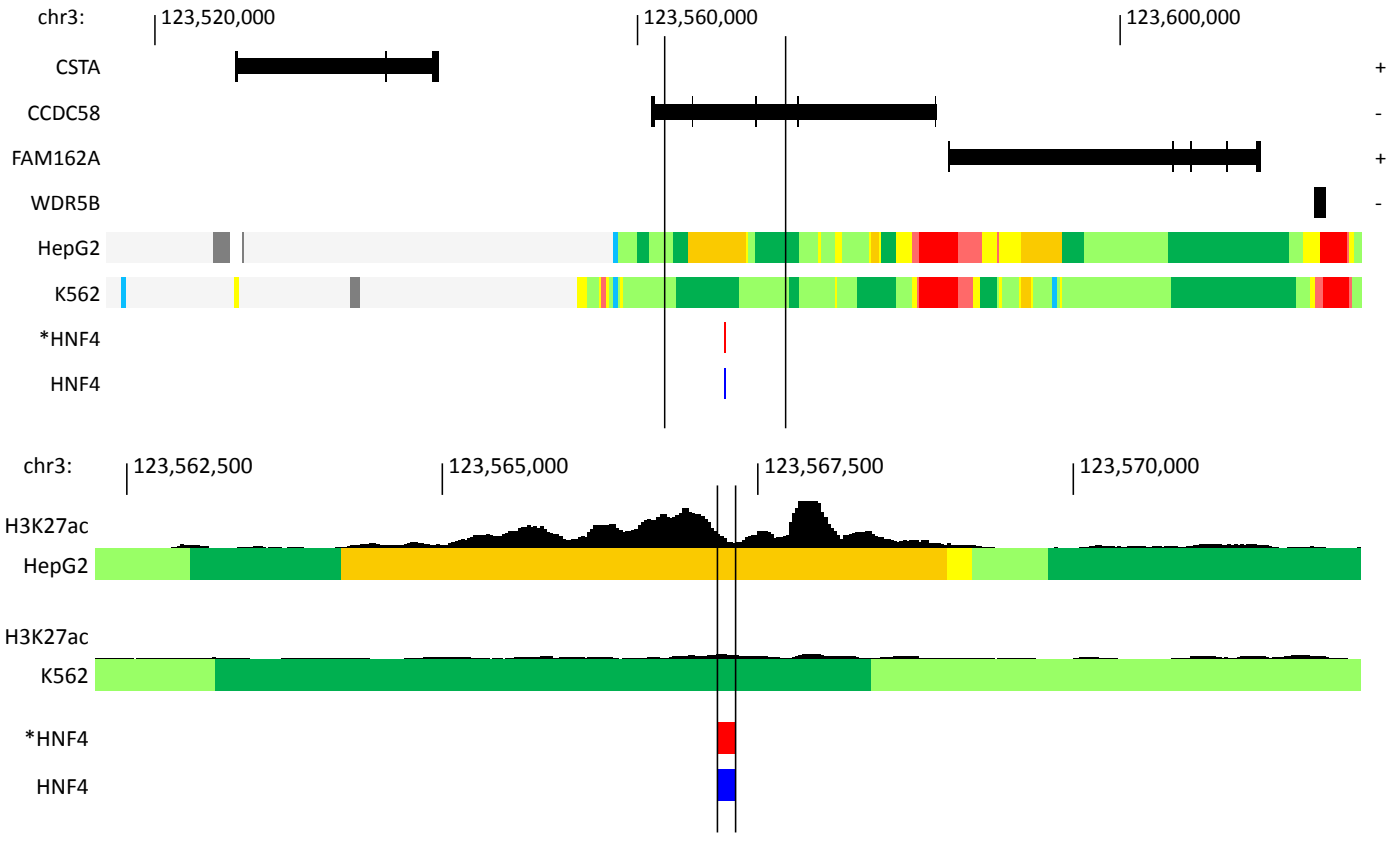
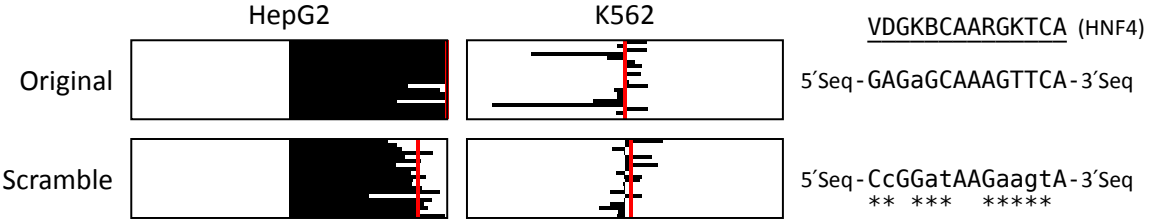
1 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr3 123567246 123567259 - (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-GAGaGCAAAGTTCA-3′Seq

5′Seq-CcGGatAAGaagtA-3′Seq

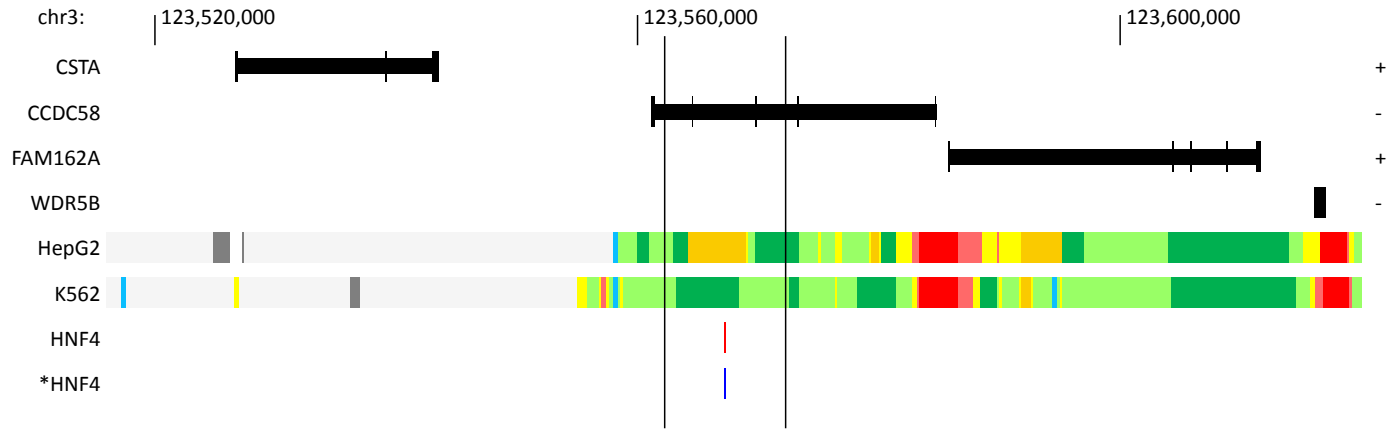
** *** *****

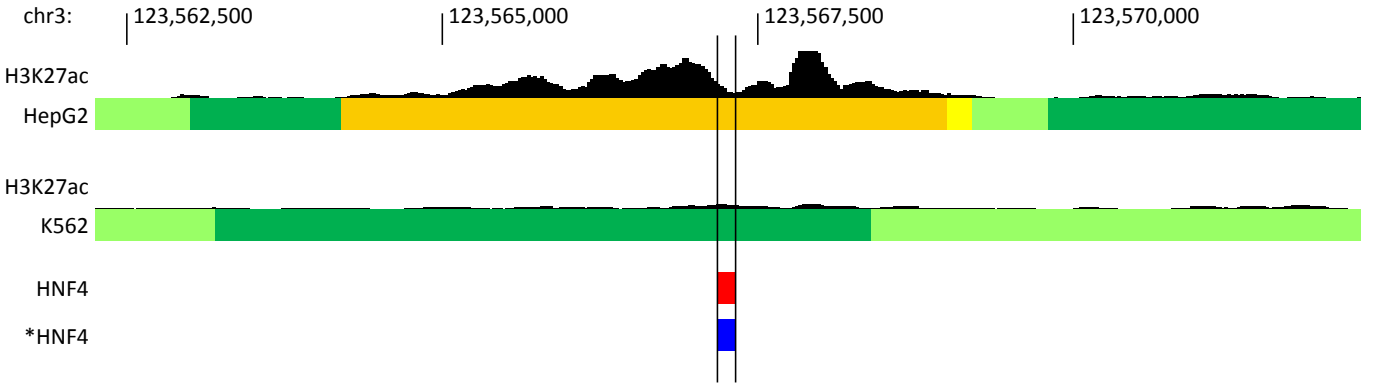
5′Seq = gttaaattggaaactgaaaagtcactgtttgcagatcaagtcaaacaacagagtgactcattagtg

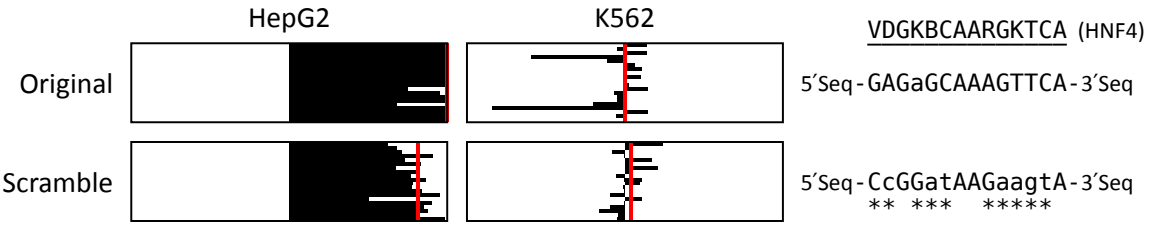
3′Seq = aaactctactgagtgtttgggaatgattgtgacacacaatttgctcagccttgagatctgccctt

2 HNF4 in HepG2 enhancer

chr3 123567246 123567259 - (hg18)



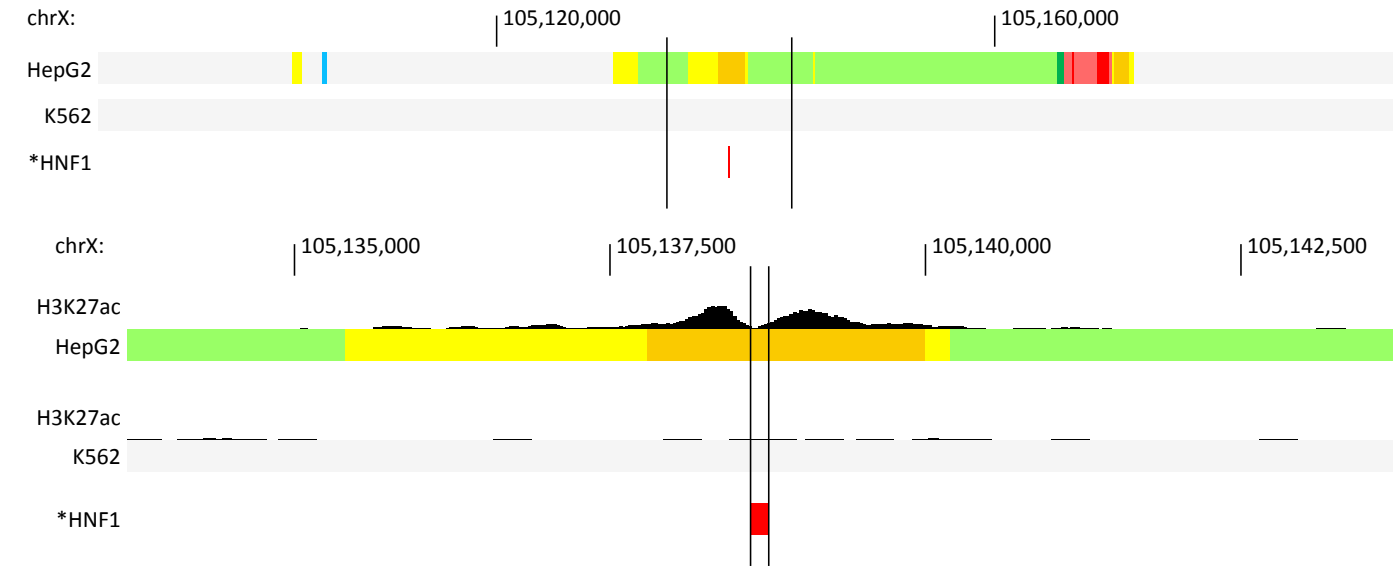


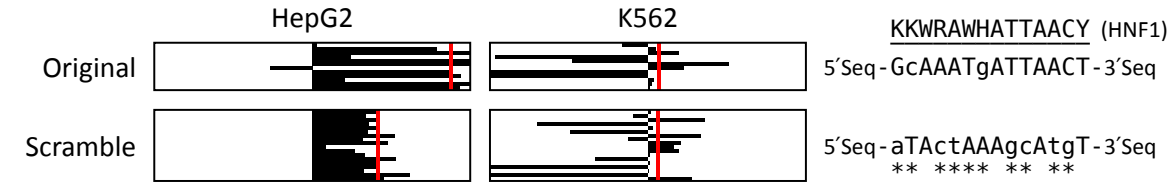


5′Seq = gttaaattggaaactgaaaagtcactgtttgcagatcaagtcaaacaacagagtgactcattagtg
3′Seq = aaactctactgagtgtttgggaatgattgtgacacacaatttgctcagccttgagatctgccctt

3 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chrX 105138680 105138693 - (hg18)





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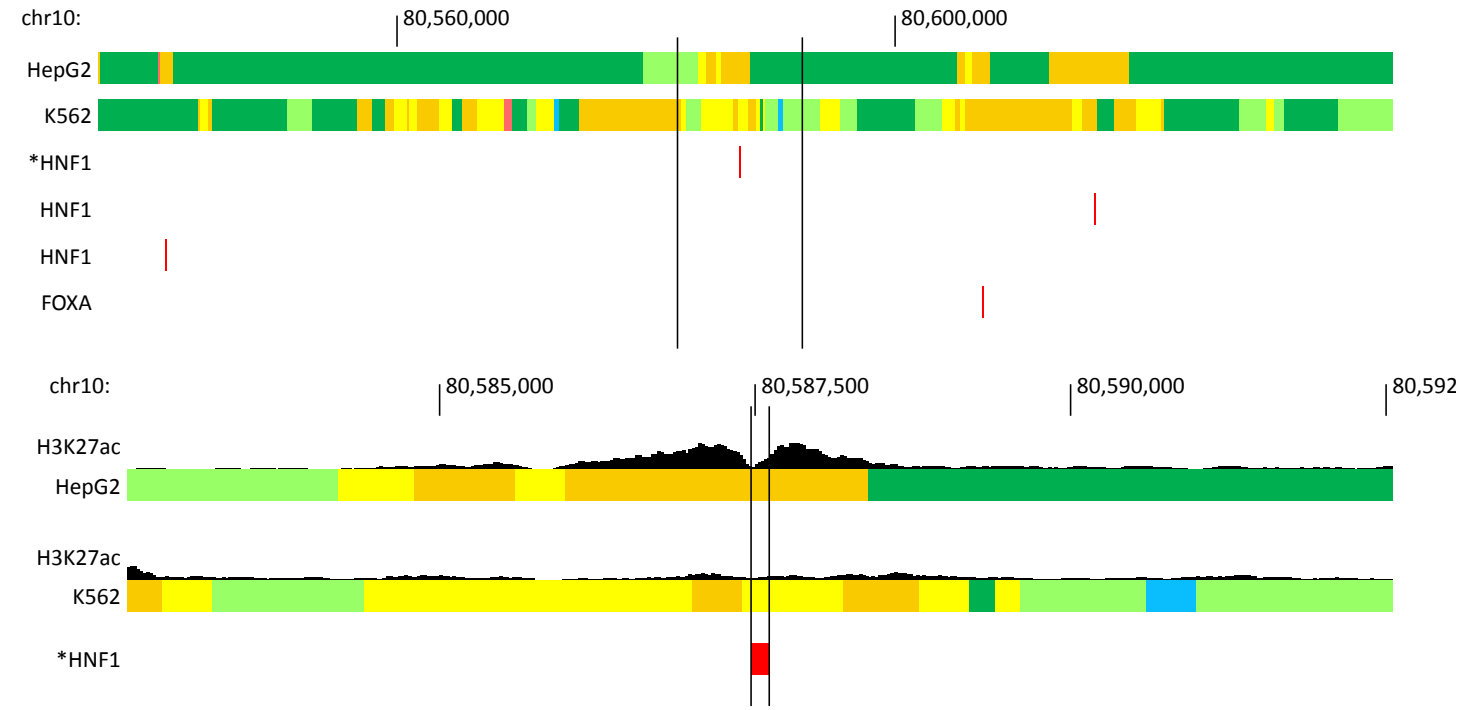
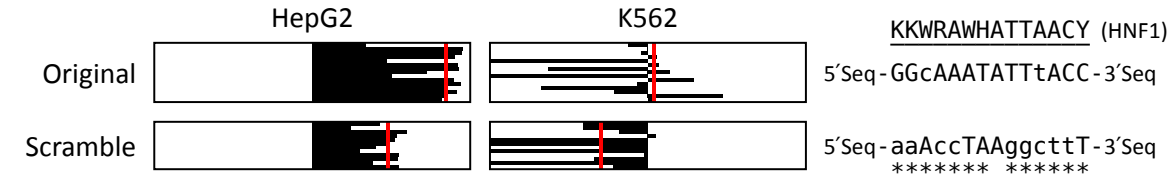
3′Seq = ttgcaaggtgagattttgcaagggcttgtctgagcatgcatcctcctccccccacccagttgtgg

4 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 80587534 80587547 - (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GGcAAATATTtACC-3′Seq

5′Seq-aaAccTAAggcttT-3′Seq

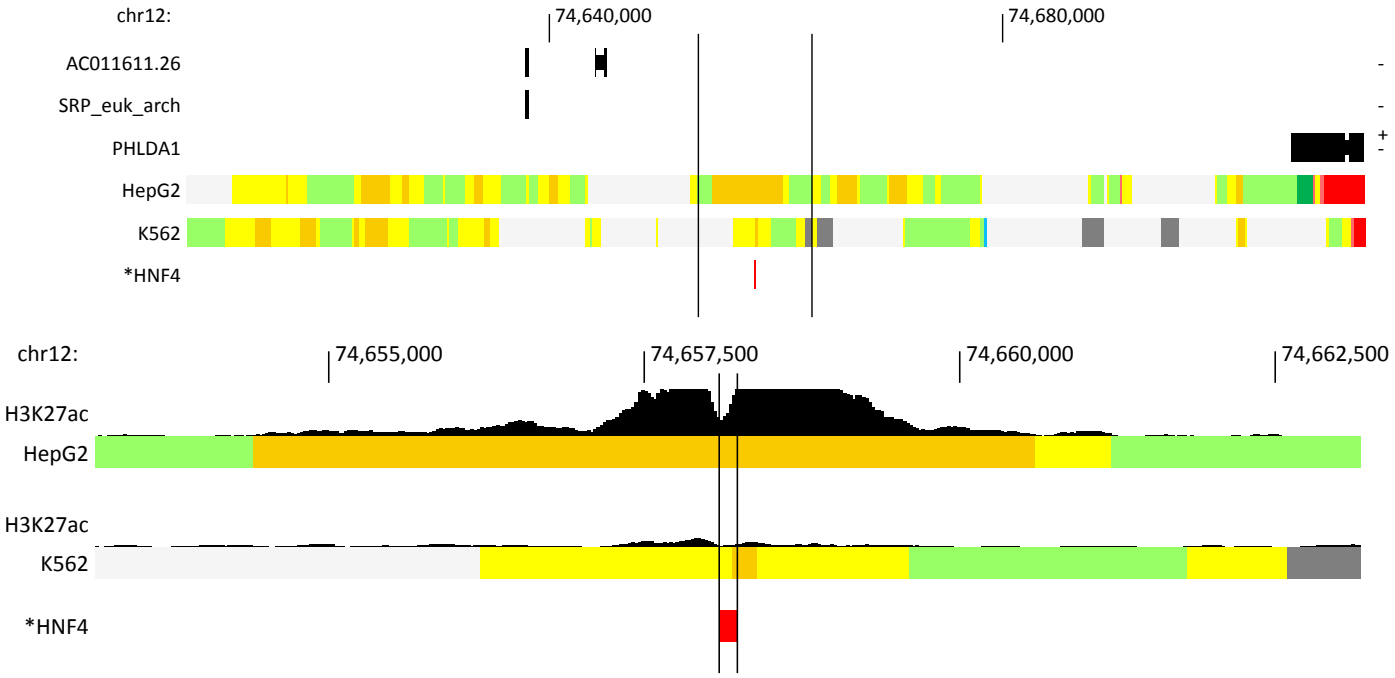
******* ******

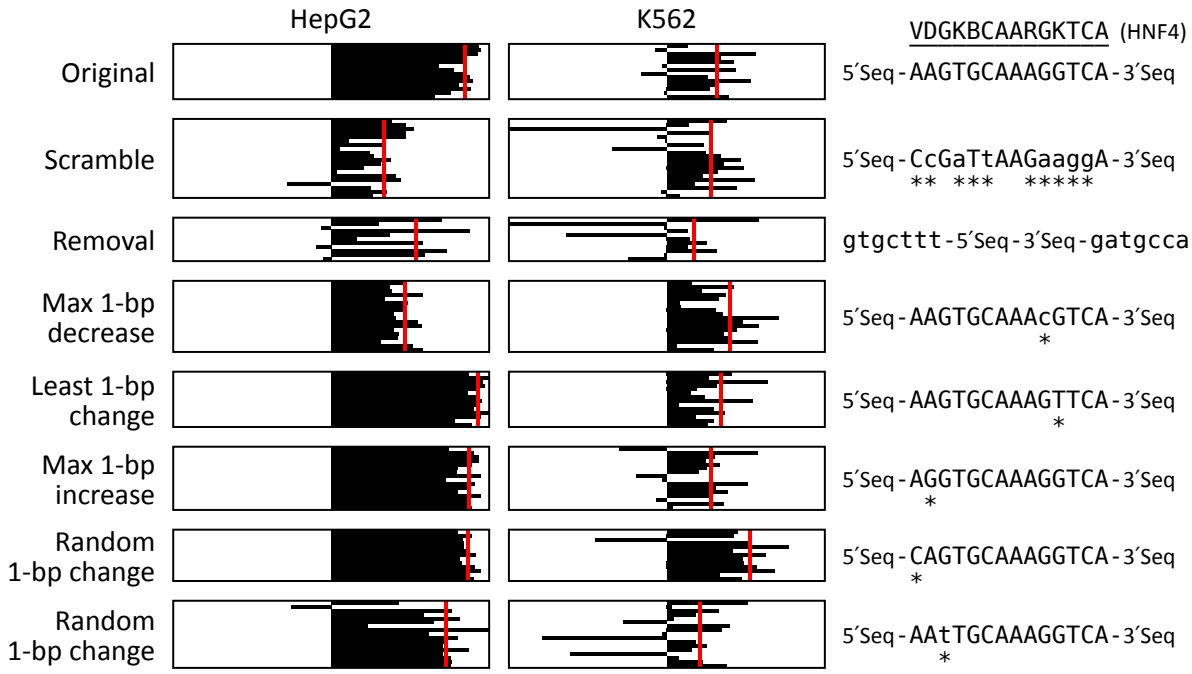
5′Seq = ccttacatgaccccagggacaggcccctgtcctcccctggcgggccagtgctggctccaggagcaa

3′Seq = ccatggttatccaaatggggctggctgccccgcctcctgcattcctgaaatacctgttccctgac

5 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr12 74658160 74658173 - (hg18)





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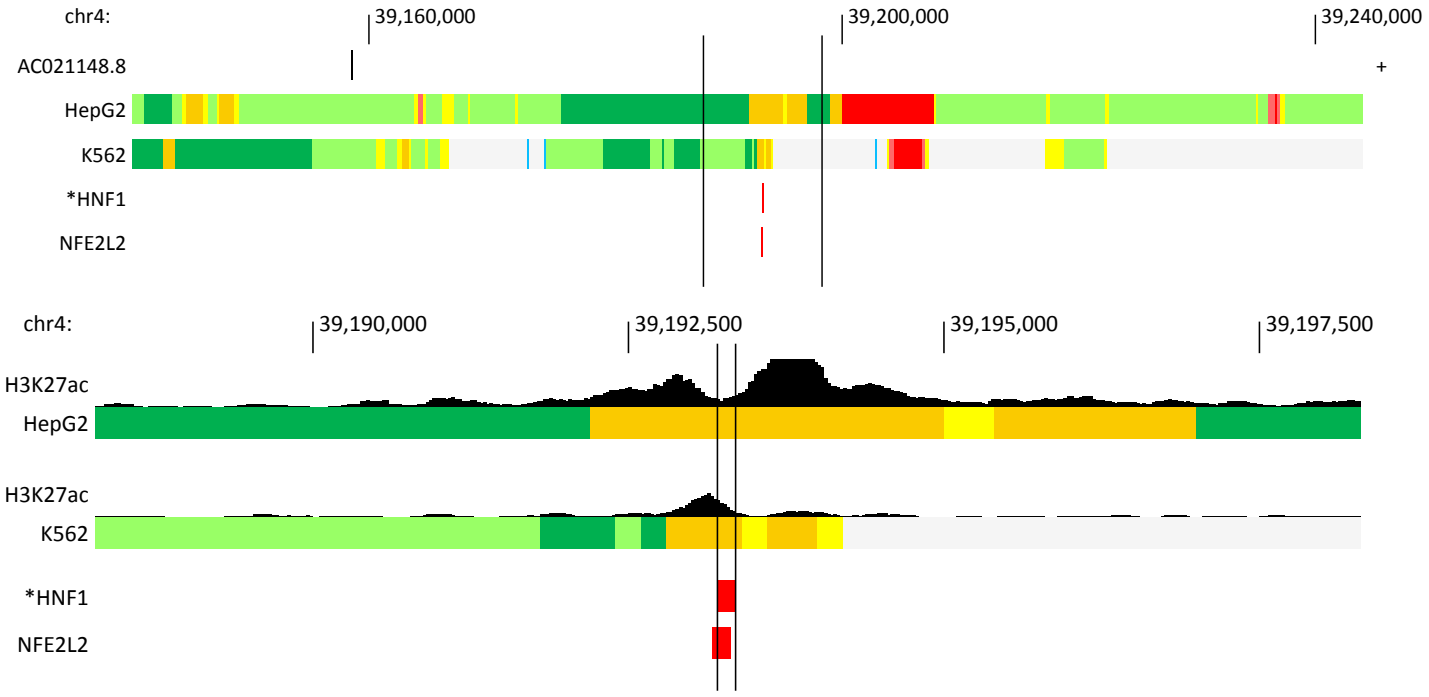
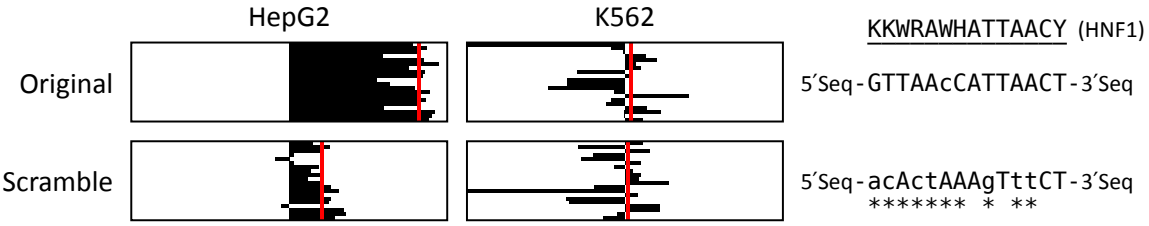
3′Seq = gaagcttccatgattcatttcctctttgctgcacgcagtggatggttttctgggtgagtcactca

6 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr4 39193271 39193284 + (hg18)





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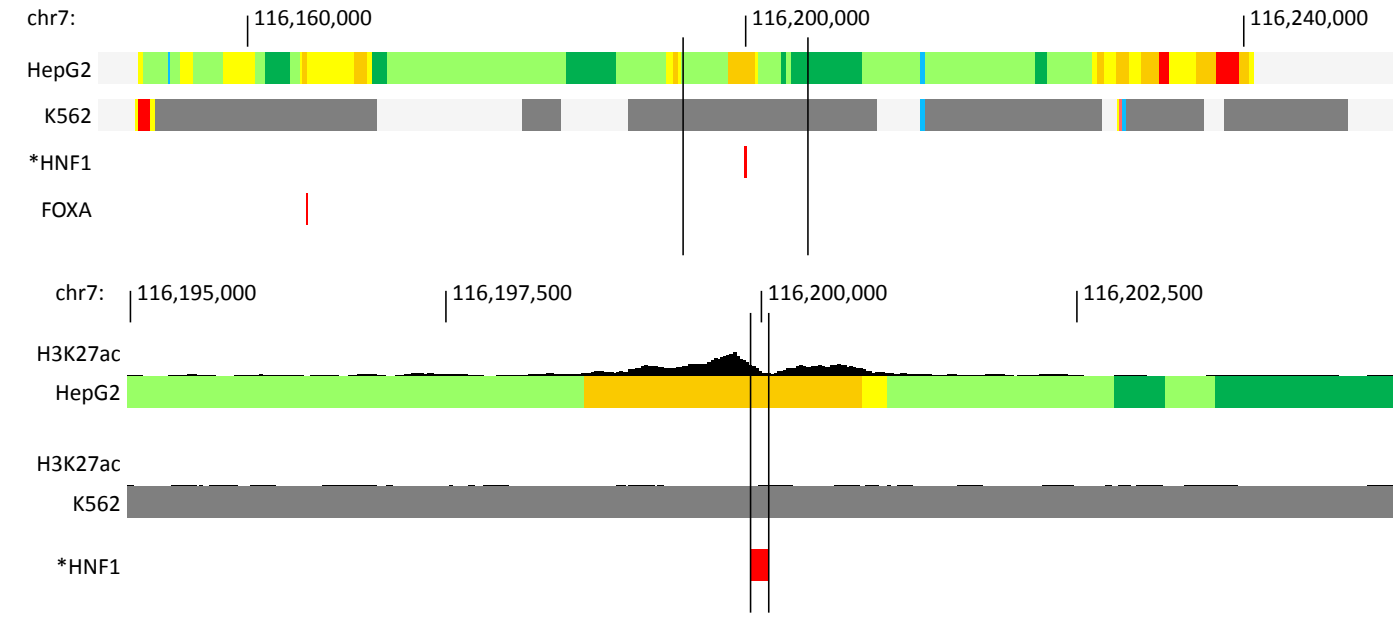
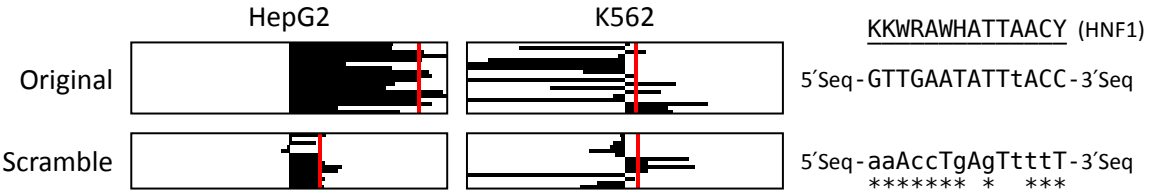
3′Seq = atgagtatcaacacaattttcagaaaattcaaggtcttctgtgatttcaagcaaatatatgattt

7 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr7 116199980 116199993 + (hg18)





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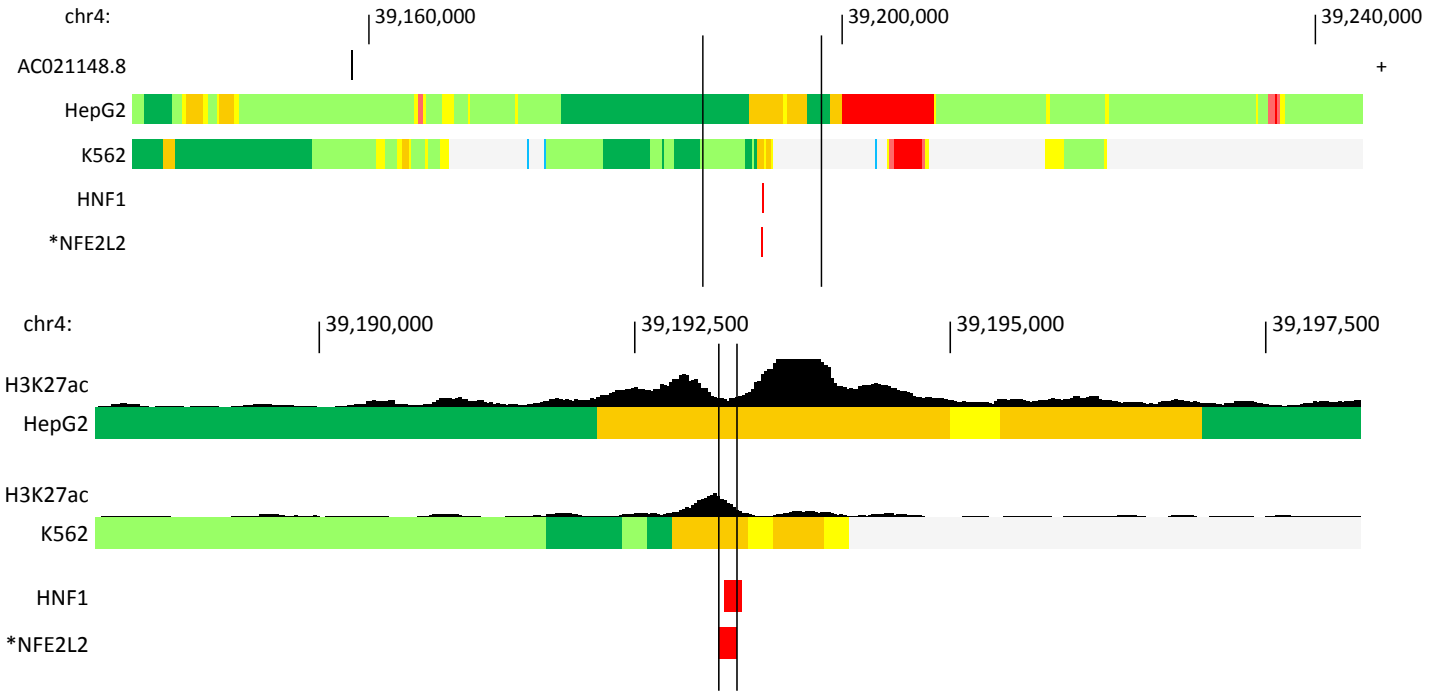
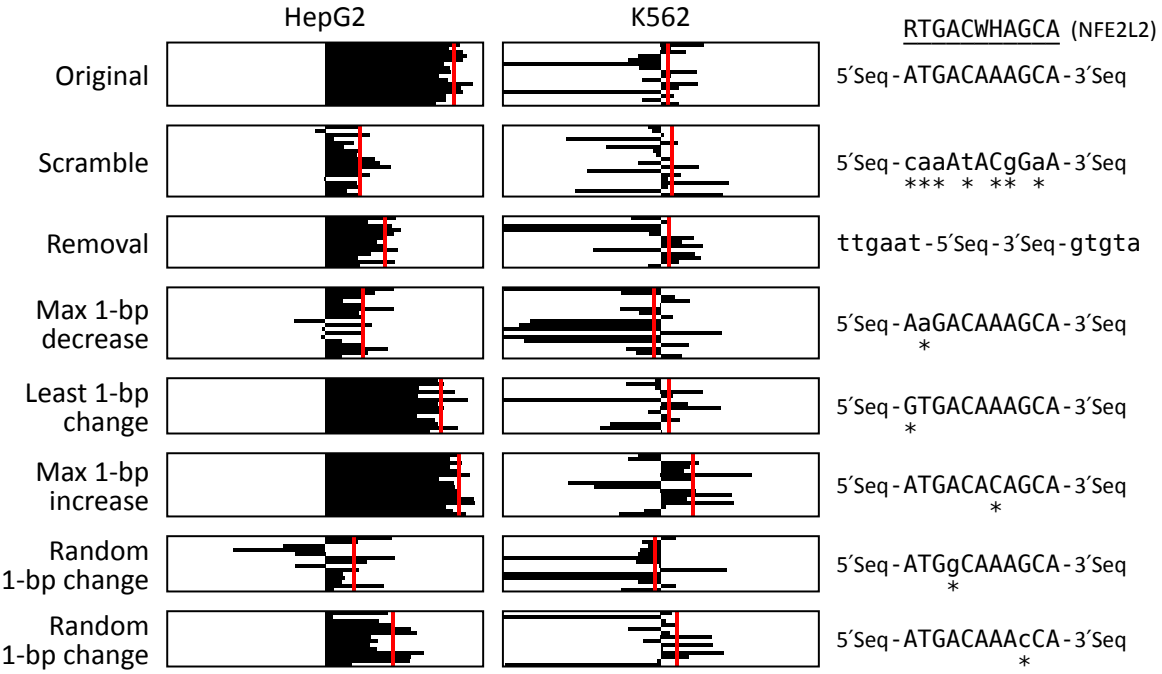
3′Seq = attggacaaataaaatgagtcacagatcattgaggatactggaaaagttagaagttgctcatcca

8 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr4 39193233 39193243 - (hg18)

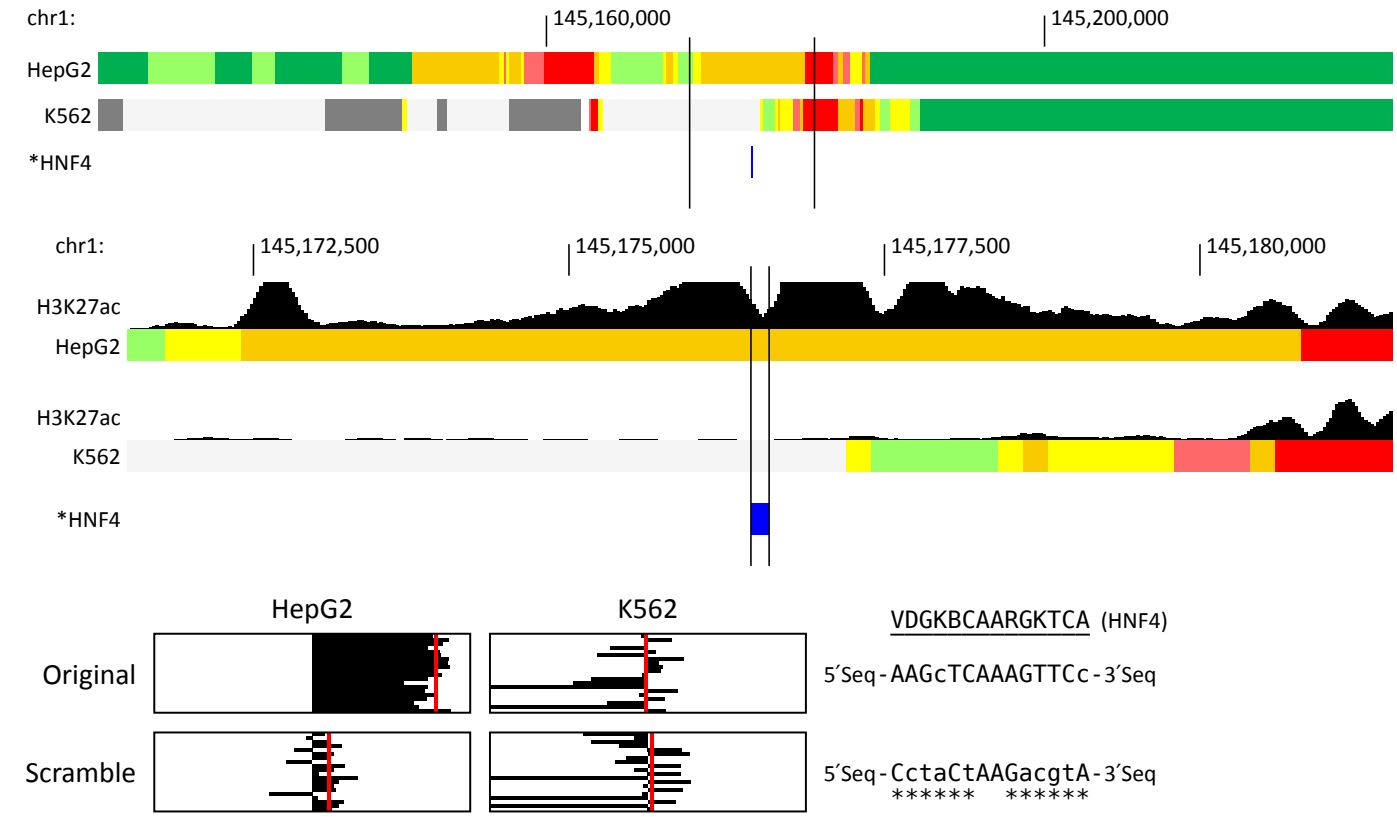




5′Seq = tttctgaaaattgtgttgatactcatagttaatggttaactcttatgagttagtcacatggtaaaca
3′Seq = ttaaatgagctgctcttctgattgtagcaagtttaatggcaatttccattttactttatttacttaa

9 HNF4 in HepG2 enhancer

chr1 145176508 145176521 + (hg18)



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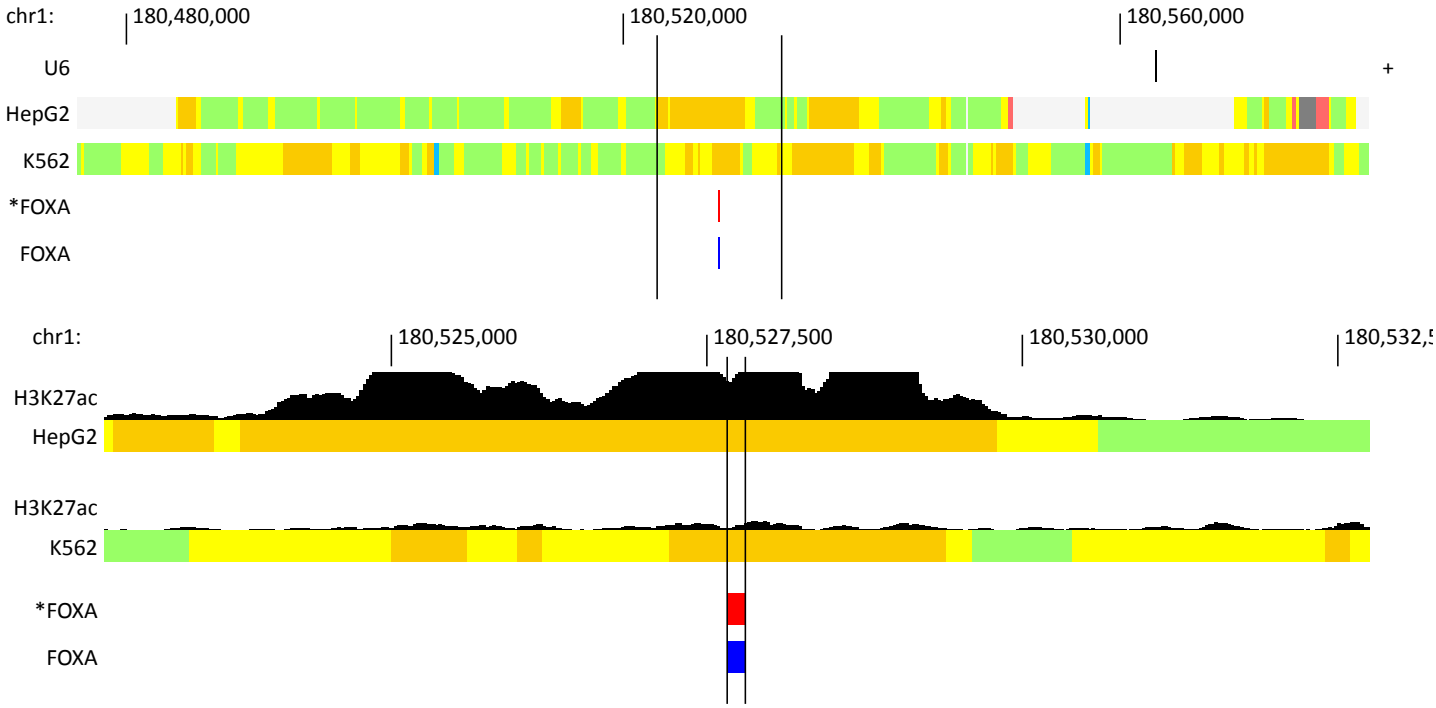
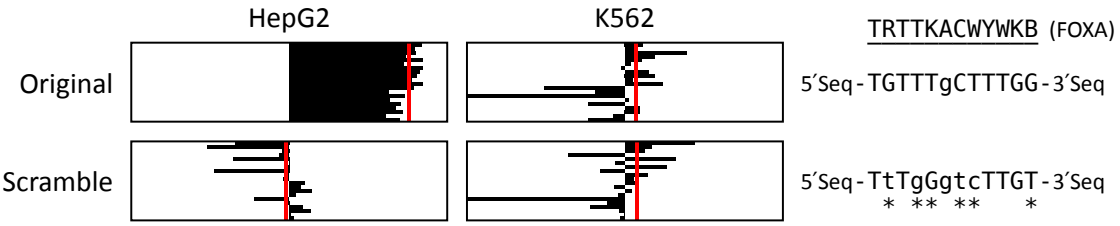
3′Seq = aagttcatttactcaagaggtctgaataaatgtttactttggtcacagcttttatccaatttccg

10 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr1 180527728 180527739 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTgCTTTGG-3′Seq

5′Seq-TtTgGgtcTTGT-3′Seq

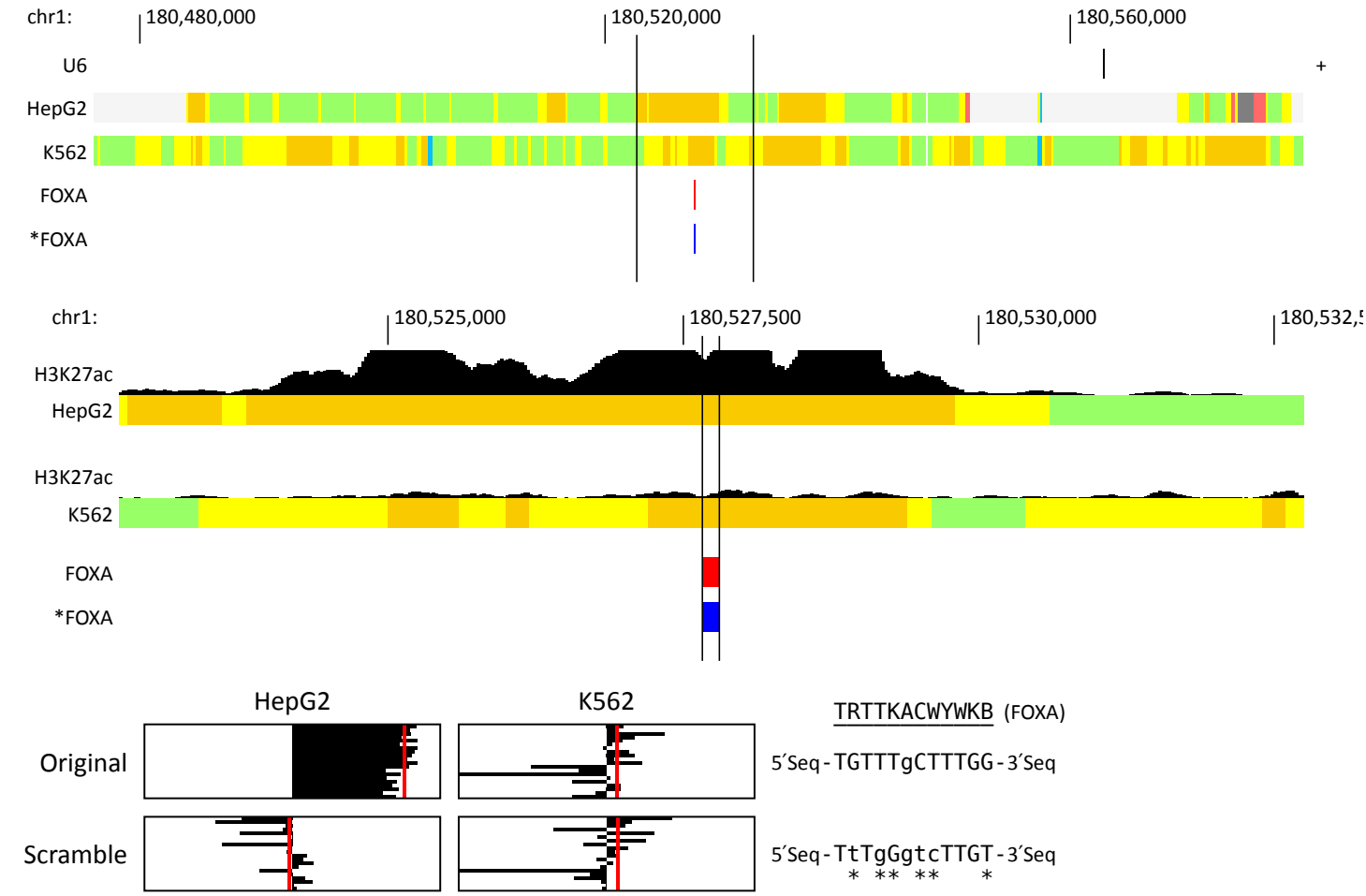
* ** ** *

5′Seq = accttgggaatcaagtgaccaagggcagaaagcaagaacggtgcagtgcaaacatggcctgcctgga

3′Seq = tttaaagagttactagggatagtatactaacctttattttgcaggggcctttactttcctggtaa

11 FOXA in HepG2 enhancer

chr1 180527728 180527739 - (hg18)



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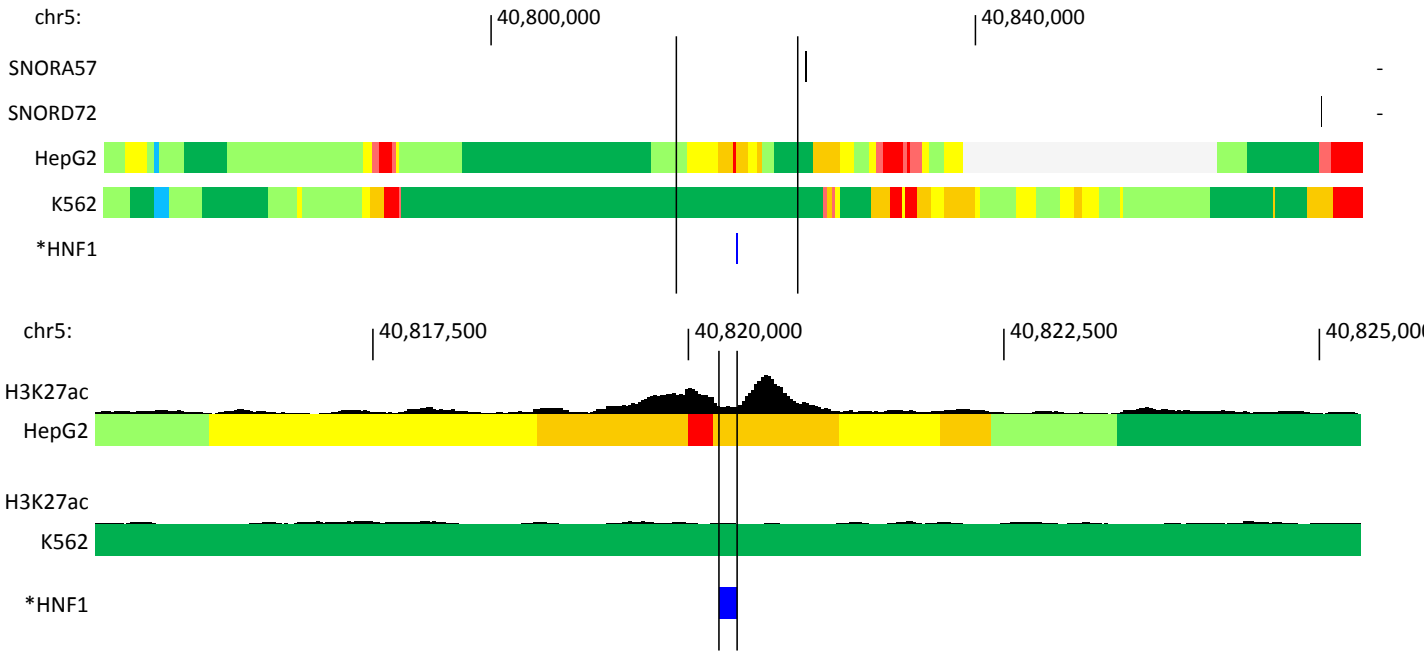
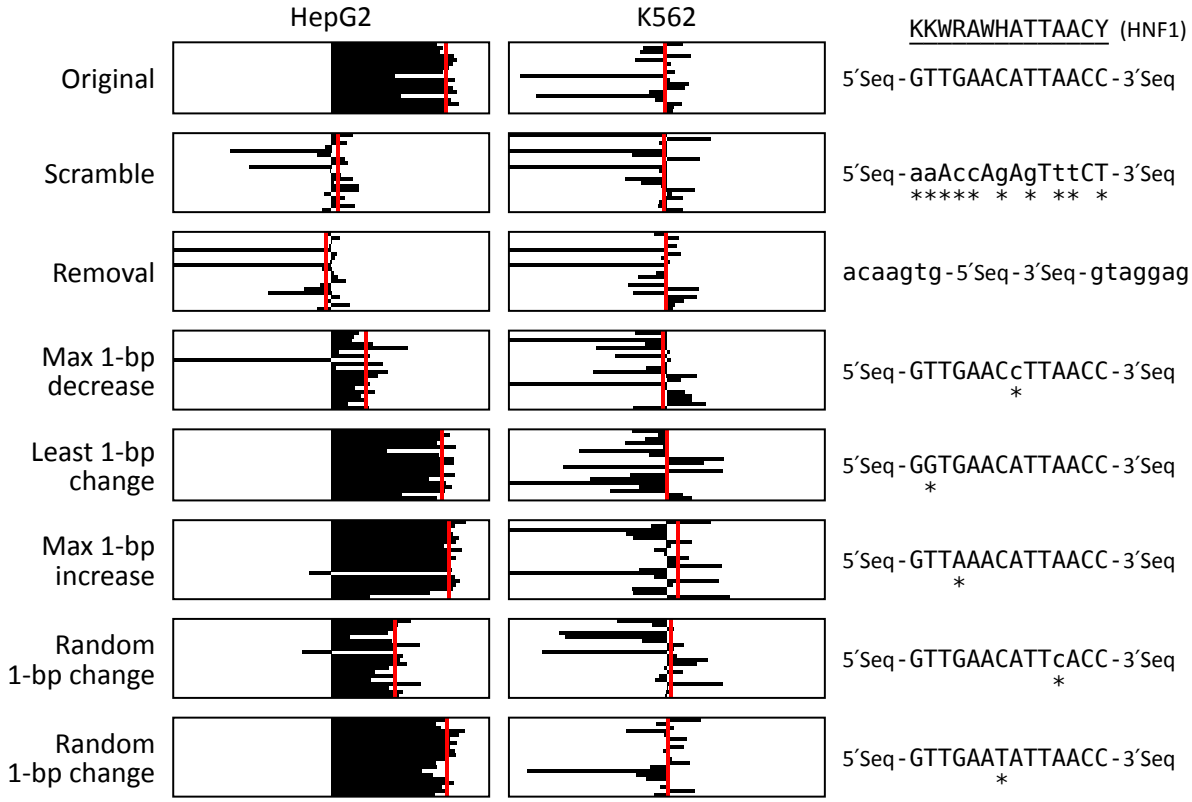
3′Seq = tttaaagagttactagggatagtatactaacctttattttgcaggggcctttactttcctggtaa

12 HNF1 in HepG2 enhancer

chr5 40820308 40820321 - (hg18)





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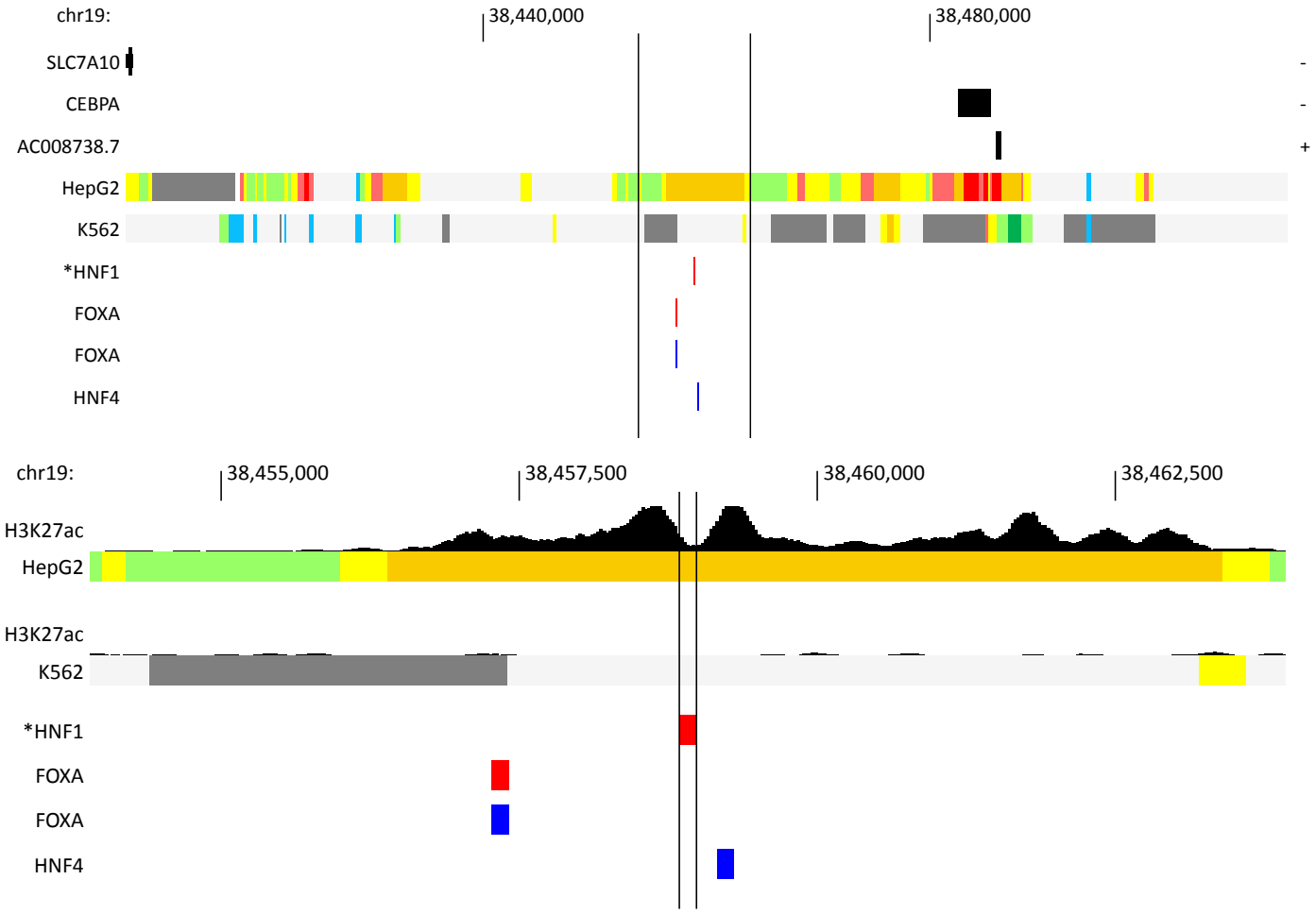
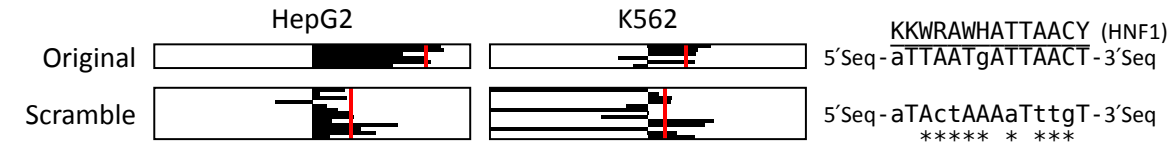
13 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr19 38458909 38458922 + (hg18)





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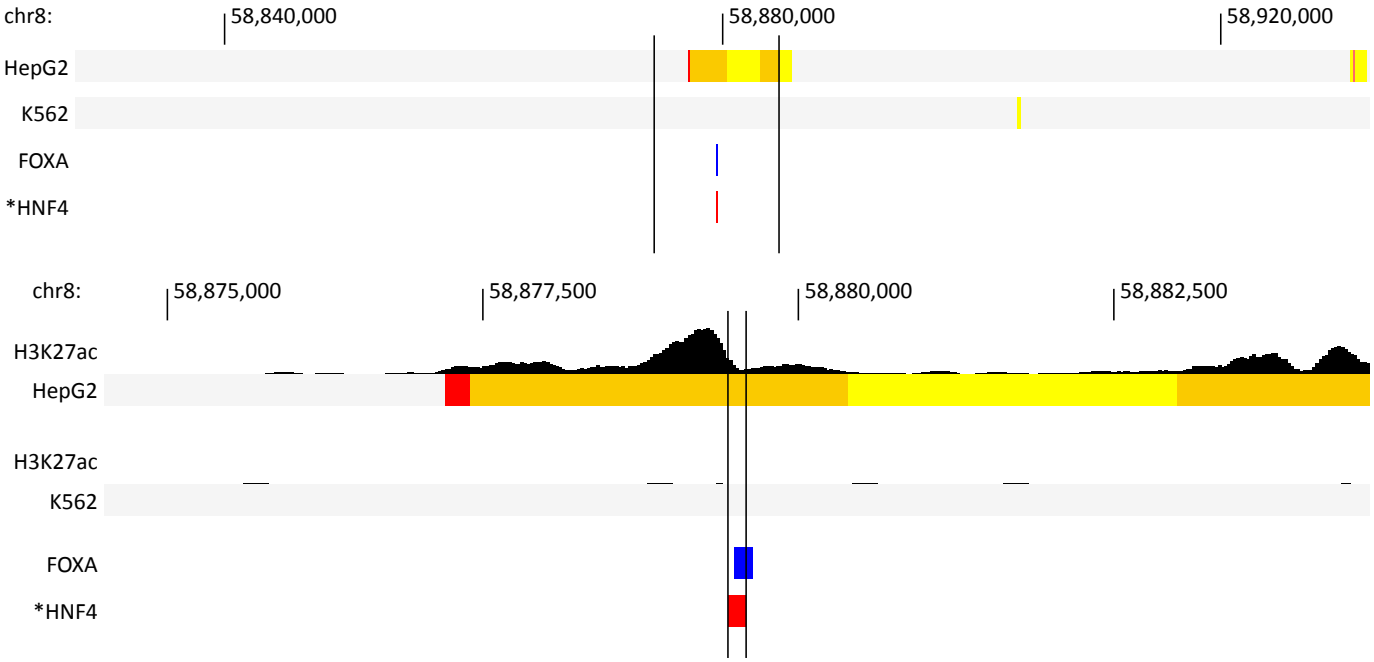
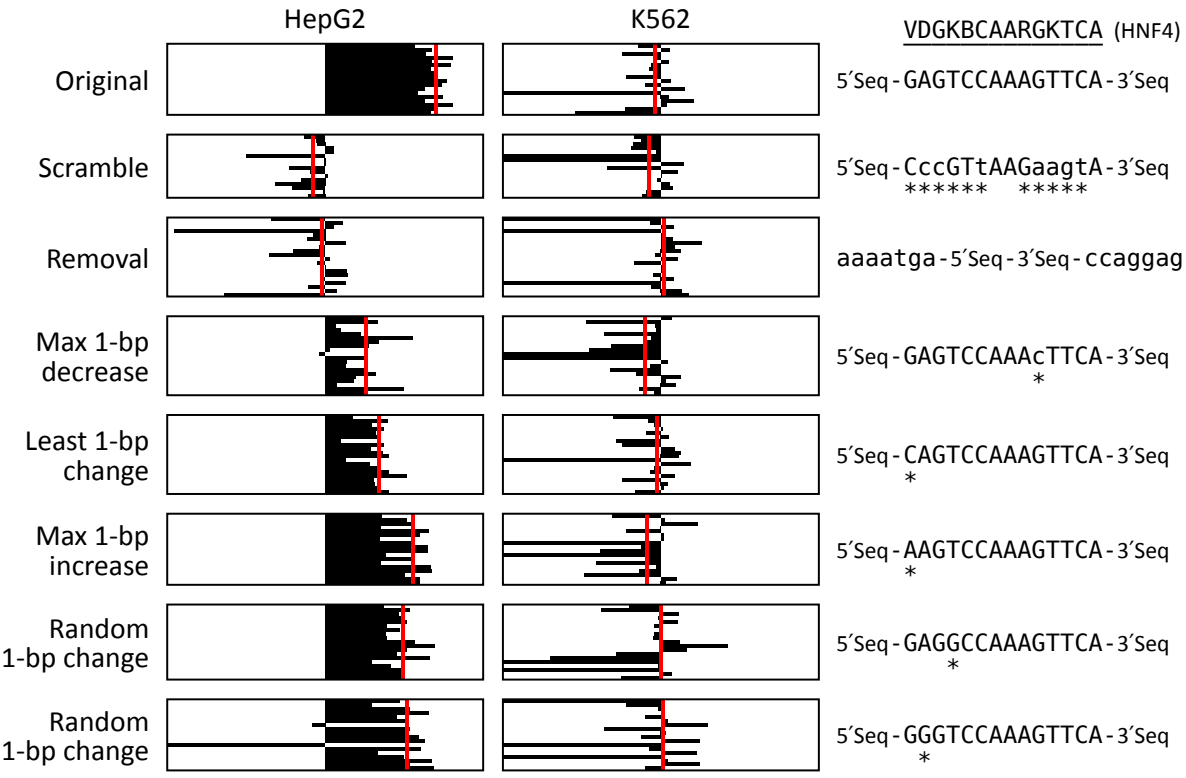
3′Seq = tggggcctgggccttgacctcgtgggcctctgagtaaacaggcctgctggagcctgccgggcccc

14 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr8 58879508 58879521 + (hg18)





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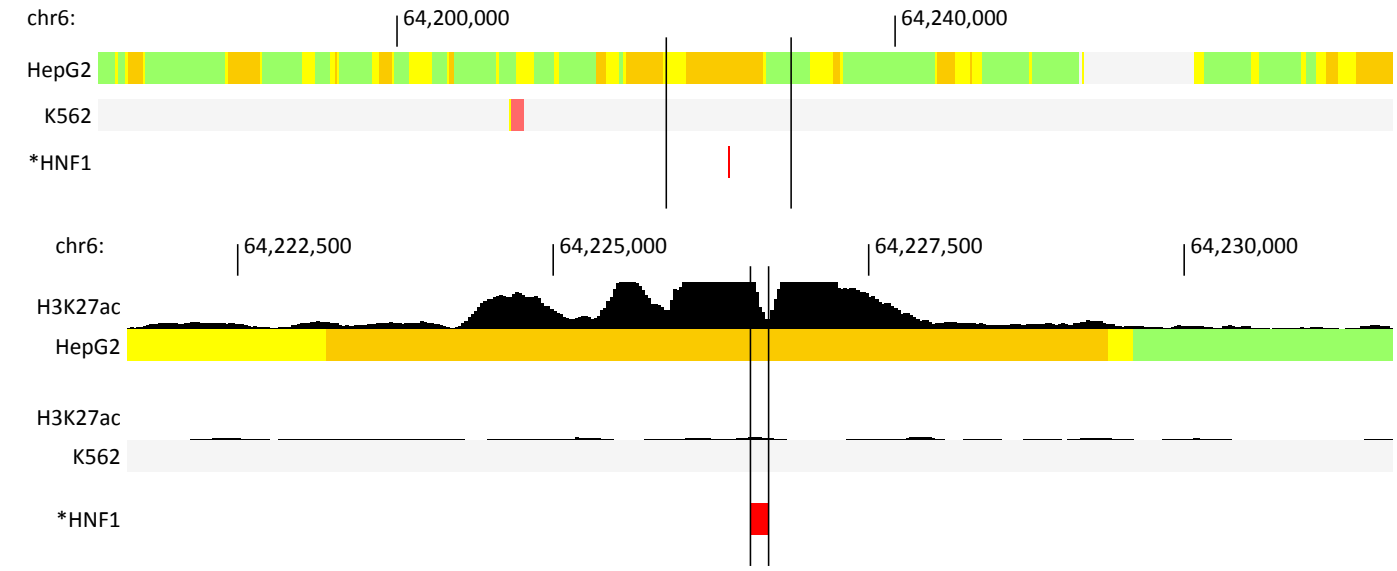
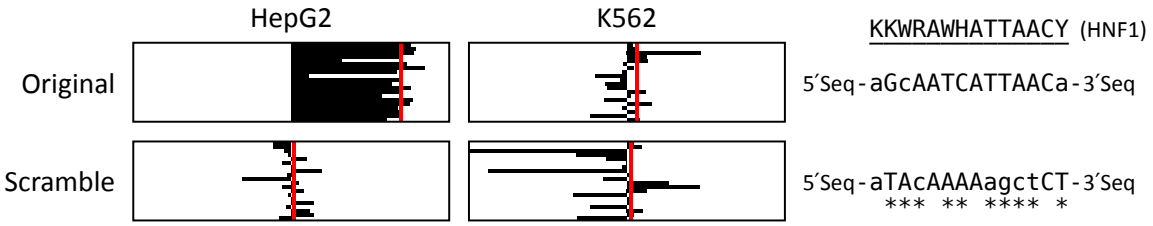
15 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 64226629 64226642 - (hg18)





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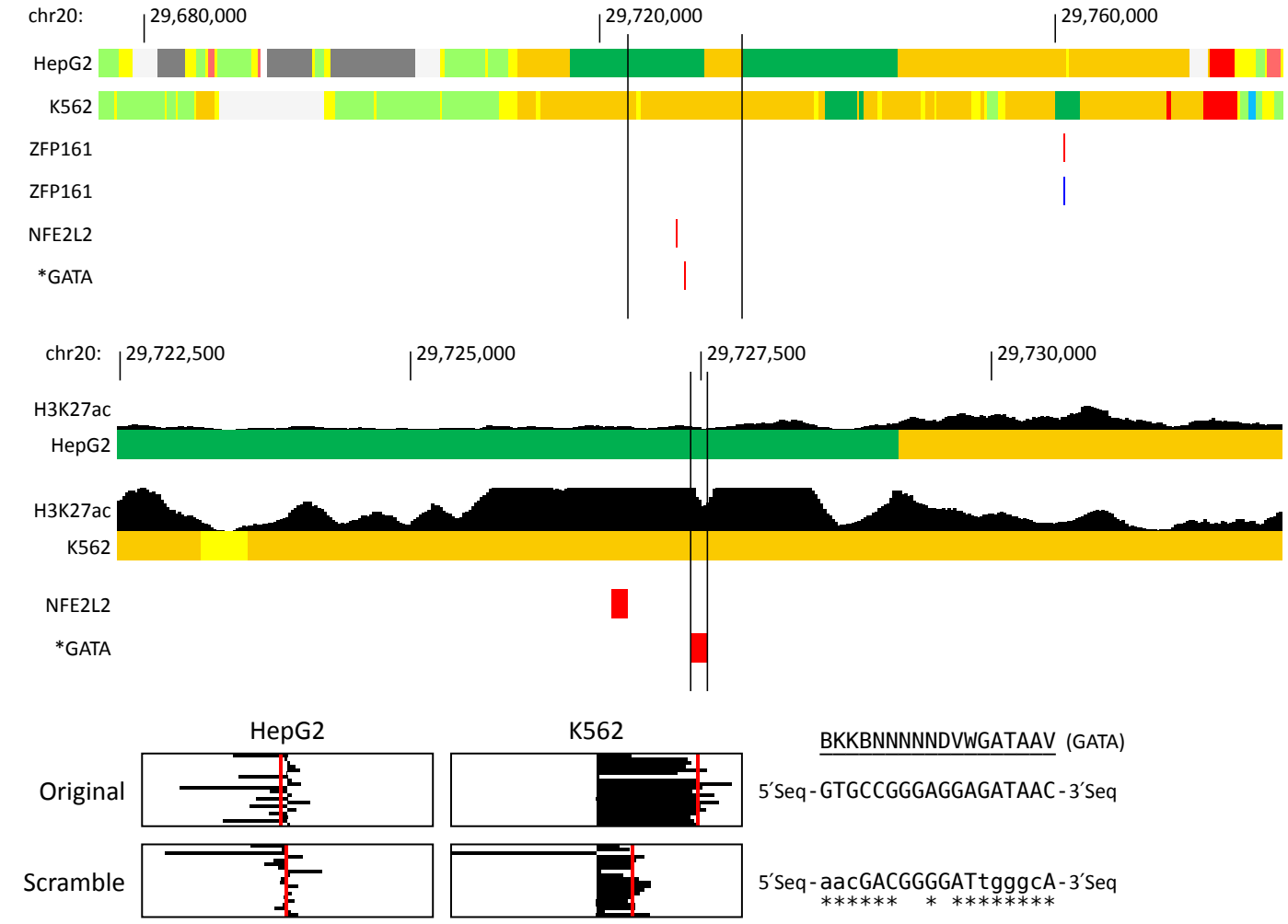
3′Seq = cttcgaaaaacatacacctggttagttgtttccaaagtacattctctctctgaaggcttttcaga

16 GATA in K562 enhancer (conserved at 60% confidence)

chr20 29727475 29727492 + (hg18)



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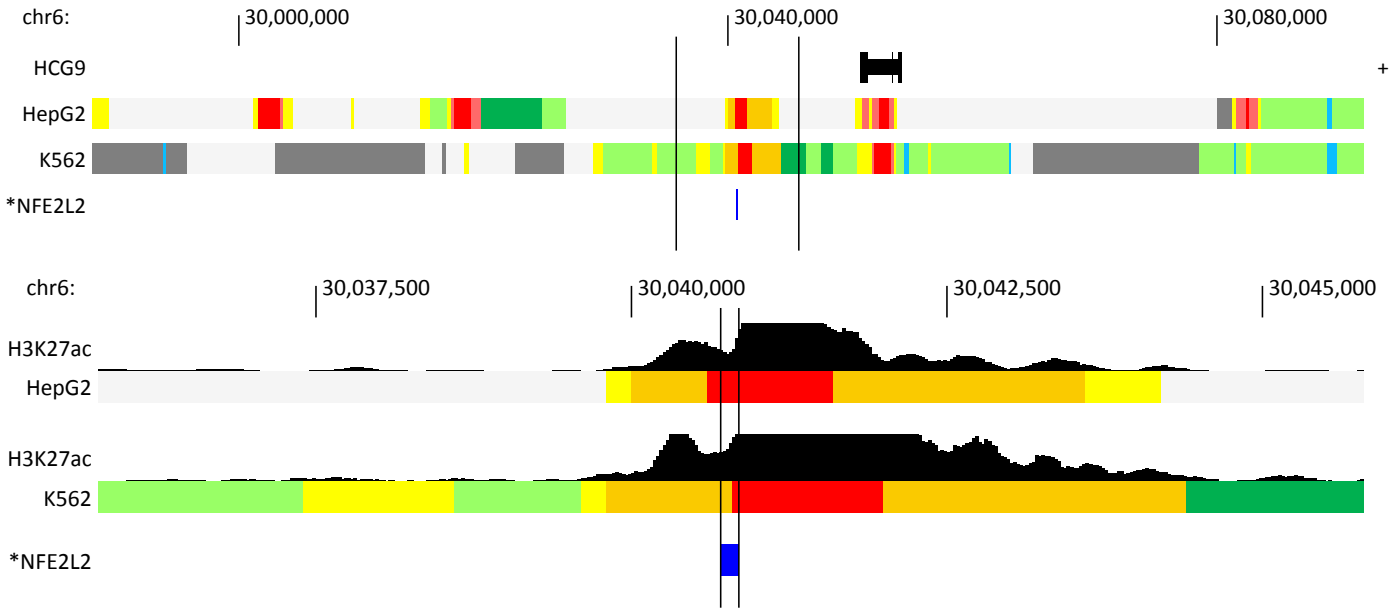
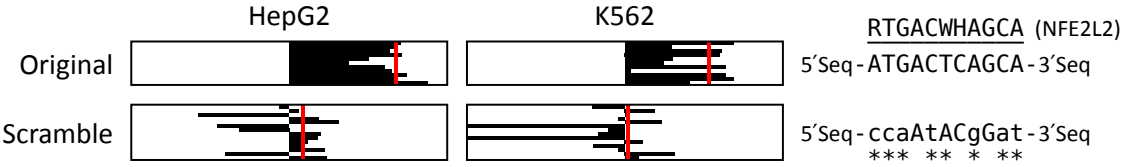
17 NFE2L2 in K562 enhancer

chr6 30040774 30040784 - (hg18)





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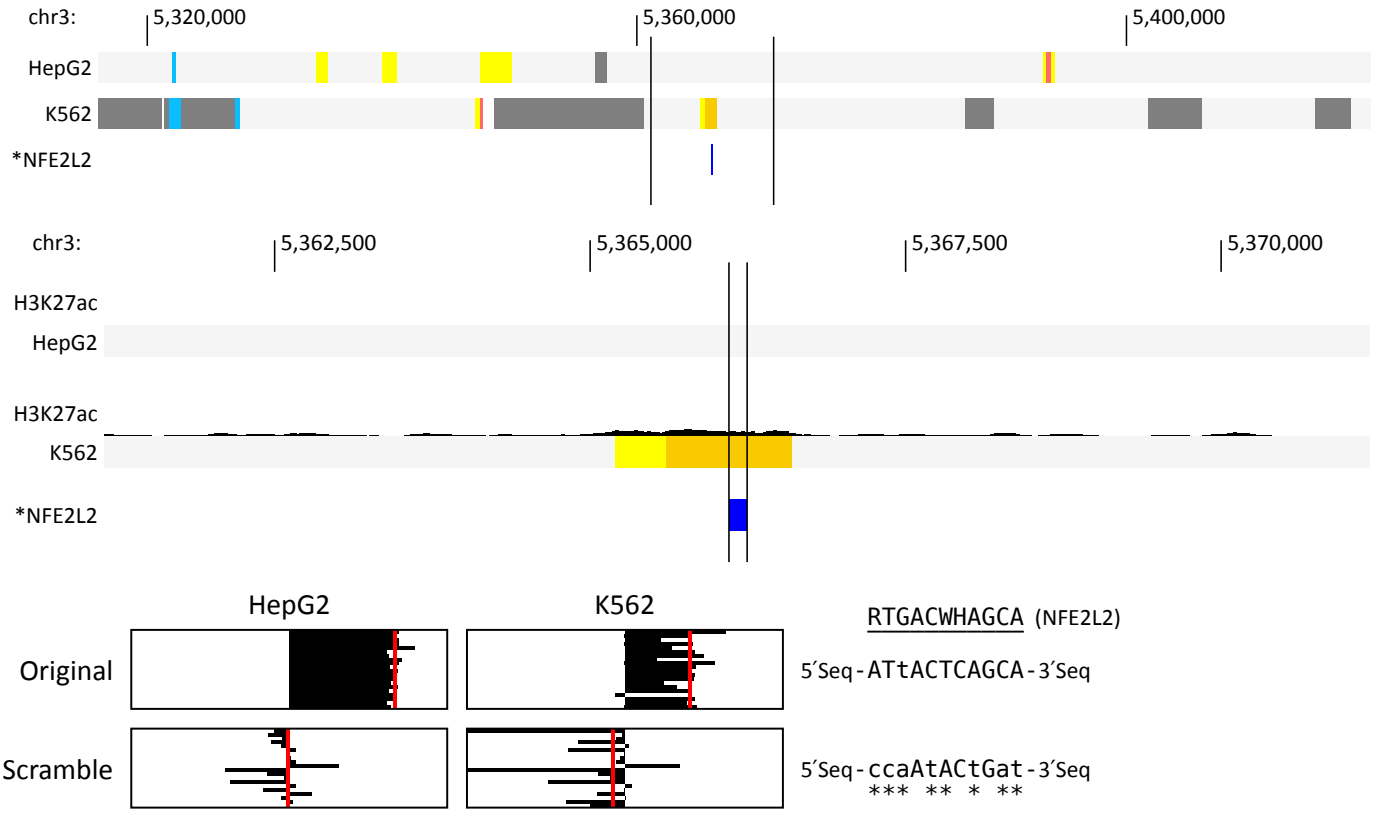
3′Seq = gtaacctttatcaacagctttagaagccagctgccacacacagctgtgccgctggctctctcttcc

18 NFE2L2 in K562 enhancer

chr3 5366167 5366177 + (hg18)



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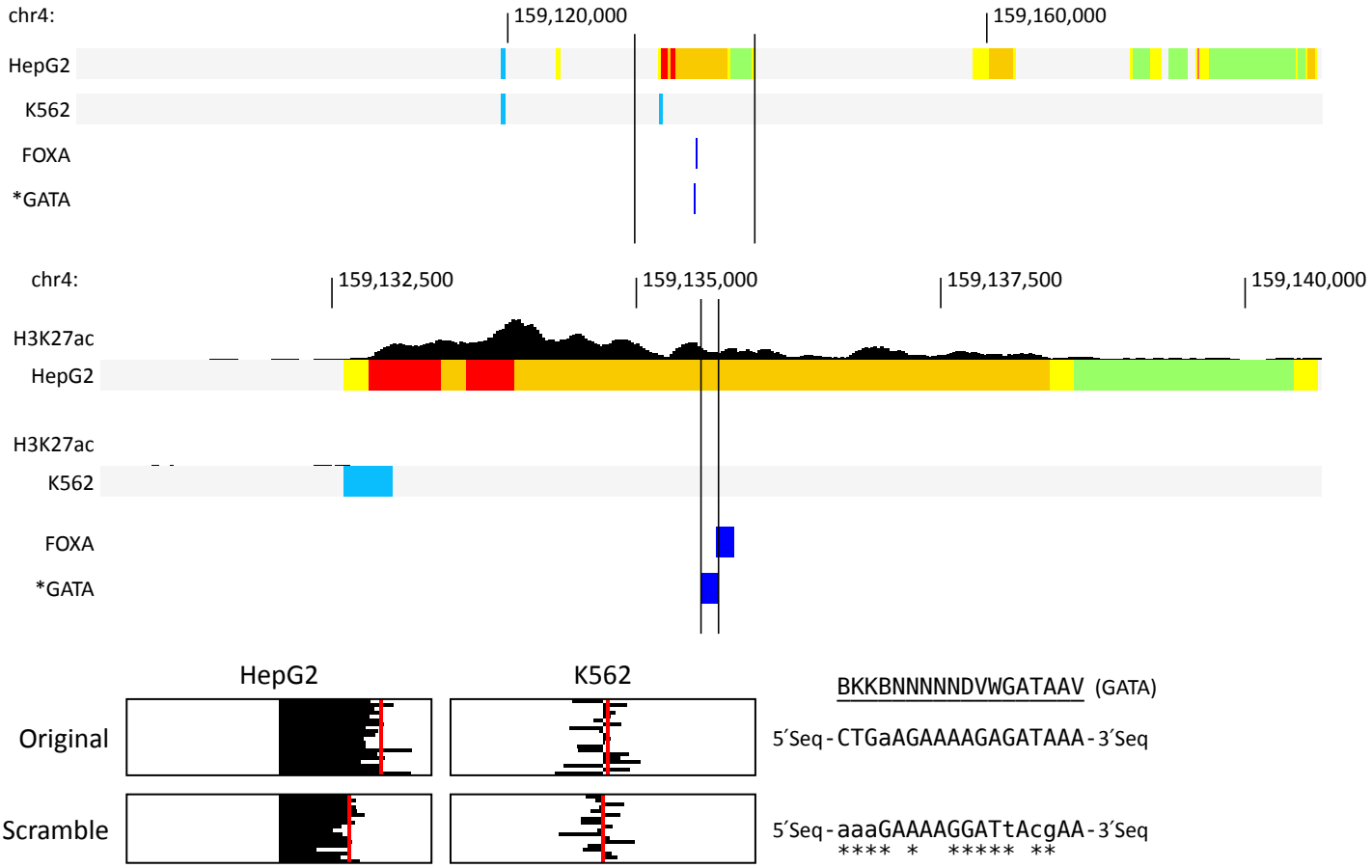
19 GATA in HepG2 enhancer

chr4 159135595 159135612 + (hg18)



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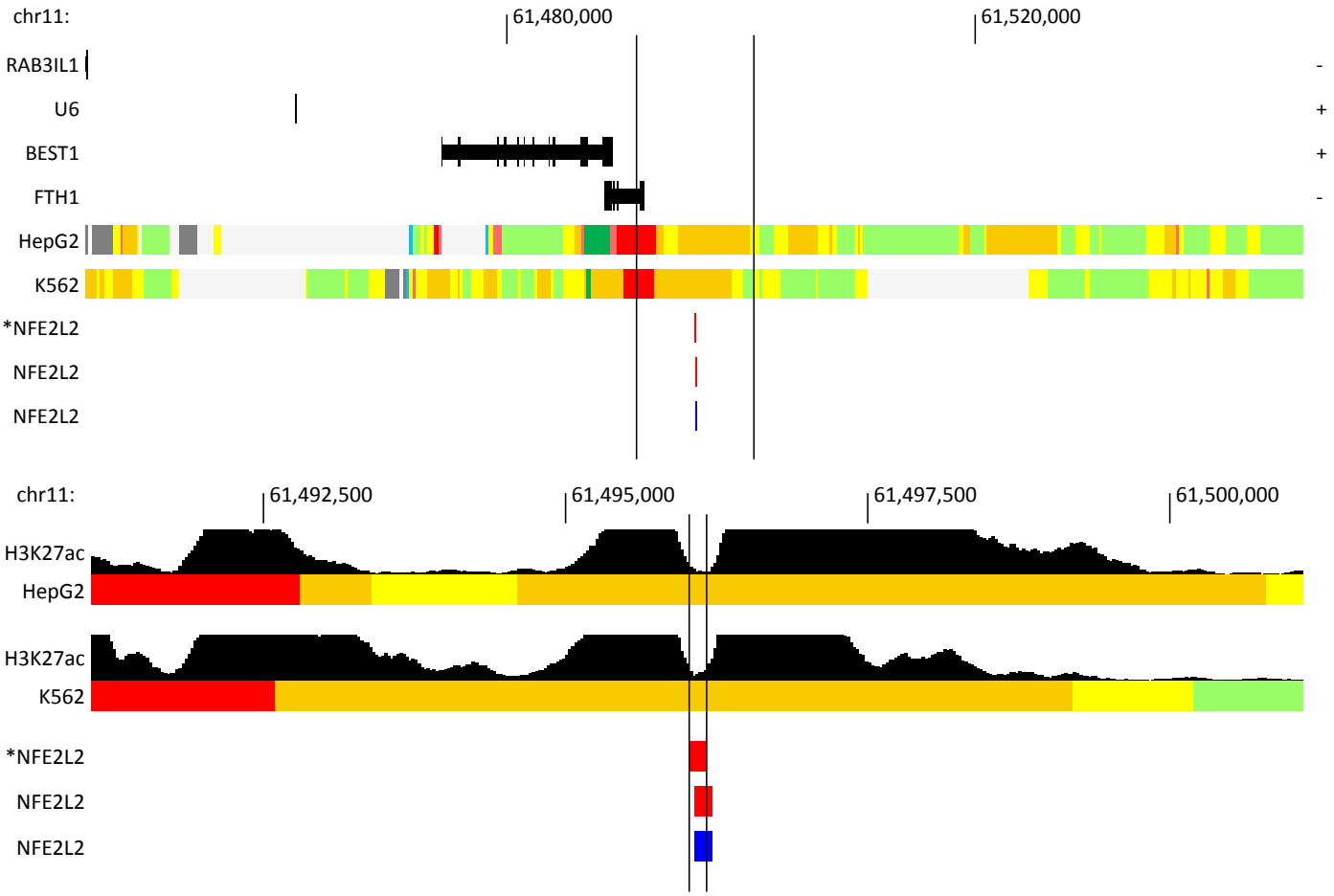
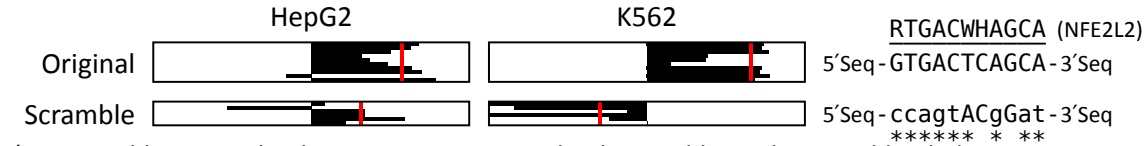
3′Seq = gccaaacaaaggcactttgatcttctgtttgtgcttggtaaactaccagtcttacgaaagacc

20 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr11 61496090 61496100 + (hg18)





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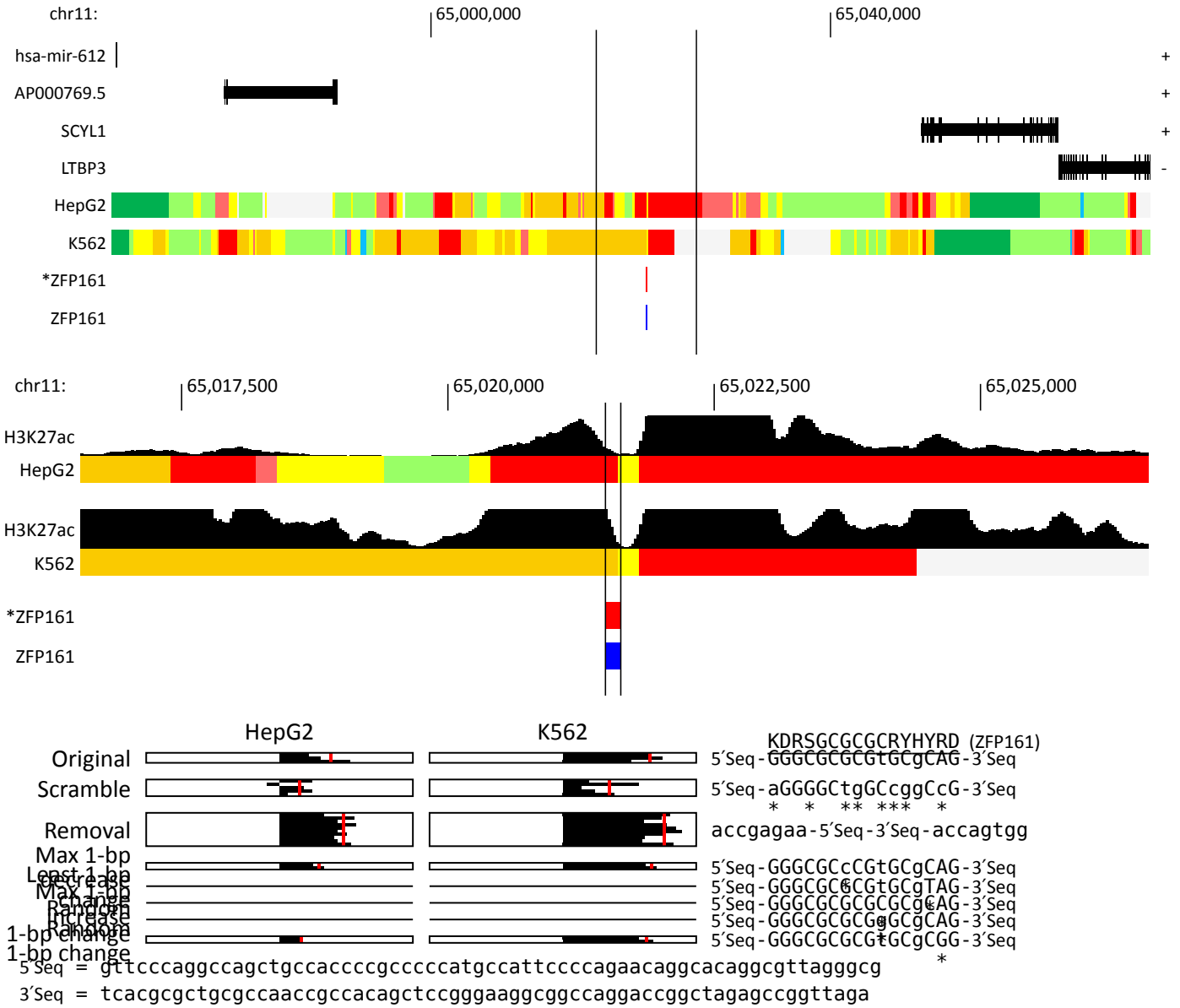
3′Seq = ctctgctaggctgggcttgggctcaaaaagtgctttgtcatggaggagaagagcagtcataagacct

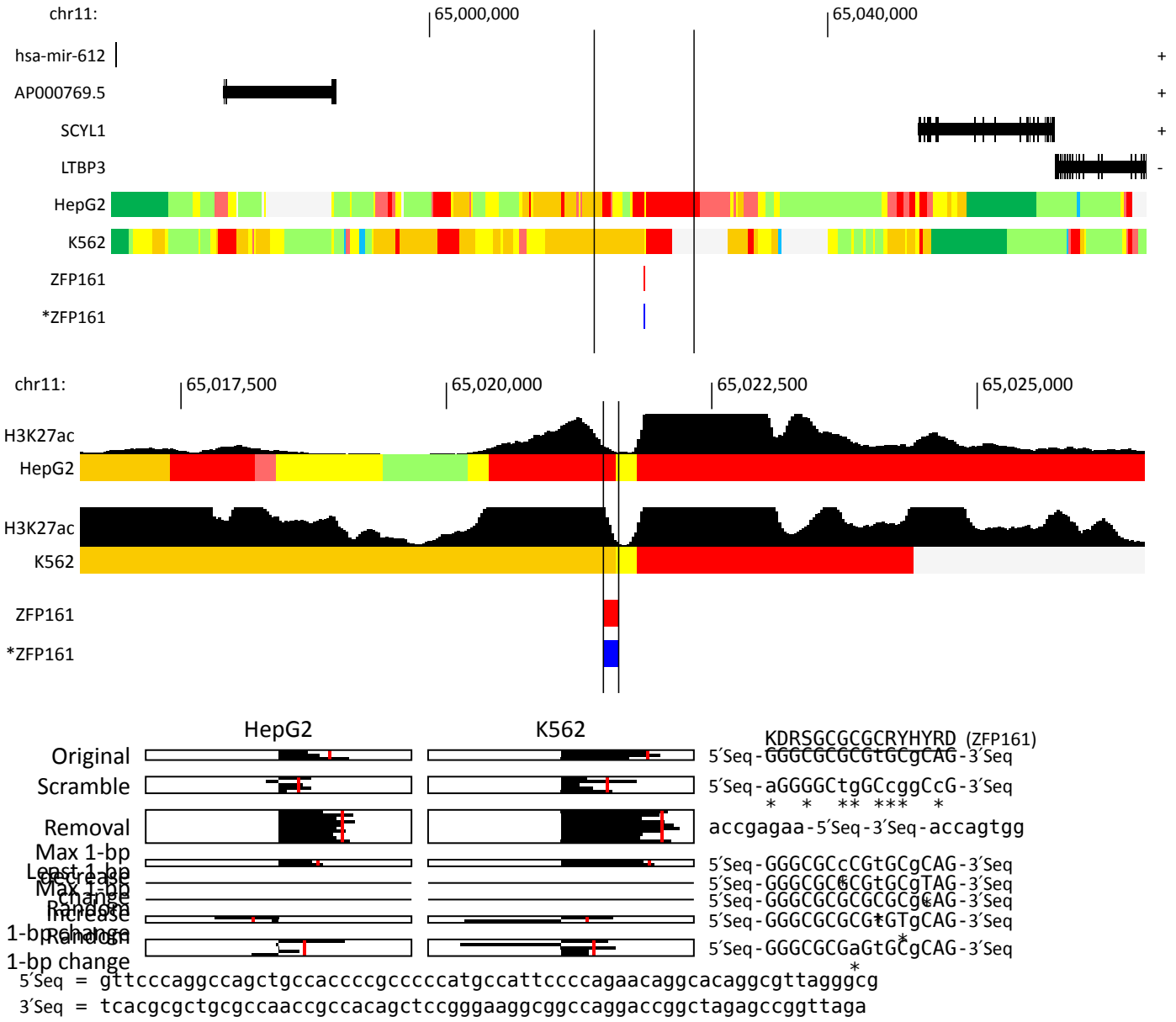
21 ZFP161 in K562 enhancer (conserved at 60% confidence)

chr11 65021544 65021559 + (hg18)



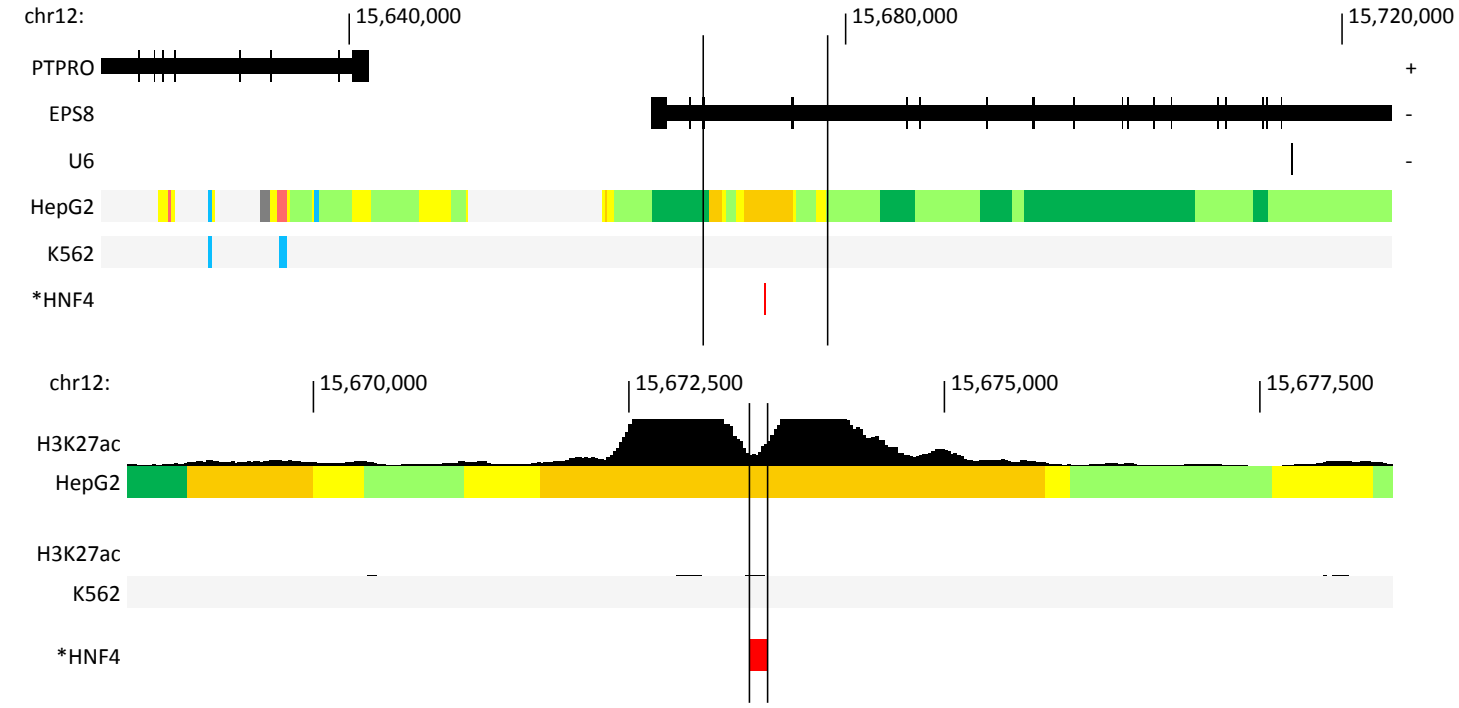
22 ZFP161 in K562 enhancer

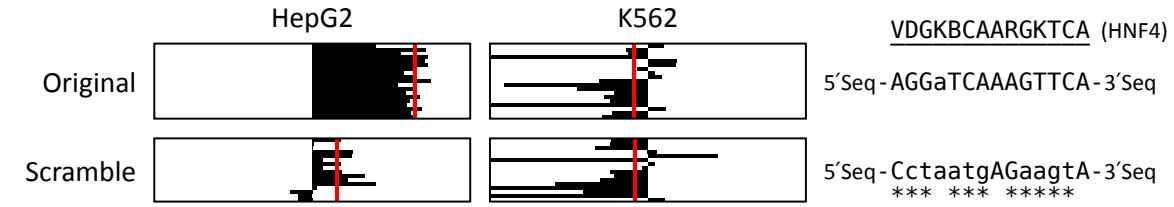
chr11 65021544 65021559 + (hg18)



23 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 15673521 15673534 - (hg18)





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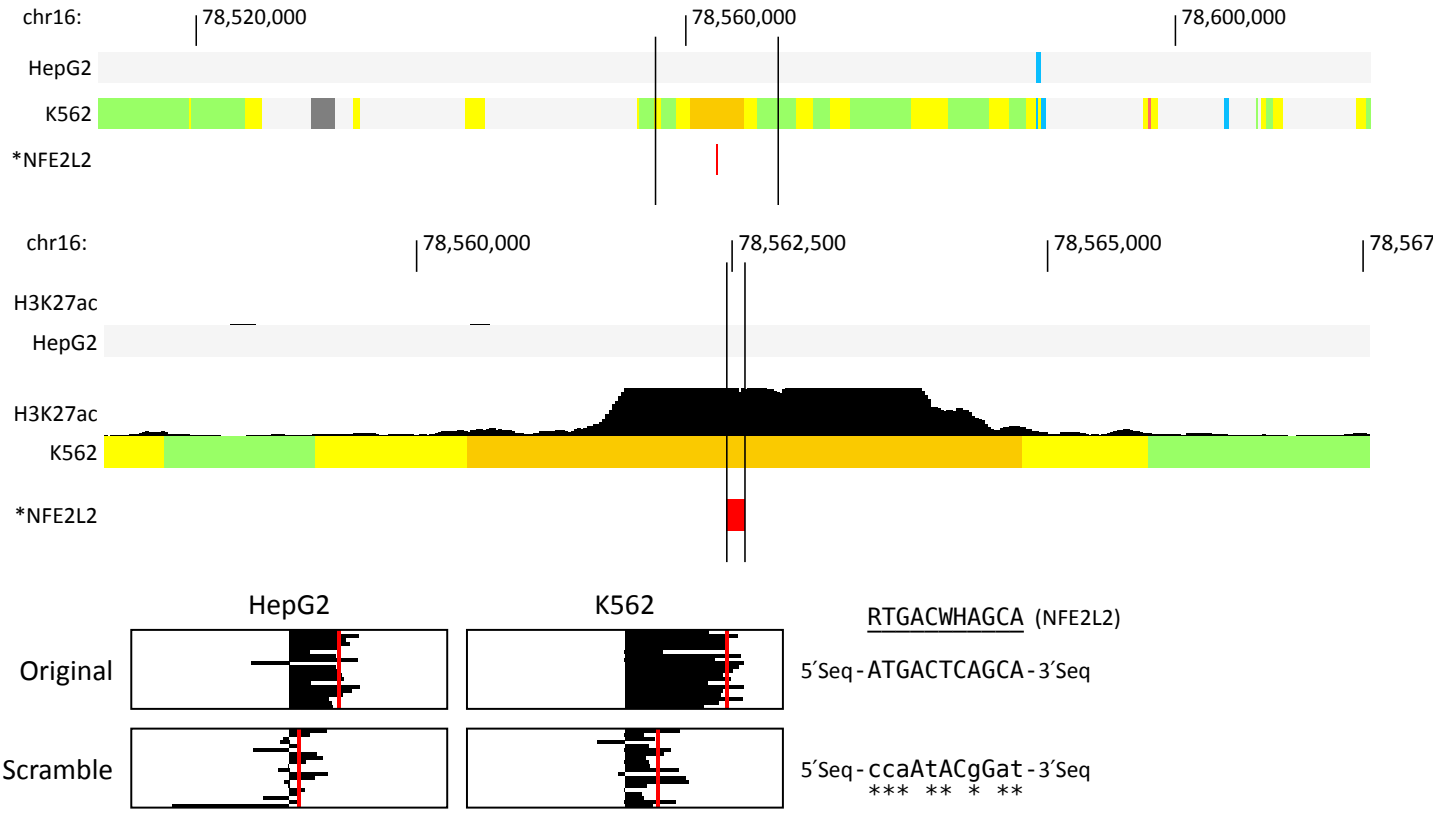
3′Seq = tcggcctccagtccccatttggagcagtgtgtgggttaggacagtctgttctttgttcacgctga

24 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr16 78562525 78562535 - (hg18)



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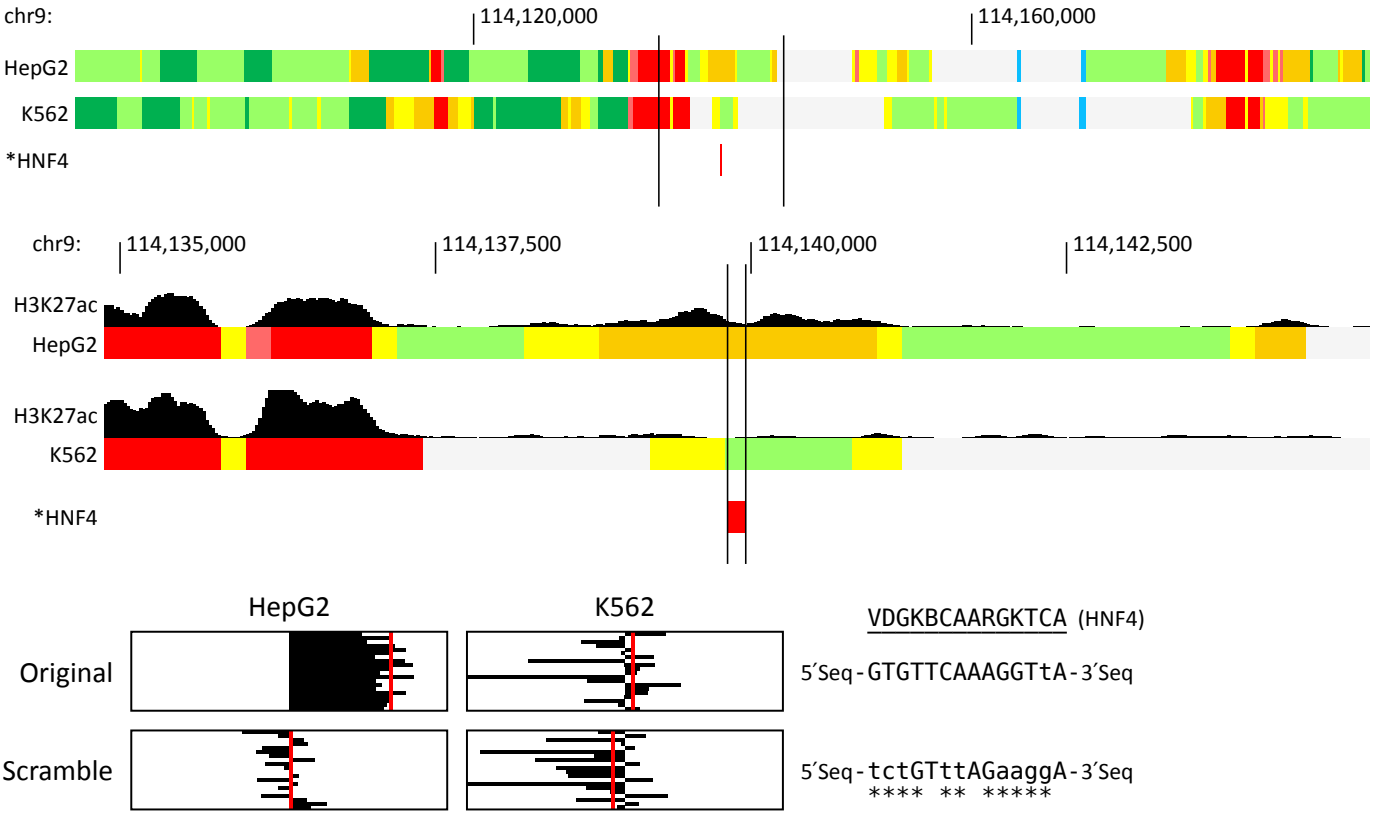
25 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr9 114139880 114139893 - (hg18)



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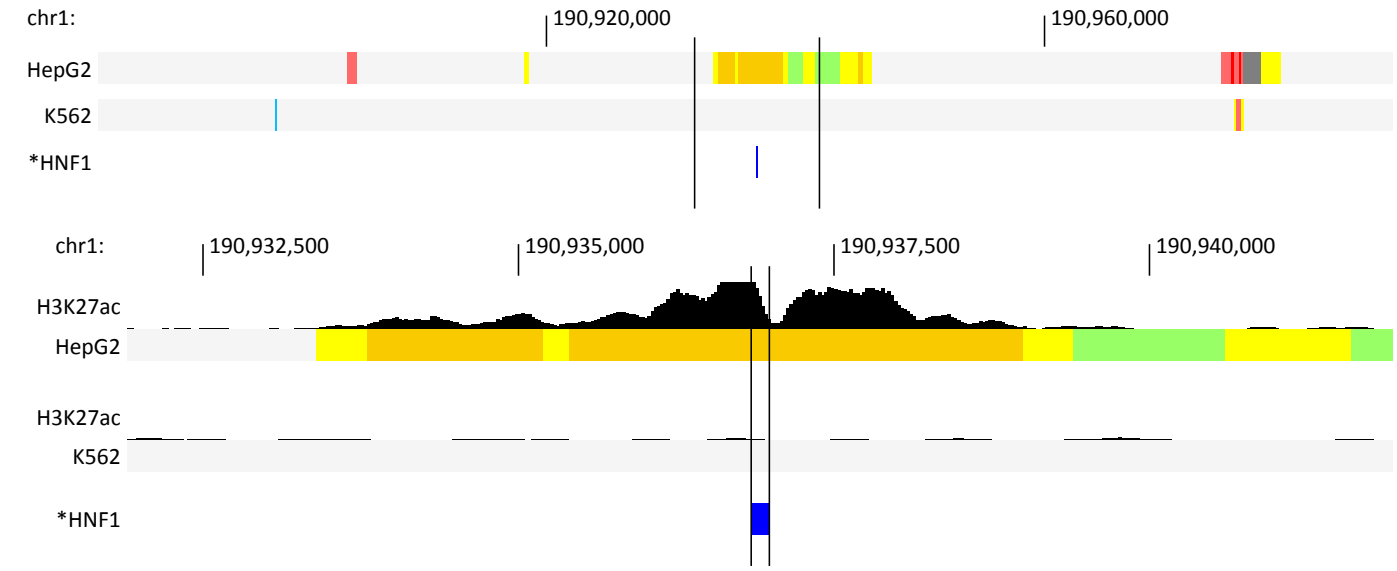
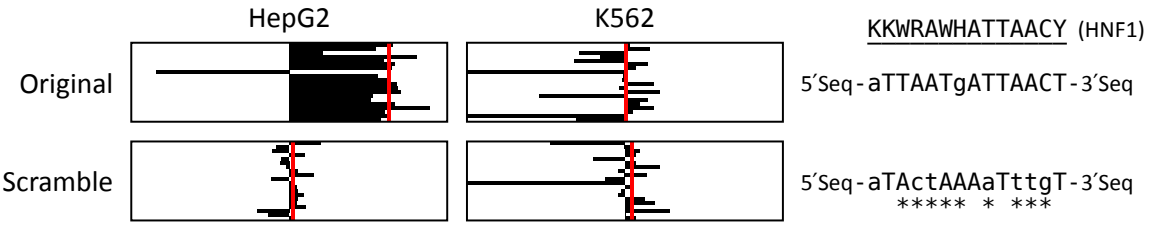
3′Seq = catgttgtccaaagataatcgtgatgggggtggtgtctctcatcagaaaaaggtgtgtcagggga

26 HNF1 in HepG2 enhancer

chr1 190936910 190936923 + (hg18)

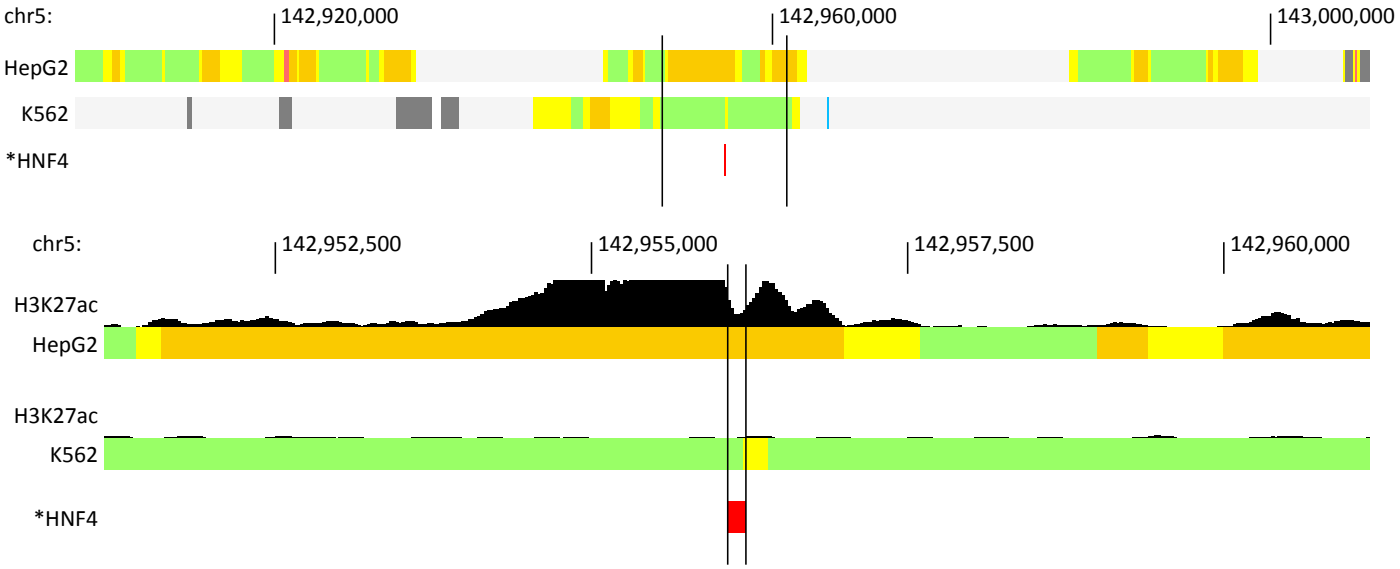


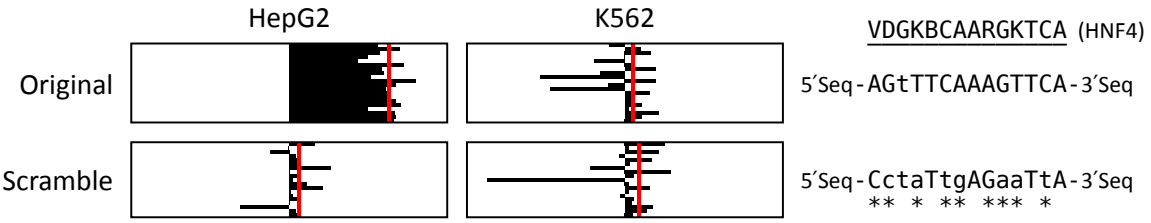


5′Seq = tattcagtttttctggaggaaataaggctaatgctgttttctatggagaaaagcataatttccaa
3′Seq = tgaaaatggatgattcattgggcaagcatttcctataccacagcattacatgttttccaattata

27 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr5 142956143 142956156 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-AGtTTCAAAGTTCA-3′Seq

5′Seq-CctaTtgAGaaTtA-3′Seq

** * ** *** *

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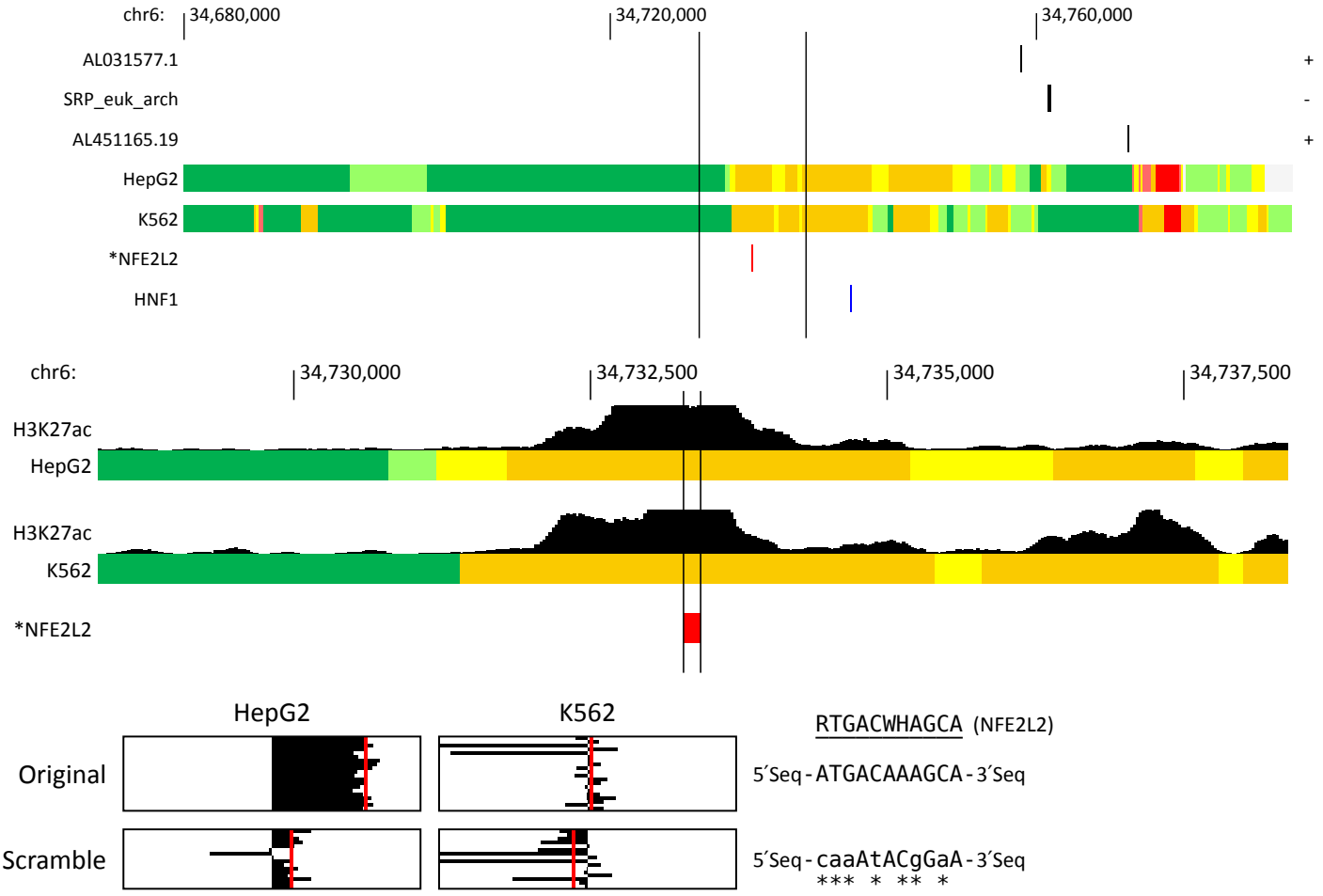
3′Seq = ggaggccccctgagcatgctggatactttcactgatgactcatgagaggtgtacatatttttctc

28 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 34733351 34733361 + (hg18)



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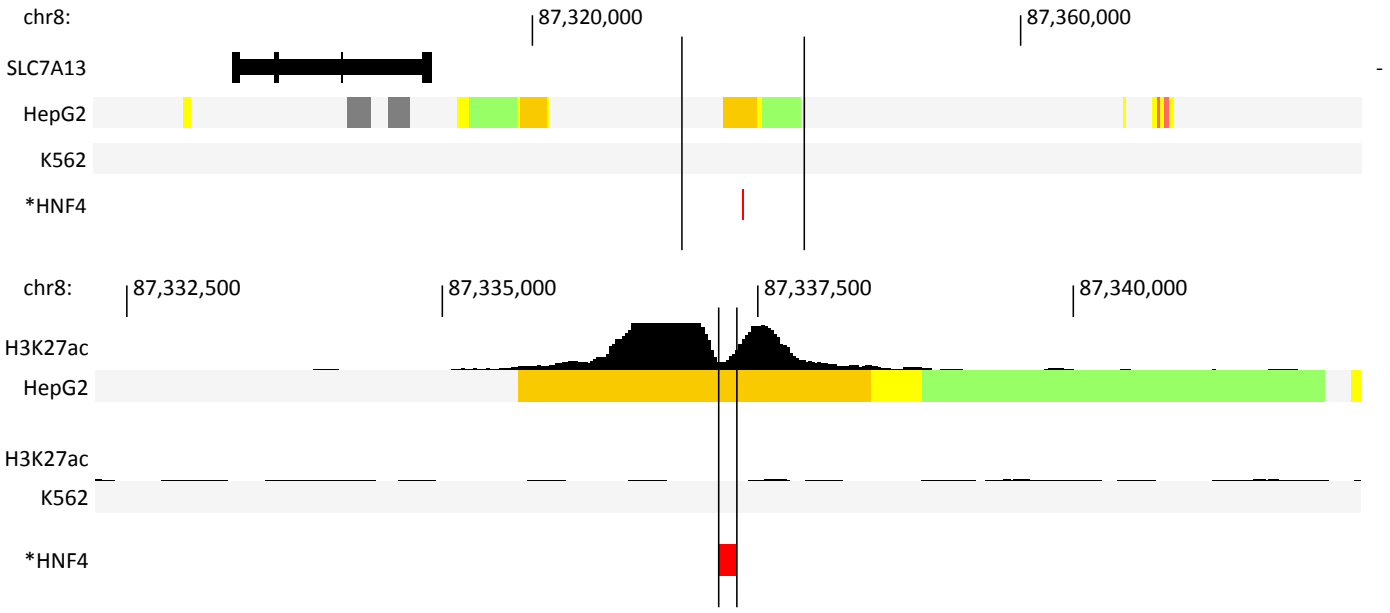
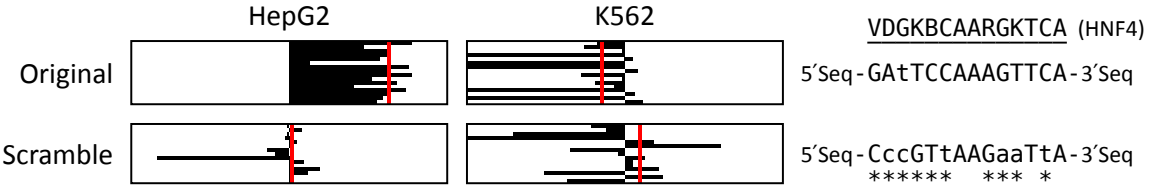
3′Seq = aattcatttcccaagtacaaggcagaaagtggactttagcccgagtgatctaacccatcaagcaggt

29 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr8 87337256 87337269 - (hg18)

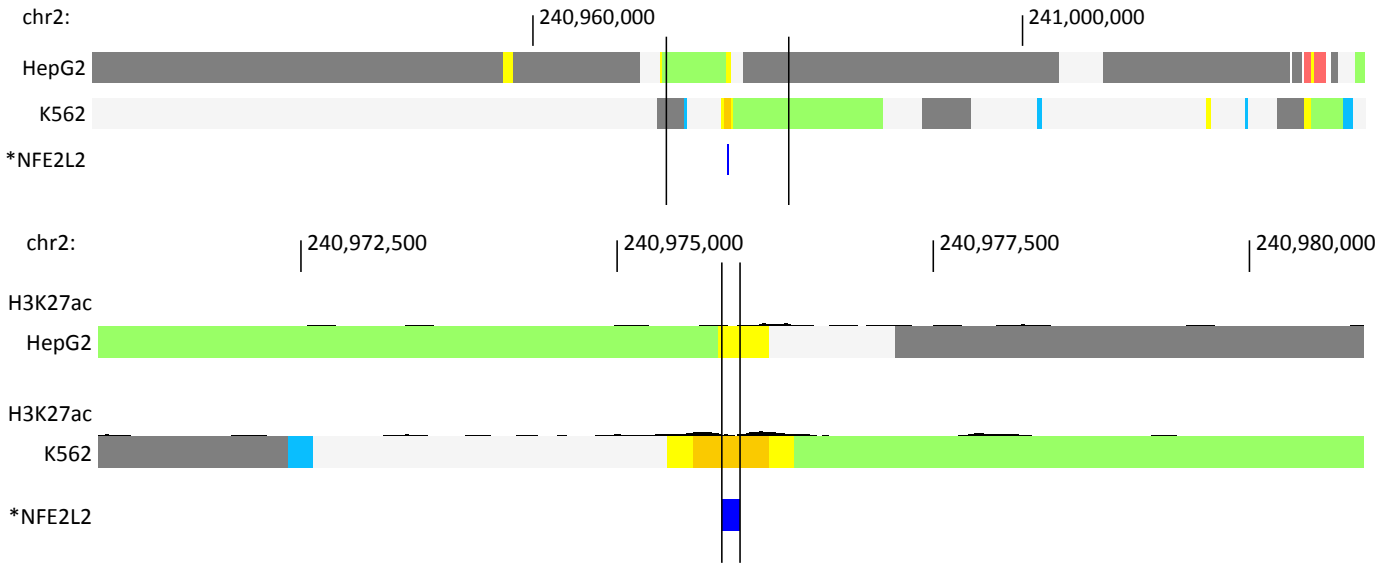




5′Seq = aatctattggaacaatgtatctatgcctgtattagtctgagaatctaaatagacattatttaacca
3′Seq = aggacaacatagttgaaagatctctgattttaaaatcaatgtttgtataagtaaacctttgtgcc

30 NFE2L2 in K562 enhancer

chr2 240975895 240975905 - (hg18)



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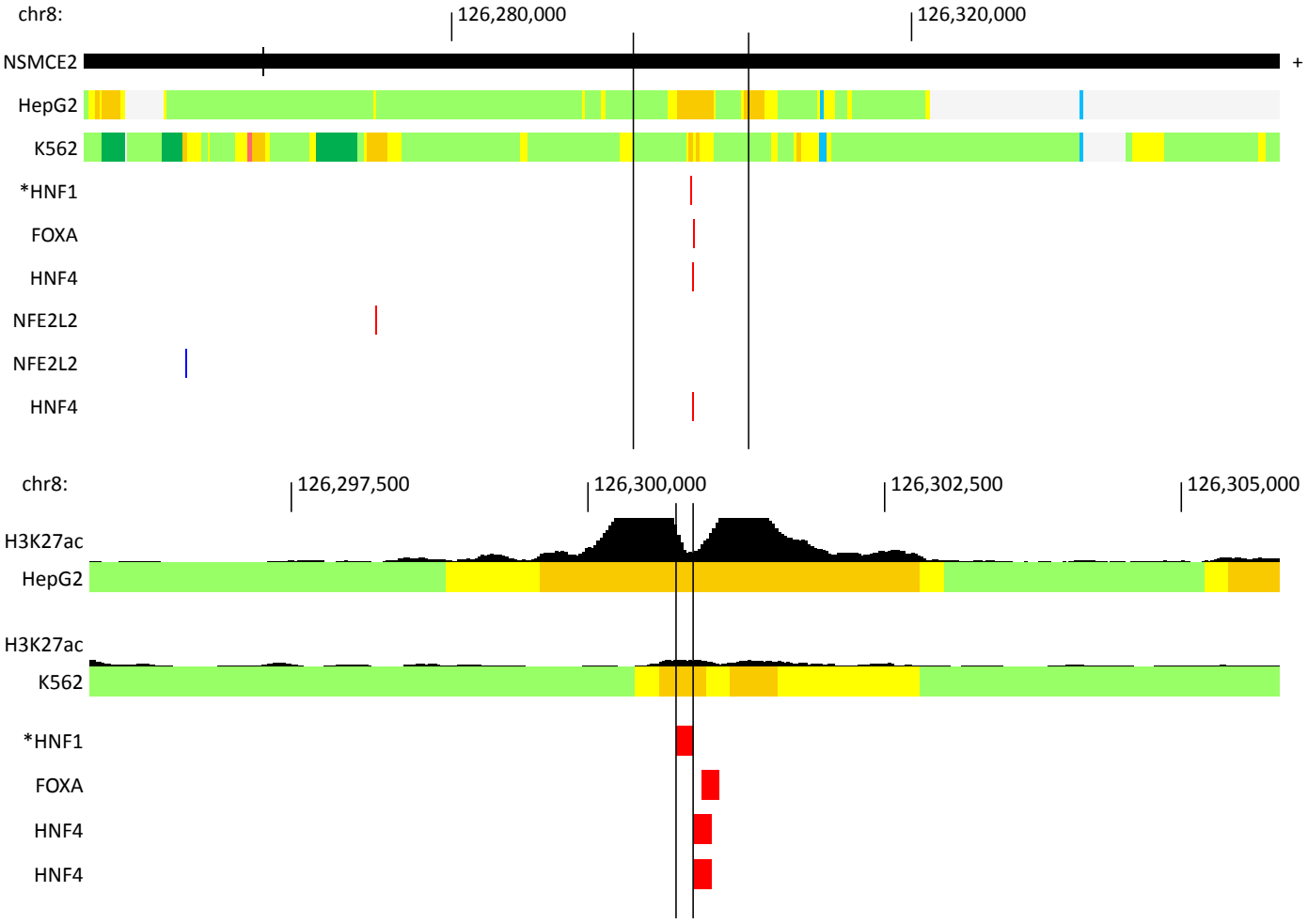
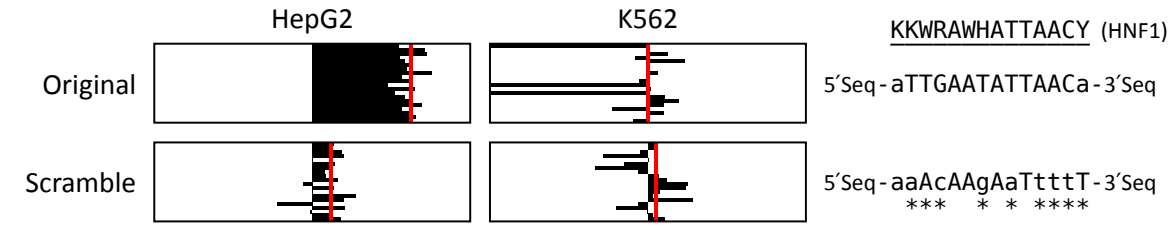
3′Seq = gctggagatgactcaggcactgtcggattgacagctgagccatttgagagcccatgacttggctgtt

31 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr8 126300808 126300821 + (hg18)

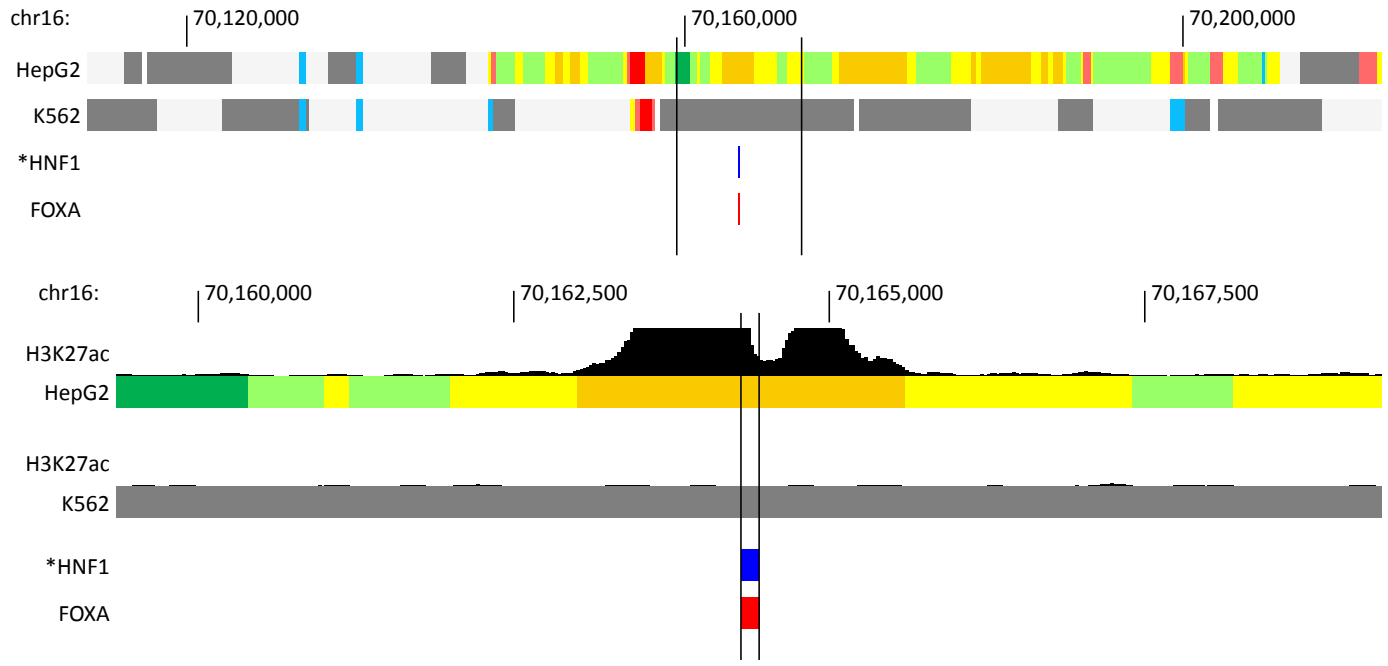


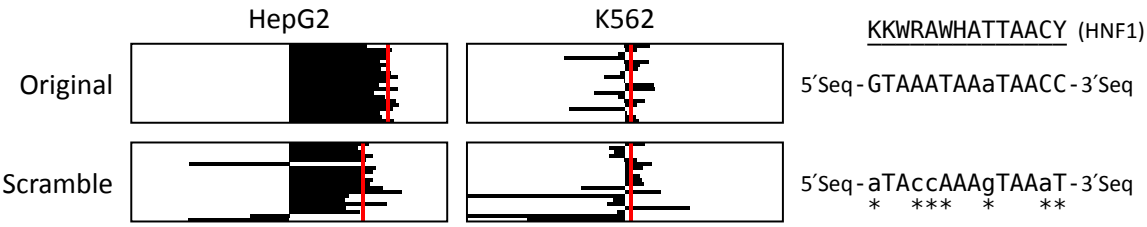


5′Seq = ccataaacactgtgaagaagcaaccatggaaacacttgttttcttgttgggctaaatttactctgg
3′Seq = cagtgcctggcagtactttaaaagcaaaaatagcttaagtgtgattcactctgagtcatttactg

32 HNF1 in HepG2 enhancer

chr16 70164366 70164379 - (hg18)

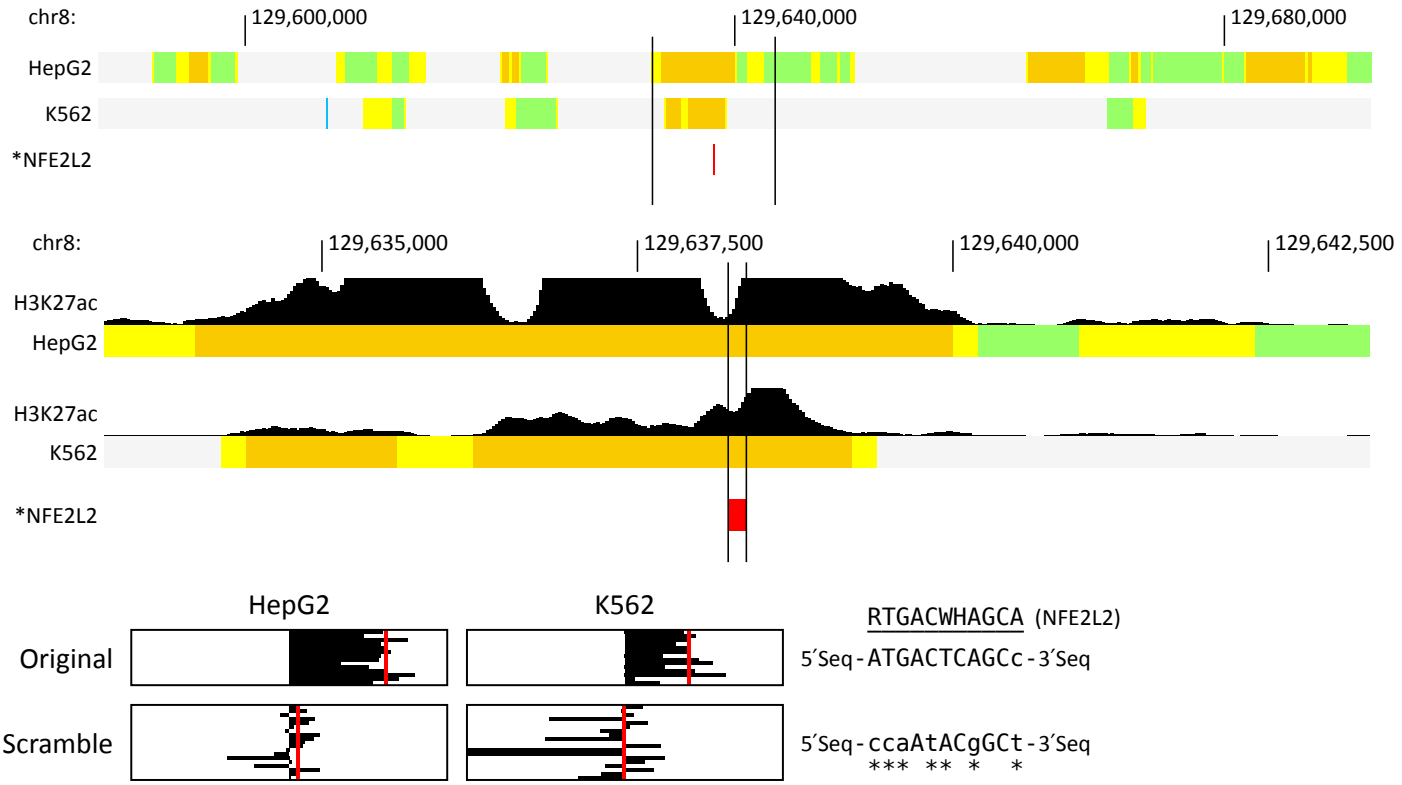




5′Seq = ctaacataatgtgtgtctgtcacctgtatgtcagcgaagagccaggcttcaaatctctggccaaaa
3′Seq = aagcgaaaaaggtccaaggccagcatgctctctcatggaagtctgctgagtcacagccaacctat

33 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr8 129638286 129638296 + (hg18)



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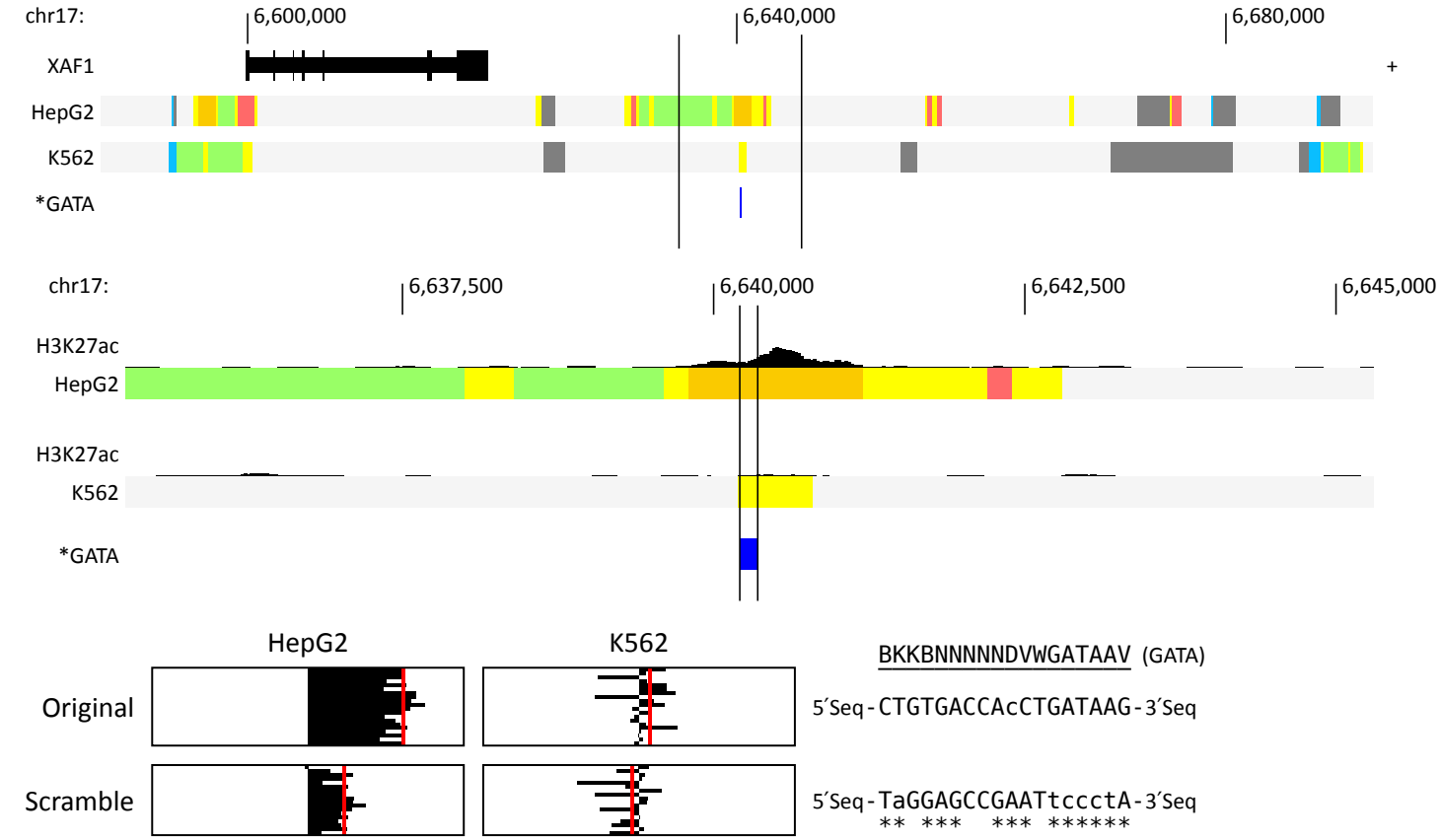
3′Seq = accctccccacggggtgagaggaagcagtggtggaaggccagcacttgttcctacctccgcatgtac

34 GATA in HepG2 enhancer

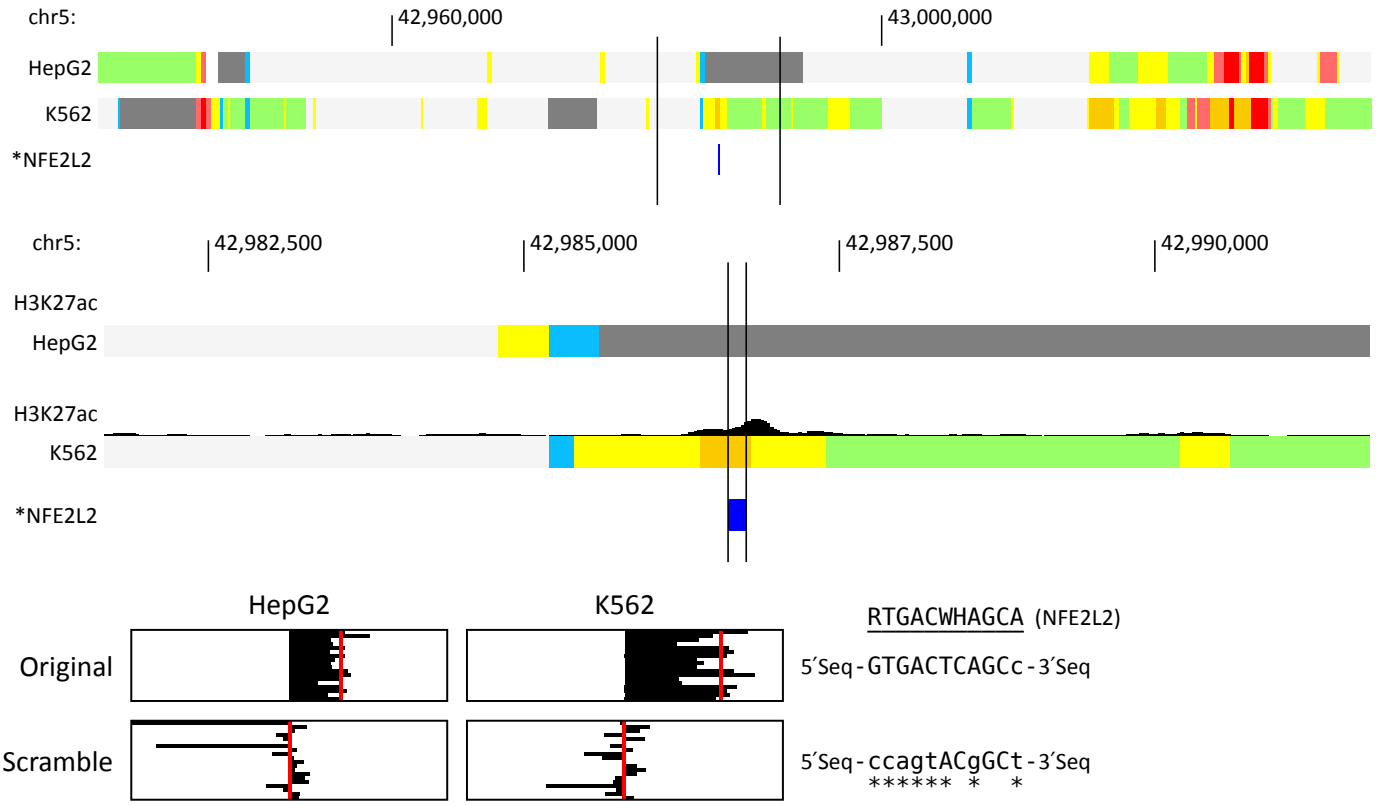
chr17 6640274 6640291 - (hg18)



5′Seq = cactttaagtccattgactacaattctagcttccaaaggtcactctgctactgggatctagttt
3′Seq = gatgagctaacctttaactgagaccagatctgaagtaaattaagtaaacattctttgttaatc

35 NFE2L2 in K562 enhancer

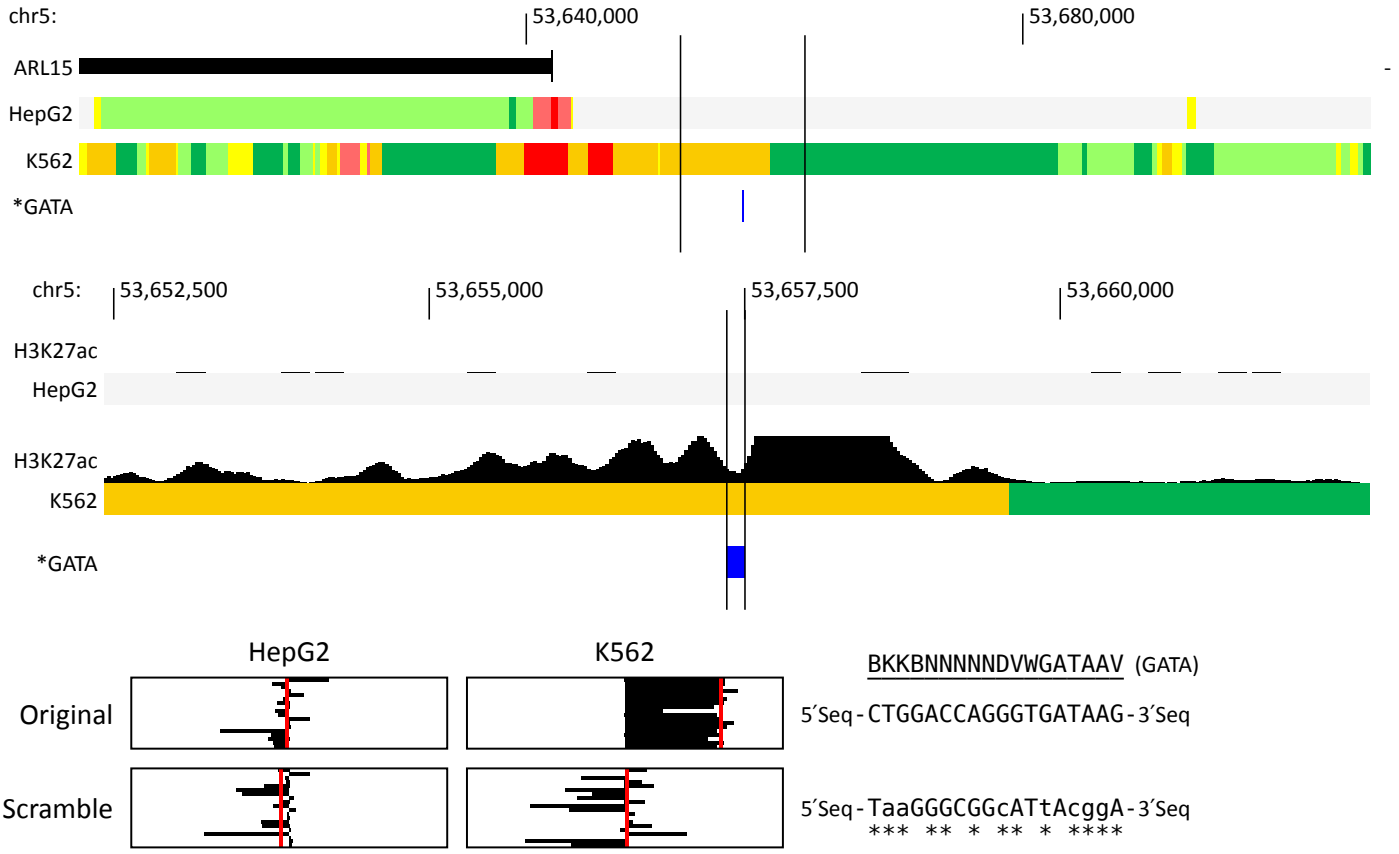
chr5 42986685 42986695 + (hg18)



5′Seq = cggggttgttaggattagaattccgaggctacaggaaacccggaattgctgagatgtgagtcacagg
3′Seq = tcgttacgatgaaacagtaacttcctactacctagaaatcgcagccagggccagaccggtgtttgtc

36 GATA in K562 enhancer

chr5 53657422 53657439 + (hg18)



5′Seq = cctagaagcagatatttcagttaaaaggcattgaggcttatctaagaatgcacagggtgaggtt
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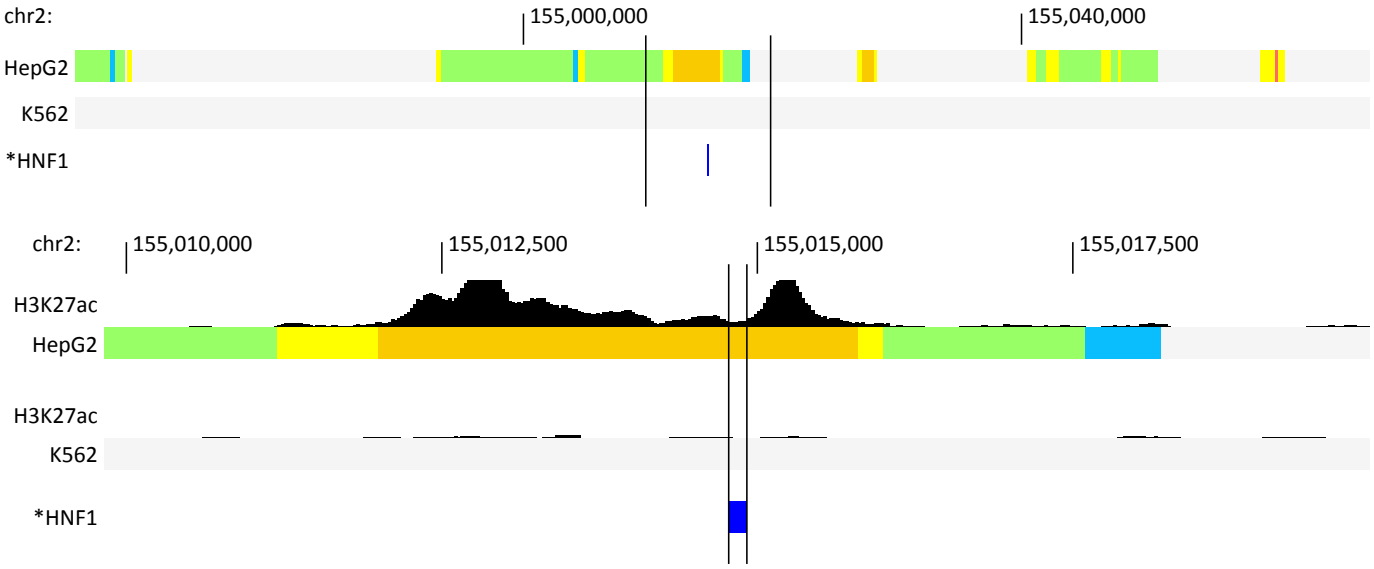
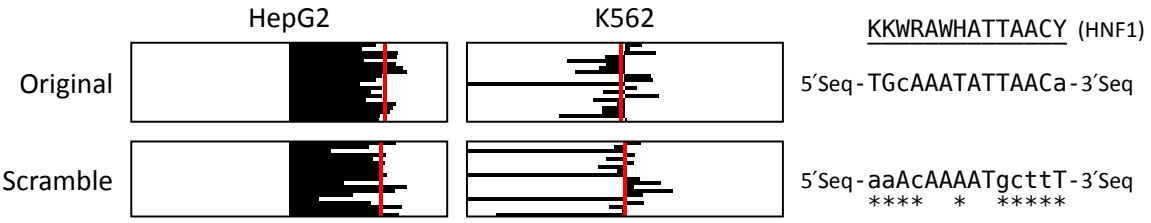
37 HNF1 in HepG2 enhancer

chr2 155014839 155014852 - (hg18)





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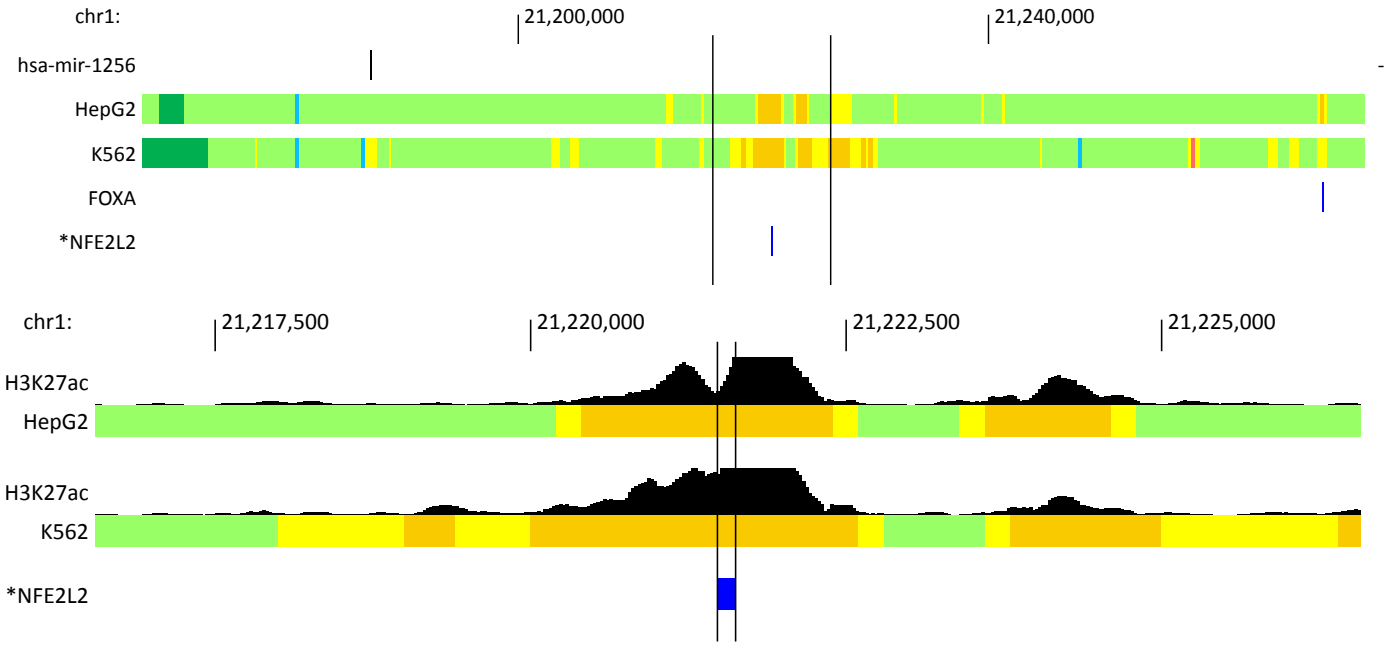
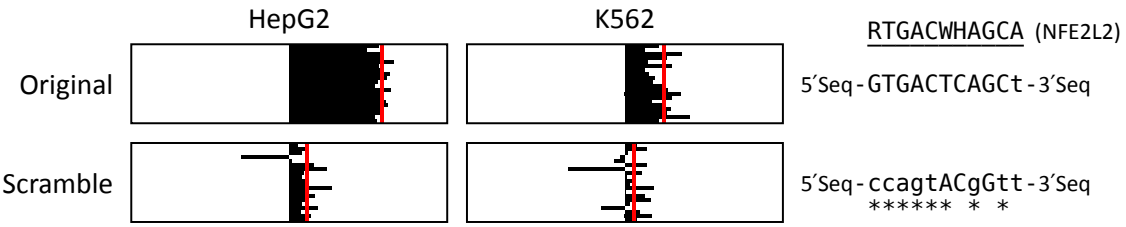
3′Seq = agcttttgcaaaagcttagttttcttaggcatgtgttattcagtaaccatttggtaaacatgcaa

38 NFE2L2 in K562 enhancer

chr1 21221547 21221557 - (hg18)

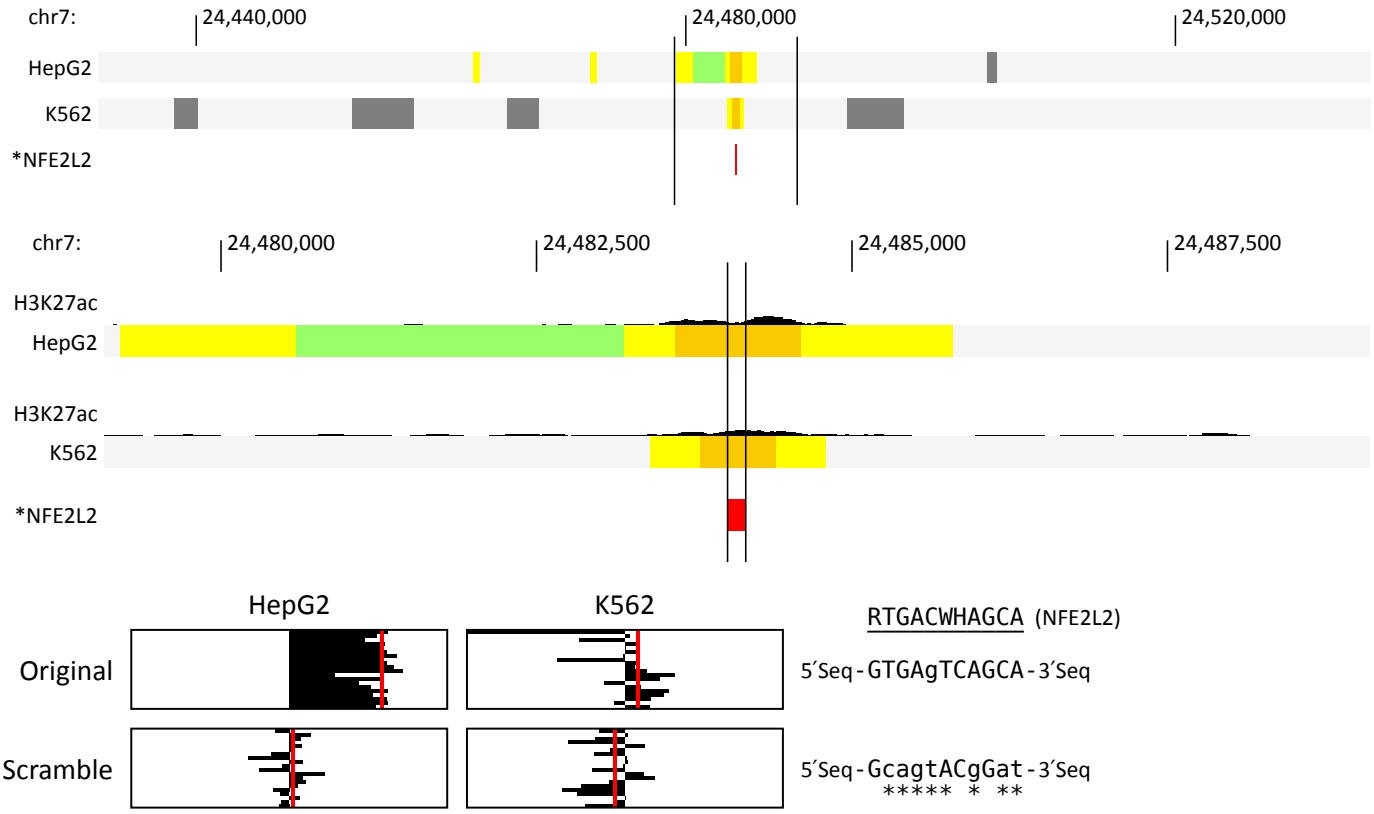




5′Seq = tgatgttgtggtgaggtagaaatttccactgtgttactgtgaacaggaagtaaagggctaatggtcg
3′Seq = gttttctgaacctgtctcatatgattcagtgtgcatgatgtctgtttattctcgacagagtaagtac

39 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 24484081 24484091 - (hg18)



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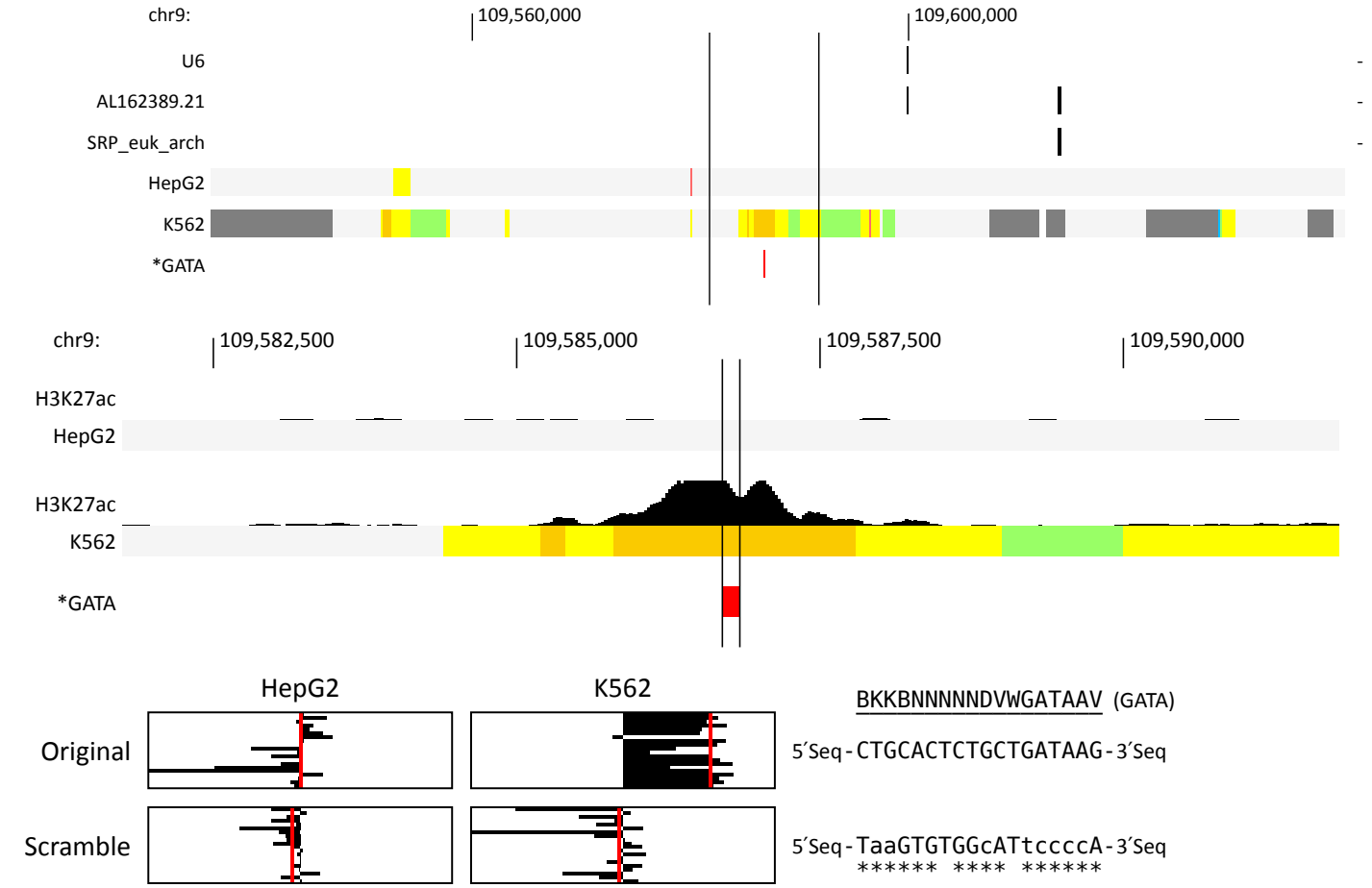
3′Seq = tttctgtgtttgcttaacttctaaggttactgaagcactgaggggacatagttggtccaaagtcac

40 GATA in K562 enhancer (conserved at 60% confidence)

chr9 109586759 109586776 - (hg18)



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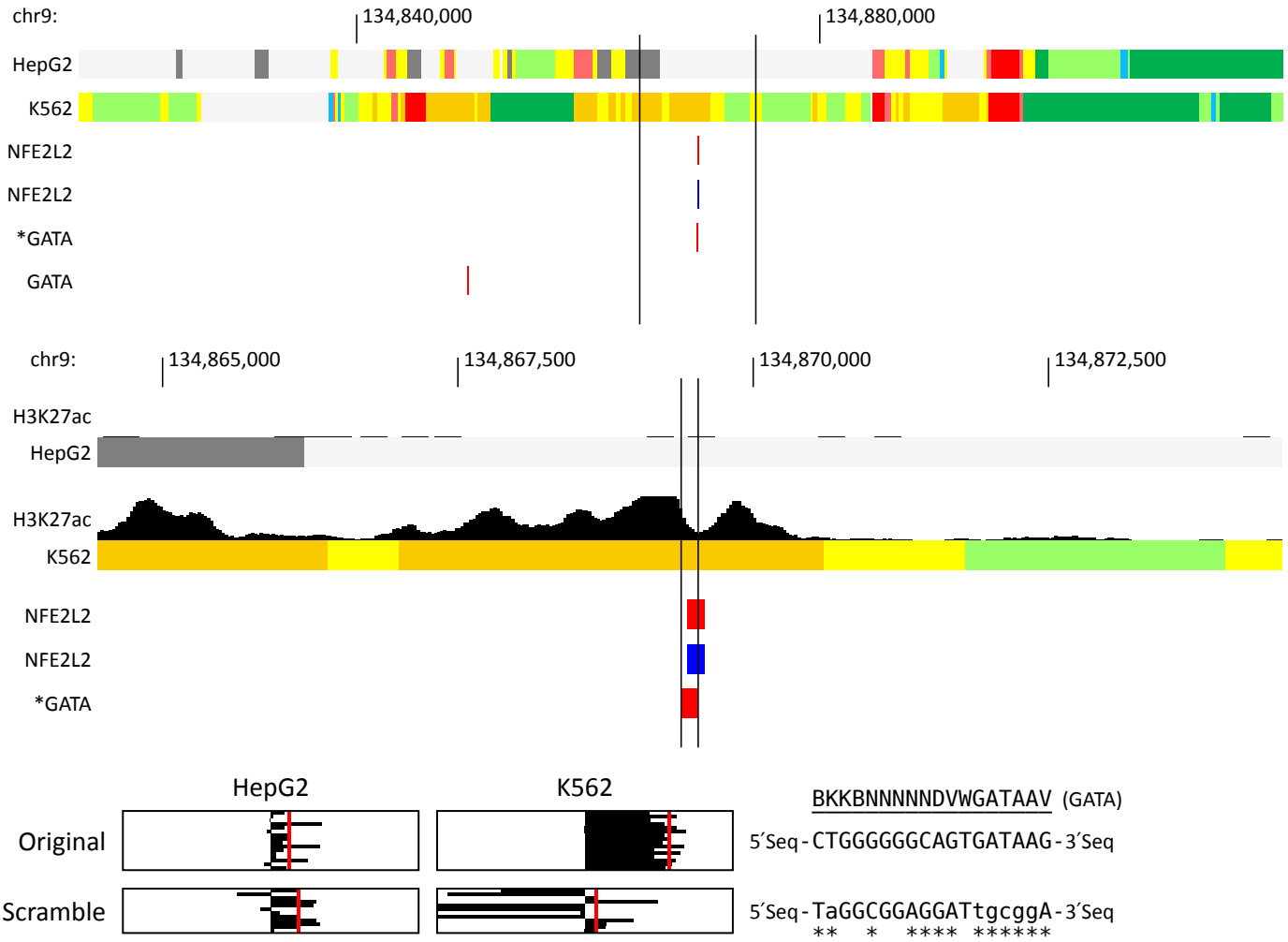
41 GATA in K562 enhancer (conserved at 60% confidence)

chr9 134869454 134869471 - (hg18)



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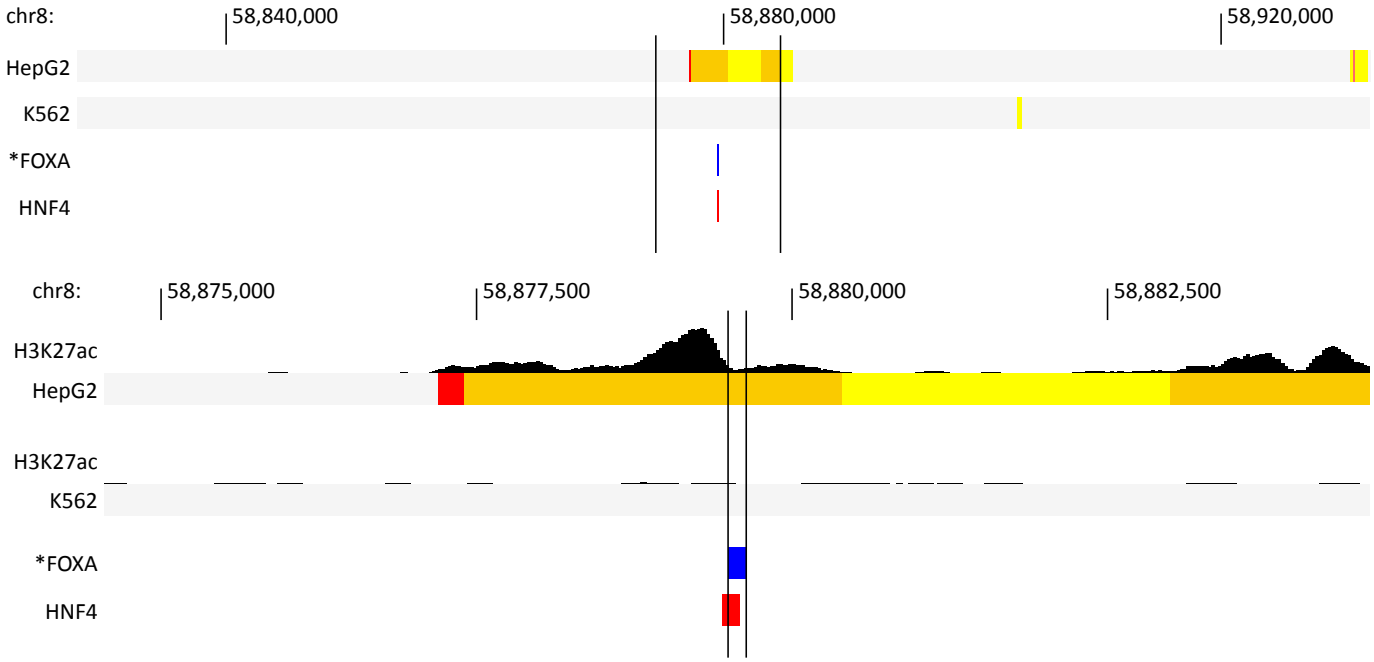
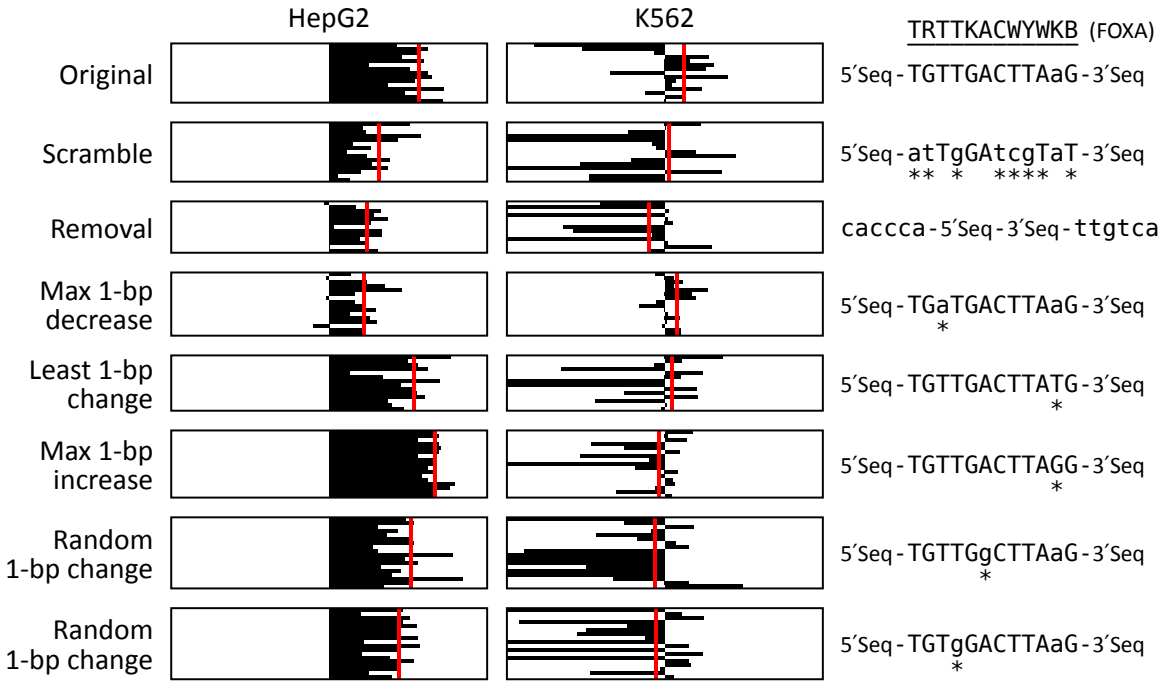
3′Seq = tctcaggccgggctgaggggcgctggggagccaccgggaggaaacccttaaccgtgacggttt

42 FOXA in HepG2 enhancer

chr8 58879560 58879571 - (hg18)





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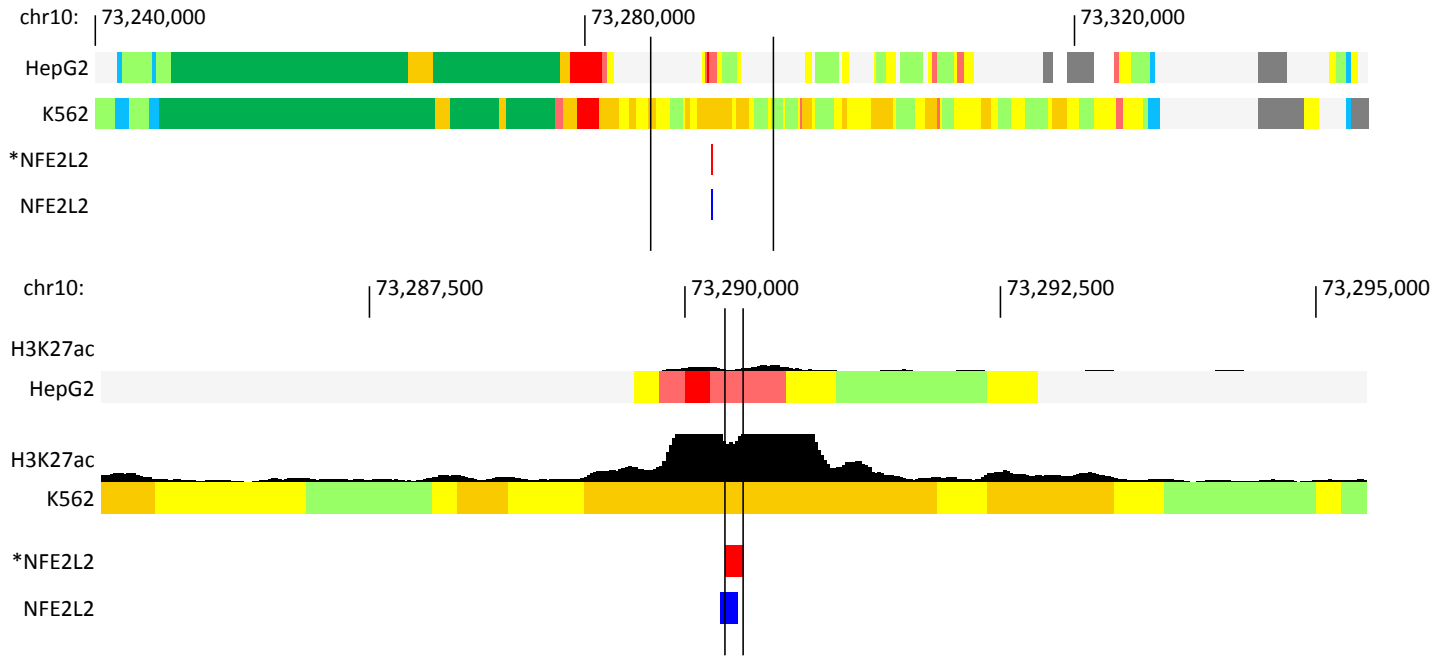
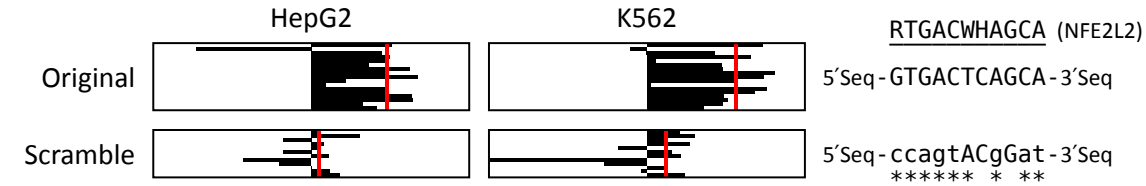
3′Seq = gcagatcattttgtttaaccatatatatttatttaaaatgaactttggactcaaataatgcctatg

43 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr10 73290384 73290394 - (hg18)





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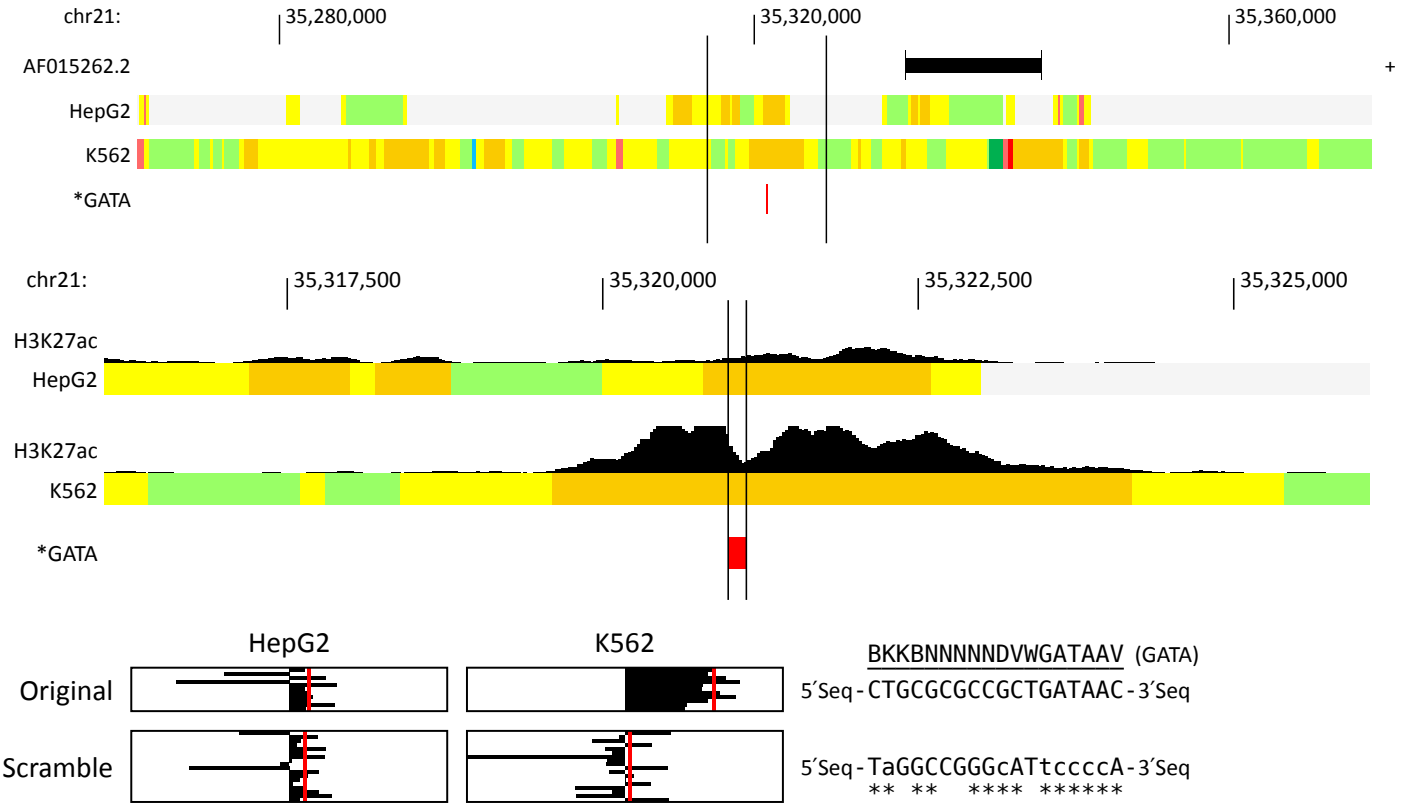
3′Seq = gctcccggcctgccccactgccctgctgctgctgactcaccagctcatgcaaggccttcttggcagc

44 GATA in K562 enhancer (conserved at 60% confidence)

chr21 35321058 35321075 - (hg18)



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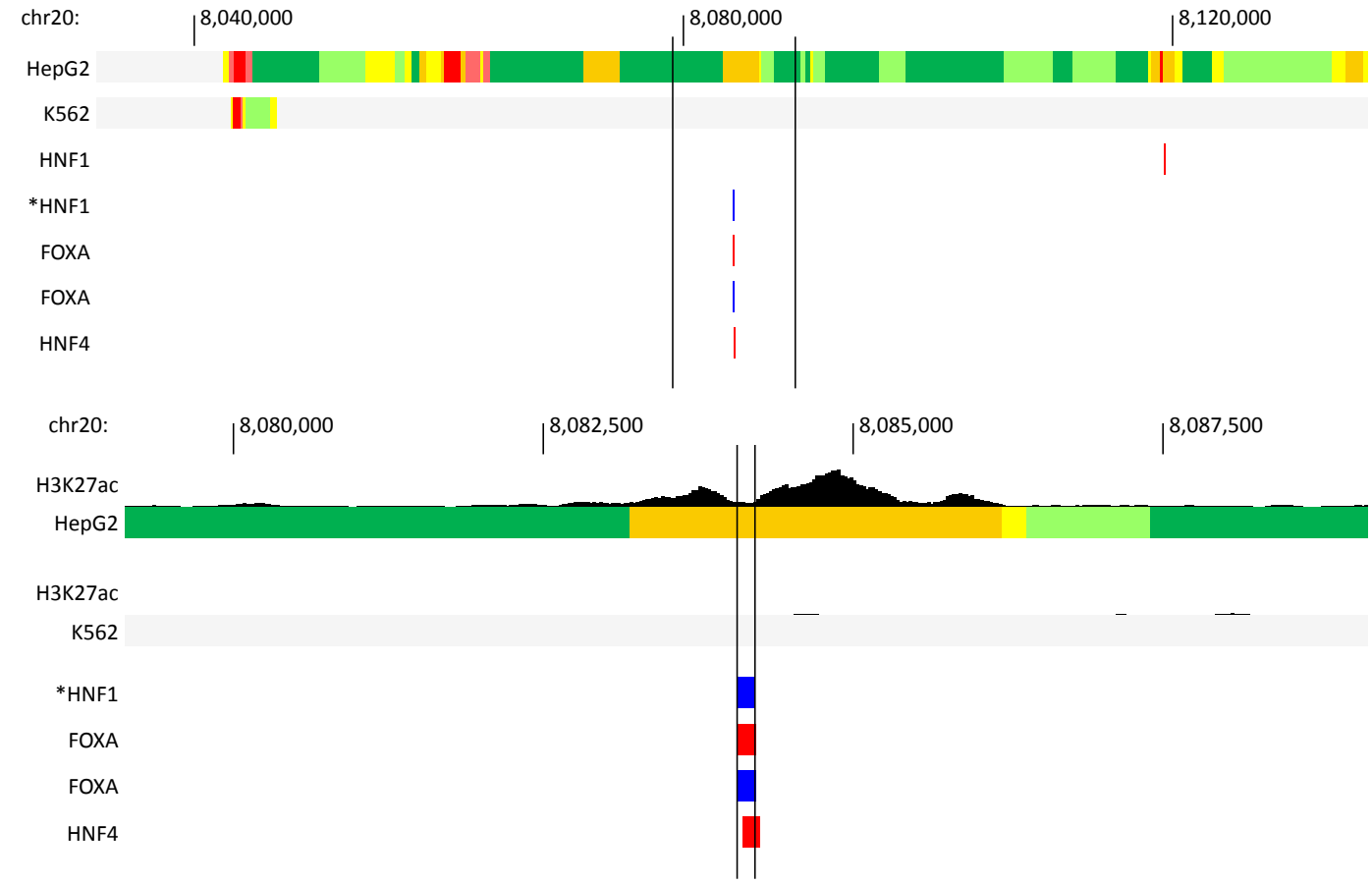
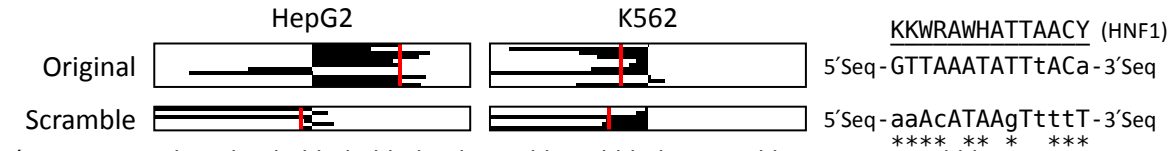
3′Seq = gcgcgggcaggcagcttttgcagaagttccgtcgctgcggcgcgctgcgcaccagagctgcgc

45 HNF1 in HepG2 enhancer

chr20 8084130 8084143 + (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GTTAAATATTtACa-3′Seq

5′Seq-aaAcATAAgTtttT-3′Seq

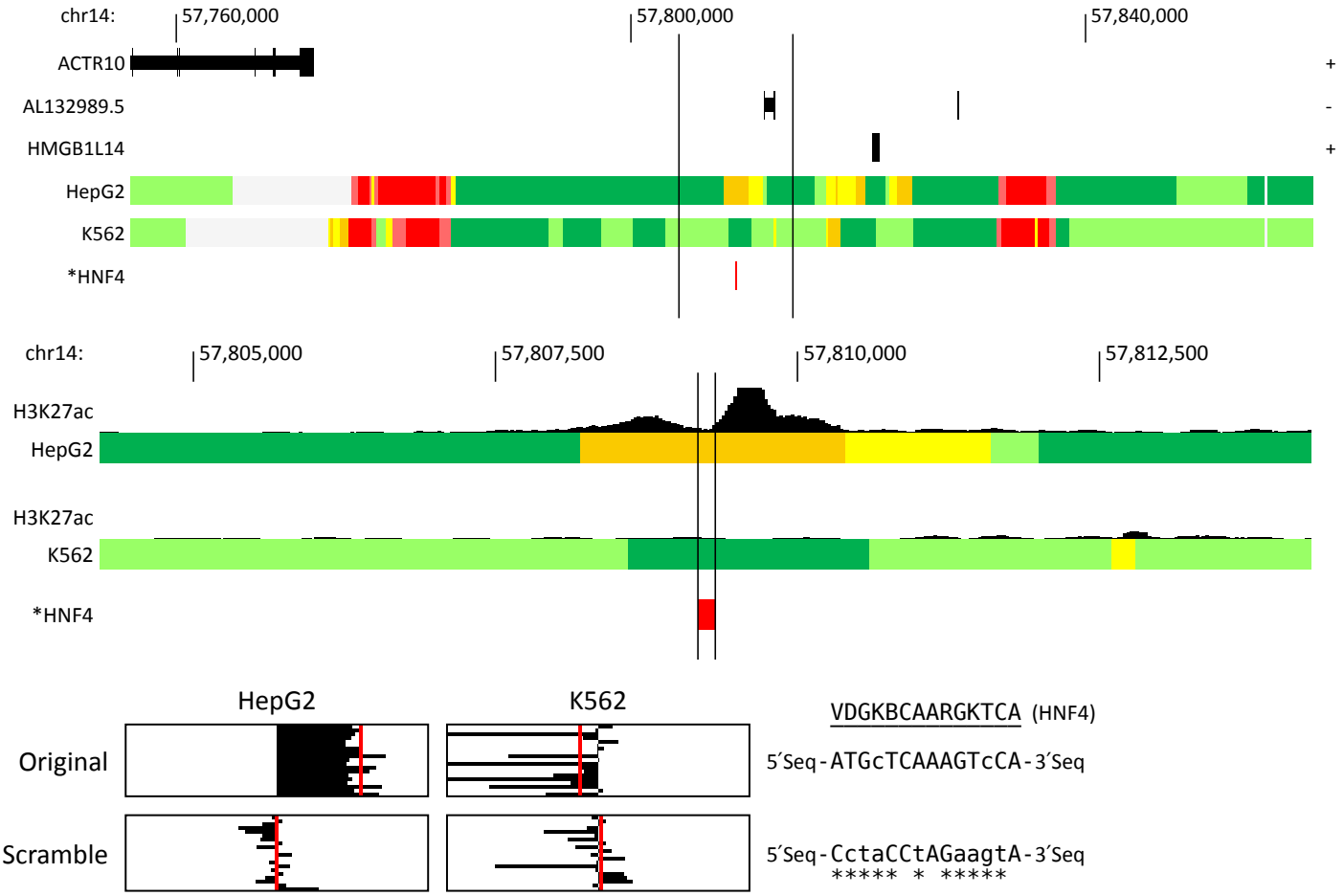
**** ** * ***

5′Seq = aaccatagatagtcttctcttatgataaccttaaatttctacagagttcaaaagcaaagtttaaaa

3′Seq = taagtcacagtaacatttttcagcatgagtccagagttcaaaaatattttgaatgatgcatcata

46 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 57809242 57809255 - (hg18)



VDGKBCAARGKTCA (HNF4)

5′Seq-ATGcTCAAAGTcCA-3′Seq

5′Seq-CctaCCtAGaagtA-3′Seq

***** * *****

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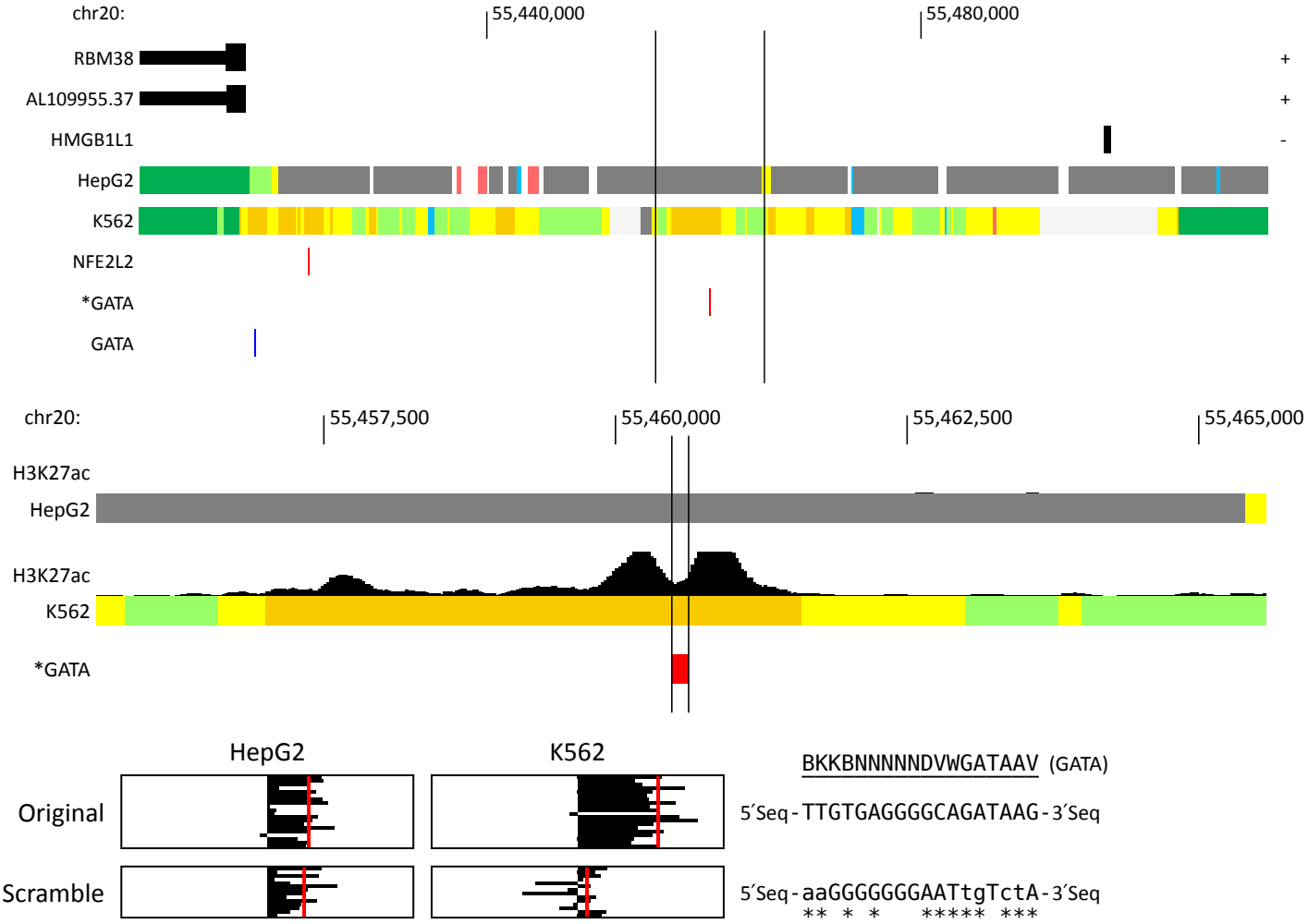
3′Seq = gcgataccctgcacccaaattcagtggctagattaccttcttaggaaagcacaacacttcaatgg

47 GATA in K562 enhancer (conserved at 60% confidence)

chr20 55460547 55460564 - (hg18)



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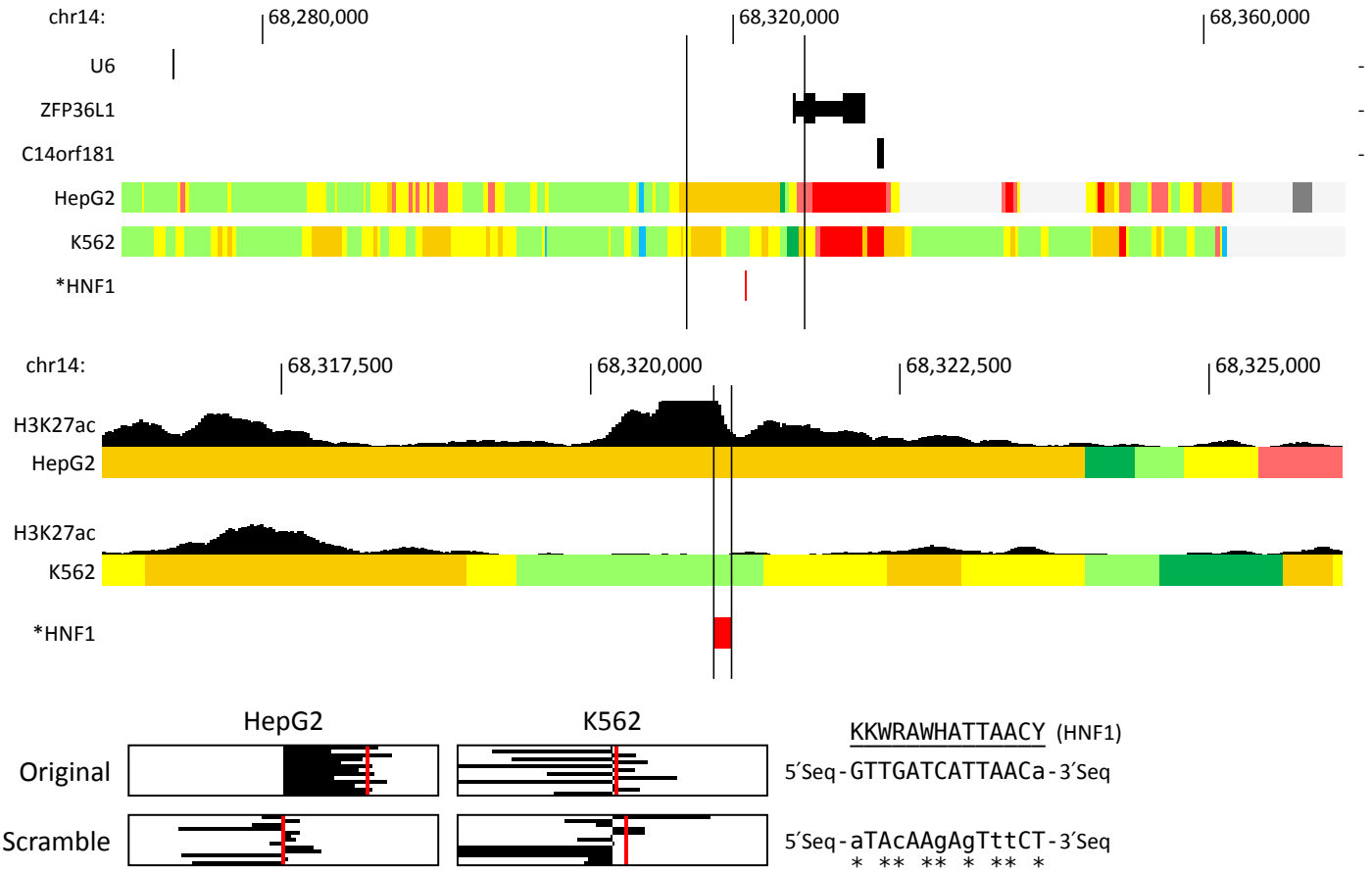
3′Seq = aatgtggtttccaaagttccggttcctcttgagcagcggaagcgctcccctgtgacctctgca

48 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr14 68321061 68321074 + (hg18)



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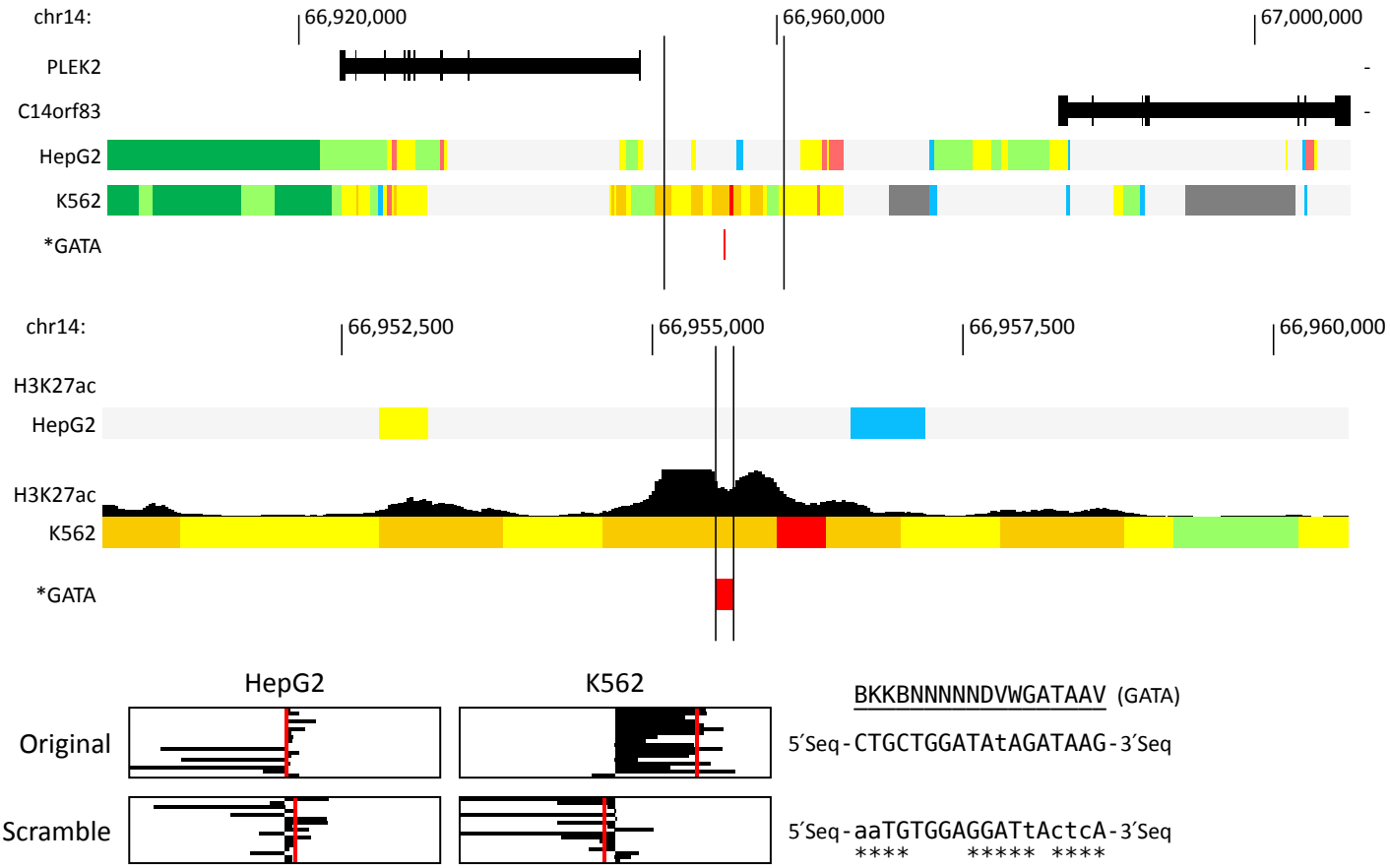
3′Seq = gaagccacctcatggcaggcagagaaggggaaagtccaaggggatggcctacccccctcctcccag

49 GATA in K562 enhancer (conserved at 60% confidence)

chr14 66955574 66955591 + (hg18)



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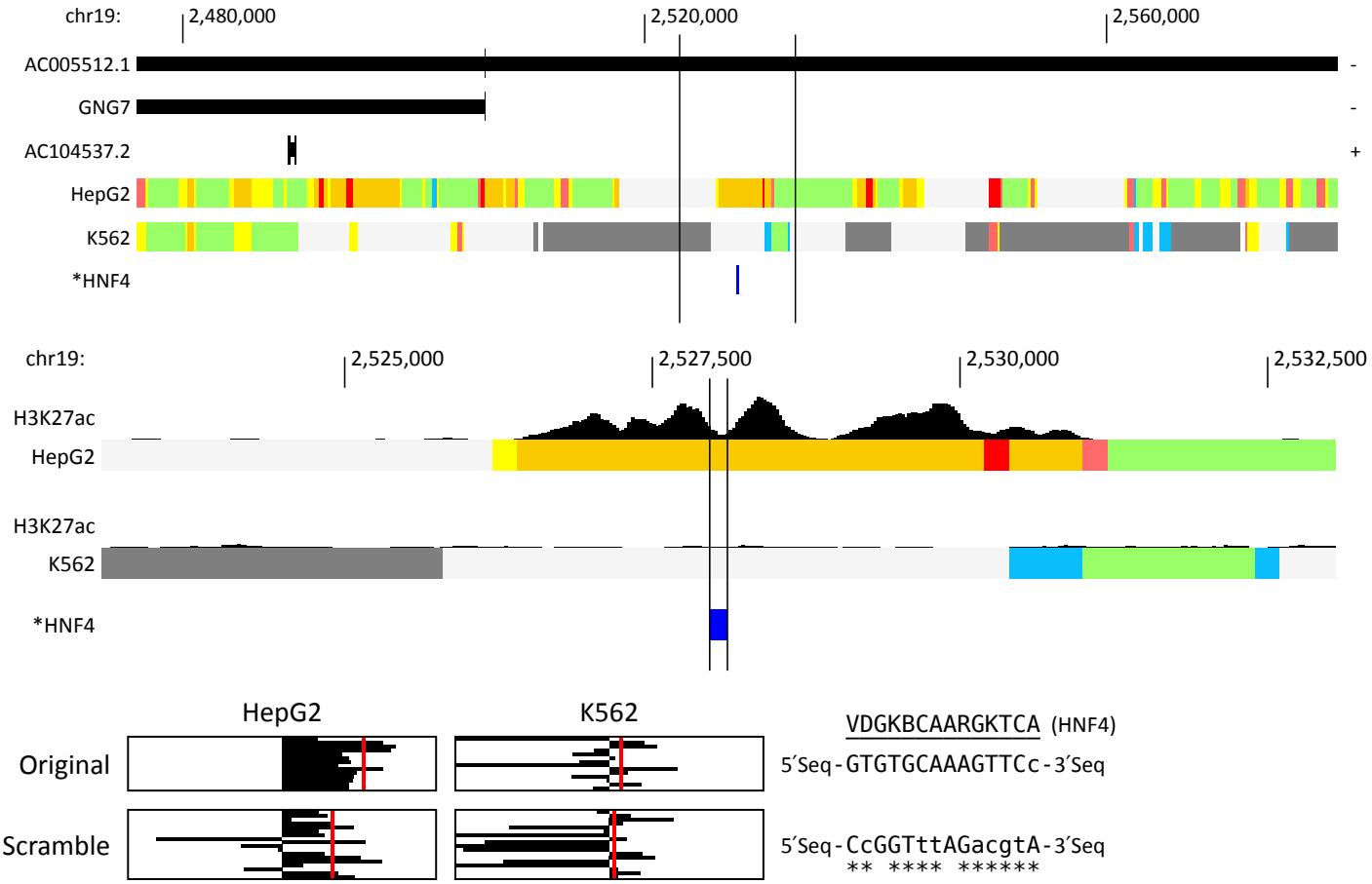
3′Seq = agccccttccctcgcctccttccattctgctttcctcactgctttccctaaatgttattcctg

50 HNF4 in HepG2 enhancer

chr19 2528032 2528045 + (hg18)



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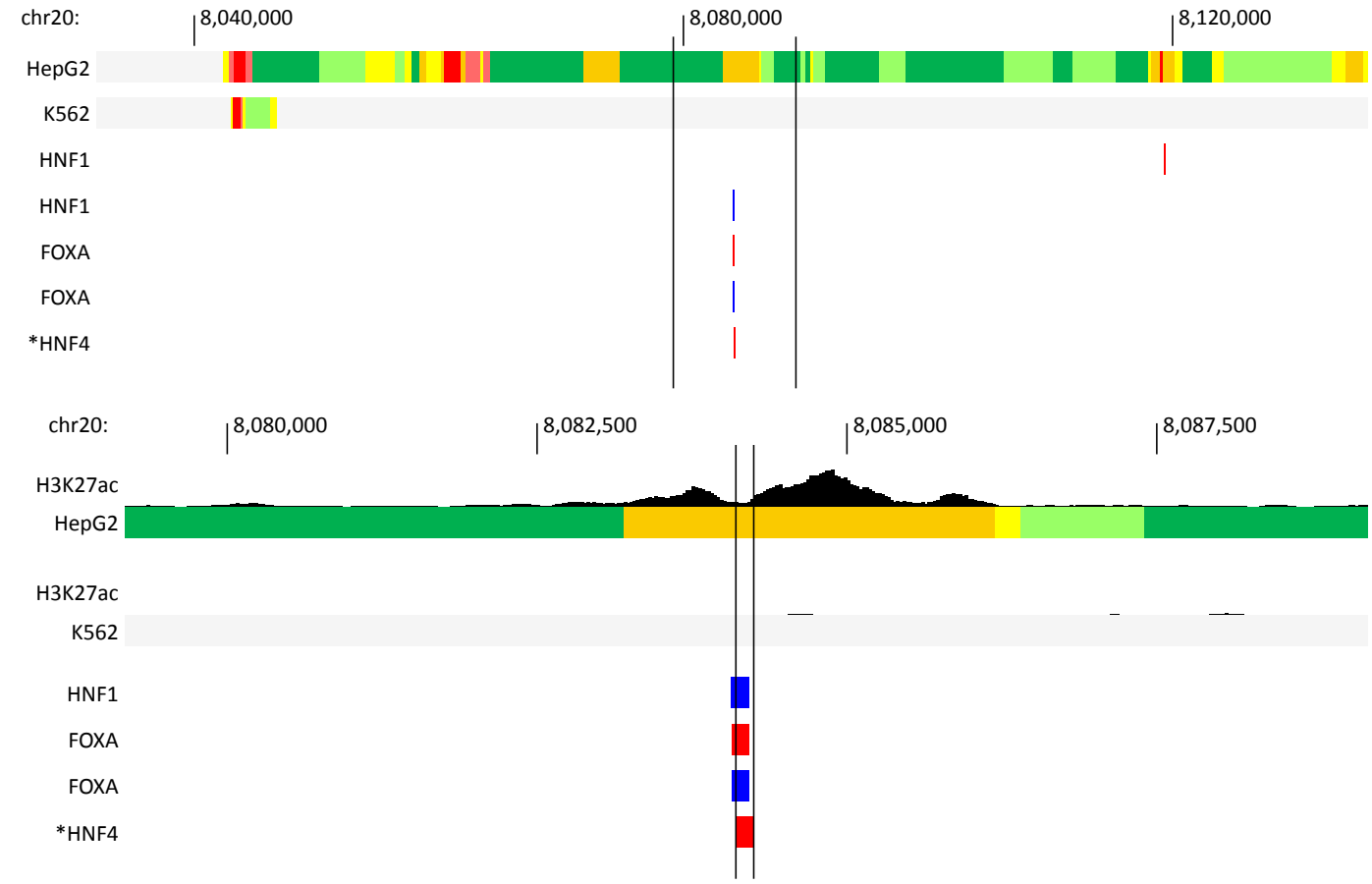
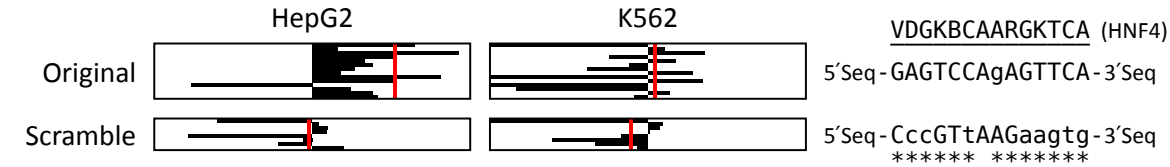
51 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr20 8084170 8084183 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-GAGTCCAgAGTTCA-3′Seq

5′Seq-CccGTtAAGaagtg-3′Seq

****** *******

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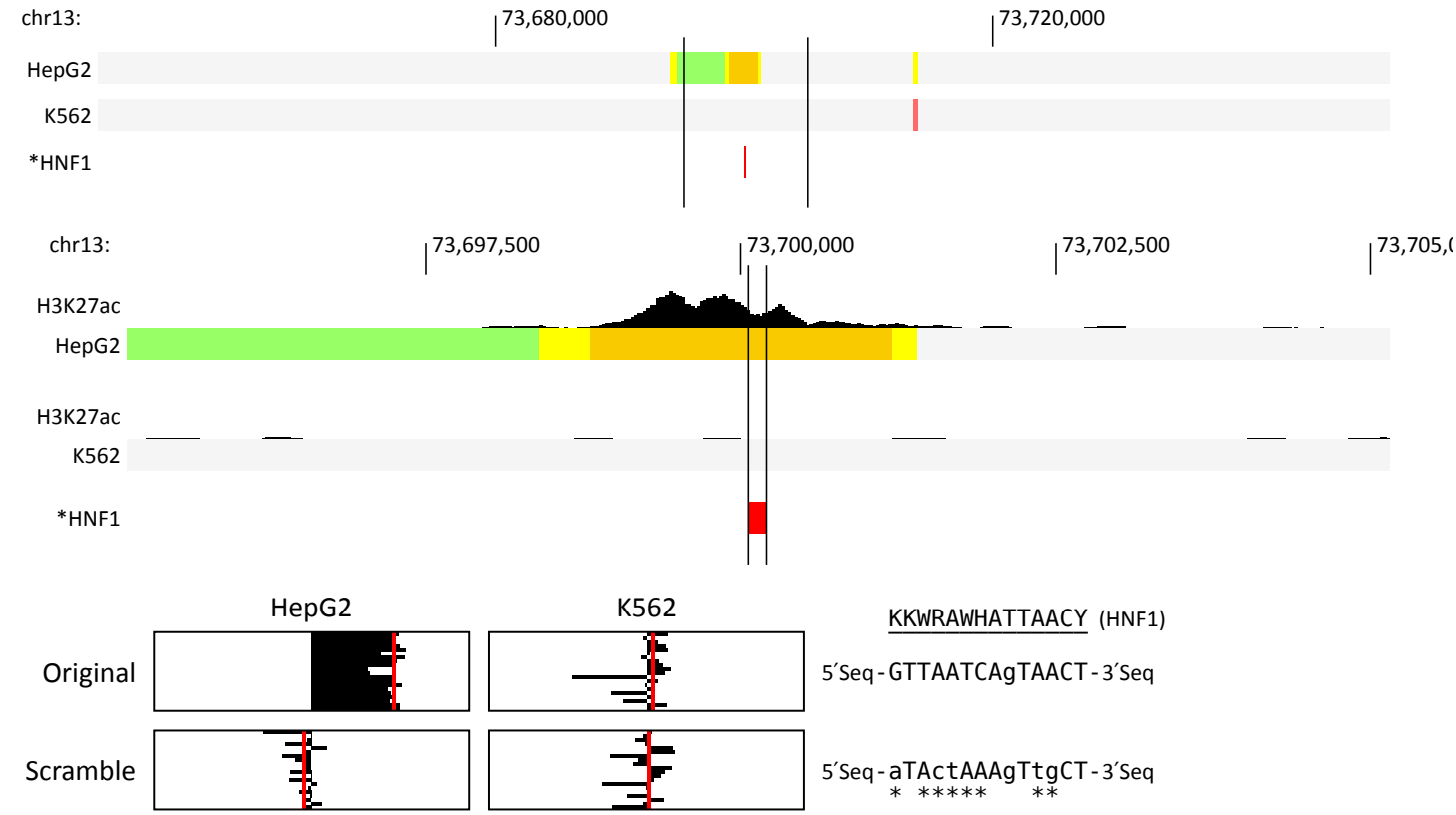
52 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr13 73700128 73700141 + (hg18)



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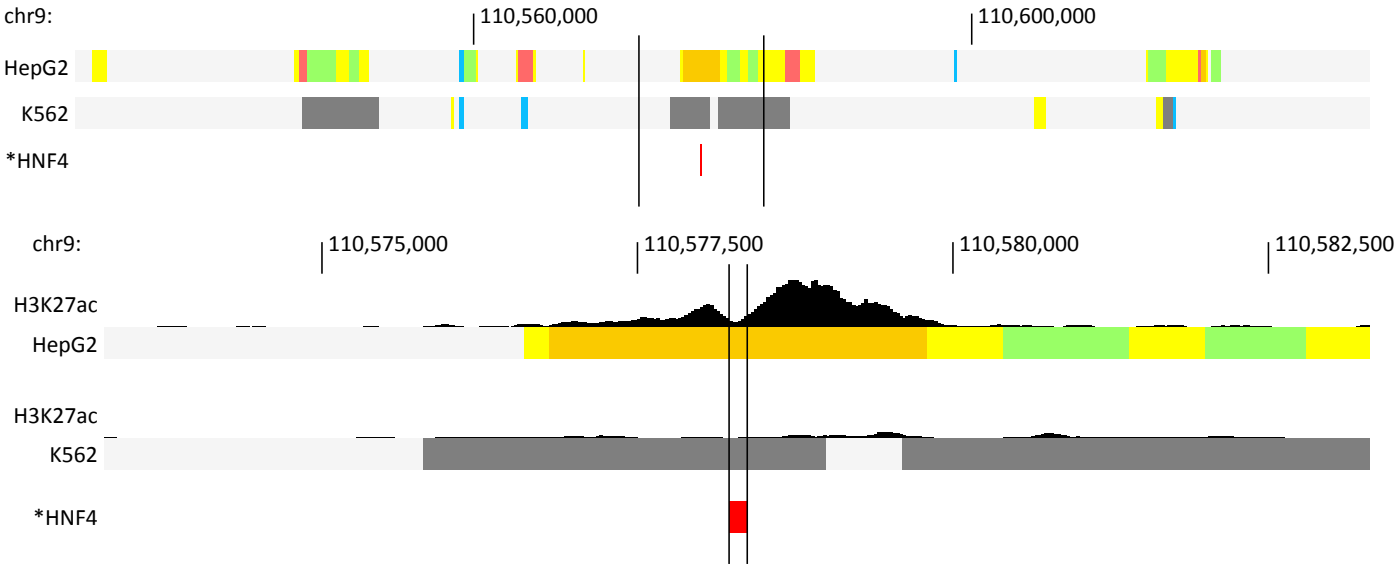
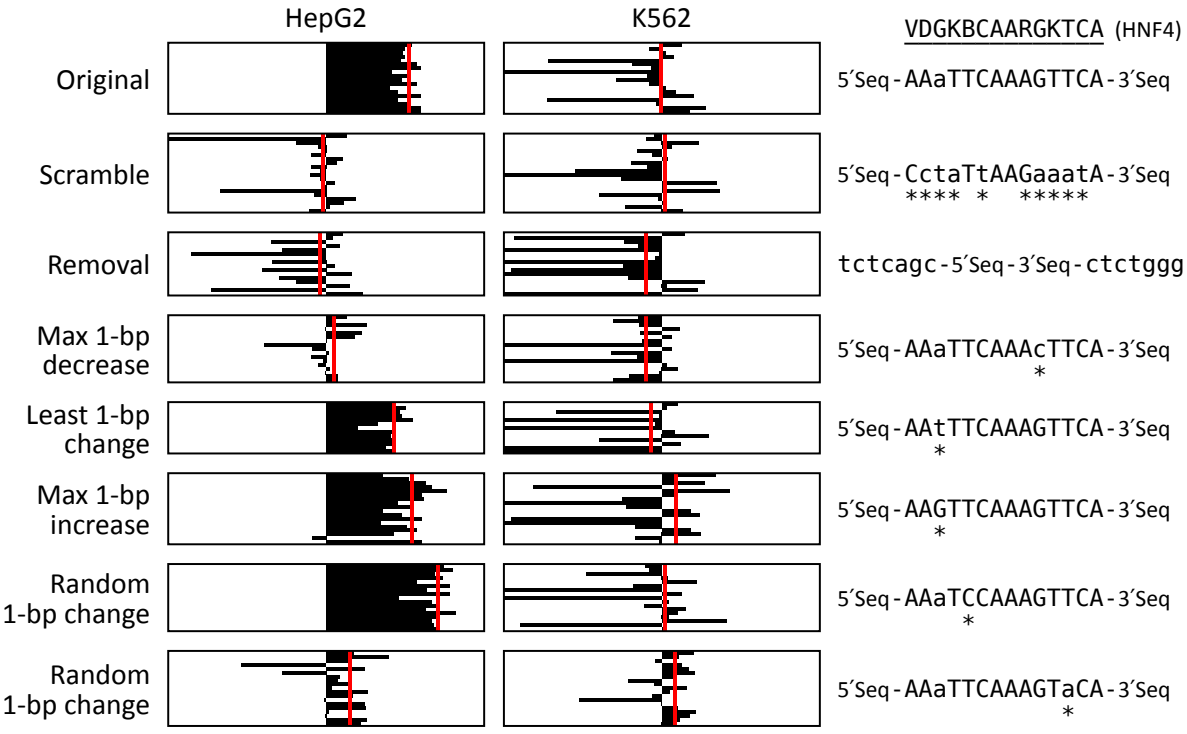
53 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr9 110578292 110578305 + (hg18)





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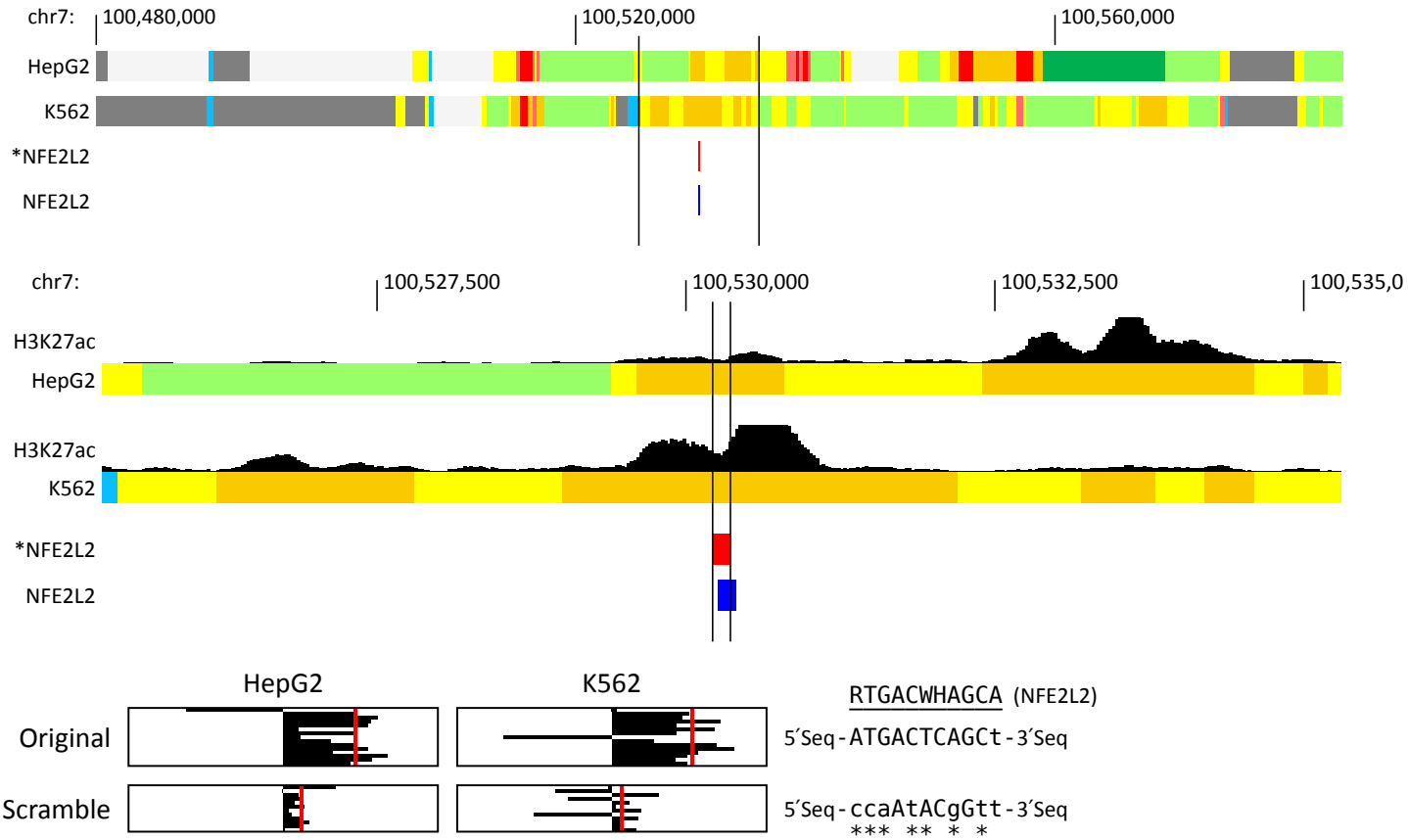
54 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 100530283 100530293 + (hg18)



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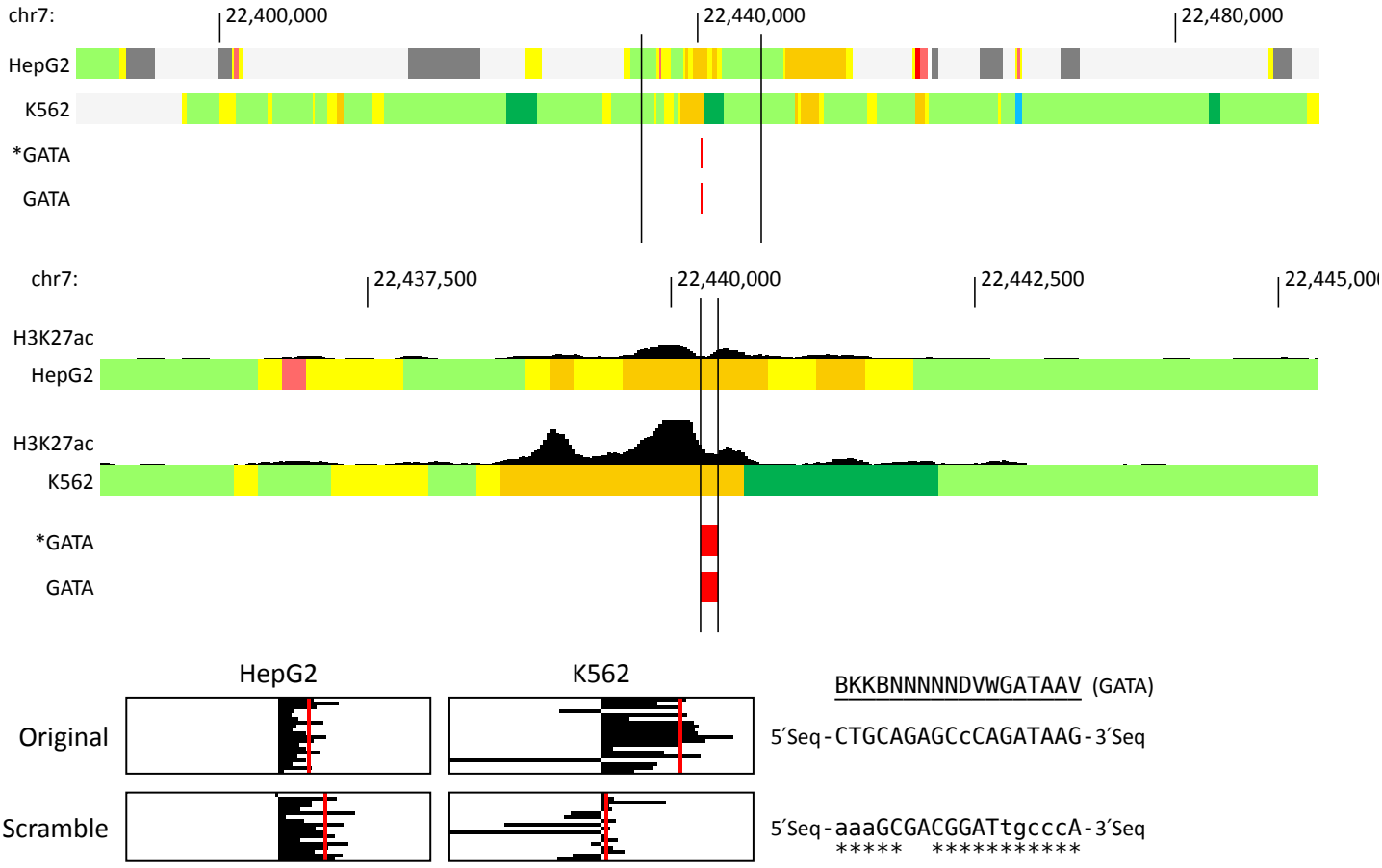
55 GATA in HepG2 enhancer (conserved at 70% confidence)

chr7 22440306 22440323 + (hg18)



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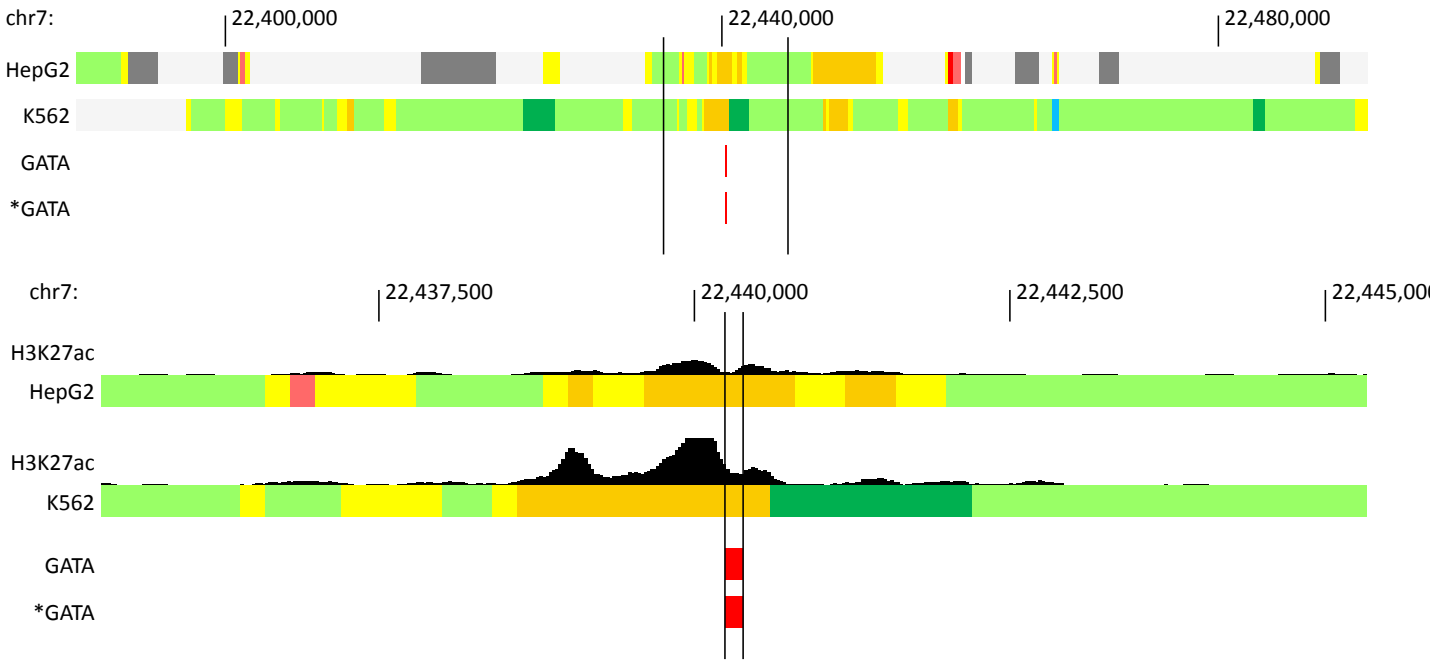
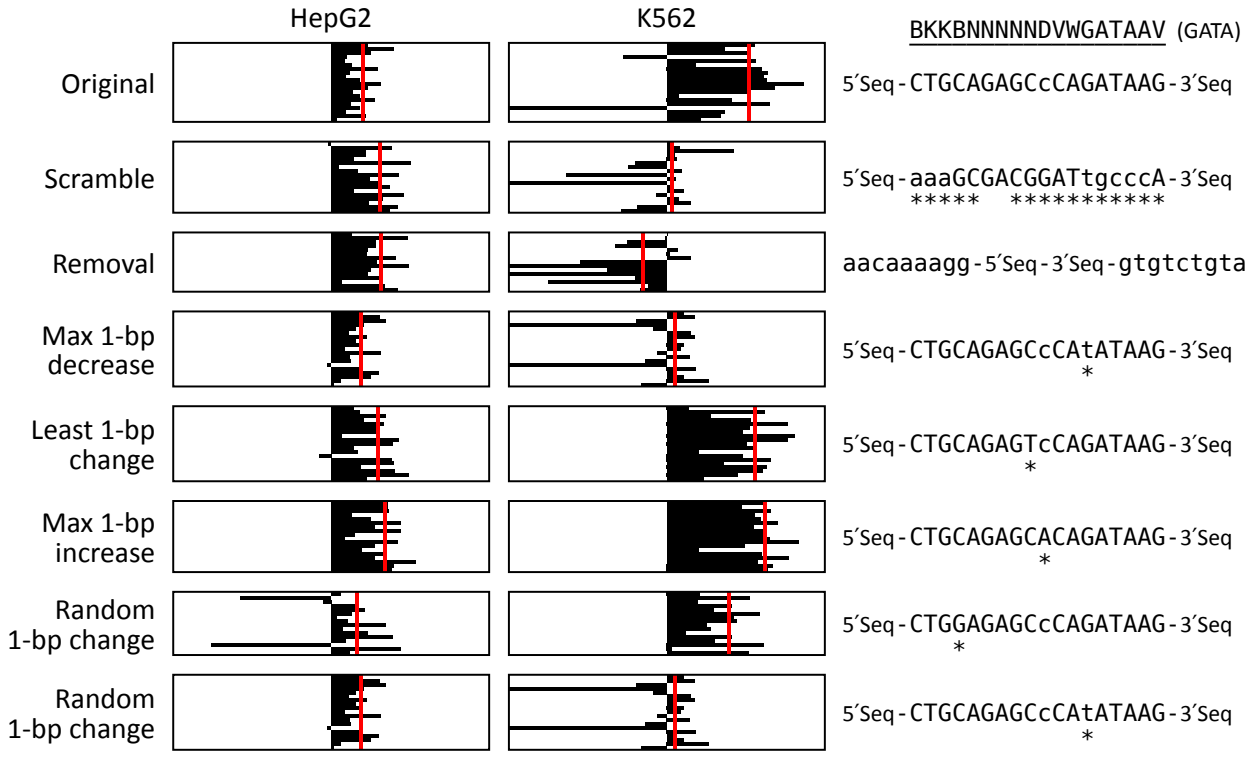
56 GATA in K562 enhancer (conserved at 70% confidence)

chr7 22440306 22440323 + (hg18)





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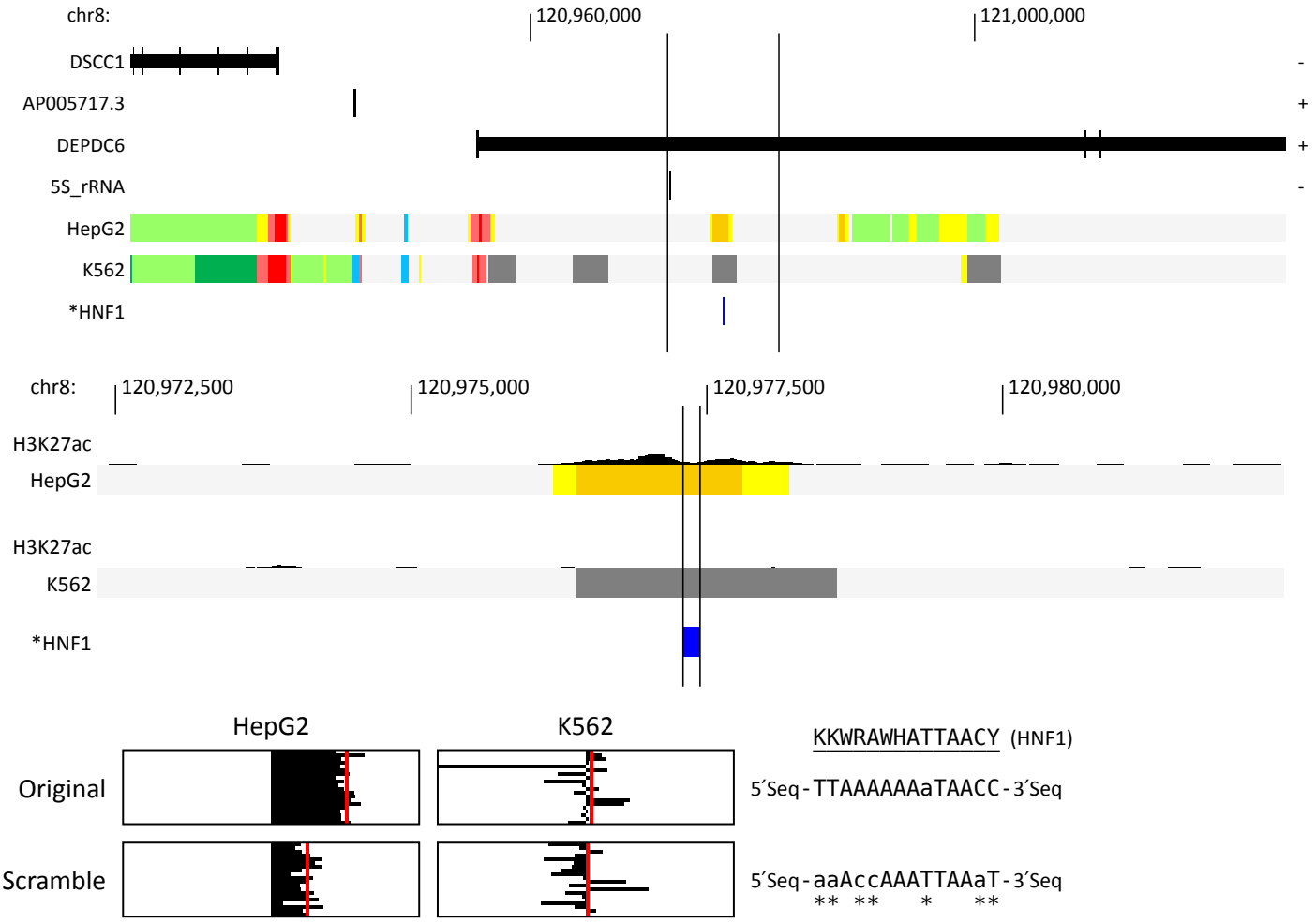
57 HNF1 in HepG2 enhancer

chr8 120977364 120977377 - (hg18)



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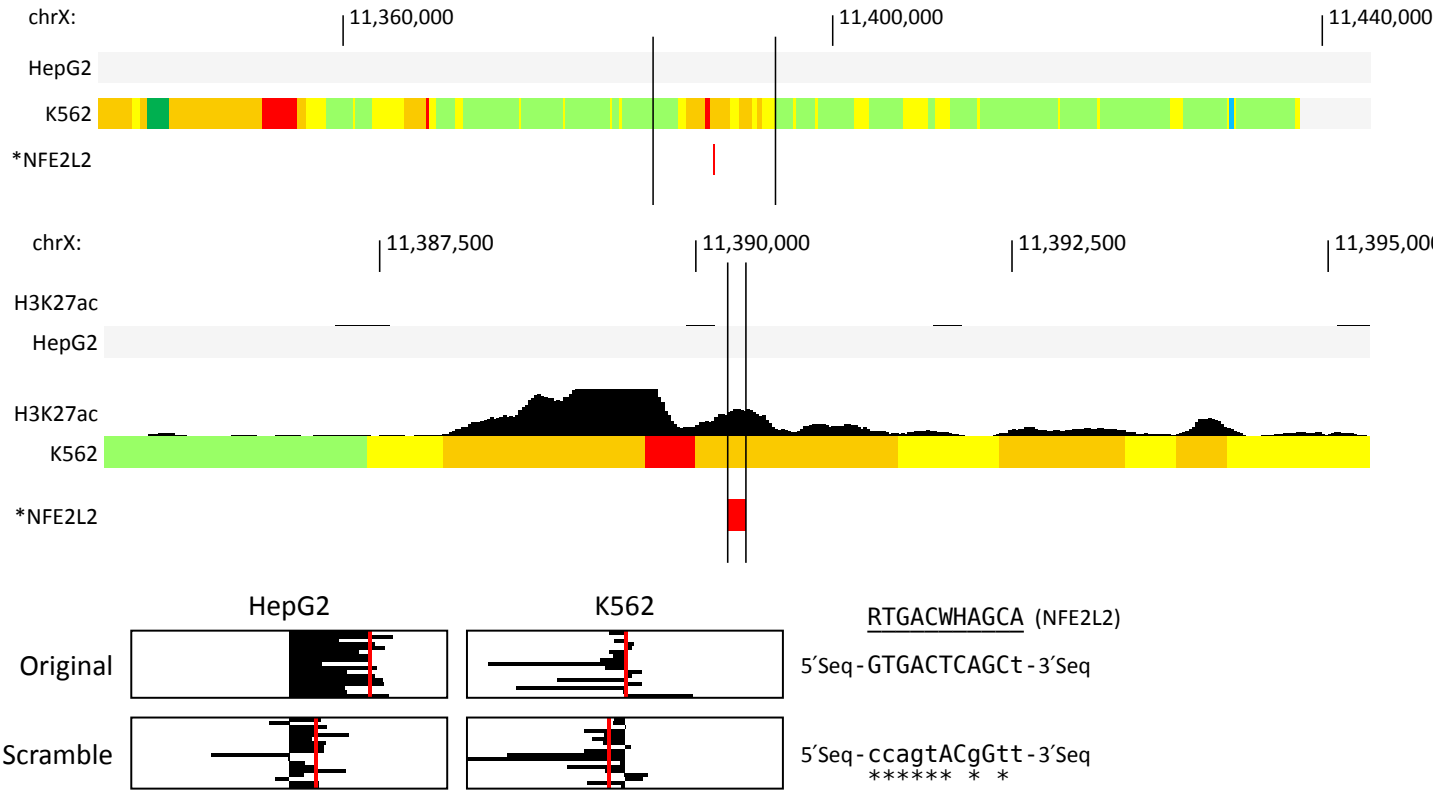
58 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chrX 11390319 11390329 - (hg18)



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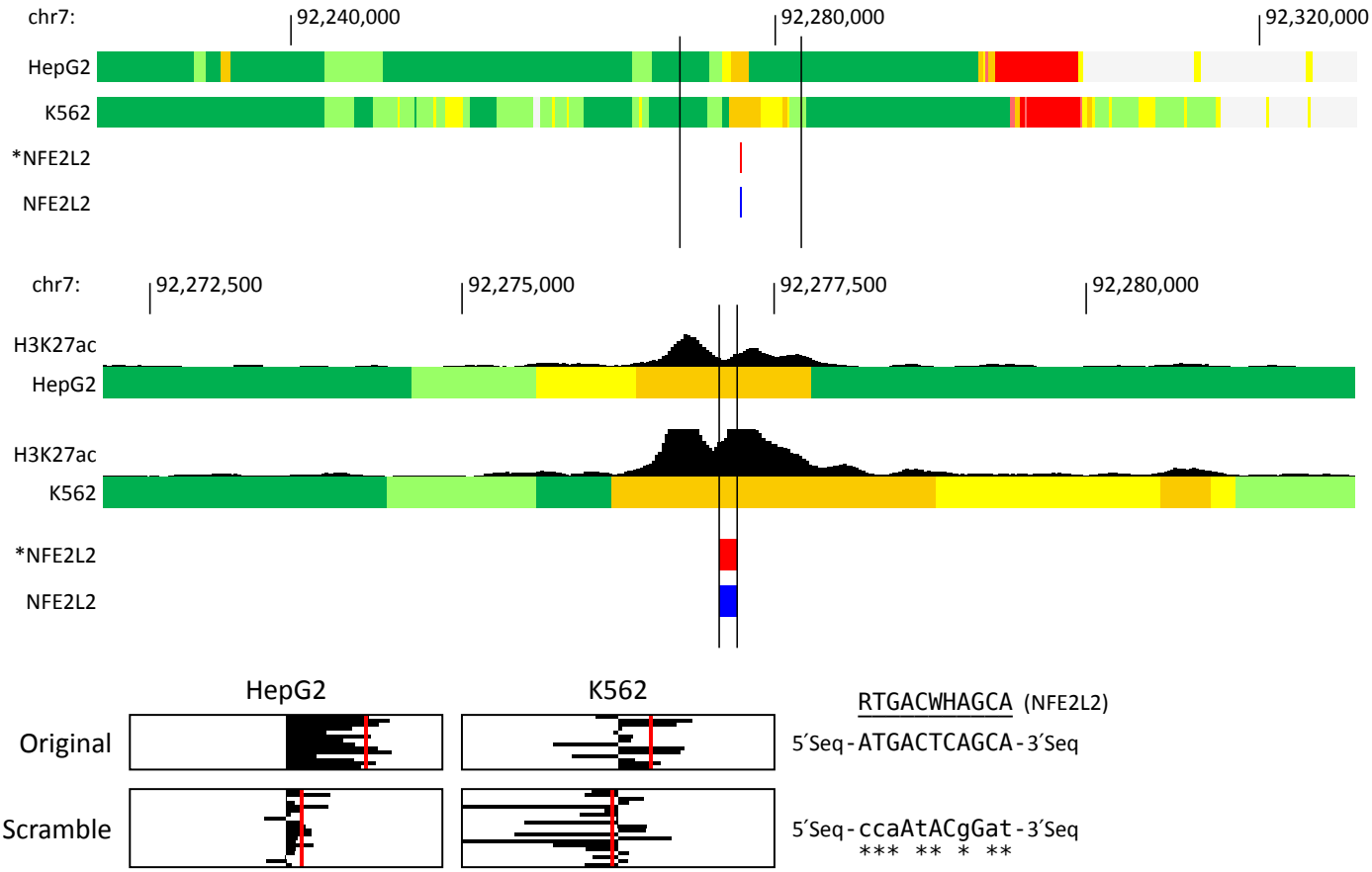
59 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 92277127 92277137 - (hg18)



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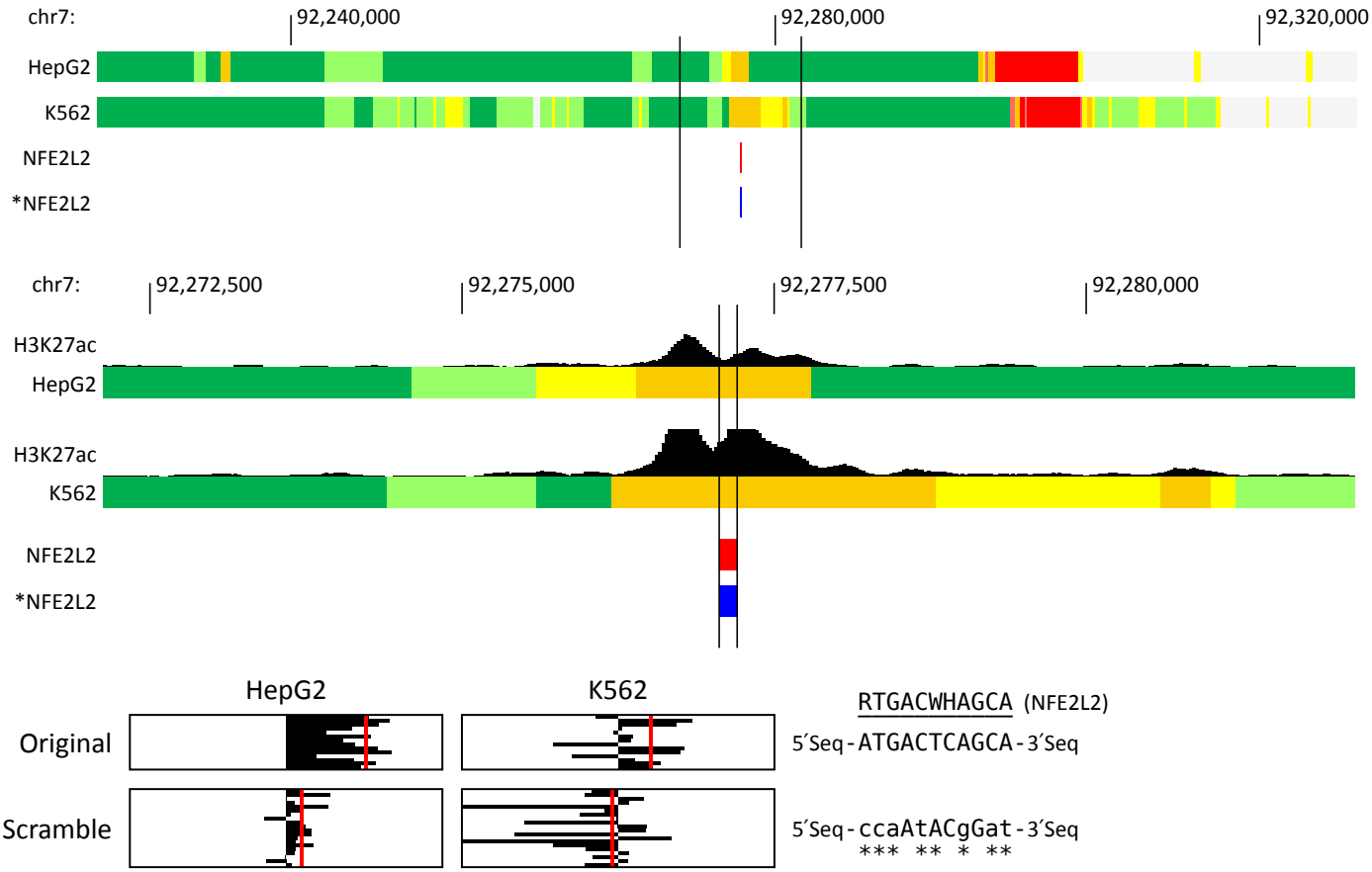
60 NFE2L2 in K562 enhancer

chr7 92277127 92277137 - (hg18)



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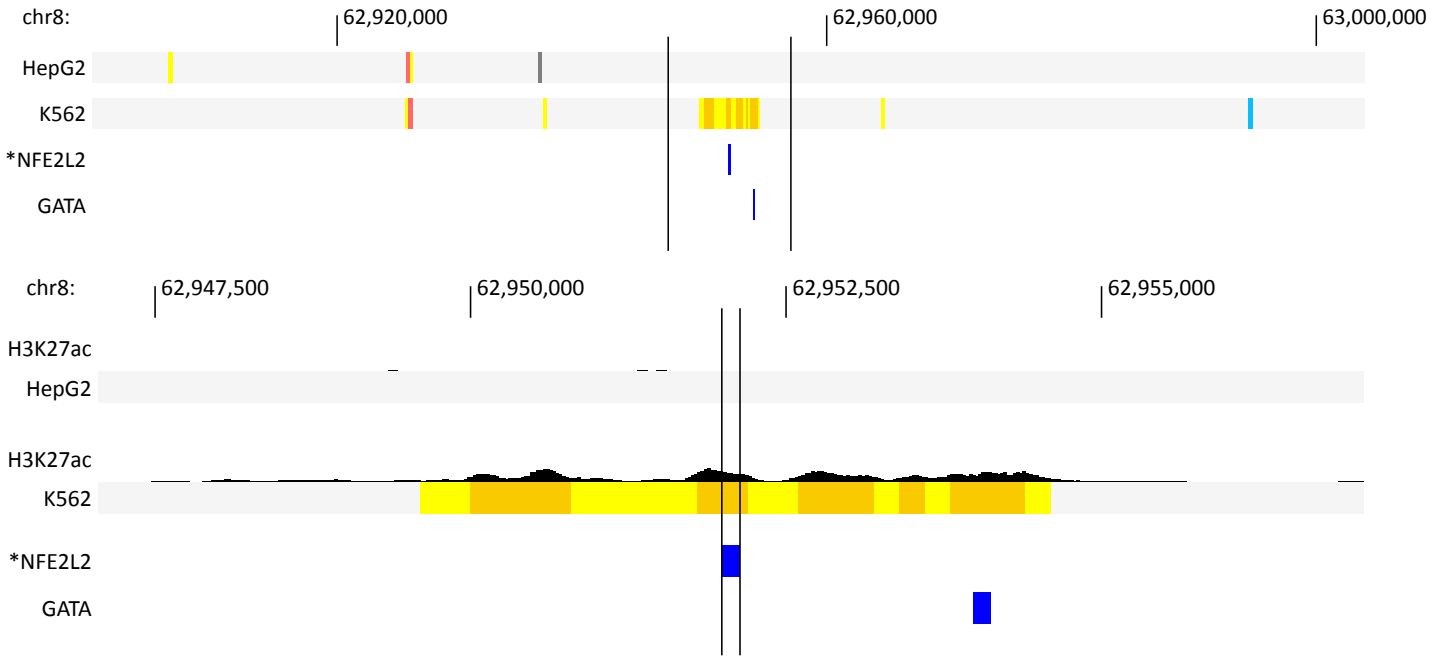
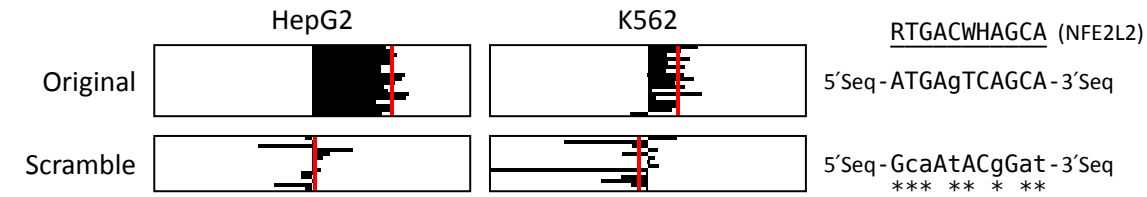
61 NFE2L2 in K562 enhancer

chr8 62952058 62952068 + (hg18)





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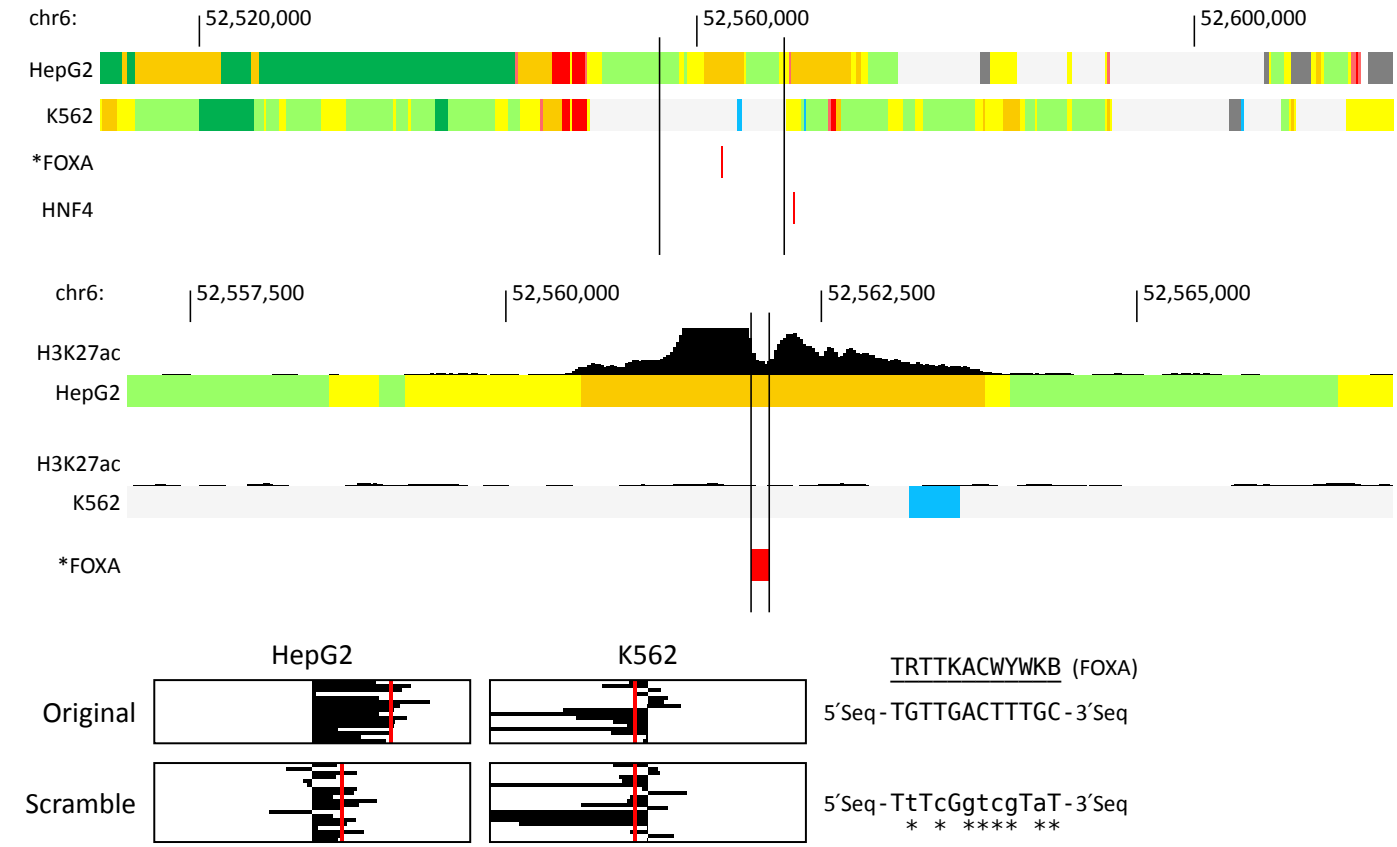
62 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr6 52562010 52562021 + (hg18)



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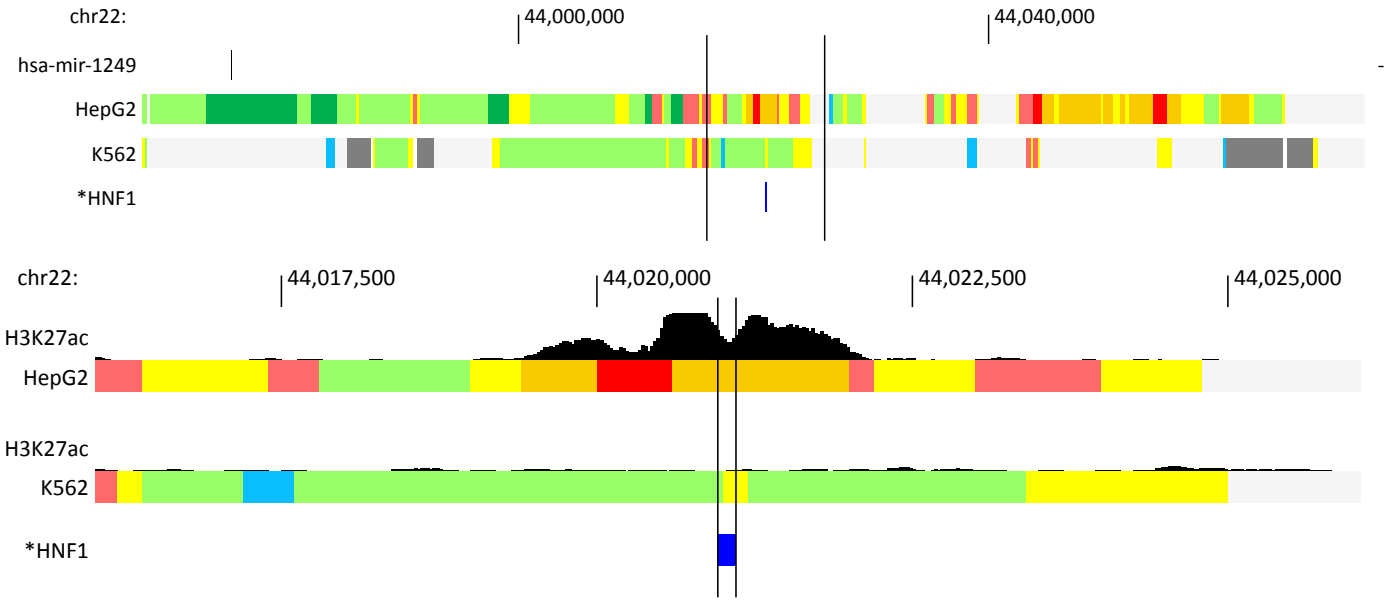
63 HNF1 in HepG2 enhancer

chr22 44021024 44021037 + (hg18)



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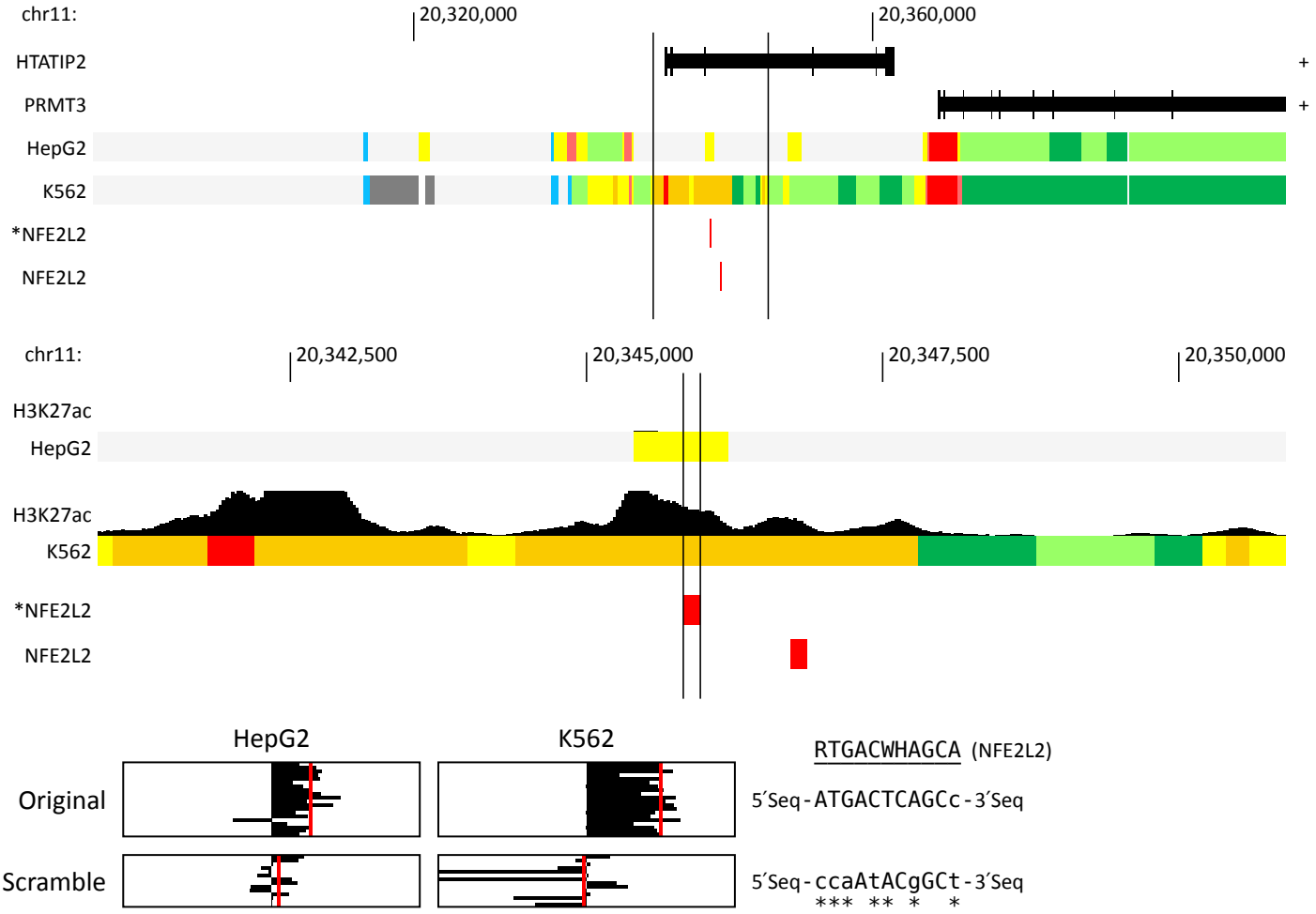
64 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr11 20345884 20345894 + (hg18)



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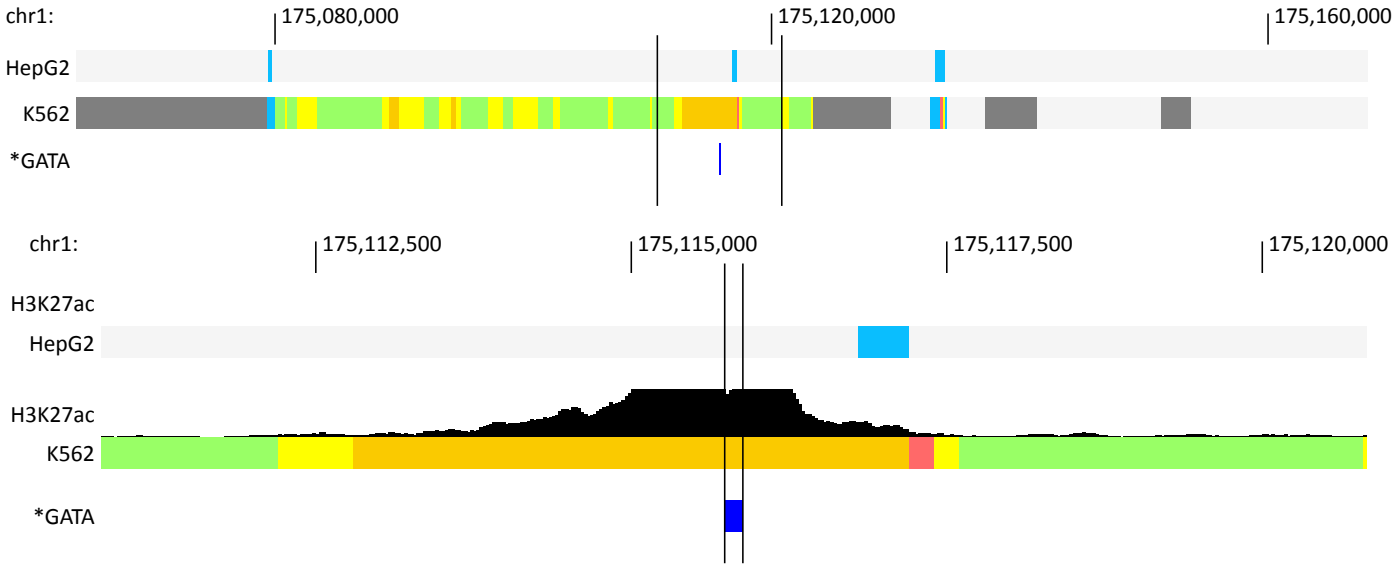
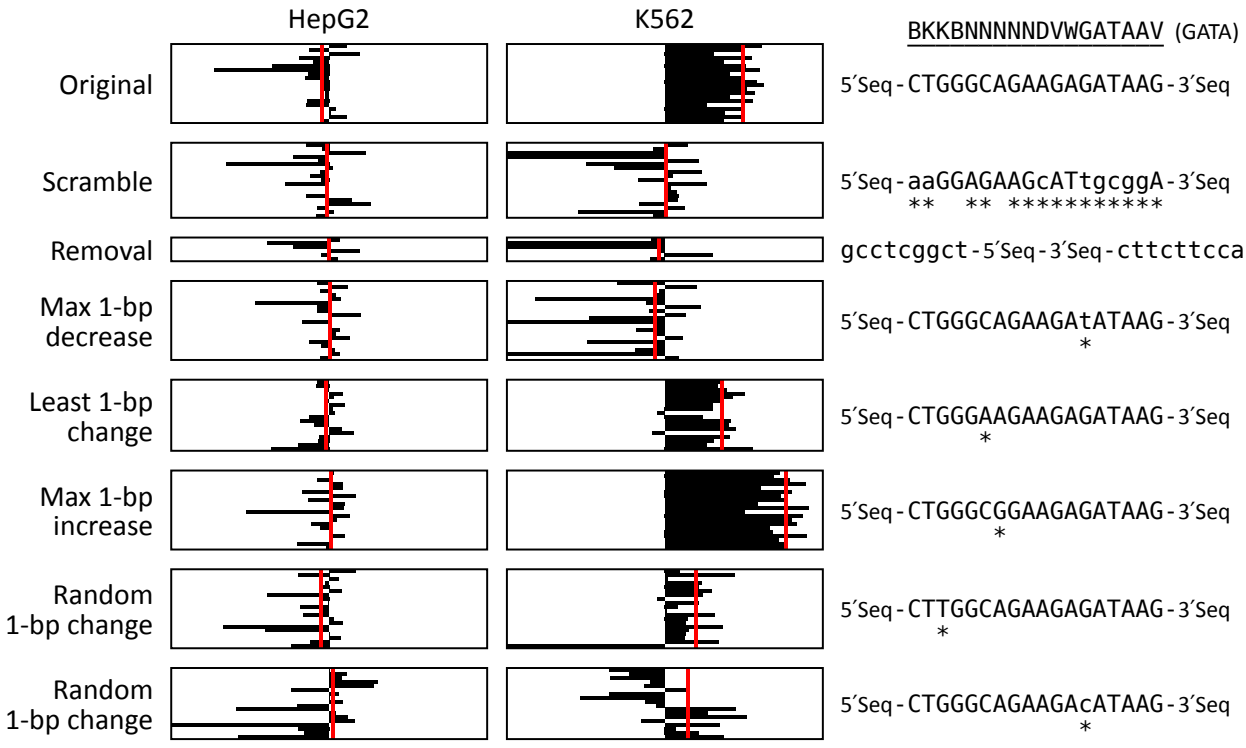
65 GATA in K562 enhancer

chr1 175115804 175115821 + (hg18)





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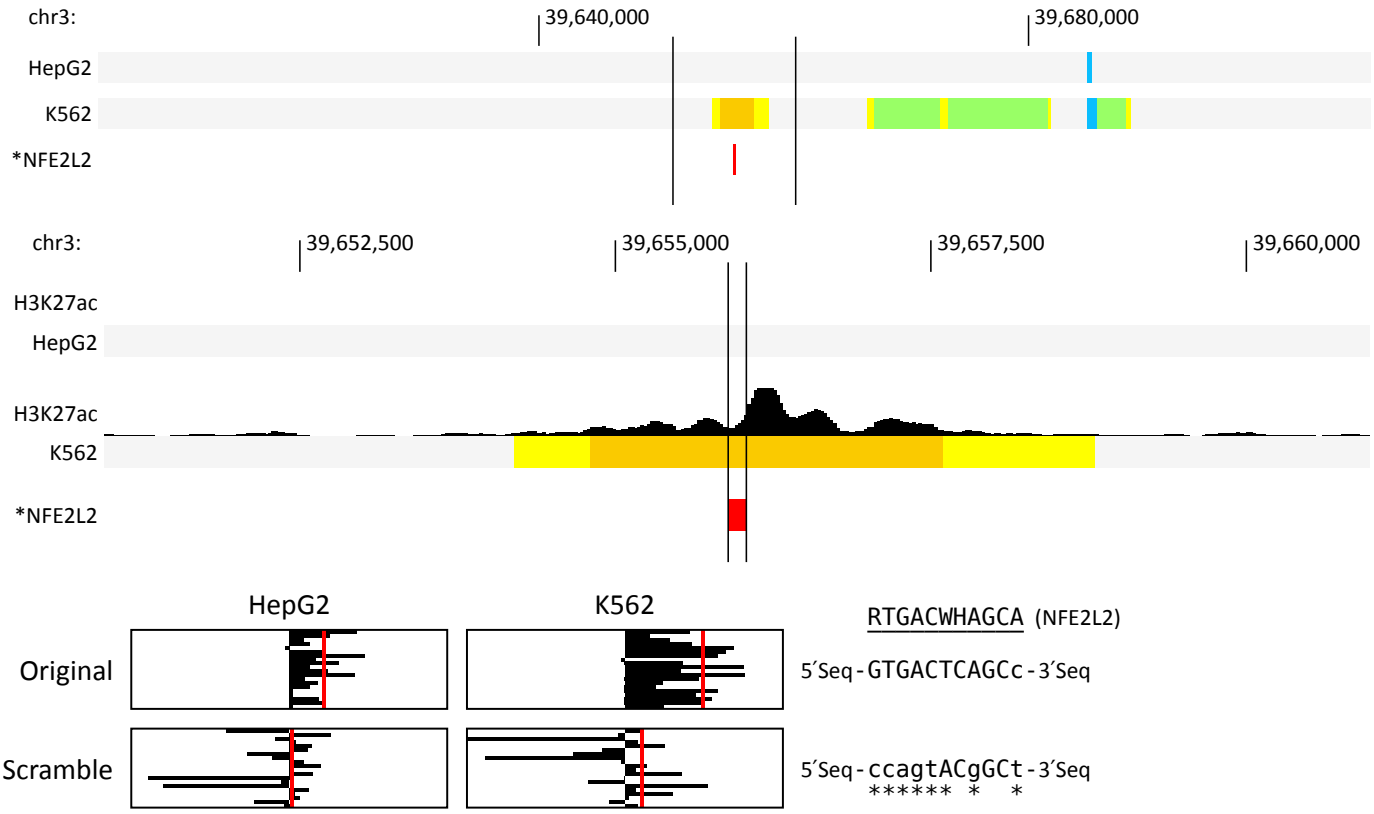
66 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr3 39655961 39655971 - (hg18)



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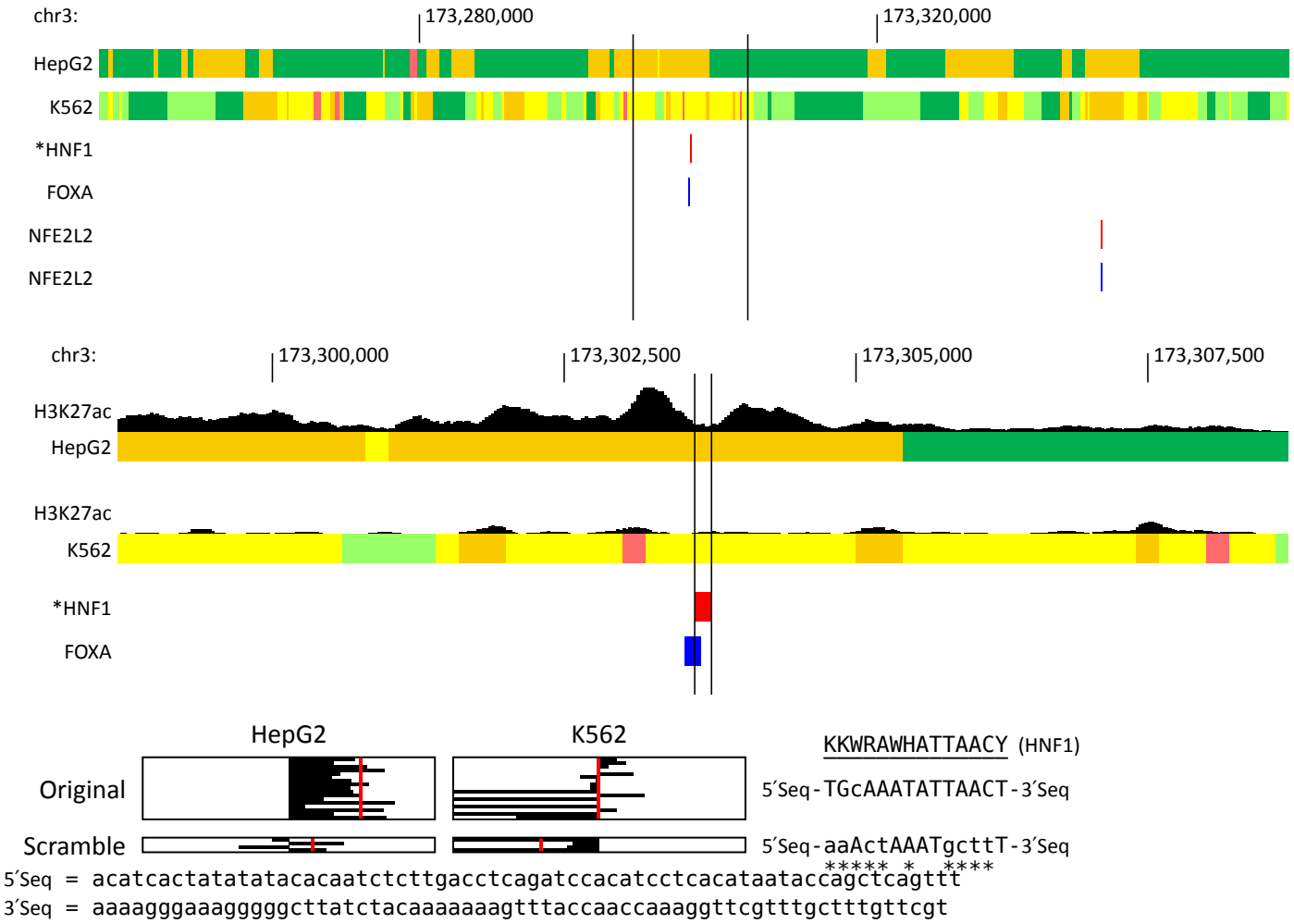
67 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr3 173303684 173303697 - (hg18)



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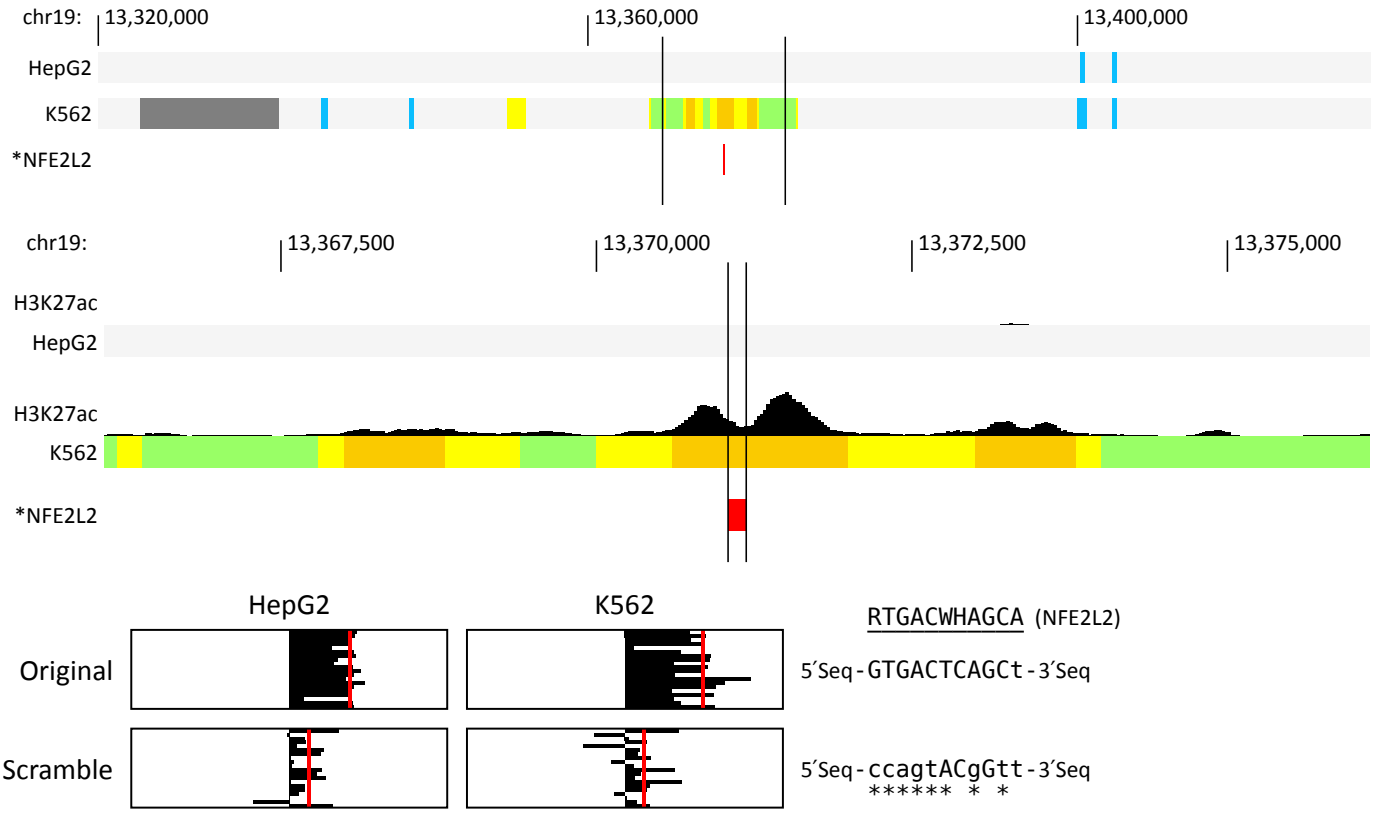
68 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr19 13371110 13371120 - (hg18)



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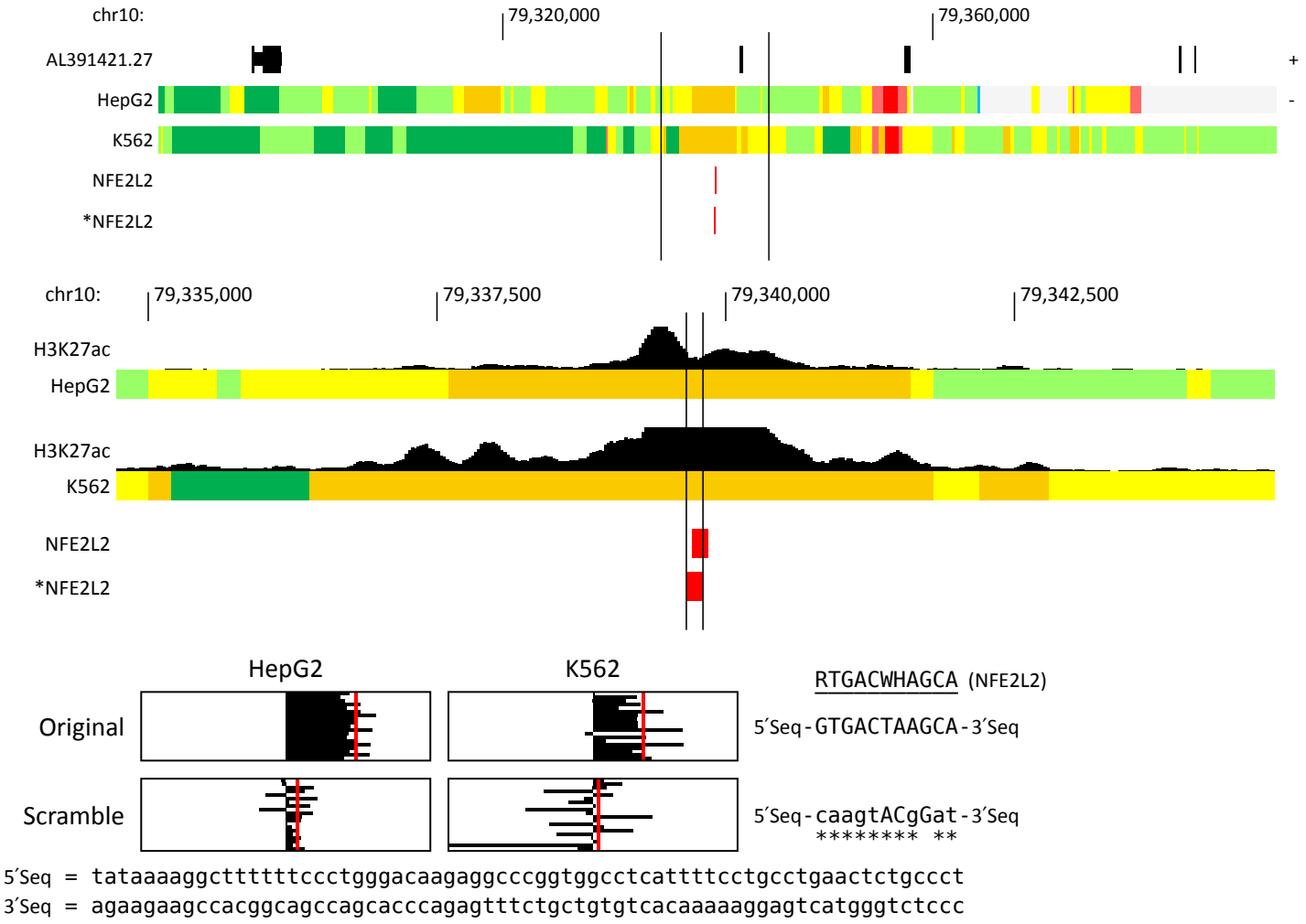
69 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr10 79339726 79339736 + (hg18)



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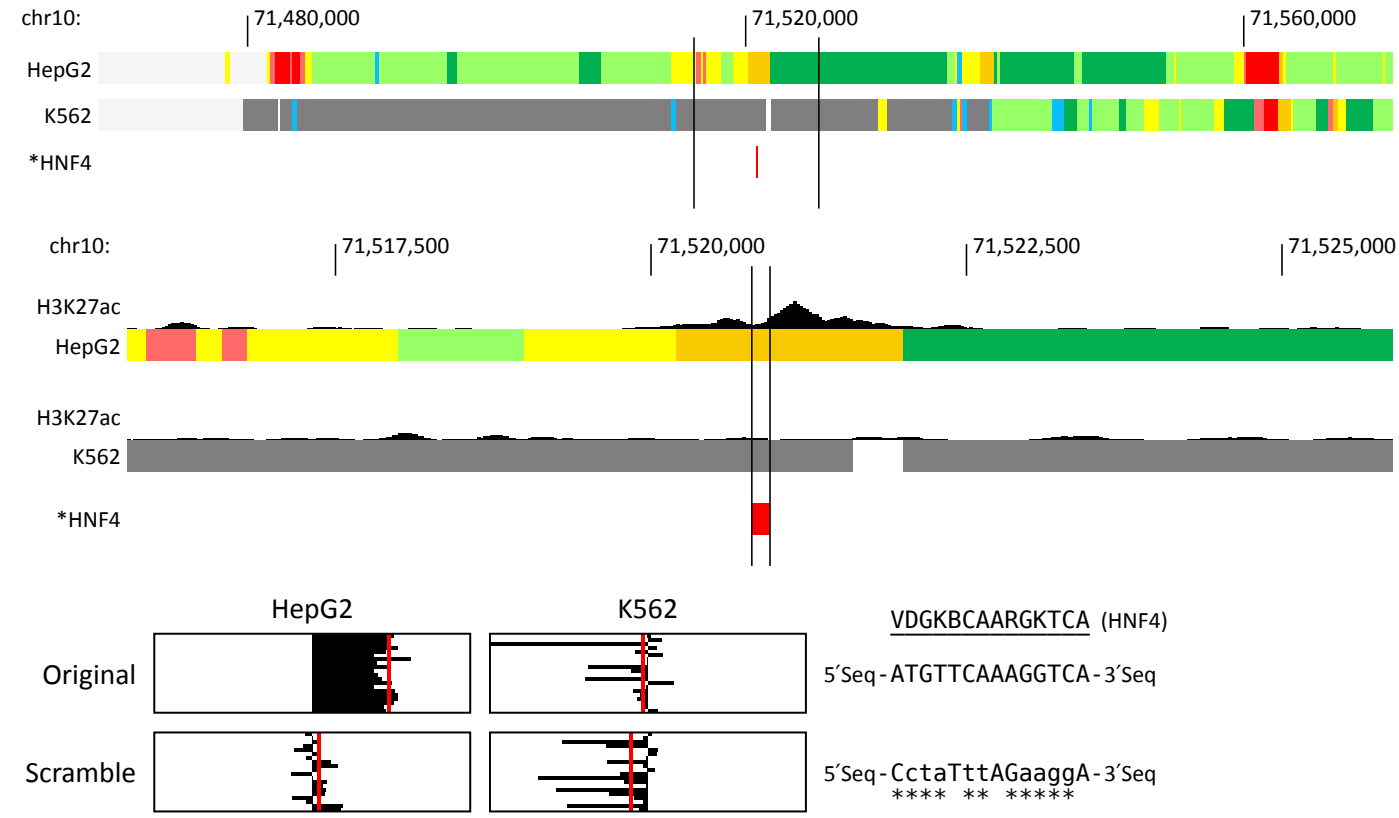
70 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr10 71520865 71520878 - (hg18)



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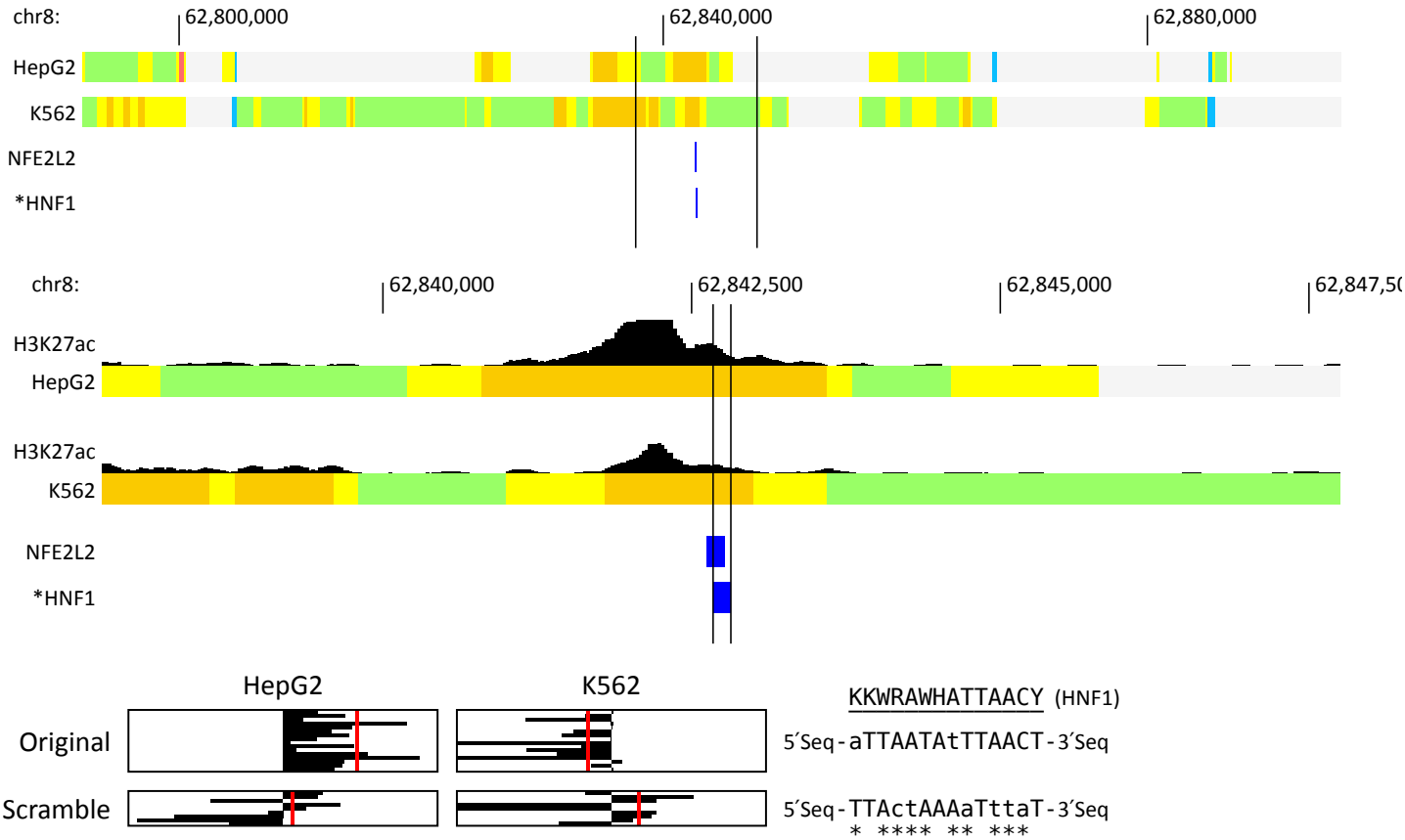
71 HNF1 in K562 enhancer

chr8 62842740 62842753 - (hg18)



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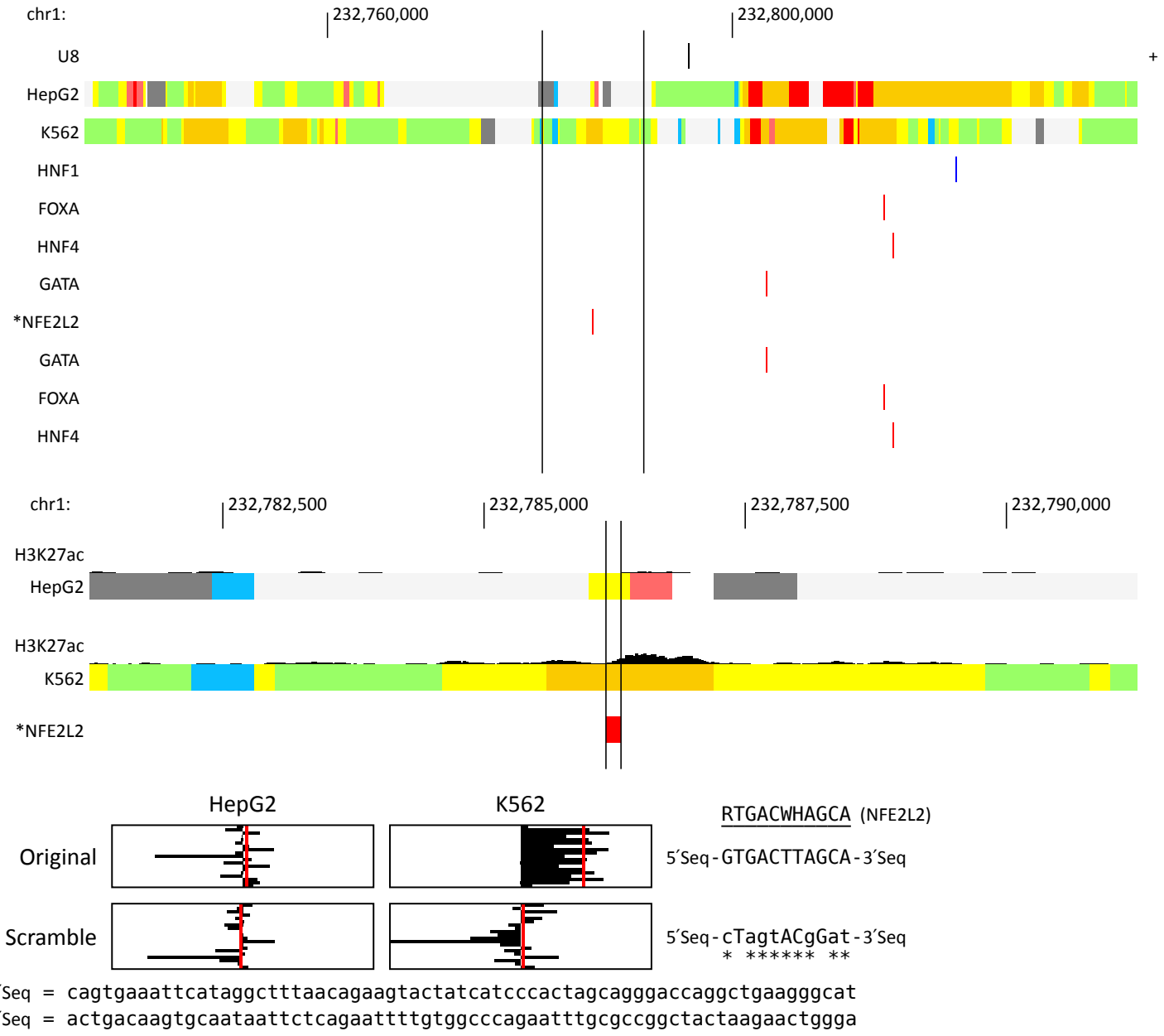
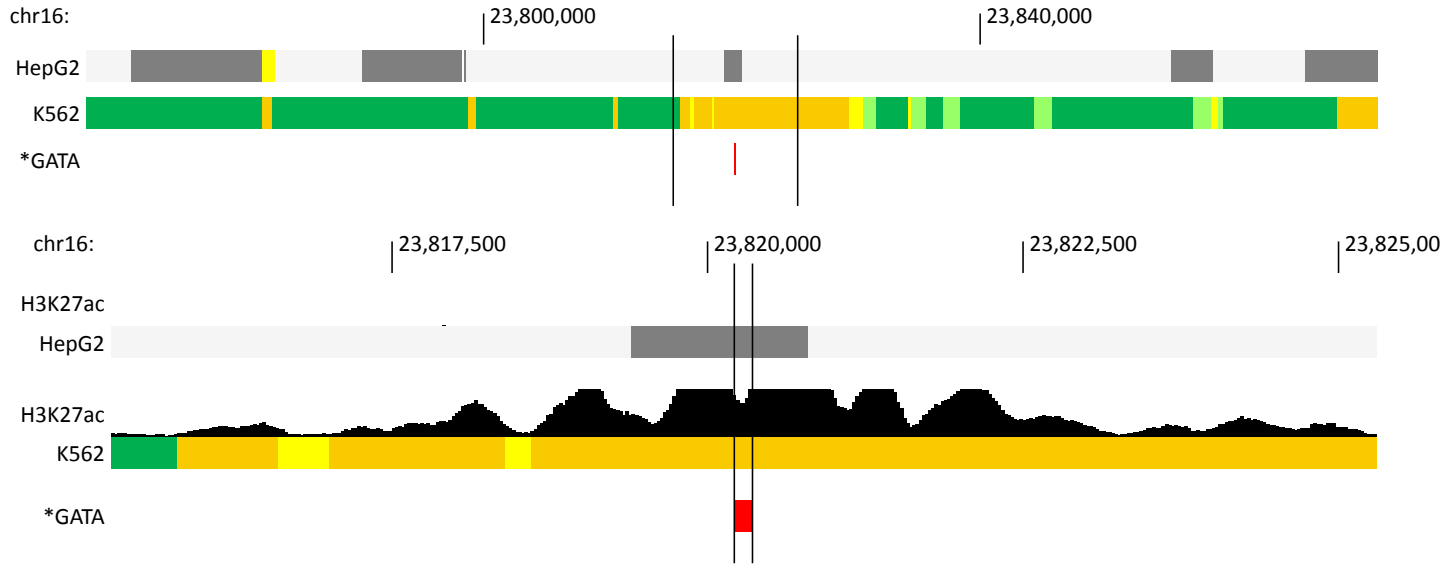
72 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 232786234 232786244 + (hg18)



73 GATA in K562 enhancer (conserved at 60% confidence)

chr16 23820276 23820293 - (hg18)



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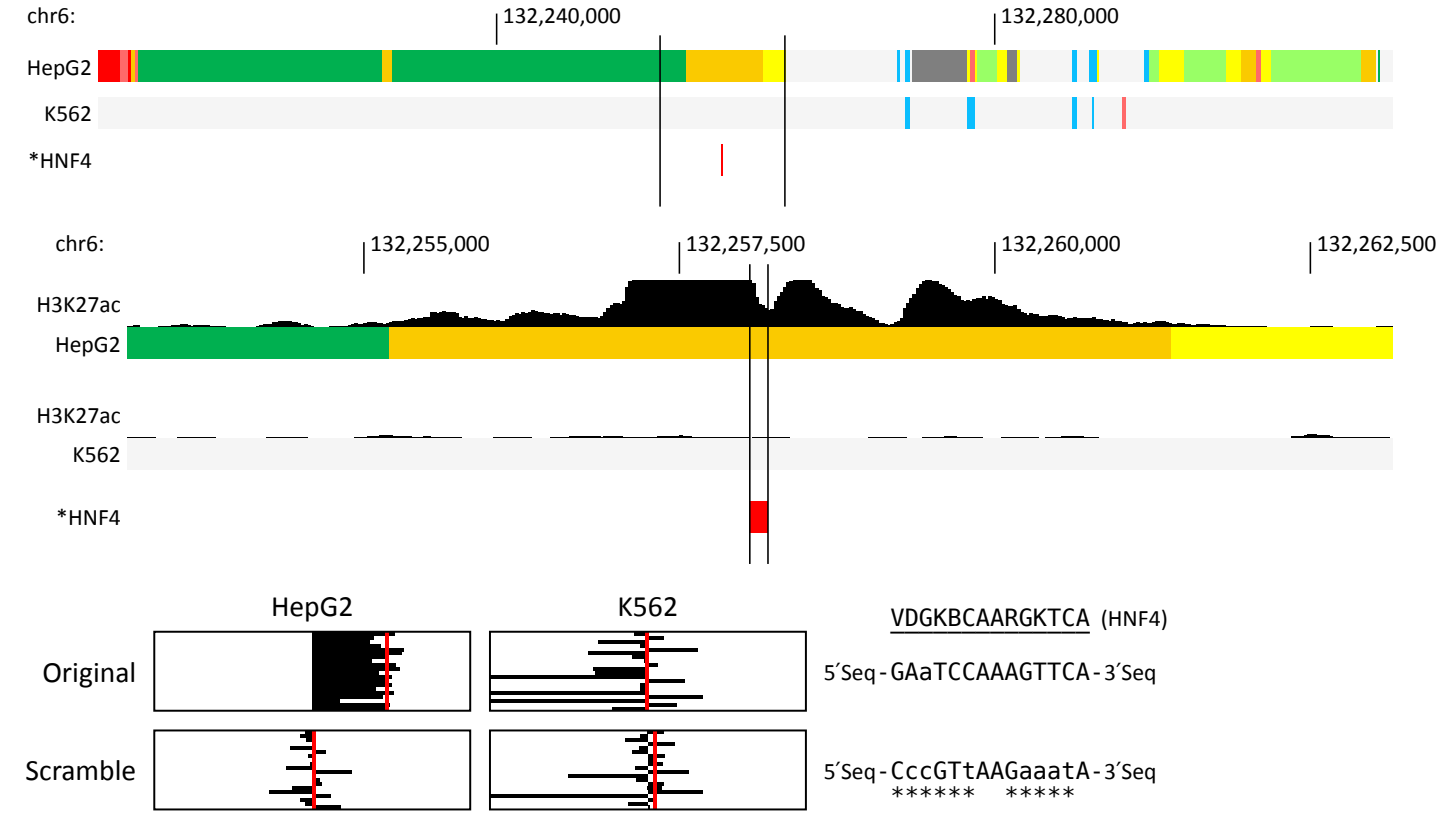
74 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr6 132258124 132258137 + (hg18)



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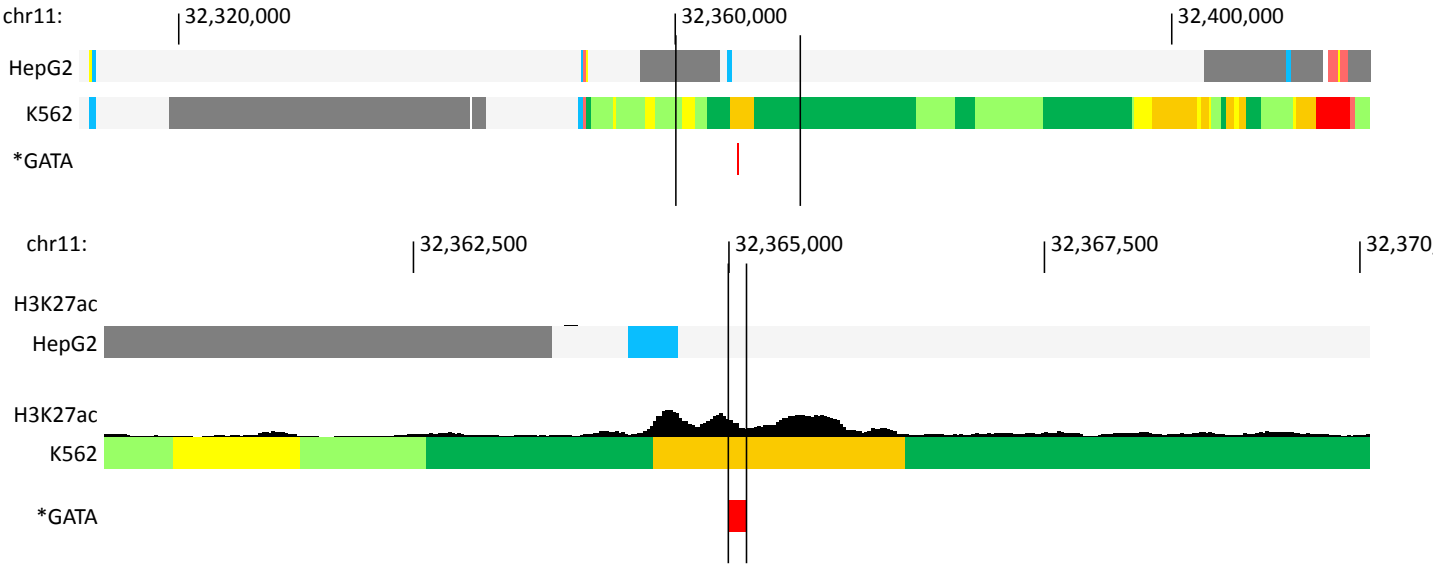
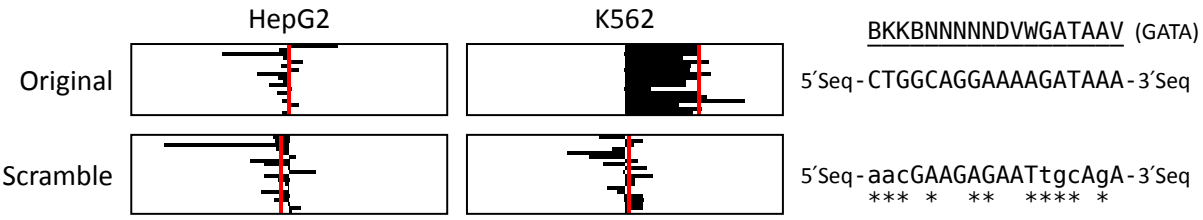
75 GATA in K562 enhancer (conserved at 70% confidence)

chr11 32365059 32365076 + (hg18)





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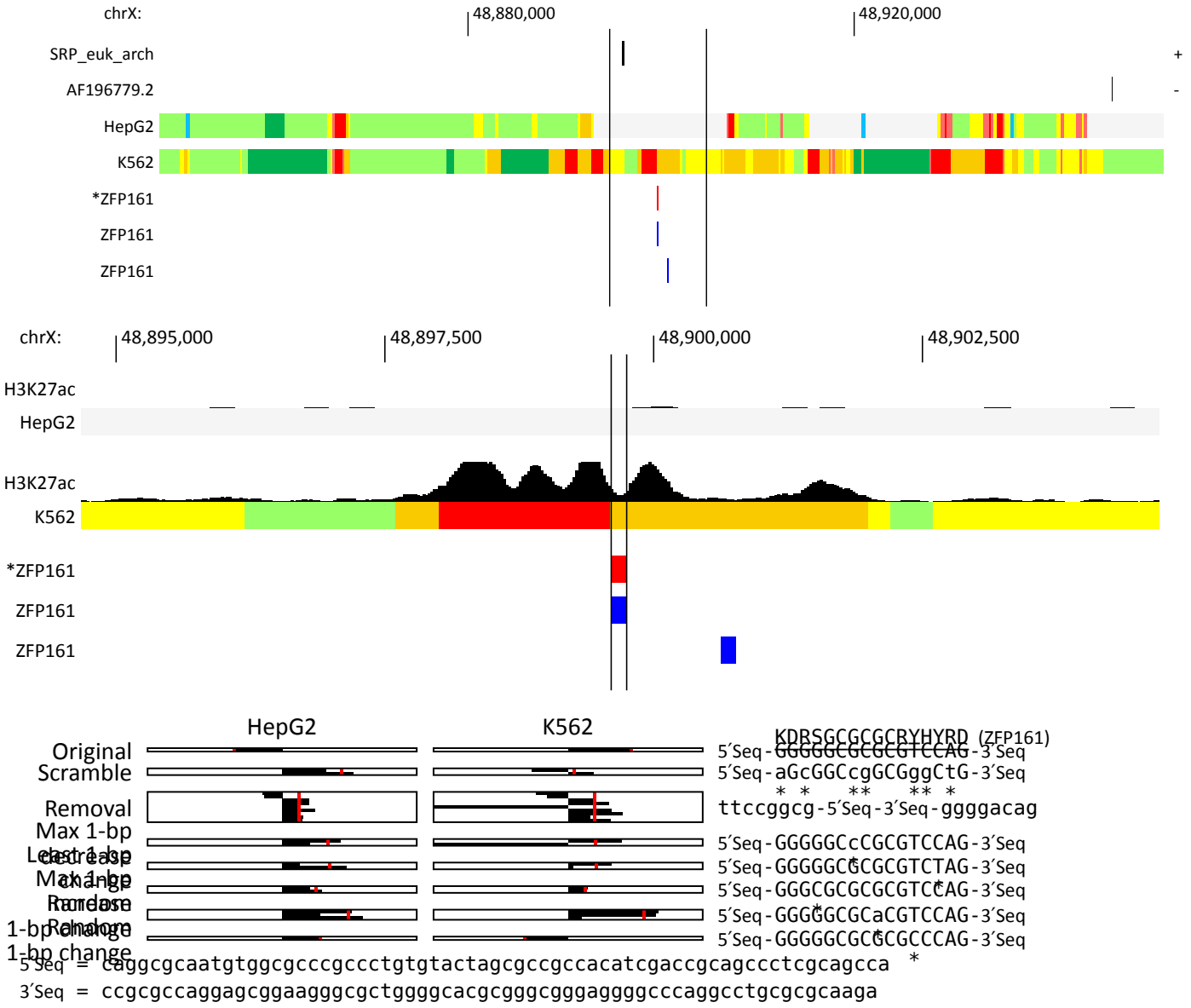
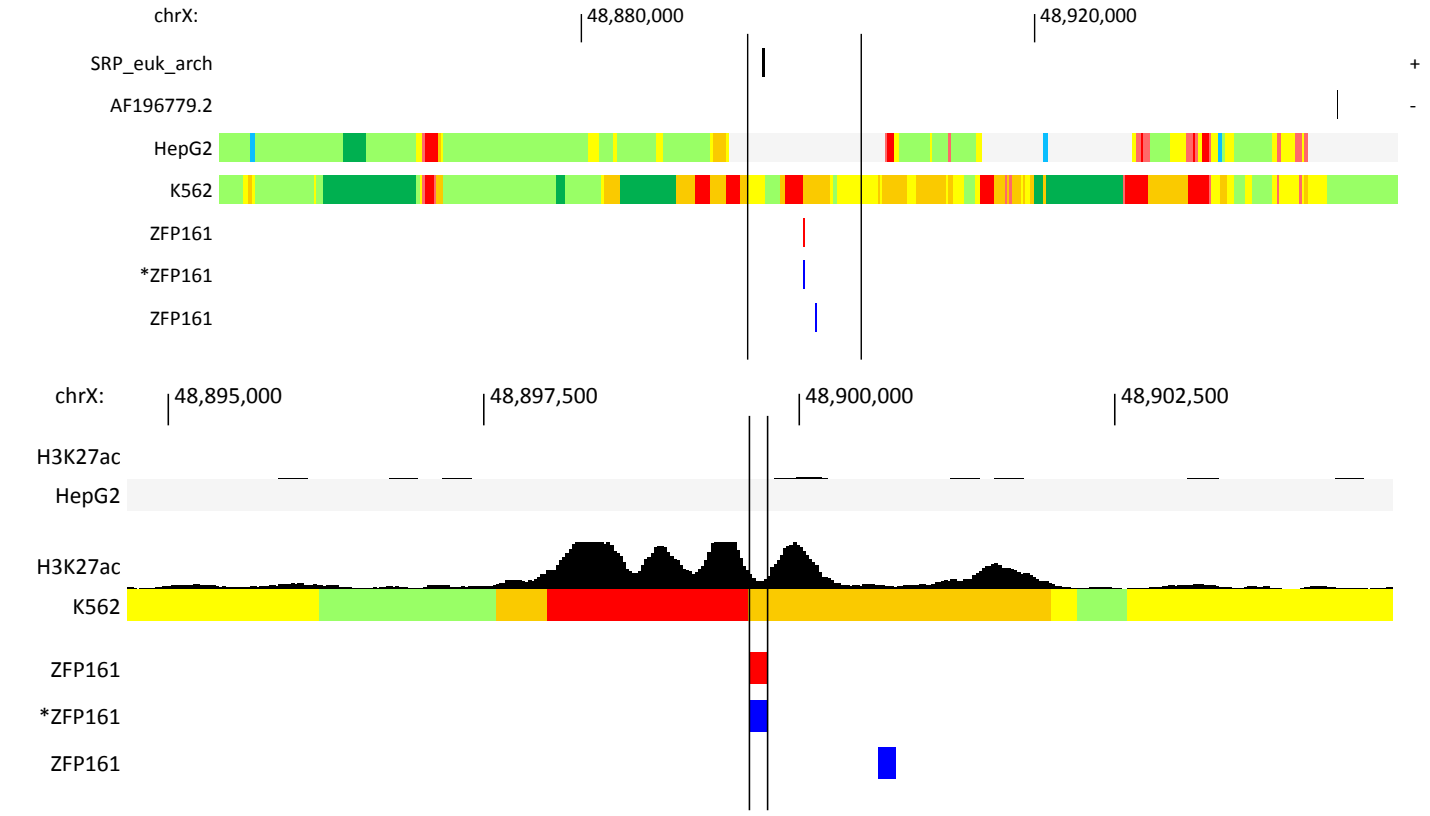
76 ZFP161 in K562 enhancer (conserved at 50% confidence)

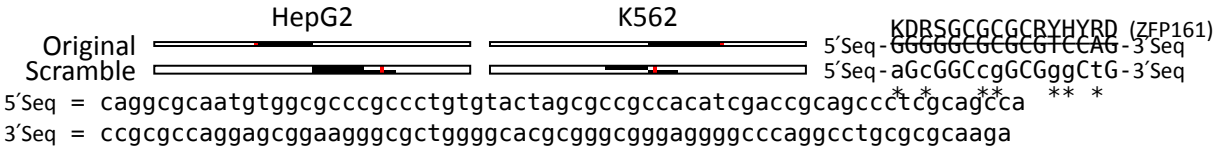
chrX 48899670 48899685 + (hg18)



77 ZFP161 in K562 enhancer

chrX 48899670 48899685 + (hg18)





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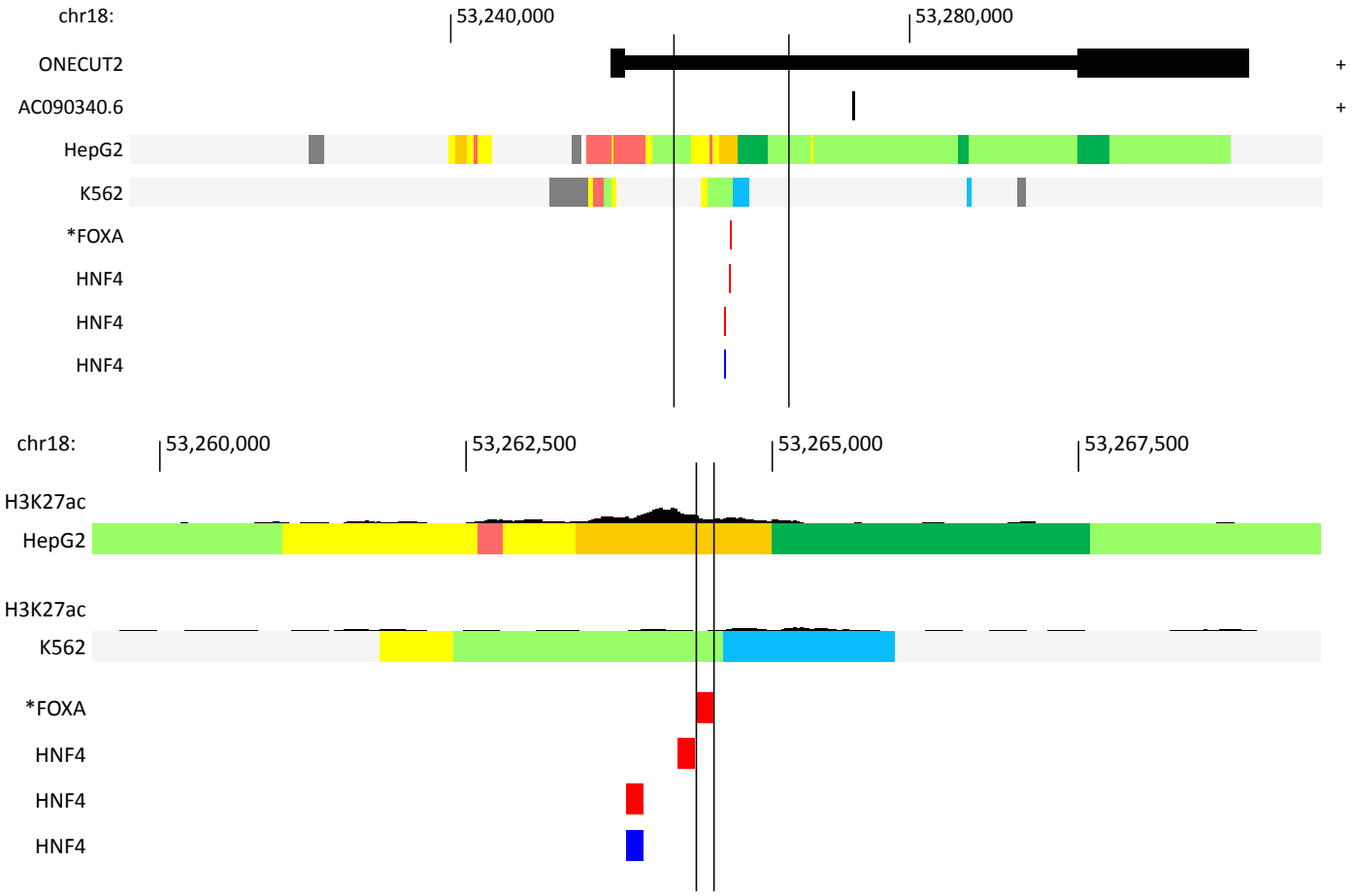
78 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr18 53264447 53264458 + (hg18)



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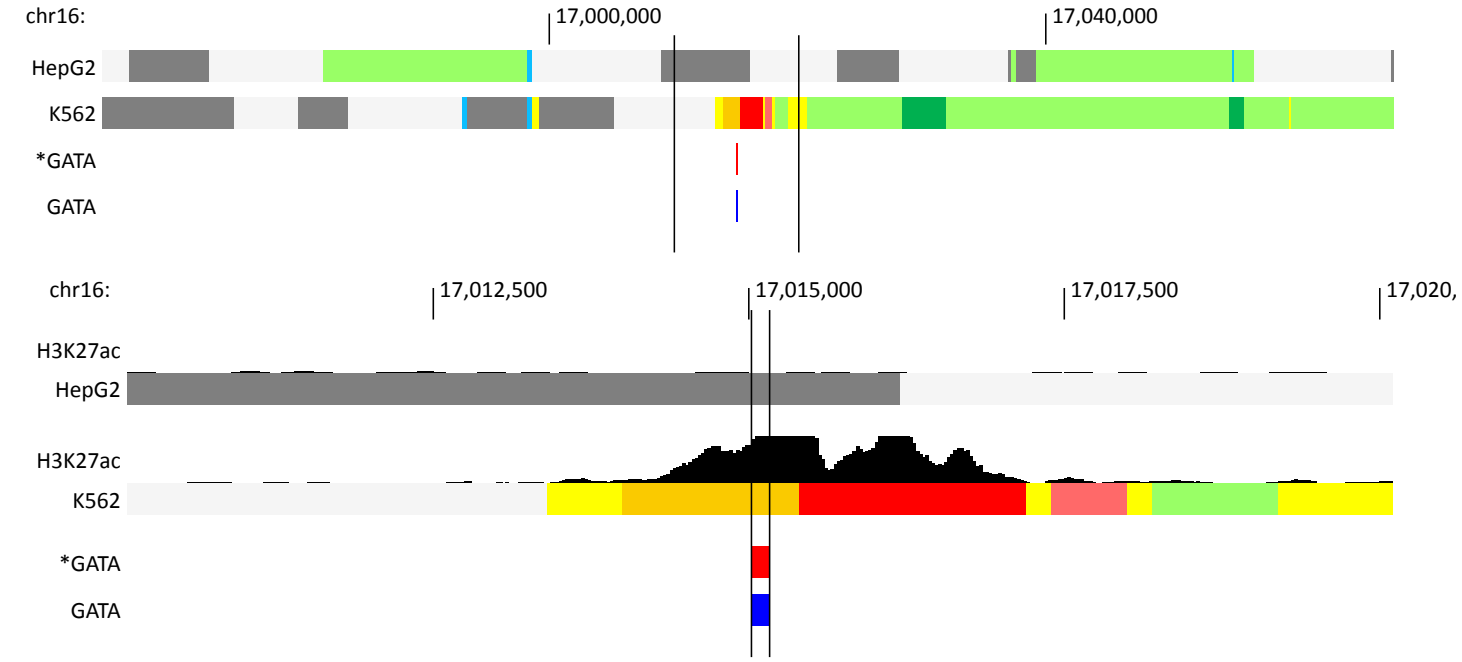
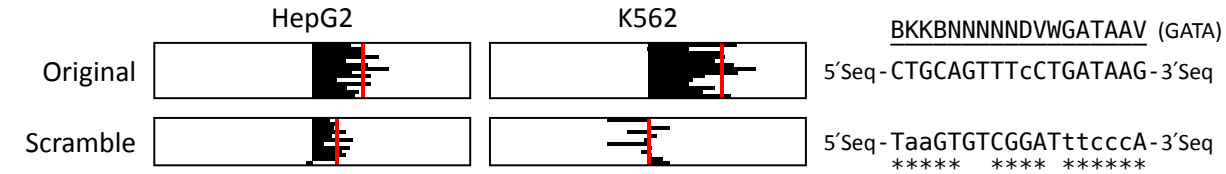
79 GATA in K562 enhancer (conserved at 70% confidence)

chr16 17015085 17015102 + (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGCAGTTTcCTGATAAG-3′Seq

5′Seq-TaaGTGTCGGATttcccA-3′Seq

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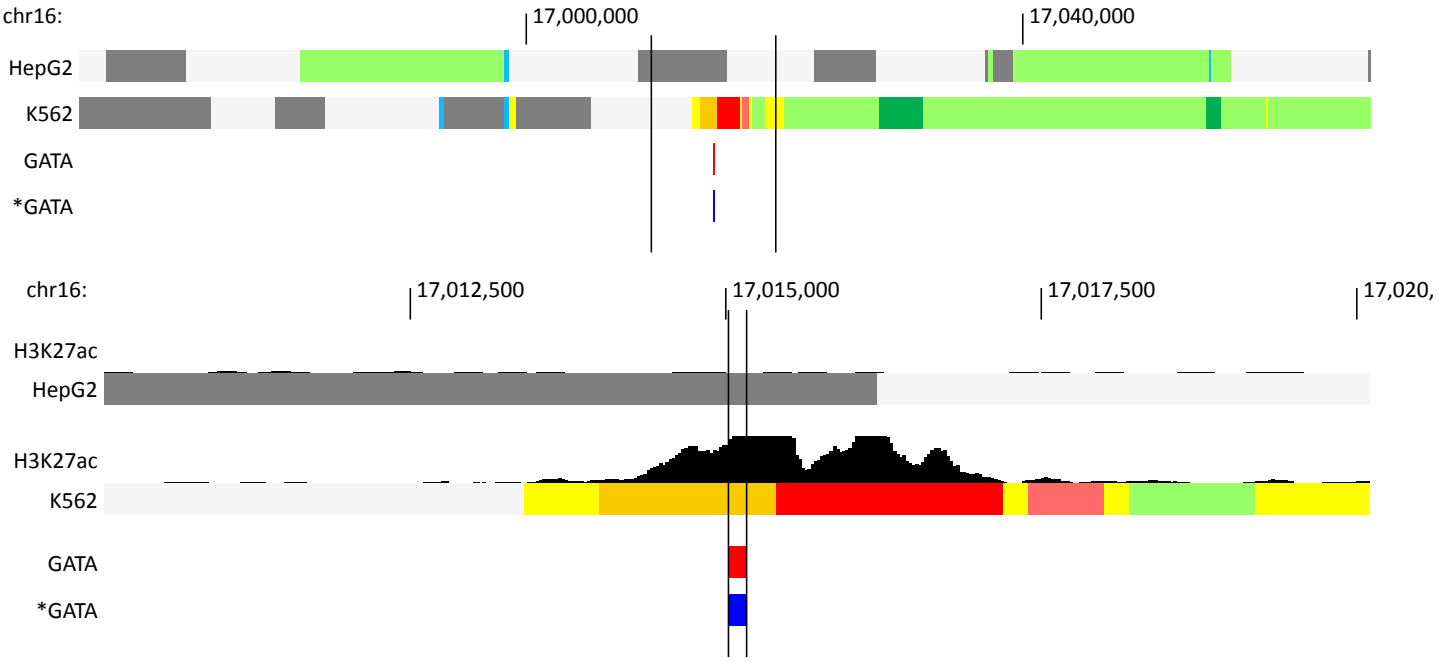
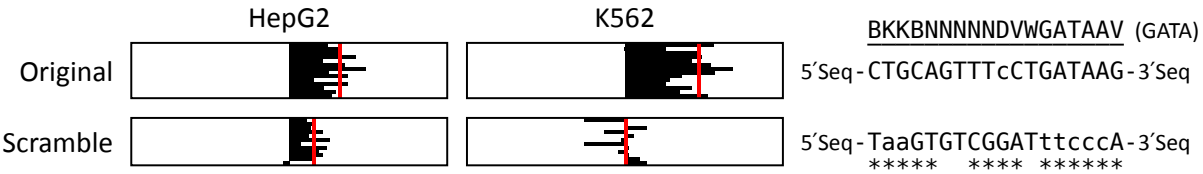
80 GATA in K562 enhancer

chr16 17015085 17015102 + (hg18)





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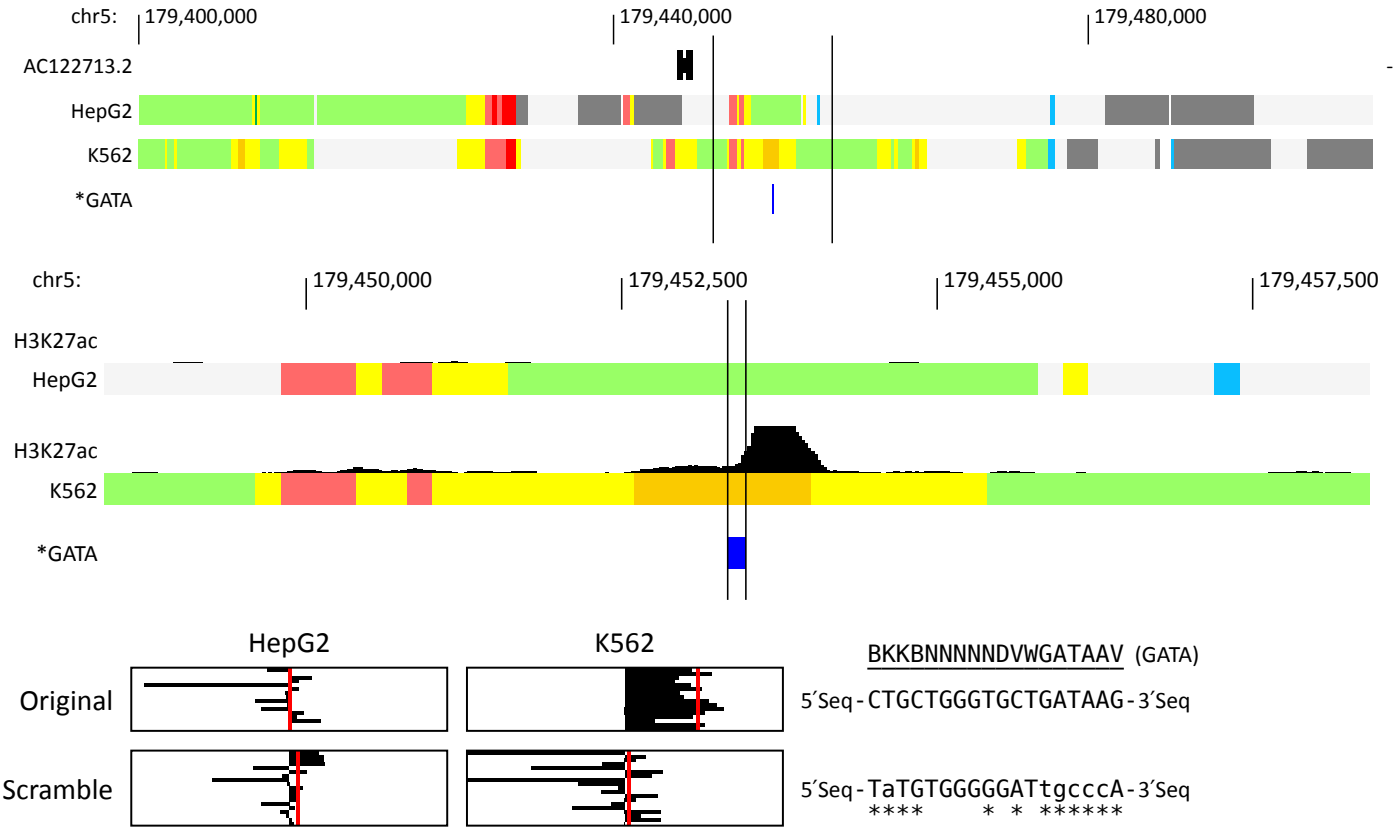
81 GATA in K562 enhancer

chr5 179453404 179453421 + (hg18)



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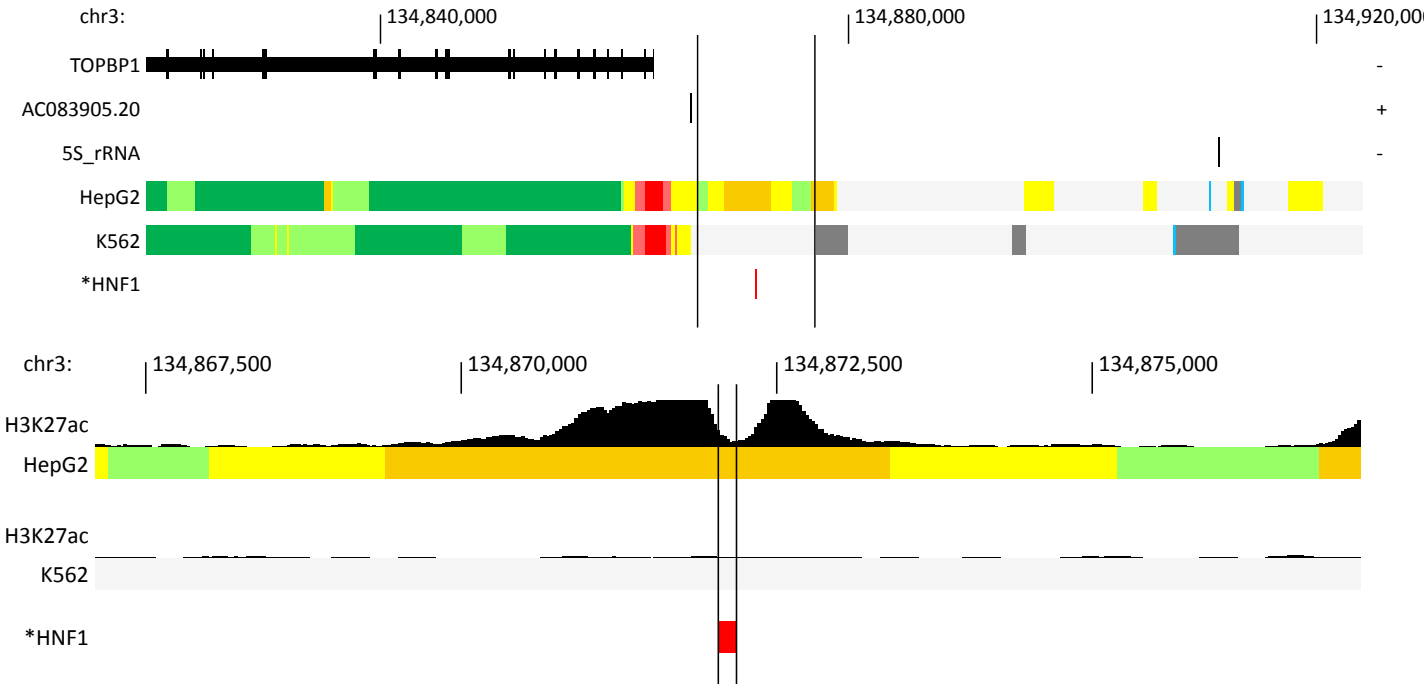
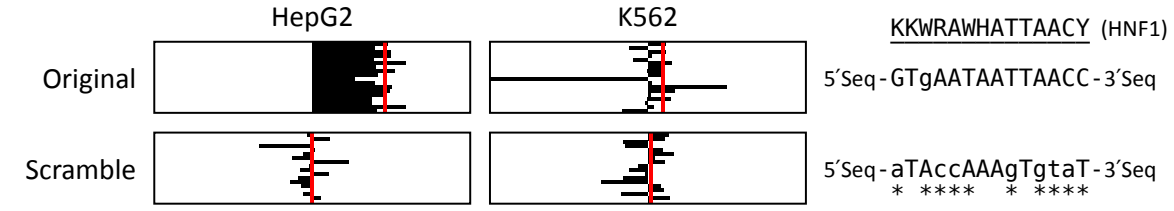
82 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr3 134872103 134872116 + (hg18)





KKWRAWHATTAACY (HNF1)

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5′Seq-aTAccAAAgTgtaT-3′Seq

* **** * ****

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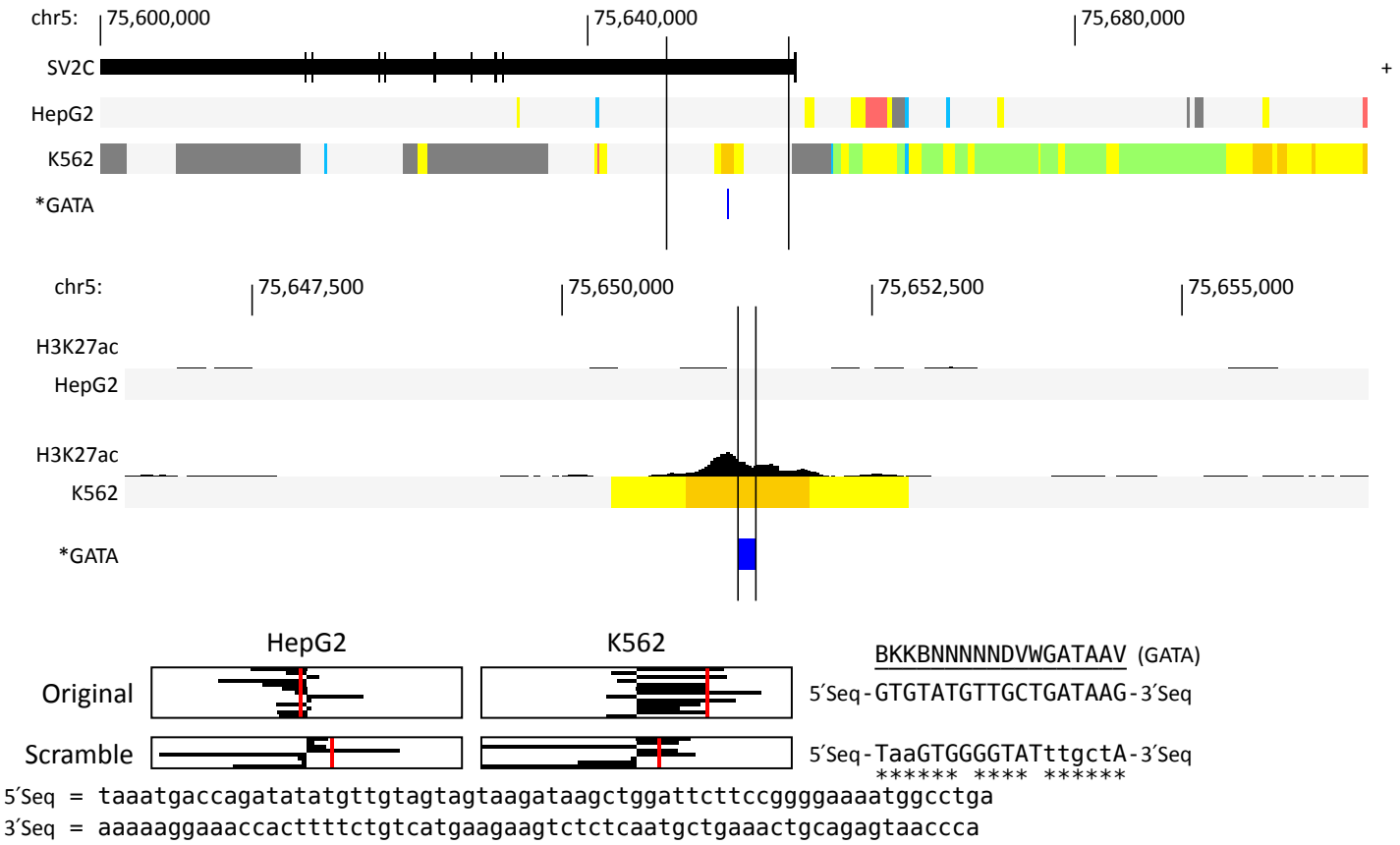
83 GATA in K562 enhancer

chr5 75651483 75651500 - (hg18)



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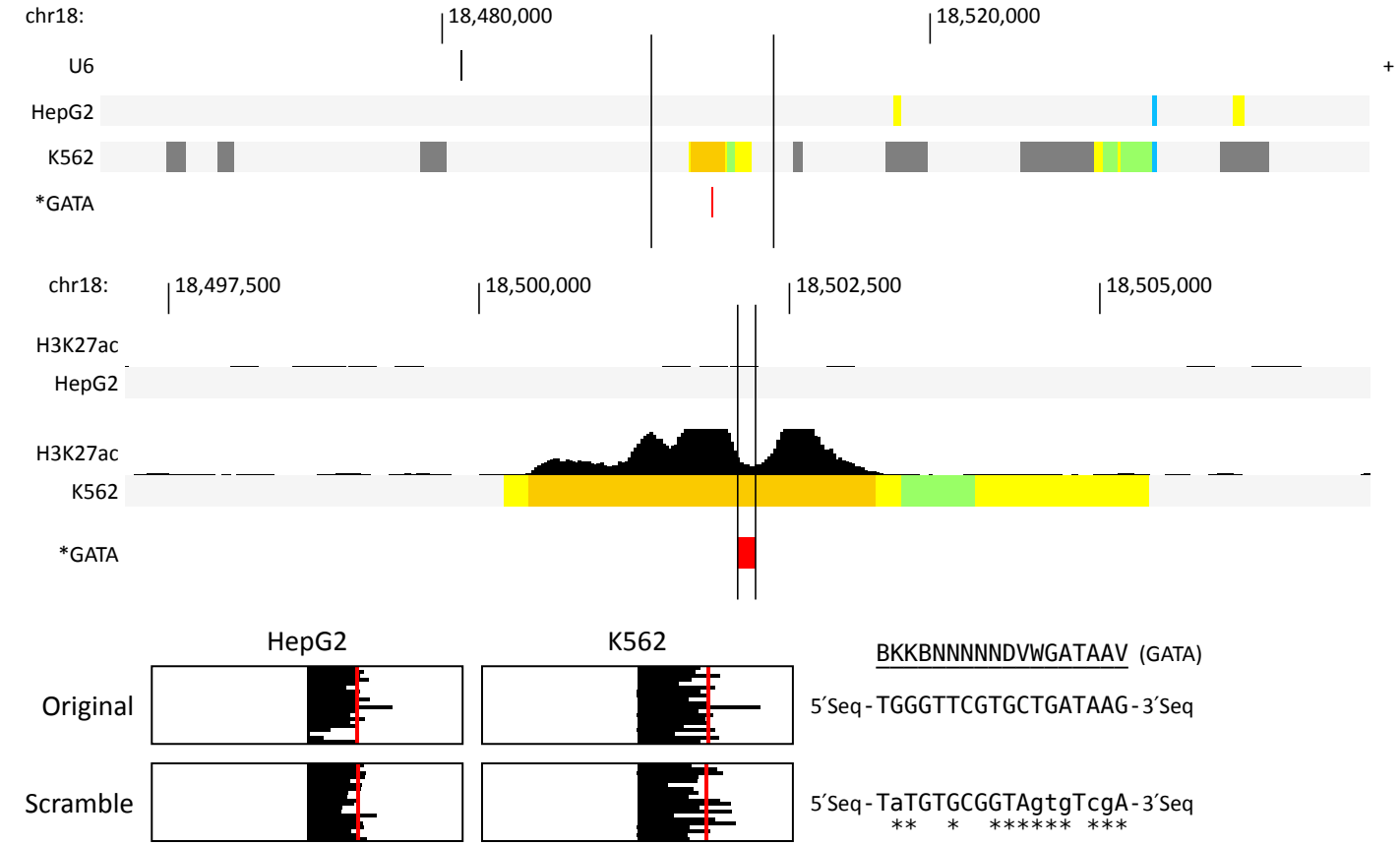
84 GATA in K562 enhancer (conserved at 60% confidence)

chr18 18502147 18502164 + (hg18)



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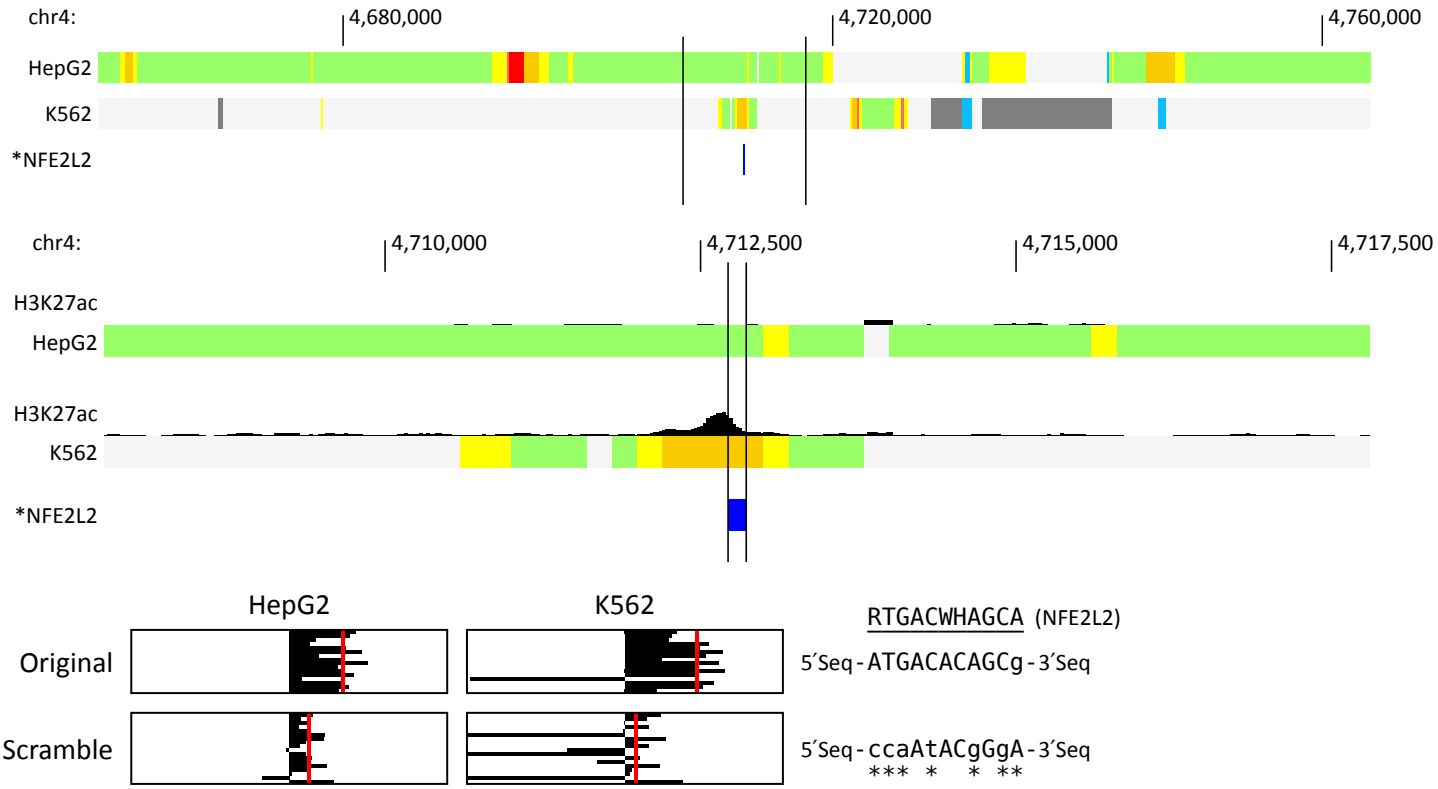
85 NFE2L2 in K562 enhancer

chr4 4712785 4712795 + (hg18)



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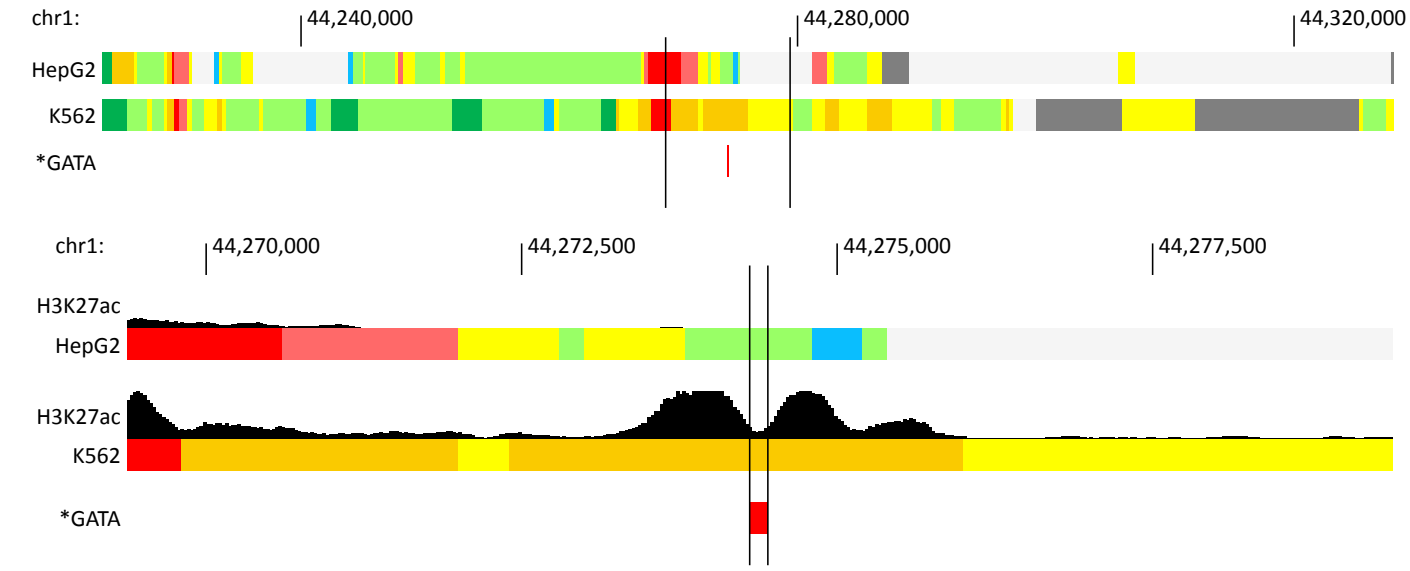
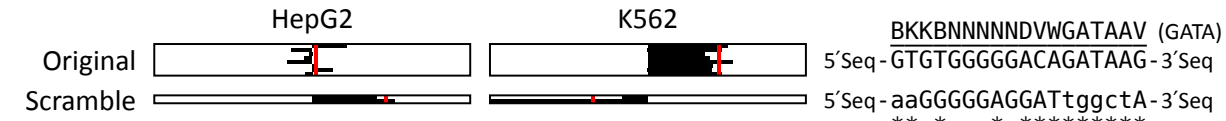
86 GATA in K562 enhancer (conserved at 60% confidence)

chr1 44274371 44274388 - (hg18)



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3′Seq = gcagggccccacgcagggcttatccagccctgccatccctgctggggagctaccagcagatgg
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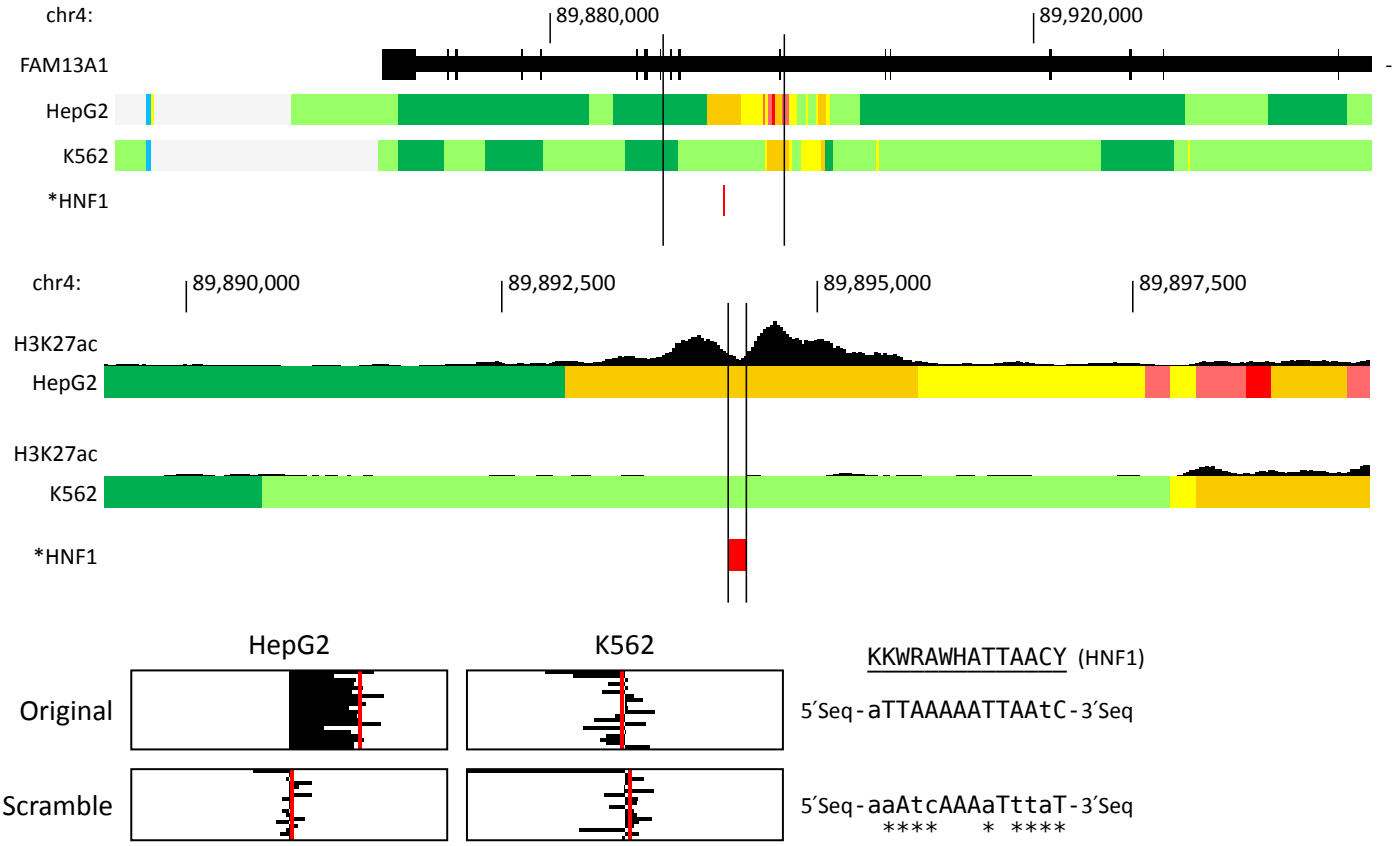
87 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr4 89894360 89894373 + (hg18)



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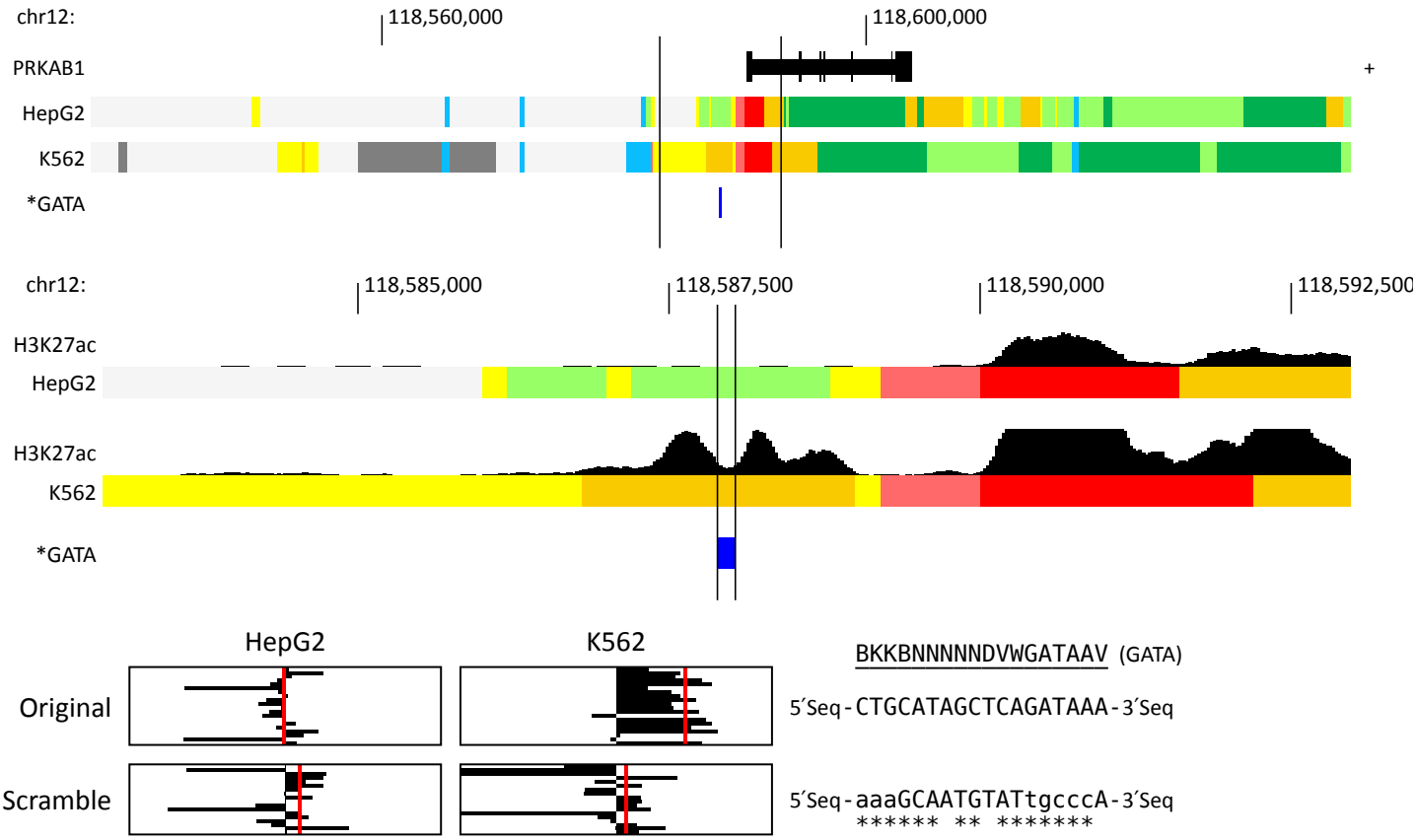
88 GATA in K562 enhancer

chr12 118587953 118587970 + (hg18)



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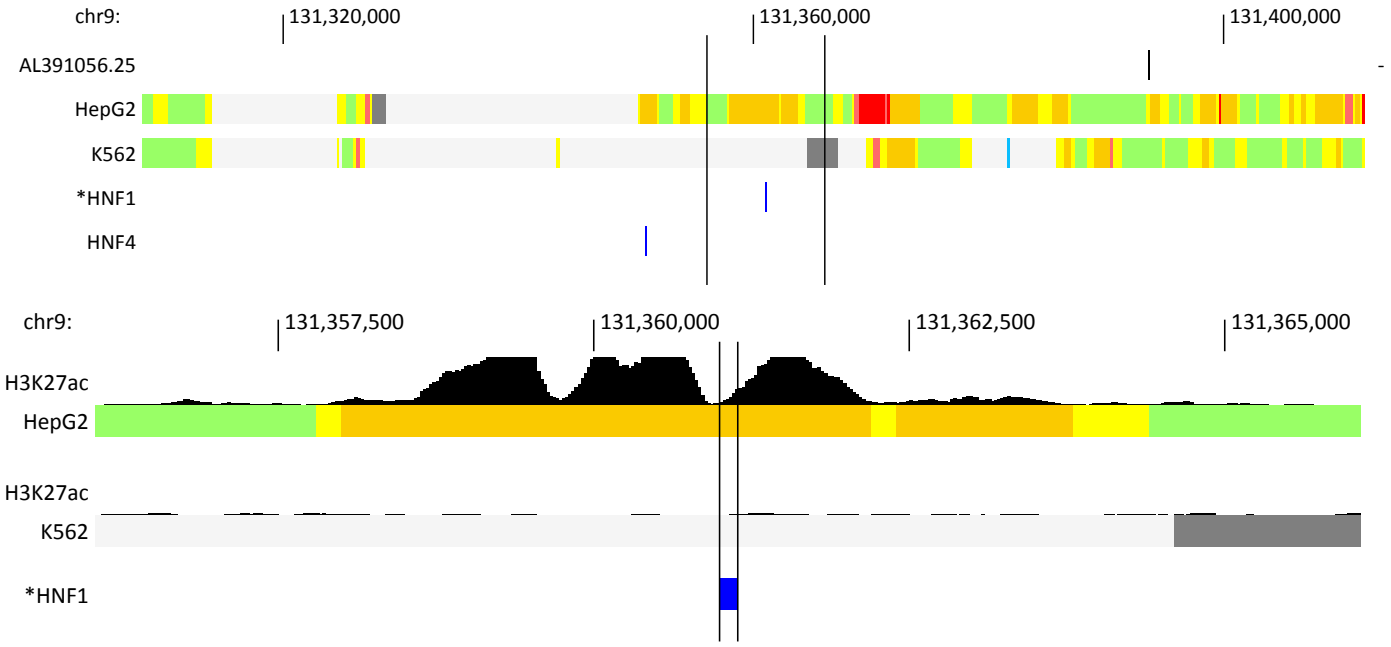
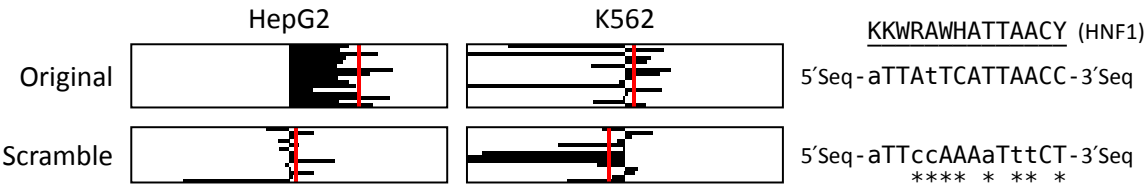
89 HNF1 in HepG2 enhancer

chr9 131361063 131361076 - (hg18)





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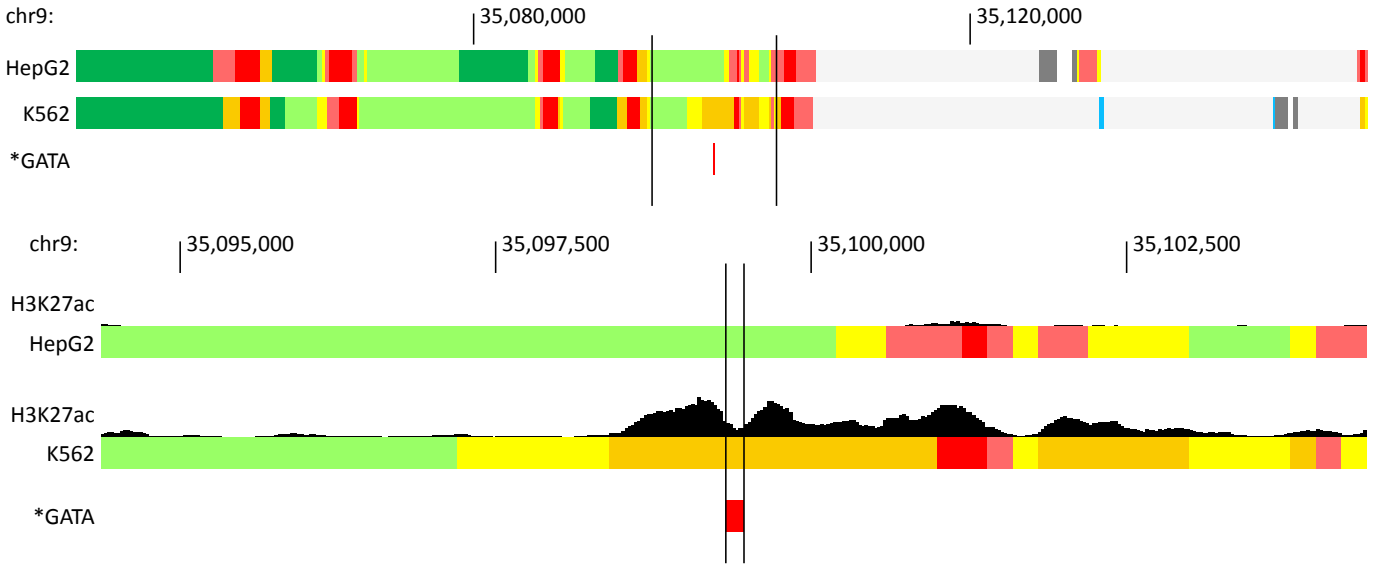
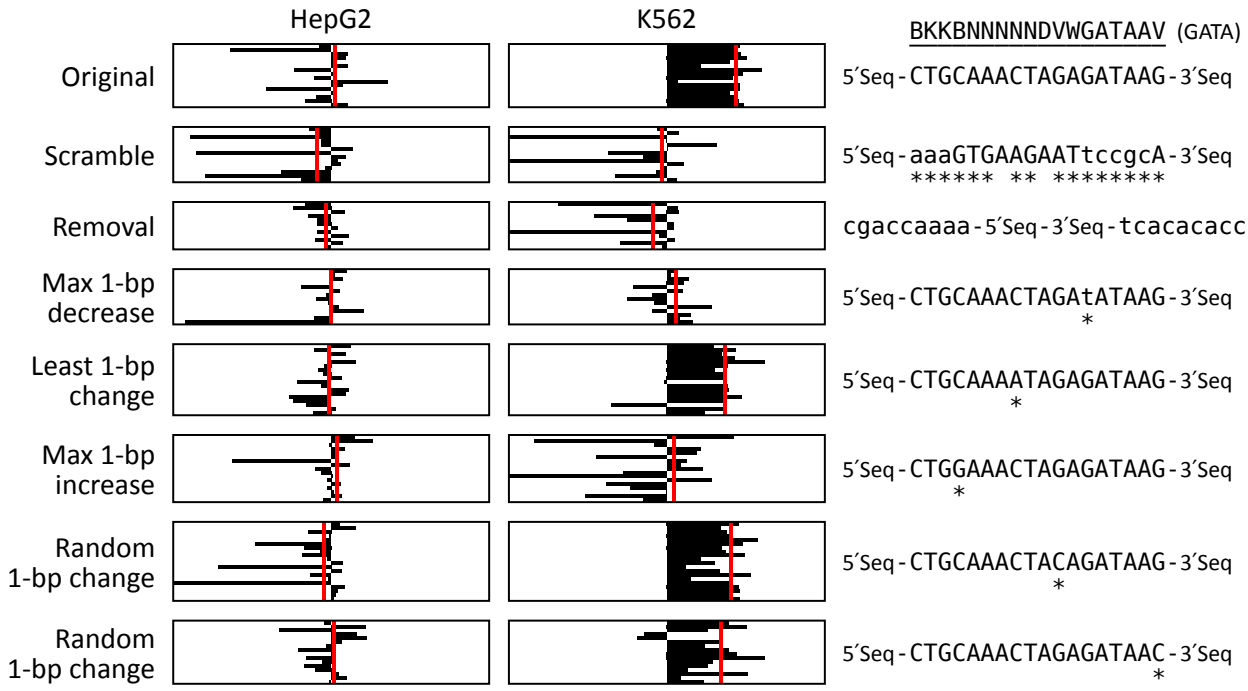
90 GATA in K562 enhancer (conserved at 70% confidence)

chr9 35099388 35099405 + (hg18)





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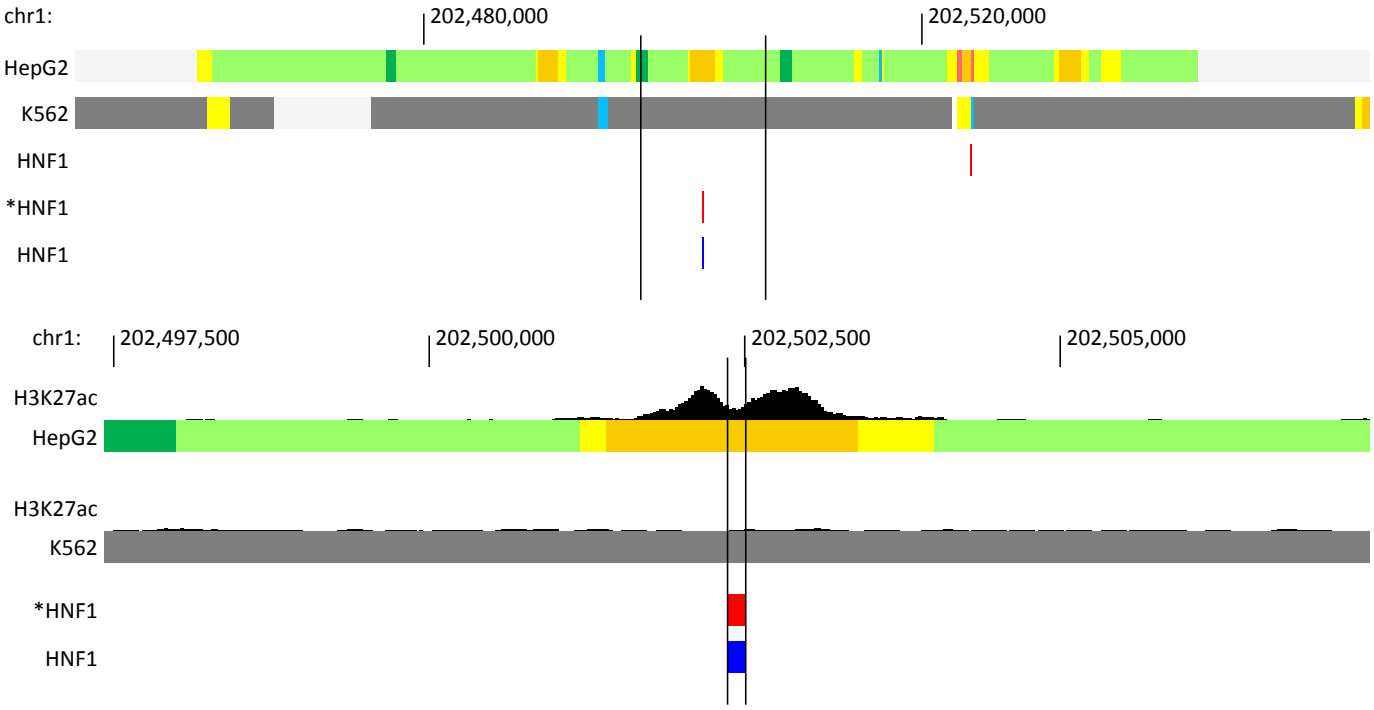
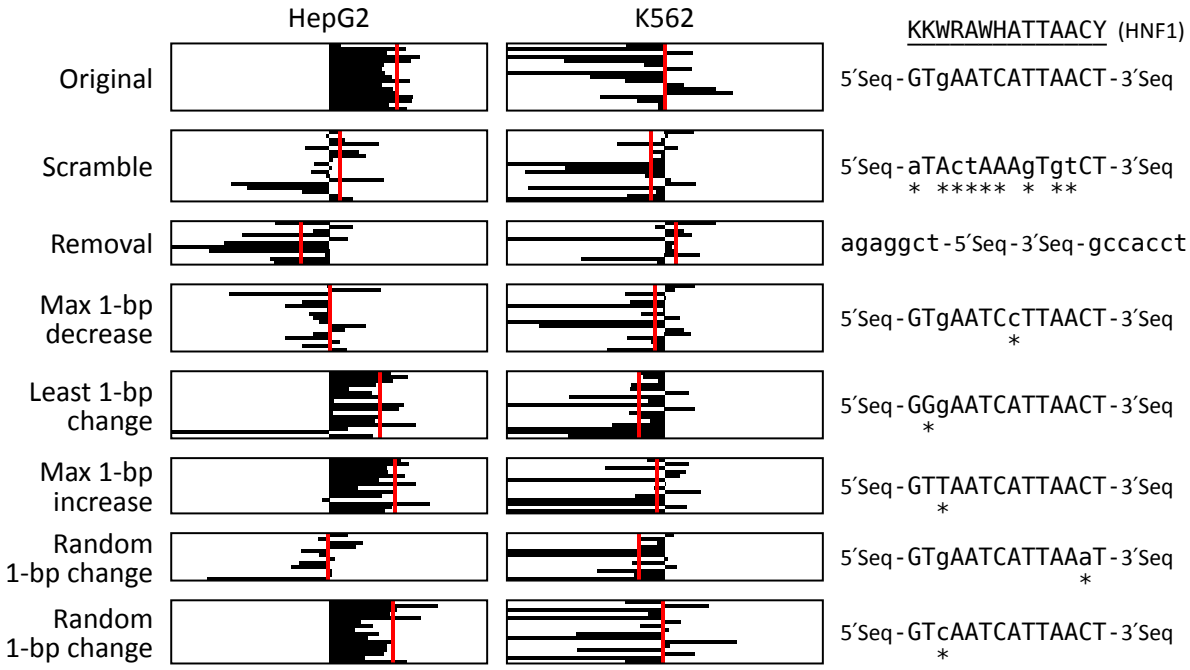
91 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 202502430 202502443 - (hg18)





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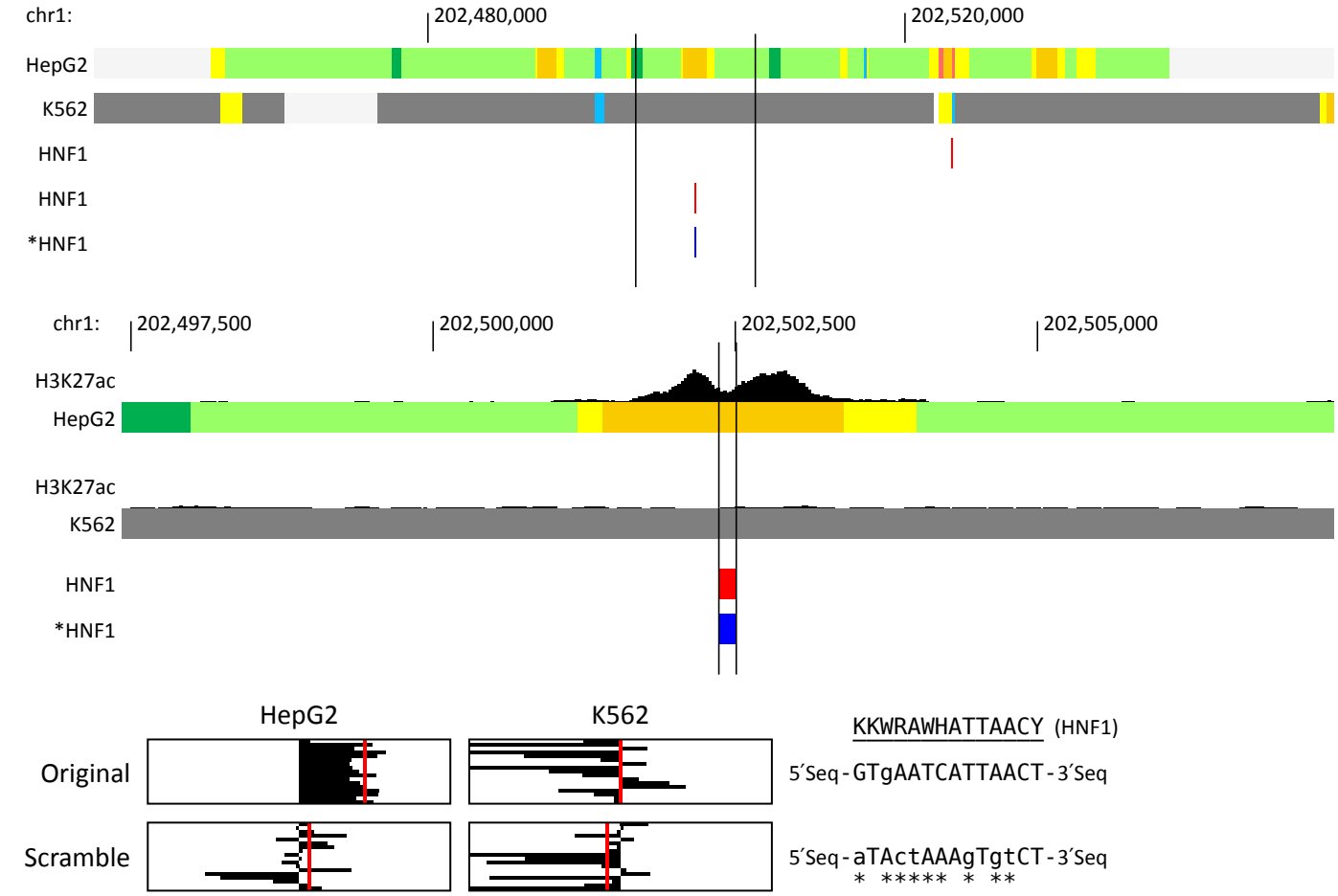
92 HNF1 in HepG2 enhancer

chr1 202502430 202502443 - (hg18)



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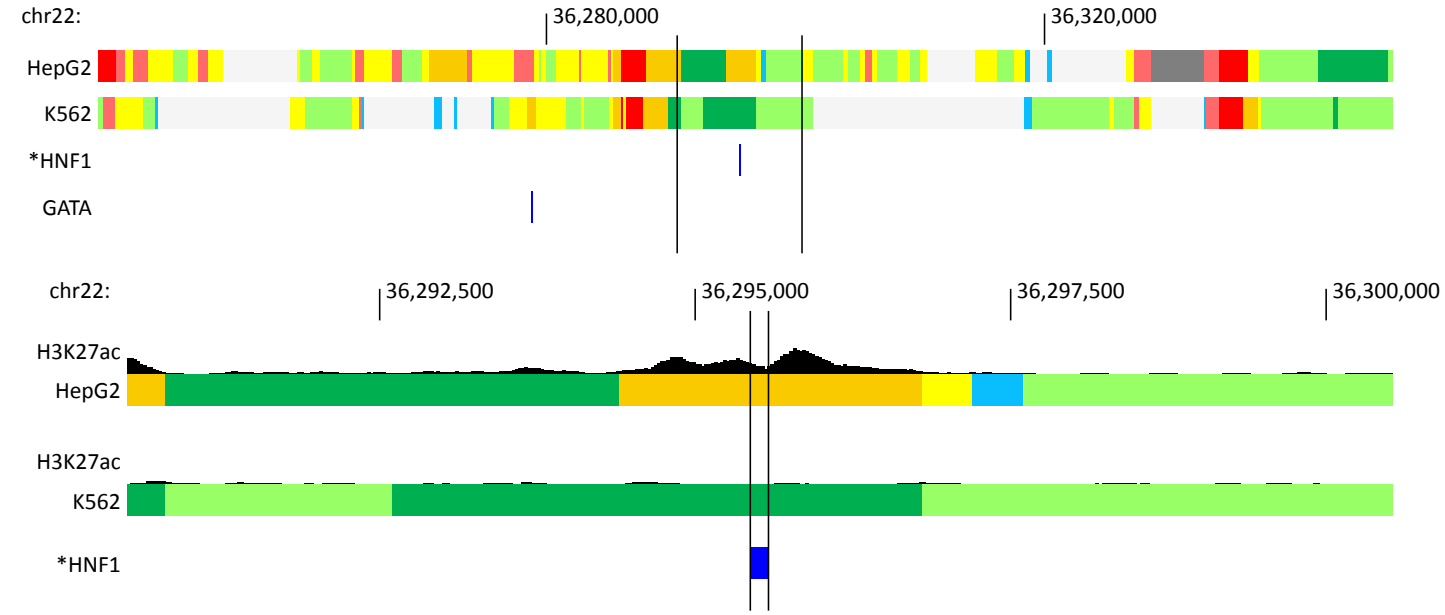
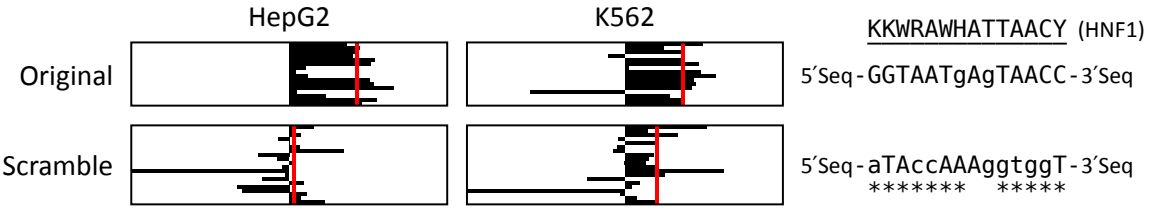
93 HNF1 in HepG2 enhancer

chr22 36295503 36295516 + (hg18)





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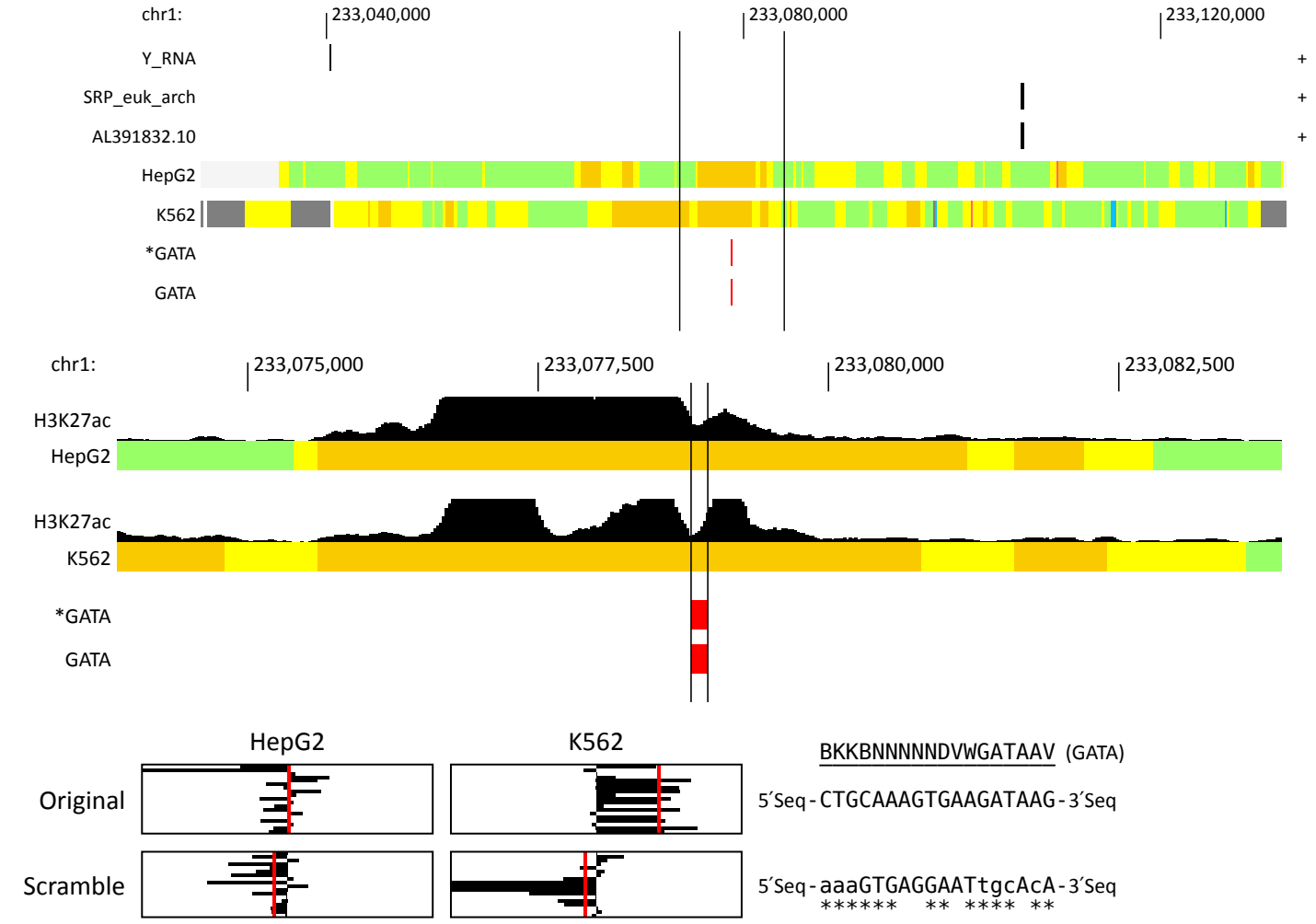
94 GATA in HepG2 enhancer (conserved at 60% confidence)

chr1 233078881 233078898 - (hg18)



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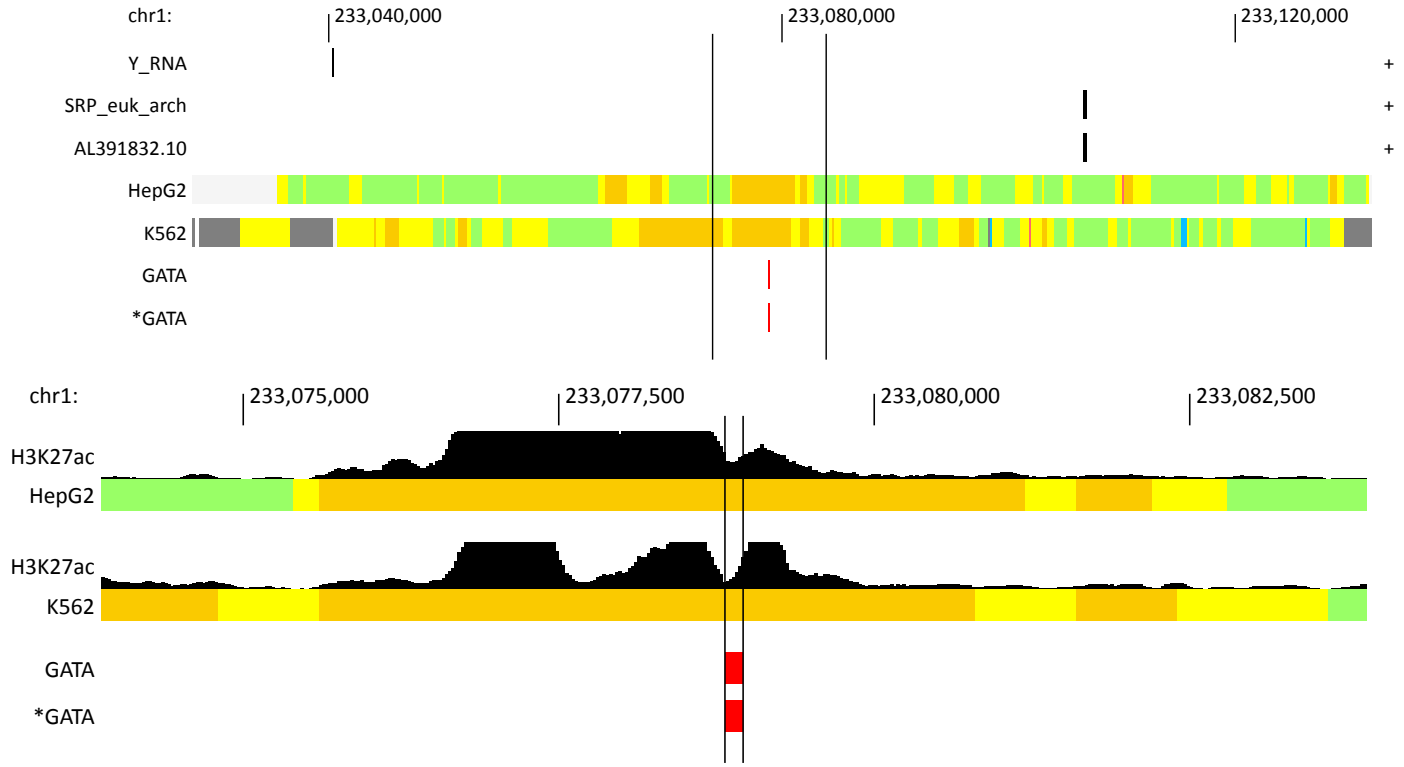
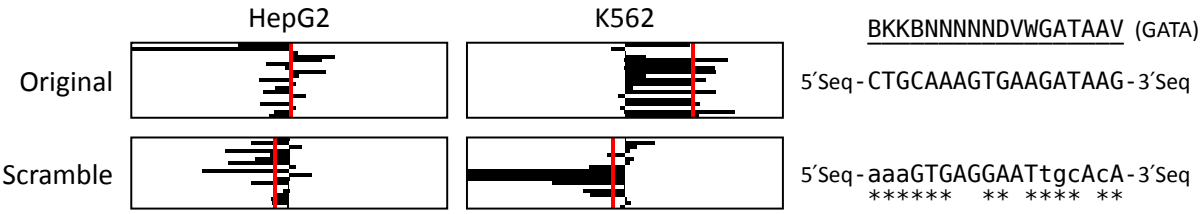
95 GATA in K562 enhancer (conserved at 60% confidence)

chr1 233078881 233078898 - (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGCAAAGTGAAGATAAG-3′Seq

5′Seq-aaaGTGAGGAATtgcAcA-3′Seq

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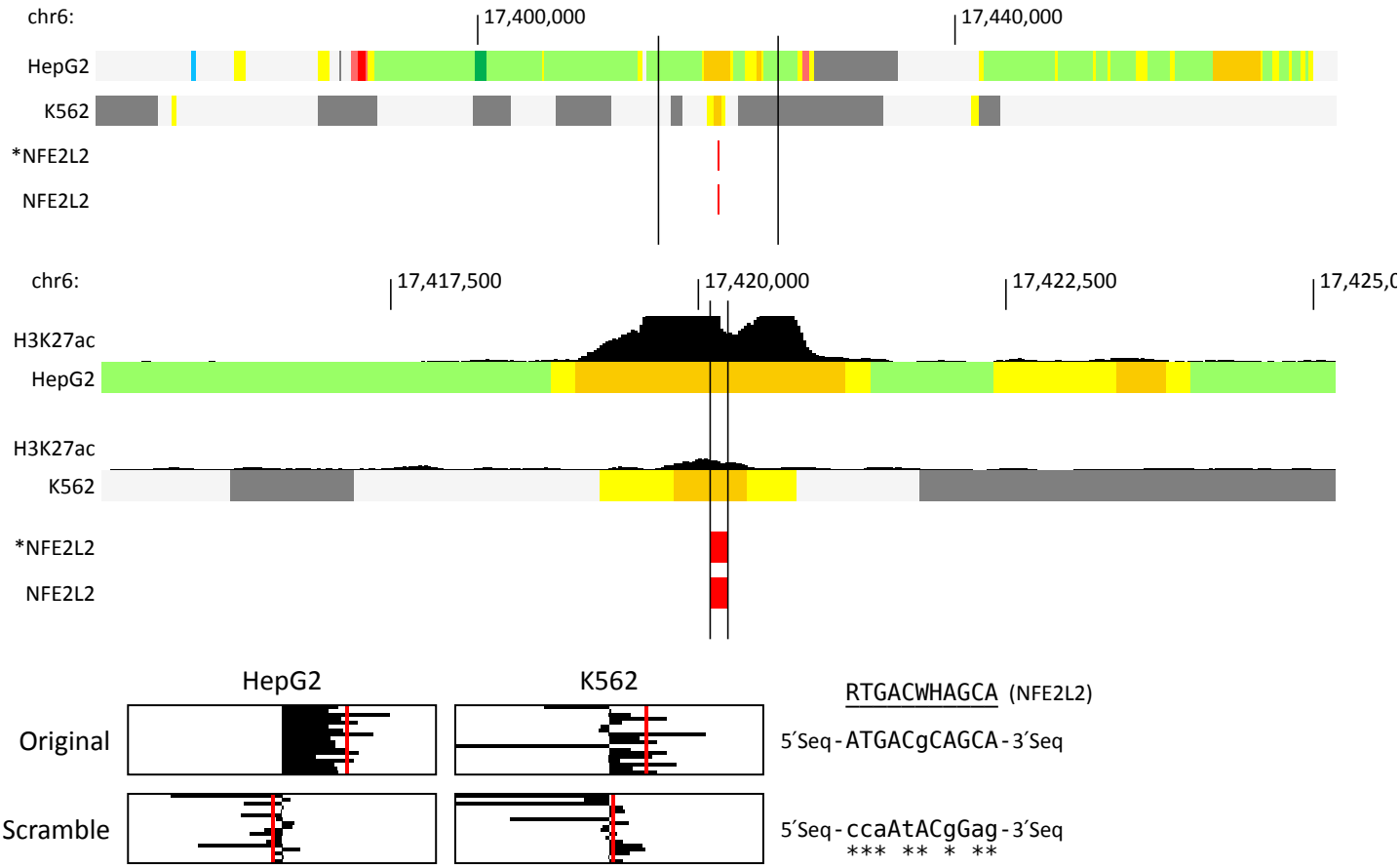
96 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr6 17420163 17420173 + (hg18)



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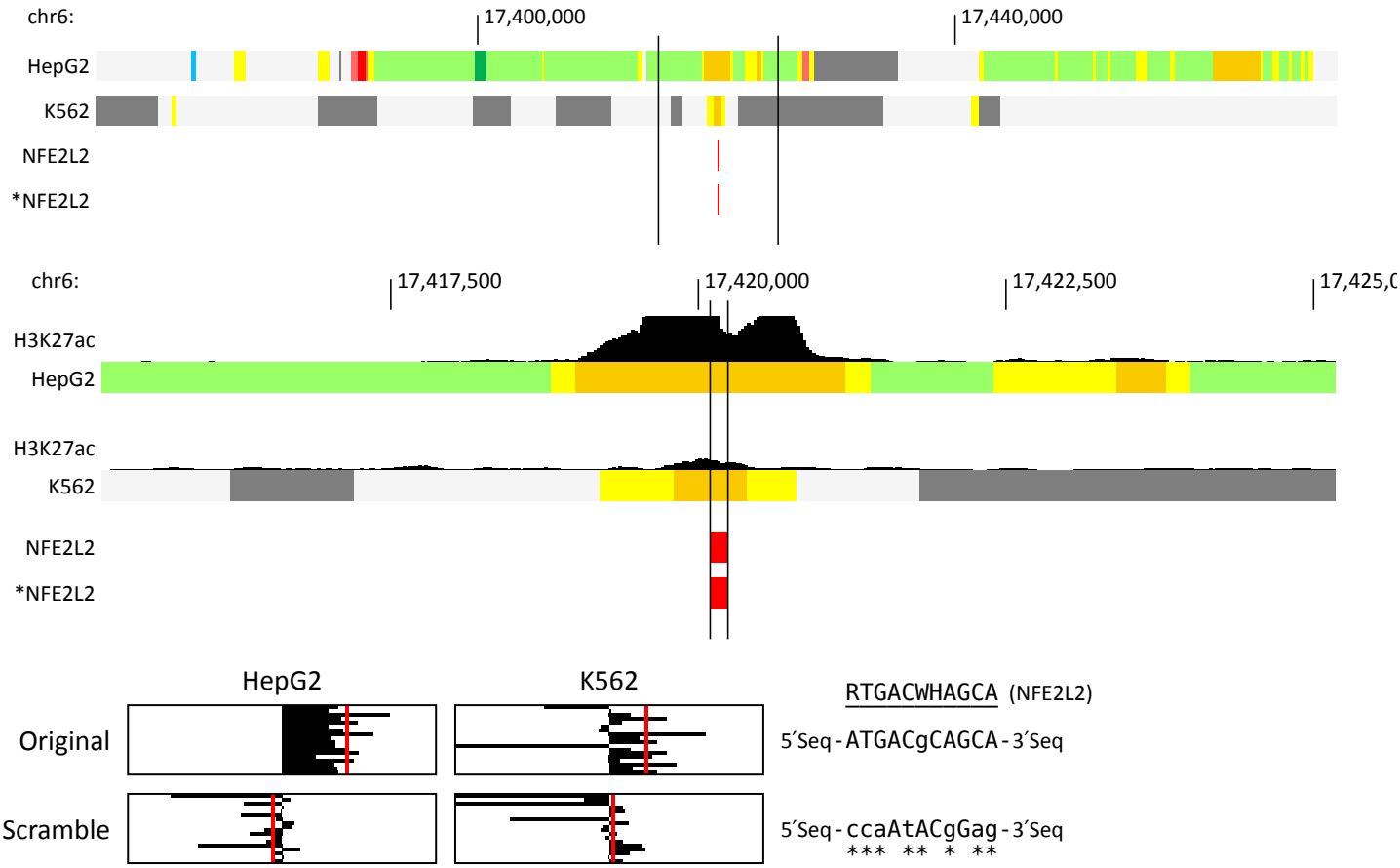
97 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 17420163 17420173 + (hg18)



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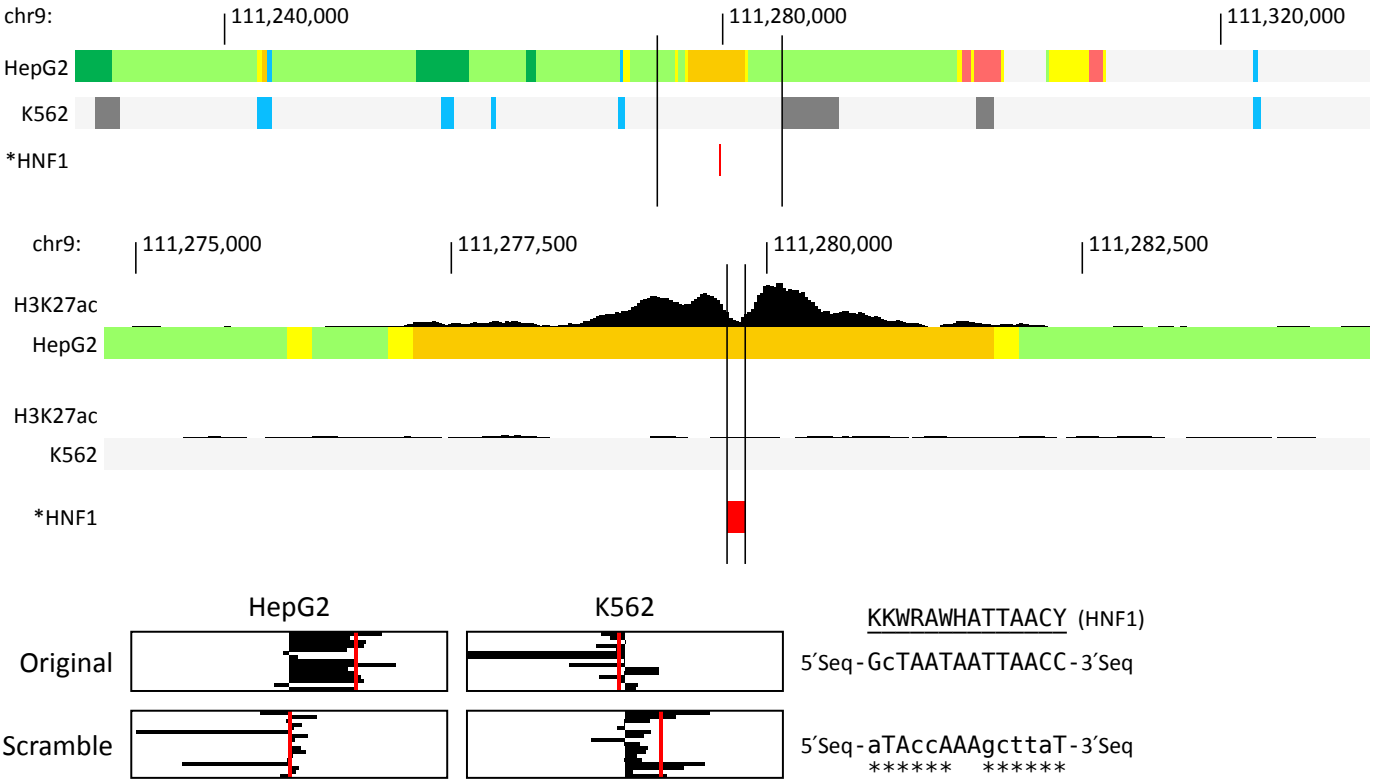
98 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr9 111279751 111279764 - (hg18)



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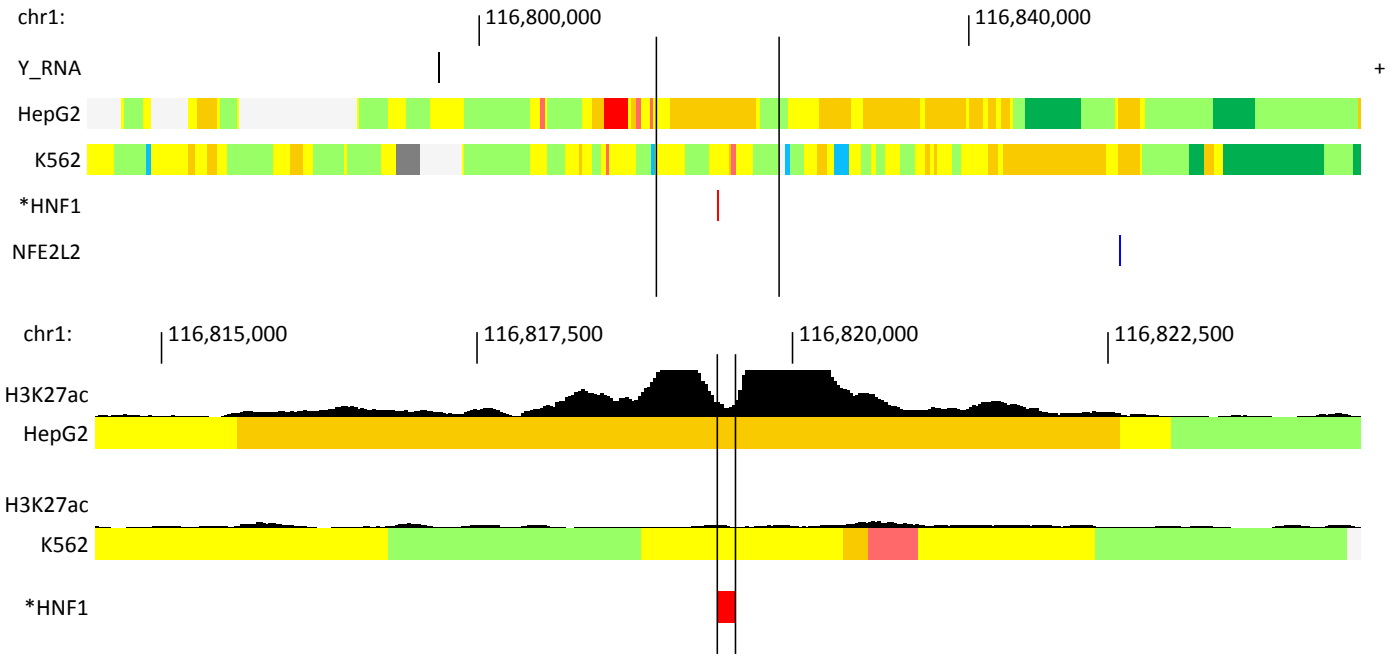
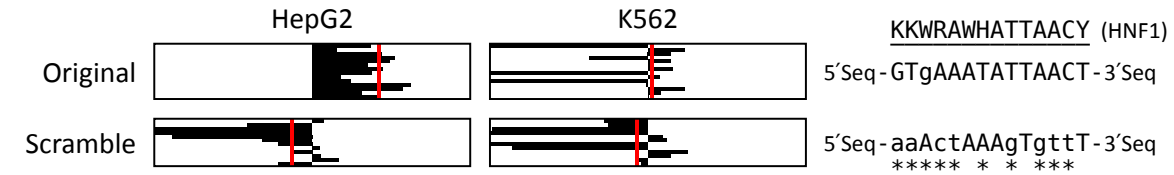
99 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 116819470 116819483 - (hg18)





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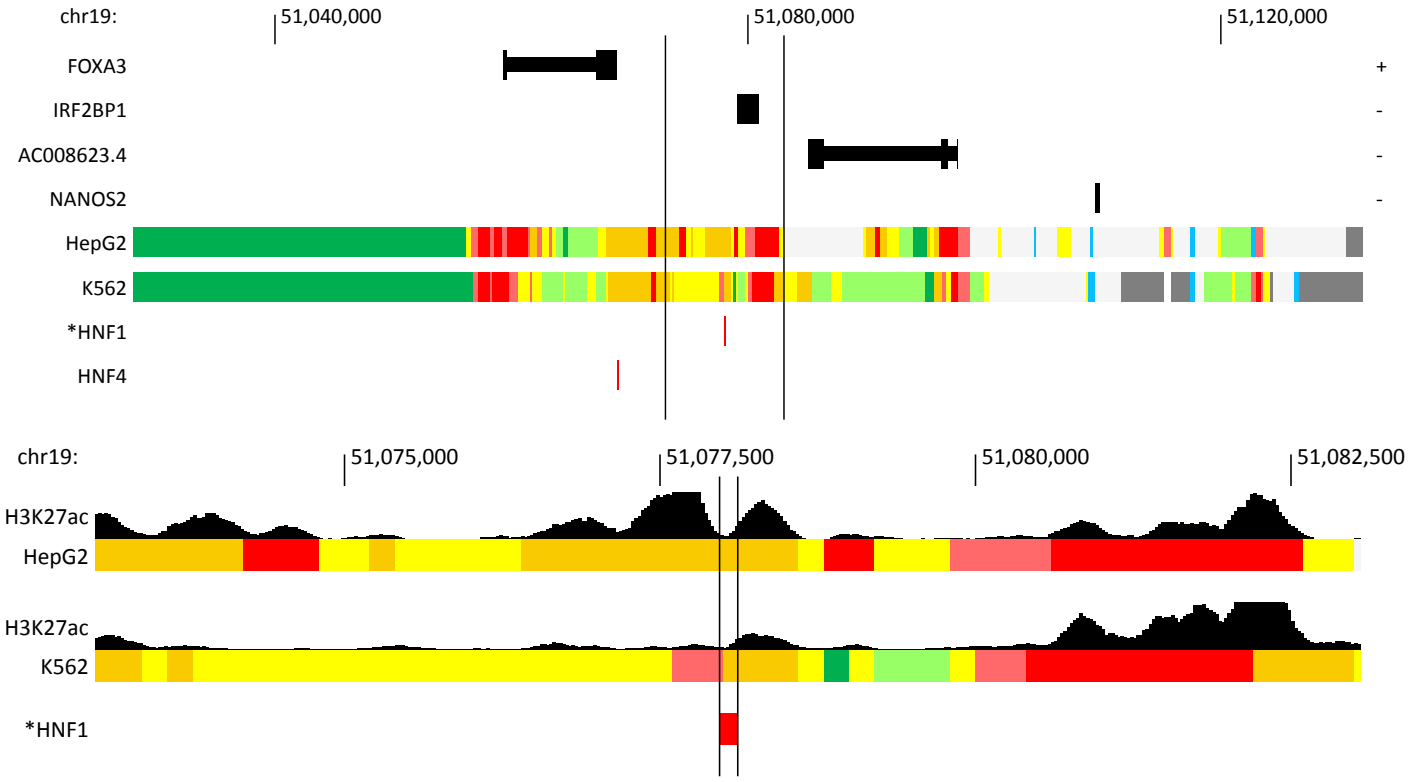
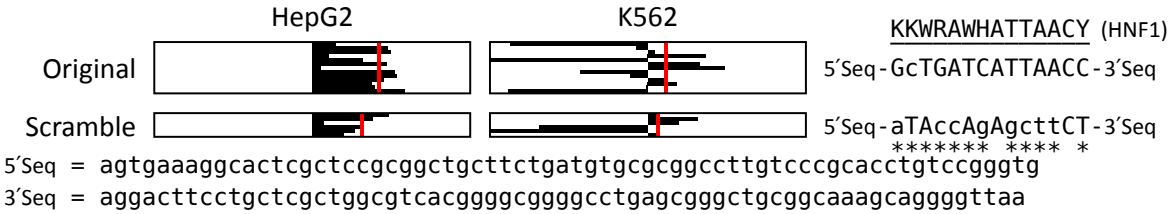
100 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr19 51078038 51078051 - (hg18)





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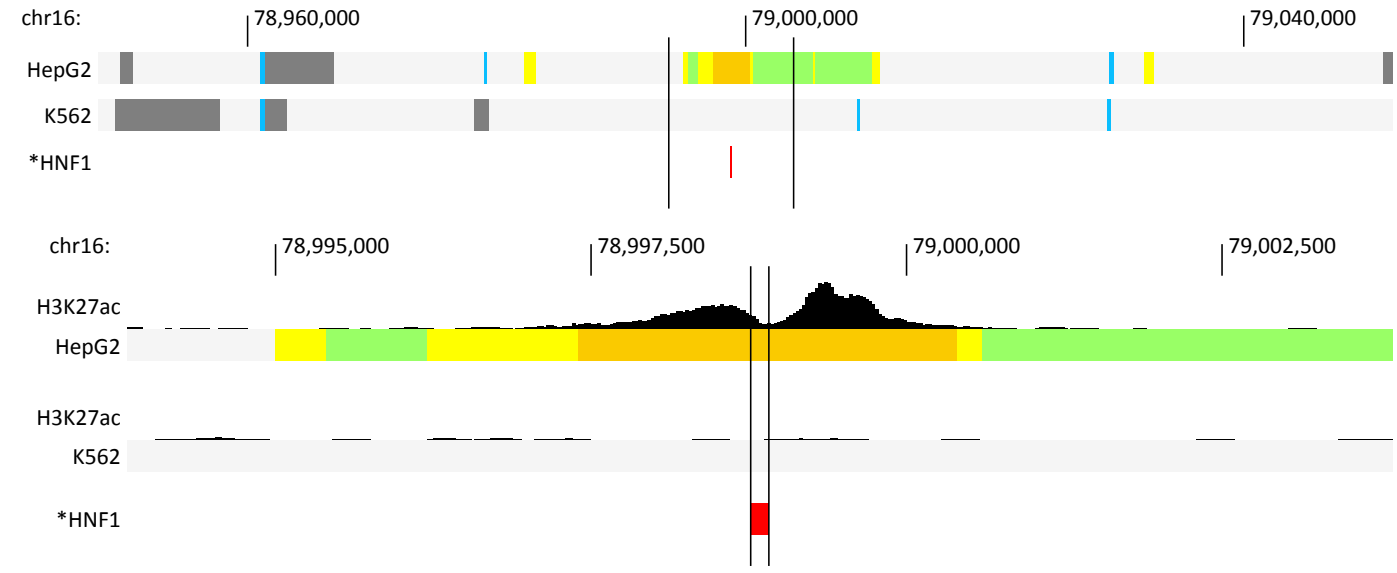
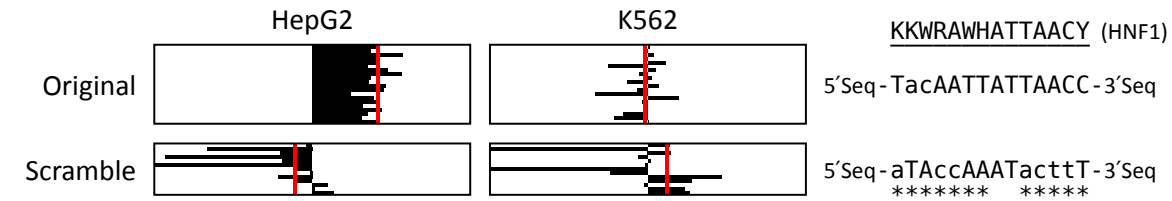
101 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr16 78998831 78998844 - (hg18)





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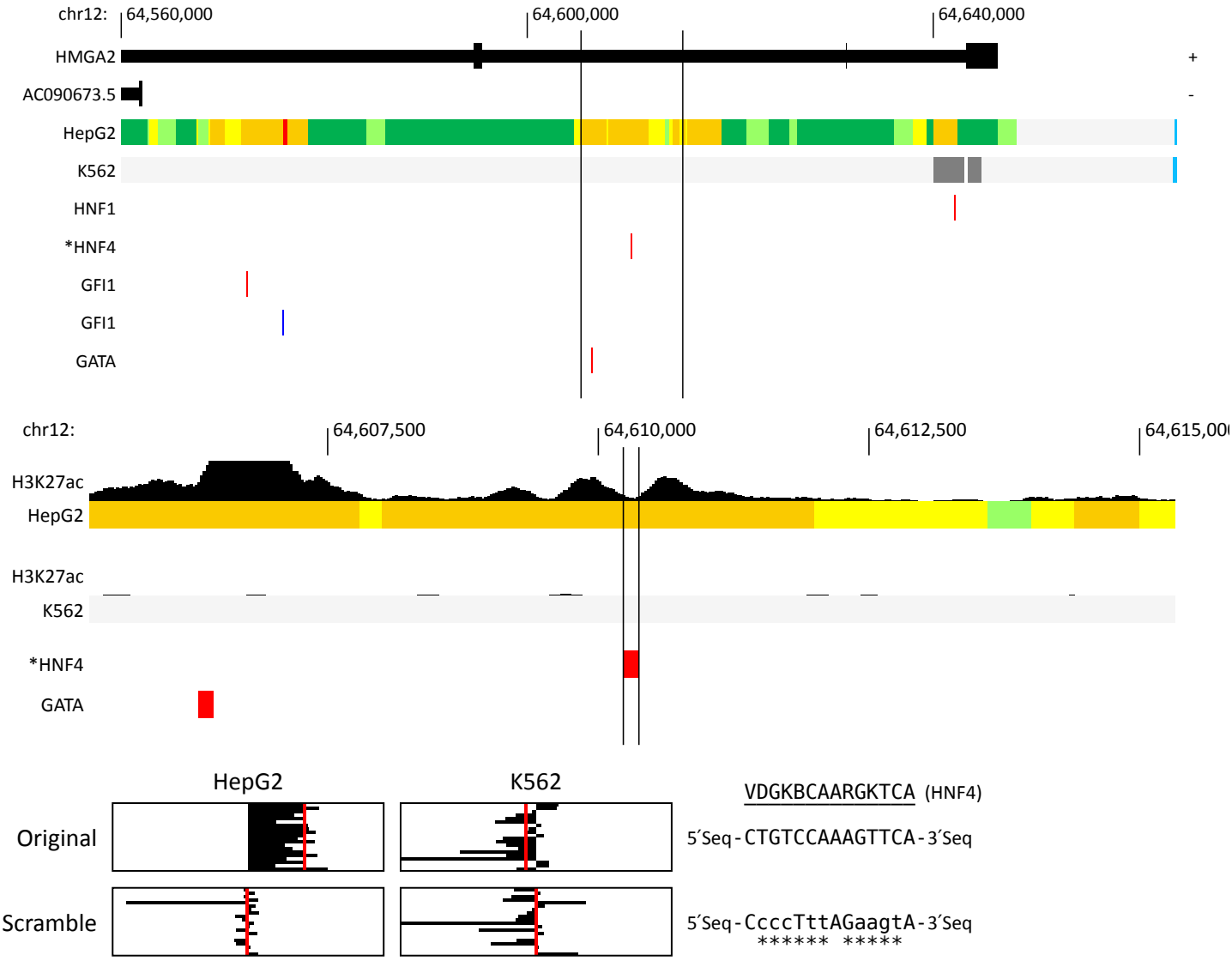
102 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 64610297 64610310 - (hg18)



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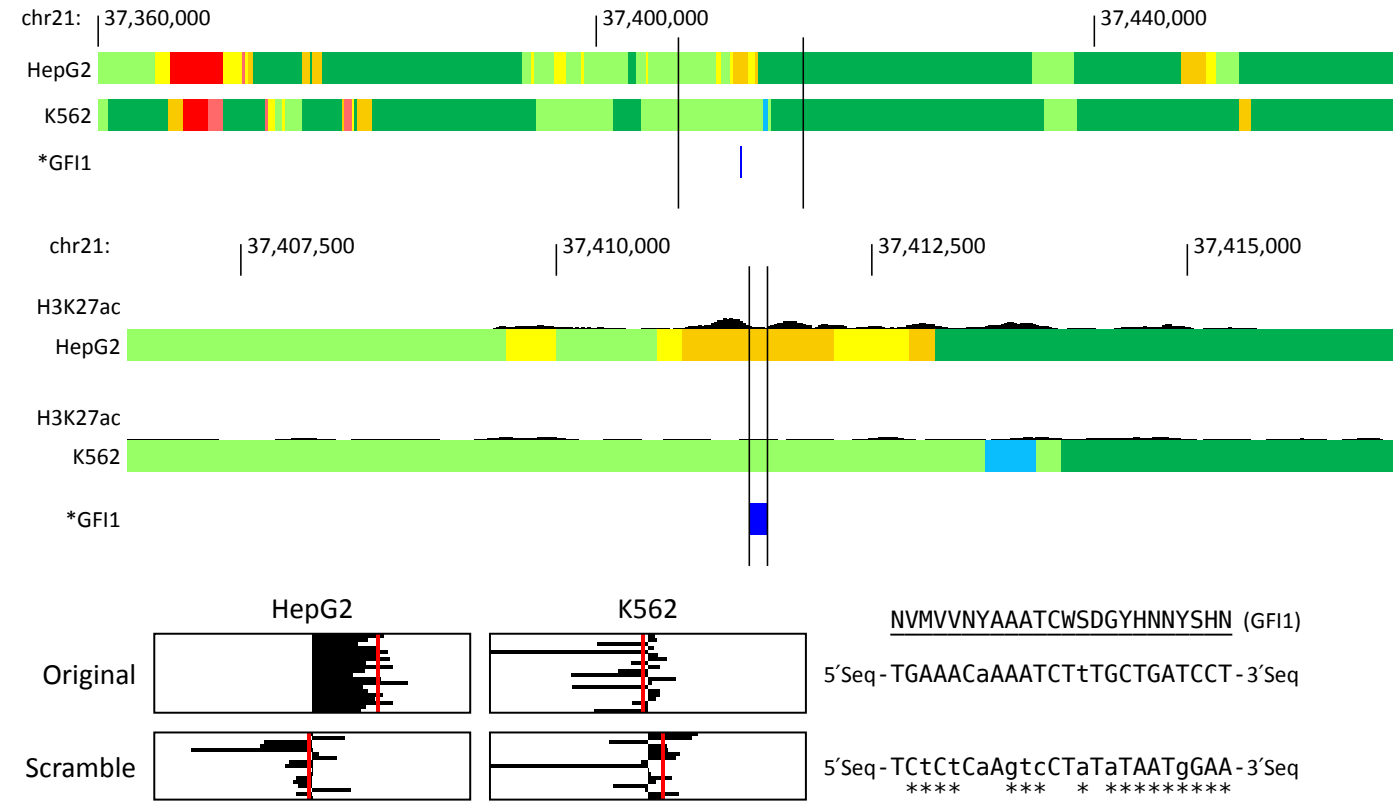
103 GFI1 in HepG2 enhancer

chr21 37411590 37411613 + (hg18)



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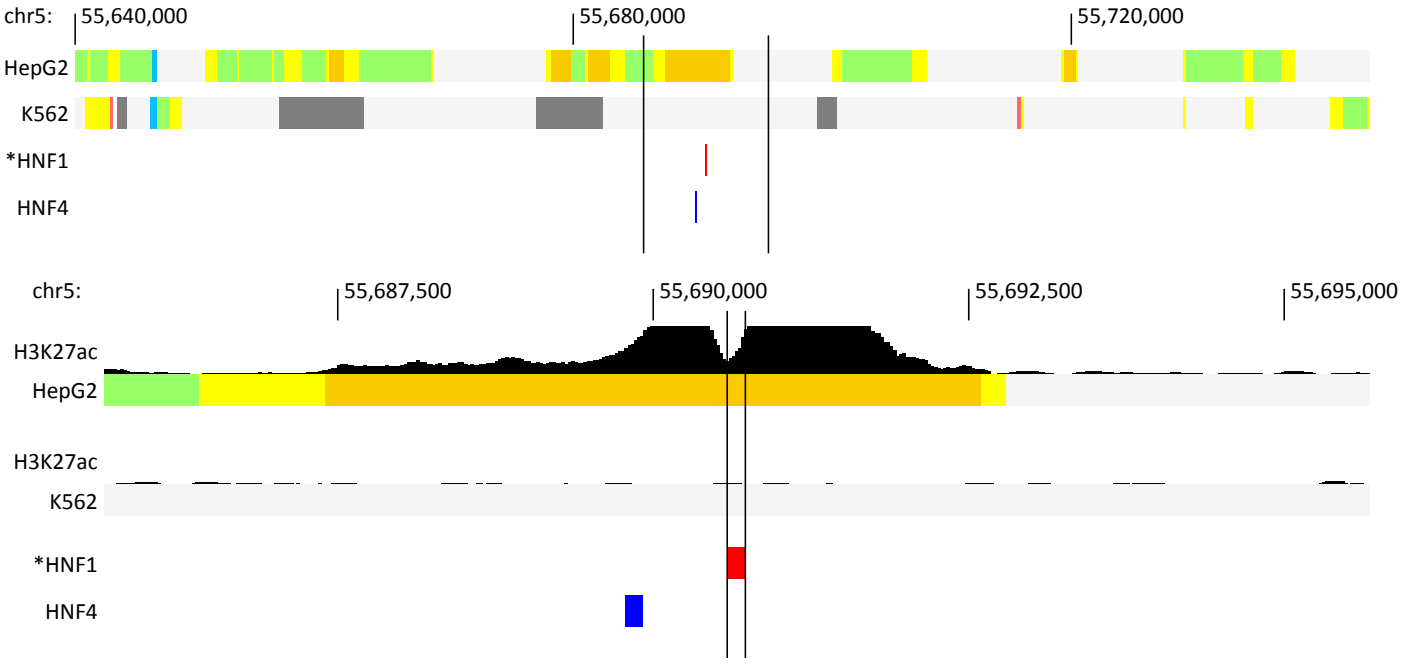
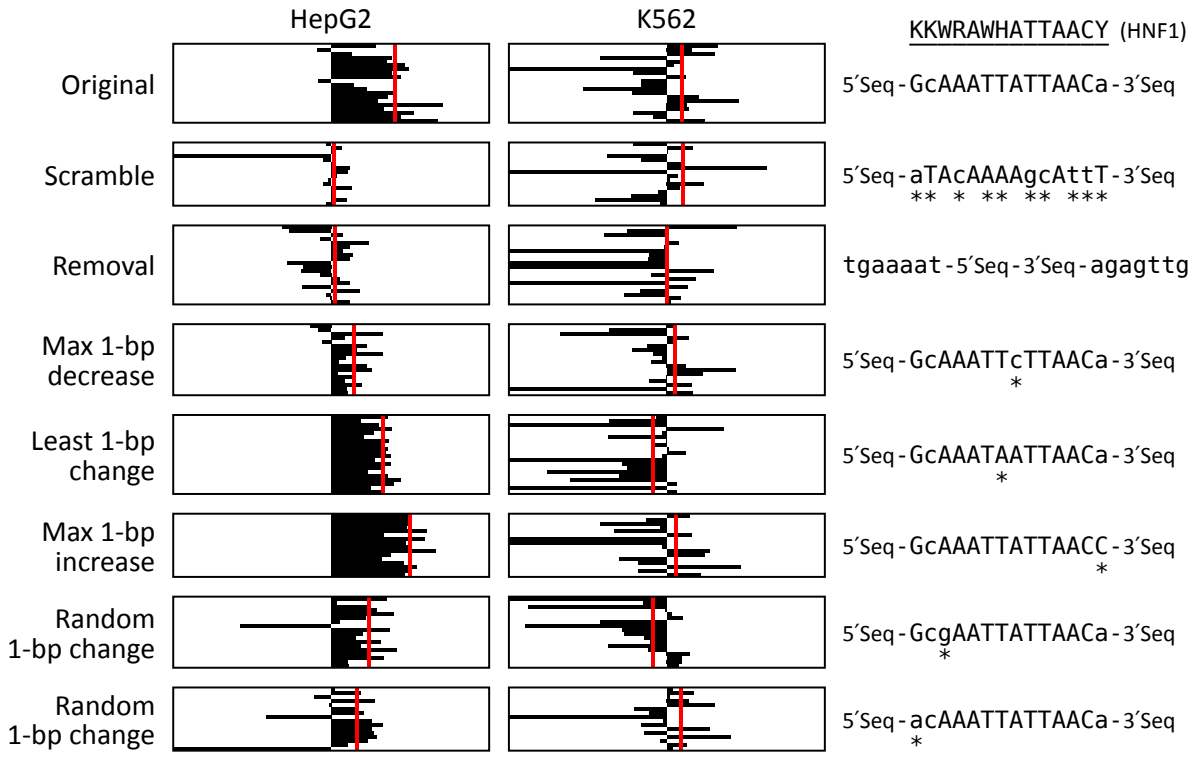
104 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr5 55690652 55690665 + (hg18)





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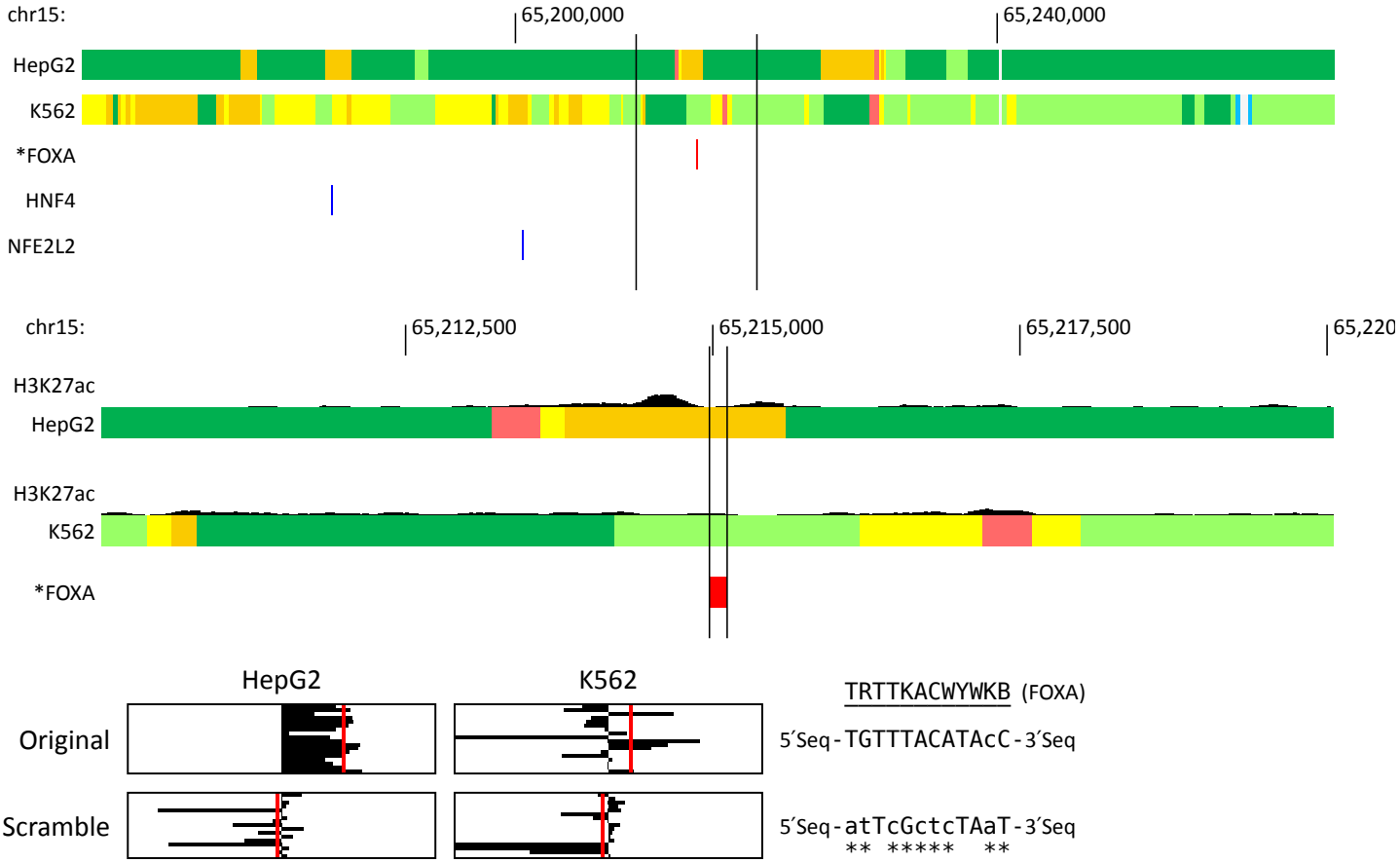
3′Seq = cattccaccaaagttgtgagggtggaggcctggccttggagaaaaaataatcaccatcataataa

105 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr15 65215040 65215051 + (hg18)



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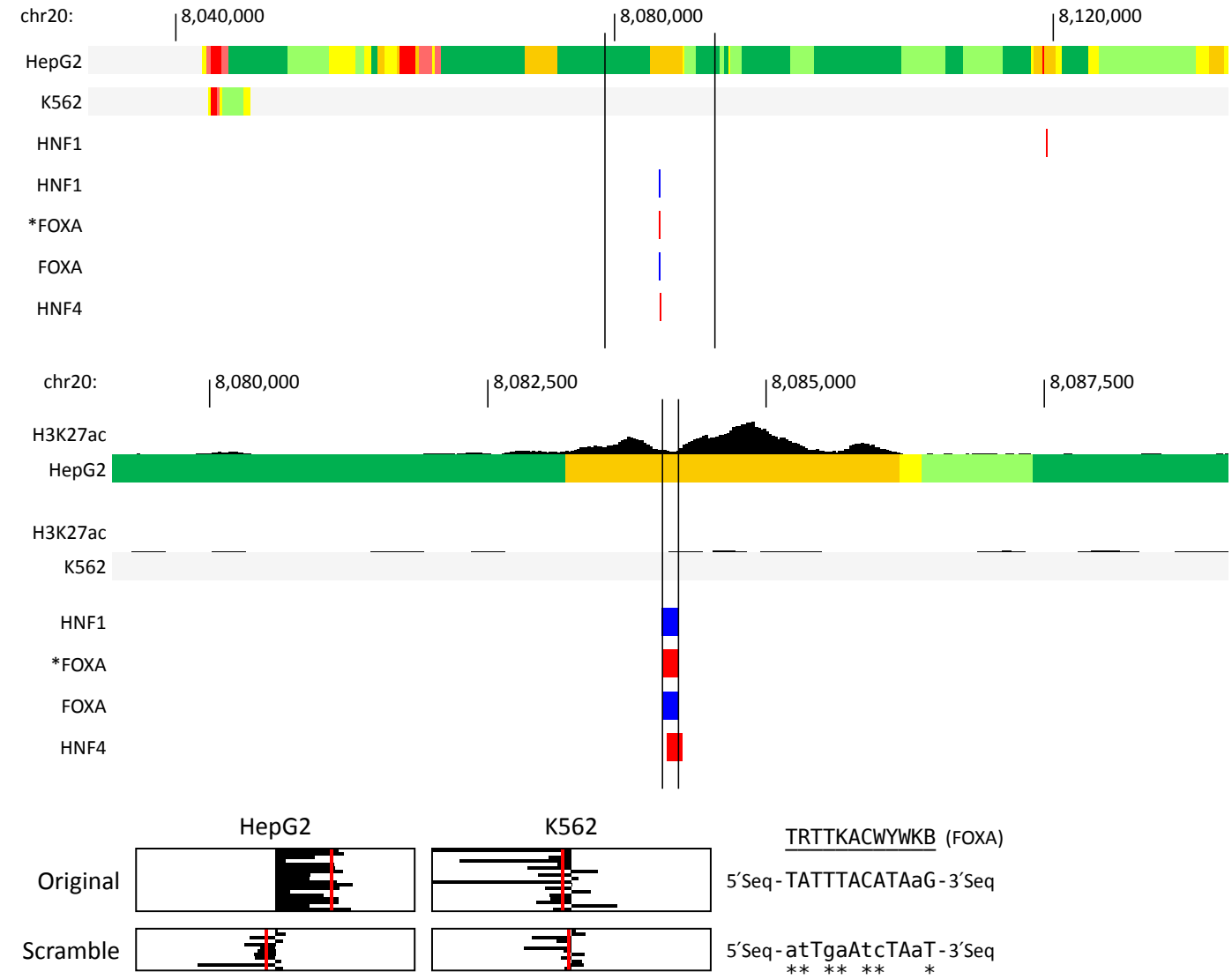
3′Seq = agagcagtactttgaactttgattttctcctctgcctctgtgctggttcagacaccctctctaaga

106 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 8084136 8084147 + (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TATTTACATAaG-3′Seq

5′Seq-atTgaAtcTAaT-3′Seq

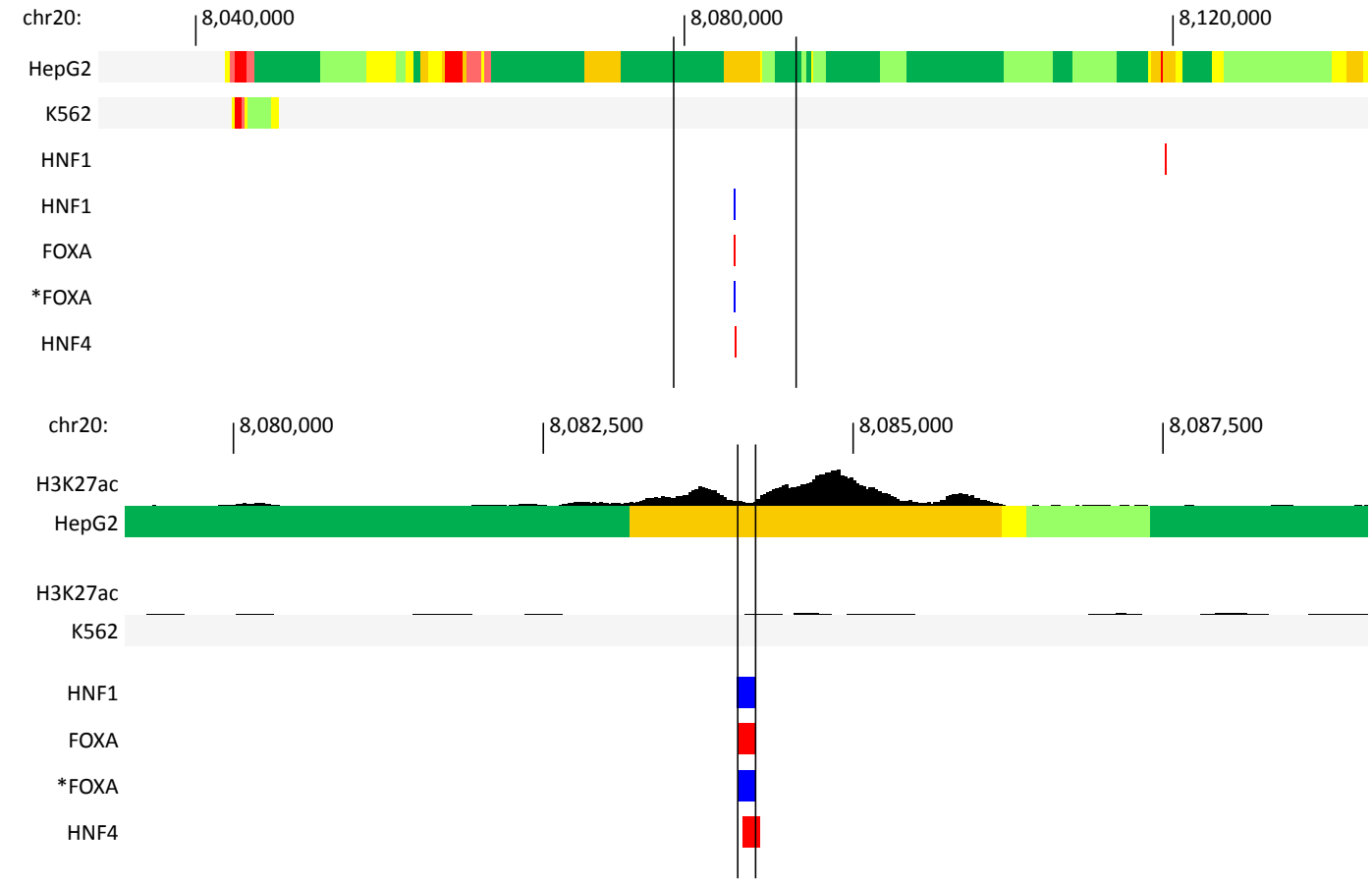
** ** ** *

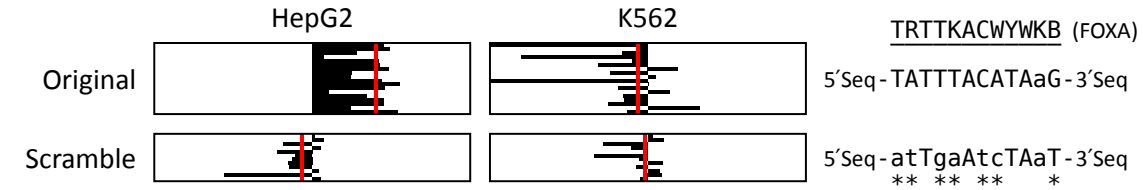
5′Seq = tagatagtcttctcttatgataaccttaaatttctacagagttcaaaagcaaagtttaaaagttaaa

3′Seq = tcacagtaacatttttcagcatgagtccagagttcaaaaatattttgaatgatgcatcataaatgt

107 FOXA in HepG2 enhancer

chr20 8084136 8084147 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTTACATAaG-3′Seq

5′Seq-atTgaAtcTAaT-3′Seq

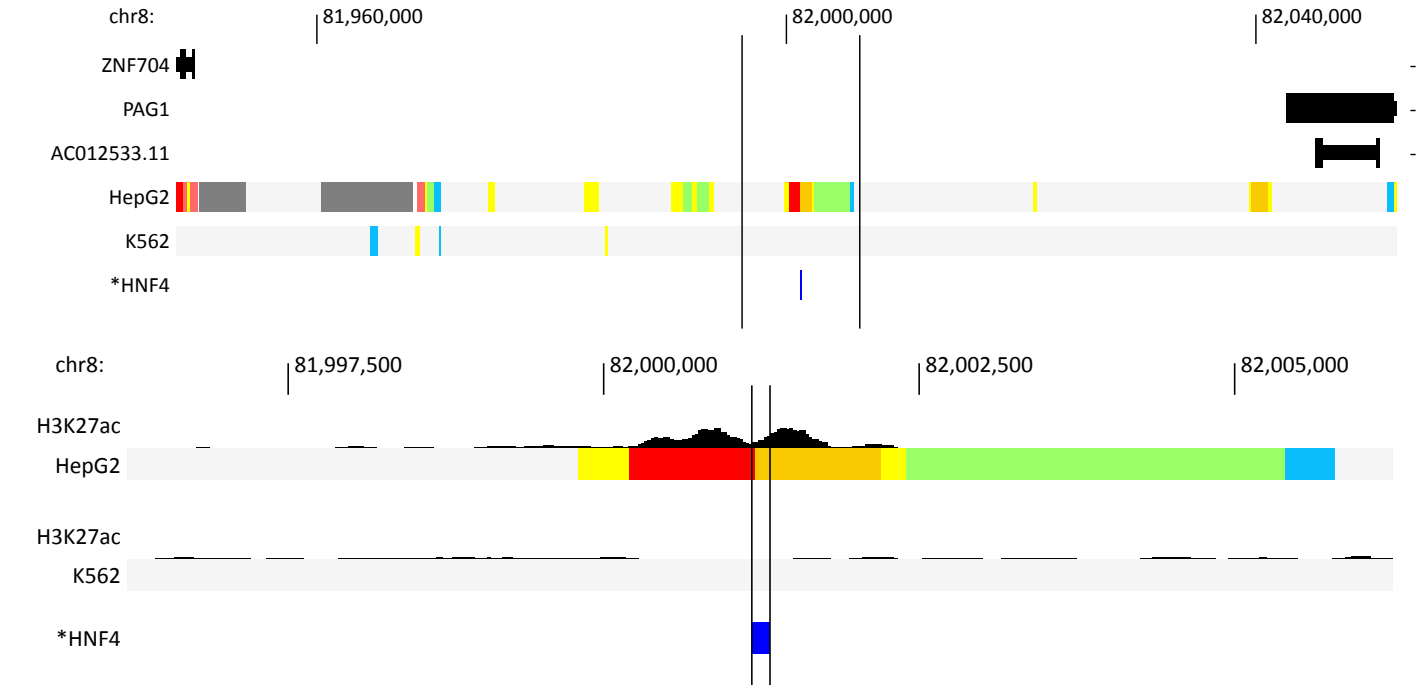
** ** ** *

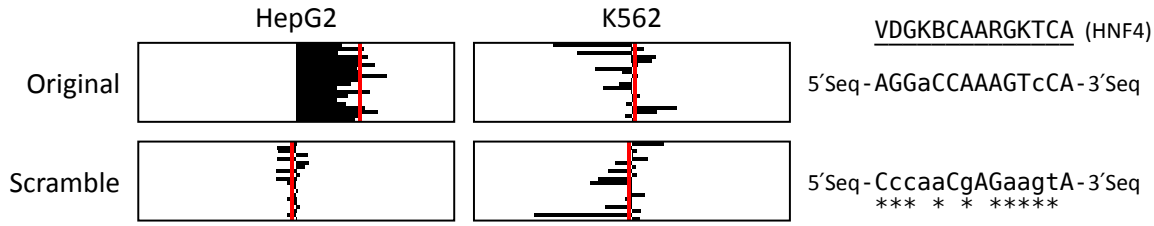
5′Seq = tagatagtcttctcttatgataaccttaaatttctacagagttcaaaagcaaagtttaaaagttaaa

3′Seq = tcacagtaacatttttcagcatgagtccagagttcaaaaatattttgaatgatgcatcataaatgt

108 HNF4 in HepG2 enhancer

chr8 82001240 82001253 - (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-AGGaCCAAAGTcCA-3′Seq

5′Seq-CccaaCgAGaagtA-3′Seq

*** * * *****

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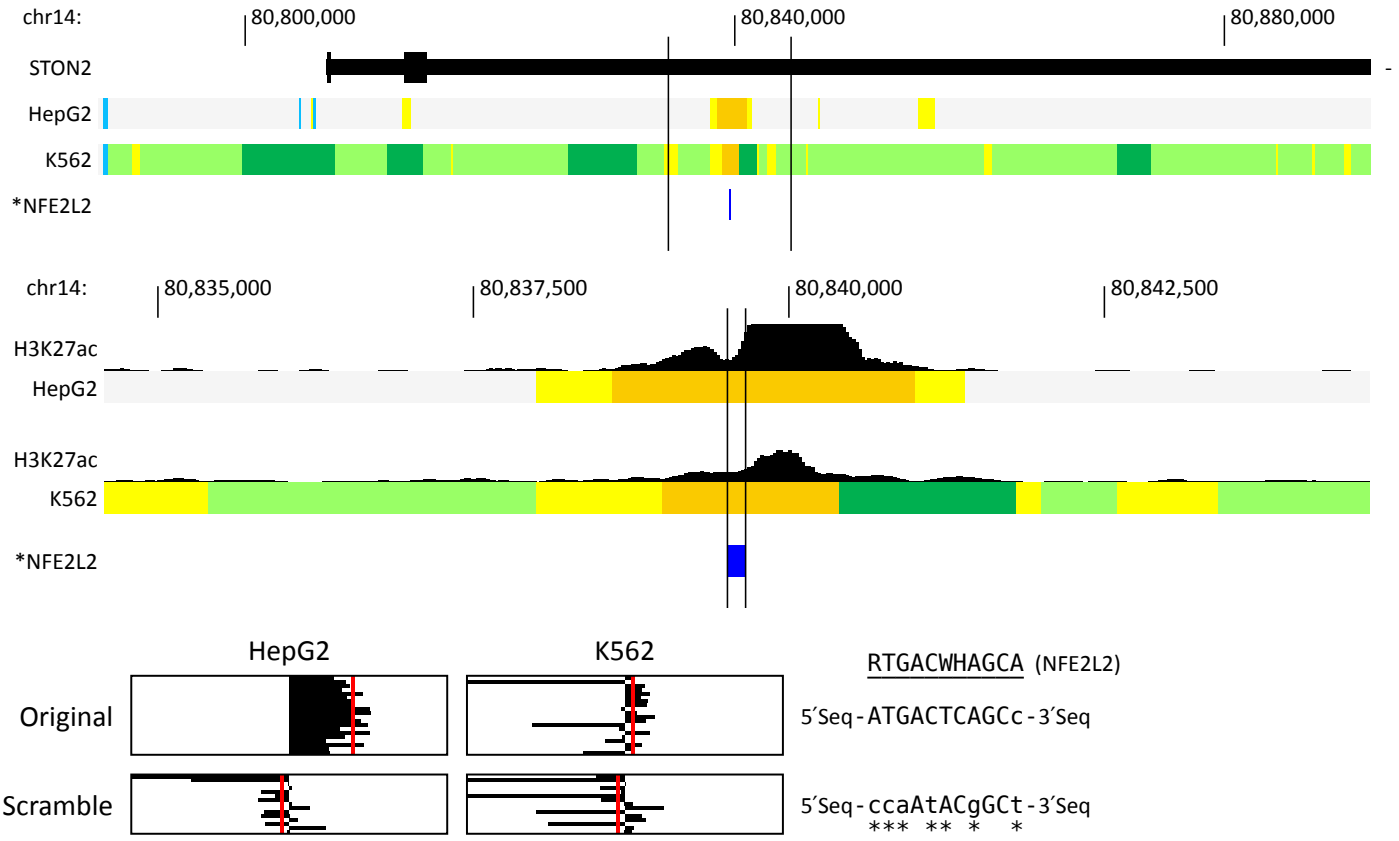
3′Seq = agaggcttgagtaaaaagagcaaacagaactctcttaactcttacaaaatatcactaaaatatgt

109 NFE2L2 in K562 enhancer

chr14 80839580 80839590 - (hg18)



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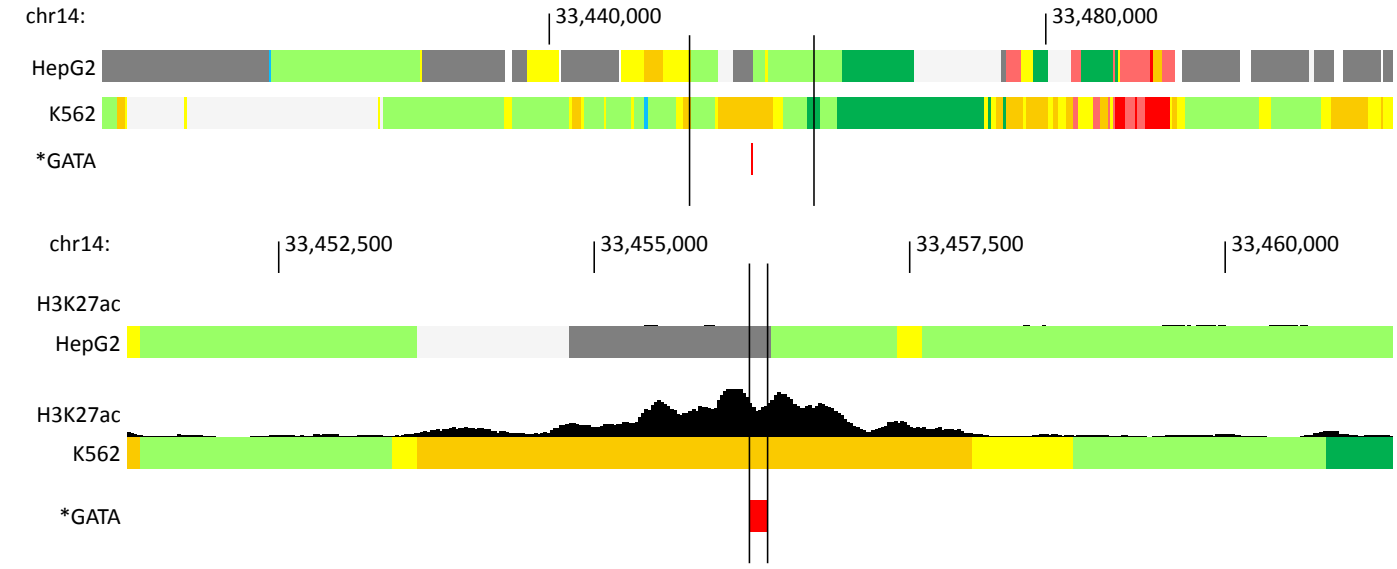
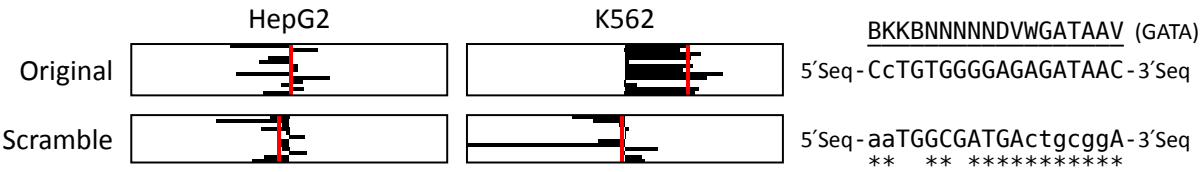
110 GATA in K562 enhancer (conserved at 60% confidence)

chr14 33456294 33456311 - (hg18)





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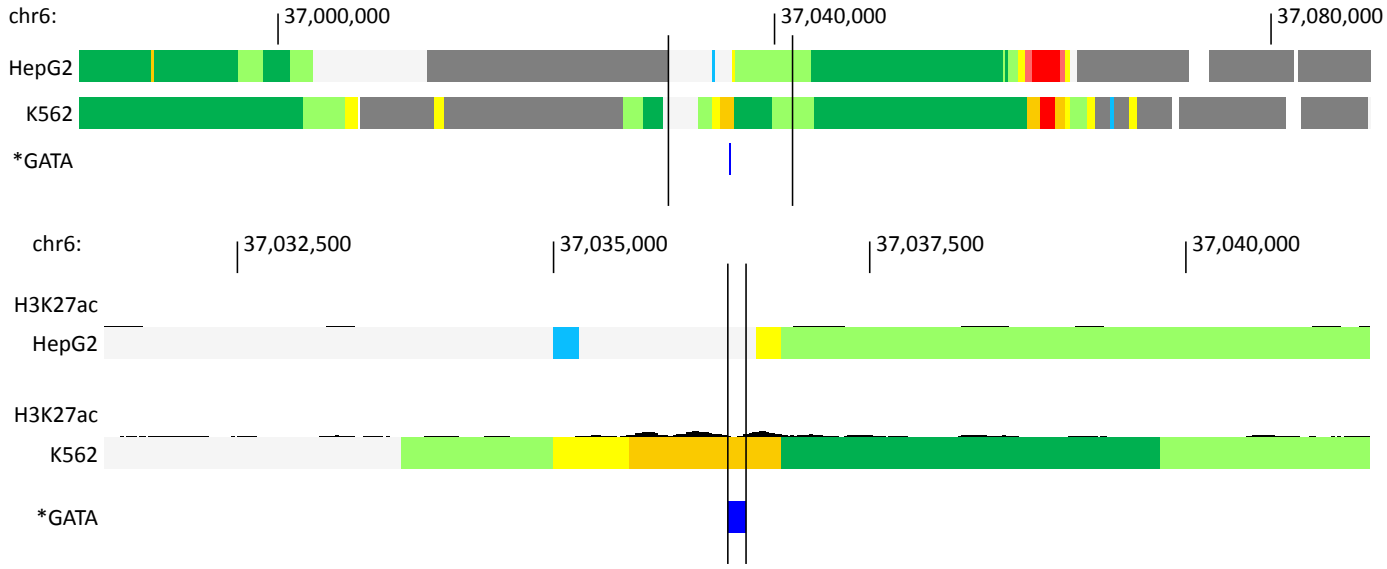
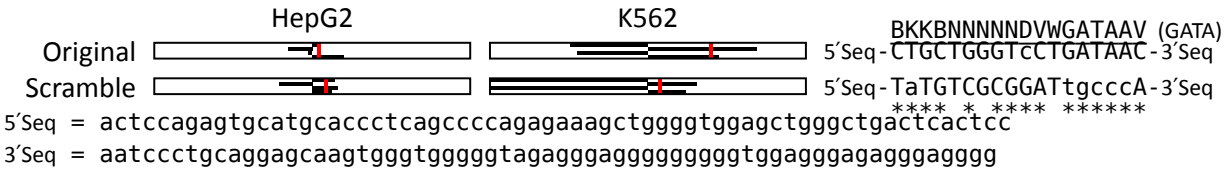
111 GATA in K562 enhancer

chr6 37036442 37036459 - (hg18)





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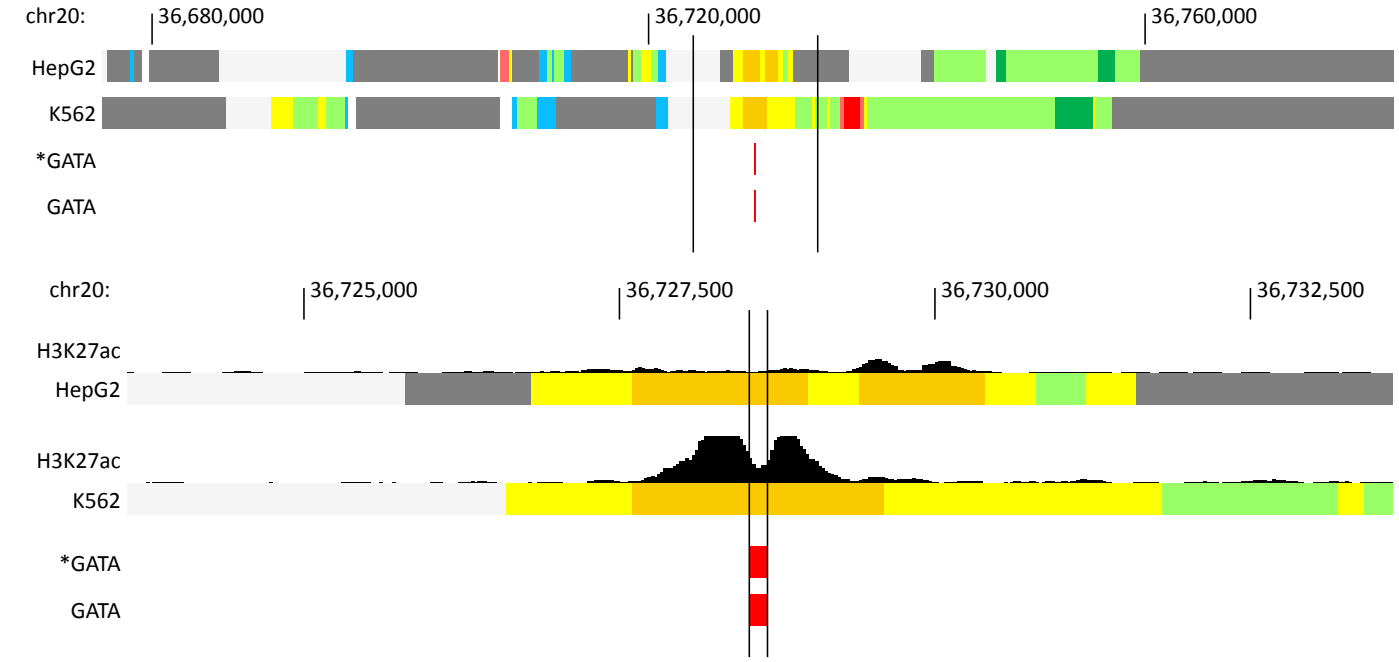
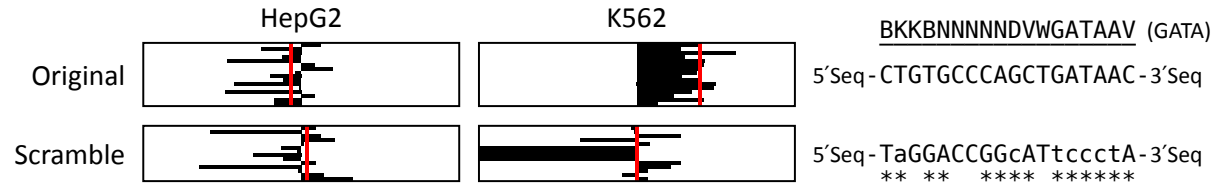
3′Seq = aatccctgcaggagcaagtgggtgggggtagagggagggggggggtggagggagagggagggg

112 GATA in HepG2 enhancer (conserved at 70% confidence)

chr20 36728593 36728610 - (hg18)





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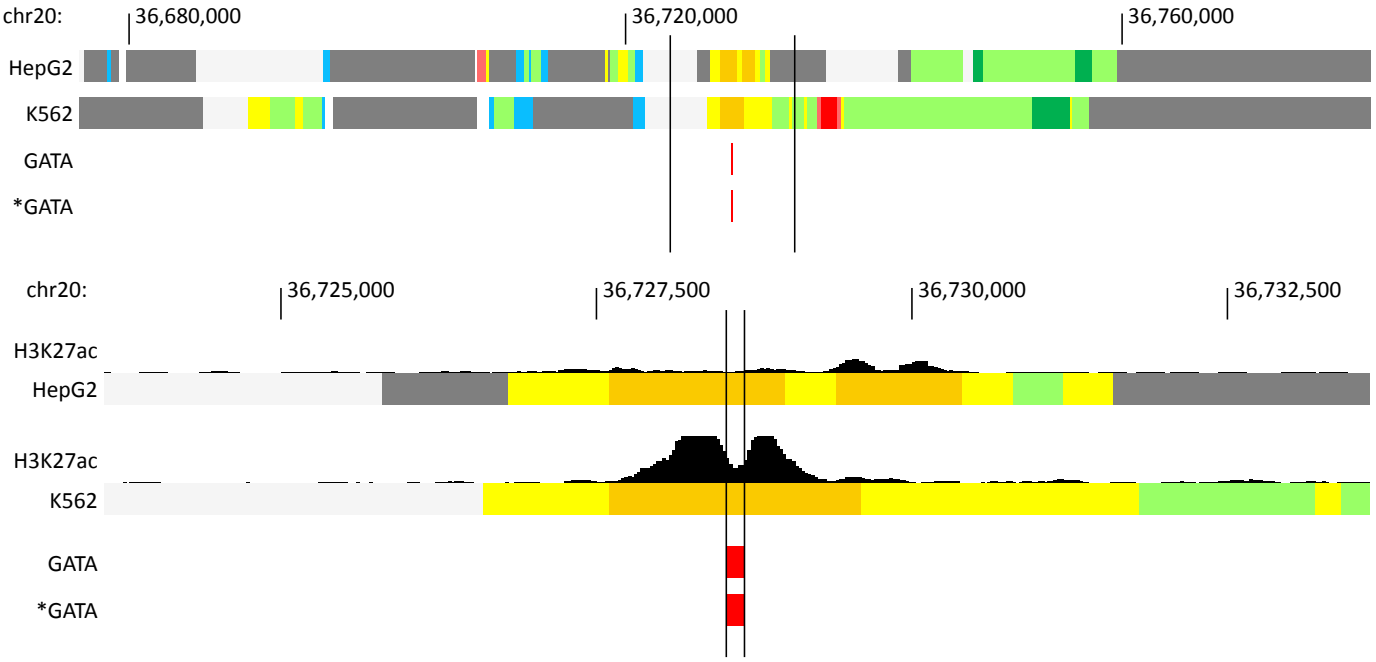
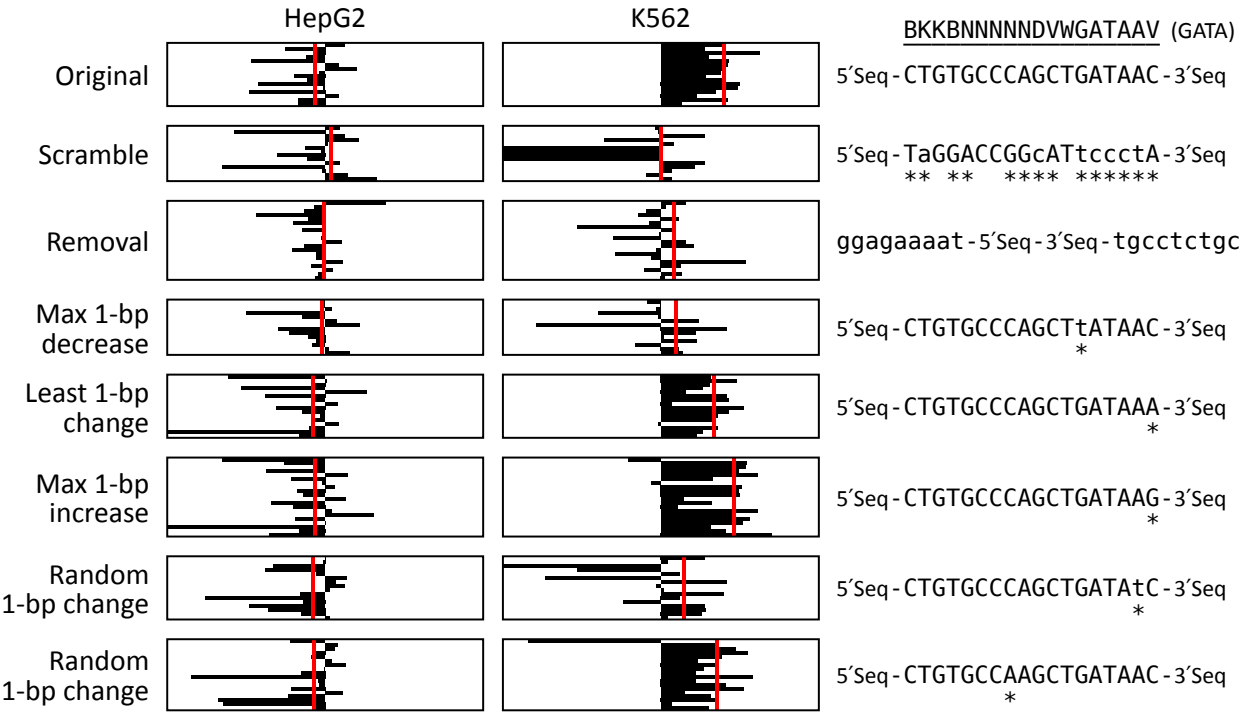
113 GATA in K562 enhancer (conserved at 70% confidence)

chr20 36728593 36728610 - (hg18)





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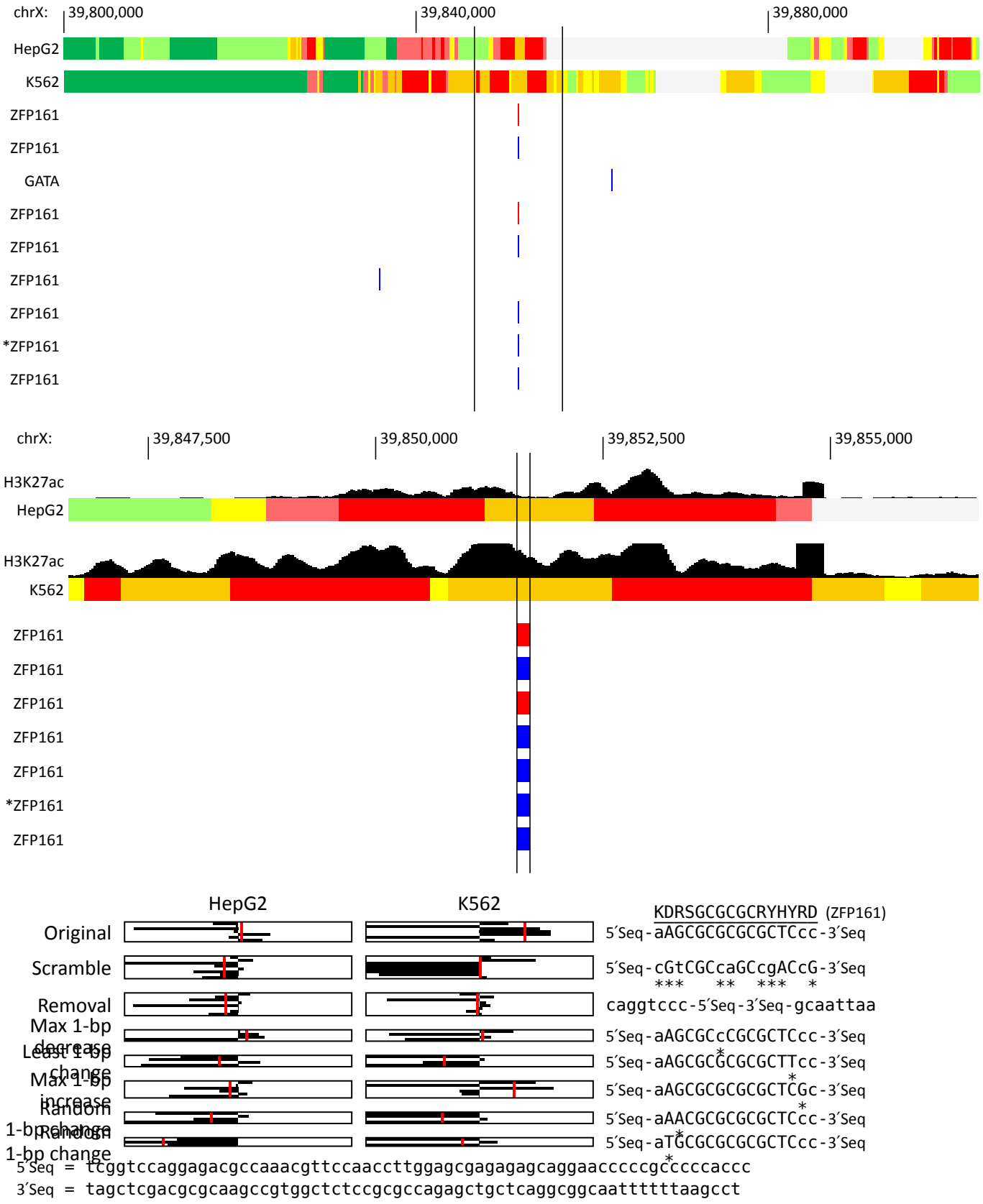
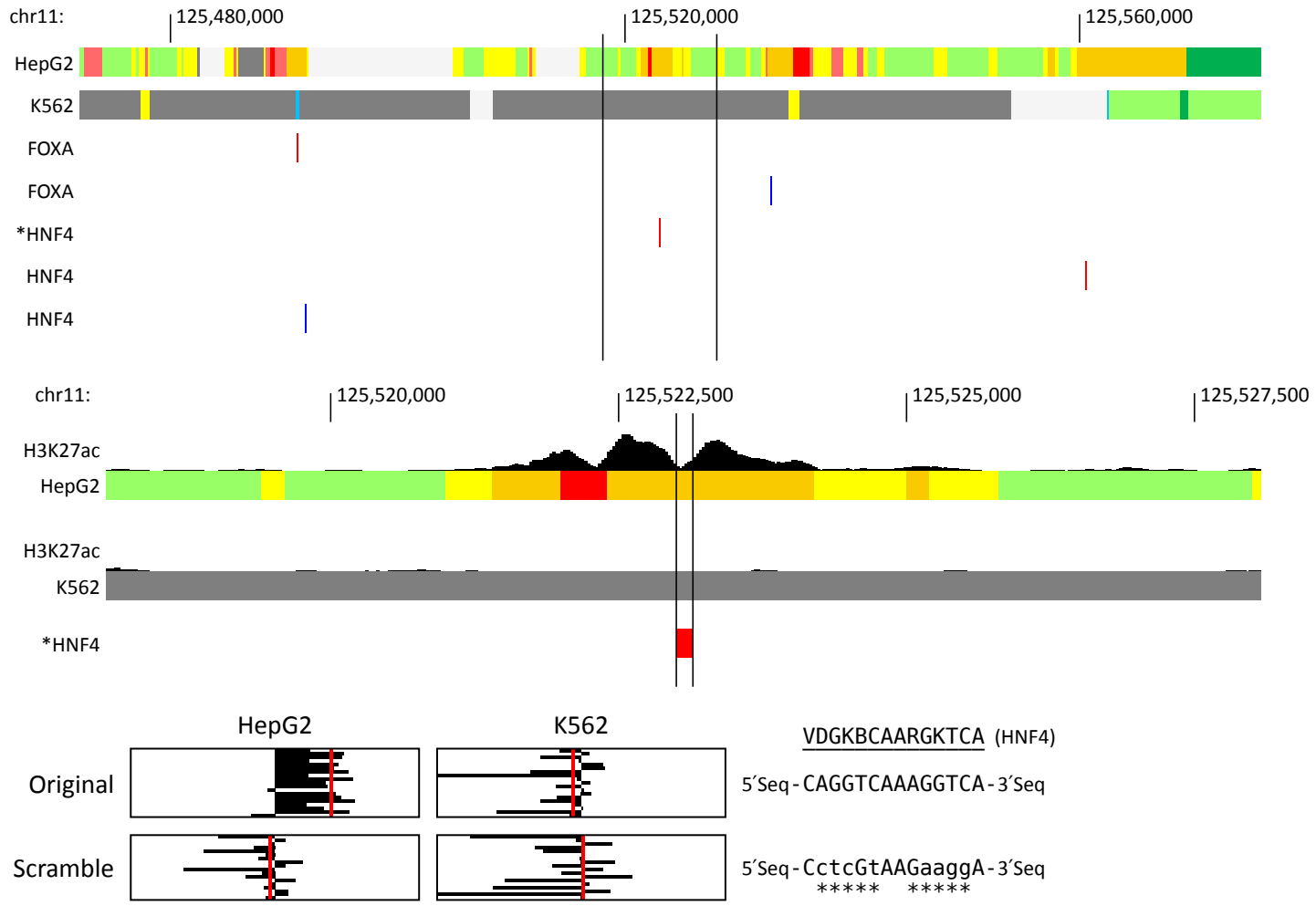
114 ZFP161 in K562 enhancer

chrX 39851618 39851633 + (hg18)



115 HNF4 in HepG2 enhancer (conserved at 50% confidence)

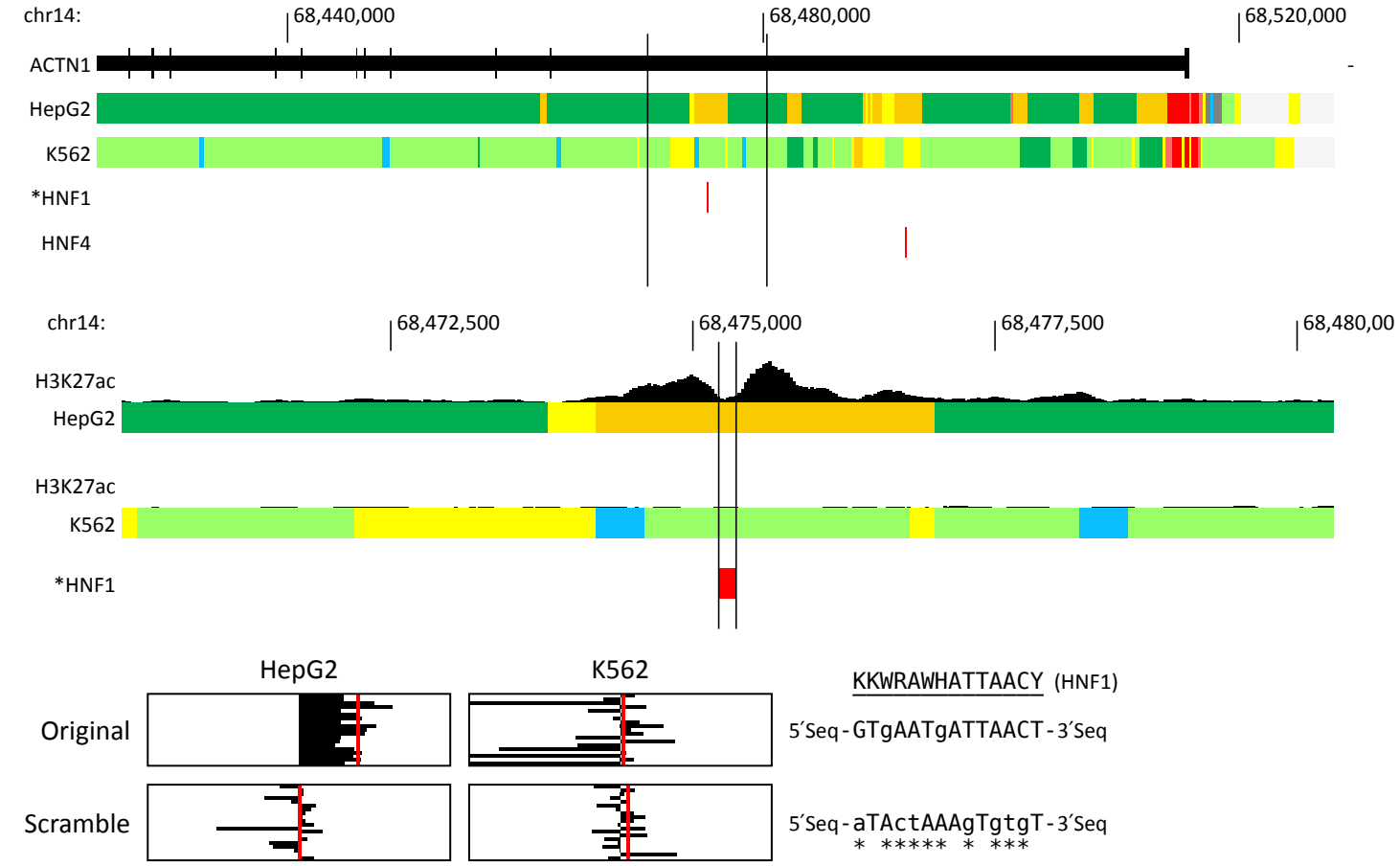
chr11 125523067 125523080 - (hg18)



5′Seq = ggggctggagcccctcccaaagtgcagtgtccatgggactgcagctcaaatgccttccaaagctcc
3′Seq = ccatcaaagcattcaactggcaaggcactctcattaagtcaaatattgacttgtctcaatatgaa

116 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr14 68475280 68475293 - (hg18)



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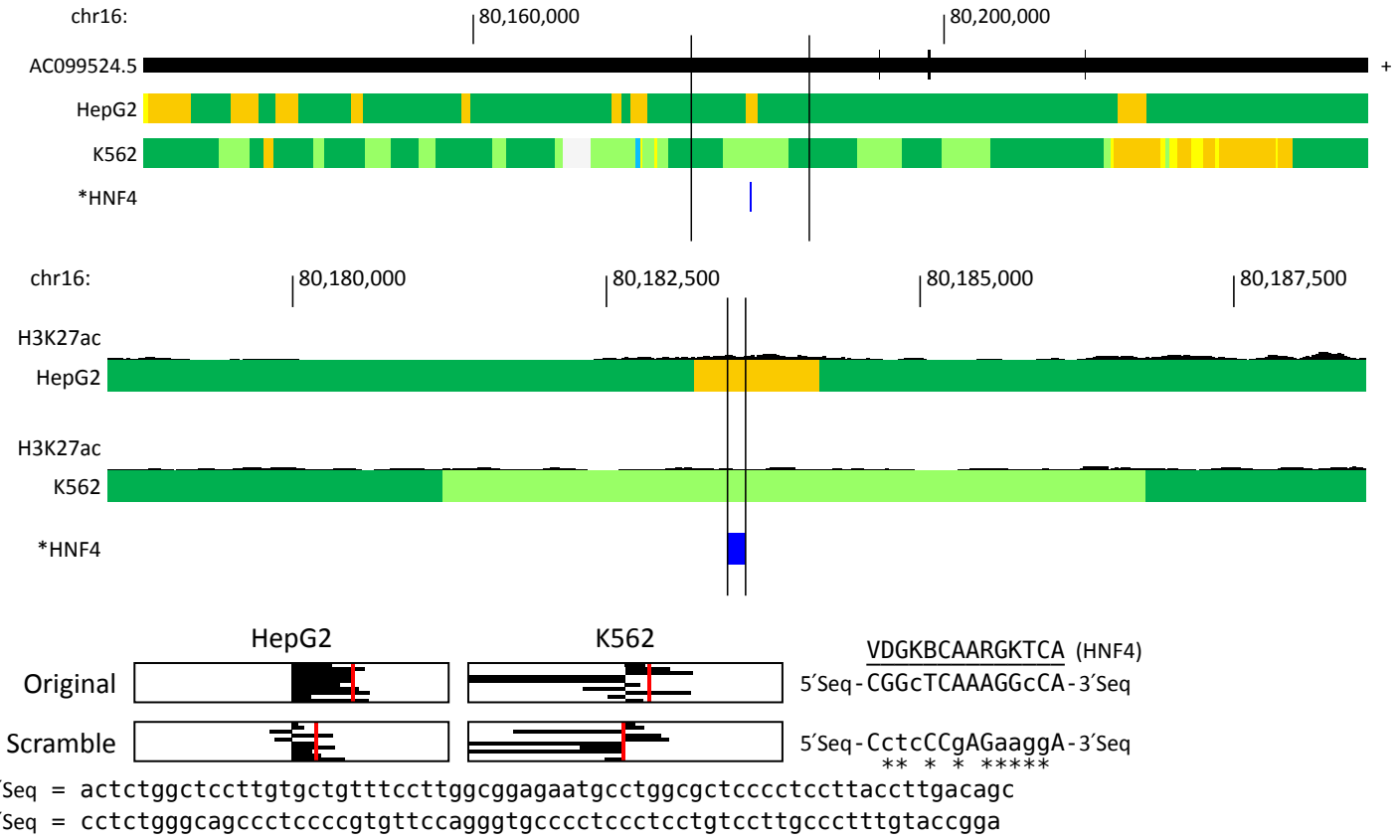
3′Seq = ttgattaaatagacagtggatgggaagtgagagcatgctgaccgctgacattgactgggctcctg

117 HNF4 in HepG2 enhancer

chr16 80183531 80183544 + (hg18)



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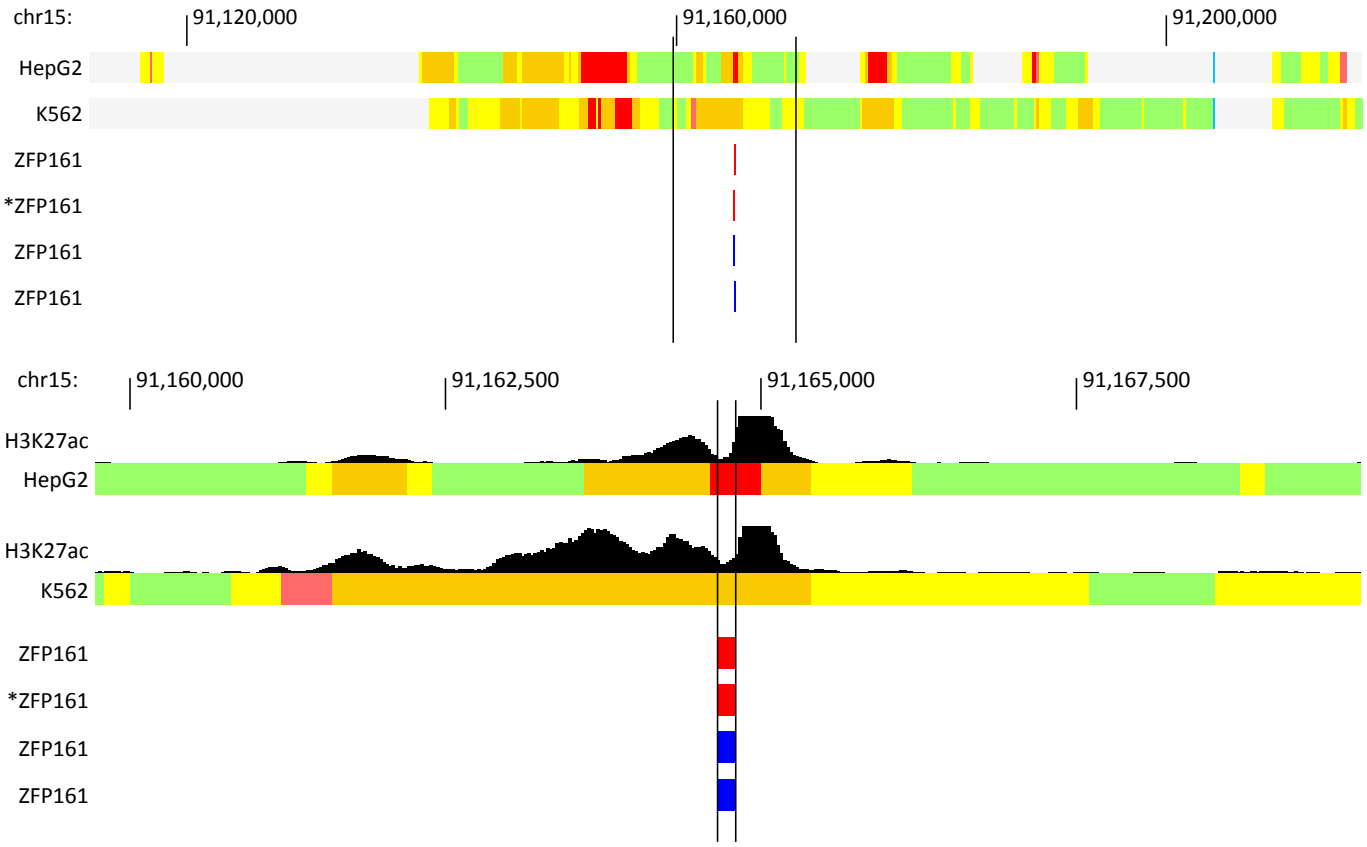
3′Seq = cctctgggcagccctccccgtgttccagggtgcccctccctcctgtccttgccctttgtaccgga

118 ZFP161 in K562 enhancer (conserved at 10% confidence)

chr15 91164721 91164736 - (hg18)



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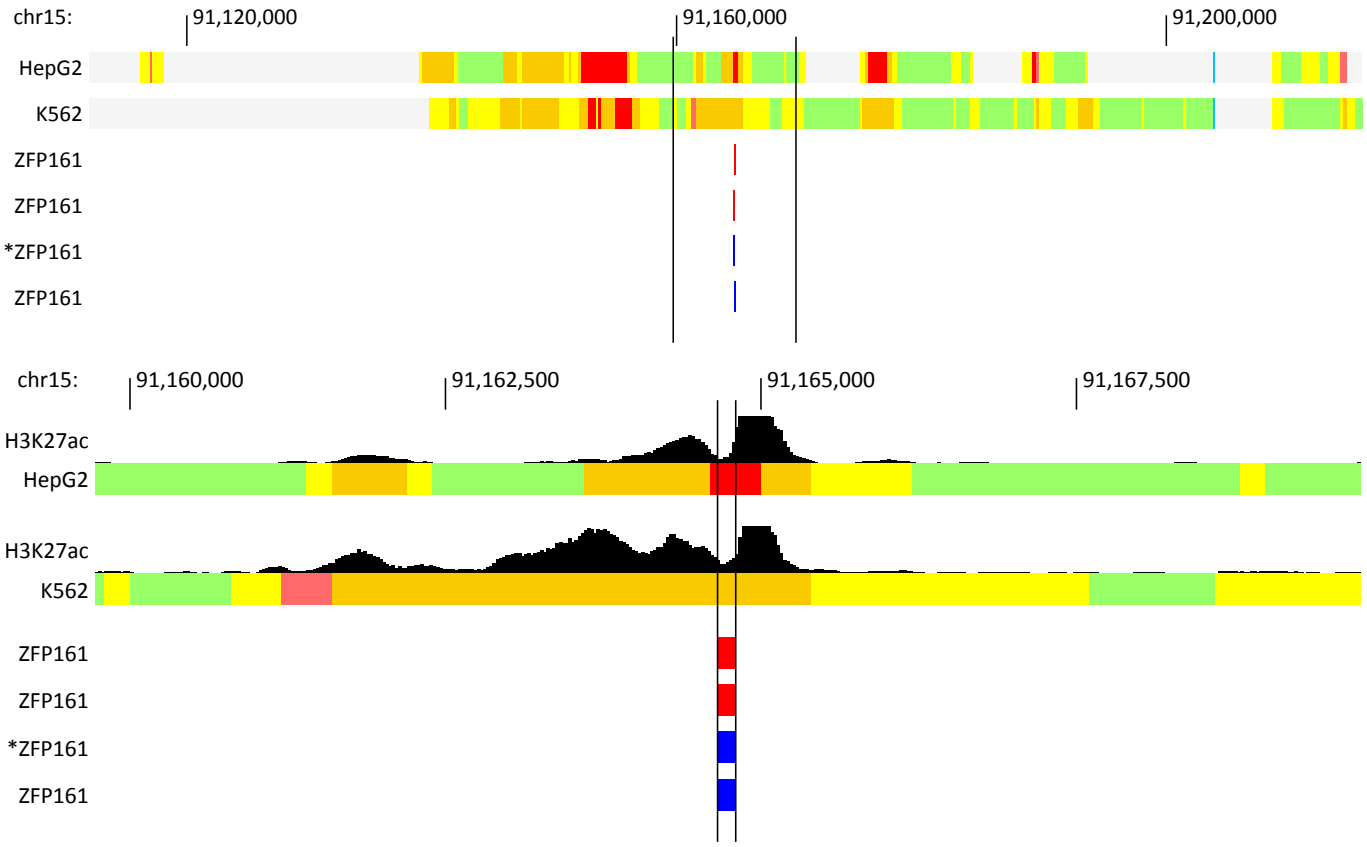
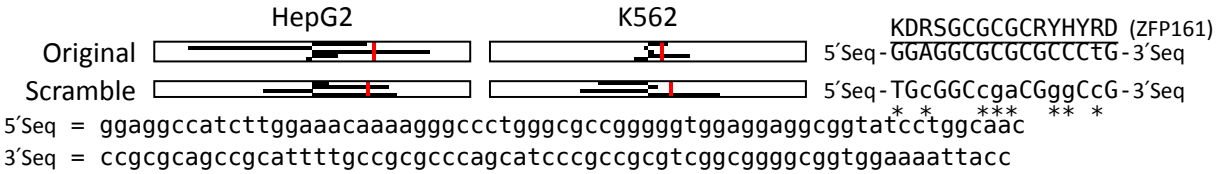
119 ZFP161 in K562 enhancer

chr15 91164721 91164736 - (hg18)





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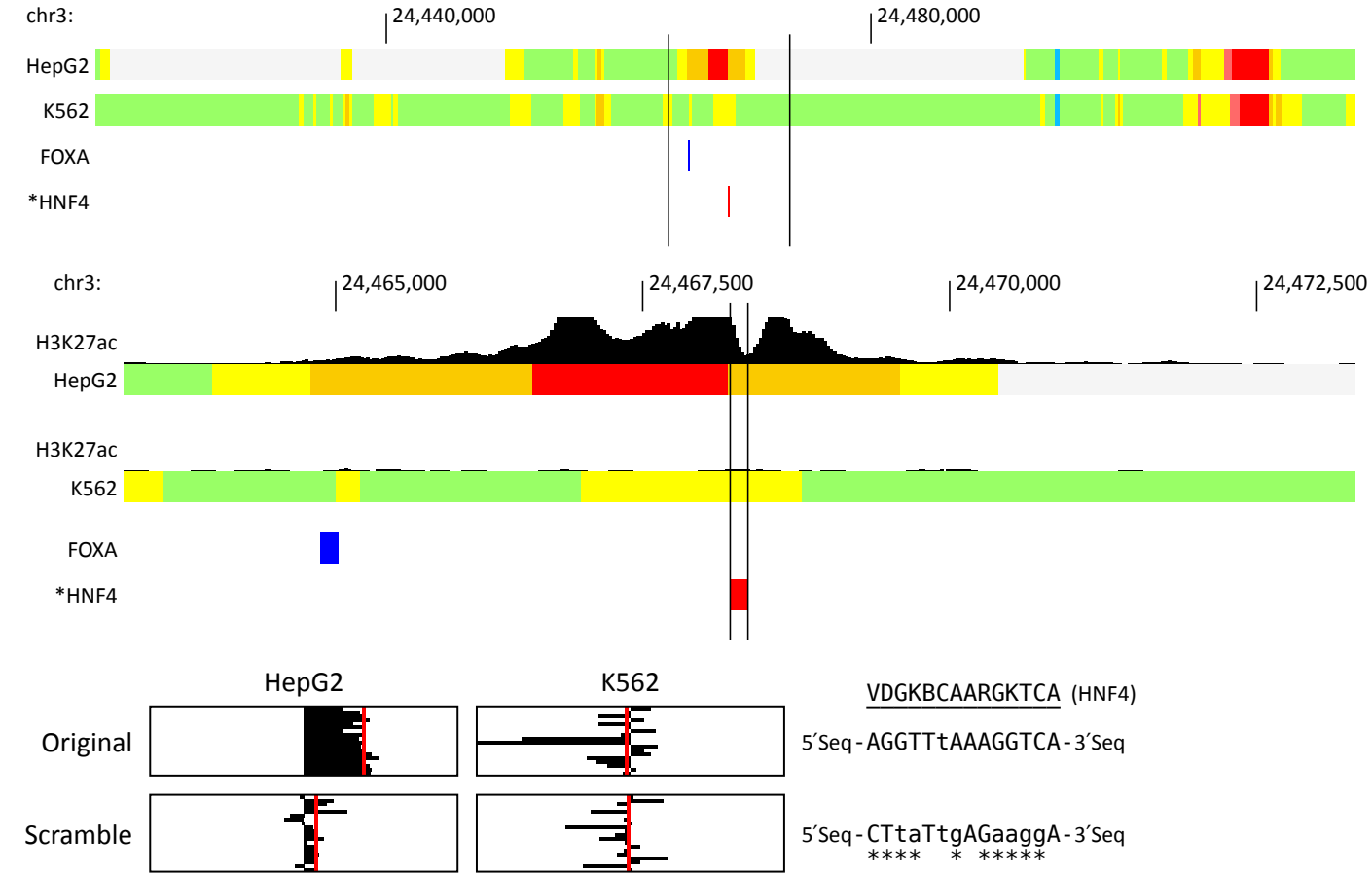
120 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr3 24468279 24468292 - (hg18)



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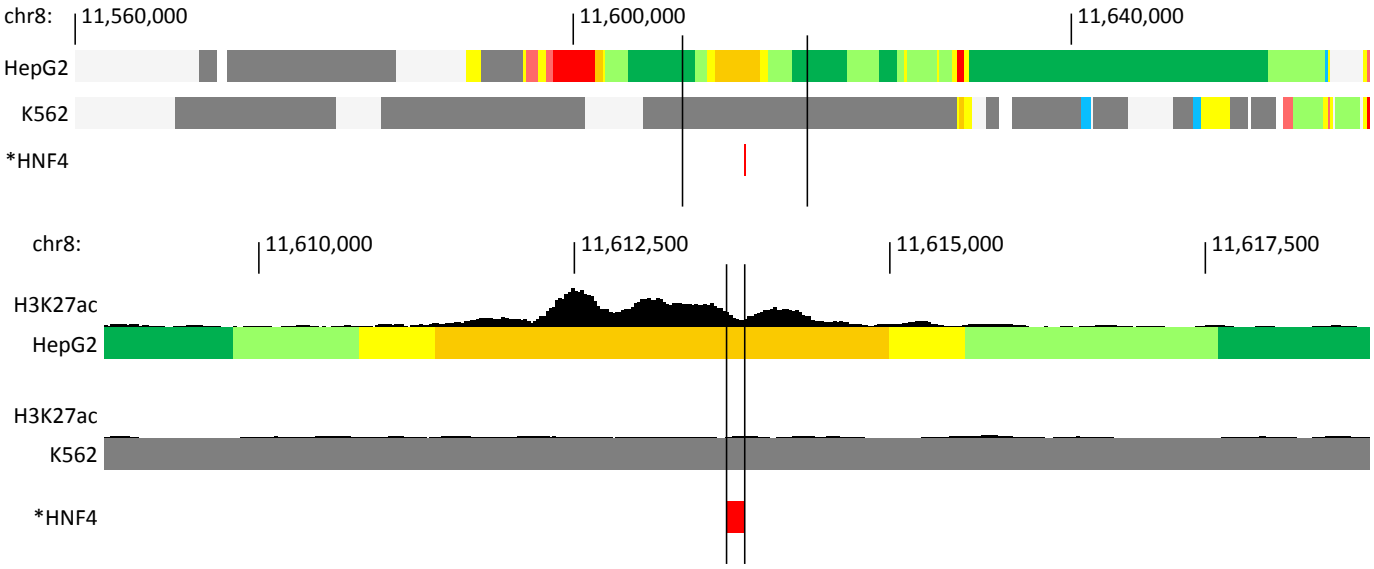
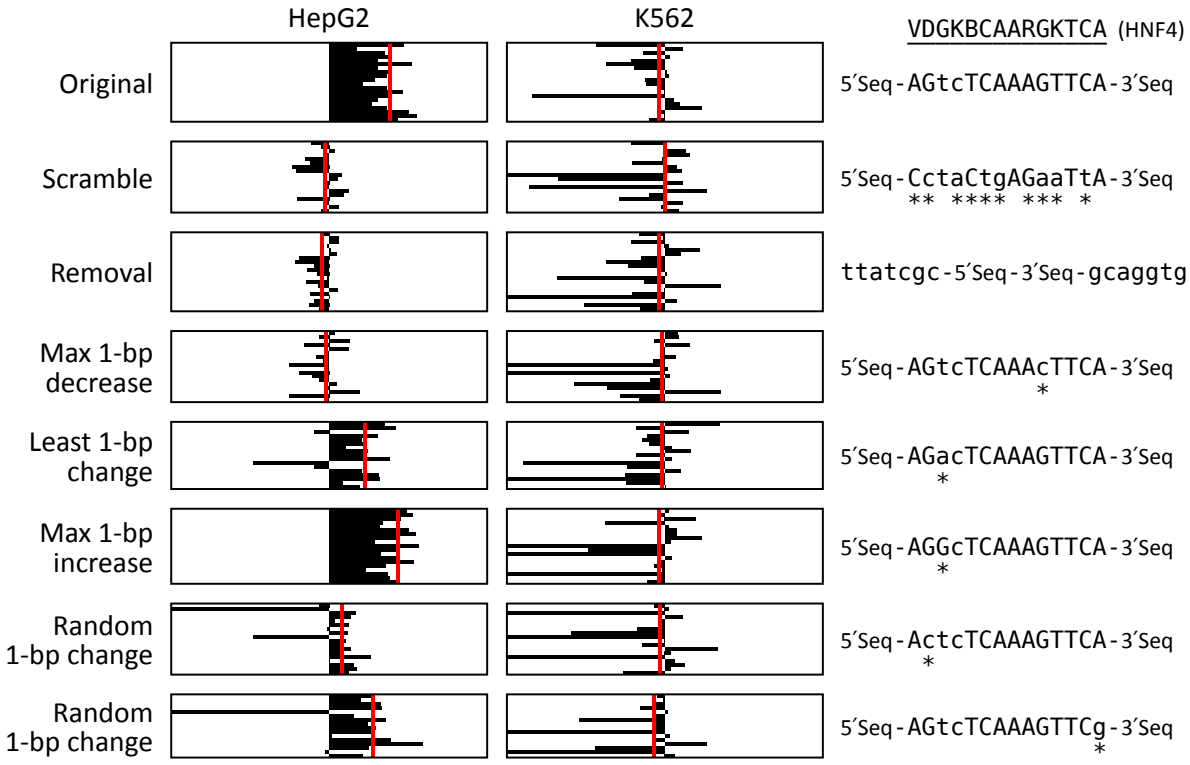
121 HNF4 in HepG2 enhancer (conserved at 70% confidence)

chr8 11613772 11613785 + (hg18)





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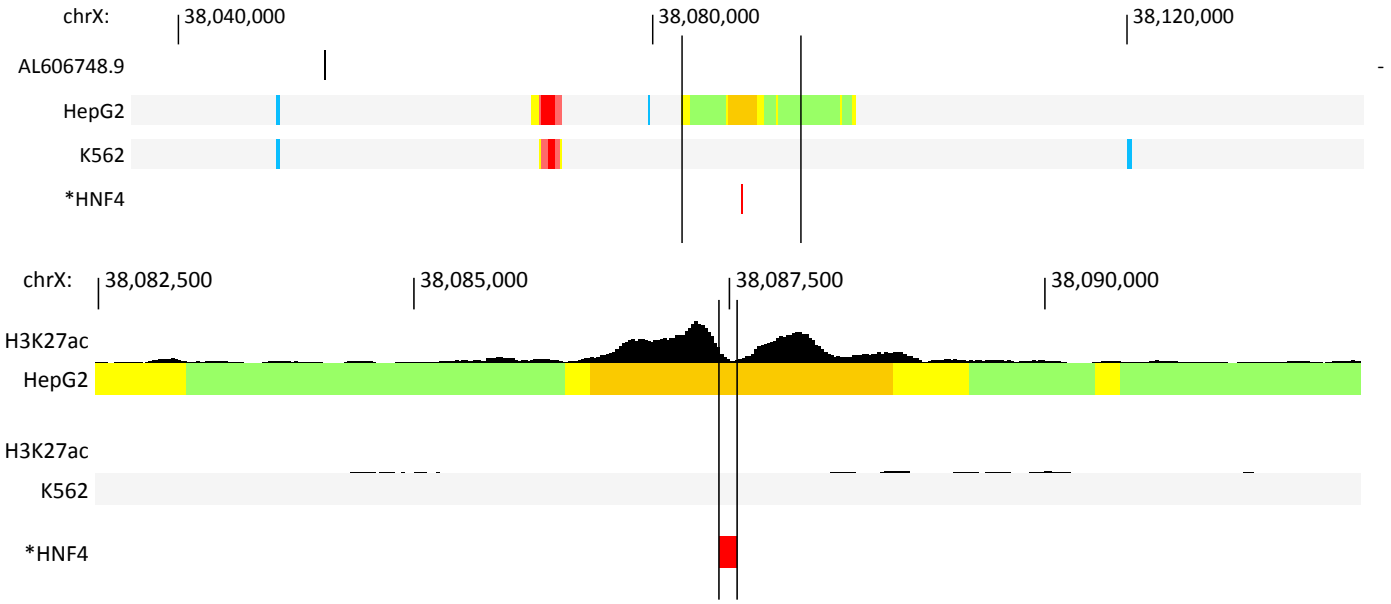
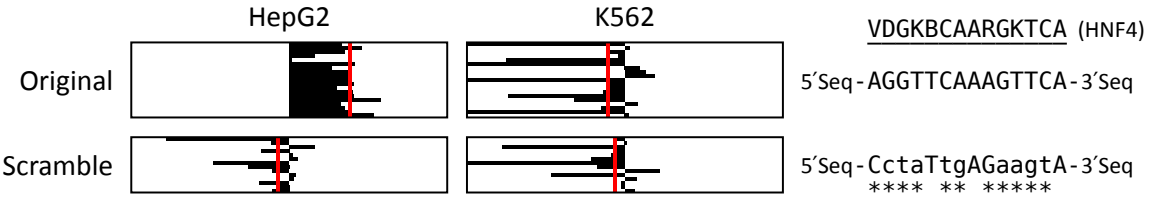
122 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chrX 38087483 38087496 - (hg18)





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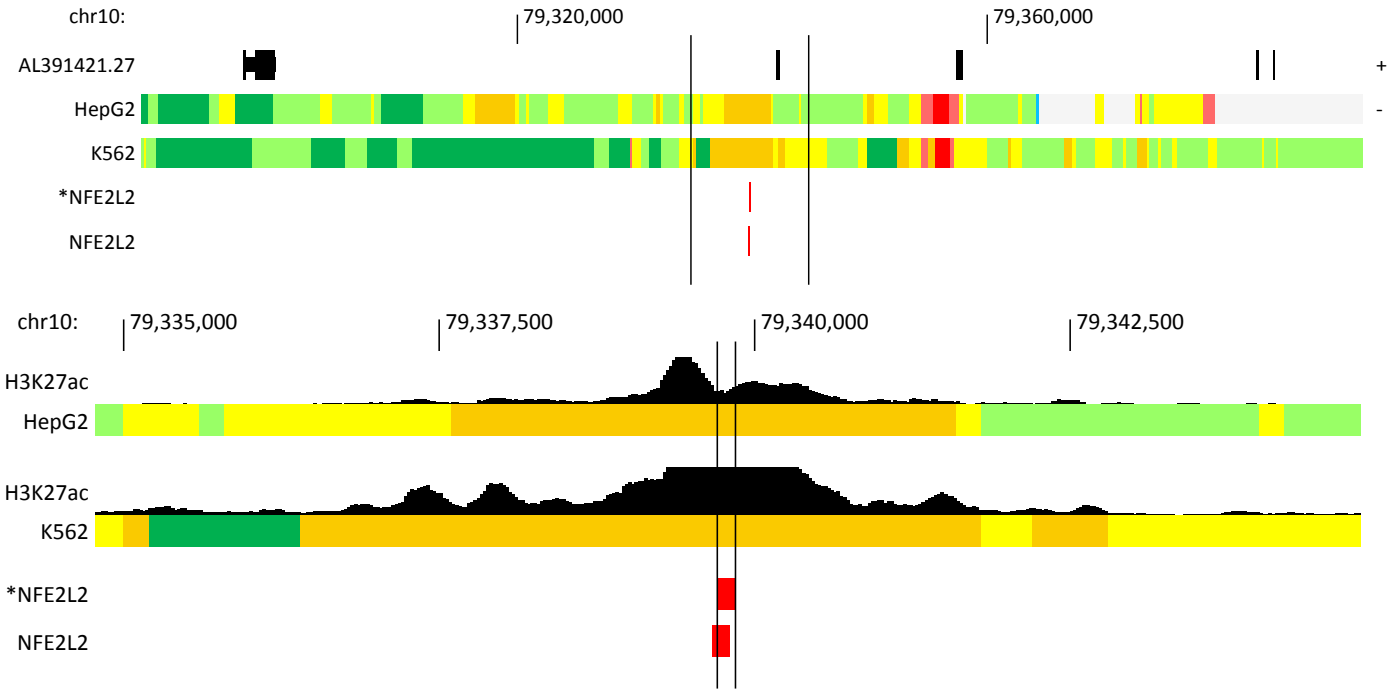
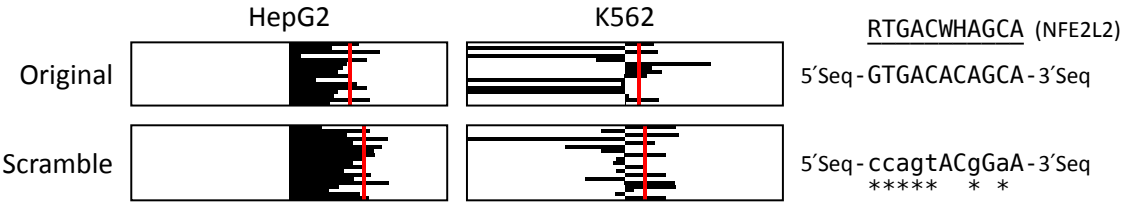
123 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr10 79339771 79339781 - (hg18)





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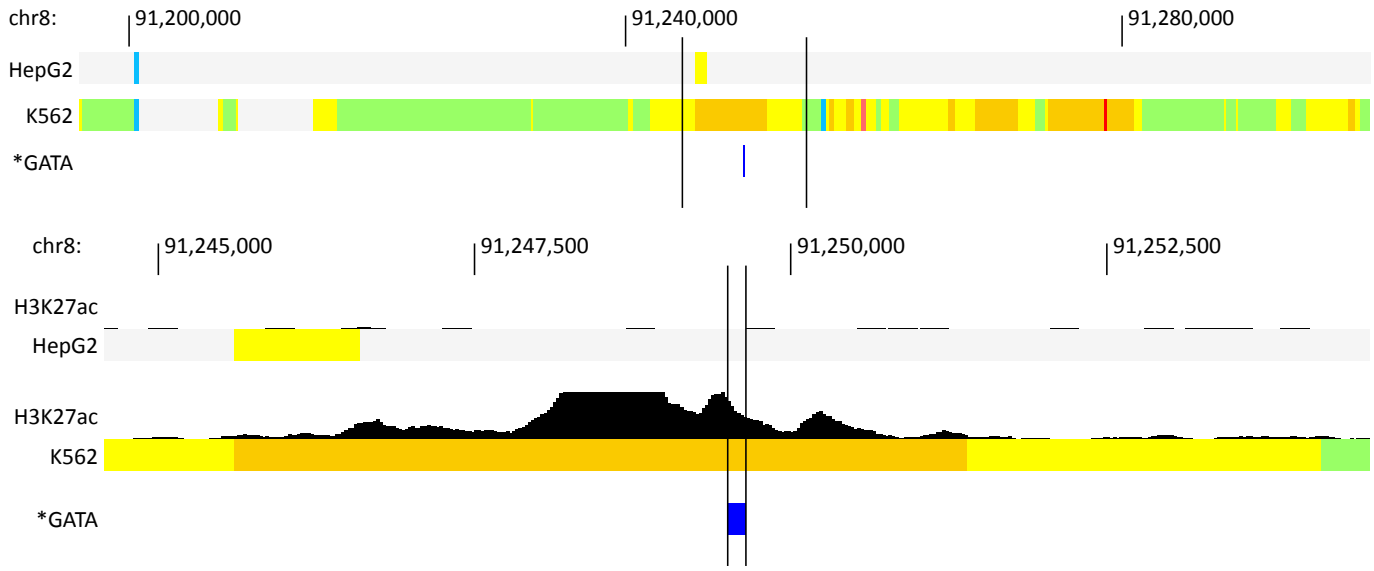
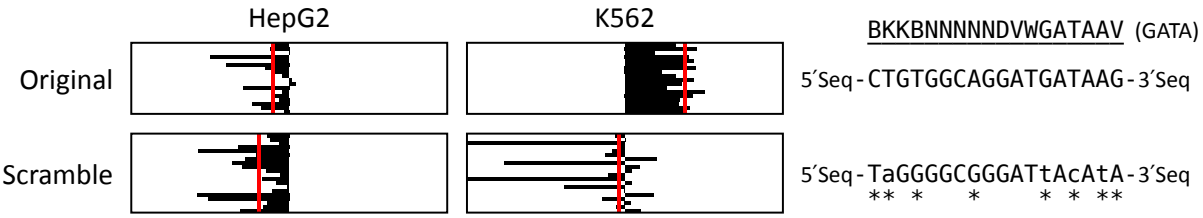
124 GATA in K562 enhancer

chr8 91249566 91249583 + (hg18)





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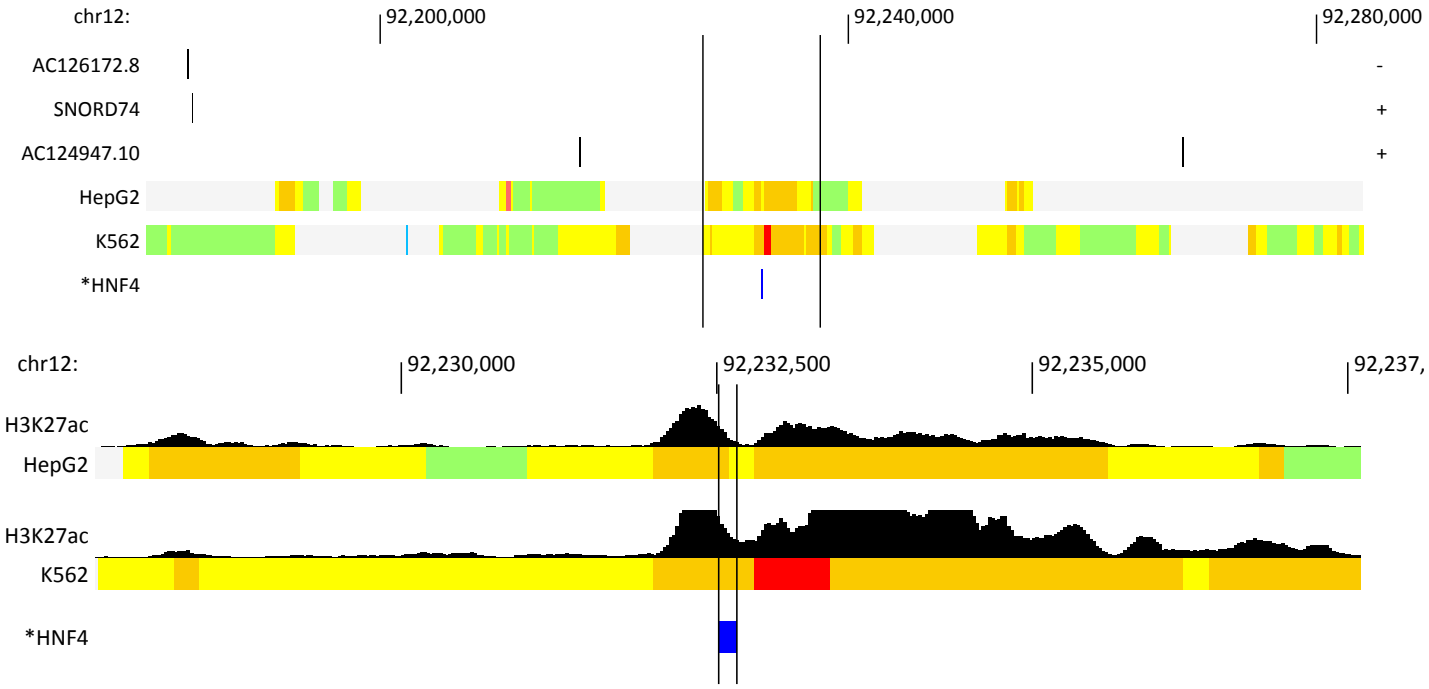
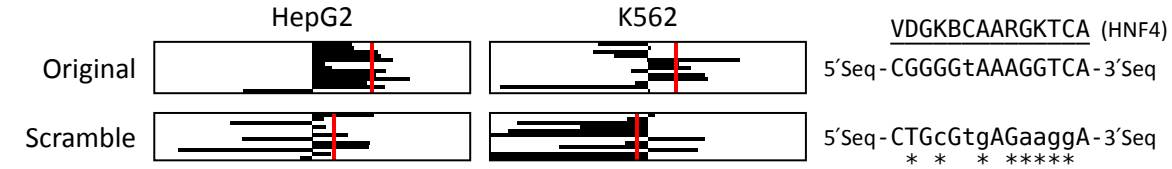
125 HNF4 in K562 enhancer

chr12 92232581 92232594 - (hg18)





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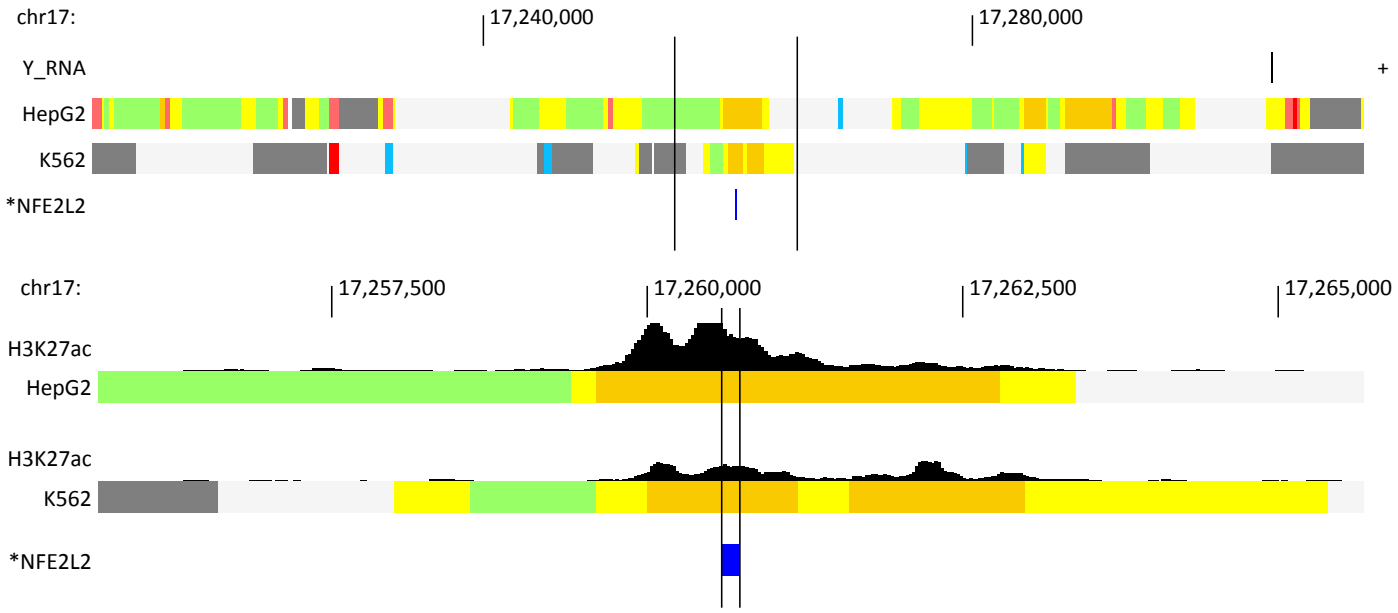
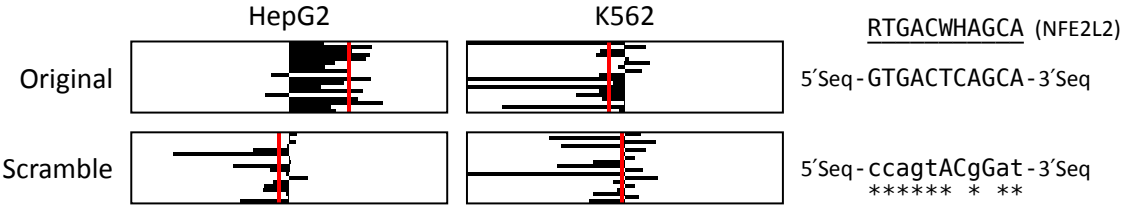
126 NFE2L2 in K562 enhancer

chr17 17260657 17260667 - (hg18)





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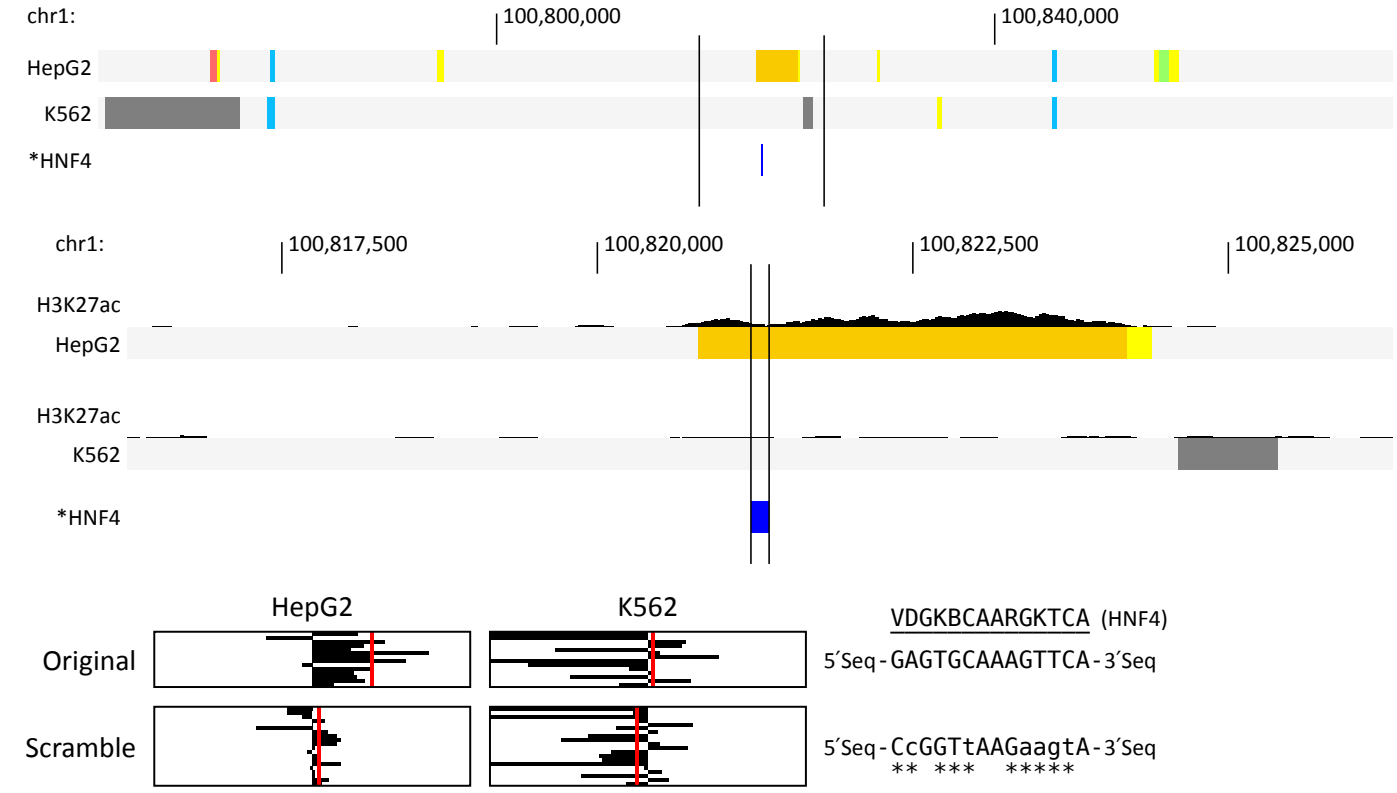
127 HNF4 in HepG2 enhancer

chr1 100821283 100821296 + (hg18)



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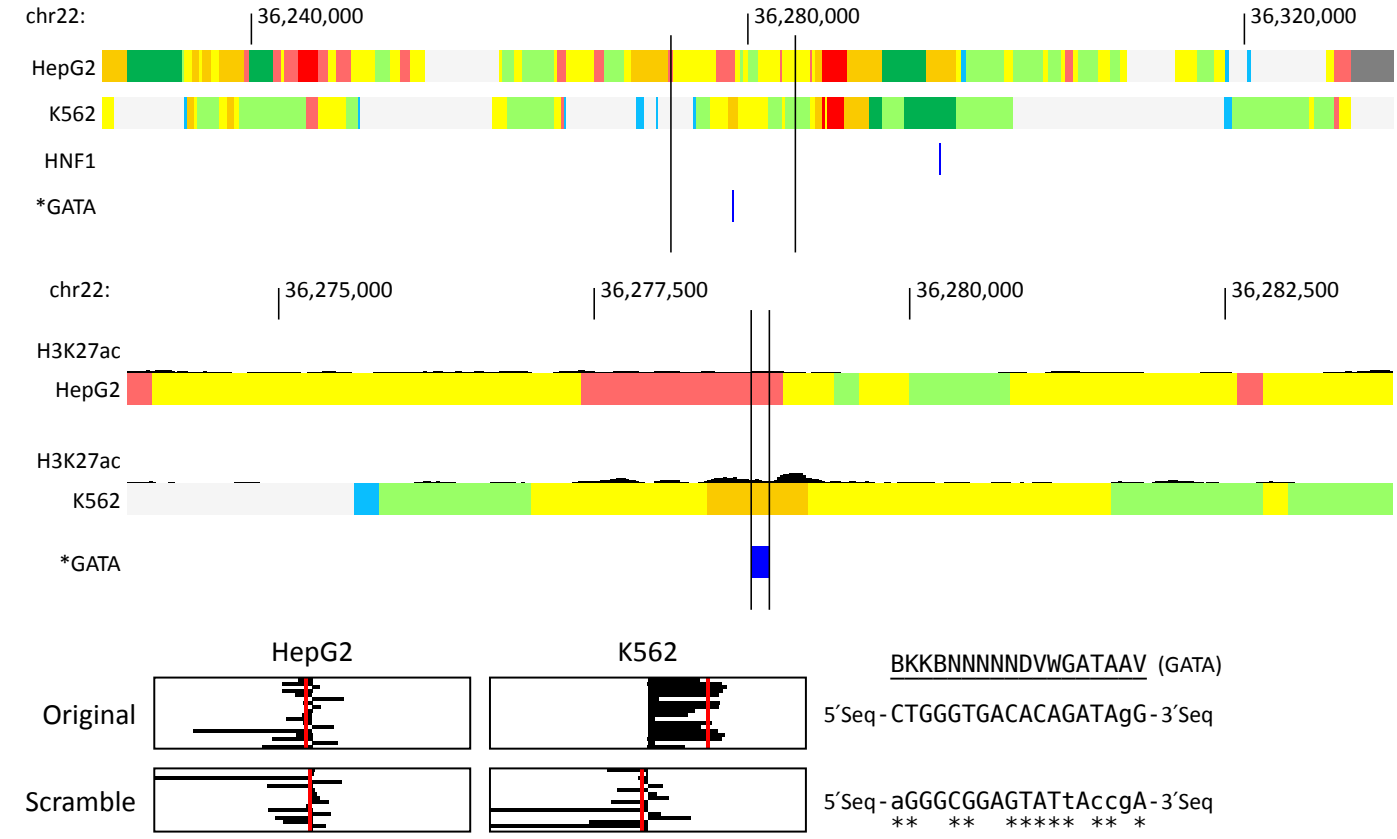
128 GATA in K562 enhancer

chr22 36278808 36278825 + (hg18)



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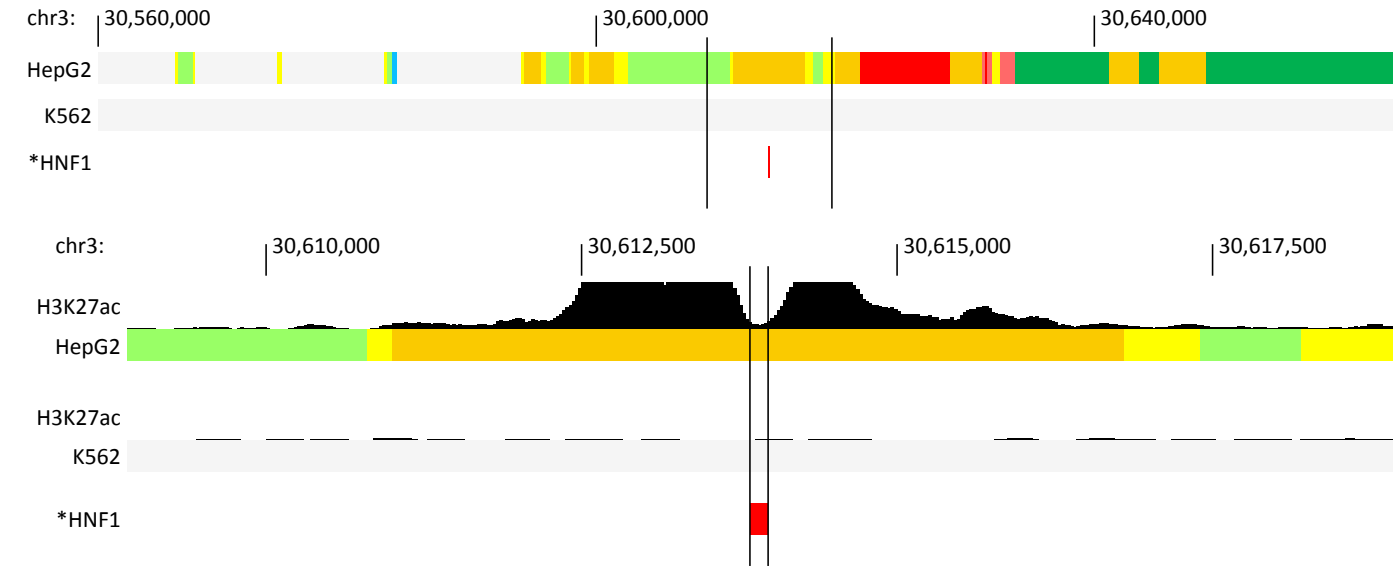
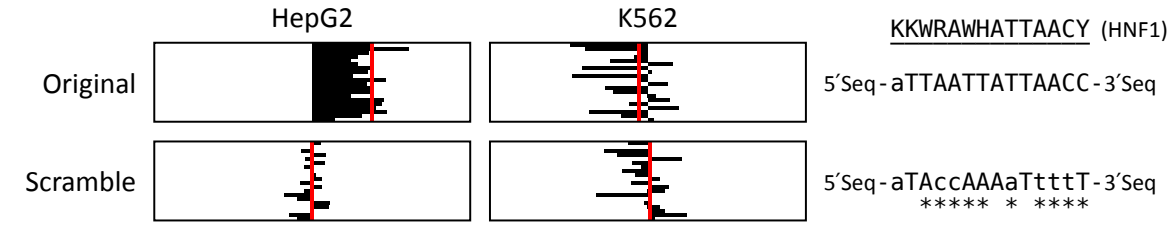
129 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr3 30613900 30613913 - (hg18)





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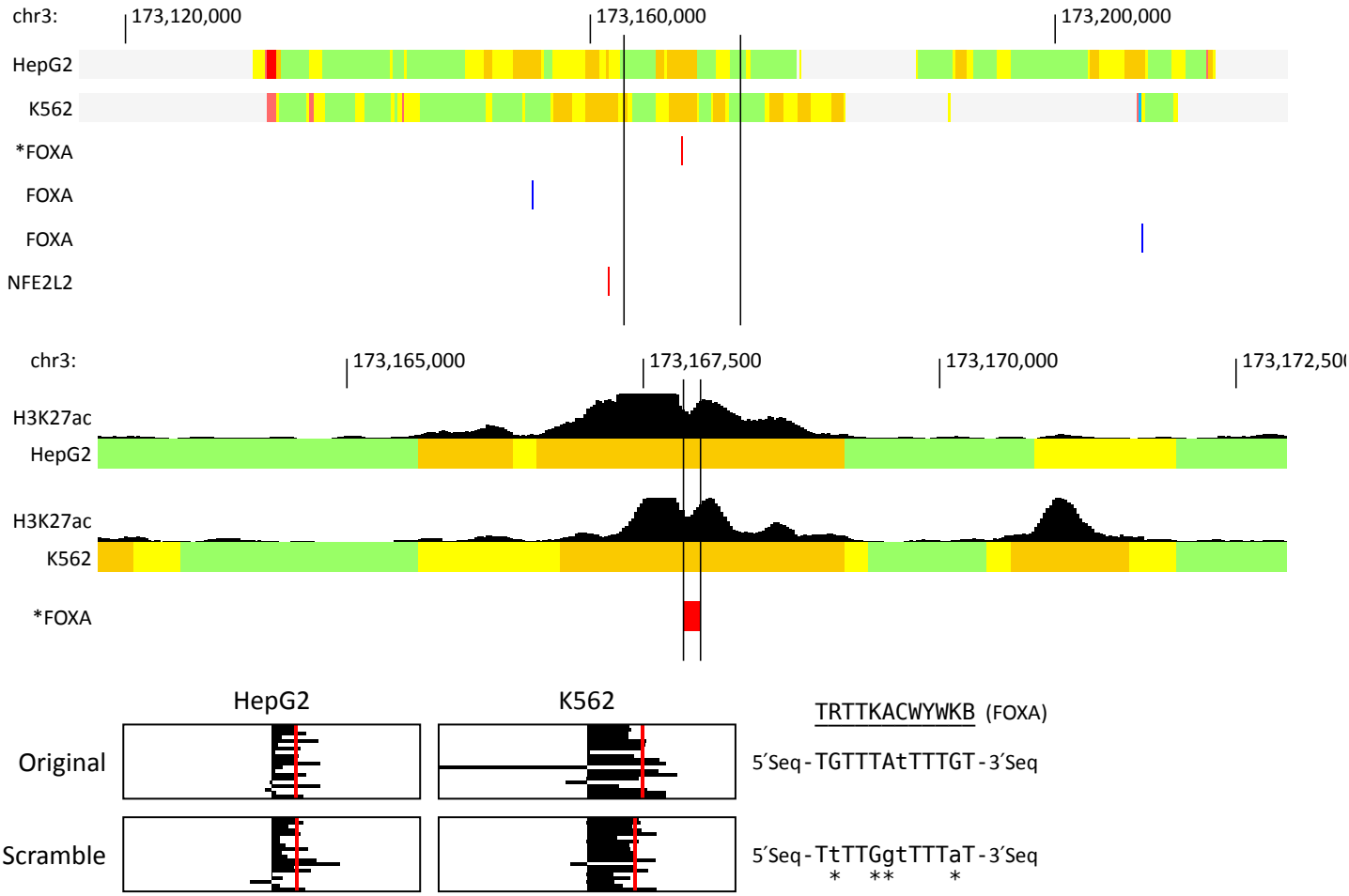
3′Seq = aacagaatcatttgaacactctgtgccacttttaccttcaggcatttcaaagggttgcctccttc

130 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 173167906 173167917 + (hg18)



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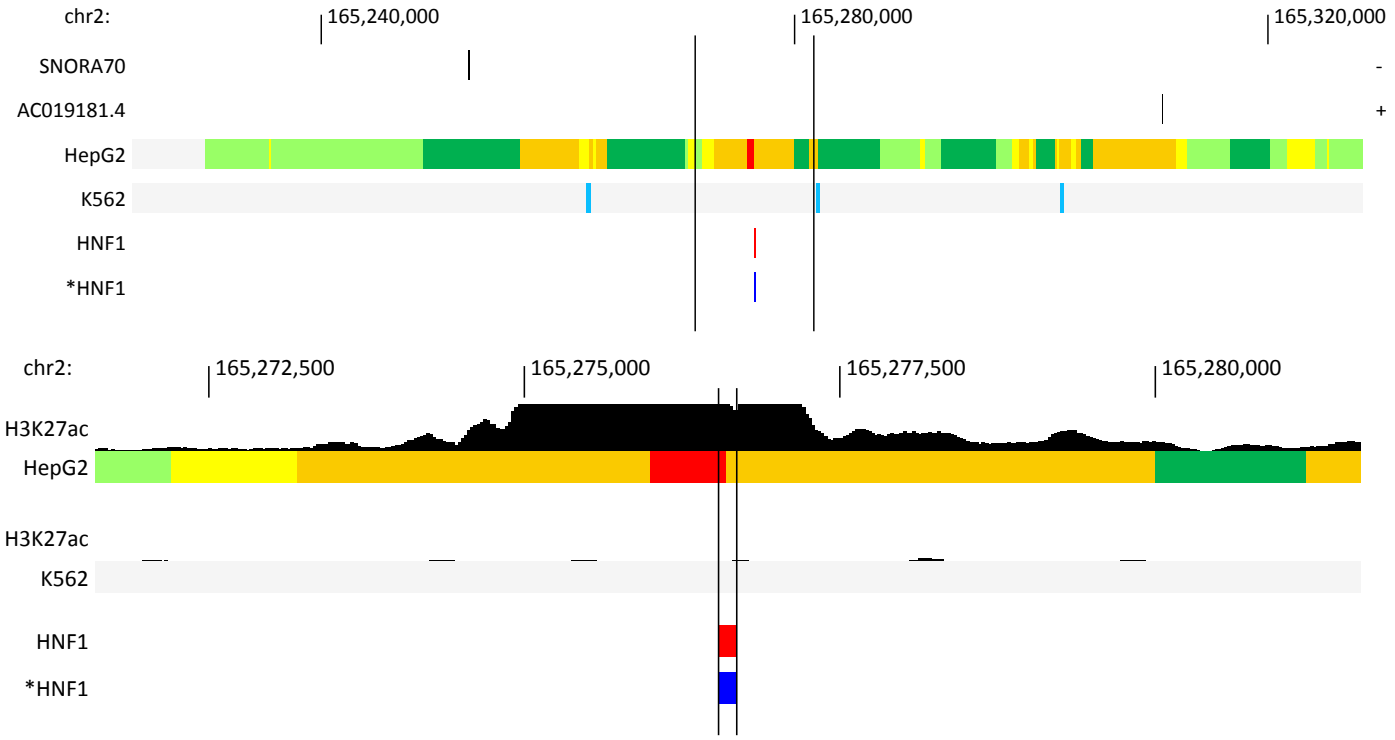
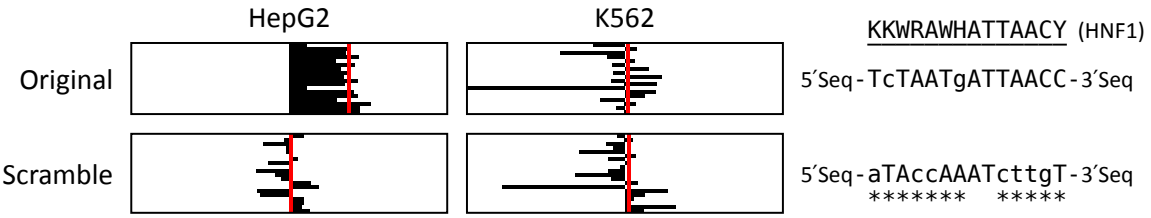
131 HNF1 in HepG2 enhancer

chr2 165276605 165276618 - (hg18)





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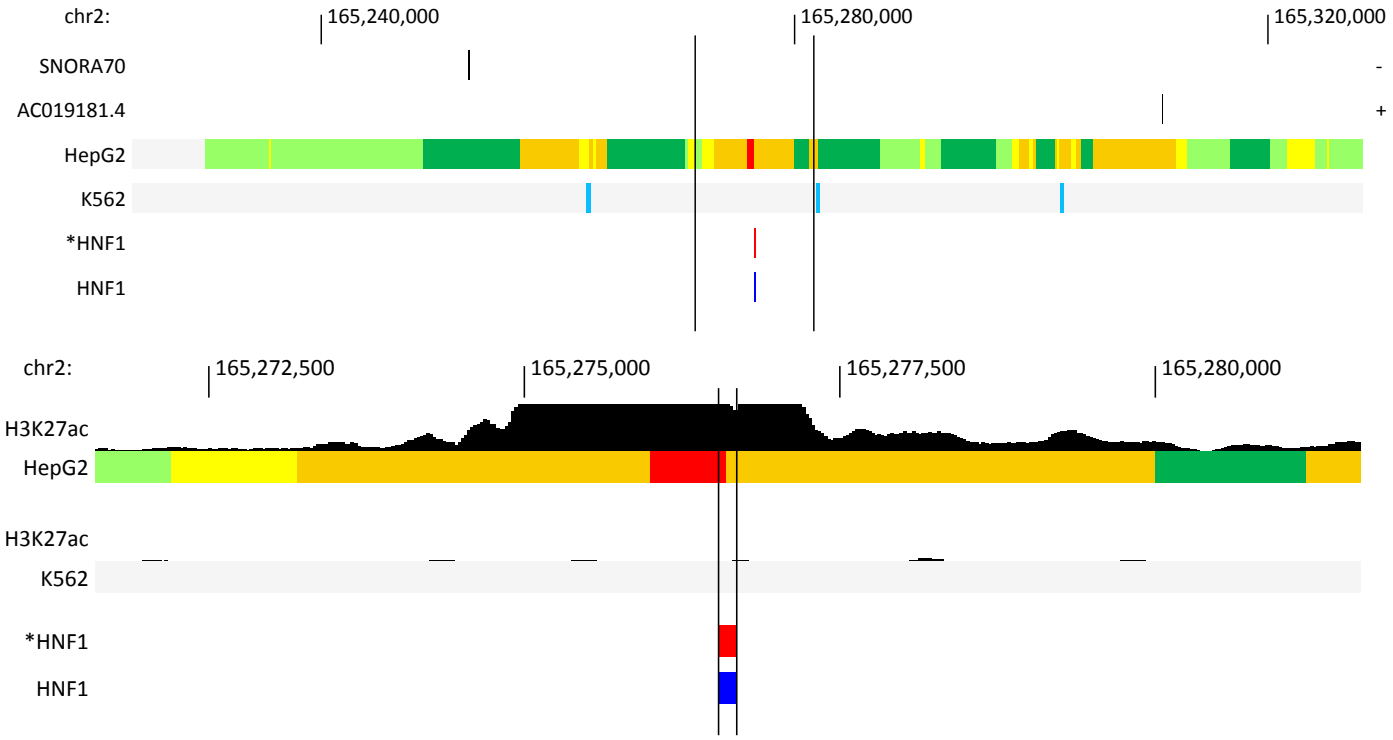
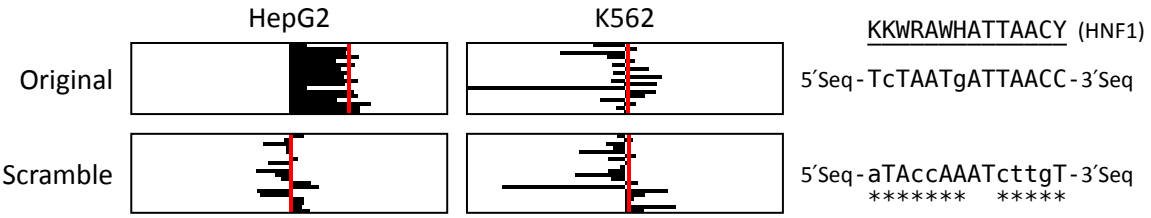
132 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr2 165276605 165276618 - (hg18)





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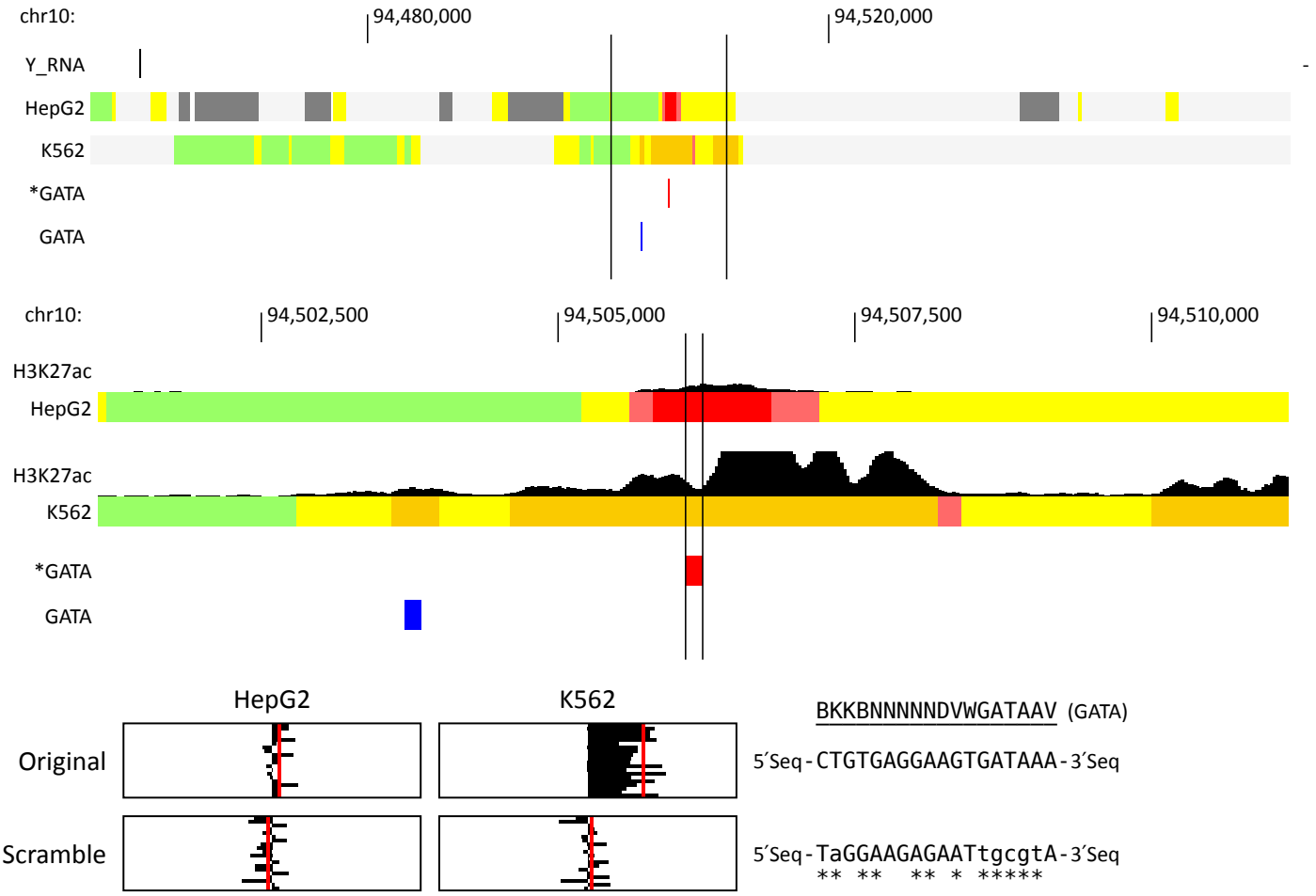
3′Seq = aaagcagtttcccctagtaagtagaaacctctgtgttttctcattttgtaaagcctttagactta

133 GATA in K562 enhancer (conserved at 70% confidence)

chr10 94506138 94506155 - (hg18)



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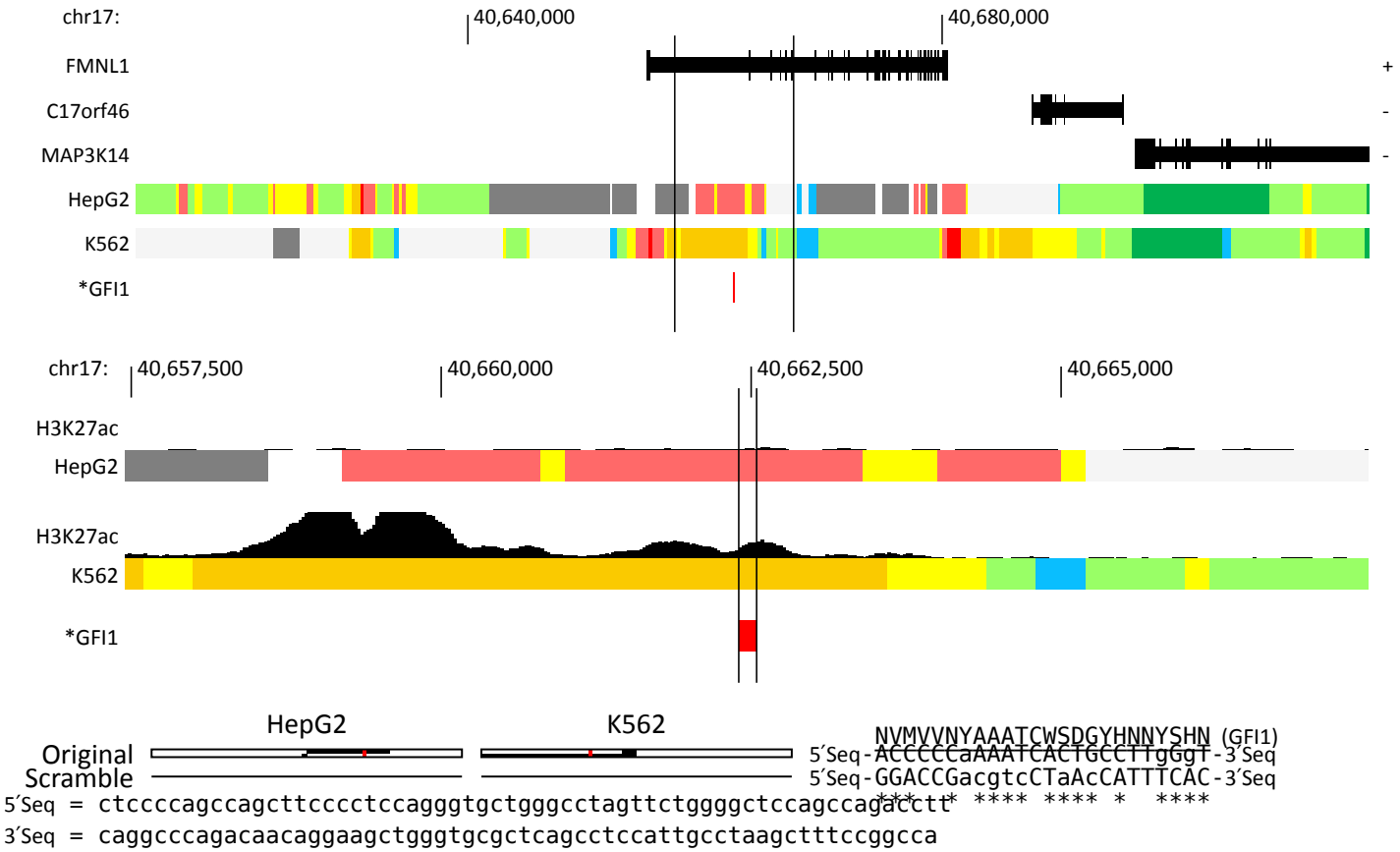
3′Seq = cccaacttcctgcacaaagctgcctgagataacactttccatggactggaaggaaaaaaaaag

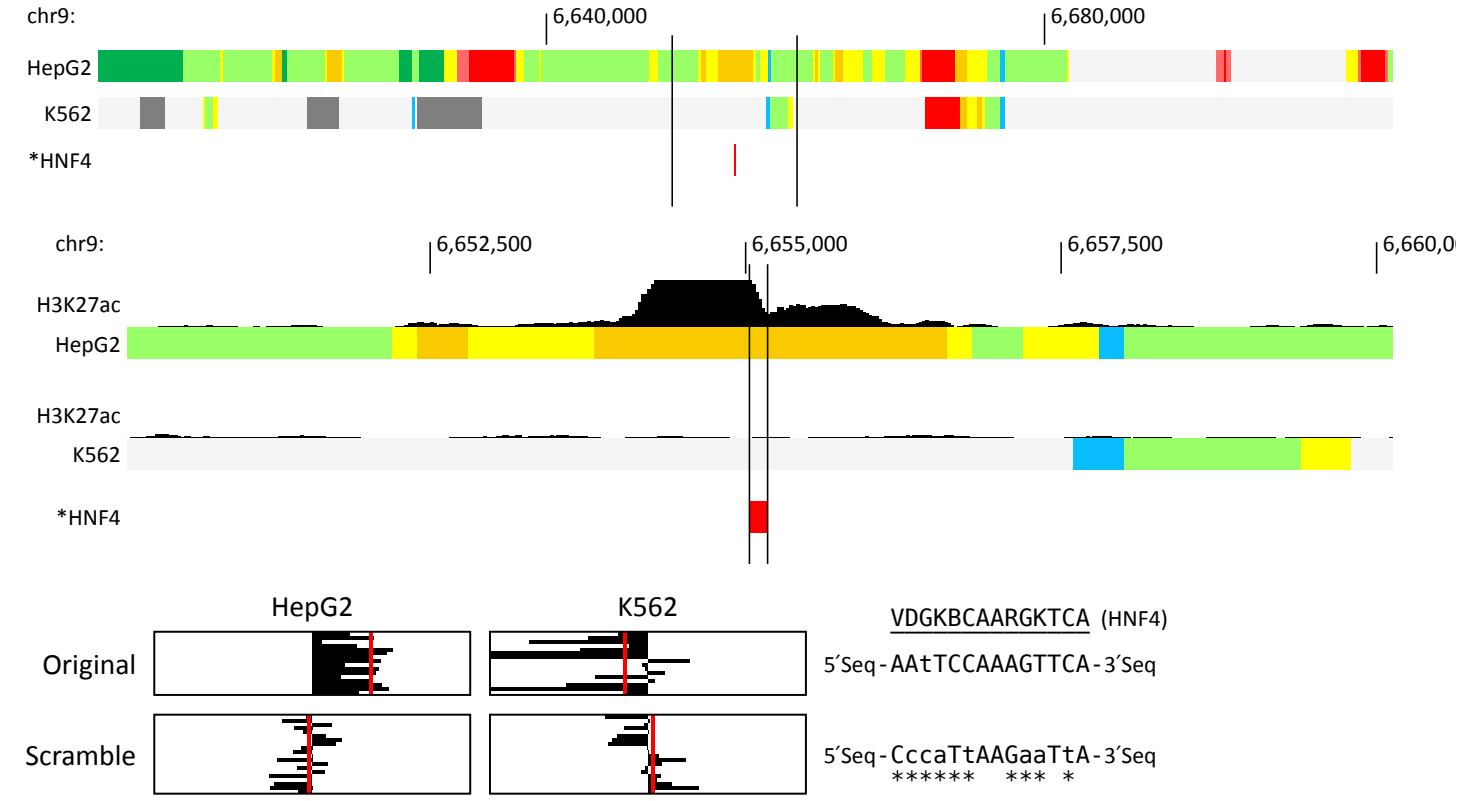
134 GFI1 in K562 enhancer (conserved at 40% confidence)

chr17 40662461 40662484 - (hg18)



135 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr9 6655096 6655109 + (hg18)



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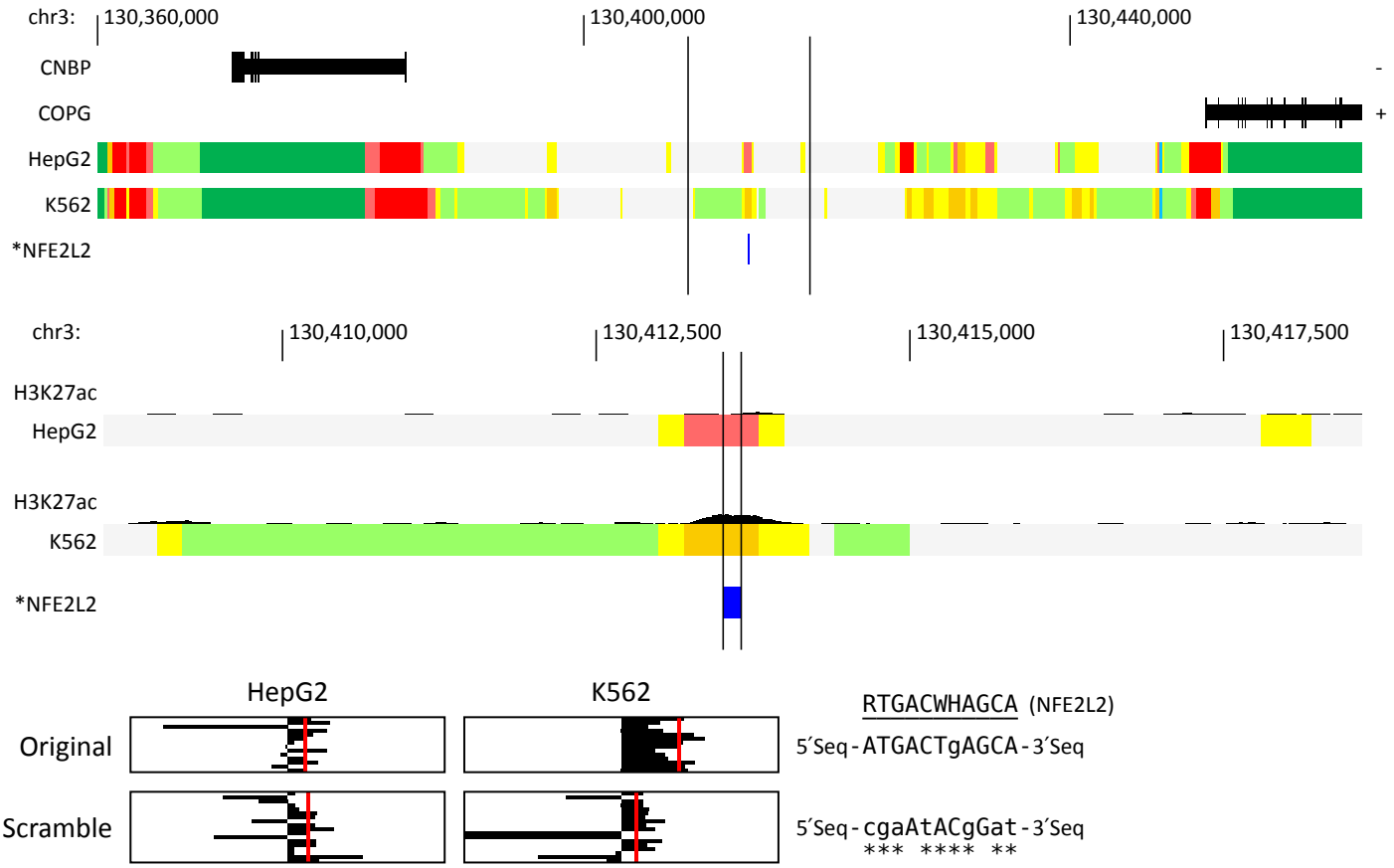
3′Seq = ctcagtgaccagcttgtgaaaagagcaaataaaccatgggtgttttatctcaaatgccattatct

136 NFE2L2 in K562 enhancer

chr3 130413579 130413589 - (hg18)



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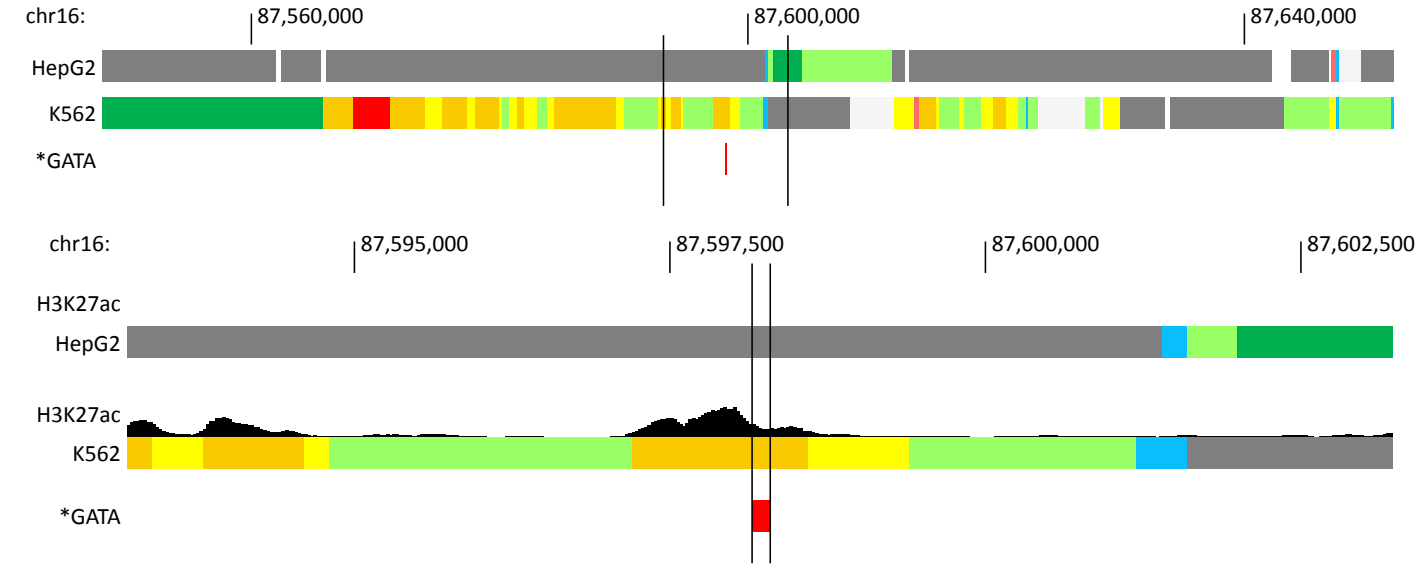
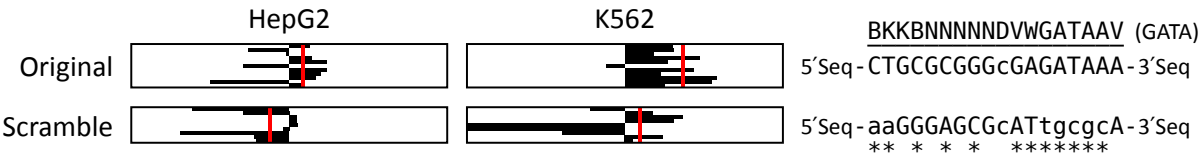
137 GATA in K562 enhancer (conserved at 60% confidence)

chr16 87598215 87598232 + (hg18)





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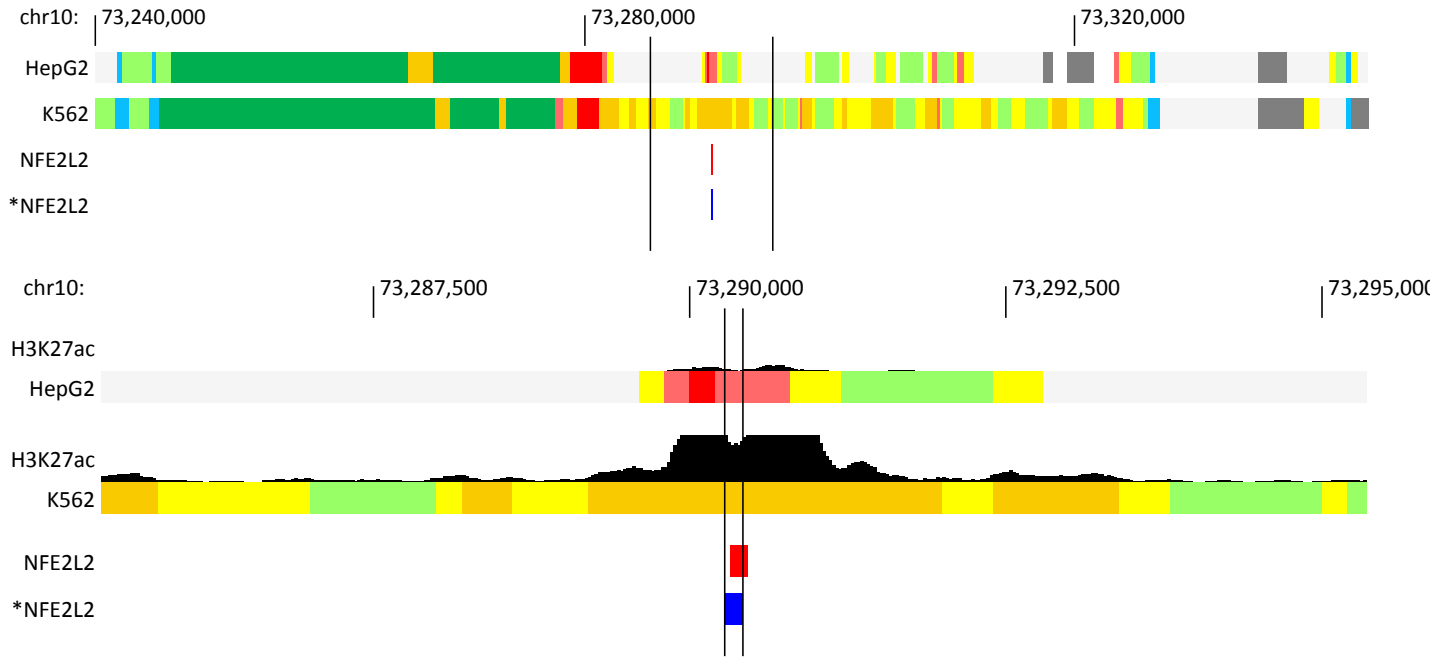
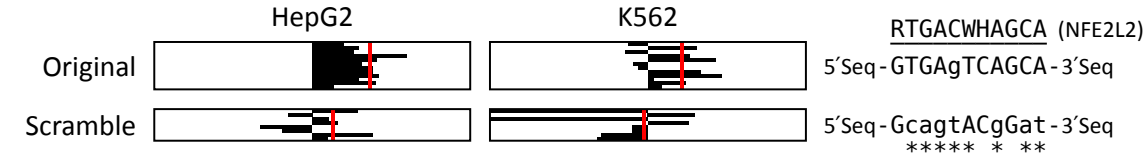
3′Seq = gccagcacgcgcctgtcctcaatcccggccgccatcaacatgcagacagcctgagcgactggc

138 NFE2L2 in K562 enhancer

chr10 73290344 73290354 + (hg18)





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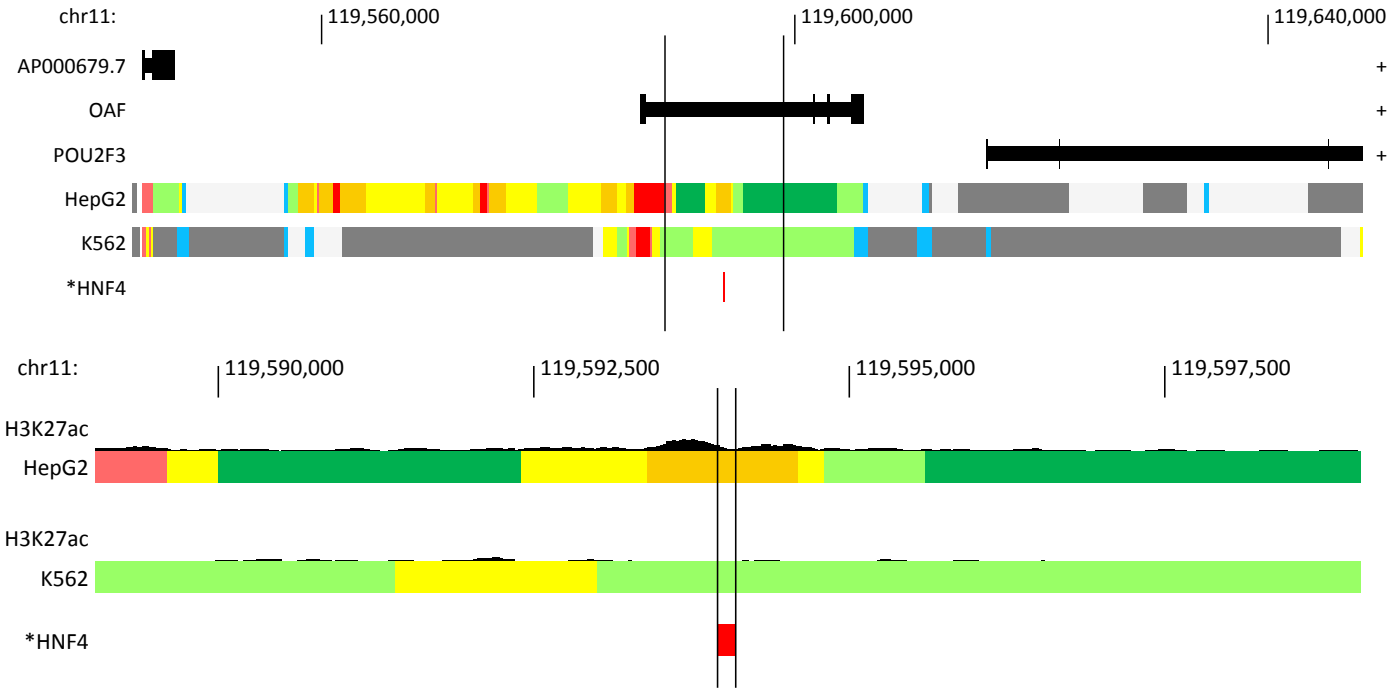
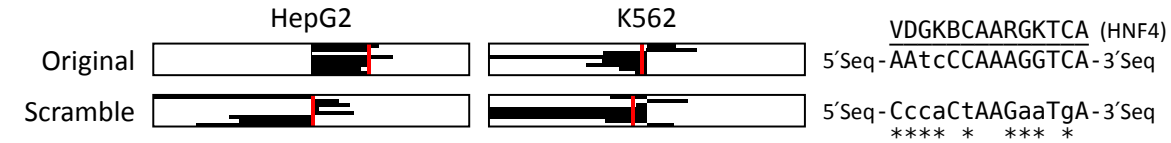
139 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr11 119594022 119594035 - (hg18)





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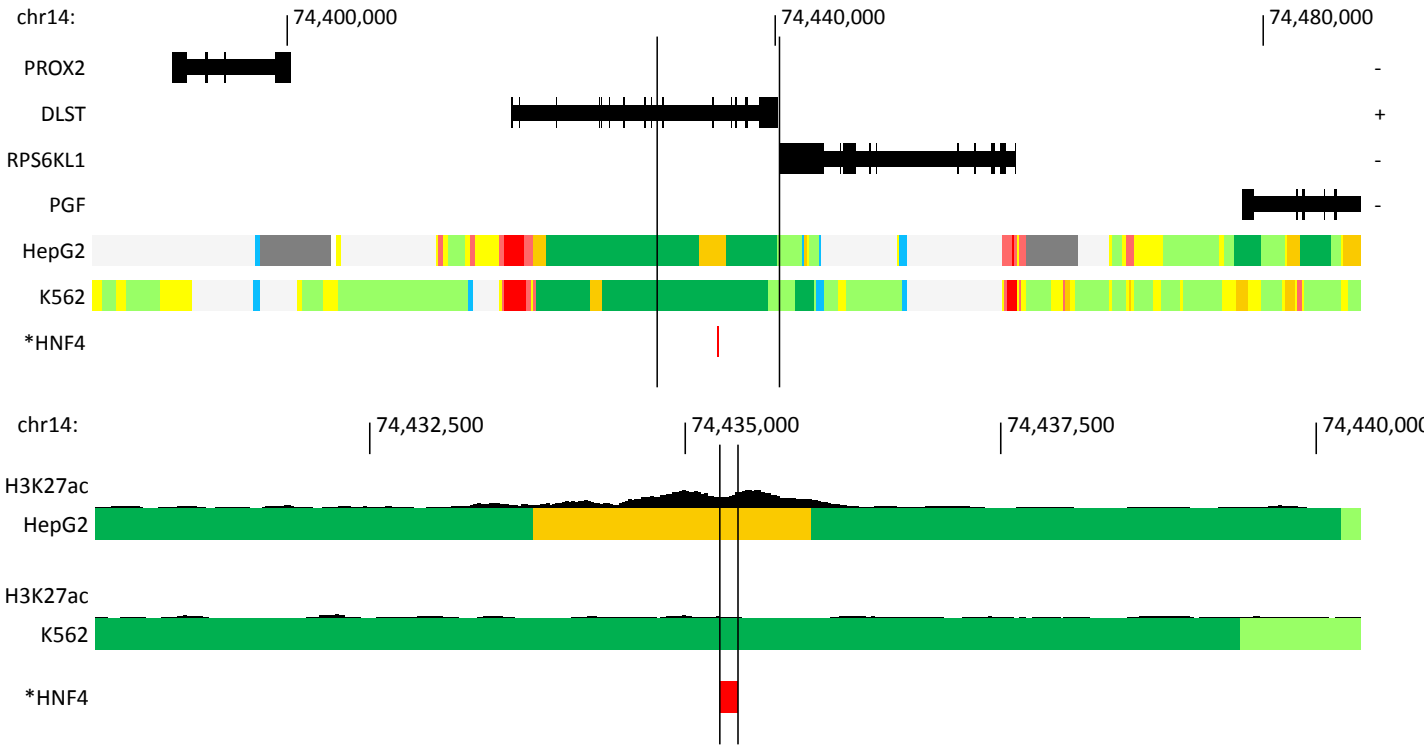
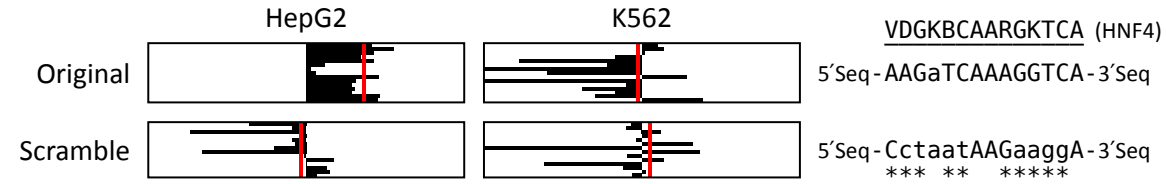
3′Seq = ccactgtcctgactgctgcaggaacaatgtgaggctttatgtggatcaactgcgccccactgtgc

140 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 74435340 74435353 - (hg18)





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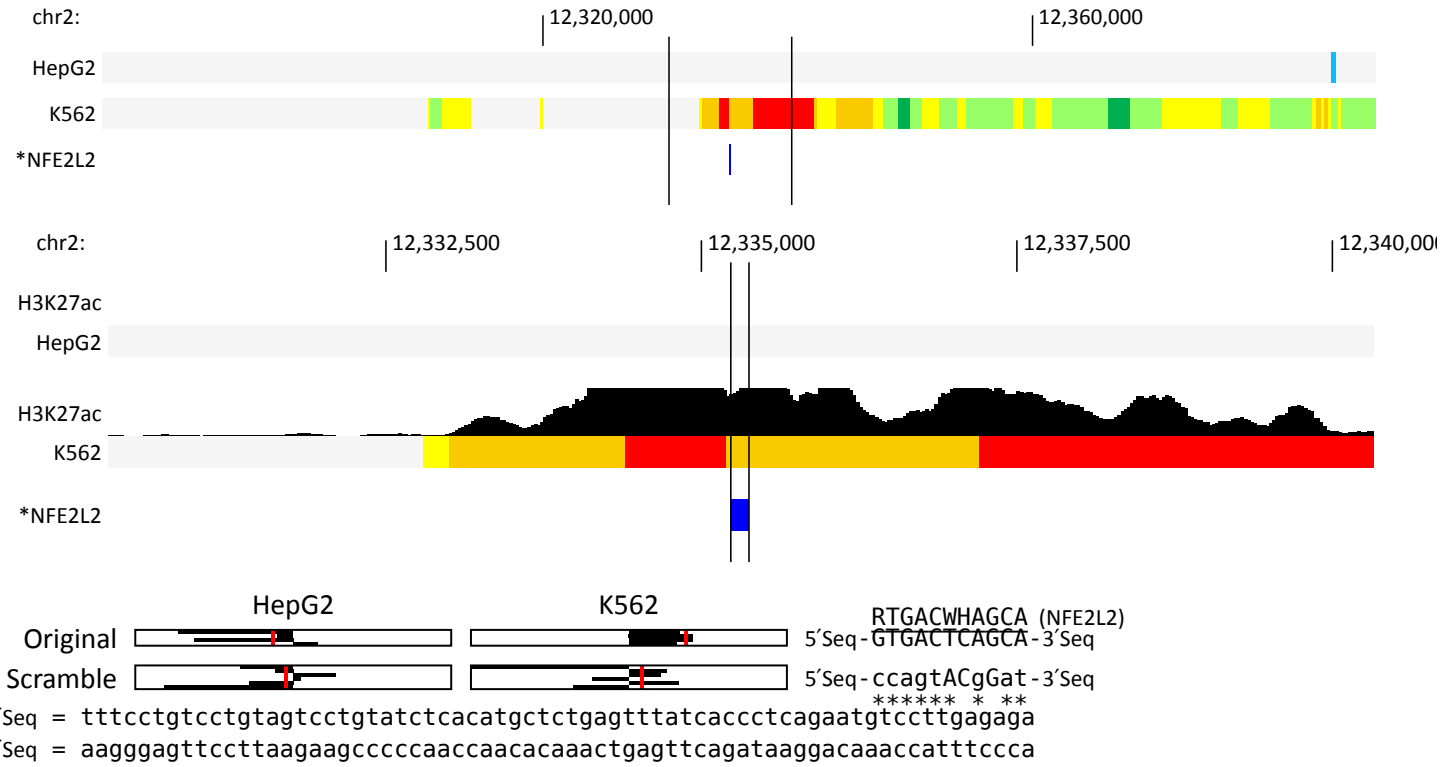
141 NFE2L2 in K562 enhancer

chr2 12335300 12335310 - (hg18)



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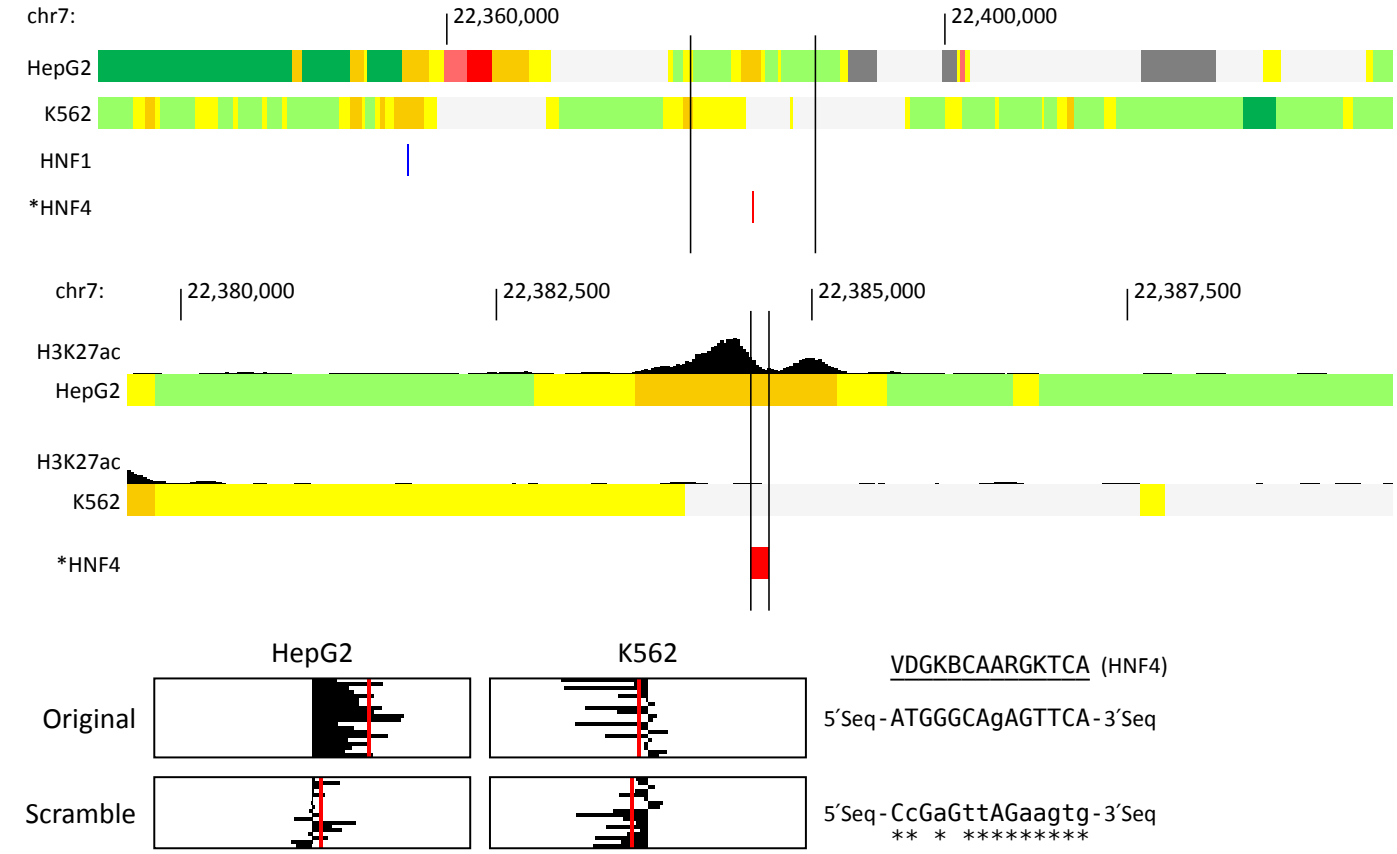
3′Seq = aagggagttccttaagaagcccccaaccaacacaaactgagttcagataaggacaaaccatttccca

142 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr7 22384582 22384595 - (hg18)



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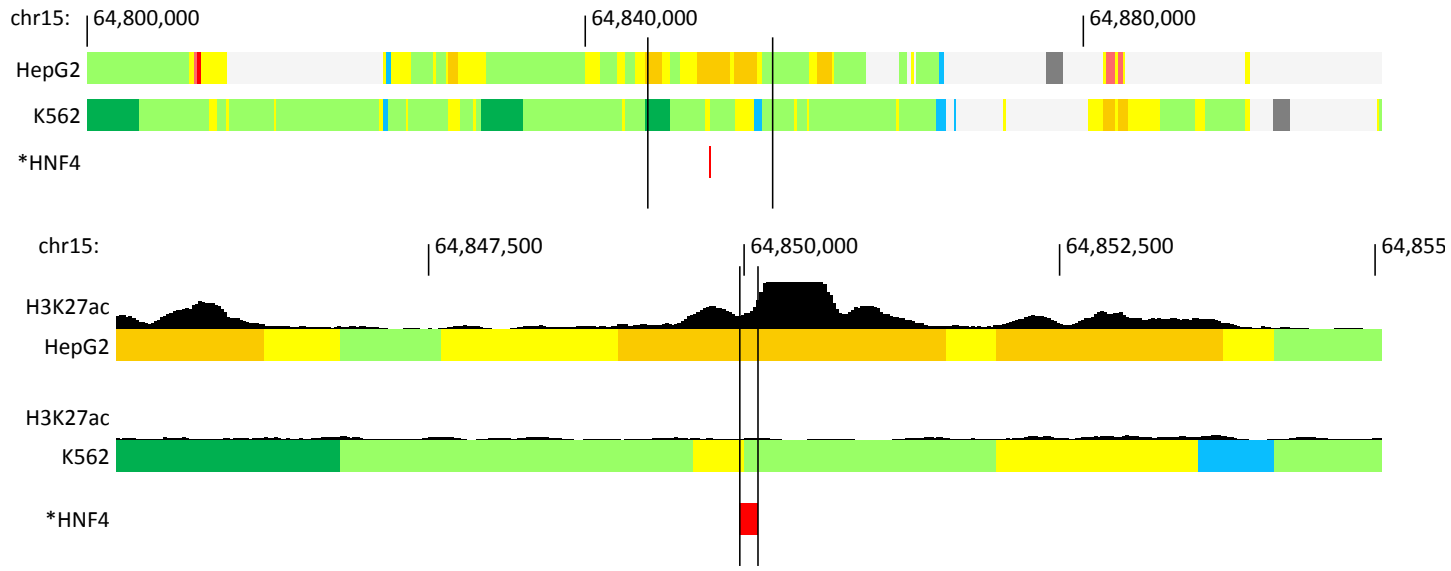
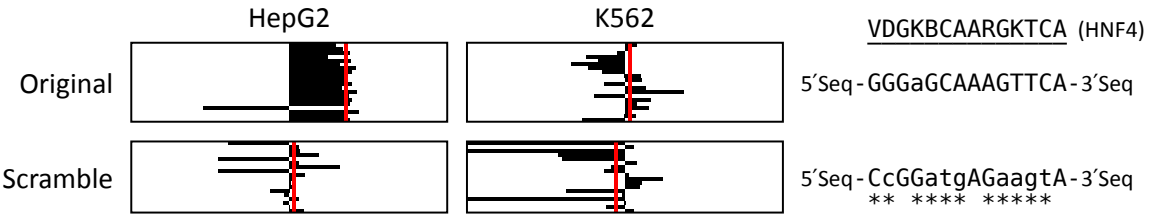
3′Seq = catcgtttttcatttgatcaagtcgagagcatgtttcataagcaaatgcaatgctcaggagcttc

143 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr15 64850032 64850045 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-GGGaGCAAAGTTCA-3′Seq

5′Seq-CcGGatgAGaagtA-3′Seq

** **** *****

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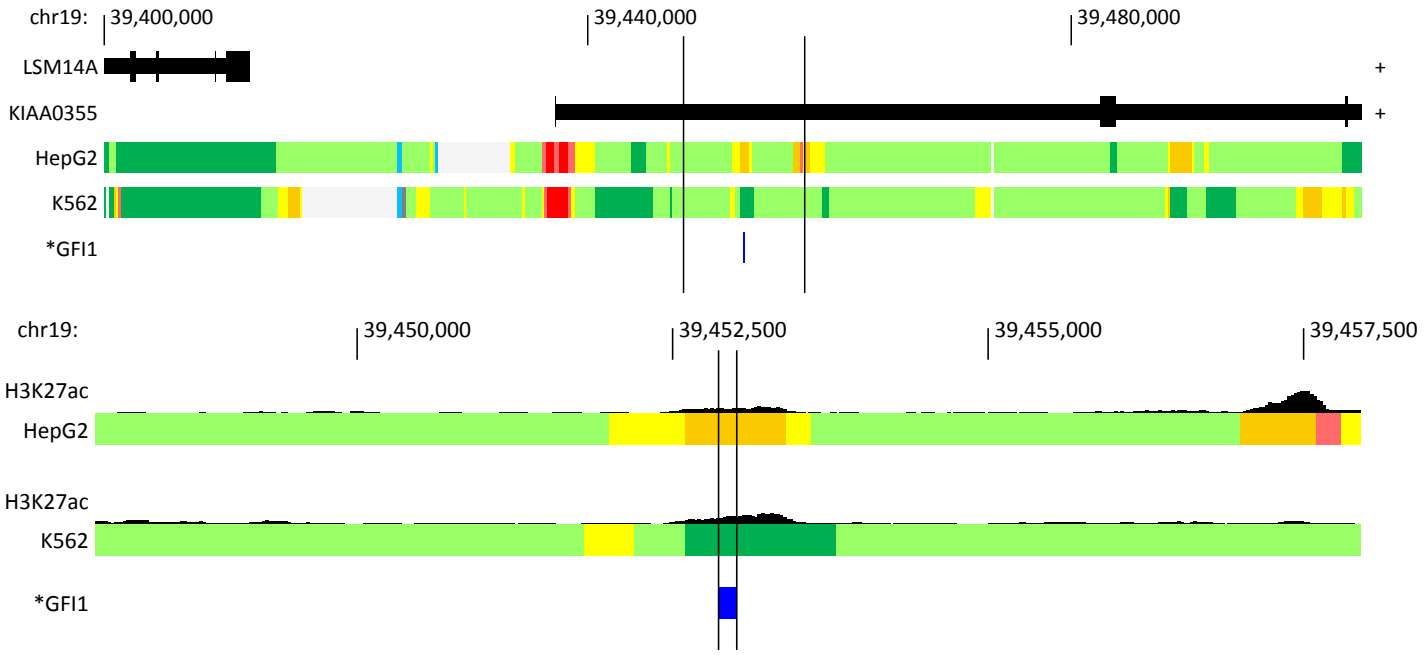
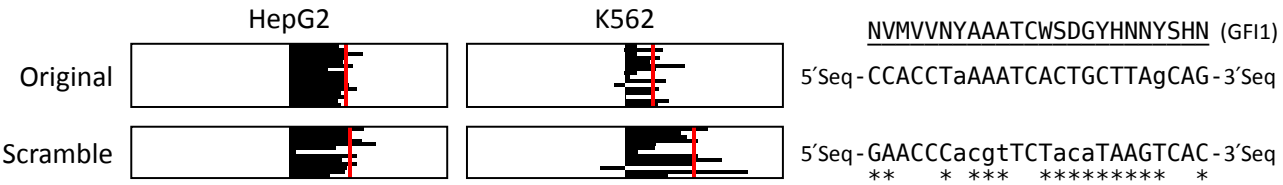
3′Seq = gaggctttgttacagaaactggttccttctcaaaacgtgggctgattttataatctgcttatctt

144 GFI1 in HepG2 enhancer

chr19 39452925 39452948 - (hg18)





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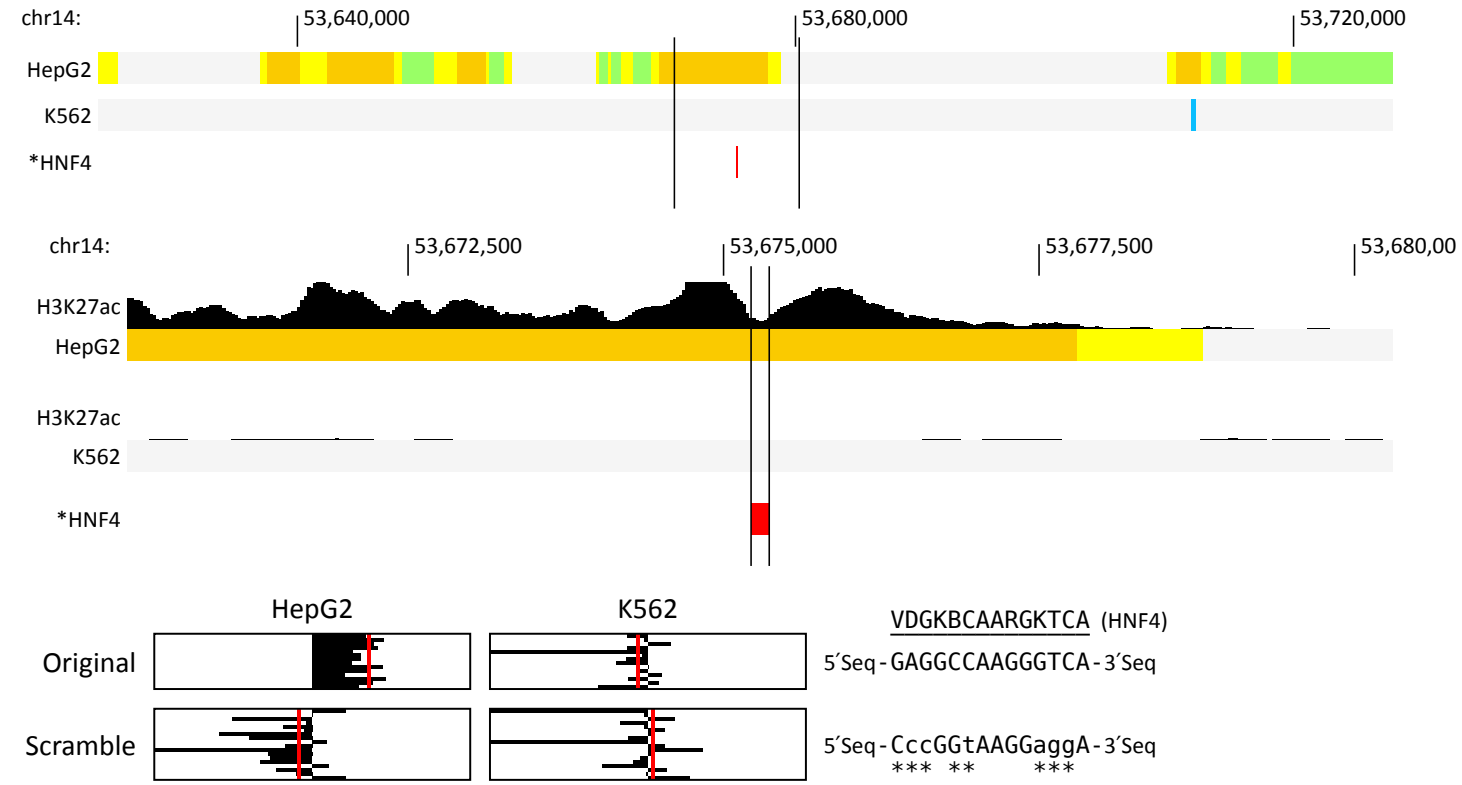
145 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 53675284 53675297 - (hg18)



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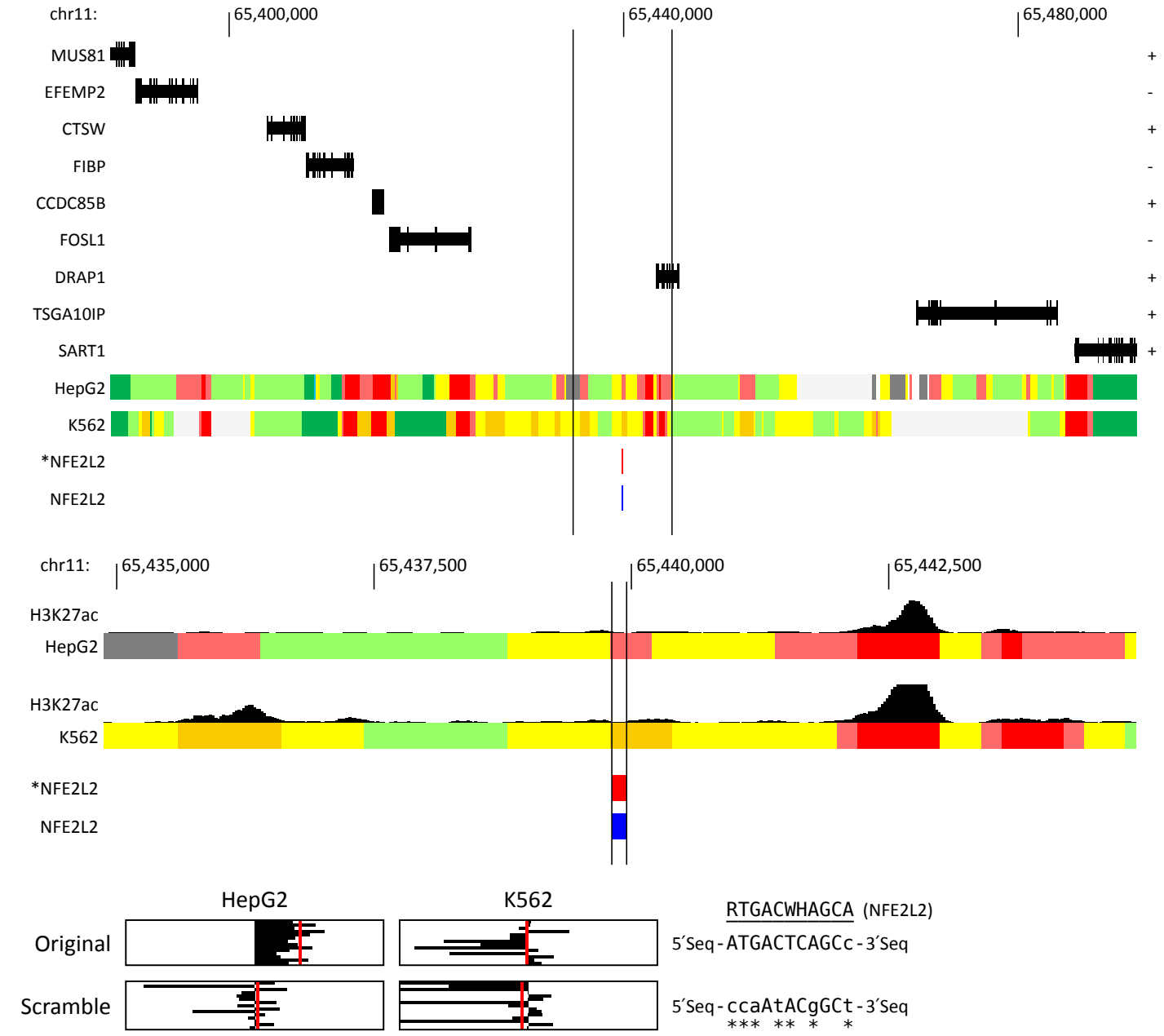
3′Seq = cctaaacaaagagccagactggcaaggaggatcaaagtgagggtacaaaaactagattcatgtgg

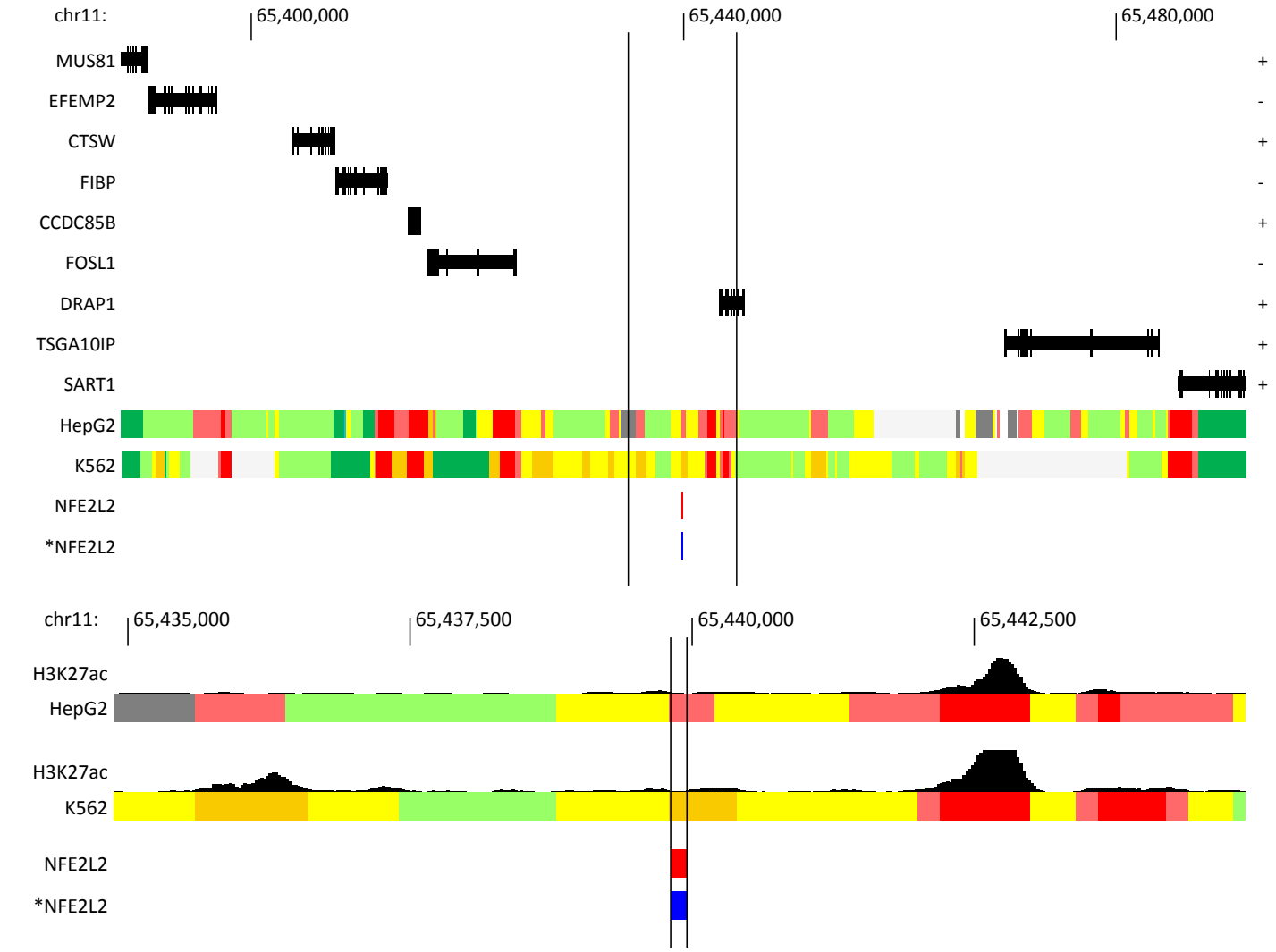
146 NFE2L2 in K562 enhancer (conserved at 60% confidence)

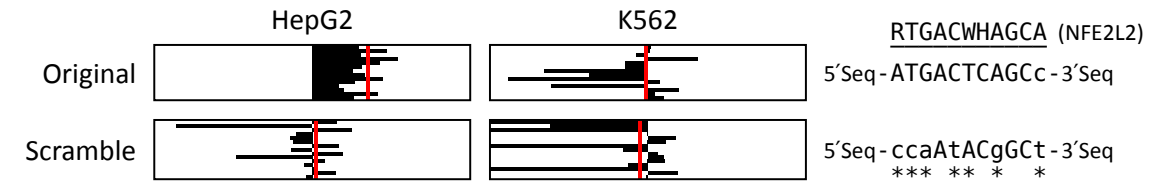
chr11 65439877 65439887 + (hg18)



147 NFE2L2 in K562 enhancer

chr11 65439877 65439887 + (hg18)





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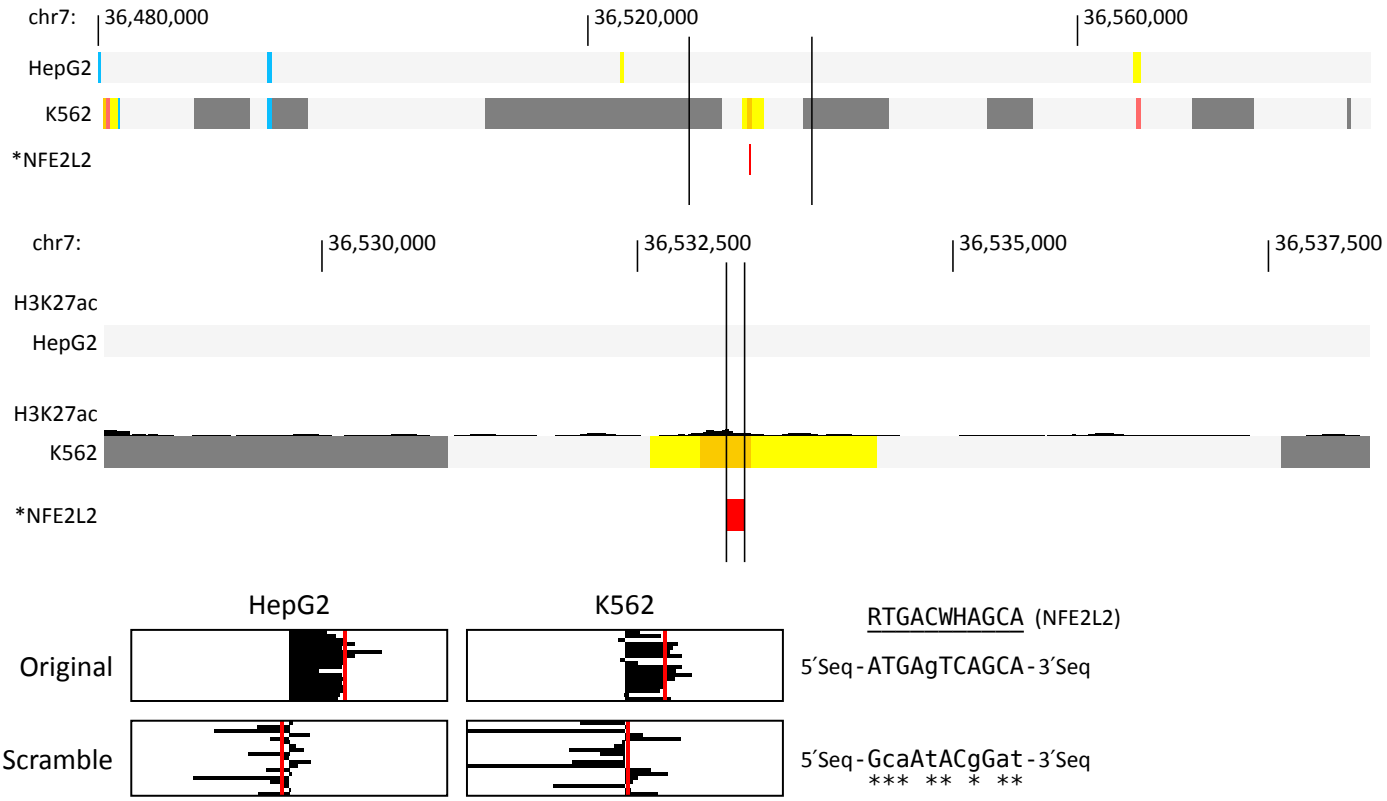
148 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 36533272 36533282 + (hg18)



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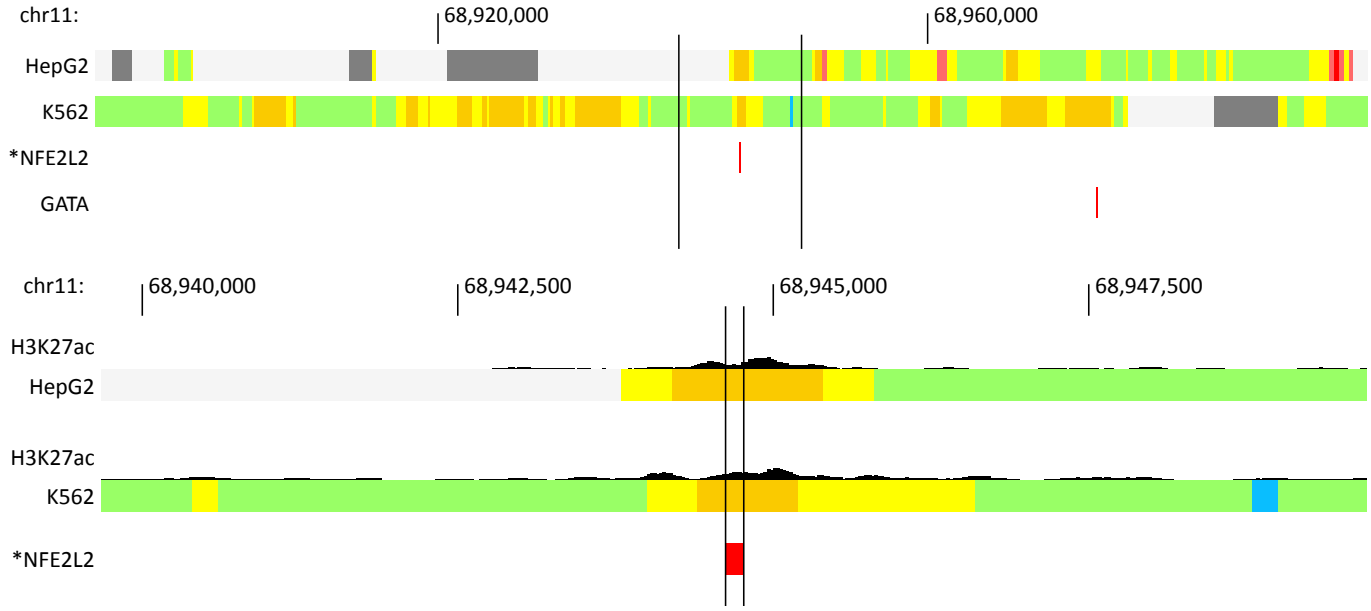
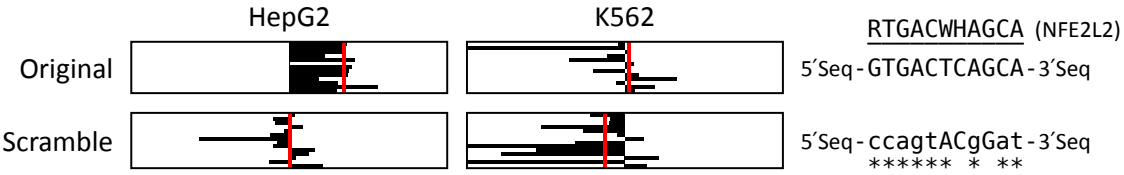
149 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr11 68944689 68944699 + (hg18)





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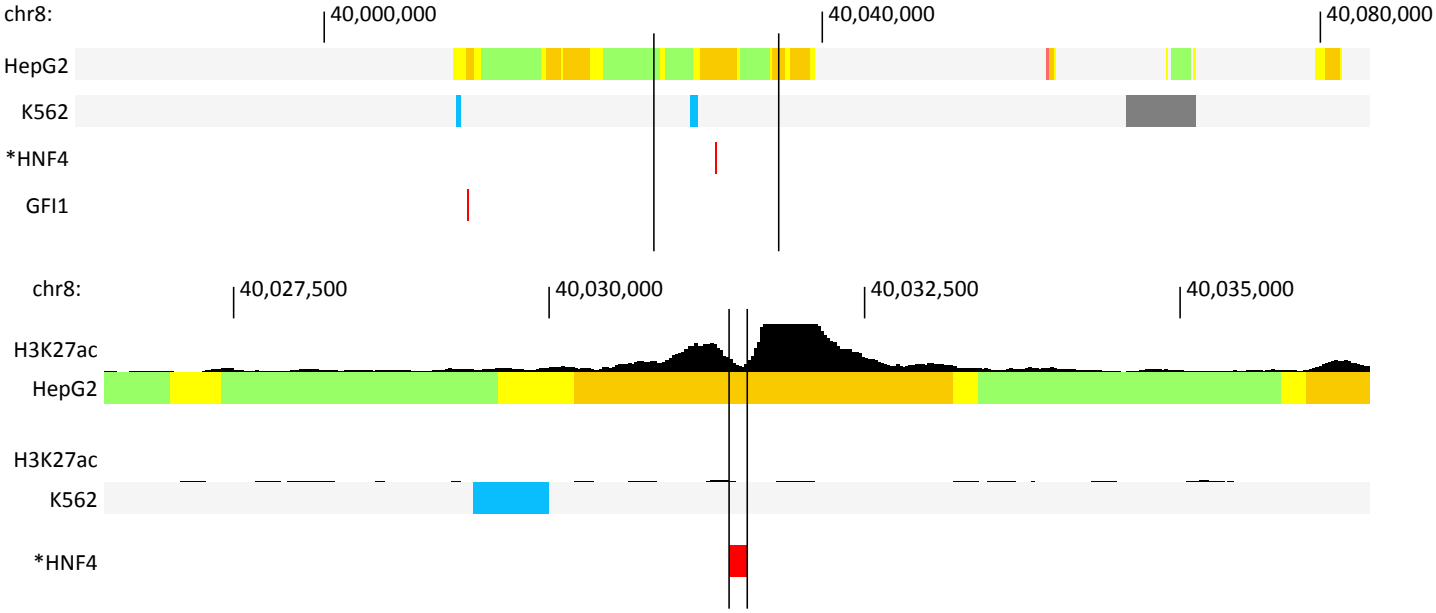
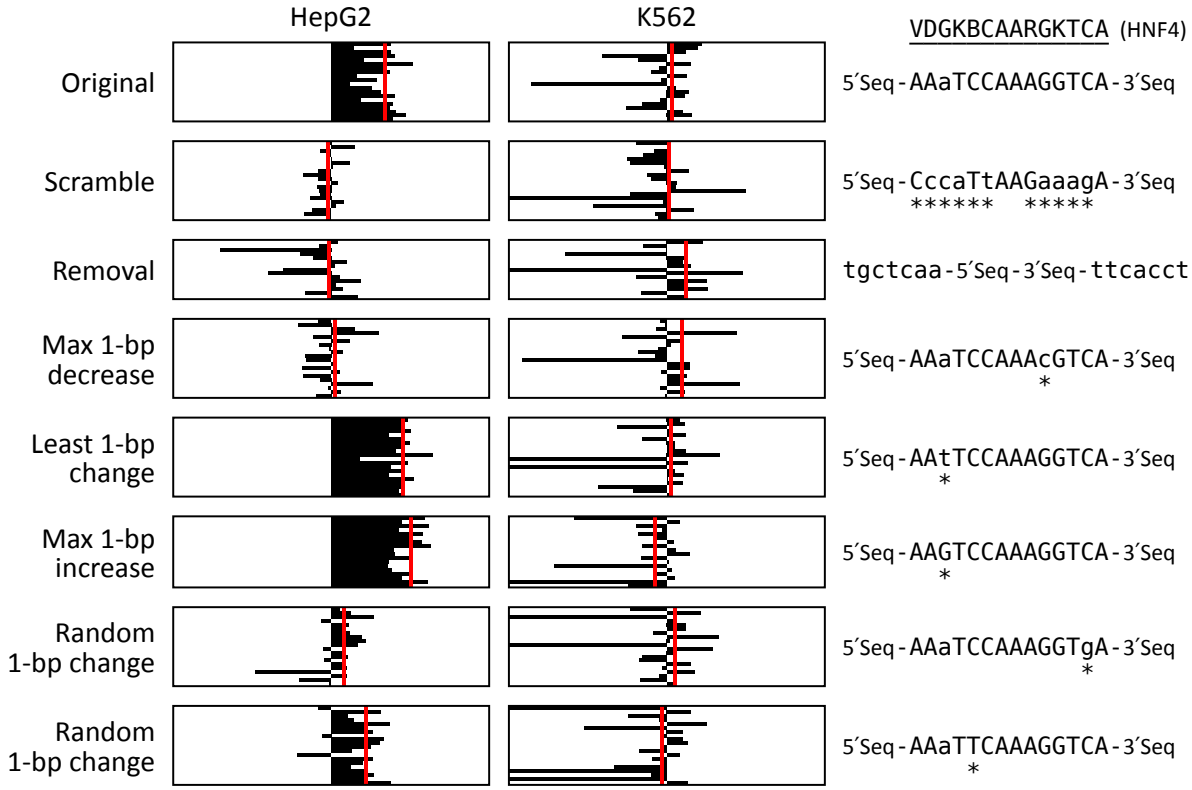
150 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr8 40031492 40031505 - (hg18)





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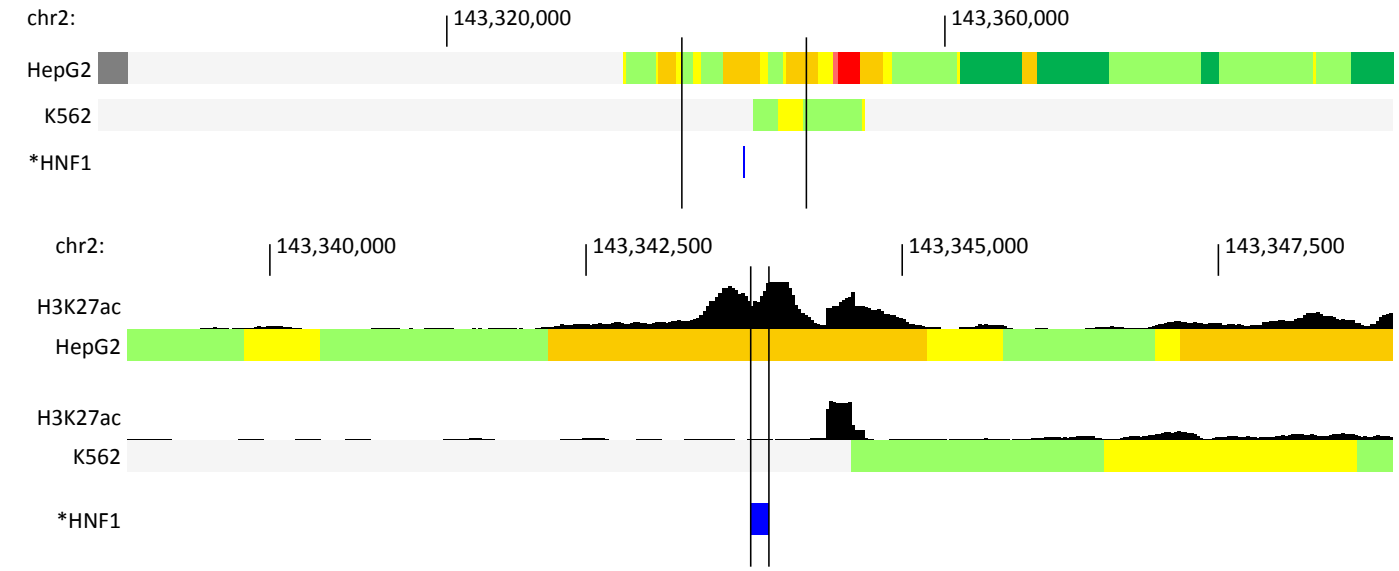
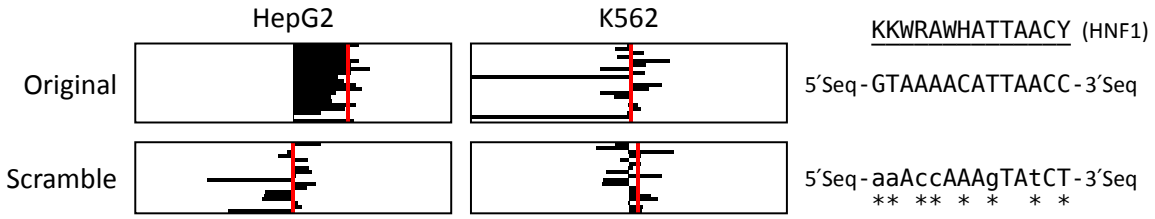
151 HNF1 in HepG2 enhancer

chr2 143343868 143343881 + (hg18)





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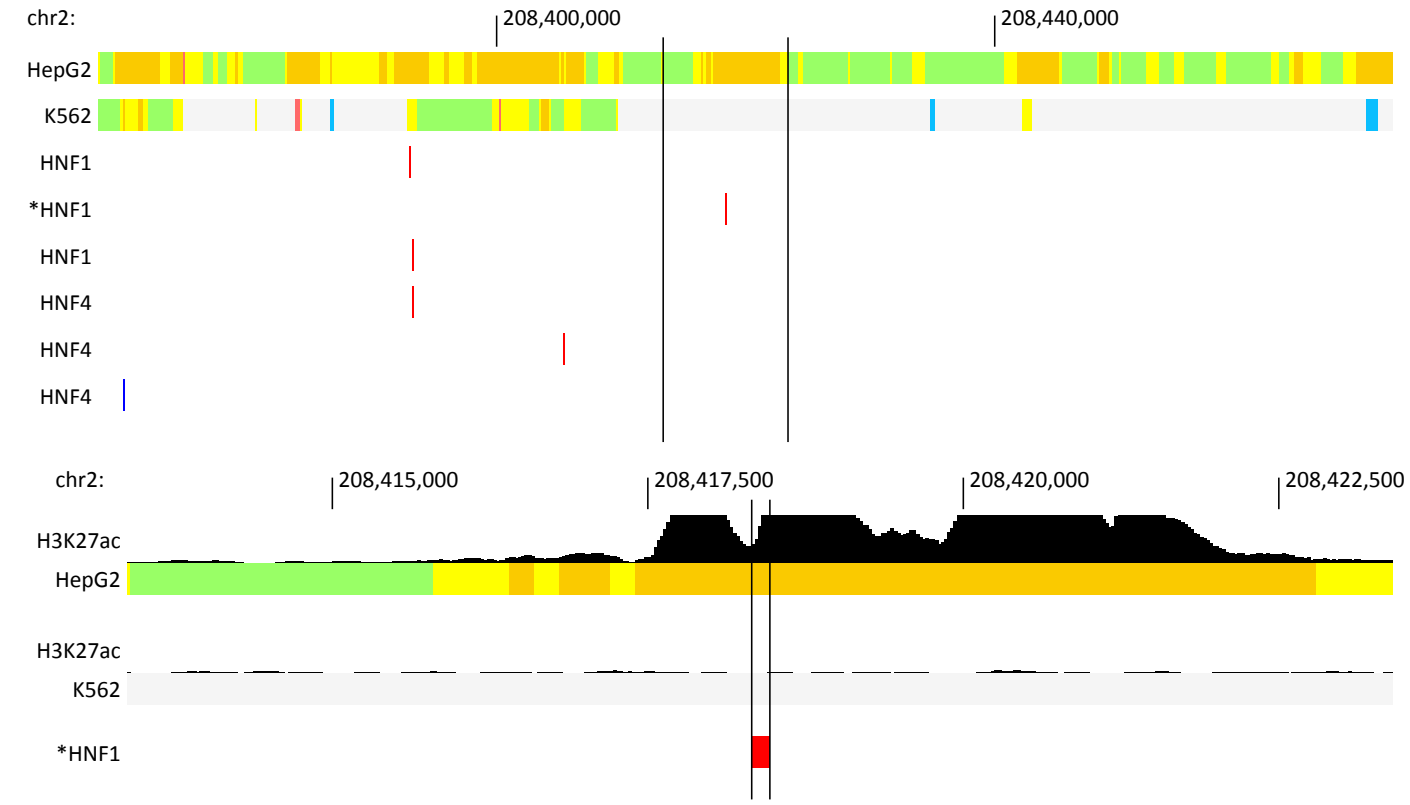
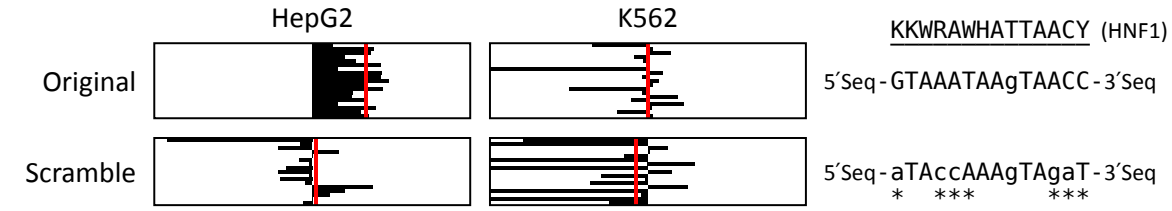
152 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr2 208418389 208418402 - (hg18)





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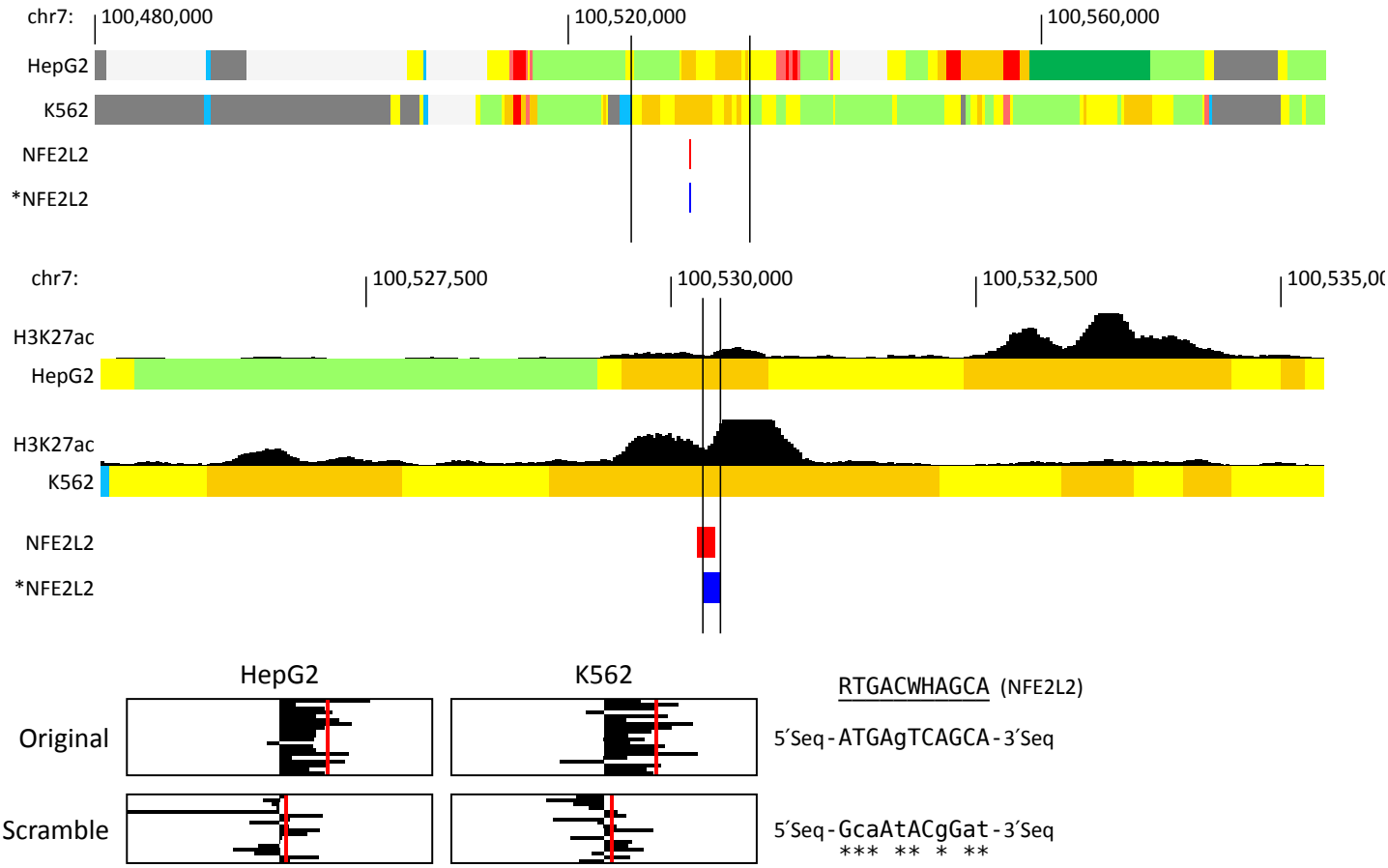
153 NFE2L2 in K562 enhancer

chr7 100530328 100530338 + (hg18)



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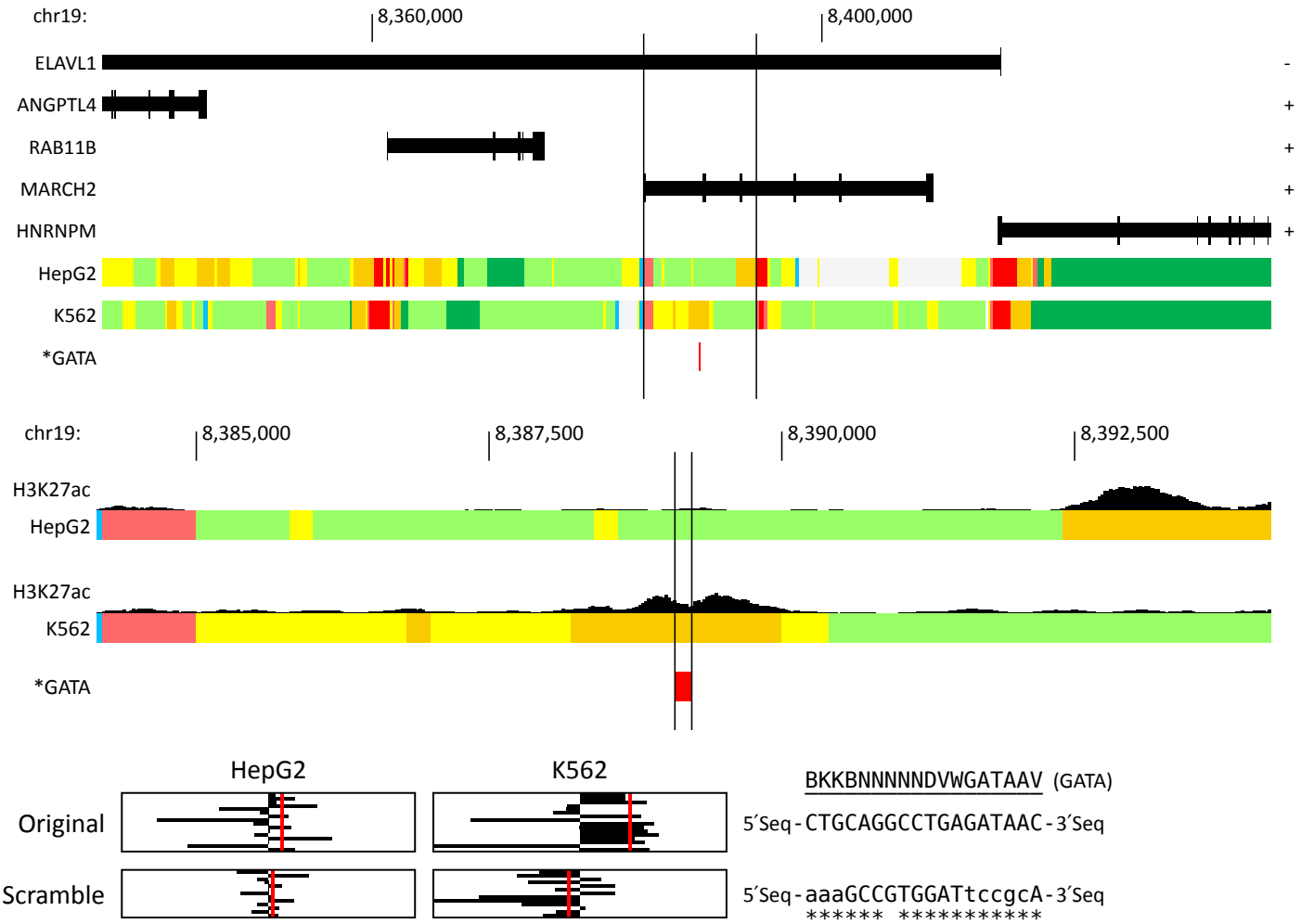
154 GATA in K562 enhancer (conserved at 60% confidence)

chr19 8389151 8389168 - (hg18)



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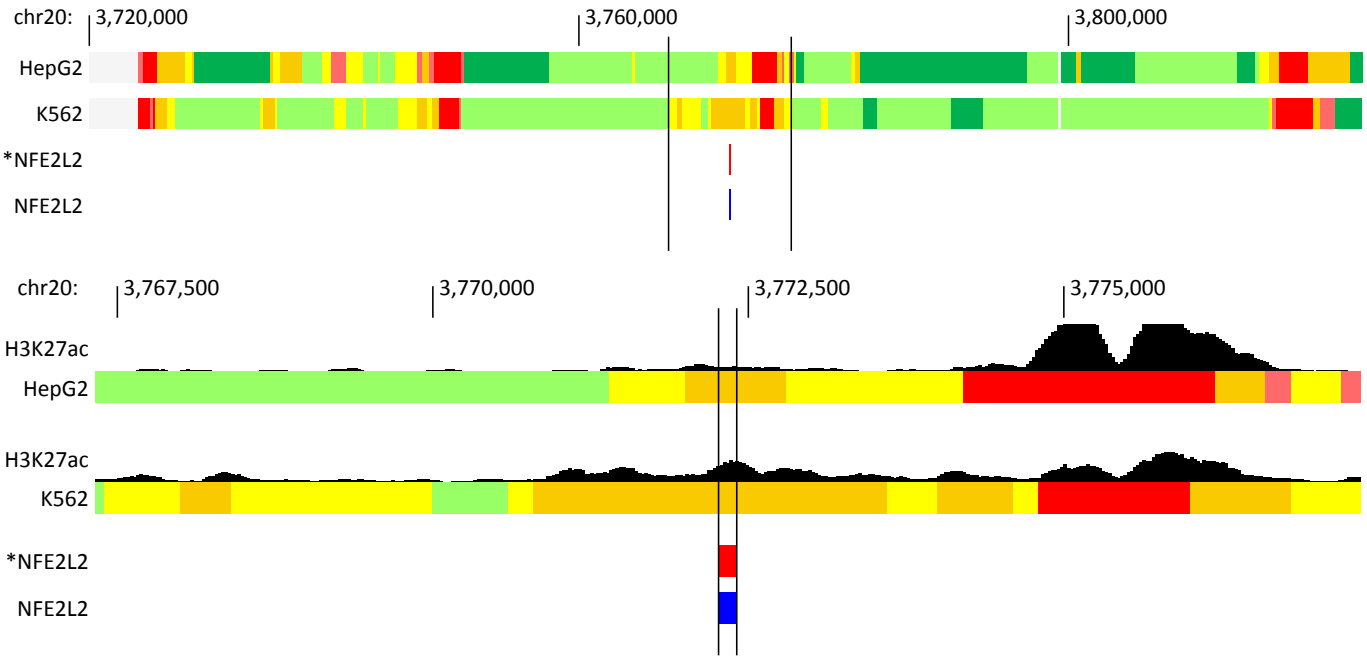
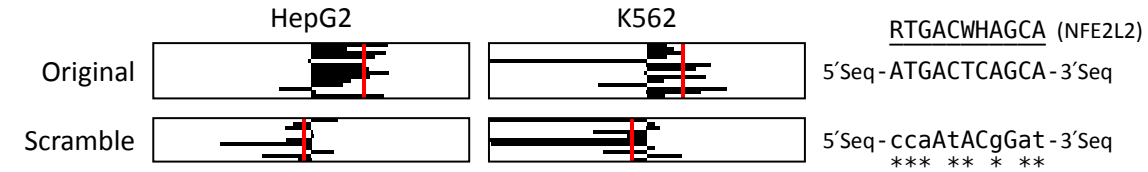
155 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 3772331 3772341 - (hg18)





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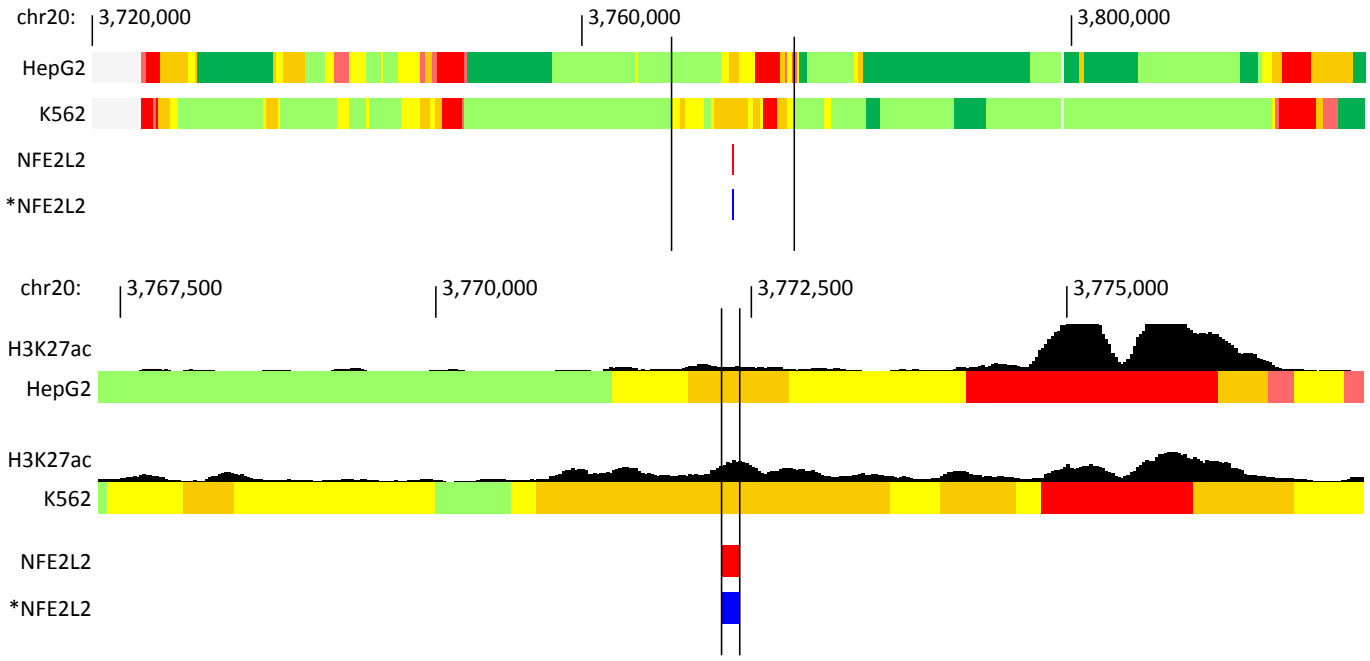
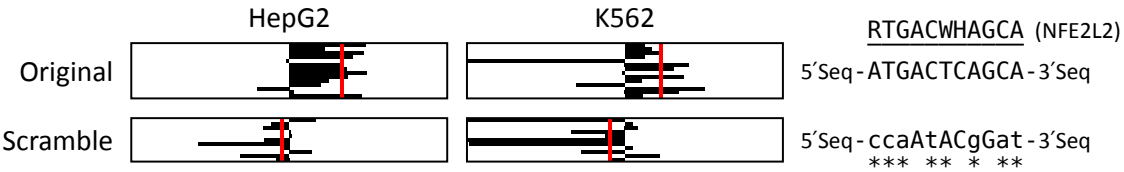
156 NFE2L2 in K562 enhancer

chr20 3772331 3772341 - (hg18)





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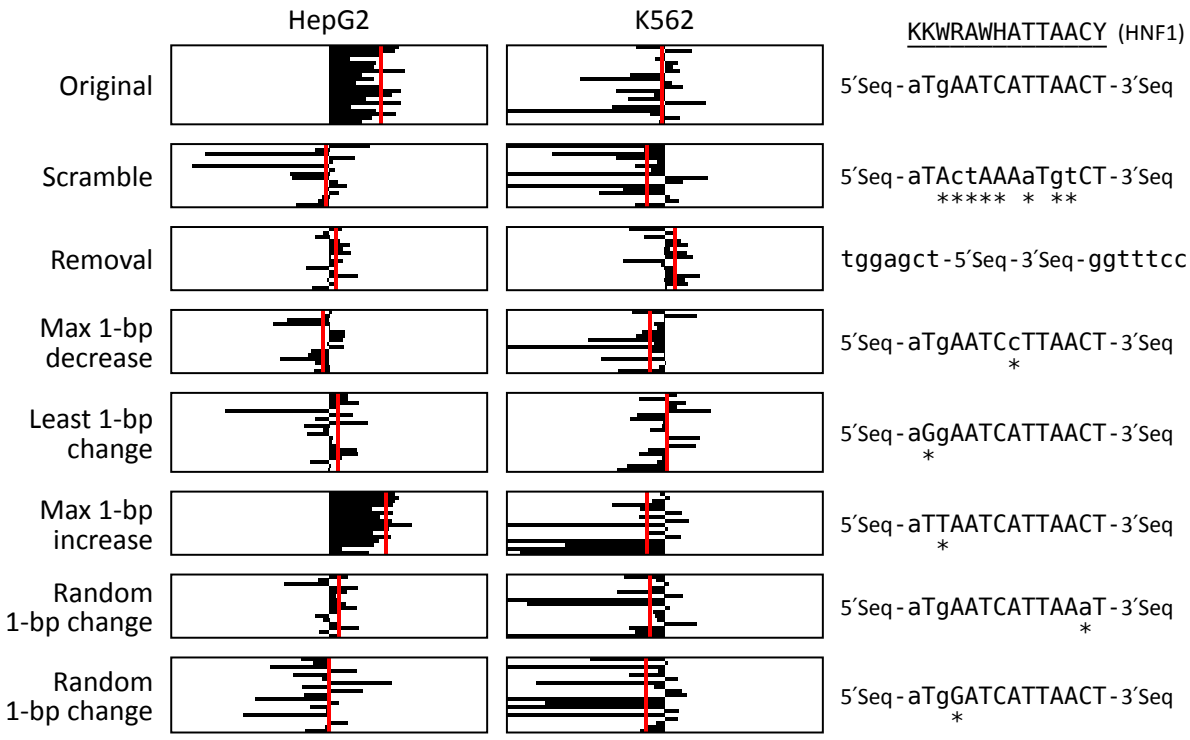
157 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 80541410 80541423 - (hg18)



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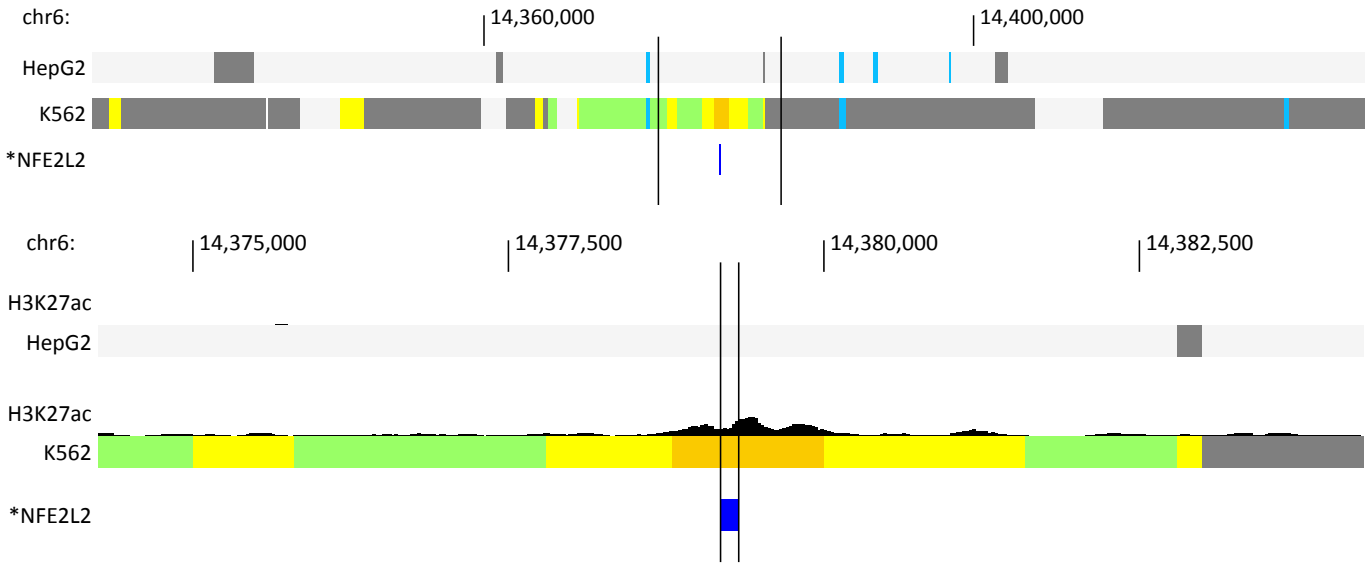
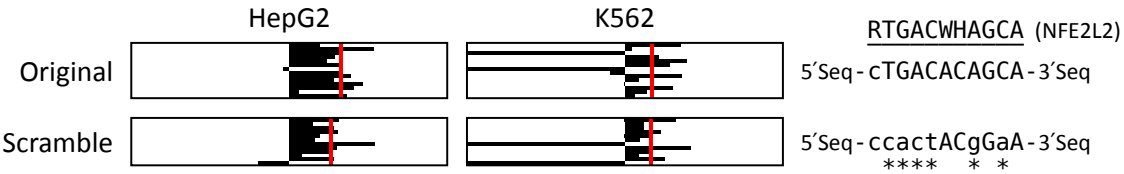
158 NFE2L2 in K562 enhancer

chr6 14379248 14379258 + (hg18)





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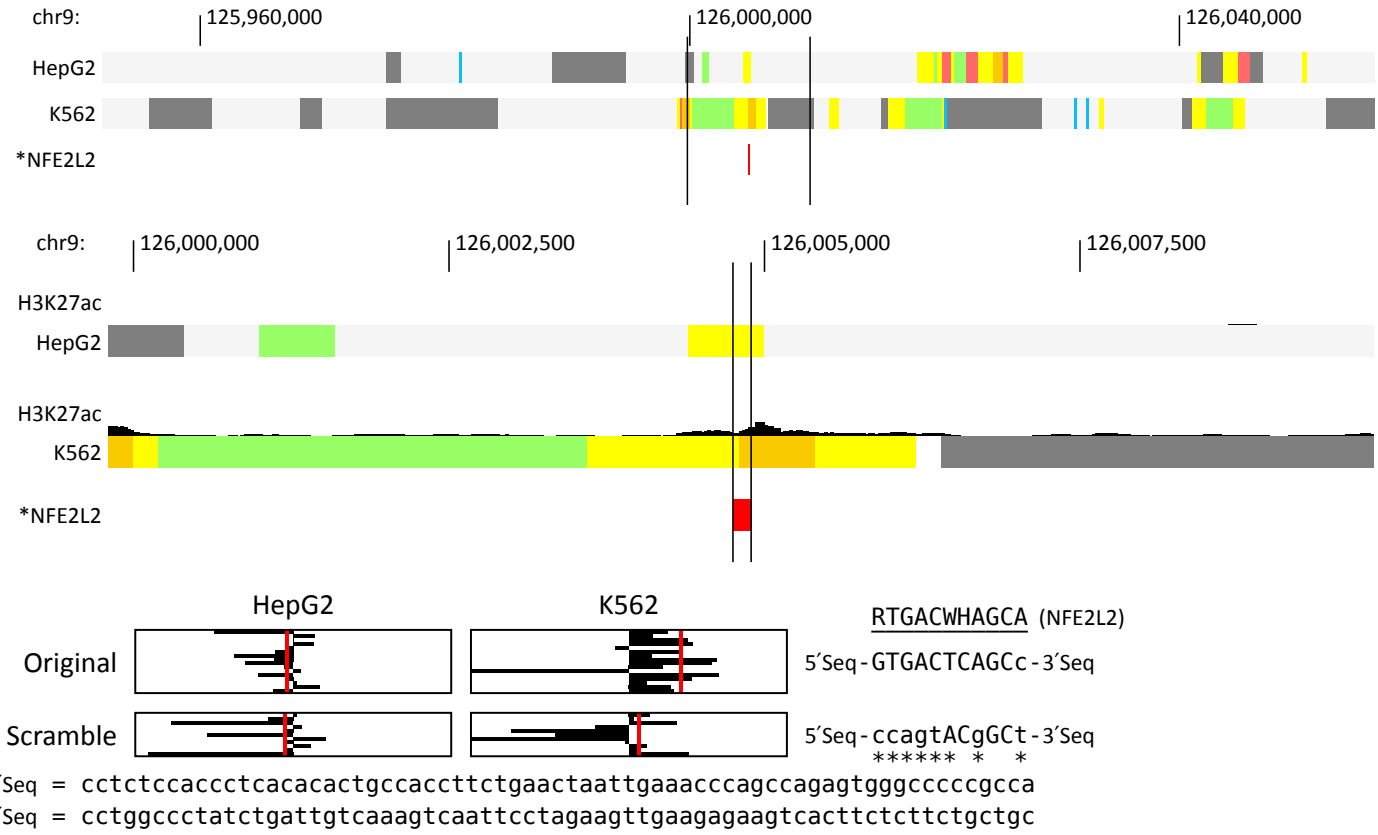
159 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr9 126004817 126004827 + (hg18)



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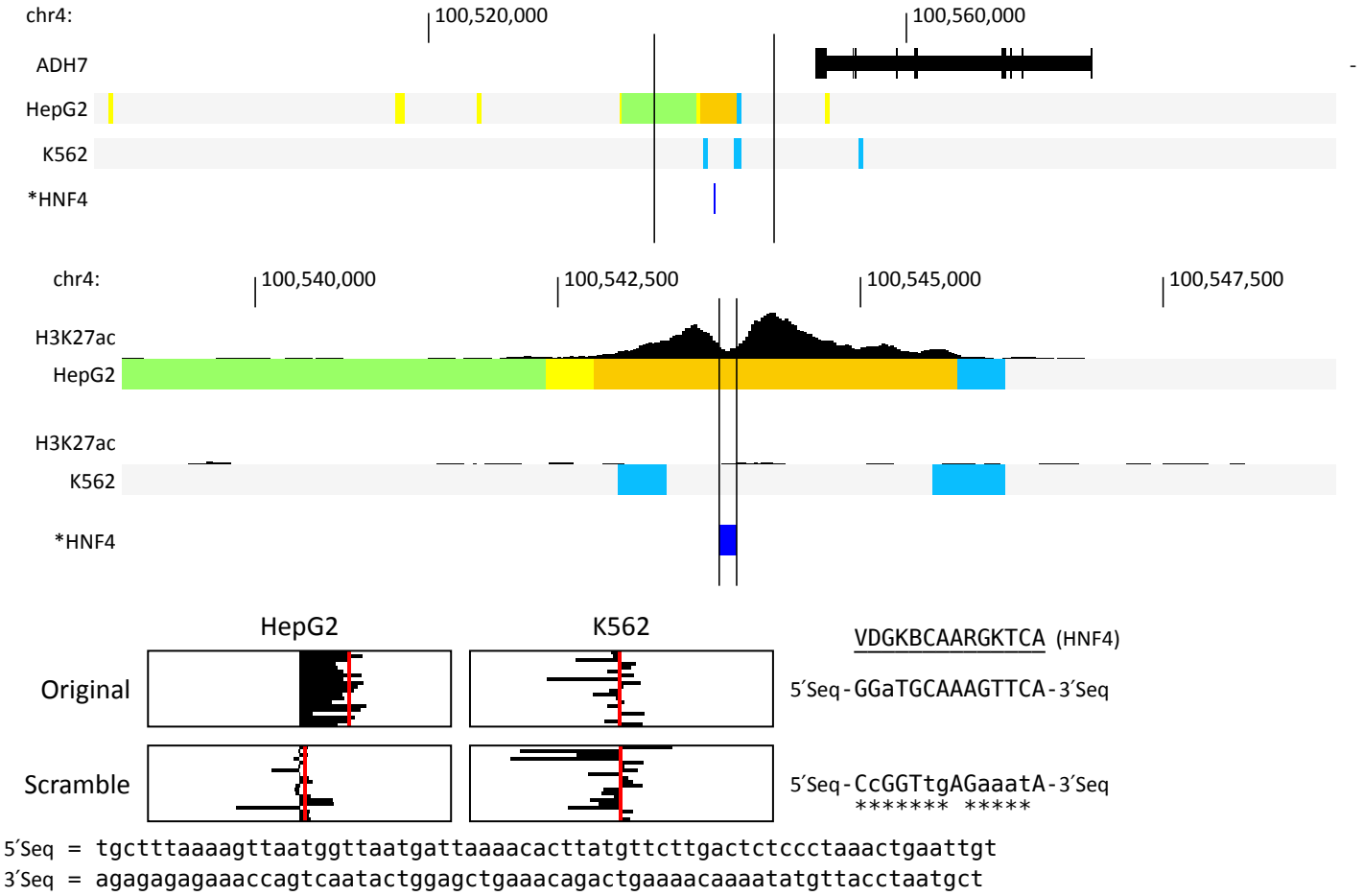
160 HNF4 in HepG2 enhancer

chr4 100543899 100543912 + (hg18)



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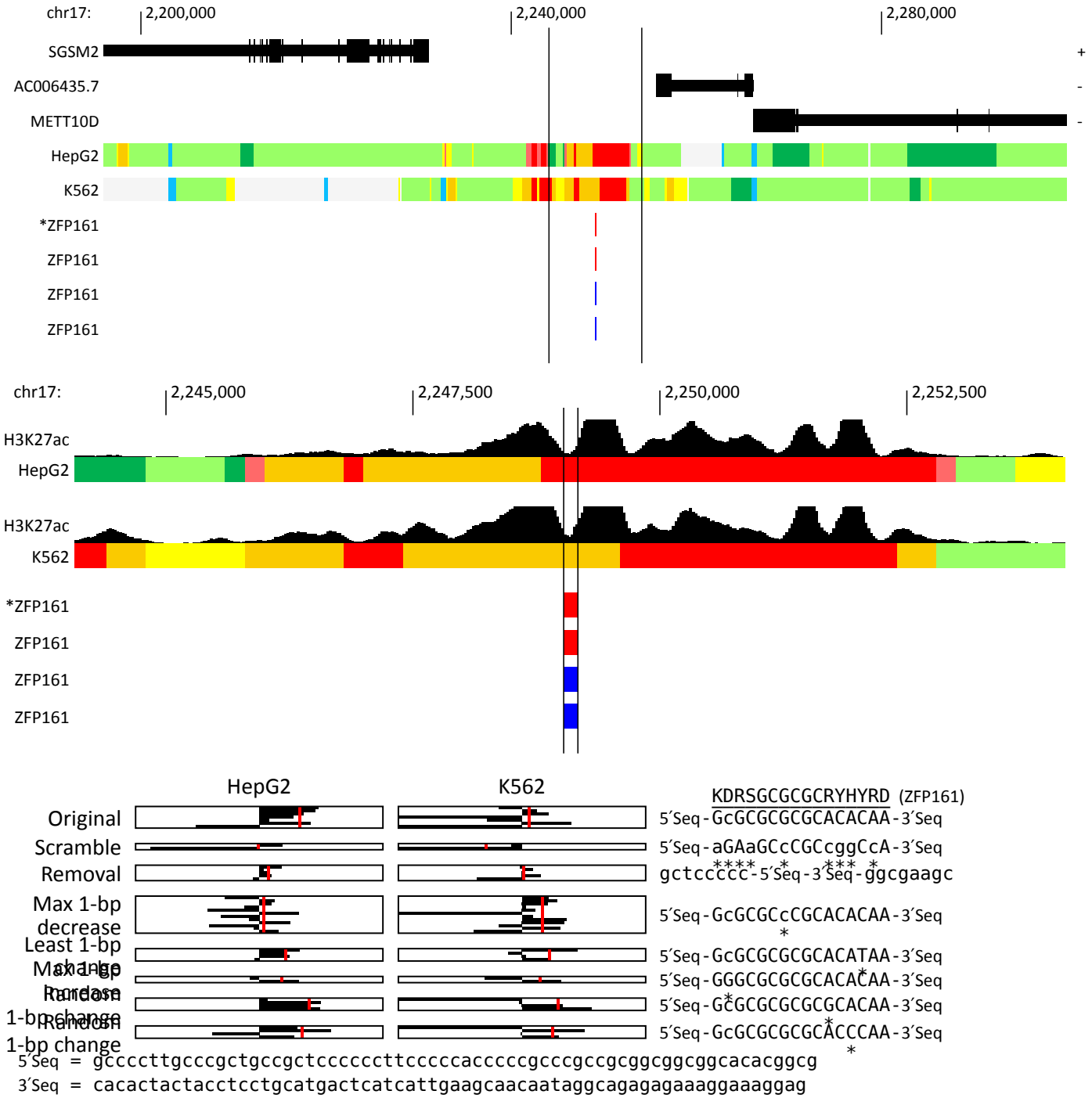
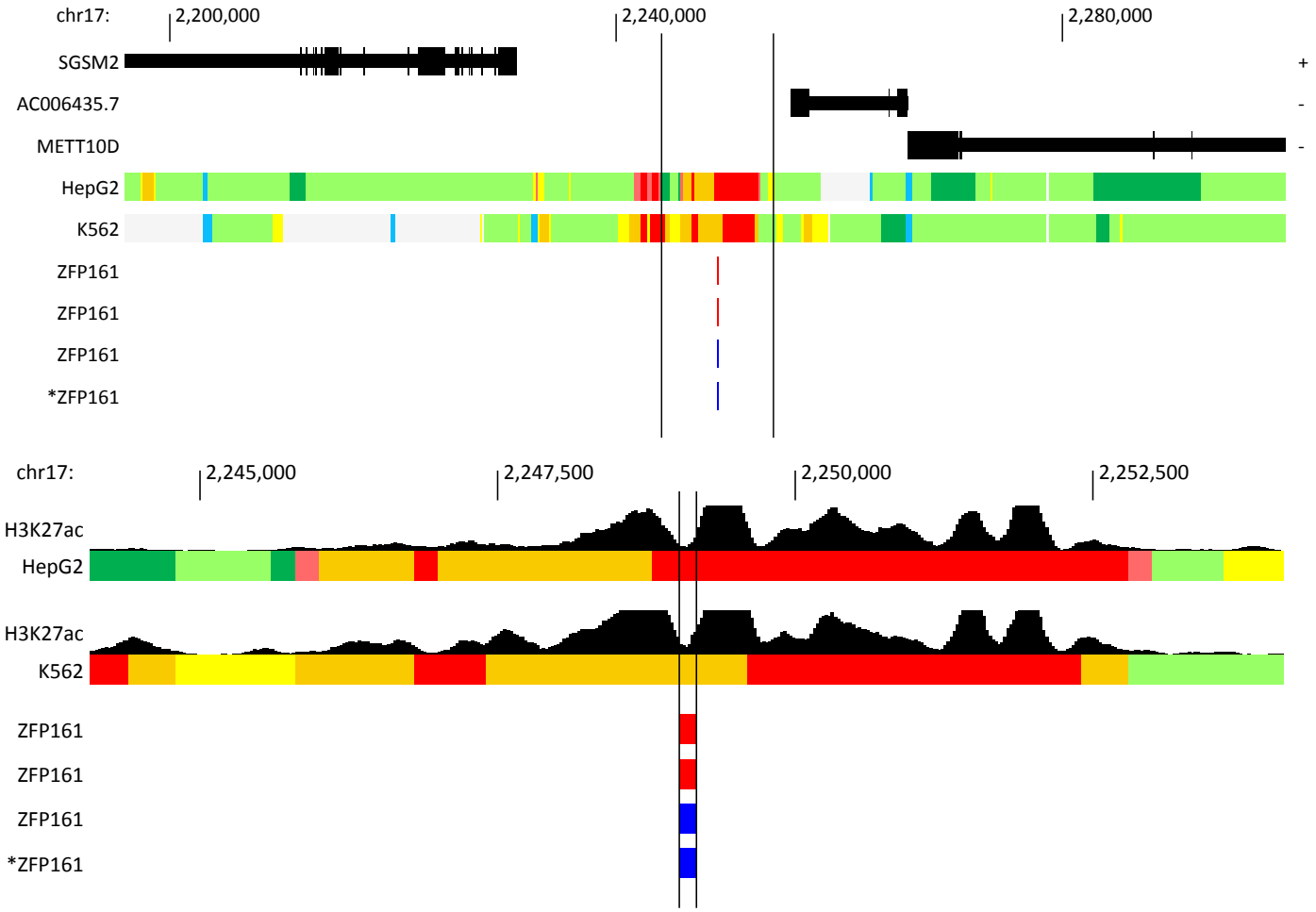
161 ZFP161 in K562 enhancer (conserved at 60% confidence)

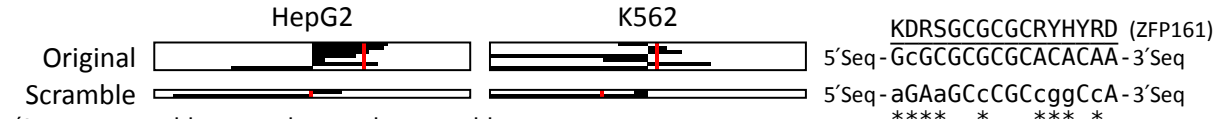
chr17 2249091 2249106 + (hg18)



162 ZFP161 in K562 enhancer

chr17 2249091 2249106 + (hg18)





KDRSGCGCGCRYHYRD (ZFP161)

5′Seq-GcGCGCGCGCACACAA-3′Seq

5′Seq-aGAaGCcCGCcggCcA-3′Seq

**** * *** *

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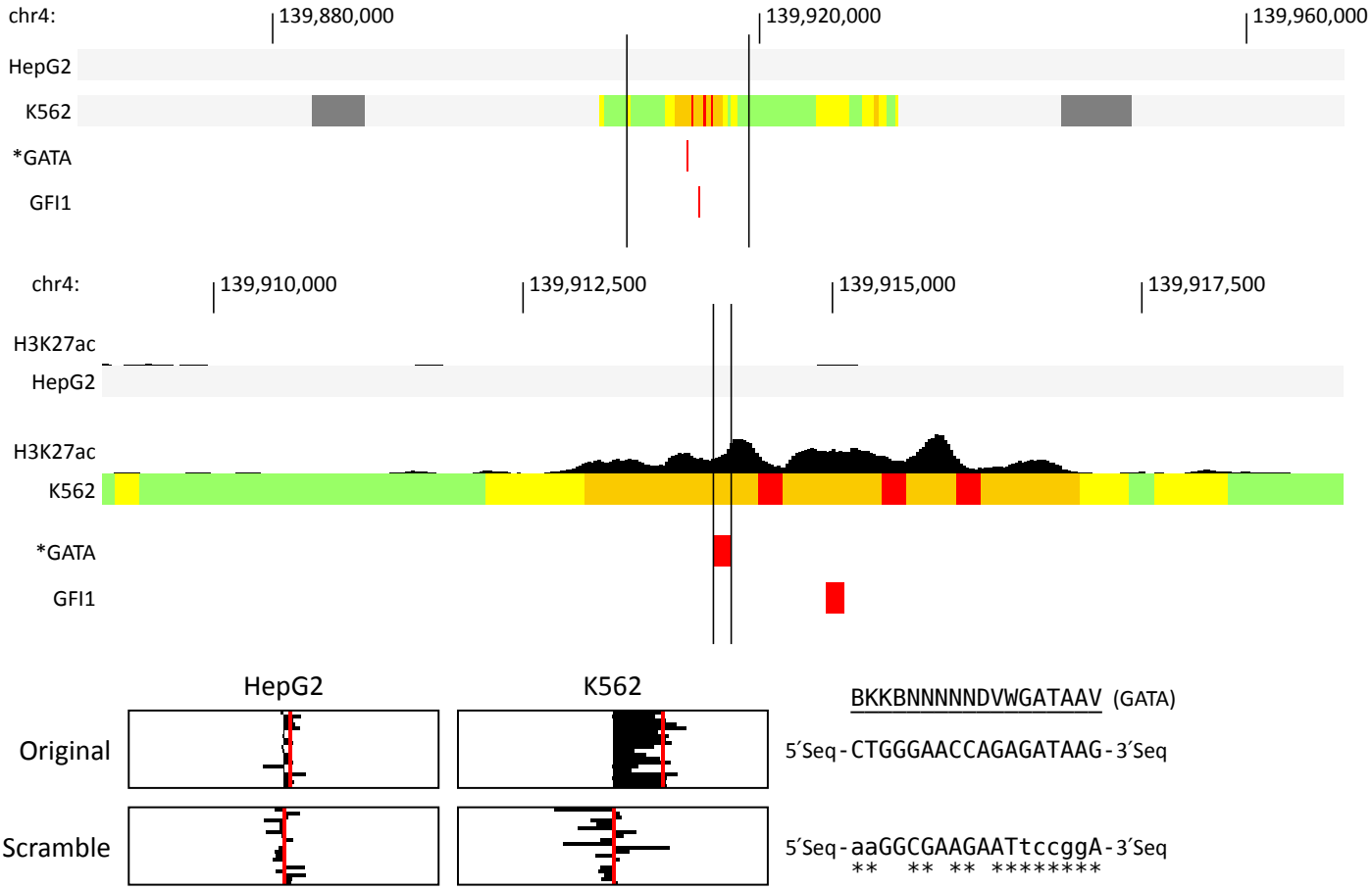
3′Seq = cacactactacctcctgcatgactcatcattgaagcaacaataggcagagagaaaggaaaggag

163 GATA in K562 enhancer (conserved at 60% confidence)

chr4 139914102 139914119 + (hg18)



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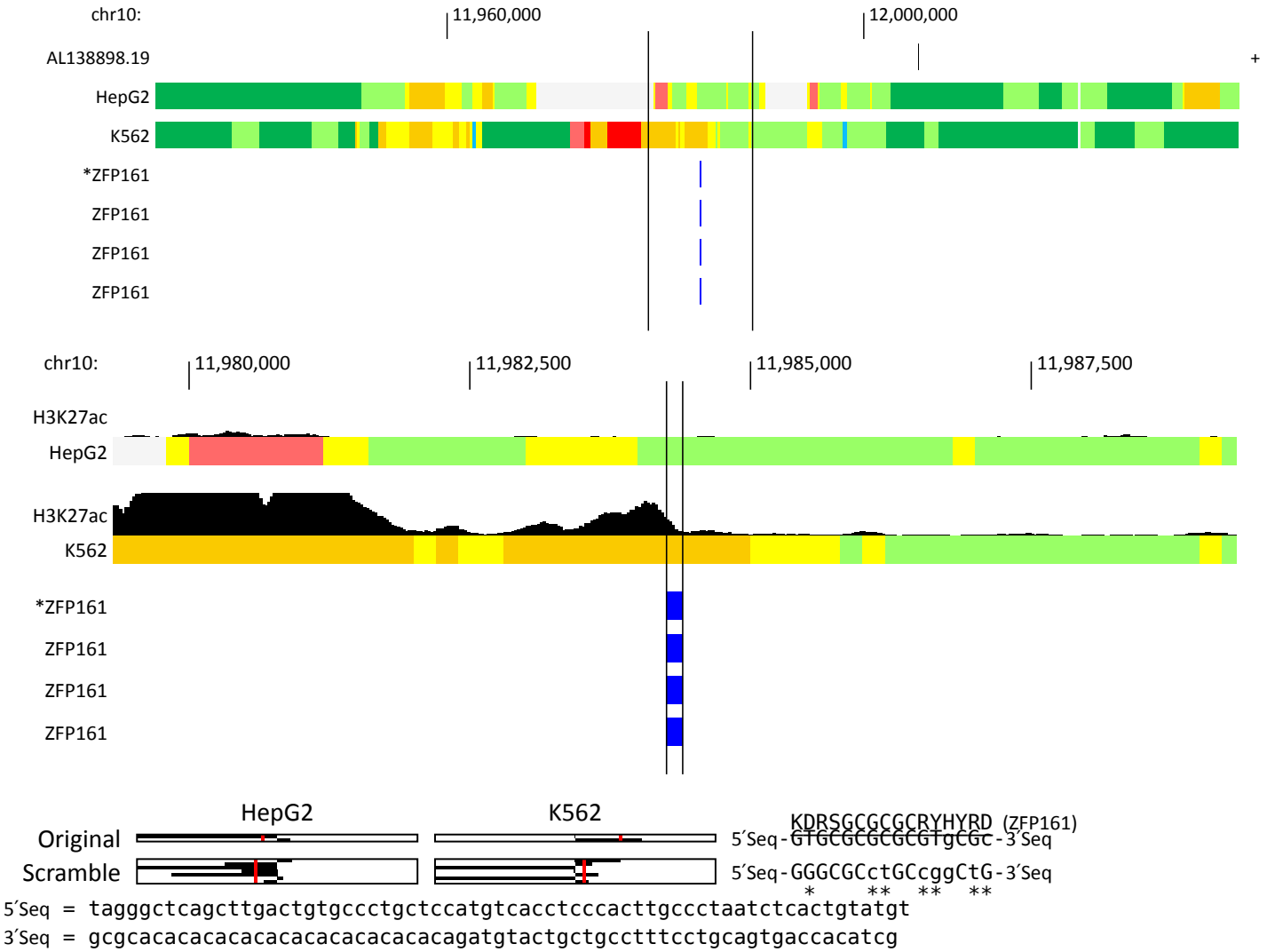
164 ZFP161 in K562 enhancer

chr10 11984317 11984332 + (hg18)



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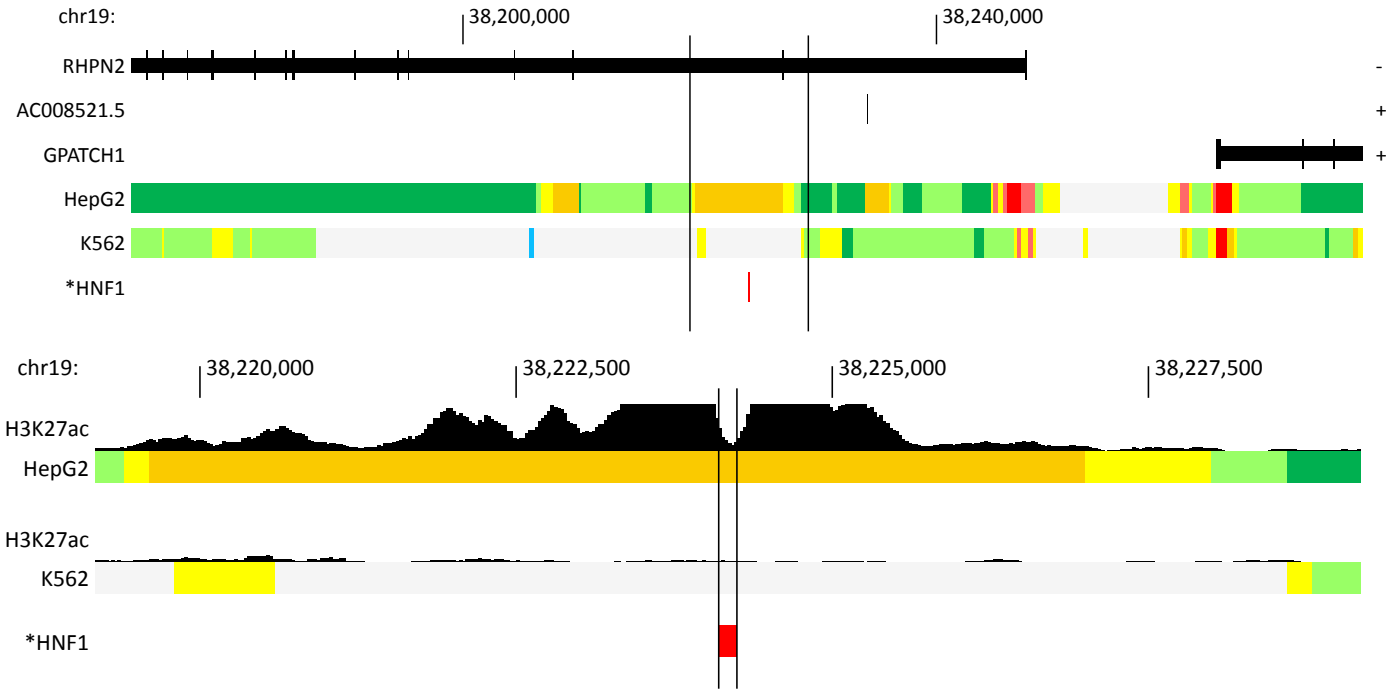
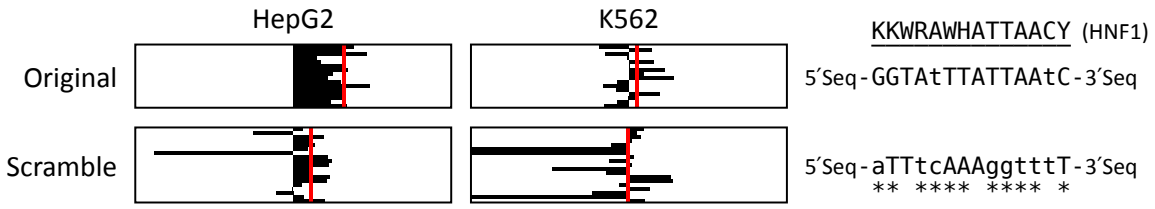
165 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr19 38224168 38224181 - (hg18)





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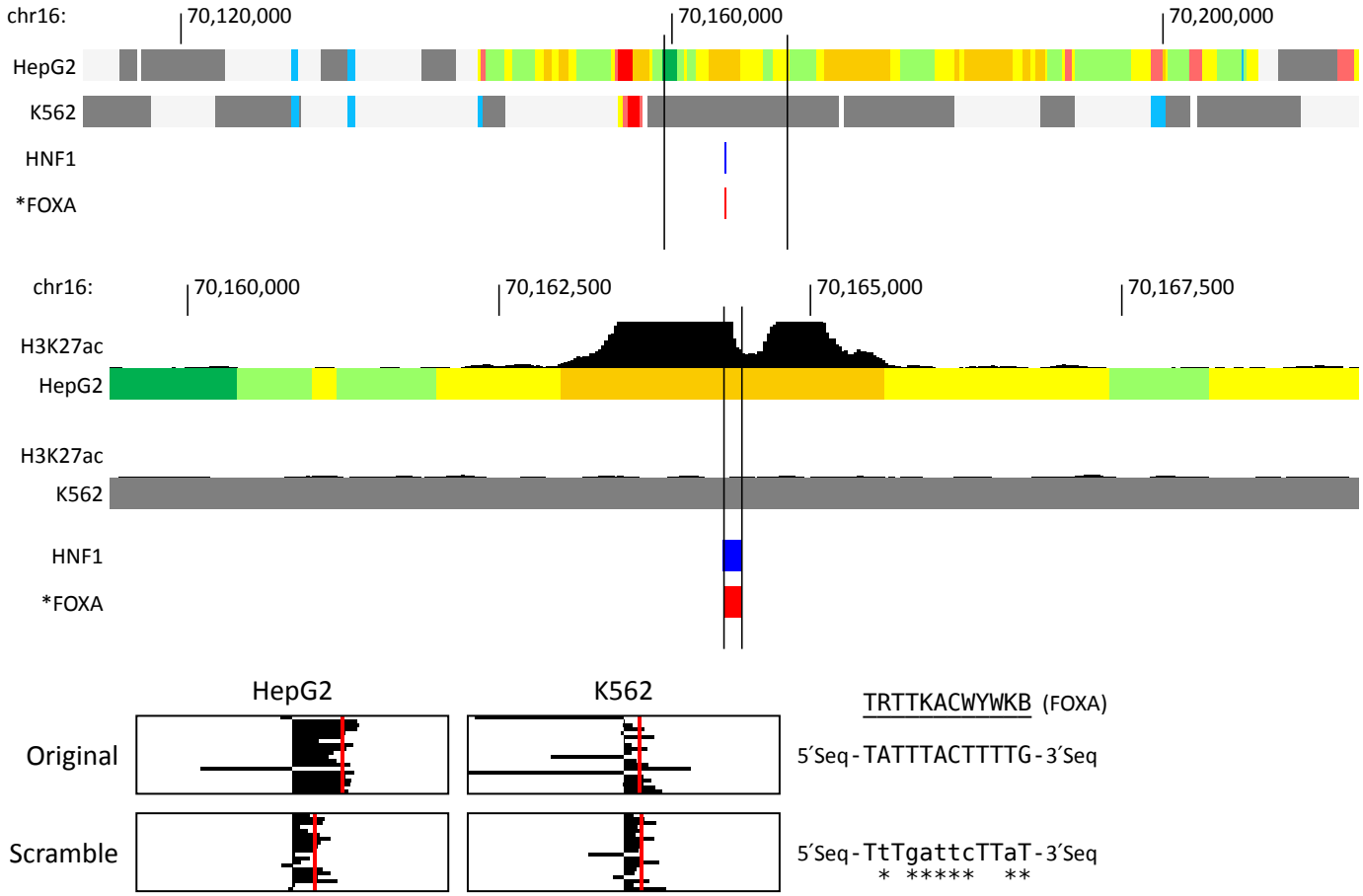
3′Seq = tgactcaacaagcaccaacggtttcccgaaaacaaatagggcattttgccaagctccgctctggc

166 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr16 70164373 70164384 + (hg18)



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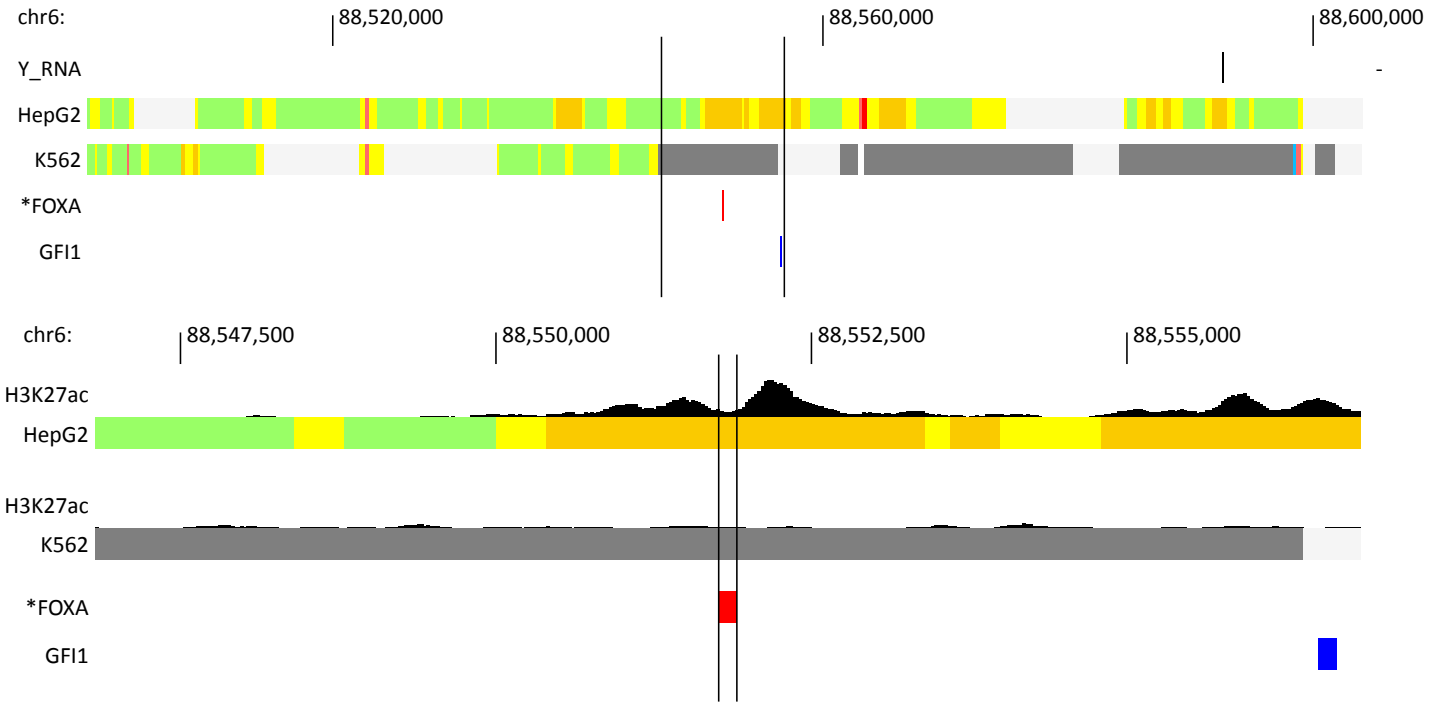
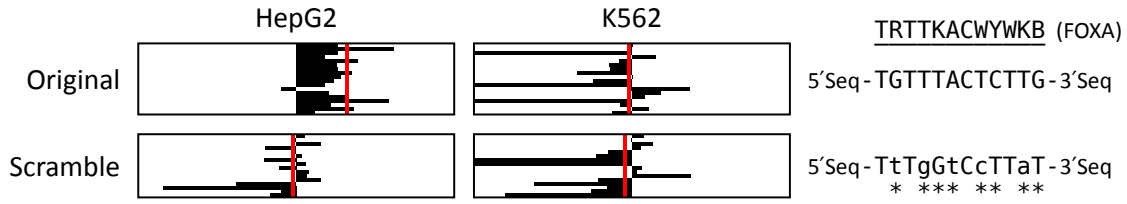
167 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr6 88551832 88551843 - (hg18)





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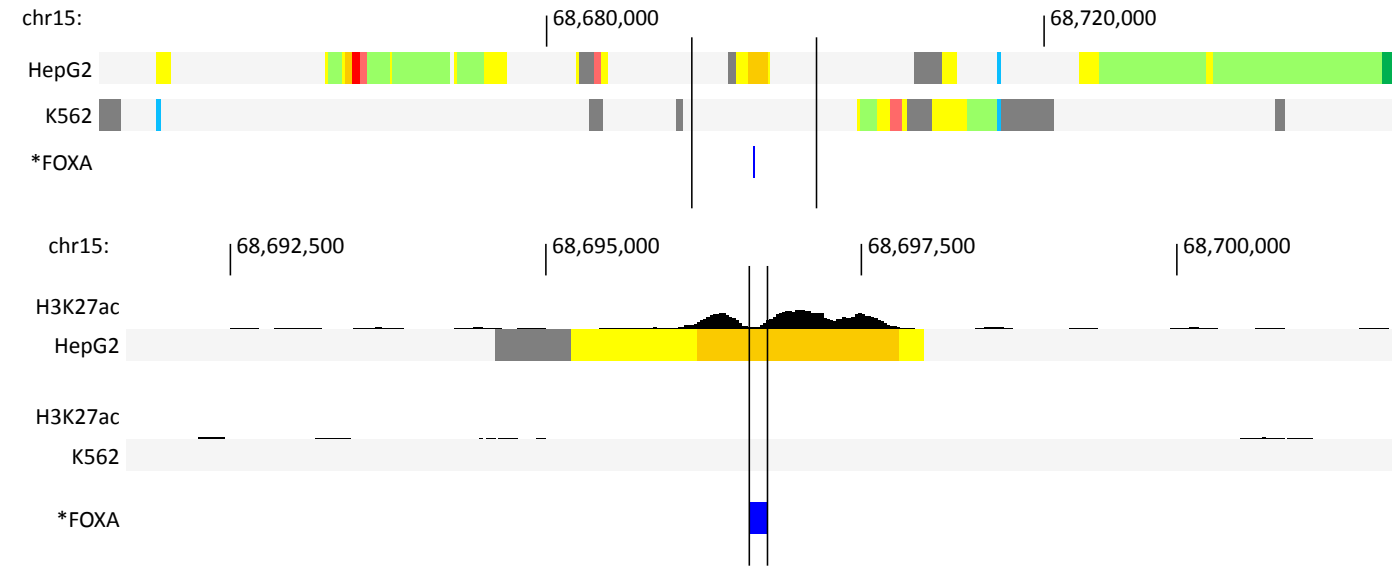
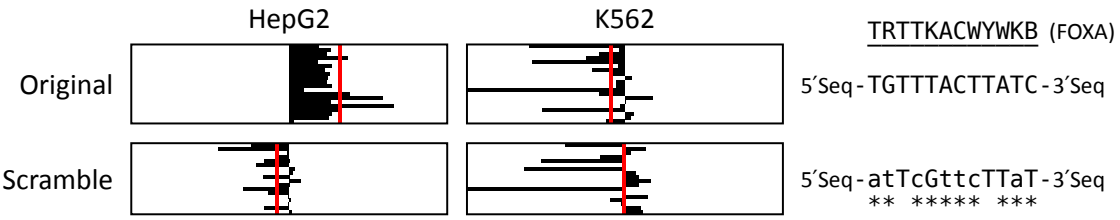
3′Seq = gagaatgccttatagatcaaaggttgtatctaacccttagacactccaaatcaaacactacagaa

168 FOXA in HepG2 enhancer

chr15 68696679 68696690 - (hg18)





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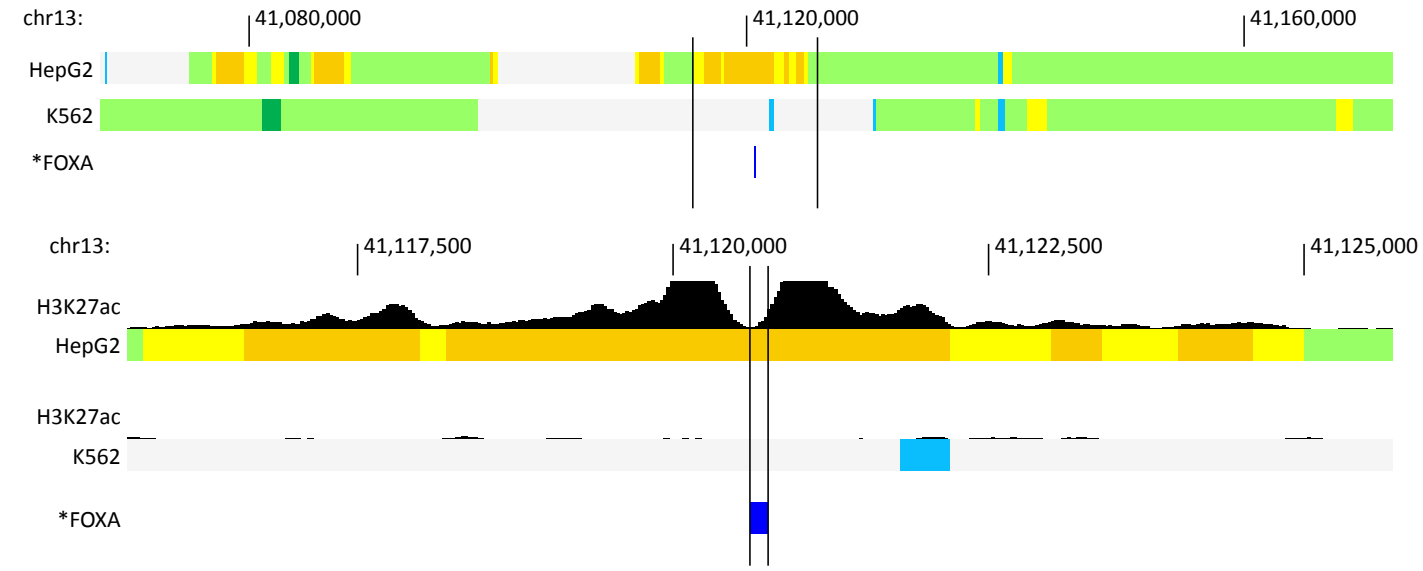
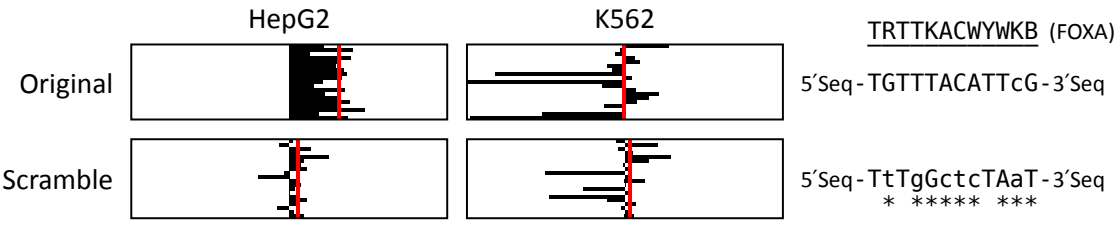
169 FOXA in HepG2 enhancer

chr13 41120676 41120687 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACATTcG-3′Seq

5′Seq-TtTgGctcTAaT-3′Seq

* ***** ***

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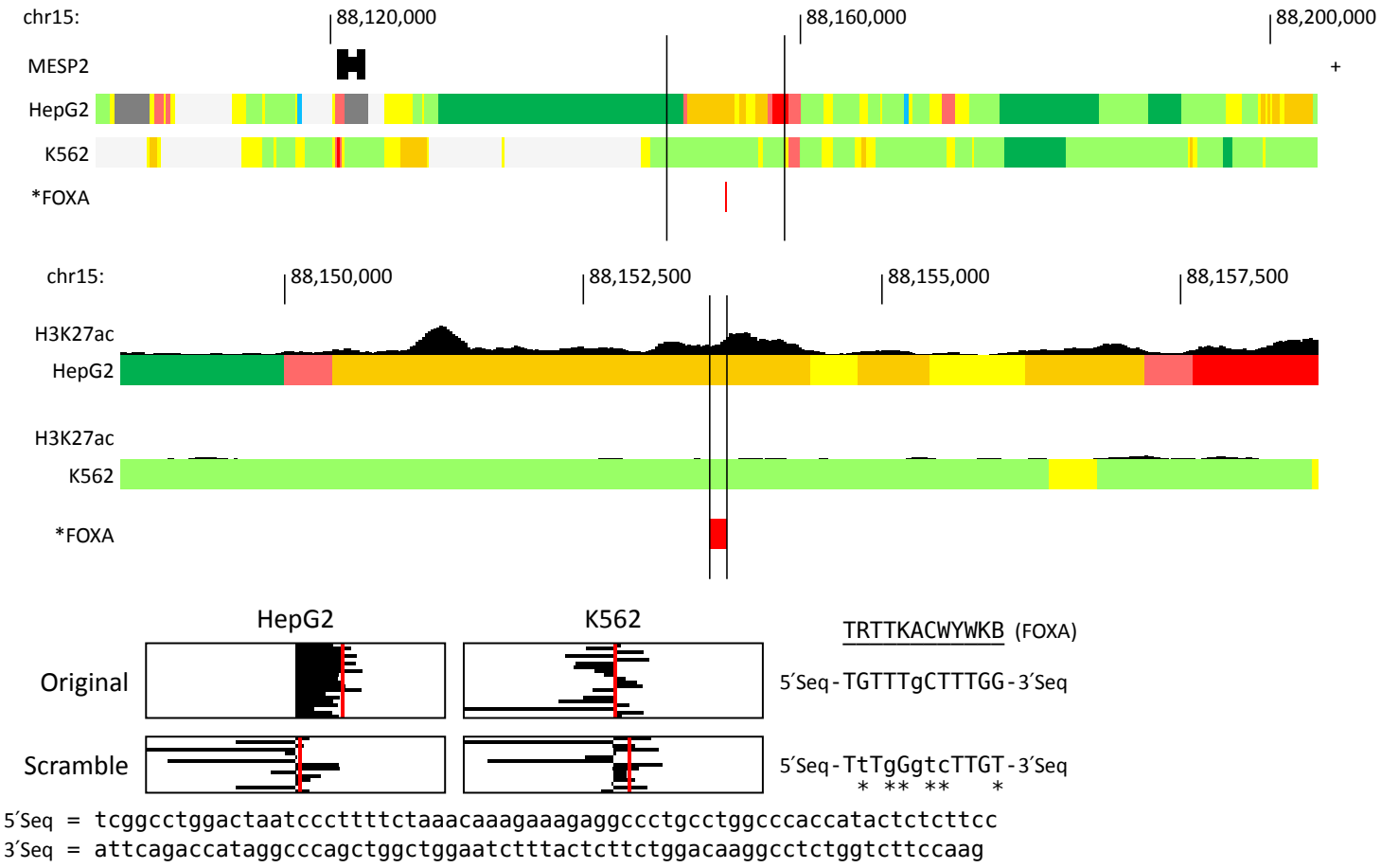
170 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr15 88153625 88153636 + (hg18)



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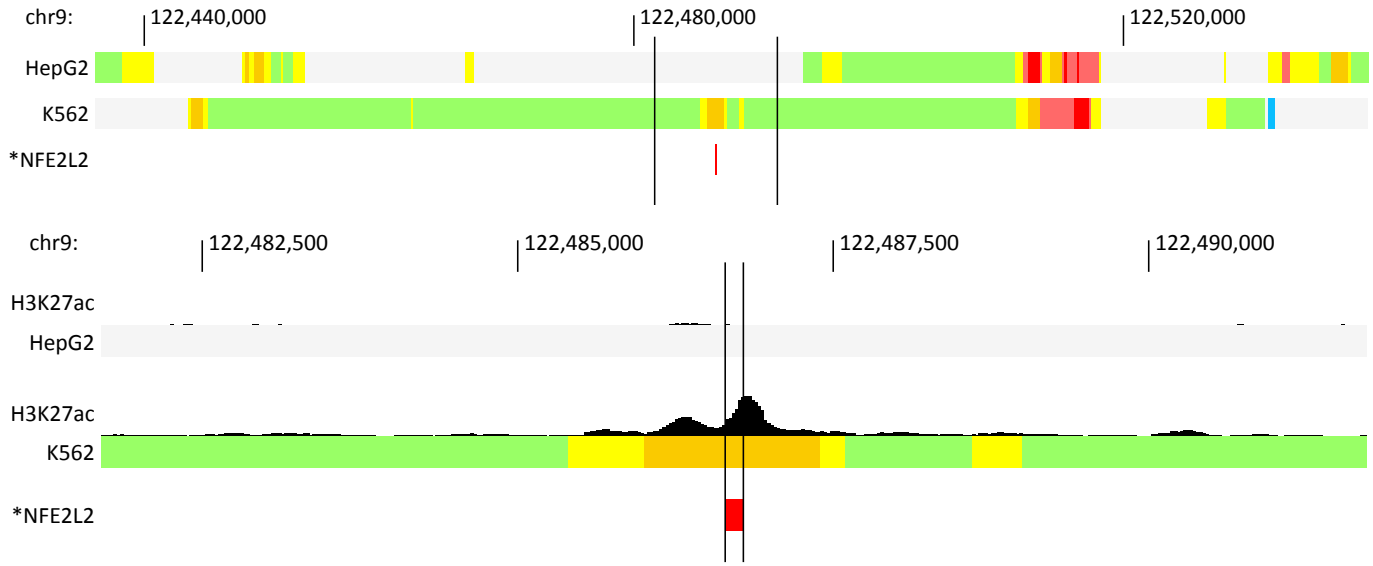
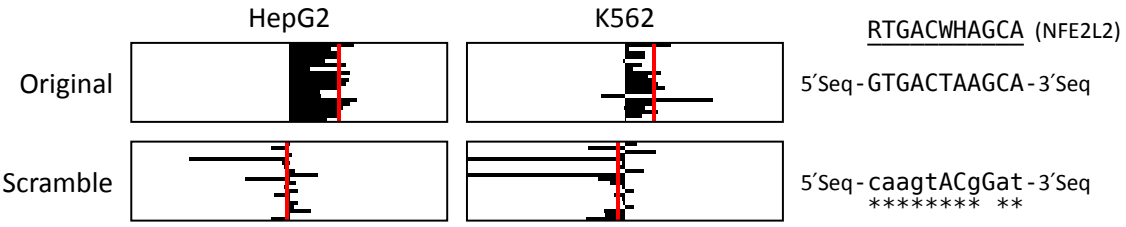
171 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr9 122486711 122486721 + (hg18)





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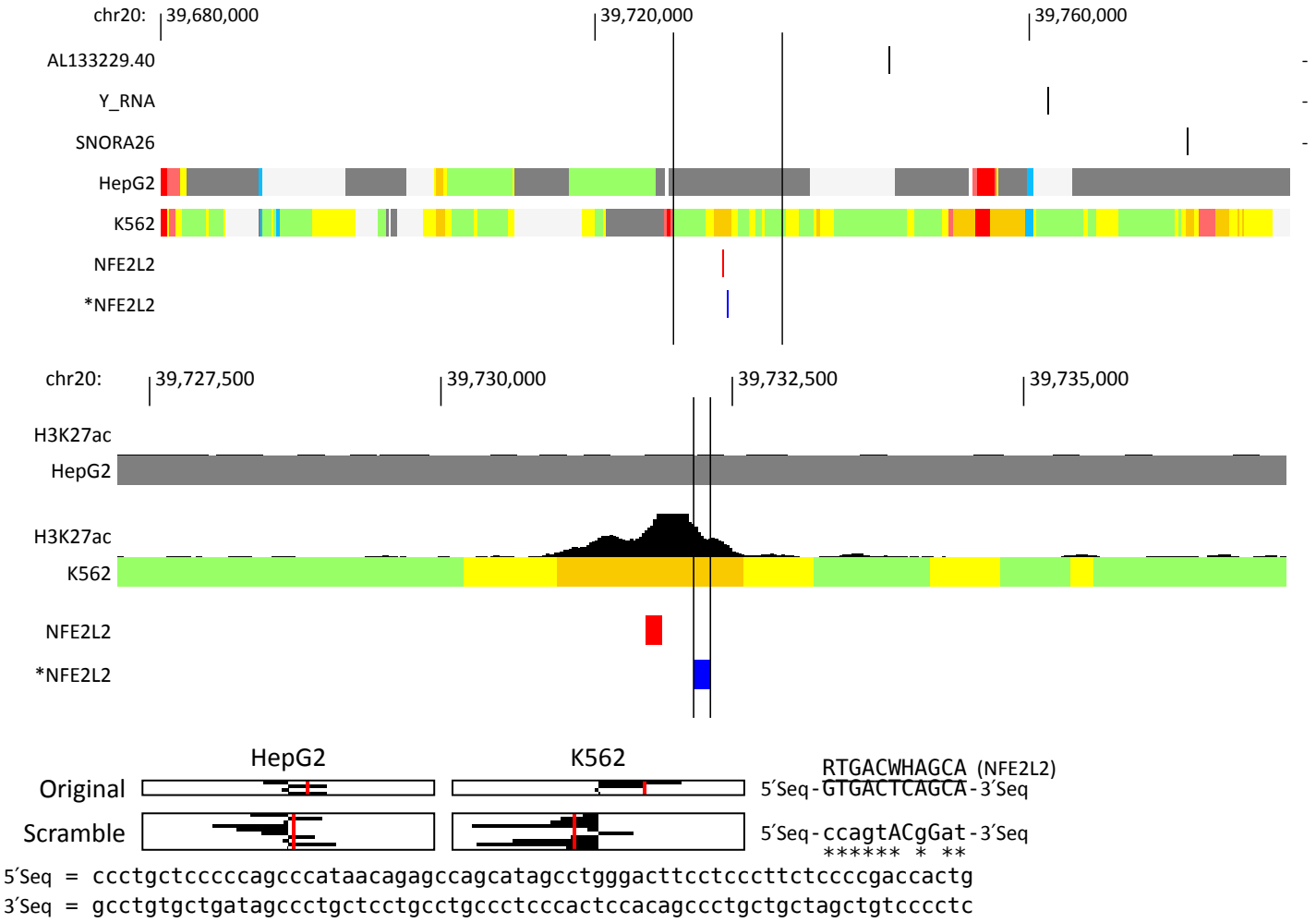
172 NFE2L2 in K562 enhancer

chr20 39732235 39732245 - (hg18)



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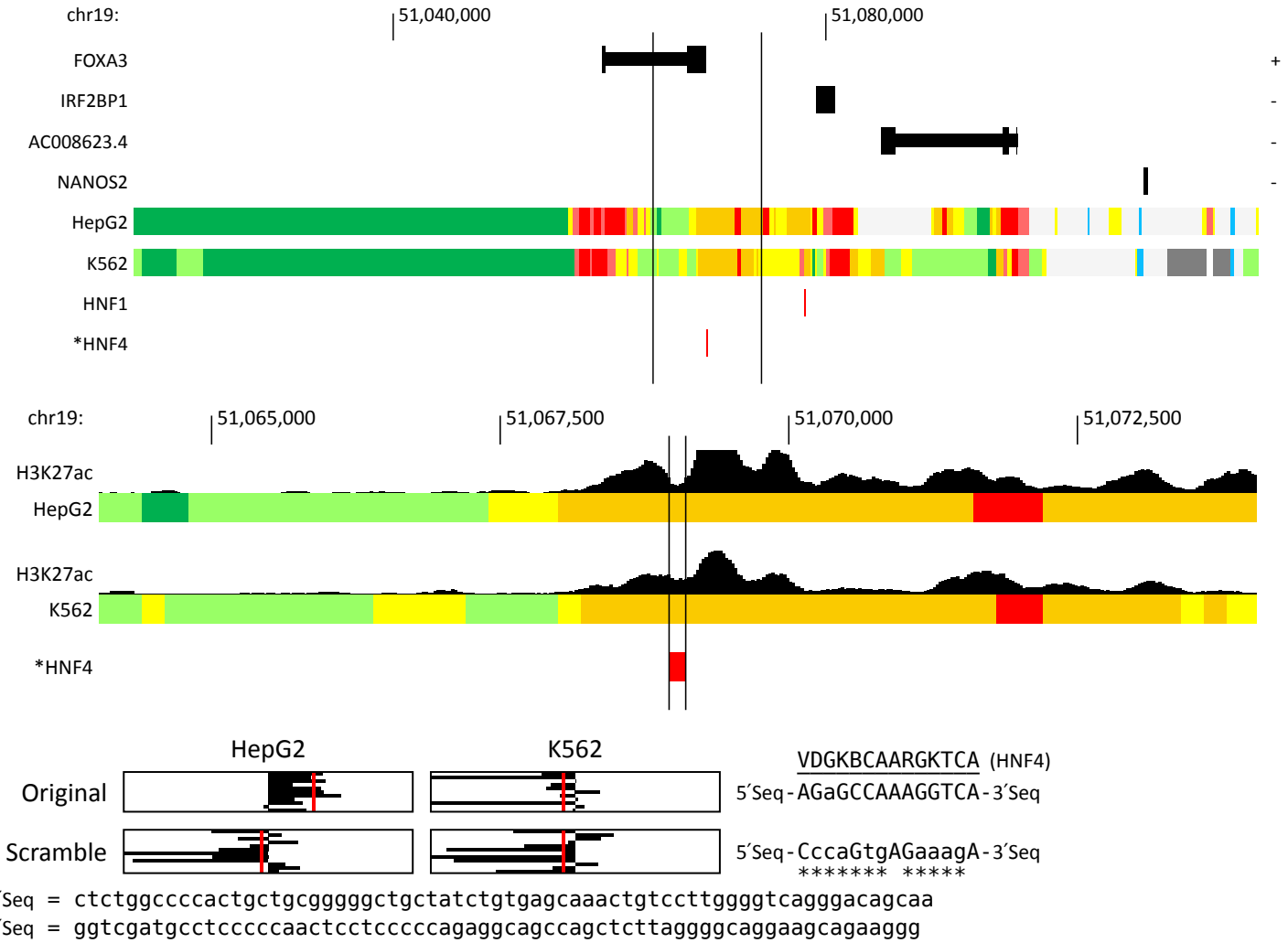
173 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr19 51069029 51069042 - (hg18)



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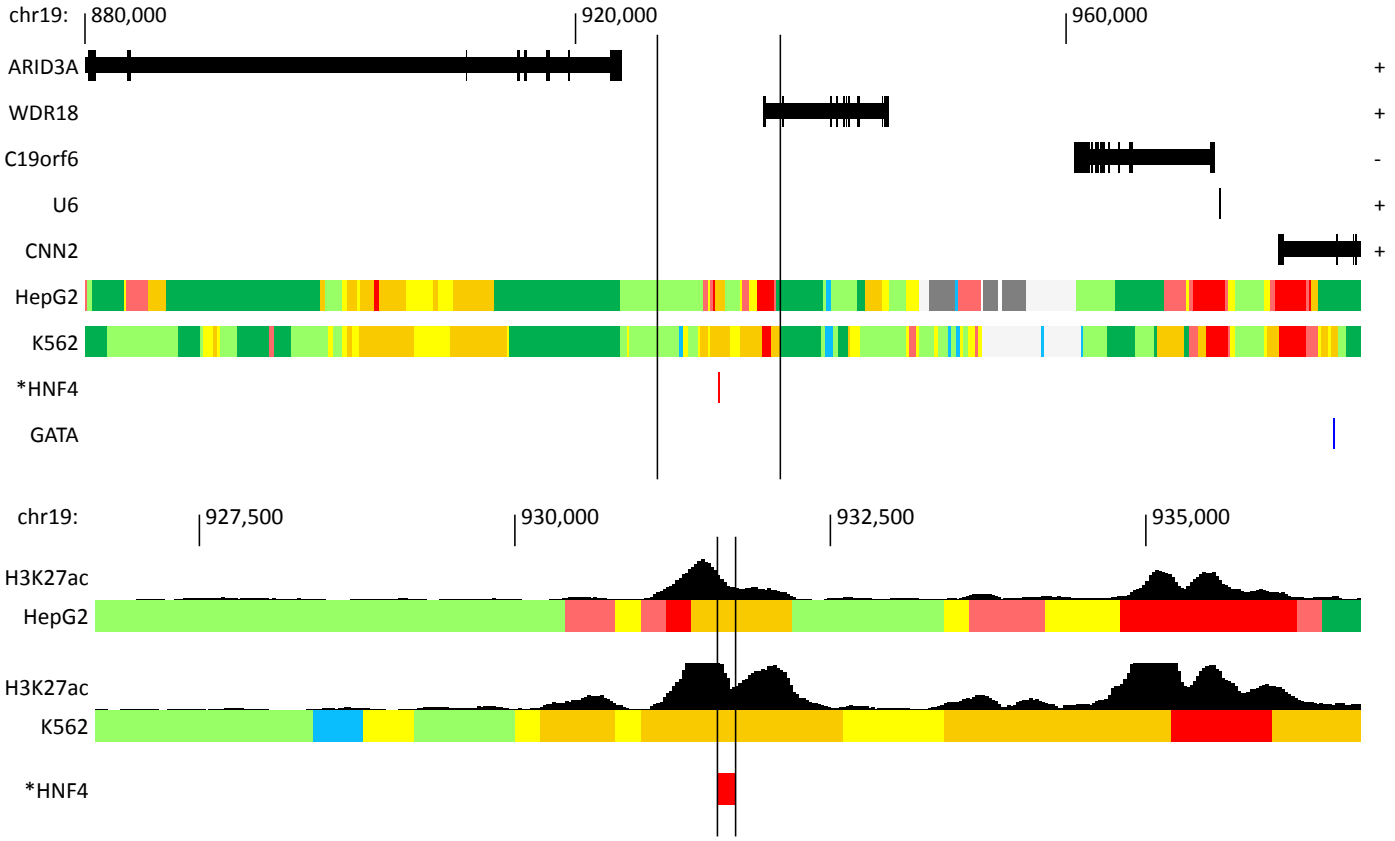
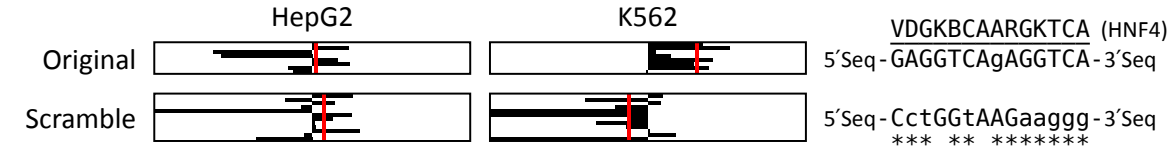
174 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr19 931671 931684 - (hg18)





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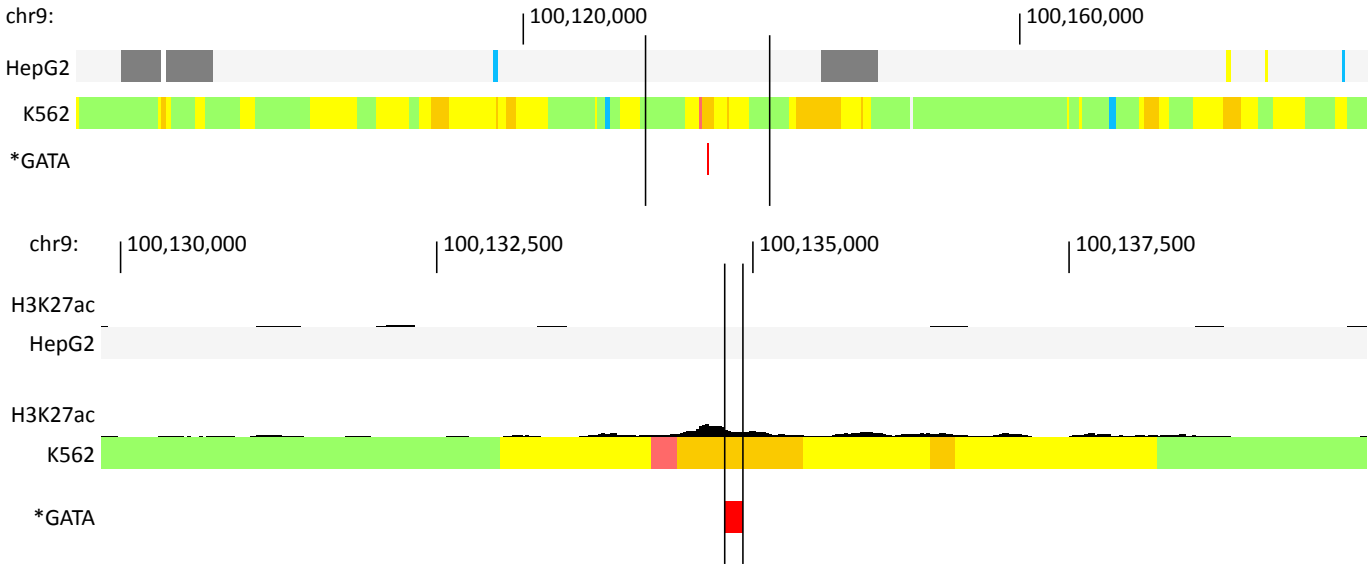
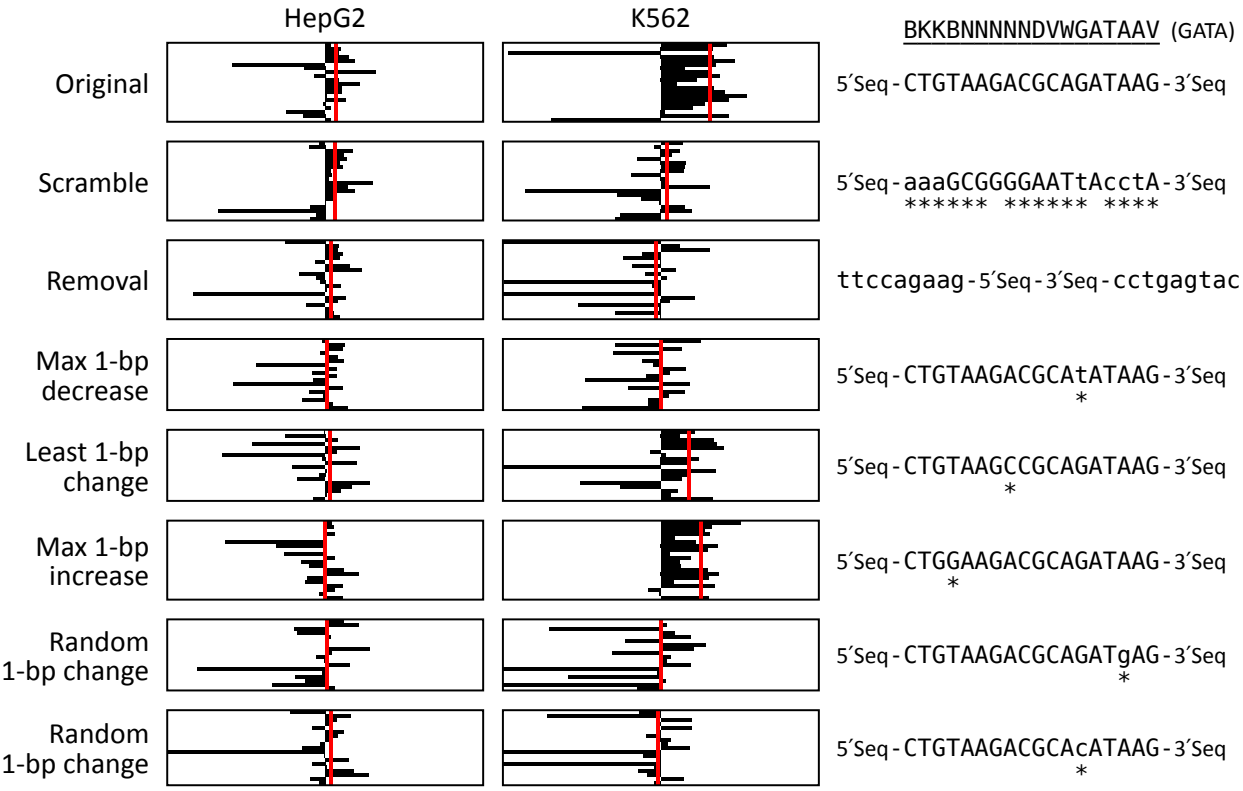
175 GATA in K562 enhancer (conserved at 70% confidence)

chr9 100134841 100134858 + (hg18)





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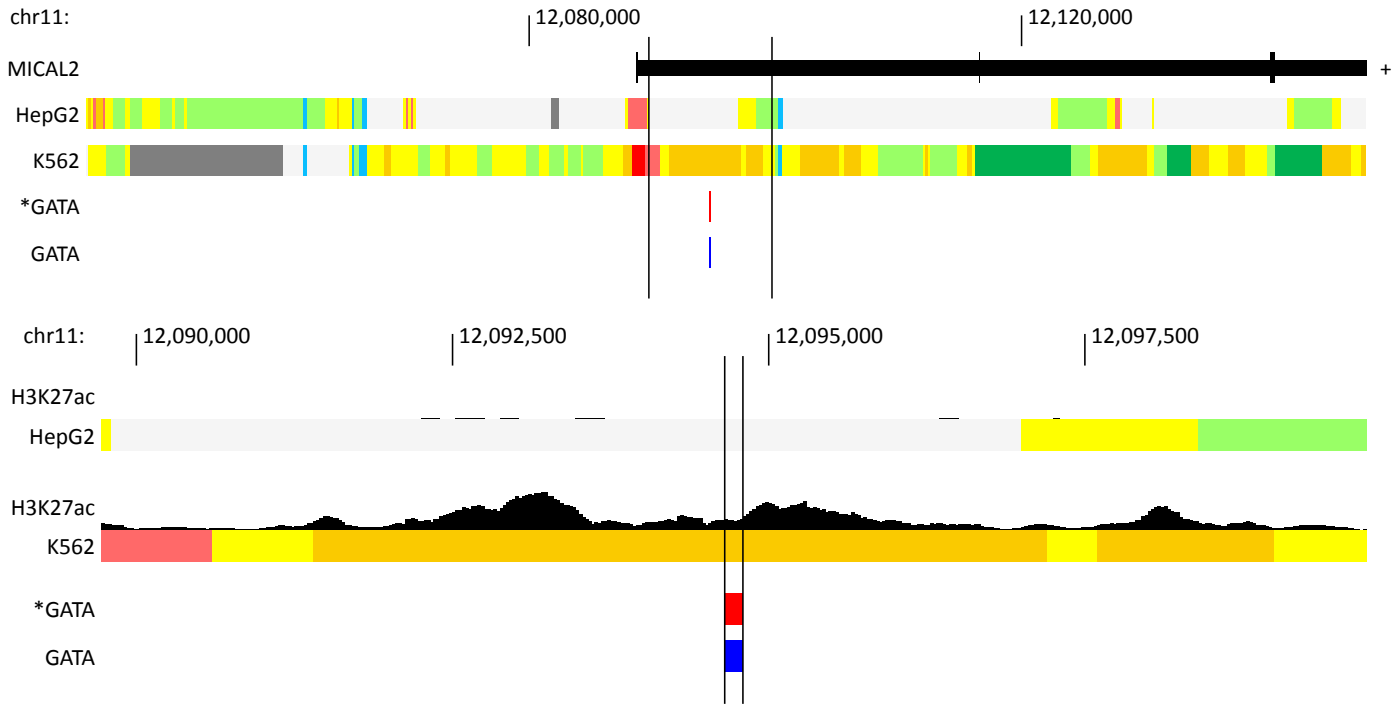
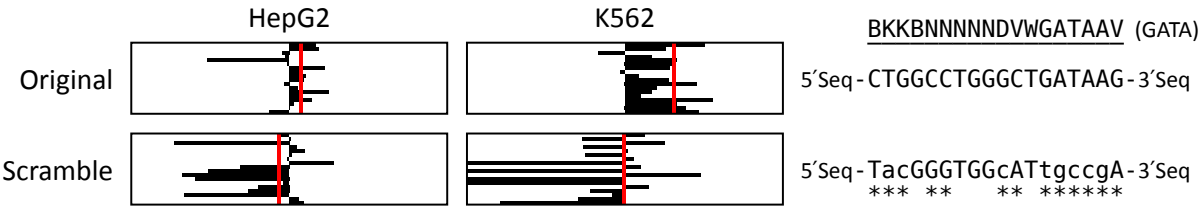
176 GATA in K562 enhancer (conserved at 60% confidence)

chr11 12094716 12094733 + (hg18)





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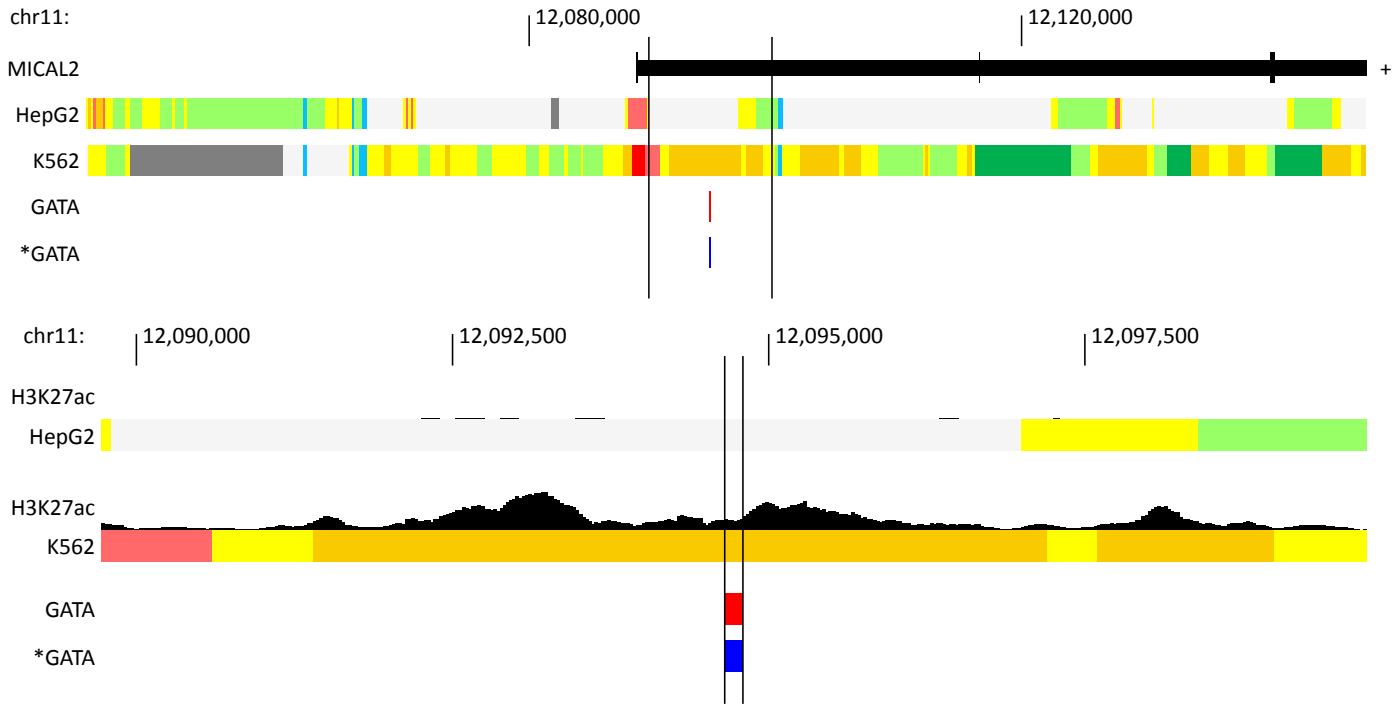
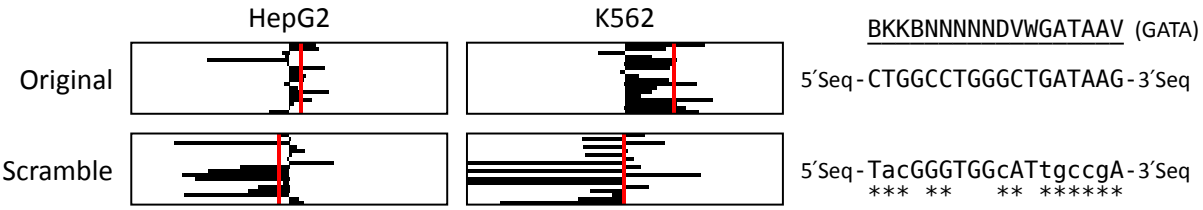
177 GATA in K562 enhancer

chr11 12094716 12094733 + (hg18)





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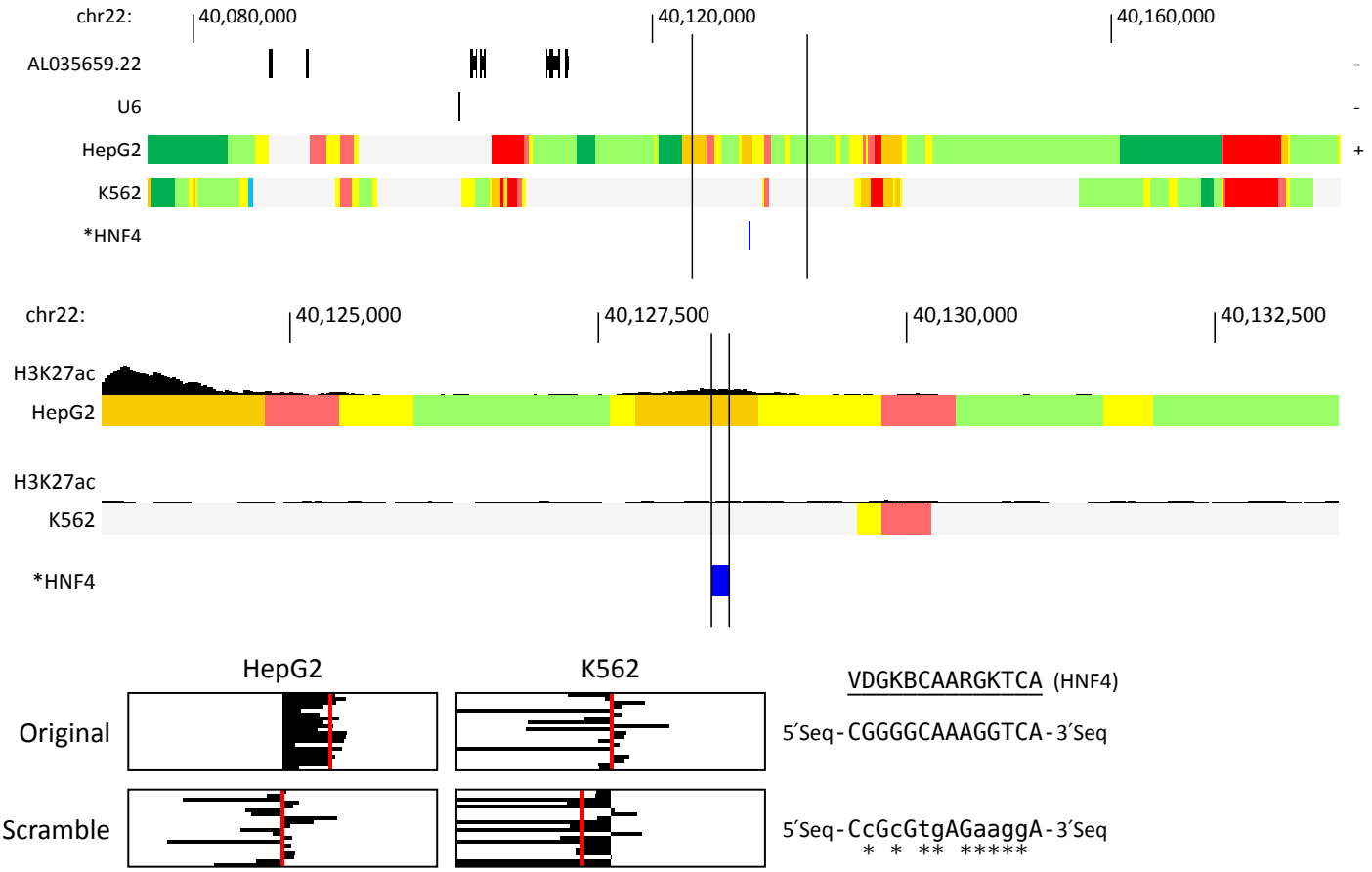
178 HNF4 in HepG2 enhancer

chr22 40128484 40128497 + (hg18)



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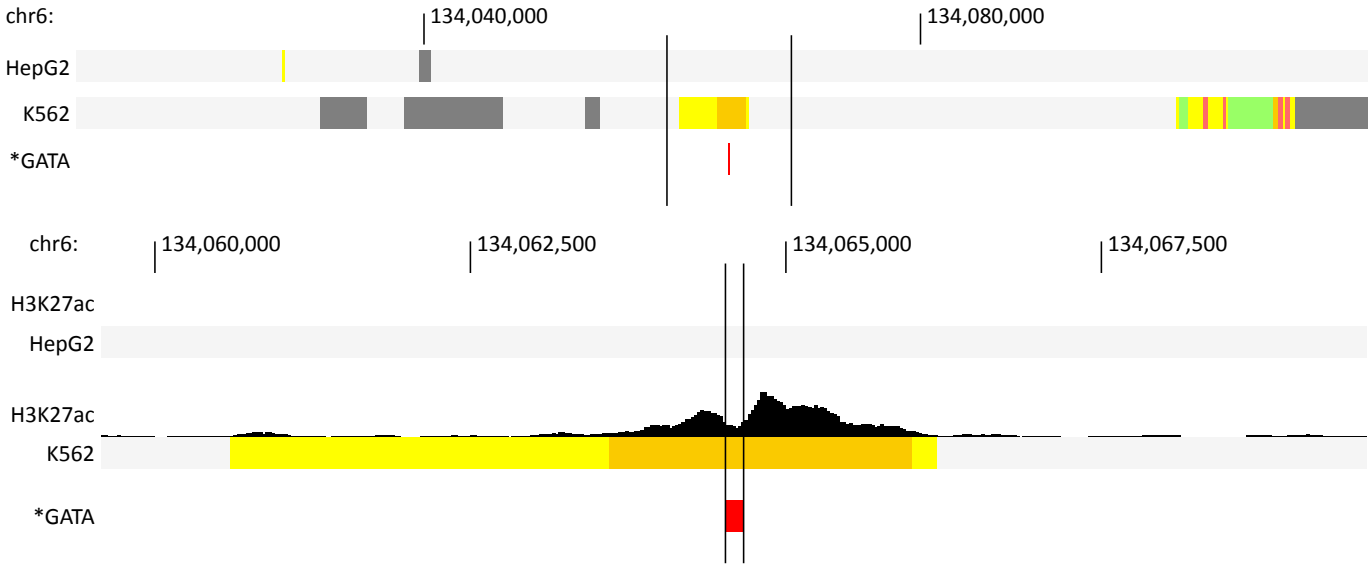
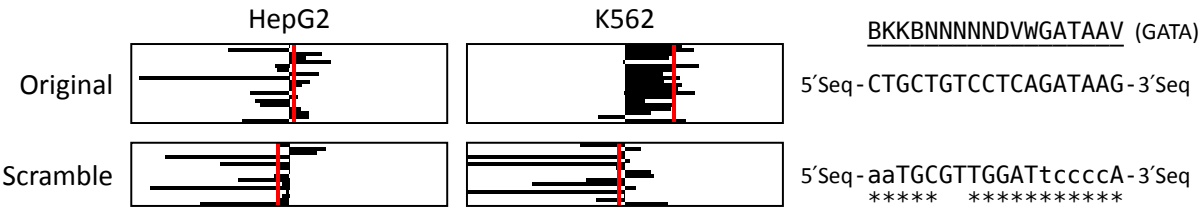
179 GATA in K562 enhancer (conserved at 70% confidence)

chr6 134064585 134064602 + (hg18)





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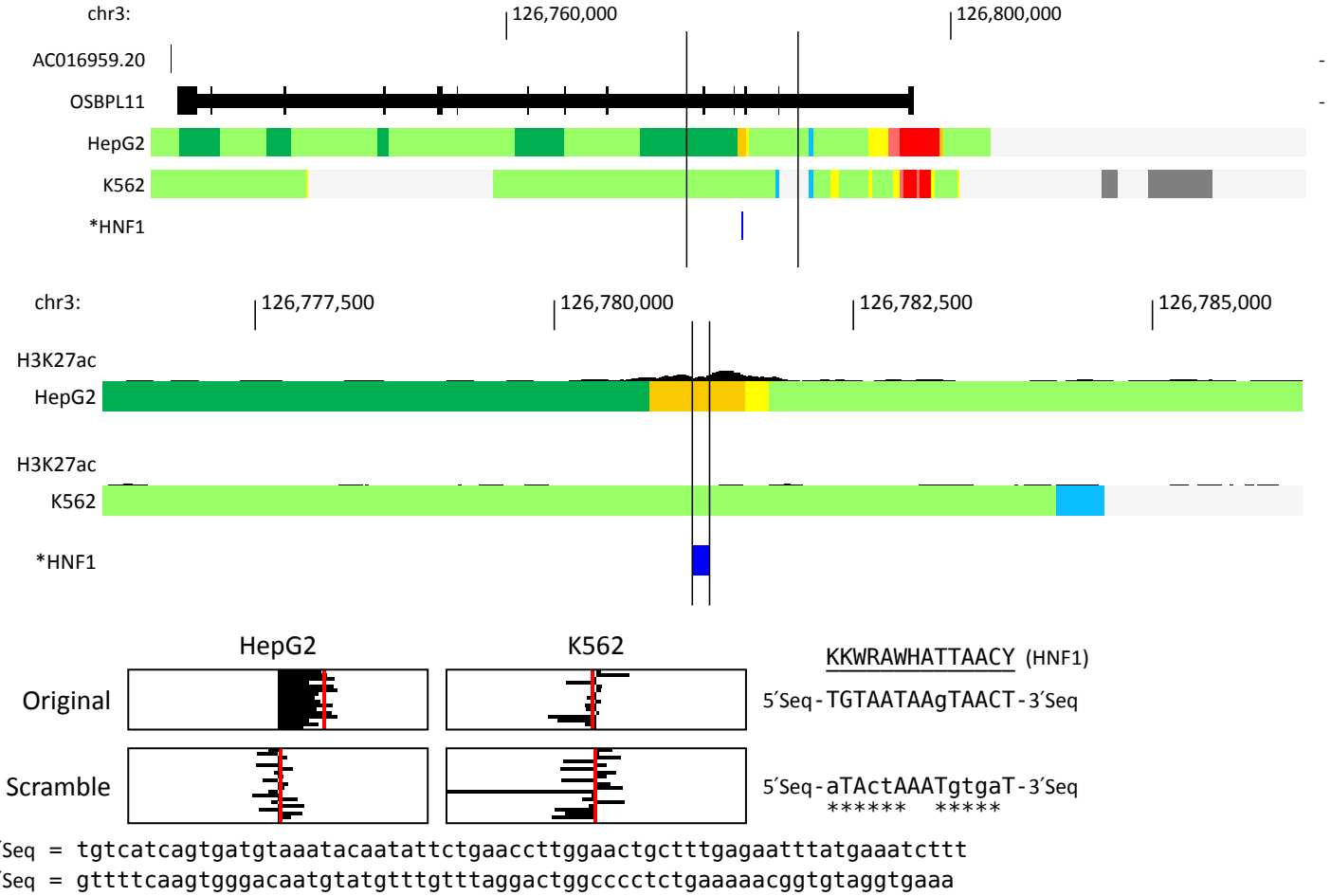
3′Seq = aacctgctgctgtctgaccacaacagctggaaatgttctgccttgaagagcttatcgtgtgga

180 HNF1 in HepG2 enhancer

chr3 126781220 126781233 - (hg18)



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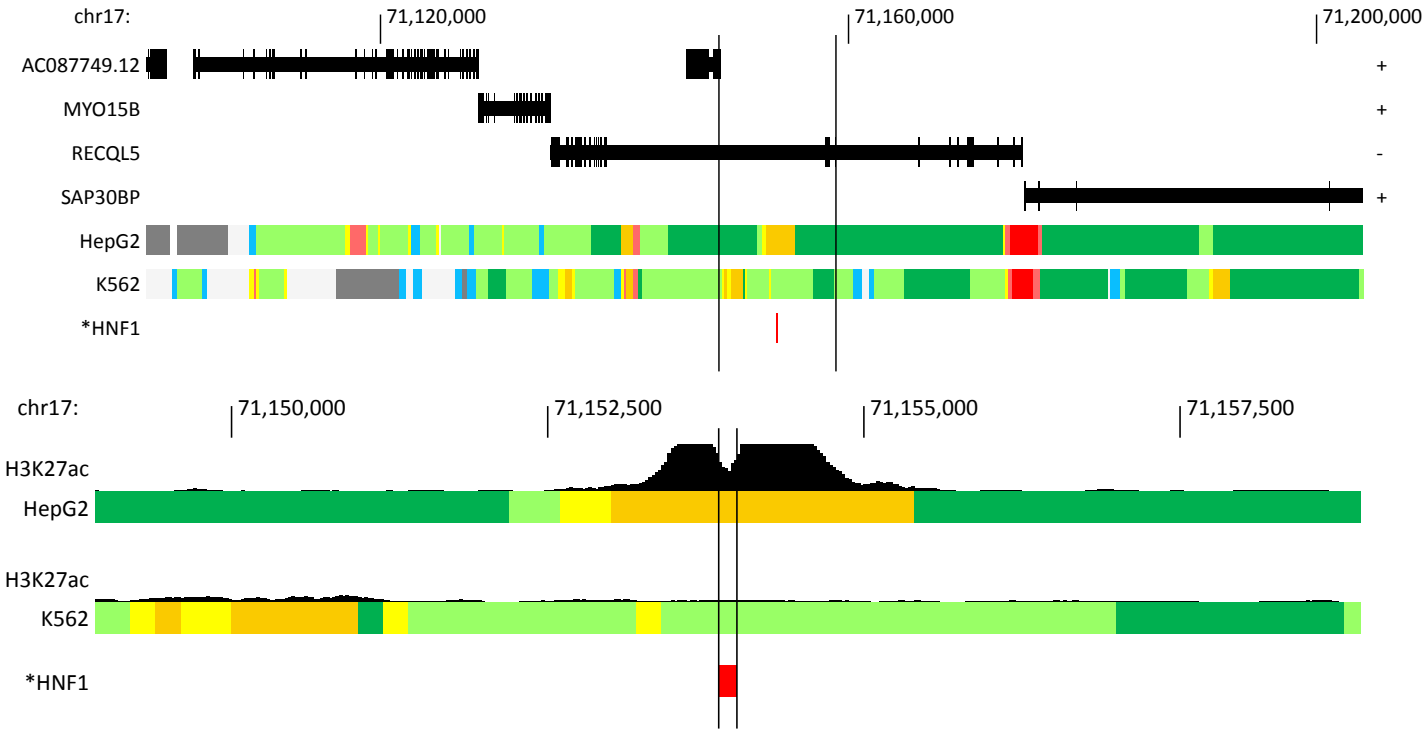
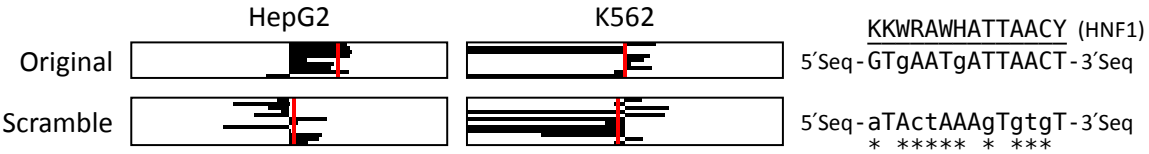
181 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr17 71153918 71153931 - (hg18)





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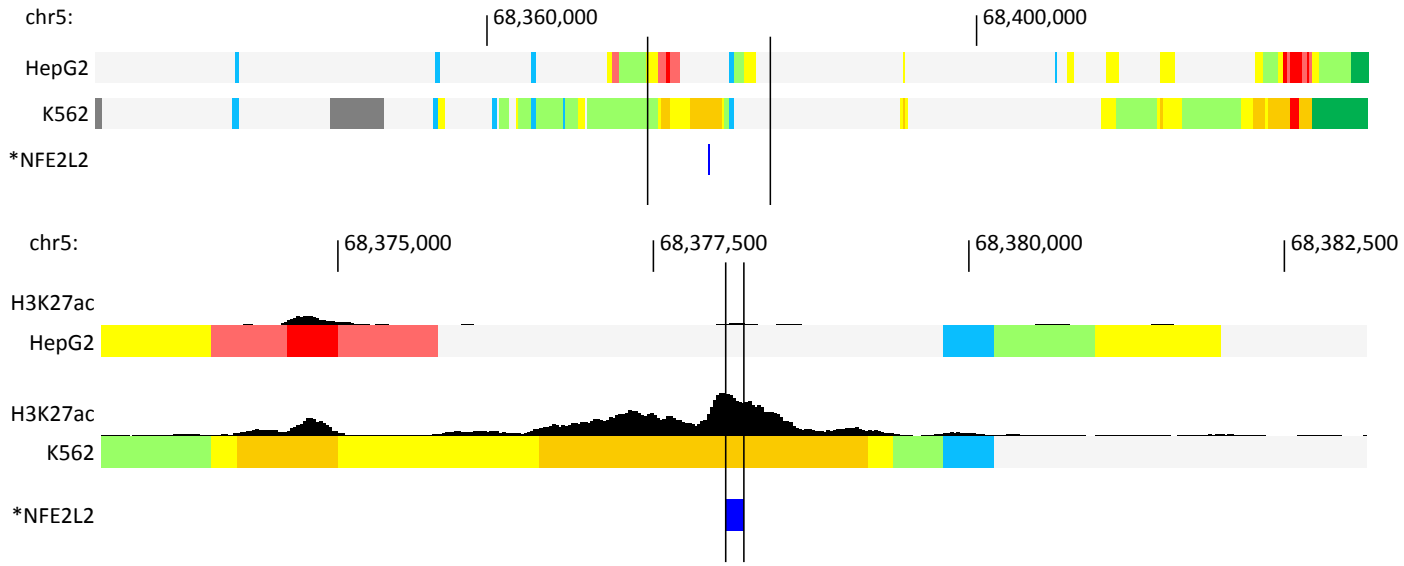
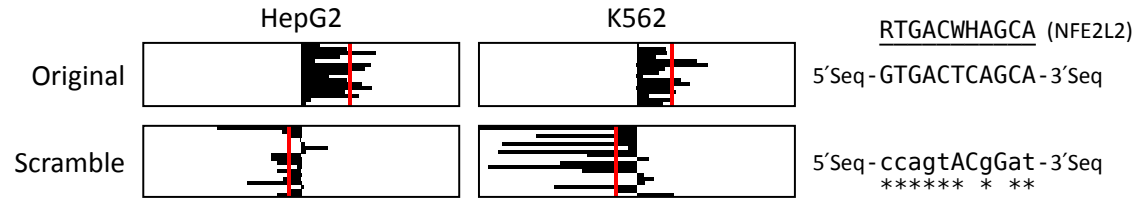
182 NFE2L2 in K562 enhancer

chr5 68378140 68378150 + (hg18)





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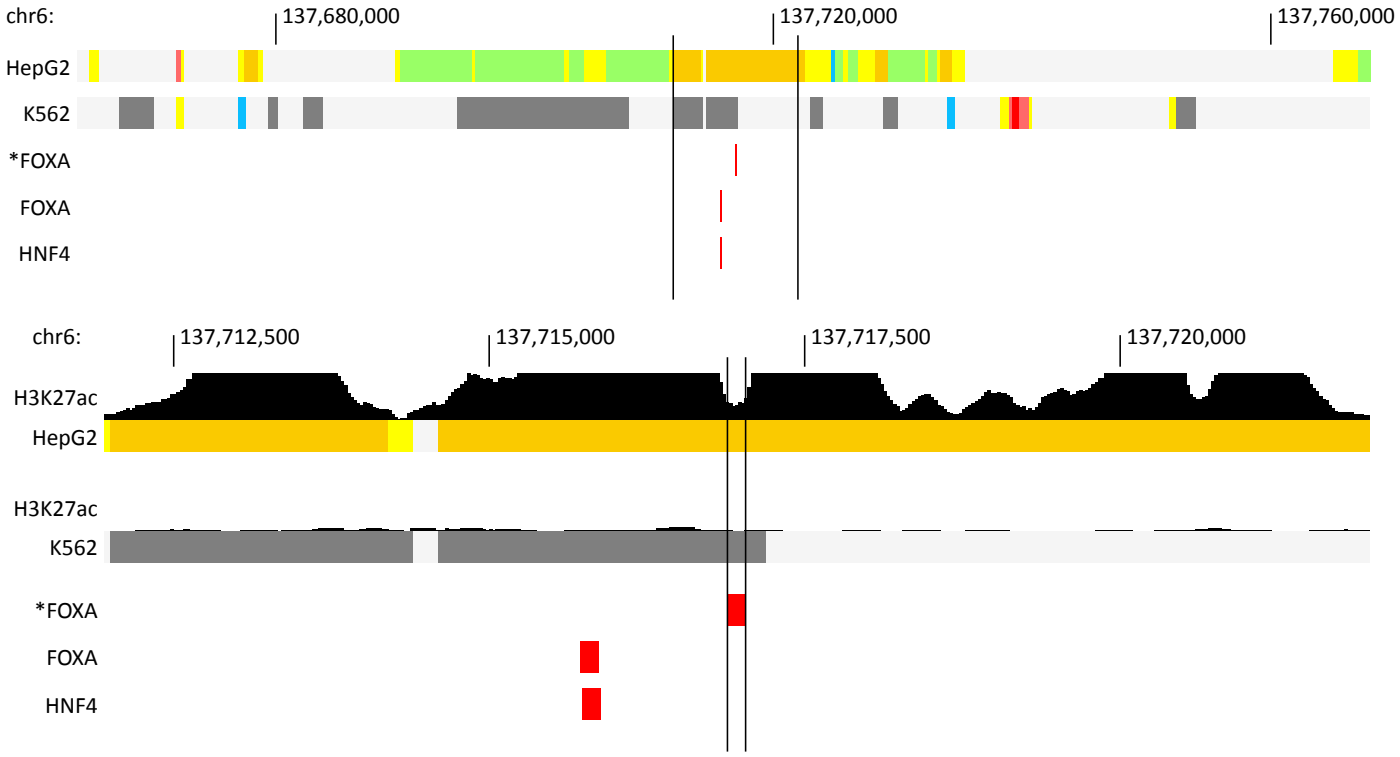
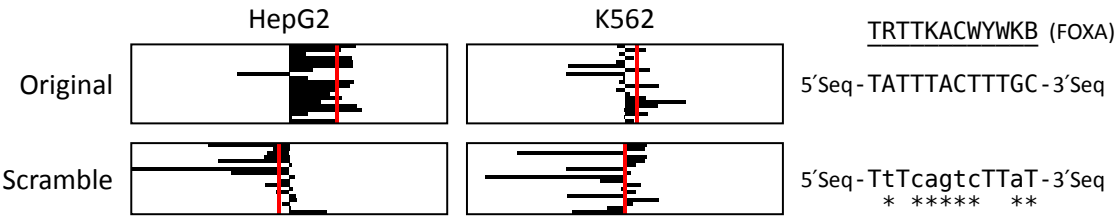
183 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr6 137716955 137716966 - (hg18)





TRTTKACWYWKB (FOXA)

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5′Seq-TtTcagtcTTaT-3′Seq

* ***** **

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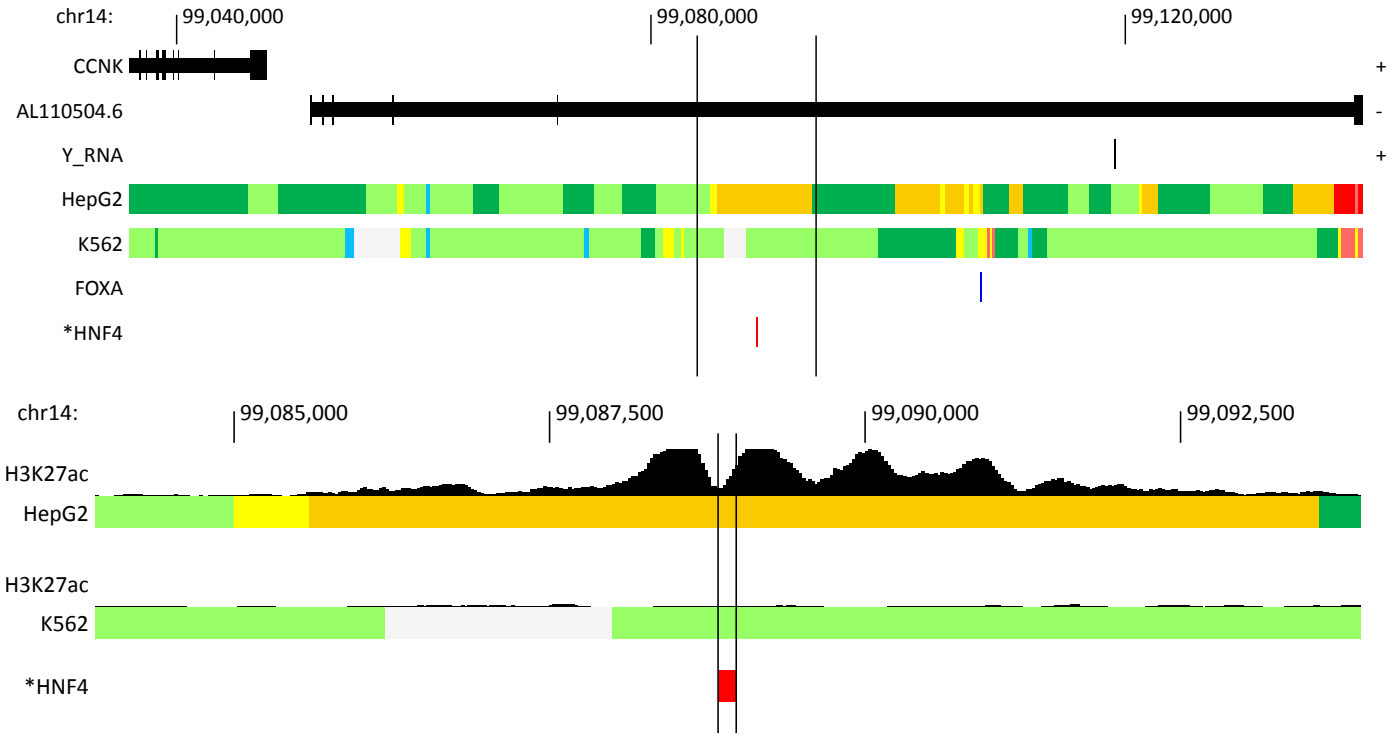
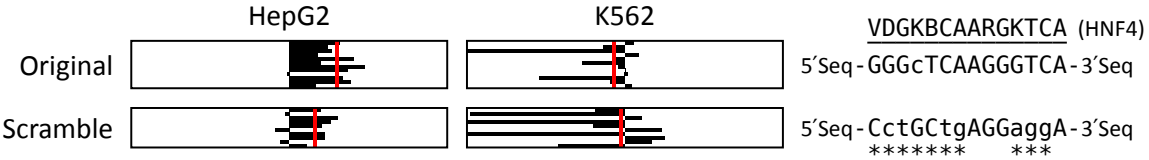
184 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 99088901 99088914 + (hg18)





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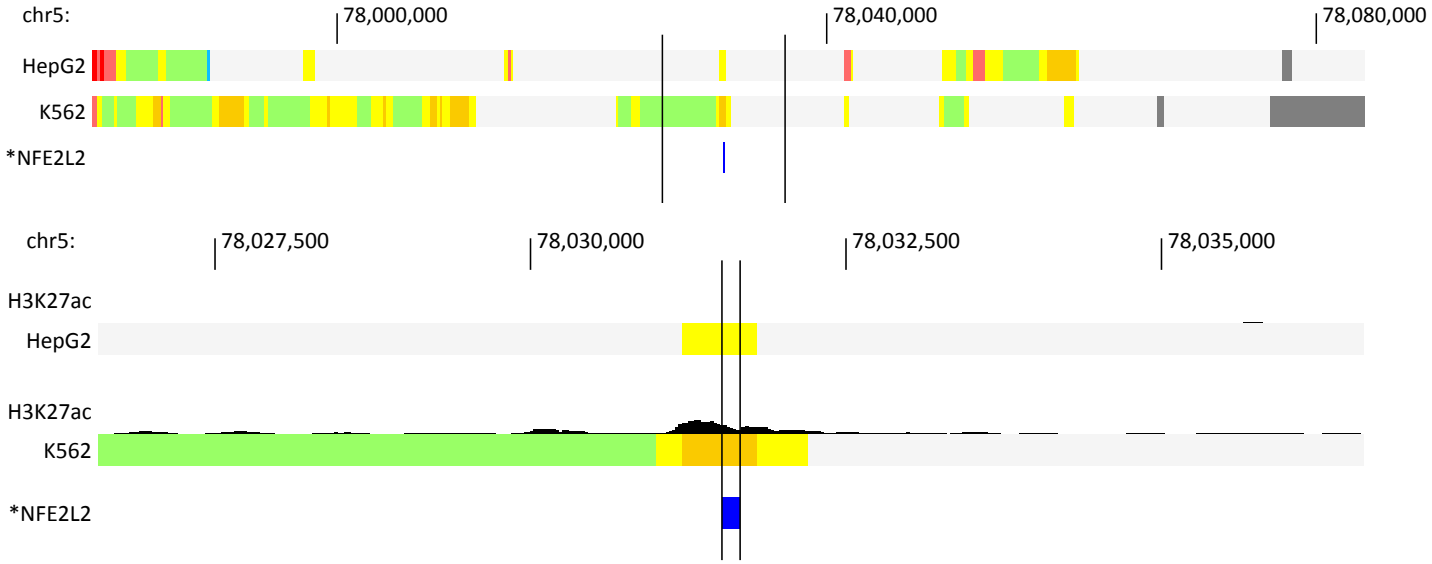
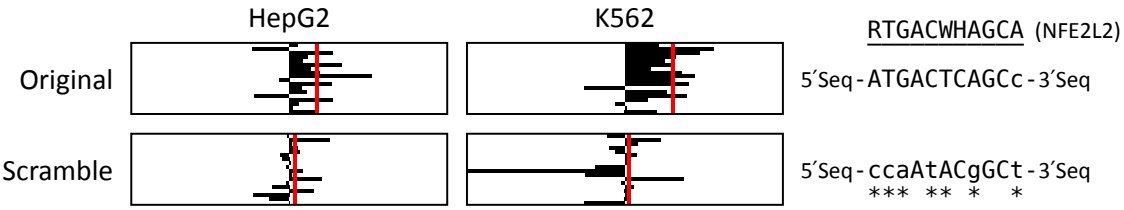
185 NFE2L2 in K562 enhancer

chr5 78031584 78031594 + (hg18)





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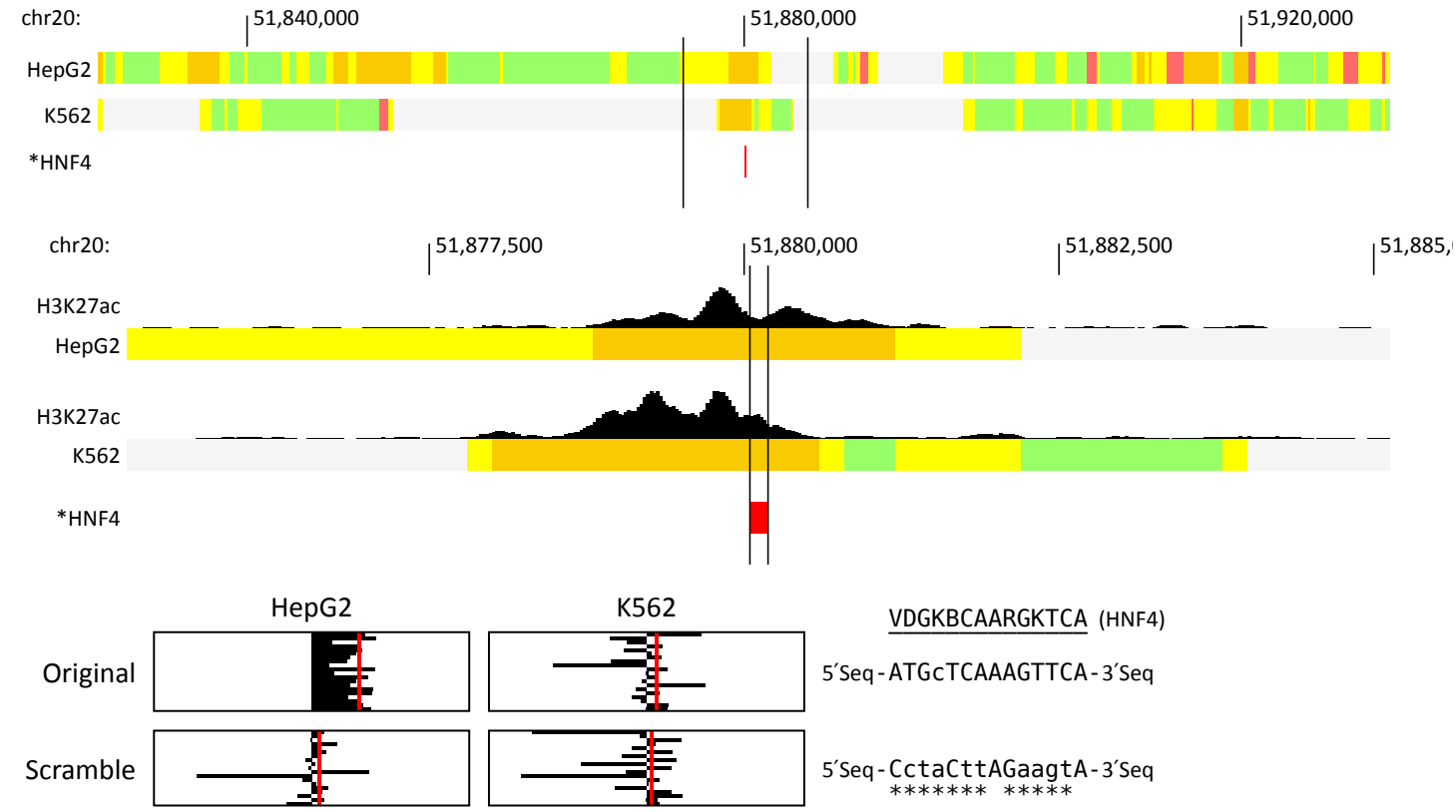
186 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr20 51880112 51880125 + (hg18)



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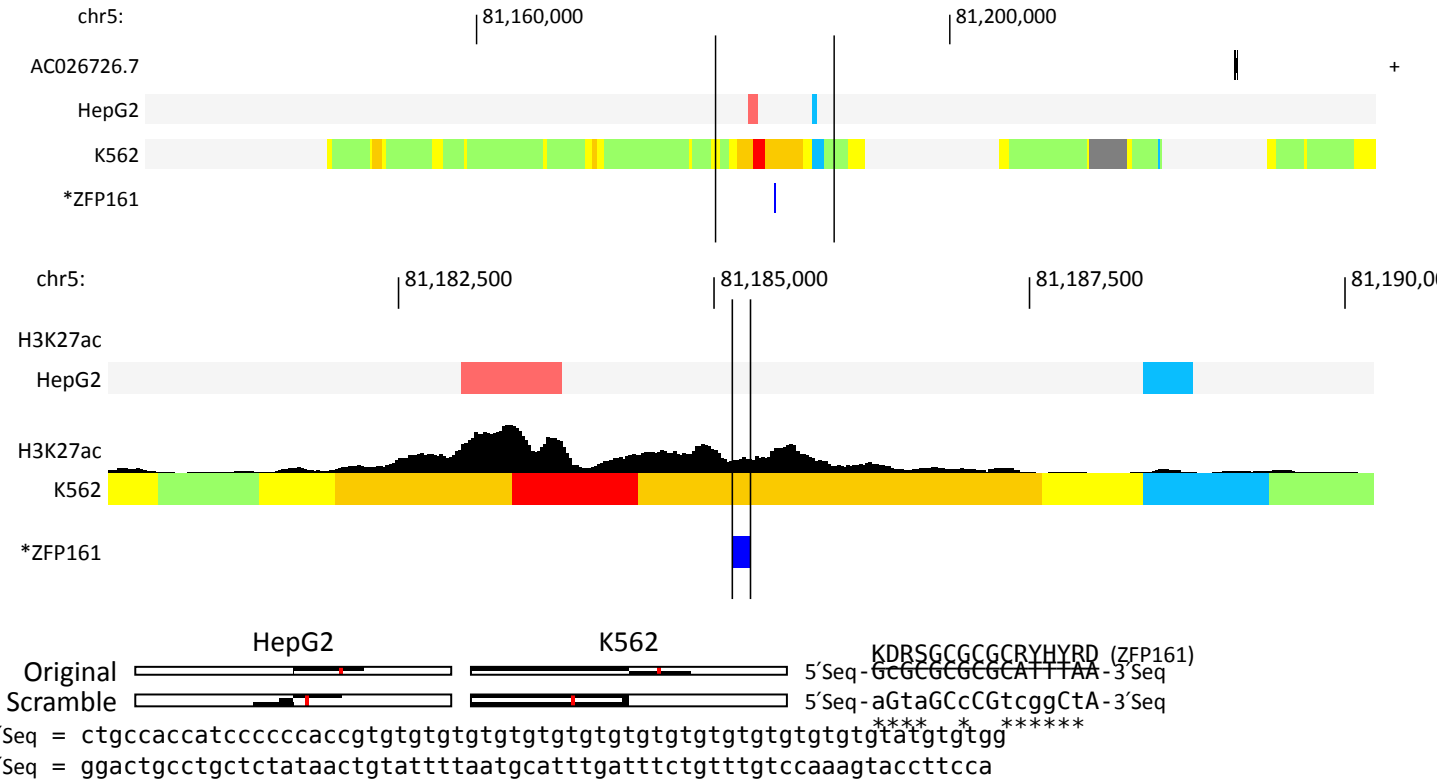
187 ZFP161 in K562 enhancer

chr5 81185210 81185225 - (hg18)



KDRSGCGCGCRYHYRD (ZFP161)

5′Seq-GcGCGCGCGCATTTAA-3′Seq

5′Seq-aGtaGCcCGtcggCtA-3′Seq

**** * * ******

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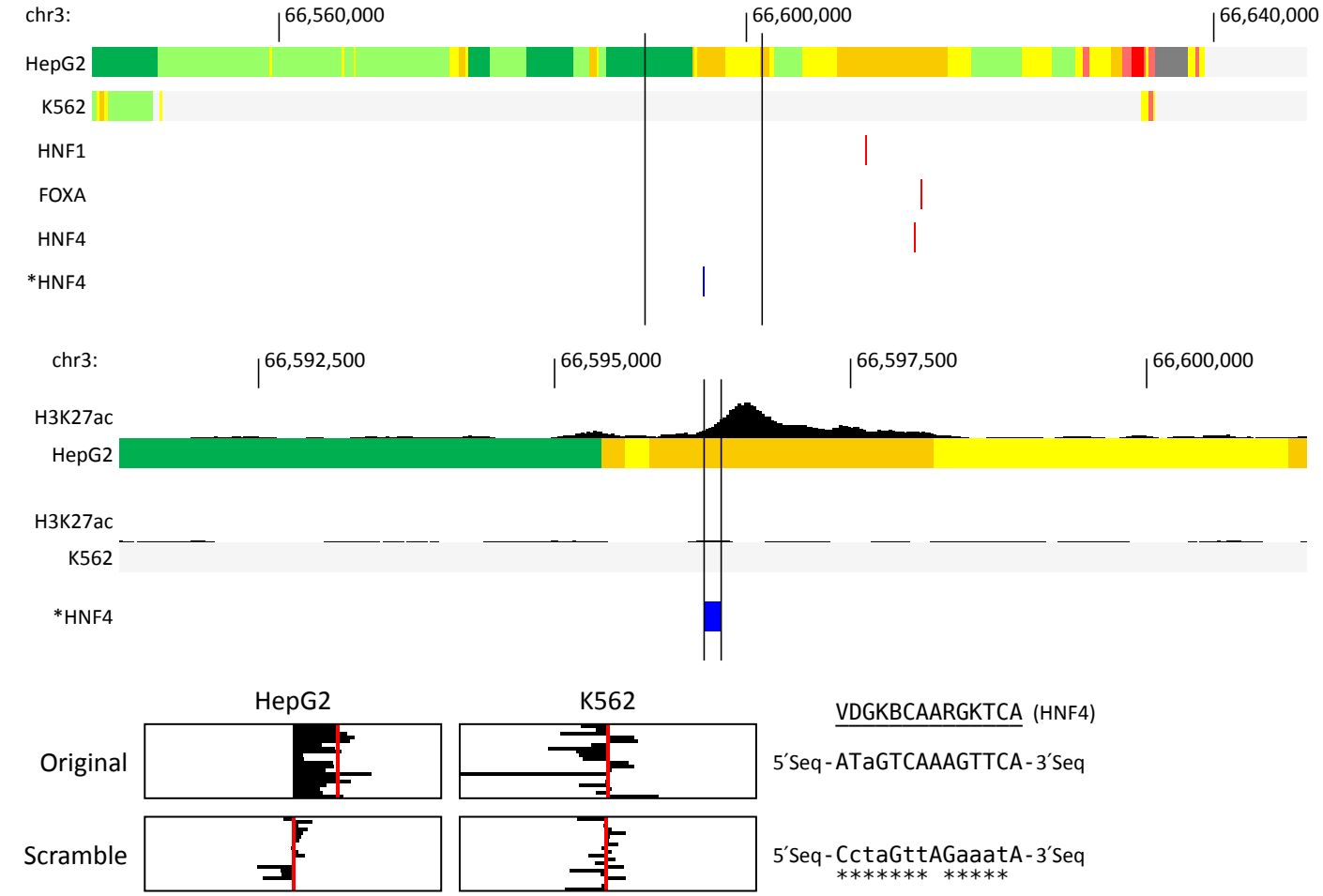
188 HNF4 in HepG2 enhancer

chr3 66596329 66596342 + (hg18)



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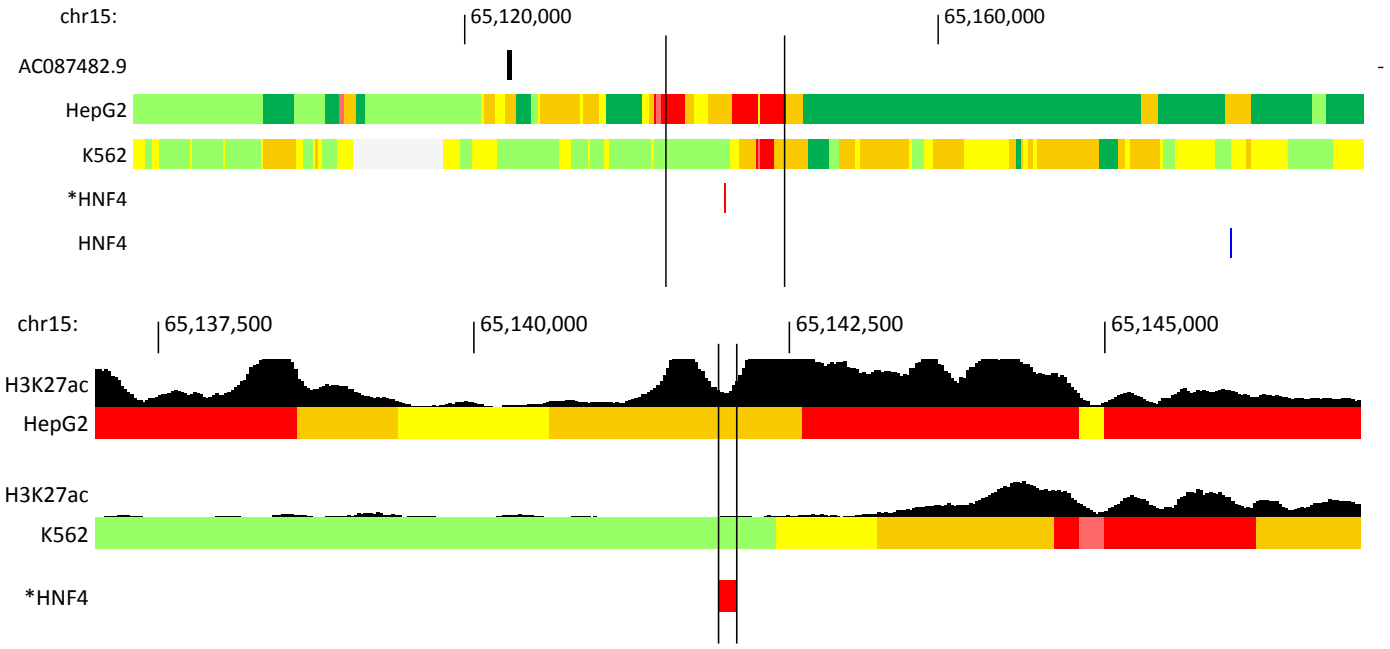
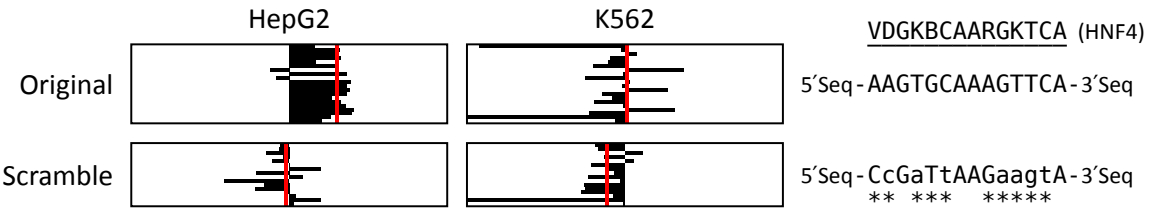
189 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr15 65142005 65142018 - (hg18)





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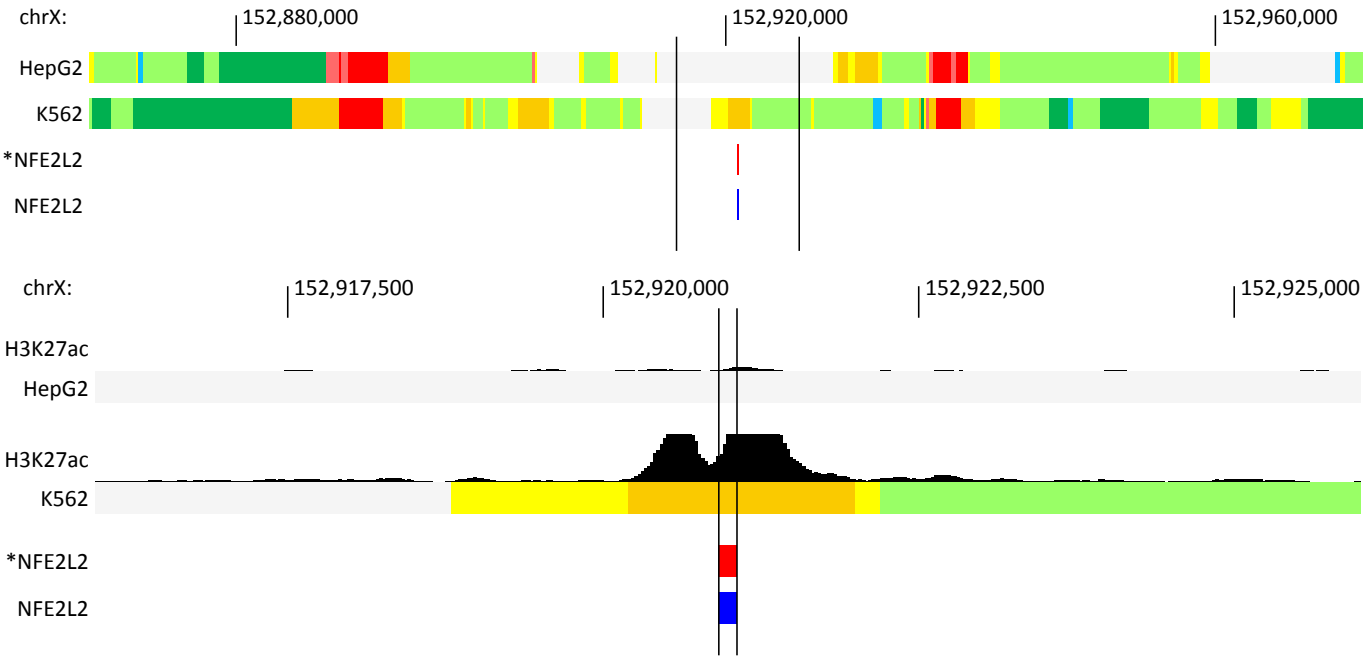
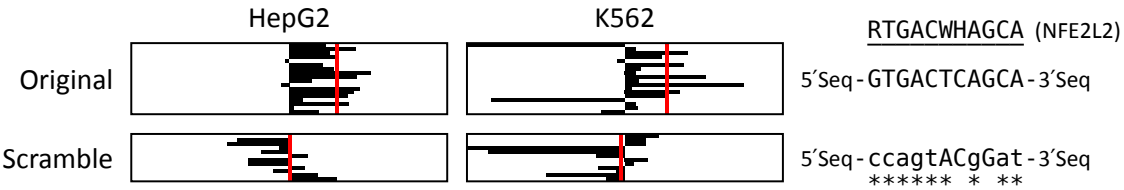
190 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chrX 152920983 152920993 + (hg18)





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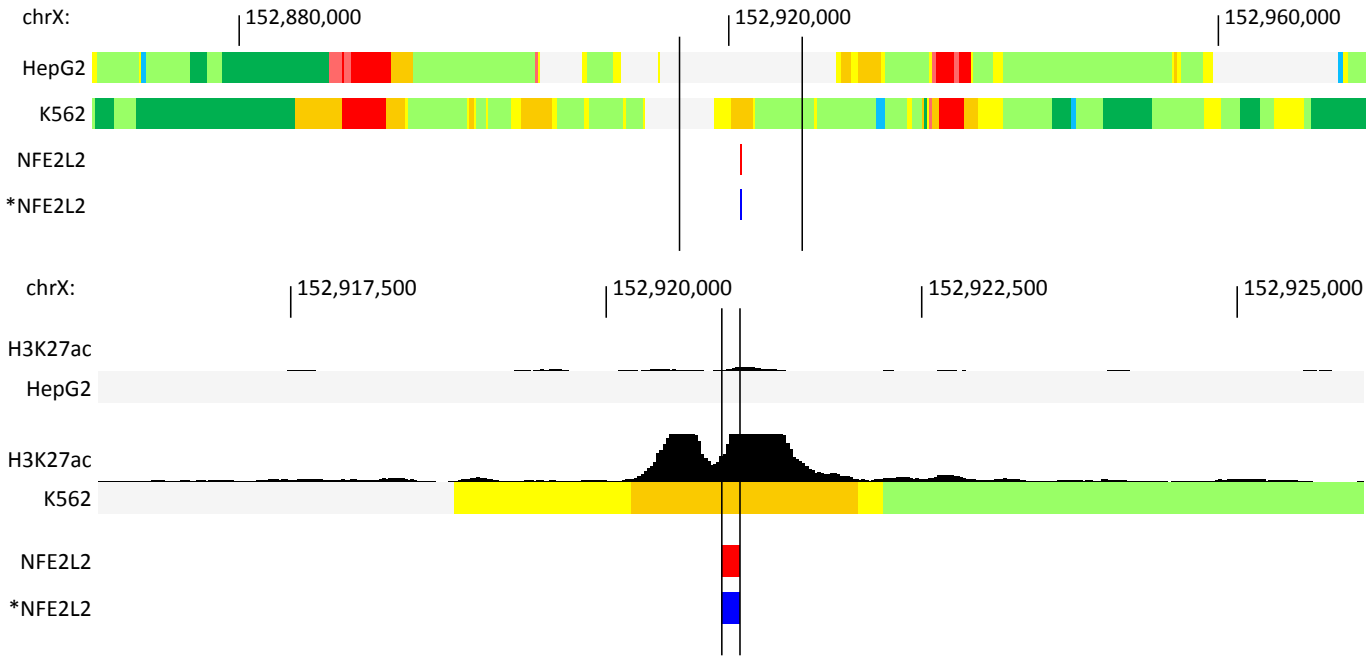
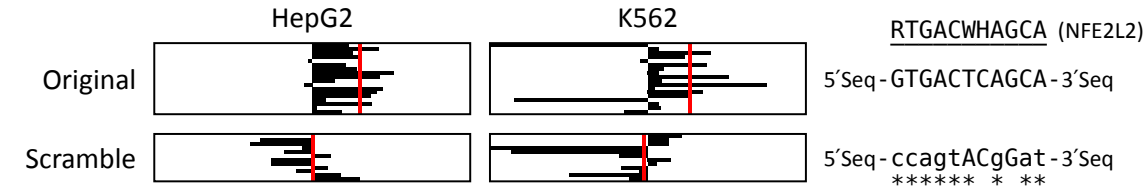
191 NFE2L2 in K562 enhancer

chrX 152920983 152920993 + (hg18)





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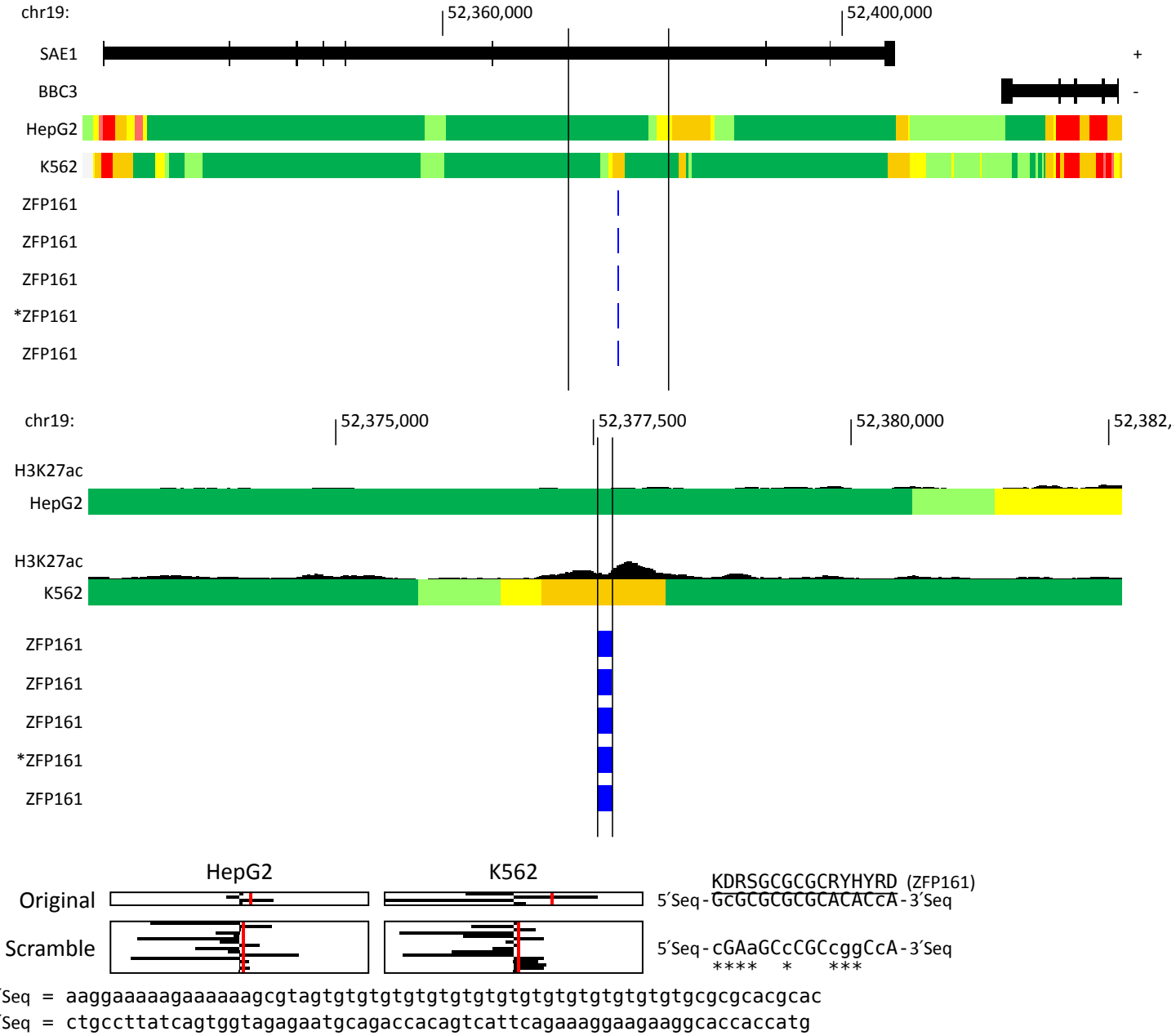
192 ZFP161 in K562 enhancer

chr19 52377606 52377621 + (hg18)



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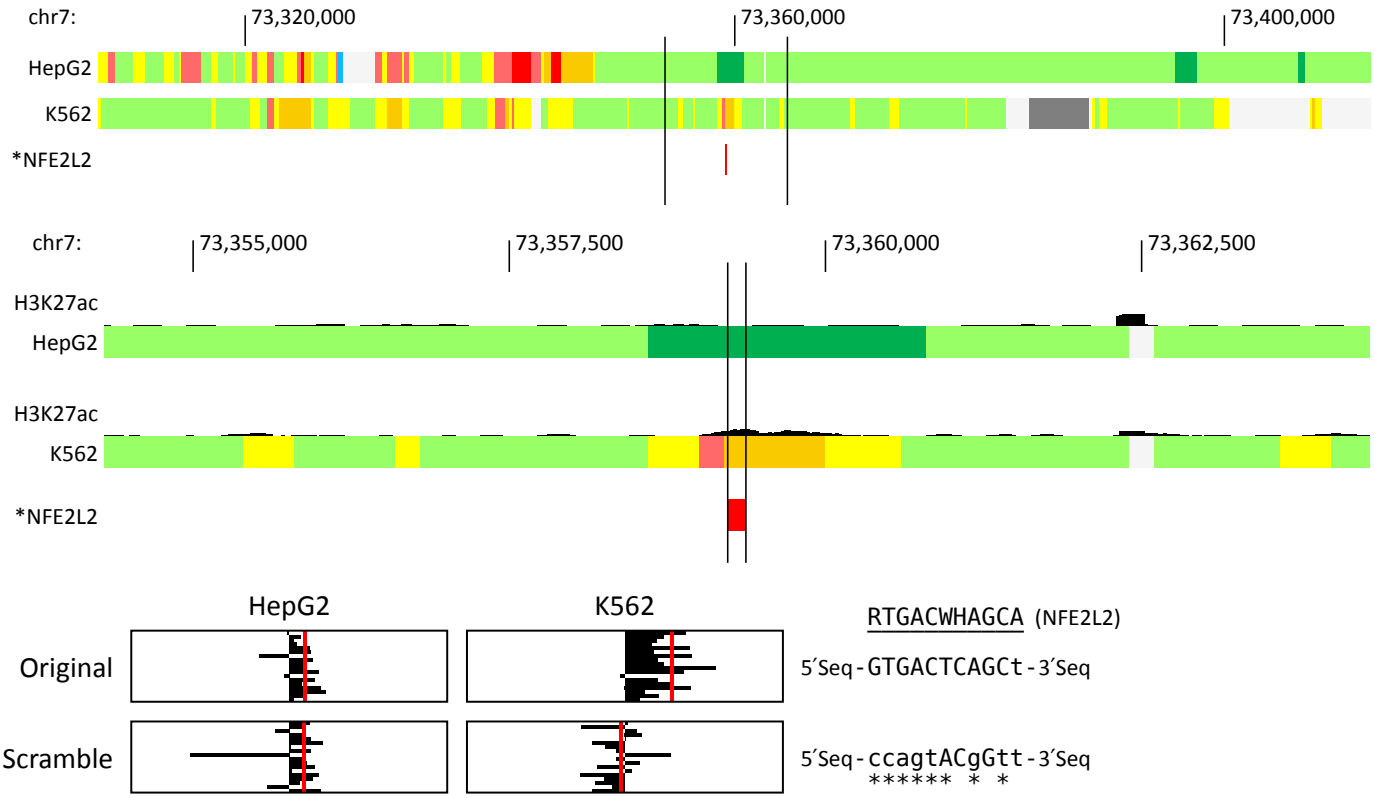
193 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 73359294 73359304 - (hg18)



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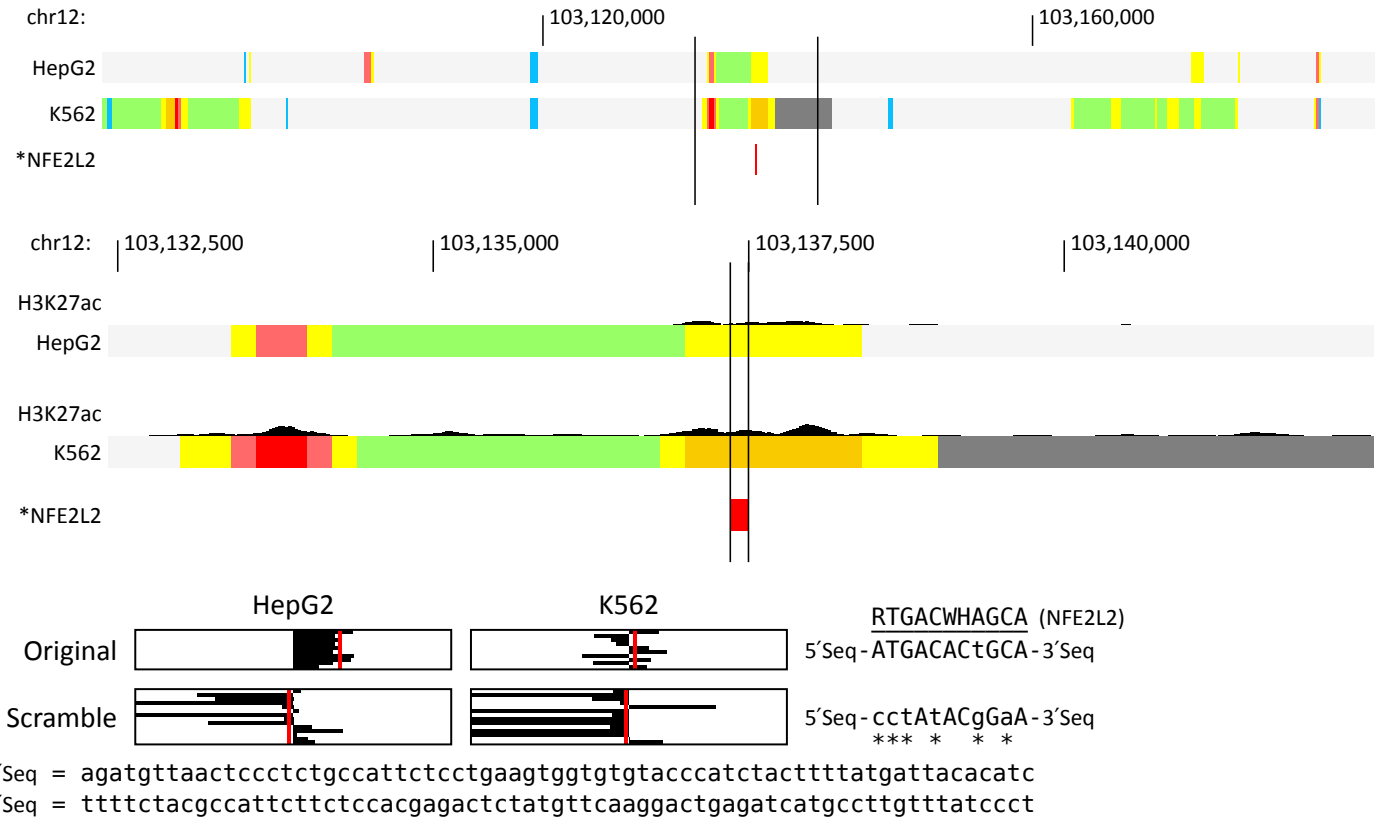
194 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr12 103137421 103137431 - (hg18)



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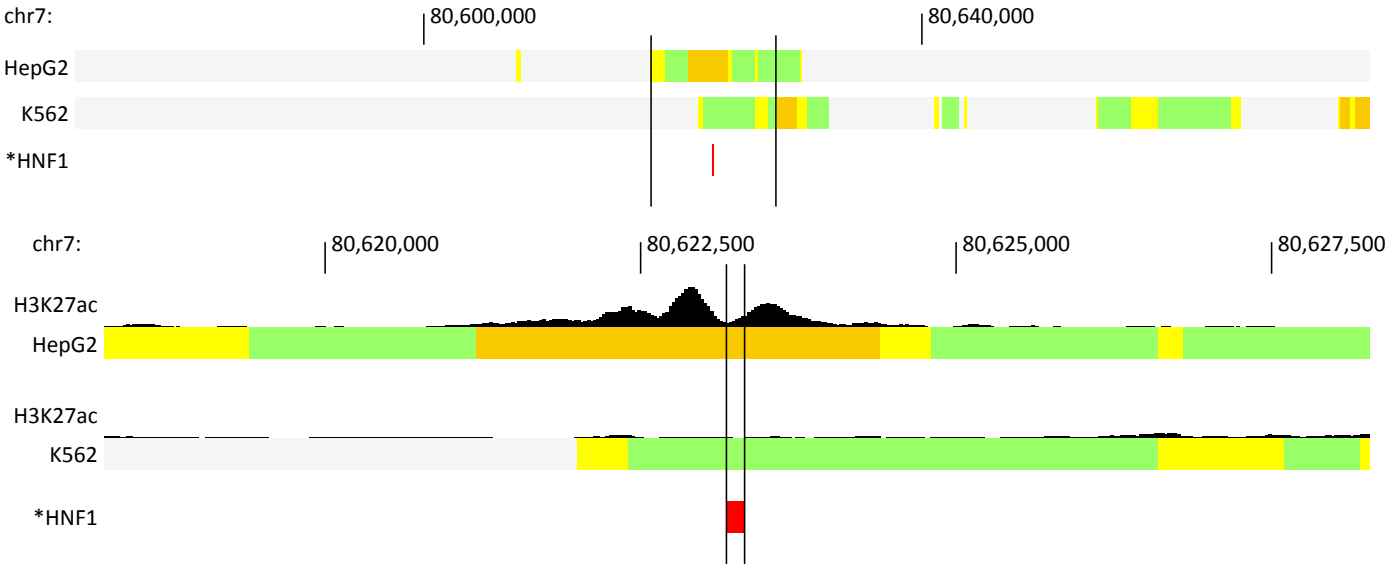
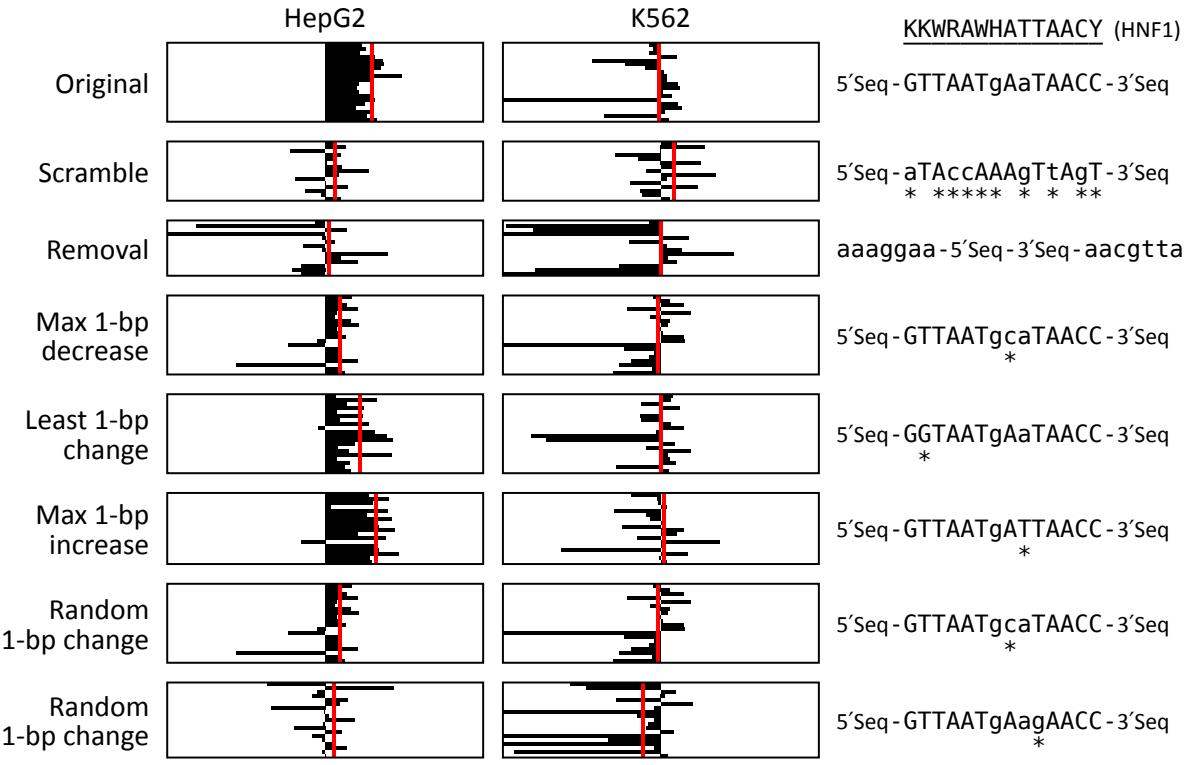
195 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr7 80623246 80623259 + (hg18)





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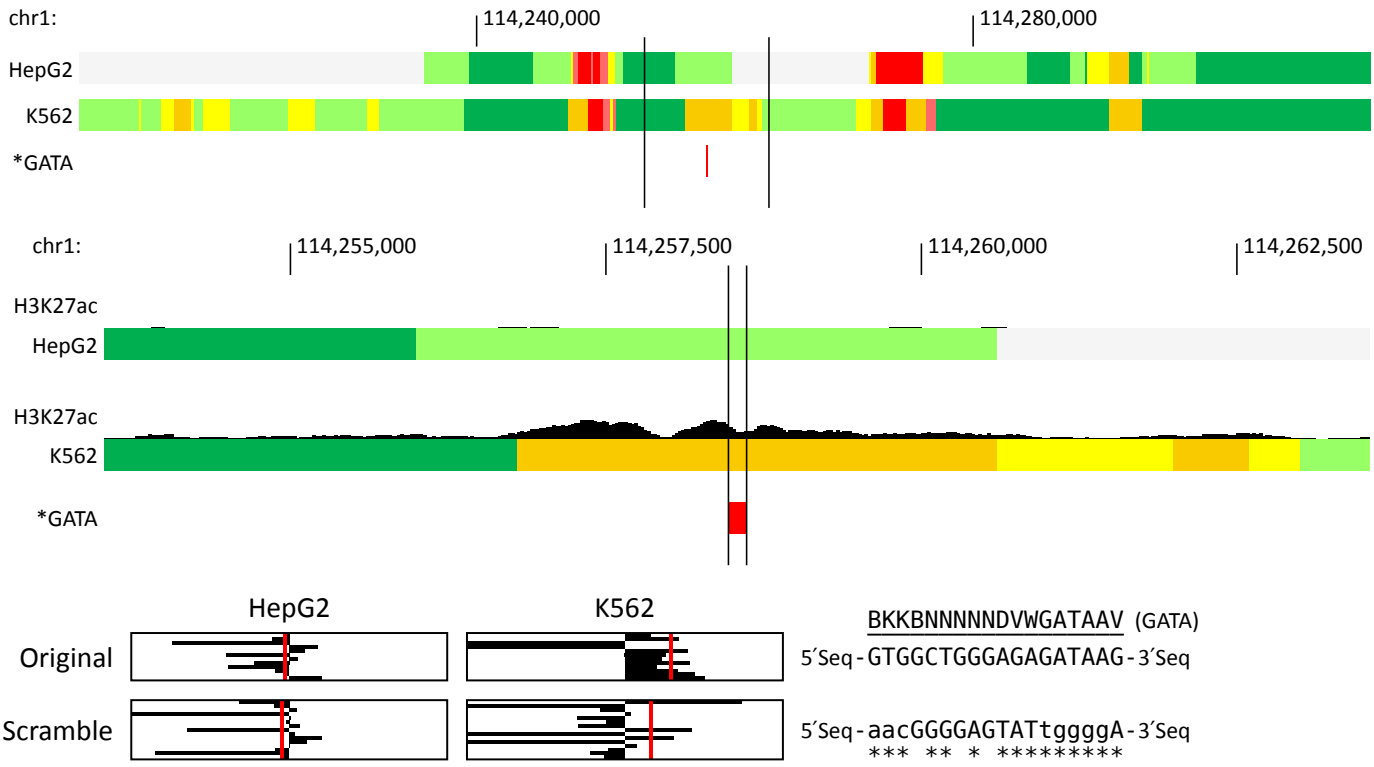
196 GATA in K562 enhancer (conserved at 60% confidence)

chr1 114258535 114258552 + (hg18)



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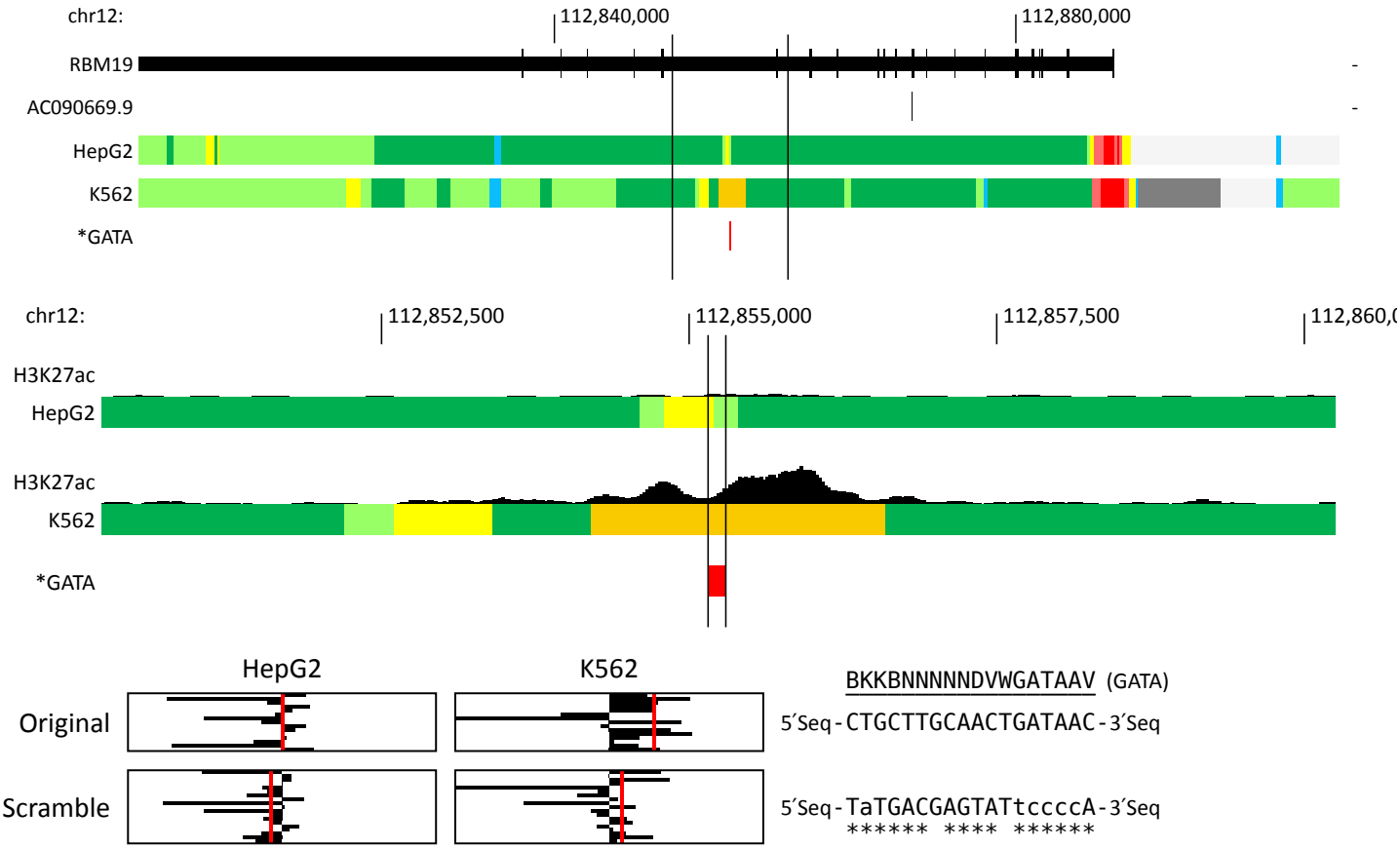
197 GATA in K562 enhancer (conserved at 60% confidence)

chr12 112855218 112855235 - (hg18)



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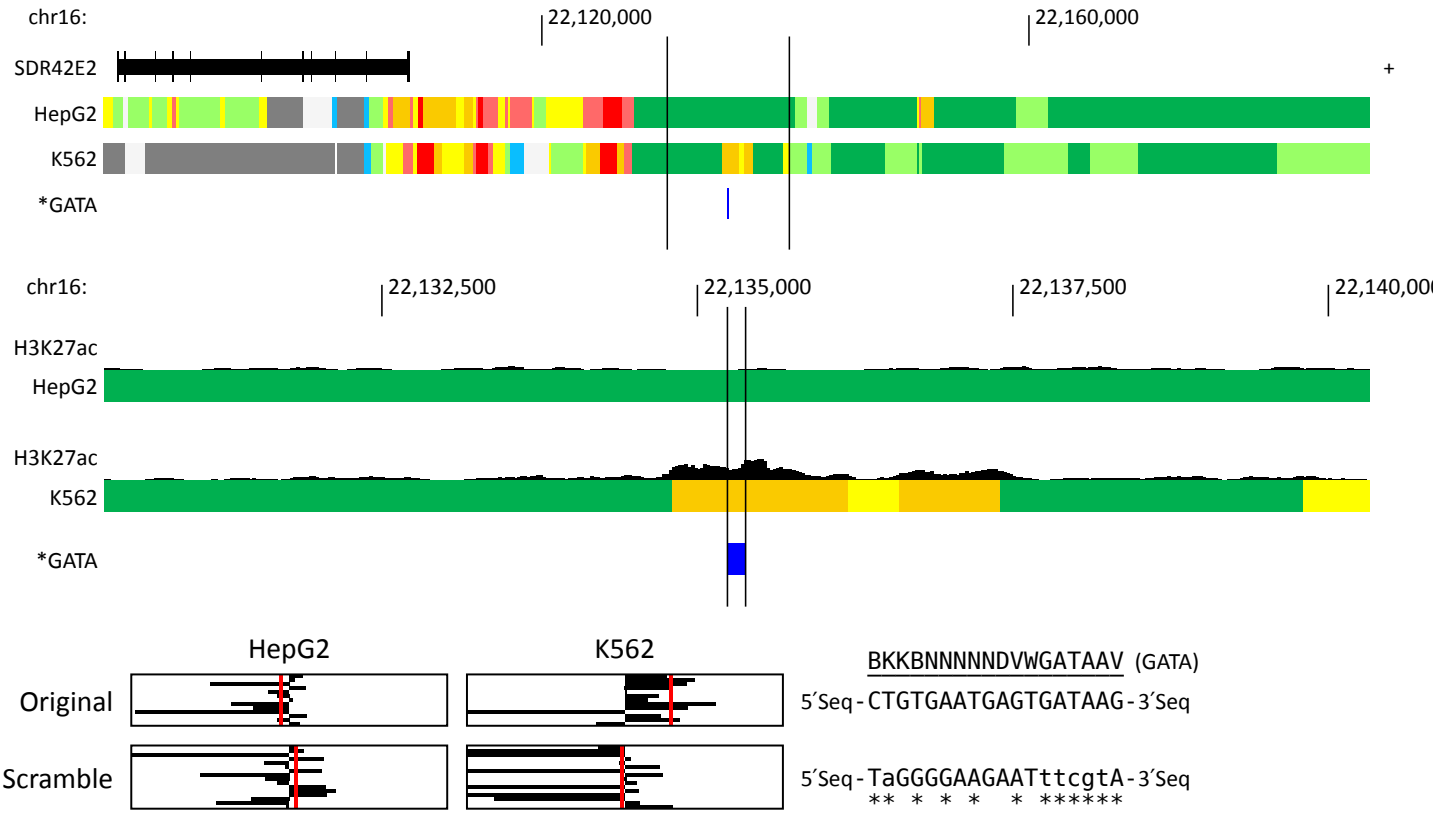
198 GATA in K562 enhancer

chr16 22135302 22135319 - (hg18)



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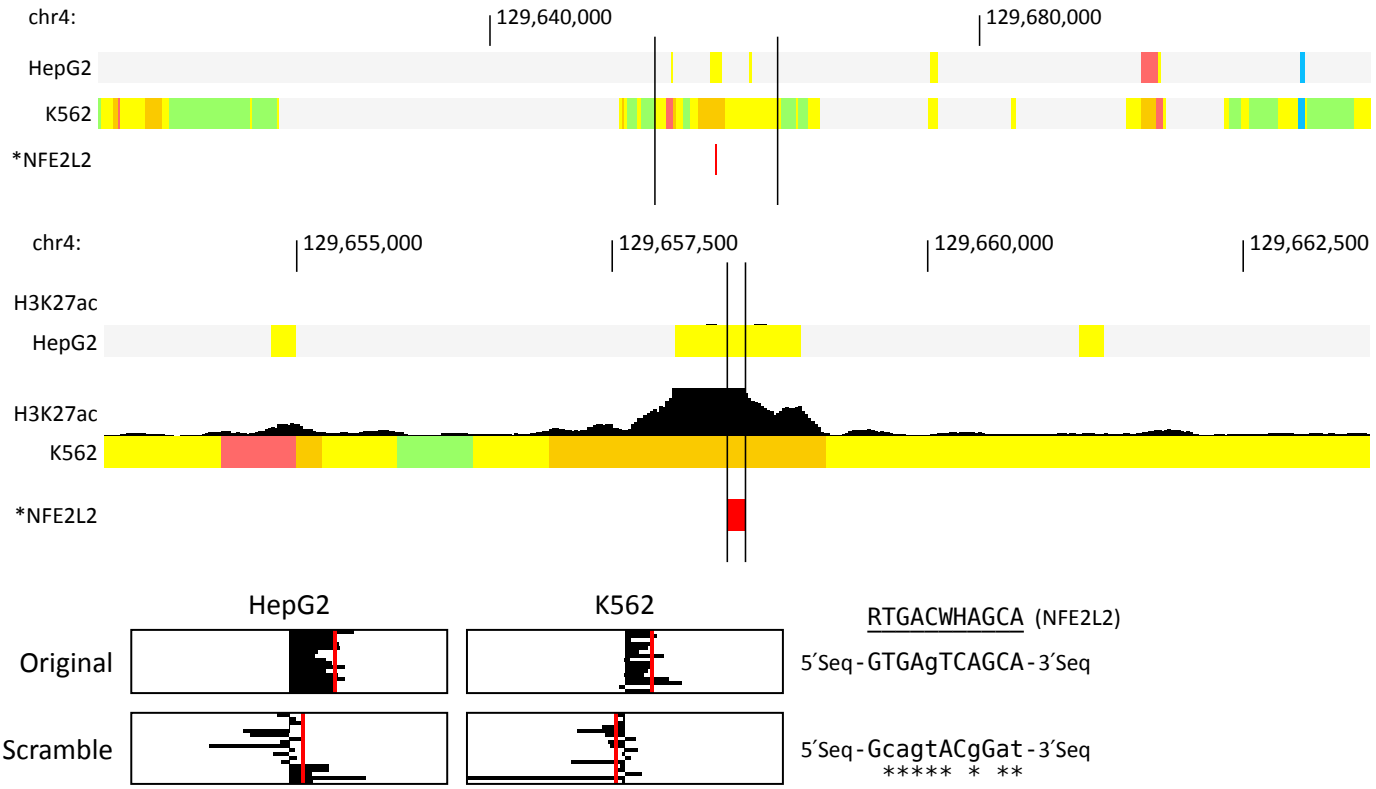
199 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr4 129658479 129658489 + (hg18)



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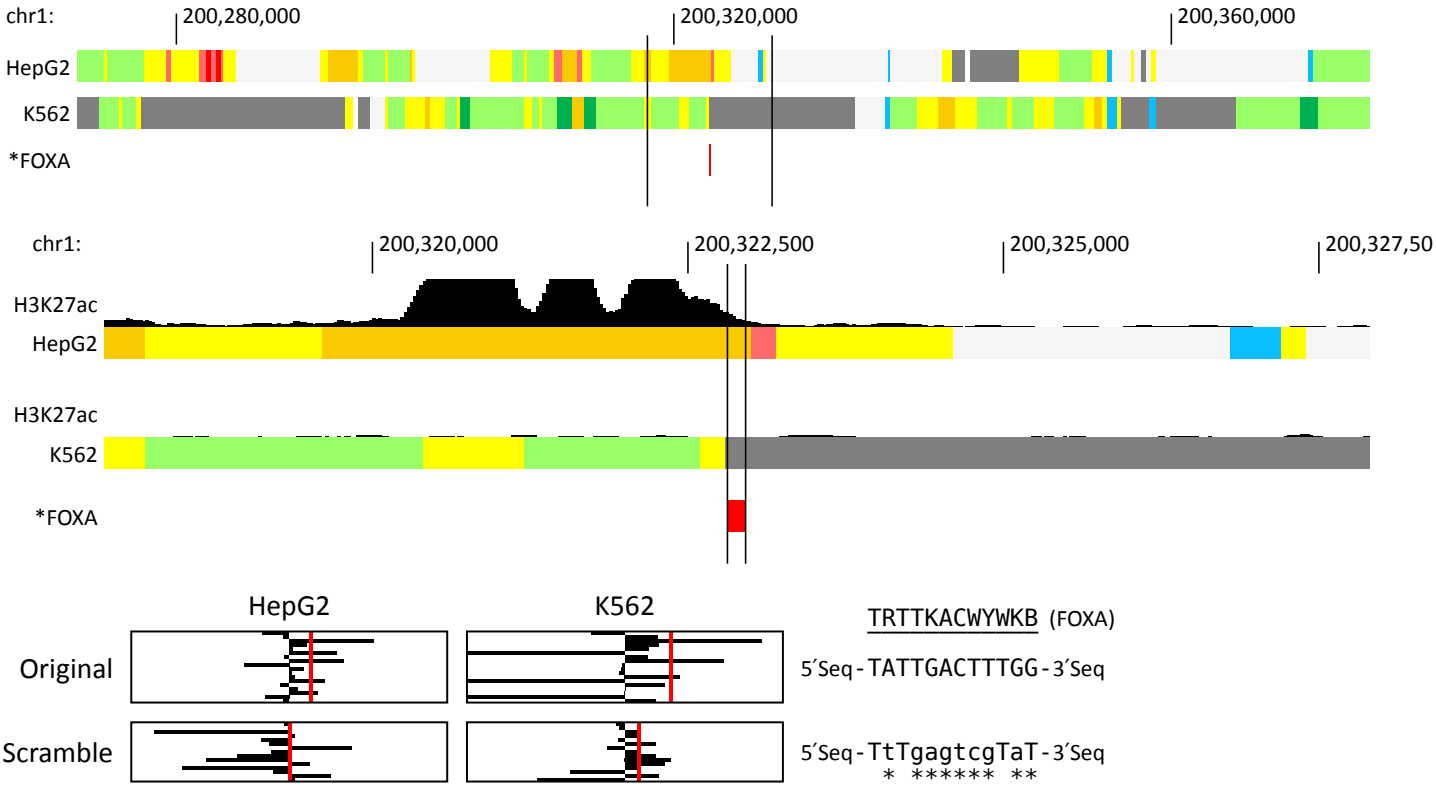
200 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr1 200322880 200322891 + (hg18)



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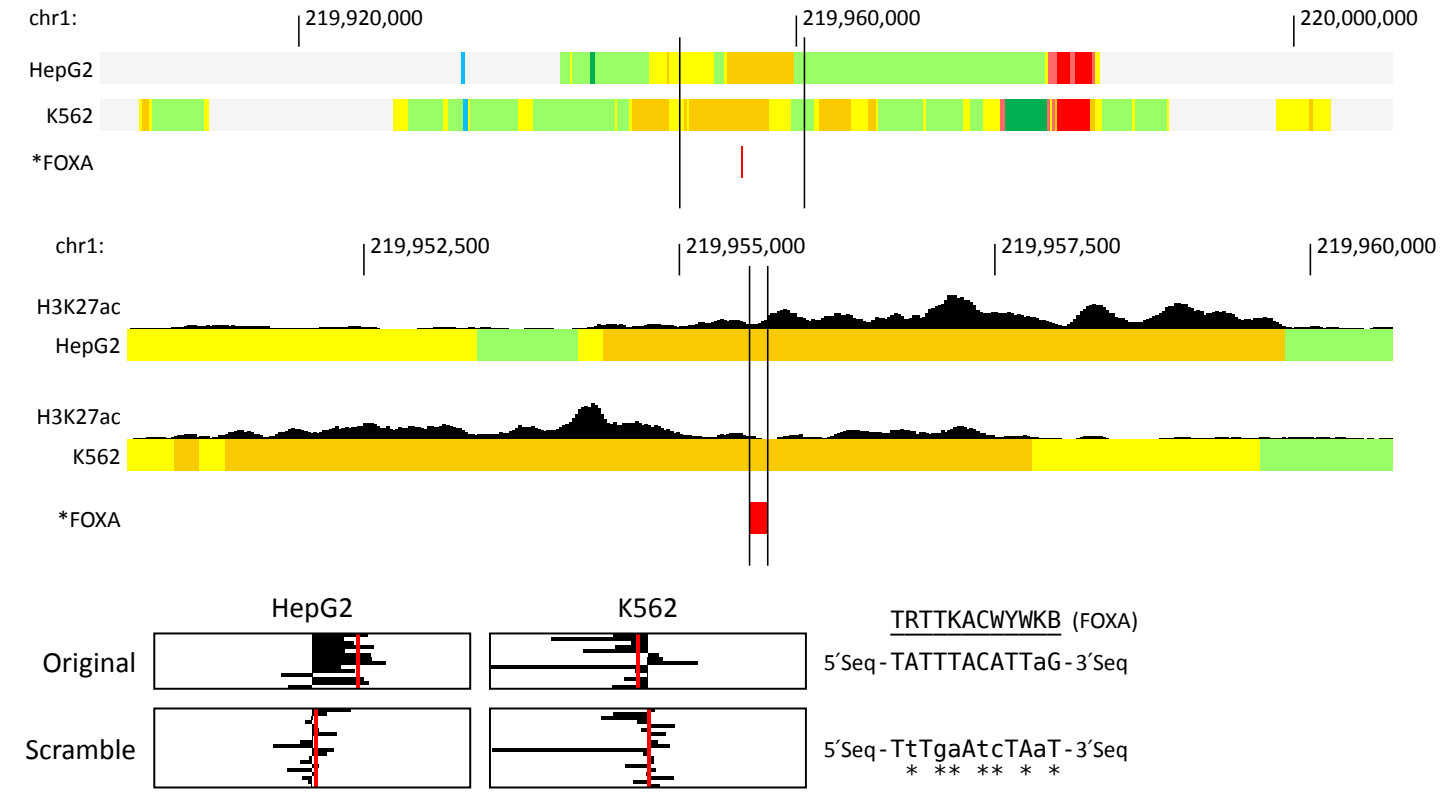
201 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr1 219955623 219955634 + (hg18)



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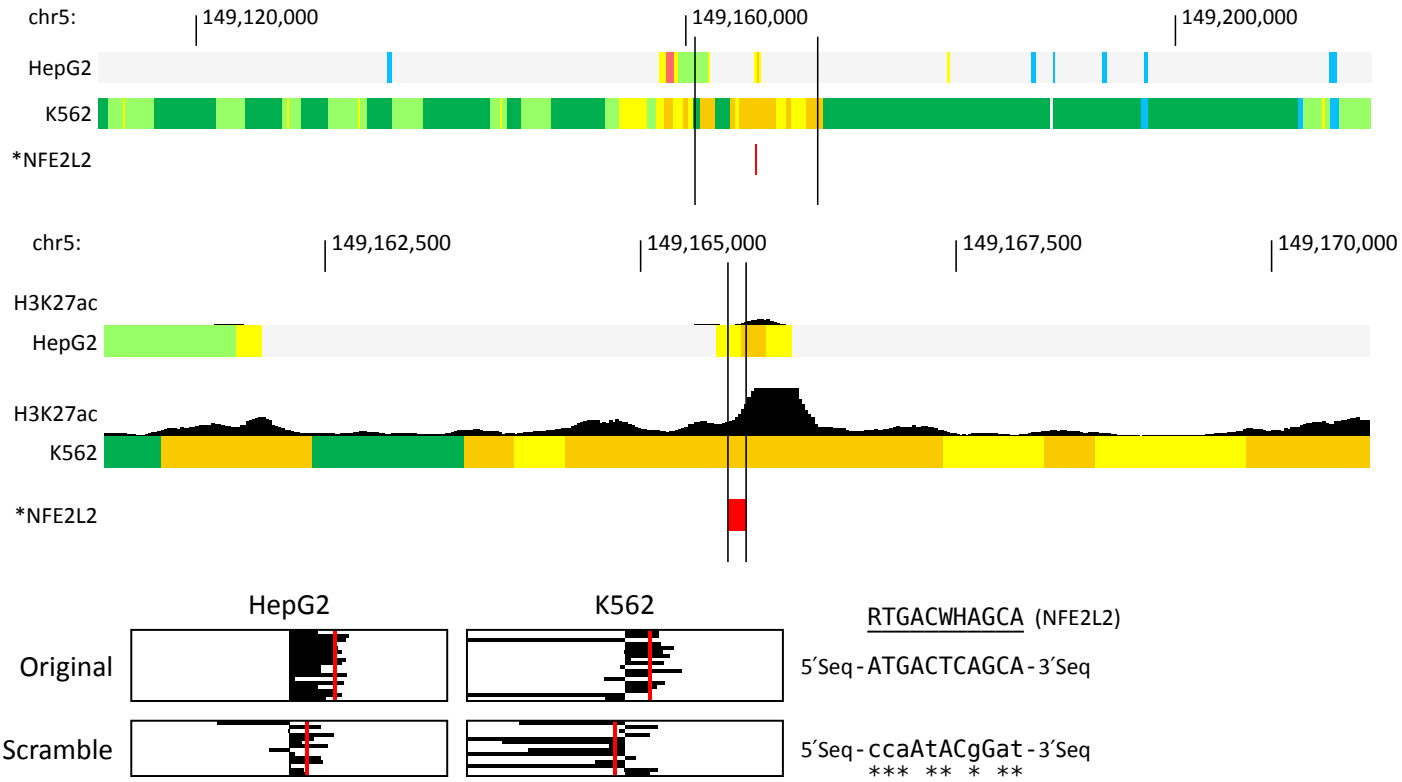
202 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr5 149165759 149165769 - (hg18)



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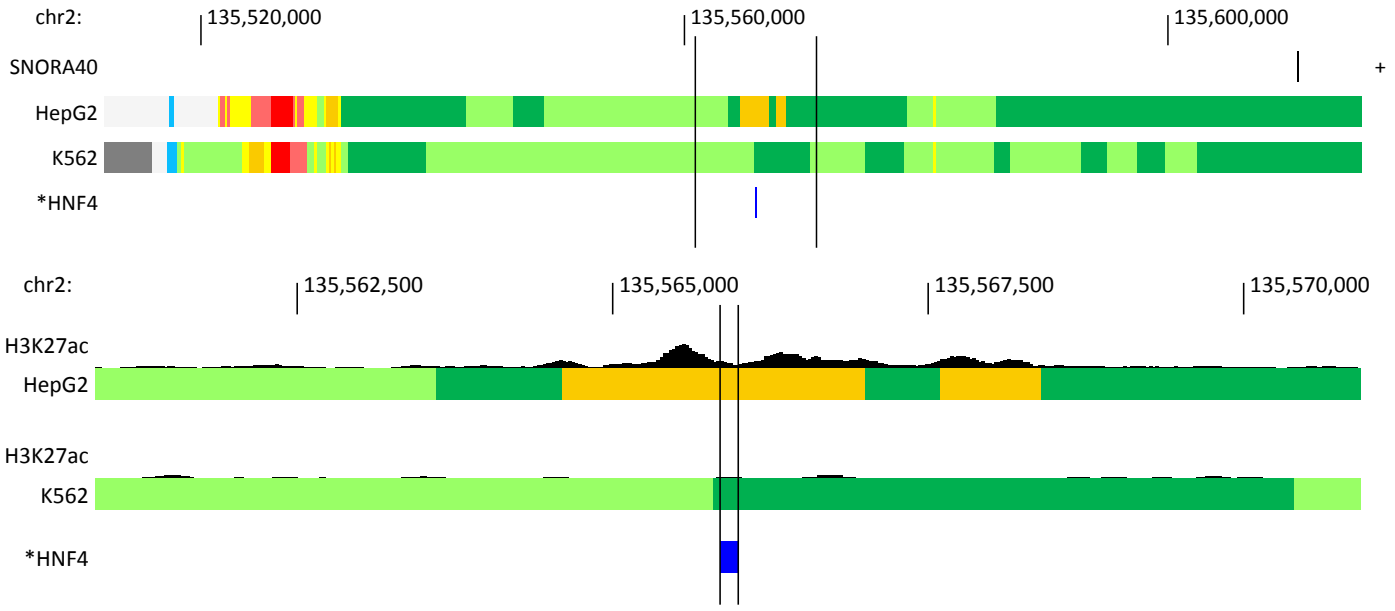
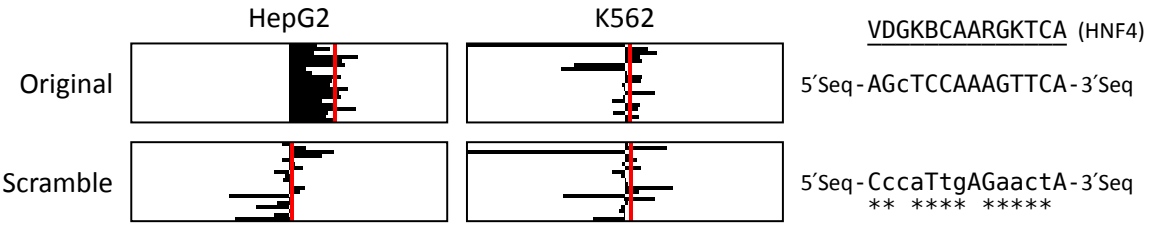
203 HNF4 in HepG2 enhancer

chr2 135565917 135565930 - (hg18)





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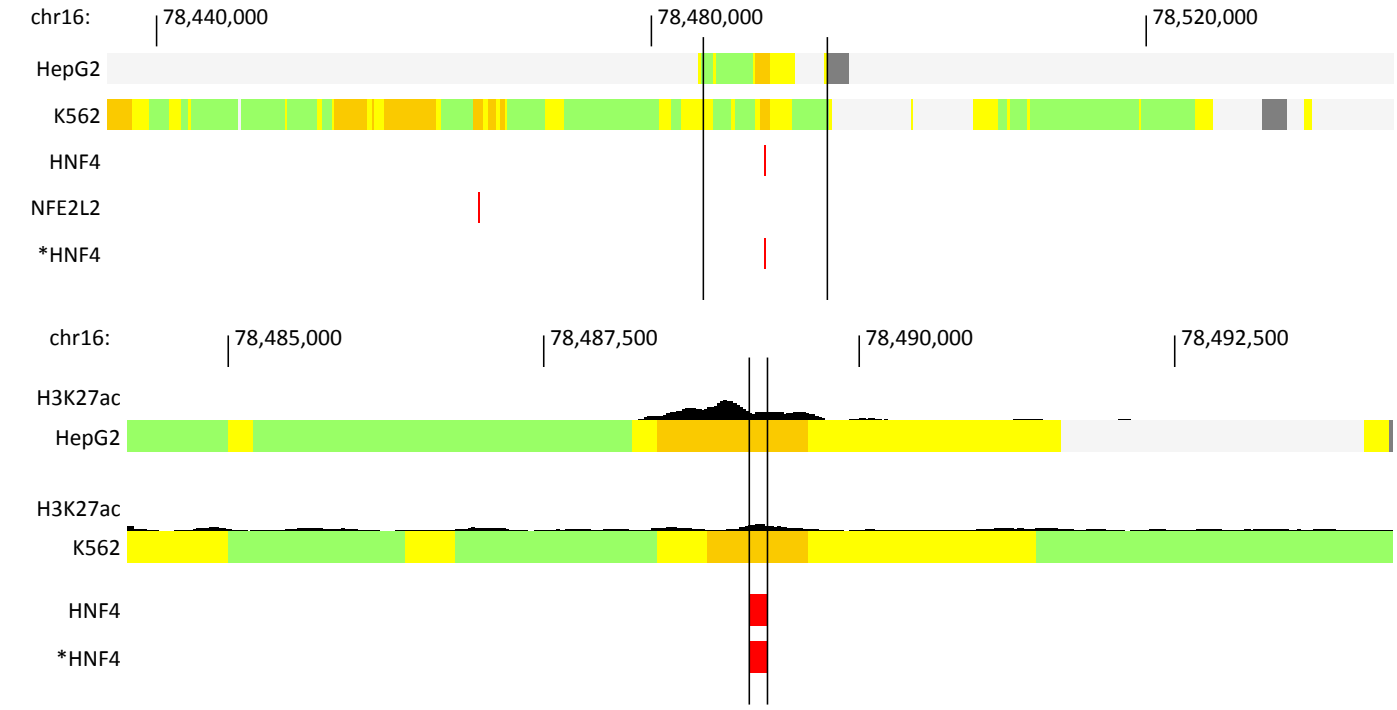
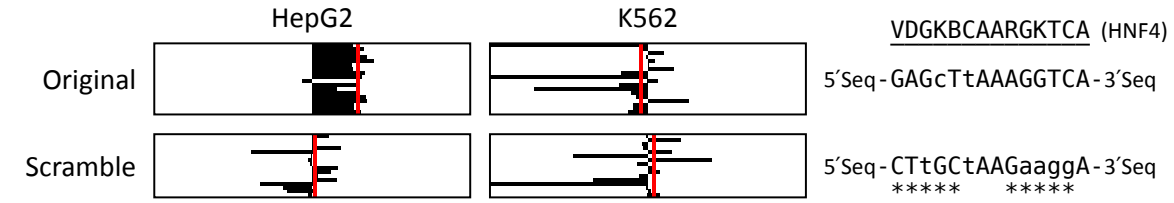
204 HNF4 in K562 enhancer (conserved at 60% confidence)

chr16 78489195 78489208 - (hg18)





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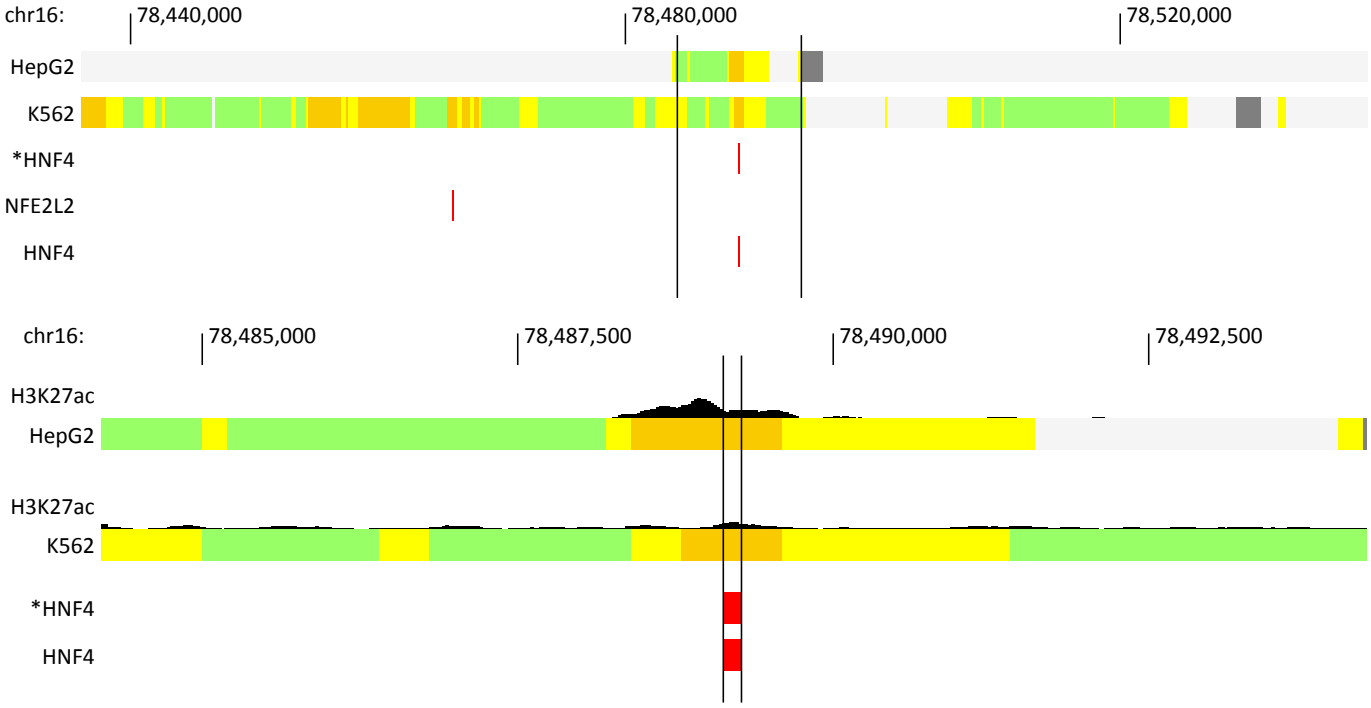
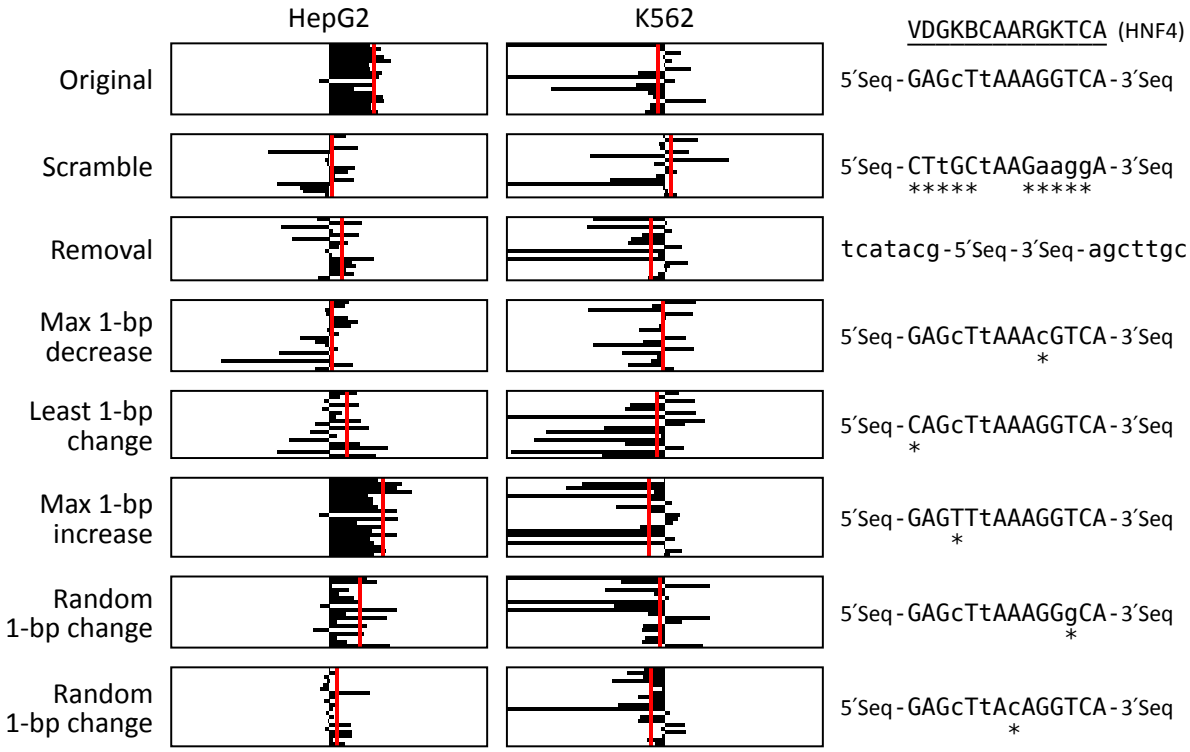
3′Seq = aaccacgatgtggttacagtgtctgtgctttccagatatgctgtccacagggatgaacaaagtcc

205 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr16 78489195 78489208 - (hg18)

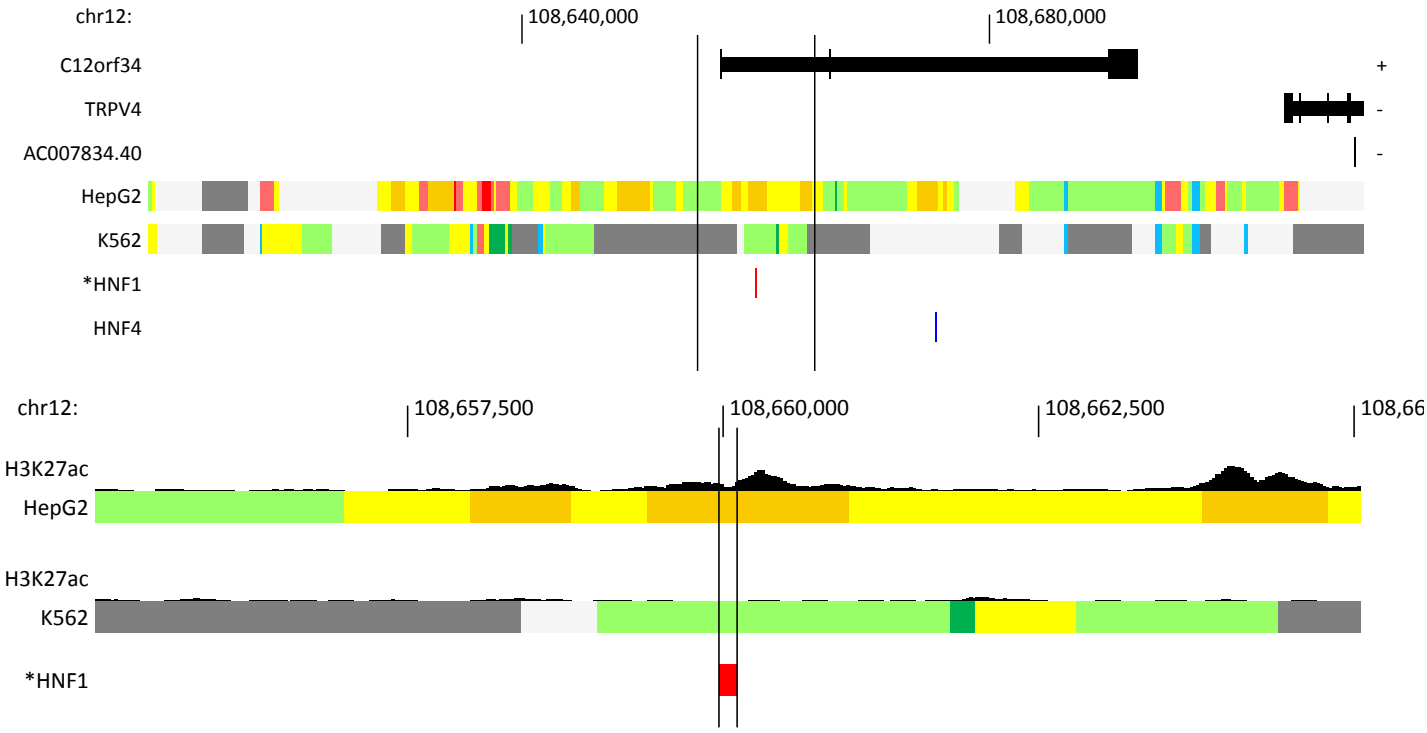


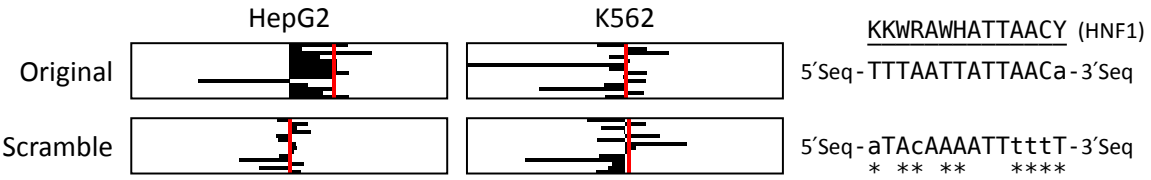


5′Seq = agtggggagccagtggcatggactctgaccgtgaaaaacaagacgctagaaggatttatgctccca
3′Seq = aaccacgatgtggttacagtgtctgtgctttccagatatgctgtccacagggatgaacaaagtcc

206 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr12 108660033 108660046 + (hg18)

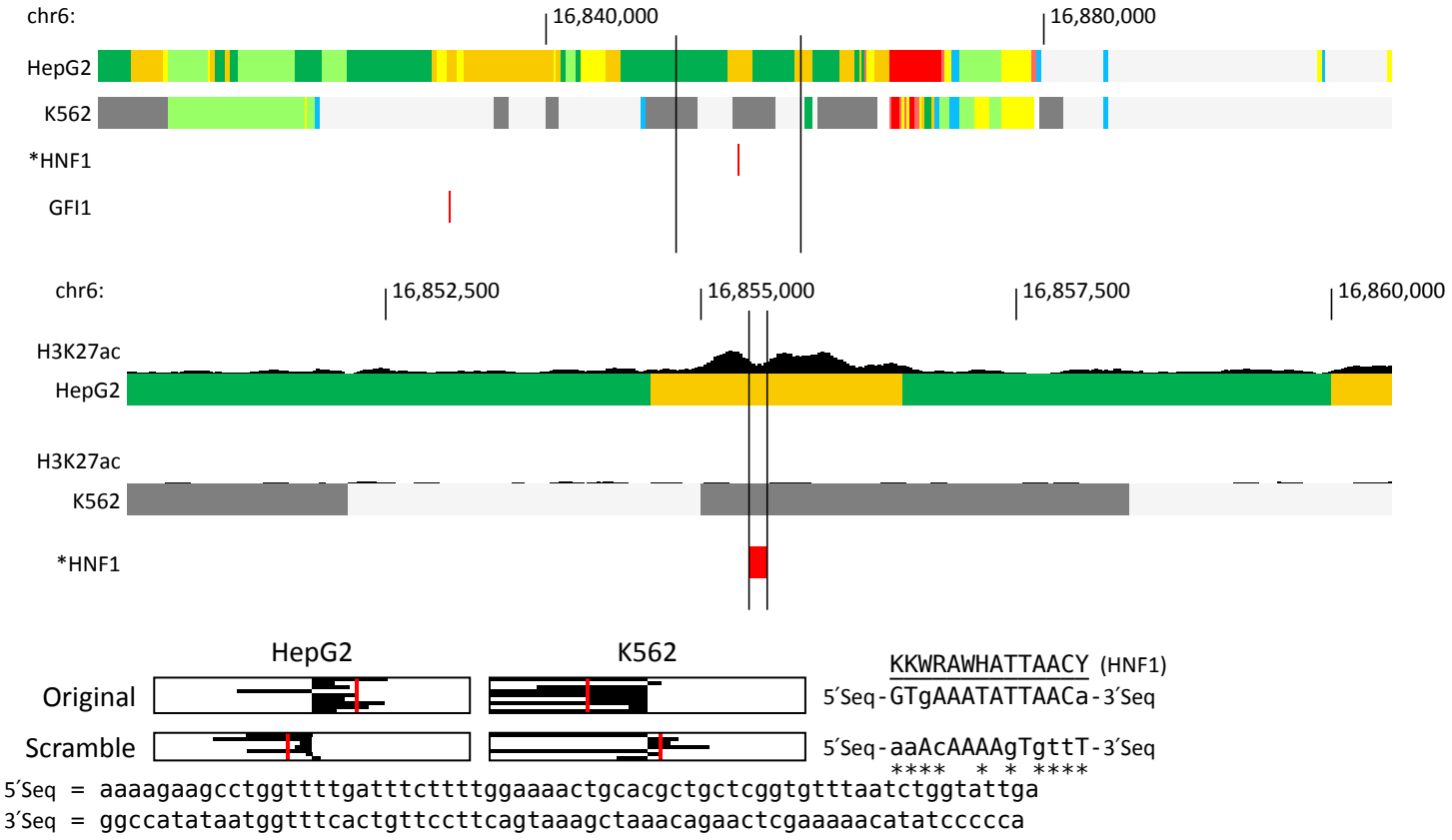




5′Seq = tccatgctaatgtaatctctaaccagatctgcctagccgcagctcaaattgctttttagattaaca
3′Seq = gggtcccttggaaggcctccggctcagaacagagatgggggagggagcggcaggagggaggtggg

207 HNF1 in HepG2 enhancer (conserved at 60% confidence)

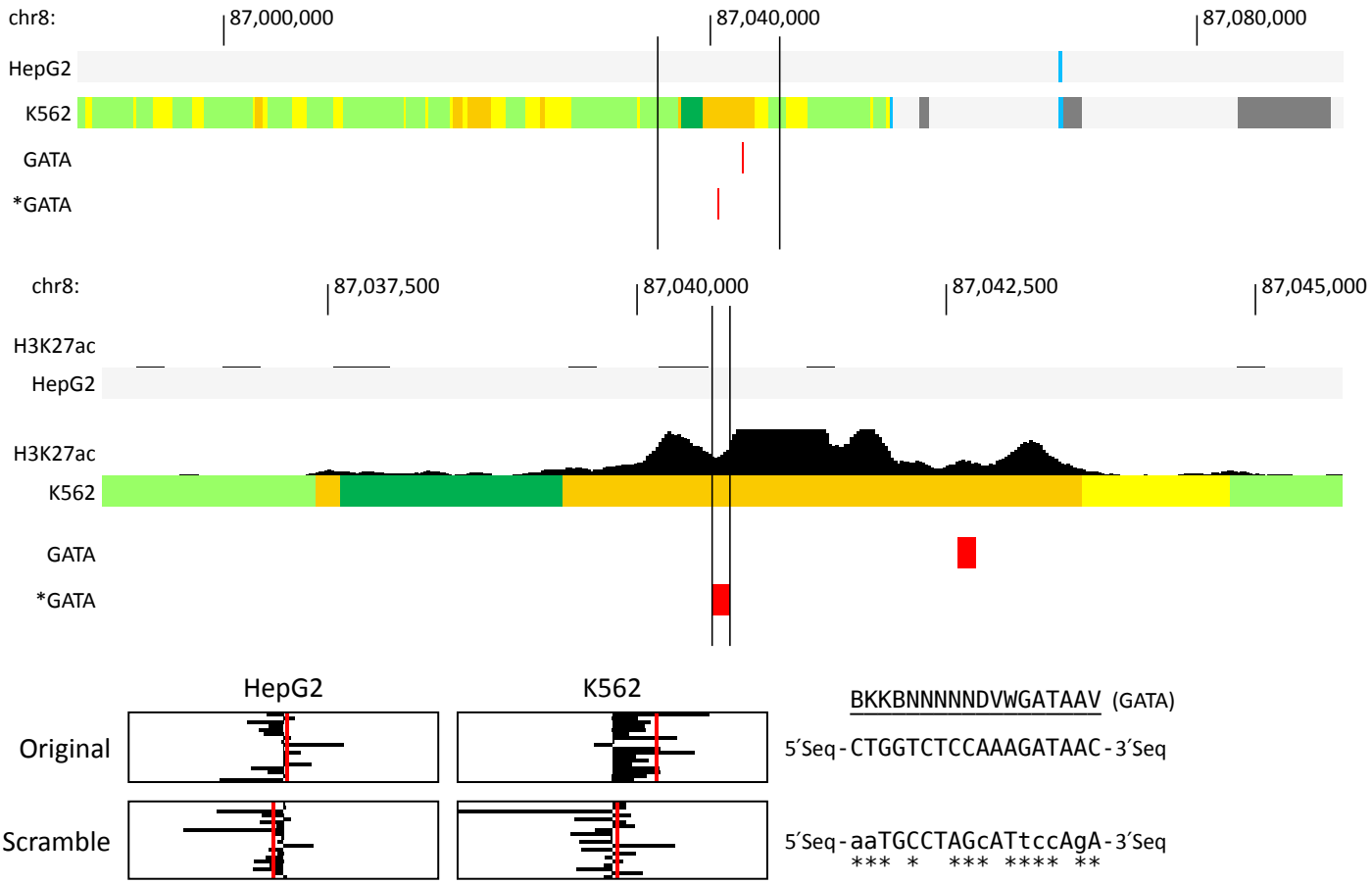
chr6 16855447 16855460 + (hg18)



5′Seq = aaaagaagcctggttttgatttcttttggaaaactgcacgctgctcggtgtttaatctggtattga
3′Seq = ggccatataatggtttcactgttccttcagtaaagctaaacagaactcgaaaaacatatccccca

208 GATA in K562 enhancer (conserved at 60% confidence)

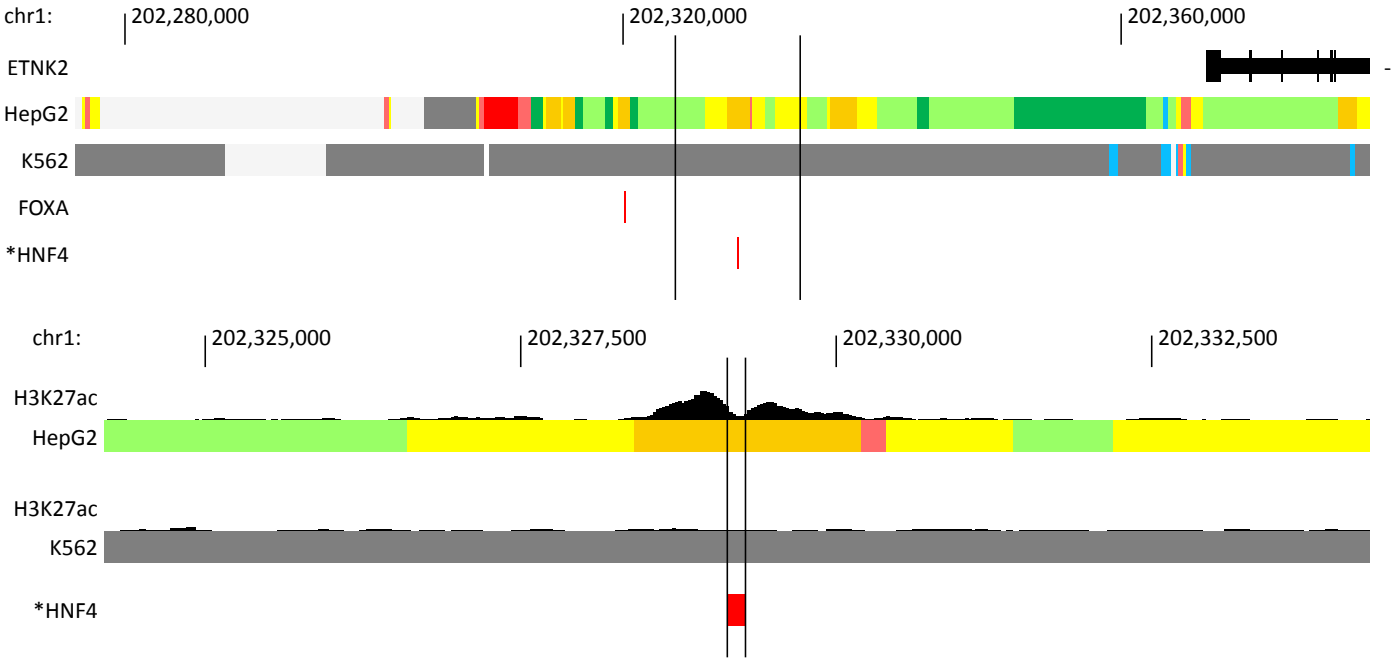
chr8 87040671 87040688 + (hg18)

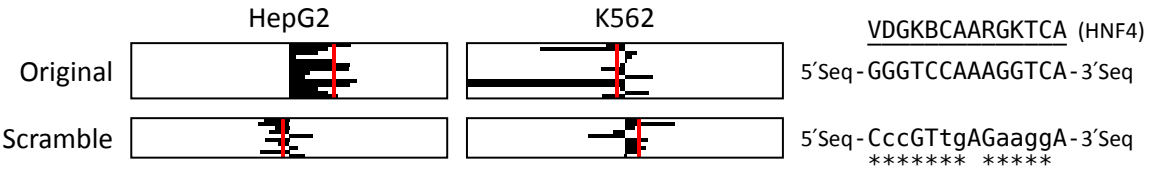


5′Seq = aatgttggtcacttaactcttctgcaaattccattccctgctatcctacgttagcacttcagat
3′Seq = atttgtcattcttcctctgttgtcaagctggcttattttctgtgcatttgaggtctgagtaac

209 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr1 202329203 202329216 - (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-GGGTCCAAAGGTCA-3′Seq

5′Seq-CccGTtgAGaaggA-3′Seq

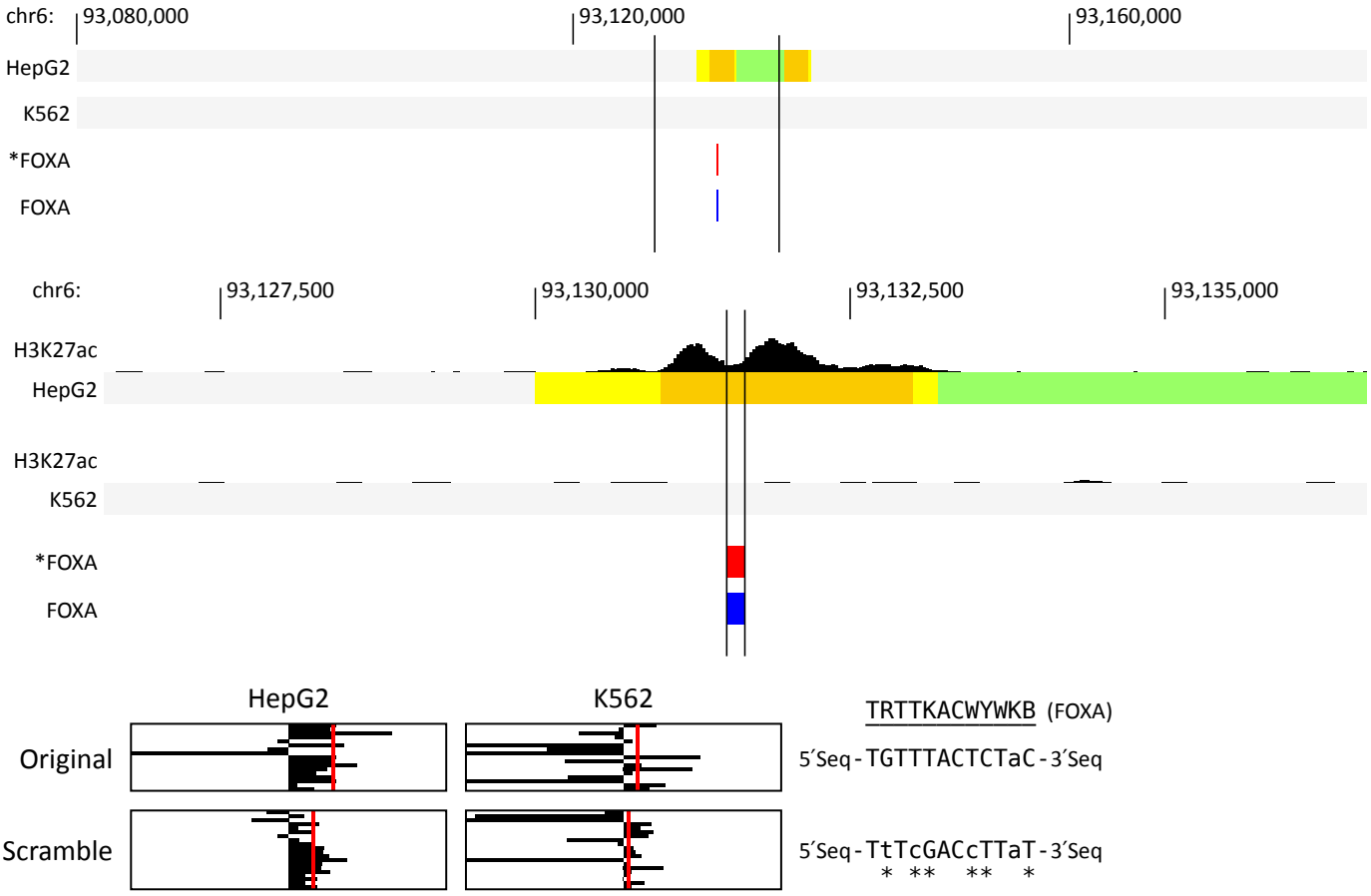
******* *****

5′Seq = ccccccacacccatgccaccgccttcacttcctgtcaggccccacaggcatcatcctgagcaccca

3′Seq = ggtacaggctgtttattattataaattgcaattcacccgcagctgggttttgtgaatacggtggc

210 FOXA in HepG2 enhancer (conserved at 40% confidence)

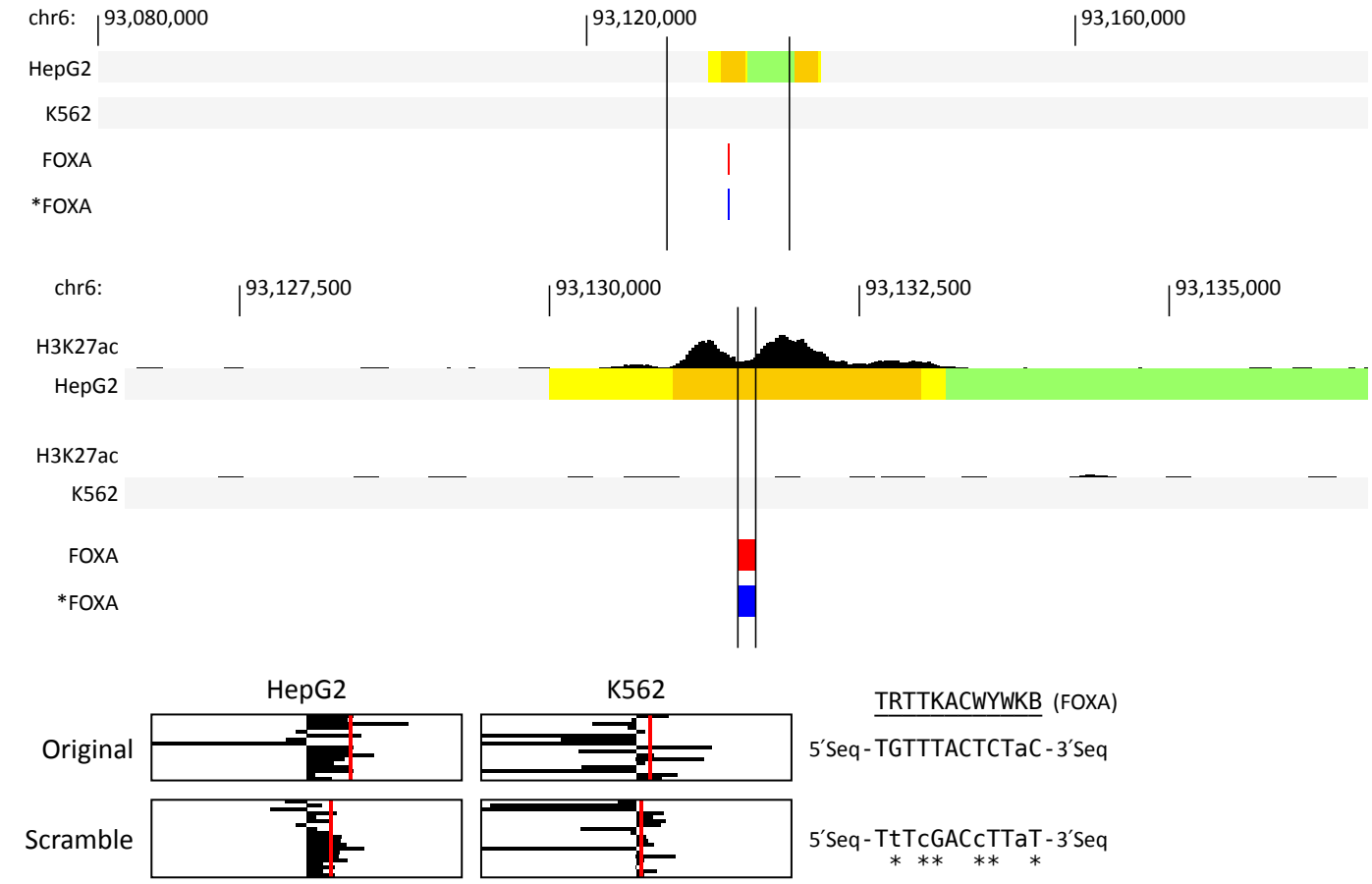
chr6 93131587 93131598 - (hg18)



5′Seq = catttcaaatggtcaaaactccagagaaatgcaggaatctatgacccctttataatggcctgatgg
3′Seq = ttgaatacacaaaggaccttgtactcttgtttcccttcagttgcagaatcaggccaggcaaggaca

211 FOXA in HepG2 enhancer

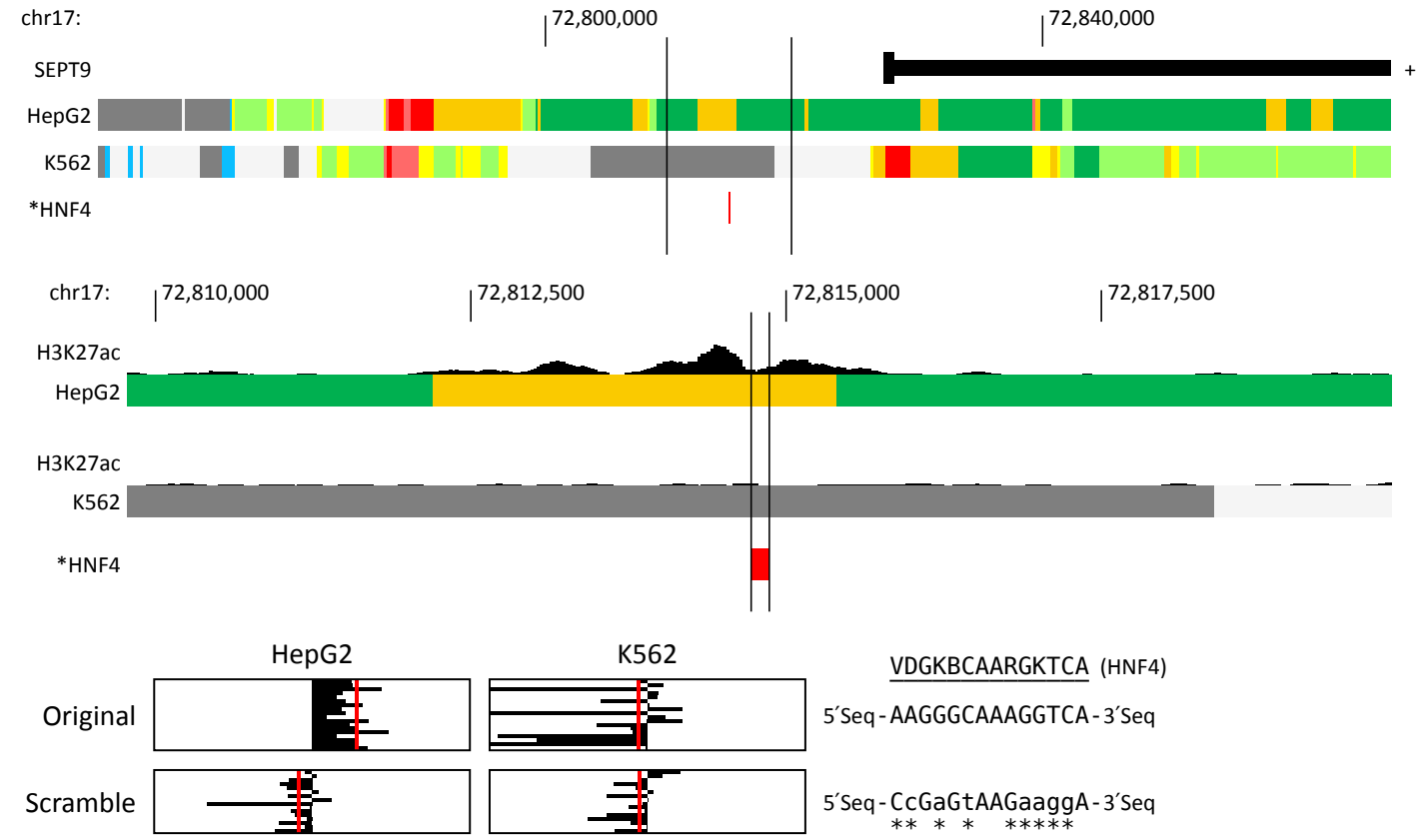
chr6 93131587 93131598 - (hg18)



5′Seq = catttcaaatggtcaaaactccagagaaatgcaggaatctatgacccctttataatggcctgatgg
3′Seq = ttgaatacacaaaggaccttgtactcttgtttcccttcagttgcagaatcaggccaggcaaggaca

212 HNF4 in HepG2 enhancer (conserved at 50% confidence)

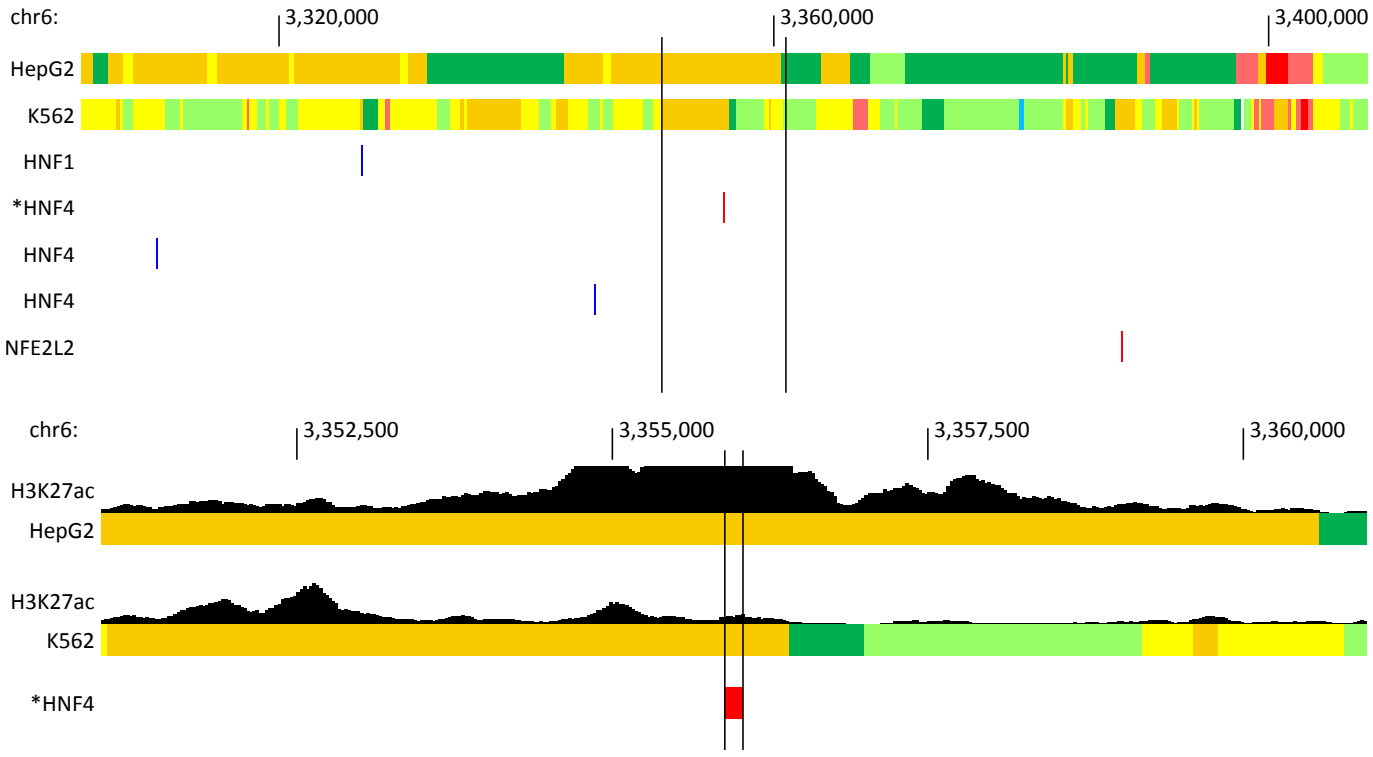
chr17 72814789 72814802 - (hg18)

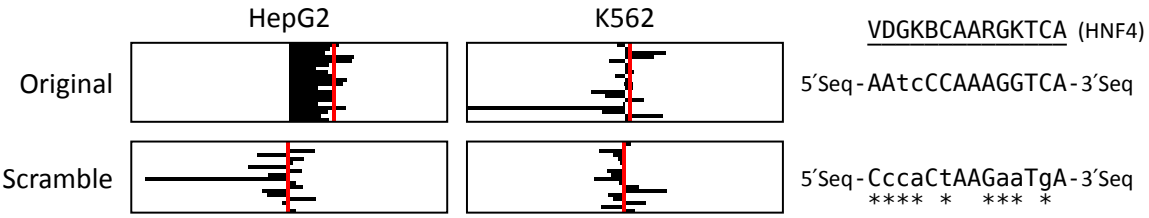


5′Seq = cactggagtcaccaagcctccggagccggccactggaggtccgcgtgcctcctaaagacagagaca
3′Seq = cacaaggccactggcgctctccctccgggtggatgattaacaccaggaatgtcctcgcctttgct

213 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr6 3355957 3355970 - (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-AAtcCCAAAGGTCA-3′Seq

5′Seq-CccaCtAAGaaTgA-3′Seq

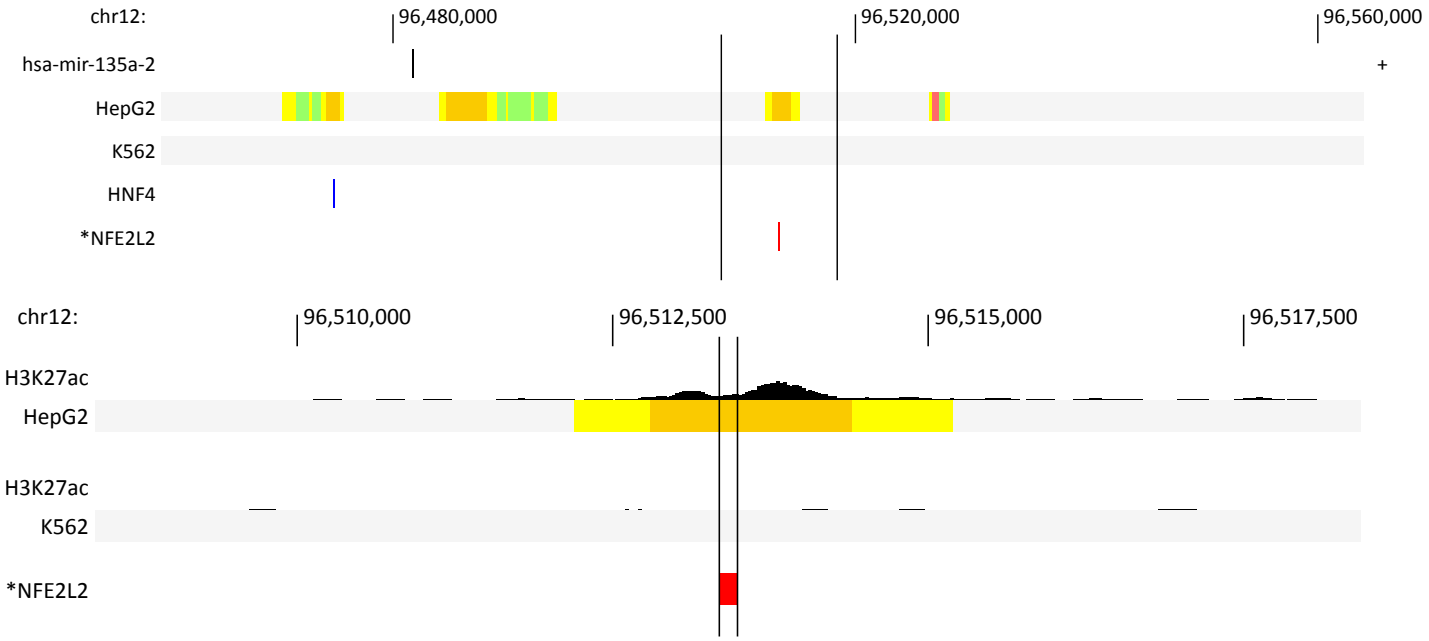
**** * *** *

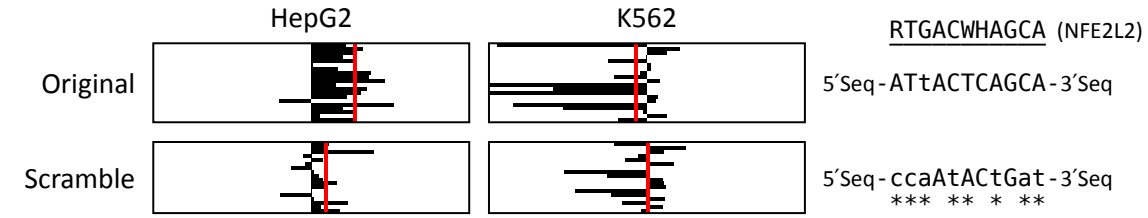
5′Seq = ttagttaacaacctggggagaggaaacaaagccgctttgcttggtgaccatgttgacttttgatcc

3′Seq = acgatttctcaagacttttatgctgggtgtatcaaggttcctgtttggagaattattaatttg

214 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr12 96513412 96513422 - (hg18)

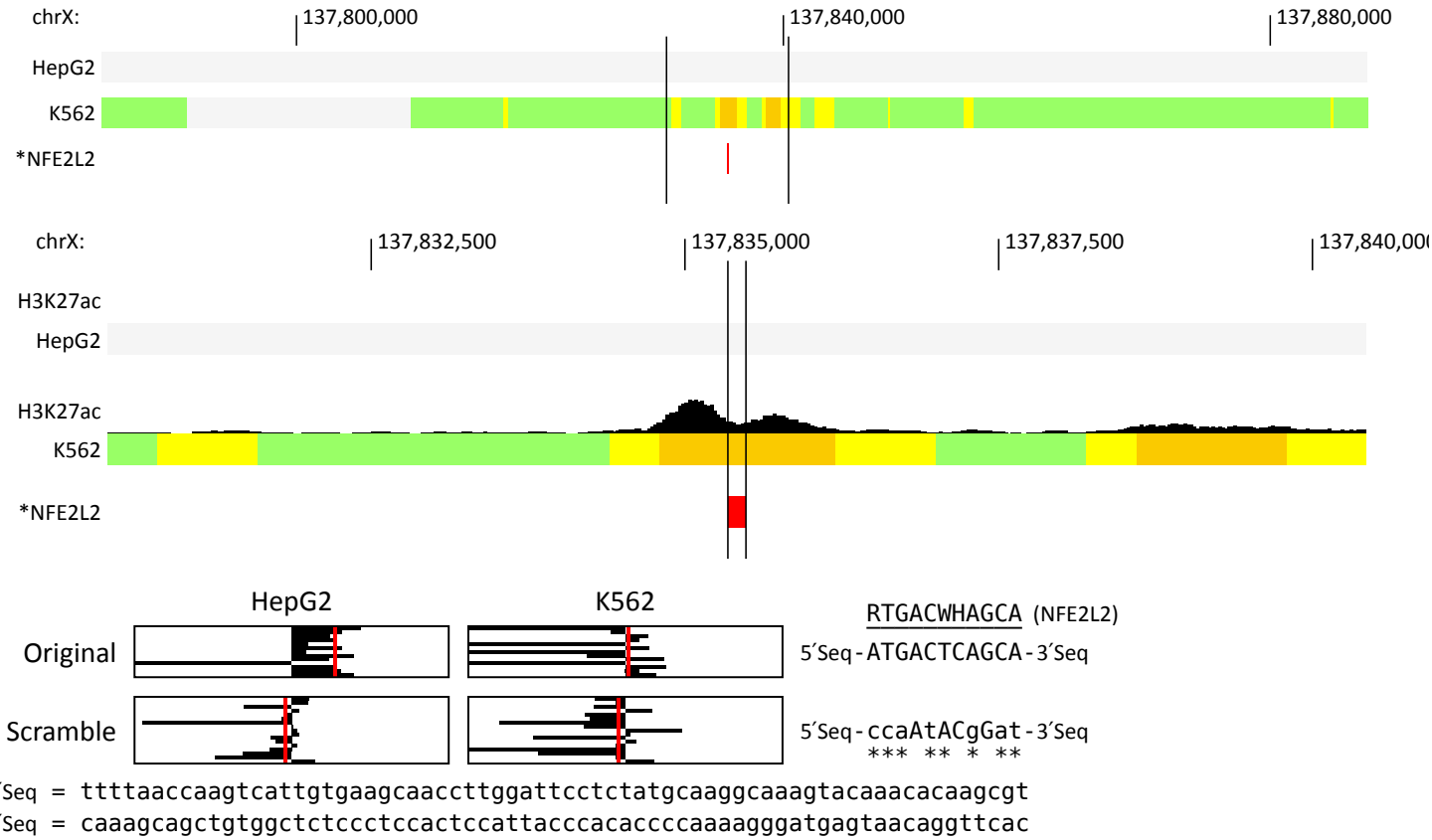




5′Seq = ttcattacccagaggataaacacaaagtggagaagccttttatcttgctgcaccggcaaacctcctt
3′Seq = tcgaacaaacatttgctaagagttaataaatccagagtgtggctttctttgttcggggaatgtccta

215 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chrX 137835409 137835419 + (hg18)

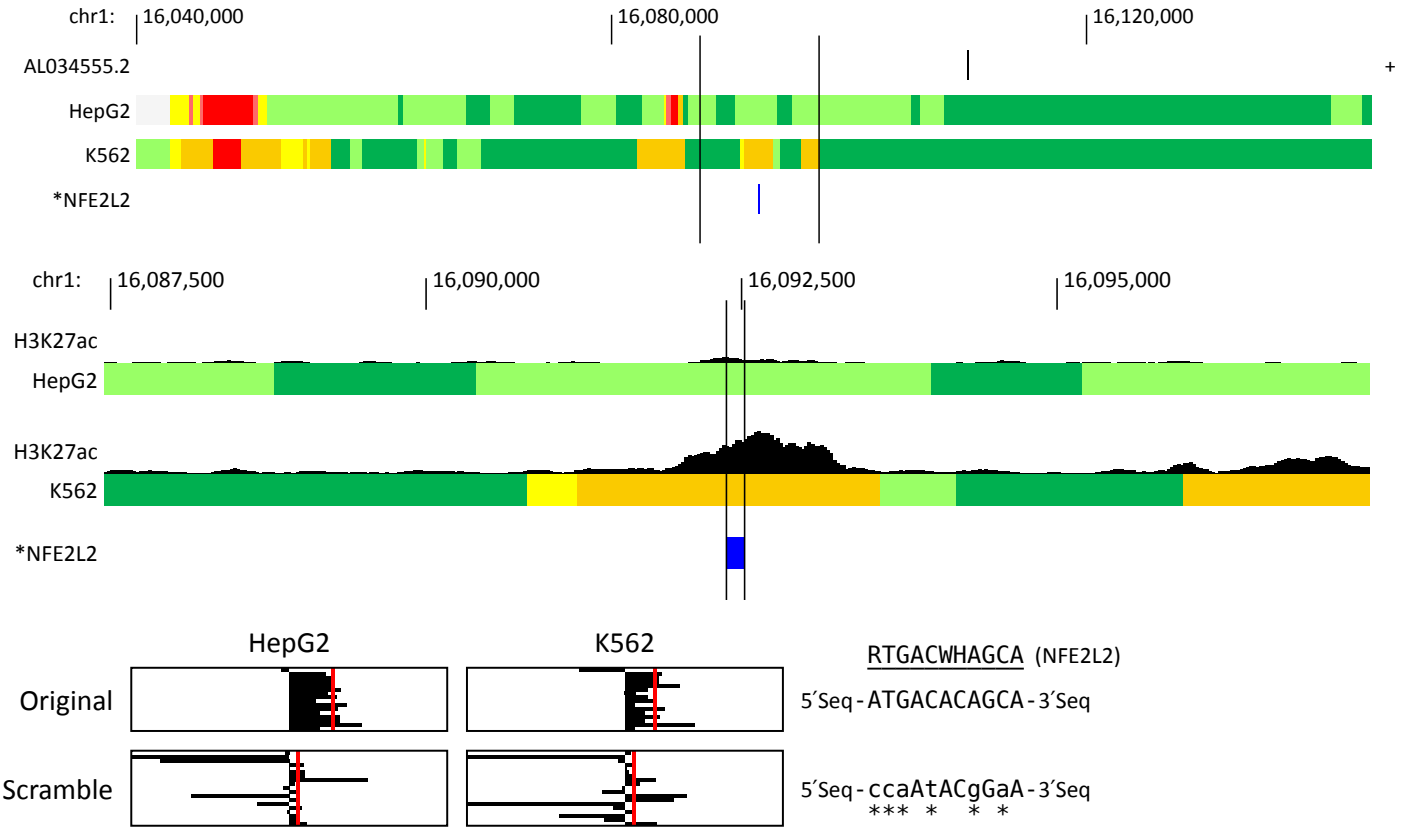


5′Seq = ttttaaccaagtcattgtgaagcaaccttggattcctctatgcaaggcaaagtacaaacacaagcgt

3′Seq = caaagcagctgtggctctccctccactccattacccacaccccaaaagggatgagtaacaggttcac

216 NFE2L2 in K562 enhancer

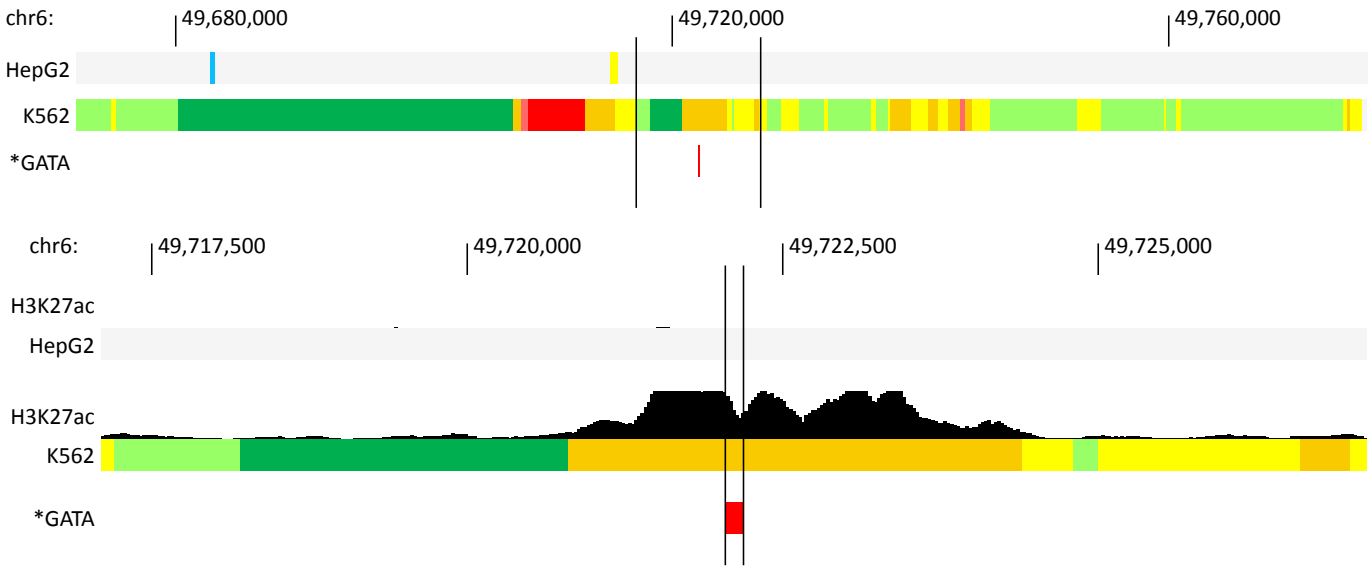
chr1 16092447 16092457 - (hg18)

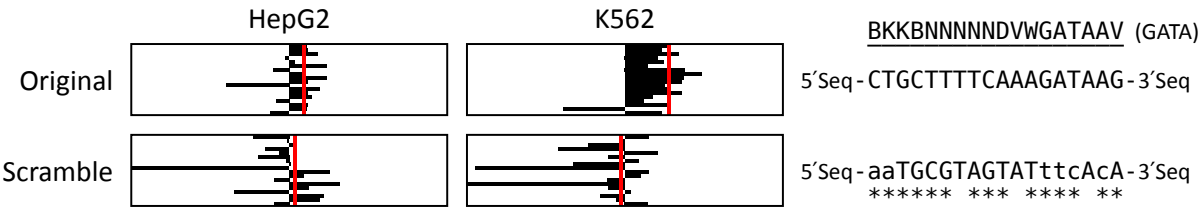


5′Seq = aattacttctctgcagtttcttccagtgacagatacaaagctacagtccaagatggctccacacacc
3′Seq = tattcaggaagctaatctgcccctccctaccaccatcgaaaataacatataaagaatcacagaactc

217 GATA in K562 enhancer (conserved at 70% confidence)

chr6 49722109 49722126 + (hg18)

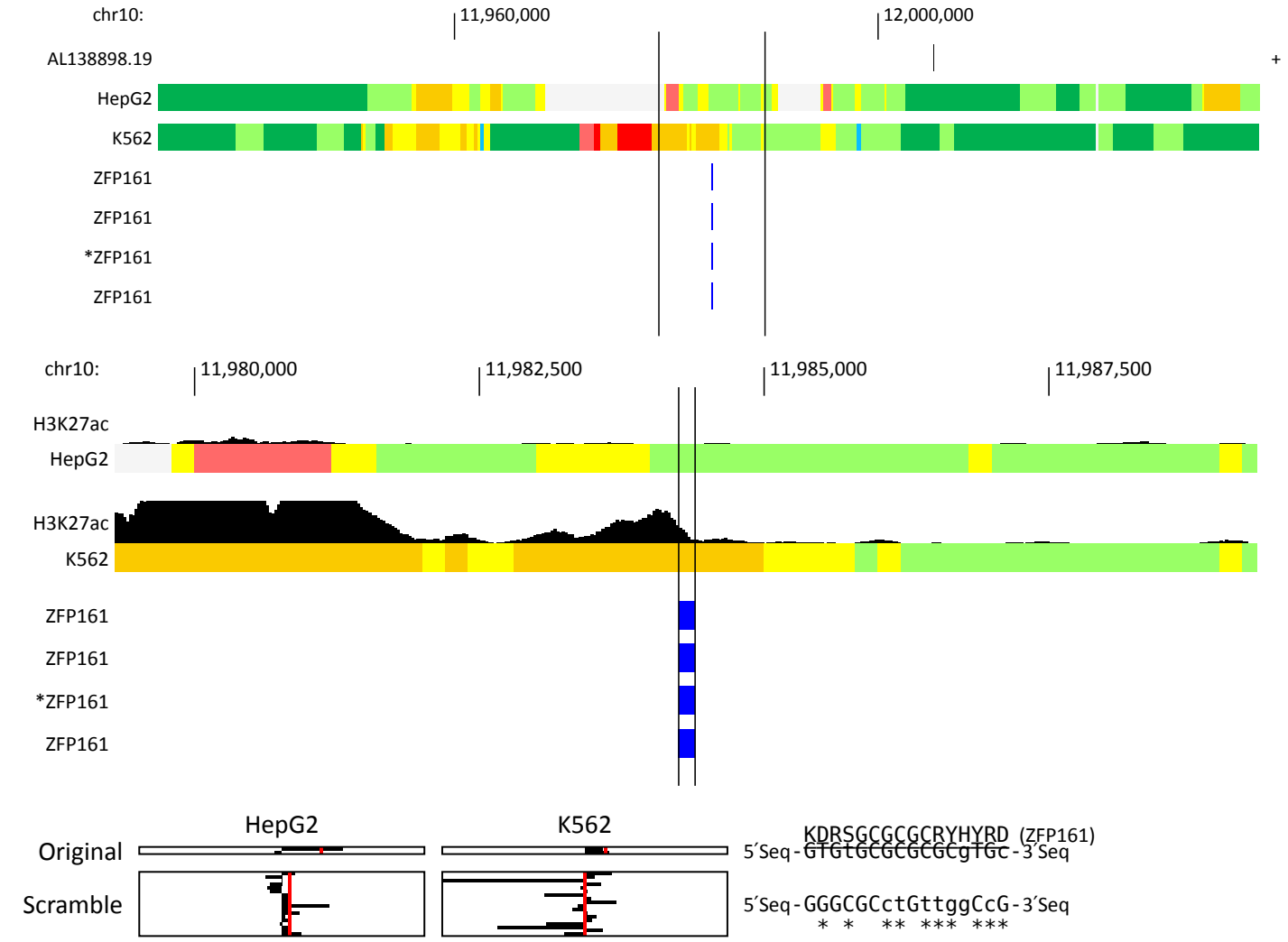




5′Seq = cccatgggagtacacagcttaagtgaaggggaagtcacataagtcagacatggtcttgagcaag
3′Seq = gttggaattgaagagcttcccagaaaatatgacagatctttatttctttttttttttcagaa

218 ZFP161 in K562 enhancer

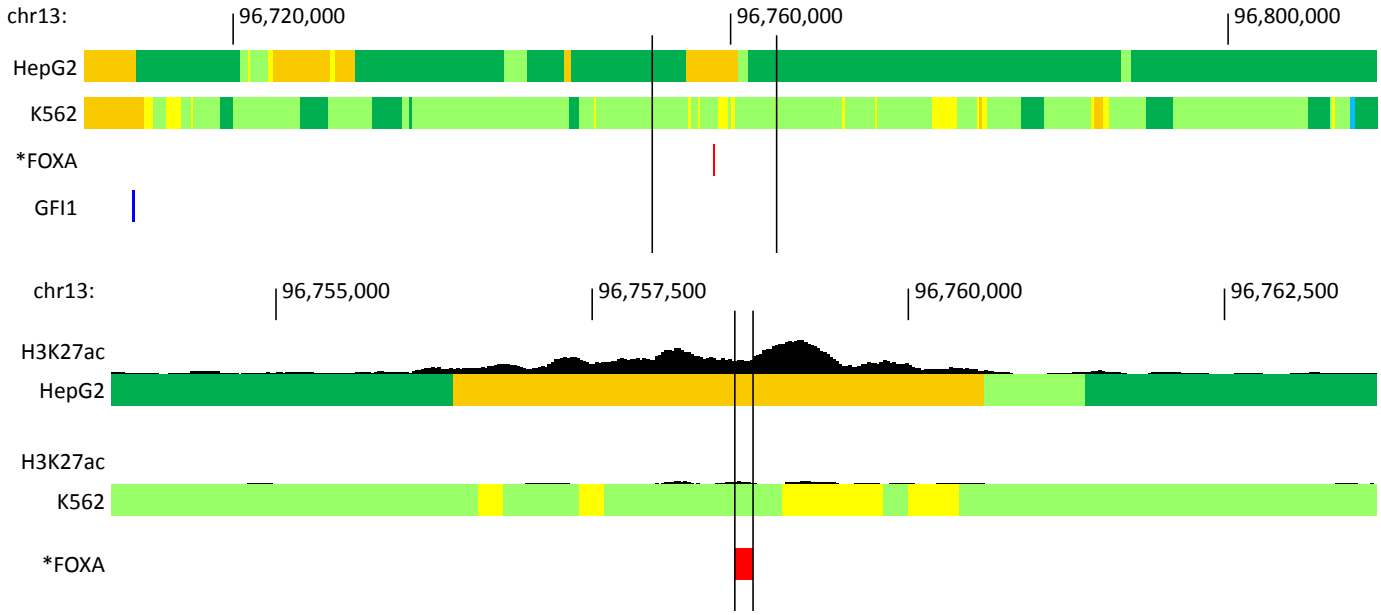
chr10 11984315 11984330 + (hg18)

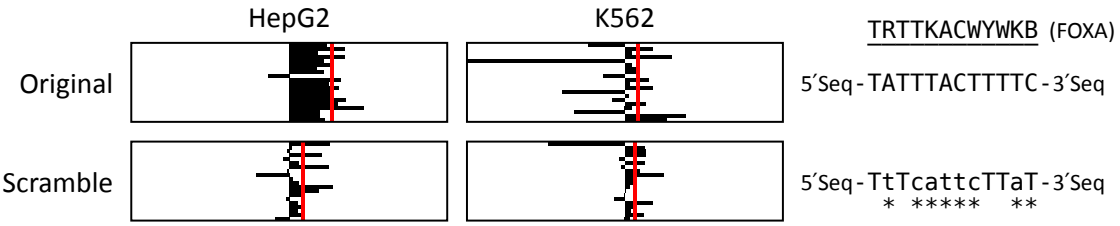


5′Seq = tttagggctcagcttgactgtgccctgctccatgtcacctcccacttgccctaatctcactgtat
3′Seq = gcgcgcacacacacacacacacacacacacacagatgtactgctgcctttcctgcagtgaccacat

219 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr13 96758695 96758706 + (hg18)

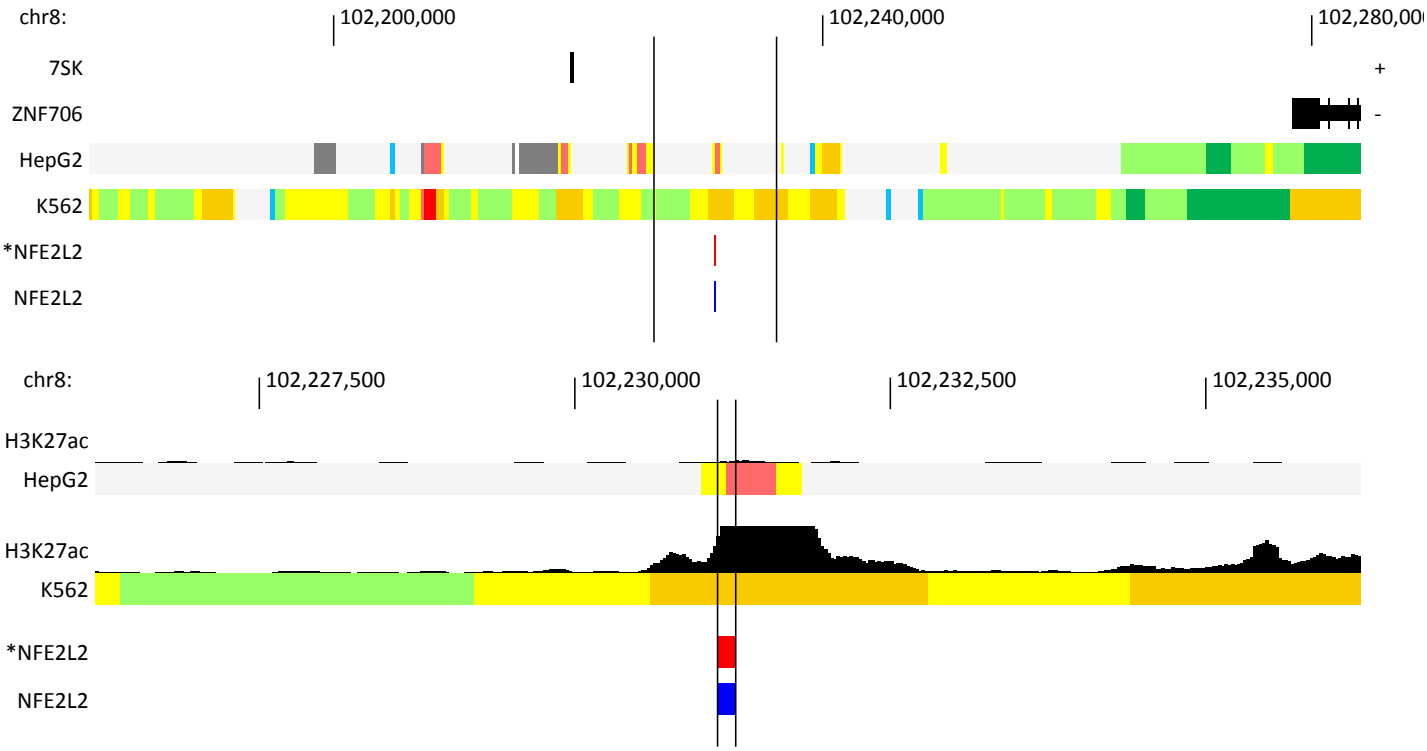


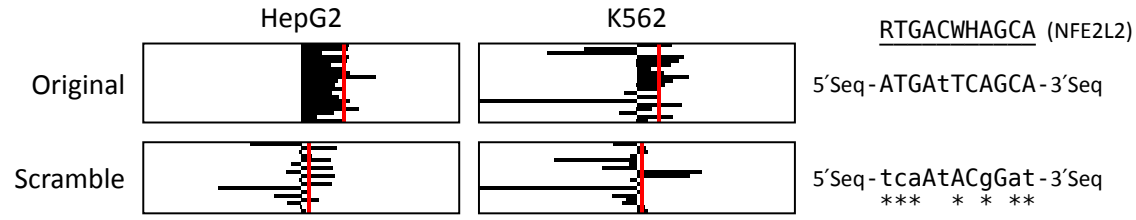


5′Seq = aaacatttggctggataacaaatccatcccctctgttagagaaaggtcatccctctggccatctggg
3′Seq = tttagaaatgagcttcatggaattttctgttggaaggggaaaatgatgaggacaaagggaatttcc

220 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 102231198 102231208 - (hg18)

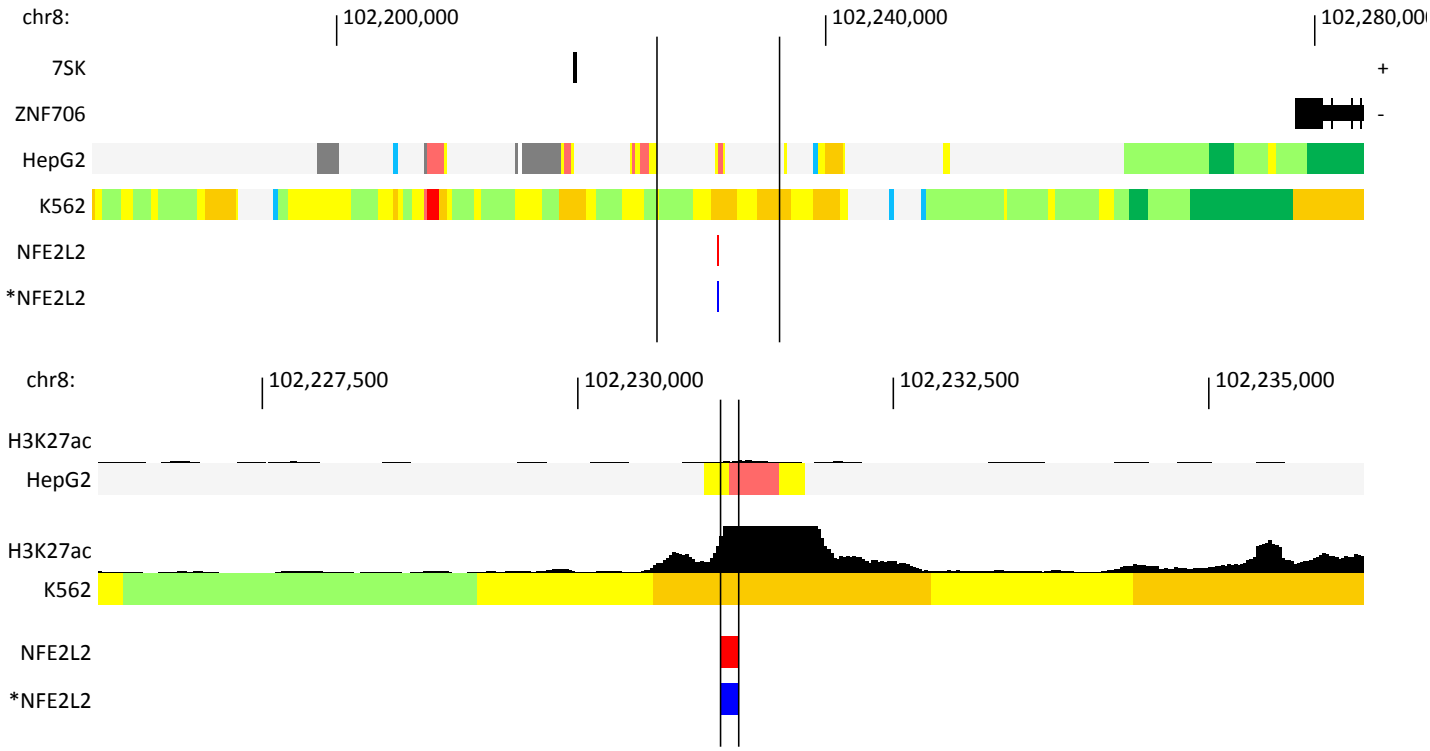


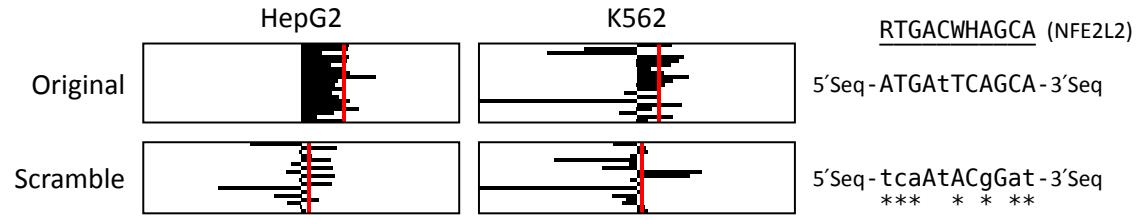


5′Seq = ggaacacacaagggcataattacagtgagctttgtccagctaacacaccaataatttgcctcacgga
3′Seq = ataaccctgccagagttcccaaagaaactccatatctgggatgatgtaatgtctccccacctctgat

221 NFE2L2 in K562 enhancer

chr8 102231198 102231208 - (hg18)

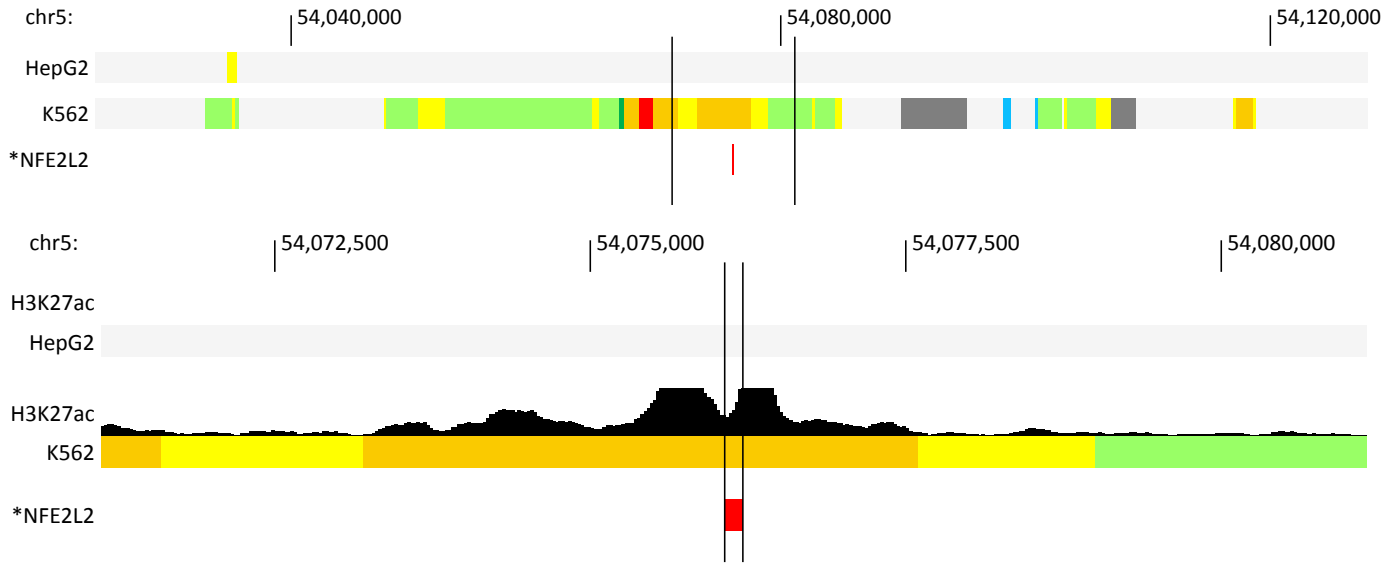


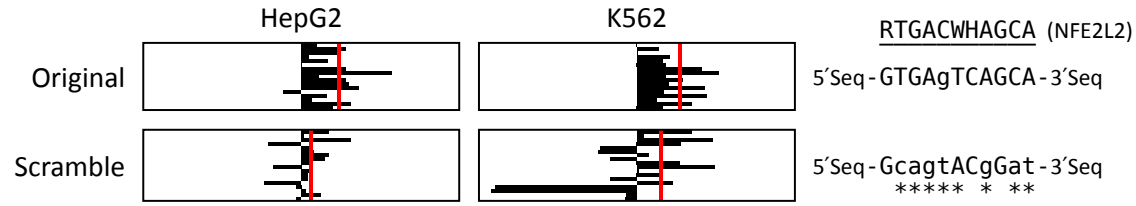


5′Seq = ggaacacacaagggcataattacagtgagctttgtccagctaacacaccaataatttgcctcacgga
3′Seq = ataaccctgccagagttcccaaagaaactccatatctgggatgatgtaatgtctccccacctctgat

222 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr5 54076132 54076142 + (hg18)





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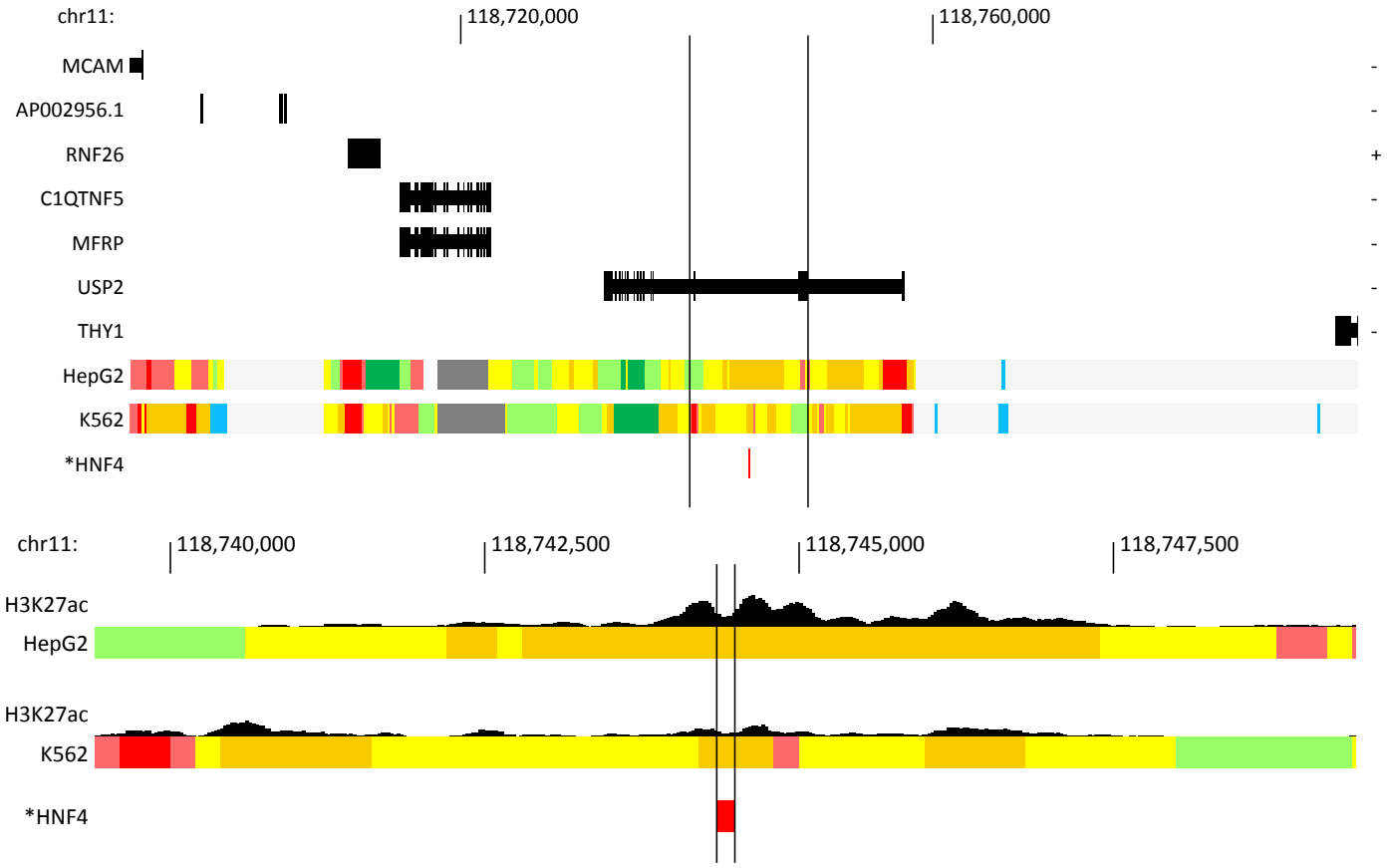
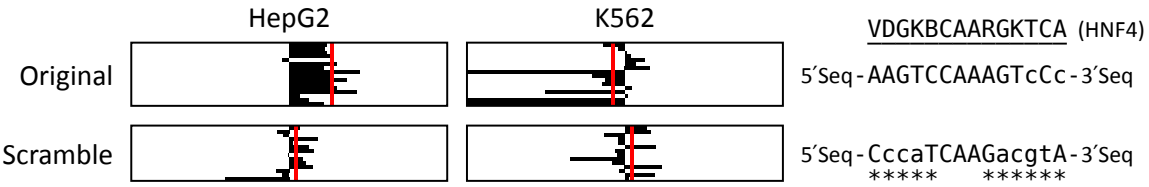
3′Seq = gtttcttgttctacagagaggtaaaactggtggtgtcagggccgtgggggggttgaatgagctttgtg

223 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr11 118744411 118744424 + (hg18)

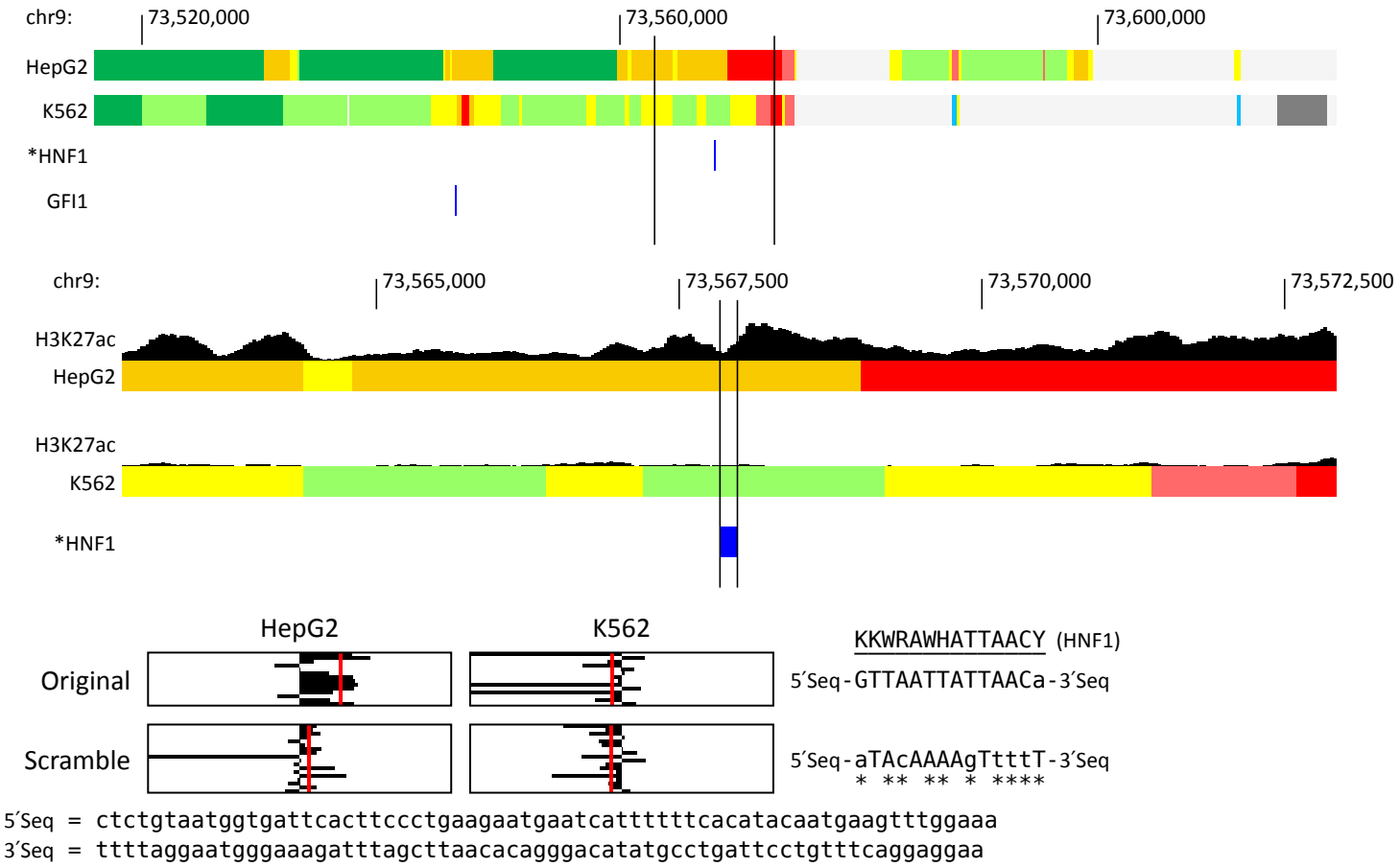




5′Seq = gacagcccctgctatccgcaatttgttctctttggagtaacctccgctcactgcagggcagcattc
3′Seq = accccagggaaaaatcacatgacctcagcttatataatctccctgtcactgaacagctggaaccc

224 HNF1 in HepG2 enhancer

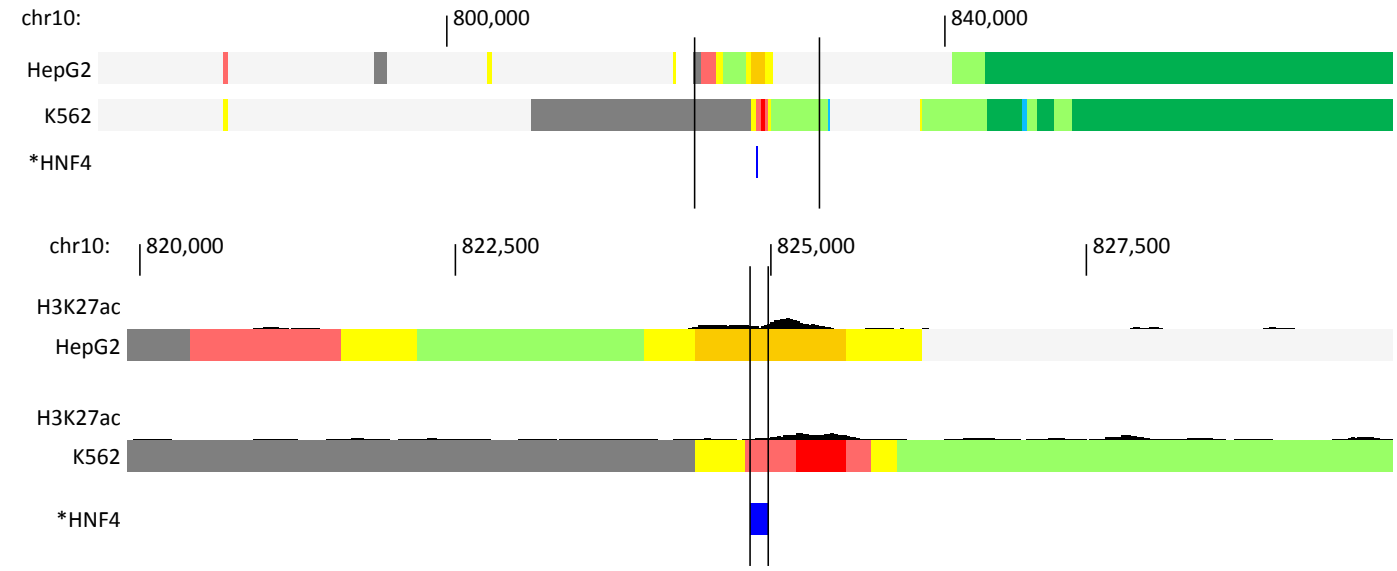
chr9 73567903 73567916 - (hg18)

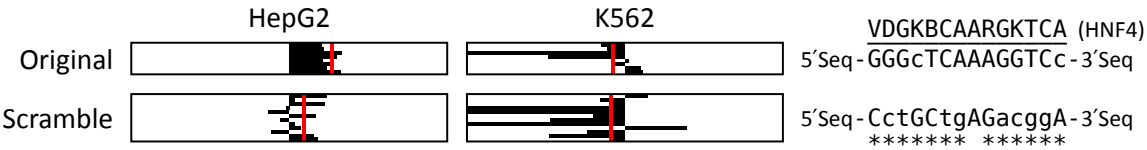


5′Seq = ctctgtaatggtgattcacttccctgaagaatgaatcatttttcacatacaatgaagtttggaaa
3′Seq = ttttaggaatgggaaagatttagcttaacacagggacatatgcctgattcctgtttcaggaggaa

225 HNF4 in HepG2 enhancer

chr10 824901 824914 + (hg18)

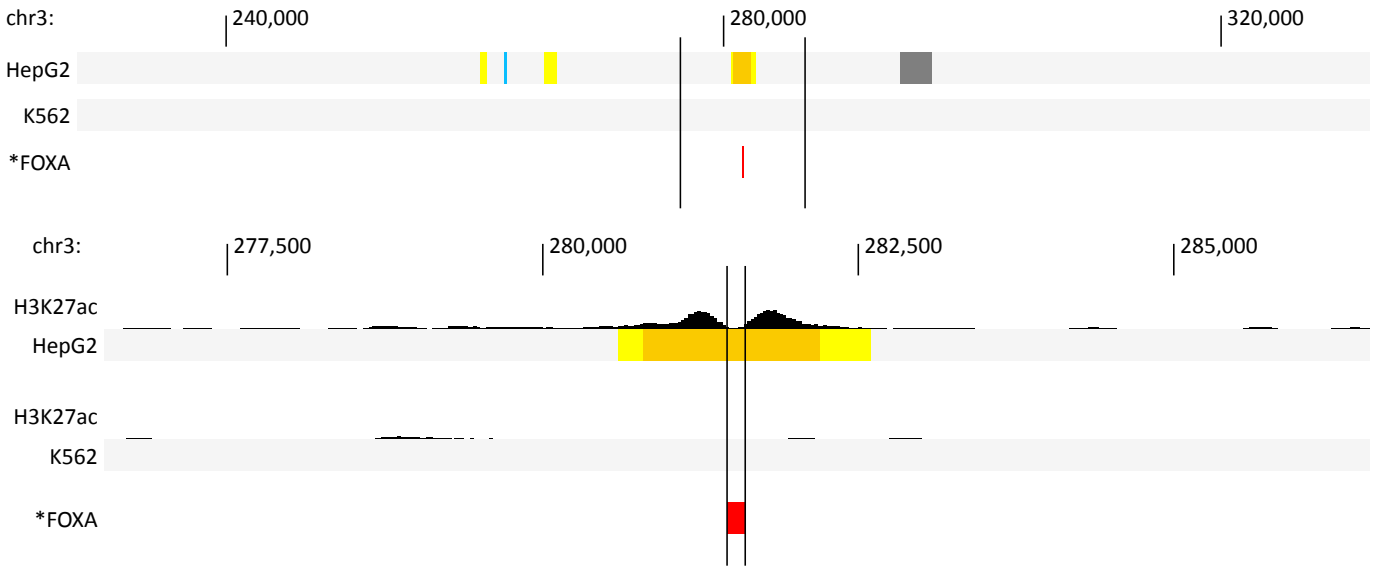


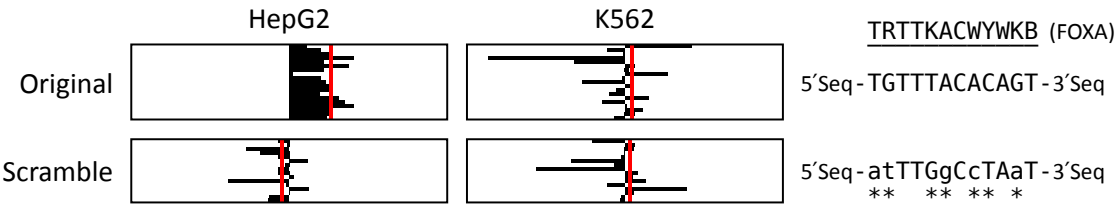


5′Seq = ggggcaggggacgtcggcttggctgtcctctgtgcgctccagctgggaggccgcttggccccgct
3′Seq = ccctgacggacgtgccttgatgttgccacgttggacgggattaaagtgctgaggctgctgtgacg

226 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 281527 281538 - (hg18)

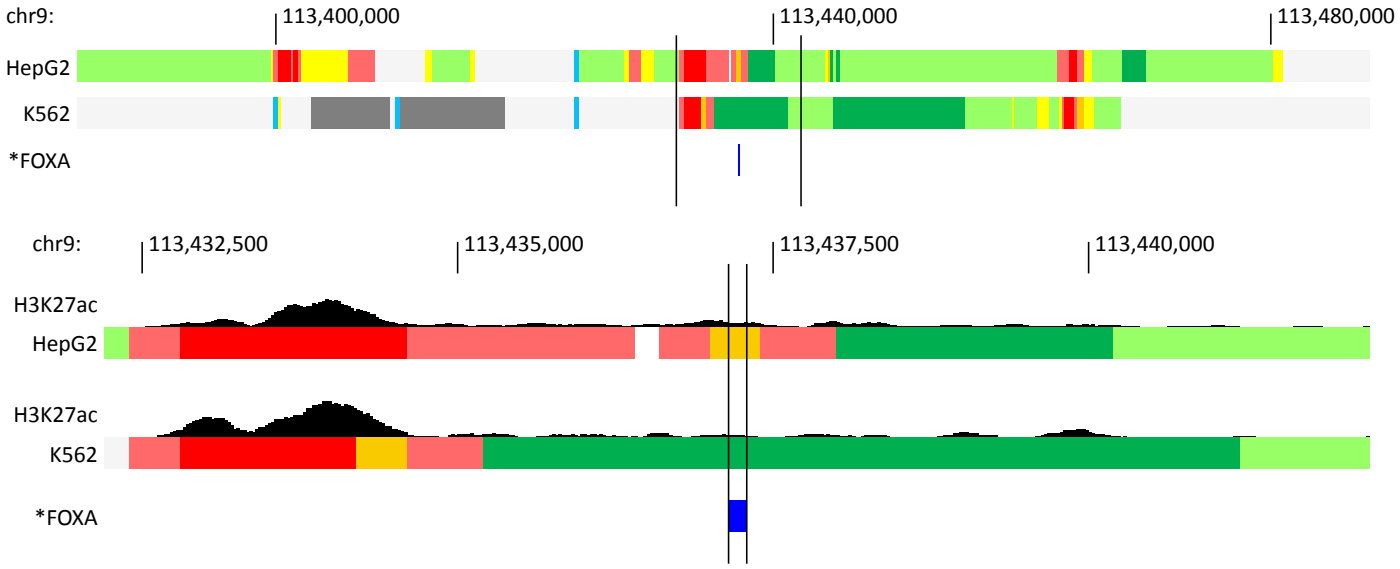


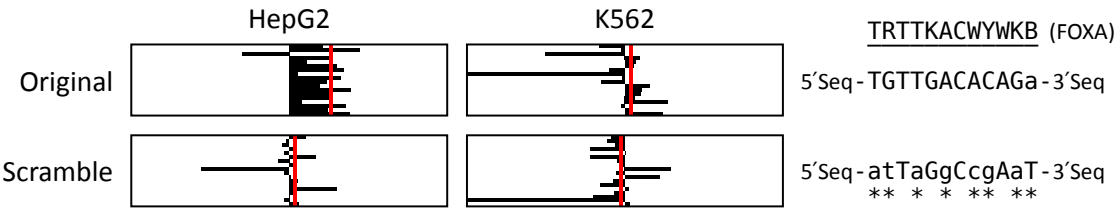


5′Seq = gtgttcaaaataaaggcacttcaaagtggtctctatgactgaccaggaagcaatgactggaaaggaa
3′Seq = gttgtagatgtctaattcactaagtacgctggtattttacgcaaacagtccattgcgaaagagaca

227 FOXA in HepG2 enhancer

chr9 113437214 113437225 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTGACACAGa-3′Seq

5′Seq-atTaGgCcgAaT-3′Seq

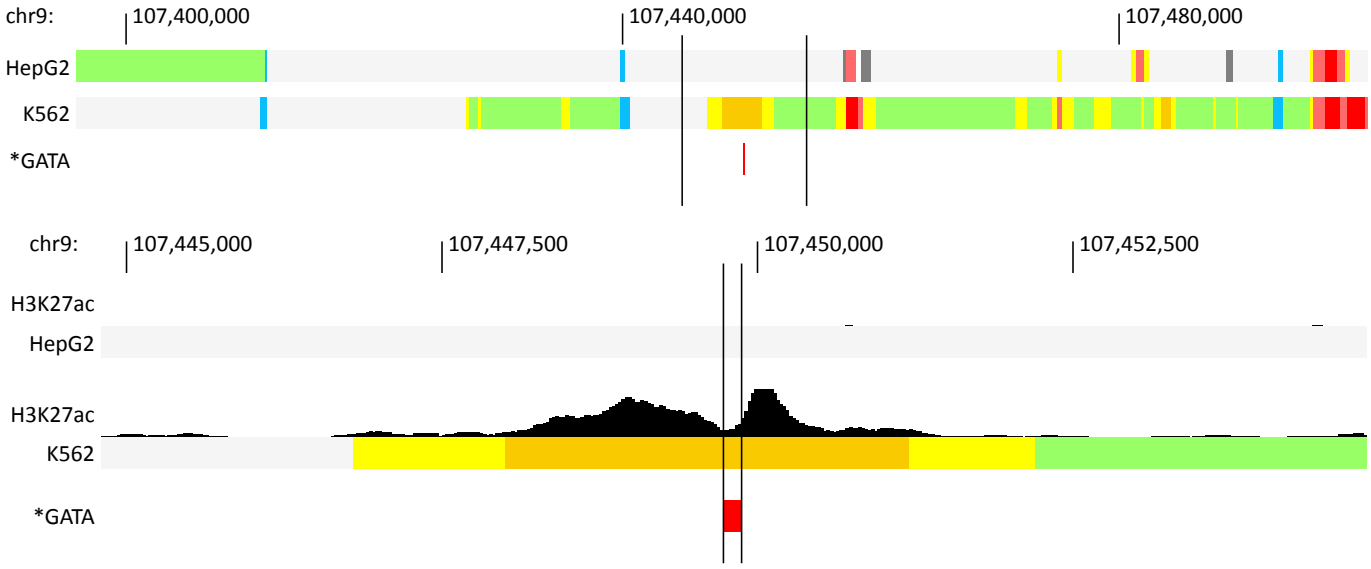
** * * ** **

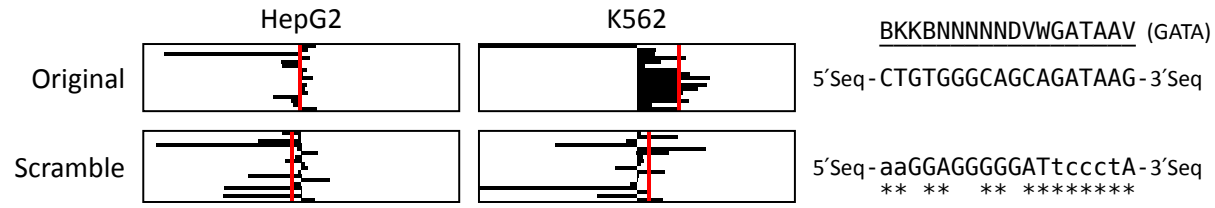
5′Seq = gataagtgctatagccactttaaaaacatgtaagtgggaccagattattctacctcatgagatccaa

3′Seq = gggtaagtgtccacttgtttaacttccaaagtccataaactccctaaatccccaaaagtcaaacac

228 GATA in K562 enhancer (conserved at 70% confidence)

chr9 107449794 107449811 - (hg18)

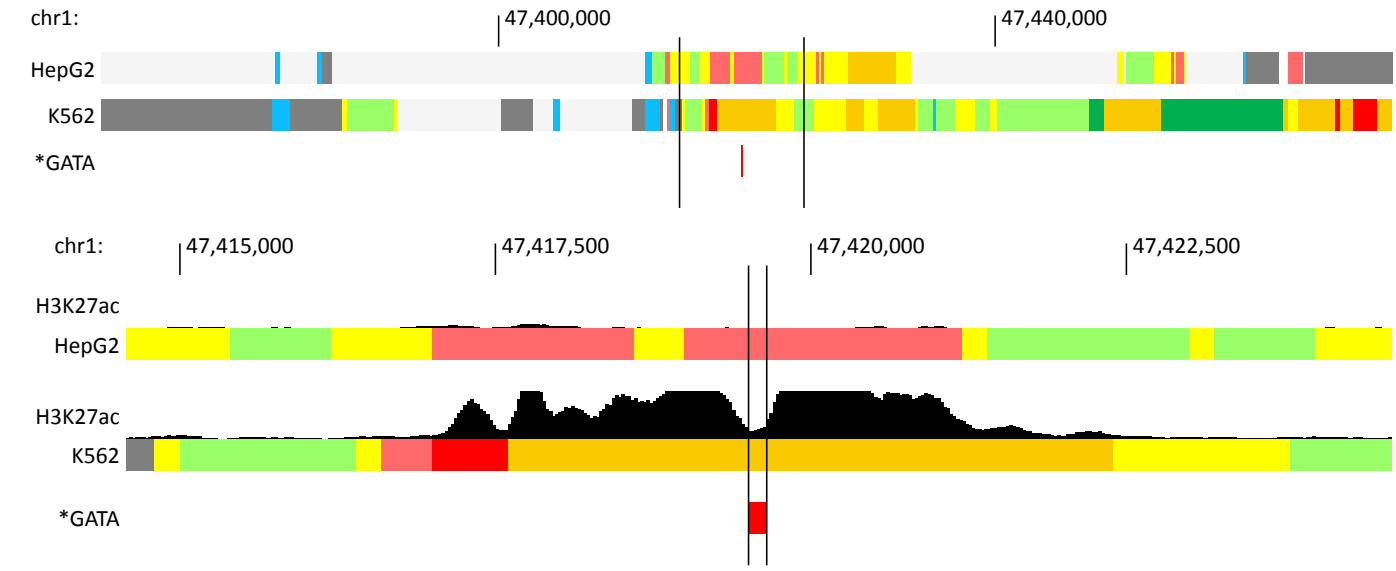


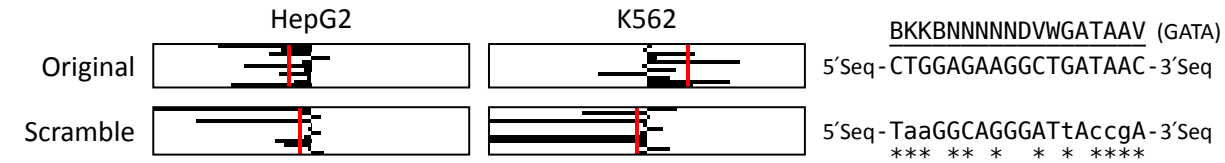


5′Seq = tctctggtctttgtgtaagggacgtgactcatcgatgggtctcctagatgaggatttagatgct
3′Seq = agtgcagcctacttgcagaaagtaaattcattgaatactccccataaagtcaatactgtcagg

229 GATA in K562 enhancer (conserved at 60% confidence)

chr1 47419570 47419587 - (hg18)





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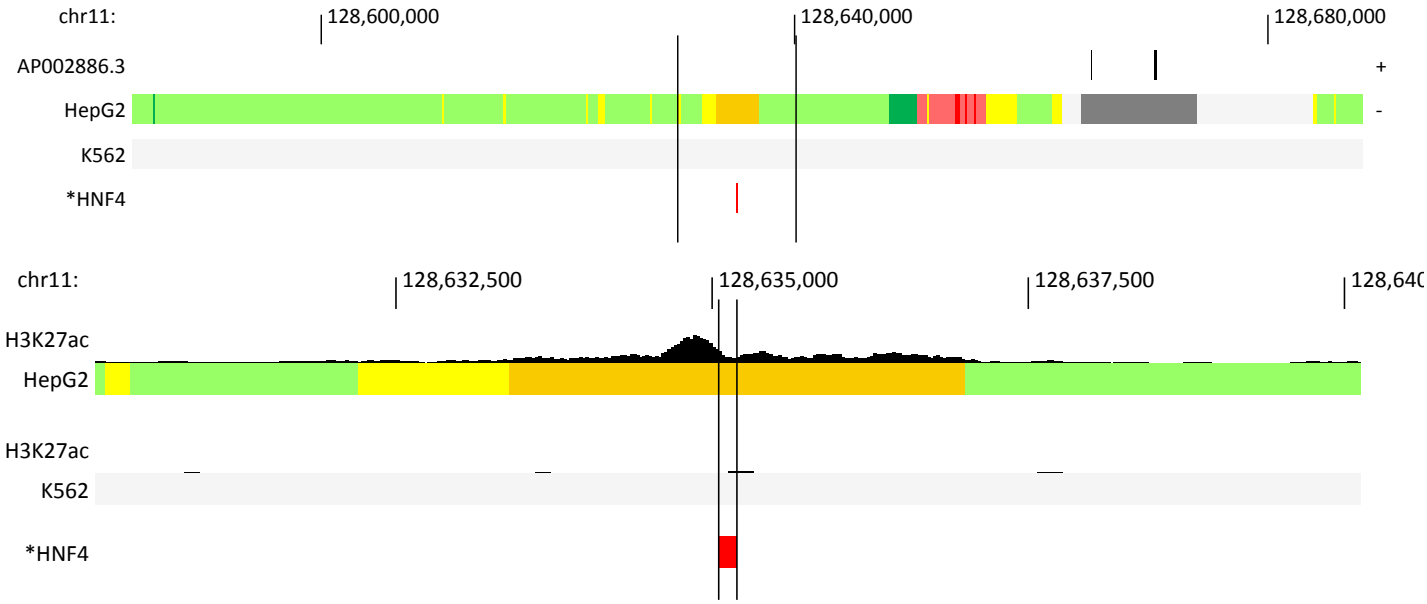
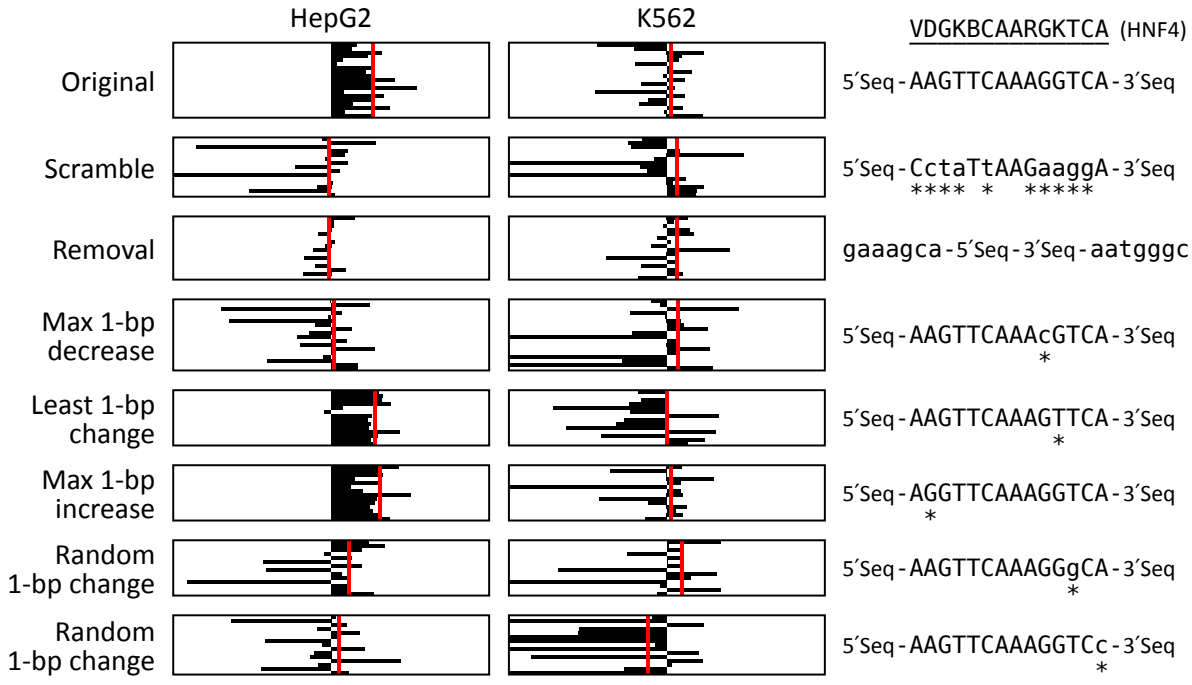
3′Seq = gcaccagctgggcccccaccatctatcgctgcacagccagtcccaggggcagcctcccagggc

230 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr11 128635118 128635131 + (hg18)

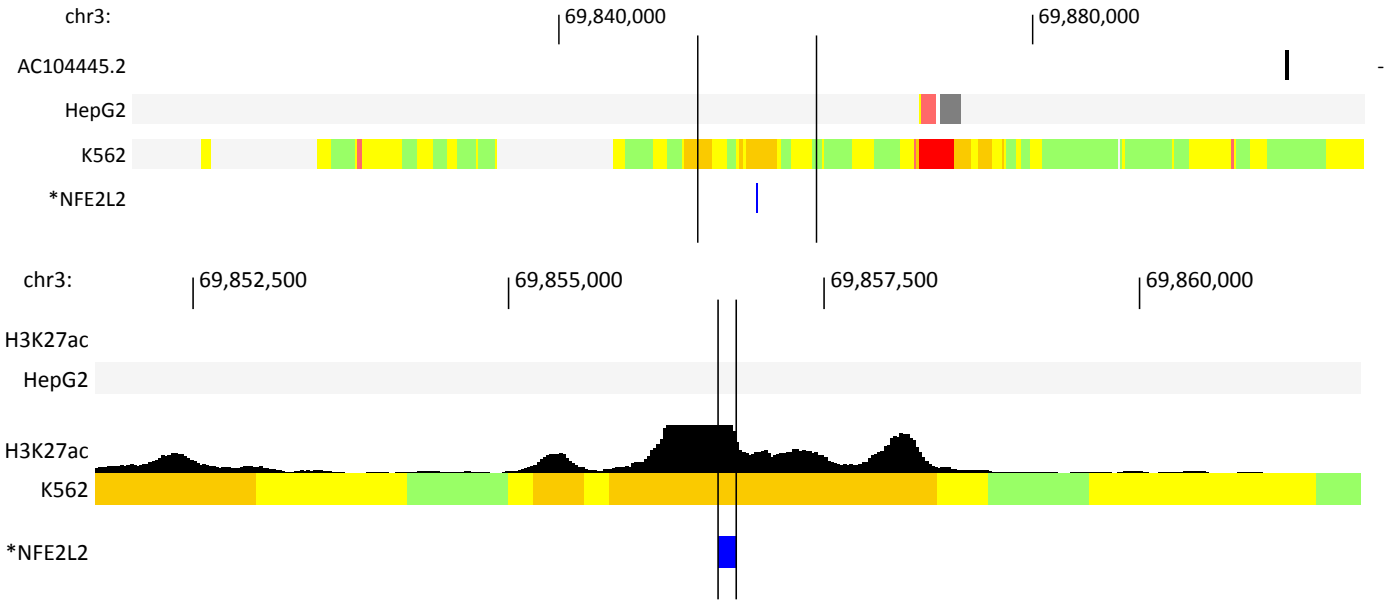


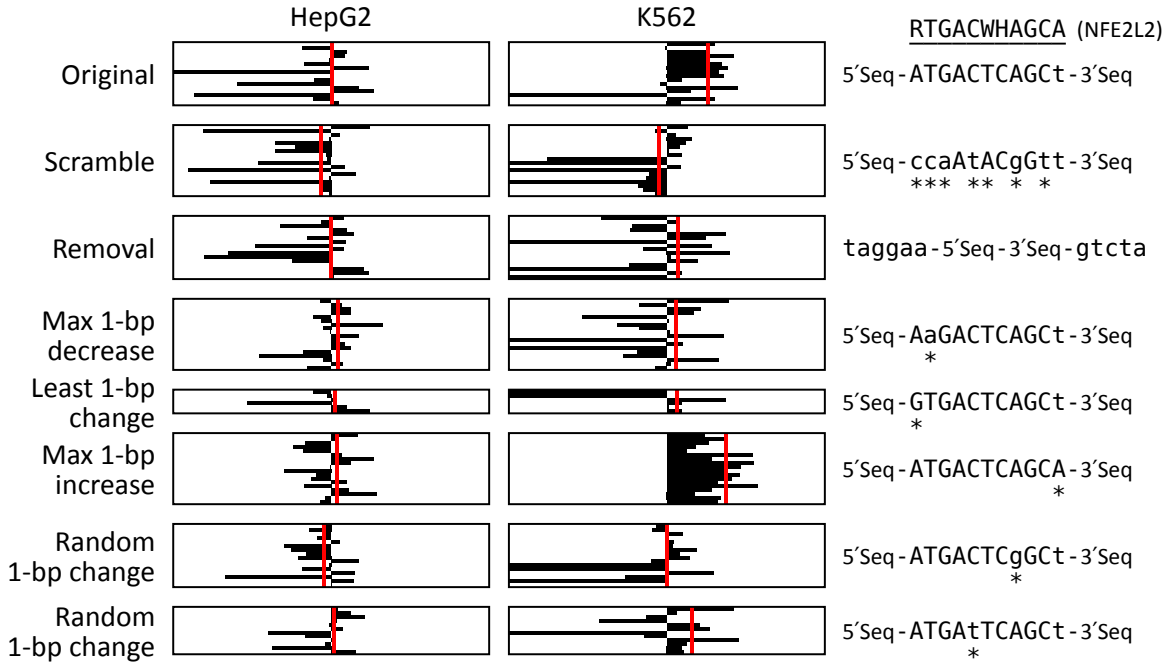


5′Seq = tatcccaagtctactggcagctttcccattctcaaacaatcccttgttcagatgcacagccacag
3′Seq = ctggcatctttgtgctcagttccatggtagttacaaacaaactttgtctccattccttcaatga

231 NFE2L2 in K562 enhancer

chr3 69856727 69856737 + (hg18)





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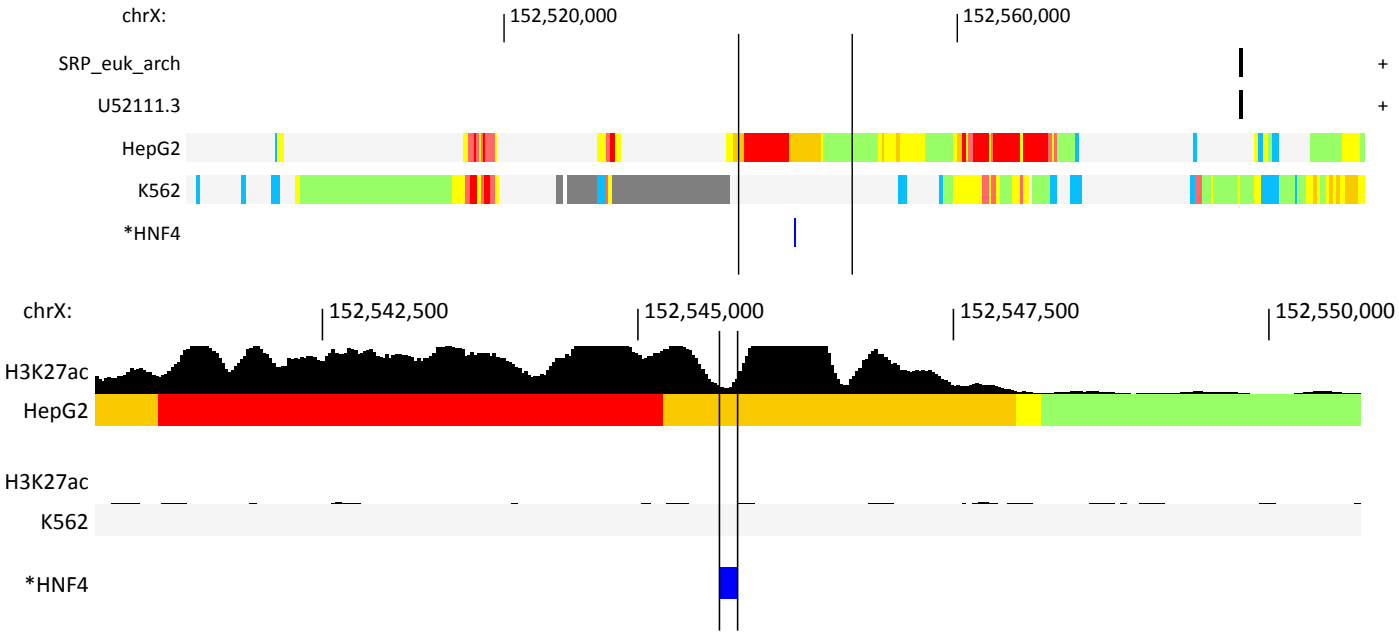
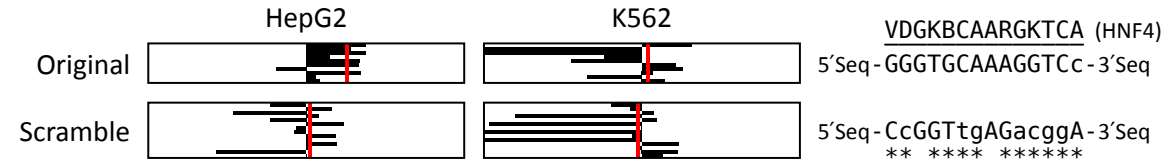
3′Seq = ccaacagccttttctcccagggtttcttagtgggaggtccagttcgctgagatagcaaggtttatcg

232 HNF4 in HepG2 enhancer

chrX 152545712 152545725 - (hg18)





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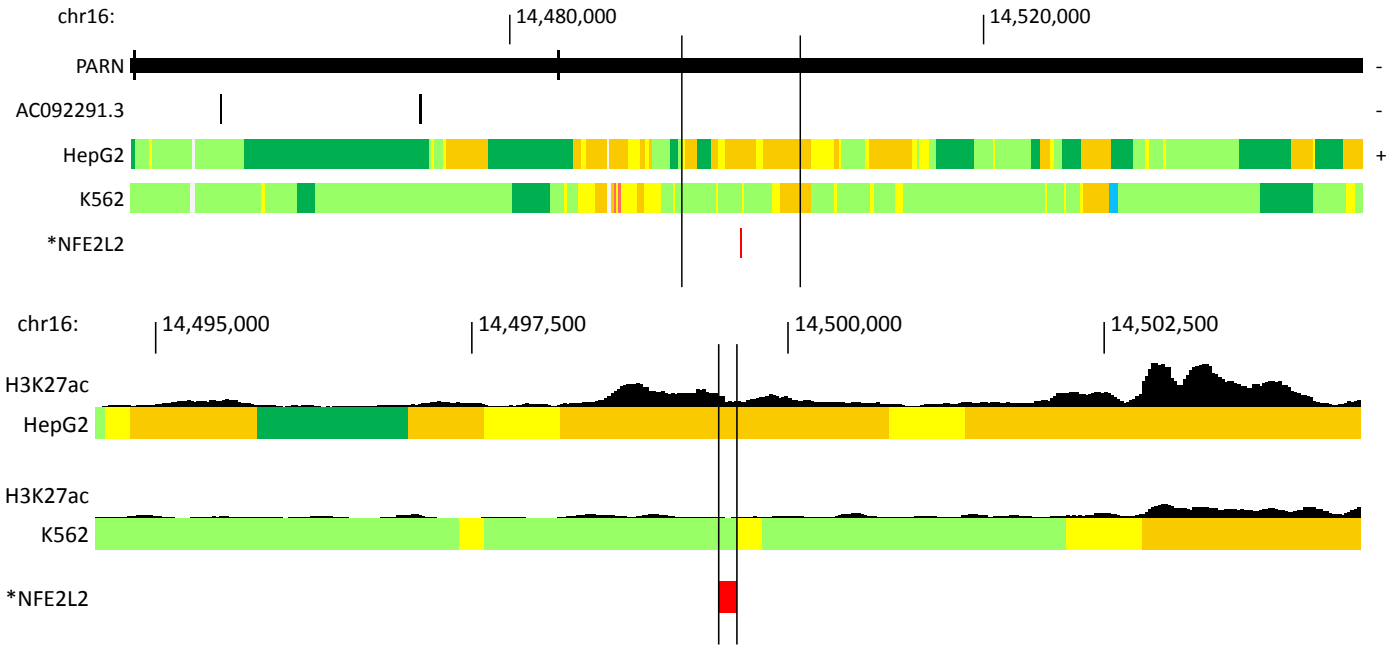
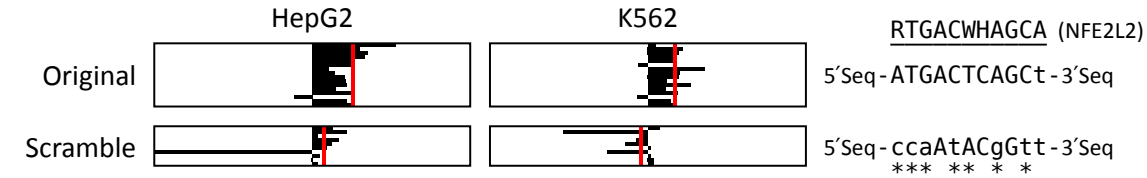
3′Seq = ccccgccccccgcctccacggcccaggaggactctgggctcagctcattccctcgtgtcggagtg

233 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr16 14499519 14499529 + (hg18)

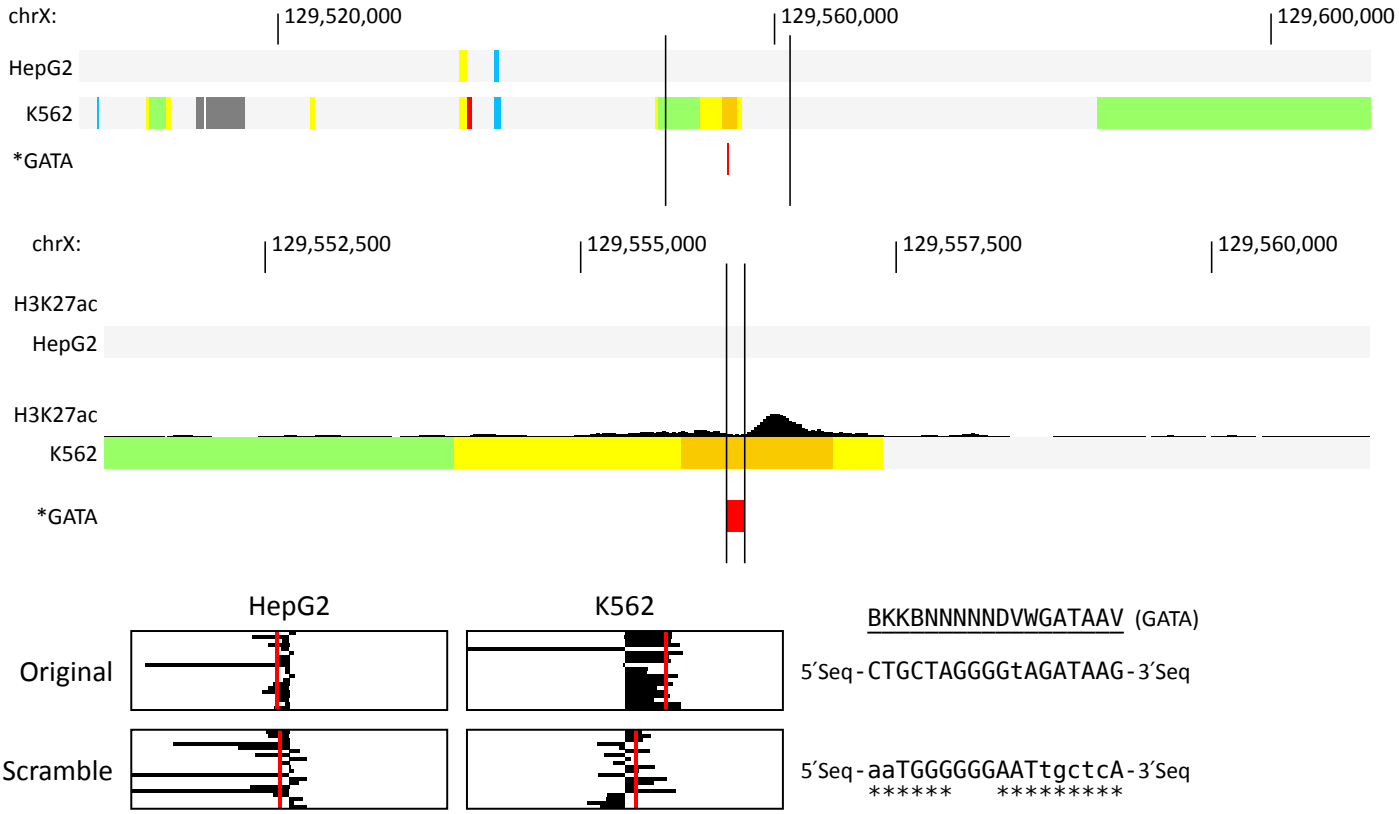




5′Seq = agcctggcaatagagagagactccatctcaaaaaaaaaaaaaaaaaaaaagaatttacttatacctc
3′Seq = tattcattaacccagtgaaaccccggaggagaggaggggaactggagagagaaagagaatgatgggc

234 GATA in K562 enhancer (conserved at 60% confidence)

chrX 129556220 129556237 + (hg18)



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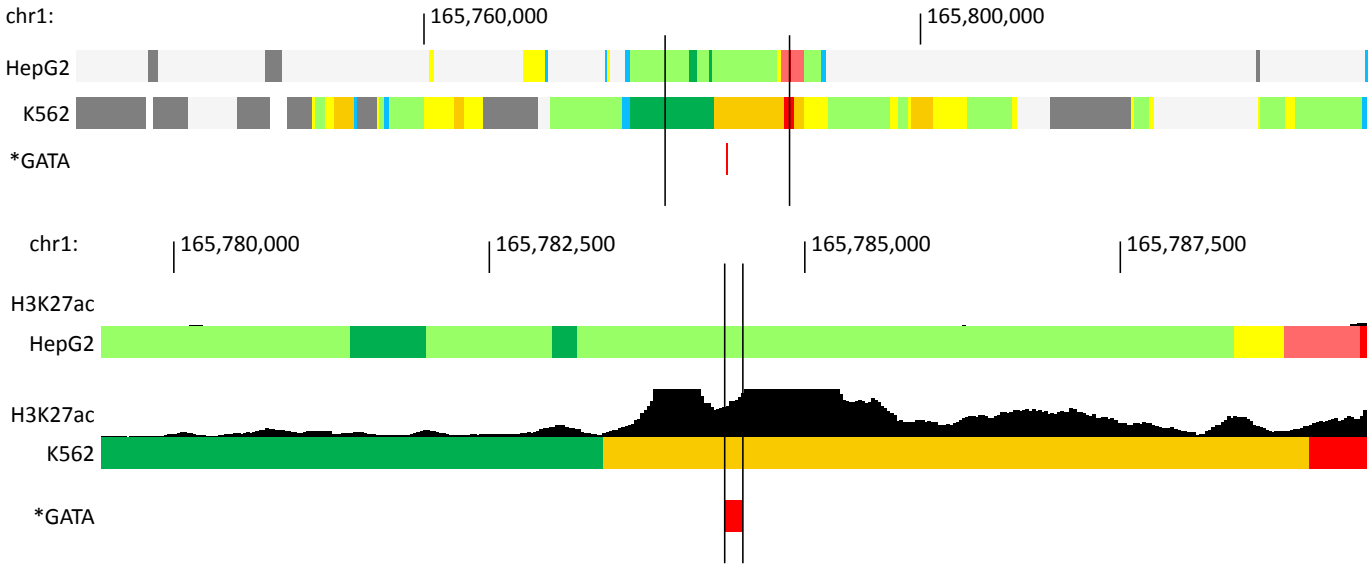
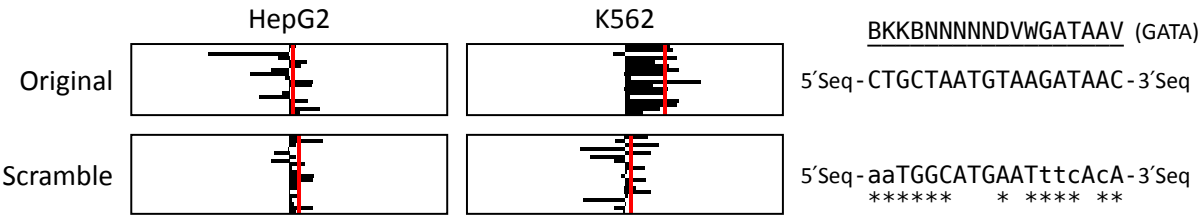
3′Seq = agctgcaggtcaccagcaccacatgtgacctgcttgtgatataagccacgtgctttatgctgt

235 GATA in K562 enhancer (conserved at 60% confidence)

chr1 165784429 165784446 - (hg18)





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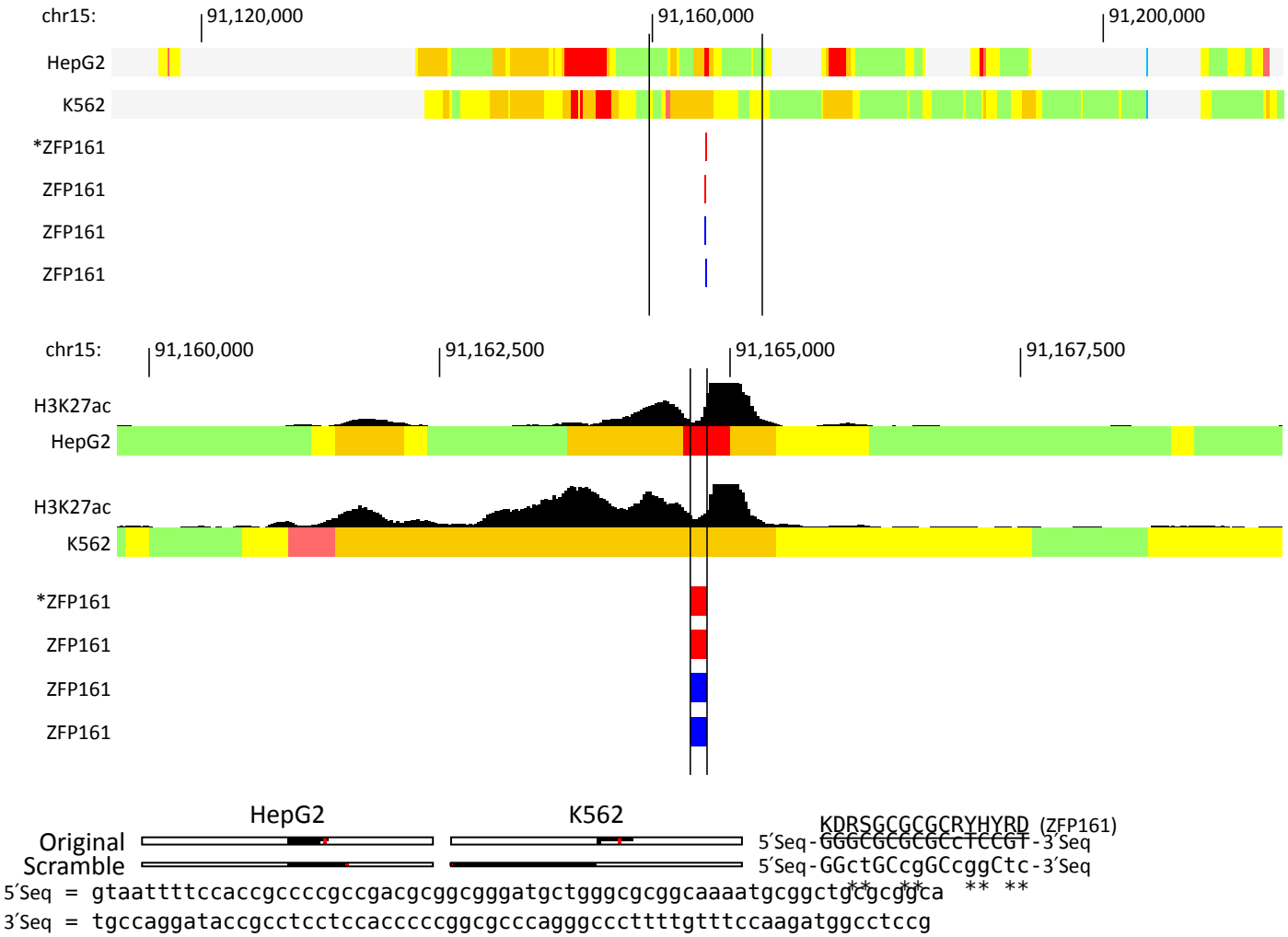
3′Seq = caagtagcatgattcagctactttcttgcttaaatcgcgtagttagccaattgagcaactgtg

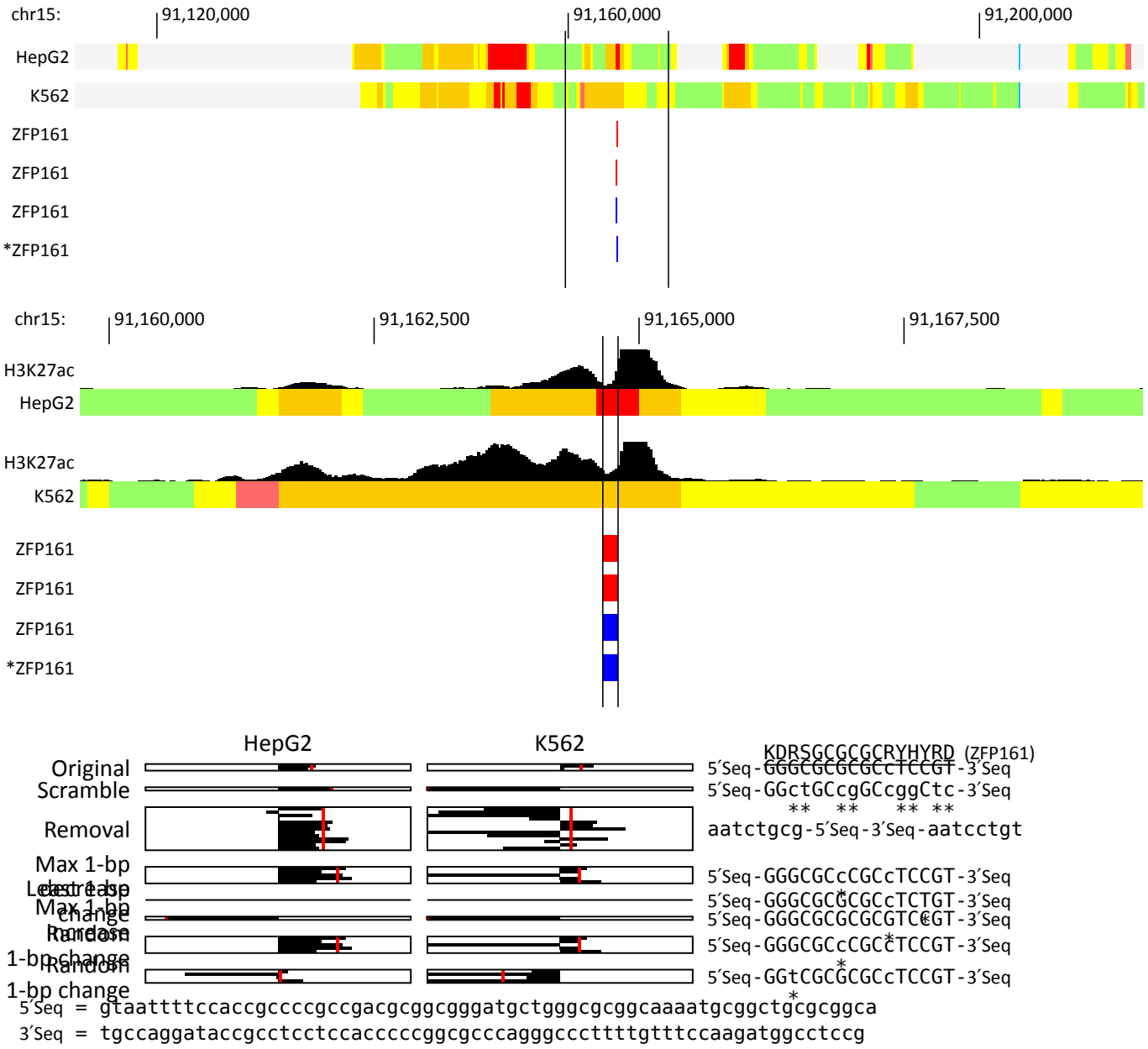
236 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr15 91164723 91164738 + (hg18)



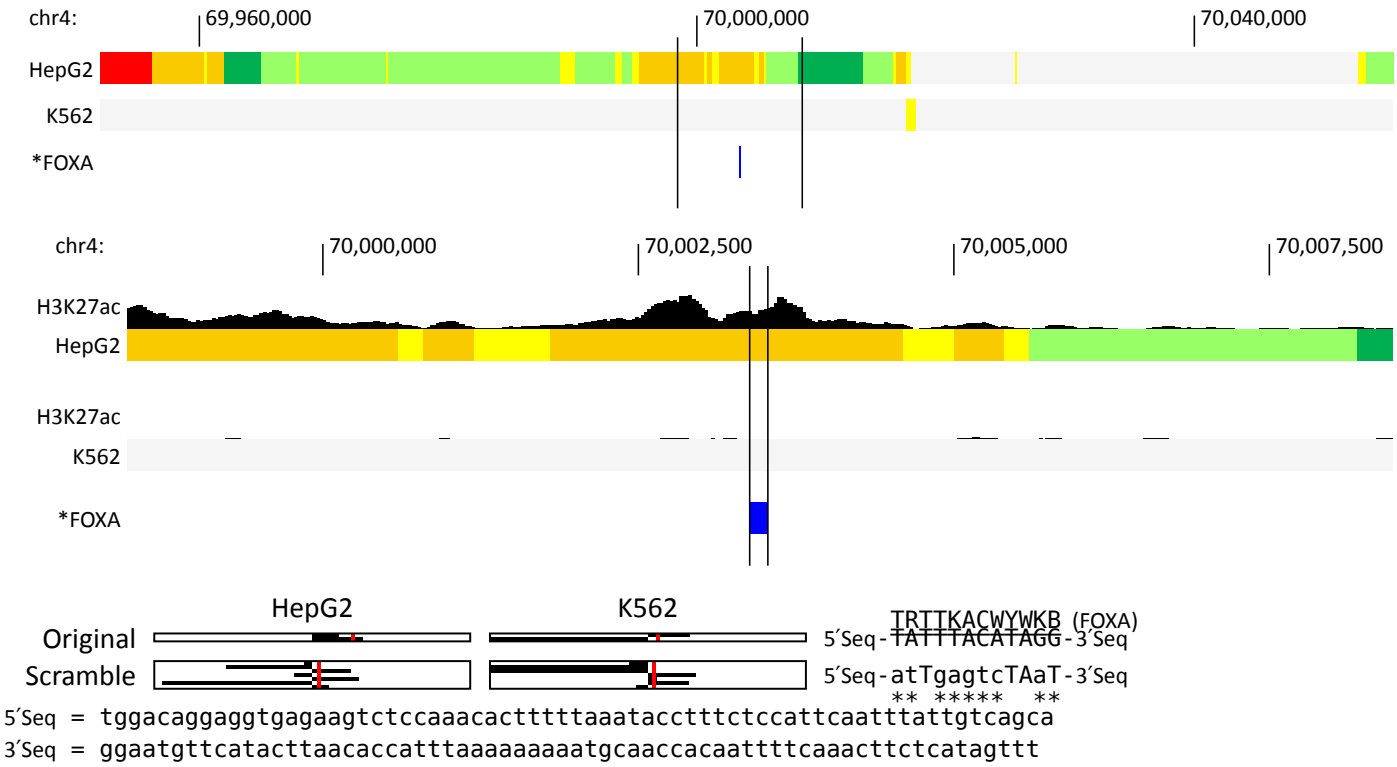
237 ZFP161 in K562 enhancer

chr15 91164723 91164738 + (hg18)



238 FOXA in HepG2 enhancer

chr4 70003449 70003460 - (hg18)



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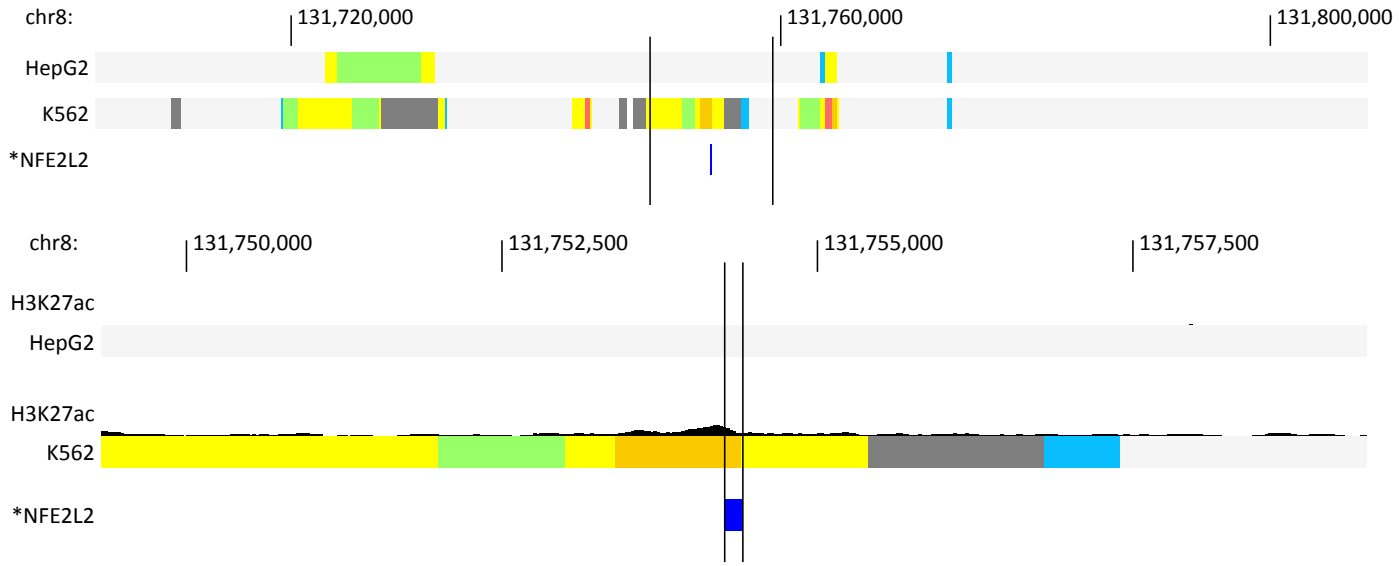
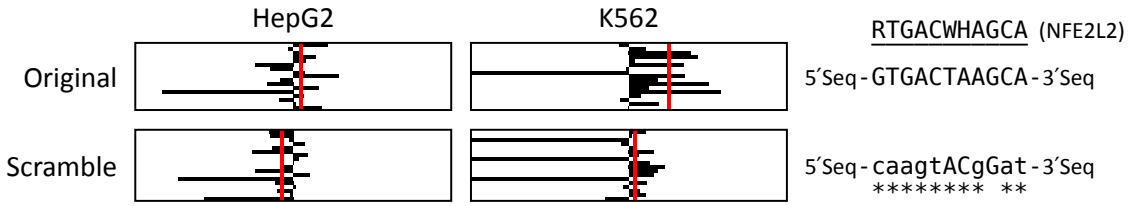
3′Seq = ggaatgttcatacttaacaccatttaaaaaaaaatgcaaccacaattttcaaacttctcatagttt

239 NFE2L2 in K562 enhancer

chr8 131754332 131754342 + (hg18)

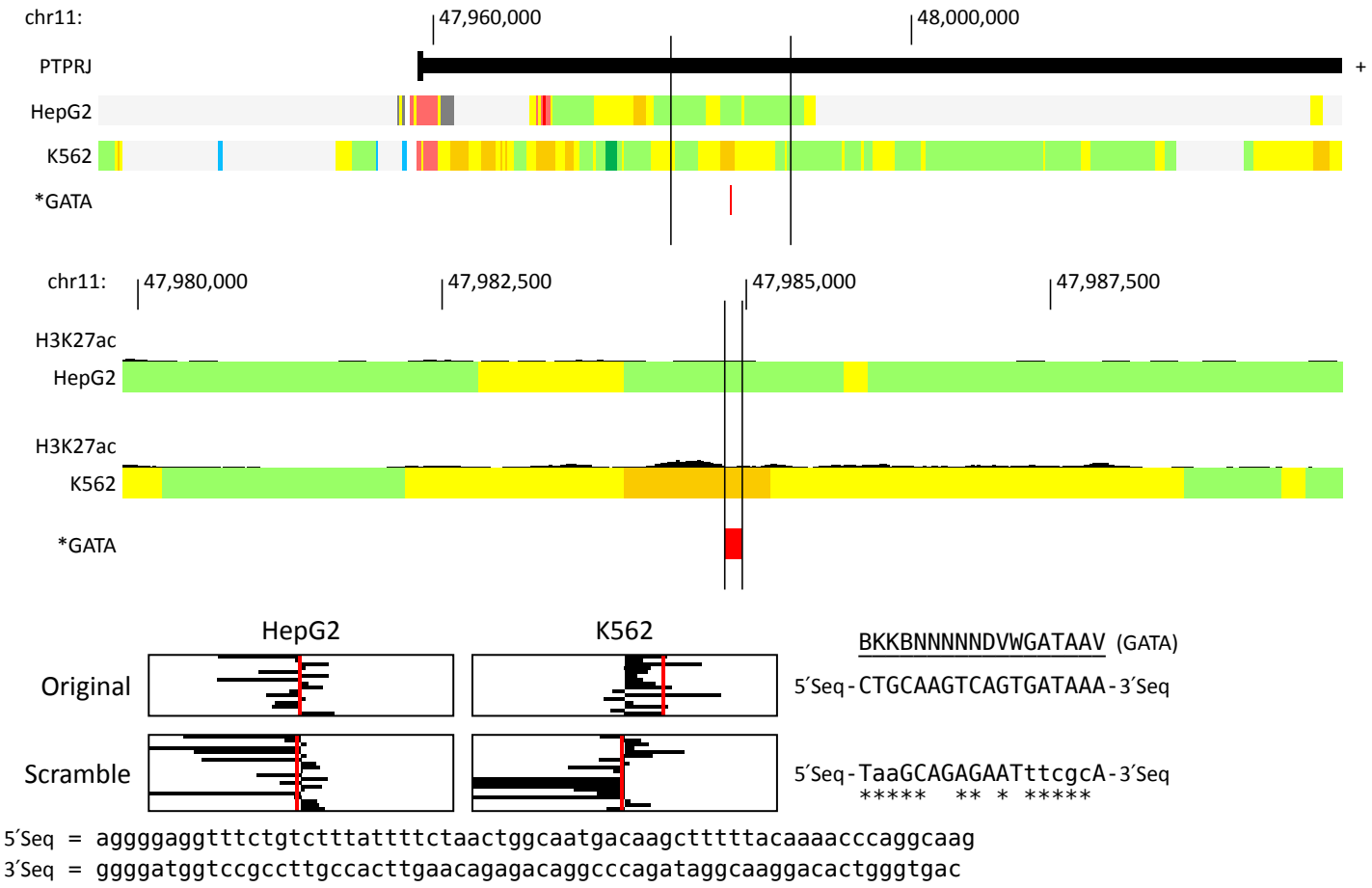




5′Seq = aagctgctctctggcccctattccagcttttccgctcctgacctcatttttcctcattttactgcc
3′Seq = gcgaagaaatgatatcttctattttaagacaggaaaccgaagcaaagagaggttgactcacttggcc

240 GATA in K562 enhancer (conserved at 60% confidence)

chr11 47984887 47984904 - (hg18)



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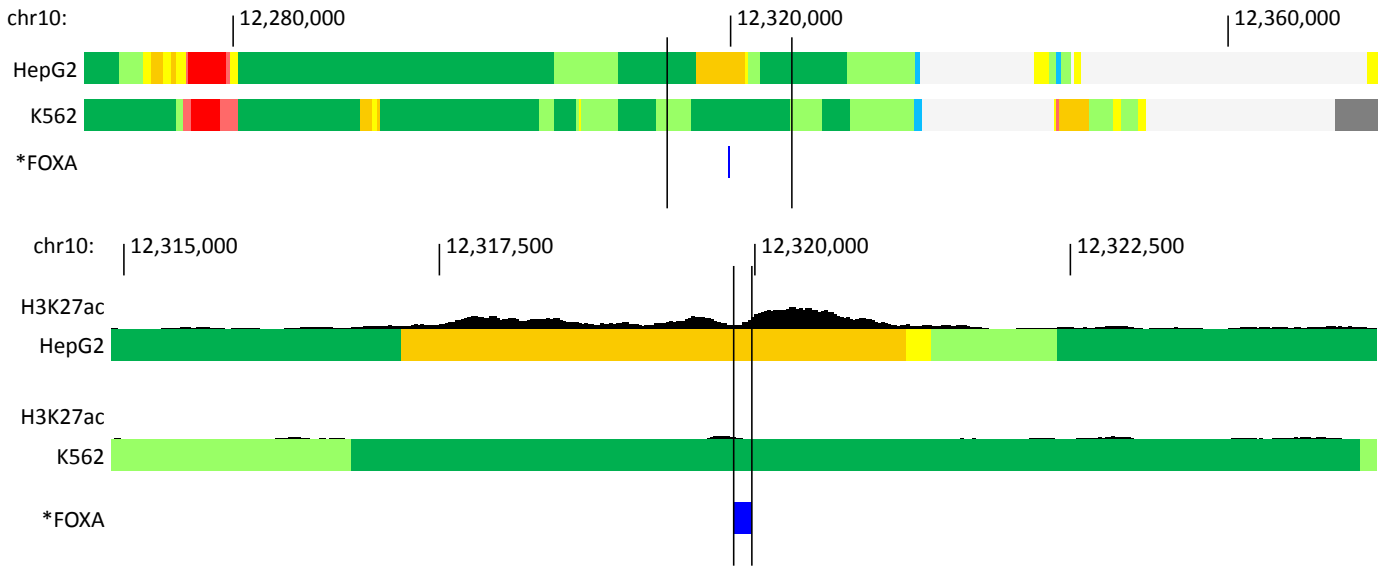
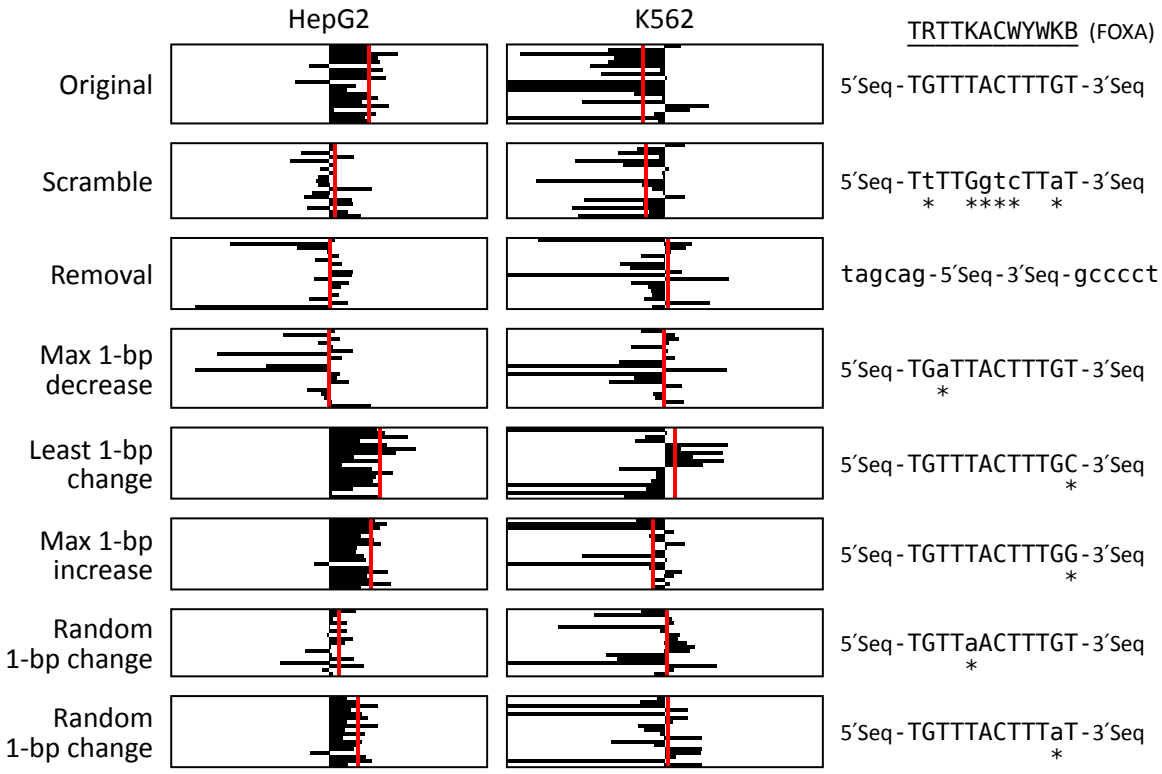
3′Seq = ggggatggtccgccttgccacttgaacagagacaggcccagataggcaaggacactgggtgac

241 FOXA in HepG2 enhancer

chr10 12319899 12319910 - (hg18)





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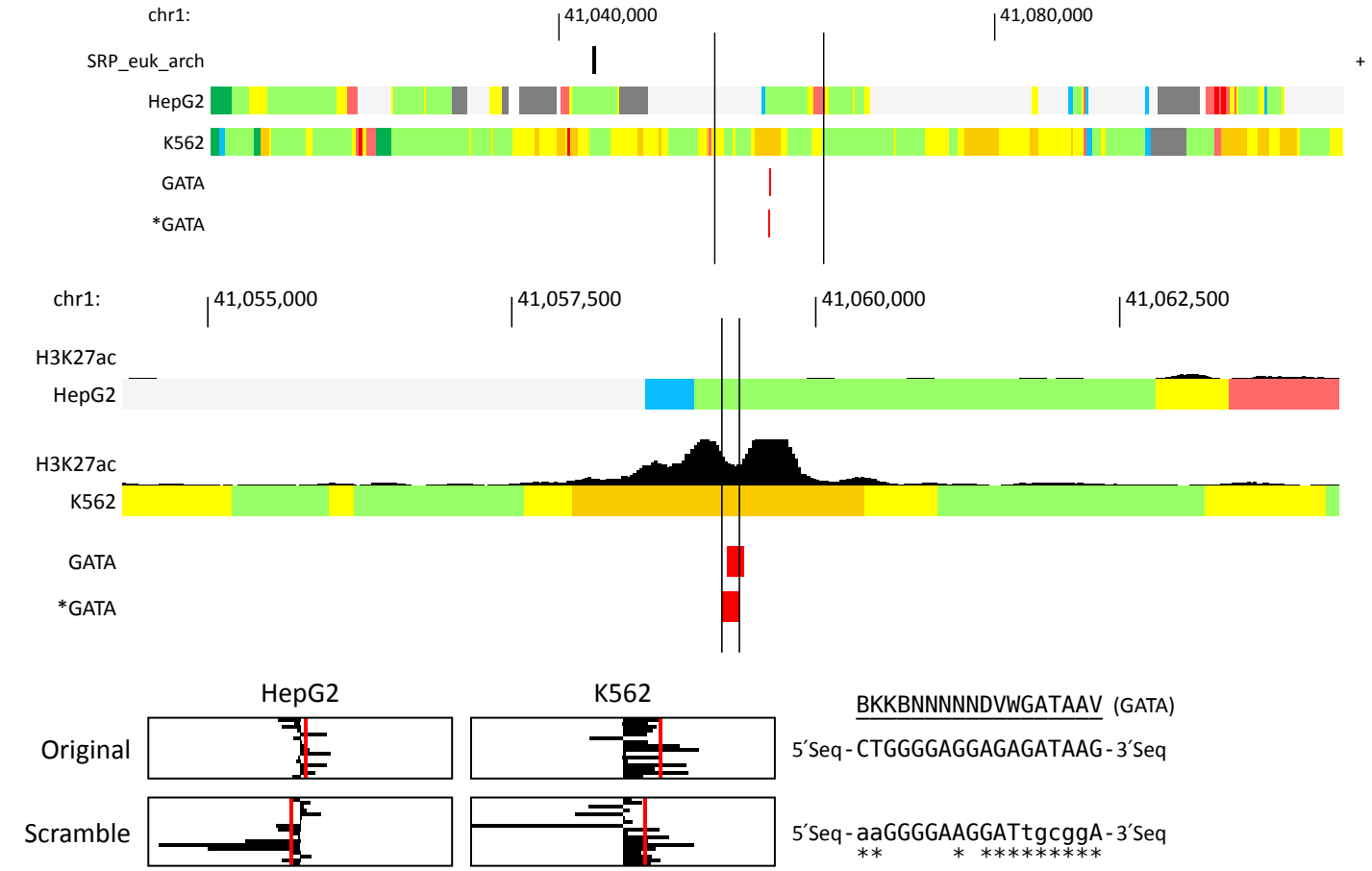
3′Seq = aactggtgctgtctttgatcattcaaagaagctagaaaggtagatagactttgttctctgtagata

242 GATA in K562 enhancer (conserved at 60% confidence)

chr1 41059292 41059309 - (hg18)



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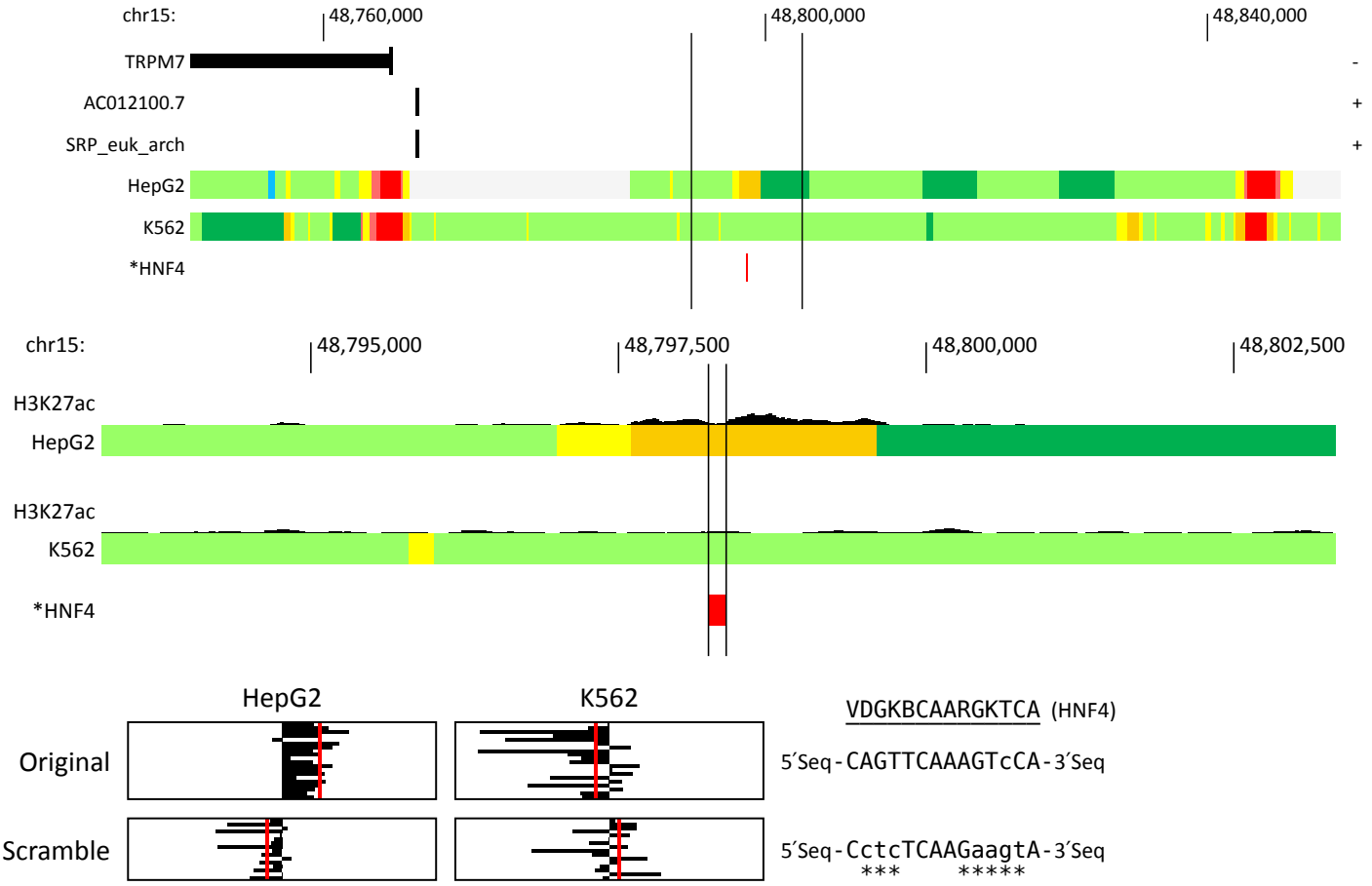
3′Seq = gaagggctgagtgaggcttgggtttggggctcagagggtgacaggctagggagcaggcagagg

243 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr15 48798297 48798310 - (hg18)



VDGKBCAARGKTCA (HNF4)

5′Seq-CAGTTCAAAGTcCA-3′Seq

5′Seq-CctcTCAAGaagtA-3′Seq

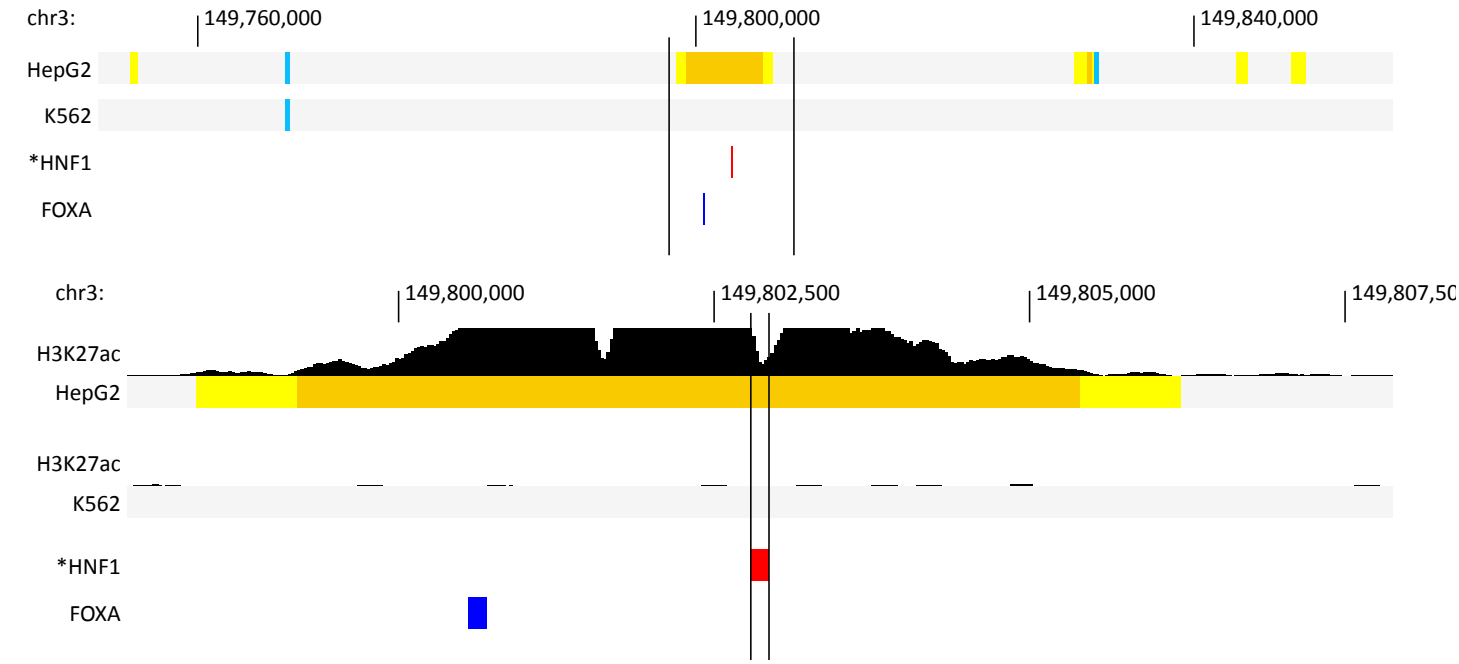
*** *****

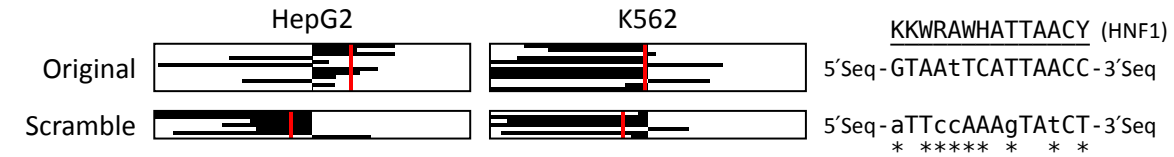
5′Seq = cagttgacacgtgaacaaaaagagagacactttggatgggtggctgaaactctgatagtagataaa

3′Seq = tgtccatcttgtgcttggtctttcatgtcatttatagtgttacttaatgagaggtggttaacaca

244 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr3 149802857 149802870 + (hg18)





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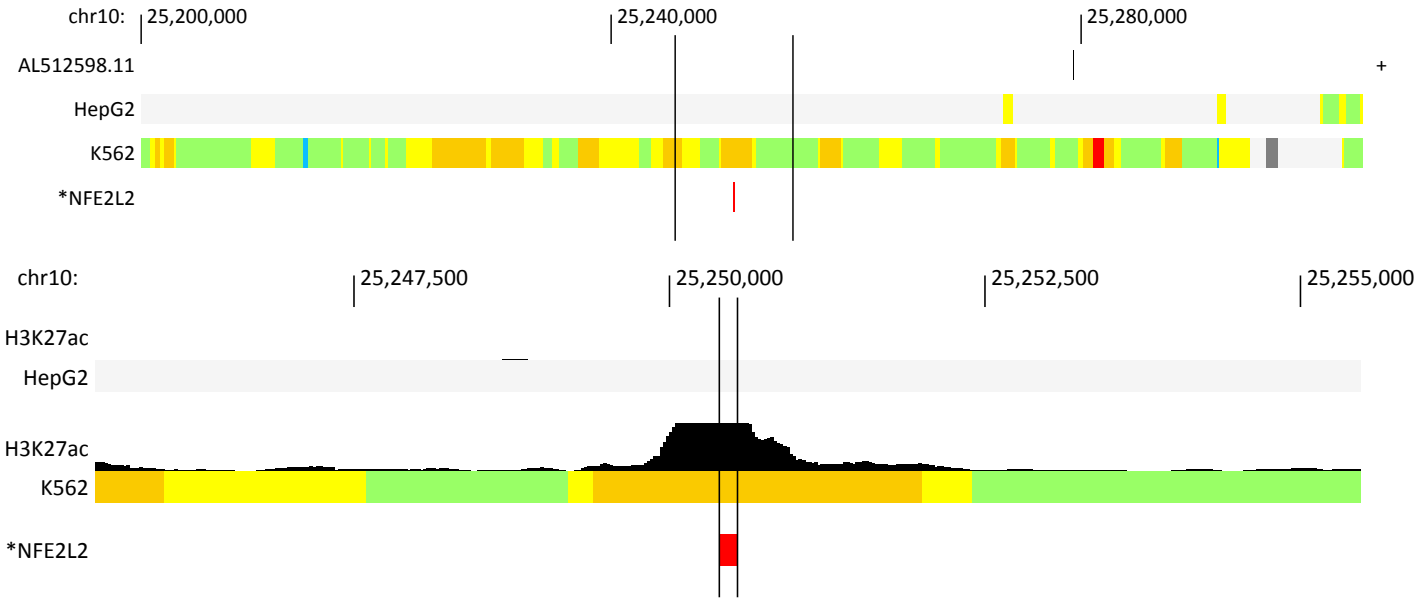
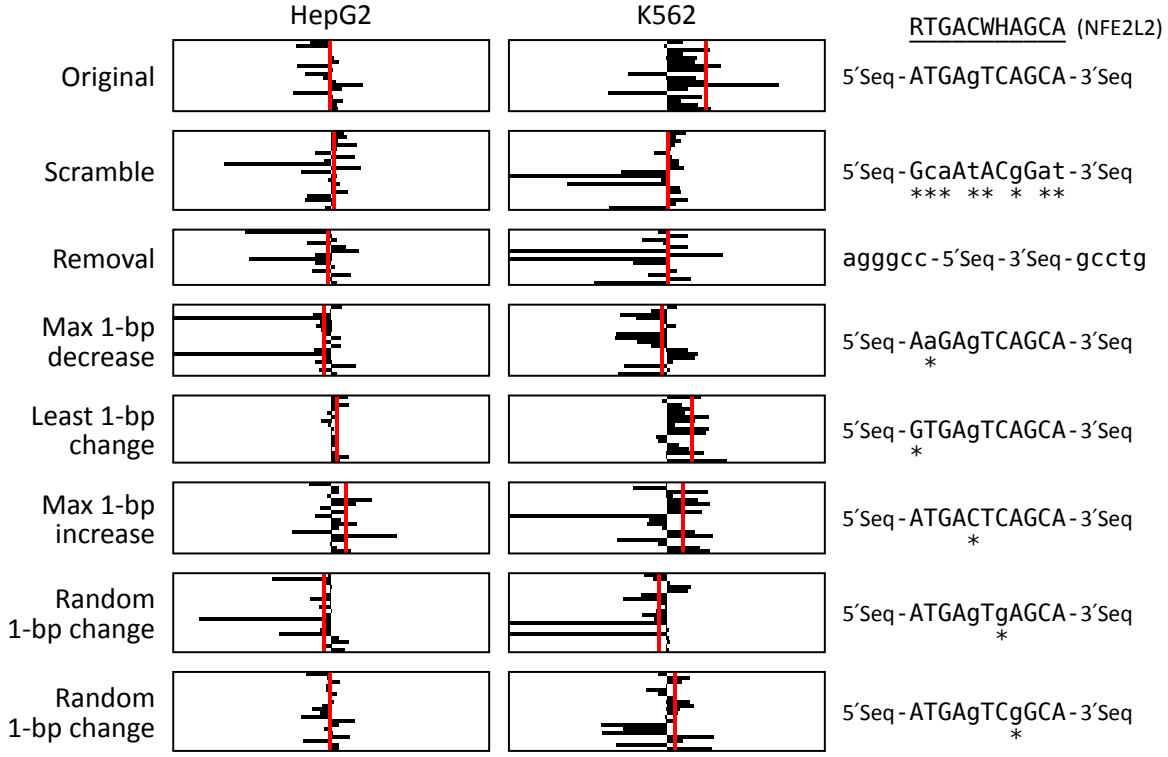
3′Seq = ctgctaccctcagcctcccaggaaaagtgtctcatttattagcttccaatcctaagttcatgttt

245 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr10 25250462 25250472 - (hg18)





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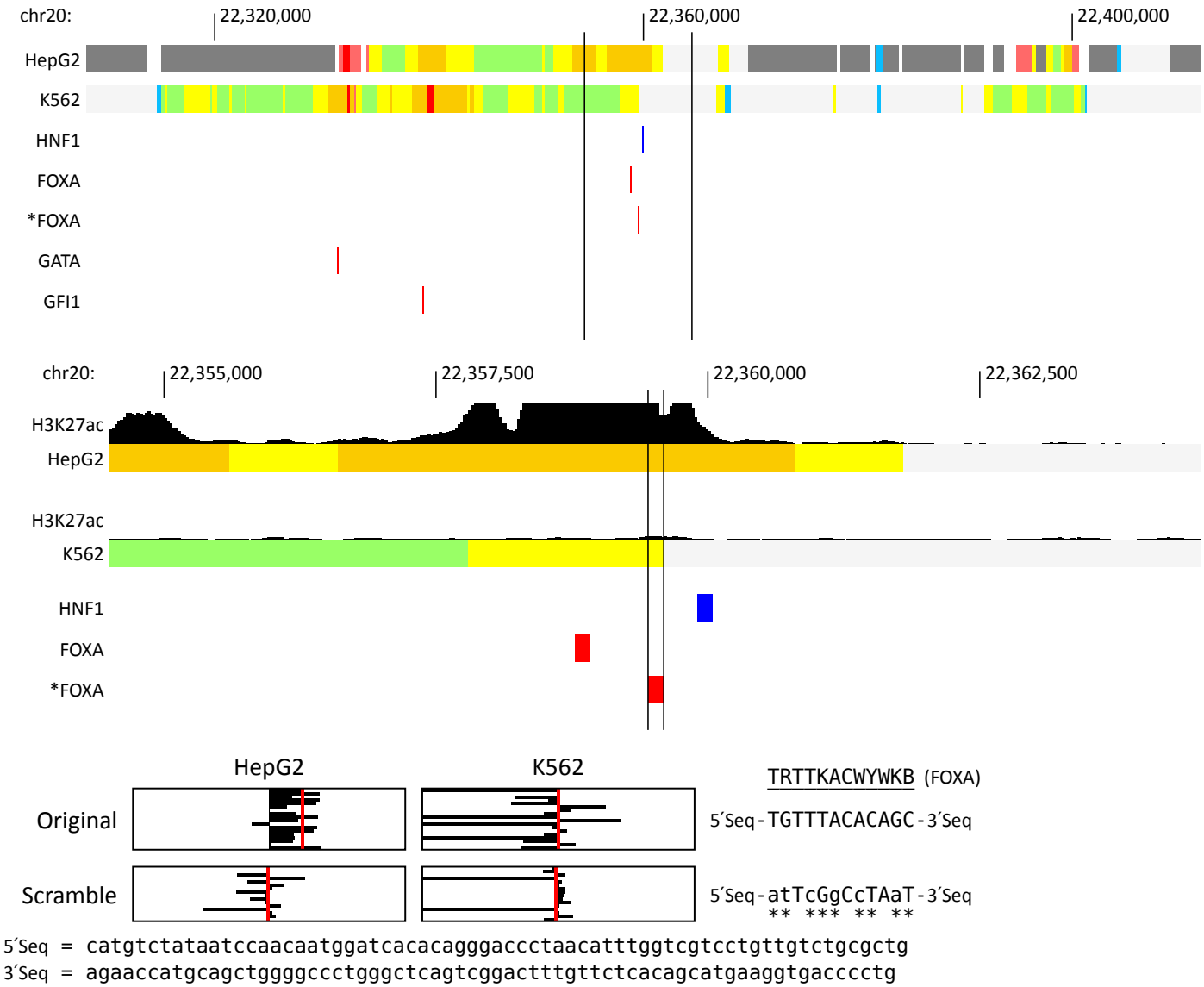
3′Seq = gtacttttgctaaaaatgctaatctaatacagcagtgggaagtgttggttagcatgtgatcatcgag

246 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 22359517 22359528 + (hg18)



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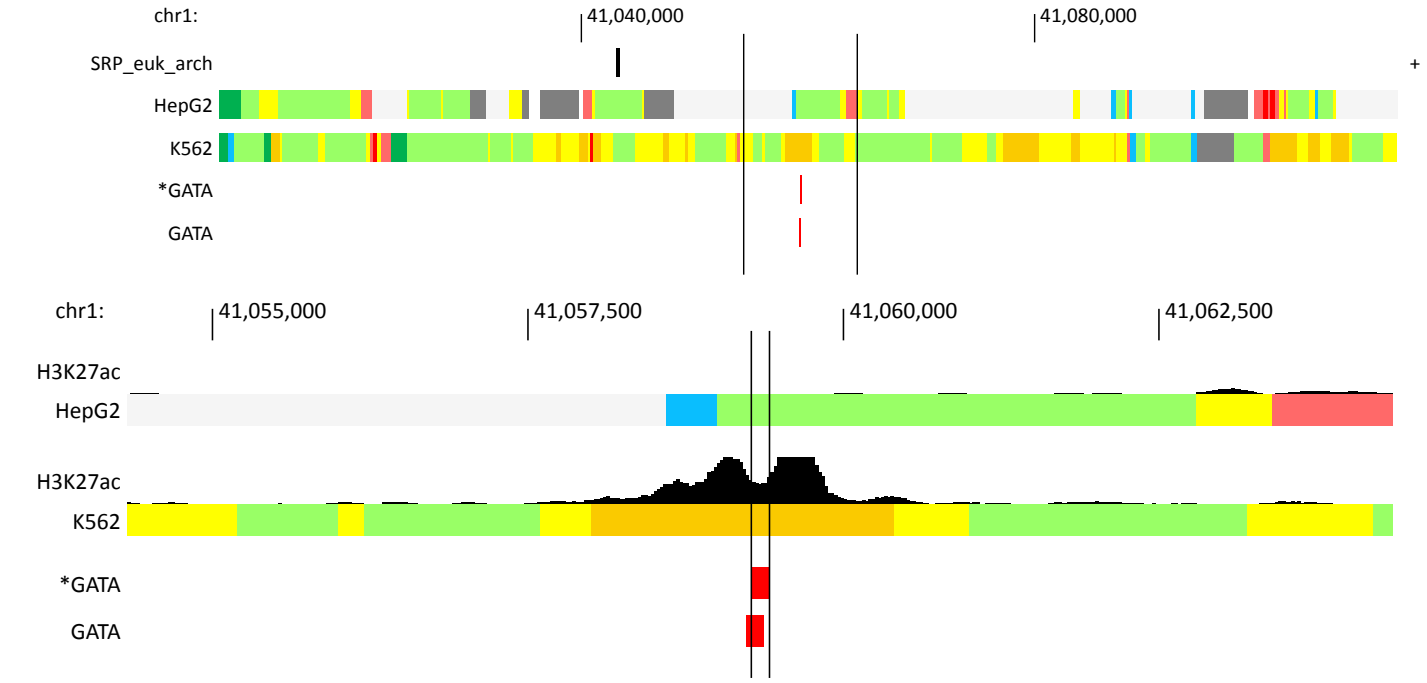
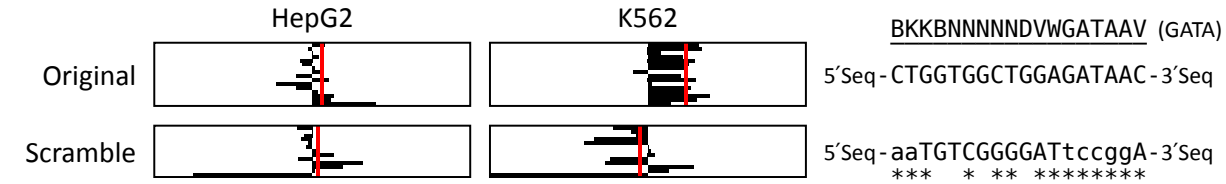
247 GATA in K562 enhancer (conserved at 60% confidence)

chr1 41059334 41059351 - (hg18)





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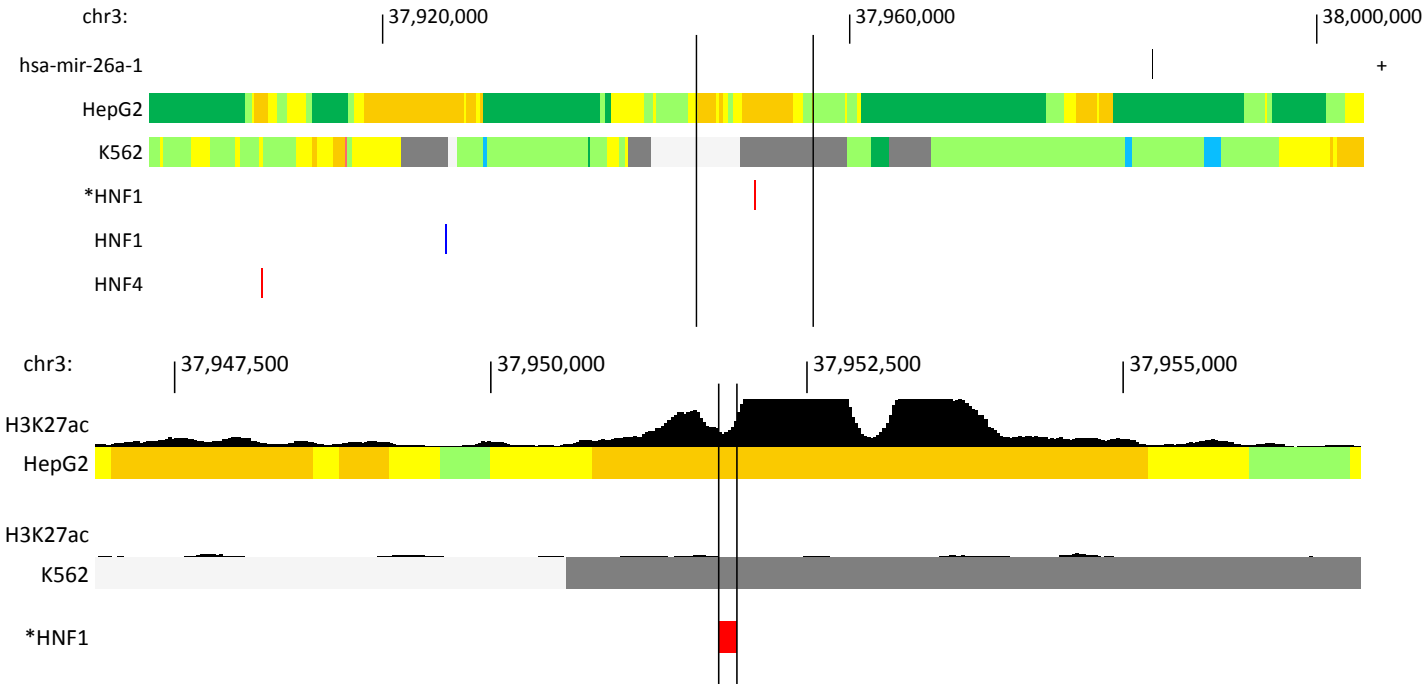
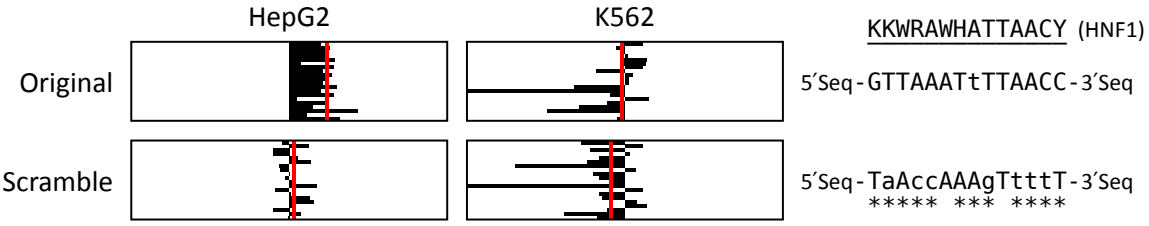
248 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr3 37951868 37951881 + (hg18)





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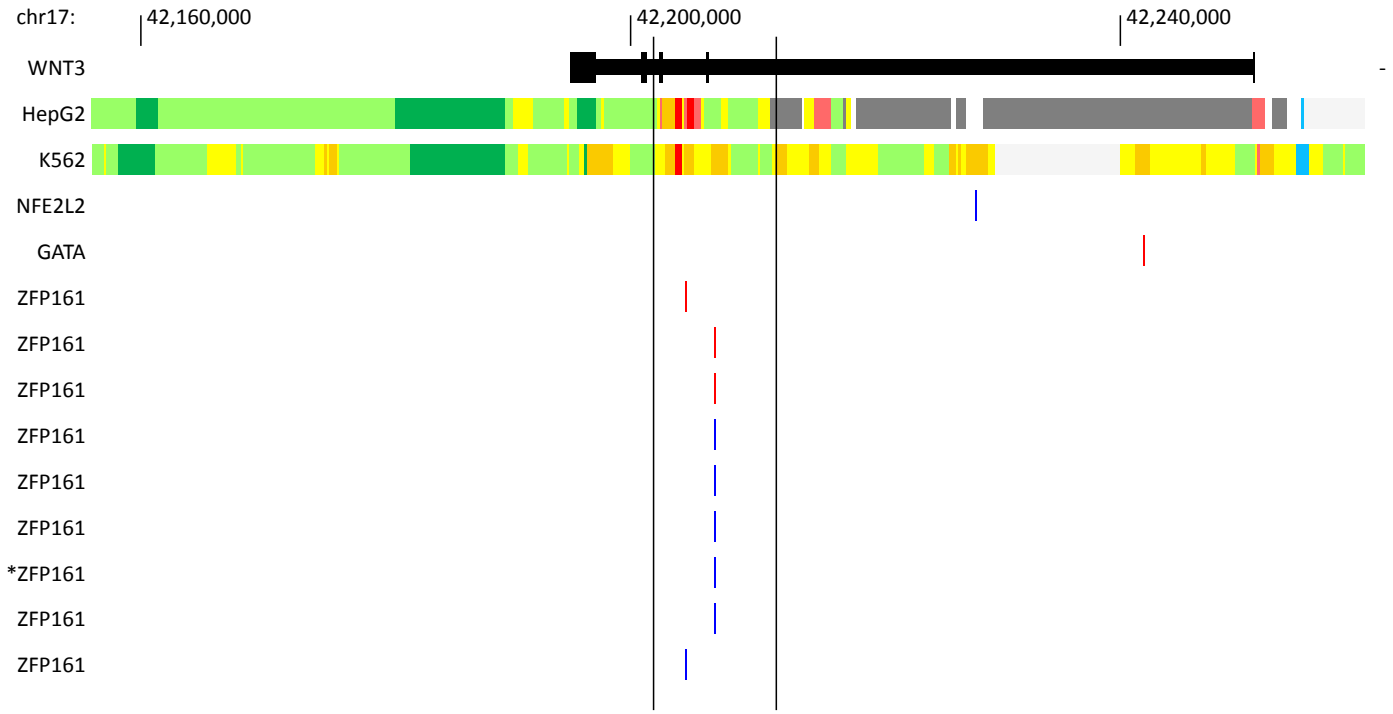
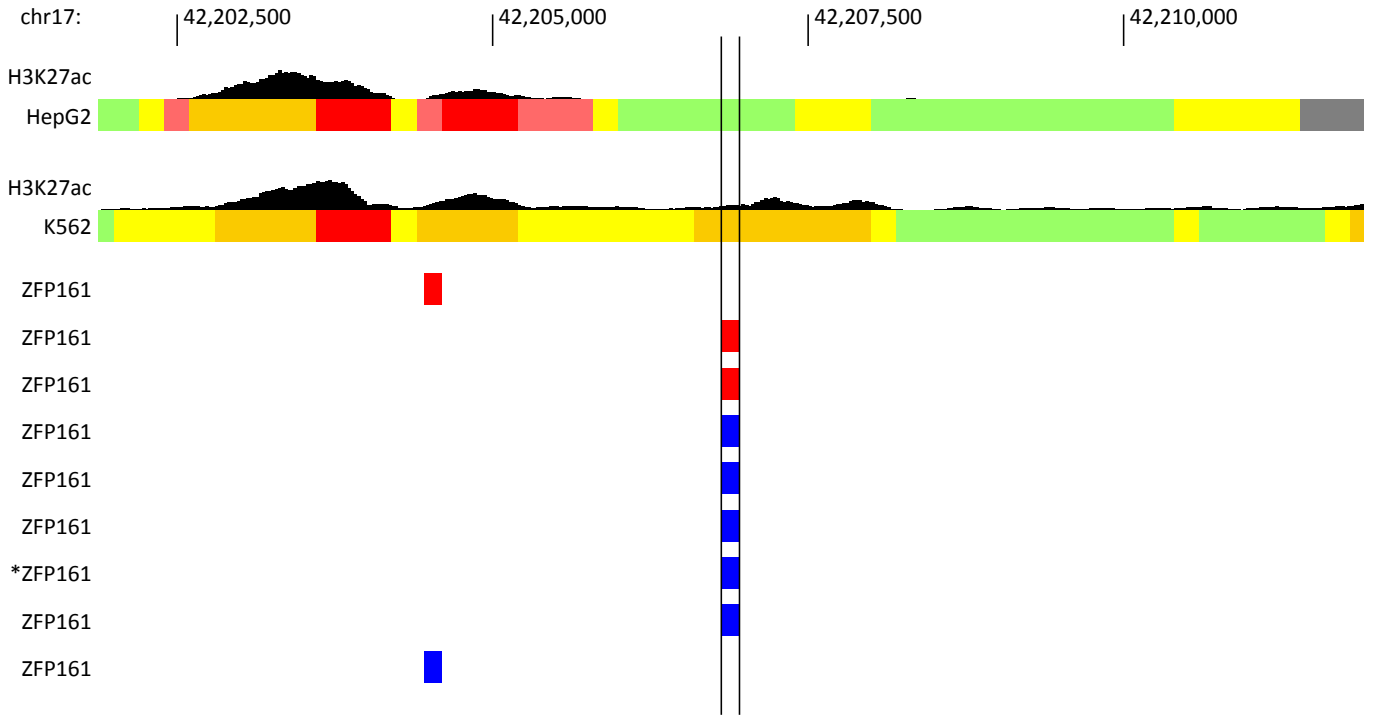
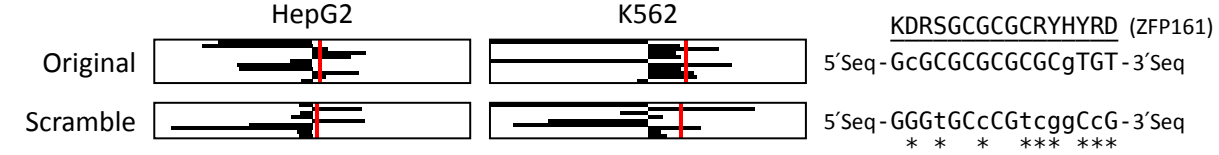
249 ZFP161 in K562 enhancer

chr17 42206877 42206892 - (hg18)







KDRSGCGCGCRYHYRD (ZFP161)

5′Seq-GcGCGCGCGCGCgTGT-3′Seq

5′Seq-GGGtGCcCGtcggCcG-3′Seq

* * * *** ***

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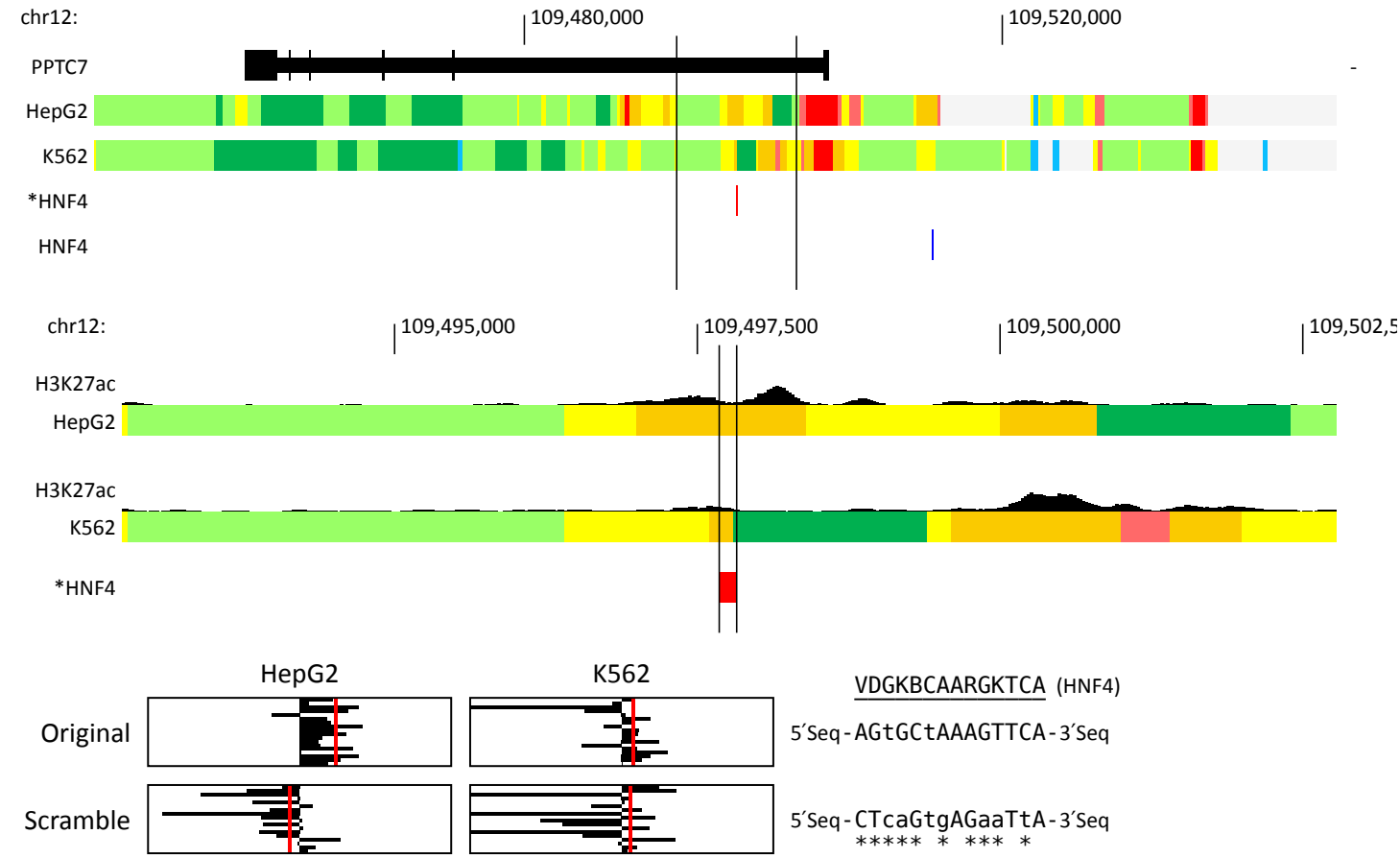
3′Seq = cccatgagtcactggaagtgtccatgtggccccagtatcctggactgccttggaaattgcccag

250 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 109497747 109497760 + (hg18)



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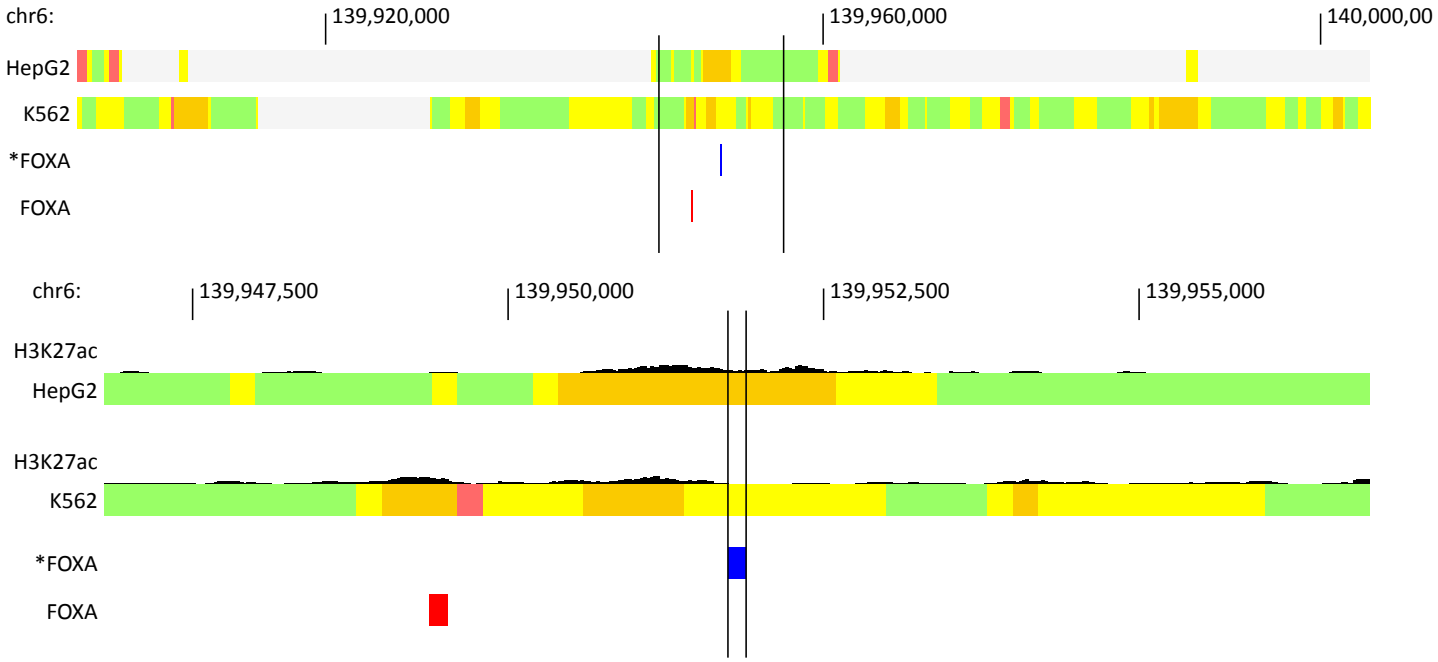
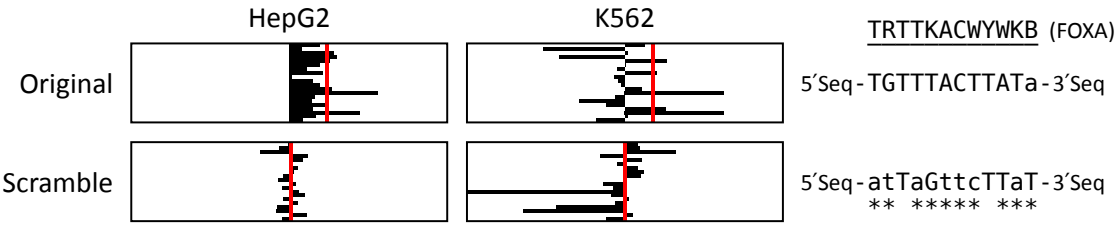
251 FOXA in HepG2 enhancer

chr6 139951809 139951820 + (hg18)





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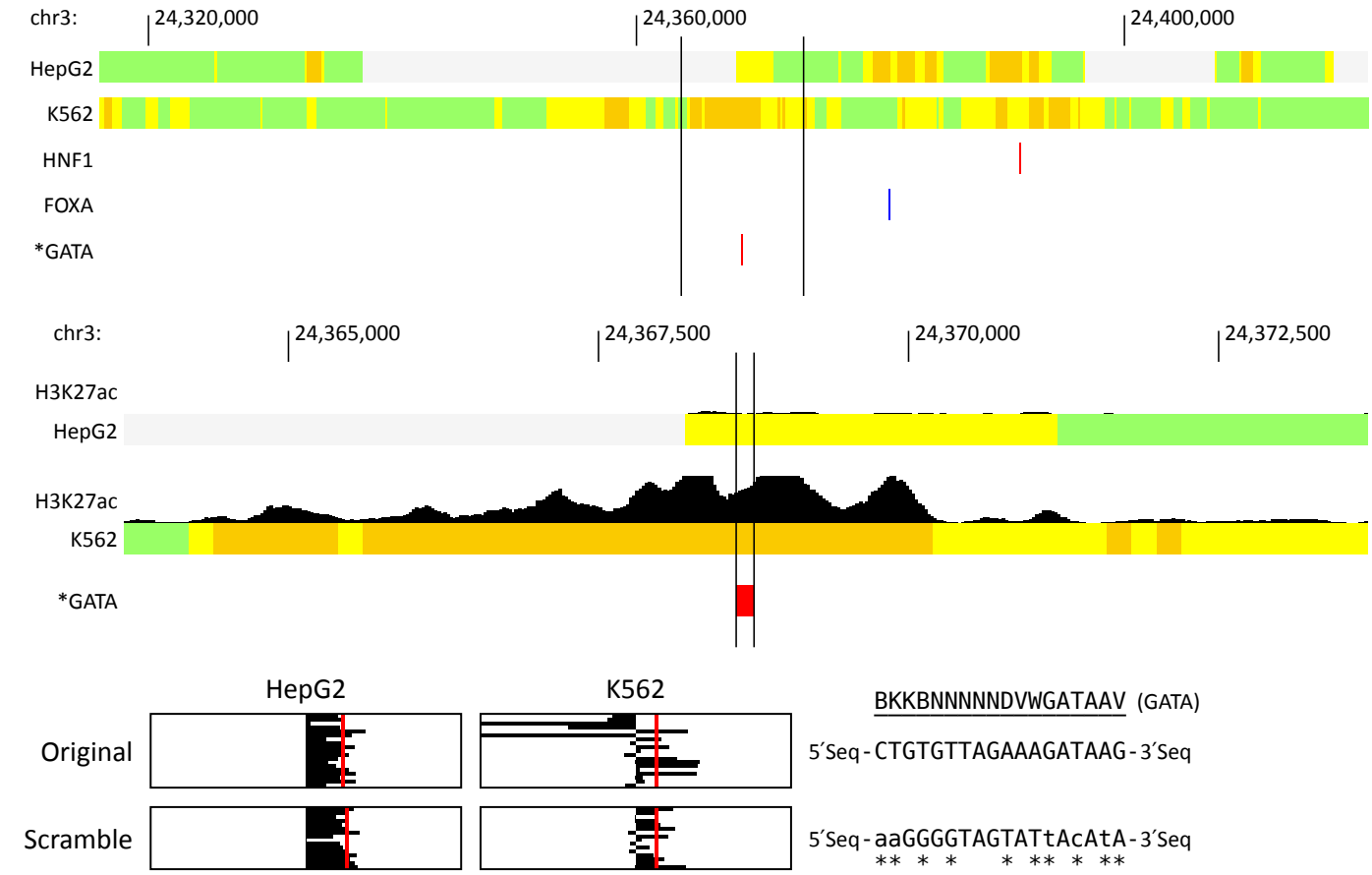
252 GATA in K562 enhancer (conserved at 60% confidence)

chr3 24368674 24368691 - (hg18)



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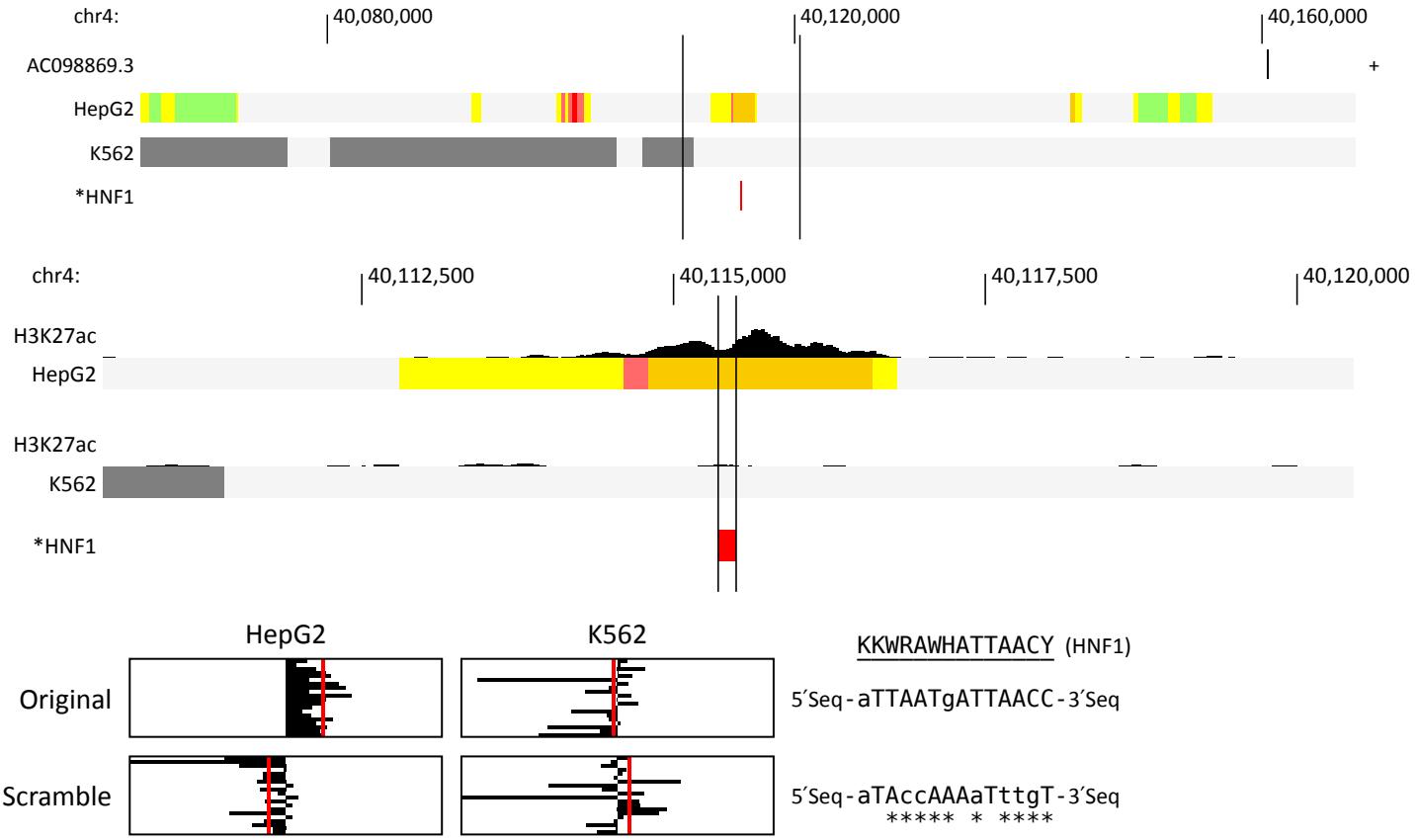
253 HNF1 in HepG2 enhancer (conserved at 60% confidence)

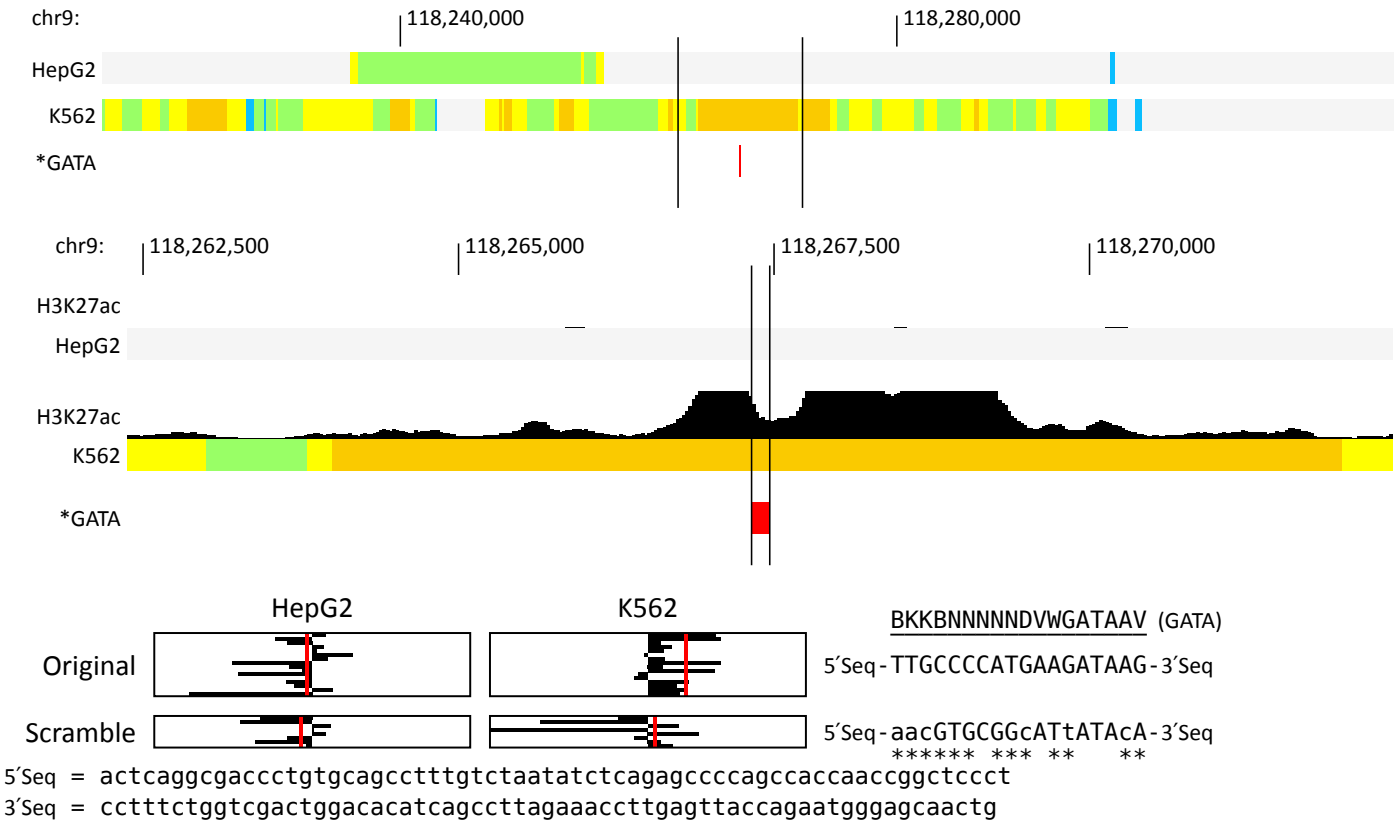
chr4 40115424 40115437 - (hg18)



5′Seq = ttcctaggctaatttttagccacccttctttcttggctcgttctactttgtttgtcaaaaatcttc
3′Seq = aaccatgaggtttaaataaccttagtcattctaaggcagctaagagatgtcactgaagcccagtt

254 GATA in K562 enhancer (conserved at 60% confidence)

chr9 118267386 118267403 + (hg18)



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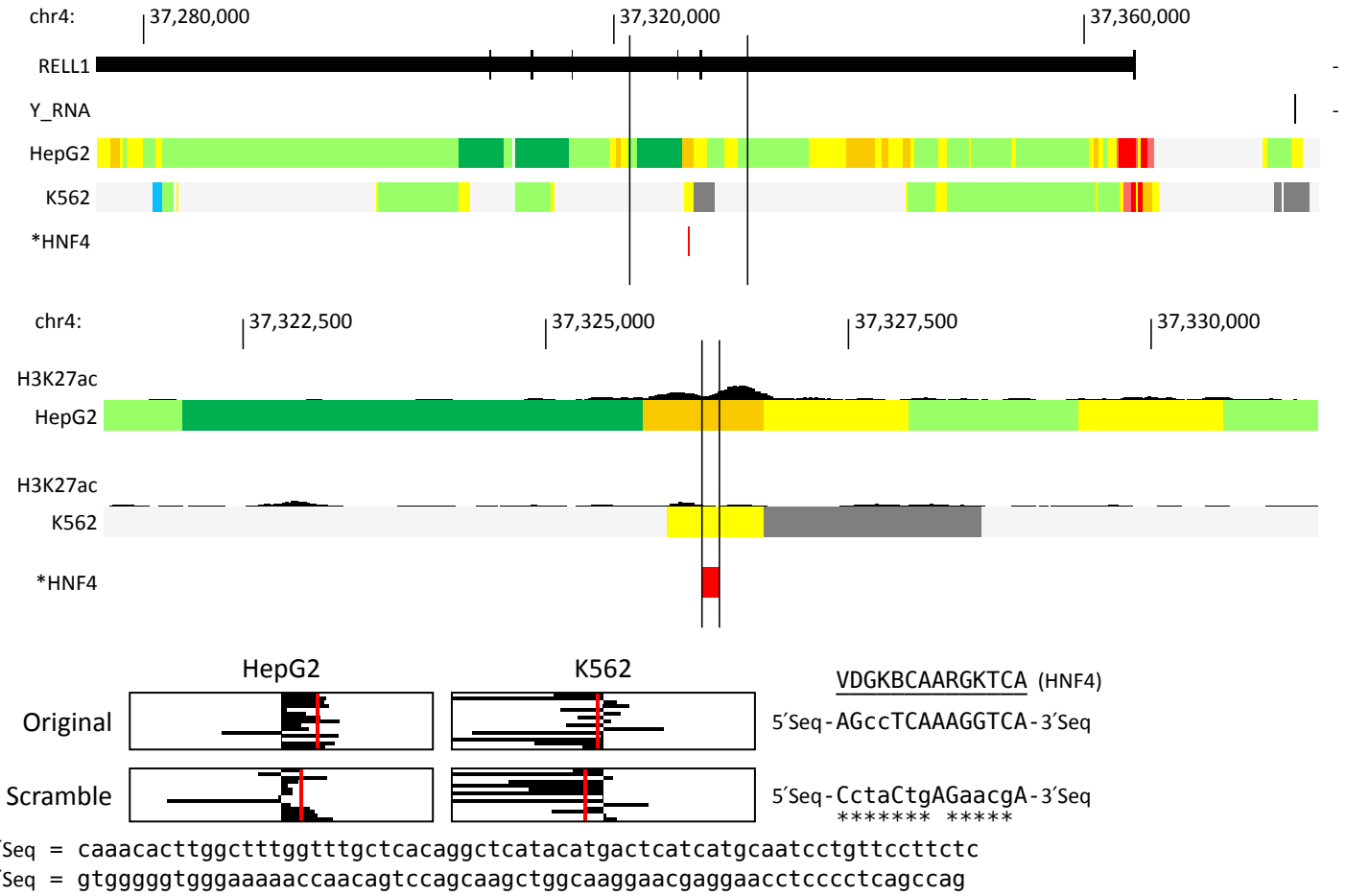
3′Seq = cctttctggtcgactggacacatcagccttagaaaccttgagttaccagaatgggagcaactg

255 HNF4 in HepG2 enhancer (conserved at 50% confidence)

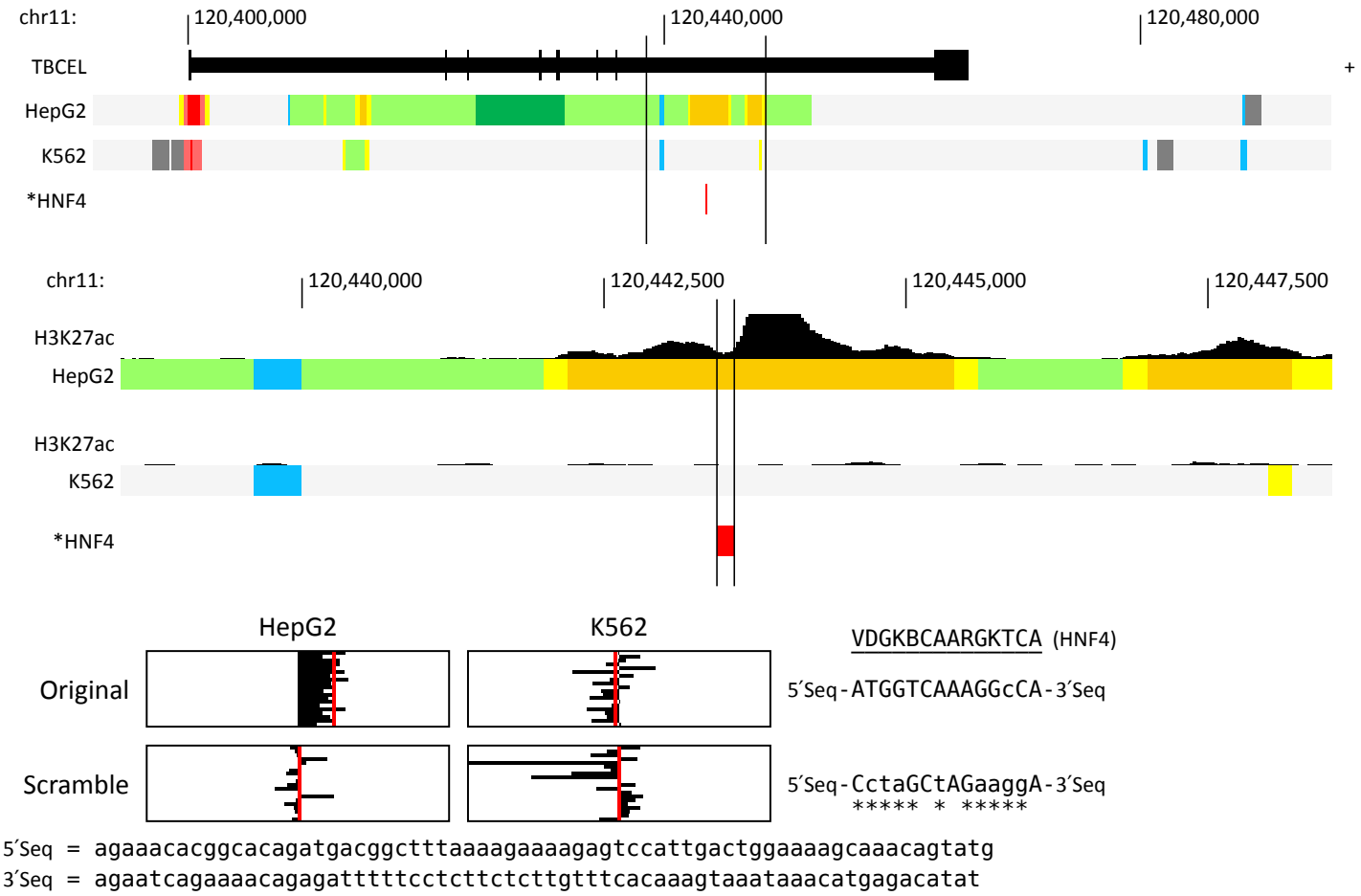
chr4 37326356 37326369 + (hg18)



5′Seq = caaacacttggctttggtttgctcacaggctcatacatgactcatcatgcaatcctgttccttctc
3′Seq = gtgggggtgggaaaaaccaacagtccagcaagctggcaaggaacgaggaacctcccctcagccag

256 HNF4 in HepG2 enhancer (conserved at 50% confidence)

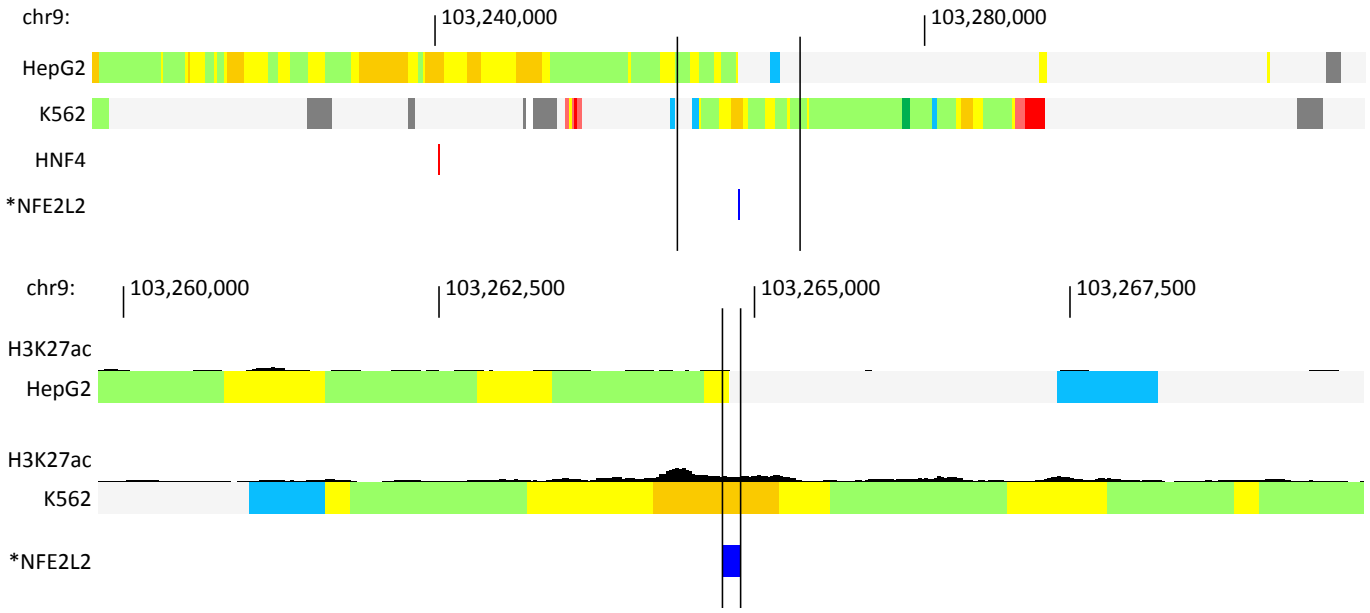
chr11 120443501 120443514 - (hg18)

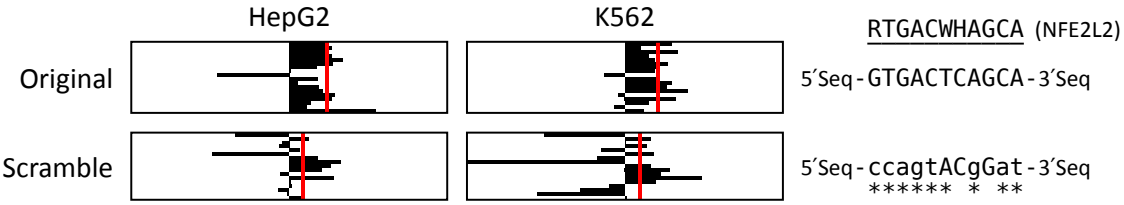


5′Seq = agaaacacggcacagatgacggctttaaaagaaaagagtccattgactggaaaagcaaacagtatg
3′Seq = agaatcagaaaacagagatttttcctcttctcttgtttcacaaagtaaataaacatgagacatat

257 NFE2L2 in K562 enhancer

chr9 103264813 103264823 + (hg18)

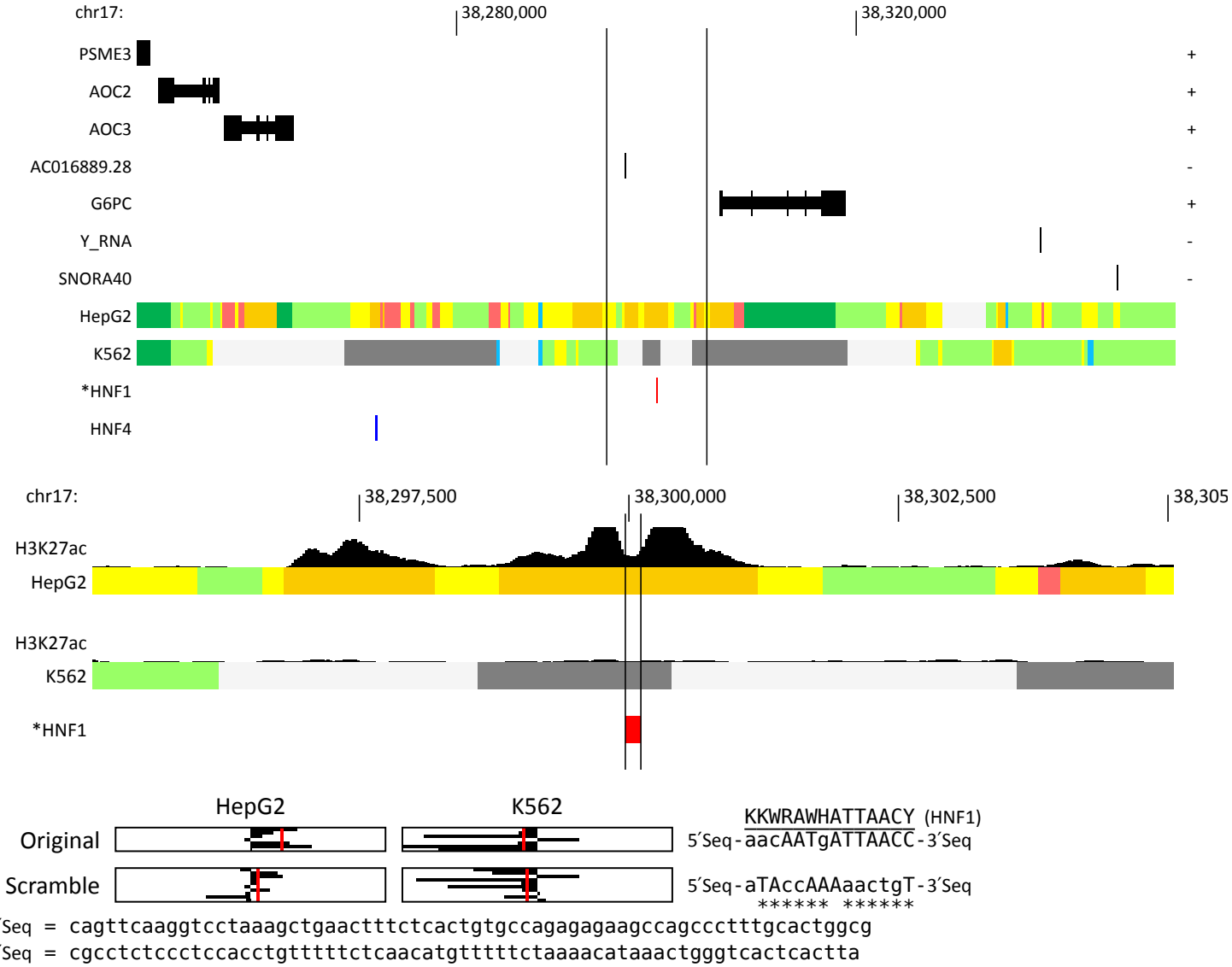




5′Seq = tttttggaaagaaatctttagagaaactataaacaaaccagtggataaaagcacagtggggtgatag
3′Seq = cgctcacccctccgctatgctgacctacactttcaagggagcttccgggagagtaatttgaaactta

258 HNF1 in HepG2 enhancer (conserved at 50% confidence)

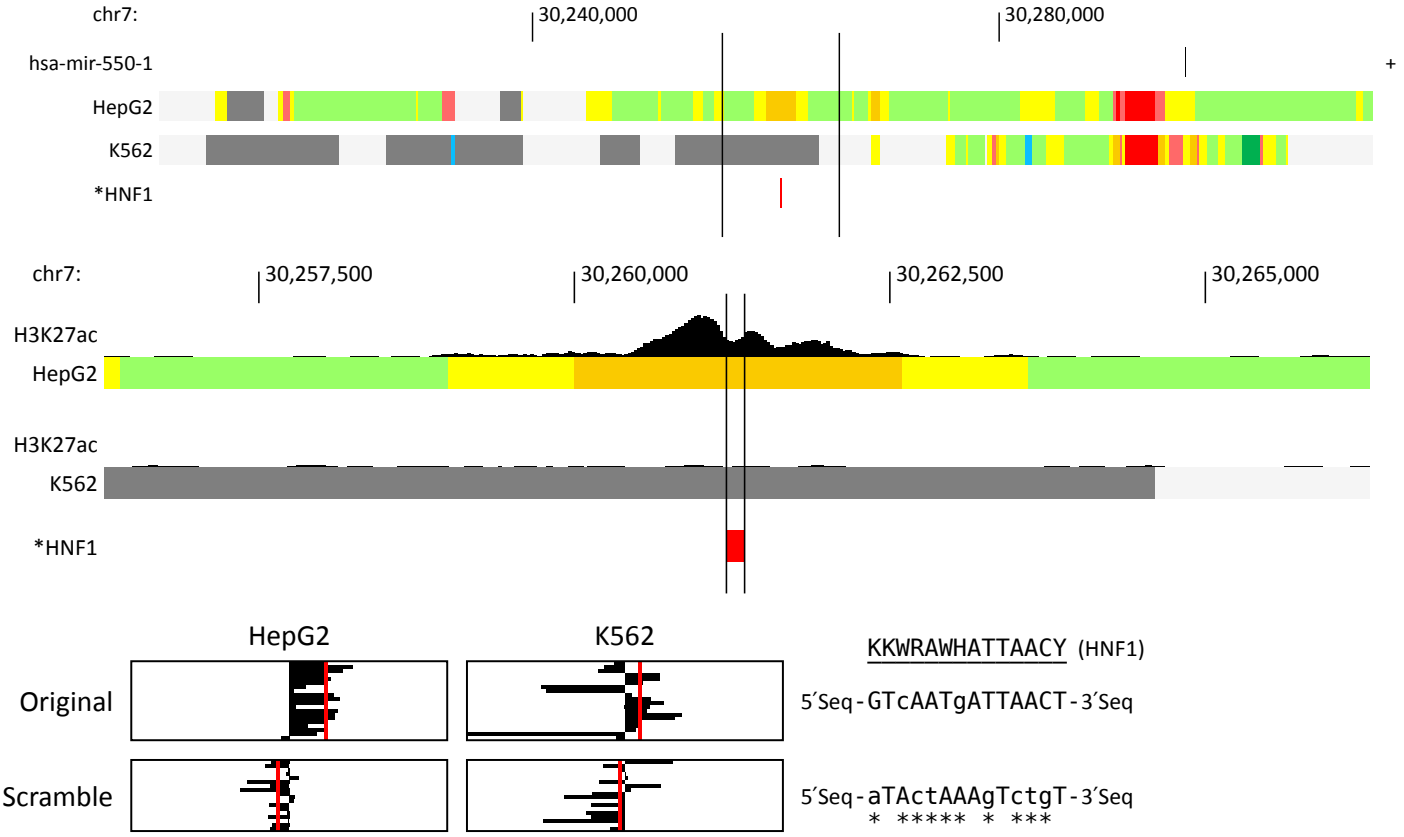
chr17 38300033 38300046 + (hg18)



5′Seq = cagttcaaggtcctaaagctgaactttctcactgtgccagagagaagccagccctttgcactggcg
3′Seq = cgcctctccctccacctgtttttctcaacatgtttttctaaaacataaactgggtcactcactta

259 HNF1 in HepG2 enhancer (conserved at 60% confidence)

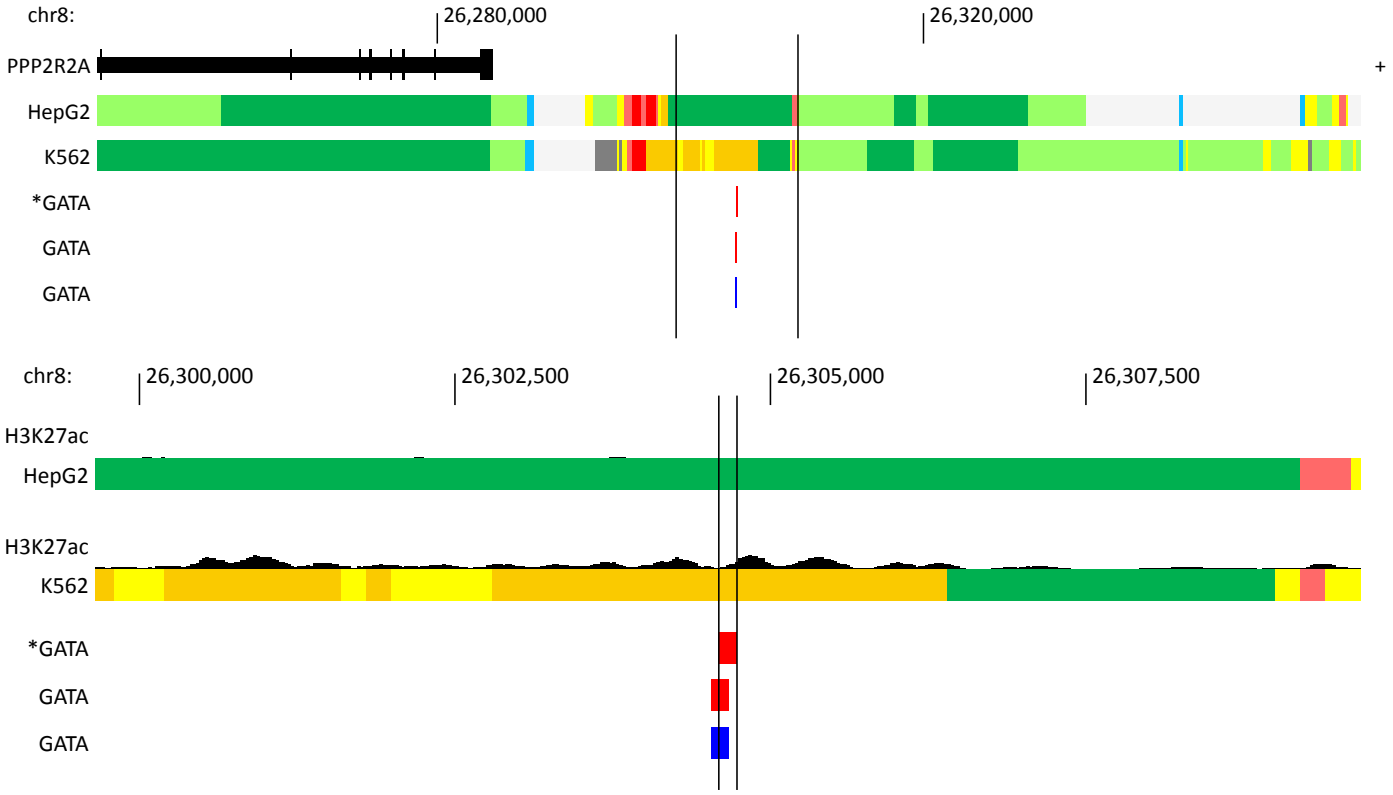
chr7 30261271 30261284 + (hg18)

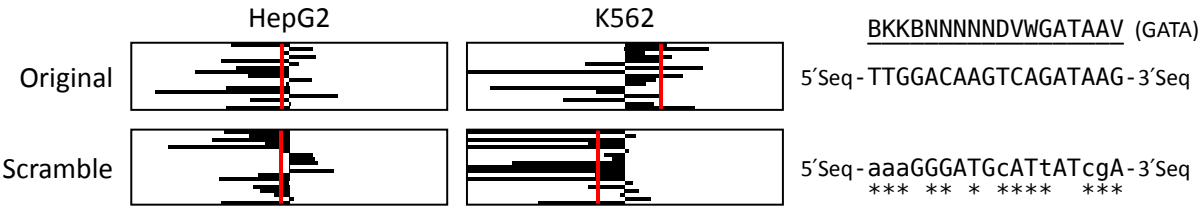


5′Seq = taaaacactgagctgaaggacaaccctgttattgtttcctagatcttctgtgacctggttttgaca
3′Seq = tactttggctagaagaggtaatgctaagtgttggaagtttactcagcttcttaactagaattgca

260 GATA in K562 enhancer (conserved at 60% confidence)

chr8 26304655 26304672 - (hg18)

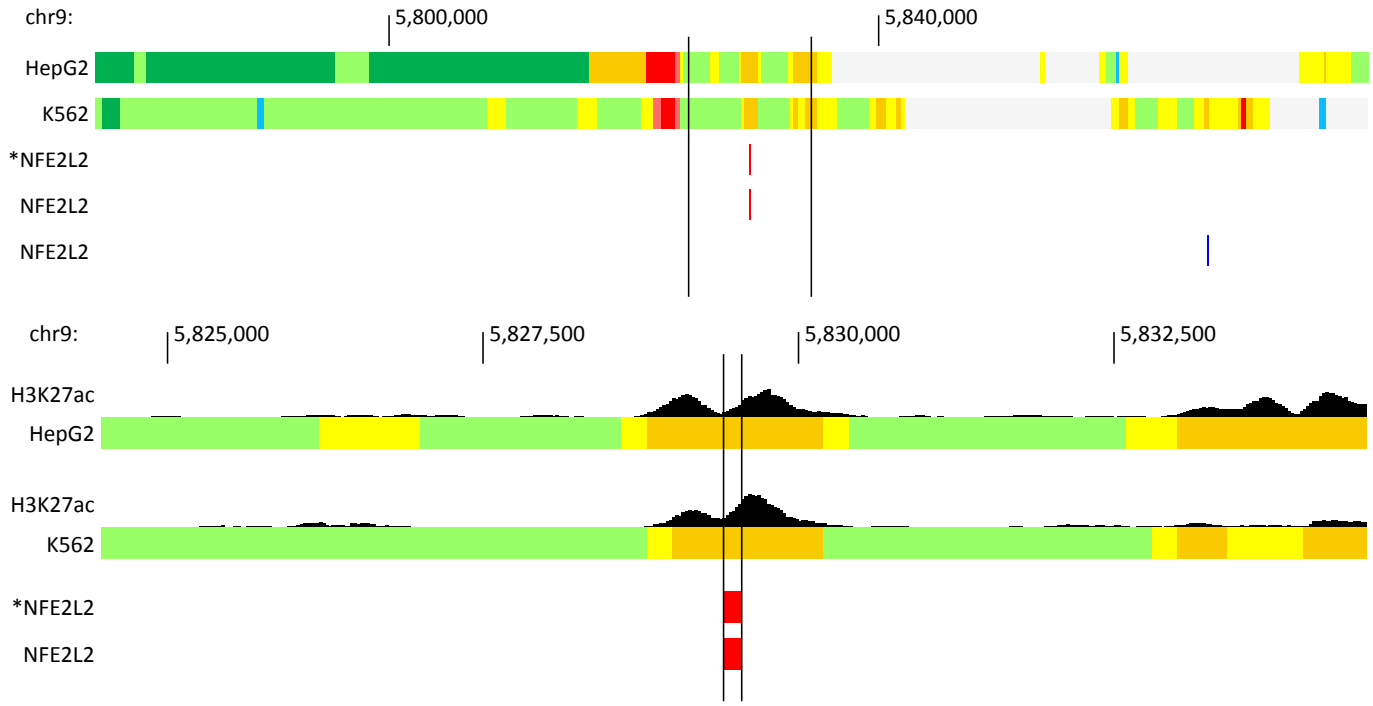


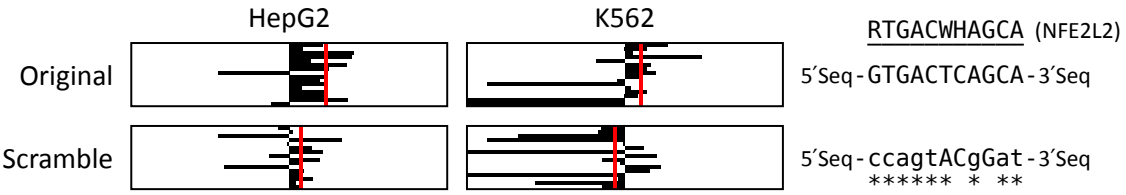


5′Seq = tttttcccattgccattatcattgccattgctgctgttcatgggtagctccacccaggaacctg
3′Seq = ttaaccacagcagaactgaaatctgtcatgtgcacacagatgtgaacatggtgaatccagata

261 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr9 5829473 5829483 + (hg18)

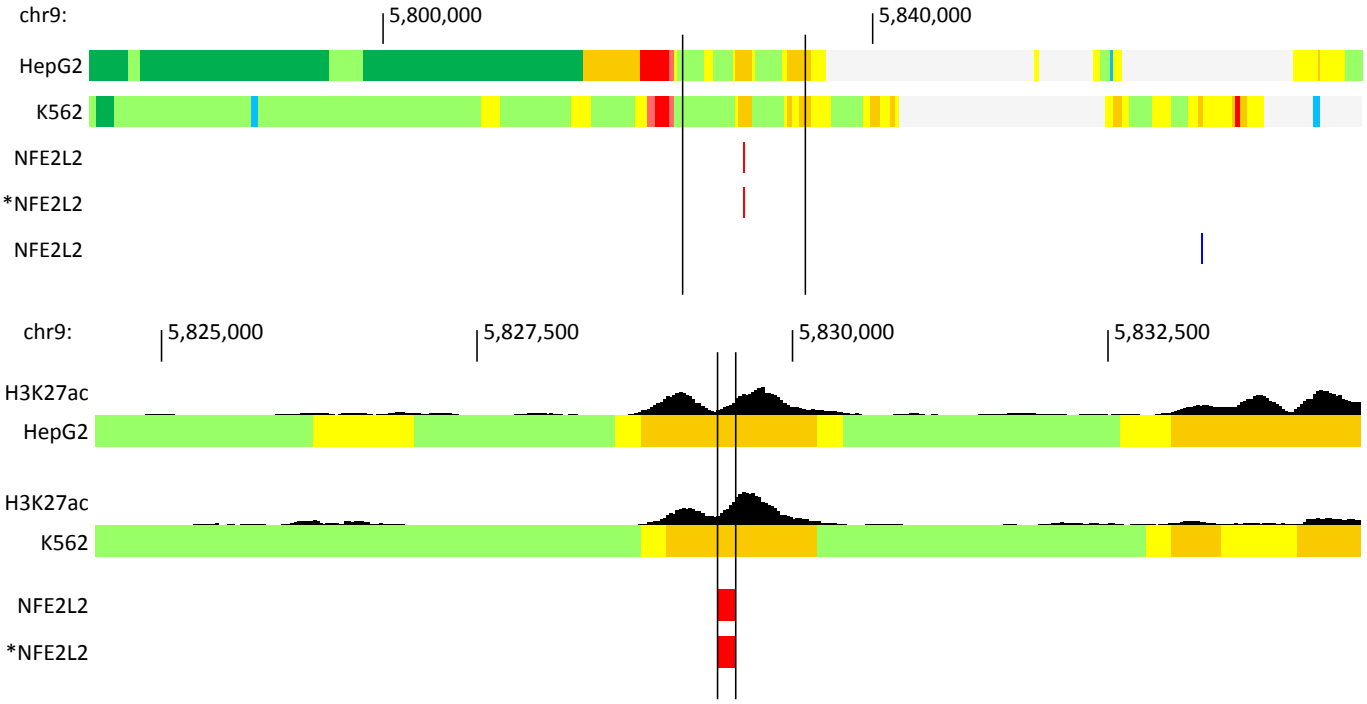


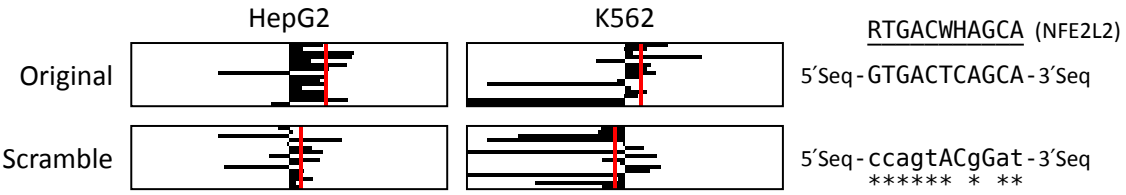


5′Seq = acacacccagggctctgtttgactttctccactgggctgcagtggcaggtgagttaggacacaggag
3′Seq = gtttgggaatgagagtcactgactcatgtgaatttgctccatgctgaaactcgattgttttagtgaa

262 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr9 5829473 5829483 + (hg18)





5′Seq = acacacccagggctctgtttgactttctccactgggctgcagtggcaggtgagttaggacacaggag
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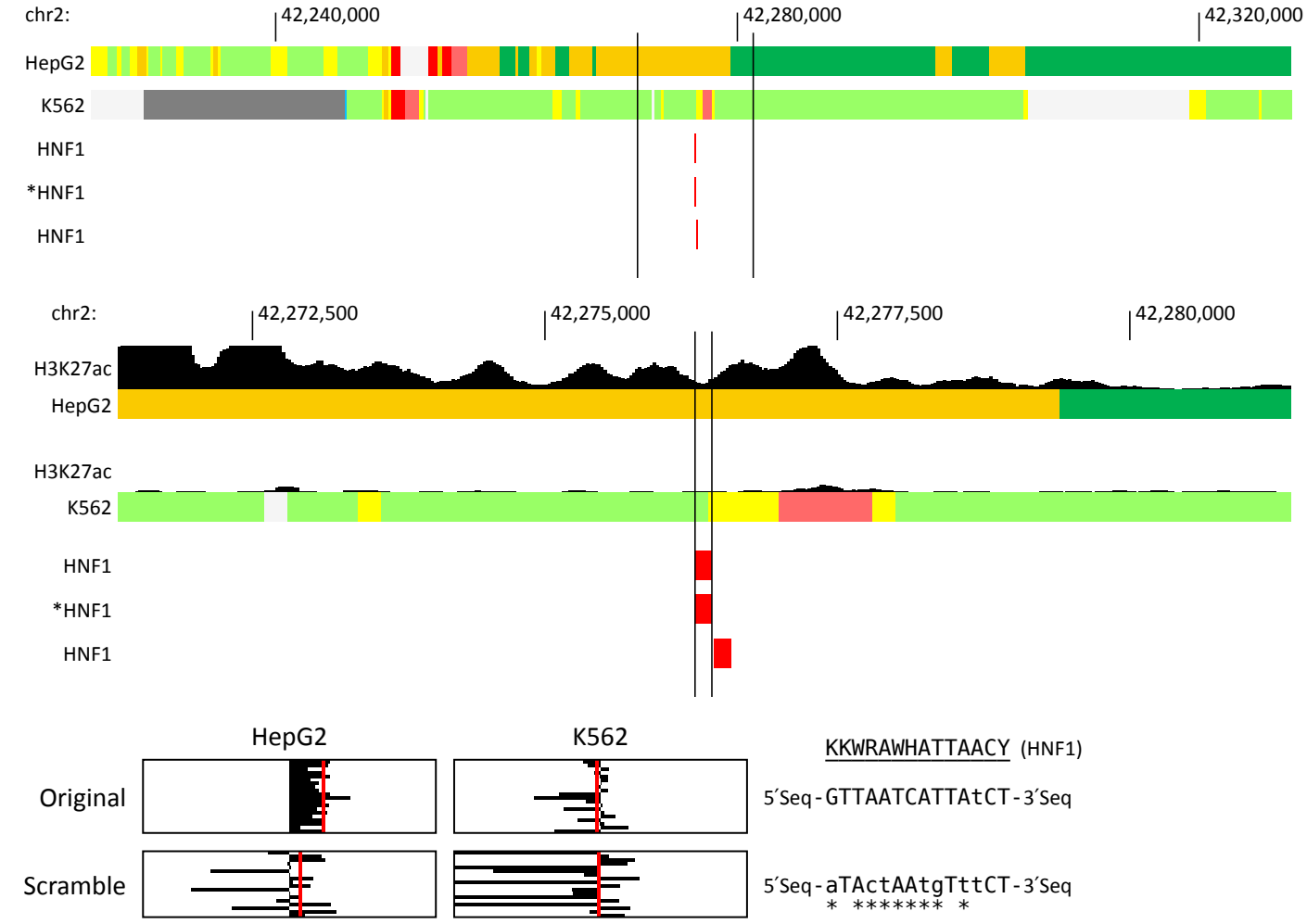
263 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr2 42276349 42276362 + (hg18)



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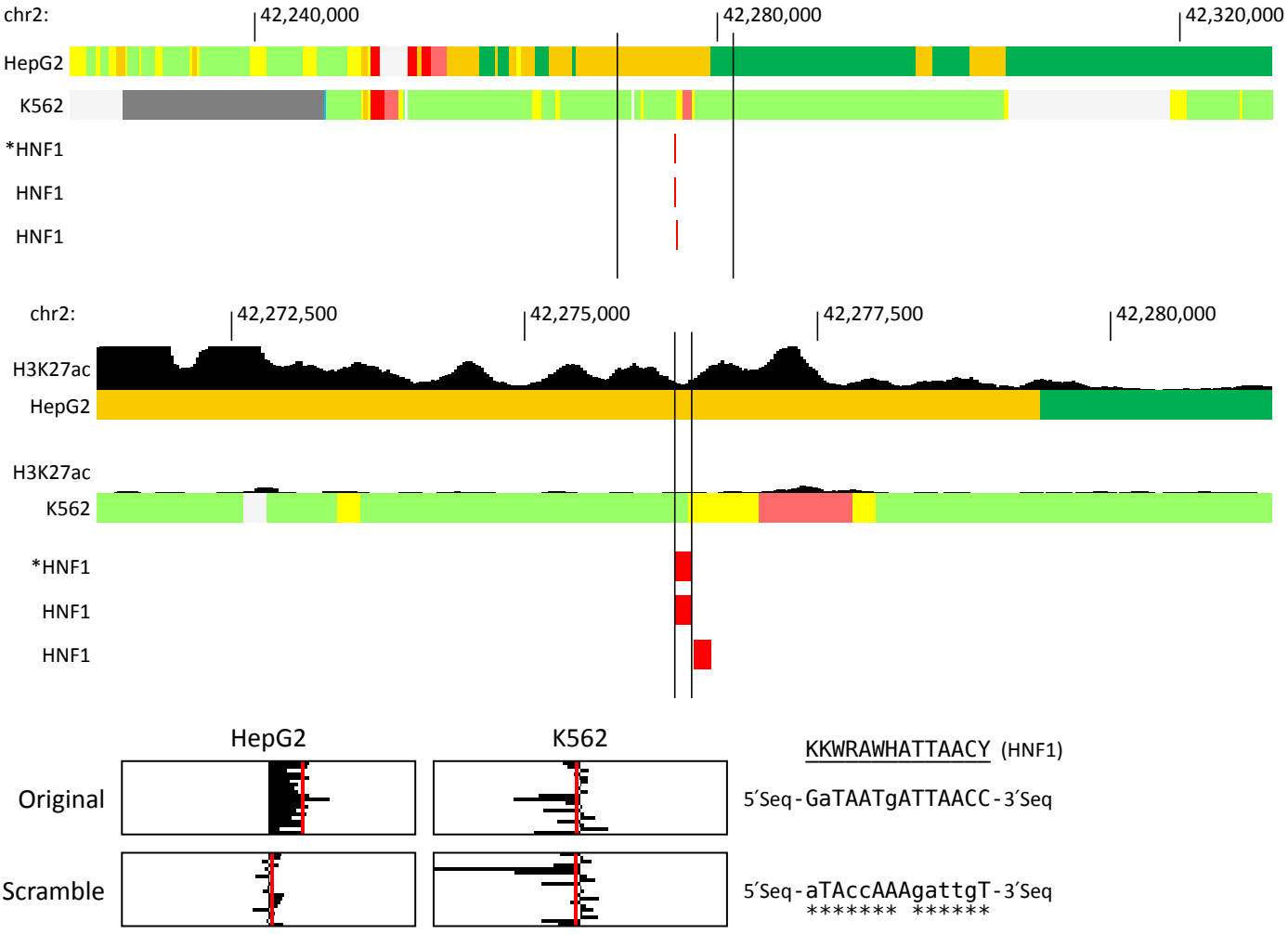
3′Seq = tgttgattatatttggttcaagatgactcatttttcaaggagctttattgcaacactacatattt

264 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr2 42276348 42276361 - (hg18)



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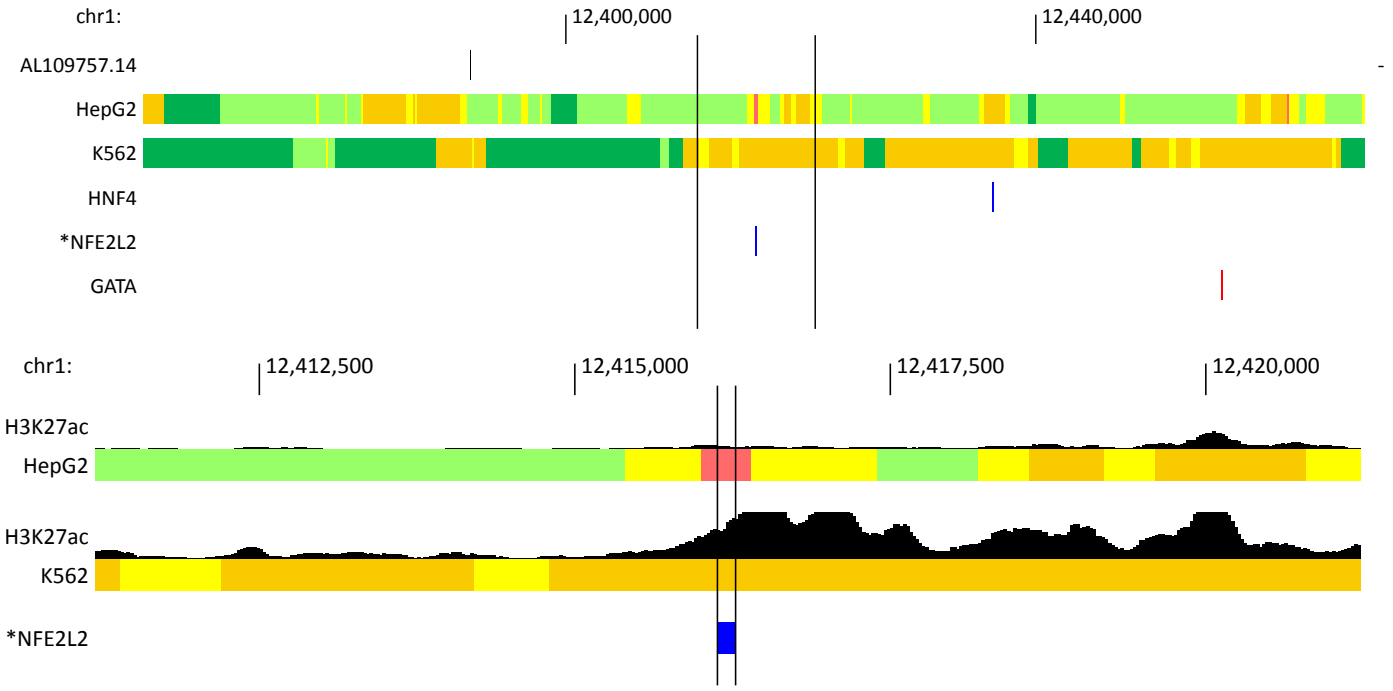
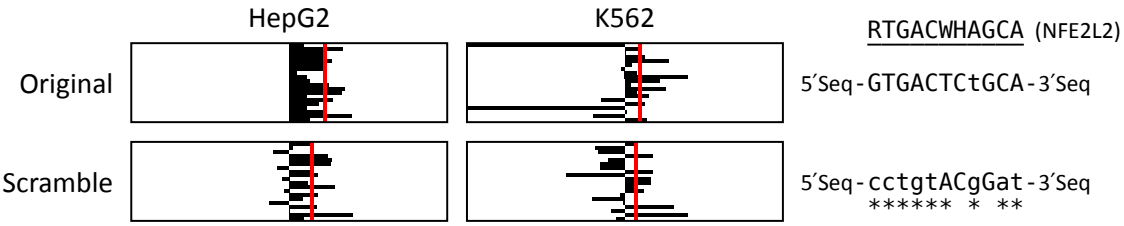
3′Seq = aaaagctggcacaaatcctaacagagtaatataattcaaattcagcctcttaaaagataactcat

265 NFE2L2 in K562 enhancer

chr1 12416197 12416207 + (hg18)

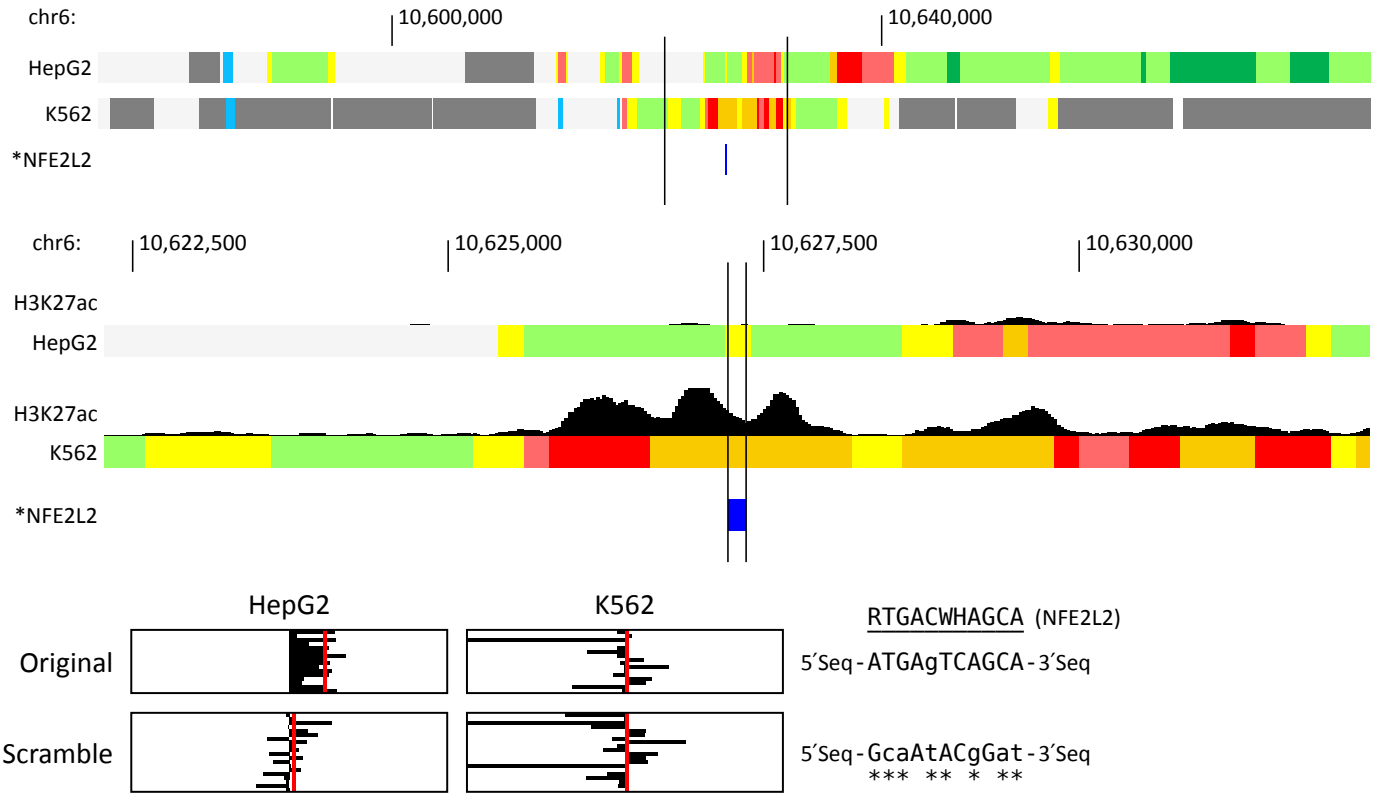




5′Seq = ggaaagttatctgtgaagagtattagttgtttaataaagcgtgcctgccctcccgatgaacccgcca
3′Seq = gctggggtcattccaagttcacgcagtggacttttgactgccttctgtgtctgtgaaaacagtcggc

266 NFE2L2 in K562 enhancer

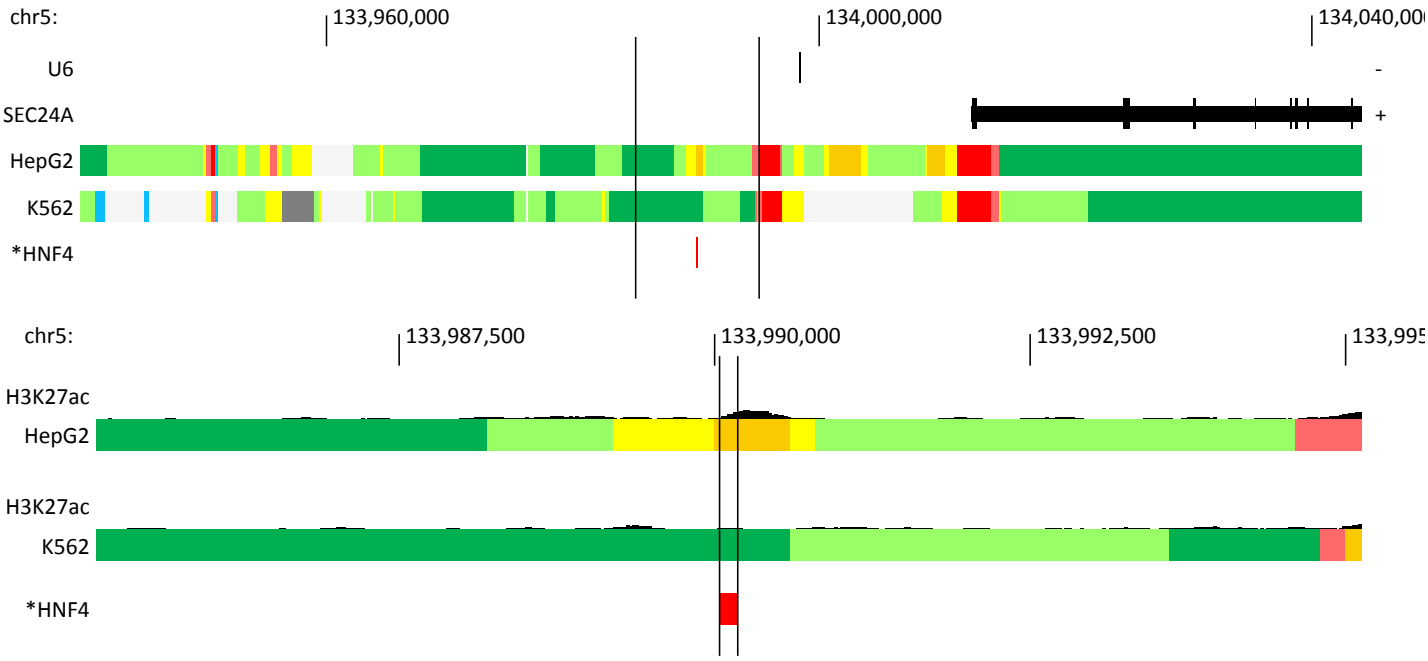
chr6 10627284 10627294 - (hg18)

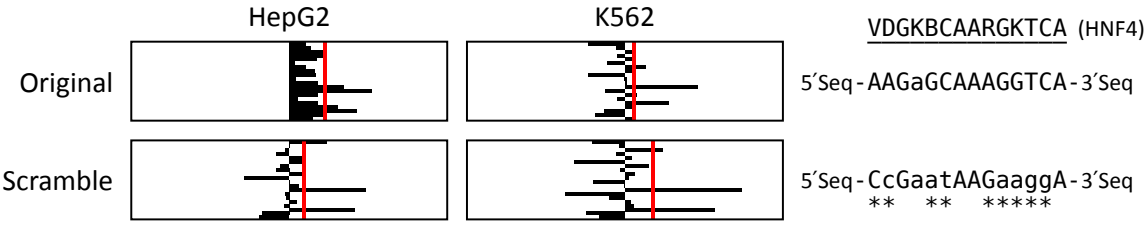


5′Seq = ctccctcatcttacgctgcattgtgtgtgttgggcccagatctacaattcaacttcctcatgagcgc
3′Seq = tttcttcatggcctgtcattctgtactgtttgcaaaagtatgaaaaatagagaccagcccatgggaa

267 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr5 133990105 133990118 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-AAGaGCAAAGGTCA-3′Seq

5′Seq-CcGaatAAGaaggA-3′Seq

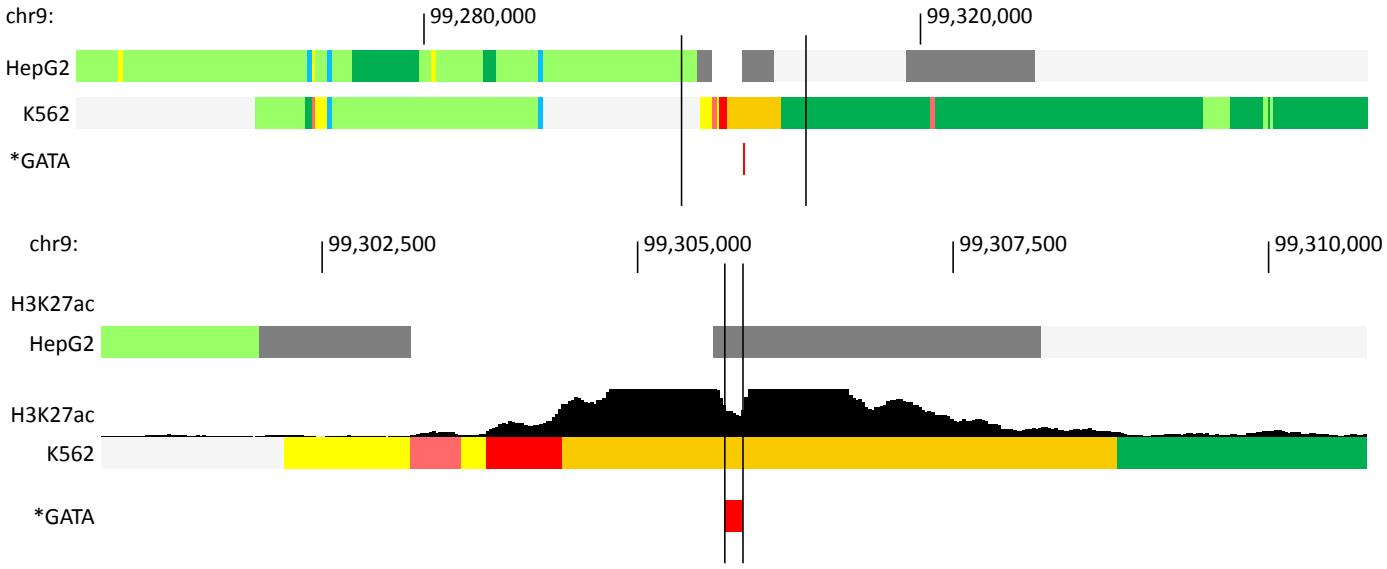
** ** *****

5′Seq = gcaaacagatacctgagcccagaaaacaggttacacaacaccatgaacacactattaagacatgtg

3′Seq = agaacaaggaaacatacacacgtcagcagatttatttattgcaccaataccaaacaggaaaagtc

268 GATA in K562 enhancer (conserved at 60% confidence)

chr9 99305755 99305772 - (hg18)



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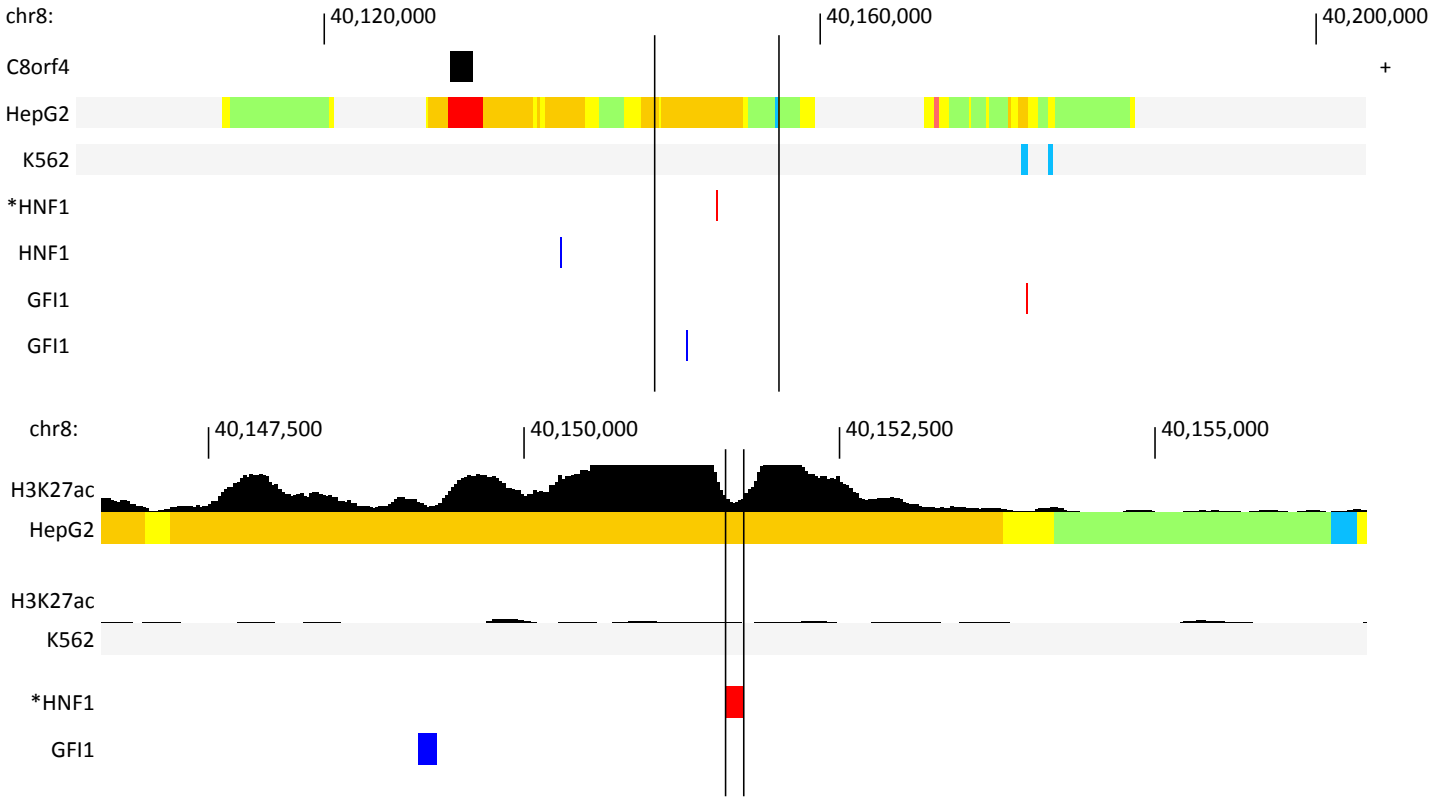
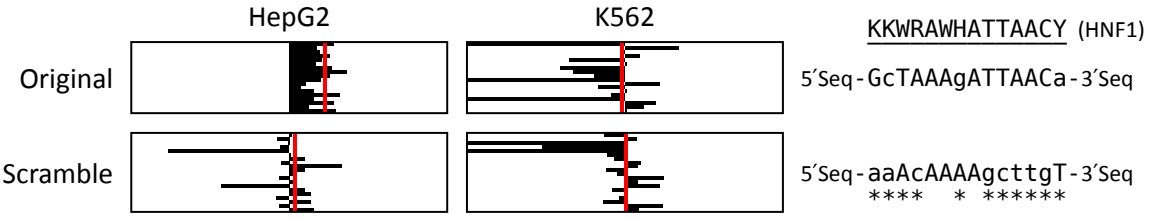
3′Seq = gtggggcggaggctatttttagaggacactggctttcatcttaggctgggagaaactcaaggg

269 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr8 40151663 40151676 - (hg18)





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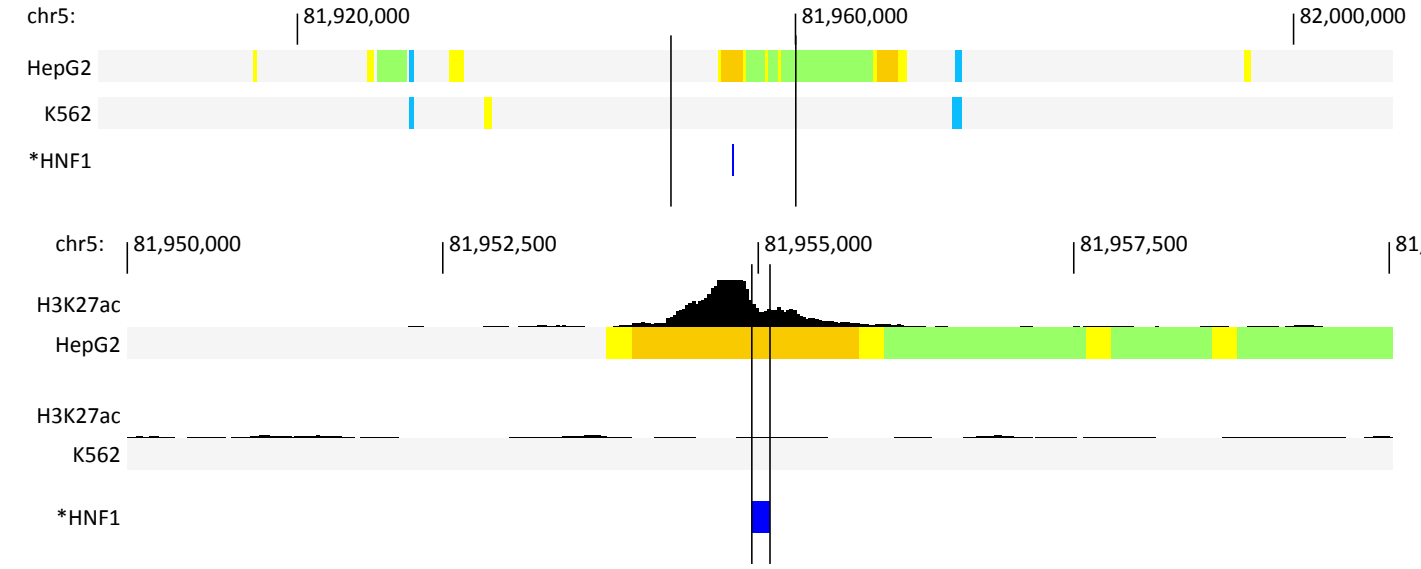
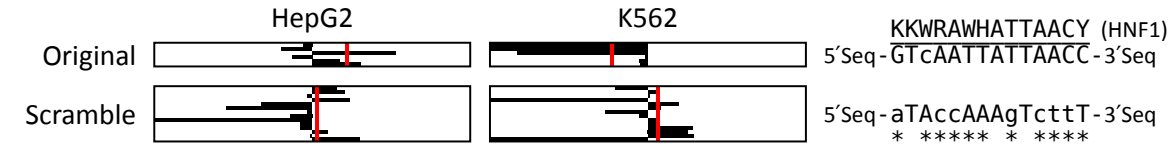
3′Seq = aagtaagcaaacttgtttgctgtacaaactatgcataagtttgaggccaacttcaggaattctga

270 HNF1 in HepG2 enhancer

chr5 81955015 81955028 - (hg18)





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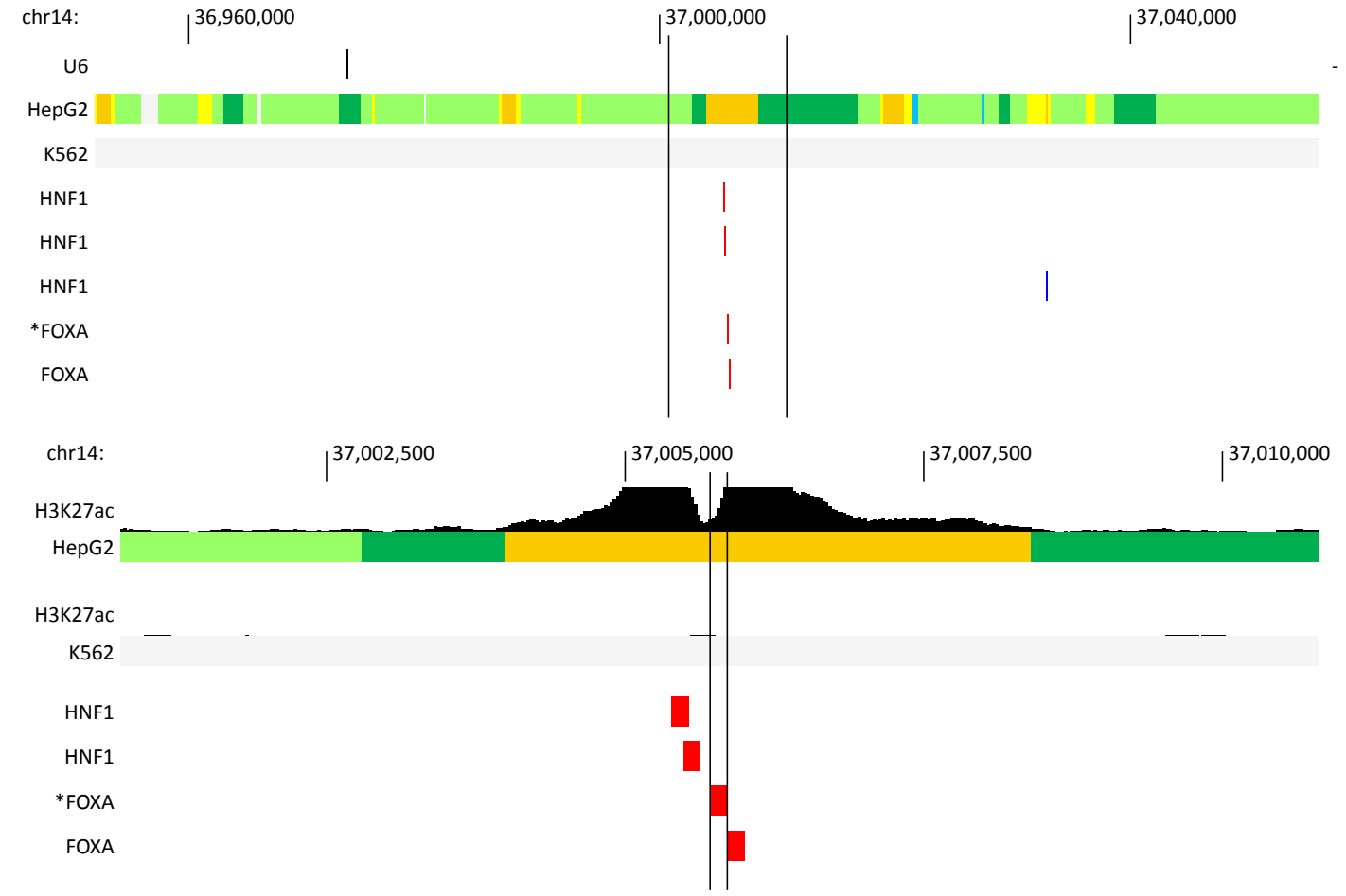
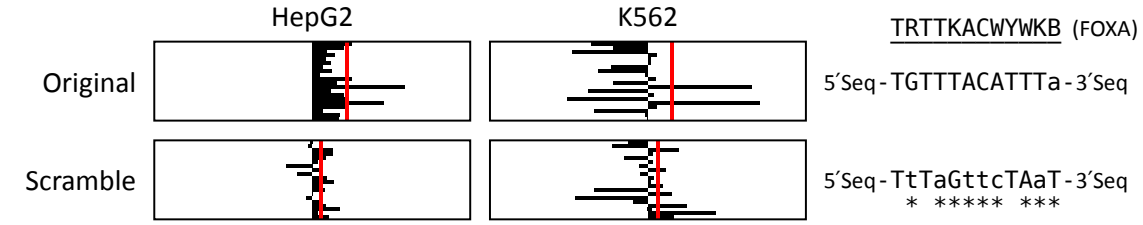
3′Seq = aggttgtttggtgccatatgcaagaaggaactcagctaacgatctgagagcaaagatcacaacca

271 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 37005778 37005789 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACATTTa-3′Seq

5′Seq-TtTaGttcTAaT-3′Seq

* ***** ***

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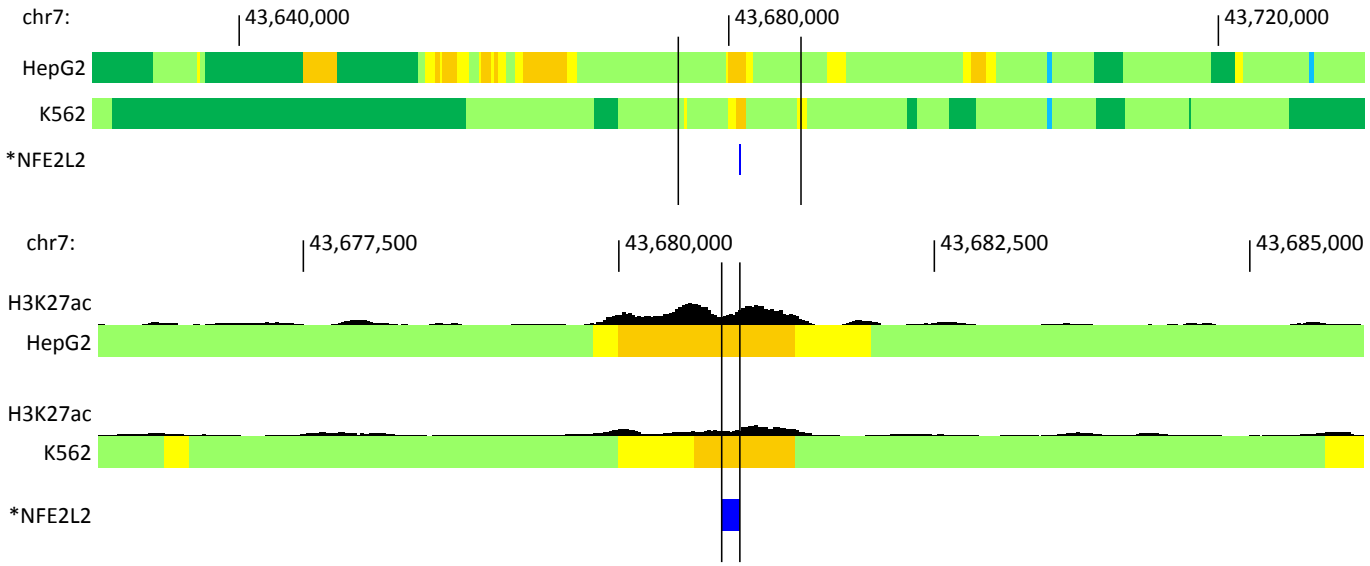
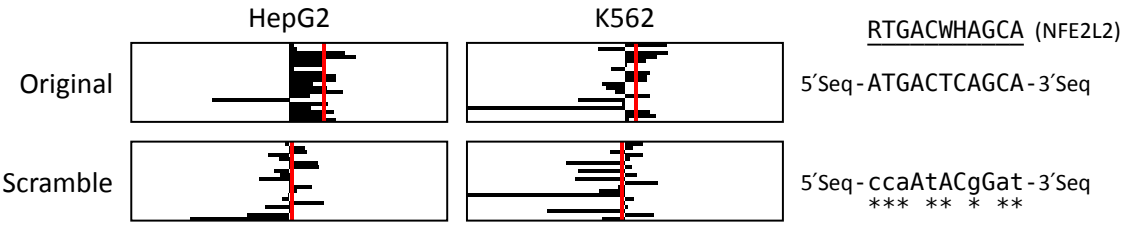
3′Seq = attagaaaggacacatagtttacagcacagtagctatcaatatcagatcagaattgatttccgctt

272 NFE2L2 in HepG2 enhancer

chr7 43680882 43680892 + (hg18)





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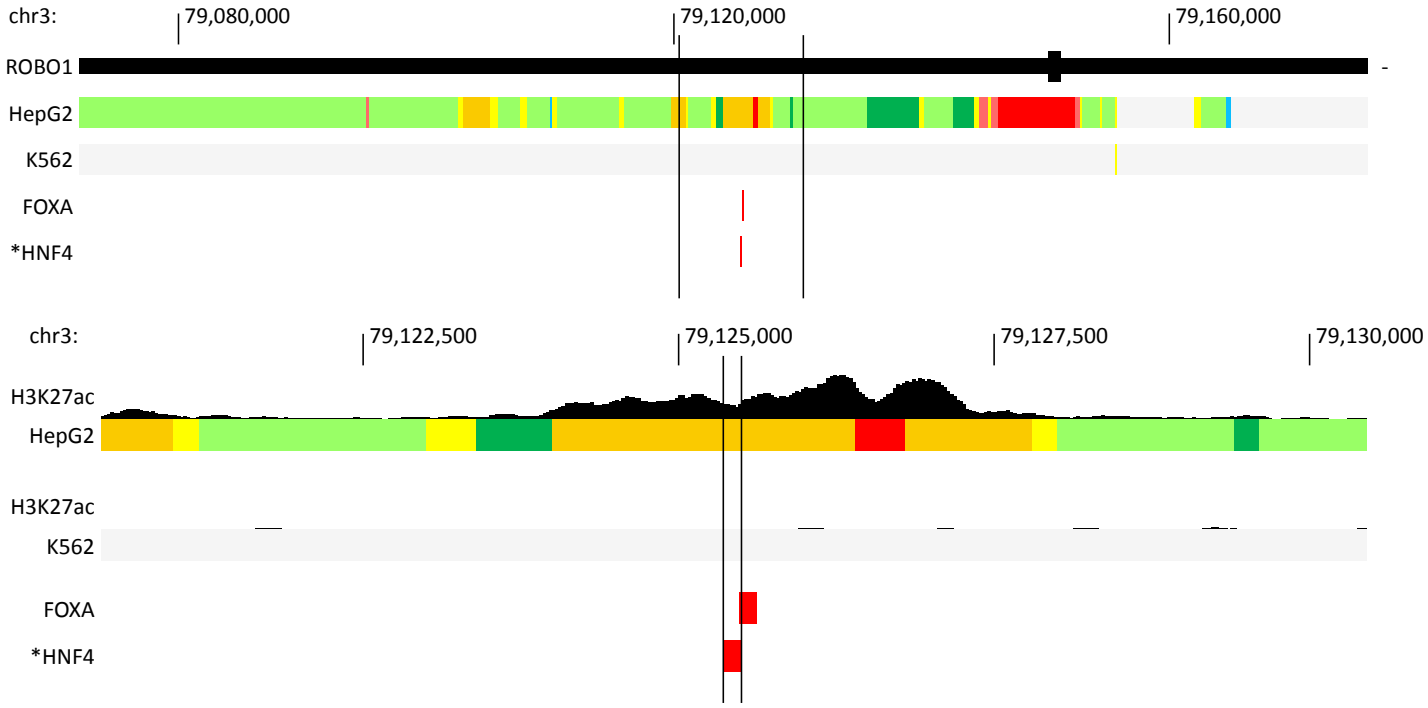
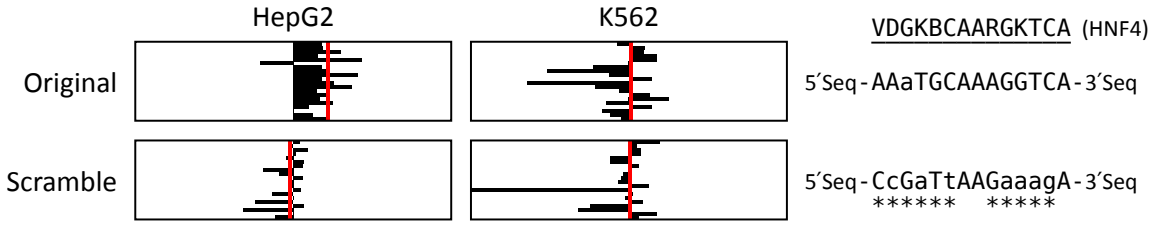
3′Seq = tcaagacttatcttcaggacttttaaggacaaacttcctataactactcttattcaaaccaactctg

273 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr3 79125420 79125433 - (hg18)





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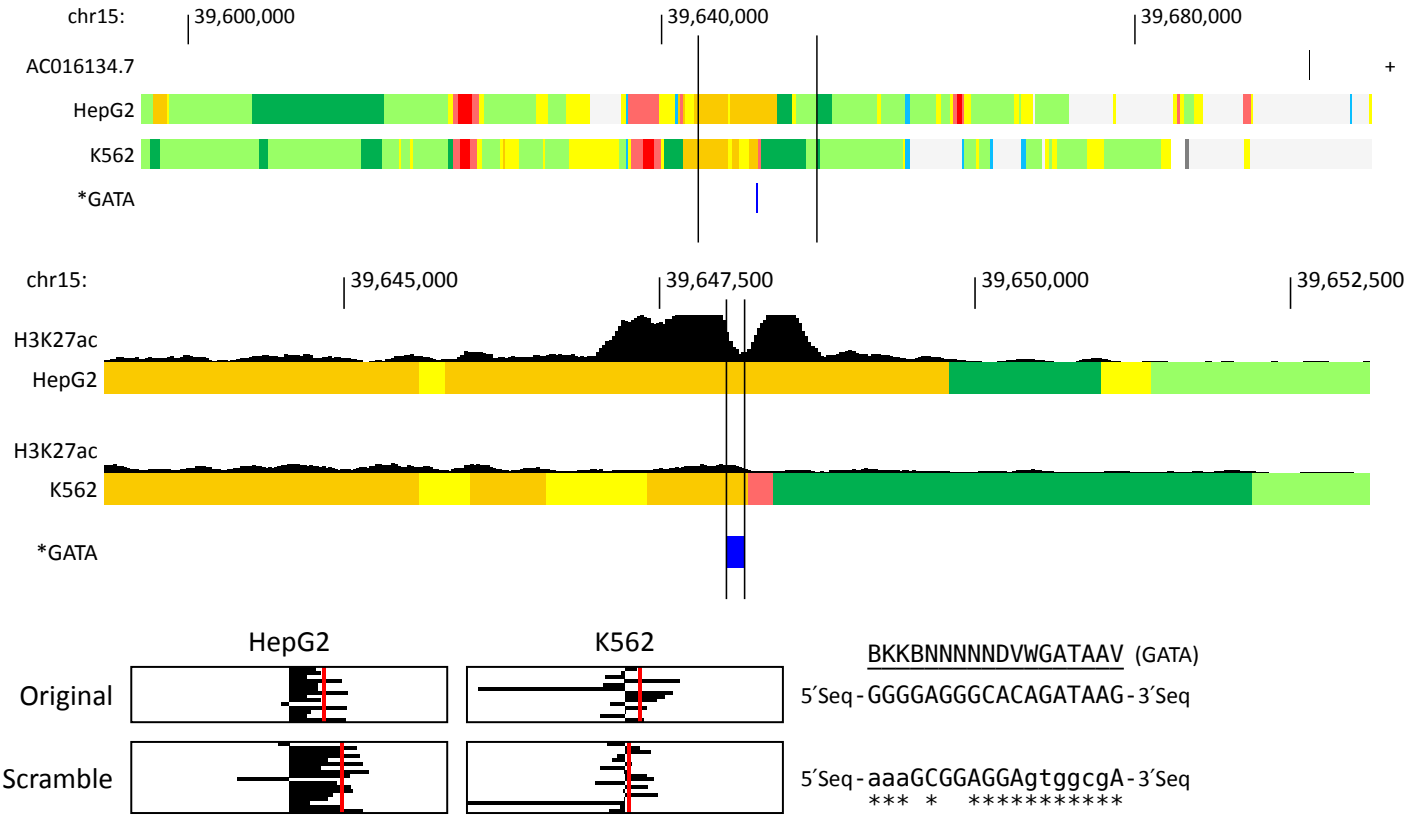
274 GATA in K562 enhancer

chr15 39648094 39648111 + (hg18)



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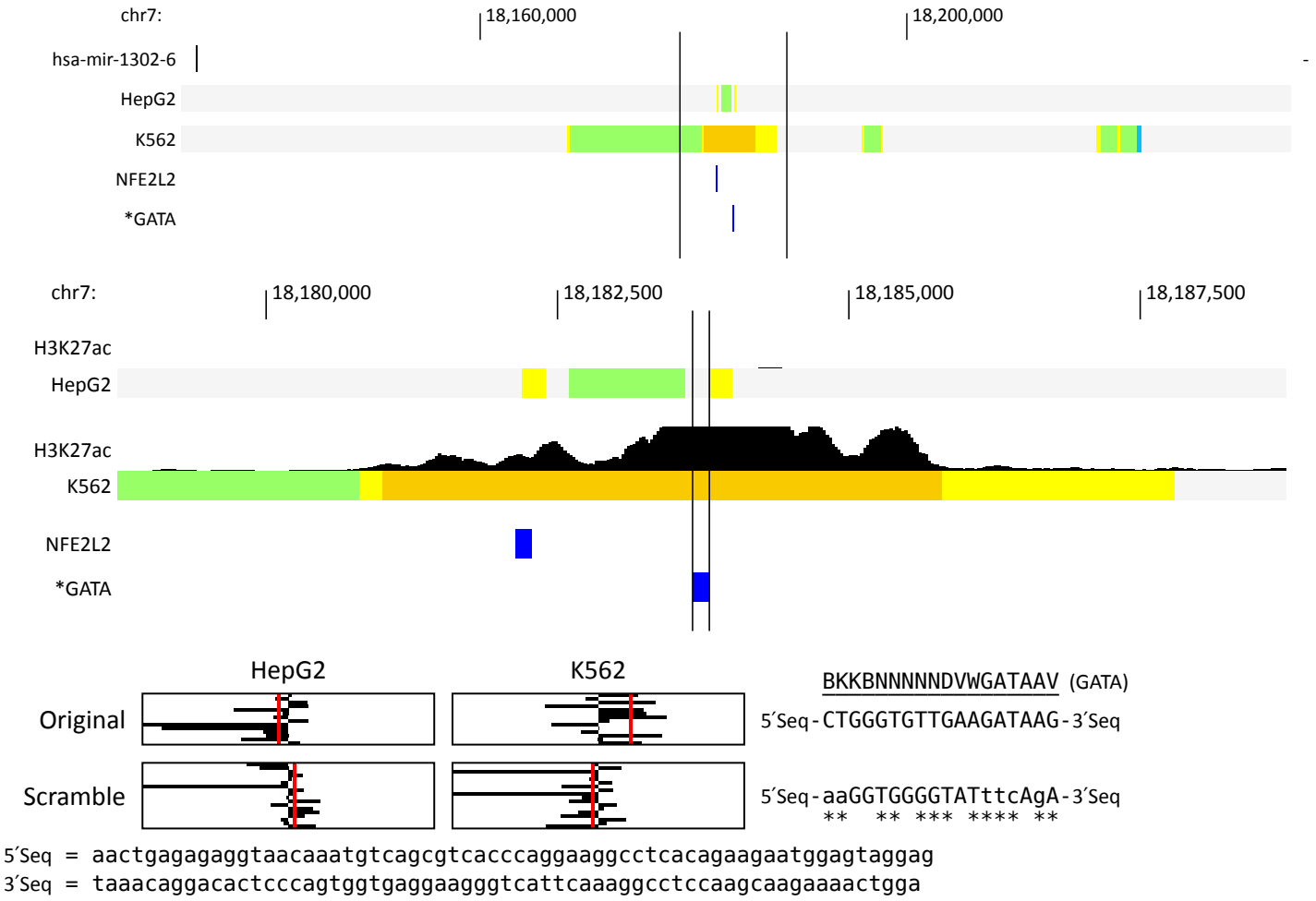
275 GATA in K562 enhancer

chr7 18183723 18183740 - (hg18)



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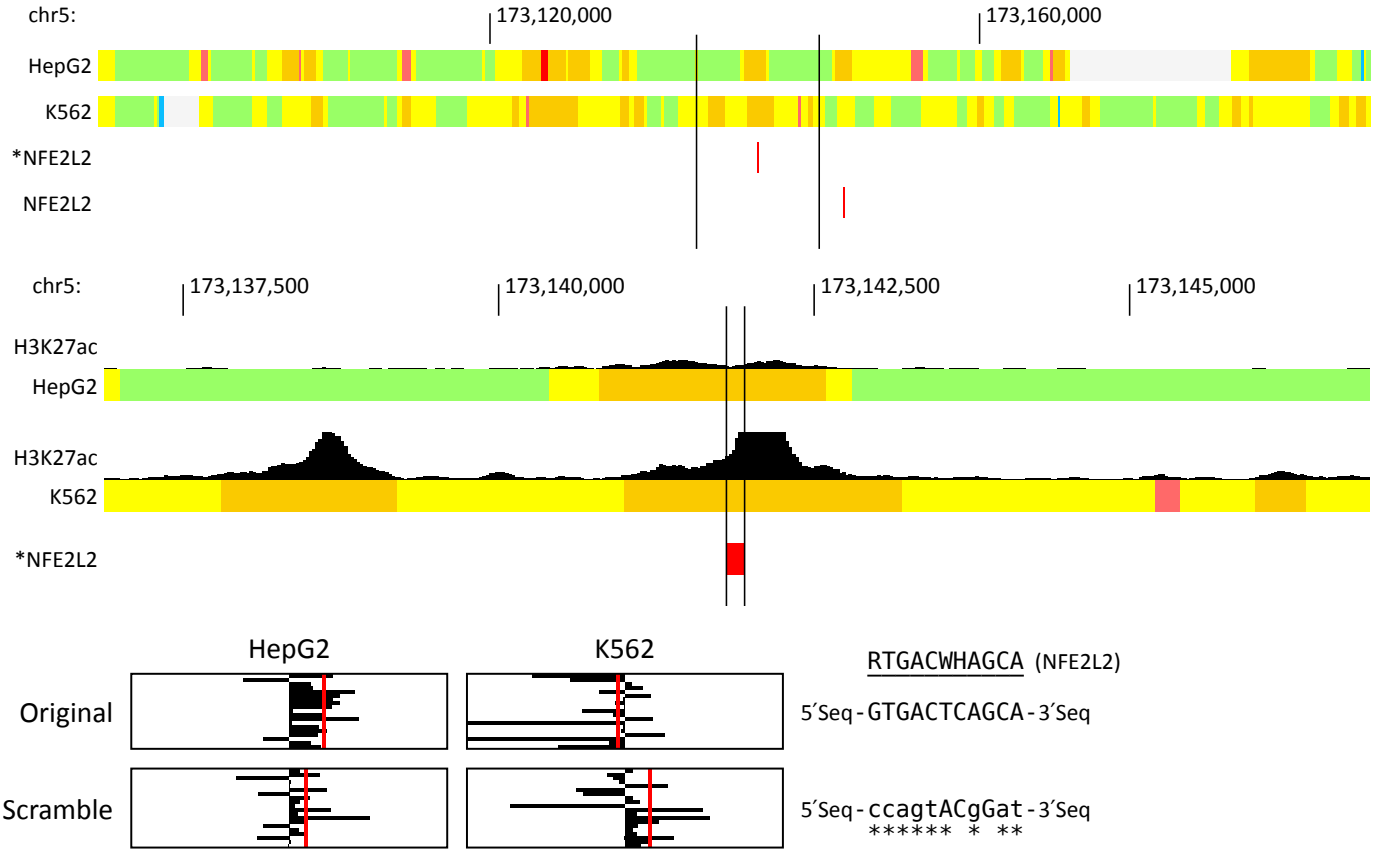
276 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr5 173141872 173141882 + (hg18)



5′Seq = atctcgagggagatttctccccacccctgctctgacgtcacgatgttcttgtttttctctgggccct
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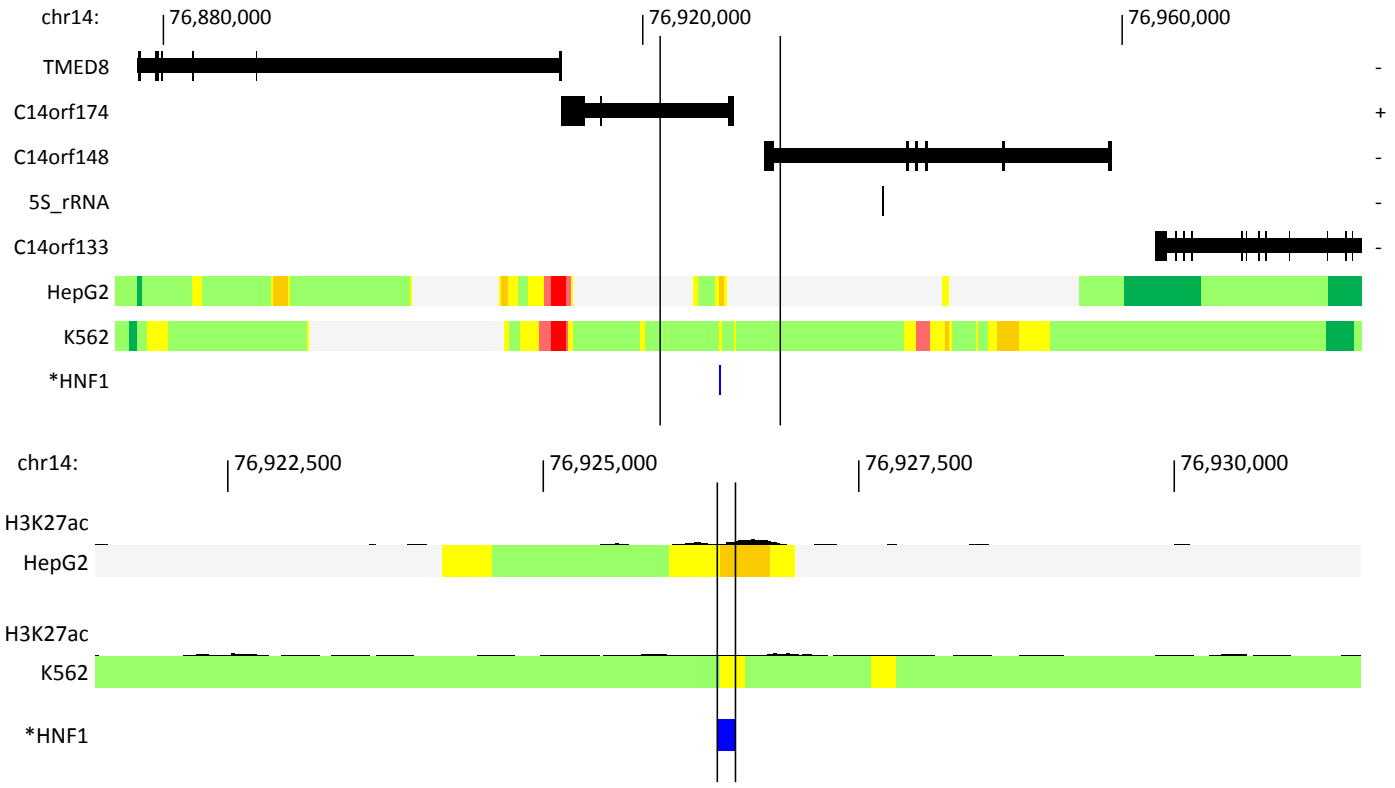
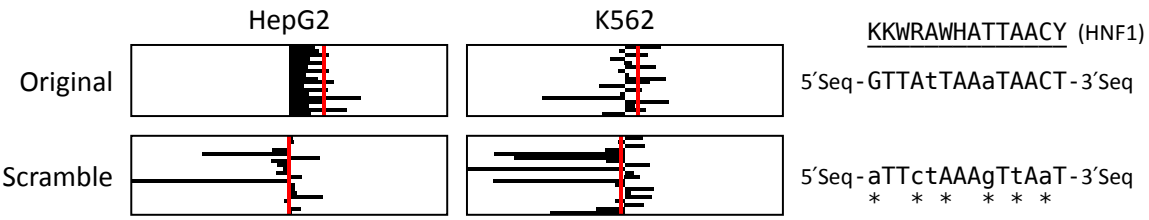
277 HNF1 in HepG2 enhancer

chr14 76926445 76926458 - (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GTTAtTAAaTAACT-3′Seq

5′Seq-aTTctAAAgTtAaT-3′Seq

* * * * * *

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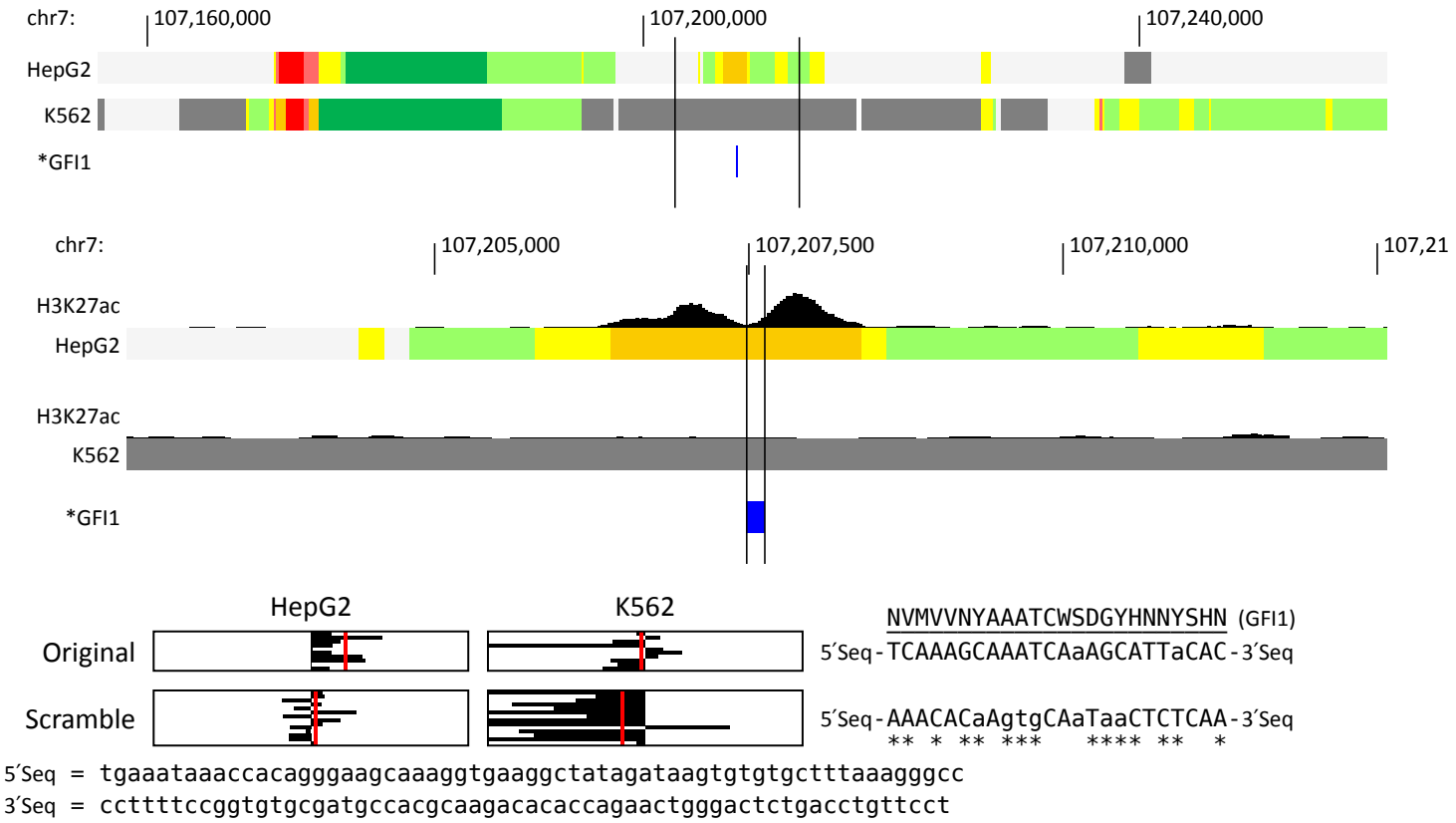
278 GFI1 in HepG2 enhancer

chr7 107207544 107207567 + (hg18)



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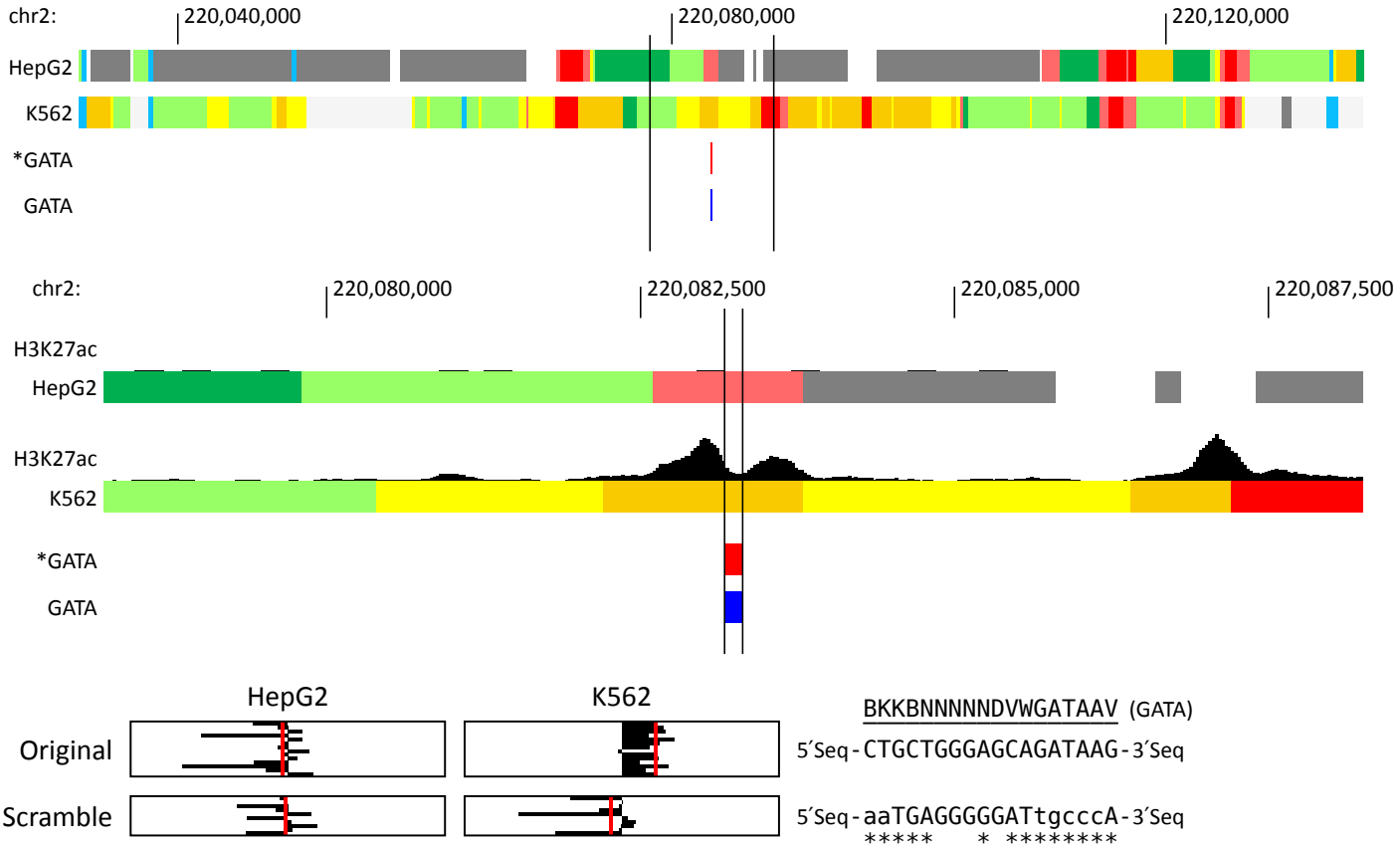
279 GATA in K562 enhancer (conserved at 60% confidence)

chr2 220083233 220083250 - (hg18)



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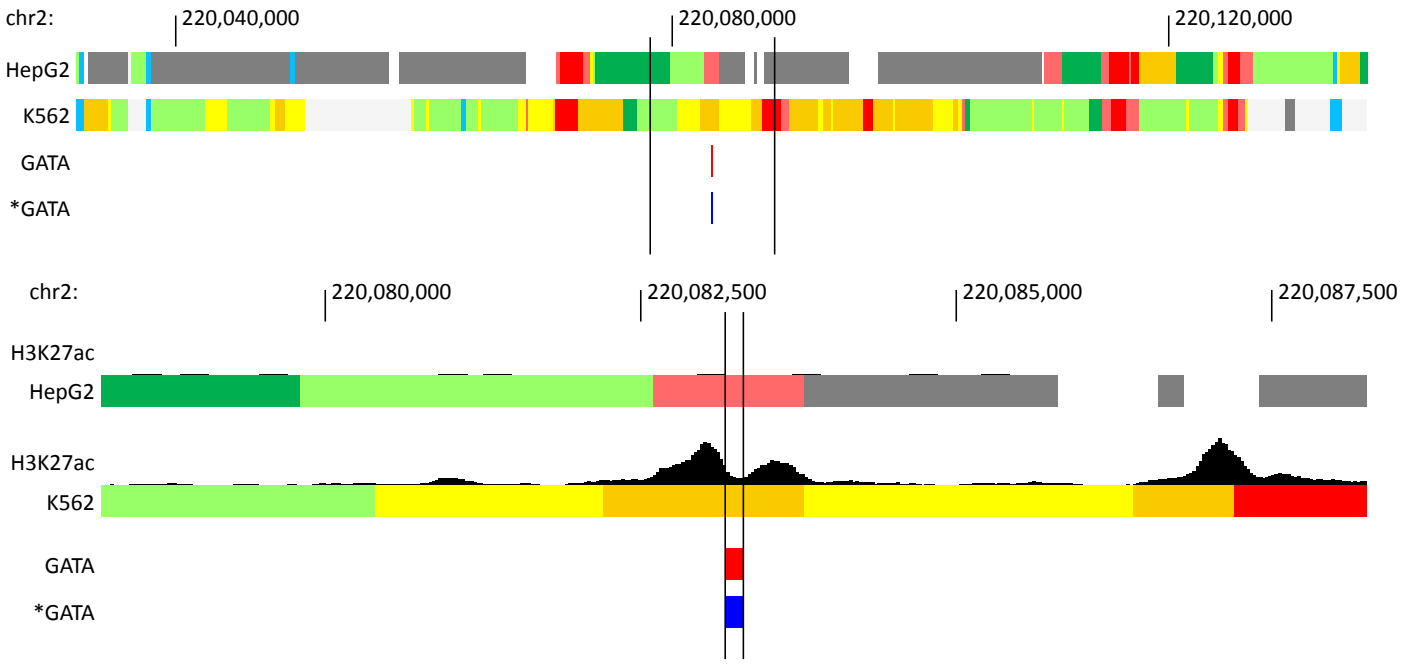
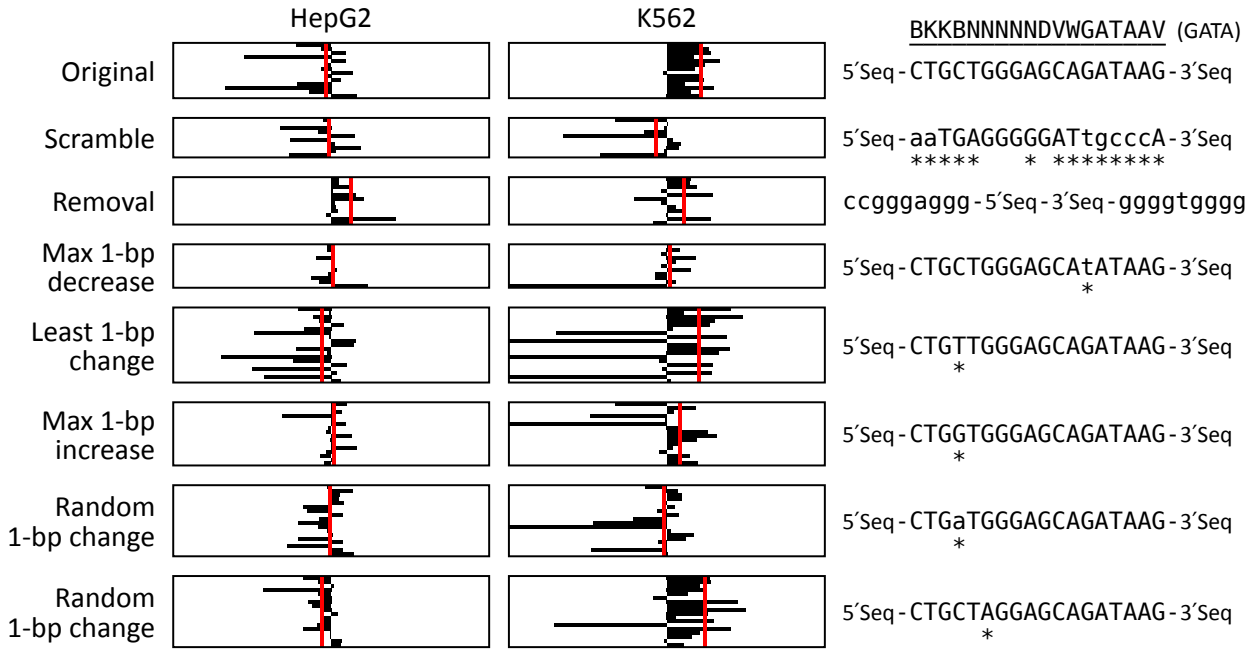
280 GATA in K562 enhancer

chr2 220083233 220083250 - (hg18)





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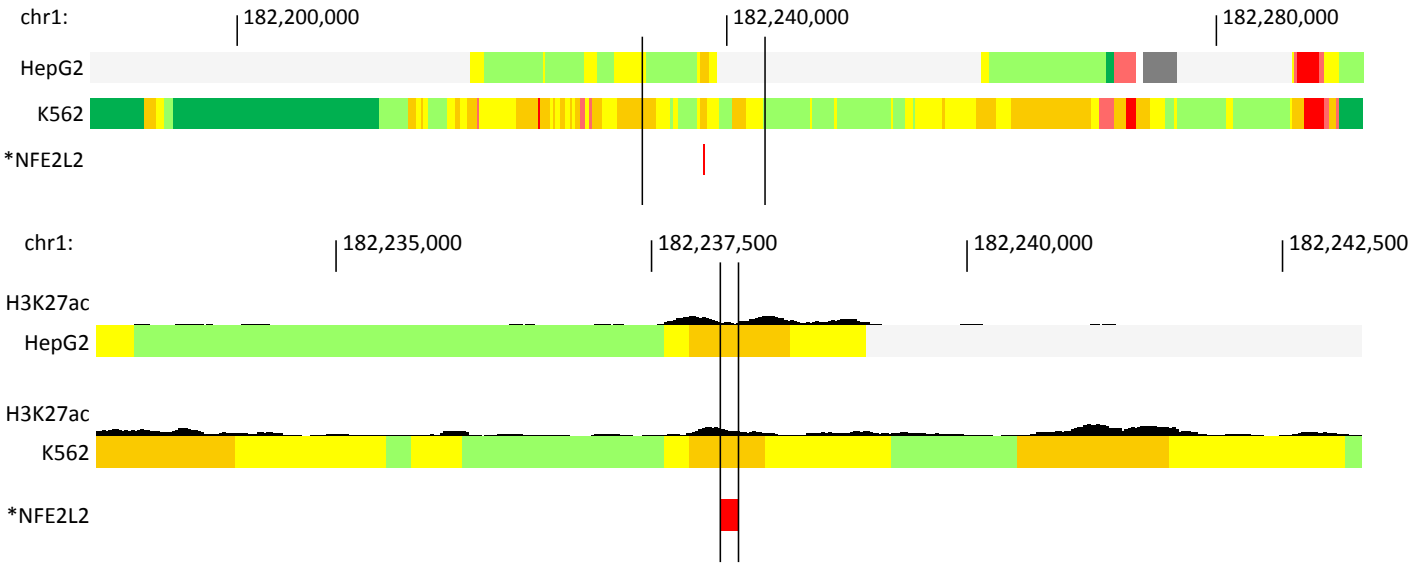
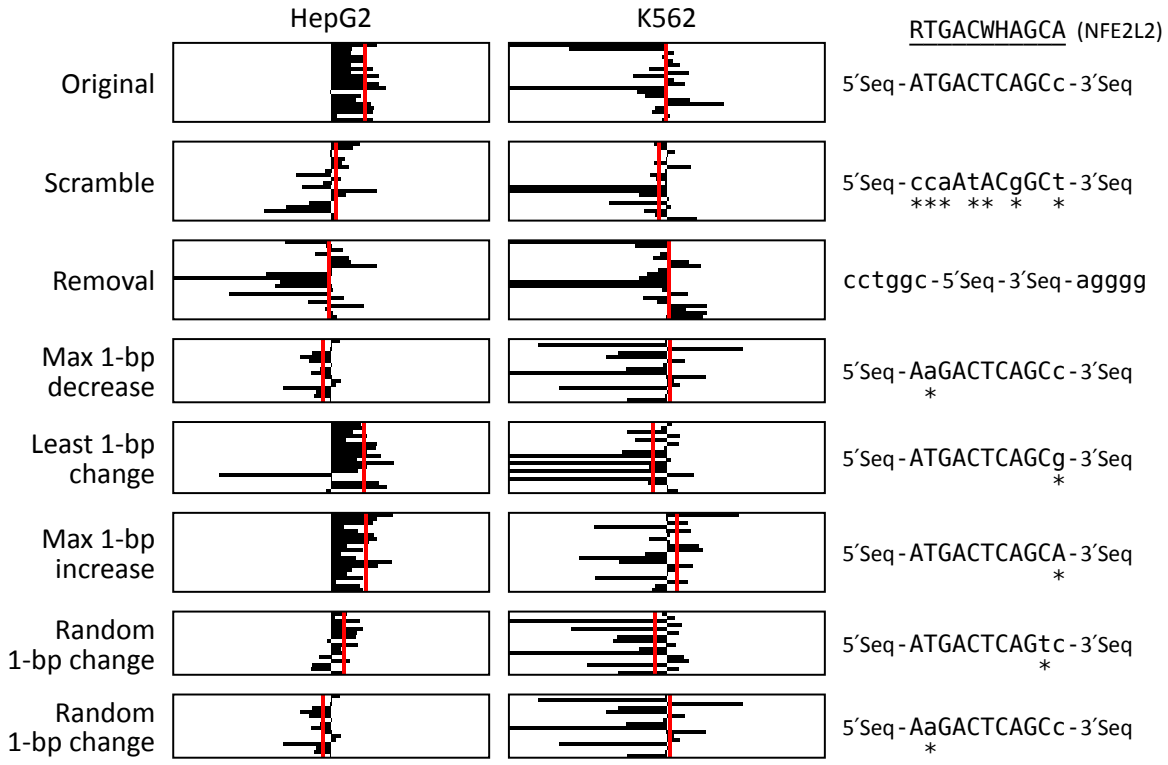
281 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 182238112 182238122 + (hg18)





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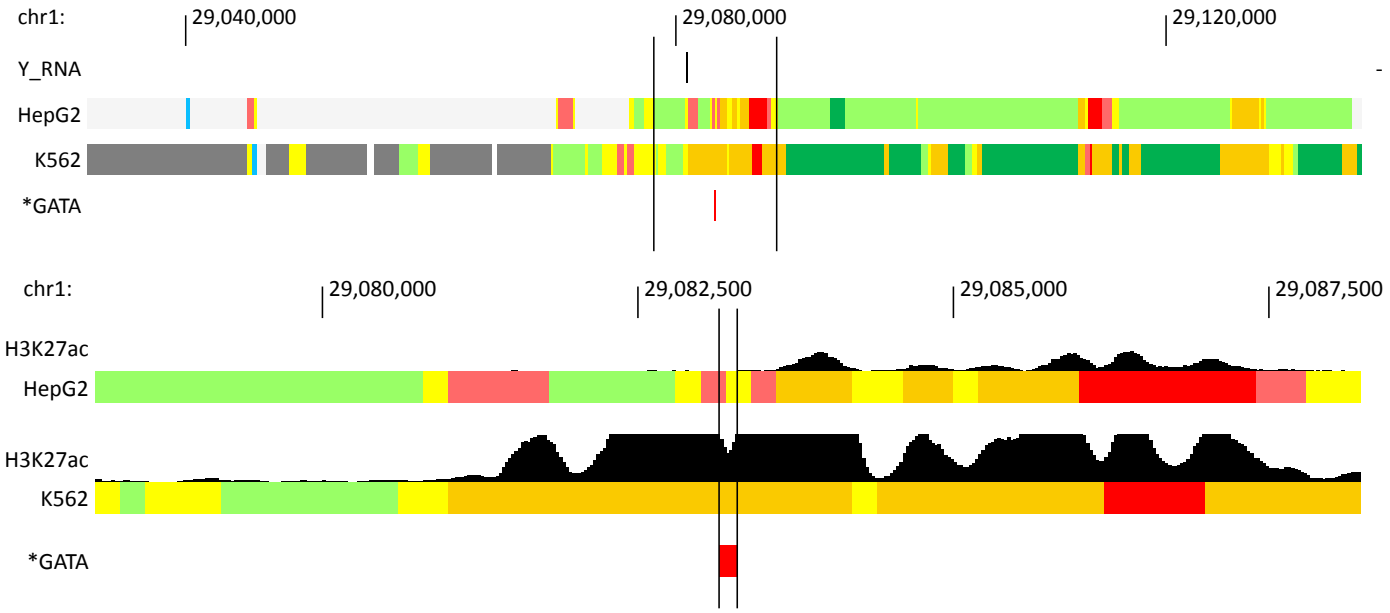
282 GATA in K562 enhancer (conserved at 60% confidence)

chr1 29083207 29083224 - (hg18)



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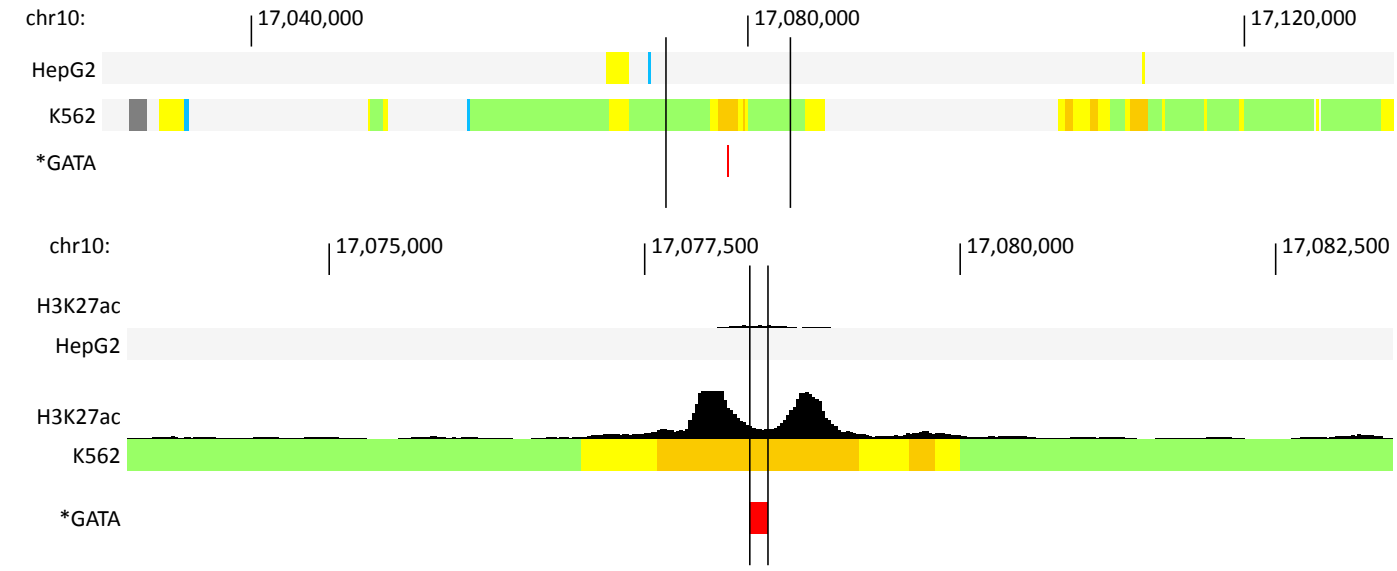
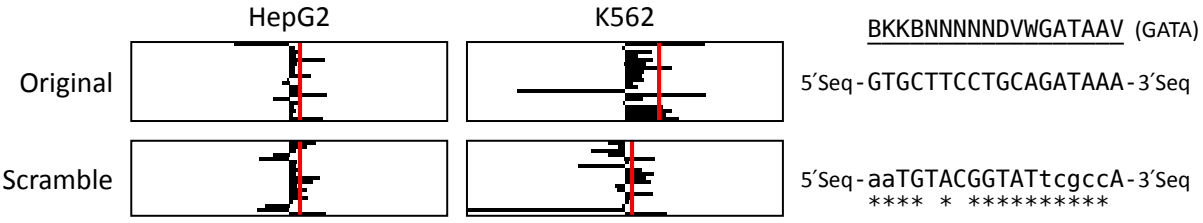
283 GATA in K562 enhancer (conserved at 60% confidence)

chr10 17078397 17078414 - (hg18)





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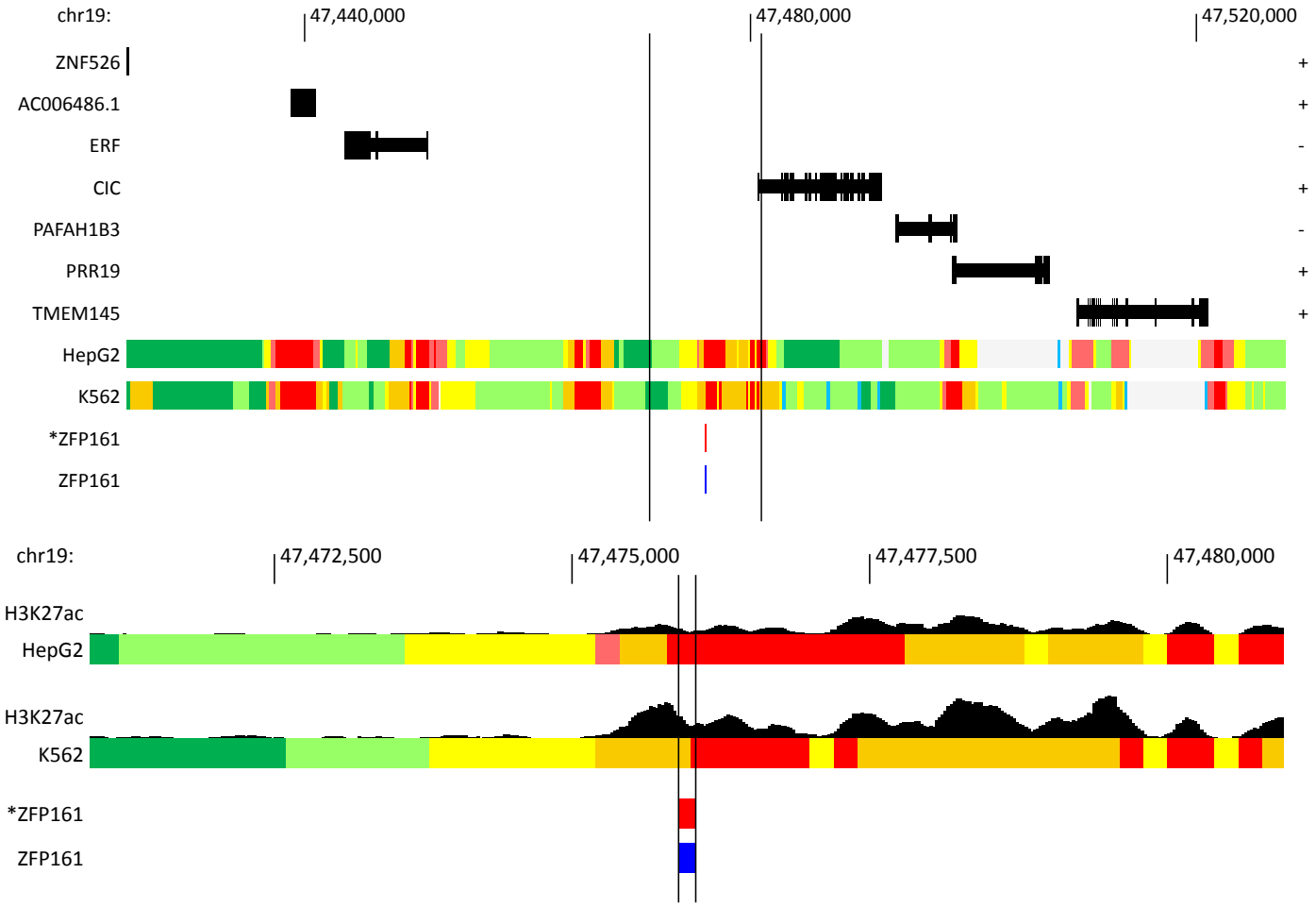
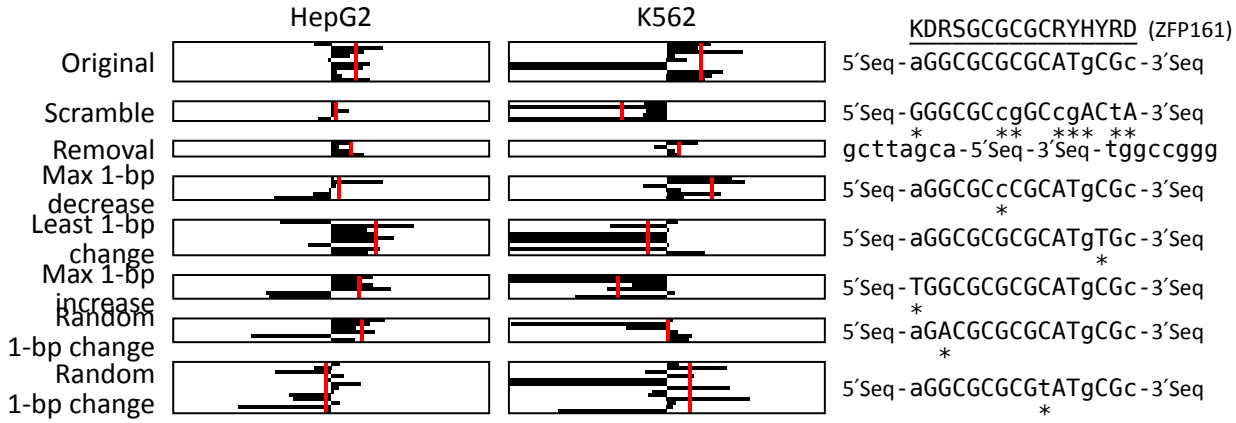
3′Seq = gcaagcacttcctttcggcagatgagtgagagtttggaggaaaatcaaggcaaacagatgatc

284 ZFP161 in K562 enhancer (conserved at 60% confidence)

chr19 47475960 47475975 + (hg18)





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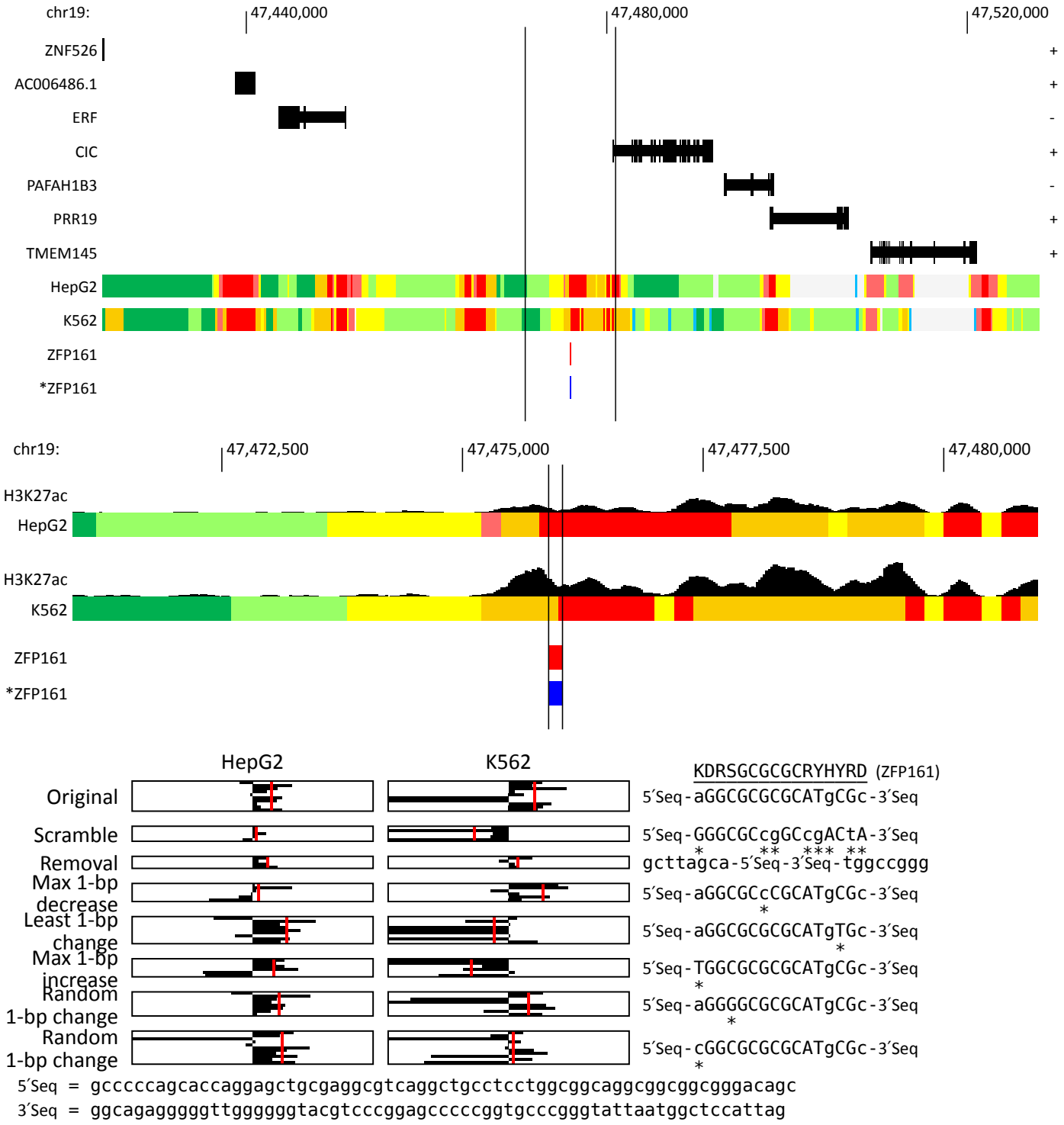
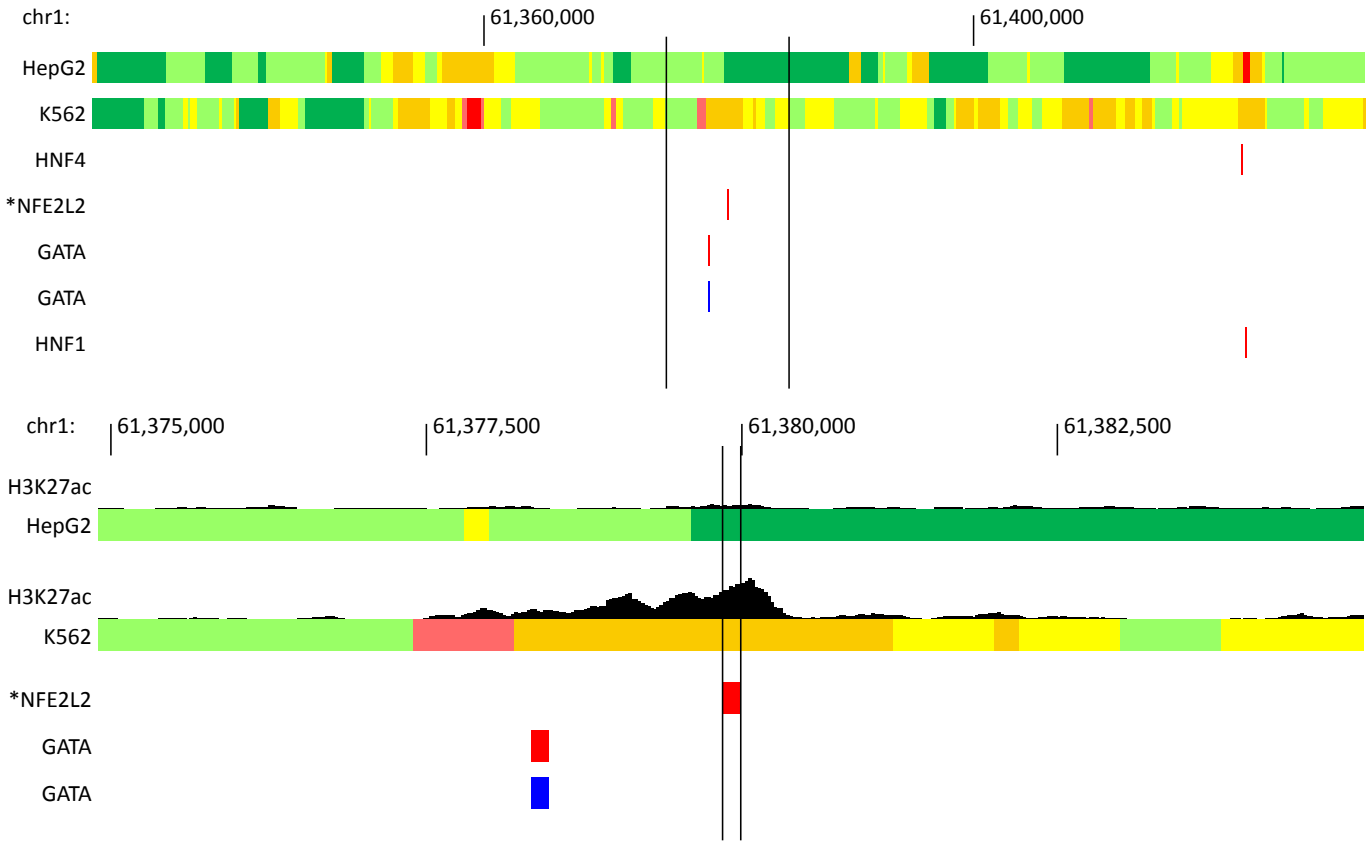
285 ZFP161 in K562 enhancer

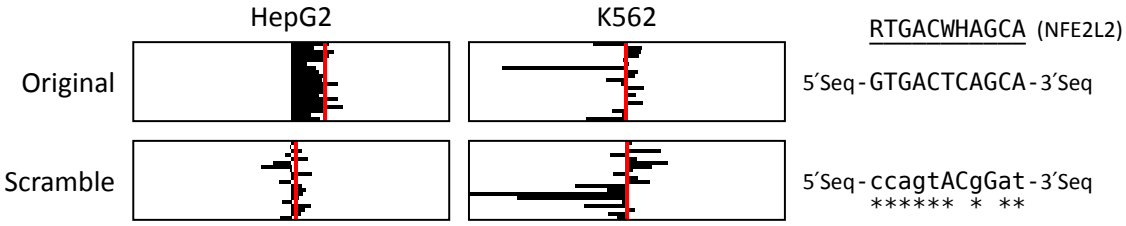
chr19 47475960 47475975 + (hg18)



286 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 61379914 61379924 + (hg18)





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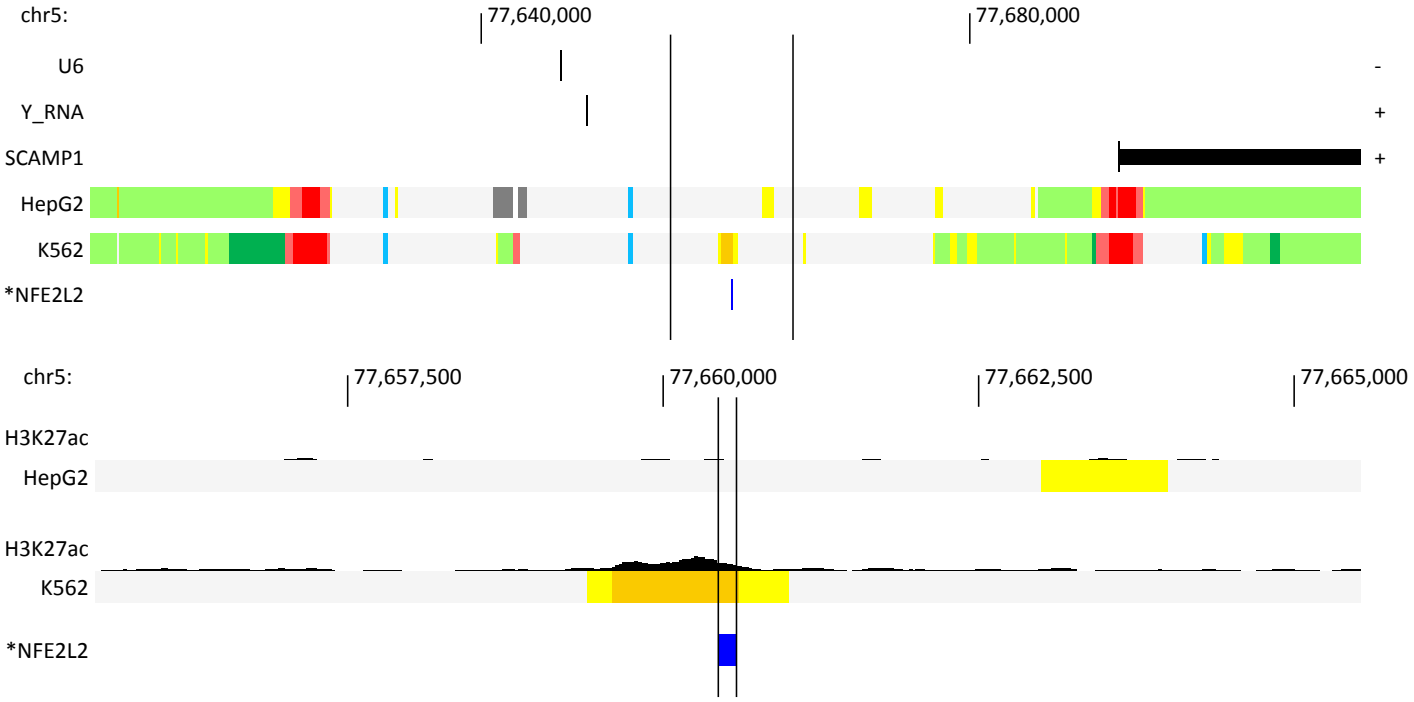
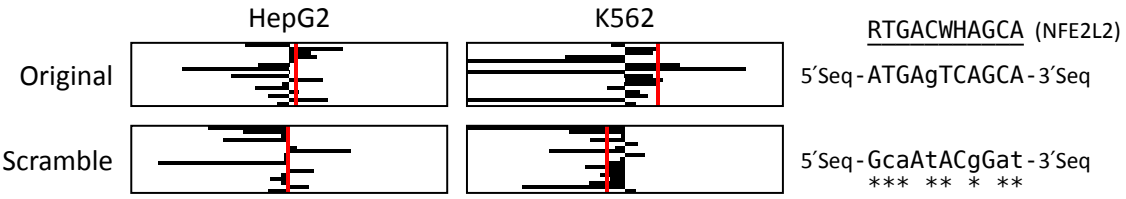
287 NFE2L2 in K562 enhancer

chr5 77660504 77660514 - (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq-ATGAgTCAGCA-3′Seq

5′Seq-GcaAtACgGat-3′Seq

*** ** * **

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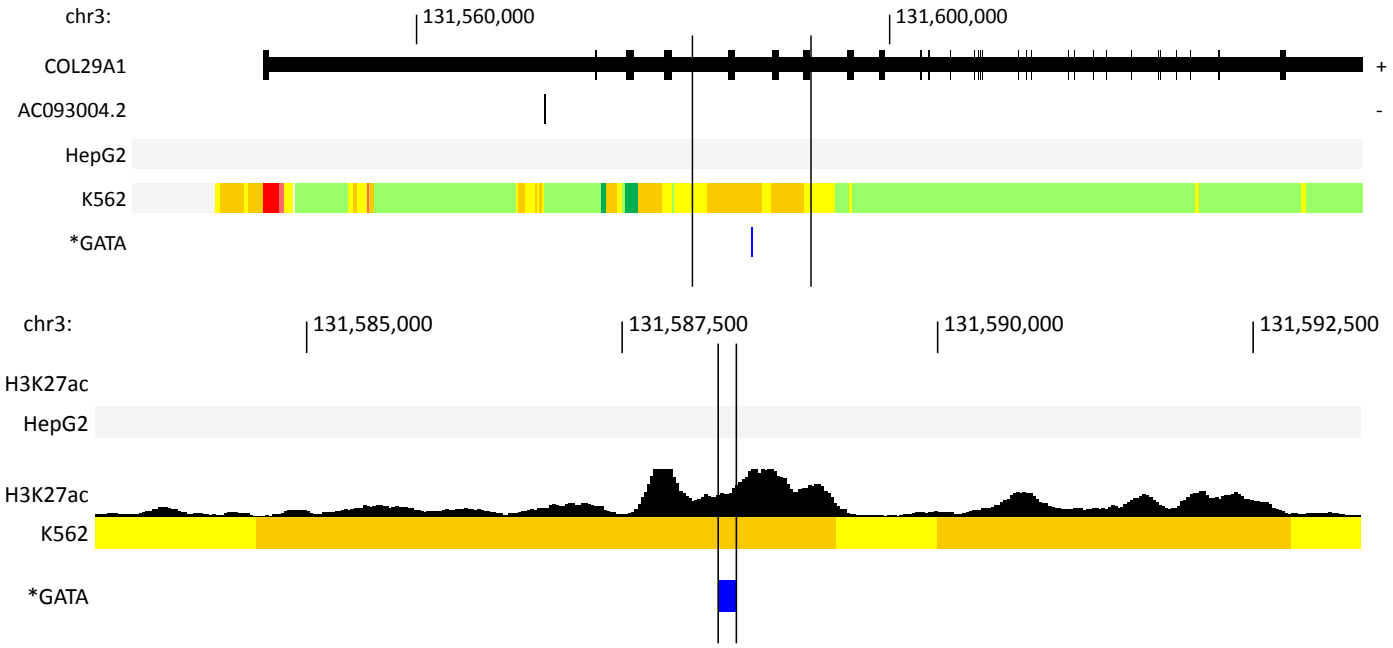
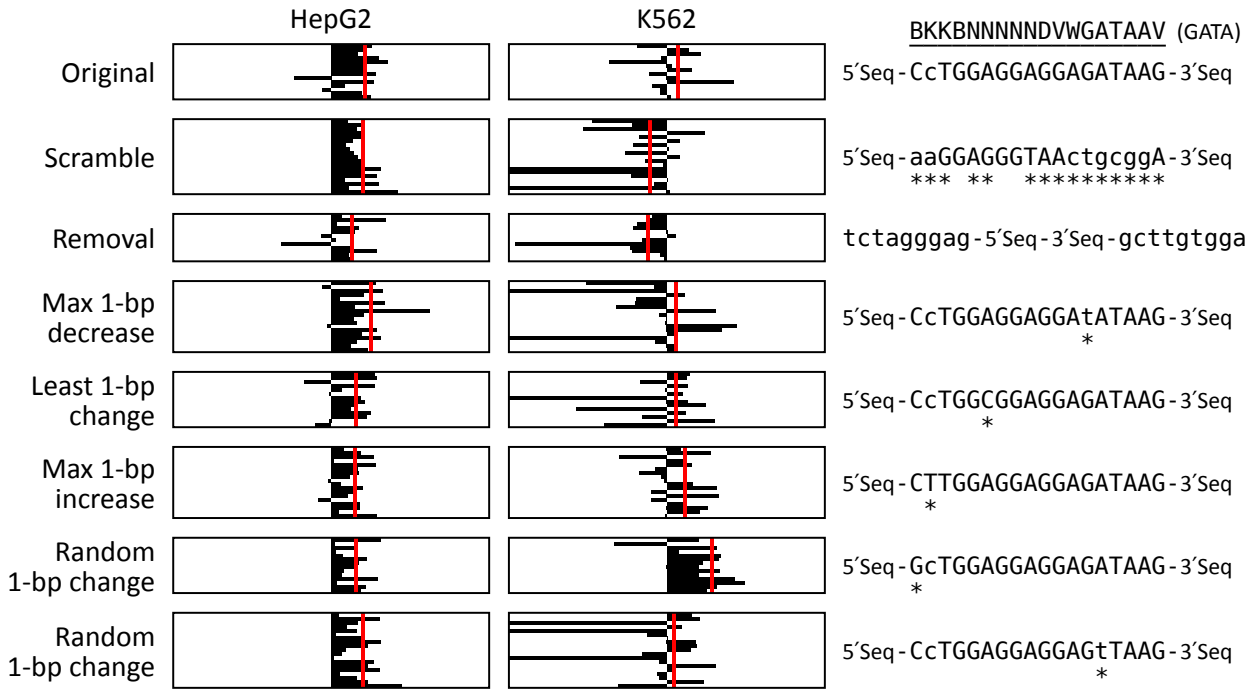
288 GATA in K562 enhancer

chr3 131588325 131588342 + (hg18)





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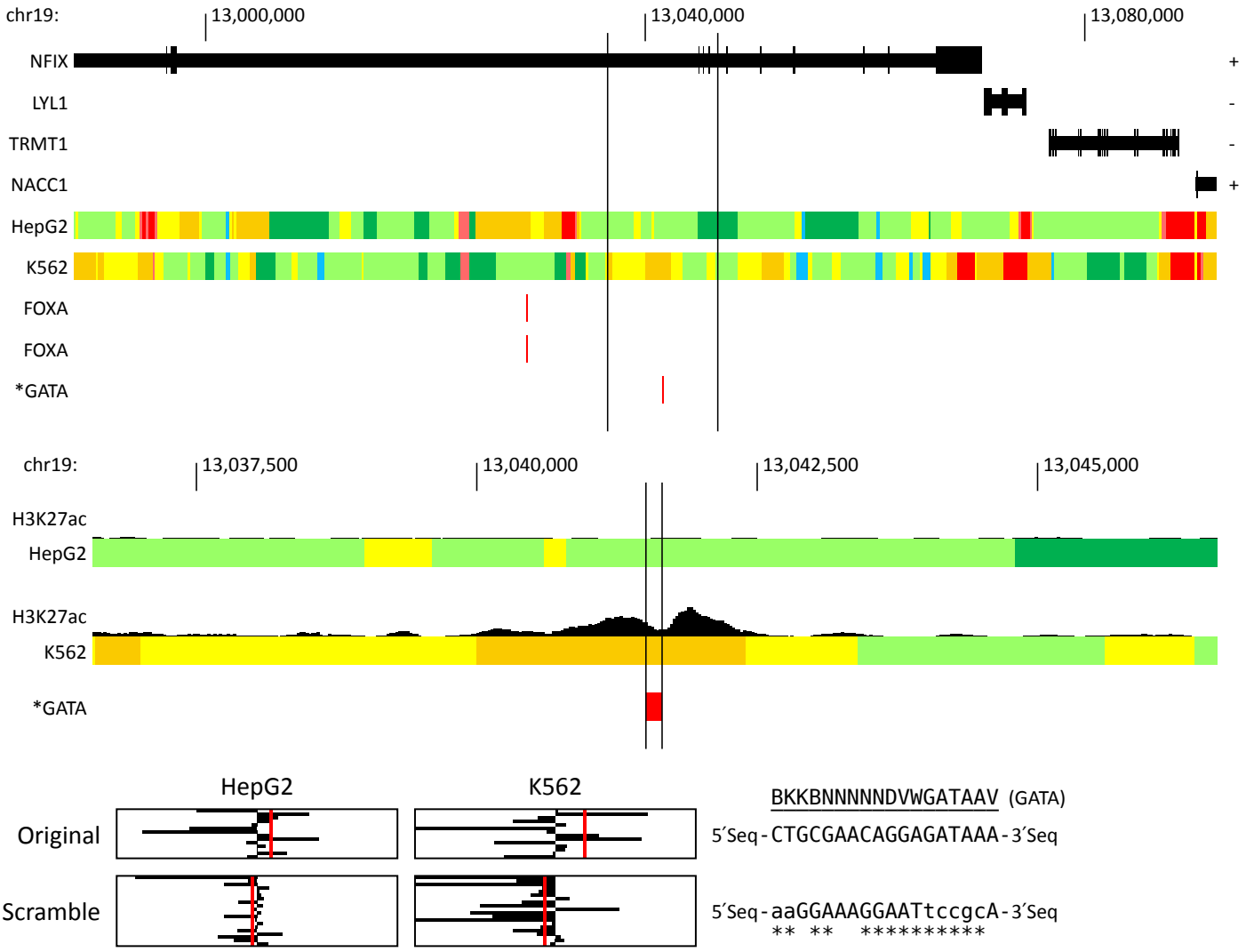
289 GATA in K562 enhancer (conserved at 60% confidence)

chr19 13041572 13041589 + (hg18)



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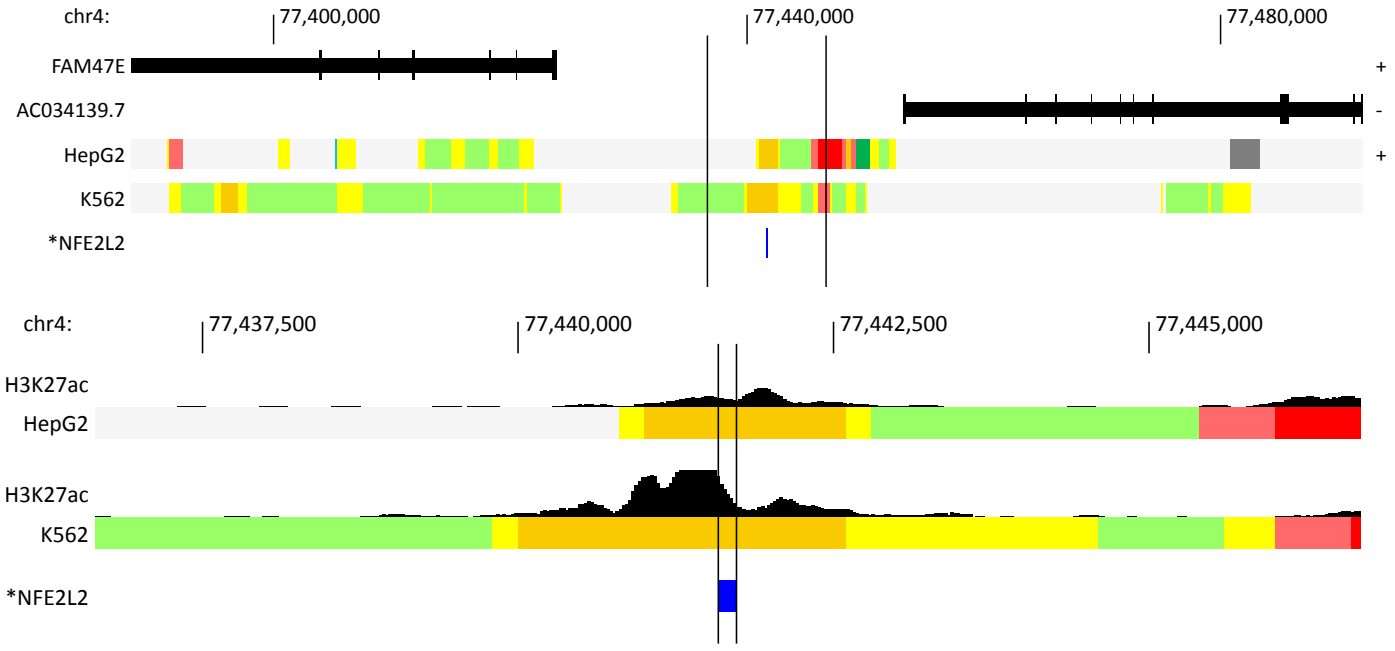
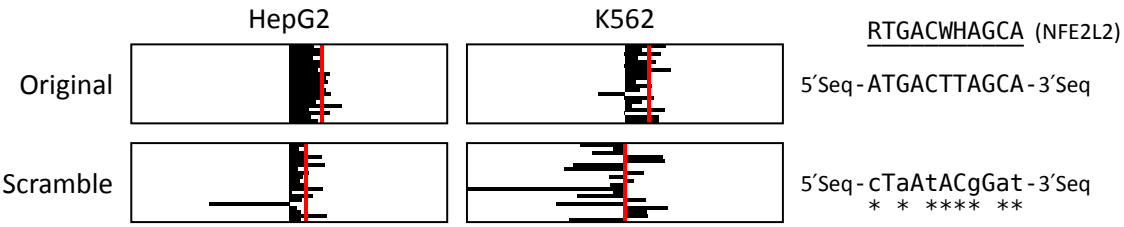
290 NFE2L2 in K562 enhancer

chr4 77441654 77441664 + (hg18)





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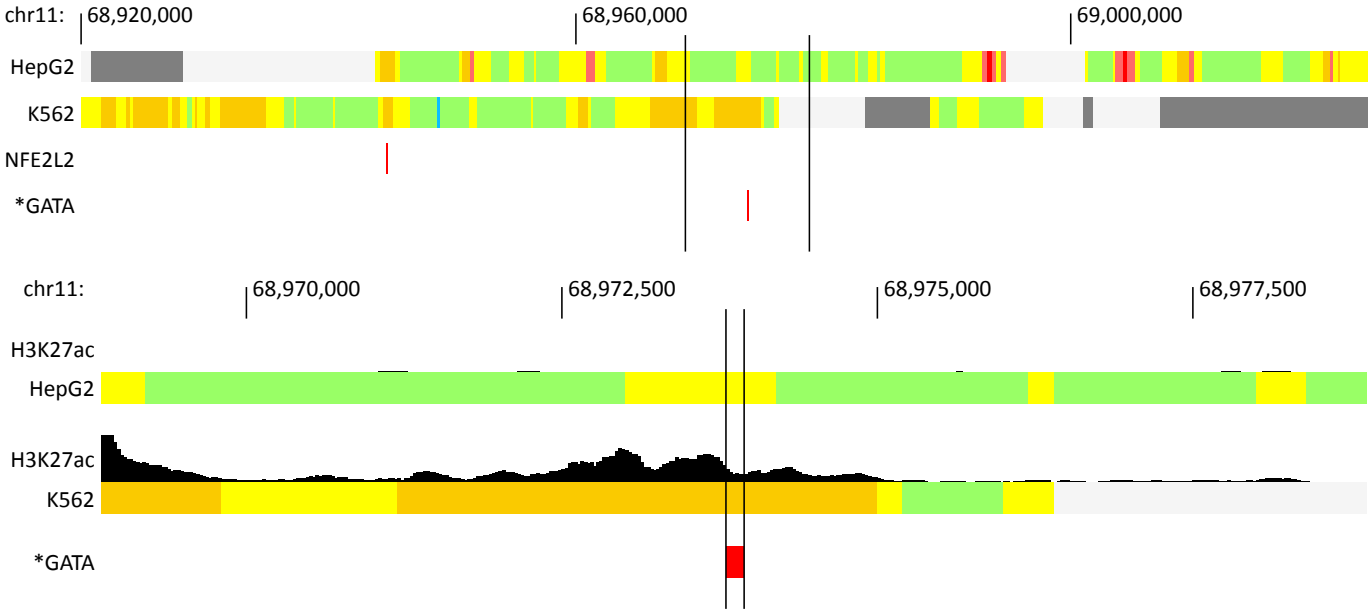
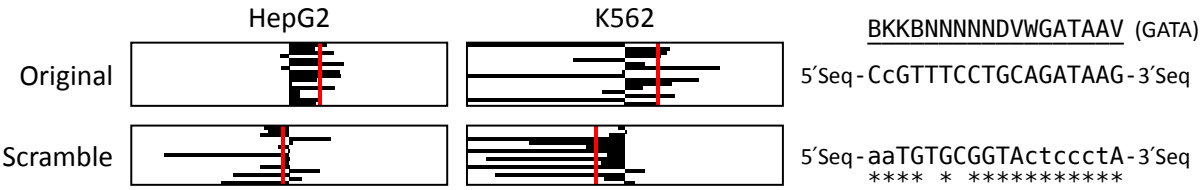
291 GATA in K562 enhancer (conserved at 60% confidence)

chr11 68973864 68973881 + (hg18)





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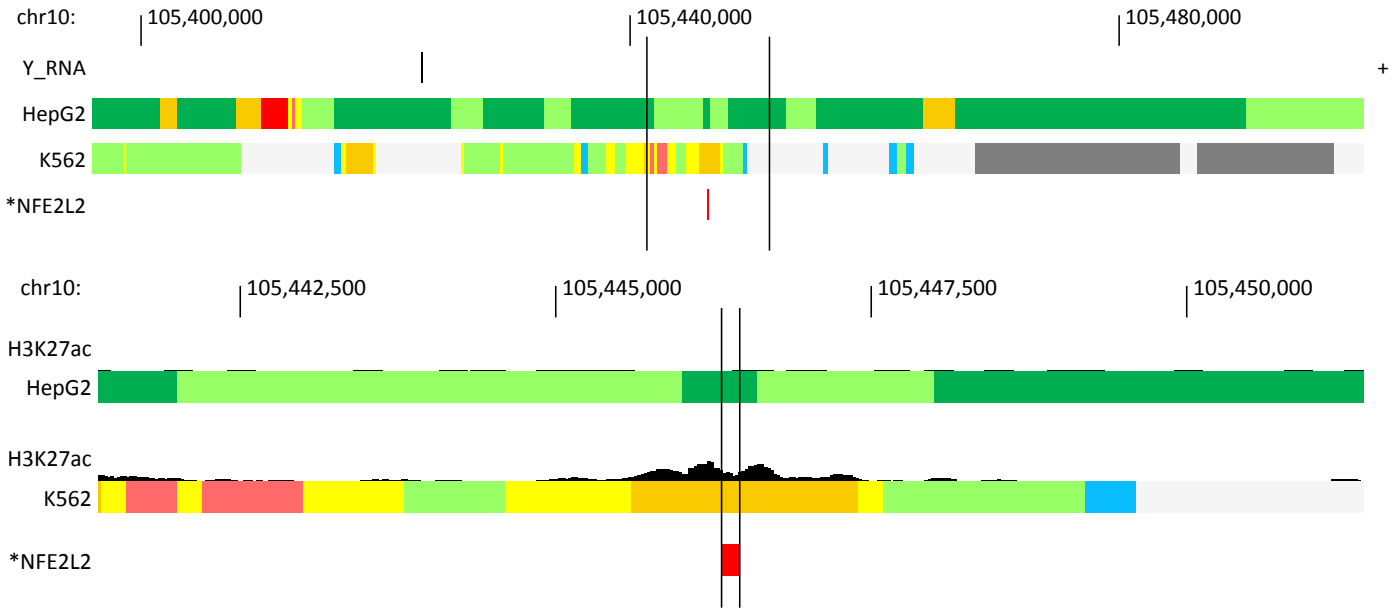
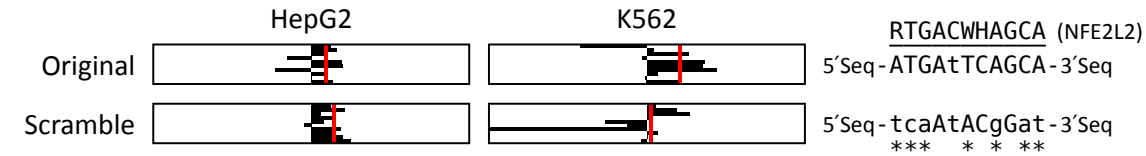
292 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr10 105446381 105446391 - (hg18)





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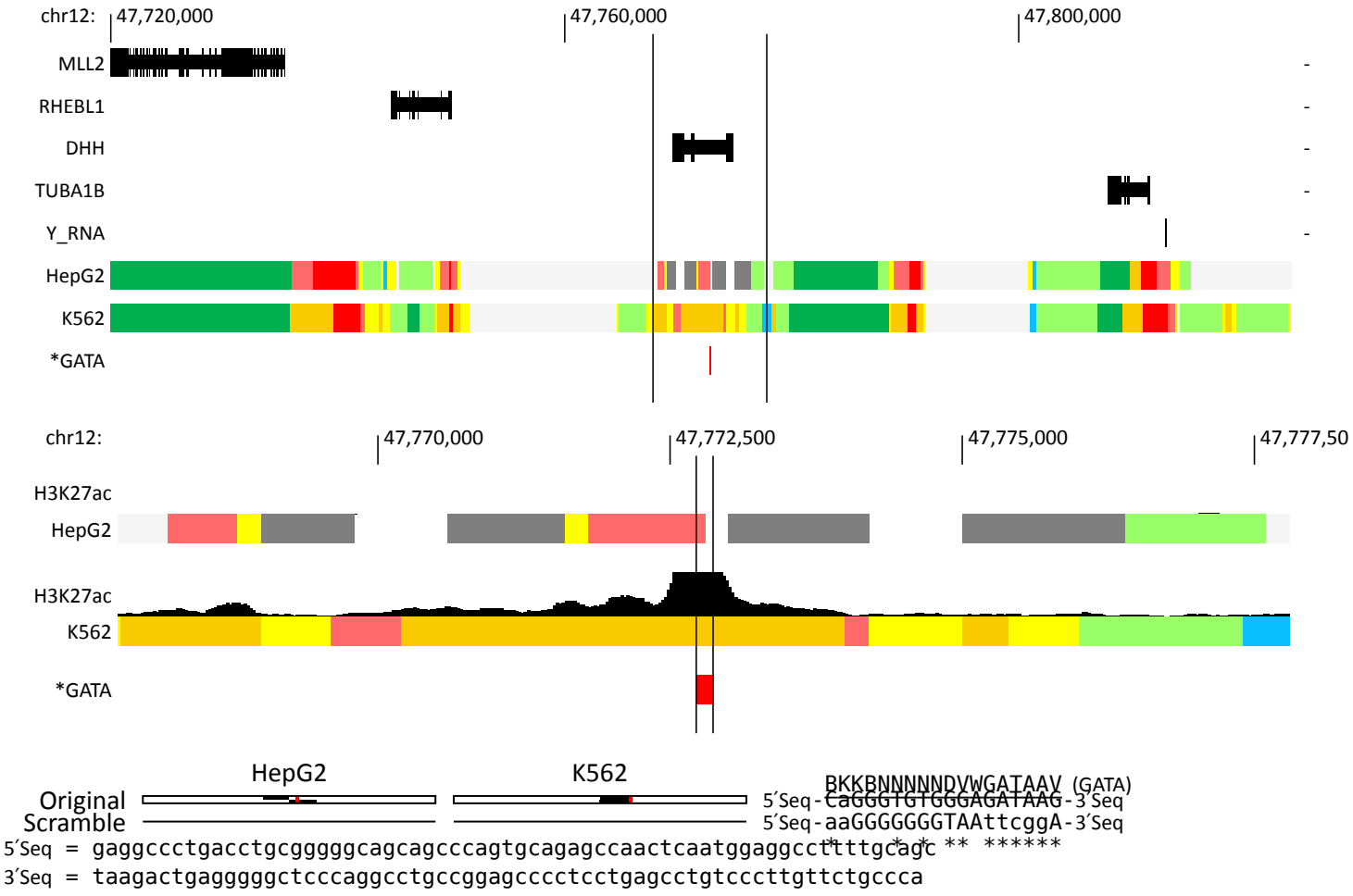
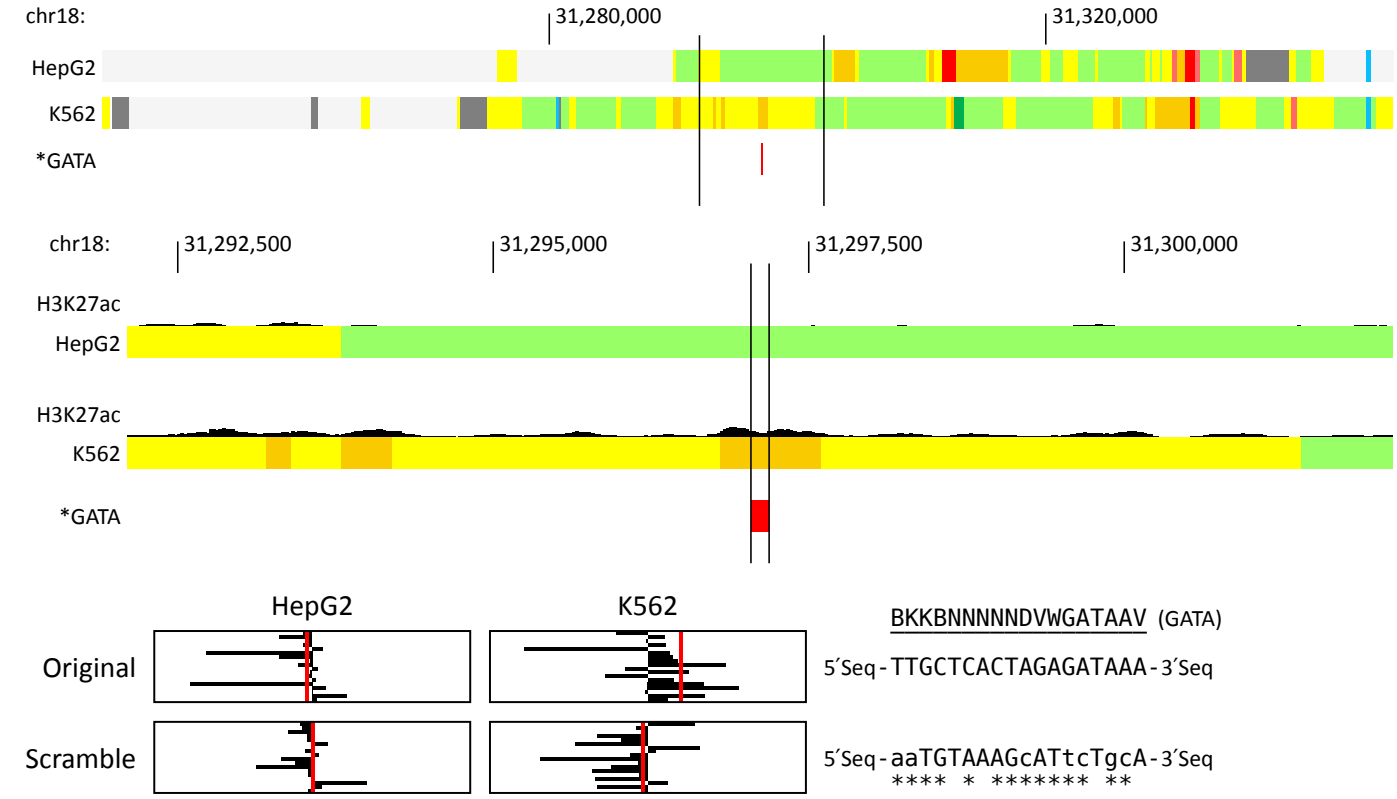
293 GATA in K562 enhancer (conserved at 60% confidence)

chr12 47772788 47772805 + (hg18)



294 GATA in K562 enhancer (conserved at 70% confidence)

chr18 31297106 31297123 - (hg18)



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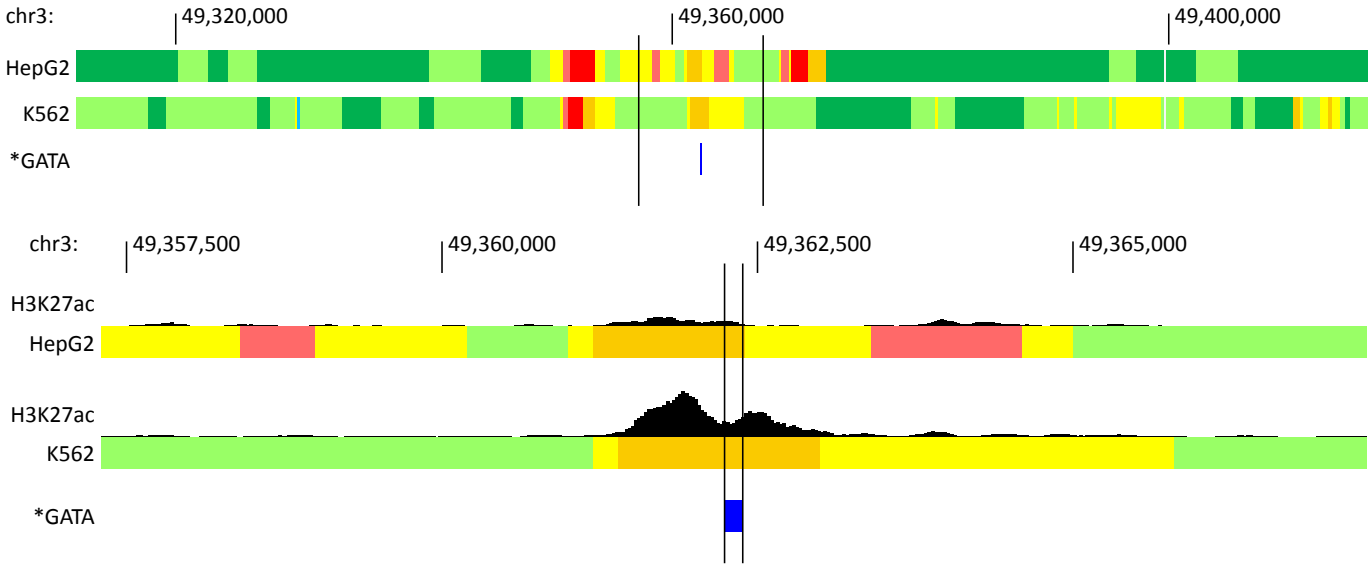
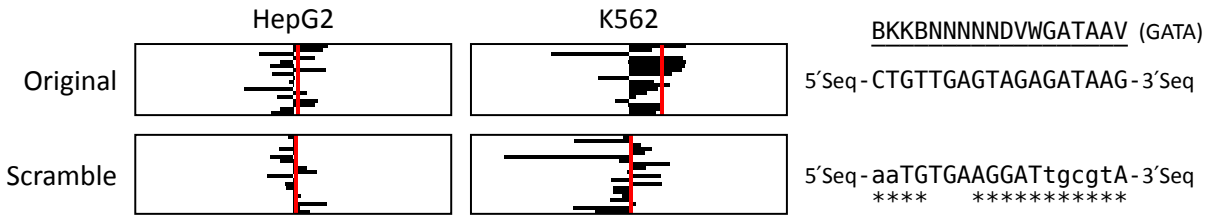
295 GATA in K562 enhancer

chr3 49362303 49362320 + (hg18)





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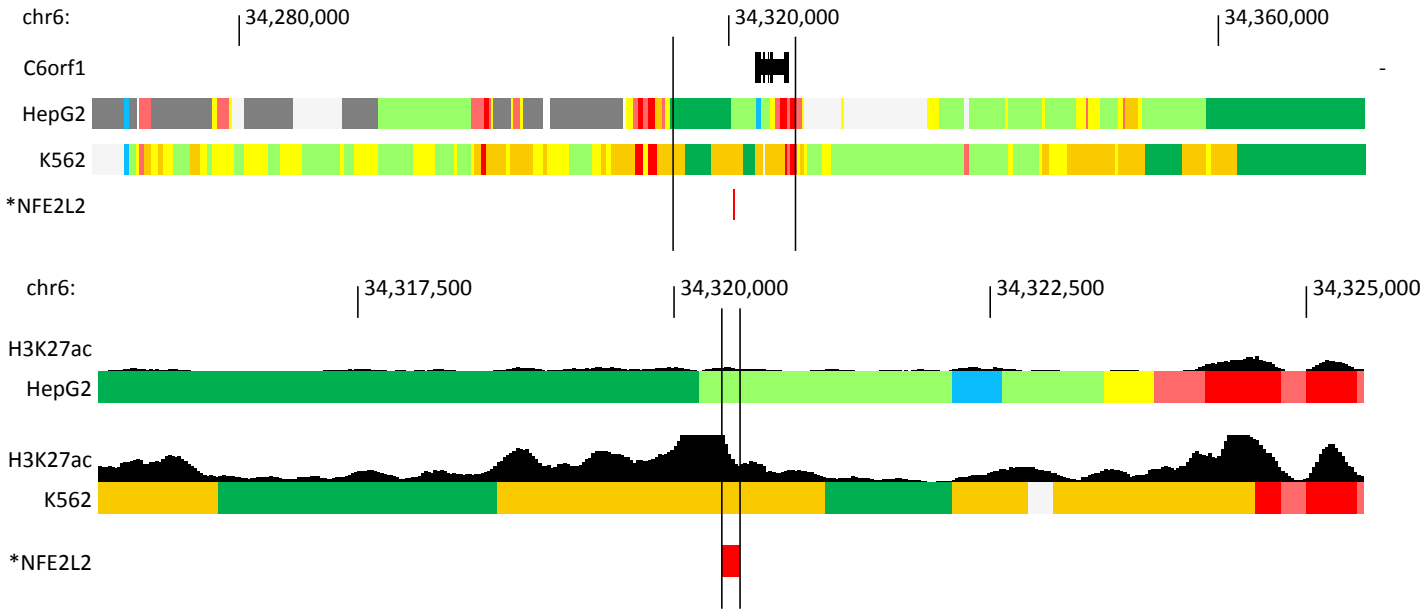
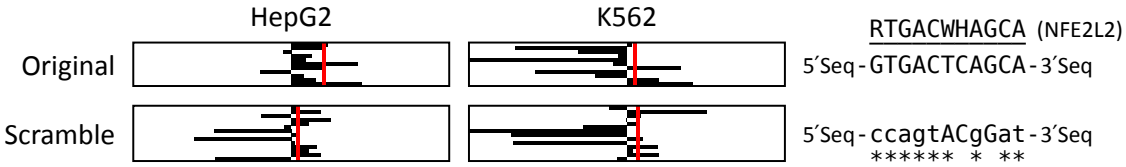
3′Seq = caatgtctctgtacacagcctctctgagaggcagtgagaattacaccatttcagggccaaggc

296 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 34320445 34320455 - (hg18)





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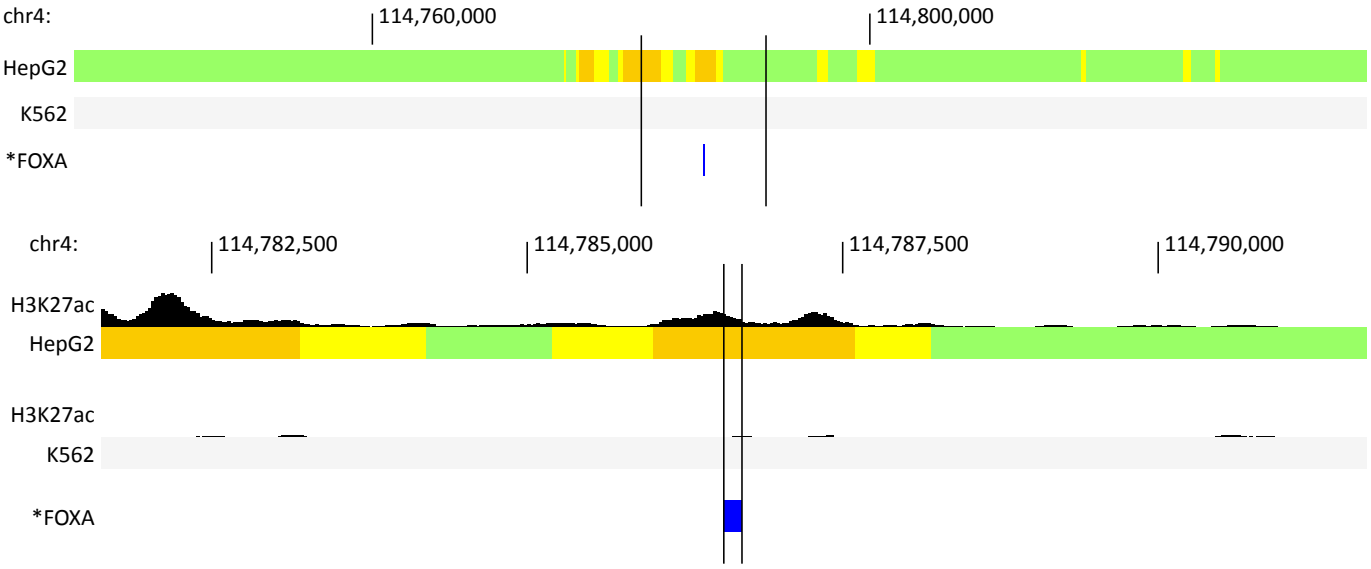
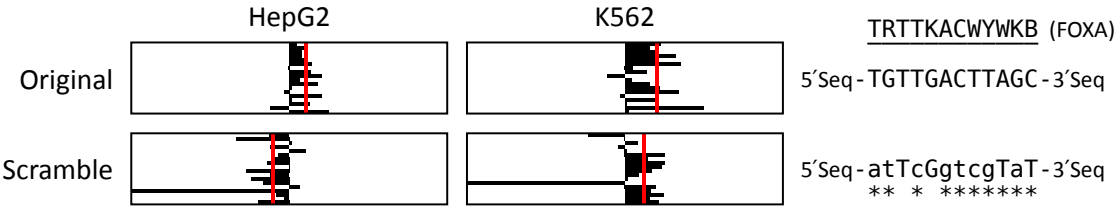
297 FOXA in HepG2 enhancer

chr4 114786625 114786636 + (hg18)





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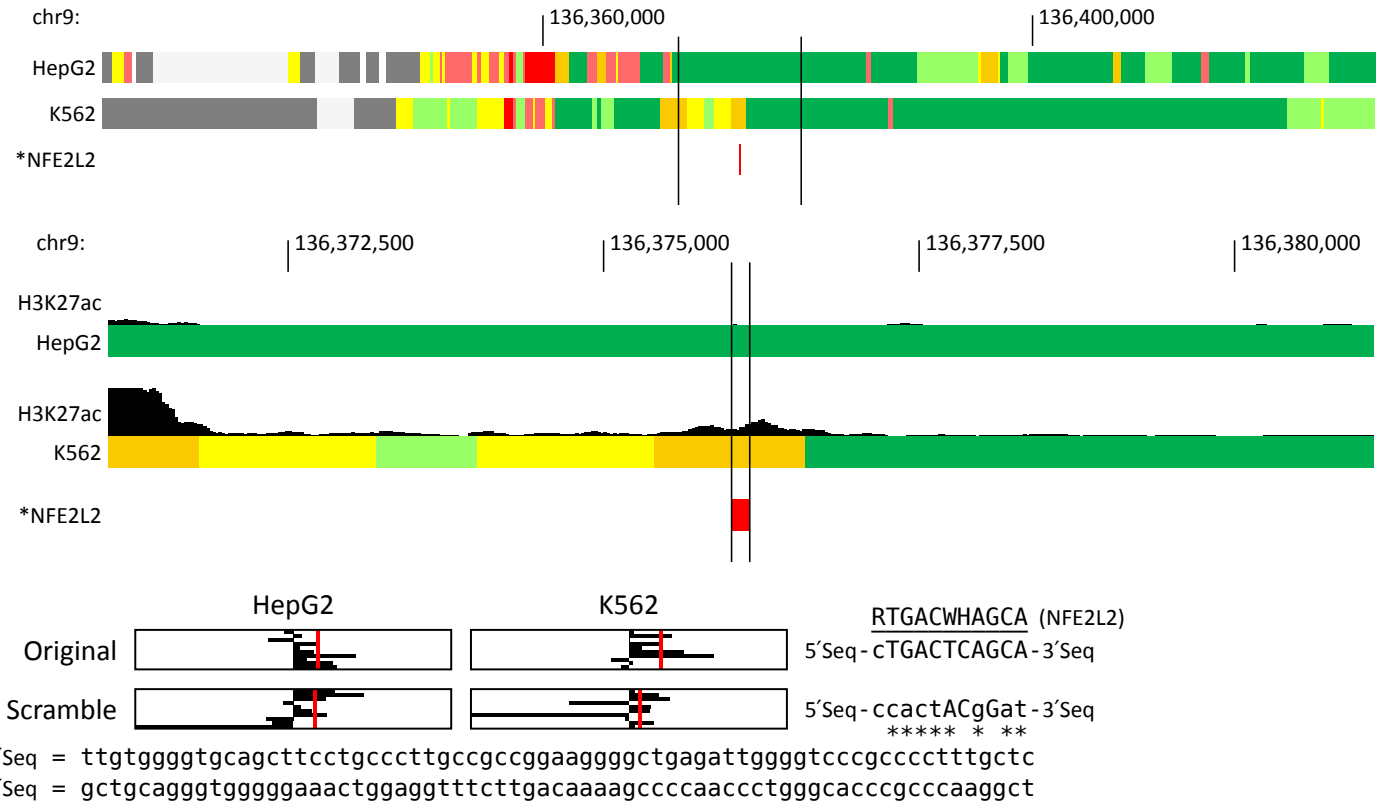
3′Seq = aagtcagggagaagtcaattgtttgctctcctgttttacagtctttaggtgtgggccagcccaggg

298 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr9 136376081 136376091 + (hg18)



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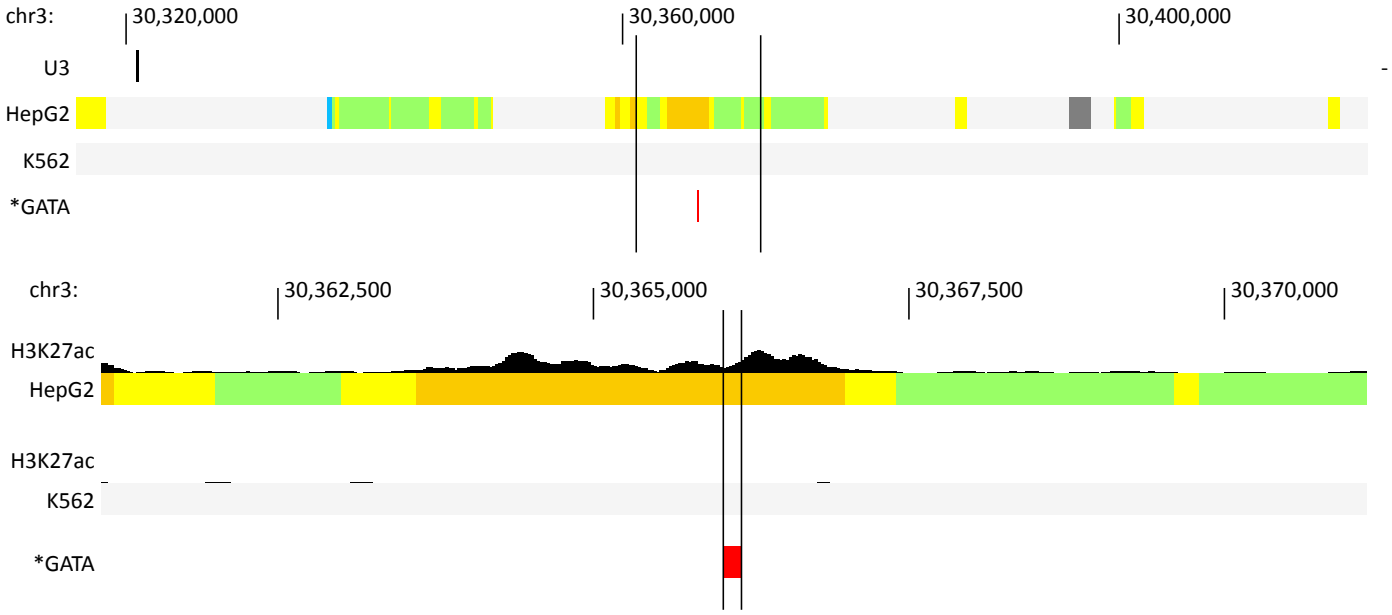
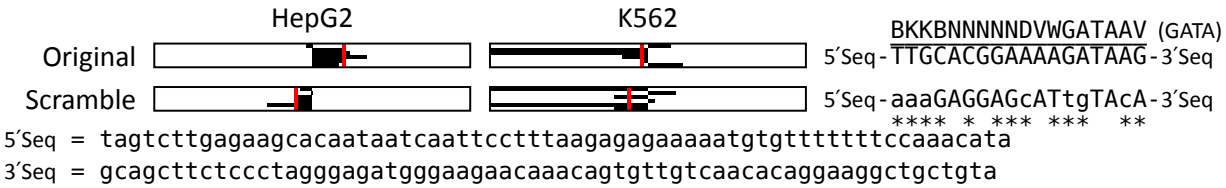
299 GATA in HepG2 enhancer (conserved at 60% confidence)

chr3 30366093 30366110 + (hg18)





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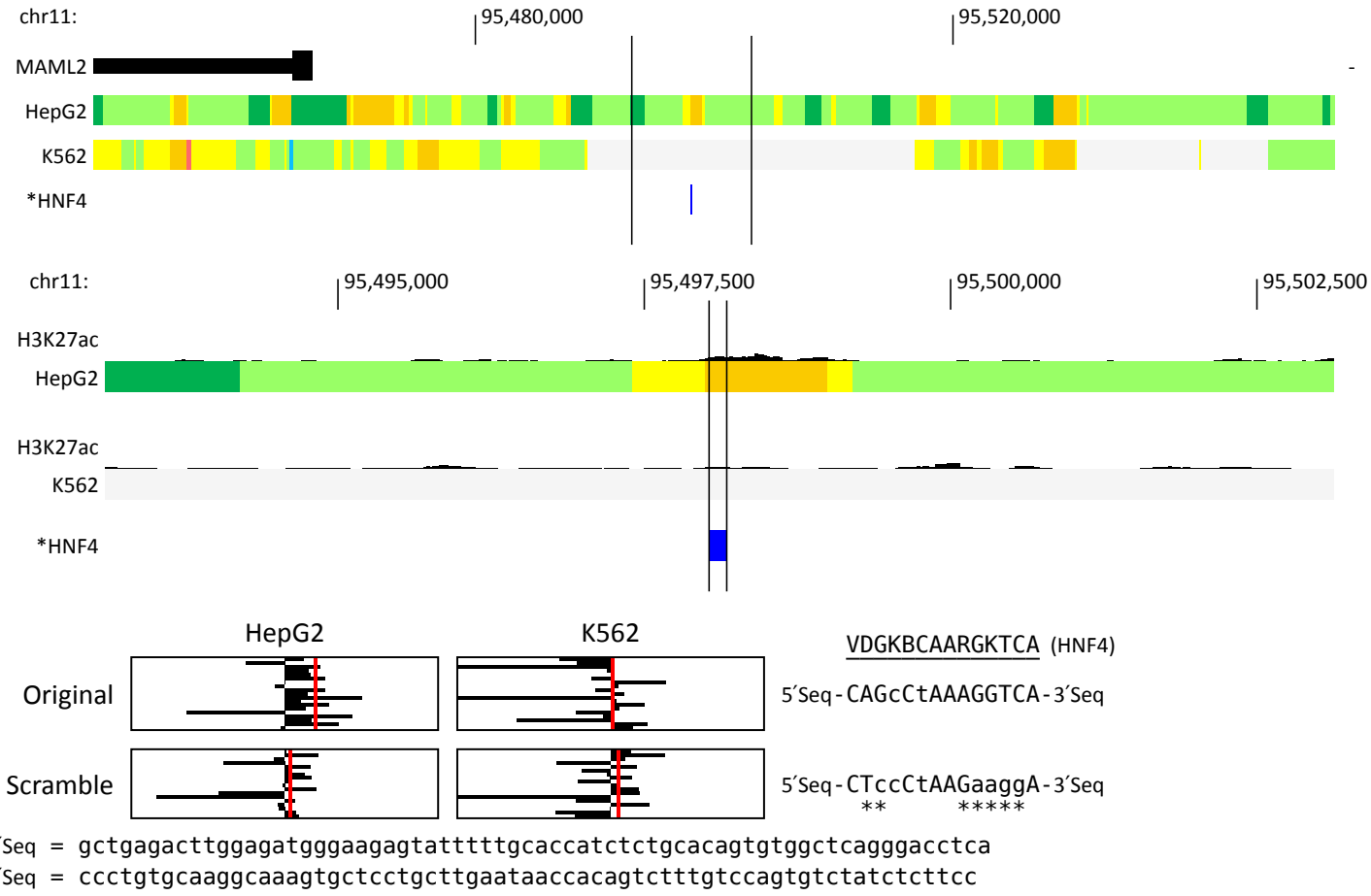
300 HNF4 in HepG2 enhancer

chr11 95498095 95498108 - (hg18)



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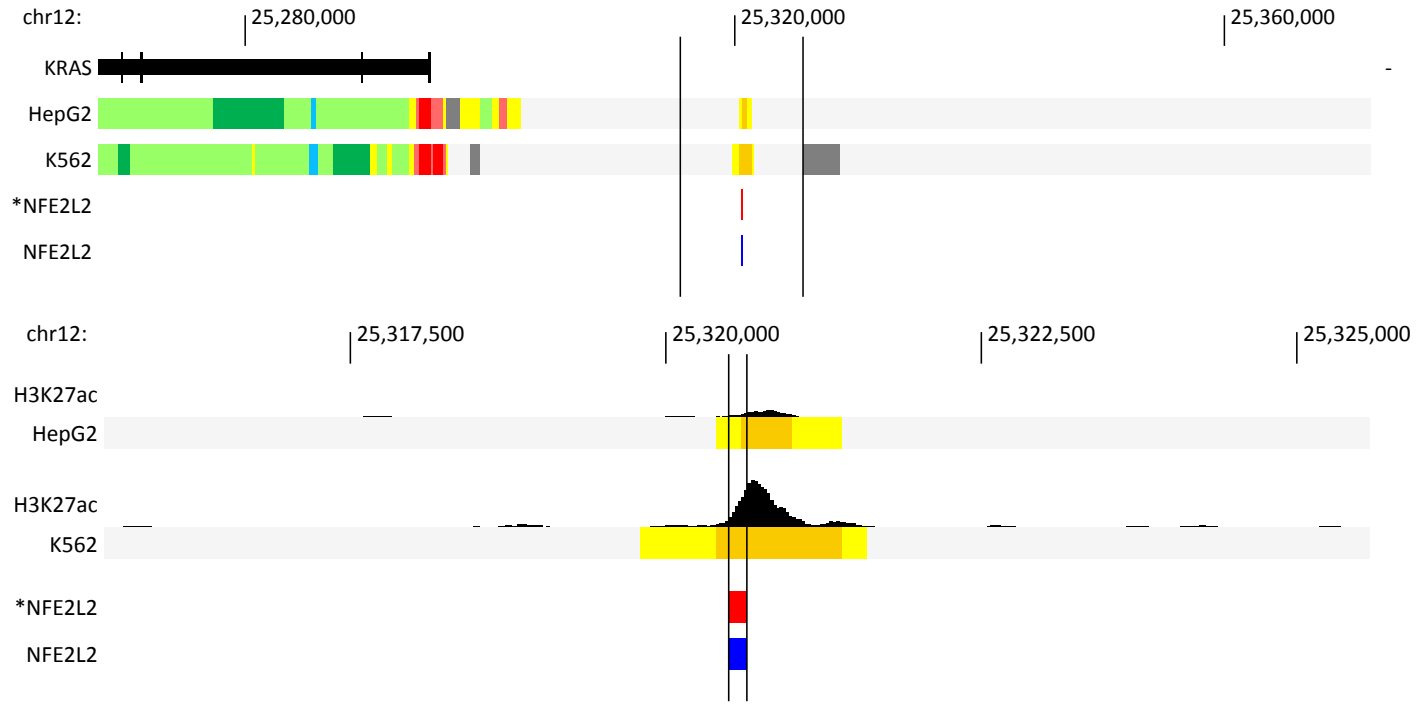
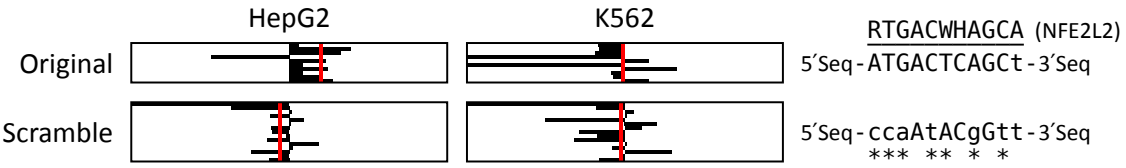
301 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr12 25320565 25320575 + (hg18)





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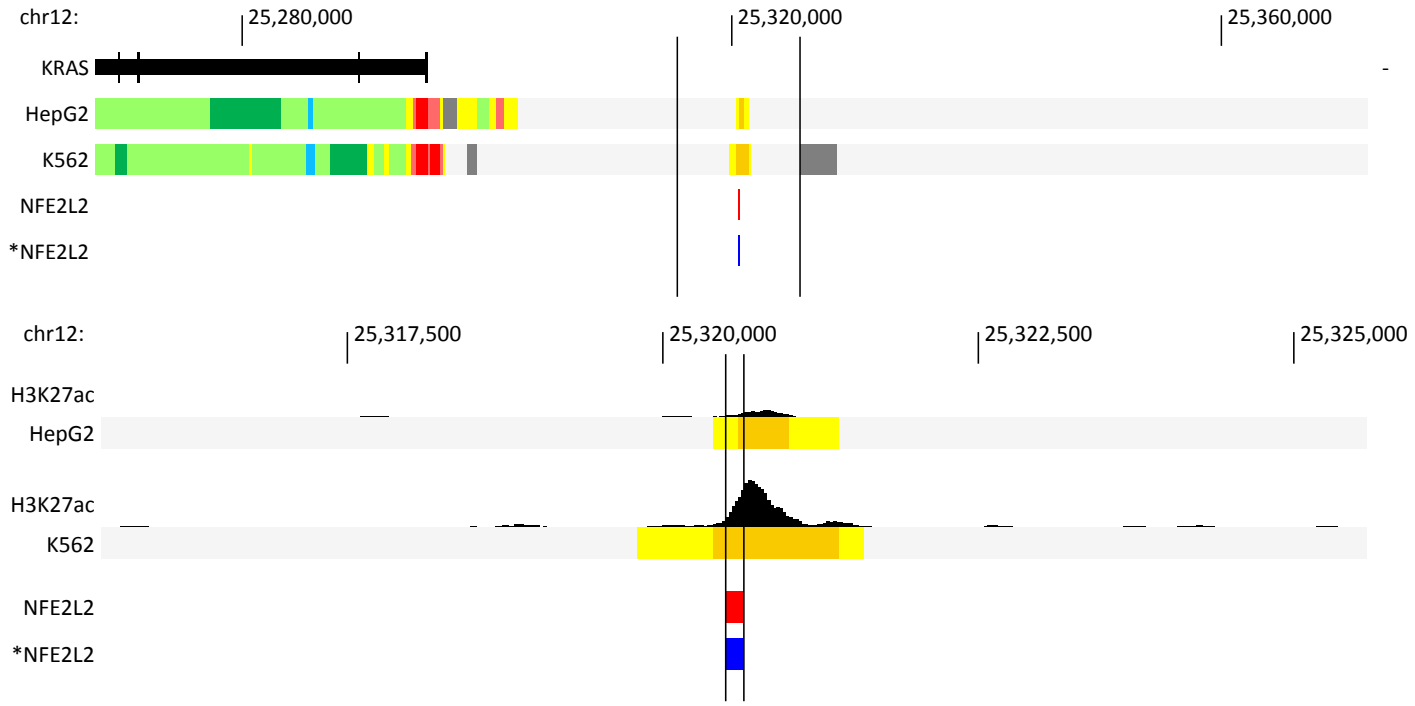
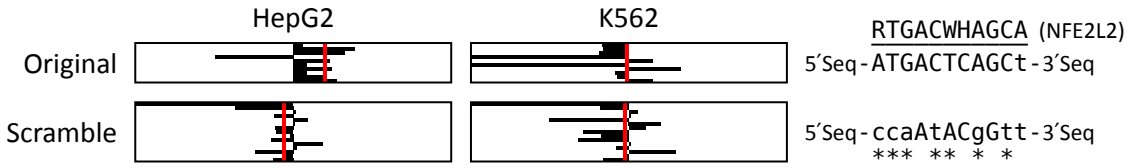
302 NFE2L2 in K562 enhancer

chr12 25320565 25320575 + (hg18)





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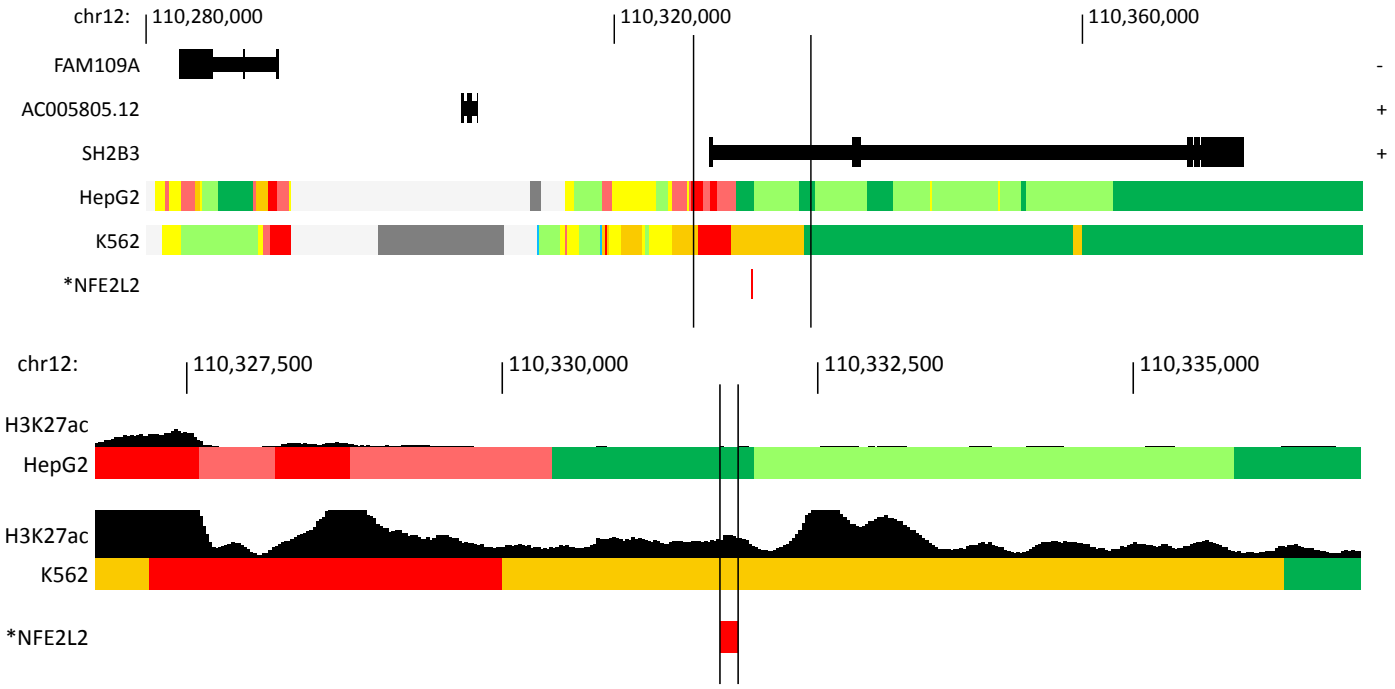
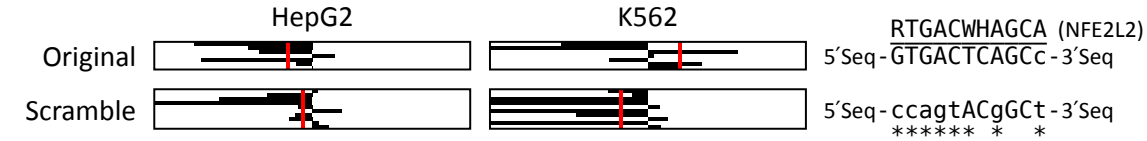
303 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr12 110331792 110331802 + (hg18)





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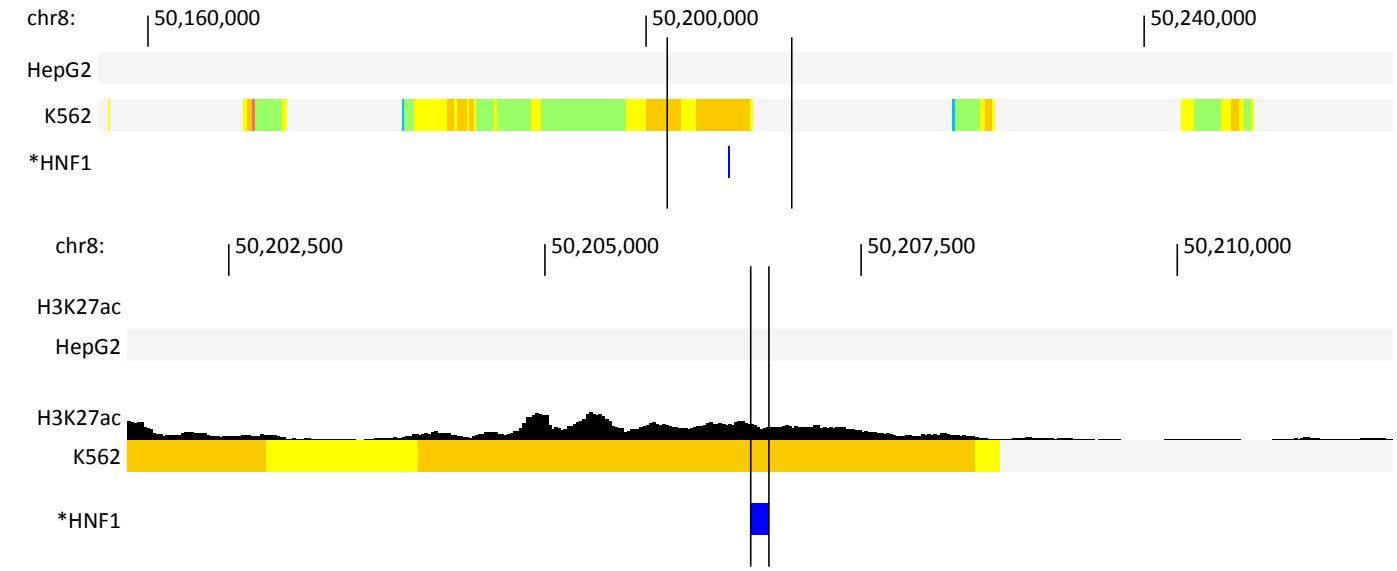
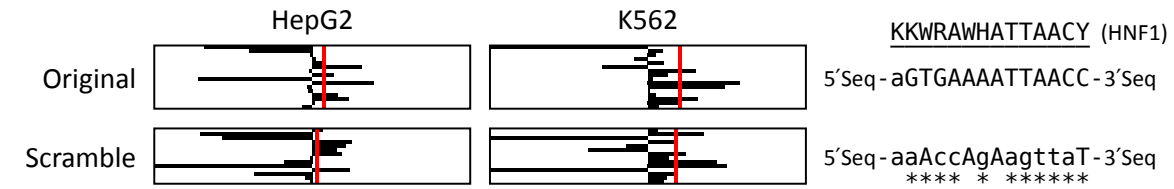
304 HNF1 in K562 enhancer

chr8 50206693 50206706 - (hg18)





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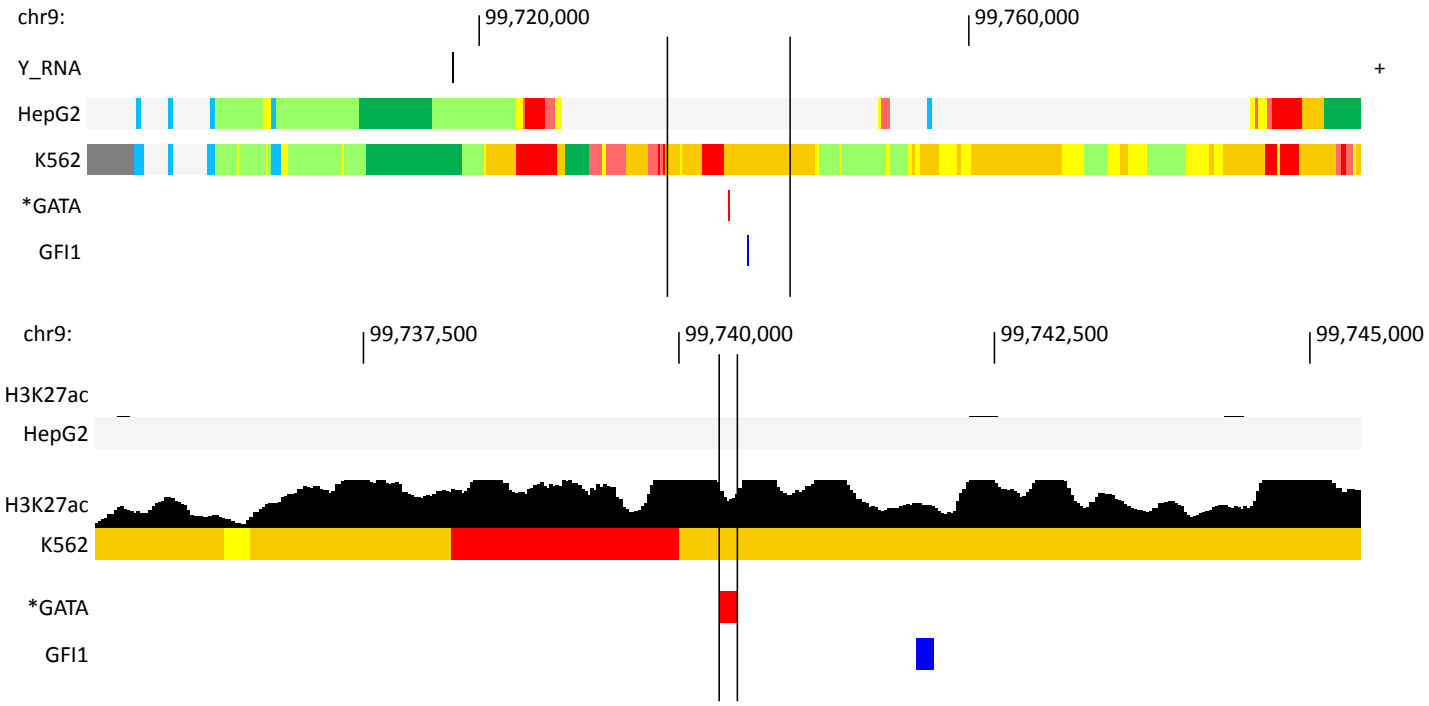
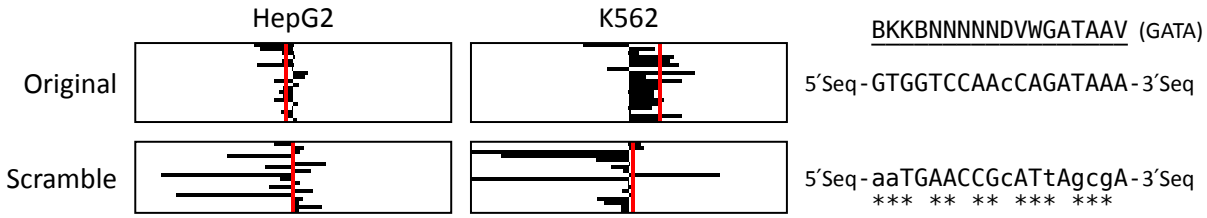
305 GATA in K562 enhancer (conserved at 60% confidence)

chr9 99740383 99740400 - (hg18)





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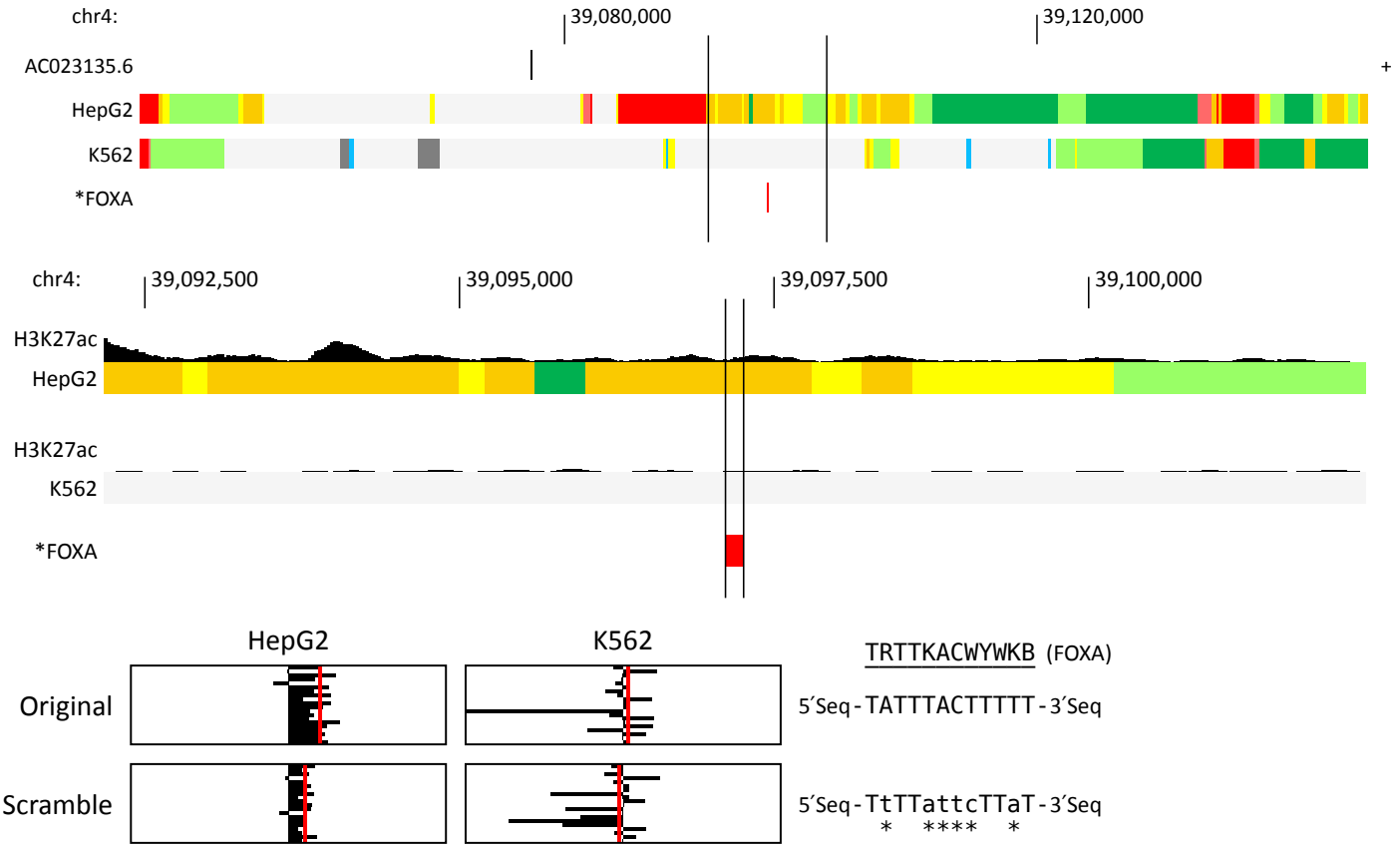
306 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr4 39097181 39097192 + (hg18)



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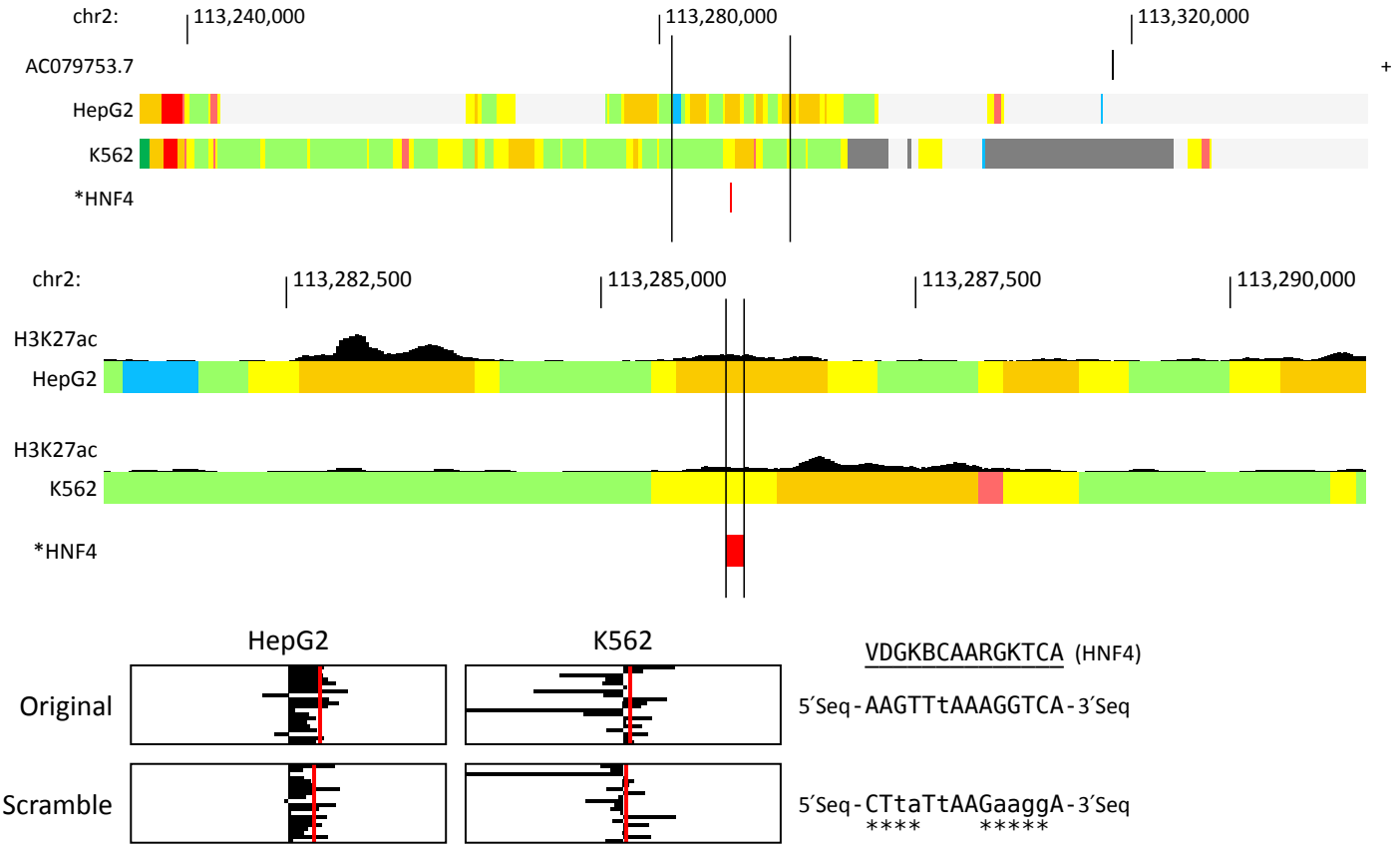
307 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 113286059 113286072 + (hg18)



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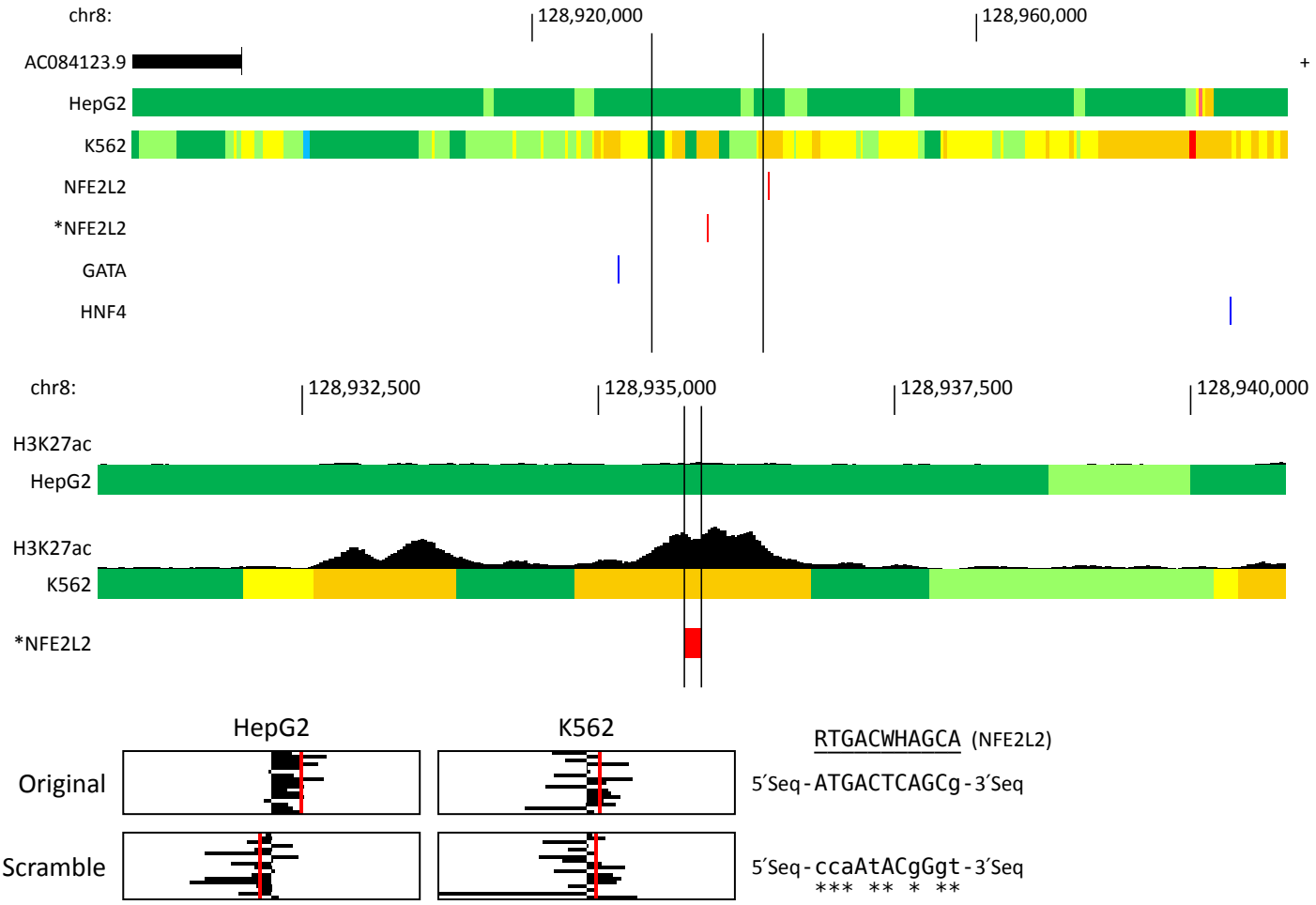
308 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 128935793 128935803 - (hg18)



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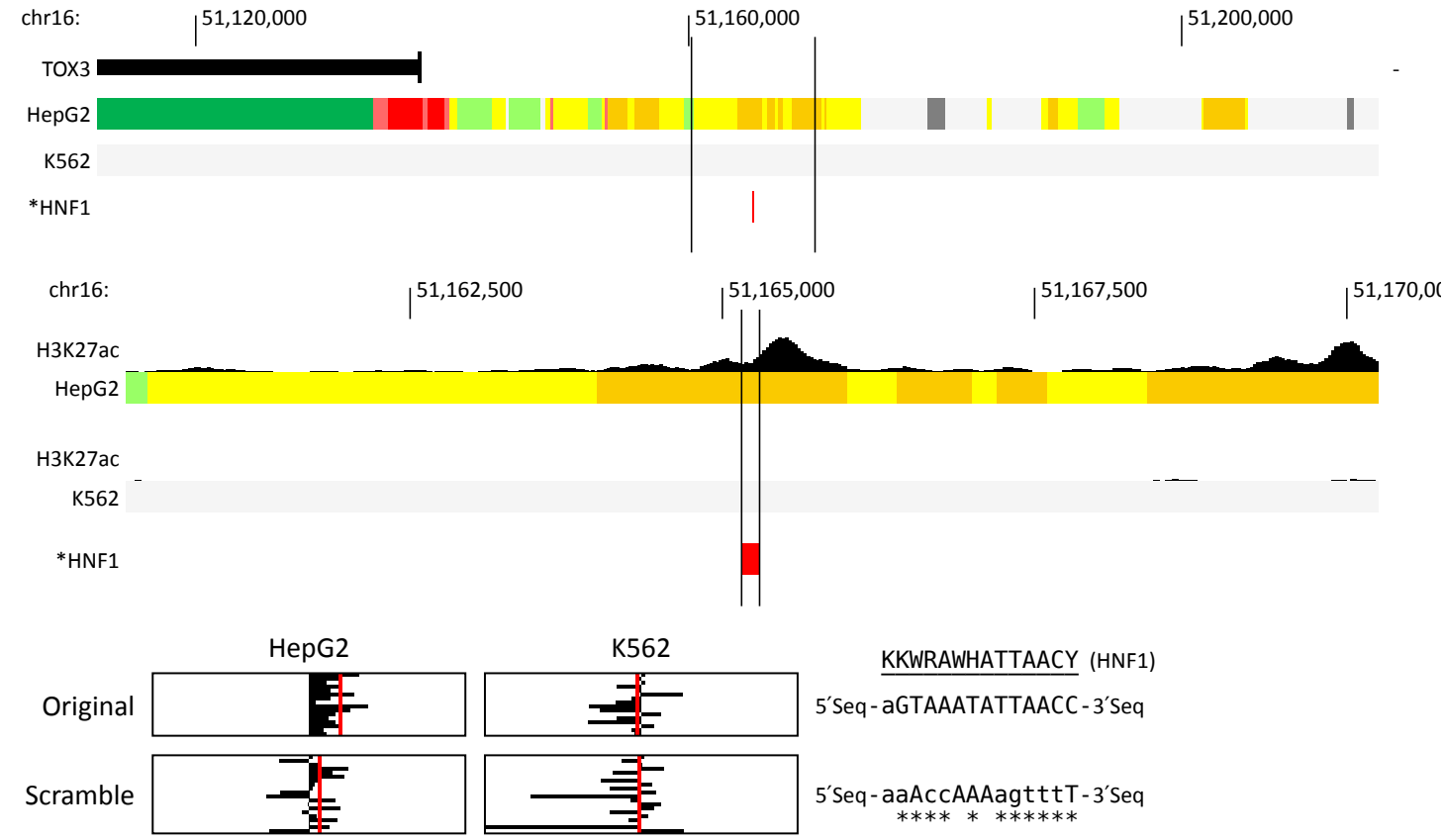
309 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr16 51165220 51165233 - (hg18)



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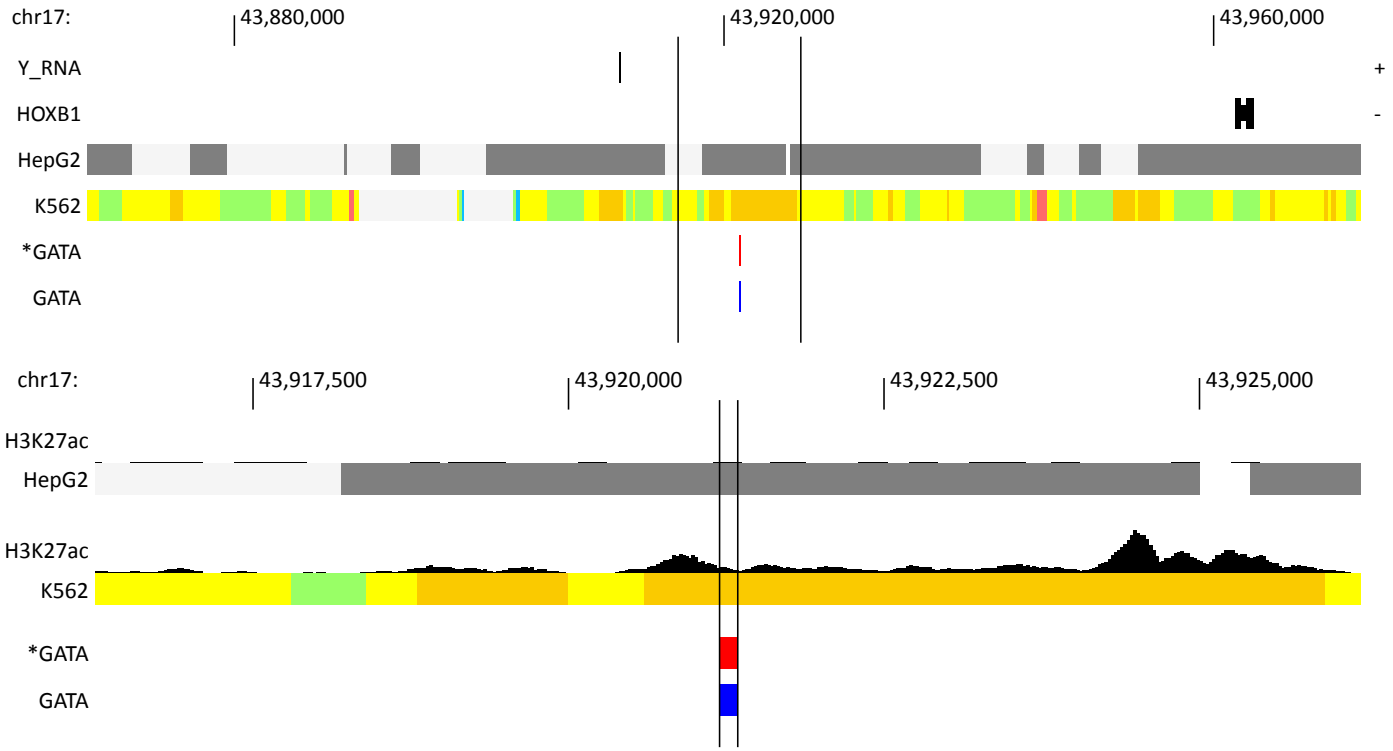
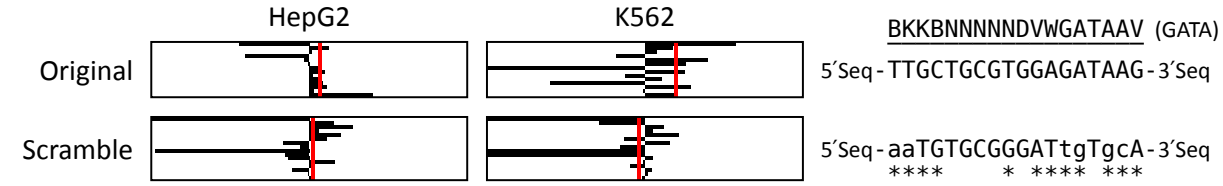
310 GATA in K562 enhancer (conserved at 60% confidence)

chr17 43921261 43921278 + (hg18)





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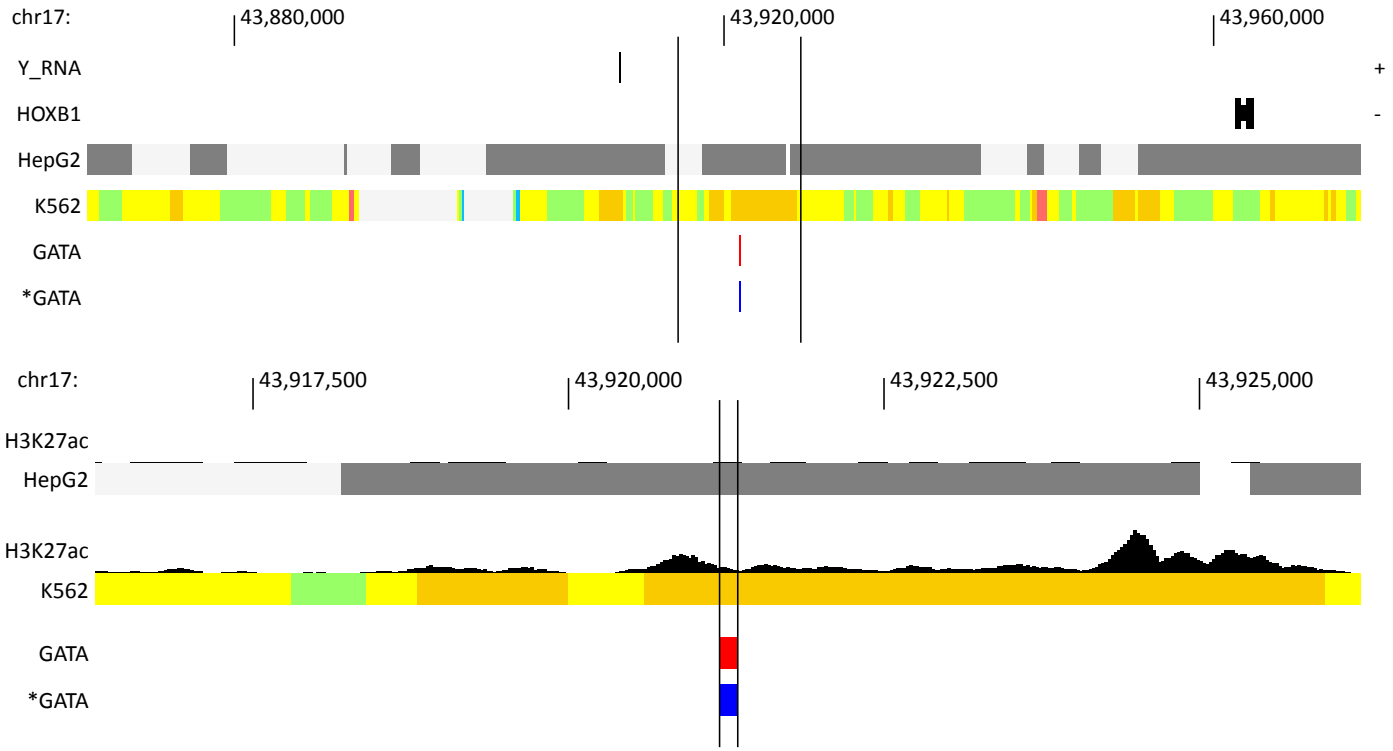
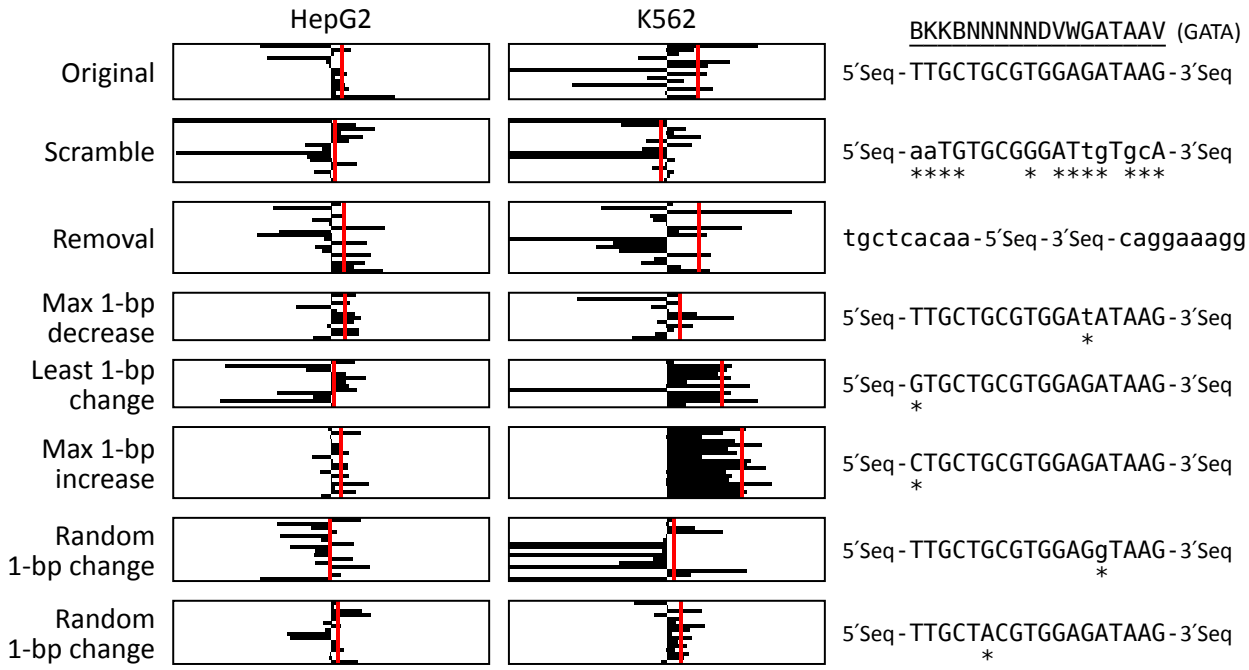
311 GATA in K562 enhancer

chr17 43921261 43921278 + (hg18)





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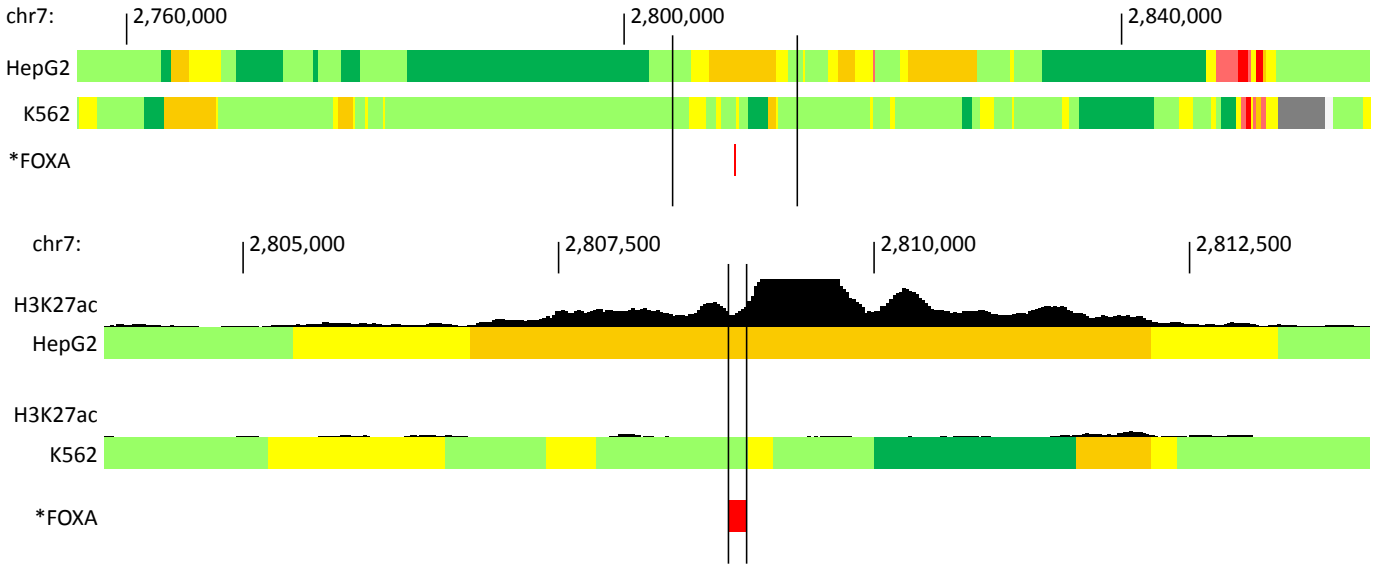
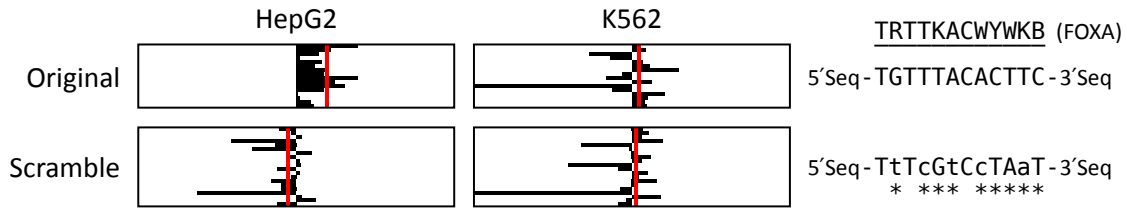
312 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr7 2808913 2808924 - (hg18)





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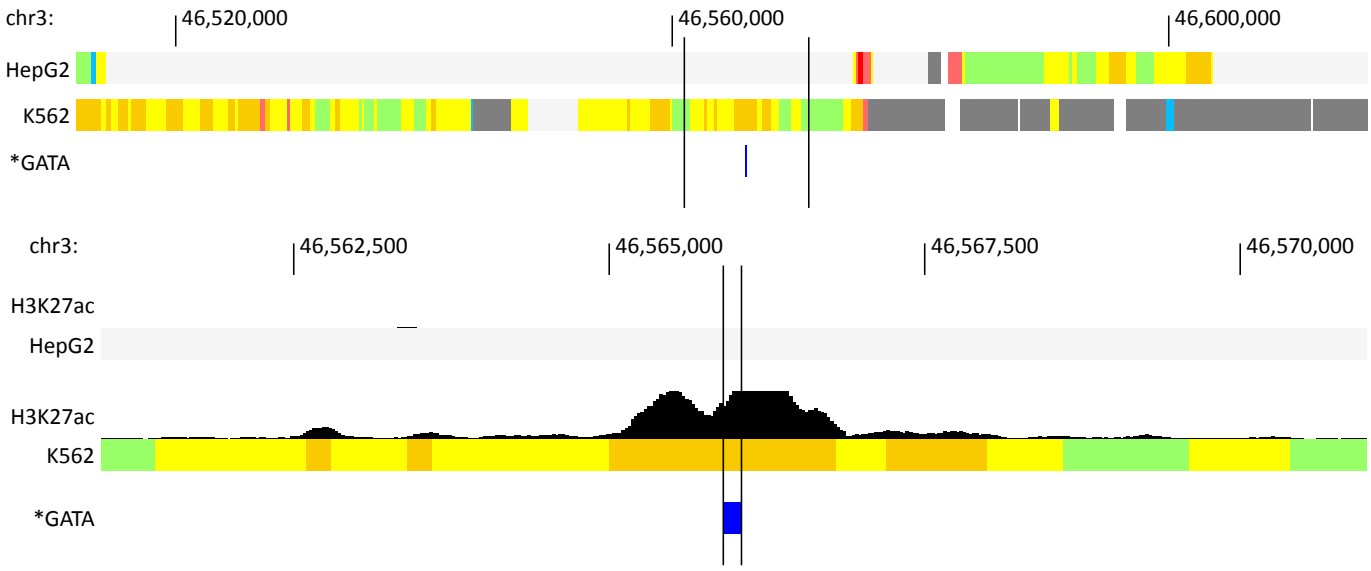
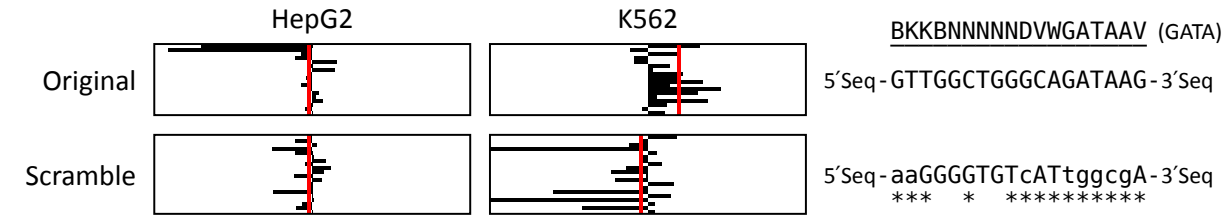
313 GATA in K562 enhancer

chr3 46565968 46565985 - (hg18)





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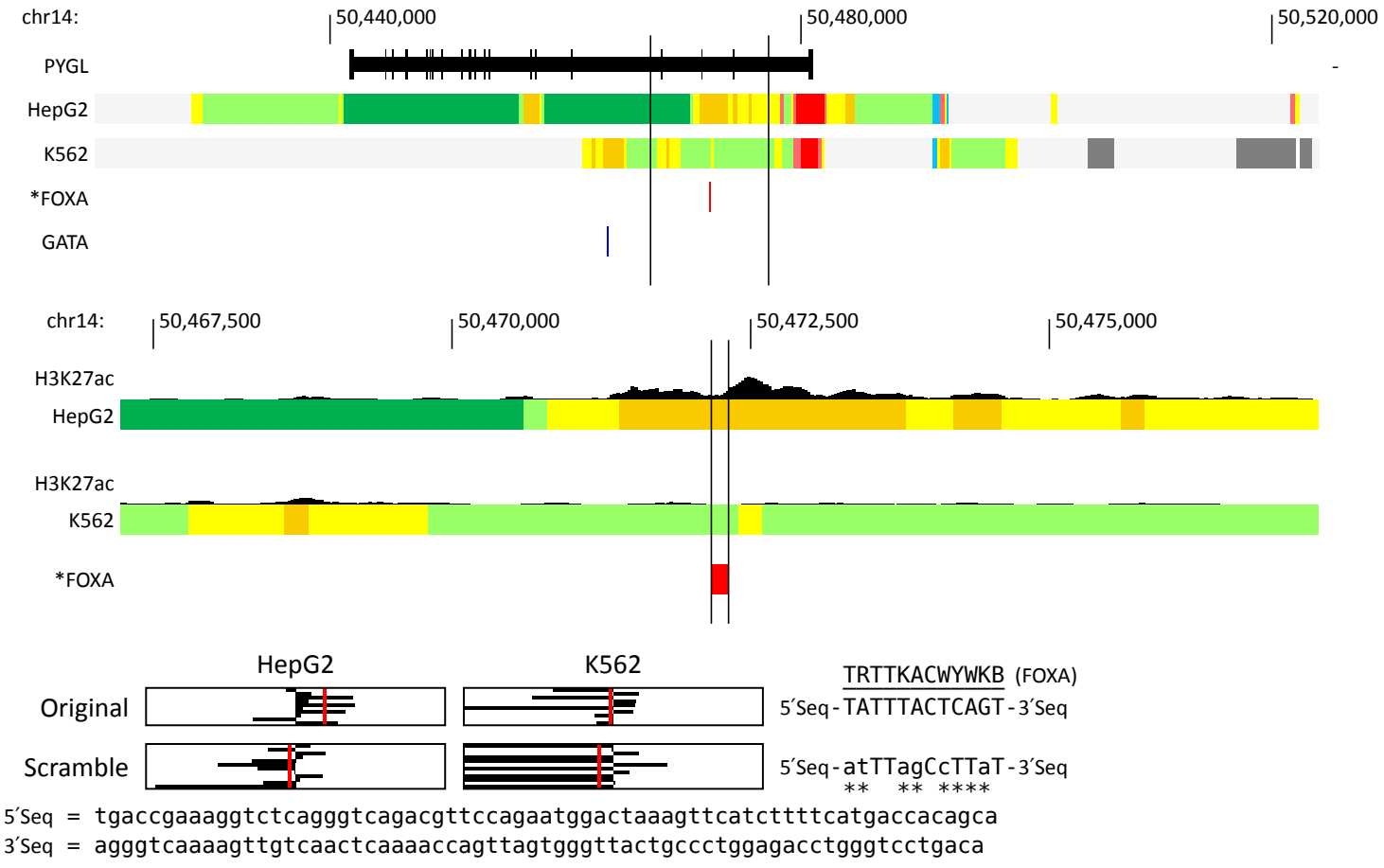
314 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 50472238 50472249 + (hg18)



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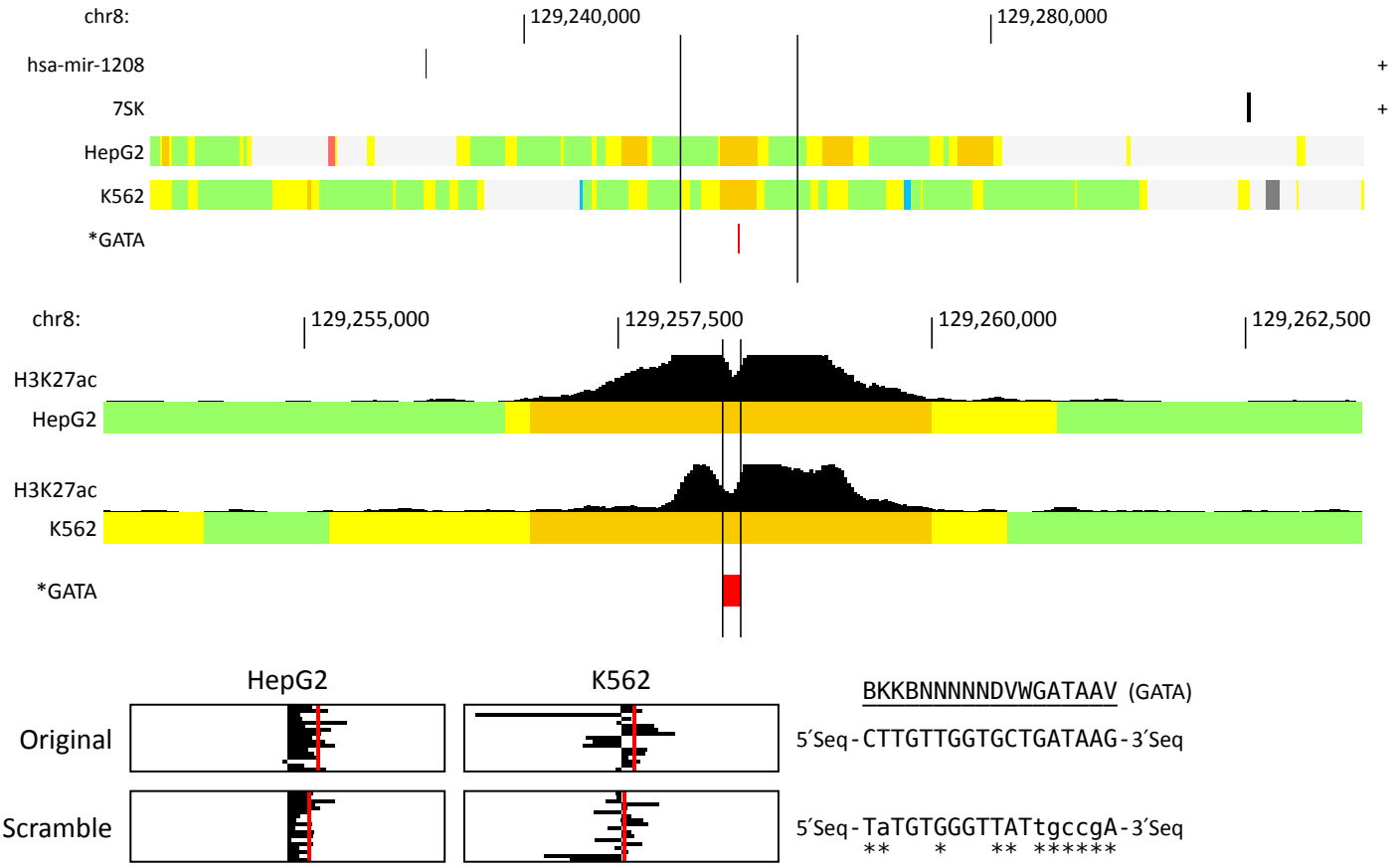
315 GATA in K562 enhancer (conserved at 60% confidence)

chr8 129258397 129258414 + (hg18)



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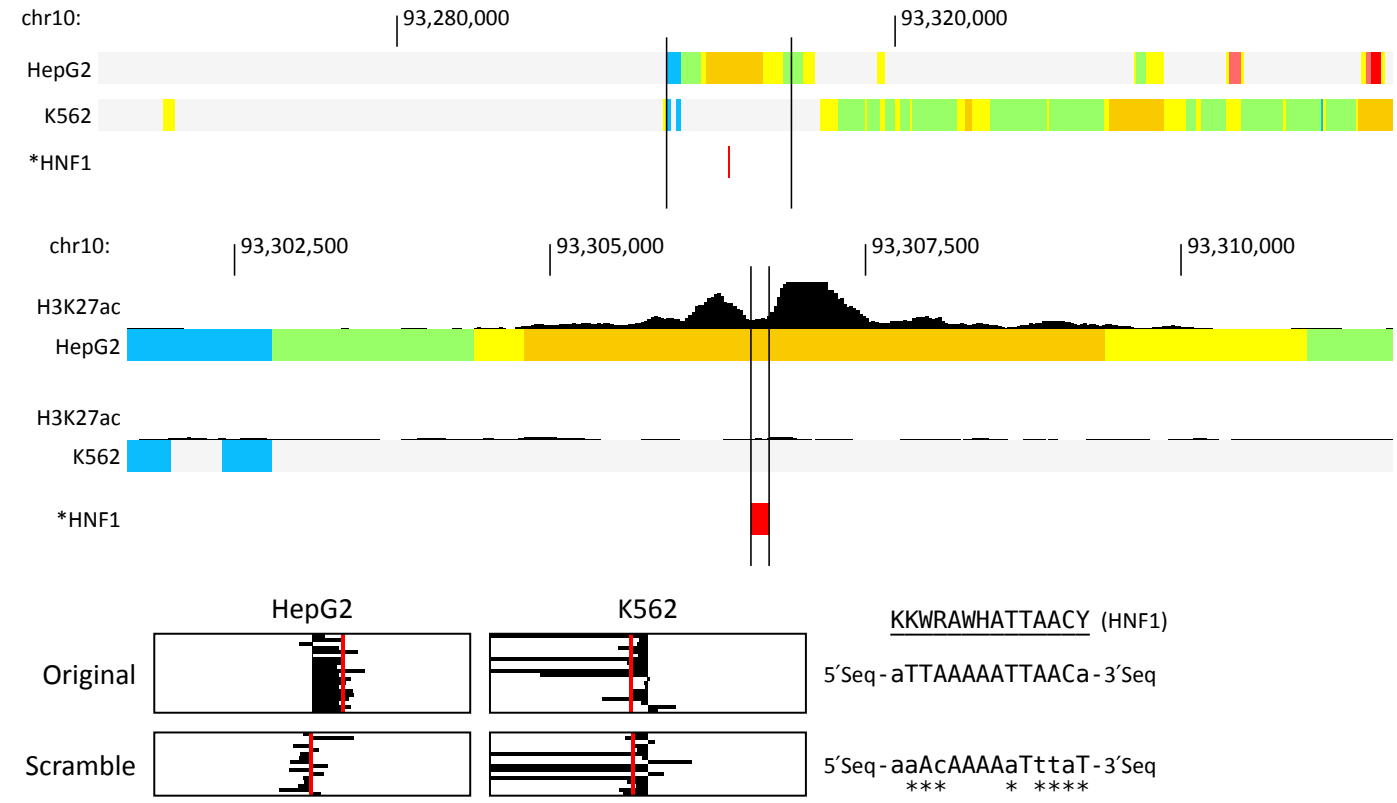
316 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 93306658 93306671 - (hg18)



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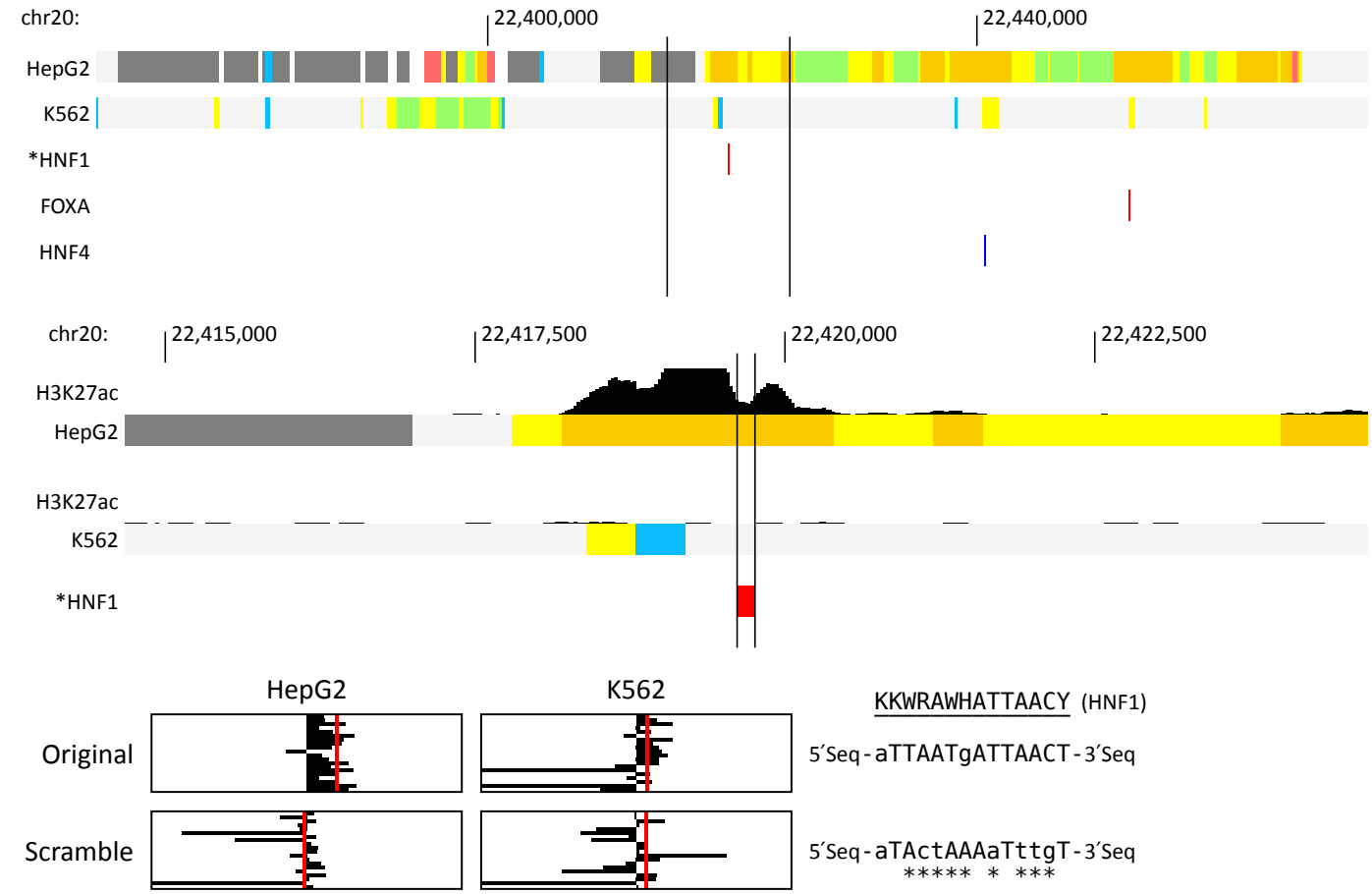
317 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr20 22419680 22419693 - (hg18)



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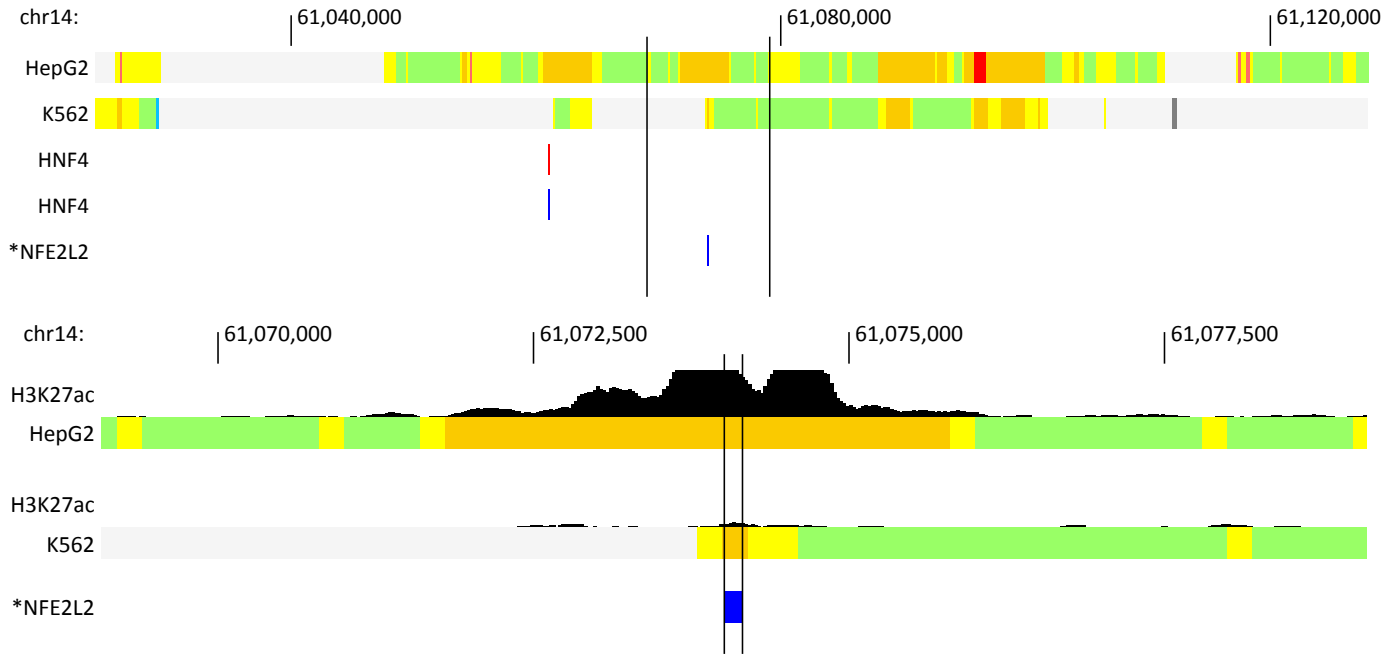
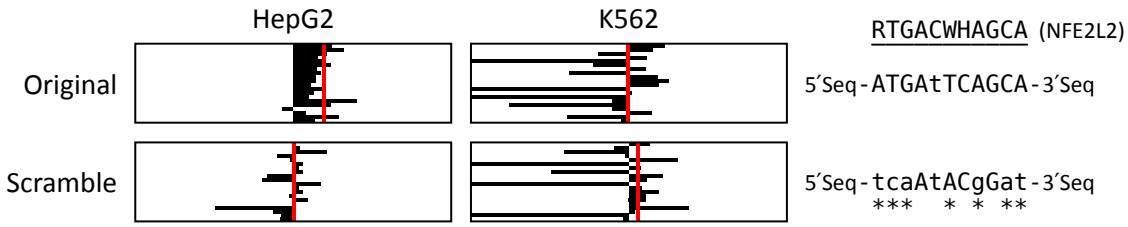
318 NFE2L2 in K562 enhancer

chr14 61074079 61074089 - (hg18)





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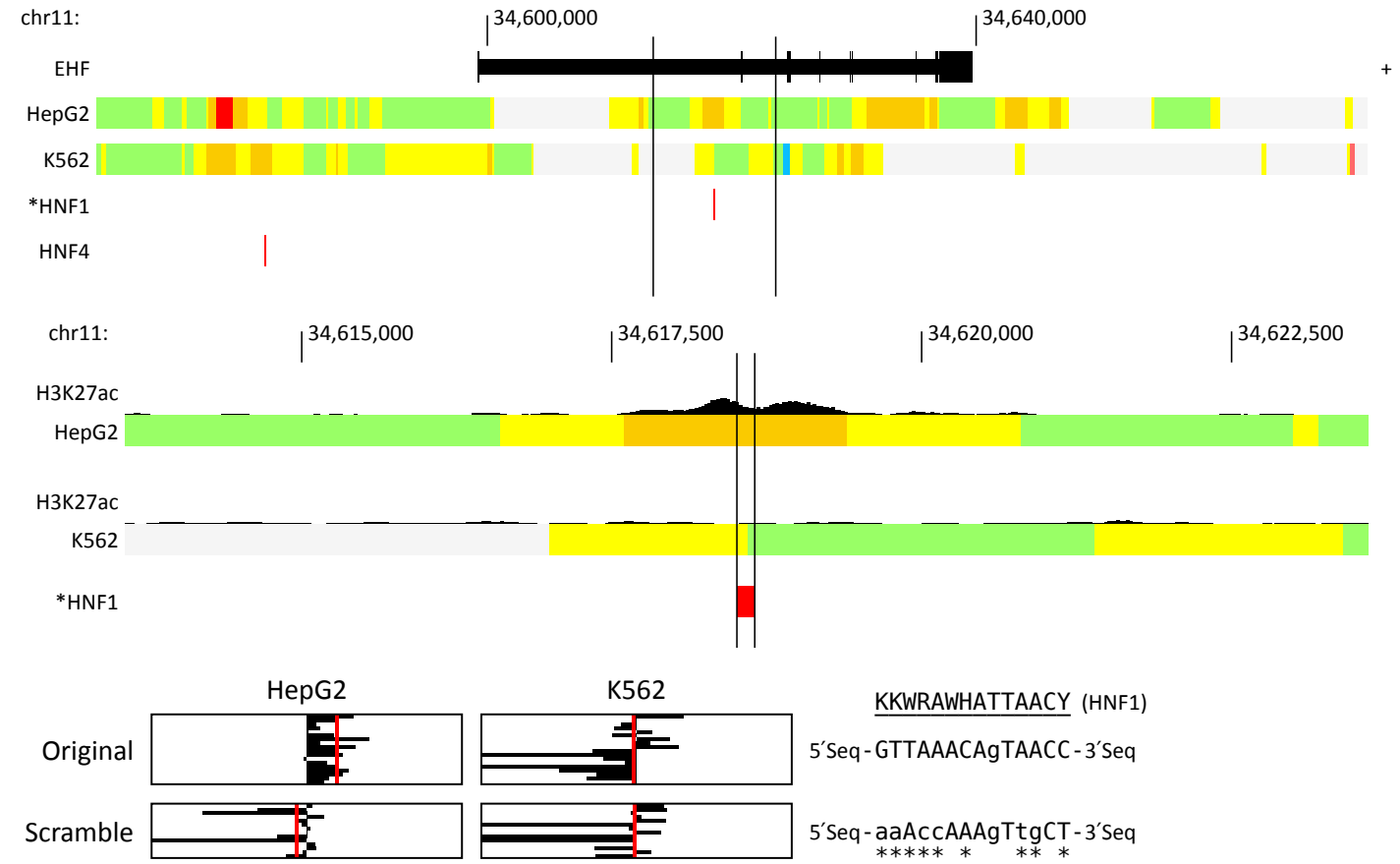
319 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr11 34618576 34618589 + (hg18)



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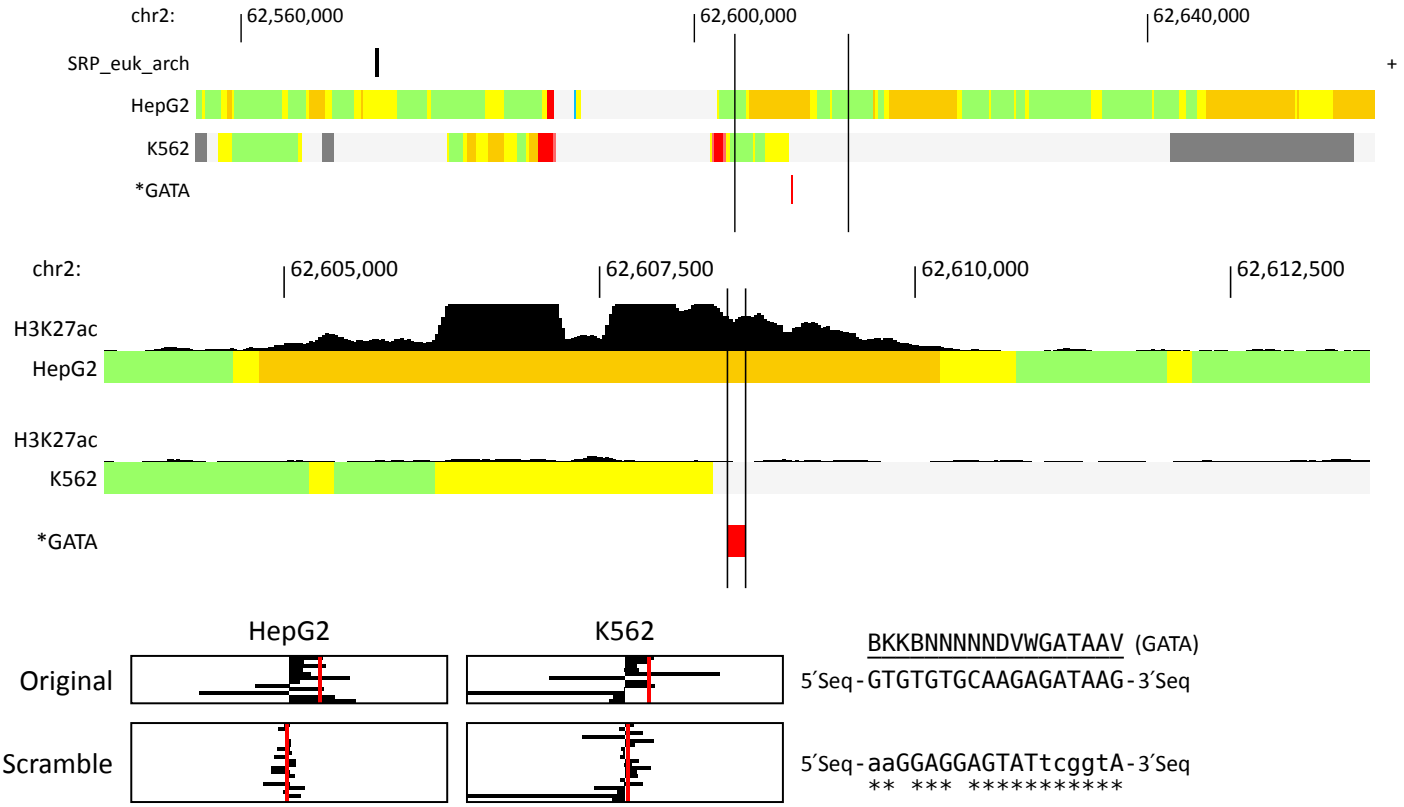
320 GATA in HepG2 enhancer (conserved at 60% confidence)

chr2 62608577 62608594 + (hg18)



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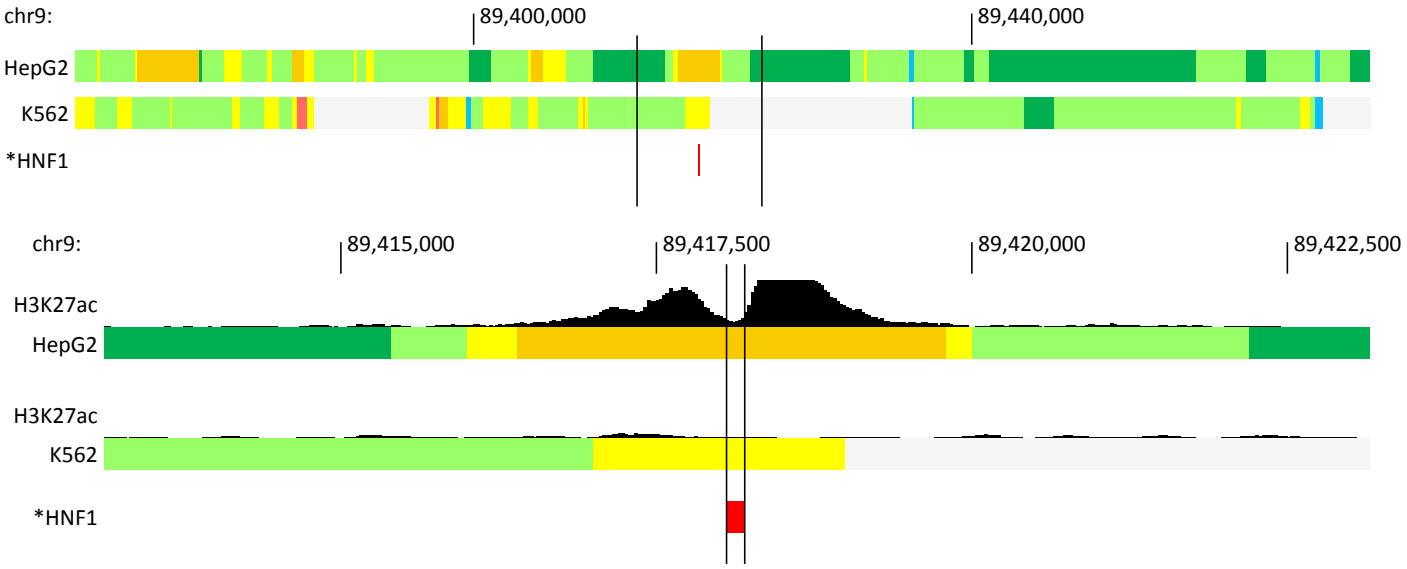
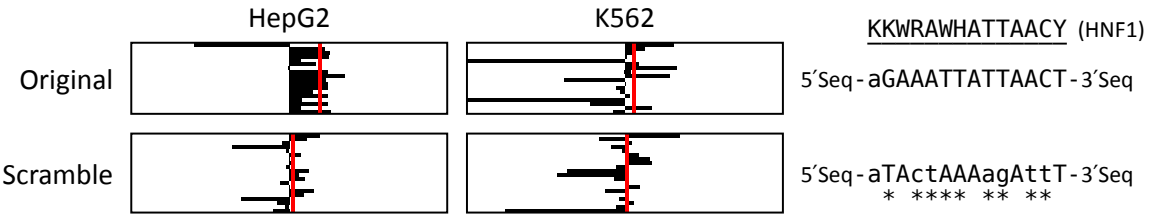
321 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr9 89418122 89418135 - (hg18)





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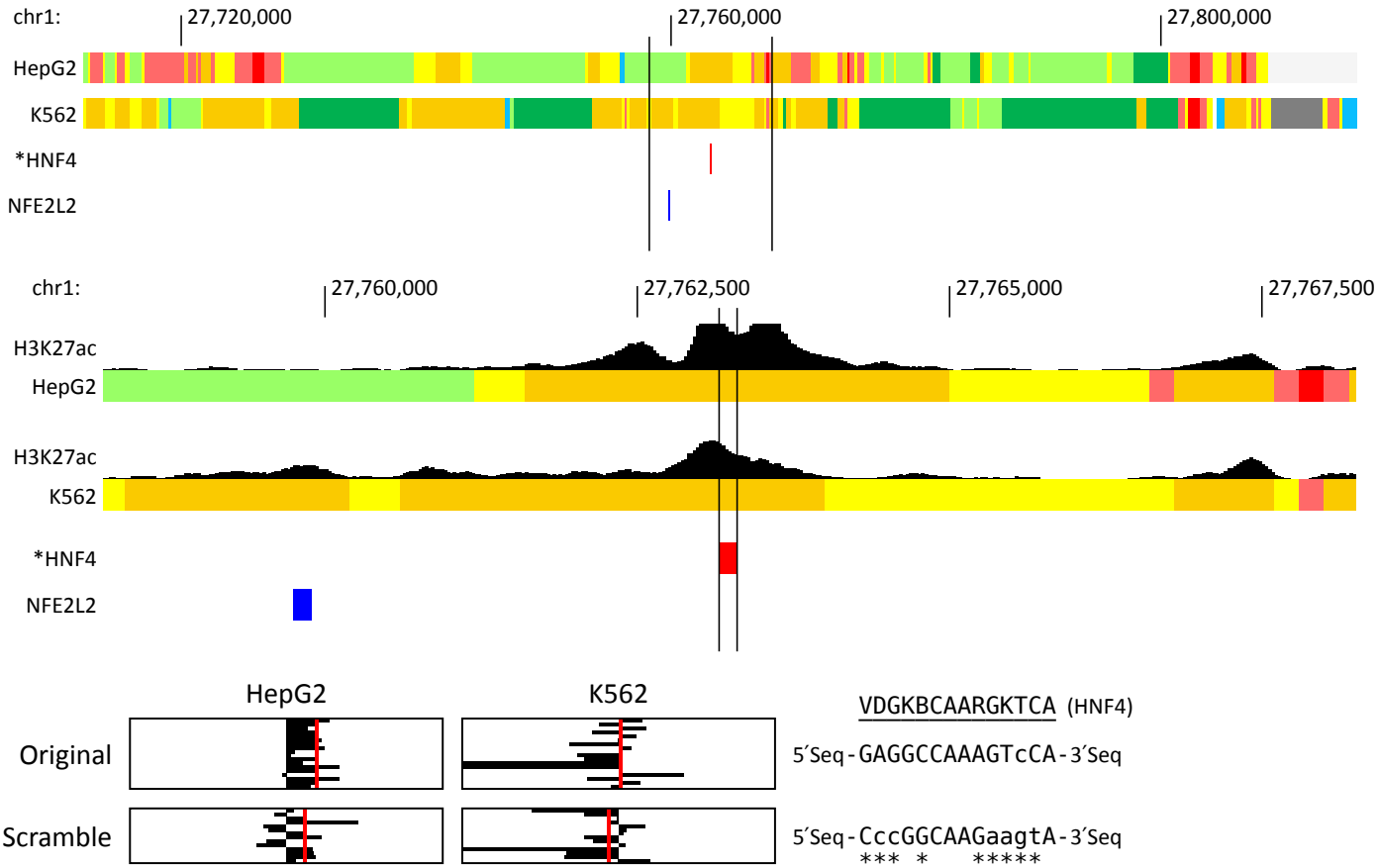
322 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr1 27763221 27763234 + (hg18)



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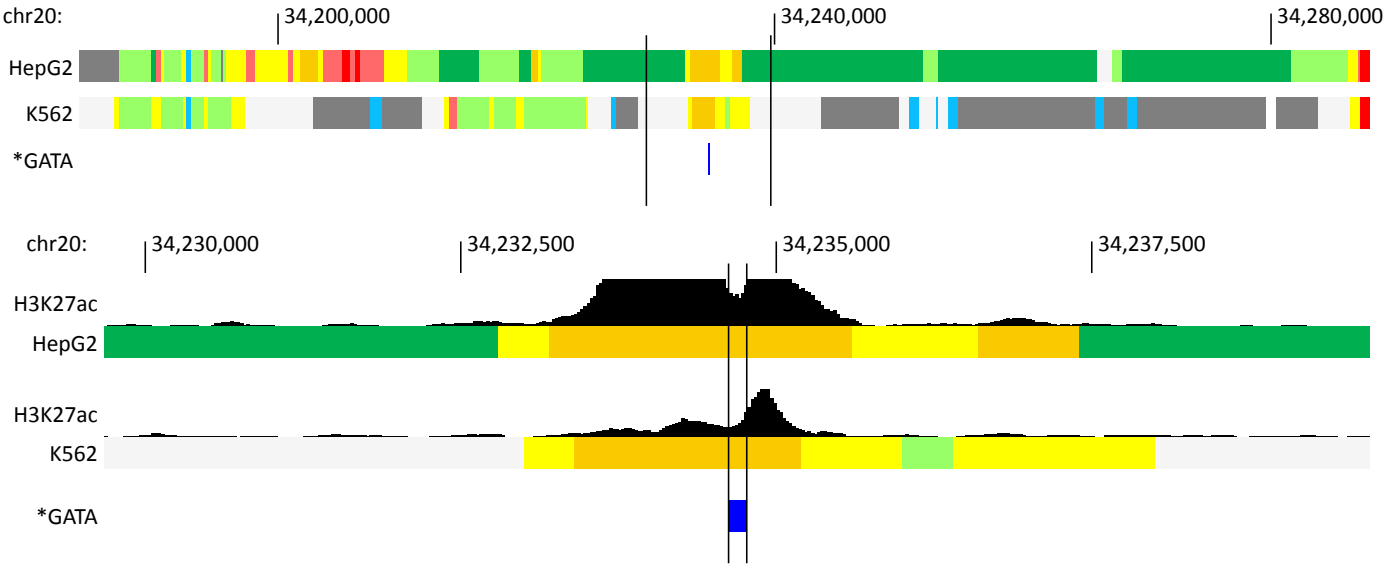
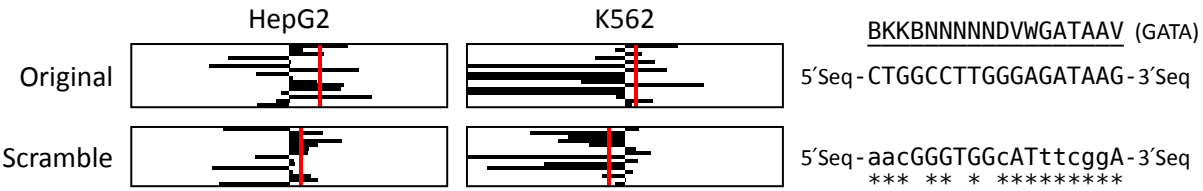
323 GATA in K562 enhancer

chr20 34234686 34234703 + (hg18)





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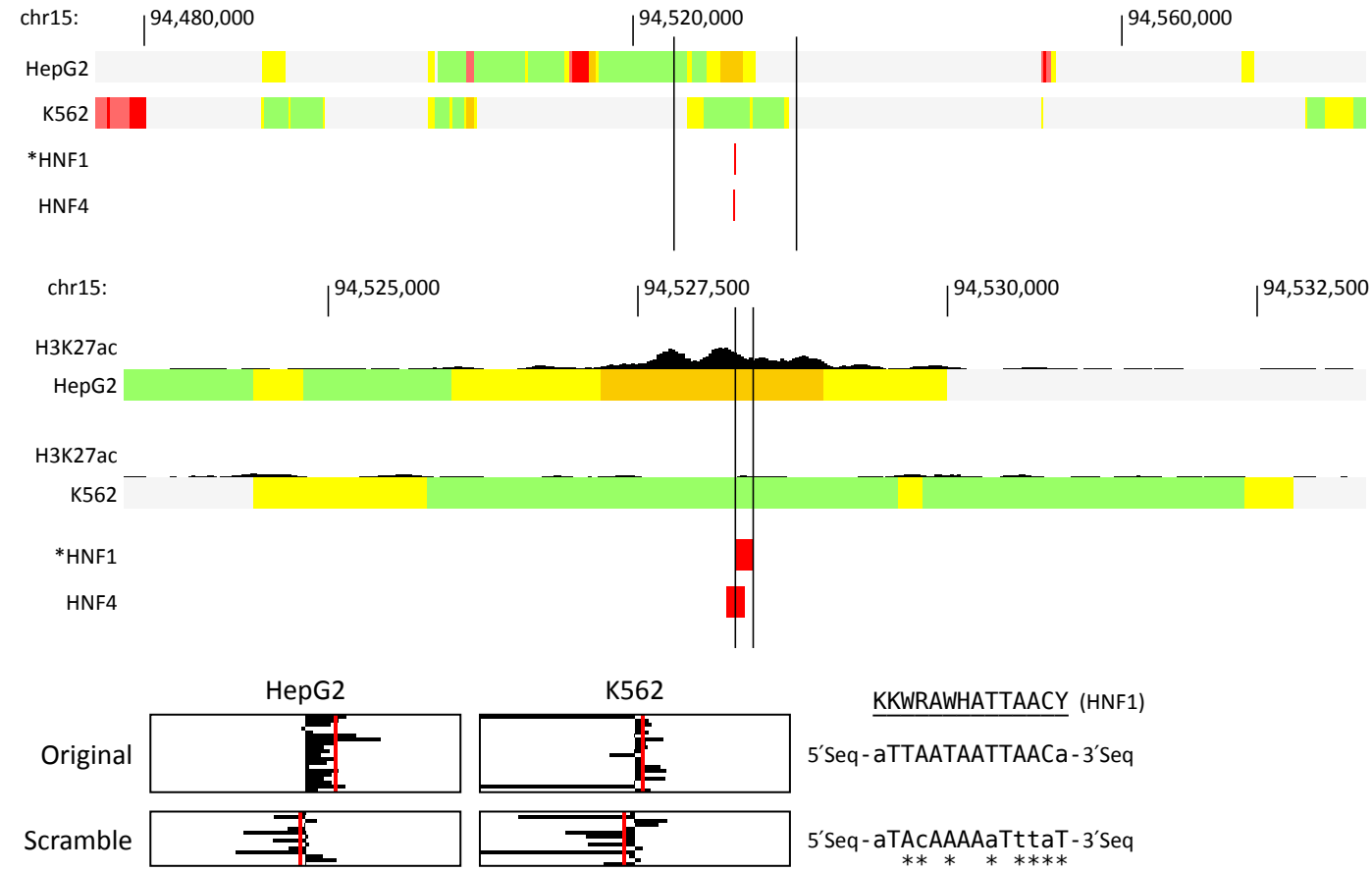
324 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr15 94528353 94528366 + (hg18)



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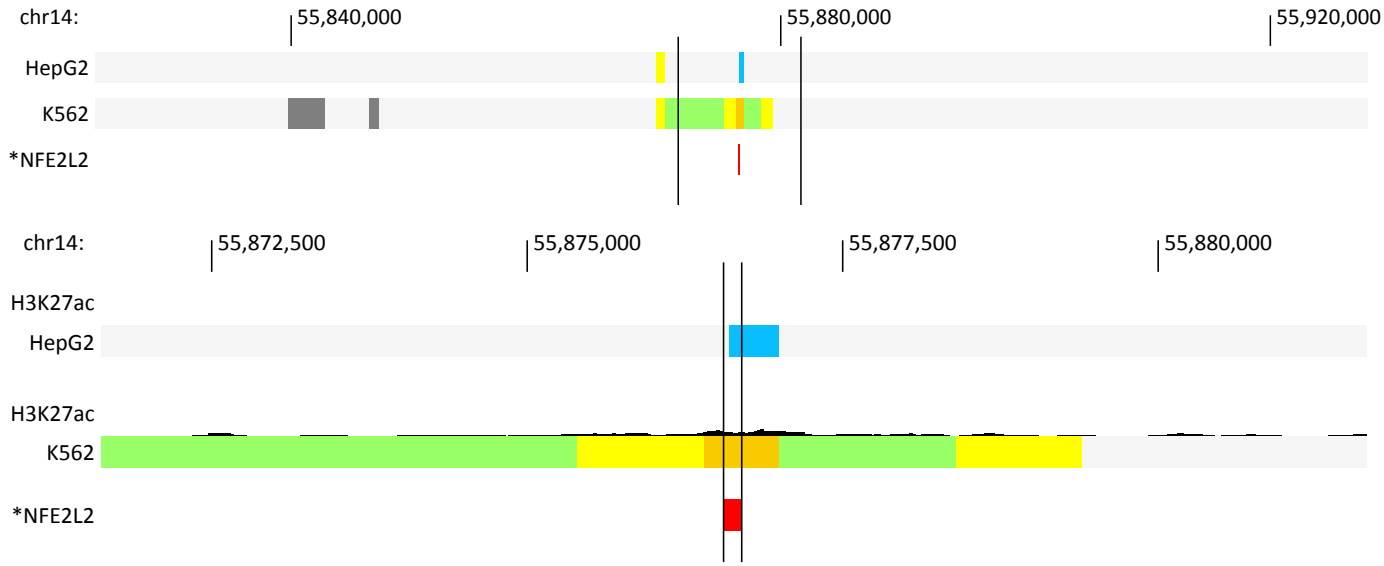
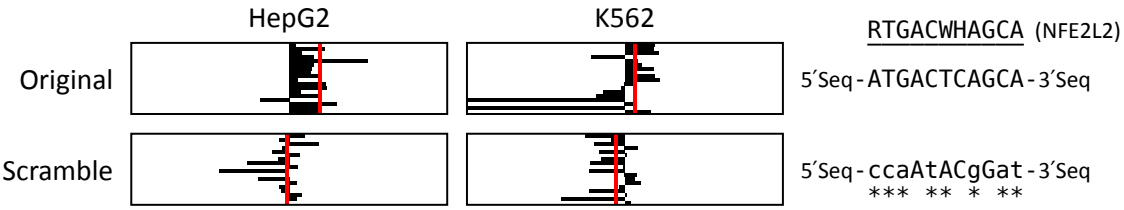
325 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr14 55876623 55876633 + (hg18)





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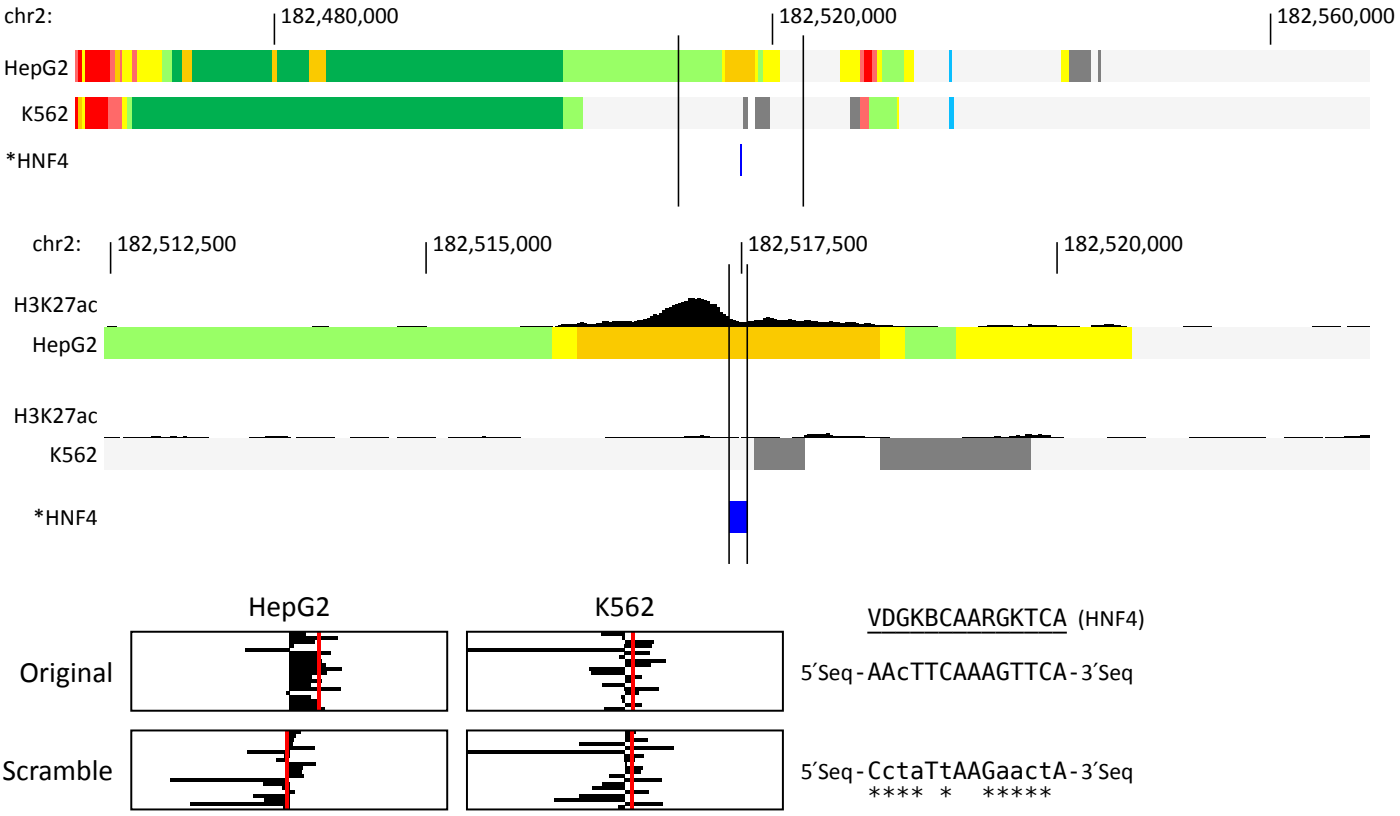
326 HNF4 in HepG2 enhancer

chr2 182517467 182517480 + (hg18)



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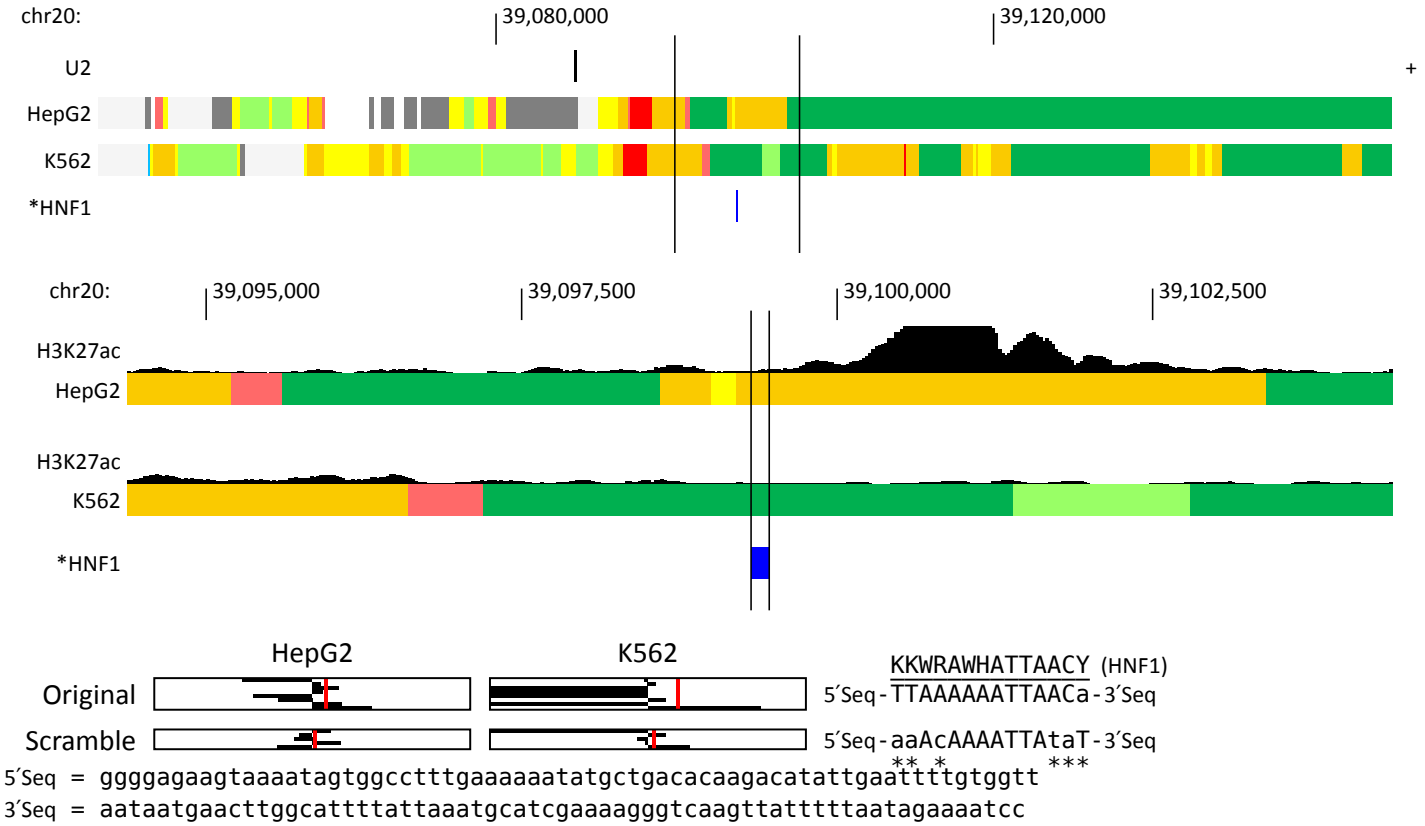
327 HNF1 in HepG2 enhancer

chr20 39099384 39099397 - (hg18)



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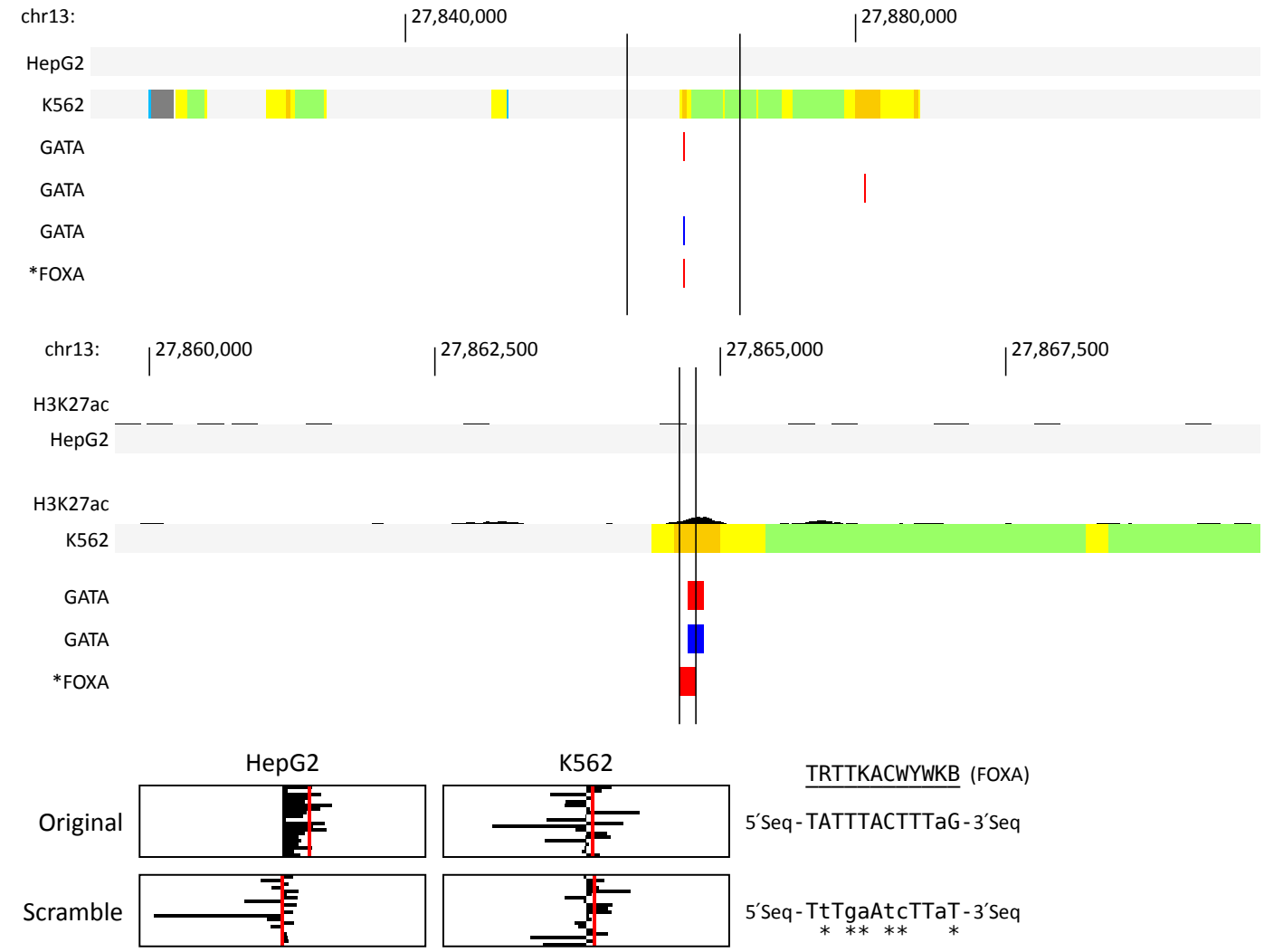
328 FOXA in K562 enhancer (conserved at 50% confidence)

chr13 27864709 27864720 + (hg18)



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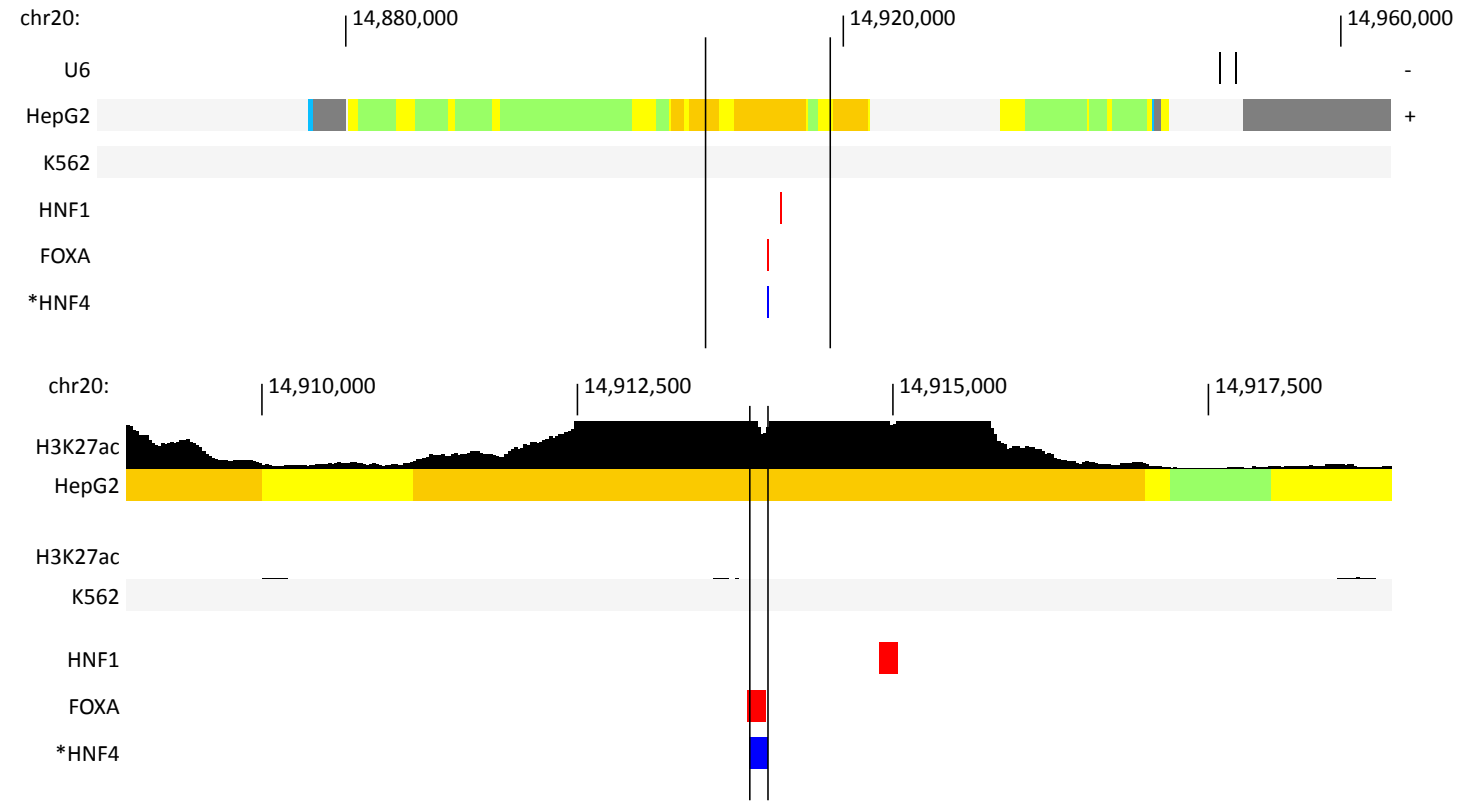
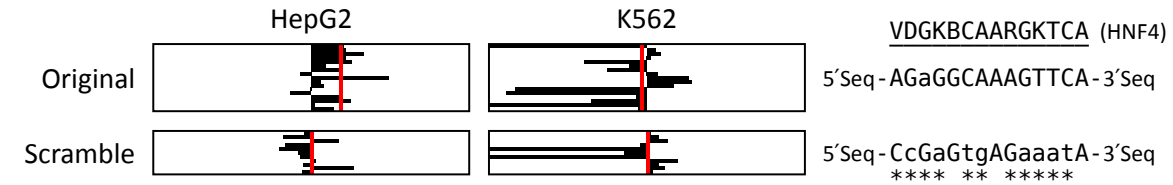
329 HNF4 in HepG2 enhancer

chr20 14913932 14913945 - (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-AGaGGCAAAGTTCA-3′Seq

5′Seq-CcGaGtgAGaaatA-3′Seq

**** ** *****

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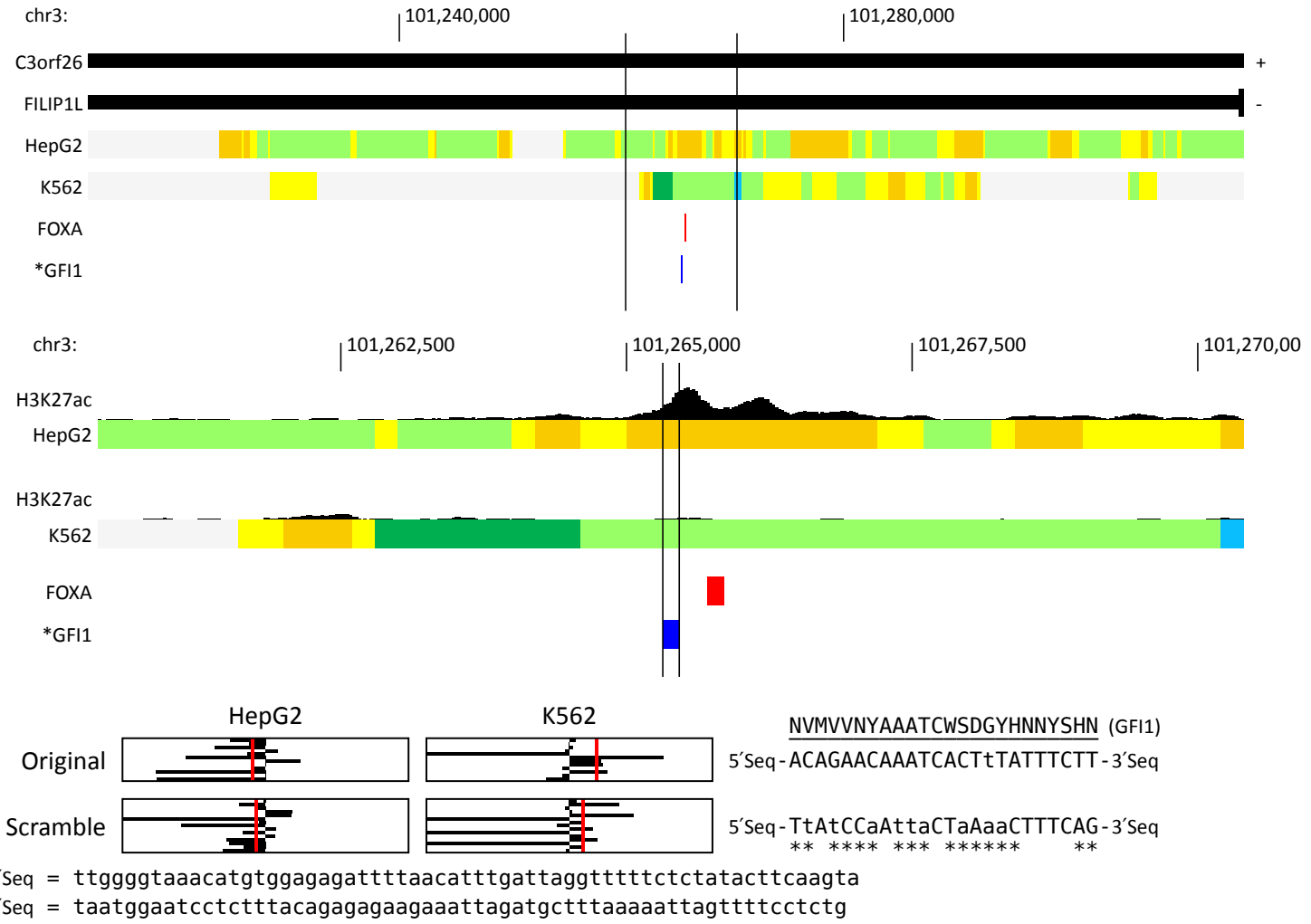
330 GFI1 in HepG2 enhancer

chr3 101265379 101265402 - (hg18)



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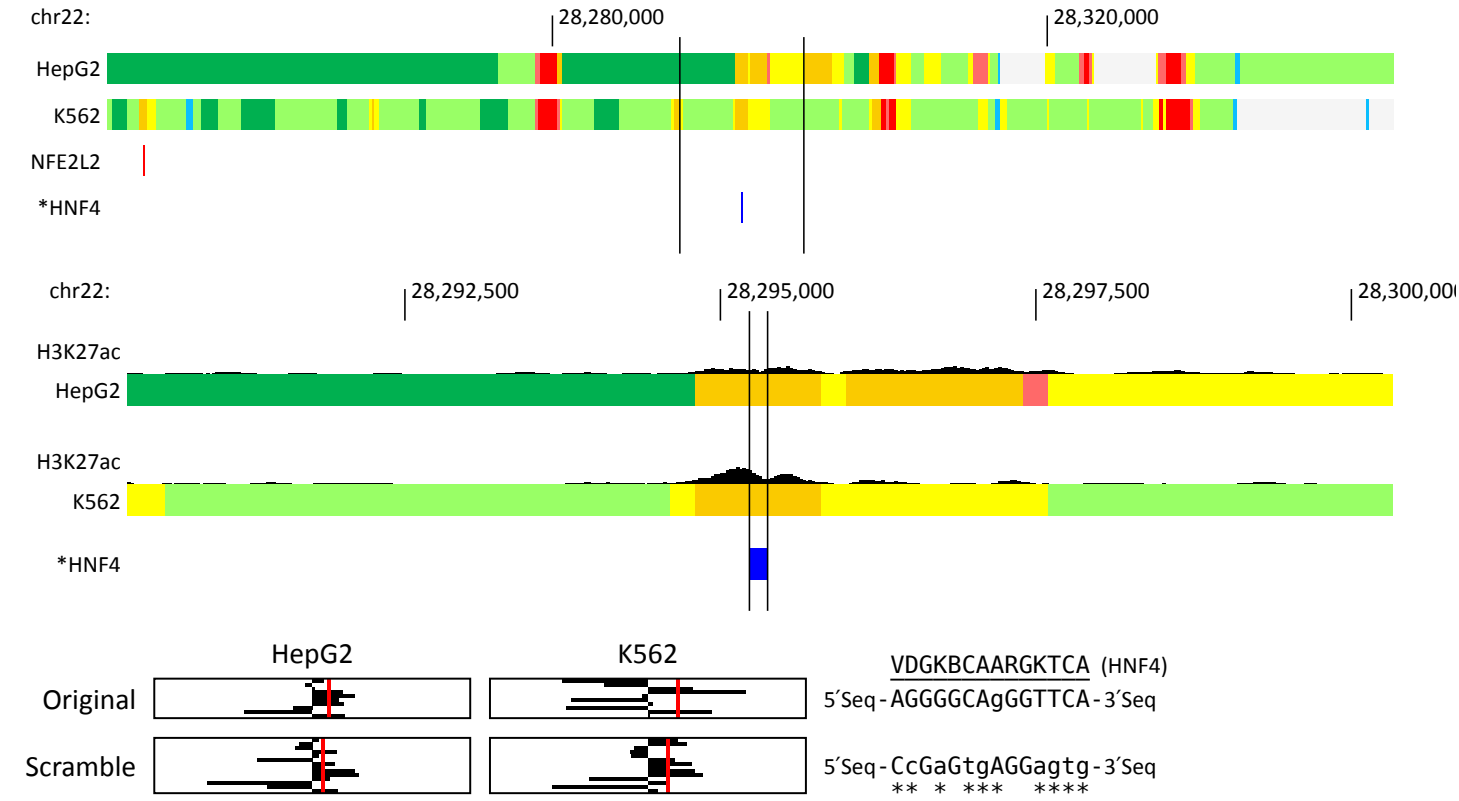
331 HNF4 in K562 enhancer

chr22 28295296 28295309 + (hg18)



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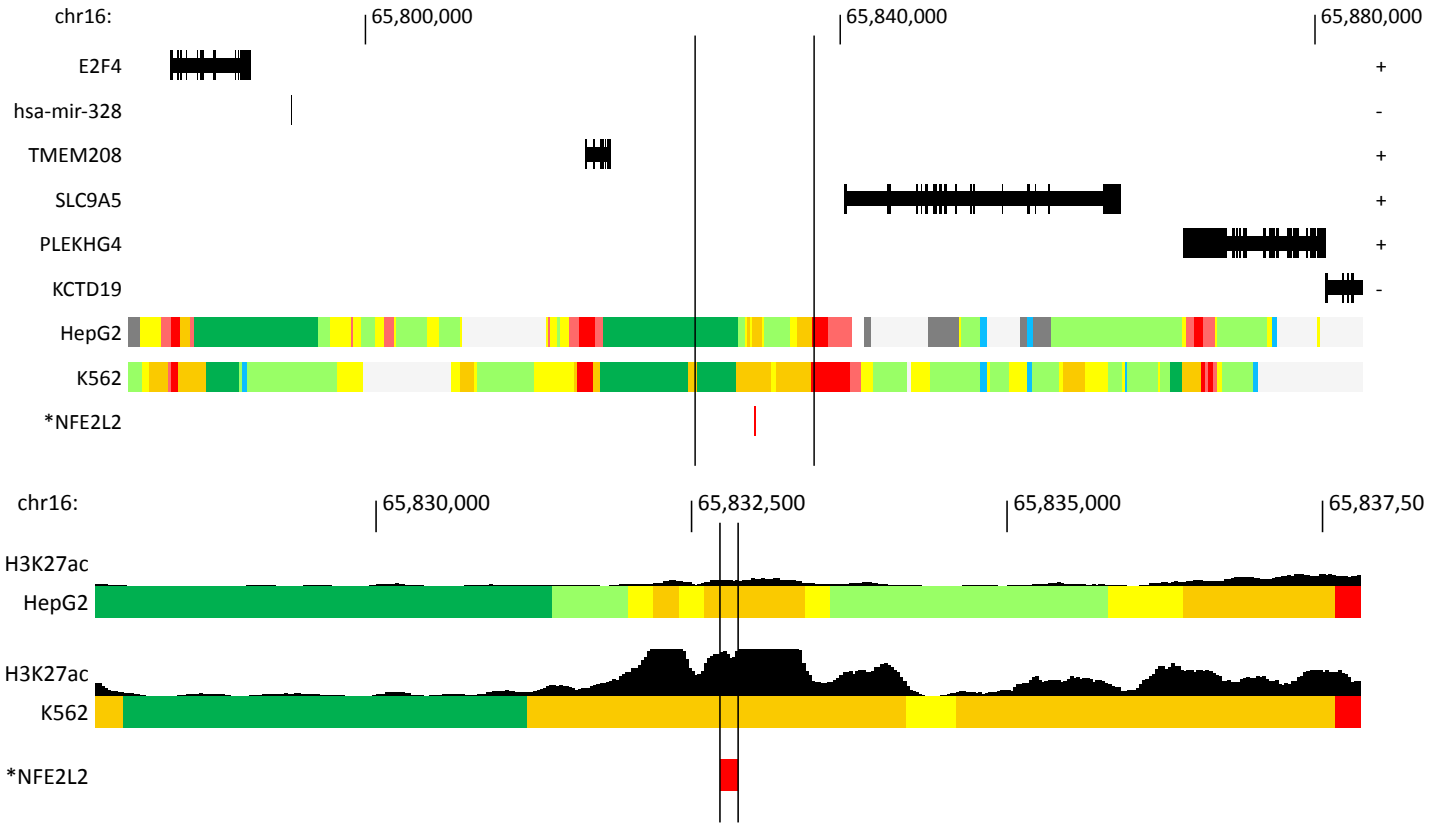
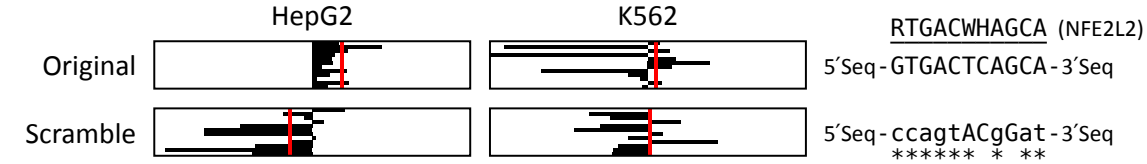
332 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr16 65832792 65832802 + (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq-GTGACTCAGCA-3′Seq

5′Seq-ccagtACgGat-3′Seq

****** * **

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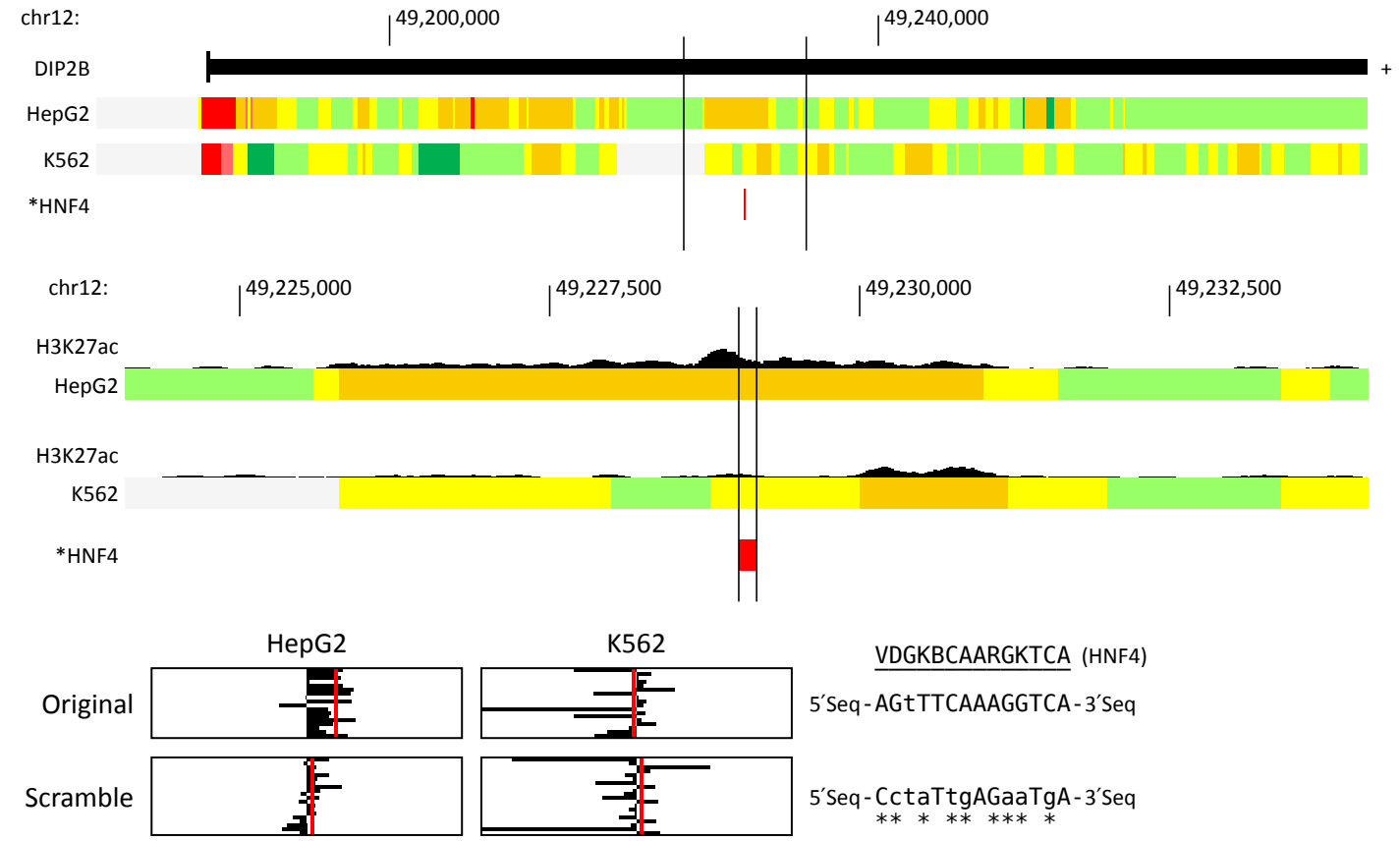
333 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 49229091 49229104 - (hg18)



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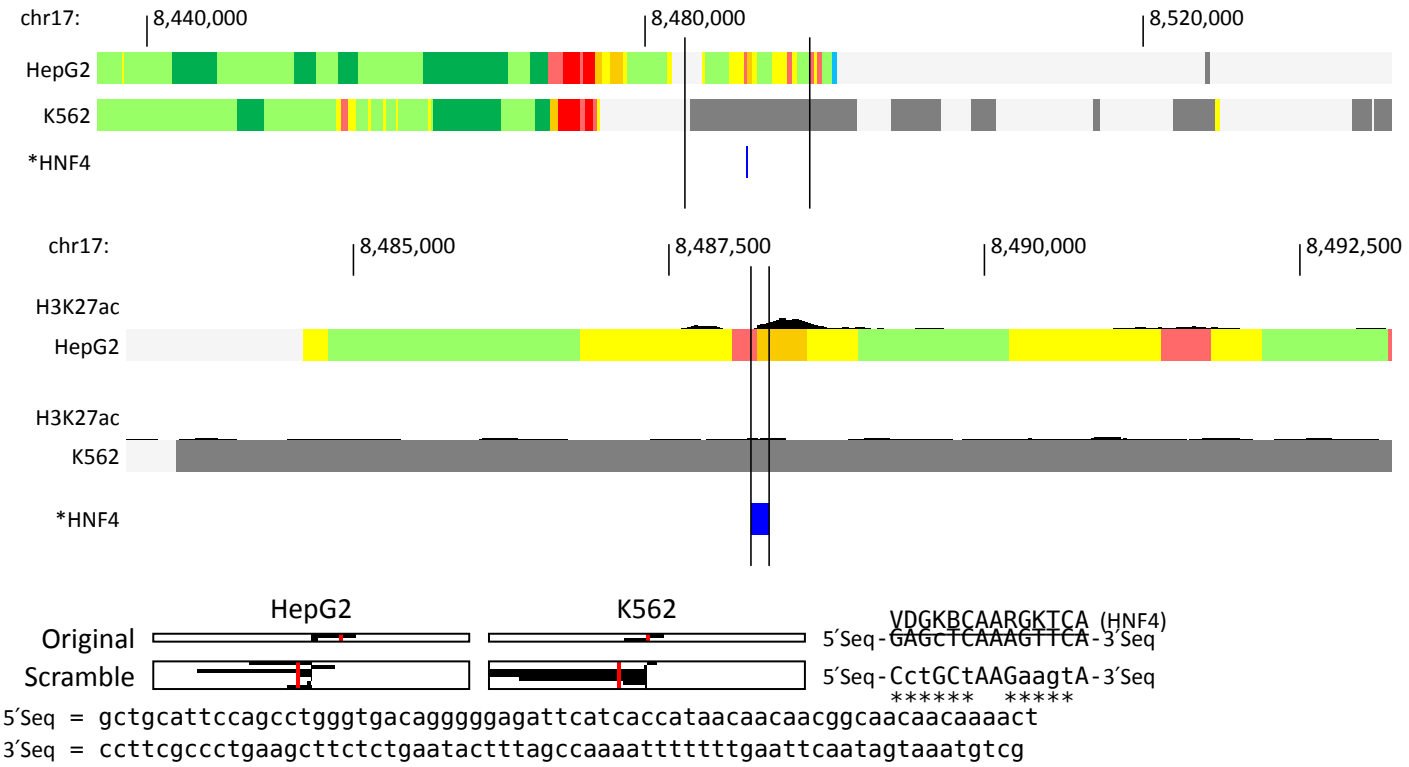
334 HNF4 in HepG2 enhancer

chr17 8488216 8488229 + (hg18)



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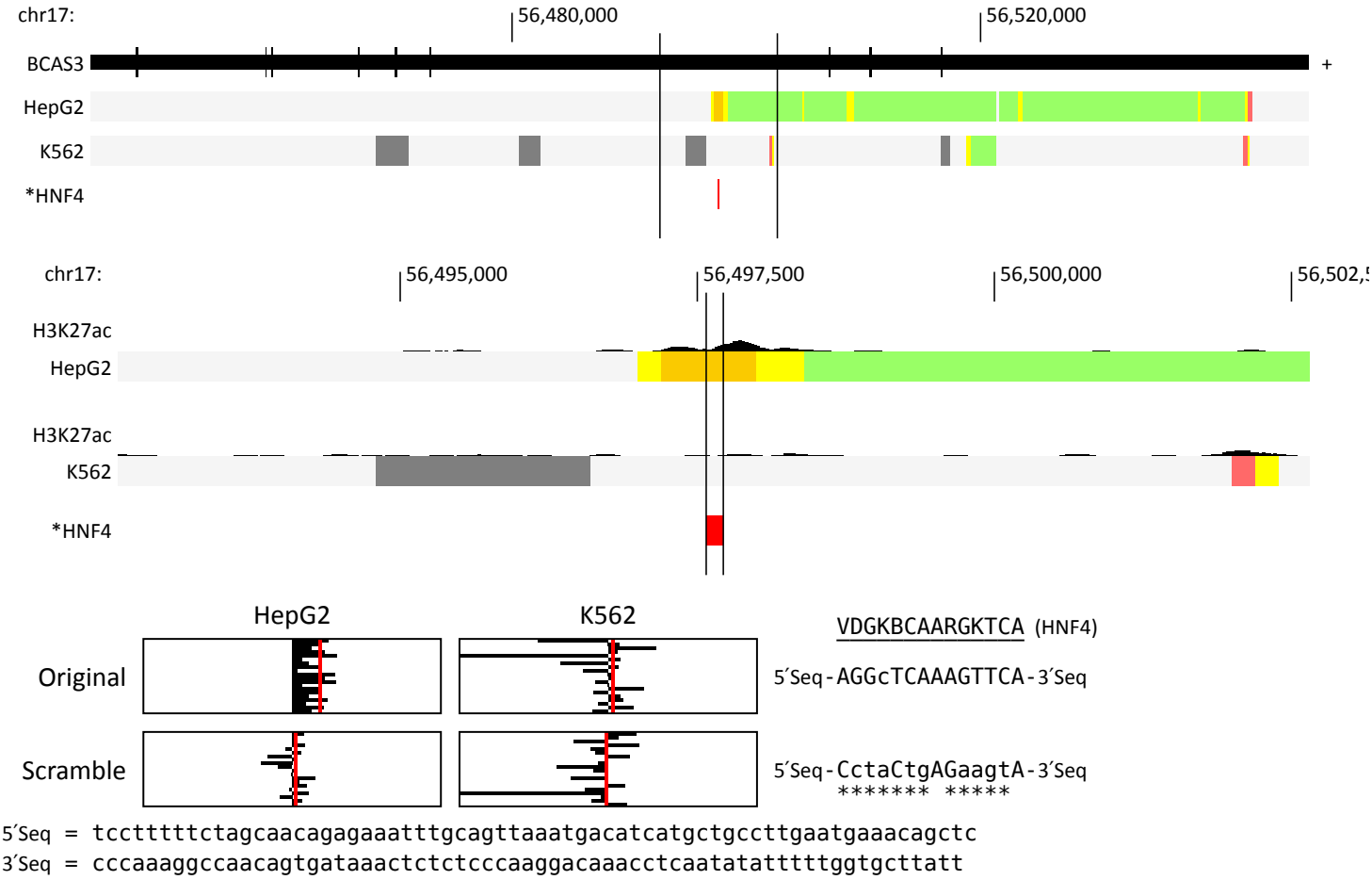
335 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr17 56497641 56497654 - (hg18)



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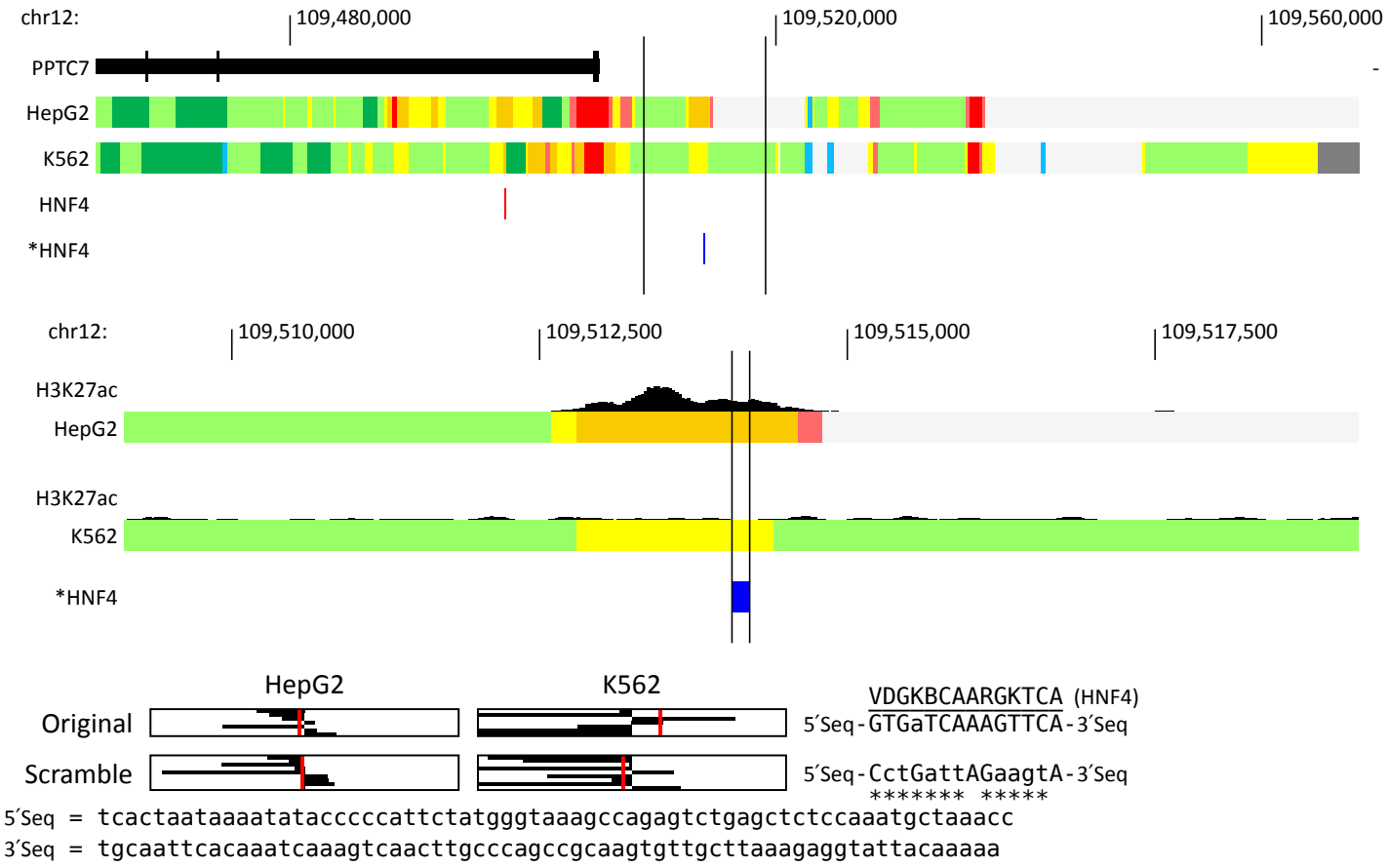
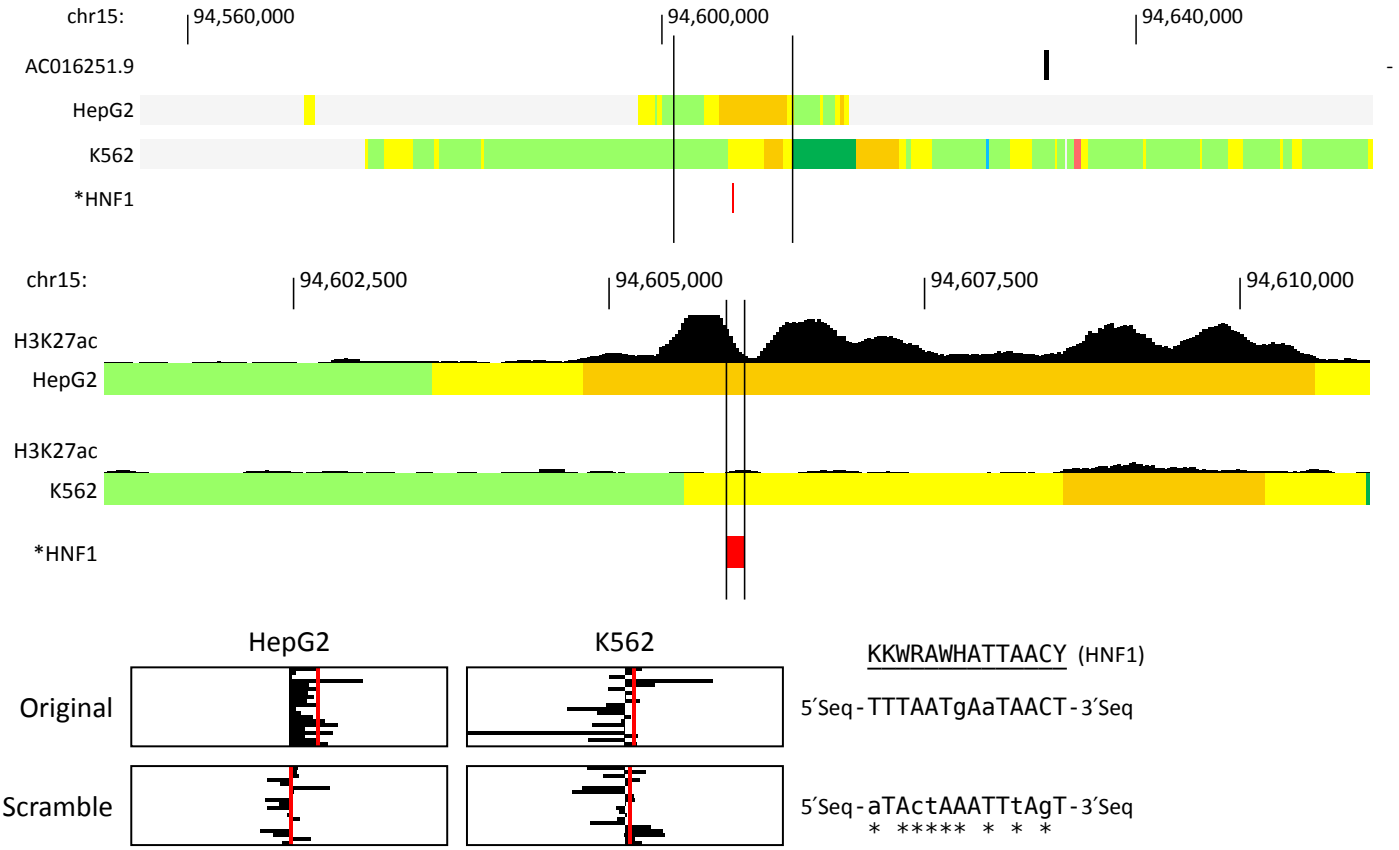
336 HNF4 in HepG2 enhancer

chr12 109514129 109514142 - (hg18)



337 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr15 94605996 94606009 + (hg18)



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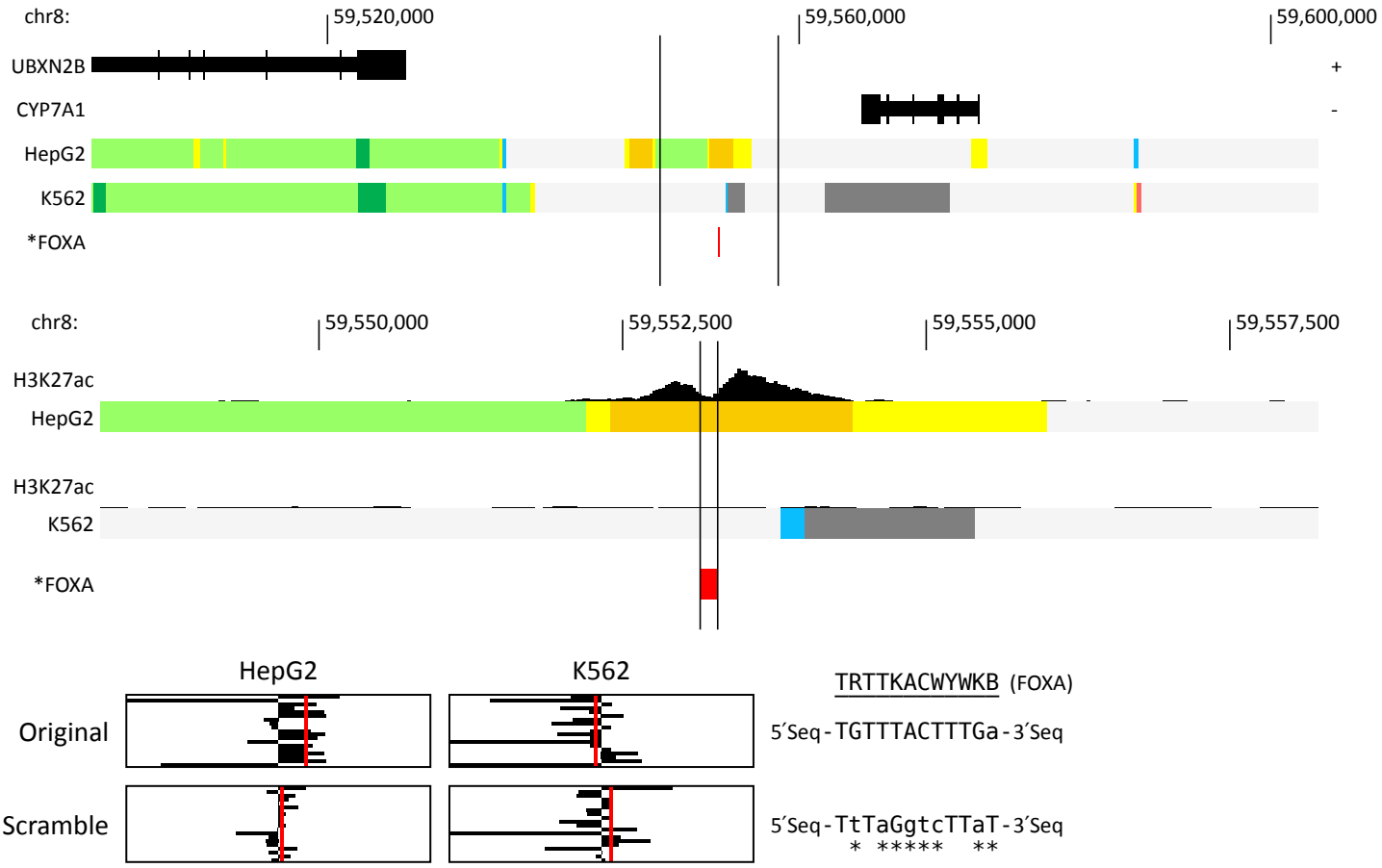
338 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr8 59553206 59553217 + (hg18)



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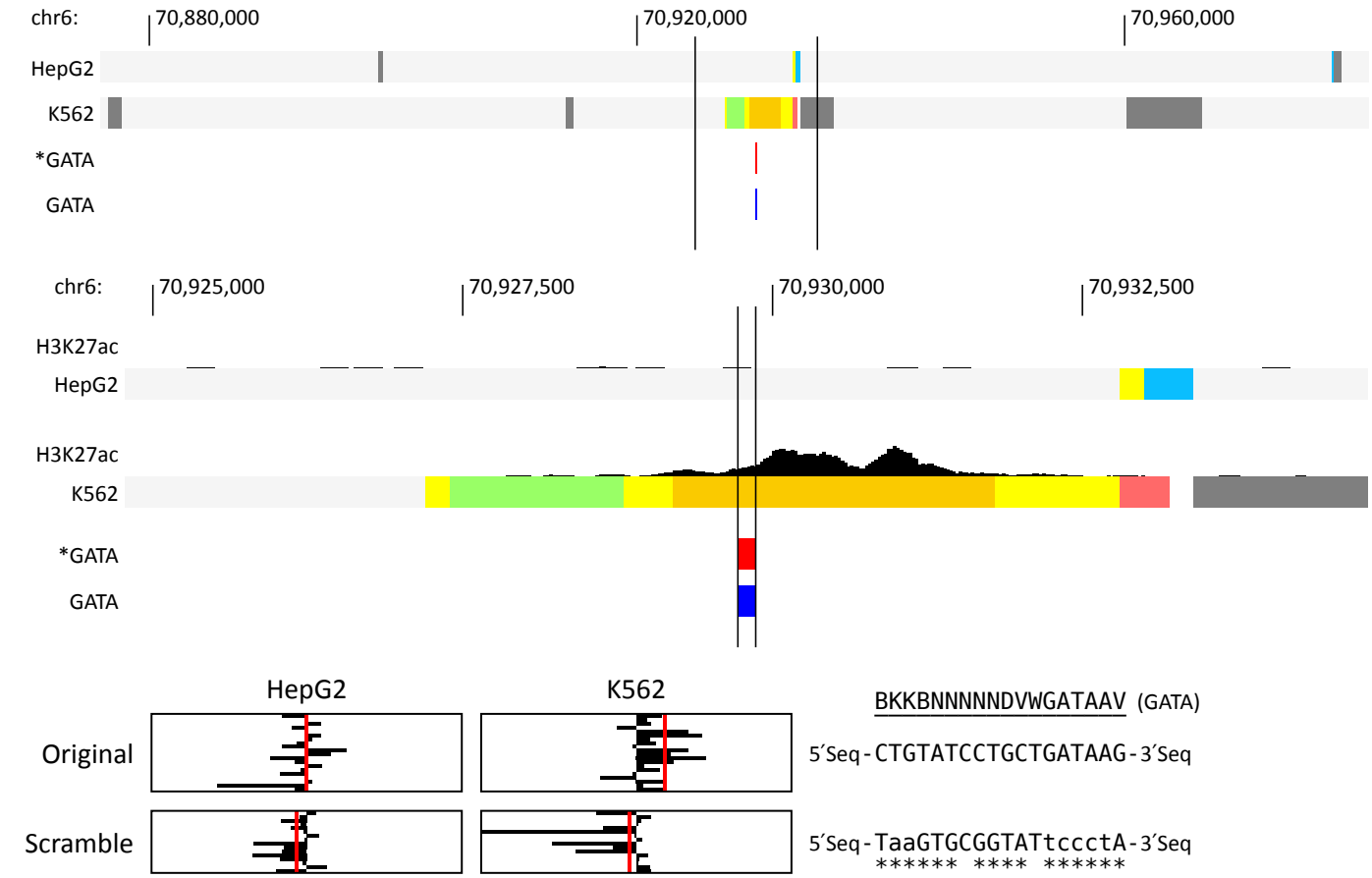
339 GATA in K562 enhancer (conserved at 60% confidence)

chr6 70929784 70929801 - (hg18)



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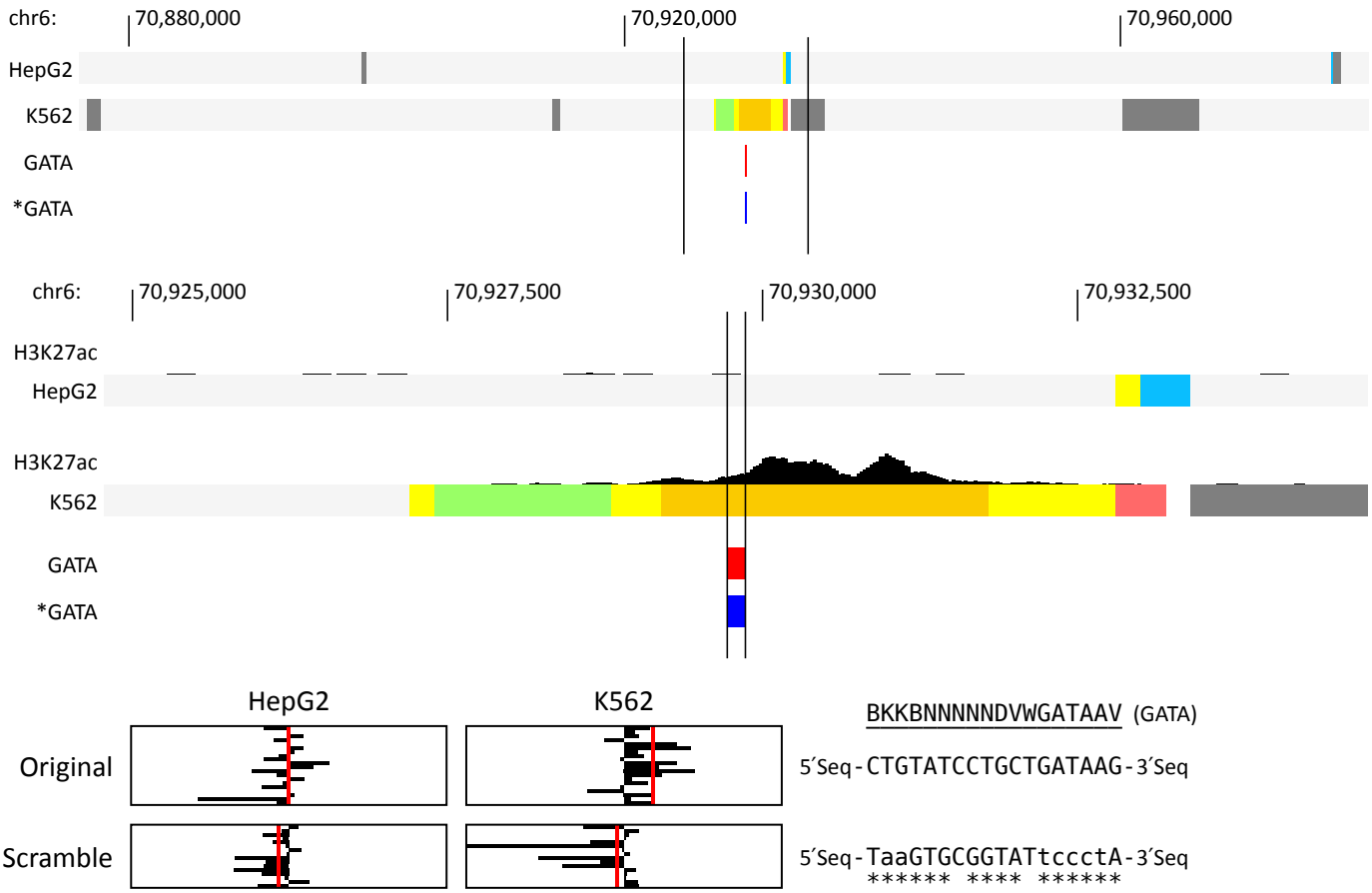
340 GATA in K562 enhancer

chr6 70929784 70929801 - (hg18)



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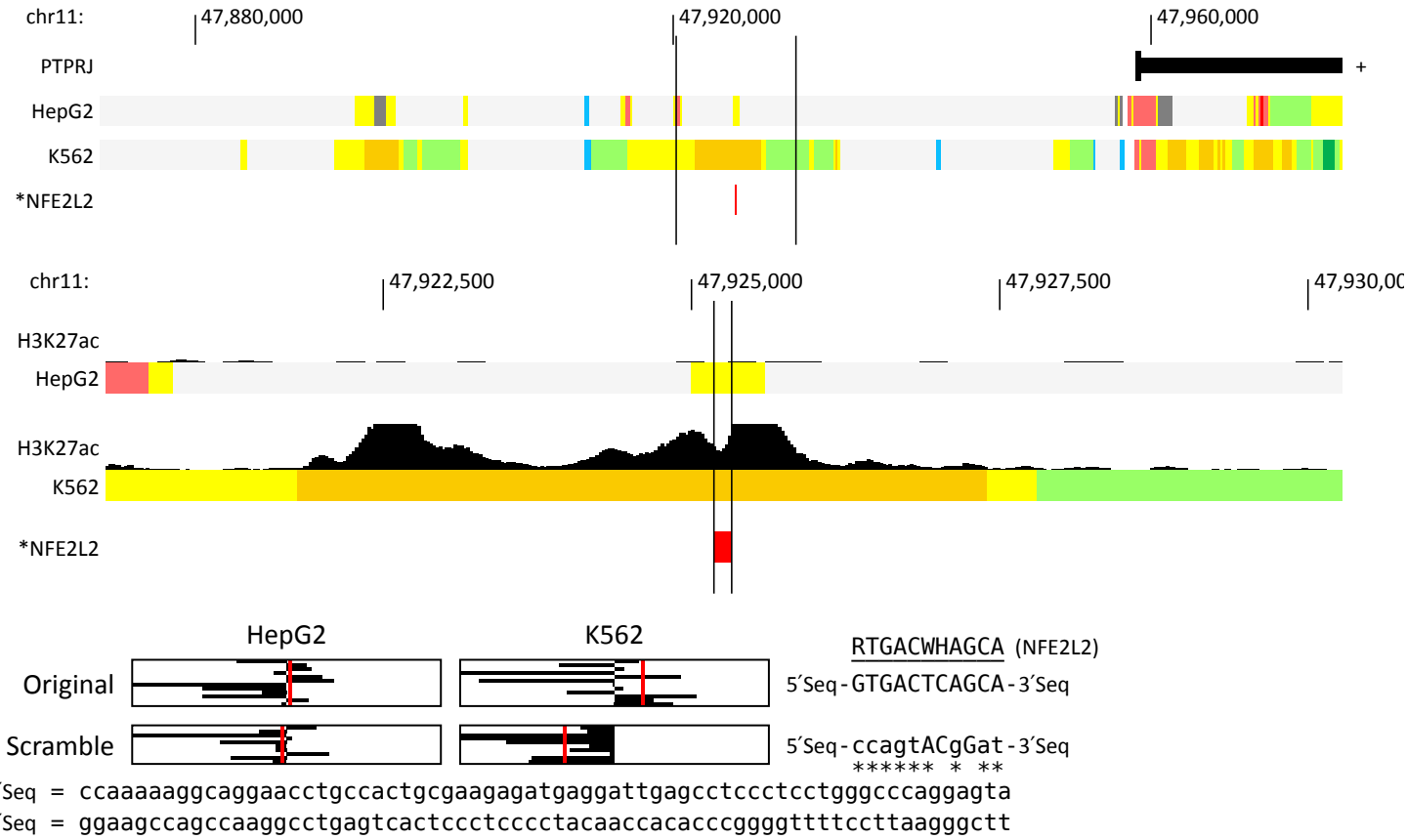
341 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr11 47925249 47925259 - (hg18)



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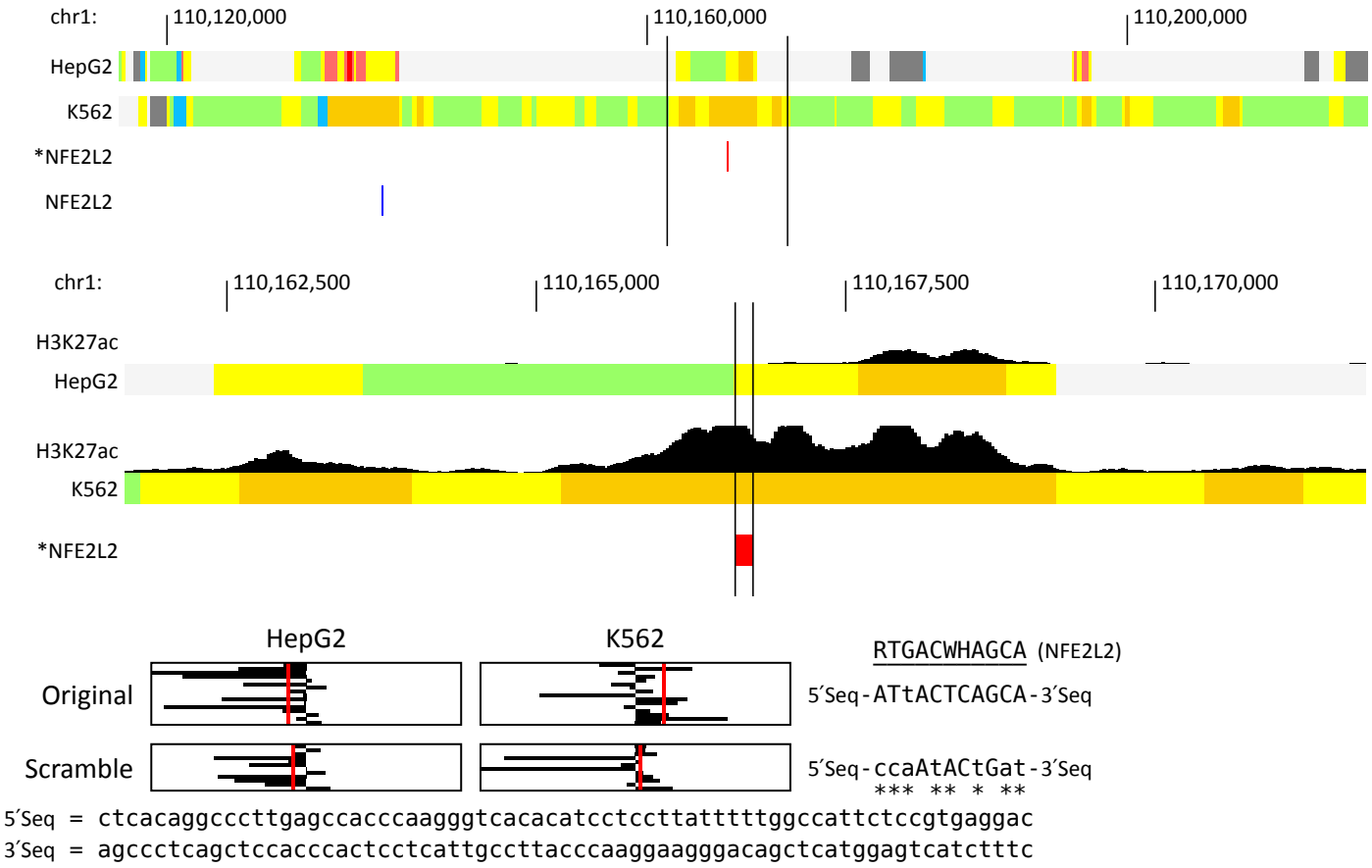
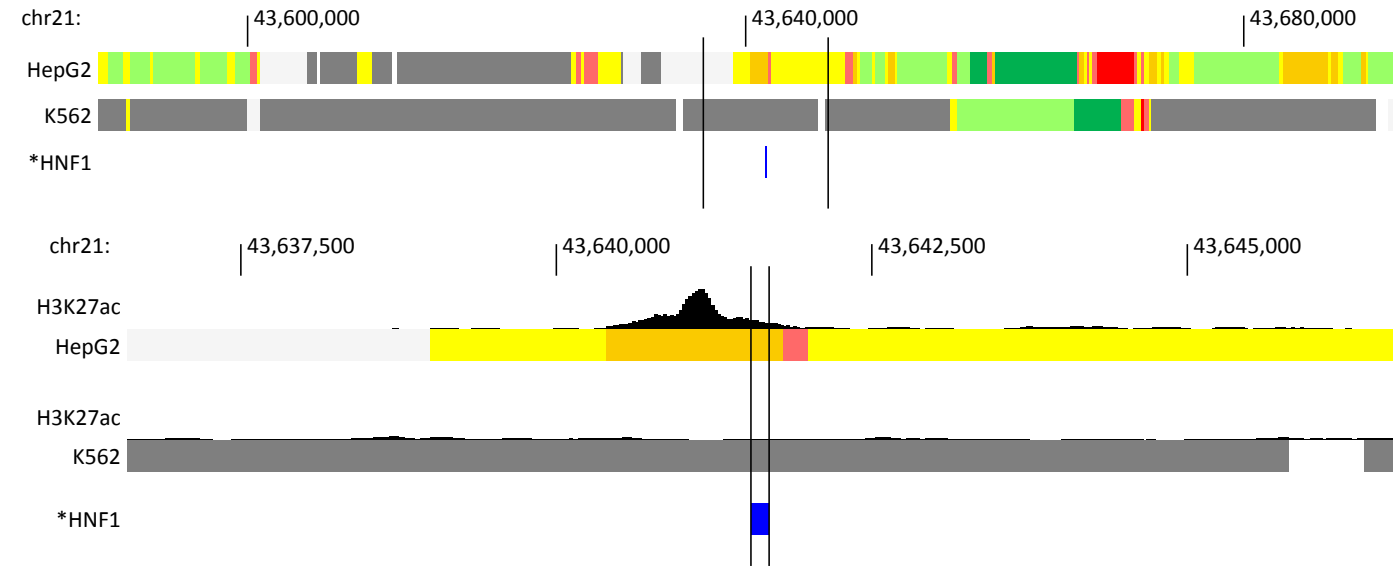
342 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 110166674 110166684 - (hg18)



343 HNF1 in HepG2 enhancer

chr21 43641608 43641621 + (hg18)



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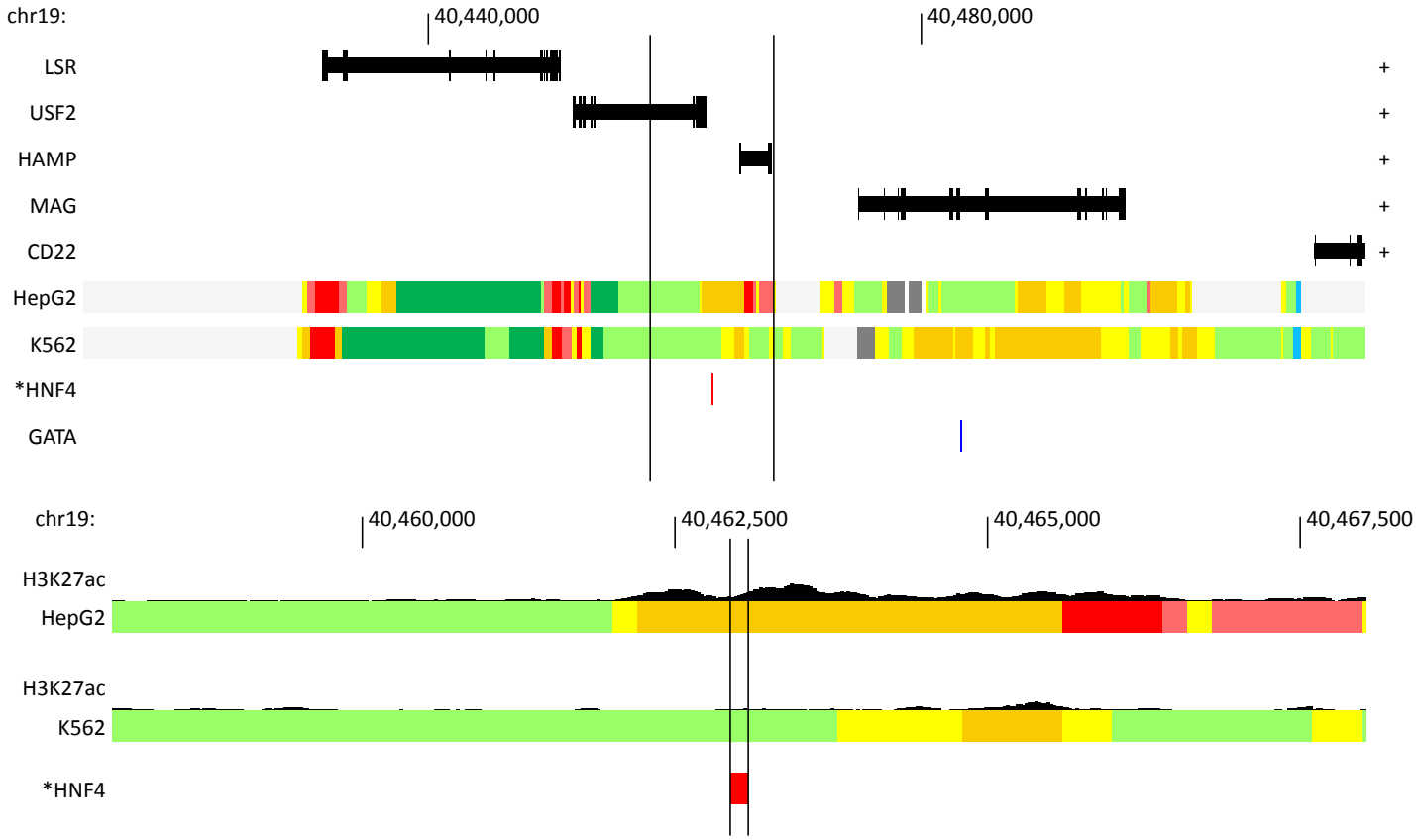
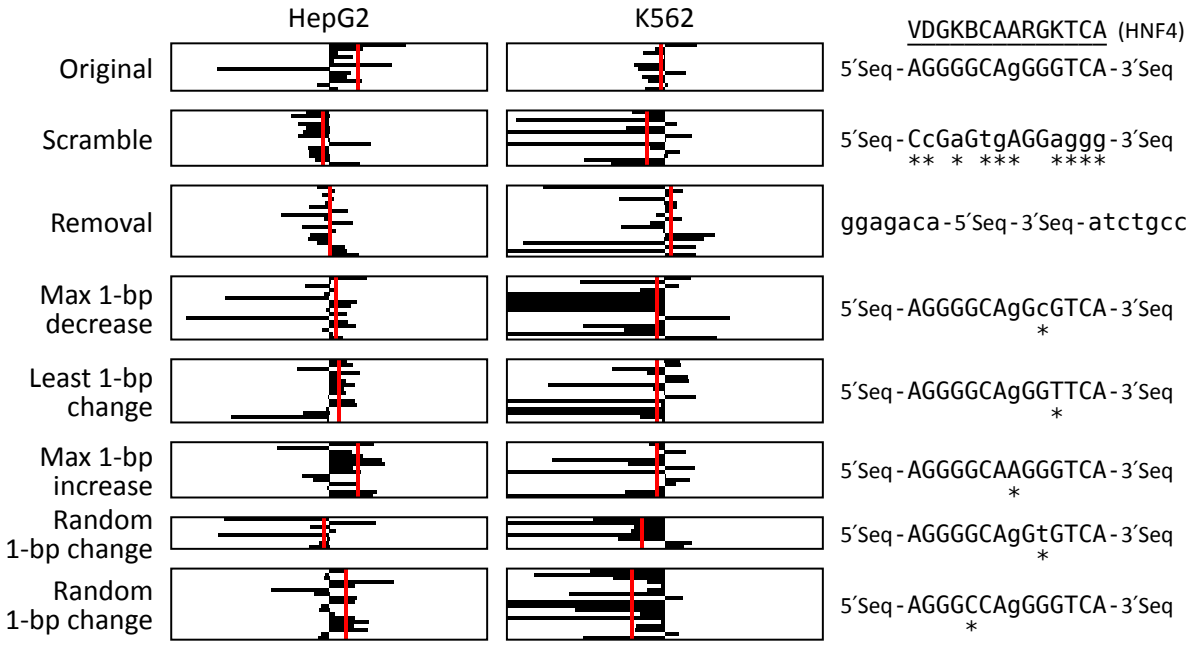
344 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr19 40463008 40463021 - (hg18)





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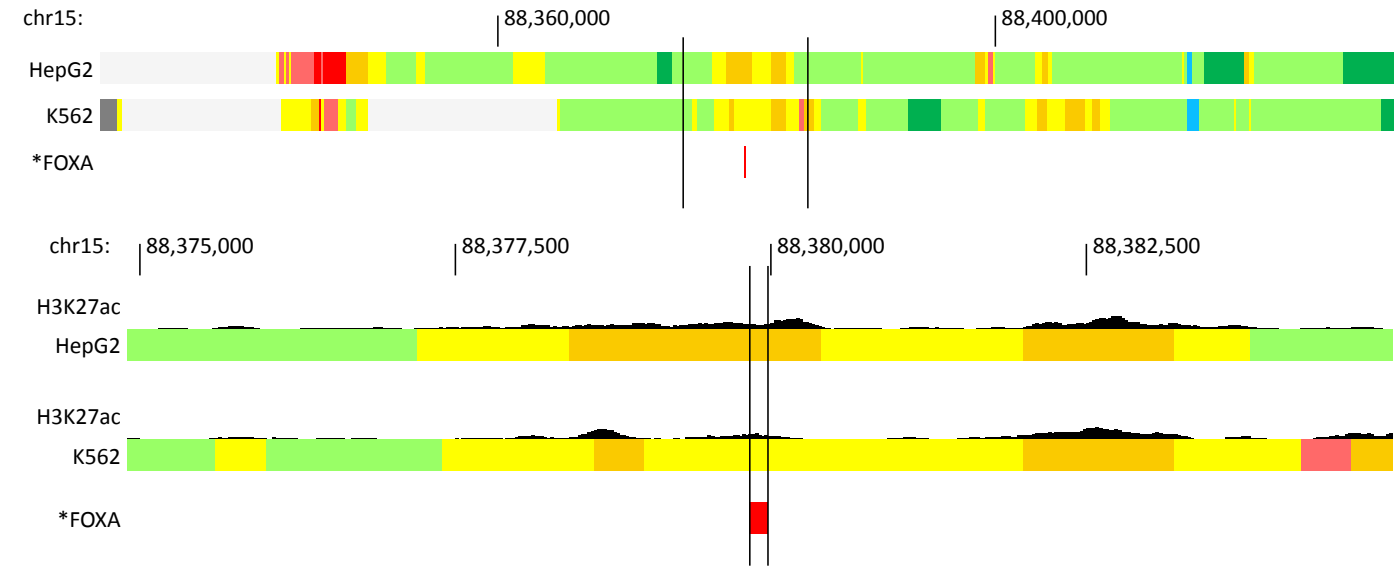
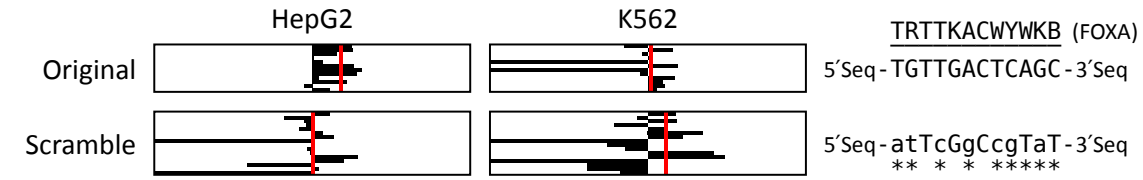
345 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr15 88379900 88379911 - (hg18)





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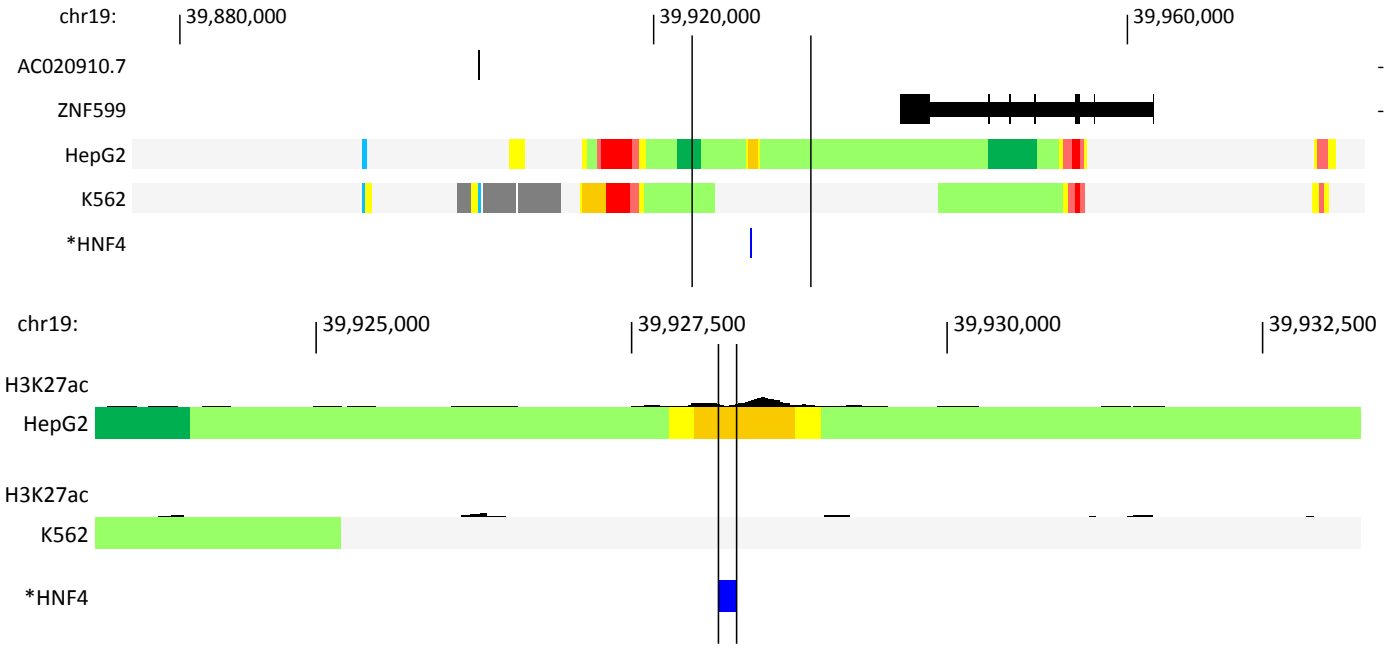
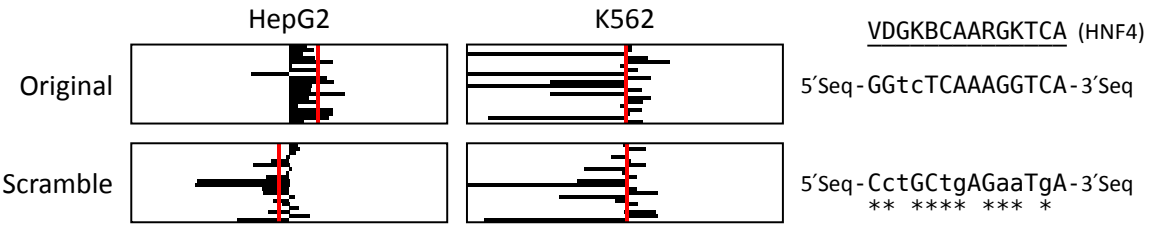
346 HNF4 in HepG2 enhancer

chr19 39928254 39928267 + (hg18)





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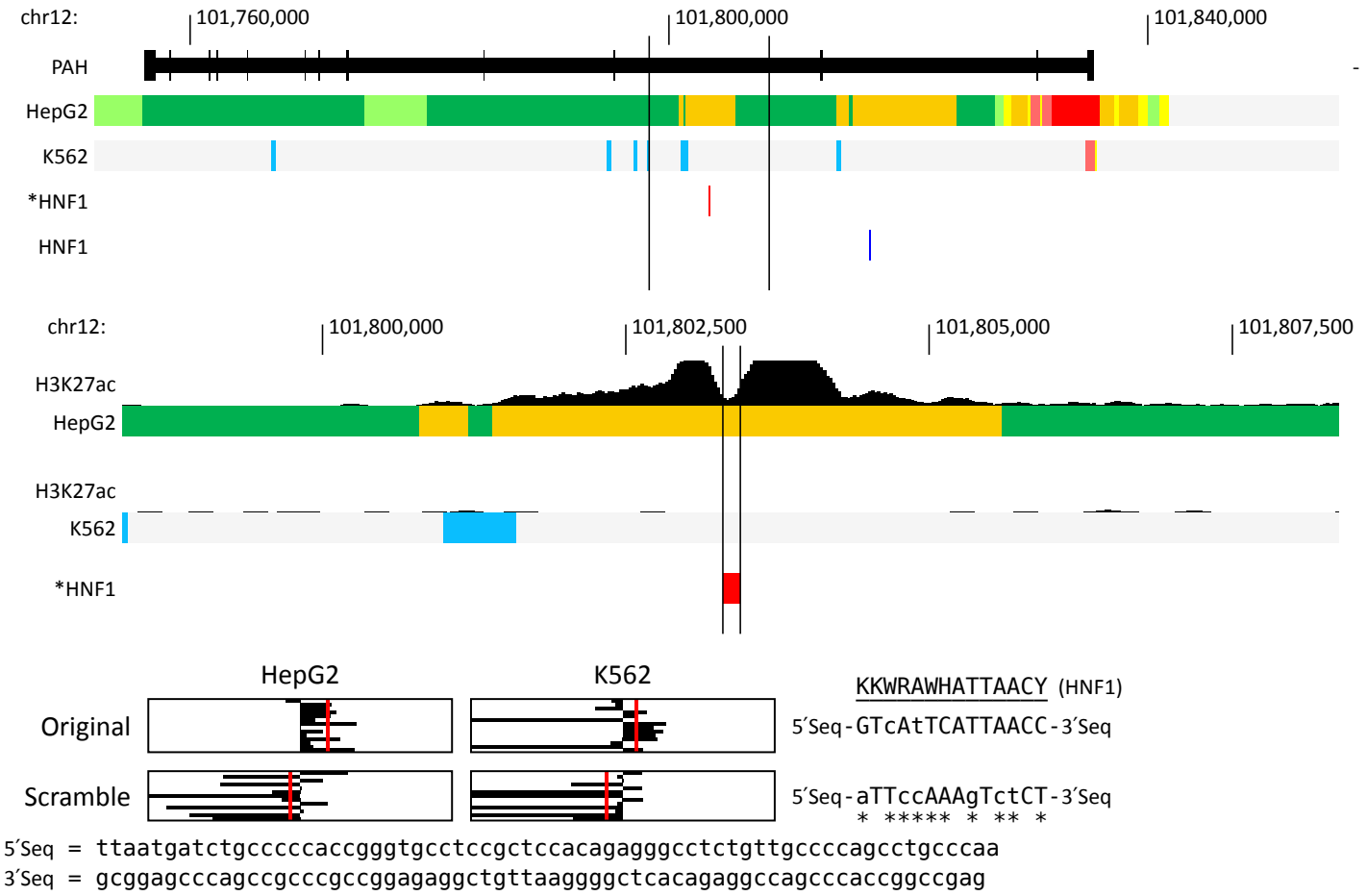
347 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr12 101803366 101803379 - (hg18)



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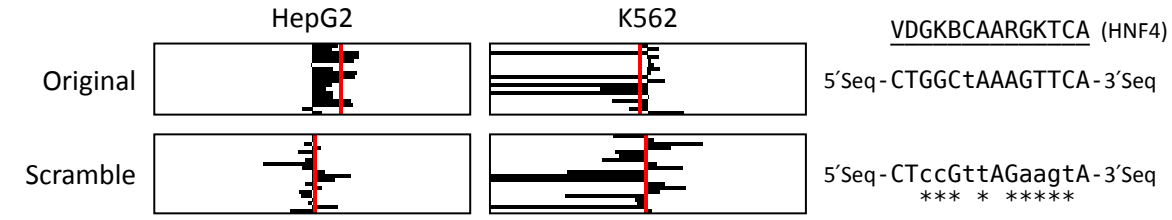
348 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr1 61421947 61421960 - (hg18)



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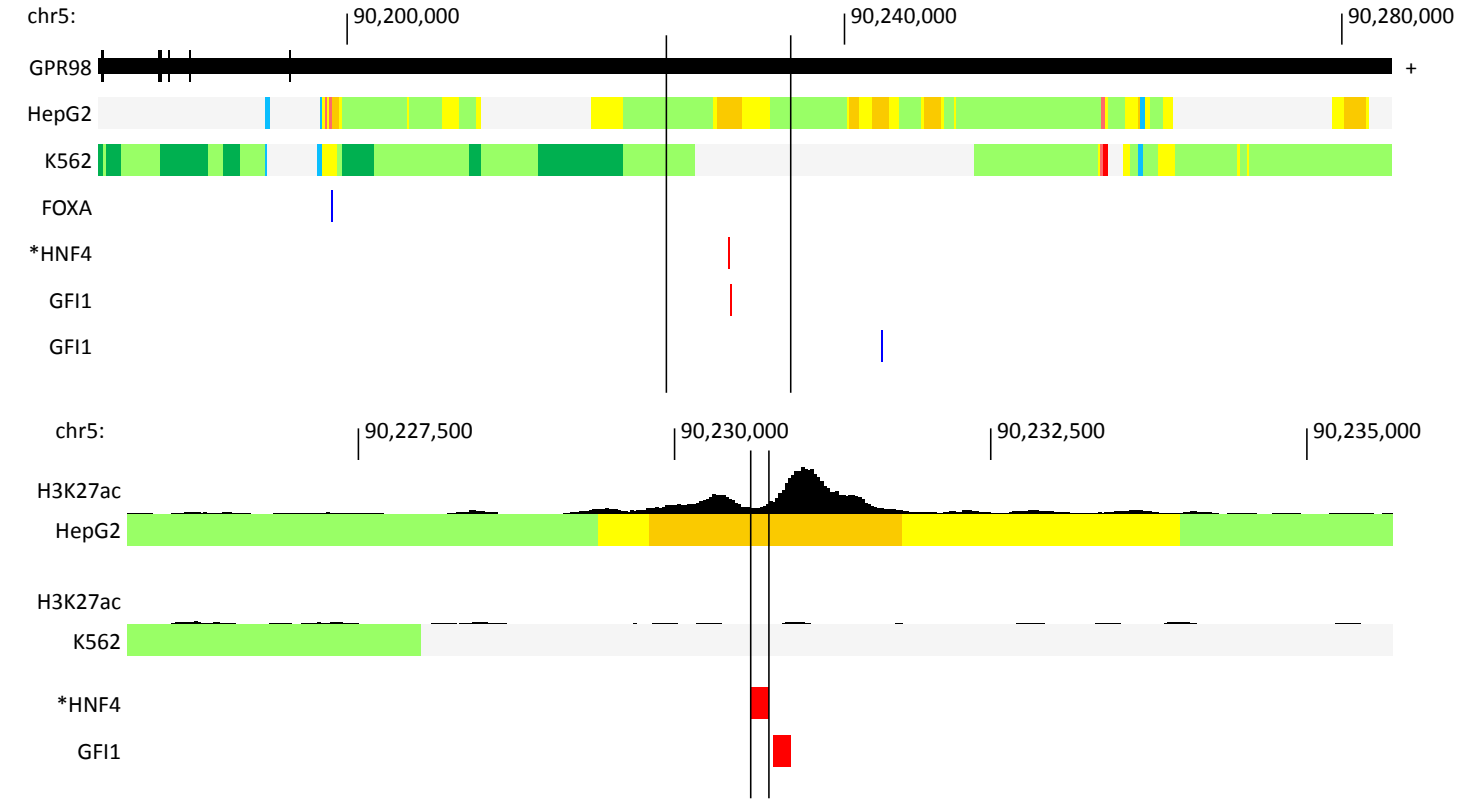
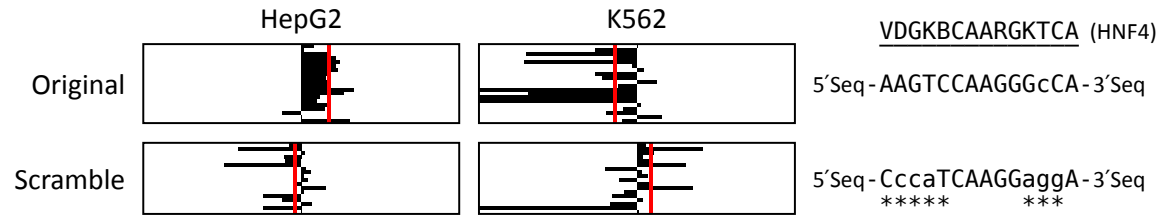
349 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr5 90230668 90230681 + (hg18)





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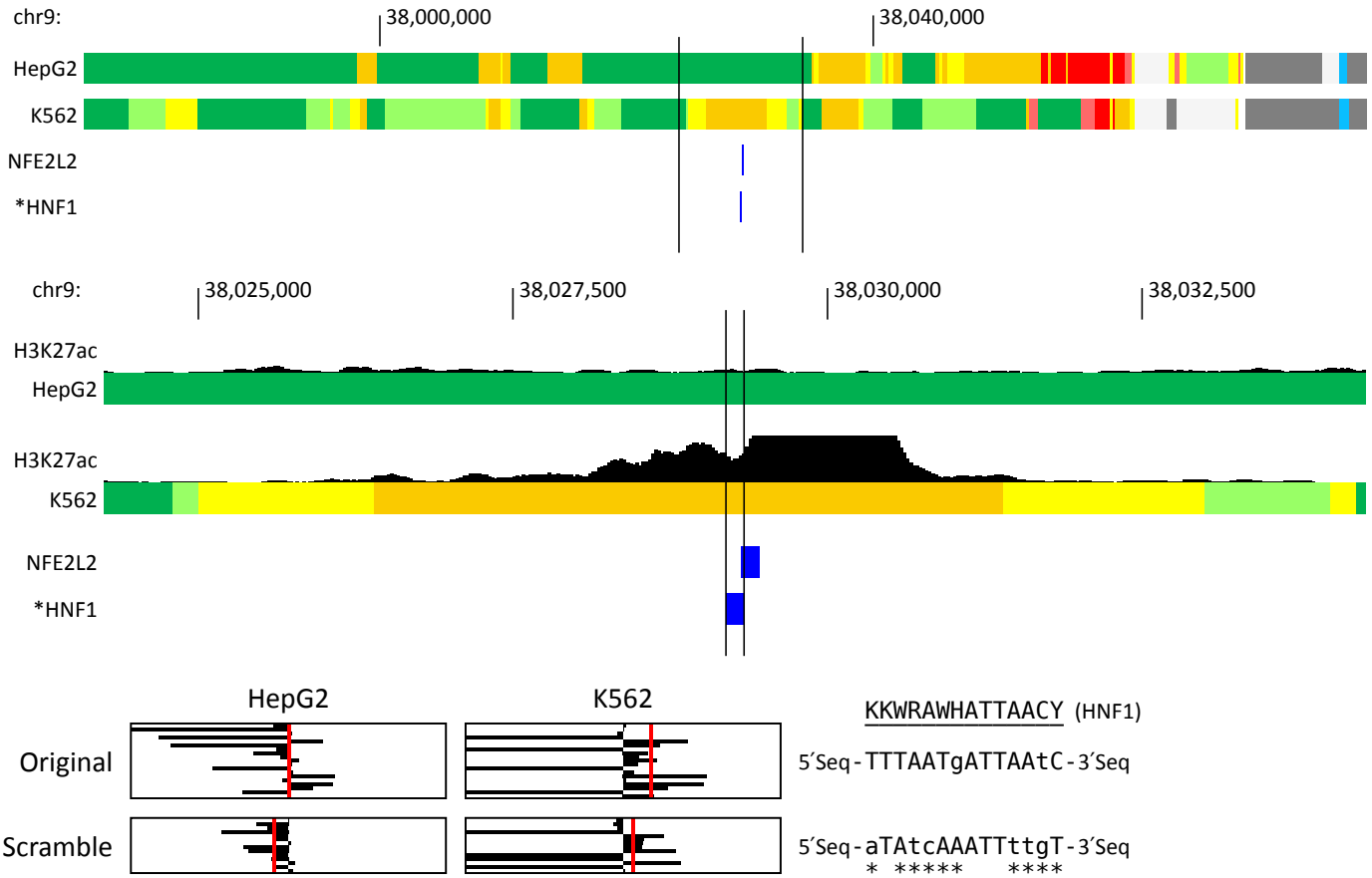
350 HNF1 in K562 enhancer

chr9 38029259 38029272 - (hg18)



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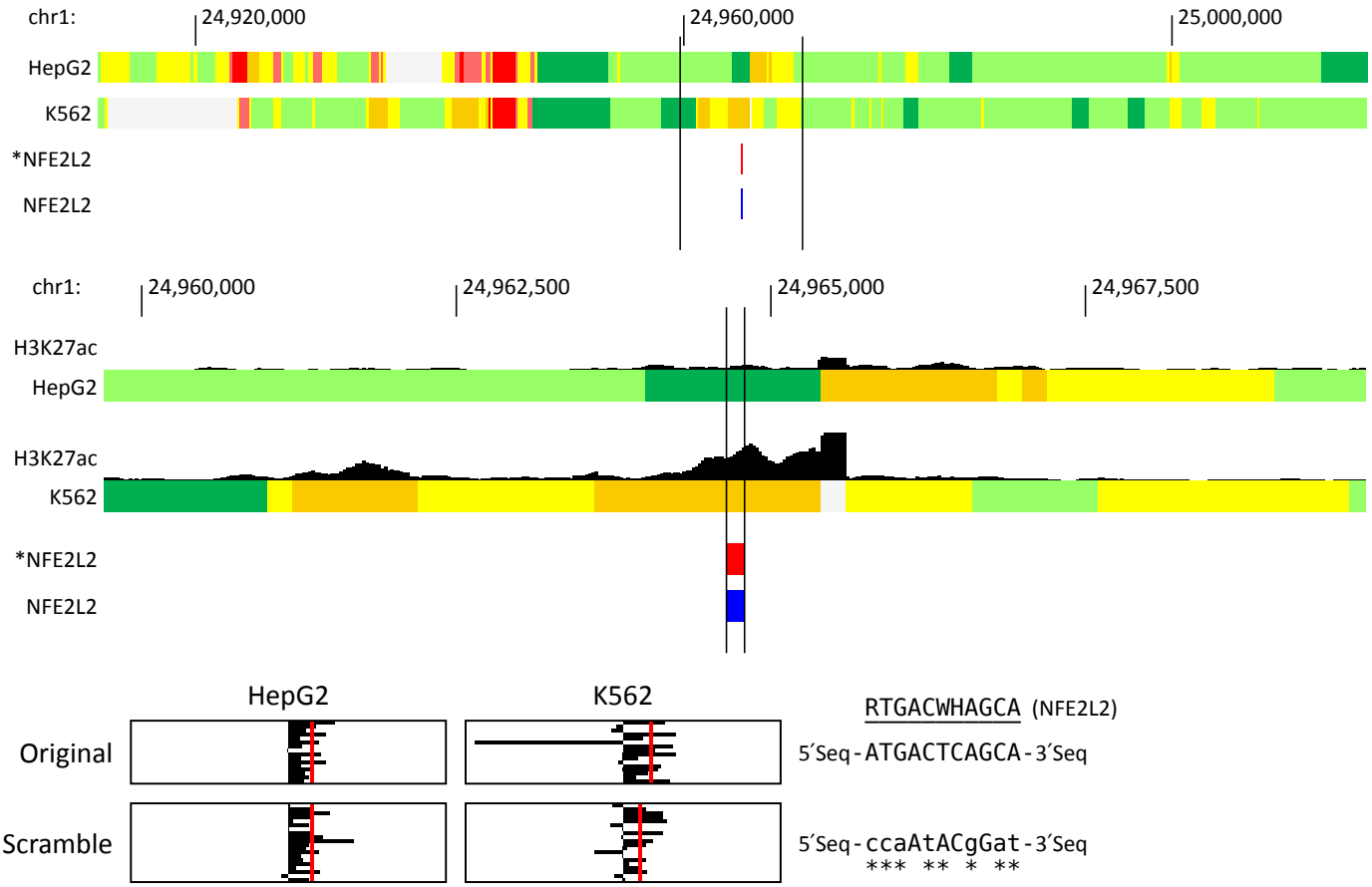
351 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 24964714 24964724 + (hg18)



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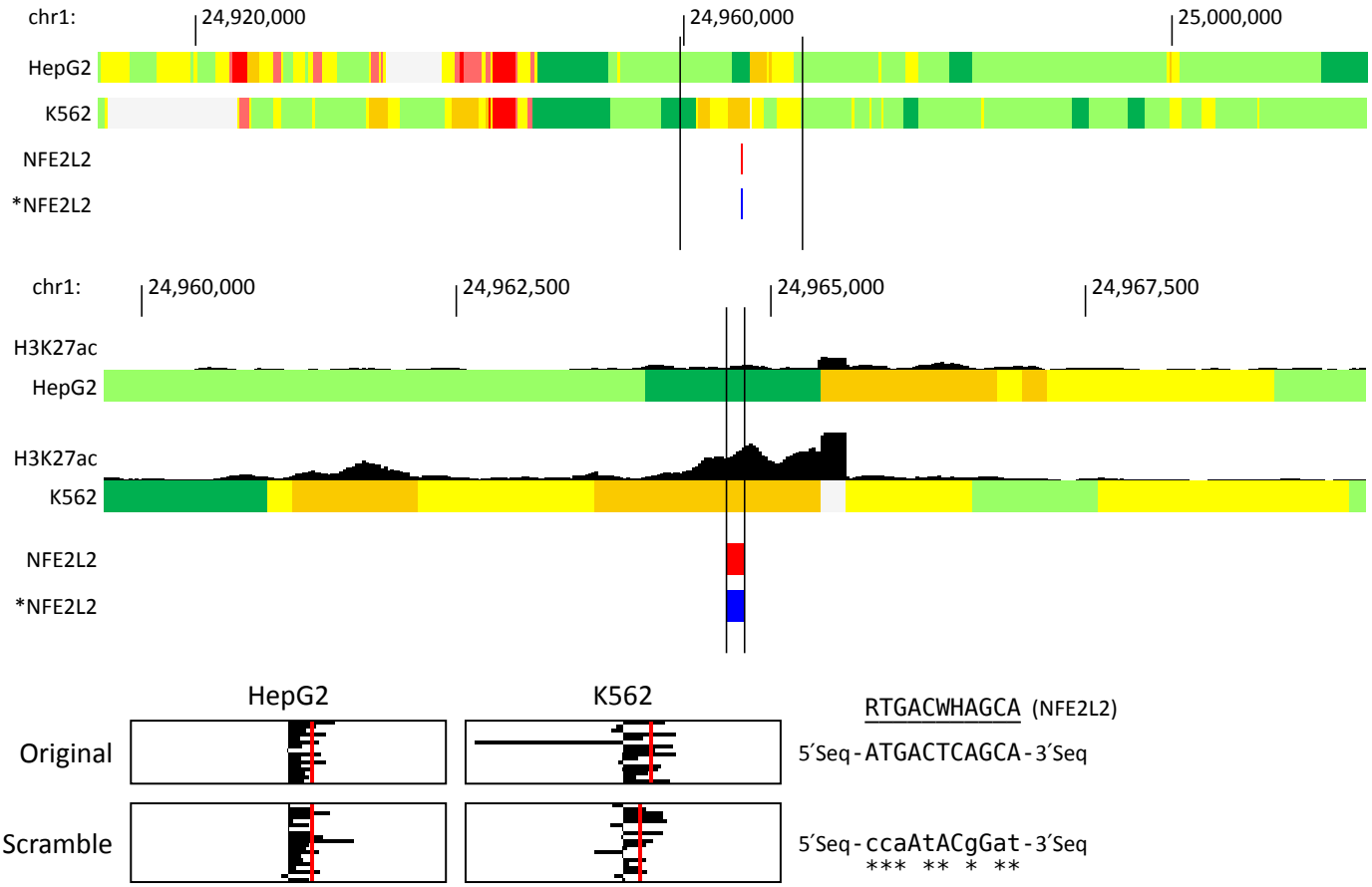
352 NFE2L2 in K562 enhancer

chr1 24964714 24964724 + (hg18)



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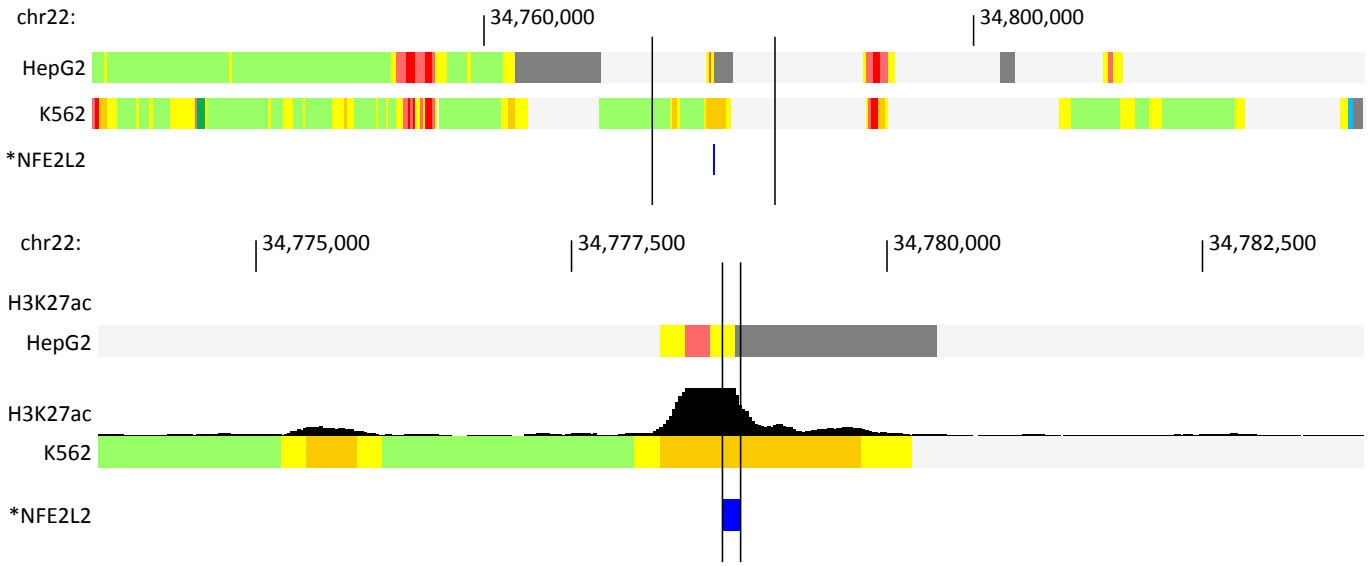
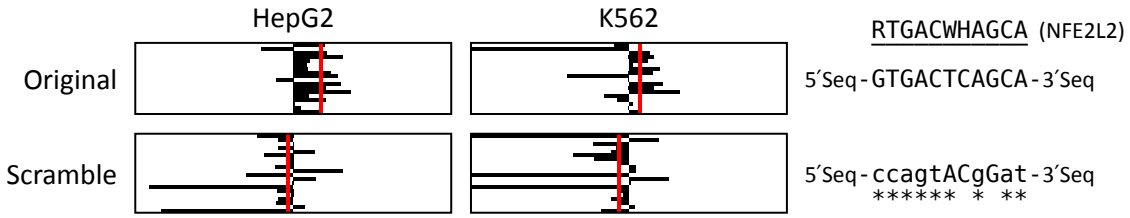
353 NFE2L2 in K562 enhancer

chr22 34778763 34778773 - (hg18)





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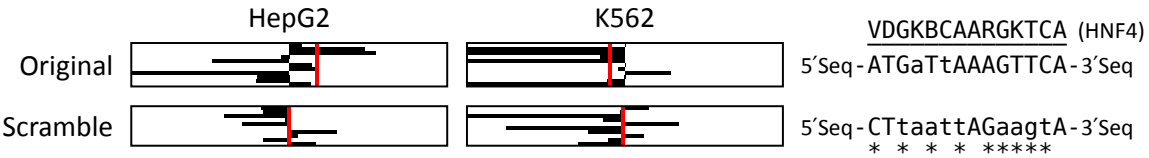
354 HNF4 in HepG2 enhancer

chr8 53278793 53278806 + (hg18)



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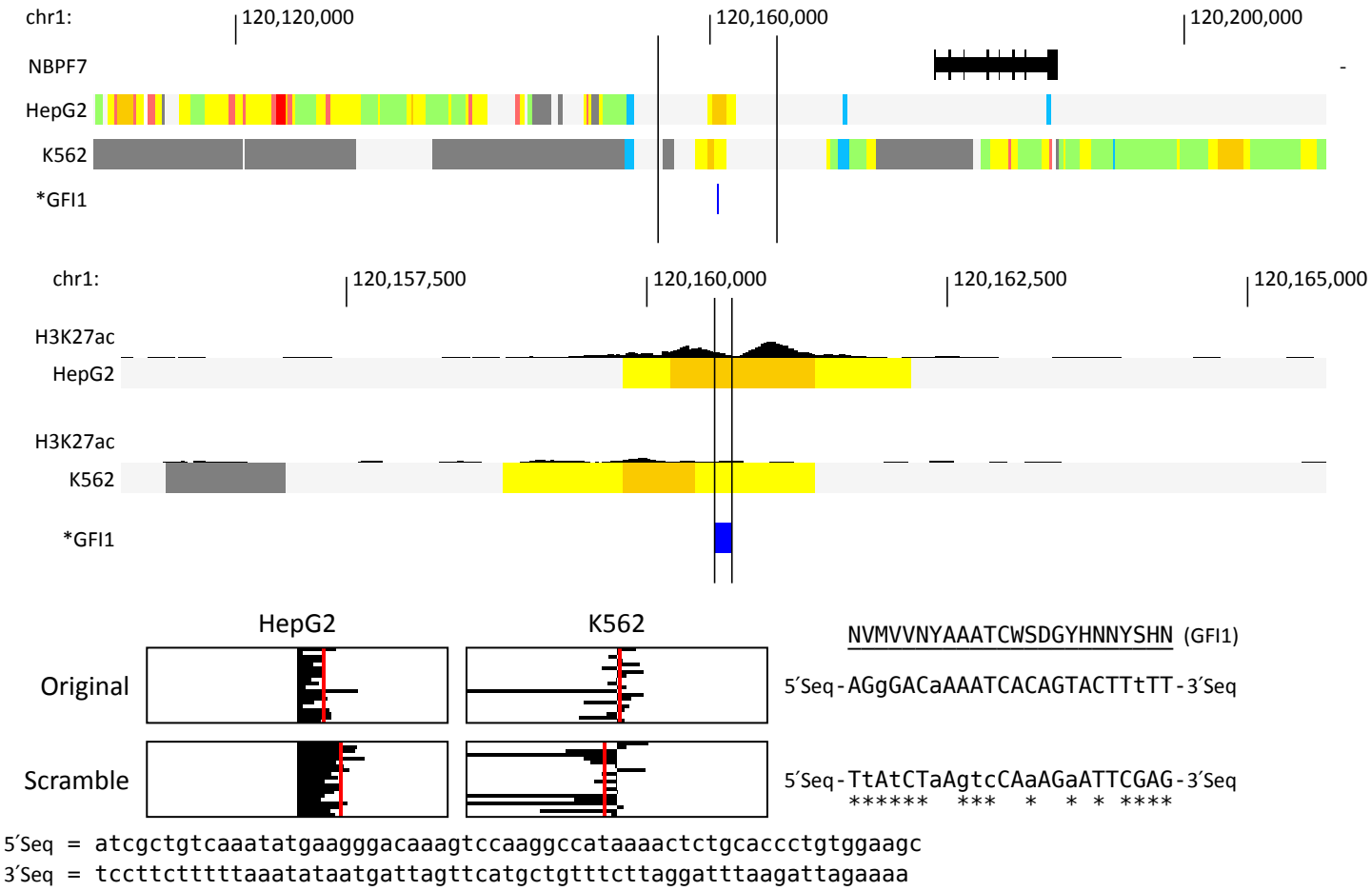
355 GFI1 in HepG2 enhancer

chr1 120160625 120160648 - (hg18)



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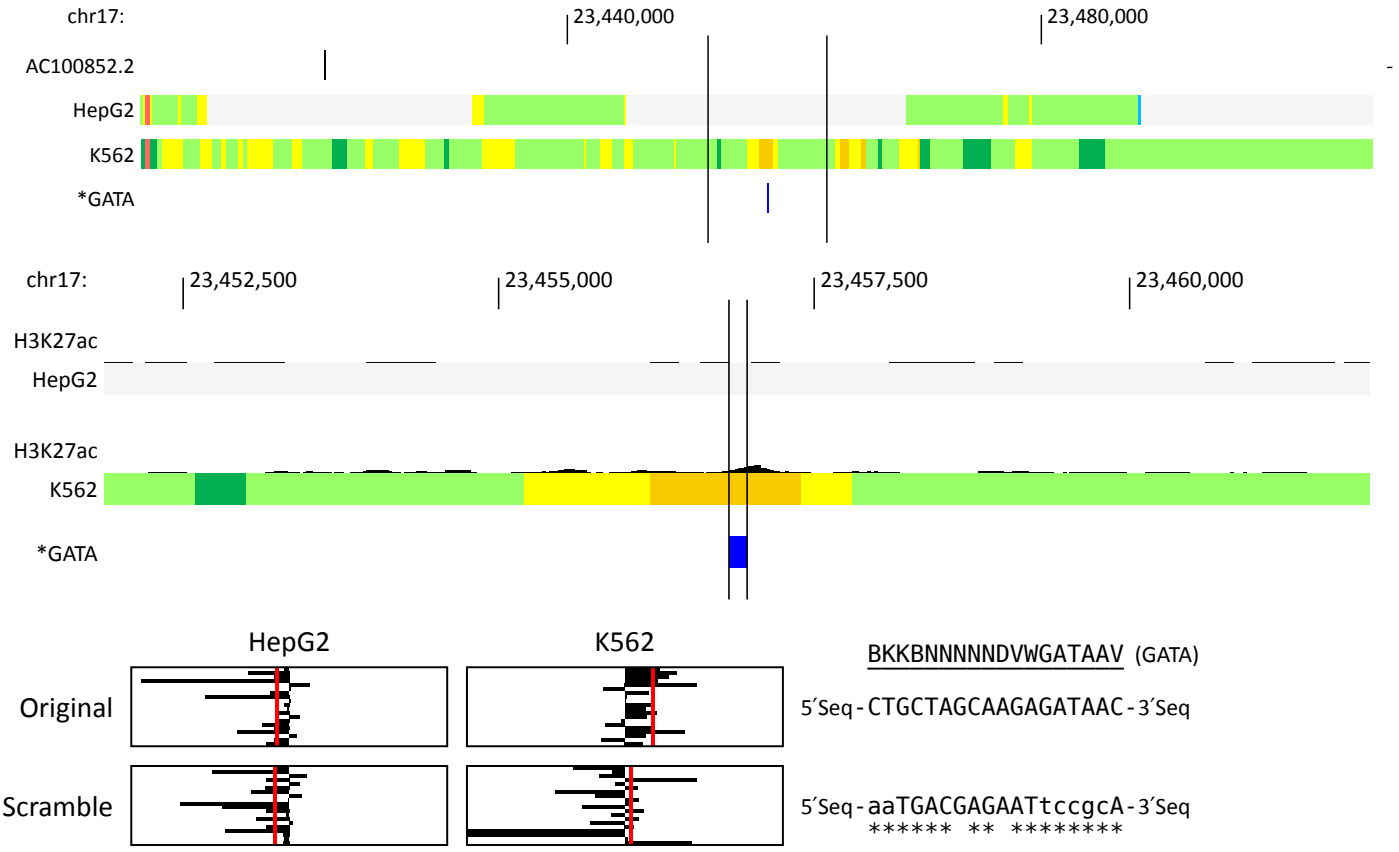
356 GATA in K562 enhancer

chr17 23456889 23456906 - (hg18)



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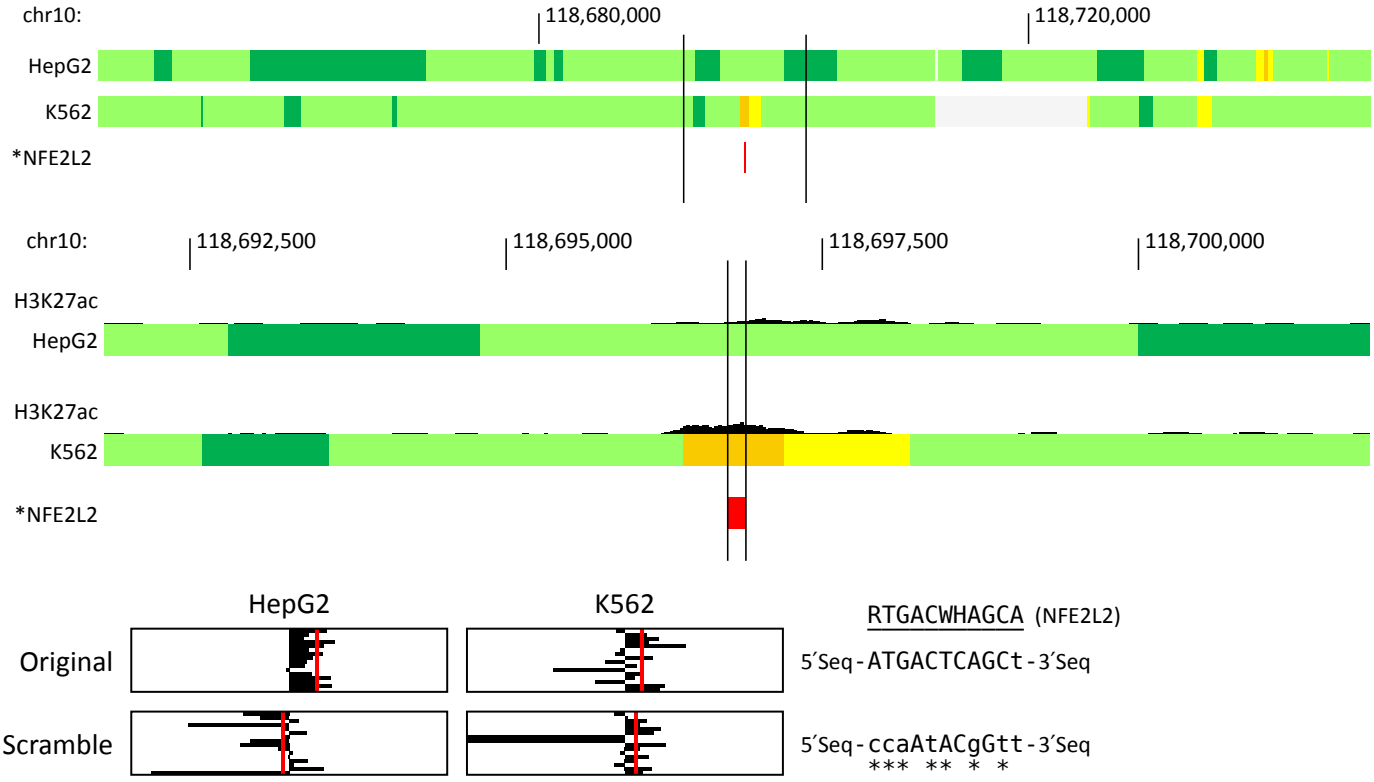
357 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr10 118696819 118696829 - (hg18)



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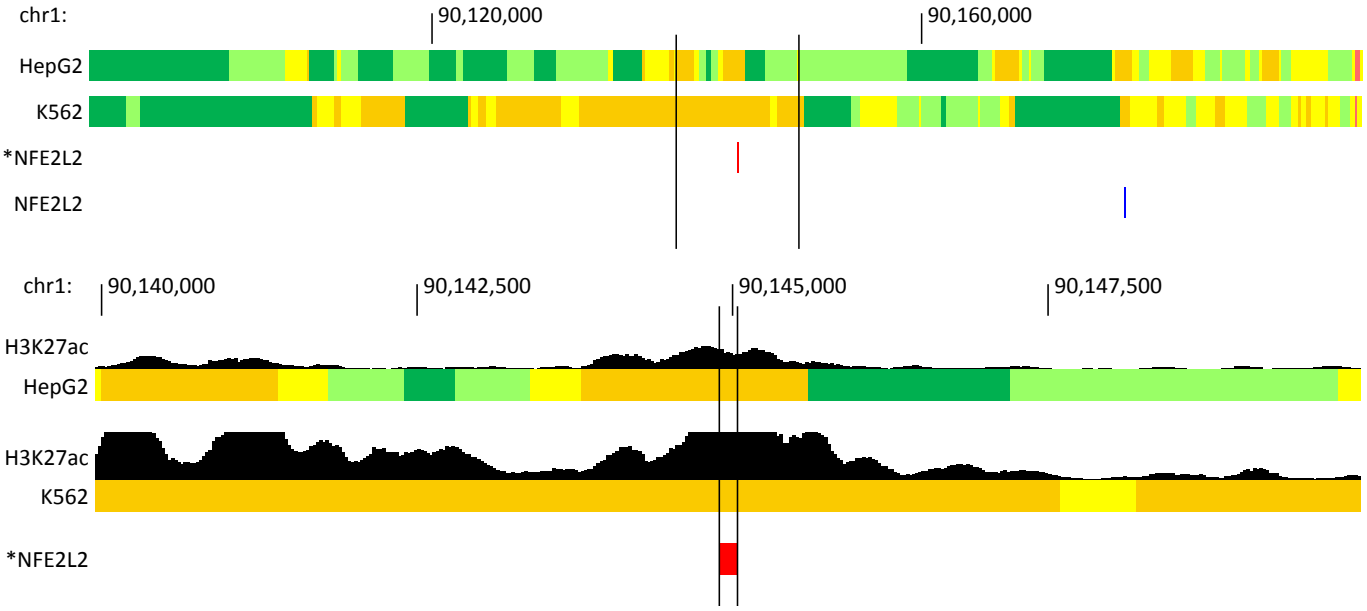
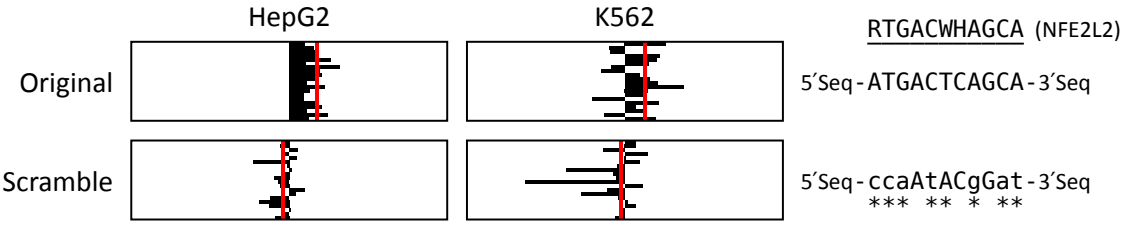
358 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr1 90144962 90144972 - (hg18)





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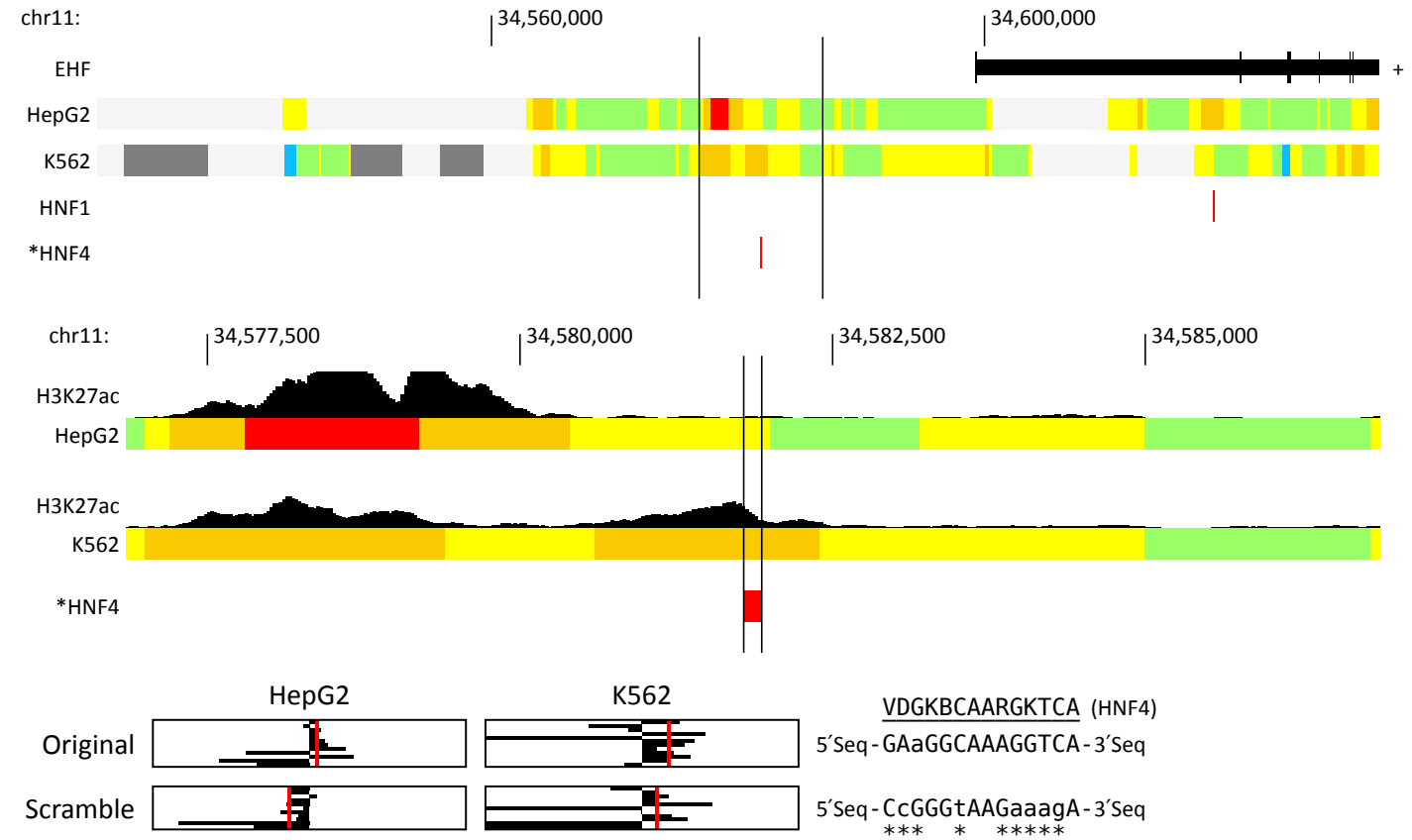
359 HNF4 in K562 enhancer (conserved at 50% confidence)

chr11 34581855 34581868 - (hg18)



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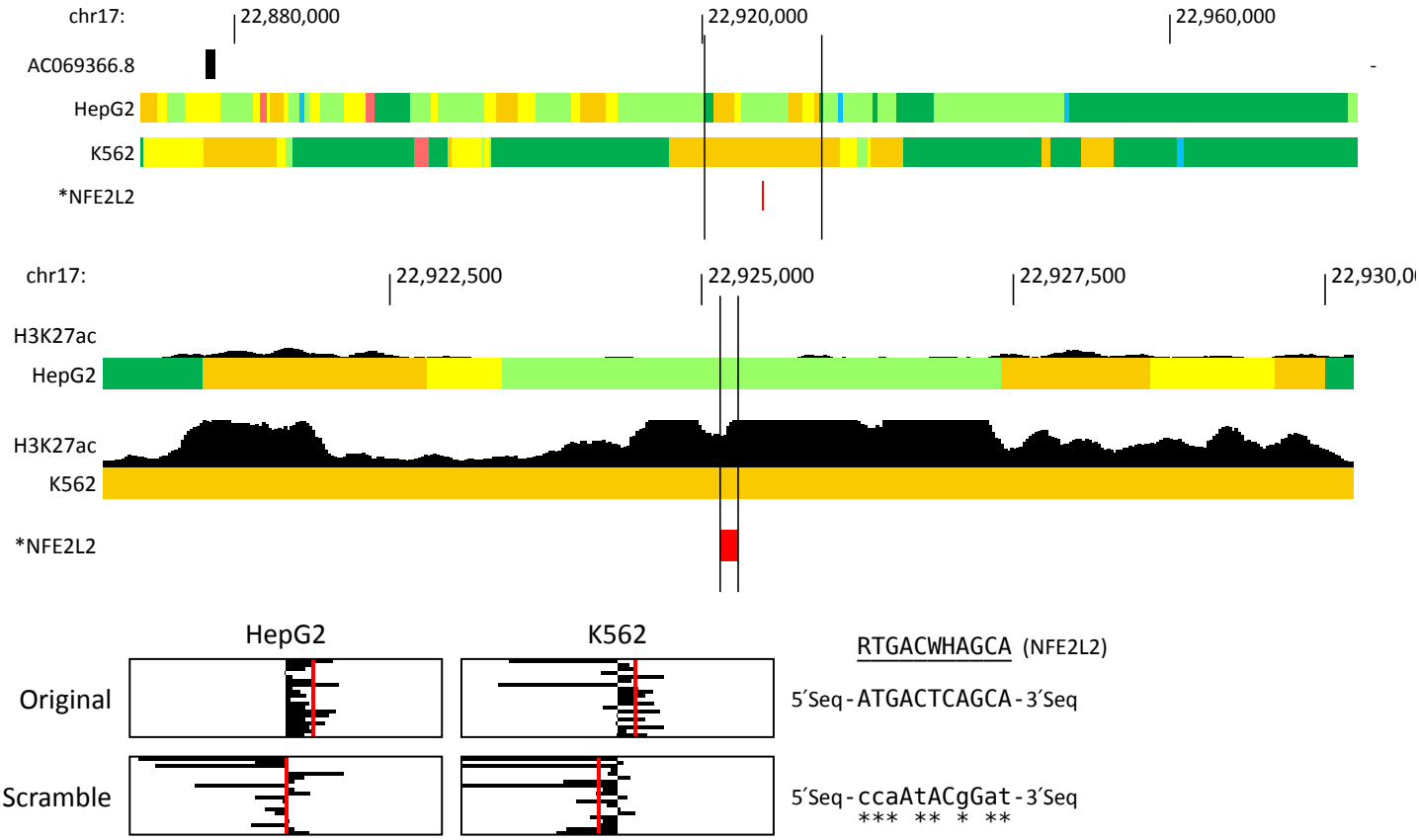
360 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr17 22925216 22925226 - (hg18)



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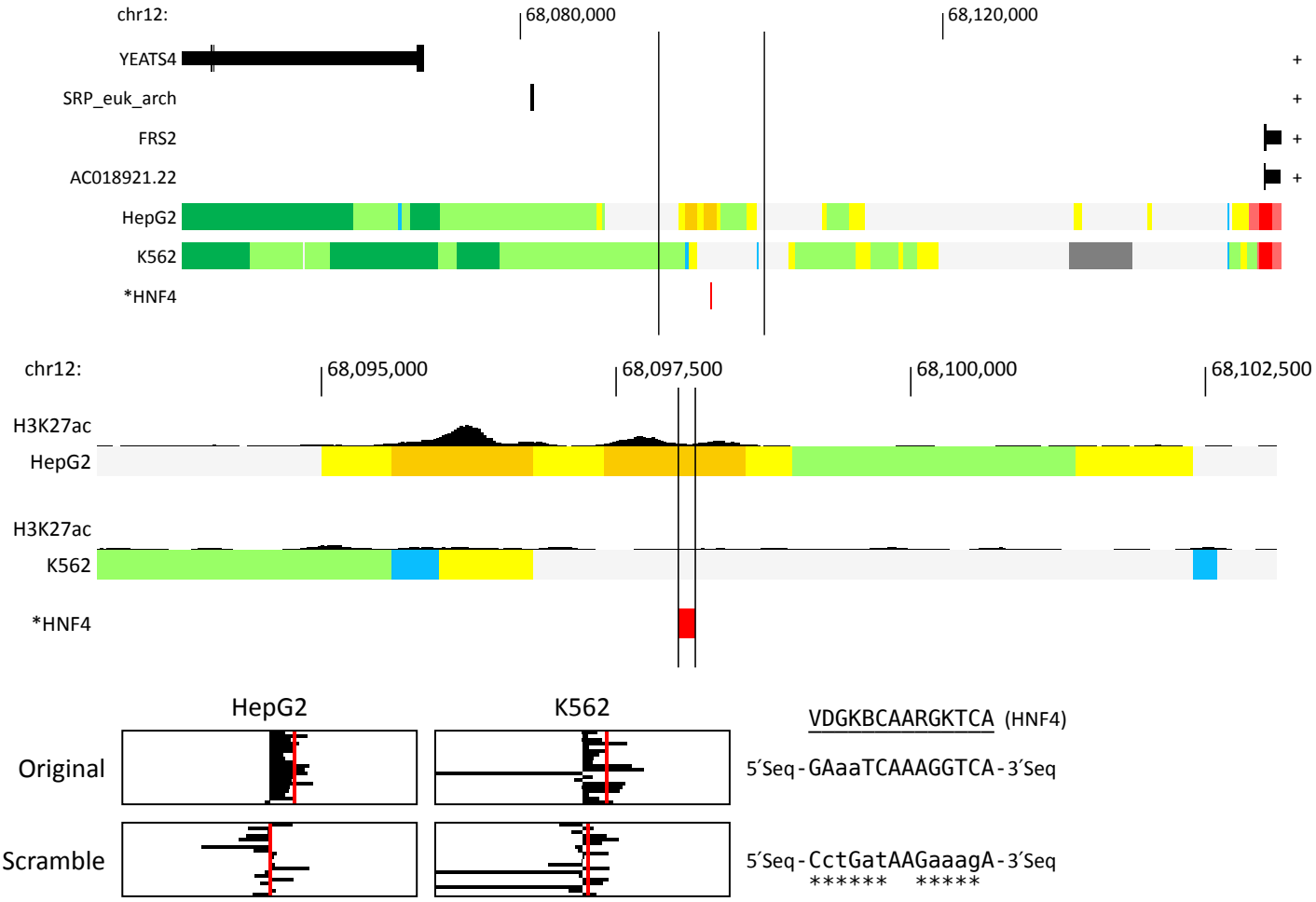
361 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 68098094 68098107 + (hg18)



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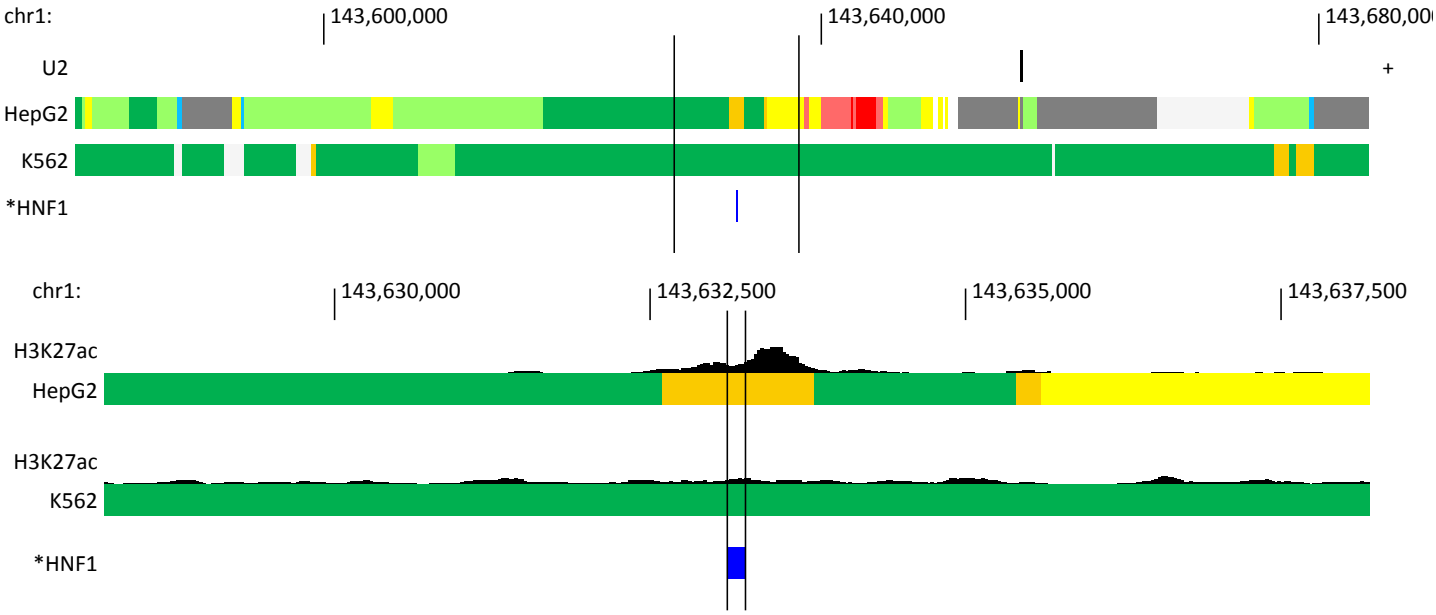
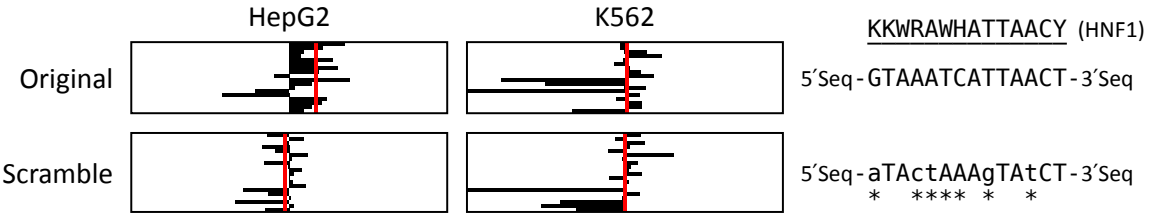
362 HNF1 in HepG2 enhancer

chr1 143633178 143633191 - (hg18)





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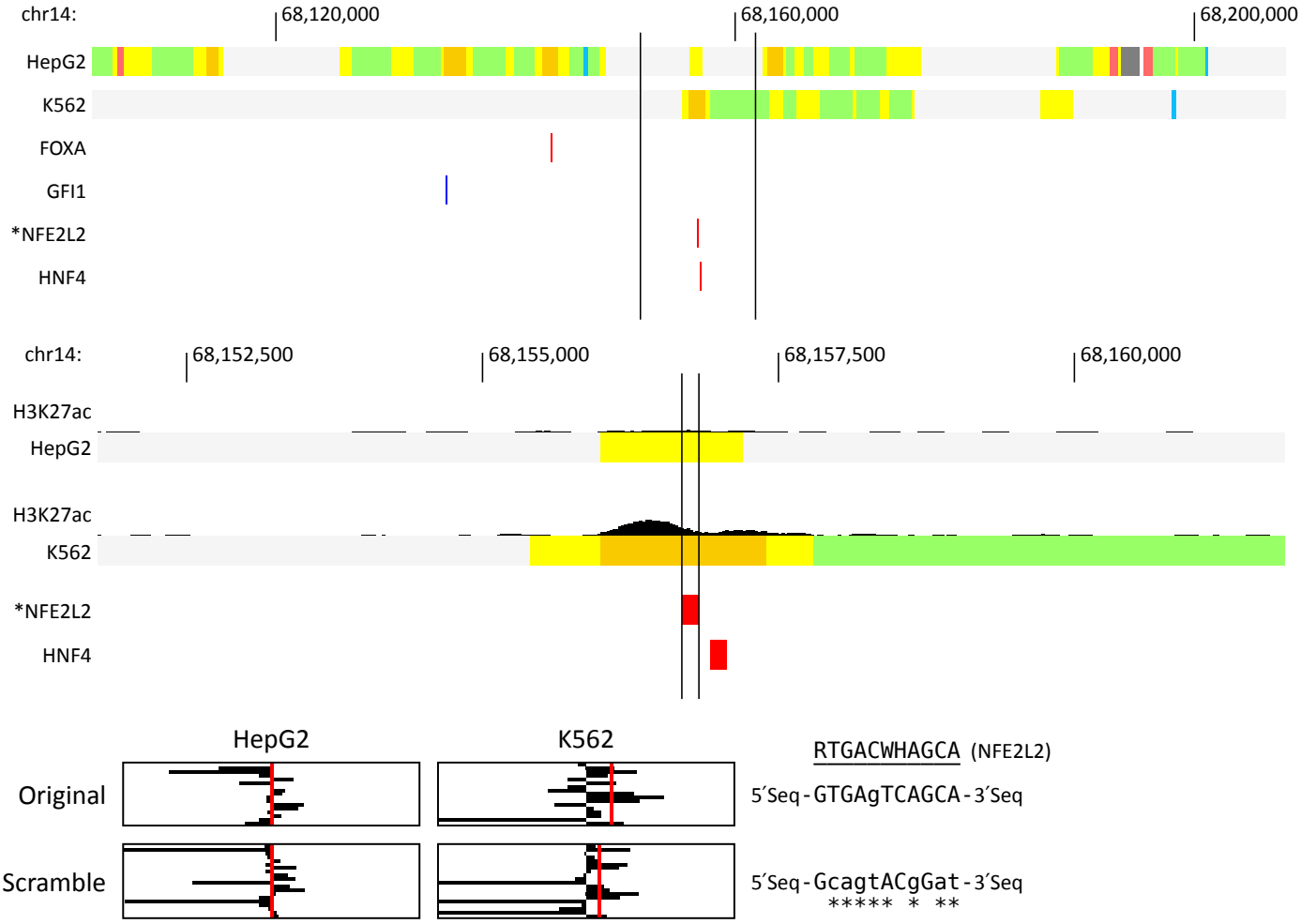
363 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr14 68156751 68156761 + (hg18)



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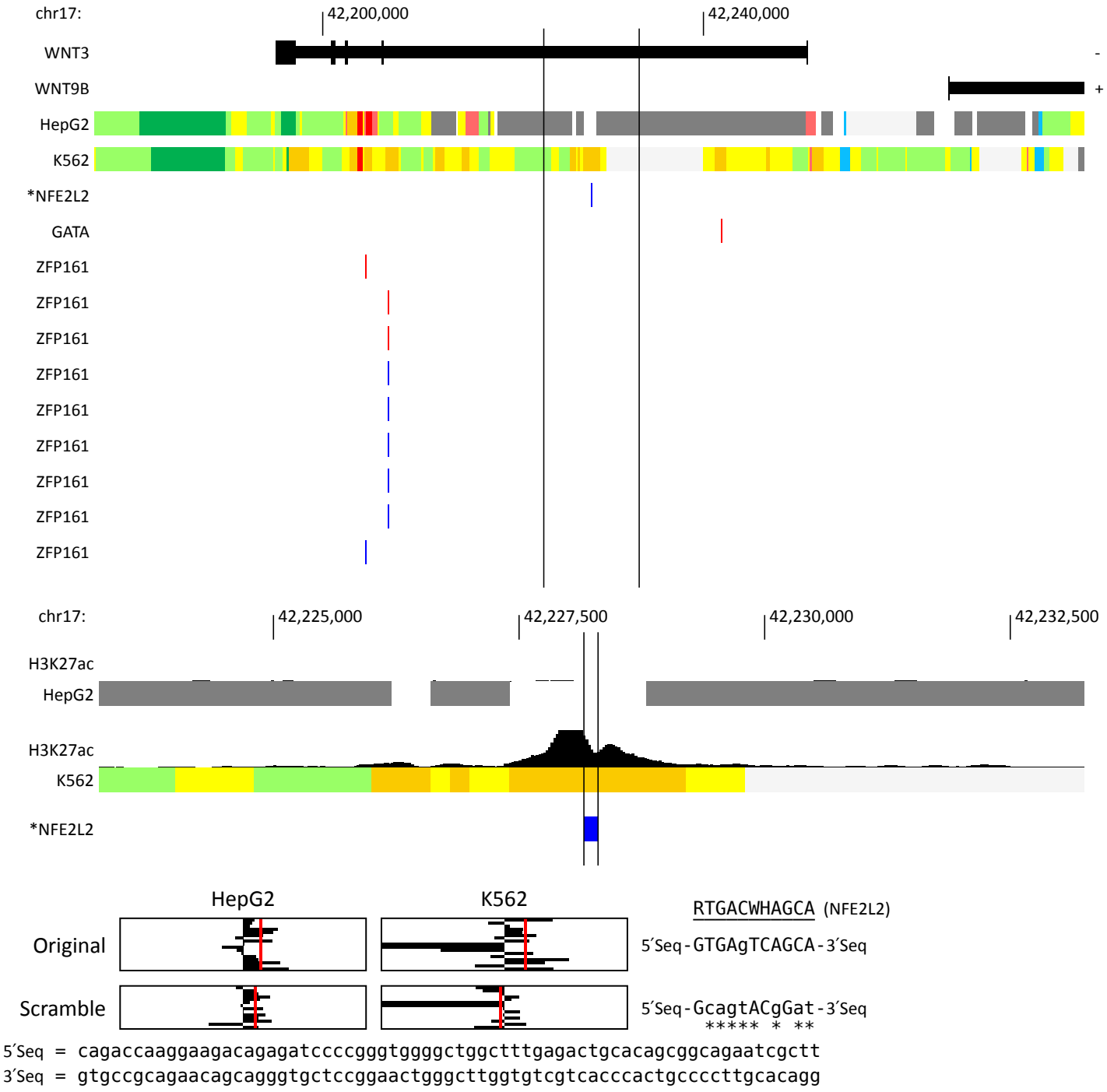
364 NFE2L2 in K562 enhancer

chr17 42228227 42228237 - (hg18)



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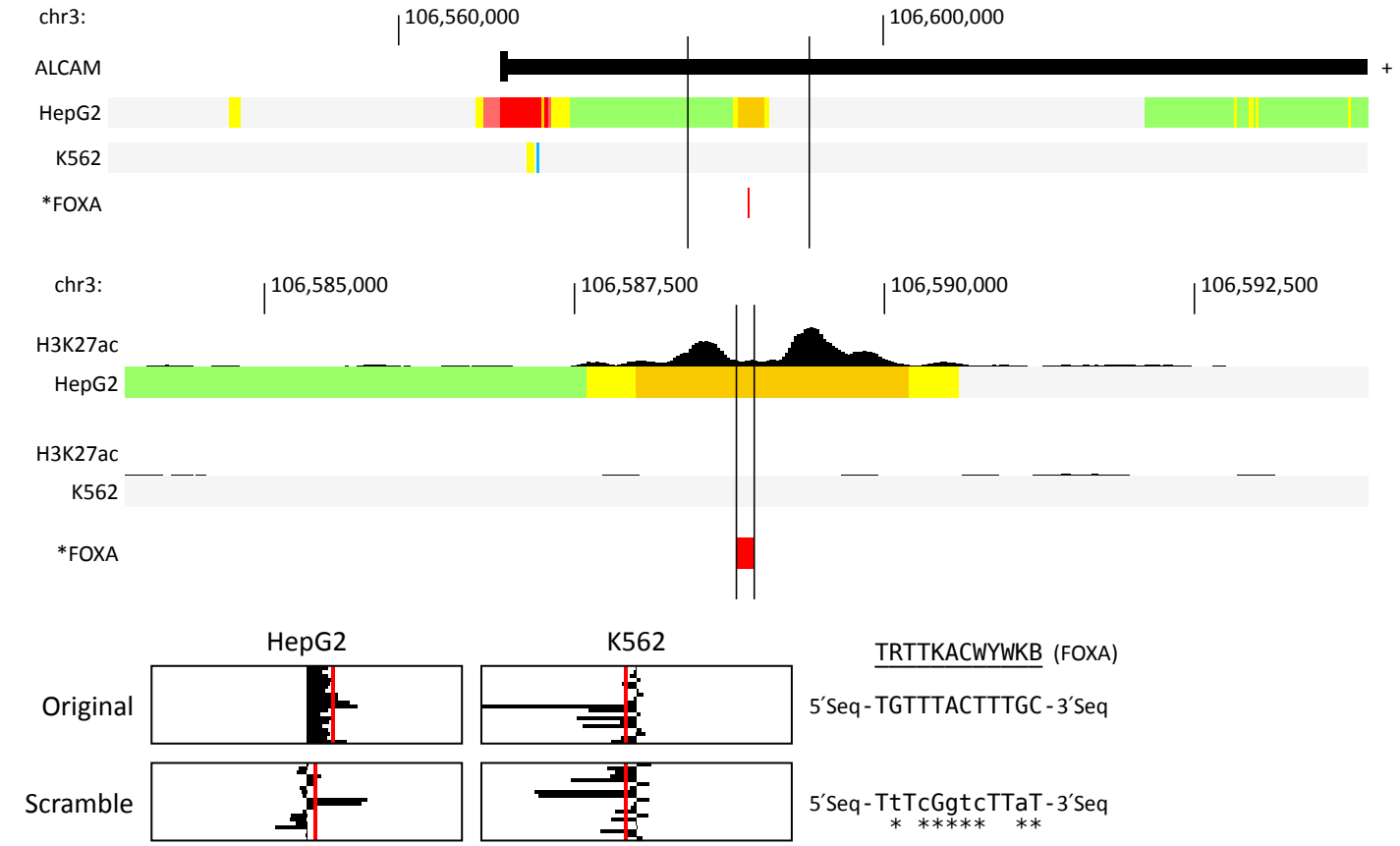
365 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 106588873 106588884 + (hg18)



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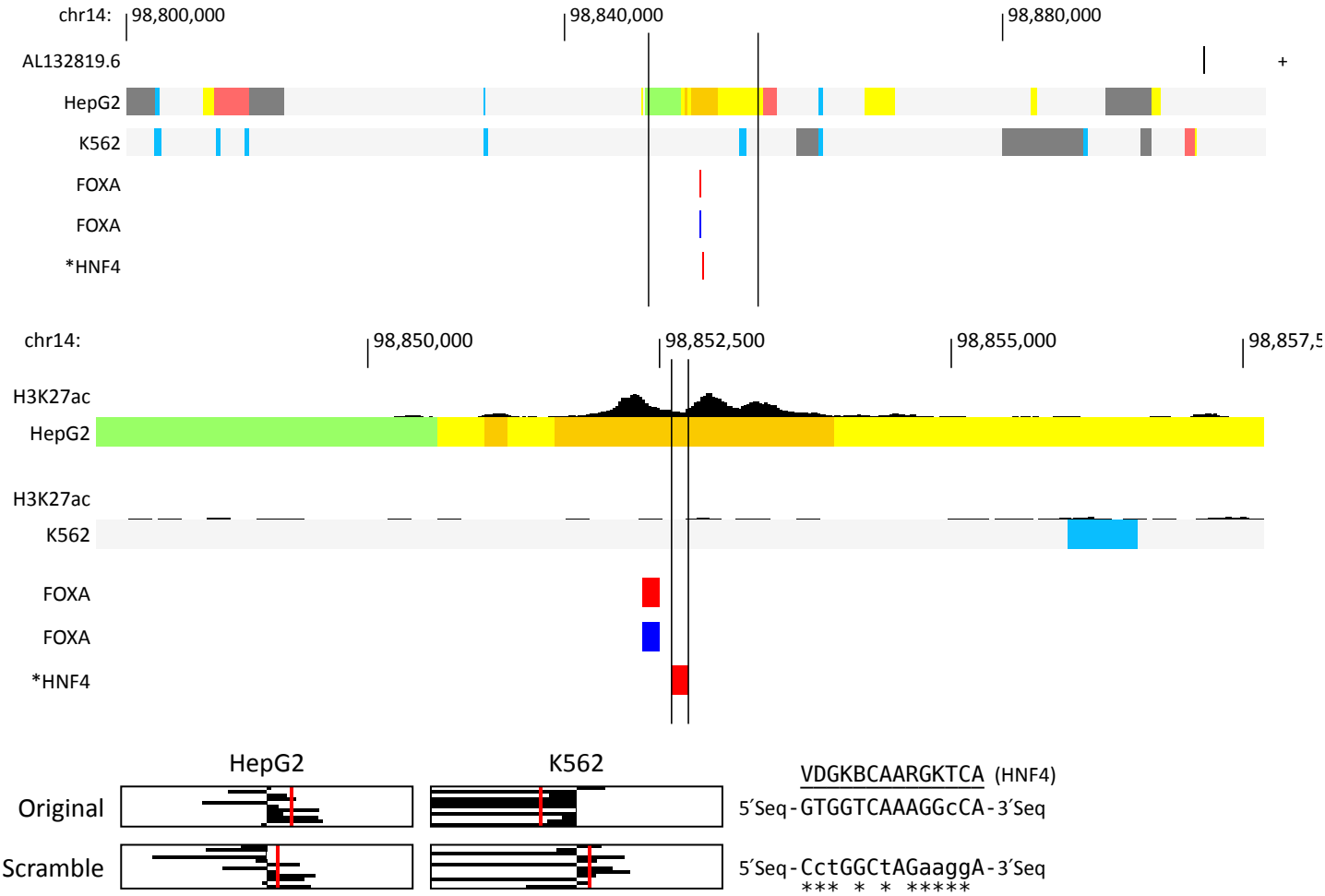
366 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 98852669 98852682 + (hg18)



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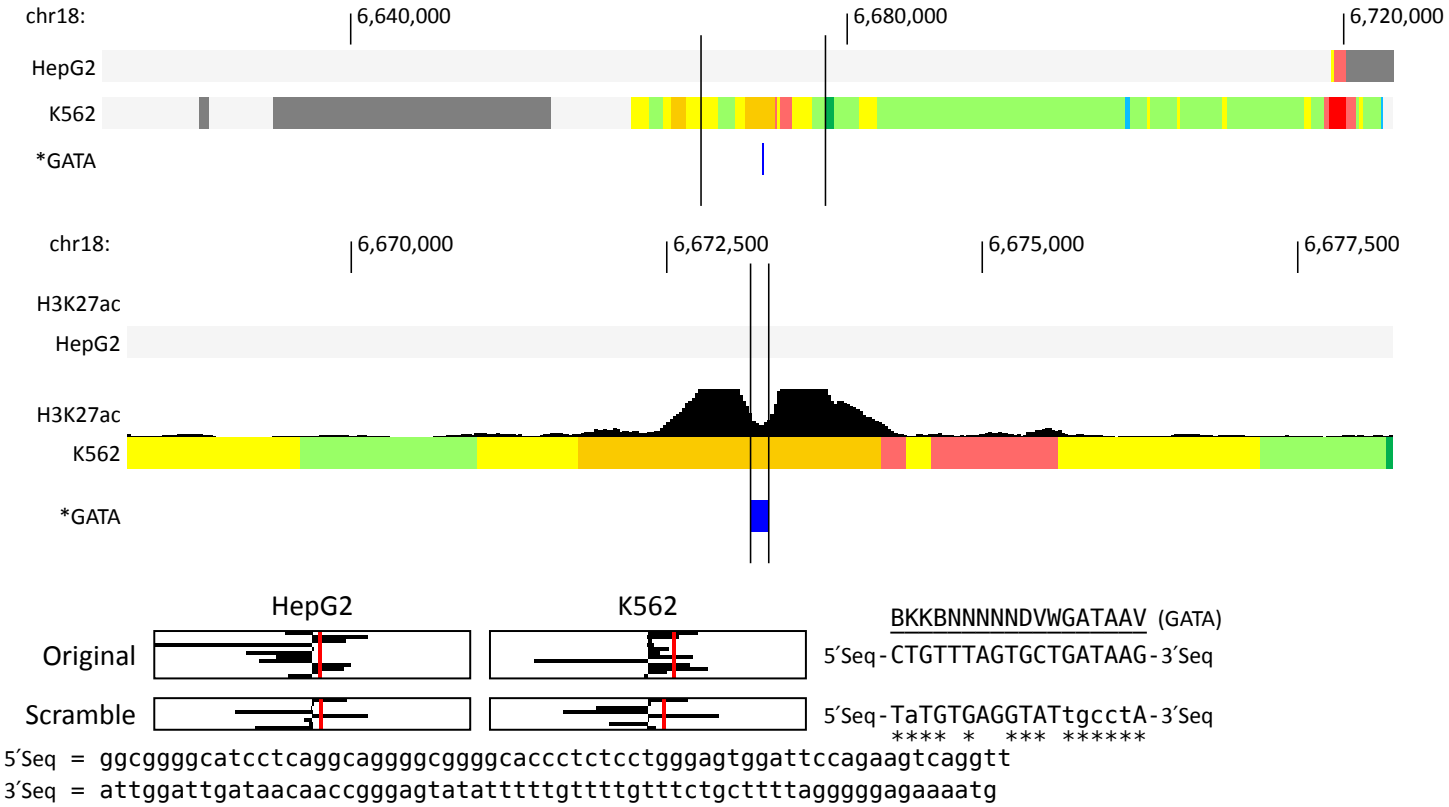
367 GATA in K562 enhancer

chr18 6673228 6673245 - (hg18)



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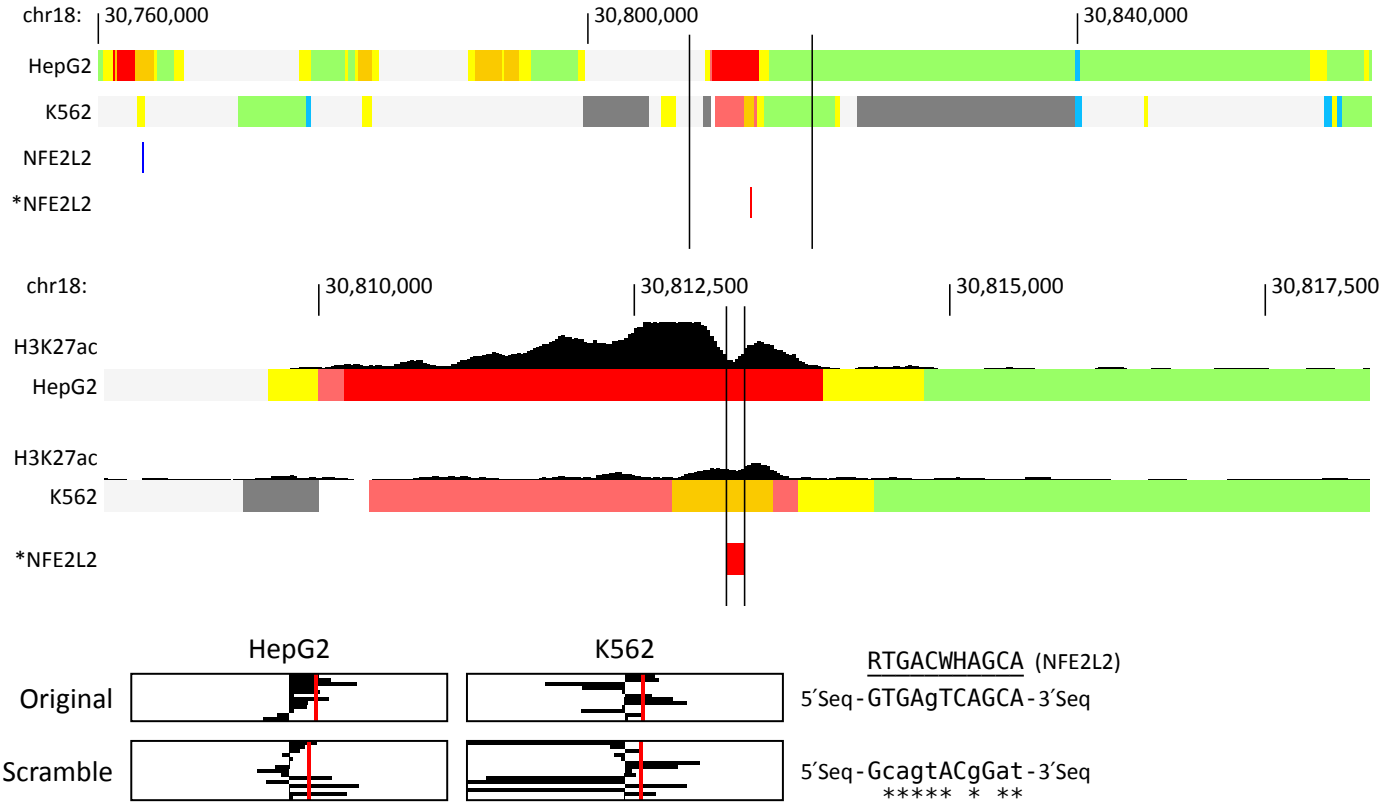
368 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr18 30813297 30813307 + (hg18)



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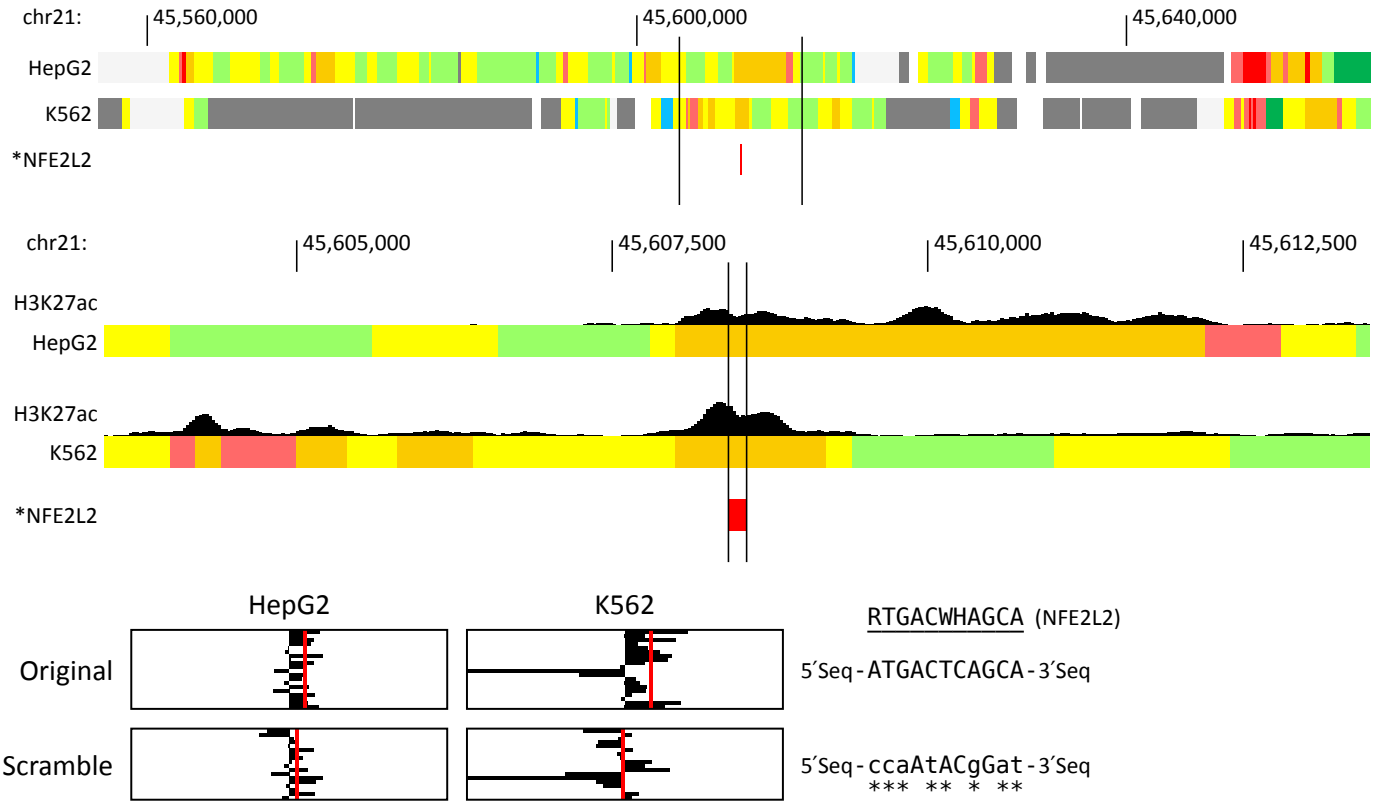
369 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr21 45608488 45608498 - (hg18)



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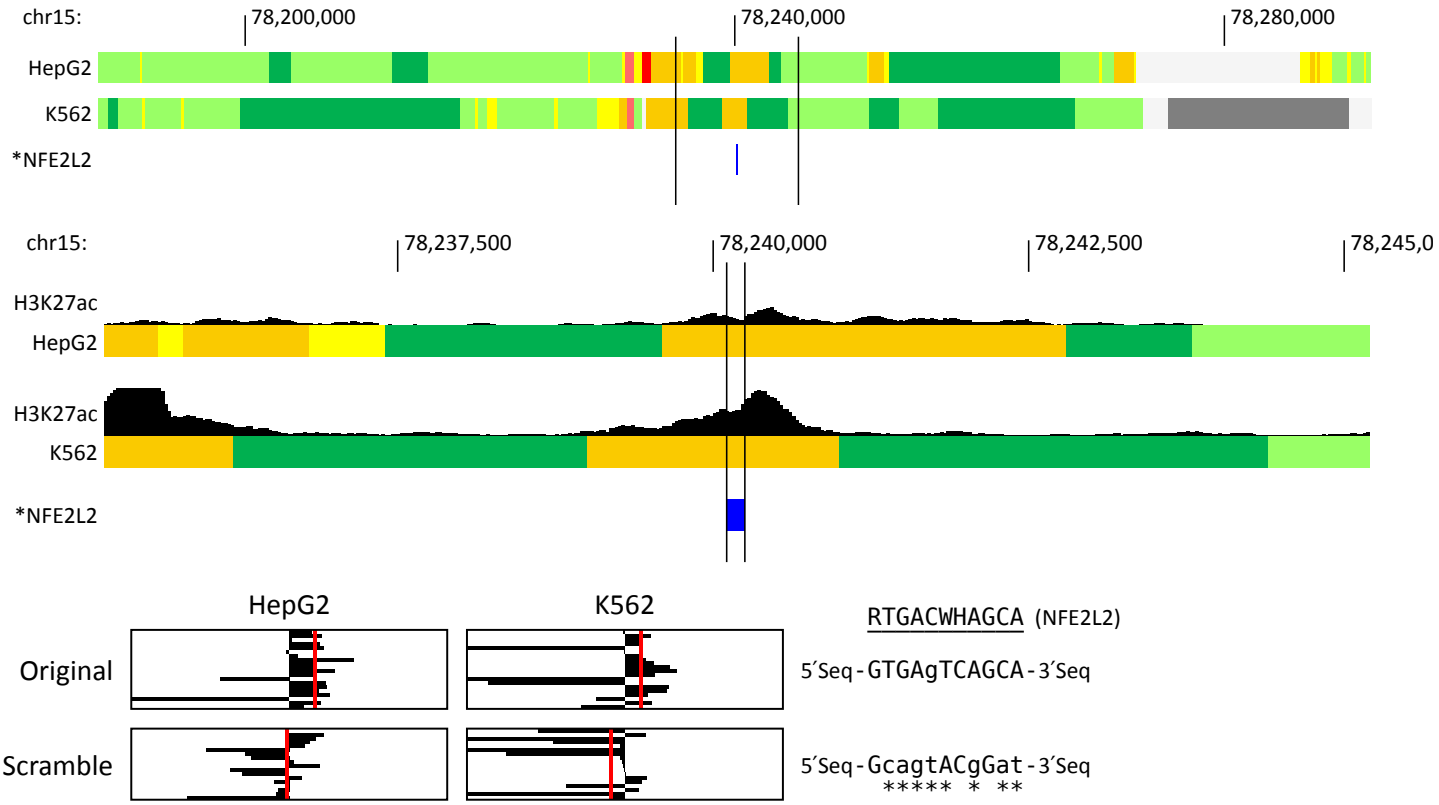
370 NFE2L2 in K562 enhancer

chr15 78240174 78240184 + (hg18)



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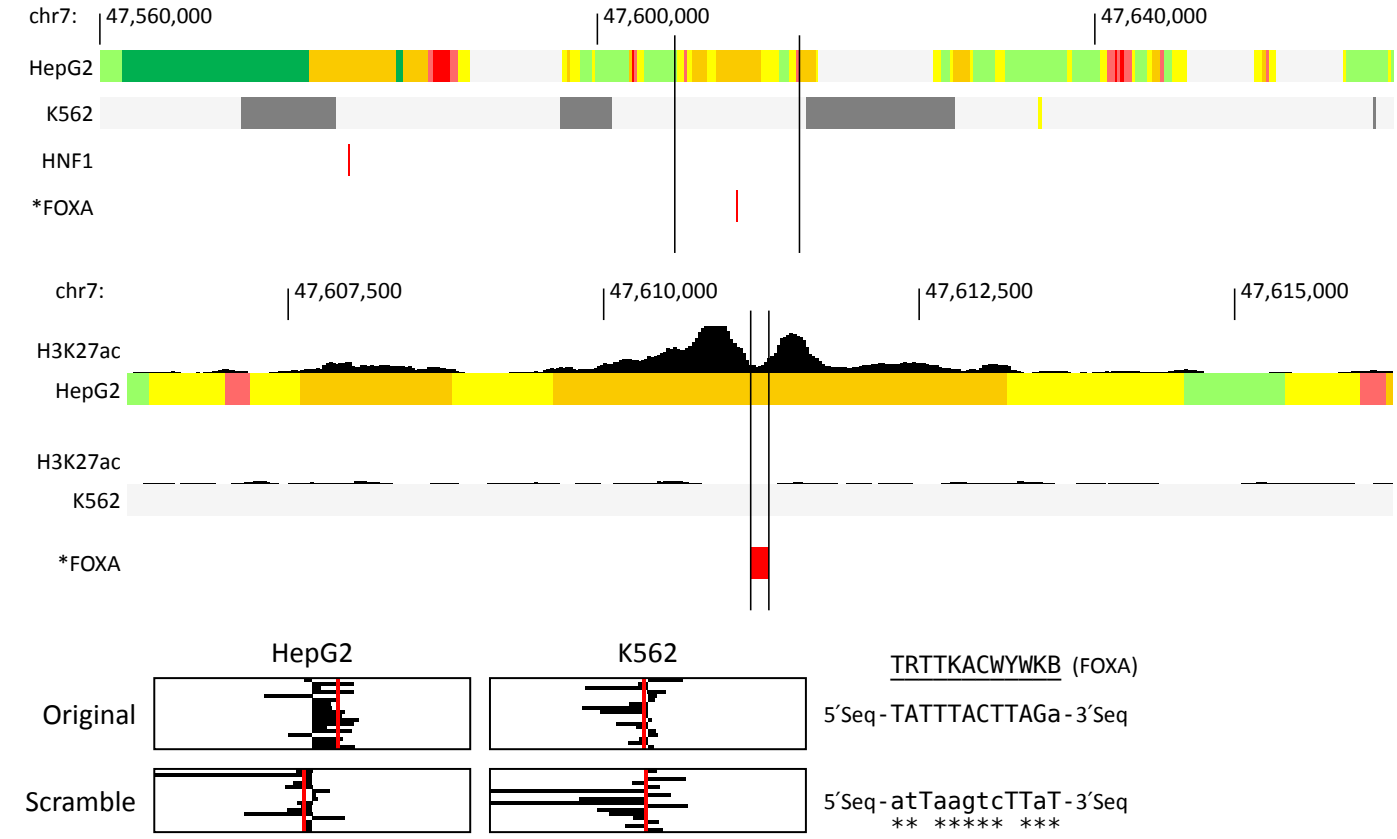
371 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr7 47611232 47611243 - (hg18)



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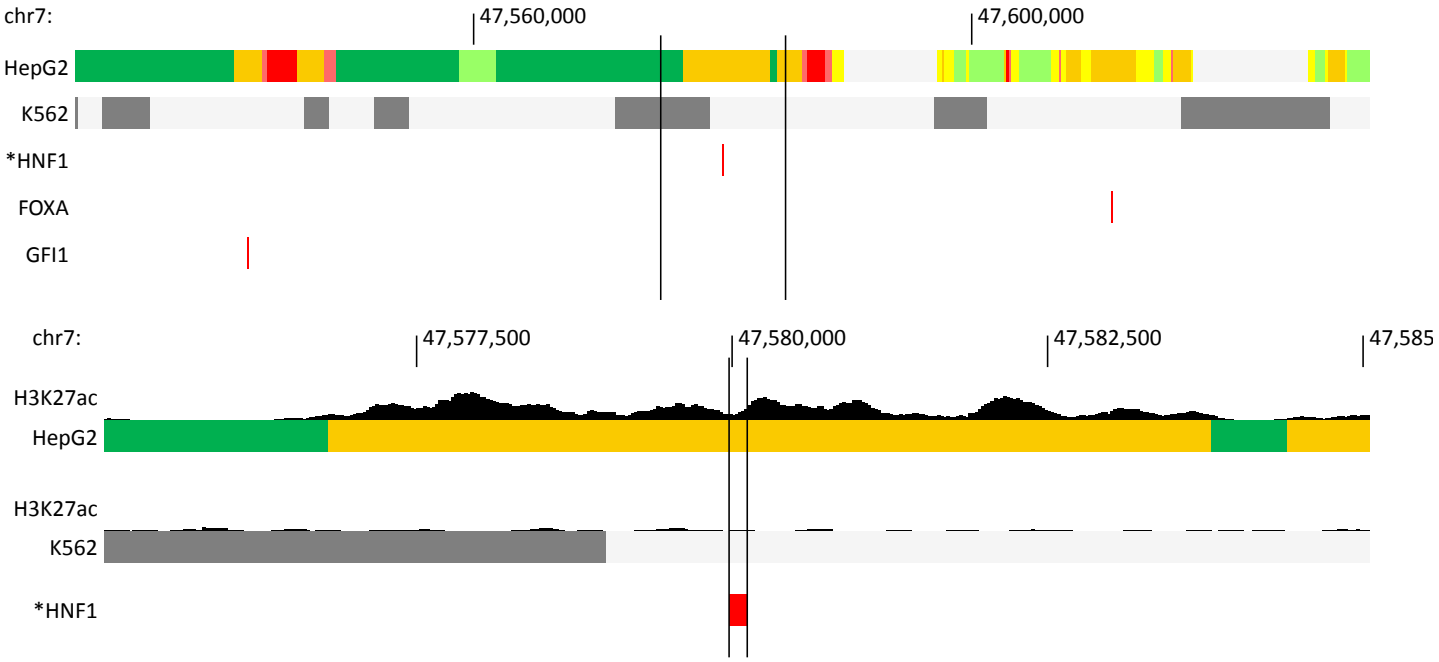
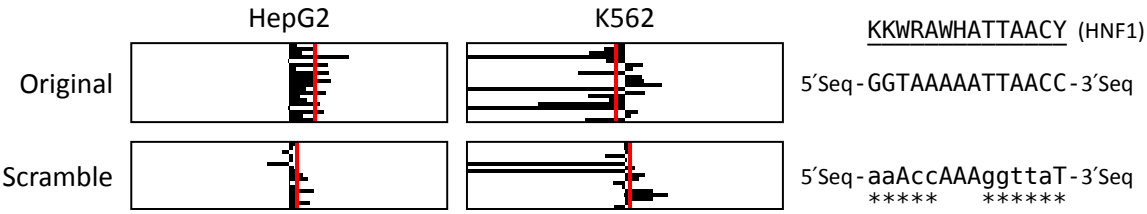
372 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr7 47580042 47580055 + (hg18)





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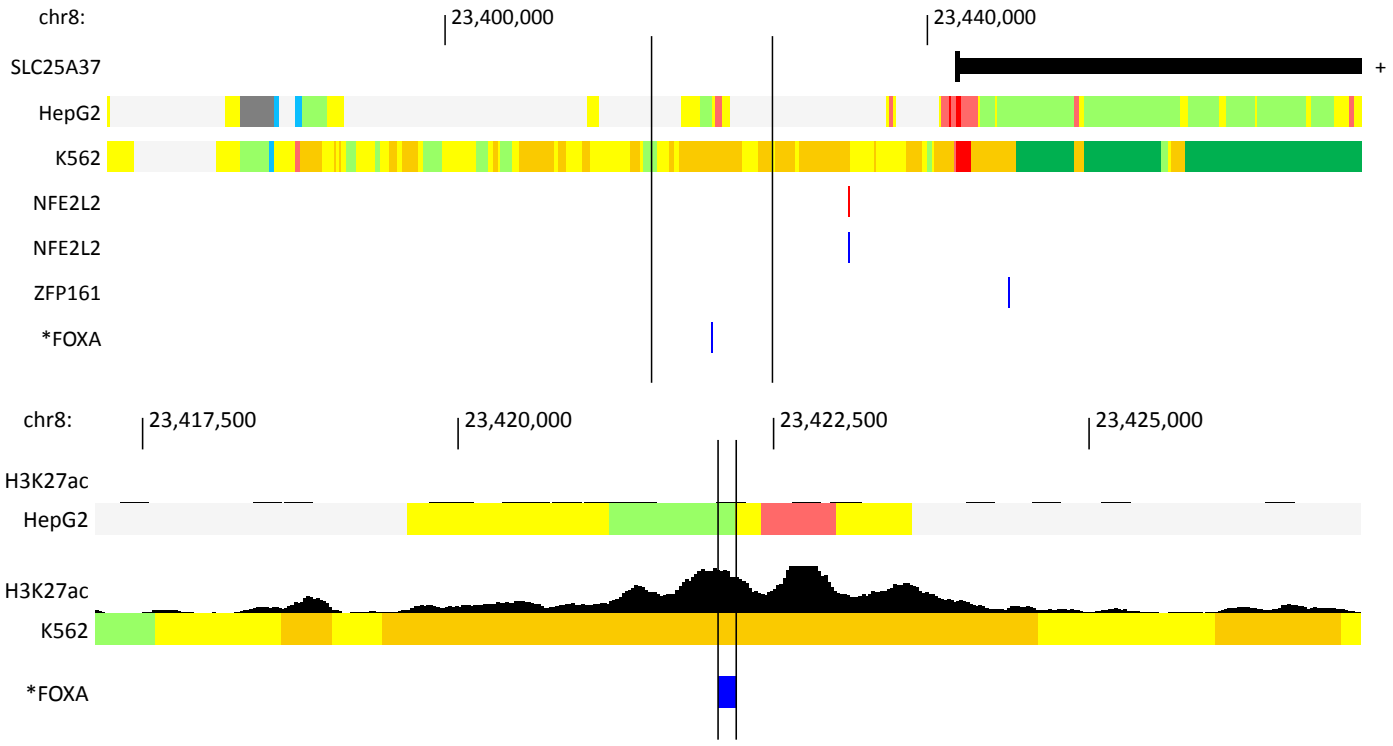
373 FOXA in K562 enhancer

chr8 23422127 23422138 + (hg18)



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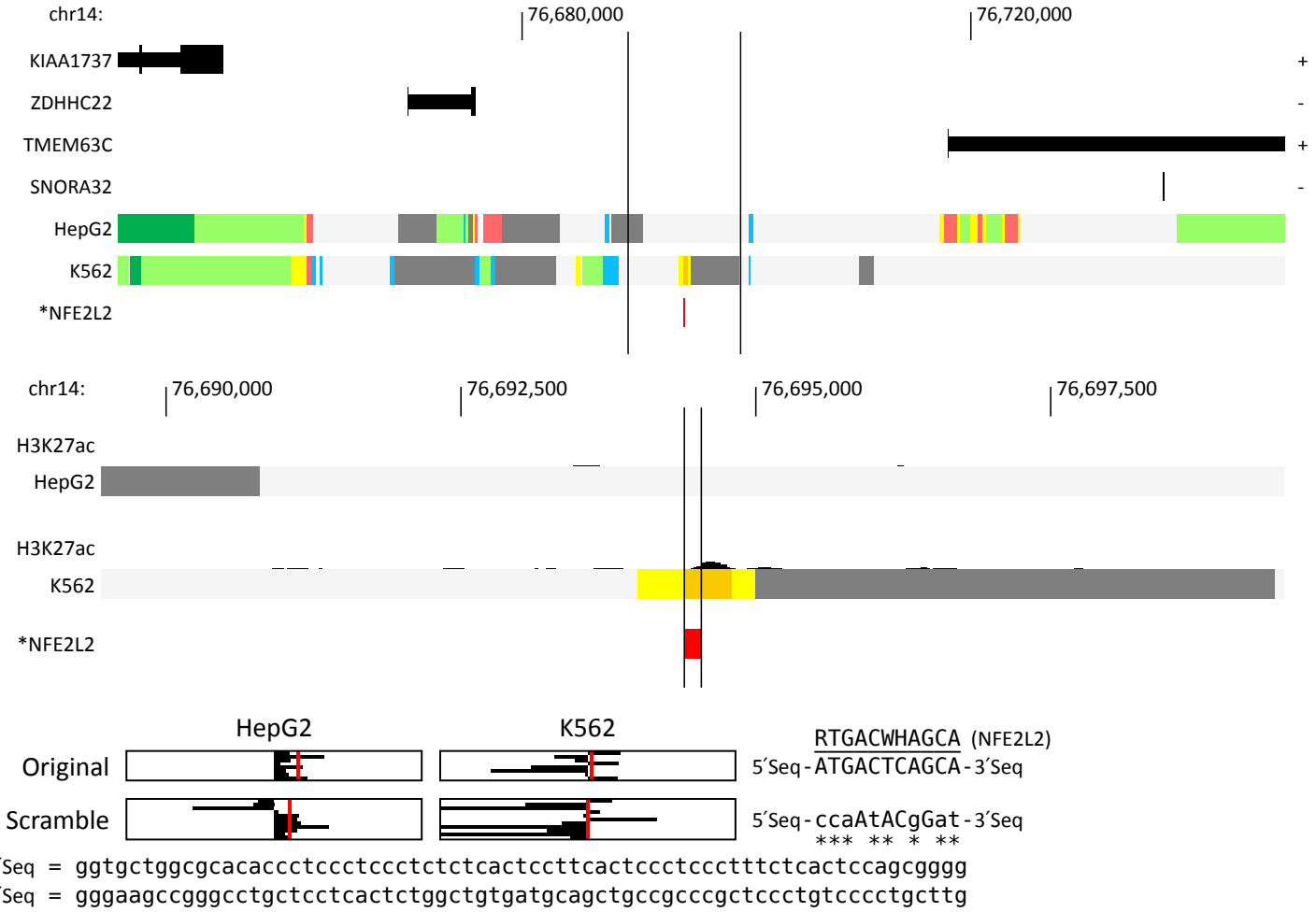
374 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr14 76694461 76694471 - (hg18)



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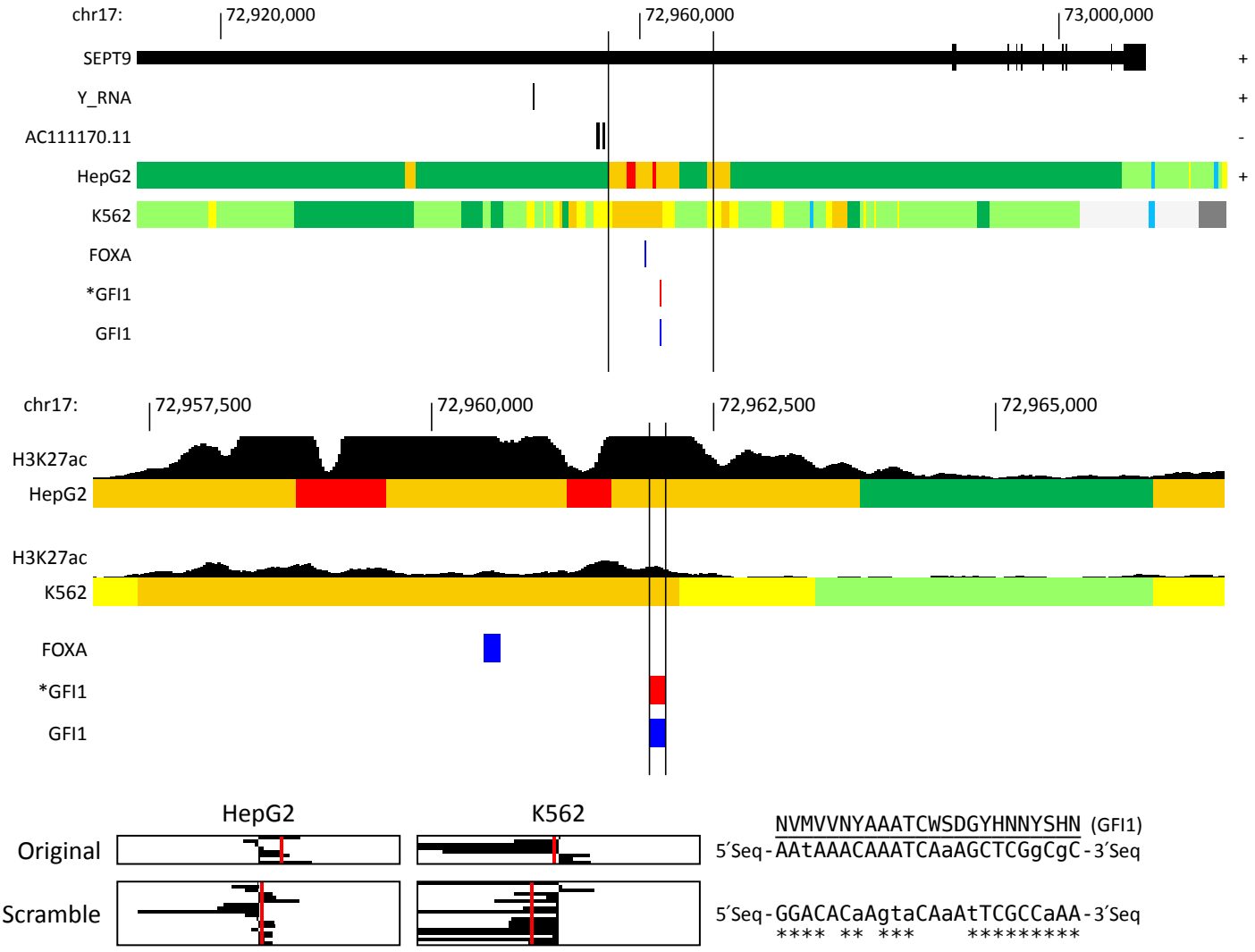
375 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr17 72961992 72962015 - (hg18)



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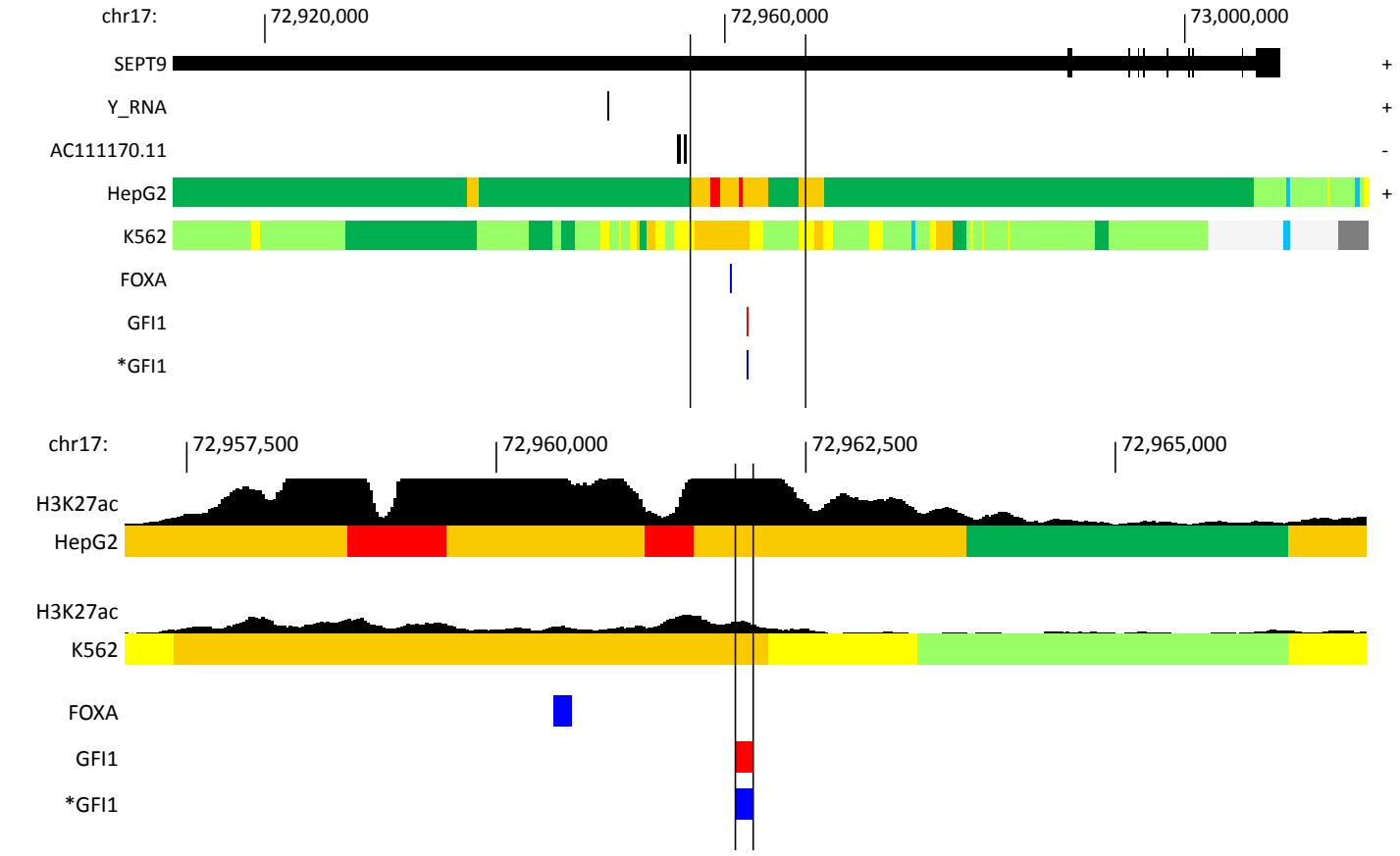
376 GFI1 in HepG2 enhancer

chr17 72961992 72962015 - (hg18)



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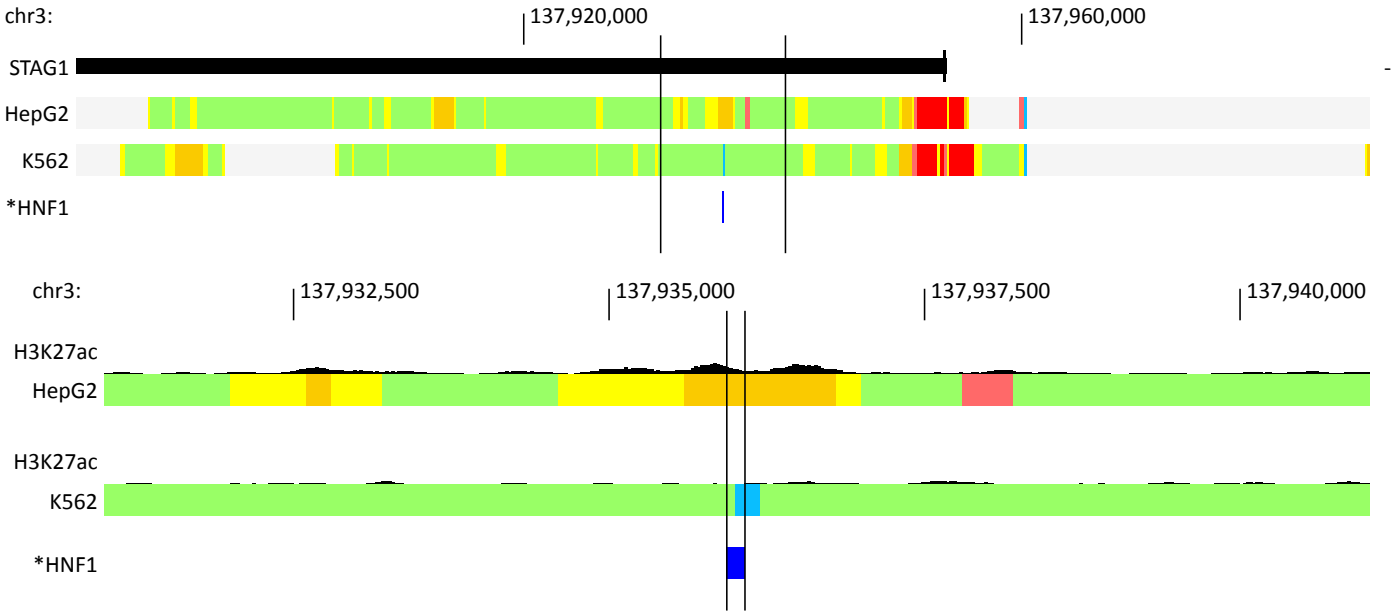
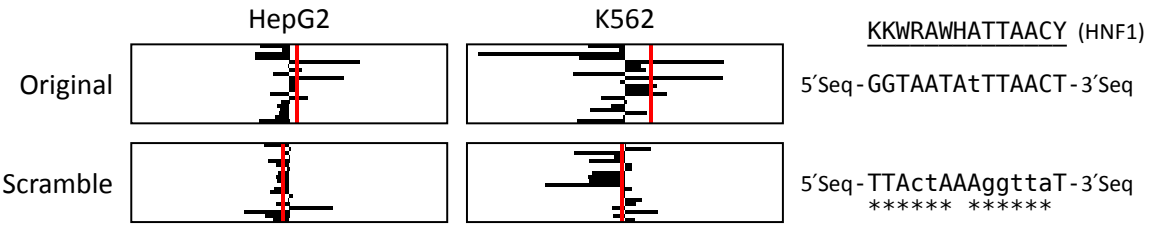
377 HNF1 in HepG2 enhancer

chr3 137935999 137936012 + (hg18)





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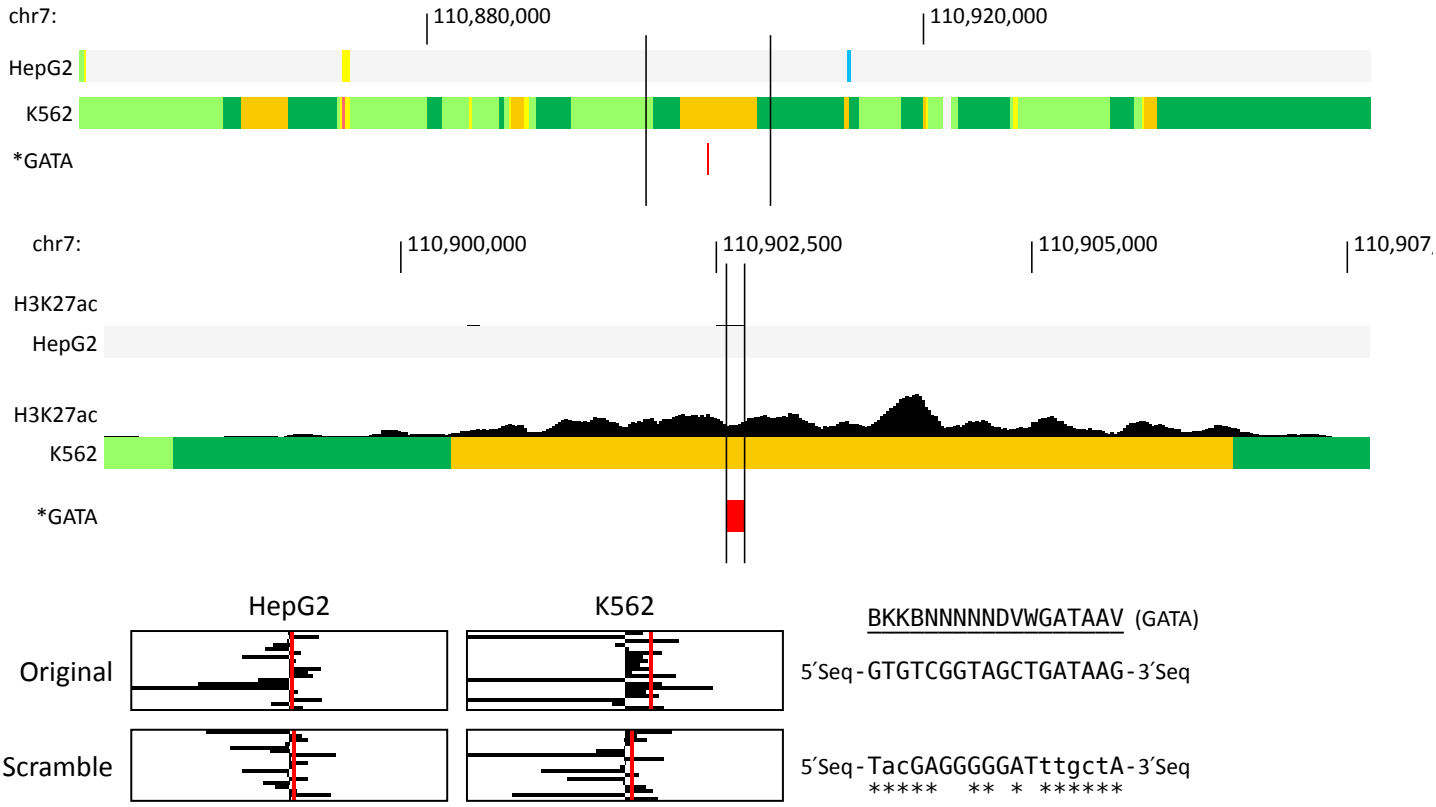
378 GATA in K562 enhancer (conserved at 60% confidence)

chr7 110902644 110902661 - (hg18)



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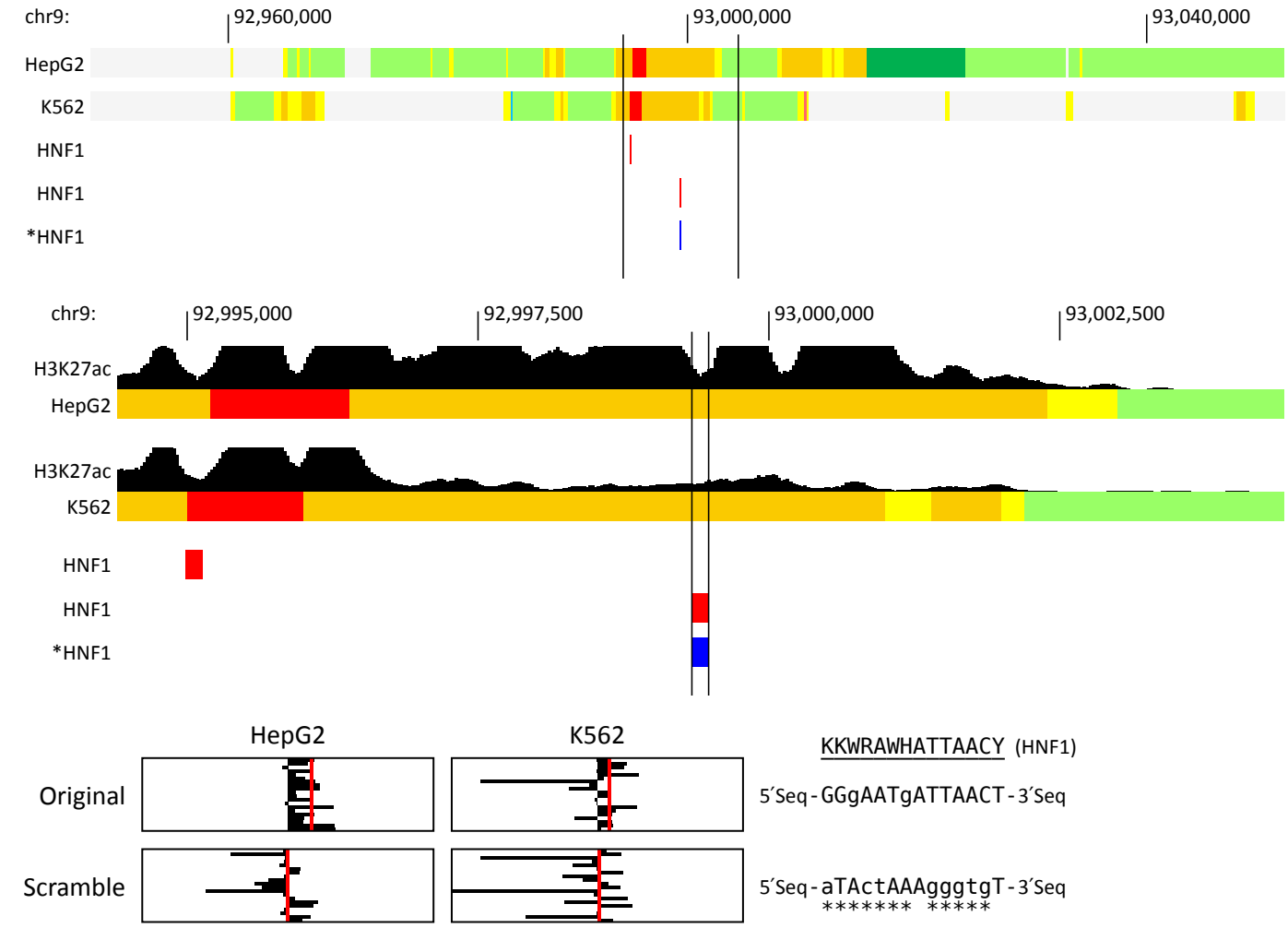
379 HNF1 in HepG2 enhancer

chr9 92999404 92999417 - (hg18)



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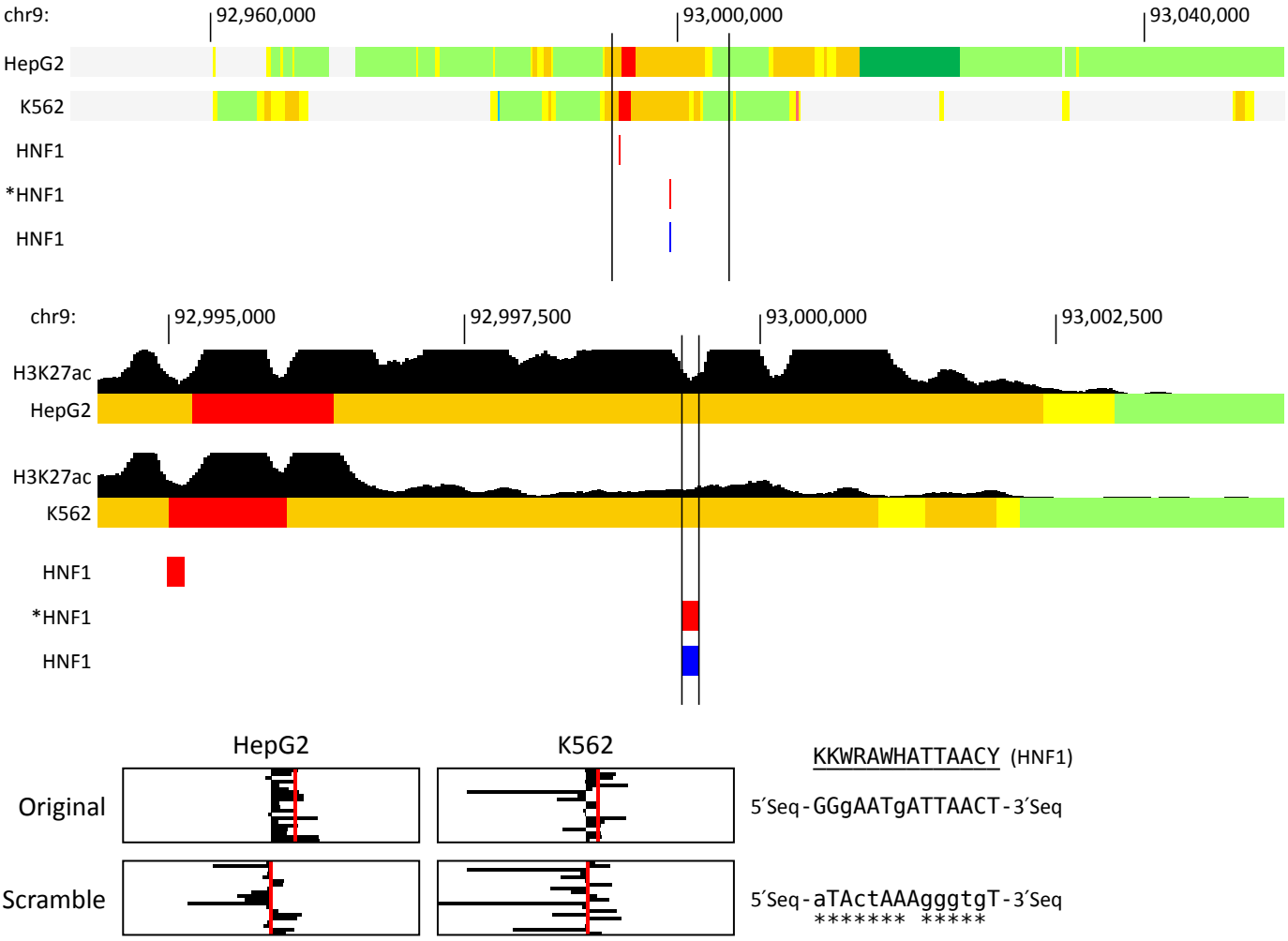
380 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr9 92999404 92999417 - (hg18)



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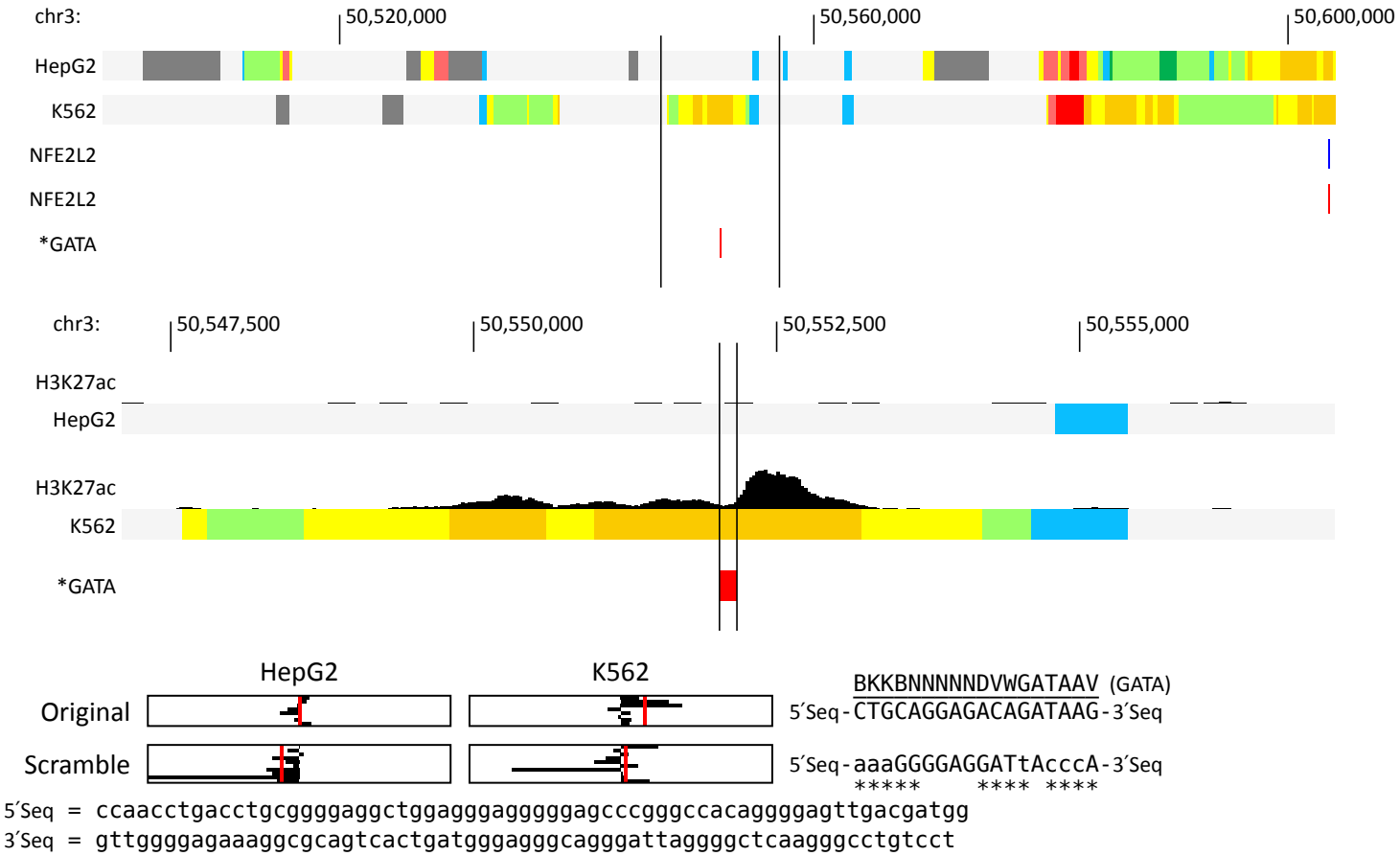
381 GATA in K562 enhancer (conserved at 60% confidence)

chr3 50552092 50552109 + (hg18)



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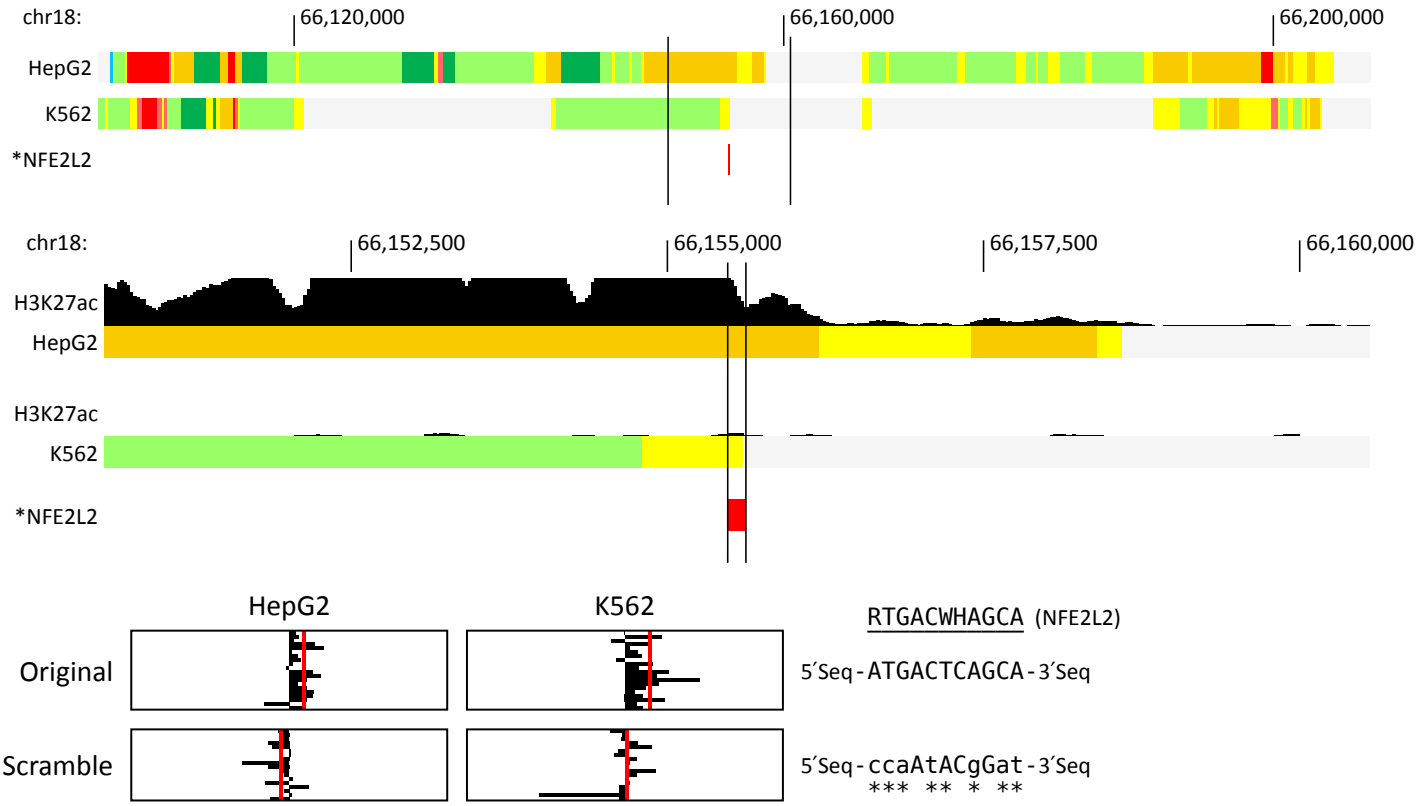
382 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr18 66155544 66155554 + (hg18)



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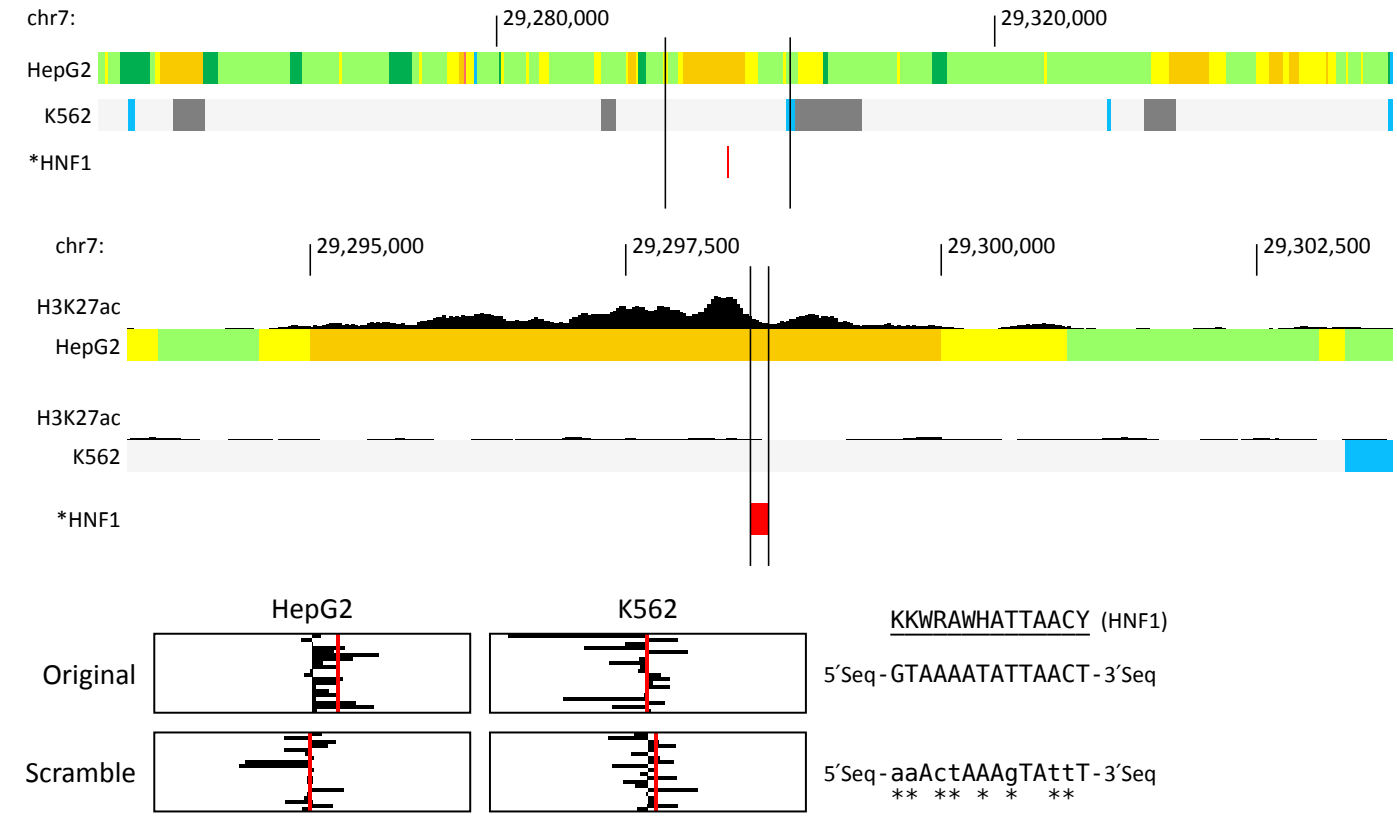
383 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr7 29298554 29298567 - (hg18)



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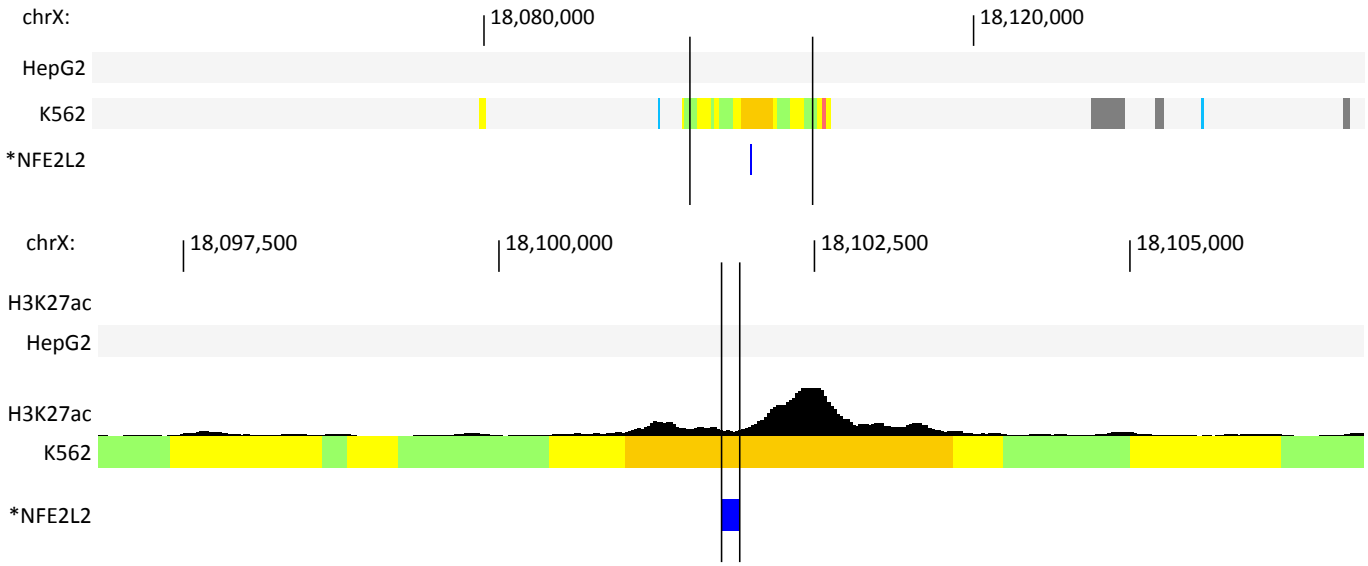
384 NFE2L2 in K562 enhancer

chrX 18101831 18101841 + (hg18)



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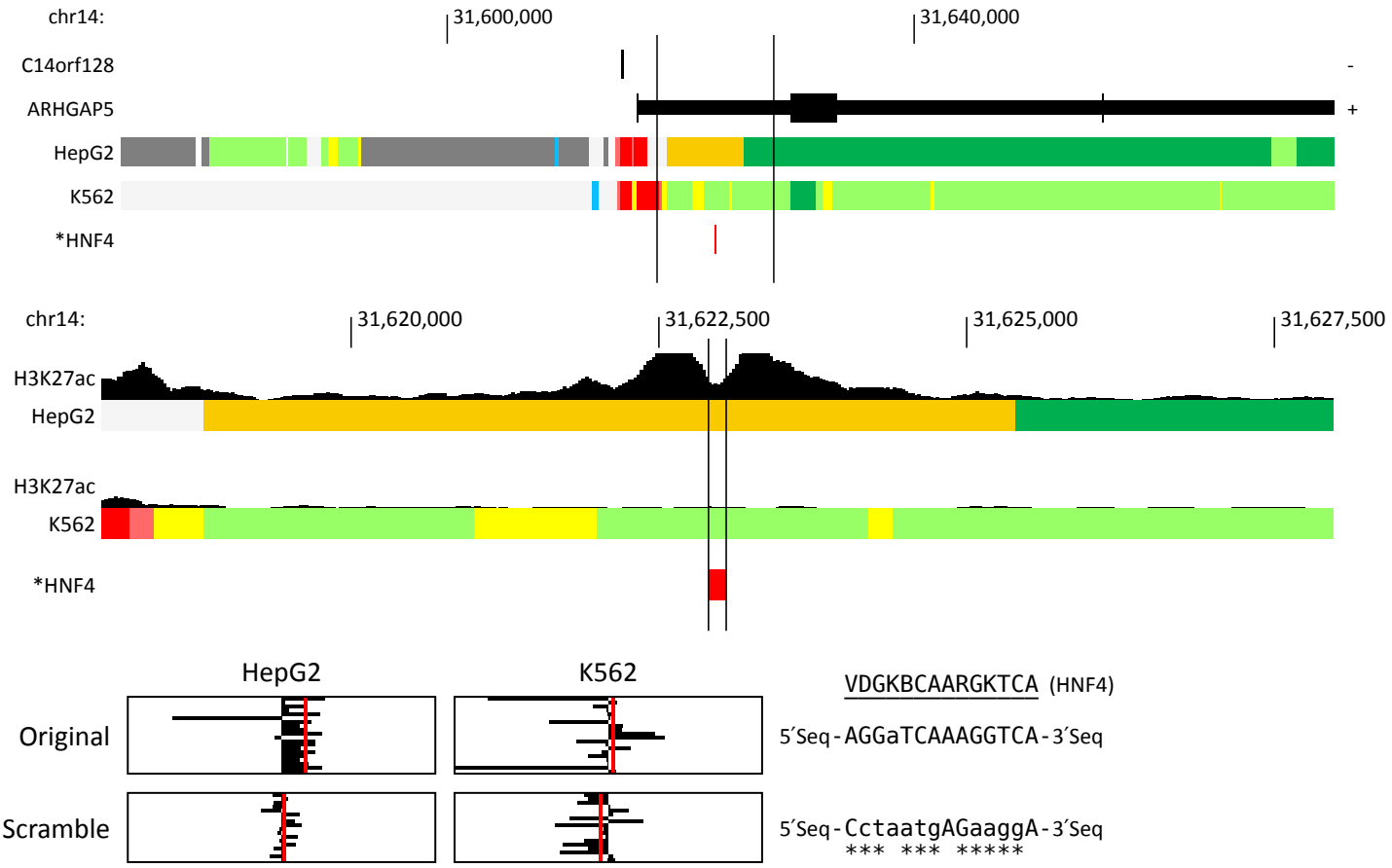
385 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 31622969 31622982 - (hg18)



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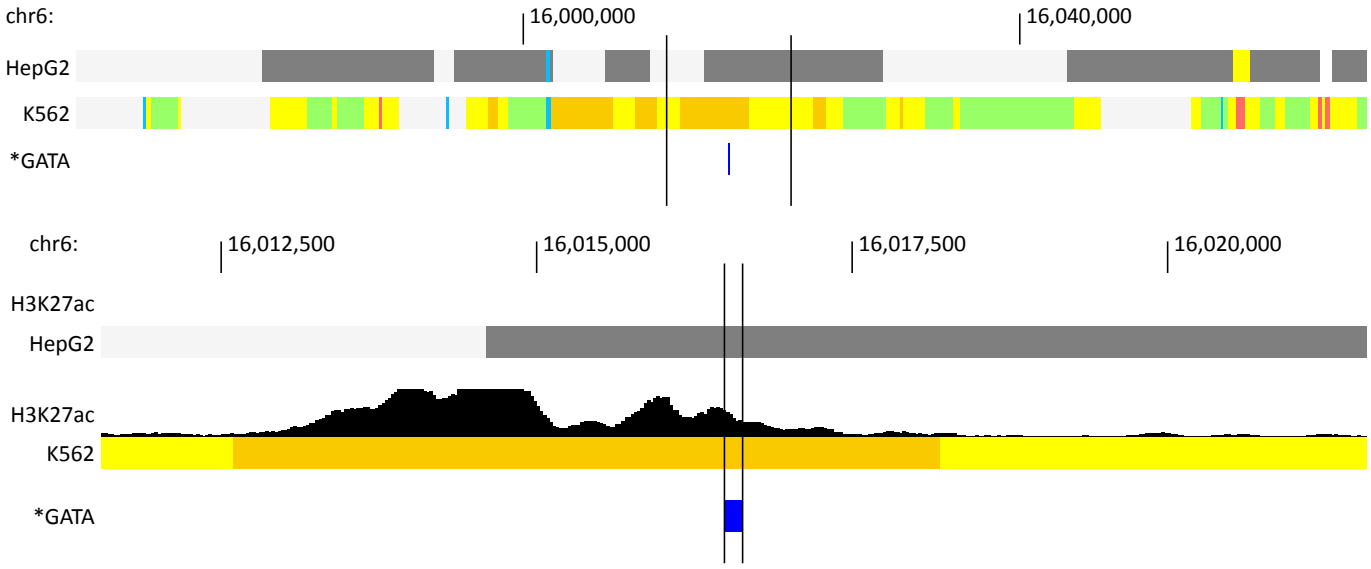
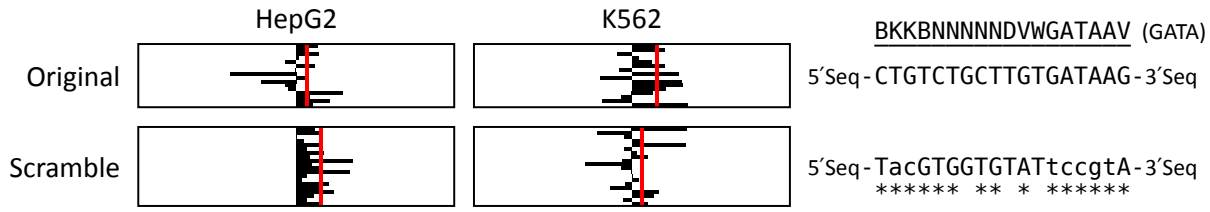
386 GATA in K562 enhancer

chr6 16016552 16016569 + (hg18)





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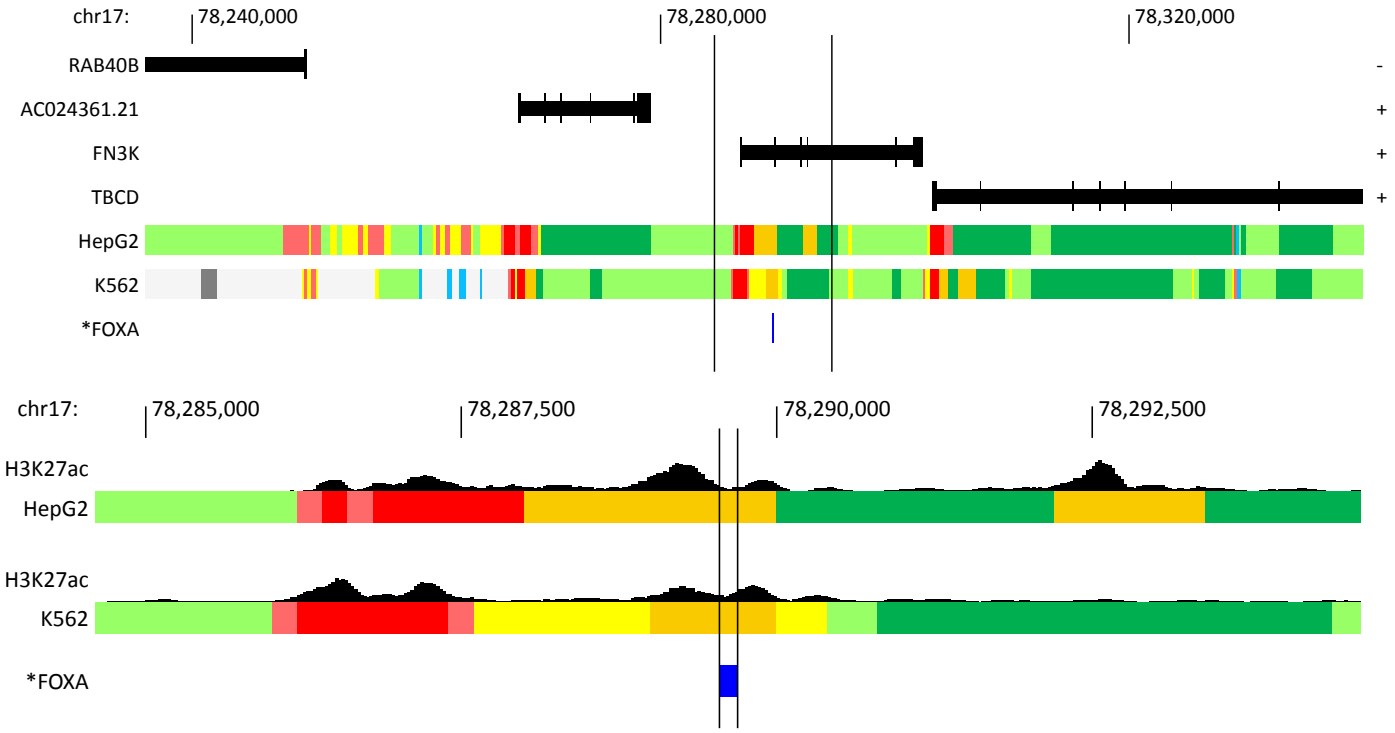
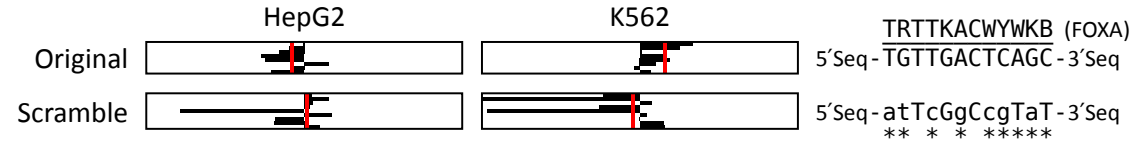
387 FOXA in HepG2 enhancer

chr17 78289613 78289624 - (hg18)



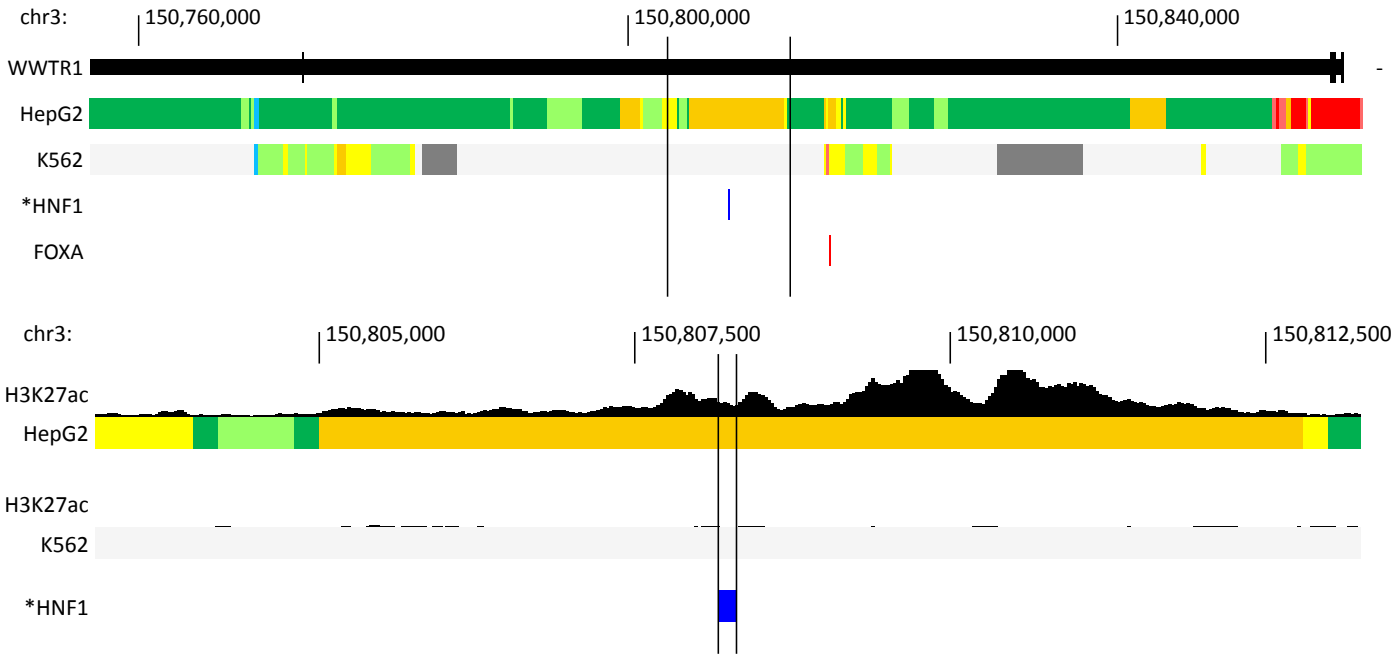


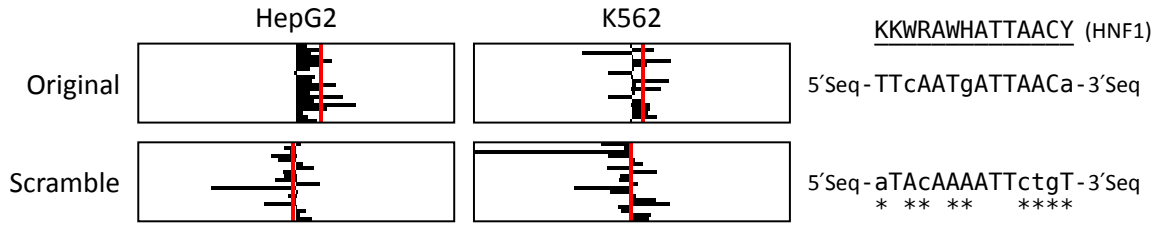
5′Seq = tccaggctggccacctccccctcaaacatctgccgggcctgcatccagaacacagccttgtcagcct

3′Seq = cagggcctctgcccactgggcccttgacagaagctaccacgtgggagtcacaaggaccttcattca

388 HNF1 in HepG2 enhancer

chr3 150808228 150808241 + (hg18)

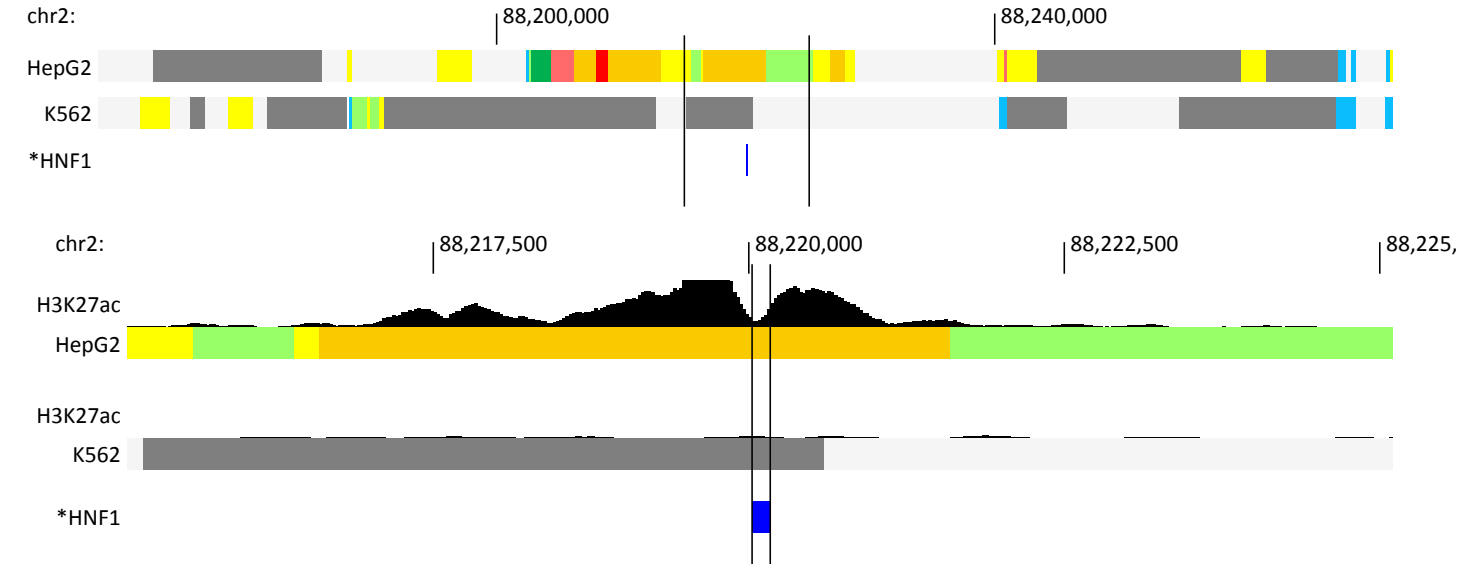


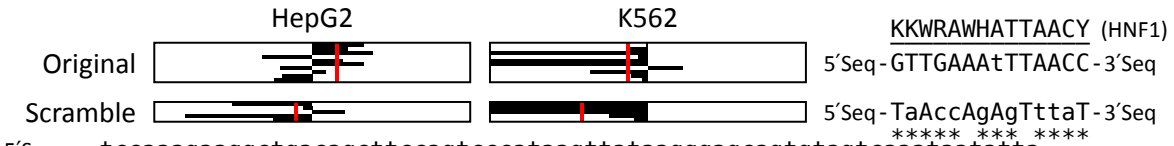


5′Seq = tccaaattaactaatataactaaaacgatagaattcattctttgtcagtgaggaatcagagttctc
3′Seq = actttaggcgactgcaaaagtcaacaaagacctgtgtgactgtaaaatttcctctggtaattcaa

389 HNF1 in HepG2 enhancer

chr2 88220092 88220105 - (hg18)



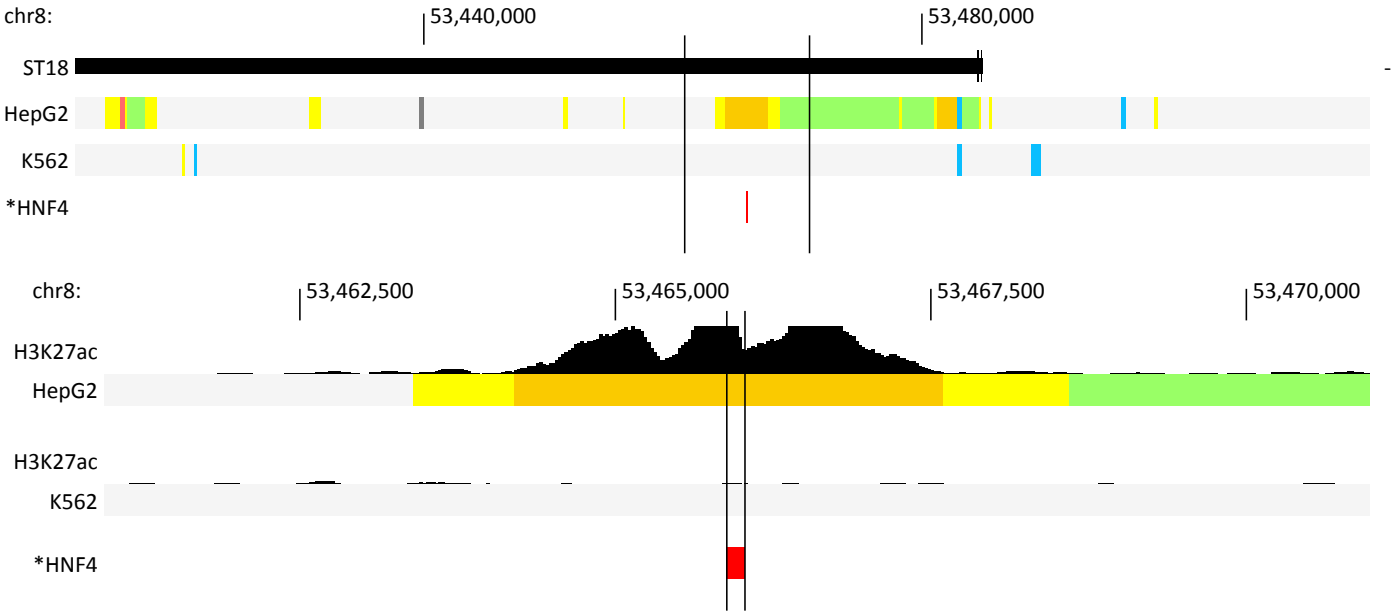


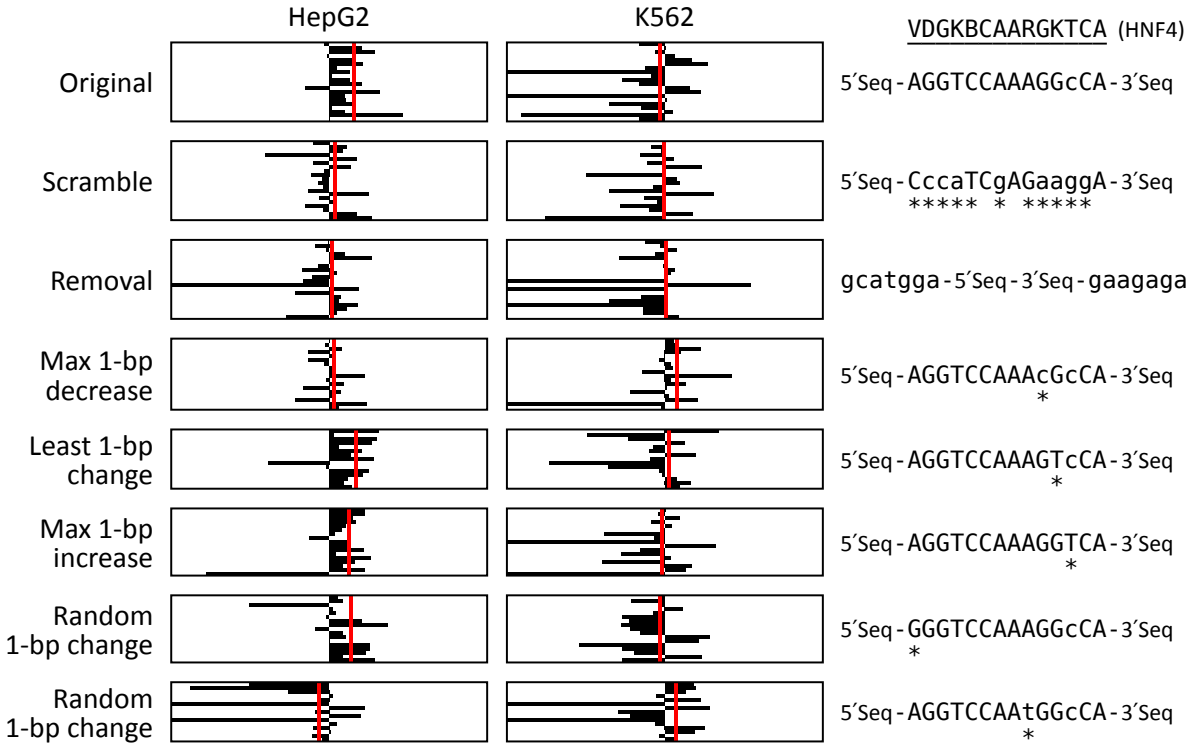
5′Seq = tccaaagaaggctgacagcttccagtcccataagttataagggagcagtgtagtcaaataatatta

3′Seq = taactgtcaaaagctttggtcaaagaggaatttggggtcaaagttgaacctgtgatttaacccgt

390 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr8 53465949 53465962 + (hg18)





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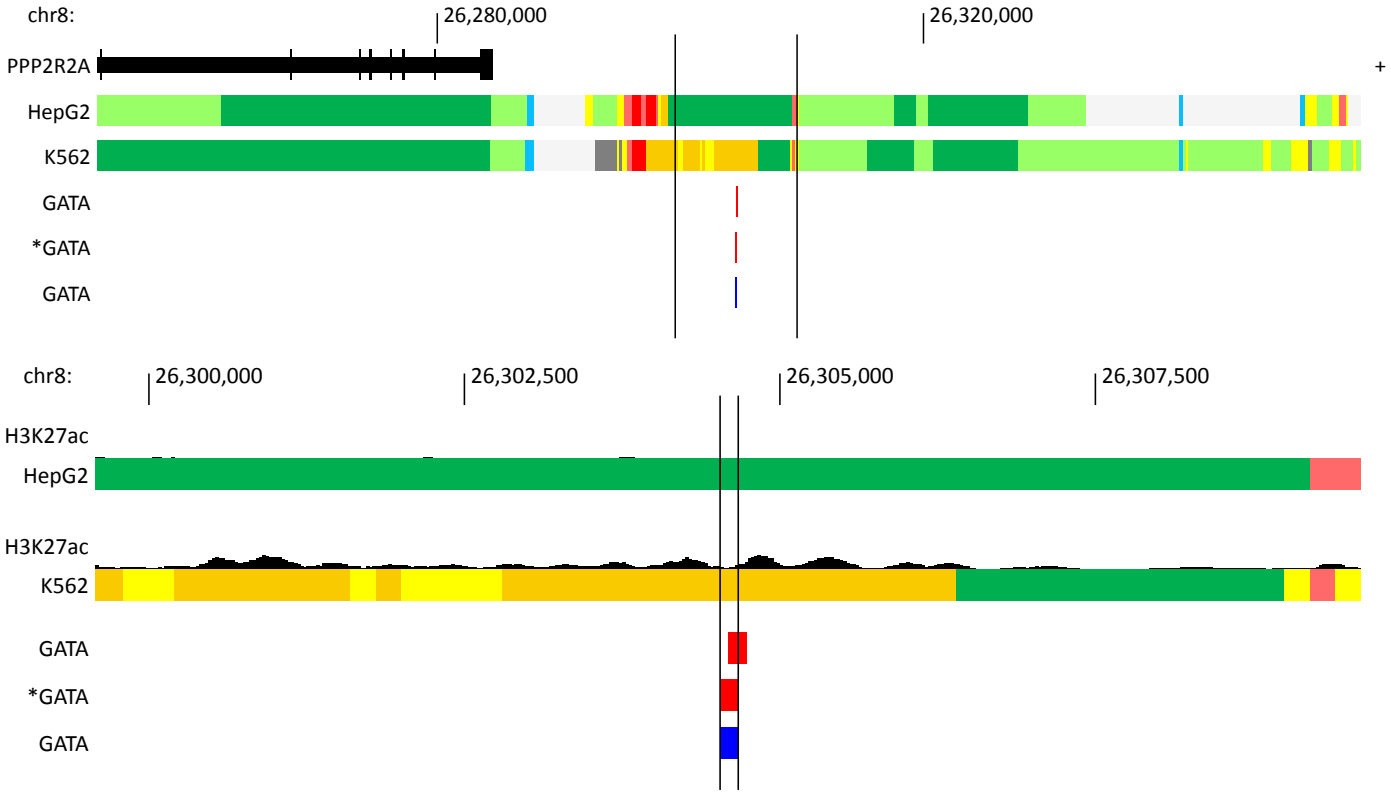
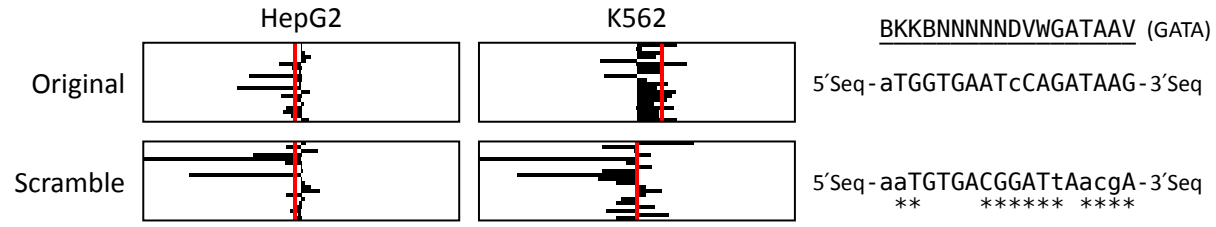
3′Seq = caggtgcagacggcactaaaaagtaaaaattacactcgggcagaggccacttggtaaaacaggaa

391 GATA in K562 enhancer (conserved at 60% confidence)

chr8 26304590 26304607 - (hg18)

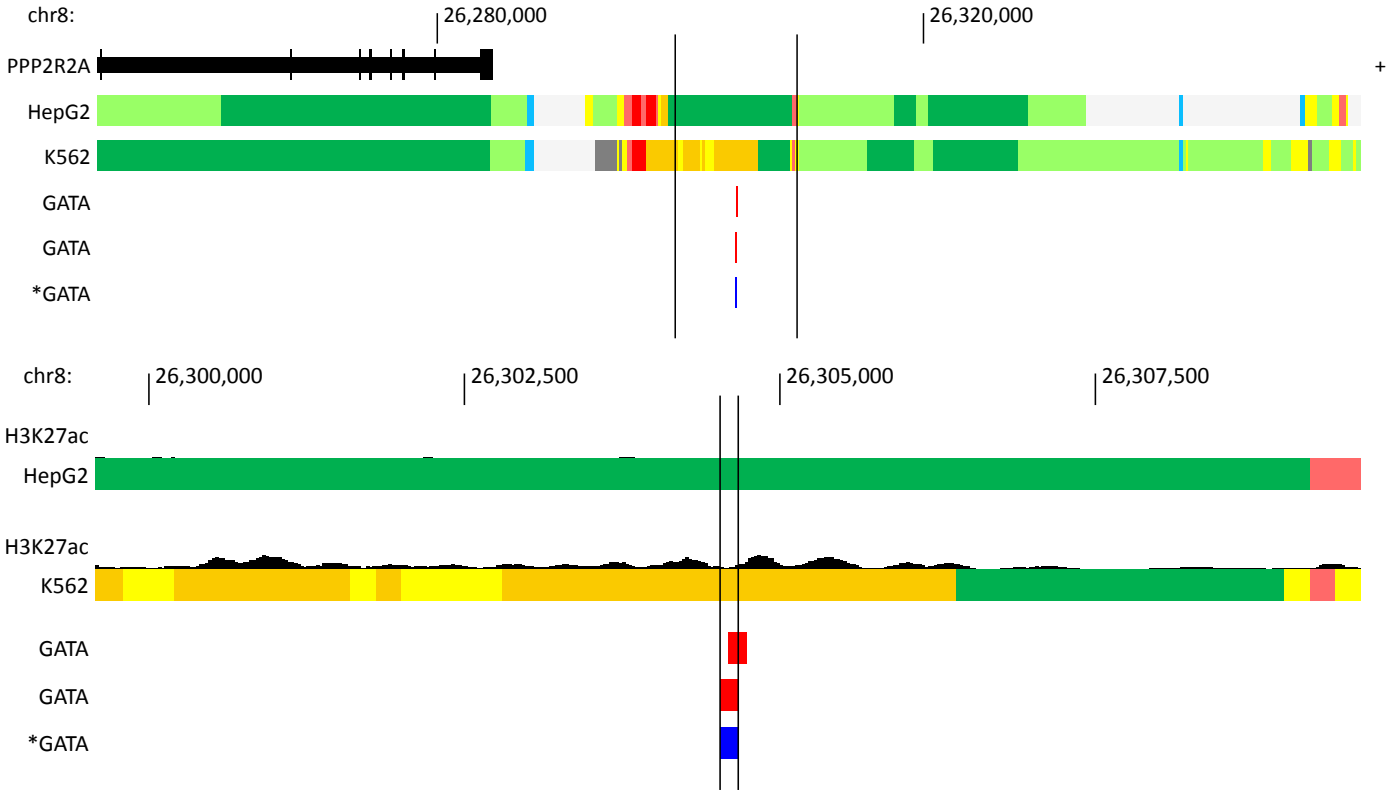


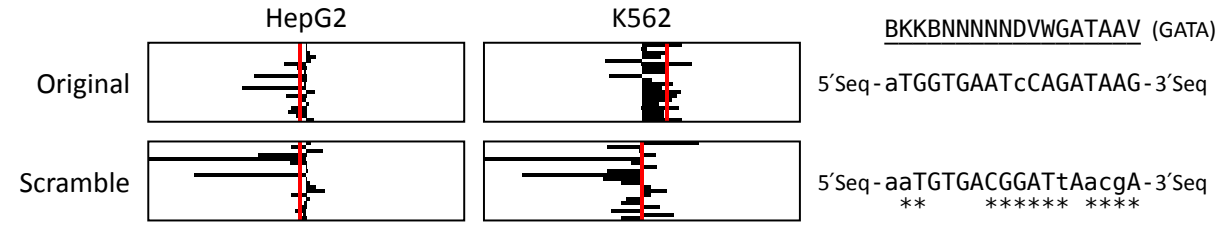


5′Seq = tggacaagtcagataagttaaccacagcagaactgaaatctgtcatgtgcacacagatgtgaac
3′Seq = aattctgactctcctcaaaccaaatgtaaaagtattctgaagaaaataaataagaagtaataa

392 GATA in K562 enhancer

chr8 26304590 26304607 - (hg18)

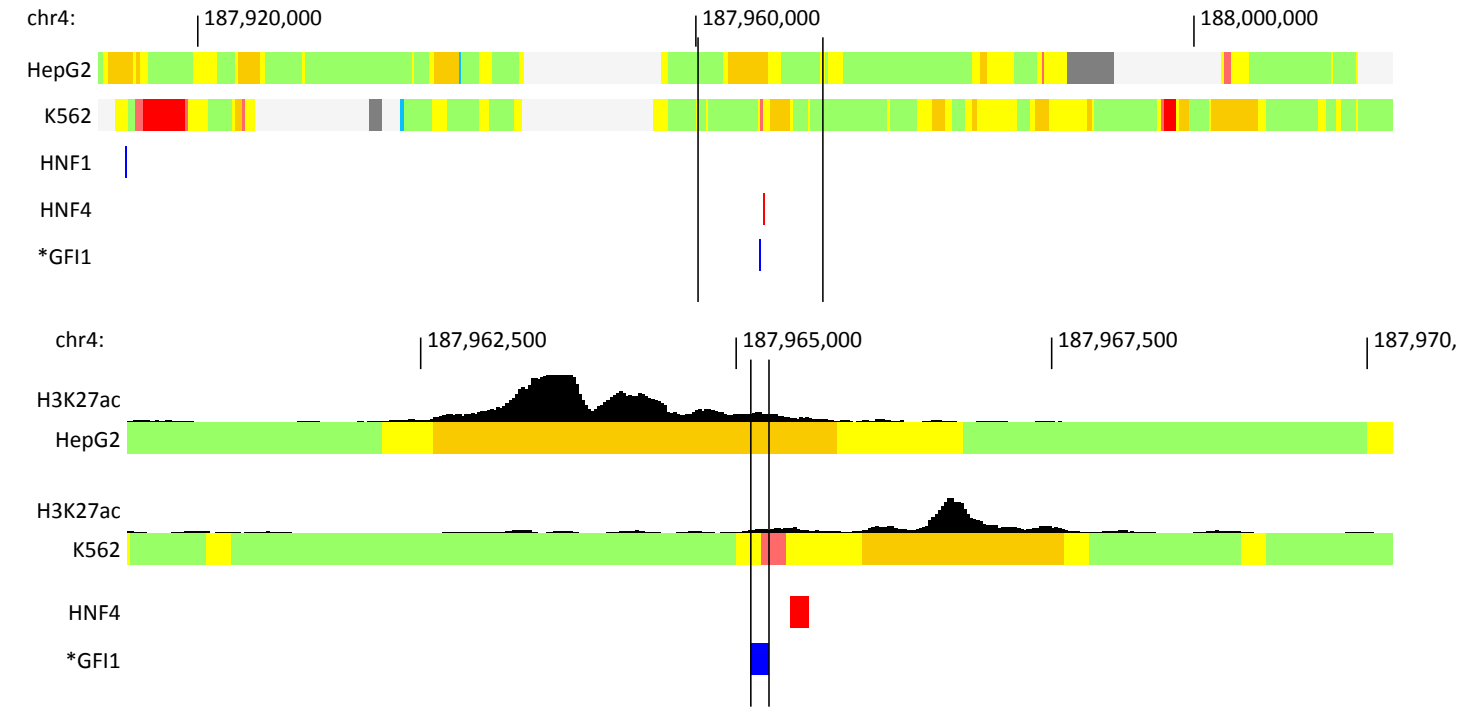


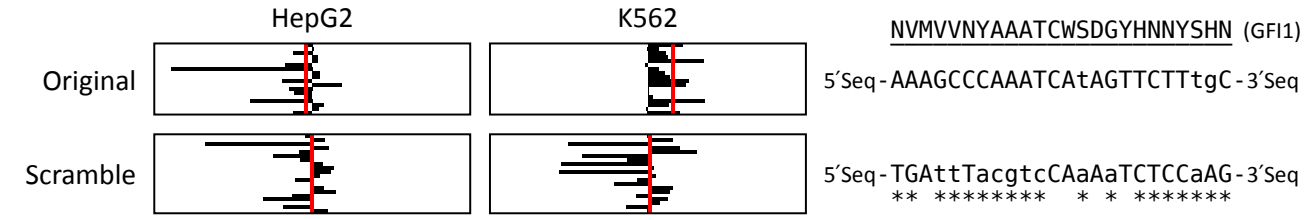


5′Seq = tggacaagtcagataagttaaccacagcagaactgaaatctgtcatgtgcacacagatgtgaac
3′Seq = aattctgactctcctcaaaccaaatgtaaaagtattctgaagaaaataaataagaagtaataa

393 GFI1 in HepG2 enhancer

chr4 187965177 187965200 - (hg18)

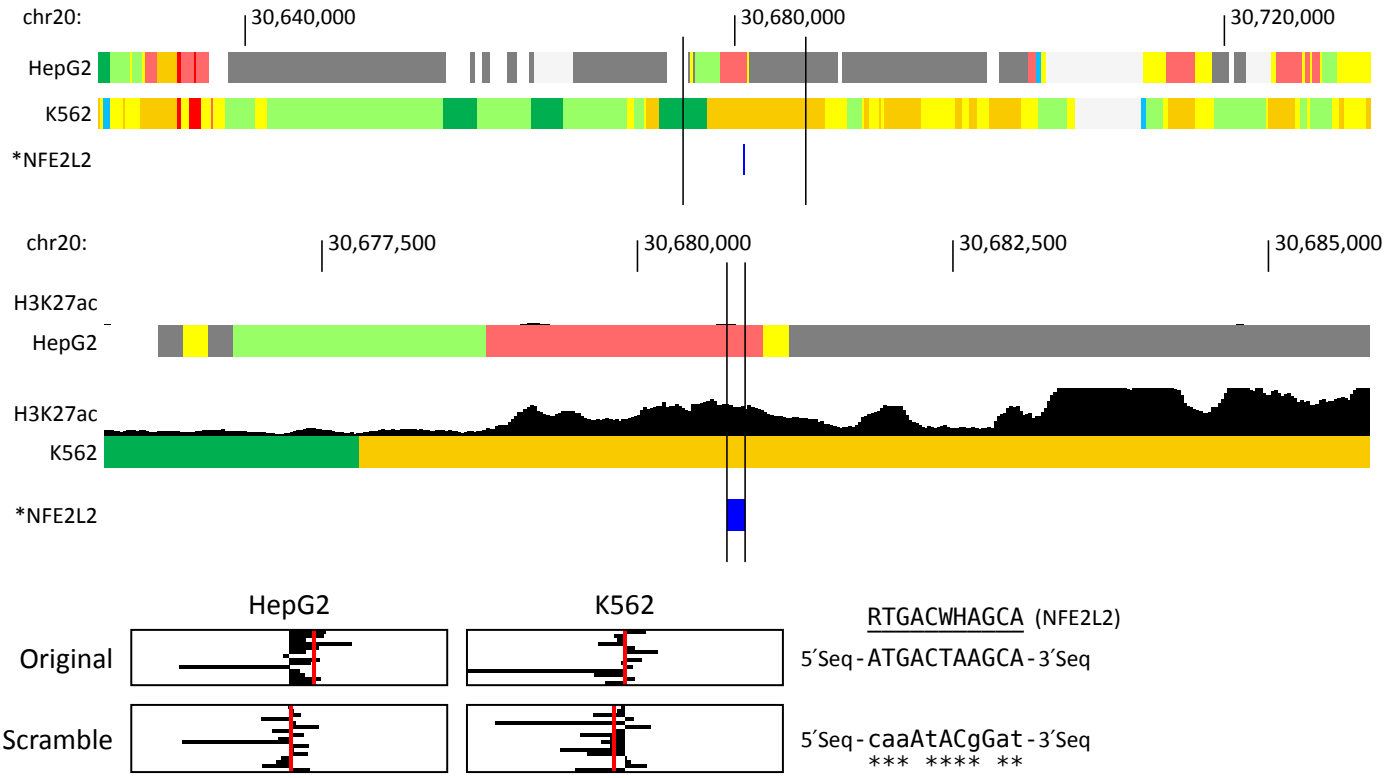




5′Seq = catcactcagtaacctgtgtcgcttgtttttccattacaaaaactgtagcttaggaactg
3′Seq = tgtagctgctatagggataagtctgtggcaaaatacattccttaatctgtctcccattag

394 NFE2L2 in K562 enhancer

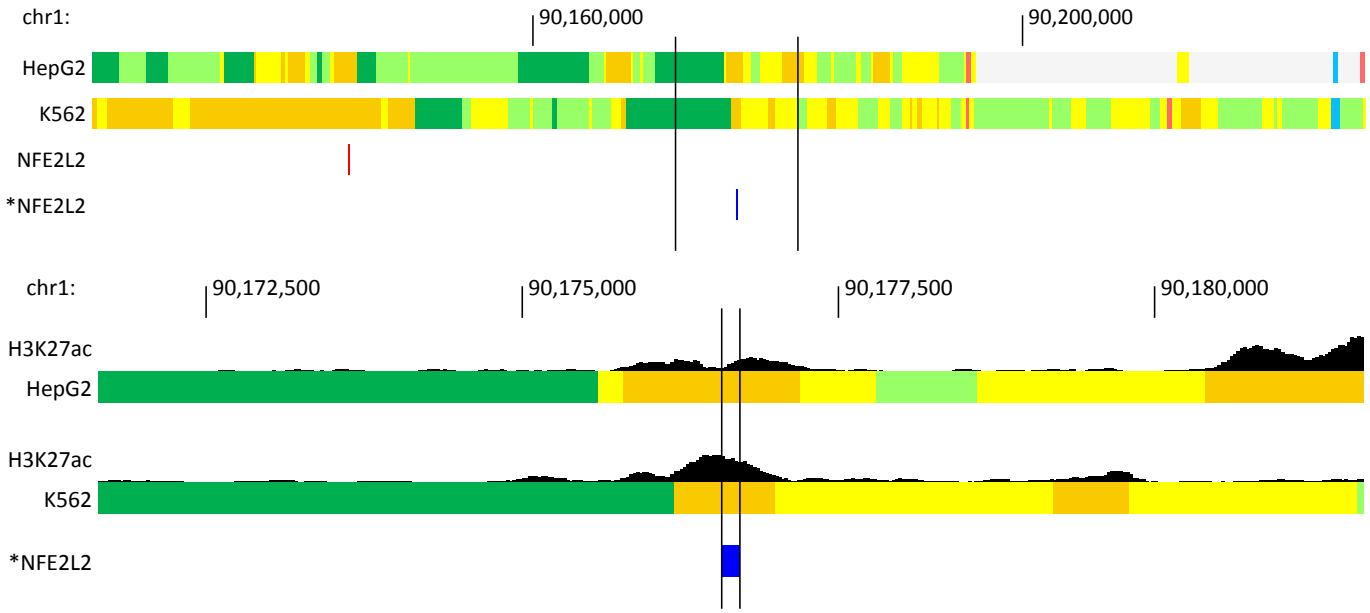
chr20 30680776 30680786 + (hg18)

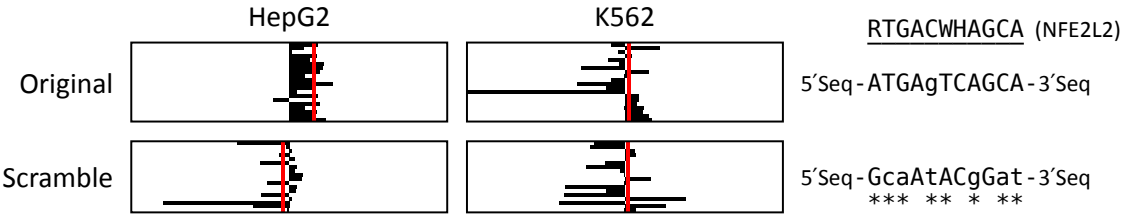


5′Seq = gtgaggaaactgaggctcagagaagtgaggctcagagatctgcccaggcatggaaaggggagggacc
3′Seq = cccactaagttacaggggcctttgcaaacatcacctggggctgcagctagaaggcggagagtagaac

395 NFE2L2 in K562 enhancer

chr1 90176644 90176654 - (hg18)

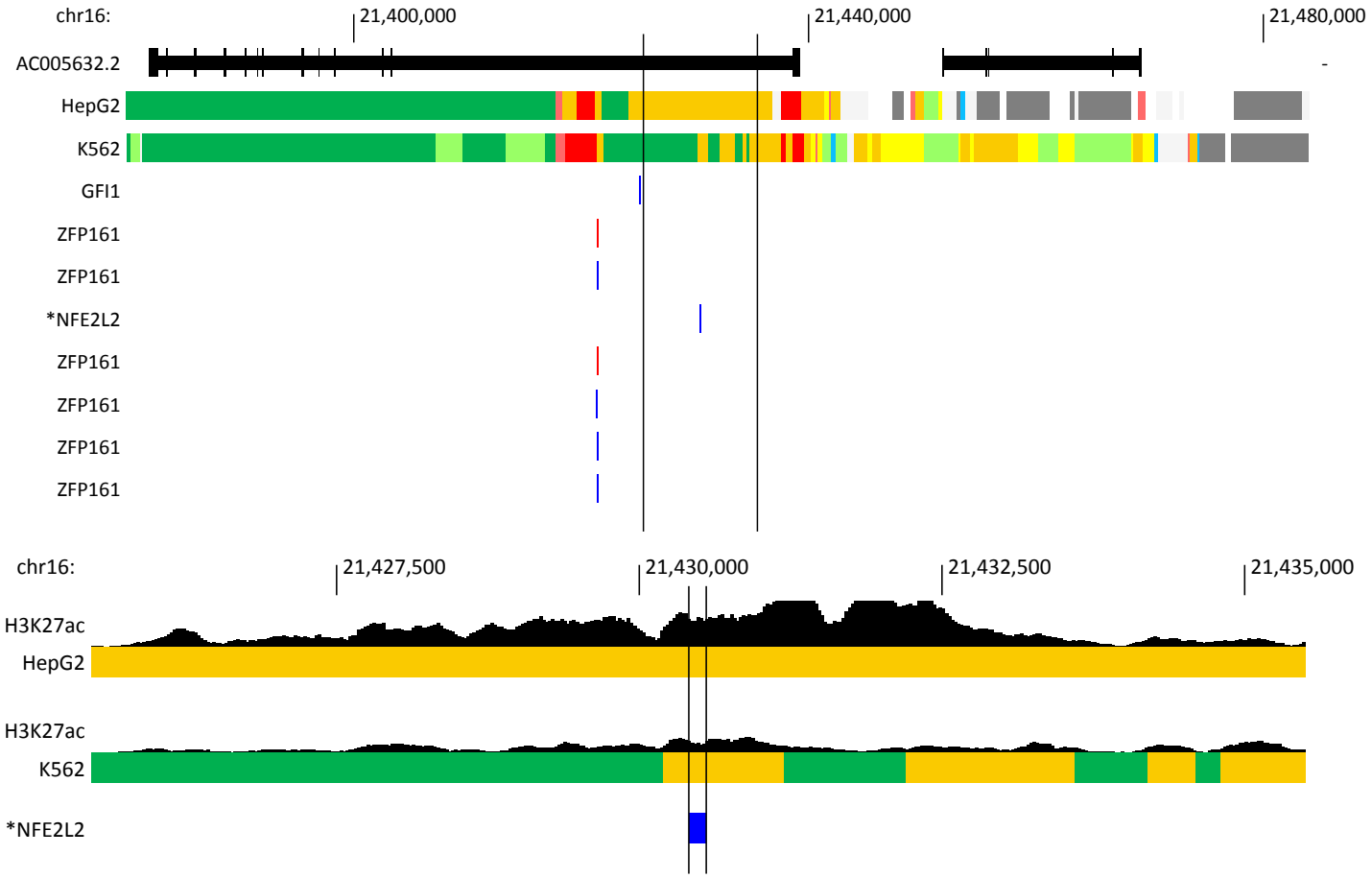


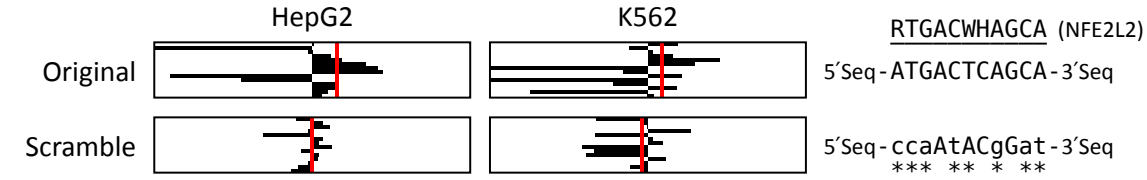


5′Seq = tatttgggcccacaactctttttctgttgttgaggtgtcaaaacccagtatatttaaagtctgttgc
3′Seq = tttctcaggaactctctgagtattcctatttgcaaacagtggtatggaatgtgacatttaaaccaac

396 NFE2L2 in K562 enhancer

chr16 21430476 21430486 + (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq-ATGACTCAGCA-3′Seq

5′Seq-ccaAtACgGat-3′Seq

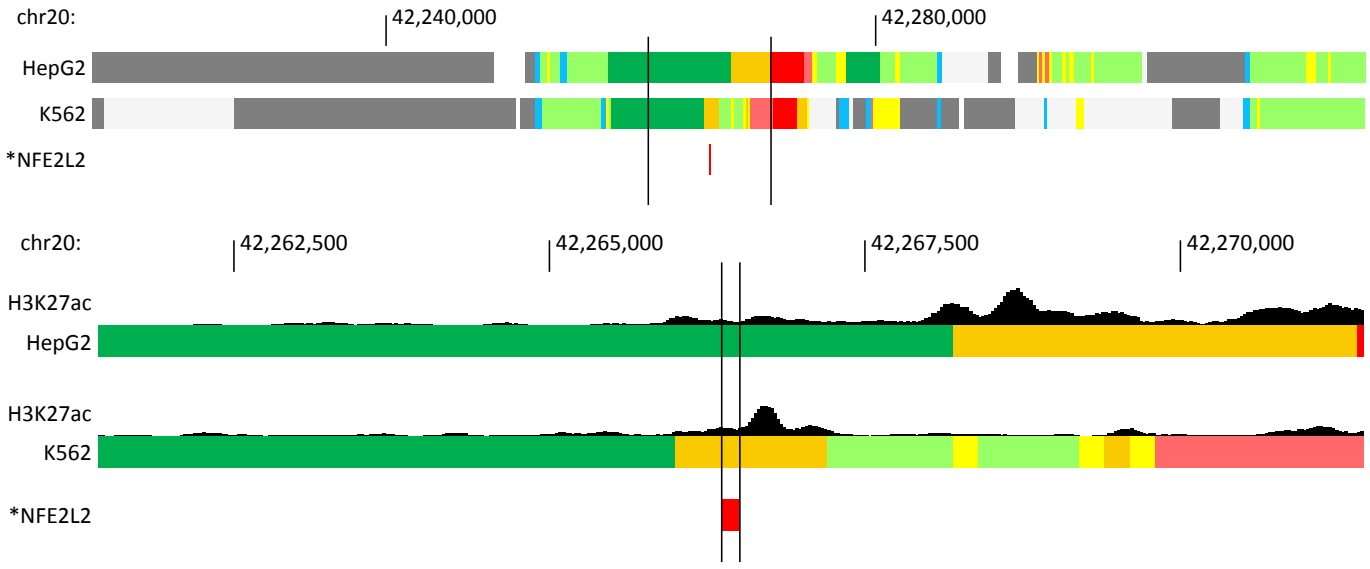
*** ** * **

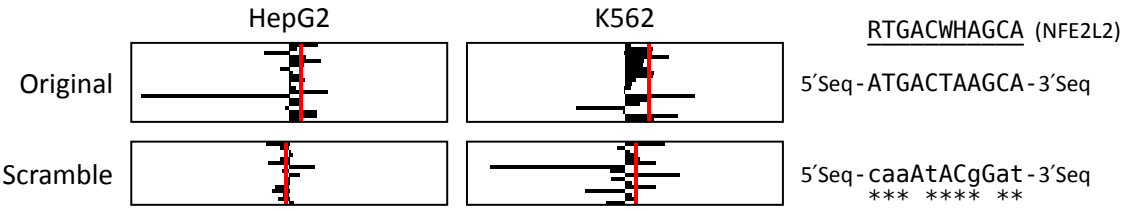
5′Seq = cgttaacaagcagctcacacatatagtgtctcagcagtgacagatgctggcccaccccgaggtcagg

3′Seq = gggatcgagtttgcgggcgtcacgctccaaggcccggaataggaggttggtgctcattcctcacata

397 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 42266432 42266442 - (hg18)

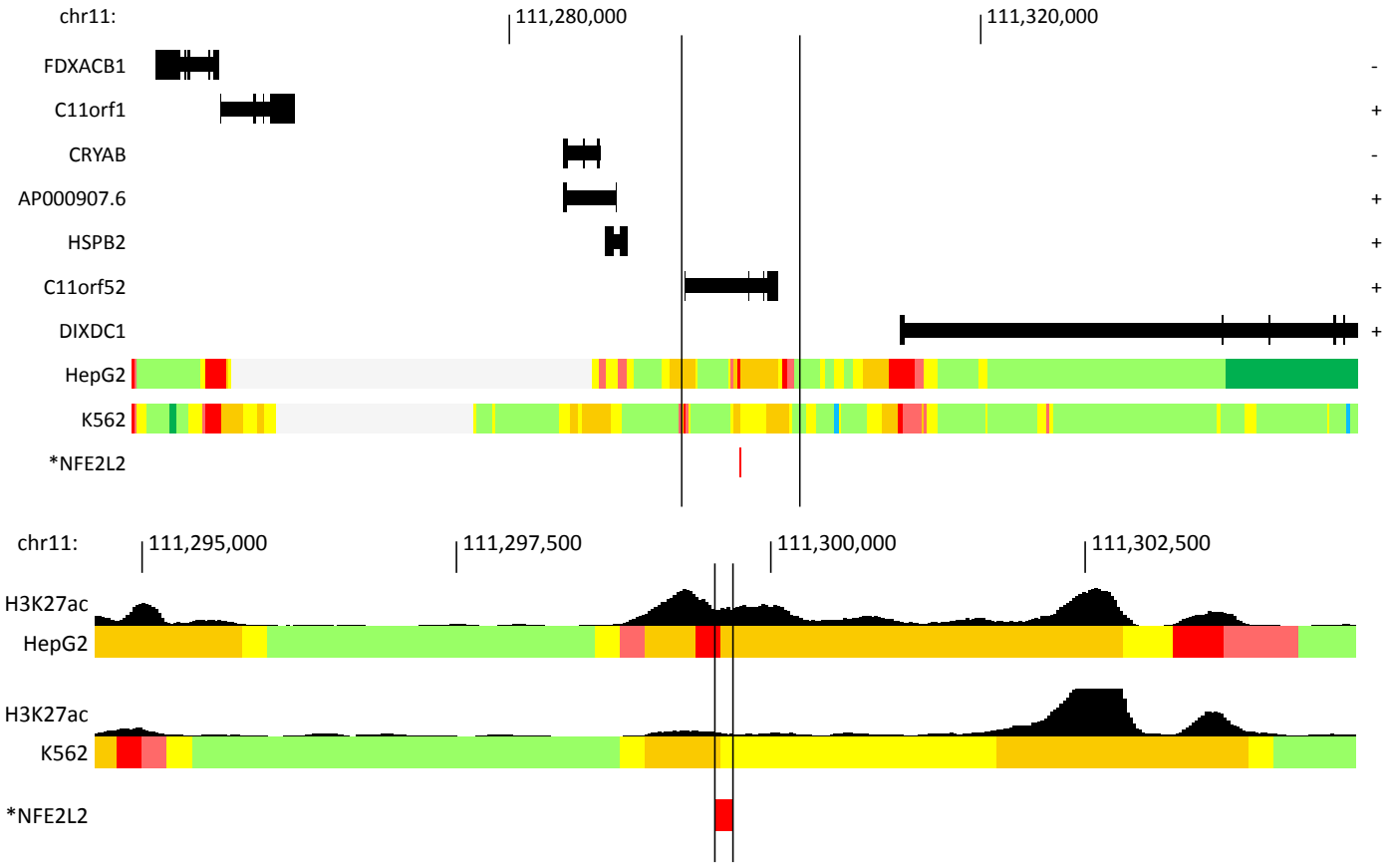


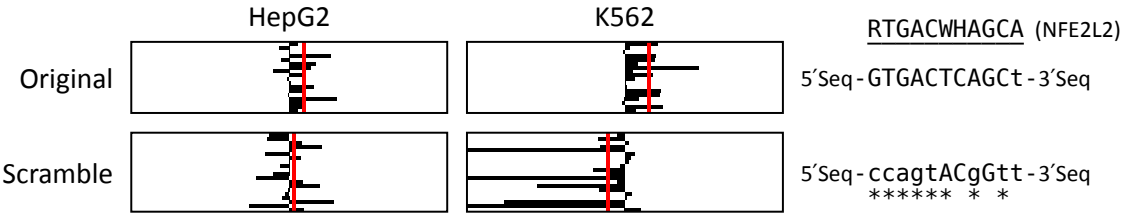


5′Seq = gtaaaattataagaagggaaggagaatatttgagaaaatgaaataagagaaggggtgagtcattagc
3′Seq = gaataagacttgtgtagtagtgtatcatacattctagttgttttatattgttgccagtttacaaatg

398 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr11 111299622 111299632 - (hg18)

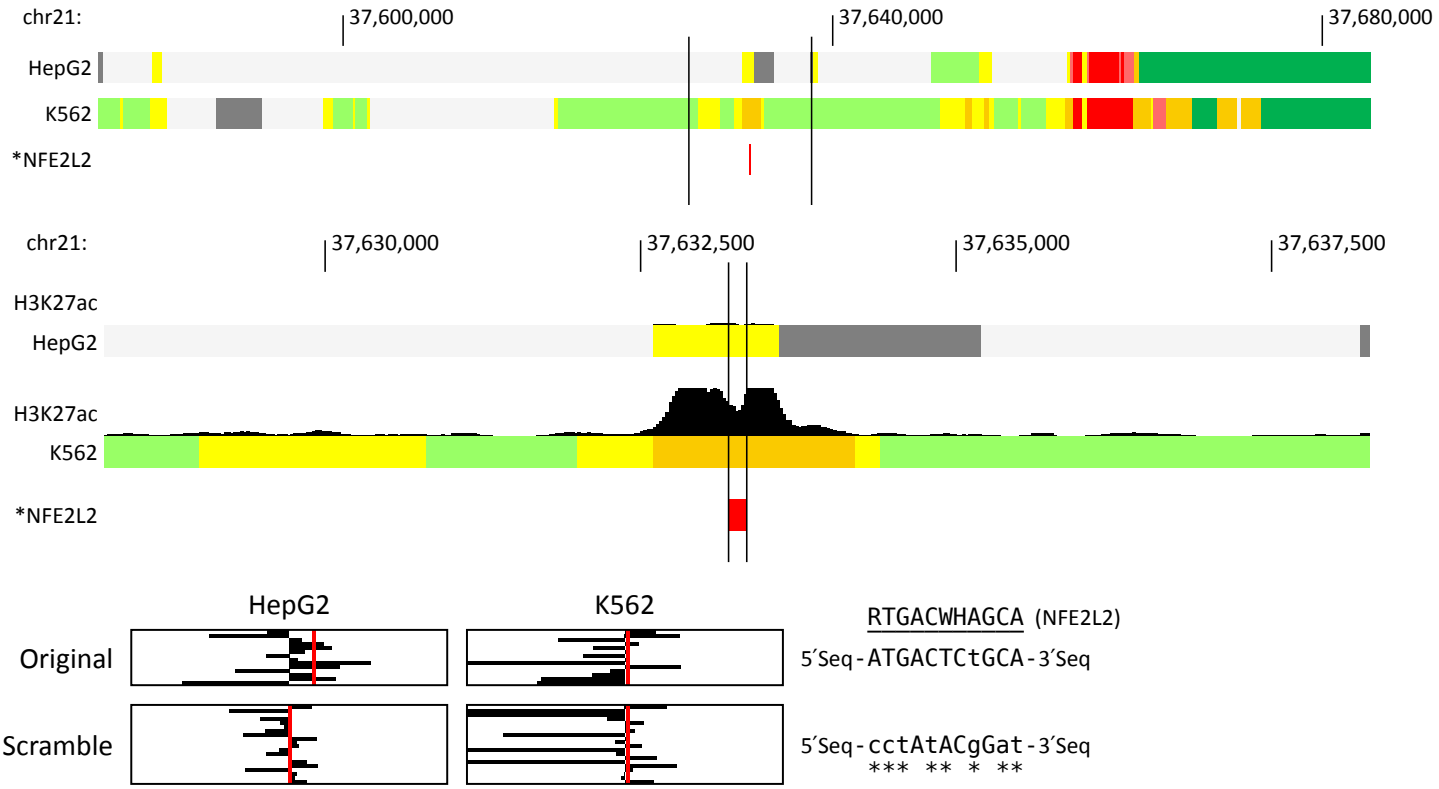




5′Seq = agatgtttaacctttaacatcctttagagaactttgtctacagaacagggagcactgaatttggtga
3′Seq = atcctgccctcactgtagggcagacctcttatatttatttctgagcccctggggtccccaatggcgc

399 NFE2L2 in K562 enhancer (conserved at 60% confidence)

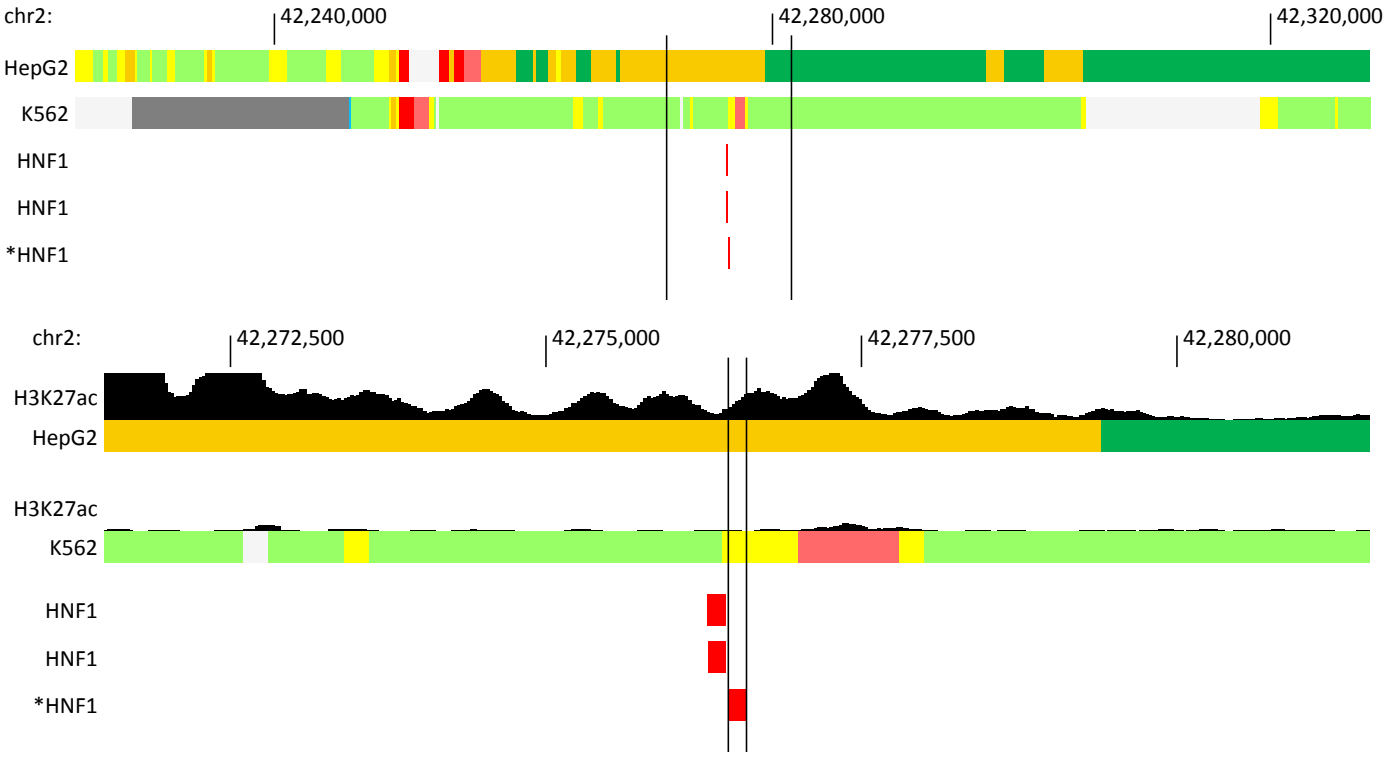
chr21 37633264 37633274 - (hg18)

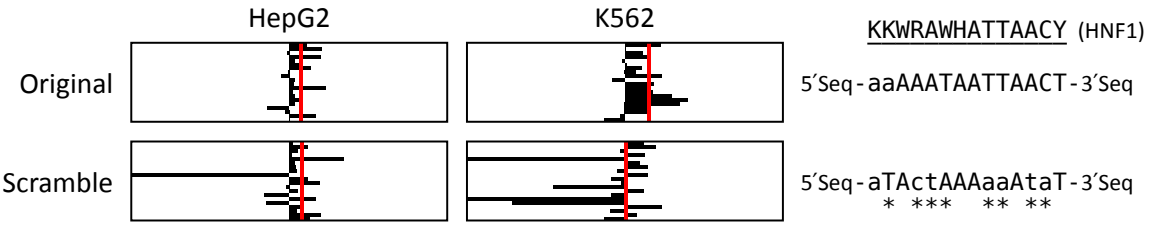


5′Seq = catggatggtggagaagggagttgccccagggtgaaggcttccctgggctctgacaggggttactgg
3′Seq = aatattaaatatagctgcatgaatcacactacaaaattccaggcctgaaatctggtgtcaggcataa

400 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr2 42276511 42276524 - (hg18)





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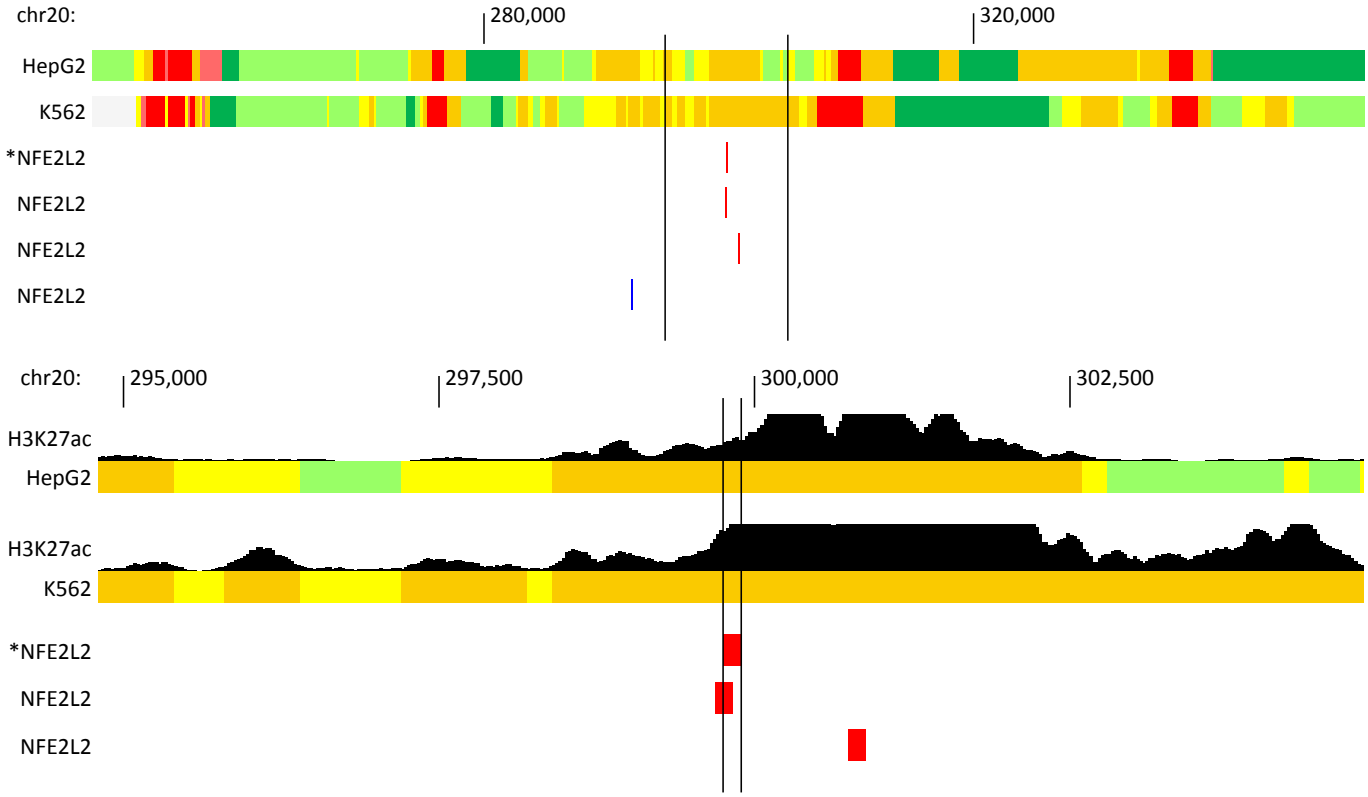
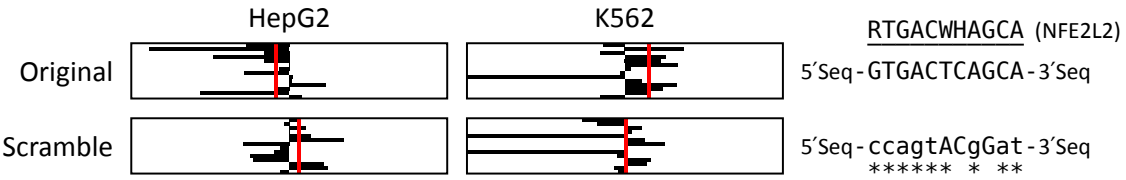
3′Seq = ttaataacacttggtacaataaagattggagaaaaaaatctccaataacctgatgctccatttcc

401 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 299818 299828 - (hg18)



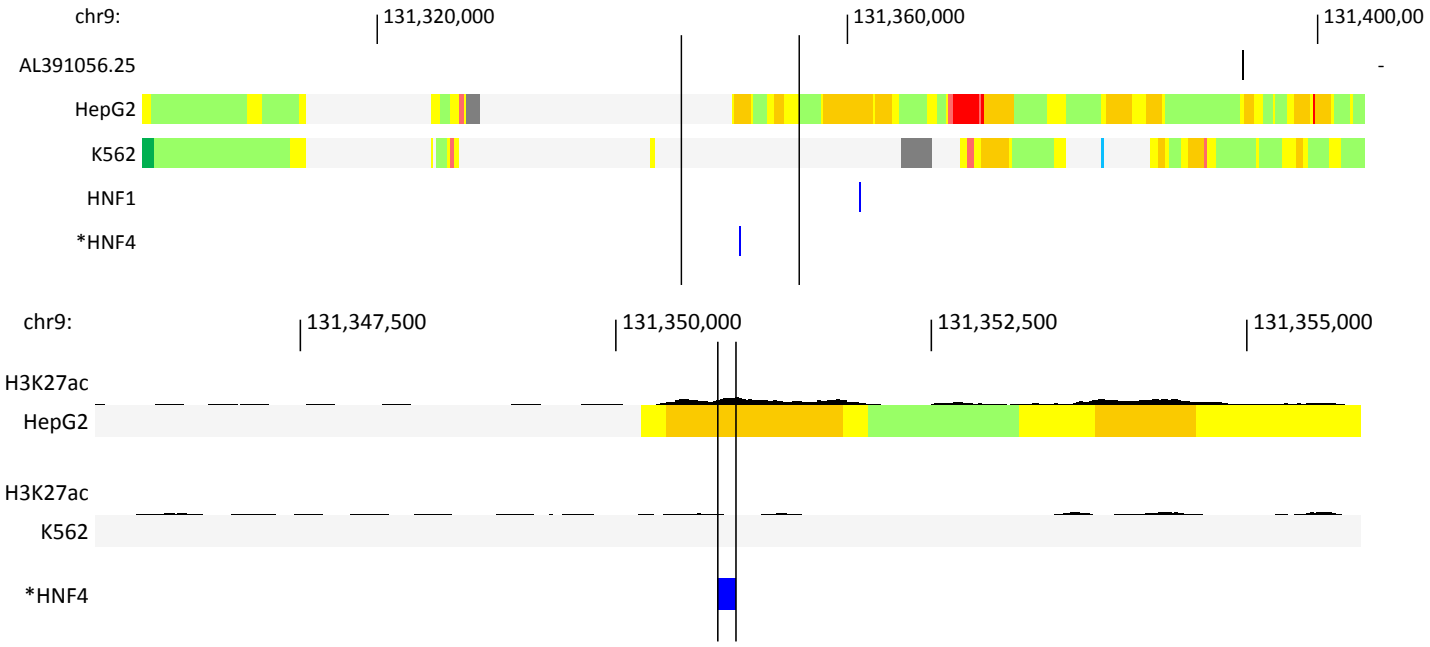


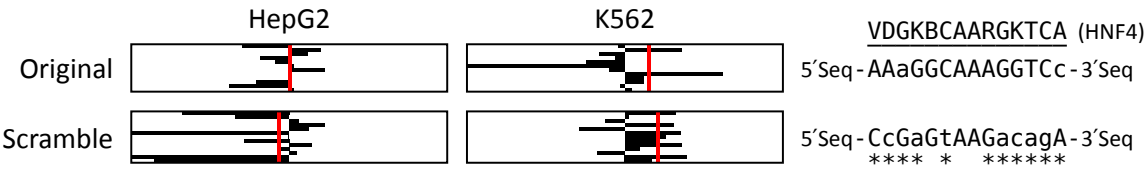
5′Seq = ccccccccaggtcgaggaaggctgaggggctggactgaacatgggacagccccctgaccagcctgact

3′Seq = gggtgggagctggaggtagagtcaggcaggaccactggggataggccaggcaggtgctgagtcaggg

402 HNF4 in HepG2 enhancer

chr9 131350874 131350887 - (hg18)





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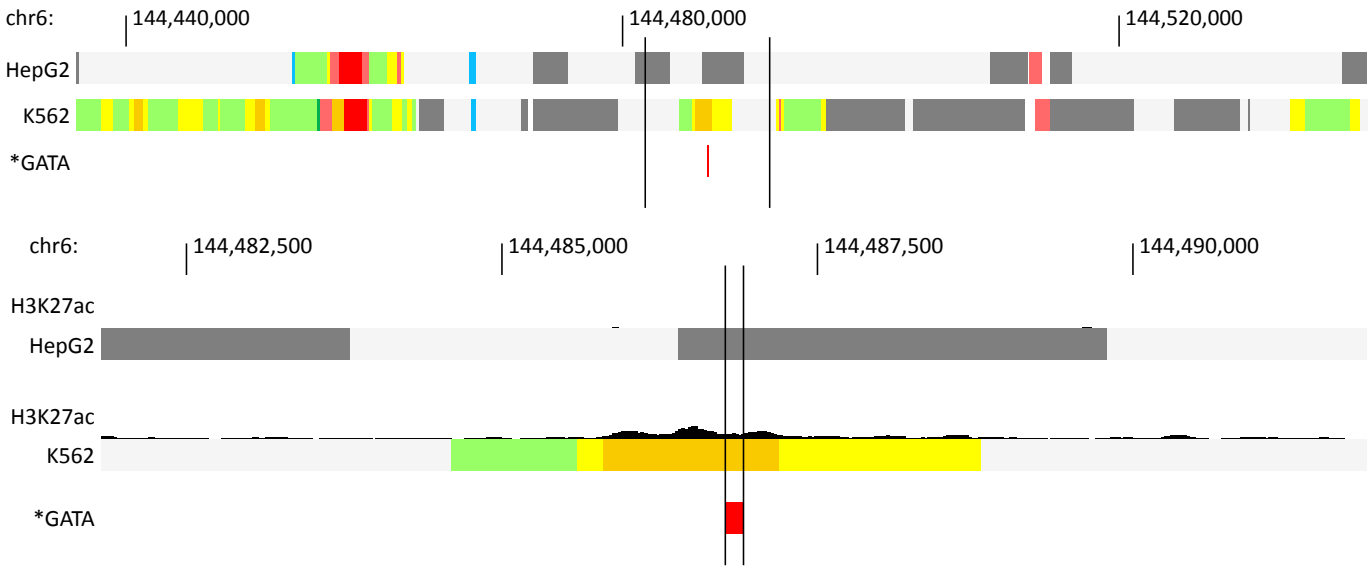
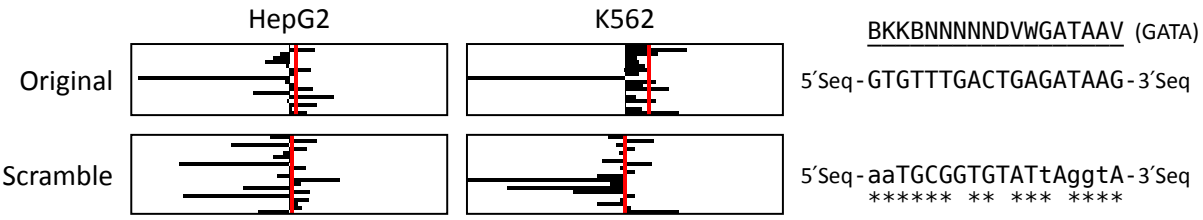
3′Seq = aaagcatgacttccacaaggacacacacacactcagaccaaccagggtcaaggctccagttcttg

403 GATA in K562 enhancer (conserved at 60% confidence)

chr6 144486834 144486851 + (hg18)

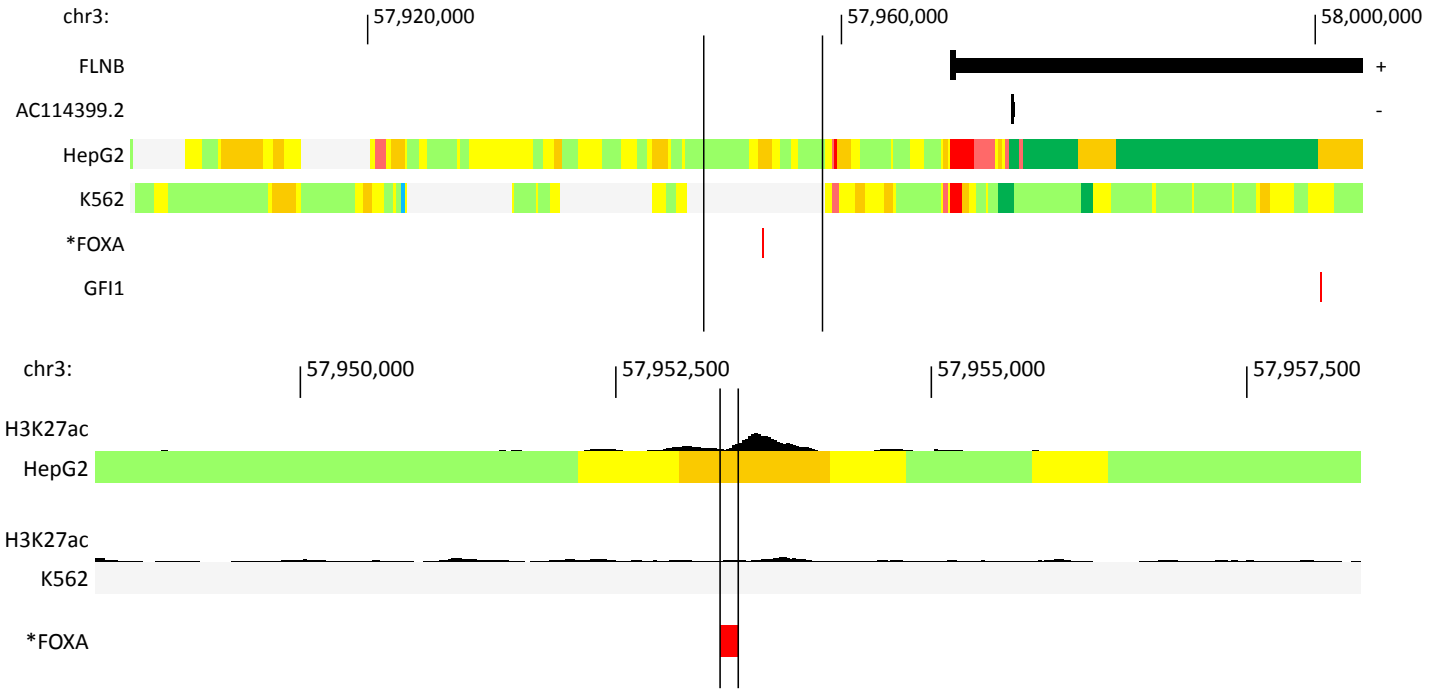


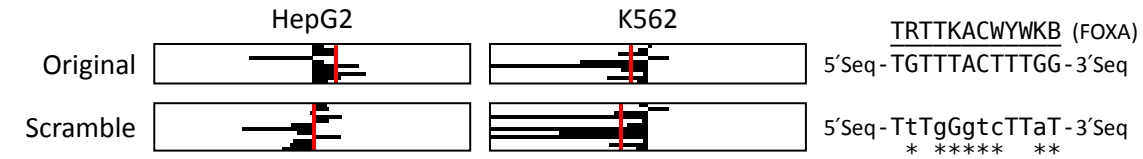


5′Seq = ataggcctgagaggttaaaatagaaagttaaataacgtgagtgacataccaaatgacccagcaa
3′Seq = ttttaacacttctgctaaaaaattgaaaaactgtcacttccttgttagagctgaaaatagtca

404 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 57953393 57953404 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTTTGG-3′Seq

5′Seq-TtTgGgtcTTaT-3′Seq

* ***** **

5′Seq = ctcccttgctccacaatggcccaacttctccctgtggaggttacaggctgtgaggaatgtgatgaca

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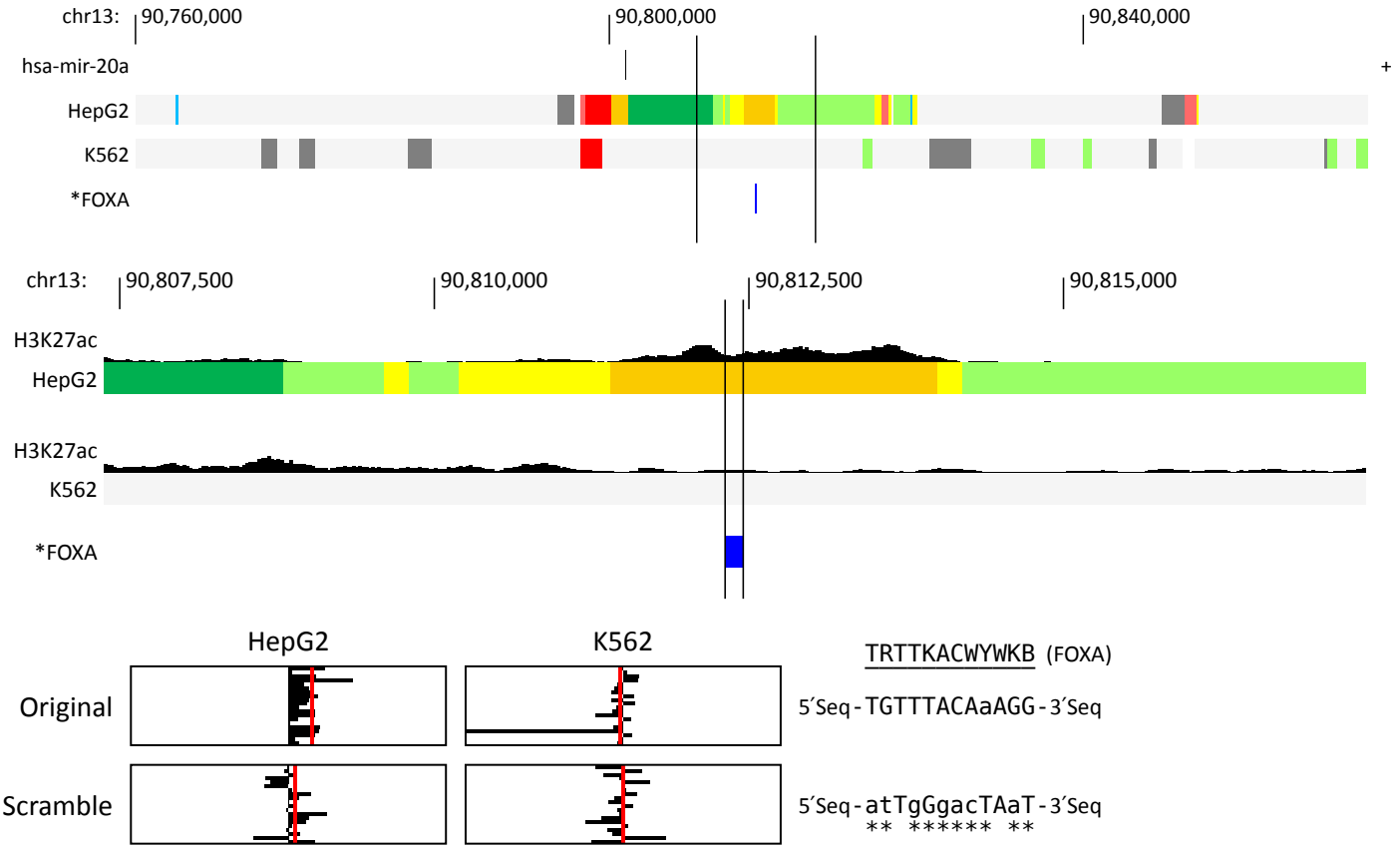
405 FOXA in HepG2 enhancer

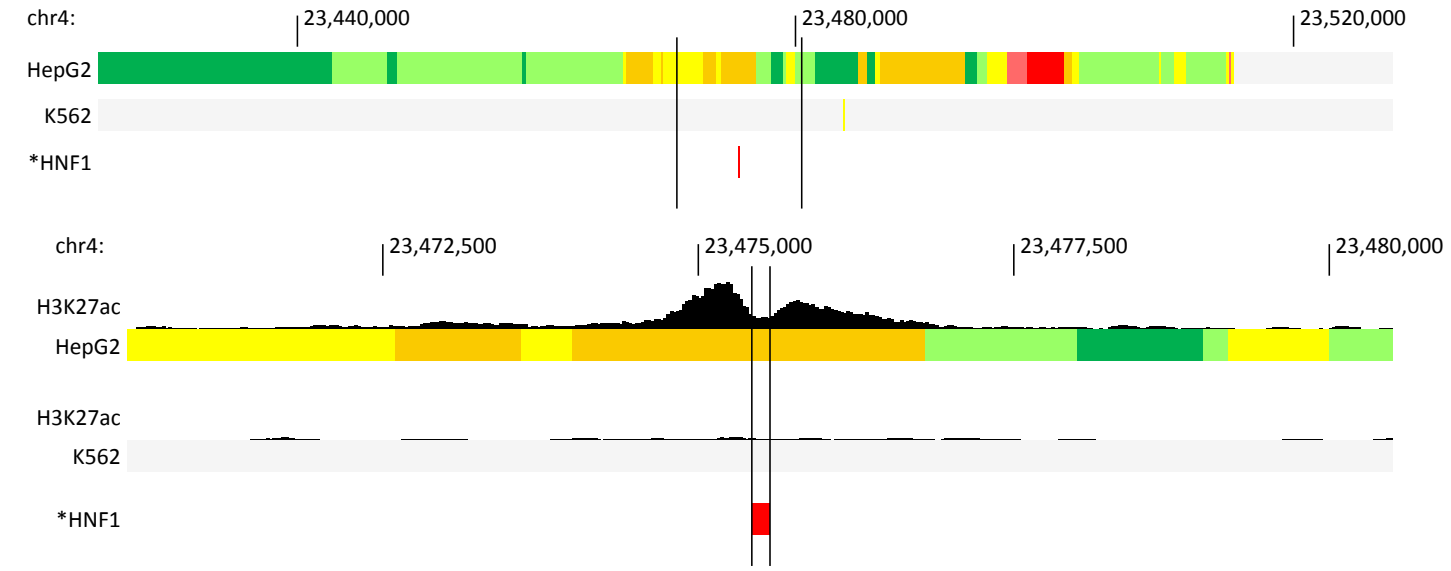
chr13 90812378 90812389 + (hg18)

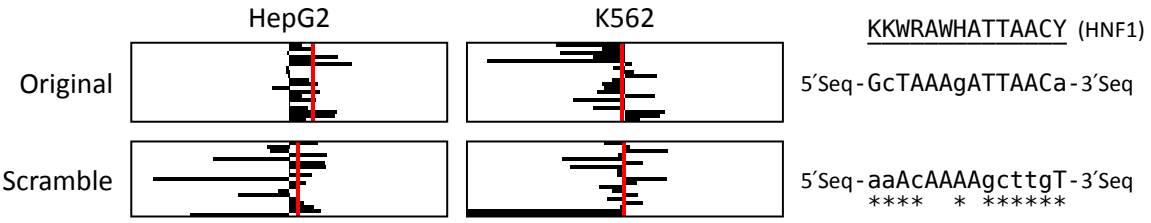


5′Seq = aacaaaatgctttcaaaatgttccacttttgaaactgtttgagtcttttatgttgactcaatgactt
3′Seq = gaaactgaagtggagttaagcaattatctggcaaatttgatcactgtacacaatcacagggaatac

406 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr4 23475490 23475503 + (hg18)





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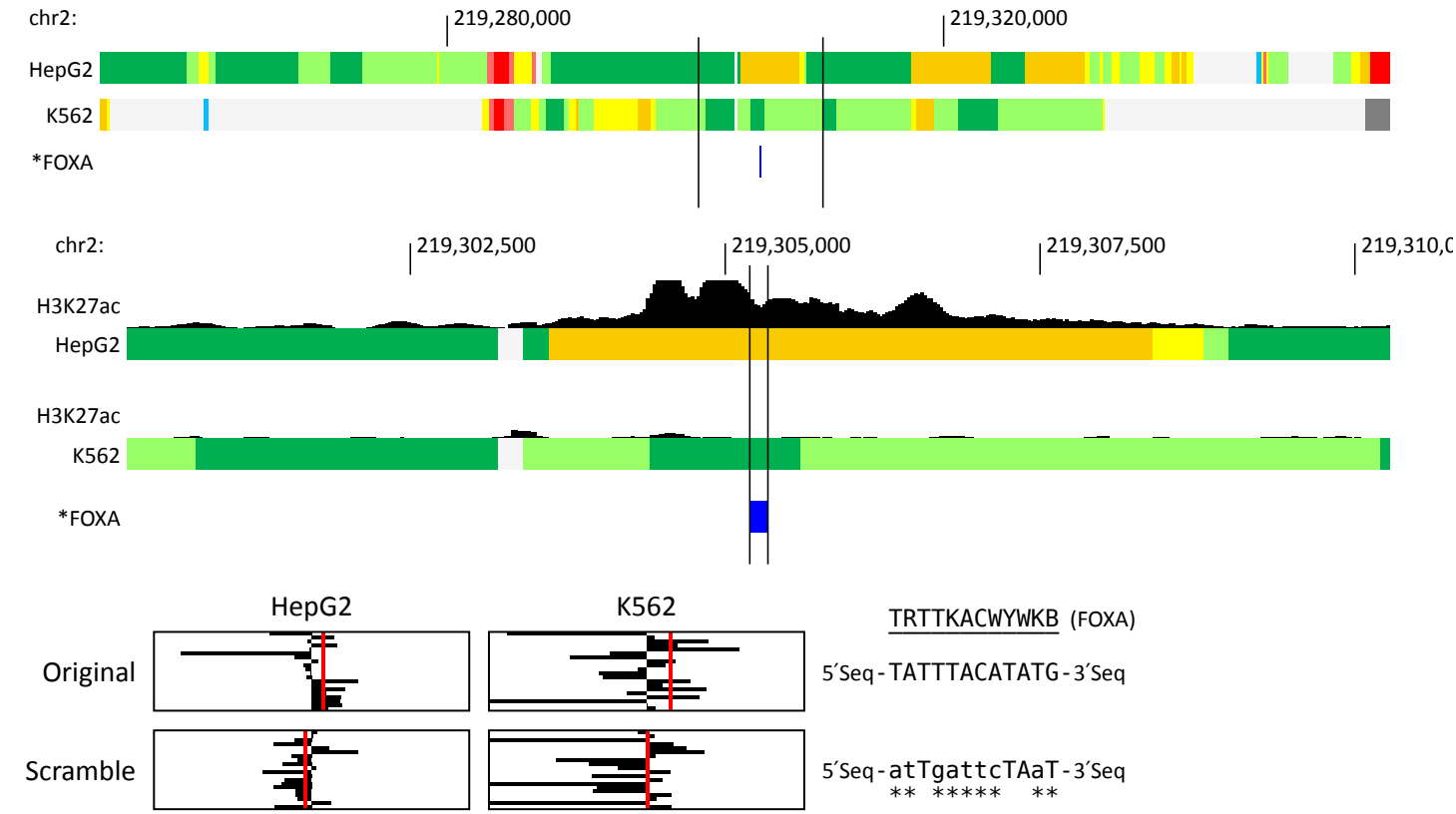
407 FOXA in HepG2 enhancer

chr2 219305262 219305273 - (hg18)



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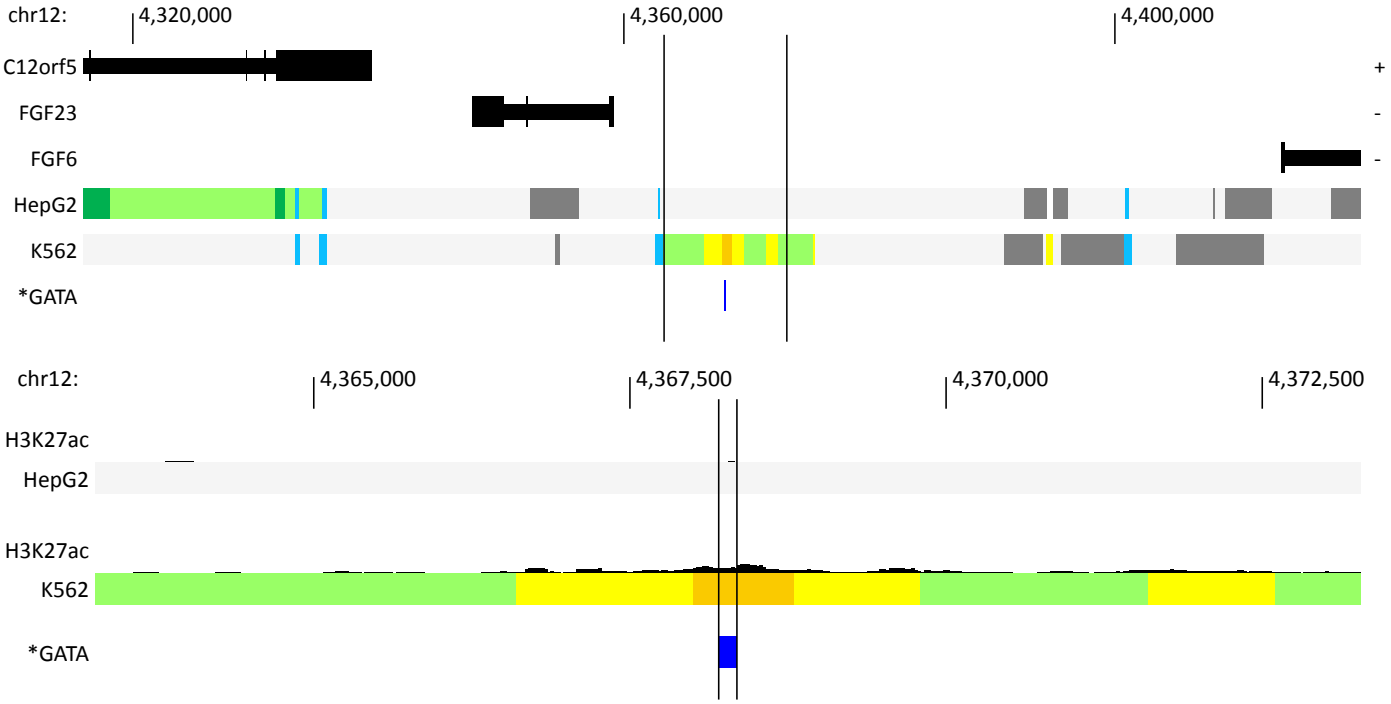
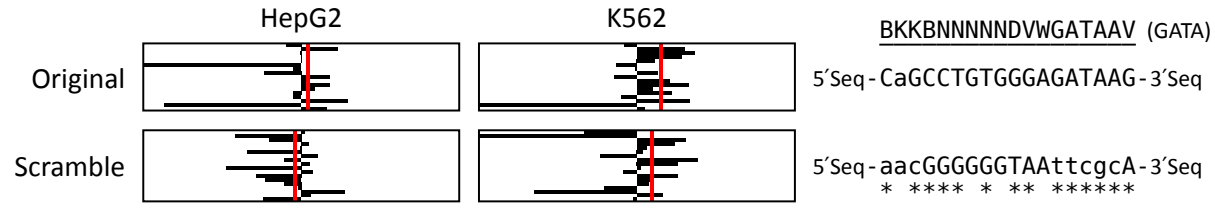
408 GATA in K562 enhancer

chr12 4368266 4368283 + (hg18)

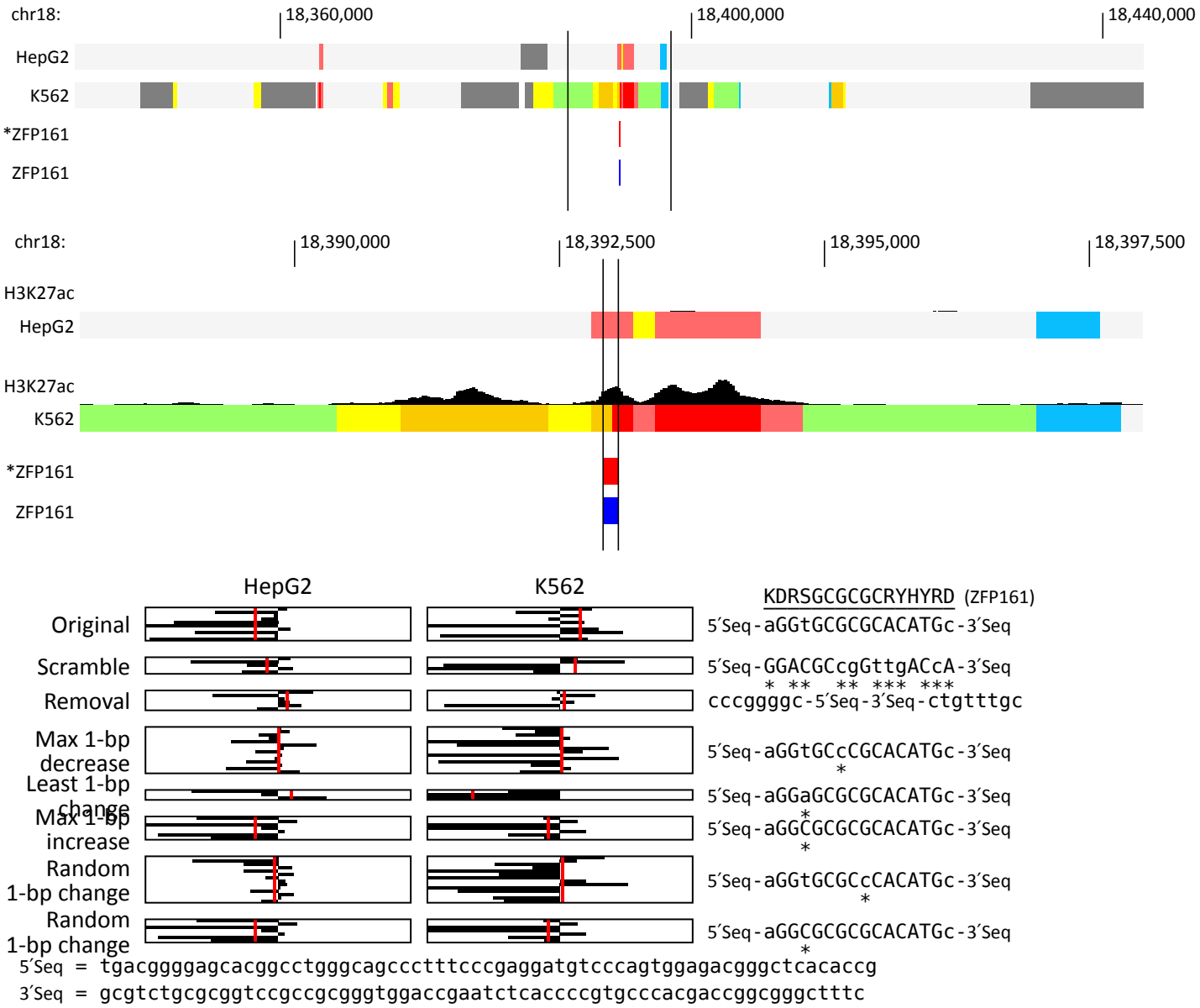




5′Seq = ccccctcctcttttccgccaacacactctttttcctggaaaccctctcctggcctccactgcta
3′Seq = acatgtgtcccacgggtgggggaggccaagcctgtgtgagtgattttacaaaaggttcacttt

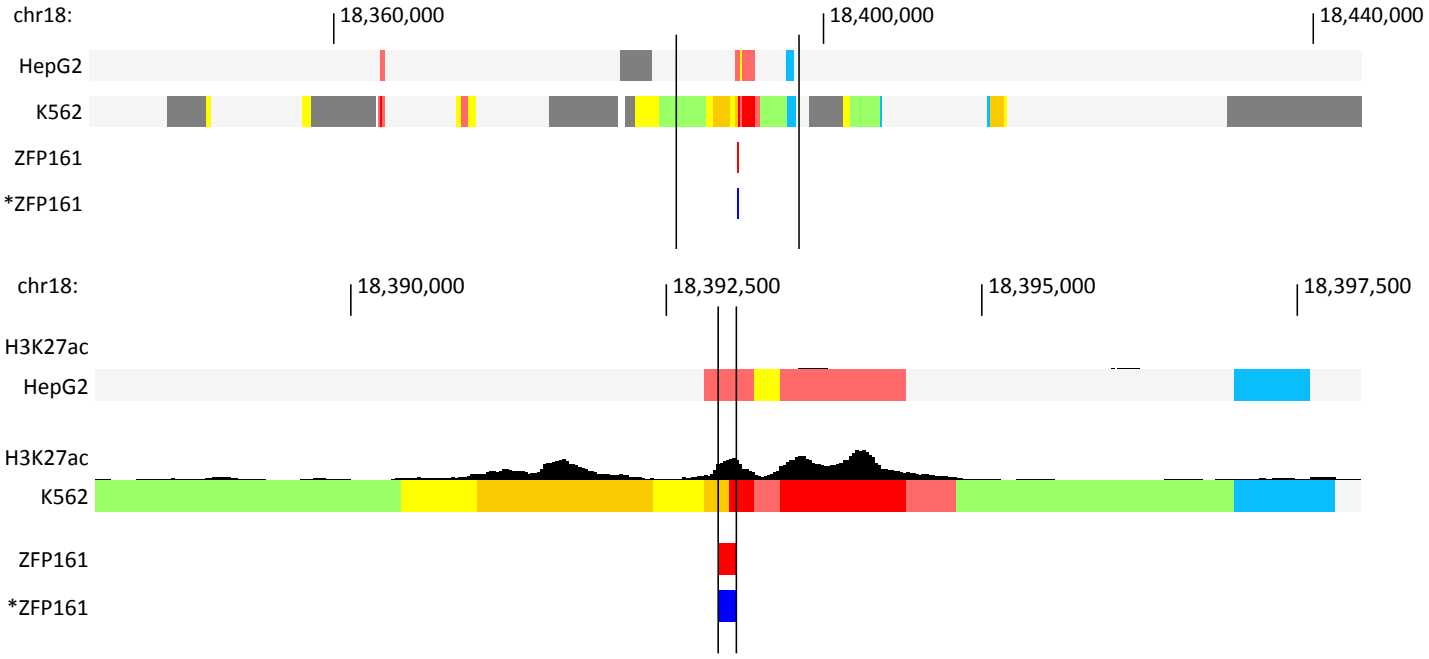
409 ZFP161 in K562 enhancer (conserved at 50% confidence)

chr18 18392976 18392991 + (hg18)



410 ZFP161 in K562 enhancer

chr18 18392976 18392991 + (hg18)



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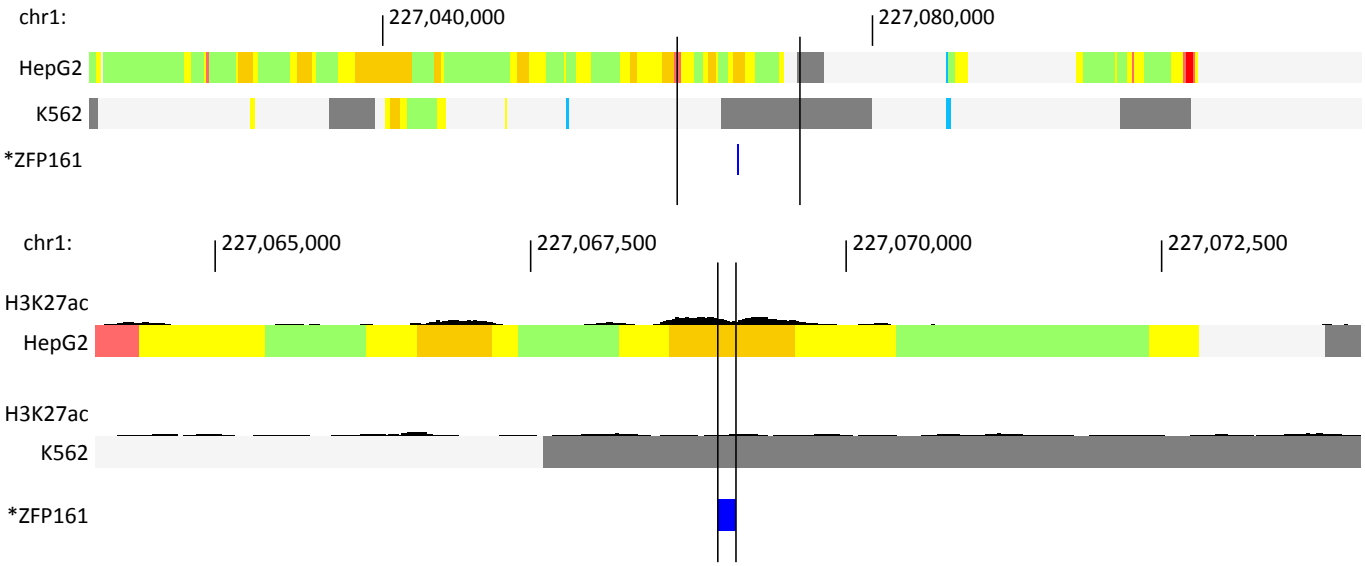
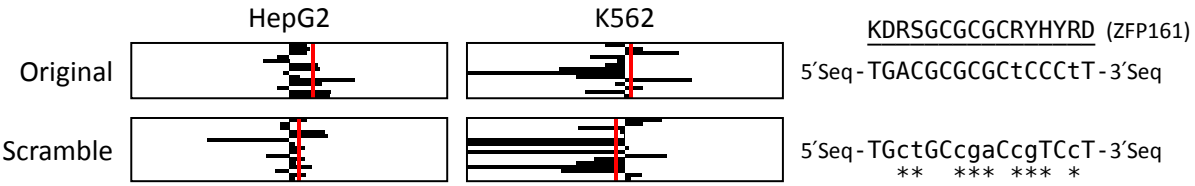
411 ZFP161 in HepG2 enhancer

chr1 227069048 227069063 + (hg18)





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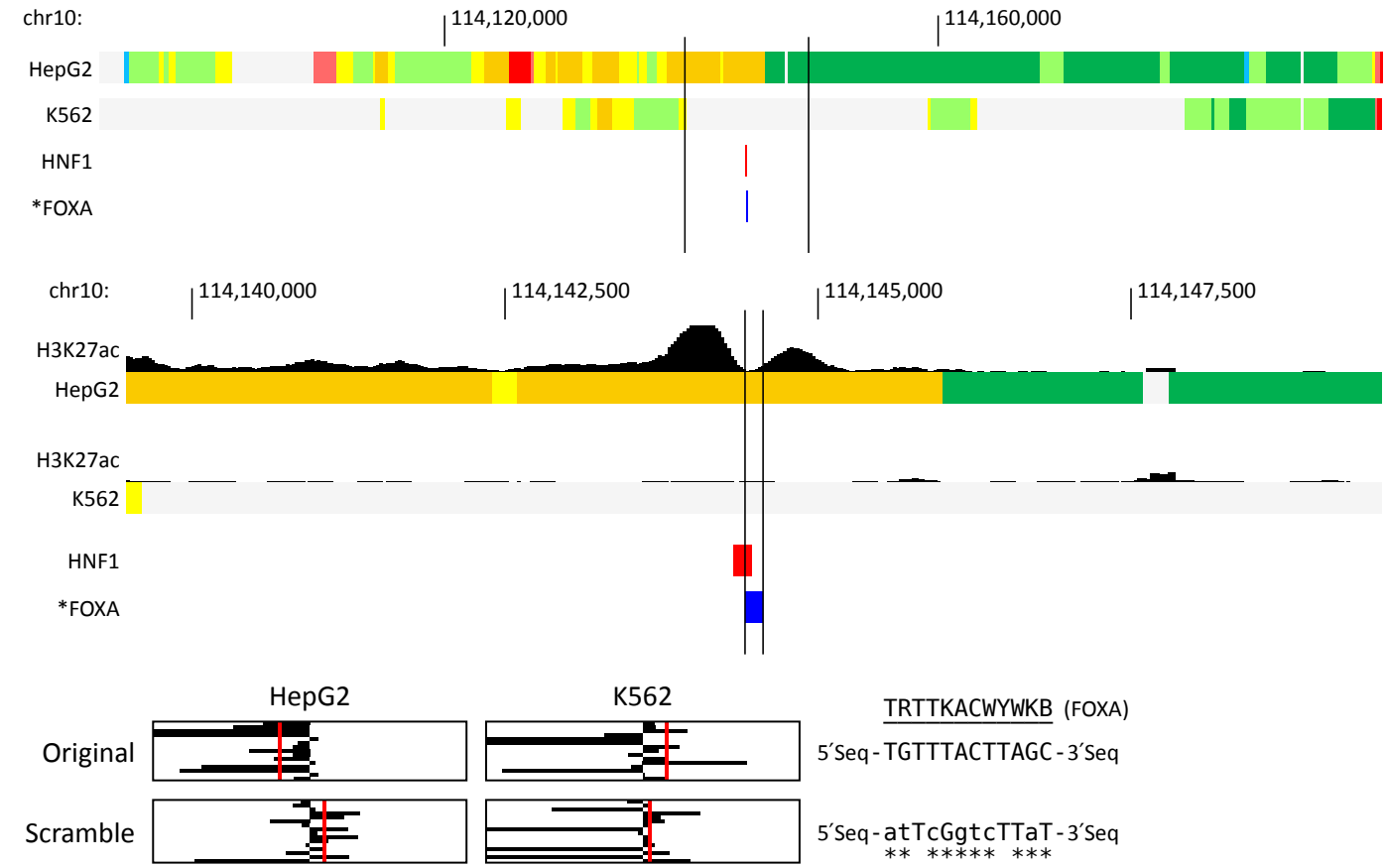
412 FOXA in HepG2 enhancer

chr10 114144484 114144495 - (hg18)



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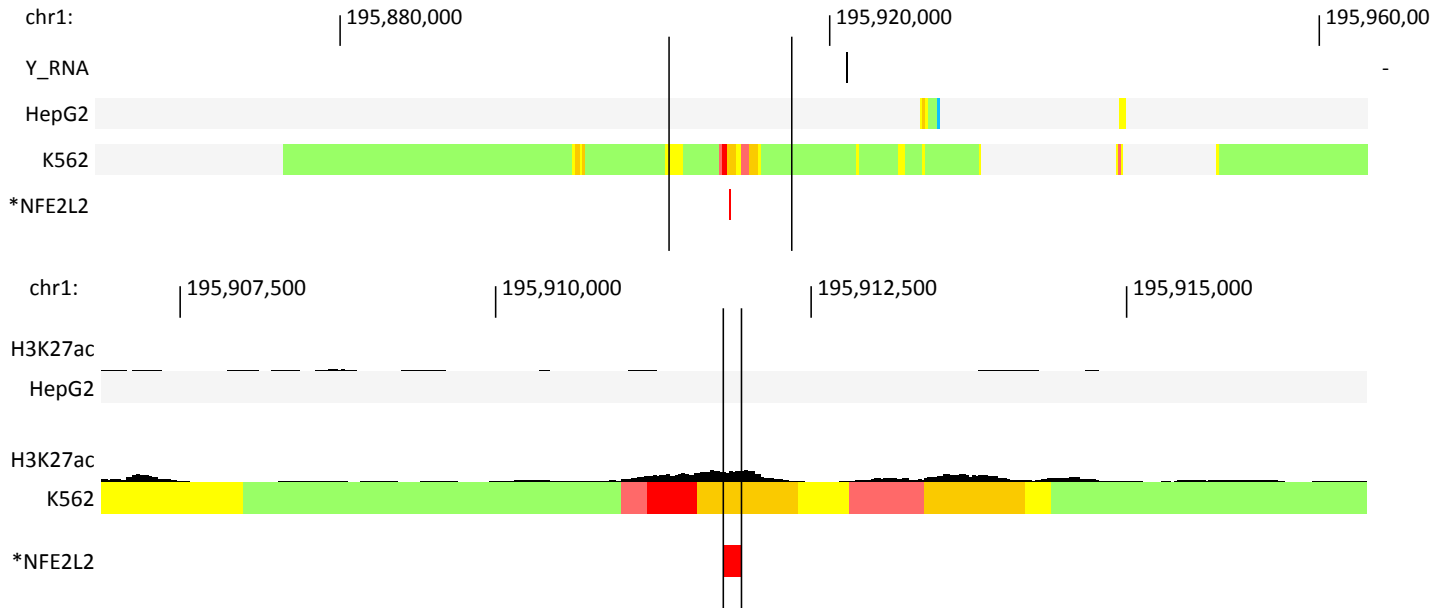
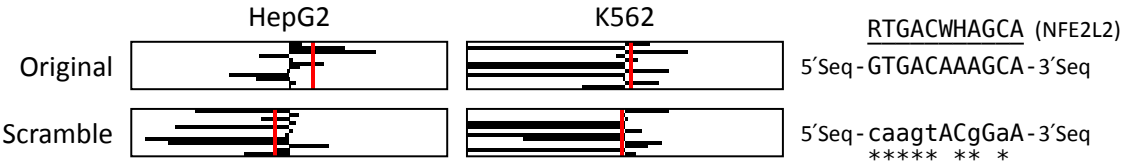
413 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 195911871 195911881 + (hg18)





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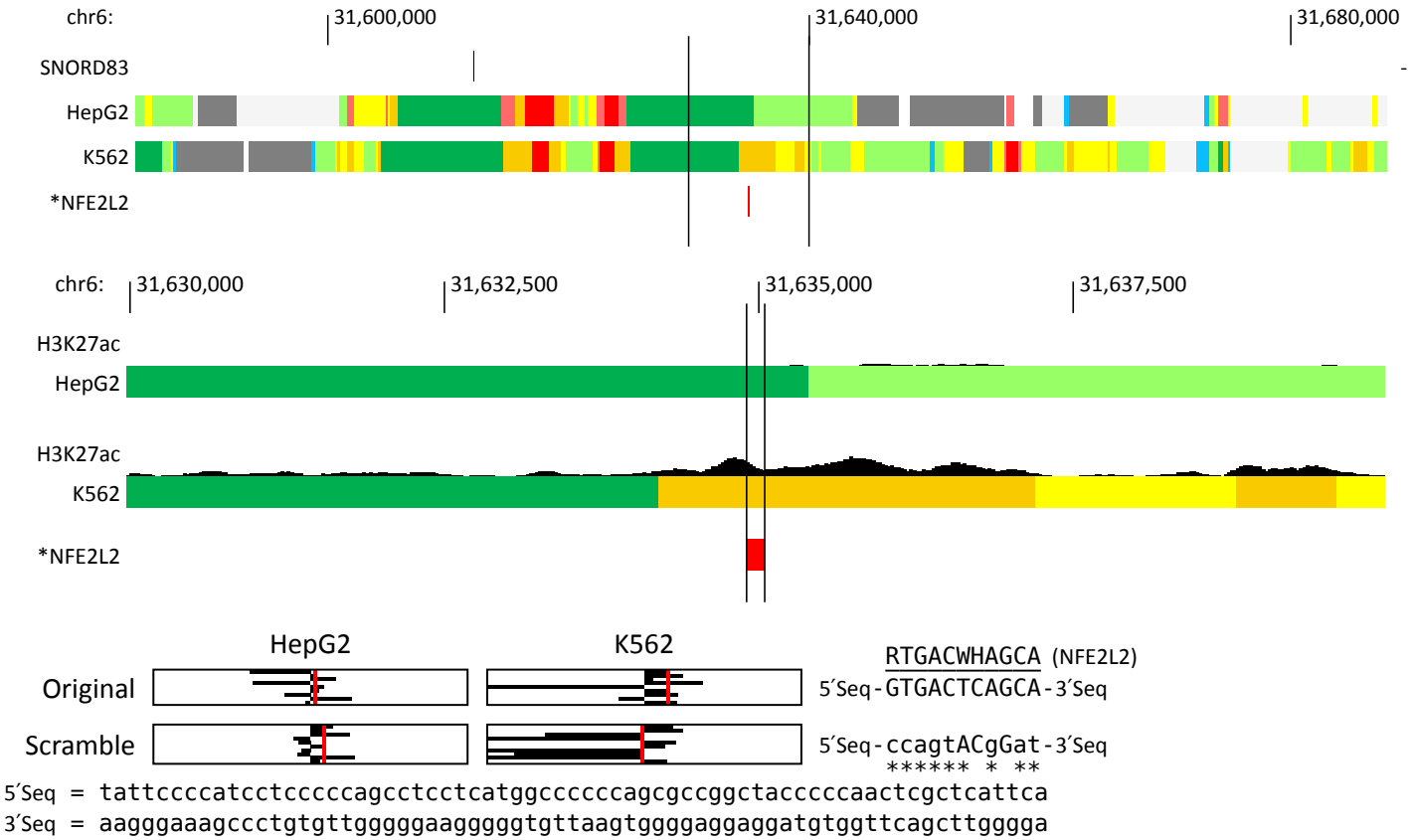
414 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 31634970 31634980 - (hg18)



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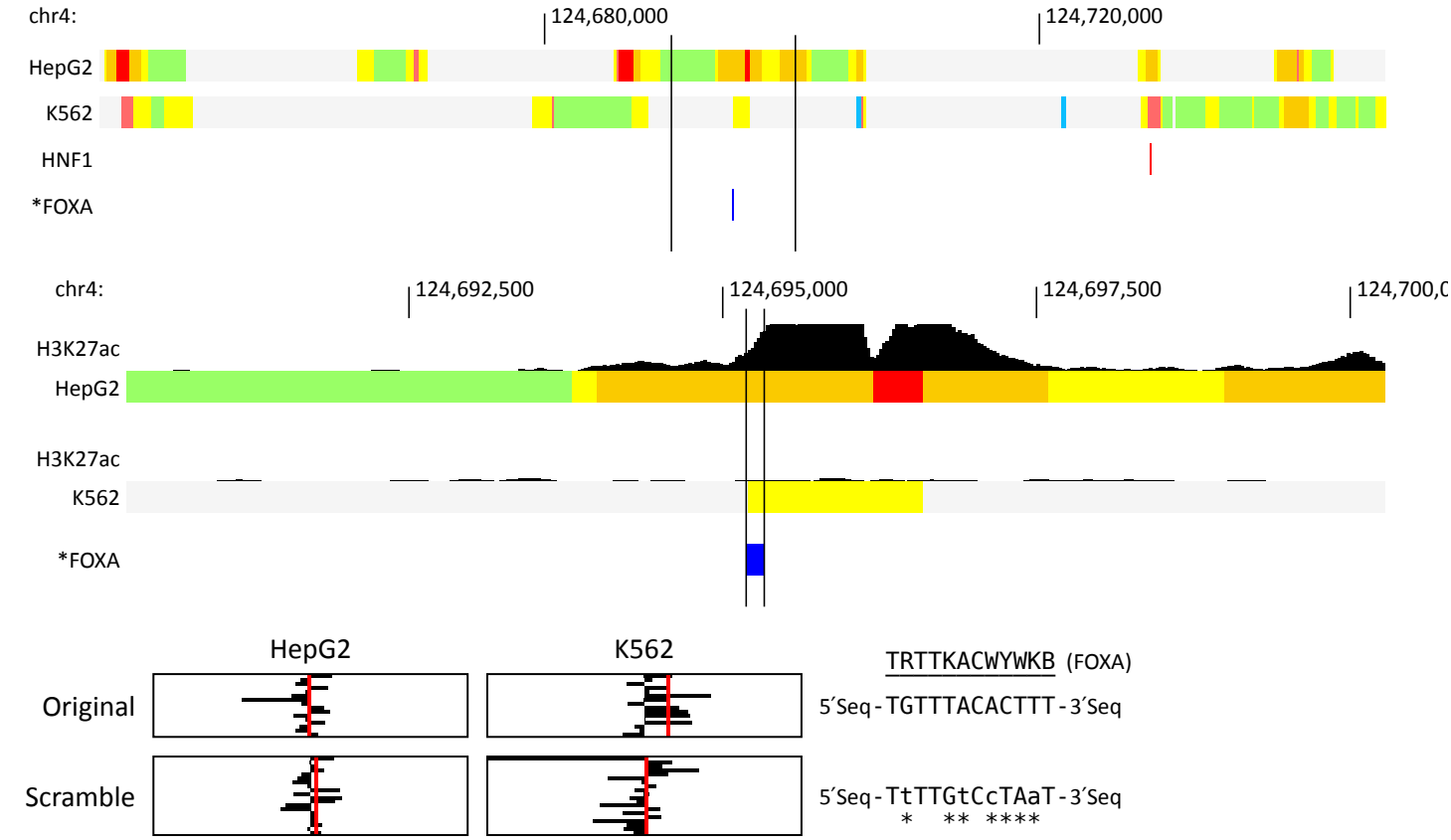
415 FOXA in HepG2 enhancer

chr4 124695254 124695265 + (hg18)



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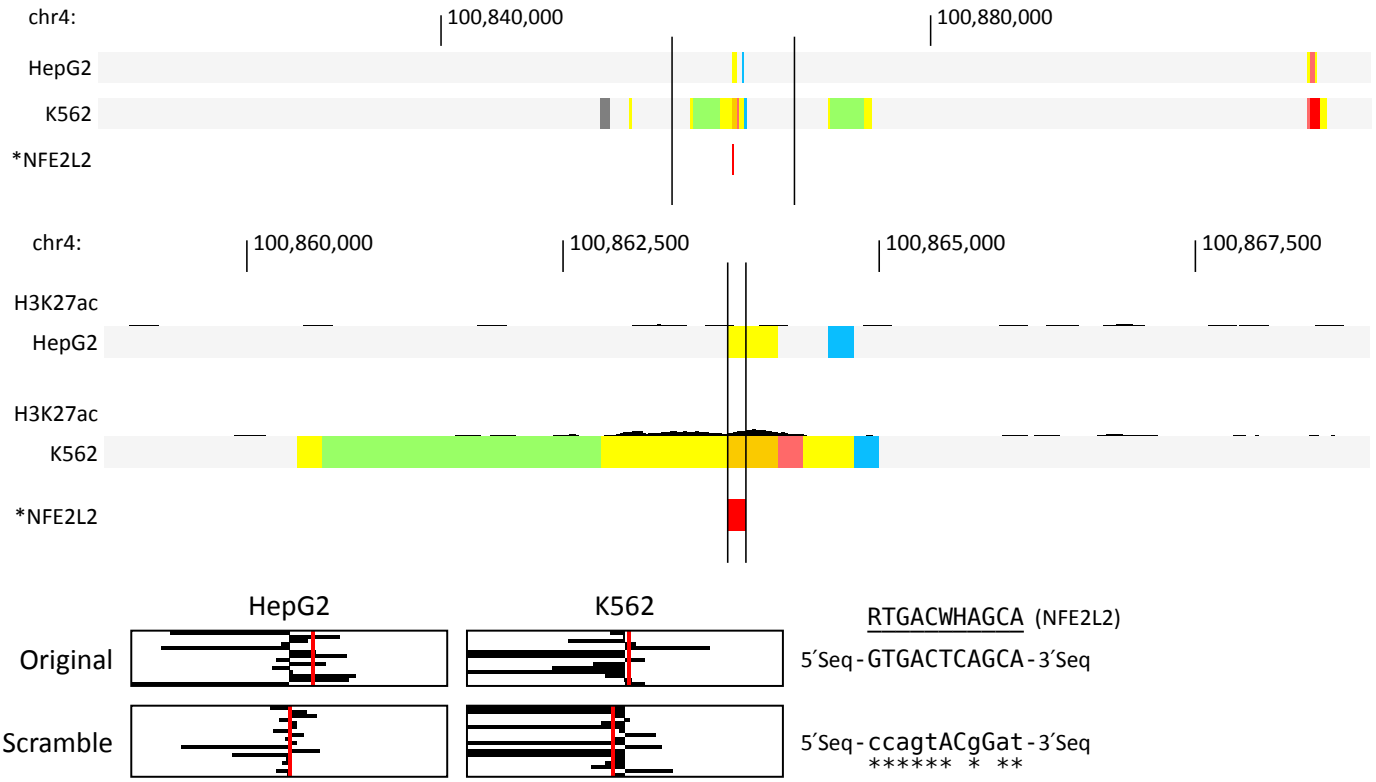
416 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr4 100863869 100863879 + (hg18)



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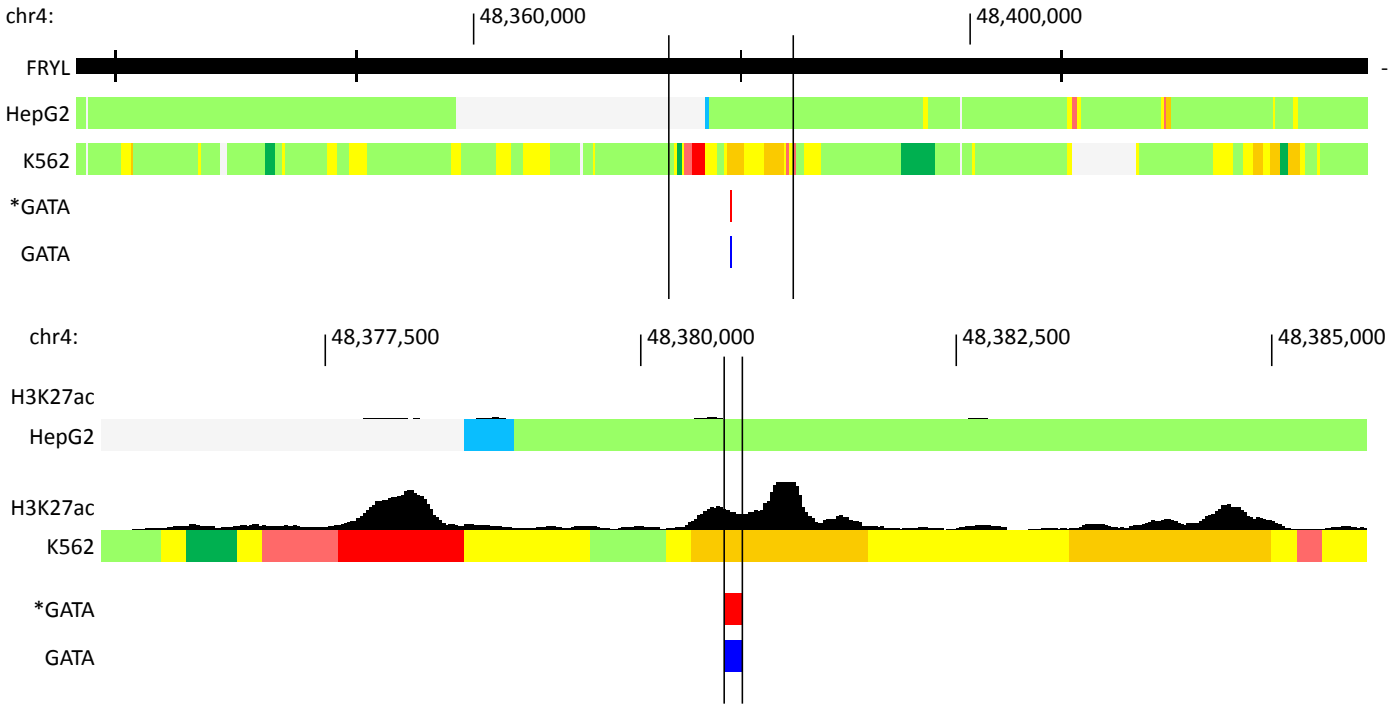
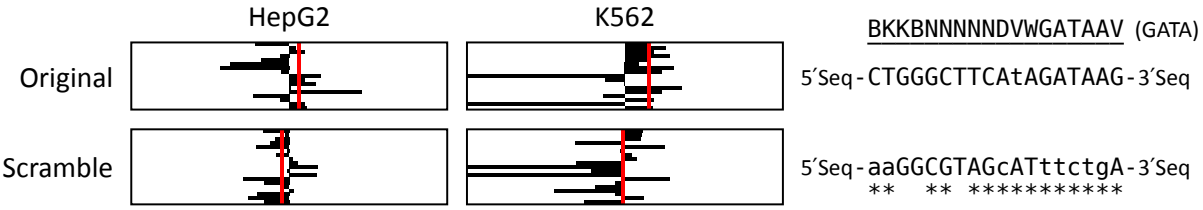
417 GATA in K562 enhancer (conserved at 60% confidence)

chr4 48380725 48380742 - (hg18)





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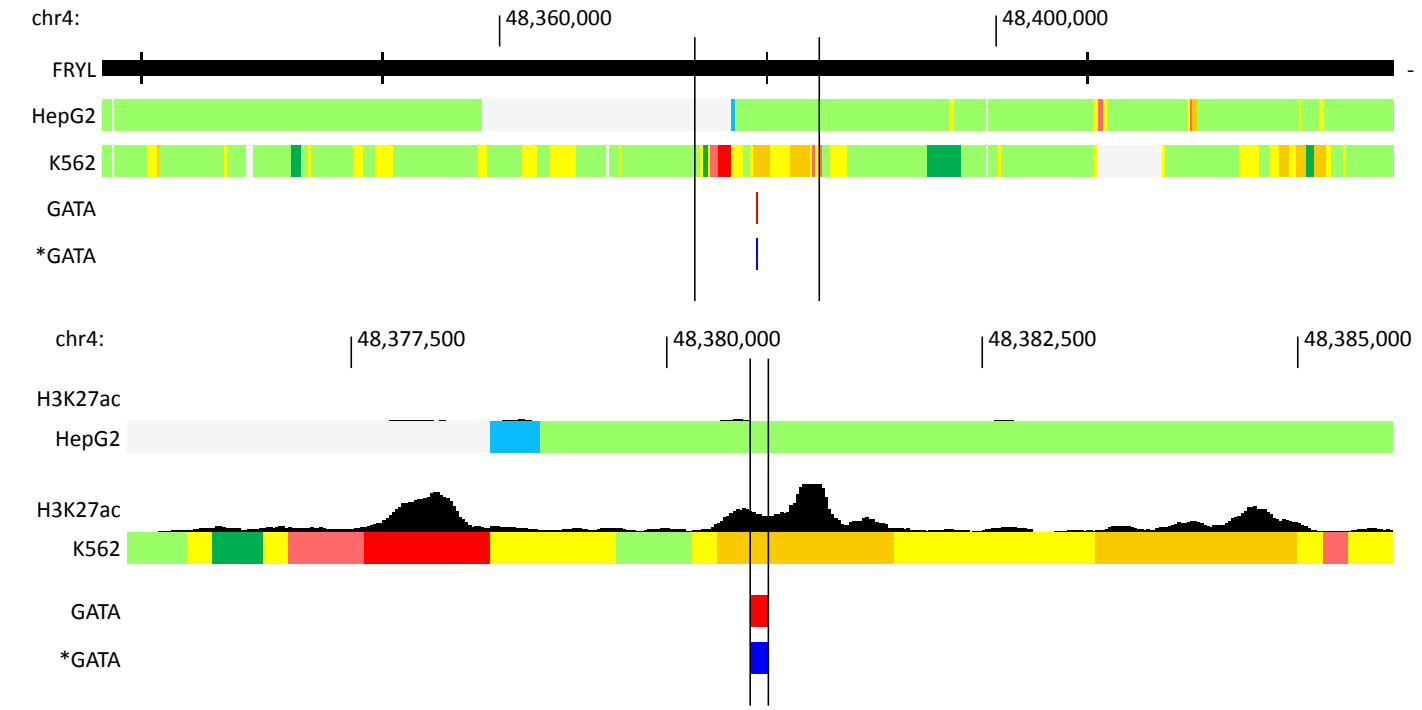
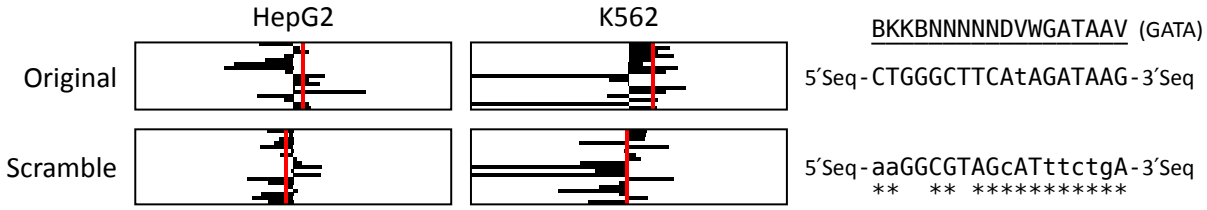
418 GATA in K562 enhancer

chr4 48380725 48380742 - (hg18)





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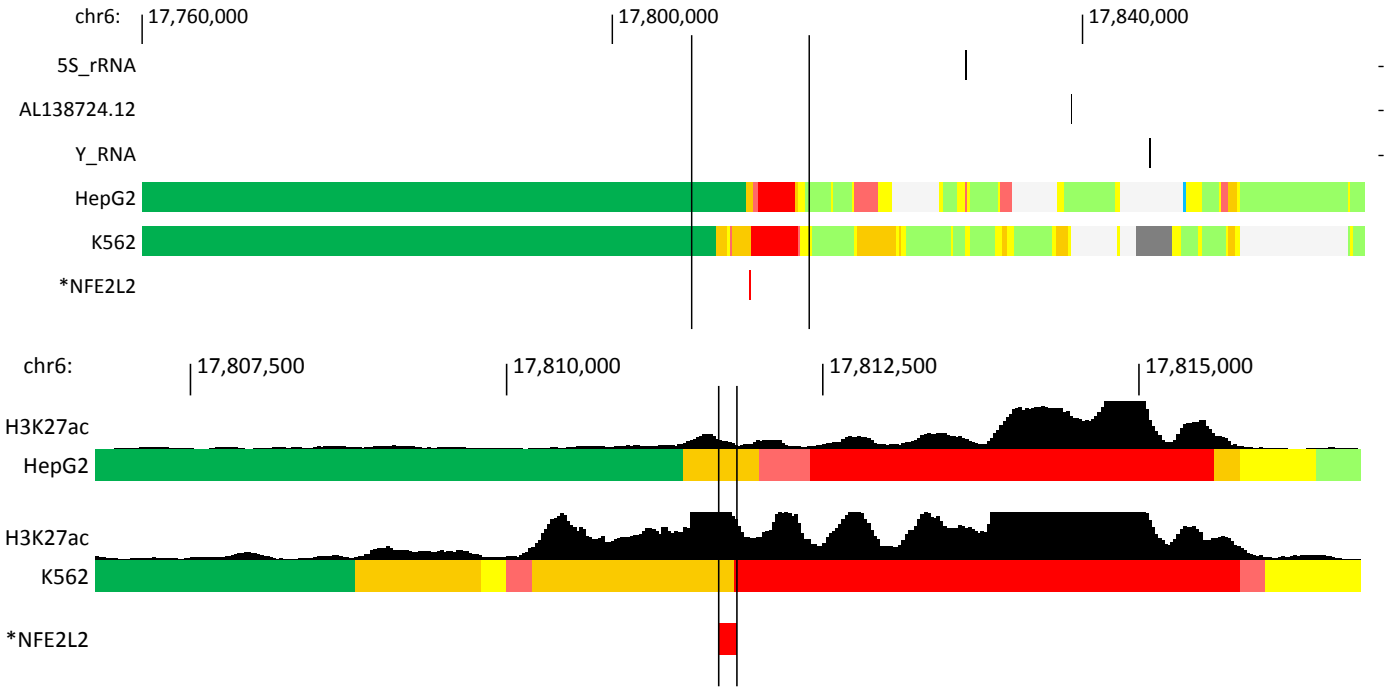
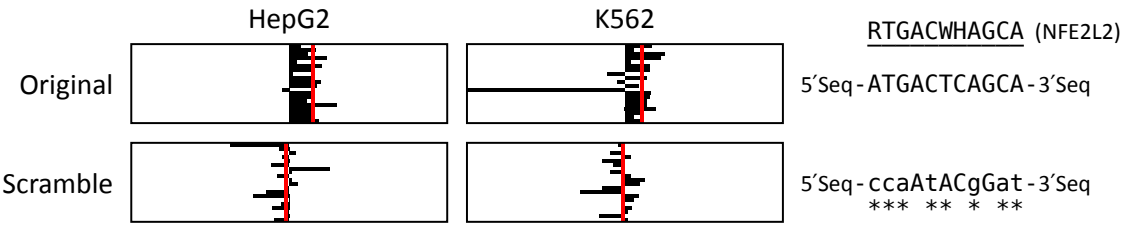
419 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 17811744 17811754 + (hg18)





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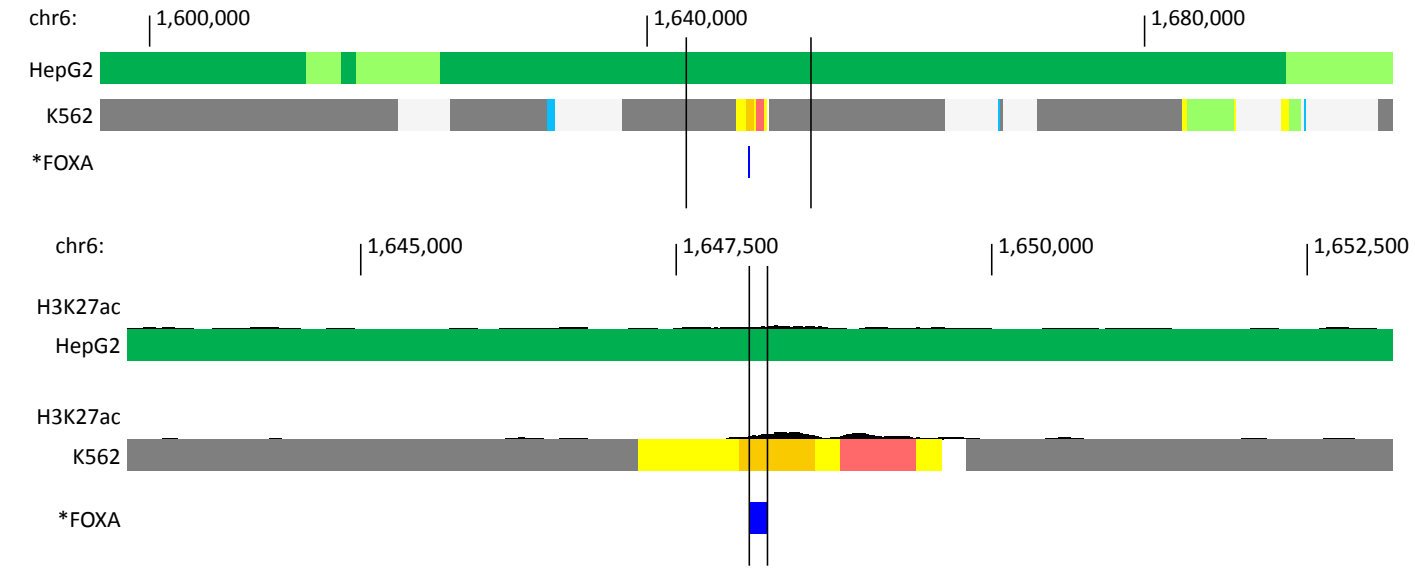
420 FOXA in K562 enhancer

chr6 1648146 1648157 + (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTGACTTATG-3′Seq

5′Seq-atTgGttcgTaT-3′Seq

** * *******

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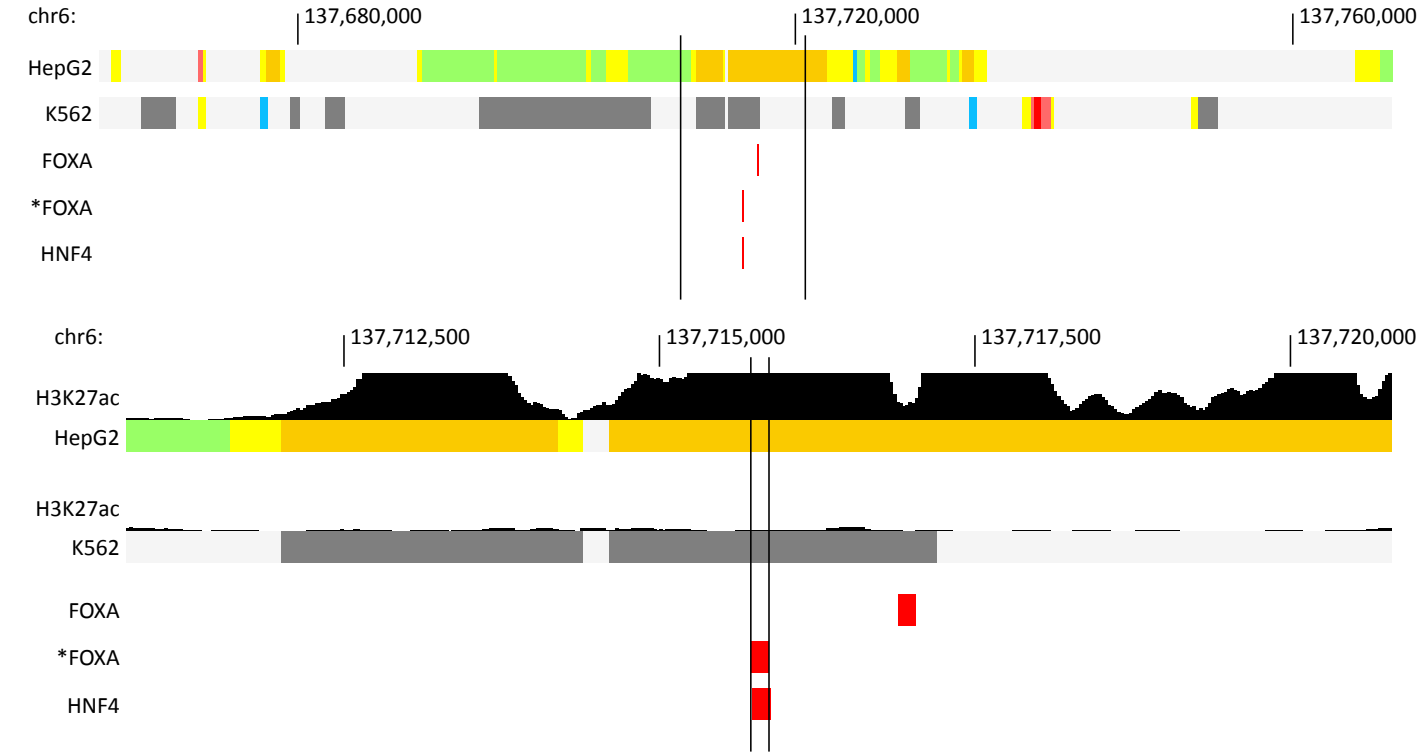
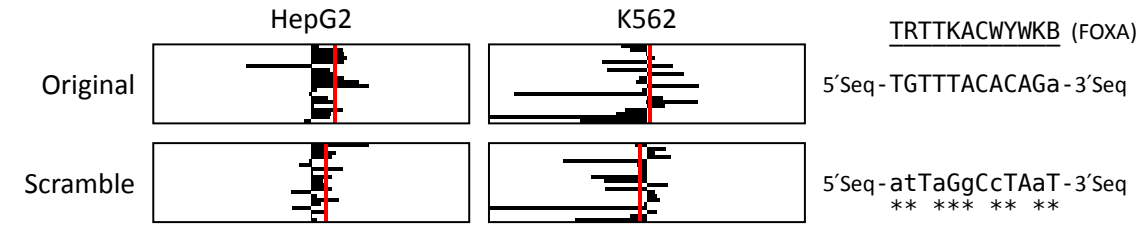
421 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr6 137715791 137715802 - (hg18)





TRTTKACWYWKB (FOXA)

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5′Seq-atTaGgCcTAaT-3′Seq

** *** ** **

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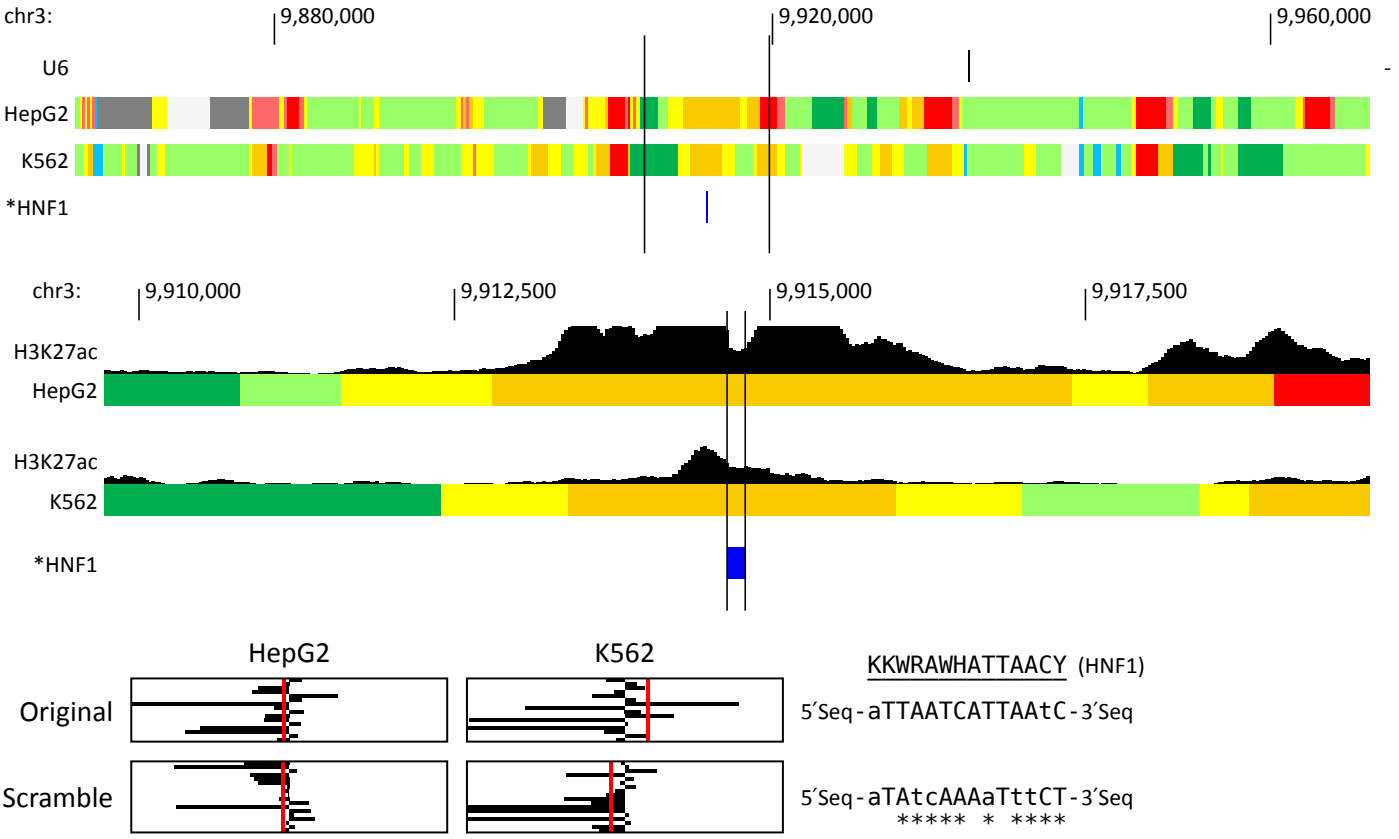
422 HNF1 in HepG2 enhancer

chr3 9914726 9914739 + (hg18)



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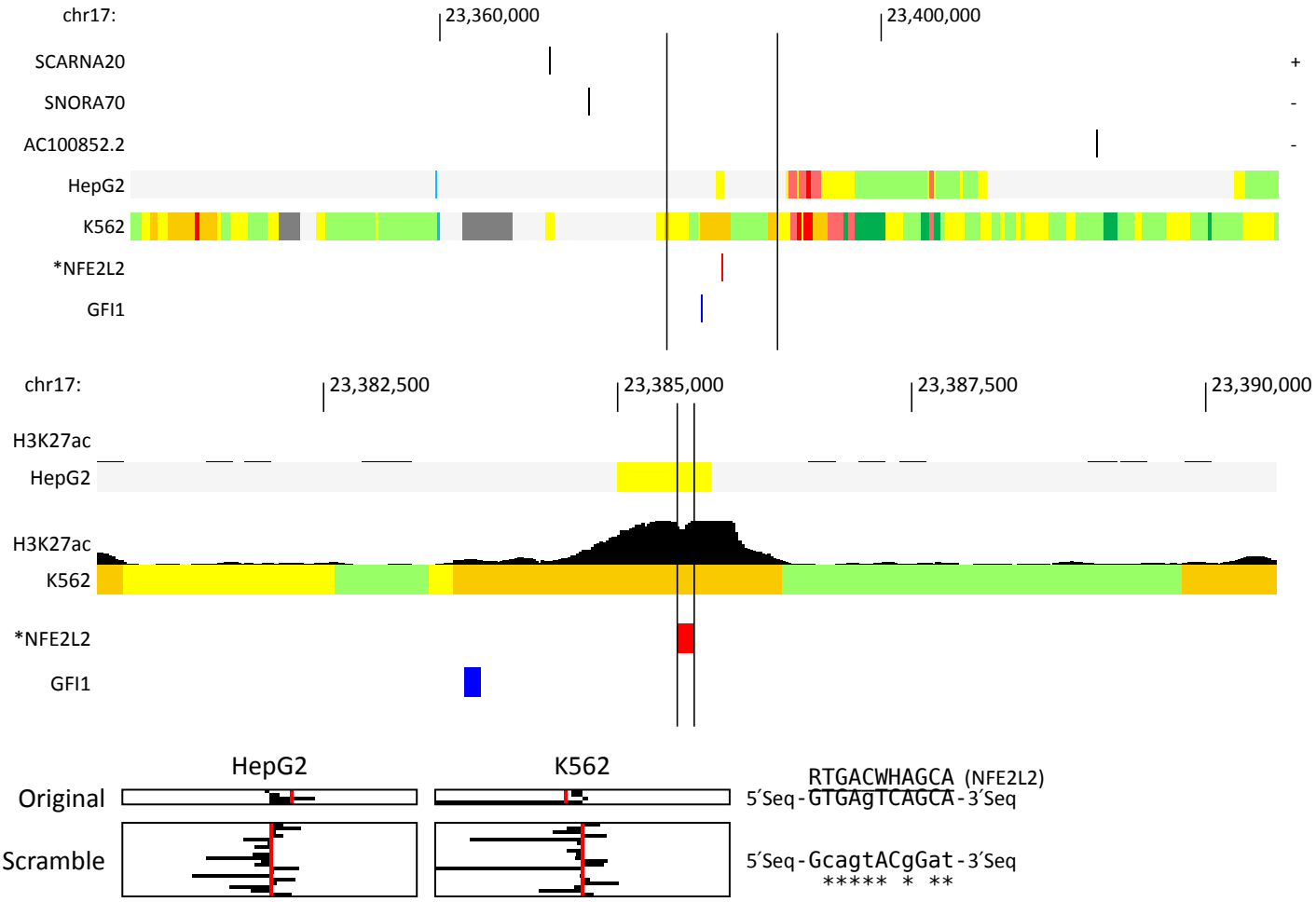
423 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr17 23385574 23385584 - (hg18)



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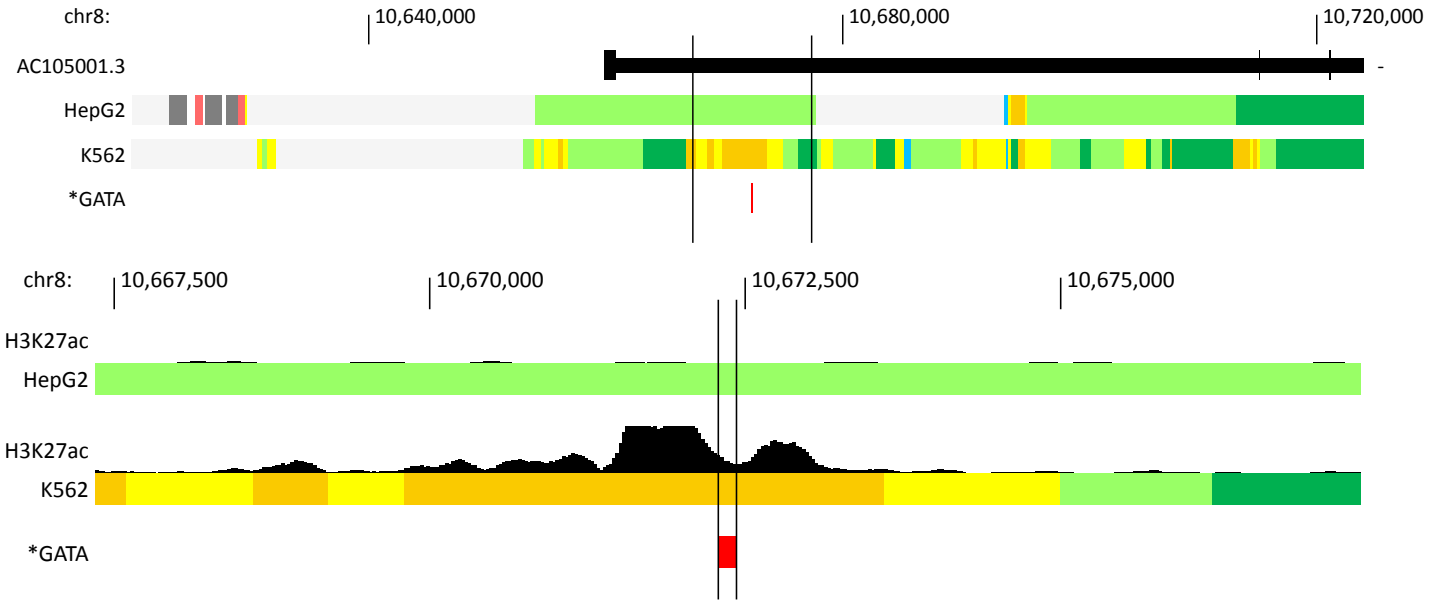
424 GATA in K562 enhancer (conserved at 60% confidence)

chr8 10672351 10672368 + (hg18)



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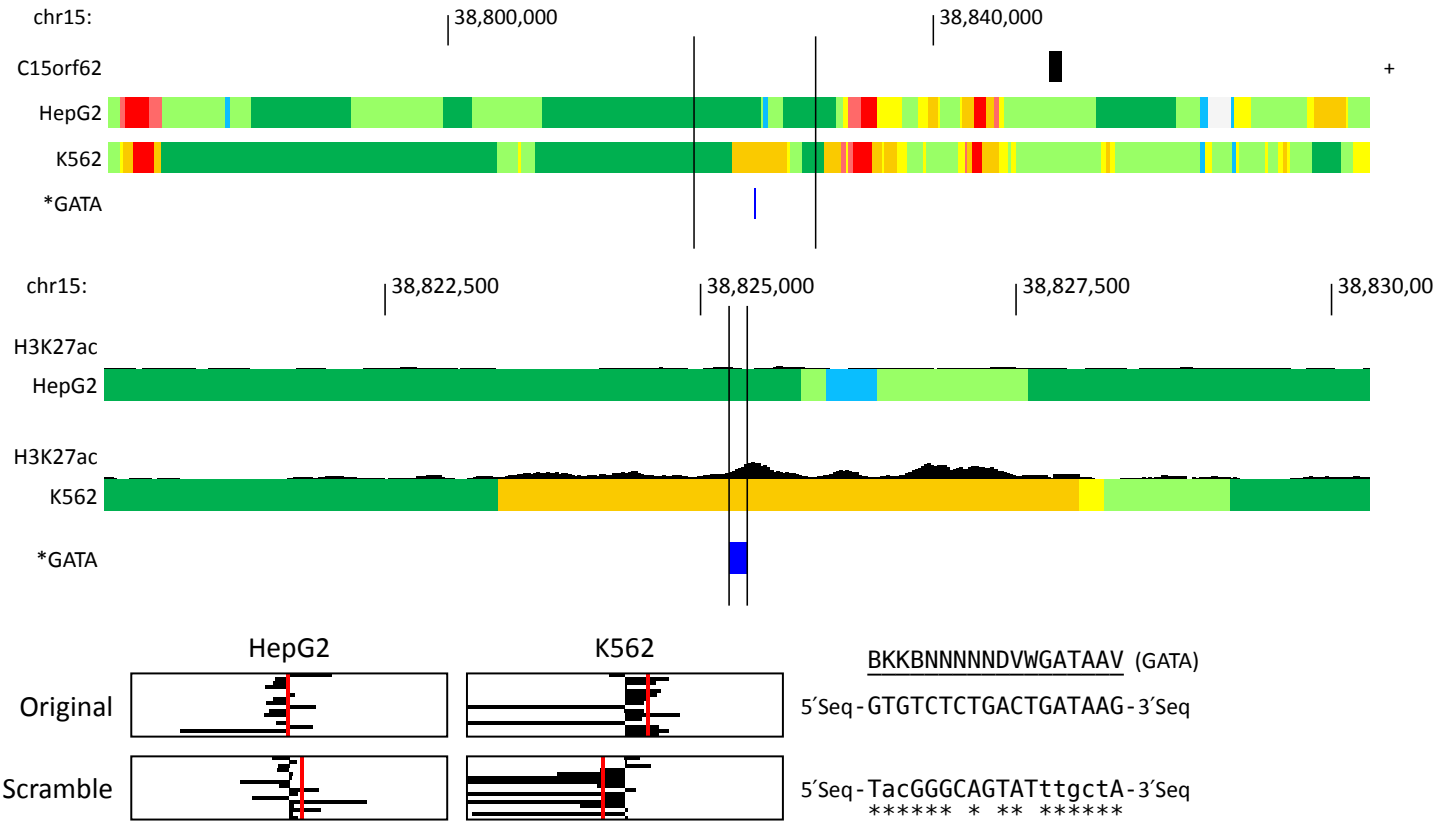
425 GATA in K562 enhancer

chr15 38825290 38825307 - (hg18)



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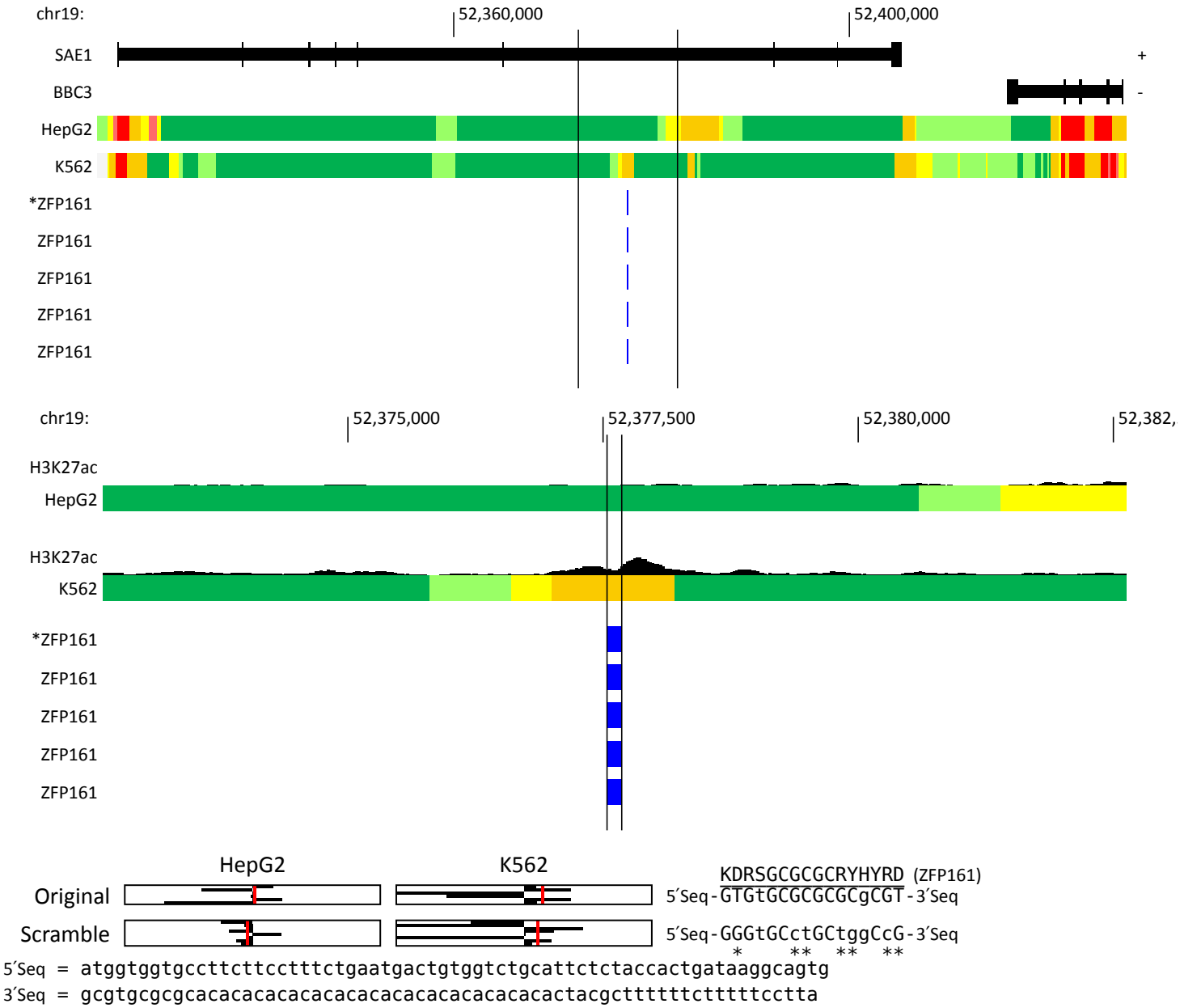
426 ZFP161 in K562 enhancer

chr19 52377604 52377619 - (hg18)



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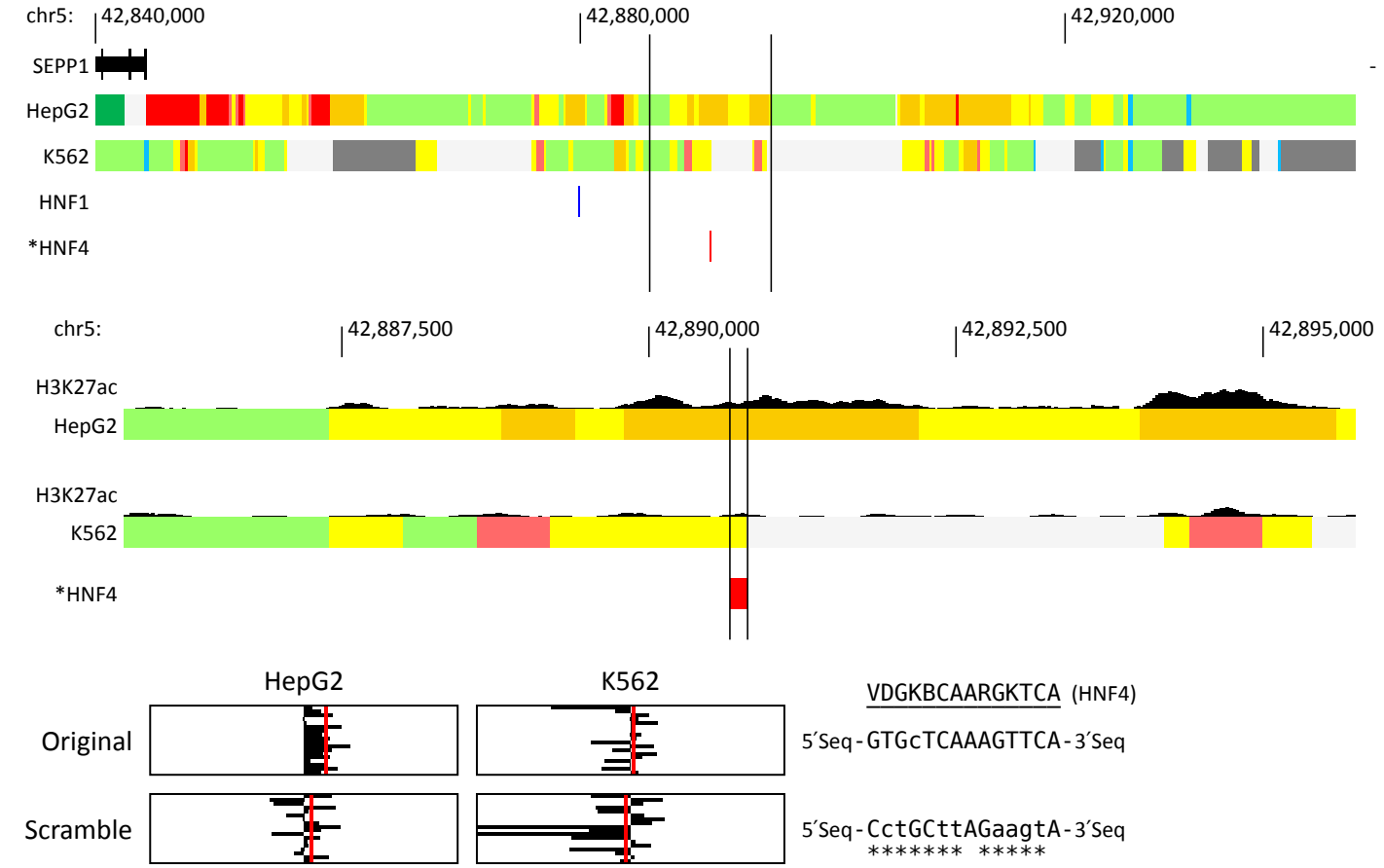
427 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr5 42890725 42890738 - (hg18)



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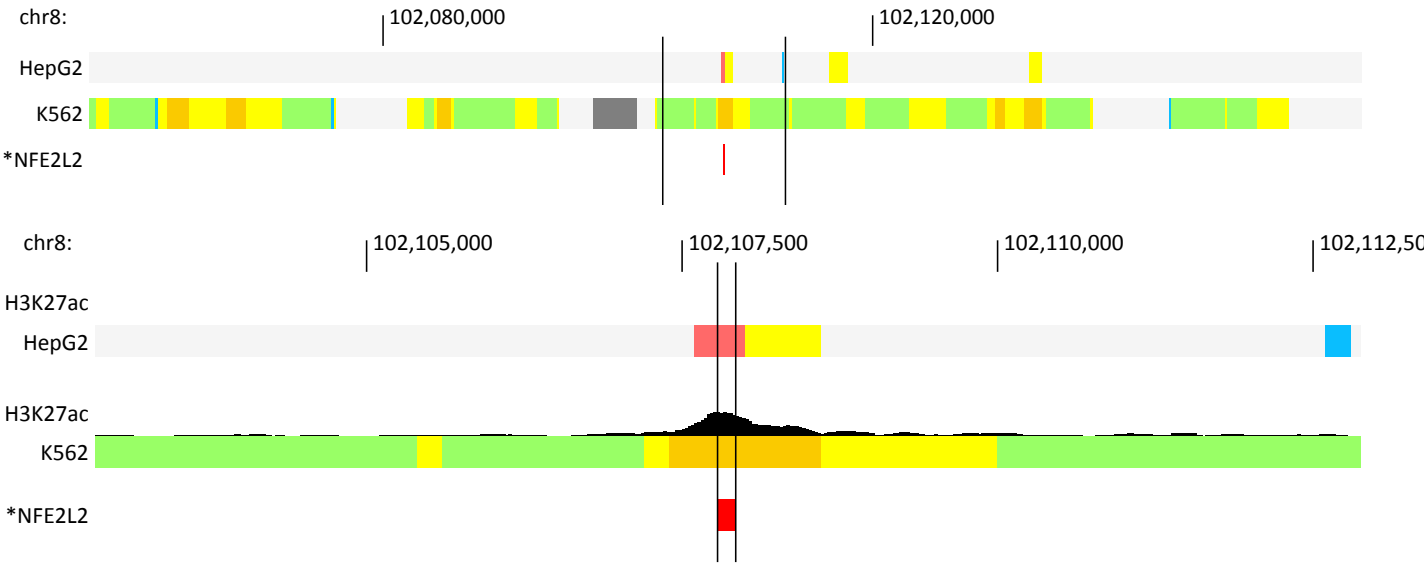
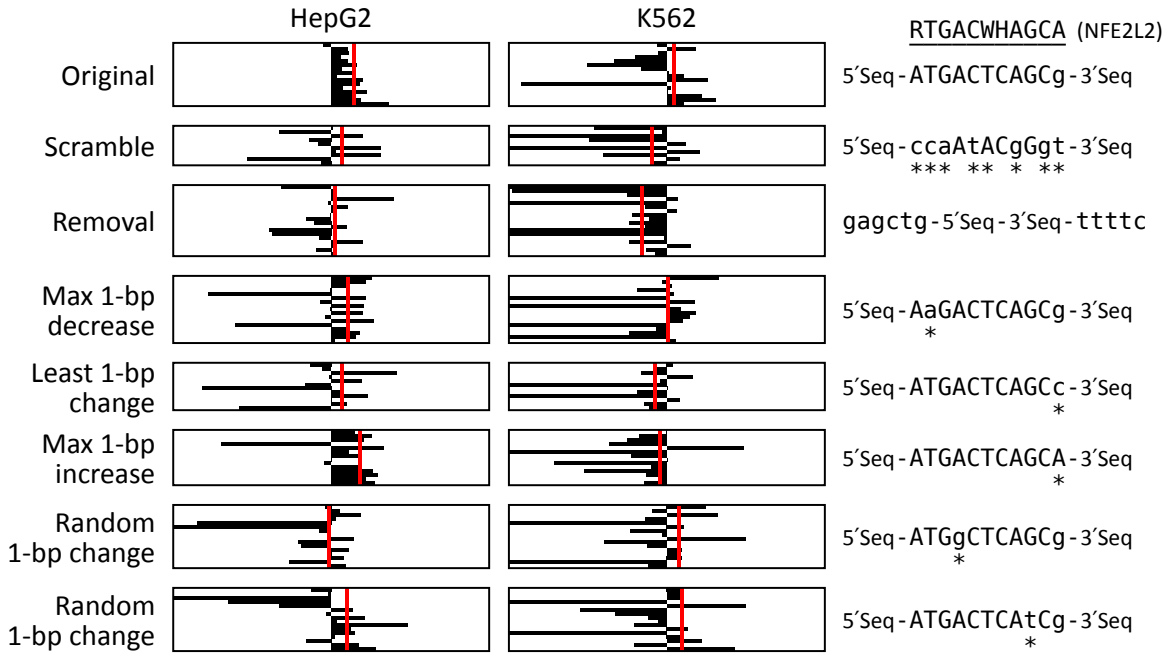
428 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 102107848 102107858 + (hg18)





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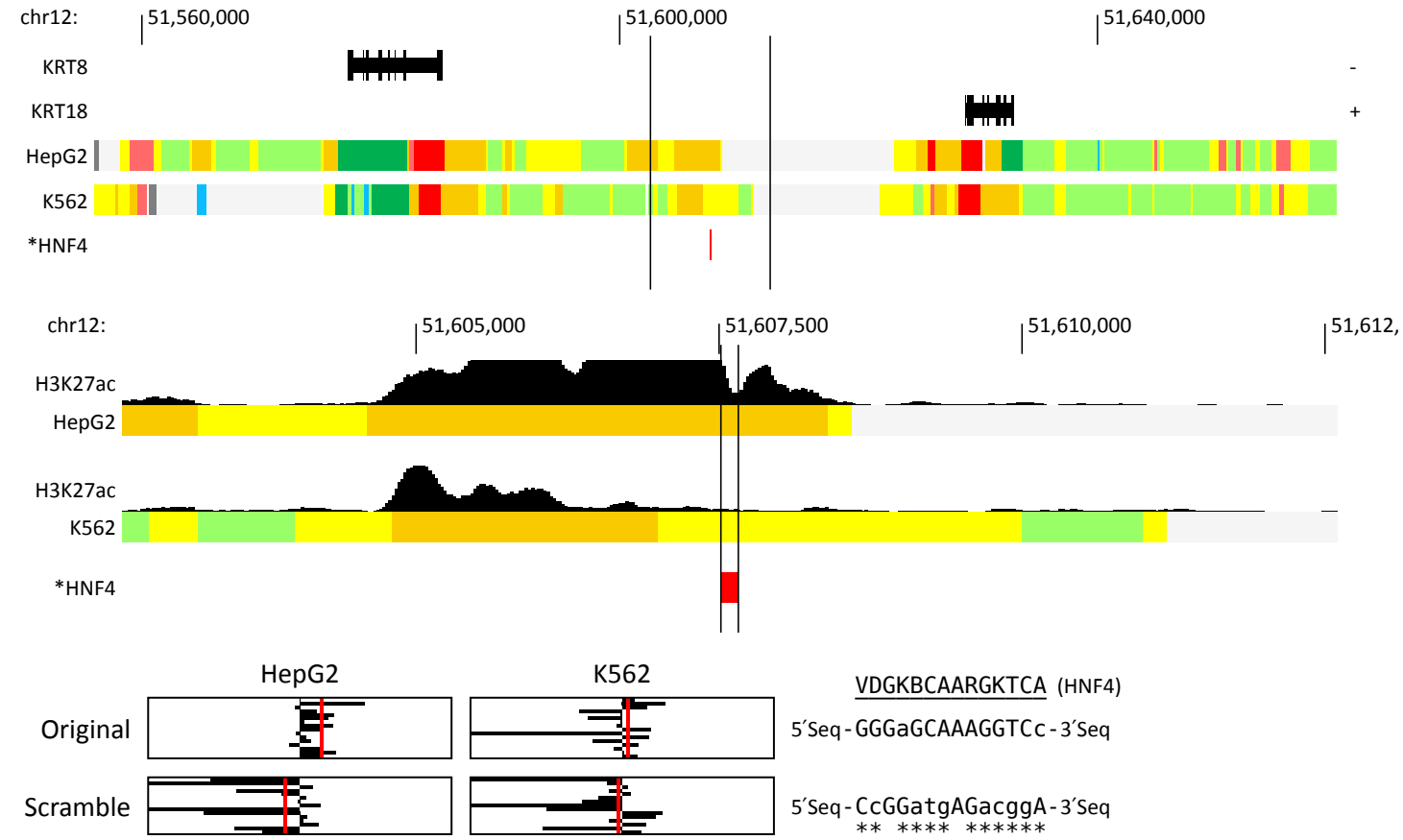
429 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 51607581 51607594 + (hg18)



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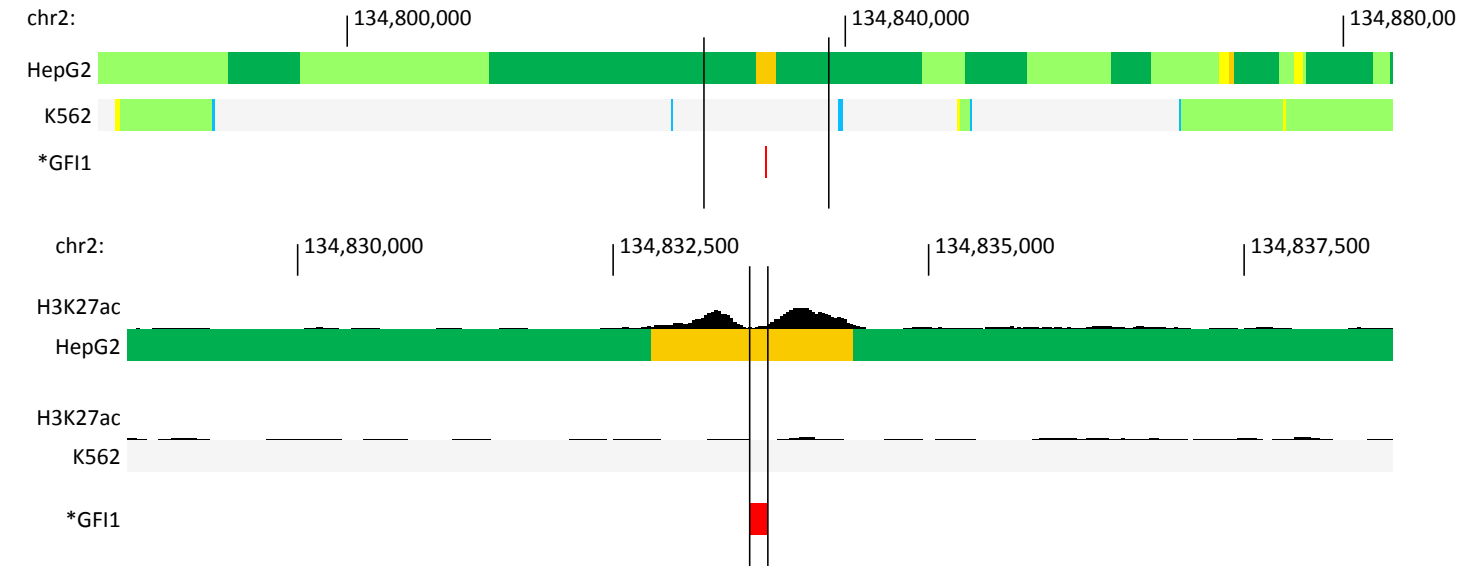
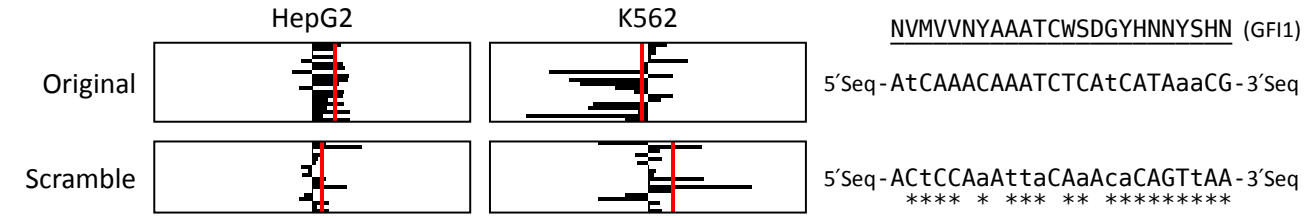
430 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 134833643 134833666 - (hg18)





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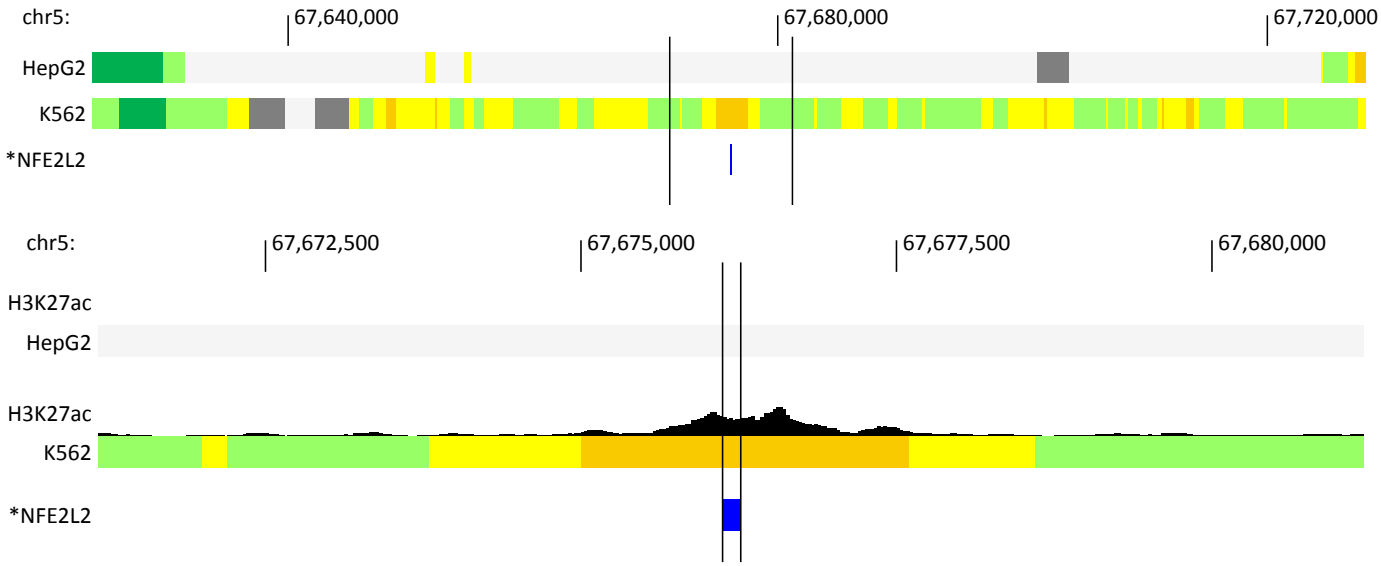
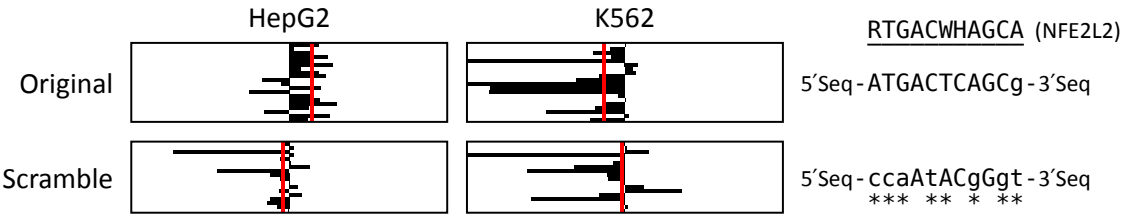
431 NFE2L2 in K562 enhancer

chr5 67676189 67676199 - (hg18)





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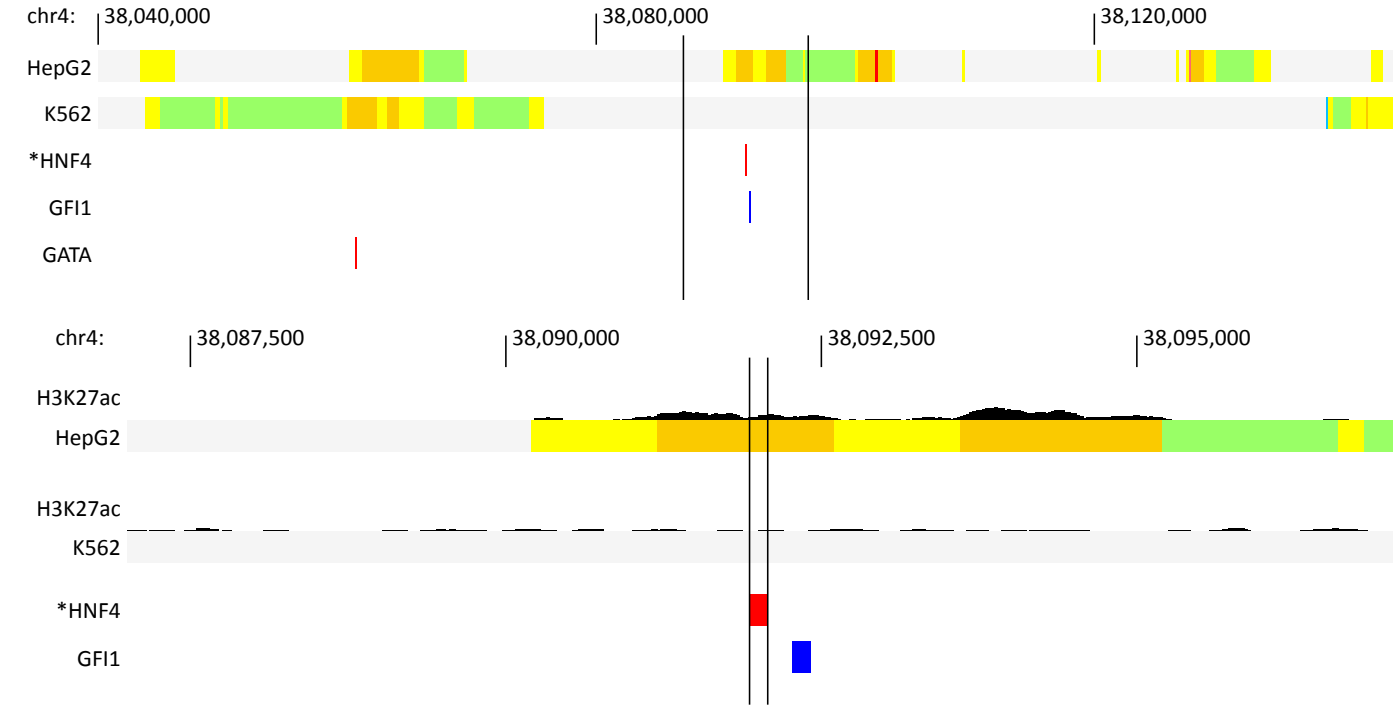
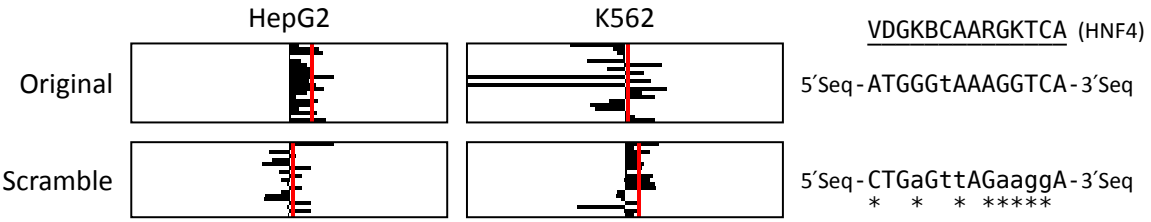
432 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr4 38091997 38092010 + (hg18)





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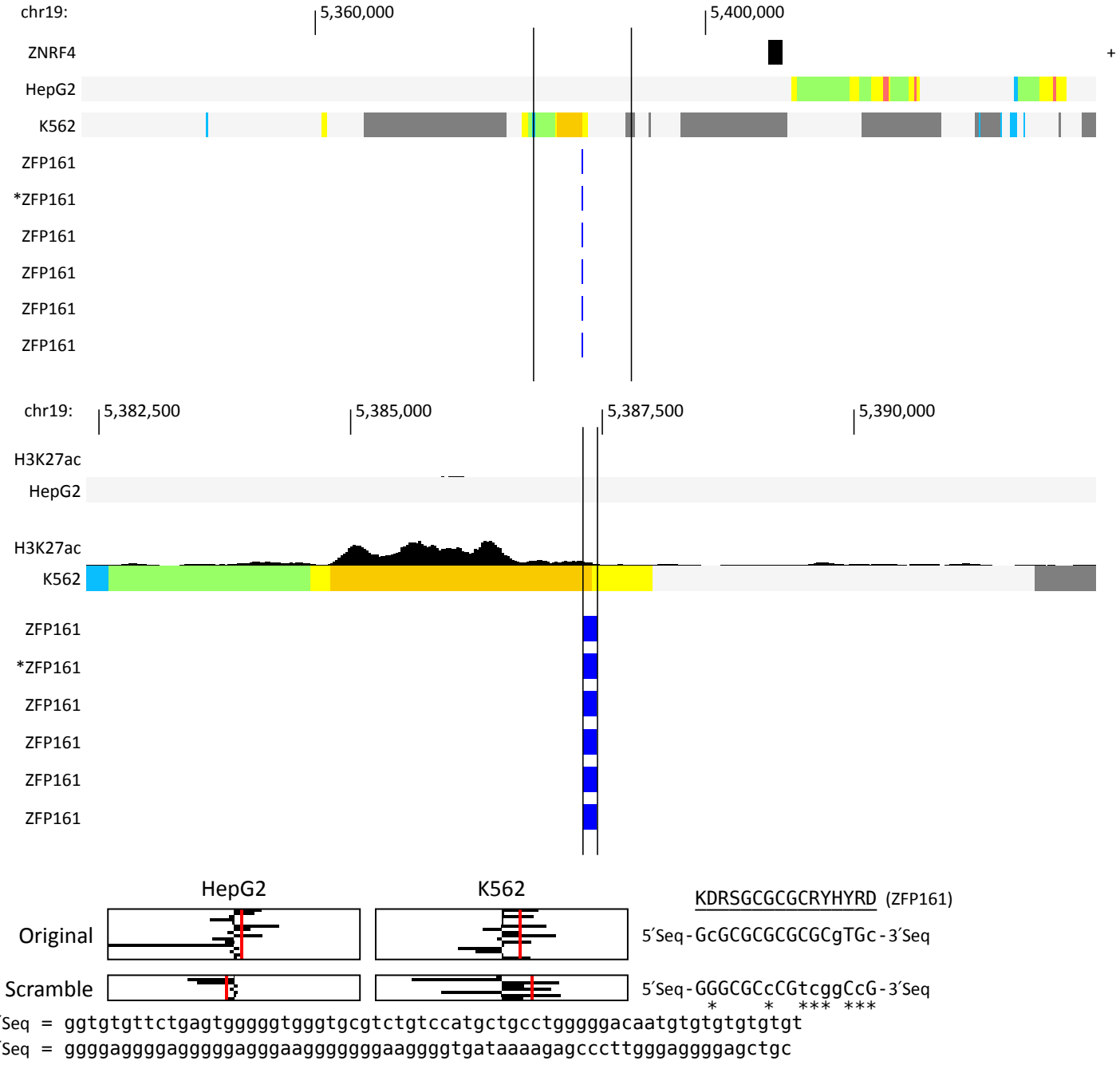
433 ZFP161 in K562 enhancer

chr19 5387373 5387388 + (hg18)



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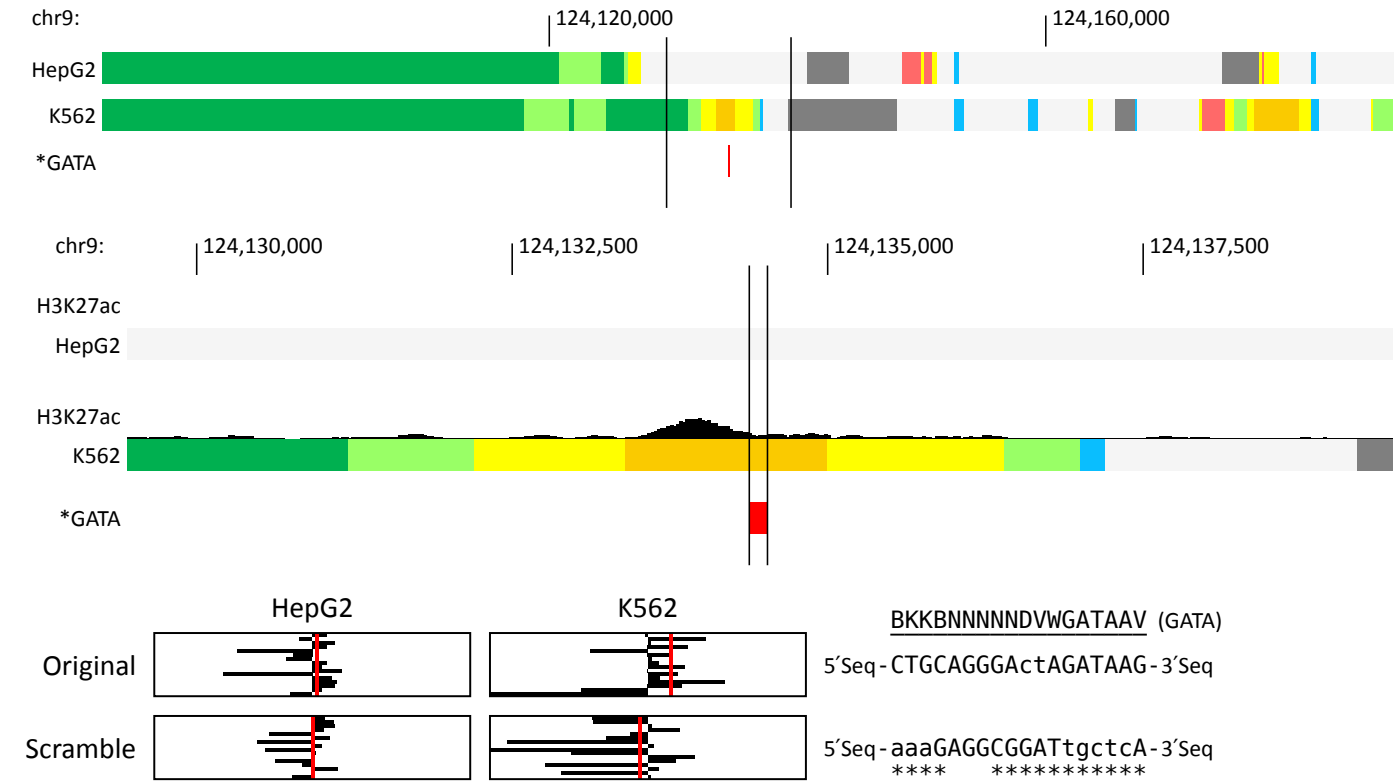
434 GATA in K562 enhancer (conserved at 60% confidence)

chr9 124134443 124134460 + (hg18)



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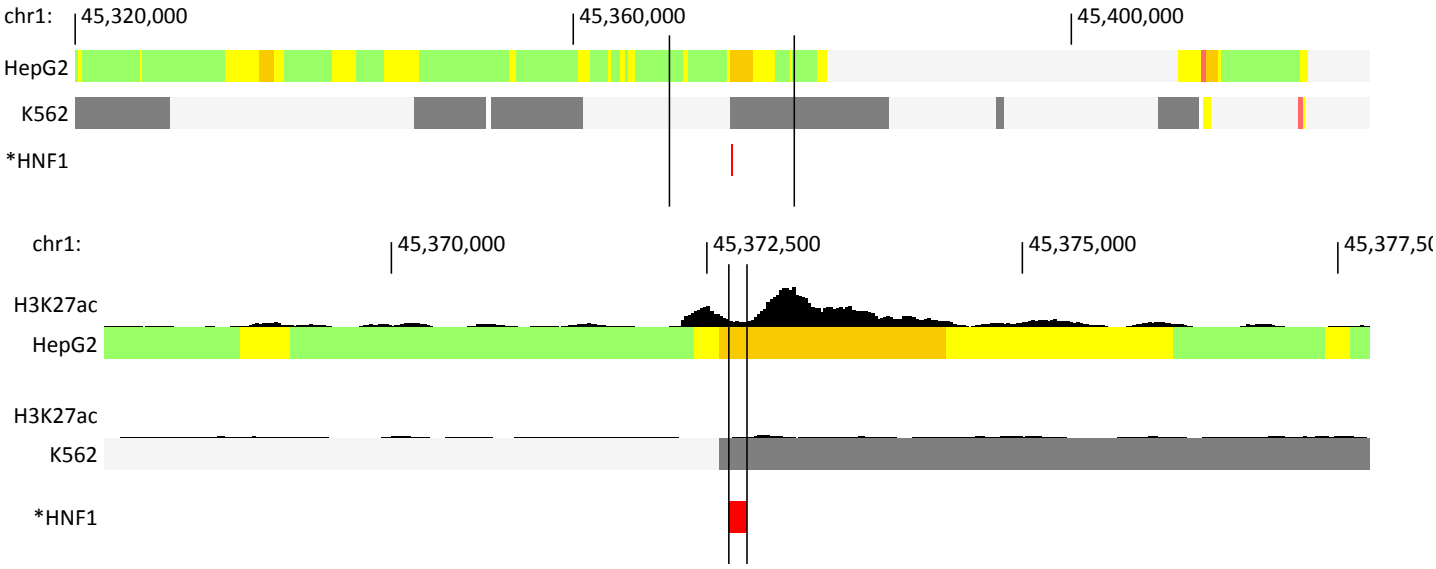
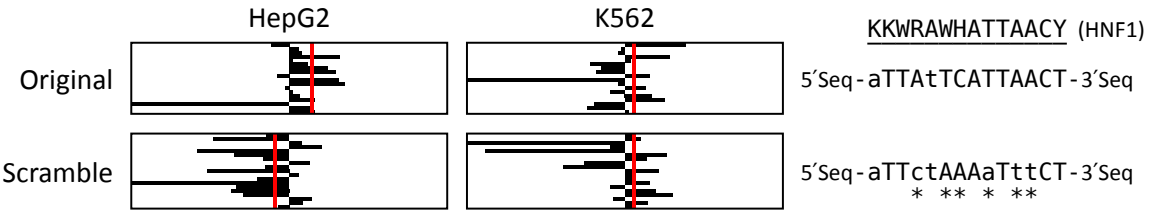
435 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 45372740 45372753 - (hg18)





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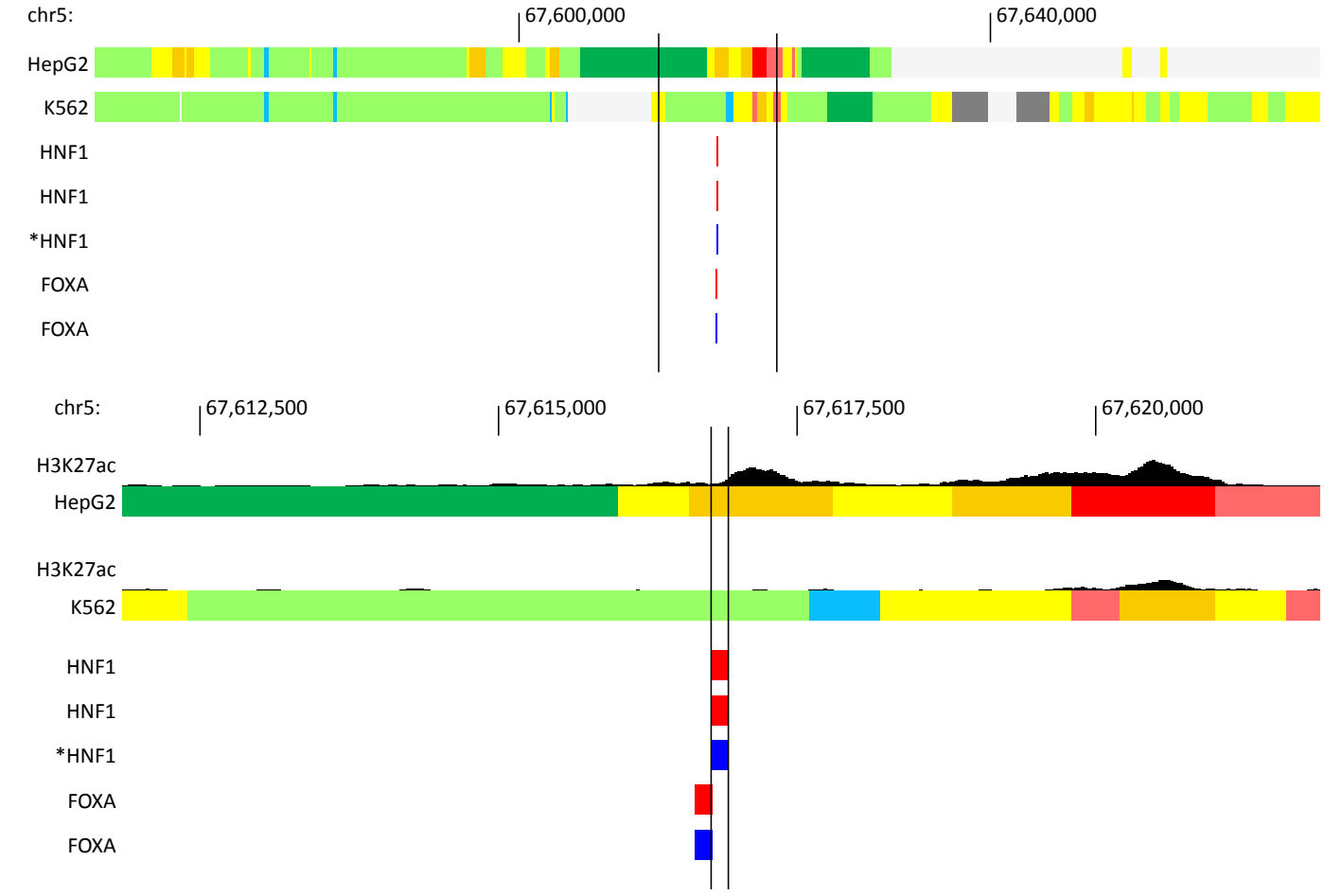
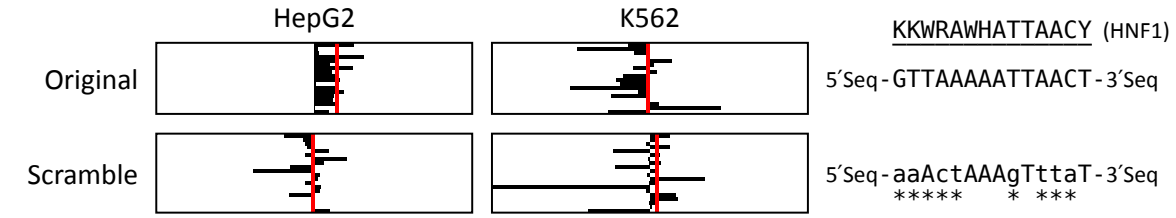
436 HNF1 in HepG2 enhancer

chr5 67616846 67616859 - (hg18)





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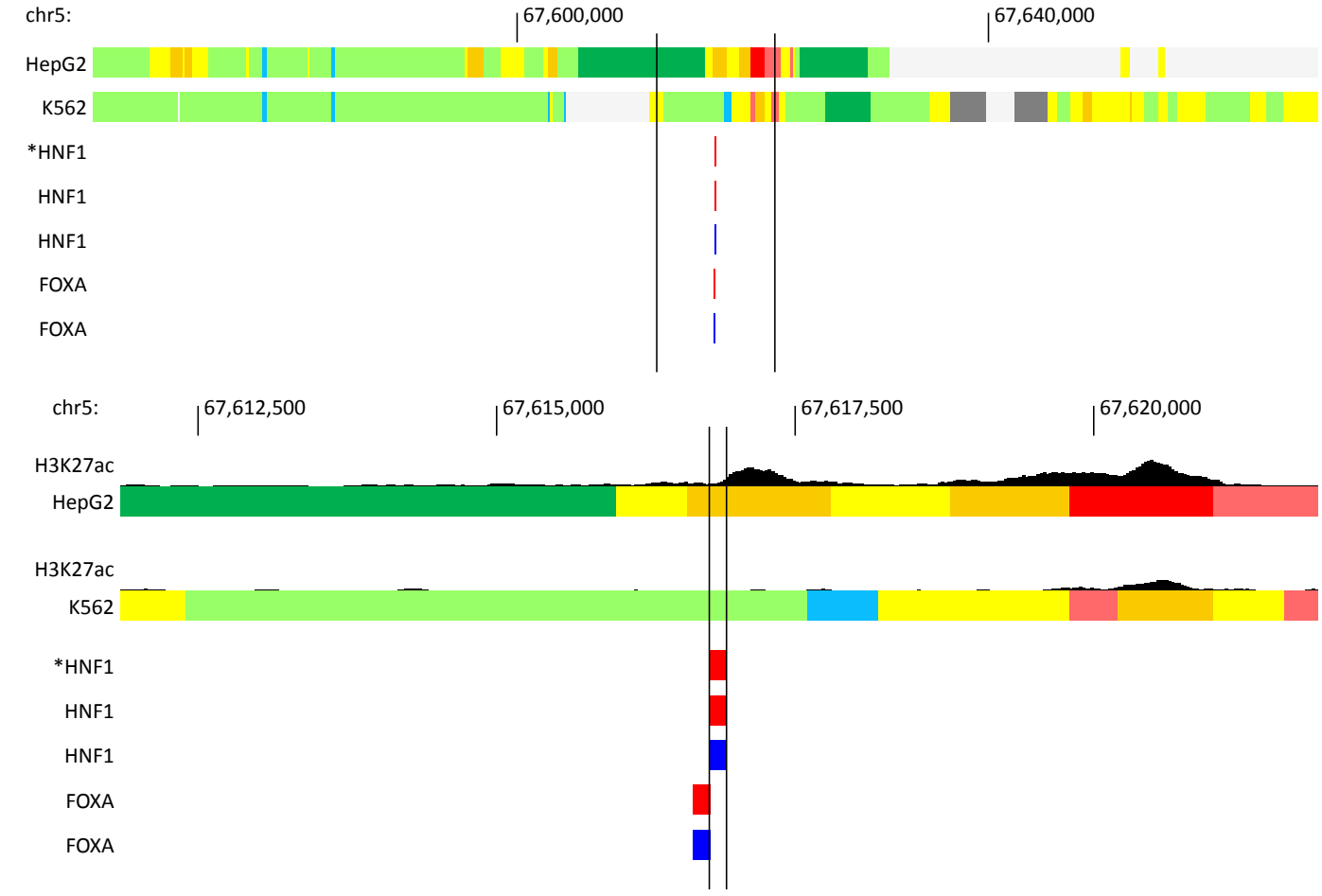
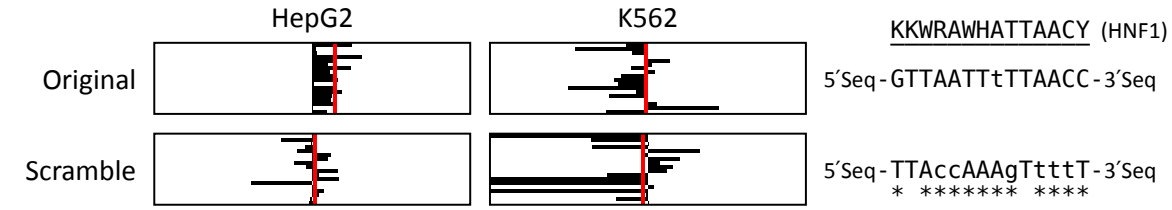
437 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr5 67616847 67616860 + (hg18)





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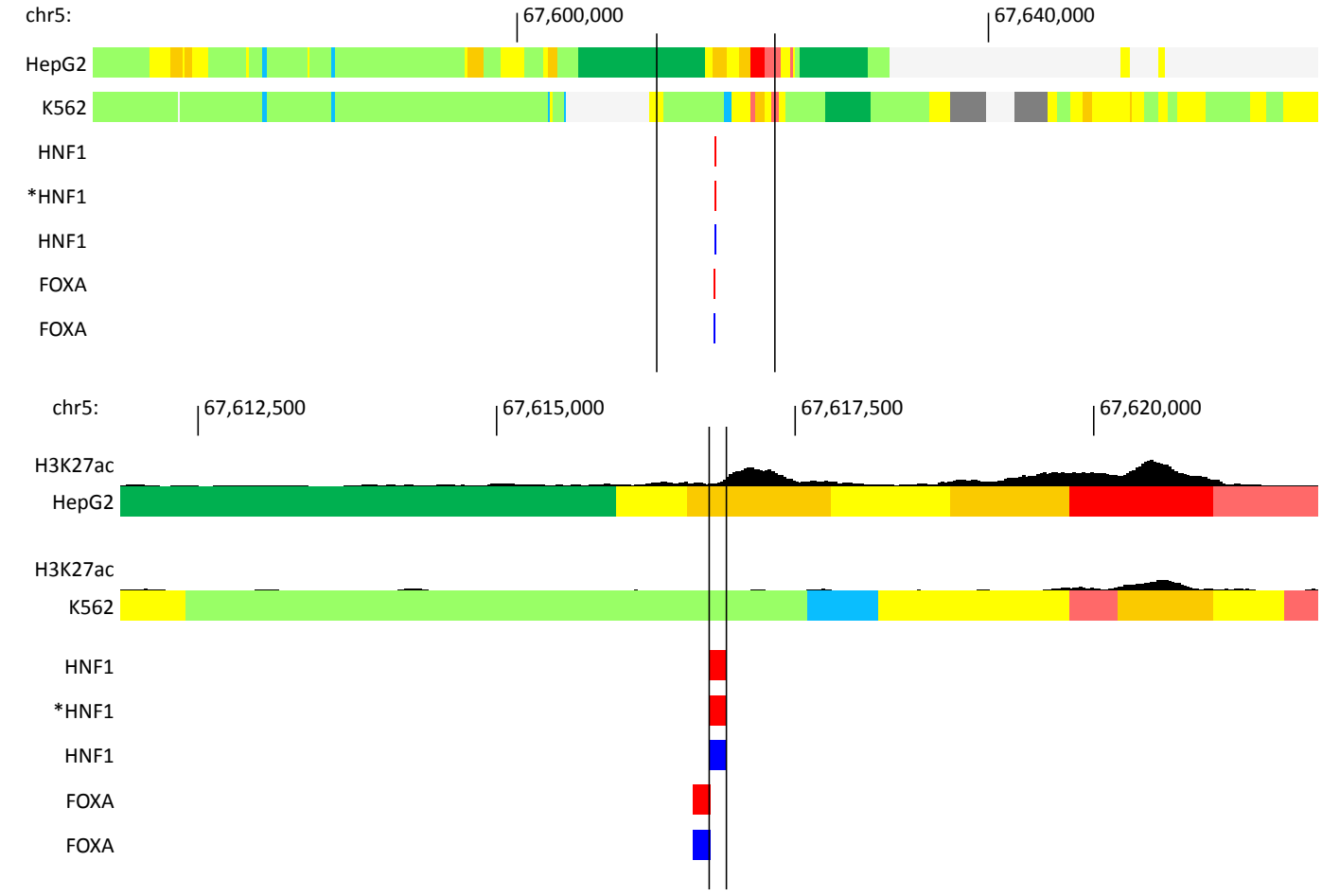
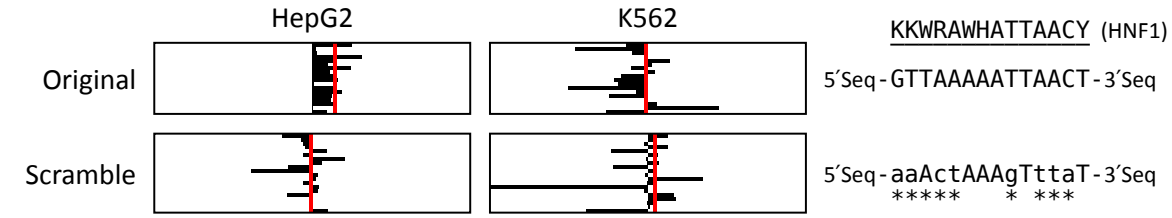
438 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr5 67616846 67616859 - (hg18)





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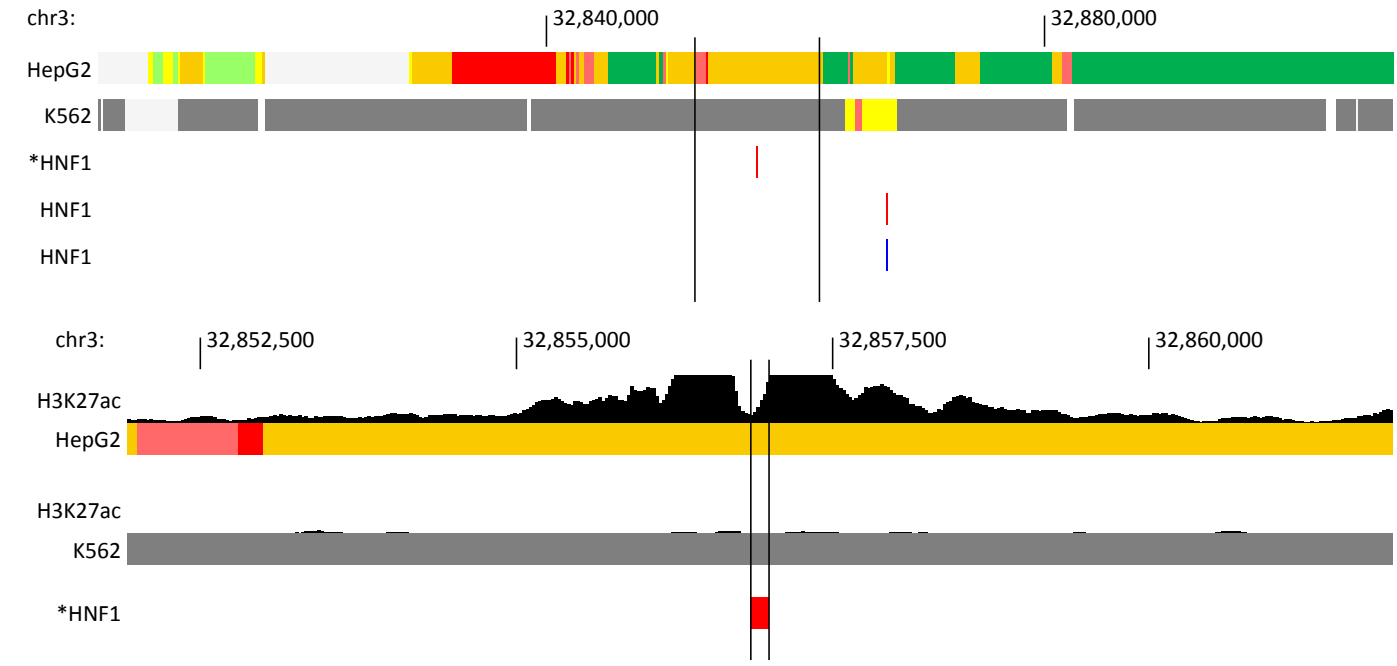
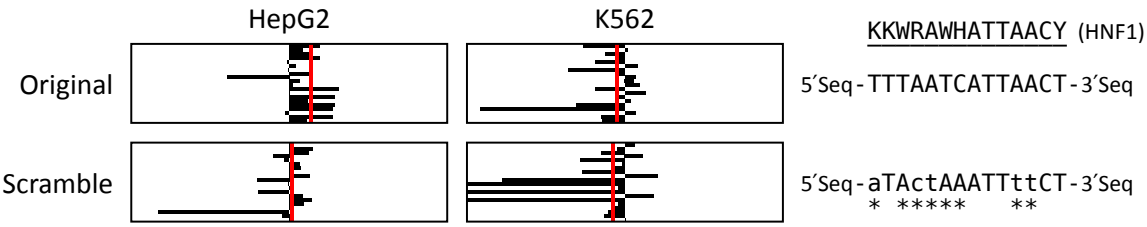
439 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr3 32856919 32856932 - (hg18)





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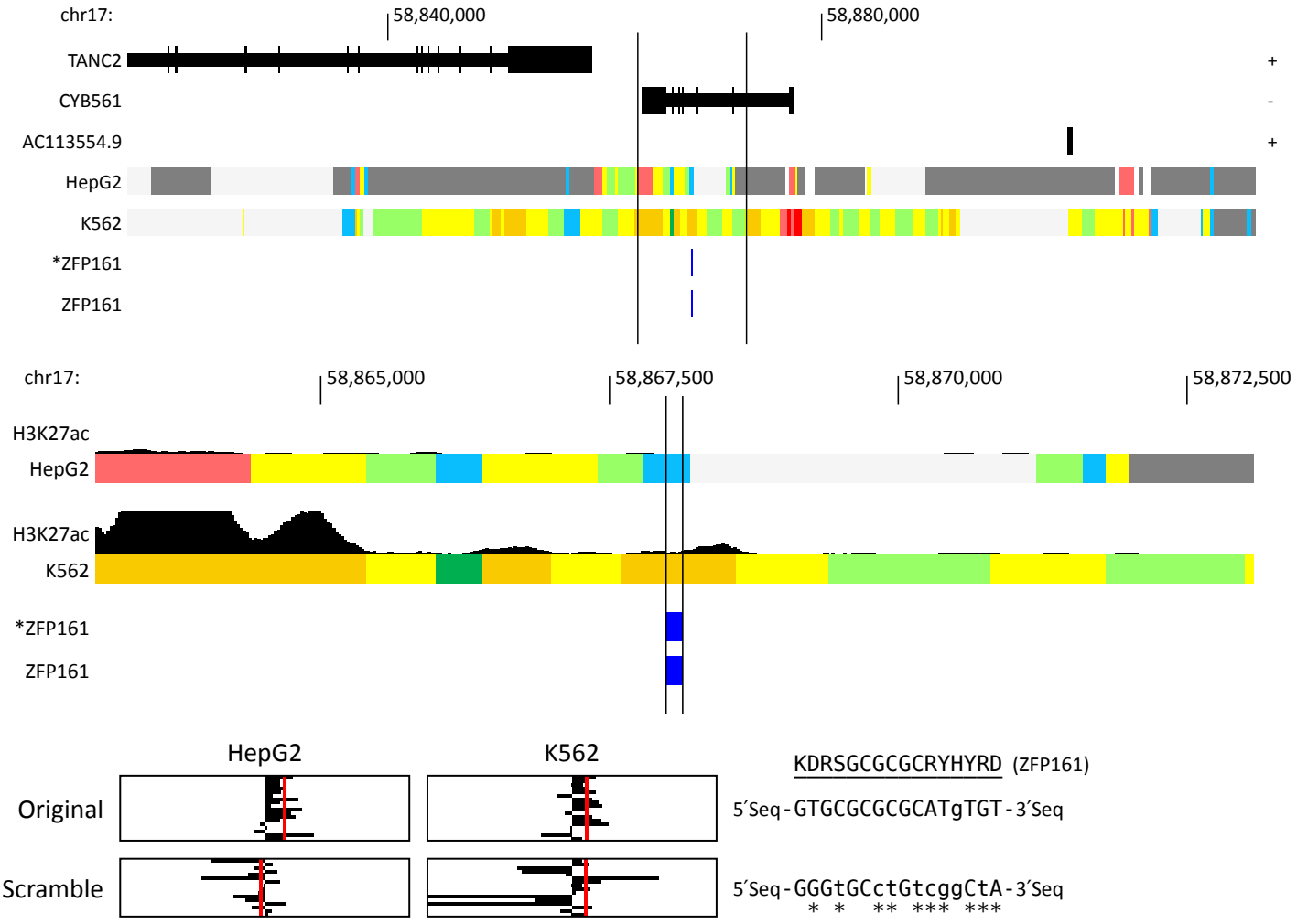
440 ZFP161 in K562 enhancer

chr17 58868055 58868070 - (hg18)



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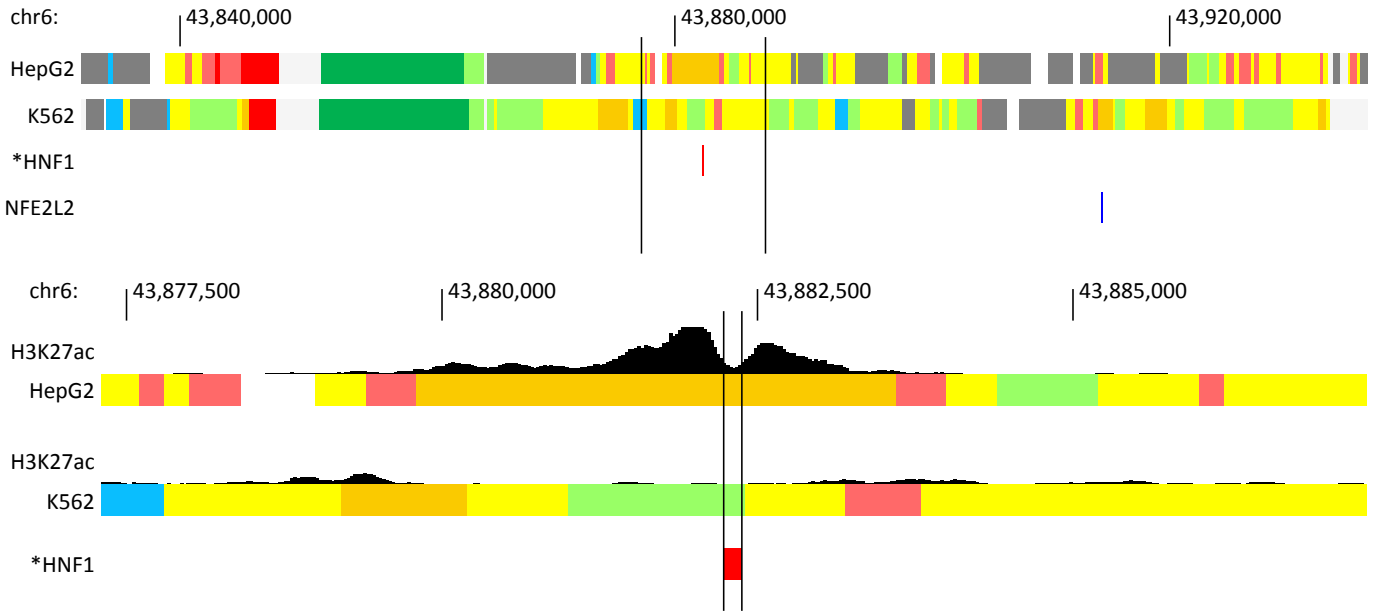
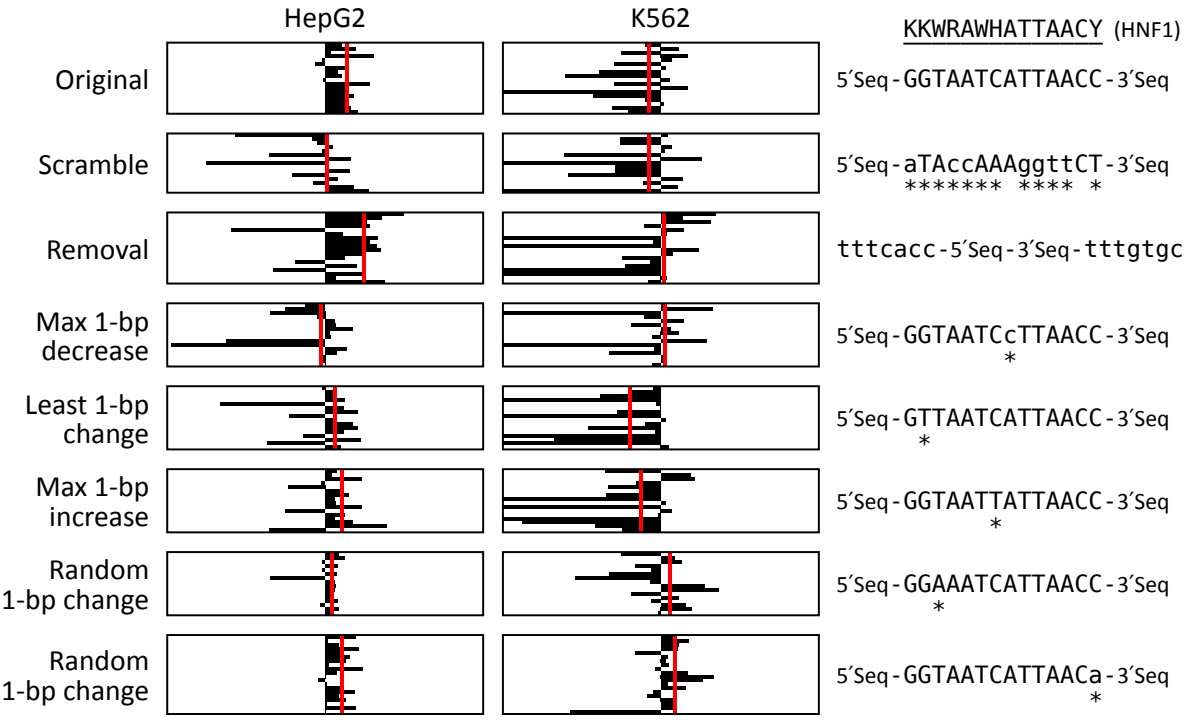
441 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 43882298 43882311 - (hg18)





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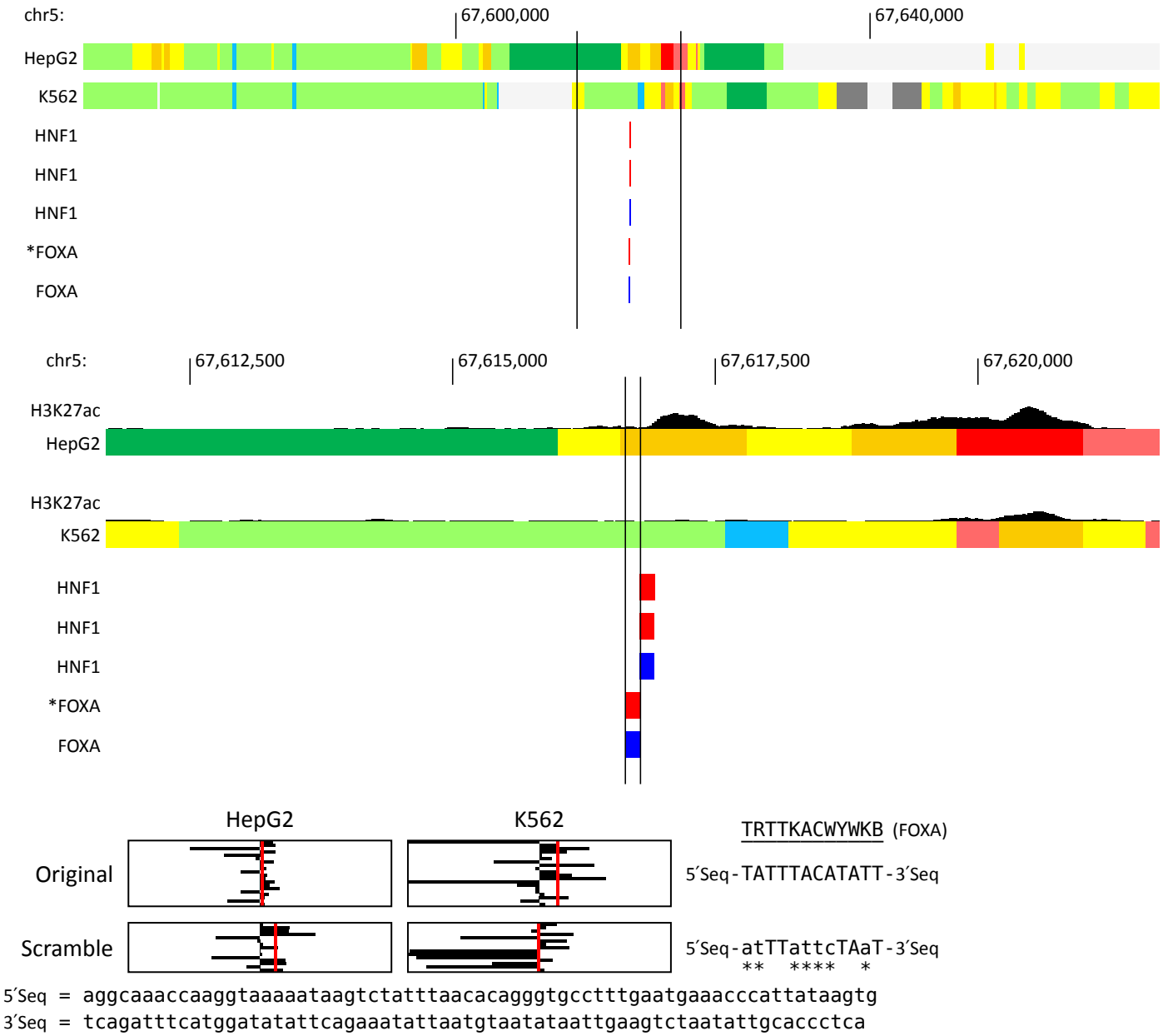
442 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr5 67616711 67616722 + (hg18)



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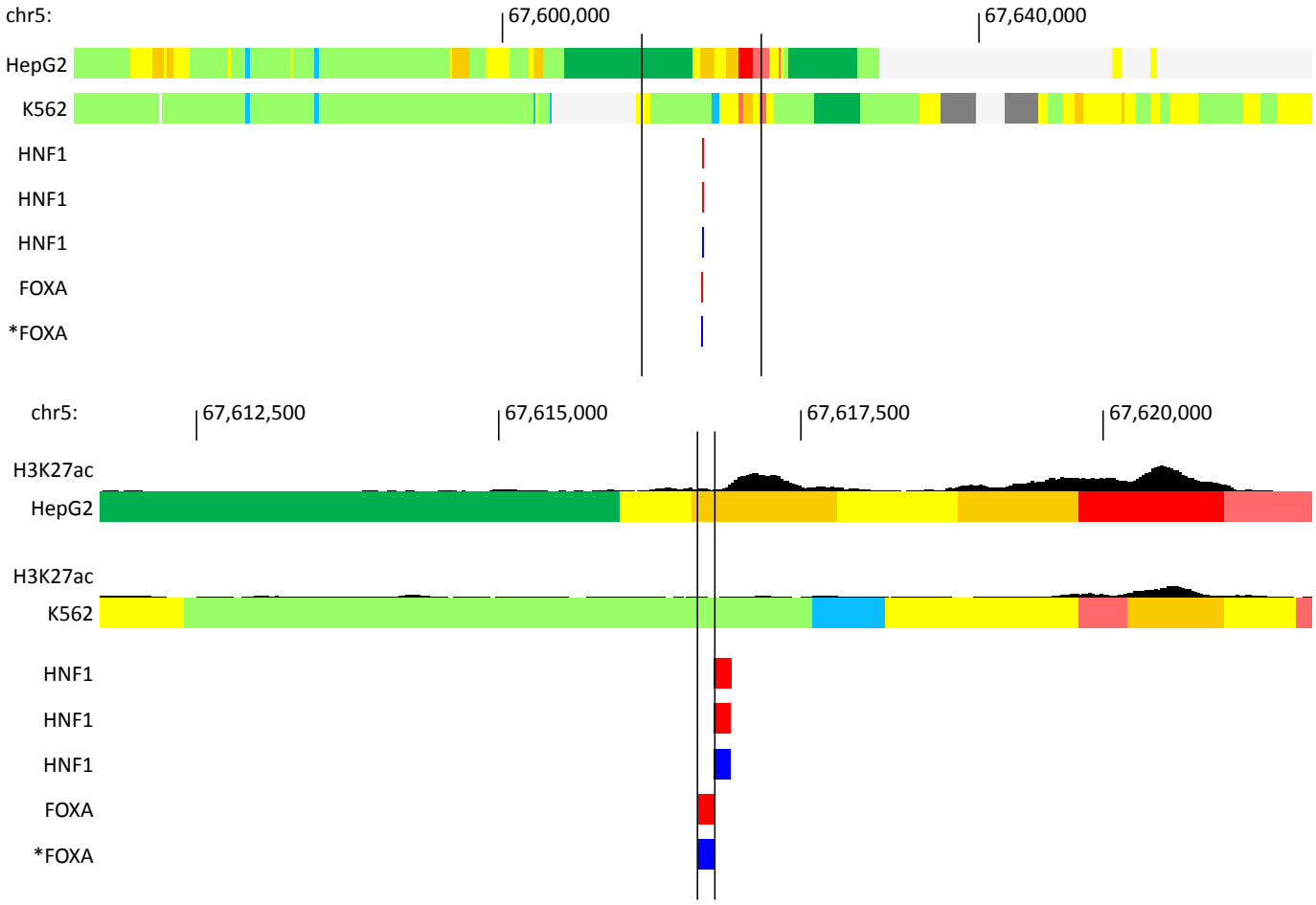
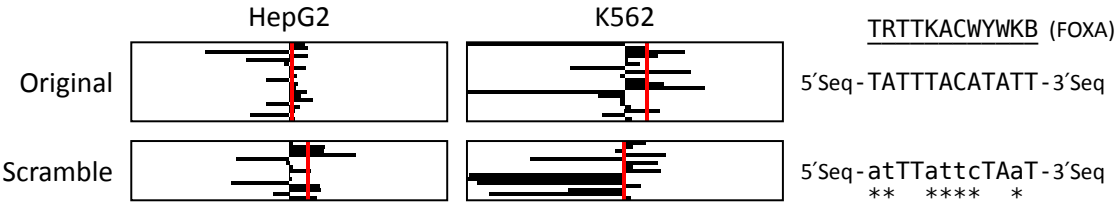
443 FOXA in HepG2 enhancer

chr5 67616711 67616722 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTTACATATT-3′Seq

5′Seq-atTTattcTAaT-3′Seq

** **** *

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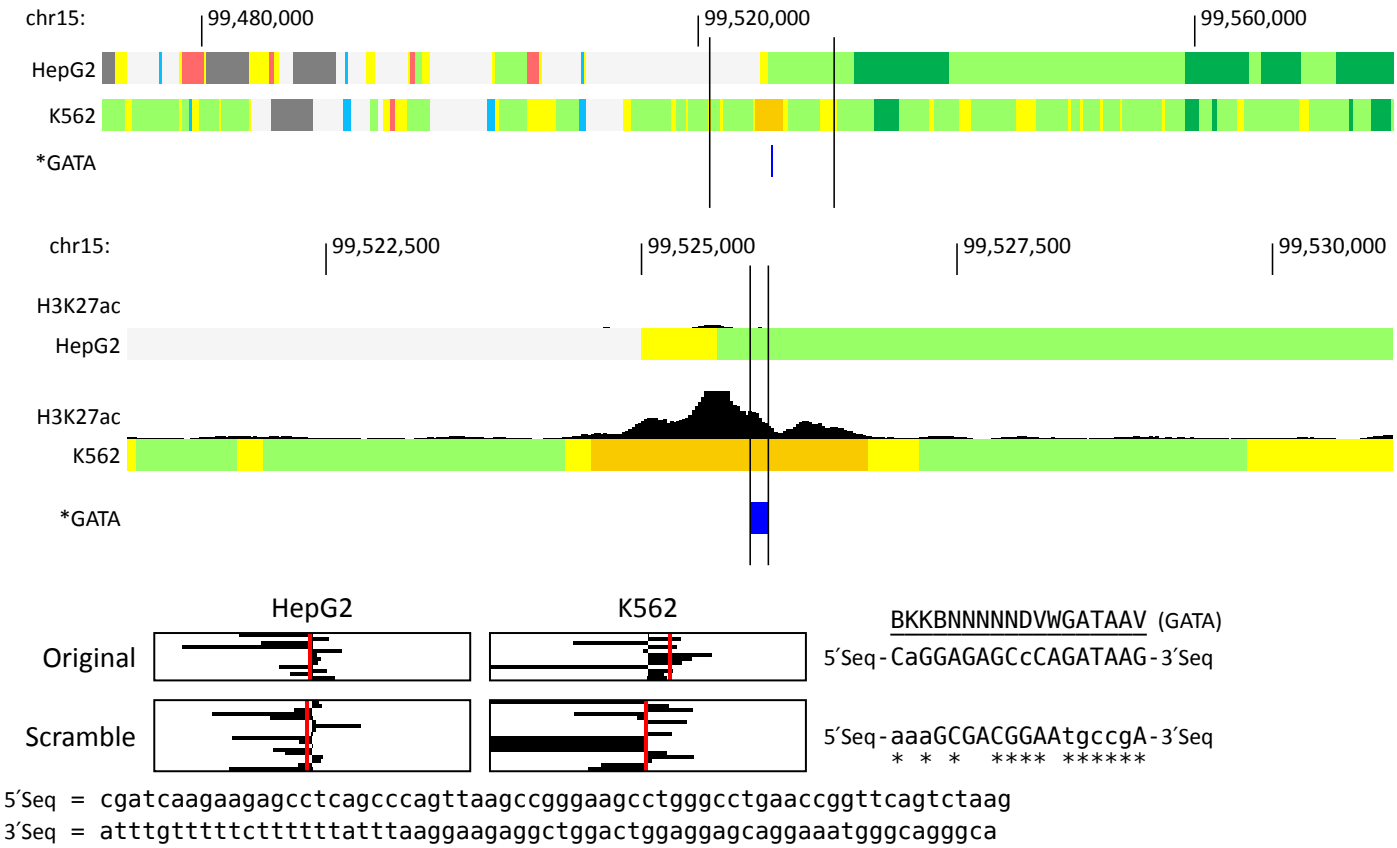
444 GATA in K562 enhancer

chr15 99525925 99525942 + (hg18)



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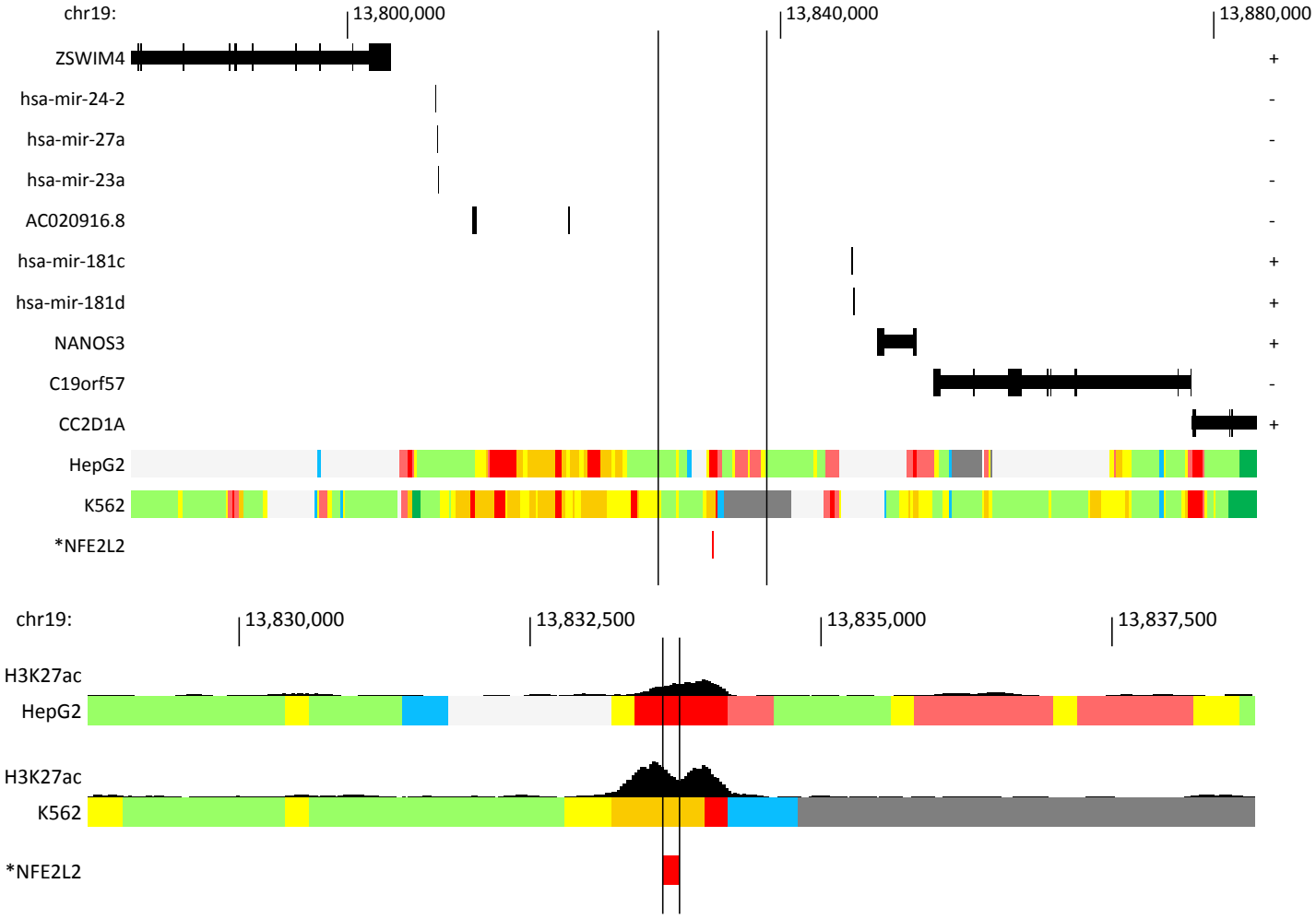
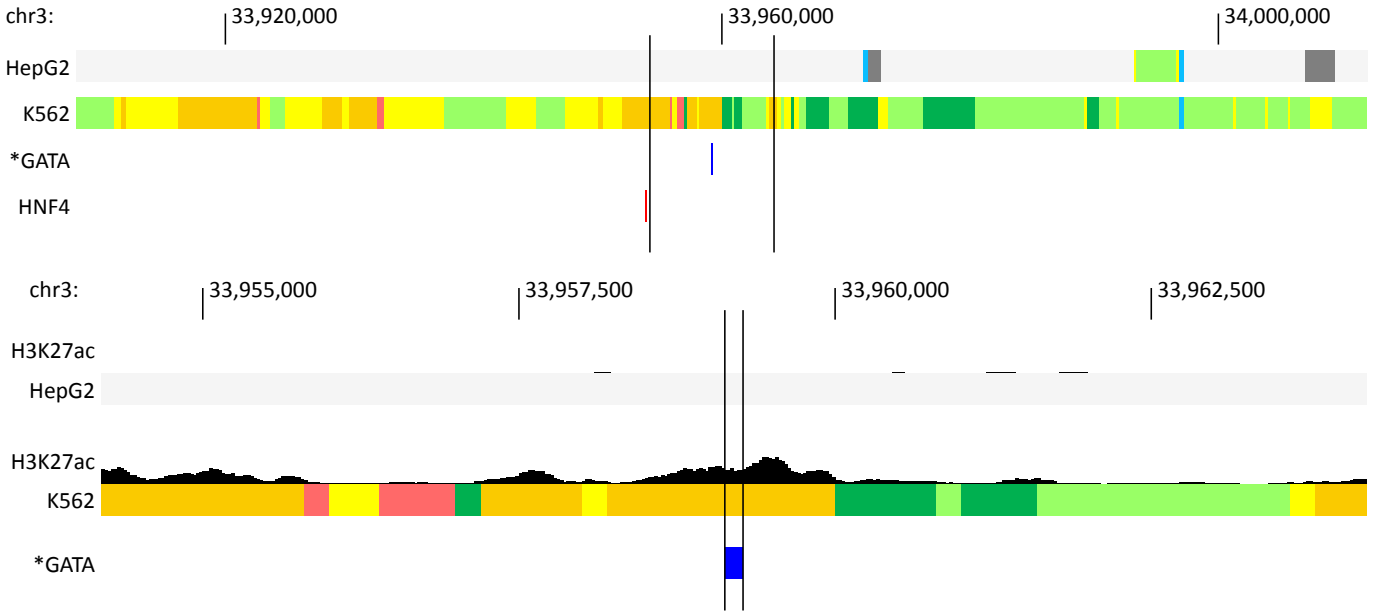
445 NFE2L2 in K562 enhancer (conserved at 60% confidence)

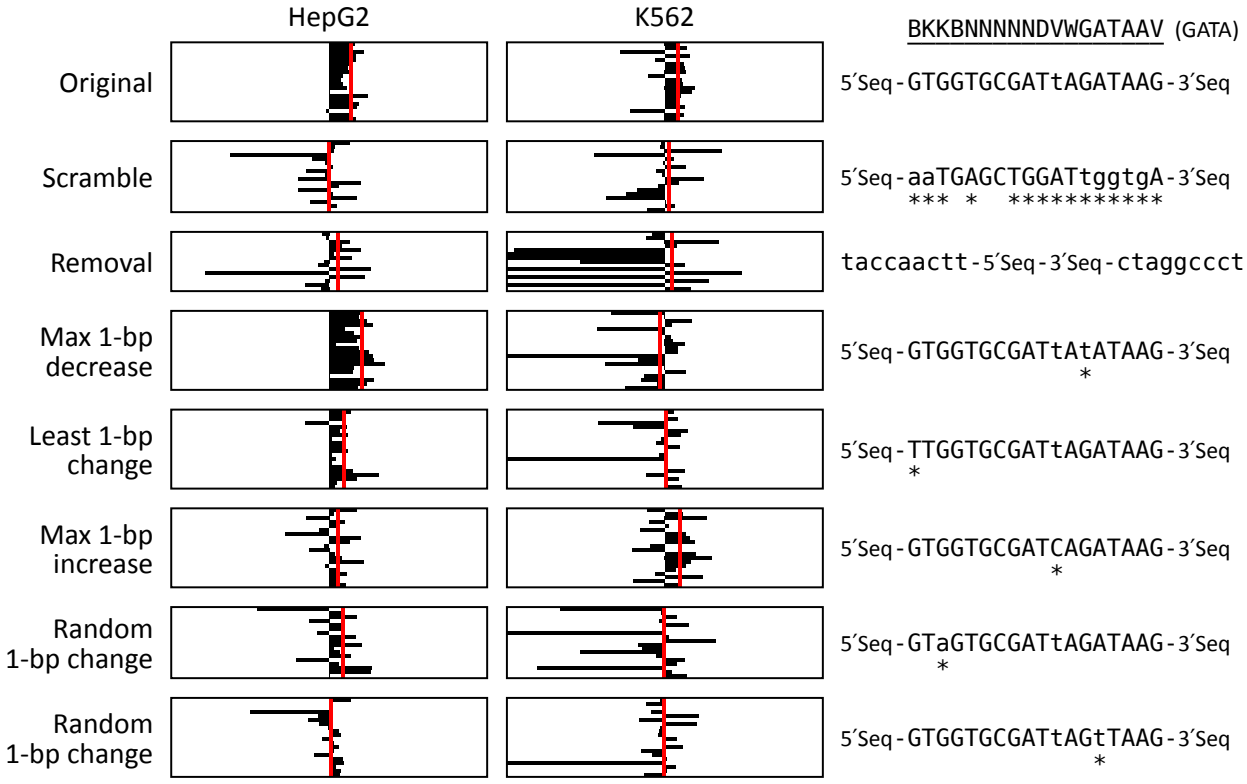
chr19 13833707 13833717 + (hg18)



446 GATA in K562 enhancer

chr3 33959192 33959209 + (hg18)





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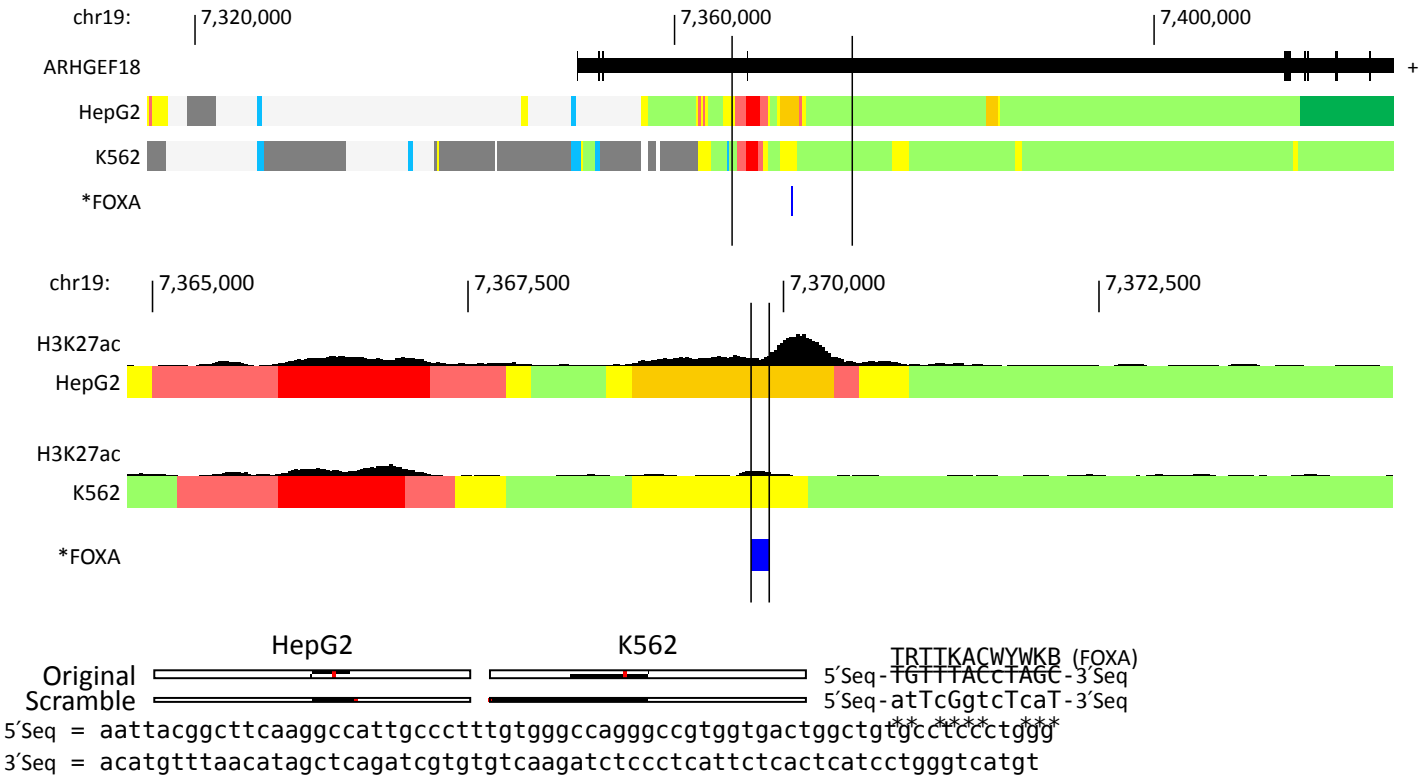
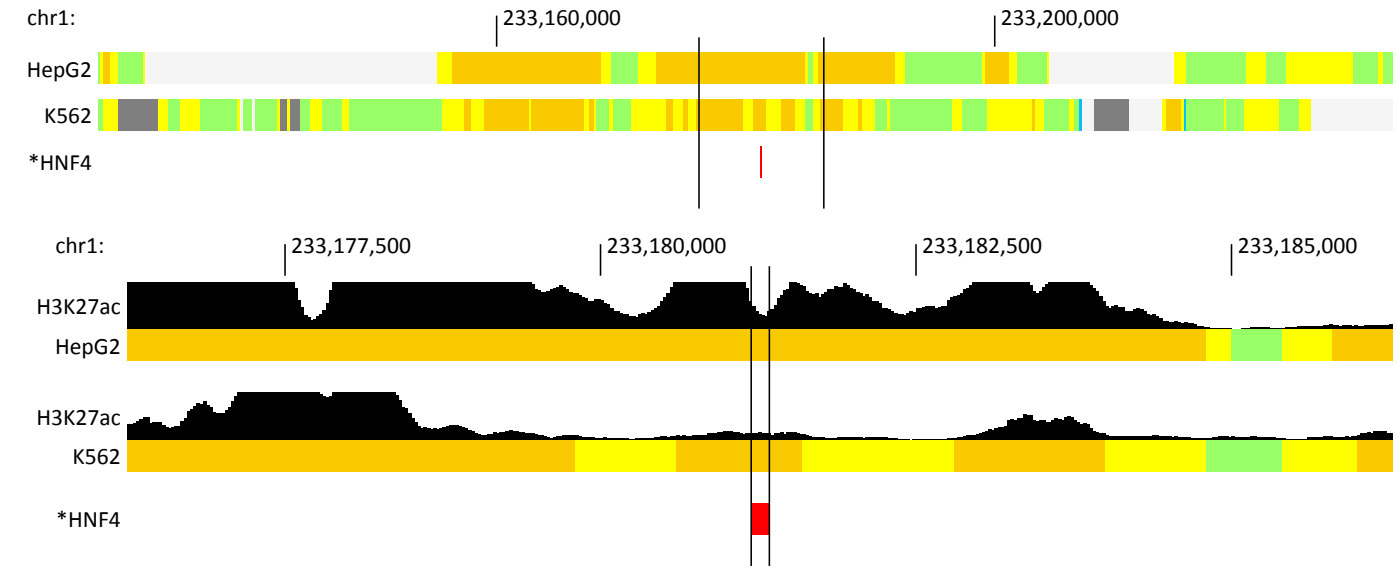
447 FOXA in HepG2 enhancer

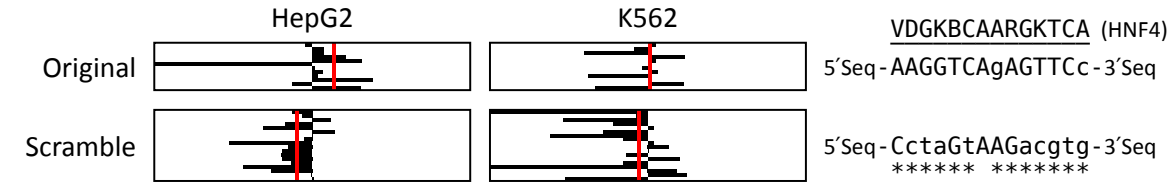
chr19 7369810 7369821 + (hg18)



448 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr1 233181260 233181273 + (hg18)





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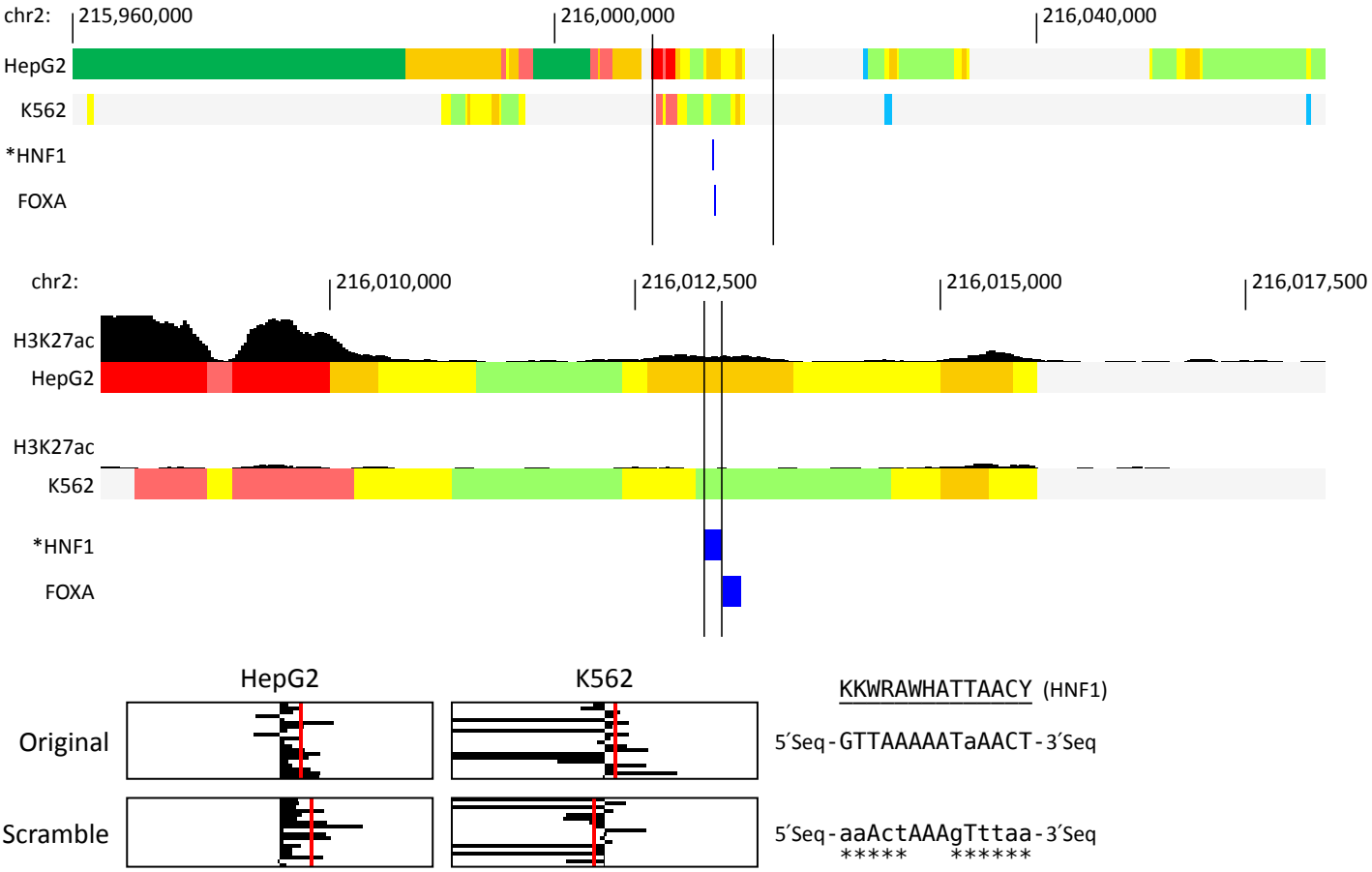
449 HNF1 in HepG2 enhancer

chr2 216013132 216013145 + (hg18)



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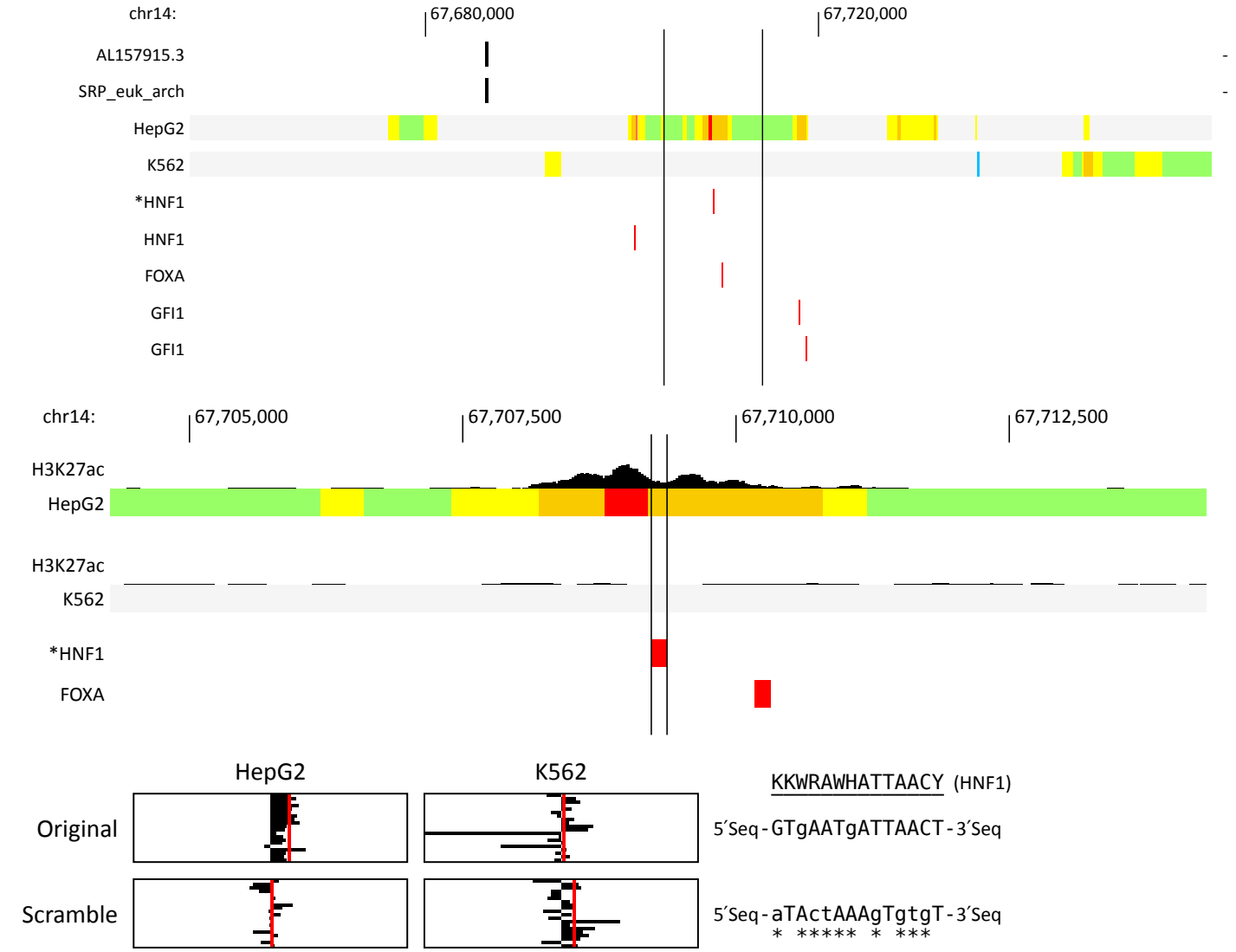
450 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr14 67709291 67709304 + (hg18)



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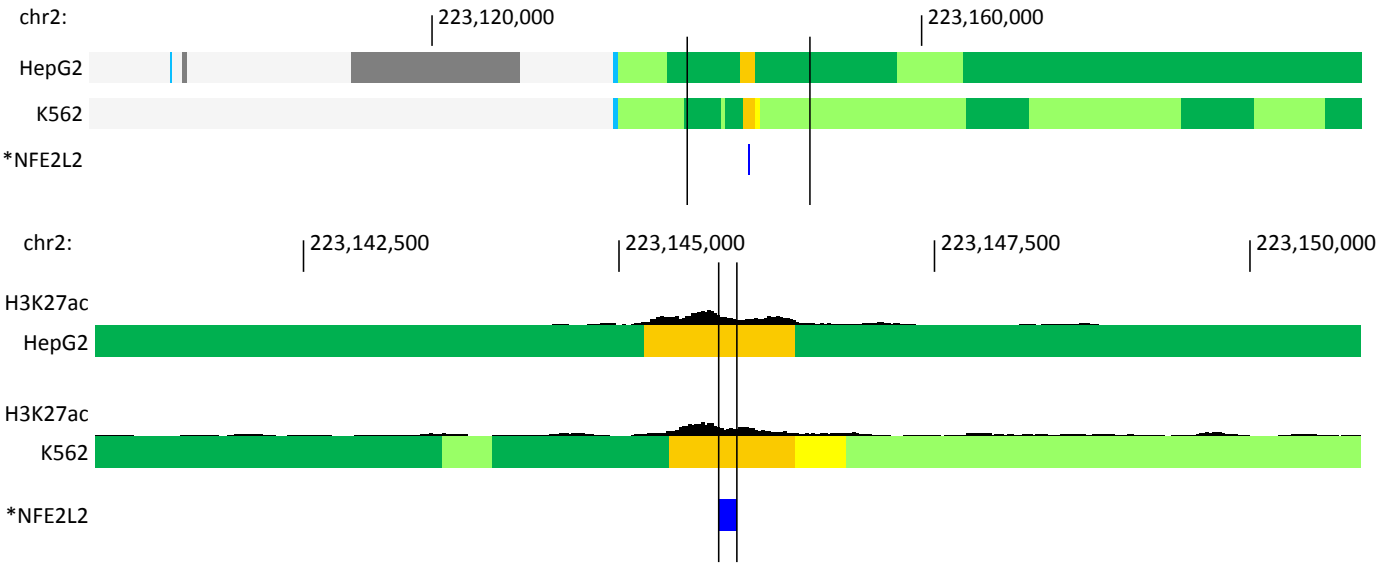
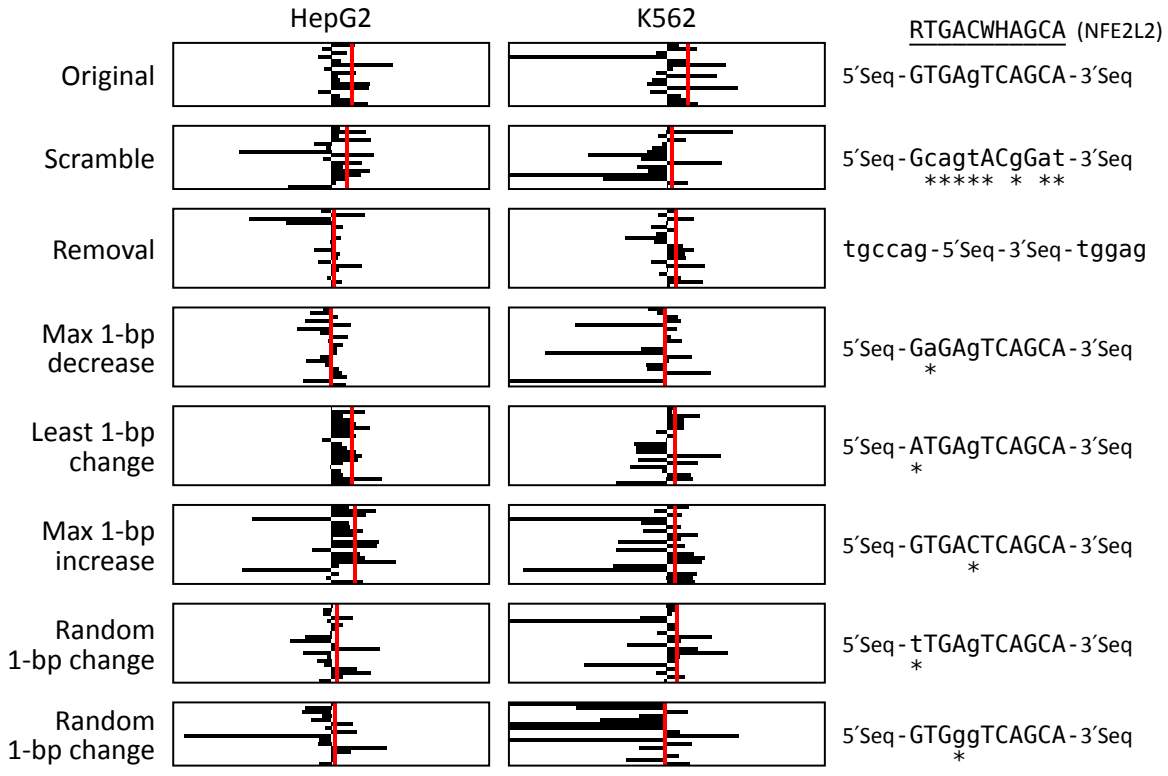
451 NFE2L2 in K562 enhancer

chr2 223145857 223145867 - (hg18)





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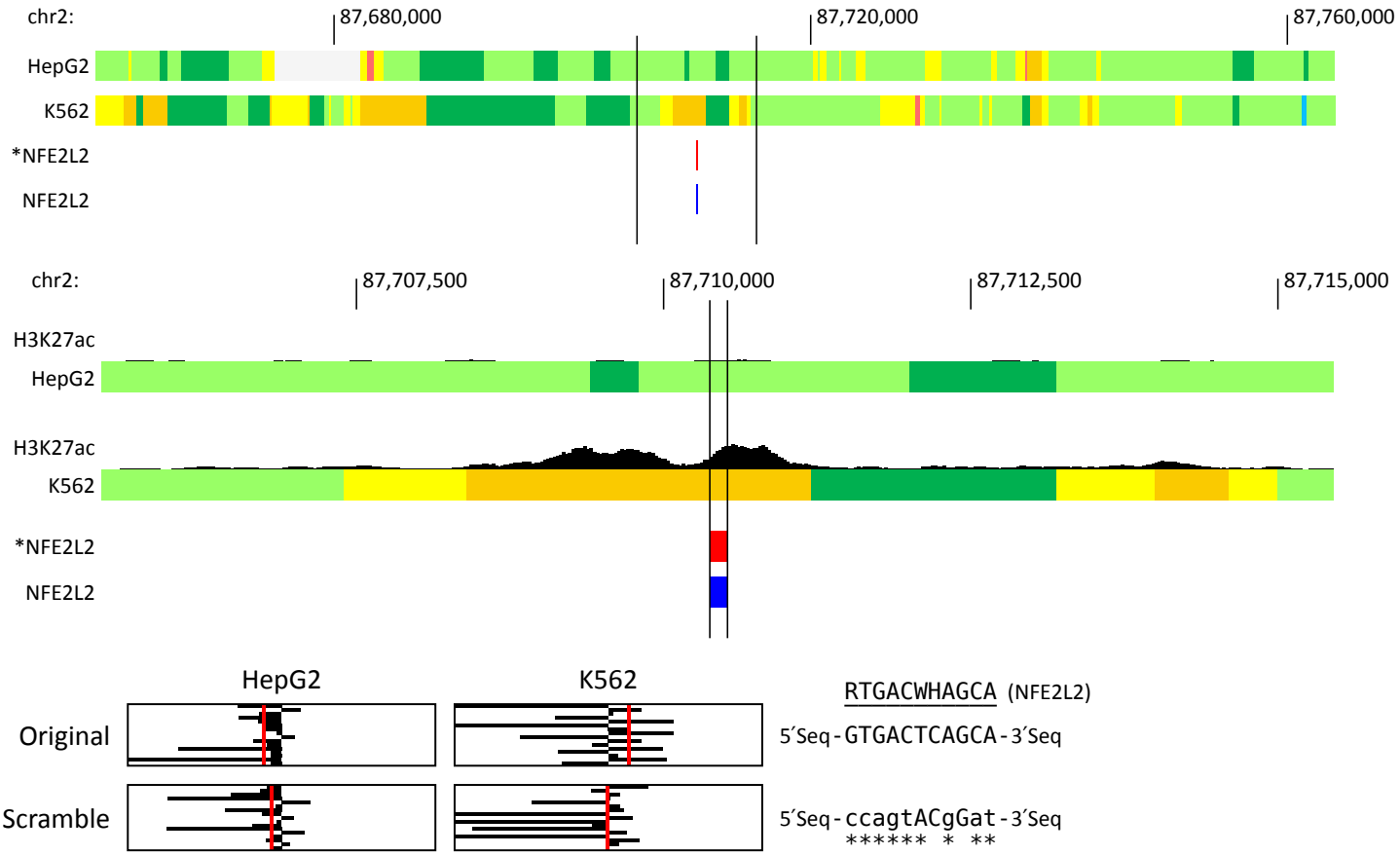
452 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr2 87710443 87710453 + (hg18)



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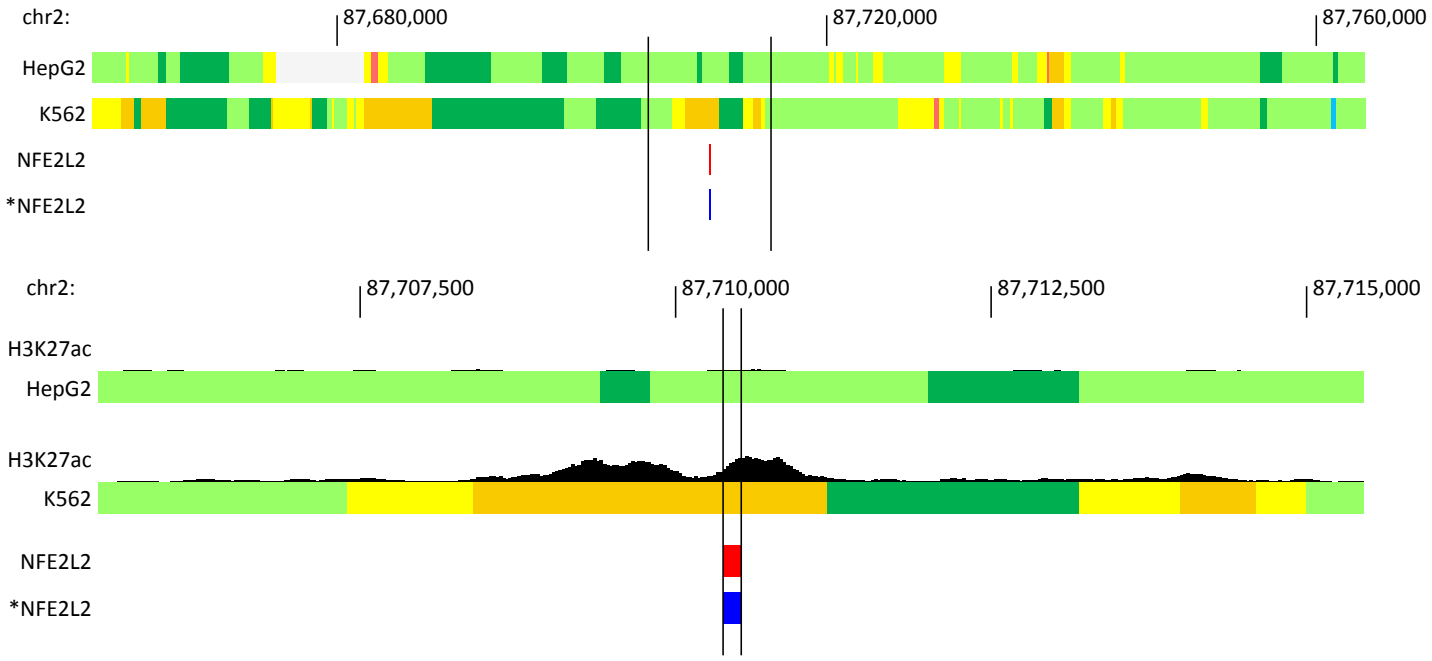
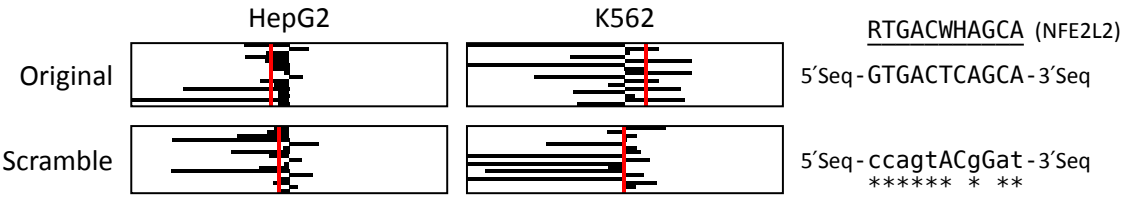
453 NFE2L2 in K562 enhancer

chr2 87710443 87710453 + (hg18)





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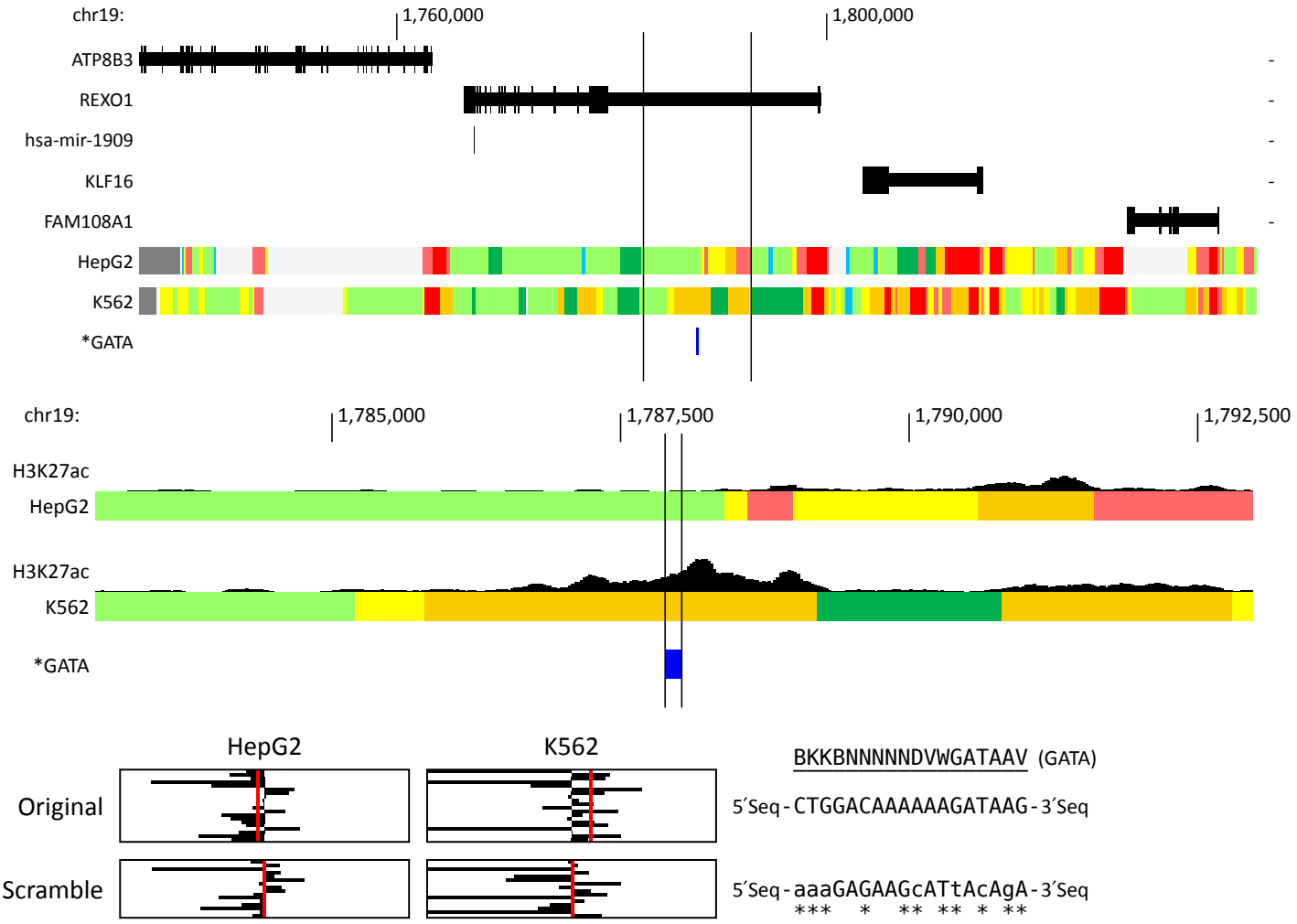
454 GATA in K562 enhancer

chr19 1787950 1787967 + (hg18)



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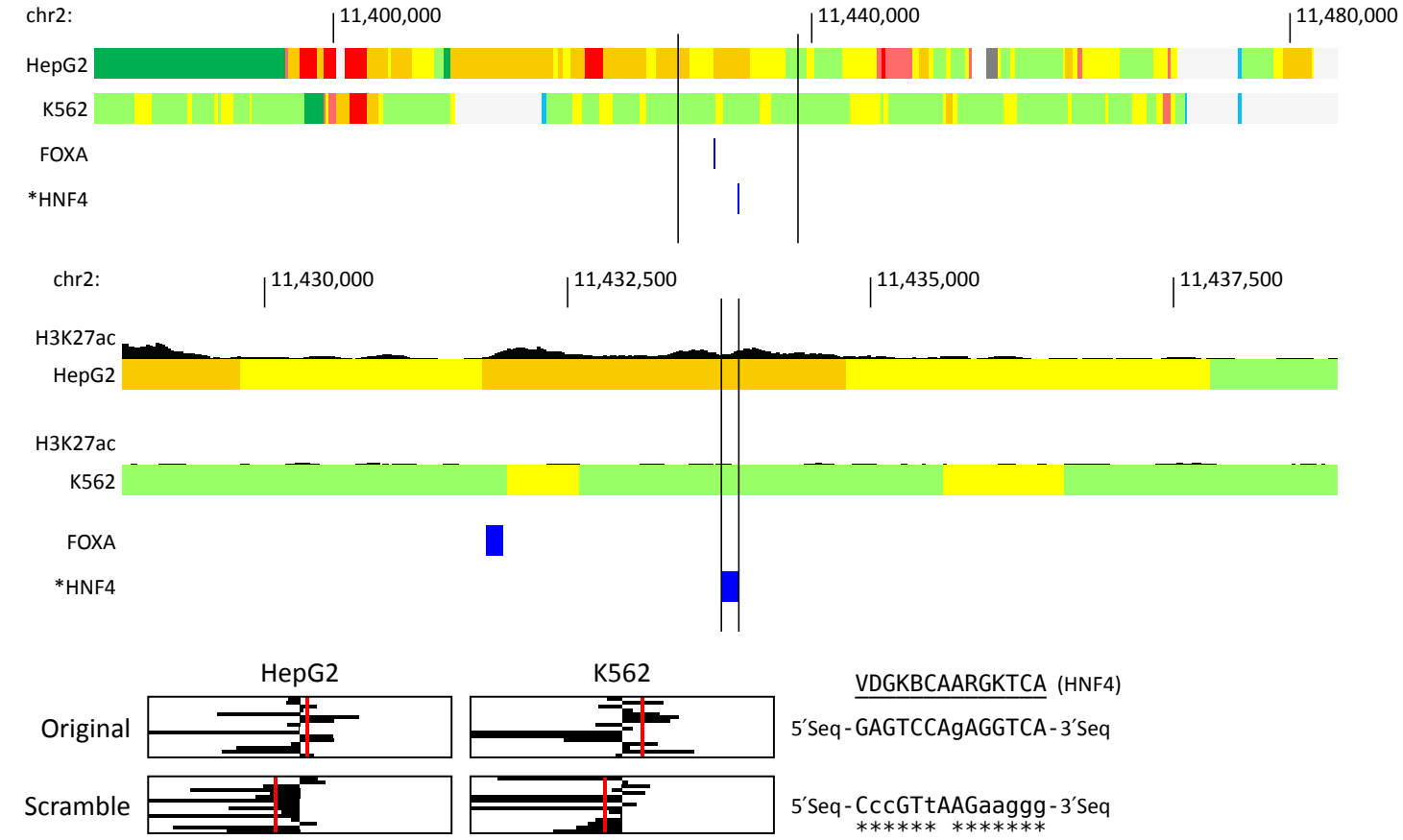
455 HNF4 in HepG2 enhancer

chr2 11433835 11433848 + (hg18)



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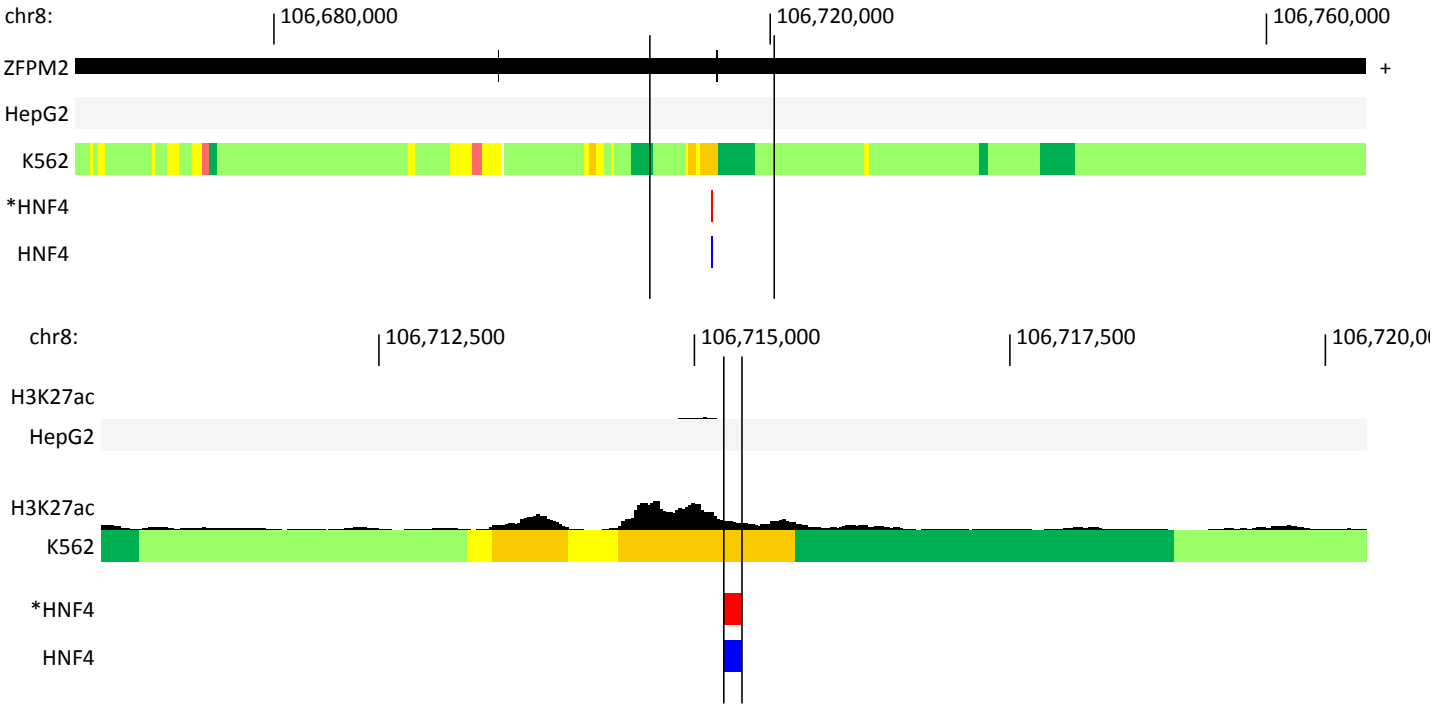
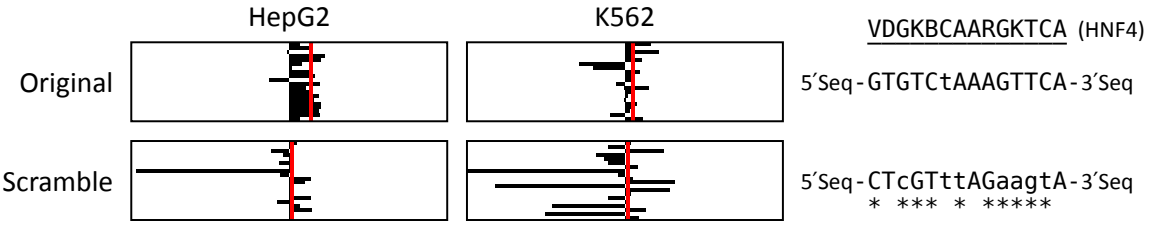
456 HNF4 in K562 enhancer (conserved at 70% confidence)

chr8 106715299 106715312 + (hg18)





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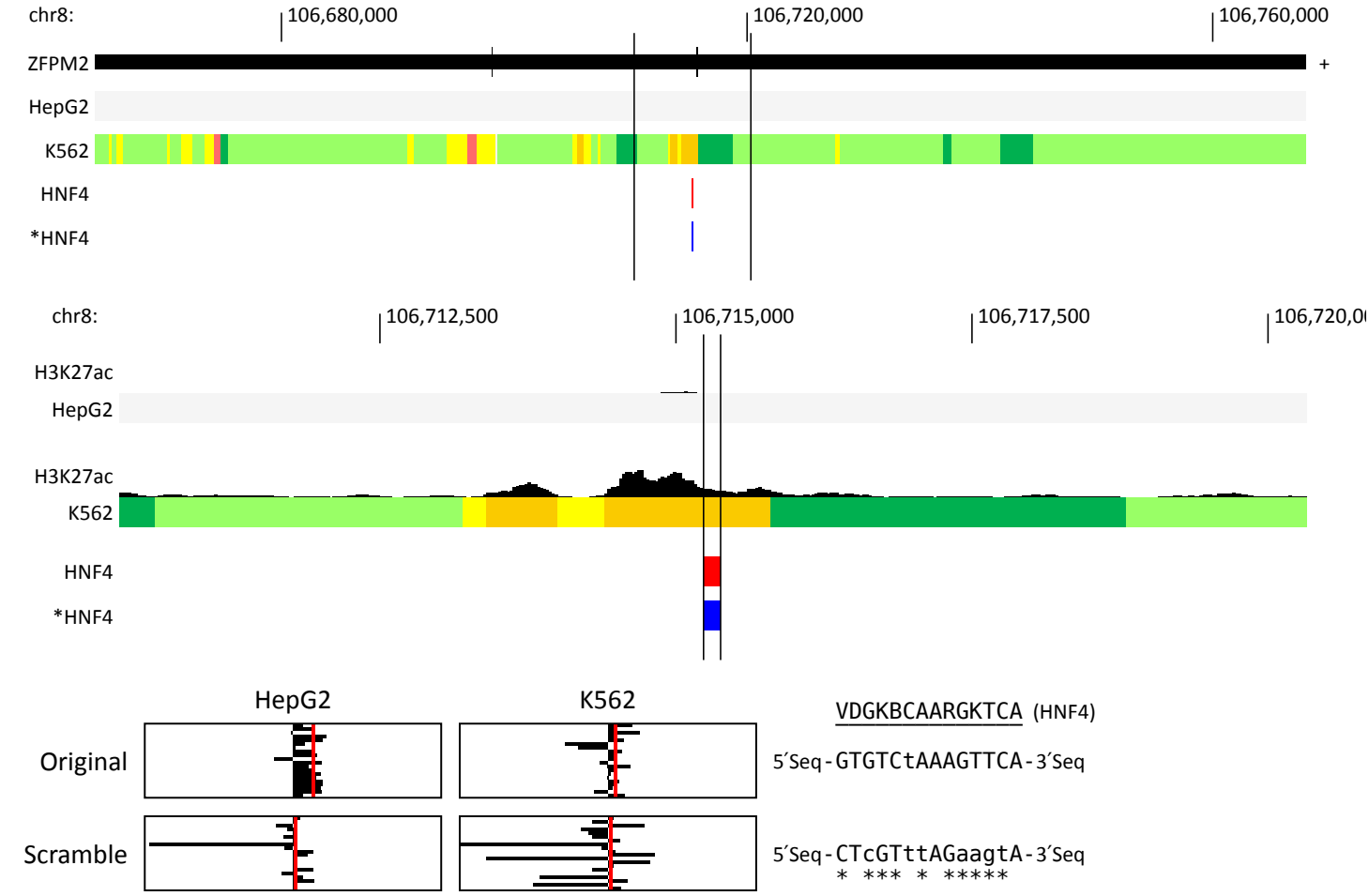
457 HNF4 in K562 enhancer

chr8 106715299 106715312 + (hg18)



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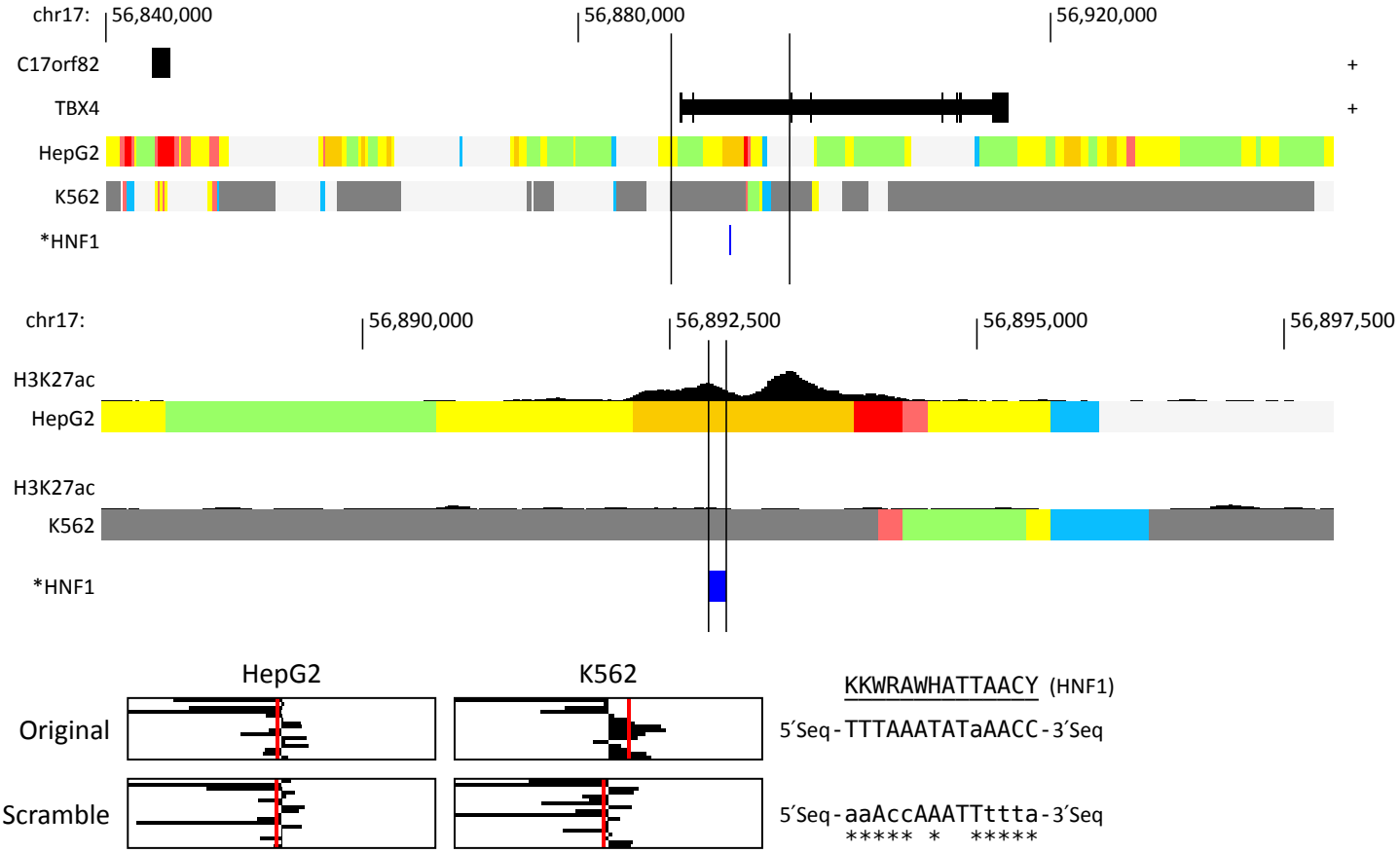
458 HNF1 in HepG2 enhancer

chr17 56892882 56892895 + (hg18)



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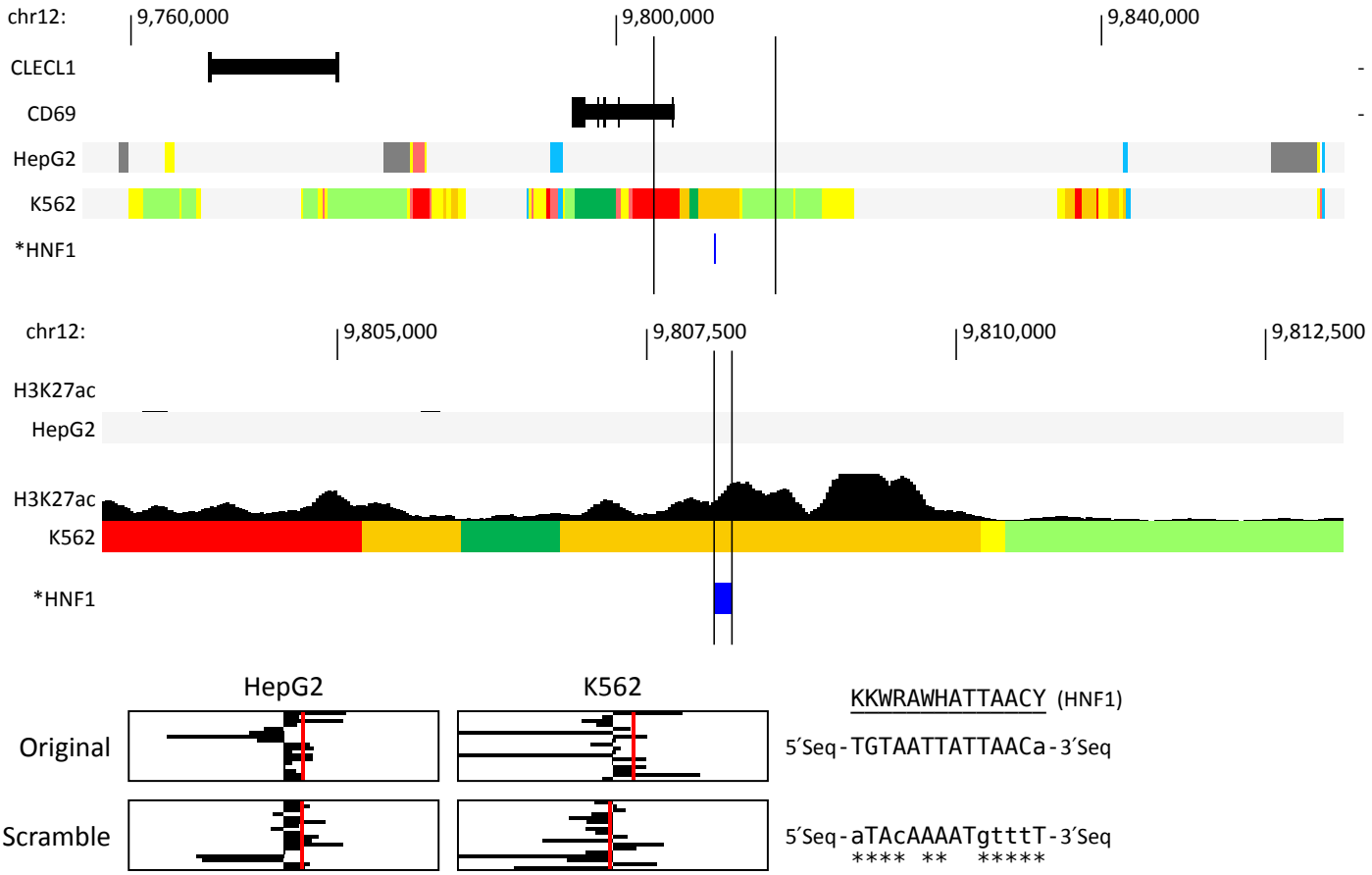
459 HNF1 in K562 enhancer

chr12 9808110 9808123 + (hg18)



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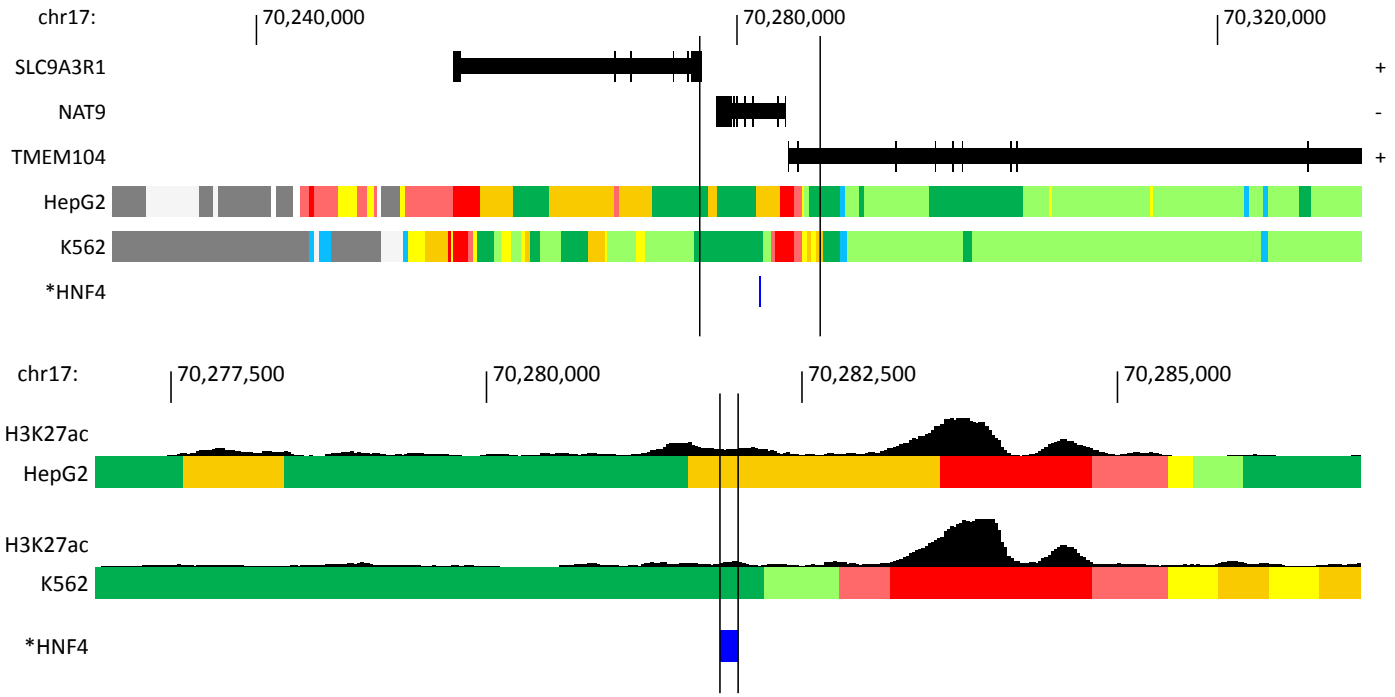
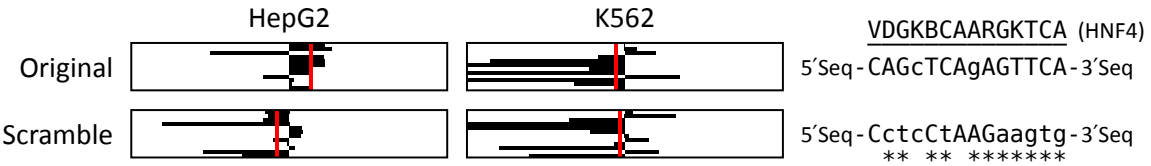
460 HNF4 in HepG2 enhancer

chr17 70281916 70281929 + (hg18)





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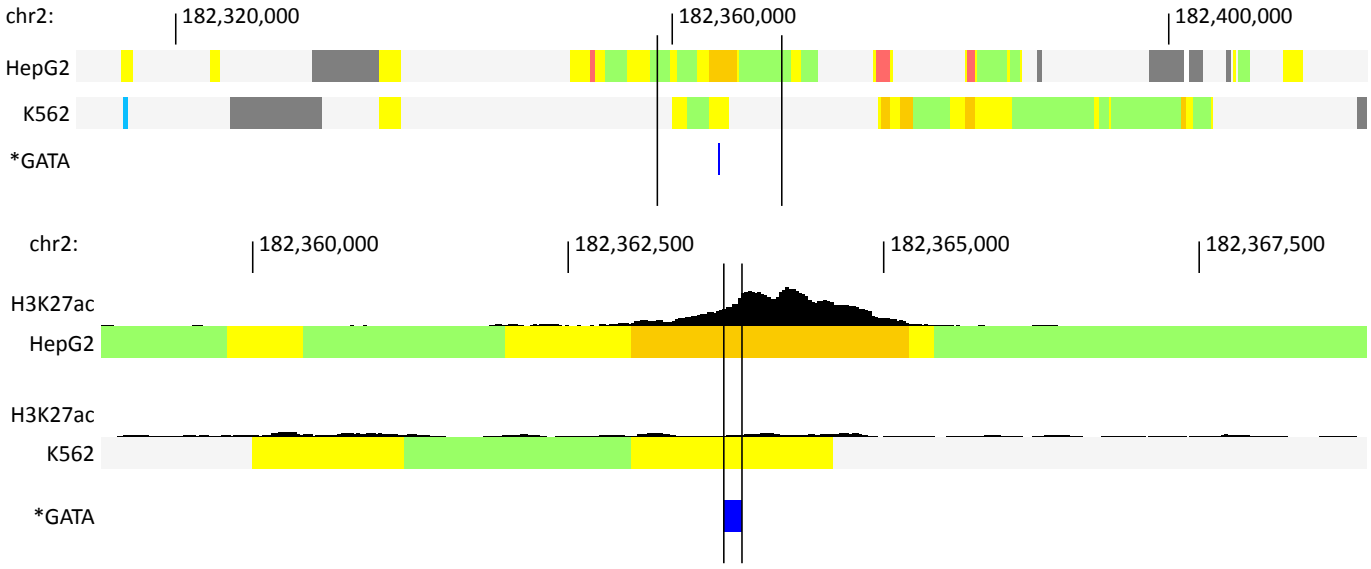
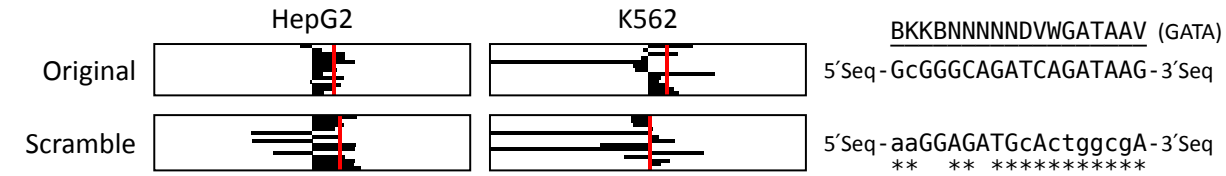
461 GATA in HepG2 enhancer

chr2 182363797 182363814 + (hg18)





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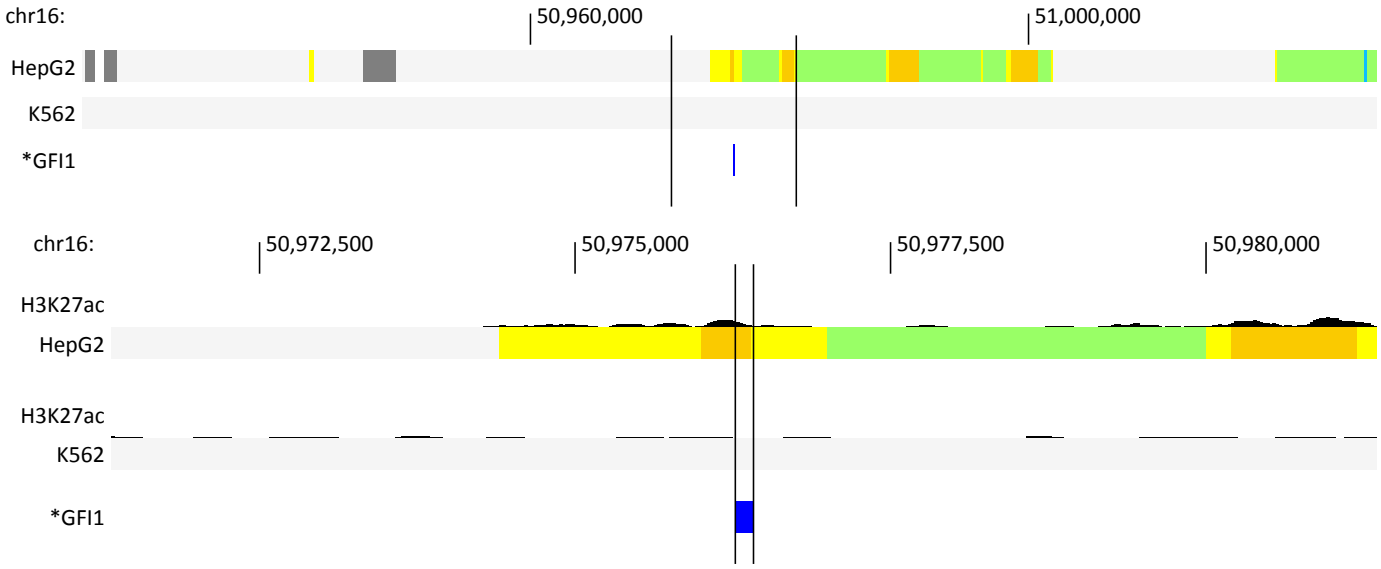
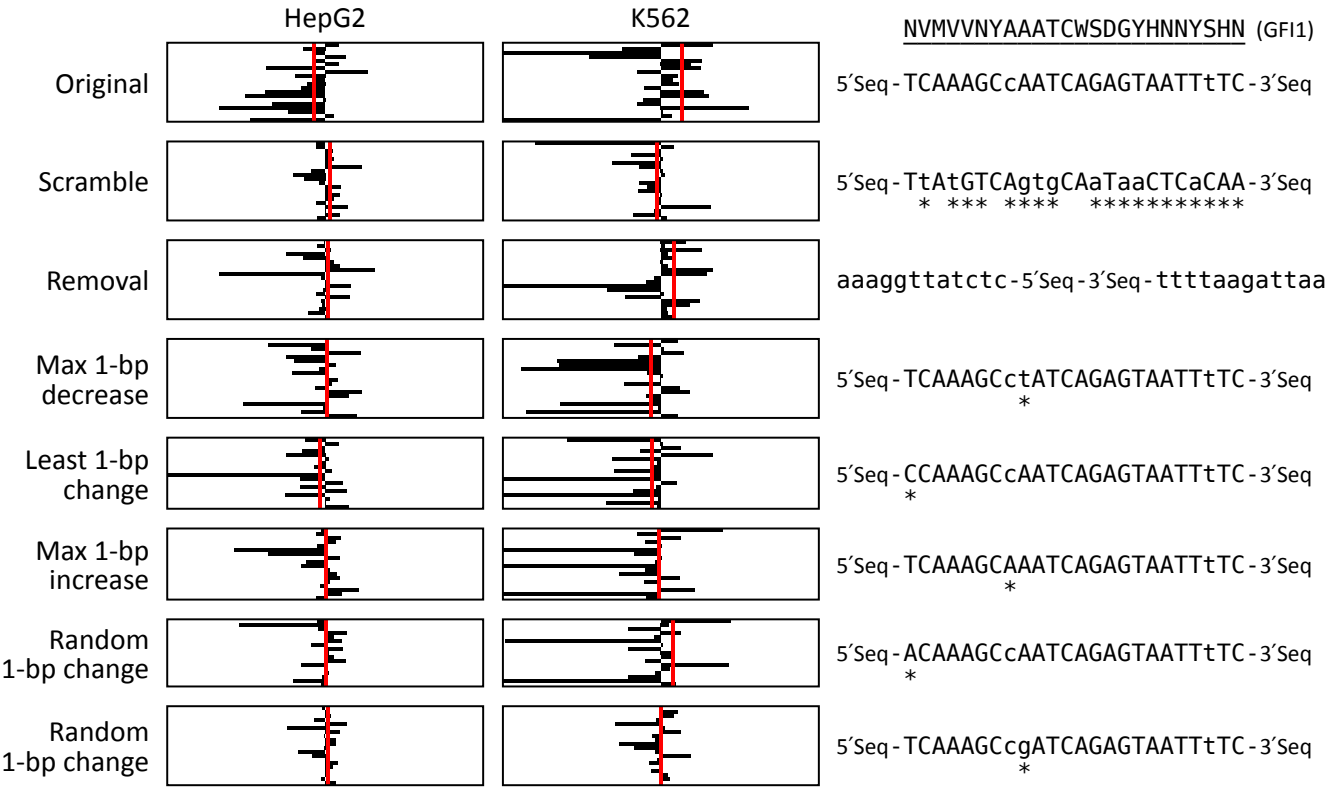
462 GFI1 in HepG2 enhancer

chr16 50976331 50976354 + (hg18)





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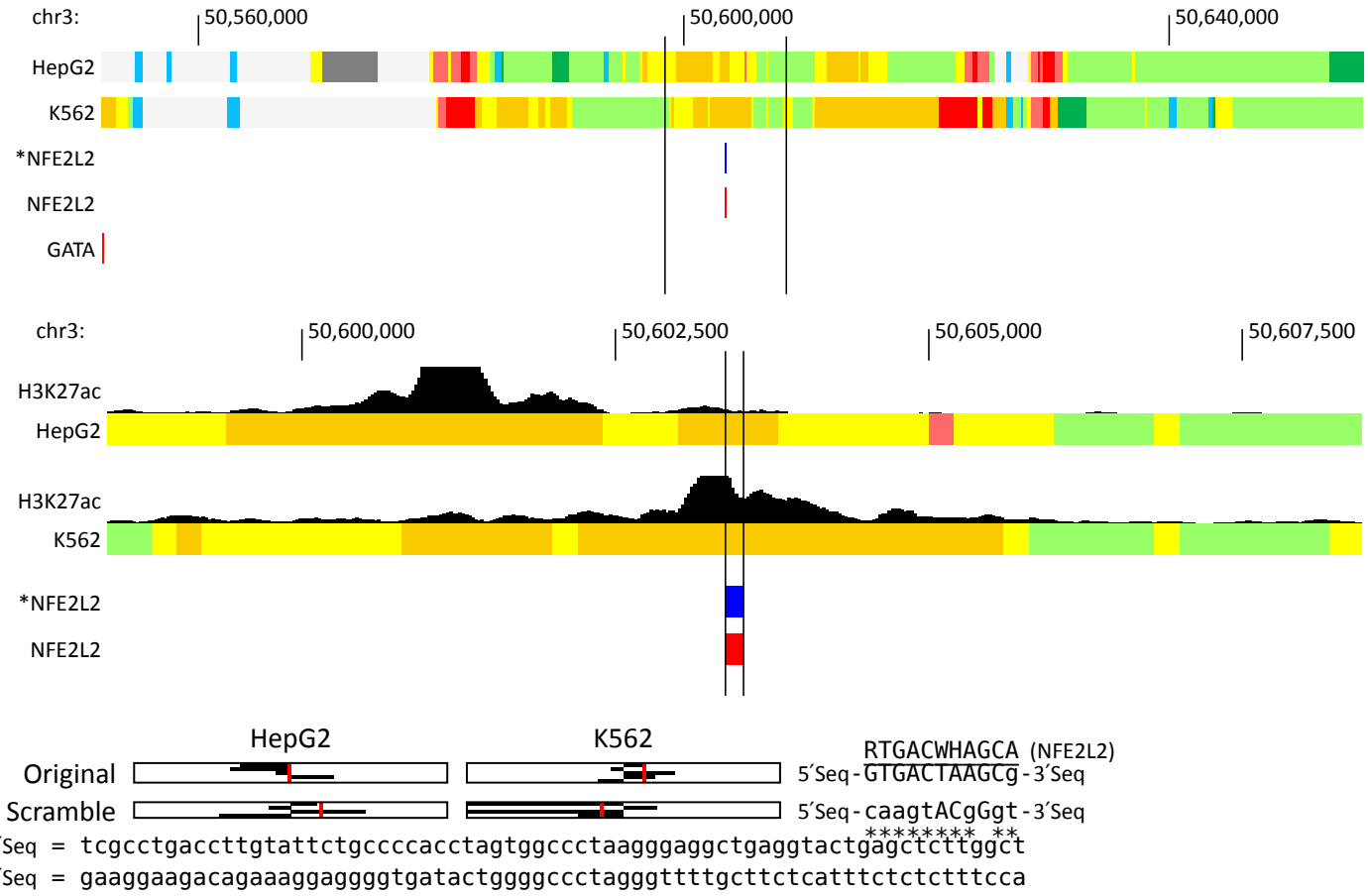
3′Seq = ctcttaactattctacatactgggcttctgggttaaatgtccttcccacccaaaagagtg

463 NFE2L2 in HepG2 enhancer

chr3 50603445 50603455 - (hg18)



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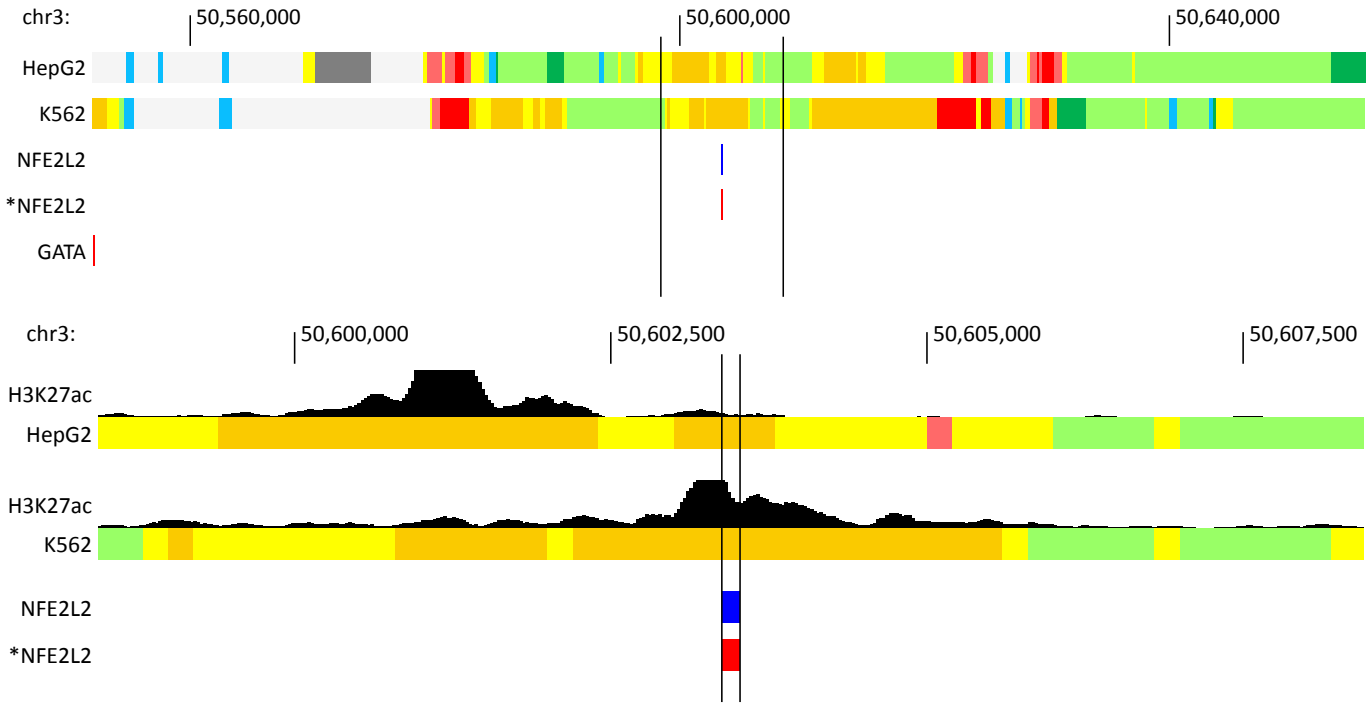
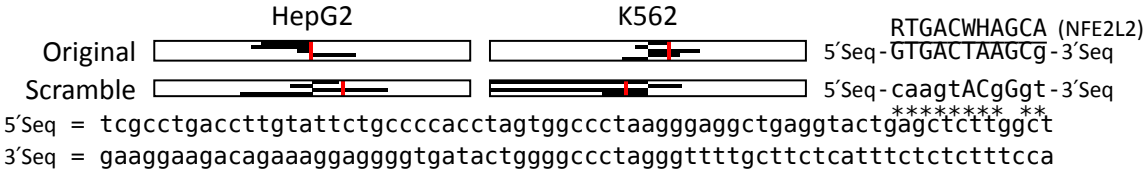
3′Seq = gaaggaagacagaaaggaggggtgatactggggccctagggttttgcttctcatttctctctttcca

464 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr3 50603445 50603455 - (hg18)





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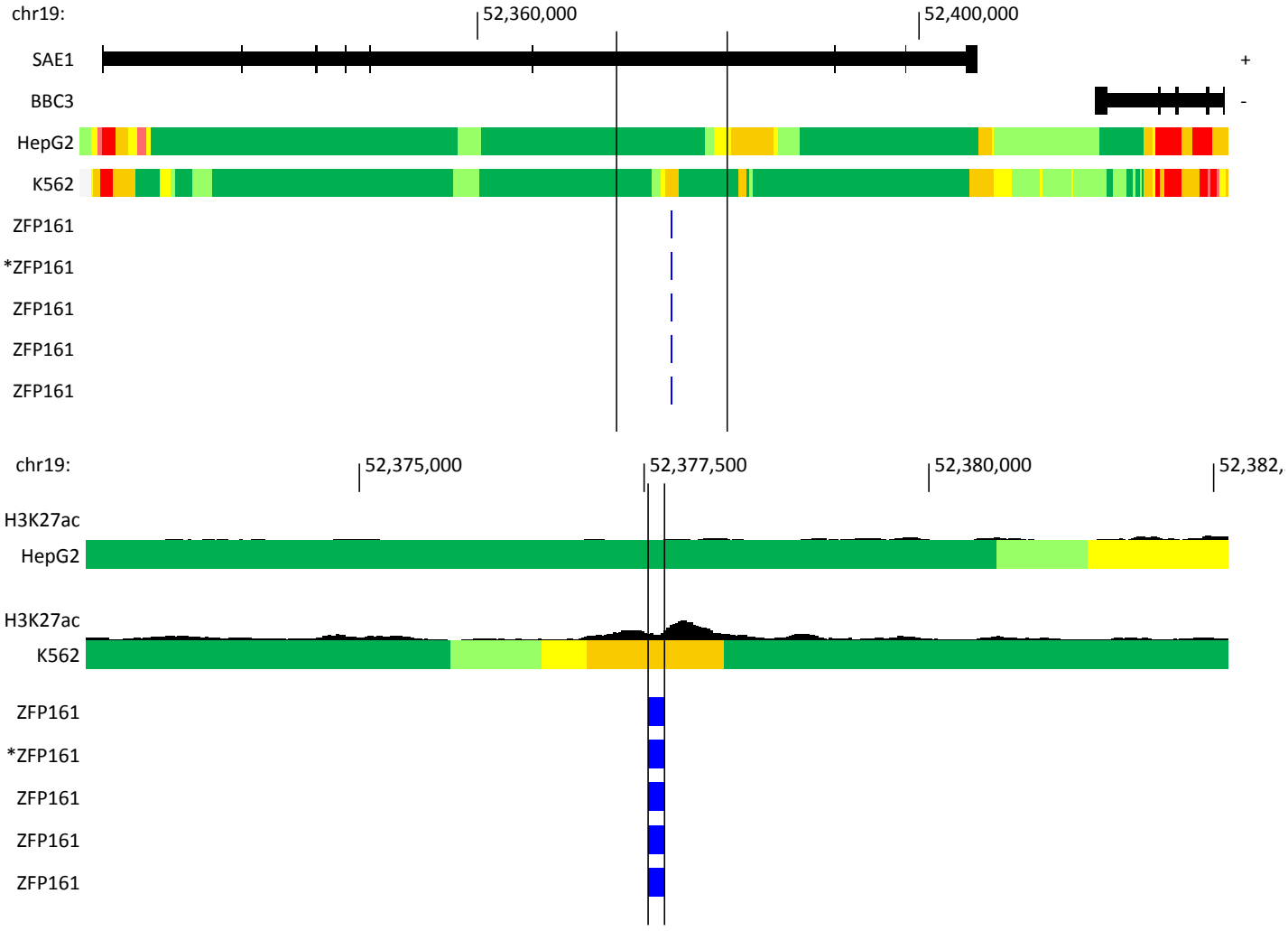
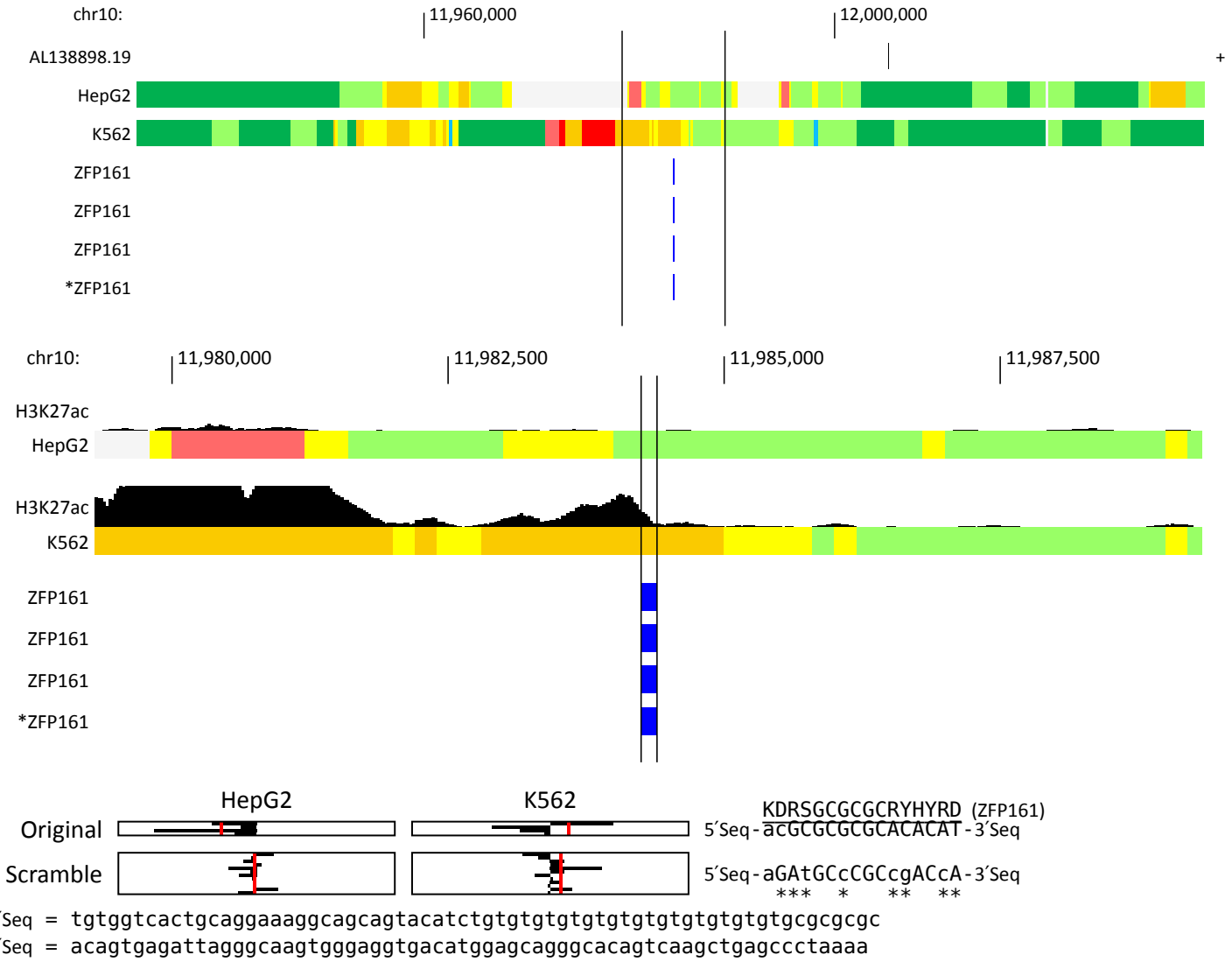
465 ZFP161 in K562 enhancer

chr19 52377600 52377615 - (hg18)



466 ZFP161 in K562 enhancer

chr10 11984313 11984328 - (hg18)



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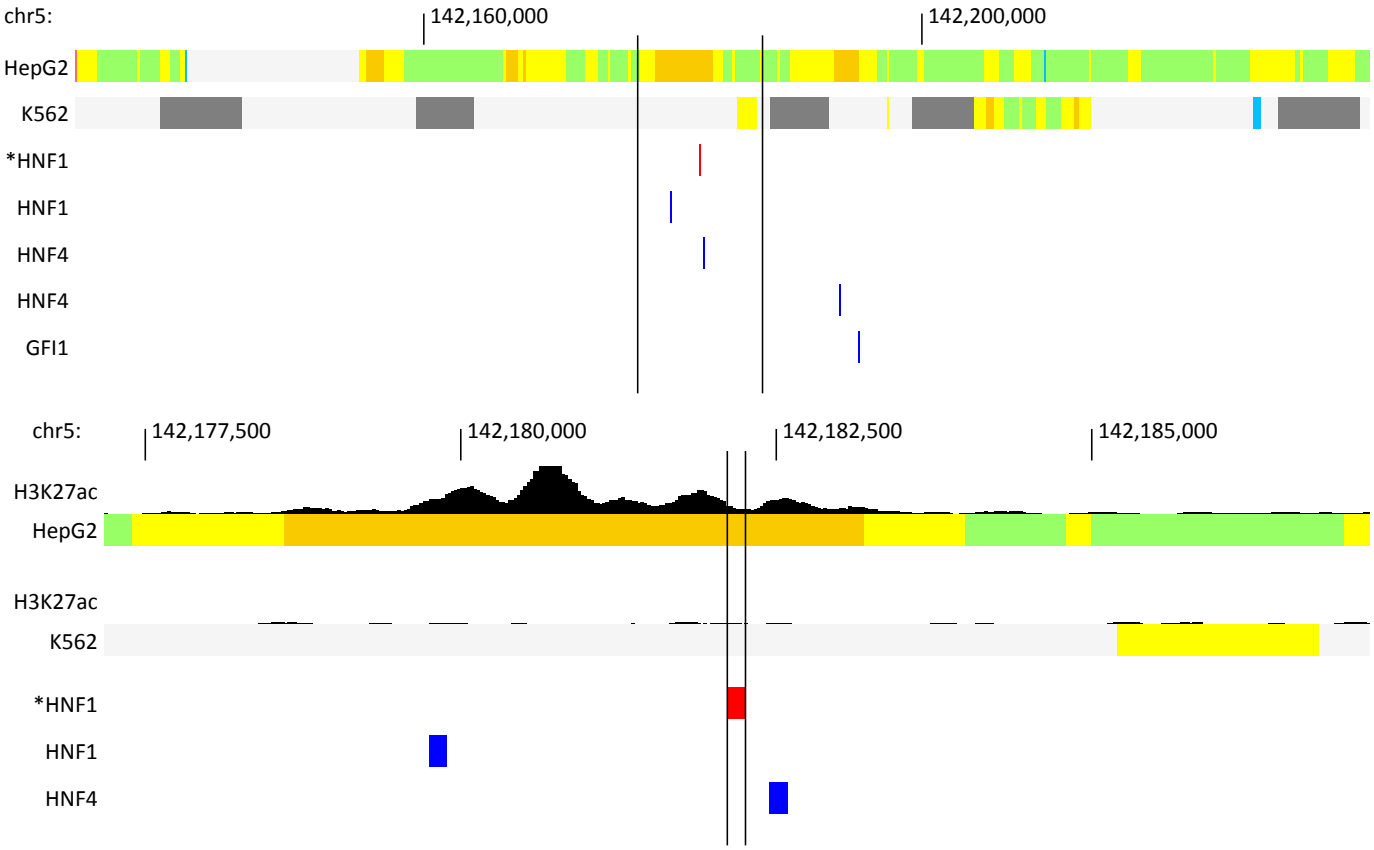
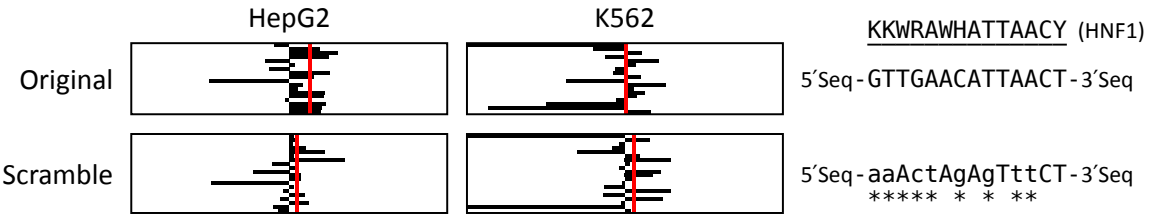
467 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr5 142182178 142182191 + (hg18)





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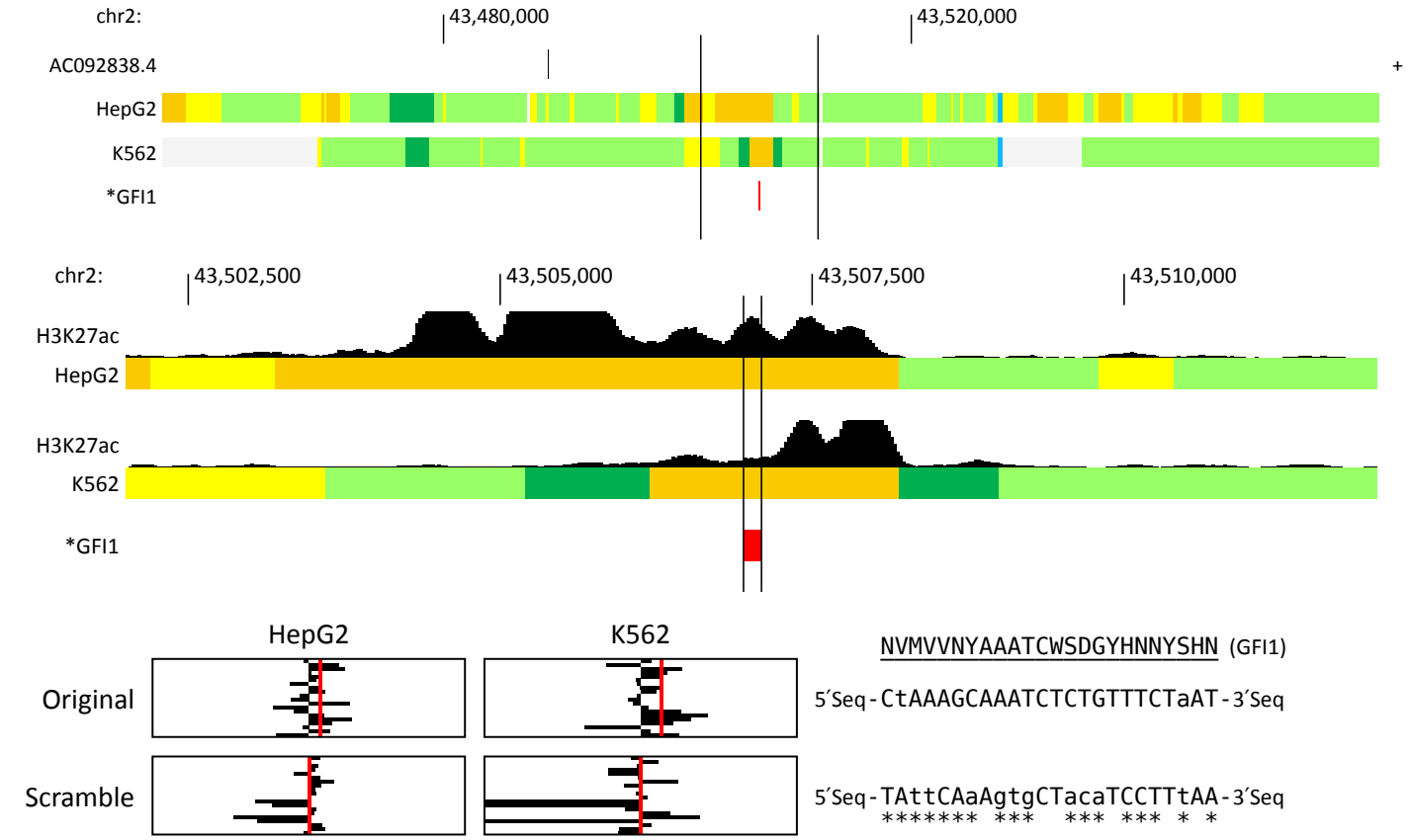
468 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 43507011 43507034 + (hg18)



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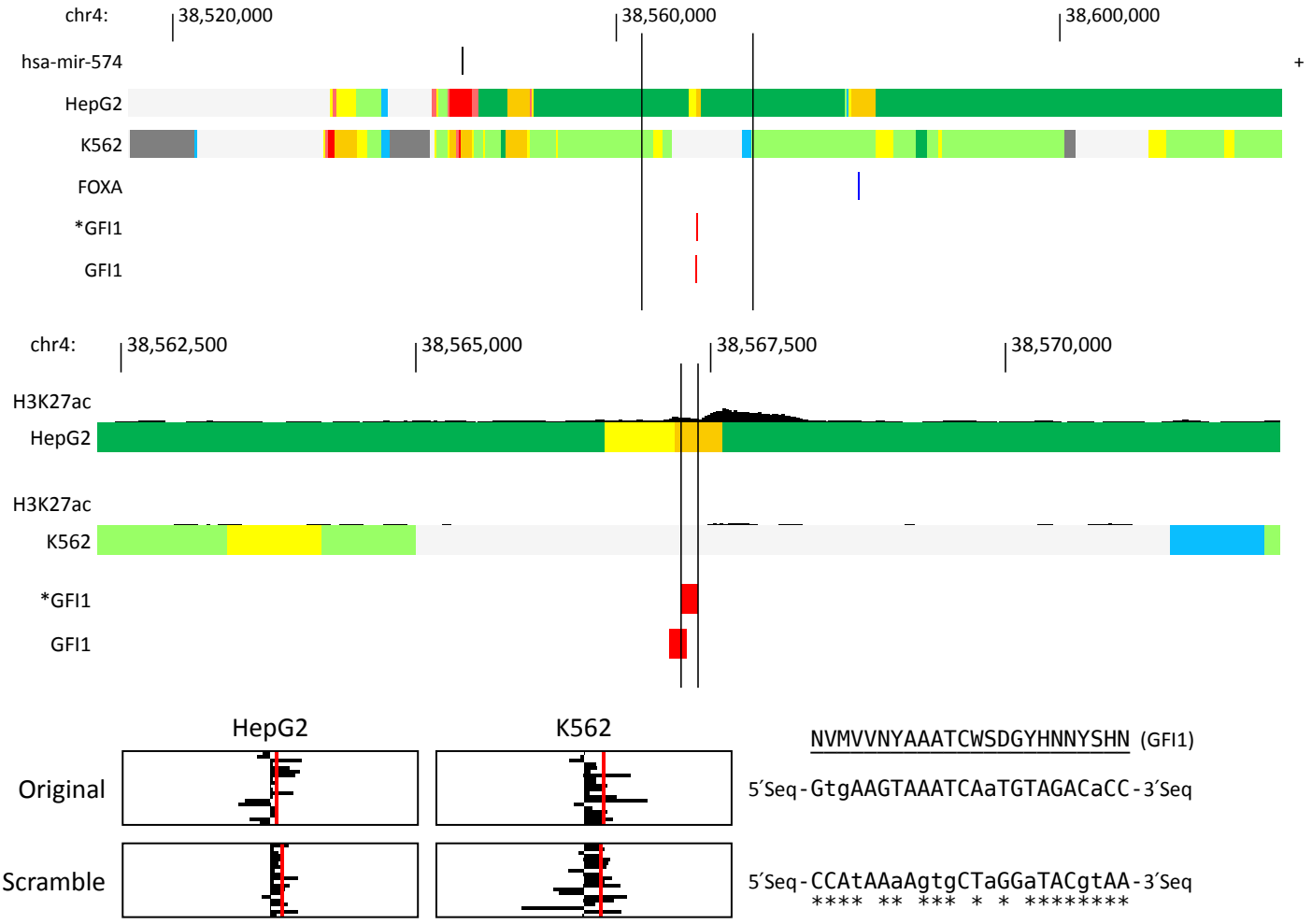
3′Seq = gtaaactgcaattctgtgcacatgcctttcctccttgcatcaactttctgaaaacatttc

469 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr4 38567310 38567333 + (hg18)



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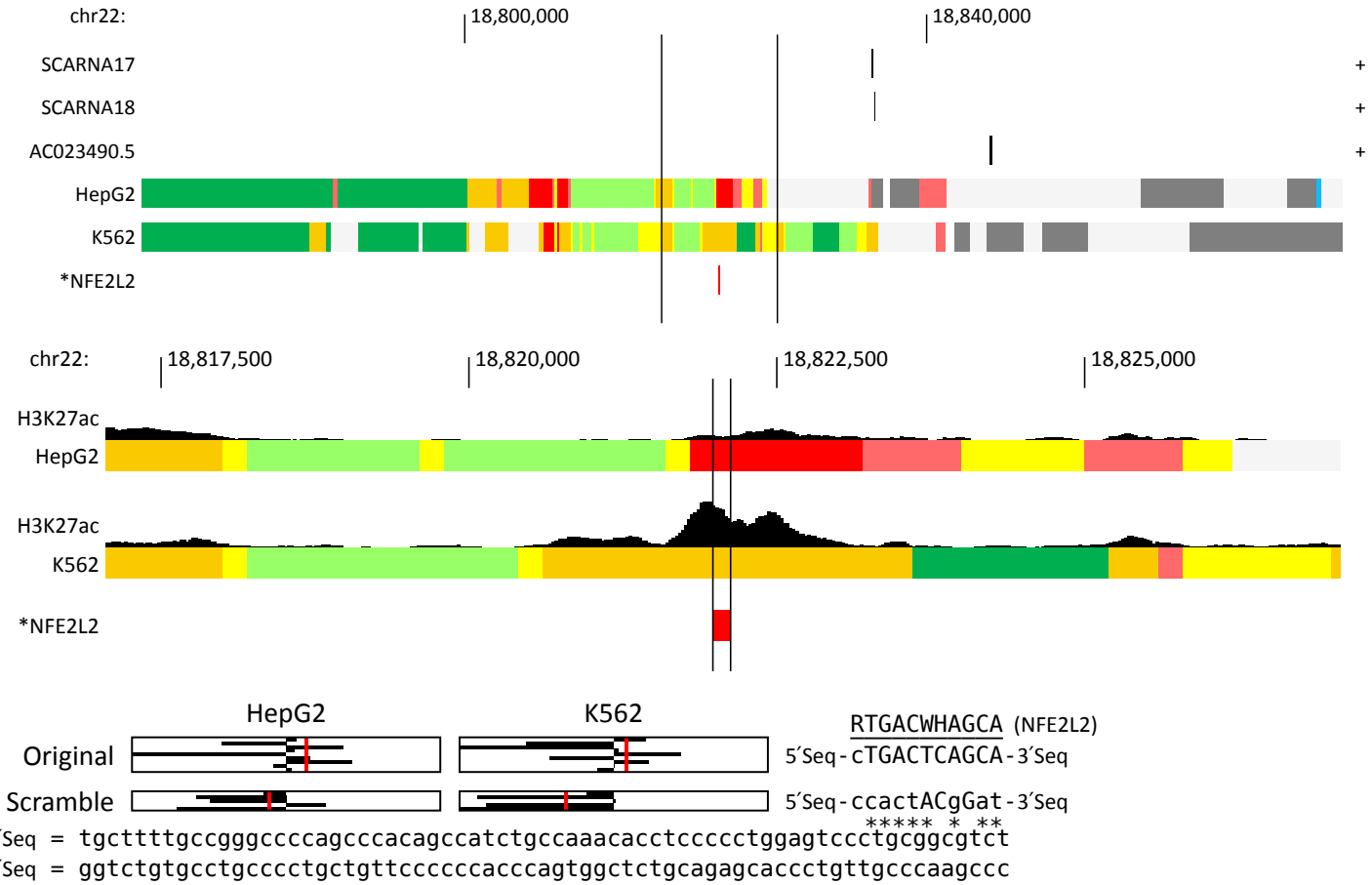
3′Seq = aaaaatgaaagcaggcagtgatgagtcatgaatatttccattcatgttaacaagcttctc

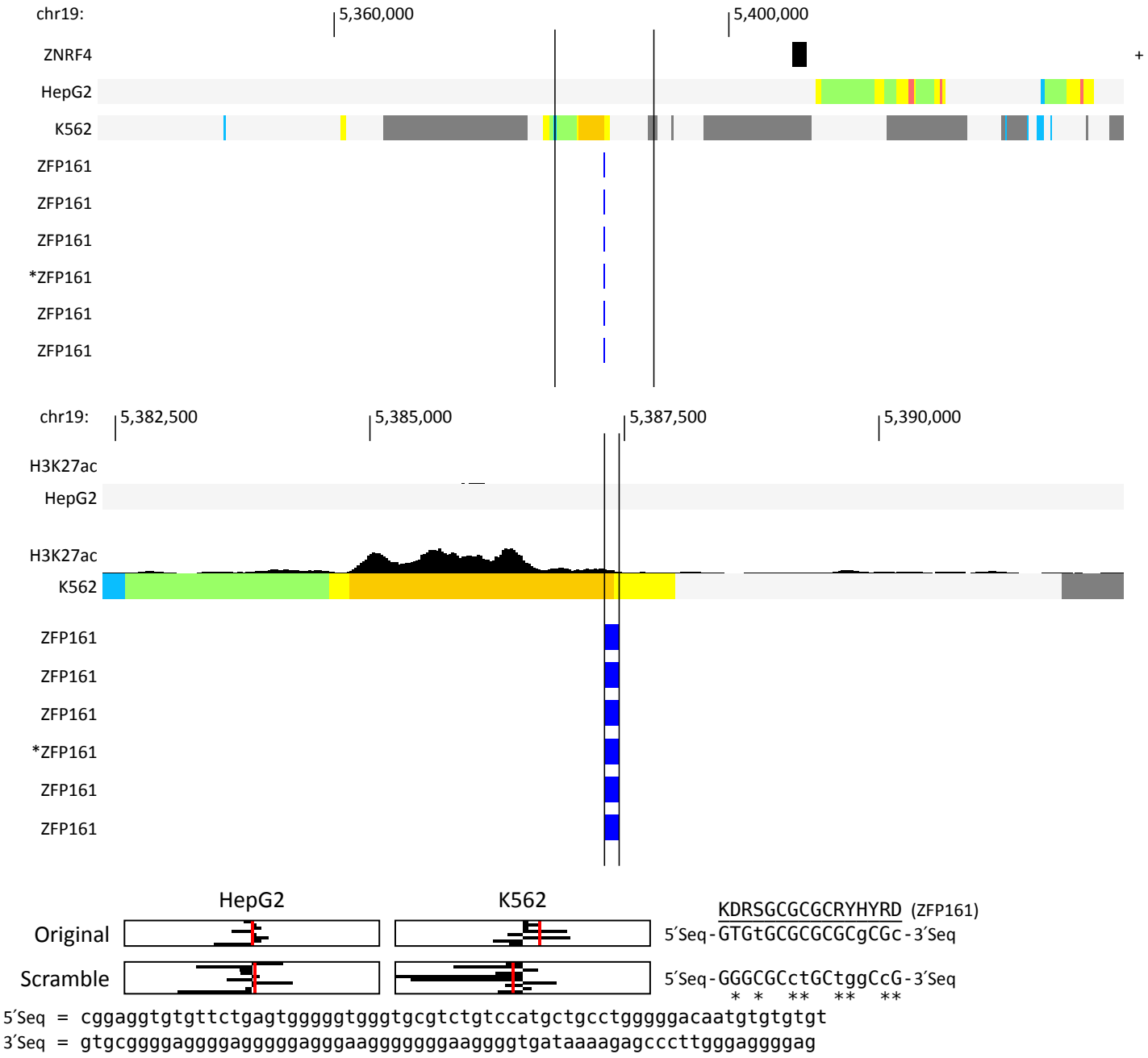
470 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr22 18822048 18822058 + (hg18)



471 ZFP161 in K562 enhancer

chr19 5387369 5387384 + (hg18)



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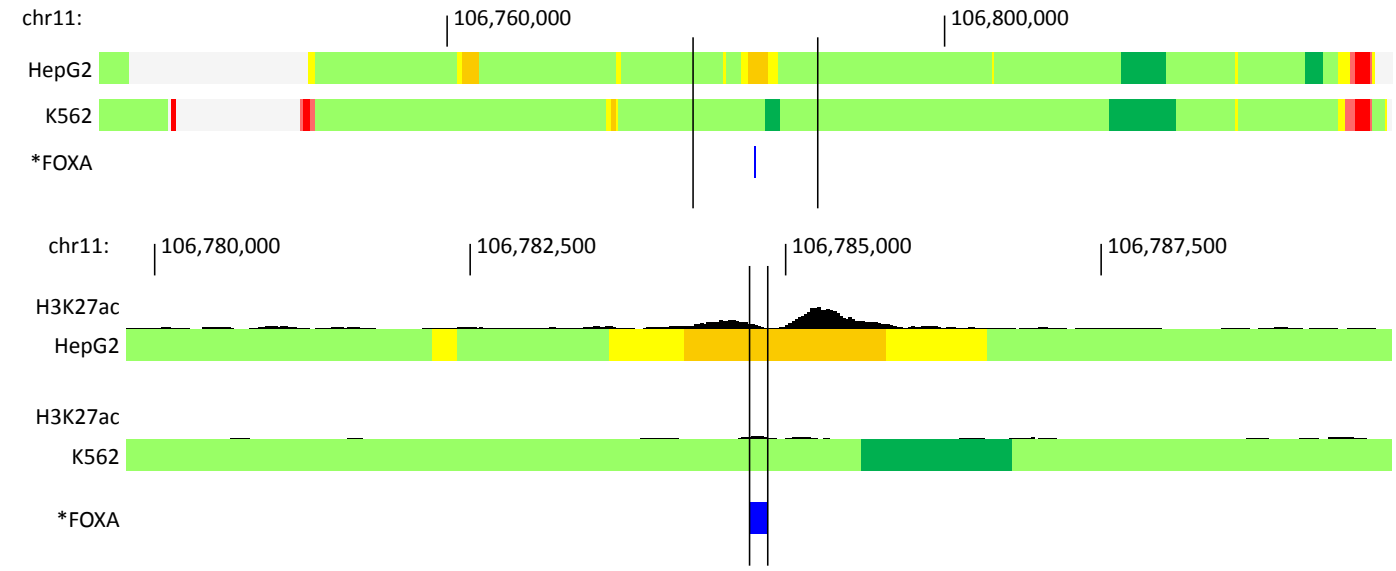
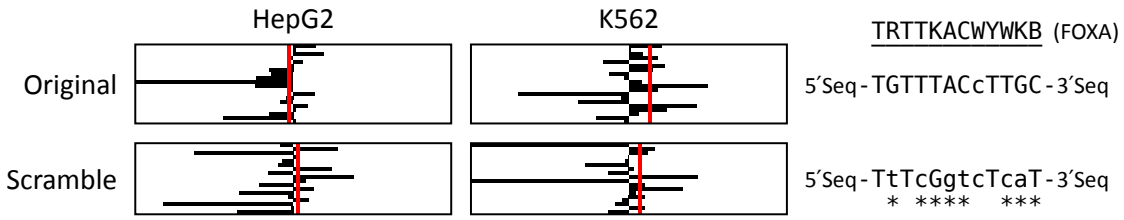
472 FOXA in HepG2 enhancer

chr11 106784781 106784792 - (hg18)





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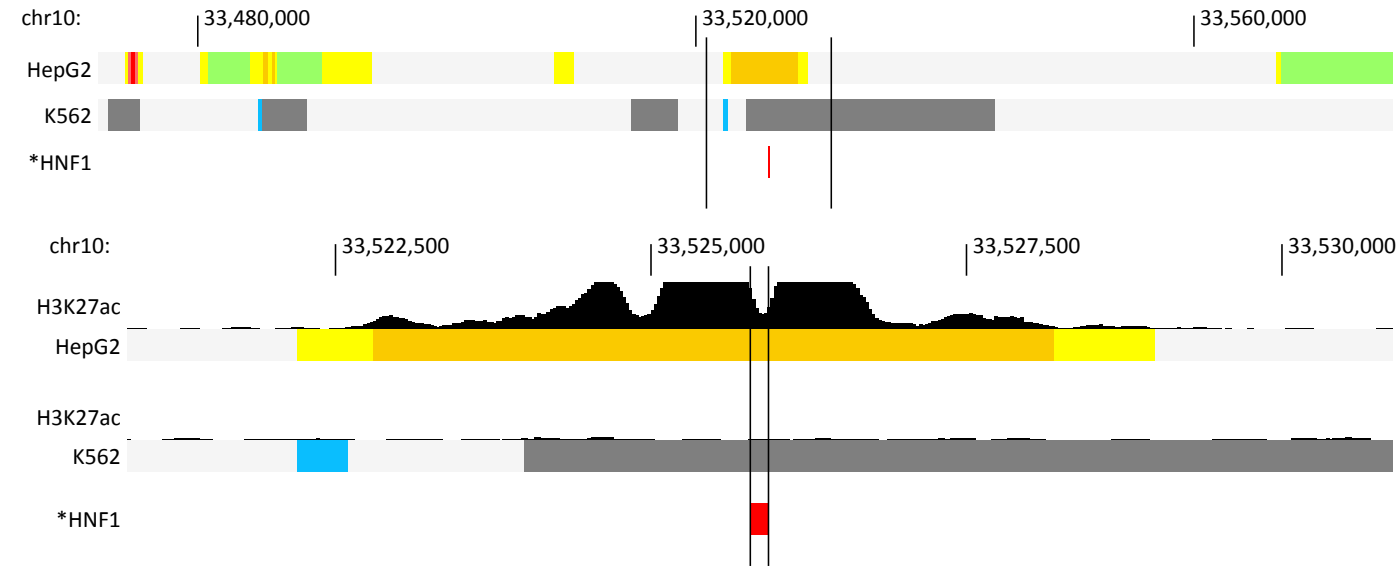
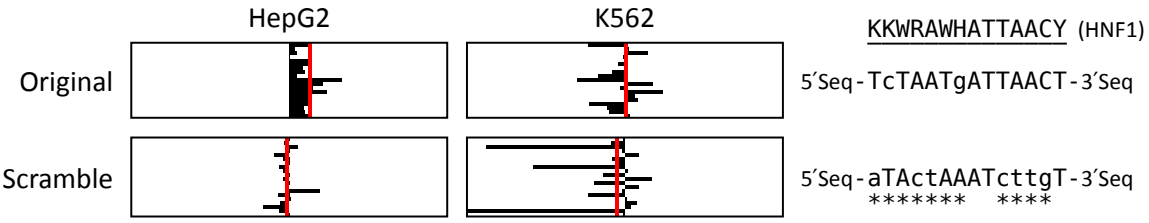
473 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 33525853 33525866 + (hg18)





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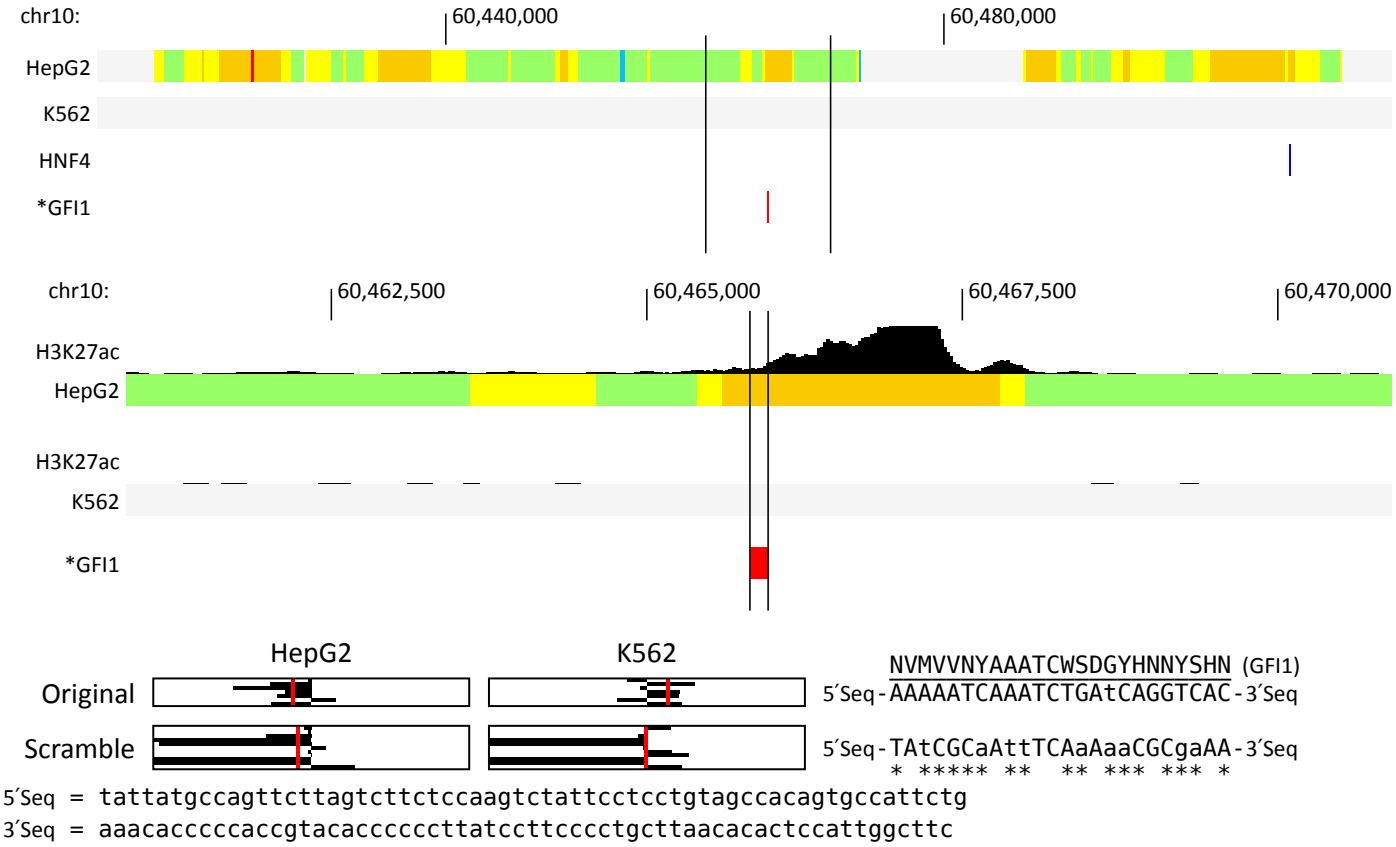
474 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr10 60465878 60465901 - (hg18)



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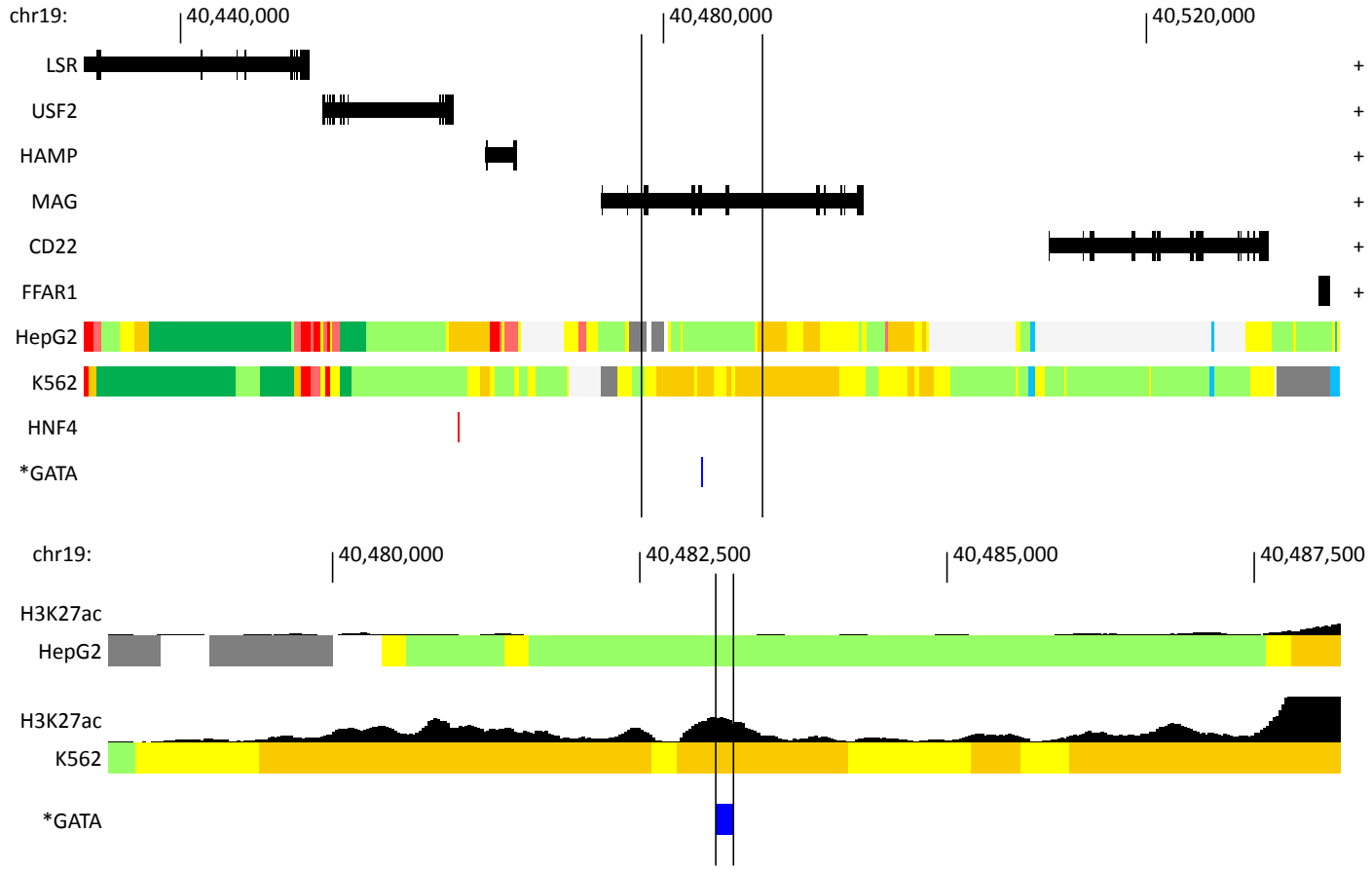
475 GATA in K562 enhancer

chr19 40483182 40483199 + (hg18)



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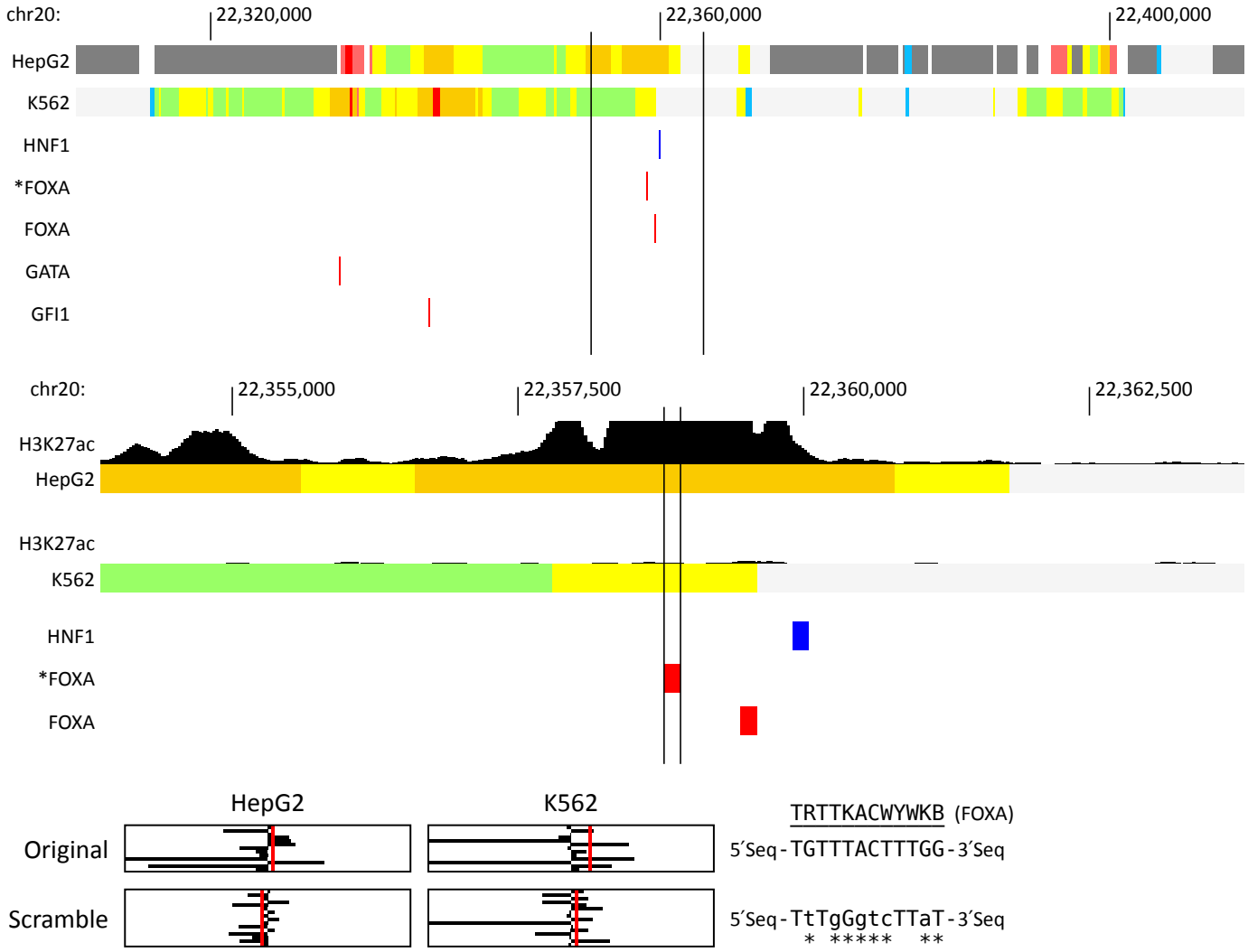
3′Seq = gggaaaggggcctcatccagggcgagcatgggctgggtcccgaggggaccggccataaacagt

476 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 22358845 22358856 + (hg18)



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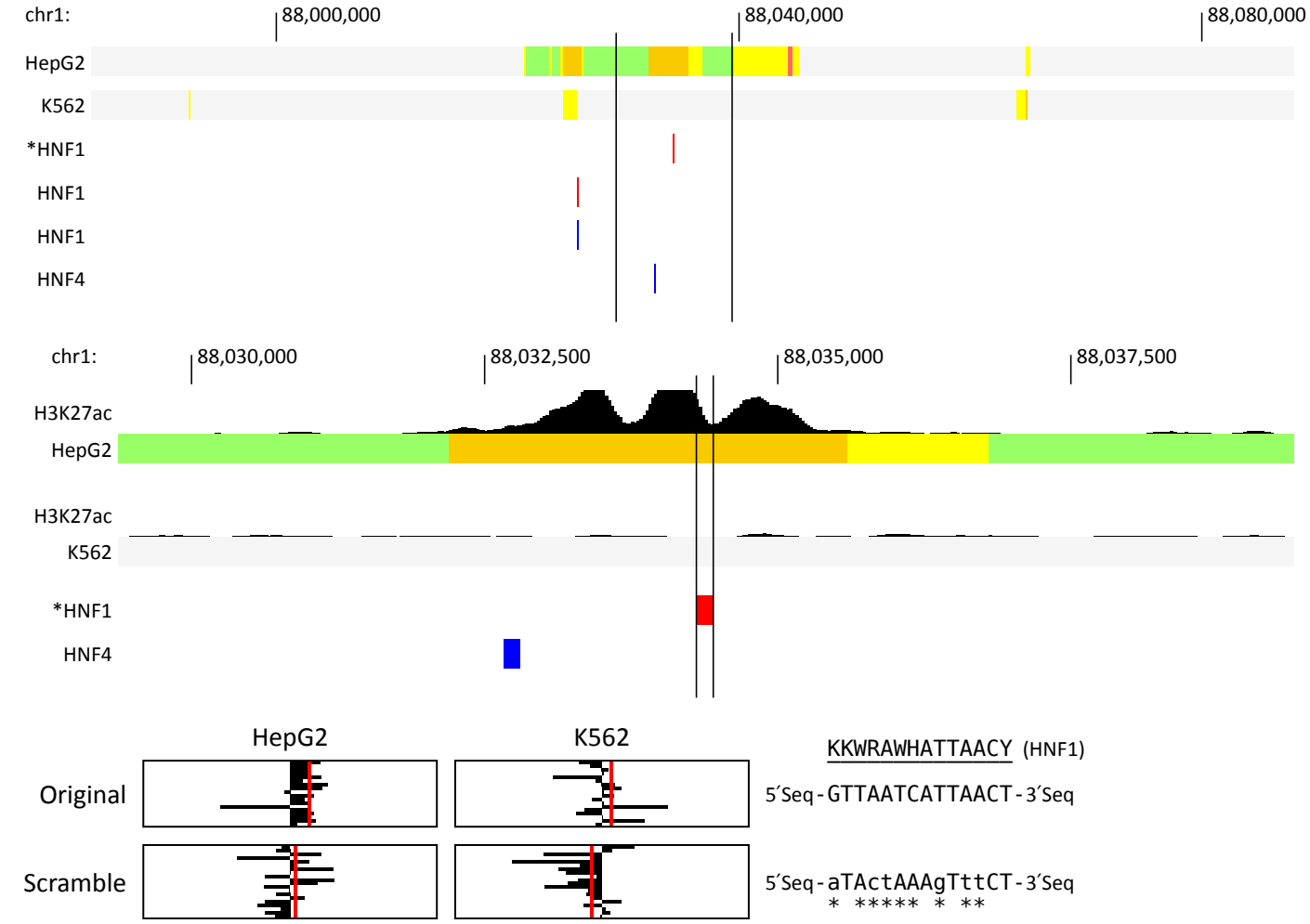
477 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 88034372 88034385 + (hg18)



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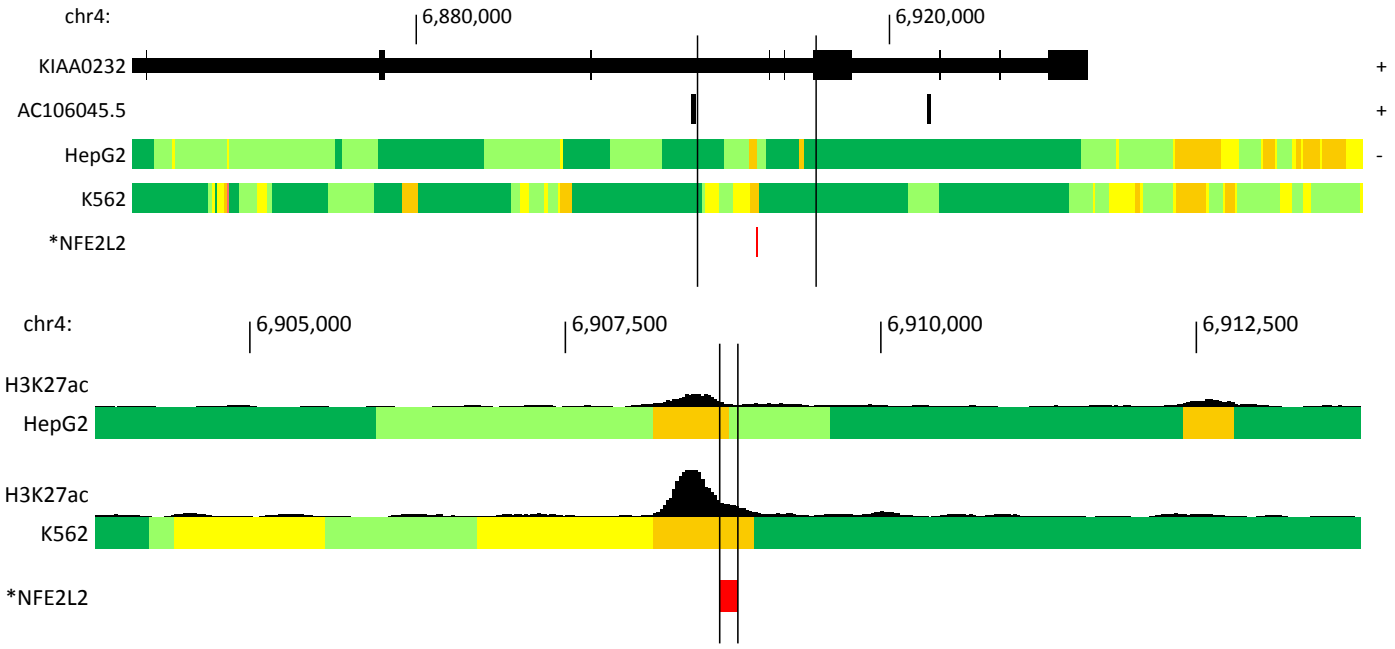
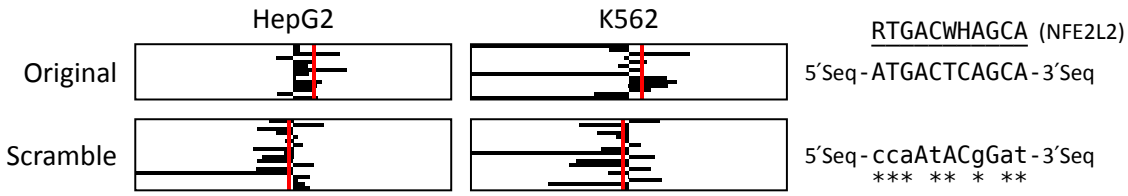
478 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr4 6908790 6908800 - (hg18)





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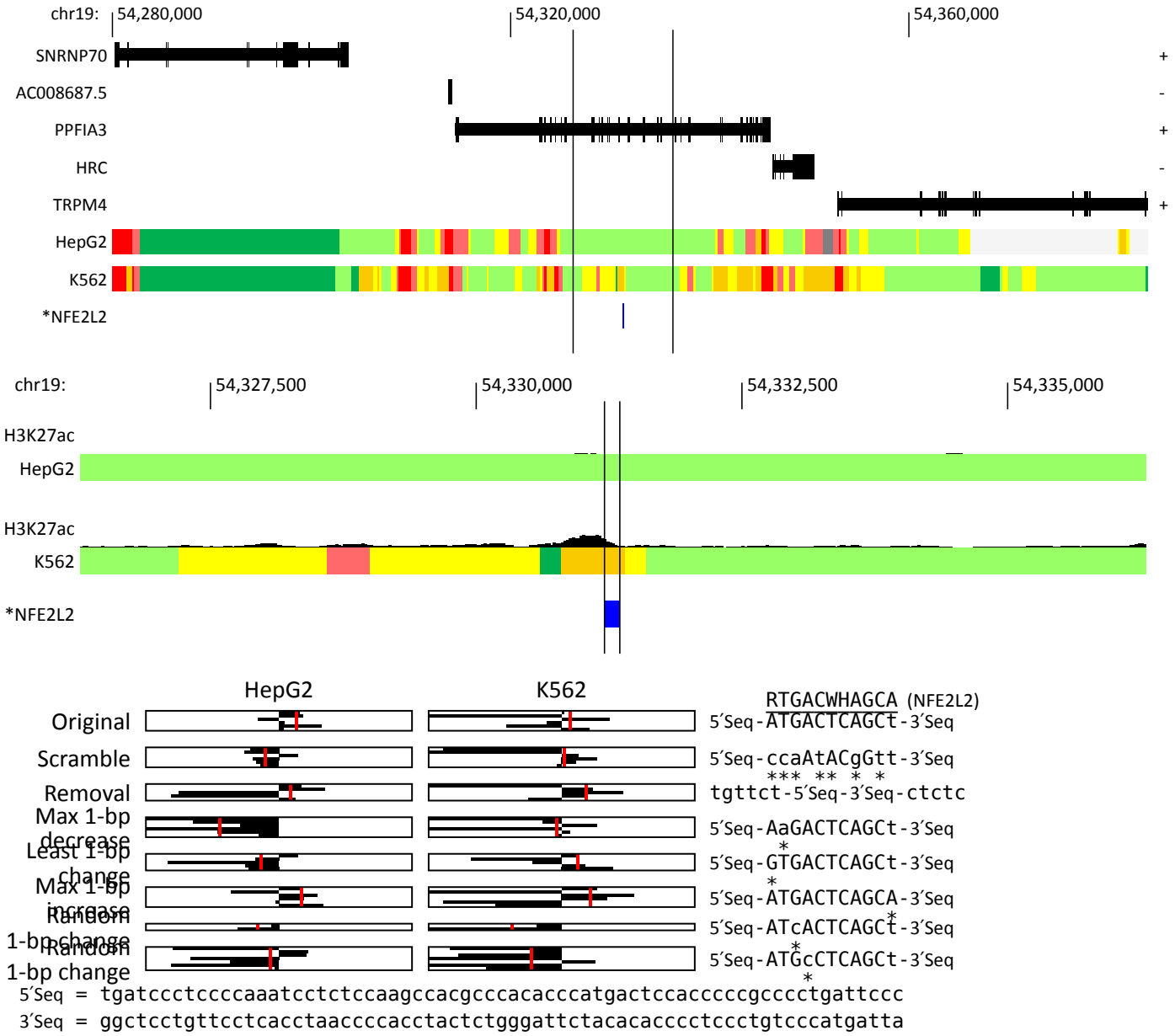
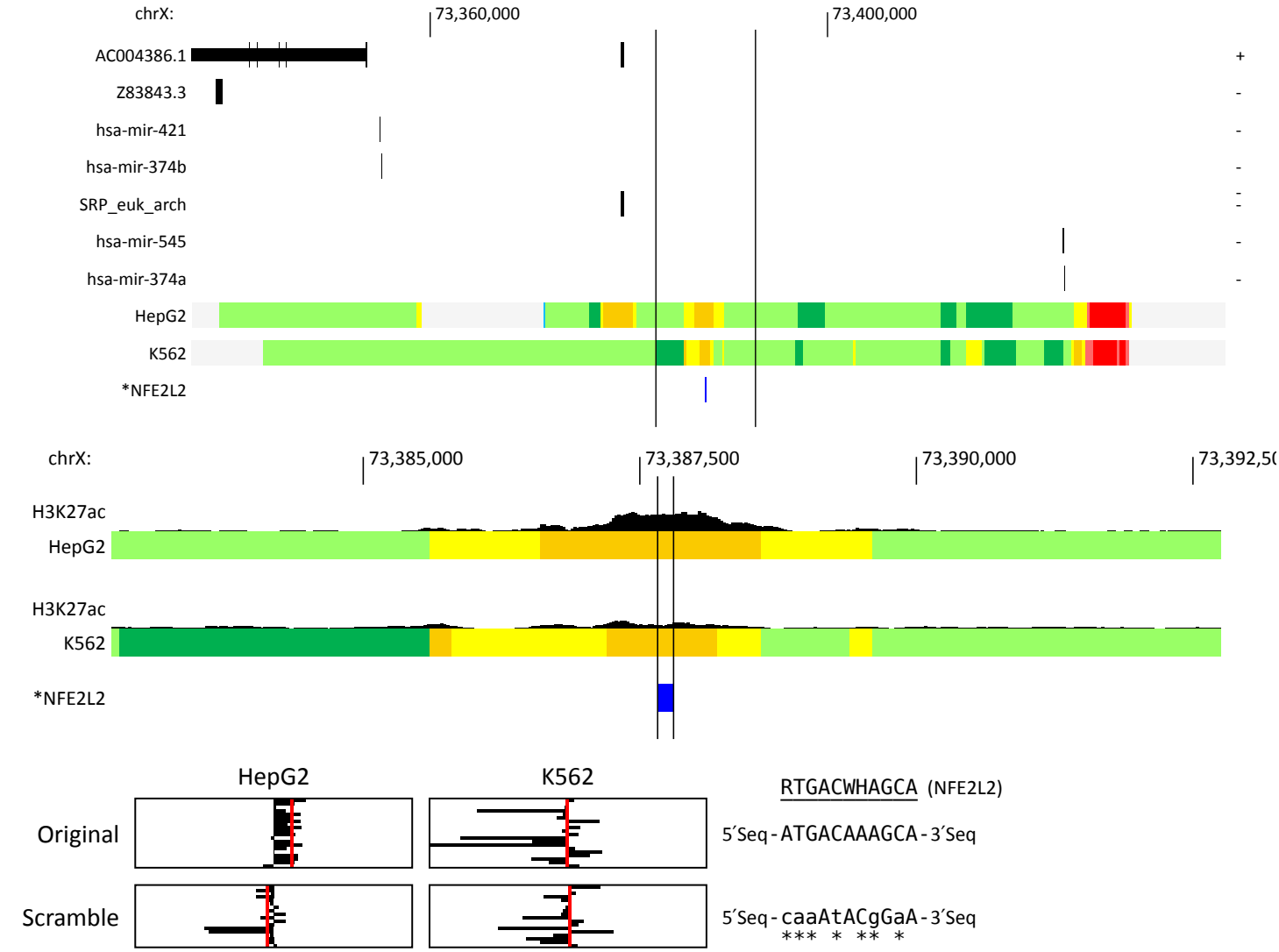
479 NFE2L2 in K562 enhancer

chr19 54331274 54331284 - (hg18)



480 NFE2L2 in K562 enhancer

chrX 73387728 73387738 + (hg18)



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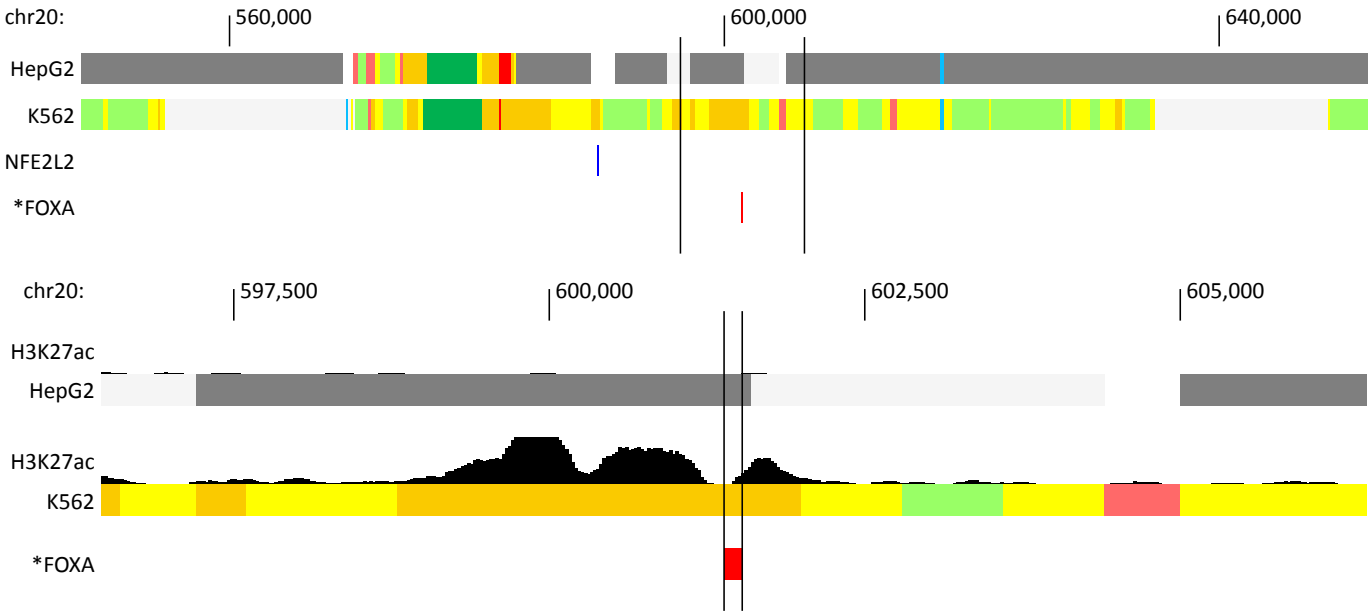
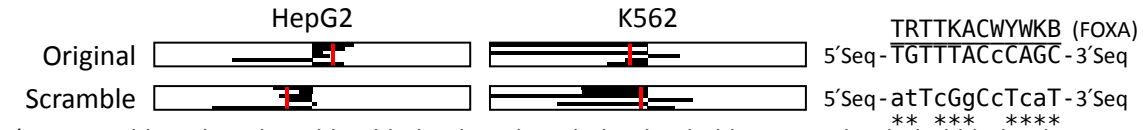
3′Seq = aaaatgcagcgcaaacatgaacatgttggtgggcacacacacatagtttctccagatgccttgattt

481 FOXA in K562 enhancer (conserved at 40% confidence)

chr20 601452 601463 + (hg18)





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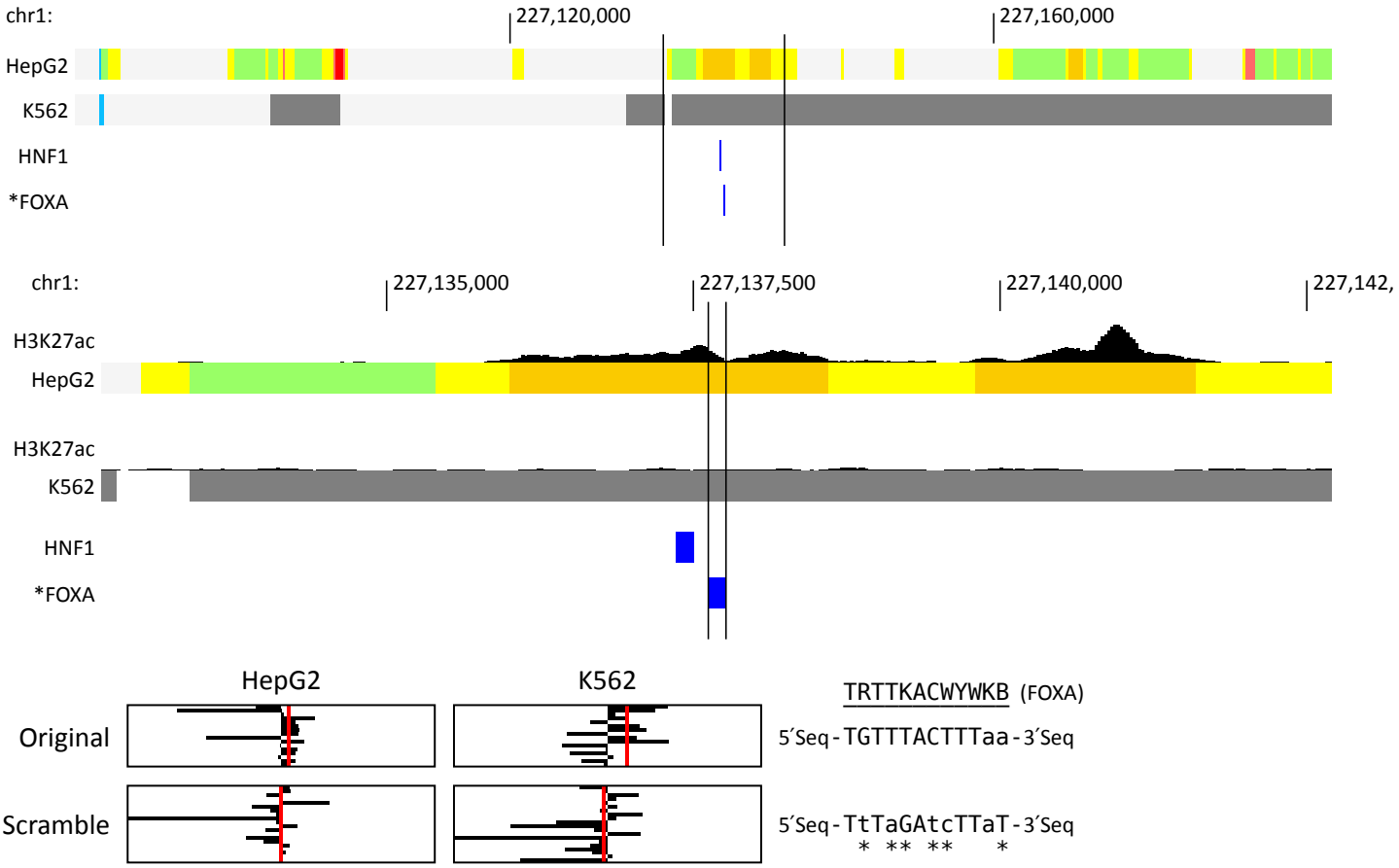
482 FOXA in HepG2 enhancer

chr1 227137689 227137700 + (hg18)



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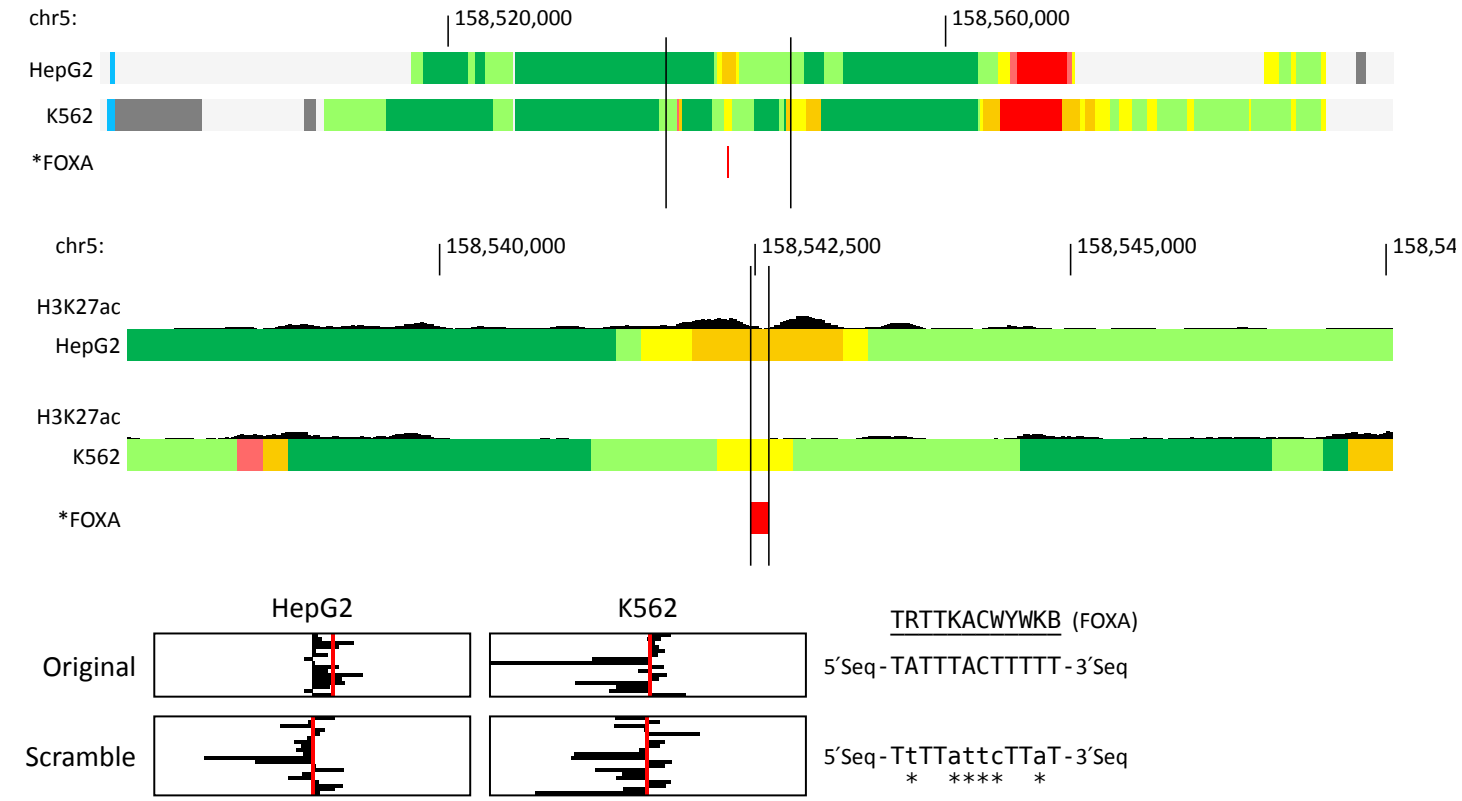
483 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr5 158542532 158542543 + (hg18)



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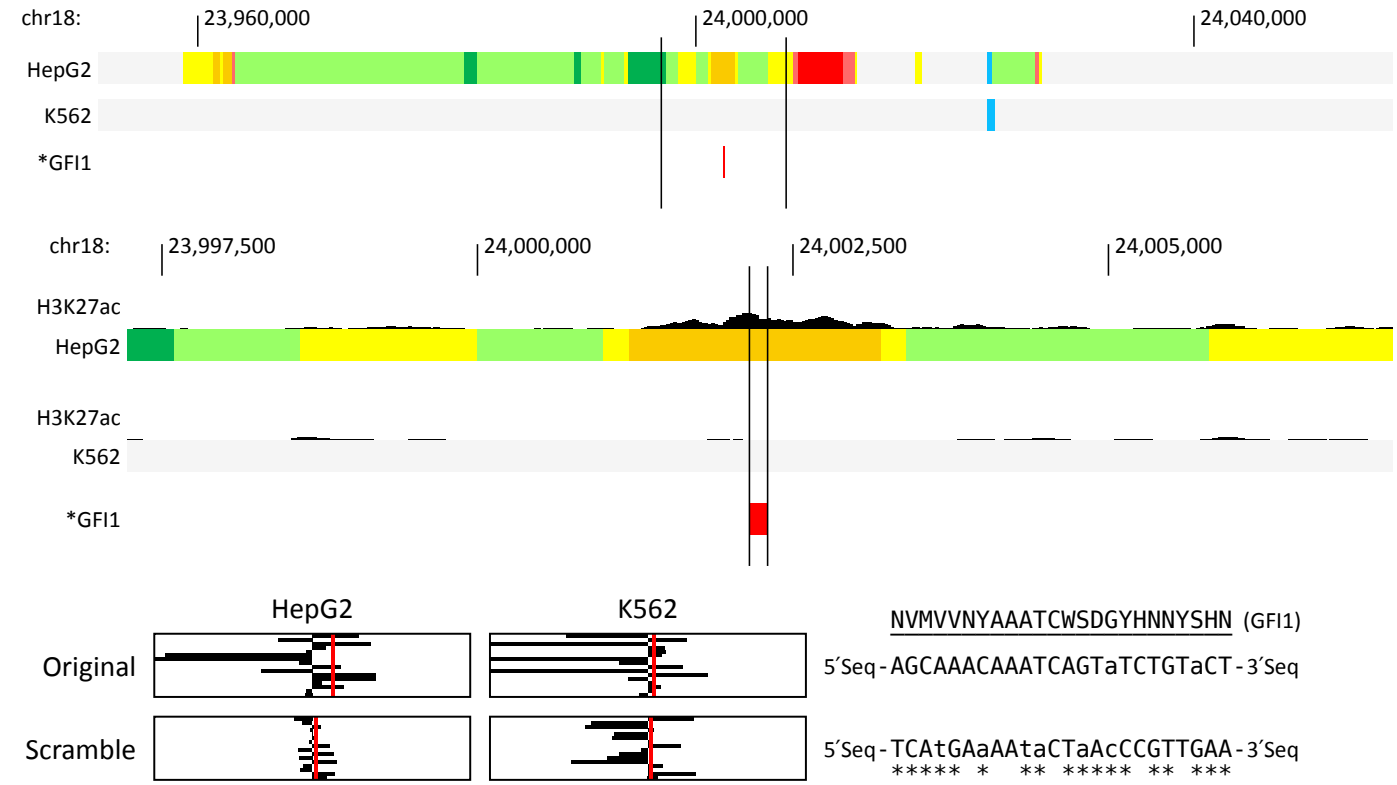
484 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr18 24002216 24002239 + (hg18)



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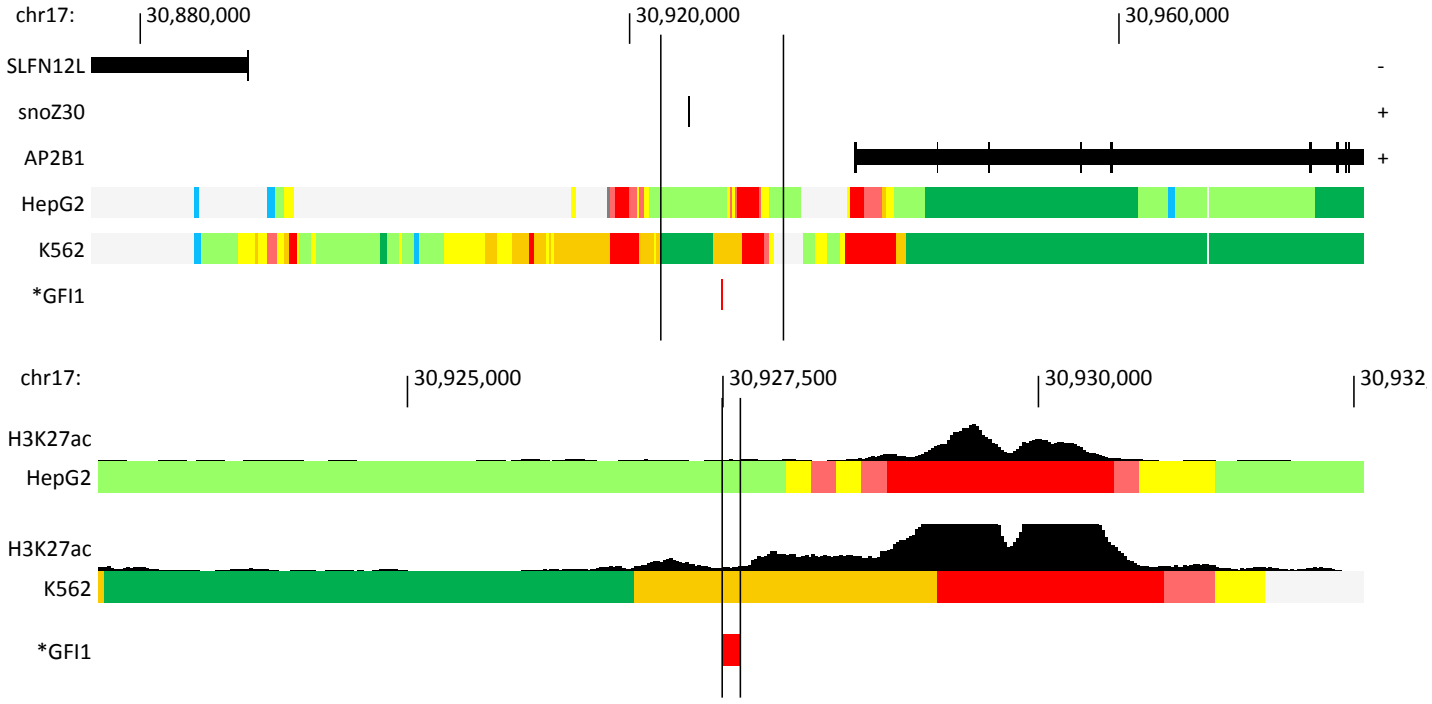
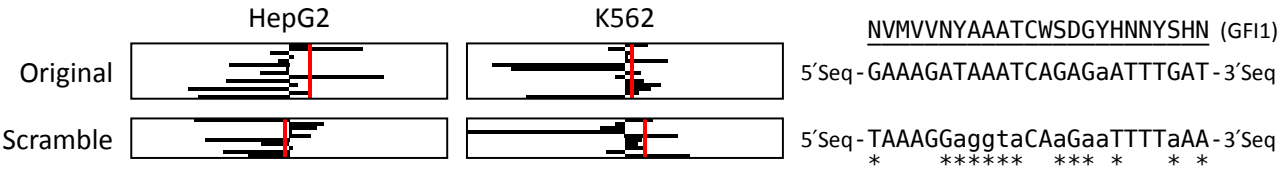
3′Seq = cagttacactacagaatattcaccggaacttgtctgcagtgggtcatttcaagatgtgga

485 GFI1 in K562 enhancer (conserved at 40% confidence)

chr17 30927555 30927578 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

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5′Seq-TAAAGGaggtaCAaGaaTTTTaAA-3′Seq

* ****** *** * * *

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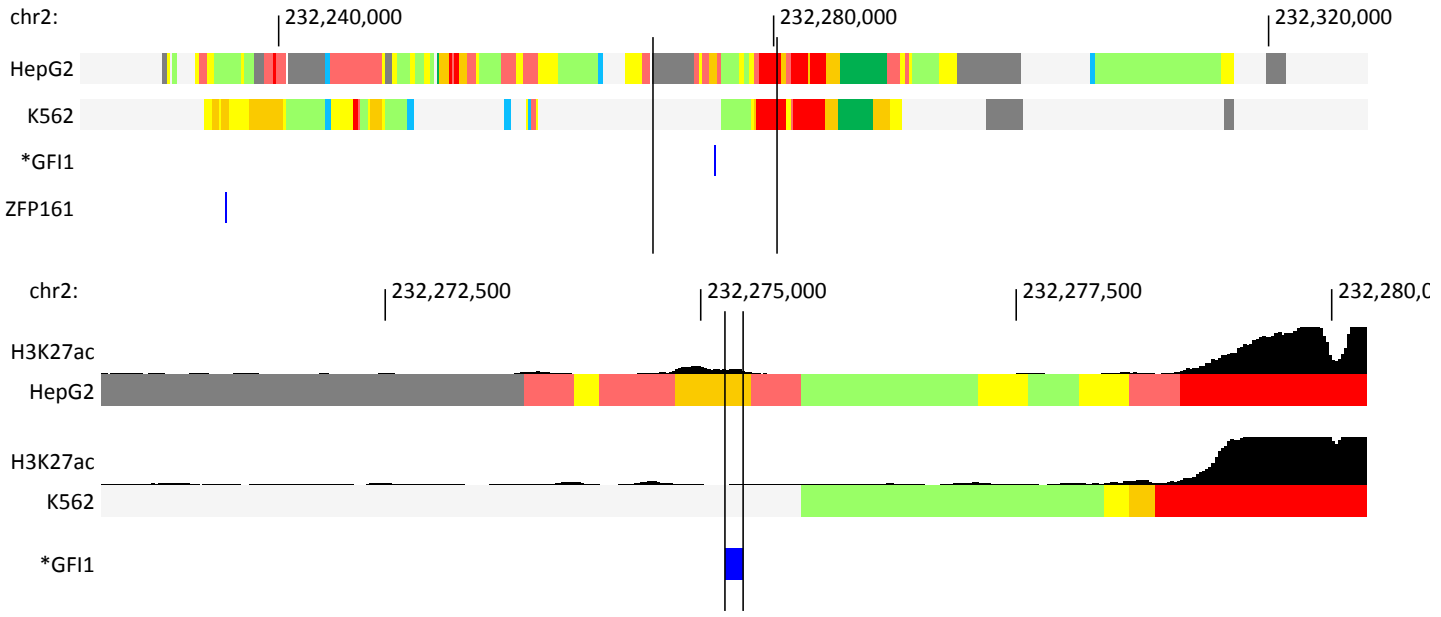
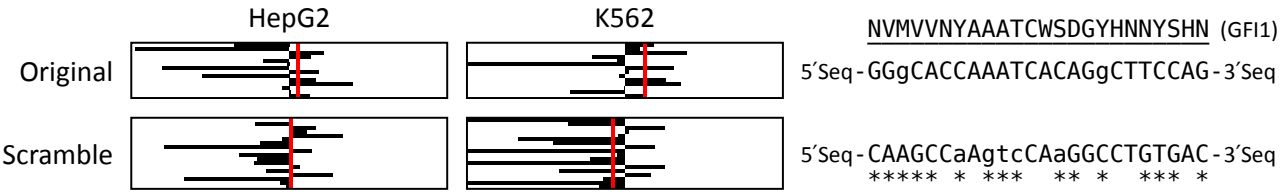
486 GFI1 in HepG2 enhancer

chr2 232275253 232275276 + (hg18)





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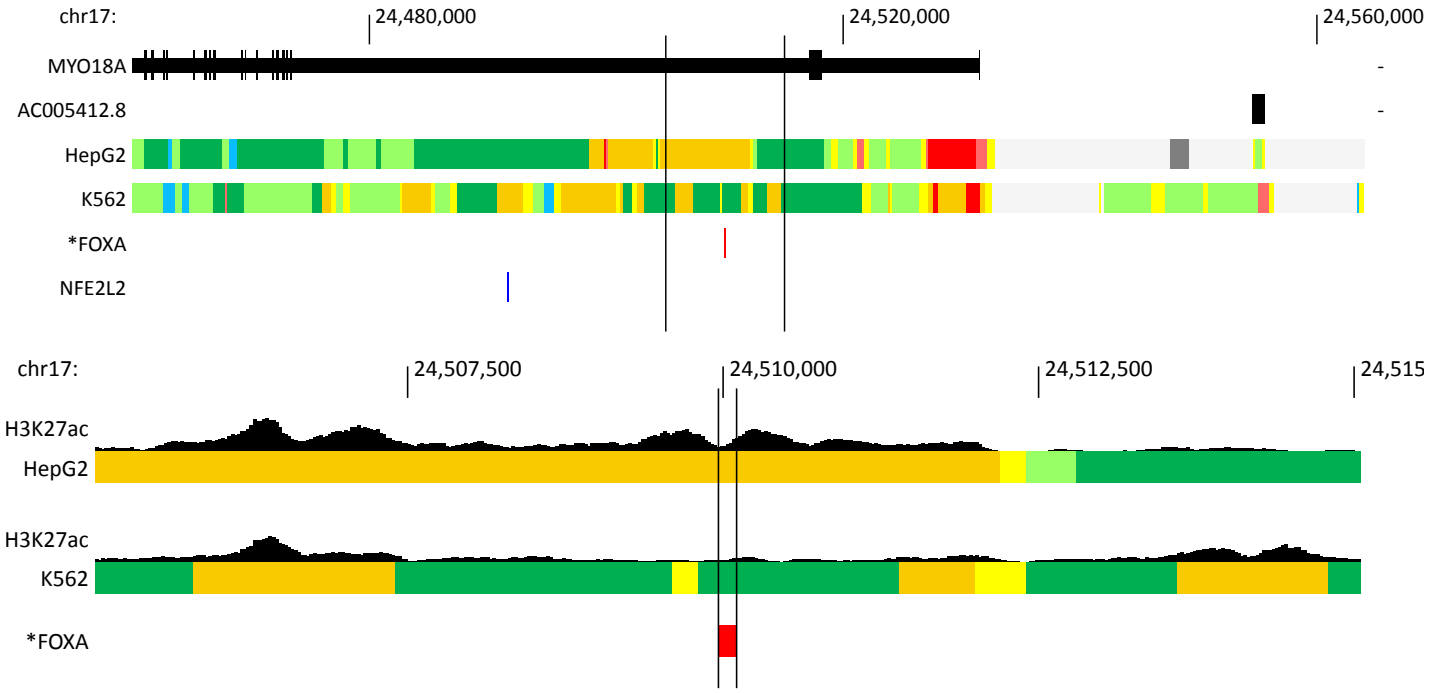
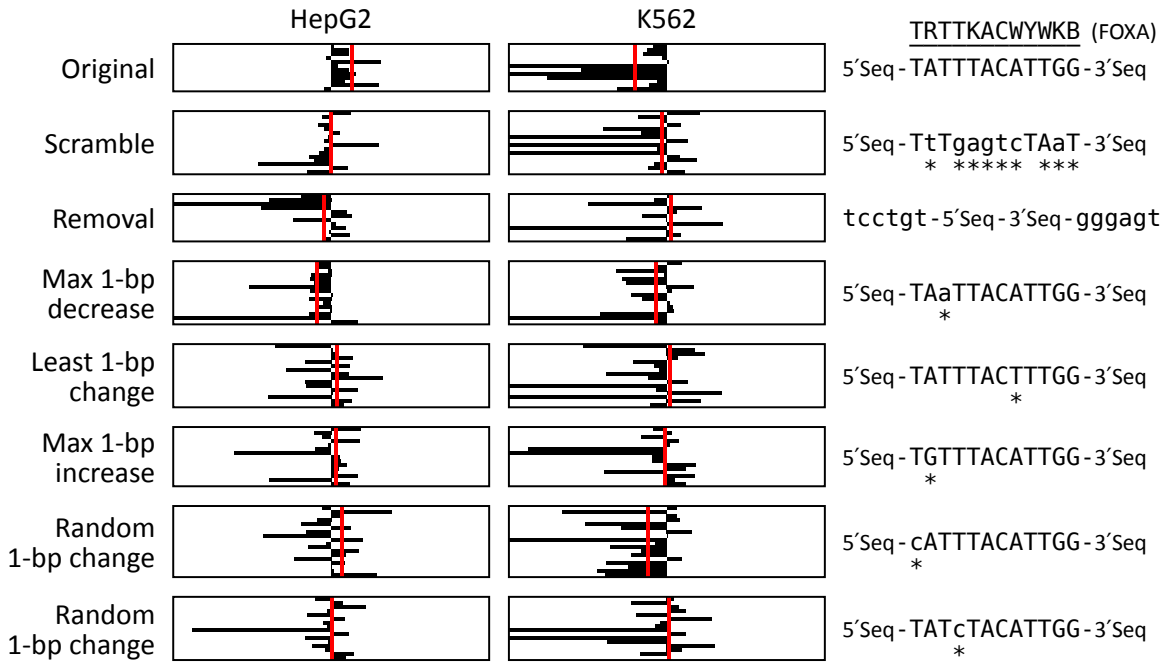
487 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr17 24510030 24510041 - (hg18)





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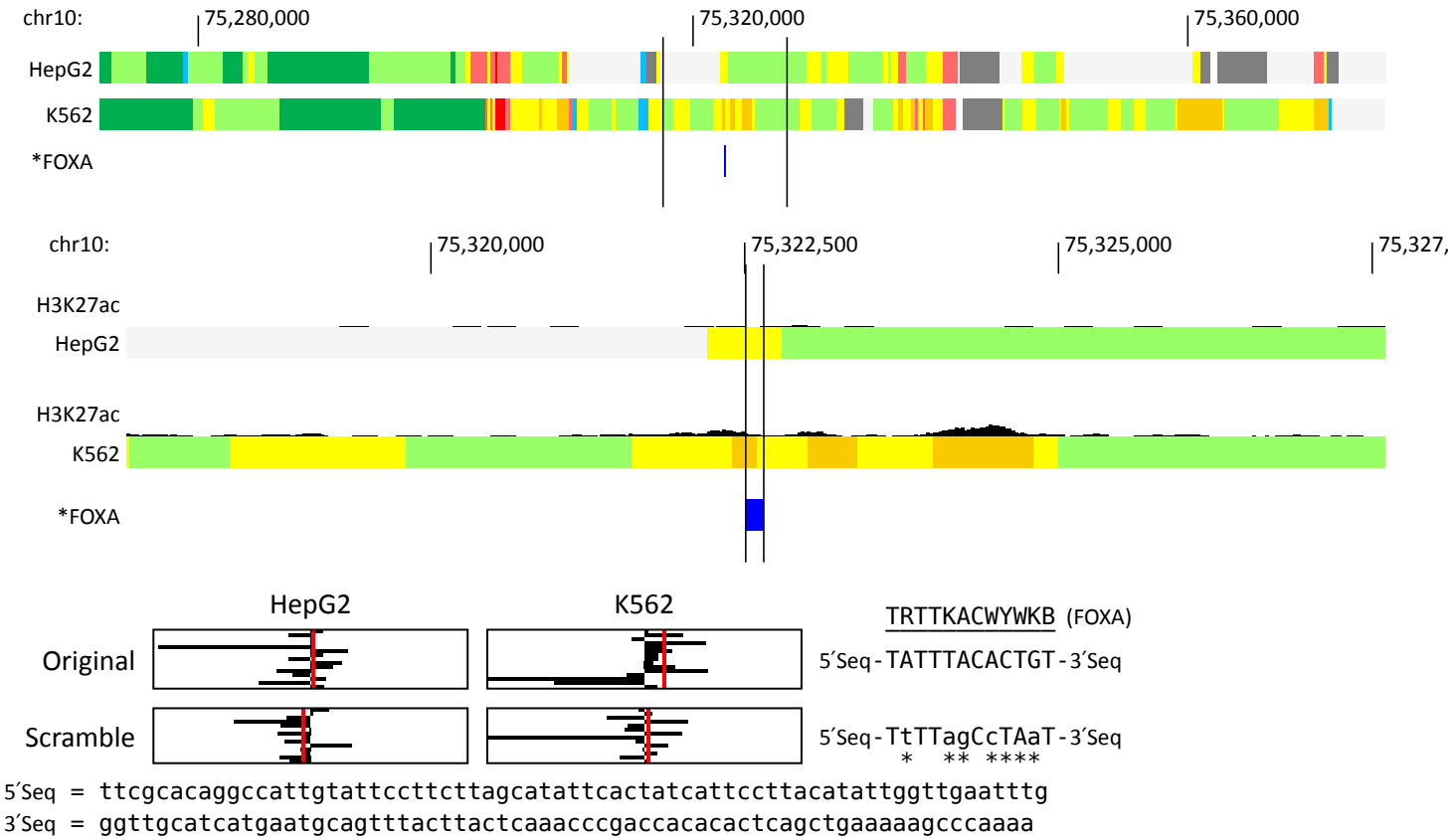
488 FOXA in K562 enhancer

chr10 75322575 75322586 + (hg18)



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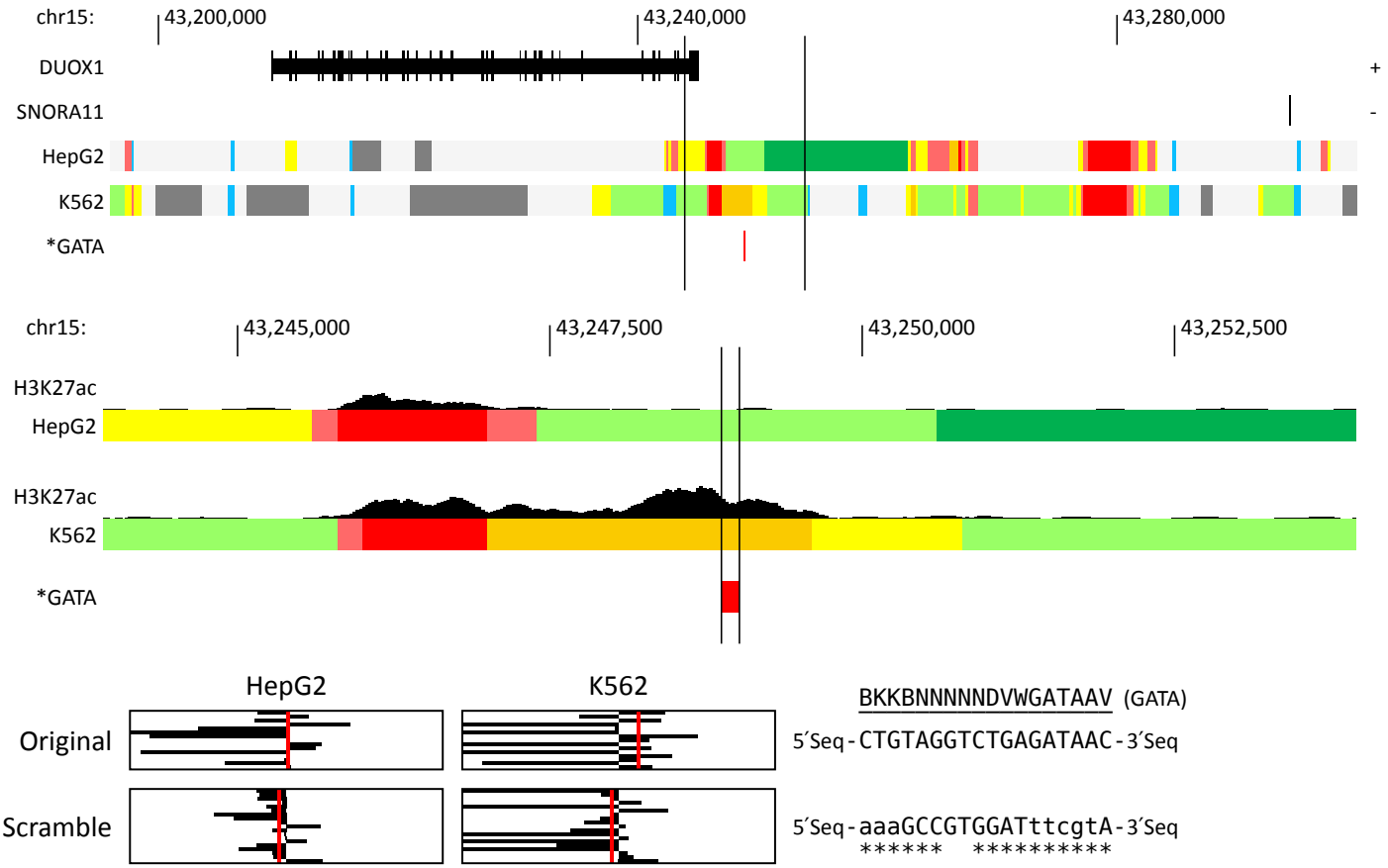
489 GATA in K562 enhancer (conserved at 60% confidence)

chr15 43248937 43248954 + (hg18)



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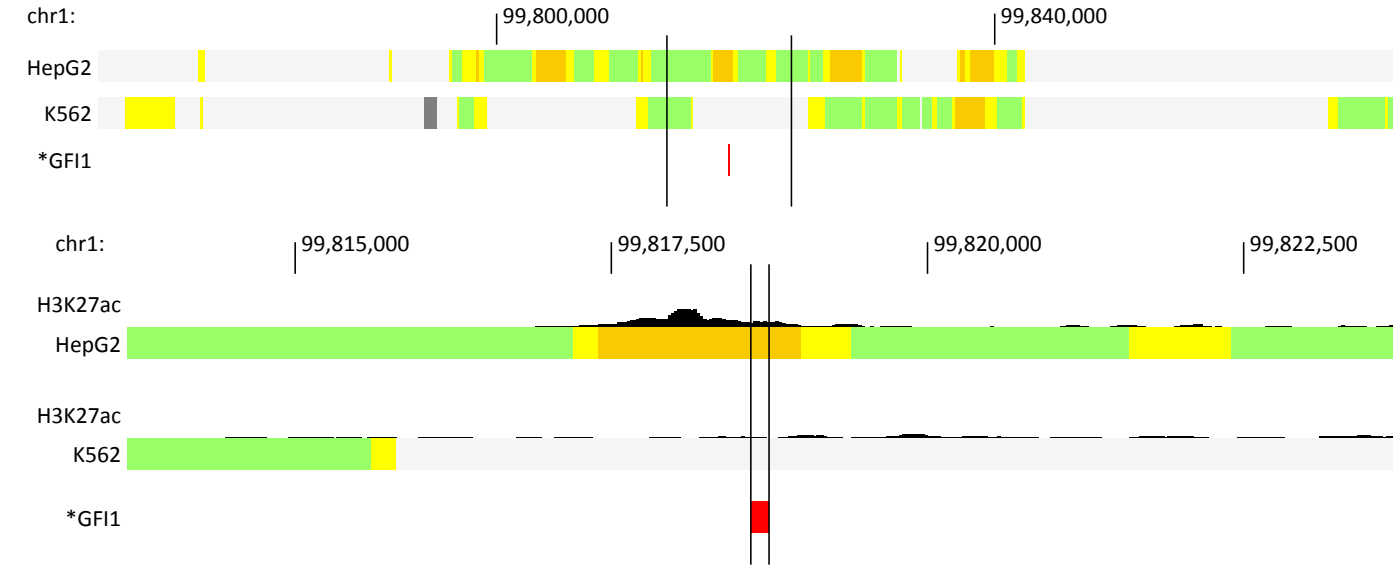
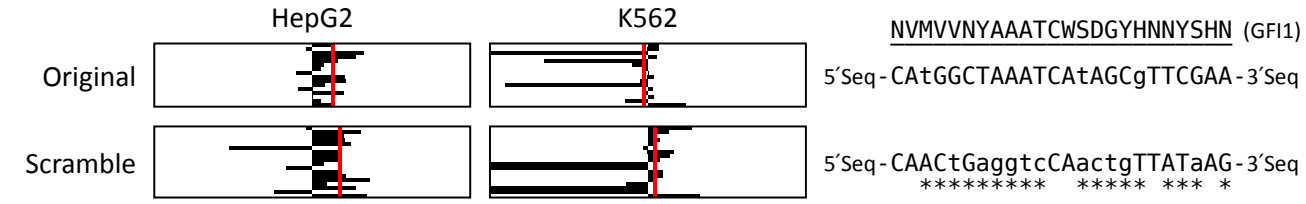
490 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 99818664 99818687 - (hg18)

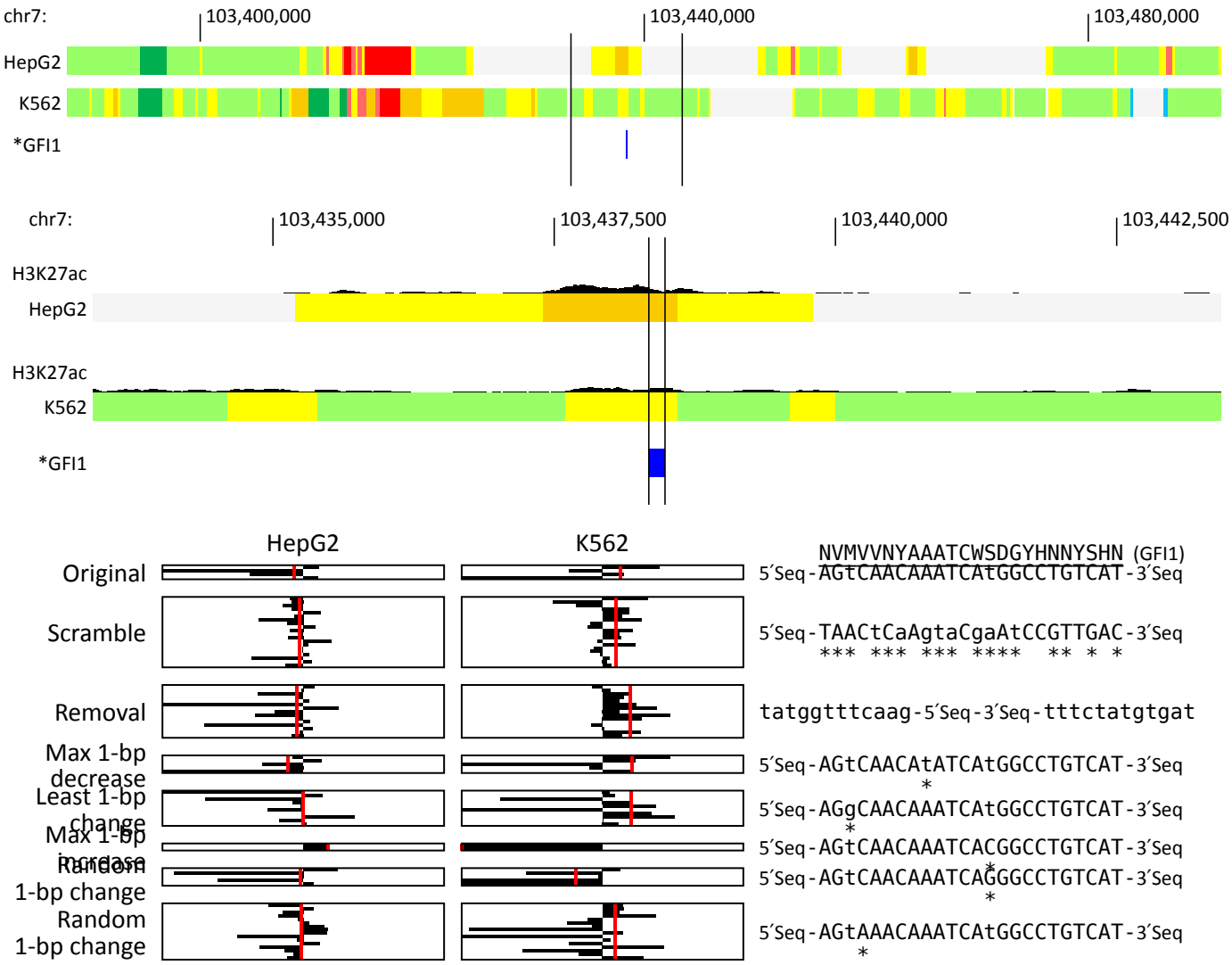




5′Seq = accagcacagagagacatgccagcacttgcaagctccctatctgagacagggtggattcca
3′Seq = tgctatcgtacctcccaactatcttctgtatcactgccaatcttttagtaggaacctgac

491 GFI1 in HepG2 enhancer

chr7 103438402 103438425 - (hg18)

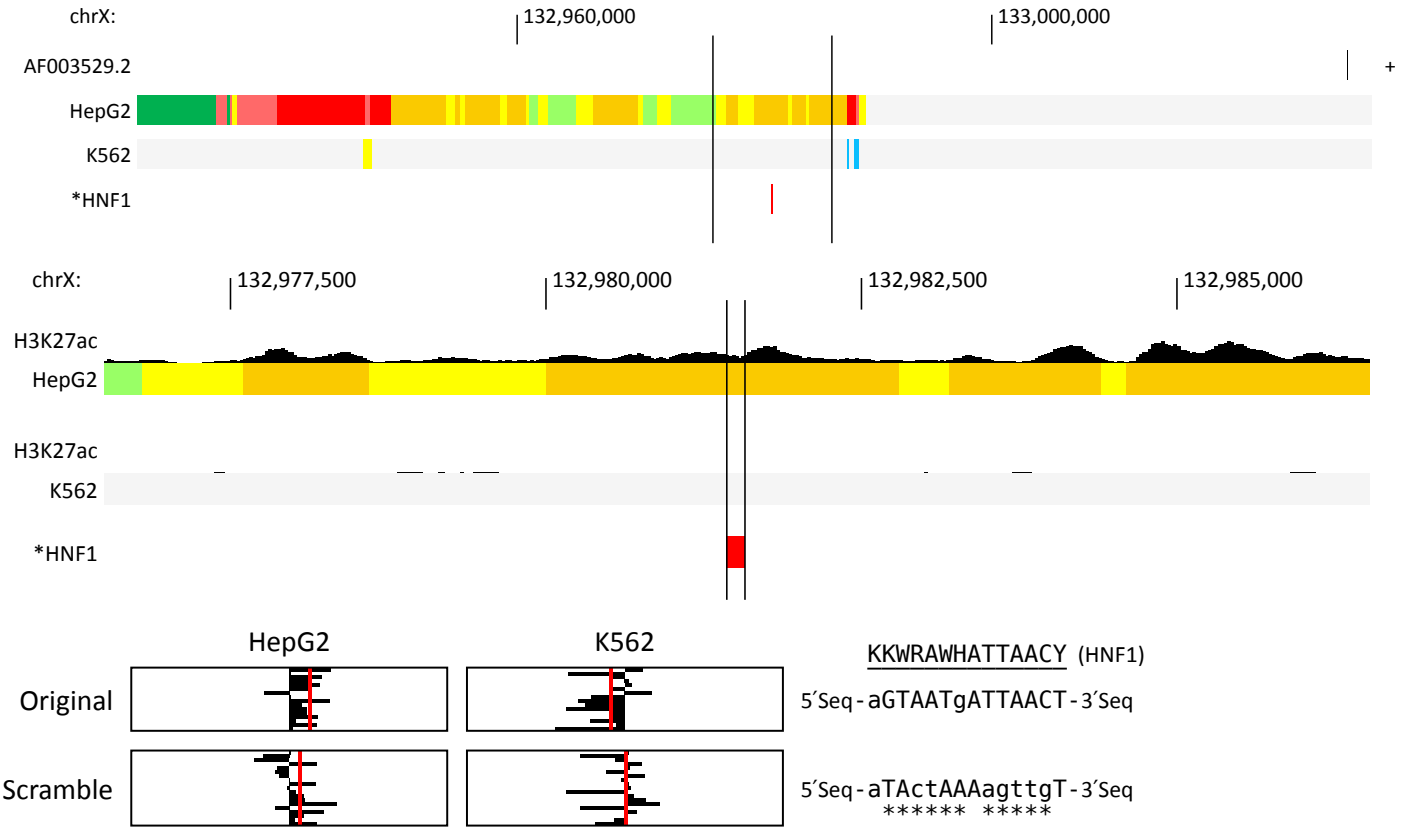


5′Seq = ctatccaaaaattactagcaatcggatgtttgaaatgactgtaacaaaataaatatctcca

3′Seq = atcaatagtaagcactggatgatgtaatcactaagccaggaccttcaaaatcttggaaga

492 HNF1 in HepG2 enhancer (conserved at 60% confidence)

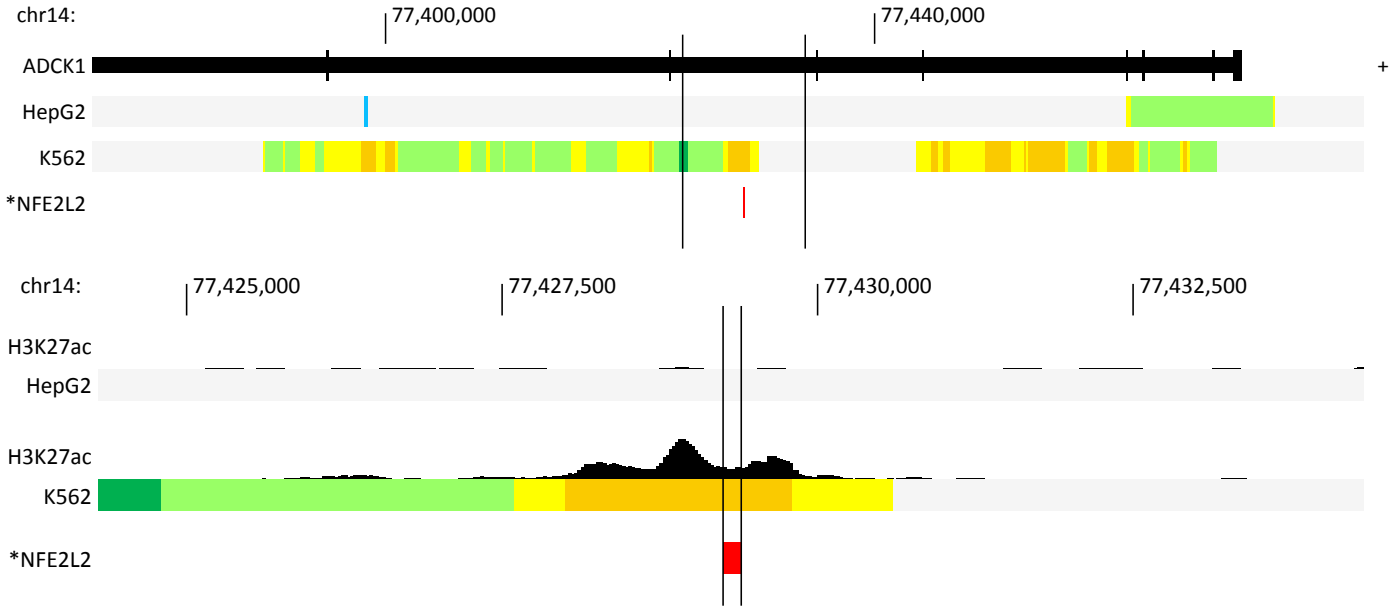
chrX 132981499 132981512 - (hg18)

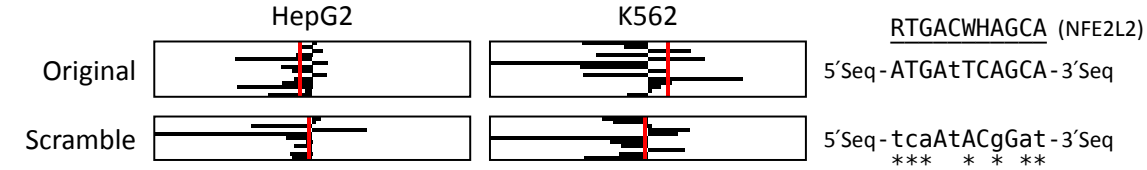


5′Seq = ggcatgtctggatgattcttgcatgtgtgtgctggtgggaggagagagcacagagtaggaggttgg
3′Seq = ctcgttagggaaaaagtggtccctgttaatgtttttggattgaatgaaagagttttcagggcaag

493 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr14 77429318 77429328 + (hg18)





5′Seq = gccagtgactcttattgatttgaatggctgtccagagccagactaattgggcccagagattggaaca
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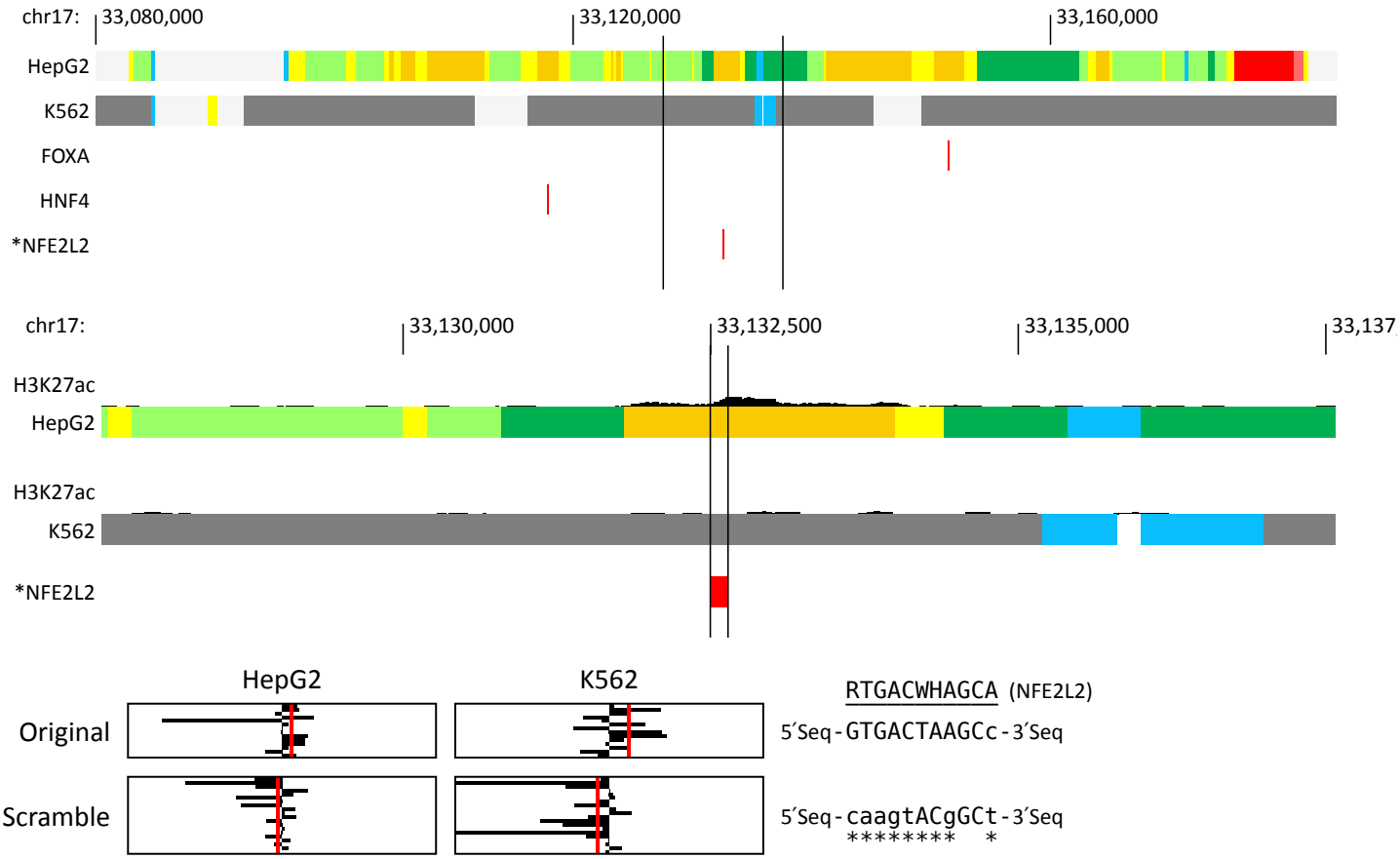
494 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr17 33132564 33132574 + (hg18)



5′Seq = catcagctgcctgtctactattccatcacctctattcagaggtgggacttagtcatcaactgaaaca
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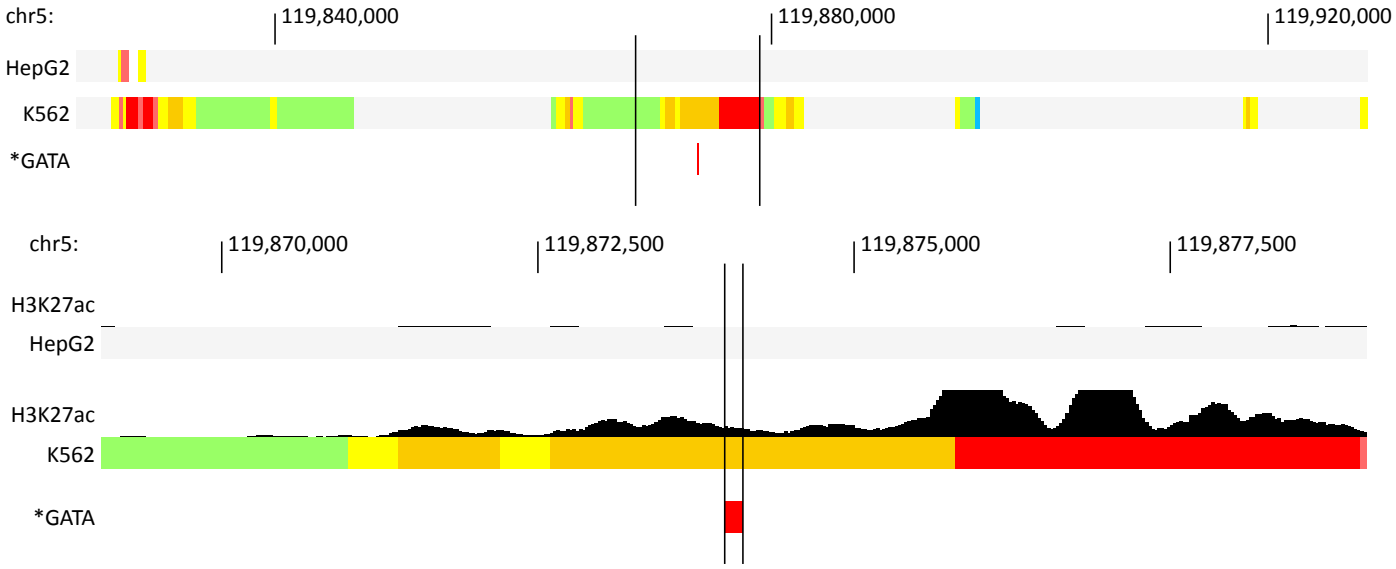
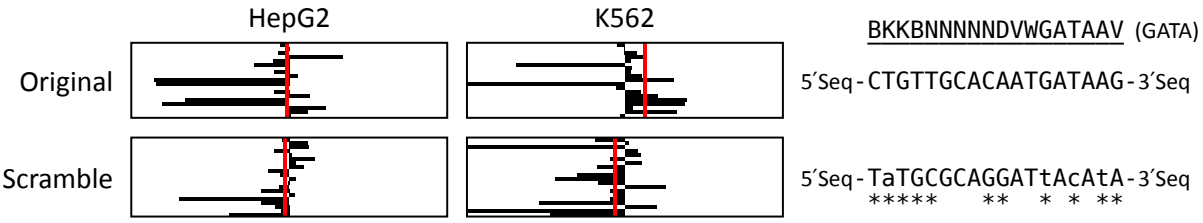
495 GATA in K562 enhancer (conserved at 60% confidence)

chr5 119874041 119874058 - (hg18)





5′Seq = tgggacatagtctttttctacaaatgataggaagtgcaaaataatctctcacagatagcaggct
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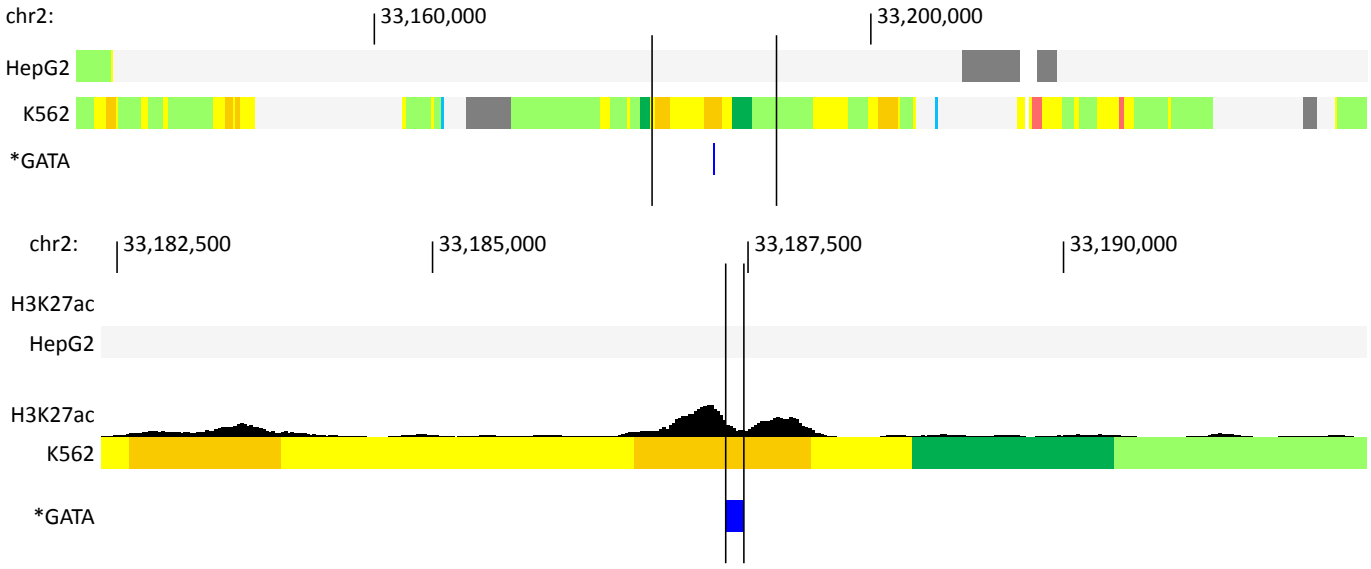
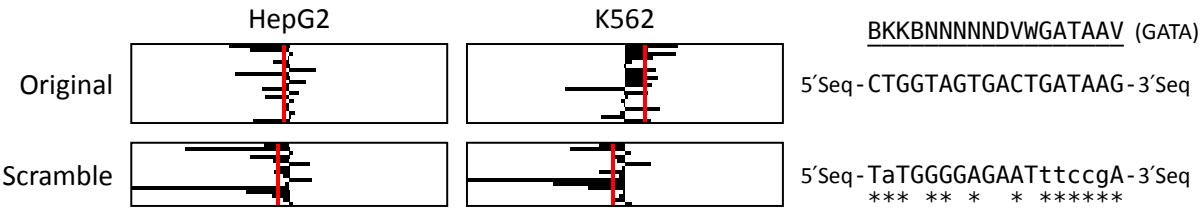
496 GATA in K562 enhancer

chr2 33187387 33187404 - (hg18)





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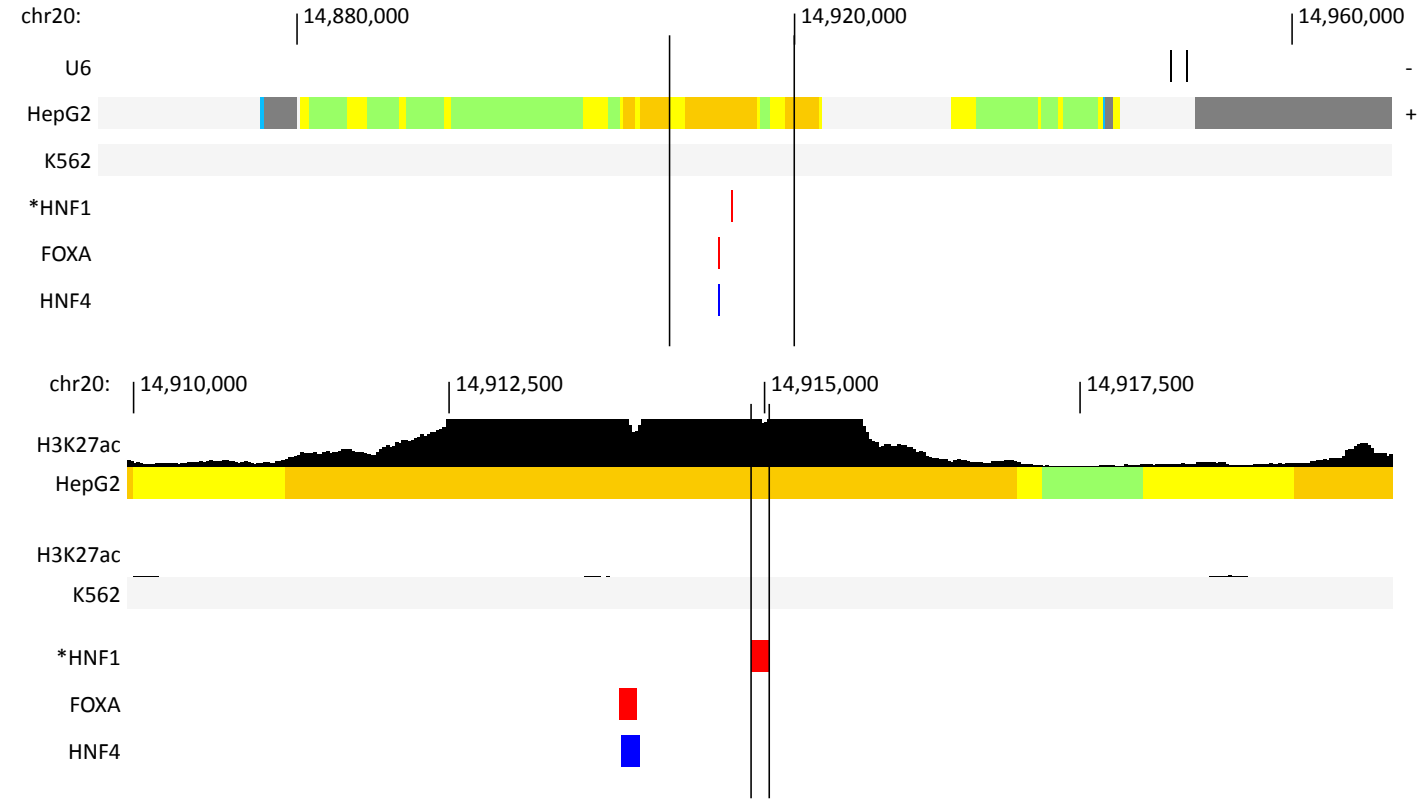
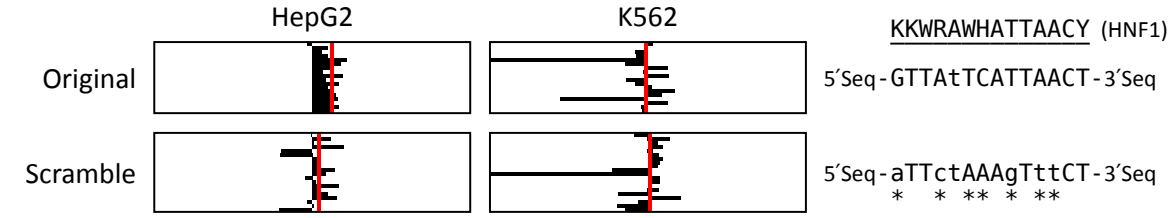
3′Seq = aaccacaagtctcttctatcagcctcttggaaagaggaatcctccgcatctcggaagcaattt

497 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr20 14914959 14914972 - (hg18)





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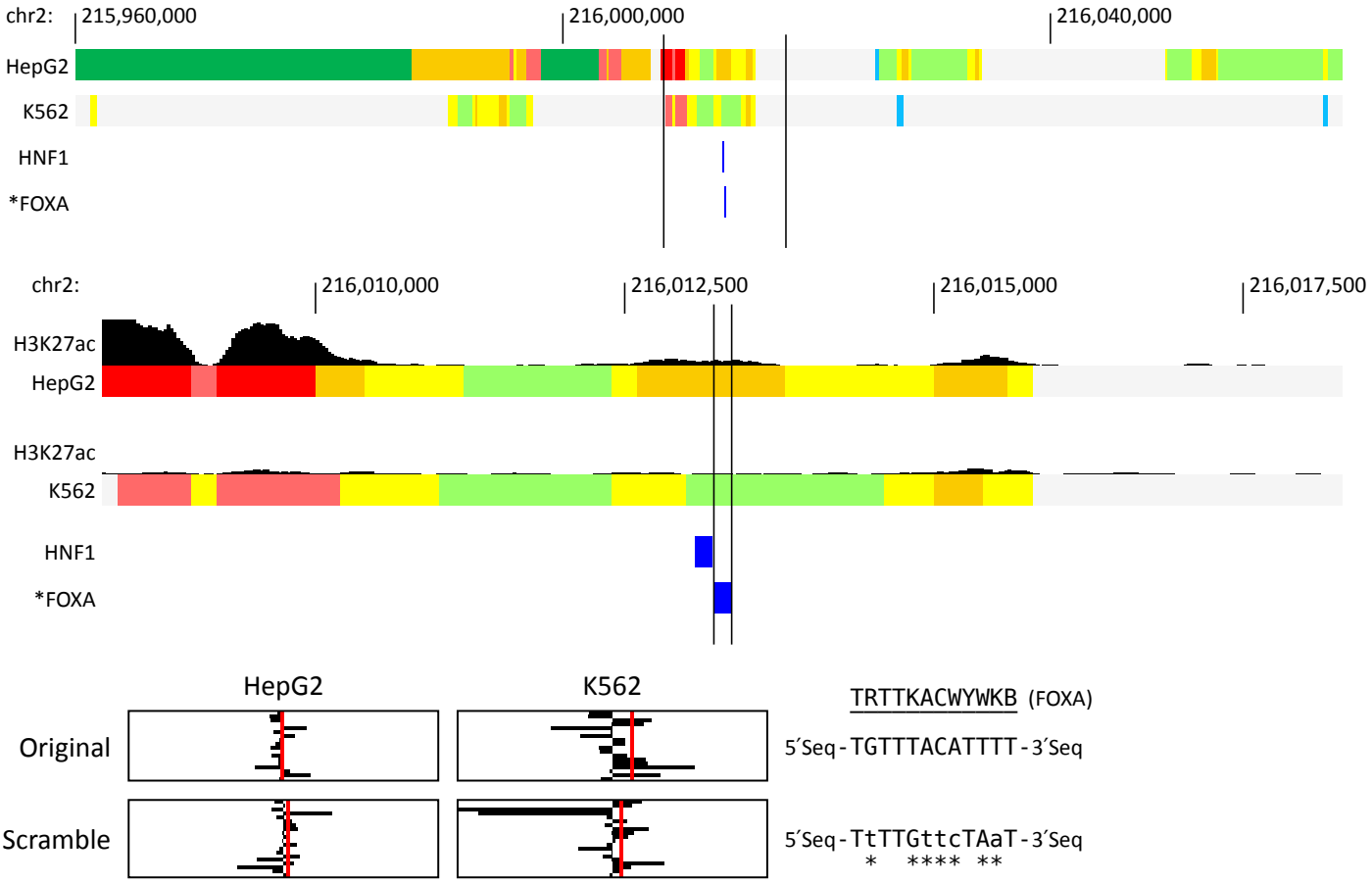
498 FOXA in HepG2 enhancer

chr2 216013288 216013299 + (hg18)



5′Seq = gaaaatactggataagggctttaaattatgccatgaaagctaaccagttttcgcttaataggcattt
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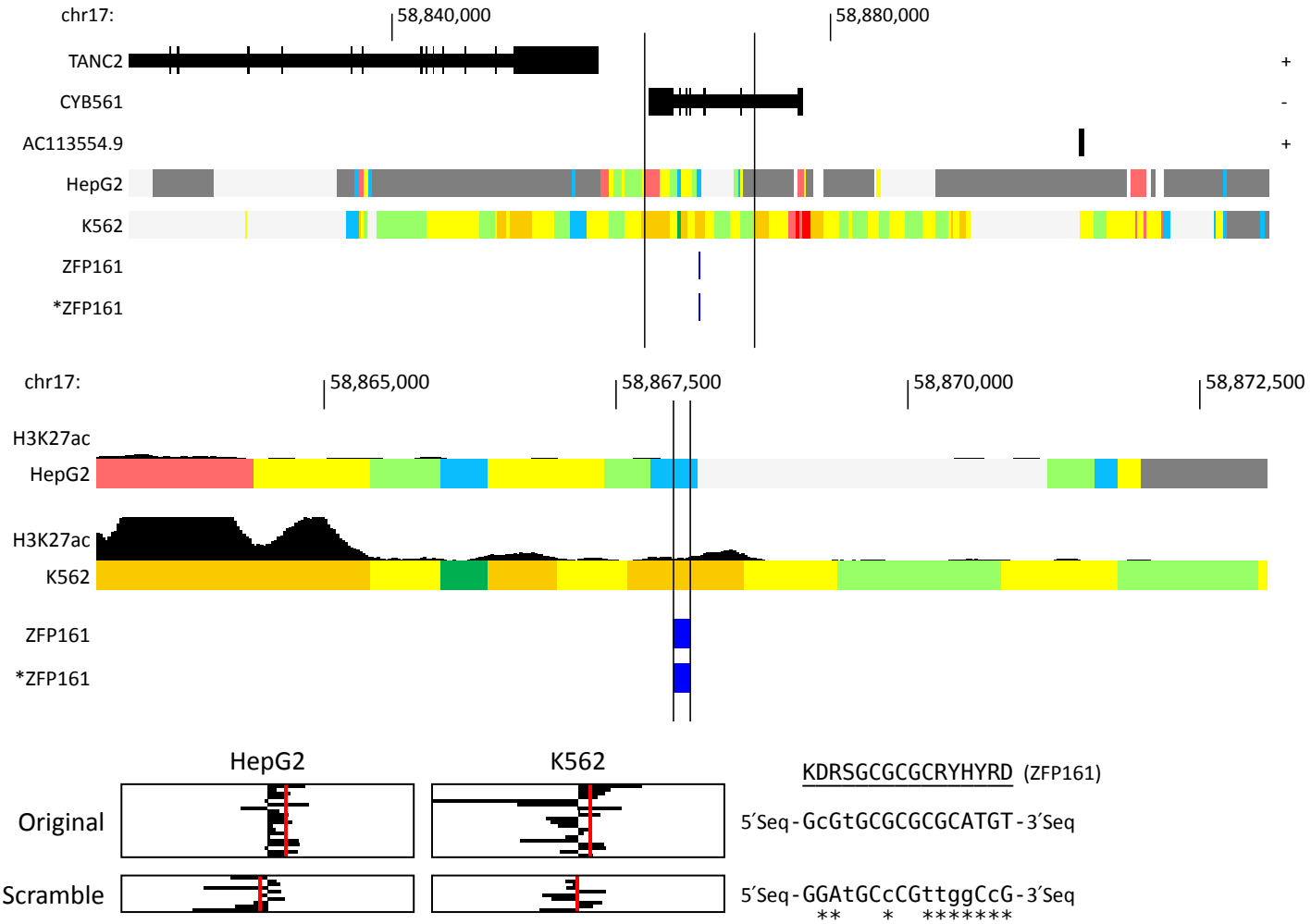
499 ZFP161 in K562 enhancer

chr17 58868057 58868072 - (hg18)



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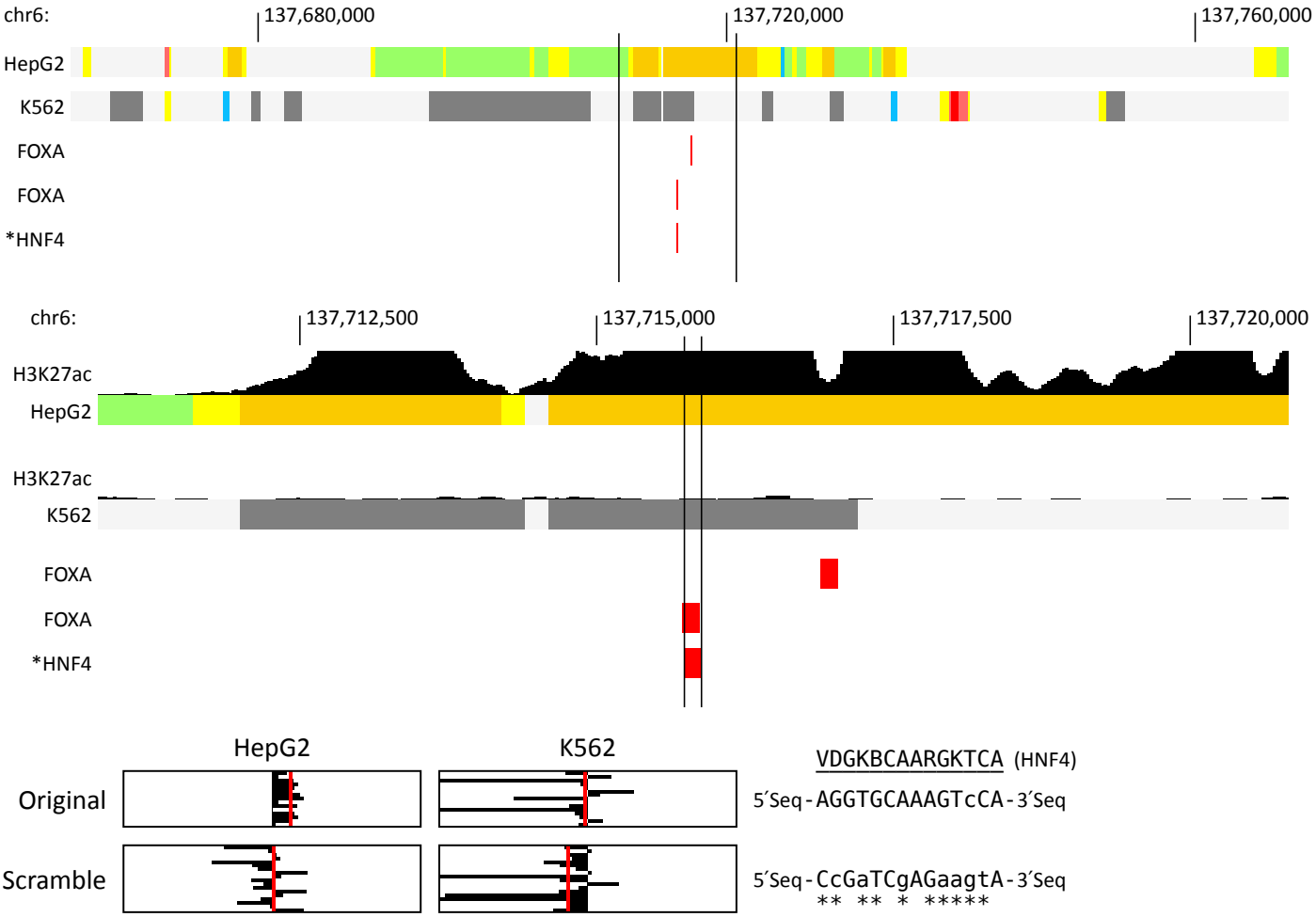
3′Seq = gtgttgttggtcttggacttggcagagctagagcgcctccccctggggcaggagcaaggcagtg

500 HNF4 in HepG2 enhancer (conserved at 50% confidence)

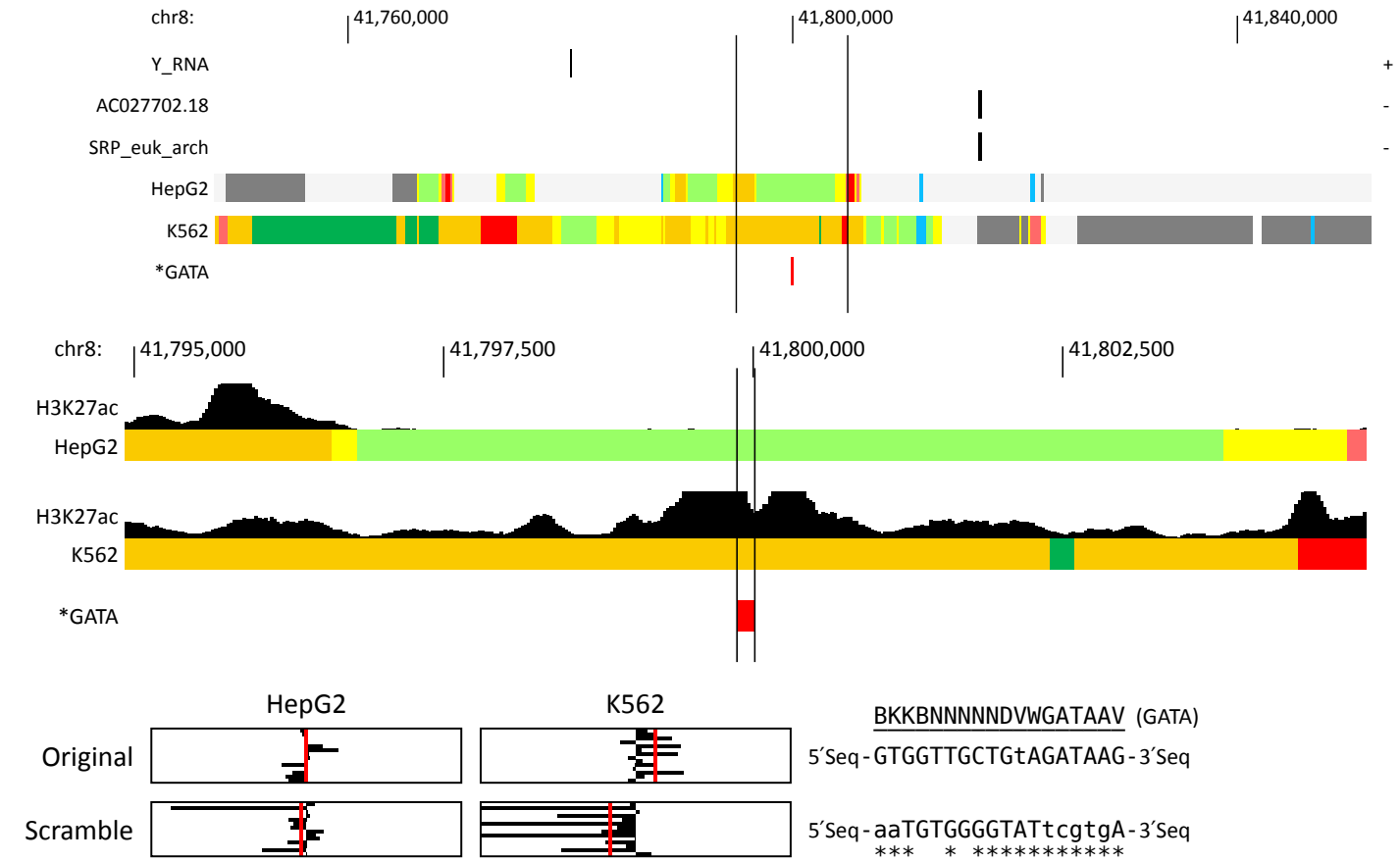
chr6 137715805 137715818 - (hg18)



5′Seq = gtccttctctgactaagggatttgctgccaaactcacagtgctgtcgtcagctgacctttgcggca
3′Seq = tctgtttacacagacttttactccataggggctaatttgagattaaatttctcggacatgataga

501 GATA in K562 enhancer (conserved at 60% confidence)

chr8 41799933 41799950 + (hg18)



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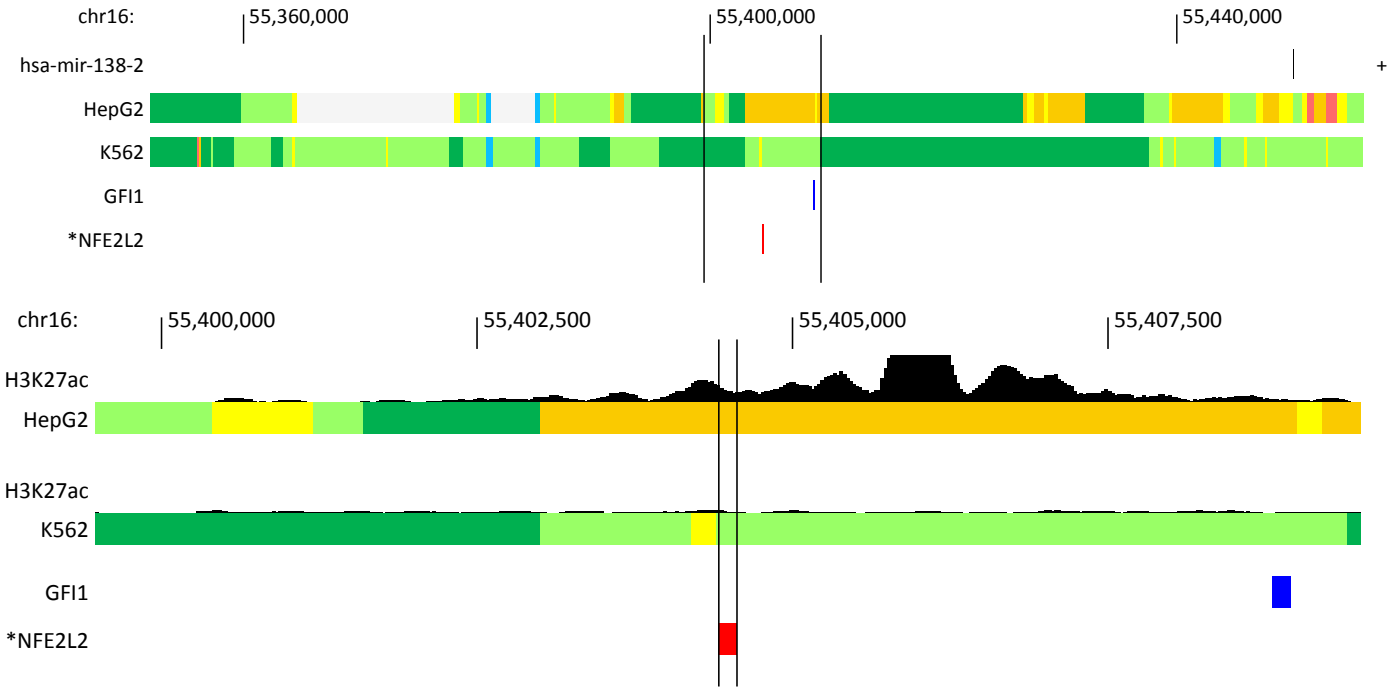
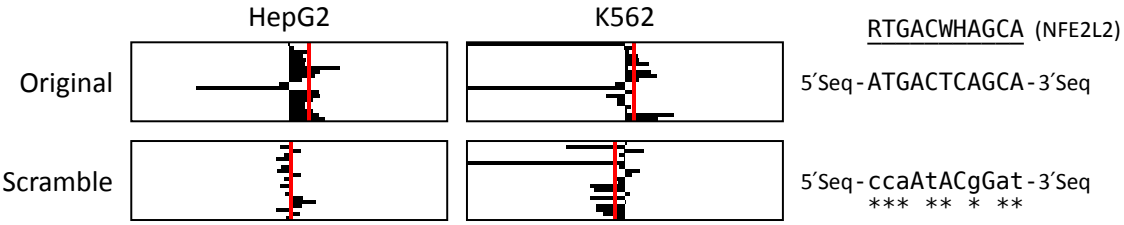
3′Seq = aaagggagtgggagtgaatgcacaacattagaaaaaaaccgcccaacttggagaagaaacaga

502 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr16 55404483 55404493 + (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq-ATGACTCAGCA-3′Seq

5′Seq-ccaAtACgGat-3′Seq

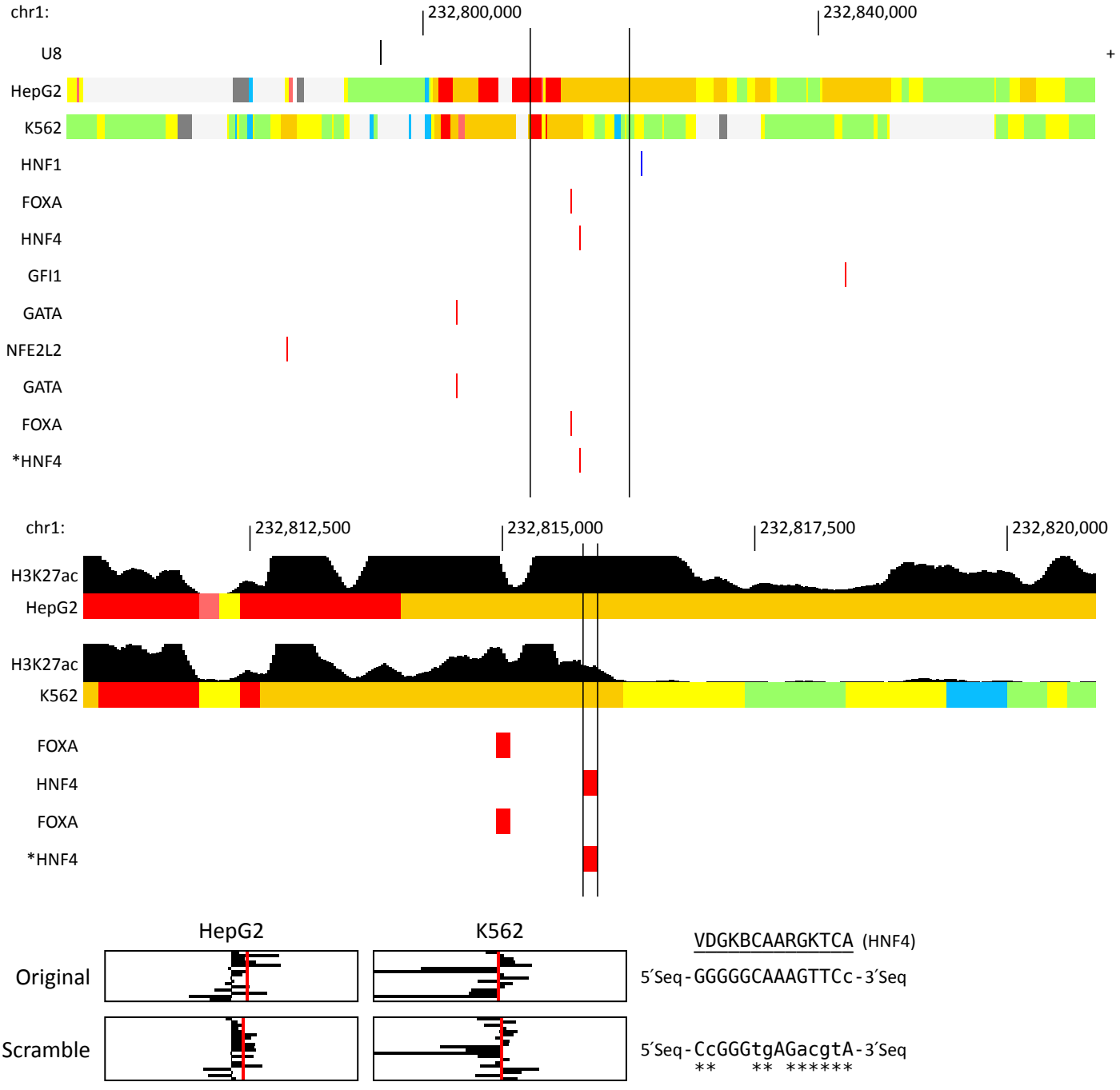
*** ** * **

5′Seq = agtctagtggctgctttgtggtattagacatagtctatgaacaatcccttaatgtattgtctggaac

3′Seq = ggaaatctcactagggaagctaaactatggcttaataagtatagataatgatggtaacattccacac

503 HNF4 in K562 enhancer (conserved at 50% confidence)

chr1 232815865 232815878 - (hg18)



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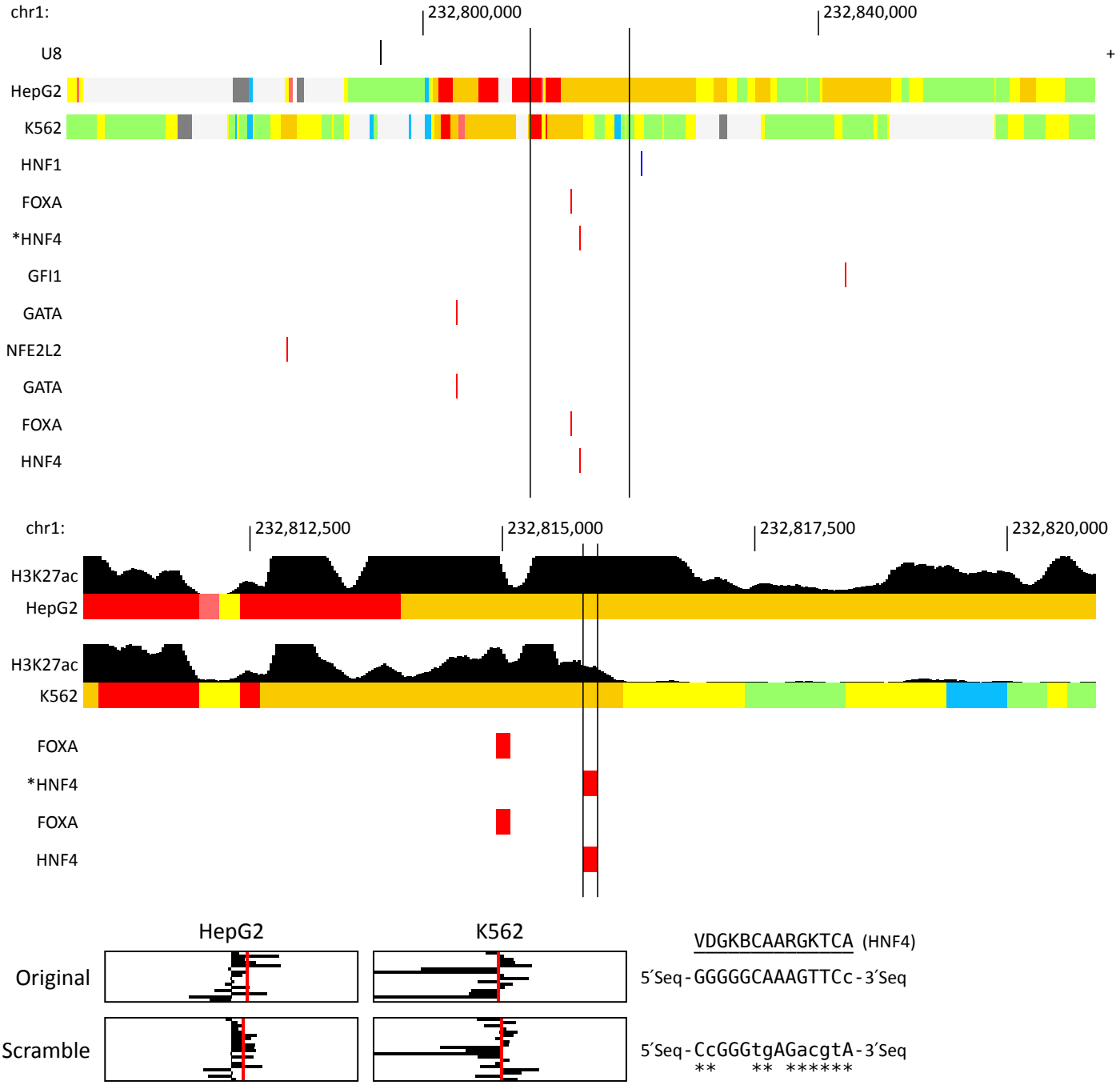
3′Seq = aataaggtactcttgtaggaaccgtttctttacactgctctatagactgtcagttcagggcttcc

504 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr1 232815865 232815878 - (hg18)



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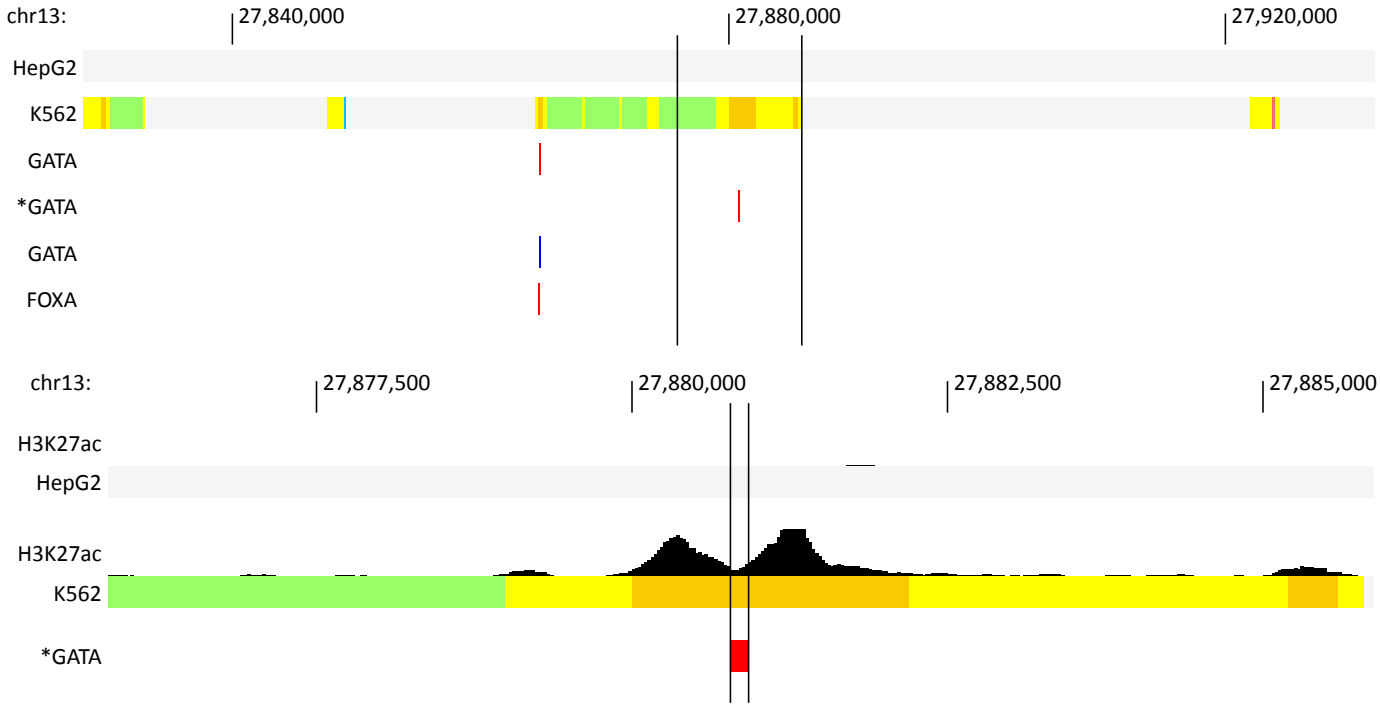
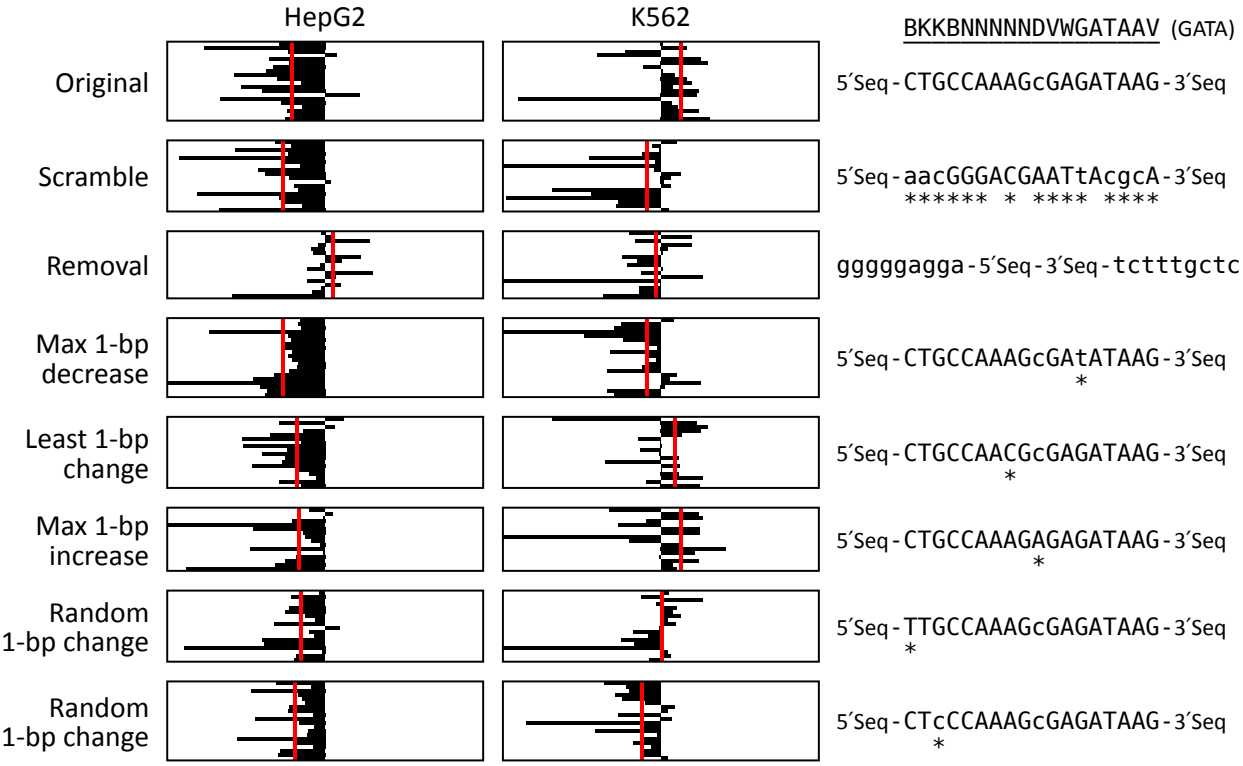
3′Seq = aataaggtactcttgtaggaaccgtttctttacactgctctatagactgtcagttcagggcttcc

505 GATA in K562 enhancer (conserved at 80% confidence)

chr13 27880844 27880861 + (hg18)





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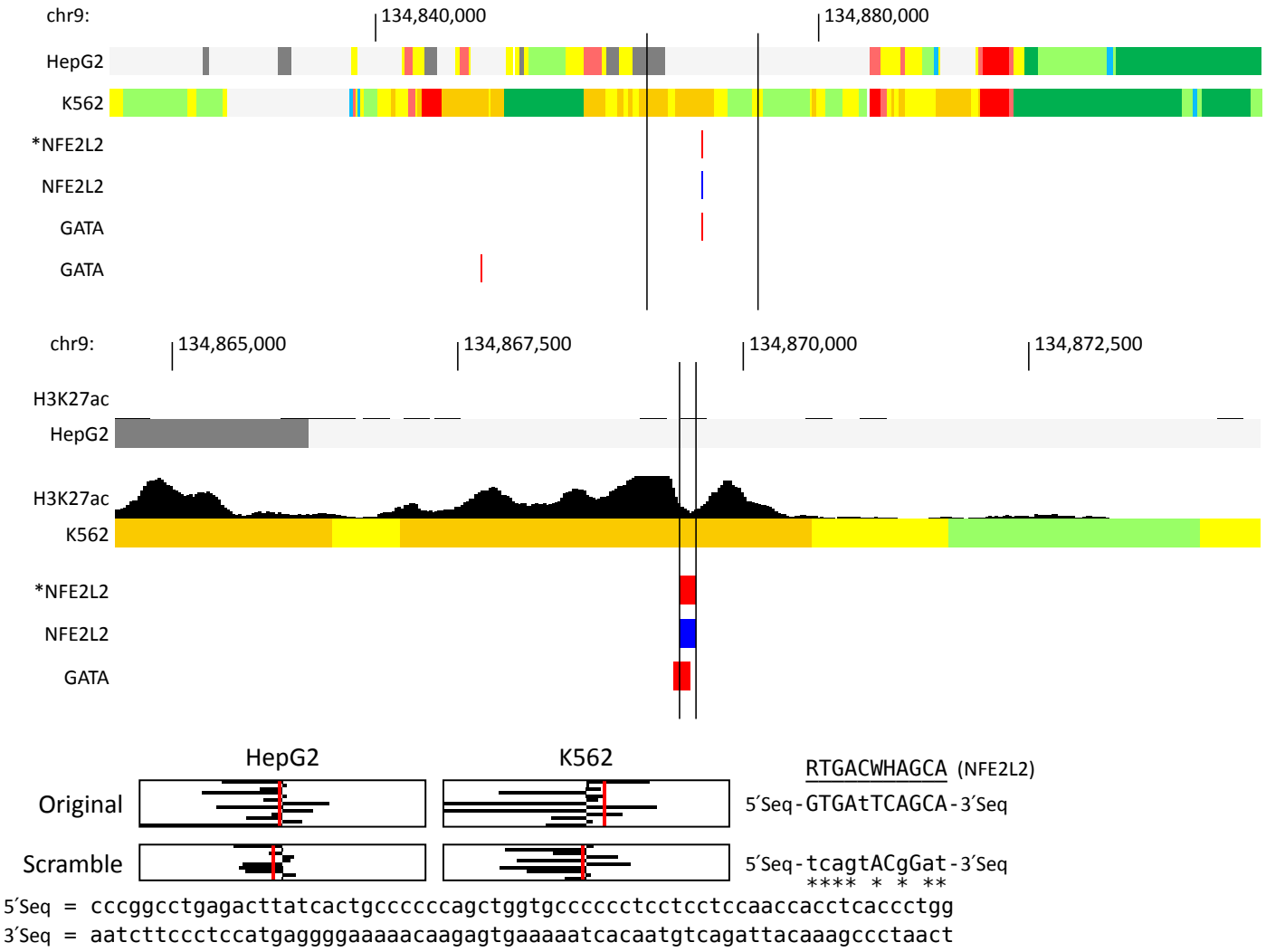
3′Seq = aaagctcccatgcactattctggacaaggccactgttatcagcctcagctcggcgctgtcctc

506 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr9 134869509 134869519 + (hg18)



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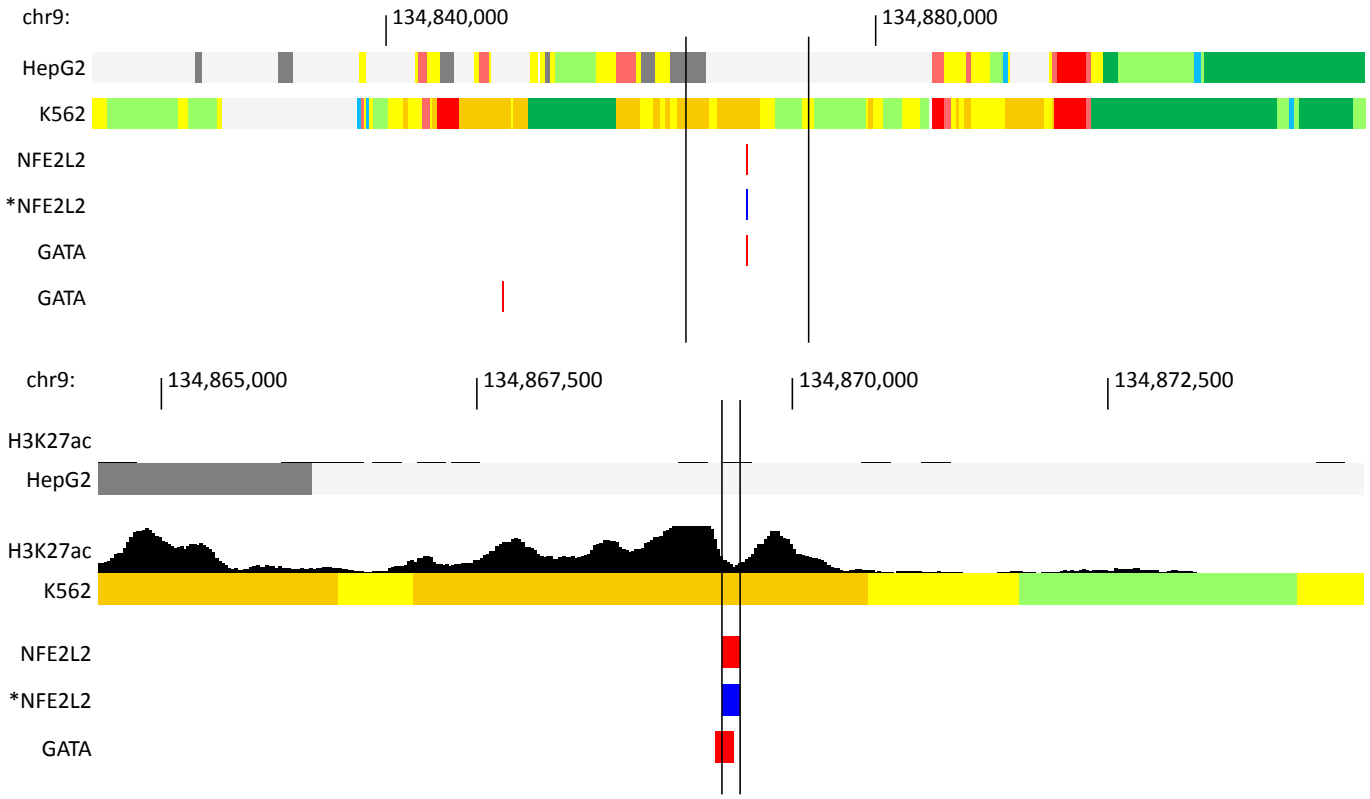
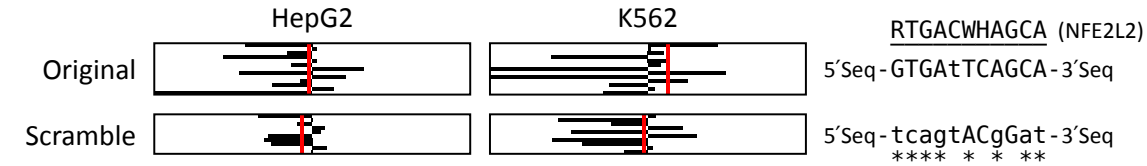
3′Seq = aatcttccctccatgaggggaaaaacaagagtgaaaaatcacaatgtcagattacaaagccctaact

507 NFE2L2 in K562 enhancer

chr9 134869509 134869519 + (hg18)





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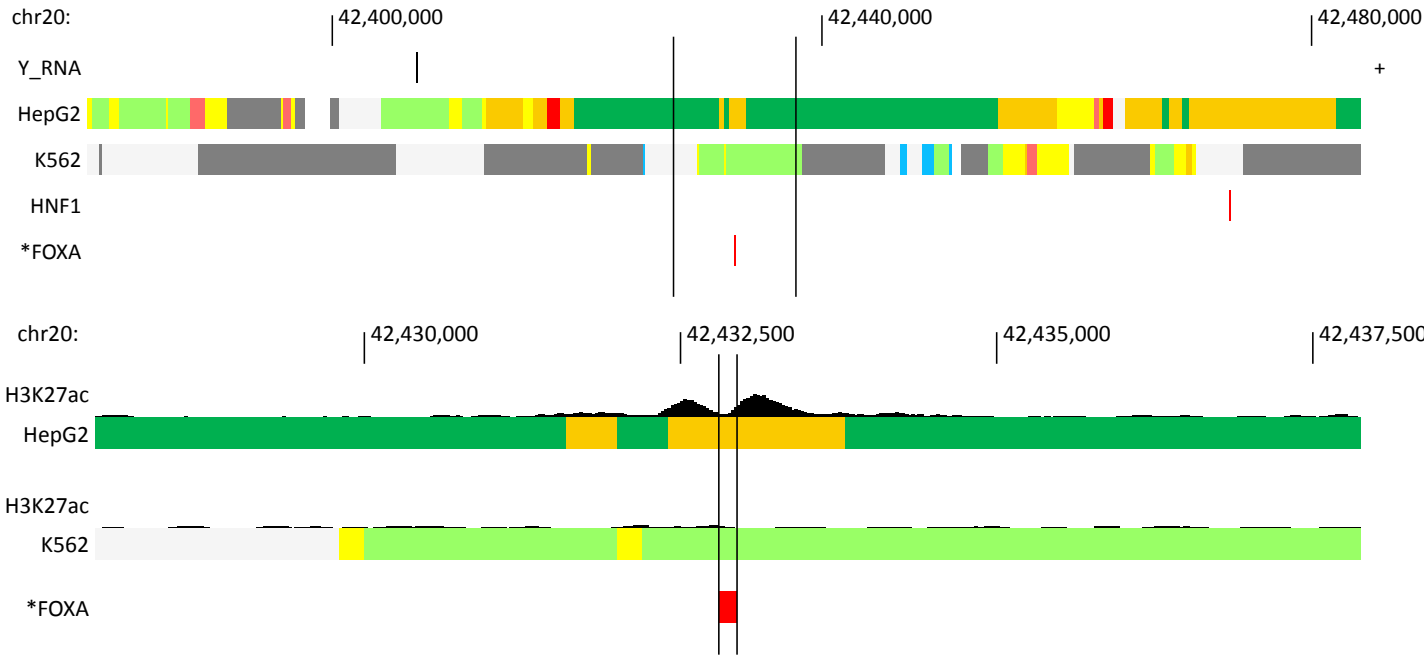
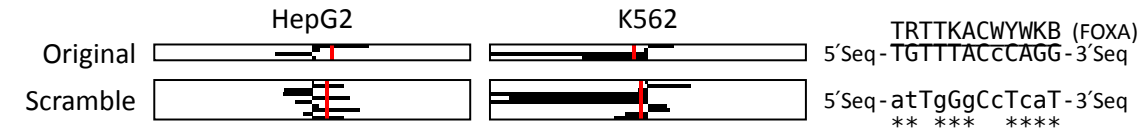
3′Seq = aatcttccctccatgaggggaaaaacaagagtgaaaaatcacaatgtcagattacaaagccctaact

508 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 42432870 42432881 - (hg18)





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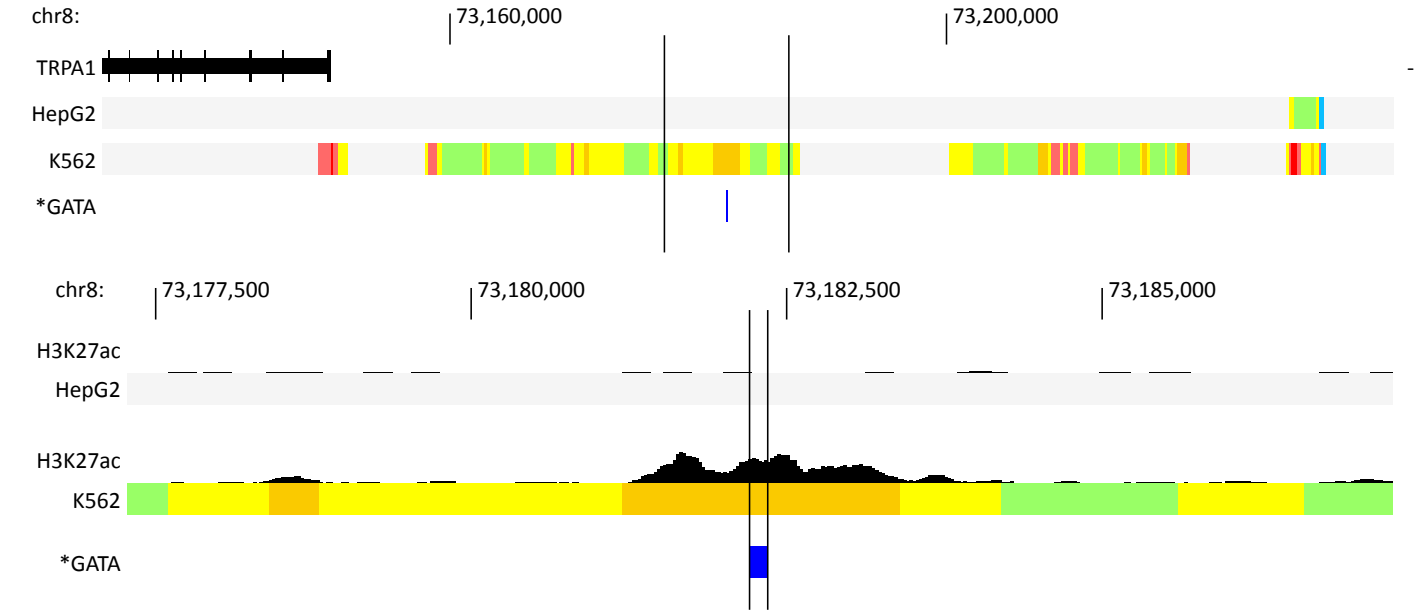
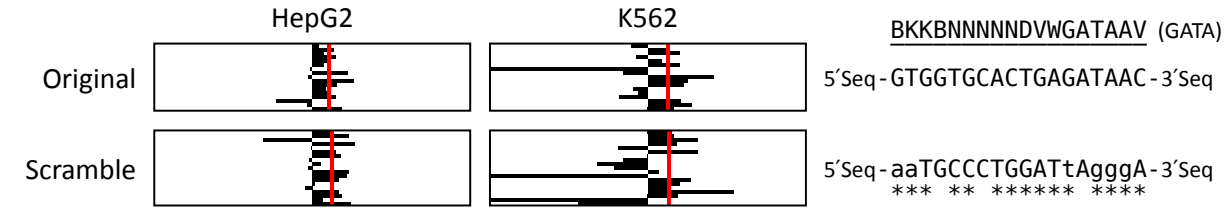
509 GATA in K562 enhancer

chr8 73182270 73182287 - (hg18)





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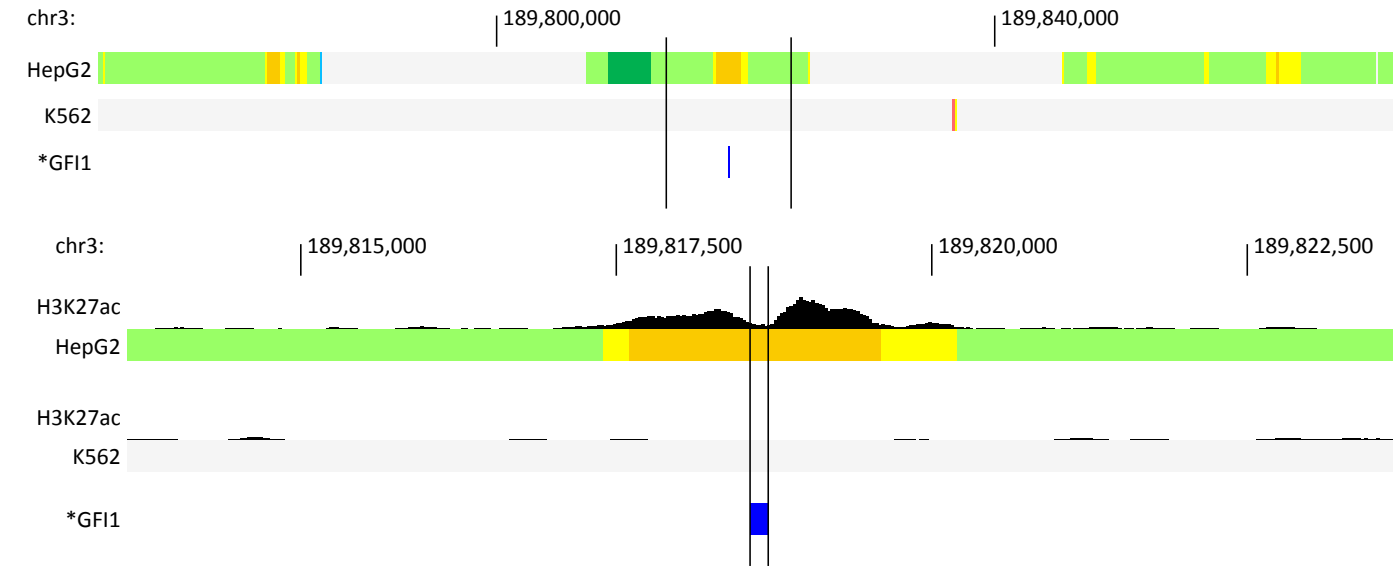
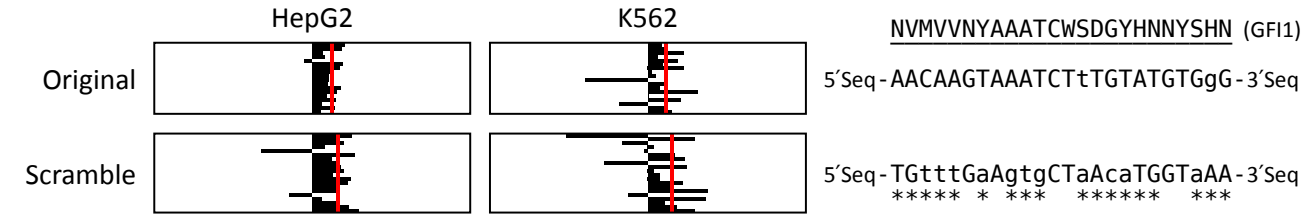
510 GFI1 in HepG2 enhancer

chr3 189818621 189818644 - (hg18)





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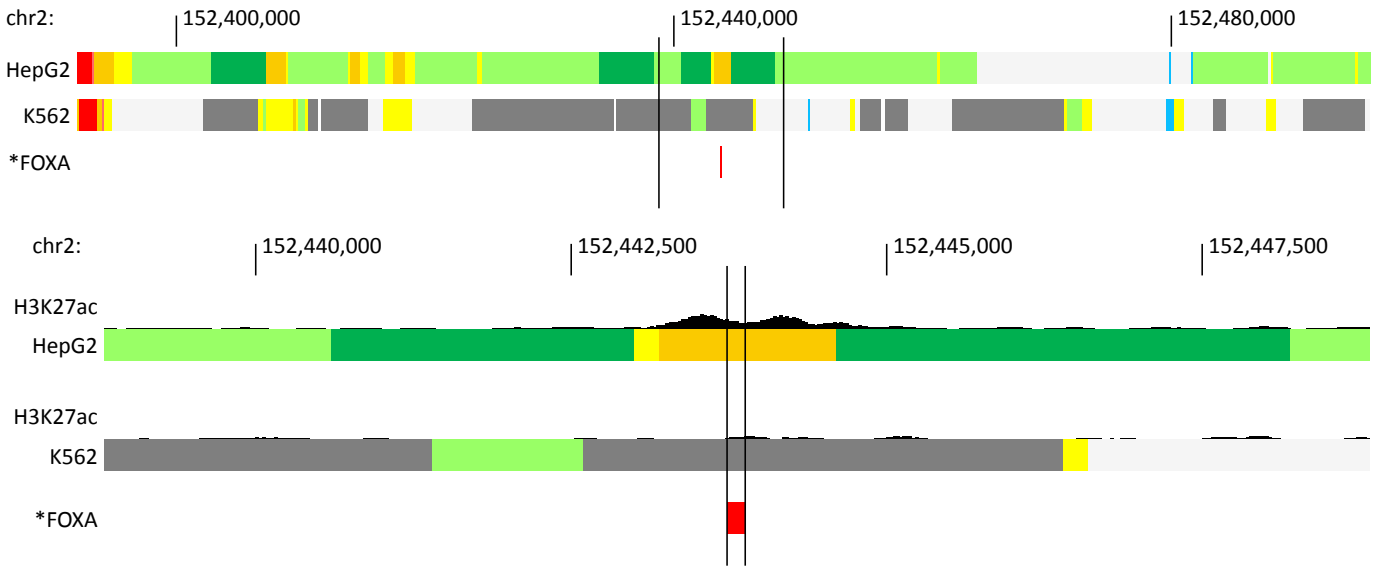
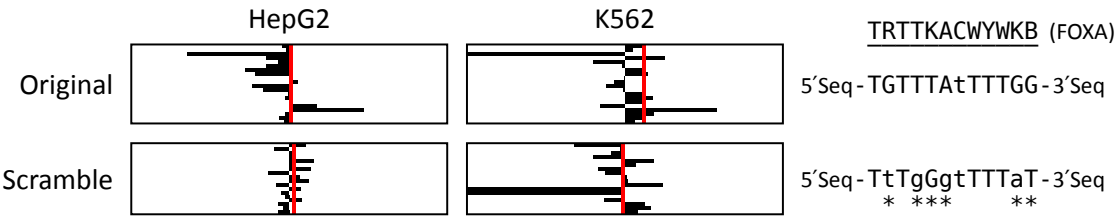
511 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 152443802 152443813 + (hg18)





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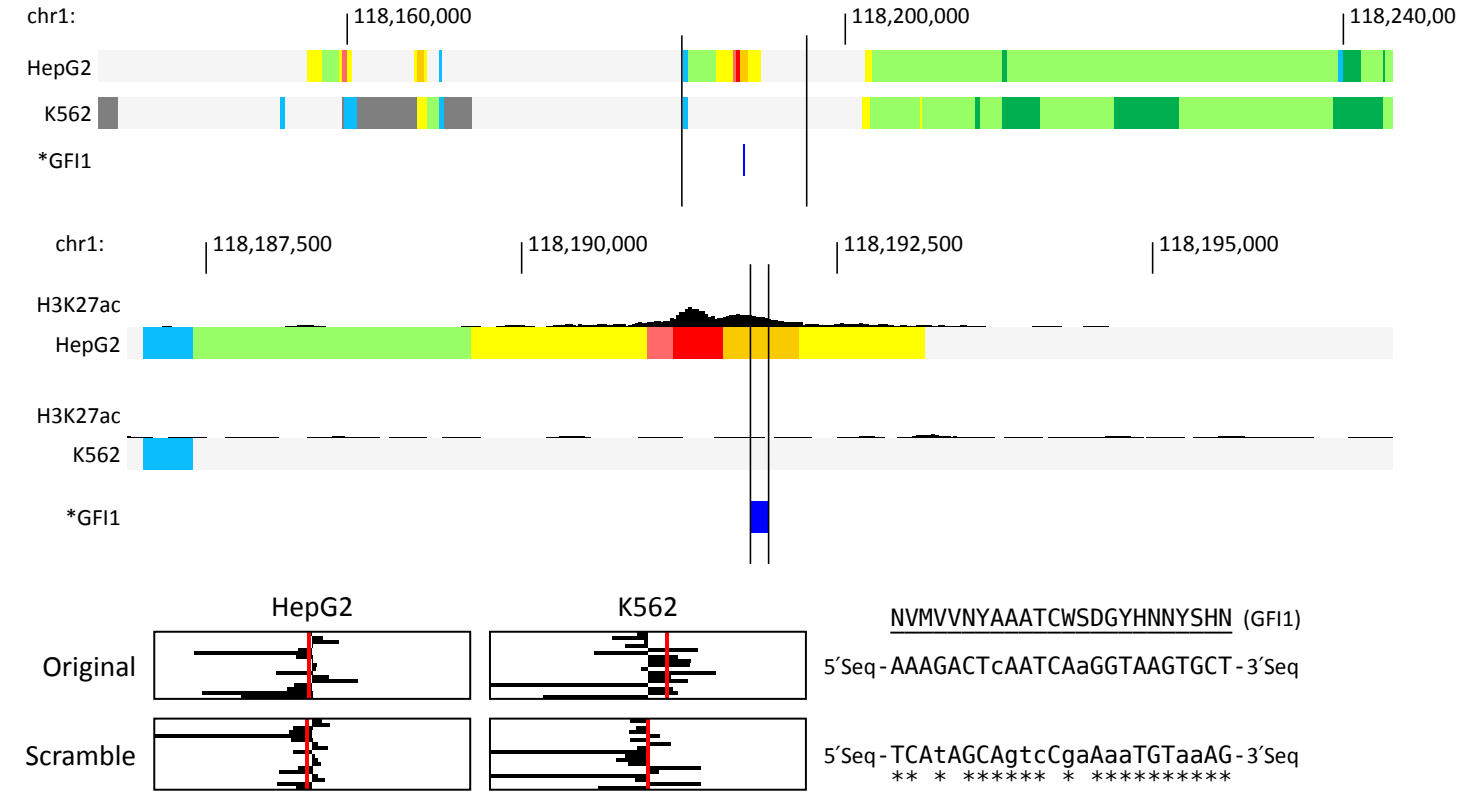
512 GFI1 in HepG2 enhancer

chr1 118191874 118191897 + (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AAAGACTcAATCAaGGTAAGTGCT-3′Seq

5′Seq-TCAtAGCAgtcCgaAaaTGTaaAG-3′Seq

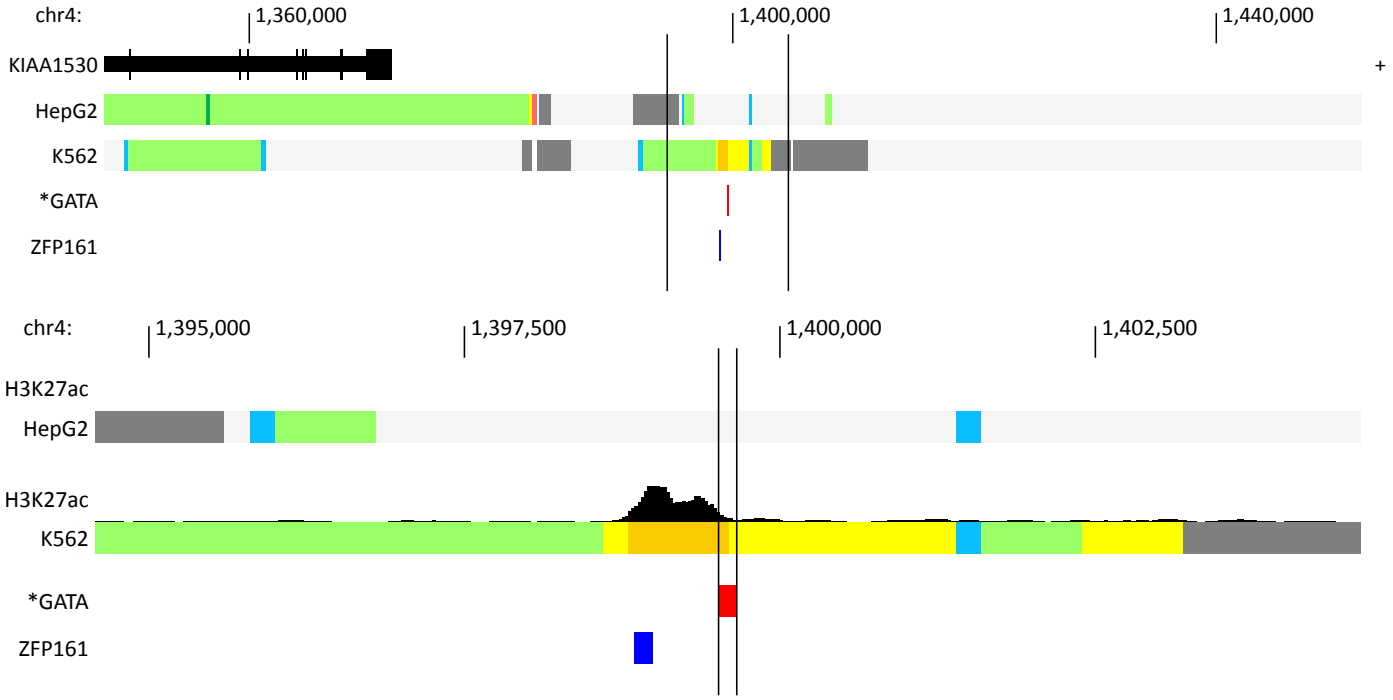
** * ****** * **********

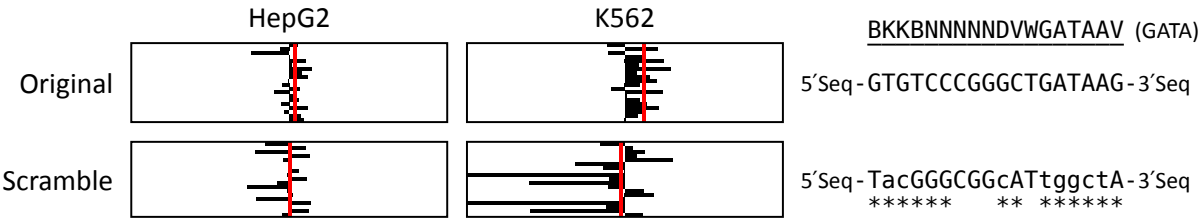
5′Seq = aaaaaaaaaaaaaaccccgagaagctagggtcttctgattttagagcatgtattctttttg

3′Seq = ataaacaagcaaaccaagaagtggtagtagtagaagaaaaaatcttcaagccctaaaaca

513 GATA in K562 enhancer (conserved at 60% confidence)

chr4 1399578 1399595 + (hg18)





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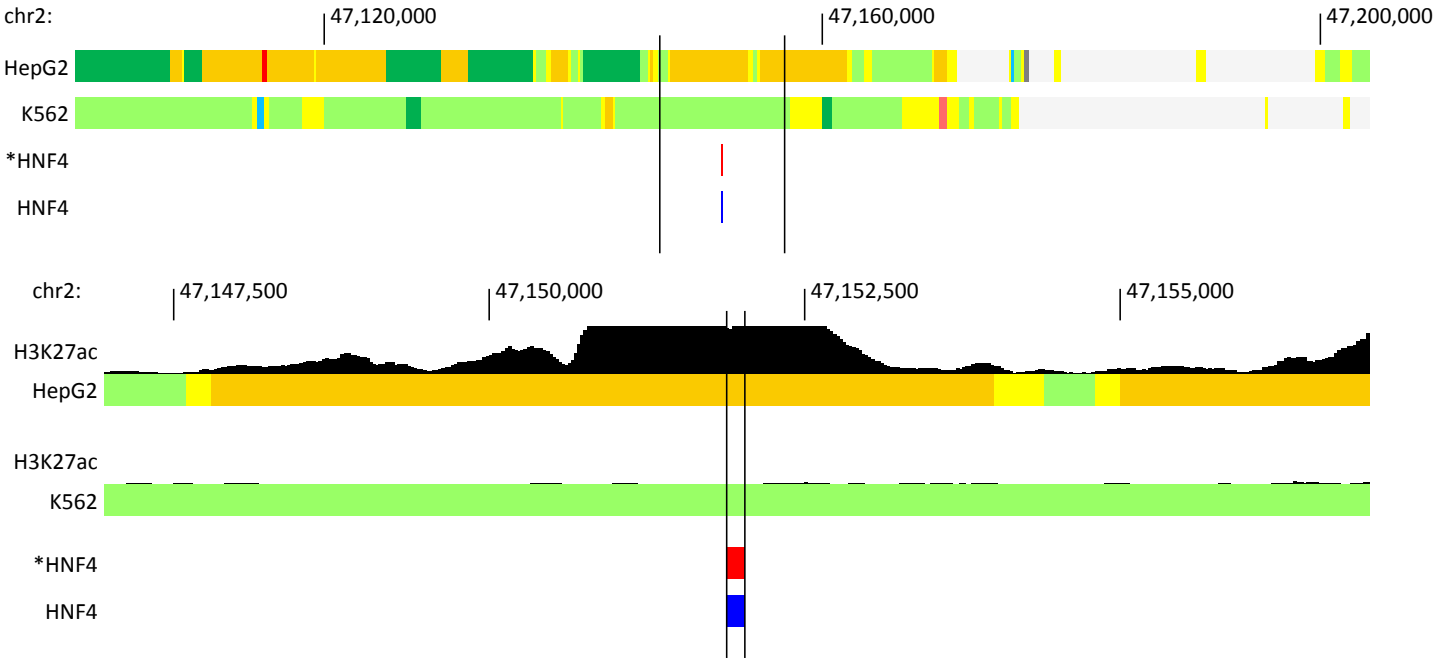
3′Seq = ctccgccaagacaatgttgactattaaagtcgacagcttgagatattacactattagttatgc

514 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 47151948 47151961 + (hg18)



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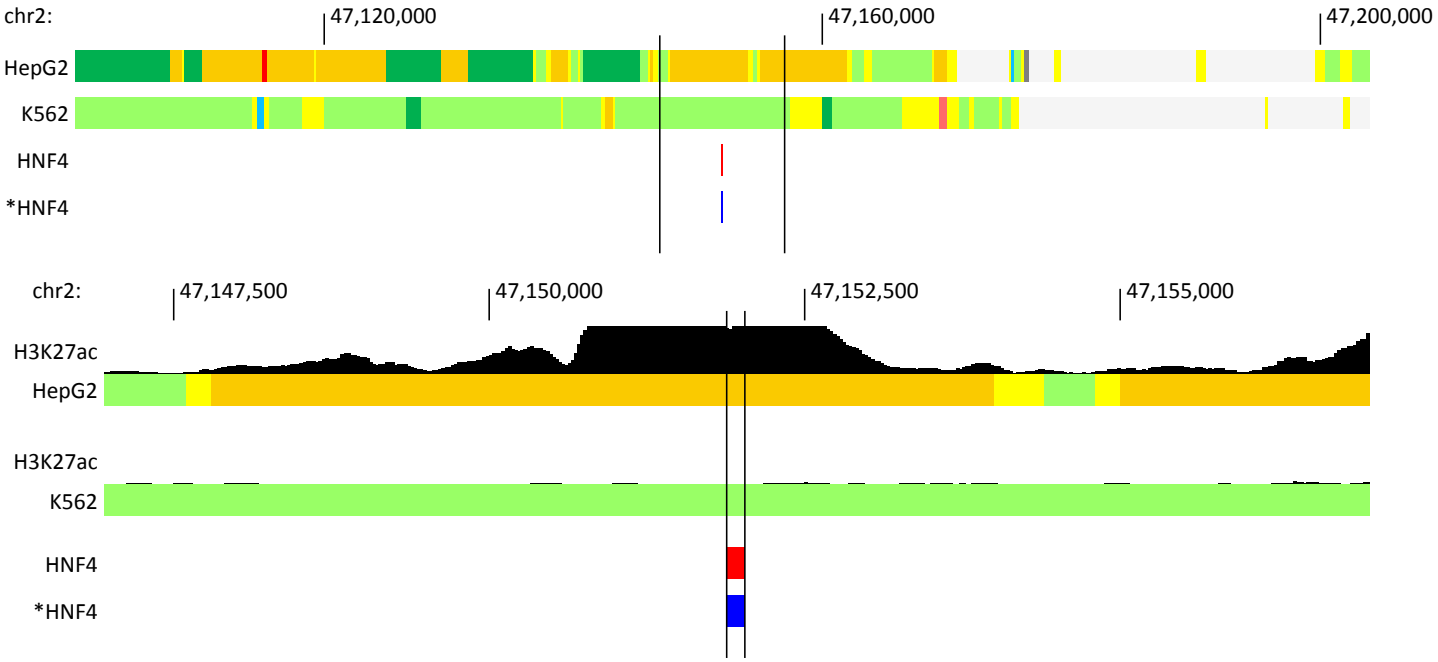
515 HNF4 in HepG2 enhancer

chr2 47151948 47151961 + (hg18)



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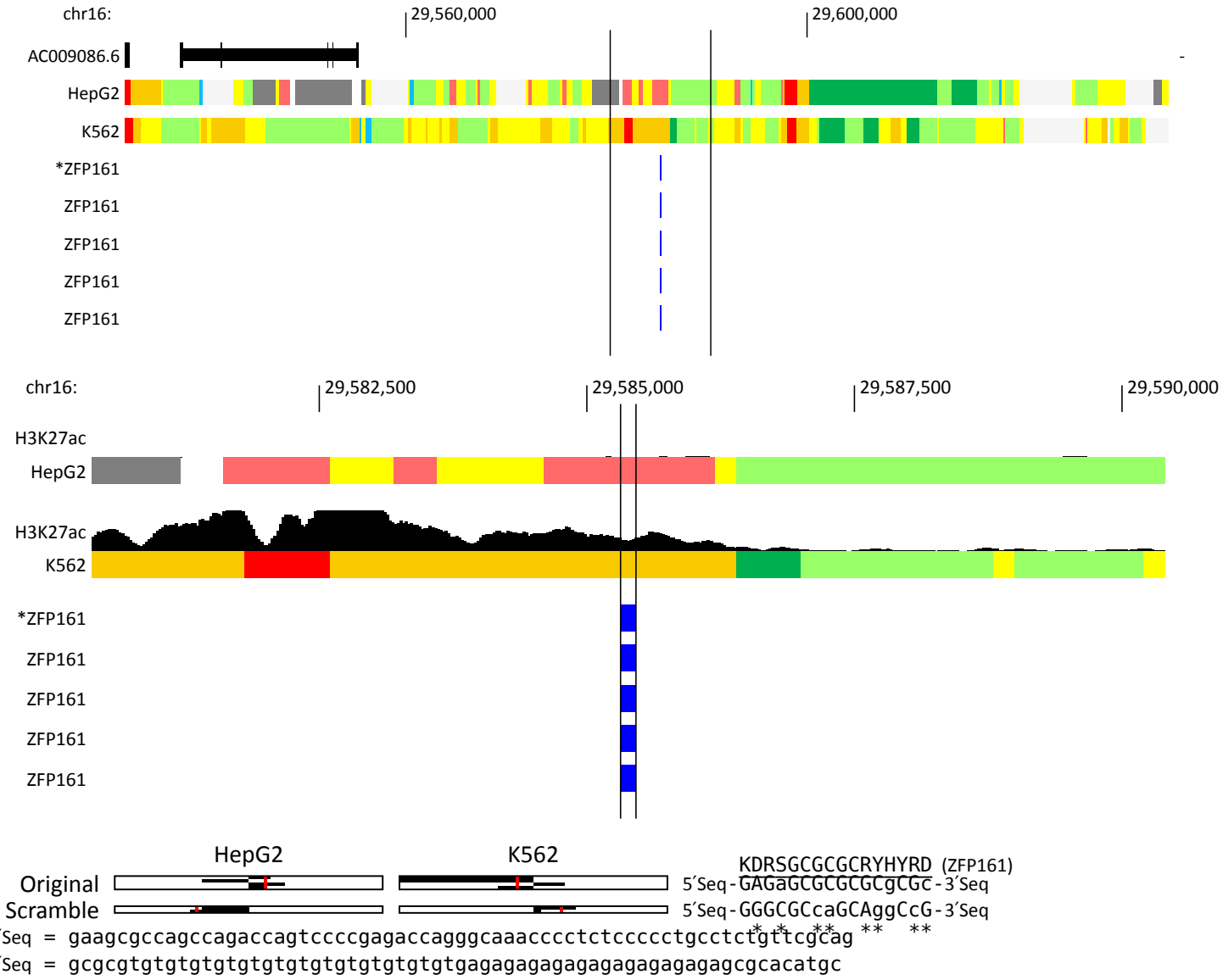
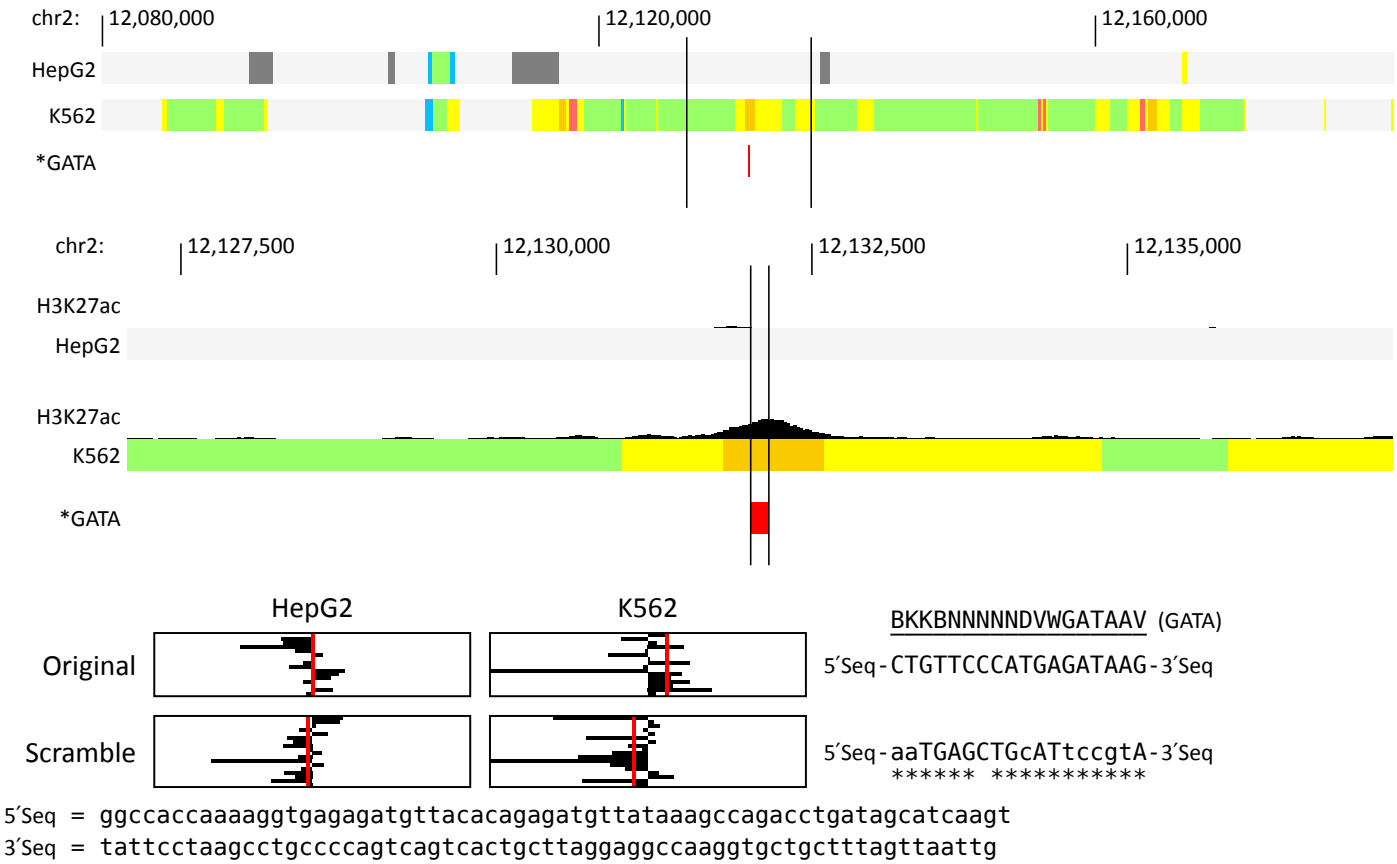
516 ZFP161 in K562 enhancer

chr16 29585380 29585395 - (hg18)



517 GATA in K562 enhancer (conserved at 60% confidence)

chr2 12132079 12132096 + (hg18)



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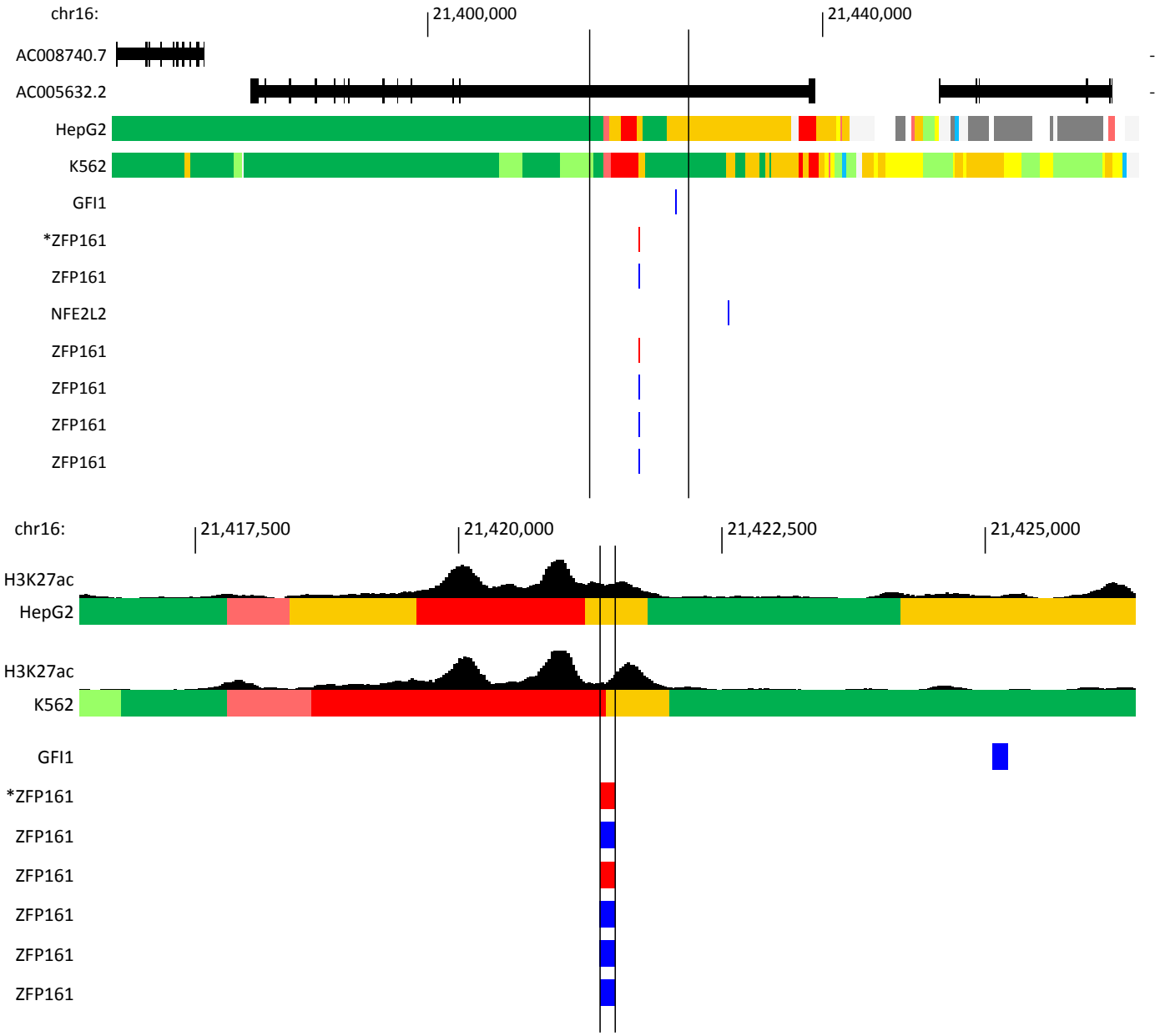
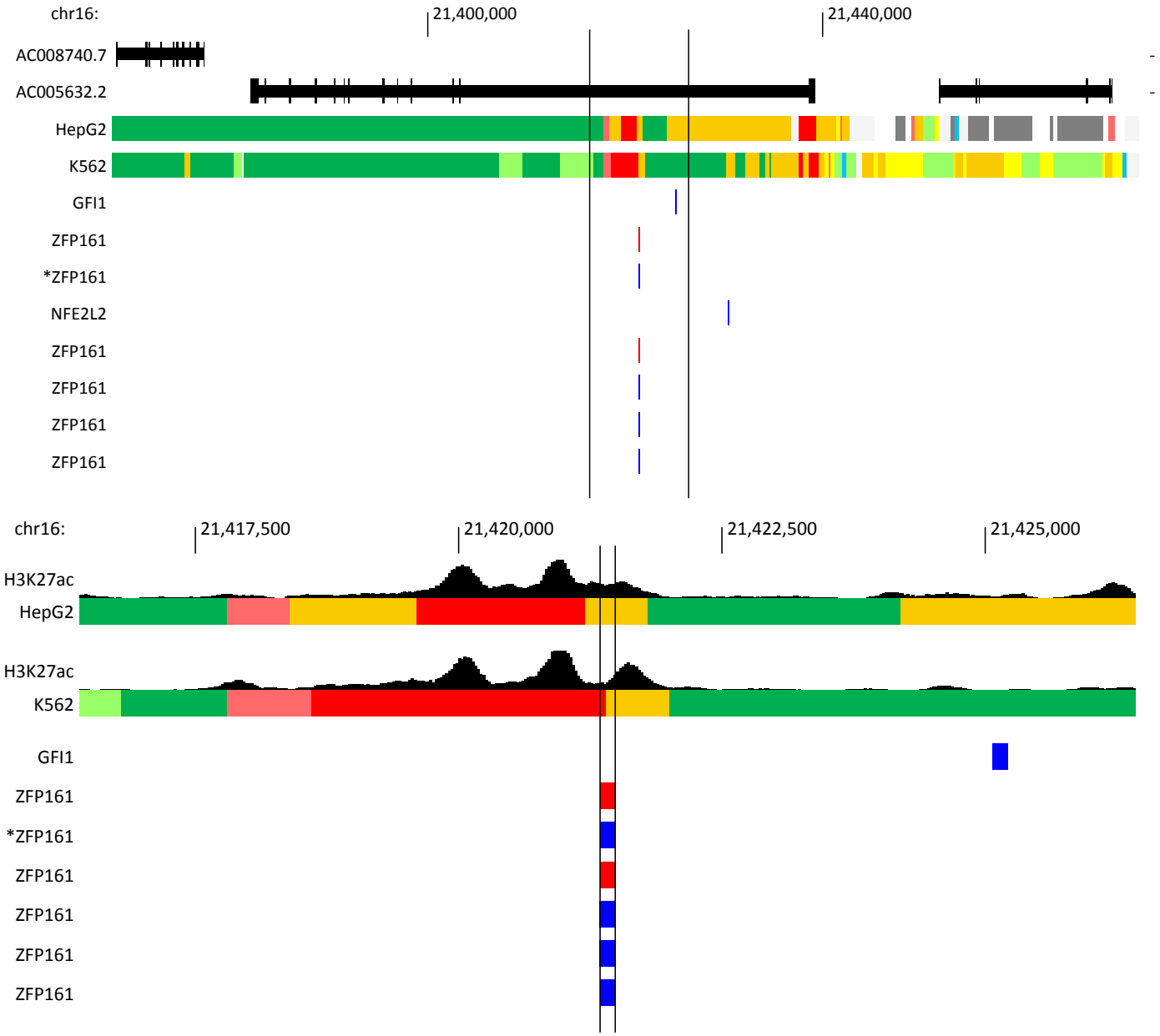
518 ZFP161 in HepG2 enhancer (conserved at 40% confidence)

chr16 21421408 21421423 + (hg18)



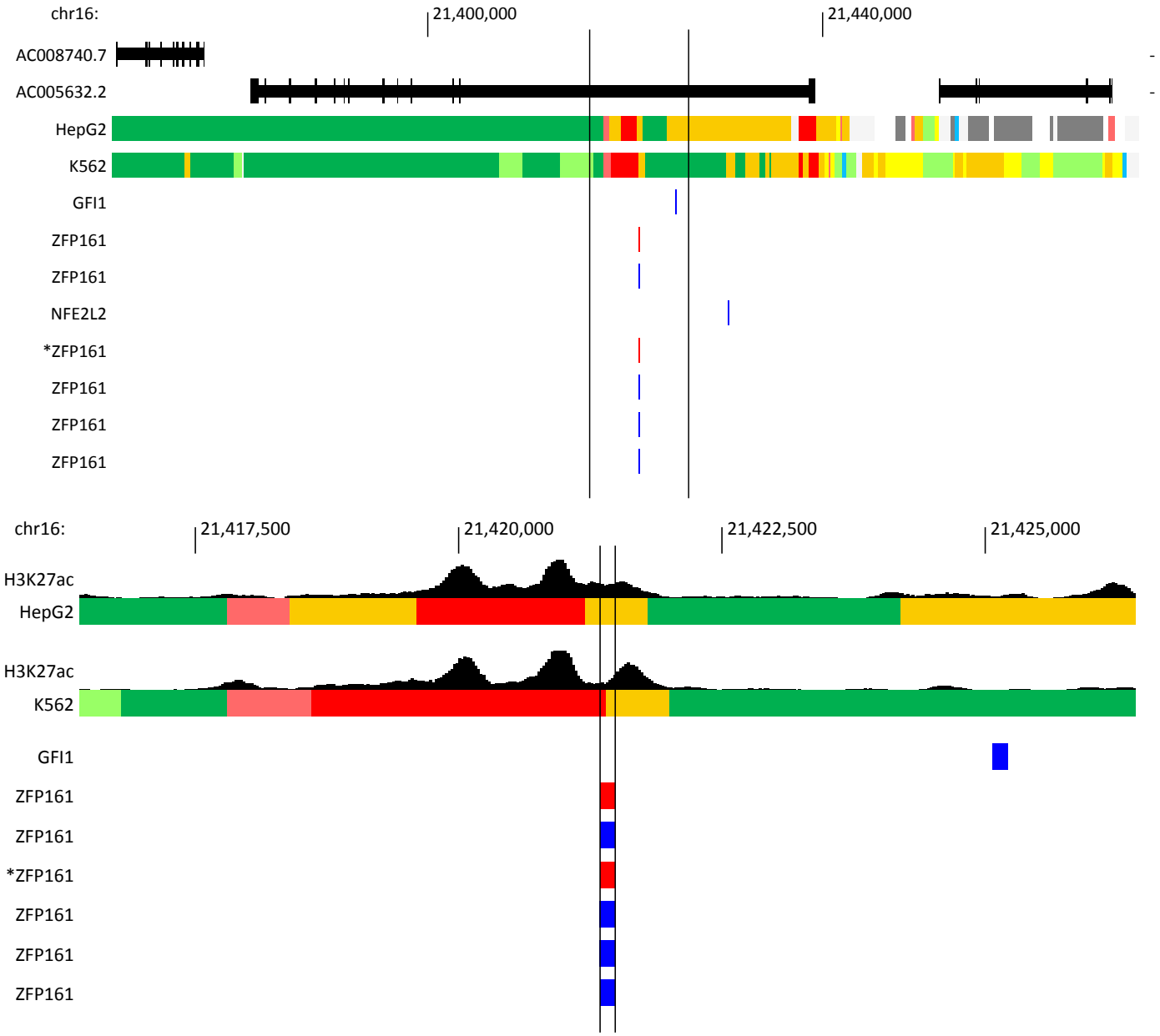
519 ZFP161 in HepG2 enhancer

chr16 21421408 21421423 + (hg18)



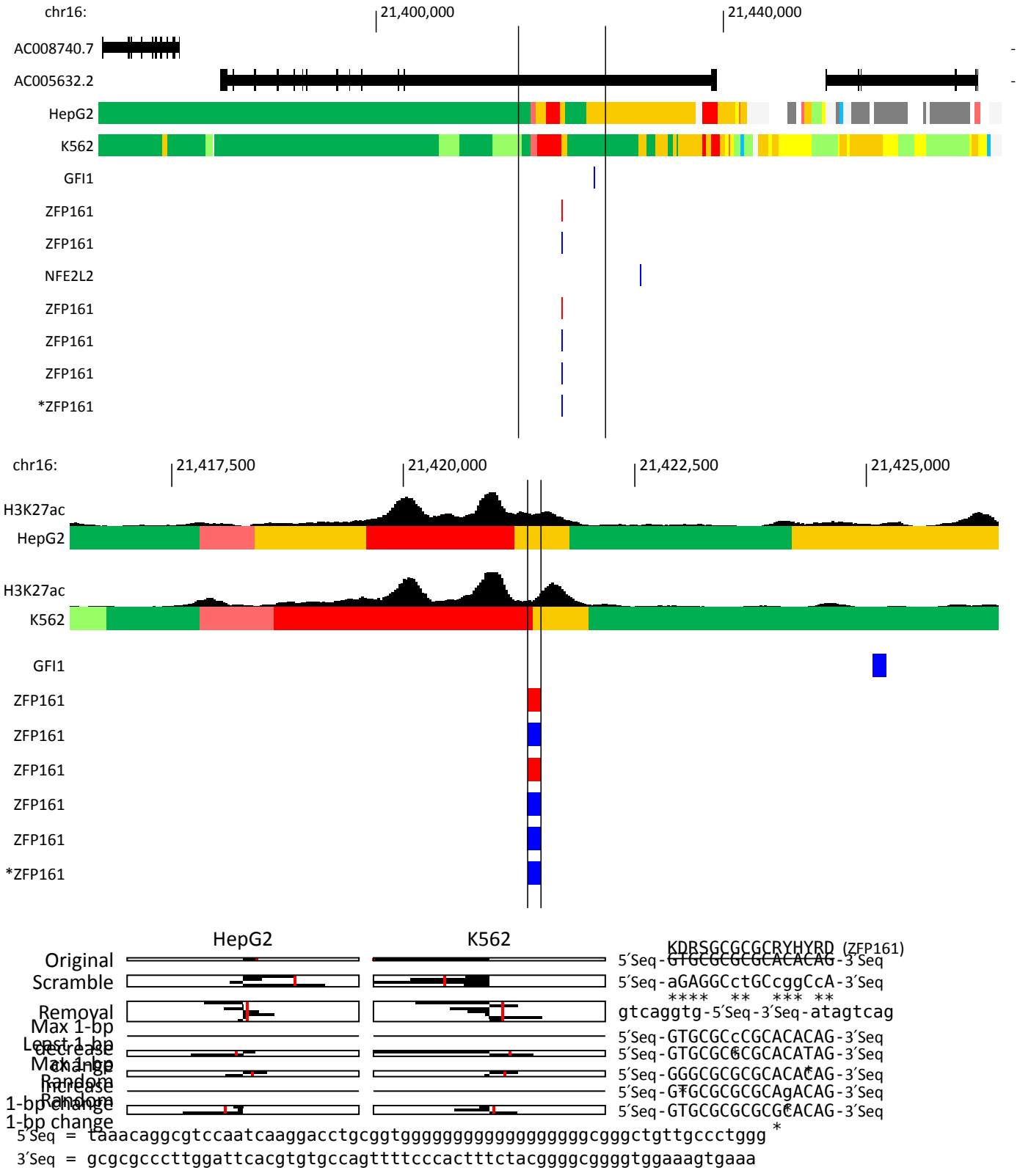
520 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr16 21421408 21421423 + (hg18)



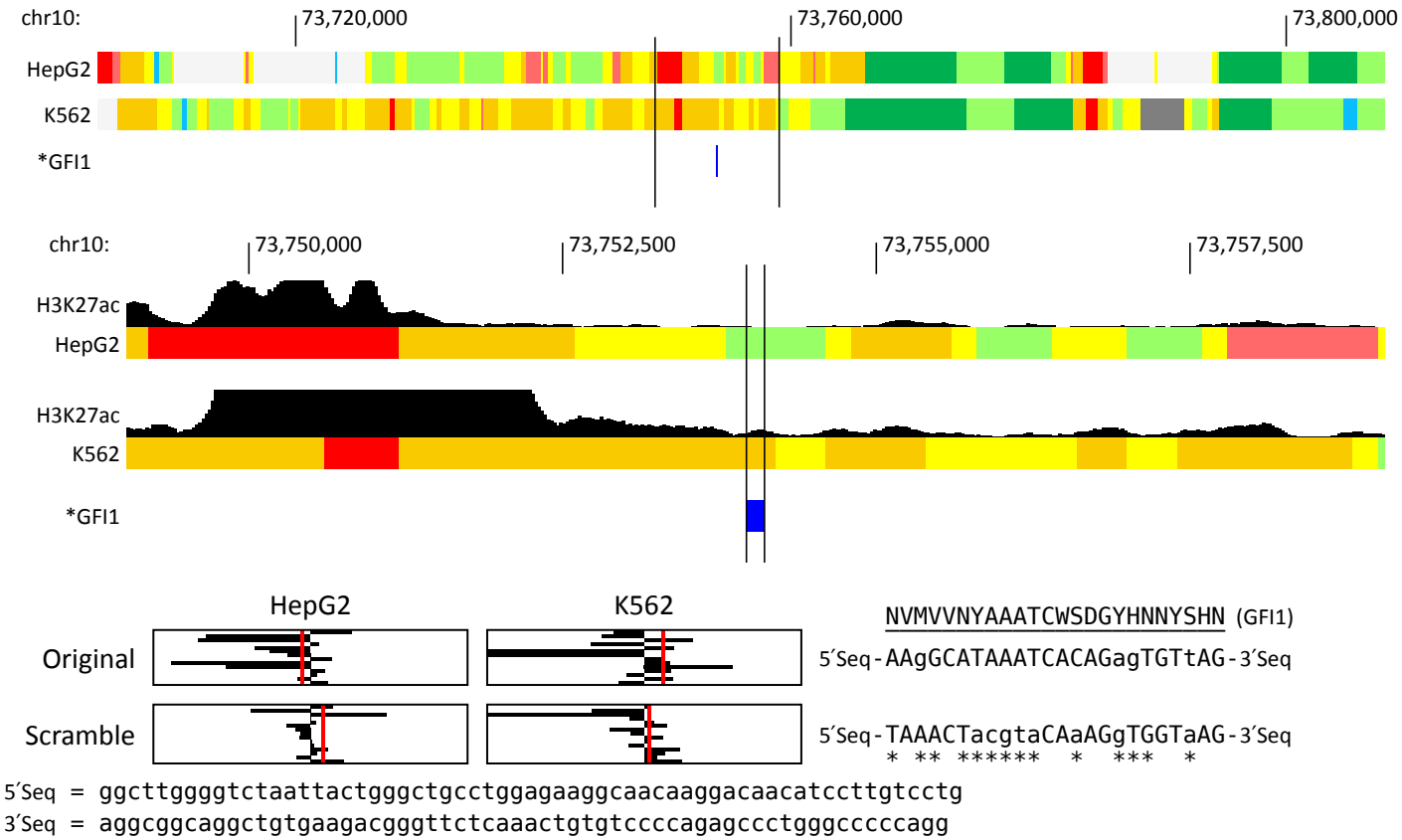
521 ZFP161 in K562 enhancer

chr16 21421408 21421423 + (hg18)



522 GFI1 in K562 enhancer

chr10 73754026 73754049 - (hg18)



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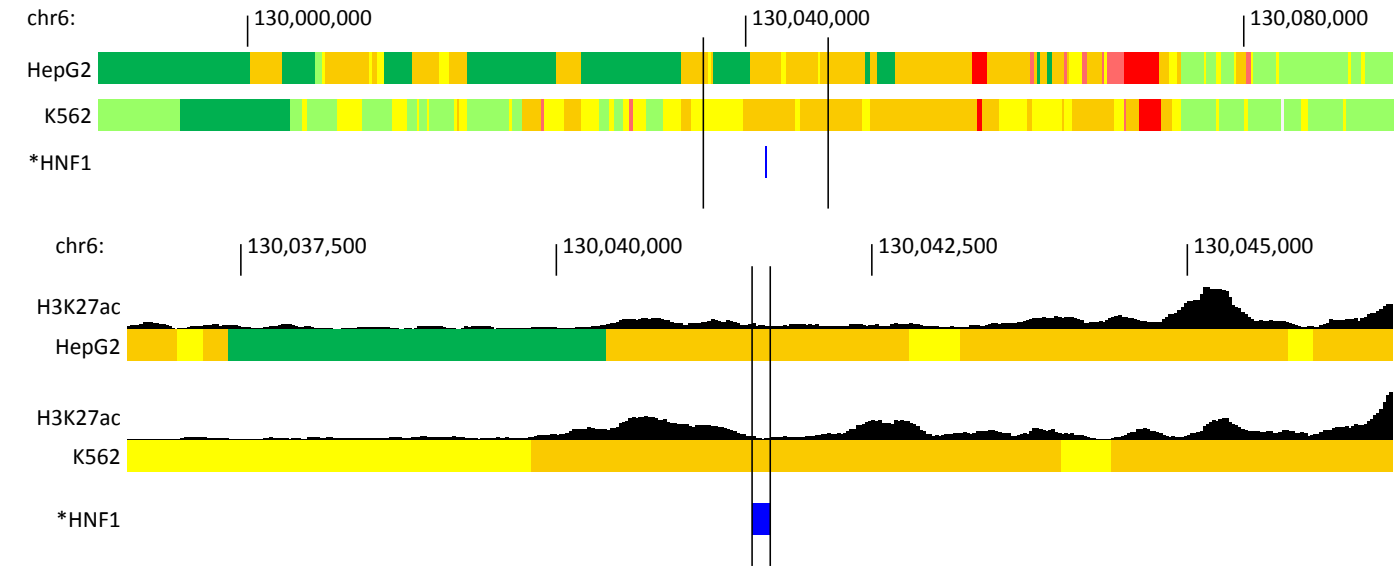
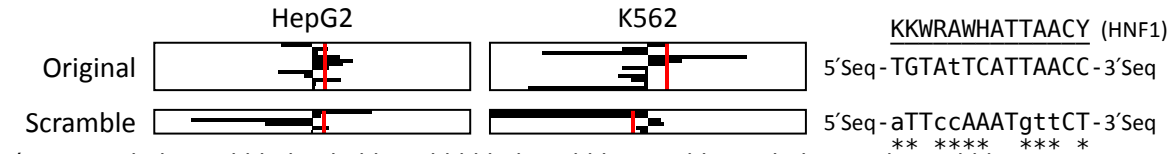
523 HNF1 in HepG2 enhancer

chr6 130041617 130041630 + (hg18)





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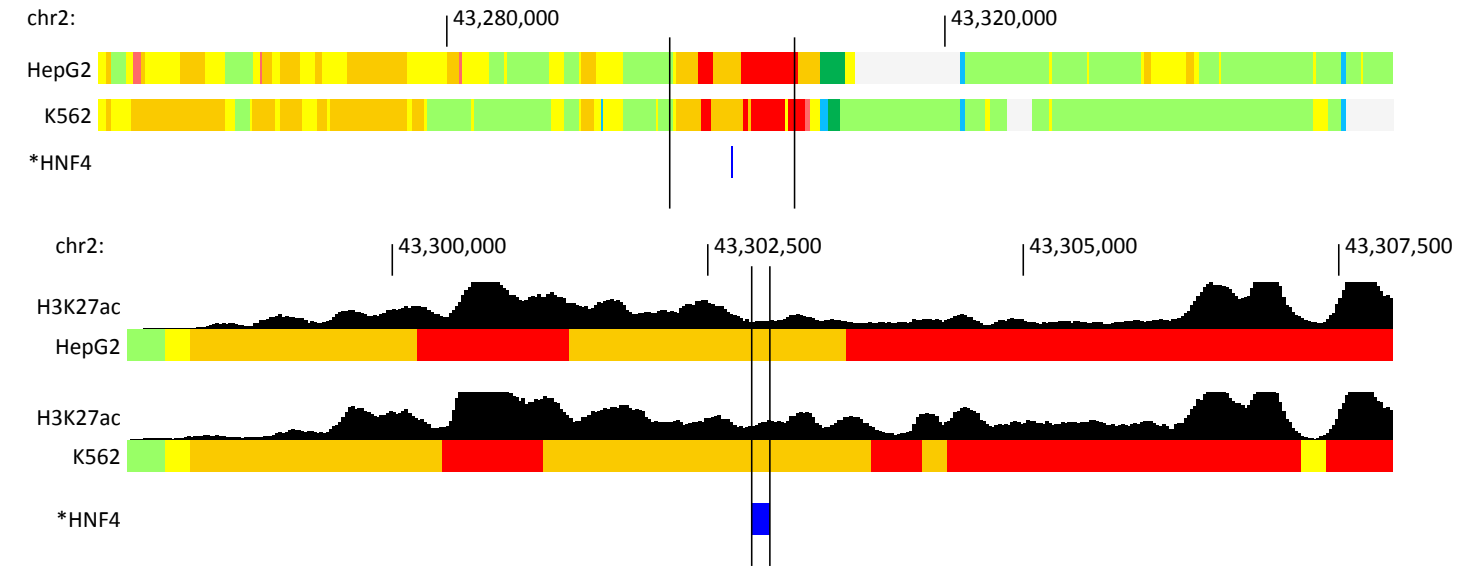
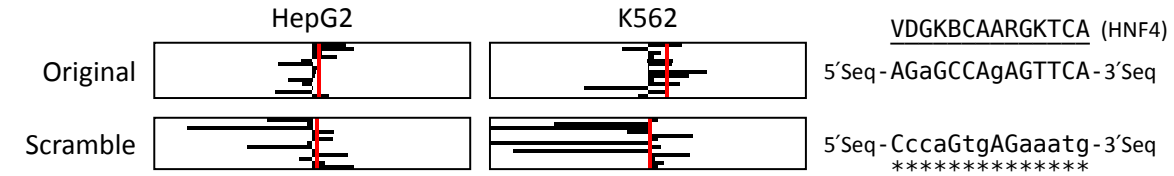
524 HNF4 in K562 enhancer

chr2 43302914 43302927 - (hg18)





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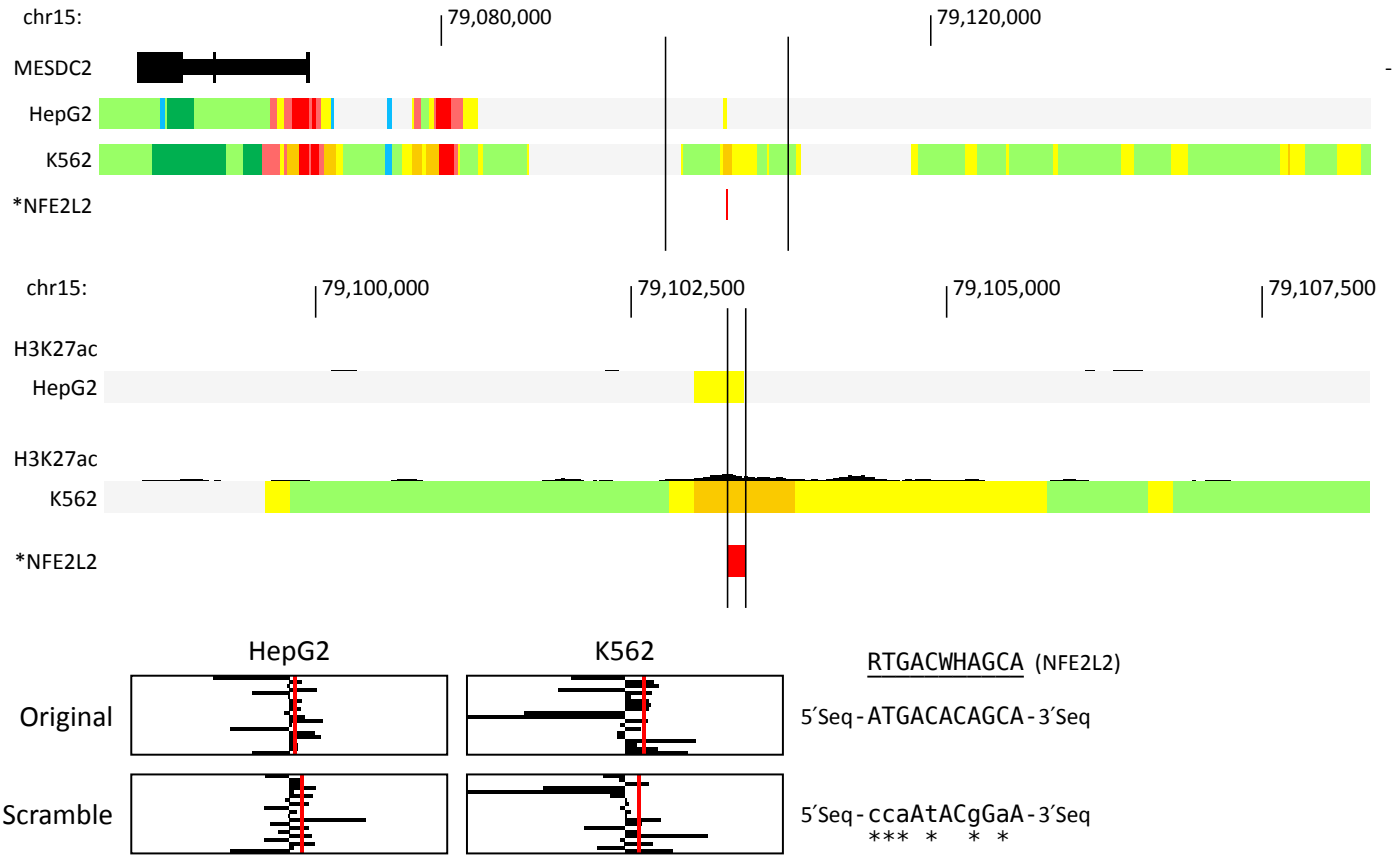
525 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr15 79103331 79103341 - (hg18)



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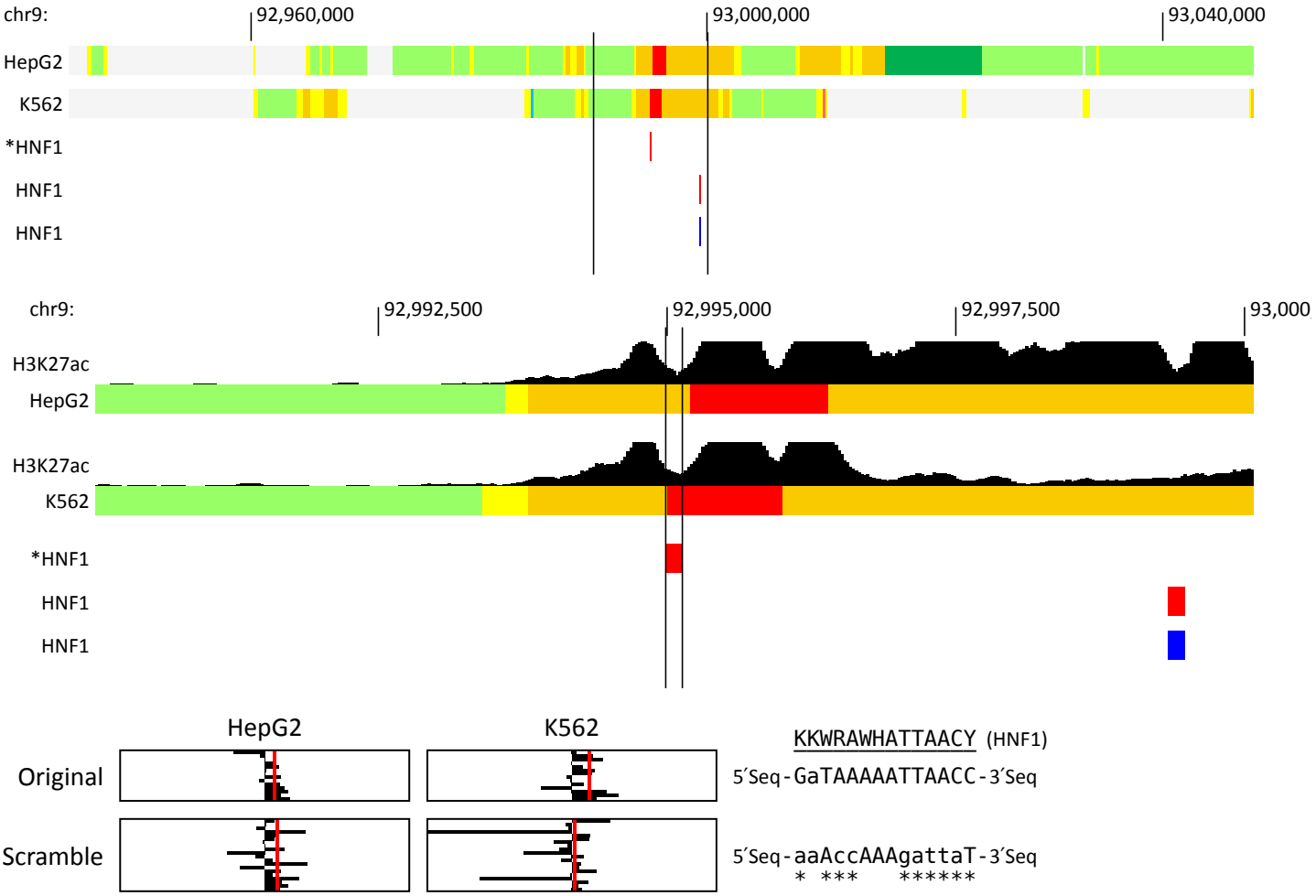
526 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr9 92995054 92995067 + (hg18)



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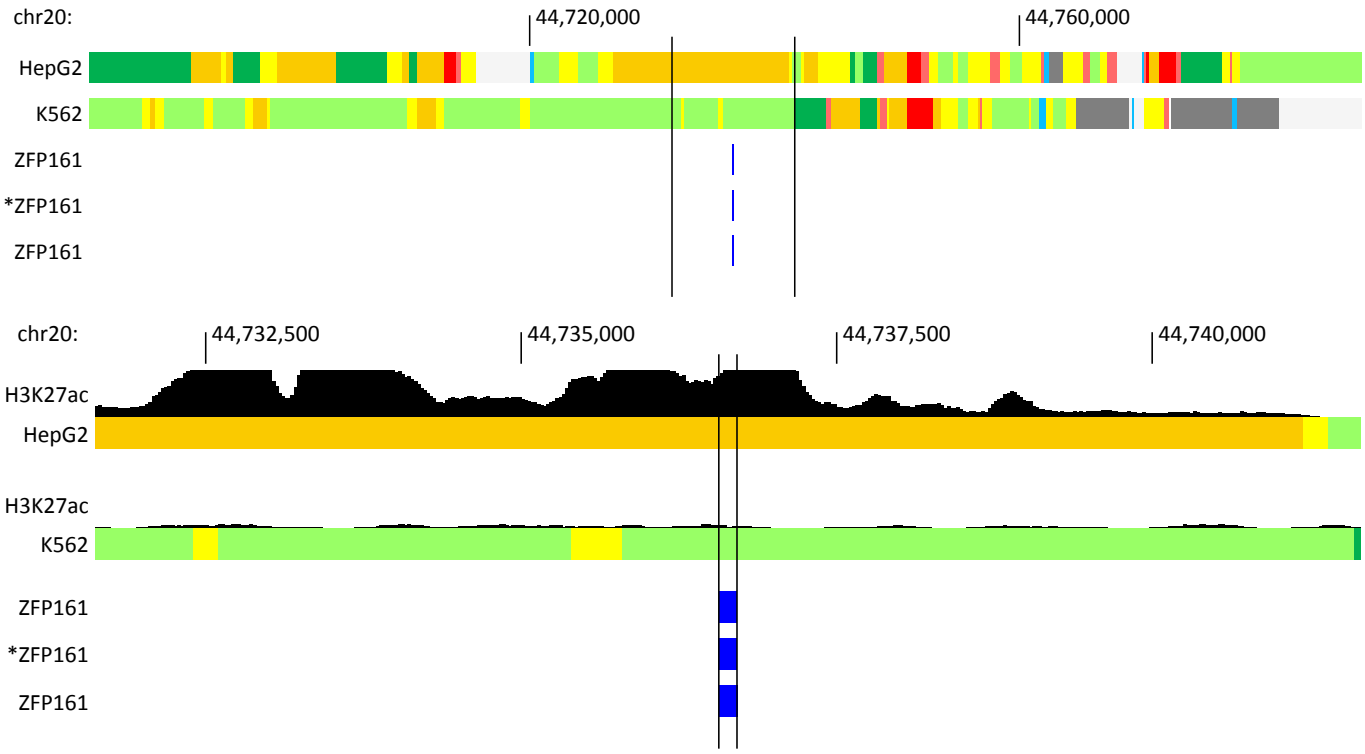
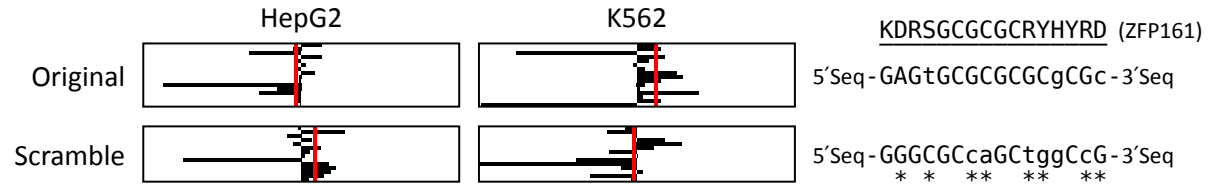
527 ZFP161 in HepG2 enhancer

chr20 44736631 44736646 + (hg18)





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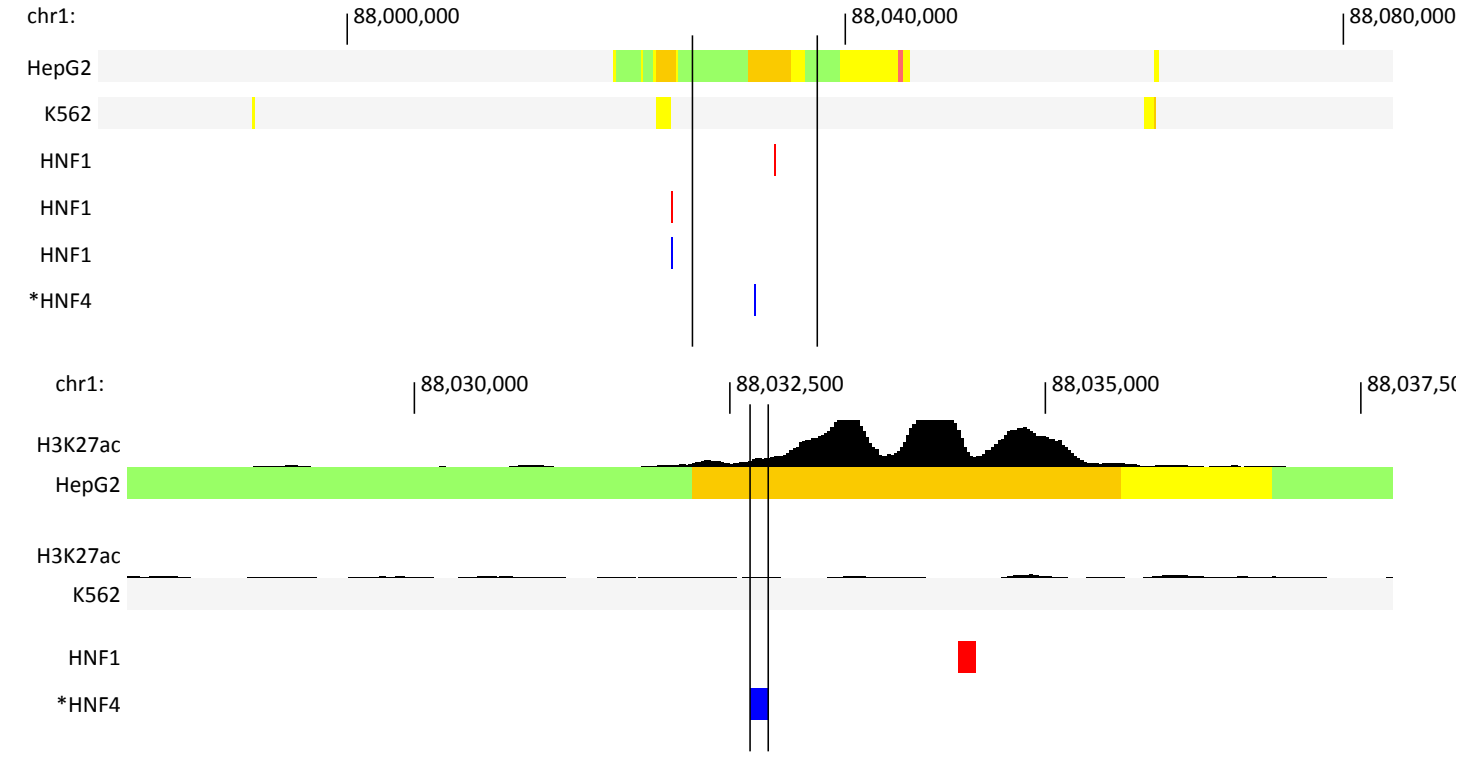
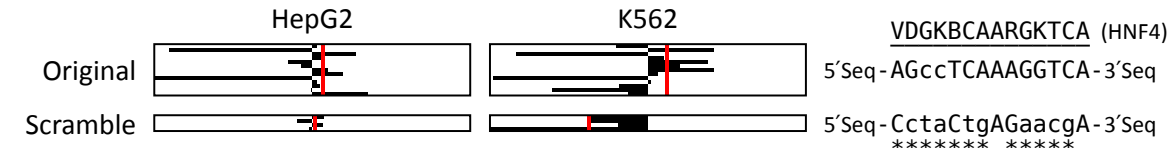
528 HNF4 in HepG2 enhancer

chr1 88032726 88032739 + (hg18)





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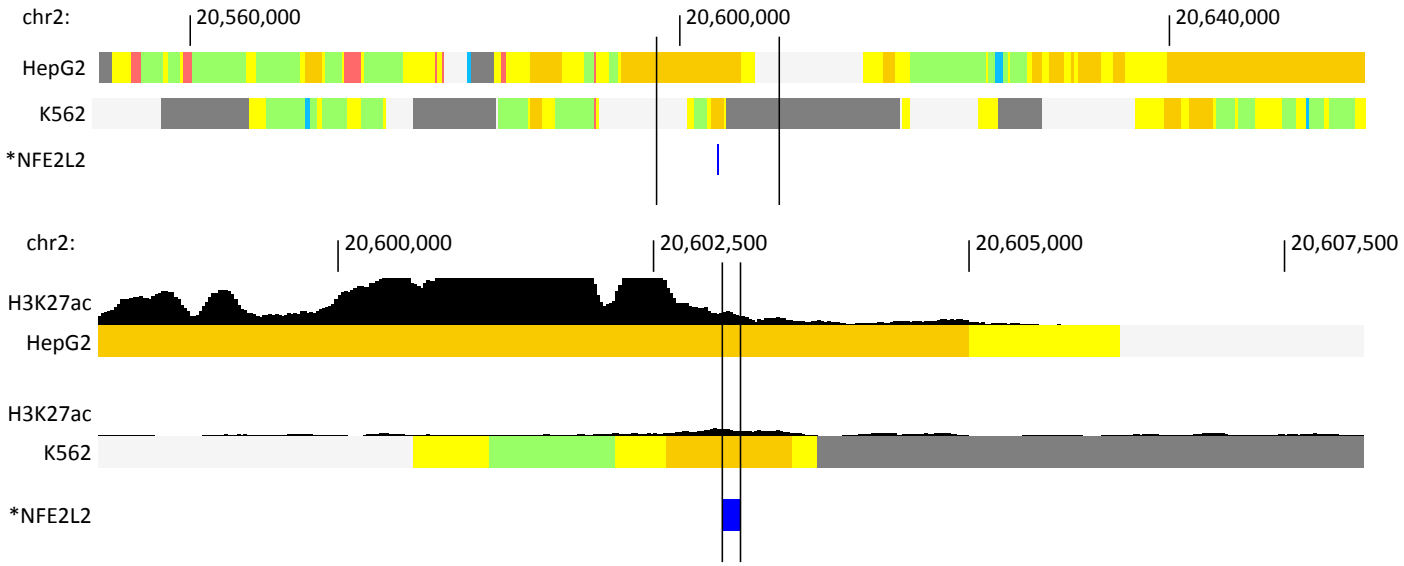
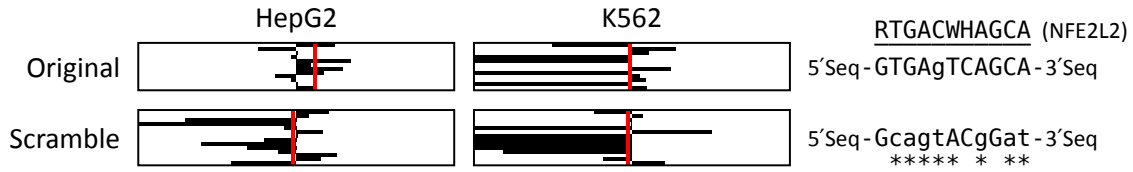
529 NFE2L2 in K562 enhancer

chr2 20603112 20603122 + (hg18)





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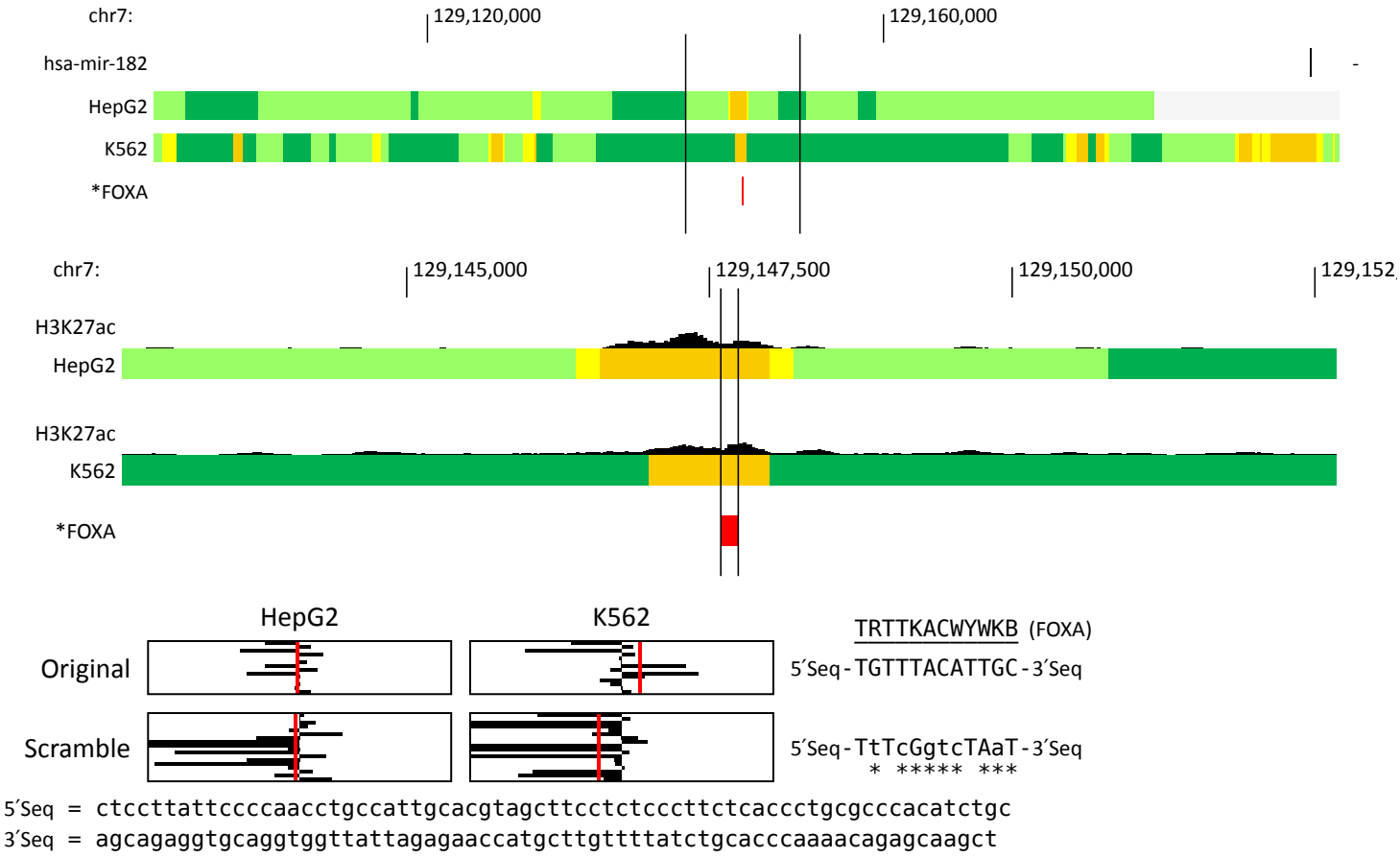
530 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr7 129147661 129147672 - (hg18)



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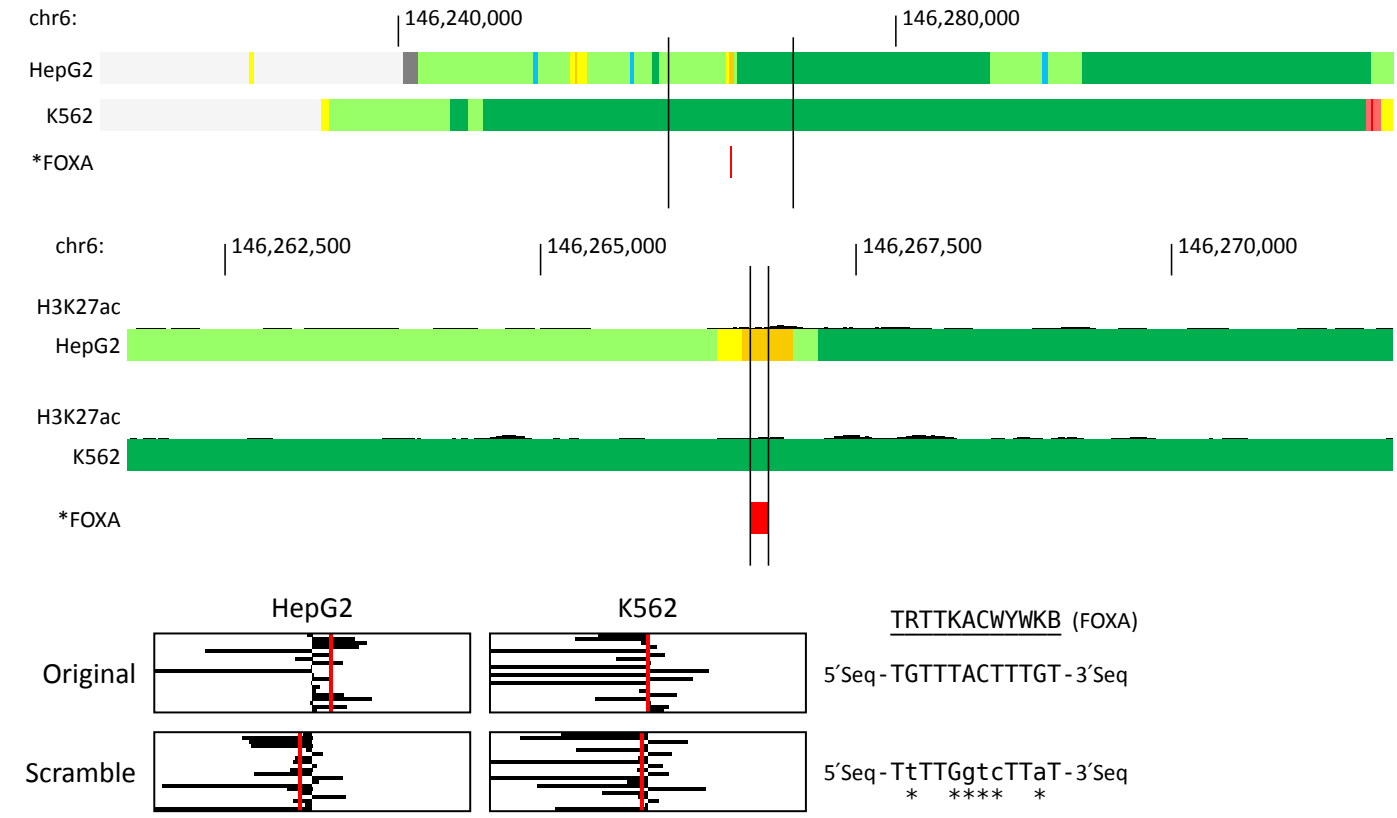
531 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr6 146266729 146266740 + (hg18)



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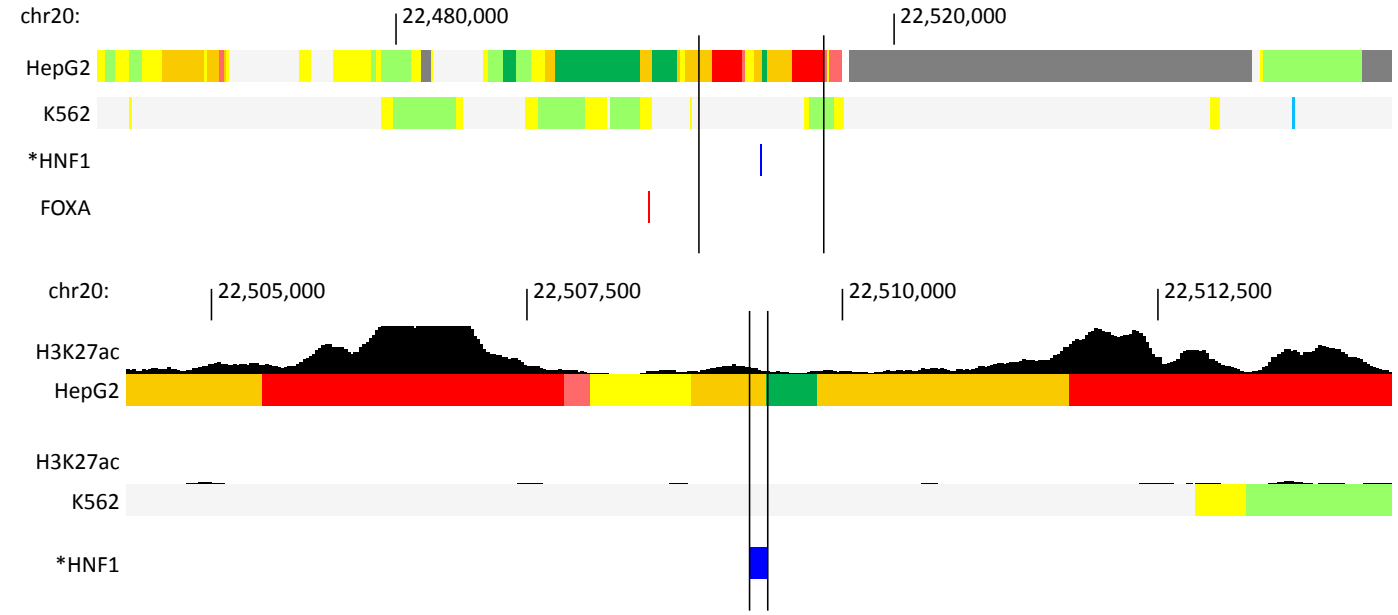
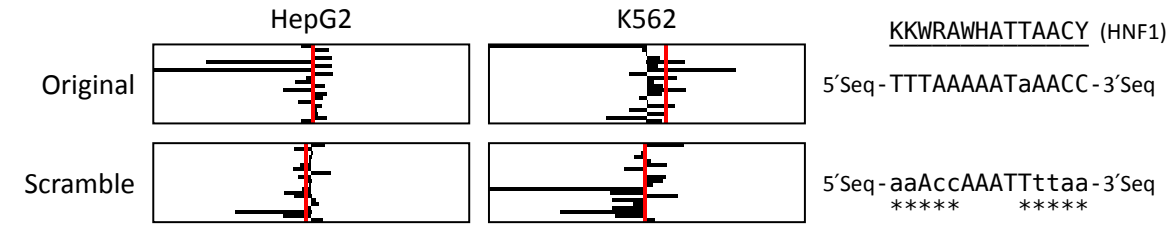
532 HNF1 in HepG2 enhancer

chr20 22509330 22509343 + (hg18)





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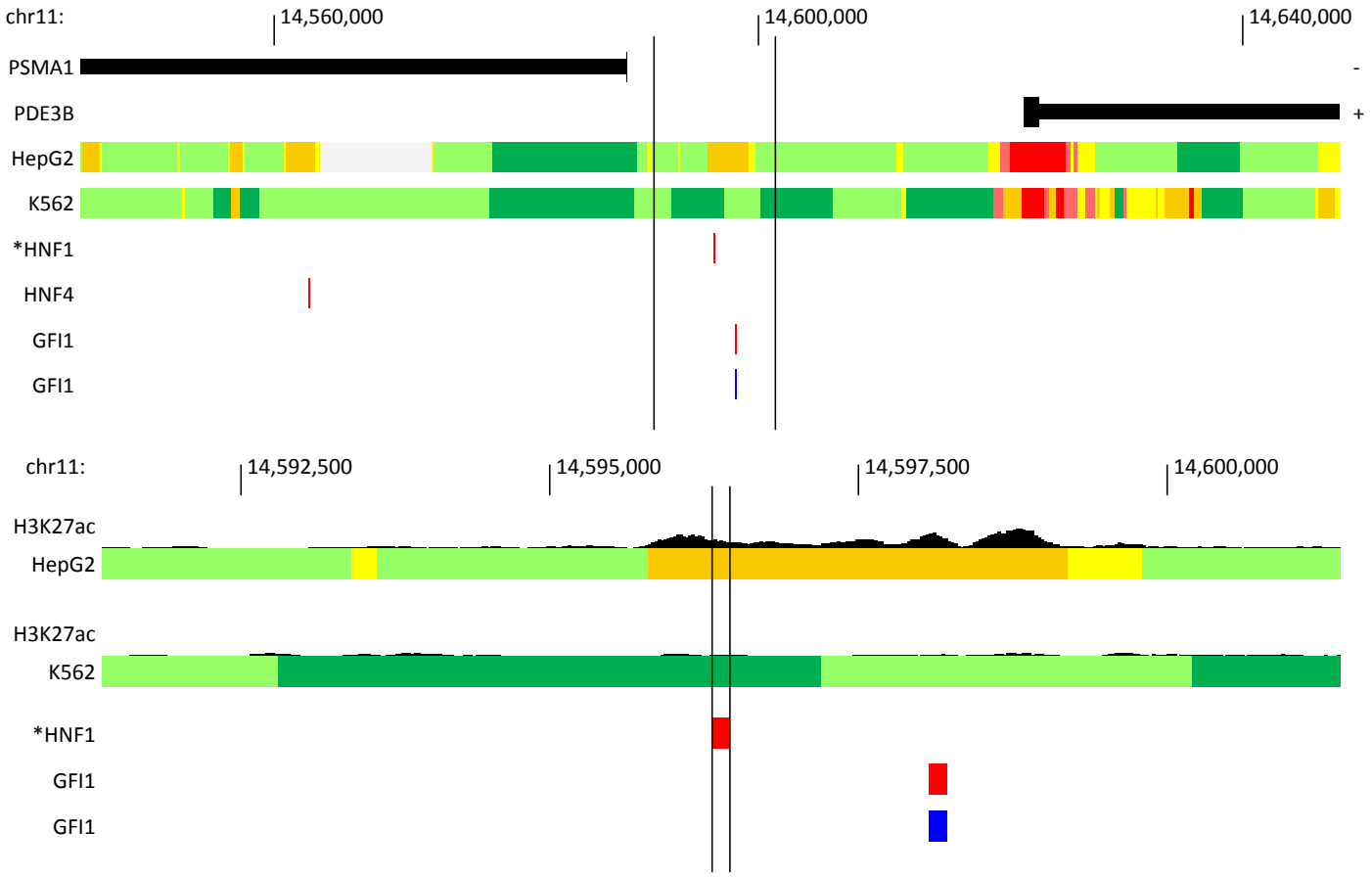
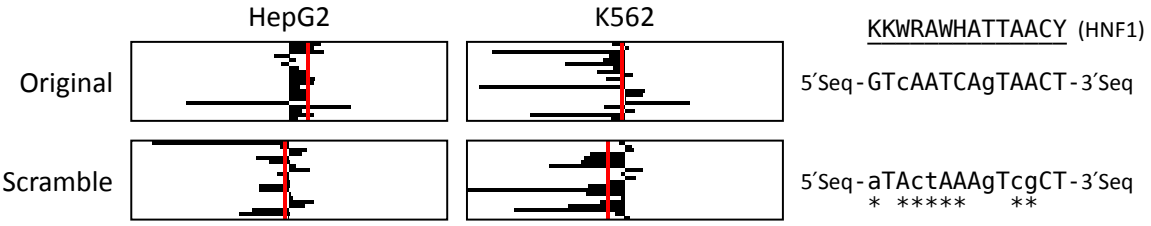
533 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr11 14596381 14596394 - (hg18)





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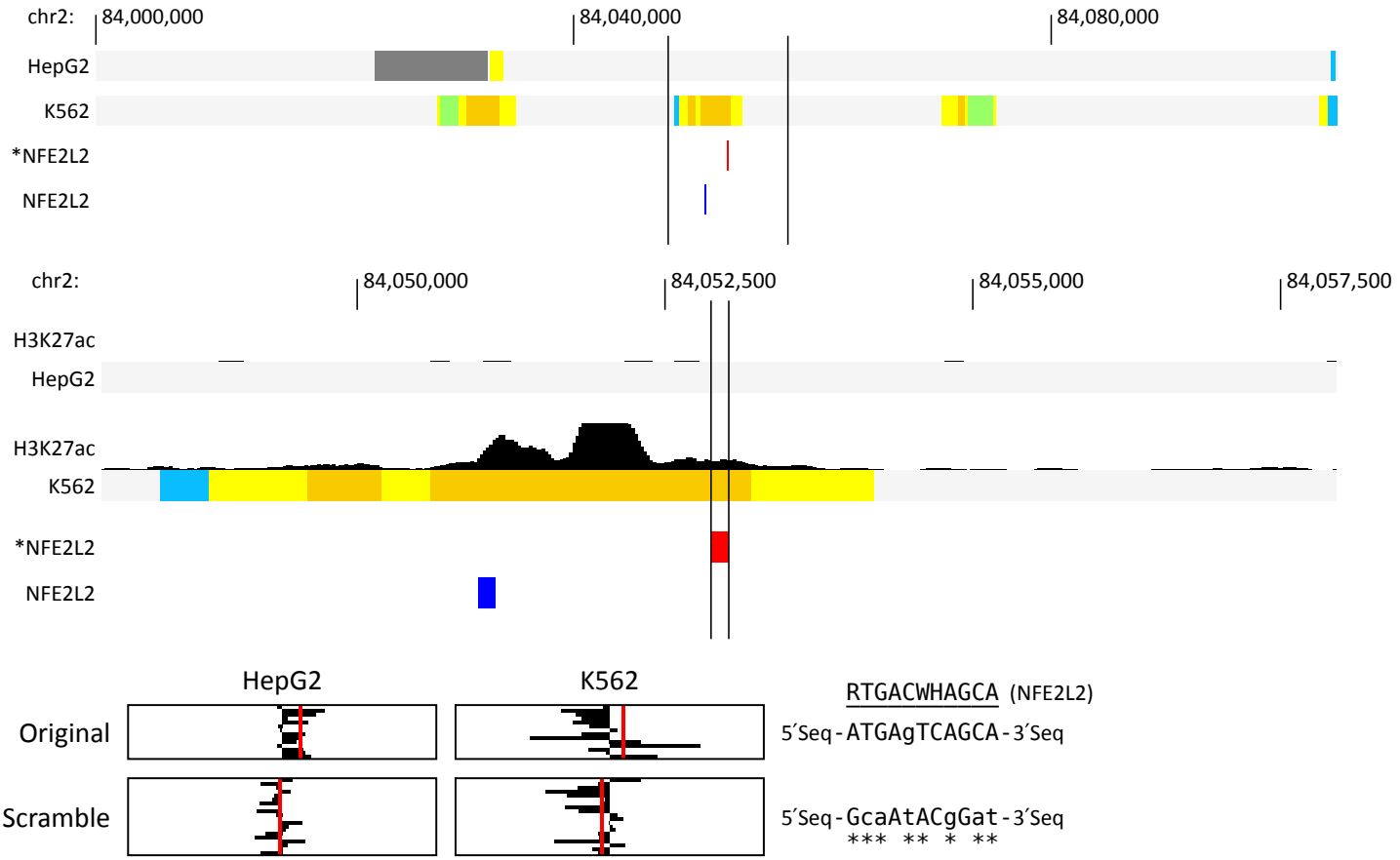
534 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr2 84052941 84052951 + (hg18)



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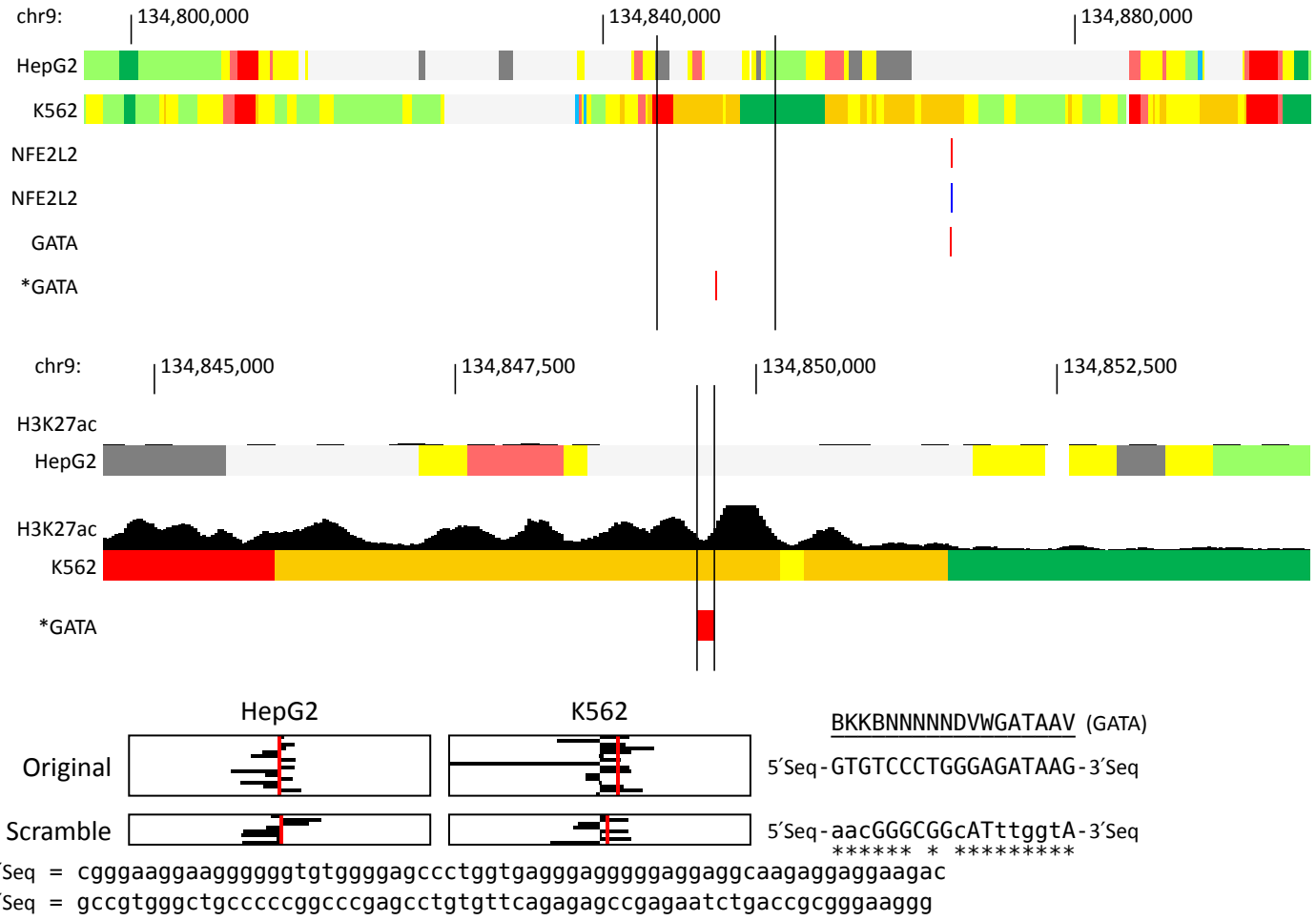
535 GATA in K562 enhancer (conserved at 60% confidence)

chr9 134849573 134849590 + (hg18)



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536 HNF4 in HepG2 enhancer

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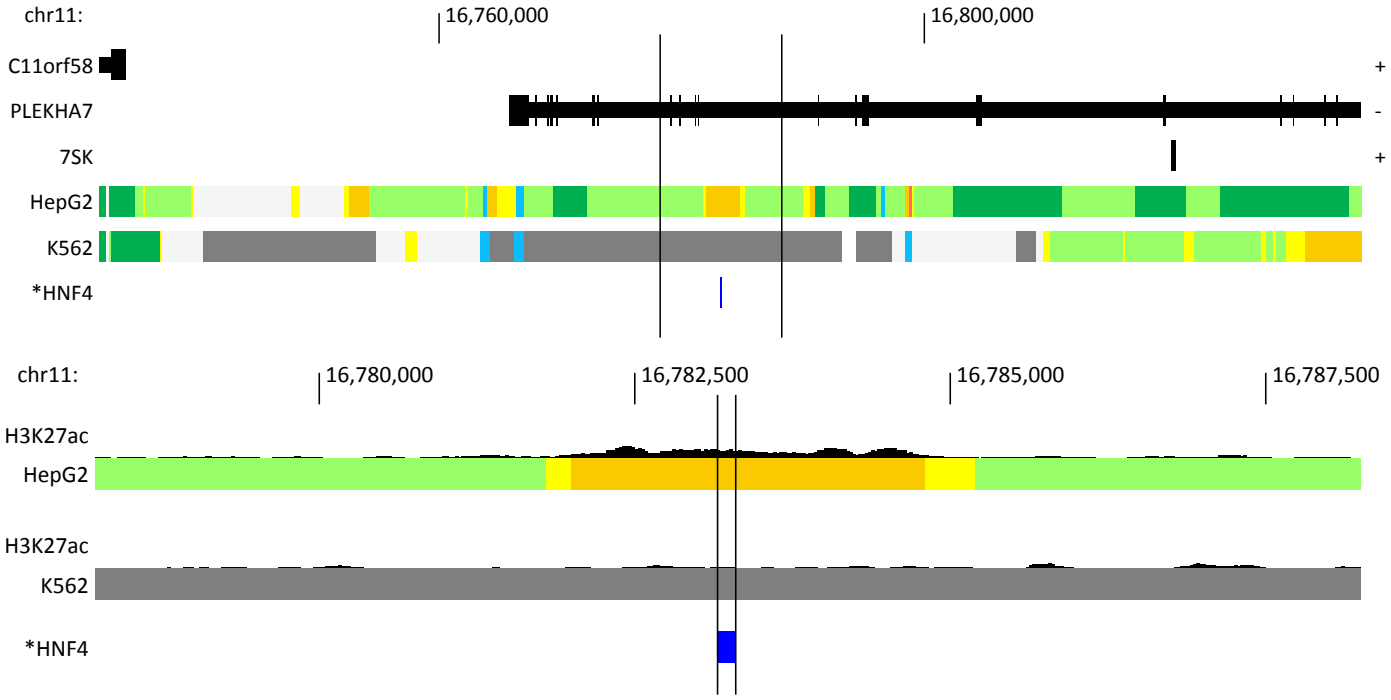

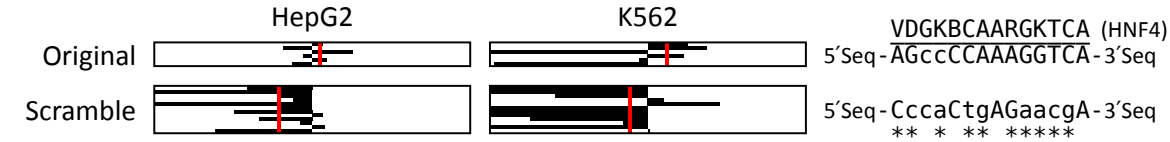

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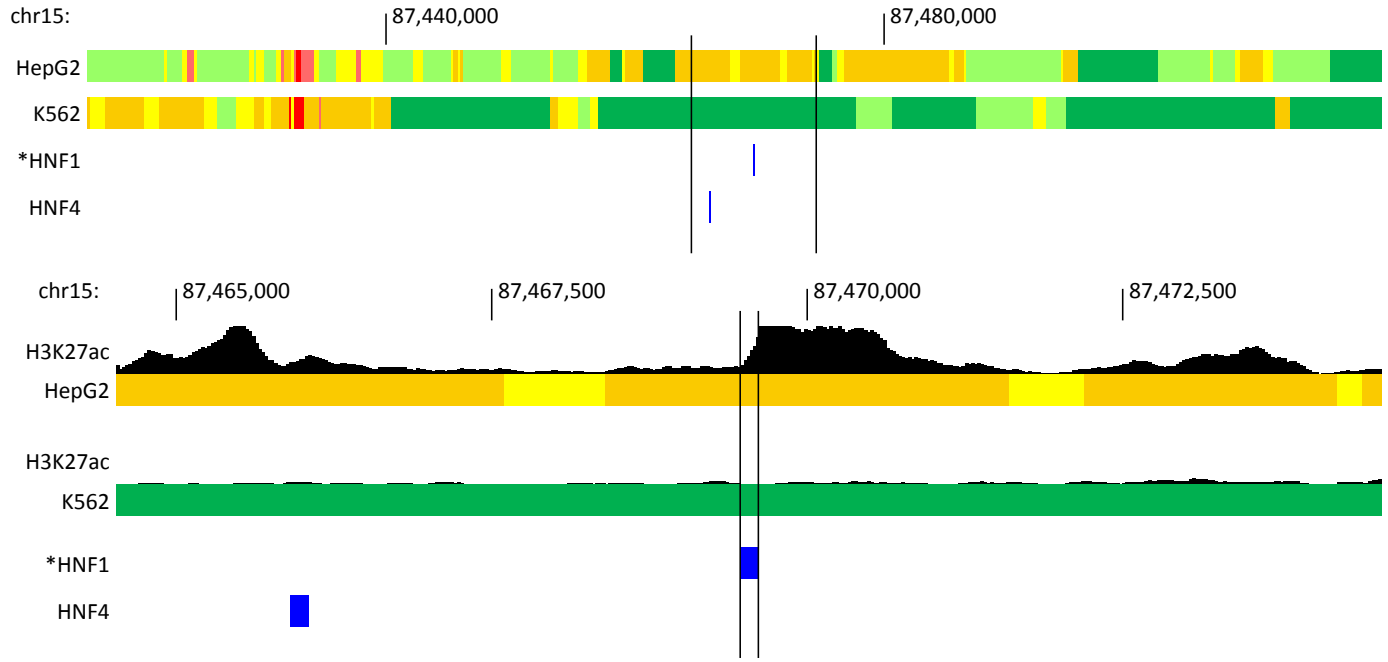
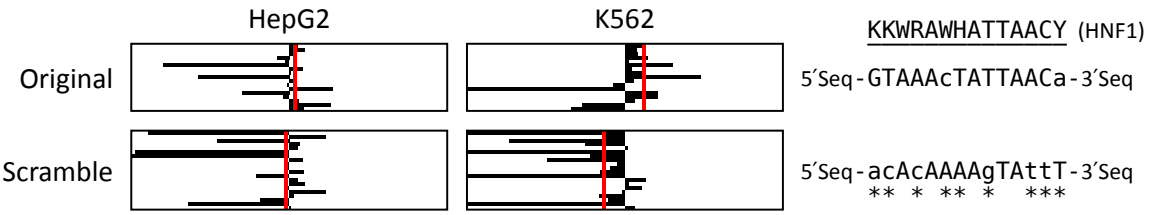
537 HNF1 in HepG2 enhancer

chr15 87469535 87469548 + (hg18)





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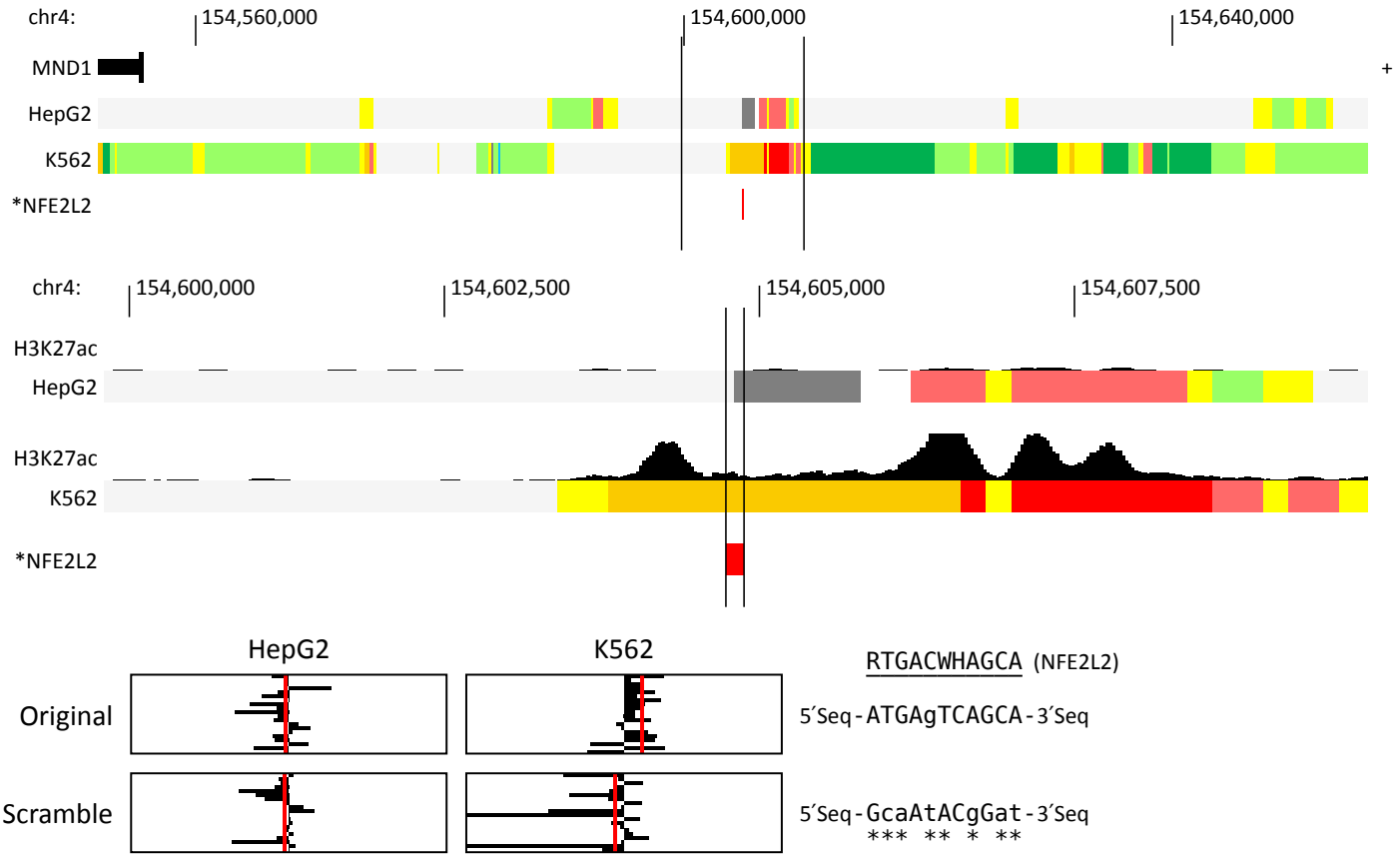
538 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr4 154604801 154604811 + (hg18)



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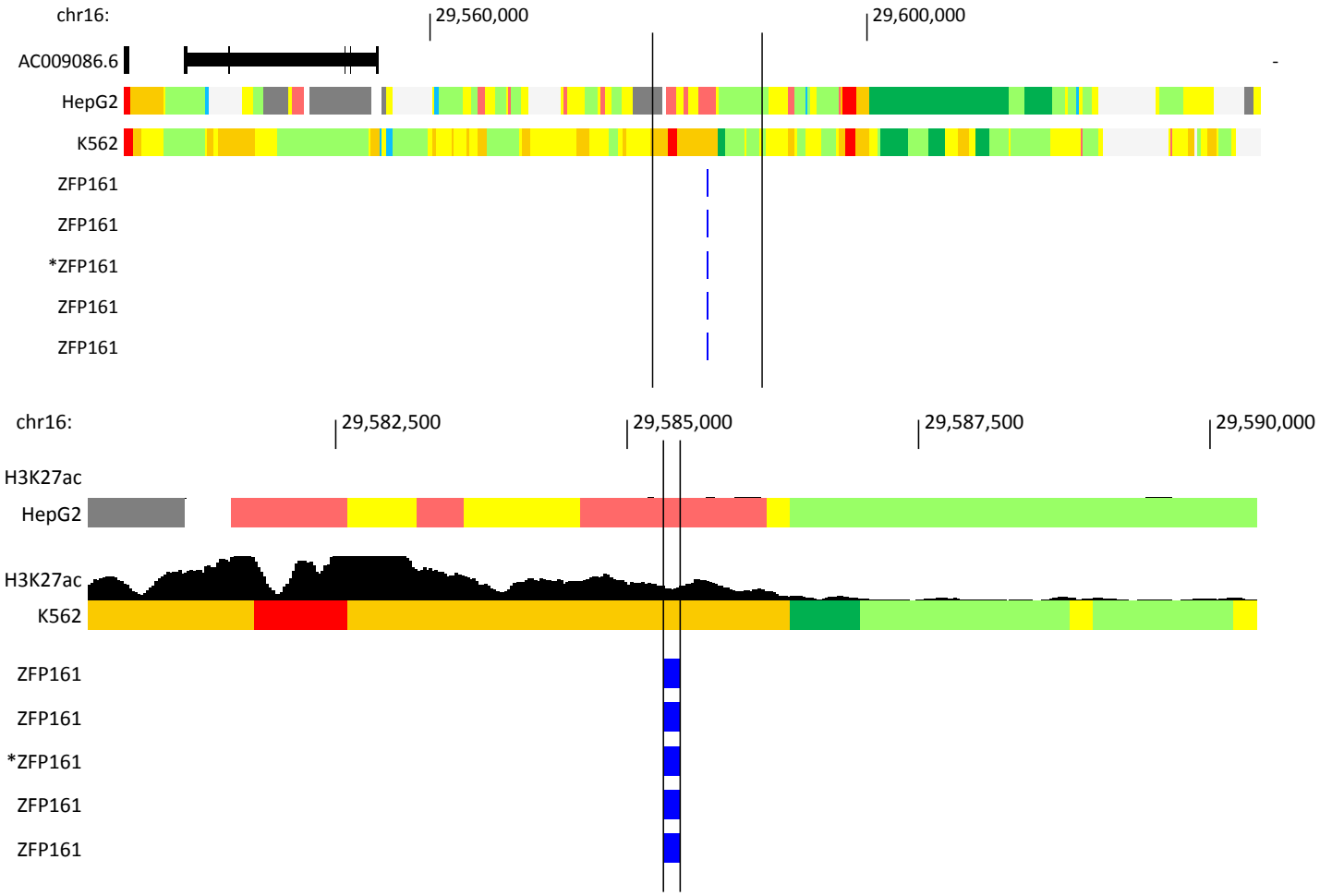
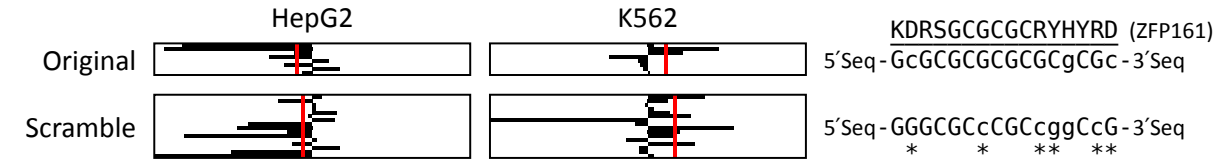
539 ZFP161 in K562 enhancer

chr16 29585376 29585391 - (hg18)





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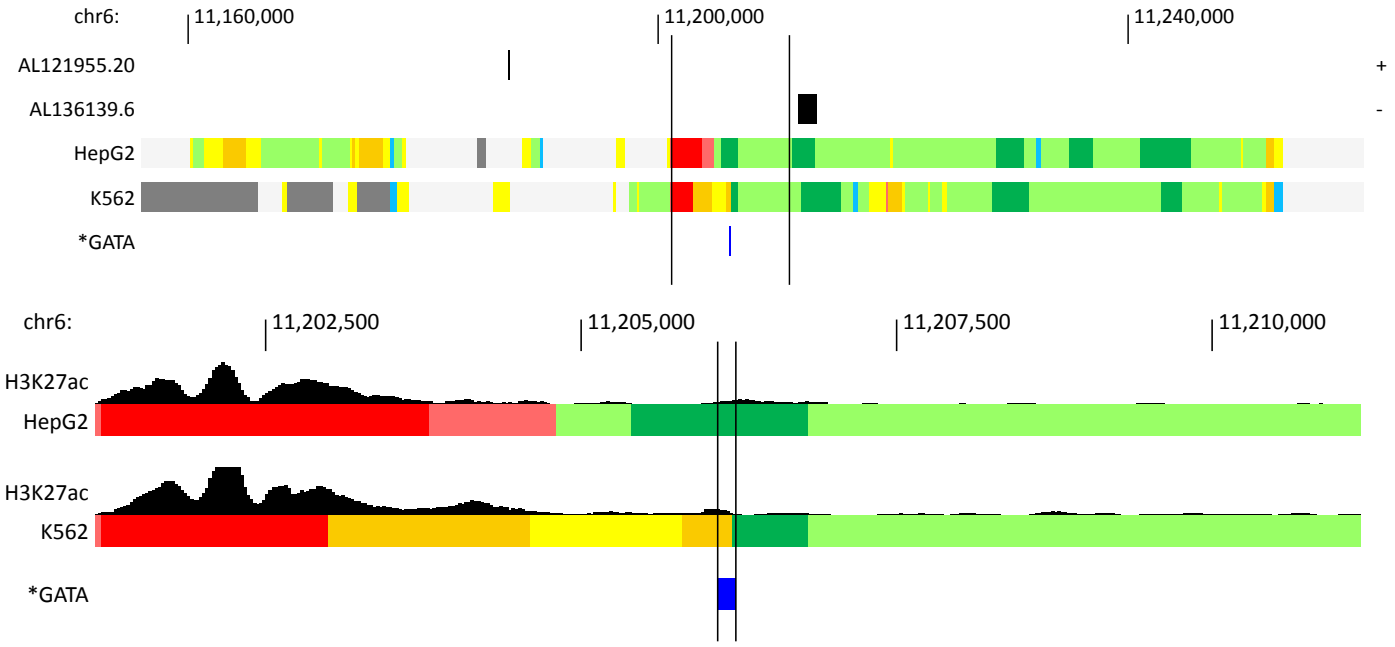
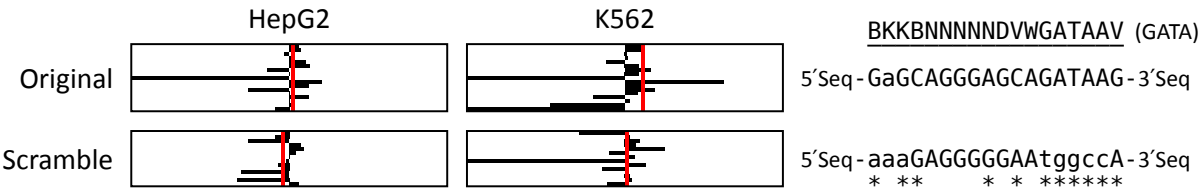
540 GATA in K562 enhancer

chr6 11206146 11206163 - (hg18)





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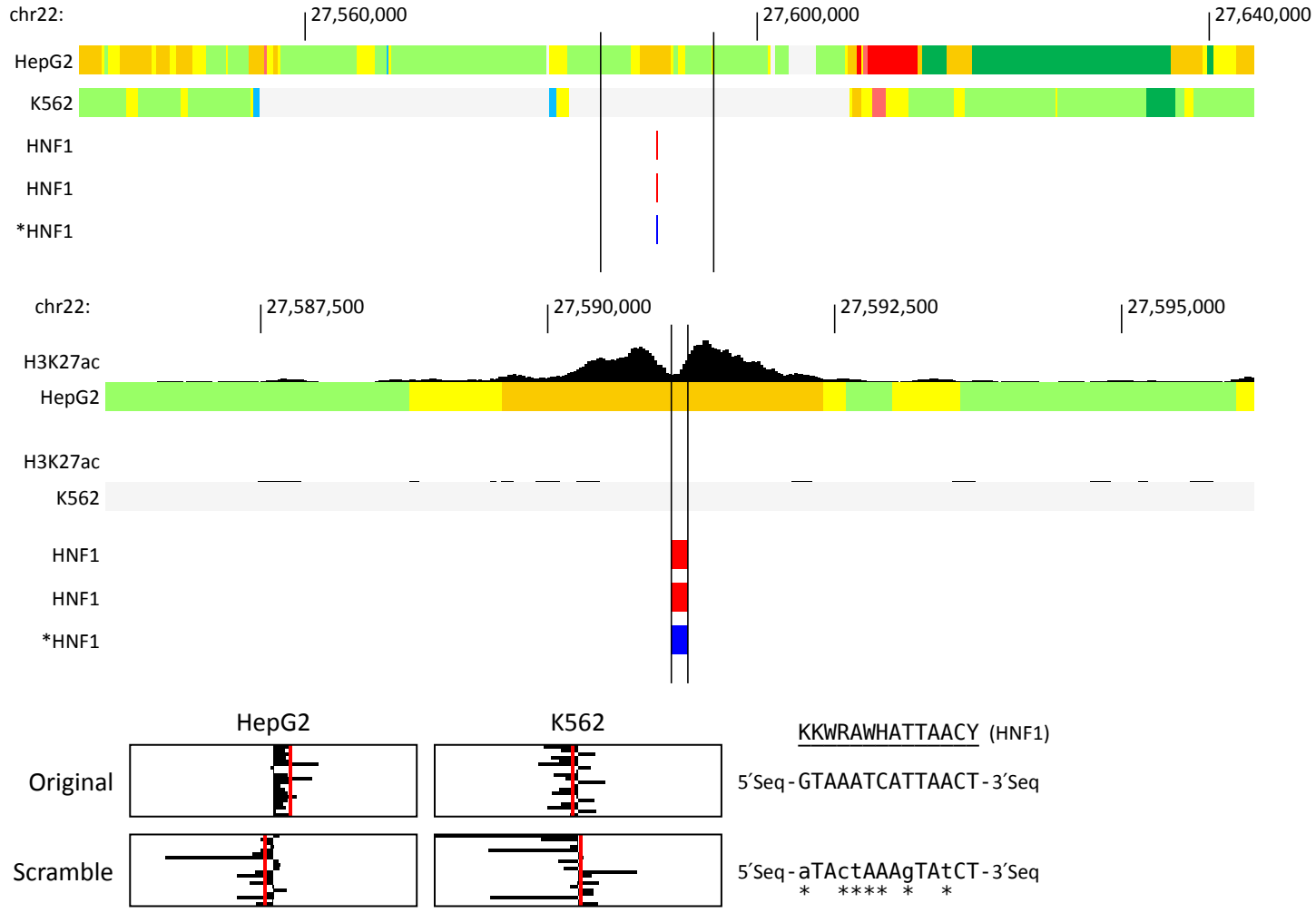
541 HNF1 in HepG2 enhancer

chr22 27591143 27591156 + (hg18)



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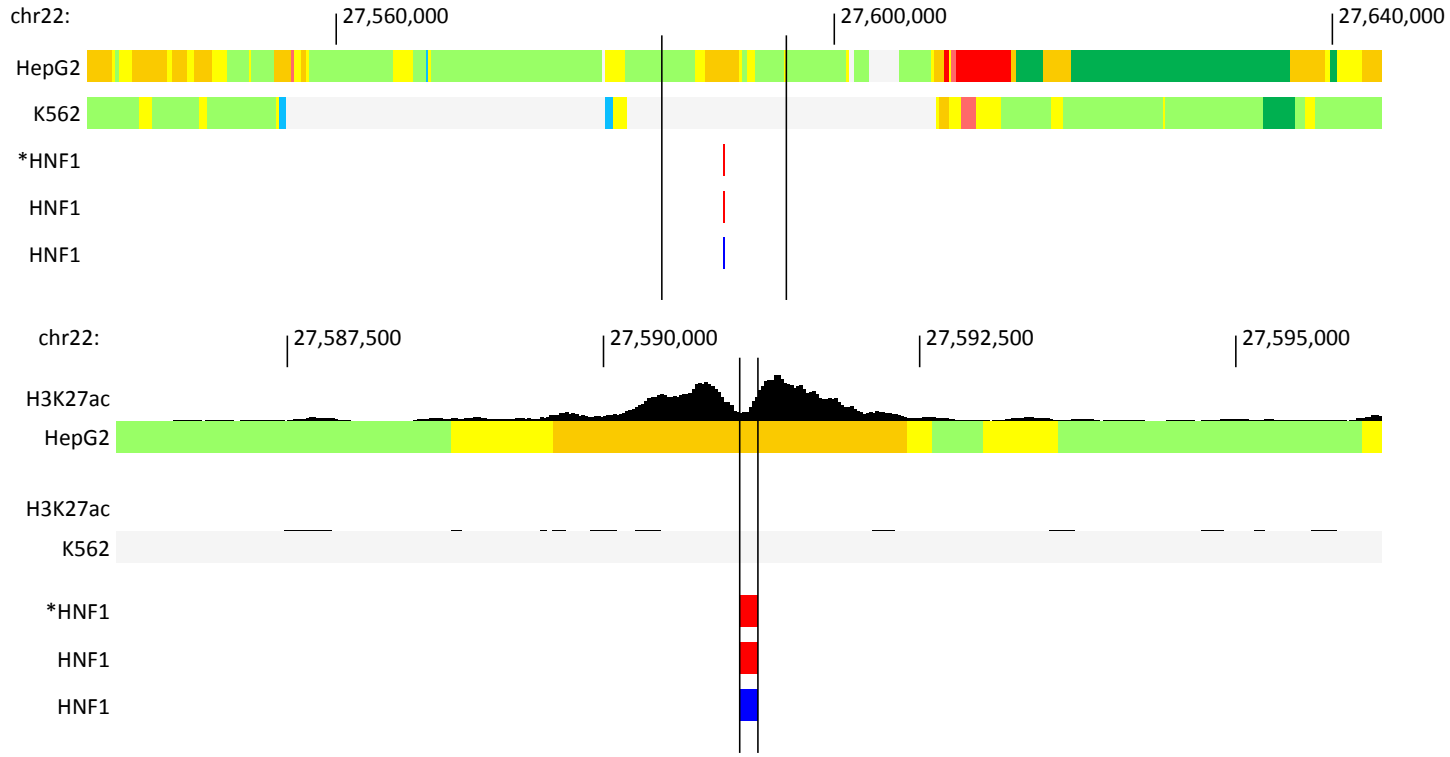
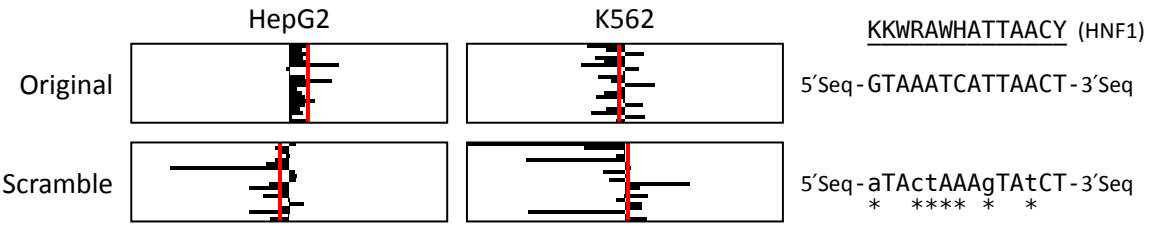
542 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr22 27591143 27591156 + (hg18)





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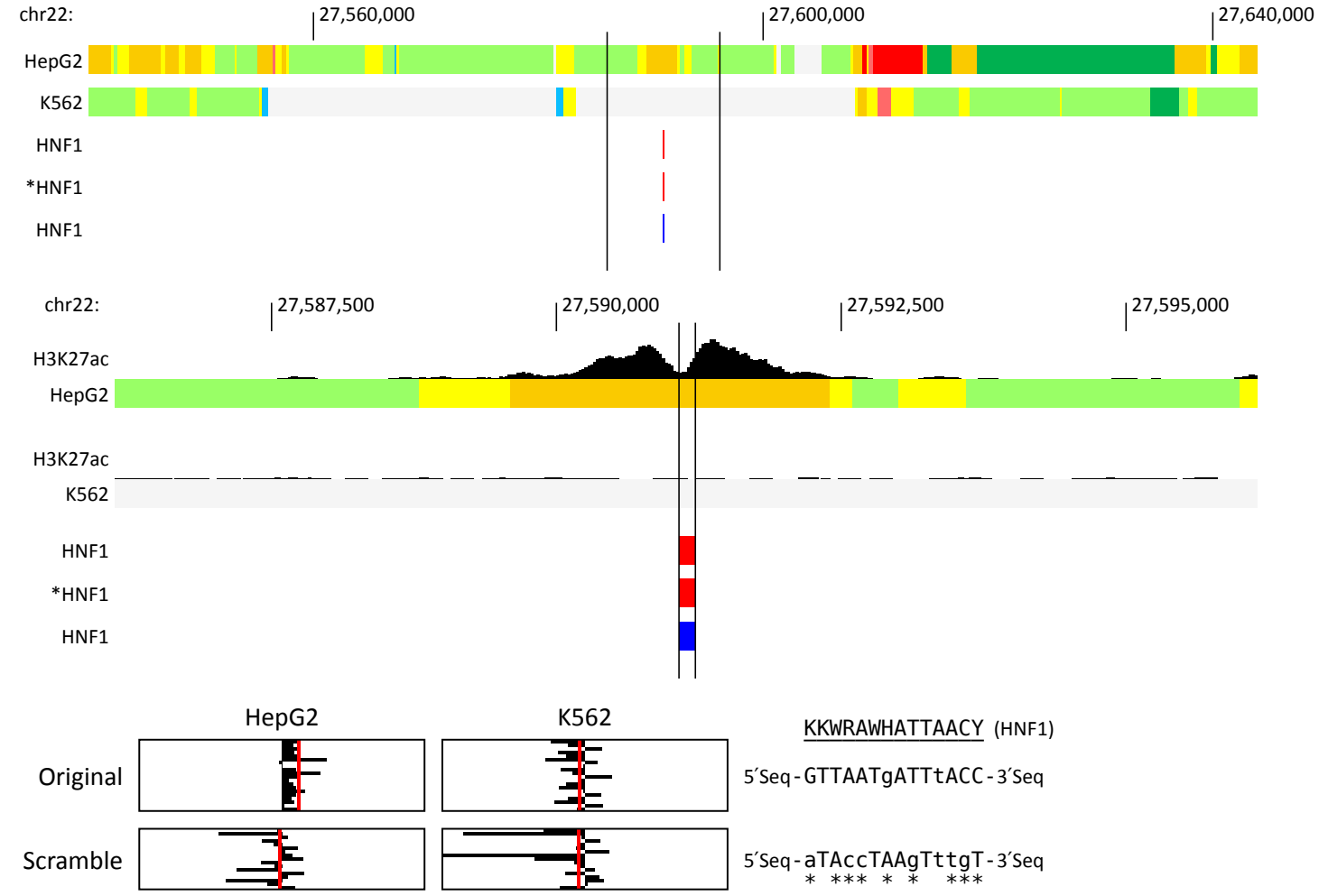
543 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr22 27591142 27591155 - (hg18)



KKWRAWHATTAACY (HNF1)

5′Seq-GTTAATgATTtACC-3′Seq

5′Seq-aTAccTAAgTttgT-3′Seq

* *** * * ***

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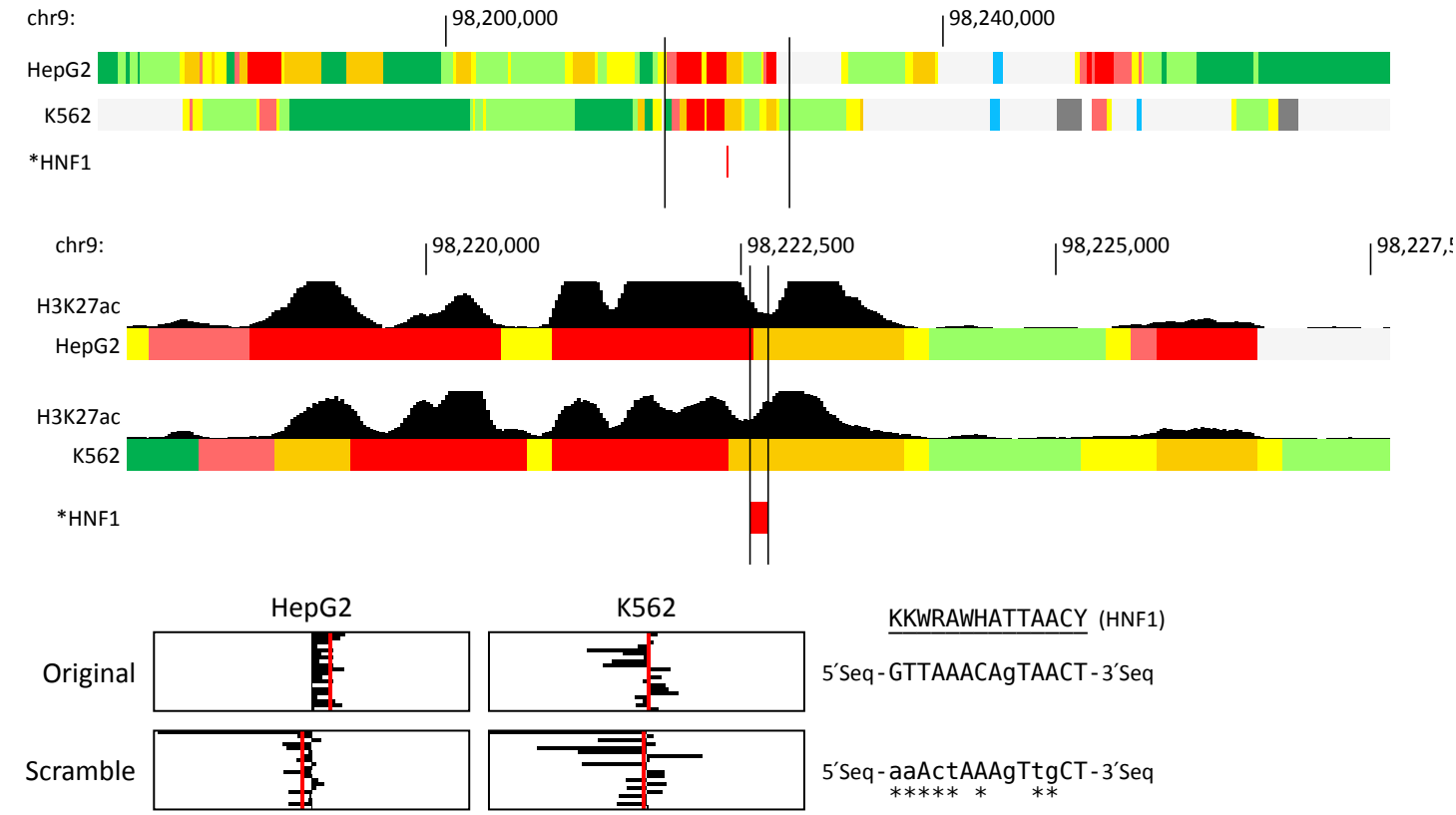
3′Seq = tcctgtgttaaattttgtttaaacagacatgaccccgttggtggccaaggctctgtcccgtccaa

544 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr9 98222638 98222651 - (hg18)



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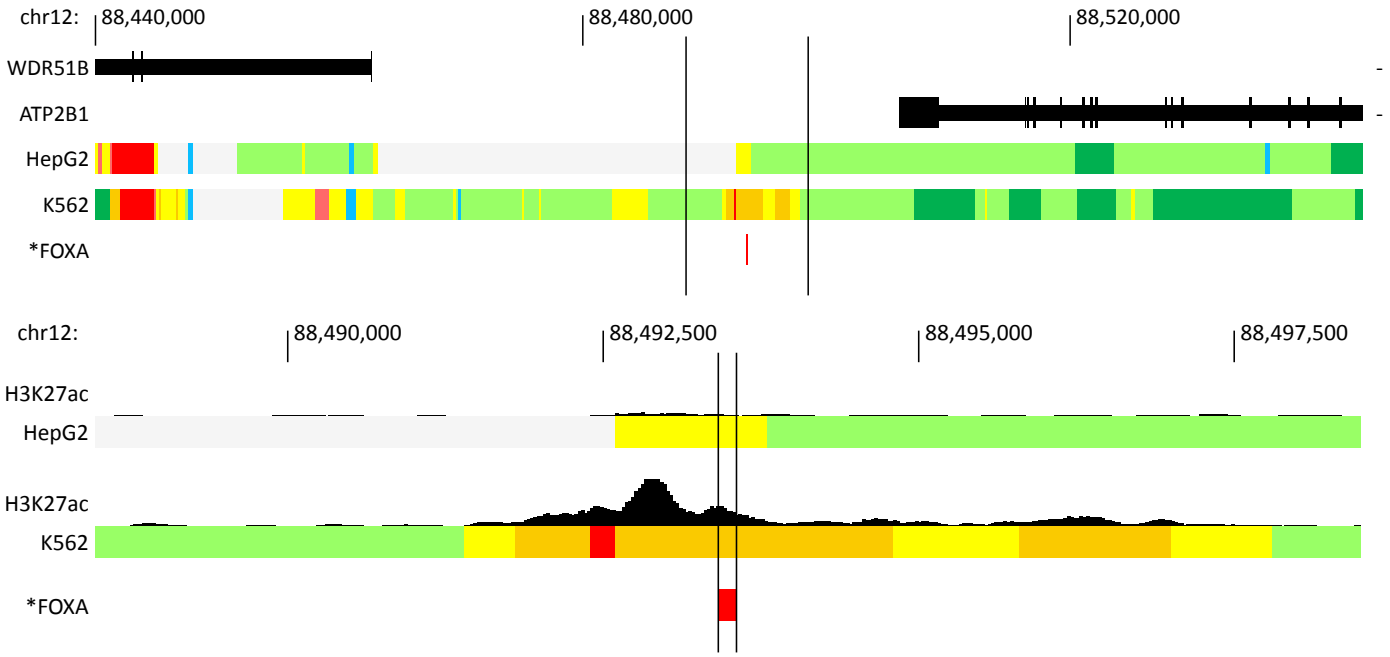
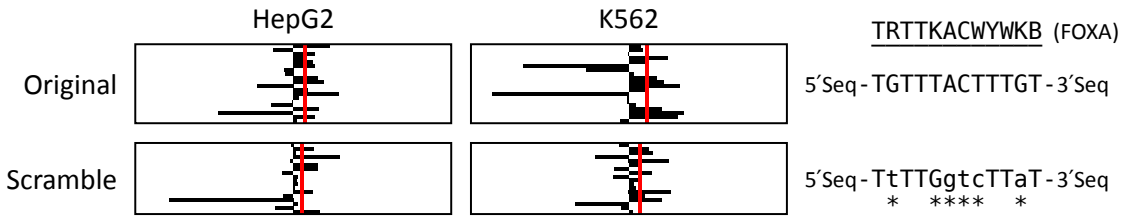
545 FOXA in K562 enhancer (conserved at 50% confidence)

chr12 88493479 88493490 - (hg18)





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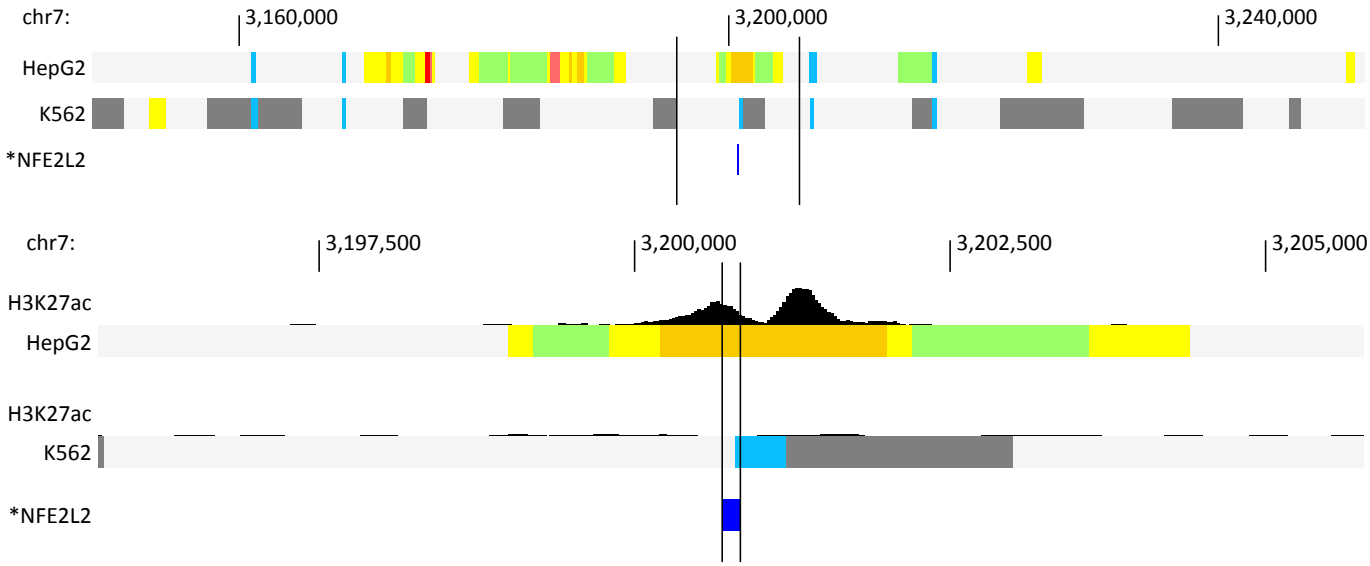
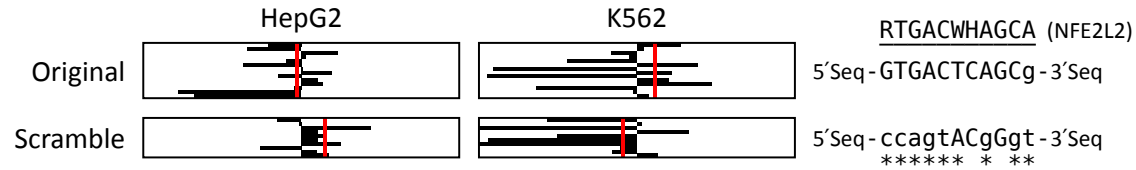
546 NFE2L2 in HepG2 enhancer

chr7 3200761 3200771 - (hg18)





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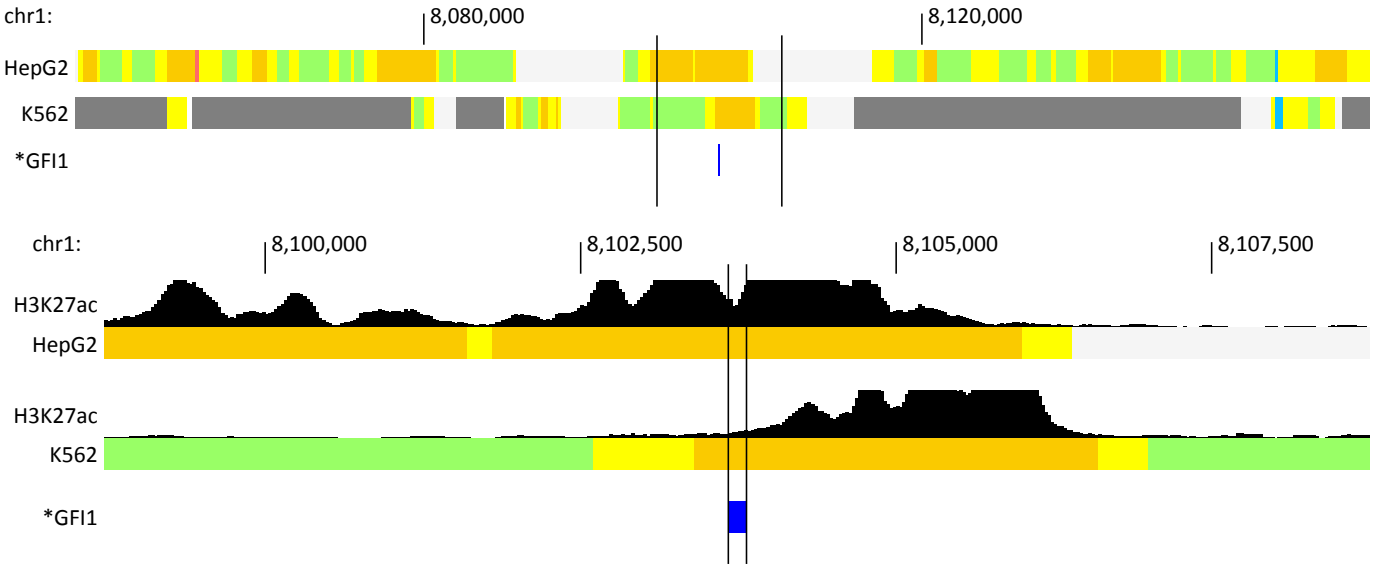
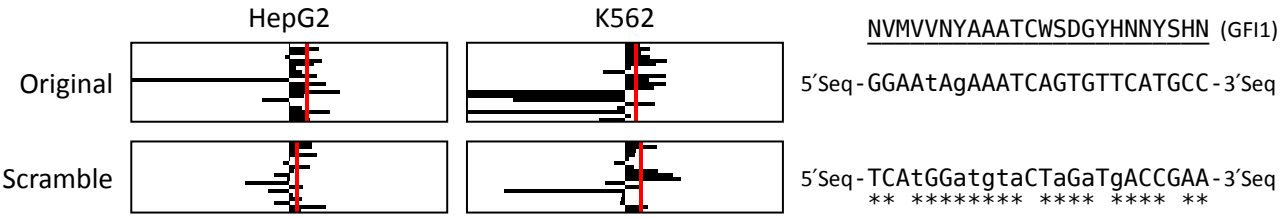
547 GFI1 in HepG2 enhancer

chr1 8103731 8103754 - (hg18)





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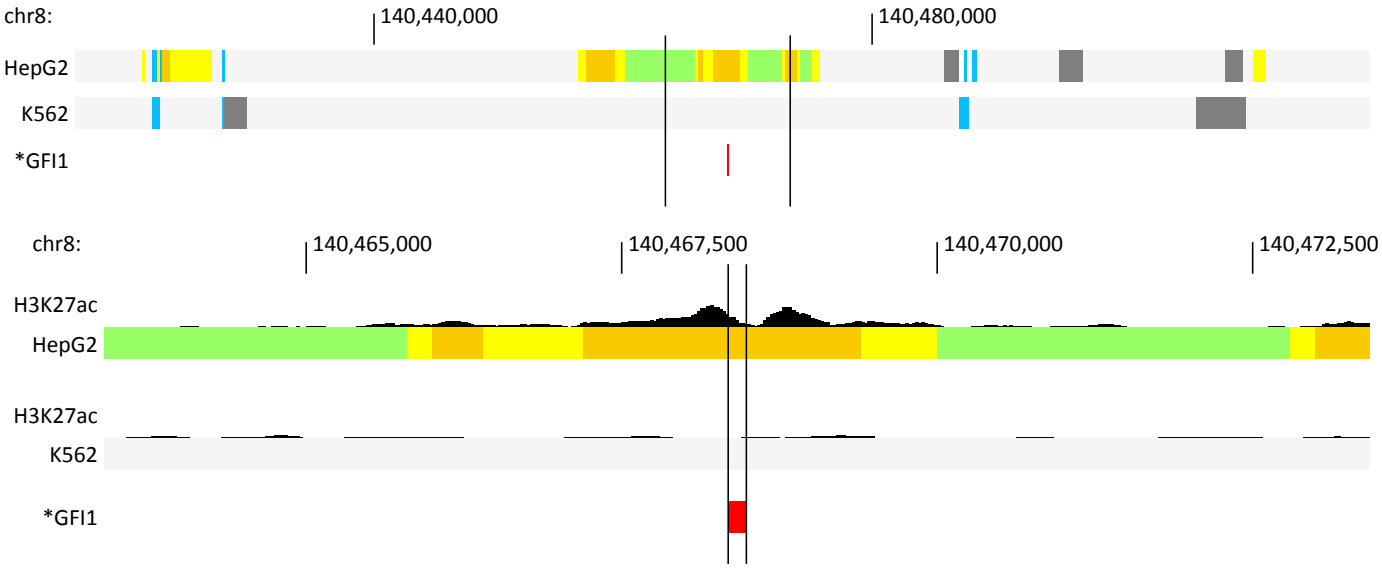
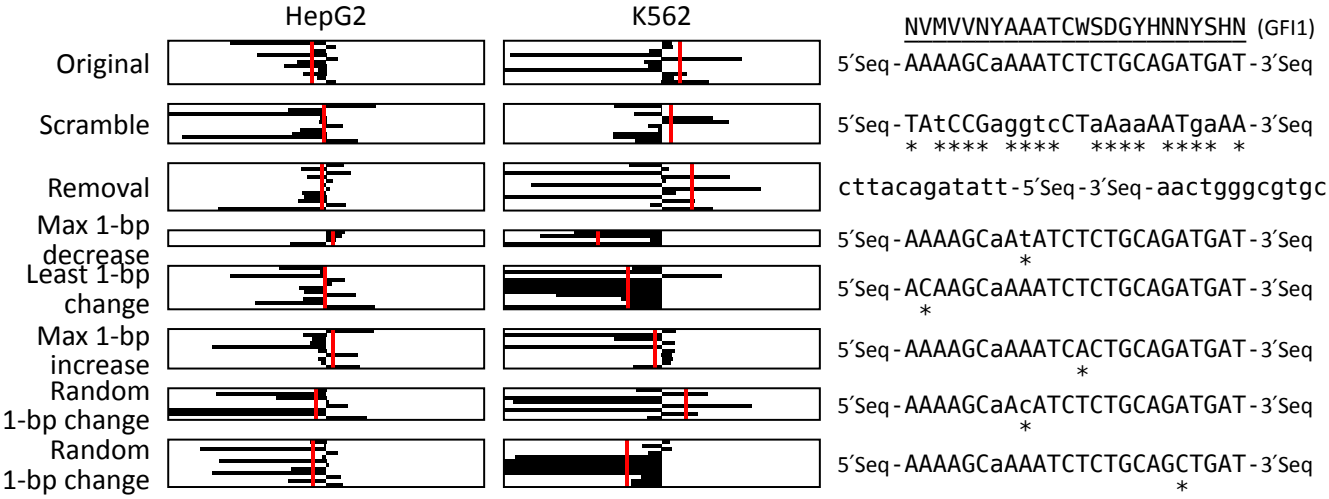
548 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr8 140468405 140468428 + (hg18)





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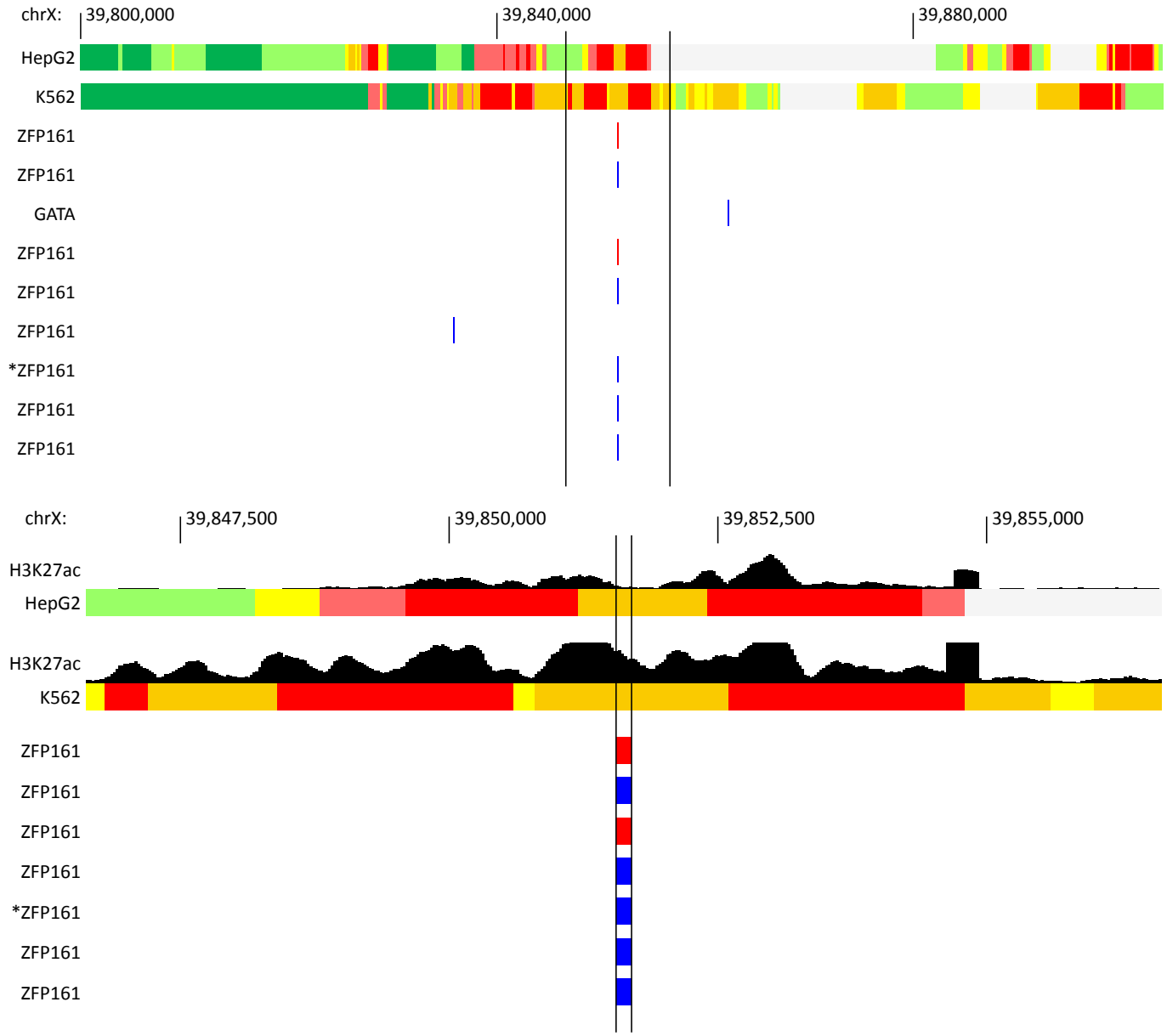
549 ZFP161 in K562 enhancer

chrX 39851618 39851633 - (hg18)



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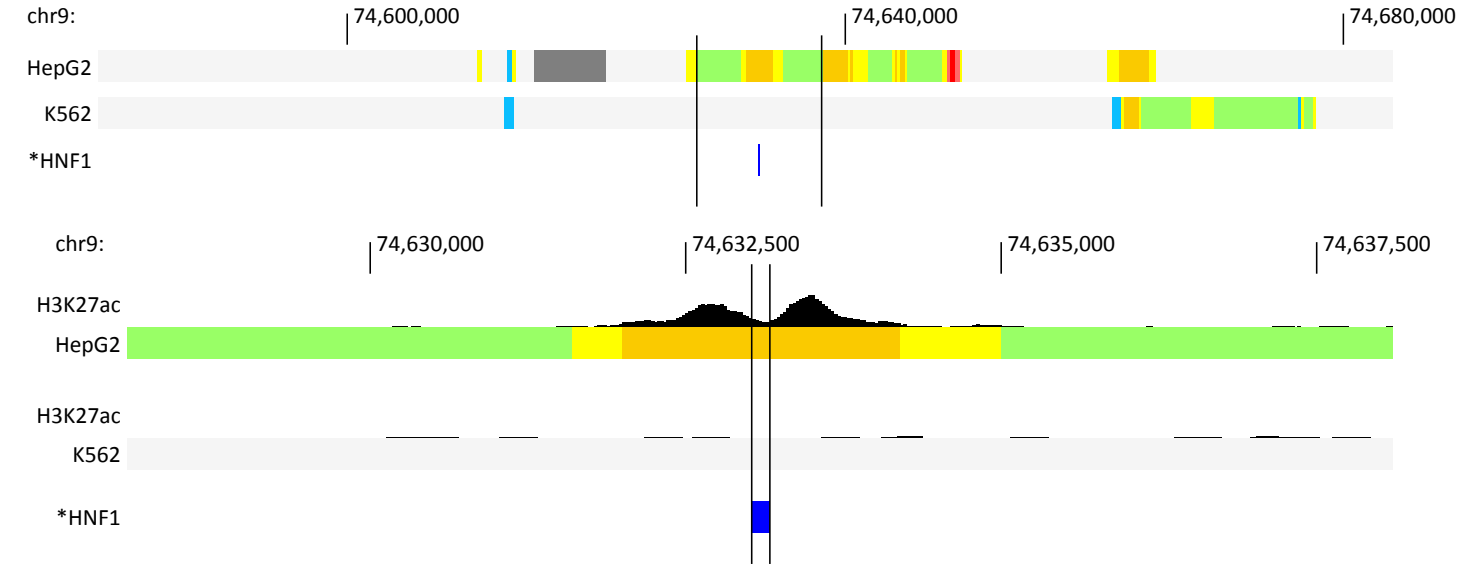
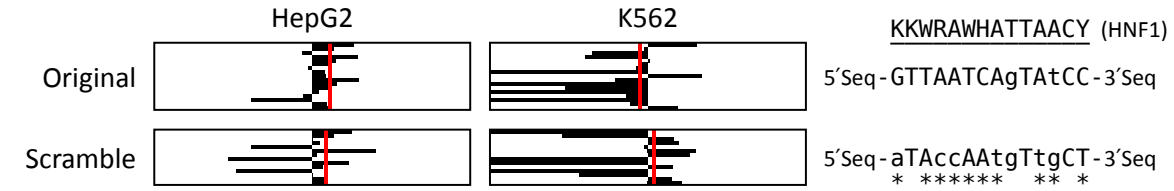
550 HNF1 in HepG2 enhancer

chr9 74633089 74633102 + (hg18)





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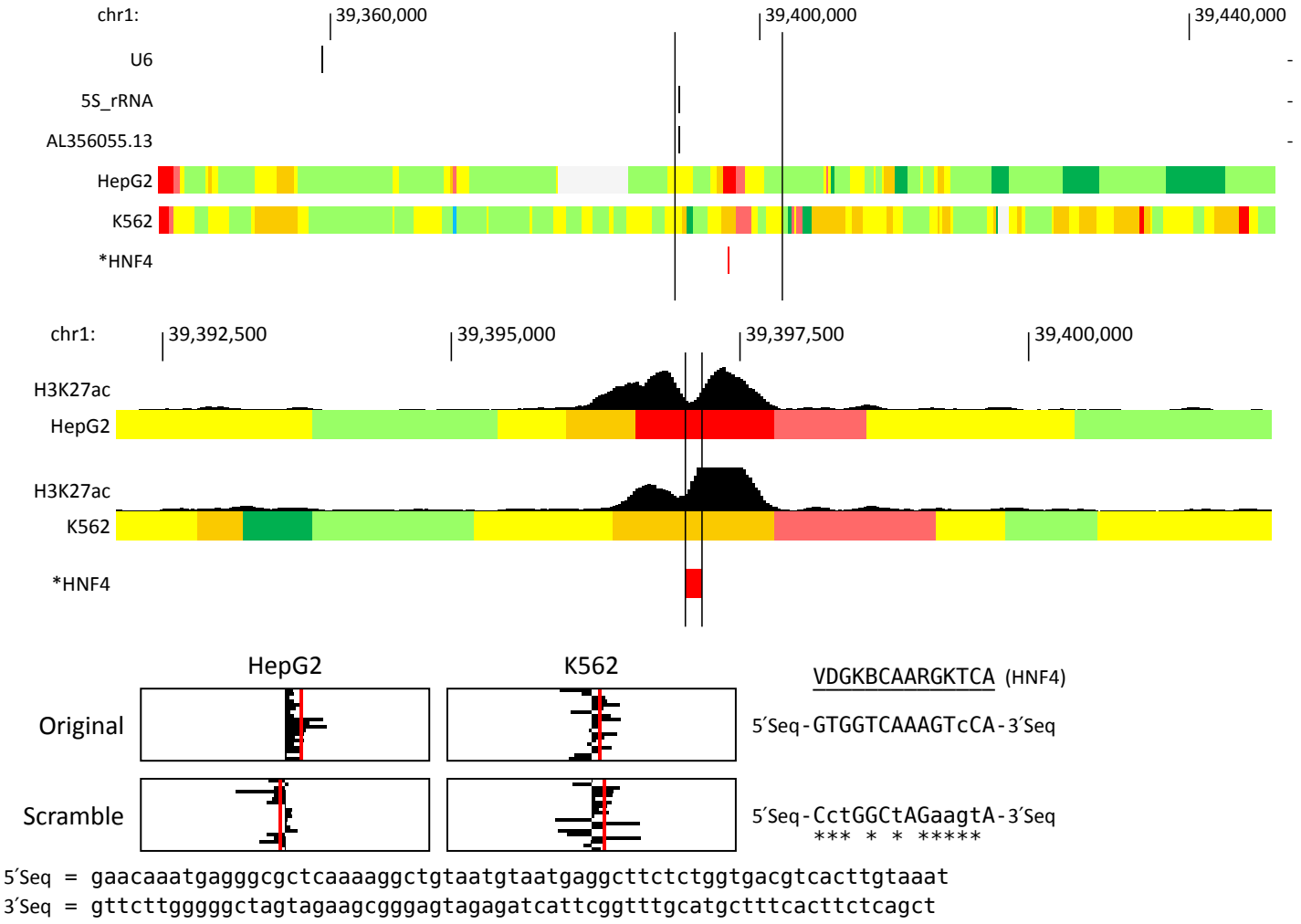
551 HNF4 in K562 enhancer (conserved at 60% confidence)

chr1 39397093 39397106 + (hg18)



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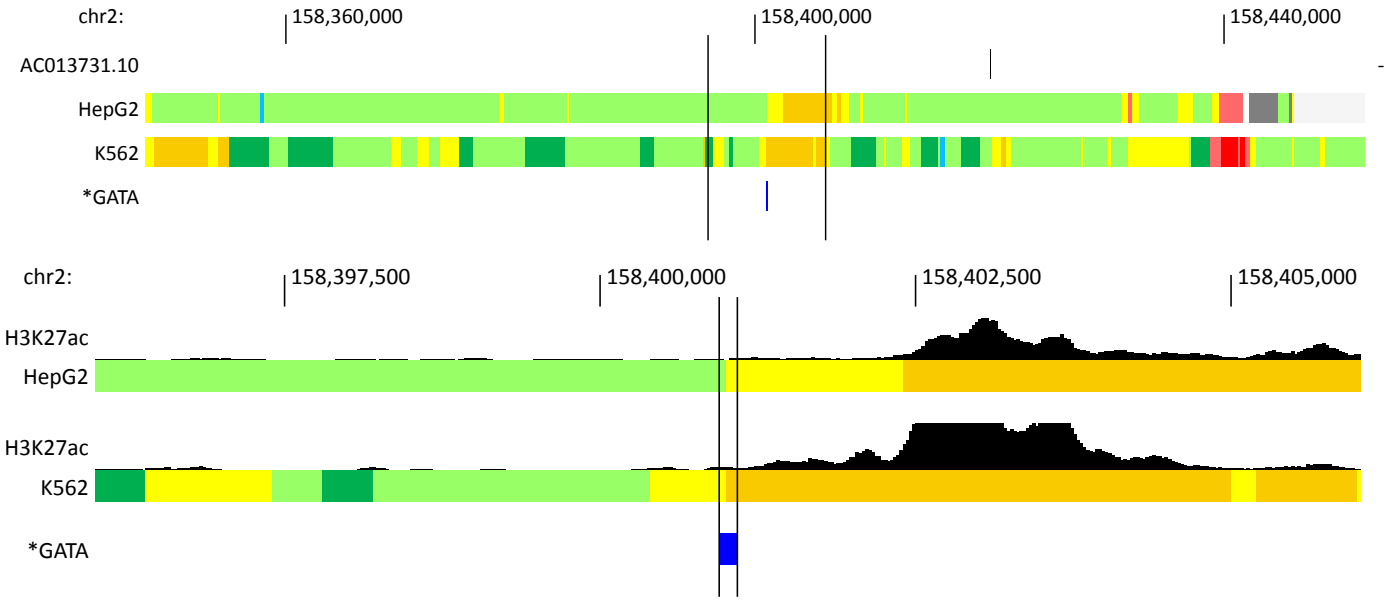
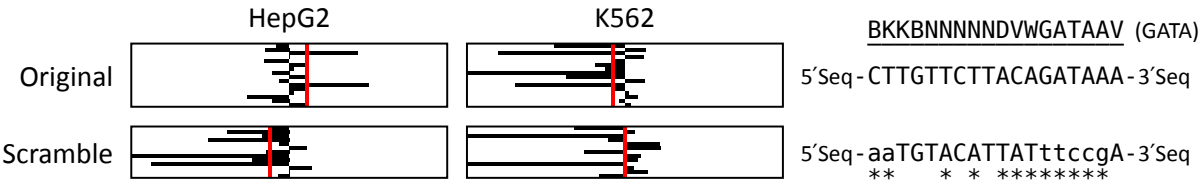
552 GATA in K562 enhancer

chr2 158401008 158401025 - (hg18)





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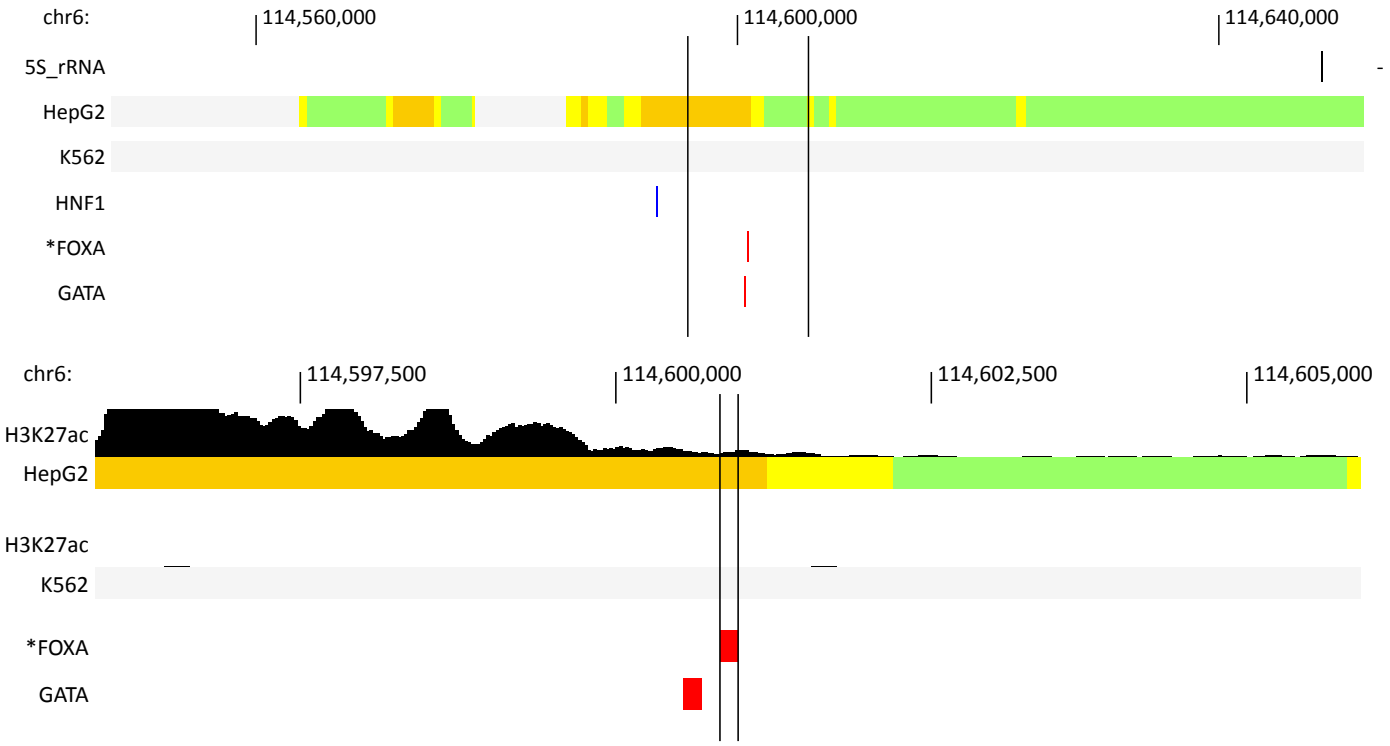
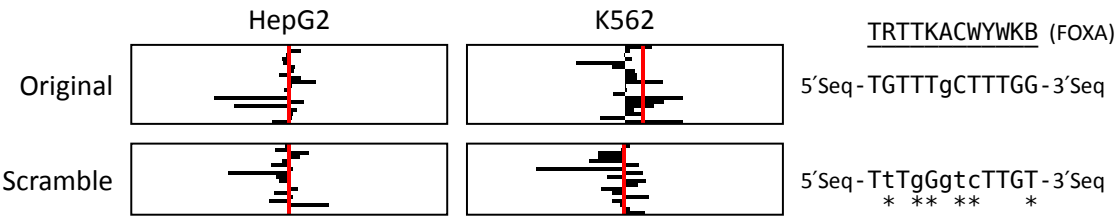
3′Seq = gcctttatgttaggcatttccaaaaaagtatttgcctcttctgacacagttttaatttacaca

553 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr6 114600892 114600903 + (hg18)





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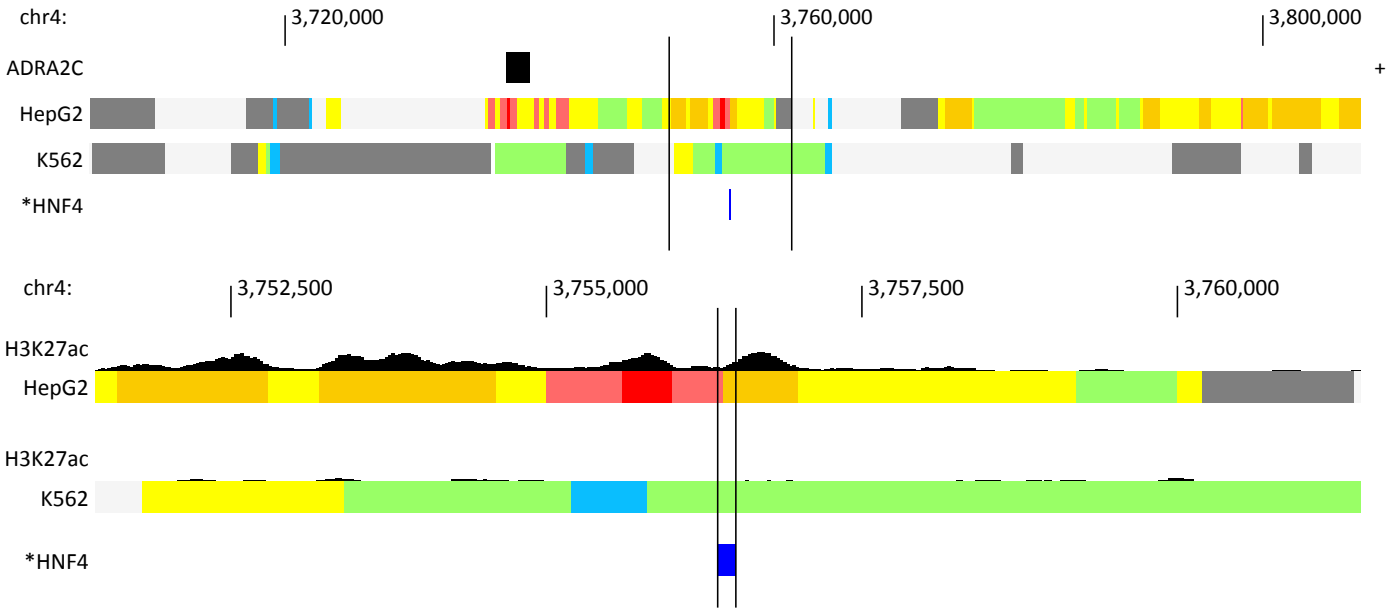
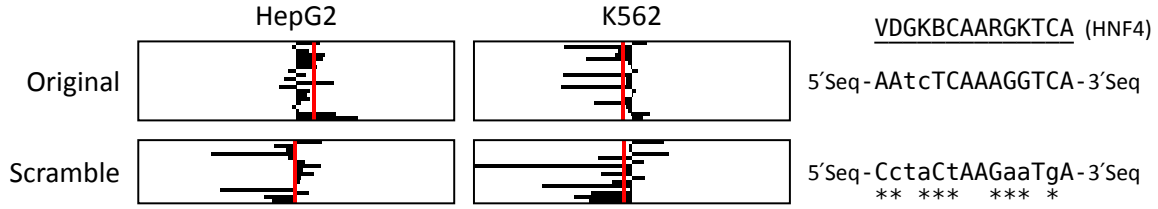
554 HNF4 in HepG2 enhancer

chr4 3756423 3756436 - (hg18)





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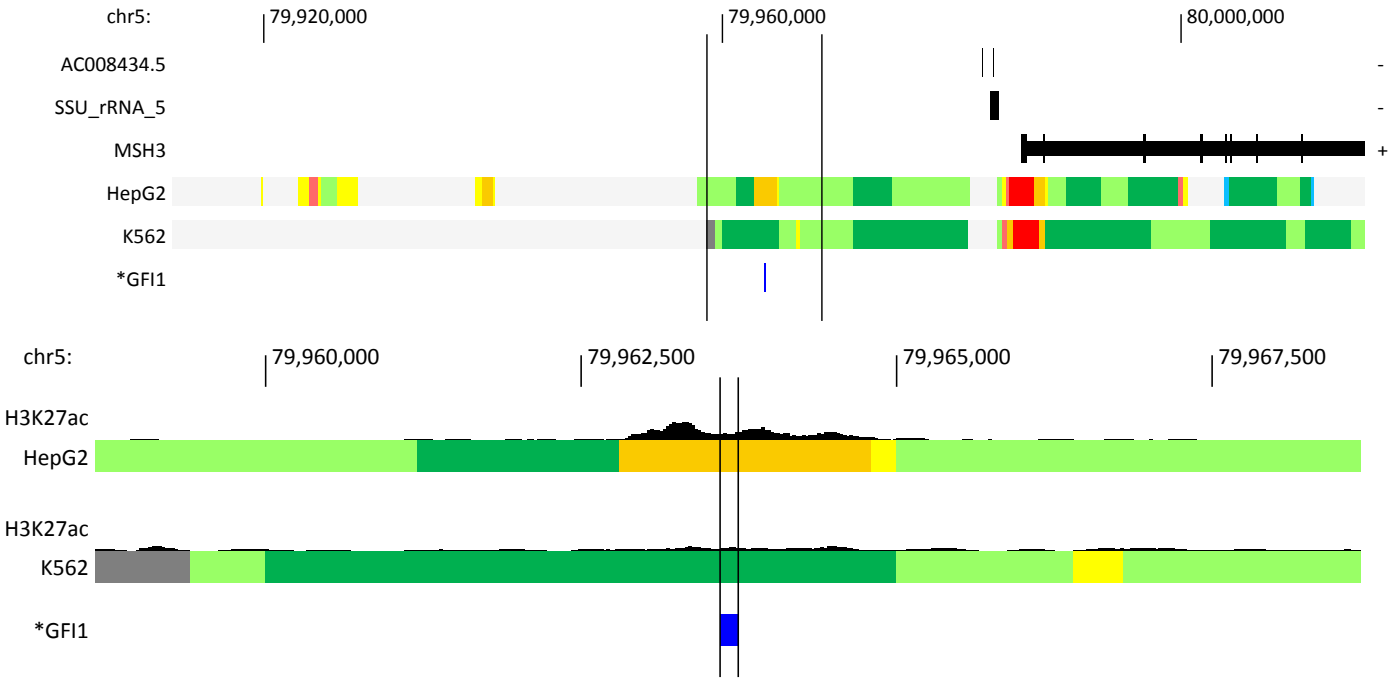
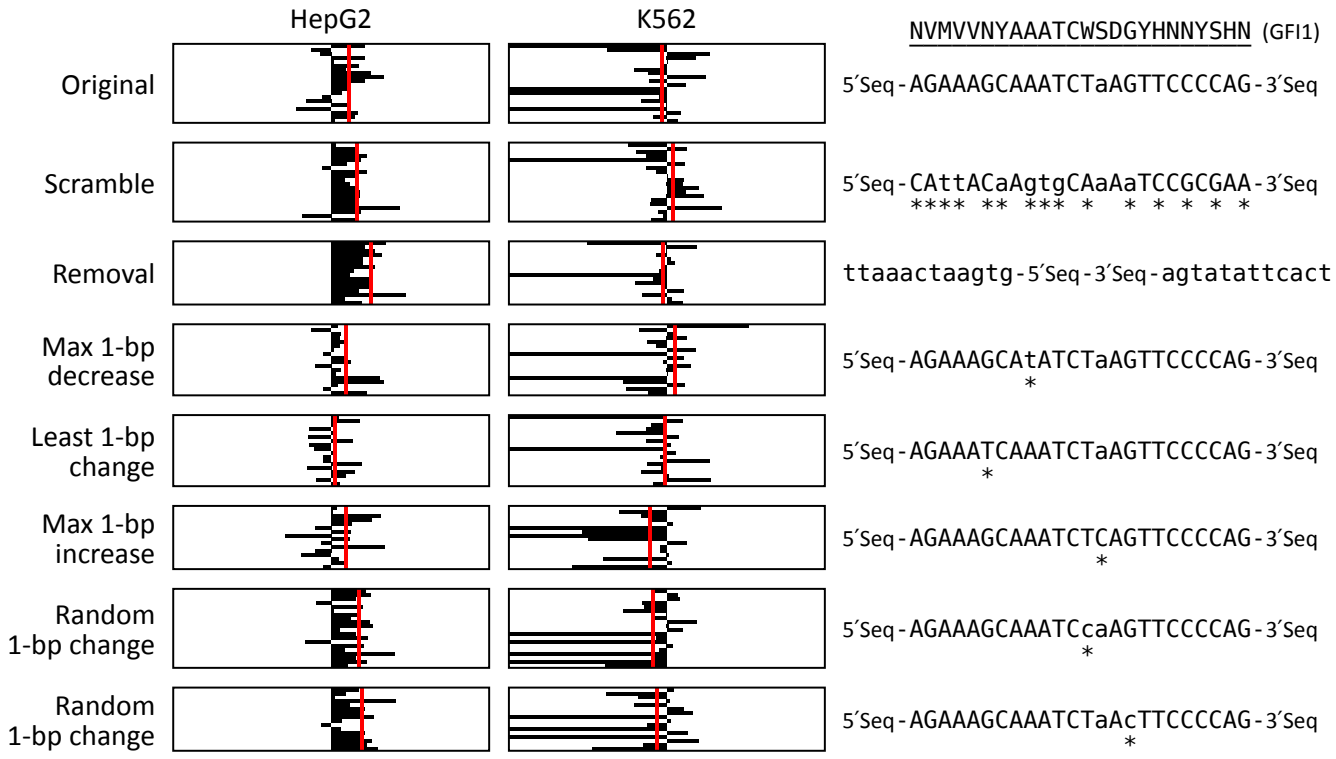
555 GFI1 in HepG2 enhancer

chr5 79963662 79963685 + (hg18)





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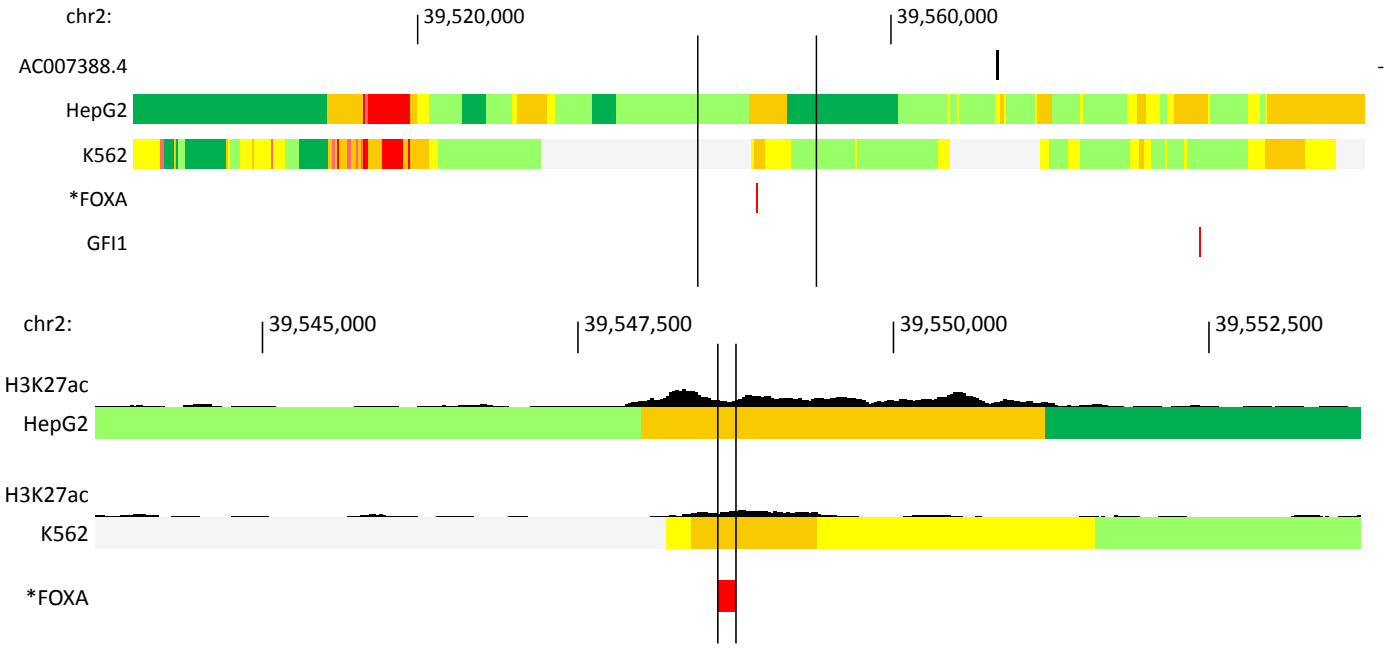
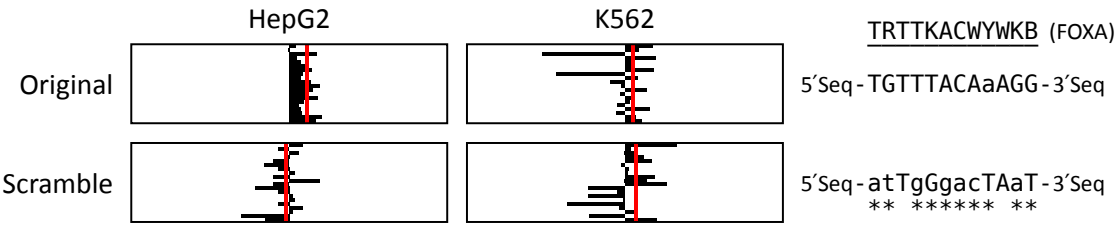
556 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 39548675 39548686 + (hg18)





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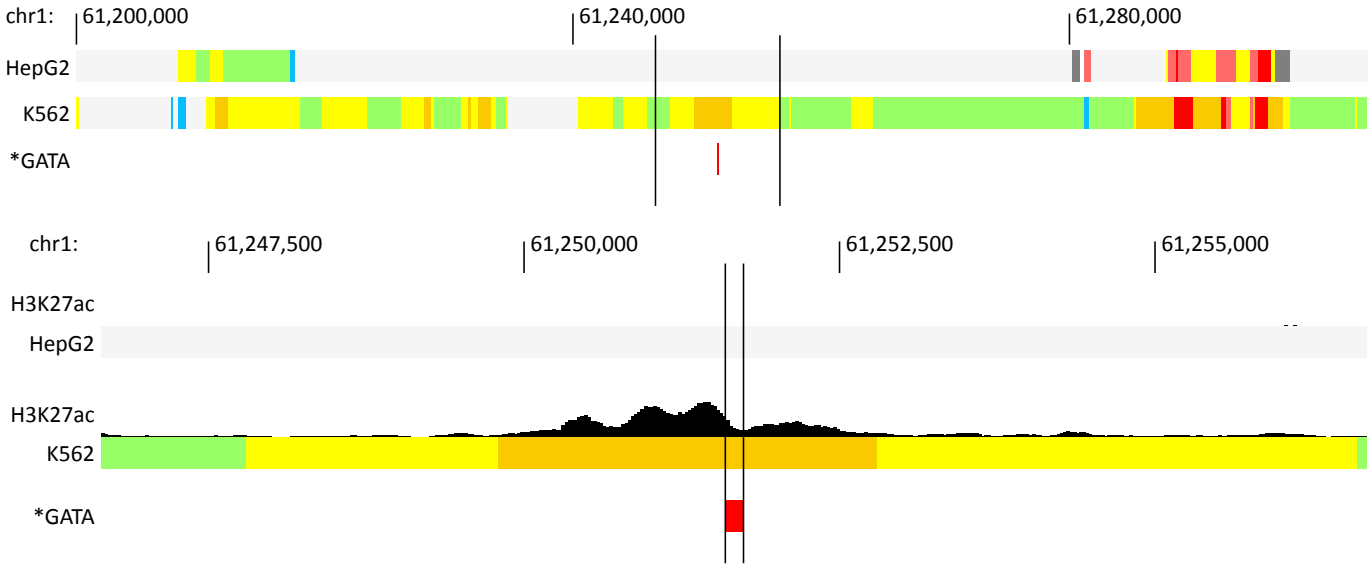
557 GATA in K562 enhancer (conserved at 60% confidence)

chr1 61251659 61251676 + (hg18)



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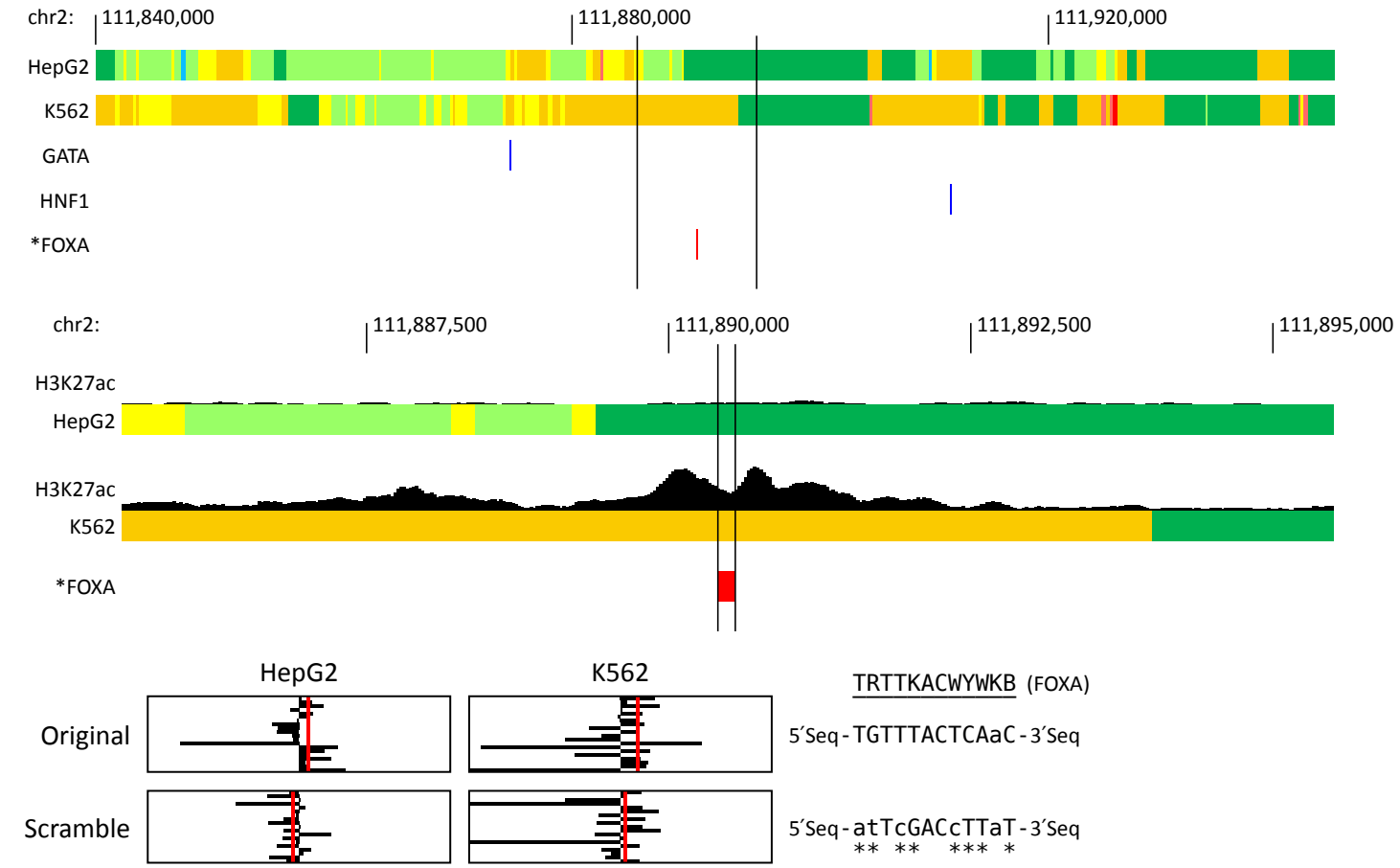
558 FOXA in K562 enhancer (conserved at 40% confidence)

chr2 111890474 111890485 + (hg18)



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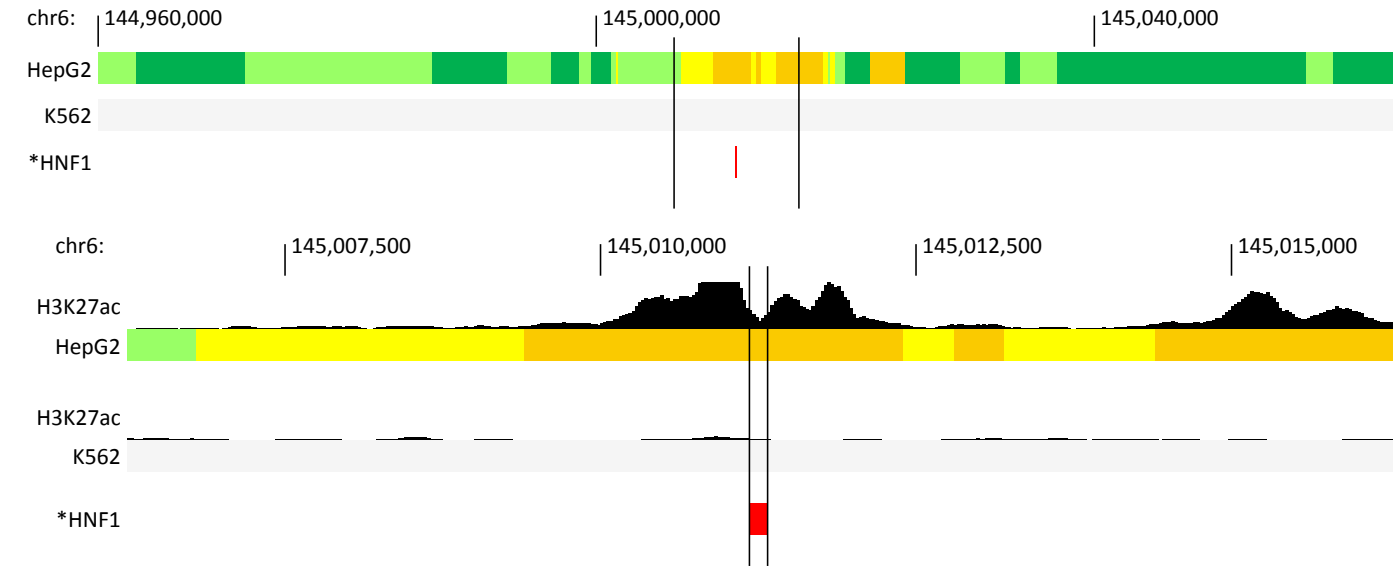
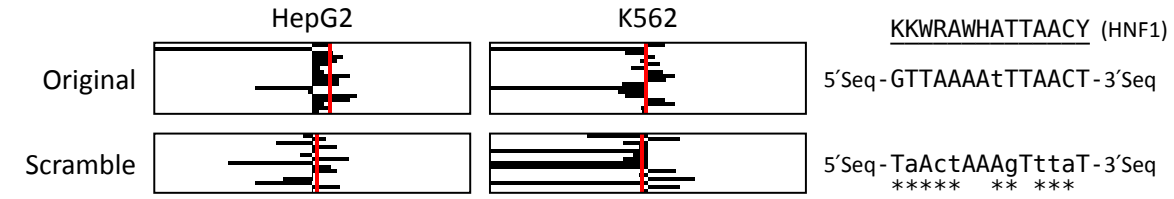
559 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr6 145011246 145011259 + (hg18)





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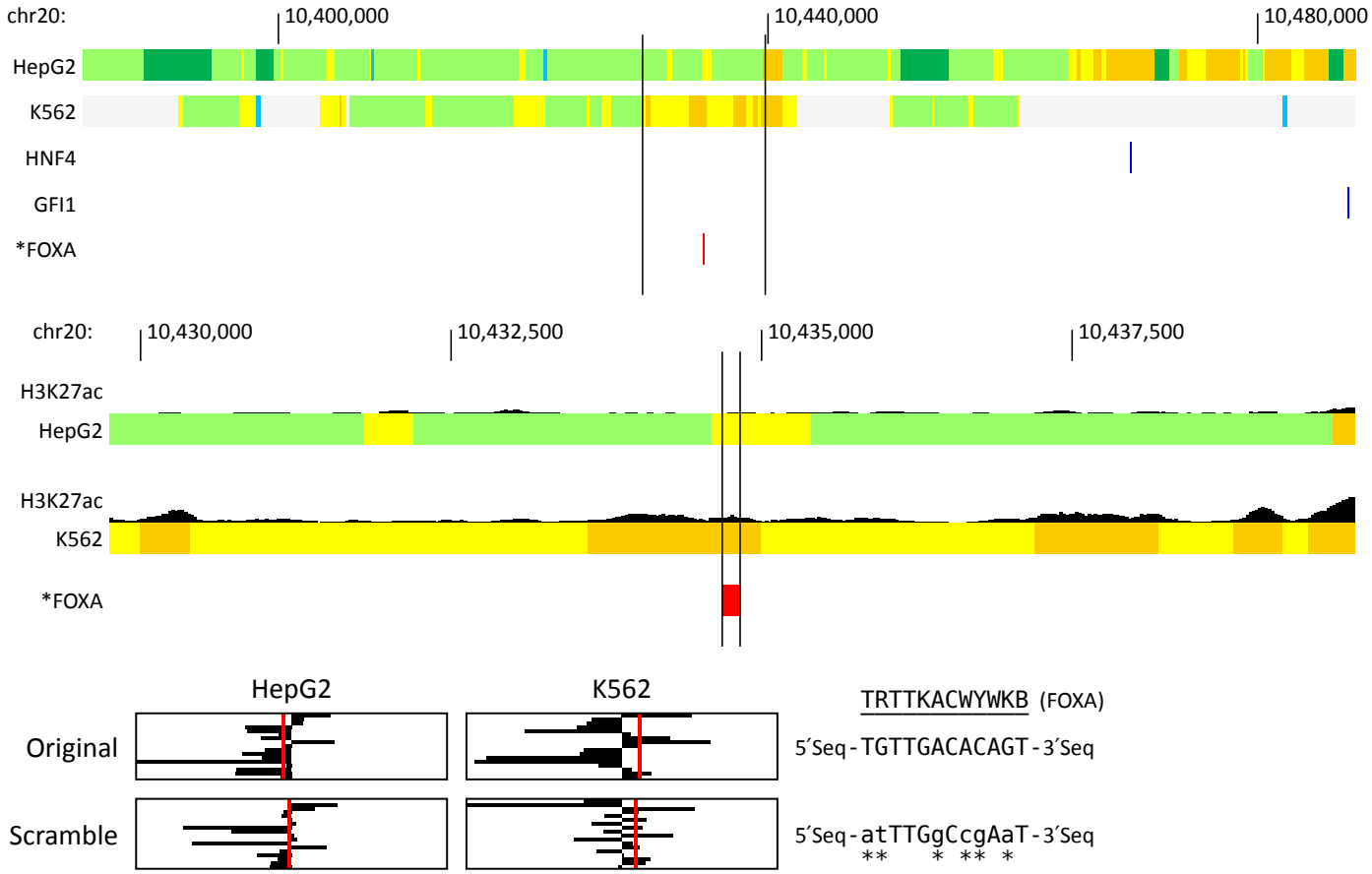
560 FOXA in K562 enhancer (conserved at 50% confidence)

chr20 10434750 10434761 - (hg18)



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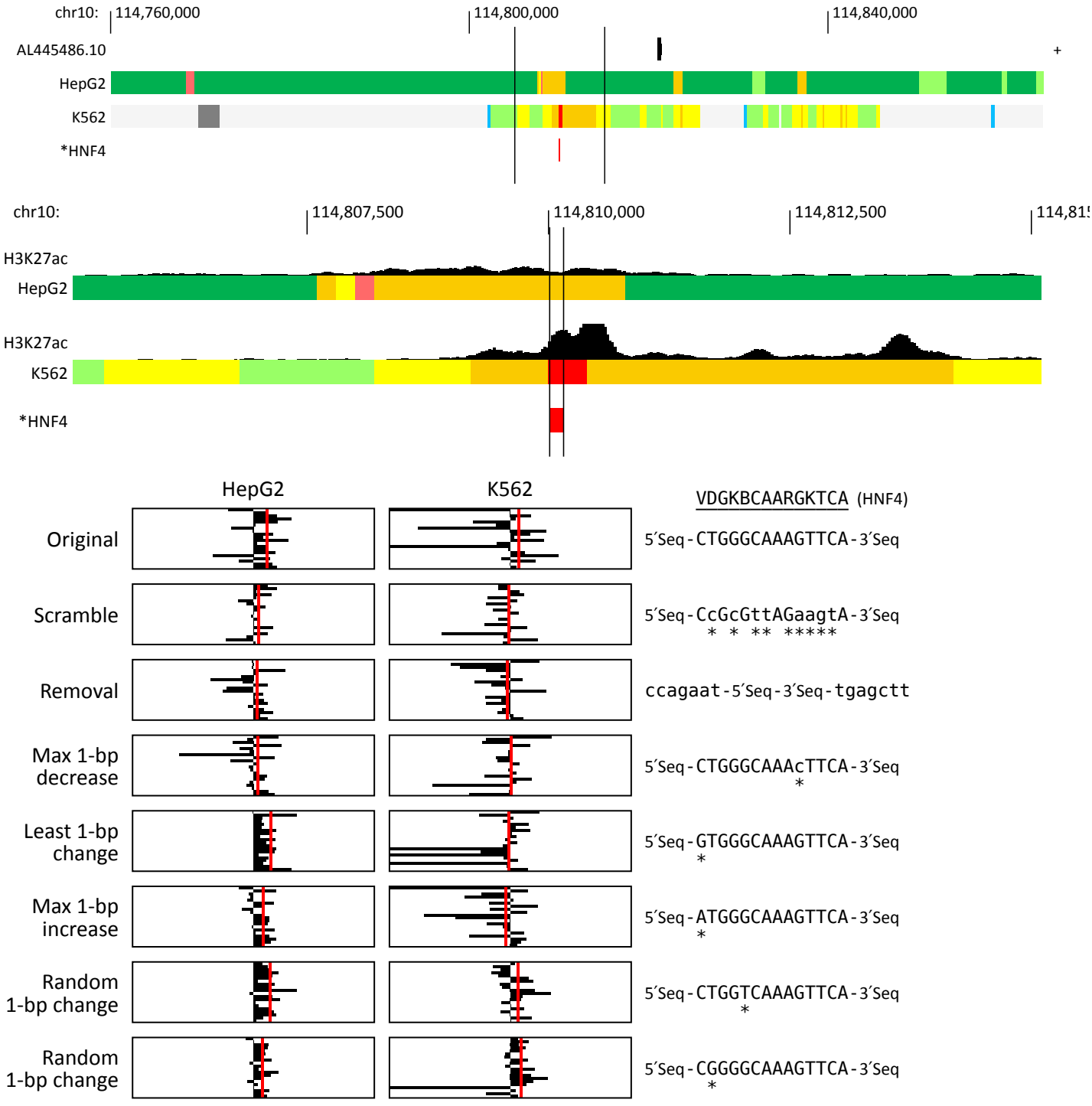
561 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr10 114810078 114810091 + (hg18)



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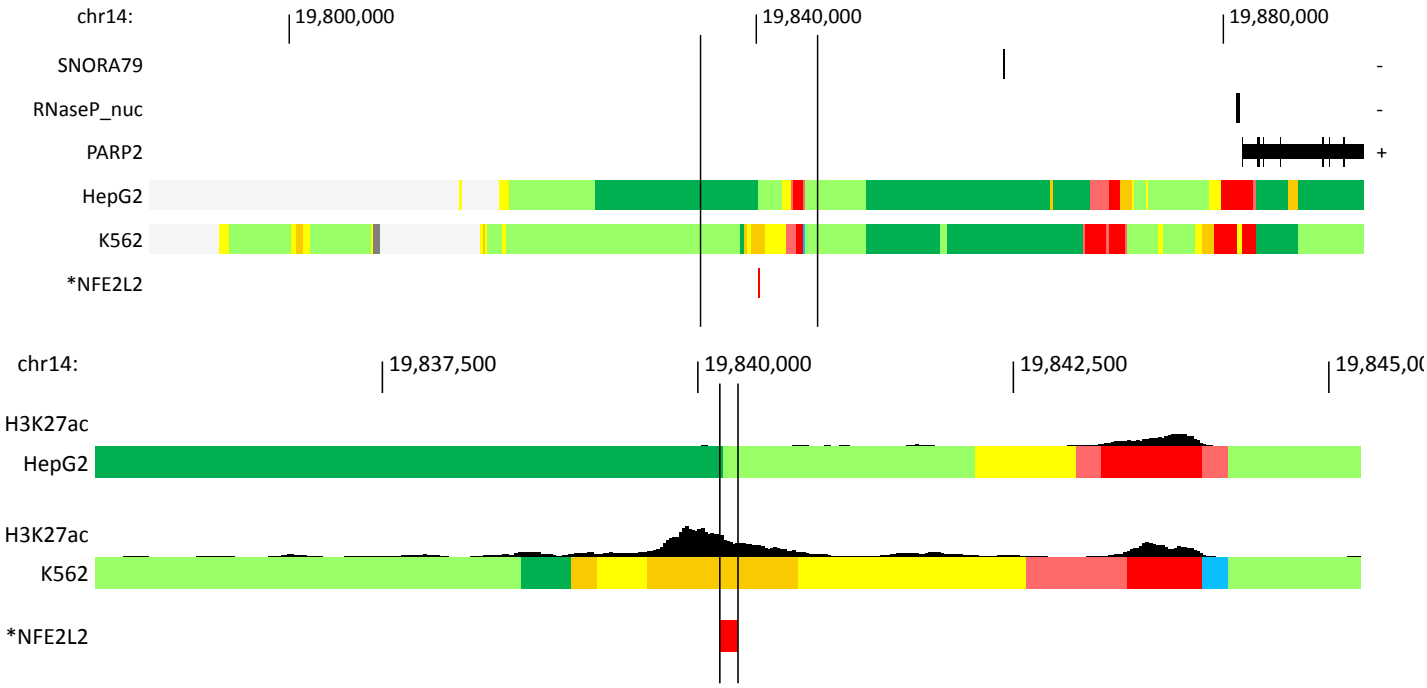
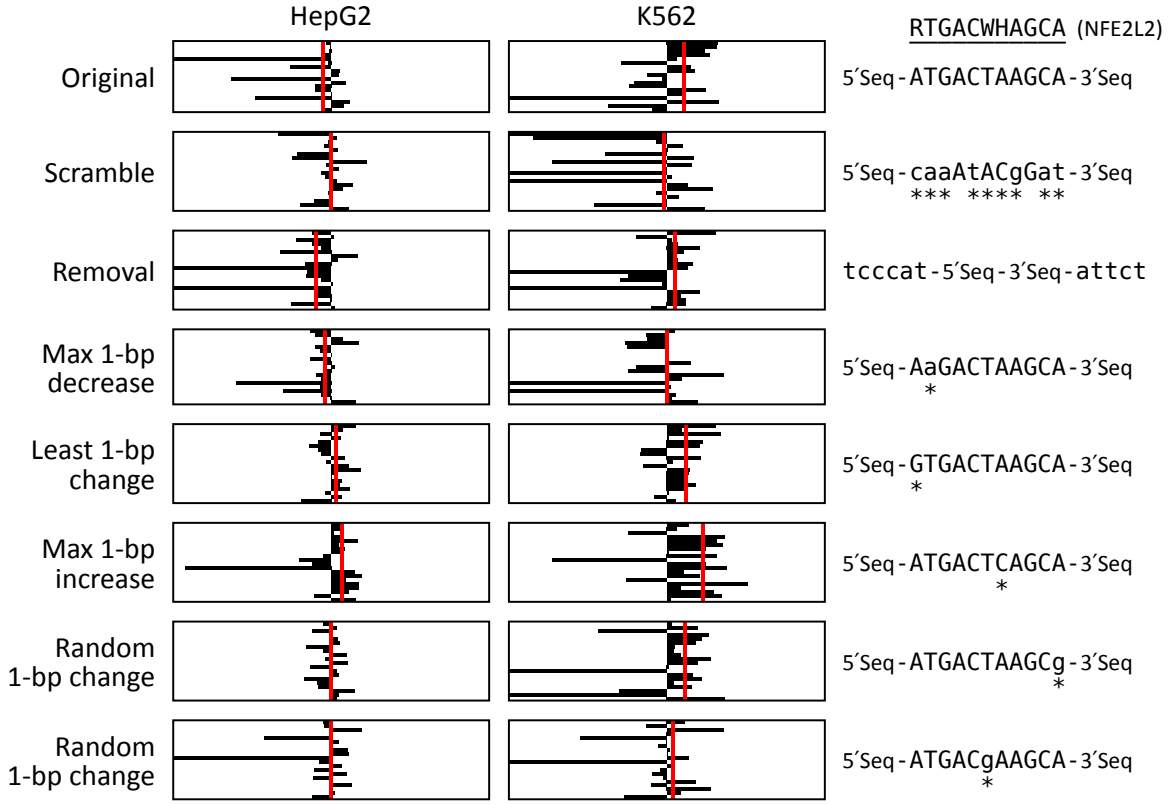
562 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr14 19840241 19840251 + (hg18)





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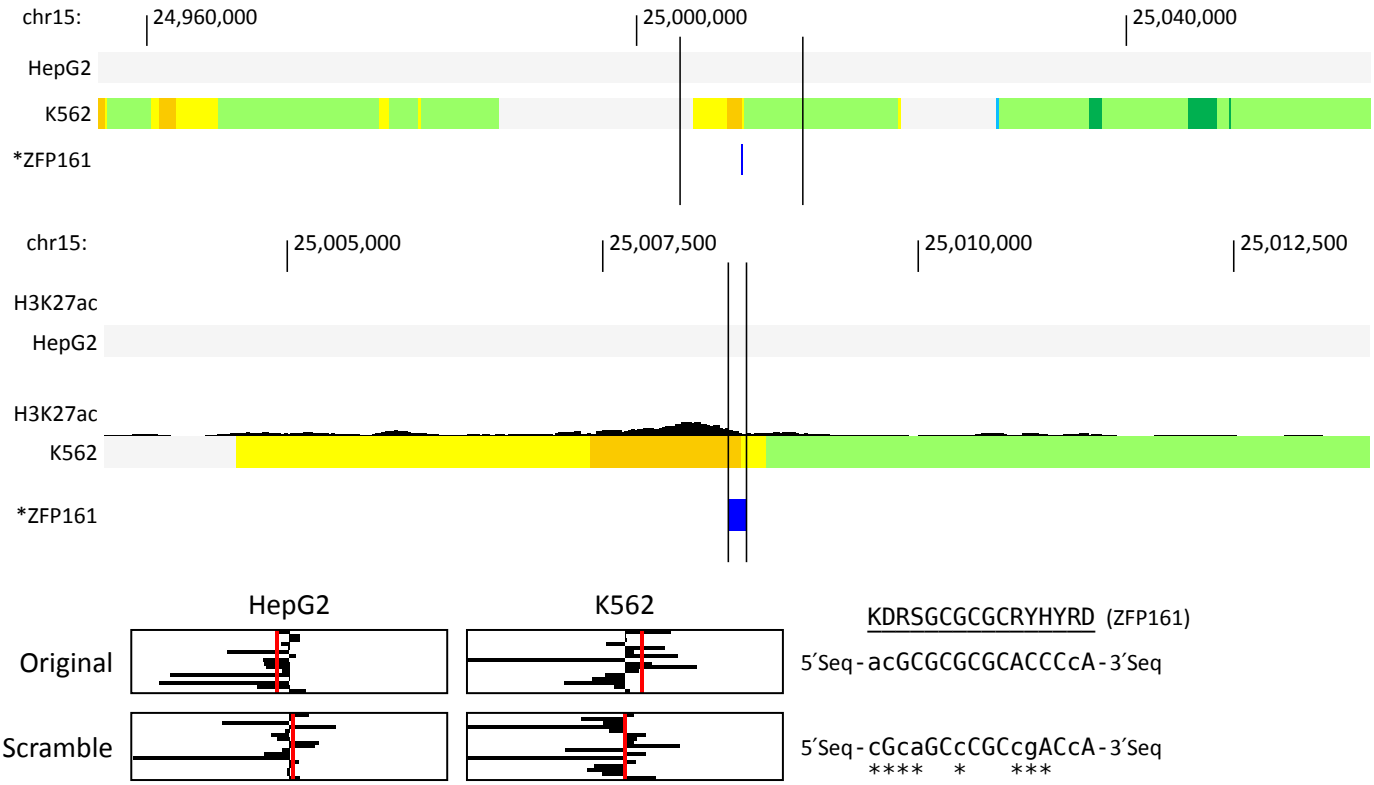
563 ZFP161 in K562 enhancer

chr15 25008560 25008575 + (hg18)



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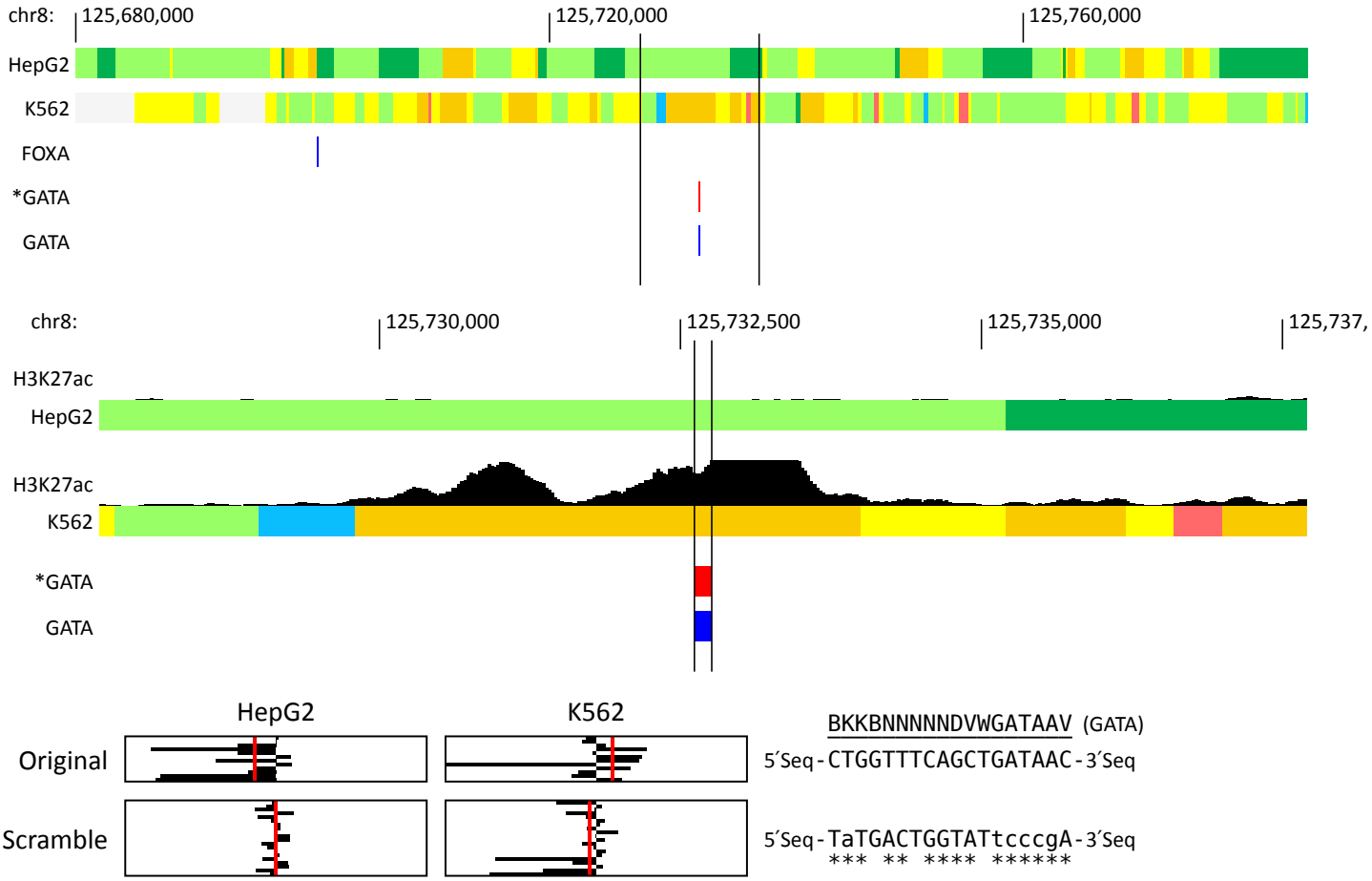
564 GATA in K562 enhancer (conserved at 60% confidence)

chr8 125732680 125732697 + (hg18)



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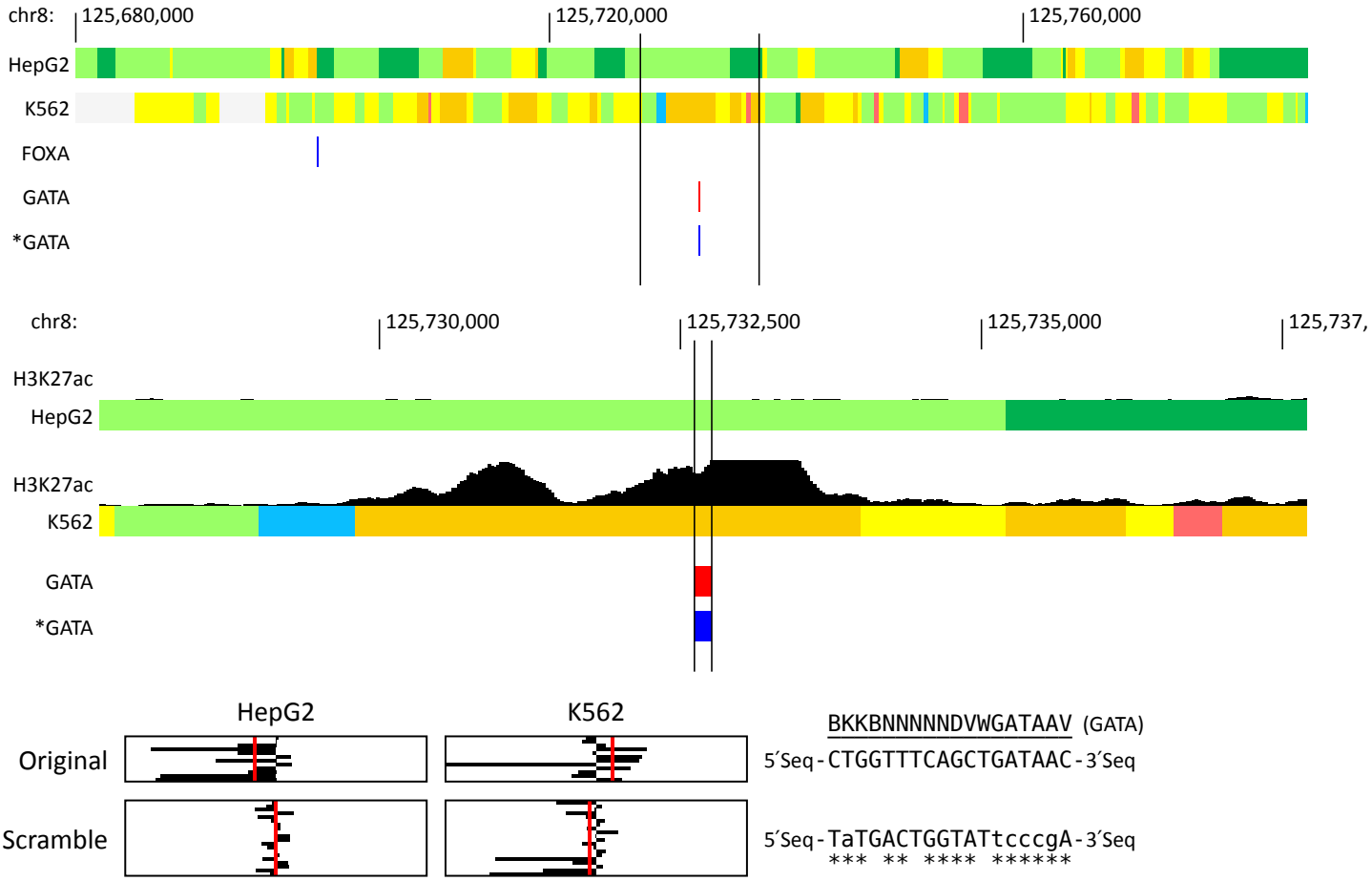
565 GATA in K562 enhancer

chr8 125732680 125732697 + (hg18)



BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGGTTTCAGCTGATAAC-3′Seq

5′Seq-TaTGACTGGTATtcccgA-3′Seq

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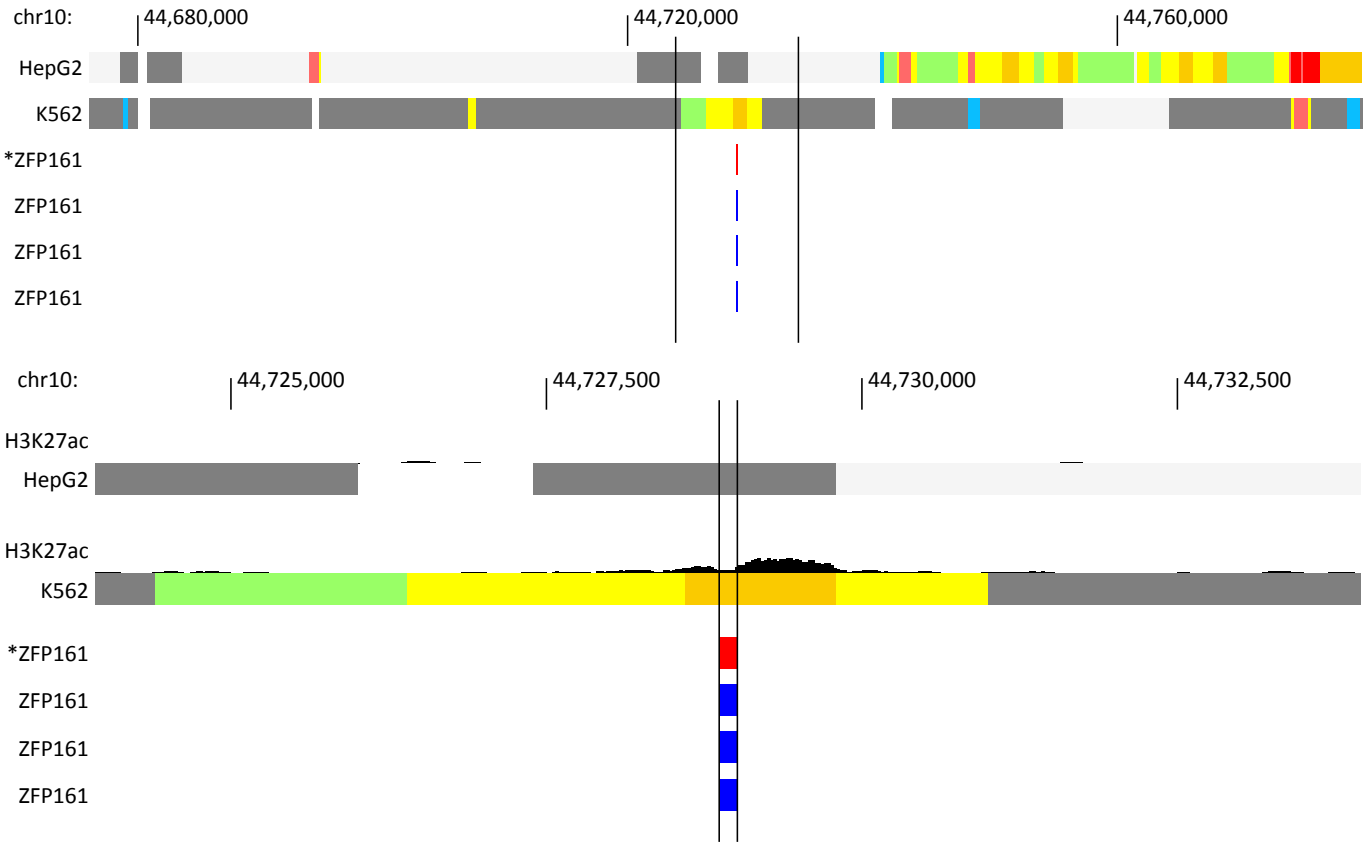
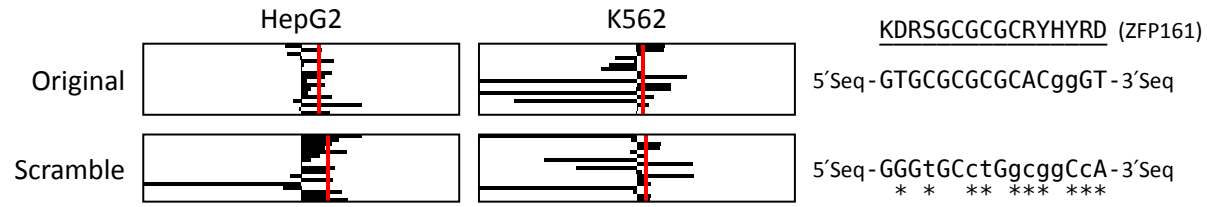
566 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr10 44728934 44728949 - (hg18)





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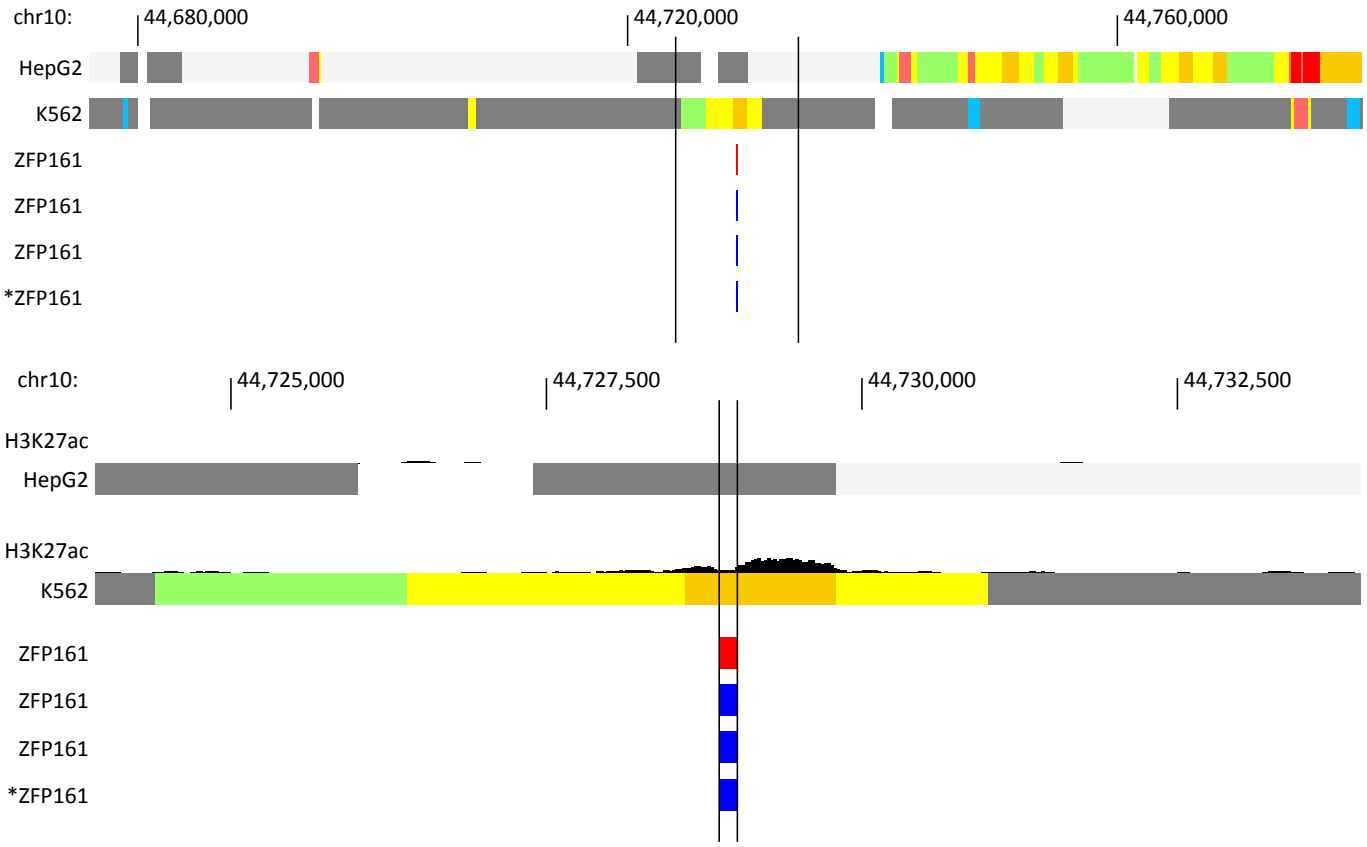
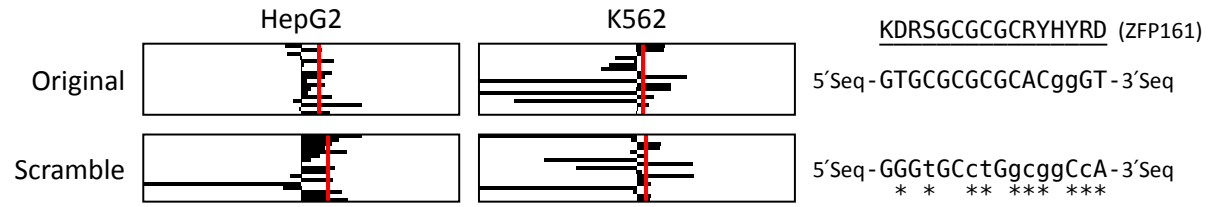
567 ZFP161 in K562 enhancer

chr10 44728934 44728949 - (hg18)





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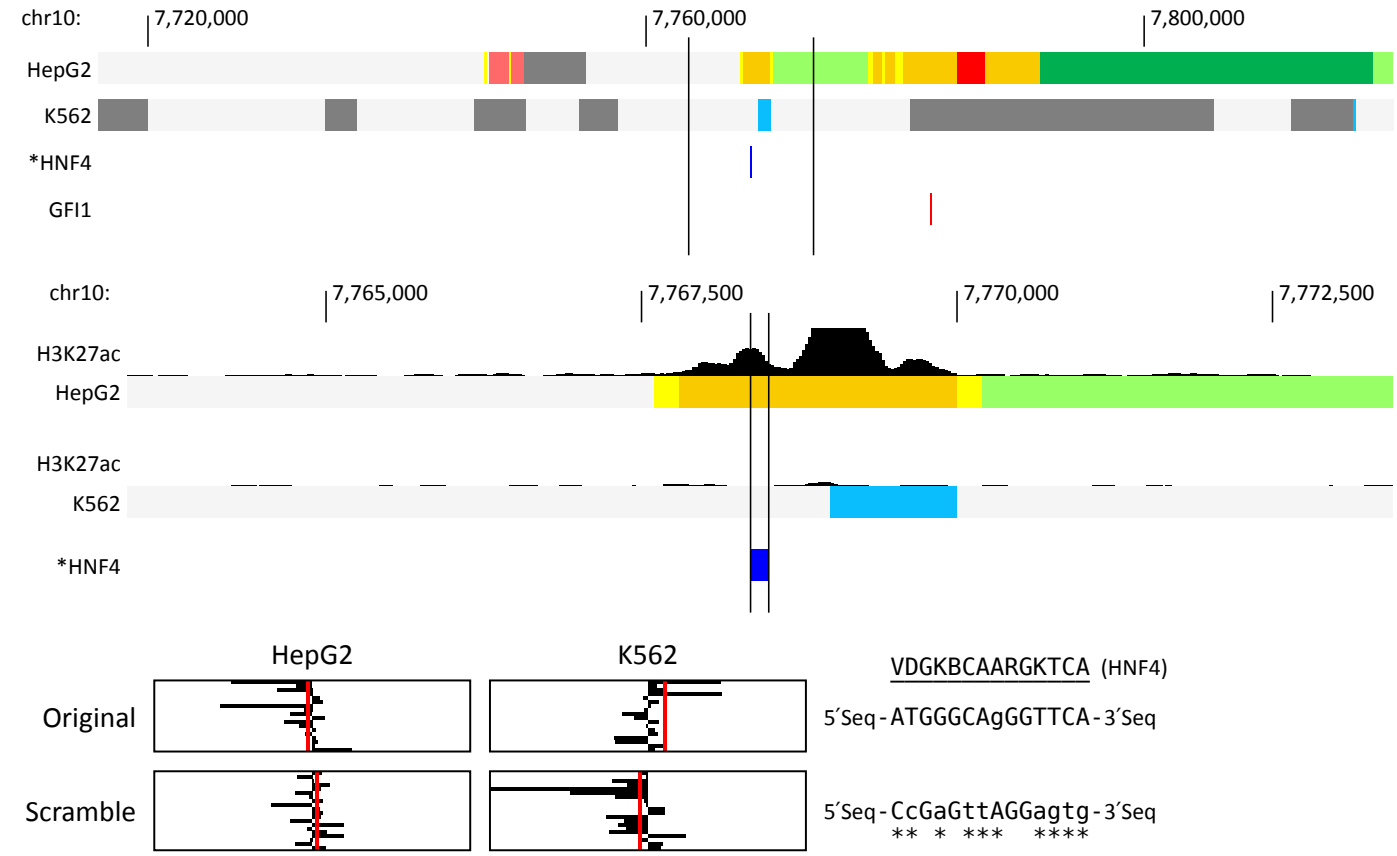
3′Seq = ttgtgtgtgtgtgtgtgtgtgtgtgtgcgtgcacatgggagtgtcaggggctgcagactcttcc

568 HNF4 in HepG2 enhancer

chr10 7768430 7768443 - (hg18)



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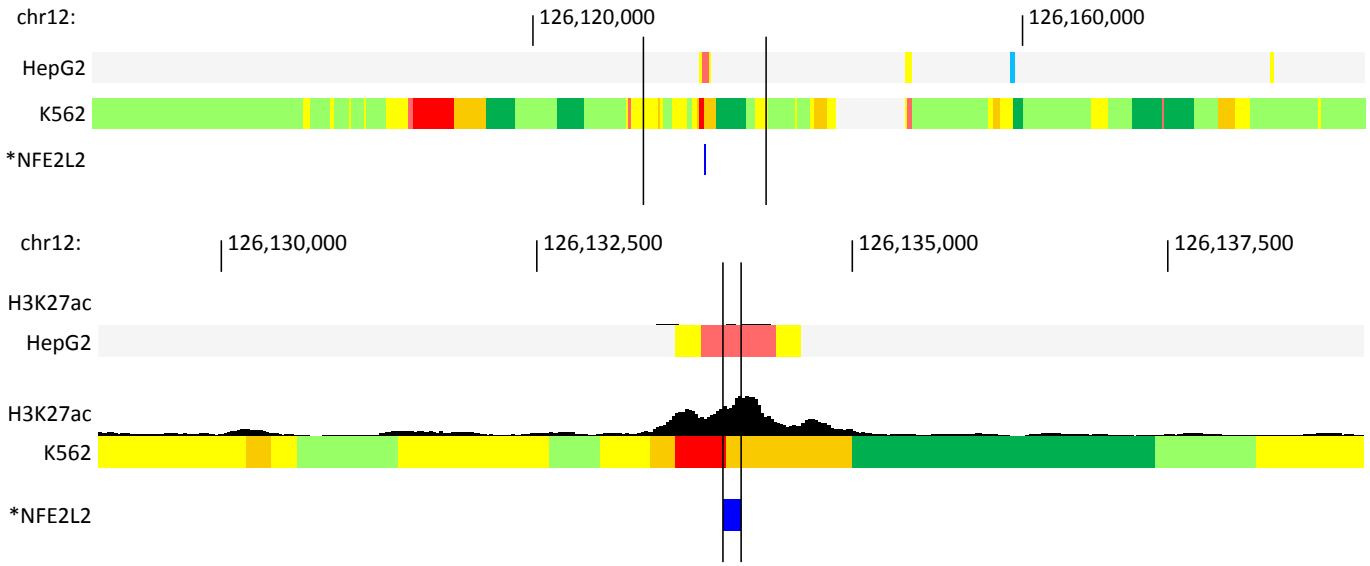
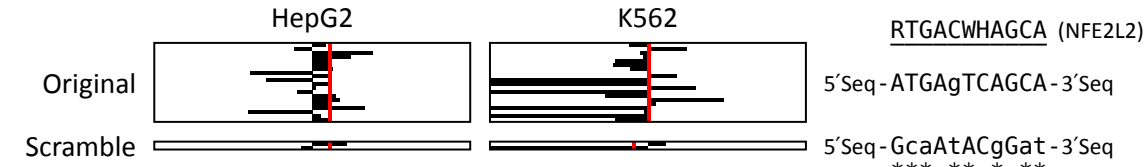
569 NFE2L2 in K562 enhancer

chr12 126134042 126134052 + (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq-ATGAgTCAGCA-3′Seq

5′Seq-GcaAtACgGat-3′Seq

*** ** * **

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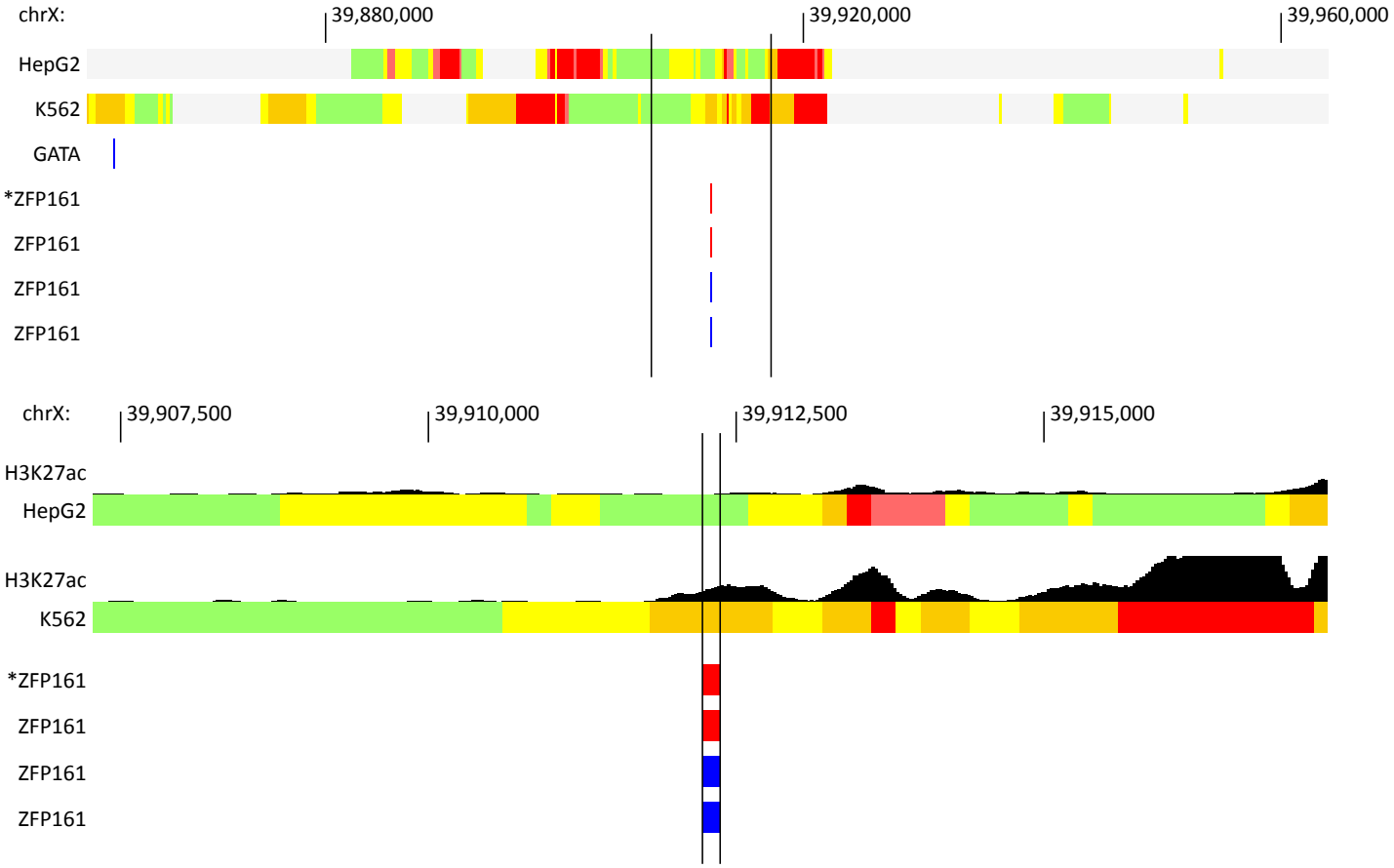
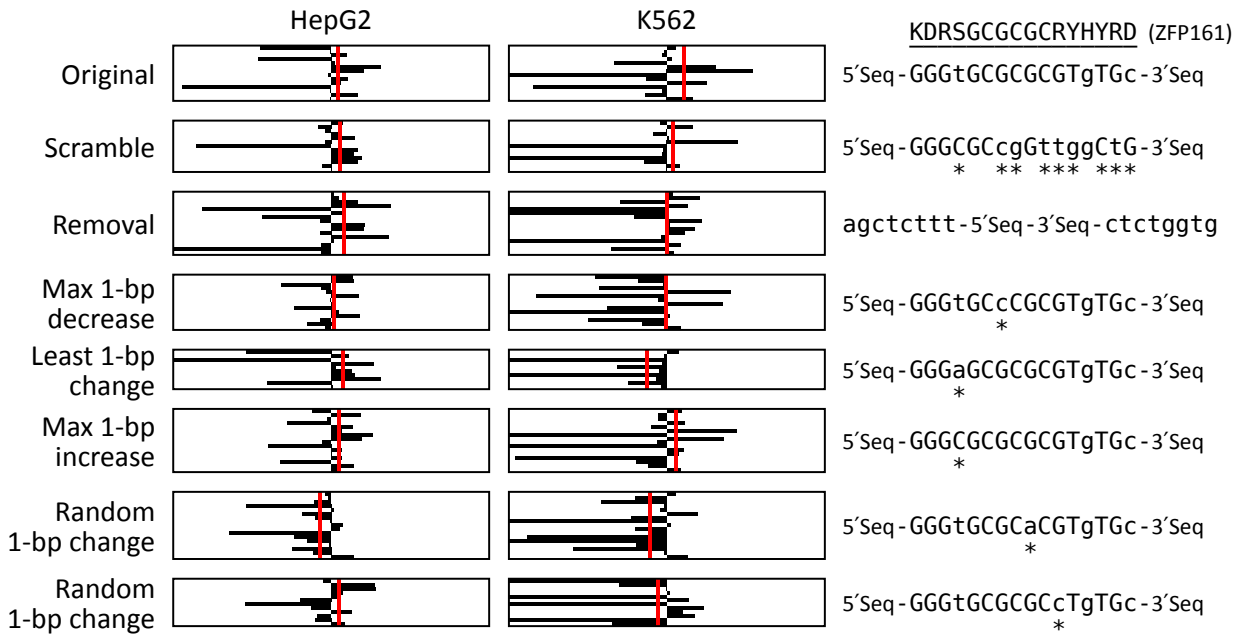
3′Seq = aatatcgcaatgataaggcagaatcaaacgctgggctcaccttgaagtgcttcctttctctcctagg

570 ZFP161 in K562 enhancer (conserved at 60% confidence)

chrX 39912291 39912306 - (hg18)





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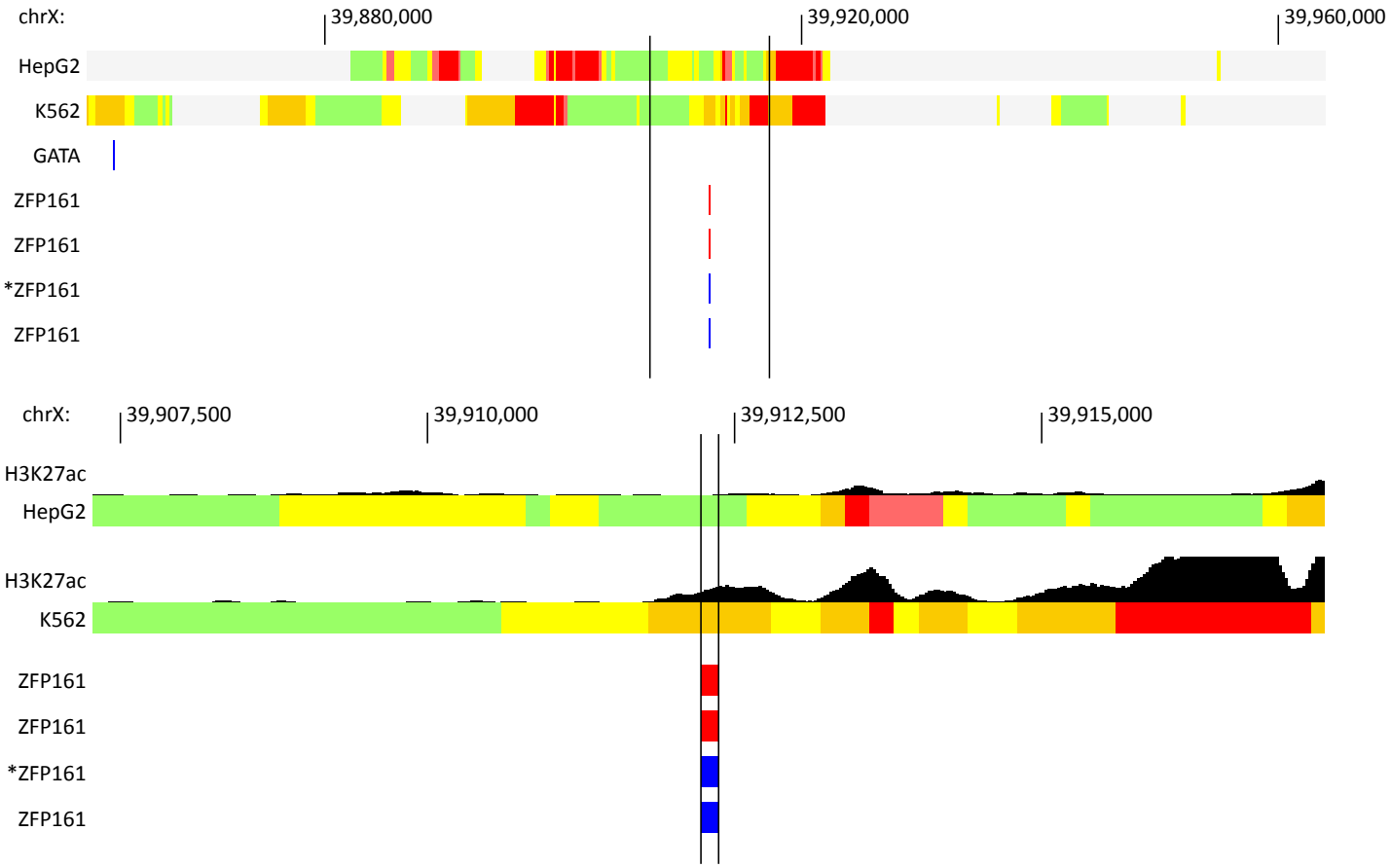
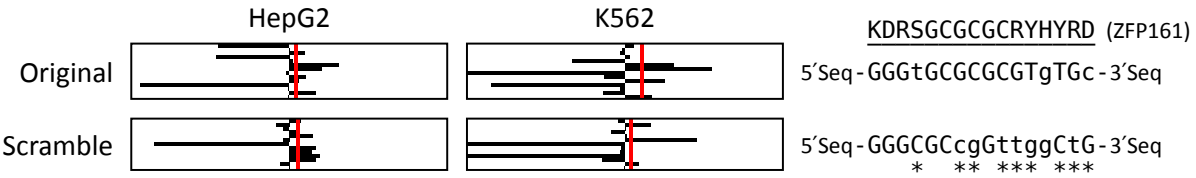
571 ZFP161 in K562 enhancer

chrX 39912291 39912306 - (hg18)





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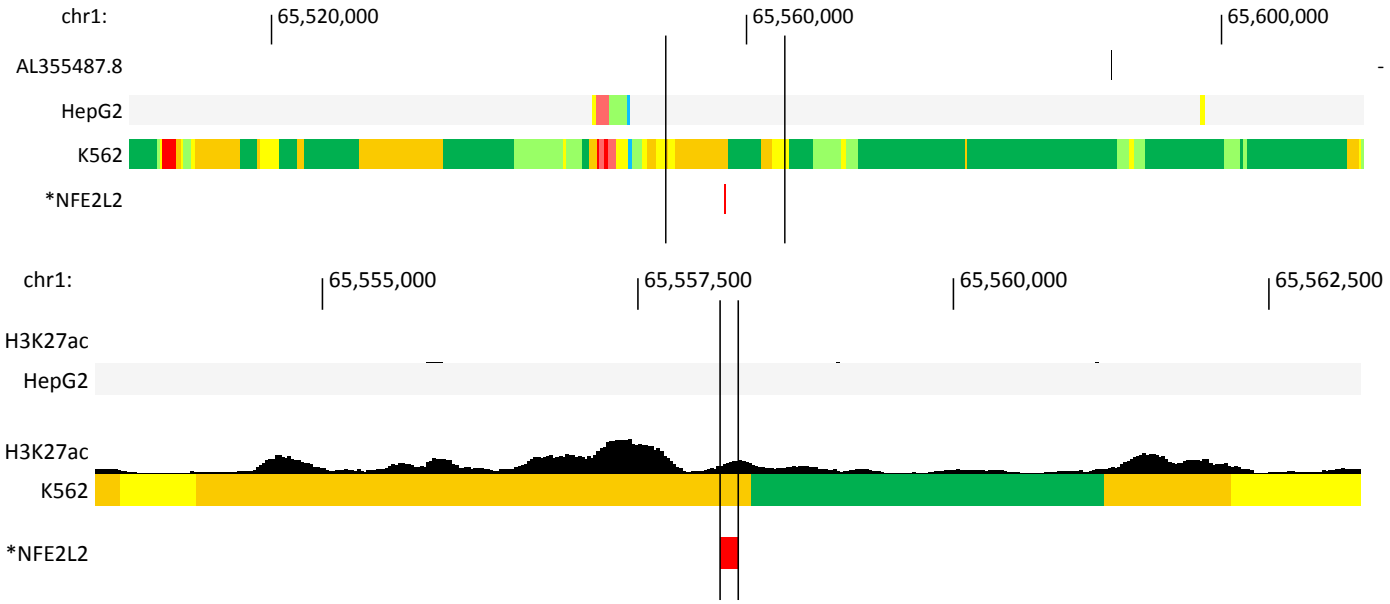
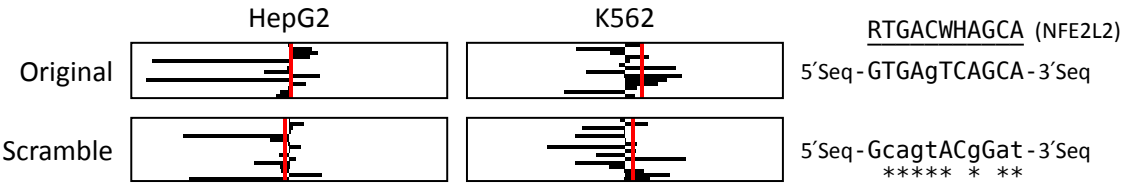
572 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 65558218 65558228 + (hg18)





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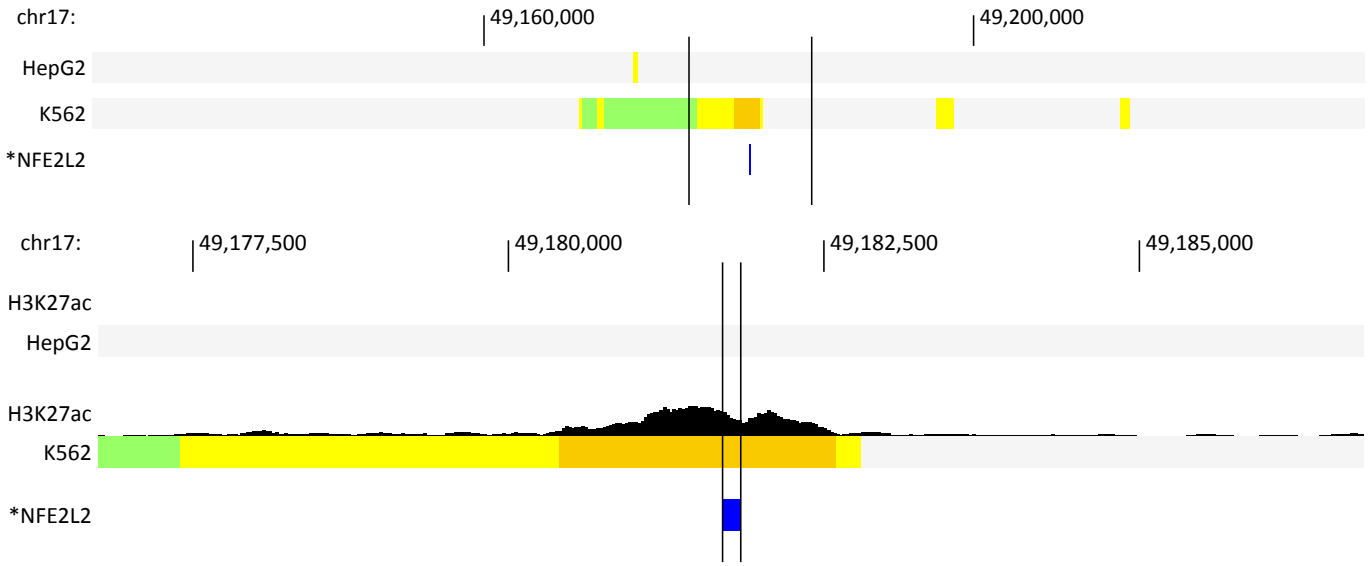
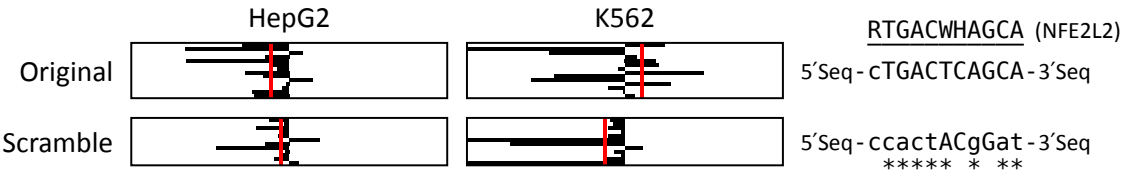
573 NFE2L2 in K562 enhancer

chr17 49181764 49181774 + (hg18)





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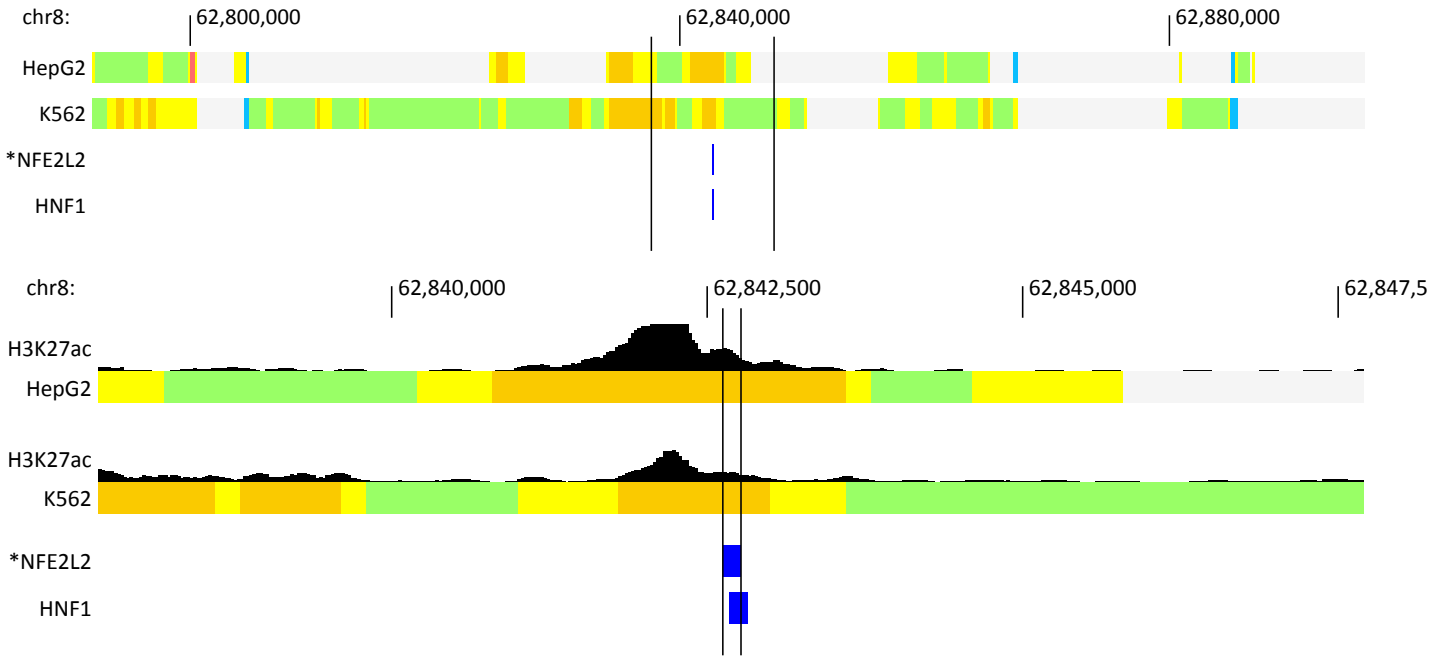
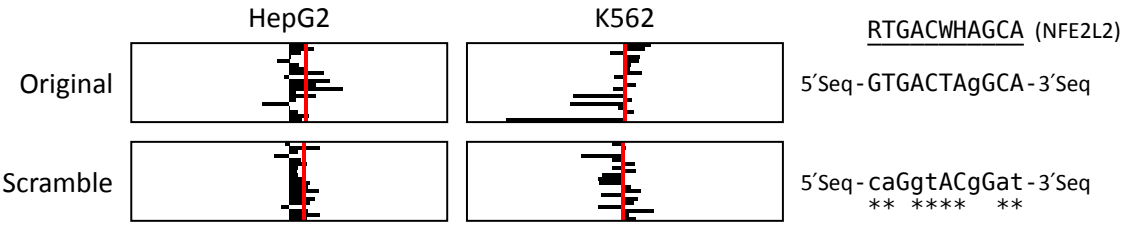
574 NFE2L2 in HepG2 enhancer

chr8 62842691 62842701 + (hg18)





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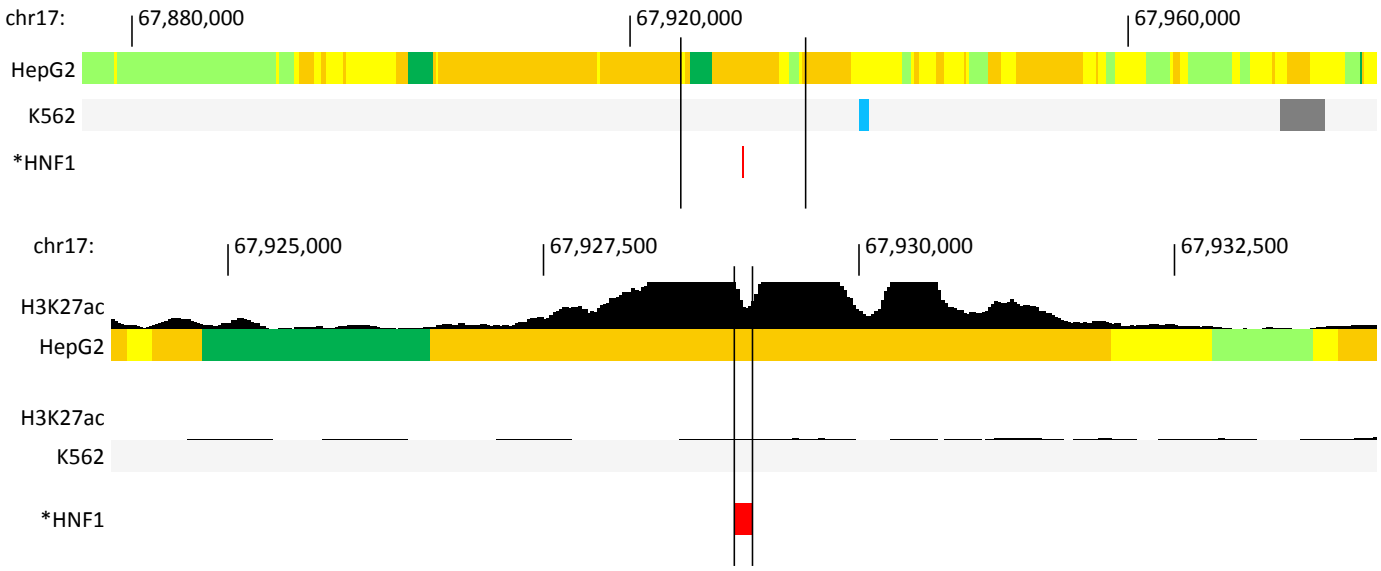
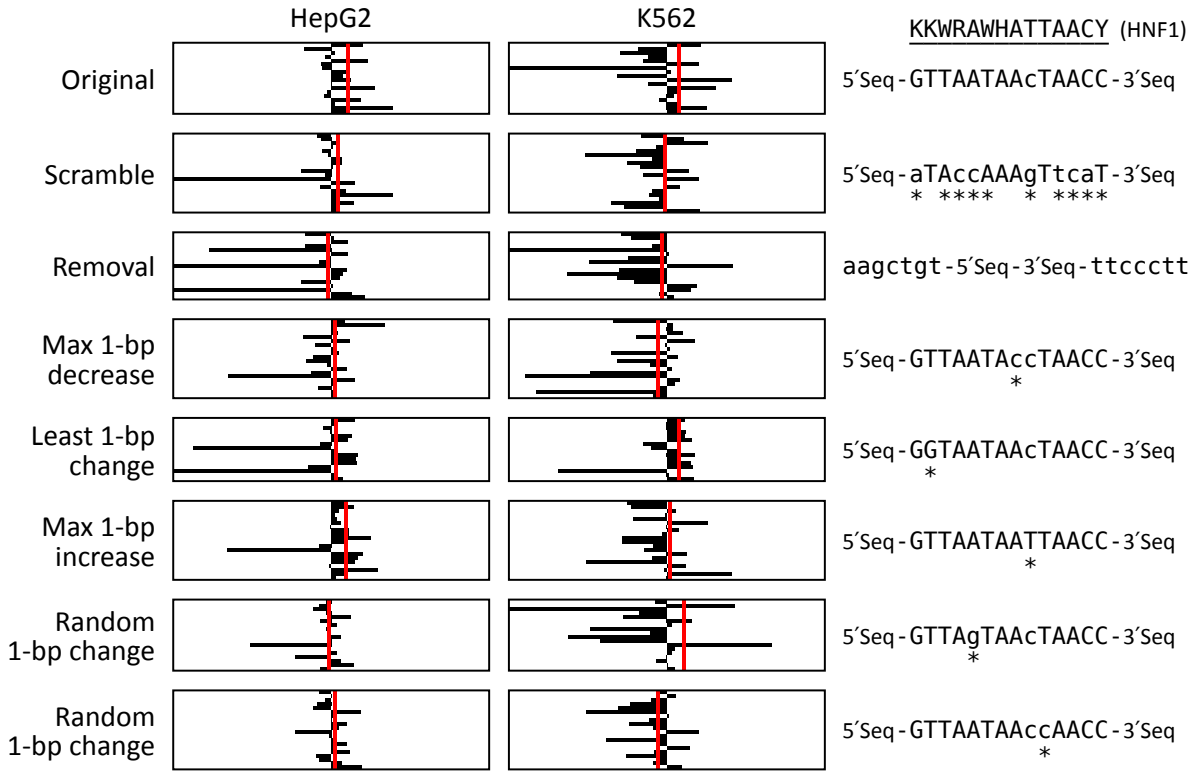
575 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr17 67929078 67929091 + (hg18)





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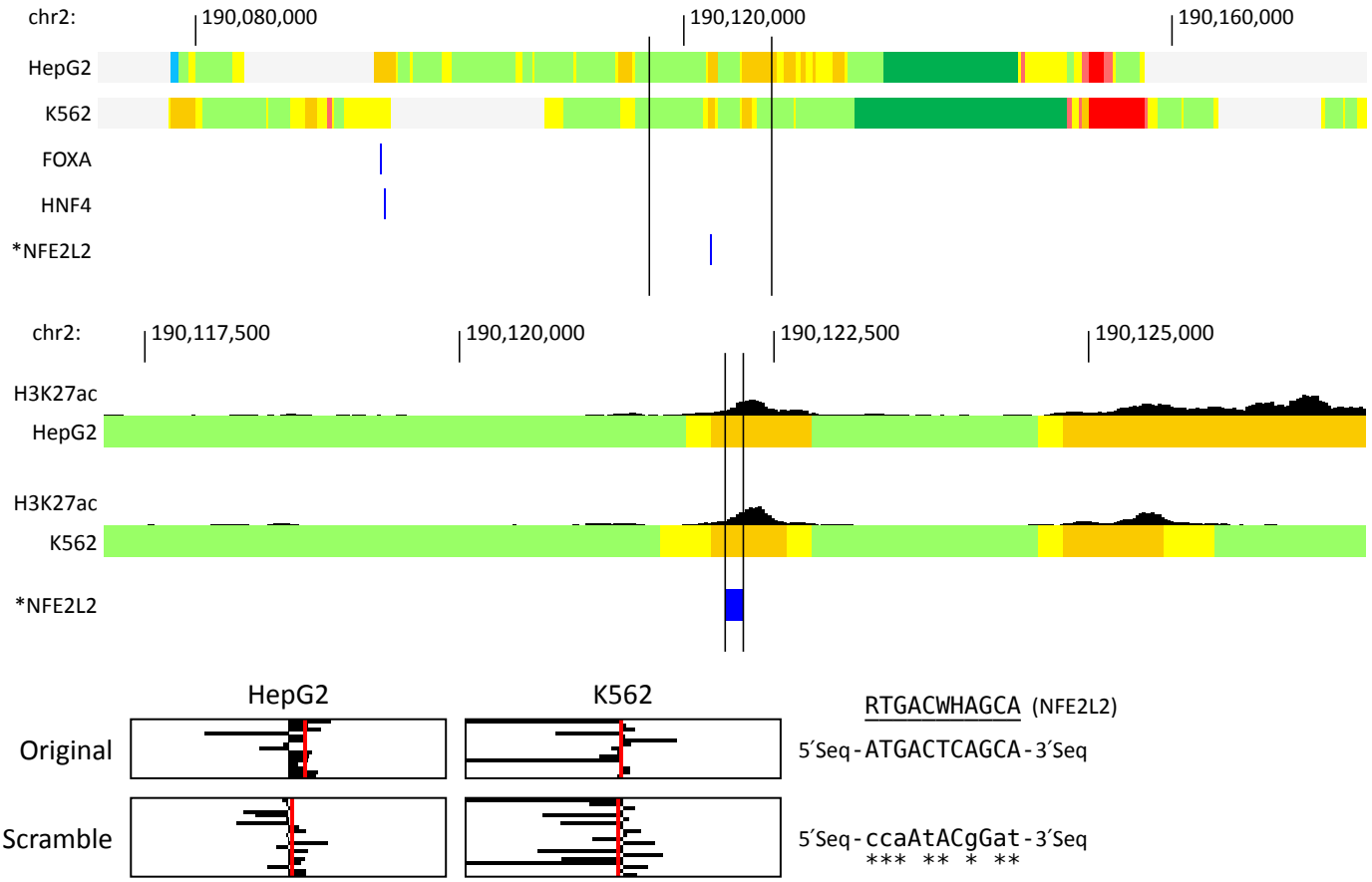
576 NFE2L2 in K562 enhancer

chr2 190122179 190122189 + (hg18)



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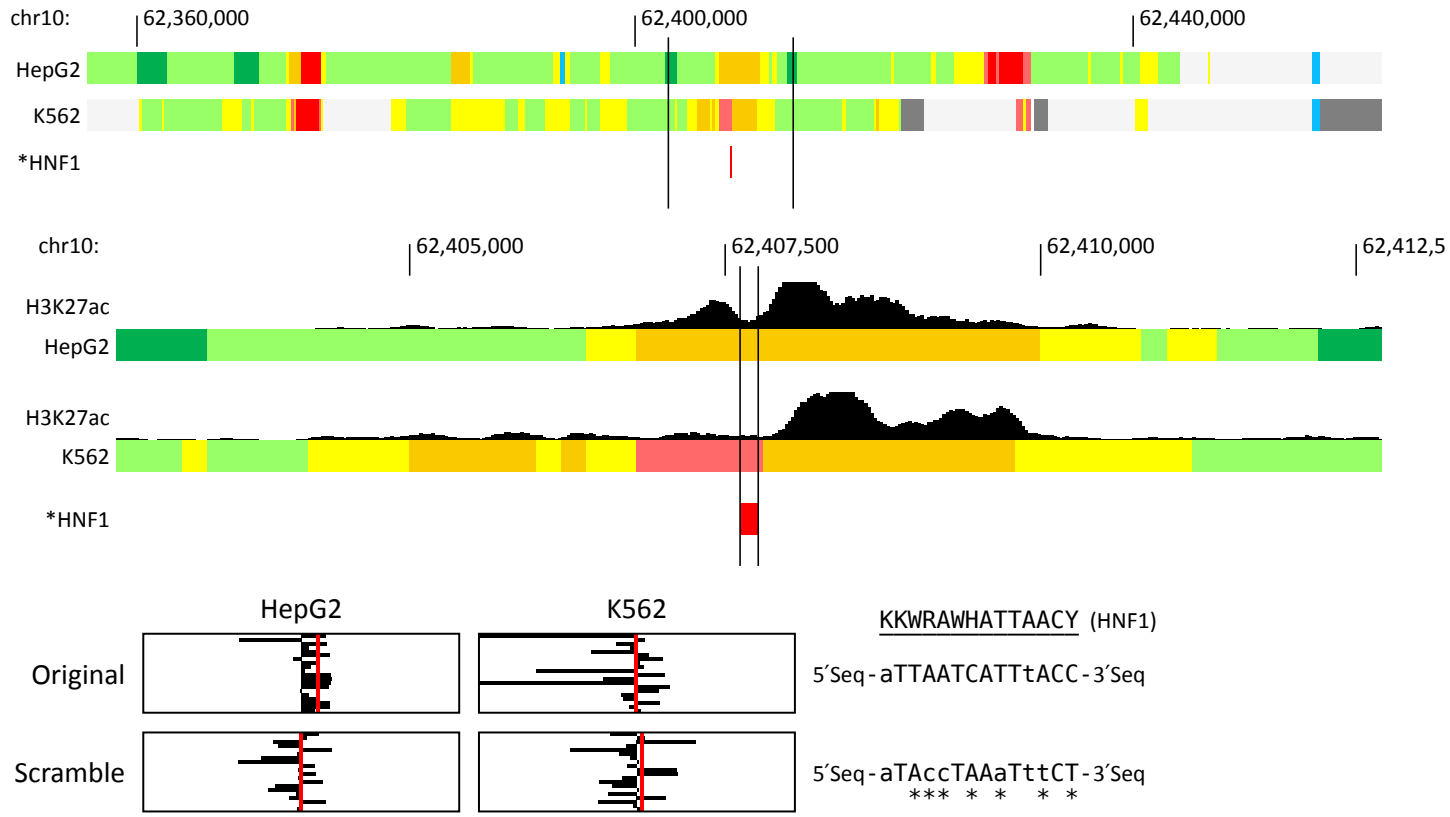
577 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 62407684 62407697 + (hg18)



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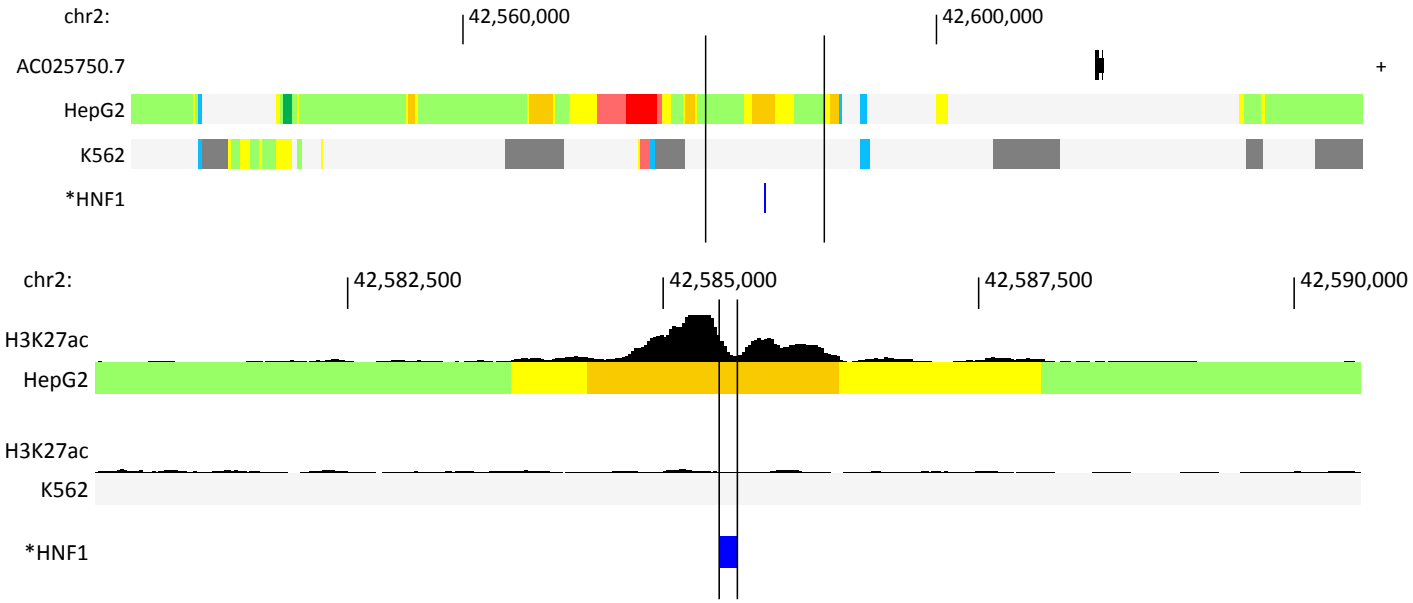
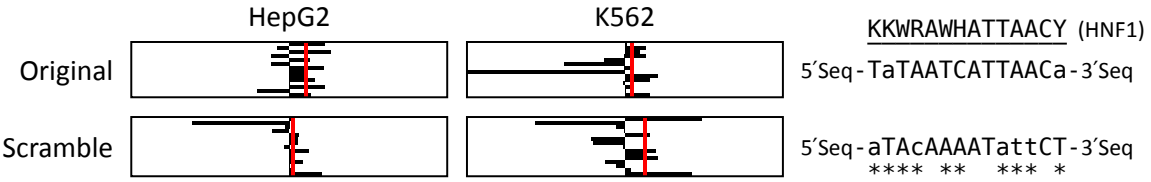
578 HNF1 in HepG2 enhancer

chr2 42585510 42585523 + (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-TaTAATCATTAACa-3′Seq

5′Seq-aTAcAAAATattCT-3′Seq

**** ** *** *

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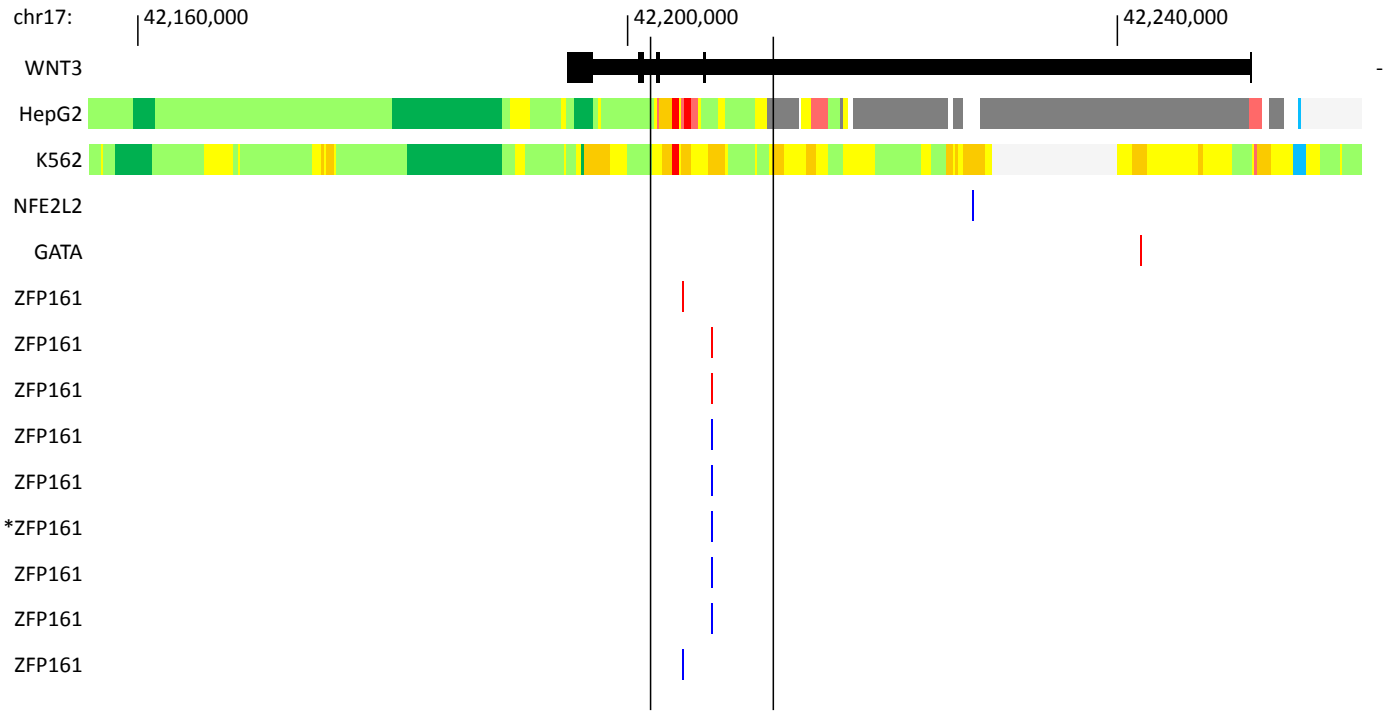
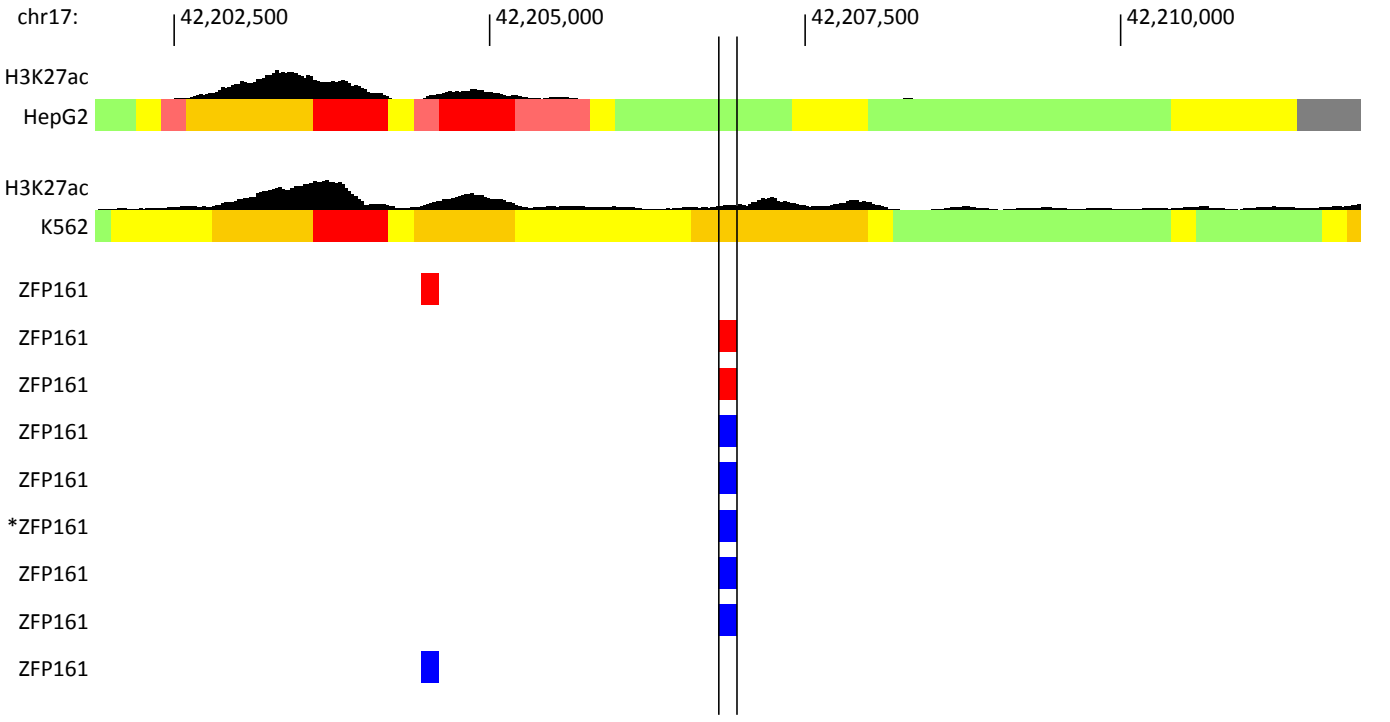
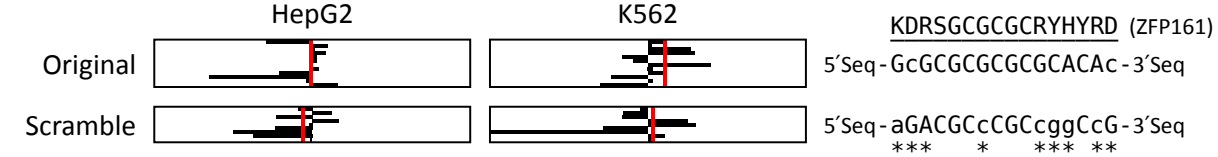
3′Seq = ggtgccattataggaacagcccctctttgtaatcttcaccccagcctcactccagtcatgctgcc

579 ZFP161 in K562 enhancer

chr17 42206881 42206896 + (hg18)







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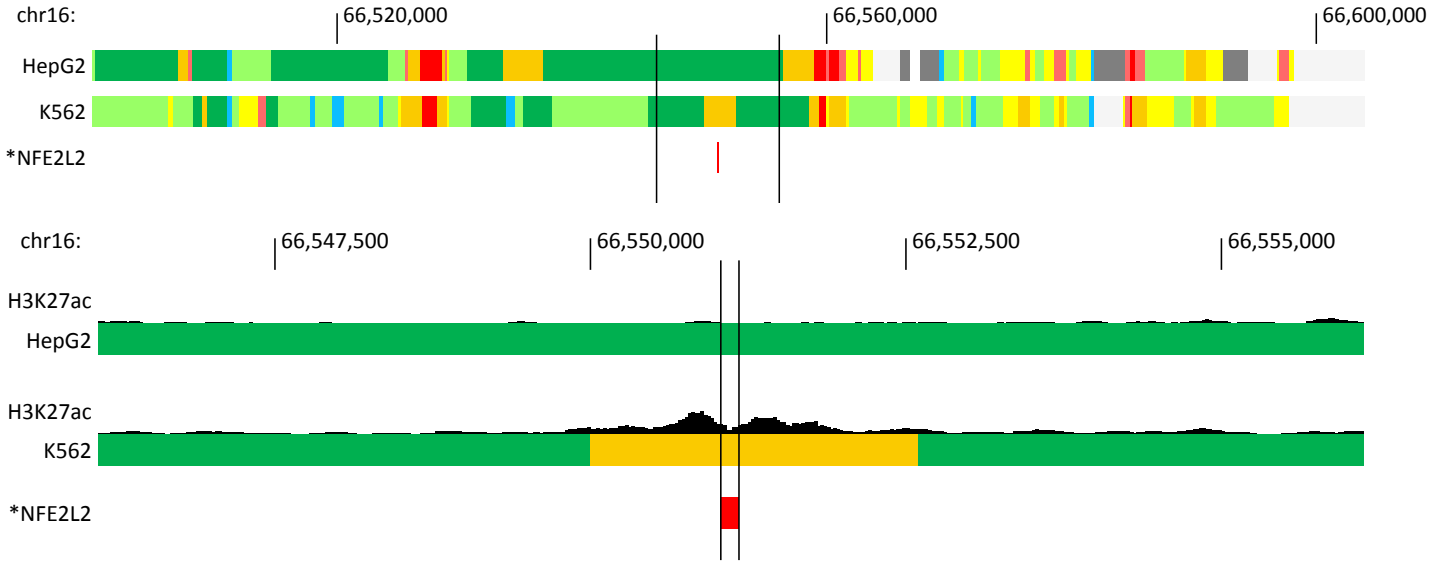
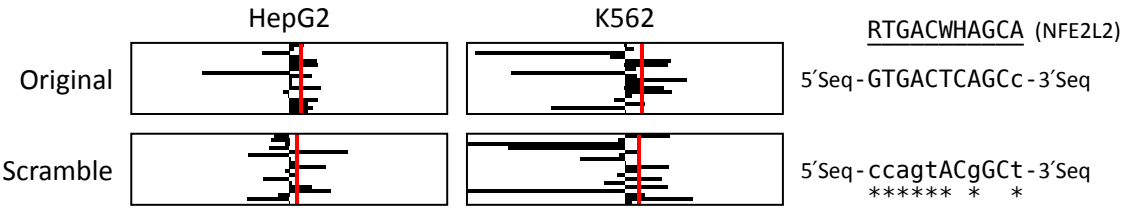
580 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr16 66551100 66551110 - (hg18)





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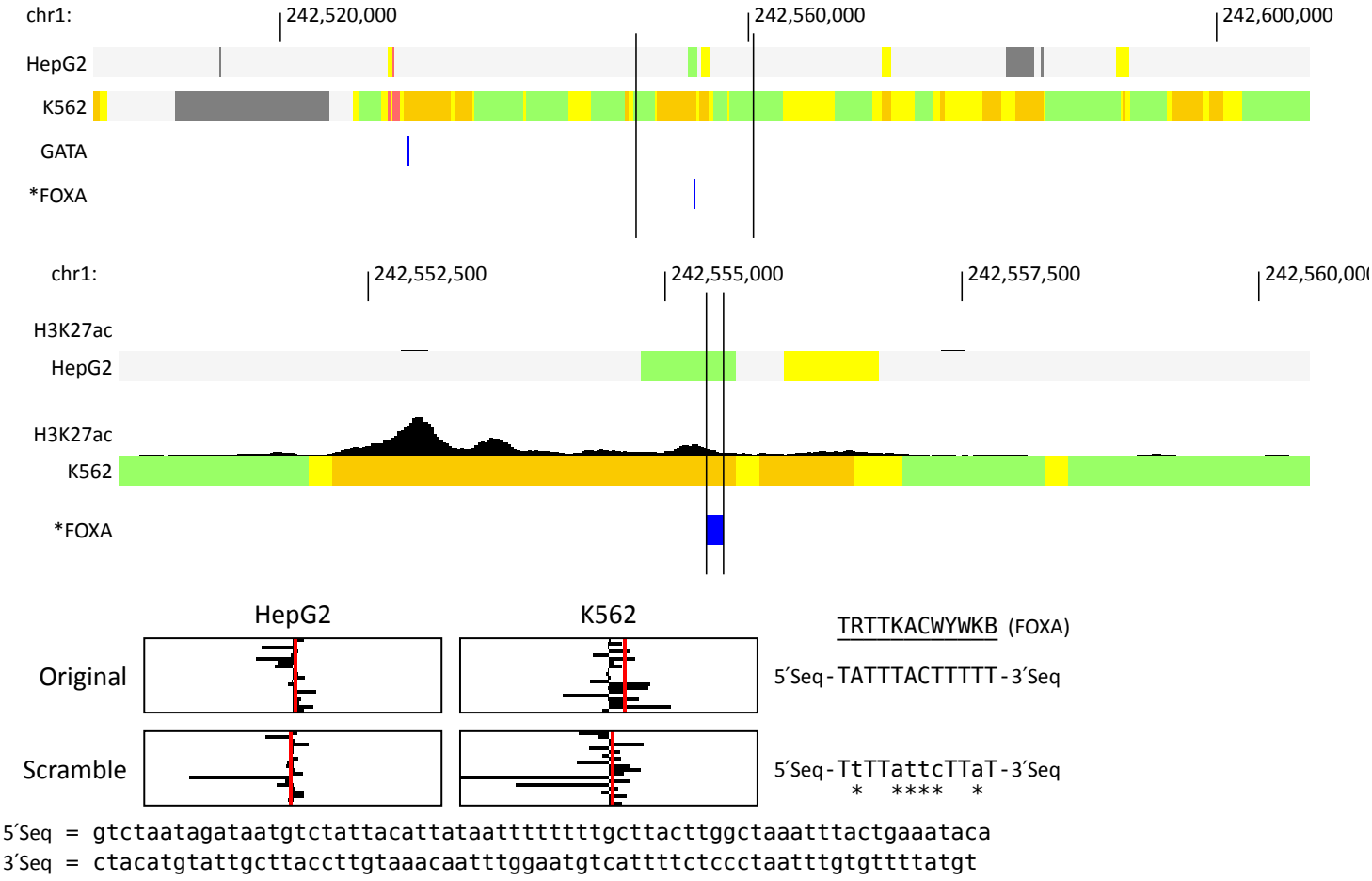
581 FOXA in K562 enhancer

chr1 242555415 242555426 - (hg18)



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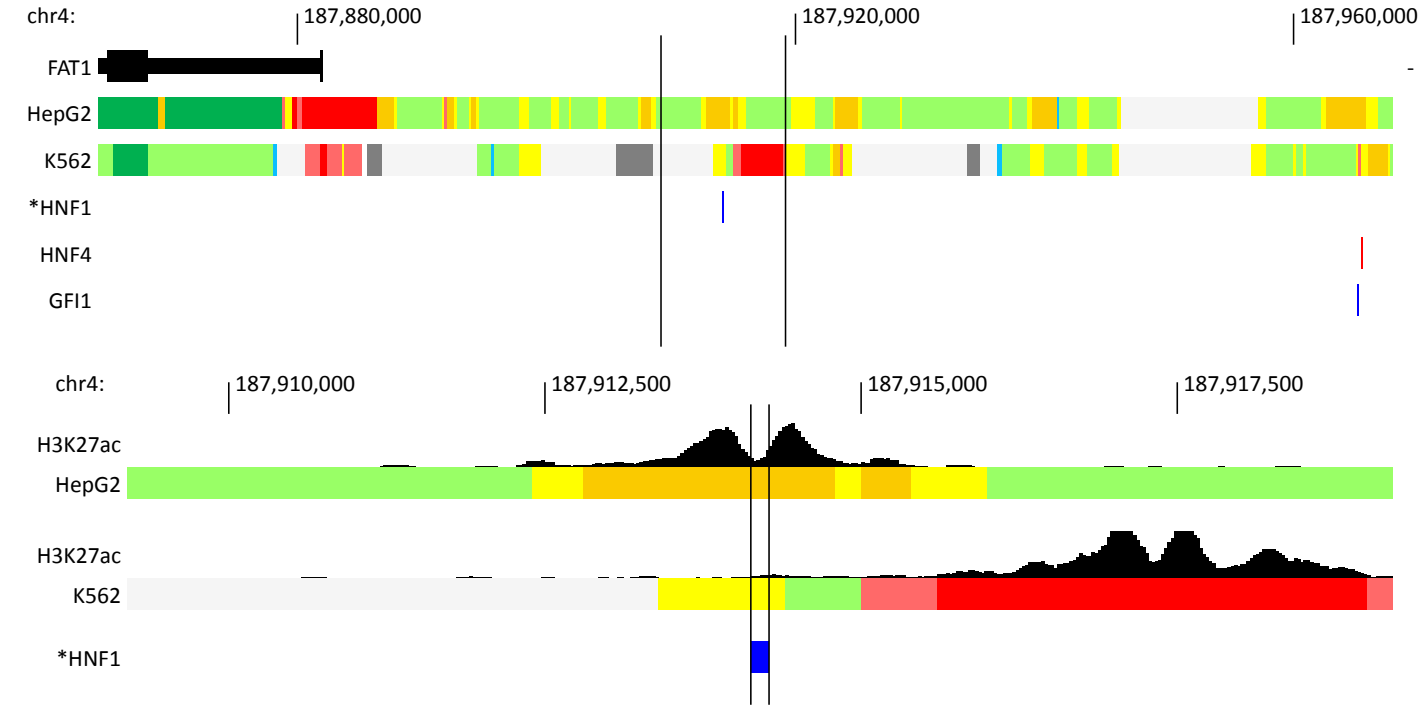
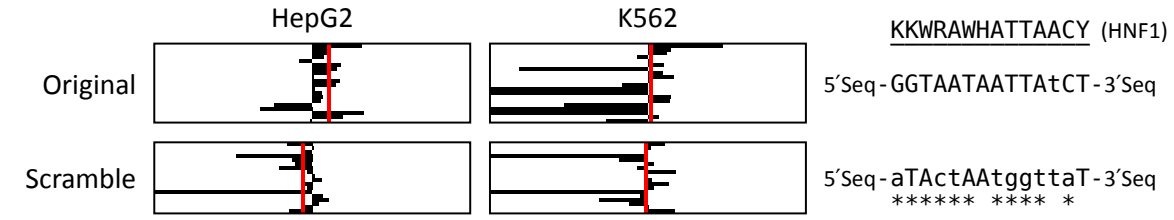
582 HNF1 in HepG2 enhancer

chr4 187914194 187914207 - (hg18)





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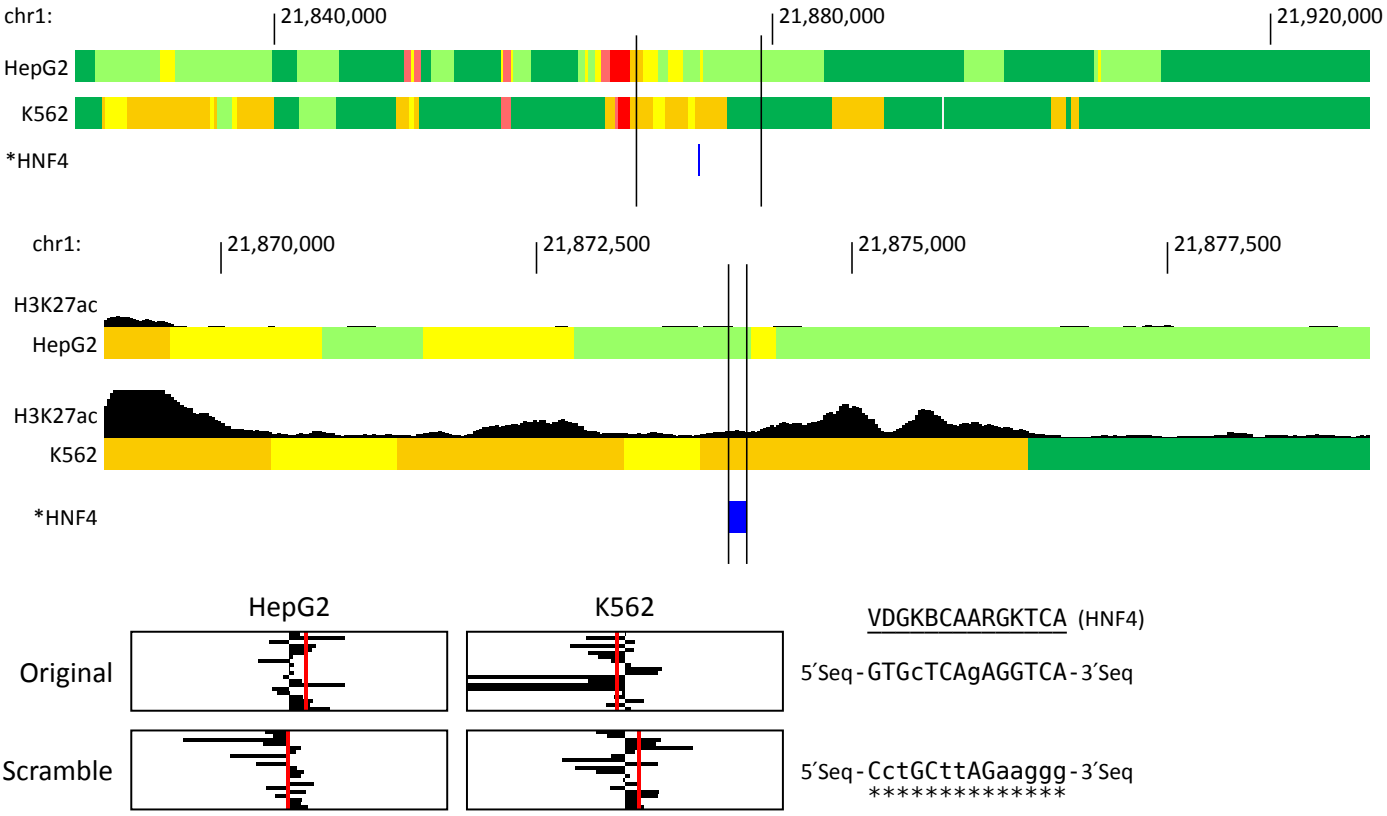
3′Seq = aattcagttagacaagacaggaagtgaagcttgccctatggcagtggaggcagaccaaagctgag

583 HNF4 in K562 enhancer

chr1 21874088 21874101 - (hg18)



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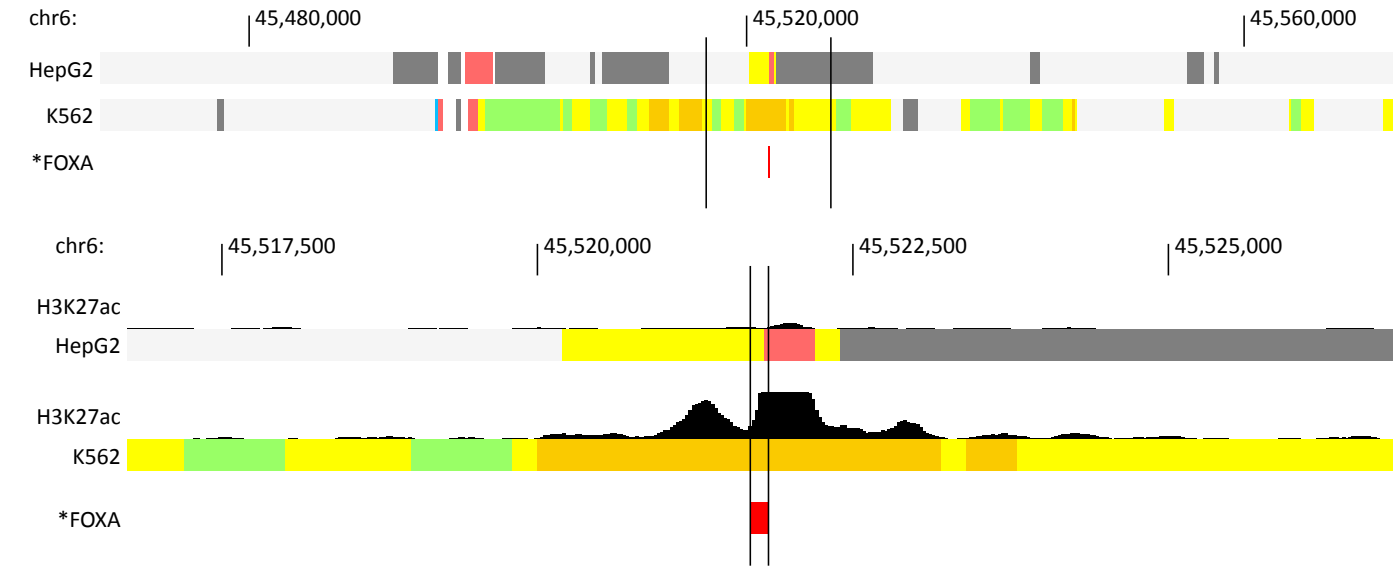
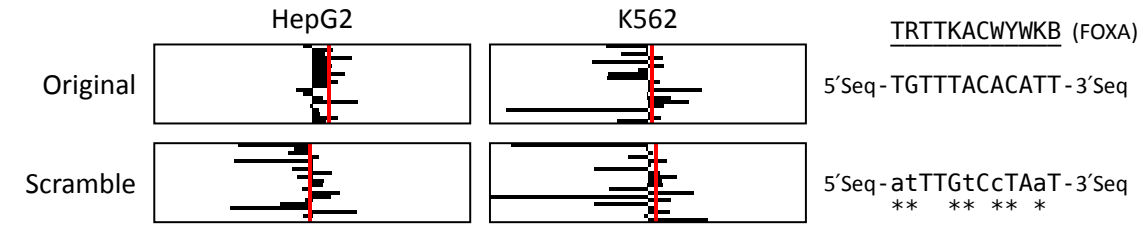
584 FOXA in K562 enhancer (conserved at 50% confidence)

chr6 45521754 45521765 + (hg18)





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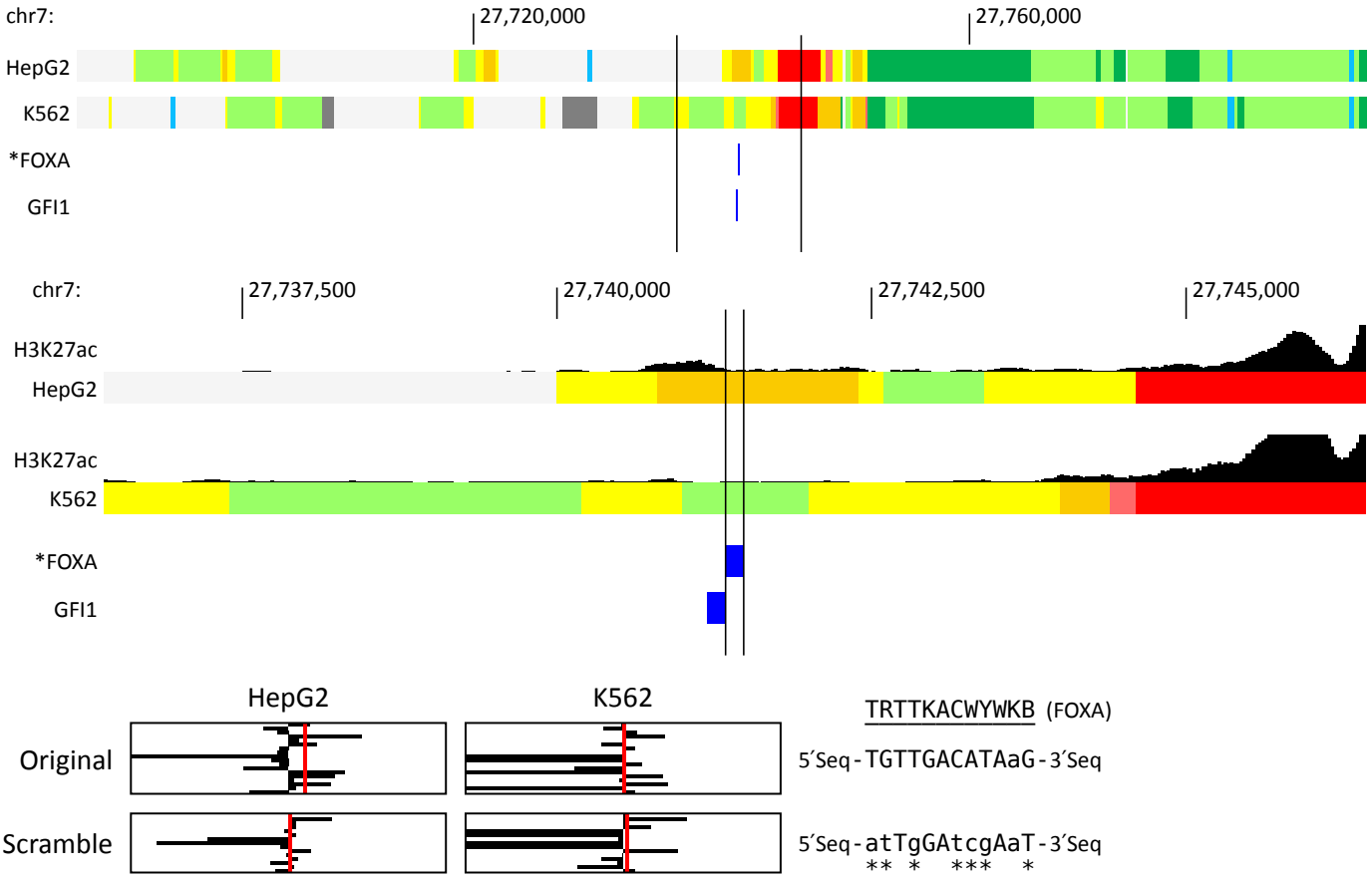
585 FOXA in HepG2 enhancer

chr7 27741407 27741418 + (hg18)



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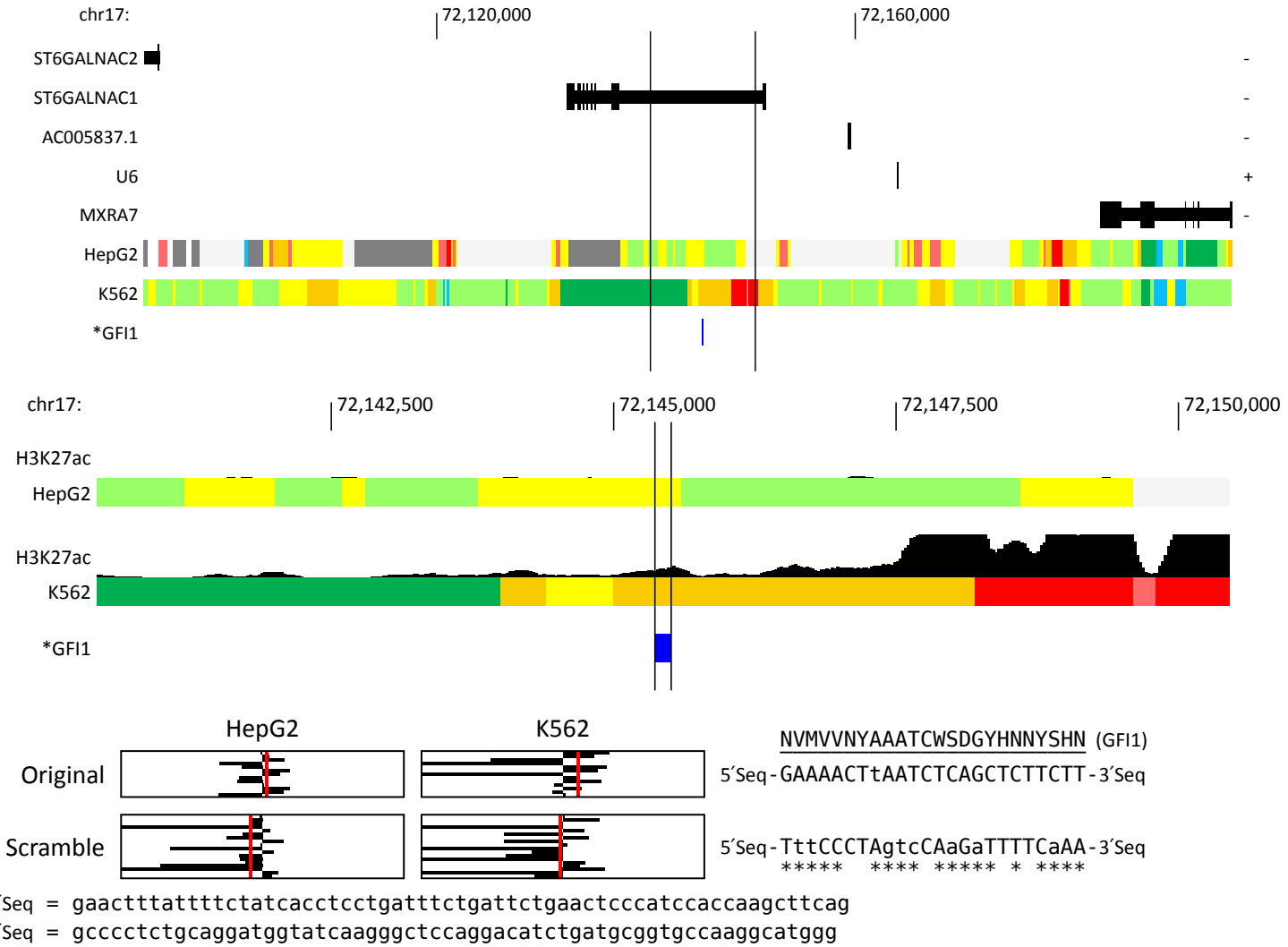
586 GFI1 in K562 enhancer

chr17 72145426 72145449 - (hg18)



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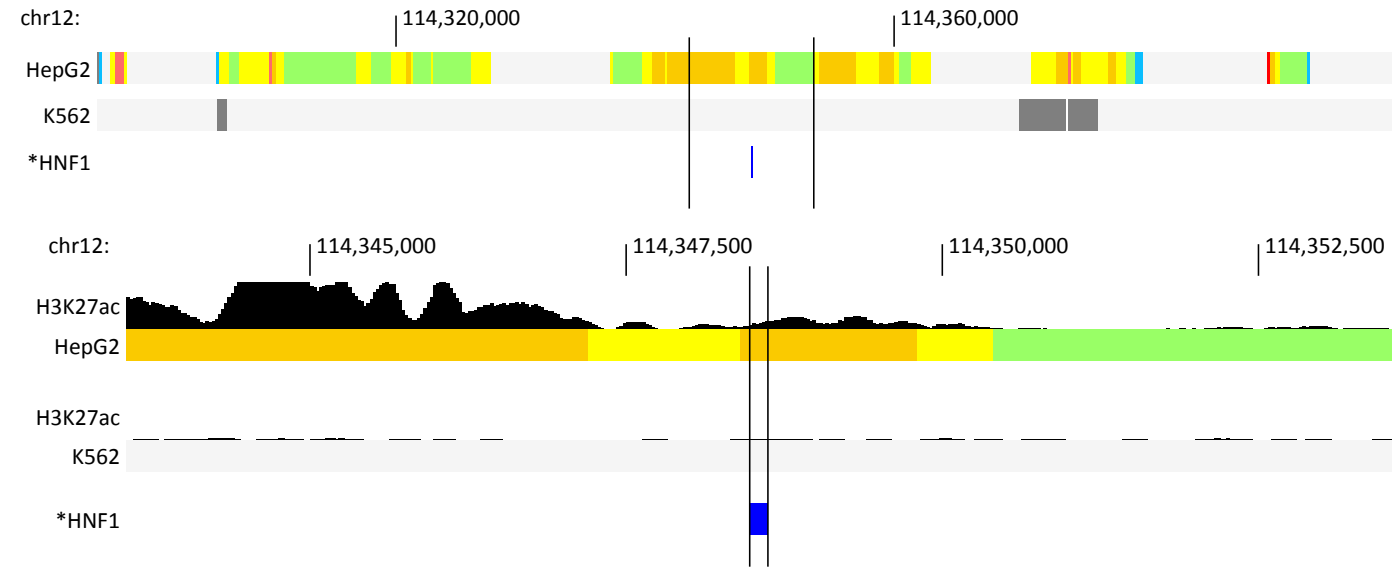
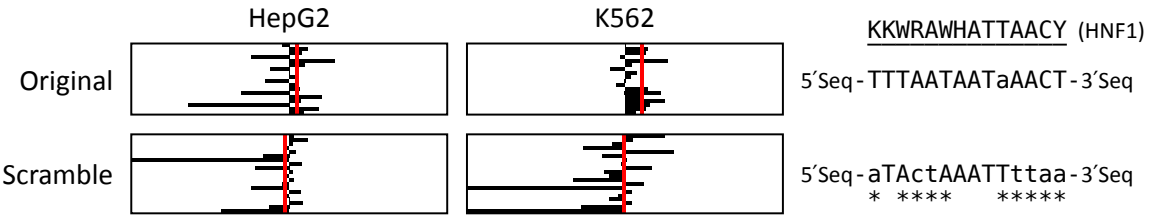
587 HNF1 in HepG2 enhancer

chr12 114348543 114348556 + (hg18)





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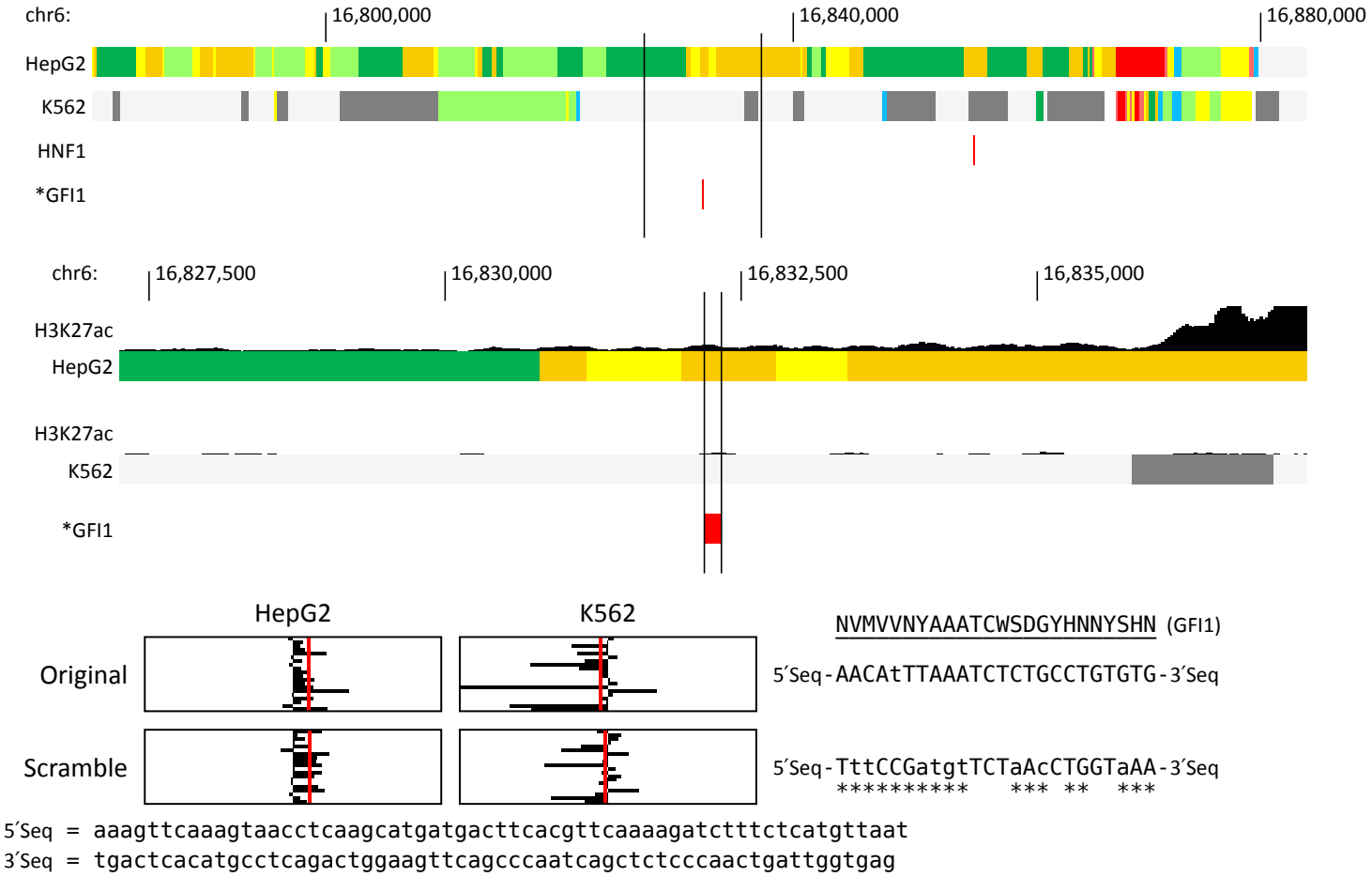
588 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 16832250 16832273 + (hg18)



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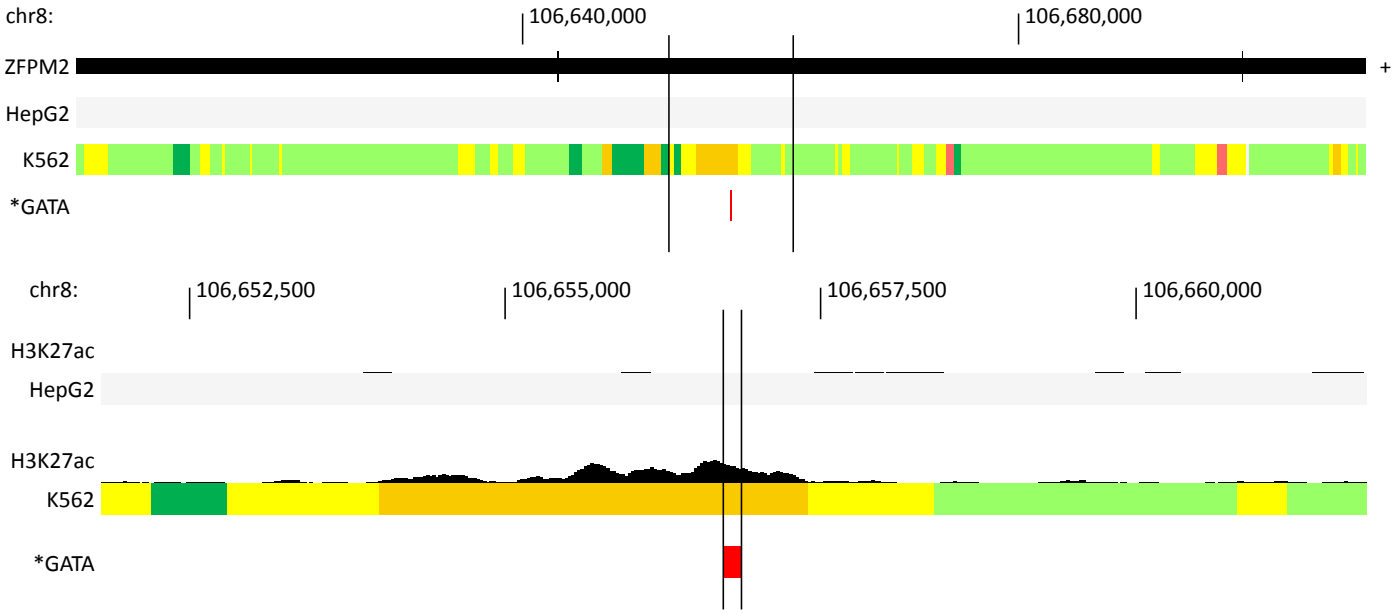
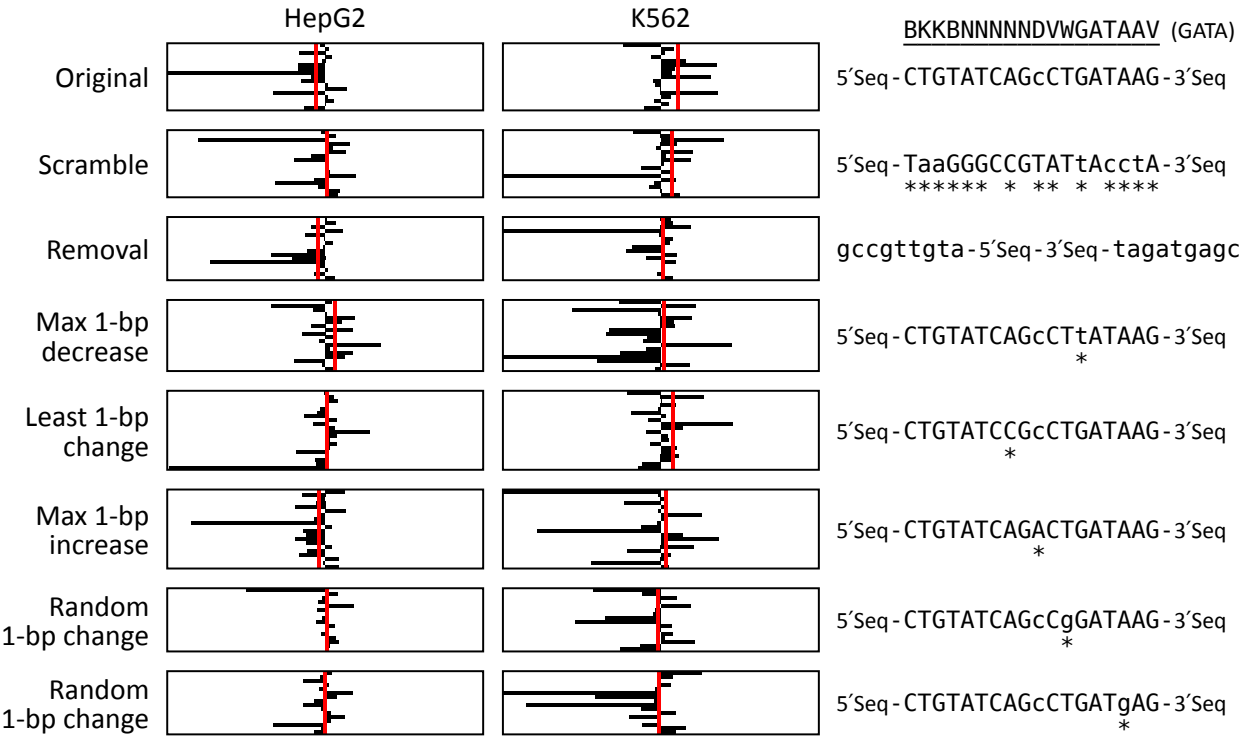
589 GATA in K562 enhancer (conserved at 70% confidence)

chr8 106656793 106656810 + (hg18)





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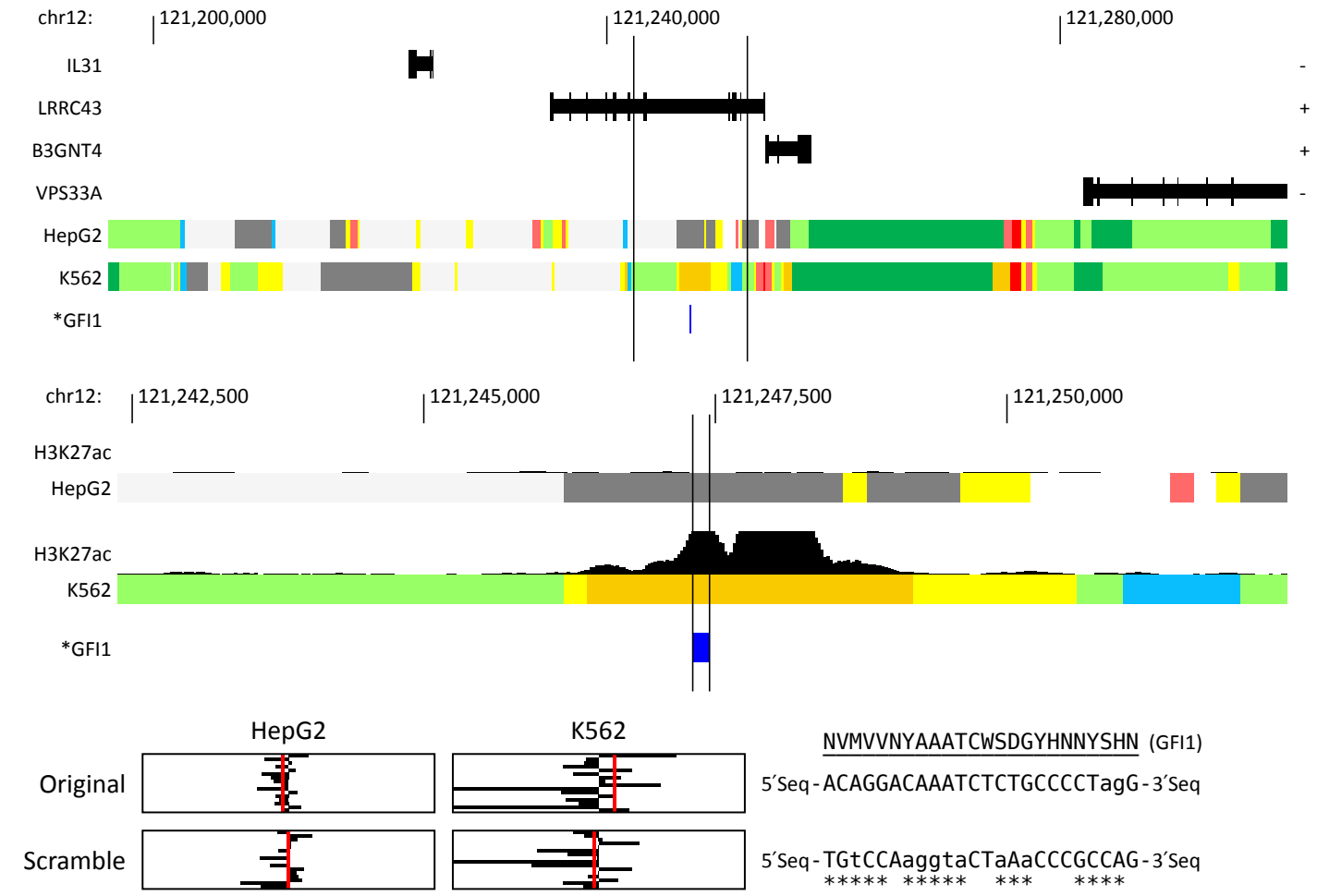
590 GFI1 in K562 enhancer

chr12 121247367 121247390 + (hg18)



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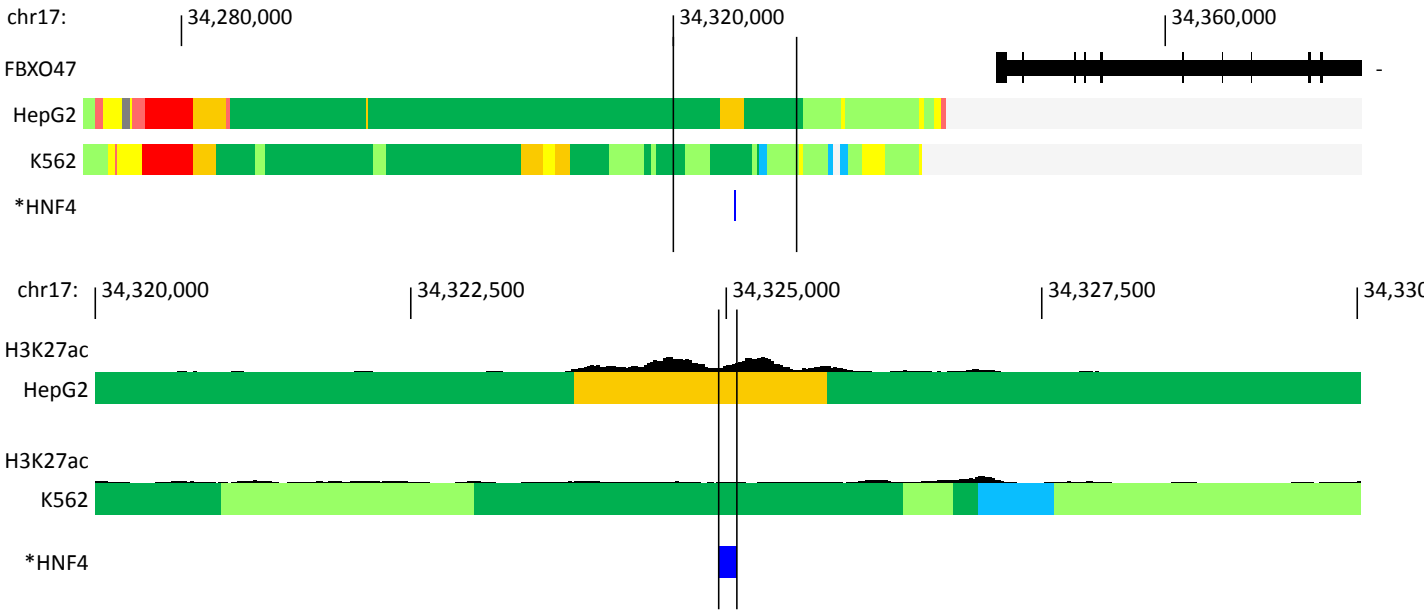
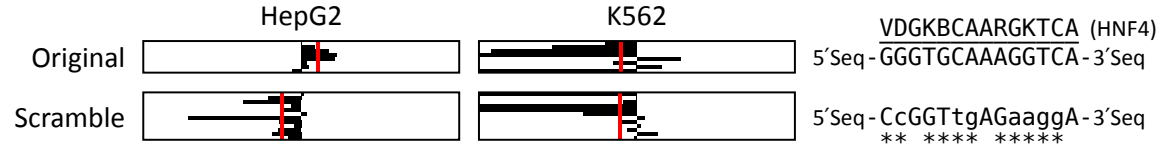
591 HNF4 in HepG2 enhancer

chr17 34325006 34325019 - (hg18)





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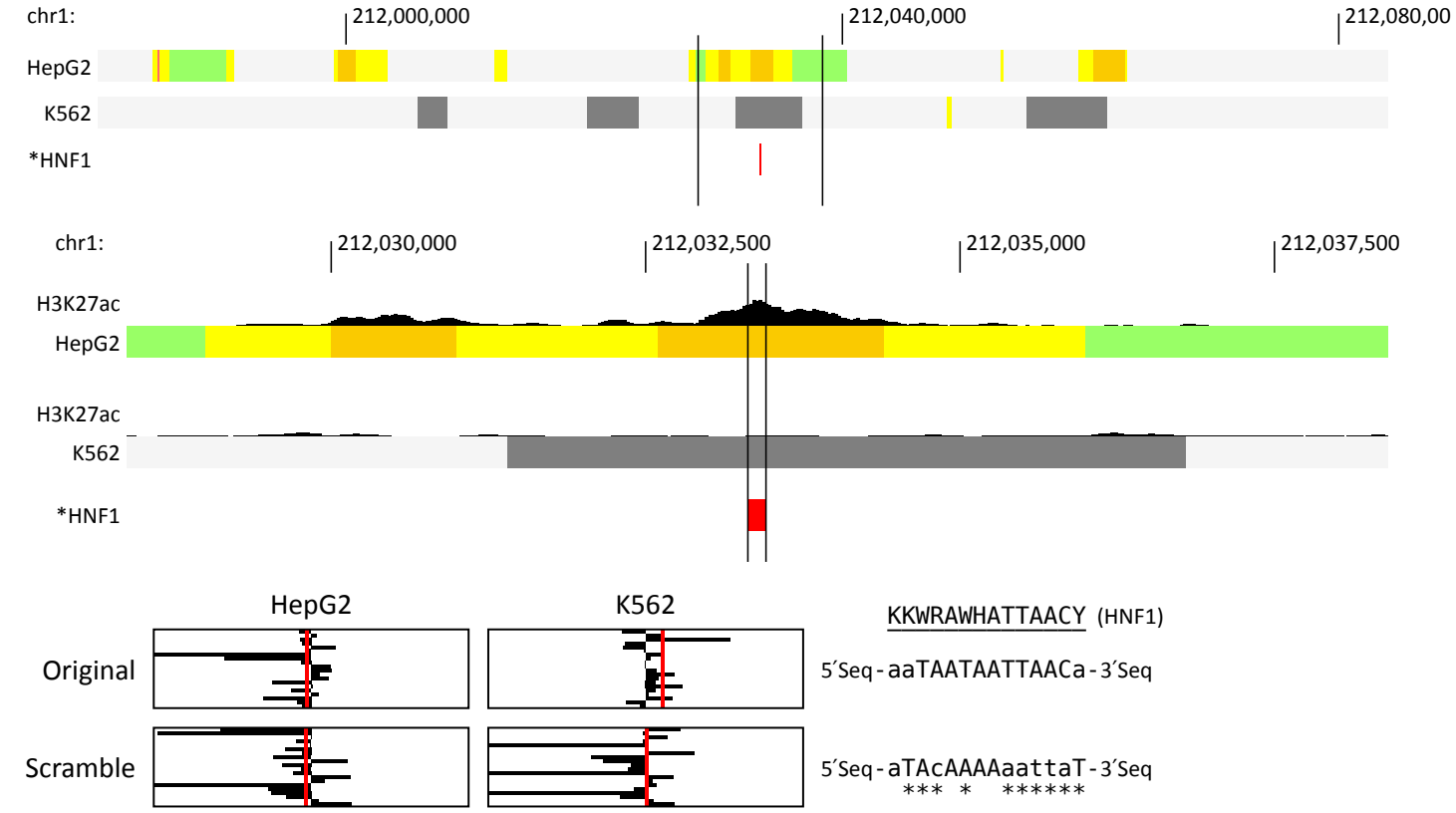
592 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 212033379 212033392 + (hg18)



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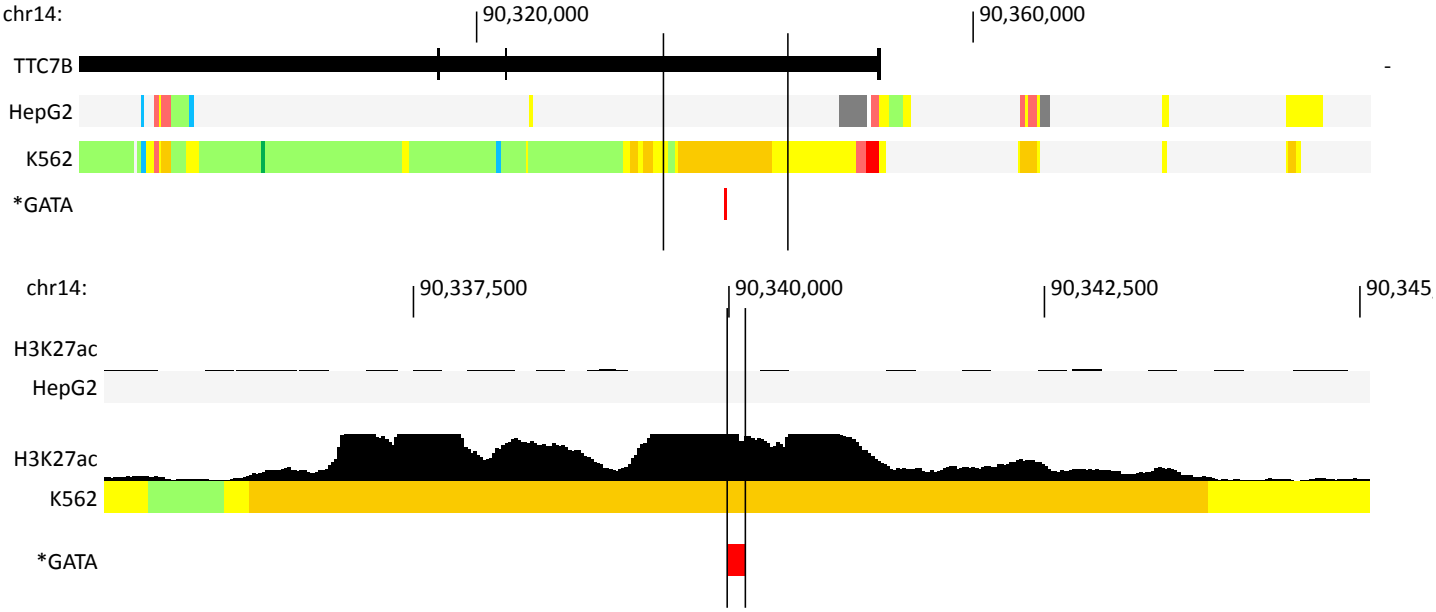
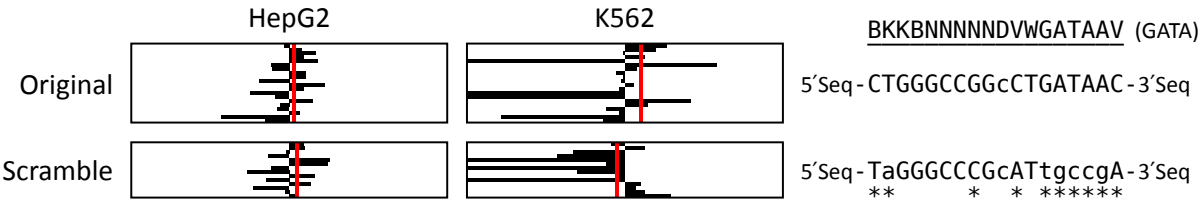
593 GATA in K562 enhancer (conserved at 60% confidence)

chr14 90340050 90340067 - (hg18)



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3′Seq = atccccctgcctggtagagtcacttcctgccctgctgggctccggggacaggccaaaccagct
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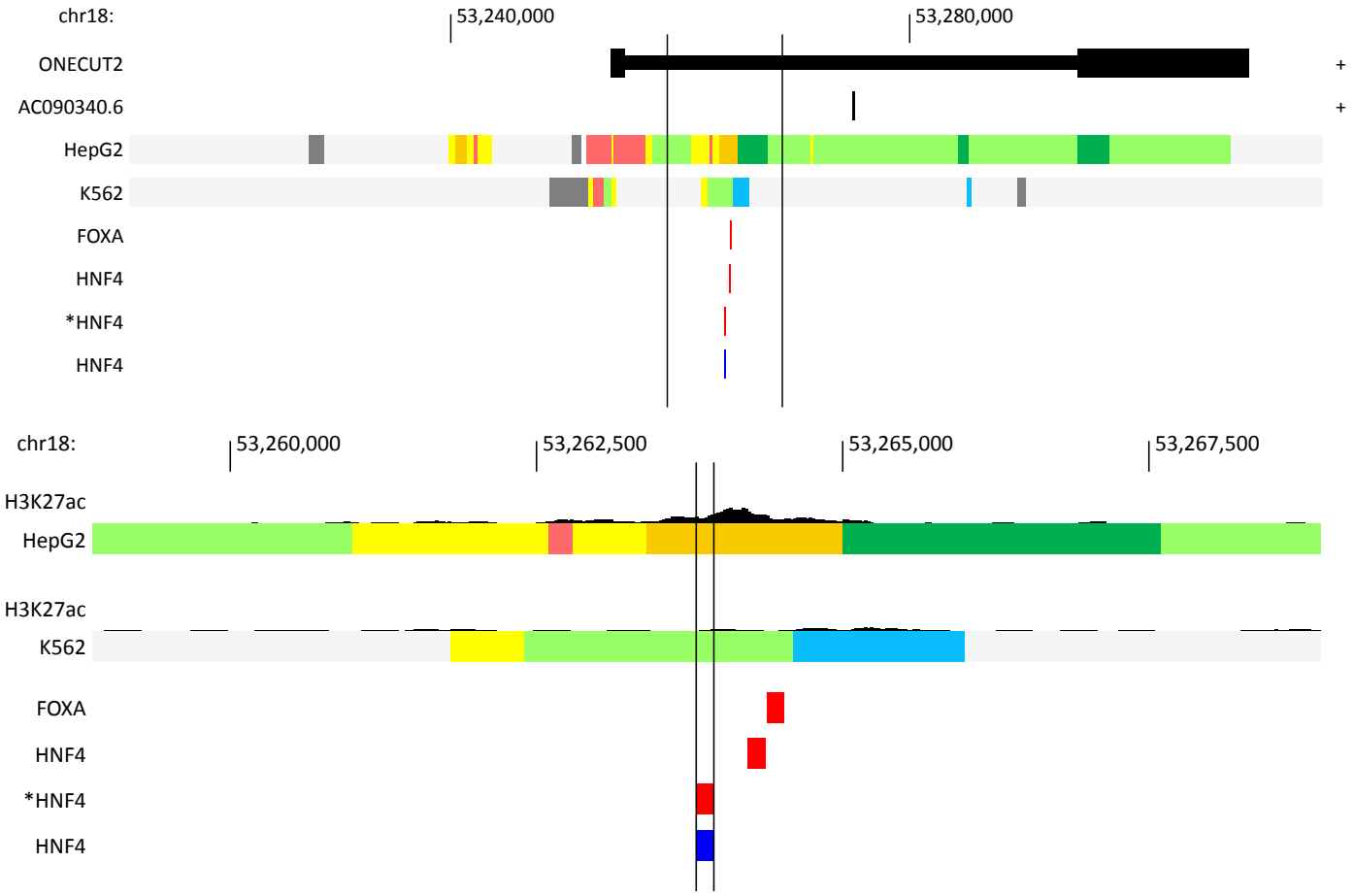
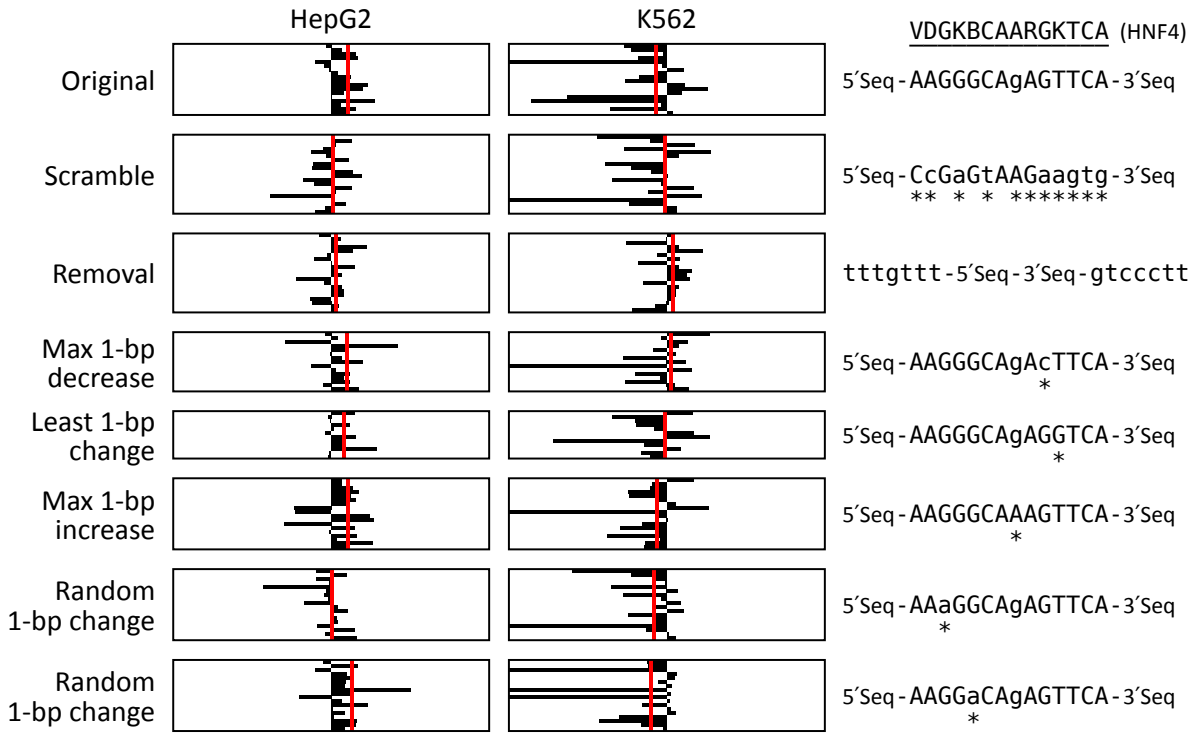
594 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr18 53263870 53263883 + (hg18)





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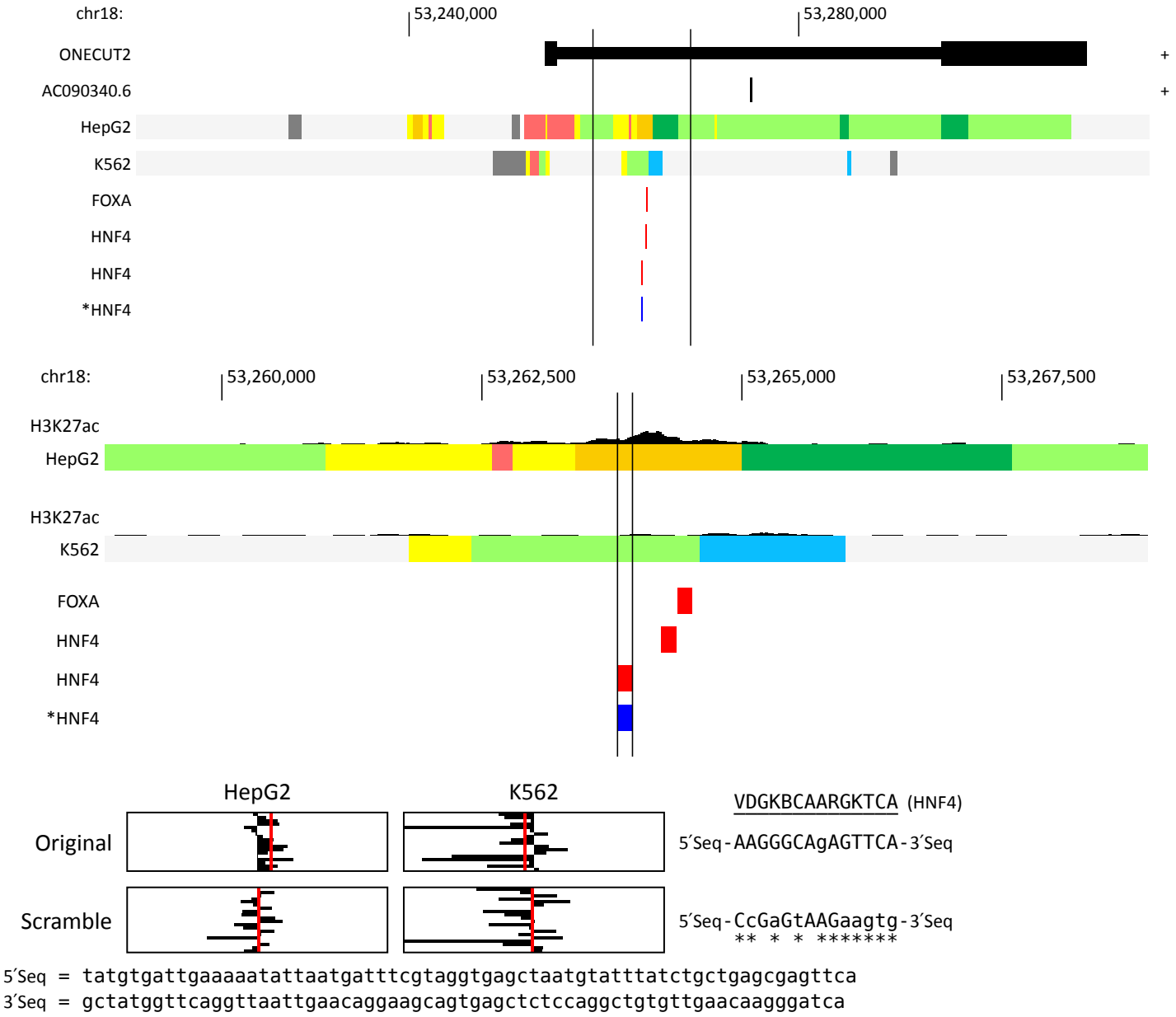
595 HNF4 in HepG2 enhancer

chr18 53263870 53263883 + (hg18)



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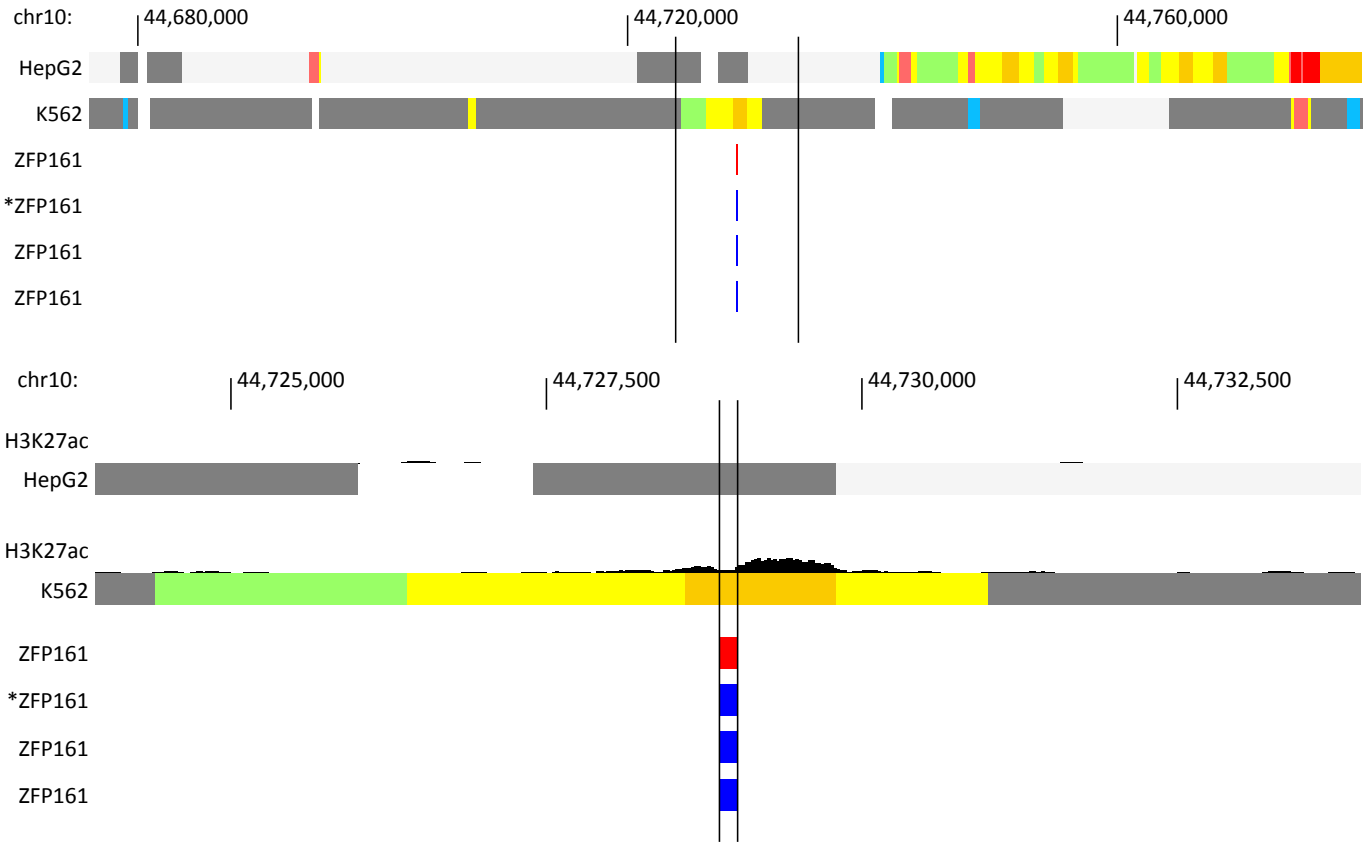
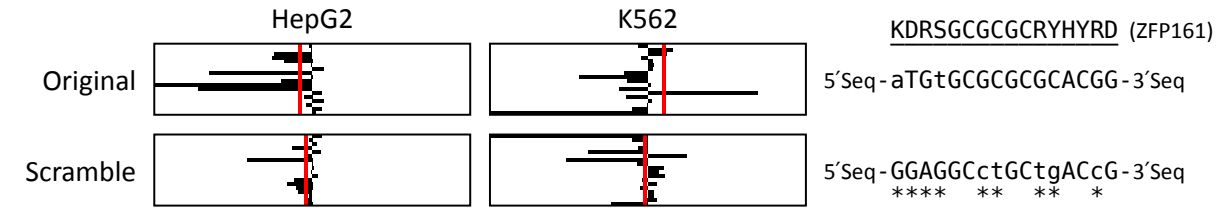
596 ZFP161 in K562 enhancer

chr10 44728936 44728951 - (hg18)





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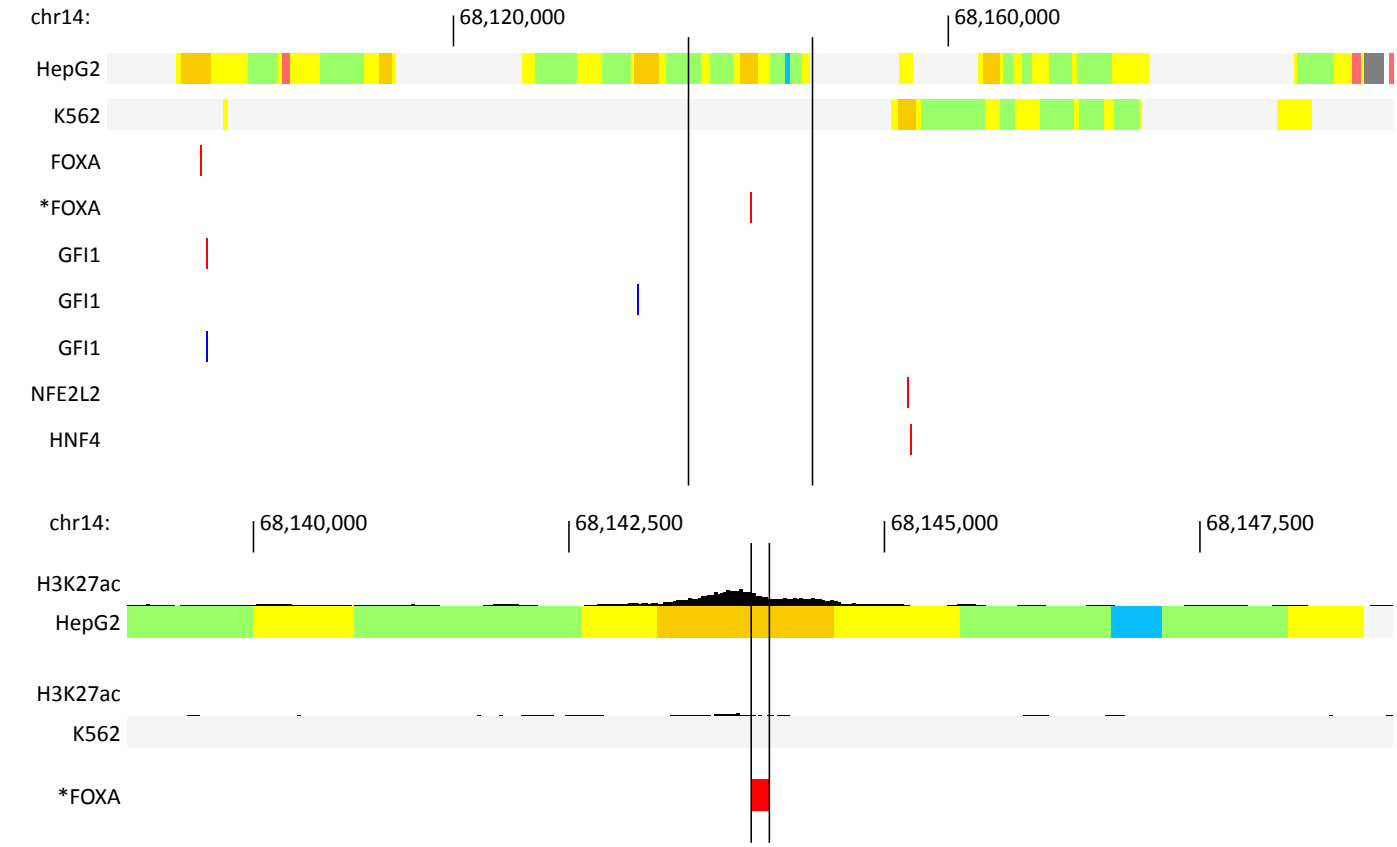
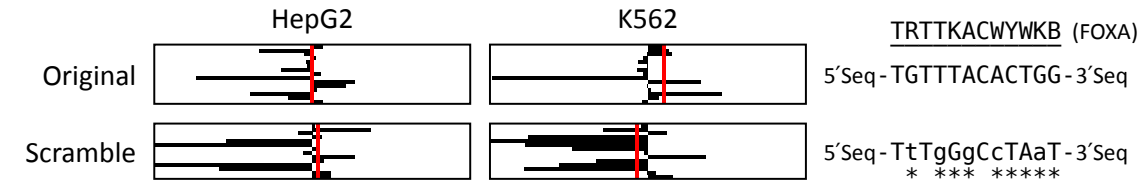
597 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 68144011 68144022 + (hg18)





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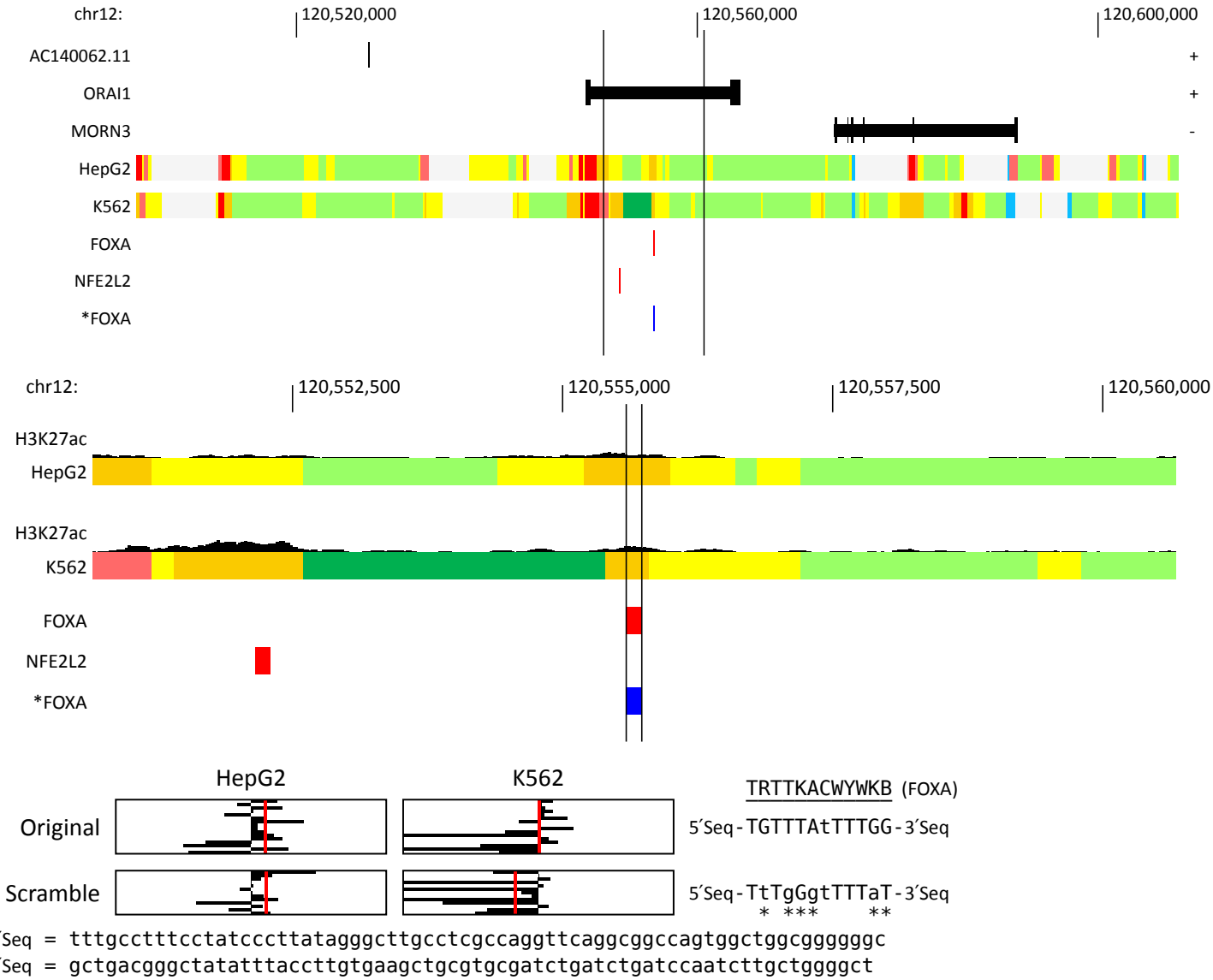
598 FOXA in K562 enhancer

chr12 120555656 120555667 + (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTTAtTTTGG-3′Seq

5′Seq-TtTgGgtTTTaT-3′Seq

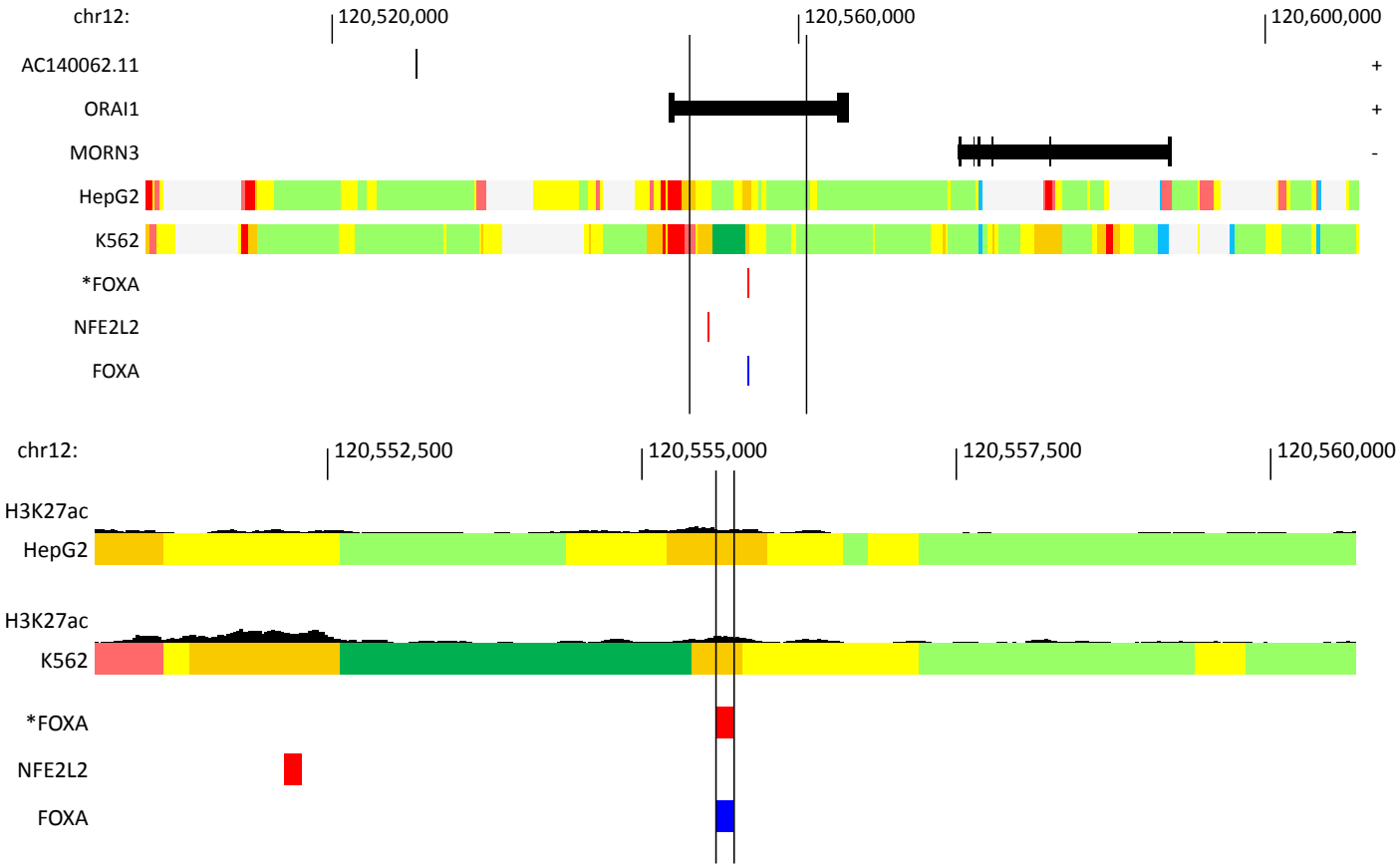
* *** **

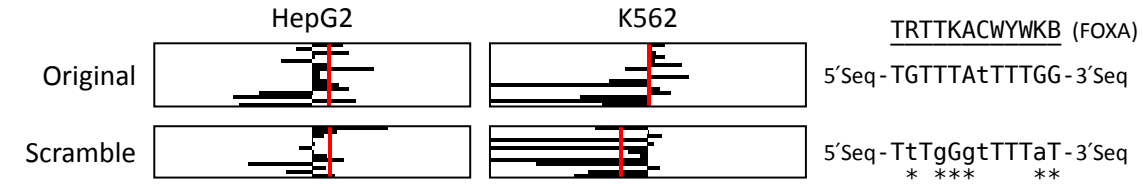
5′Seq = tttgcctttcctatcccttatagggcttgcctcgccaggttcaggcggccagtggctggcgggggc

3′Seq = gctgacgggctatatttaccttgtgaagctgcgtgcgatctgatctgatccaatcttgctggggct

599 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr12 120555656 120555667 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTAtTTTGG-3′Seq

5′Seq-TtTgGgtTTTaT-3′Seq

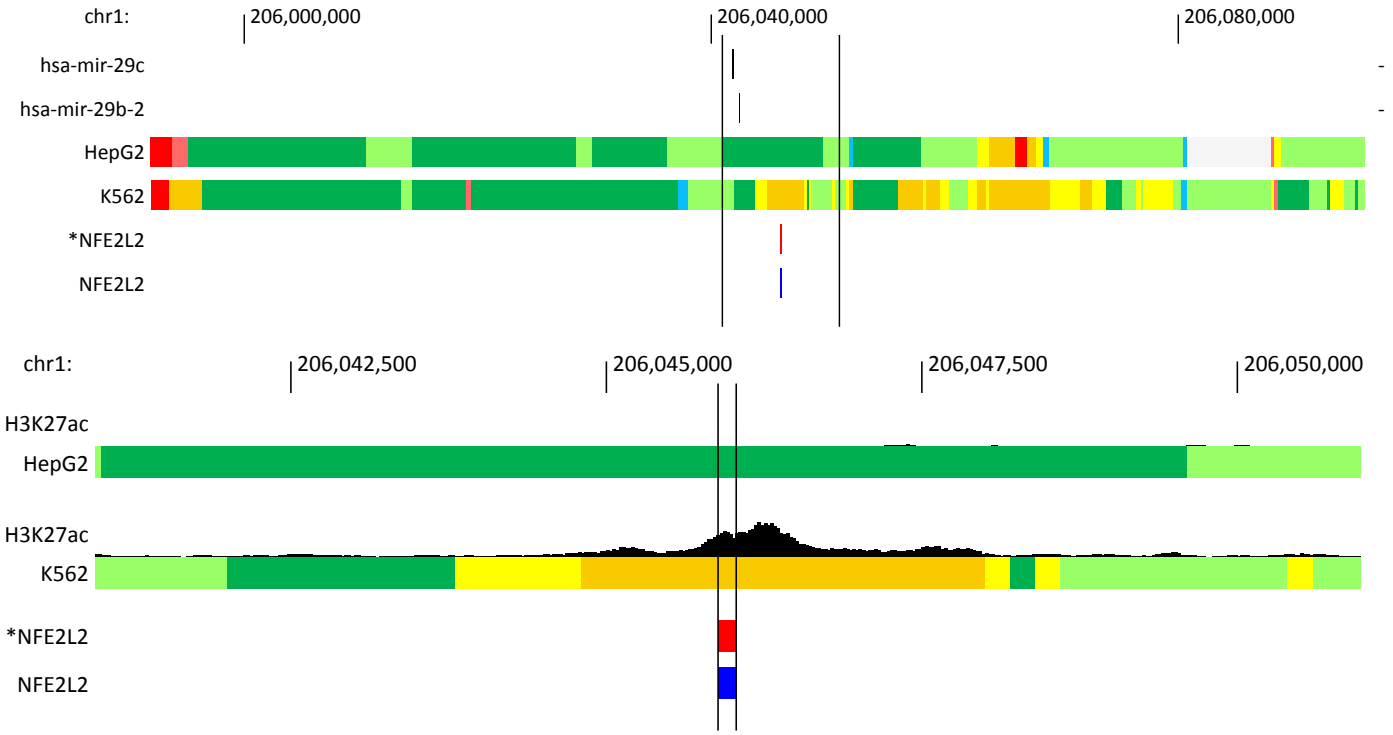
* *** **

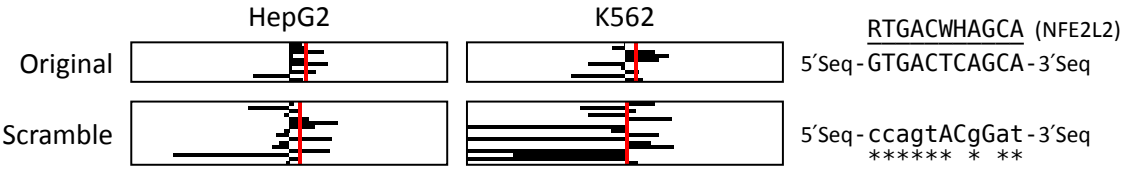
5′Seq = tttgcctttcctatcccttatagggcttgcctcgccaggttcaggcggccagtggctggcgggggc

3′Seq = gctgacgggctatatttaccttgtgaagctgcgtgcgatctgatctgatccaatcttgctggggct

600 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 206045952 206045962 - (hg18)





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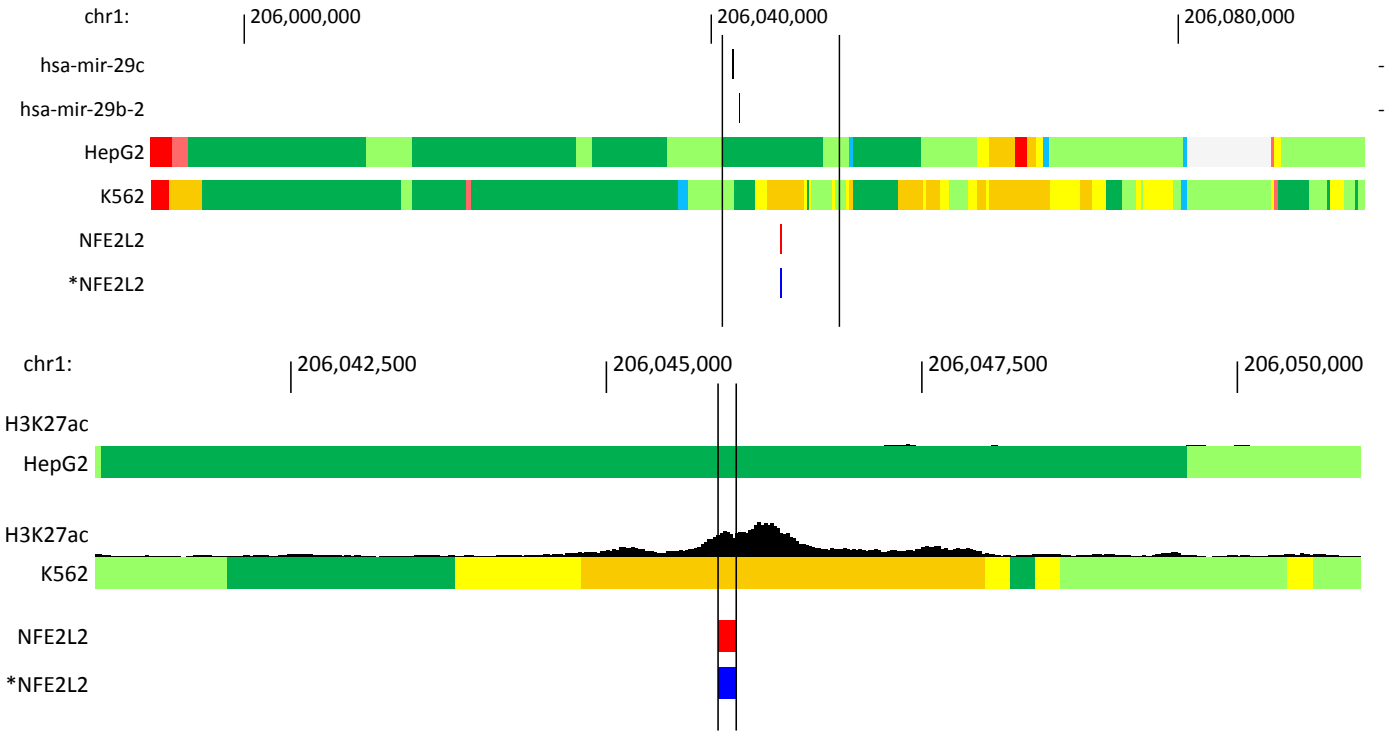
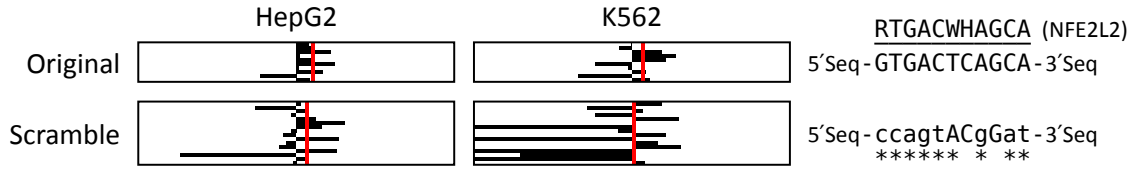
601 NFE2L2 in K562 enhancer

chr1 206045952 206045962 - (hg18)





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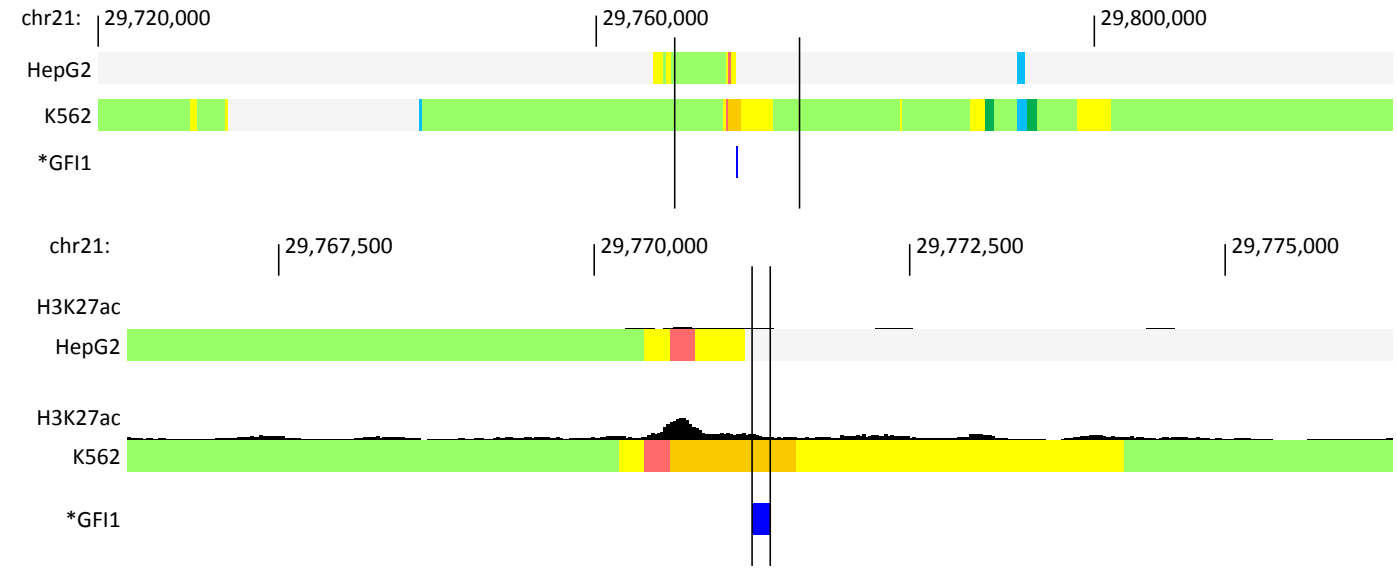
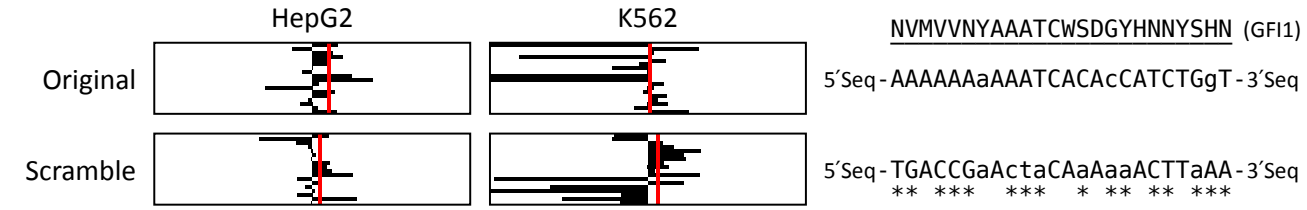
602 GFI1 in K562 enhancer

chr21 29771312 29771335 - (hg18)





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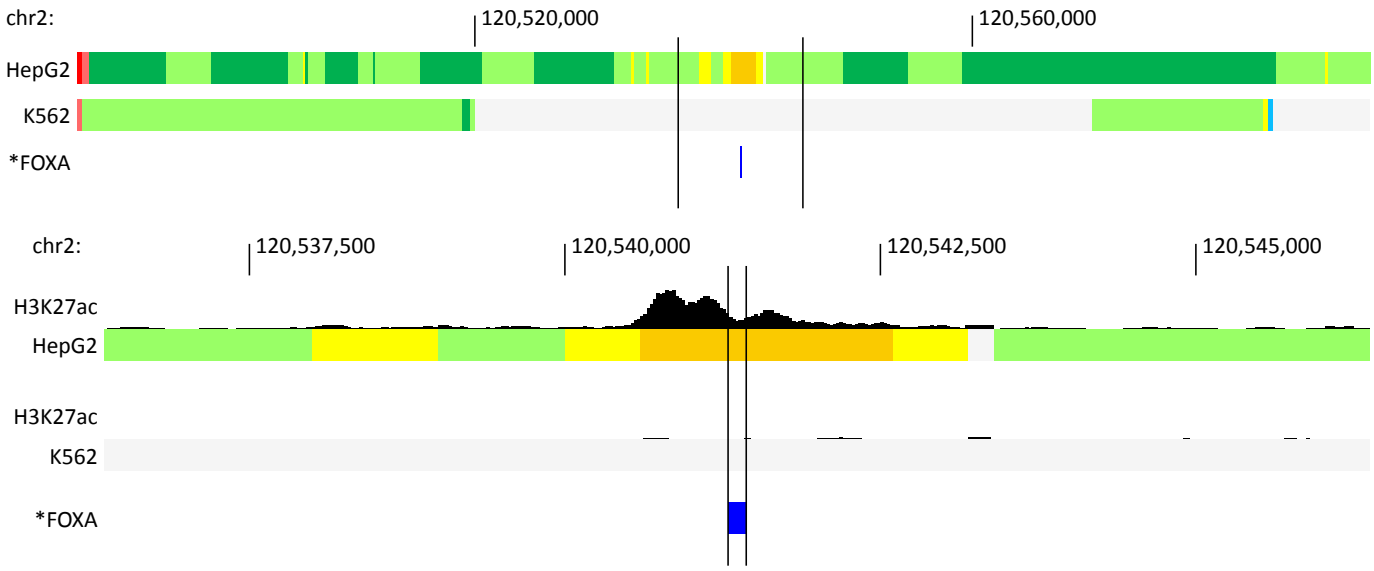
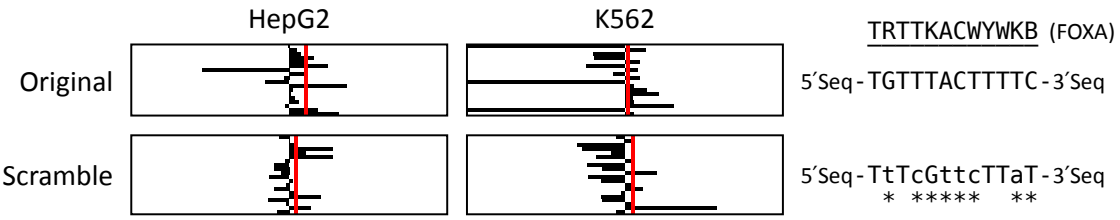
603 FOXA in HepG2 enhancer

chr2 120541360 120541371 - (hg18)





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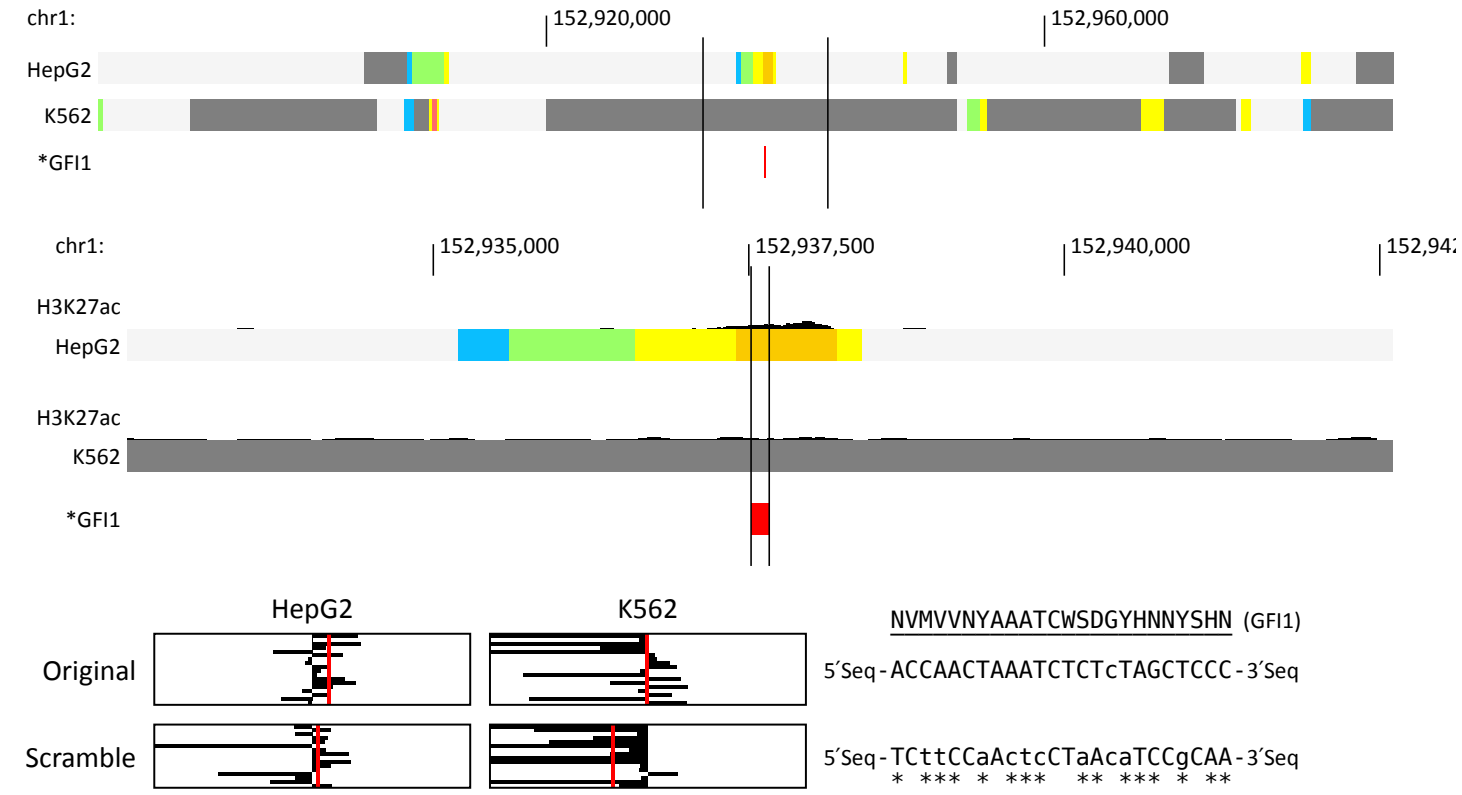
604 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 152937579 152937602 - (hg18)



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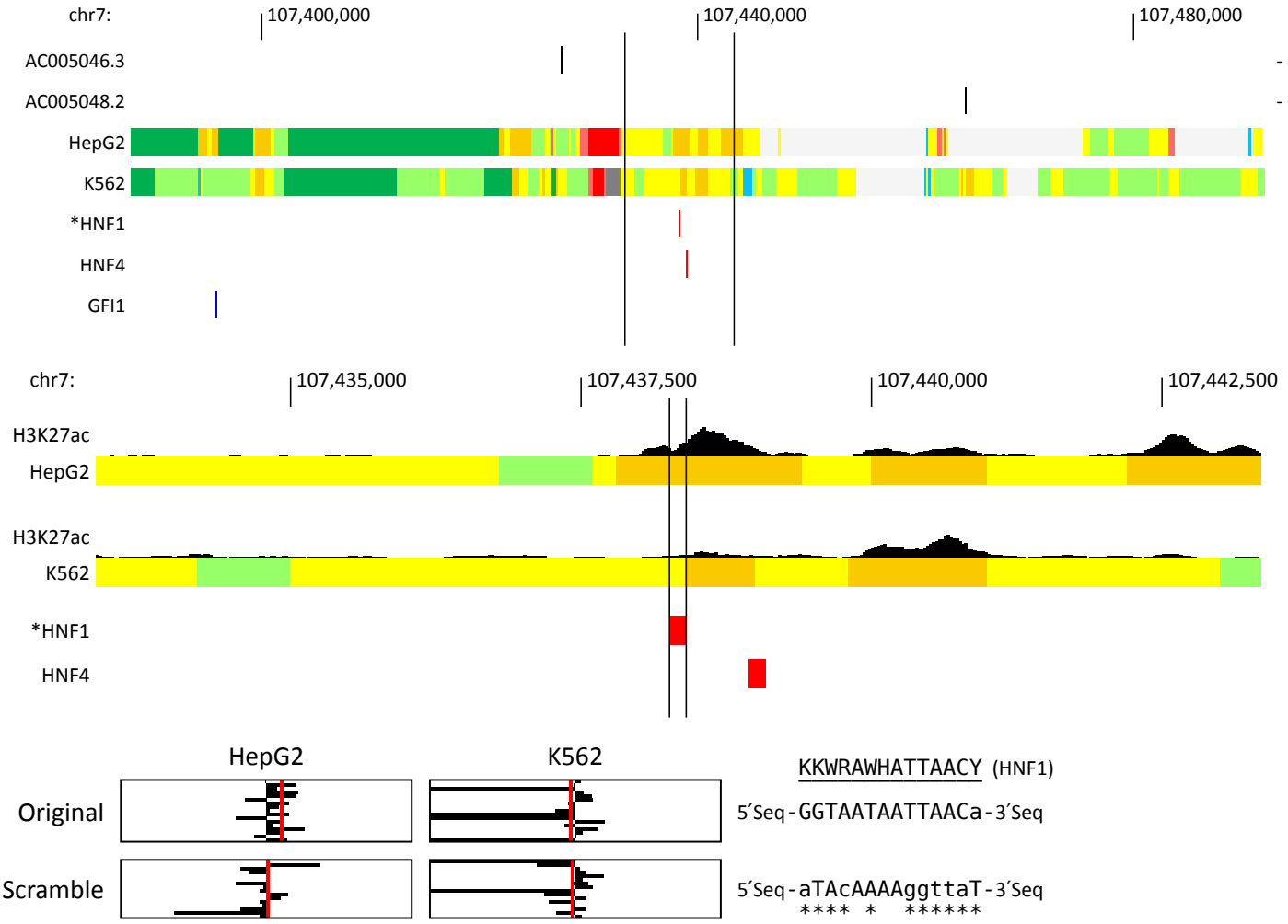
605 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr7 107438327 107438340 - (hg18)



5′Seq = tgtccaagccatgaatagtagtagagtgtttaacttgctcattgaattgtttcctggatcacccta
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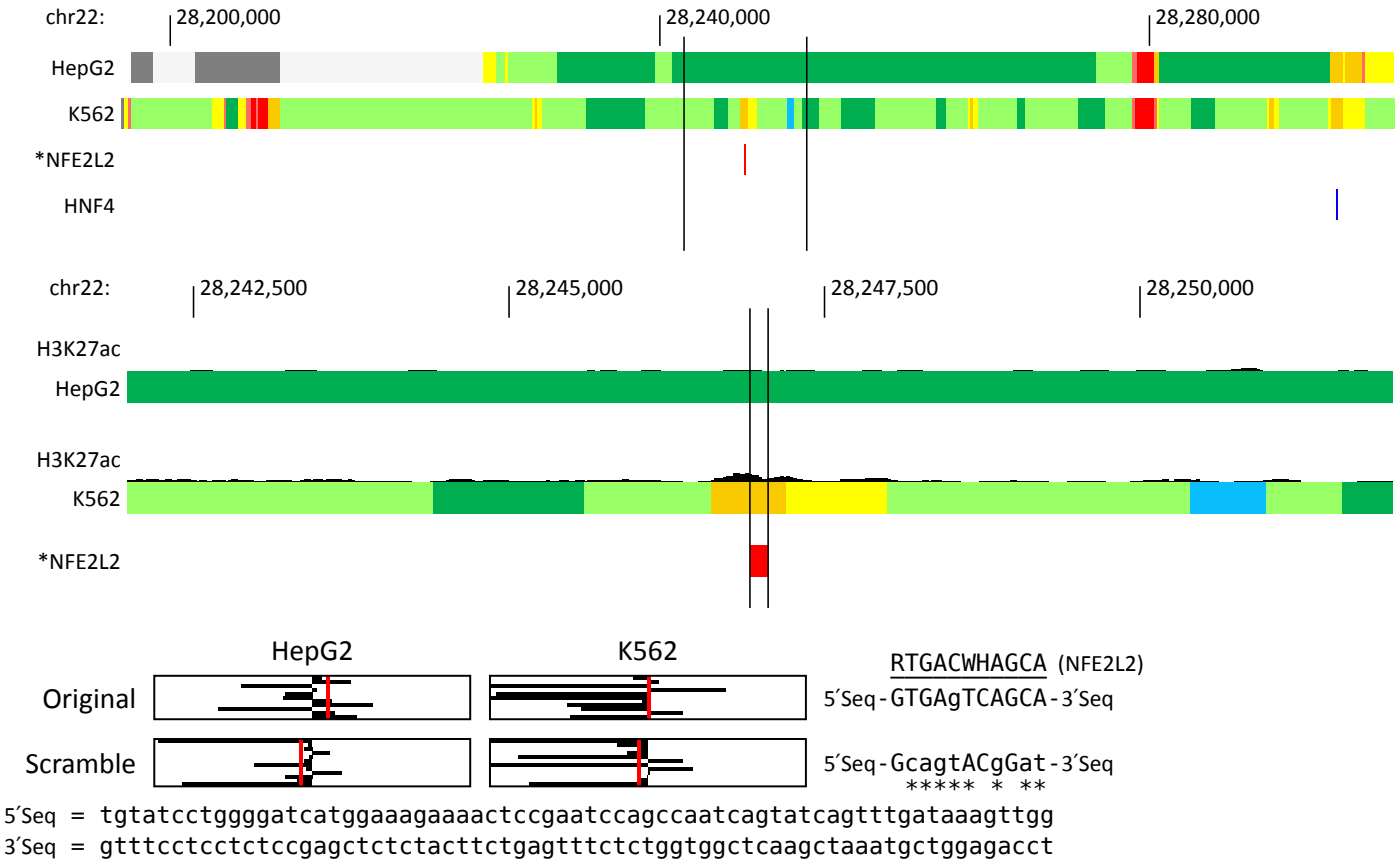
606 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr22 28246976 28246986 - (hg18)



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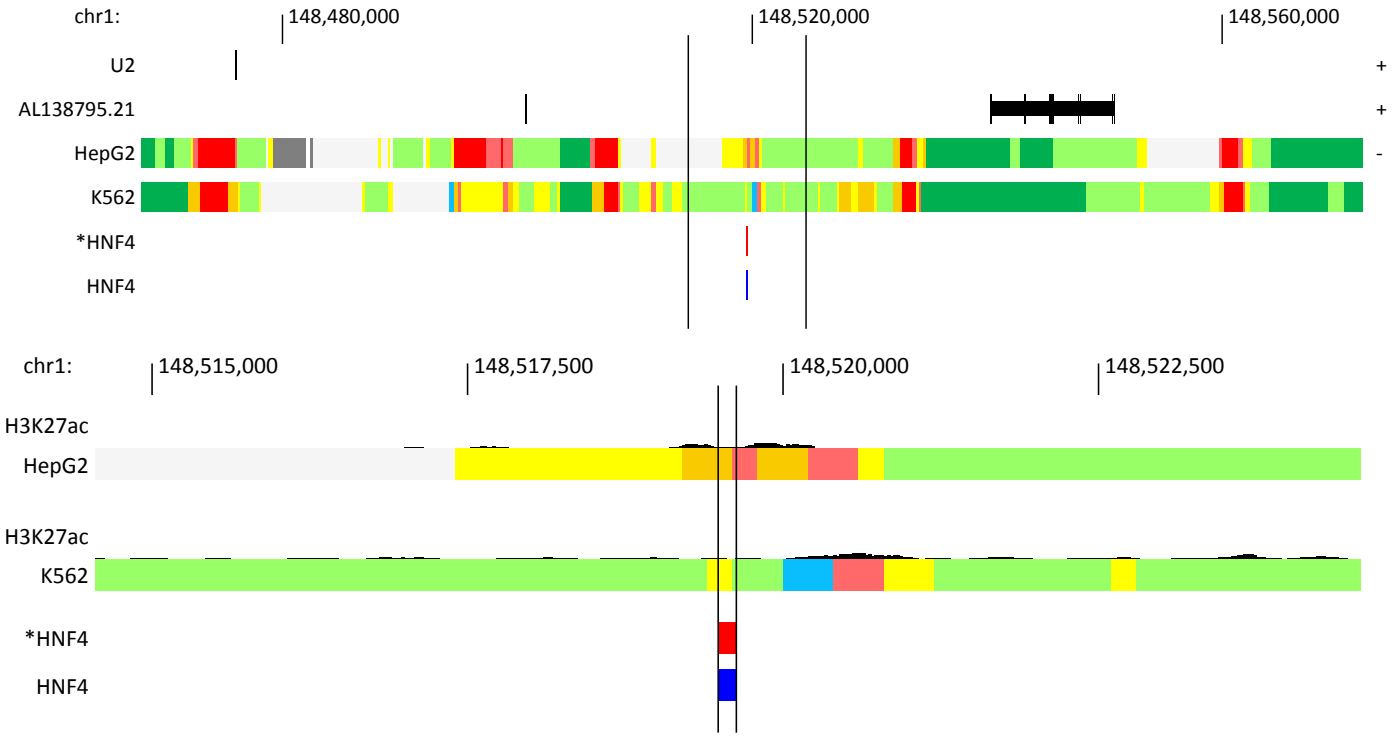
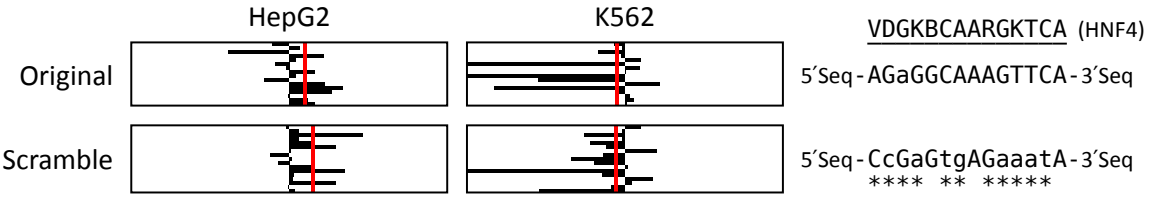
607 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr1 148519552 148519565 + (hg18)





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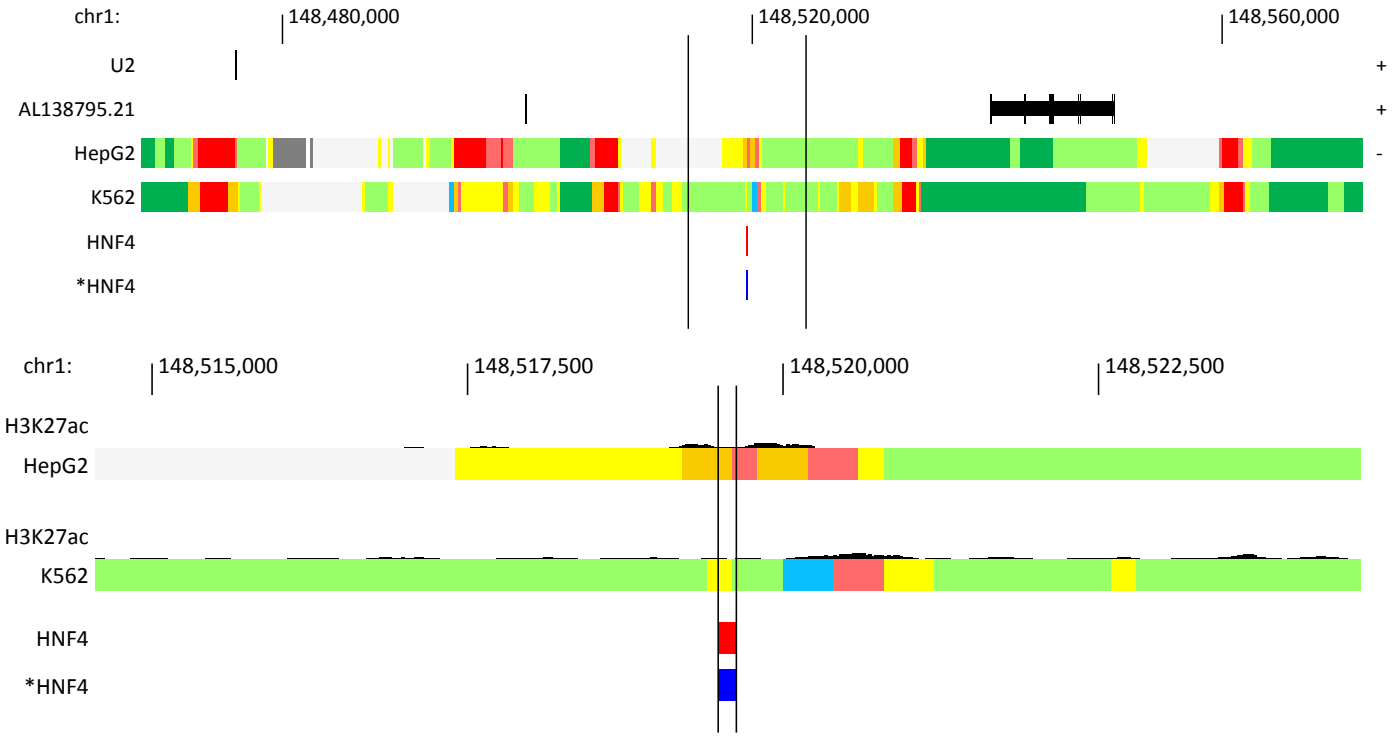
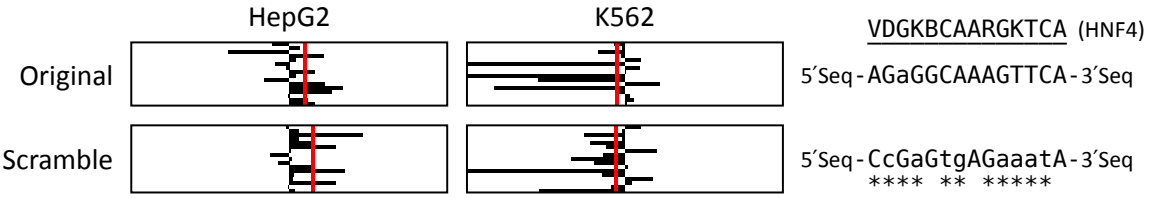
608 HNF4 in HepG2 enhancer

chr1 148519552 148519565 + (hg18)





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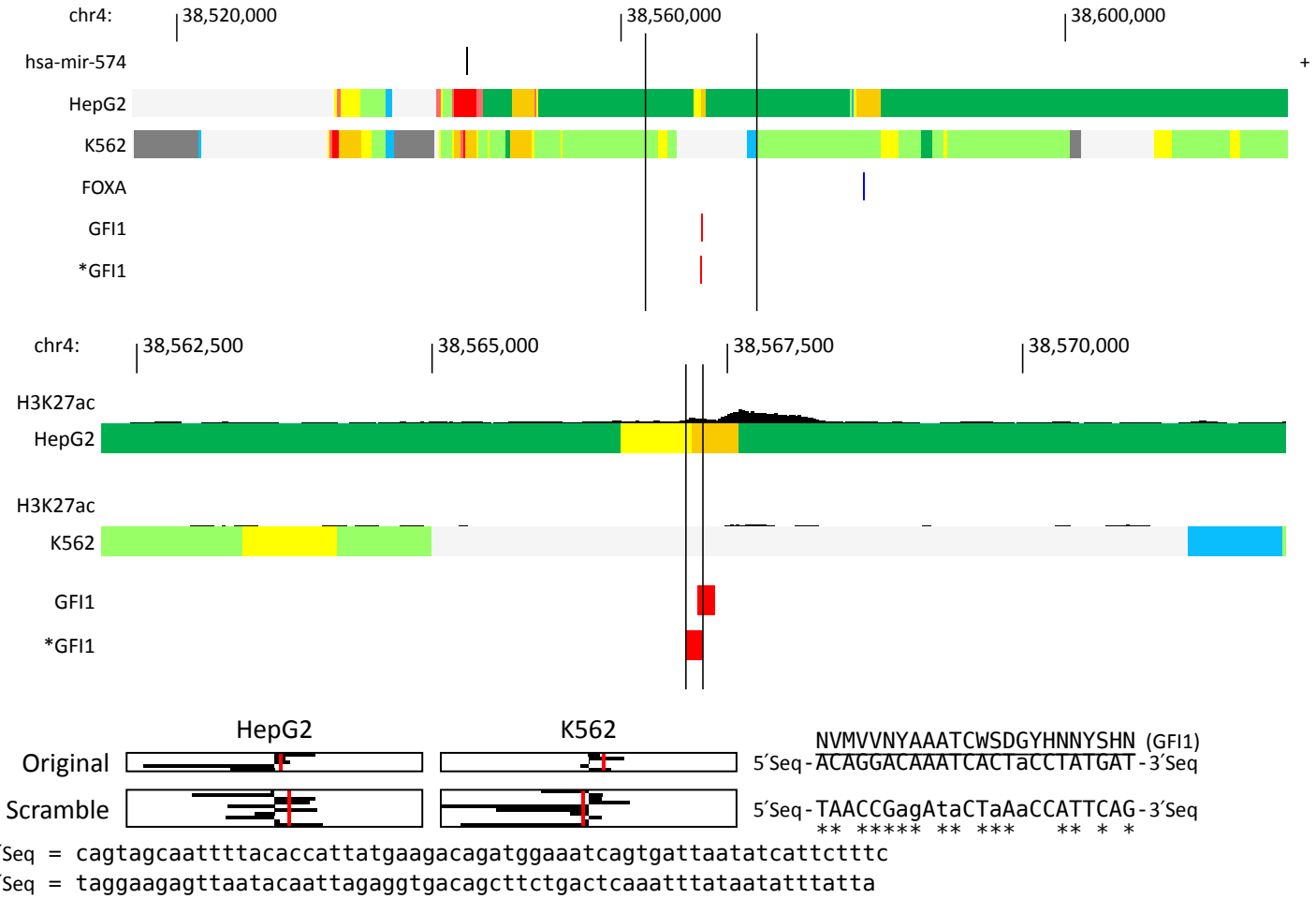
609 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr4 38567210 38567233 - (hg18)



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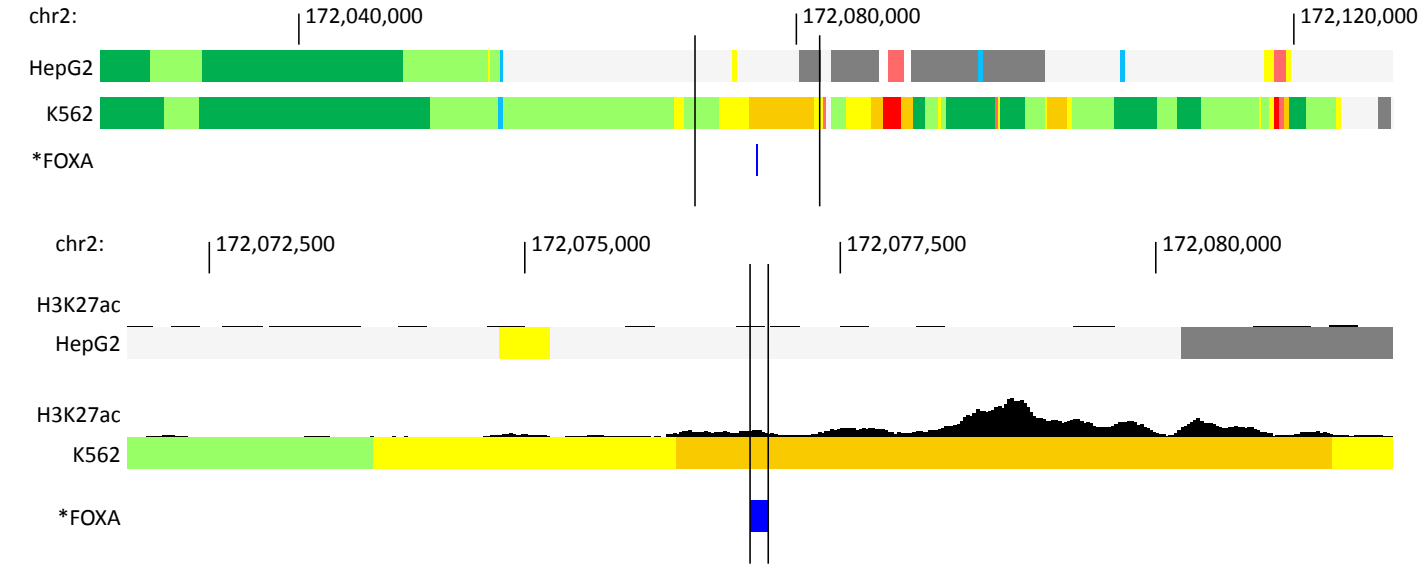
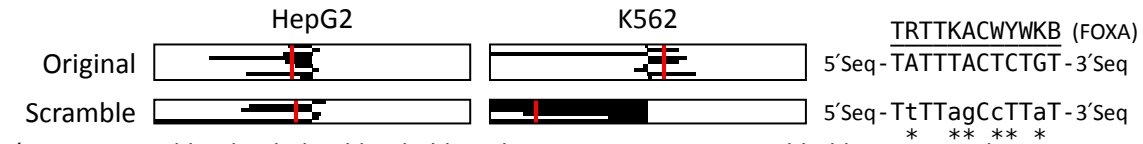
610 FOXA in K562 enhancer

chr2 172076852 172076863 - (hg18)





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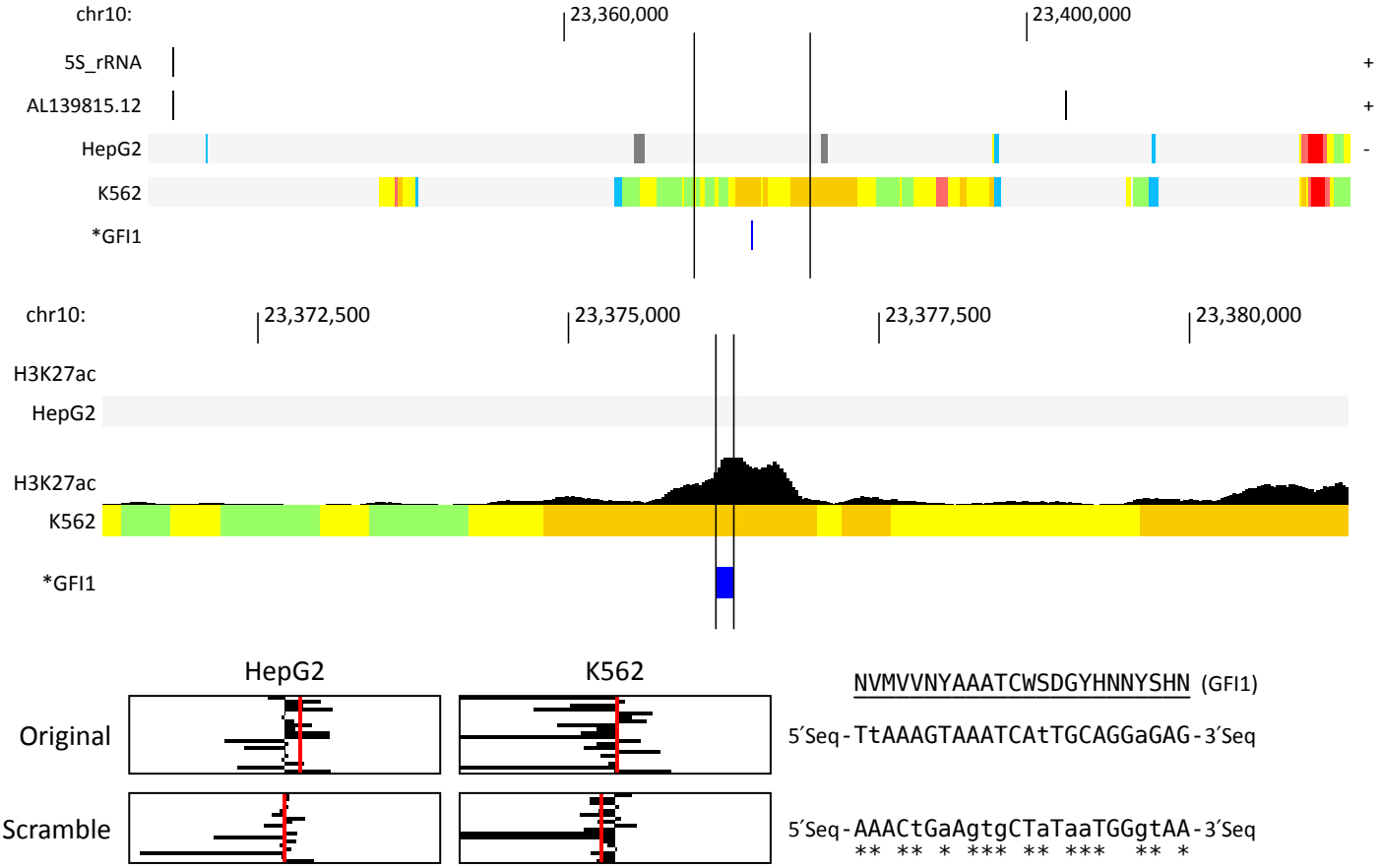
611 GFI1 in K562 enhancer

chr10 23376248 23376271 + (hg18)



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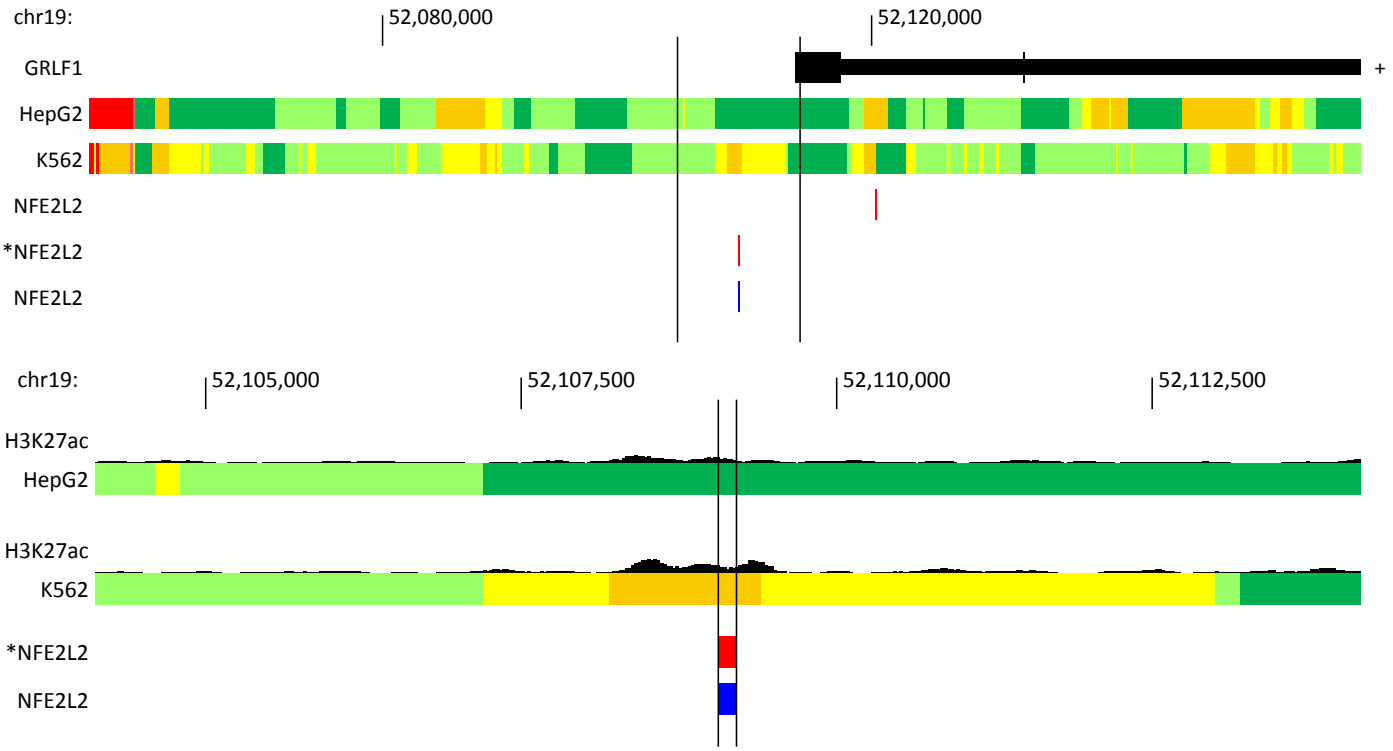
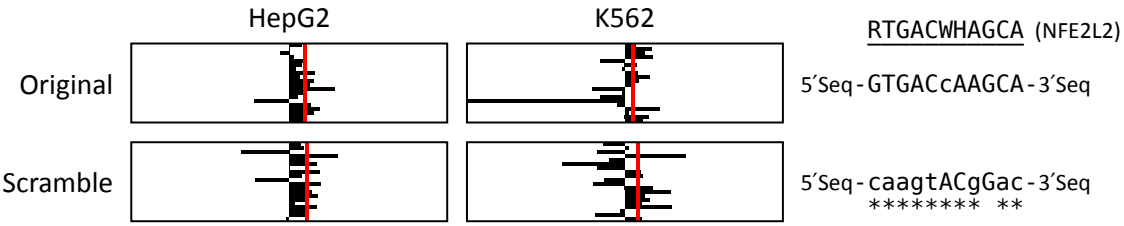
612 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr19 52109129 52109139 + (hg18)





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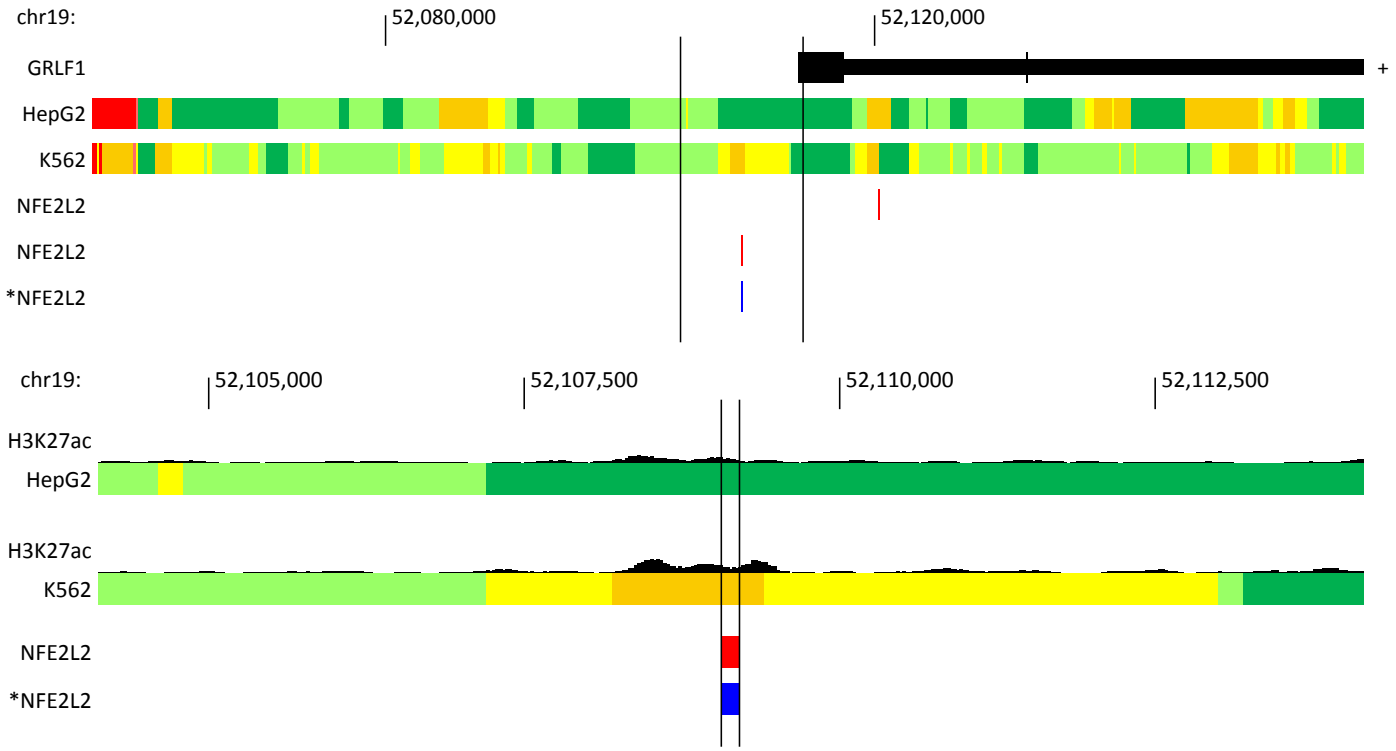
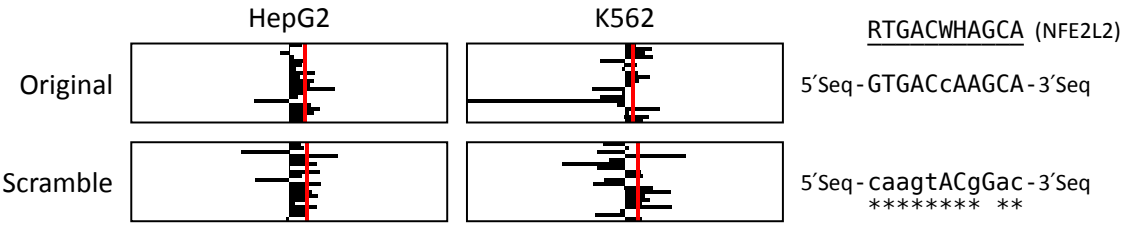
613 NFE2L2 in K562 enhancer

chr19 52109129 52109139 + (hg18)





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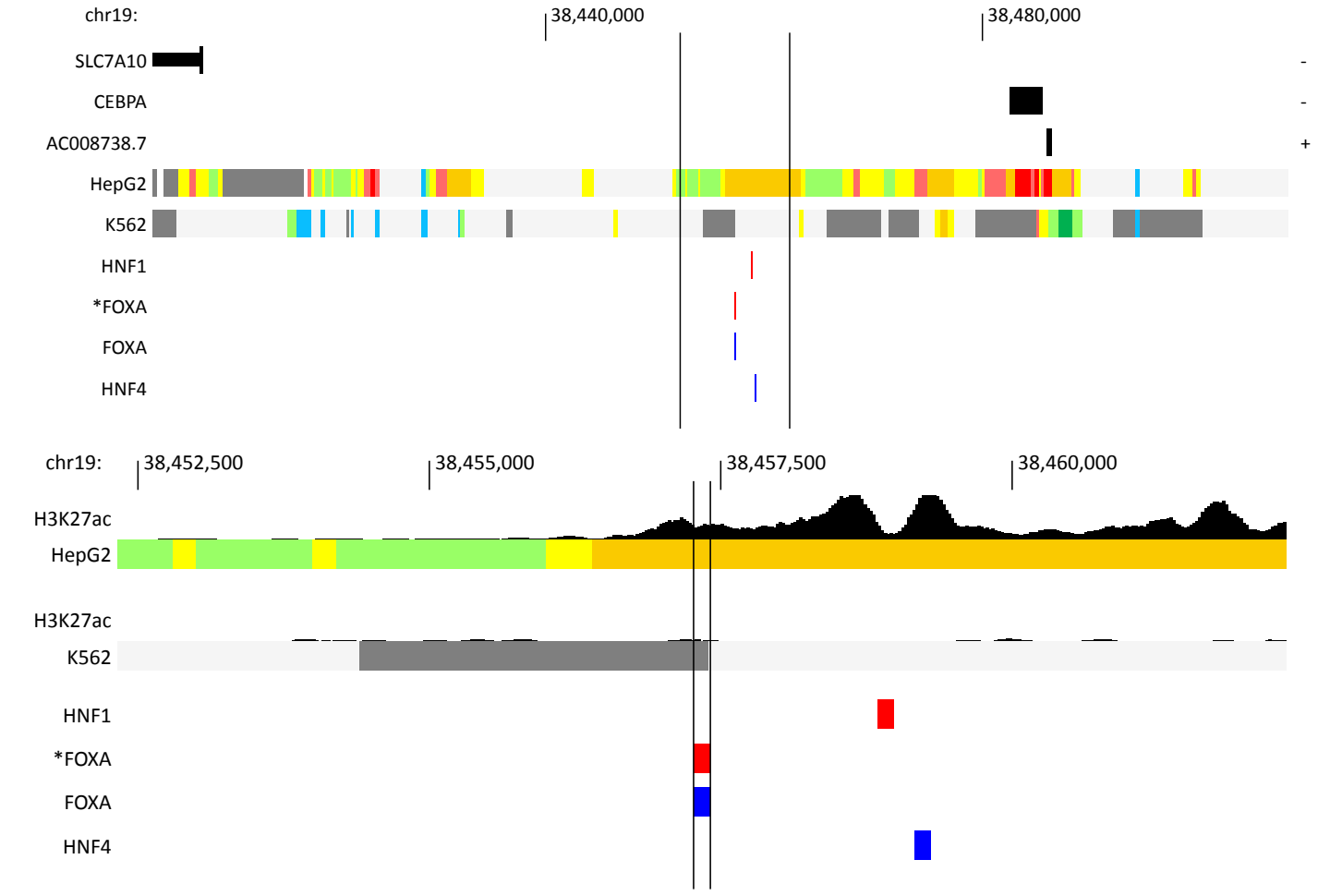
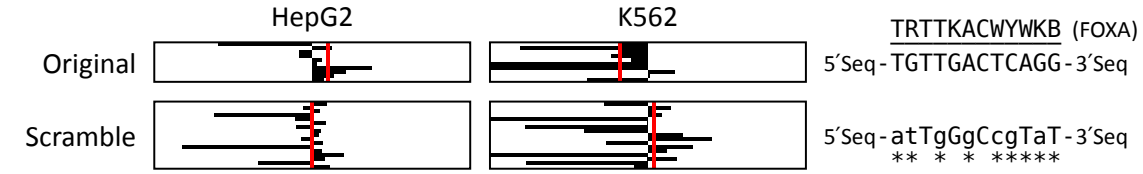
614 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr19 38457334 38457345 + (hg18)





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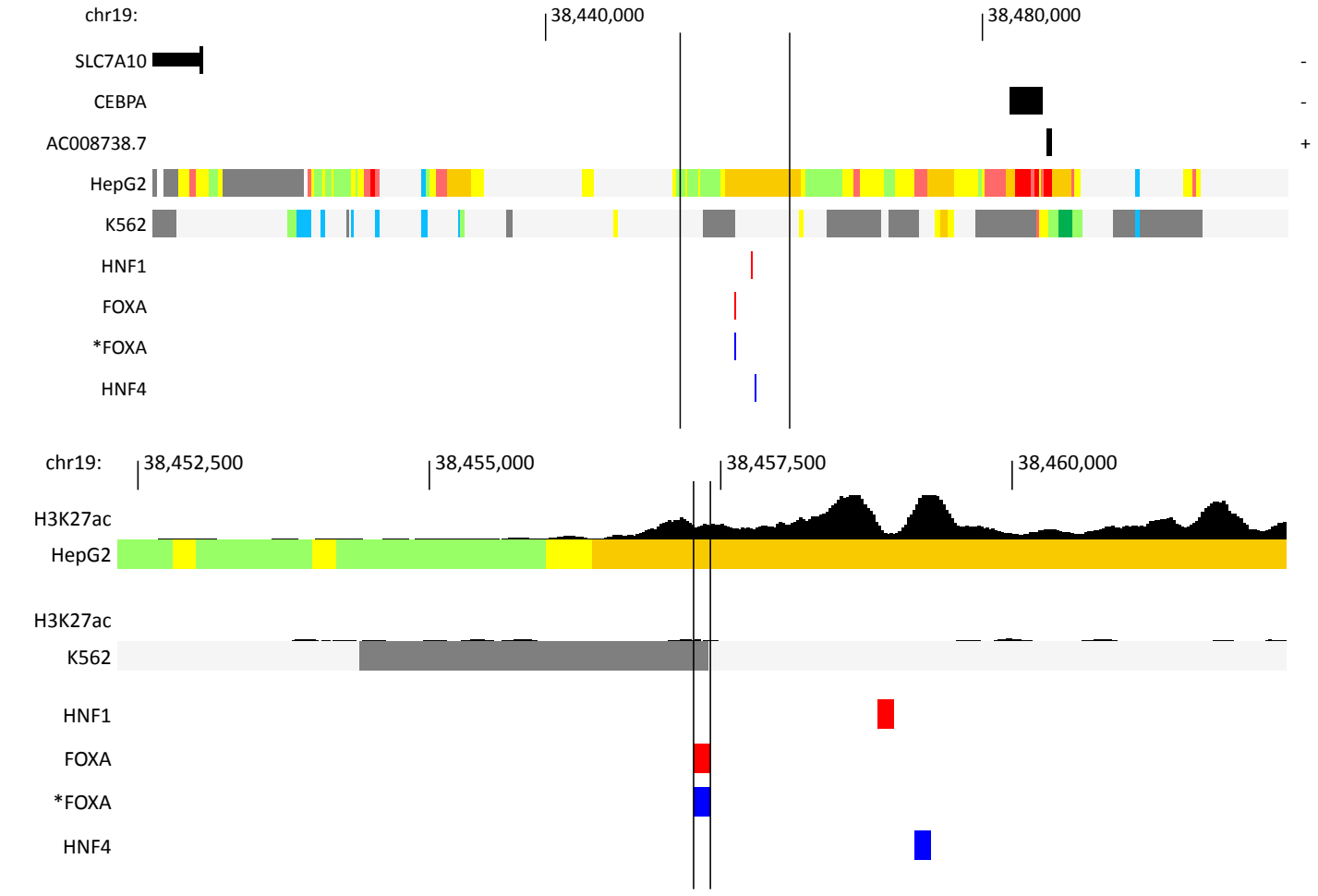
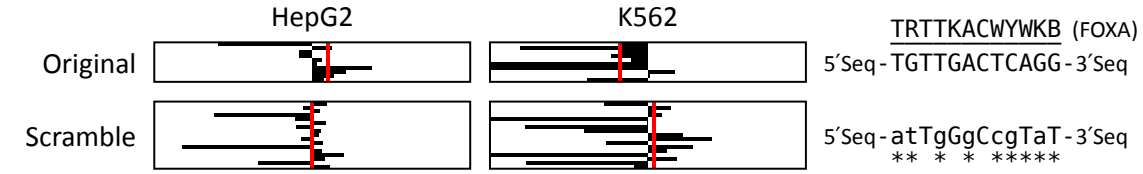
615 FOXA in HepG2 enhancer

chr19 38457334 38457345 + (hg18)





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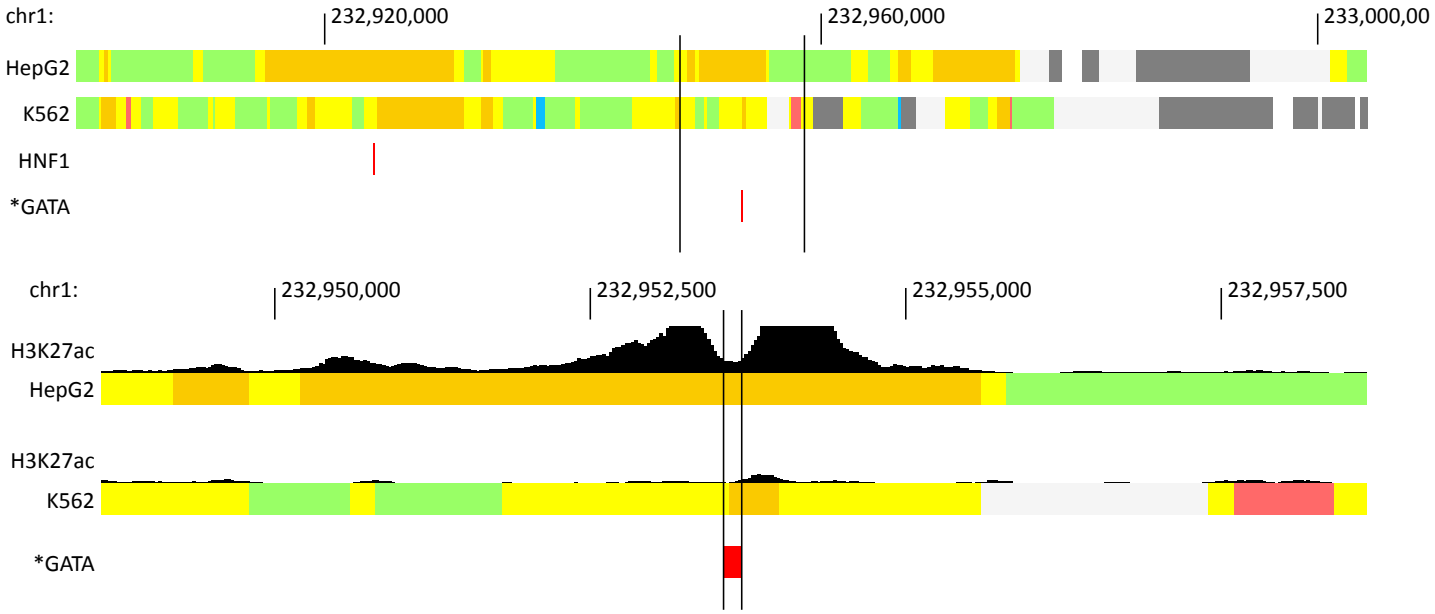
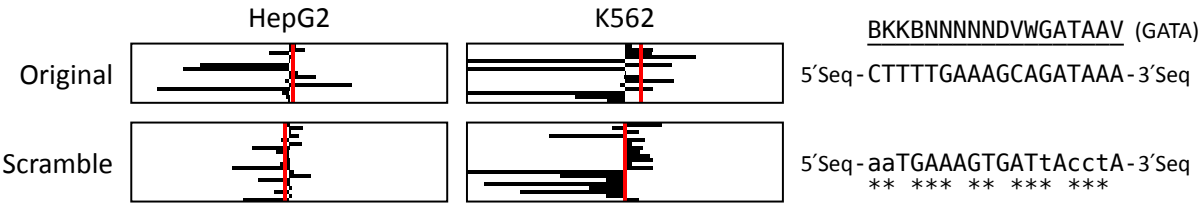
616 GATA in K562 enhancer (conserved at 60% confidence)

chr1 232953620 232953637 + (hg18)





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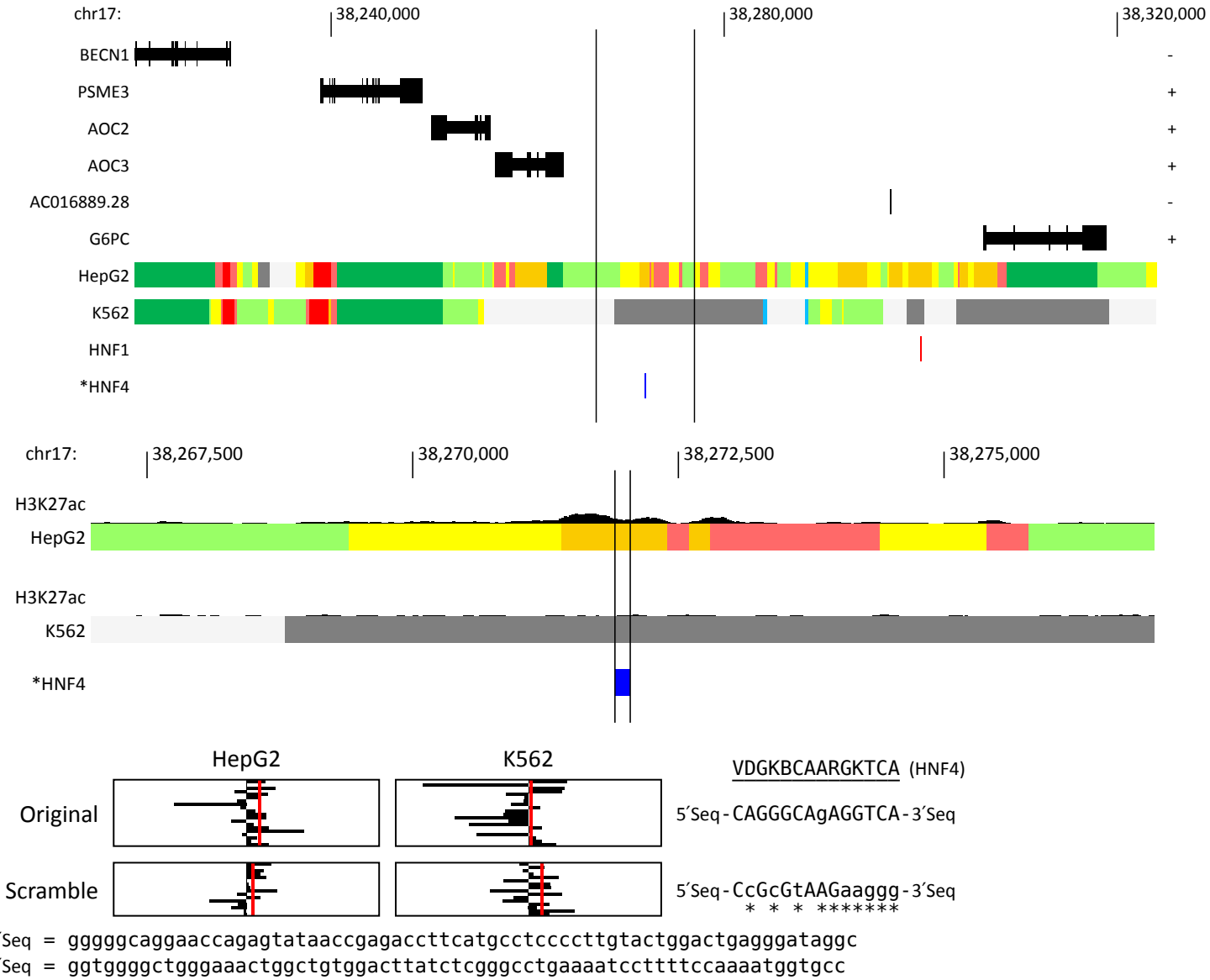
617 HNF4 in HepG2 enhancer

chr17 38271969 38271982 - (hg18)



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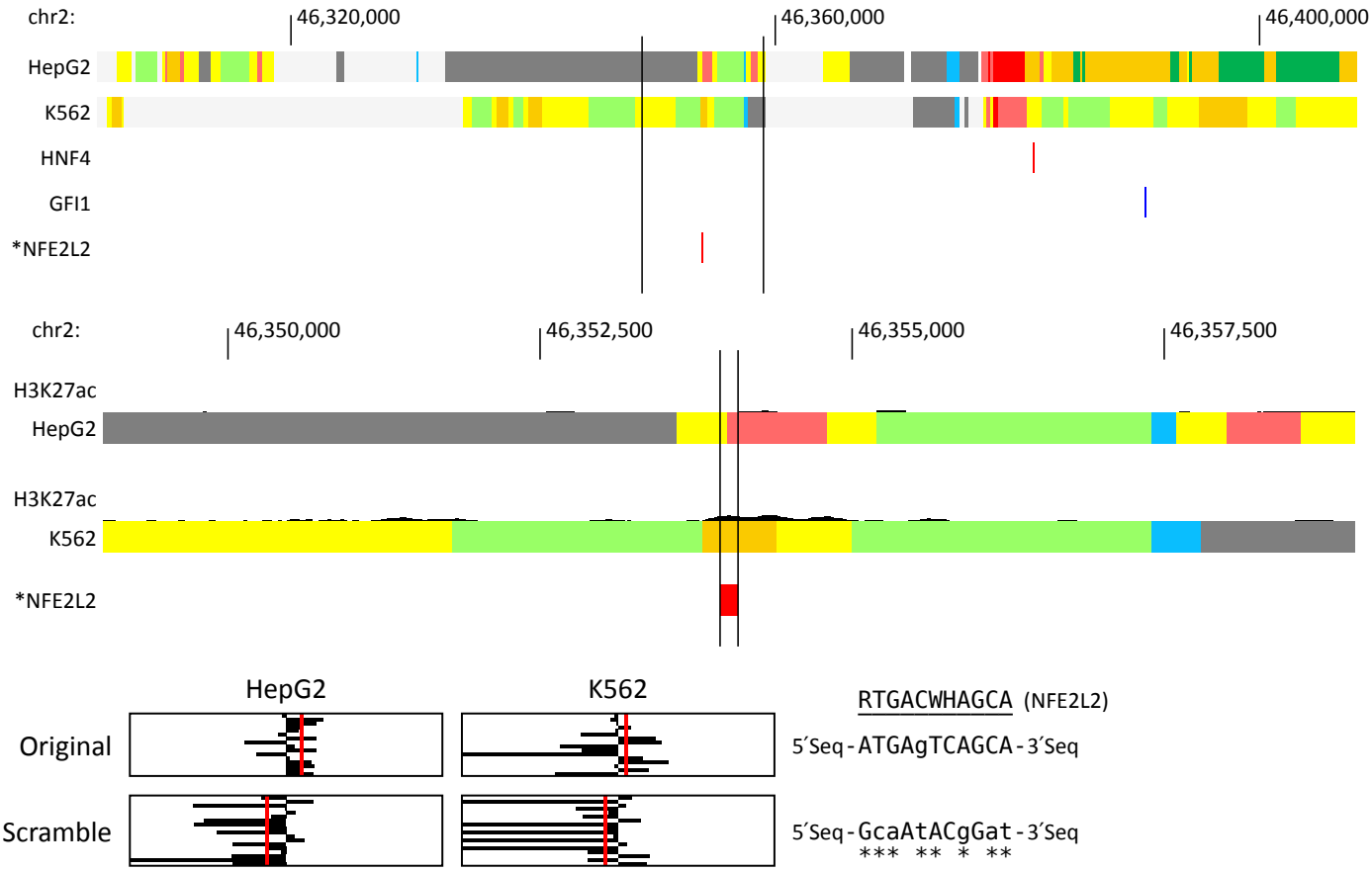
618 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr2 46354009 46354019 + (hg18)



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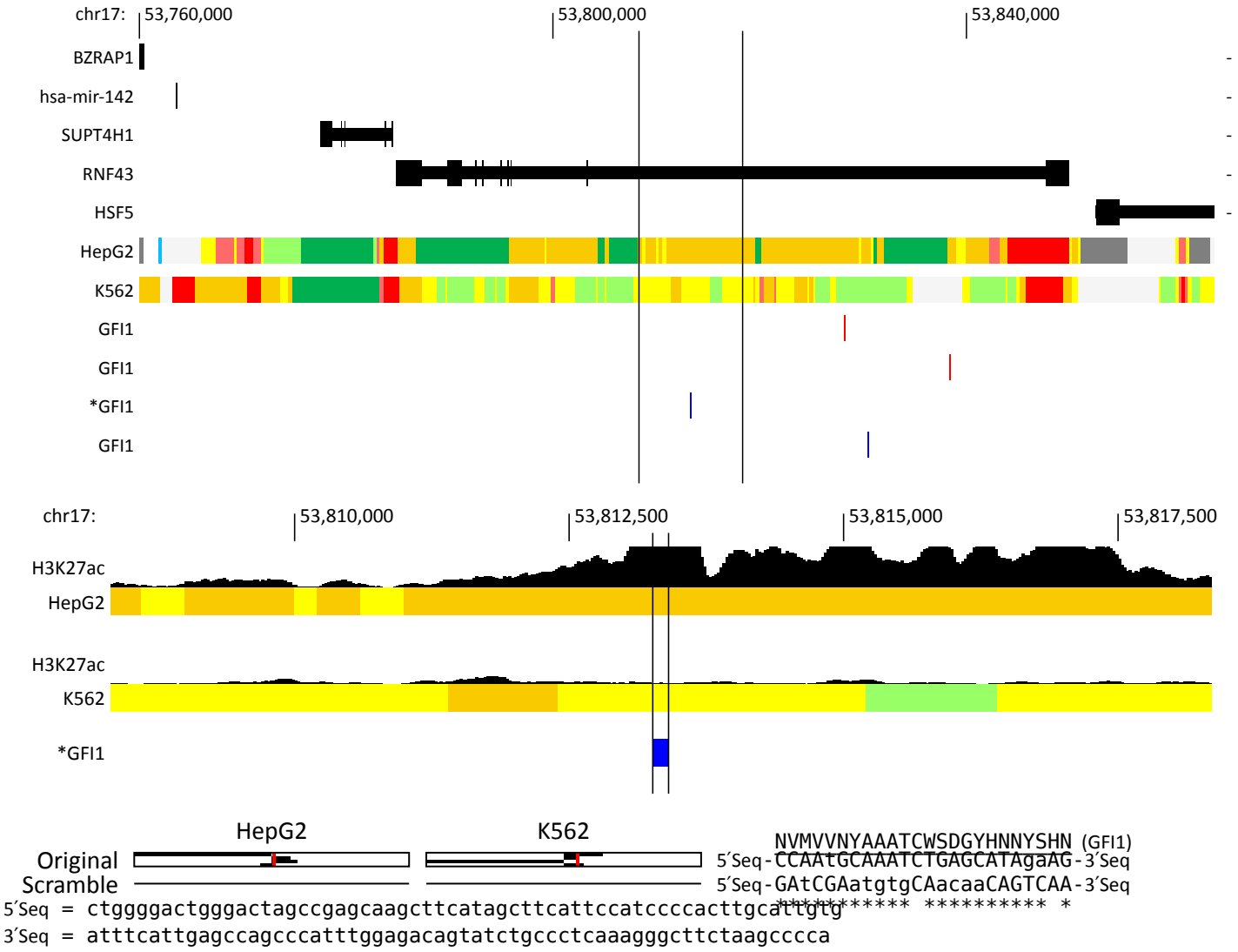
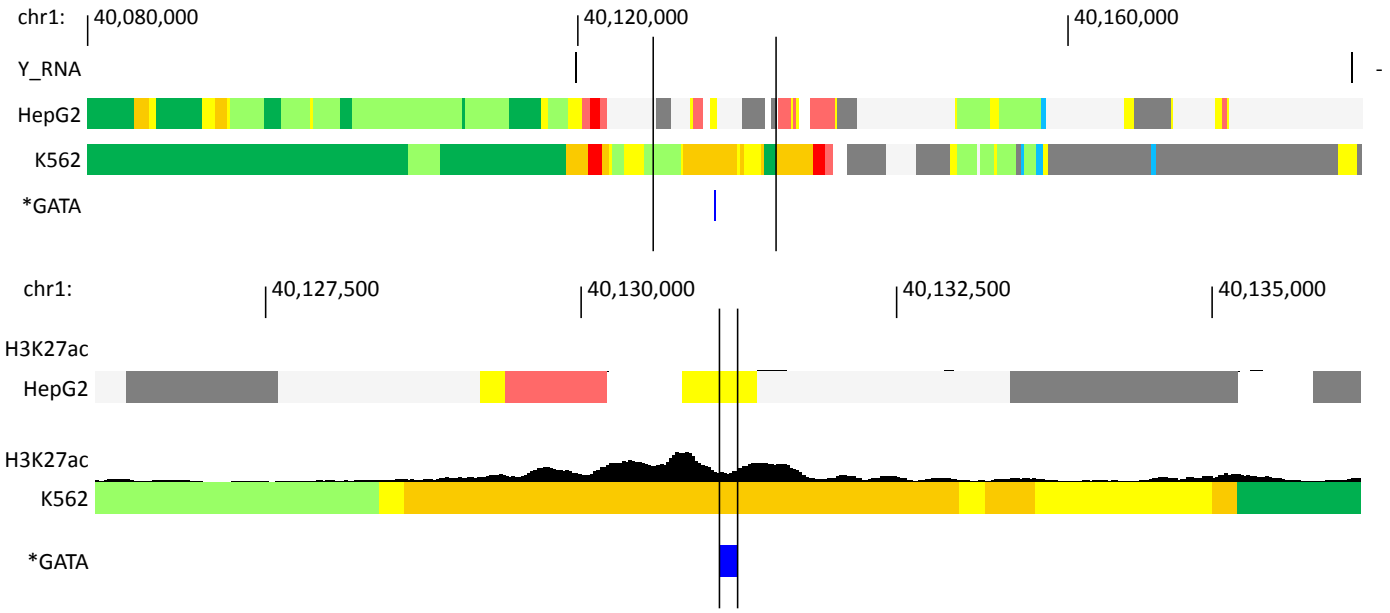
619 GFI1 in HepG2 enhancer

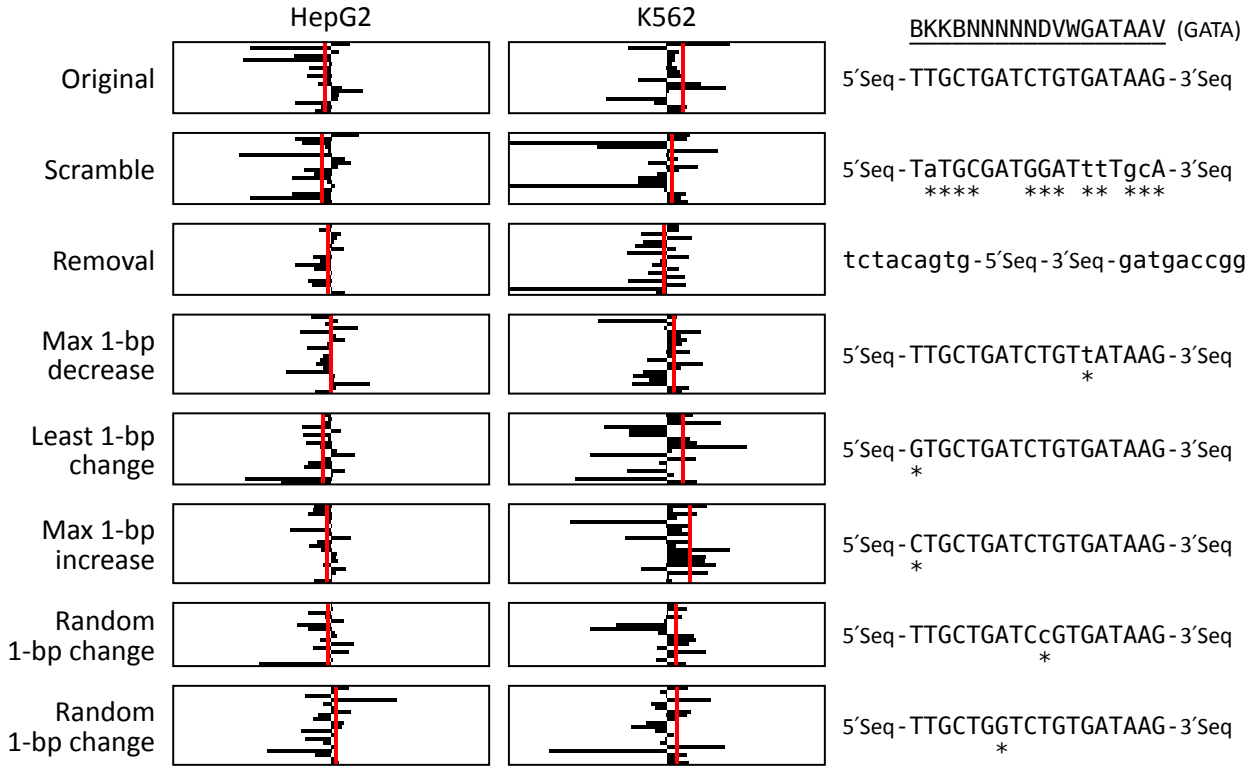
chr17 53813323 53813346 - (hg18)



620 GATA in K562 enhancer

chr1 40131160 40131177 - (hg18)





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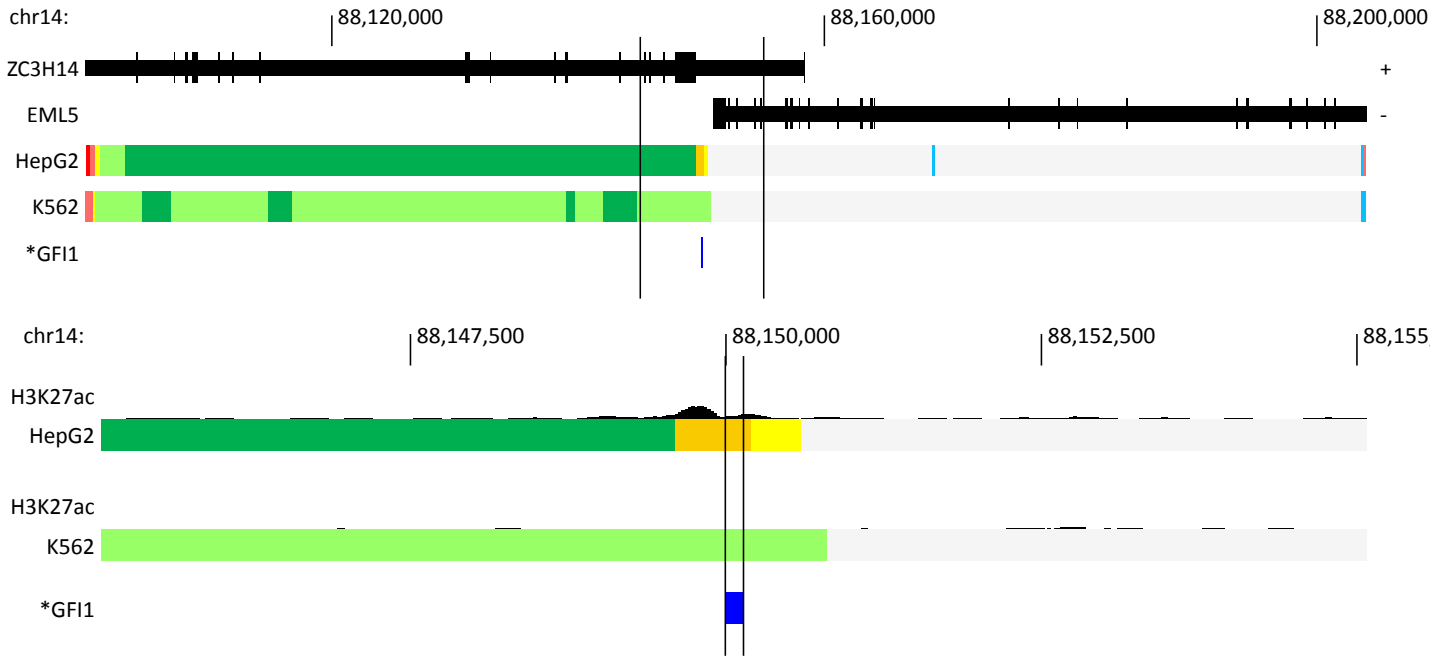
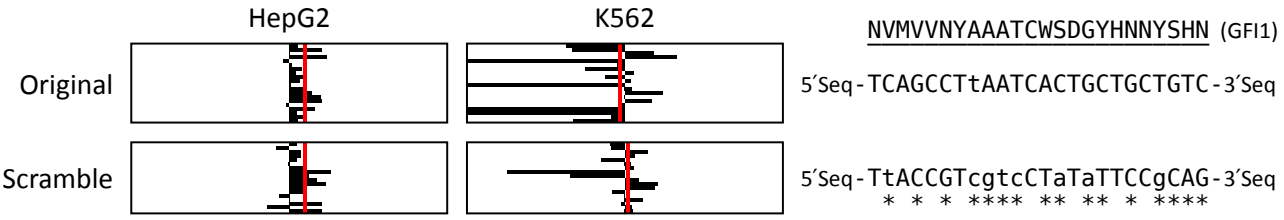
621 GFI1 in HepG2 enhancer

chr14 88150056 88150079 - (hg18)





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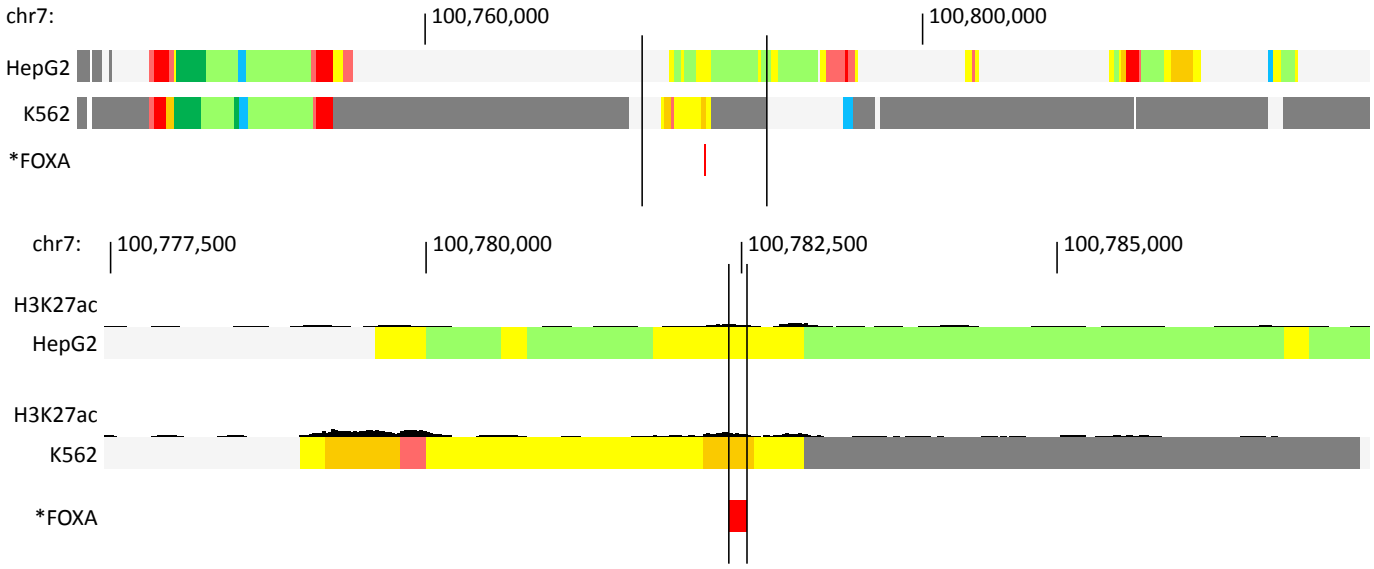
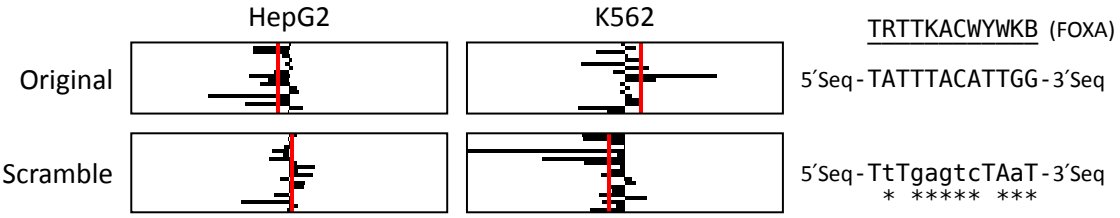
622 FOXA in K562 enhancer (conserved at 40% confidence)

chr7 100782466 100782477 + (hg18)





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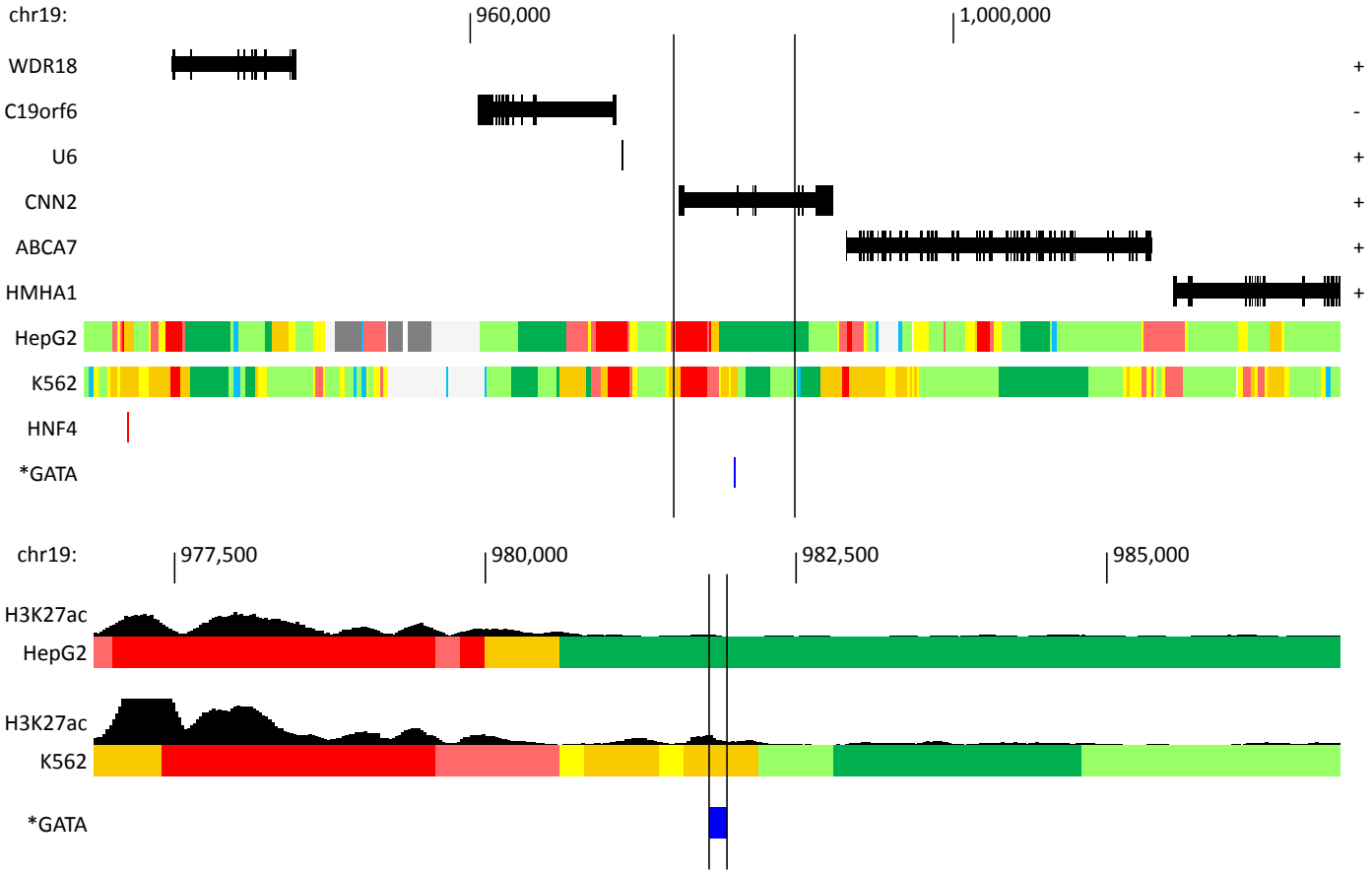
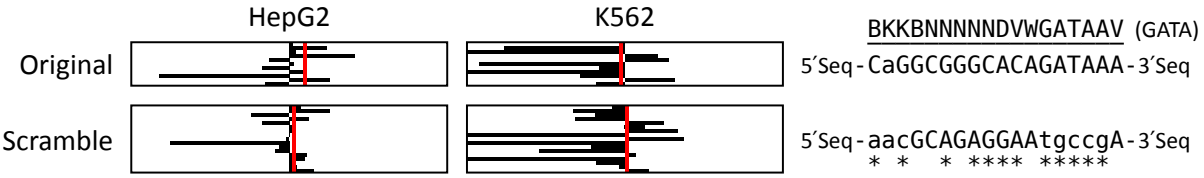
623 GATA in K562 enhancer

chr19 981864 981881 - (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CaGGCGGGCACAGATAAA-3′Seq

5′Seq-aacGCAGAGGAAtgccgA-3′Seq

* * * **** *****

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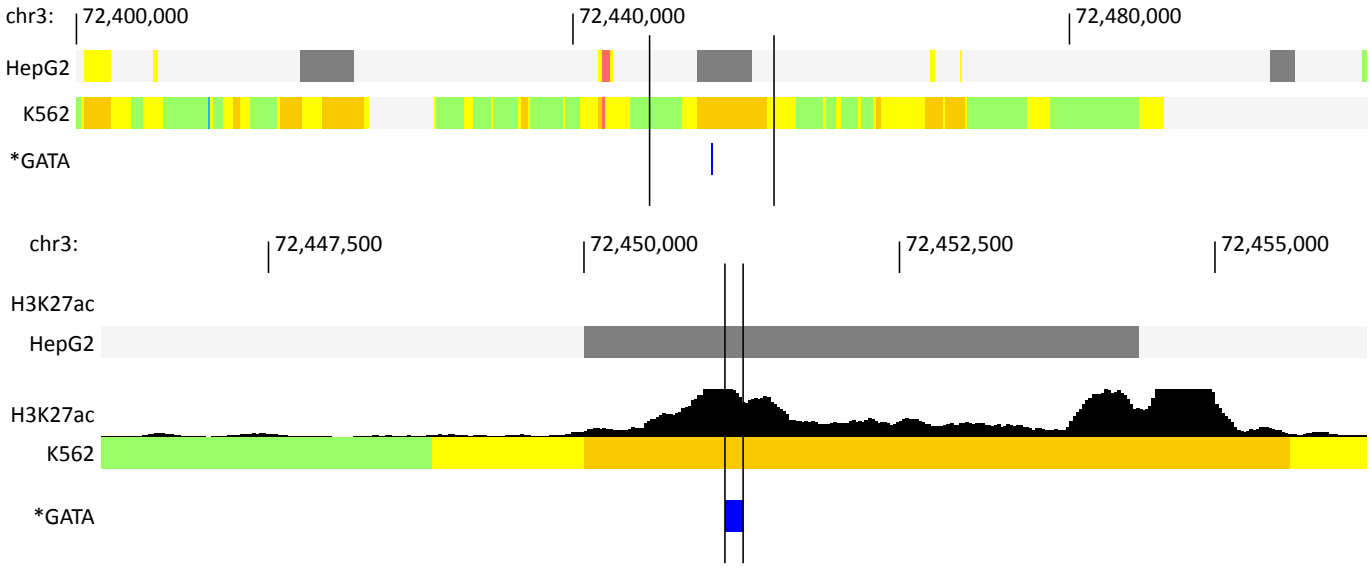
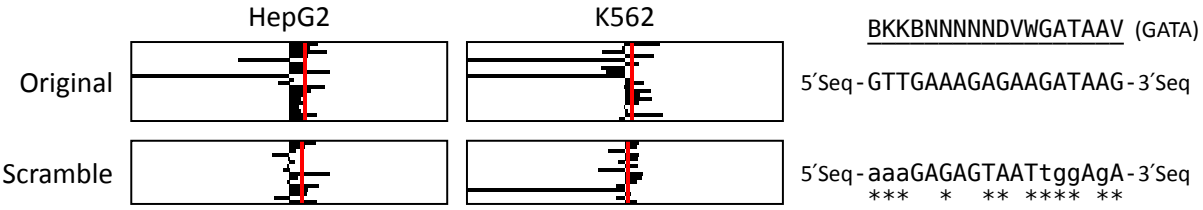
624 GATA in K562 enhancer

chr3 72451181 72451198 - (hg18)





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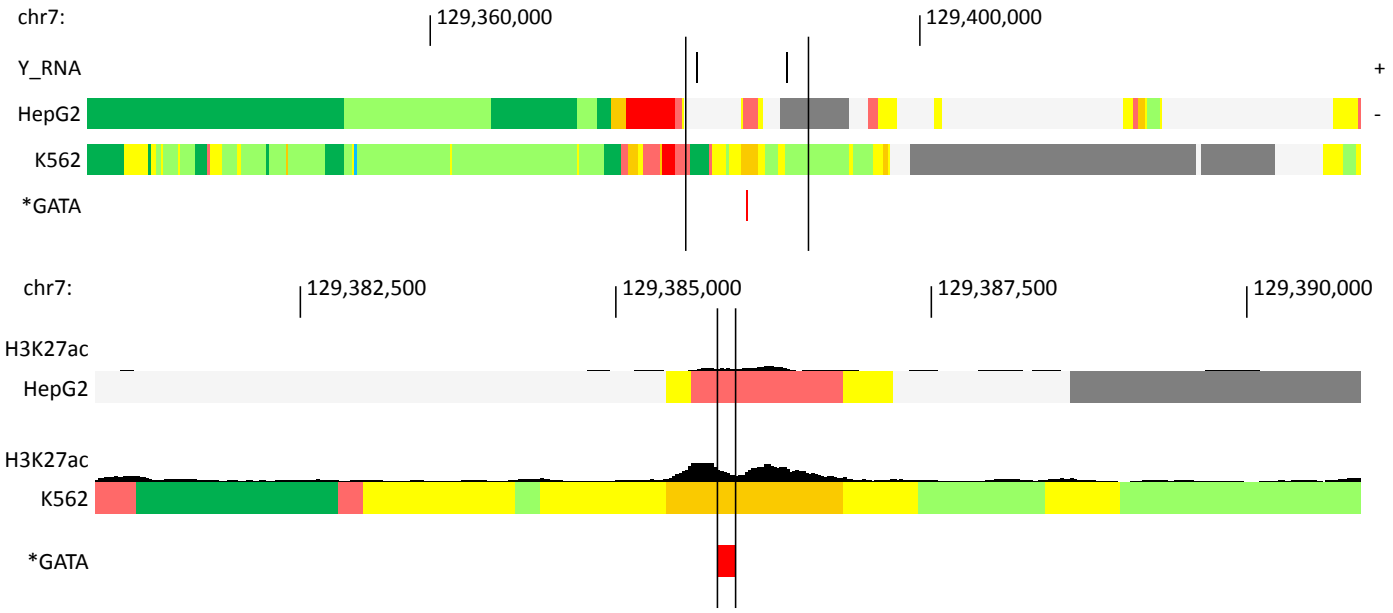
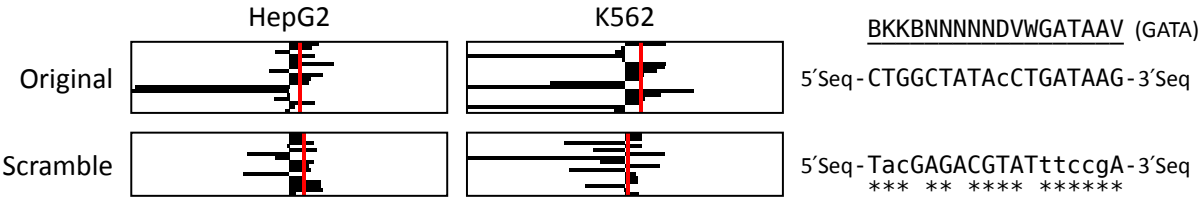
625 GATA in K562 enhancer (conserved at 60% confidence)

chr7 129385869 129385886 - (hg18)





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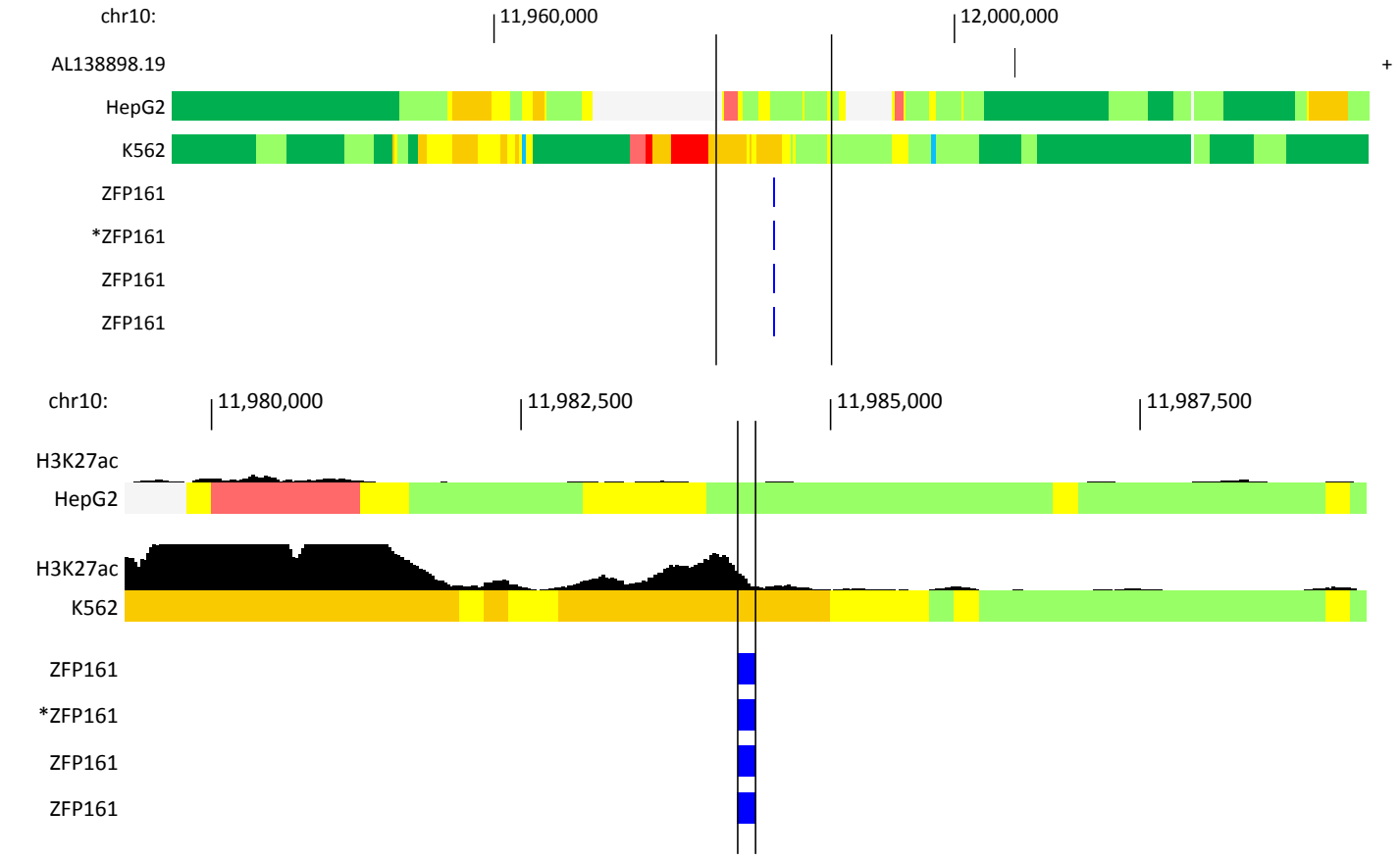
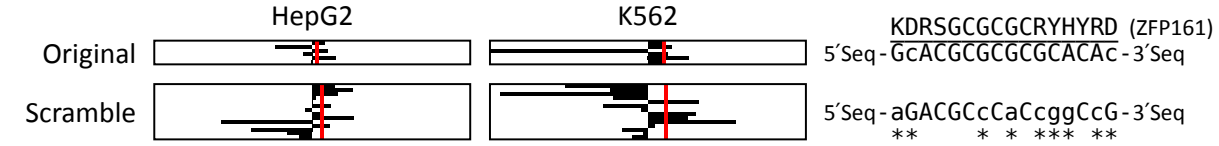
626 ZFP161 in K562 enhancer

chr10 11984315 11984330 - (hg18)





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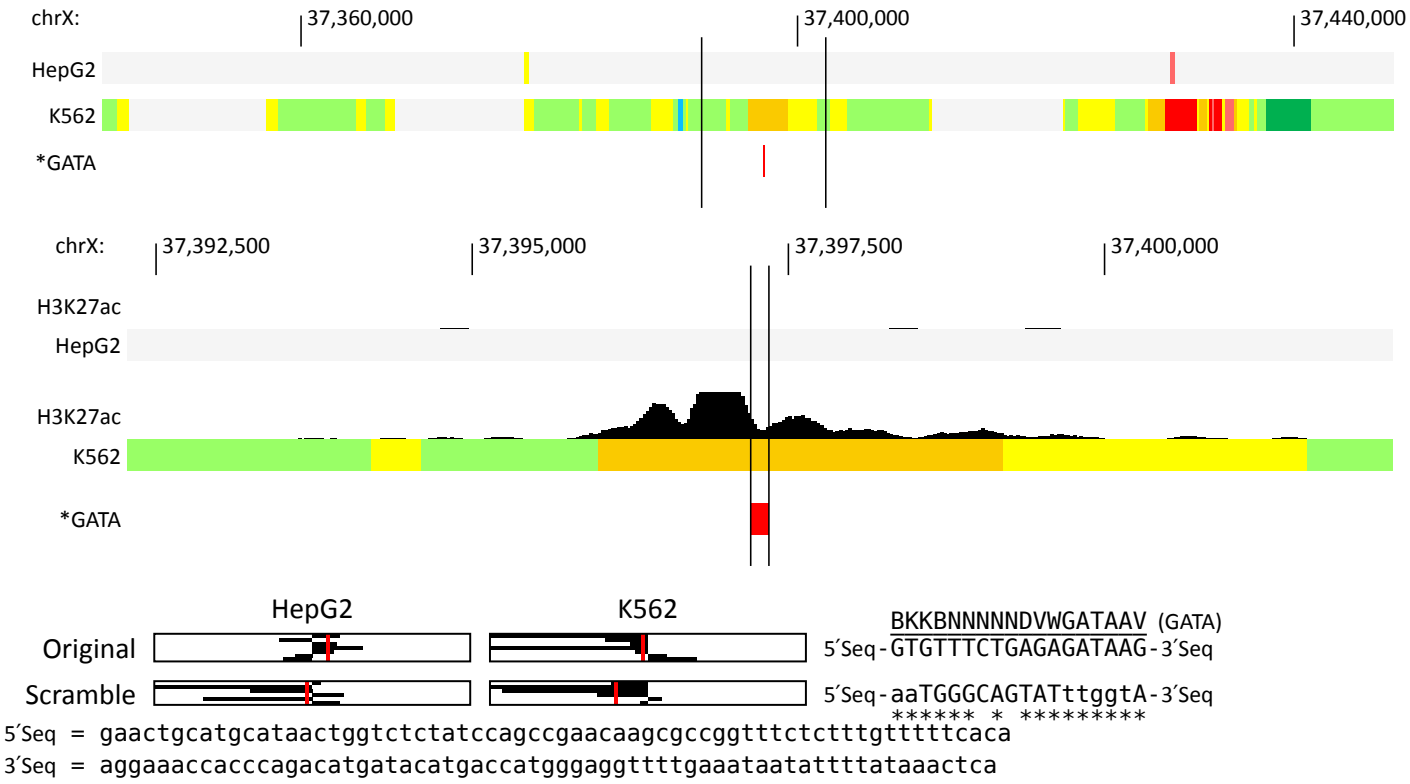
627 GATA in K562 enhancer (conserved at 60% confidence)

chrX 37397266 37397283 + (hg18)



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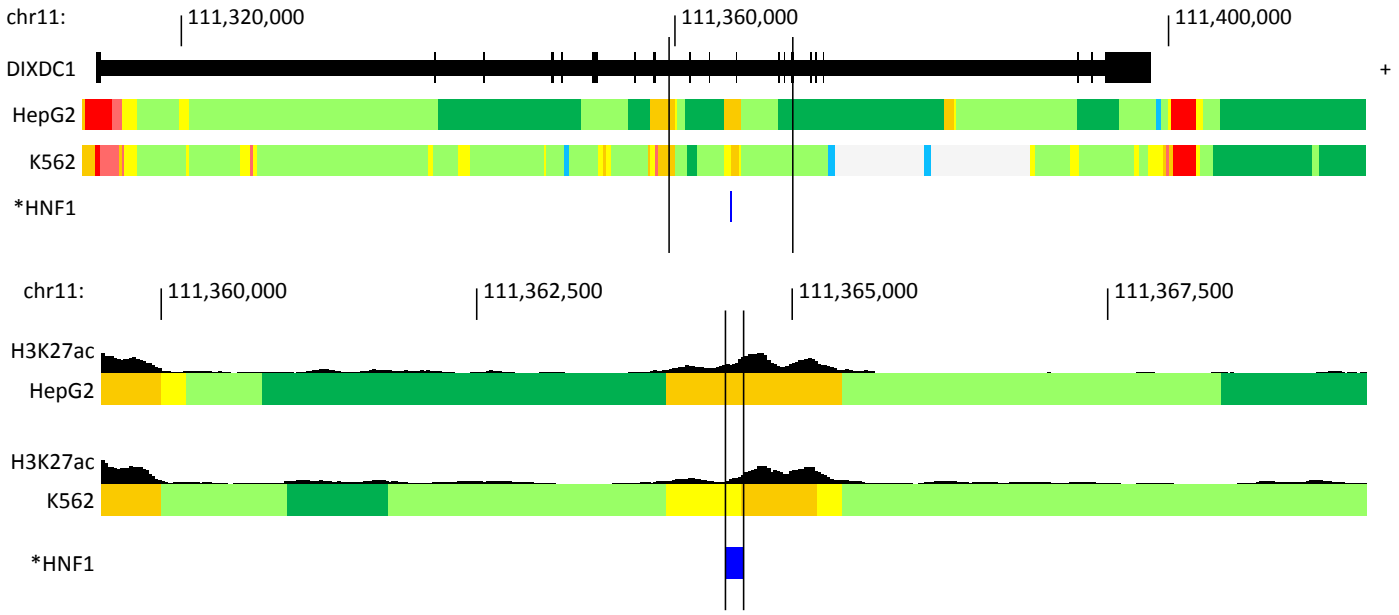
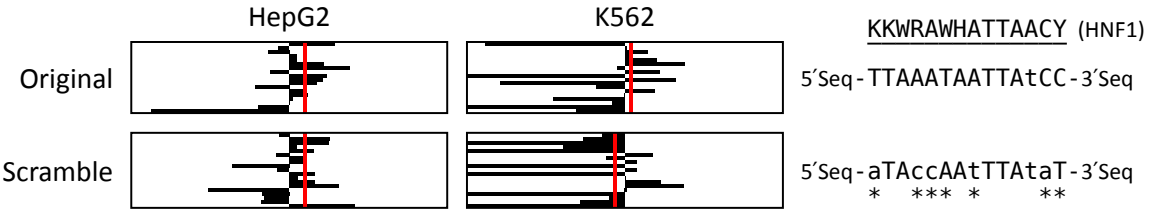
3′Seq = aggaaaccacccagacatgatacatgaccatgggaggttttgaaataatattttataaactca

628 HNF1 in HepG2 enhancer

chr11 111364537 111364550 - (hg18)





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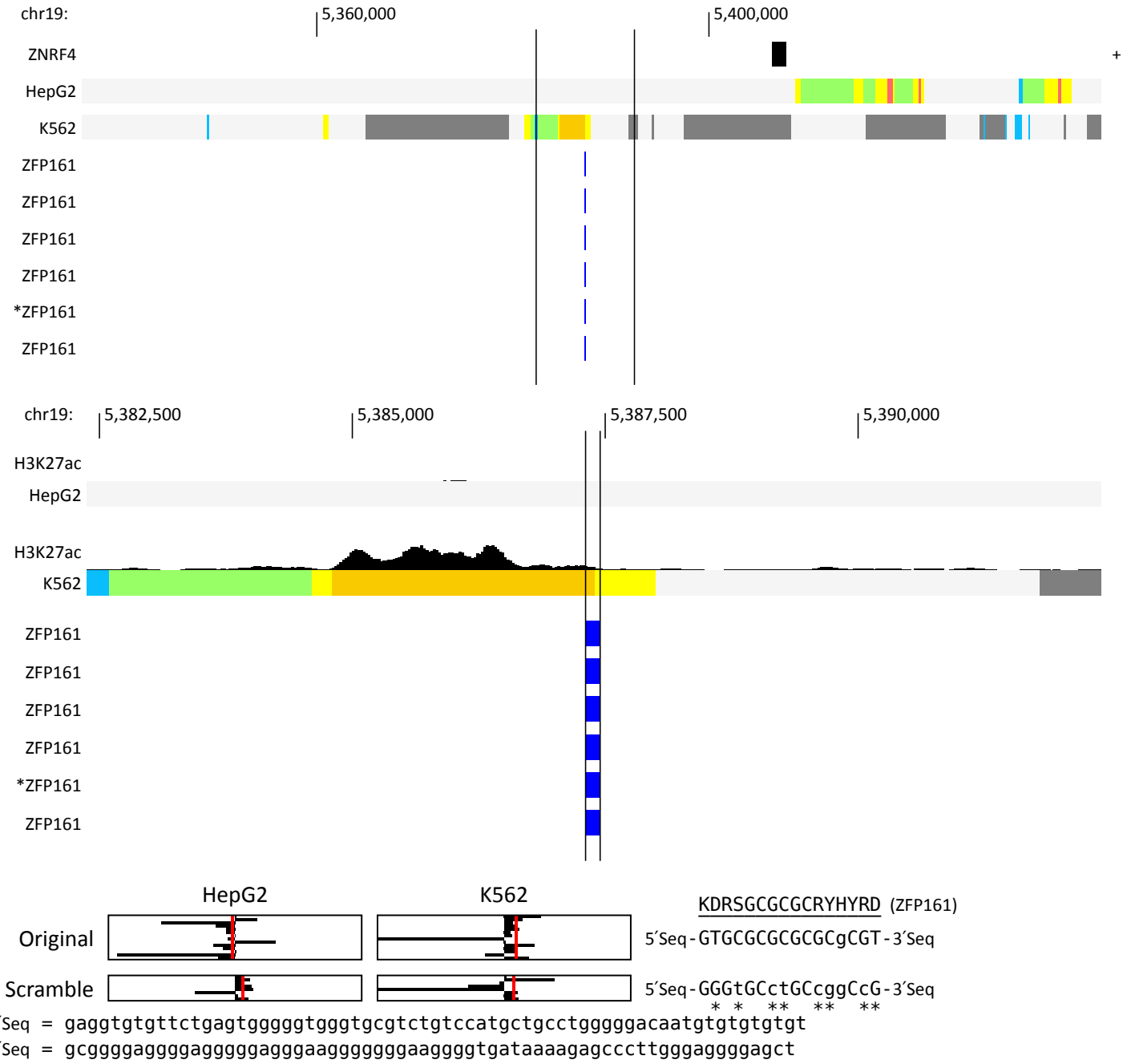
629 ZFP161 in K562 enhancer

chr19 5387371 5387386 + (hg18)



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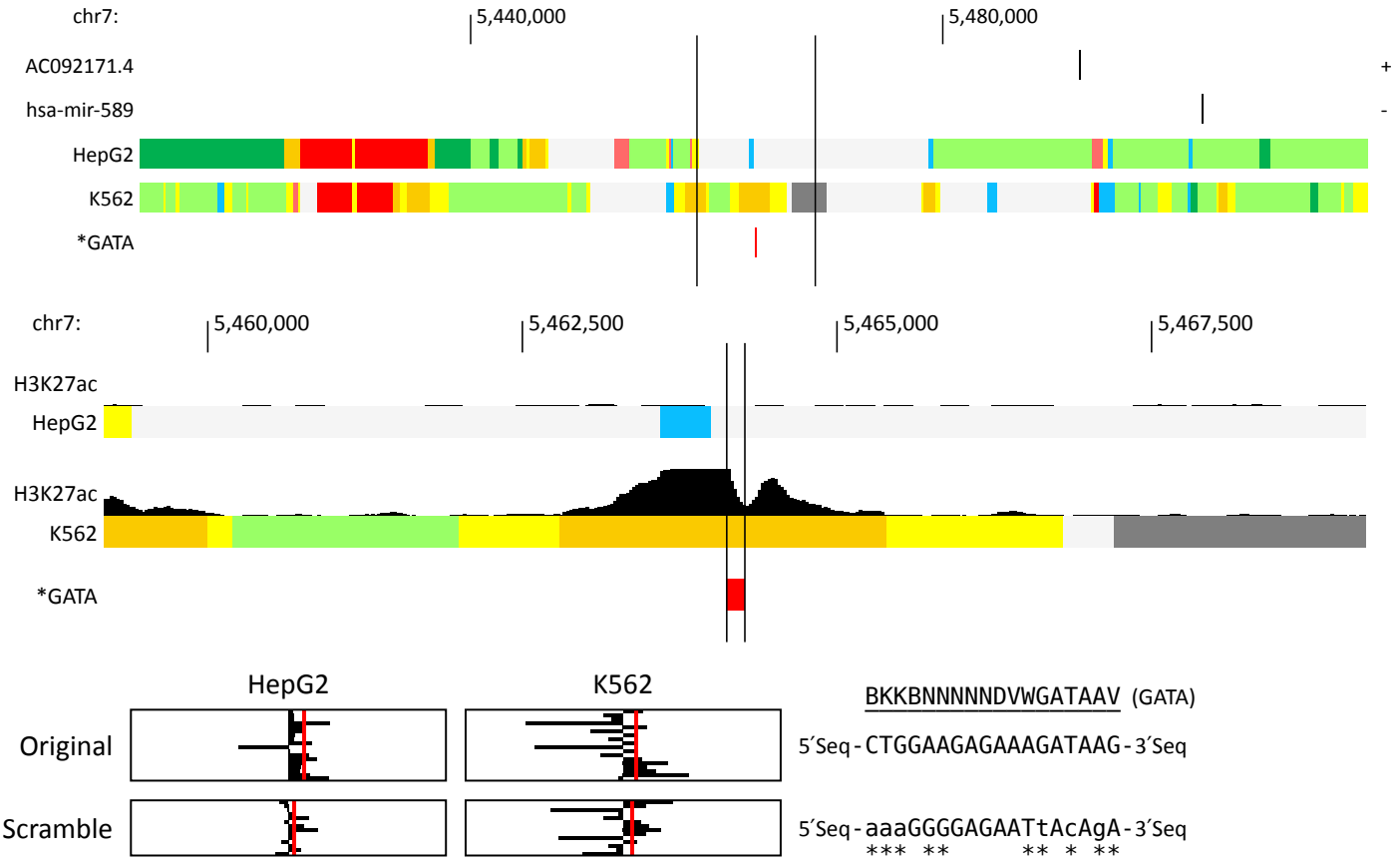
630 GATA in K562 enhancer (conserved at 60% confidence)

chr7 5464188 5464205 - (hg18)



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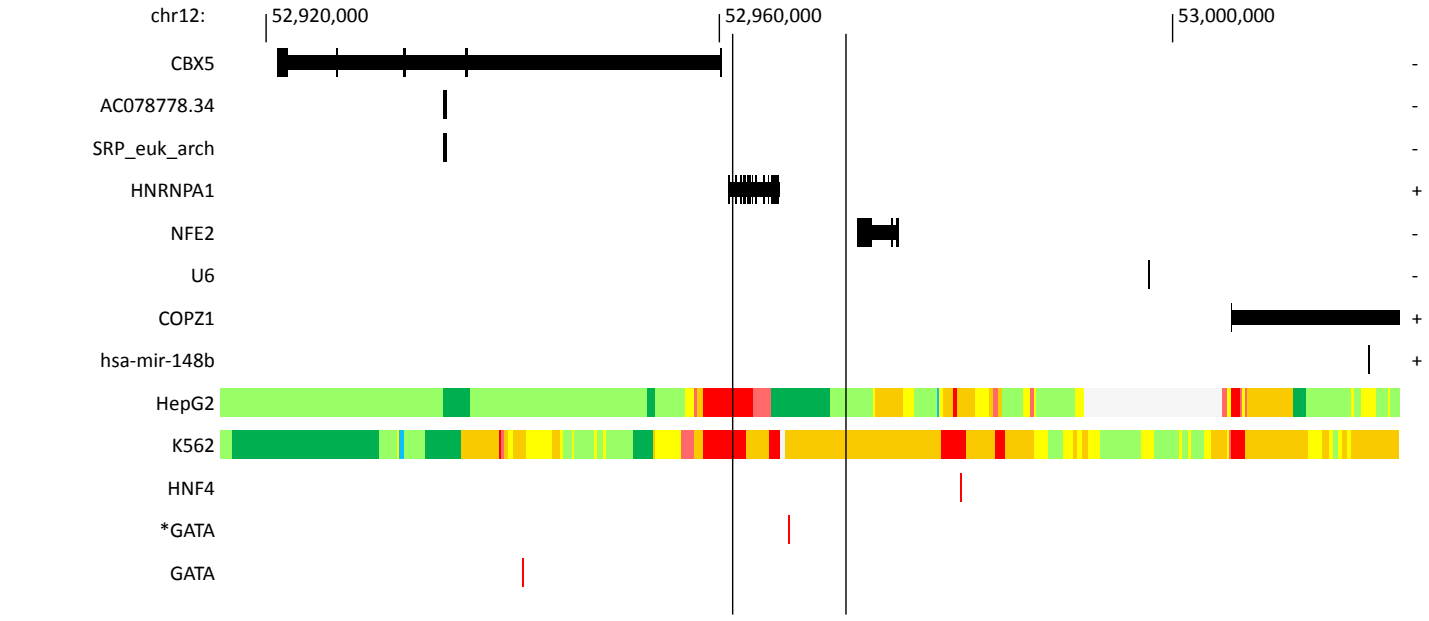
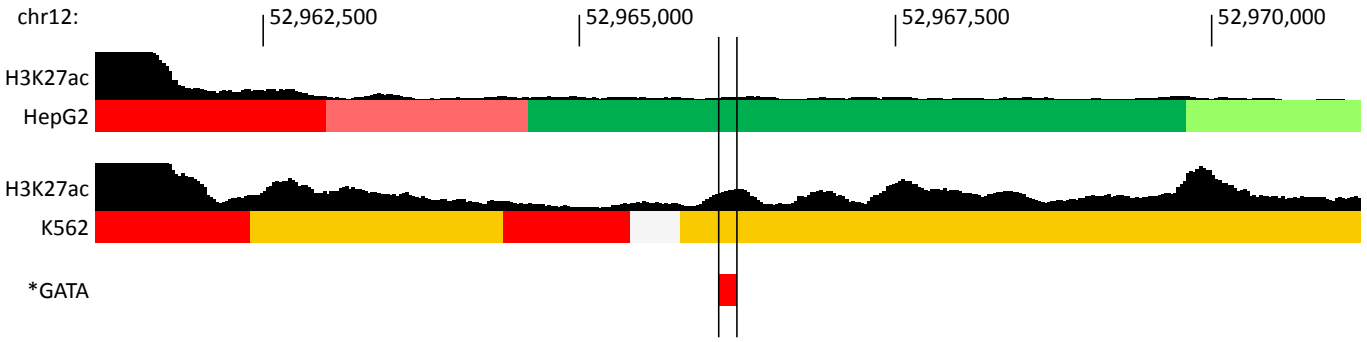
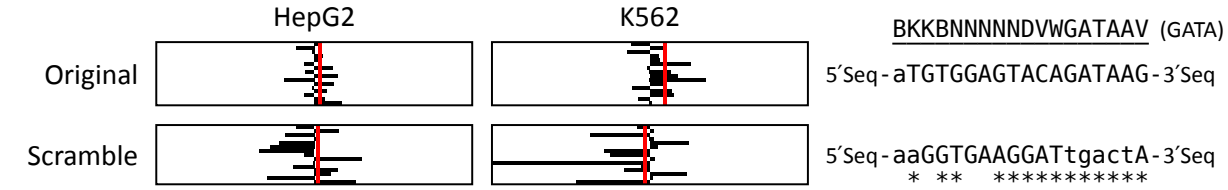
631 GATA in K562 enhancer (conserved at 60% confidence)

chr12 52966166 52966183 + (hg18)







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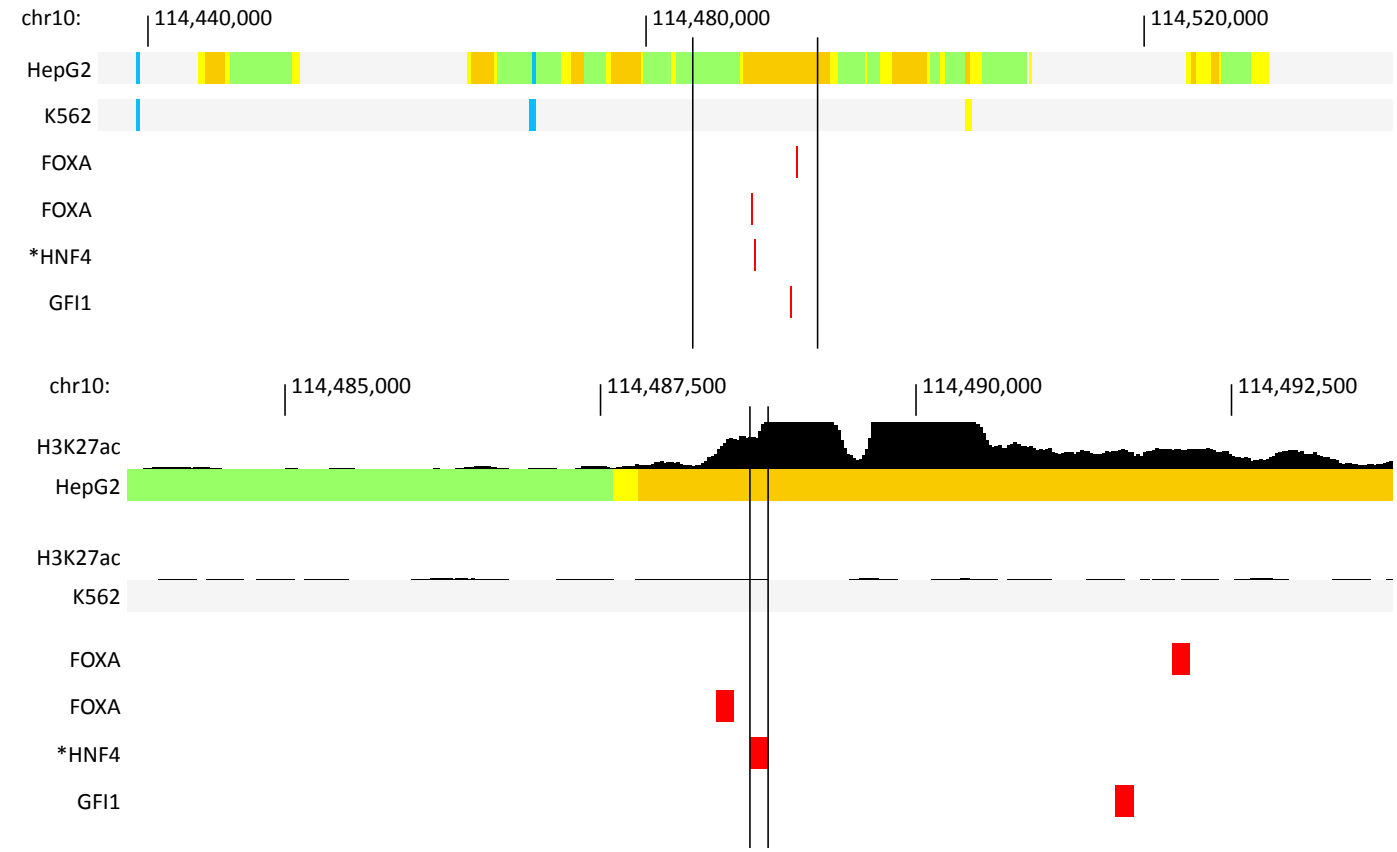
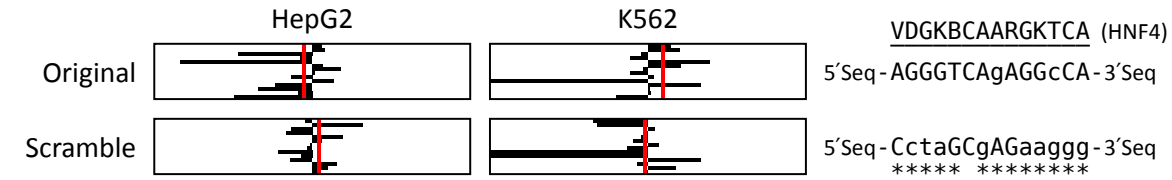
632 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr10 114488750 114488763 + (hg18)





5′Seq = acacgttccacggcctgaactcgctctgaatggactccagattcccaatgatgcatgcagcccctc
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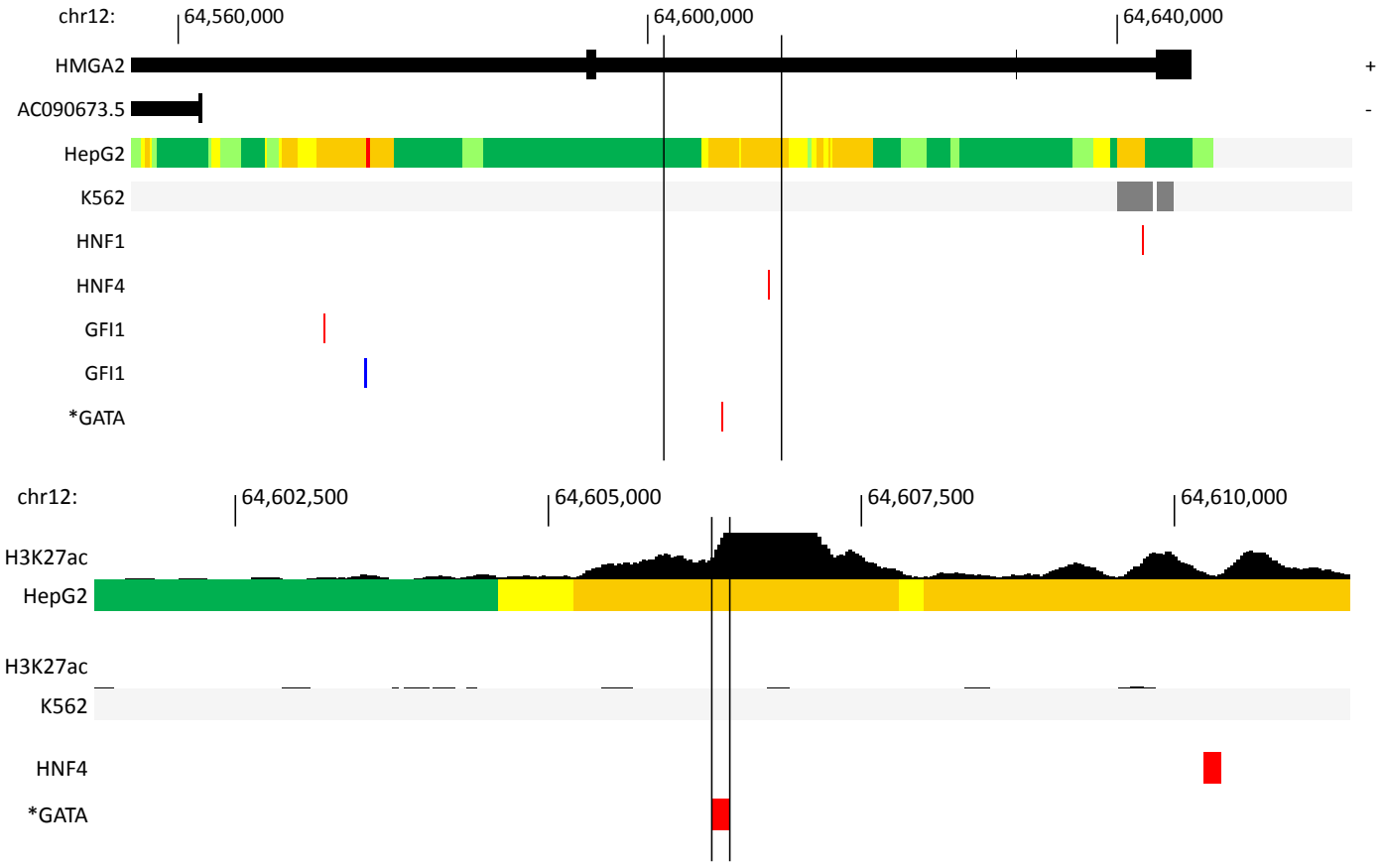
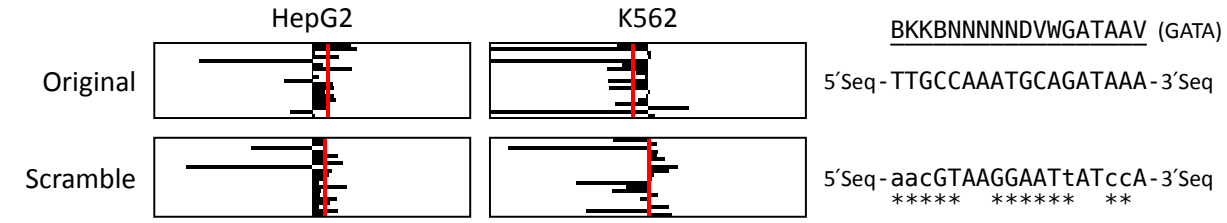
633 GATA in HepG2 enhancer (conserved at 60% confidence)

chr12 64606369 64606386 - (hg18)





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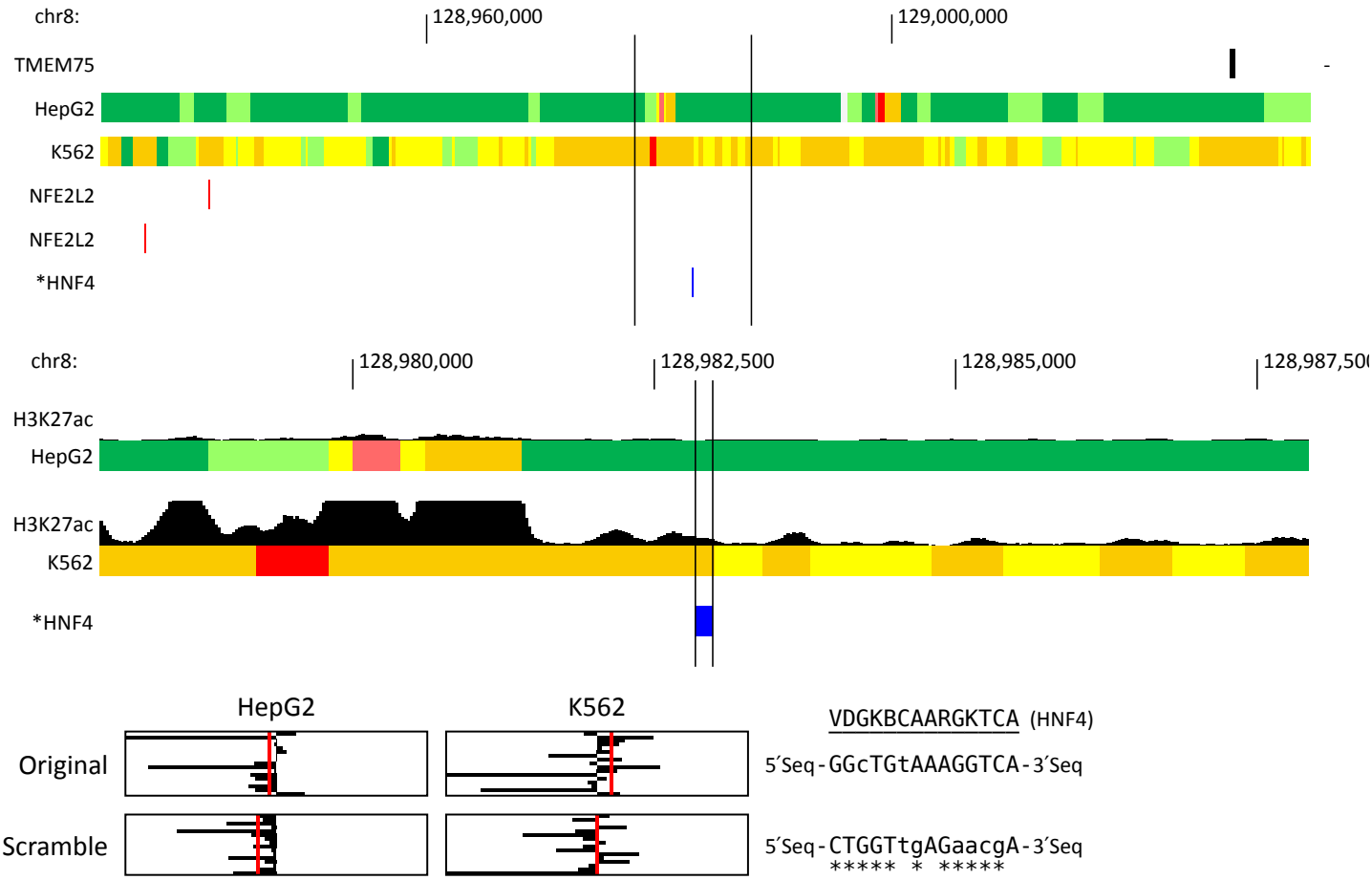
634 HNF4 in K562 enhancer

chr8 128982907 128982920 + (hg18)



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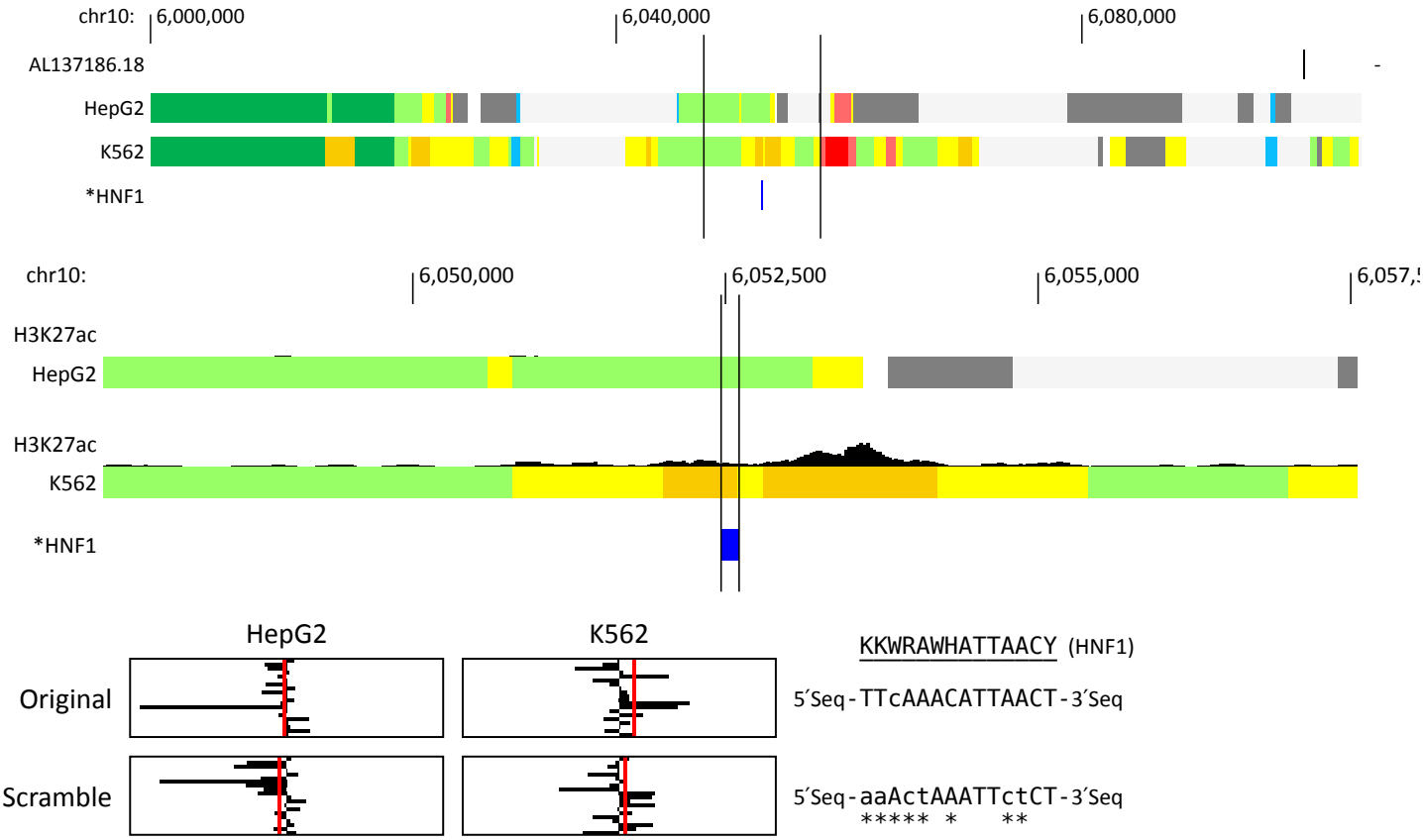
635 HNF1 in K562 enhancer

chr10 6052531 6052544 - (hg18)



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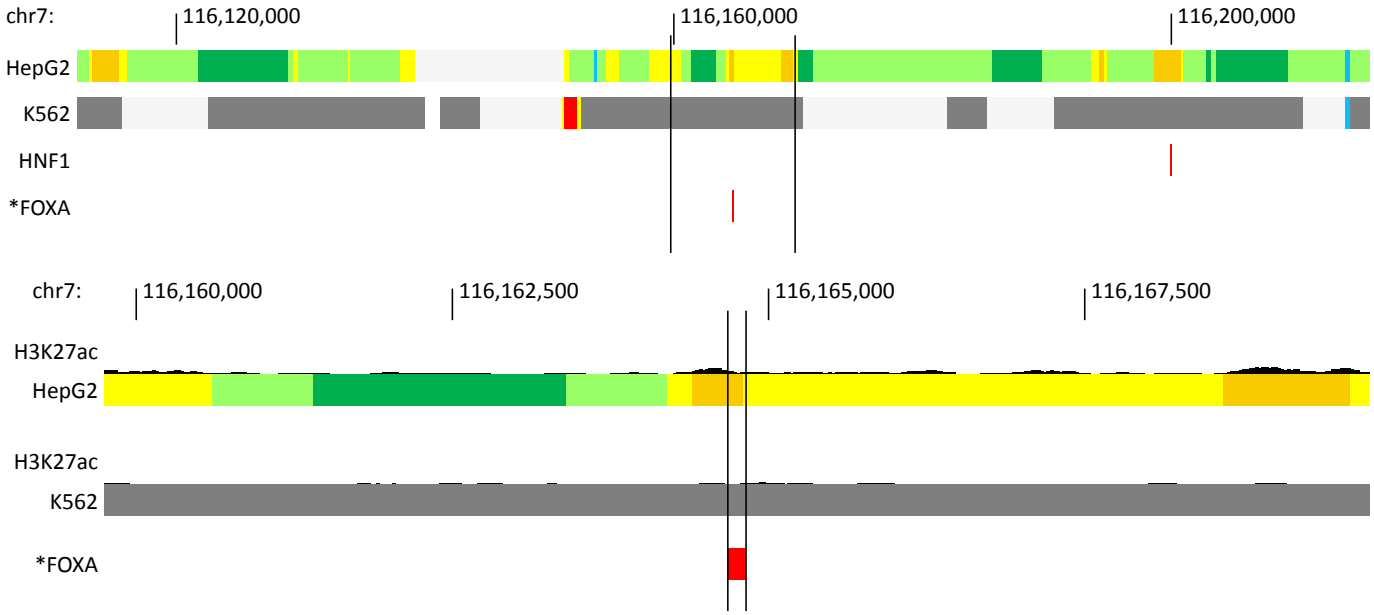
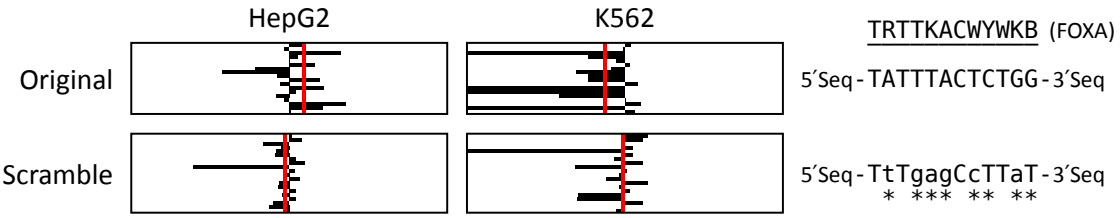
636 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr7 116164745 116164756 + (hg18)





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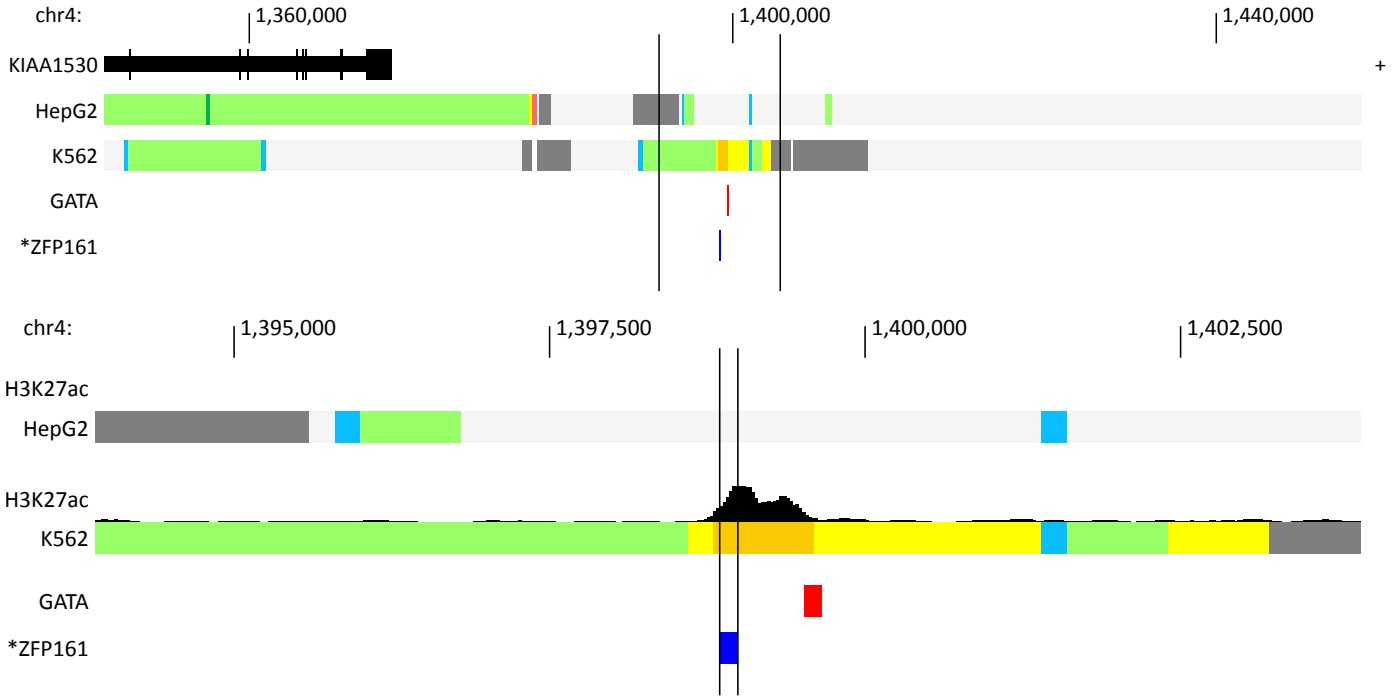
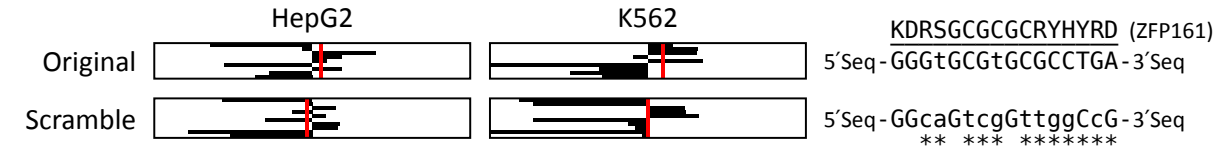
637 ZFP161 in K562 enhancer

chr4 1398913 1398928 + (hg18)





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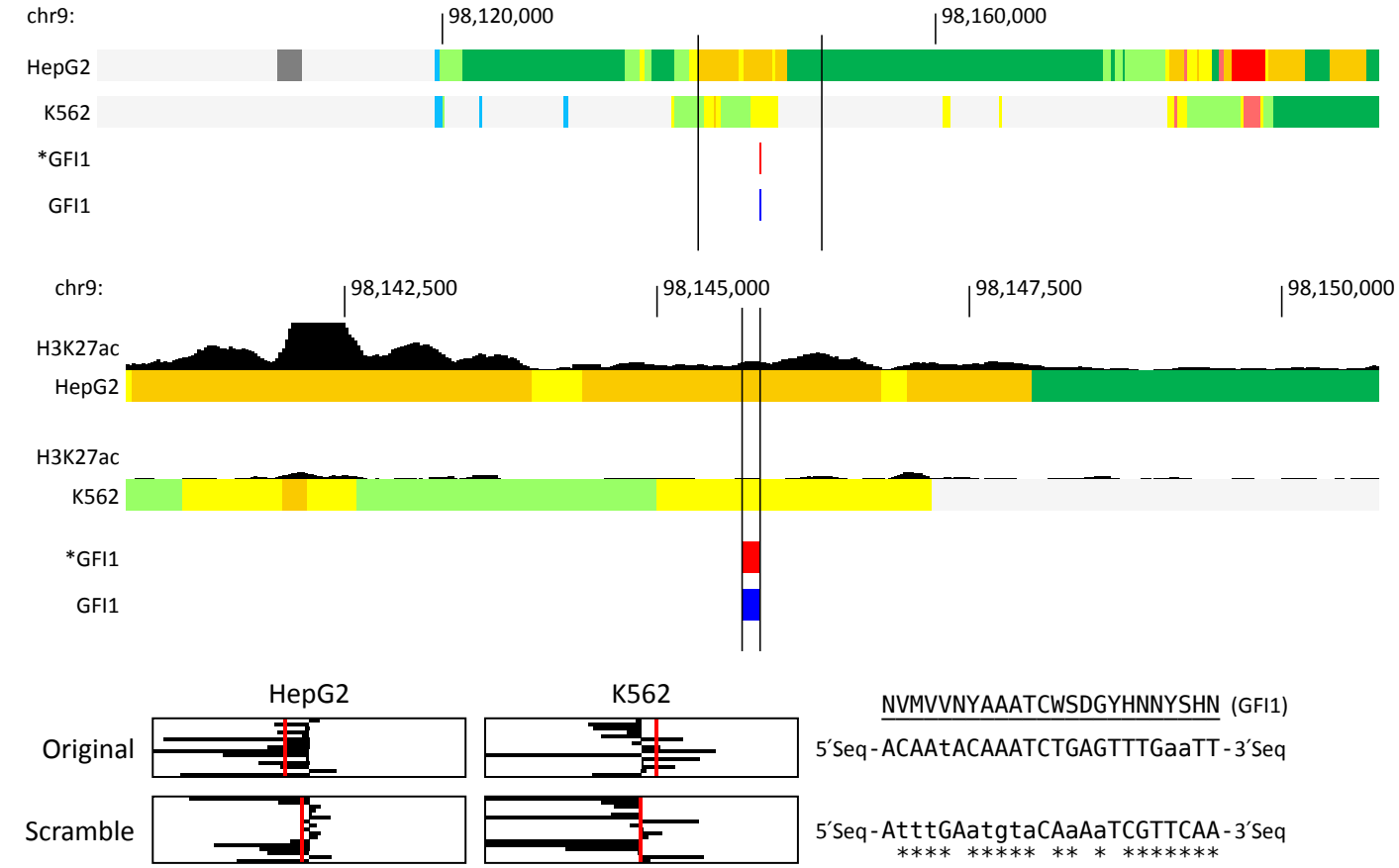
638 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr9 98145742 98145765 - (hg18)



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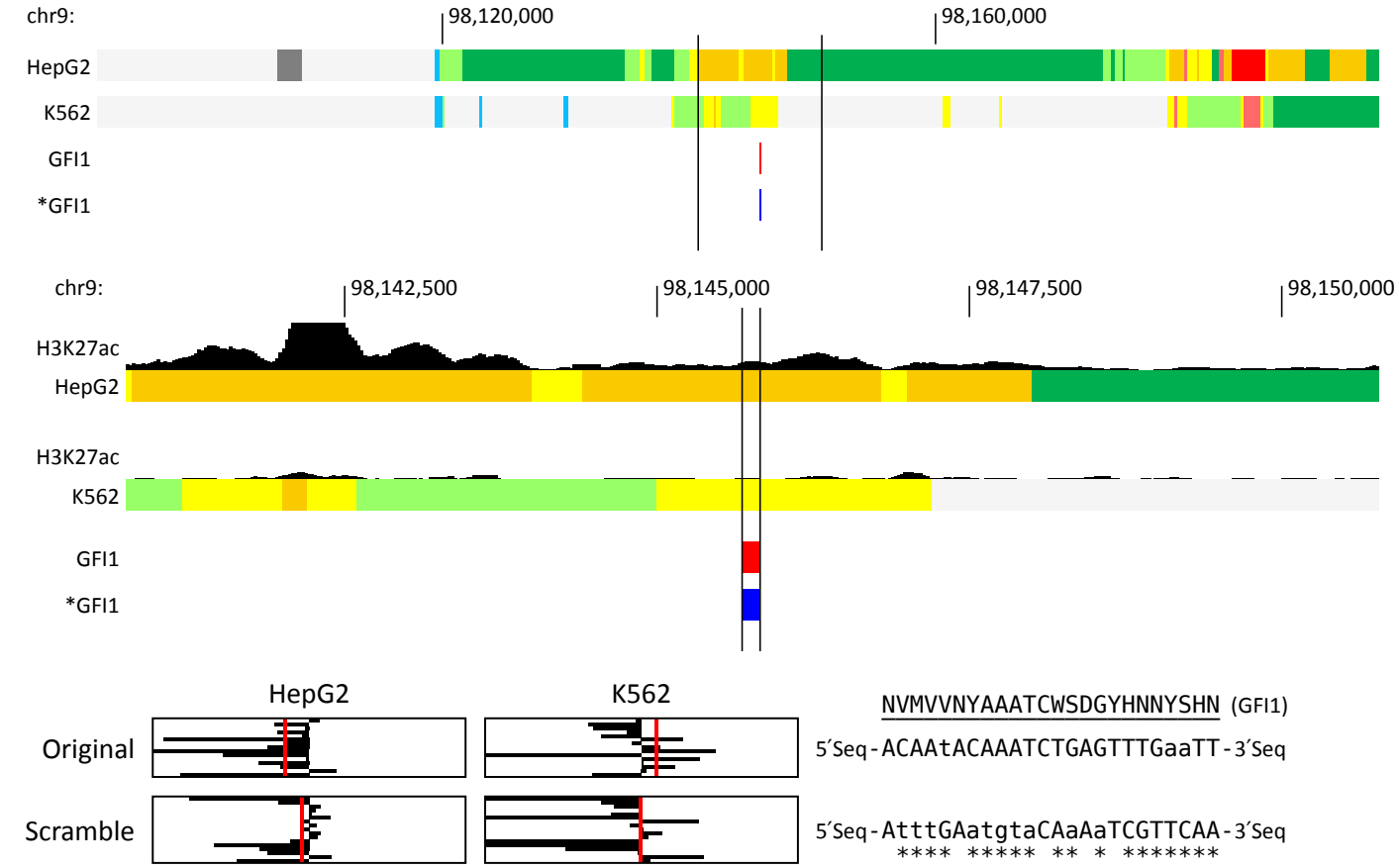
639 GFI1 in HepG2 enhancer

chr9 98145742 98145765 - (hg18)



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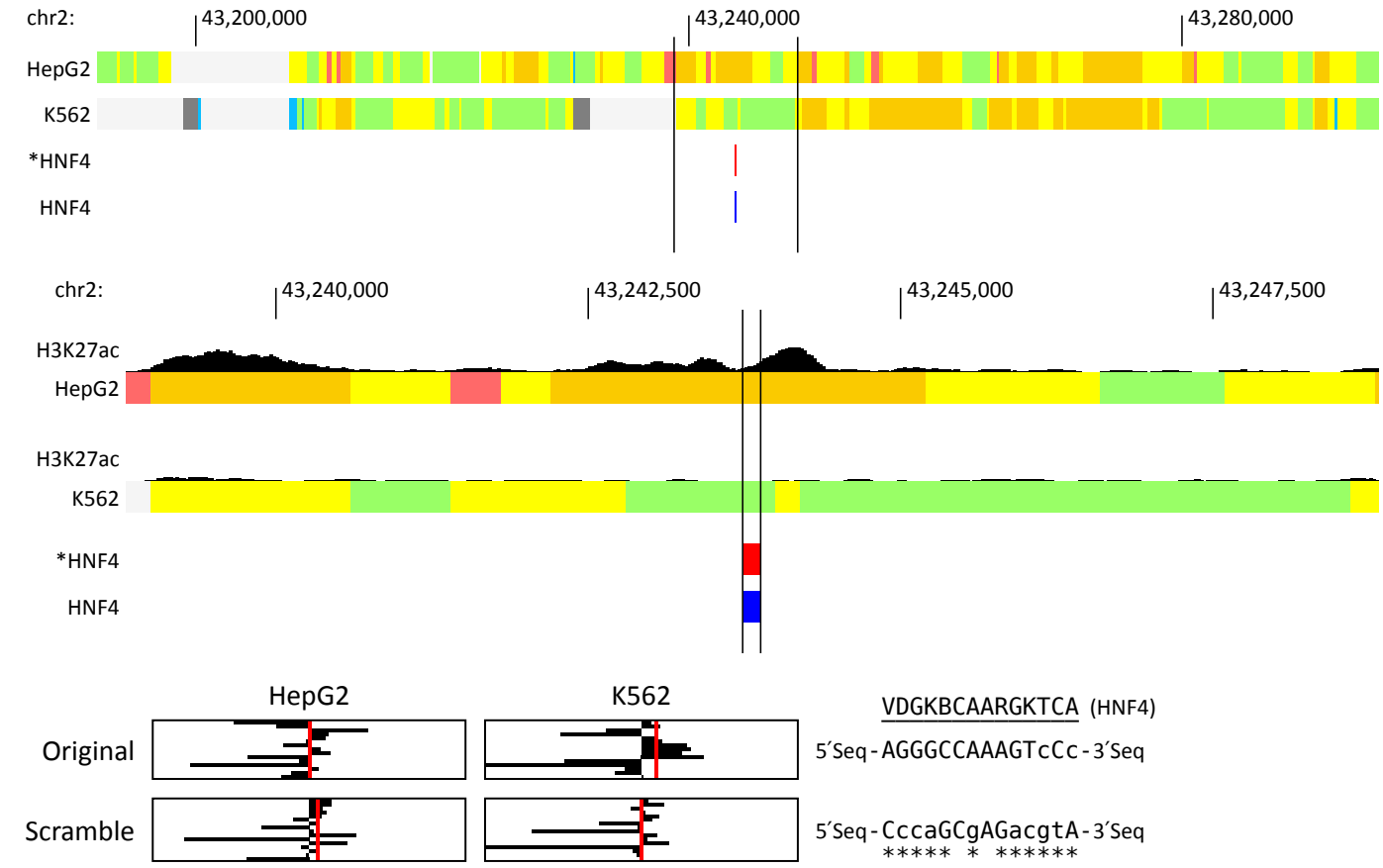
3′Seq = ccatatccccctttgctaatgtggggaccctgggagagctacttaccctagaaaggggatt

640 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 43243802 43243815 - (hg18)



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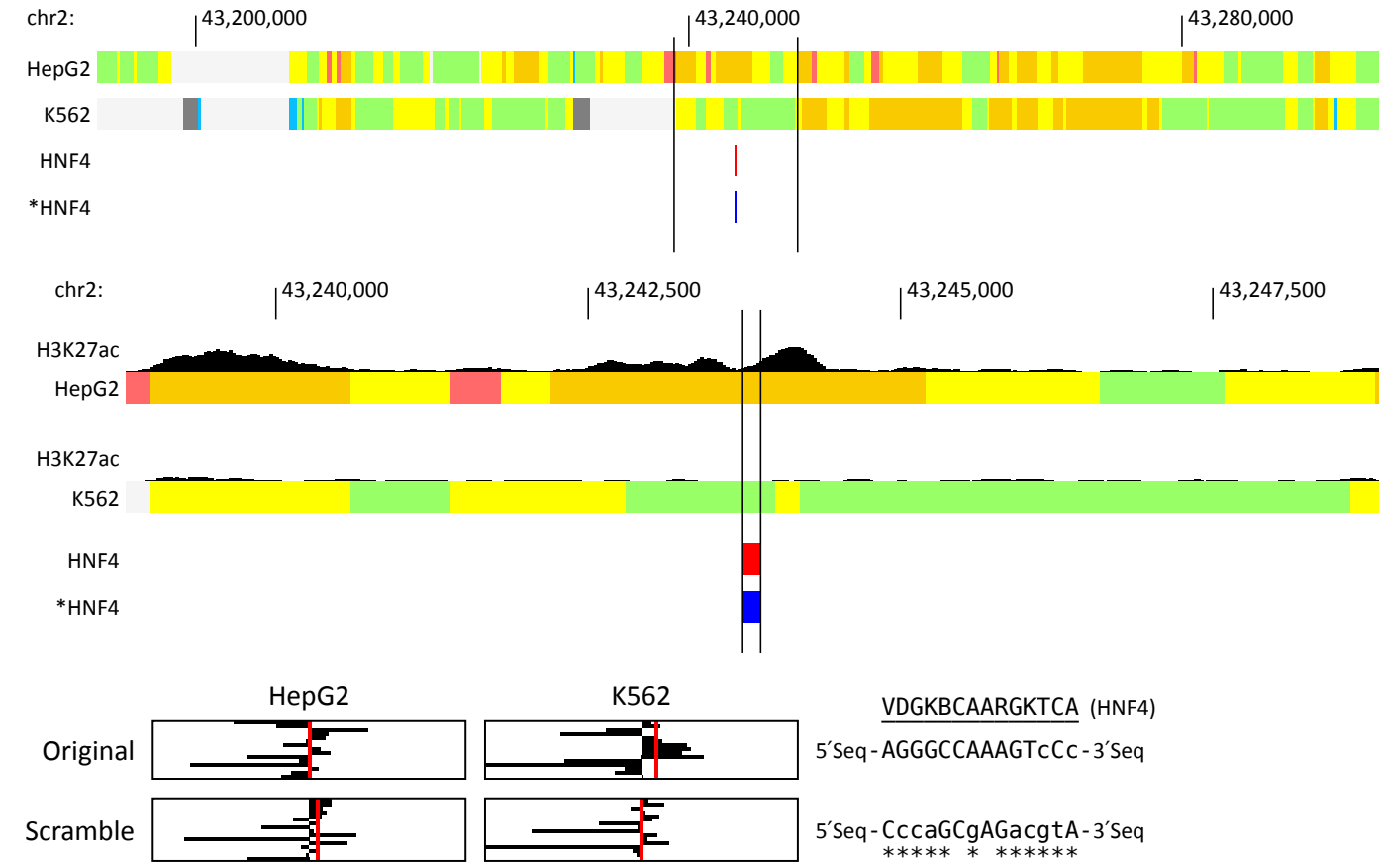
641 HNF4 in HepG2 enhancer

chr2 43243802 43243815 - (hg18)



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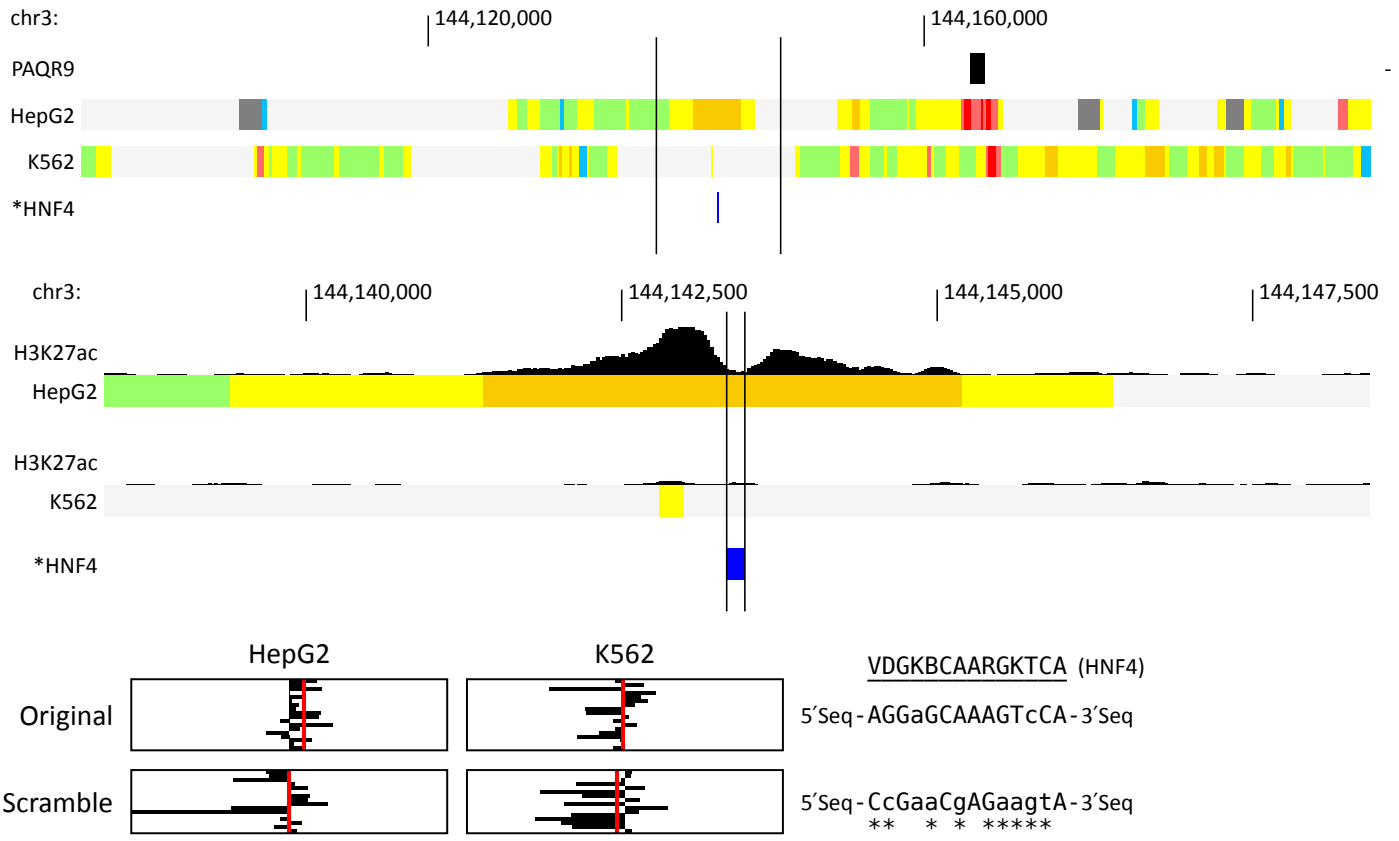
642 HNF4 in HepG2 enhancer

chr3 144143398 144143411 - (hg18)



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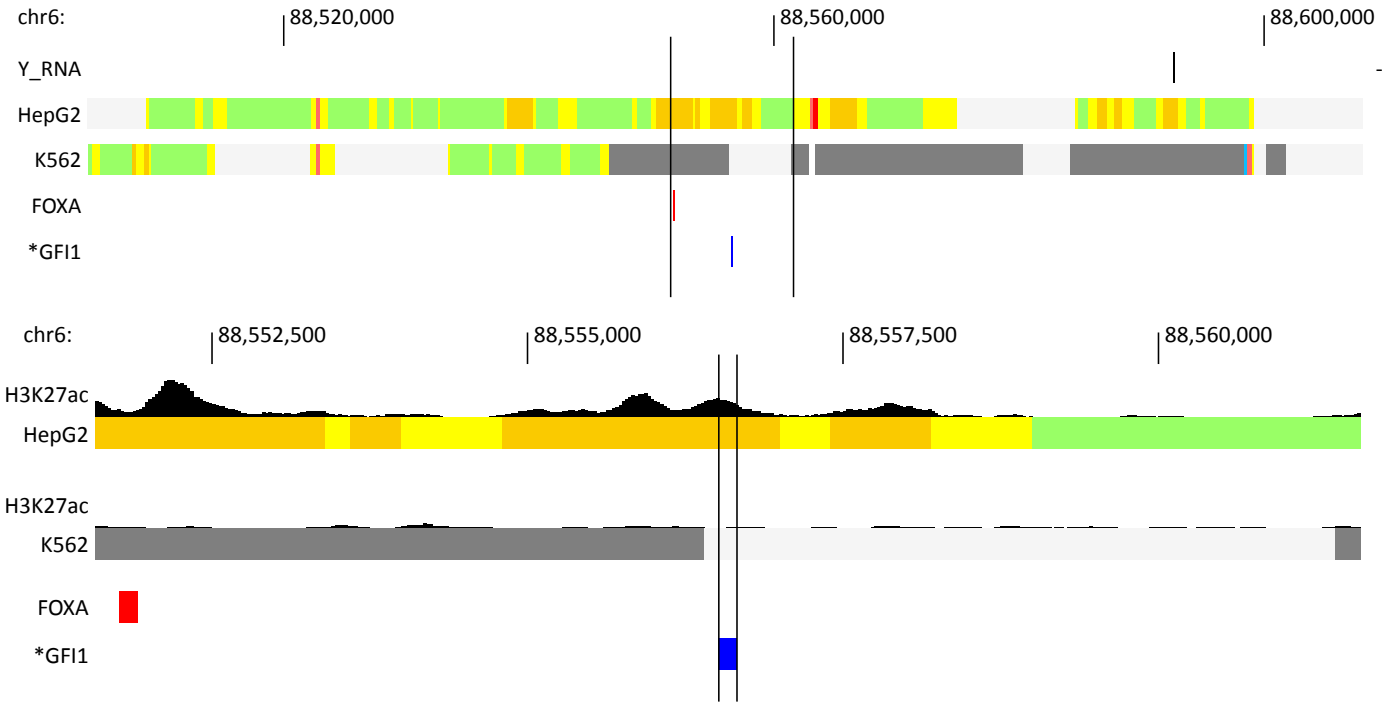
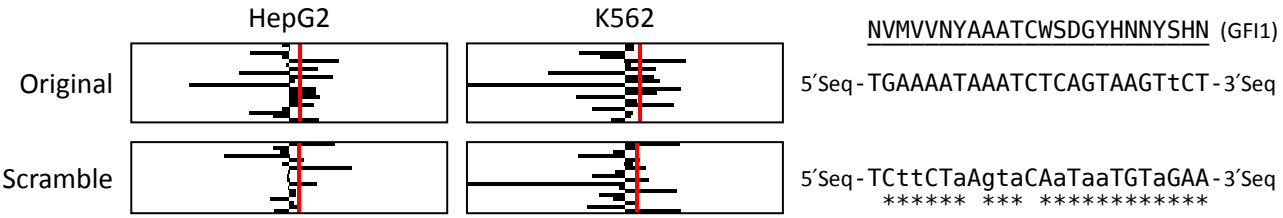
643 GFI1 in HepG2 enhancer

chr6 88556577 88556600 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-TGAAAATAAATCTCAGTAAGTtCT-3′Seq

5′Seq-TCttCTaAgtaCAaTaaTGTaGAA-3′Seq

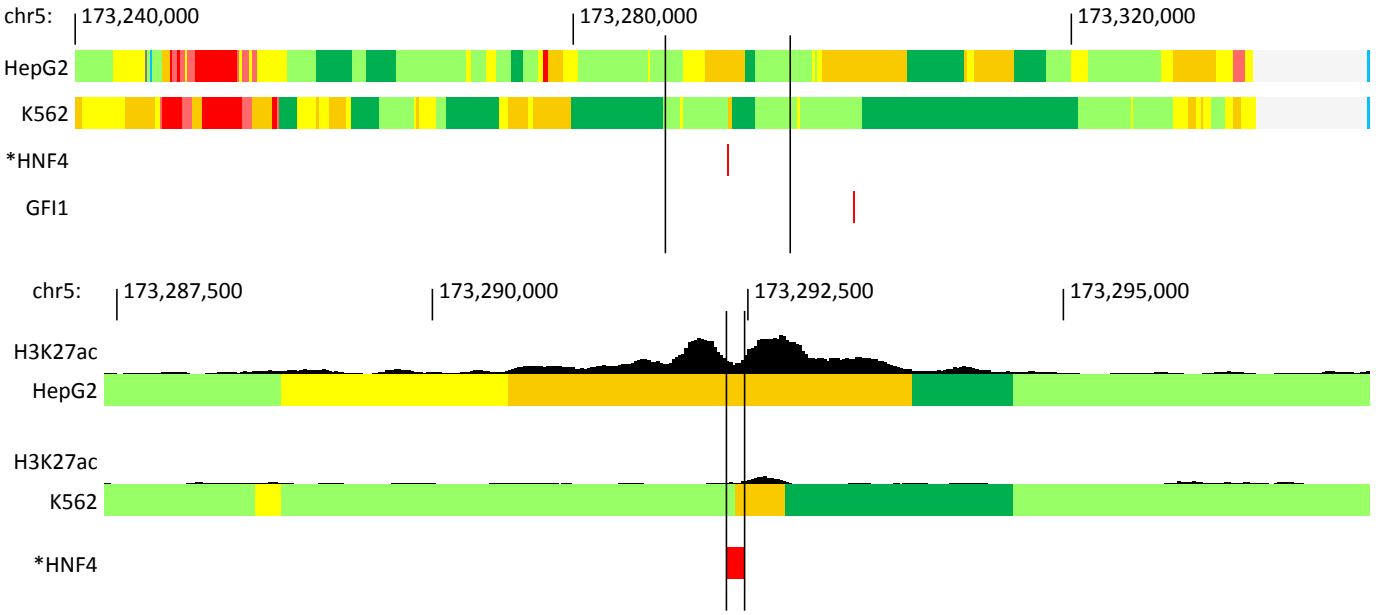
****** *** ************

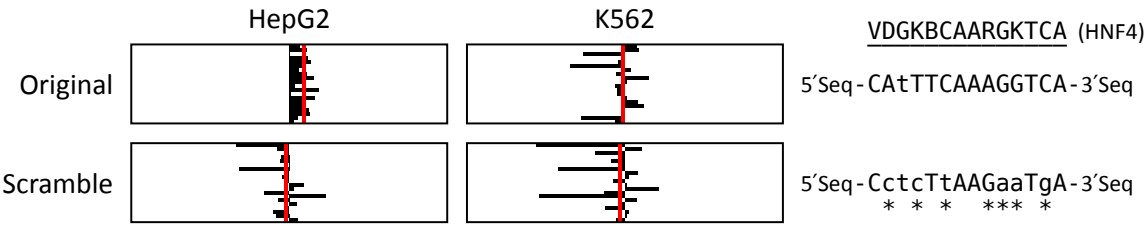
5′Seq = ccacatattagcagatgctcaaaaagctagaacgaattaccggctaaatgctatgactttg

3′Seq = tacccagggagttaaactactggatatagggagaatggaaggaagacgaggtgggggttg

644 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr5 173292396 173292409 - (hg18)





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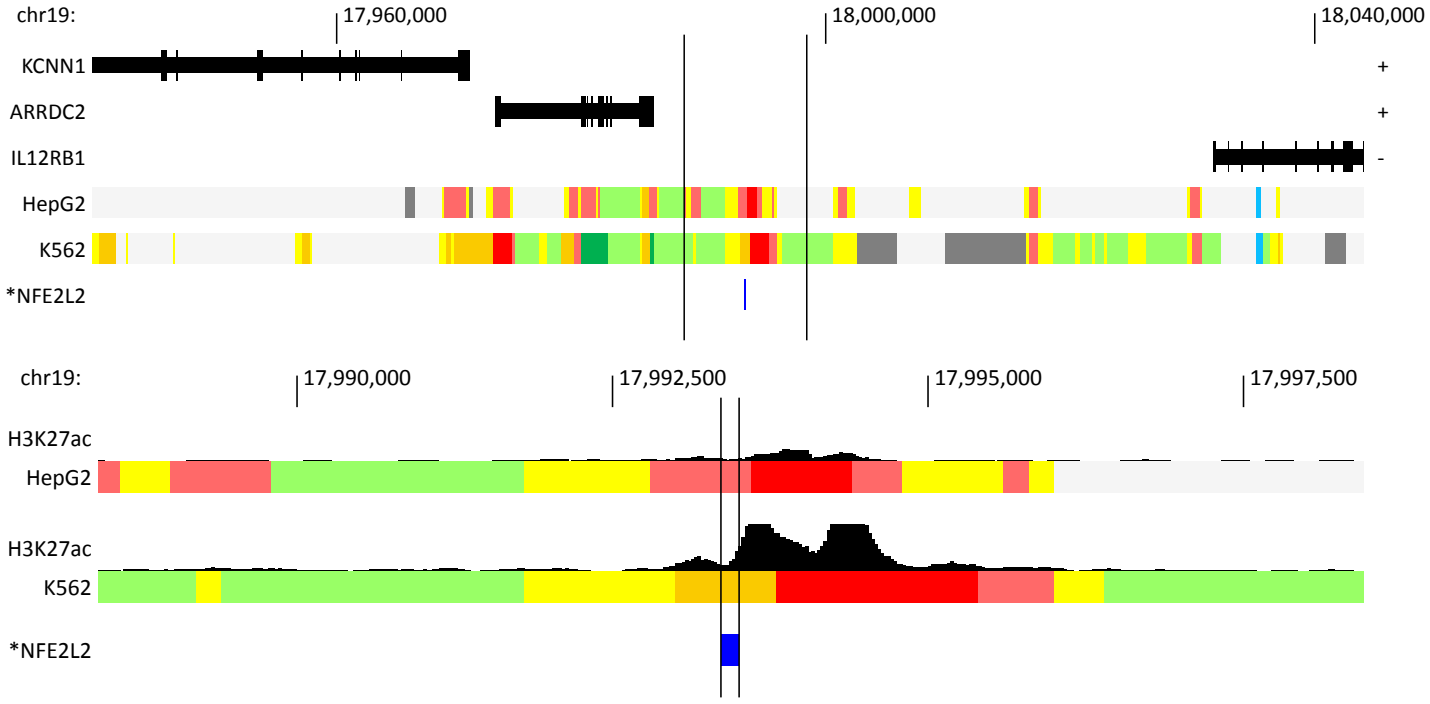
645 NFE2L2 in K562 enhancer

chr19 17993426 17993436 + (hg18)



RTGACWHAGCA (NFE2L2)

5′Seq-GTGACTCAGCc-3′Seq

5′Seq-ccagtACgGCt-3′Seq

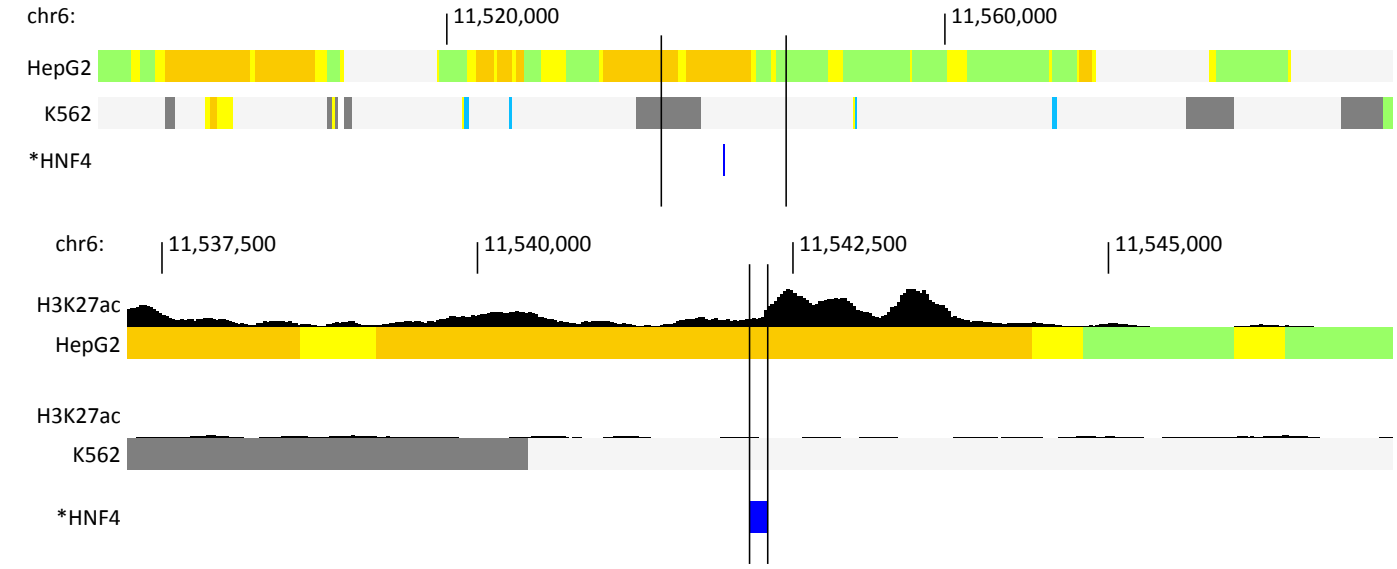
****** * *

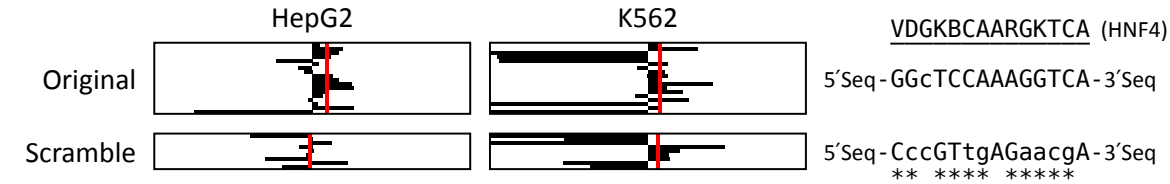
5′Seq = cttgtttttgatgttcaggaaagtccccagaaagcactgggcccgggcaaggggccaggaggaaatg

3′Seq = ggtggccatcagtgcctgccacgctgggctgggtggactgcgcggcccgatctgggaggatccacag

646 HNF4 in HepG2 enhancer

chr6 11542222 11542235 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-GGcTCCAAAGGTCA-3′Seq

5′Seq-CccGTtgAGaacgA-3′Seq

** **** *****

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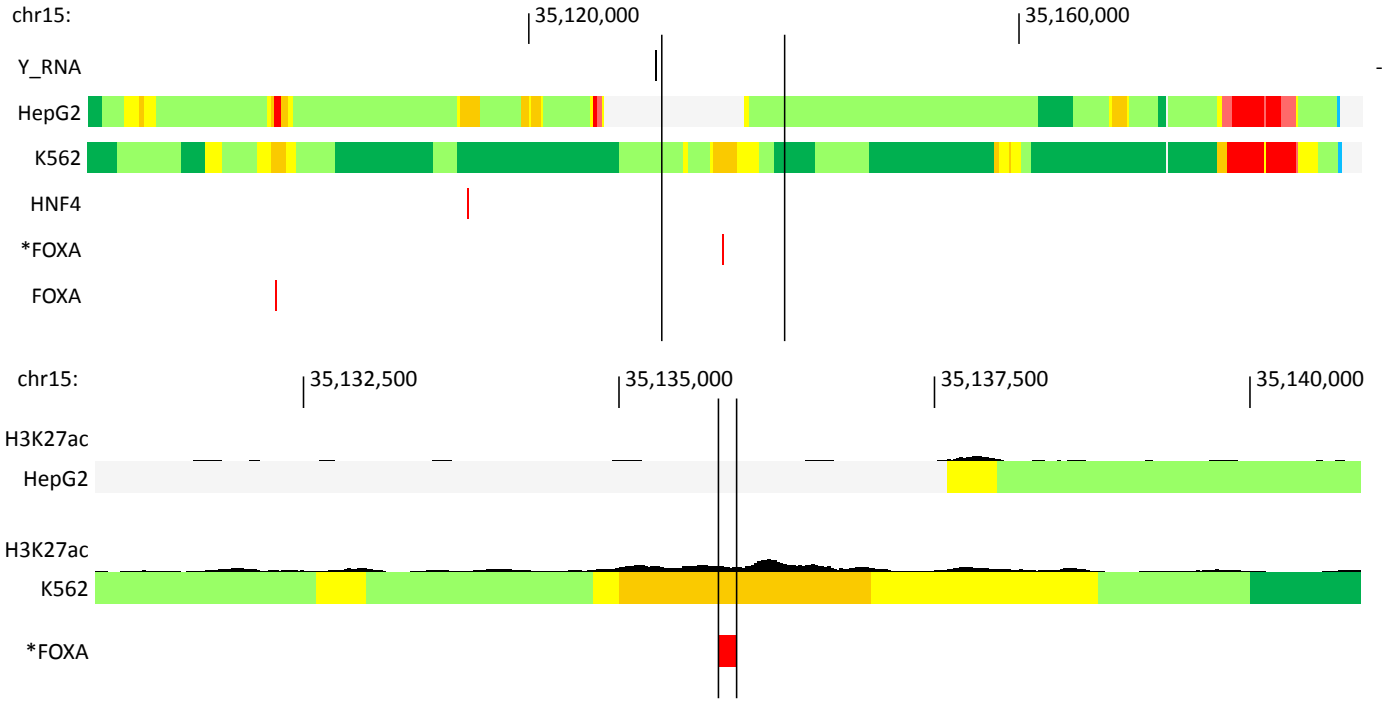
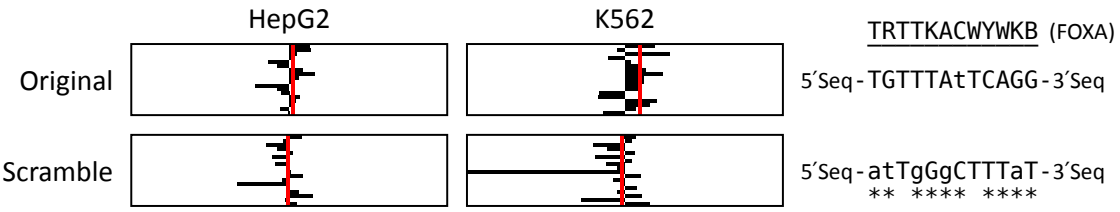
647 FOXA in K562 enhancer (conserved at 50% confidence)

chr15 35135855 35135866 + (hg18)





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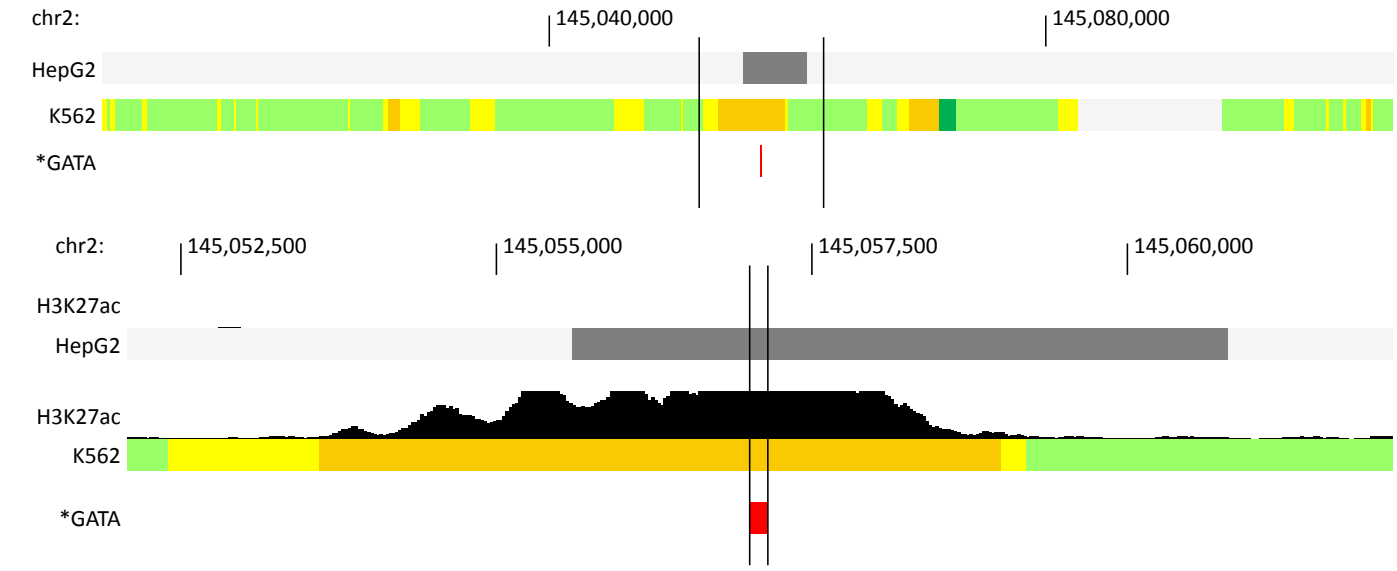
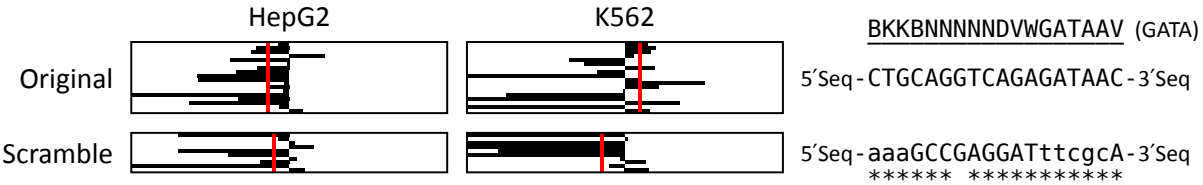
3′Seq = cataacaagctcttcaaaatgagcataatttaagaggtgaatagtgcaaagagggctaacattcaa

648 GATA in K562 enhancer (conserved at 70% confidence)

chr2 145057071 145057088 + (hg18)





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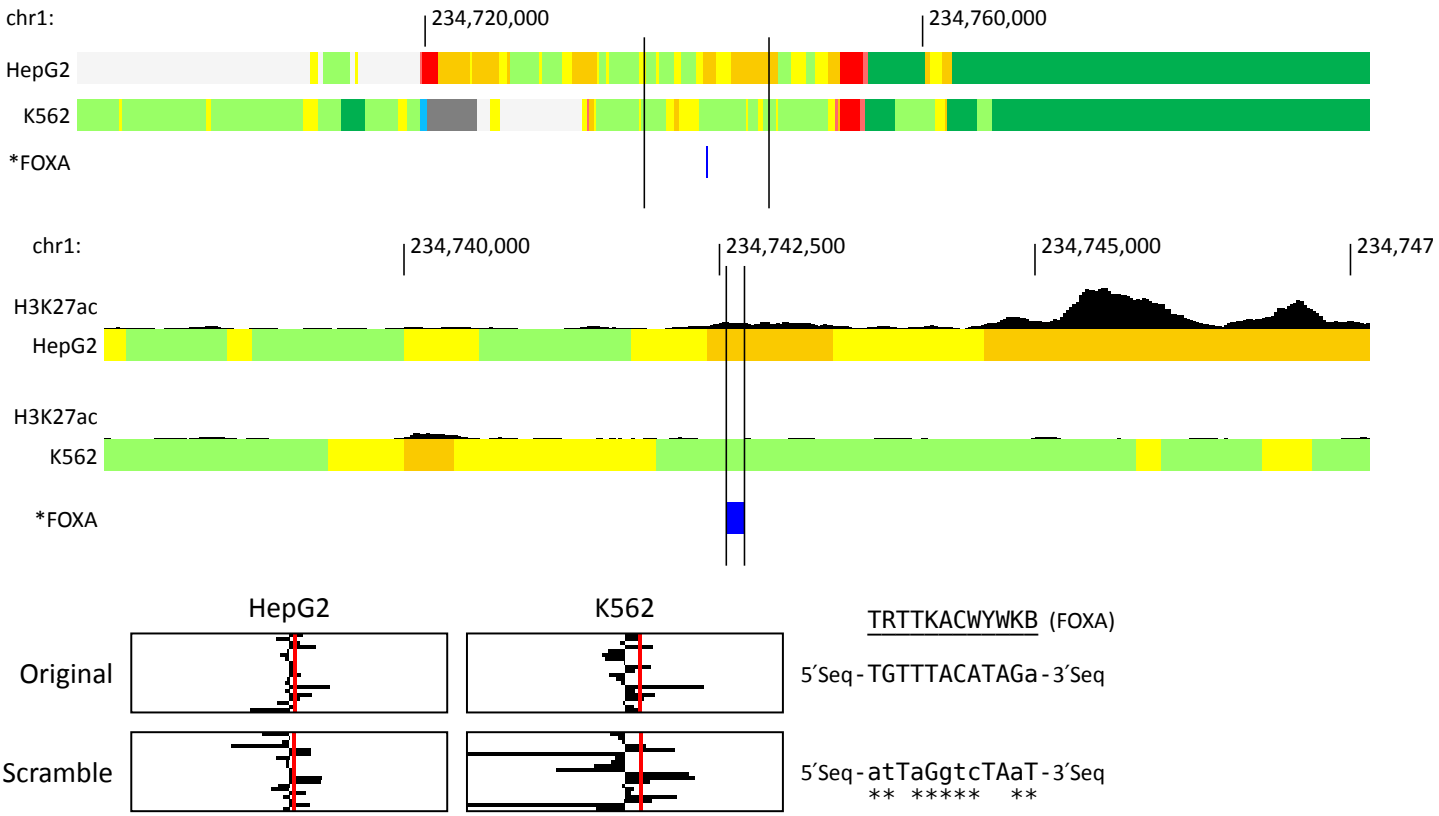
649 FOXA in HepG2 enhancer

chr1 234742621 234742632 - (hg18)



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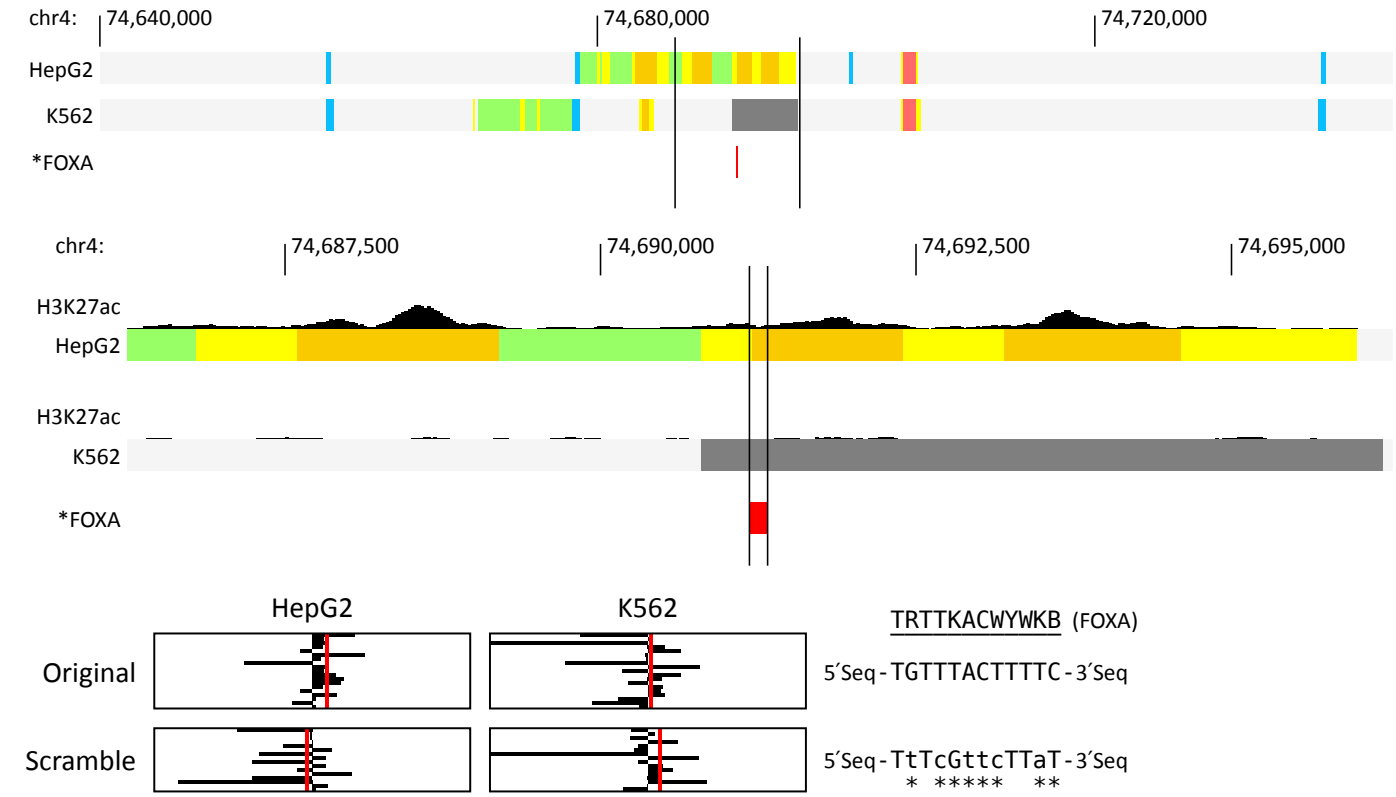
3′Seq = cgtaaggtatactttagccttgggagcactataaagacatgttgttgtcttgataaaaagaaagaa

650 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr4 74691247 74691258 - (hg18)



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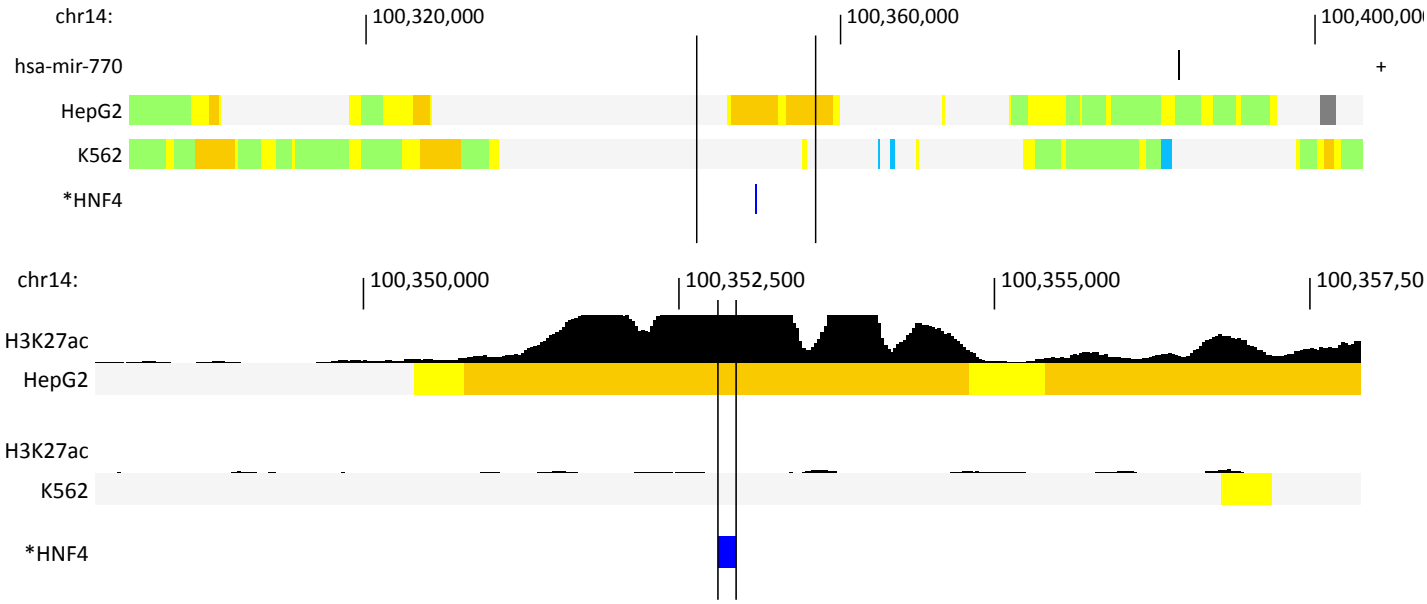
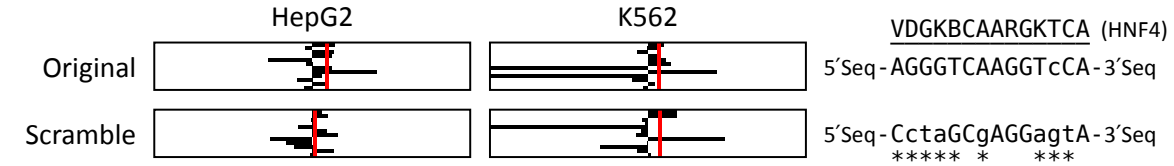
651 HNF4 in HepG2 enhancer

chr14 100352875 100352888 - (hg18)





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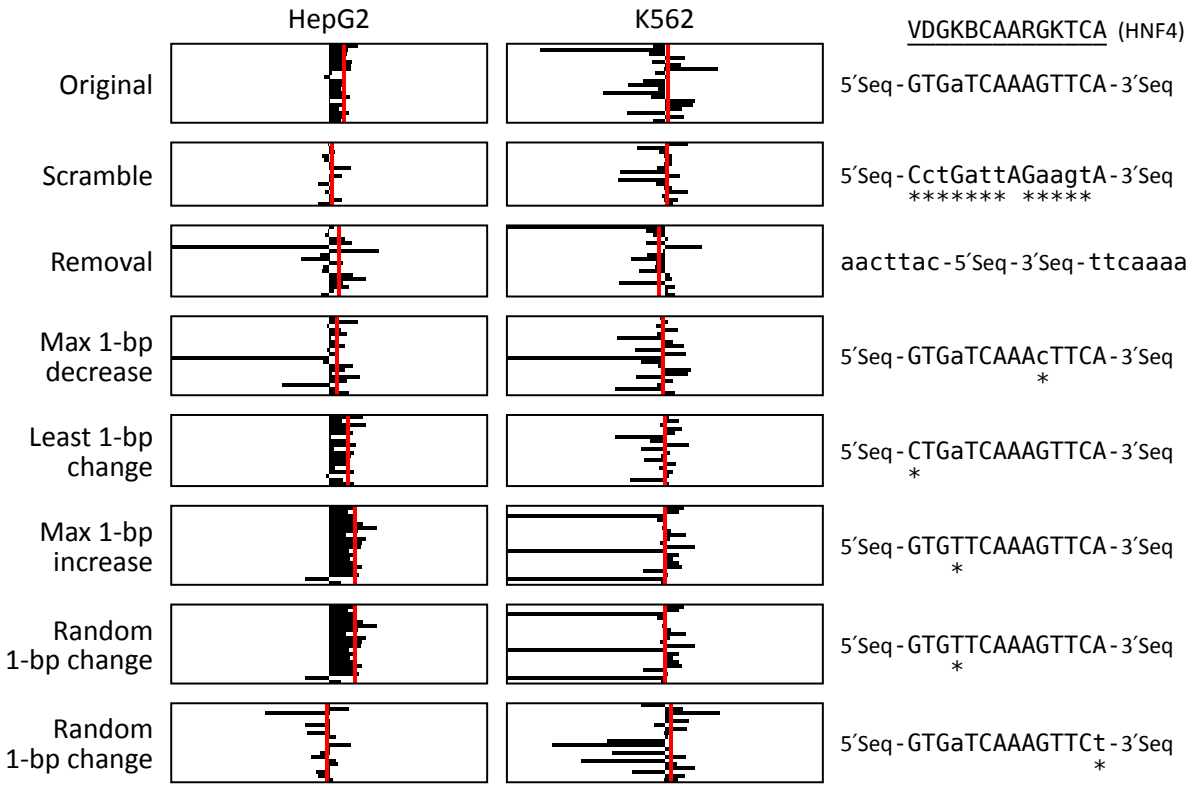
3′Seq = gggctggggaggtggaactctggagtagggagcacagggaacataggcagggaggccaggccagg

652 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr1 92775312 92775325 - (hg18)



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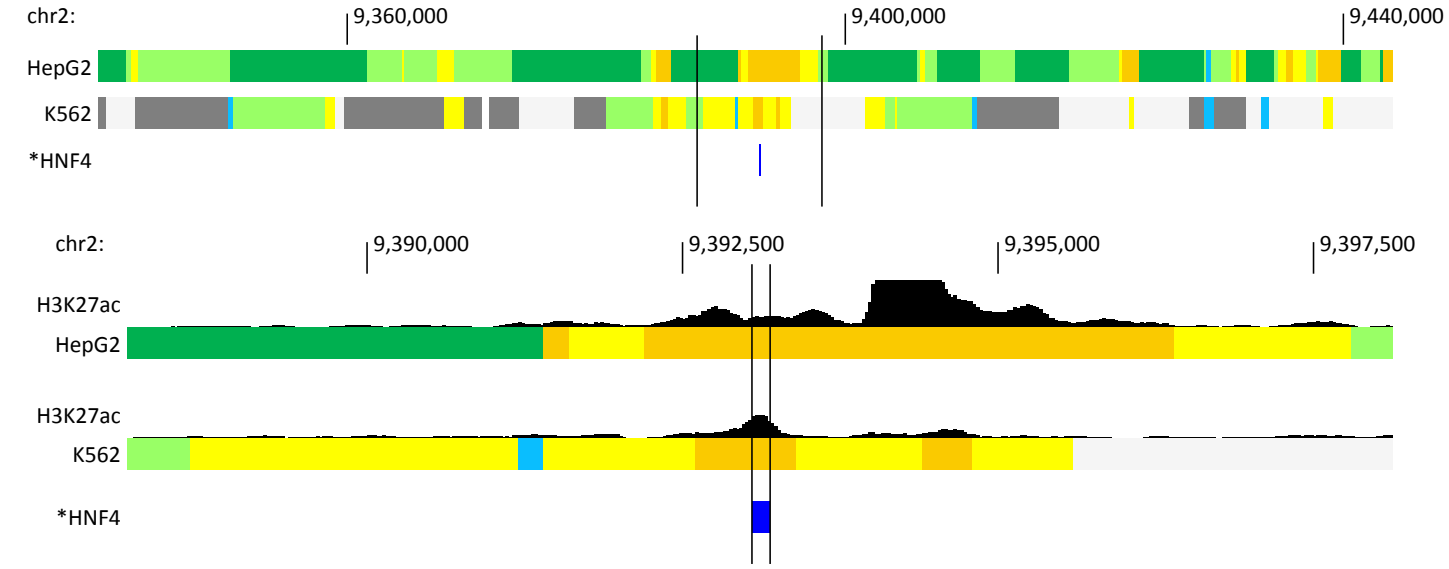
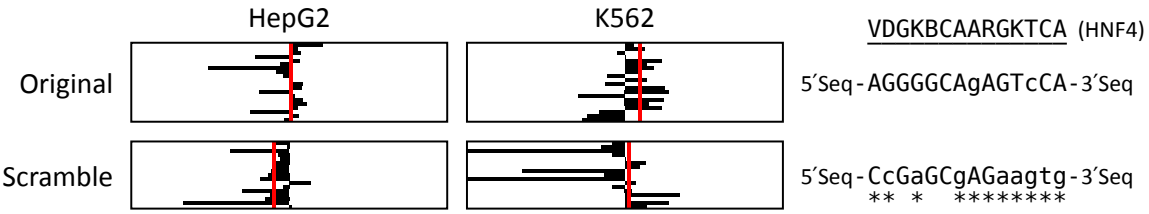
653 HNF4 in K562 enhancer

chr2 9393116 9393129 - (hg18)





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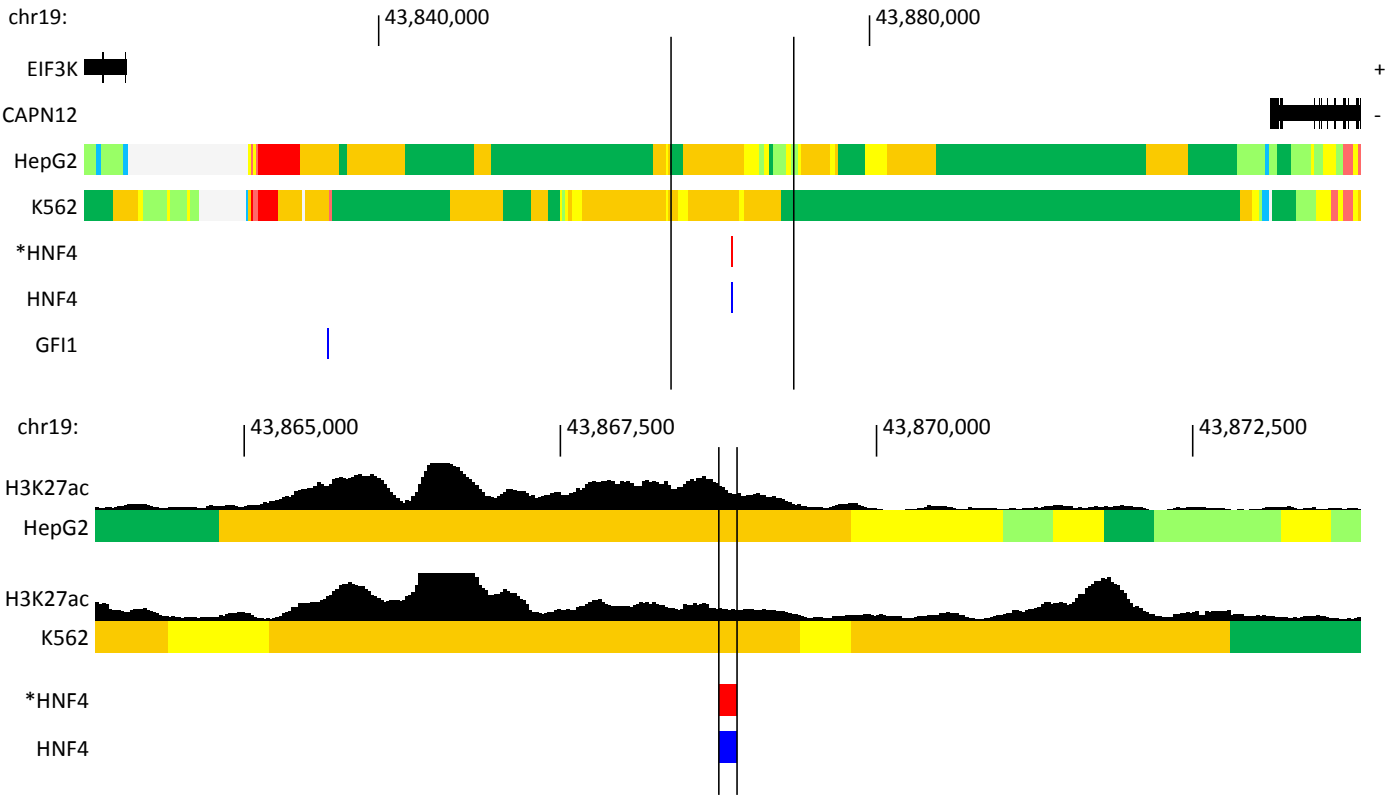
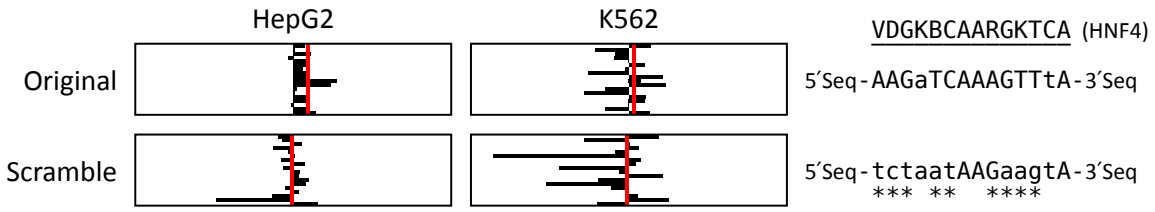
3′Seq = cgtatgtcagggtagggaaatgacacagggccaggtacaggataaatagcacaaatgacacatgg

654 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr19 43868819 43868832 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-AAGaTCAAAGTTtA-3′Seq

5′Seq-tctaatAAGaagtA-3′Seq

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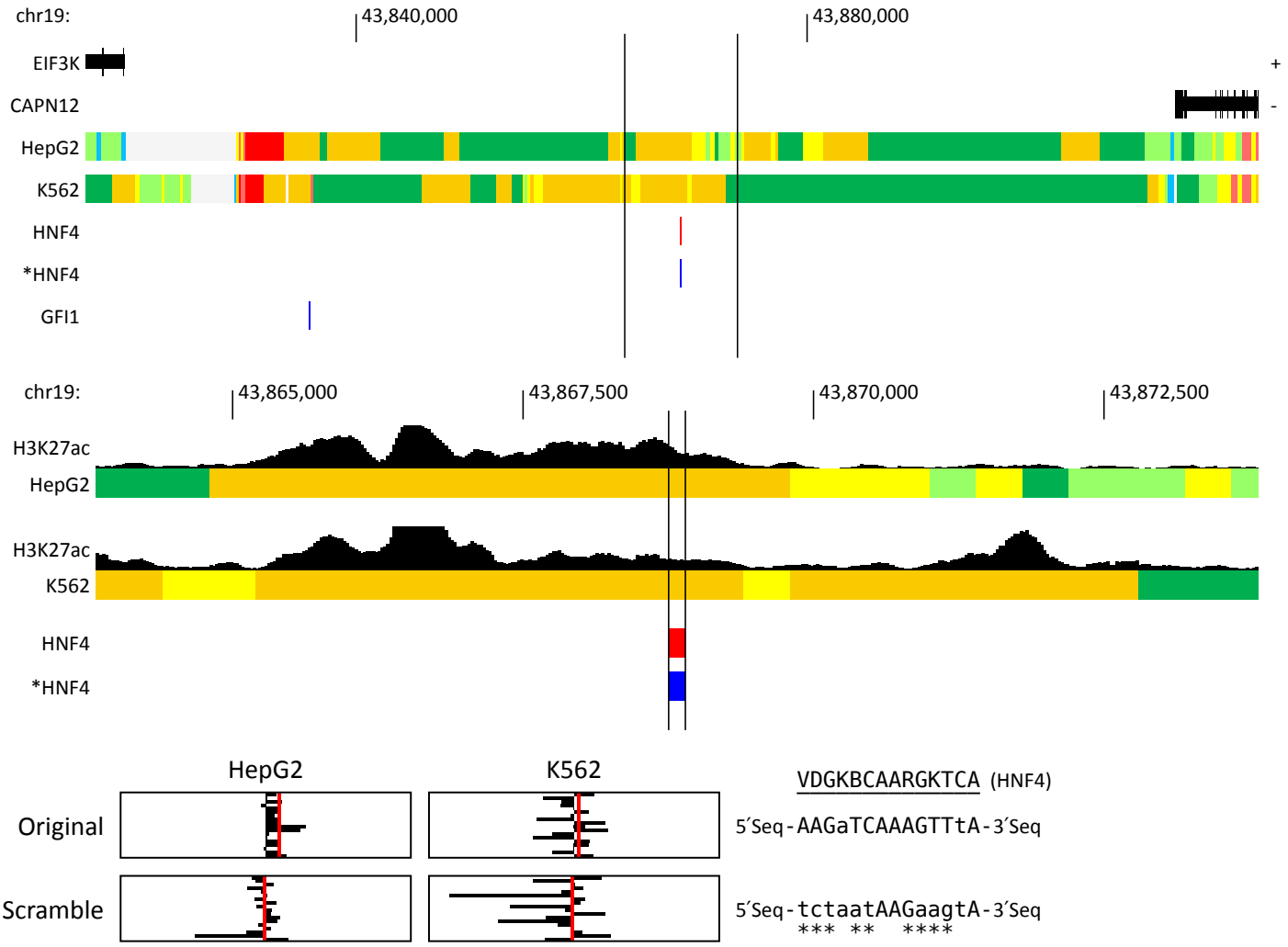
5′Seq = cactcgctaagattccaggccacactgtctcaaggccagaattggcttacttggctatctttttga

3′Seq = aaccagatgatctgtagtcccccacccccaccctgaaacctgagcttagctgtaagcattgaaag

655 HNF4 in HepG2 enhancer

chr19 43868819 43868832 + (hg18)



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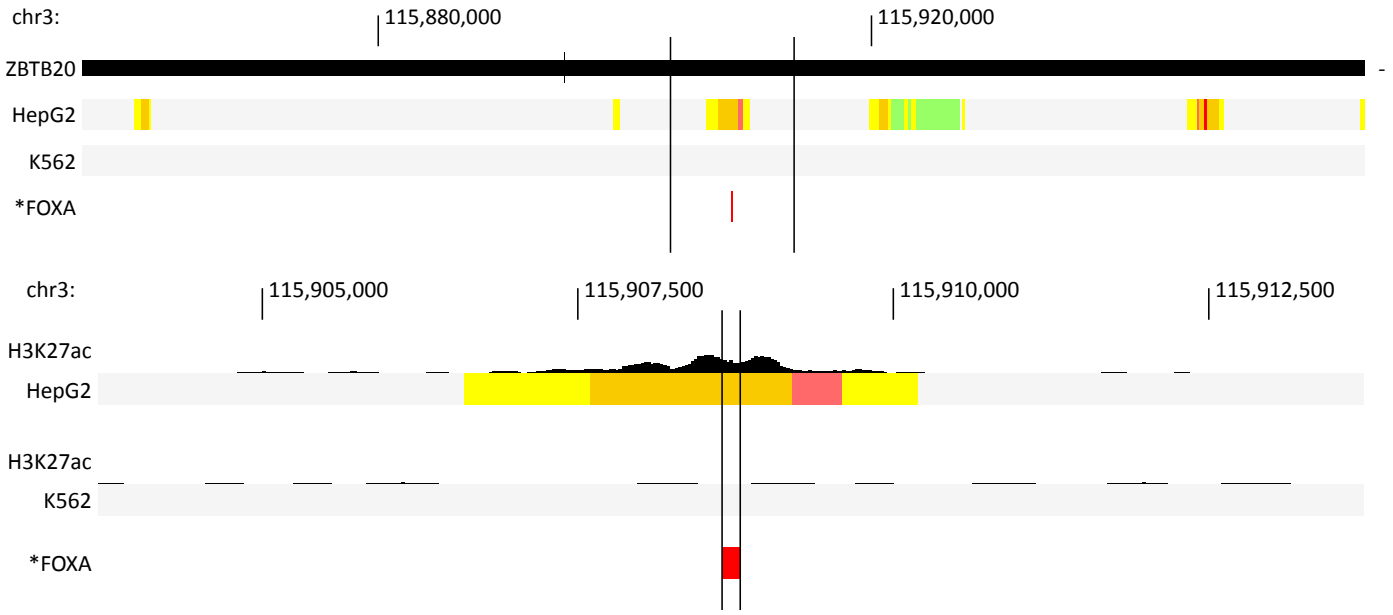
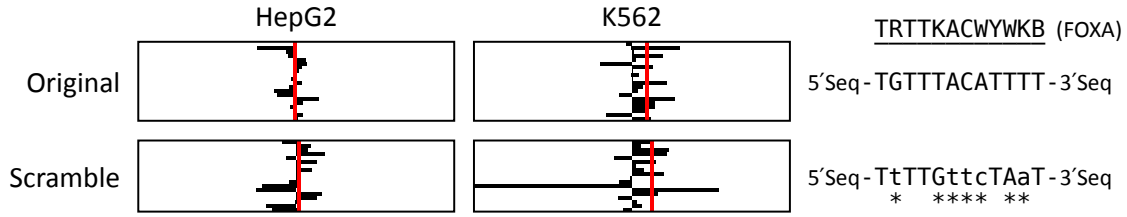
3′Seq = aaccagatgatctgtagtcccccacccccaccctgaaacctgagcttagctgtaagcattgaaag

656 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 115908710 115908721 + (hg18)





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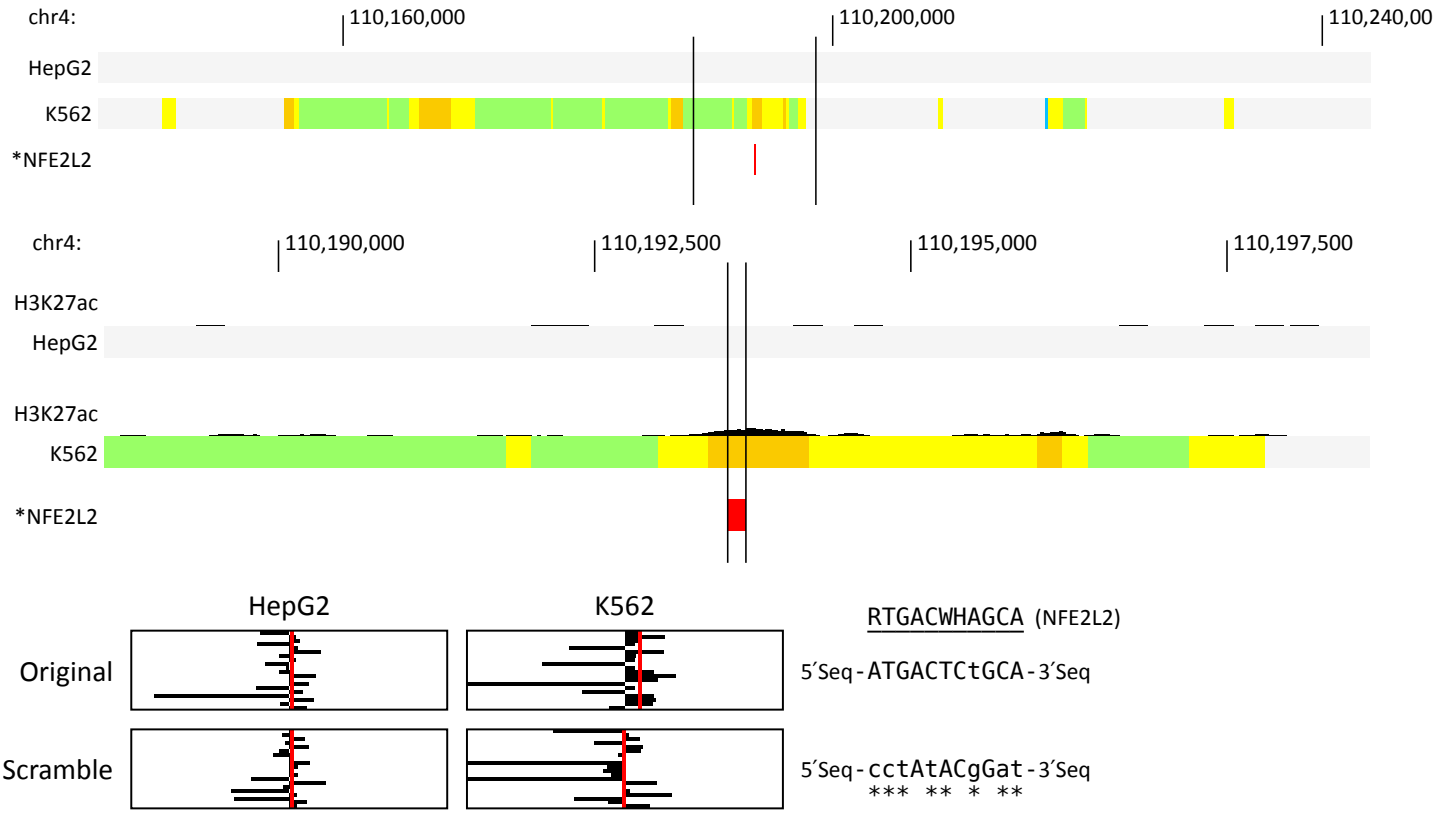
3′Seq = tgctatatgtcatttataatgcattttctaaatgtgtgtatatctattcggaaggactatttggaa

657 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr4 110193619 110193629 + (hg18)



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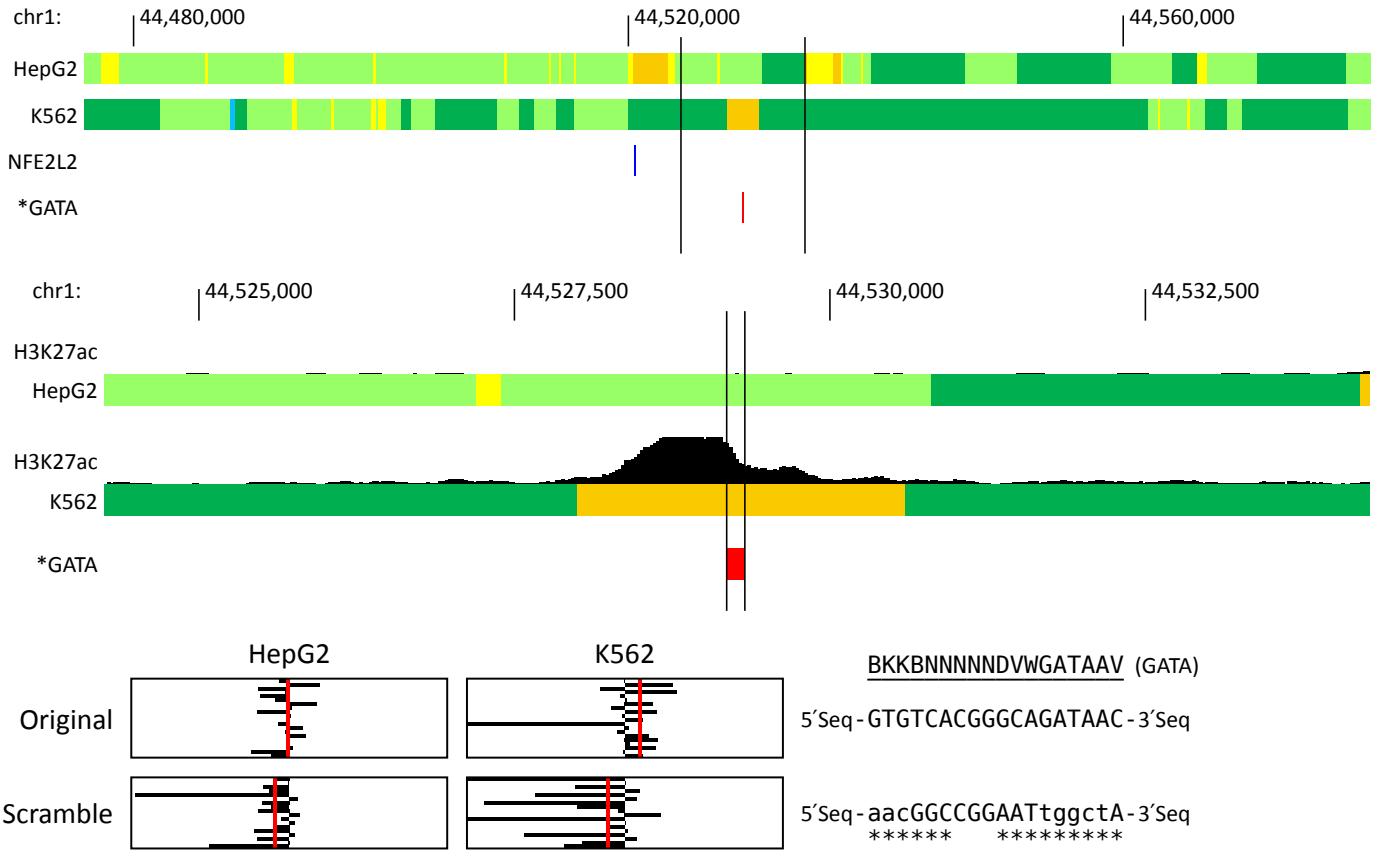
658 GATA in K562 enhancer (conserved at 60% confidence)

chr1 44529246 44529263 - (hg18)



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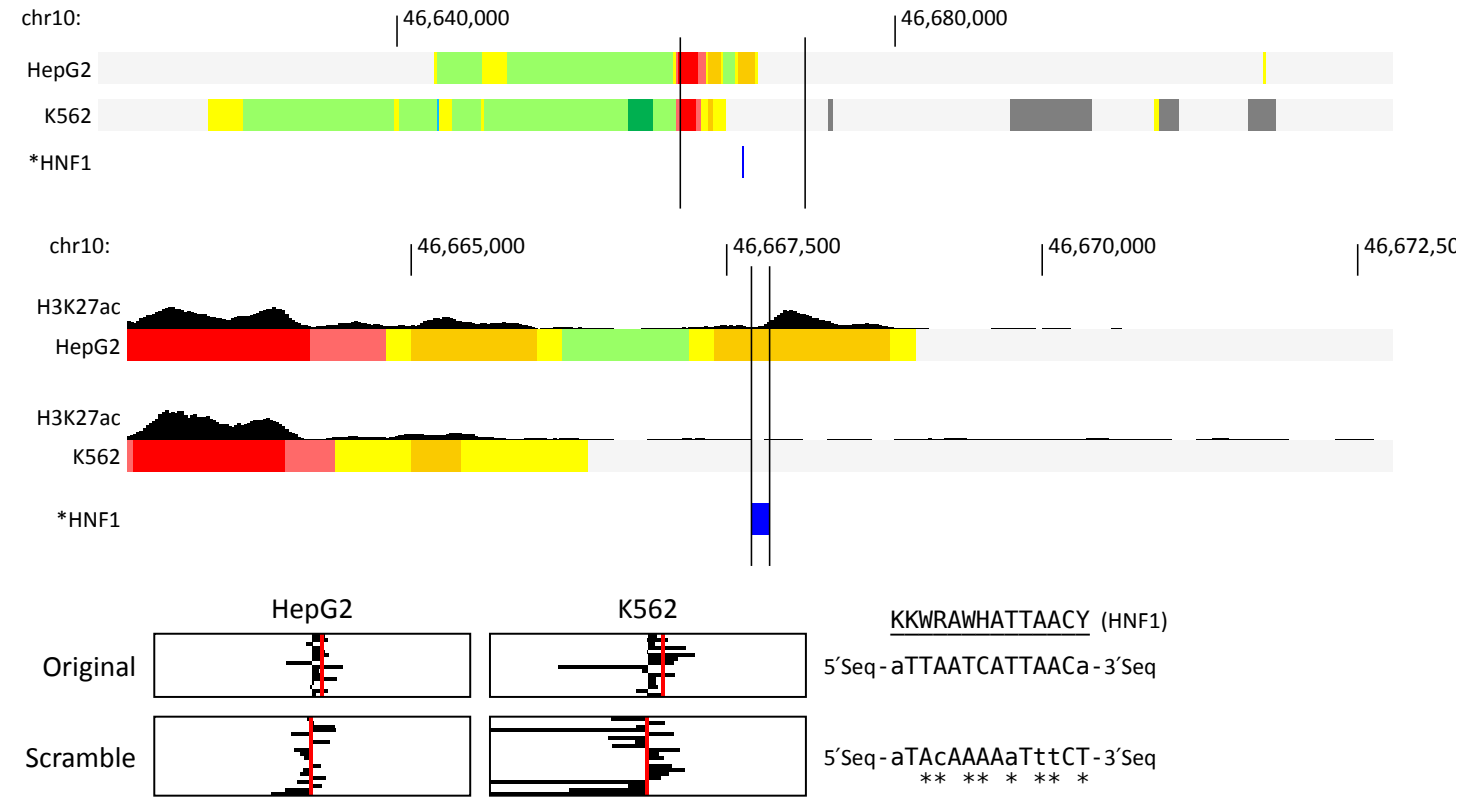
3′Seq = taacgtcccagcctcgtgcctgctctcattgttgctcaatttgctccatgtgtaagctcagcc

659 HNF1 in HepG2 enhancer

chr10 46667762 46667775 - (hg18)



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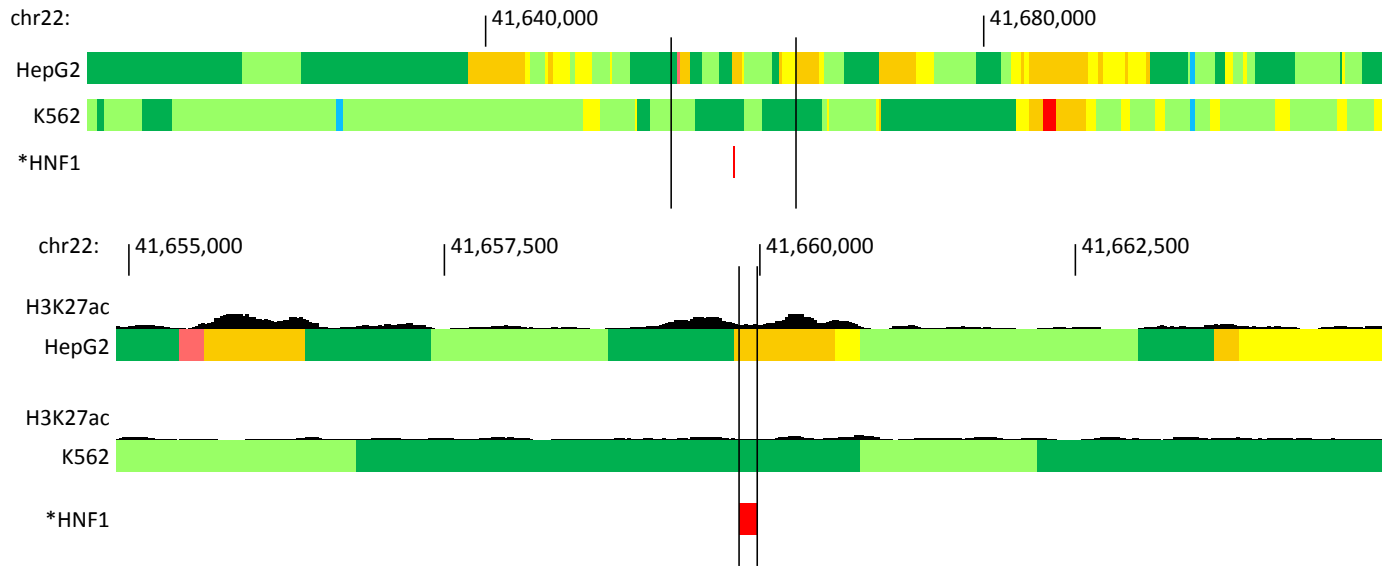
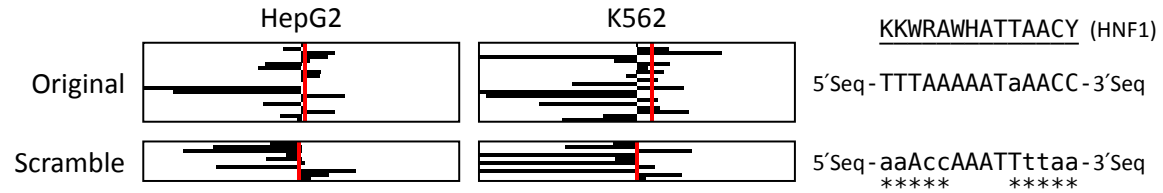
660 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr22 41659901 41659914 + (hg18)





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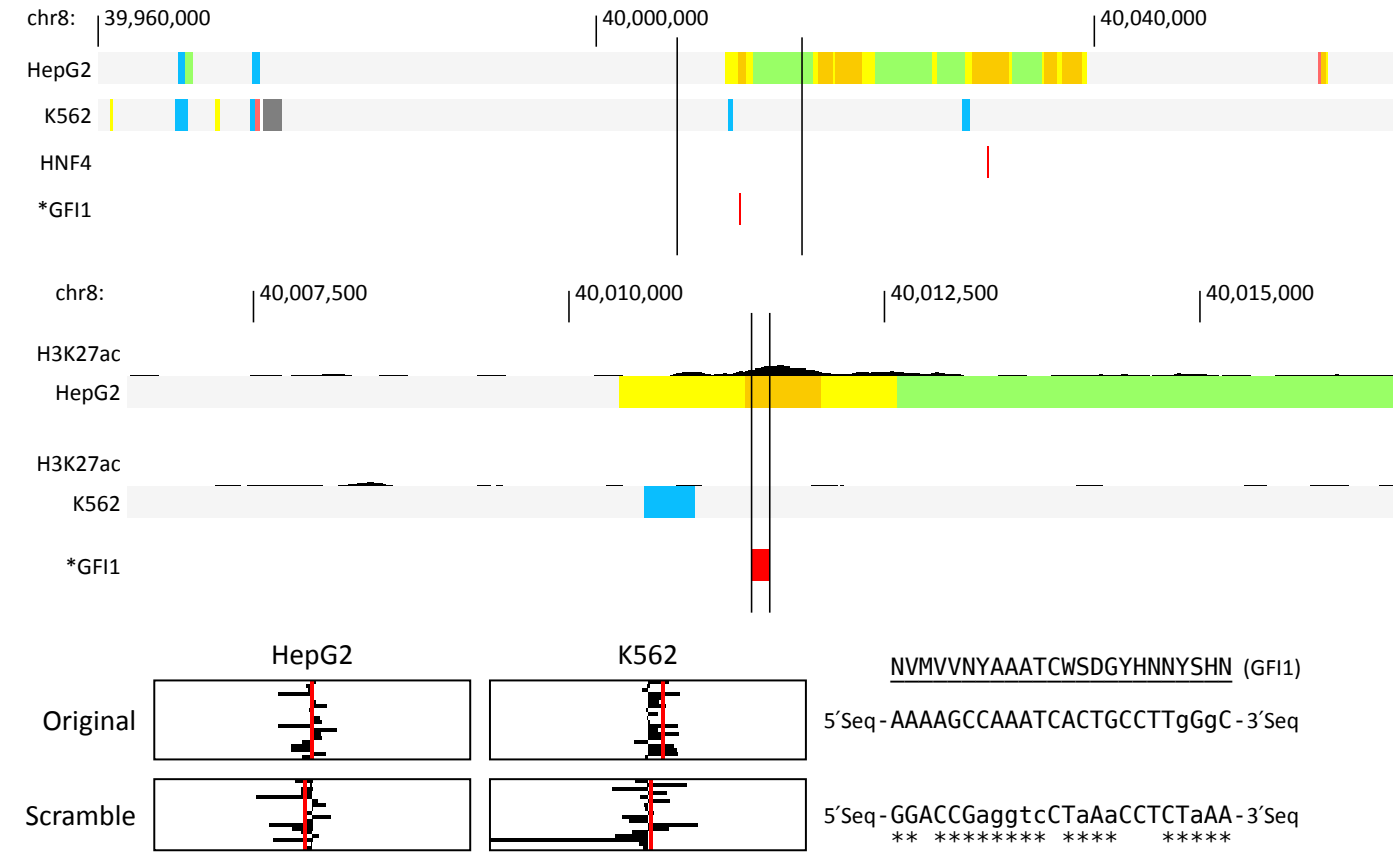
661 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr8 40011508 40011531 + (hg18)



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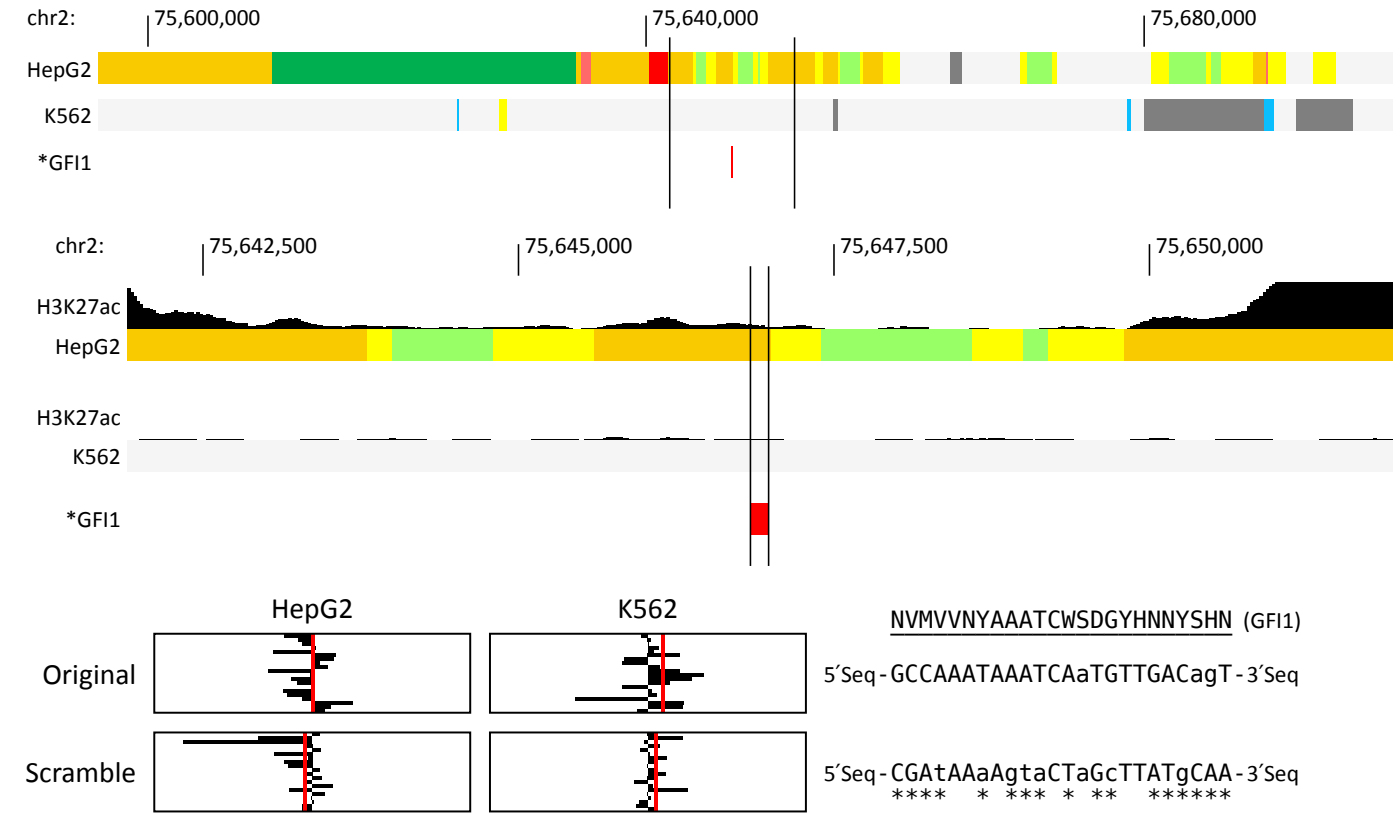
662 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 75646899 75646922 + (hg18)



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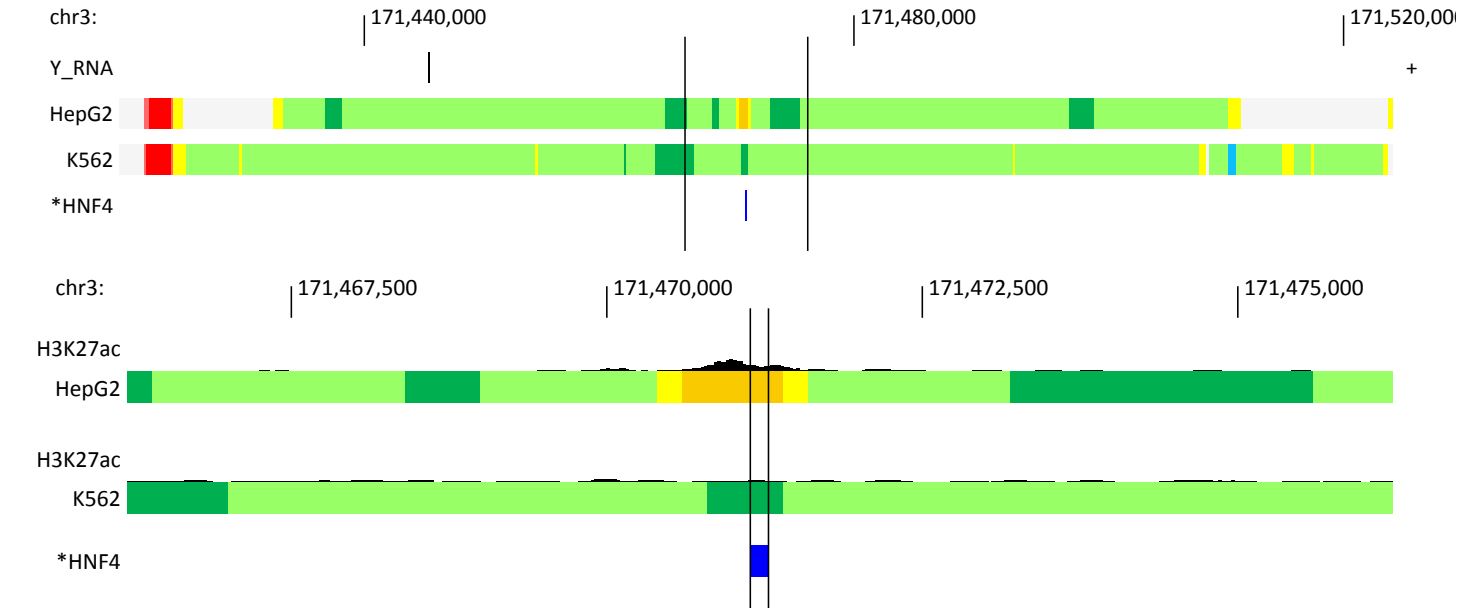
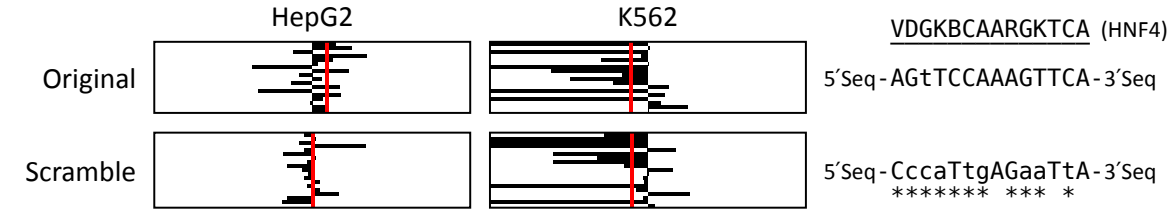
663 HNF4 in HepG2 enhancer

chr3 171471203 171471216 - (hg18)





5′Seq = aggattttacagcaggtaaagaagttaactgtgtcccacagacaagtattaccacagatatttcga
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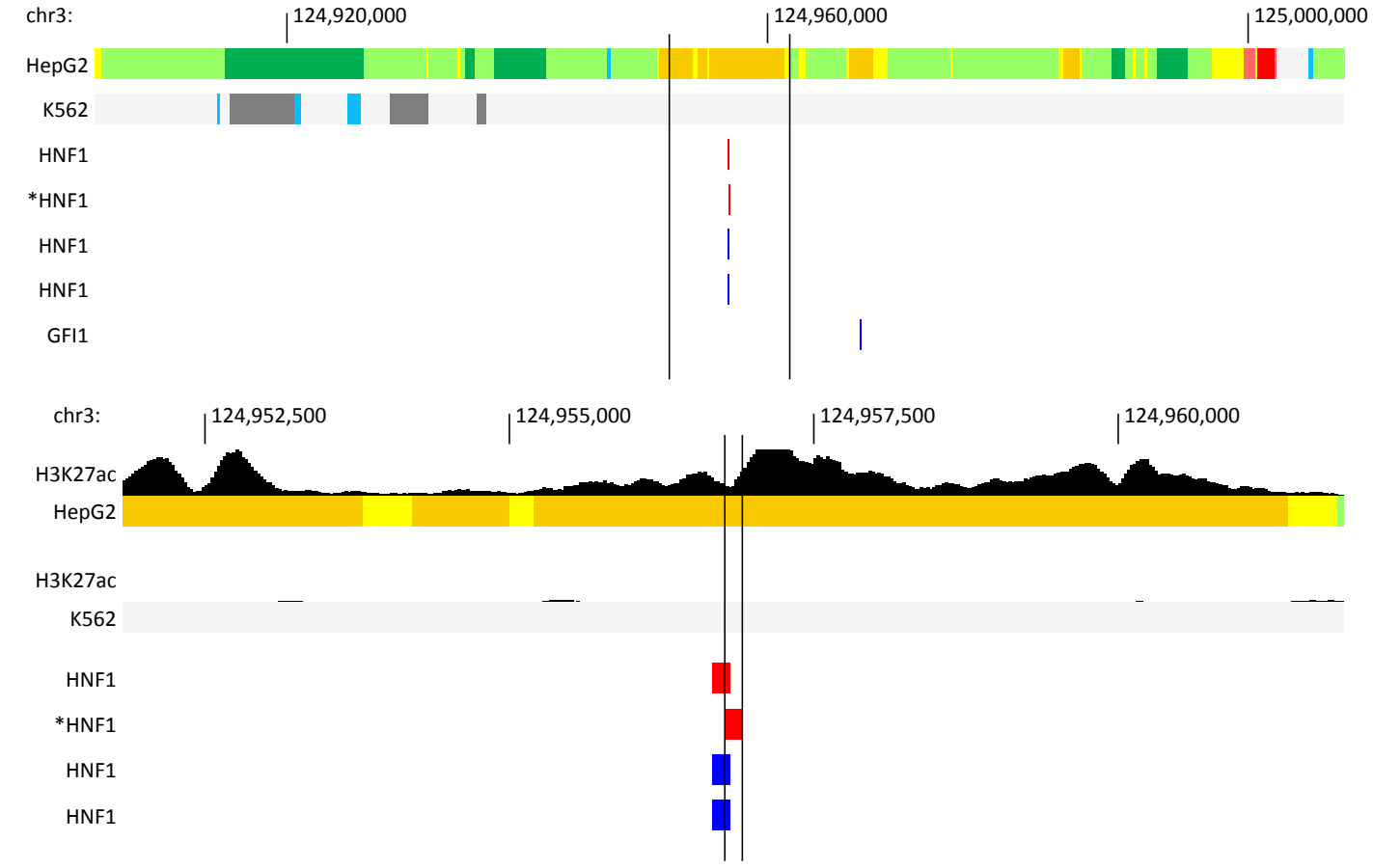
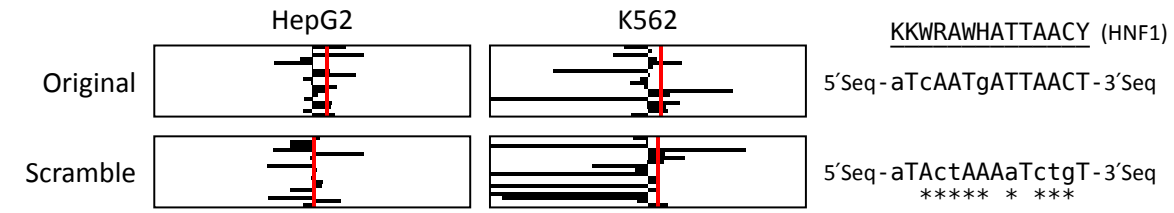
664 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr3 124956835 124956848 + (hg18)





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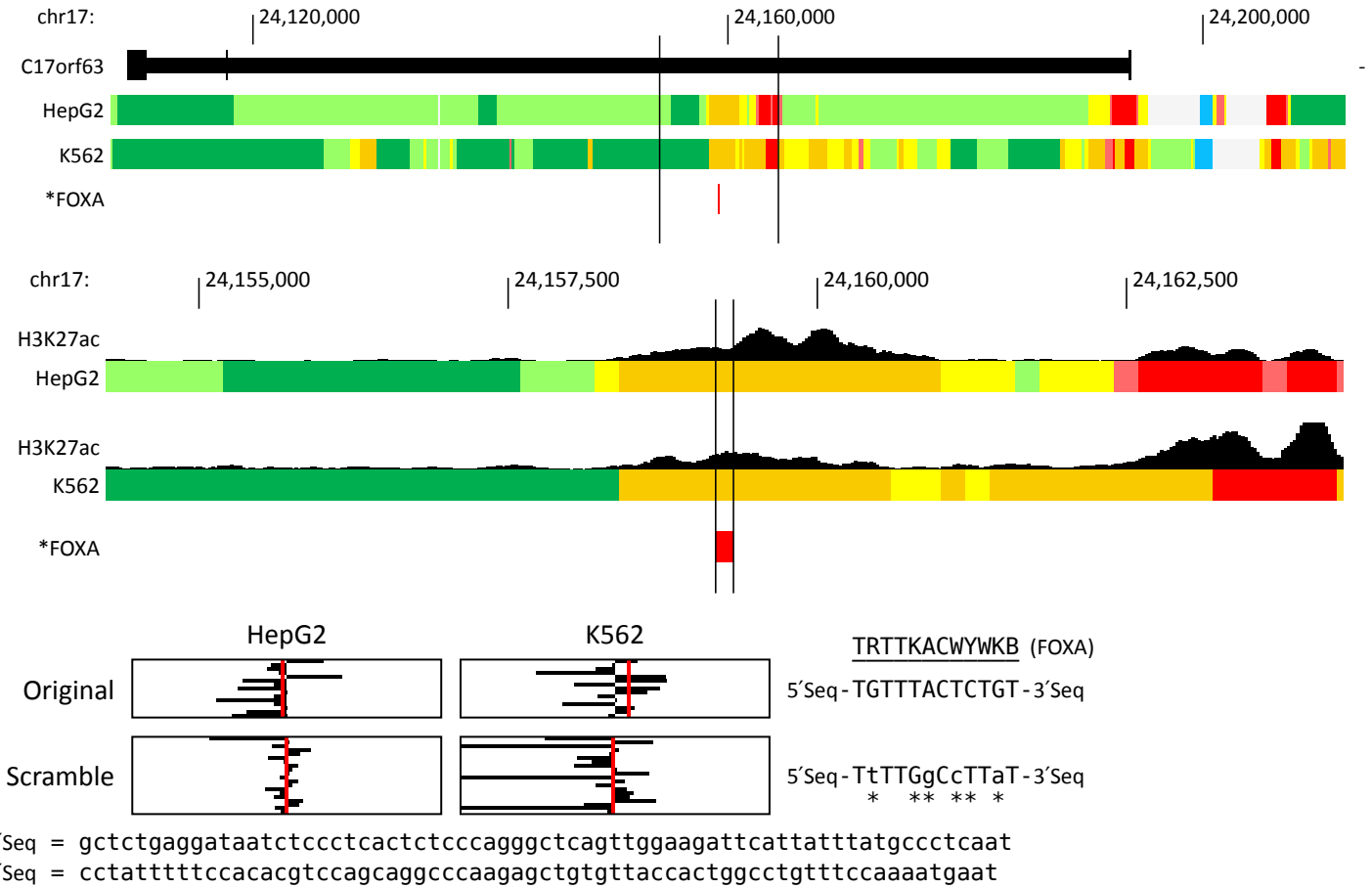
665 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 24159245 24159256 + (hg18)



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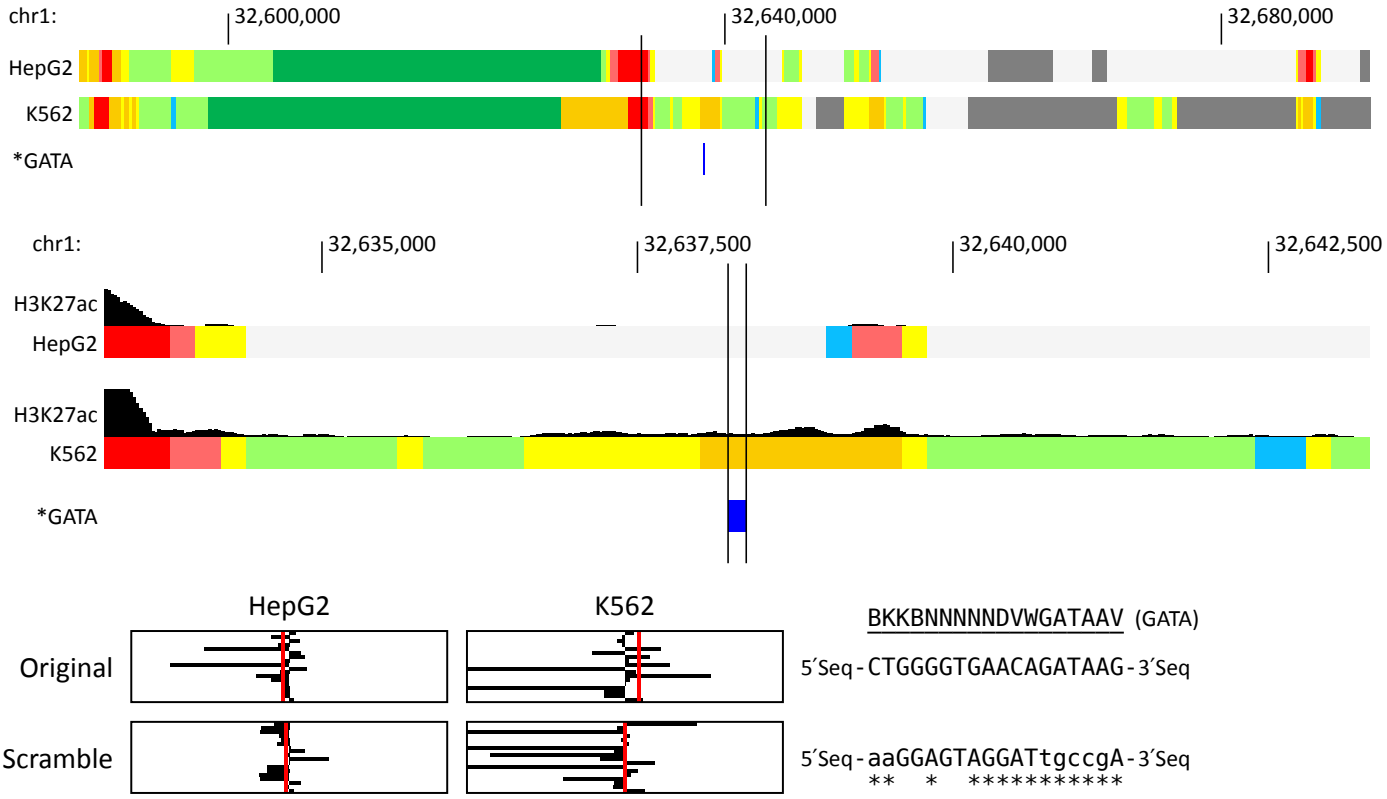
666 GATA in K562 enhancer

chr1 32638282 32638299 - (hg18)



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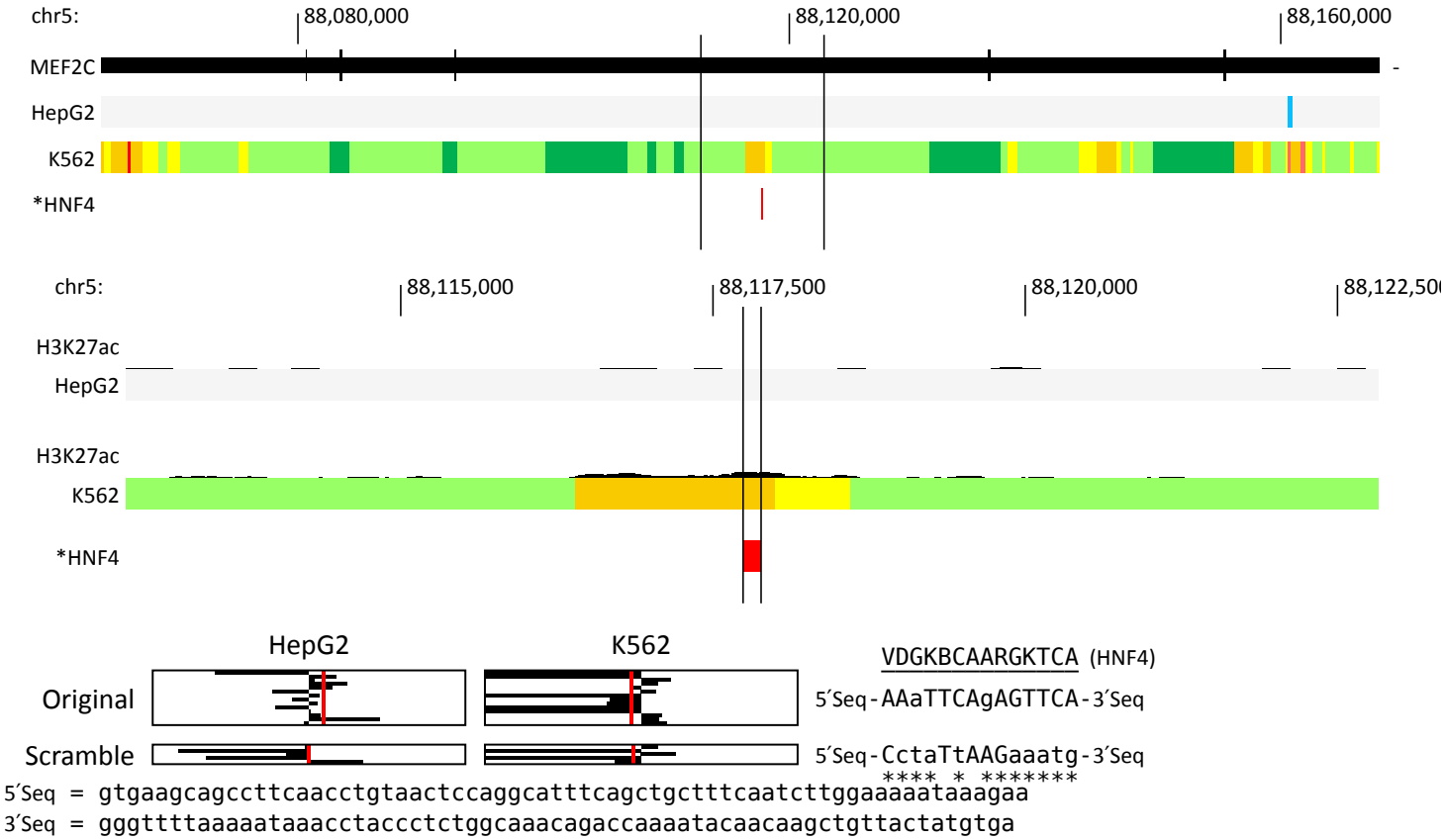
667 HNF4 in K562 enhancer (conserved at 60% confidence)

chr5 88117807 88117820 + (hg18)



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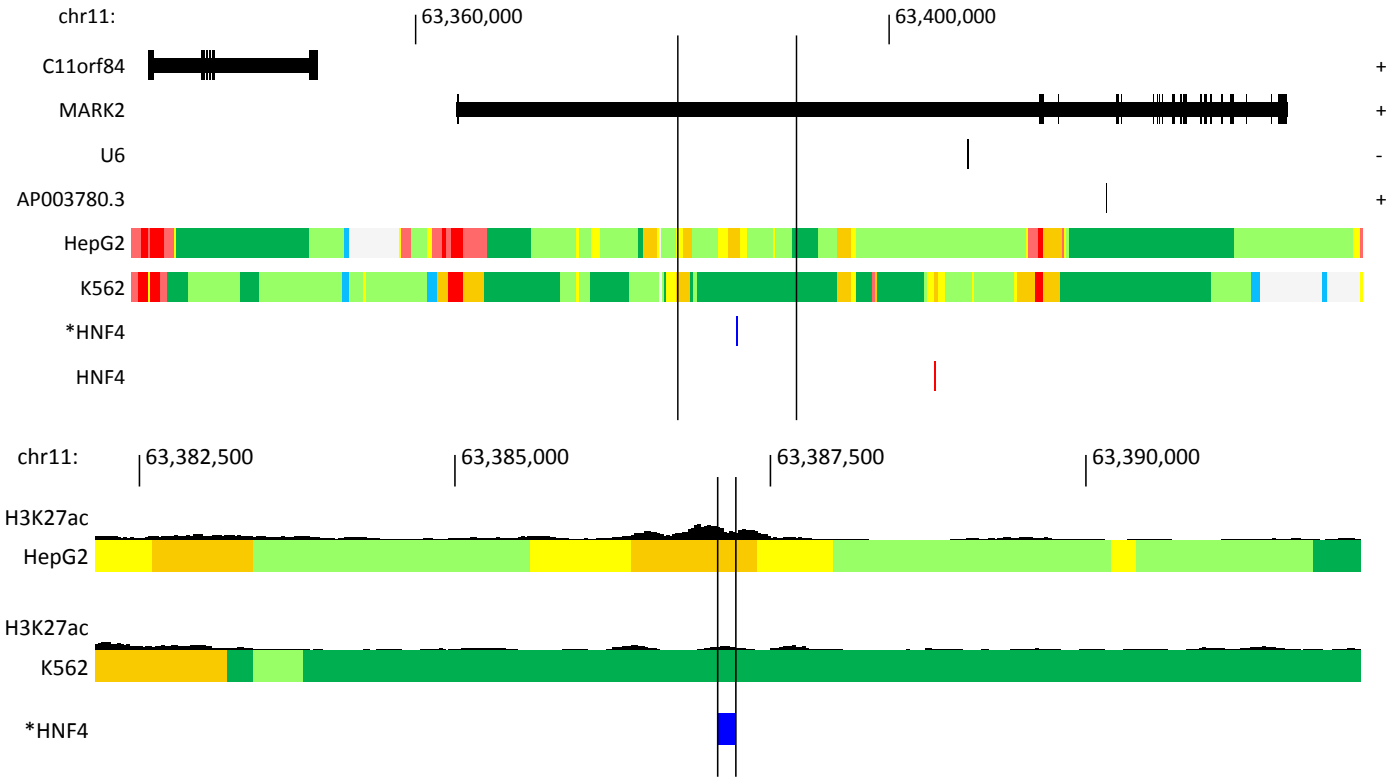
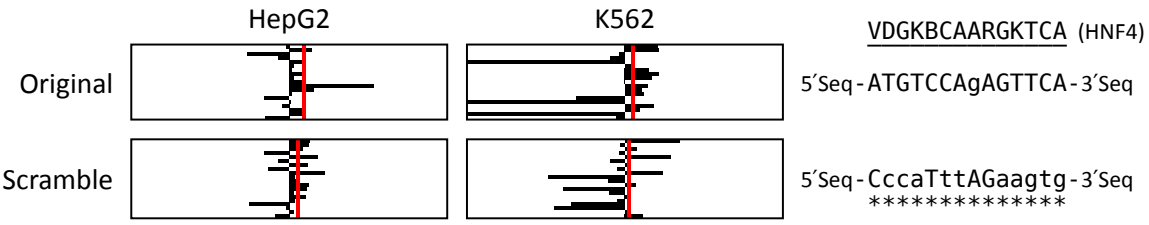
668 HNF4 in HepG2 enhancer

chr11 63387148 63387161 - (hg18)





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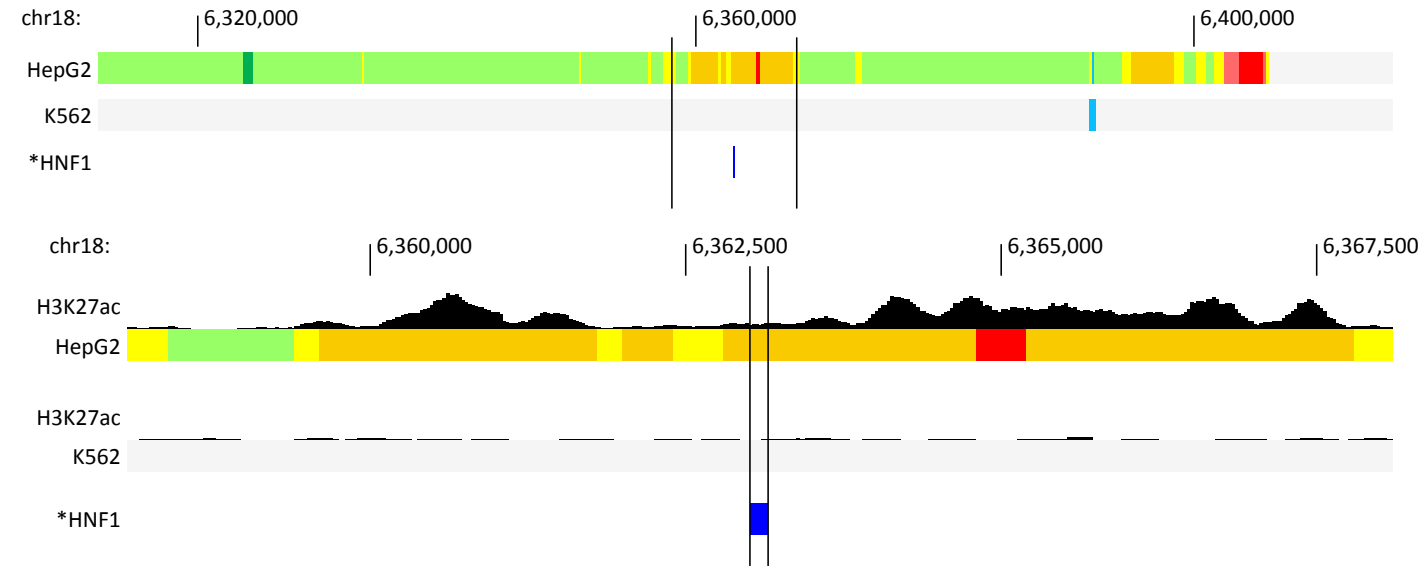
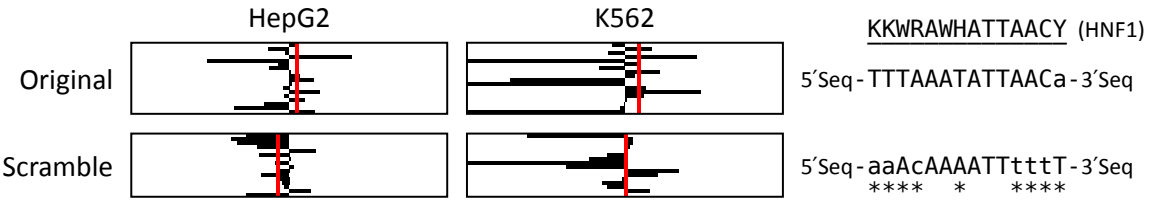
669 HNF1 in HepG2 enhancer

chr18 6363075 6363088 - (hg18)





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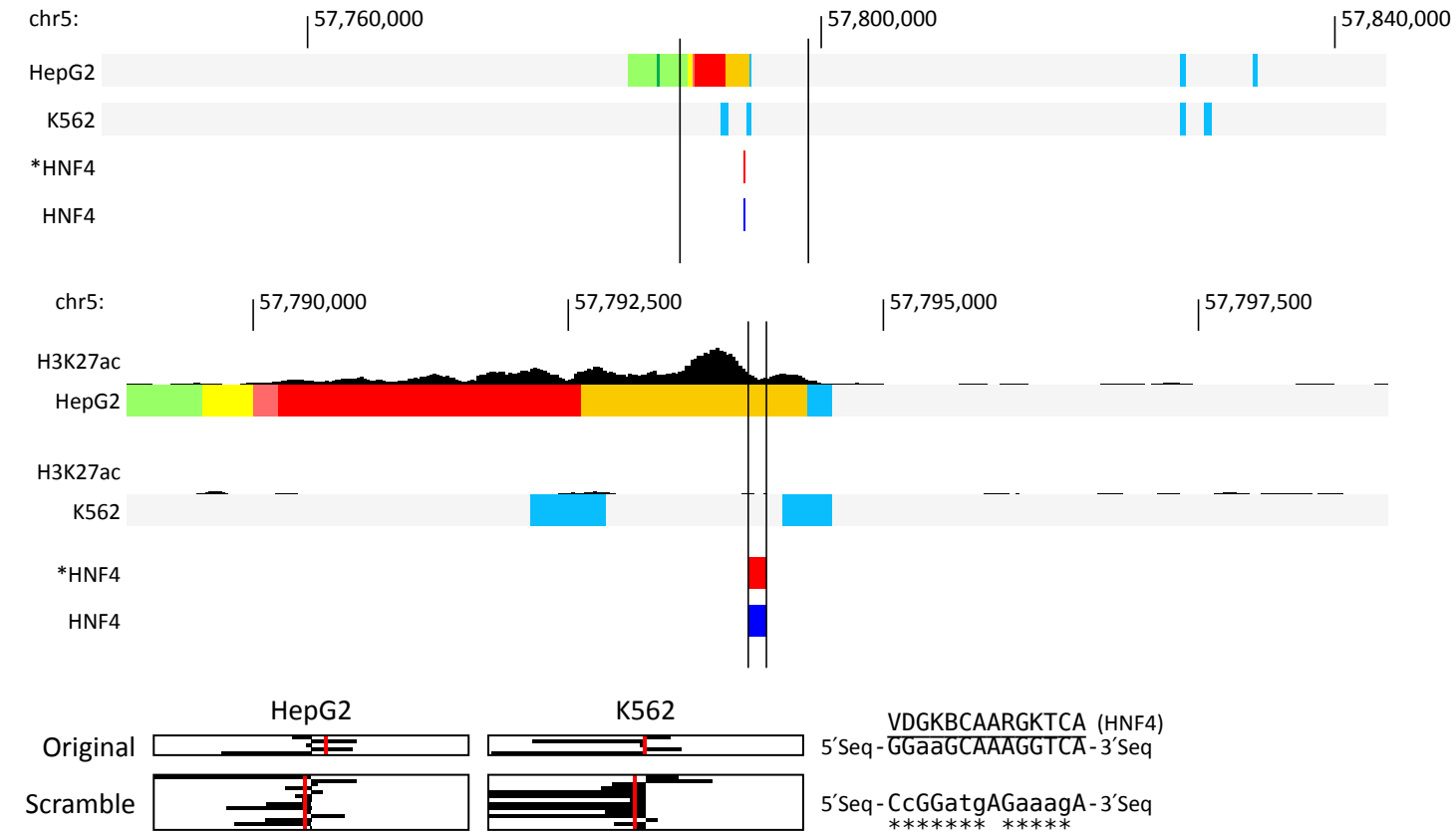
670 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr5 57793994 57794007 - (hg18)



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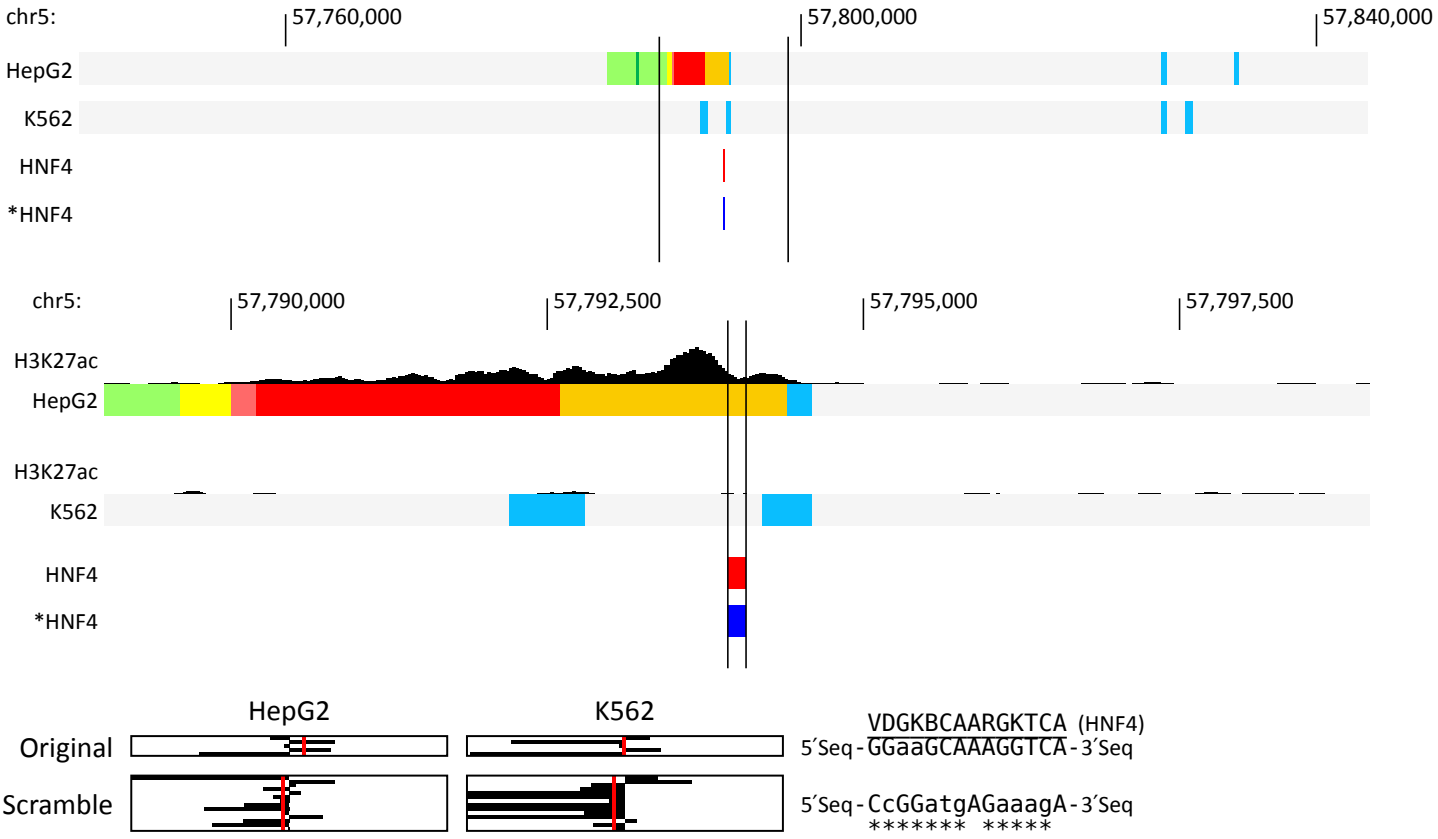
671 HNF4 in HepG2 enhancer

chr5 57793994 57794007 - (hg18)



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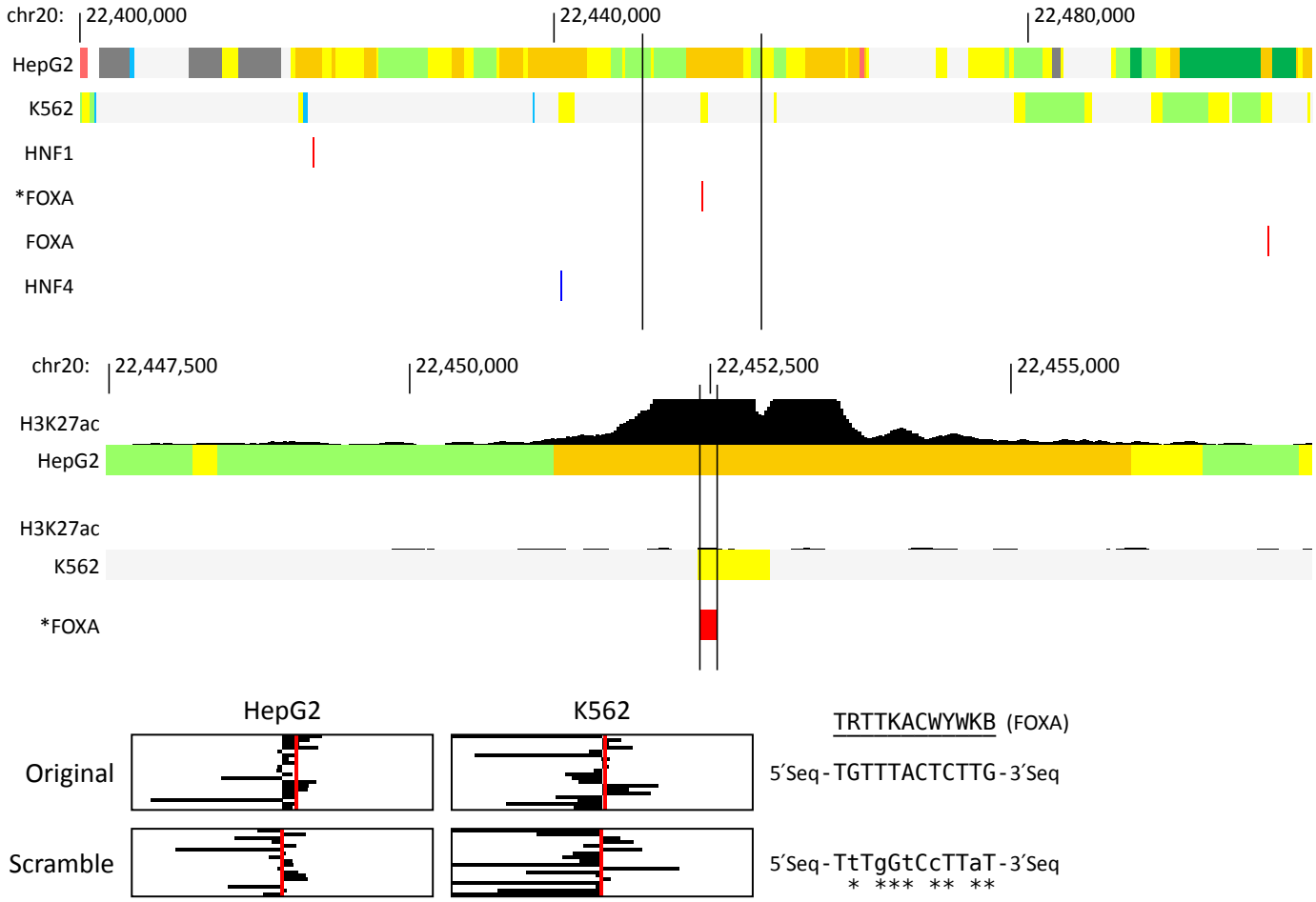
672 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 22452480 22452491 + (hg18)



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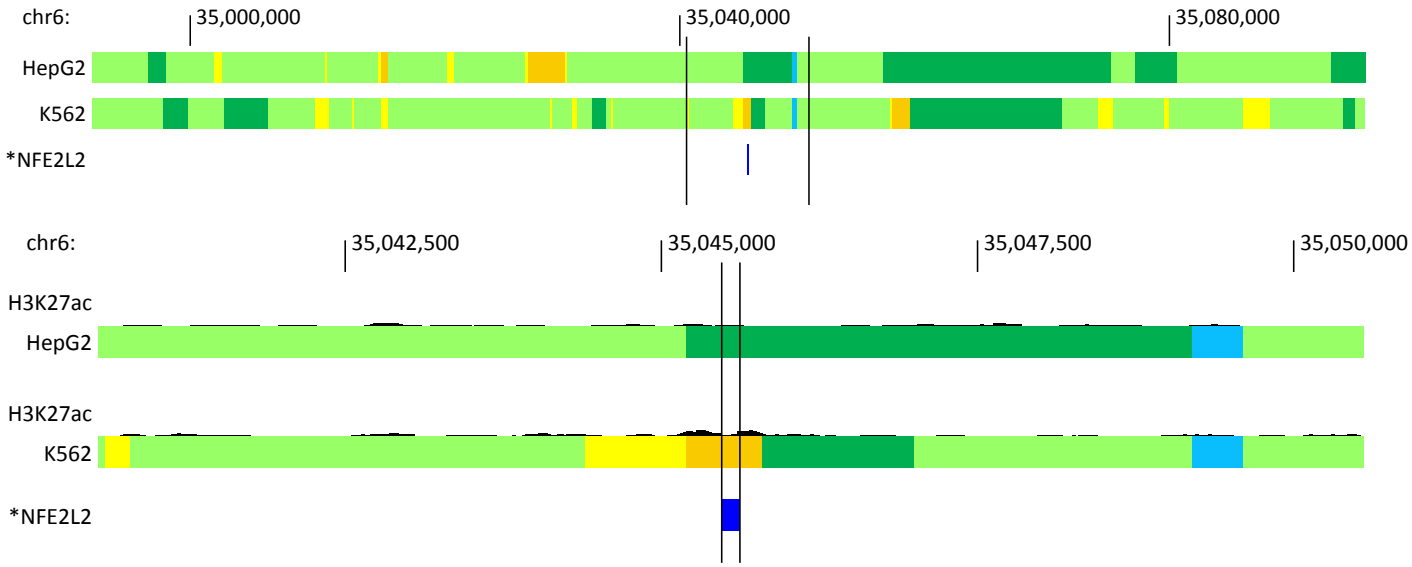
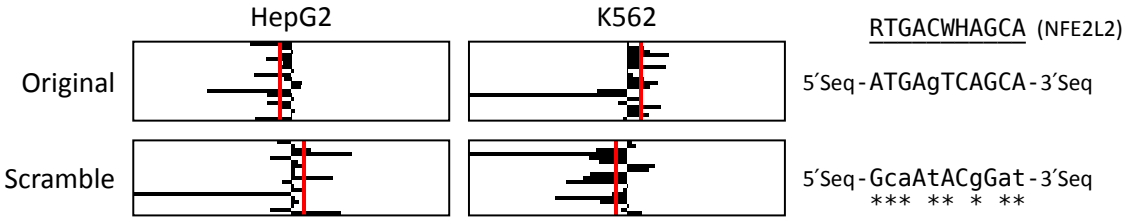
673 NFE2L2 in K562 enhancer

chr6 35045544 35045554 + (hg18)





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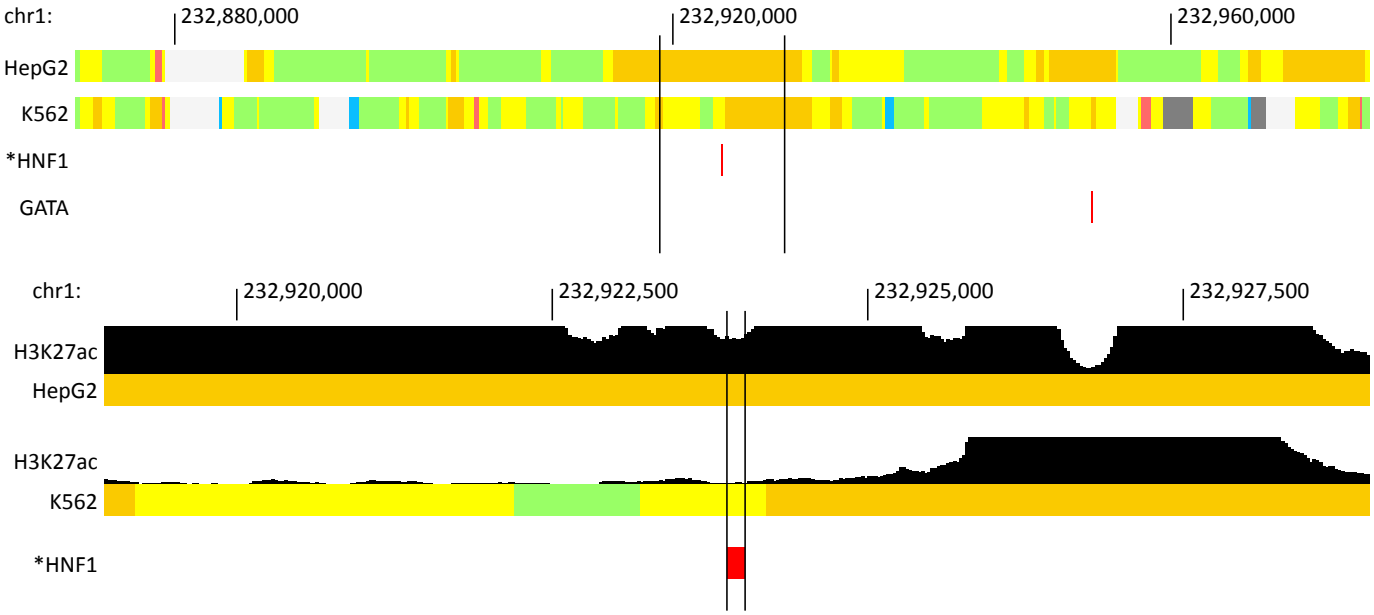
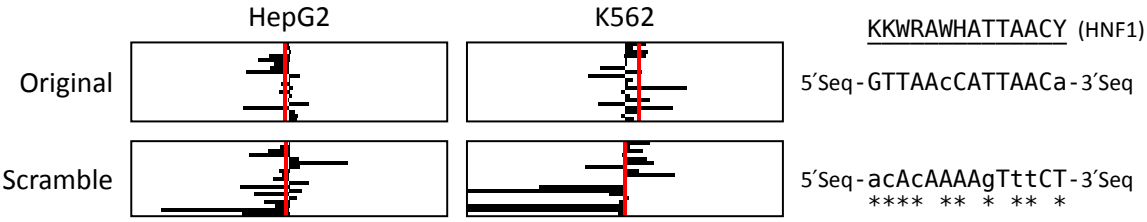
674 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr1 232923950 232923963 + (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GTTAAcCATTAACa-3′Seq

5′Seq-acAcAAAAgTttCT-3′Seq

**** ** * ** *

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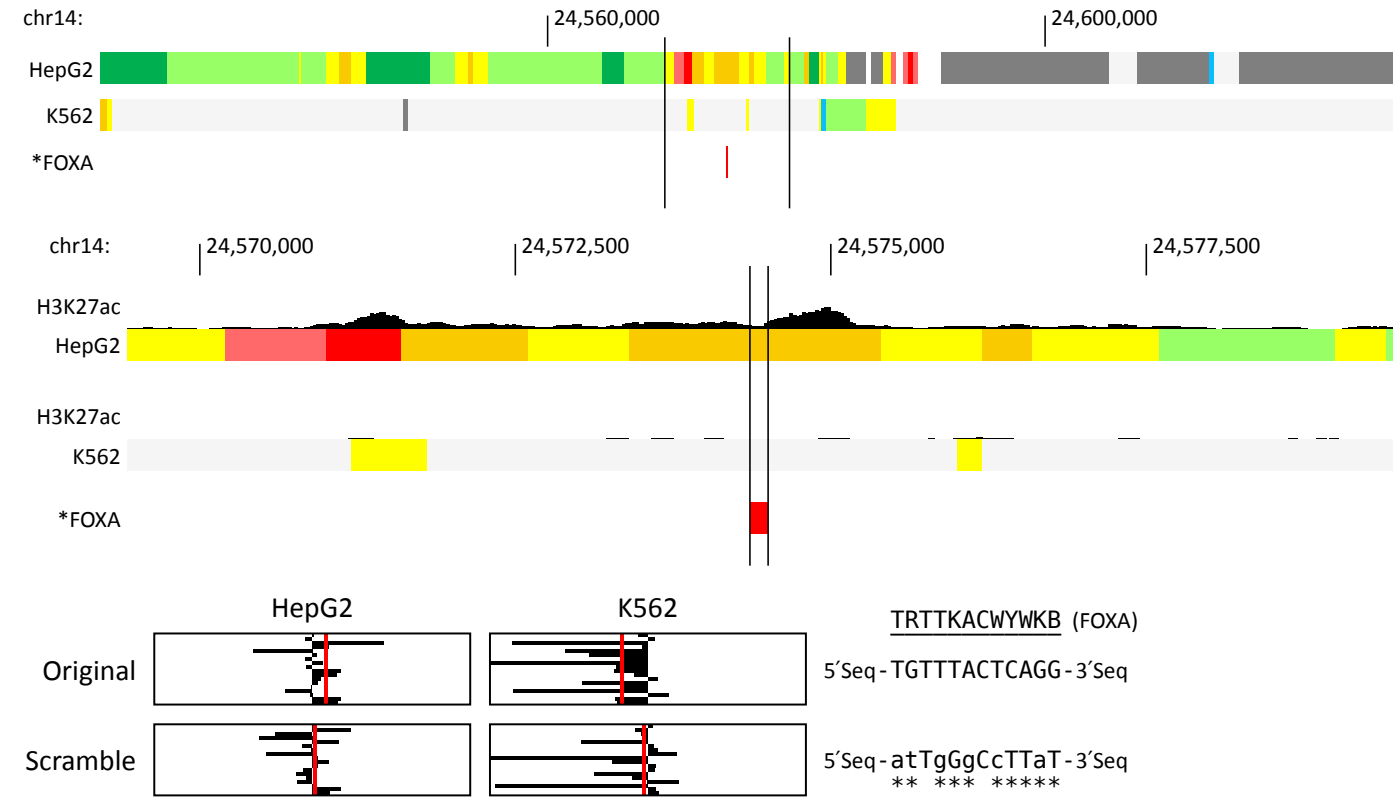
3′Seq = attcataaaagtgcagatccctgcacgataagtccagtccttggaatgttattagaaaatcctat

675 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 24574426 24574437 + (hg18)



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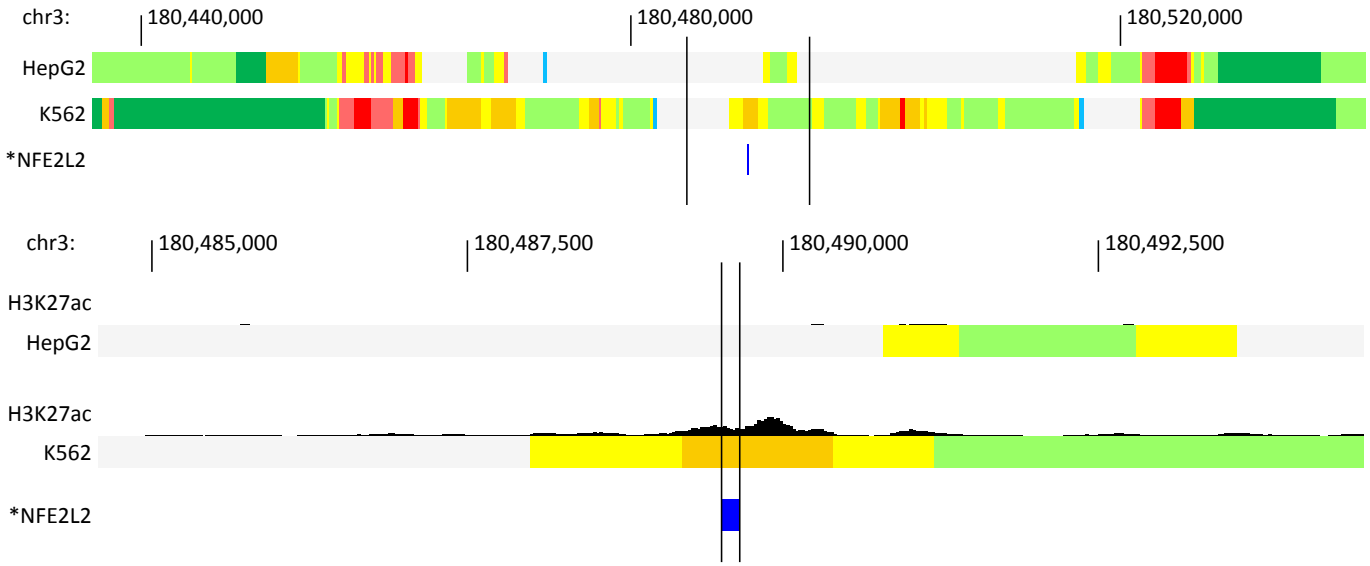
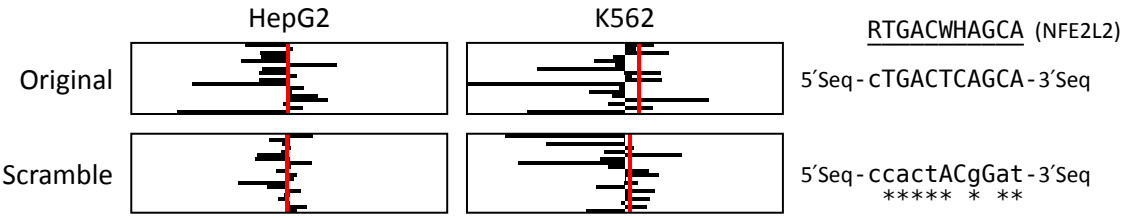
3′Seq = acaccatgaaattcaaagtacaaagcaccatttatacgtttctttctttggcaggaagtcaataa

676 NFE2L2 in K562 enhancer

chr3 180489581 180489591 - (hg18)





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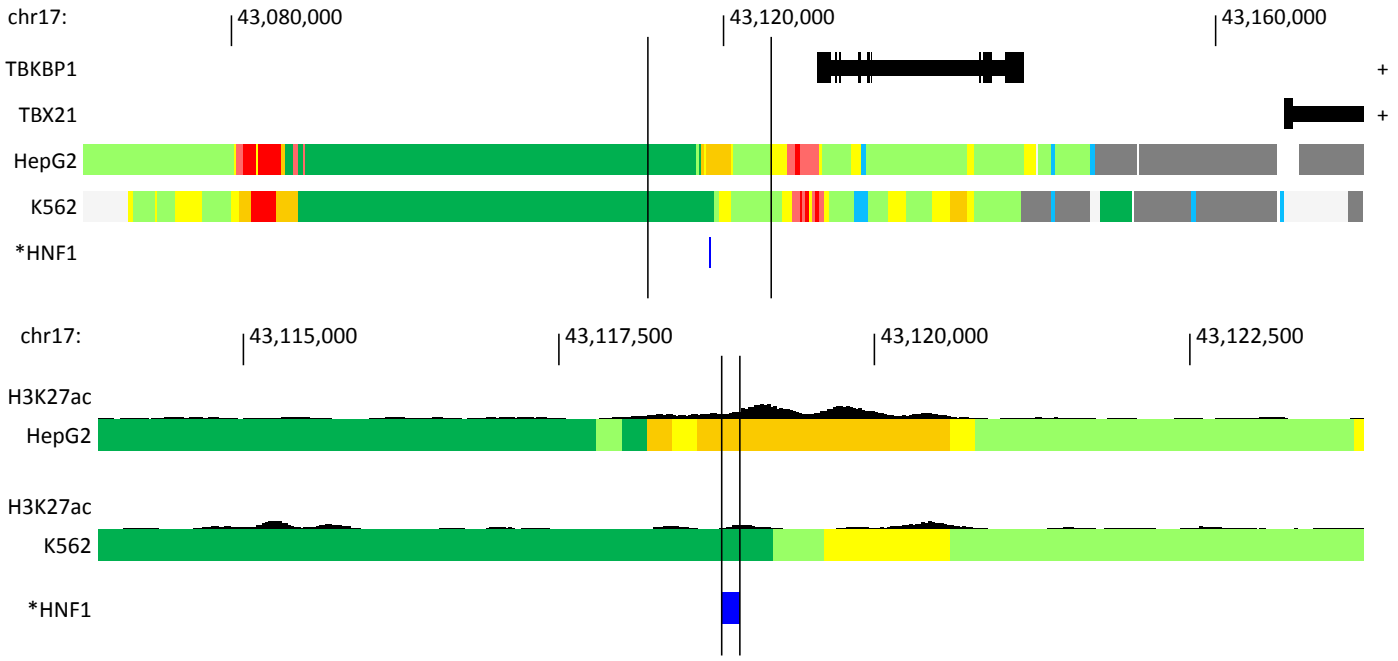
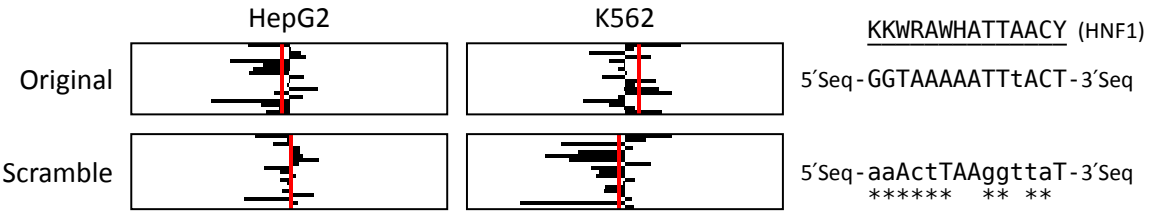
677 HNF1 in HepG2 enhancer

chr17 43118856 43118869 - (hg18)





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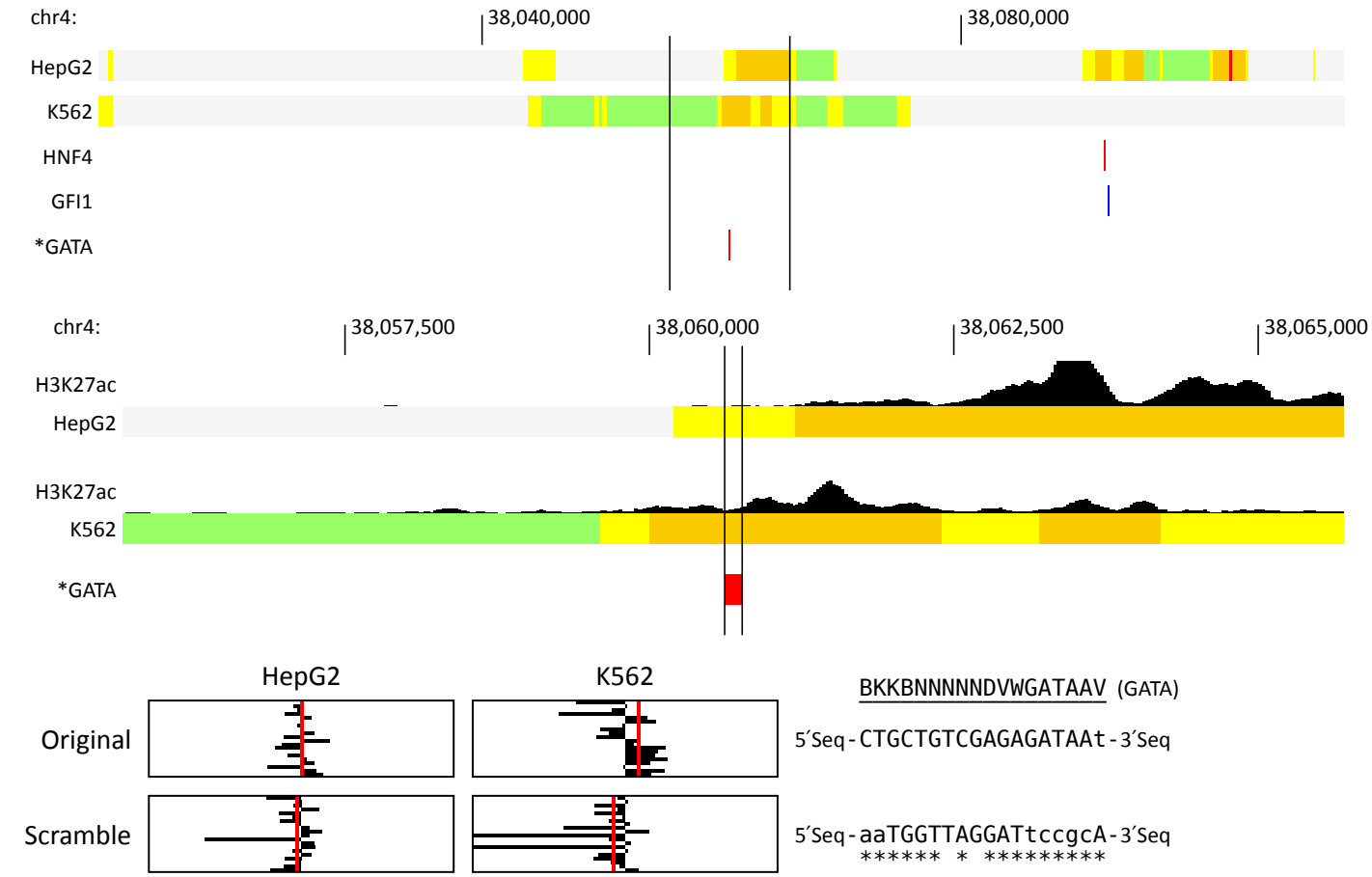
678 GATA in K562 enhancer (conserved at 60% confidence)

chr4 38060682 38060699 - (hg18)



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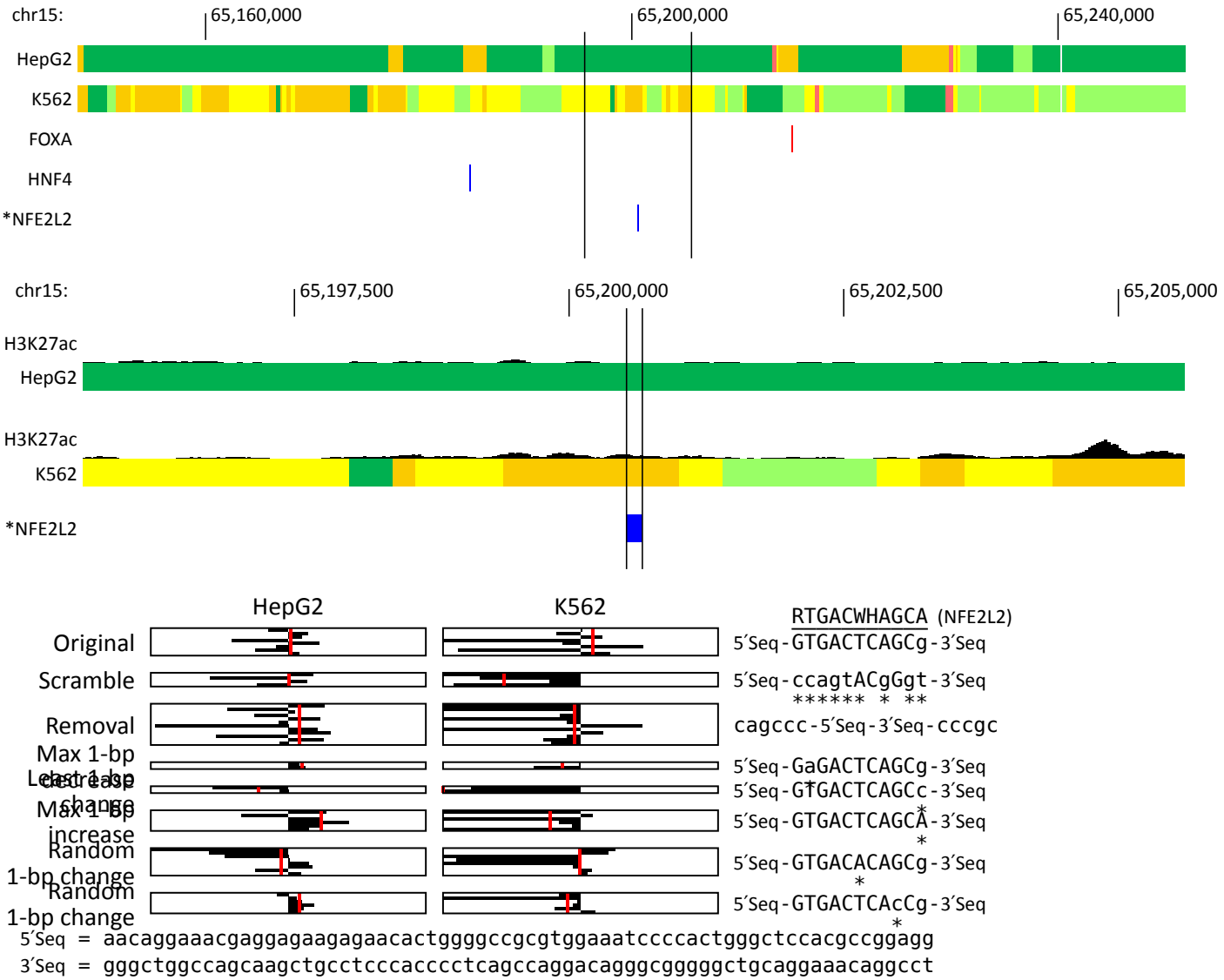
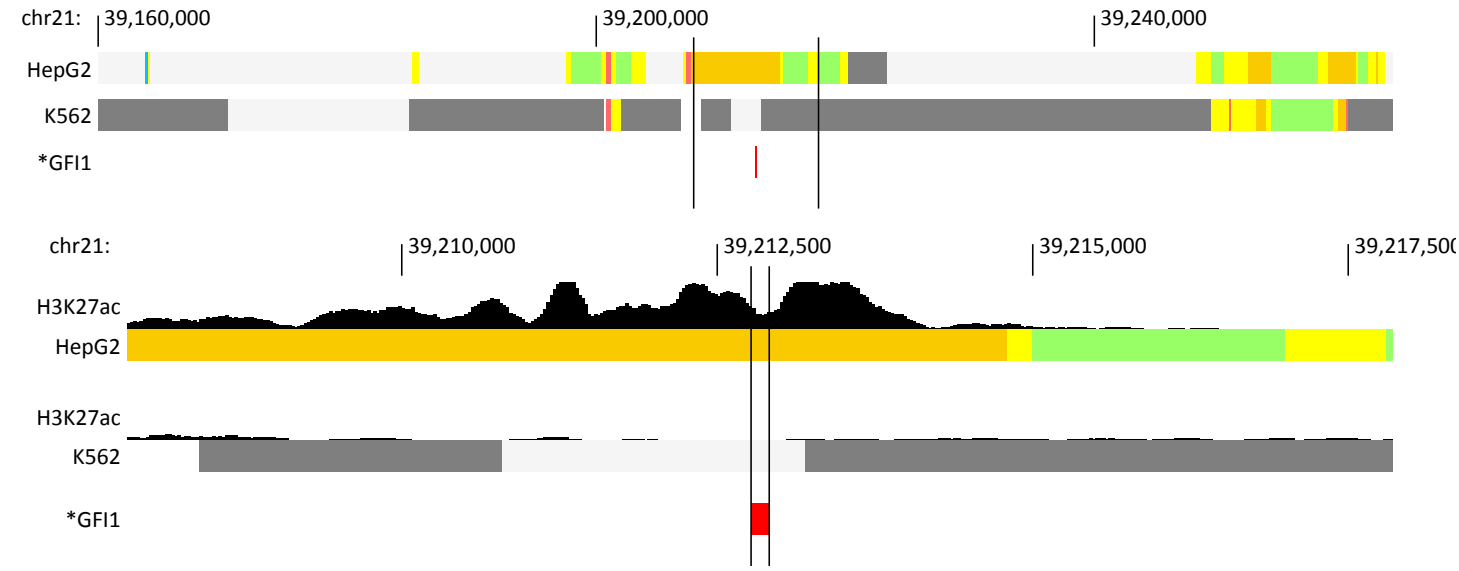
679 NFE2L2 in K562 enhancer

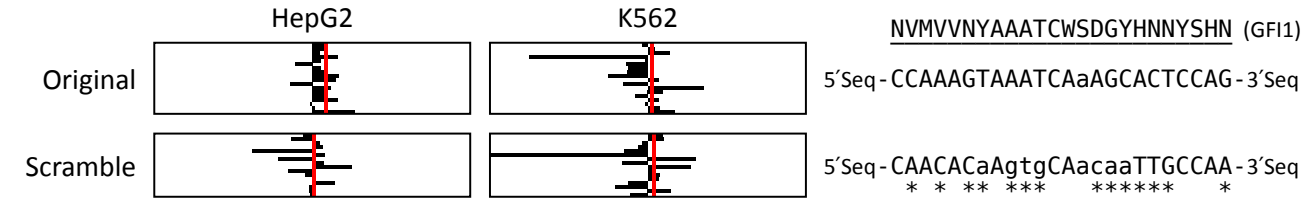
chr15 65200590 65200600 - (hg18)



680 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr21 39212829 39212852 + (hg18)





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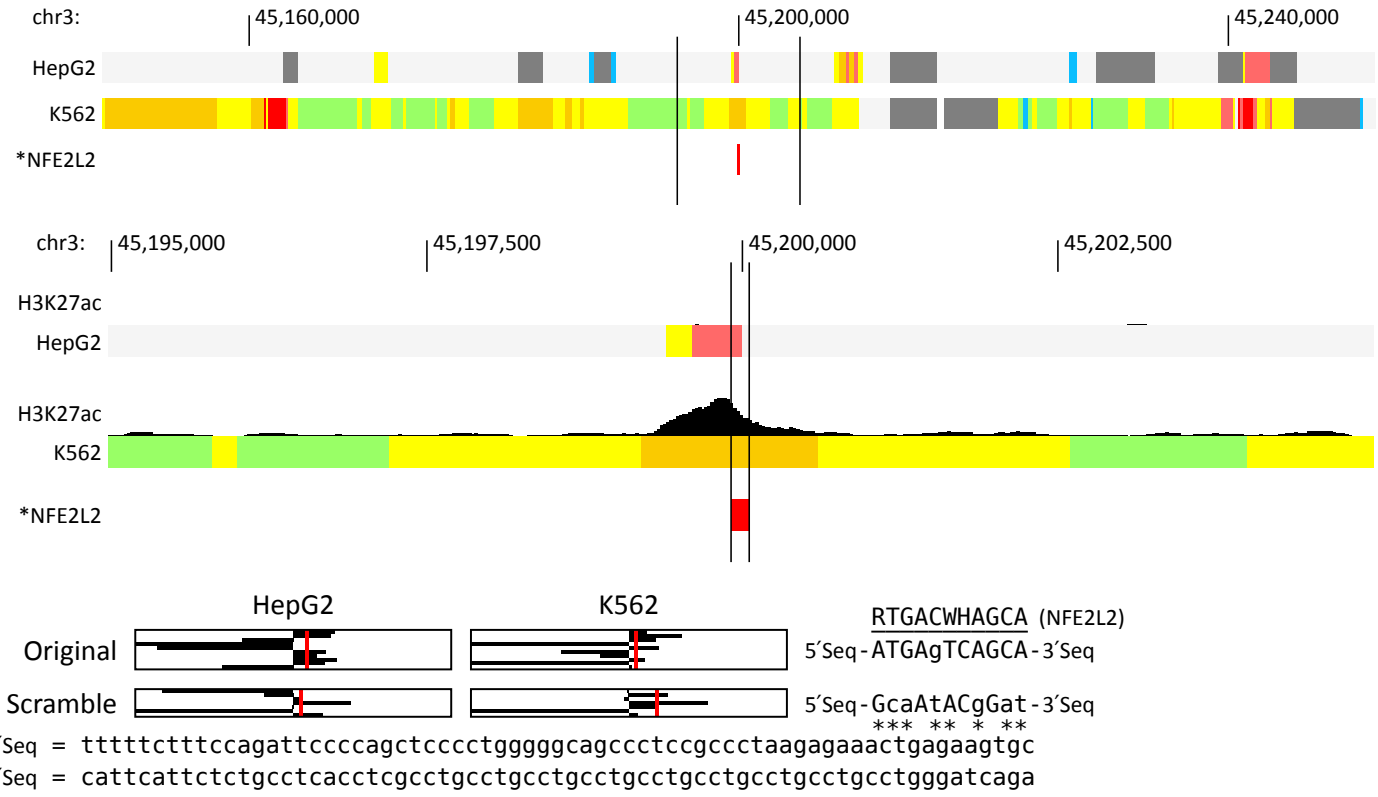
681 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr3 45199977 45199987 - (hg18)



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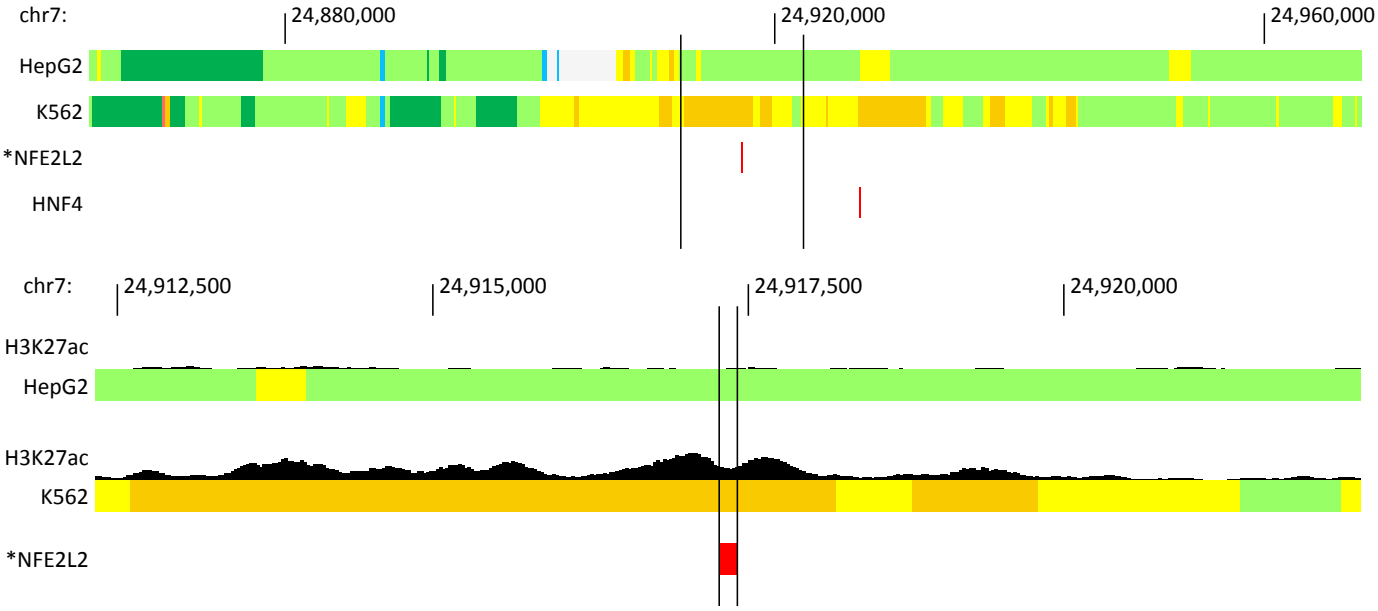
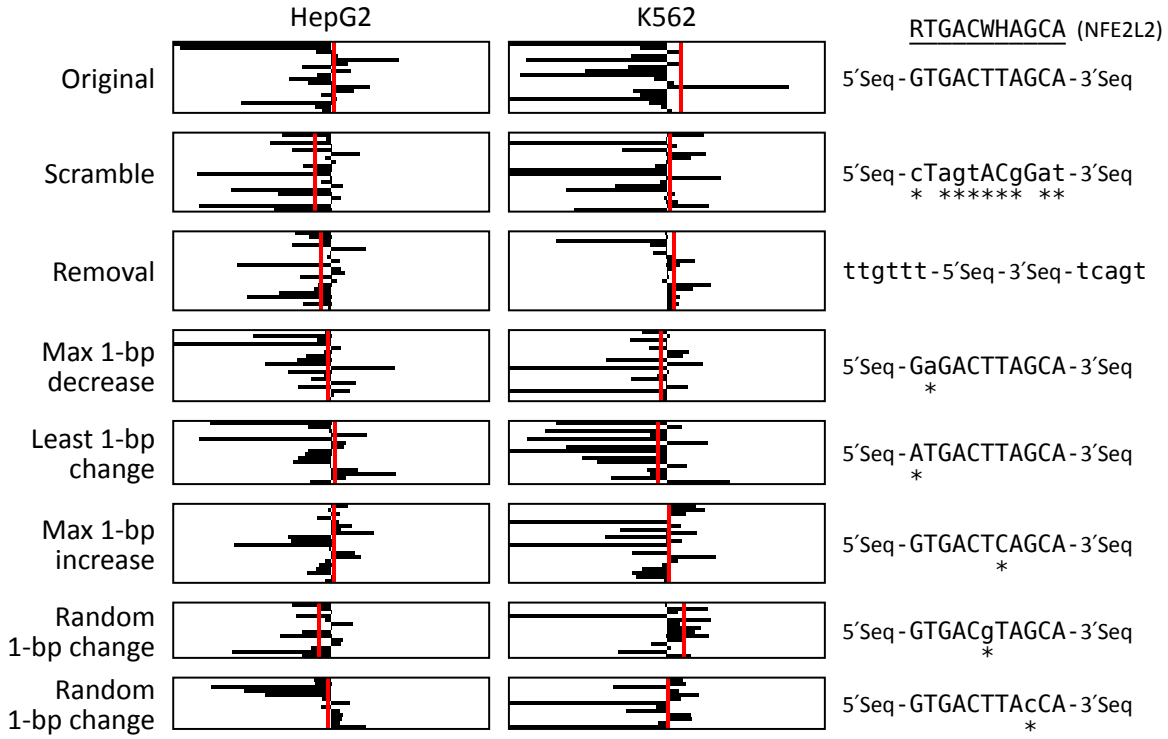
682 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 24917336 24917346 + (hg18)





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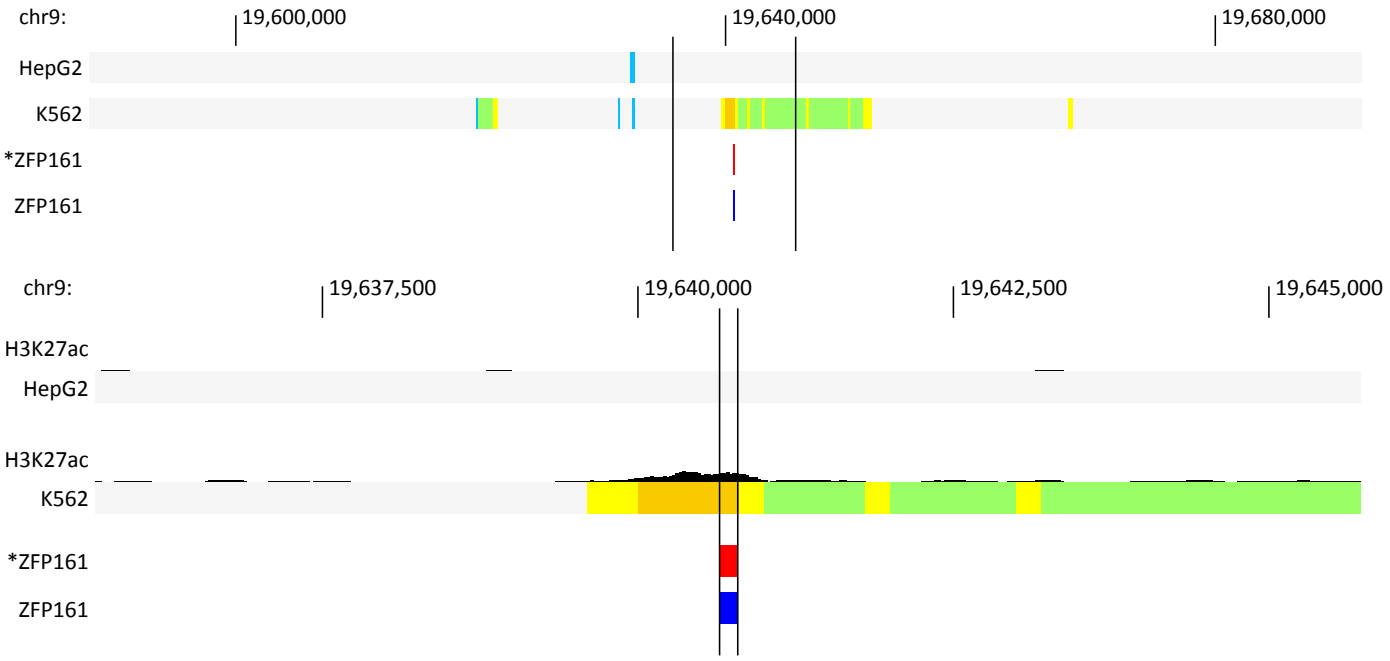
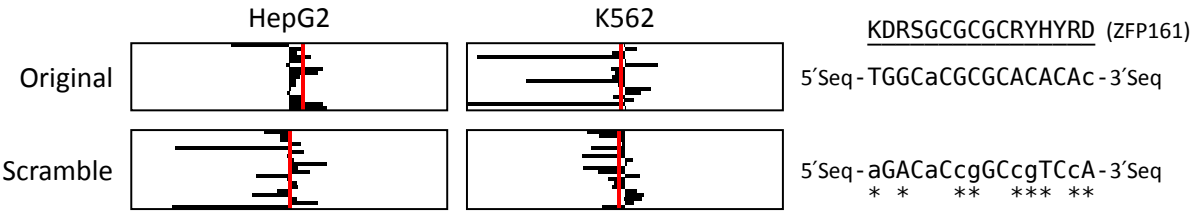
683 ZFP161 in K562 enhancer (conserved at 20% confidence)

chr9 19640712 19640727 + (hg18)





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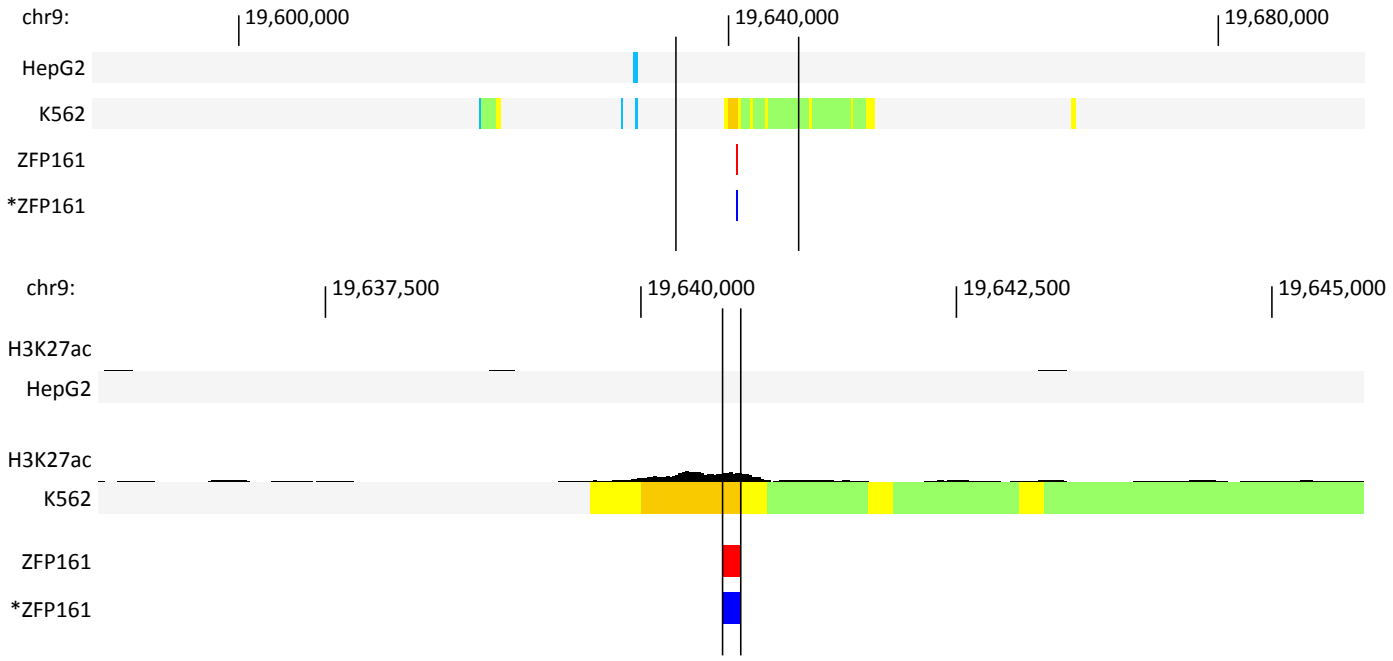
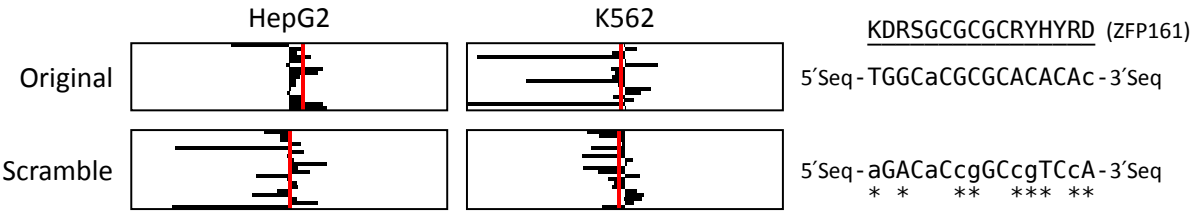
684 ZFP161 in K562 enhancer

chr9 19640712 19640727 + (hg18)





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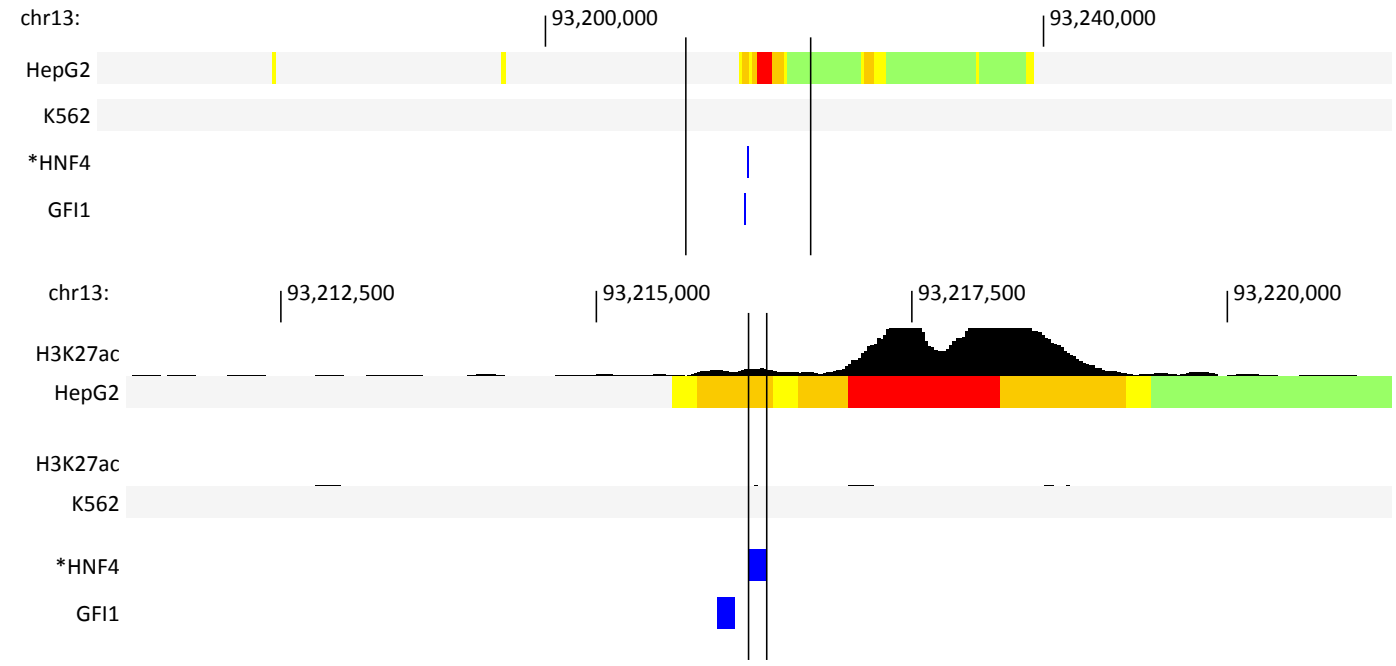
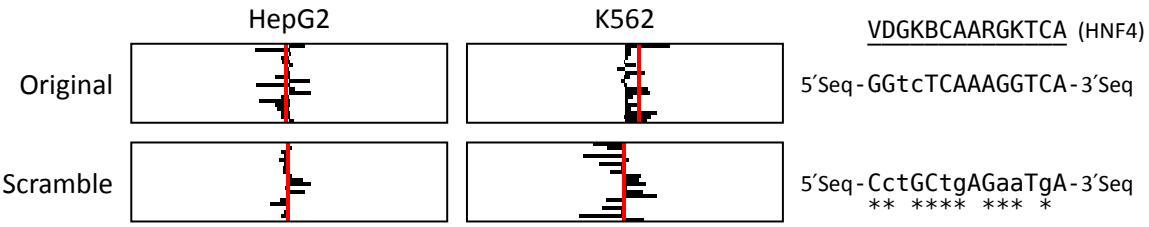
685 HNF4 in HepG2 enhancer

chr13 93216272 93216285 - (hg18)





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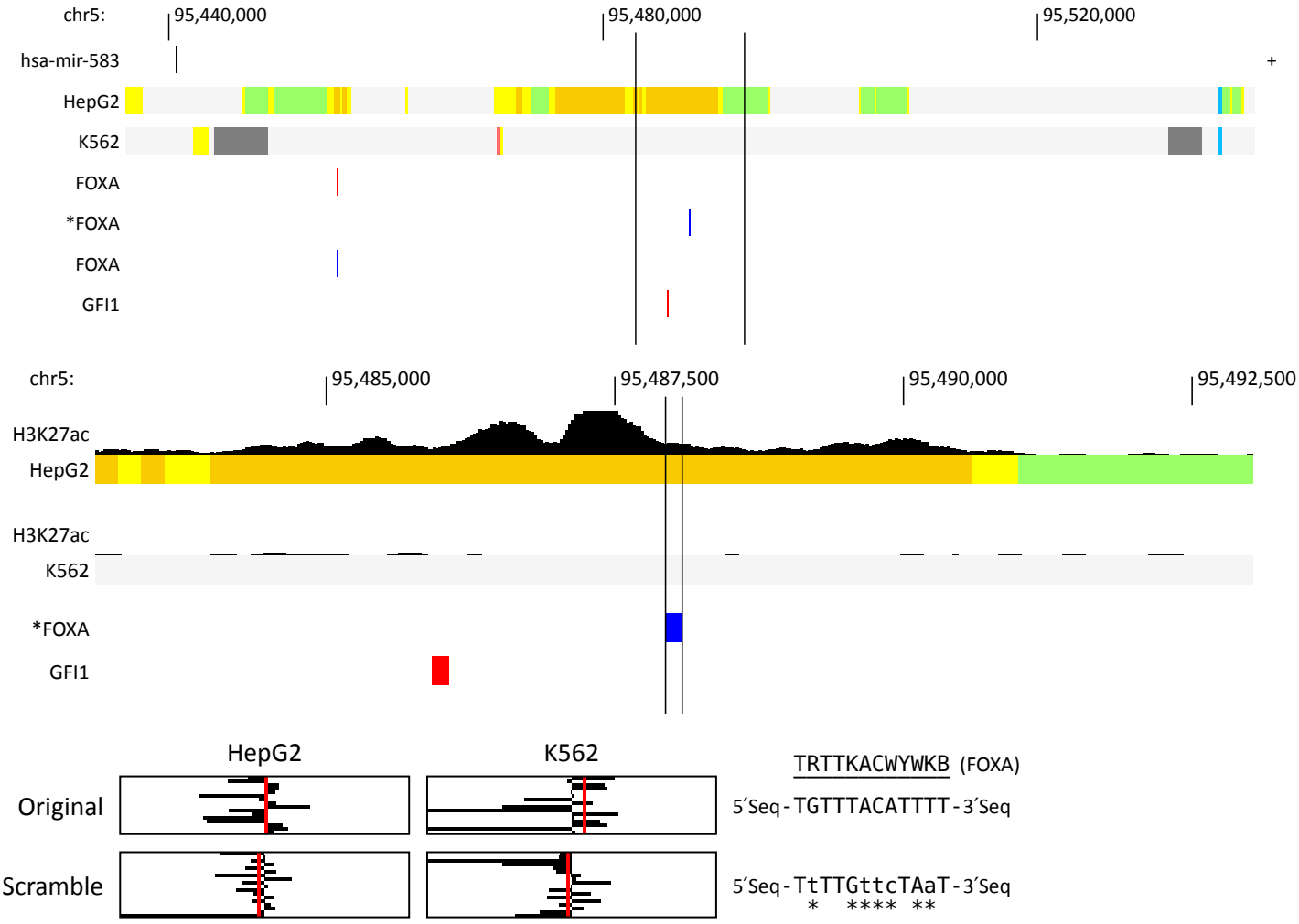
686 FOXA in HepG2 enhancer

chr5 95488006 95488017 + (hg18)



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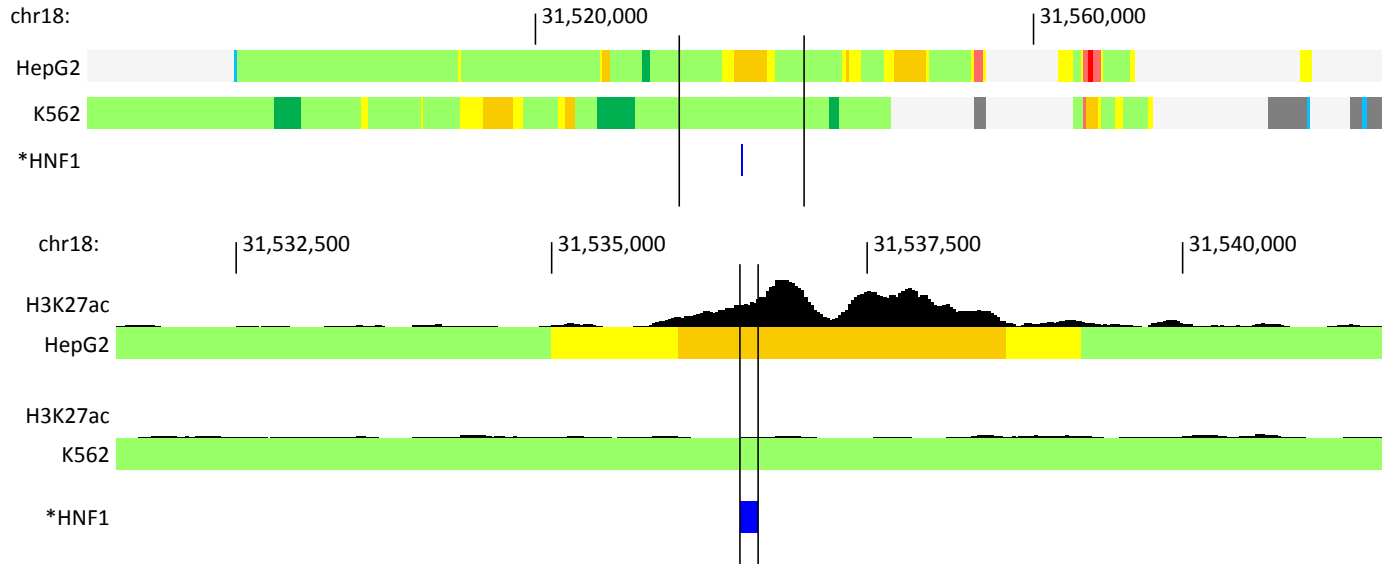
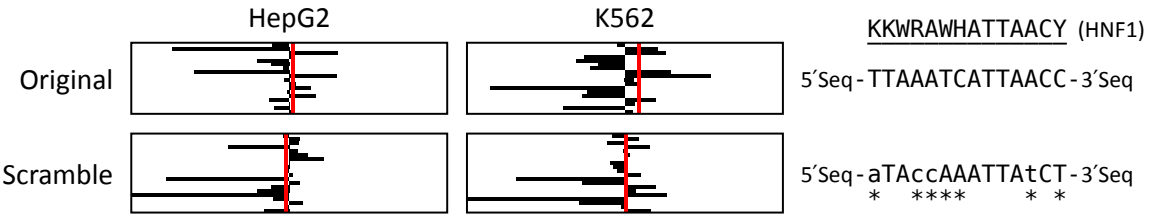
687 HNF1 in HepG2 enhancer

chr18 31536558 31536571 + (hg18)





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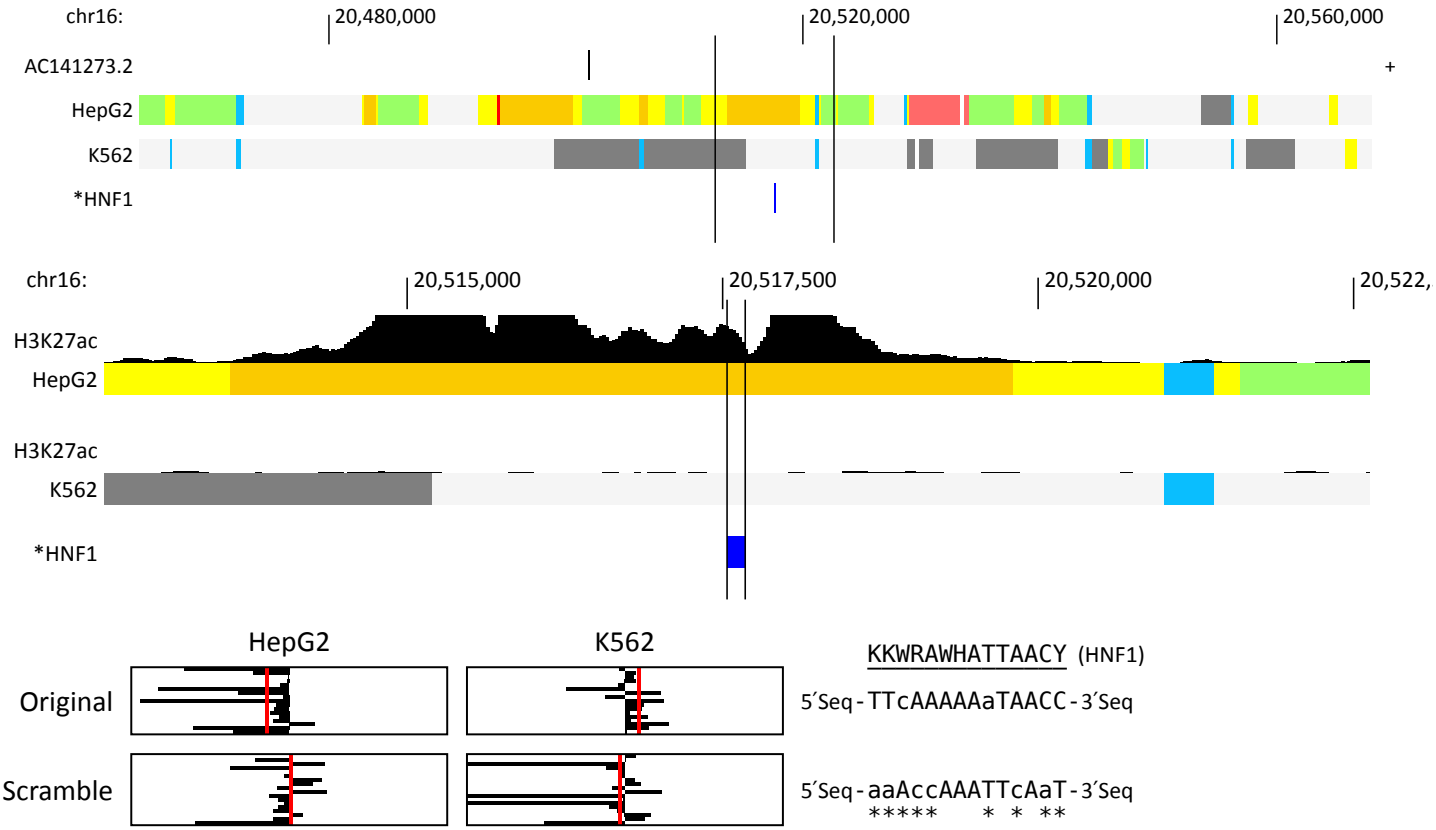
688 HNF1 in HepG2 enhancer

chr16 20517601 20517614 + (hg18)



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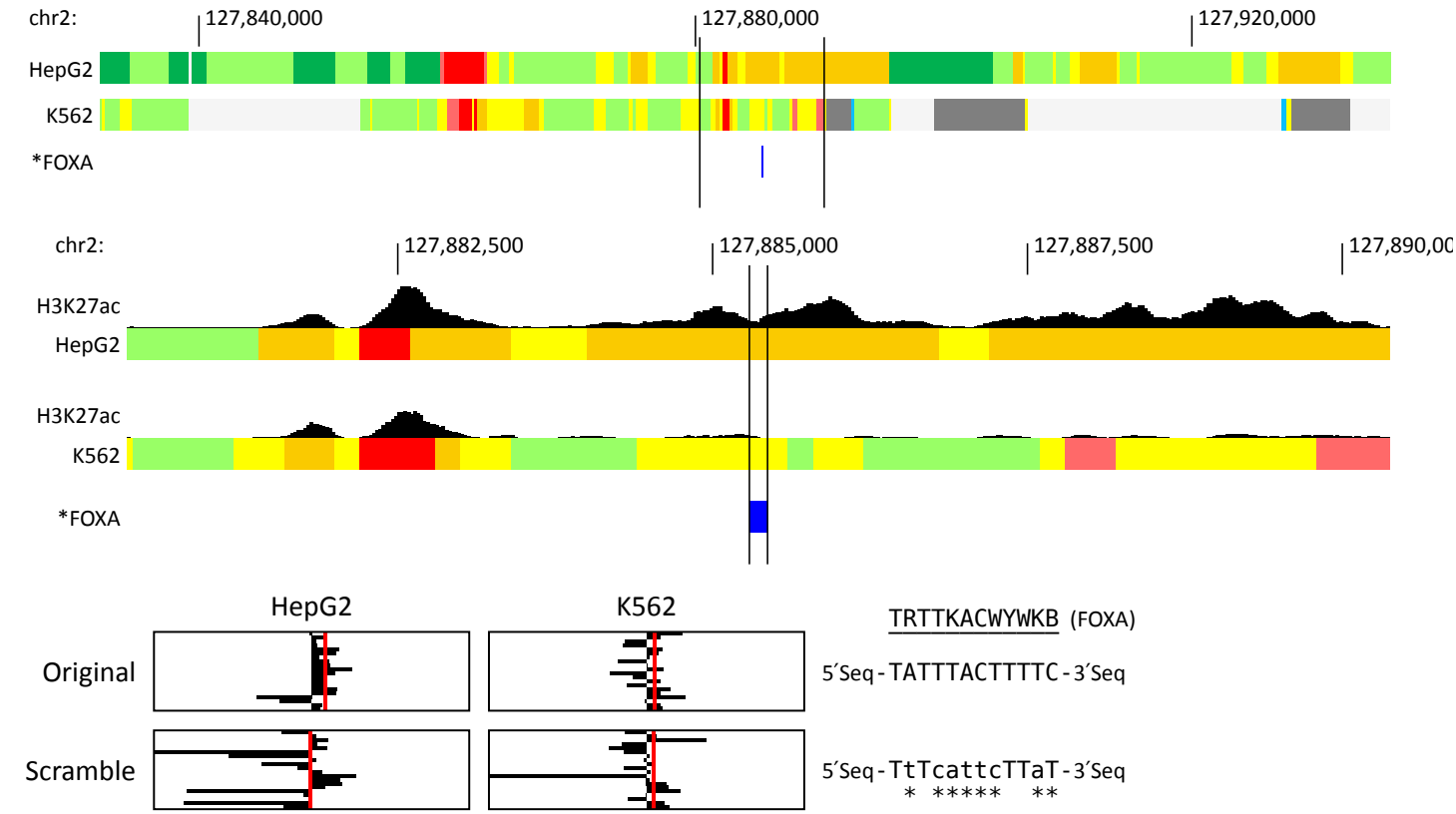
689 FOXA in HepG2 enhancer

chr2 127885359 127885370 - (hg18)



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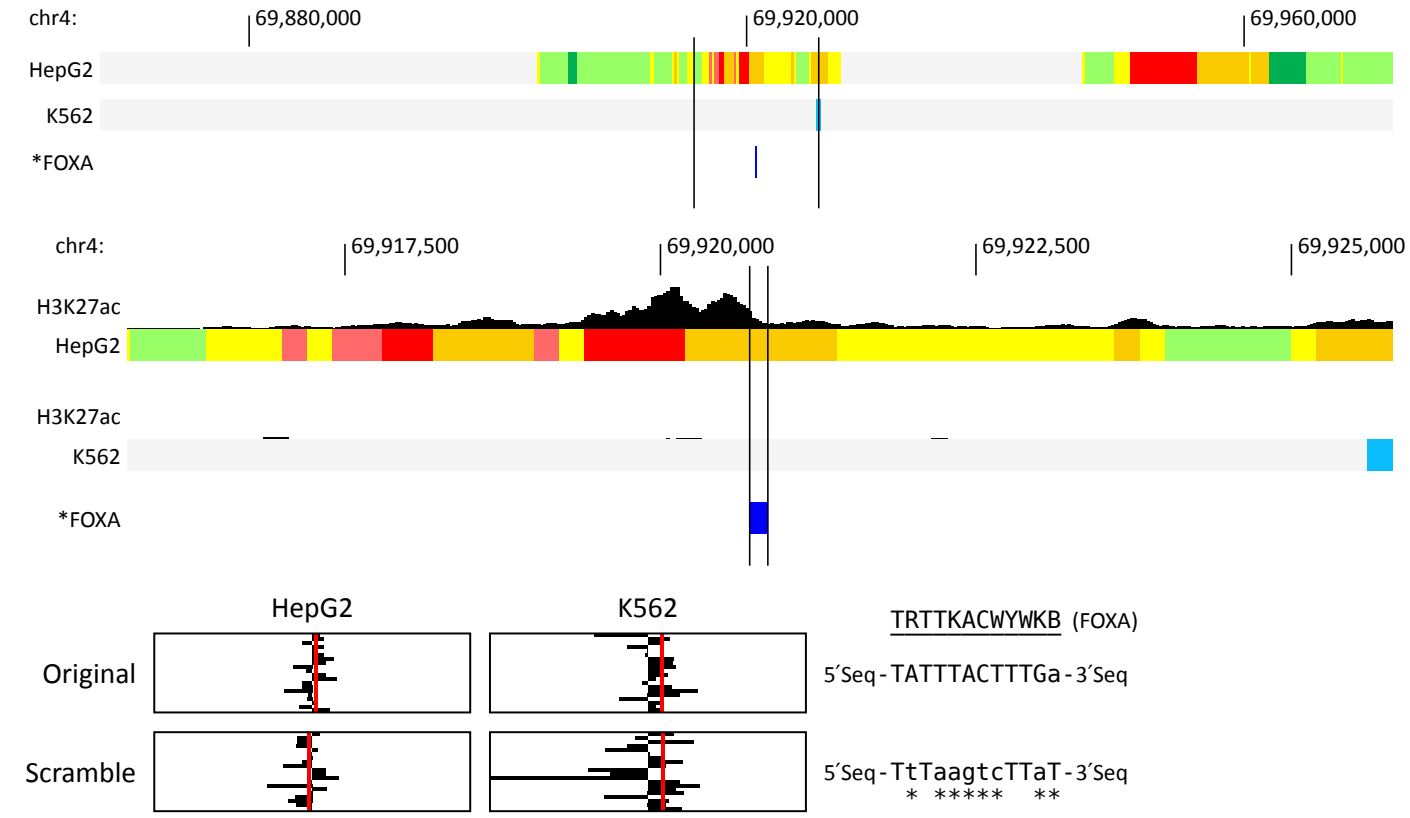
690 FOXA in HepG2 enhancer

chr4 69920774 69920785 - (hg18)



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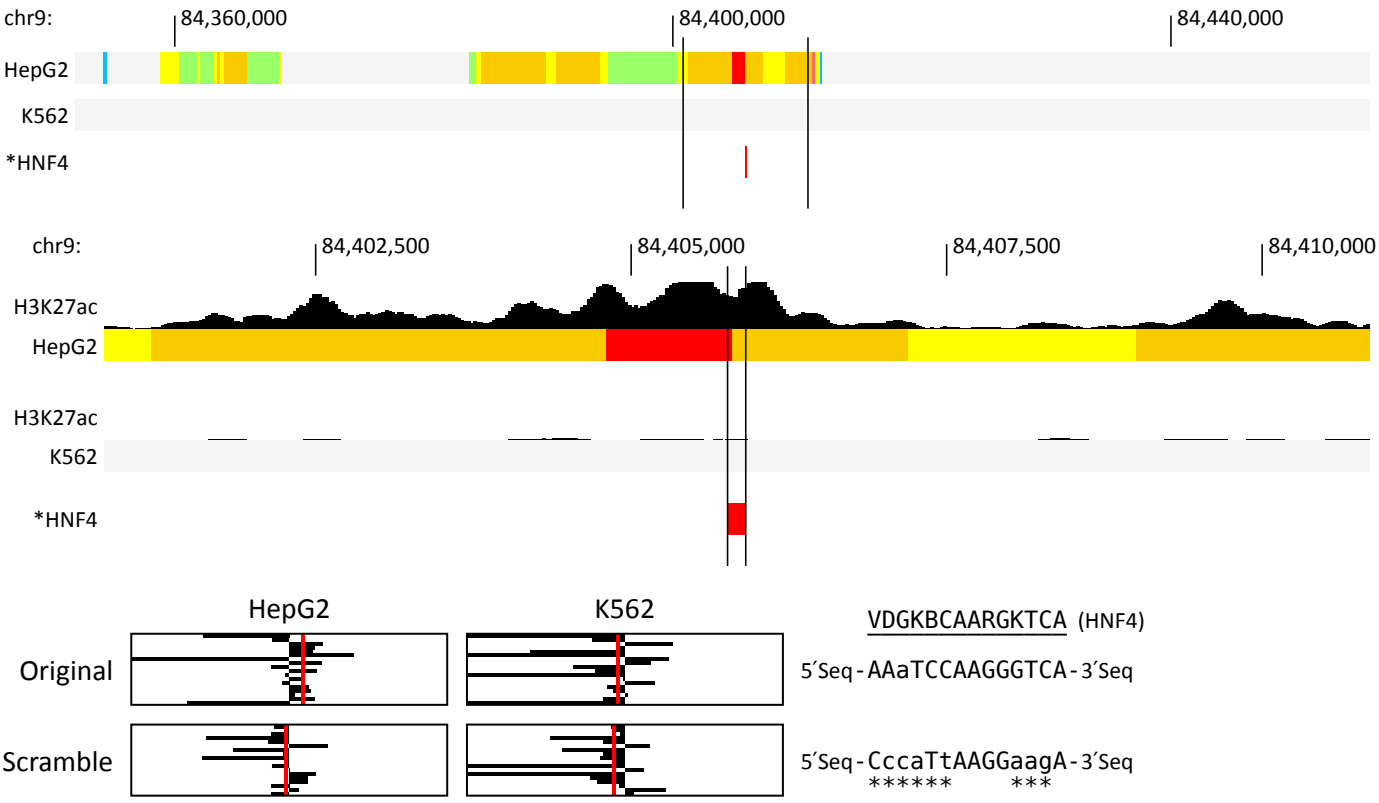
3′Seq = attgaaggagttatgttttaacttgattgatttttctctgtatataagtatgagaaagaaacagtg

691 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr9 84405830 84405843 + (hg18)



5′Seq = catcatcacaagctggtaaacacaaacaaagccccccacatggccccttttctttgaagggtagtac
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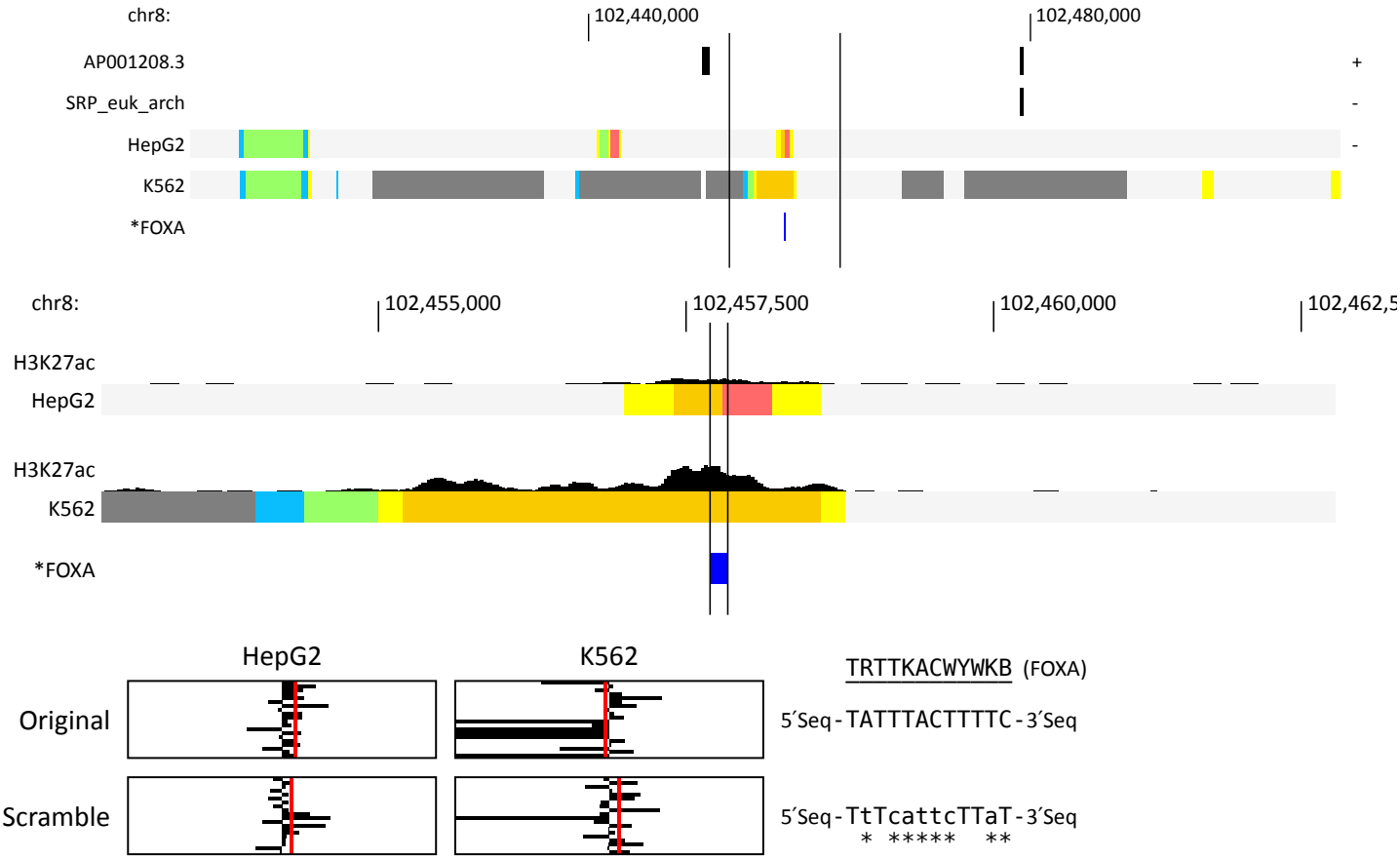
692 FOXA in HepG2 enhancer

chr8 102457762 102457773 + (hg18)



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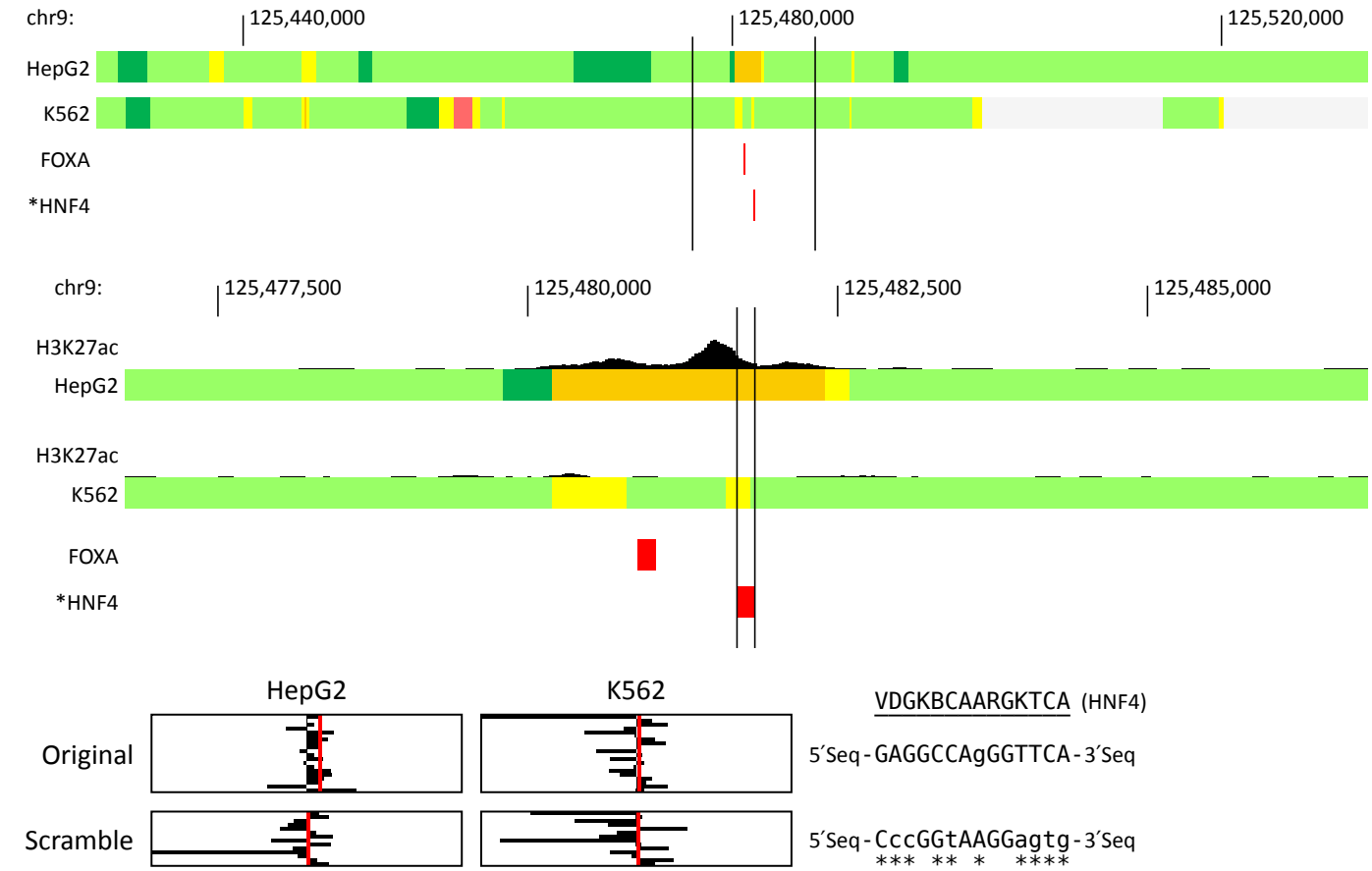
693 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr9 125481754 125481767 + (hg18)



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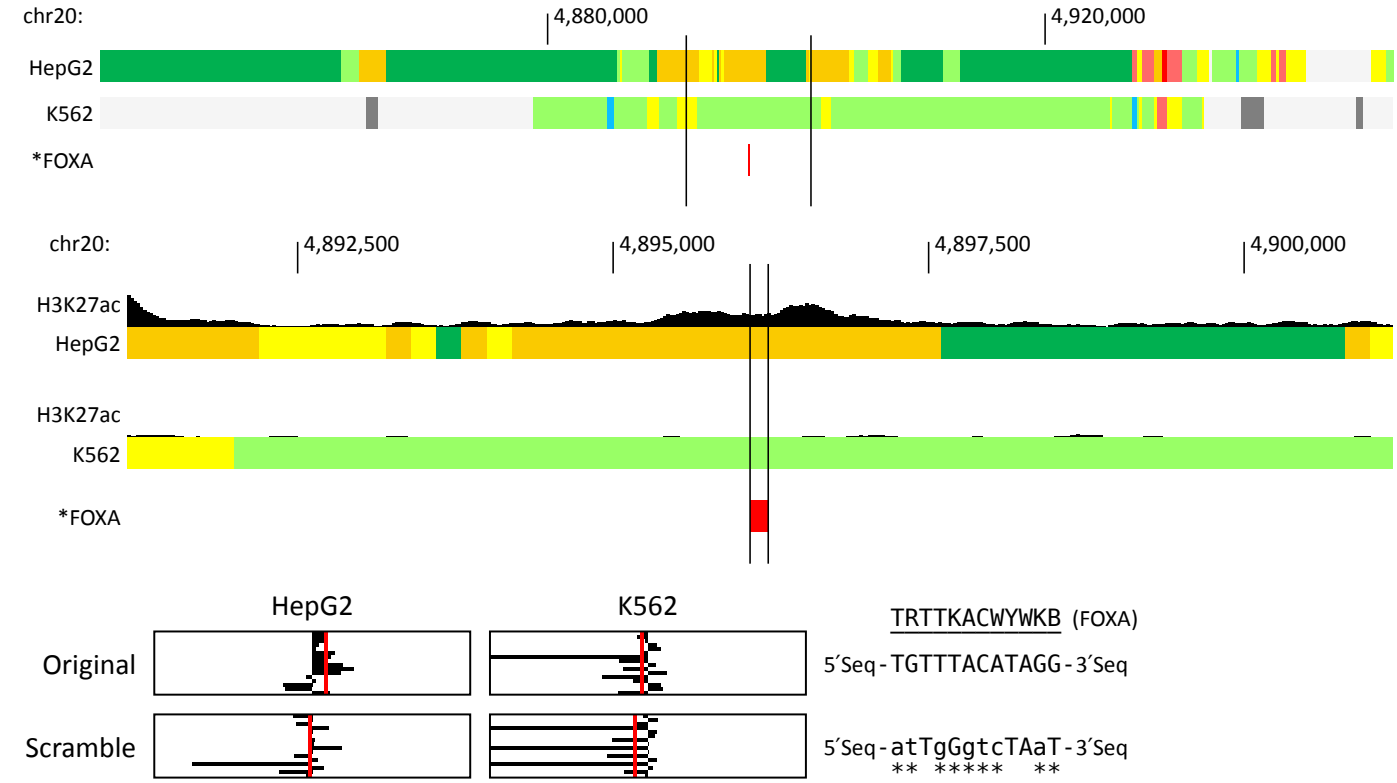
694 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 4896152 4896163 + (hg18)



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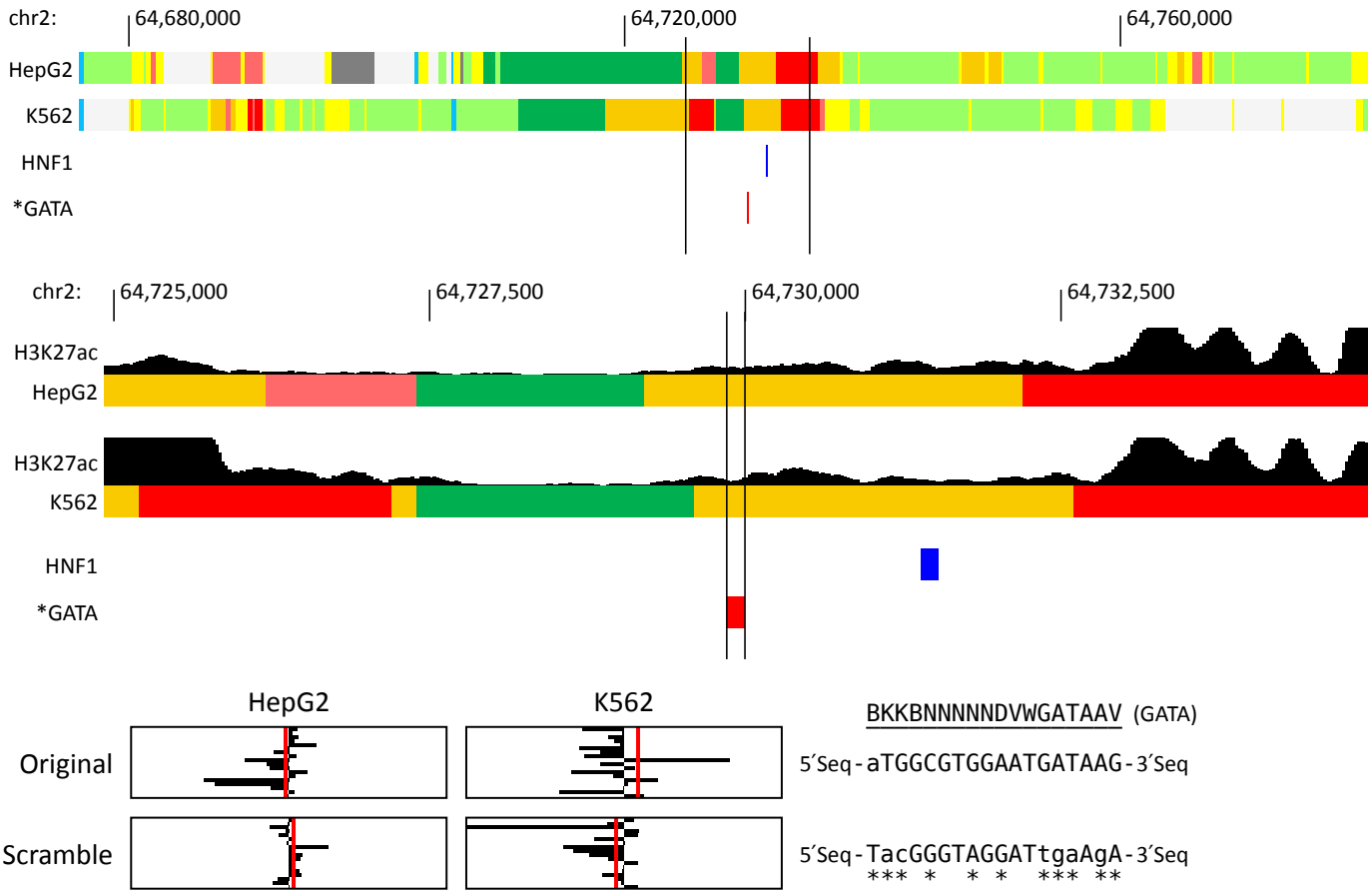
3′Seq = tttgtgaaaccacccaatttctccagtaaatatttaattctctttgctactgatcaaaccataagc

695 GATA in K562 enhancer (conserved at 60% confidence)

chr2 64729917 64729934 + (hg18)



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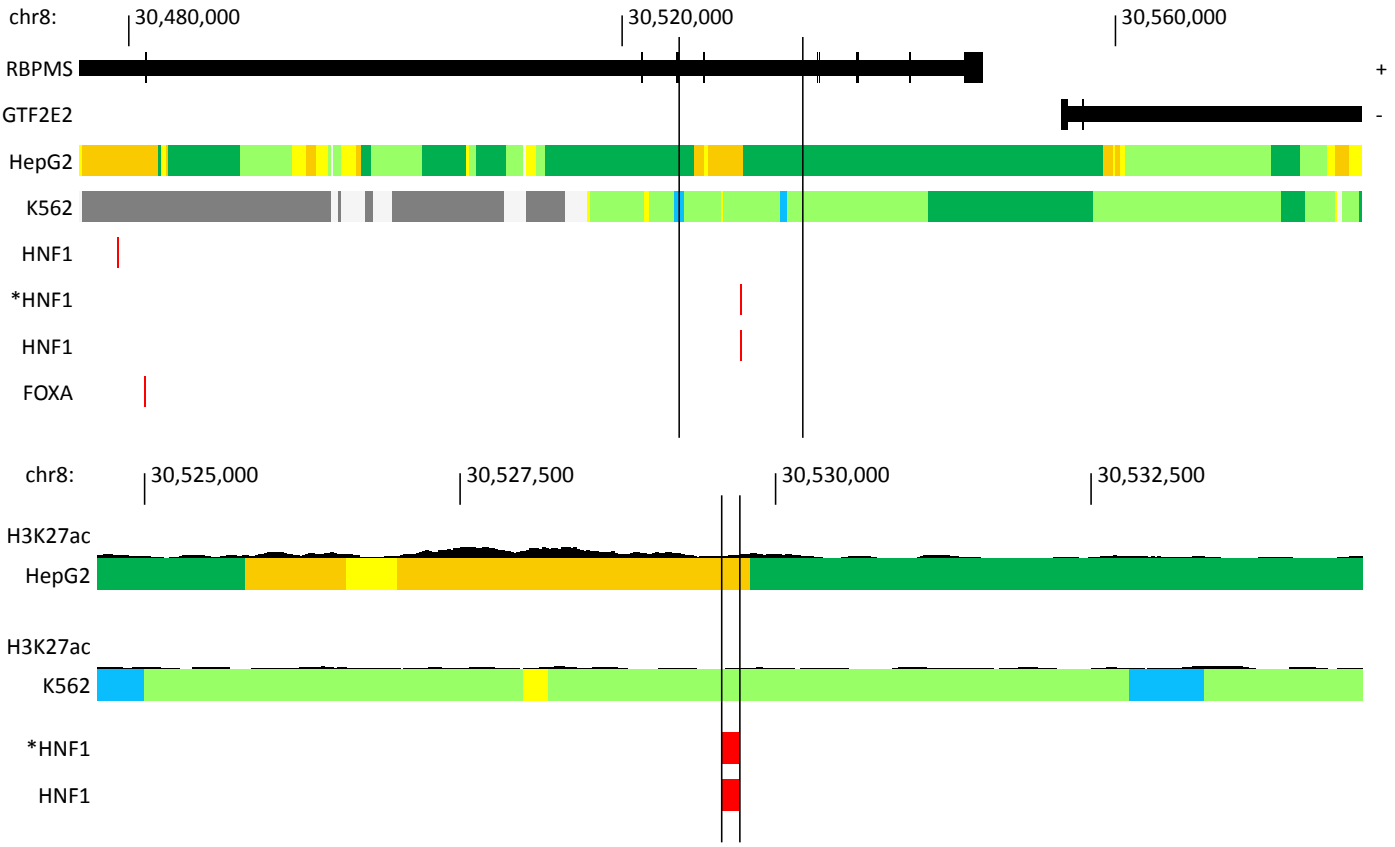
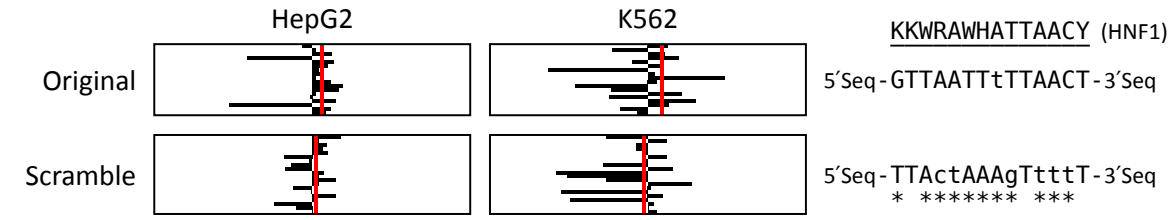
3′Seq = cagccggccggagcagaggcaagcaaagcgctaaaggctgatctggagcaagagacttttgat

696 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr8 30529639 30529652 - (hg18)





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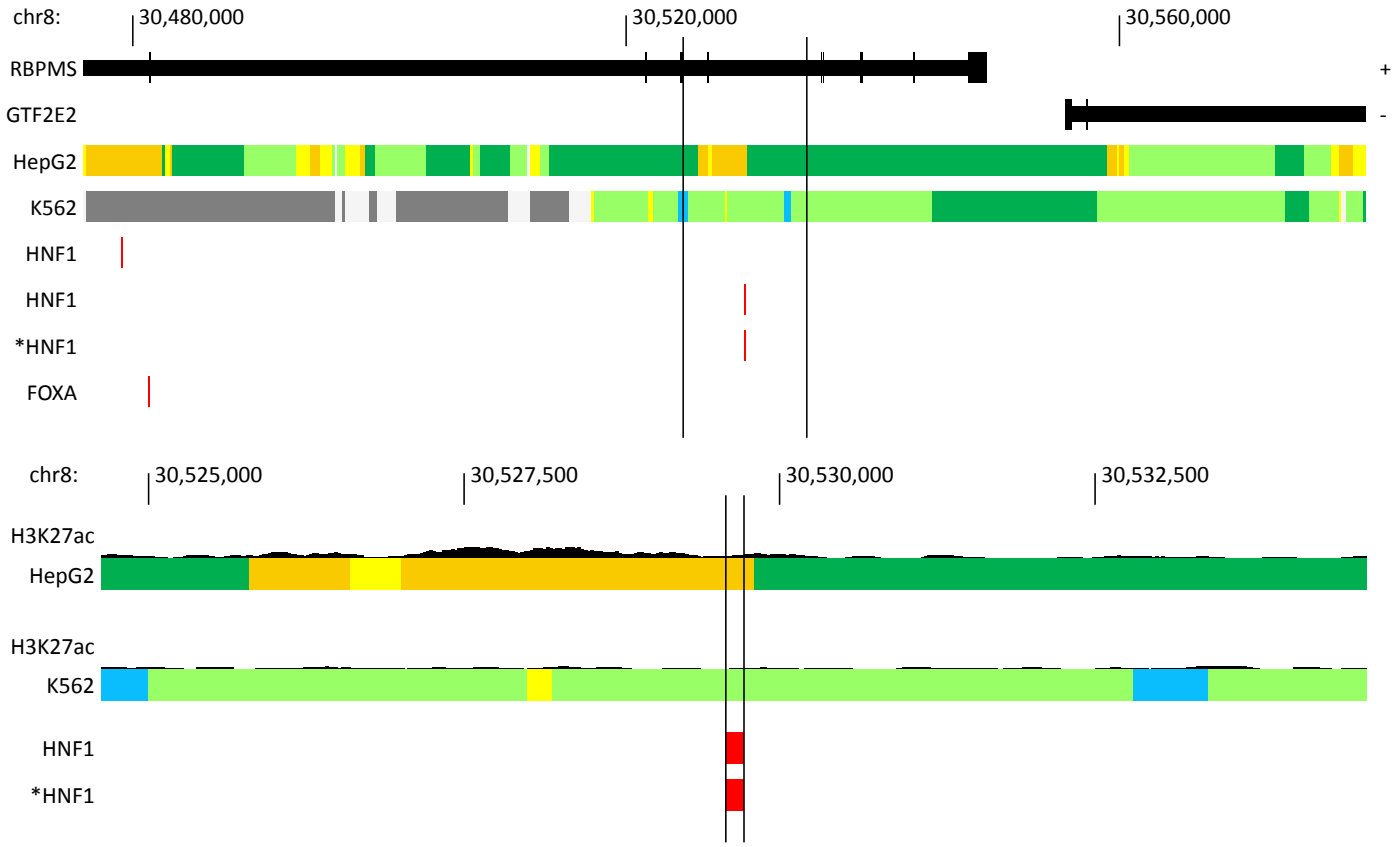
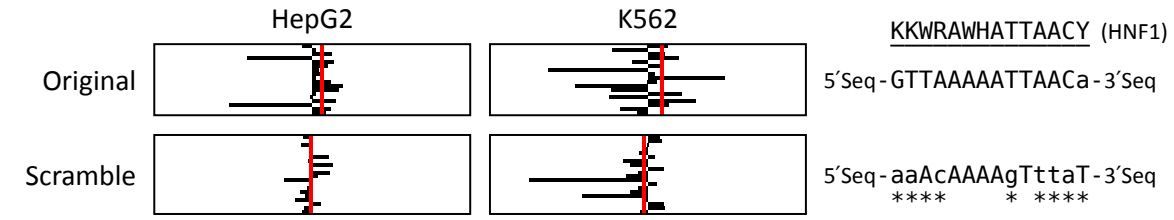
697 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr8 30529640 30529653 + (hg18)





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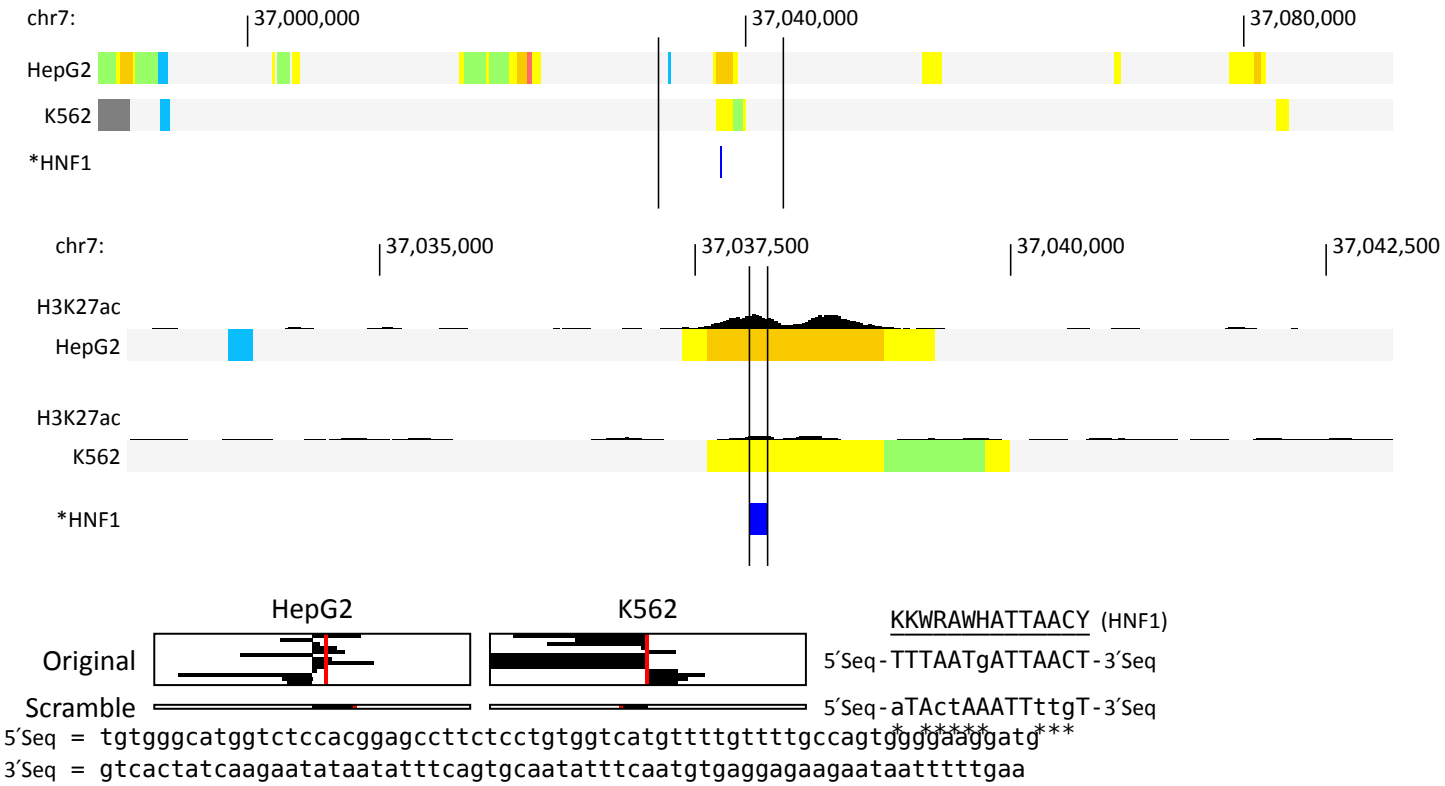
698 HNF1 in HepG2 enhancer

chr7 37037996 37038009 - (hg18)

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                                                  * *****  ***
3′Seq = gtcactatcaagaatataatatttcagtgcaatatttcaatgtgaggagaagaataatttttgaa
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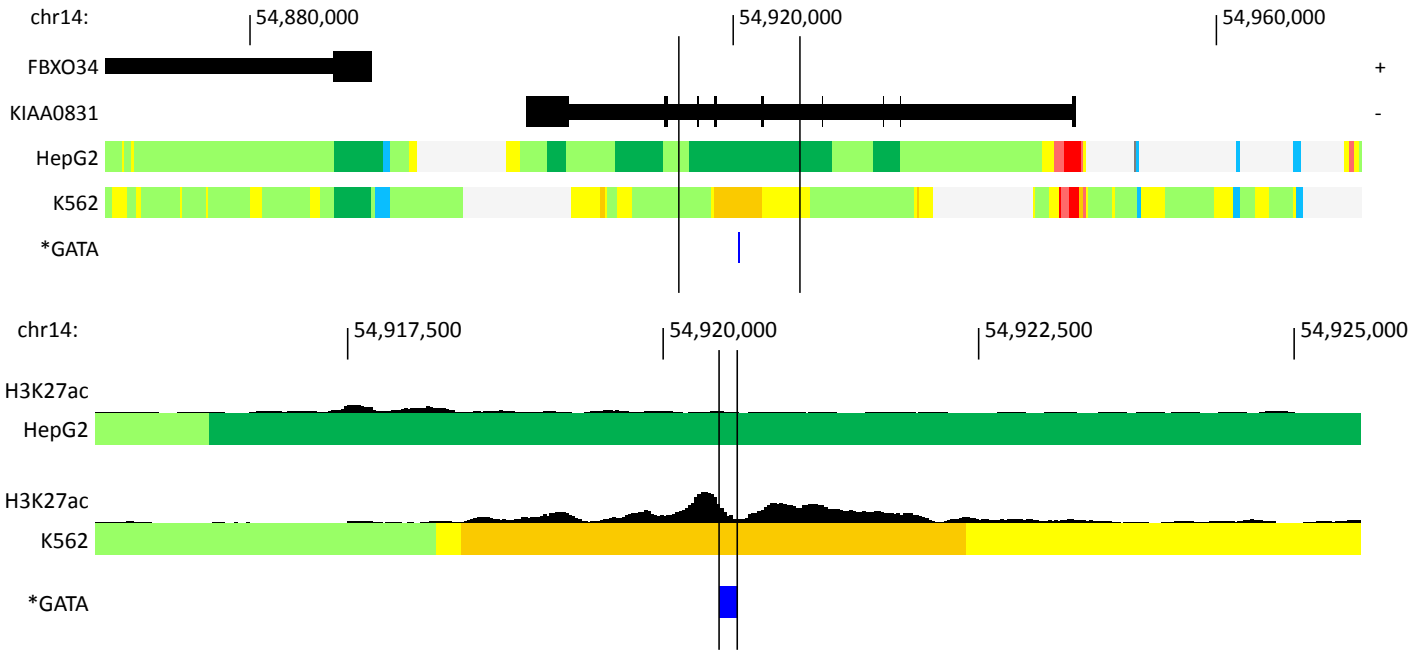
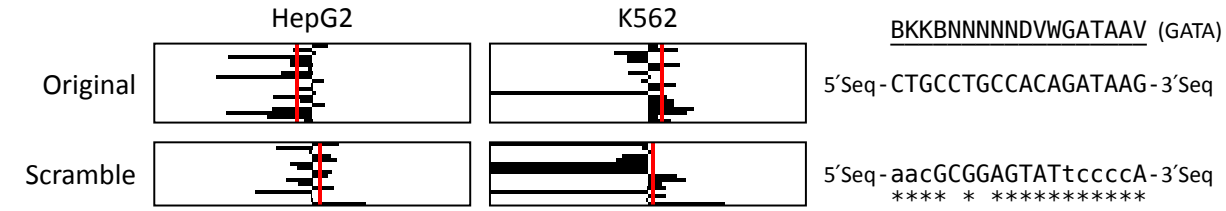
699 GATA in K562 enhancer

chr14 54920507 54920524 + (hg18)





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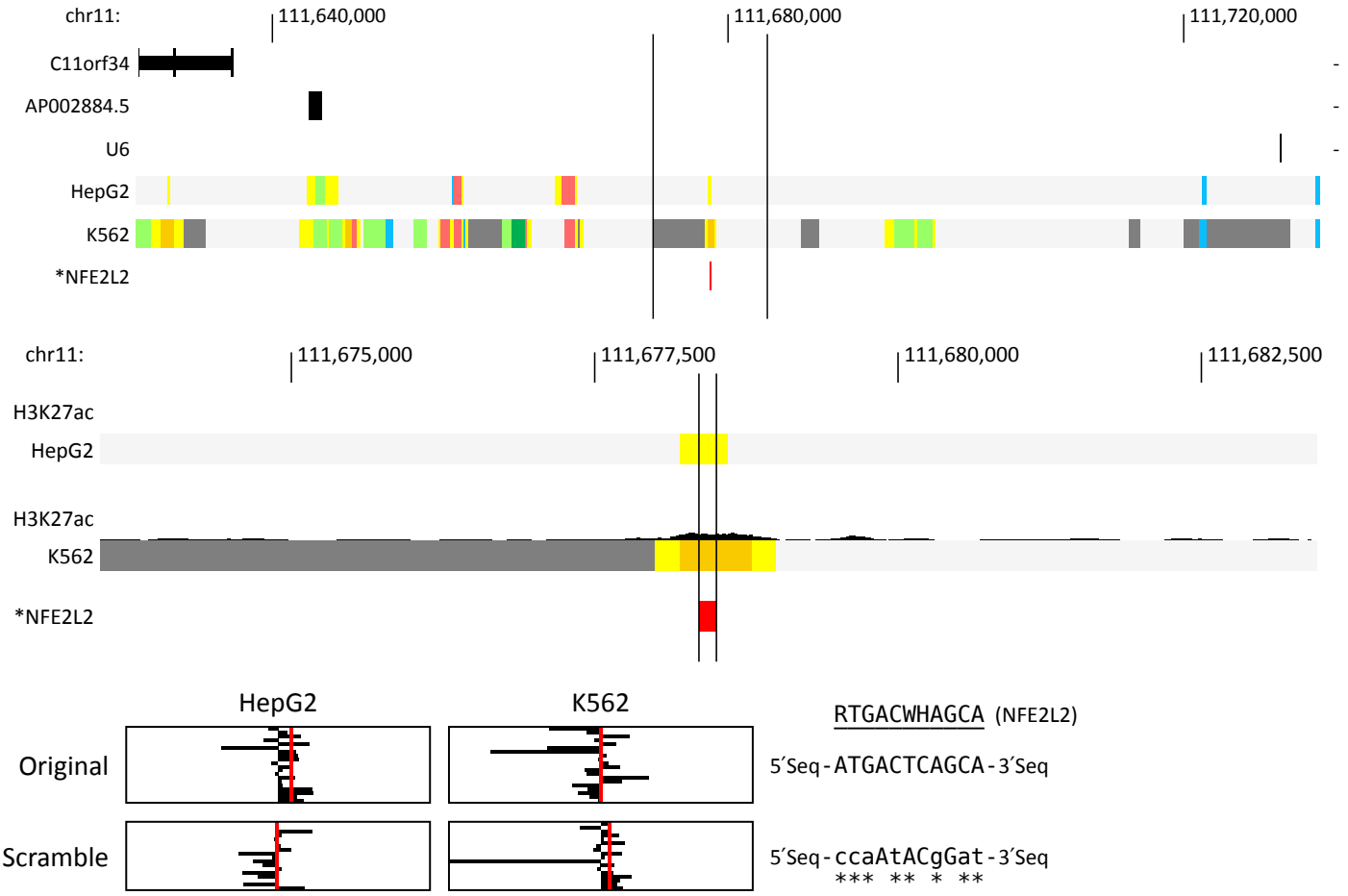
700 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr11 111678426 111678436 + (hg18)



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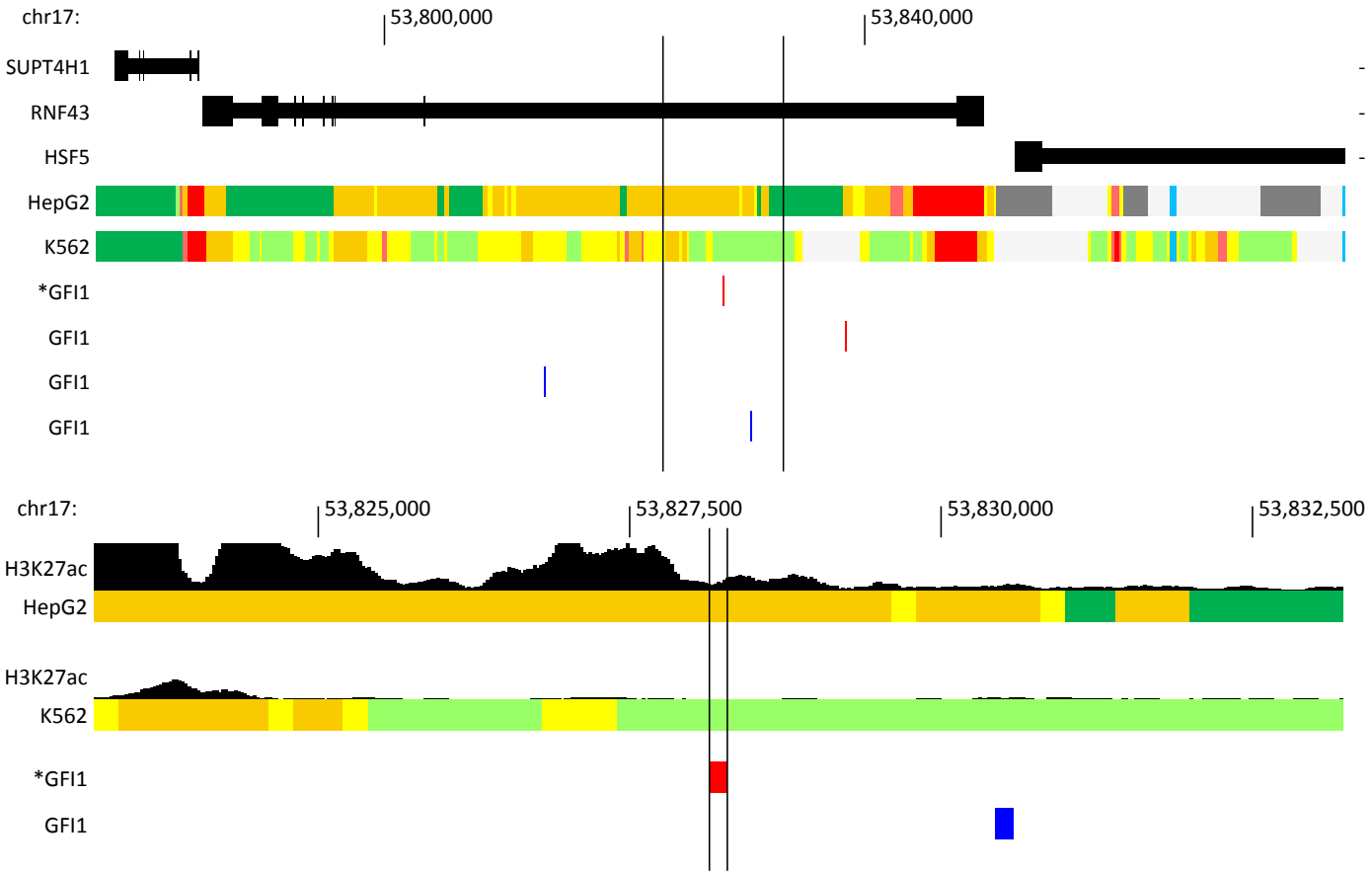
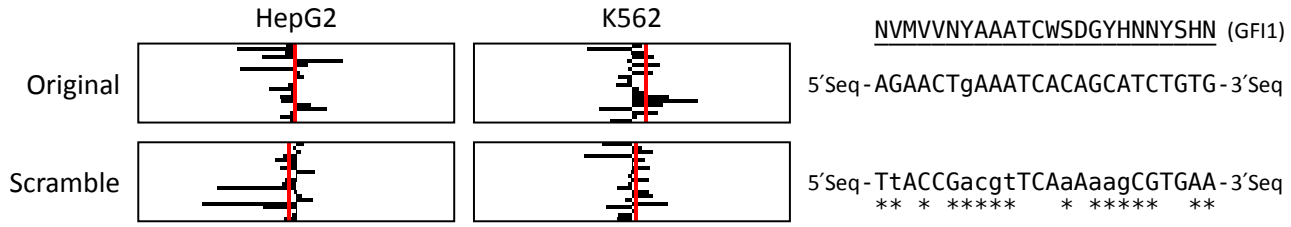
701 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr17 53828201 53828224 - (hg18)





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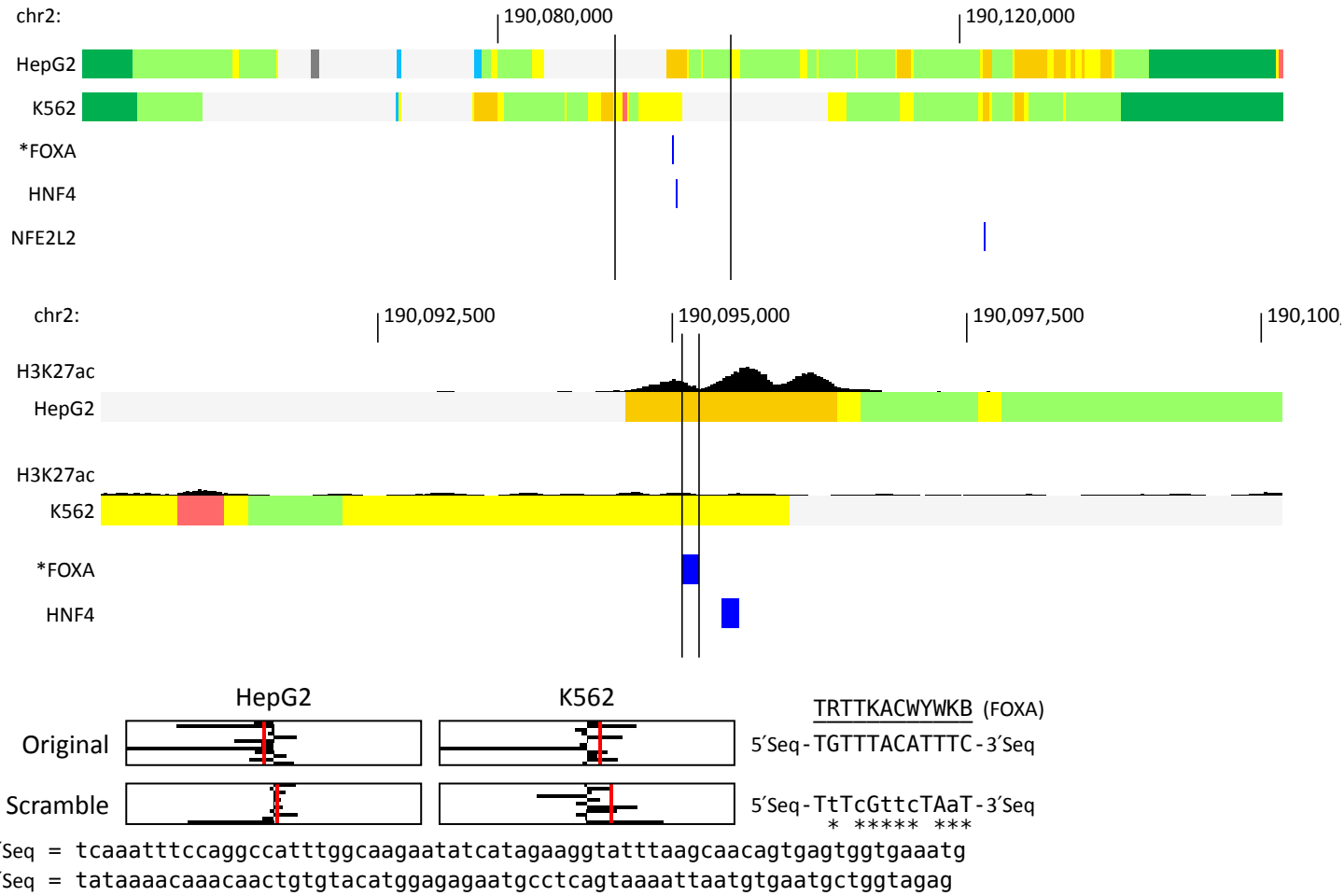
702 FOXA in HepG2 enhancer

chr2 190095150 190095161 - (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACATTTC-3′Seq

5′Seq-TtTcGttcTAaT-3′Seq

* ***** ***

5′Seq = tcaaatttccaggccatttggcaagaatatcatagaaggtatttaagcaacagtgagtggtgaaatg

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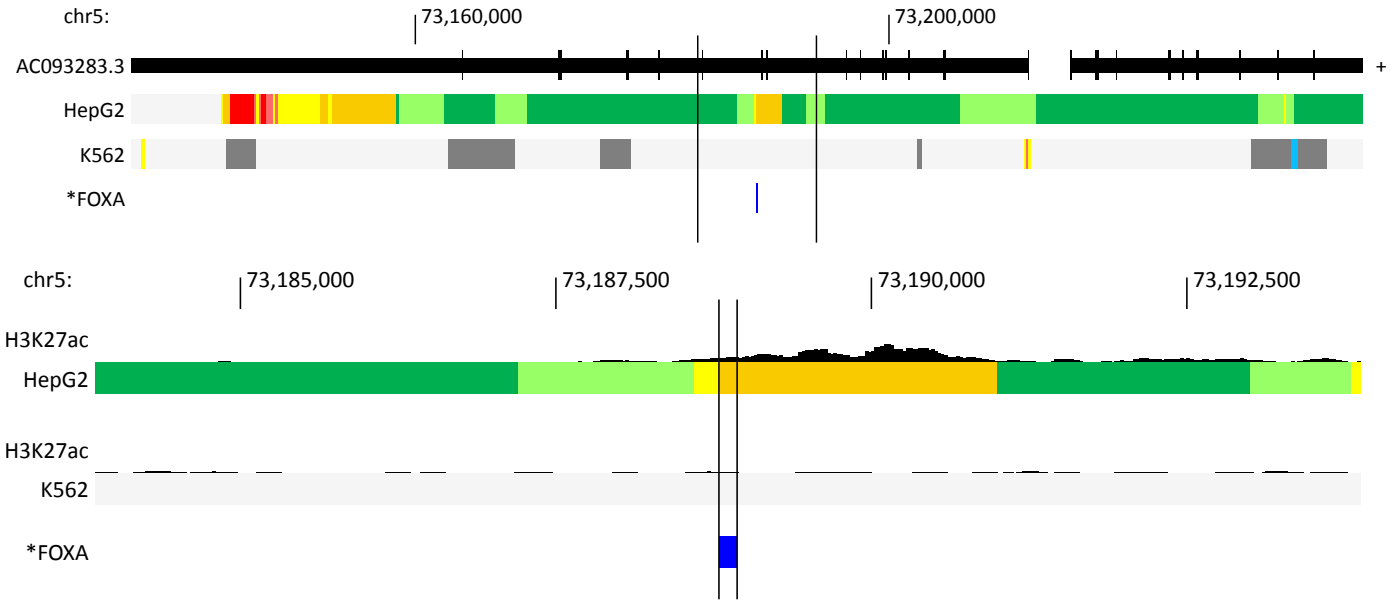
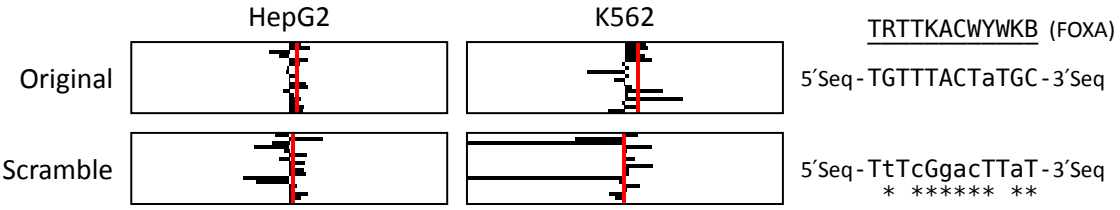
703 FOXA in HepG2 enhancer

chr5 73188859 73188870 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTaTGC-3′Seq

5′Seq-TtTcGgacTTaT-3′Seq

* ***** **

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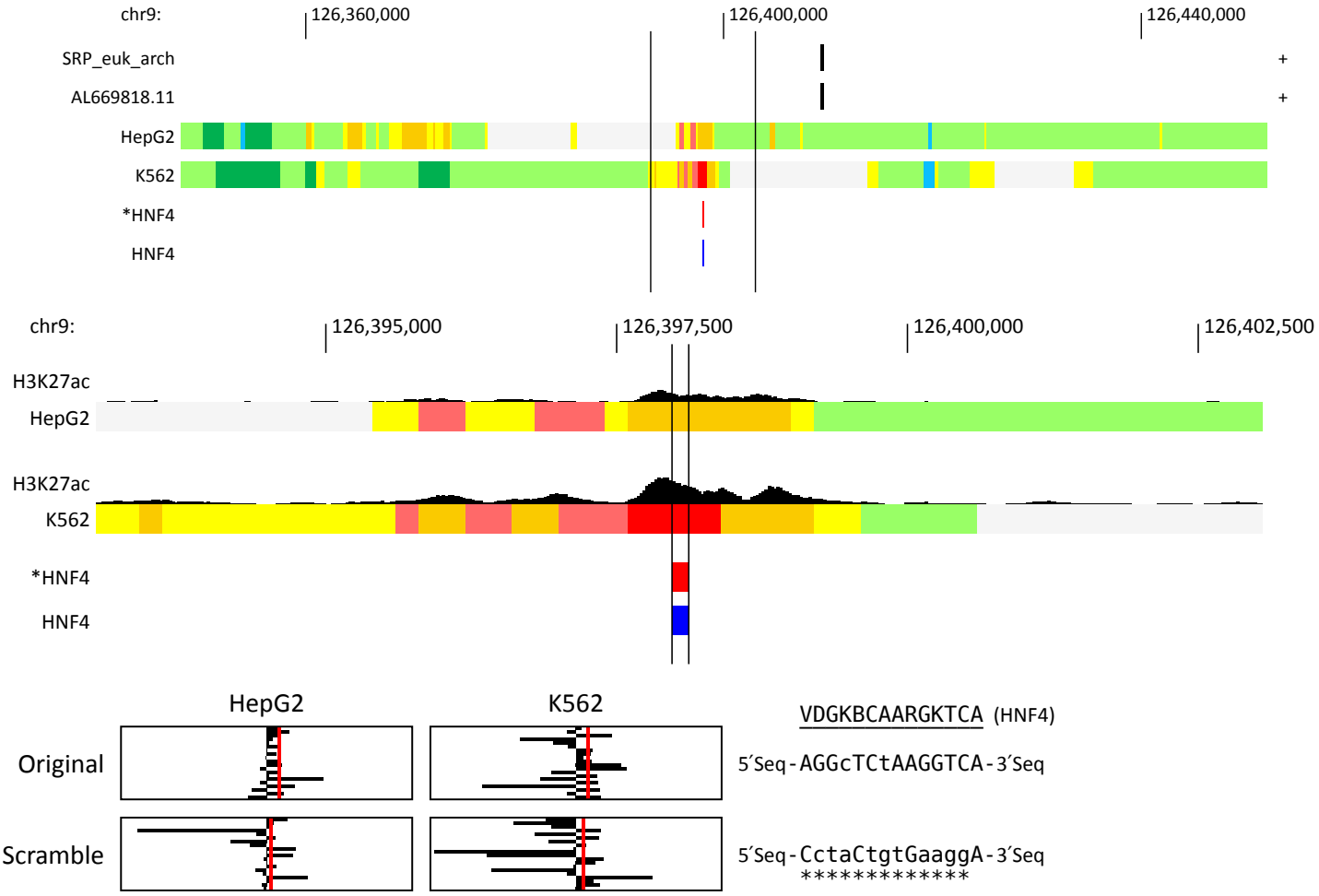
3′Seq = tagtaagaattccccagagcacagagaagccaaataaccaacaatatgcaactggattttatttat

704 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr9 126398042 126398055 + (hg18)



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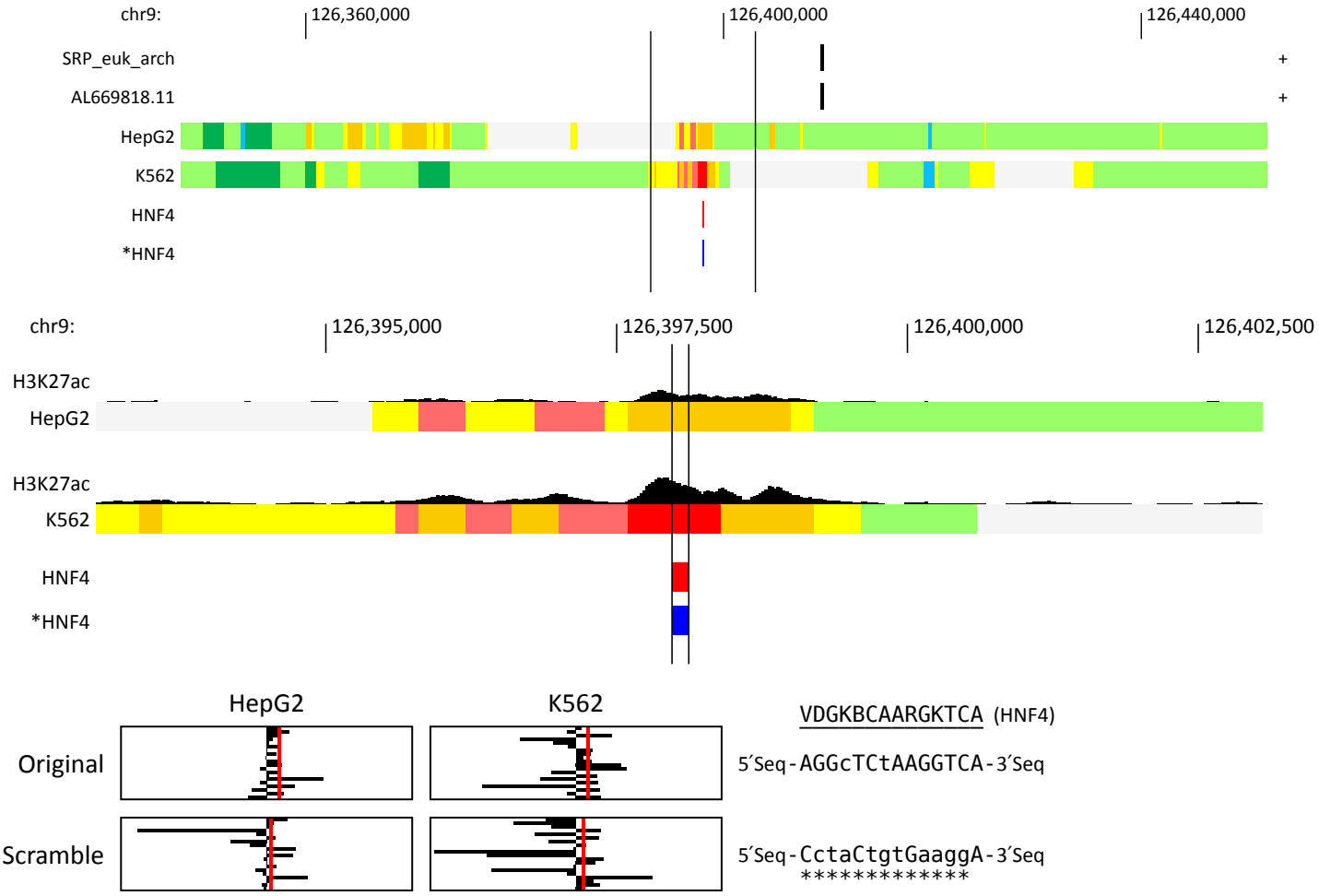
705 HNF4 in HepG2 enhancer

chr9 126398042 126398055 + (hg18)



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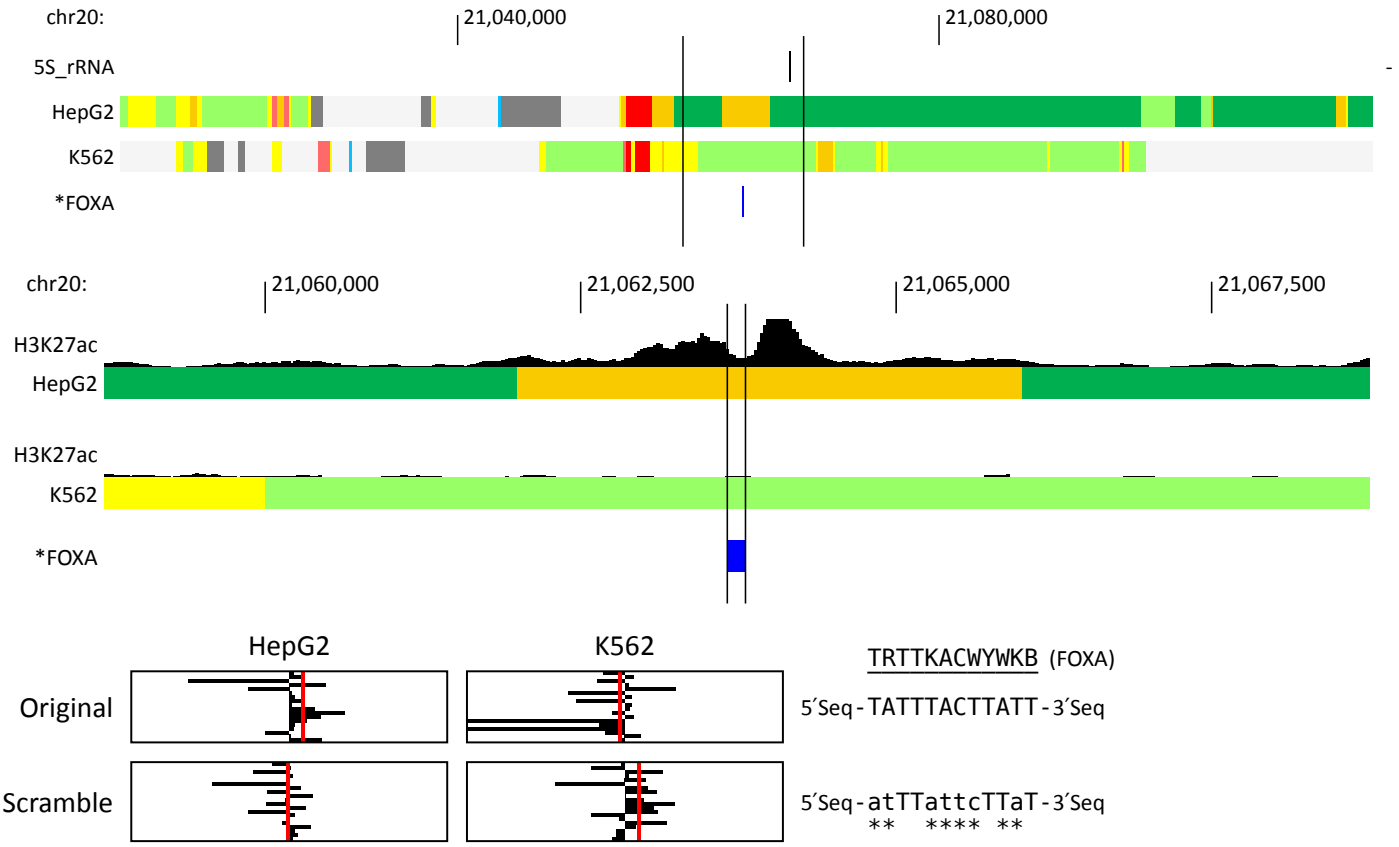
706 FOXA in HepG2 enhancer

chr20 21063729 21063740 + (hg18)



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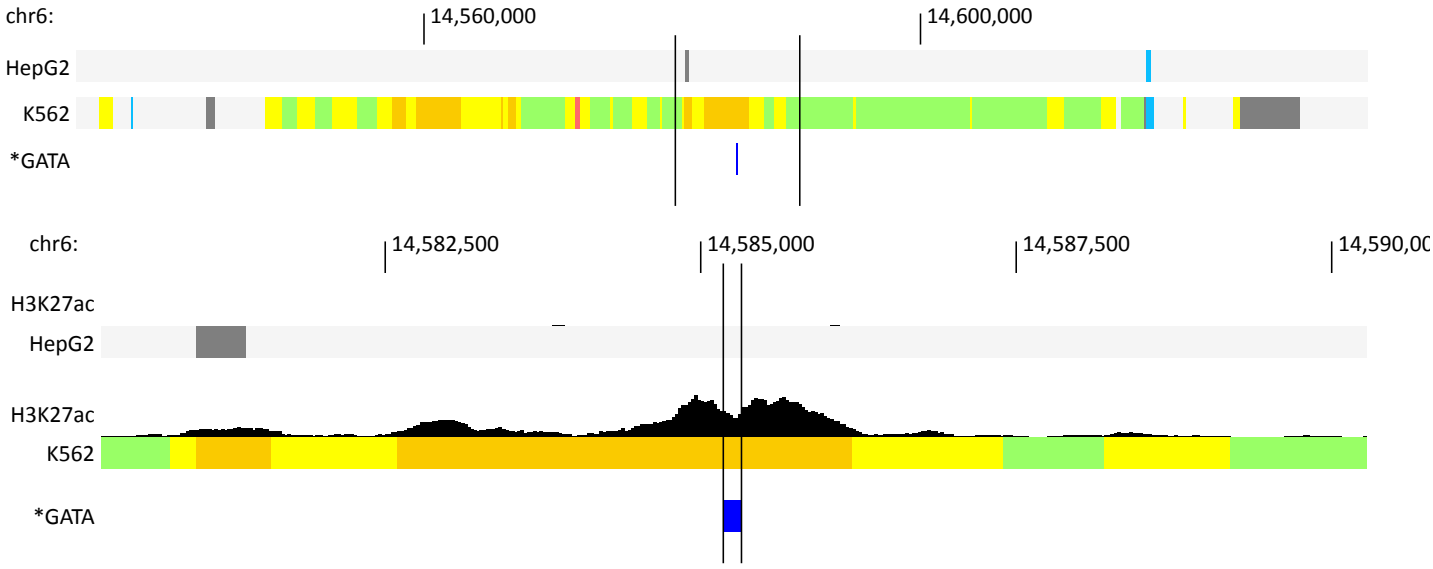
707 GATA in K562 enhancer

chr6 14585243 14585260 + (hg18)



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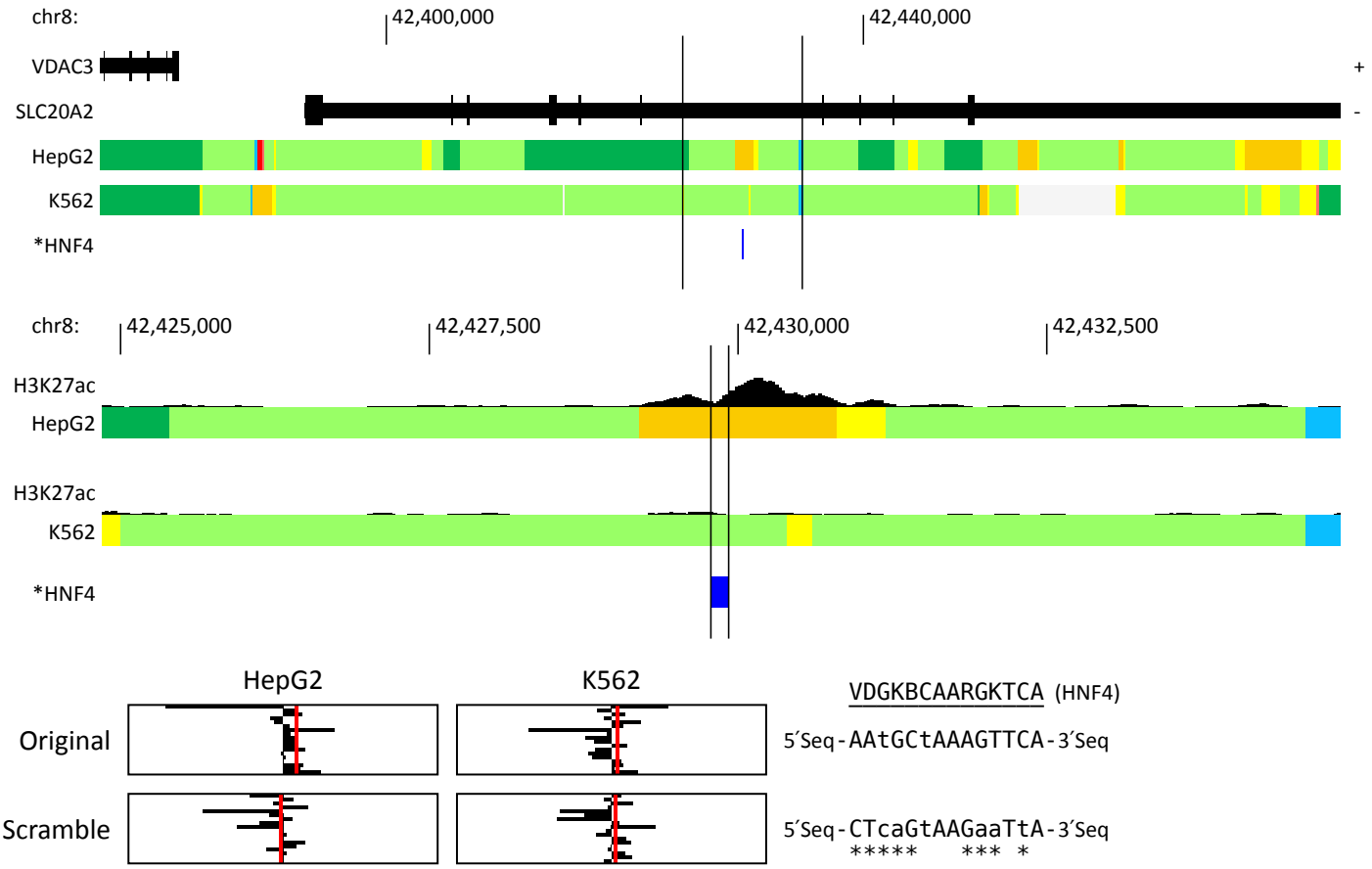
708 HNF4 in HepG2 enhancer

chr8 42429846 42429859 - (hg18)



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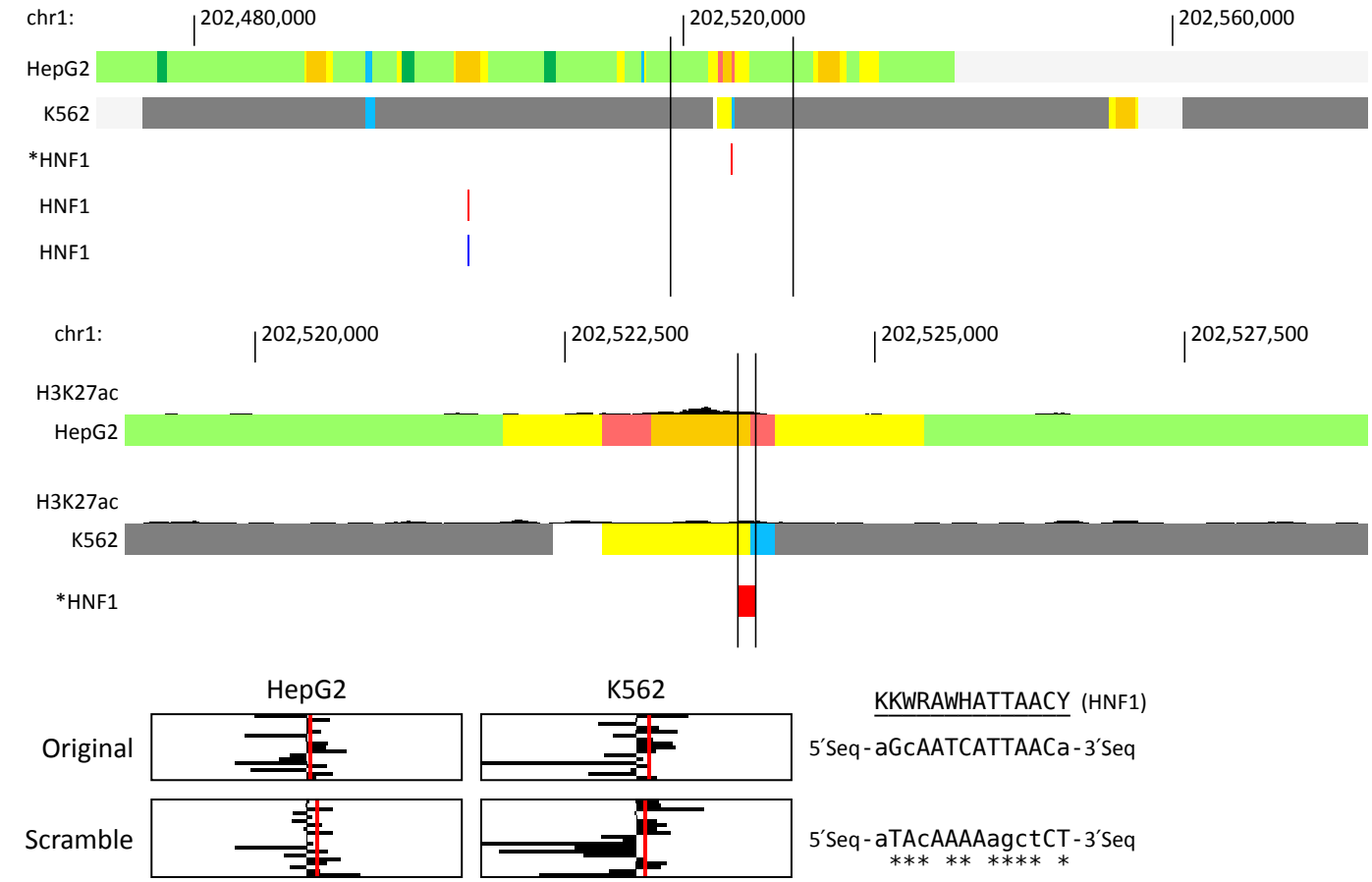
709 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 202523961 202523974 + (hg18)



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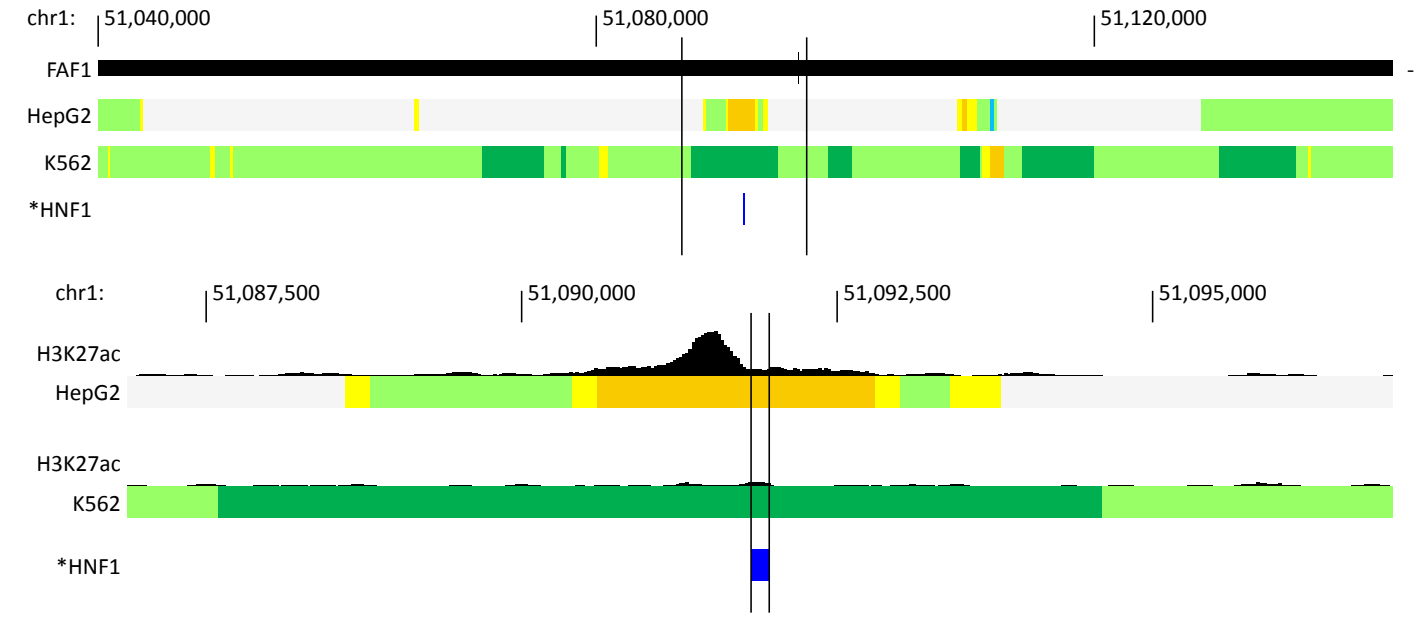
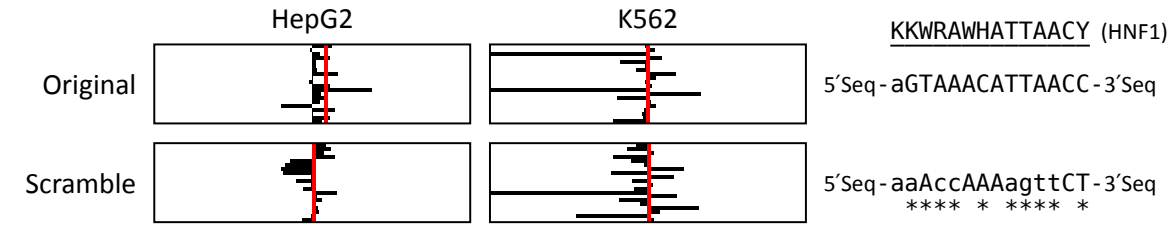
710 HNF1 in HepG2 enhancer

chr1 51091884 51091897 - (hg18)





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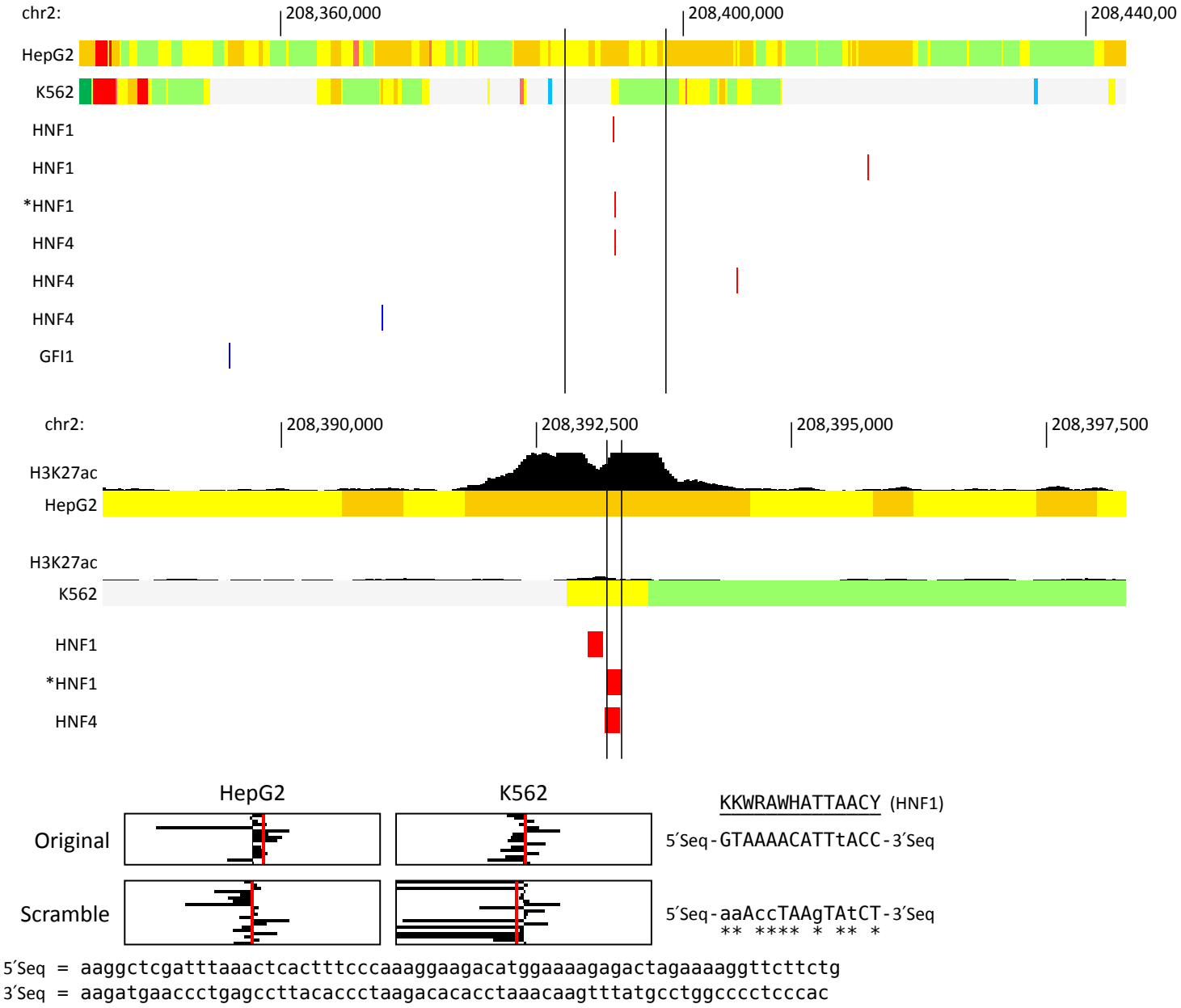
711 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr2 208393257 208393270 - (hg18)



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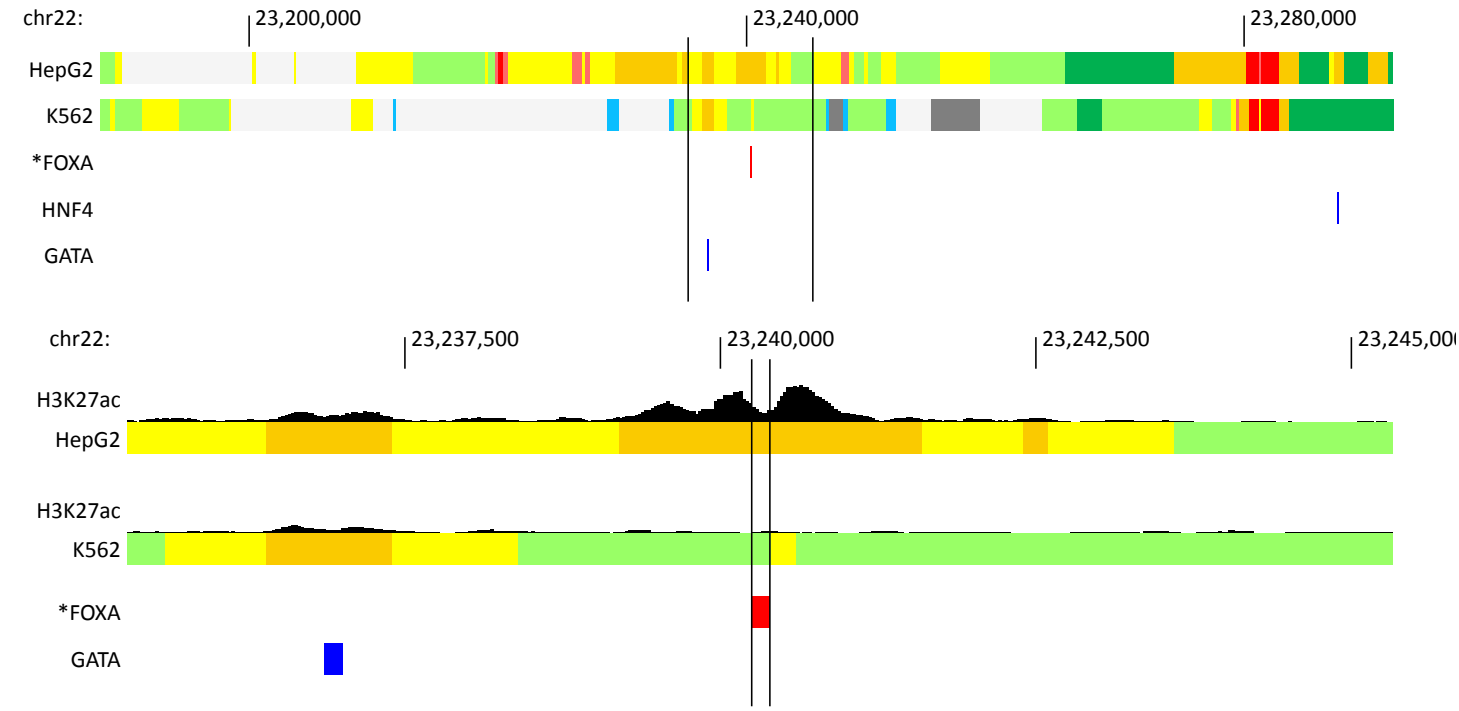
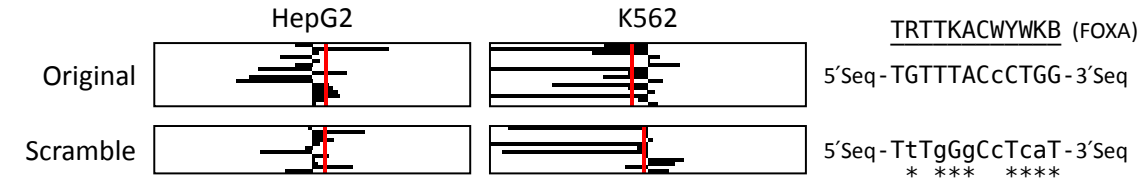
712 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr22 23240315 23240326 + (hg18)





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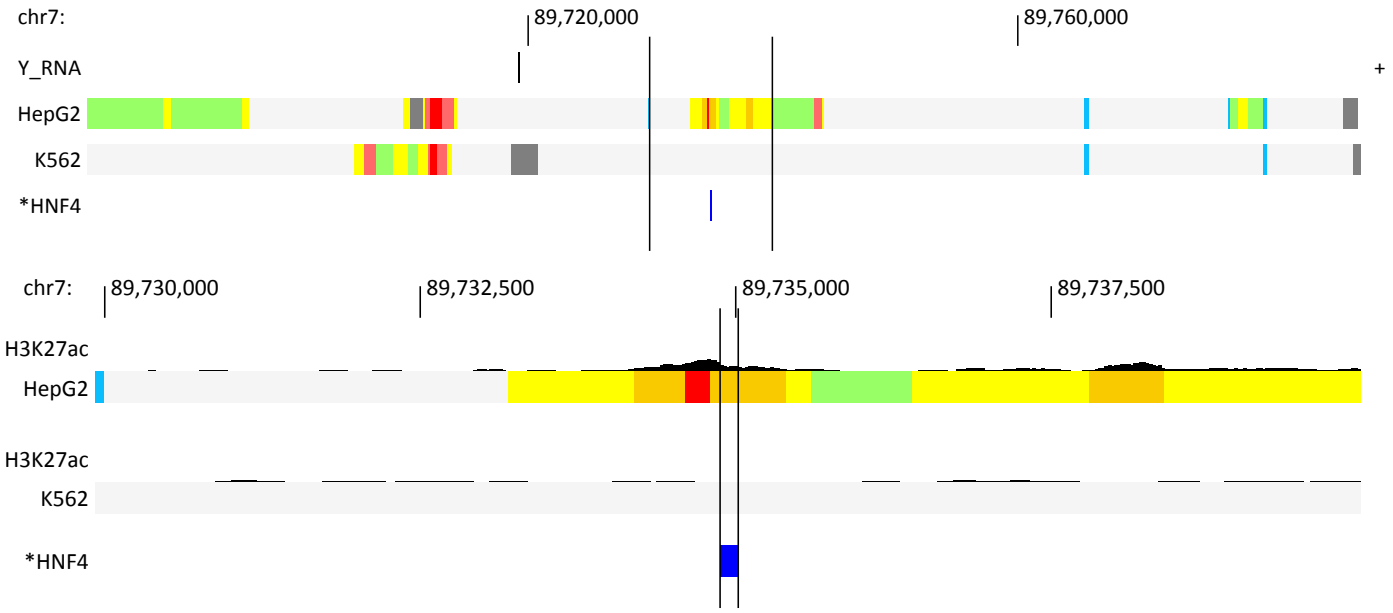
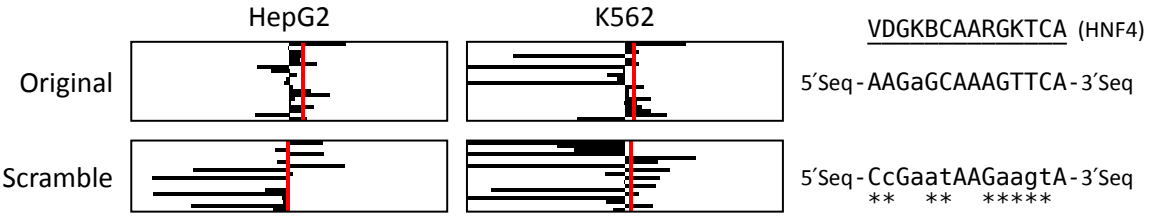
713 HNF4 in HepG2 enhancer

chr7 89734942 89734955 + (hg18)





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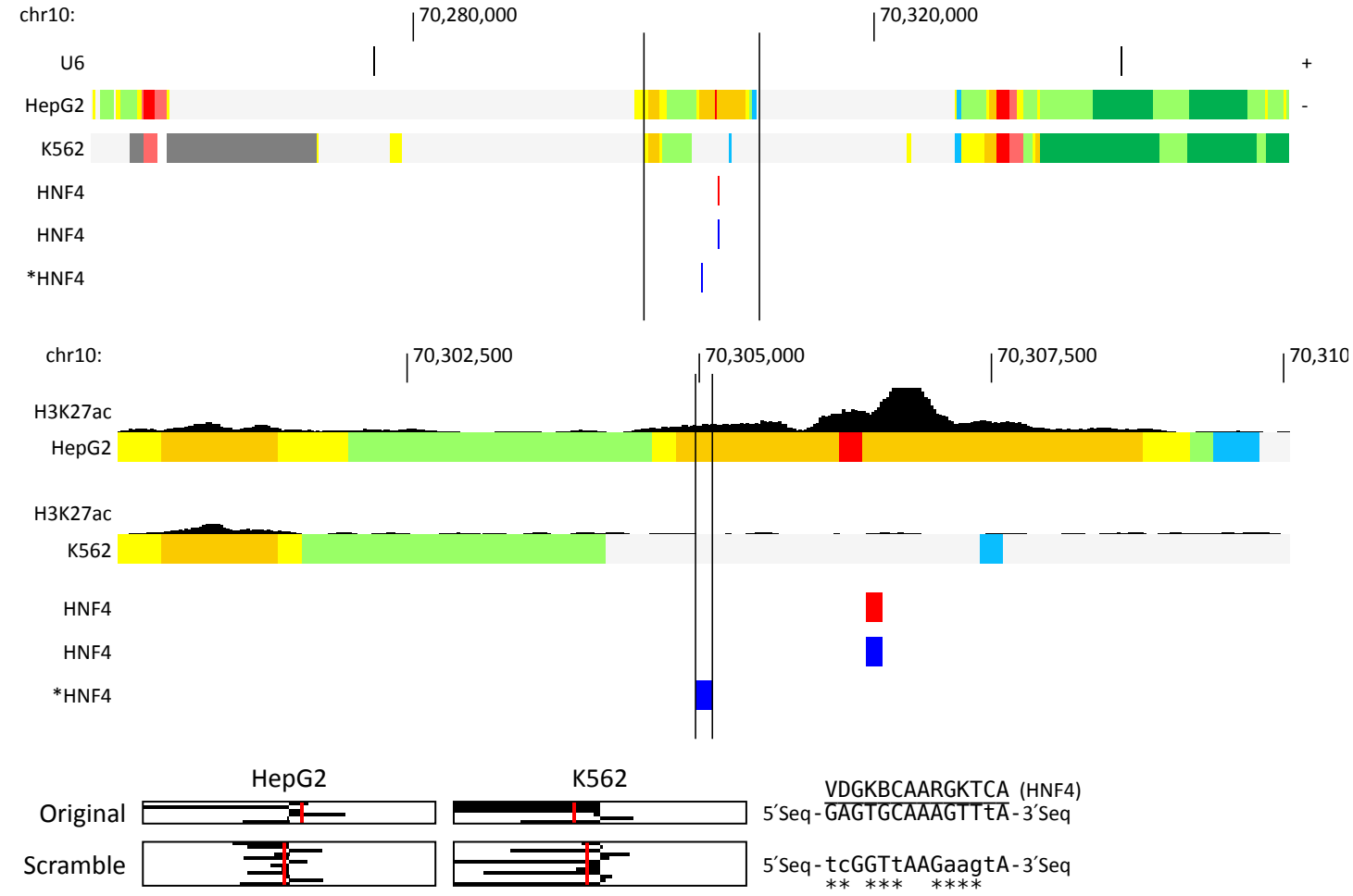
714 HNF4 in HepG2 enhancer

chr10 70305034 70305047 + (hg18)



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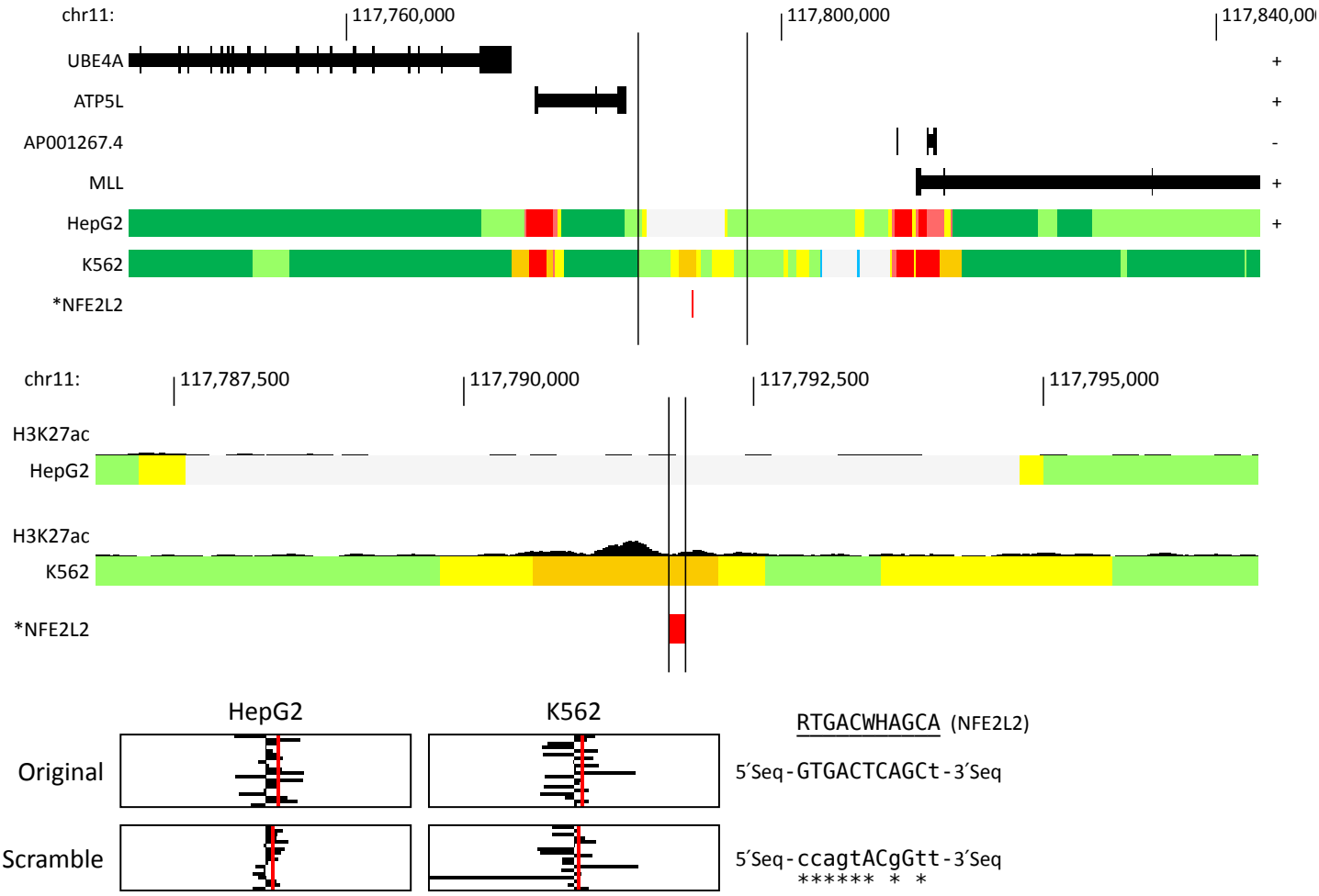
715 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr11 117791836 117791846 - (hg18)



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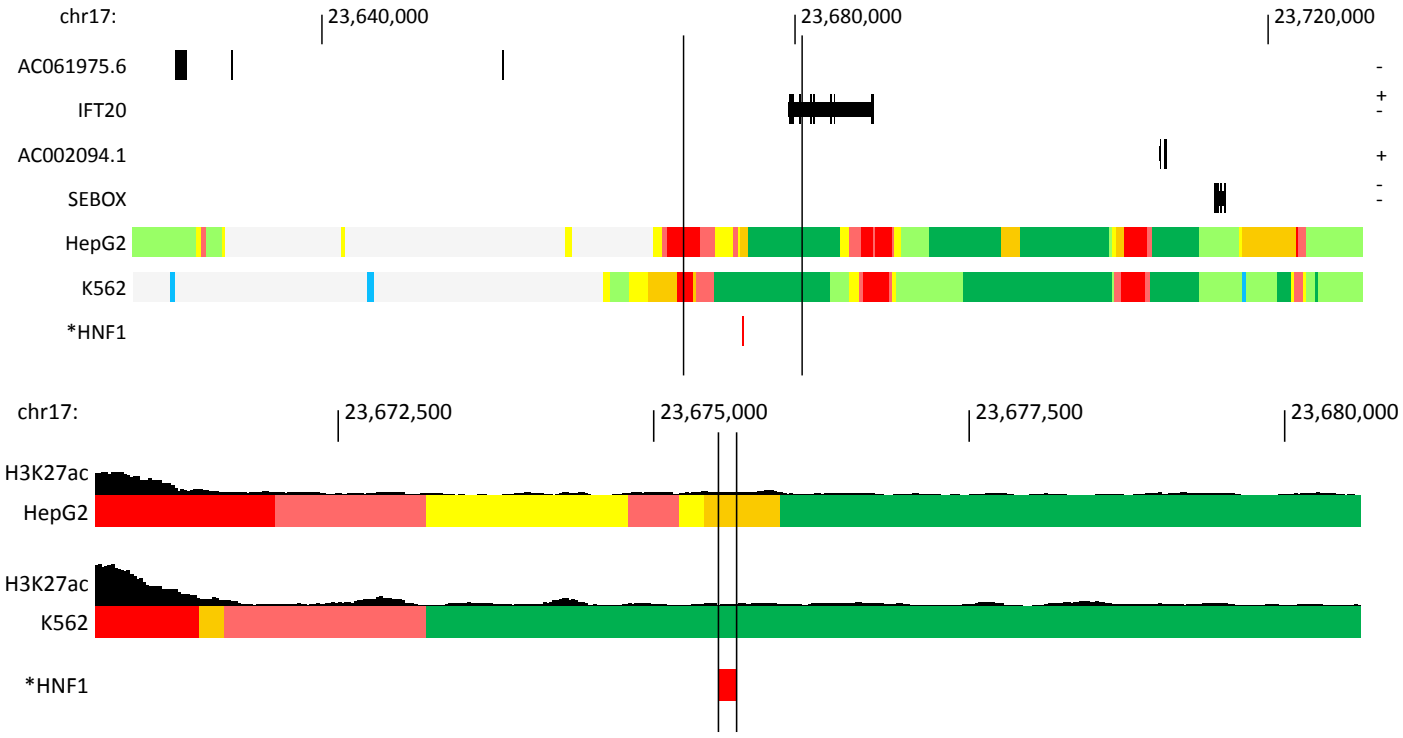
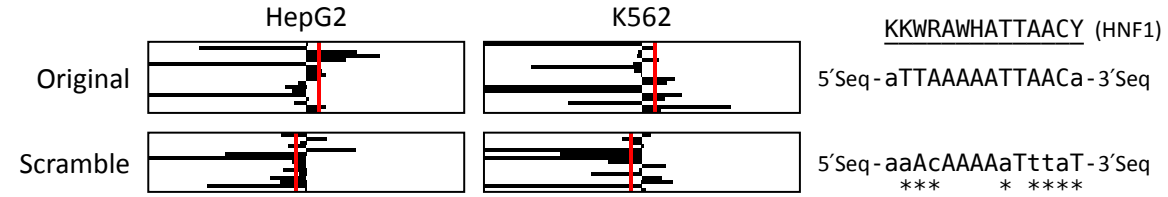
716 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr17 23675579 23675592 + (hg18)





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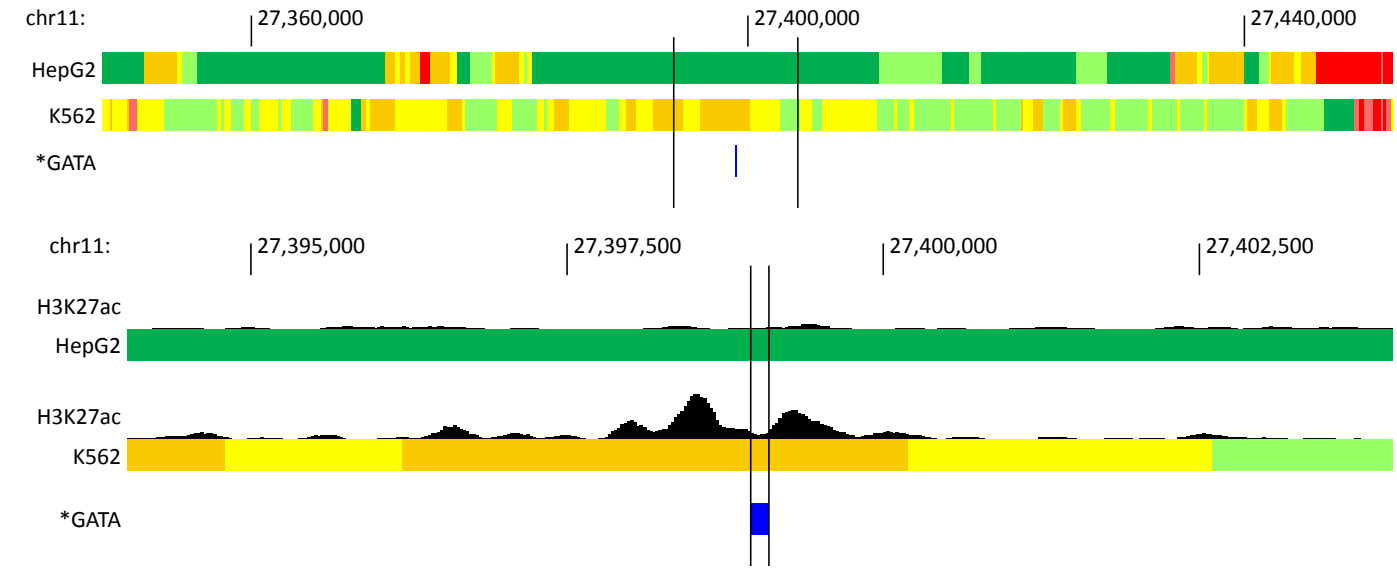
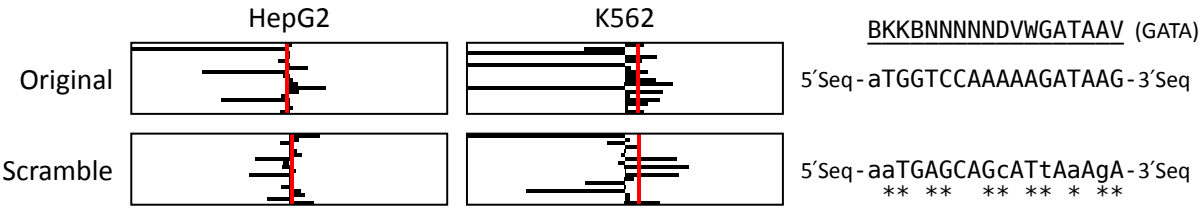
717 GATA in K562 enhancer

chr11 27399016 27399033 + (hg18)





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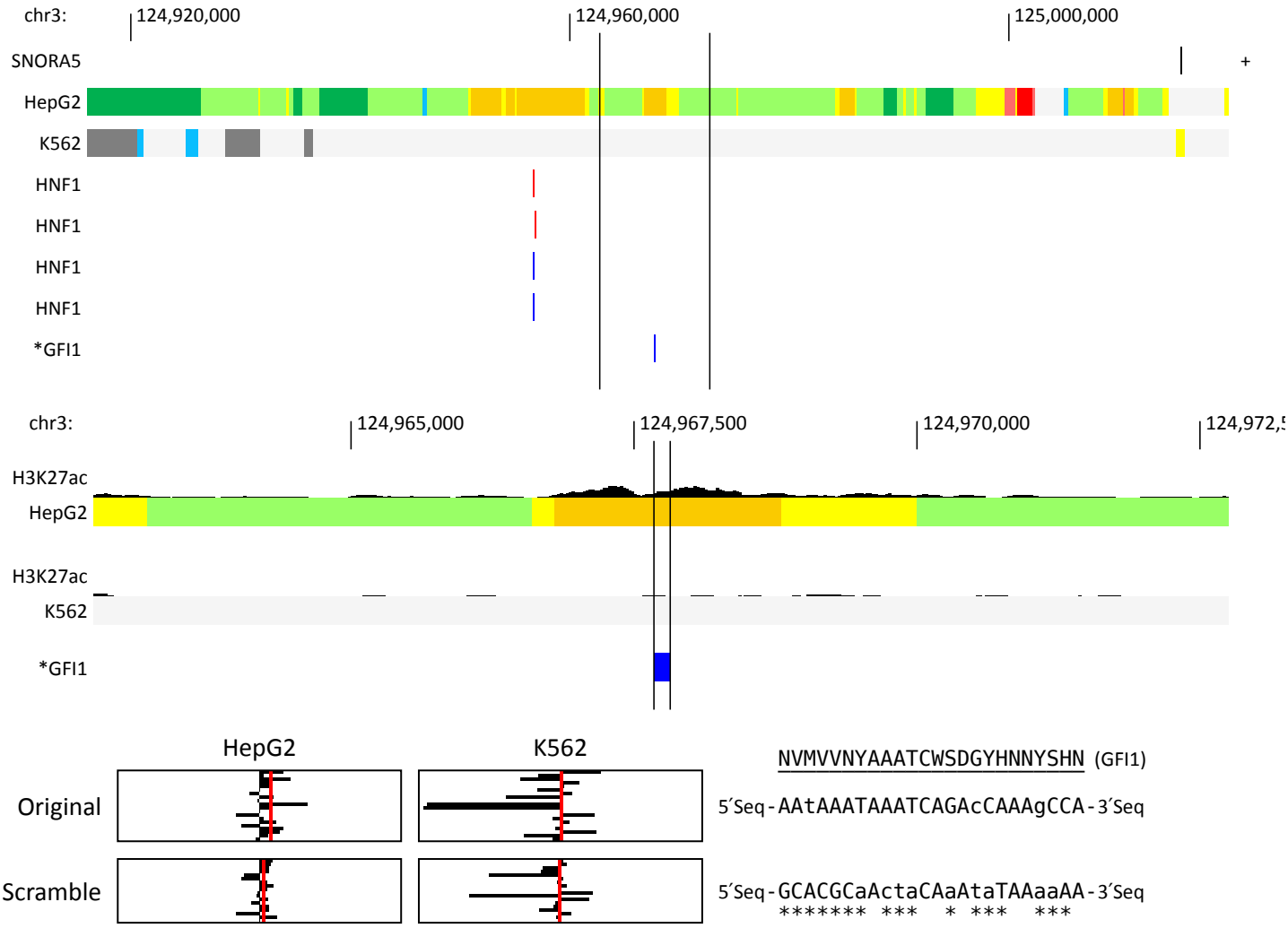
718 GFI1 in HepG2 enhancer

chr3 124967737 124967760 + (hg18)



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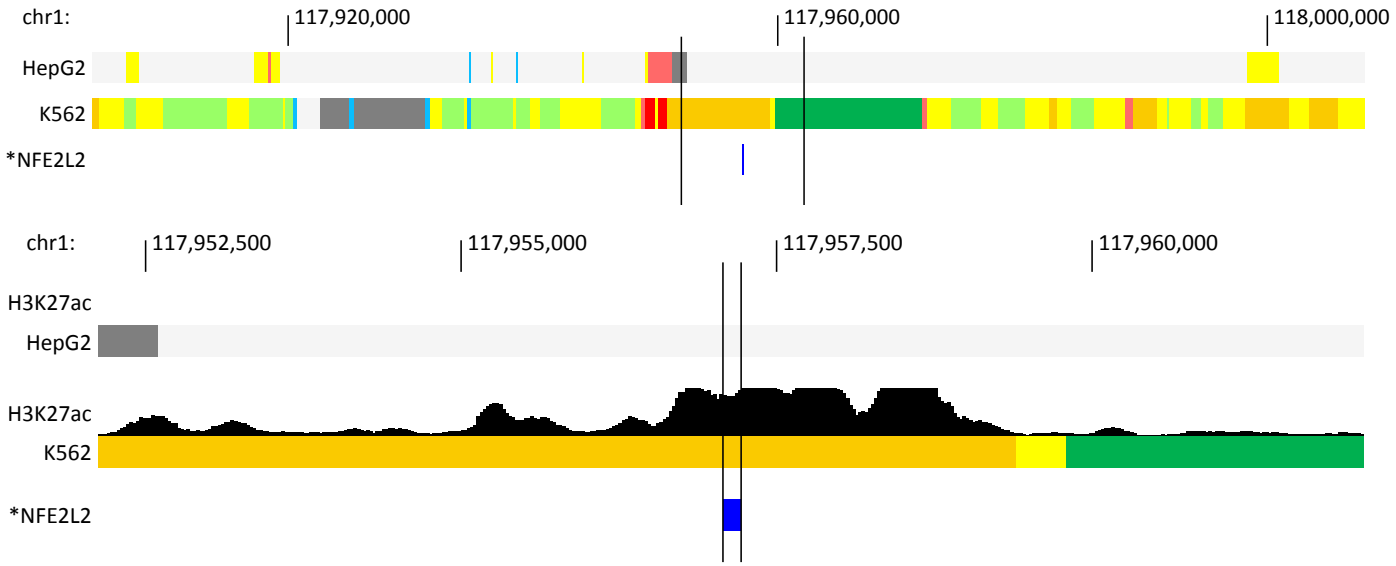
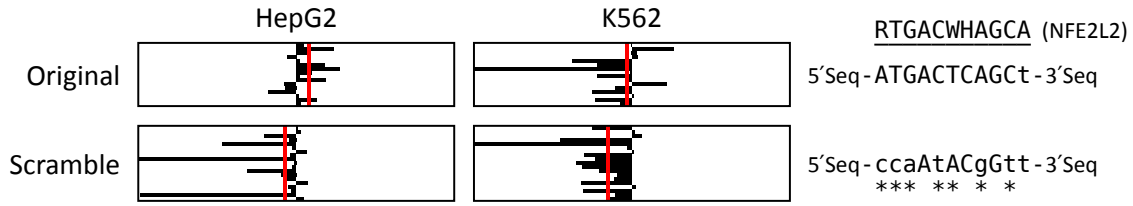
719 NFE2L2 in K562 enhancer

chr1 117957142 117957152 - (hg18)





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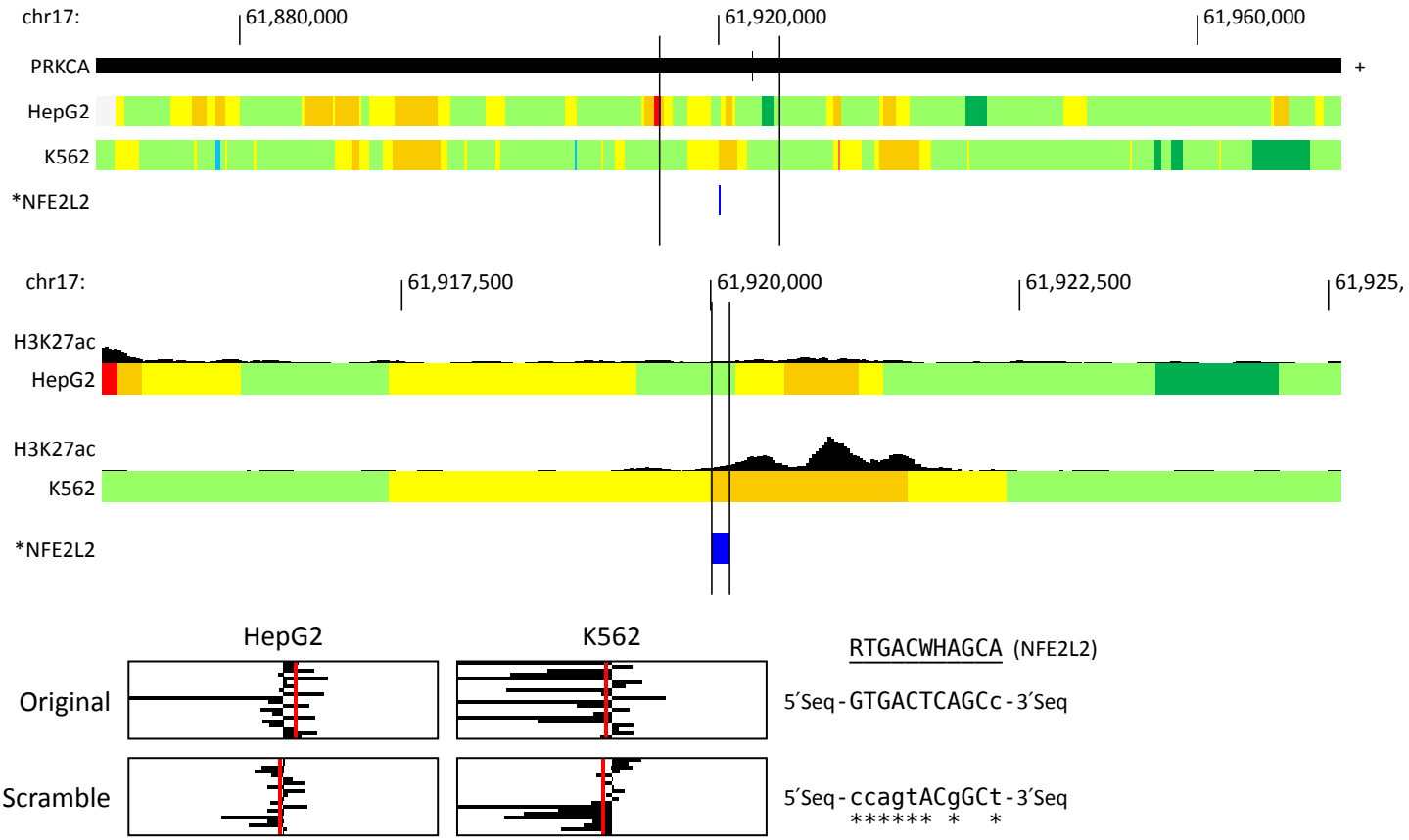
720 NFE2L2 in K562 enhancer

chr17 61920076 61920086 + (hg18)



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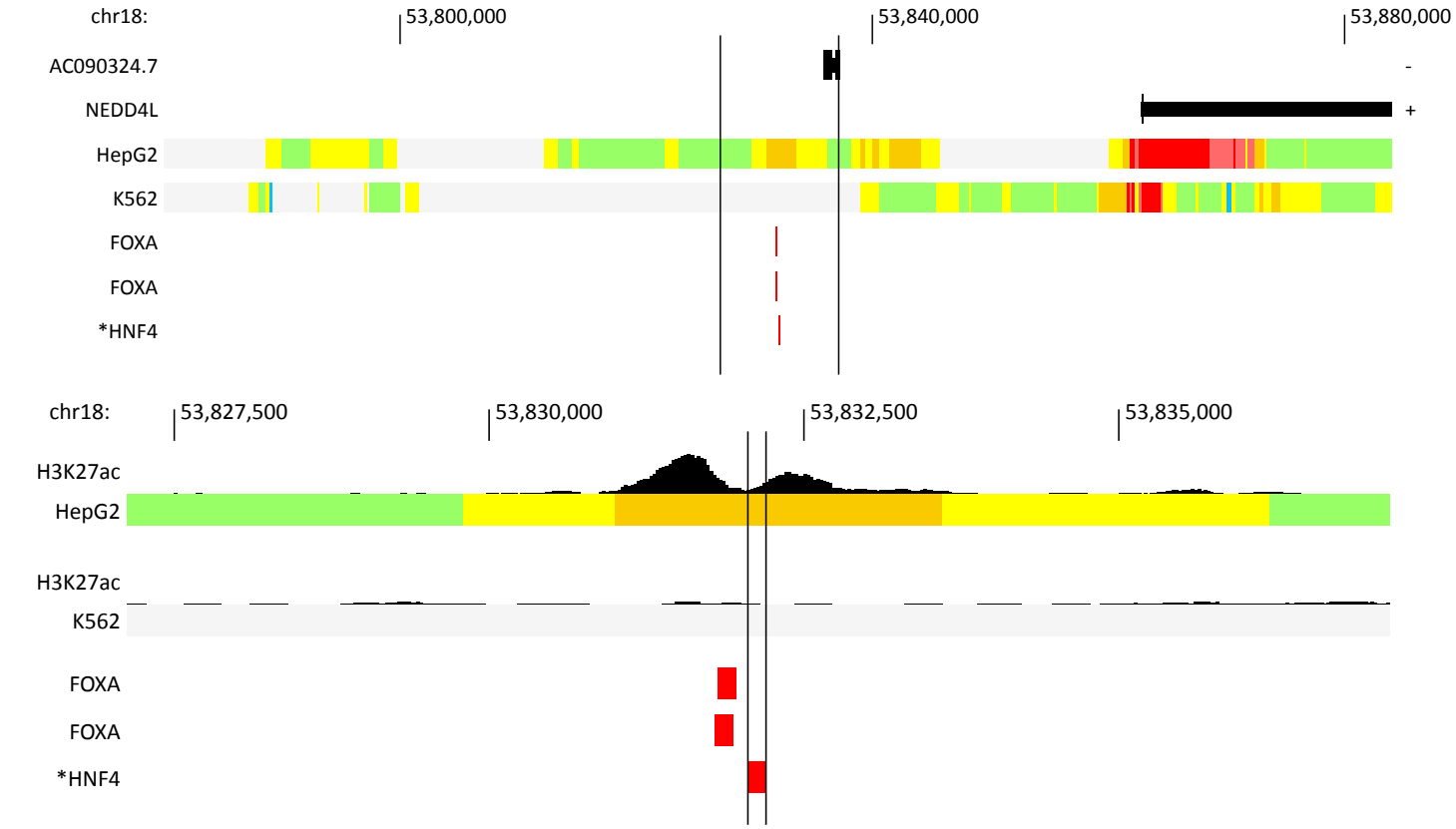
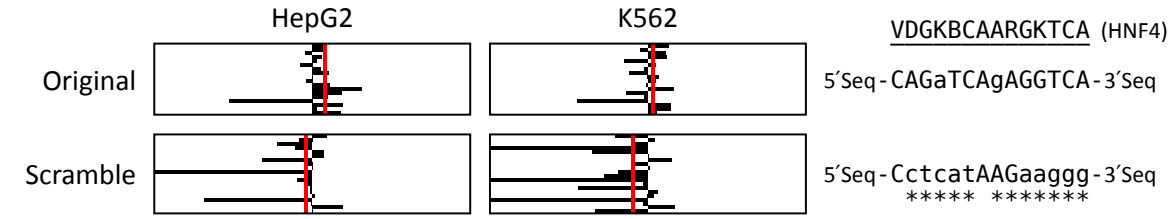
721 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr18 53832121 53832134 - (hg18)





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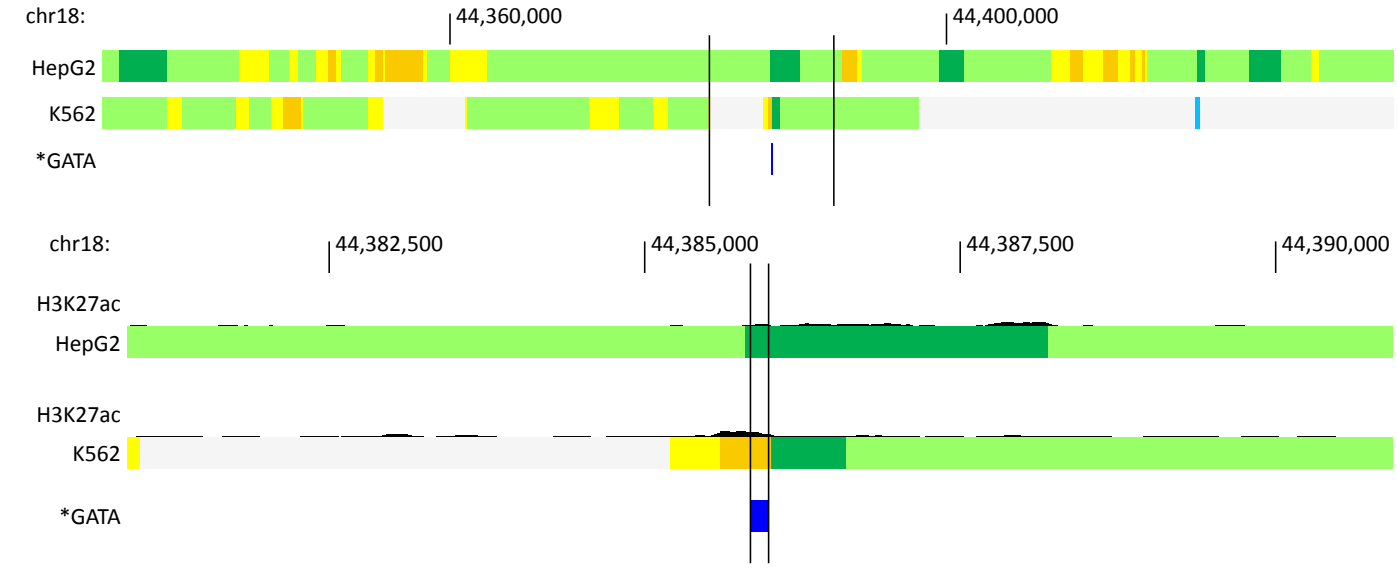
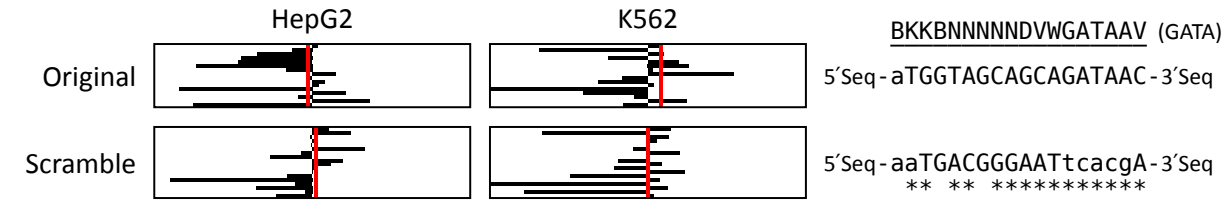
722 GATA in K562 enhancer

chr18 44385902 44385919 - (hg18)





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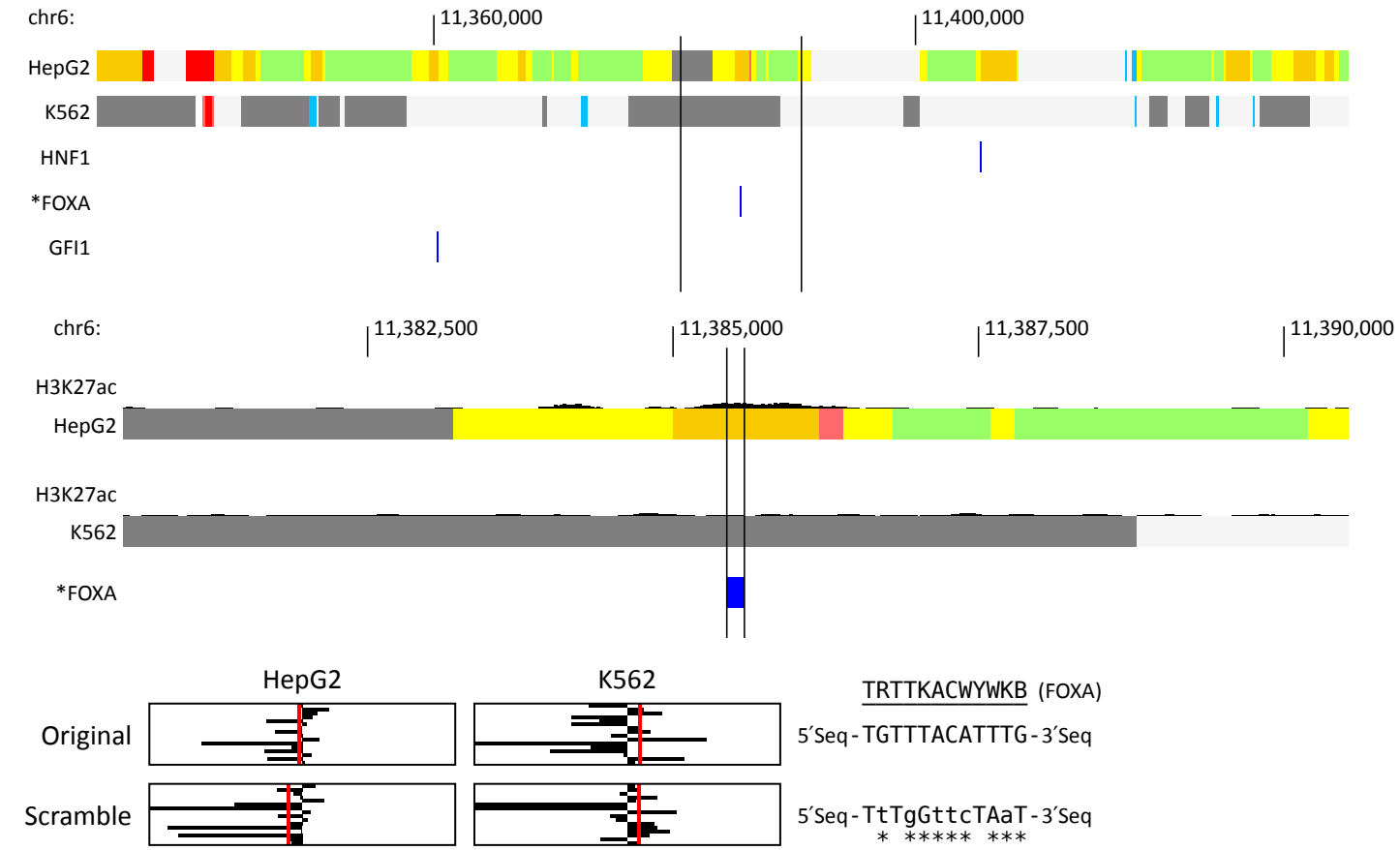
723 FOXA in HepG2 enhancer

chr6 11385507 11385518 - (hg18)



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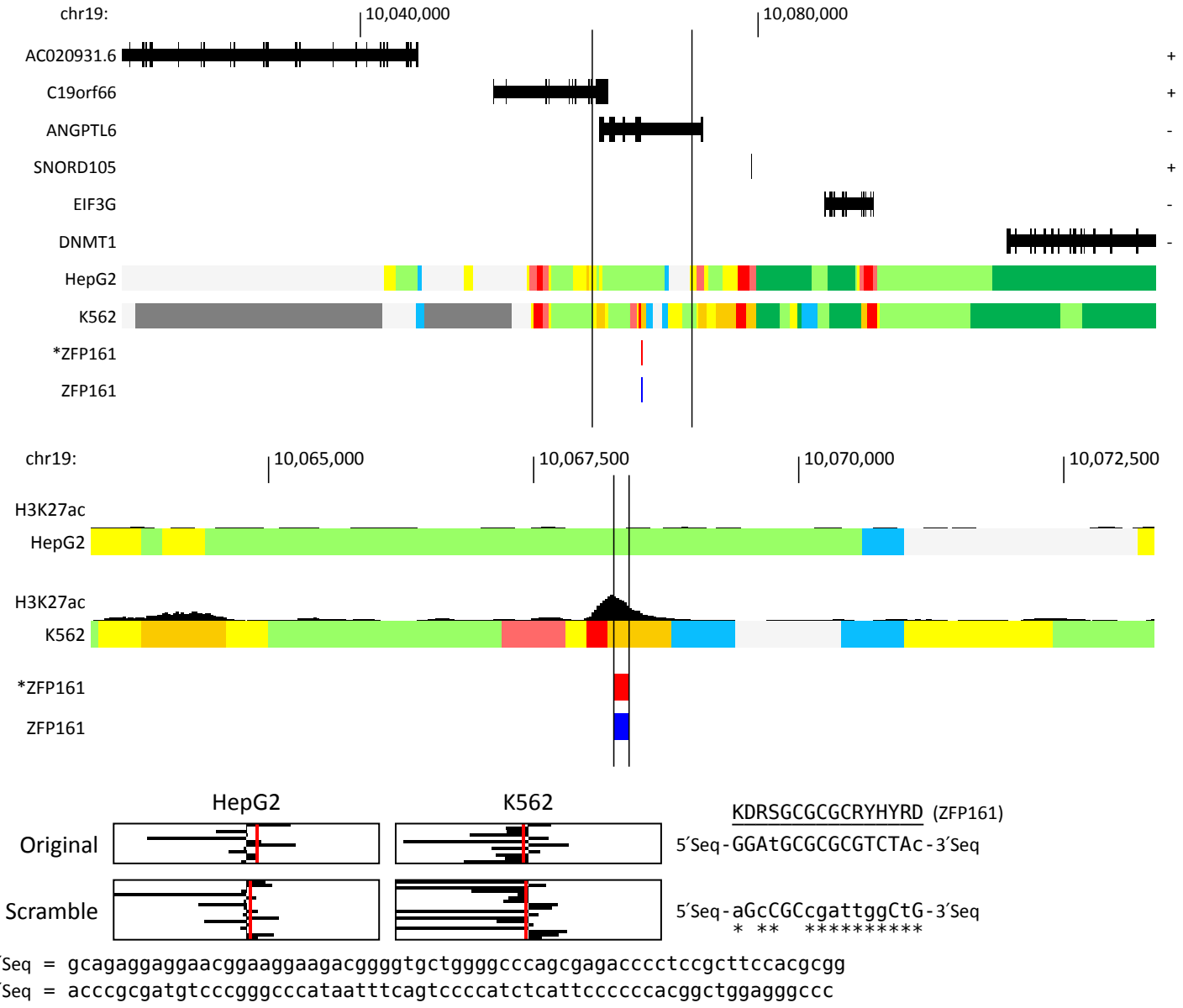
724 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr19 10068321 10068336 + (hg18)



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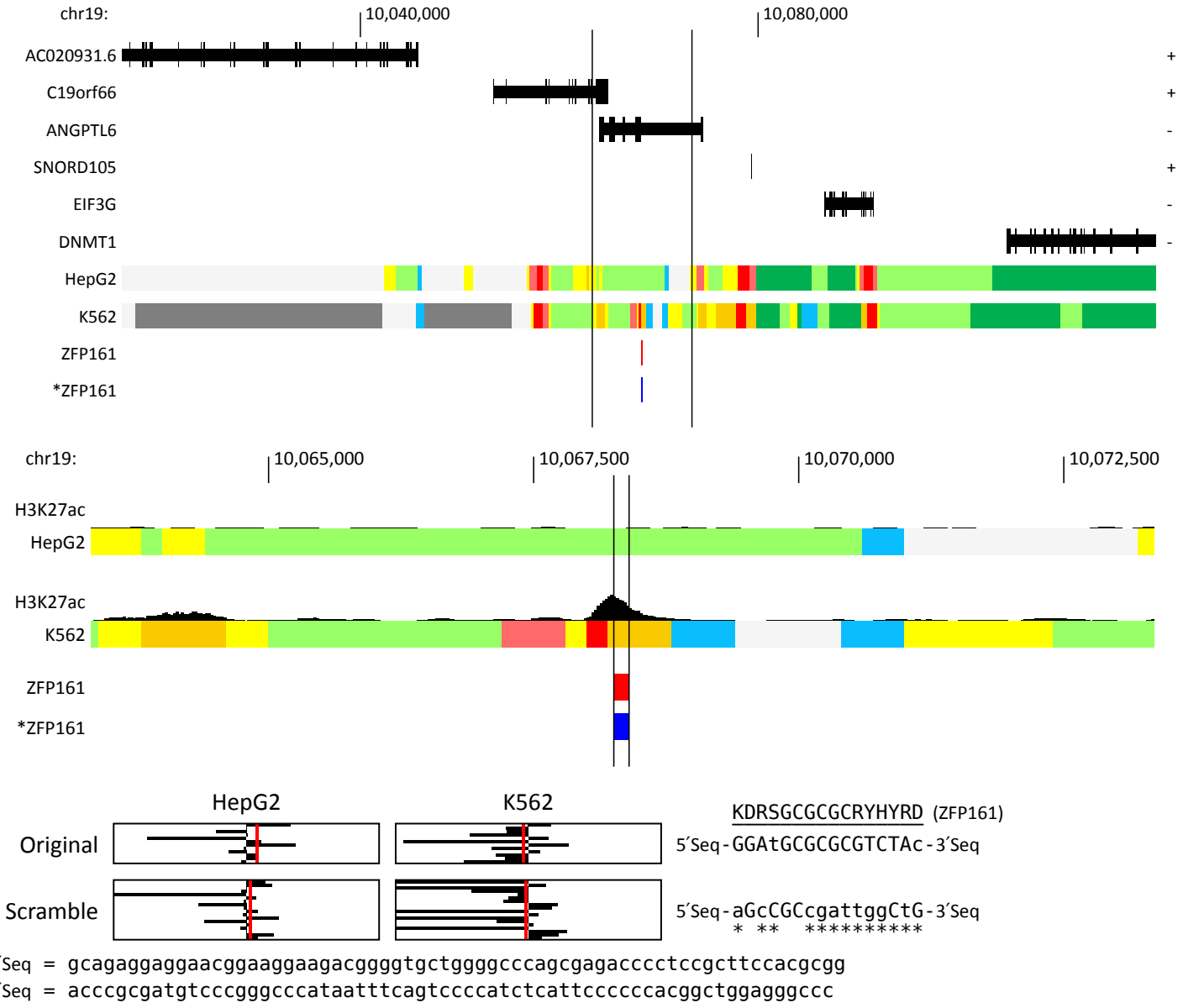
725 ZFP161 in K562 enhancer

chr19 10068321 10068336 + (hg18)



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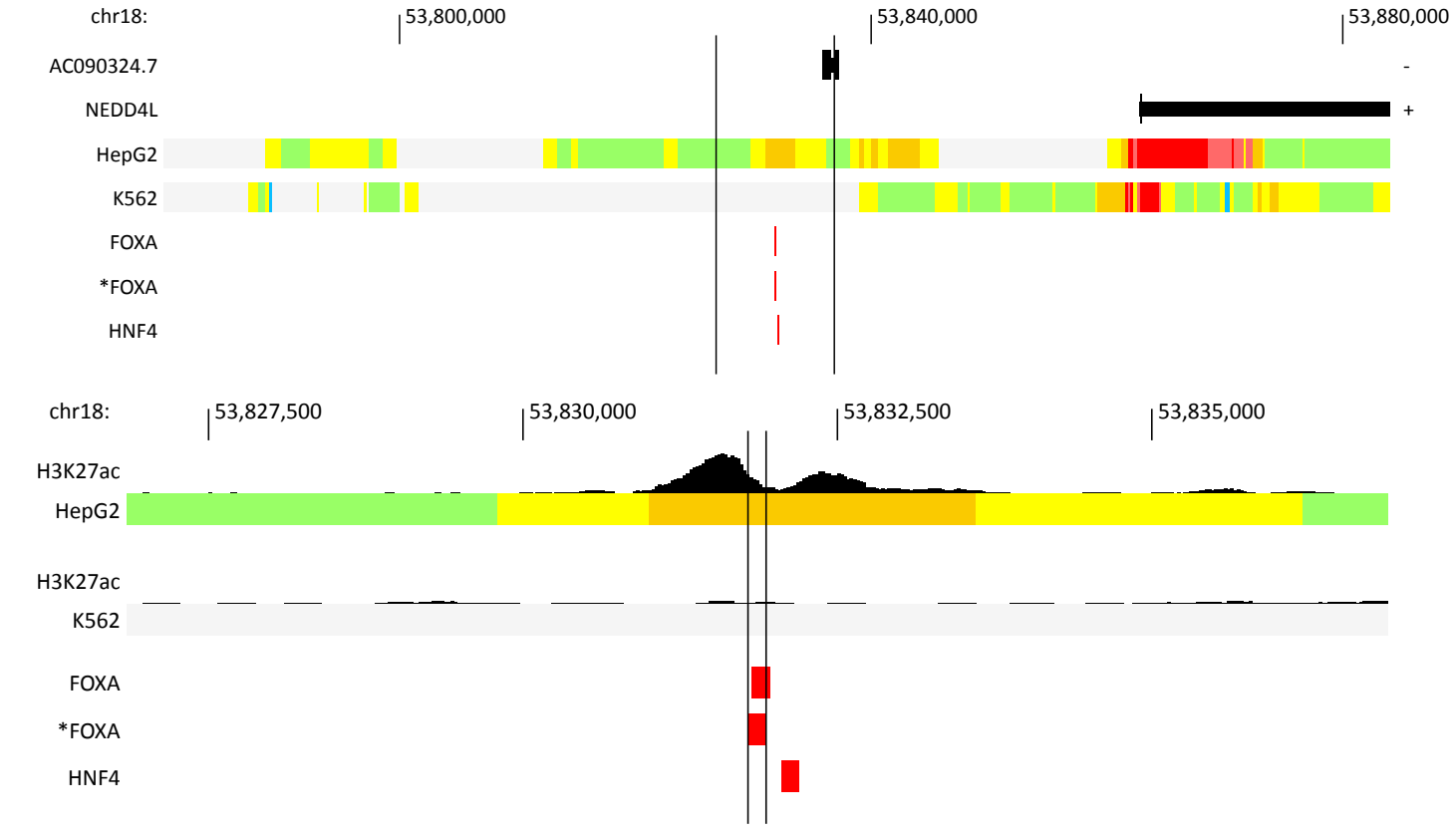
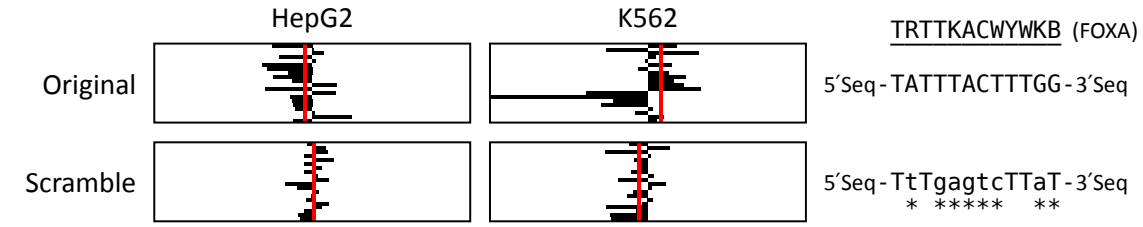
726 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr18 53831856 53831867 - (hg18)





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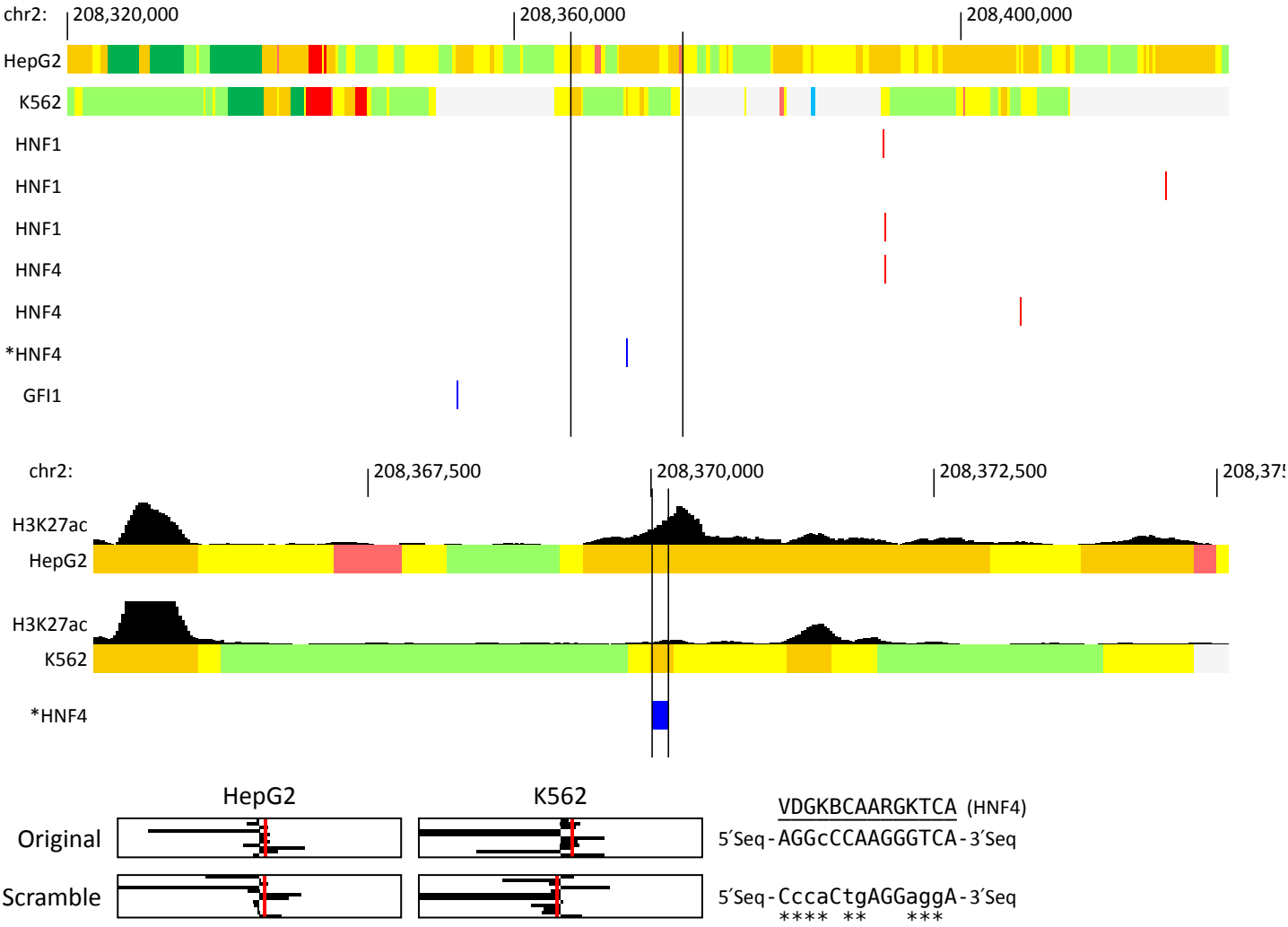
727 HNF4 in HepG2 enhancer

chr2 208370076 208370089 + (hg18)



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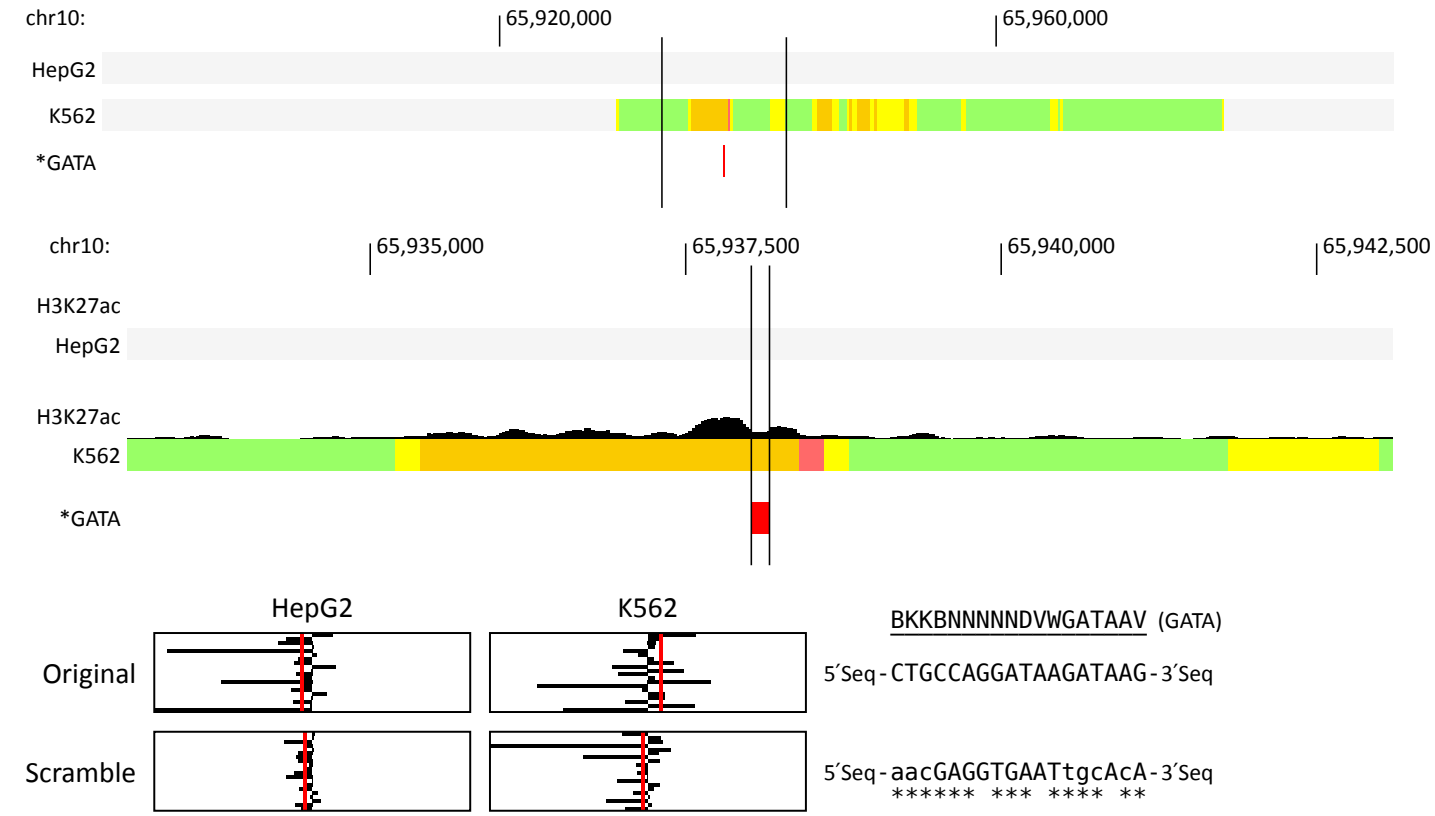
728 GATA in K562 enhancer (conserved at 60% confidence)

chr10 65938084 65938101 - (hg18)



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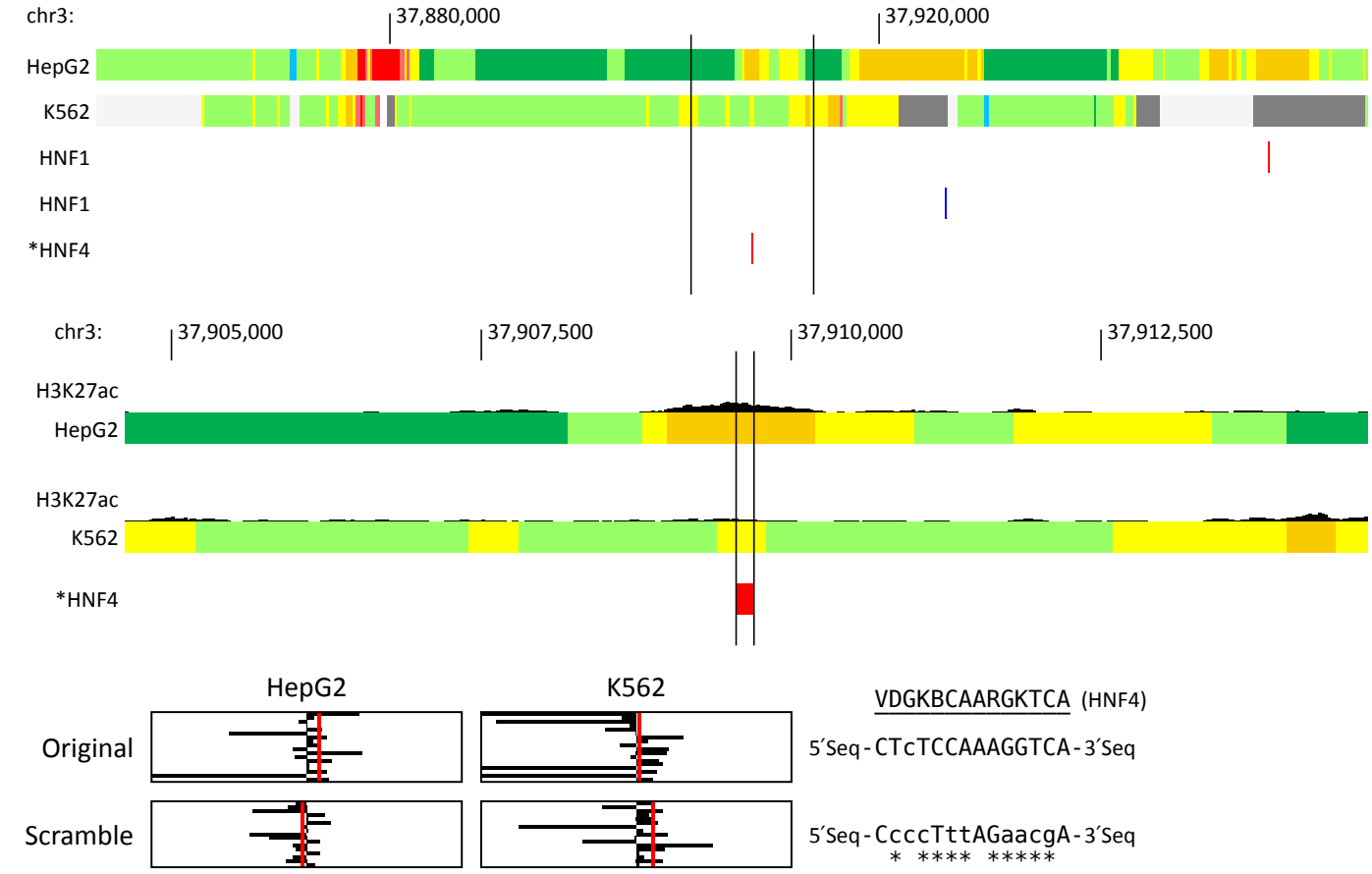
729 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr3 37909622 37909635 - (hg18)



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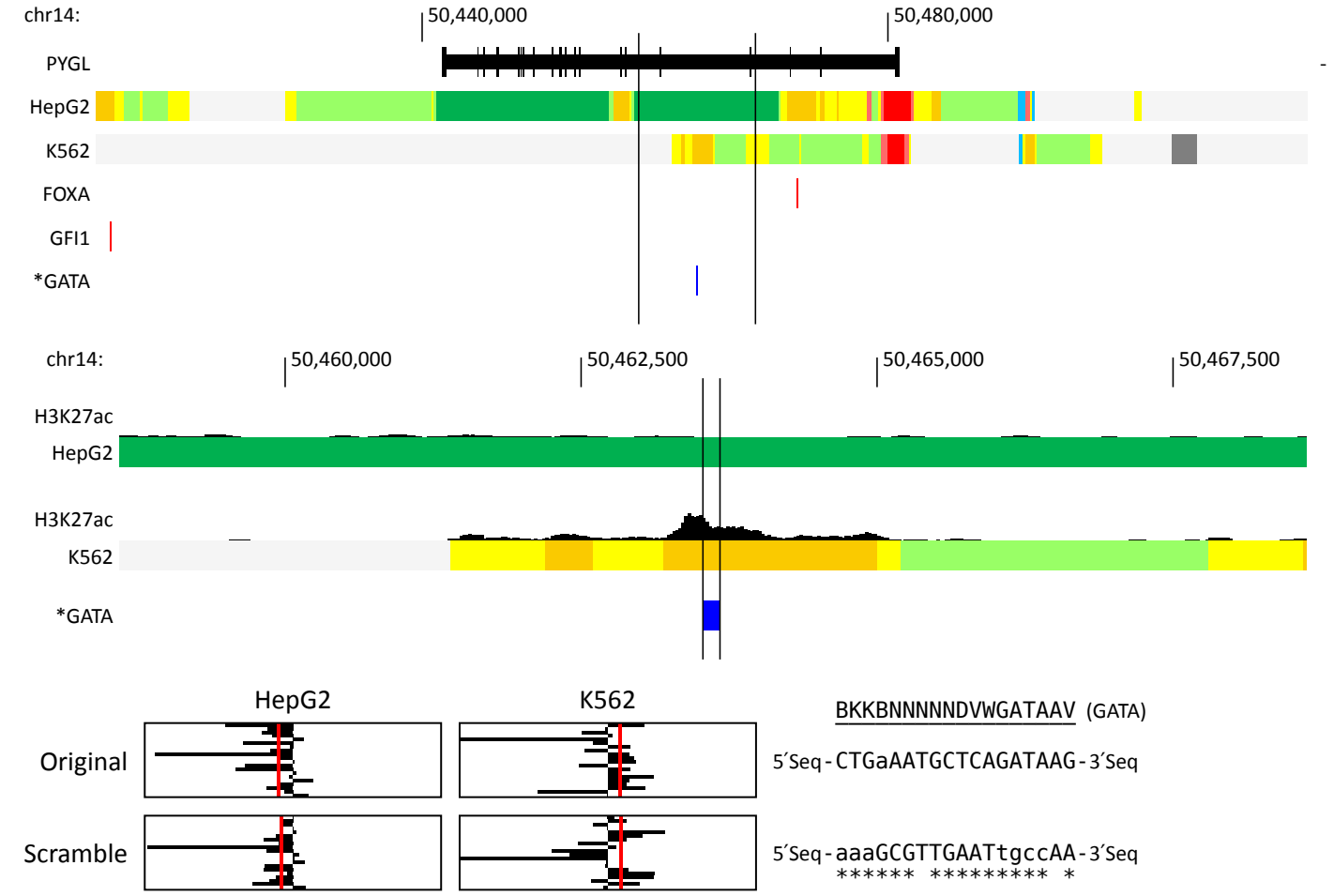
730 GATA in K562 enhancer

chr14 50463593 50463610 + (hg18)



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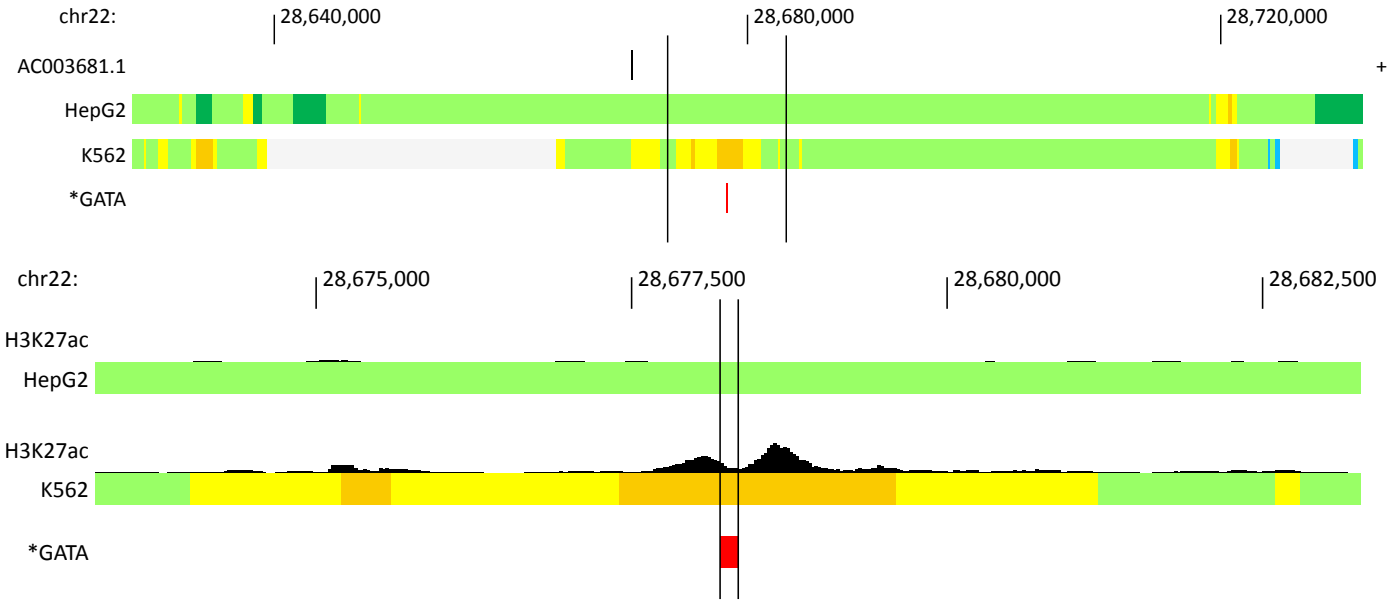
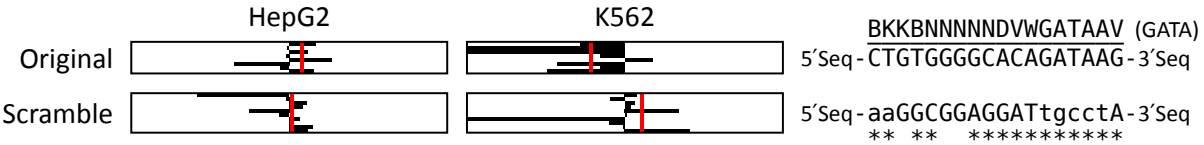
731 GATA in K562 enhancer (conserved at 60% confidence)

chr22 28678265 28678282 - (hg18)





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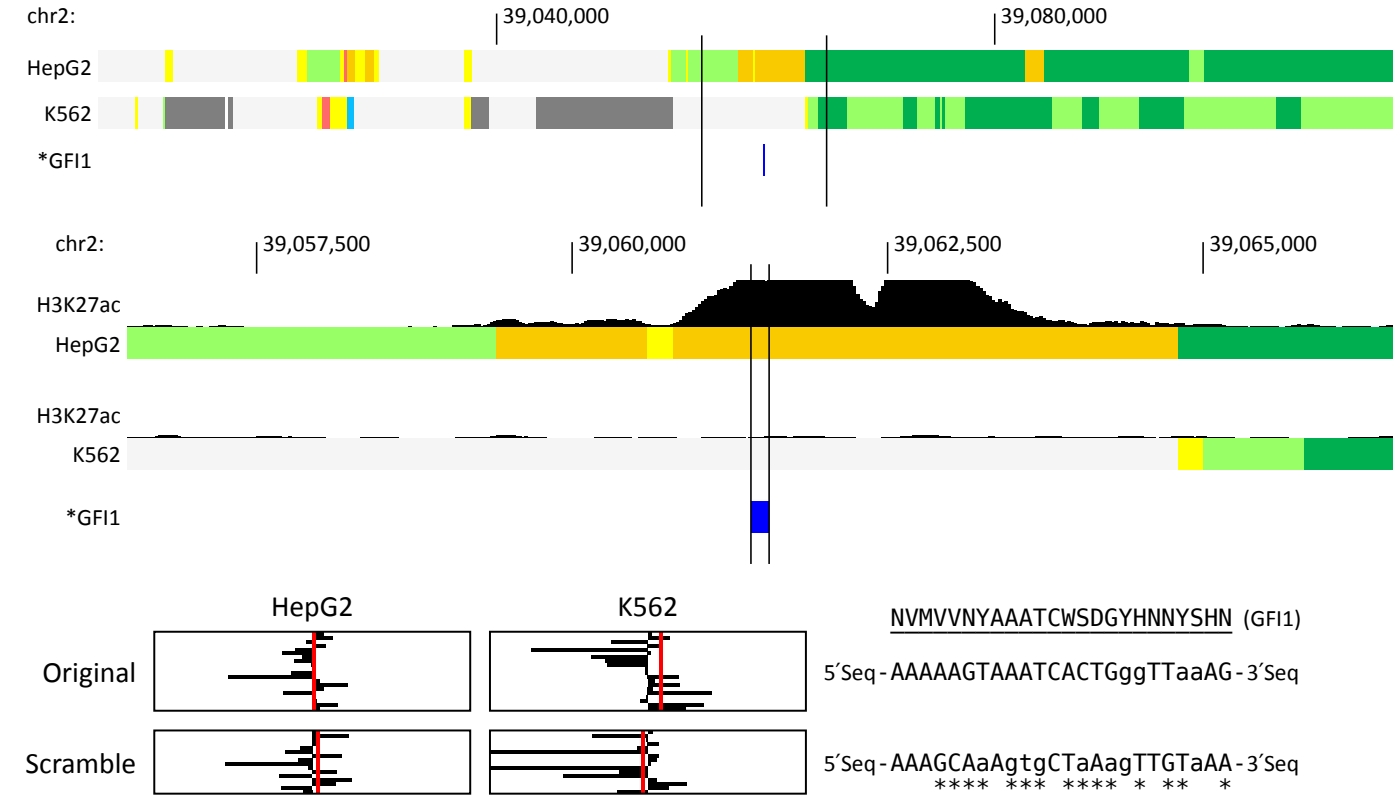
732 GFI1 in HepG2 enhancer

chr2 39061478 39061501 + (hg18)



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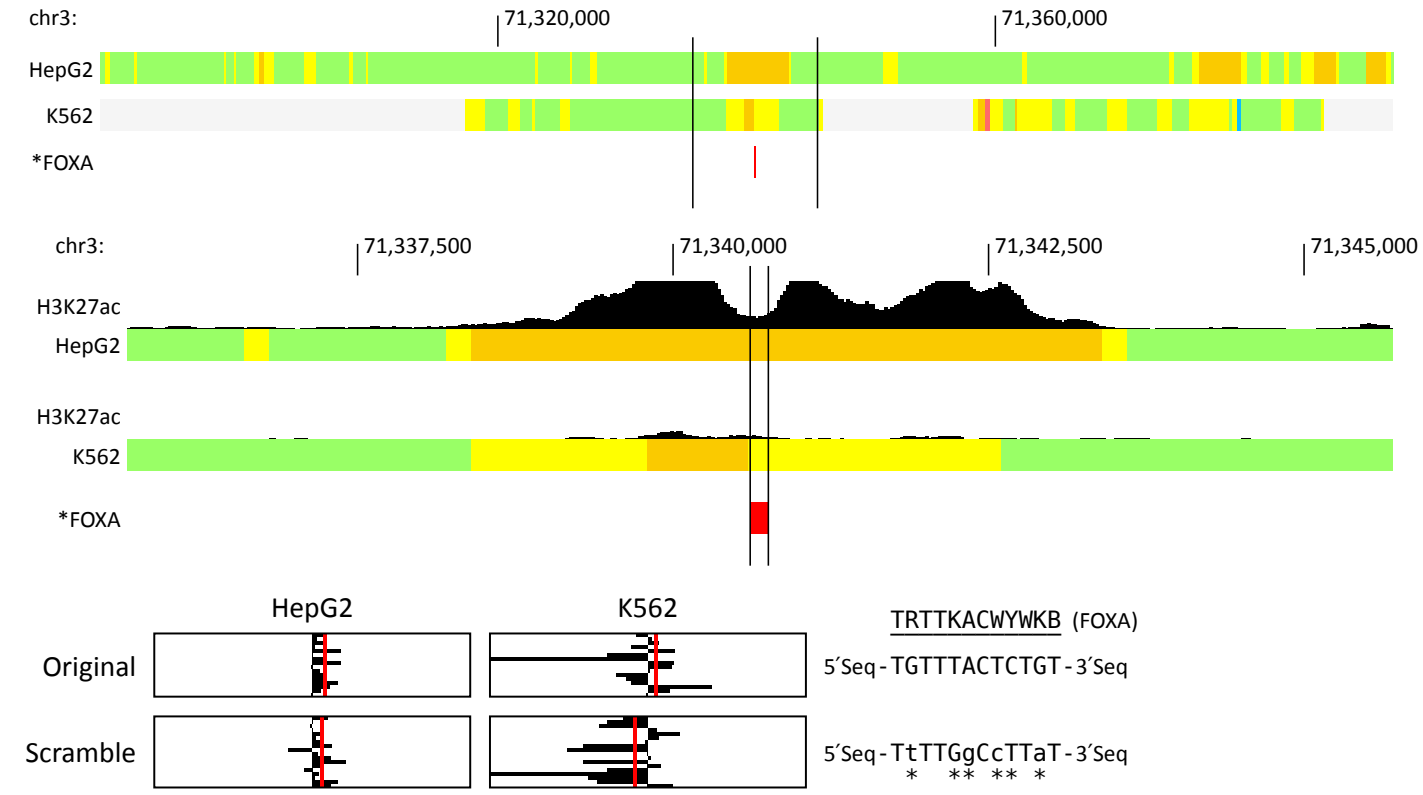
733 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 71340678 71340689 - (hg18)



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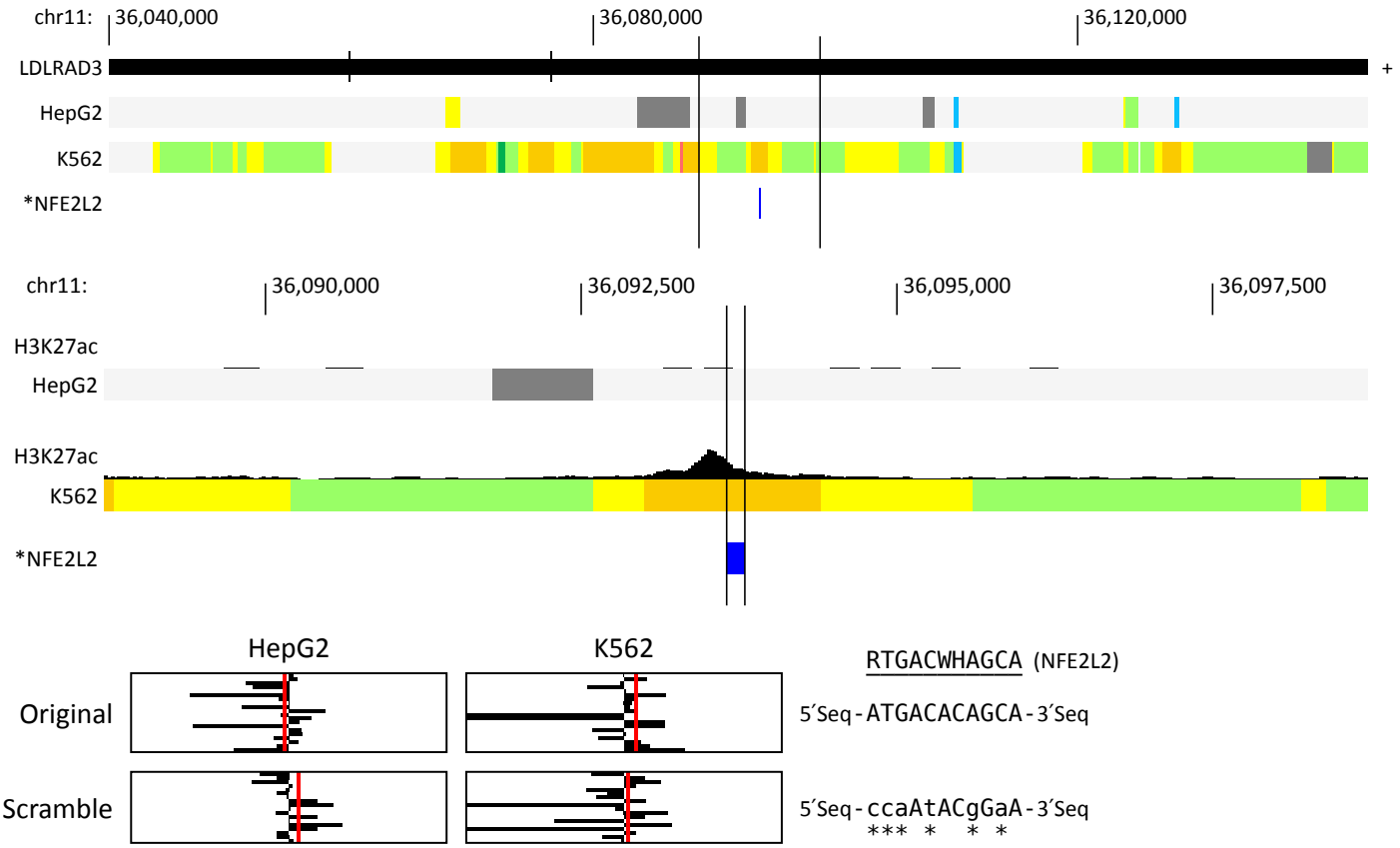
734 NFE2L2 in K562 enhancer

chr11 36093719 36093729 - (hg18)



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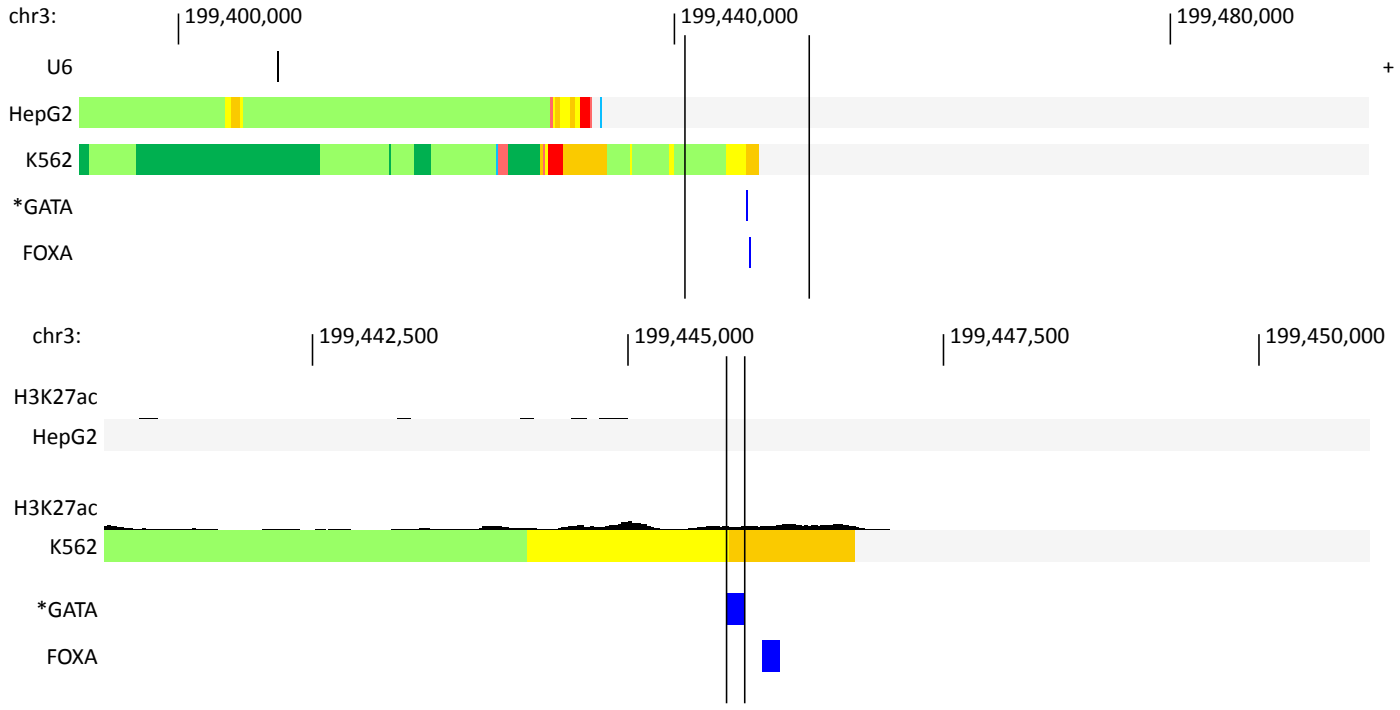
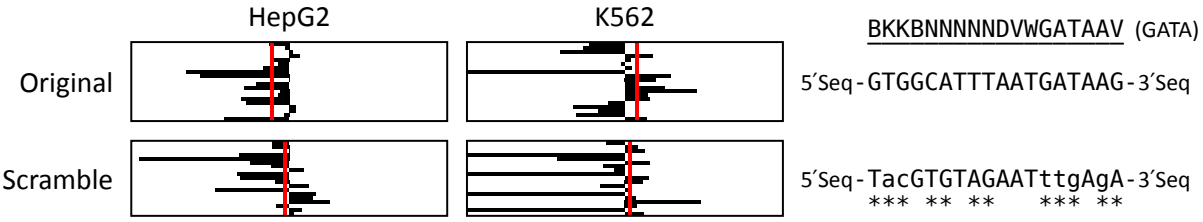
735 GATA in K562 enhancer

chr3 199445845 199445862 - (hg18)





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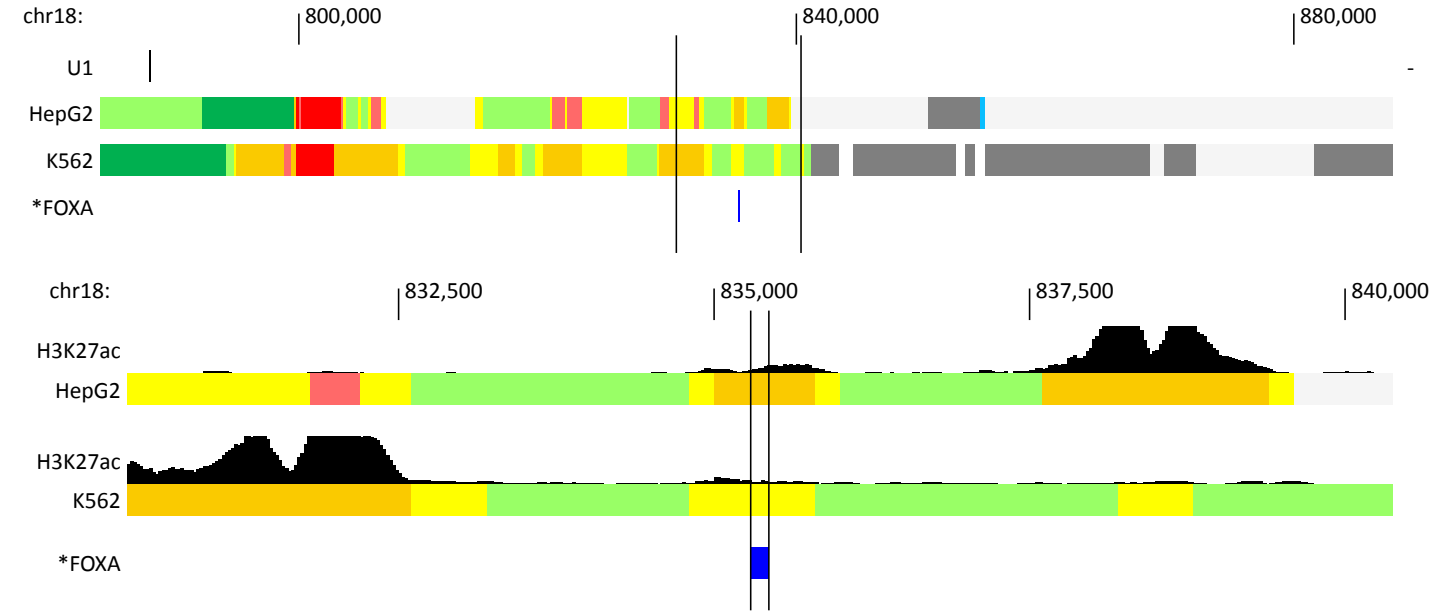
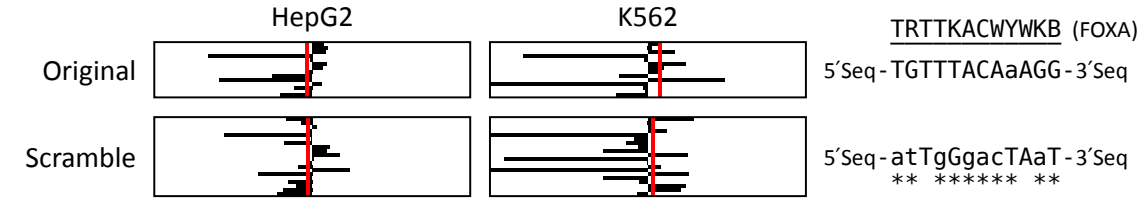
736 FOXA in HepG2 enhancer

chr18 835357 835368 + (hg18)





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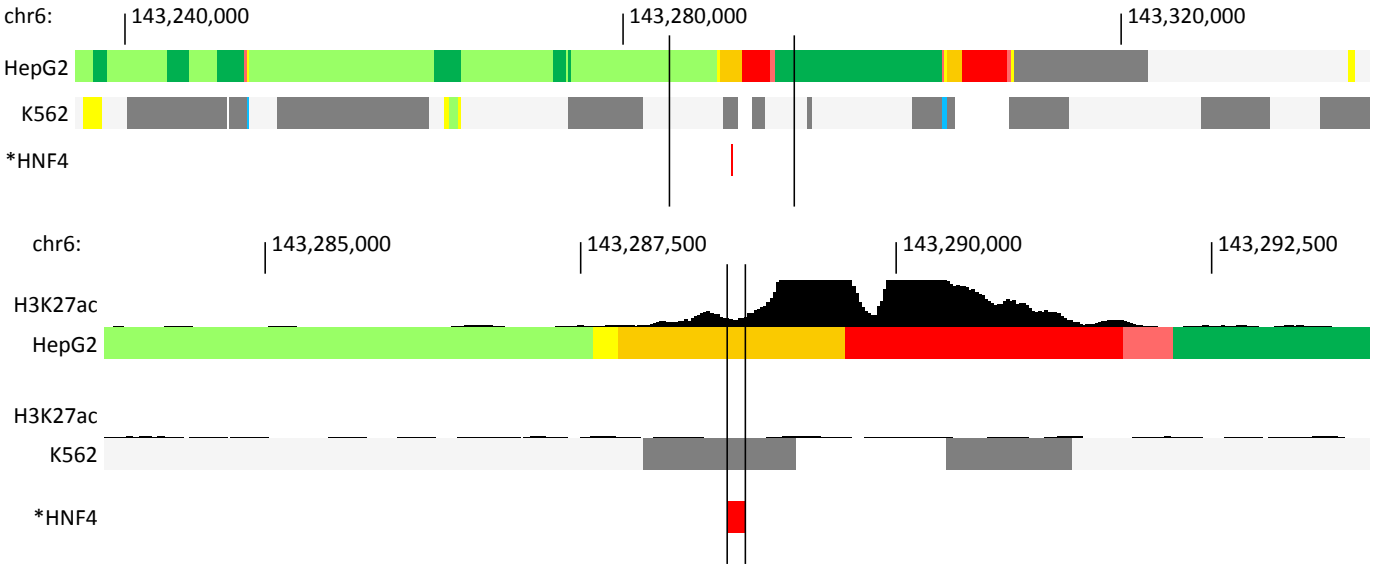
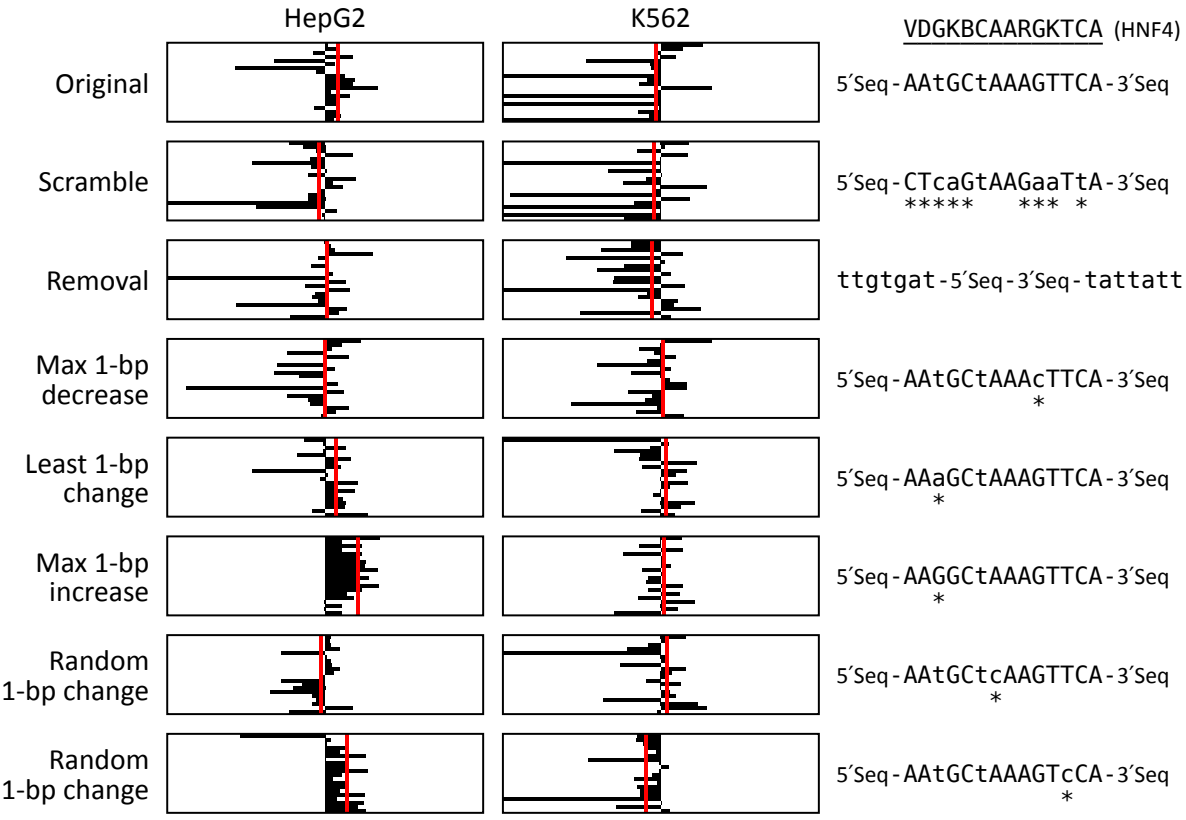
737 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr6 143288727 143288740 - (hg18)





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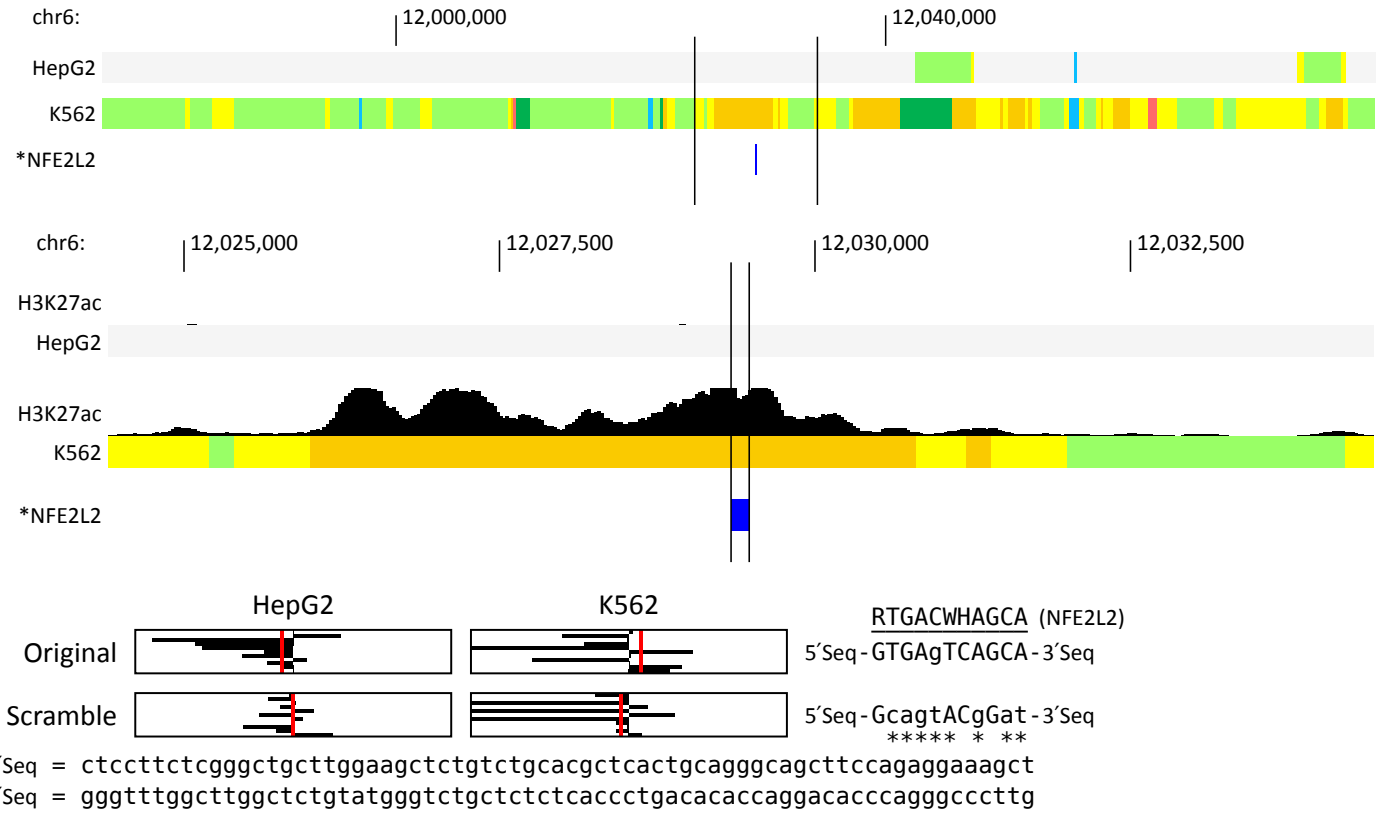
738 NFE2L2 in K562 enhancer

chr6 12029402 12029412 - (hg18)



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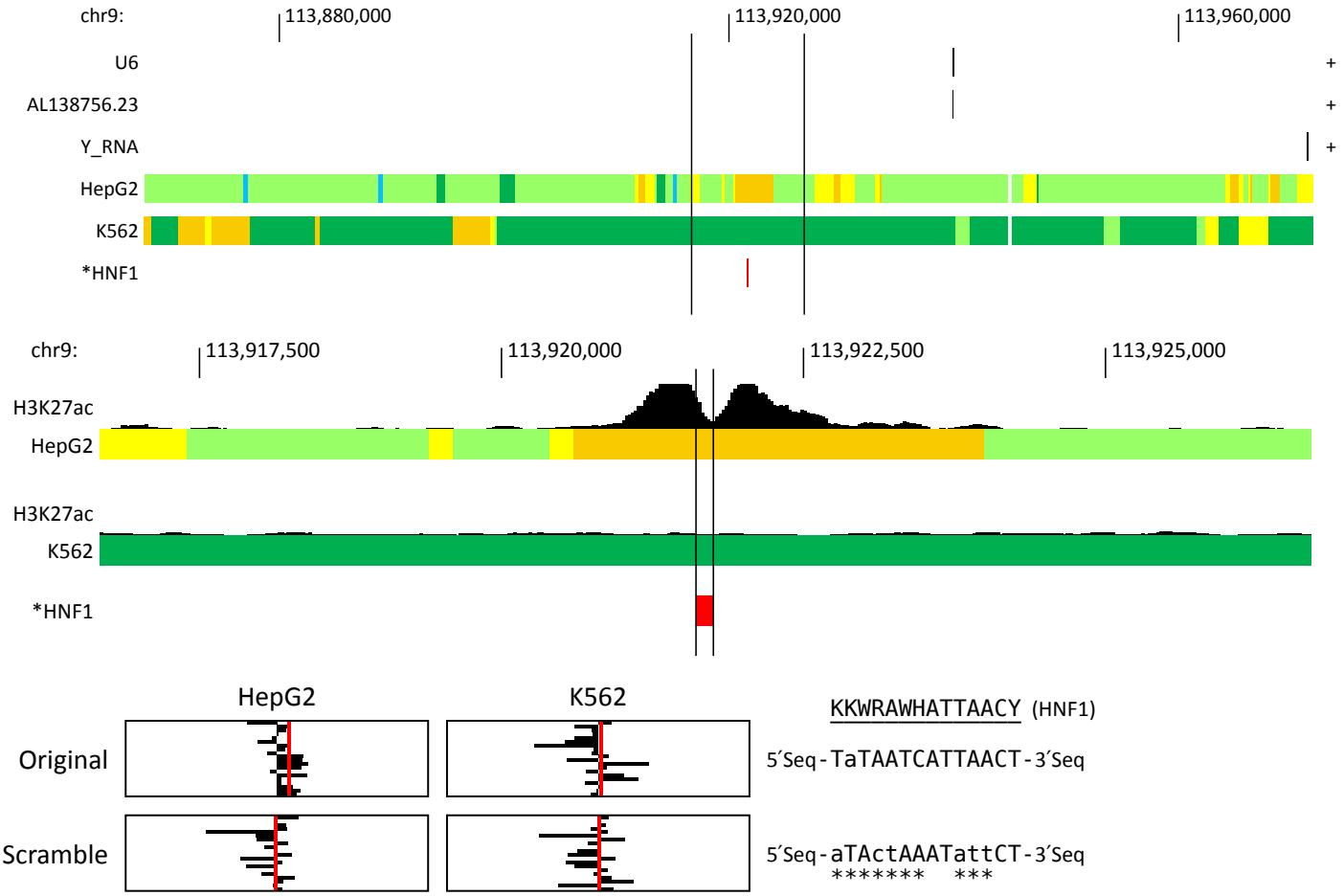
739 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr9 113921676 113921689 + (hg18)



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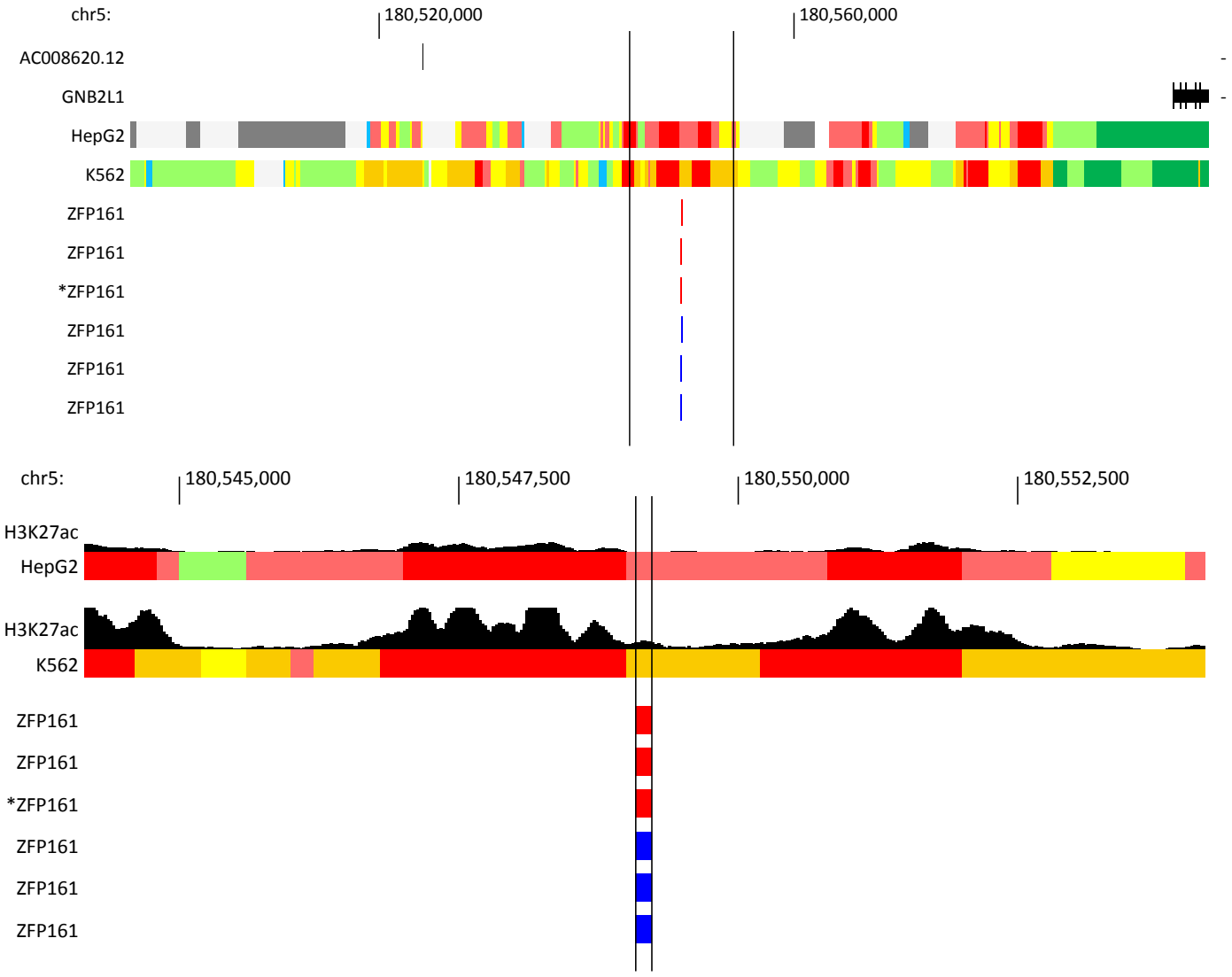
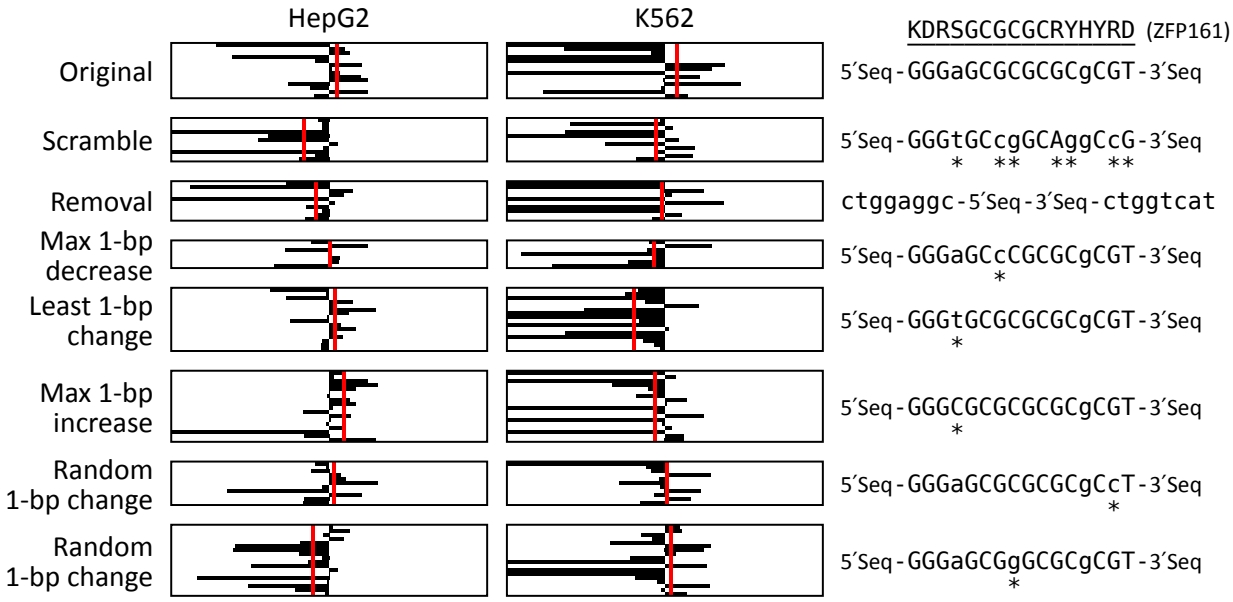
740 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr5 180549148 180549163 - (hg18)





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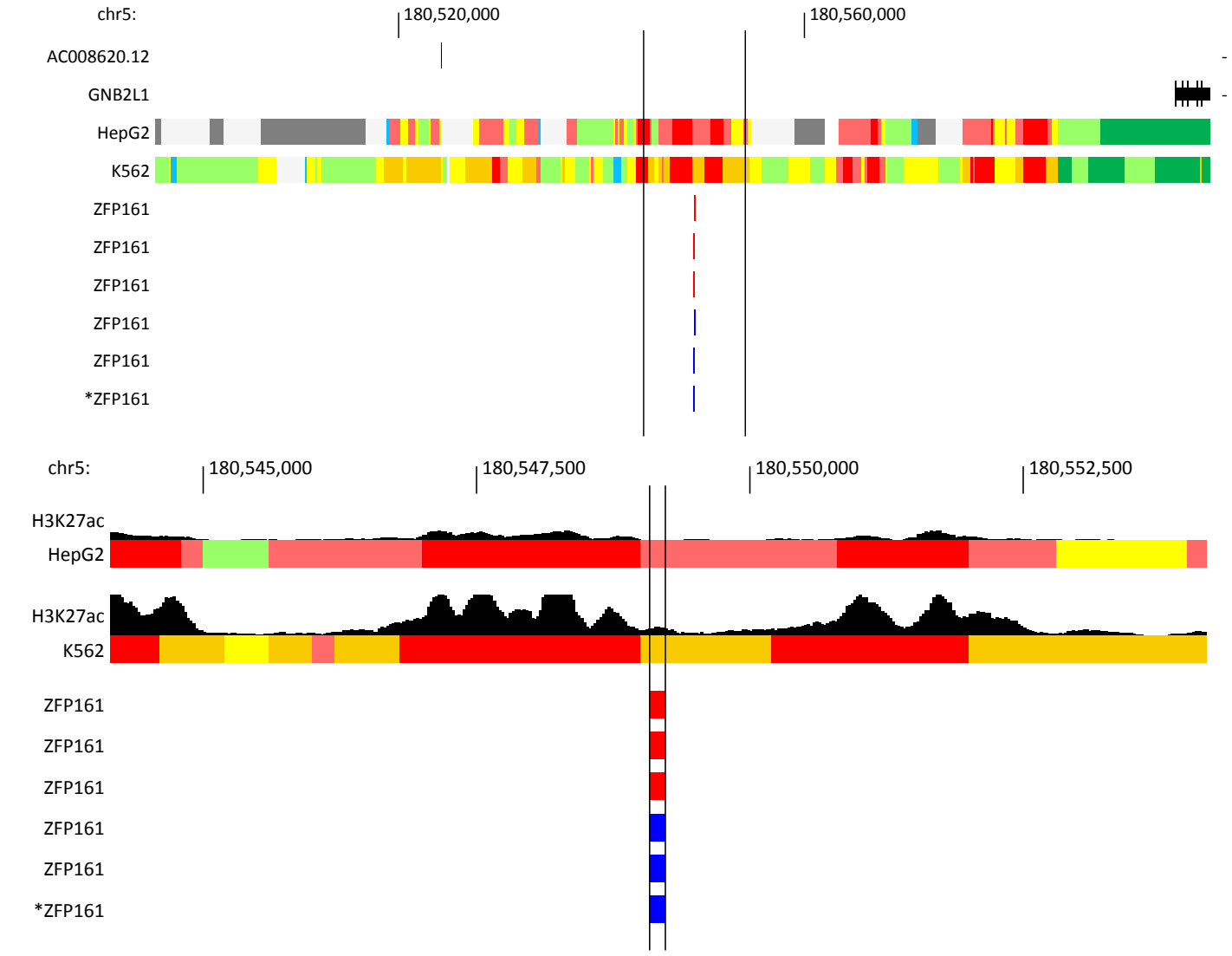
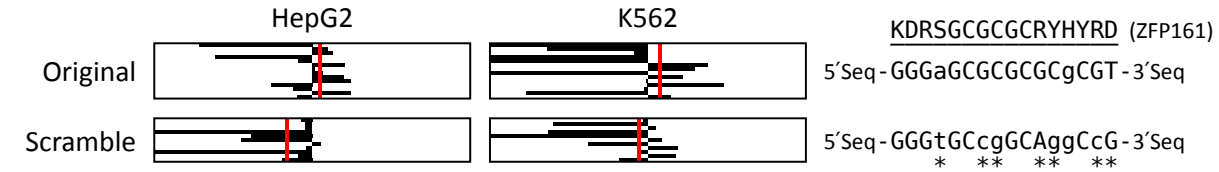
741 ZFP161 in K562 enhancer

chr5 180549148 180549163 - (hg18)





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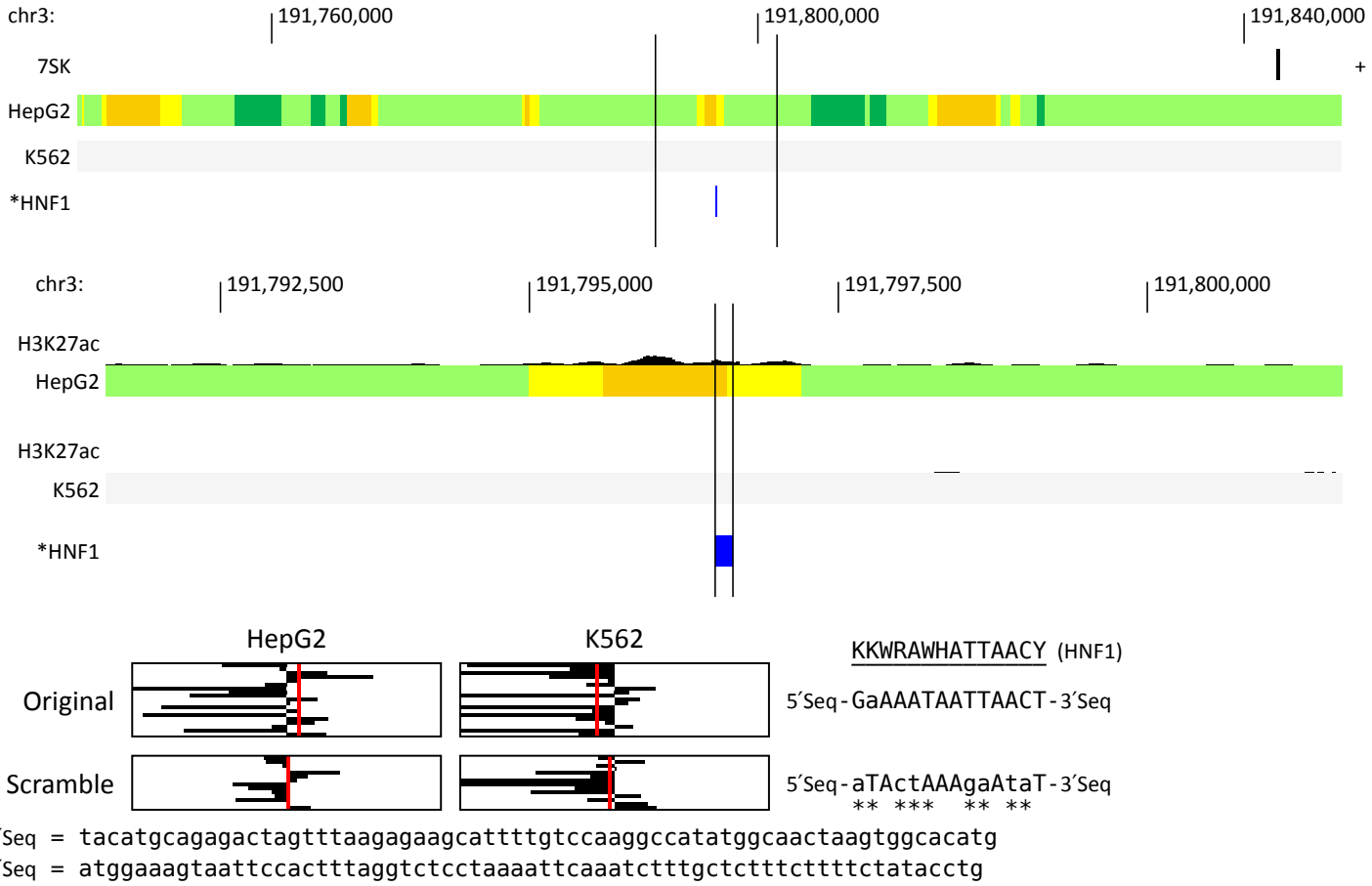
742 HNF1 in HepG2 enhancer

chr3 191796569 191796582 + (hg18)



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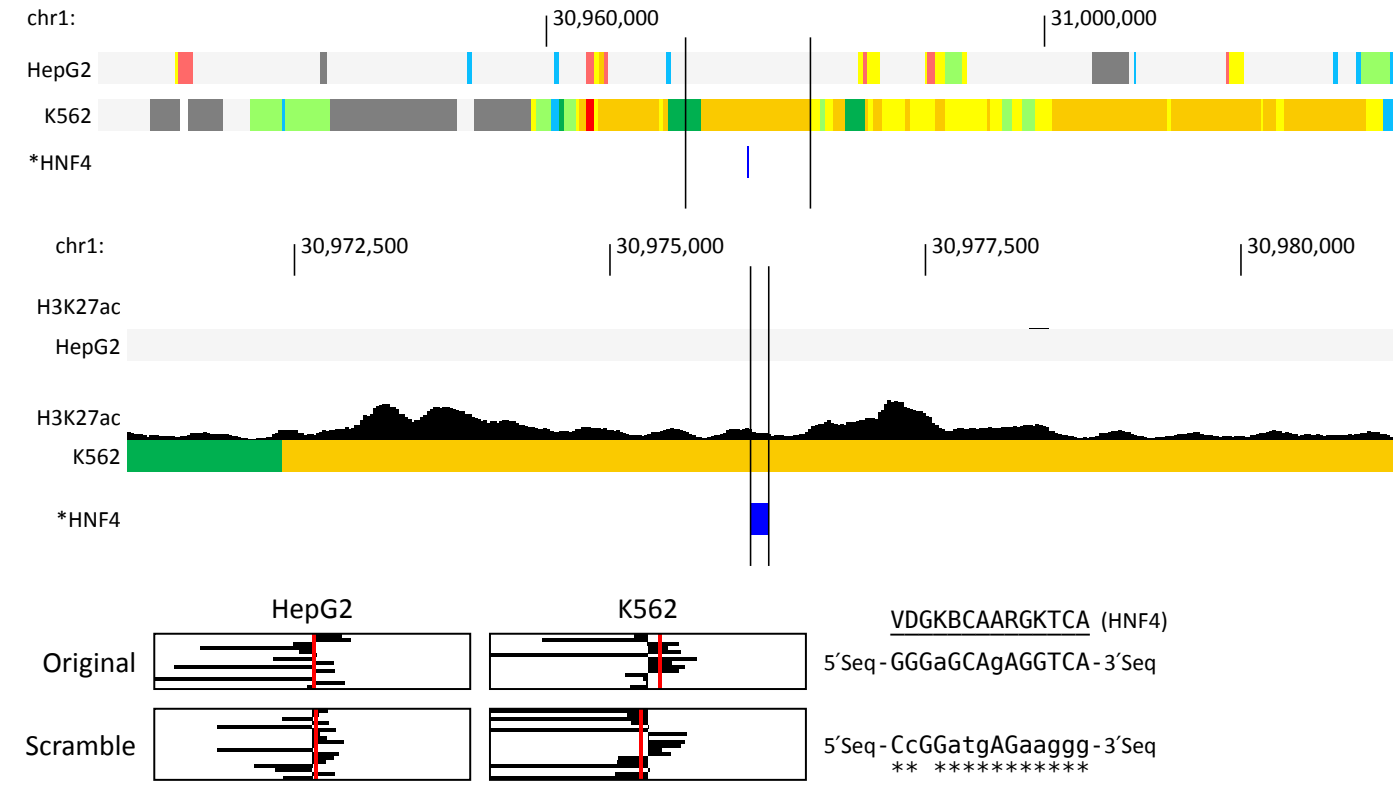
743 HNF4 in K562 enhancer

chr1 30976180 30976193 - (hg18)



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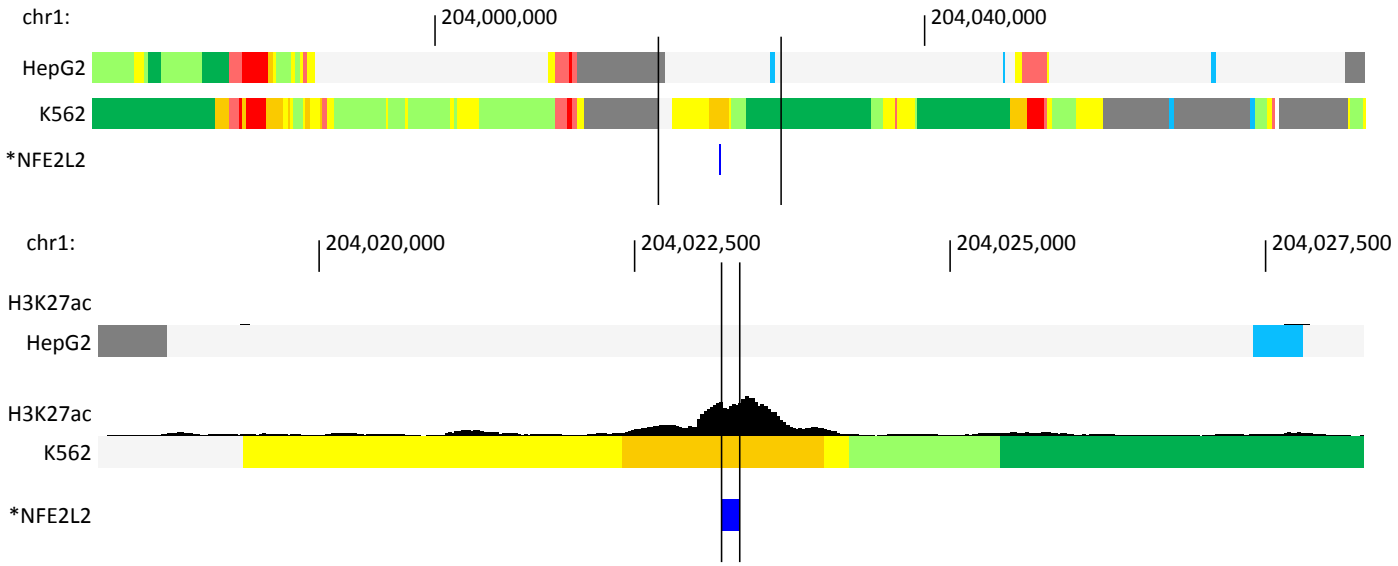
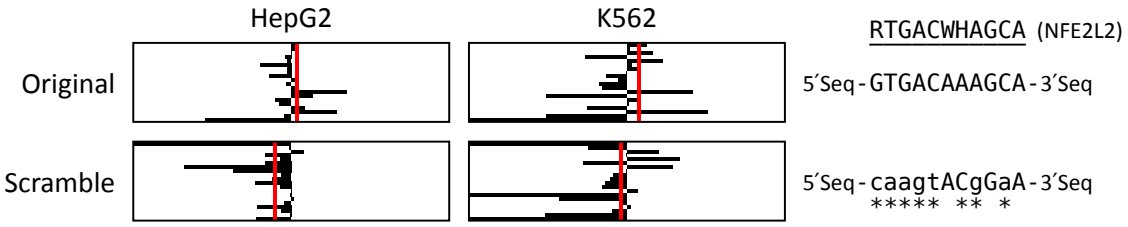
744 NFE2L2 in K562 enhancer

chr1 204023256 204023266 - (hg18)





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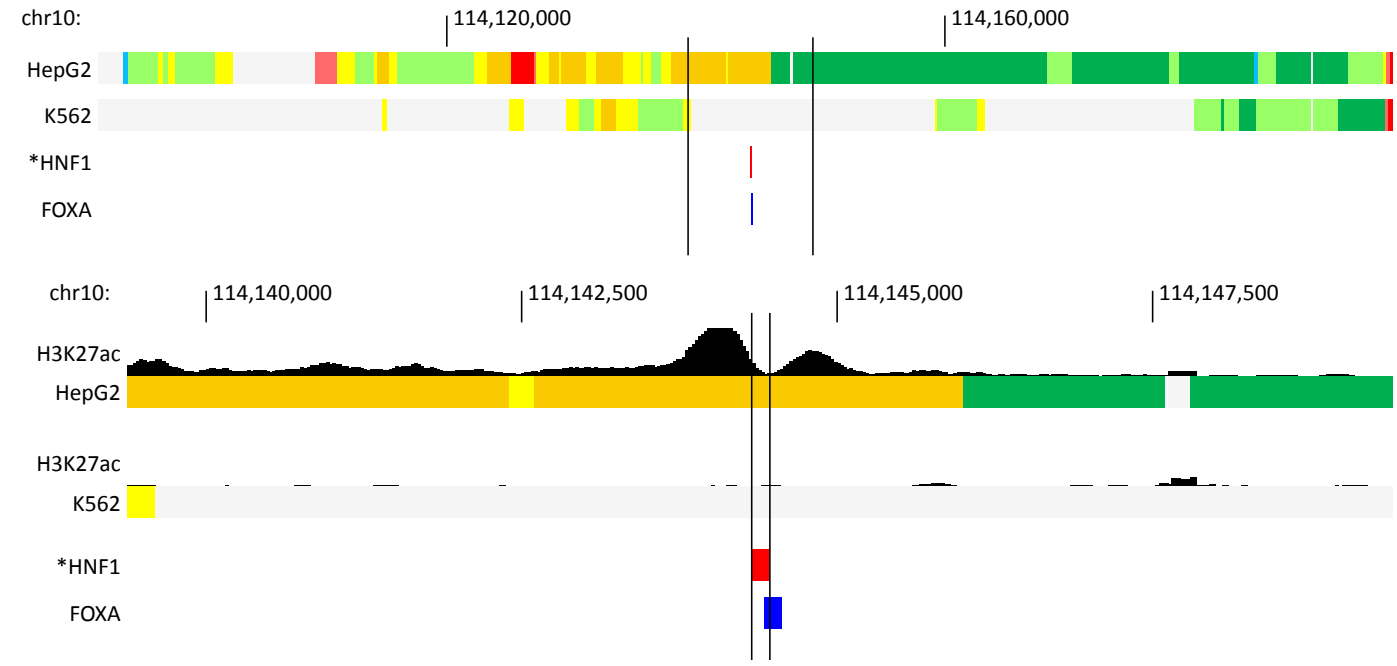
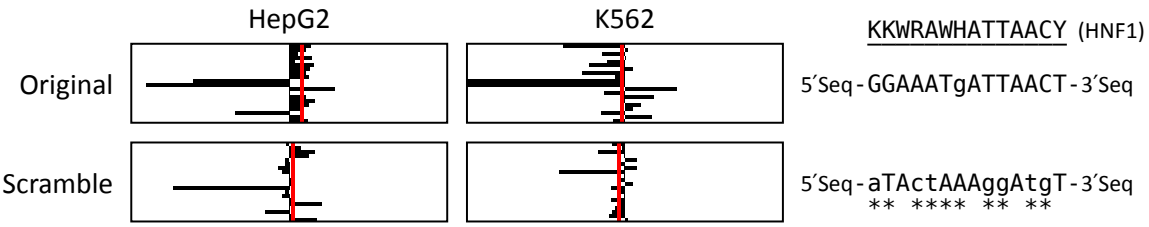
745 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 114144389 114144402 + (hg18)





5′Seq = caggctgccttcttccaggctttgtgcaccaacattaaaaaggcagtcatttctcaaaattgtttg
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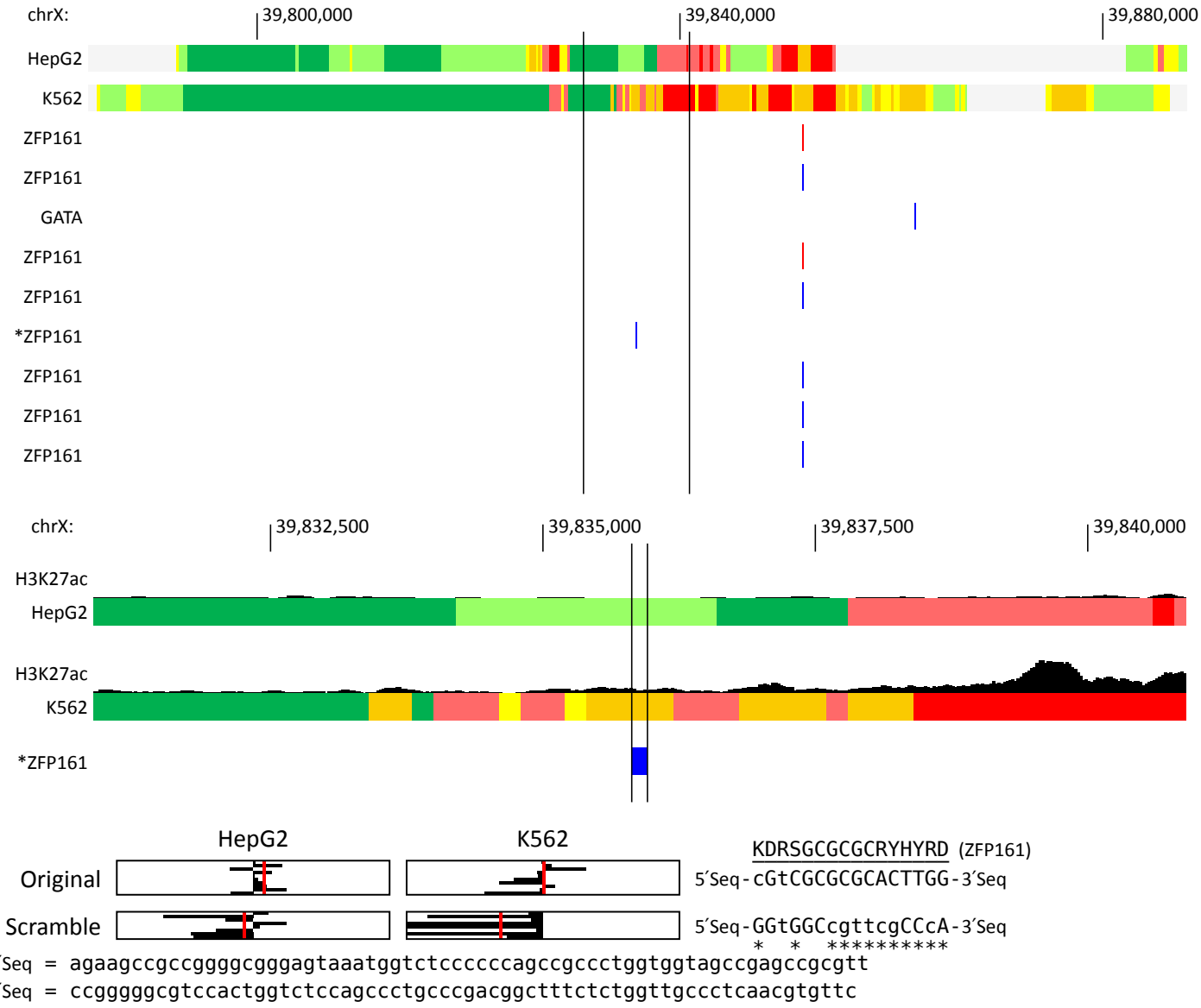
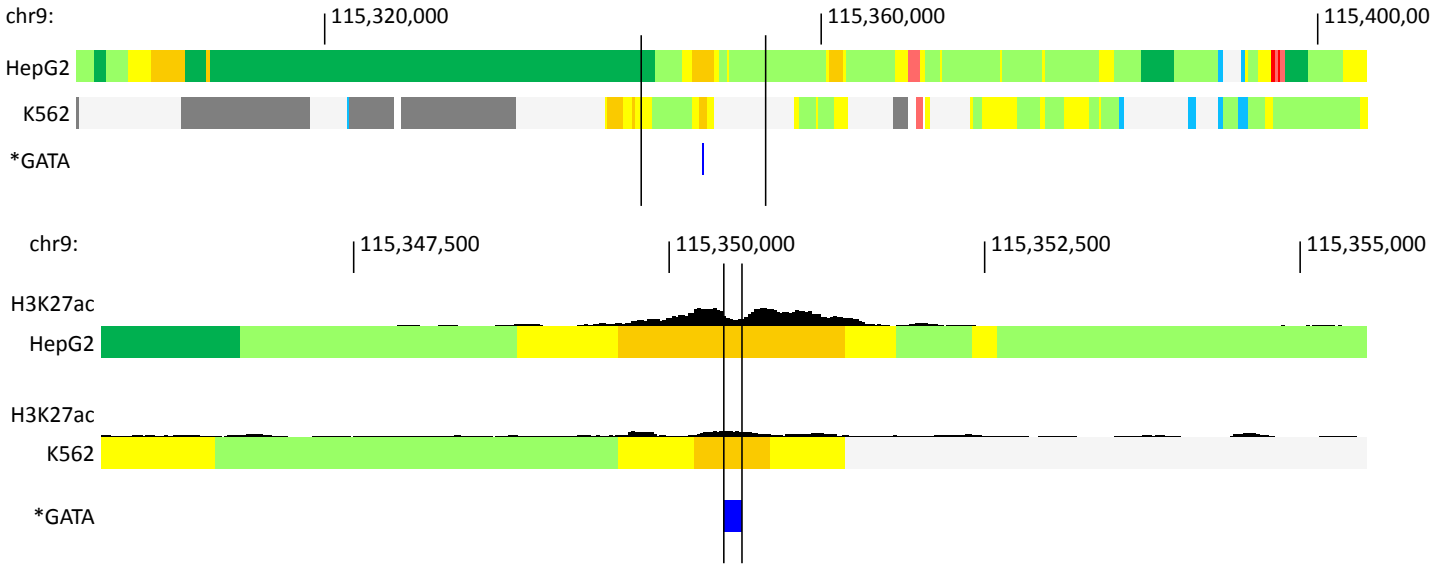
746 ZFP161 in K562 enhancer

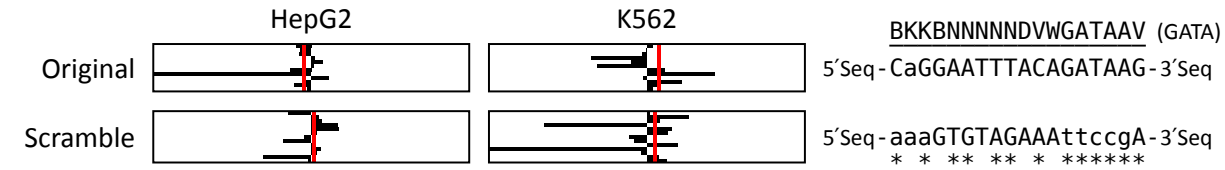
chrX 39835880 39835895 - (hg18)



747 GATA in K562 enhancer

chr9 115350497 115350514 - (hg18)





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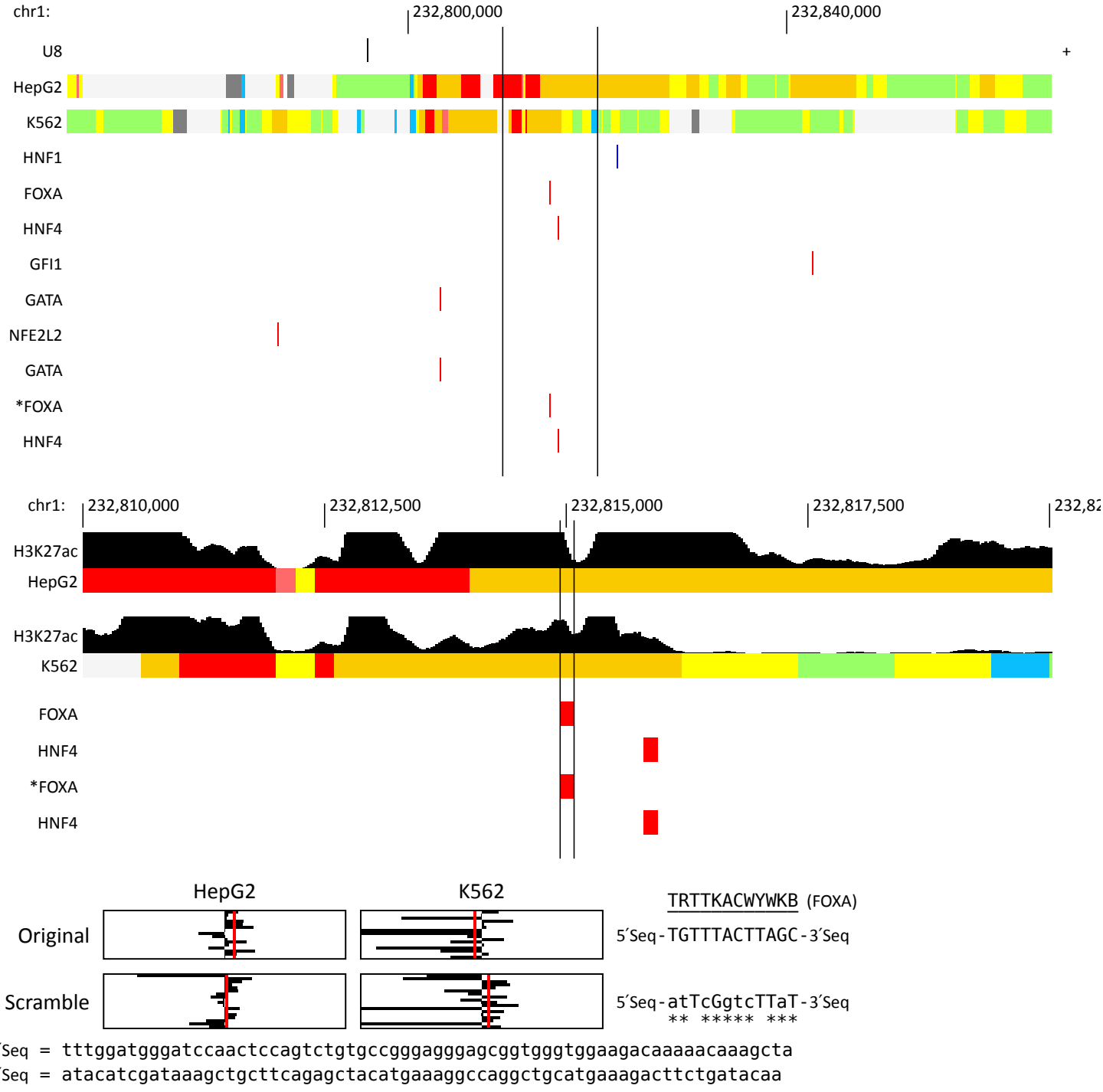
748 FOXA in K562 enhancer (conserved at 50% confidence)

chr1 232815004 232815015 - (hg18)



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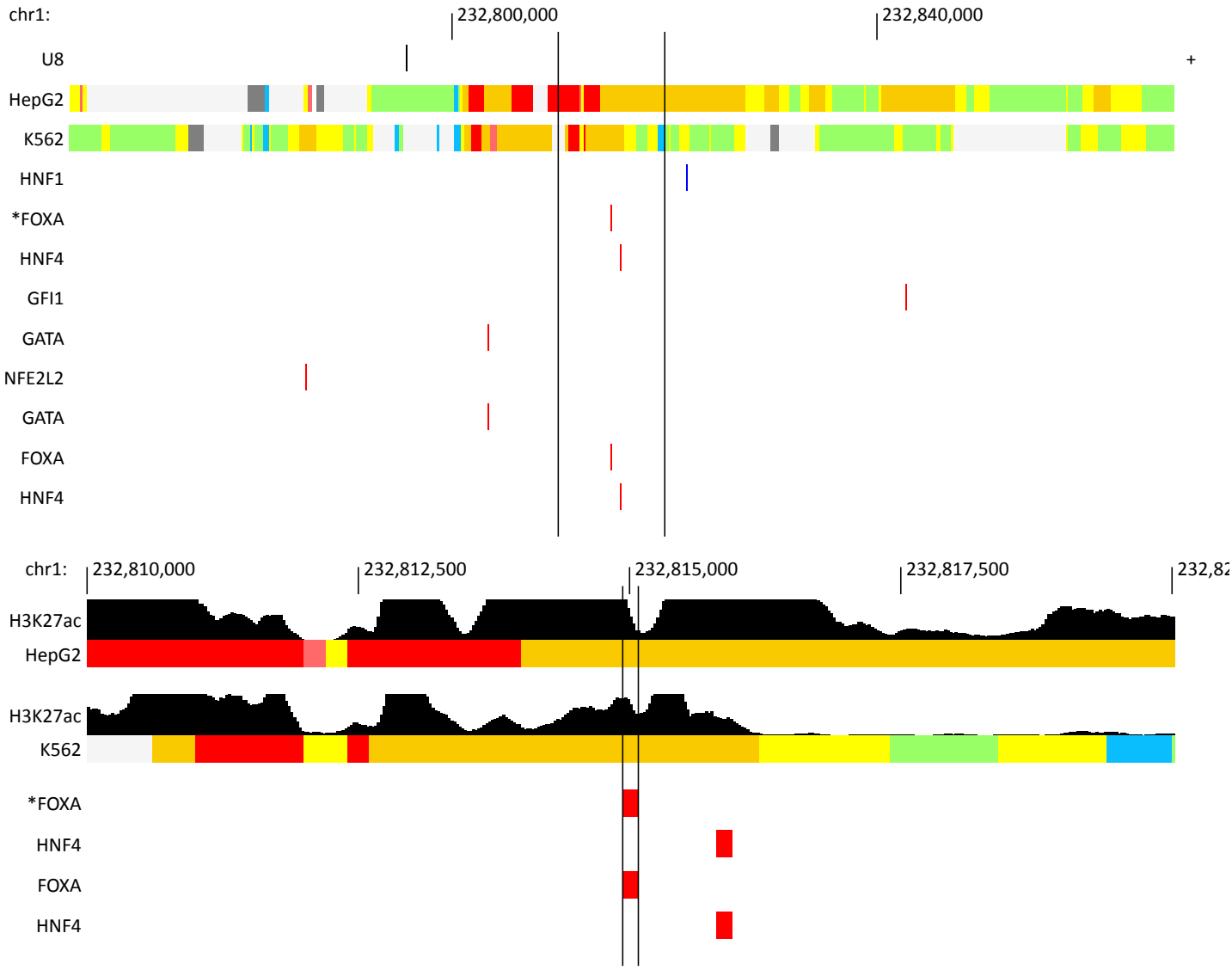
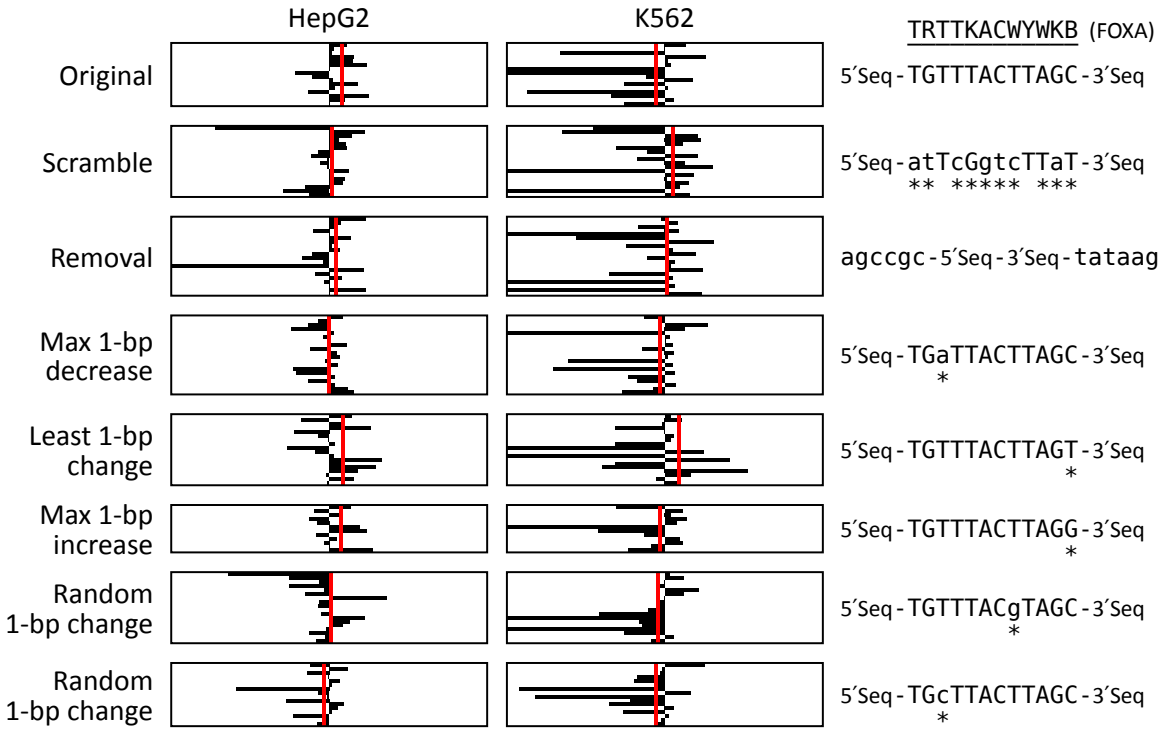
749 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr1 232815004 232815015 - (hg18)





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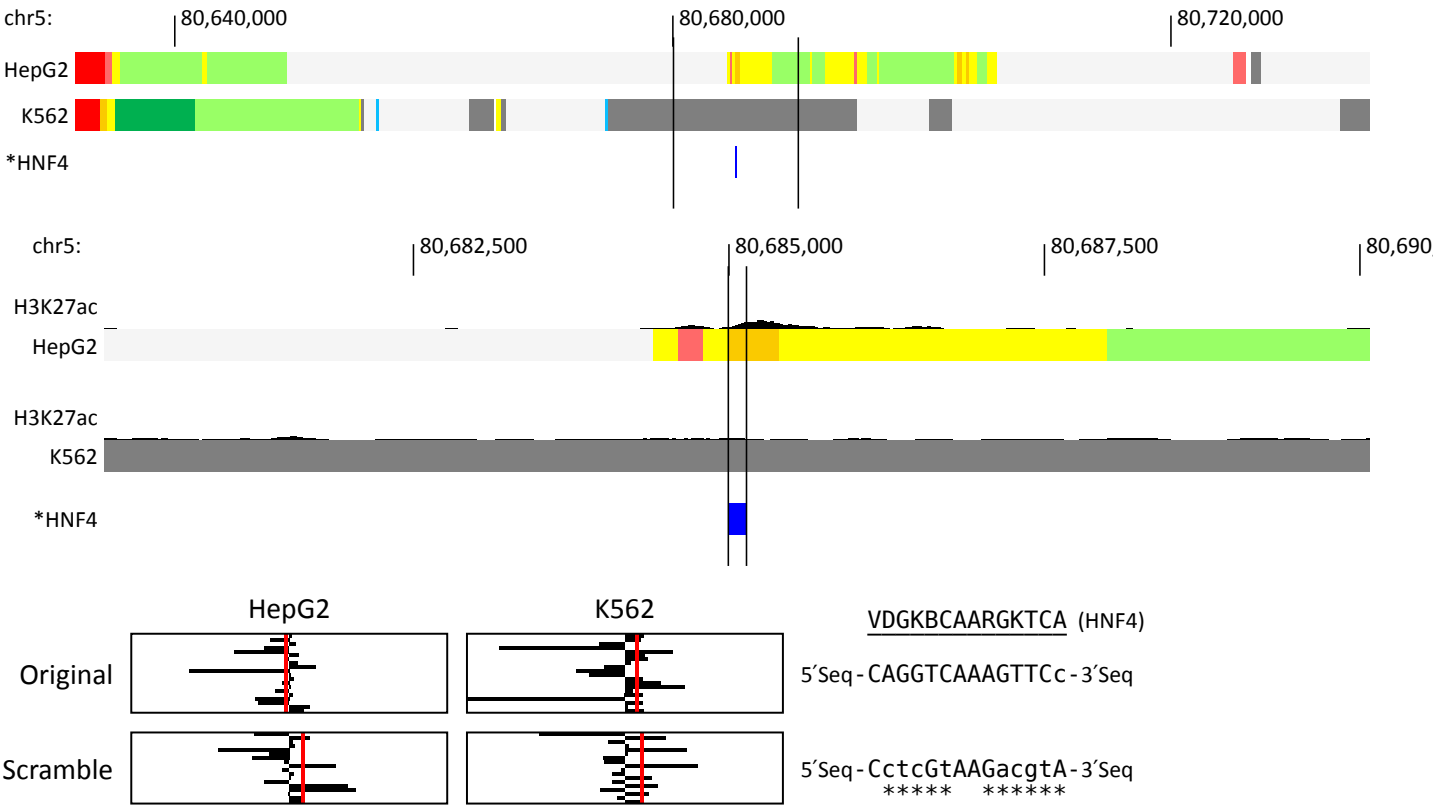
3′Seq = atacatcgataaagctgcttcagagctacatgaaaggccaggctgcatgaaagacttctgatacaa

750 HNF4 in HepG2 enhancer

chr5 80685061 80685074 - (hg18)



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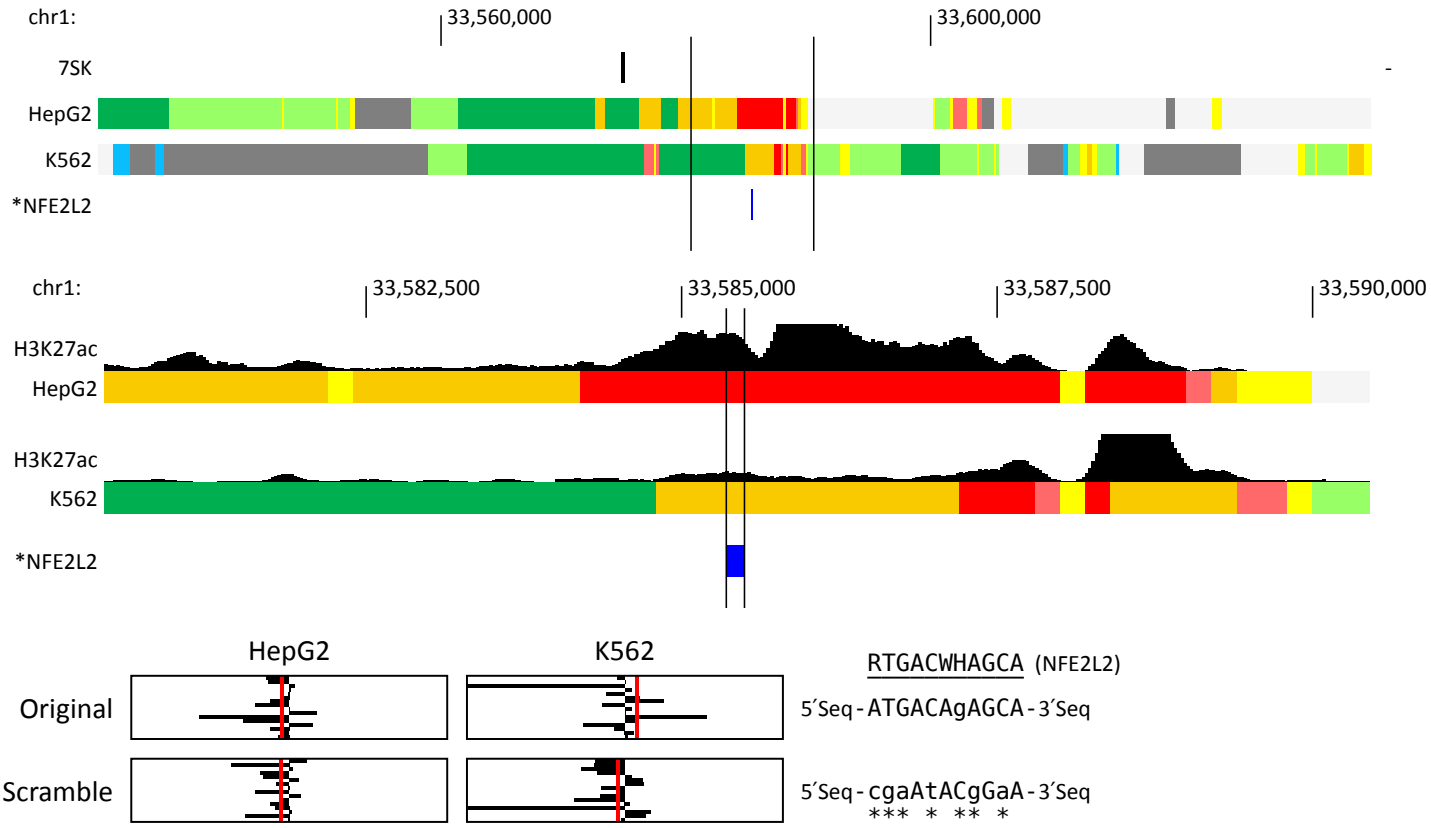
751 NFE2L2 in K562 enhancer

chr1 33585421 33585431 + (hg18)



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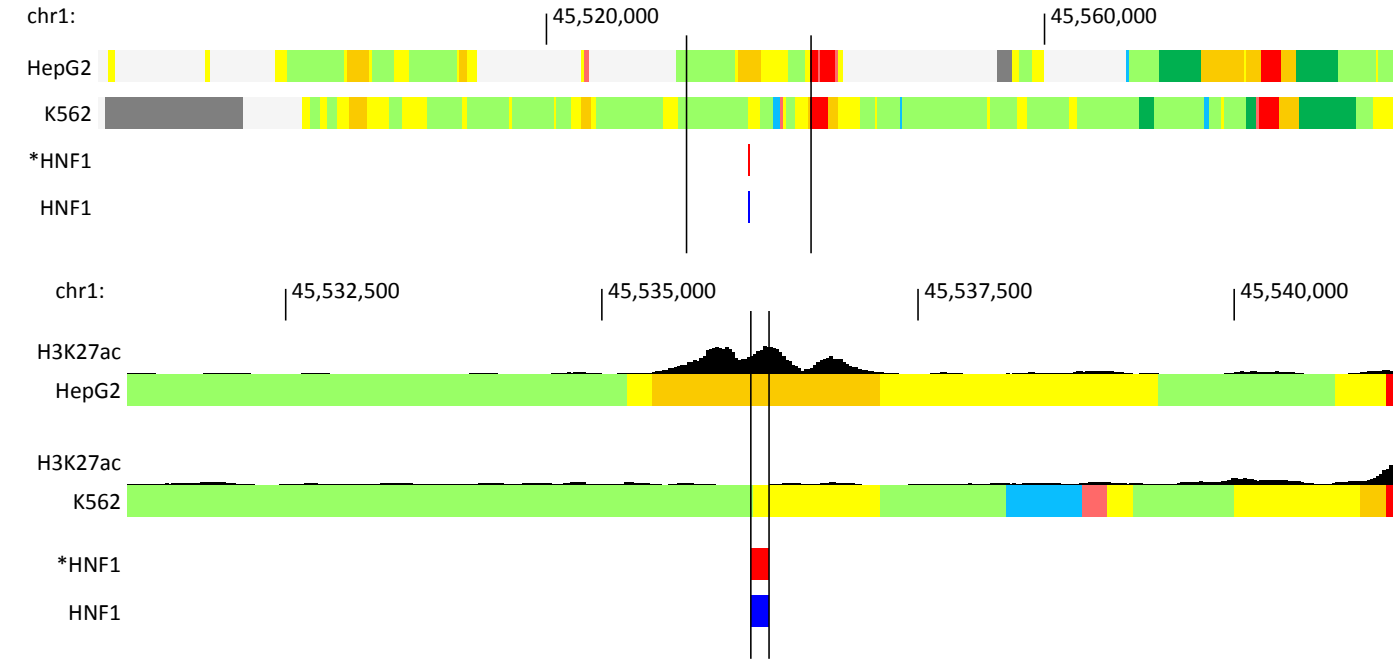
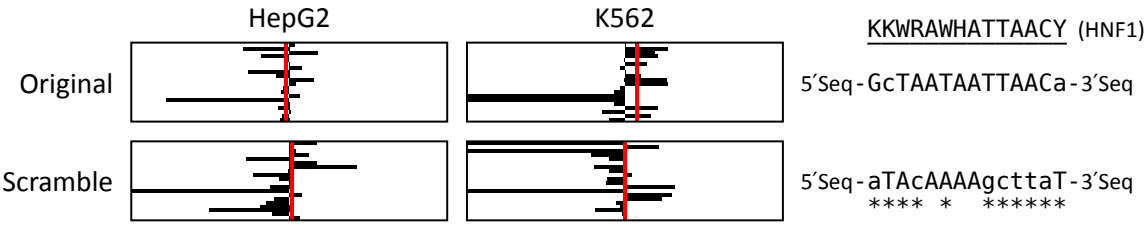
752 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 45536244 45536257 + (hg18)





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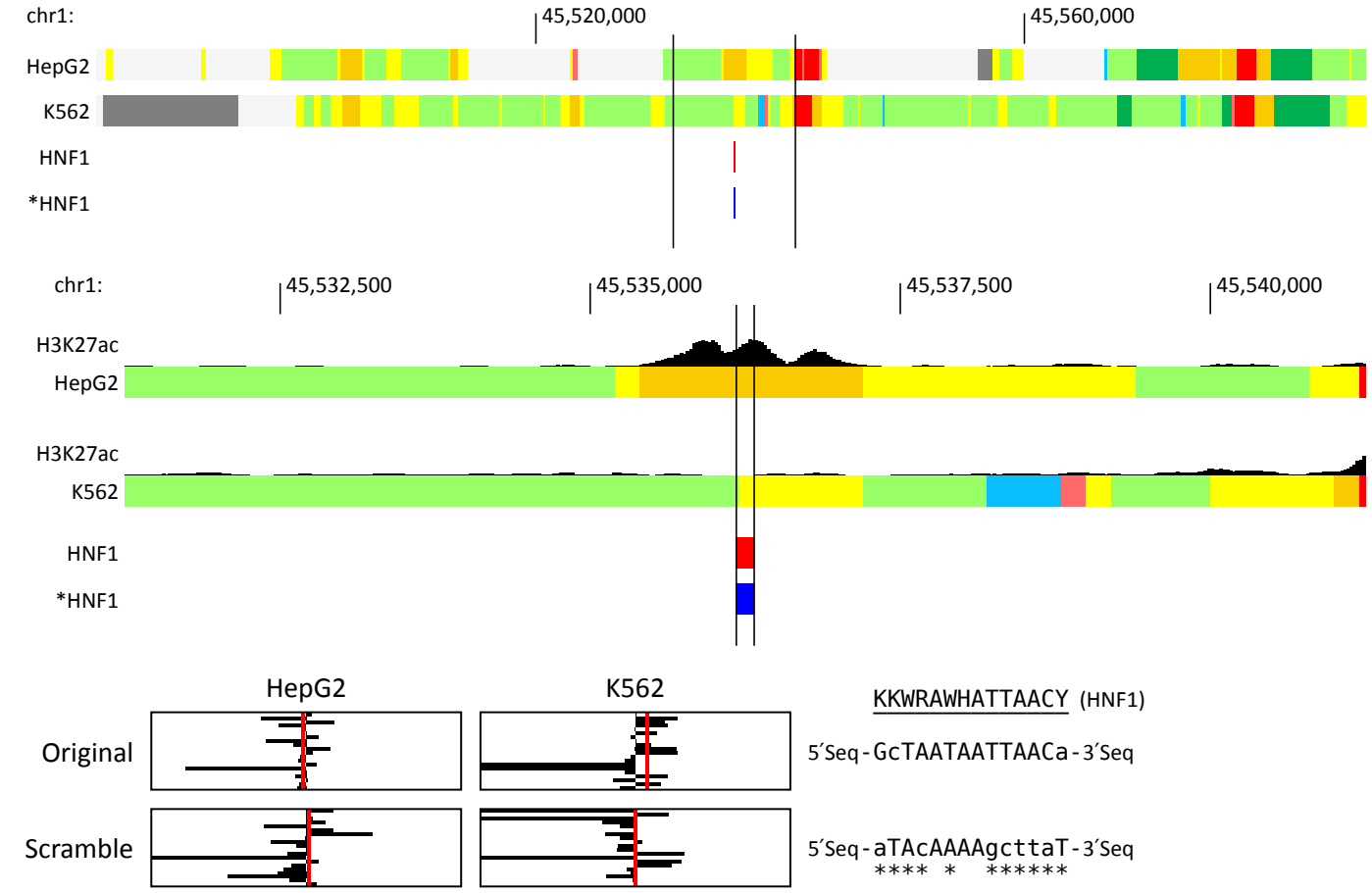
753 HNF1 in HepG2 enhancer

chr1 45536244 45536257 + (hg18)



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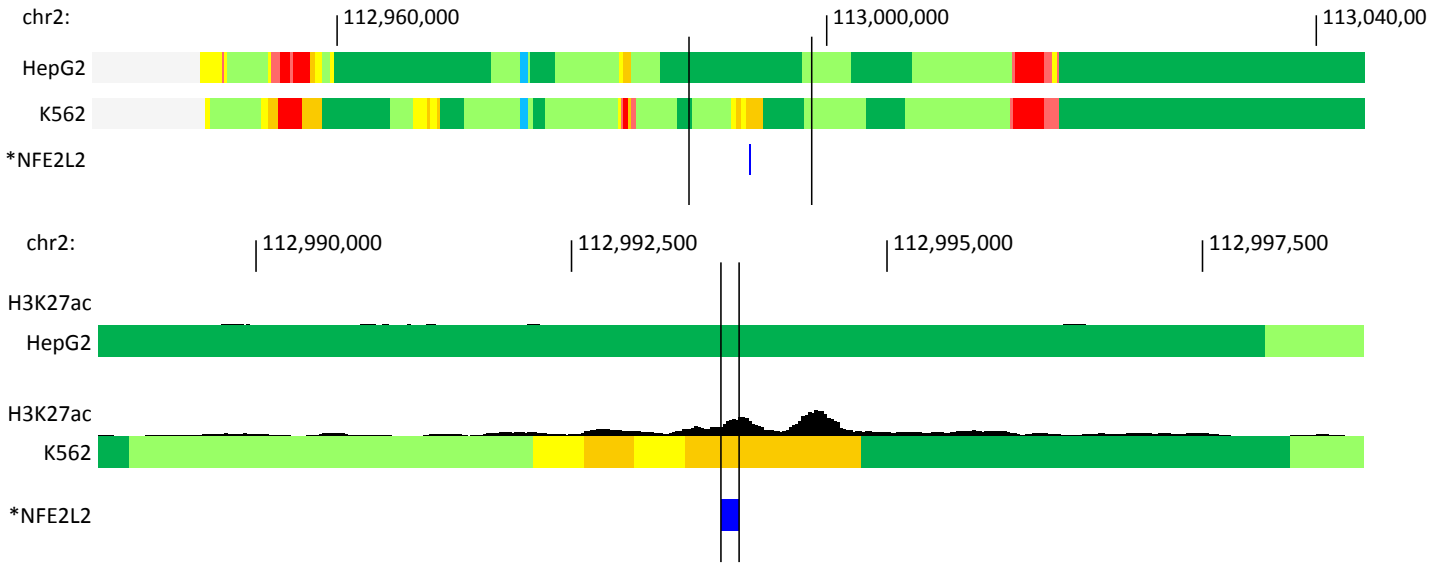
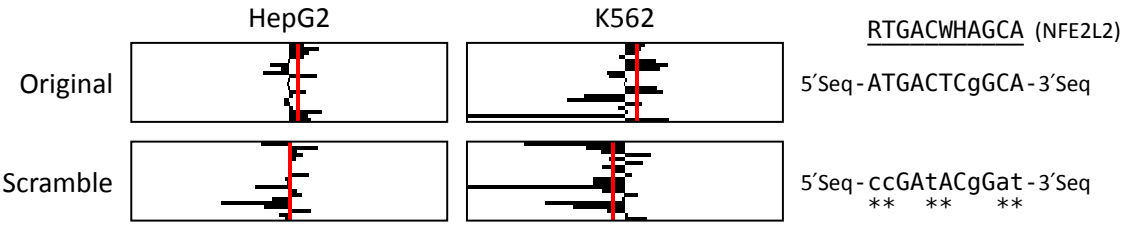
754 NFE2L2 in K562 enhancer

chr2 112993751 112993761 + (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq-ATGACTCgGCA-3′Seq

5′Seq-ccGAtACgGat-3′Seq

** ** **

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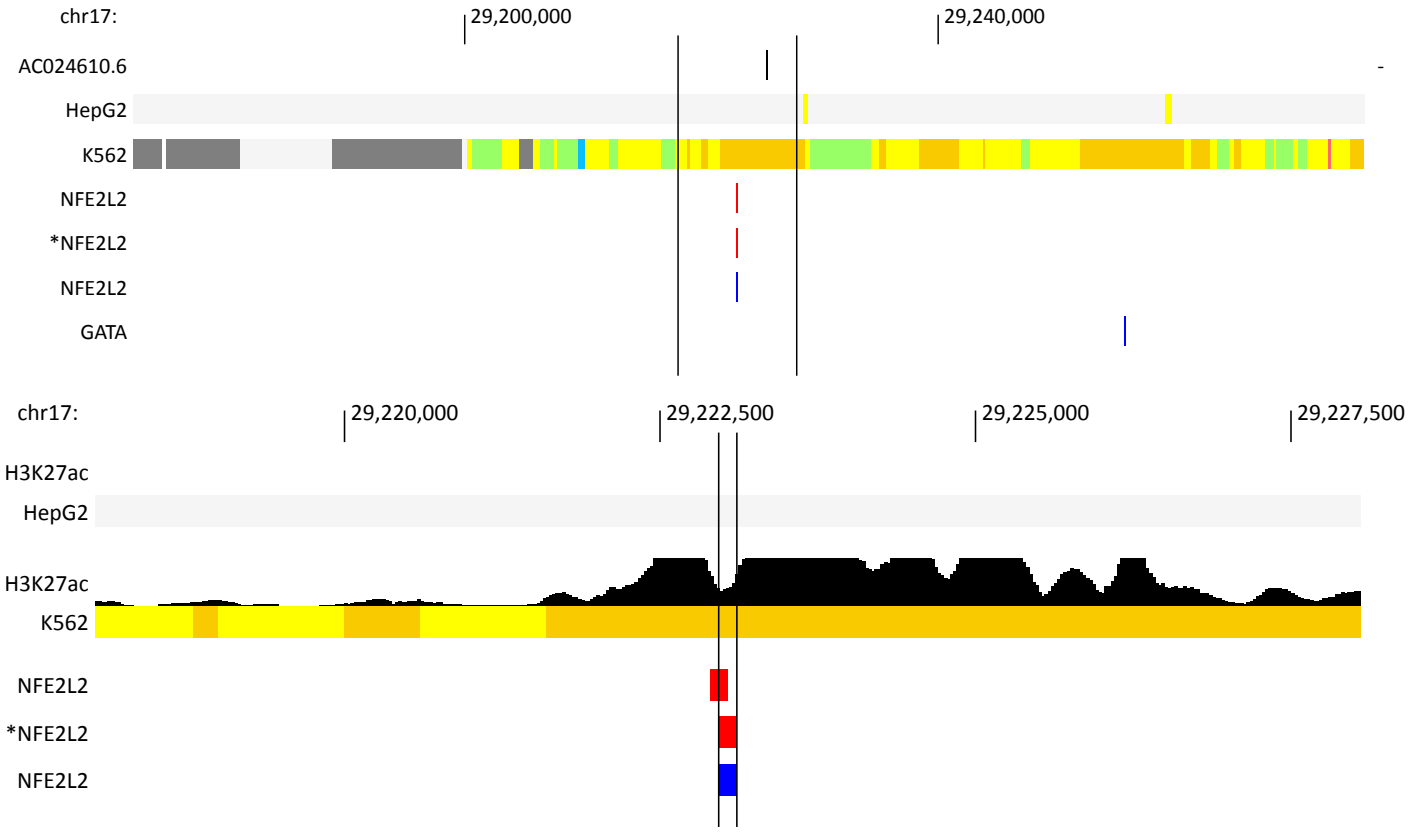
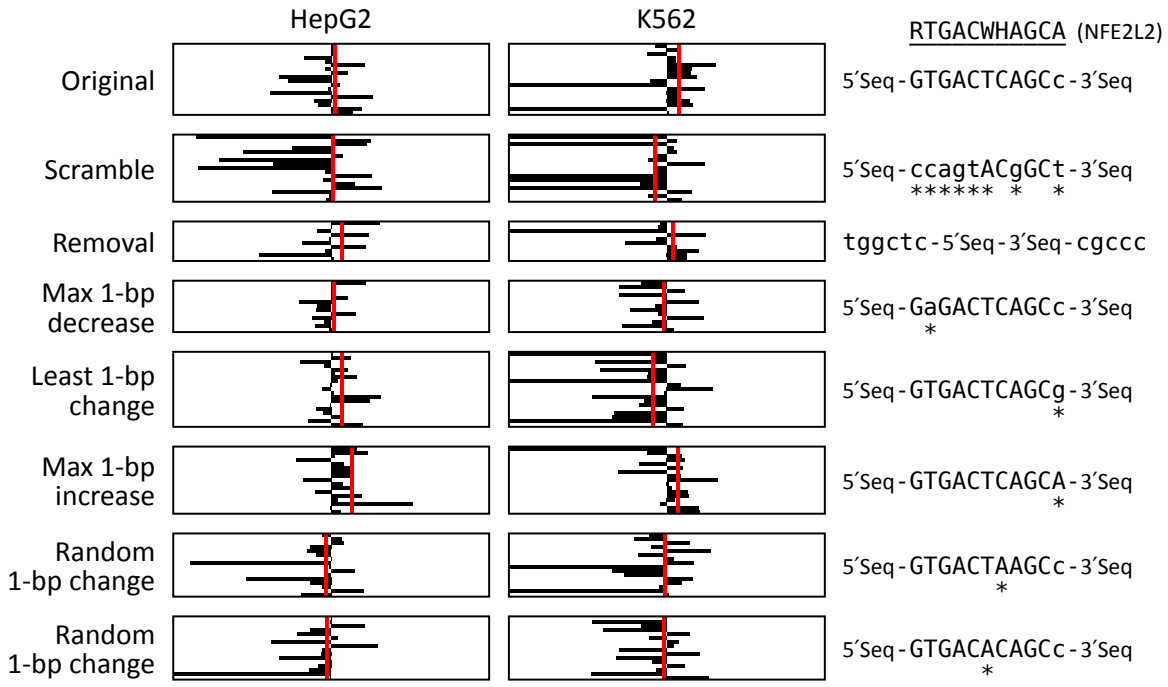
3′Seq = ctctactgcttcttgagacatgggaaagtggcttttgcctggaagaacacgagtggttgcagtttc

755 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr17 29223032 29223042 - (hg18)





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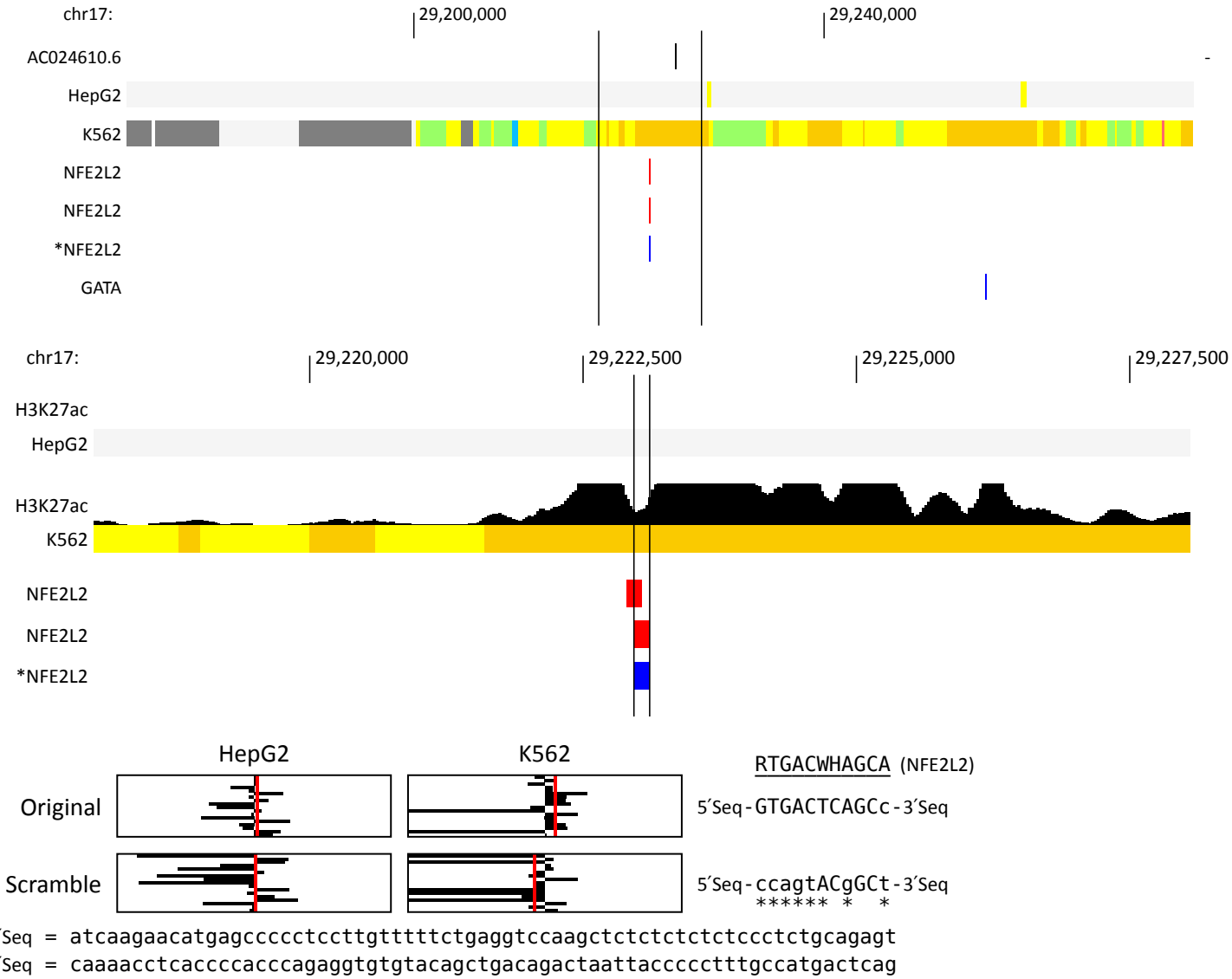
756 NFE2L2 in K562 enhancer

chr17 29223032 29223042 - (hg18)



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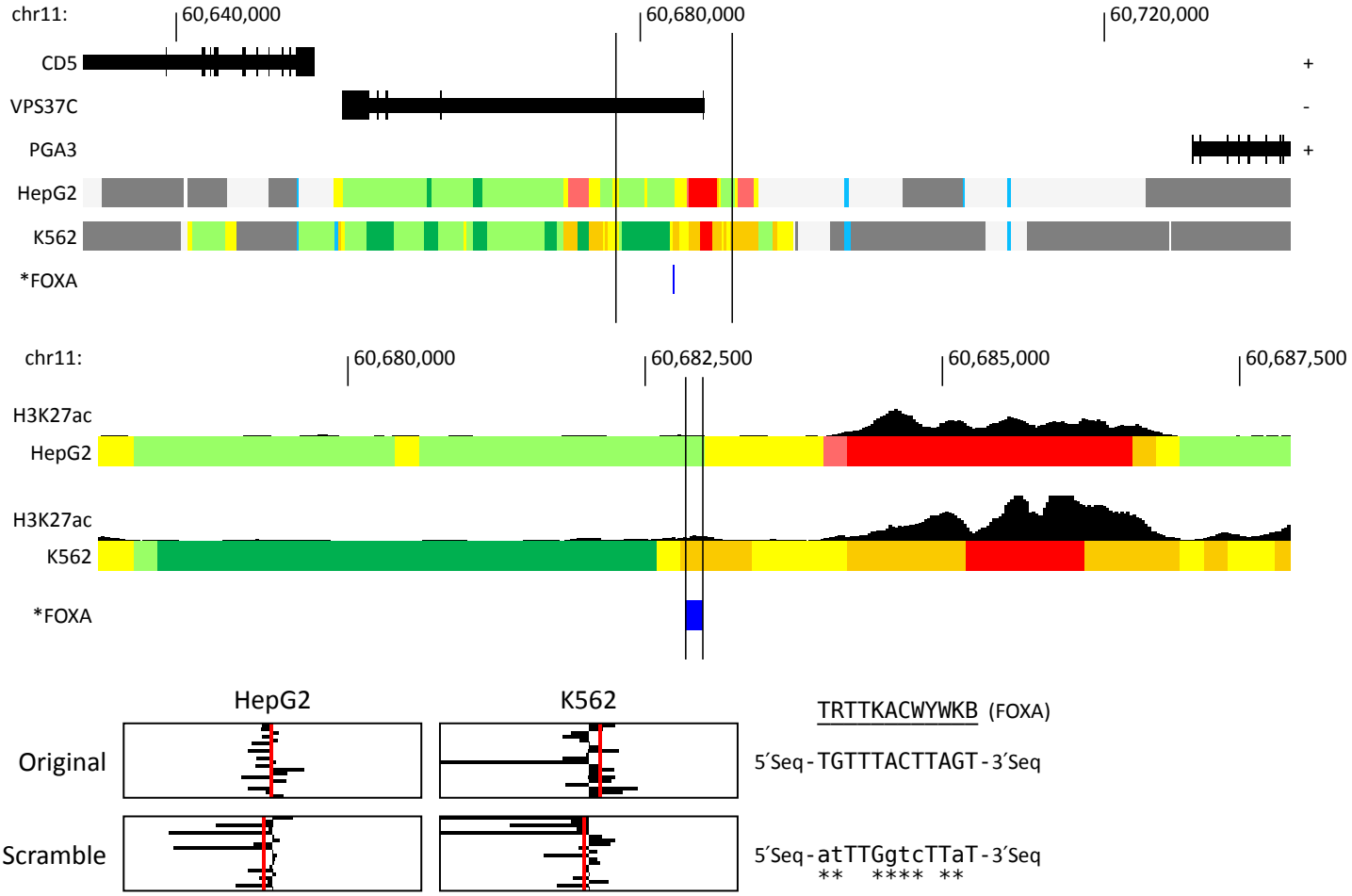
757 FOXA in K562 enhancer

chr11 60682908 60682919 - (hg18)



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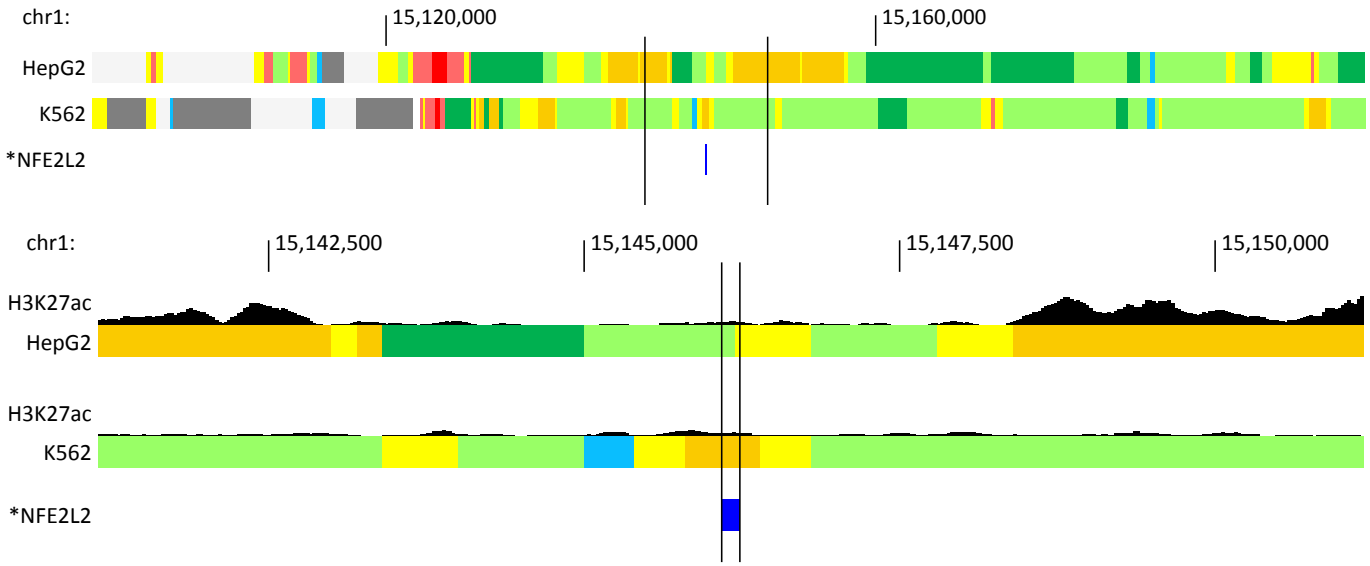
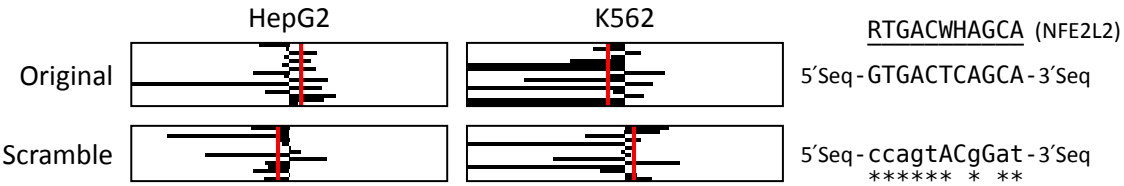
758 NFE2L2 in K562 enhancer

chr1 15146157 15146167 - (hg18)





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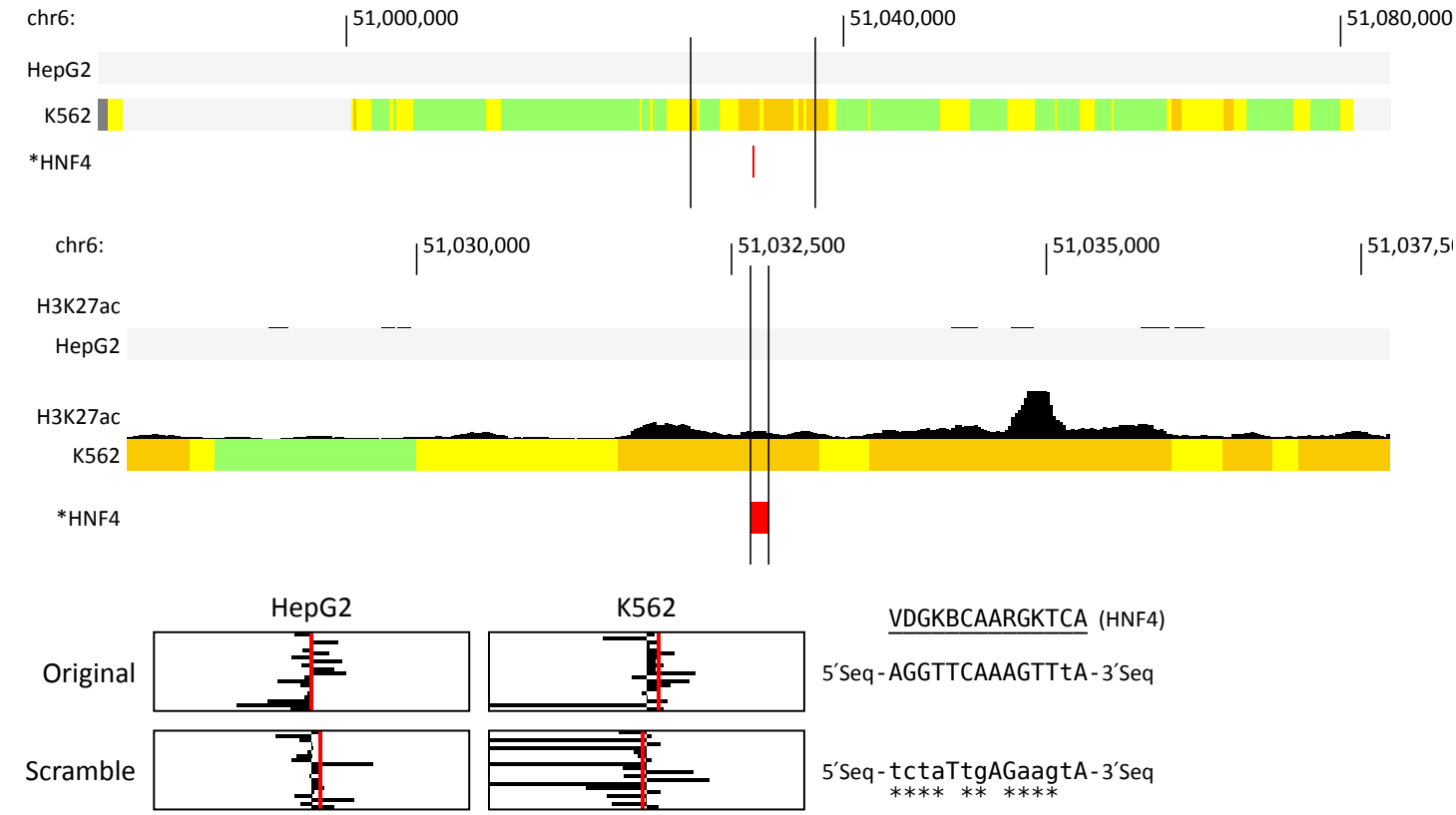
759 HNF4 in K562 enhancer (conserved at 60% confidence)

chr6 51032717 51032730 + (hg18)



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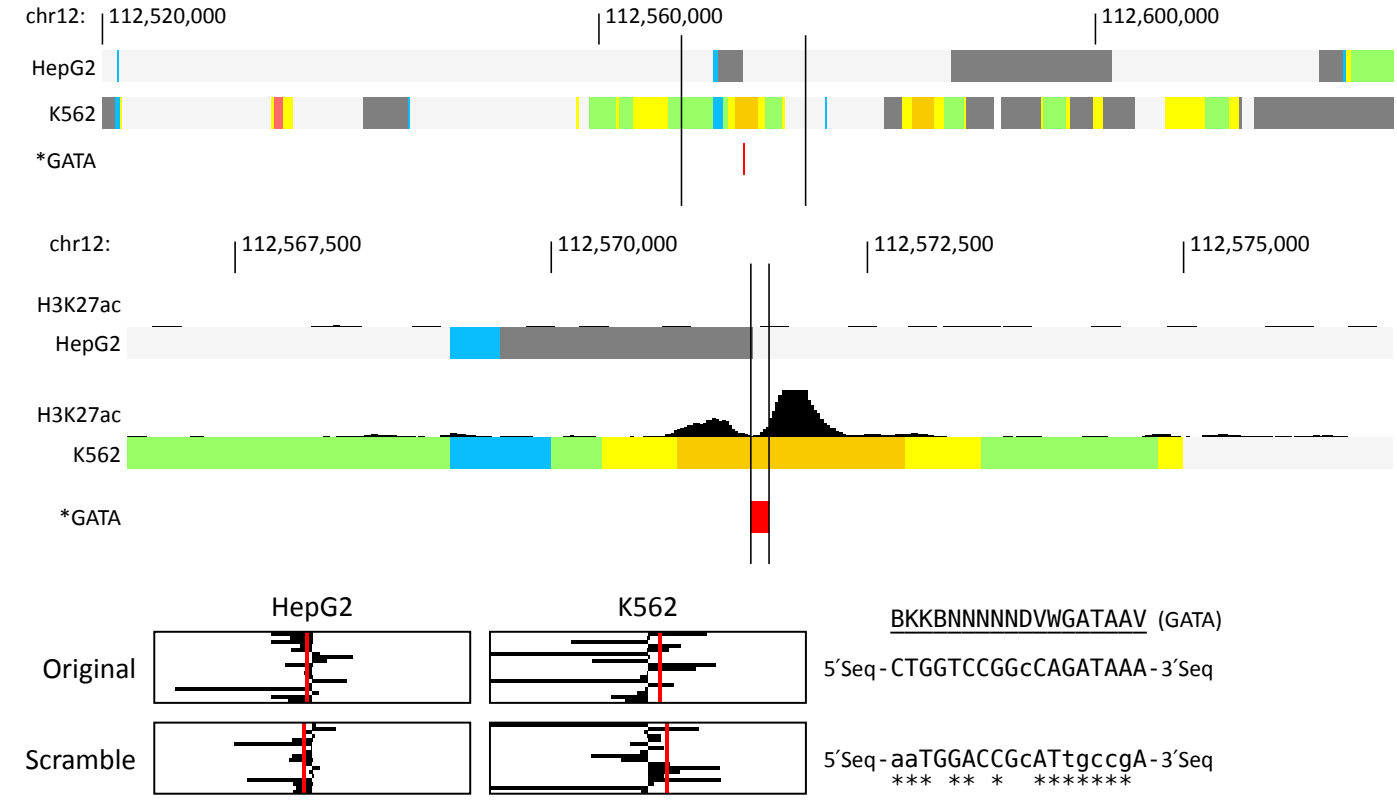
3′Seq = tgaaccctagcaagatgtactcagacttttctcttctattctgtgaaagctttatattgtcctcc

760 GATA in K562 enhancer (conserved at 70% confidence)

chr12 112571642 112571659 + (hg18)



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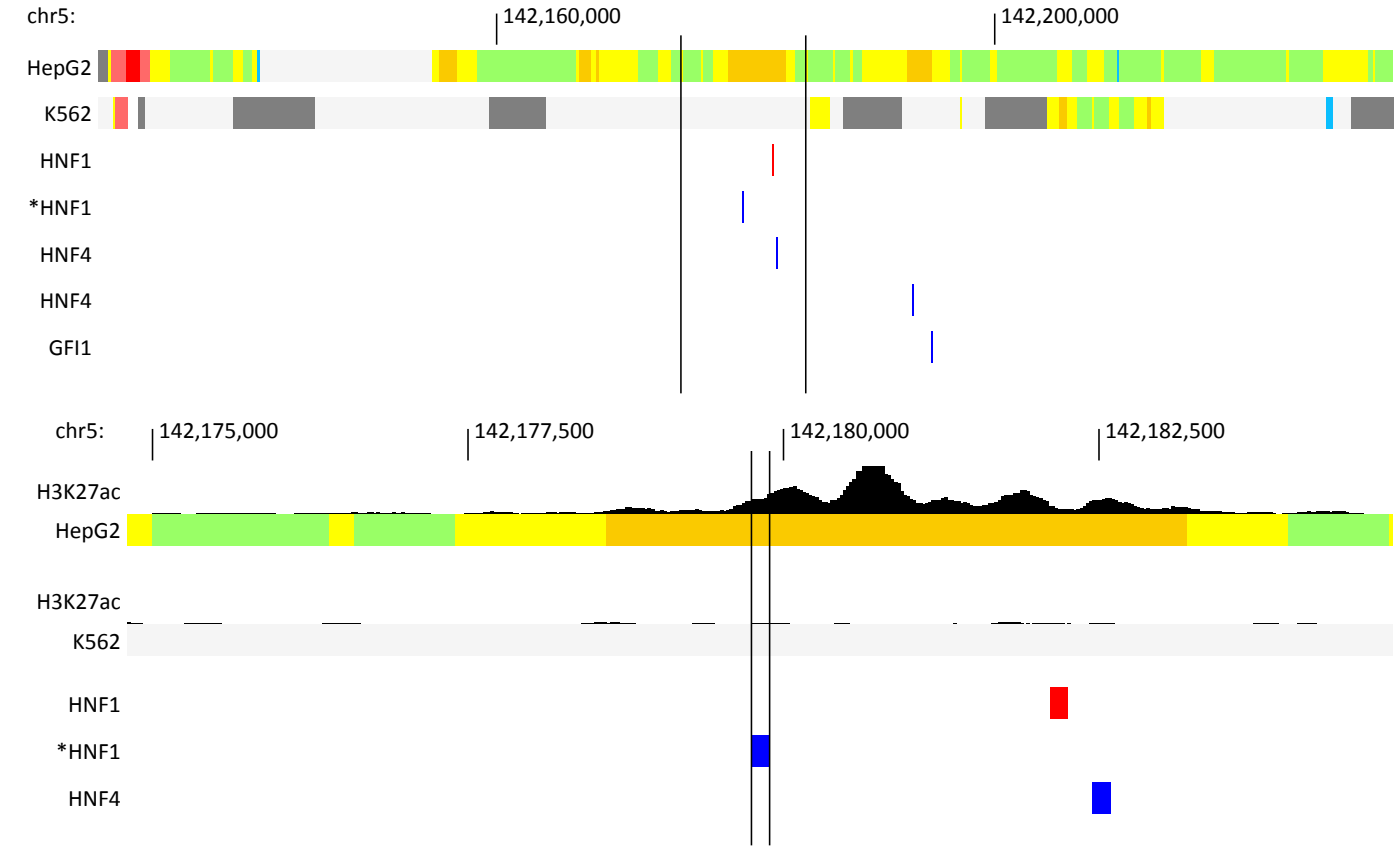
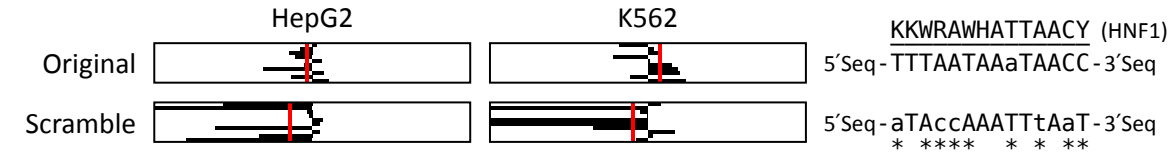
761 HNF1 in HepG2 enhancer

chr5 142179812 142179825 - (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-TTTAATAAaTAACC-3′Seq

5′Seq-aTAccAAATTtAaT-3′Seq

* **** * * **

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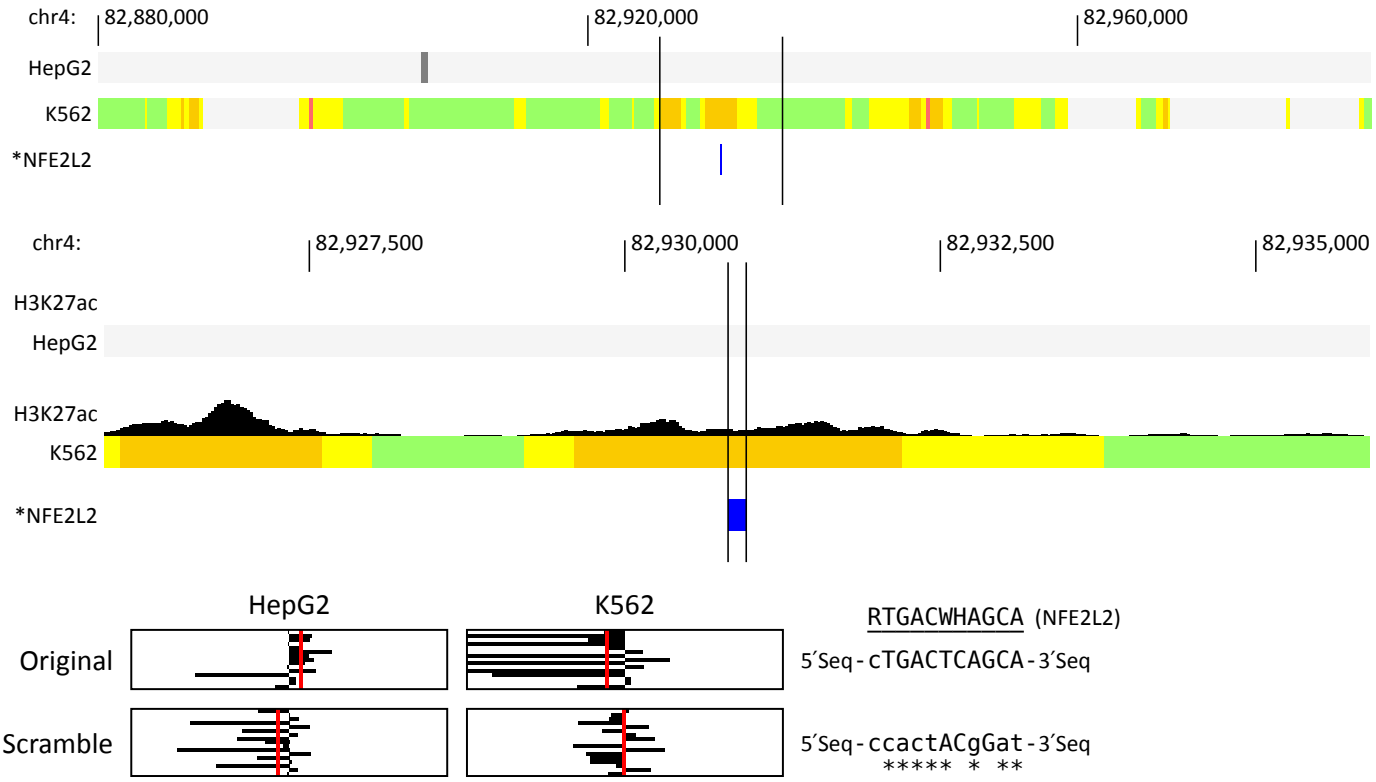
3′Seq = cccagaaagttccaacactaaatttctaaaccaagcgatgactcactctccctcctccacaaaca

762 NFE2L2 in K562 enhancer

chr4 82930885 82930895 + (hg18)



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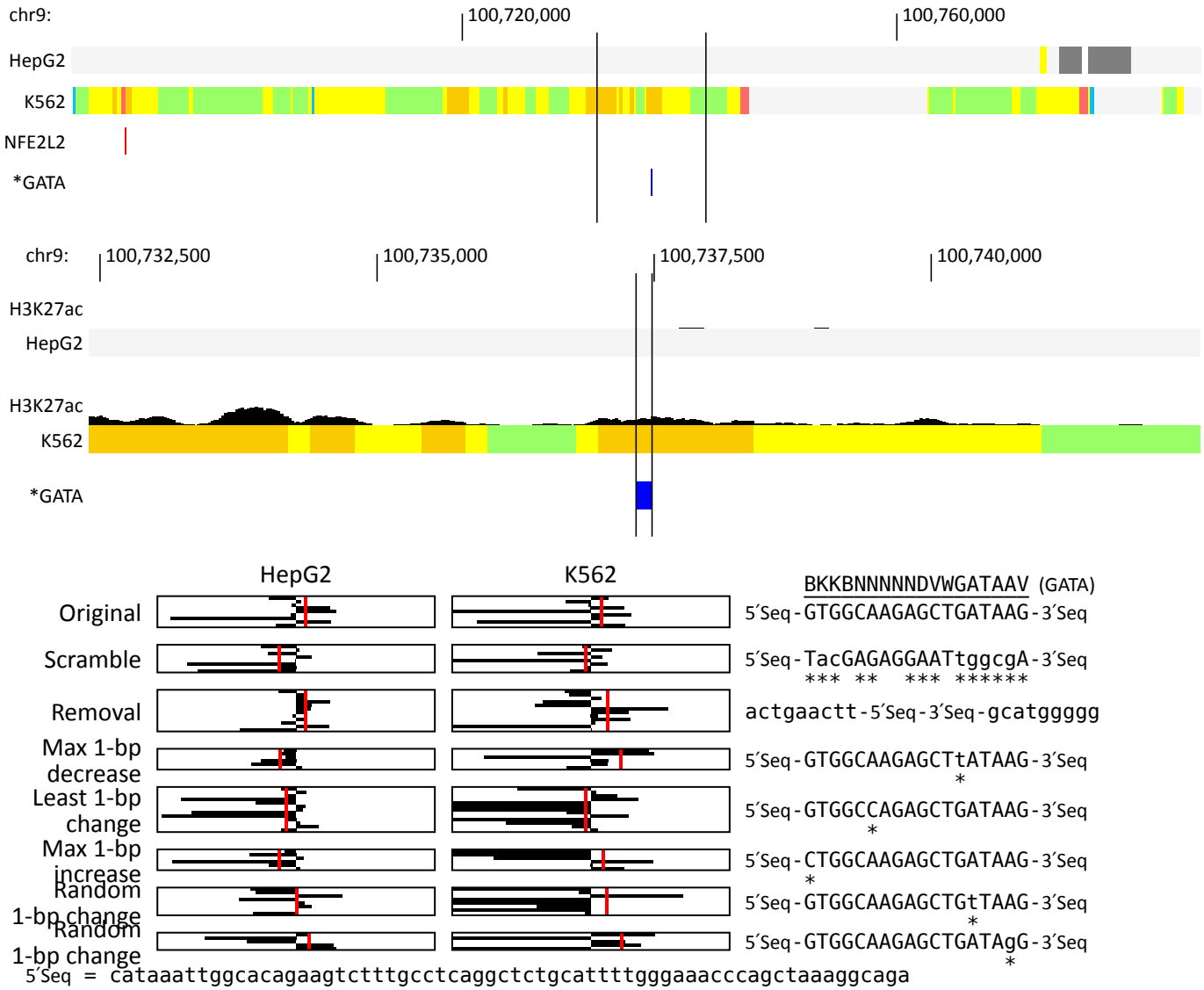
3′Seq = ggtgcacatgaggcccaagagagaacagcaccccaagtatttcactcatcaagaactttgtgatatt

763 GATA in K562 enhancer

chr9 100737401 100737418 - (hg18)



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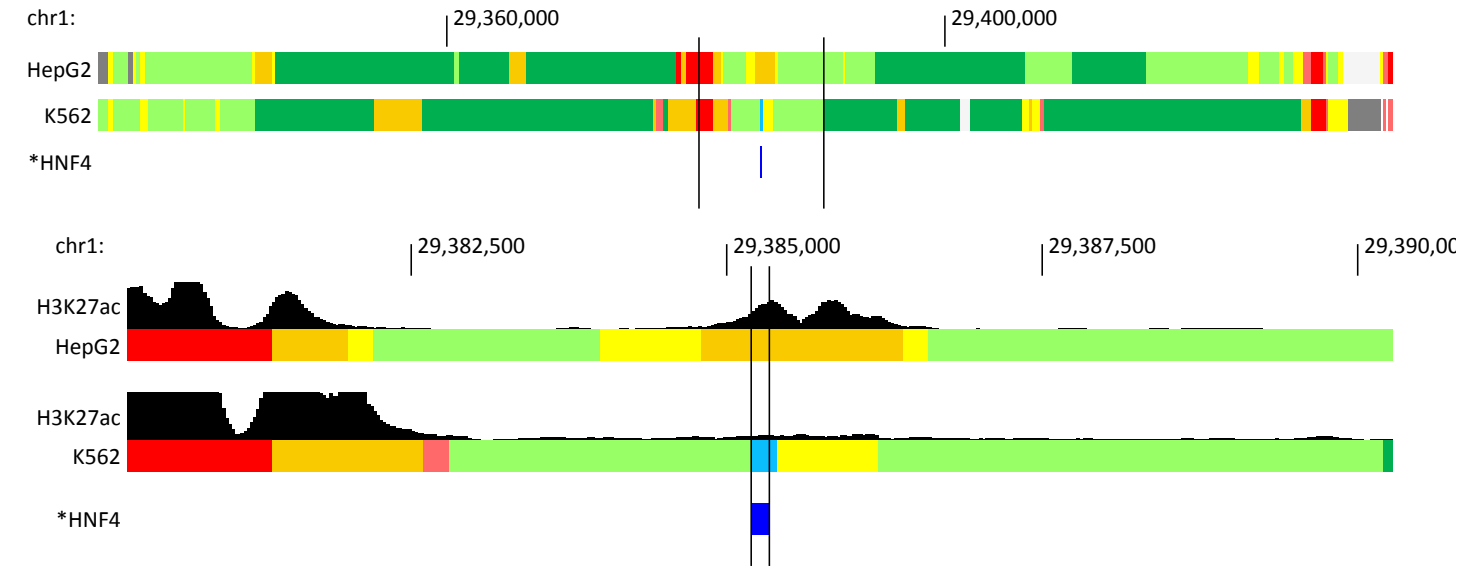
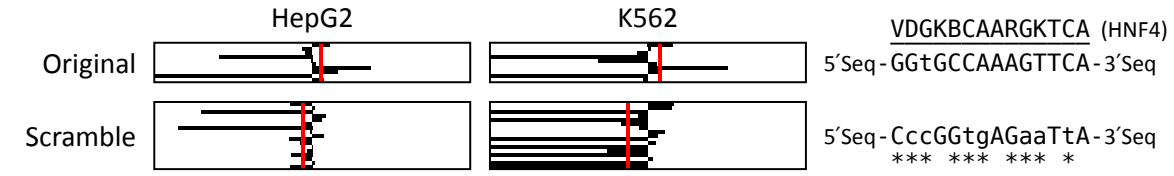
764 HNF4 in HepG2 enhancer

chr1 29385260 29385273 + (hg18)





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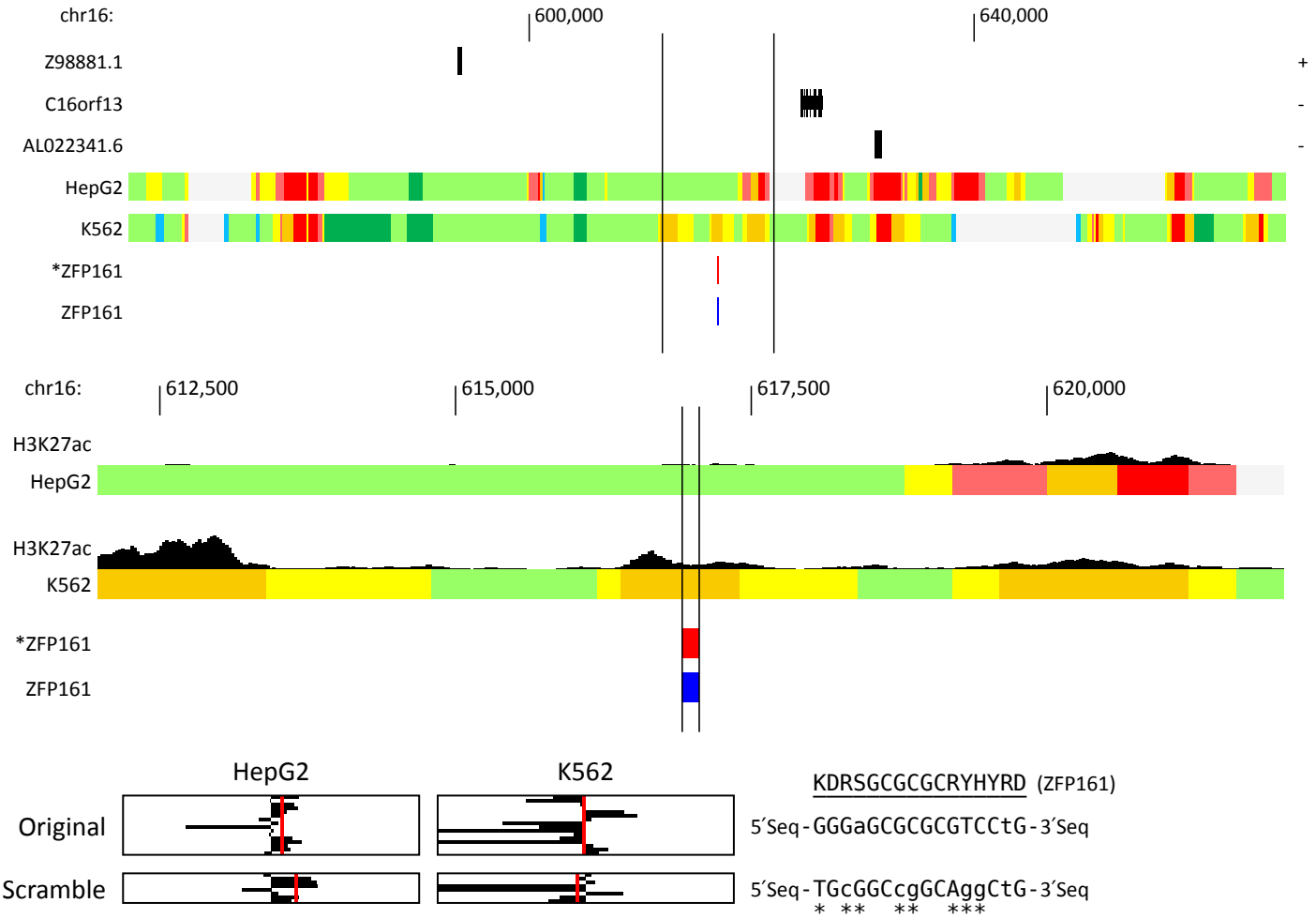
765 ZFP161 in K562 enhancer (conserved at 20% confidence)

chr16 616981 616996 - (hg18)



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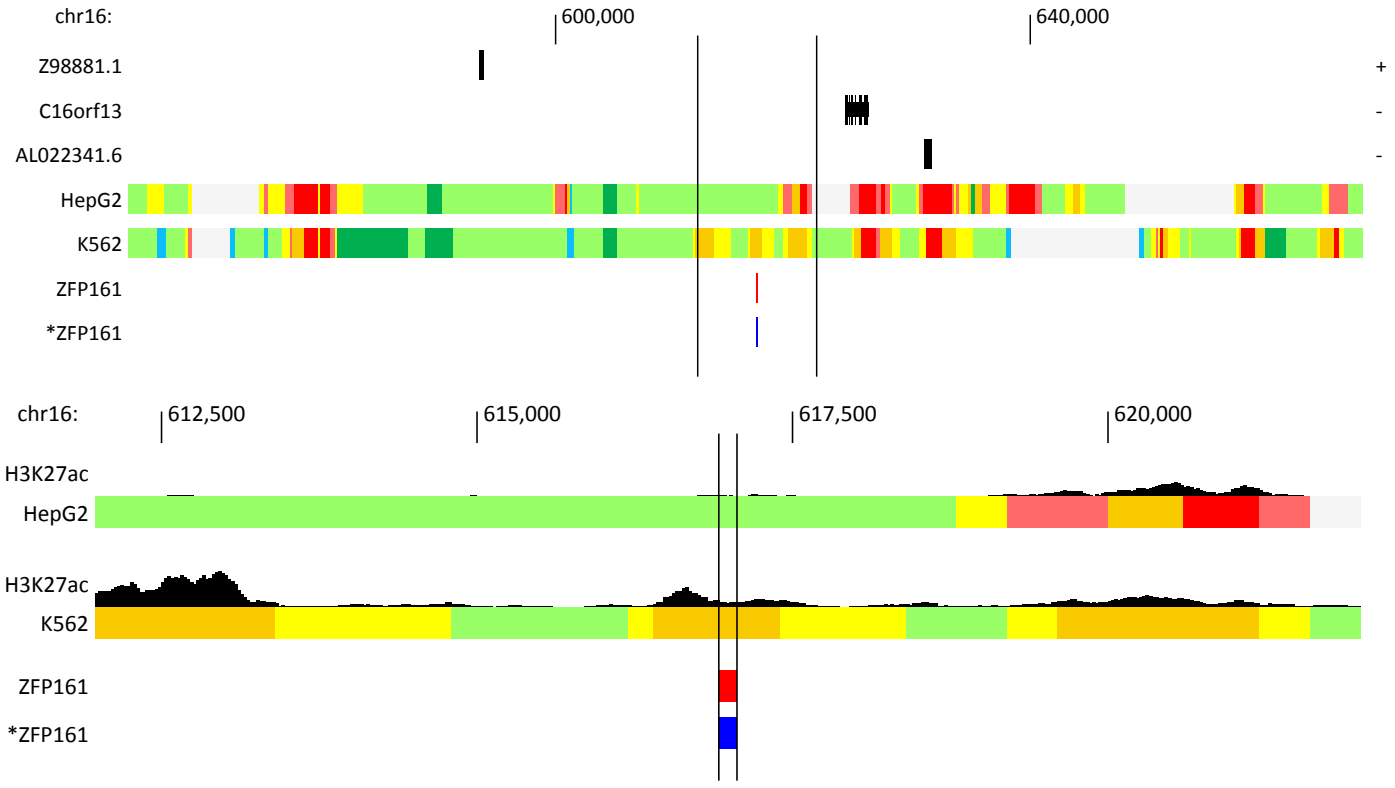
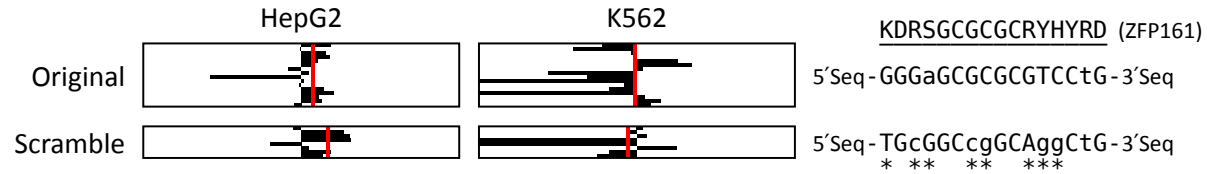
766 ZFP161 in K562 enhancer

chr16 616981 616996 - (hg18)





KDRSGCGCGCRYHYRD (ZFP161)

5′Seq-GGGaGCGCGCGTCCtG-3′Seq

5′Seq-TGcGGCcgGCAggCtG-3′Seq

* ** ** ***

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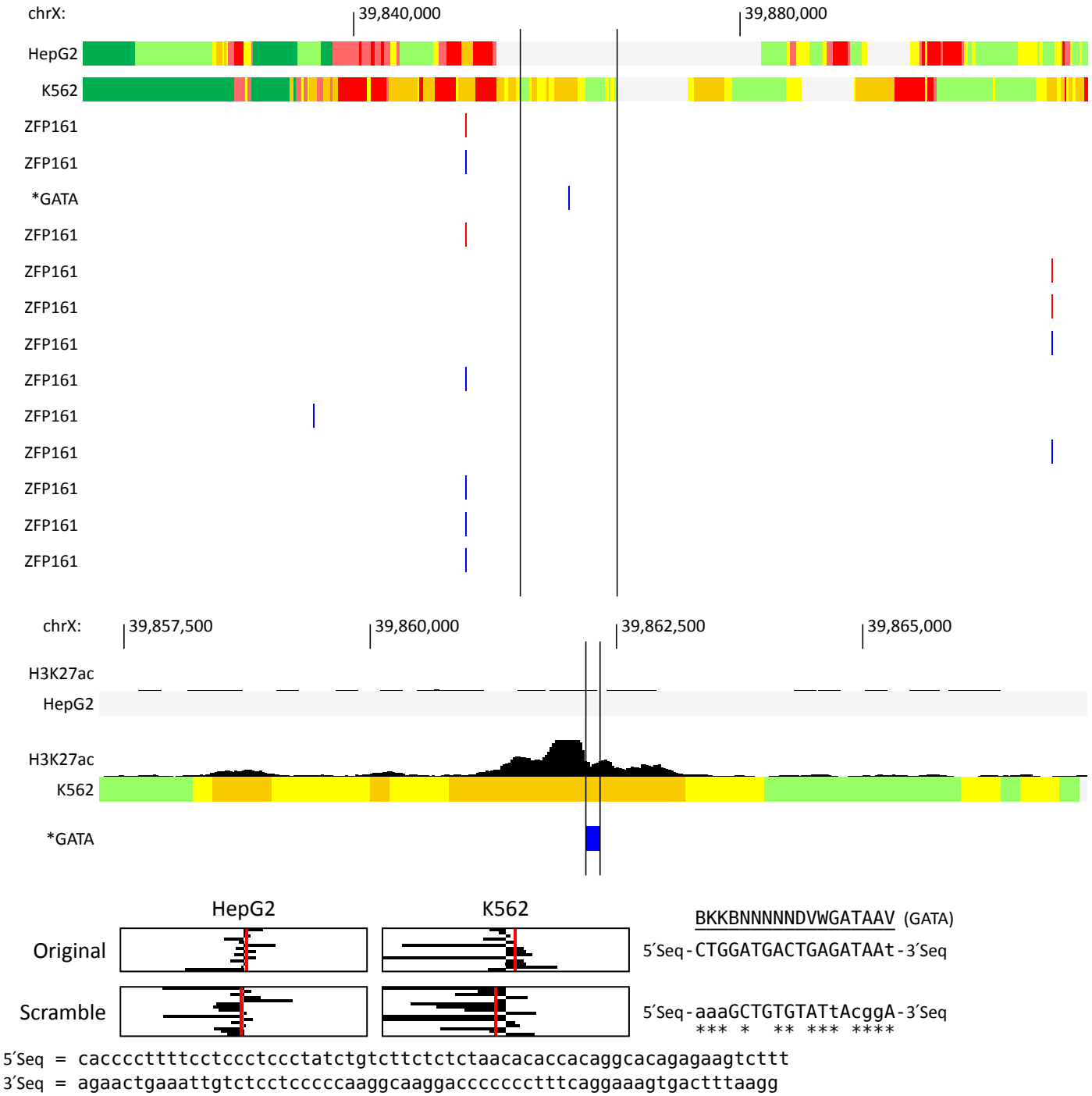
767 GATA in K562 enhancer

chrX 39862253 39862270 + (hg18)



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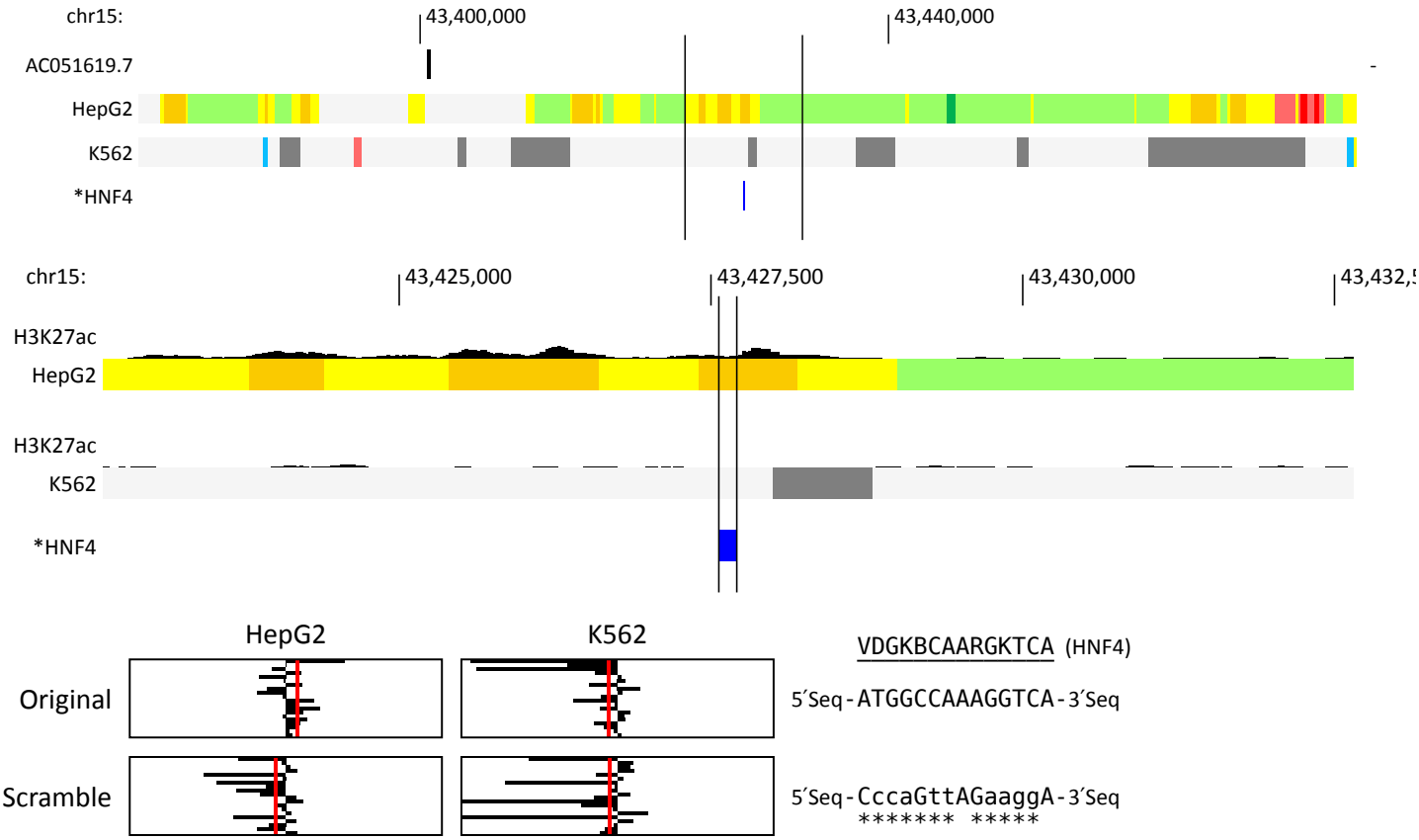
768 HNF4 in HepG2 enhancer

chr15 43427629 43427642 - (hg18)



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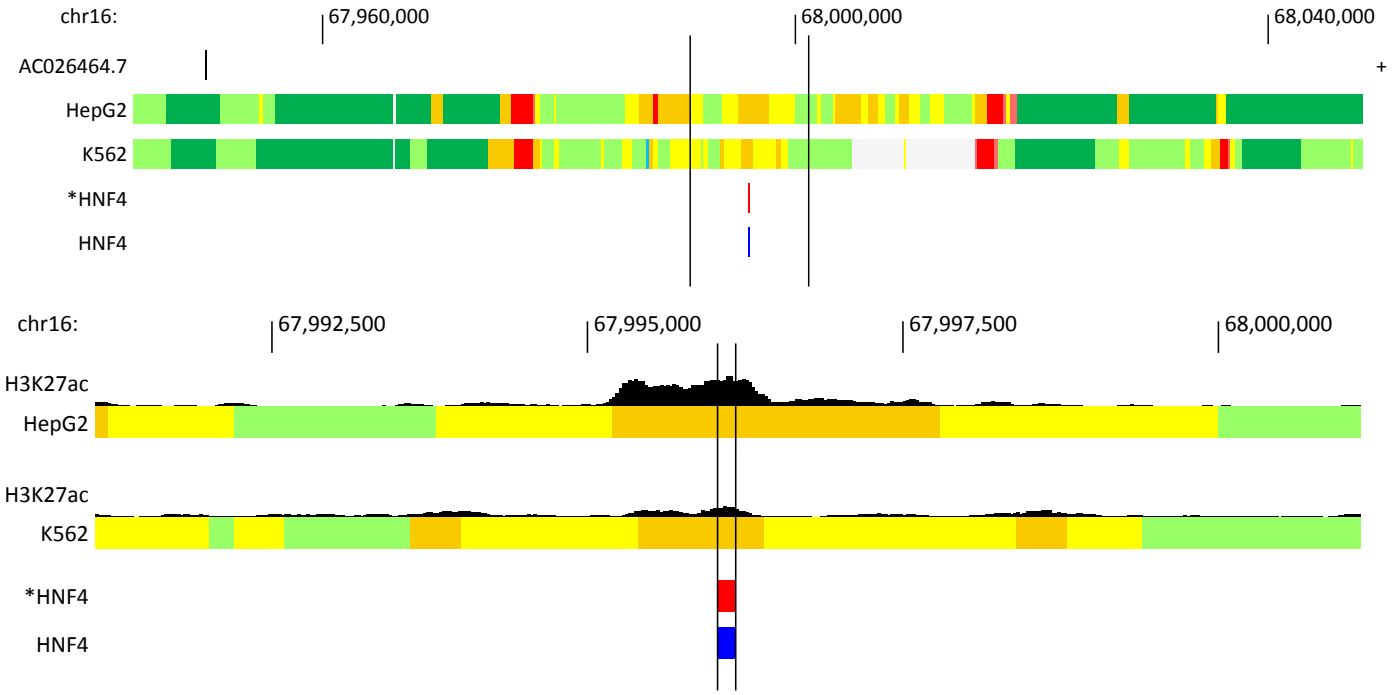
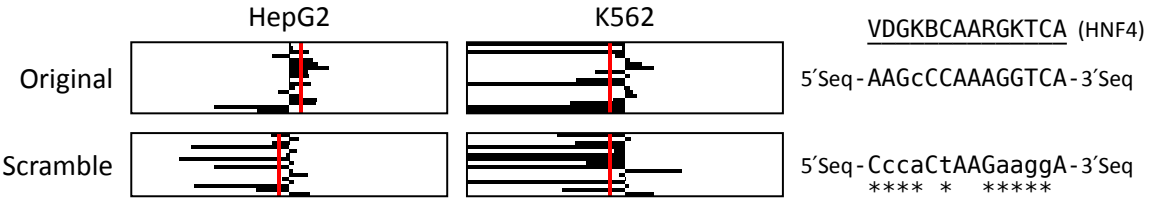
769 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr16 67996097 67996110 - (hg18)





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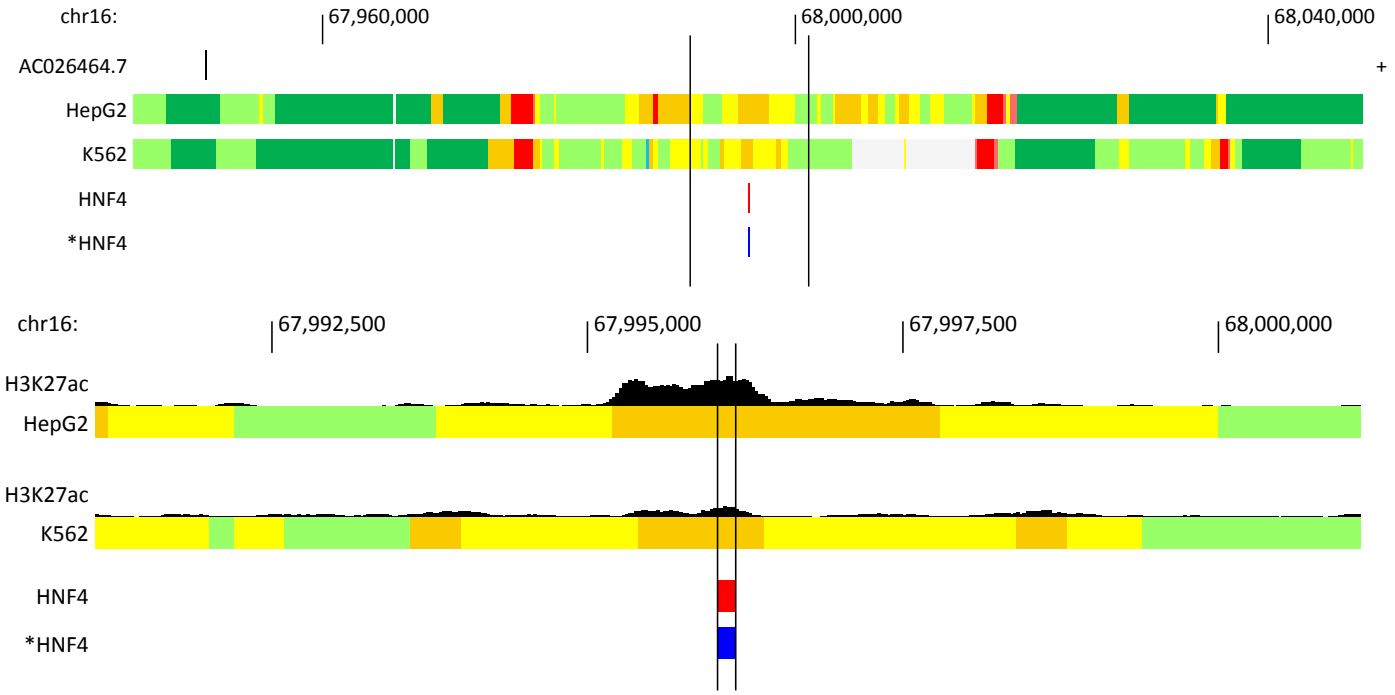
770 HNF4 in HepG2 enhancer

chr16 67996097 67996110 - (hg18)



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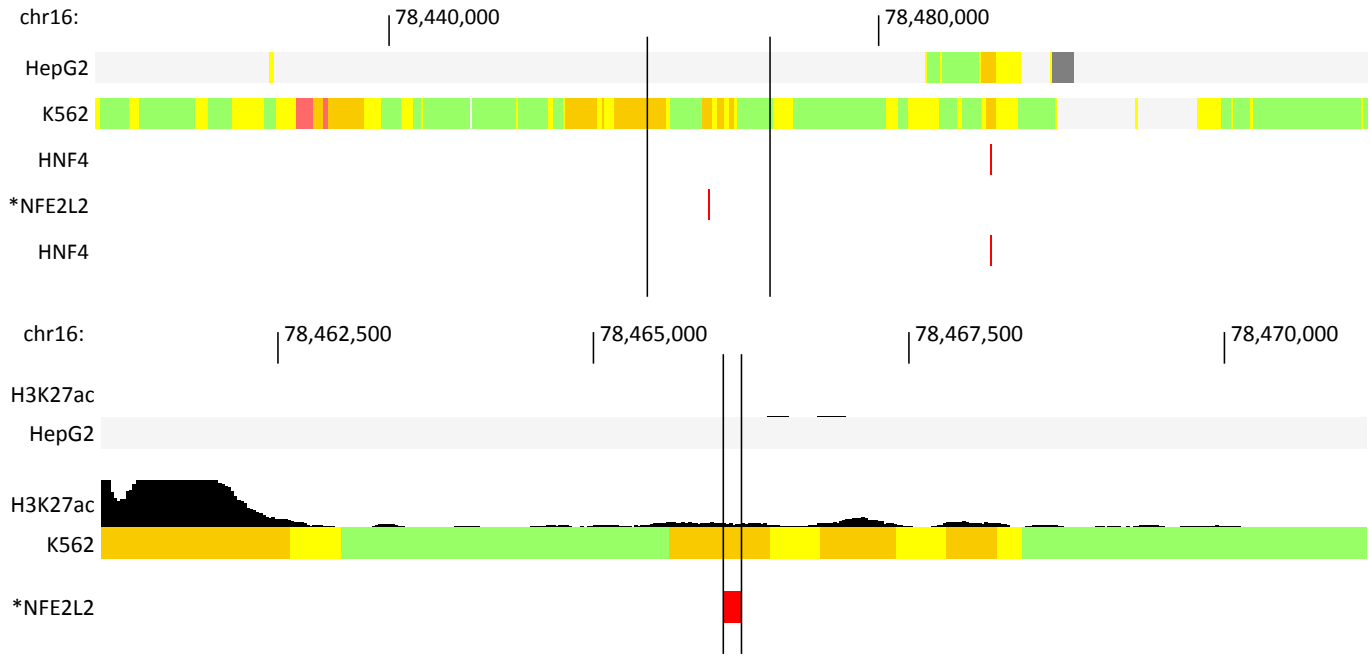
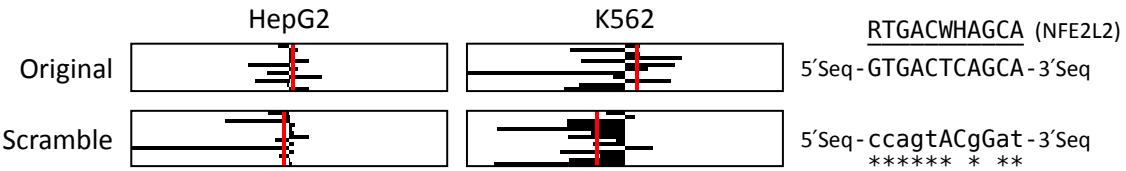
771 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr16 78466096 78466106 - (hg18)





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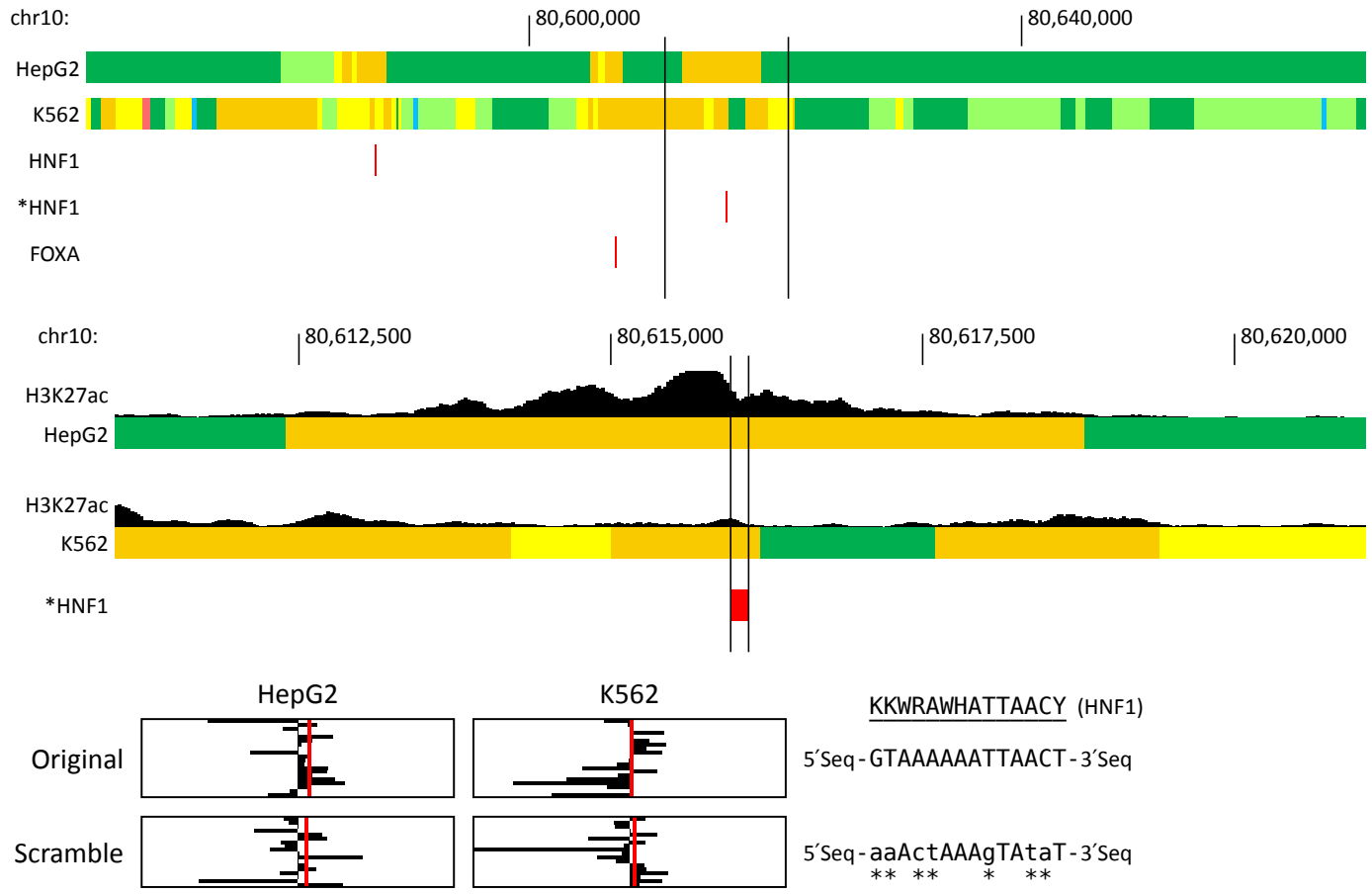
772 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr10 80616027 80616040 - (hg18)



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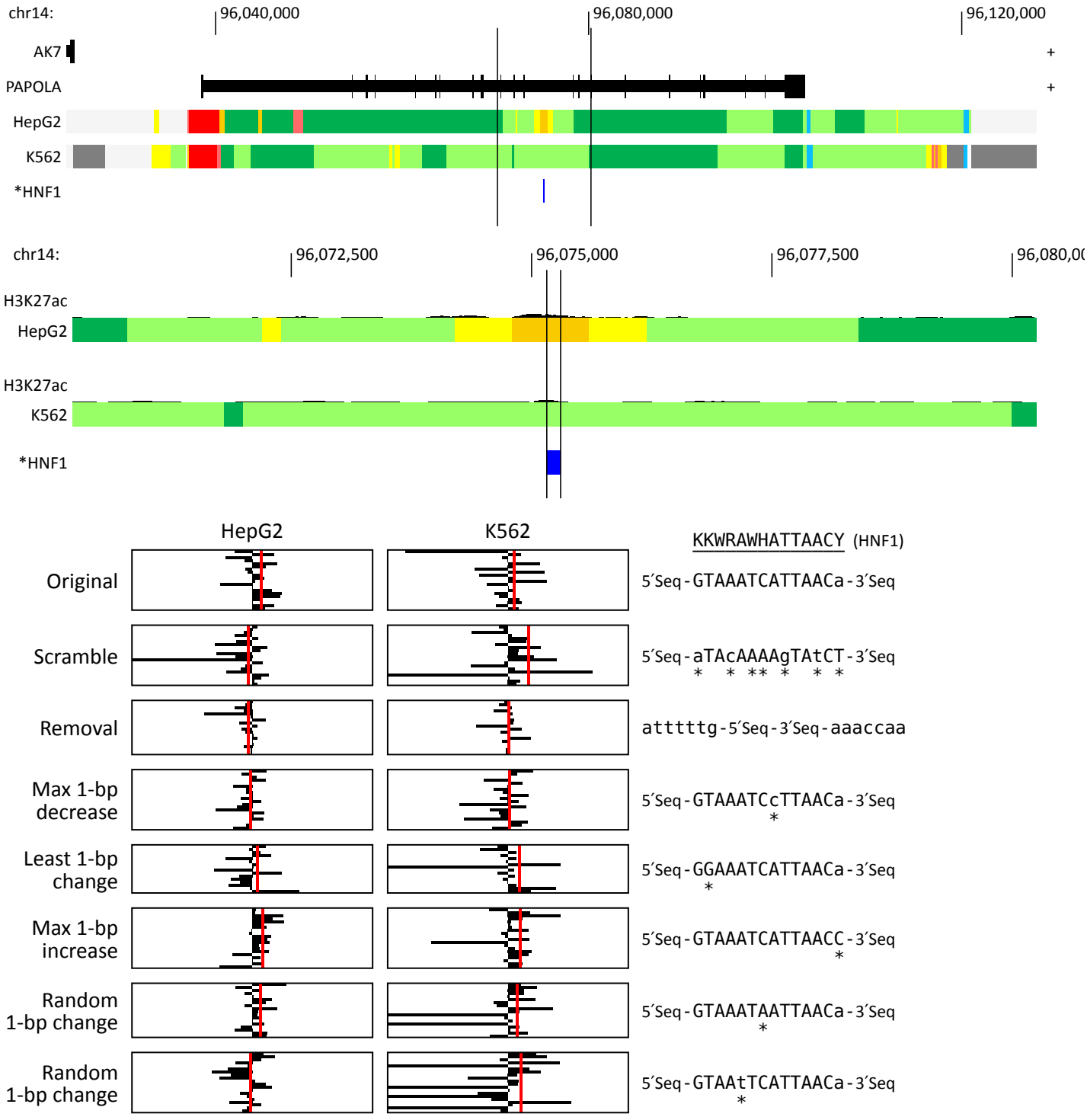
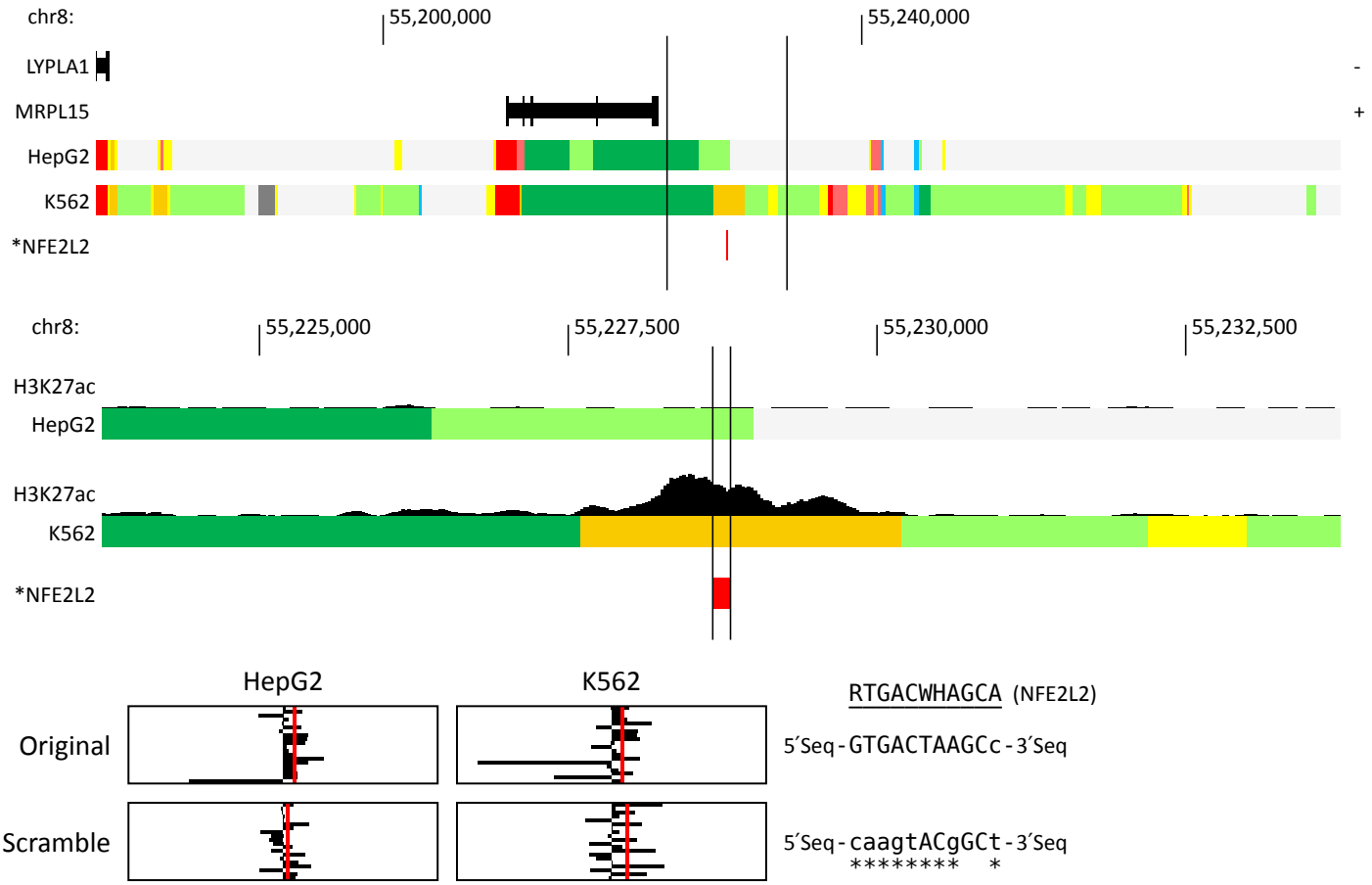
773 HNF1 in HepG2 enhancer

chr14 96075224 96075237 + (hg18)



774 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 55228737 55228747 - (hg18)



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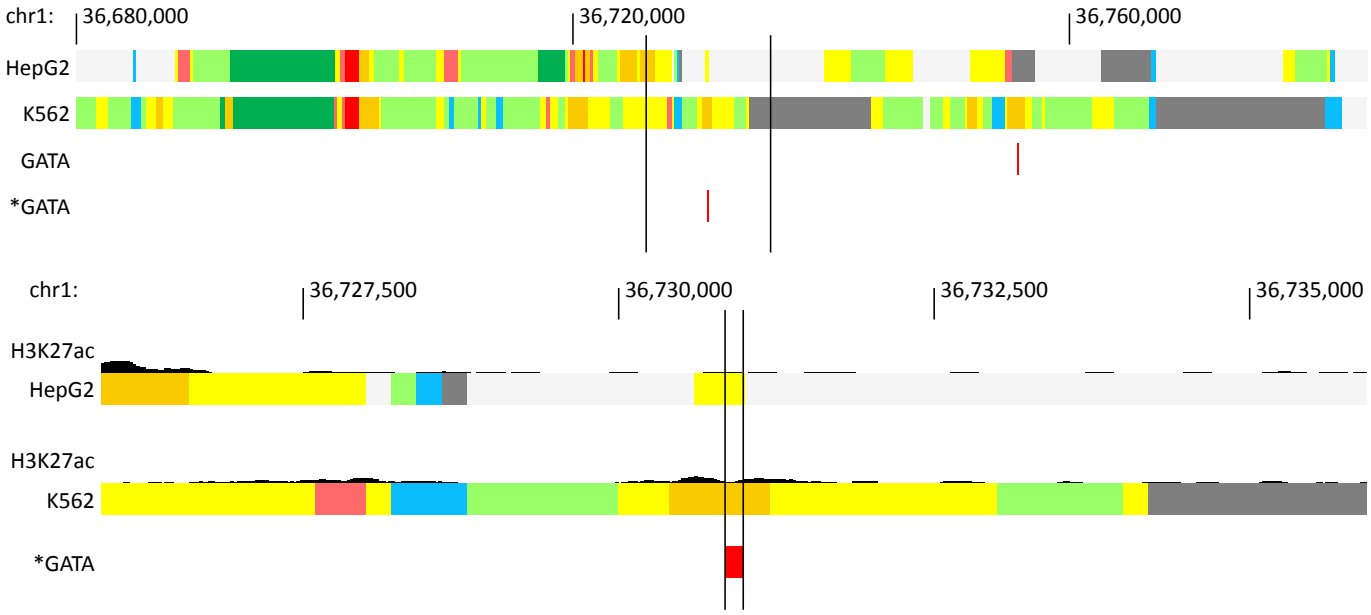
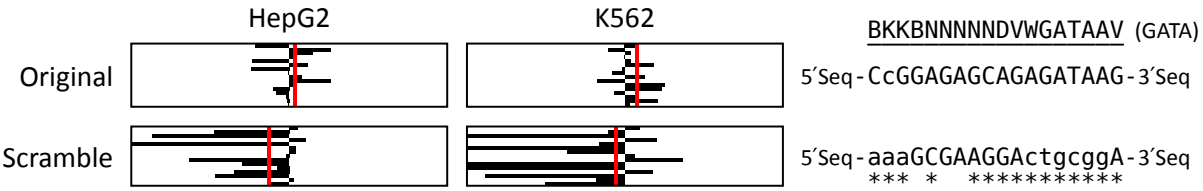
775 GATA in K562 enhancer (conserved at 60% confidence)

chr1 36730907 36730924 - (hg18)





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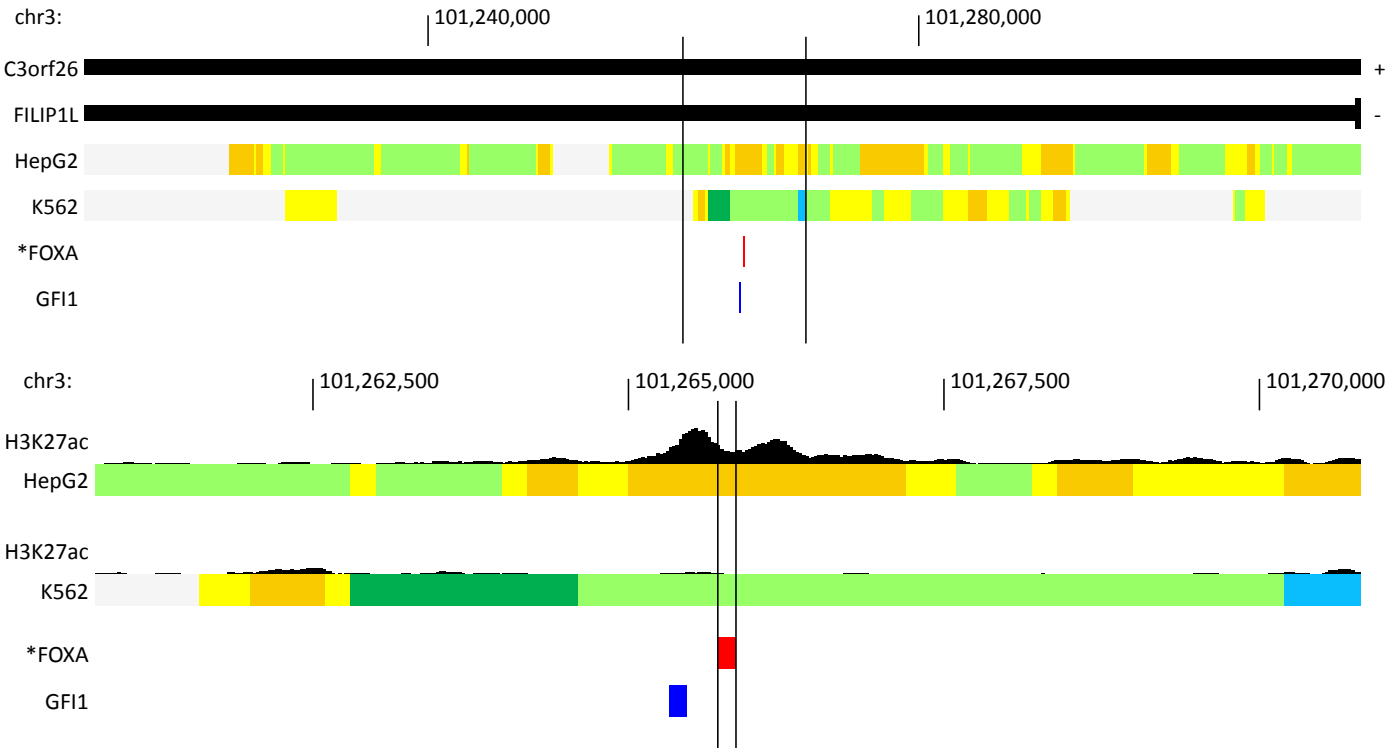
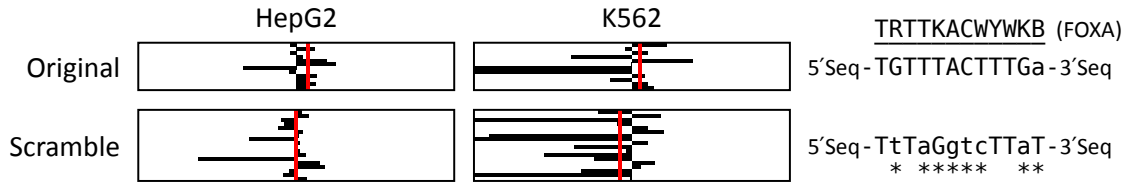
3′Seq = gccctcctgaccagaagaccacaagcaggggataagagggaggggaagtcttctcttctgccc

776 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 101265775 101265786 - (hg18)





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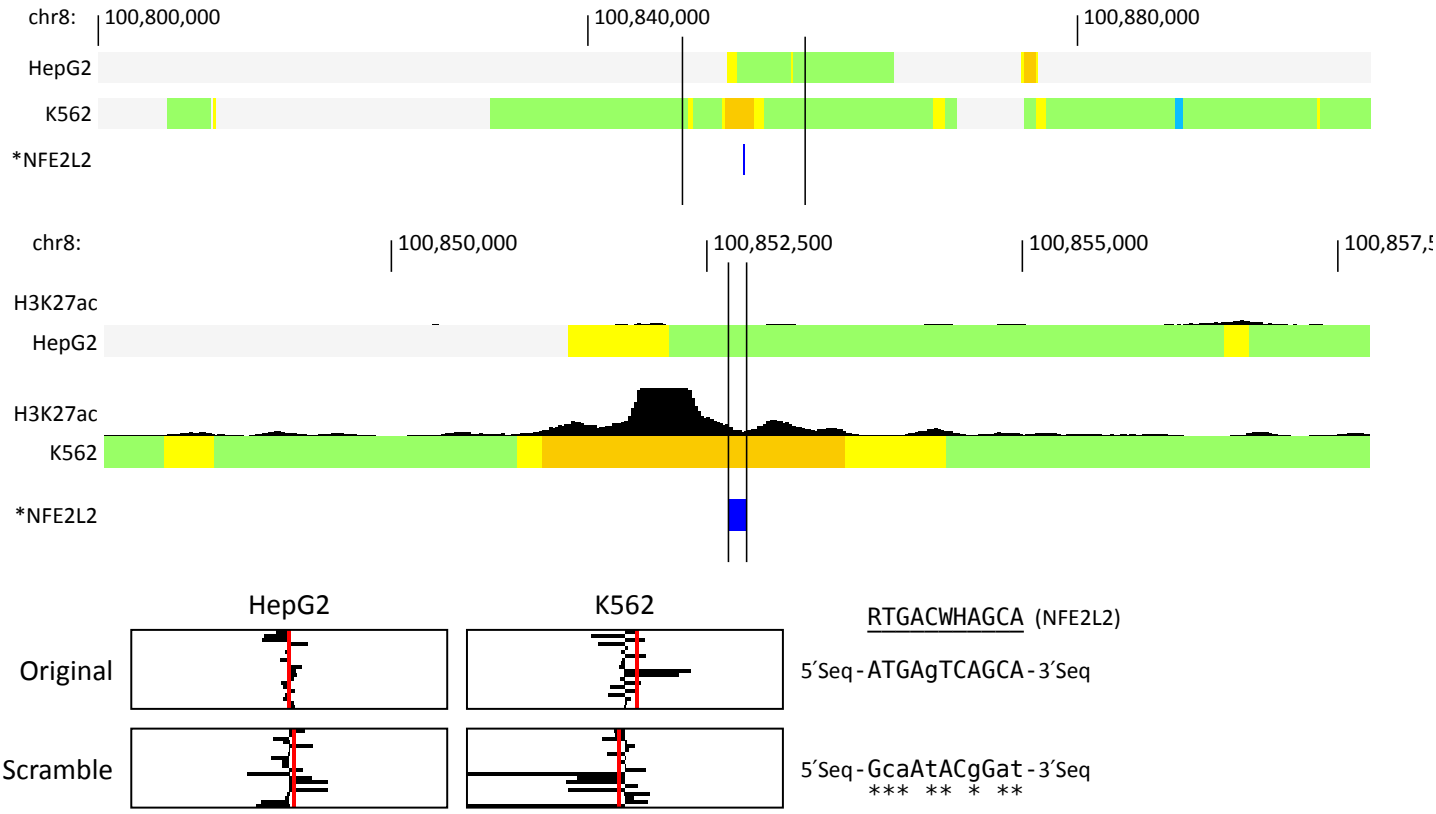
777 NFE2L2 in K562 enhancer

chr8 100852738 100852748 - (hg18)



RTGACWHAGCA (NFE2L2)

5′Seq-ATGAgTCAGCA-3′Seq

5′Seq-GcaAtACgGat-3′Seq

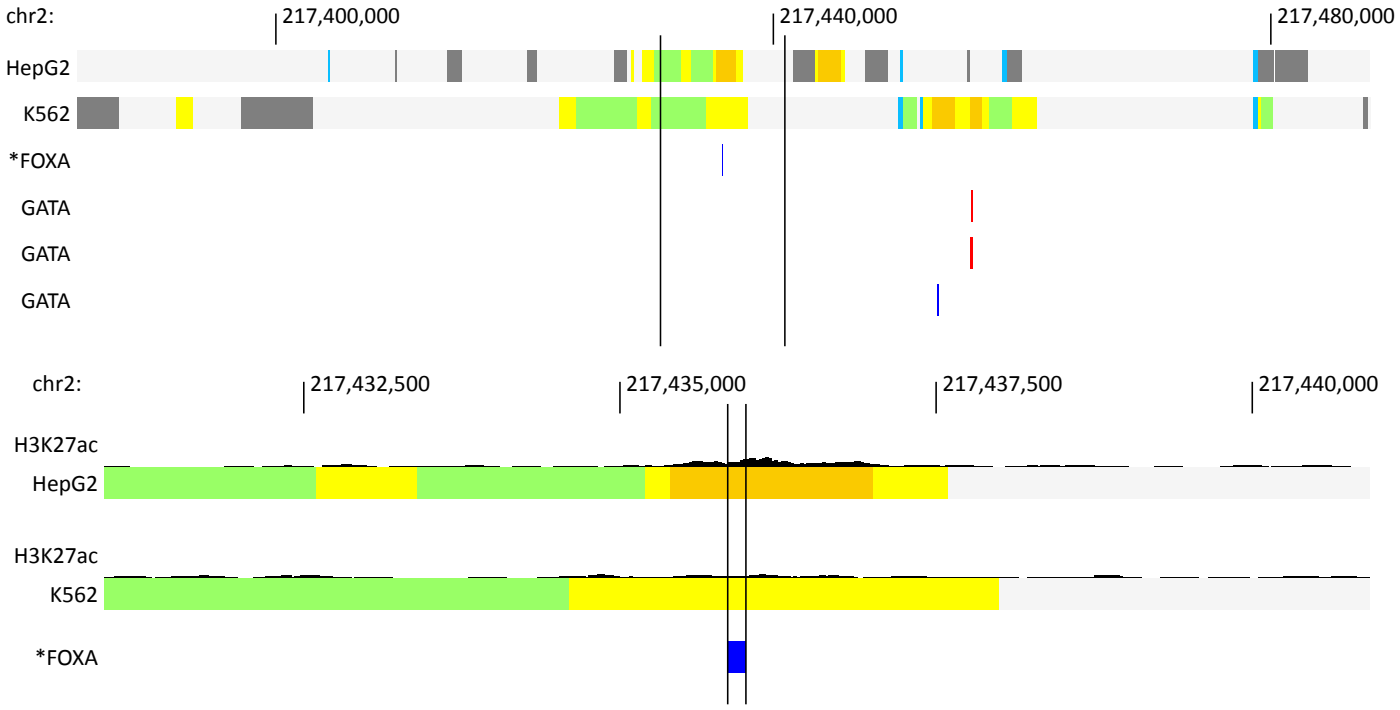
*** ** * **

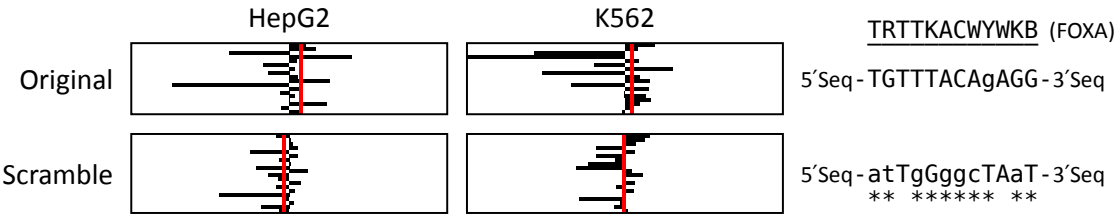
5′Seq = atttttatcacatgaagaaagagccatacacccttaagccatttctctttccaagatgccttctgtc

3′Seq = ttttgtgggtagagataaaaagtccttacaagcaatctgctctcacatgctttaatattgtgagaag

778 FOXA in HepG2 enhancer

chr2 217435919 217435930 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACAgAGG-3′Seq

5′Seq-atTgGggcTAaT-3′Seq

** ****** **

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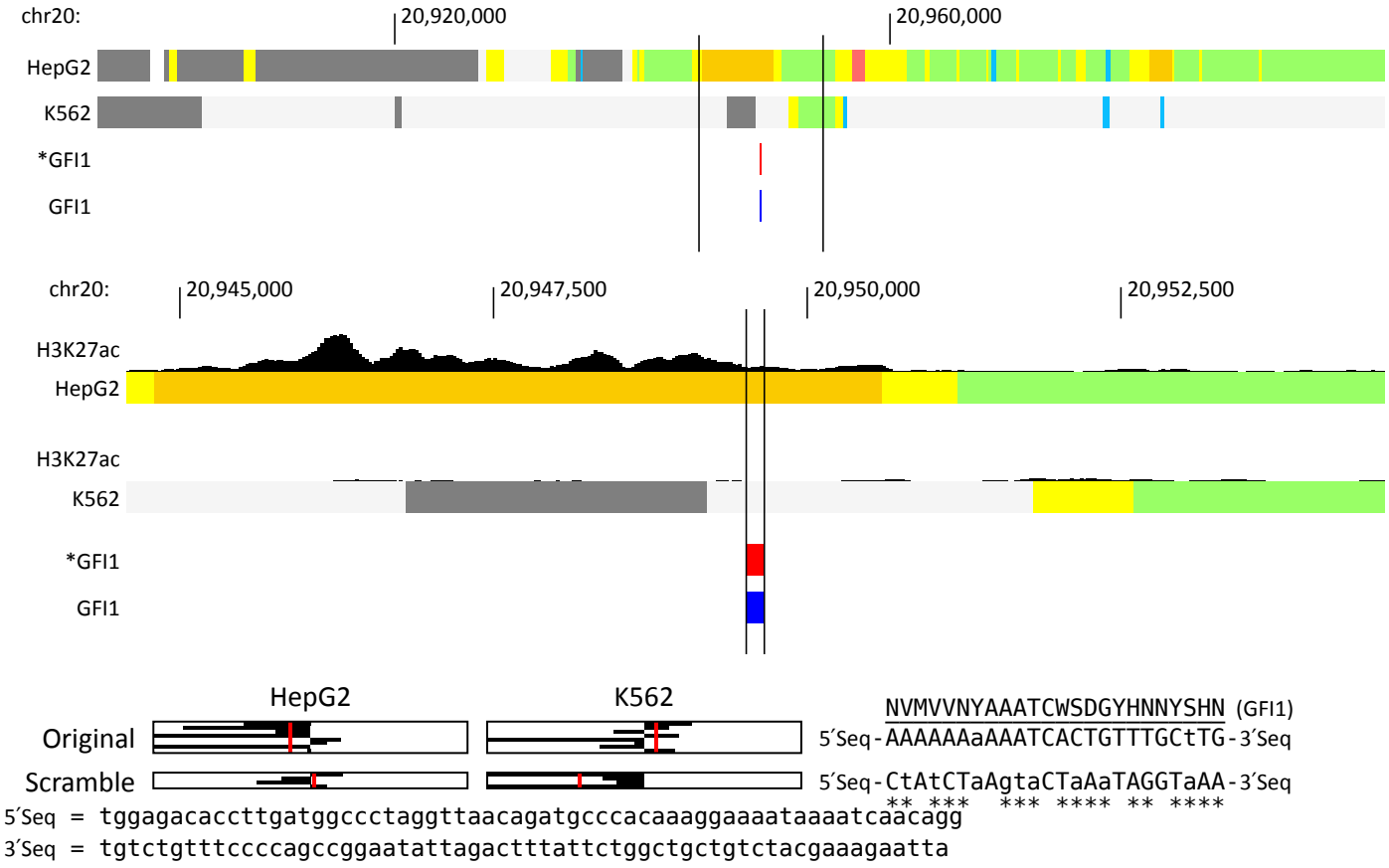
3′Seq = aactggcctctttggtttgagagacatttttctggatggtcctgaaggctggatactatttctctc

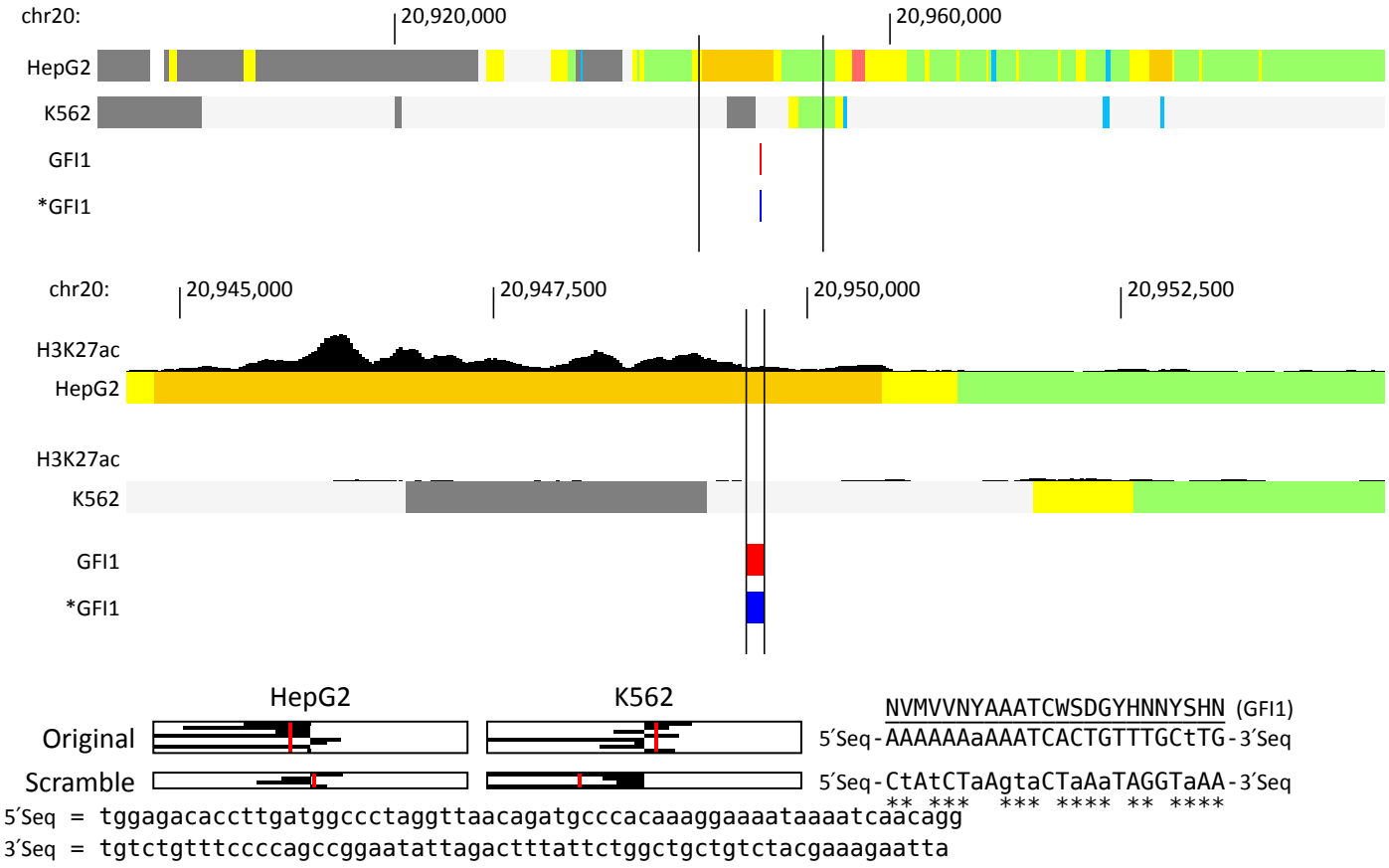
779 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr20 20949575 20949598 - (hg18)



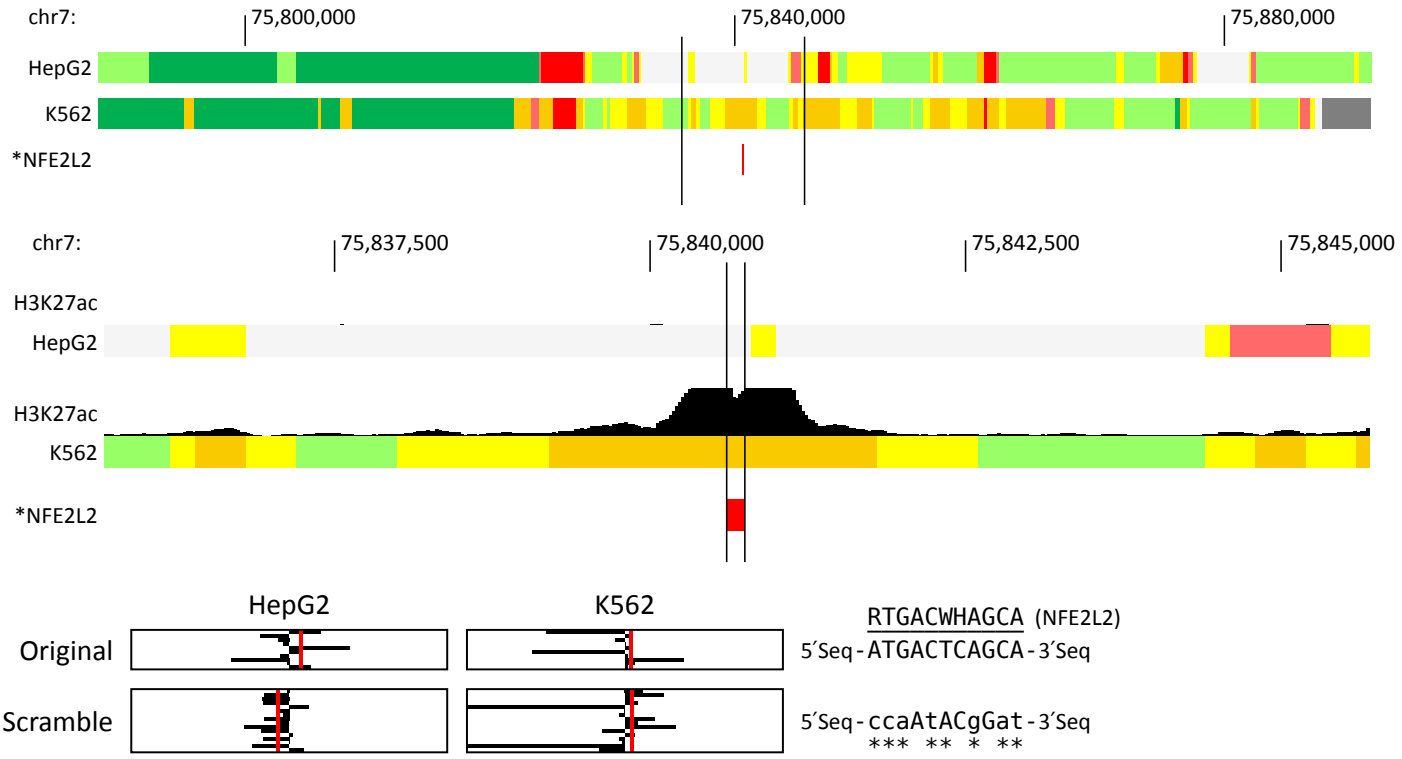
780 GFI1 in HepG2 enhancer

chr20 20949575 20949598 - (hg18)



781 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 75840674 75840684 - (hg18)



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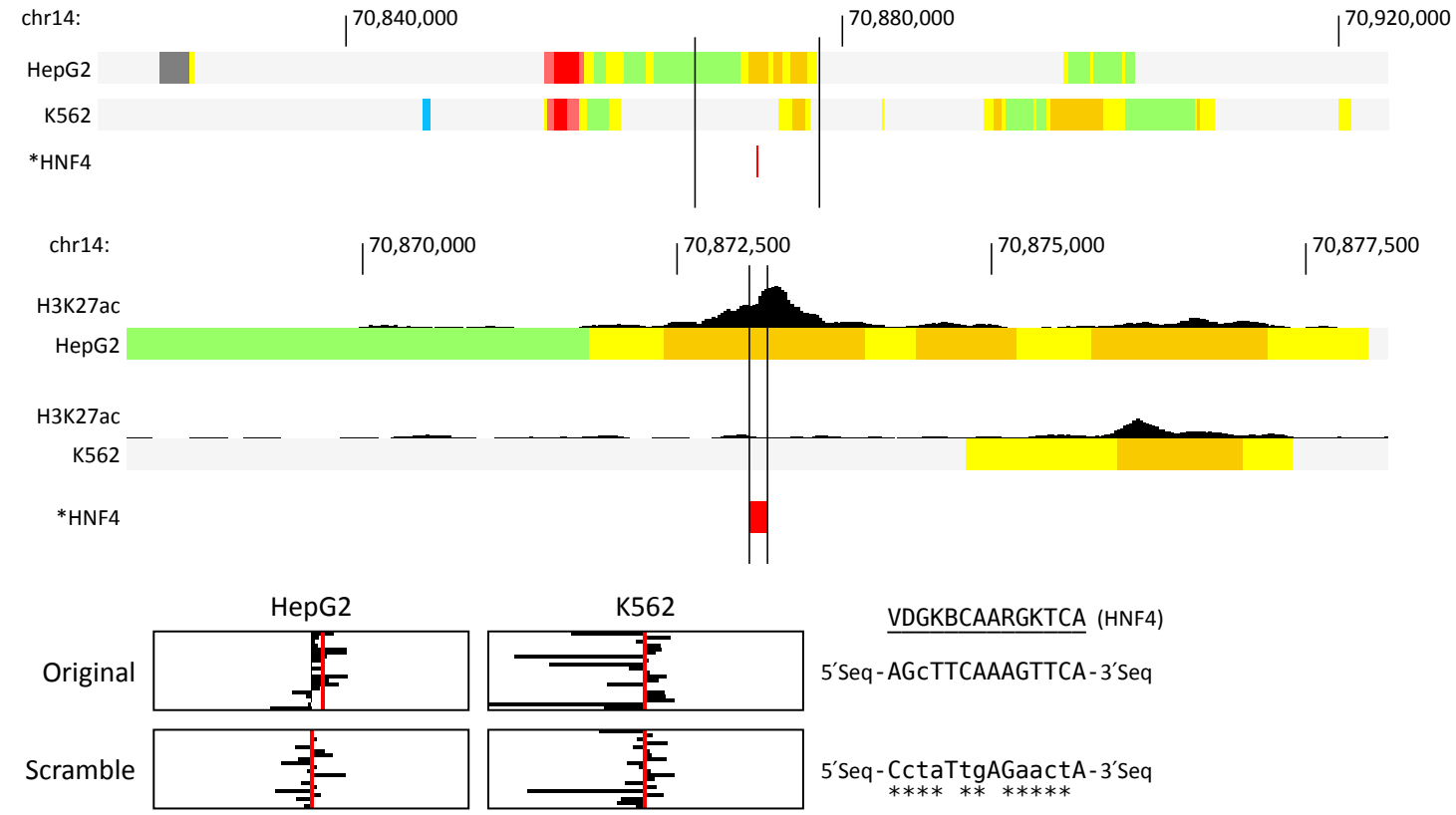
782 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 70873141 70873154 - (hg18)



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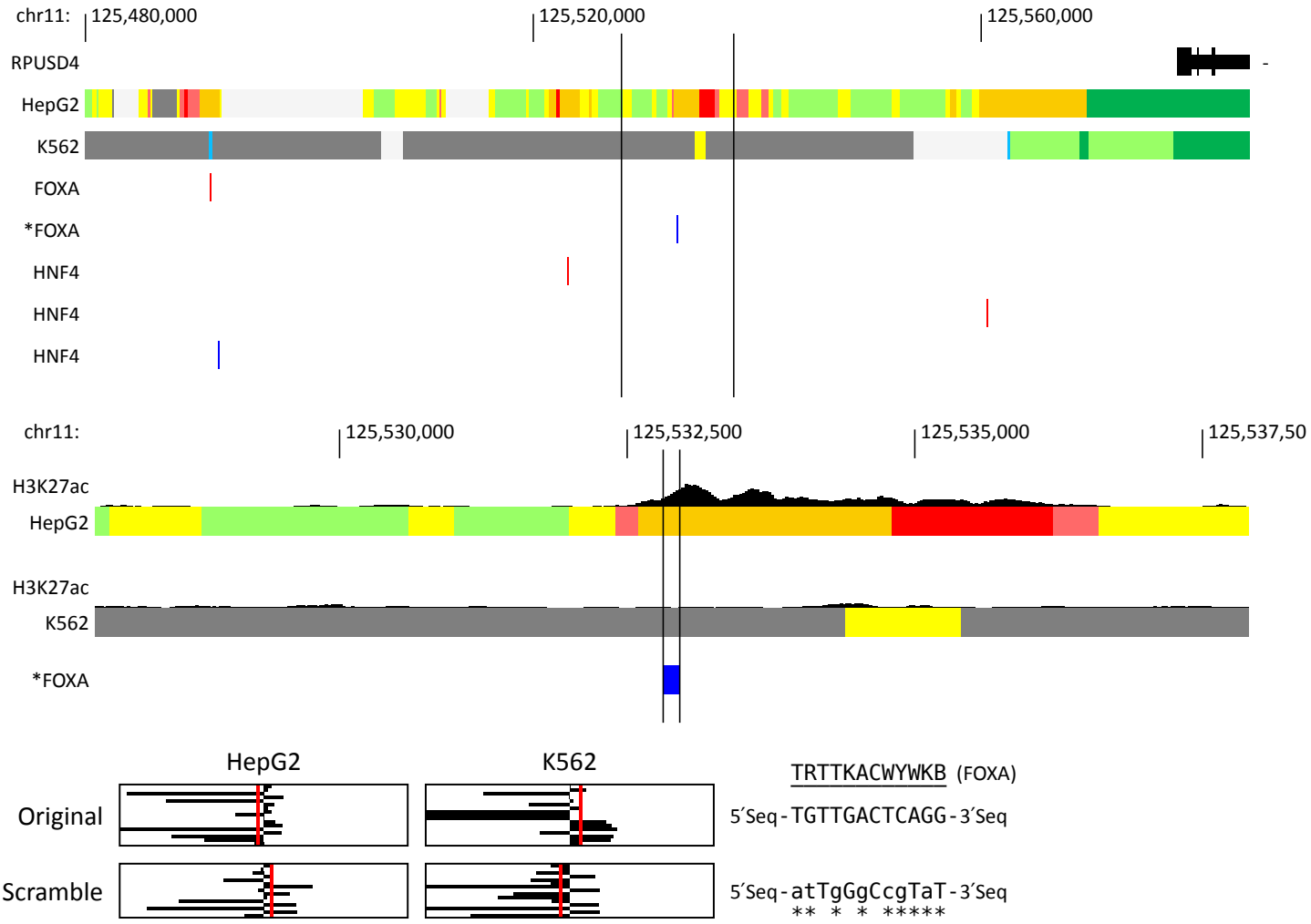
783 FOXA in HepG2 enhancer

chr11 125532880 125532891 - (hg18)



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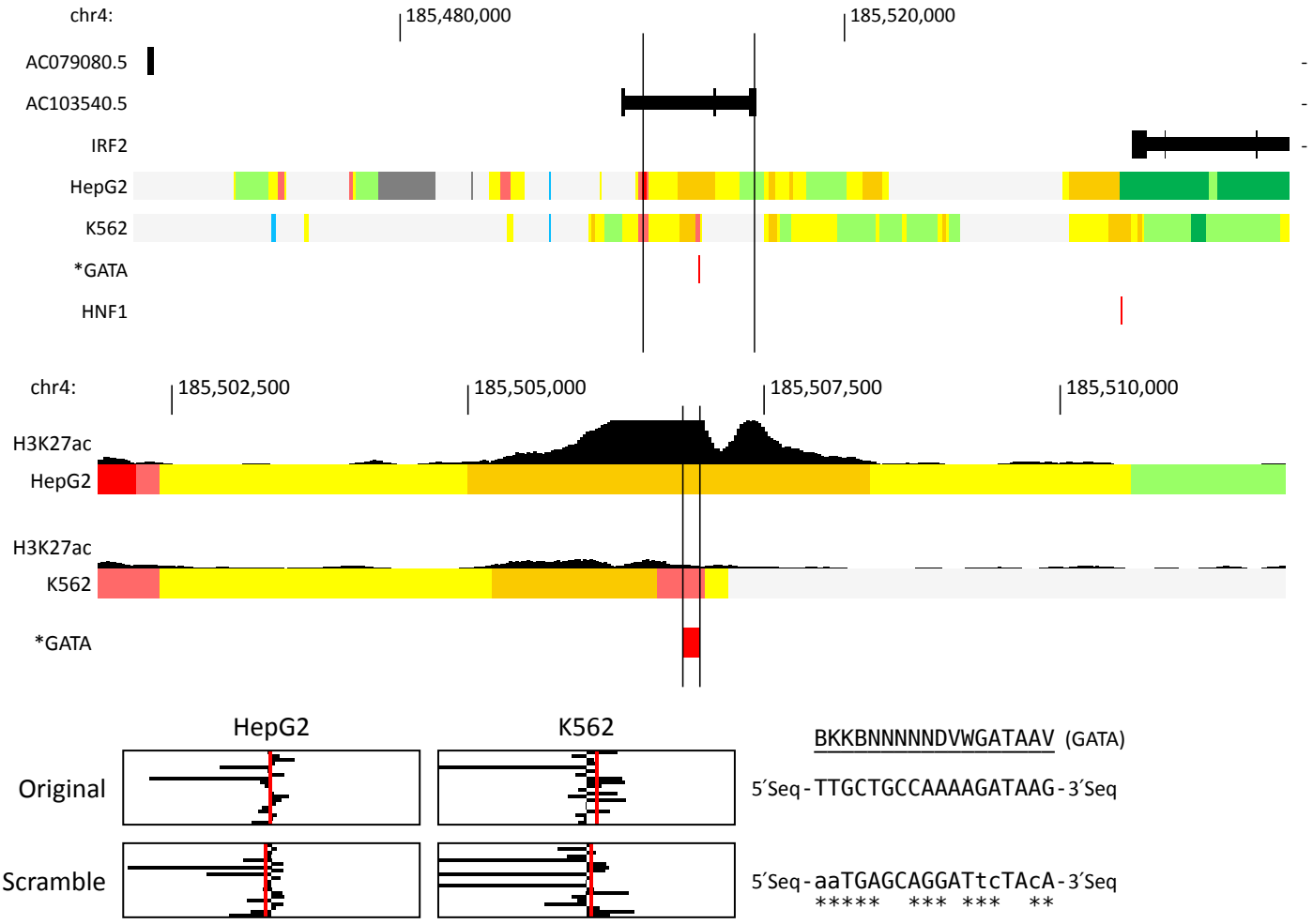
784 GATA in HepG2 enhancer (conserved at 60% confidence)

chr4 185506878 185506895 - (hg18)



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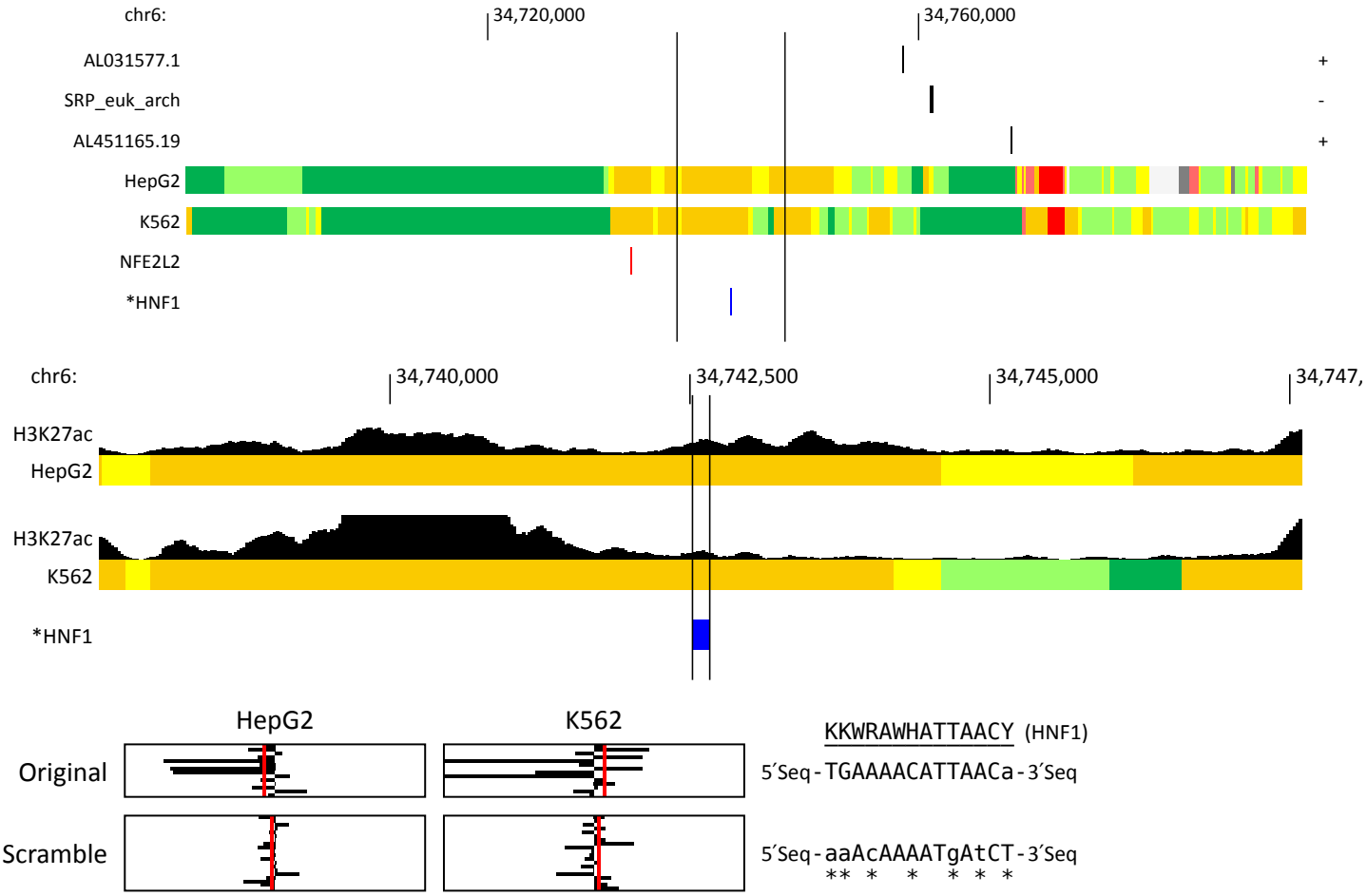
785 HNF1 in K562 enhancer

chr6 34742587 34742600 - (hg18)



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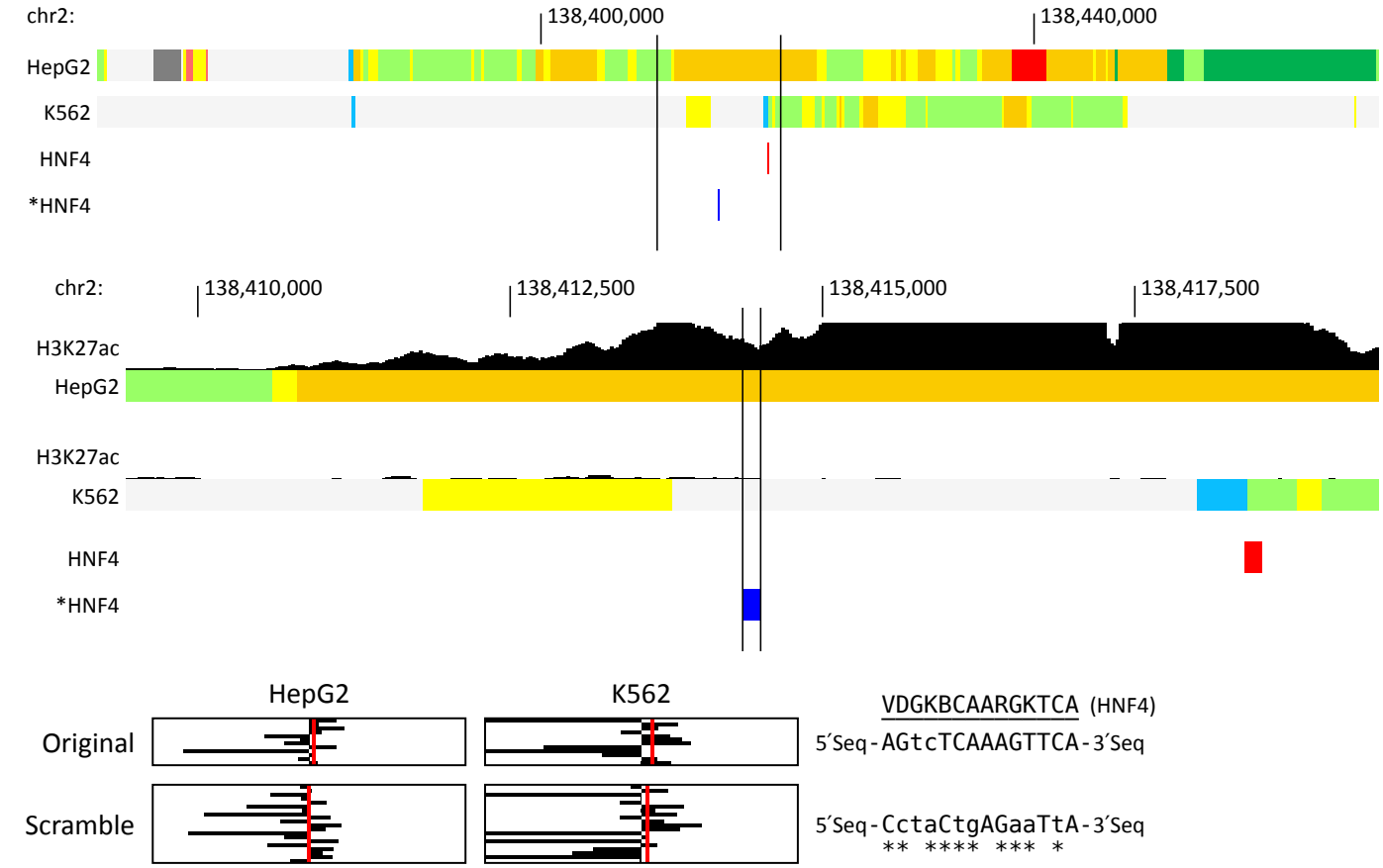
786 HNF4 in HepG2 enhancer

chr2 138414427 138414440 + (hg18)



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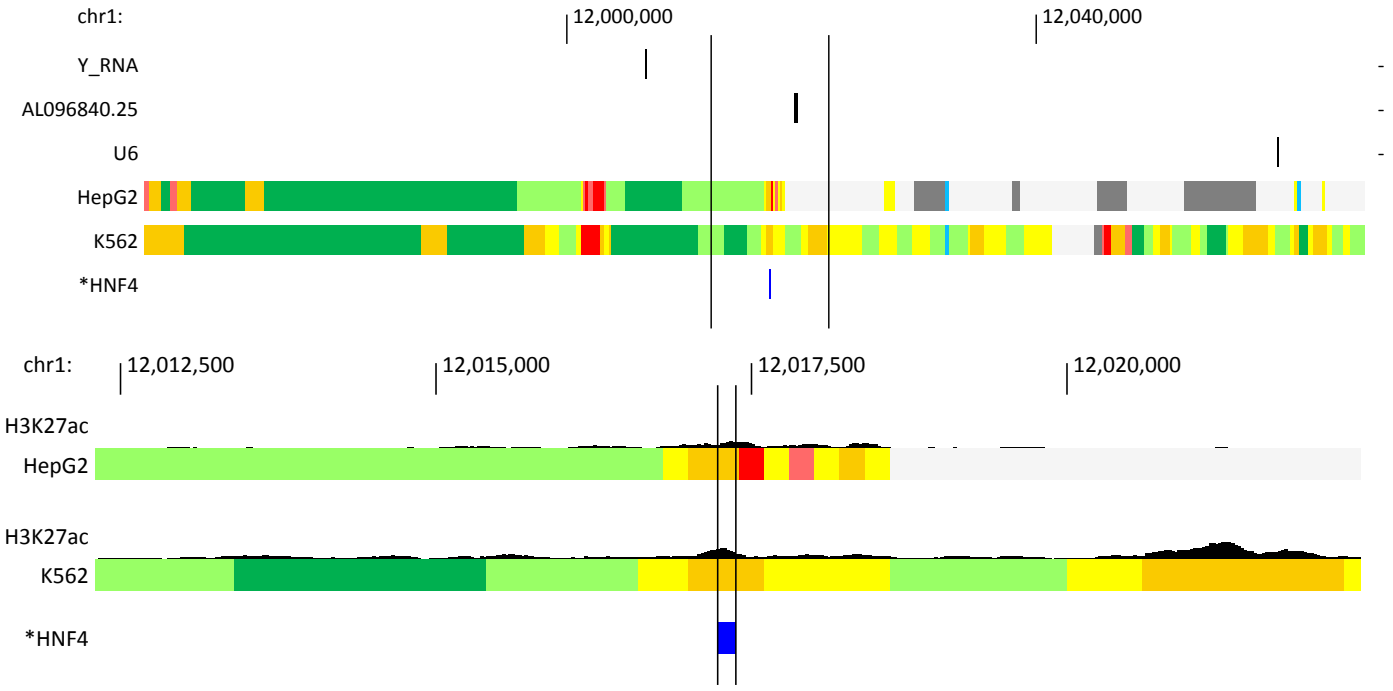
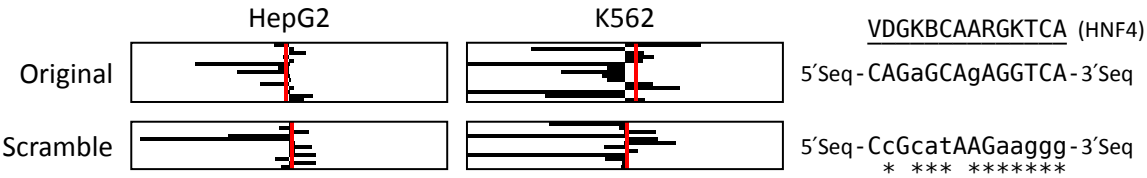
787 HNF4 in HepG2 enhancer

chr1 12017298 12017311 - (hg18)





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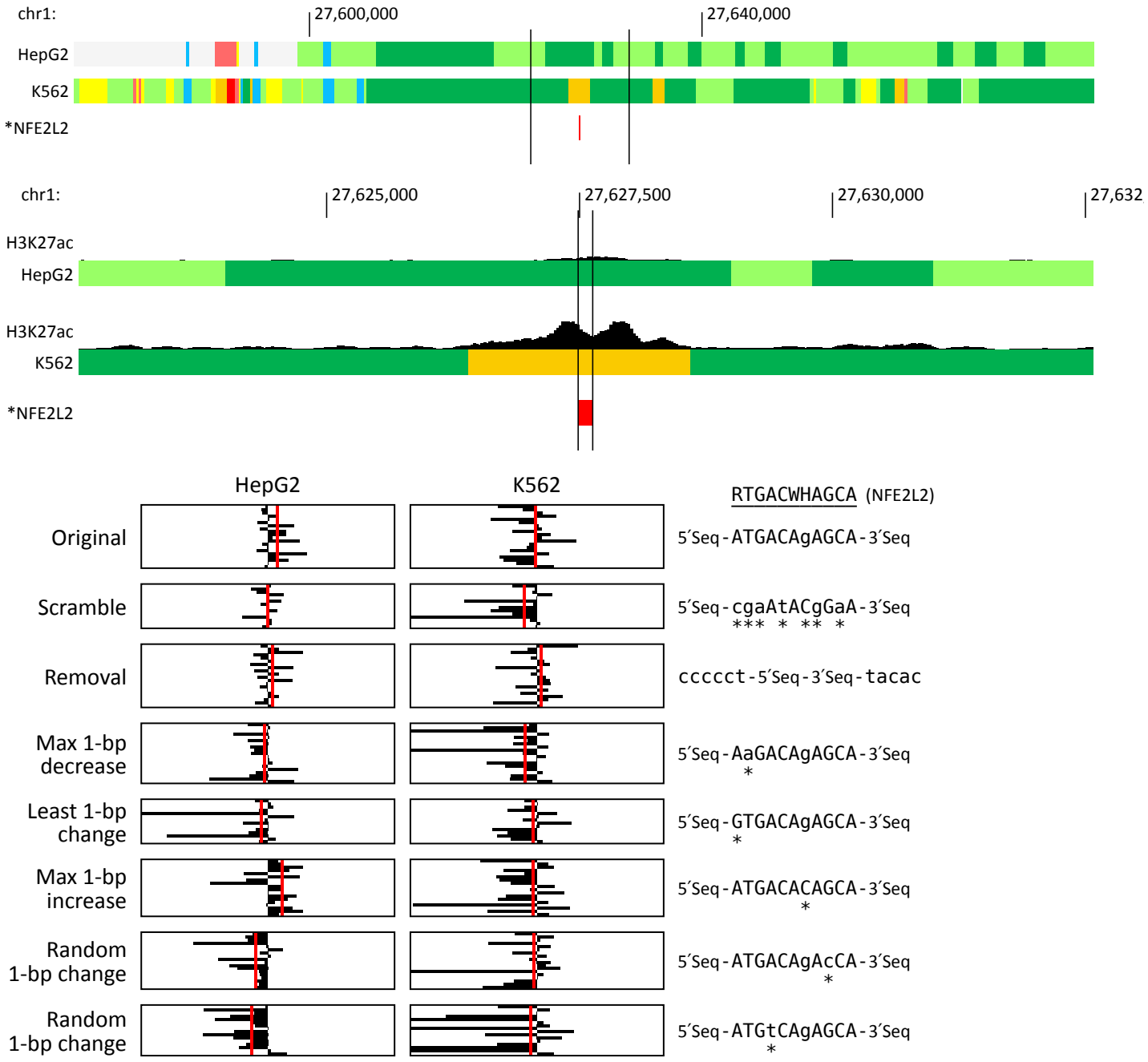
788 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 27627553 27627563 - (hg18)



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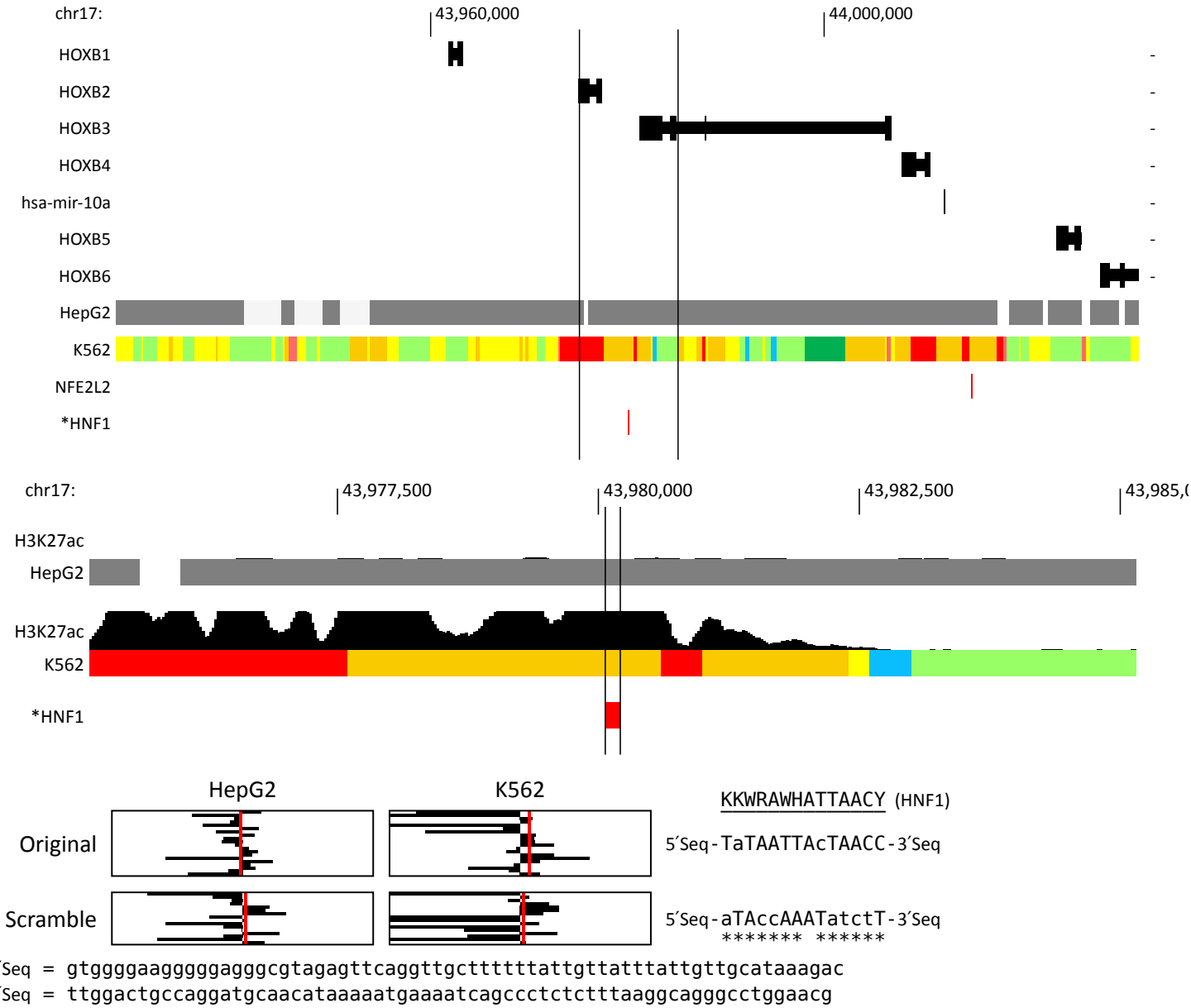
789 HNF1 in K562 enhancer (conserved at 60% confidence)

chr17 43980132 43980145 + (hg18)



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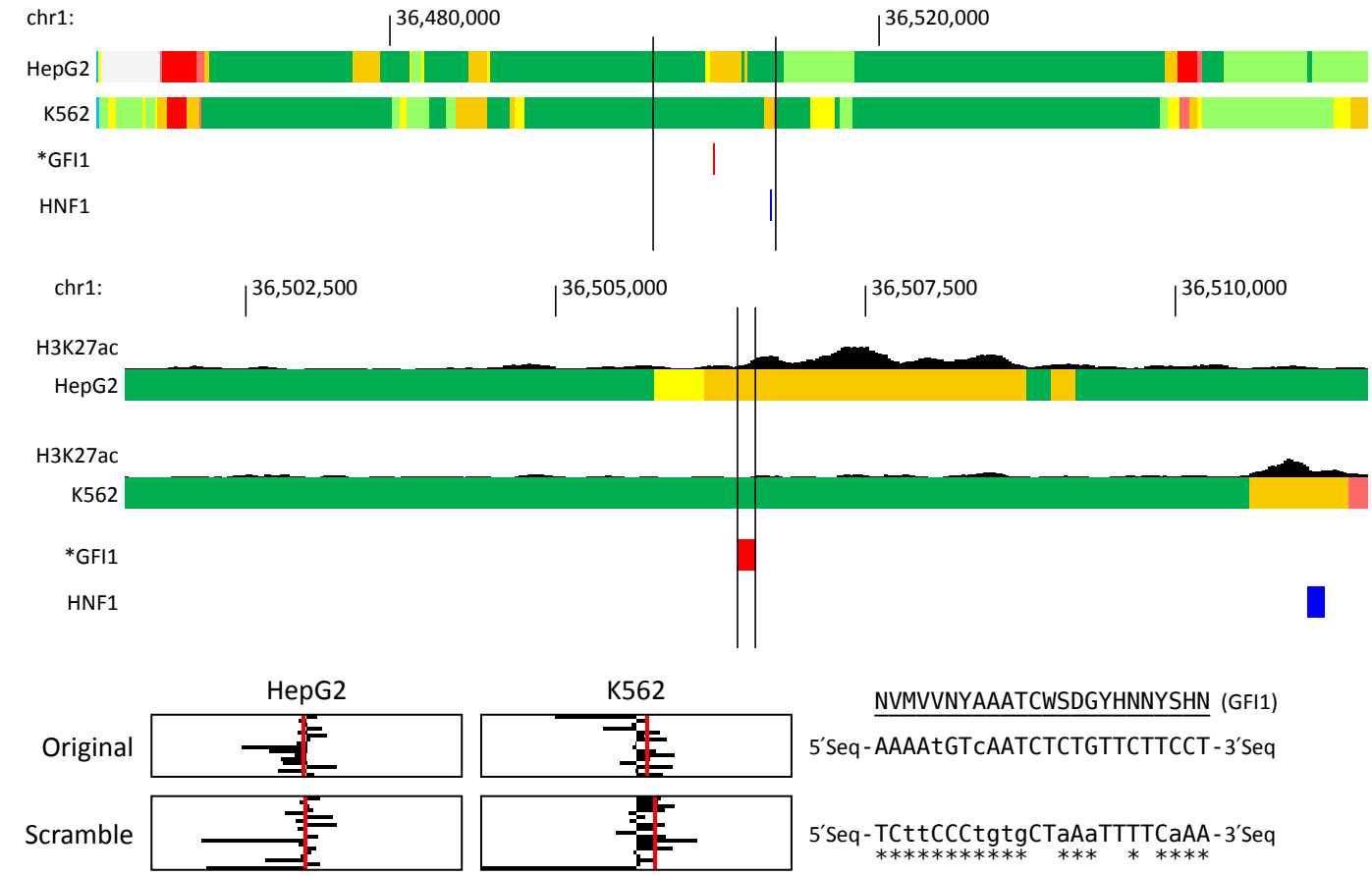
790 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 36506528 36506551 - (hg18)



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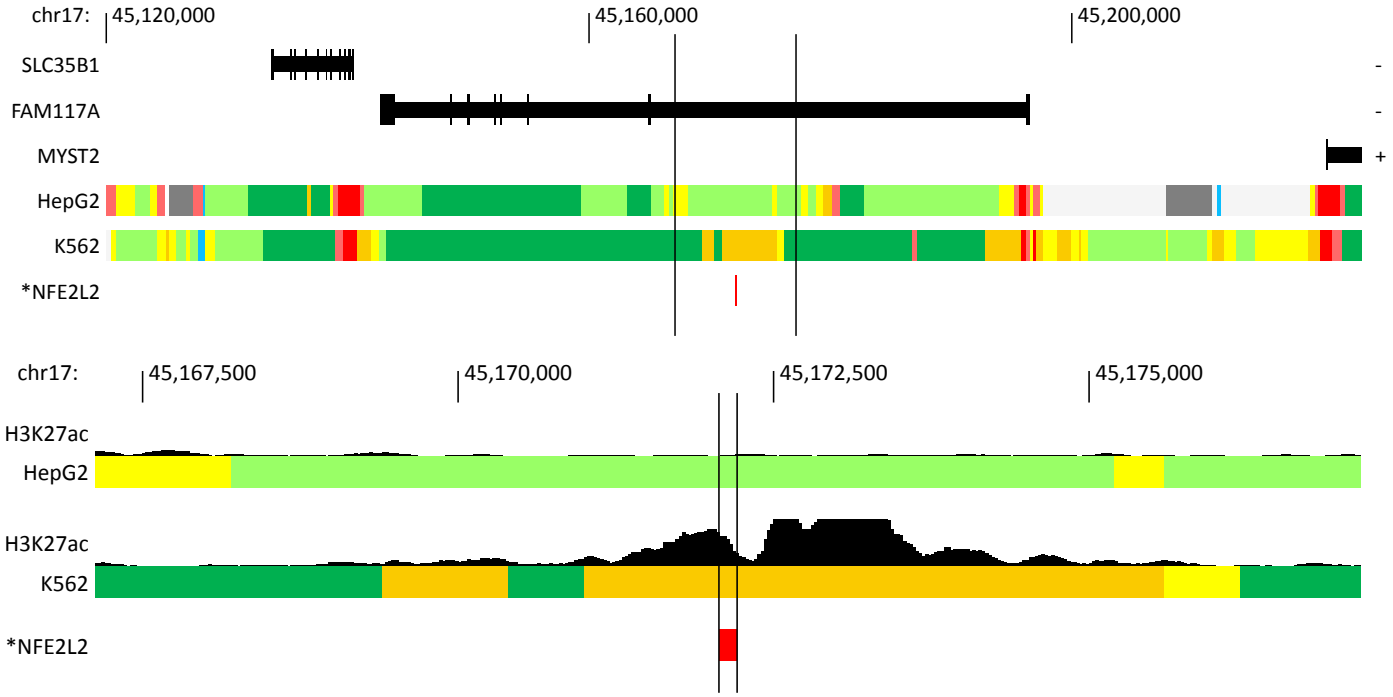
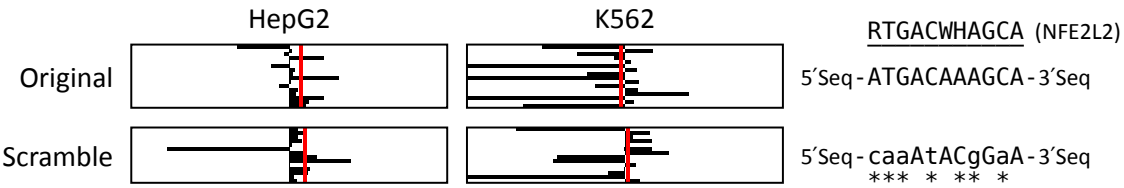
791 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr17 45172134 45172144 + (hg18)





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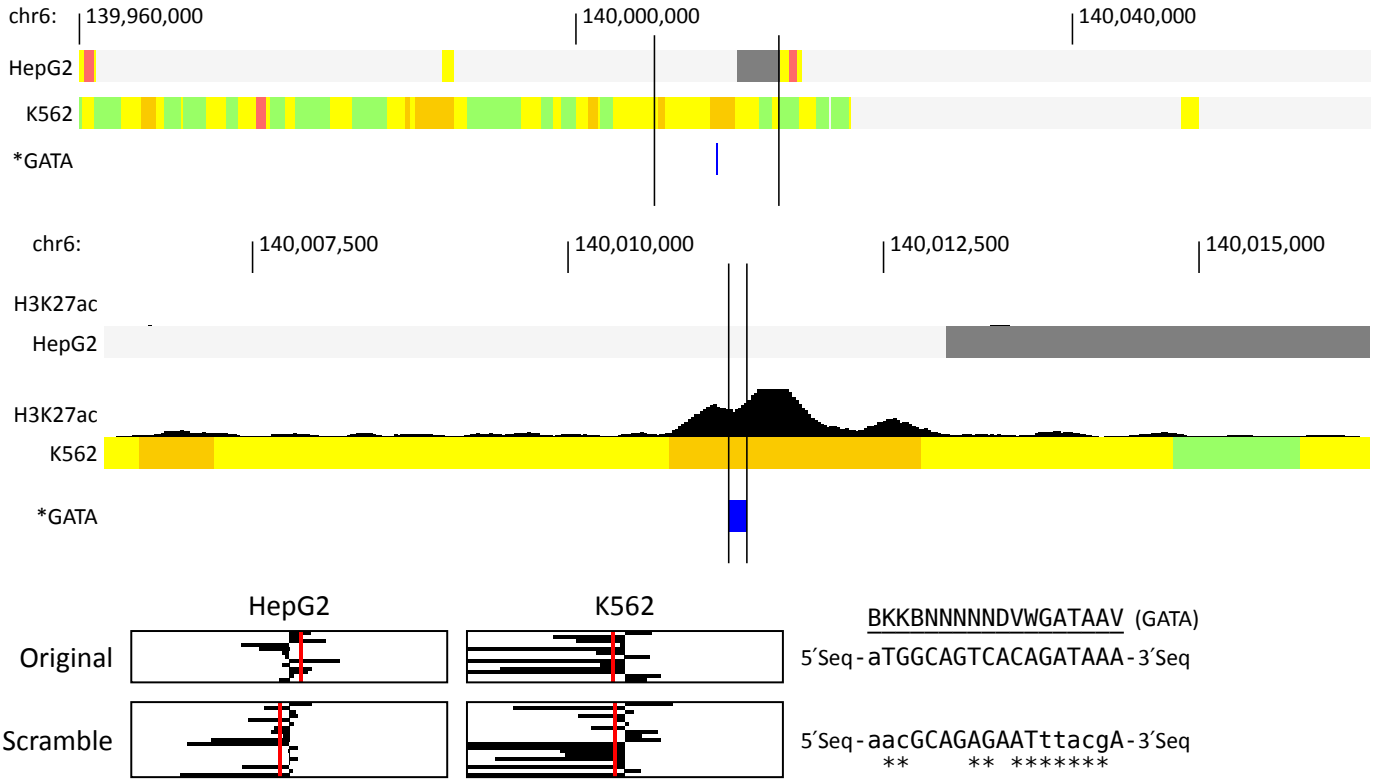
792 GATA in K562 enhancer

chr6 140011337 140011354 + (hg18)



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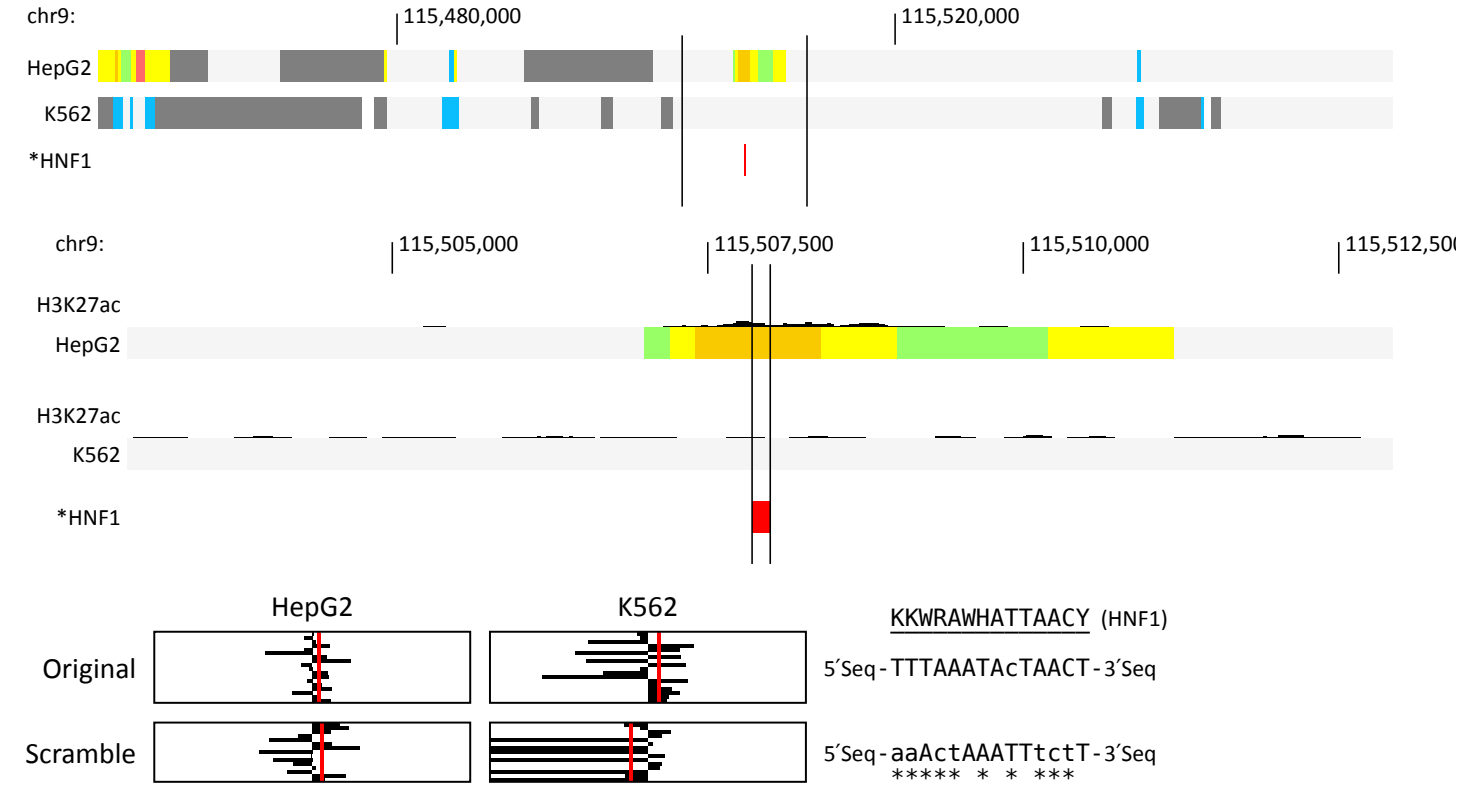
793 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr9 115507917 115507930 + (hg18)



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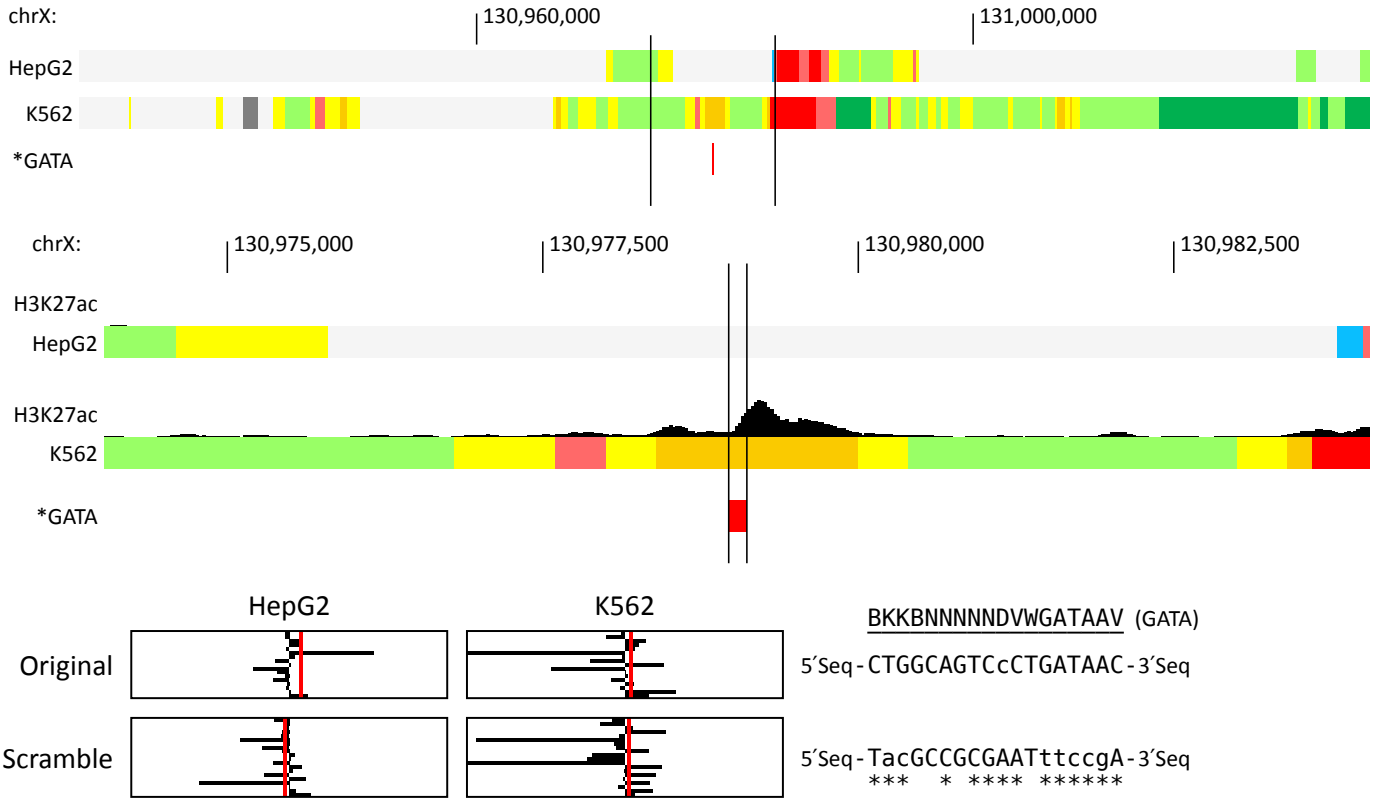
794 GATA in K562 enhancer (conserved at 60% confidence)

chrX 130979037 130979054 + (hg18)



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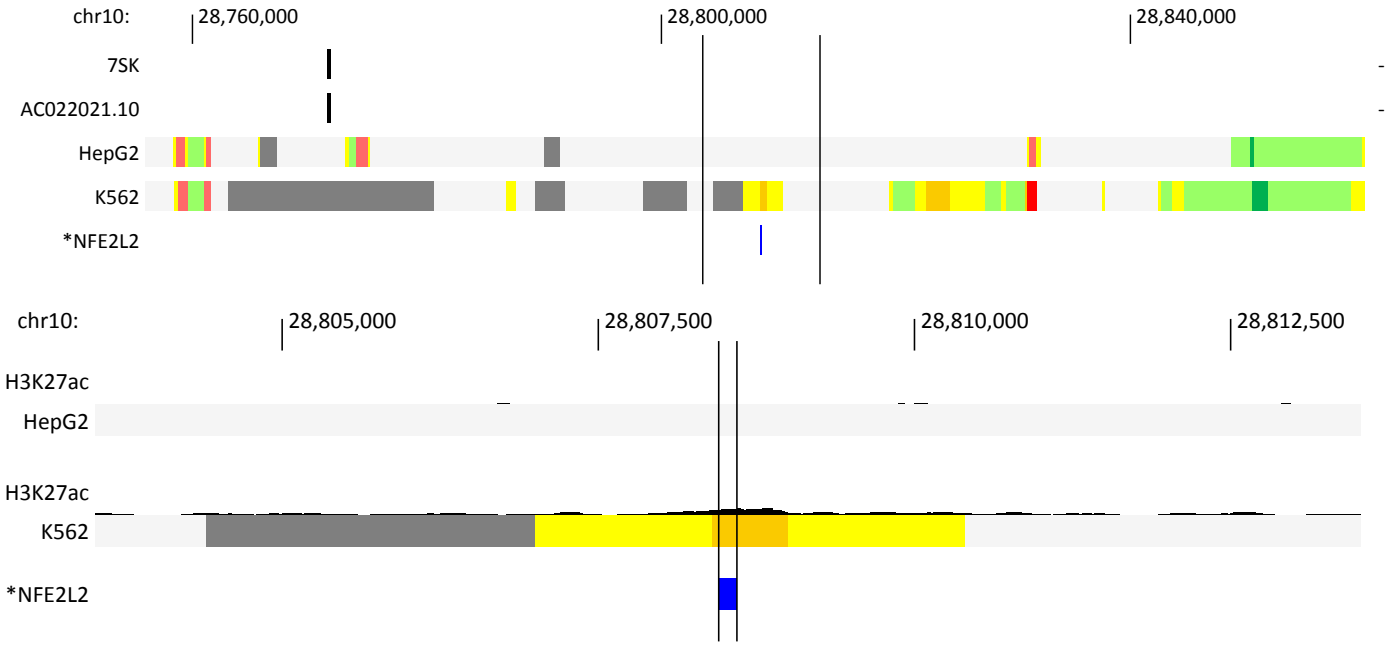
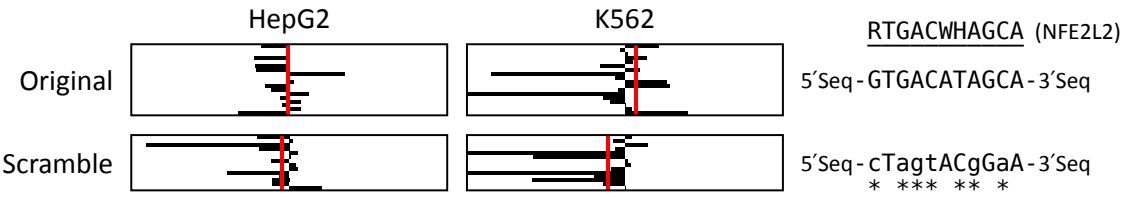
795 NFE2L2 in K562 enhancer

chr10 28808519 28808529 - (hg18)





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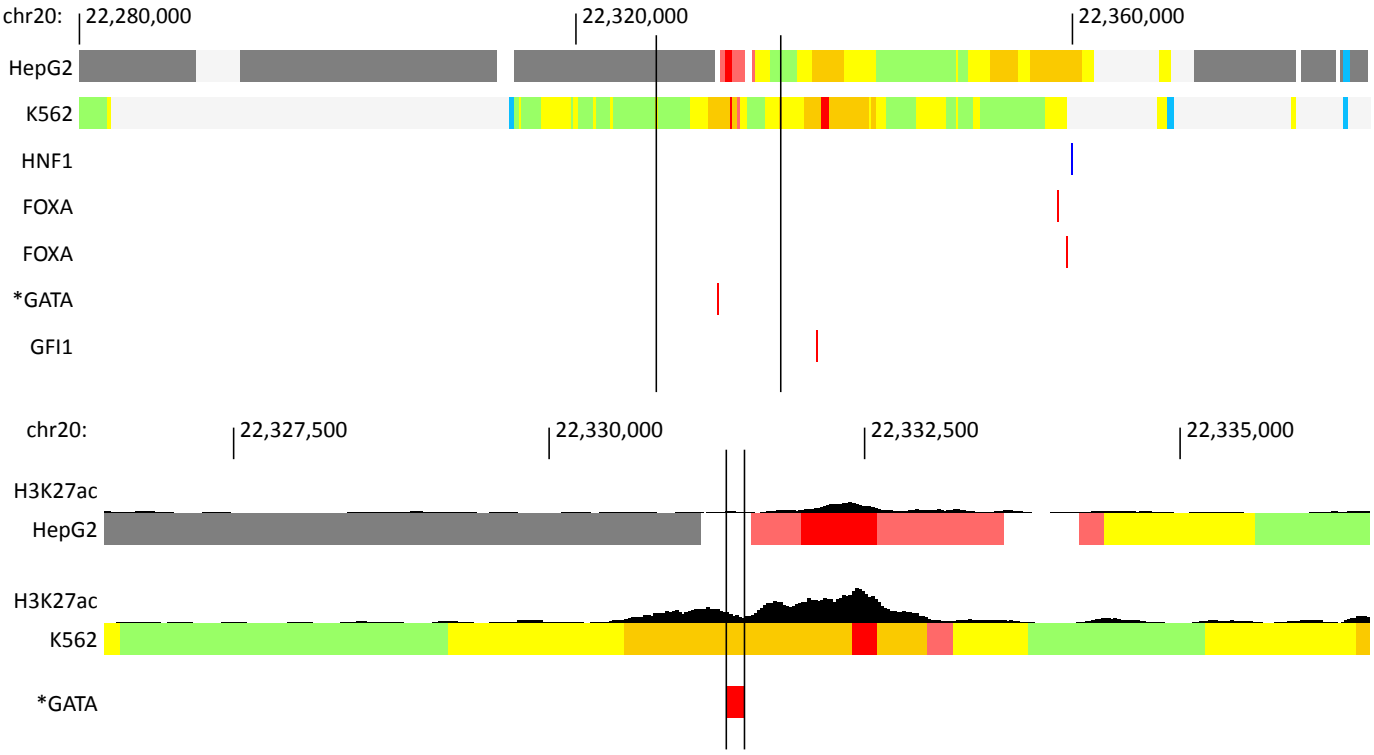
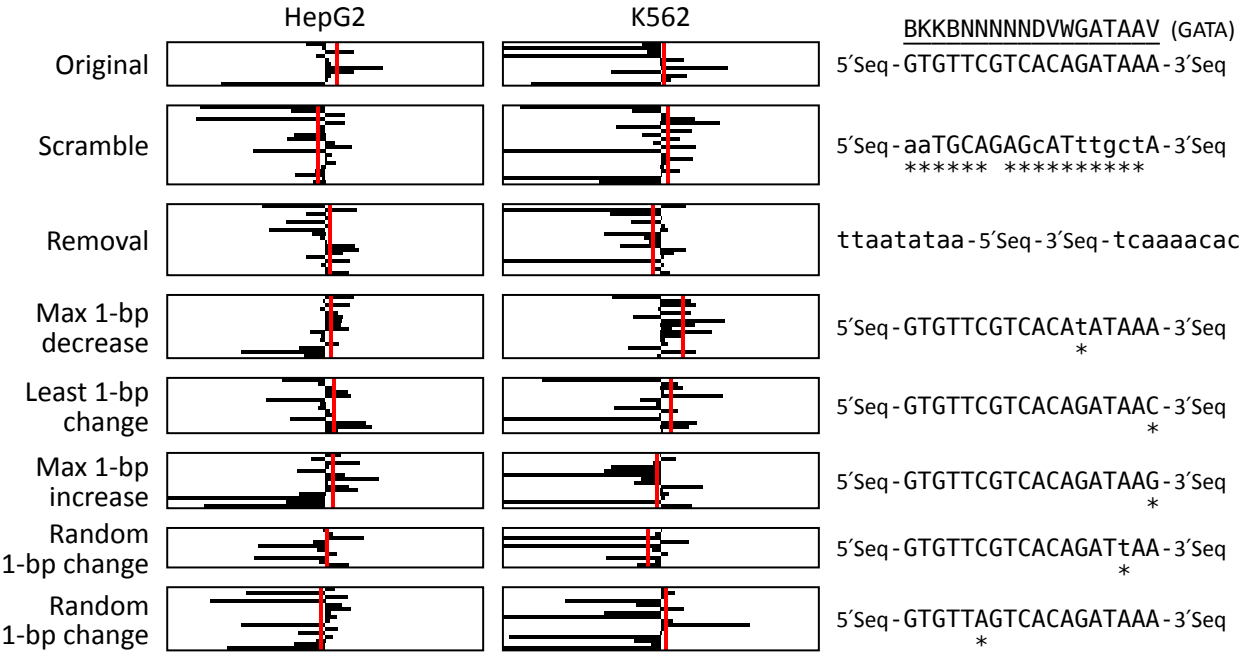
796 GATA in K562 enhancer (conserved at 70% confidence)

chr20 22331468 22331485 - (hg18)





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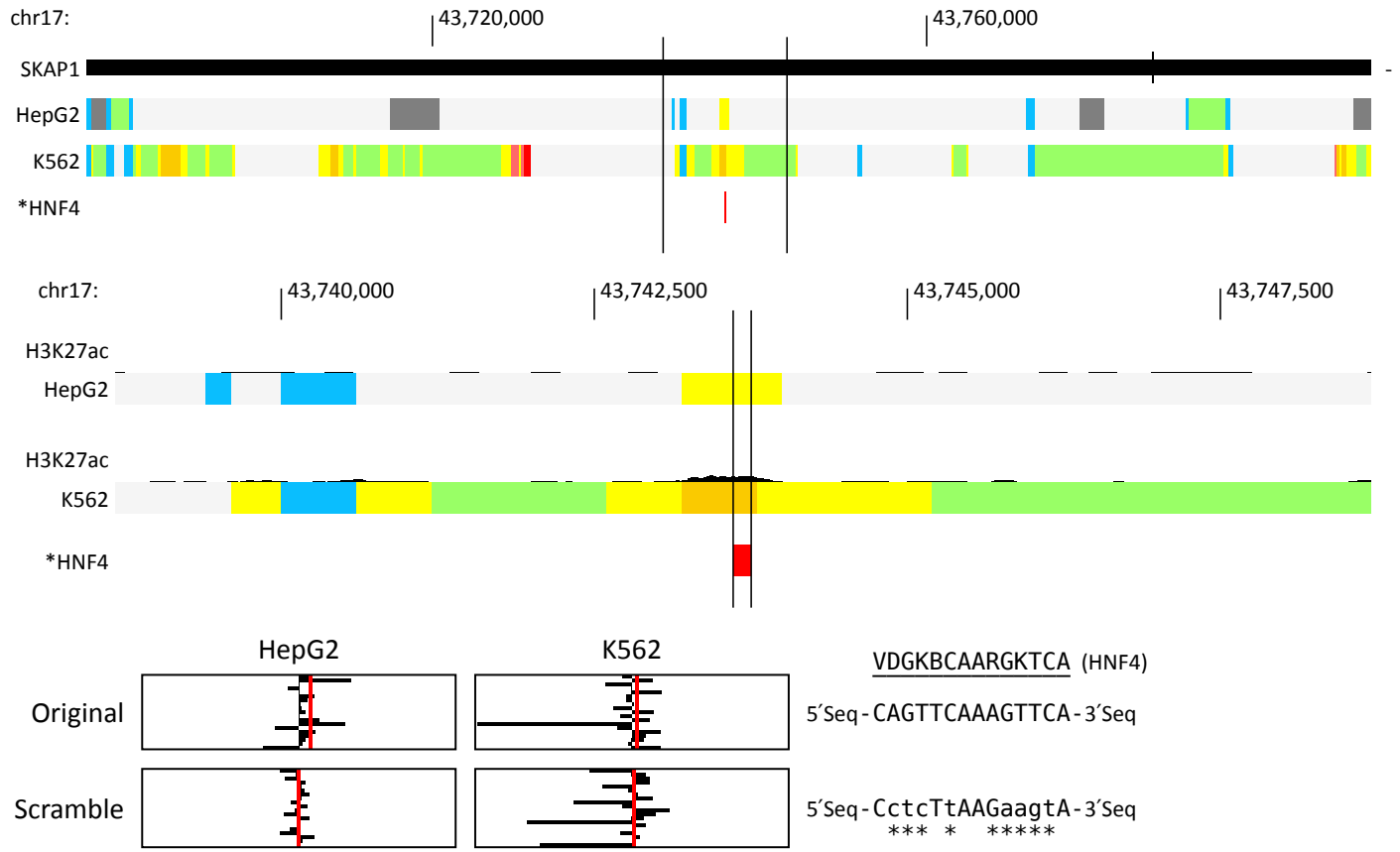
797 HNF4 in K562 enhancer (conserved at 60% confidence)

chr17 43743675 43743688 - (hg18)



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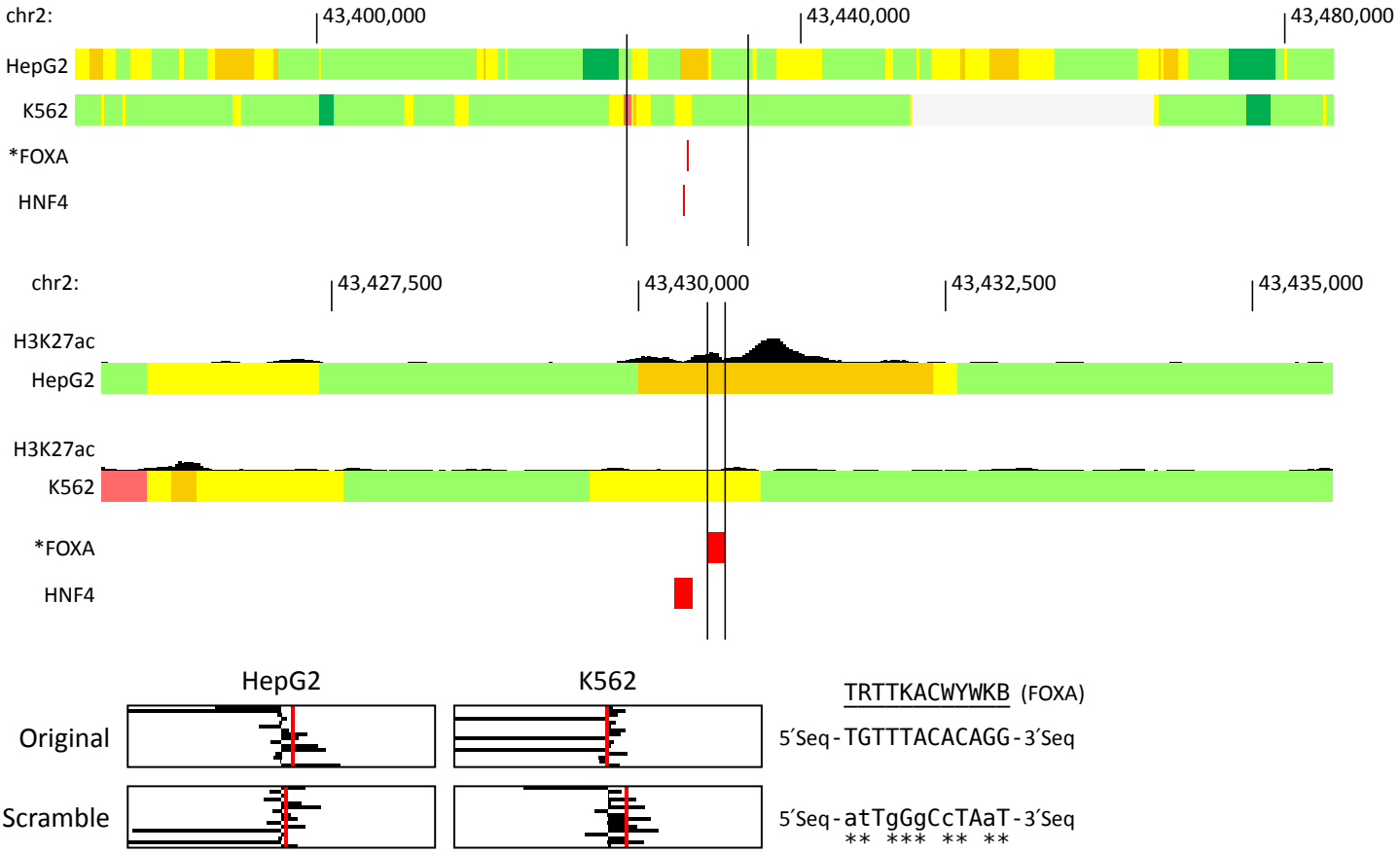
798 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 43430628 43430639 + (hg18)



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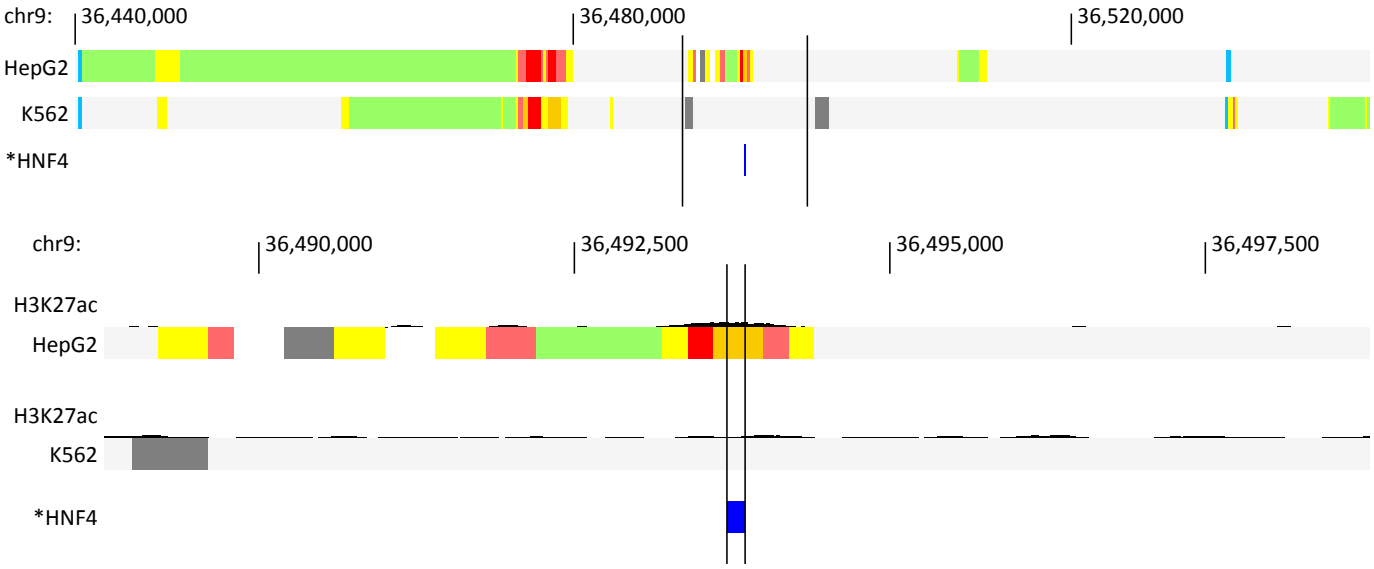
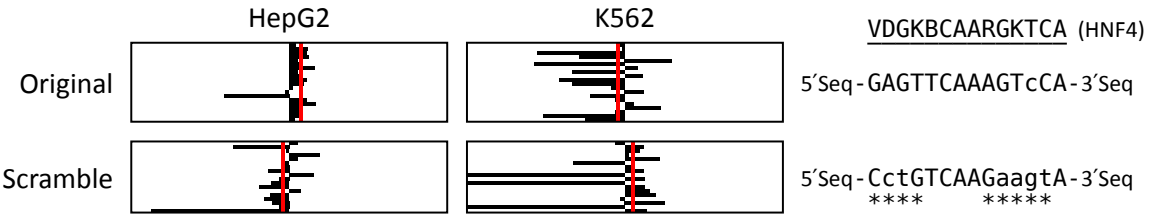
799 HNF4 in HepG2 enhancer

chr9 36493775 36493788 - (hg18)





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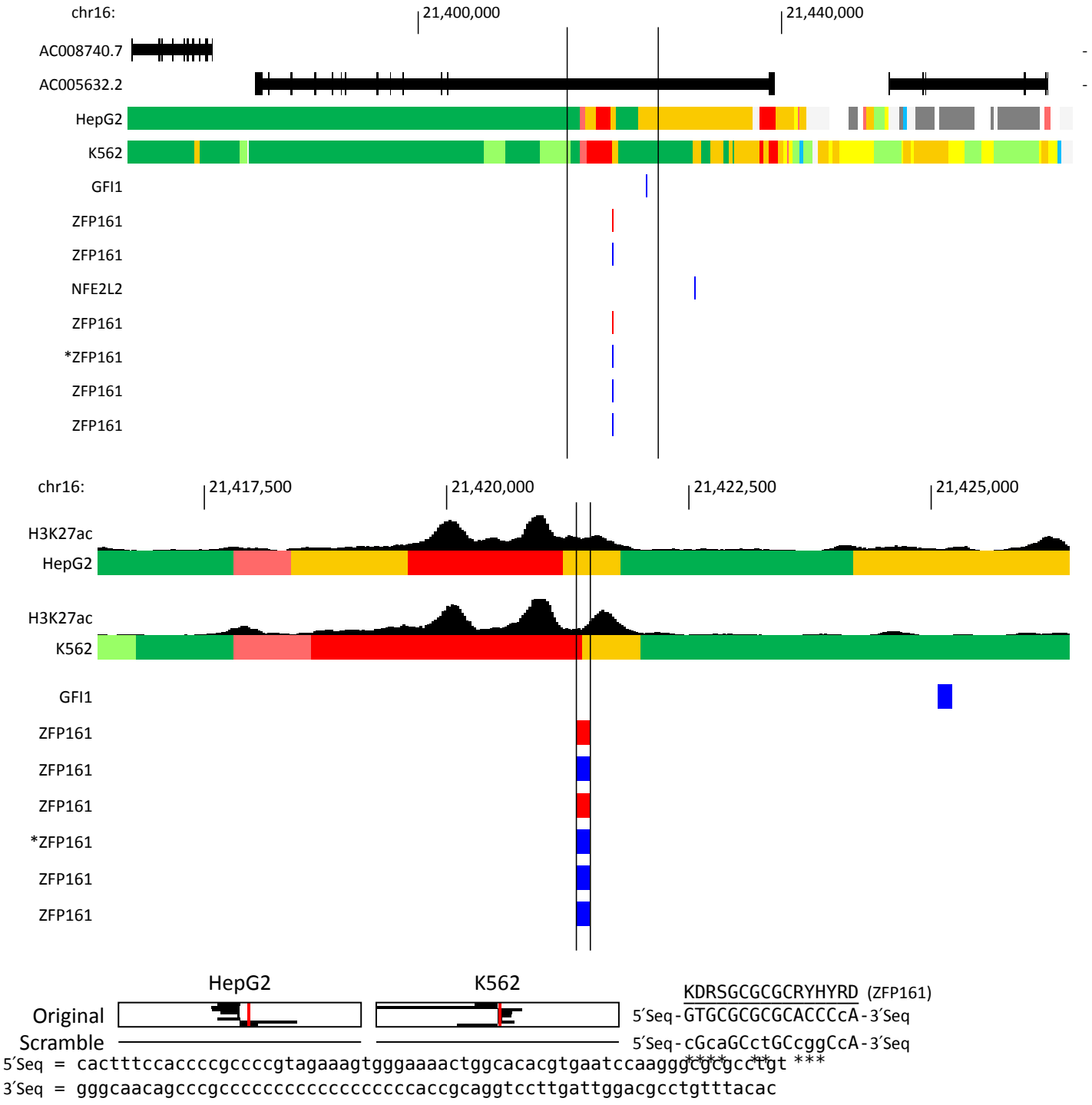
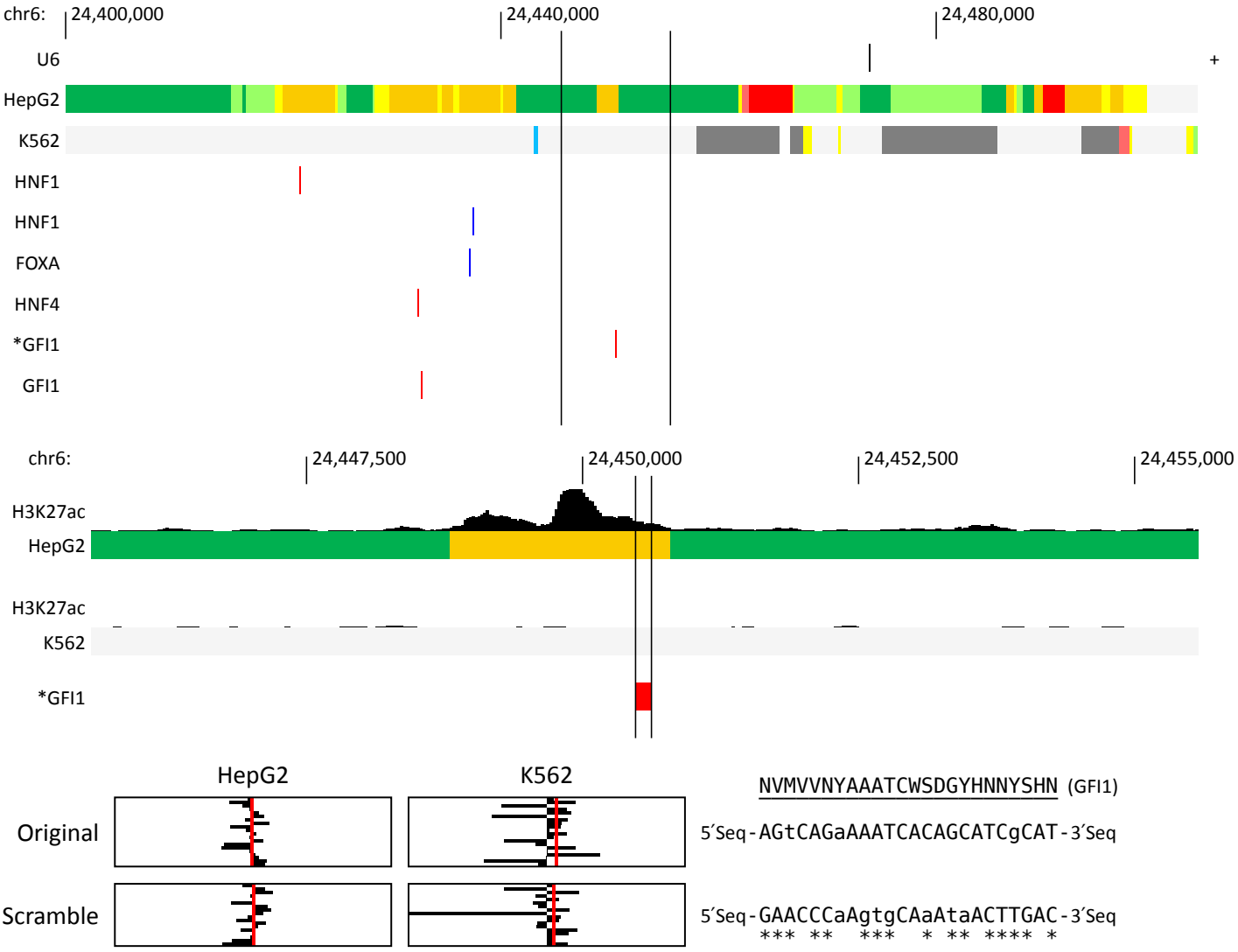
800 ZFP161 in K562 enhancer

chr16 21421404 21421419 - (hg18)



801 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 24450541 24450564 + (hg18)



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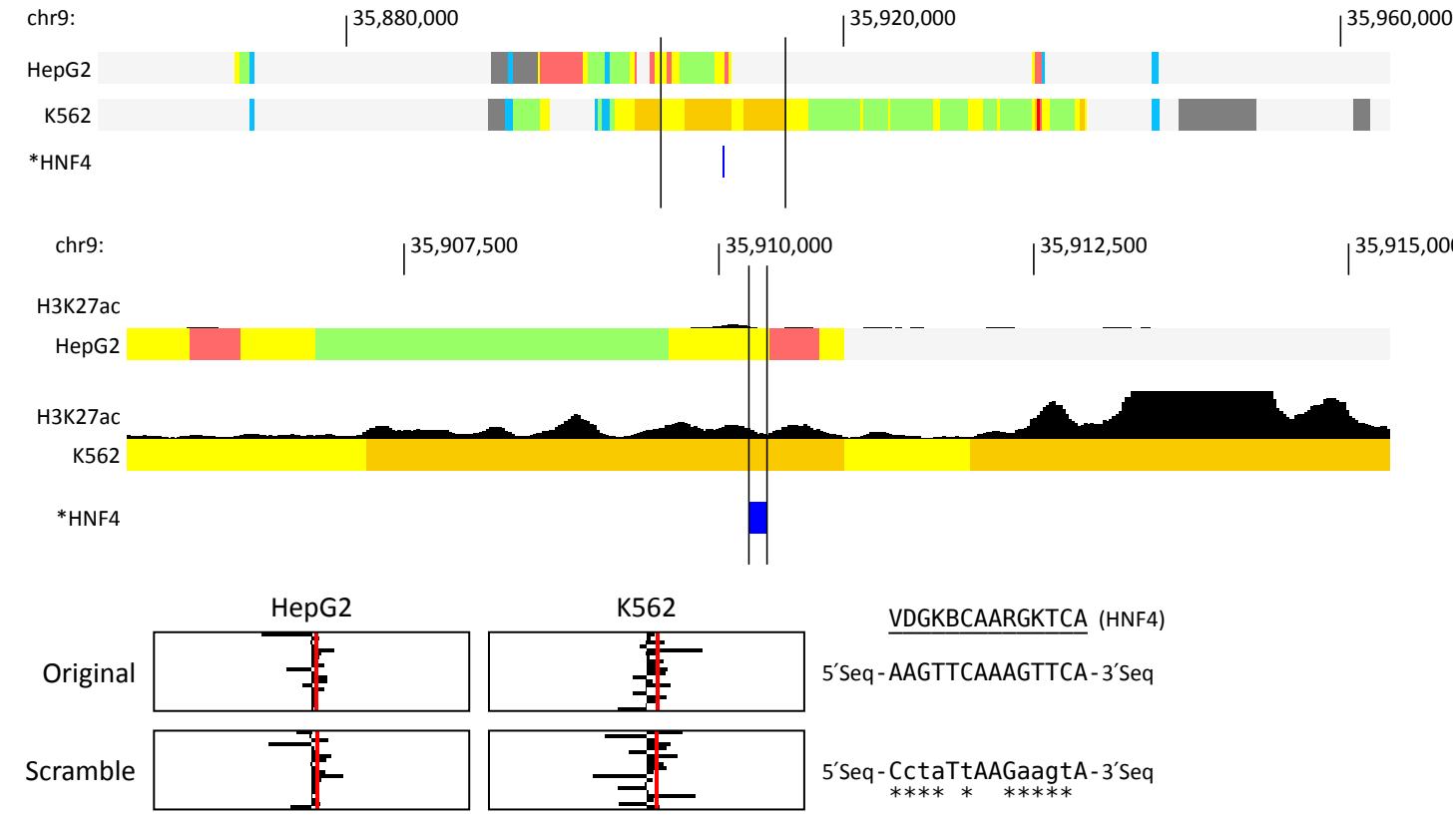
802 HNF4 in K562 enhancer

chr9 35910304 35910317 - (hg18)



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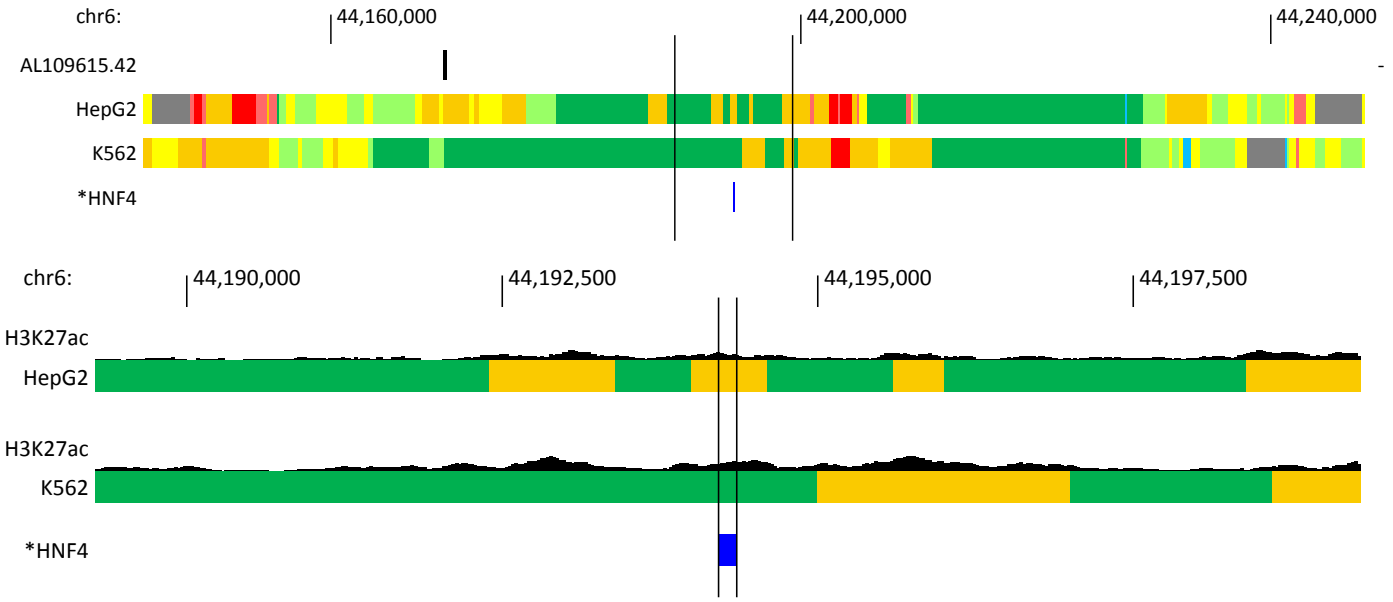
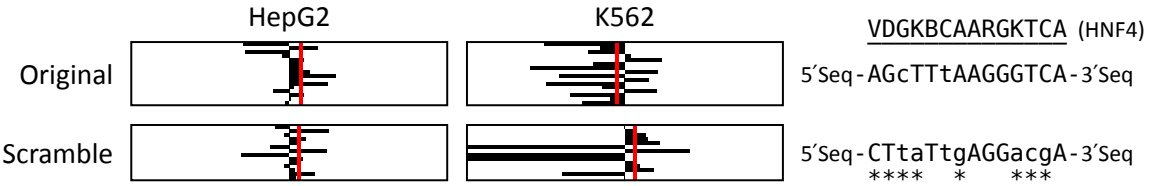
803 HNF4 in HepG2 enhancer

chr6 44194280 44194293 + (hg18)





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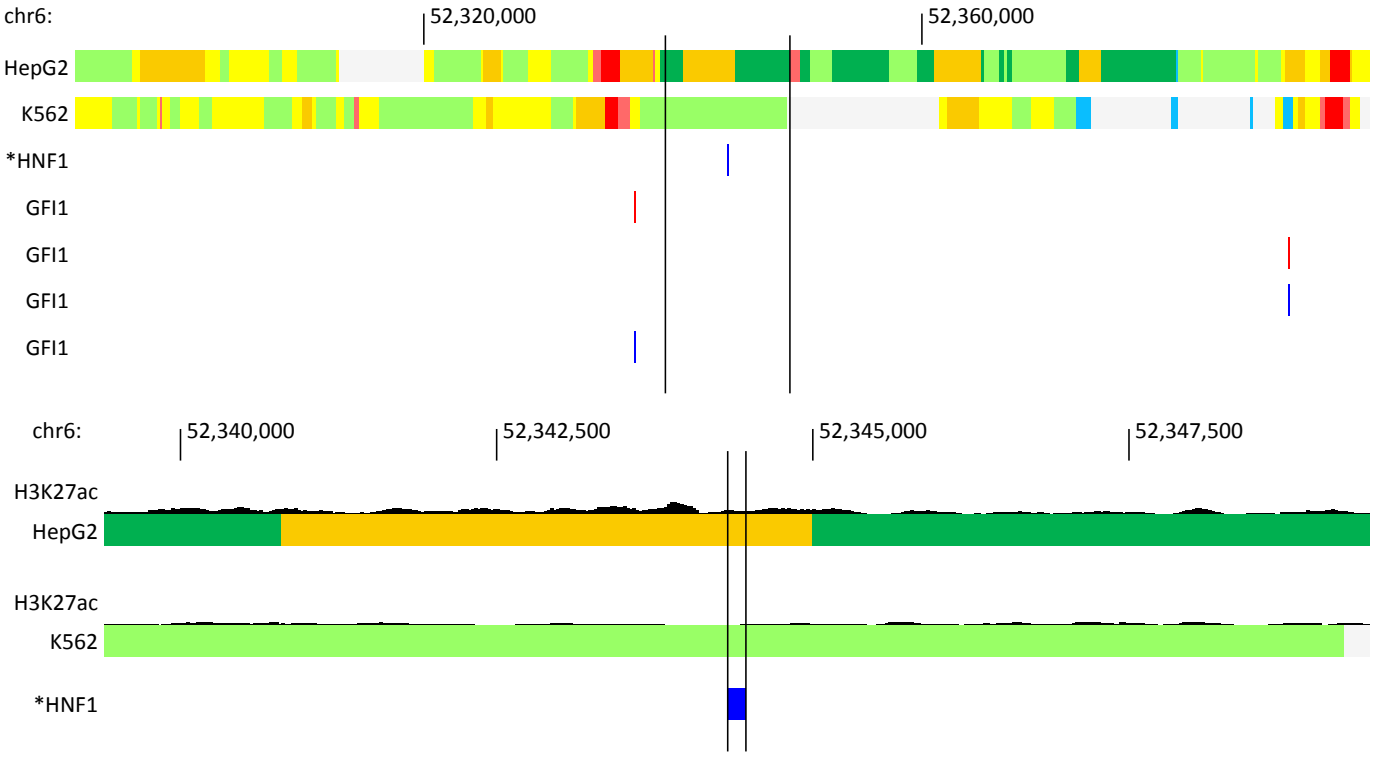
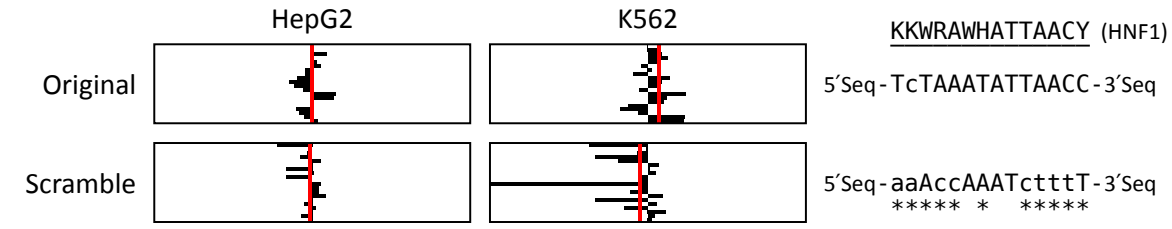
804 HNF1 in HepG2 enhancer

chr6 52344393 52344406 + (hg18)





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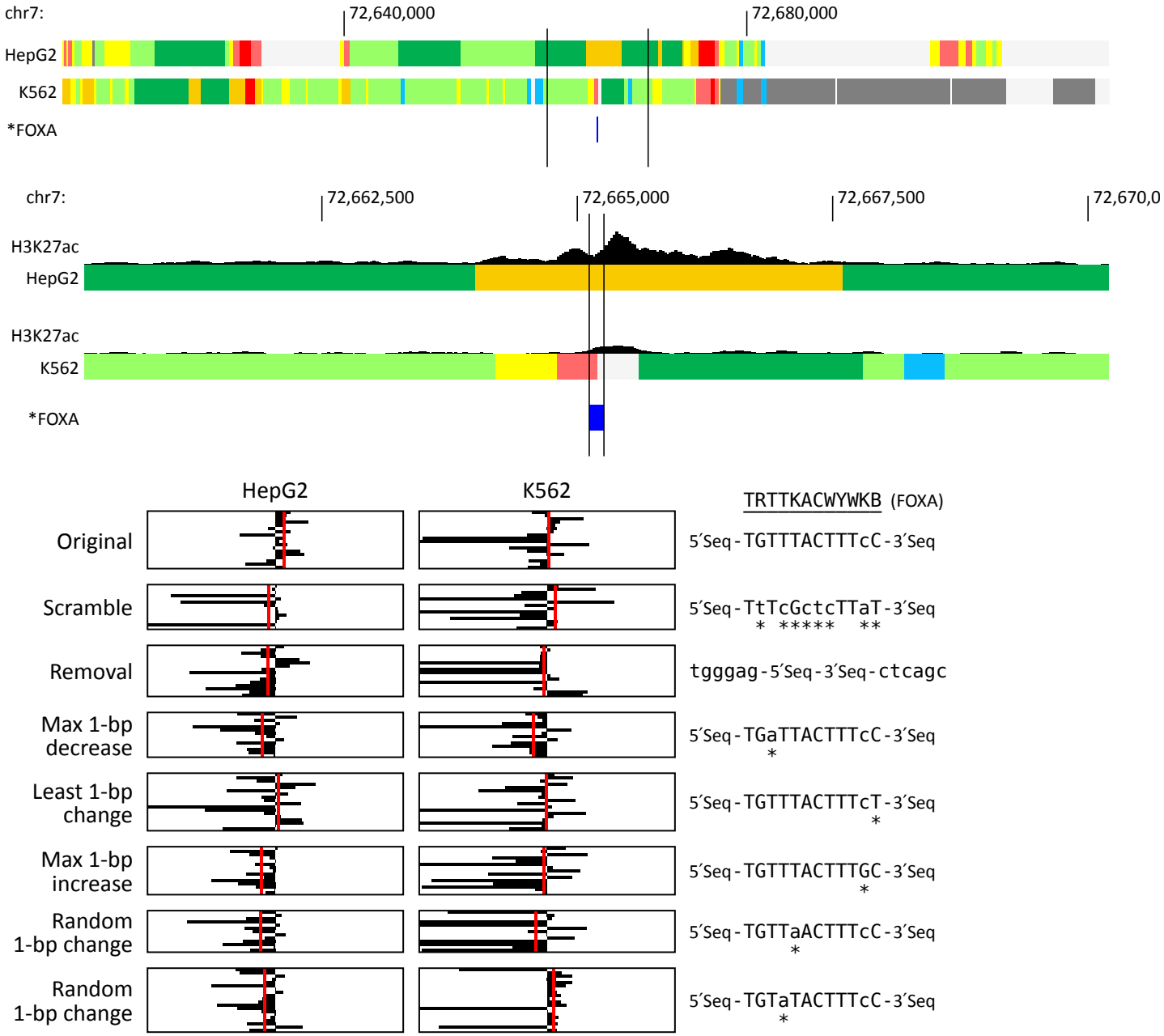
805 FOXA in HepG2 enhancer

chr7 72665184 72665195 - (hg18)



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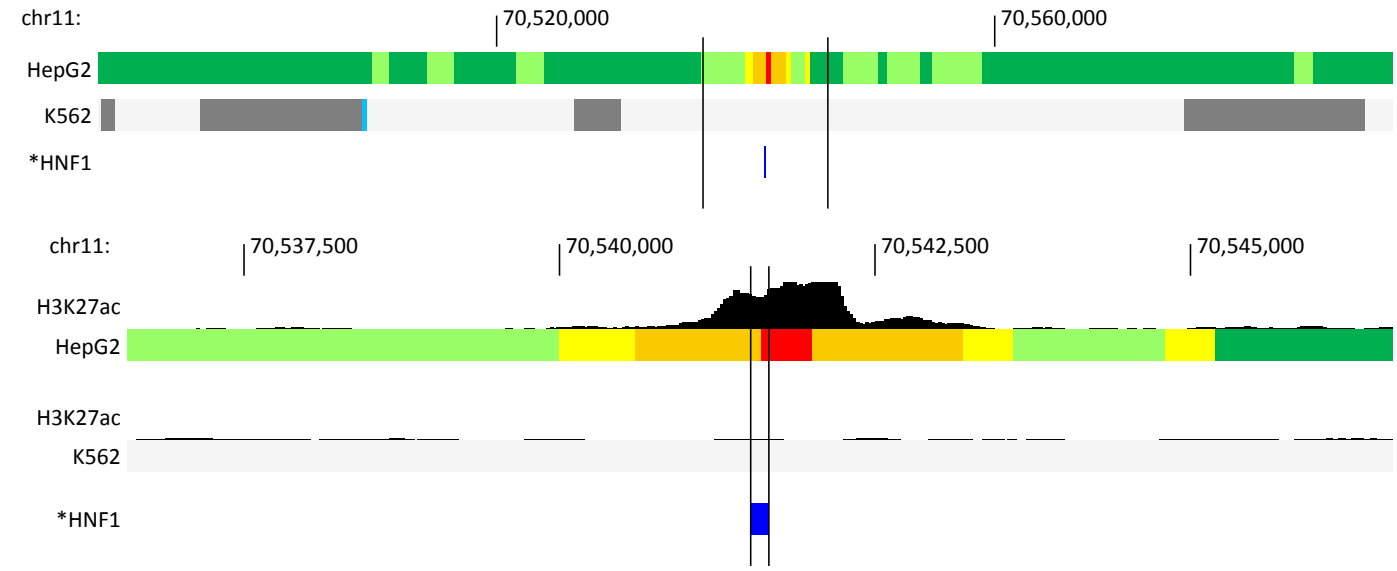
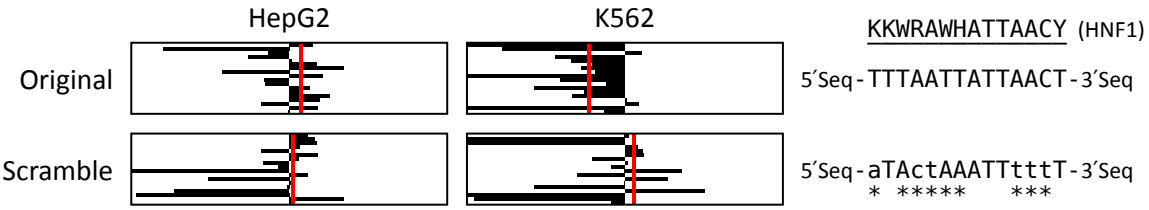
806 HNF1 in HepG2 enhancer

chr11 70541581 70541594 + (hg18)





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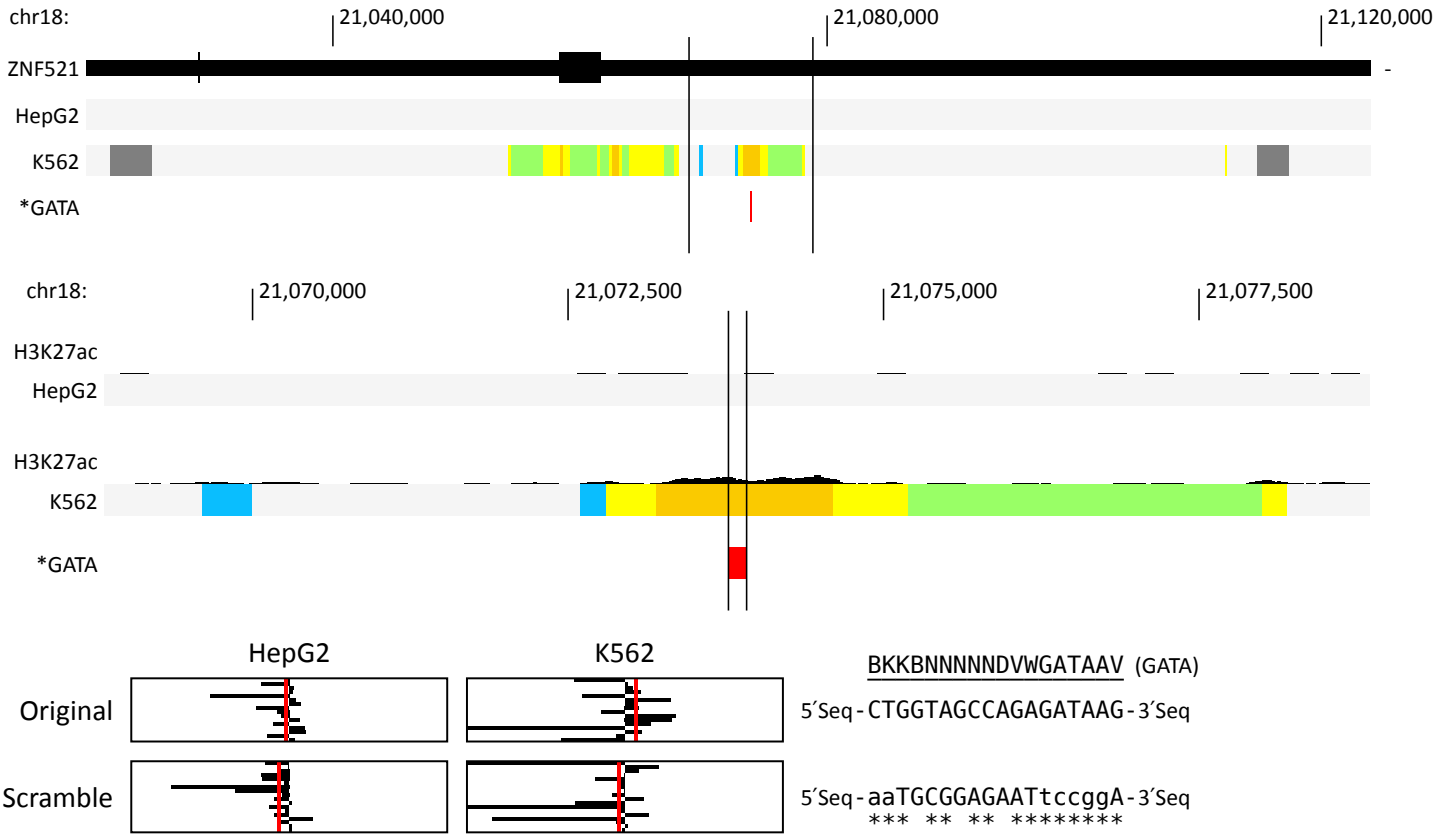
807 GATA in K562 enhancer (conserved at 70% confidence)

chr18 21073835 21073852 - (hg18)



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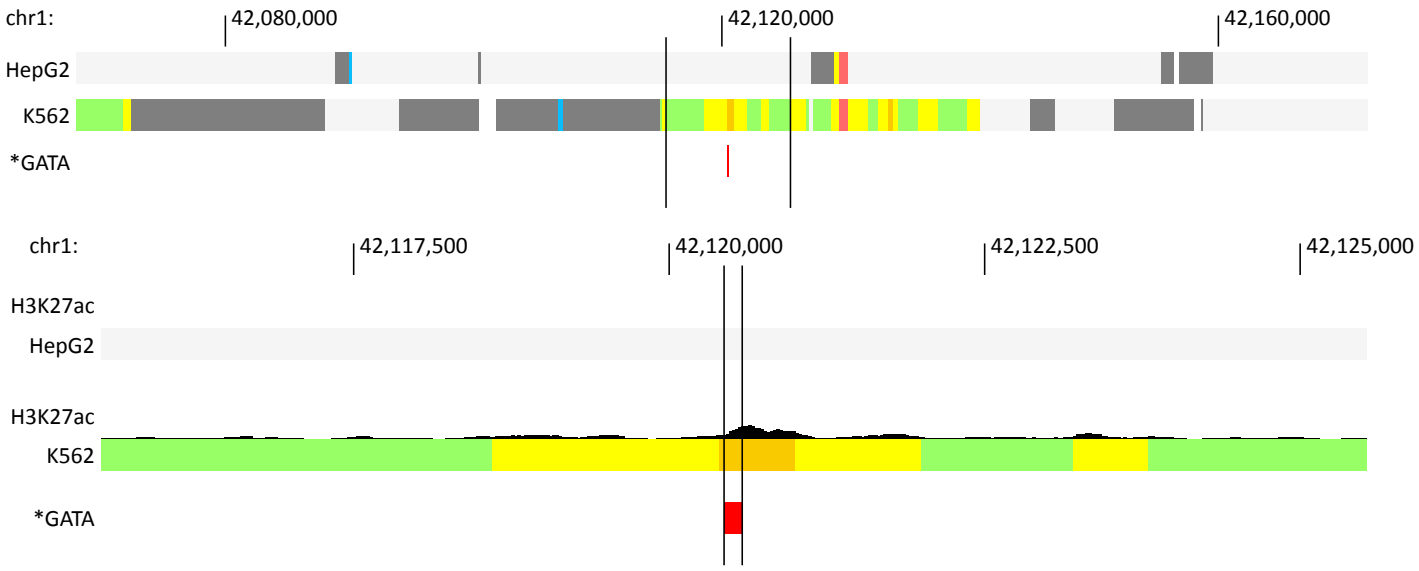
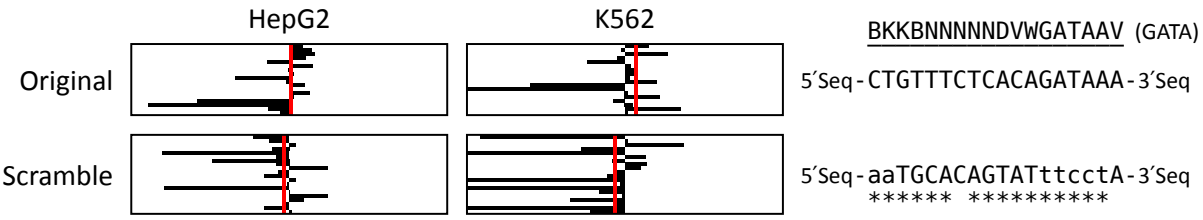
808 GATA in K562 enhancer (conserved at 60% confidence)

chr1 42120499 42120516 + (hg18)





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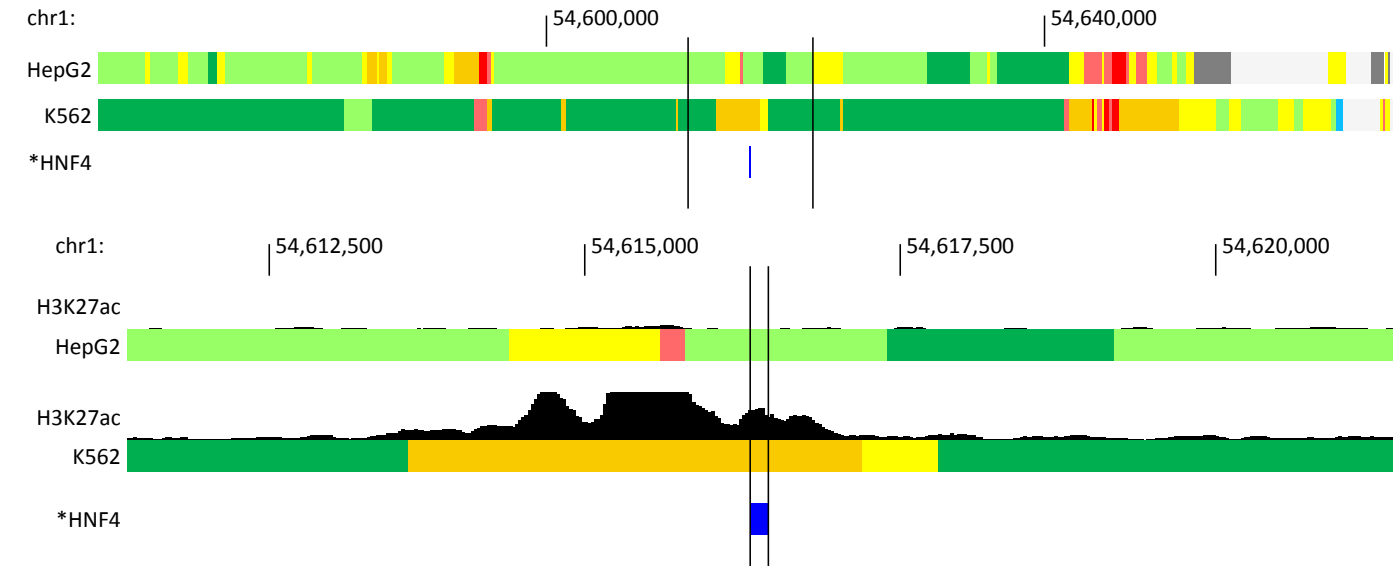
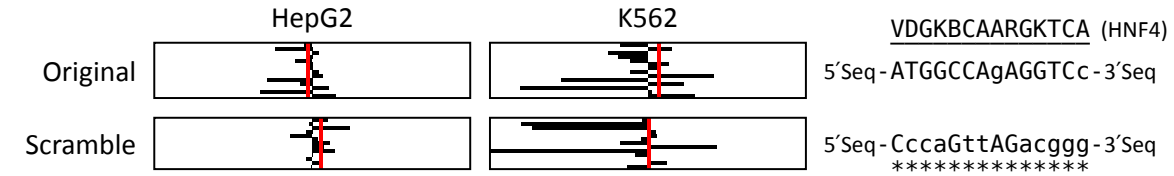
809 HNF4 in K562 enhancer

chr1 54616377 54616390 - (hg18)





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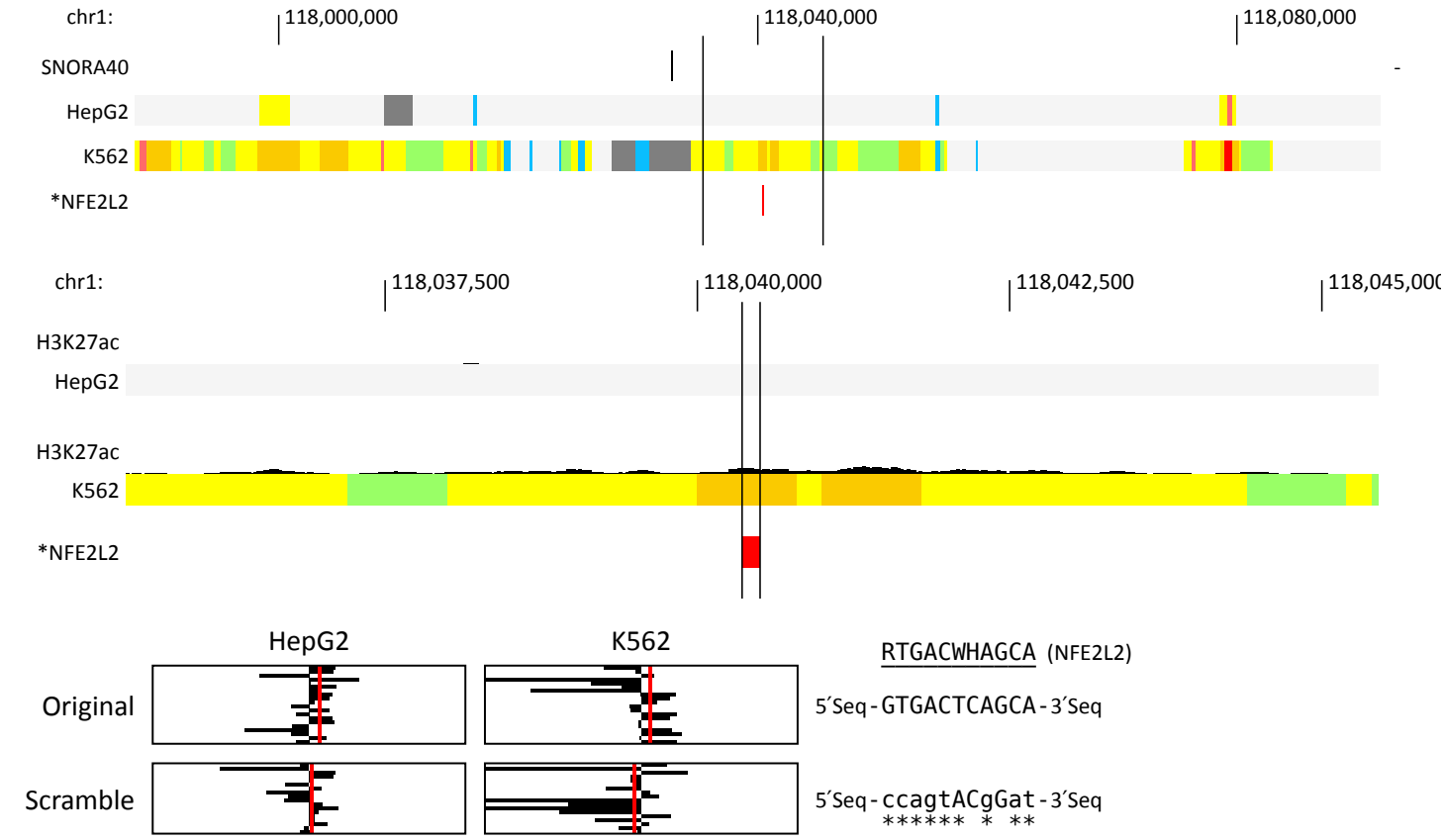
810 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 118040425 118040435 - (hg18)



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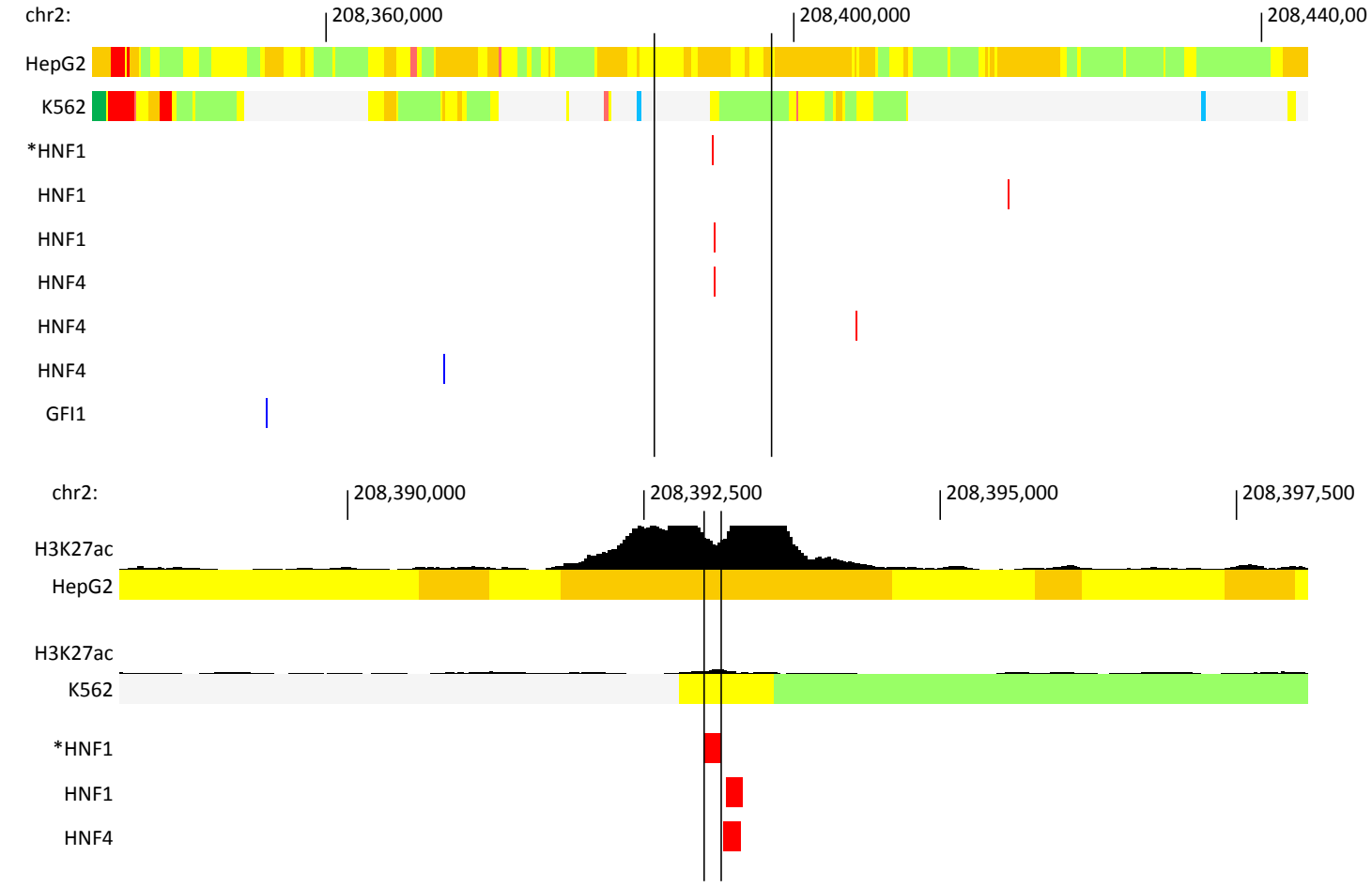
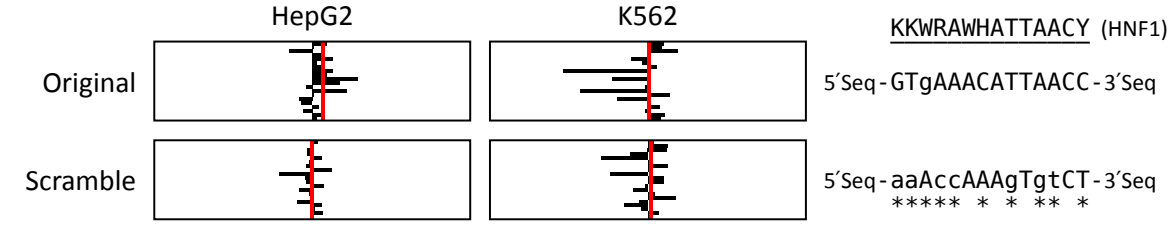
811 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr2 208393074 208393087 + (hg18)





KKWRAWHATTAACY (HNF1)

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5′Seq-aaAccAAAgTgtCT-3′Seq

***** * * ** *

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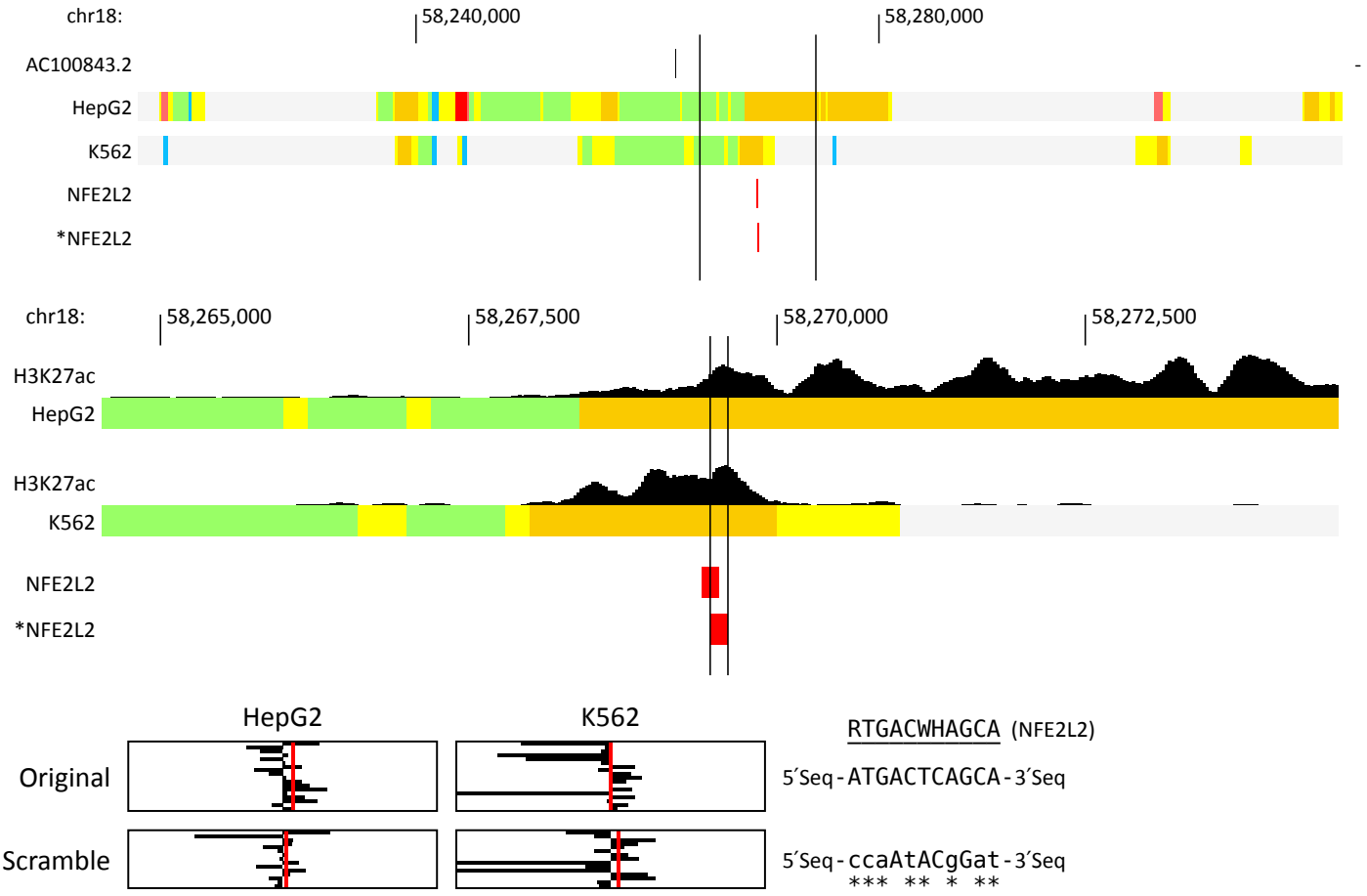
3′Seq = cgtttctctttatcgtggattgtggcaggtttcgtgtgacgacgaagtccagttatttcttggac

812 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr18 58269525 58269535 - (hg18)



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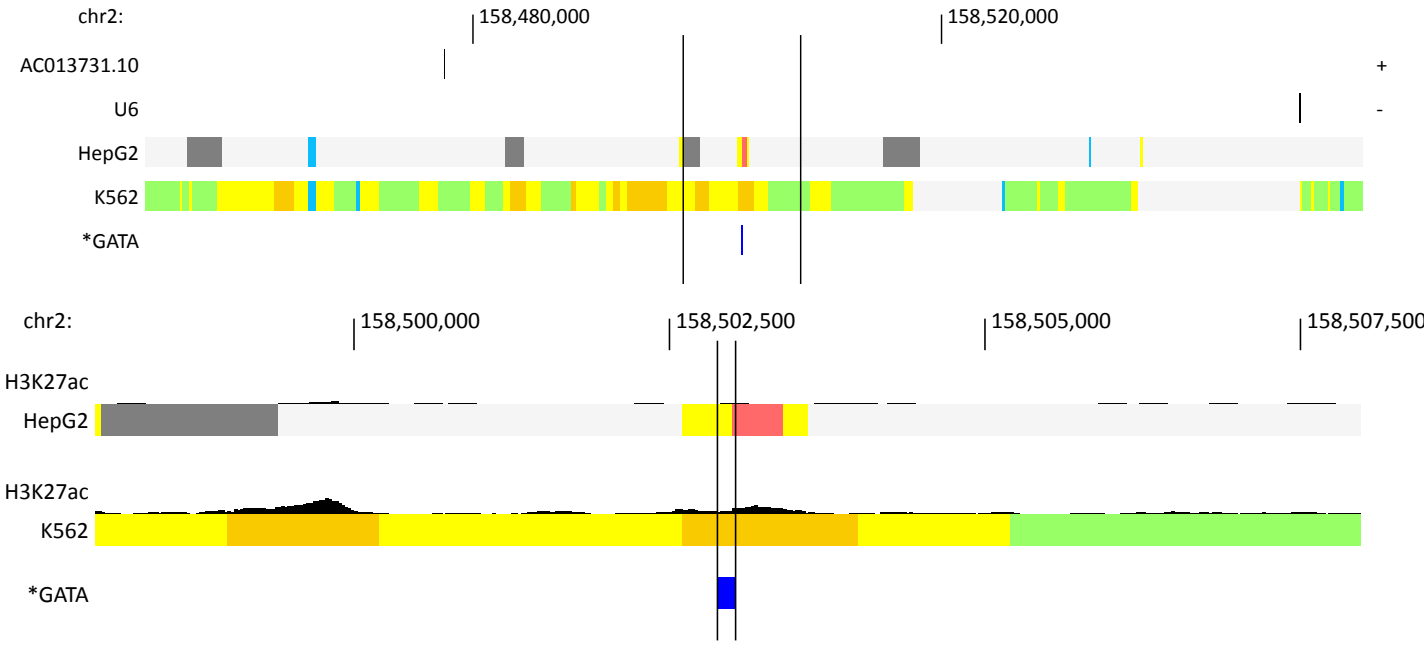
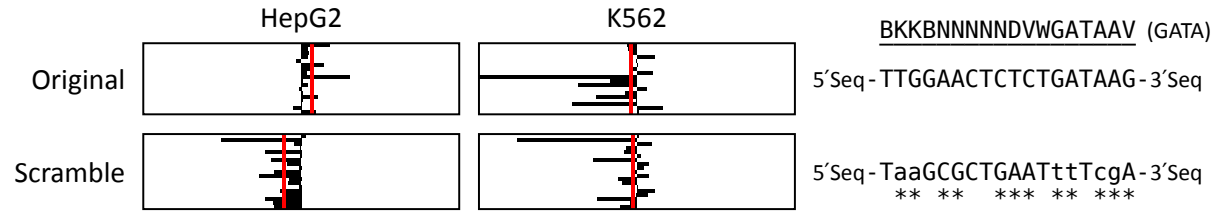
813 GATA in K562 enhancer

chr2 158502944 158502961 - (hg18)





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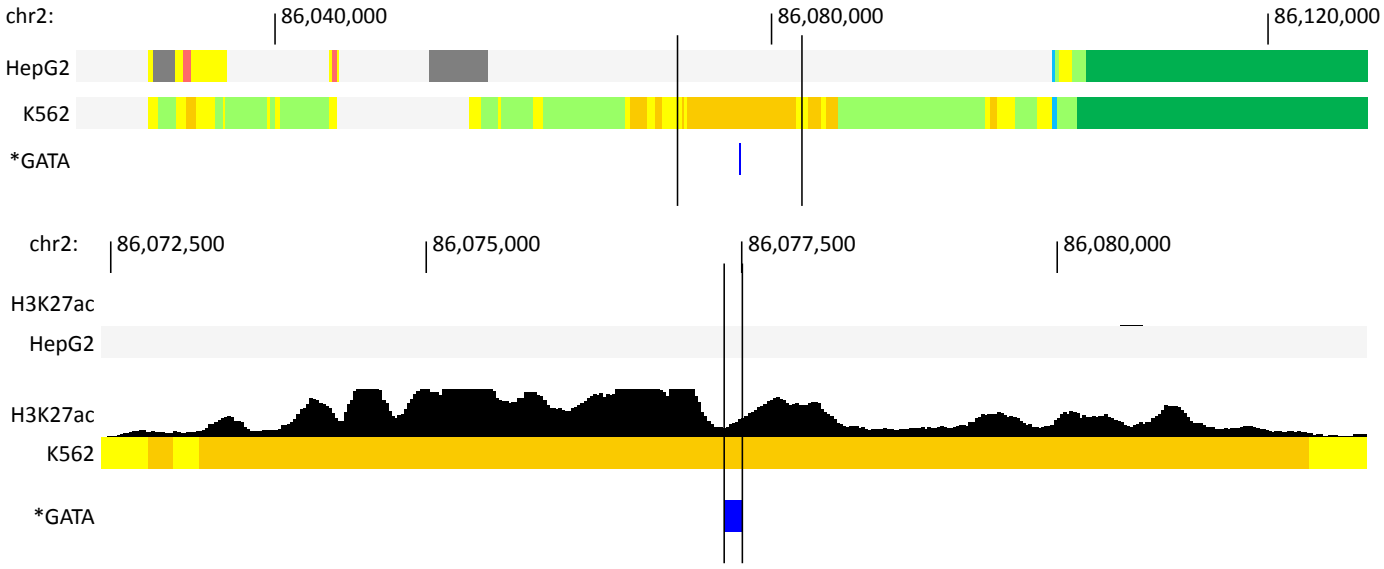
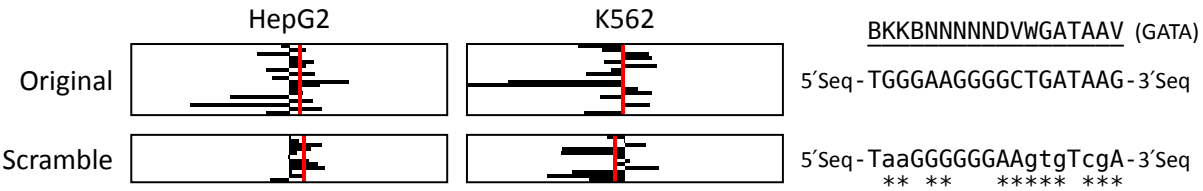
814 GATA in K562 enhancer

chr2 86077425 86077442 - (hg18)





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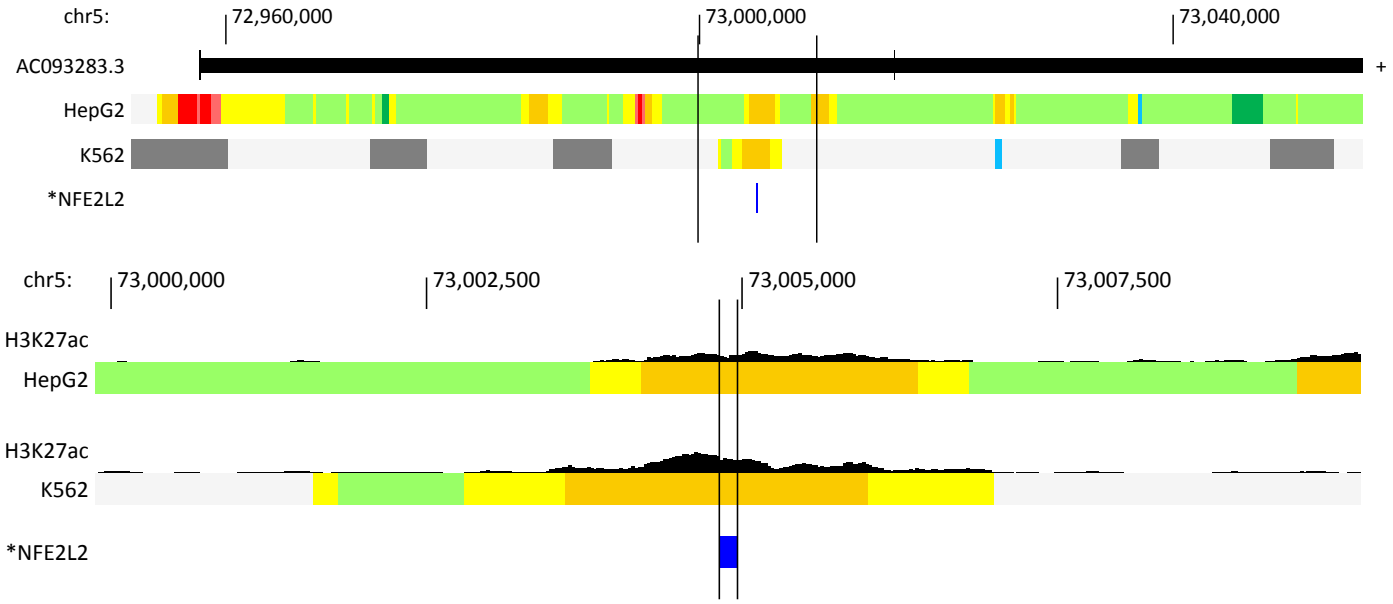
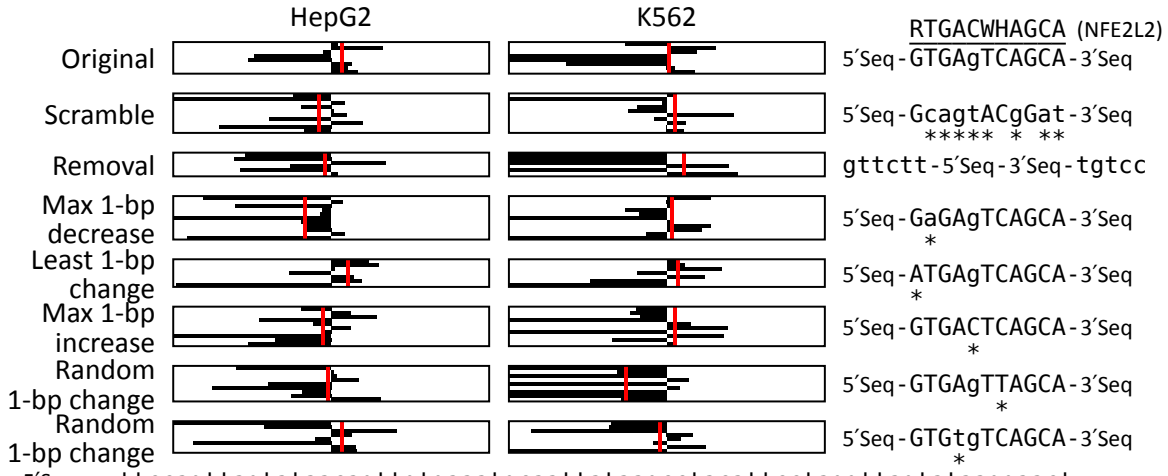
815 NFE2L2 in K562 enhancer

chr5 73004887 73004897 + (hg18)





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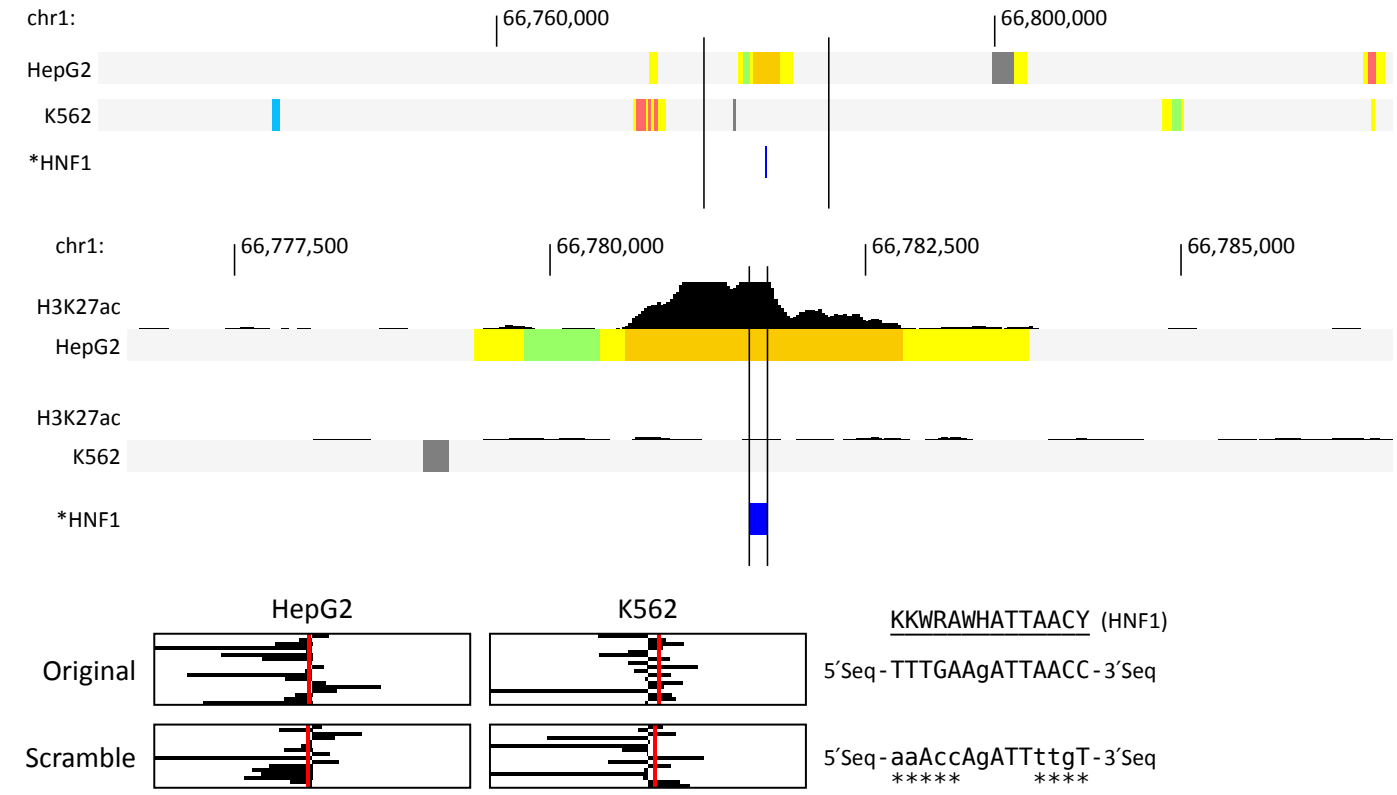
816 HNF1 in HepG2 enhancer

chr1 66781645 66781658 + (hg18)



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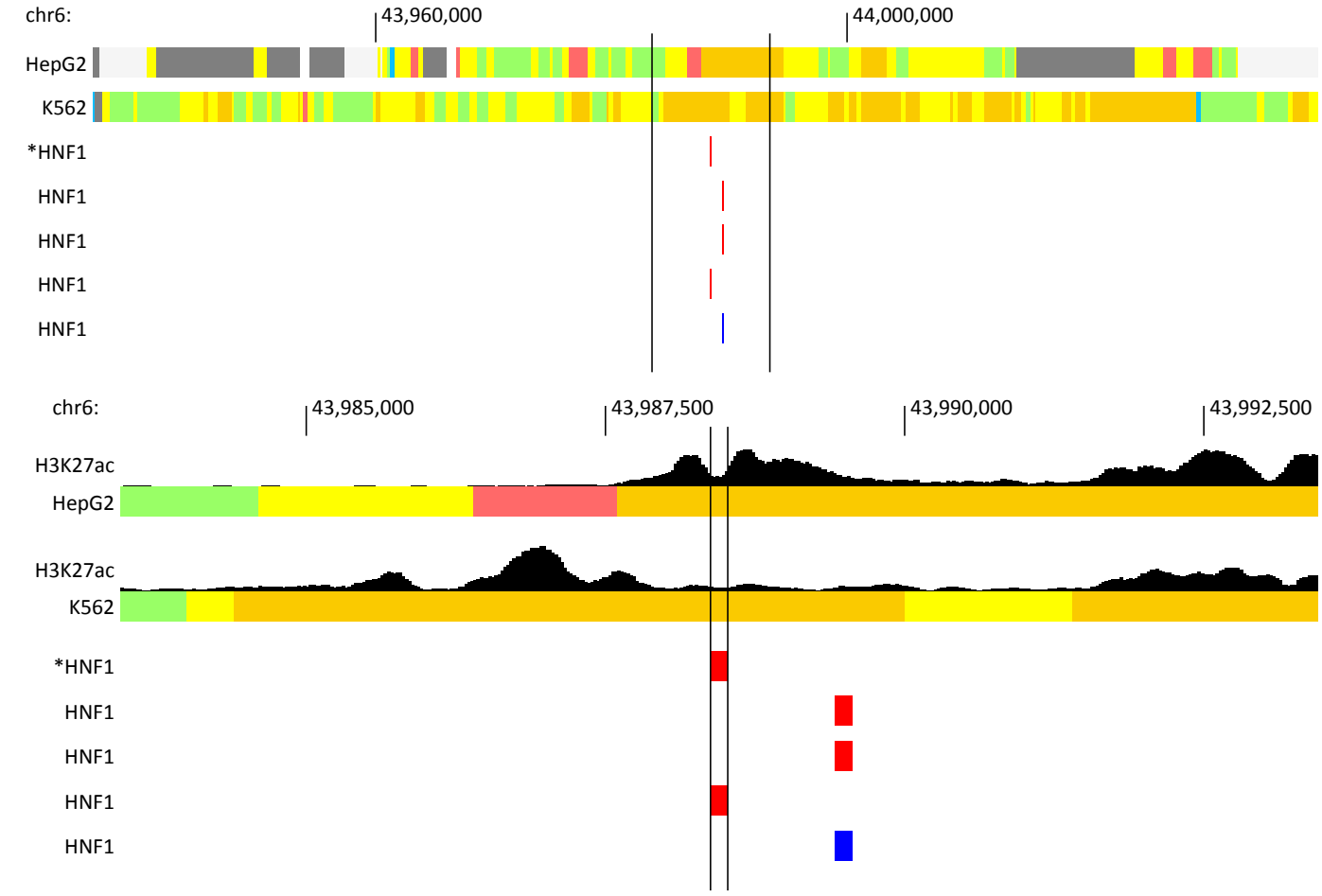
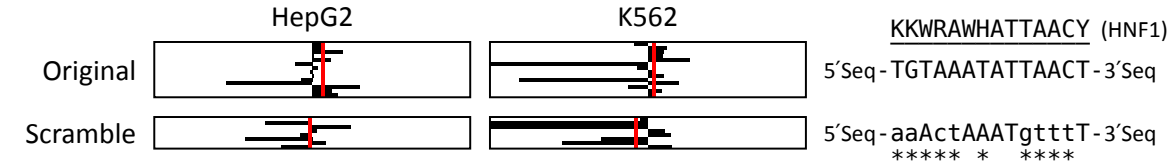
817 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 43988444 43988457 - (hg18)





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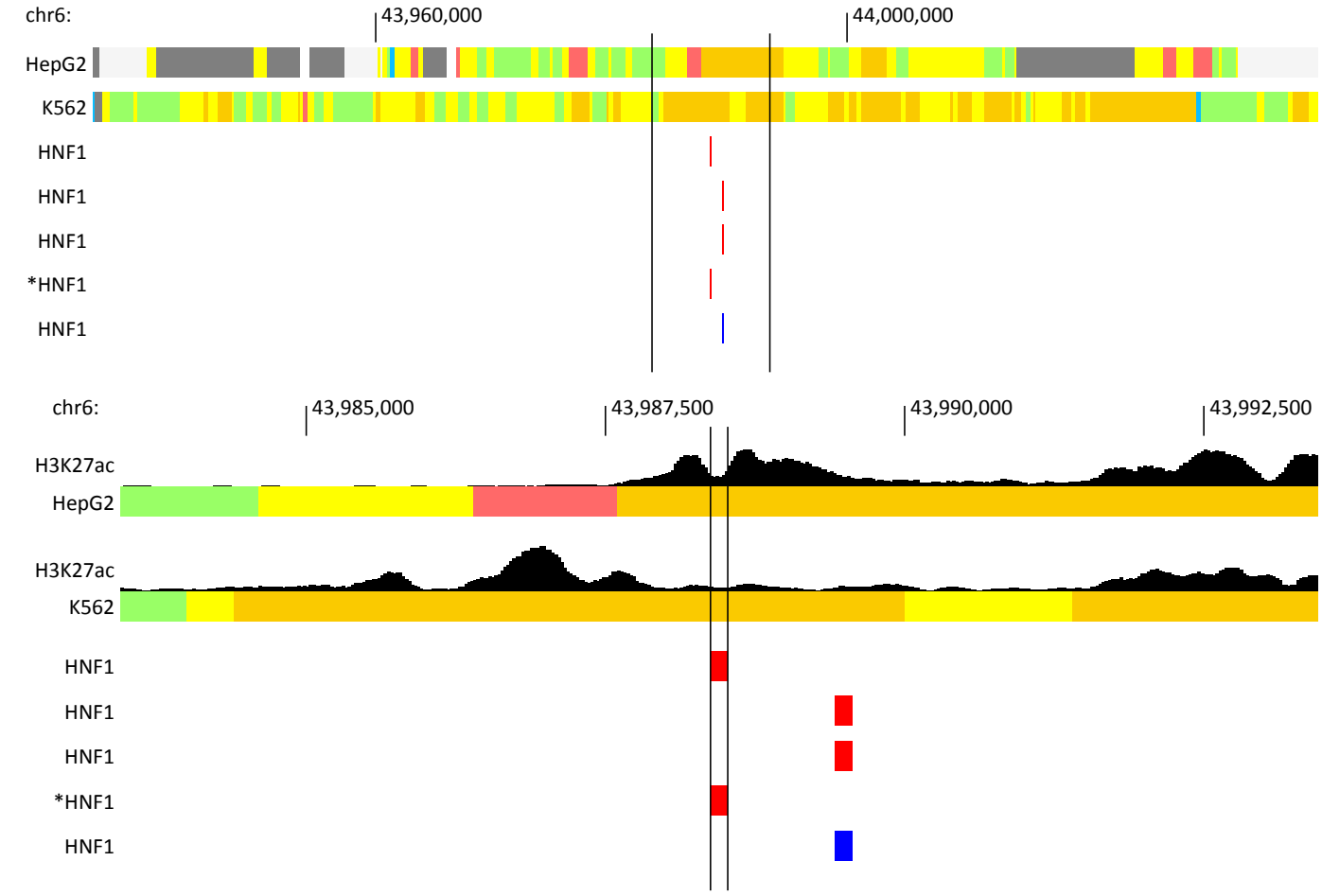
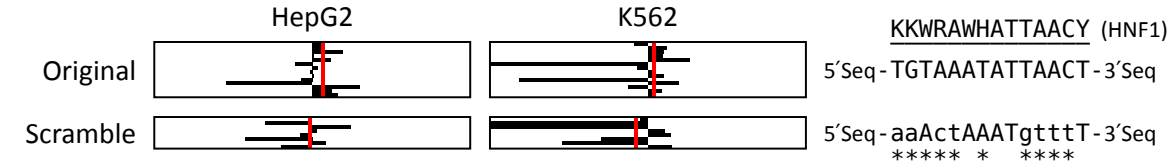
818 HNF1 in K562 enhancer (conserved at 60% confidence)

chr6 43988444 43988457 - (hg18)





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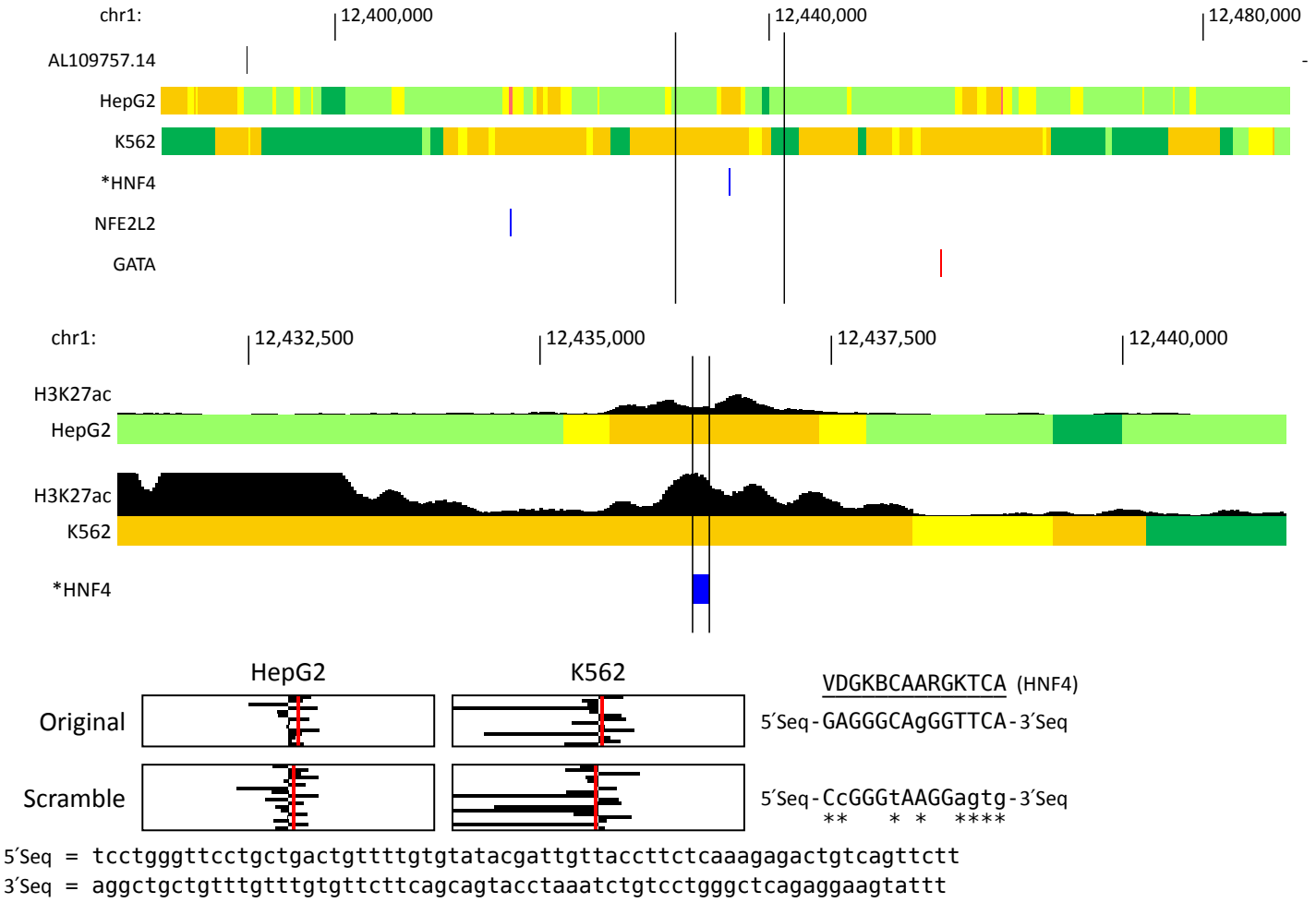
819 HNF4 in HepG2 enhancer

chr1 12436375 12436388 + (hg18)



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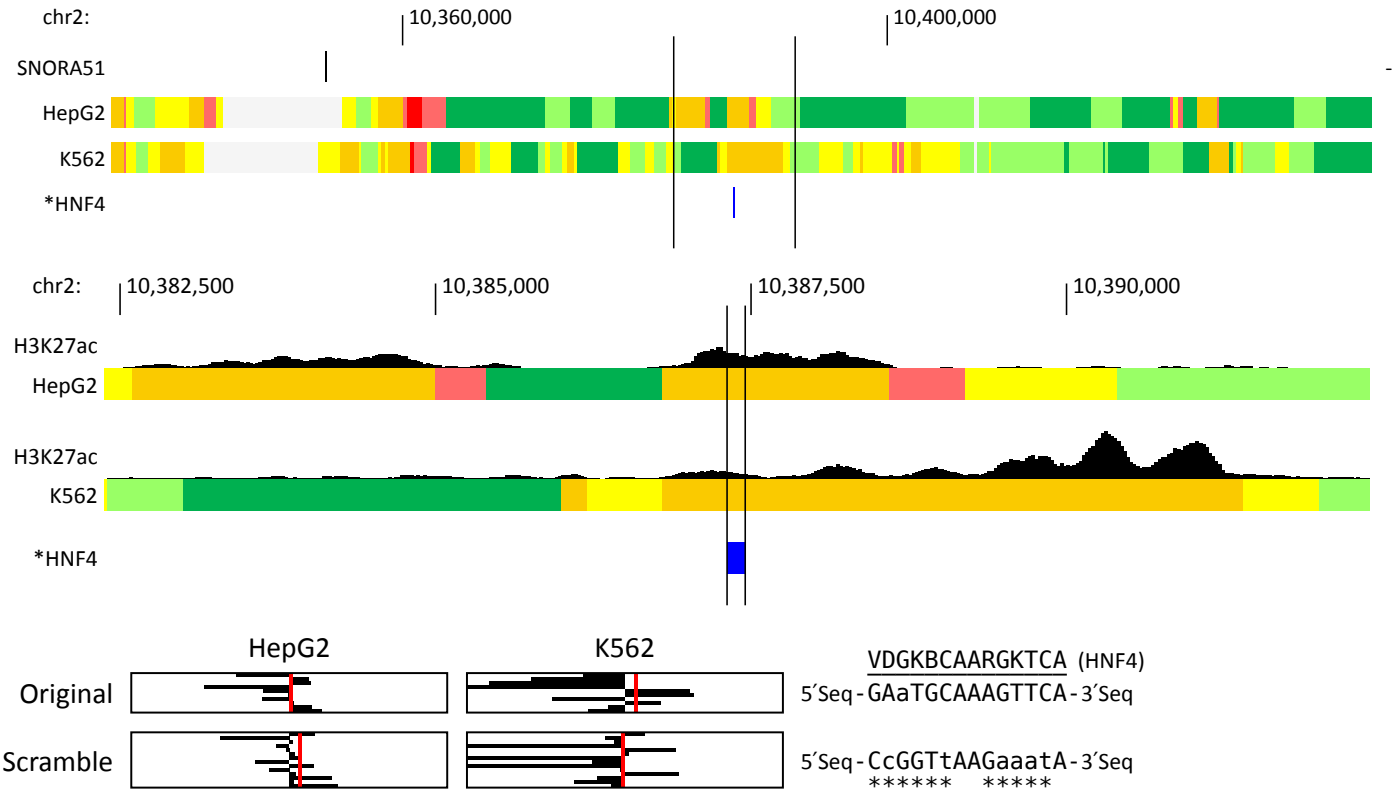
820 HNF4 in HepG2 enhancer

chr2 10387376 10387389 + (hg18)



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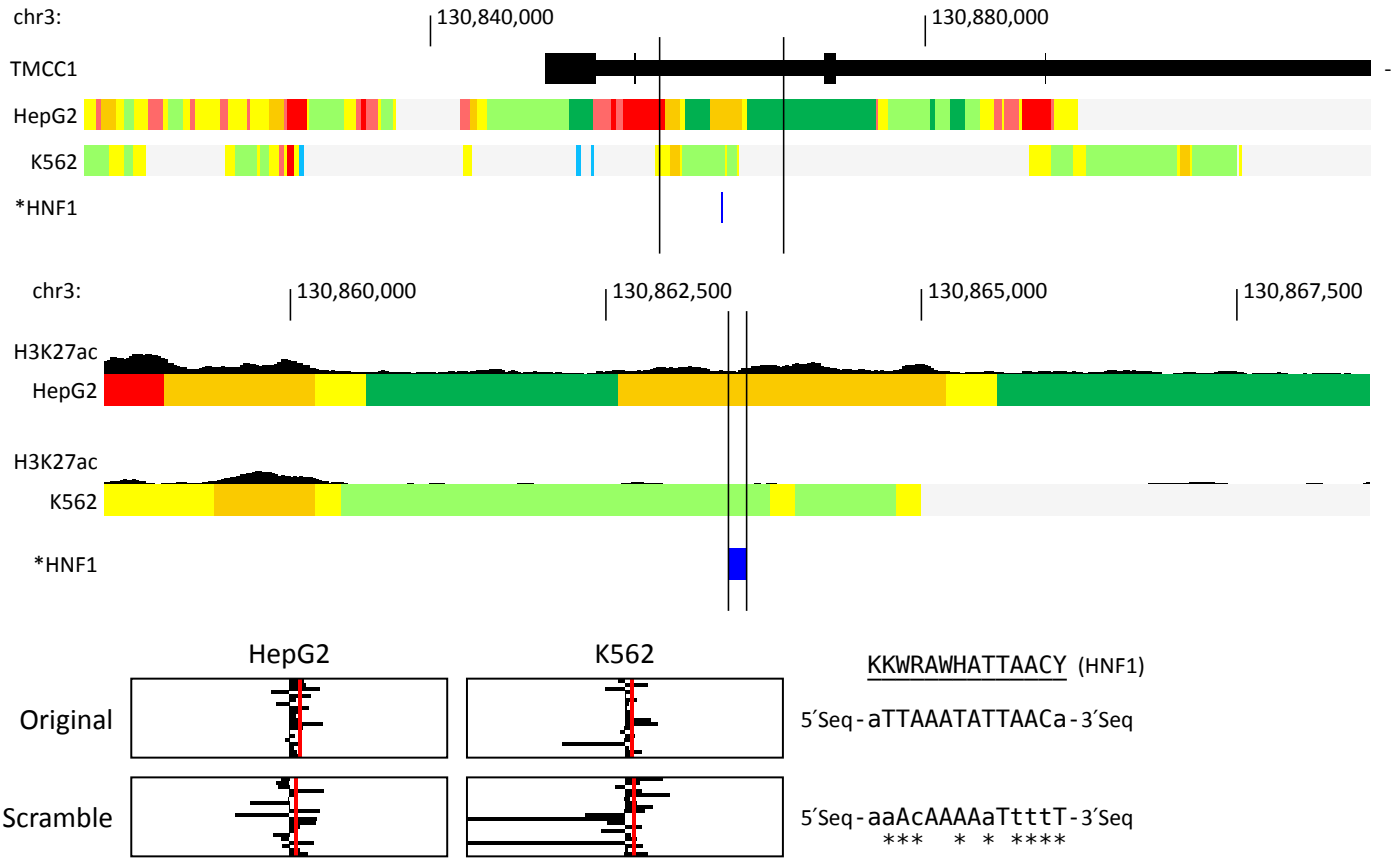
821 HNF1 in HepG2 enhancer

chr3 130863537 130863550 + (hg18)



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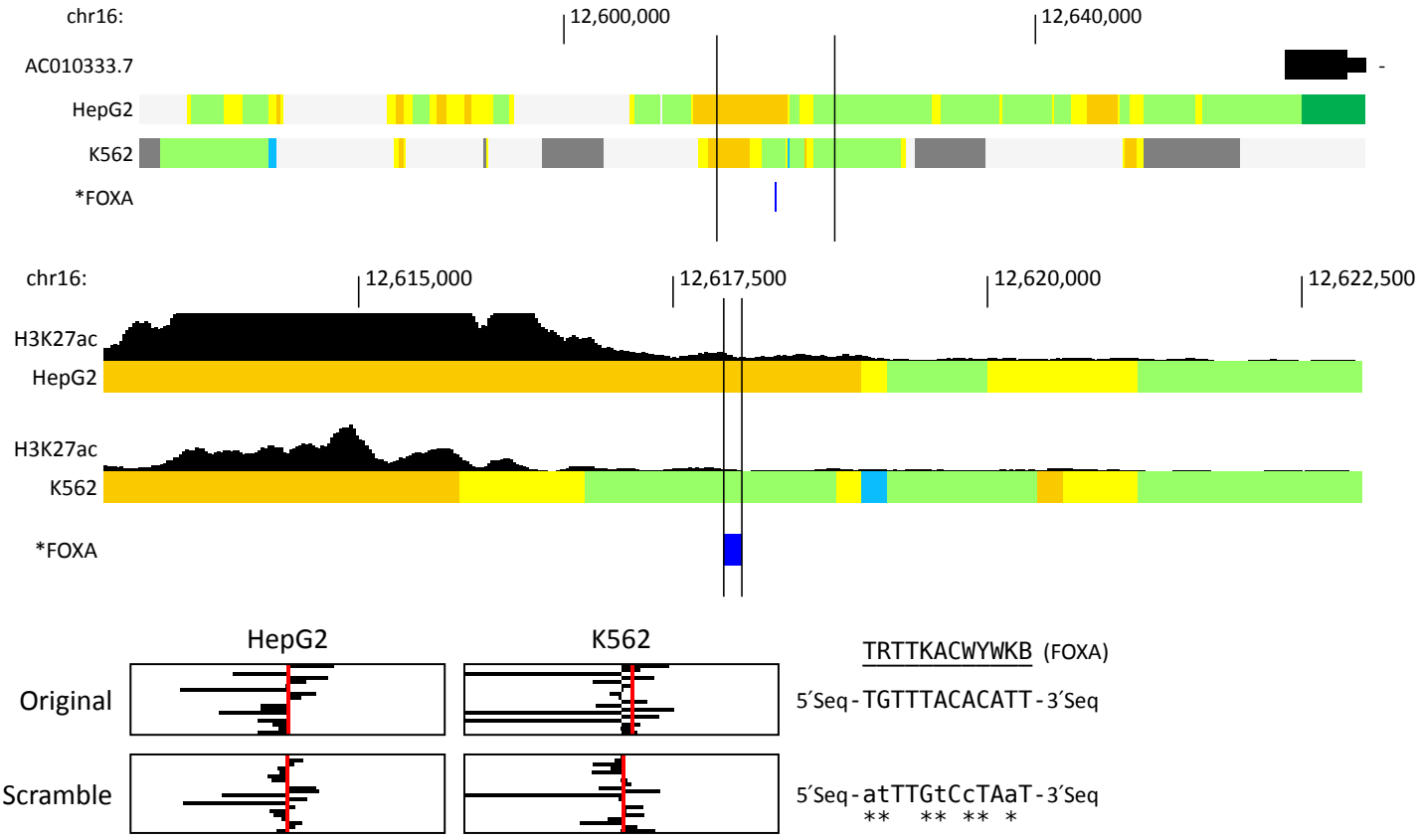
822 FOXA in HepG2 enhancer

chr16 12617970 12617981 + (hg18)



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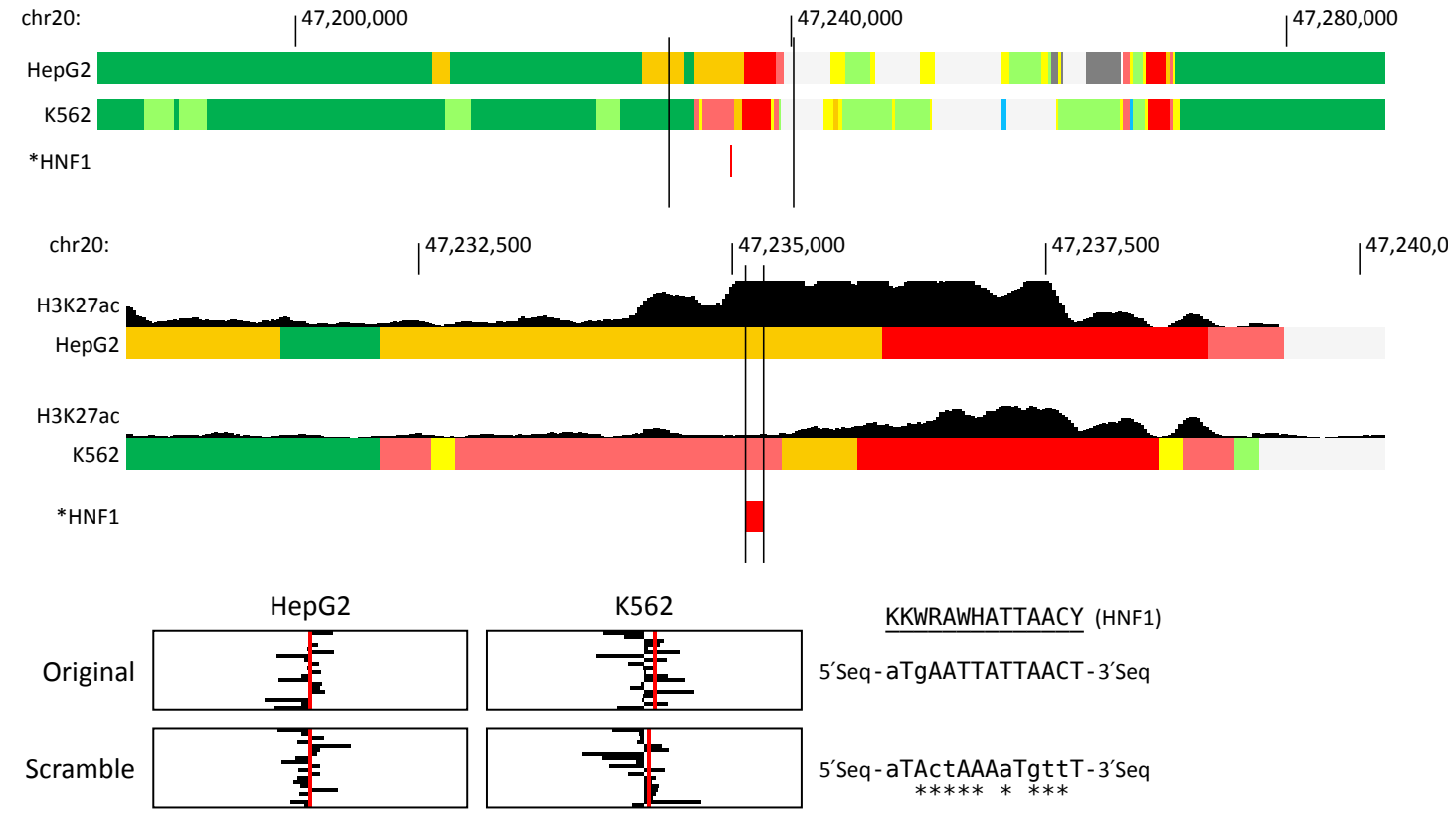
823 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr20 47235172 47235185 + (hg18)



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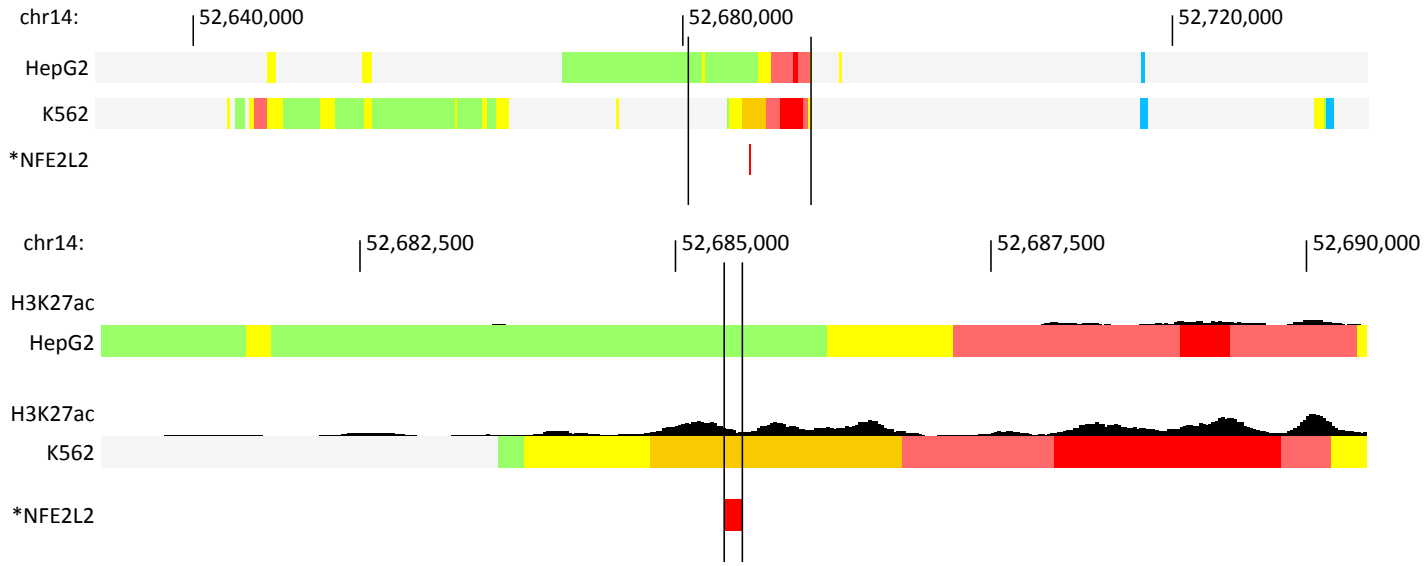
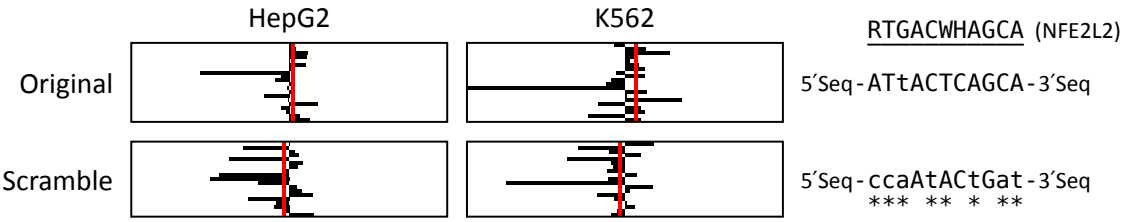
824 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr14 52685453 52685463 + (hg18)





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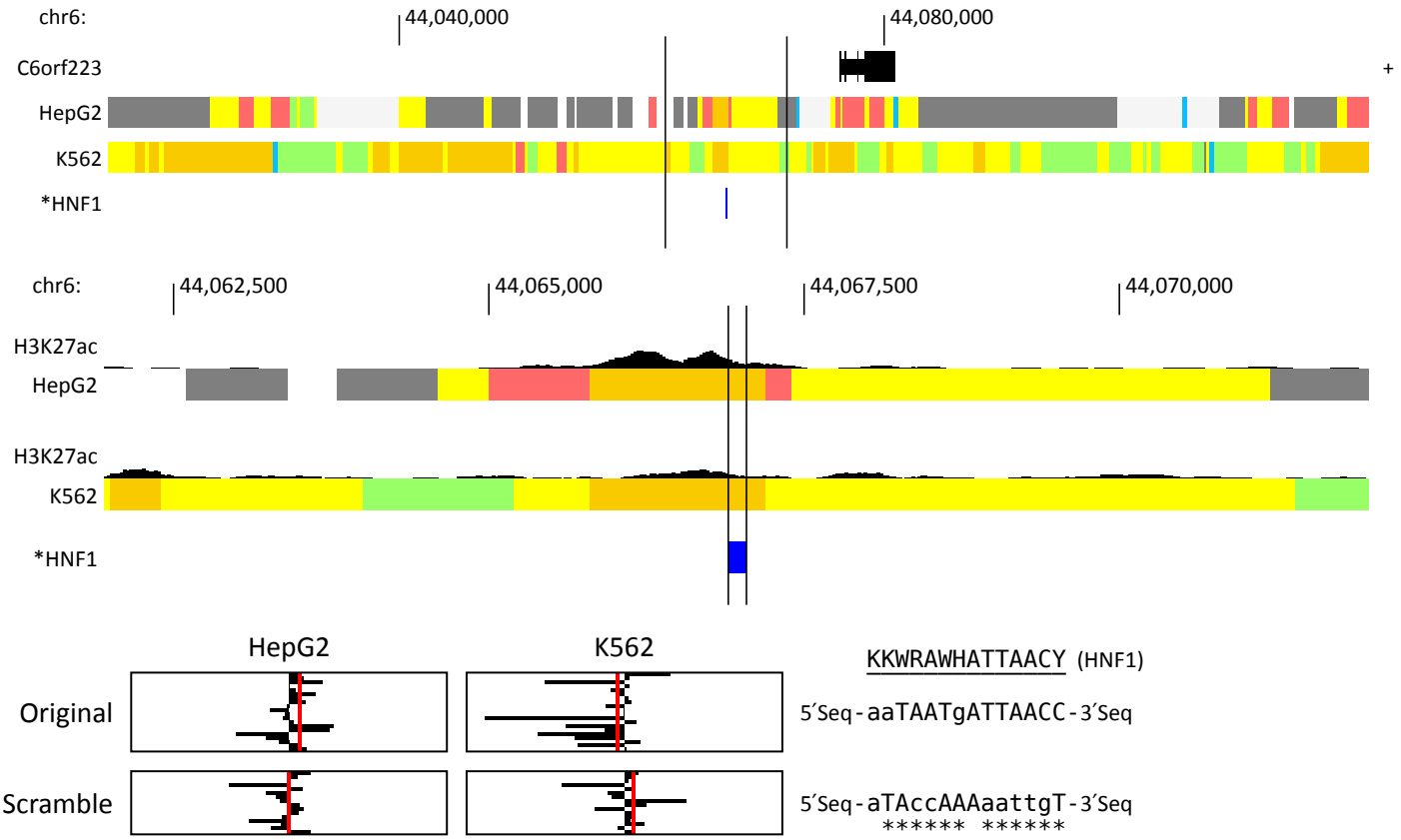
825 HNF1 in HepG2 enhancer

chr6 44066965 44066978 - (hg18)



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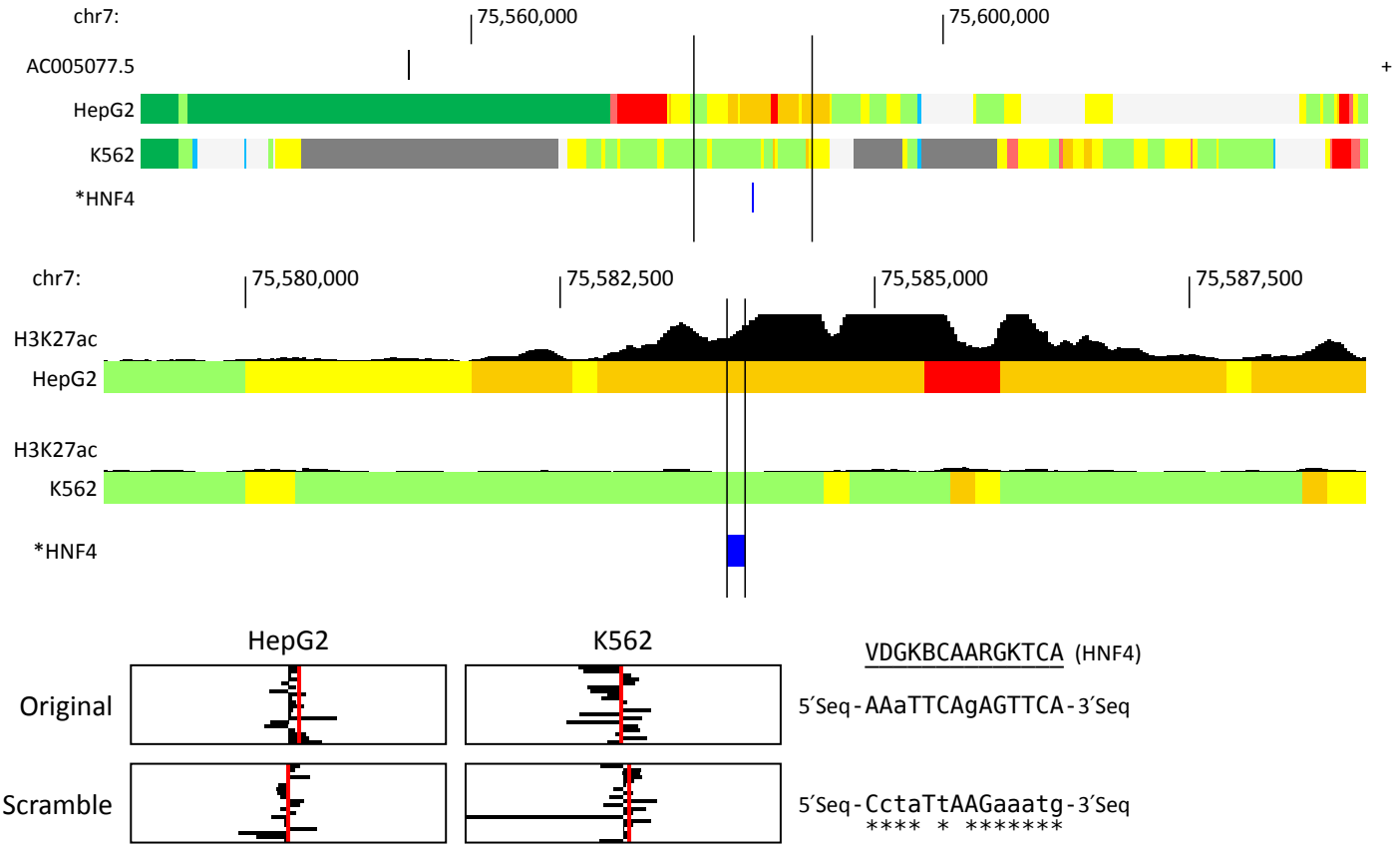
826 HNF4 in HepG2 enhancer

chr7 75583892 75583905 - (hg18)



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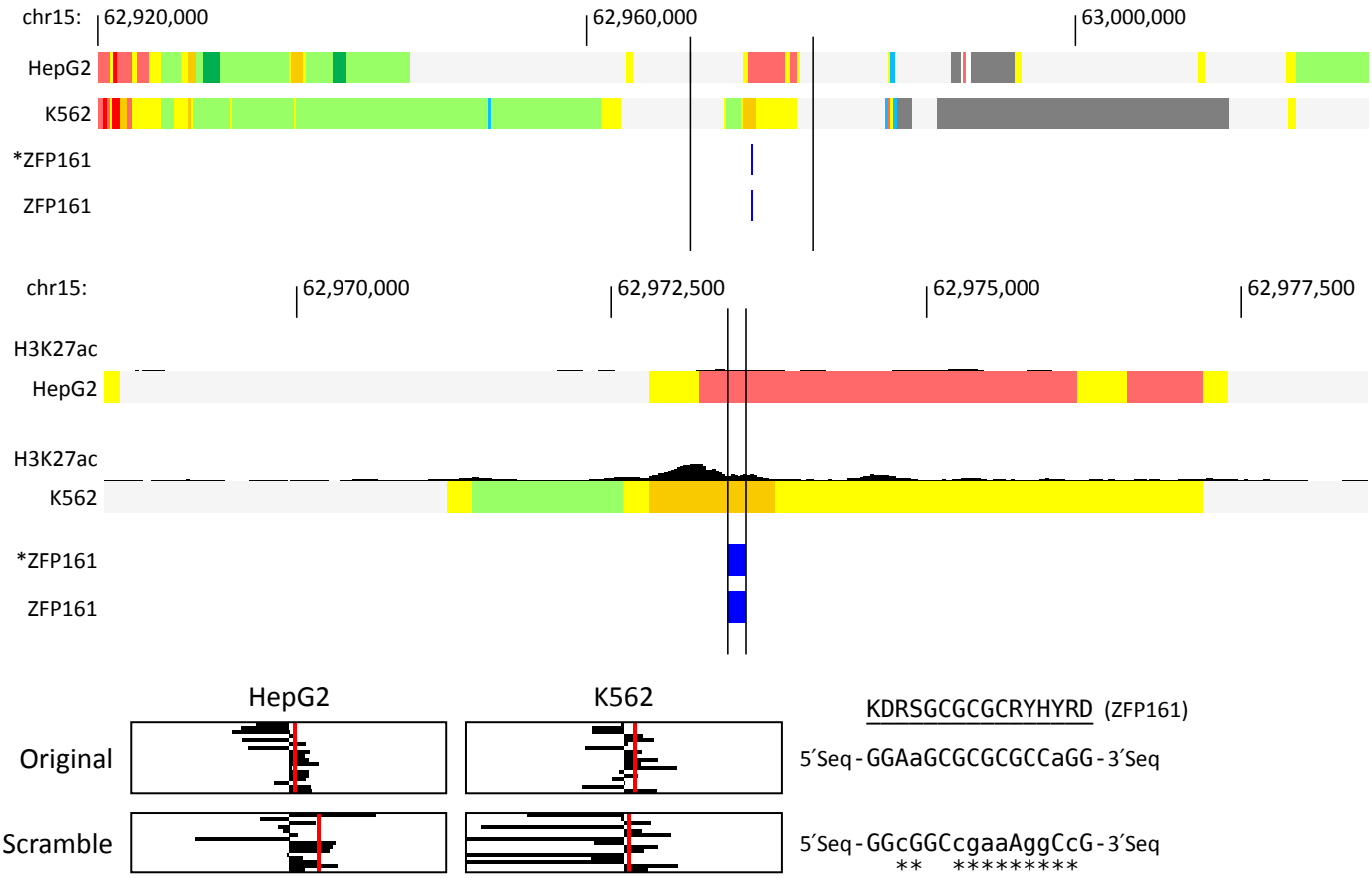
827 ZFP161 in K562 enhancer

chr15 62973489 62973504 - (hg18)



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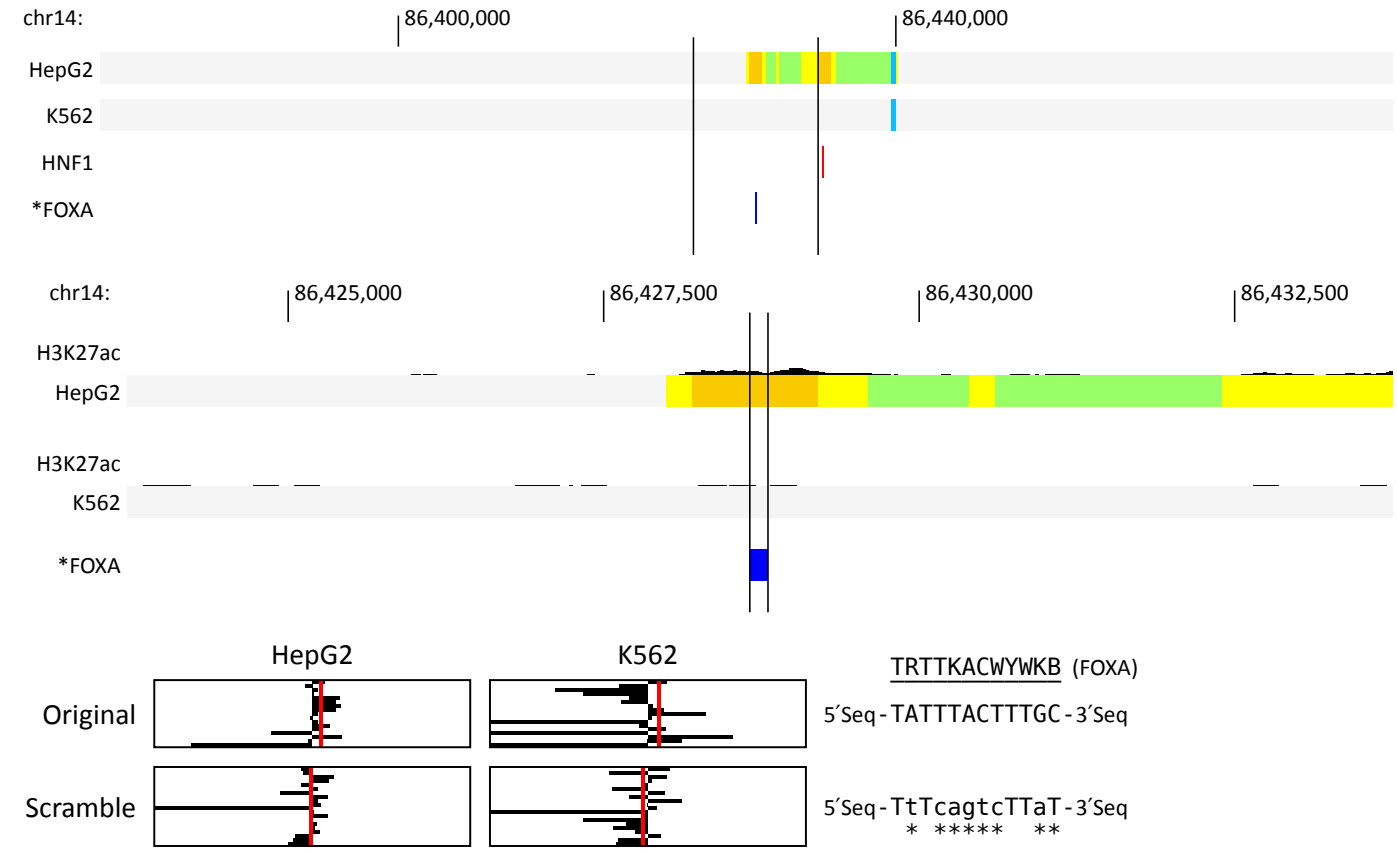
828 FOXA in HepG2 enhancer

chr14 86428725 86428736 + (hg18)



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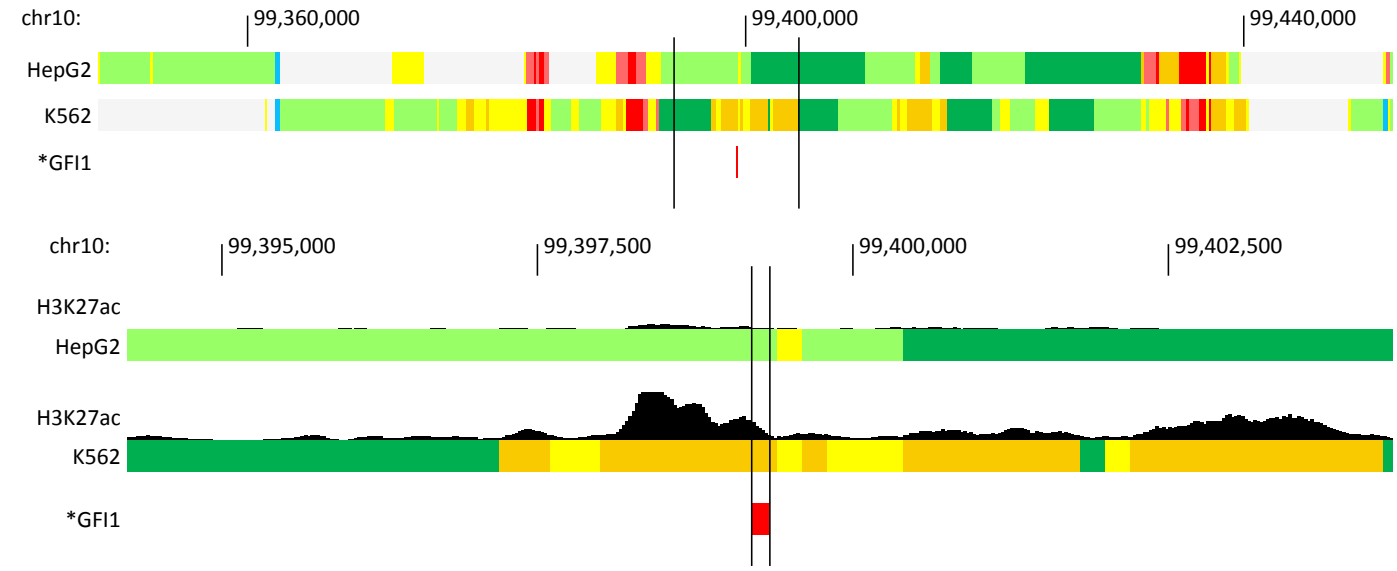
829 GFI1 in K562 enhancer (conserved at 40% confidence)

chr10 99399259 99399282 - (hg18)



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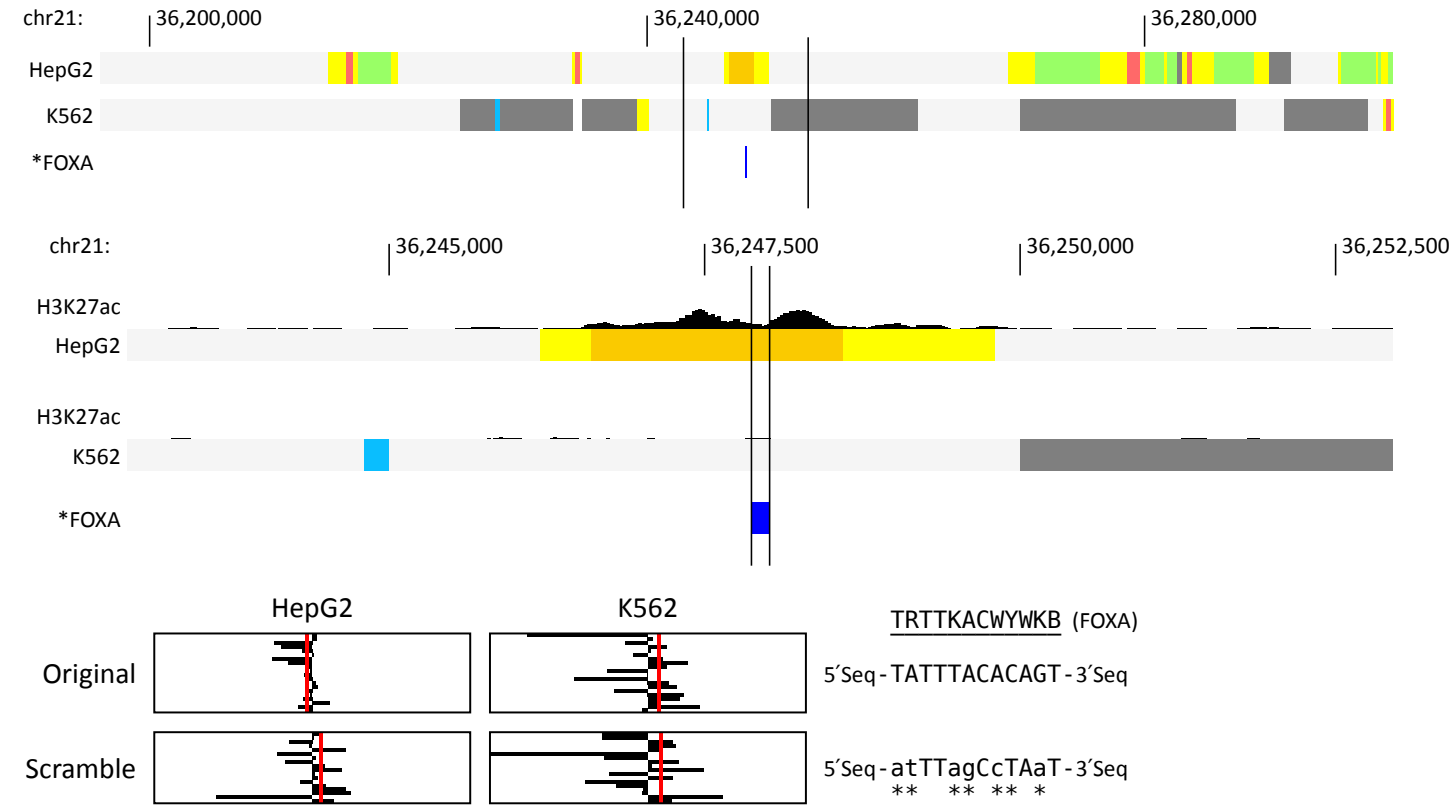
830 FOXA in HepG2 enhancer

chr21 36247938 36247949 - (hg18)



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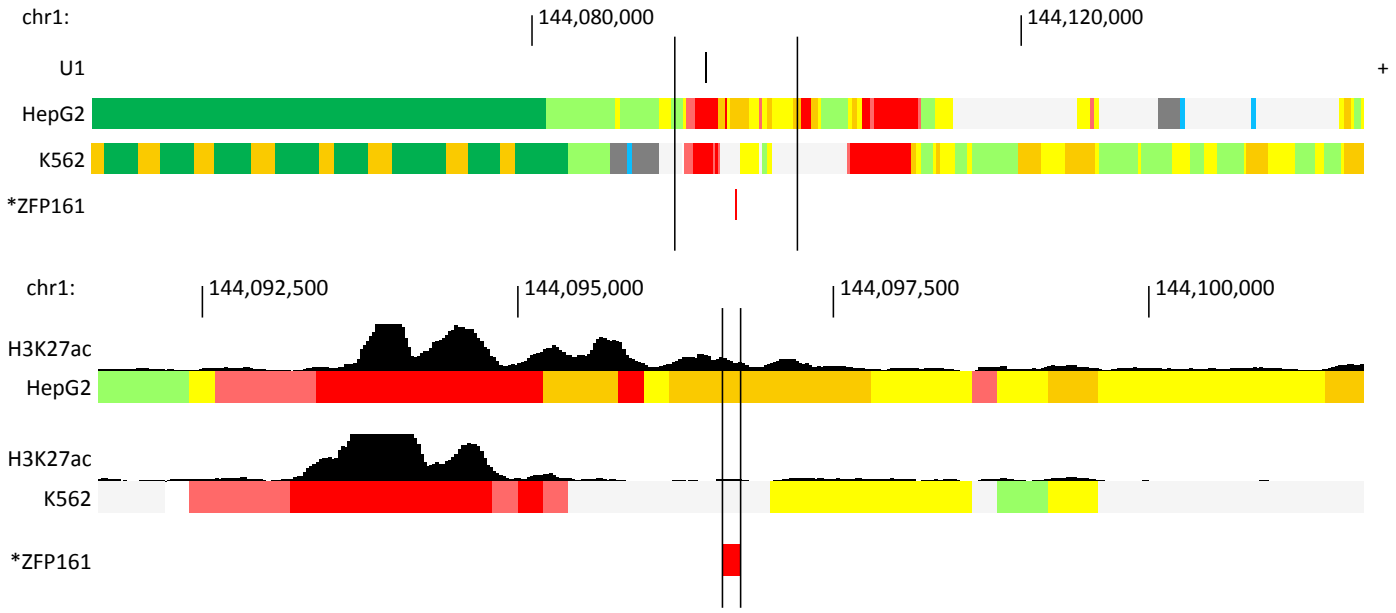
831 ZFP161 in HepG2 enhancer (conserved at 30% confidence)

chr1 144096686 144096701 - (hg18)



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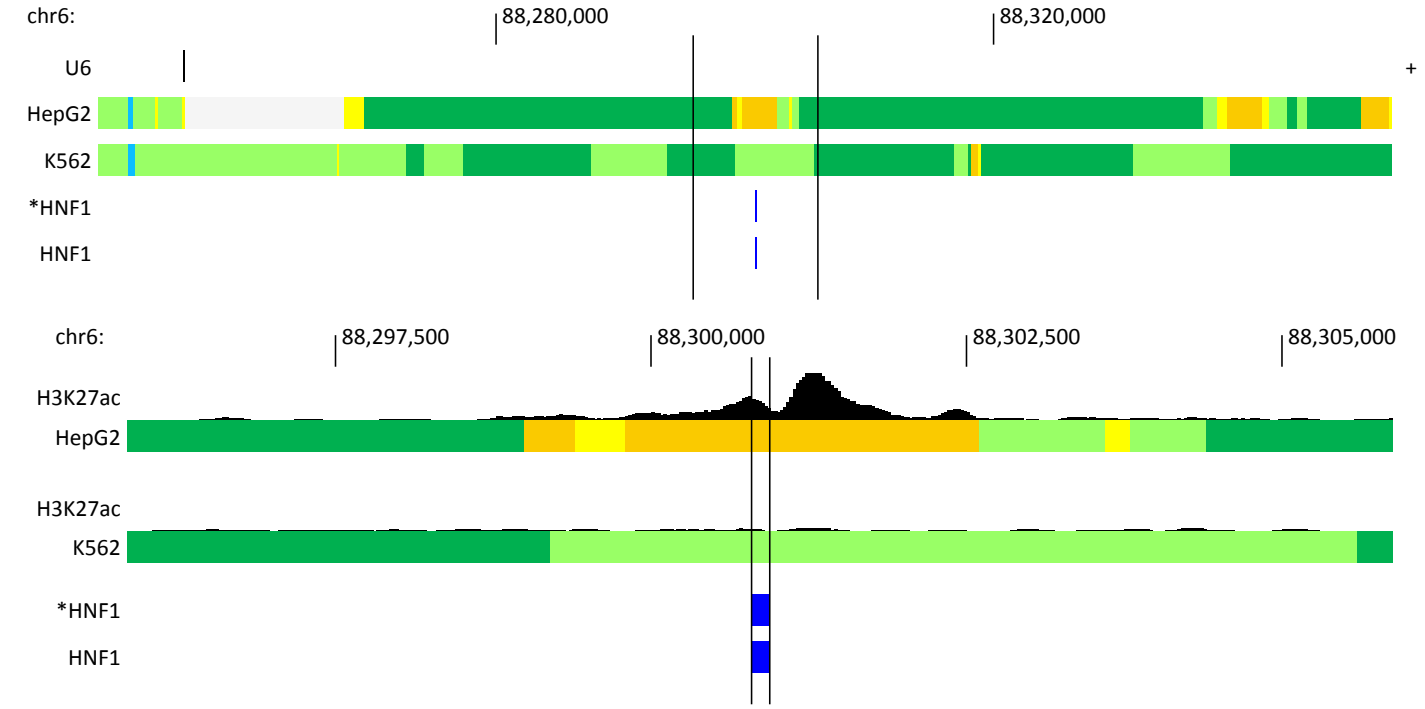
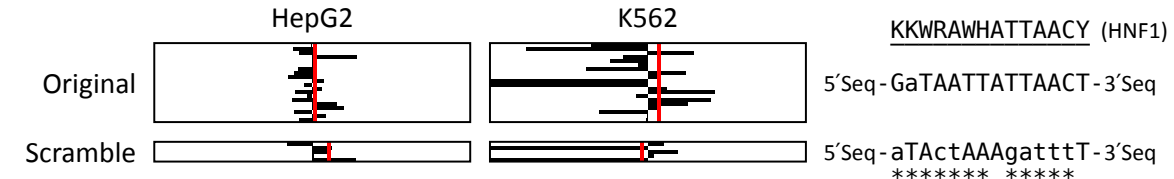
832 HNF1 in HepG2 enhancer

chr6 88300863 88300876 + (hg18)





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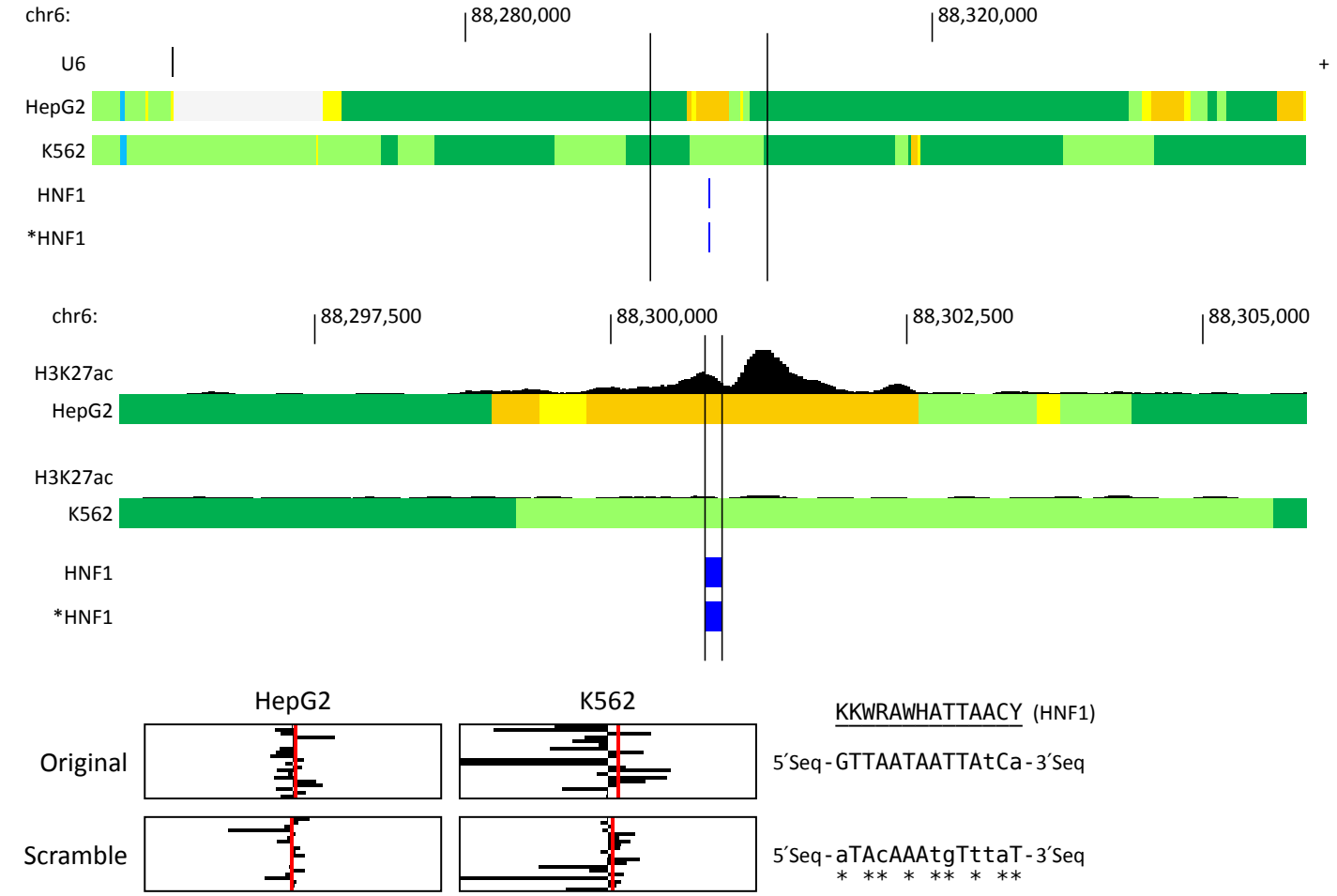
833 HNF1 in HepG2 enhancer

chr6 88300862 88300875 - (hg18)



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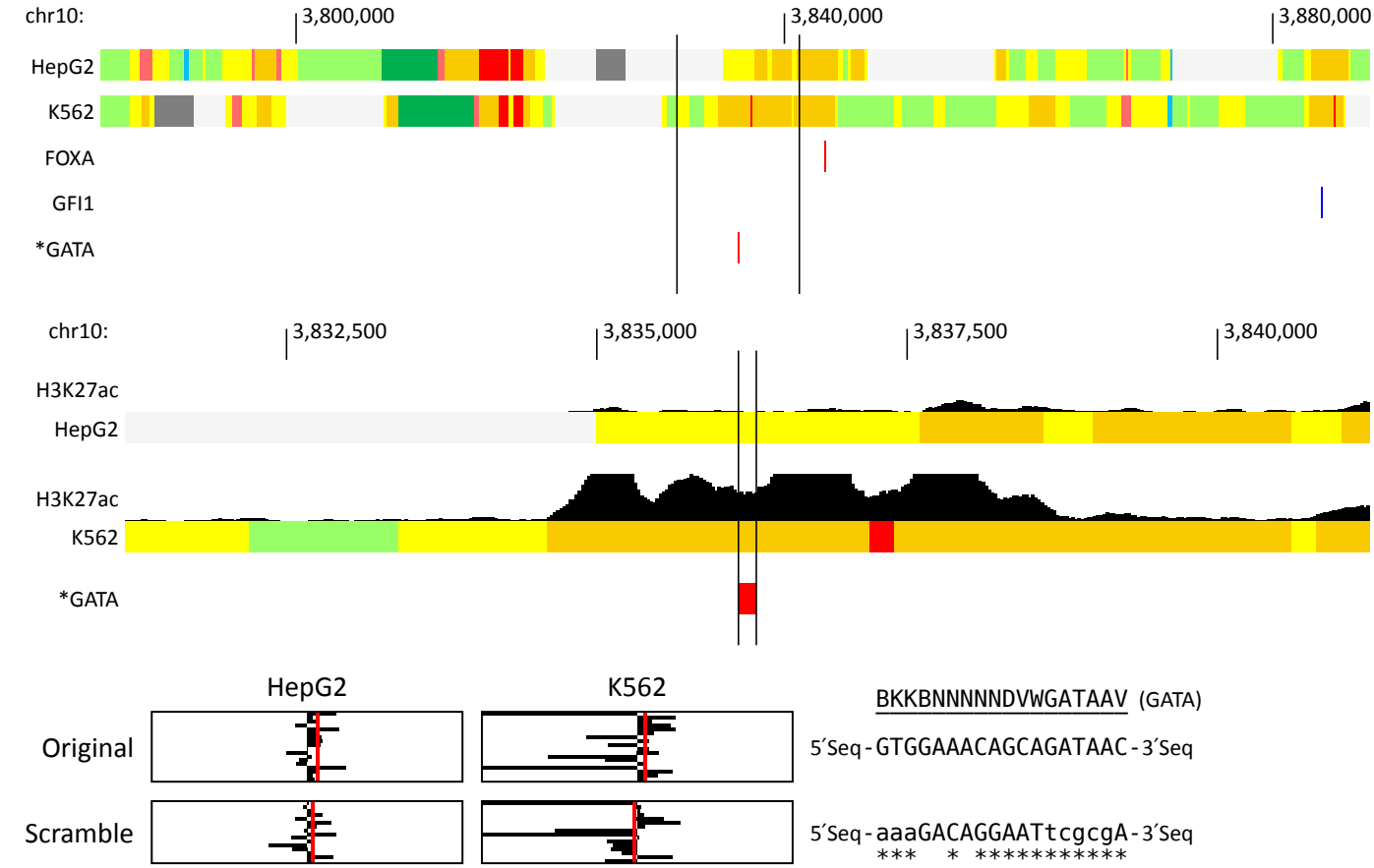
834 GATA in K562 enhancer (conserved at 60% confidence)

chr10 3836205 3836222 + (hg18)



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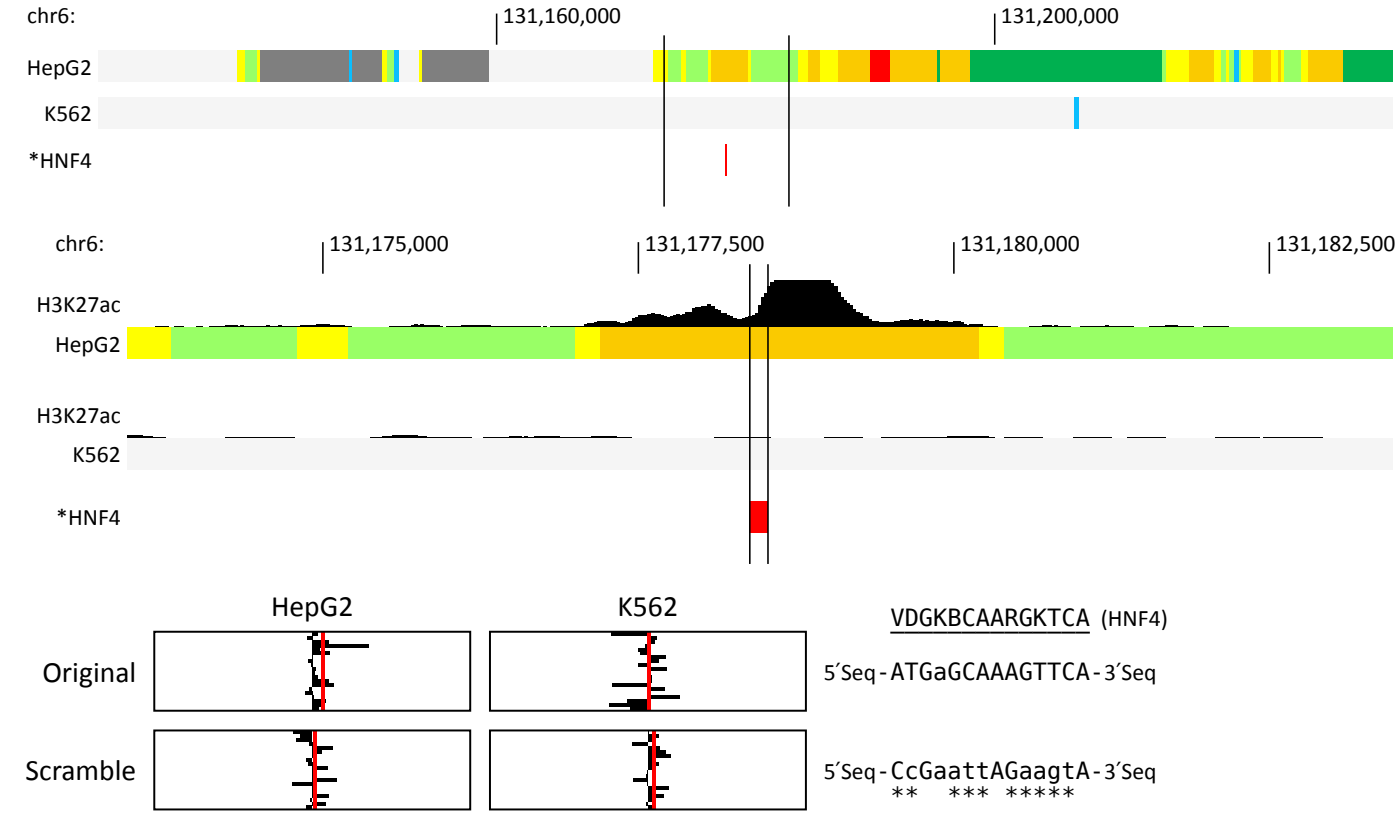
835 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr6 131178449 131178462 + (hg18)



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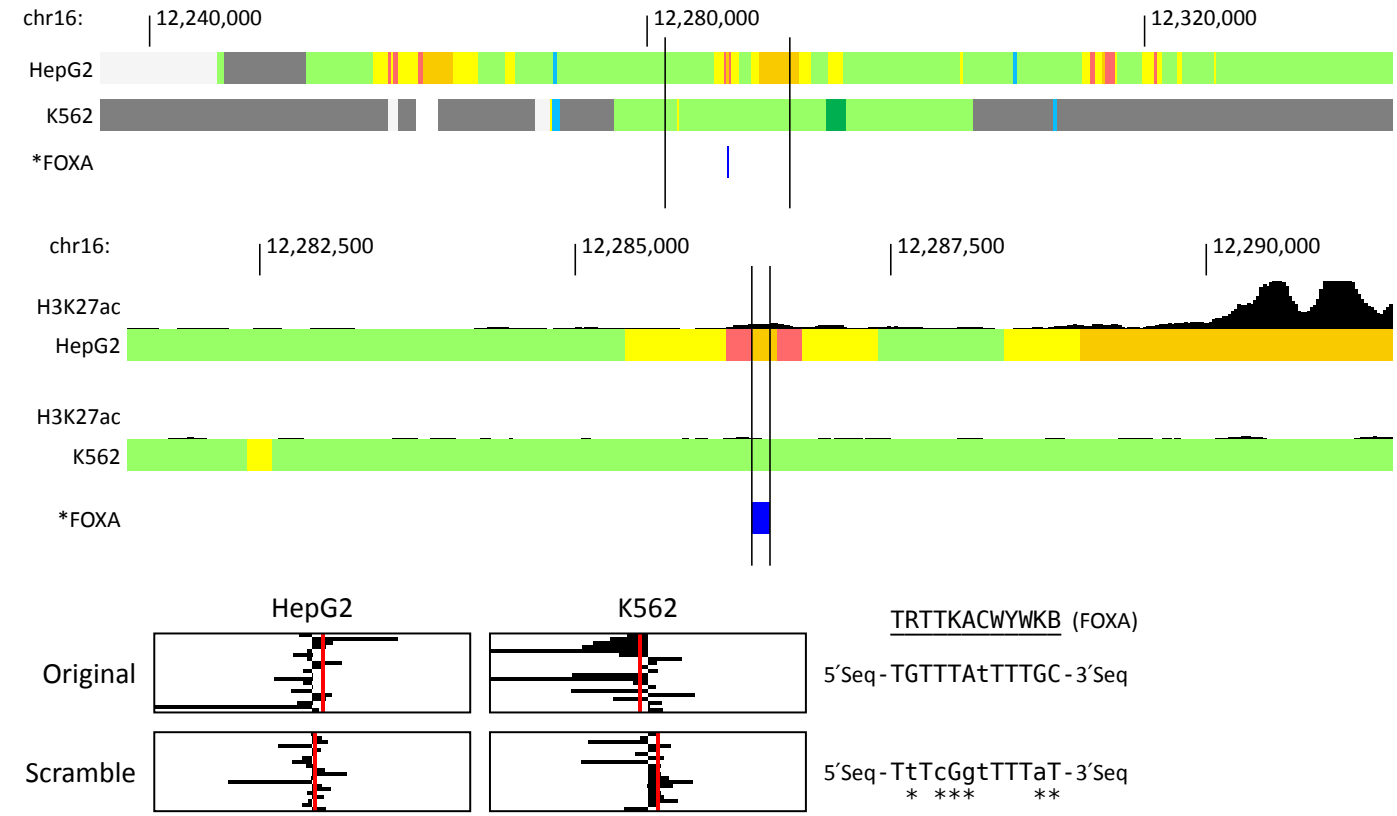
836 FOXA in HepG2 enhancer

chr16 12286466 12286477 + (hg18)



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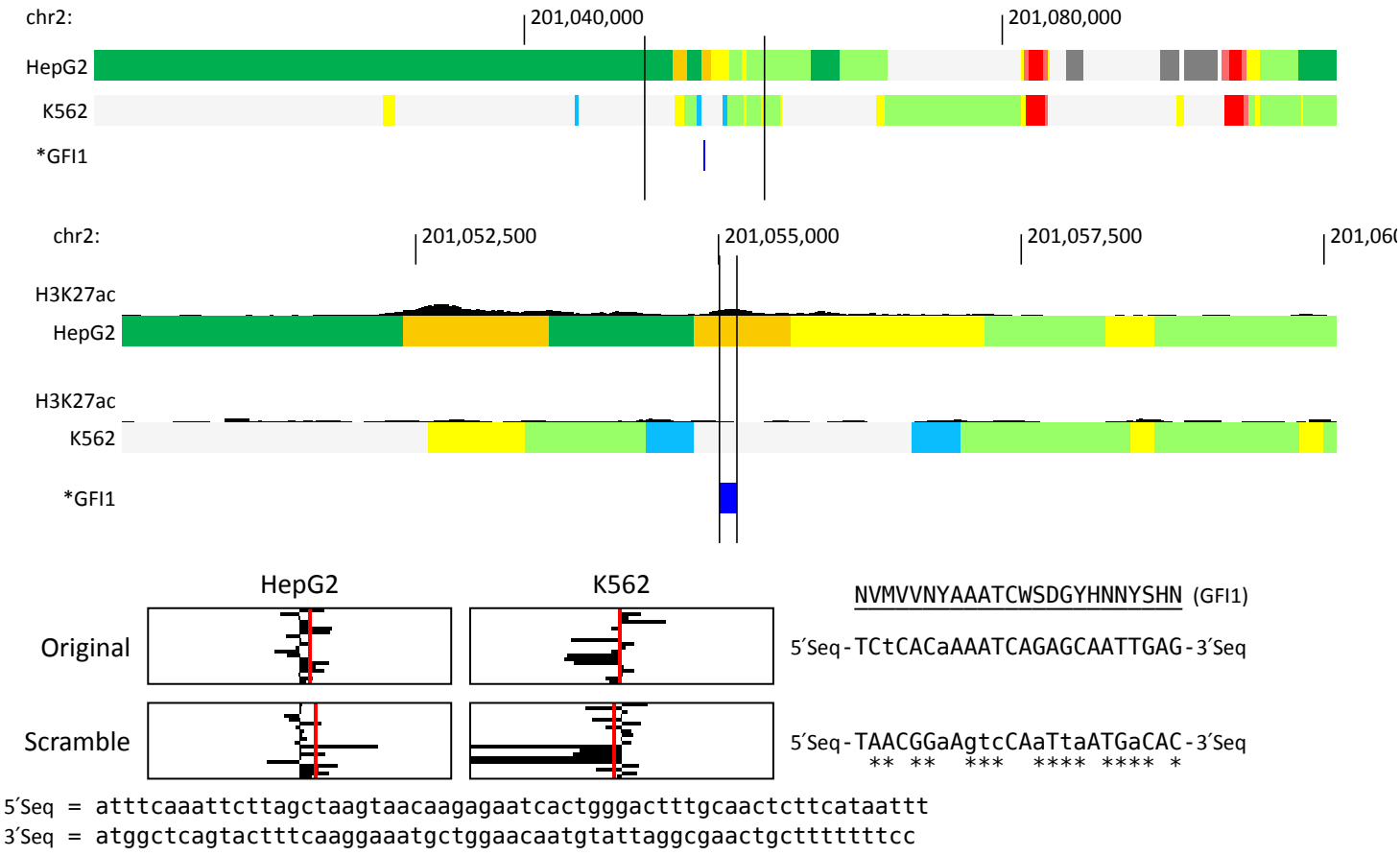
837 GFI1 in HepG2 enhancer

chr2 201055069 201055092 - (hg18)



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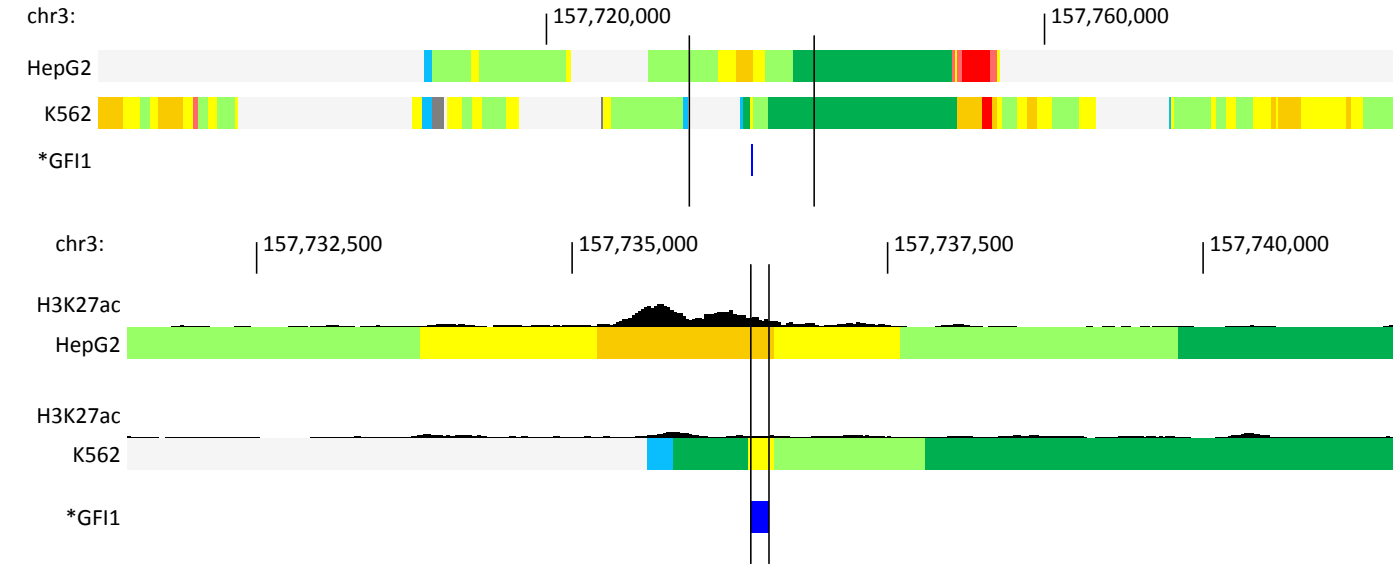
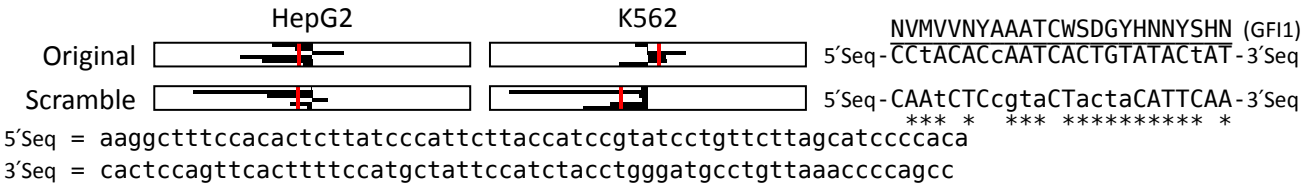
838 GFI1 in HepG2 enhancer

chr3 157736477 157736500 + (hg18)





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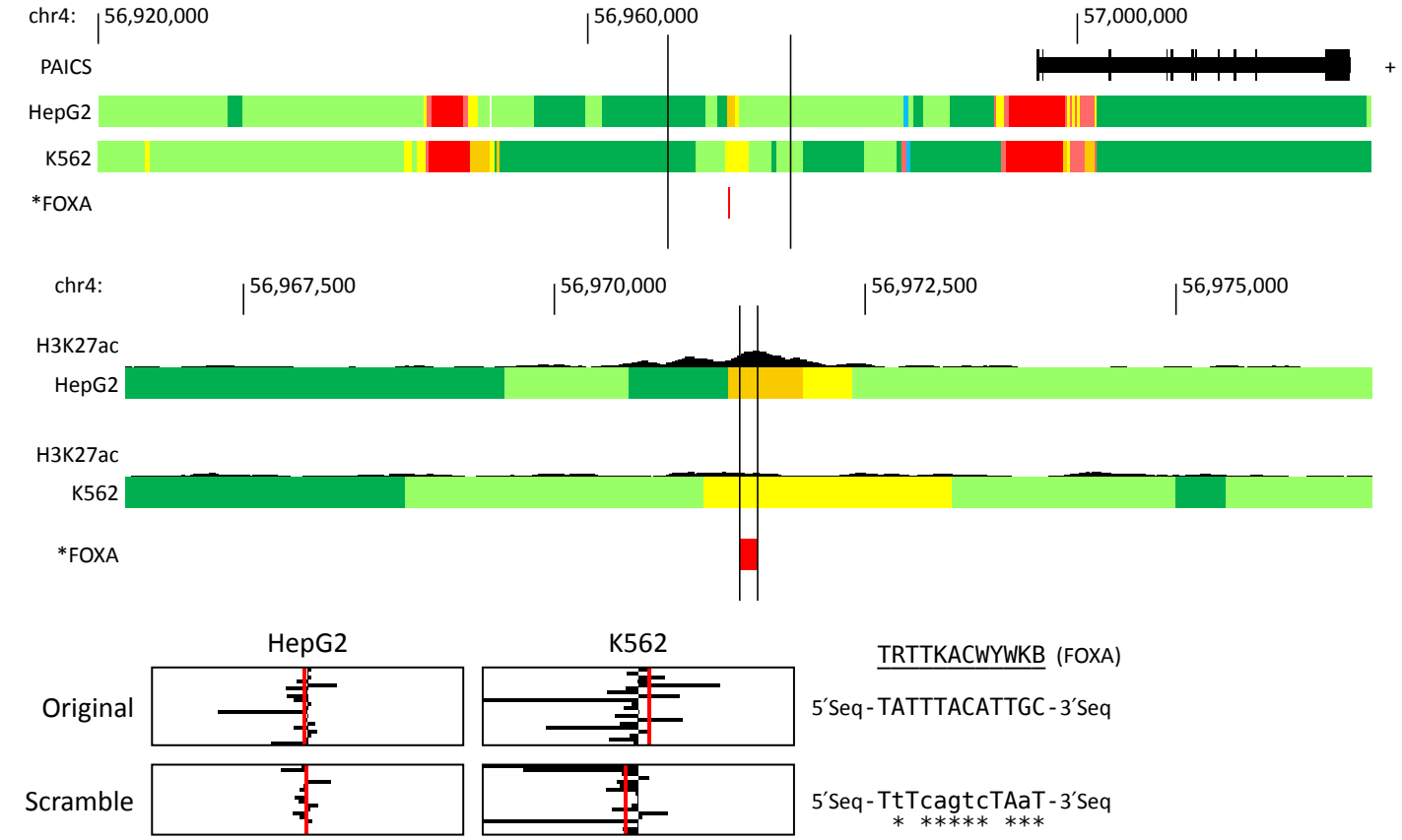
839 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr4 56971558 56971569 + (hg18)



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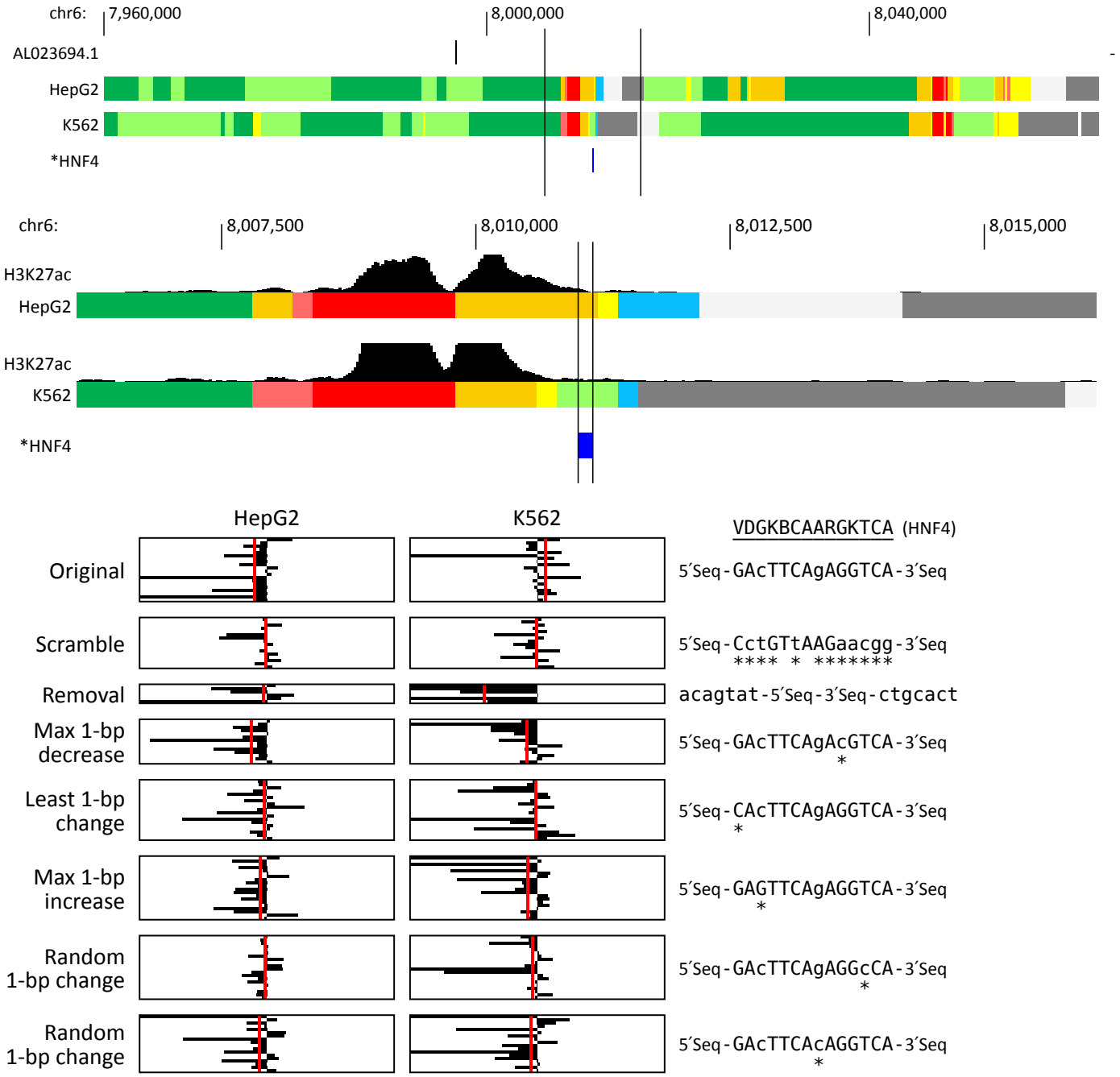
840 HNF4 in HepG2 enhancer

chr6 8011072 8011085 - (hg18)



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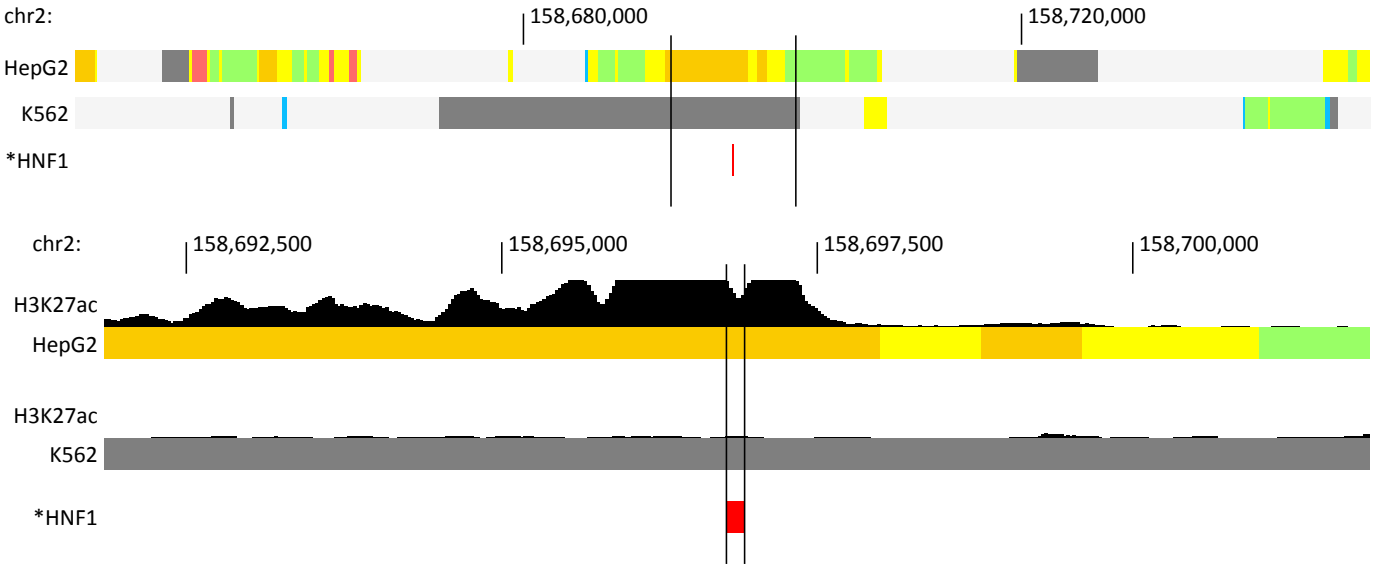
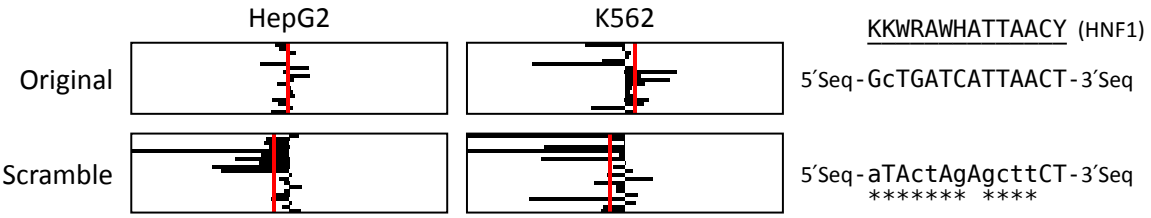
841 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr2 158696846 158696859 + (hg18)





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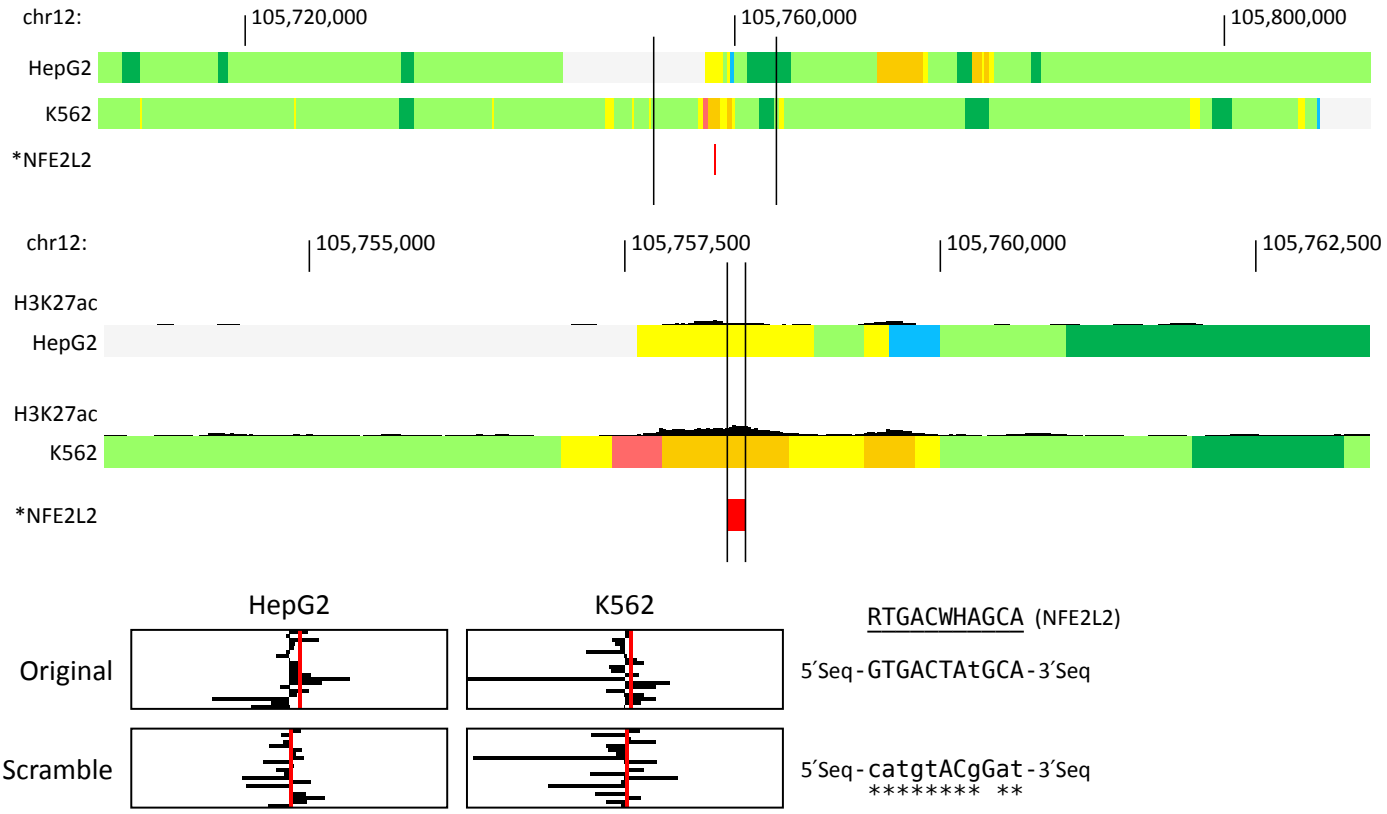
842 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr12 105758379 105758389 - (hg18)



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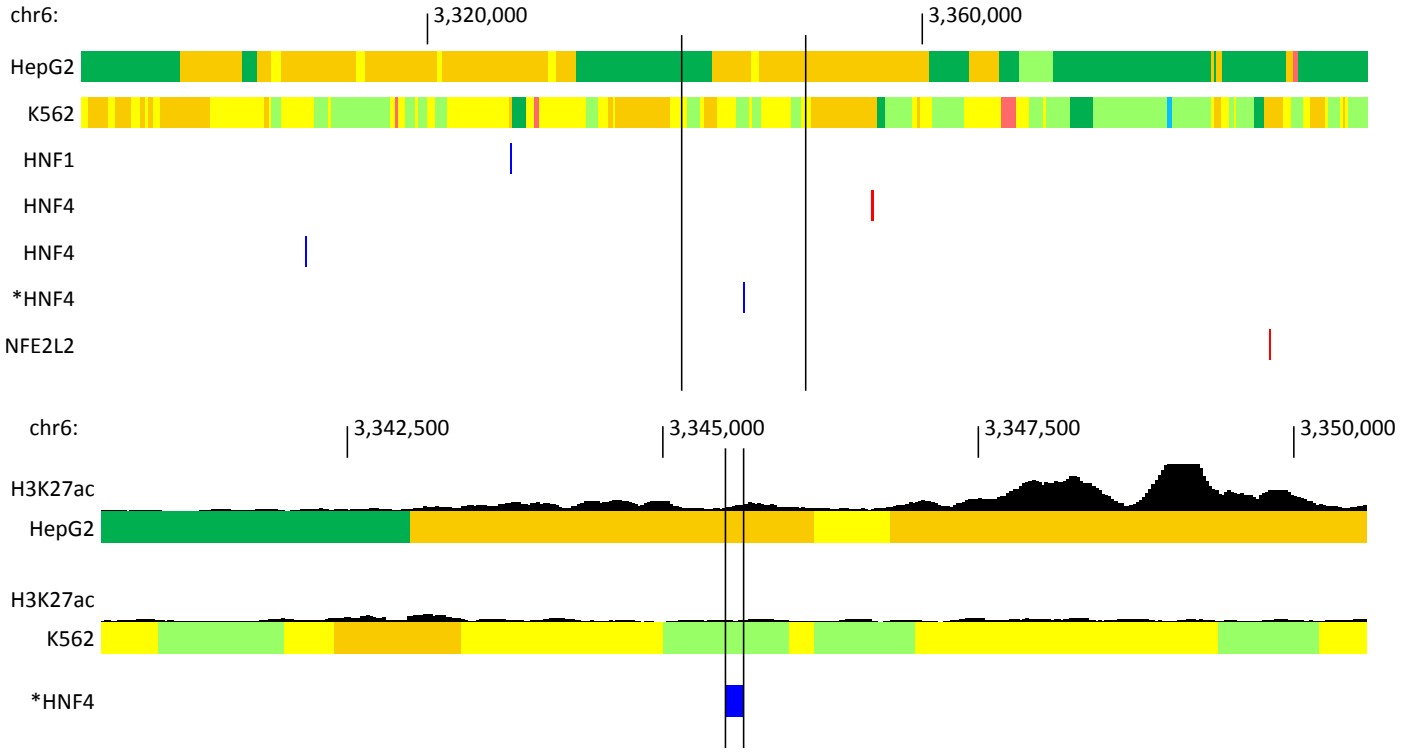
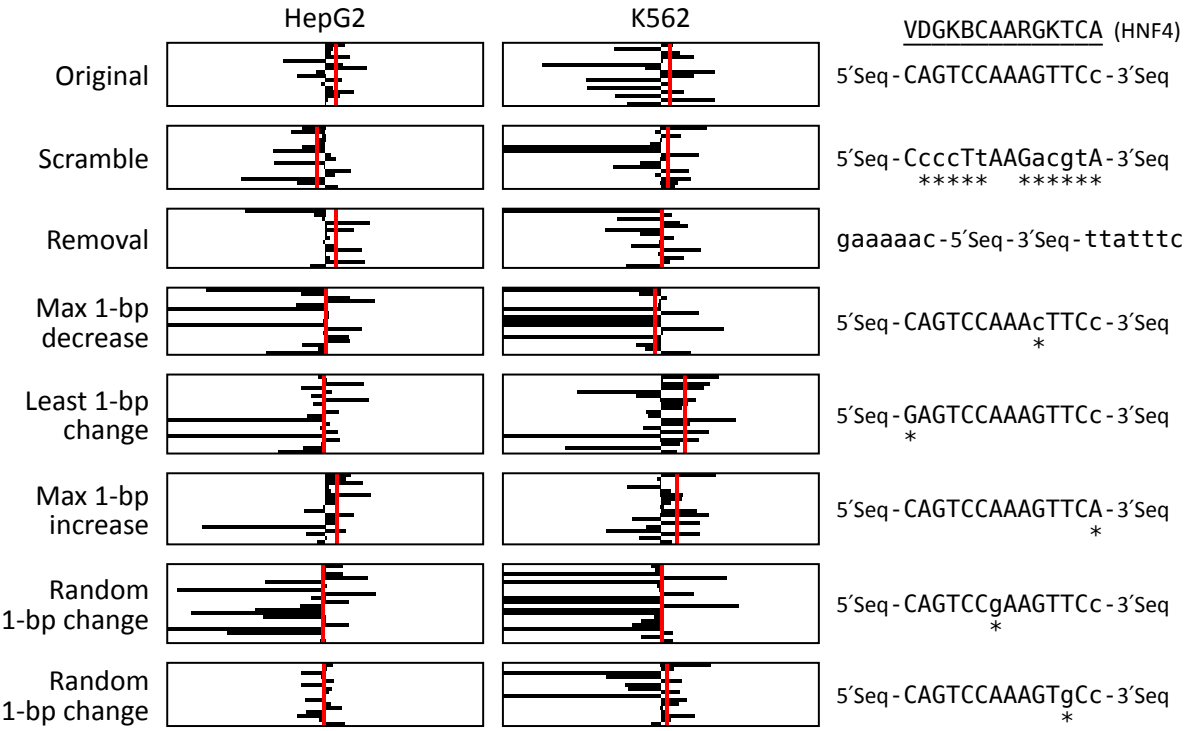
843 HNF4 in HepG2 enhancer

chr6 3345562 3345575 + (hg18)





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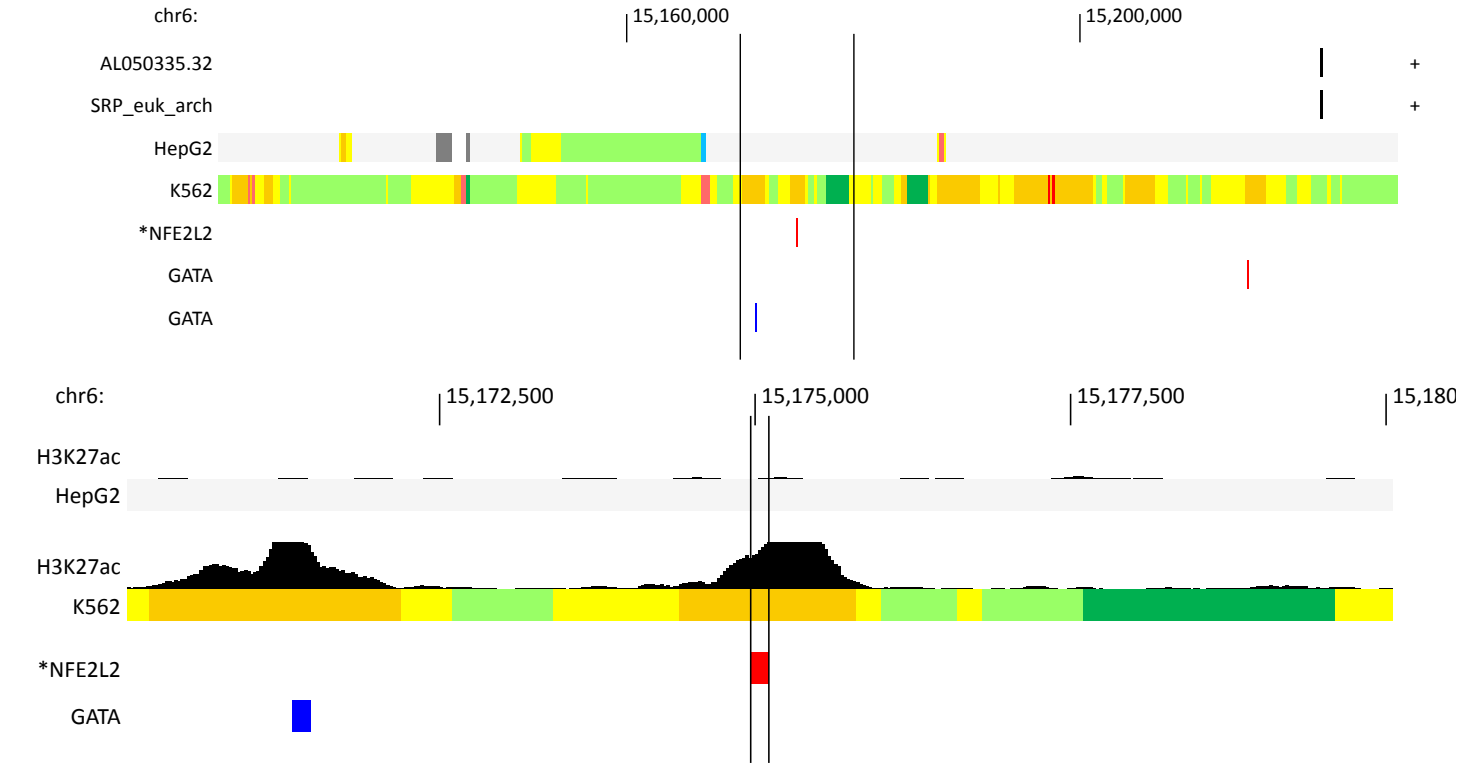
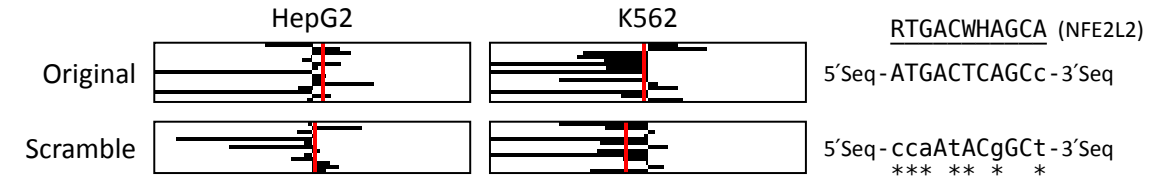
844 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 15175032 15175042 + (hg18)





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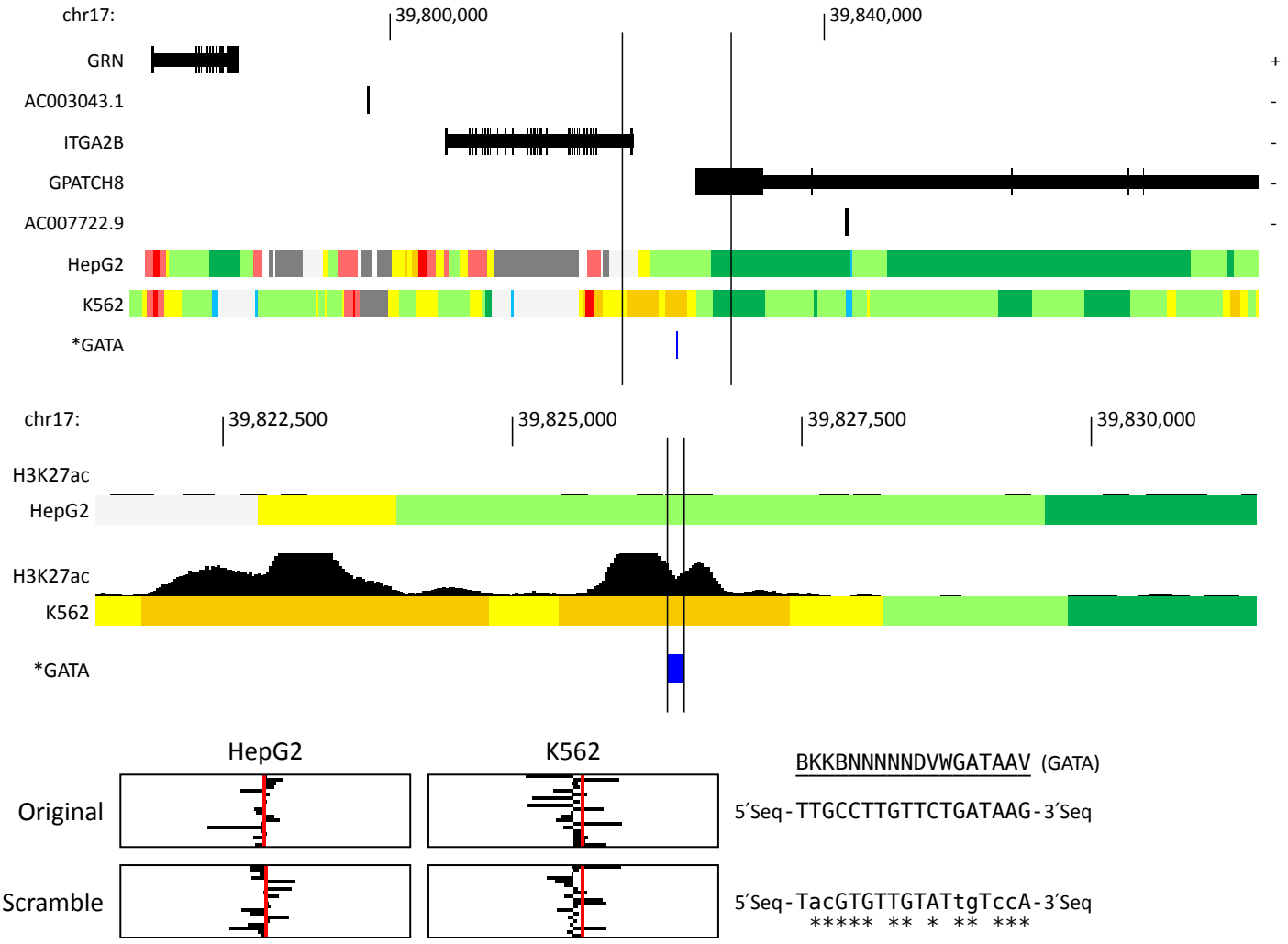
845 GATA in K562 enhancer

chr17 39826403 39826420 - (hg18)



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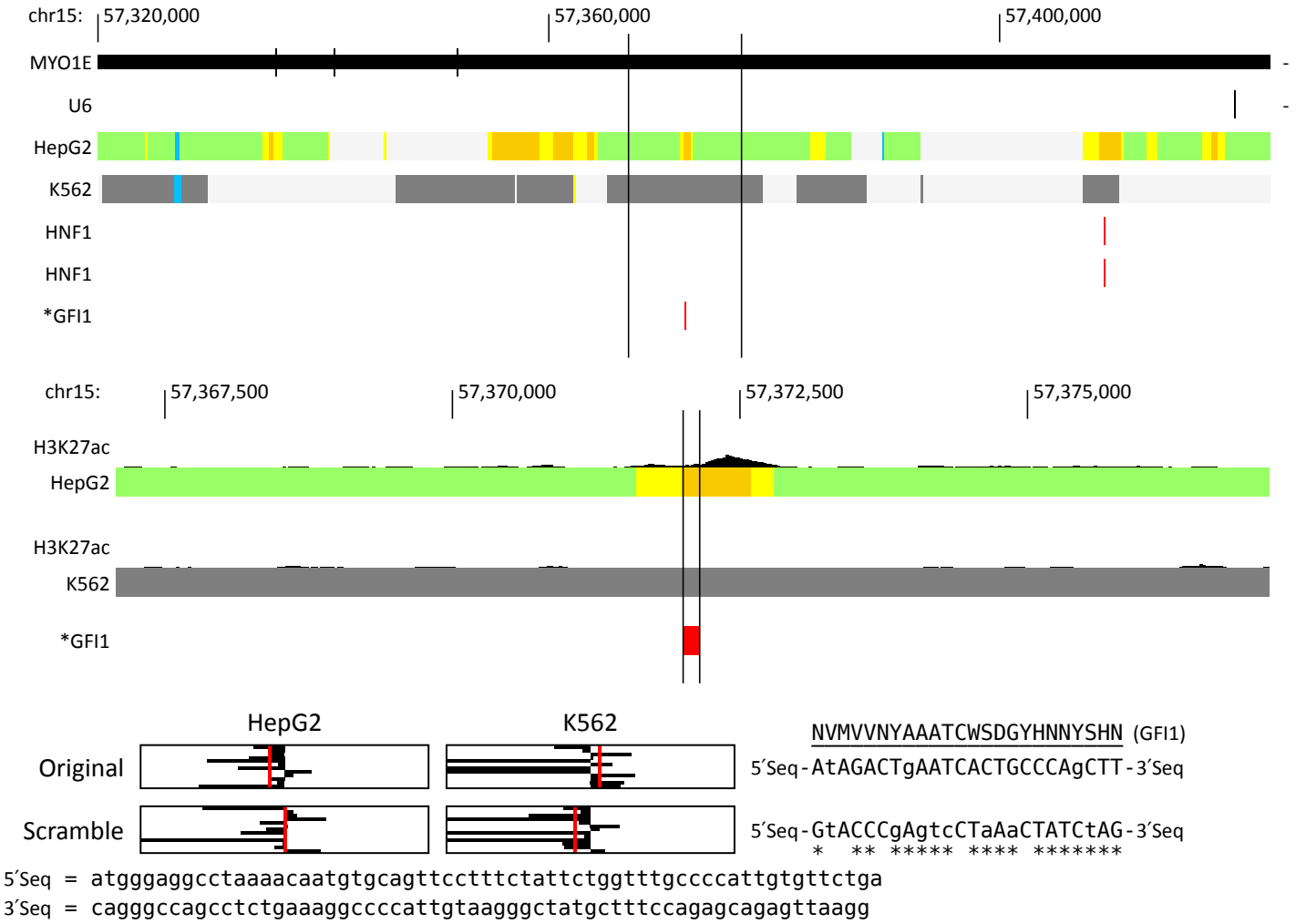
846 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr15 57372067 57372090 + (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

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* ** ***** **** *******

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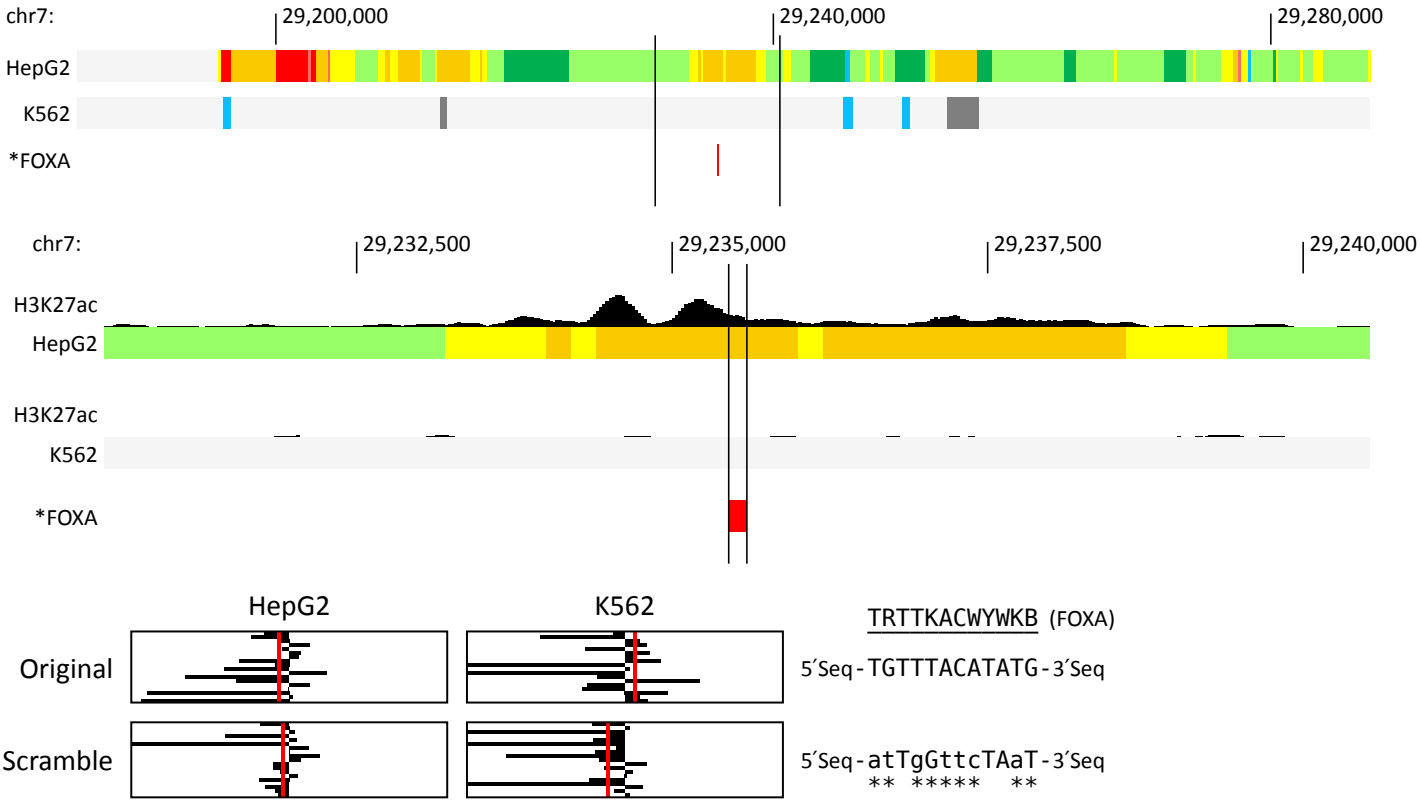
847 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr7 29235515 29235526 - (hg18)



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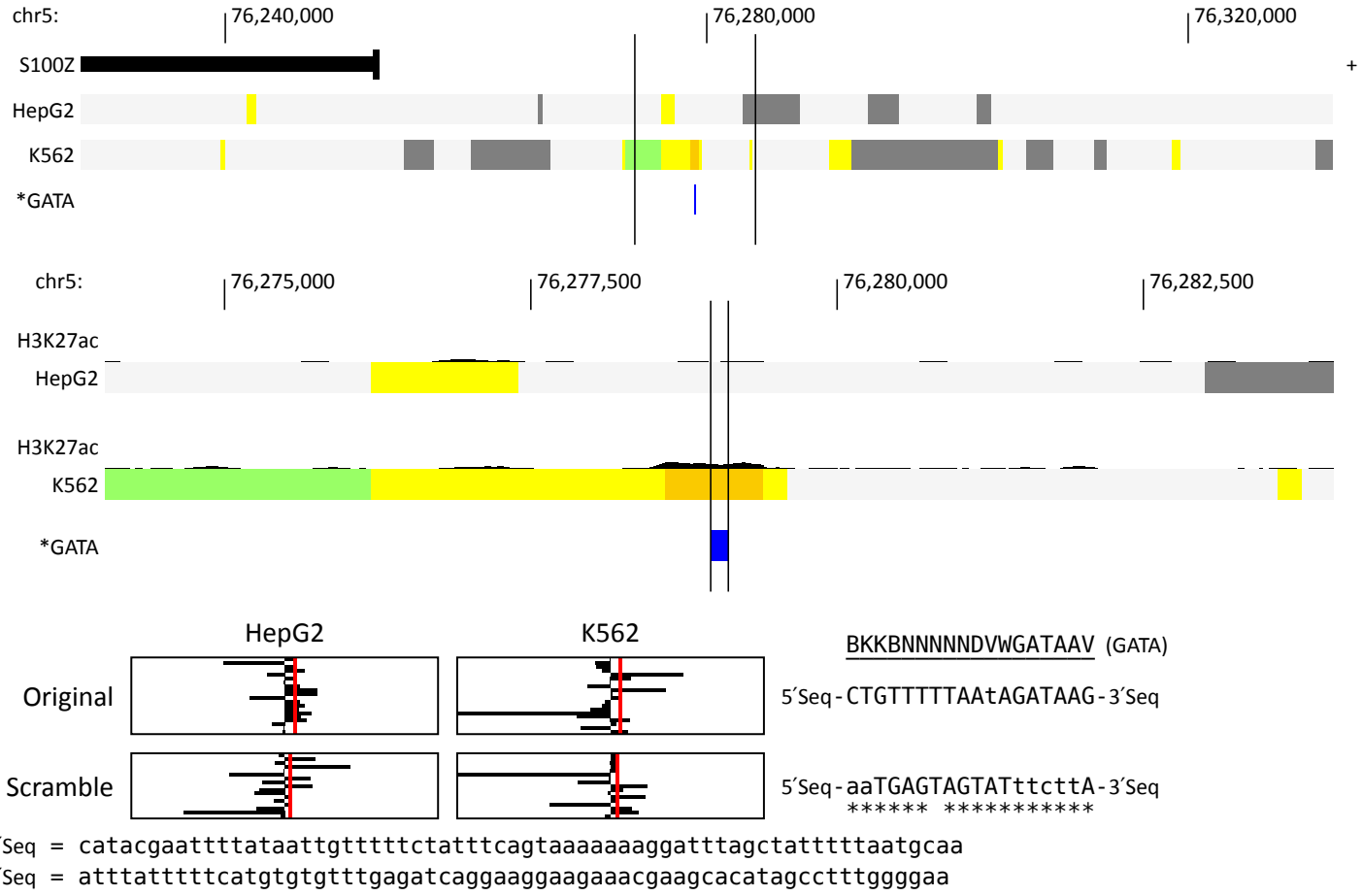
848 GATA in K562 enhancer

chr5 76279032 76279049 - (hg18)



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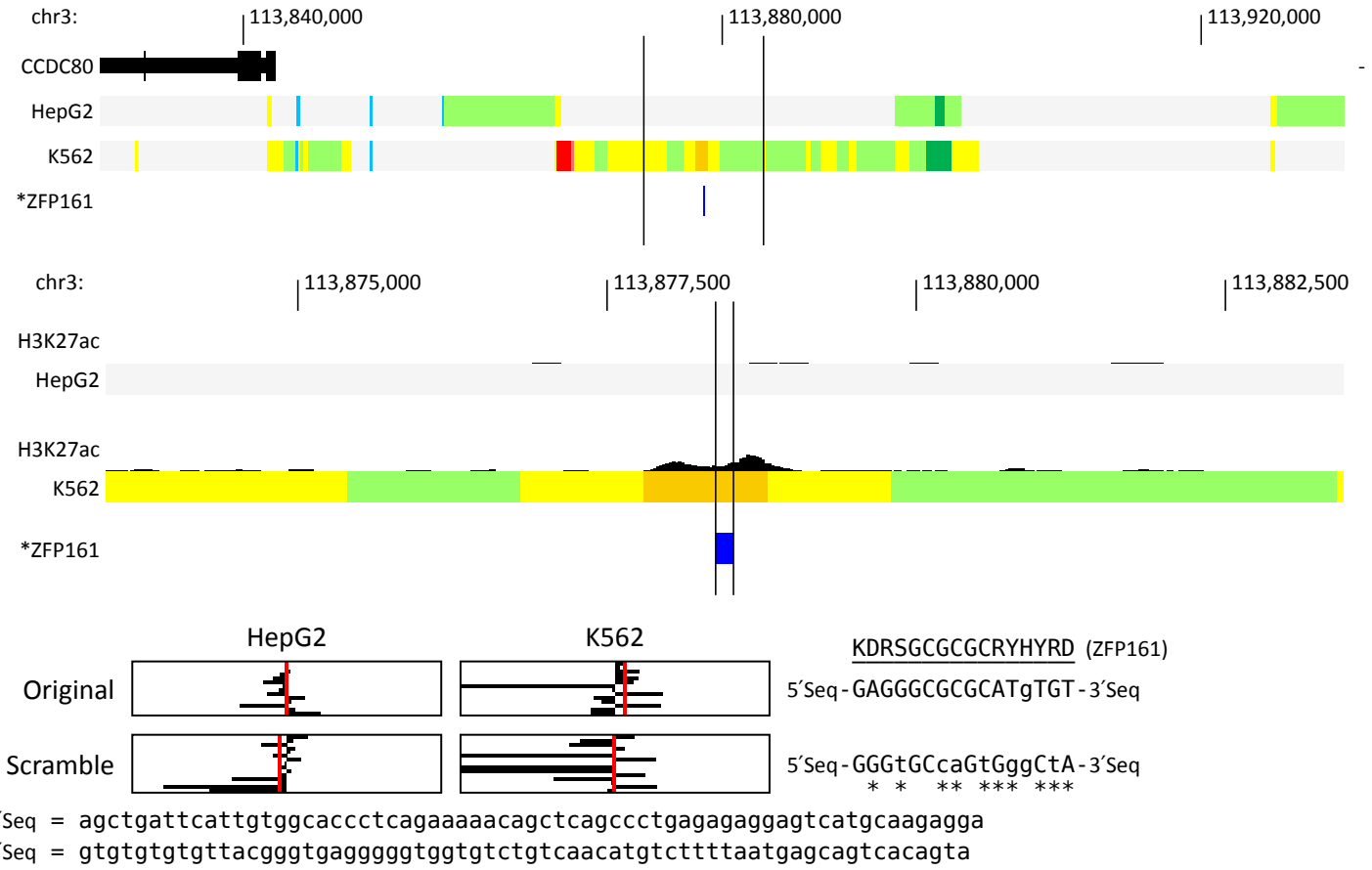
849 ZFP161 in K562 enhancer

chr3 113878443 113878458 - (hg18)



KDRSGCGCGCRYHYRD (ZFP161)

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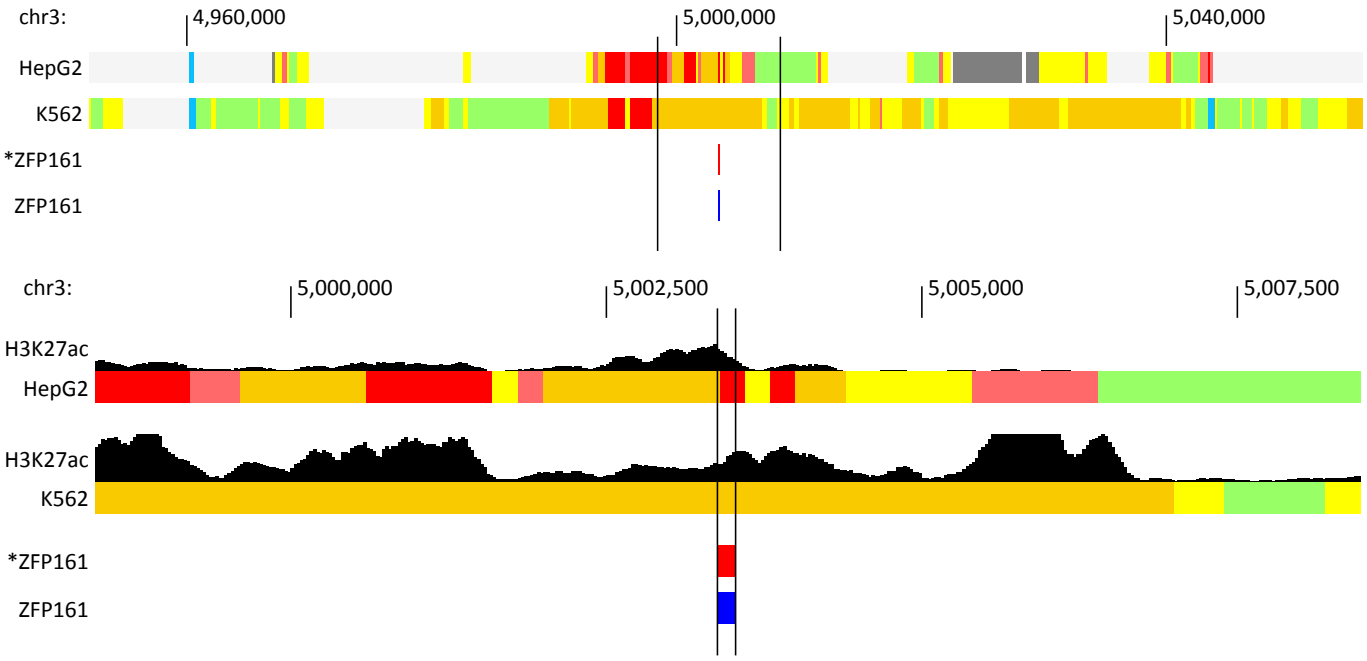
850 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr3 5003445 5003460 + (hg18)



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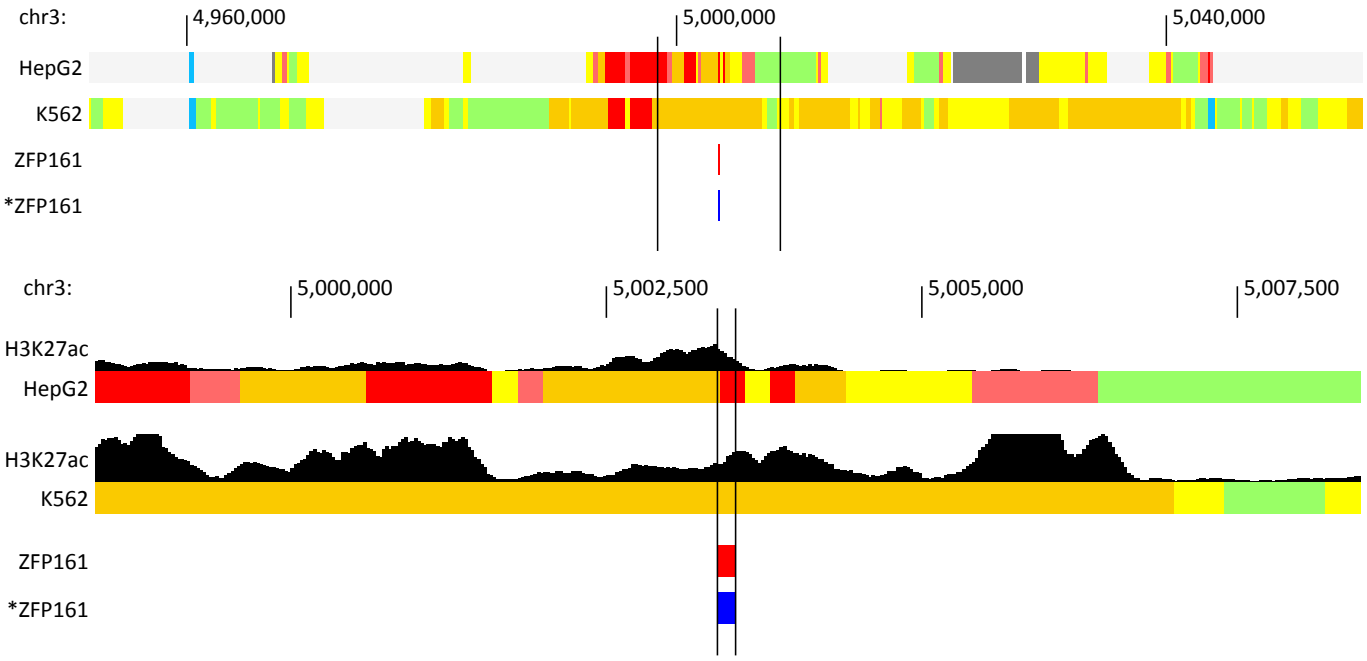
851 ZFP161 in K562 enhancer

chr3 5003445 5003460 + (hg18)



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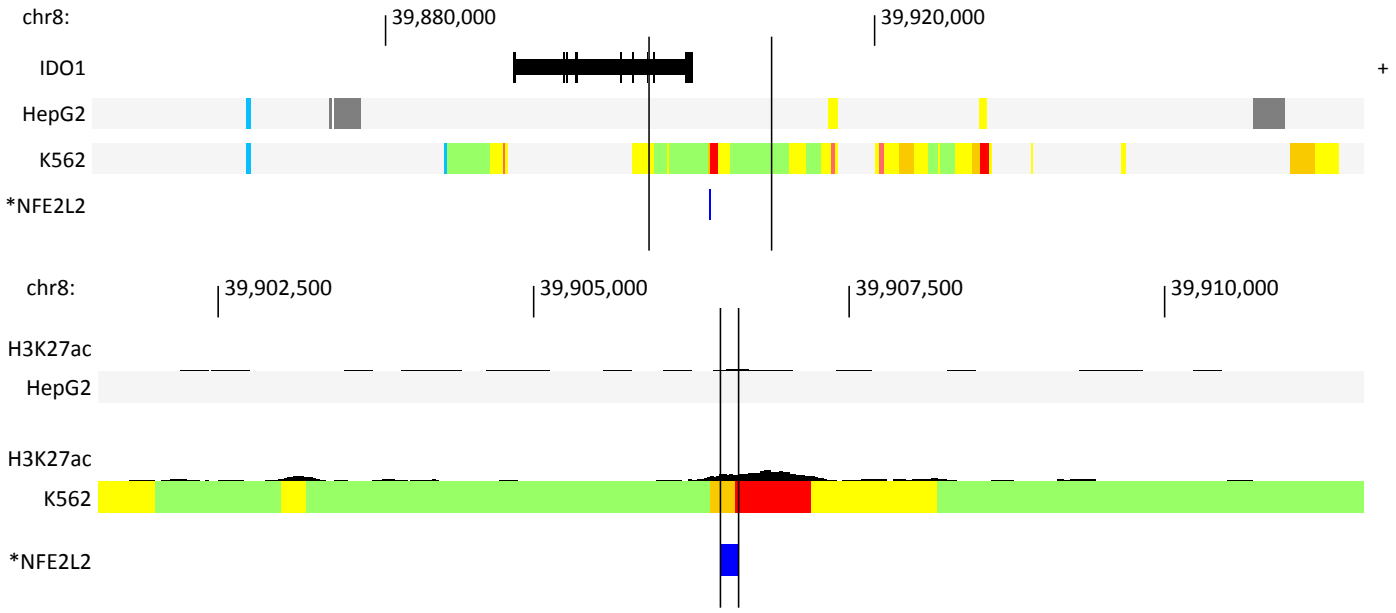
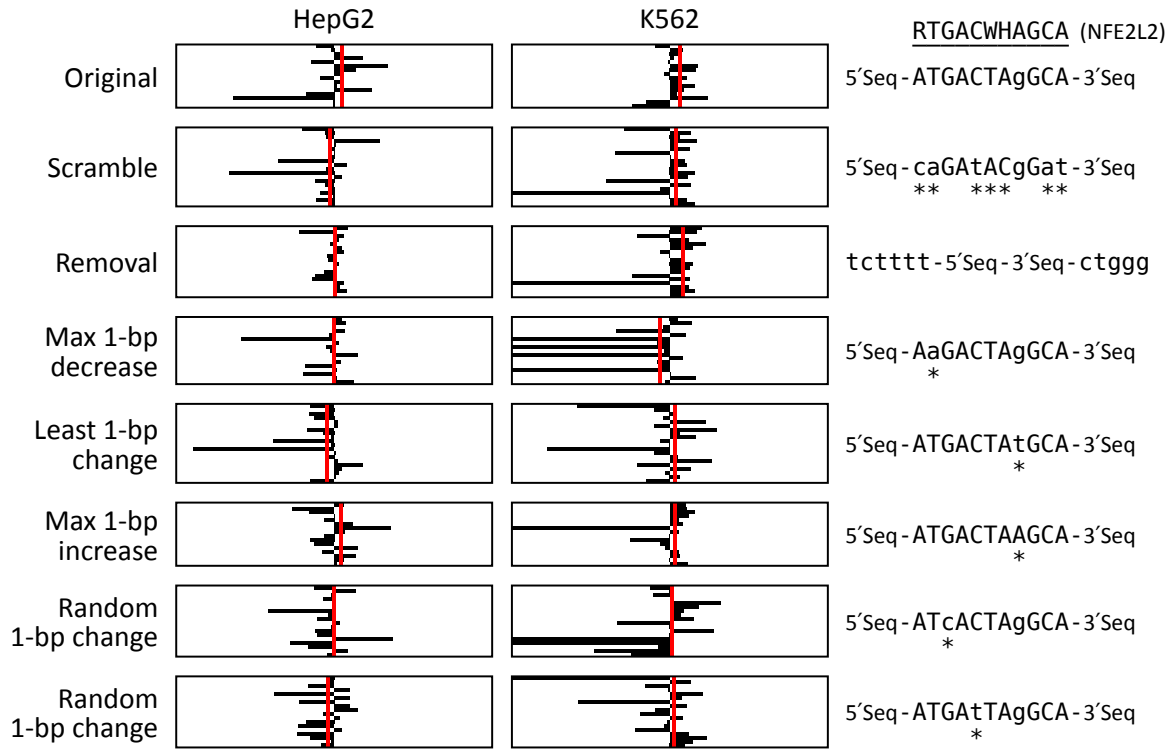
852 NFE2L2 in K562 enhancer

chr8 39906547 39906557 + (hg18)





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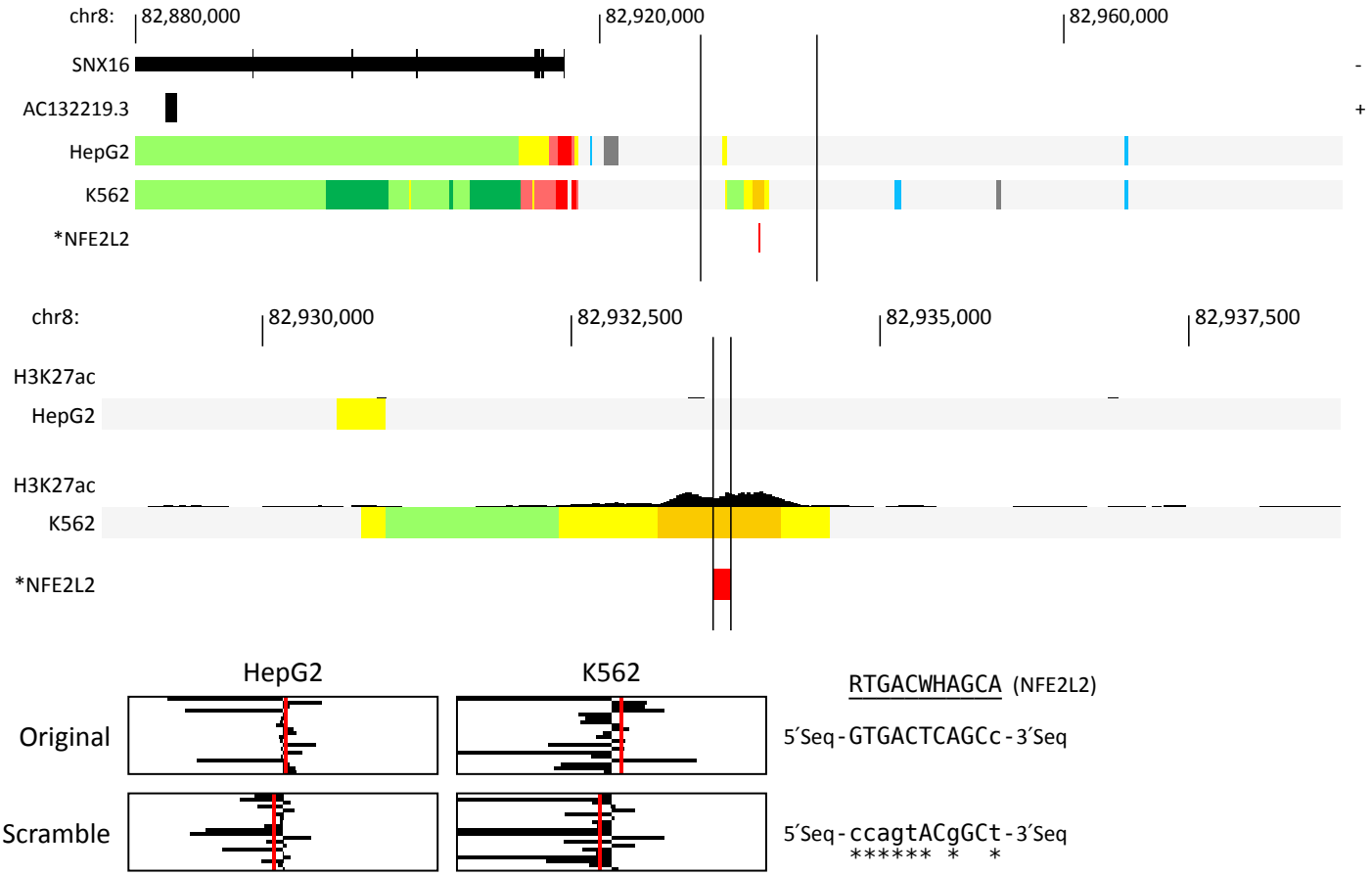
853 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 82933715 82933725 - (hg18)



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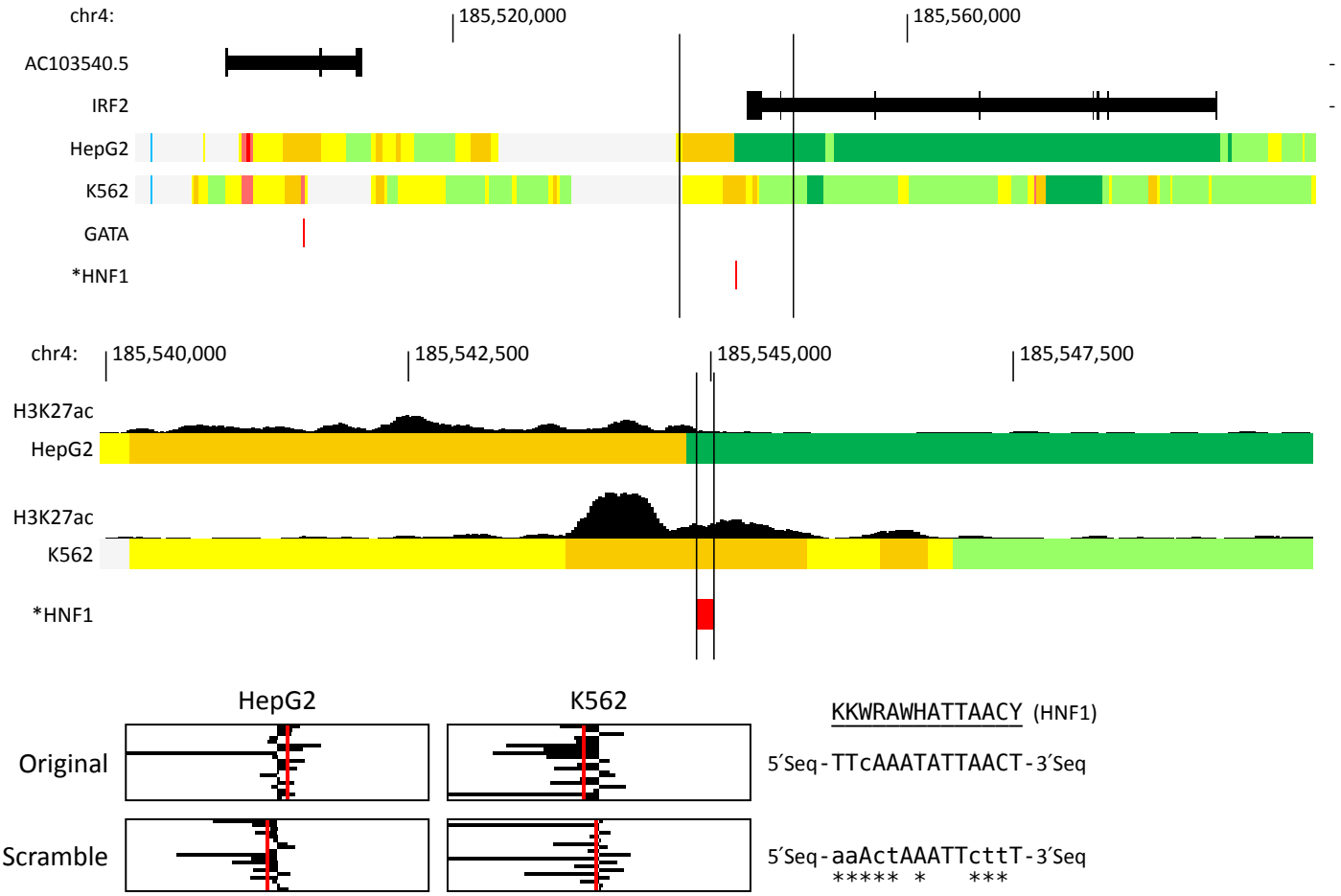
854 HNF1 in K562 enhancer (conserved at 60% confidence)

chr4 185544948 185544961 + (hg18)



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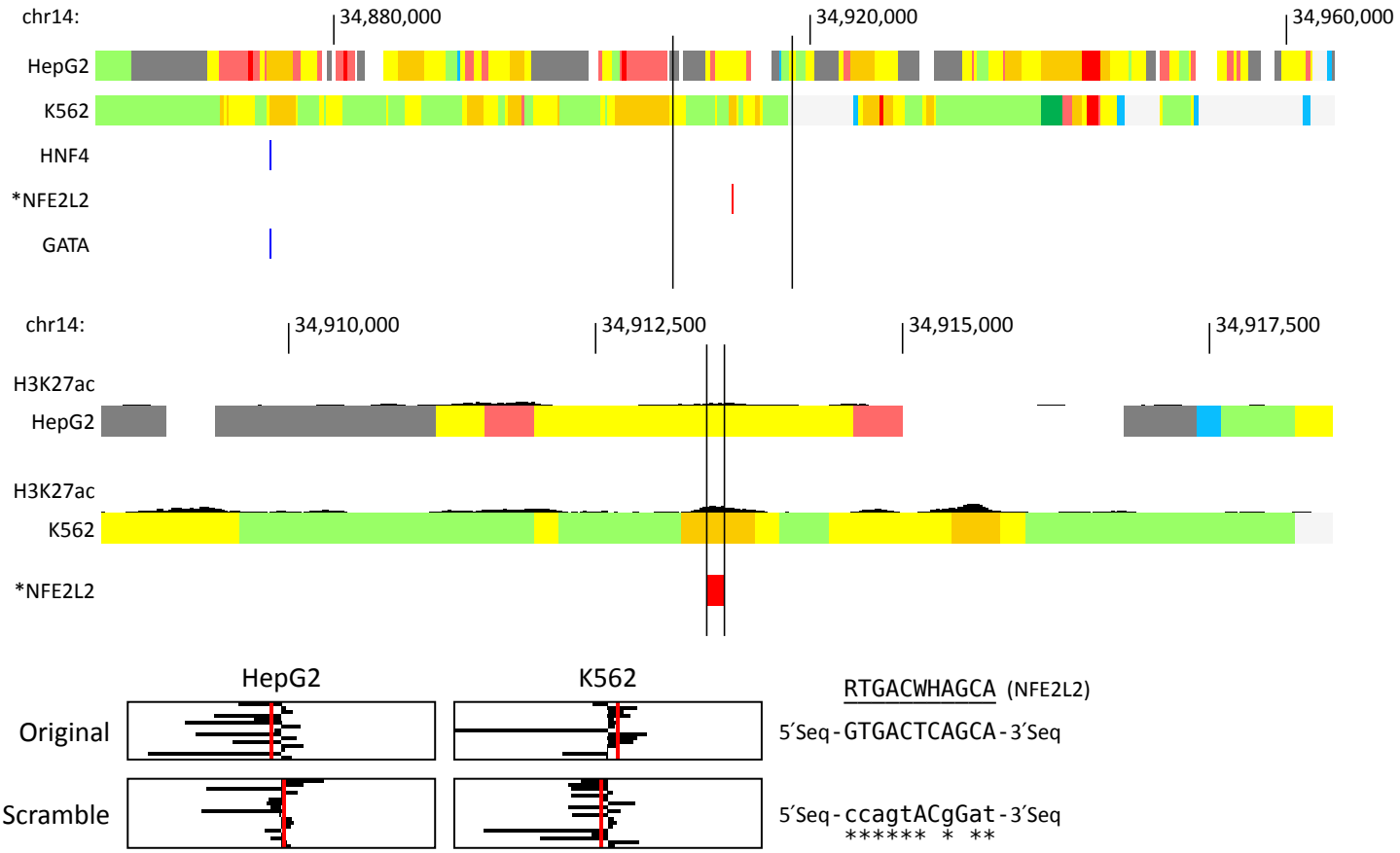
855 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr14 34913472 34913482 + (hg18)



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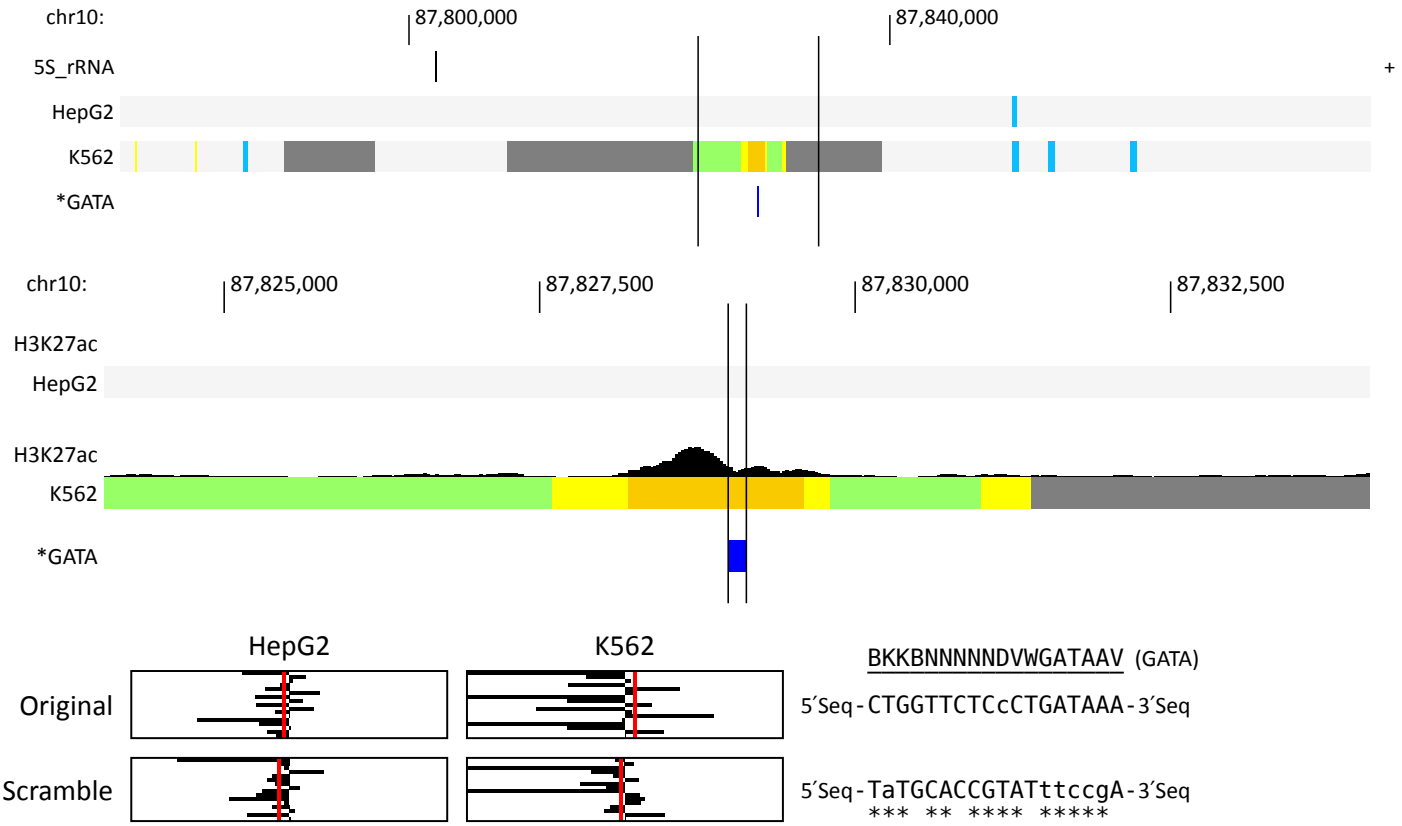
856 GATA in K562 enhancer

chr10 87829058 87829075 + (hg18)



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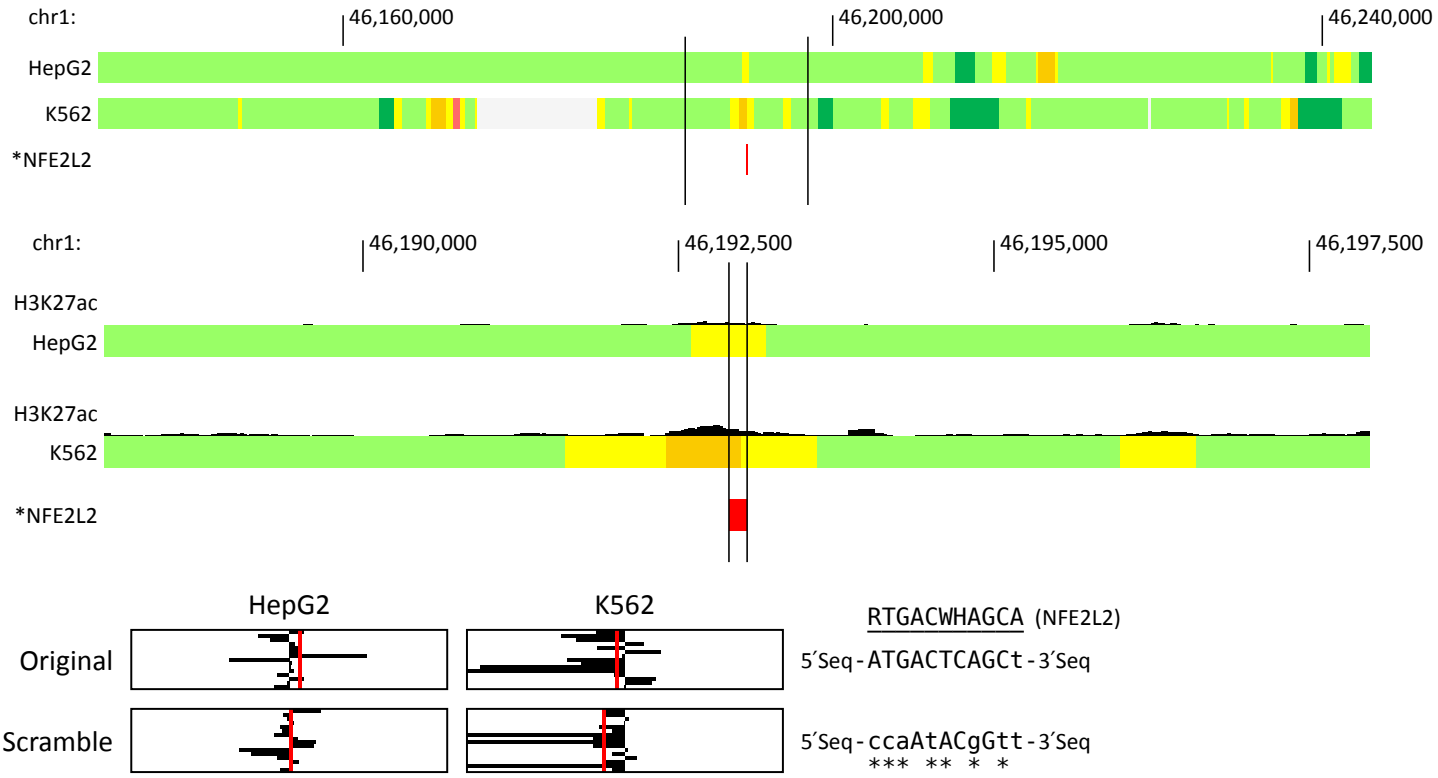
857 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 46192967 46192977 - (hg18)



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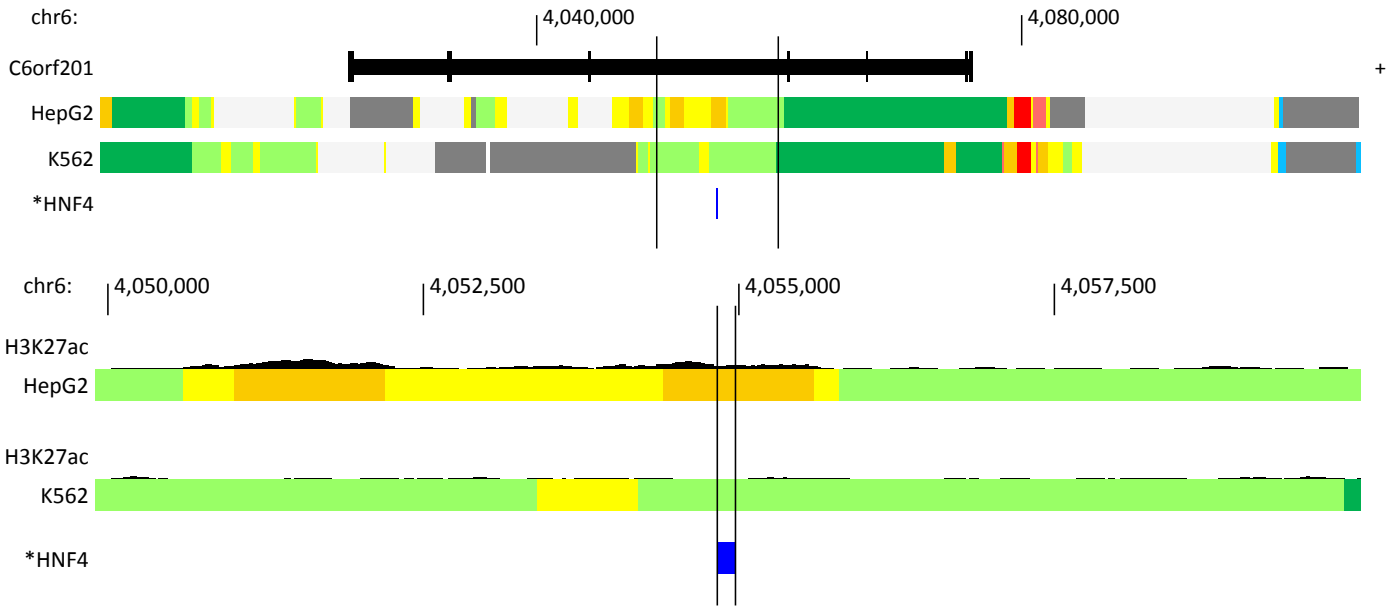
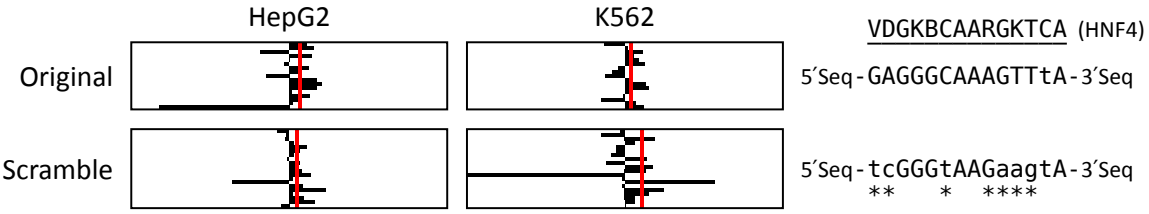
858 HNF4 in HepG2 enhancer

chr6 4054895 4054908 + (hg18)





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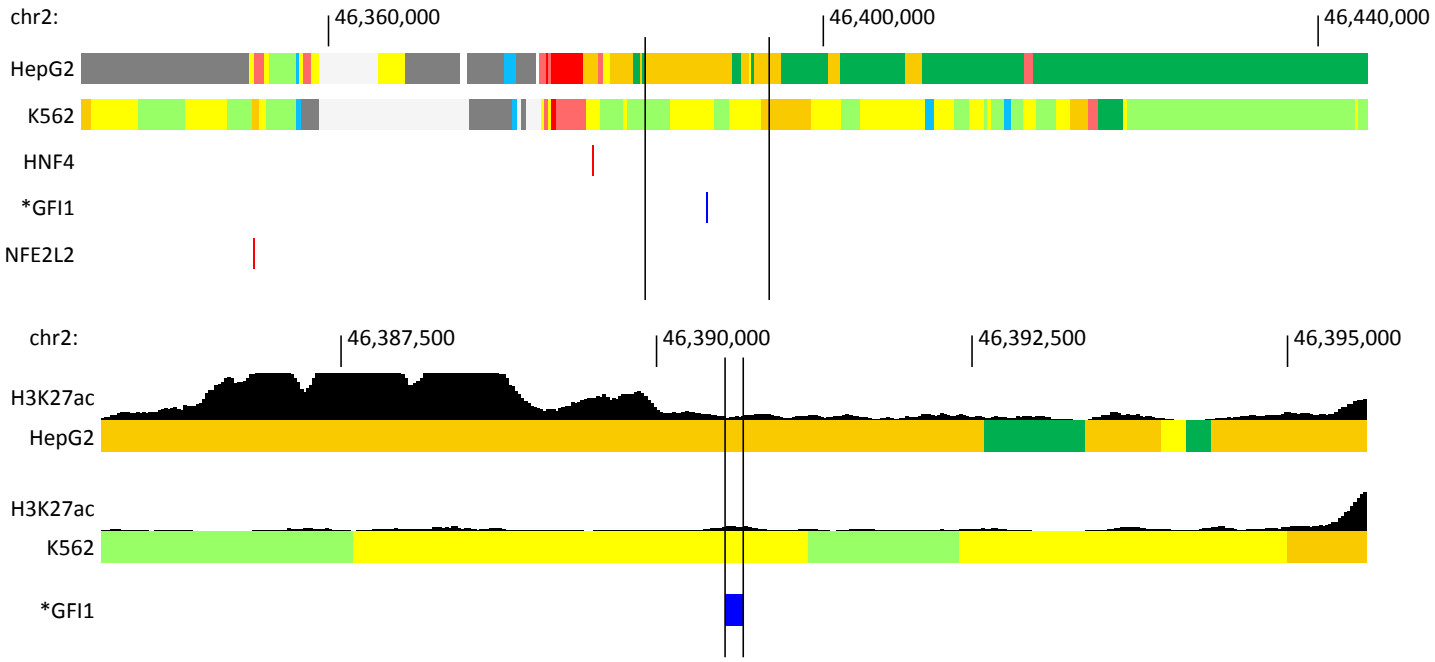
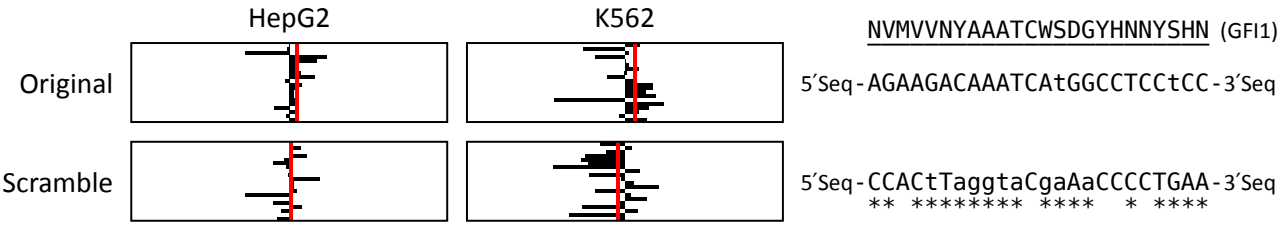
859 GFI1 in HepG2 enhancer

chr2 46390604 46390627 - (hg18)





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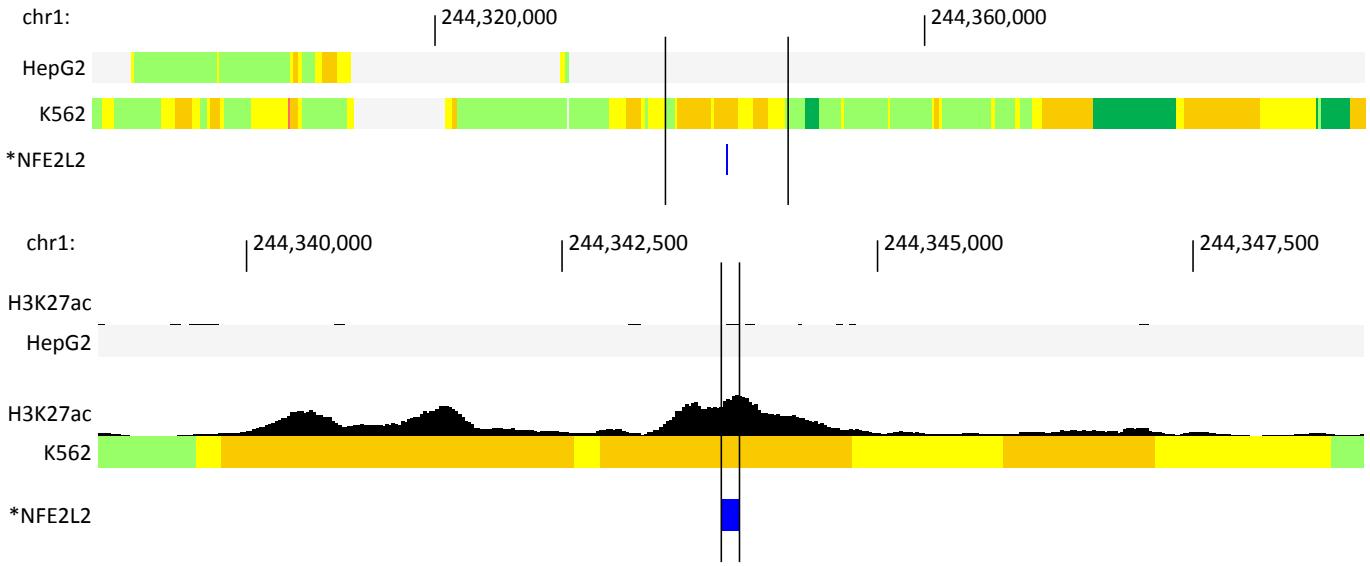
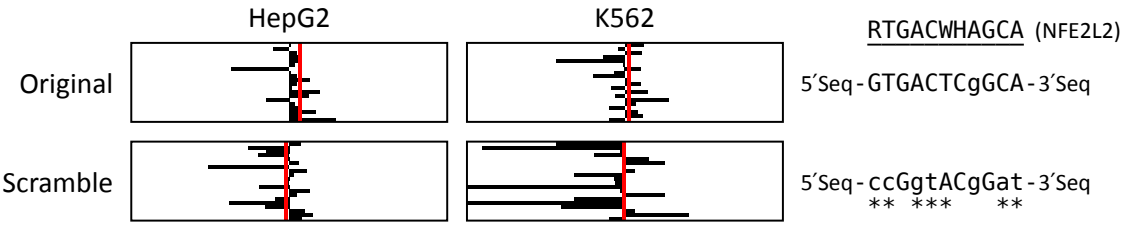
860 NFE2L2 in K562 enhancer

chr1 244343829 244343839 - (hg18)





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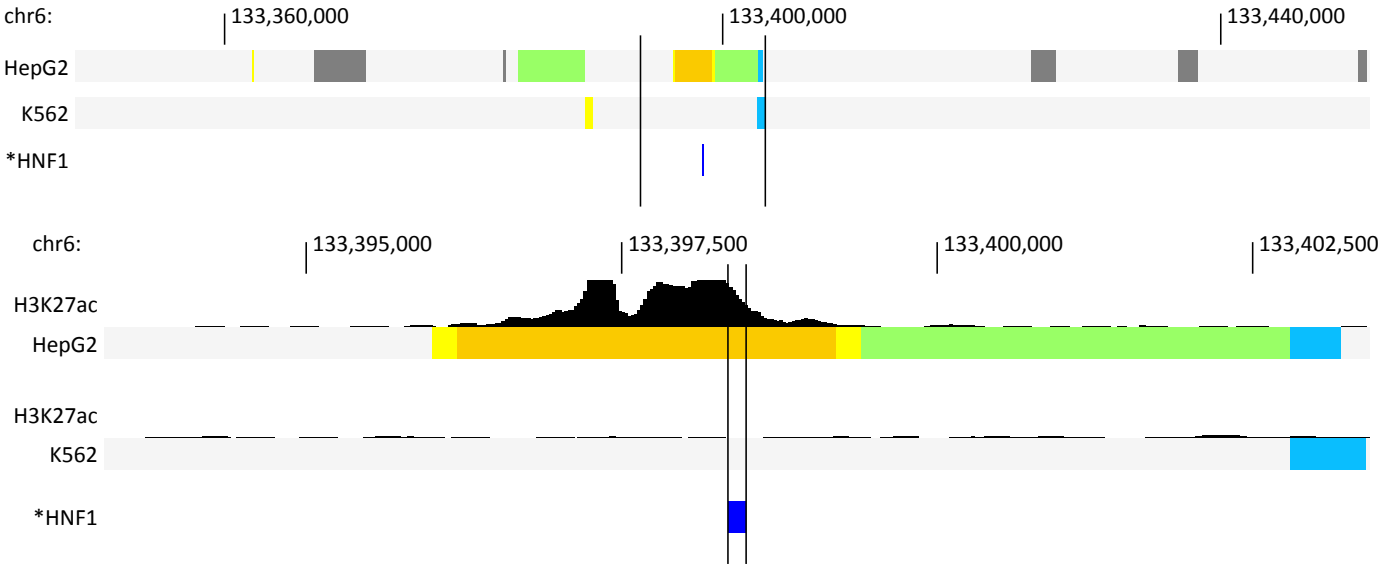
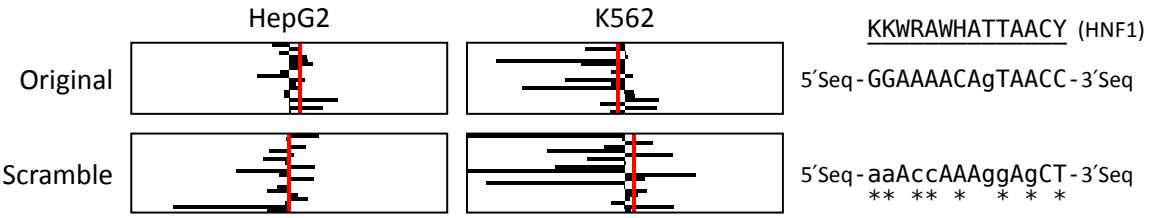
861 HNF1 in HepG2 enhancer

chr6 133398408 133398421 - (hg18)





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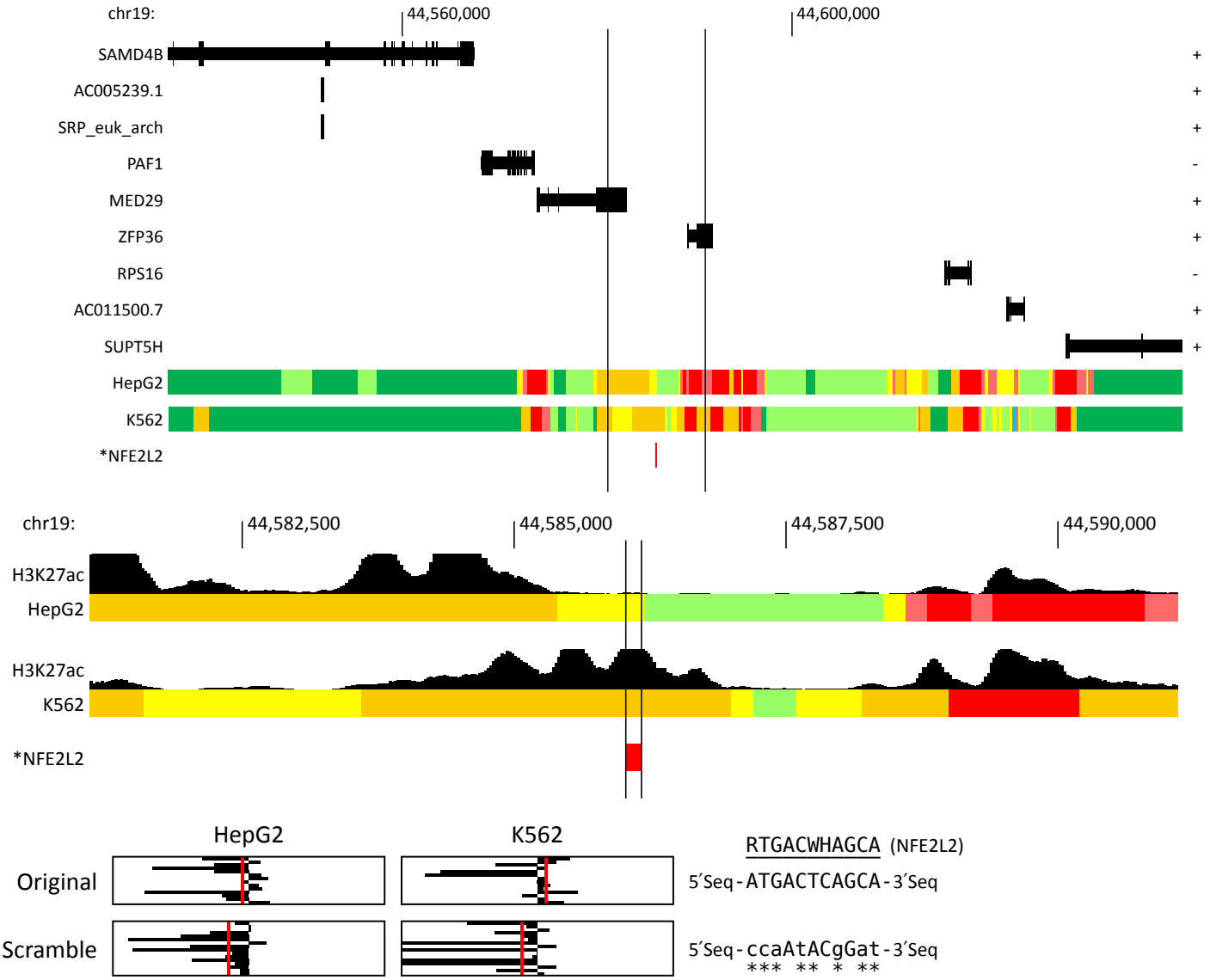
862 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr19 44586094 44586104 + (hg18)



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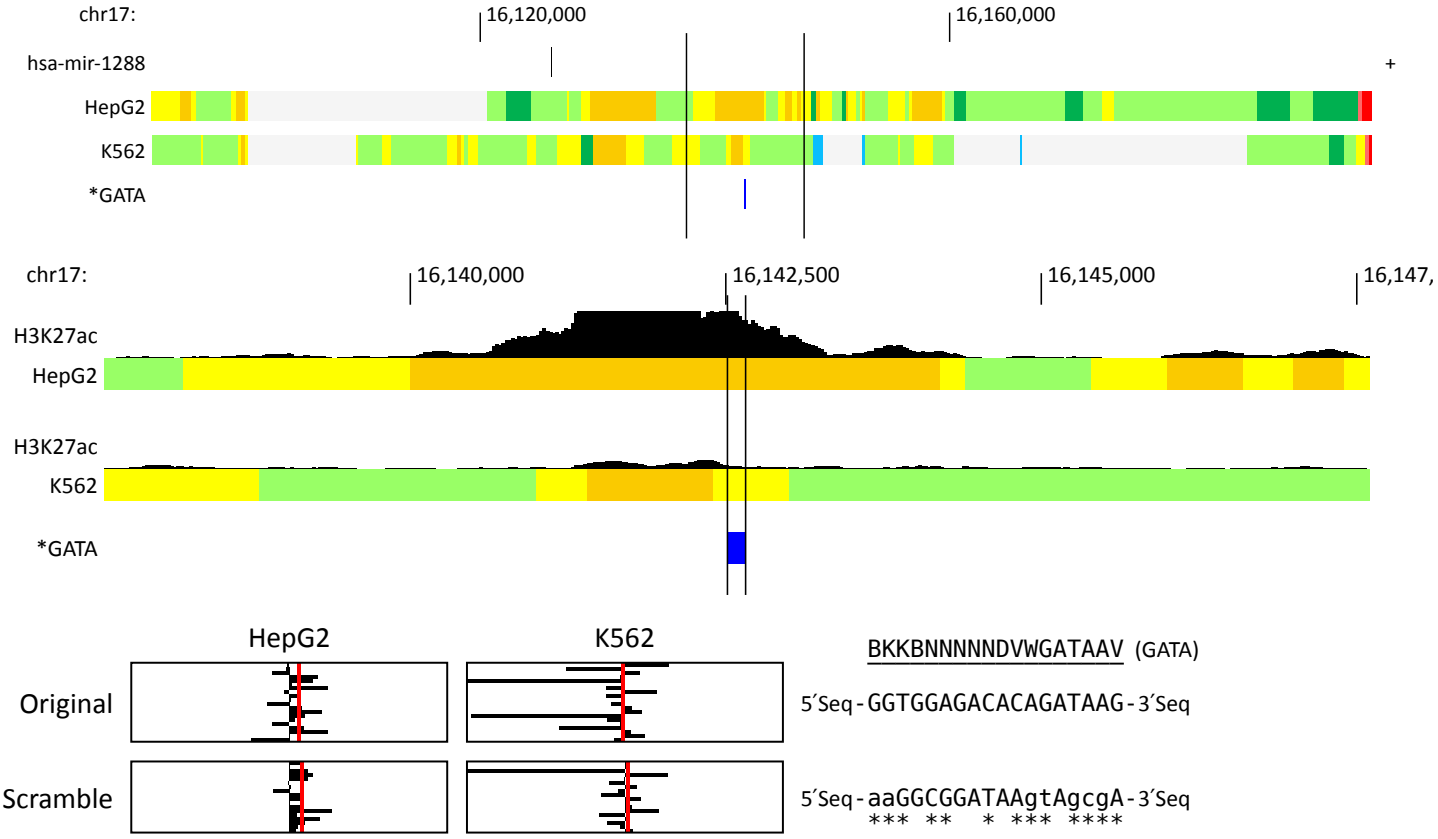
863 GATA in HepG2 enhancer

chr17 16142577 16142594 + (hg18)



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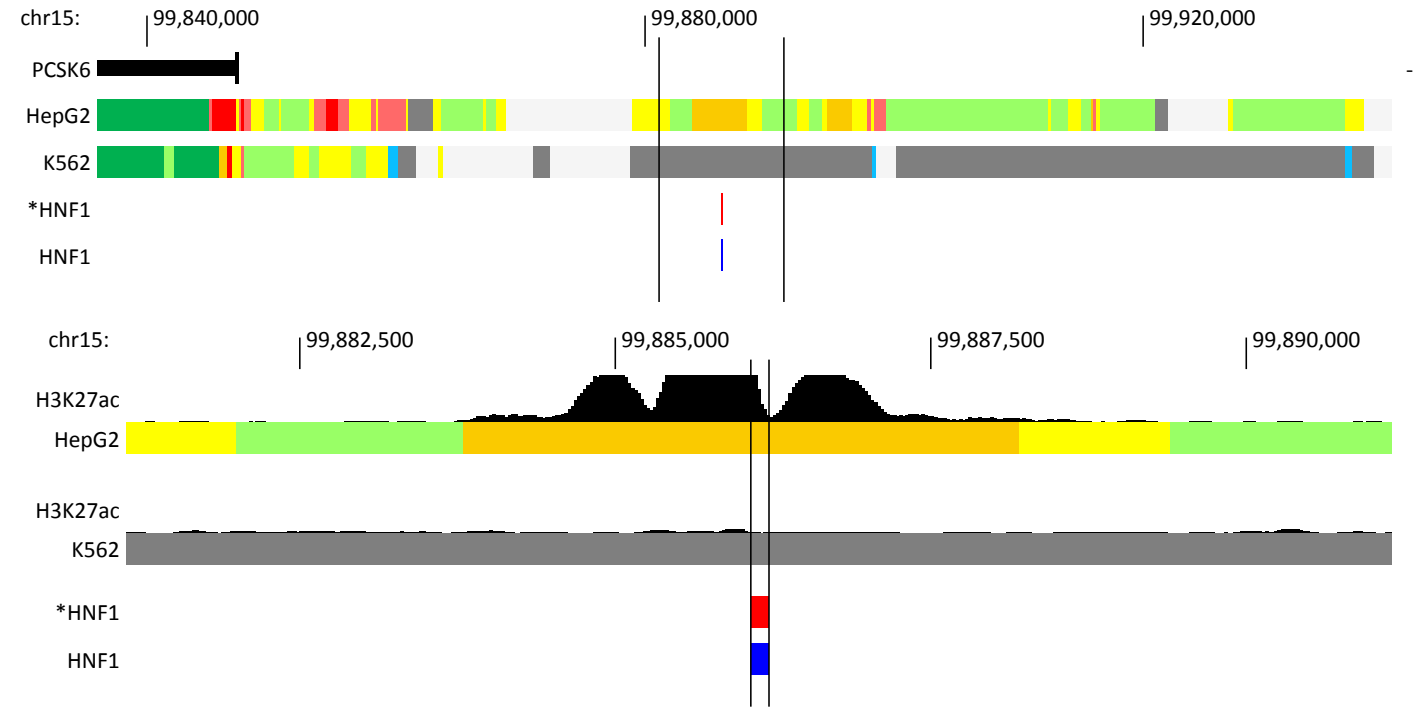
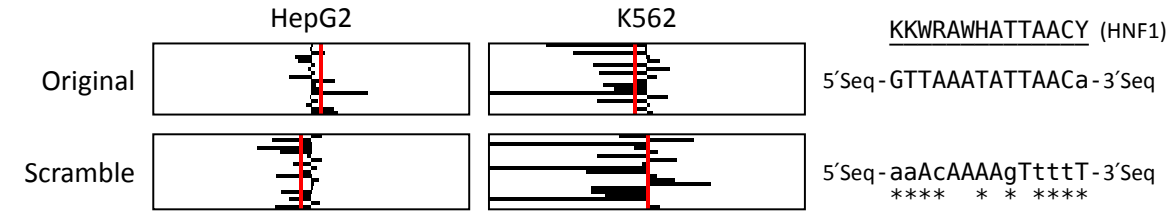
864 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr15 99886140 99886153 - (hg18)





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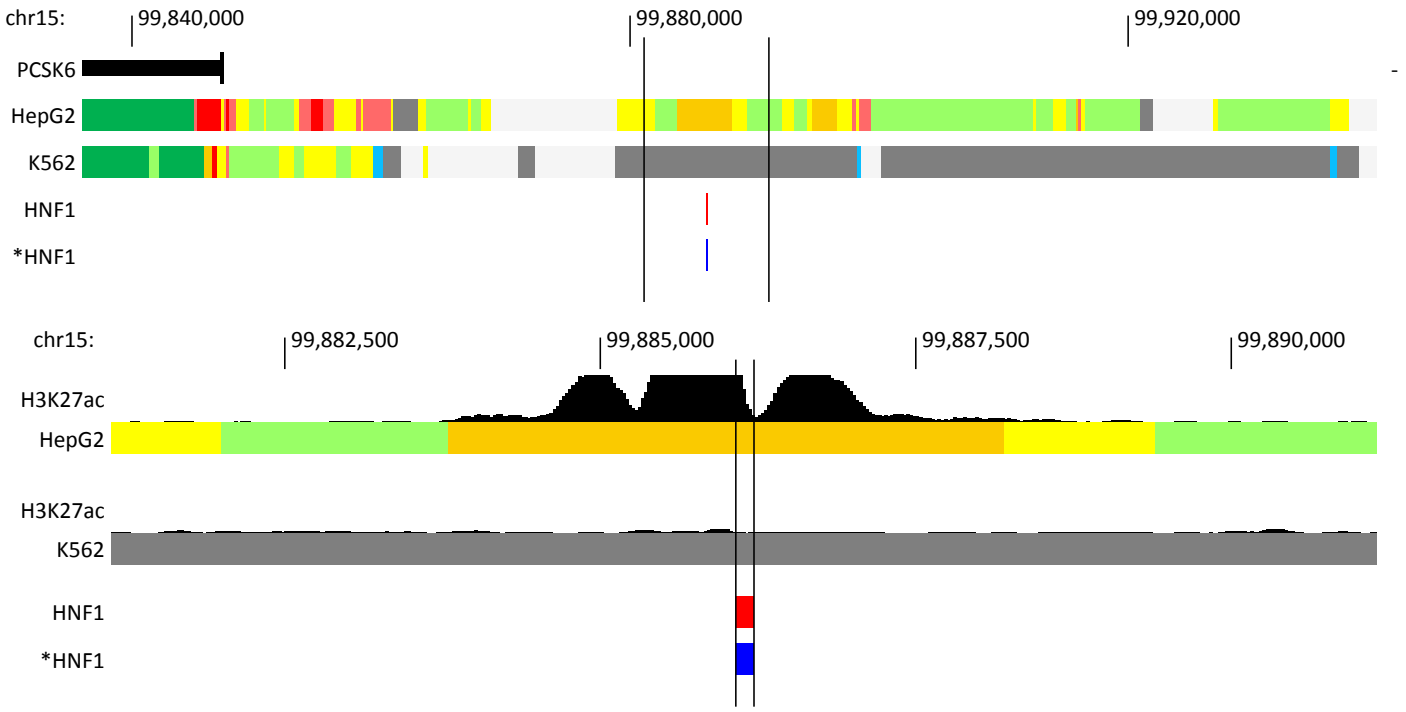
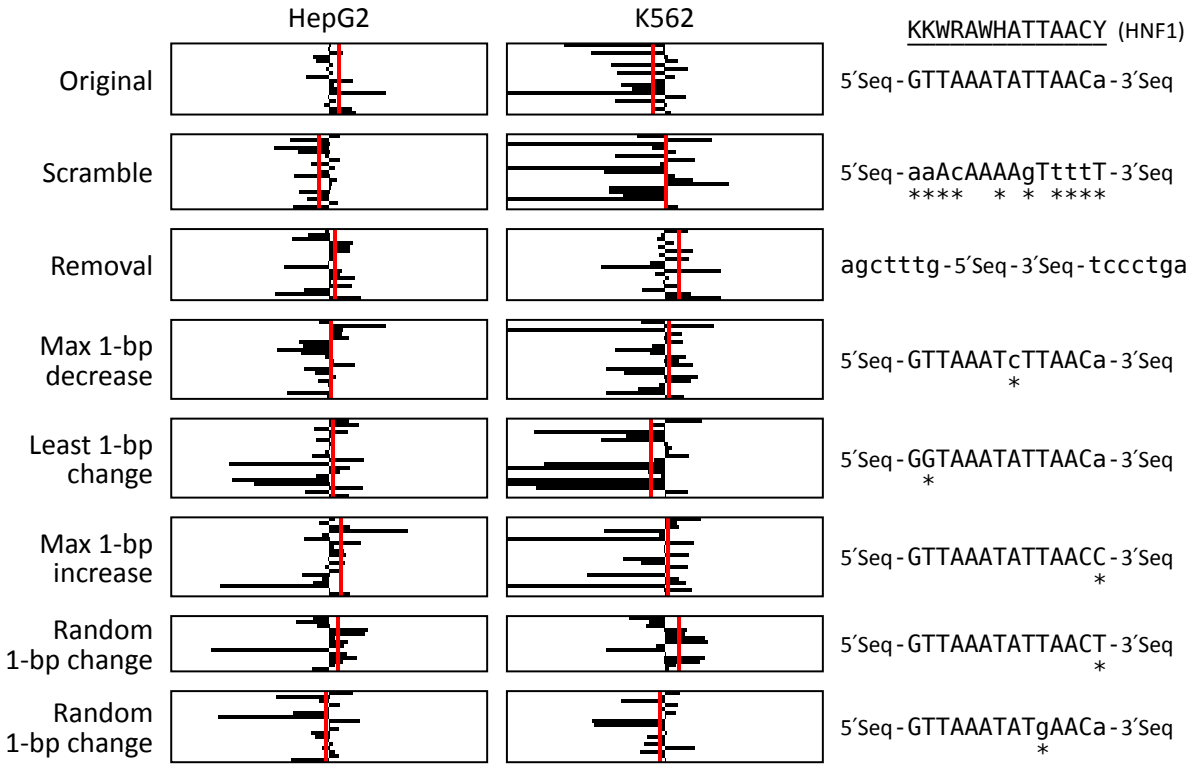
865 HNF1 in HepG2 enhancer

chr15 99886140 99886153 - (hg18)





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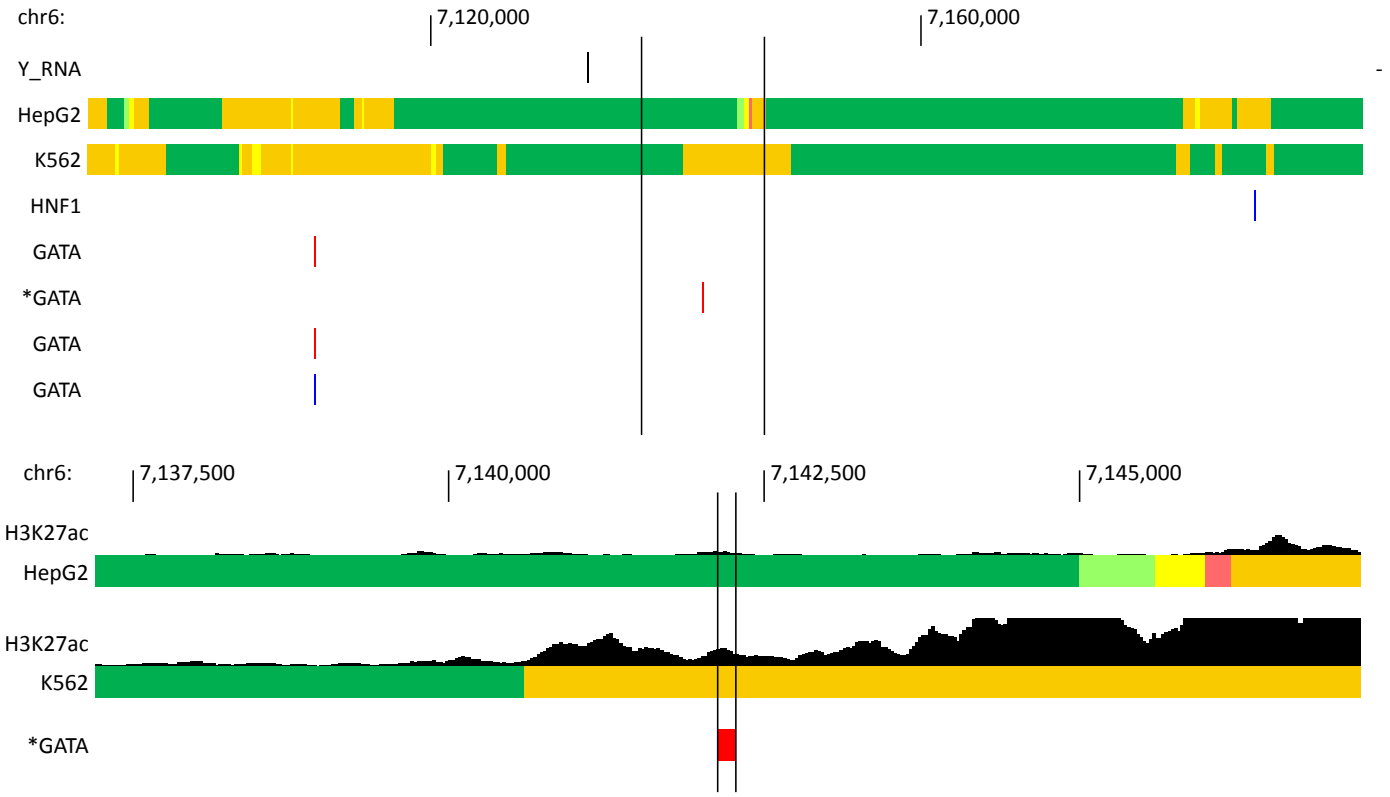
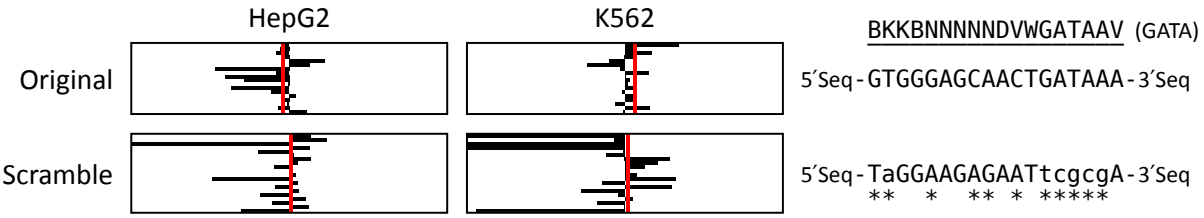
866 GATA in K562 enhancer (conserved at 60% confidence)

chr6 7142196 7142213 - (hg18)



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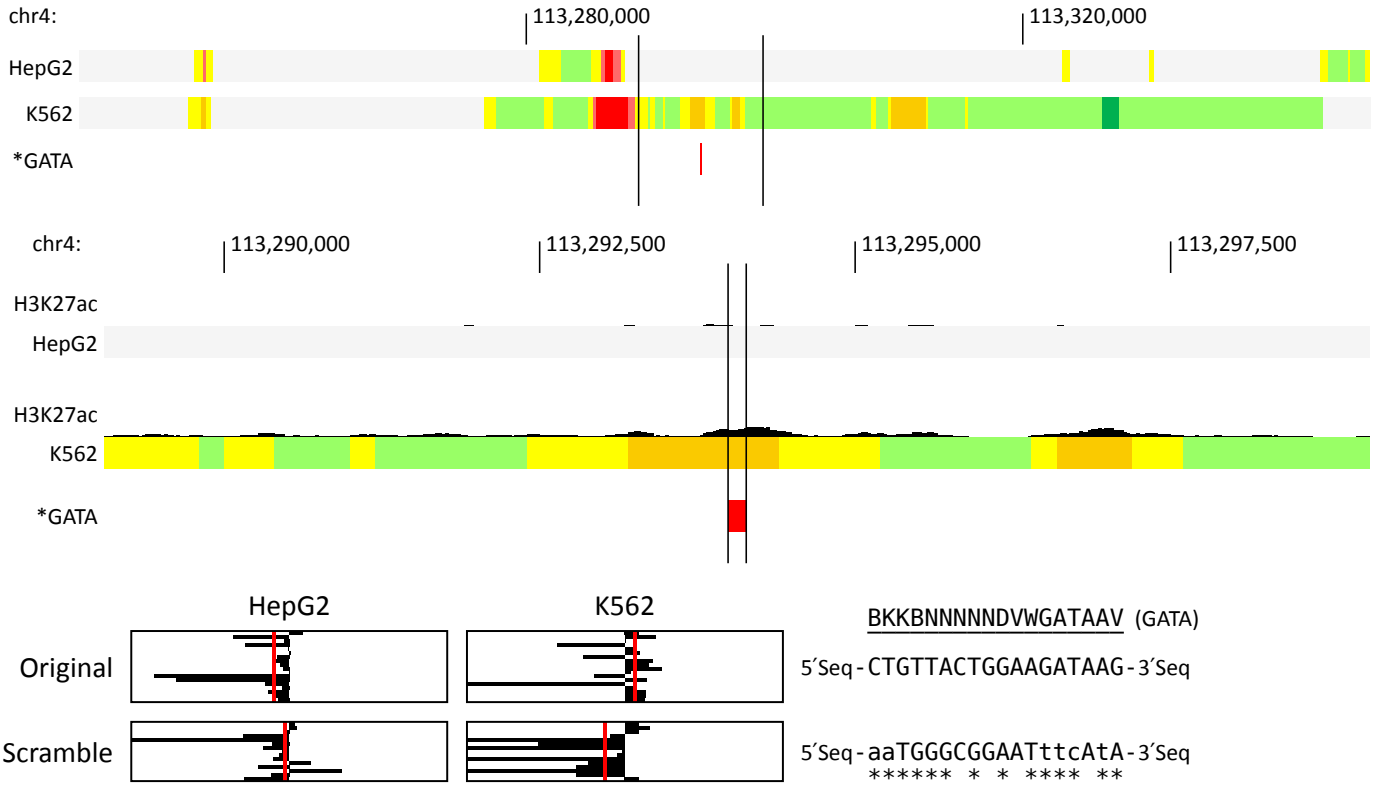
867 GATA in K562 enhancer (conserved at 50% confidence)

chr4 113294057 113294074 - (hg18)



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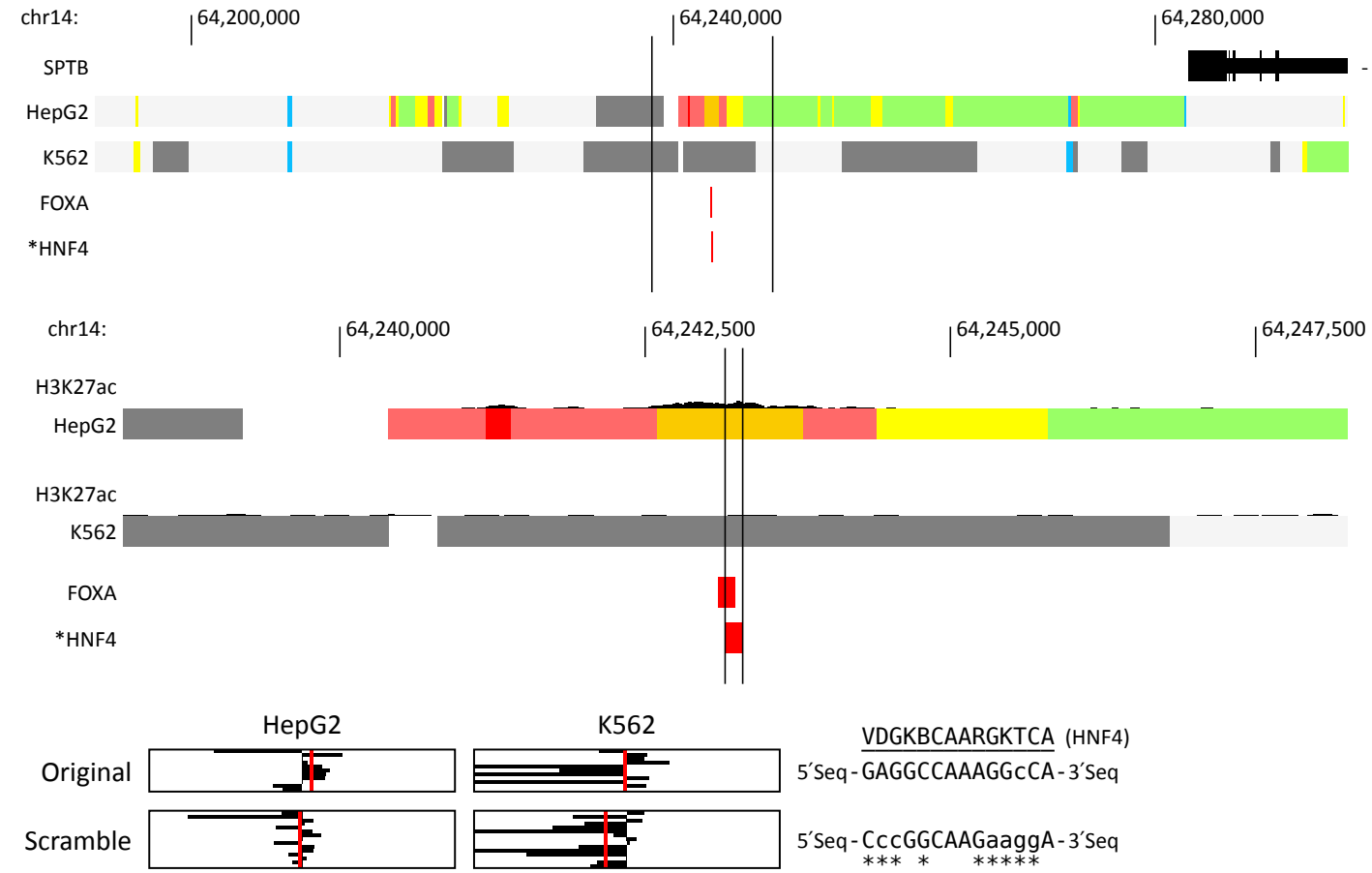
868 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 64243221 64243234 + (hg18)



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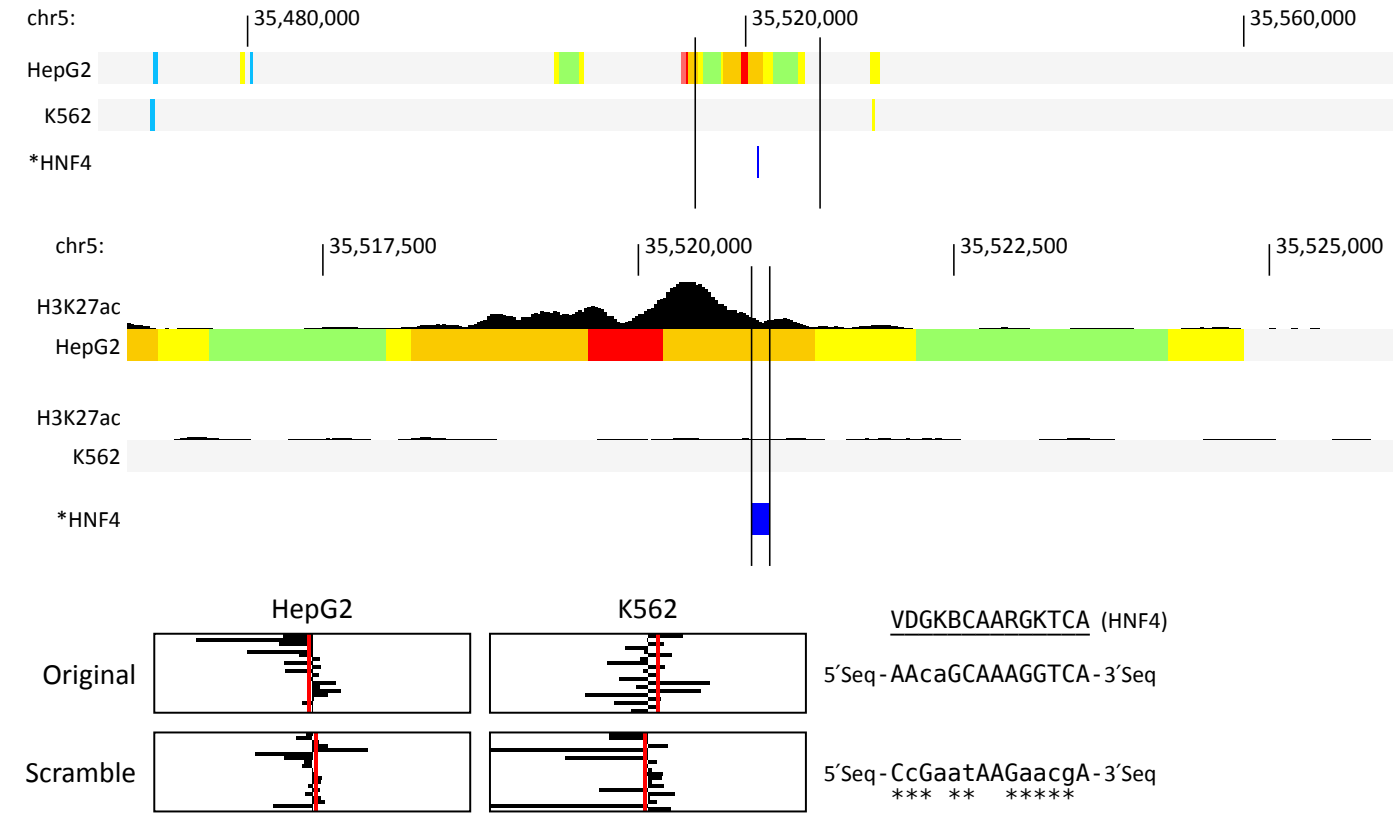
869 HNF4 in HepG2 enhancer

chr5 35520963 35520976 + (hg18)



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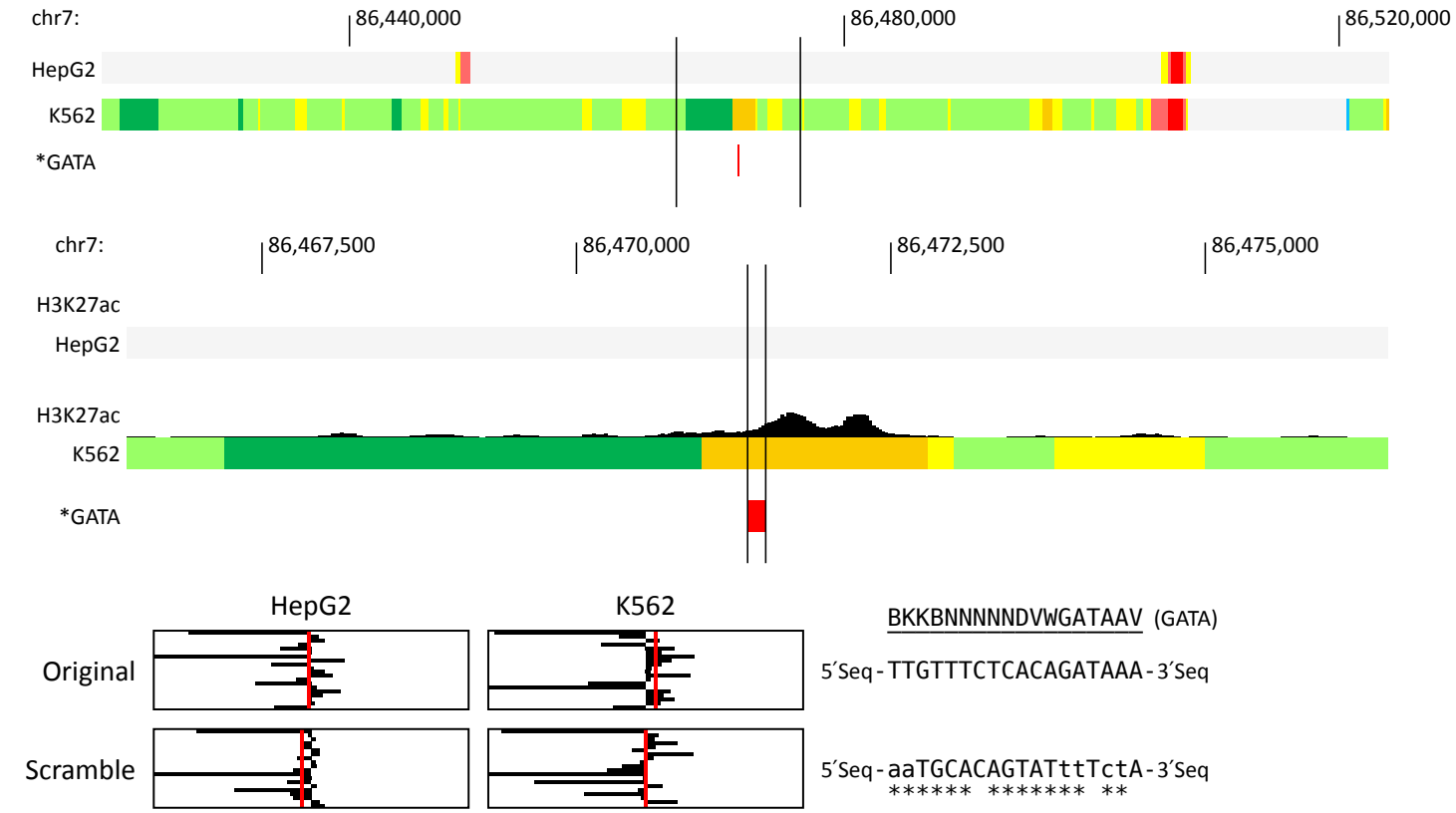
870 GATA in K562 enhancer (conserved at 60% confidence)

chr7 86471425 86471442 + (hg18)



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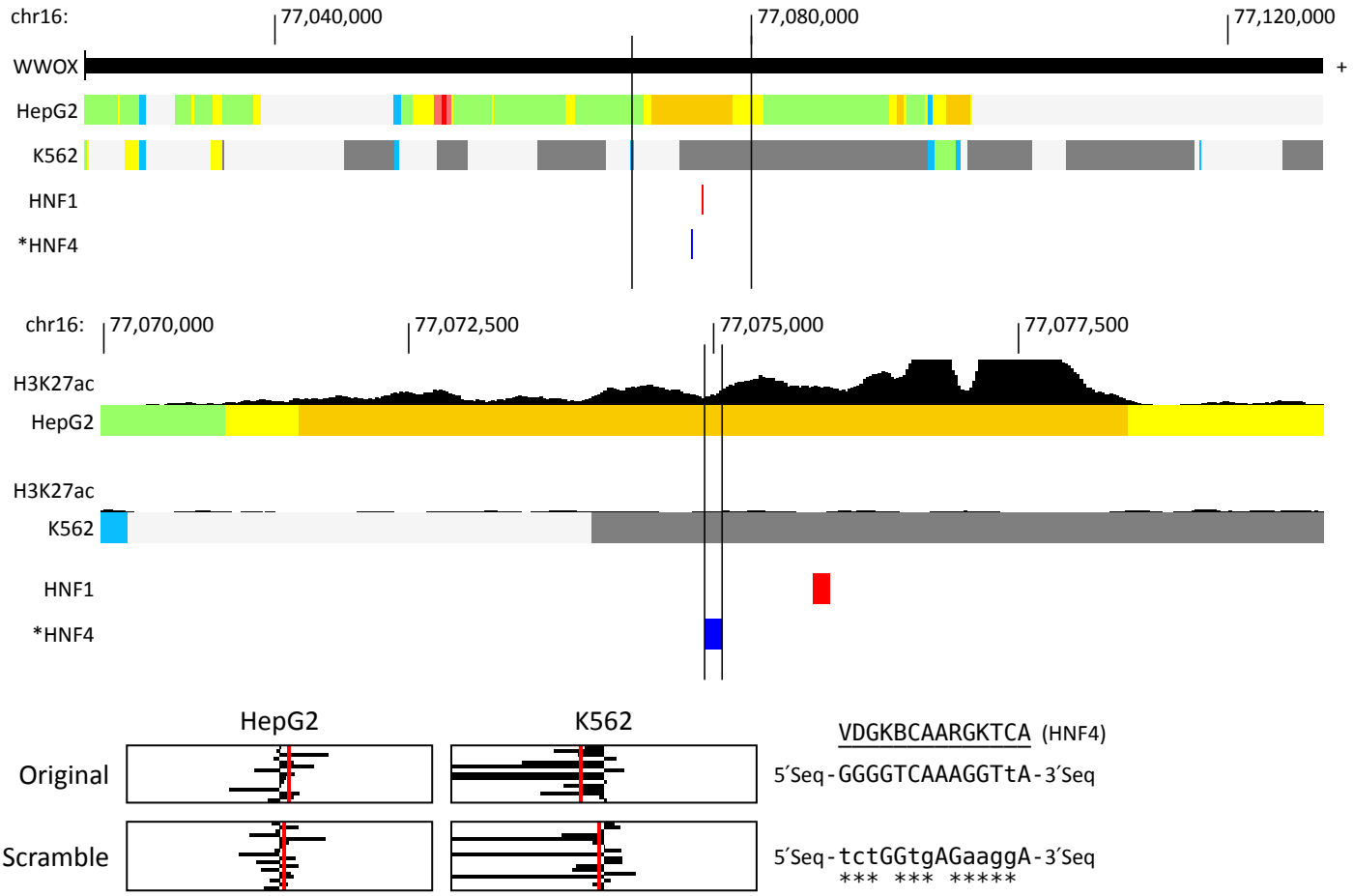
871 HNF4 in HepG2 enhancer

chr16 77074992 77075005 - (hg18)



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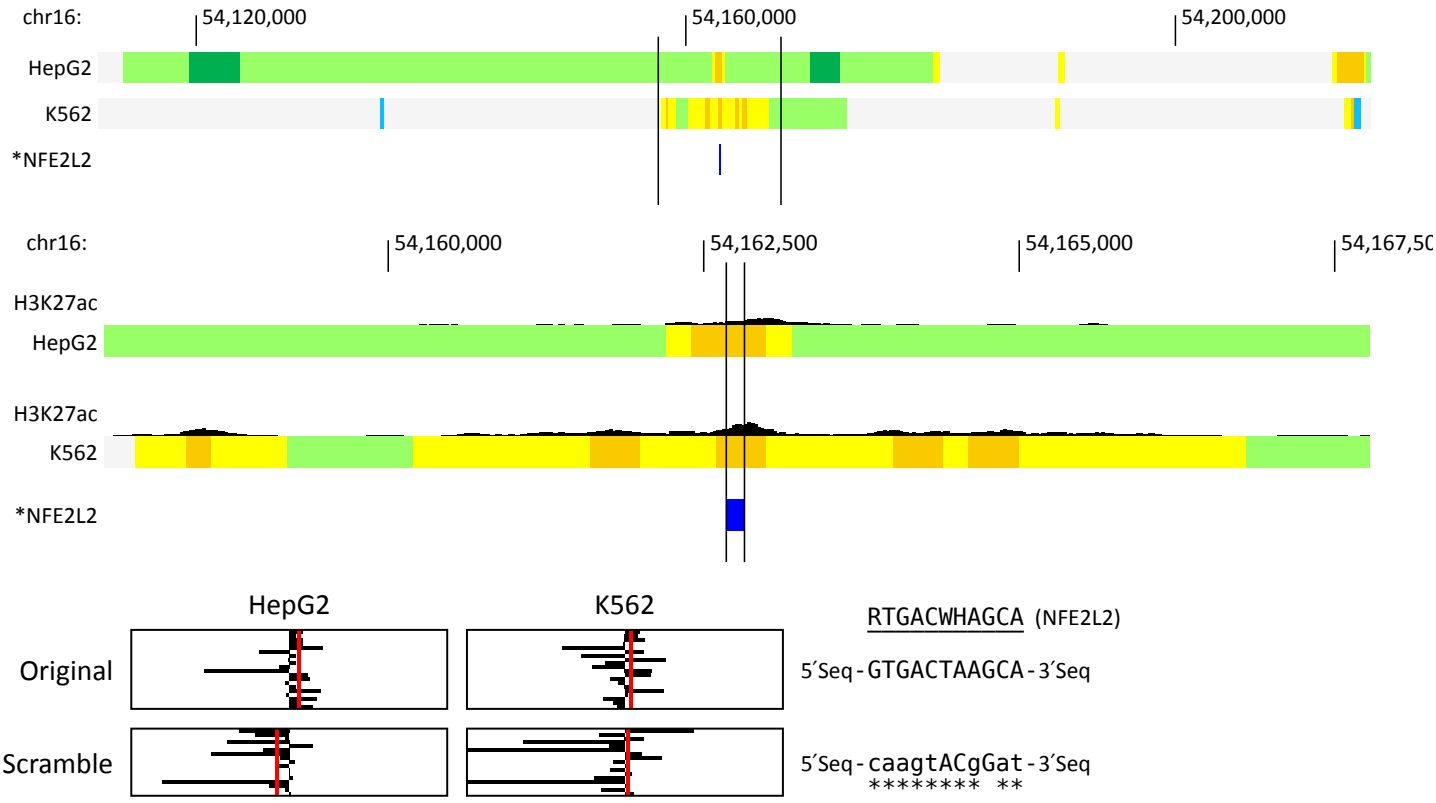
872 NFE2L2 in K562 enhancer

chr16 54162746 54162756 + (hg18)



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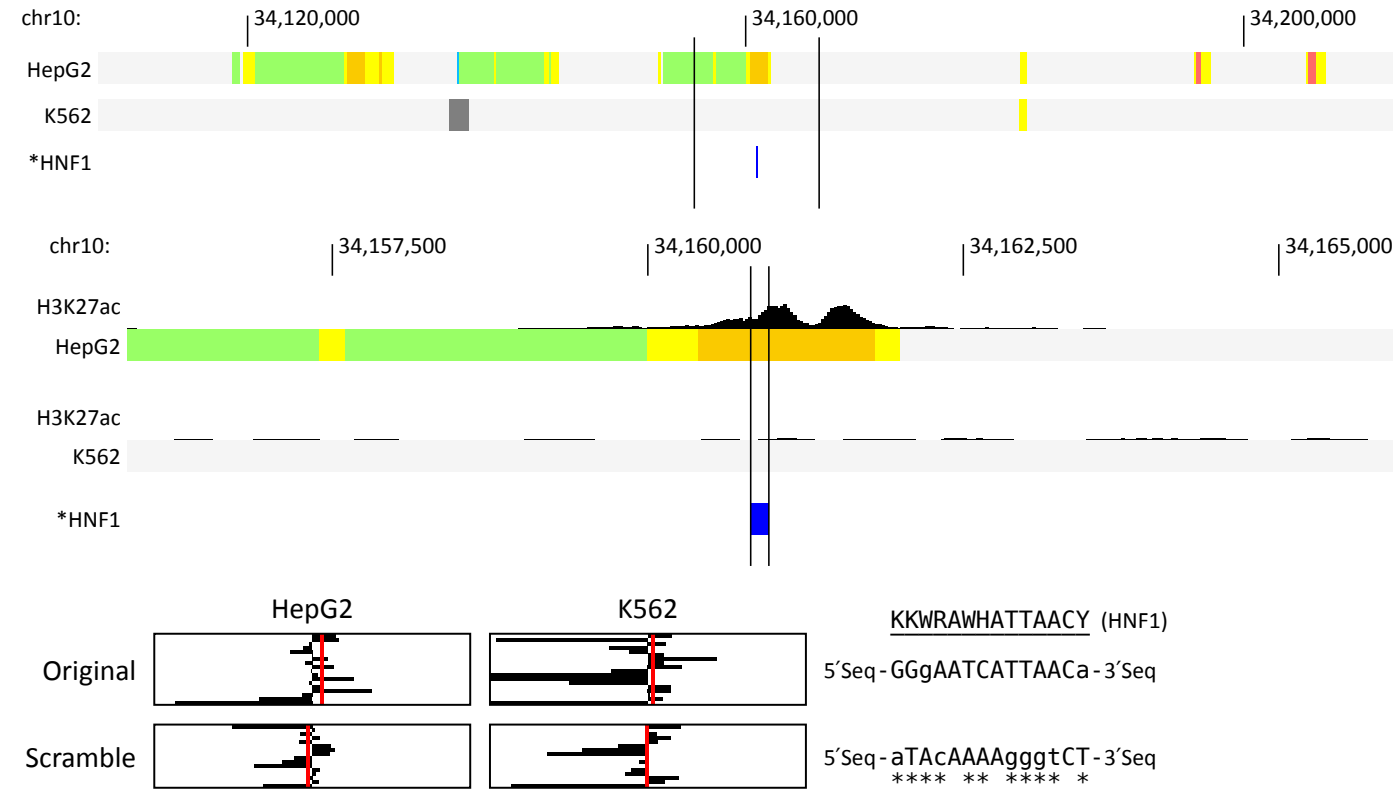
873 HNF1 in HepG2 enhancer

chr10 34160881 34160894 + (hg18)



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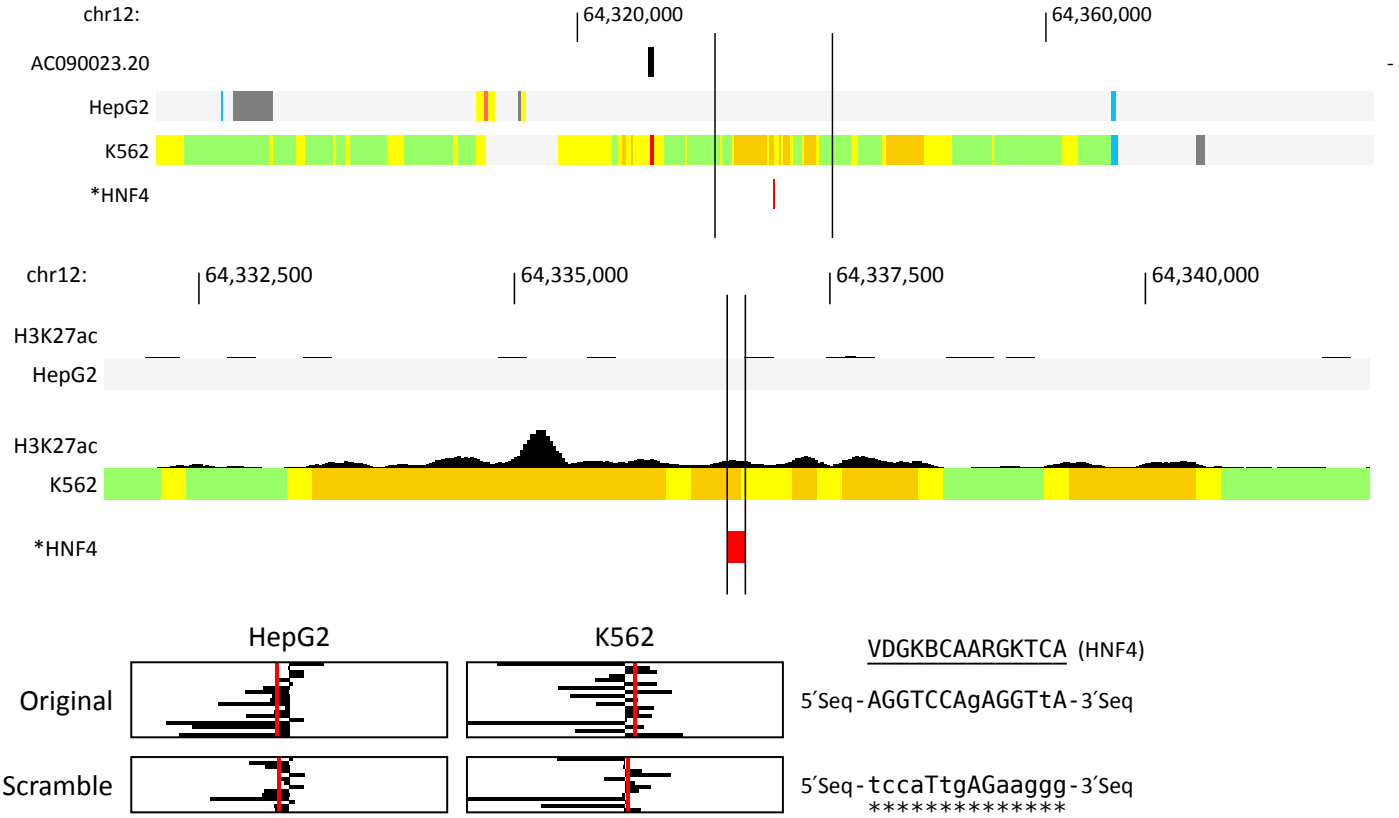
874 HNF4 in K562 enhancer (conserved at 50% confidence)

chr12 64336752 64336765 + (hg18)



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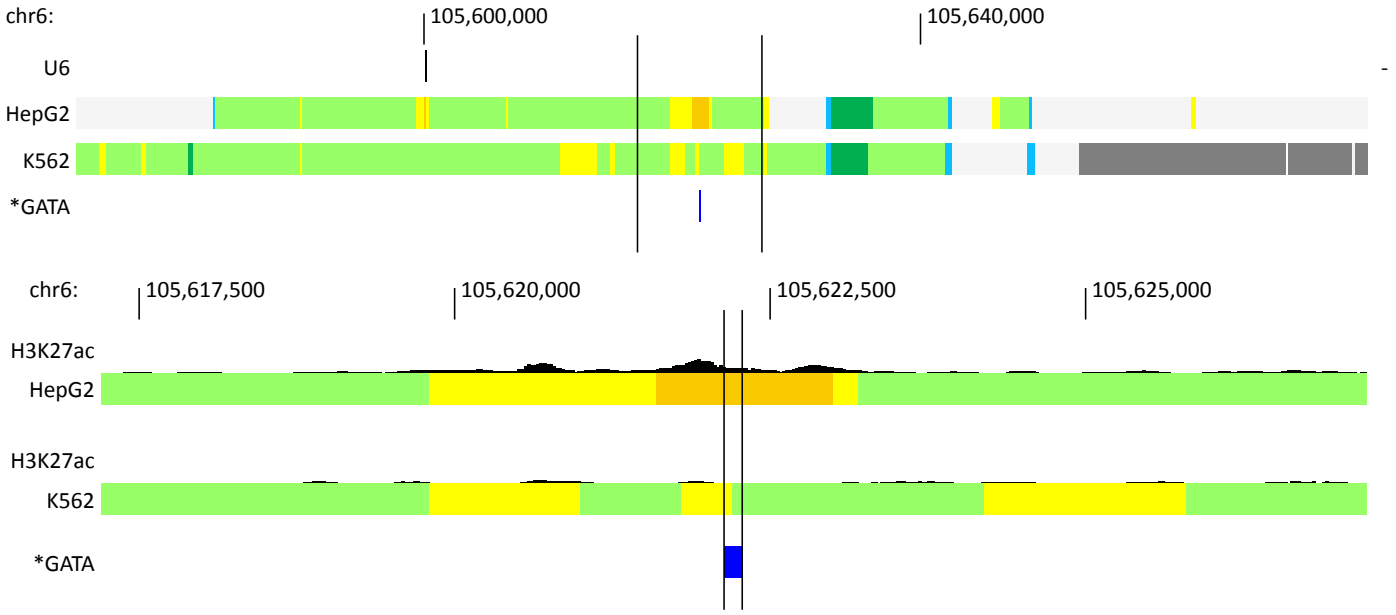
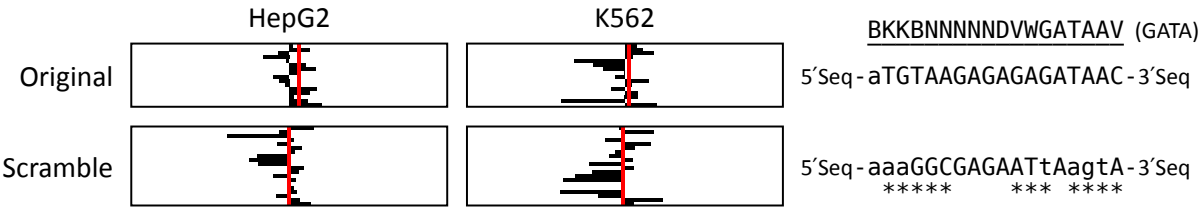
875 GATA in HepG2 enhancer

chr6 105622199 105622216 + (hg18)





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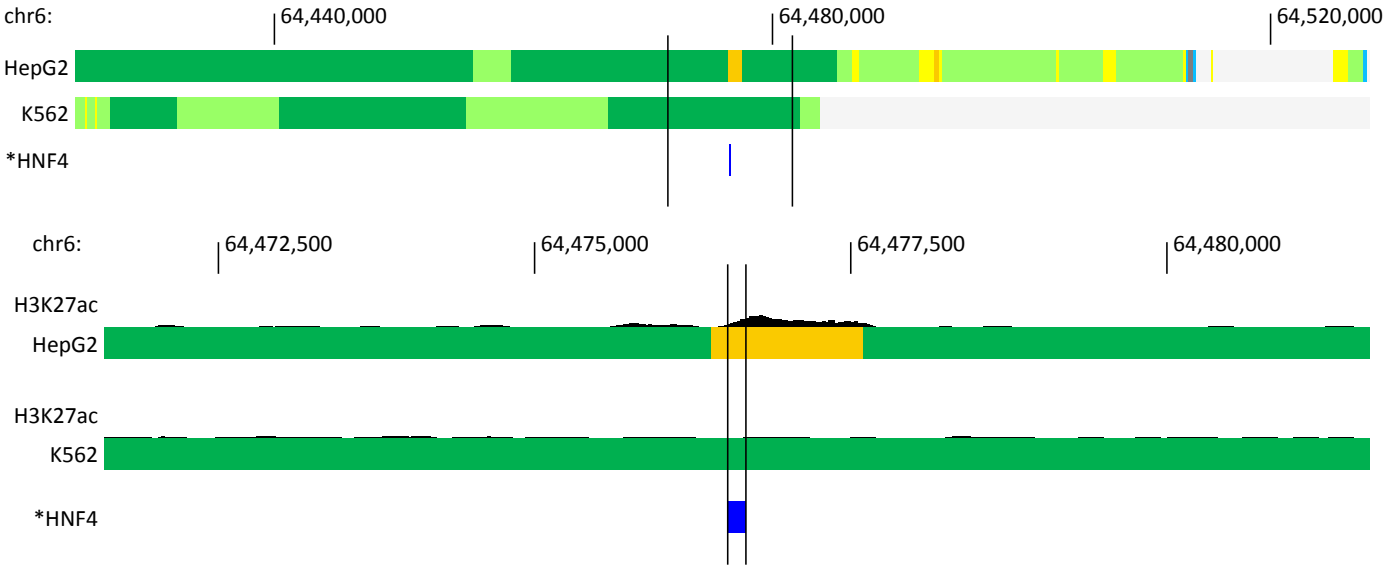
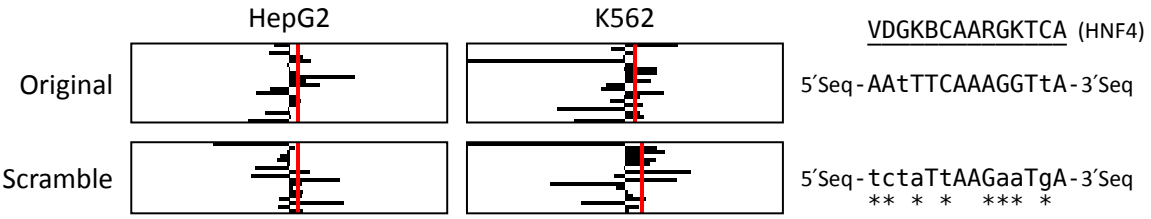
876 HNF4 in HepG2 enhancer

chr6 64476593 64476606 - (hg18)





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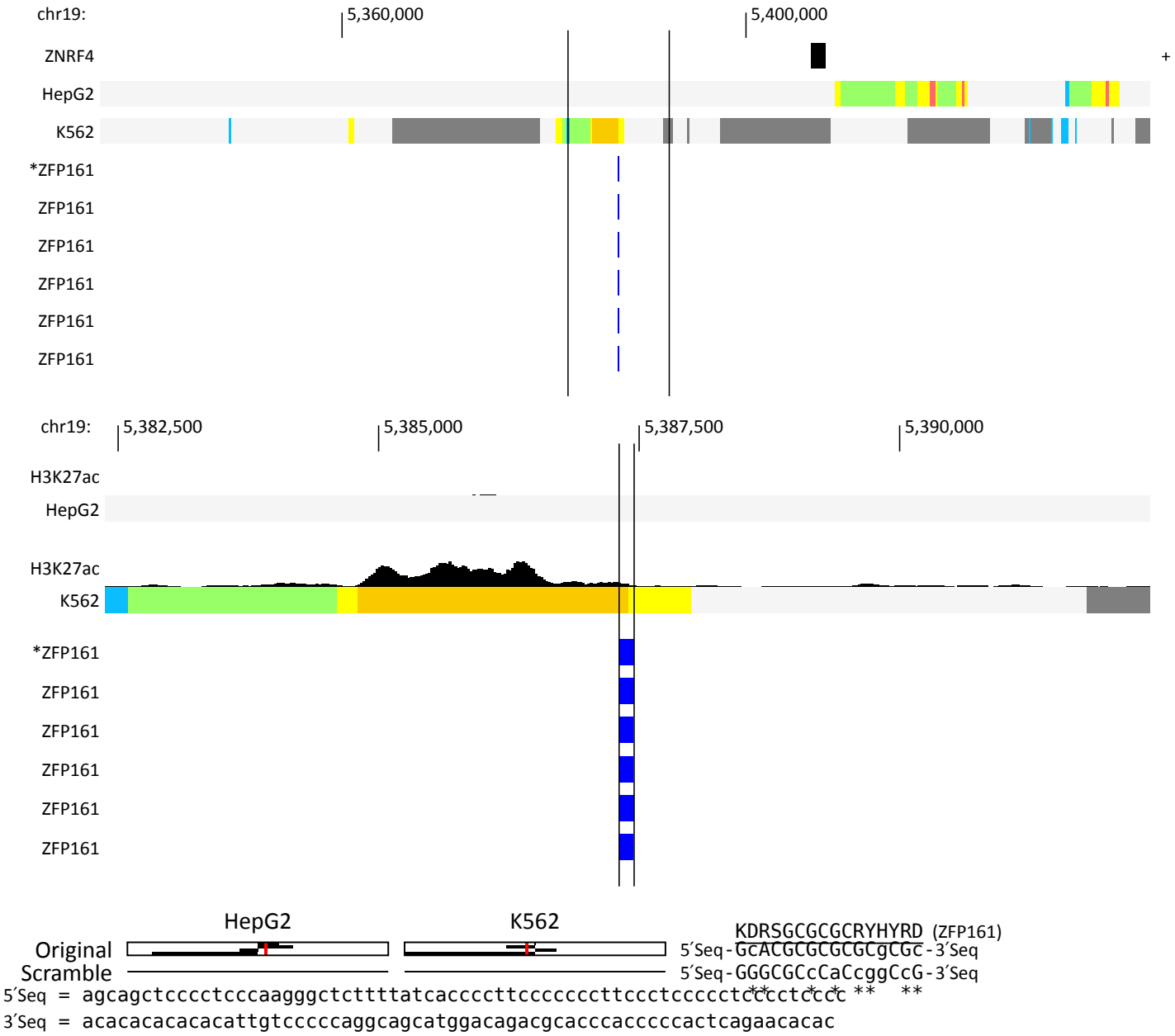
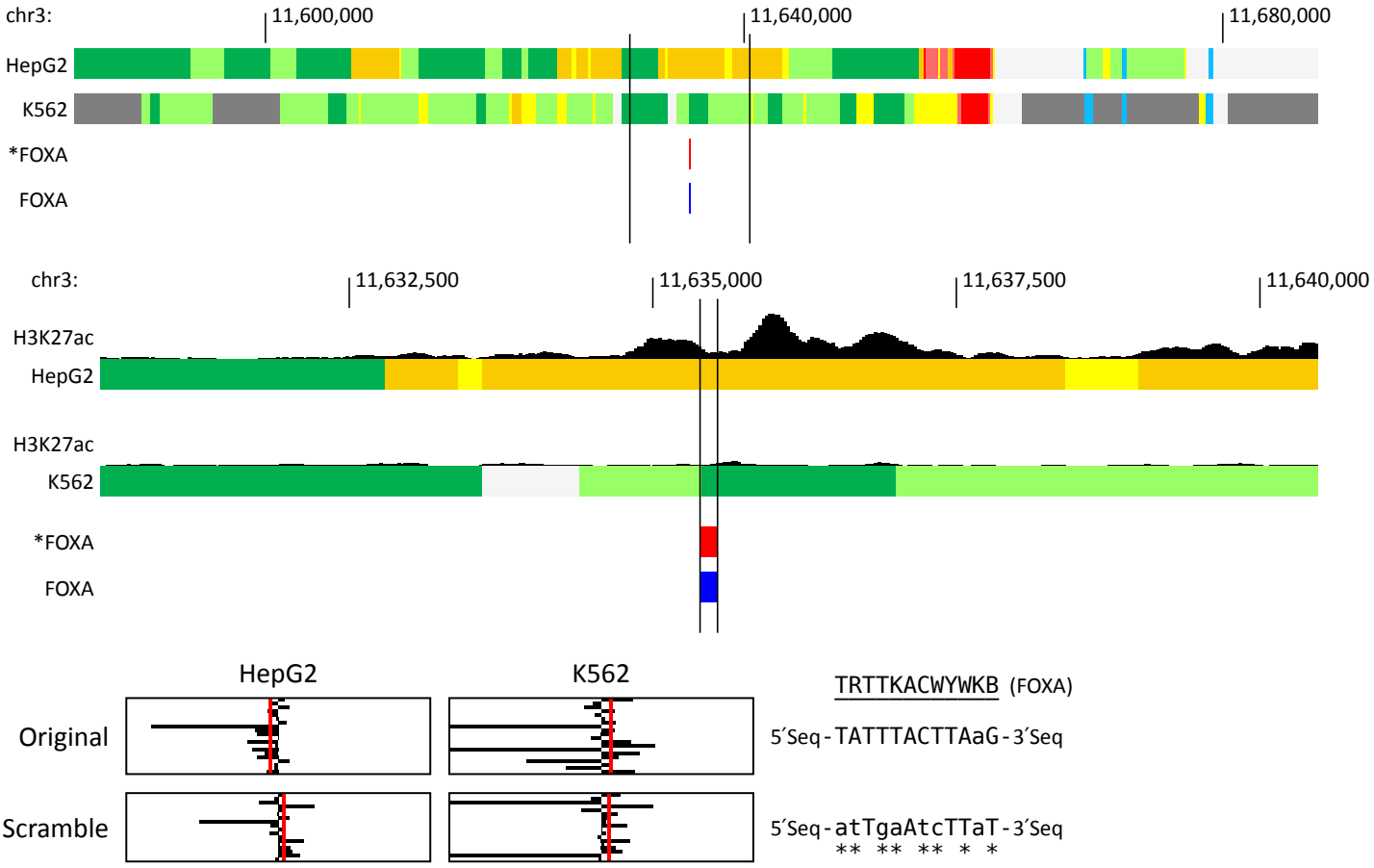
877 ZFP161 in K562 enhancer

chr19 5387373 5387388 - (hg18)



878 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 11635456 11635467 + (hg18)



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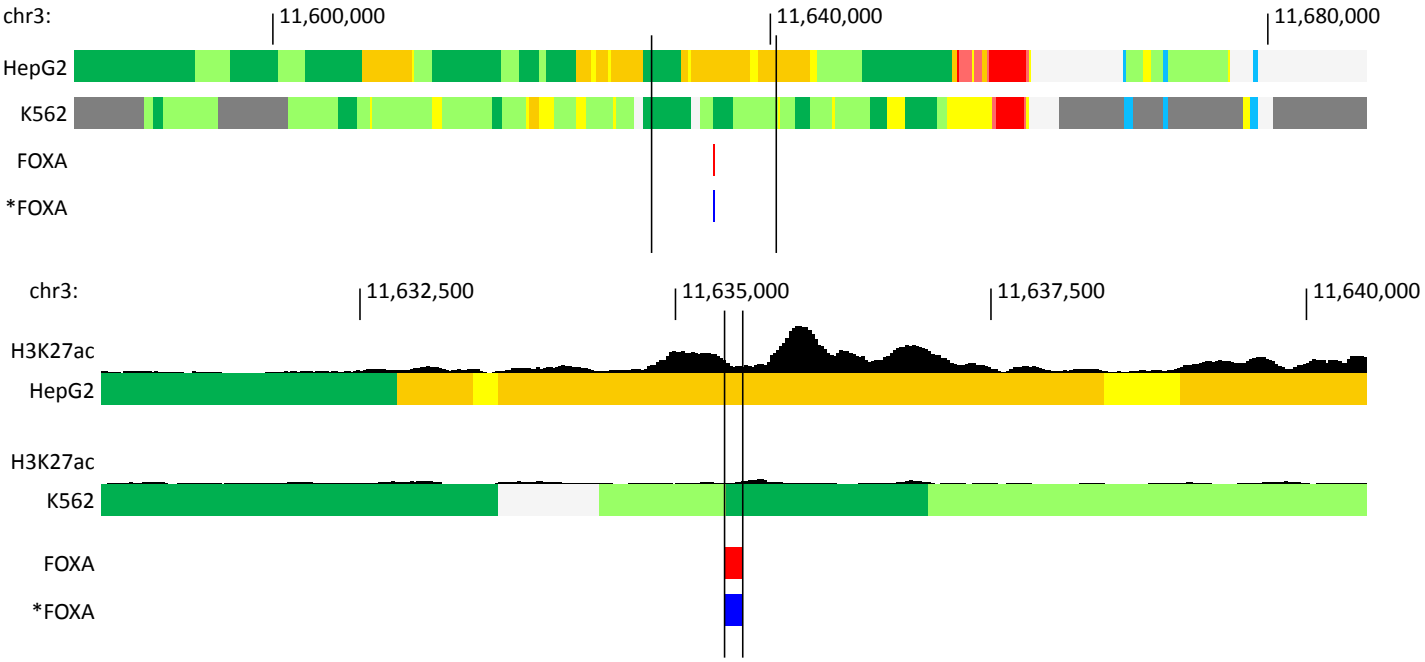
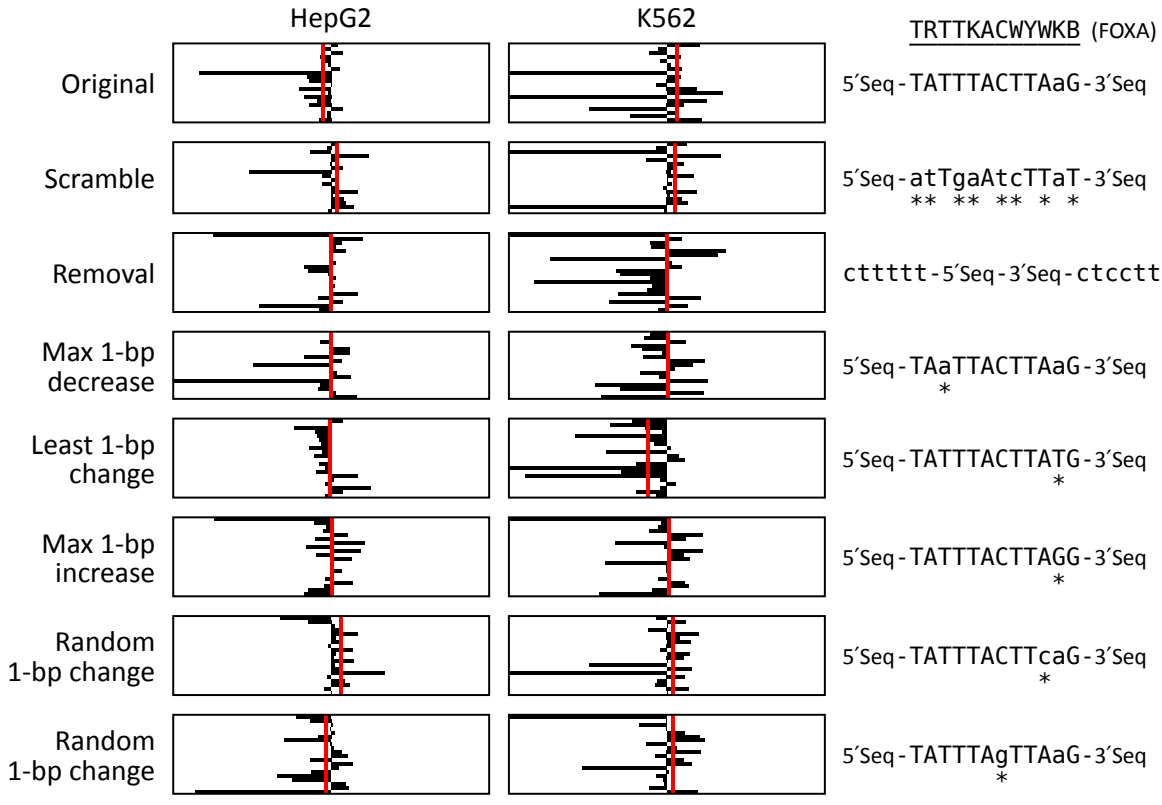
879 FOXA in HepG2 enhancer

chr3 11635456 11635467 + (hg18)





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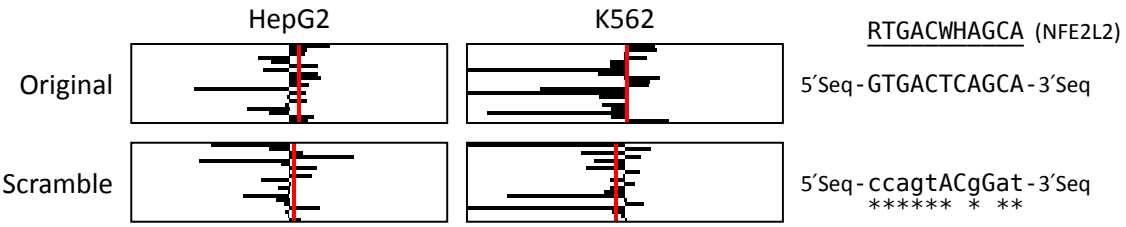
880 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr2 183632705 183632715 - (hg18)



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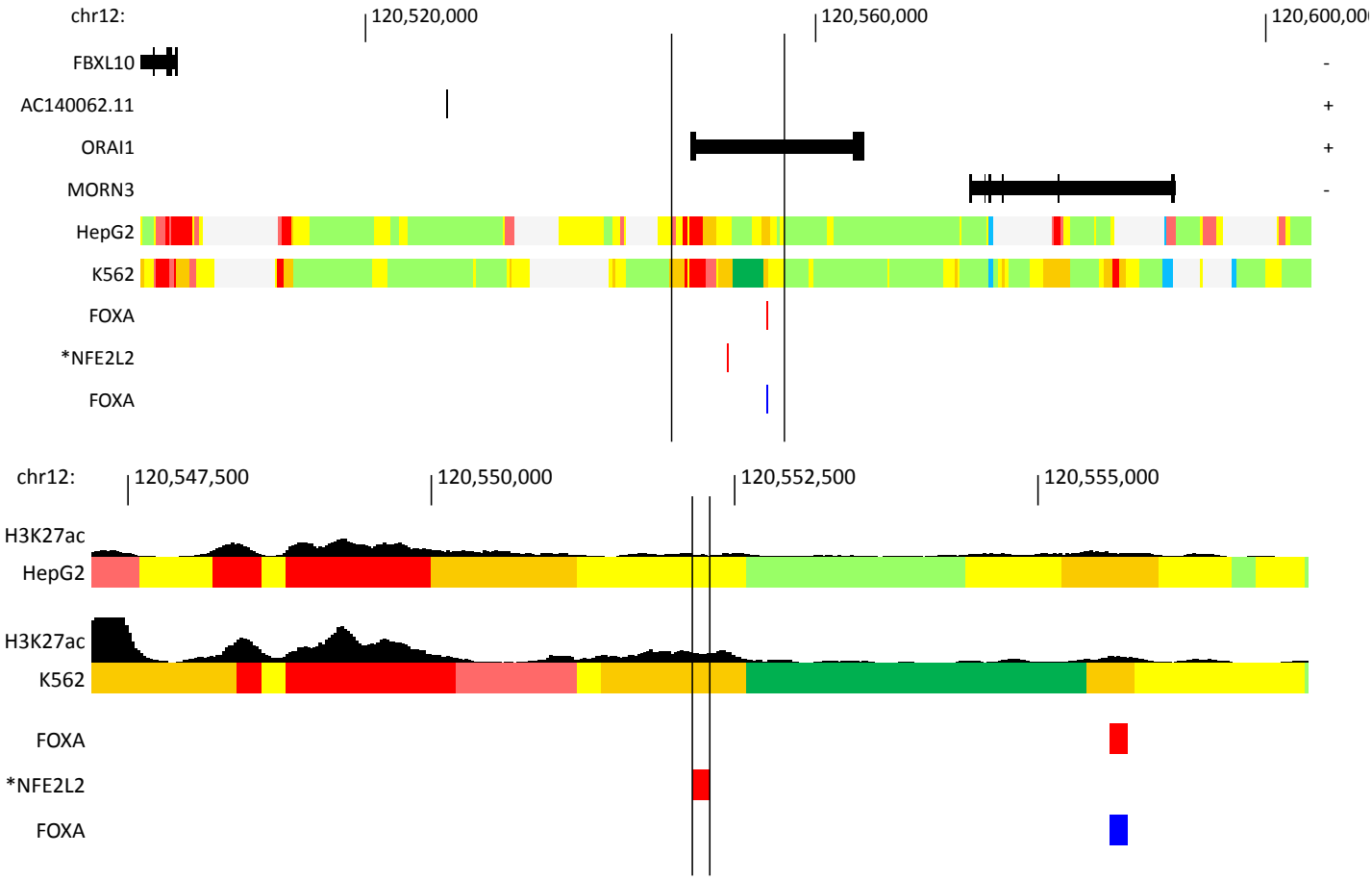
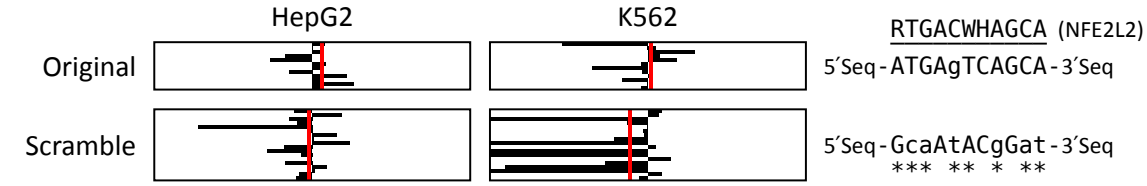
881 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr12 120552218 120552228 + (hg18)





5′Seq = gggtgccagcagccccaacgccatggtaacagagtgacaagtttcctggattactctcccttggctt
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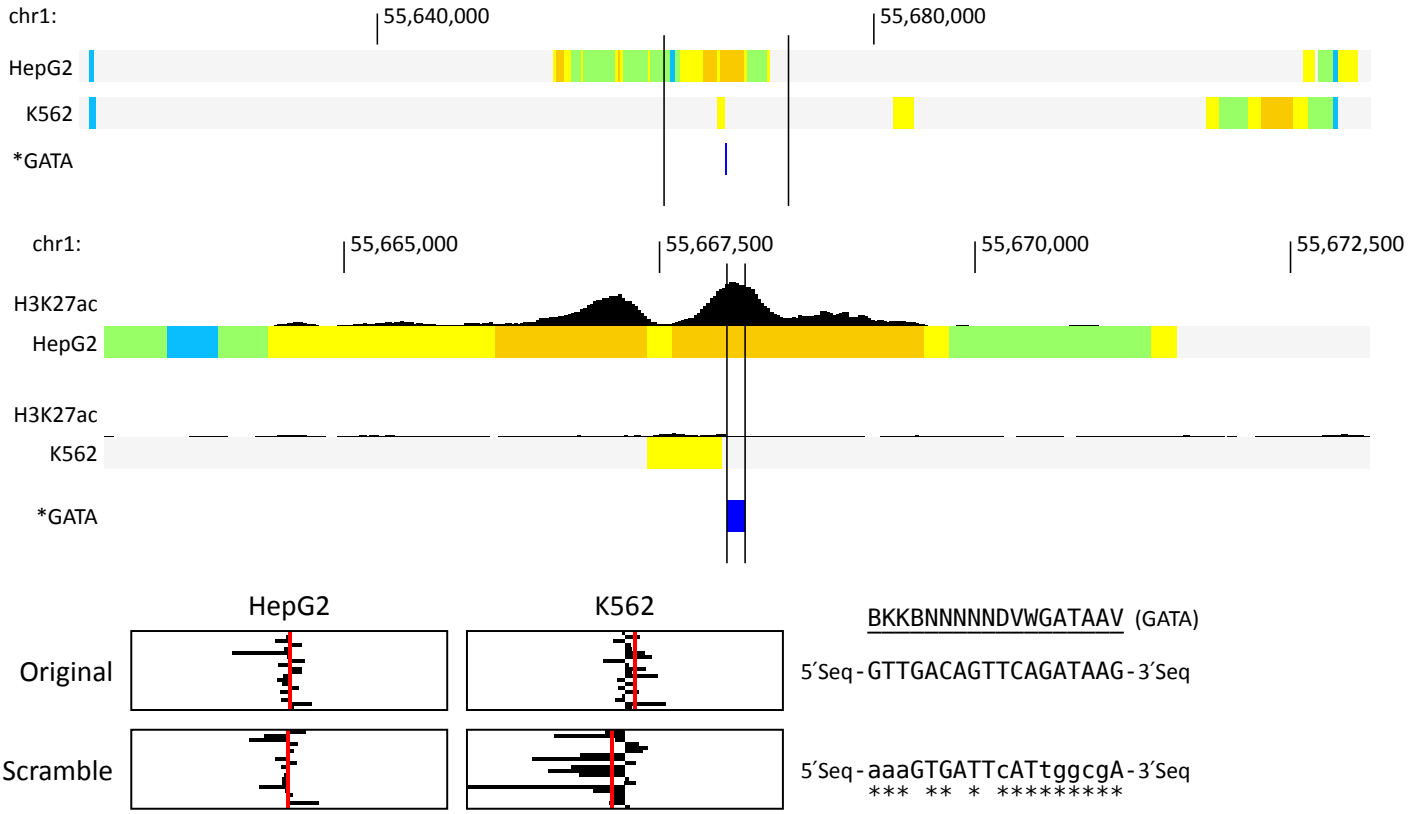
882 GATA in HepG2 enhancer

chr1 55668098 55668115 + (hg18)



5′Seq = acatactatatgacacaaacttcatatctgttatttaatcgaattctcagaacagccctgcatg
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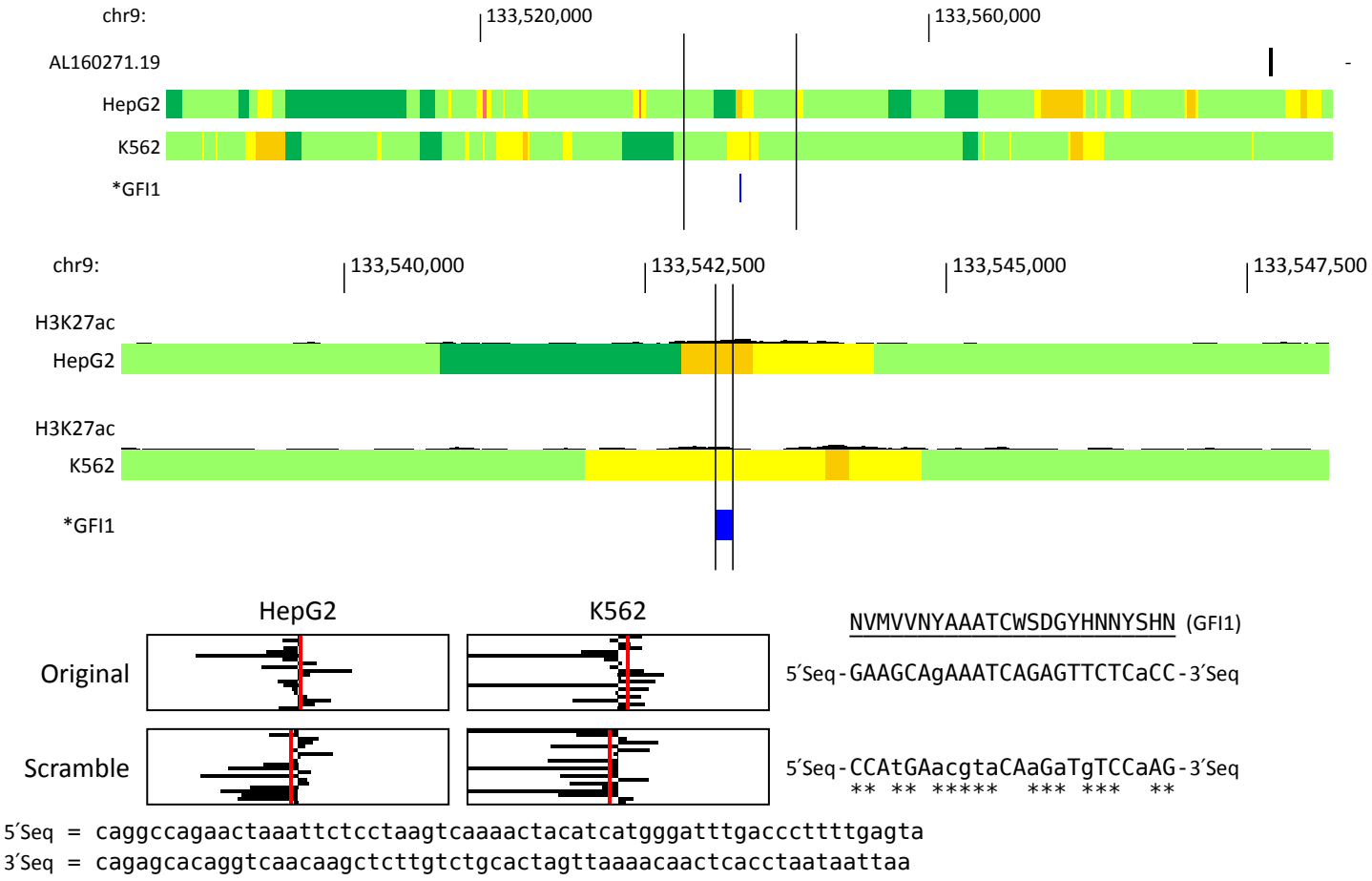
883 GFI1 in HepG2 enhancer

chr9 133543145 133543168 + (hg18)



5′Seq = caggccagaactaaattctcctaagtcaaaactacatcatgggatttgacccttttgagta
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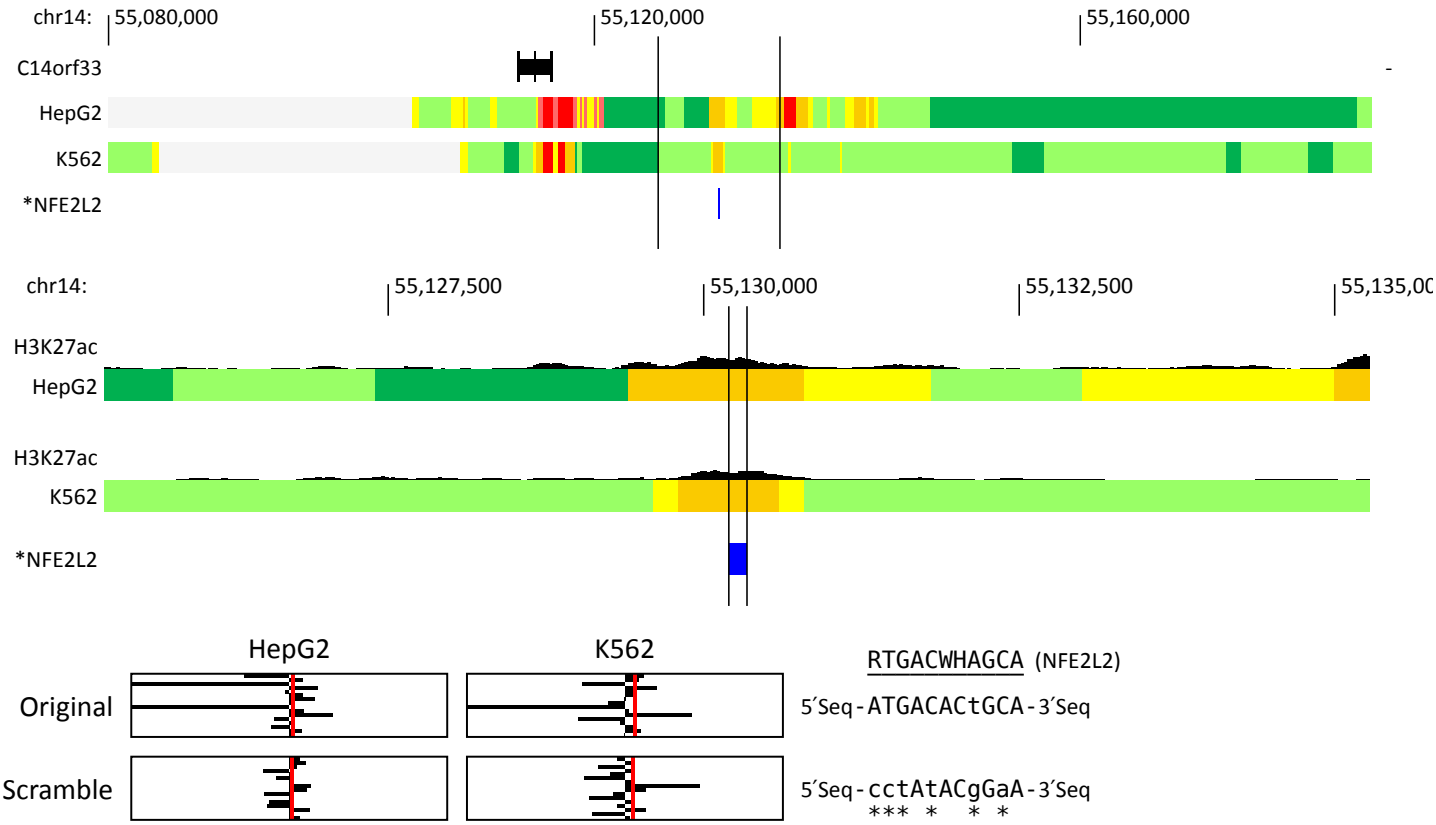
884 NFE2L2 in K562 enhancer

chr14 55130266 55130276 - (hg18)



5′Seq = gtaaaaagagaggtttcaaaaaaataaaaaggtaaaaaaagagaggggaggagaggggagaaaaaca
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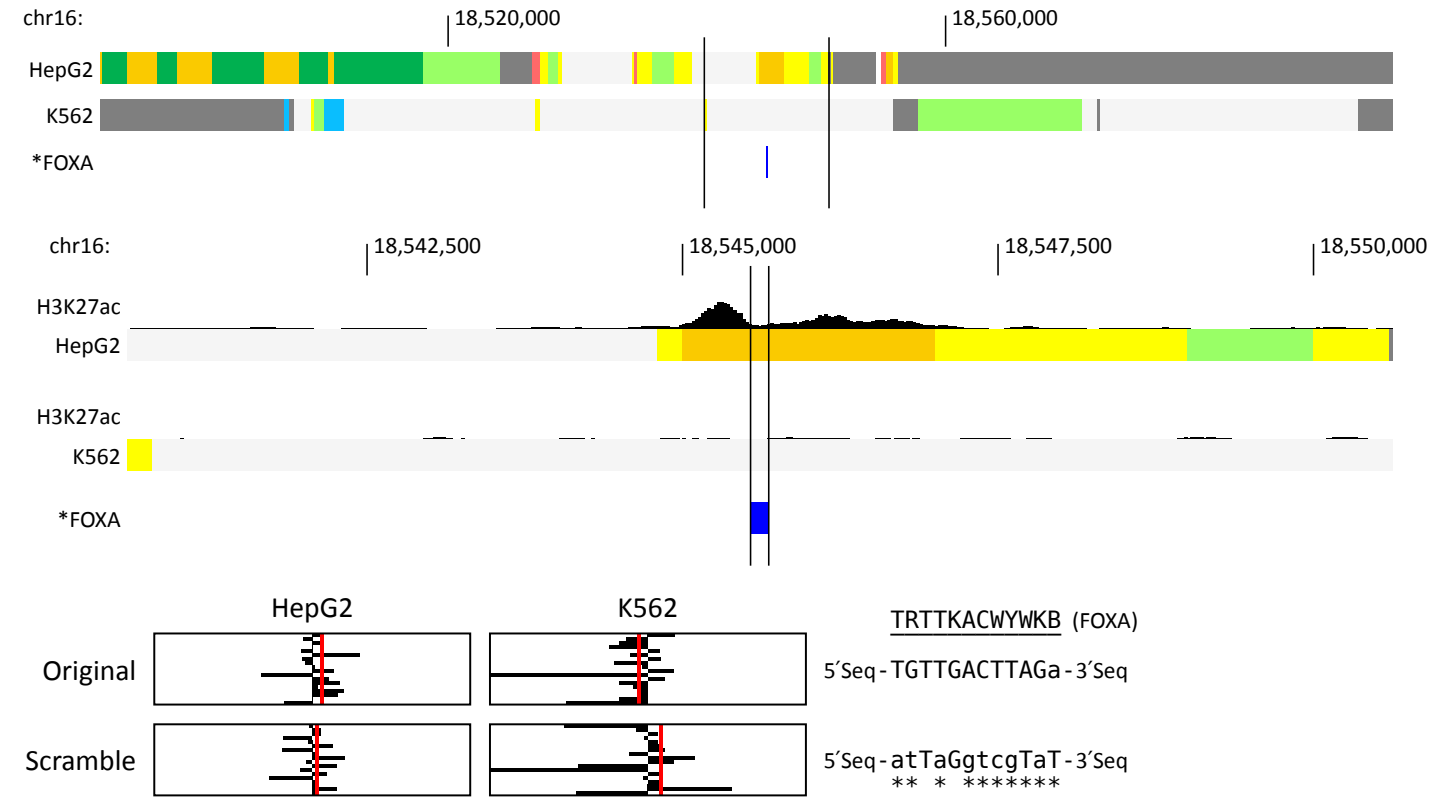
885 FOXA in HepG2 enhancer

chr16 18545606 18545617 - (hg18)



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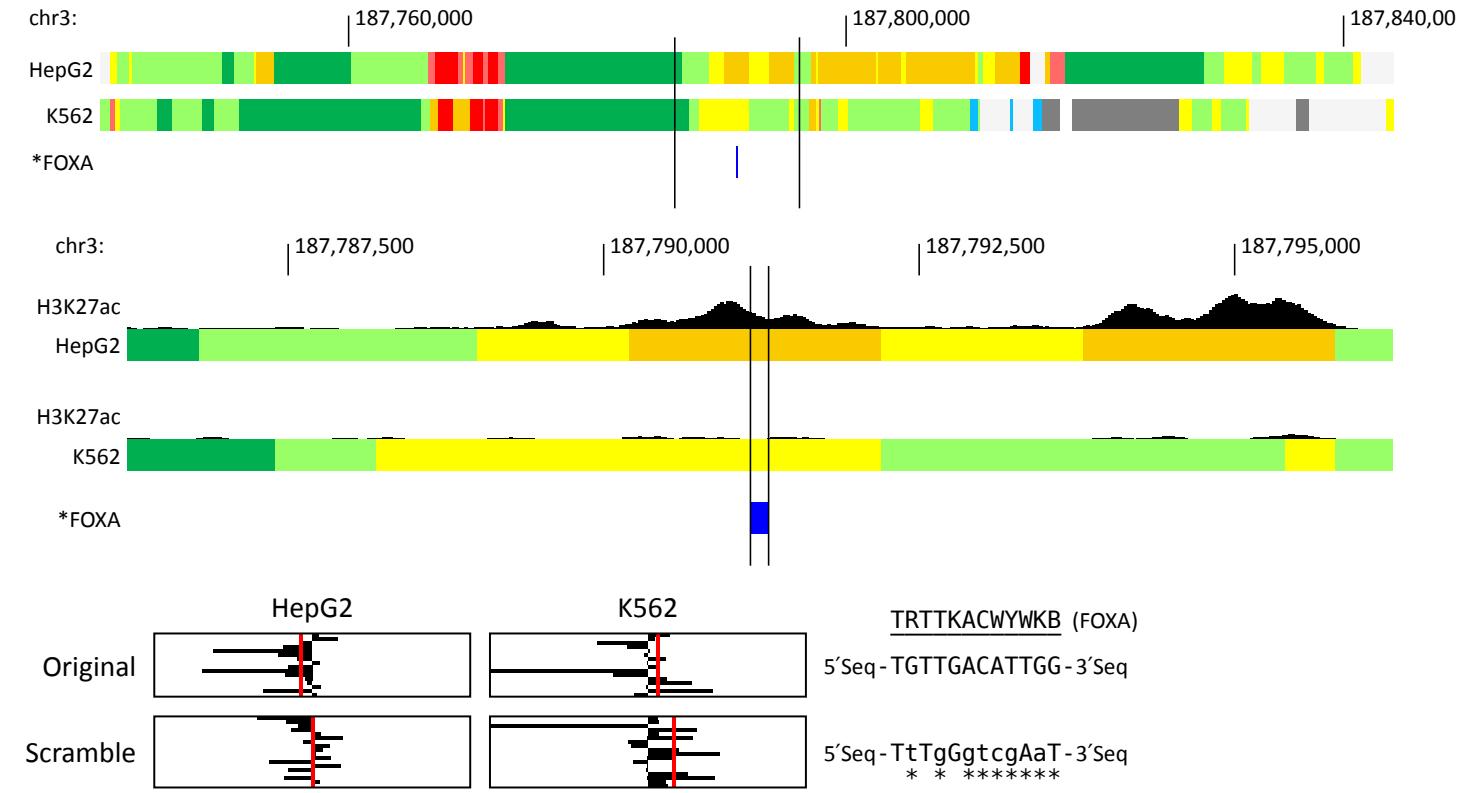
886 FOXA in HepG2 enhancer

chr3 187791230 187791241 + (hg18)



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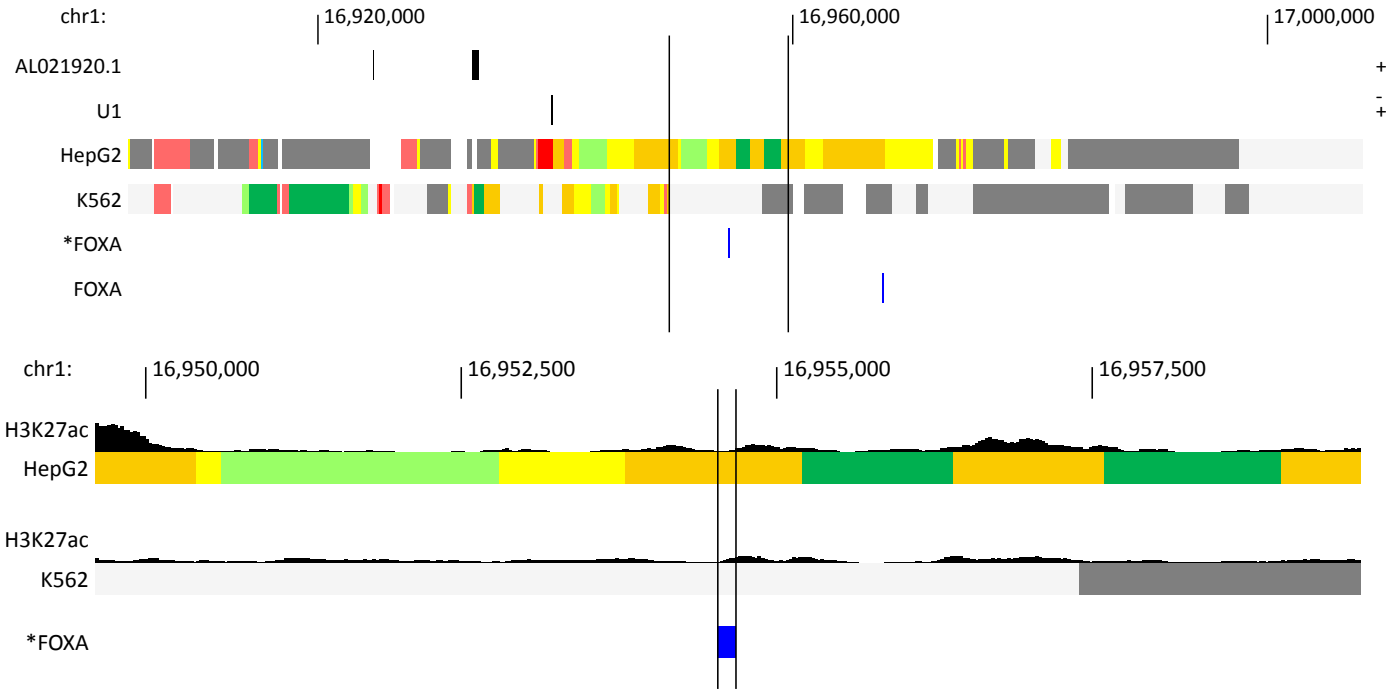
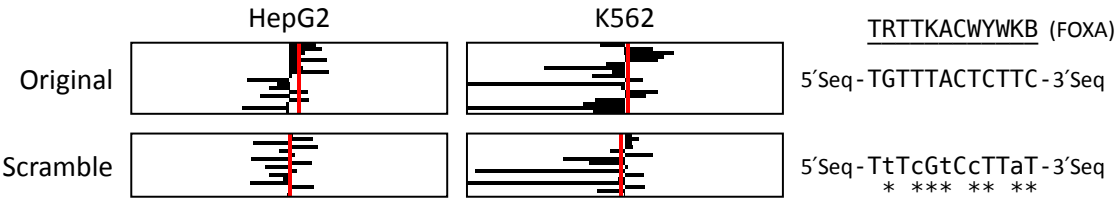
887 FOXA in HepG2 enhancer

chr1 16954600 16954611 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTCTTC-3′Seq

5′Seq-TtTcGtCcTTaT-3′Seq

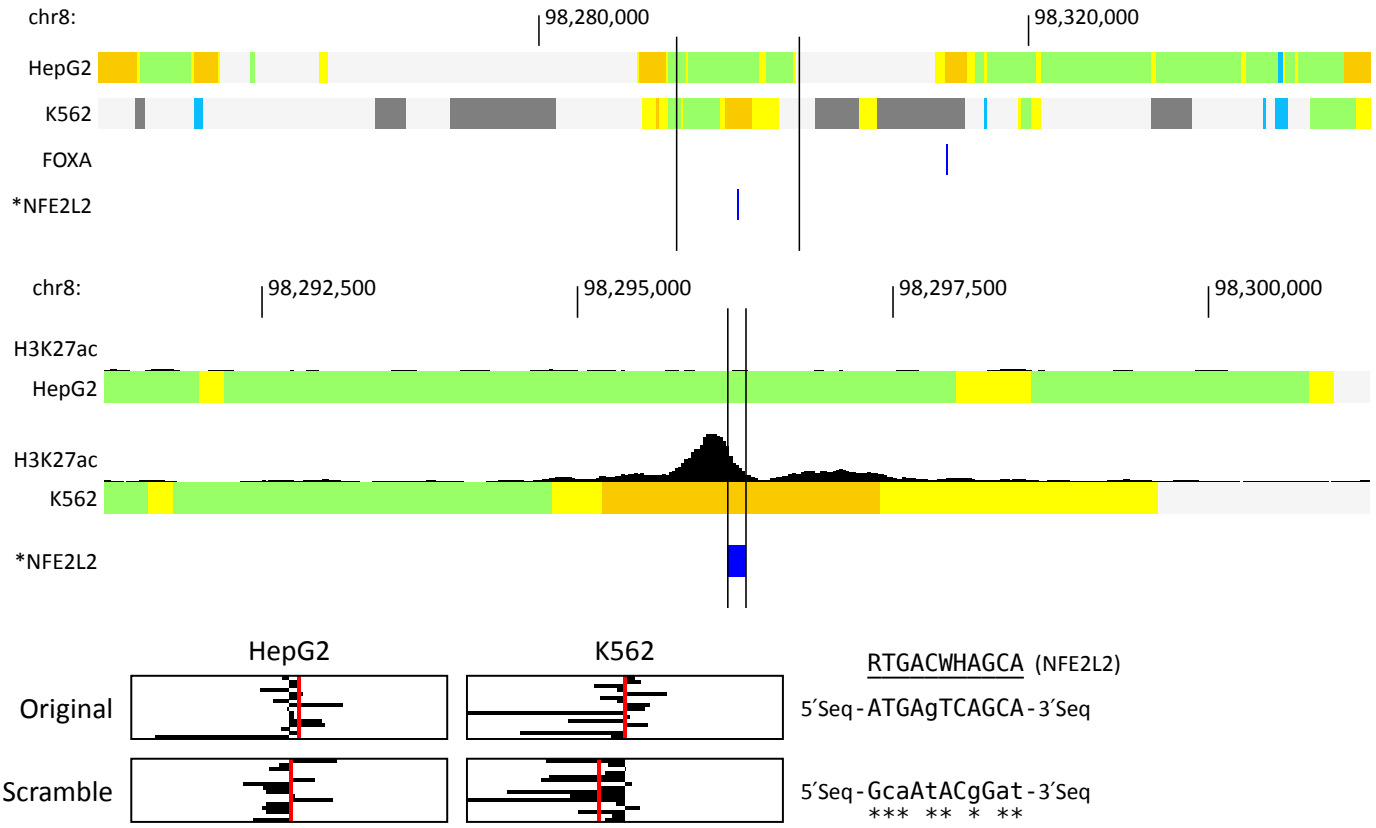
* *** ** **

5′Seq = ttgcacattgccagacacccagtggaaggtcaatgaatgactatttgaggactaactattacagaaa

3′Seq = tgagtcctgatttctagtctcctggactaaataggttcactgttttcctcccggttcagtttccag

888 NFE2L2 in K562 enhancer

chr8 98296258 98296268 - (hg18)



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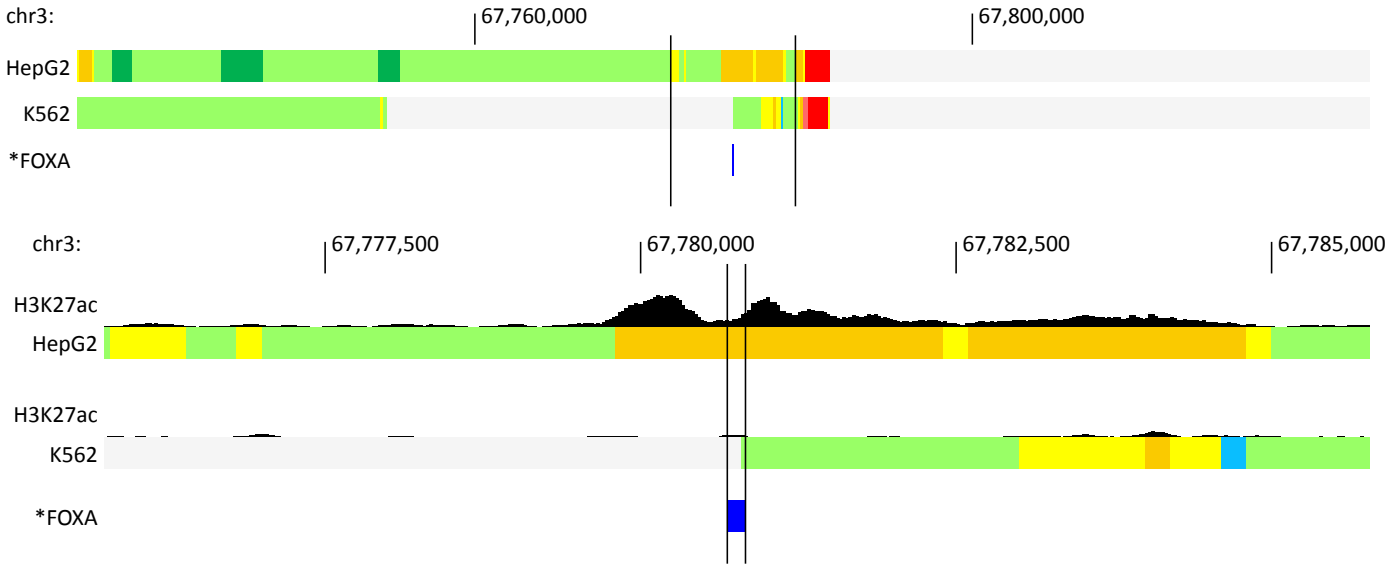
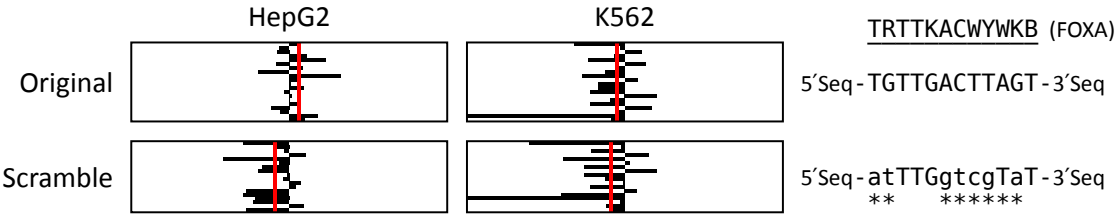
3′Seq = attaatctgctgcctcaggccaggccagggttgatagggcaggggaggatgtgggcagttaccgaca

889 FOXA in HepG2 enhancer

chr3 67780754 67780765 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTGACTTAGT-3′Seq

5′Seq-atTTGgtcgTaT-3′Seq

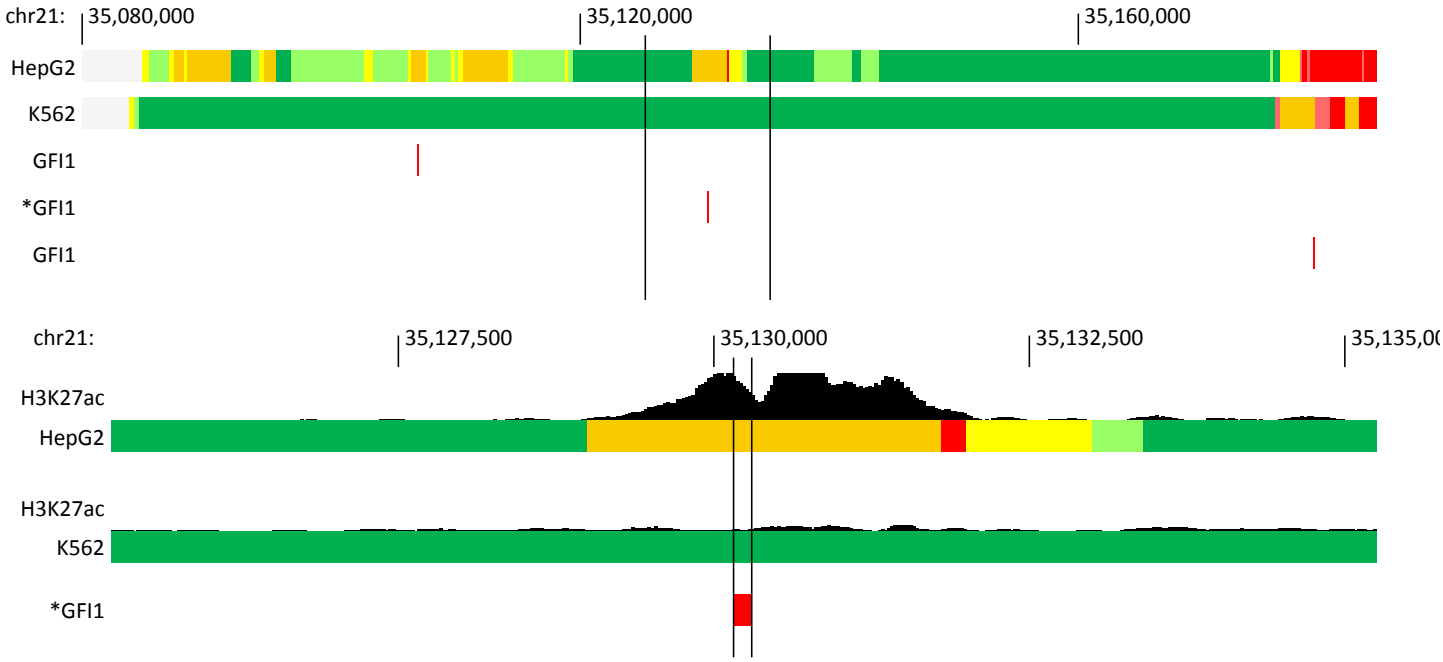
** ******

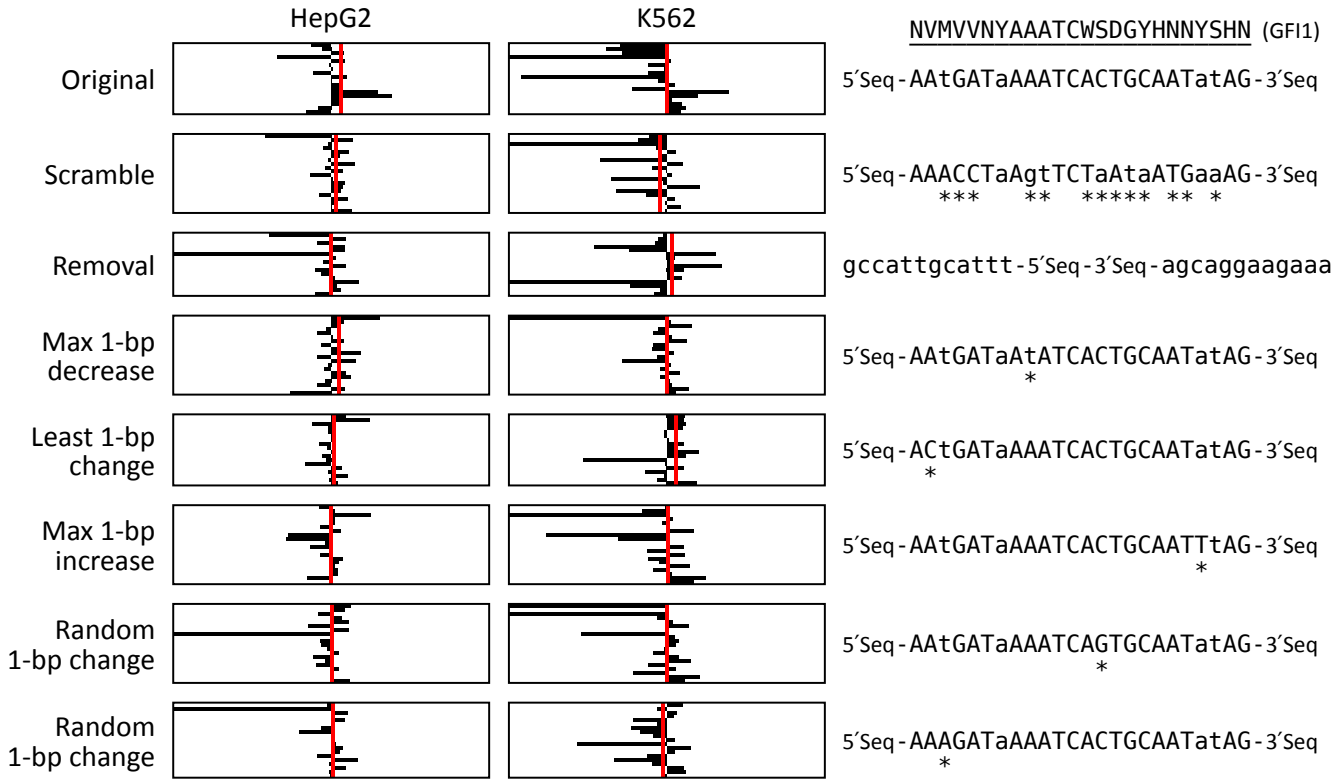
5′Seq = agctcatggggagcttaattgtaccatcctggttattactcatttcacaaacatttacatgtctcag

3′Seq = agtgacgactgctggacctcgtgcatcaaagatttgaggtgagggaacacttaaagaattggcagt

890 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr21 35130217 35130240 - (hg18)





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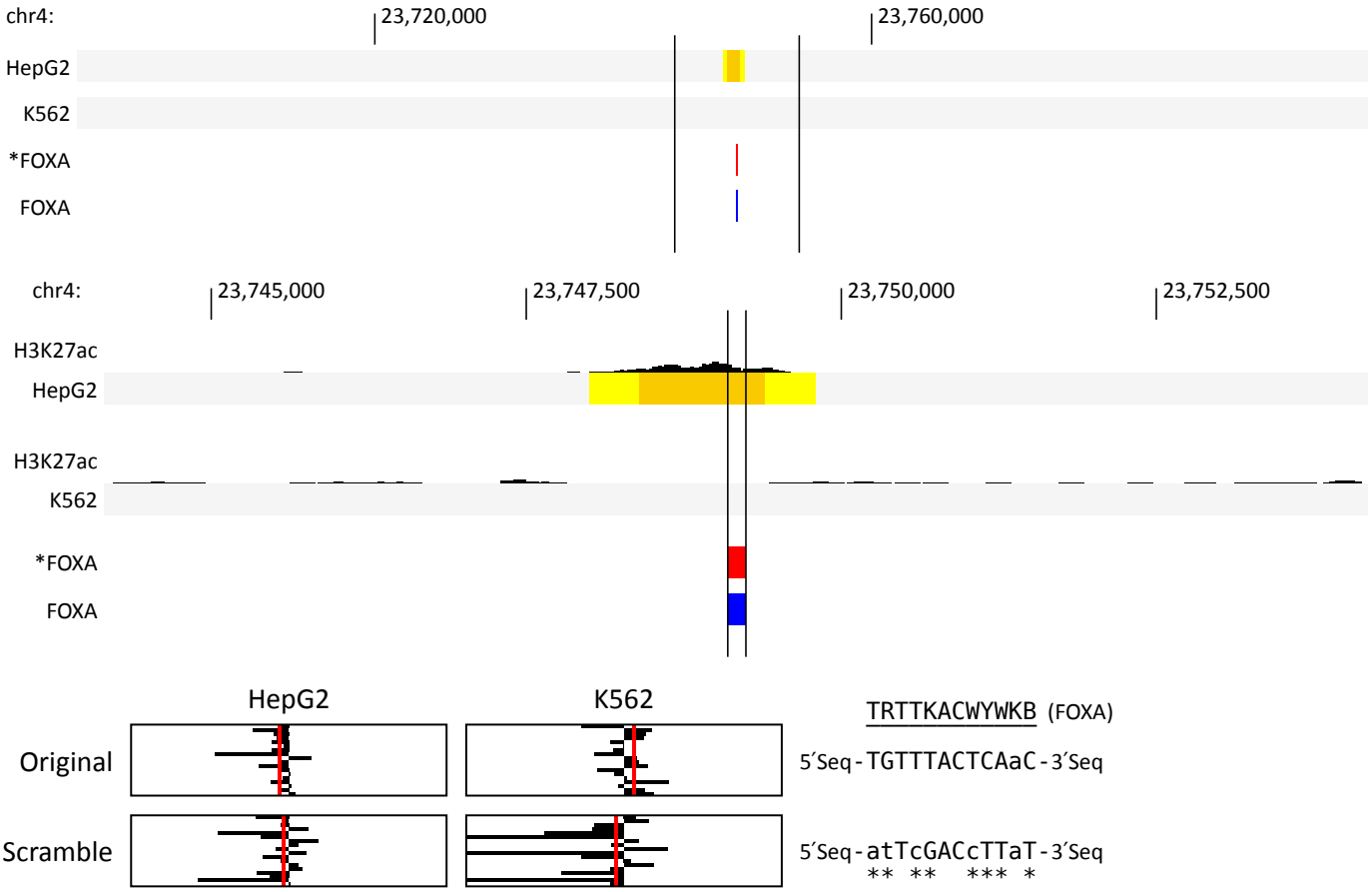
3′Seq = tgggccctttttttctggtctggaatttgagacaatgtcaactgtgccaaggggcctggc

891 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr4 23749166 23749177 + (hg18)



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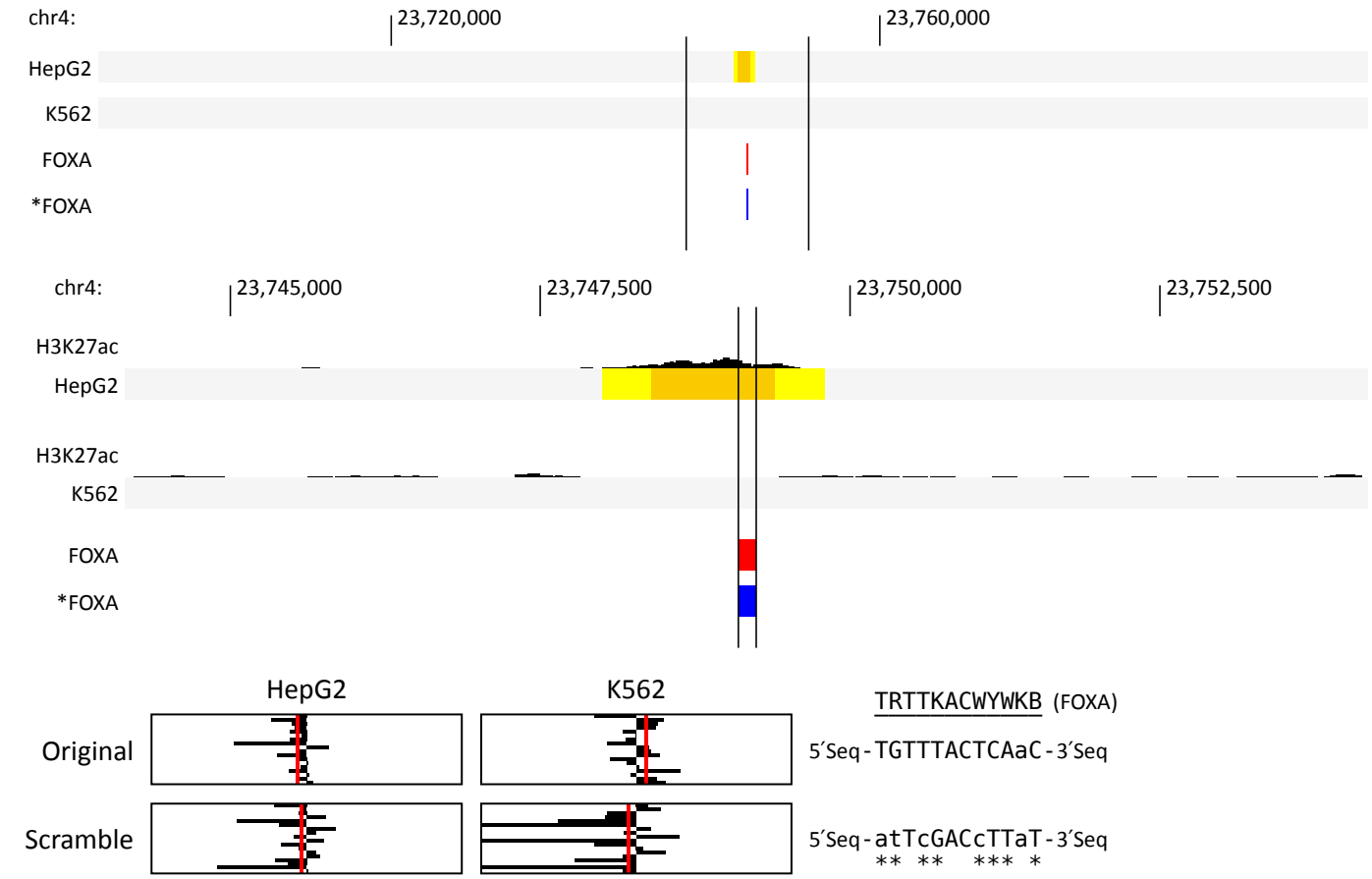
892 FOXA in HepG2 enhancer

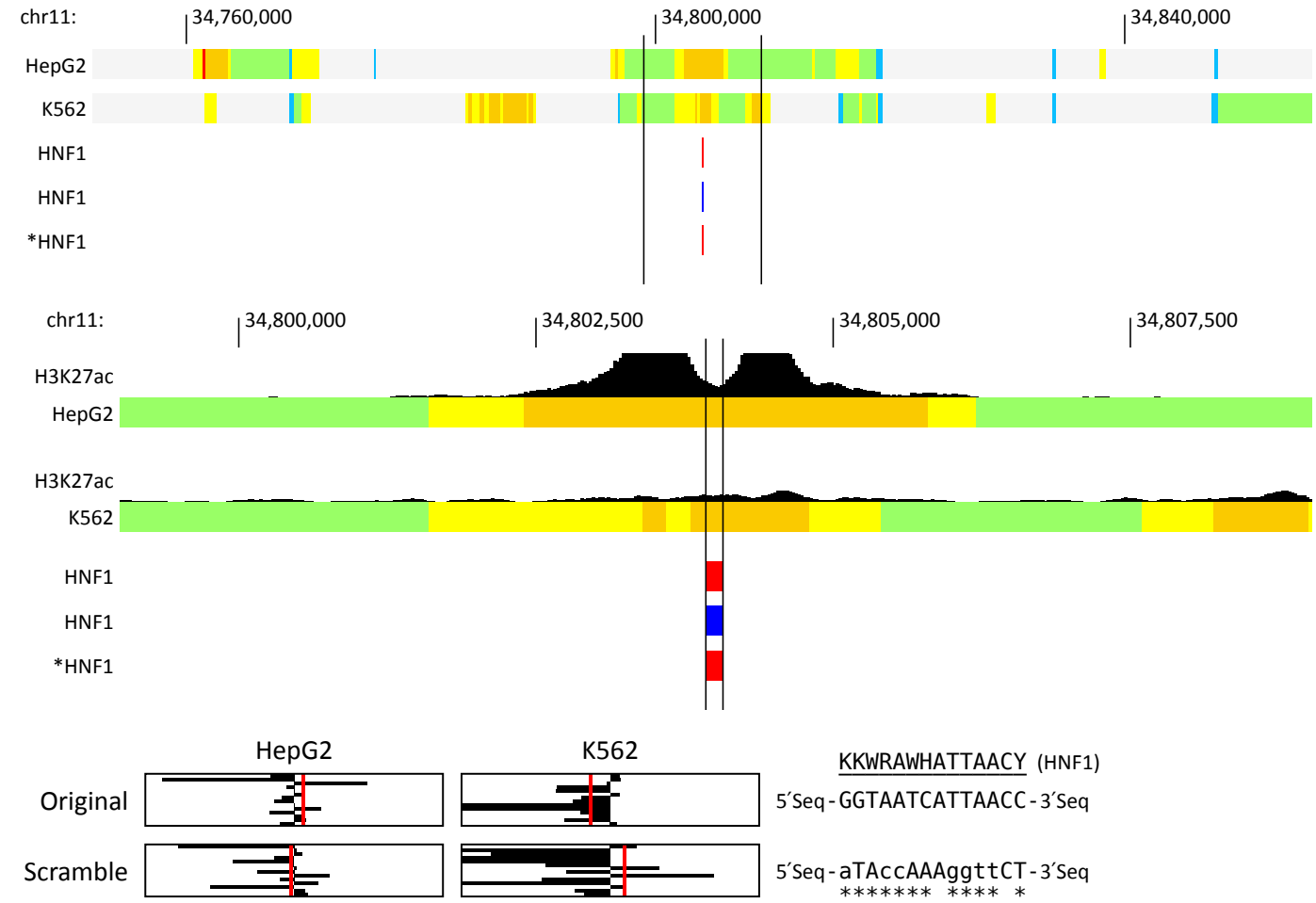
chr4 23749166 23749177 + (hg18)



5′Seq = gacacagtccaattgcagtgaaattagaagctgccttagatacaccagggtatacagaacaagcact
3′Seq = atataagttaaggtcaacaagggaaggtatgcttcctgttcacaaatccttgagggctgtttgttt

893 HNF1 in K562 enhancer (conserved at 60% confidence)

chr11 34803995 34804008 - (hg18)



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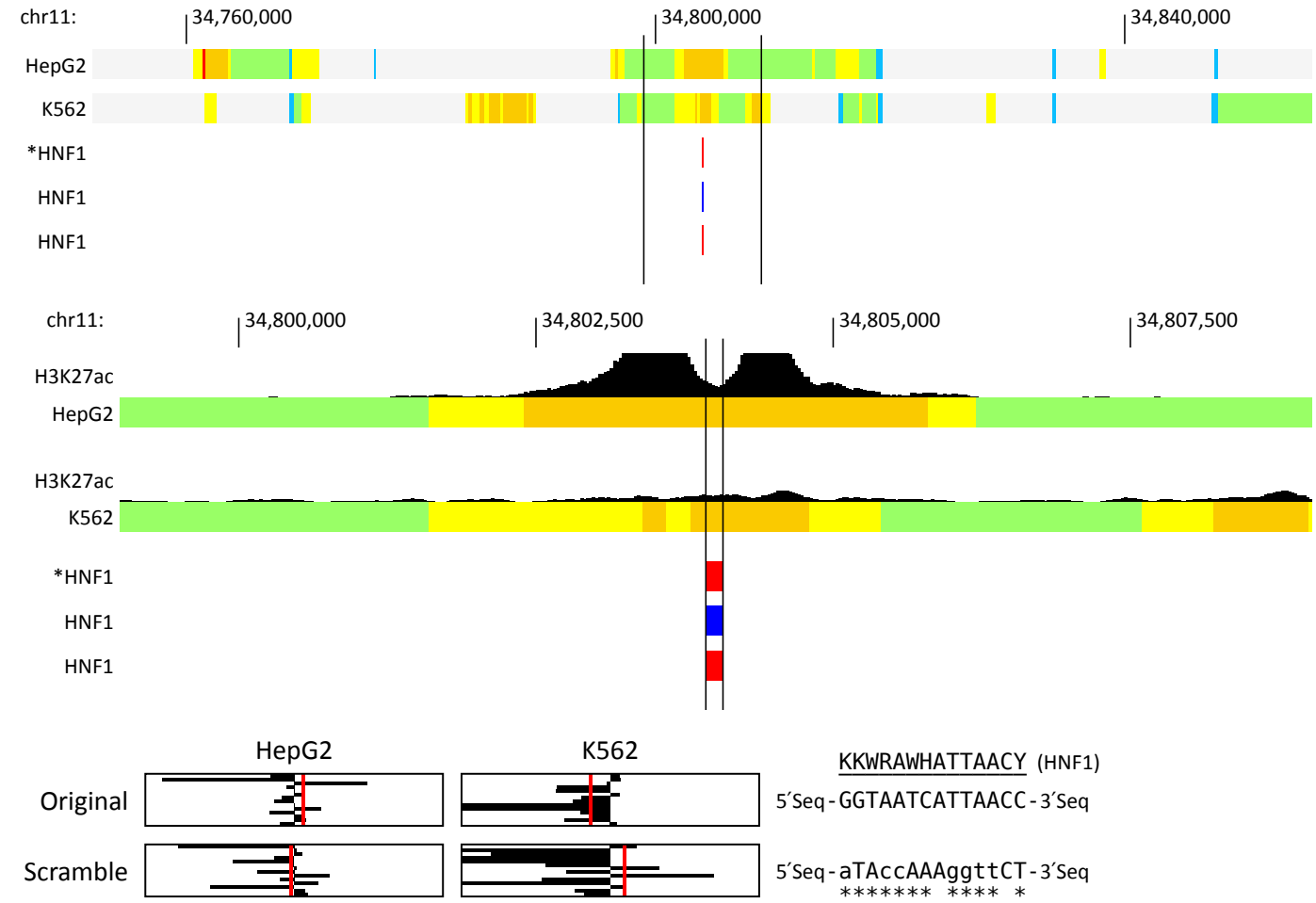
894 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr11 34803995 34804008 - (hg18)



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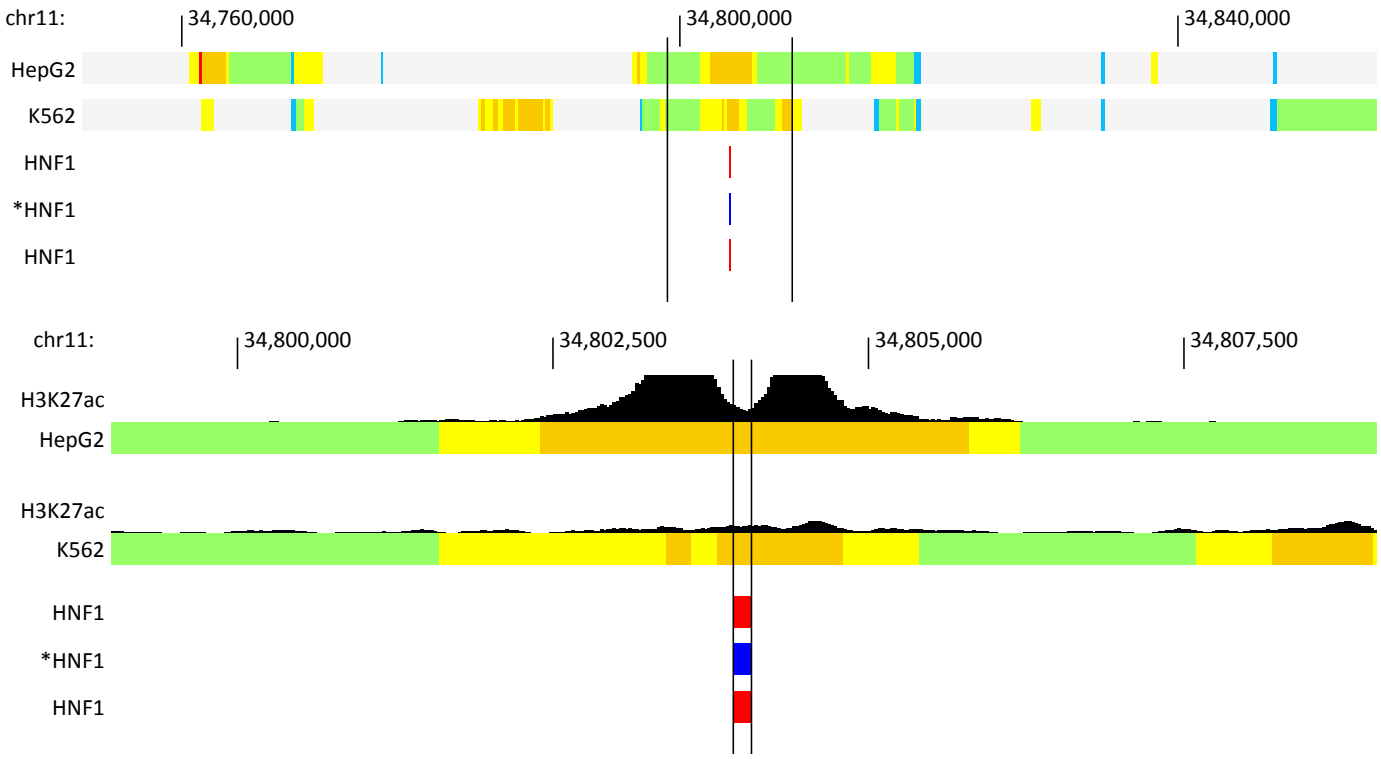
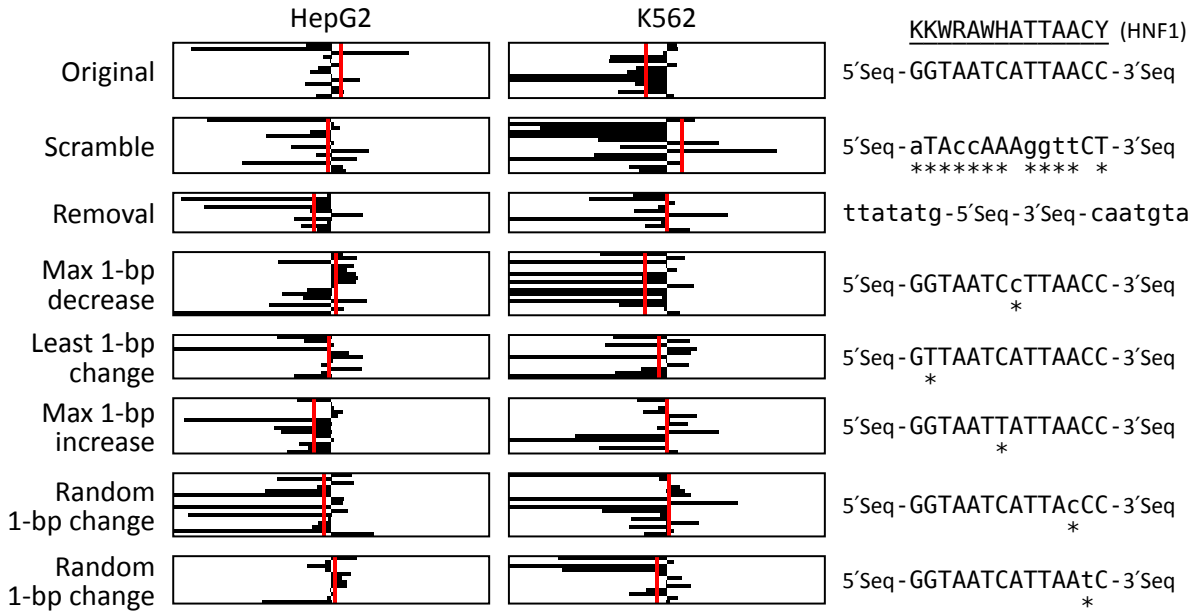
895 HNF1 in HepG2 enhancer

chr11 34803995 34804008 - (hg18)





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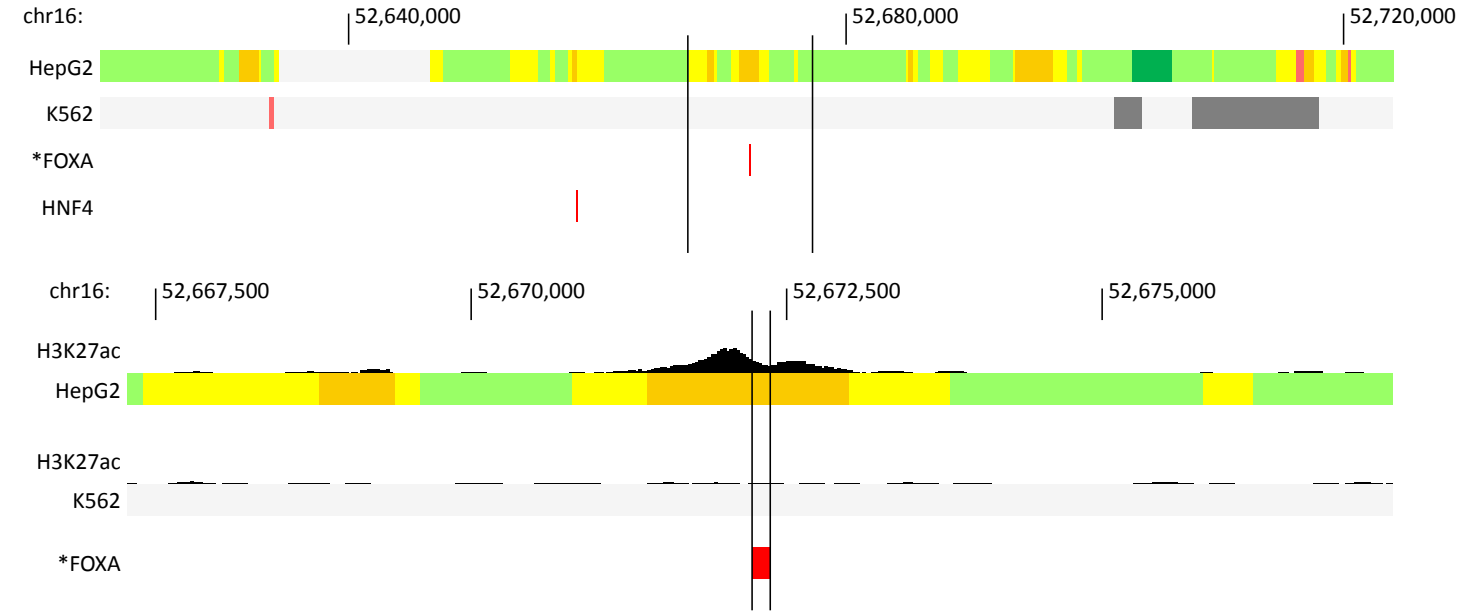
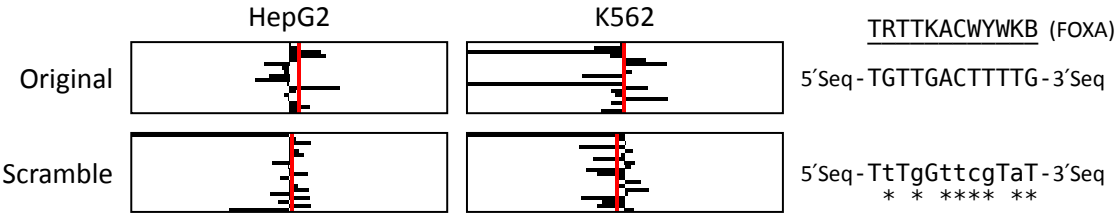
3′Seq = tgaaatggcatttgcgatgatgagatggtgctgtgtgctgctctccttcatctctccagcaaaca

896 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr16 52672293 52672304 - (hg18)





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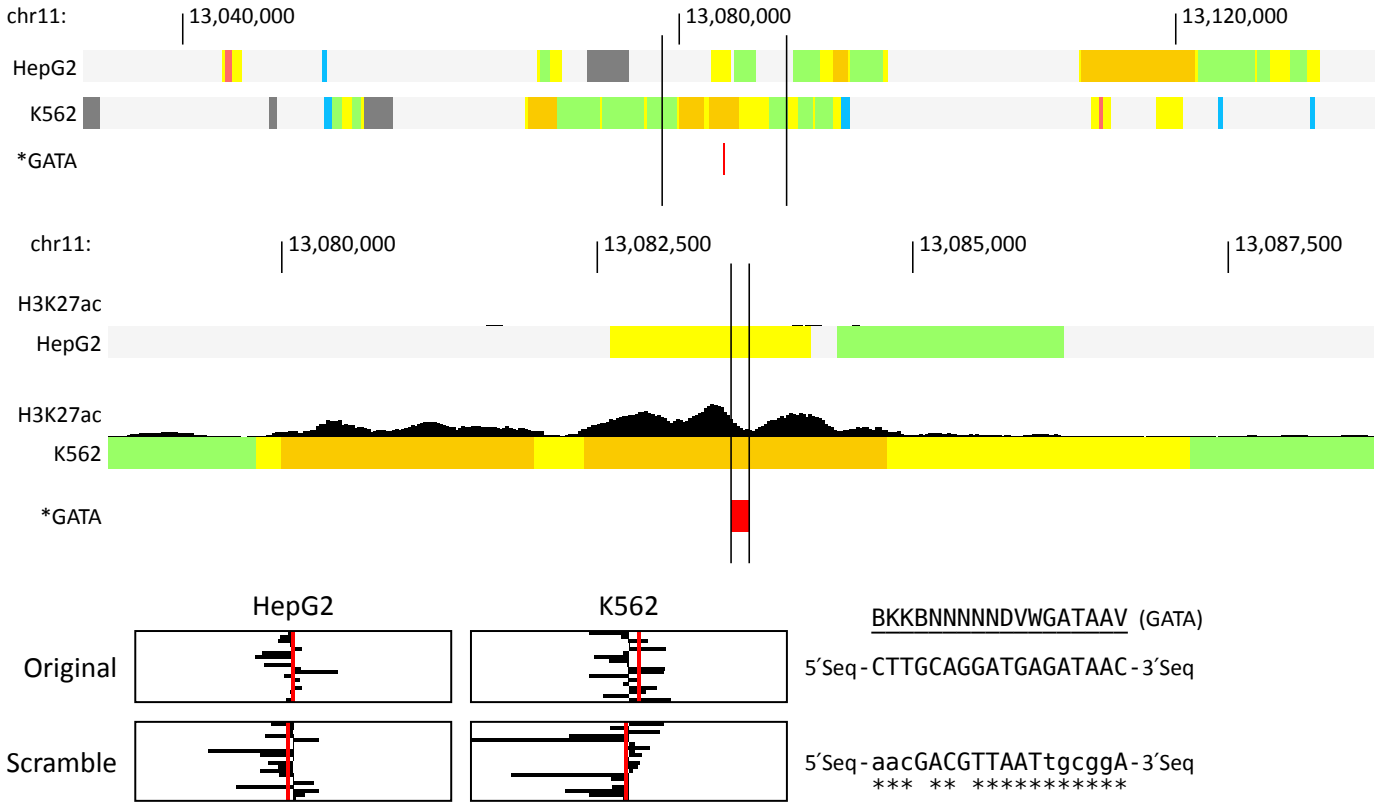
897 GATA in K562 enhancer (conserved at 60% confidence)

chr11 13083624 13083641 - (hg18)



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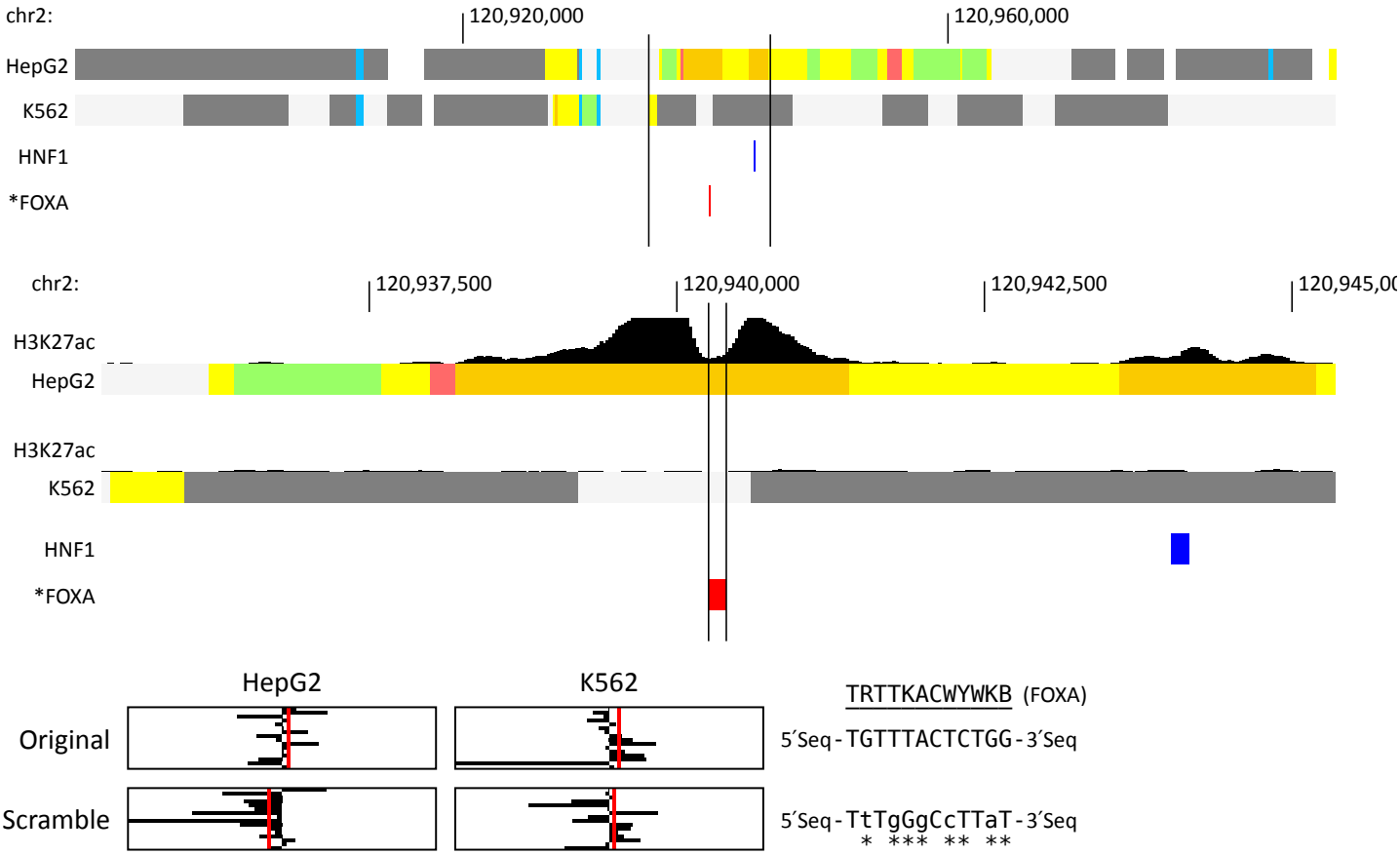
898 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 120940325 120940336 - (hg18)



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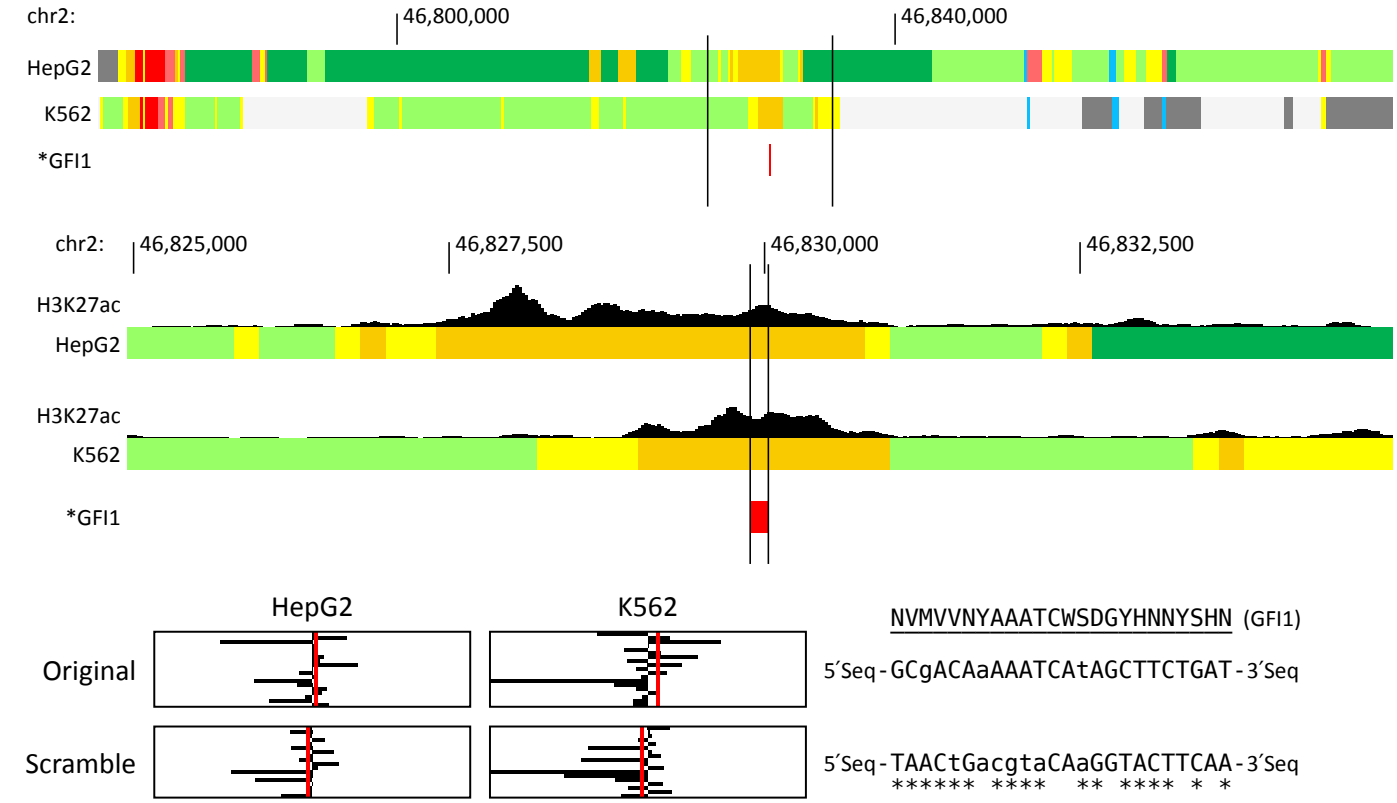
899 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 46829947 46829970 - (hg18)



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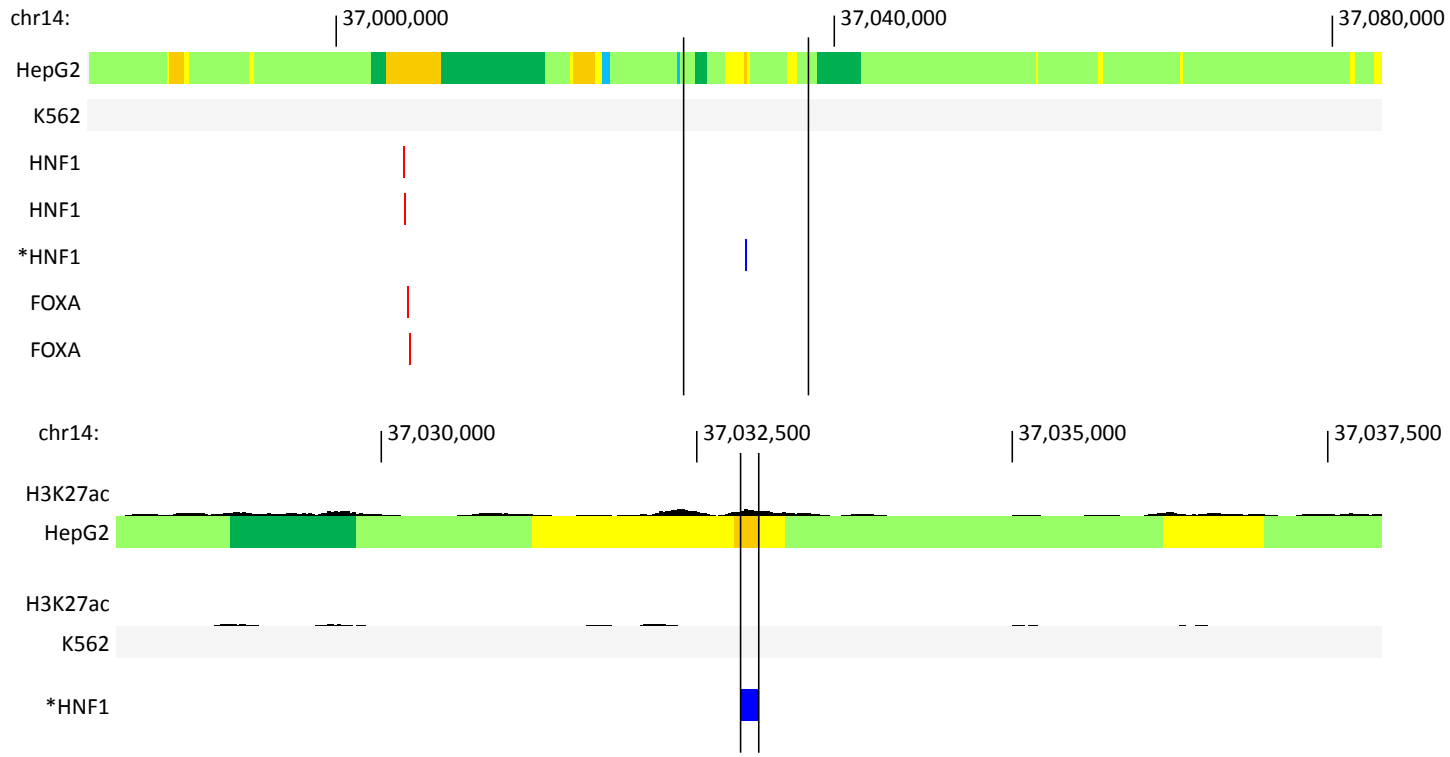
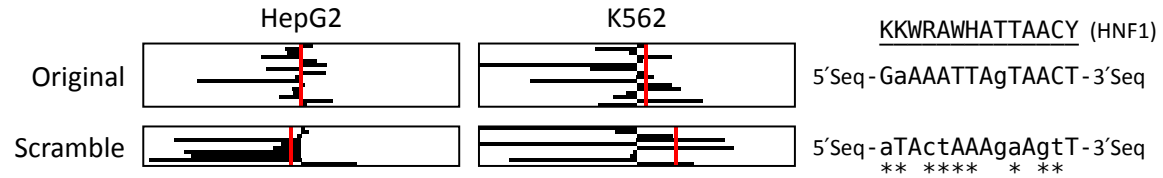
900 HNF1 in HepG2 enhancer

chr14 37032913 37032926 + (hg18)





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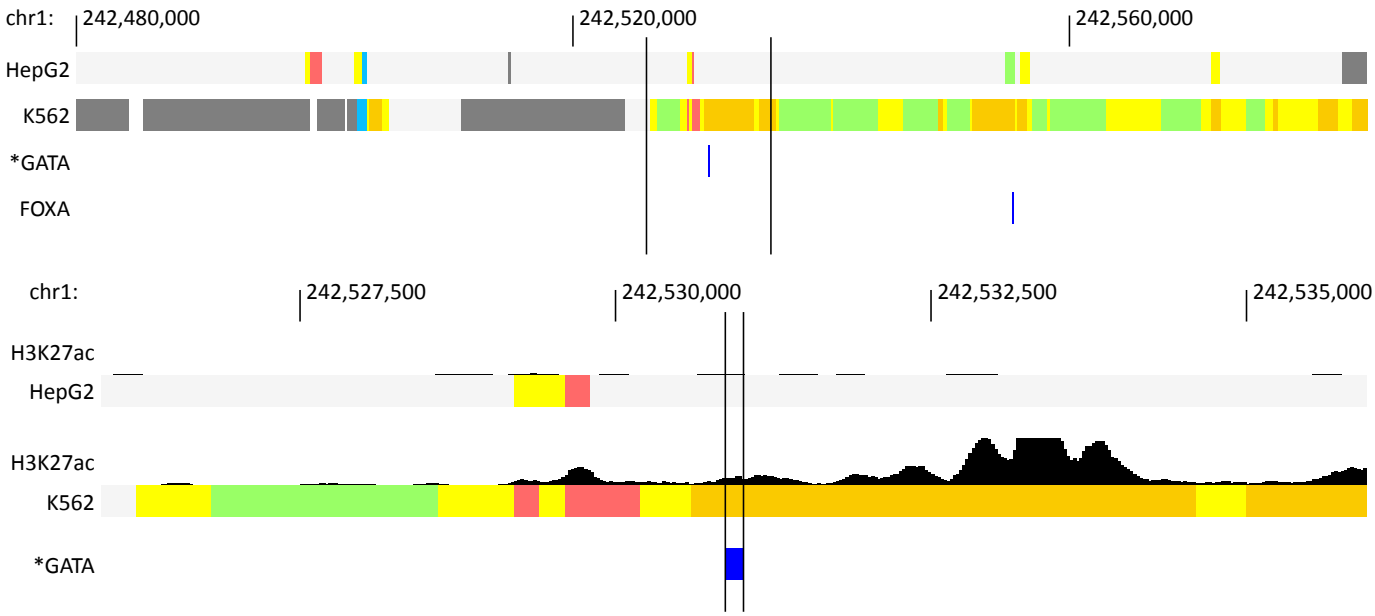
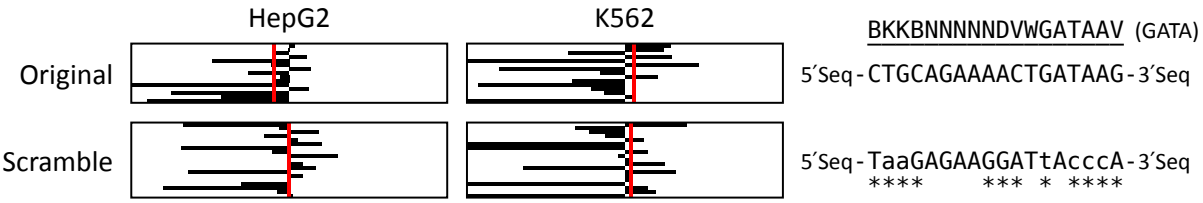
901 GATA in K562 enhancer

chr1 242530934 242530951 - (hg18)





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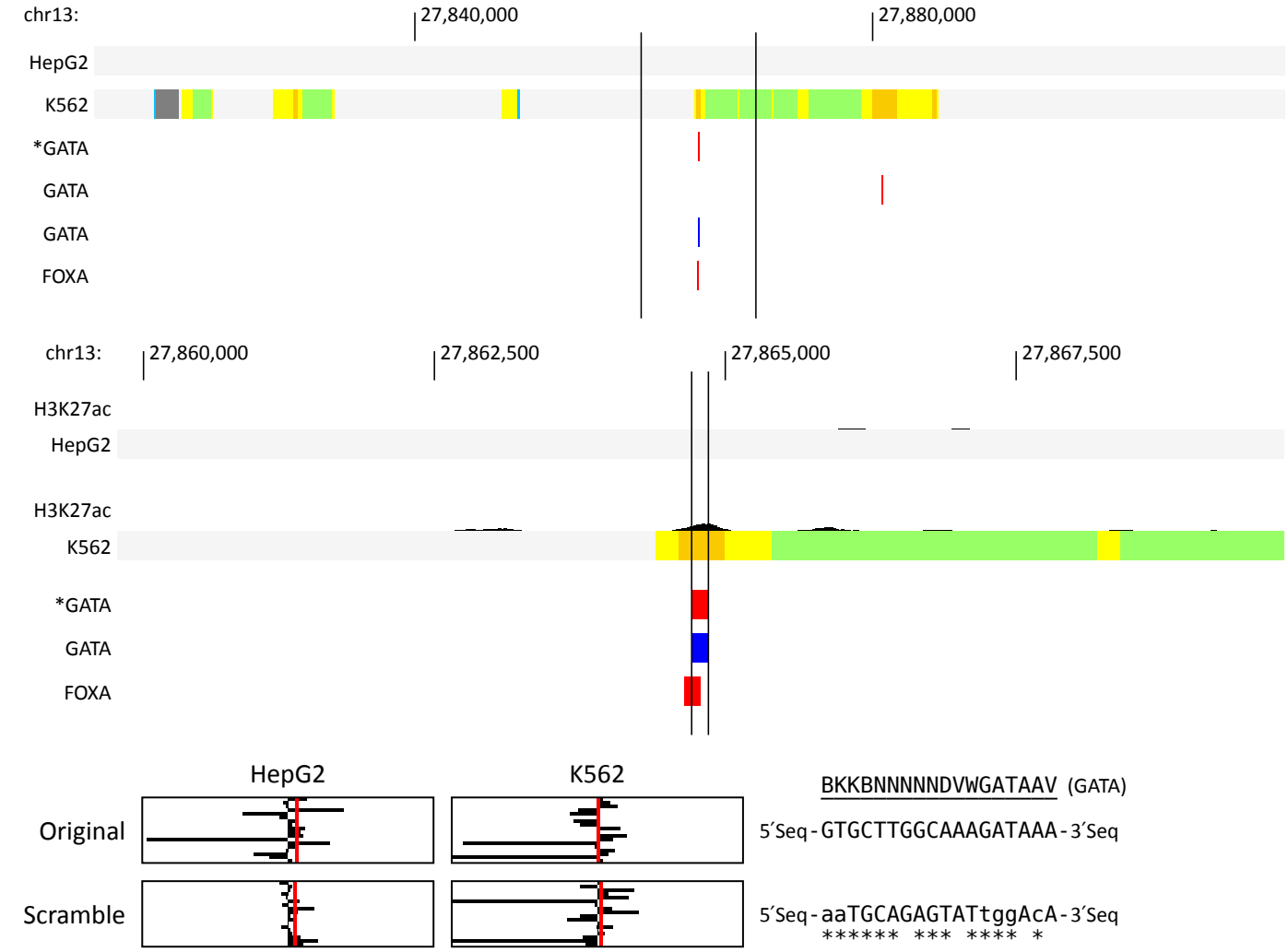
902 GATA in K562 enhancer (conserved at 60% confidence)

chr13 27864775 27864792 - (hg18)



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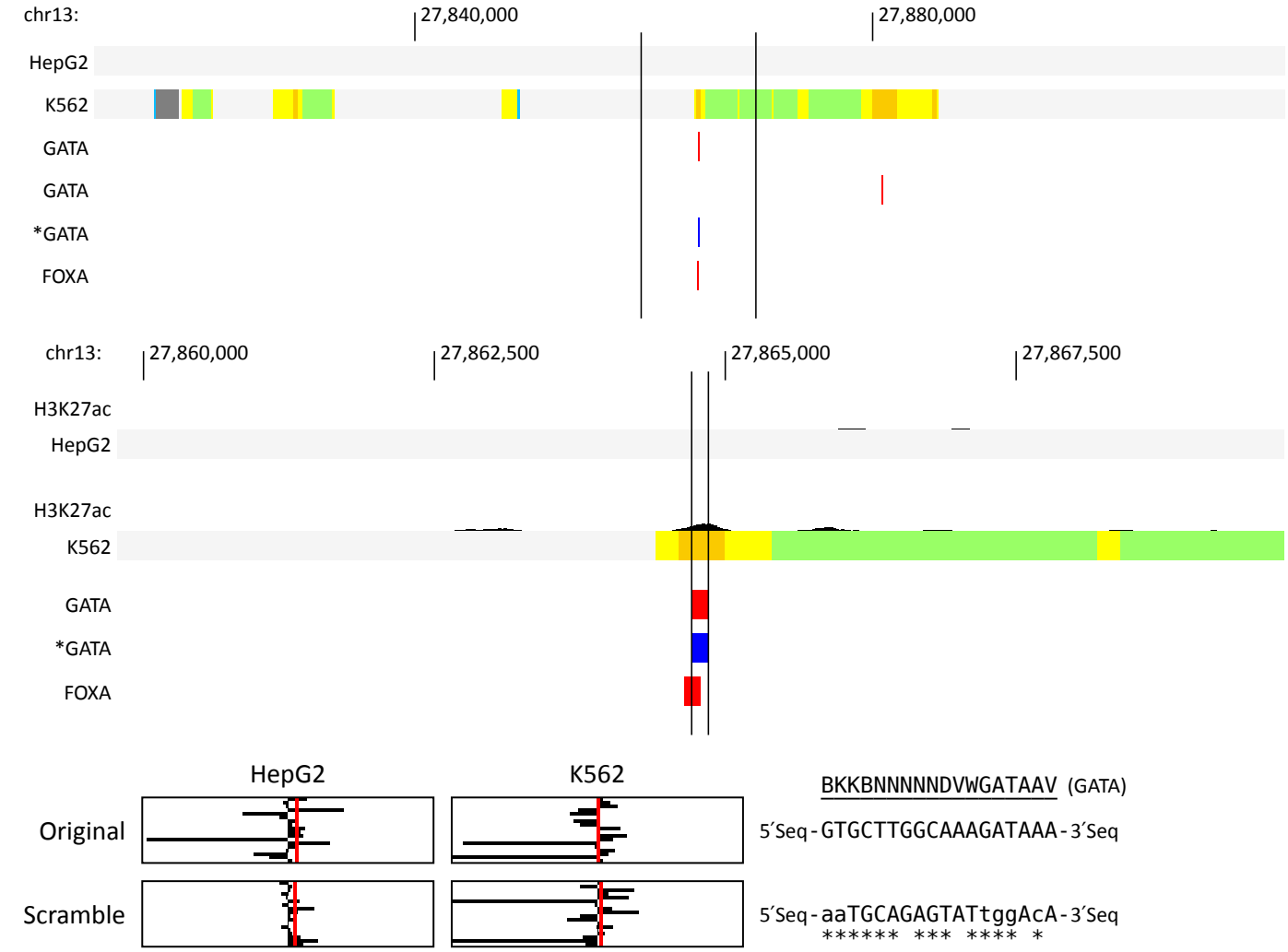
903 GATA in K562 enhancer

chr13 27864775 27864792 - (hg18)



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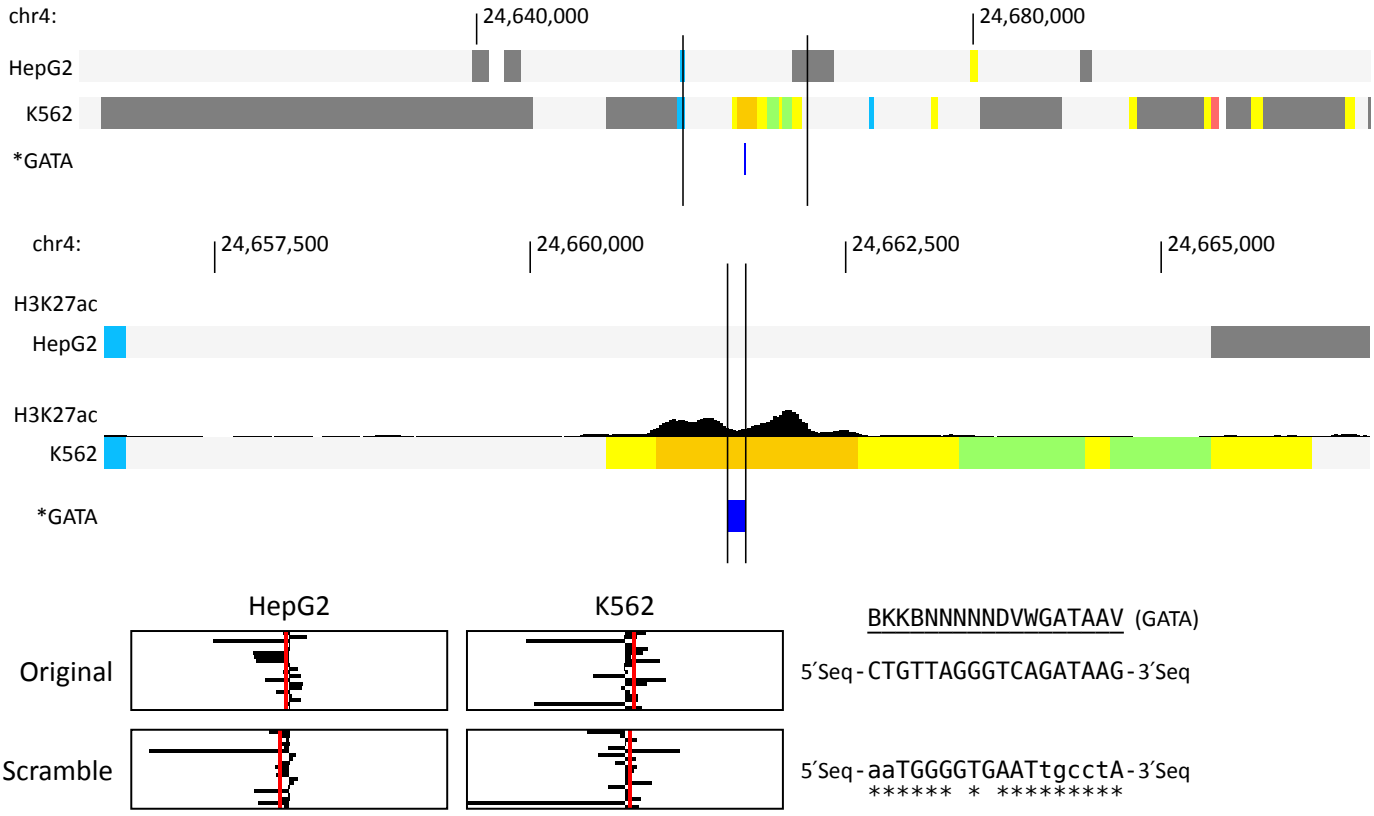
904 GATA in K562 enhancer

chr4 24661628 24661645 + (hg18)



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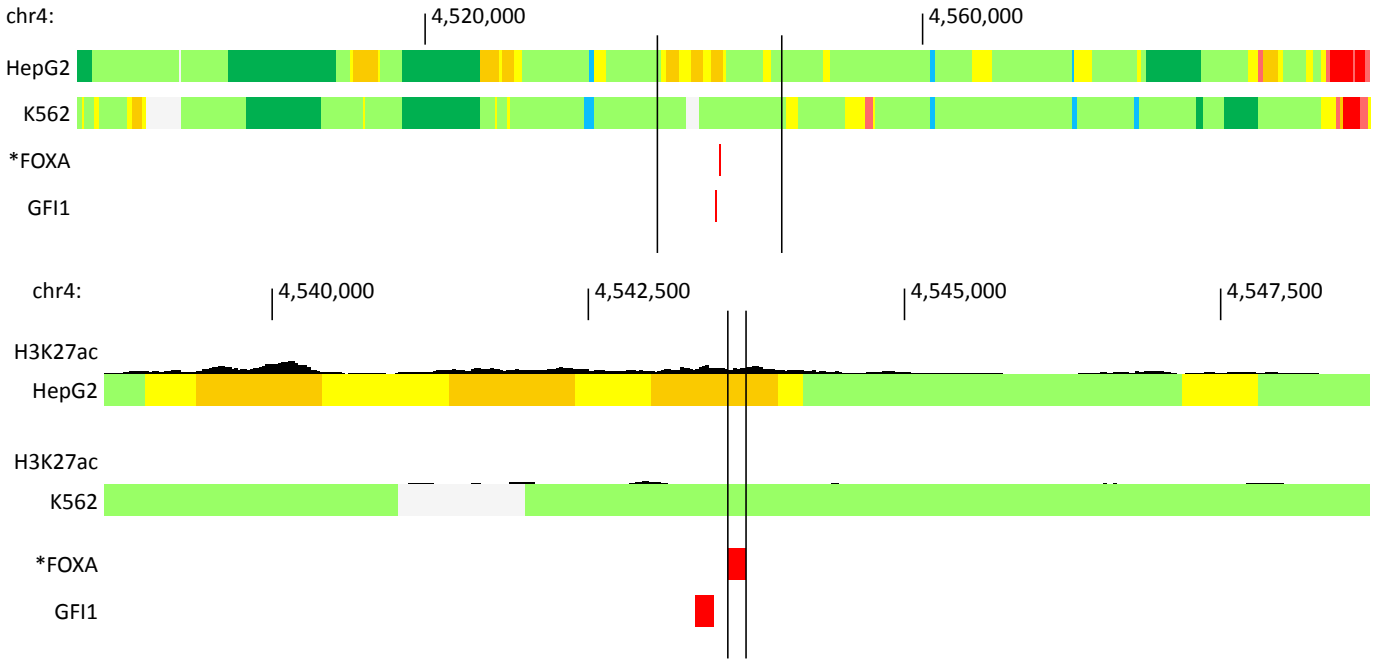
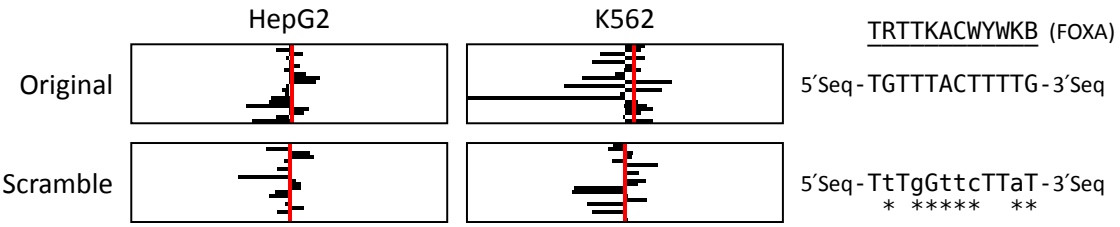
905 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr4 4543670 4543681 + (hg18)





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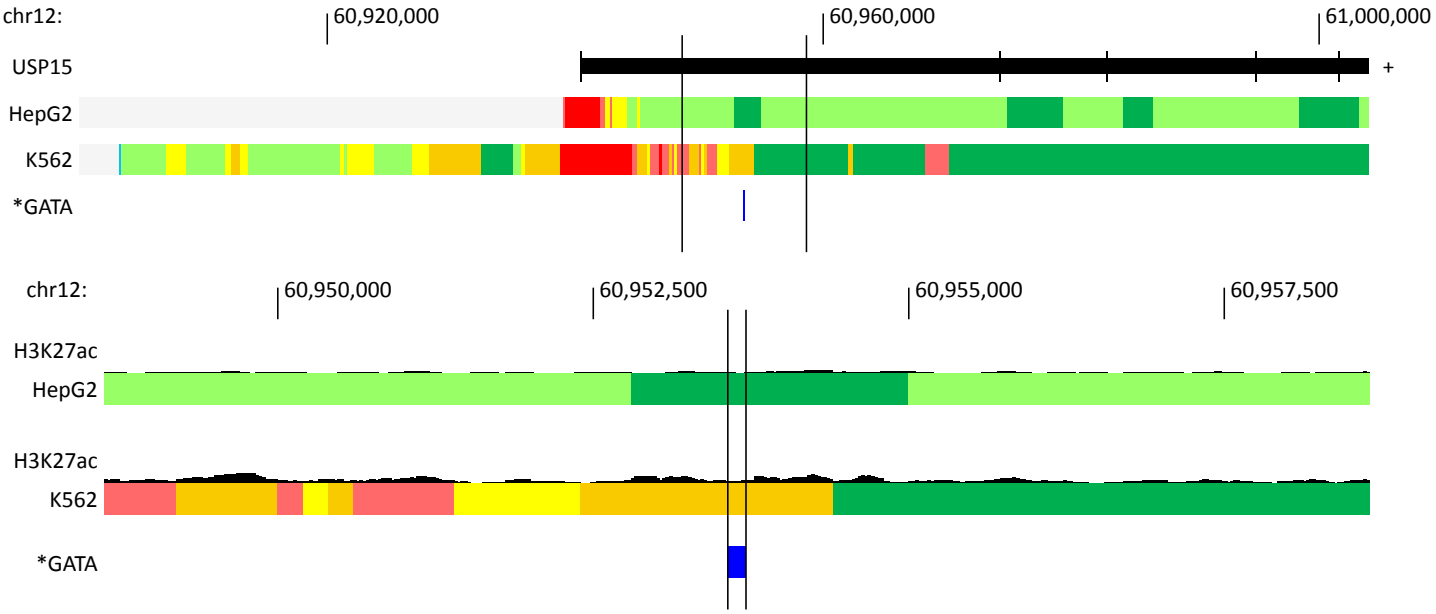
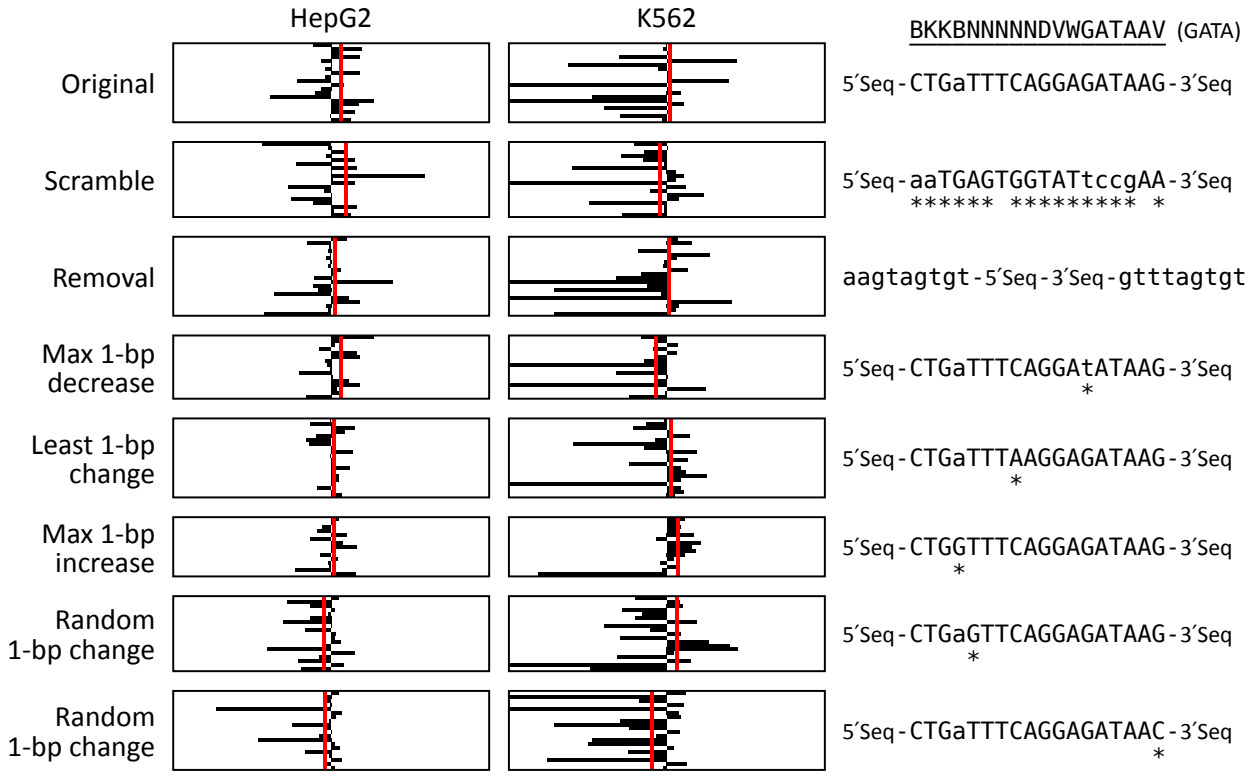
906 GATA in K562 enhancer

chr12 60953630 60953647 + (hg18)





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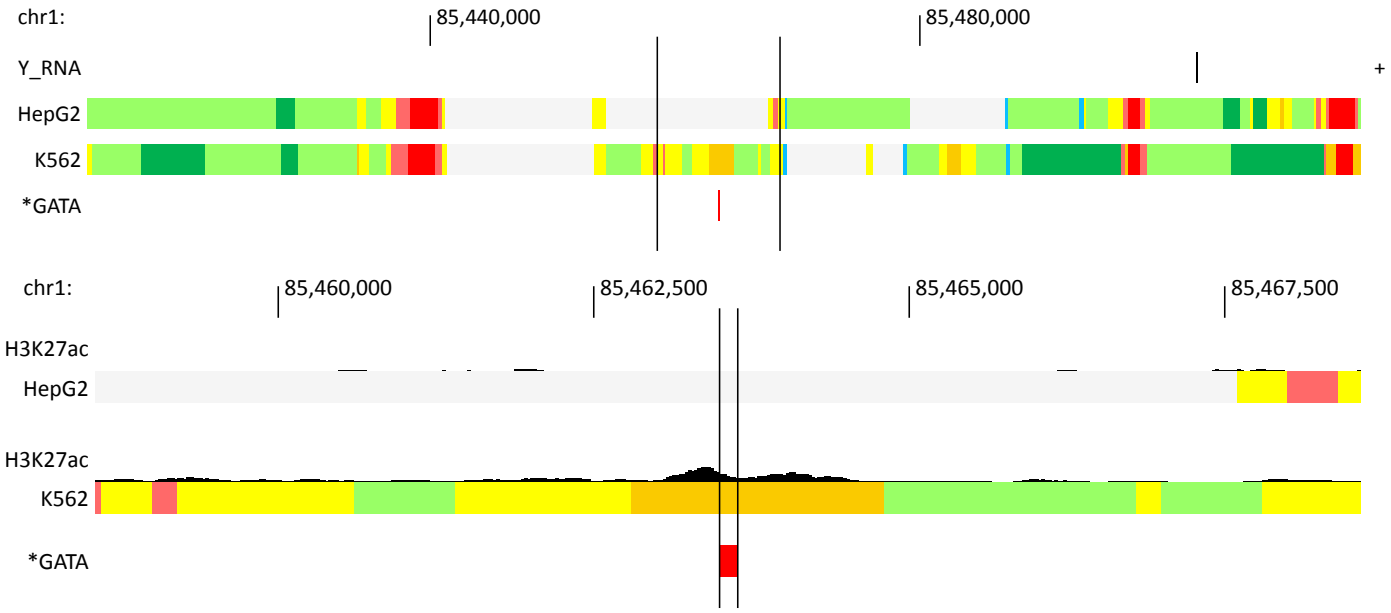
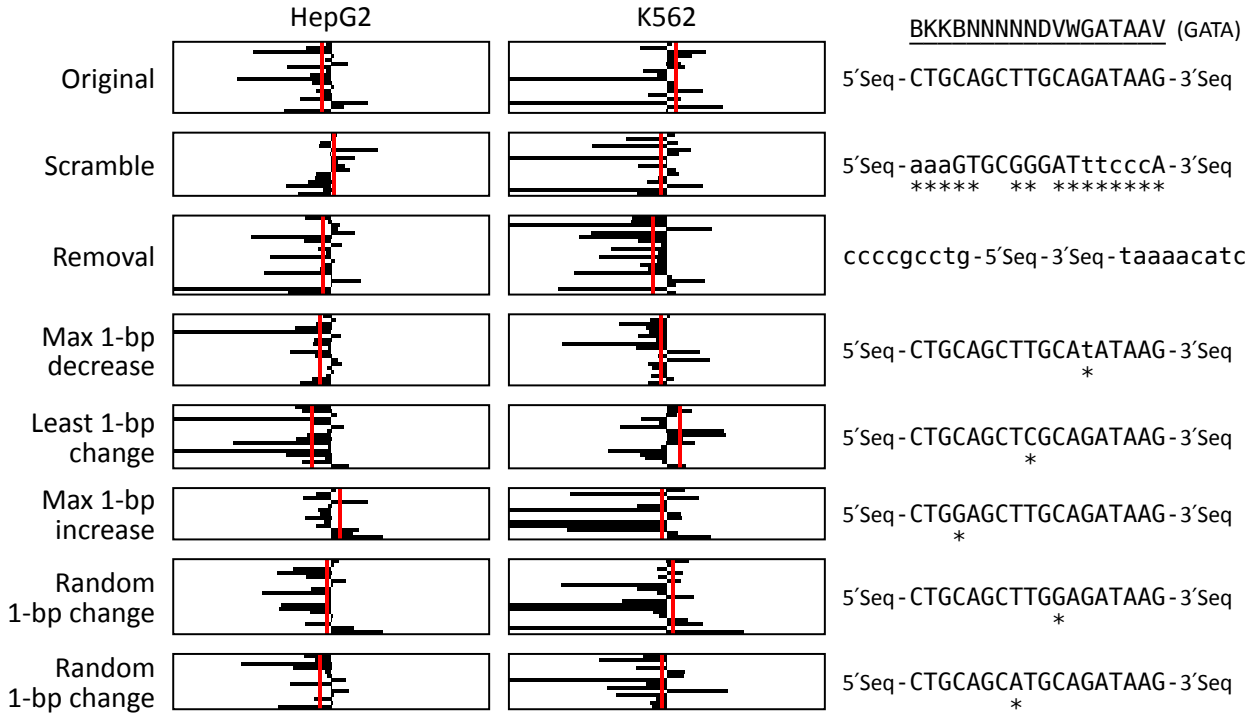
3′Seq = aatatatataaacaaaaataatcatgaaaacaaattgagattggtatgacaaattcatccaca

907 GATA in K562 enhancer (conserved at 70% confidence)

chr1 85463561 85463578 + (hg18)





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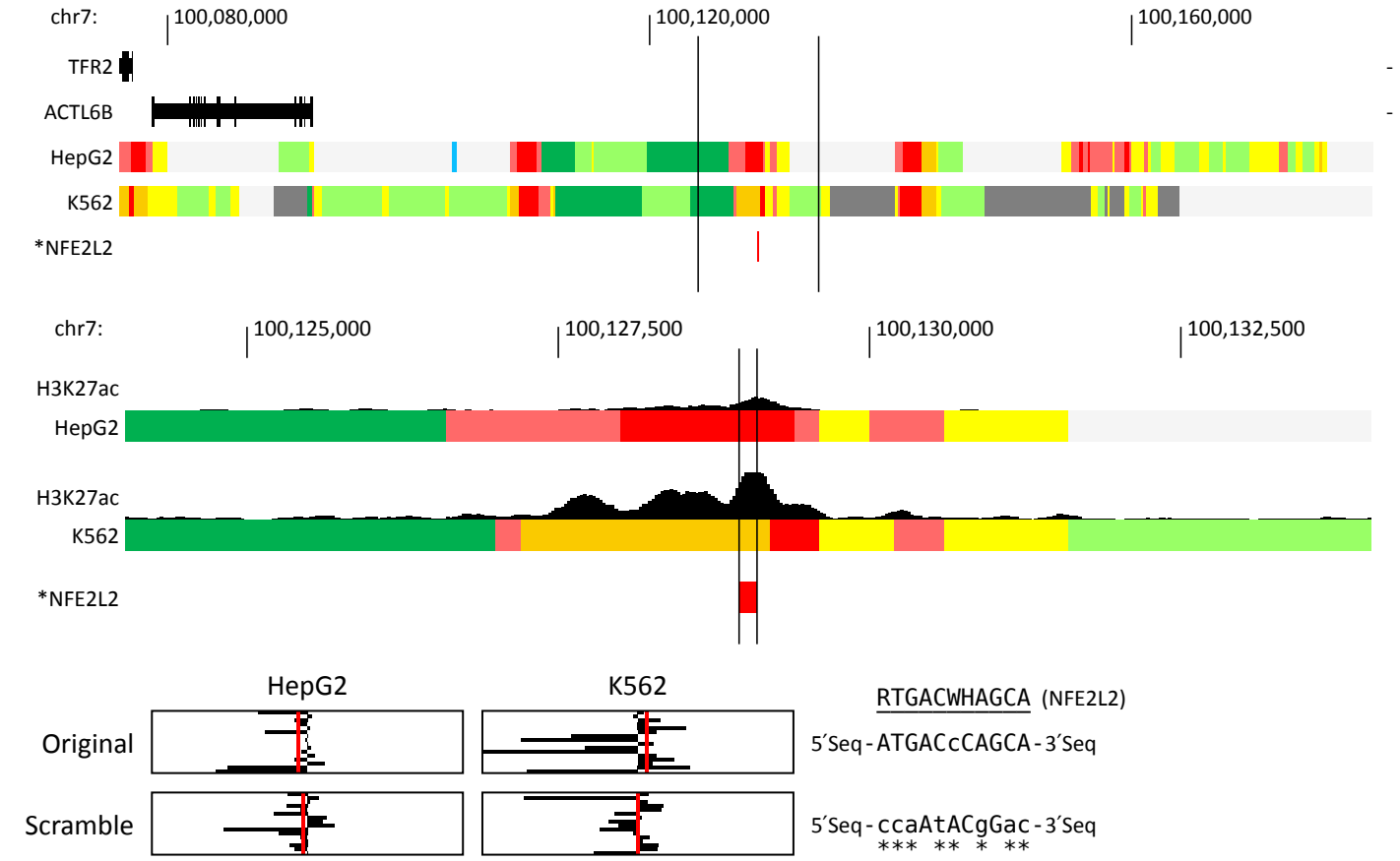
908 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 100129019 100129029 + (hg18)



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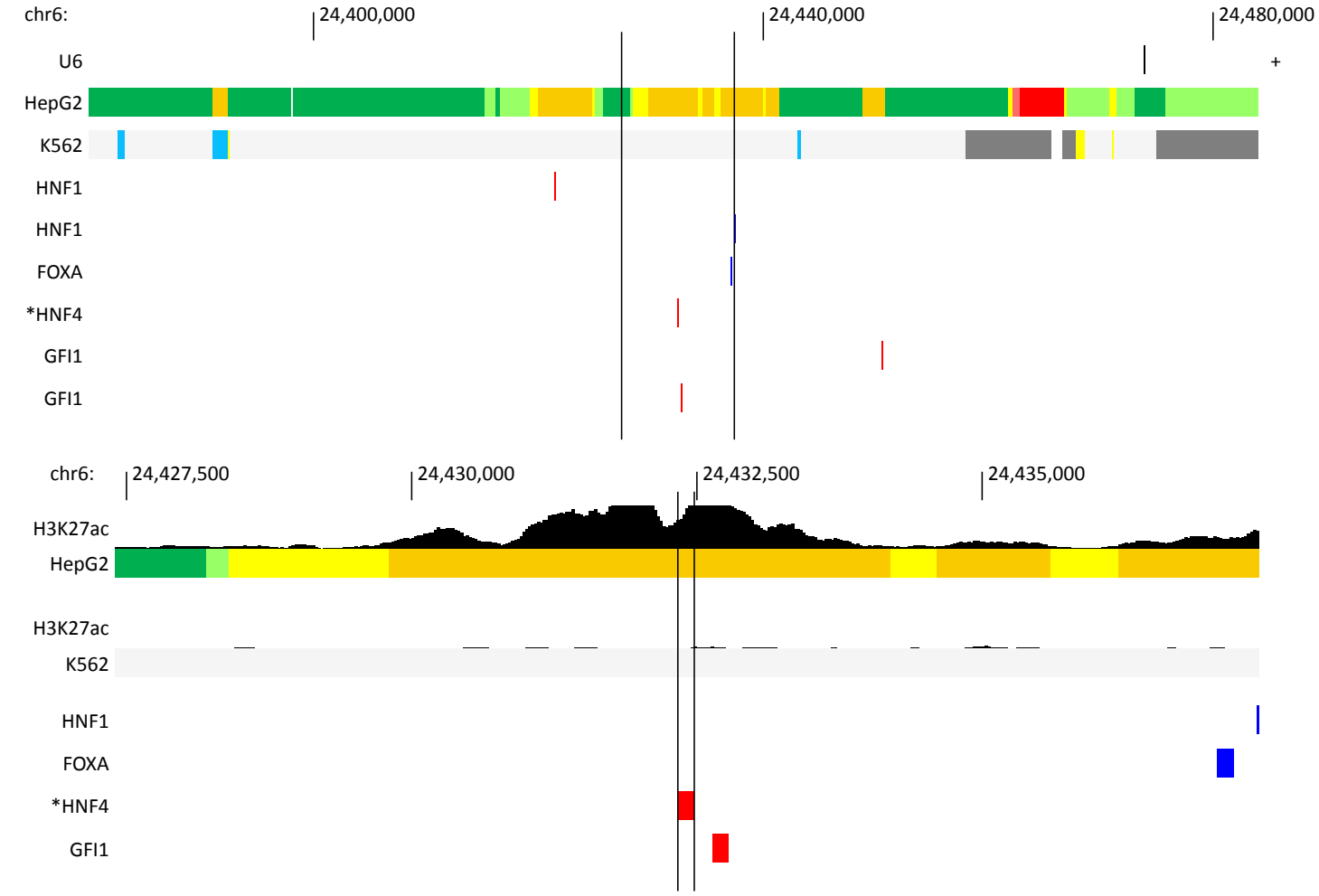
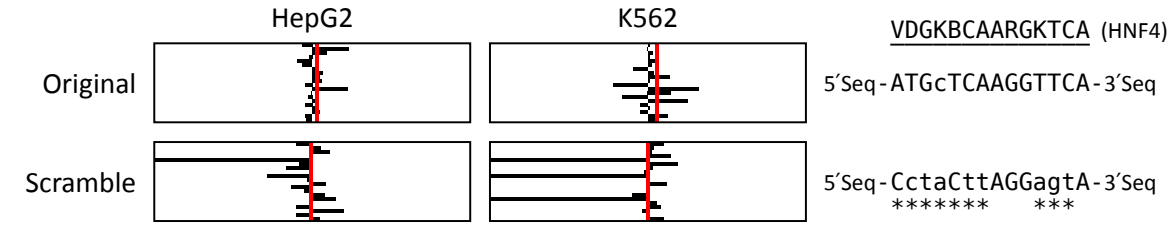
909 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr6 24432399 24432412 + (hg18)





5′Seq = aacctcactttcacatcaaaactgcaccatccaggaggtcaaagcacctgatgtagatacagaaga
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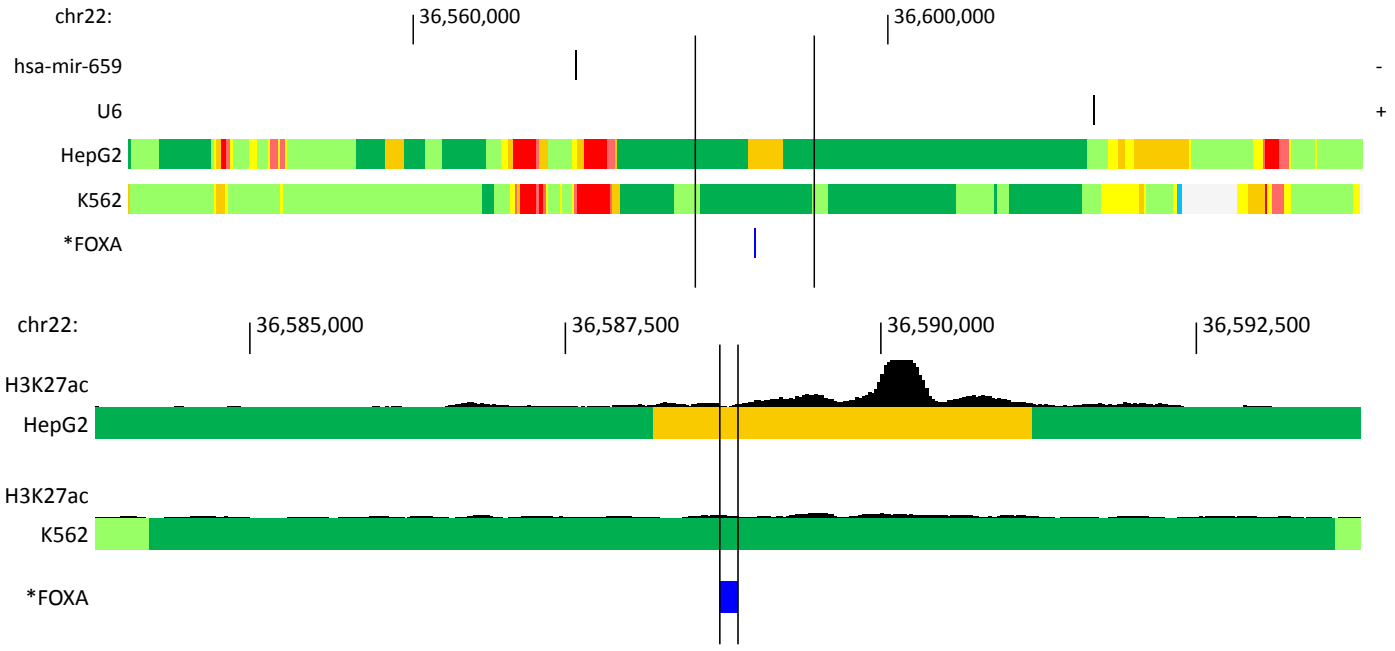
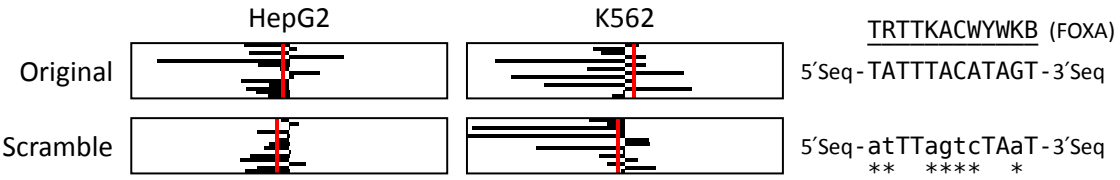
910 FOXA in HepG2 enhancer

chr22 36588791 36588802 + (hg18)





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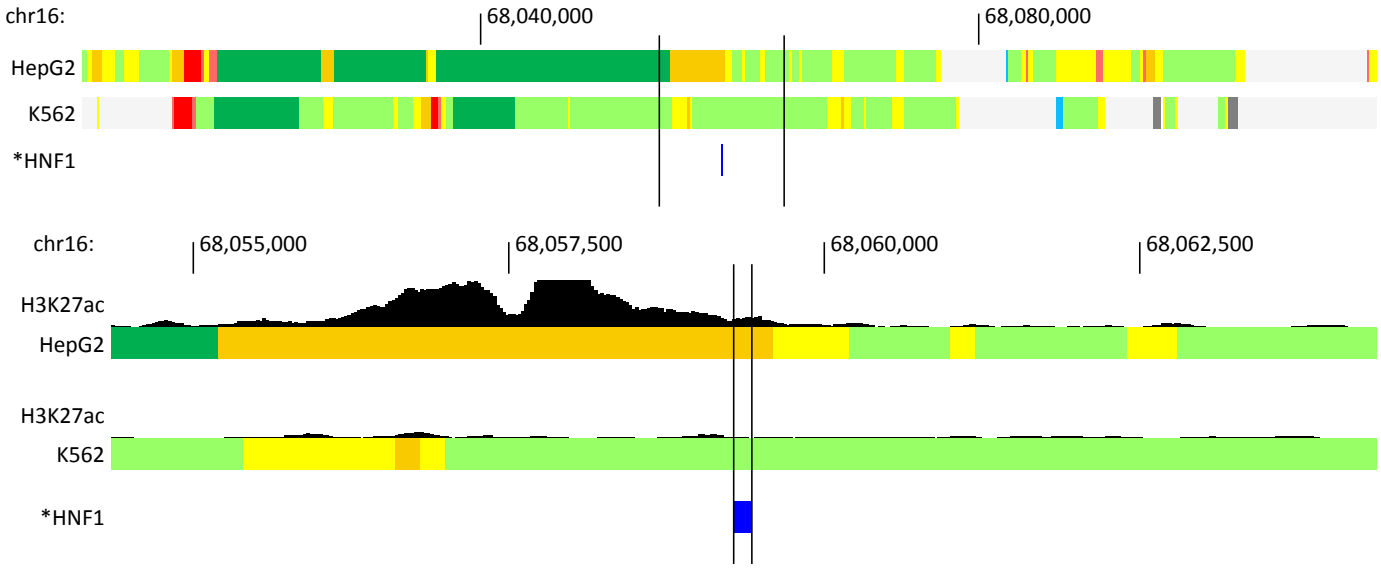
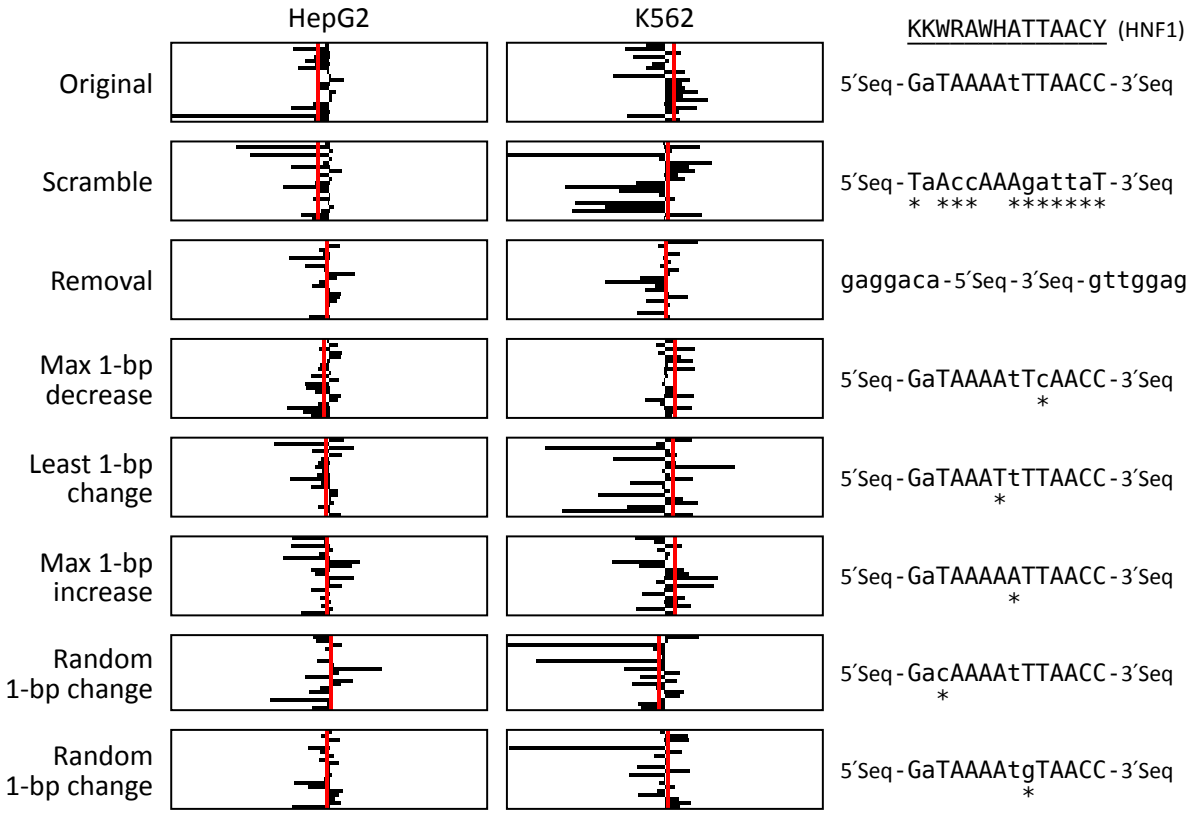
3′Seq = aagaaagagaggacagataccaattctcttgtatttgttcacagctgtcacagtataccatgggta

911 HNF1 in HepG2 enhancer

chr16 68059348 68059361 + (hg18)





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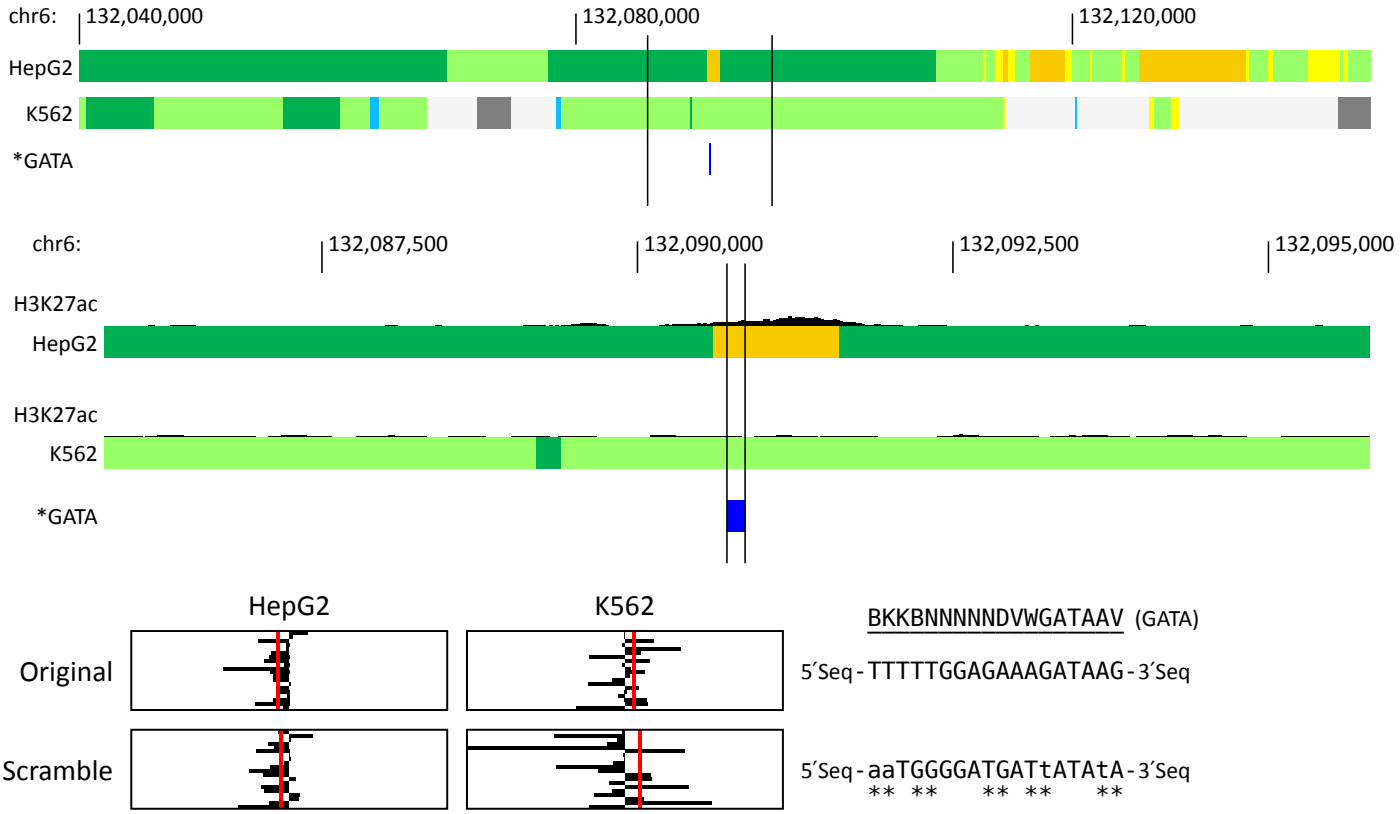
912 GATA in HepG2 enhancer

chr6 132090773 132090790 + (hg18)



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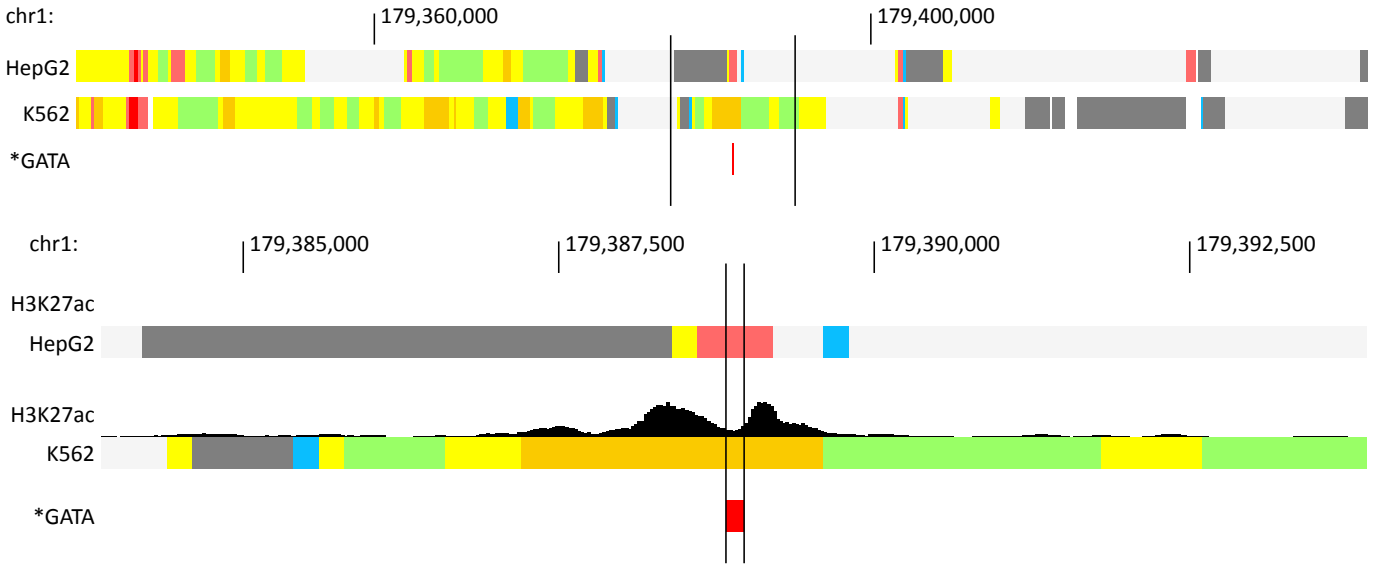
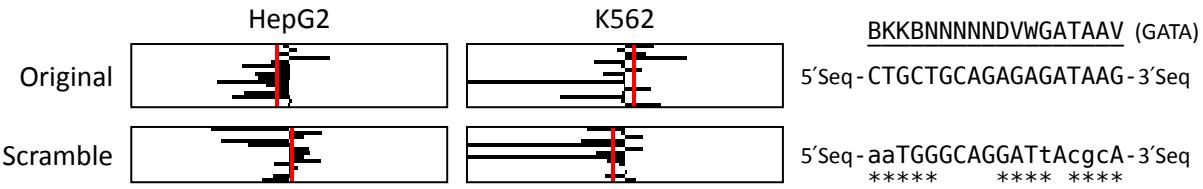
913 GATA in K562 enhancer (conserved at 60% confidence)

chr1 179388889 179388906 - (hg18)





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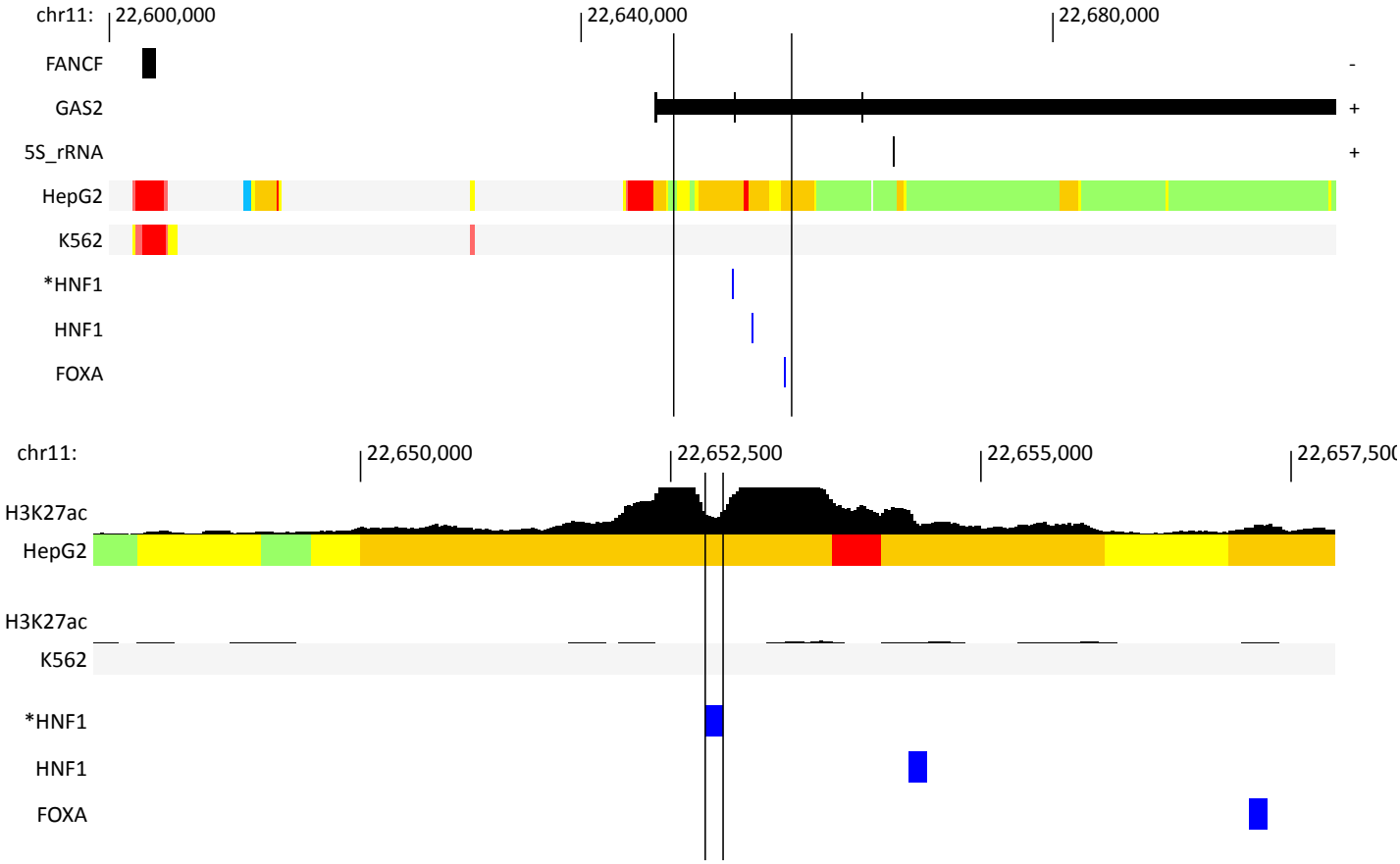
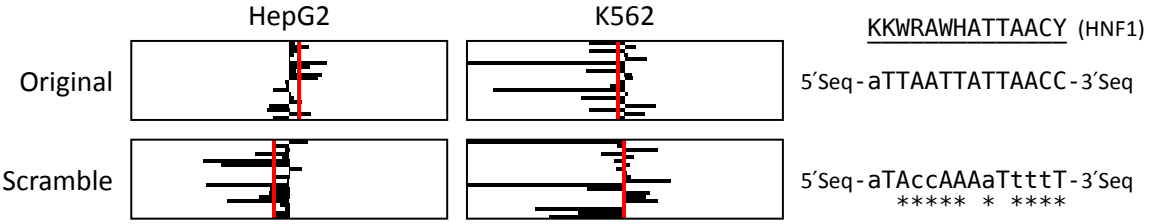
914 HNF1 in HepG2 enhancer

chr11 22652844 22652857 - (hg18)





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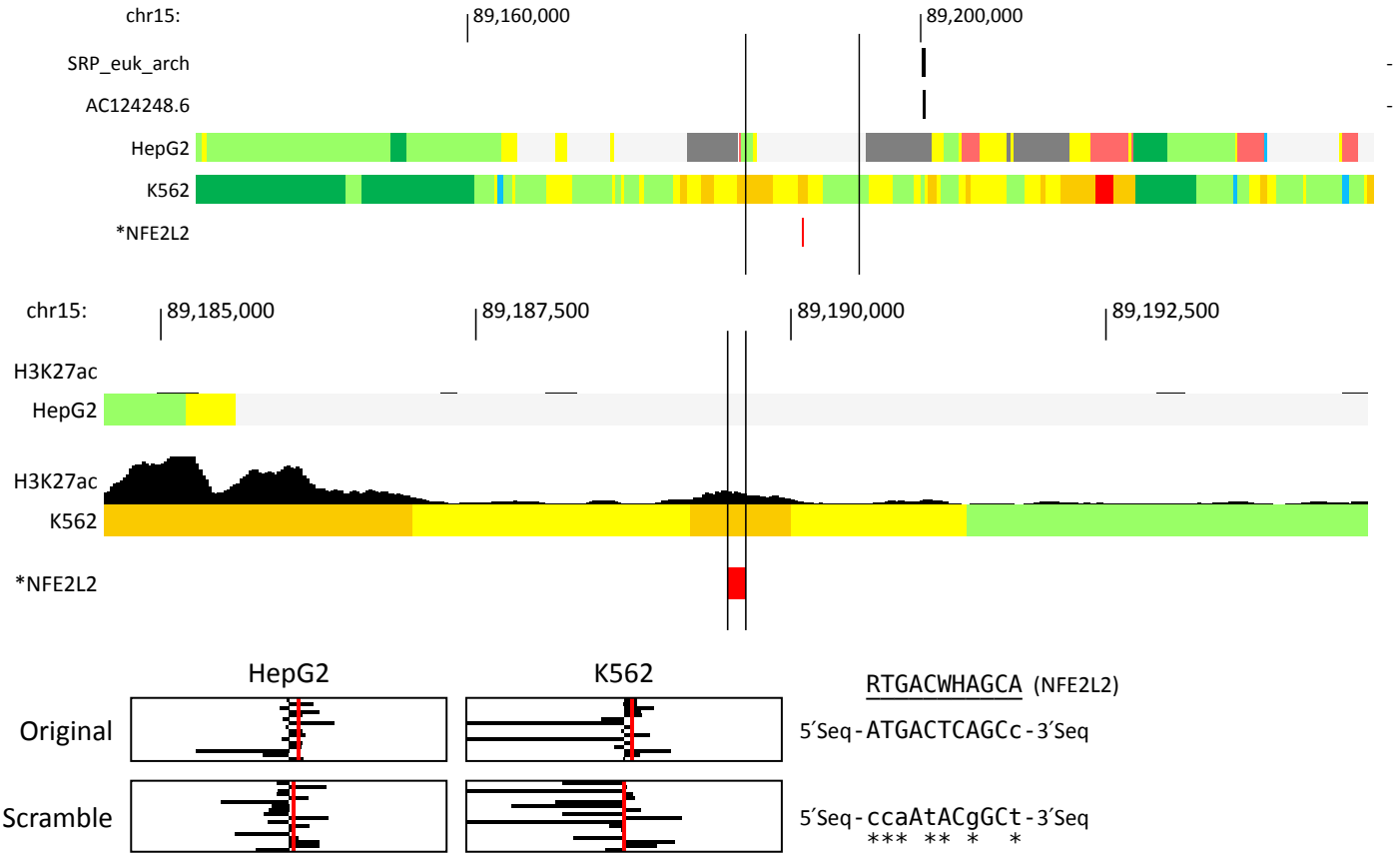
915 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr15 89189565 89189575 + (hg18)



RTGACWHAGCA (NFE2L2)

5′Seq-ATGACTCAGCc-3′Seq

5′Seq-ccaAtACgGCt-3′Seq

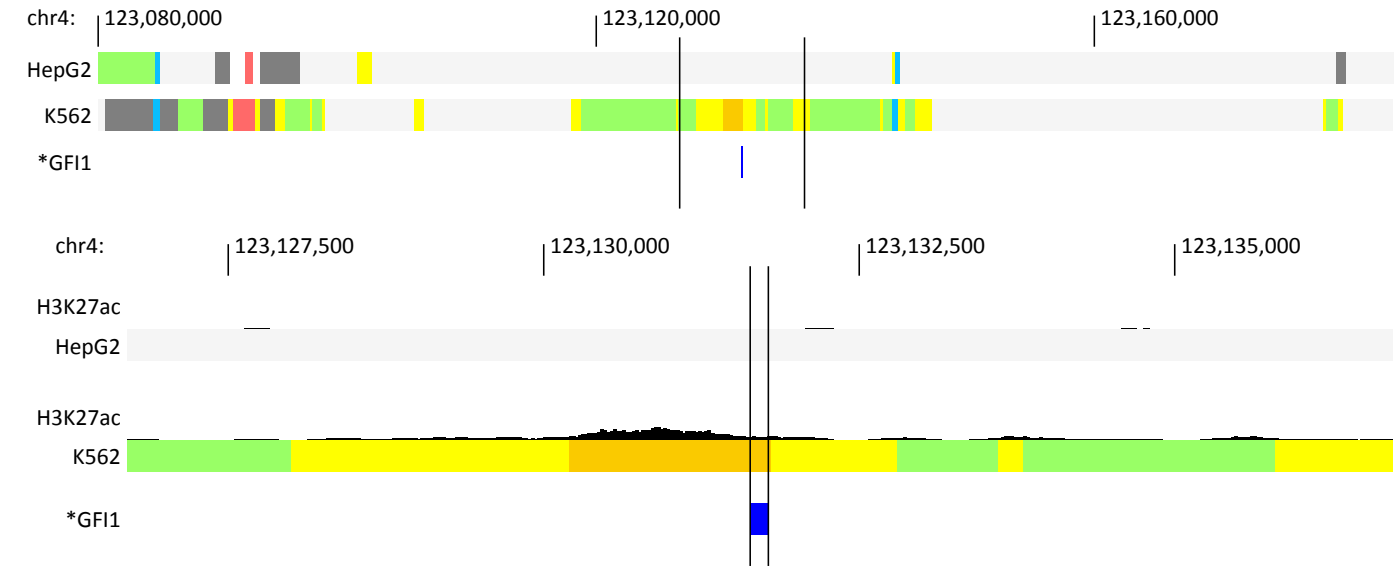
*** ** * *

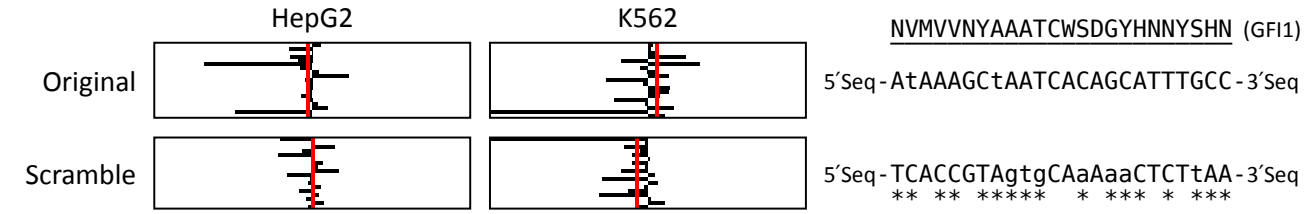
5′Seq = cacacggagccccactccaggcctggtcgaaaaaaatgctgctccagctgaaggctttctcagagaa

3′Seq = tgagcactcagatgcaacttccacgttttatggactgaaggtgctttcataacagctggtgatgatg

916 GFI1 in K562 enhancer

chr4 123131697 123131720 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AtAAAGCtAATCACAGCATTTGCC-3′Seq

5′Seq-TCACCGTAgtgCAaAaaCTCTtAA-3′Seq

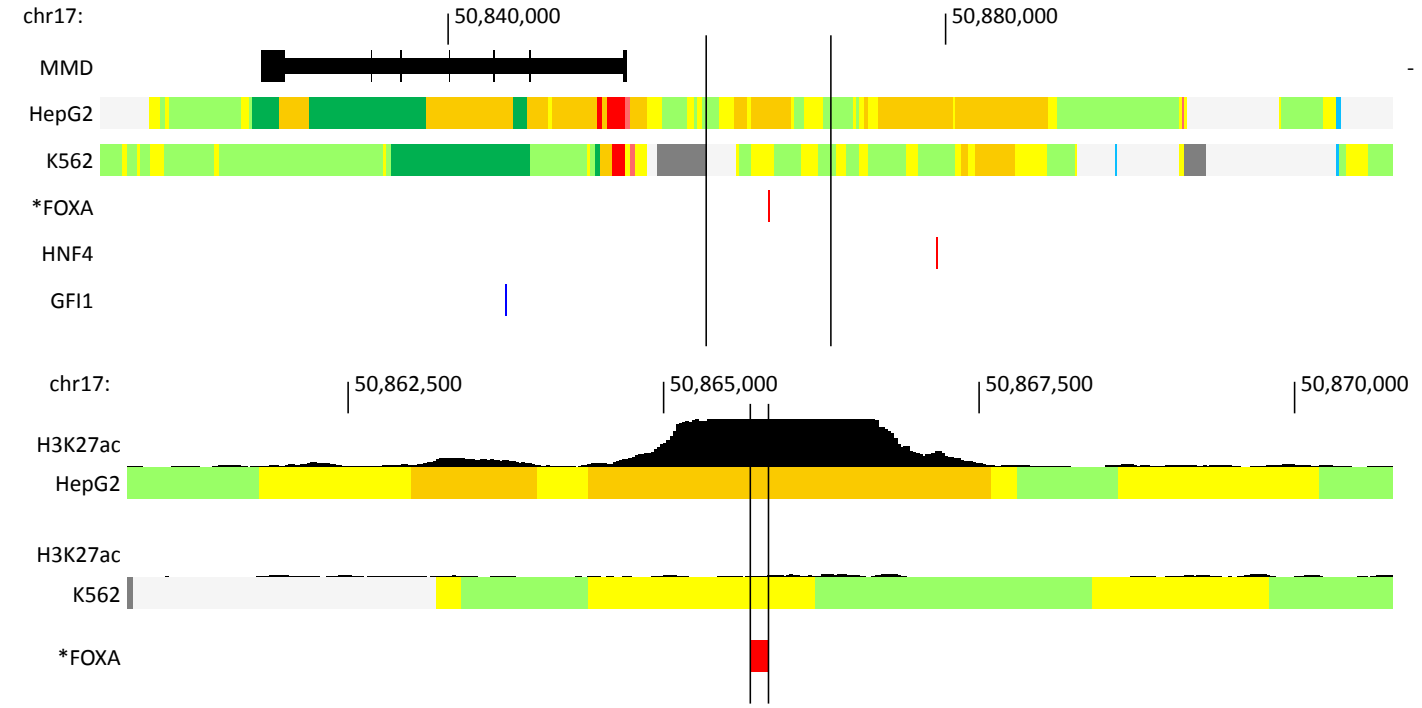
** ** ***** * *** * ***

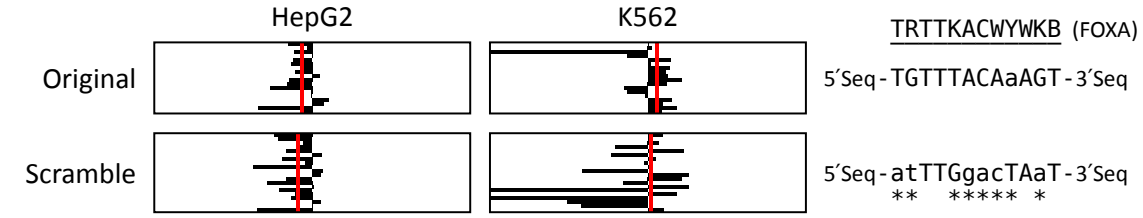
5′Seq = aagacaaaaagattaaaaataaacagaaactgtaagcaaacataaggatcattaaacagct

3′Seq = tagaccaattccaagagaaagcaattttctttgatgtaagcaccctgggaaggaaatatt

917 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 50865754 50865765 - (hg18)





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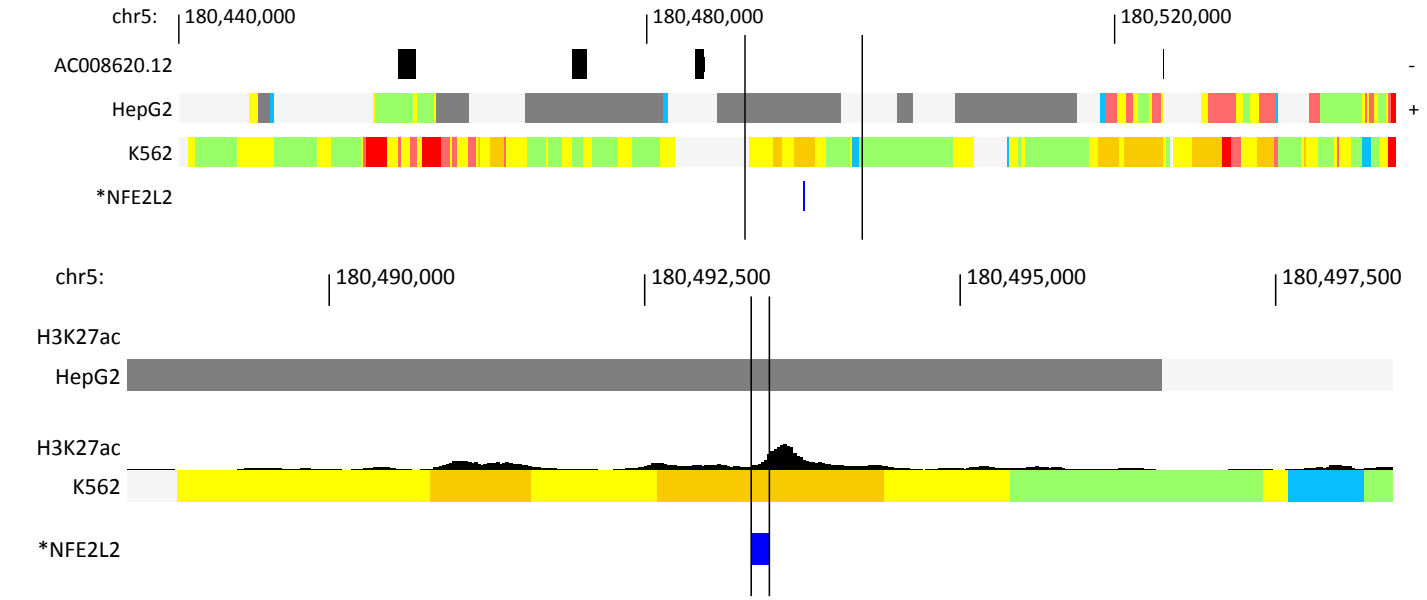
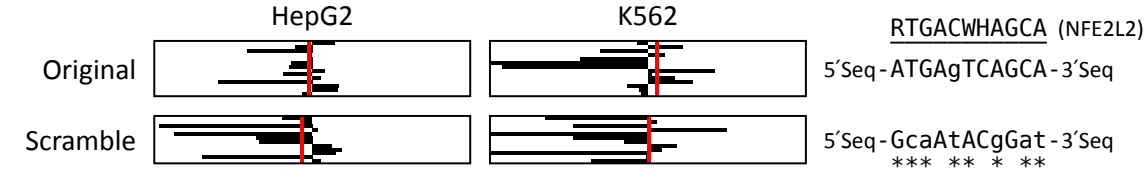
918 NFE2L2 in K562 enhancer

chr5 180493411 180493421 - (hg18)





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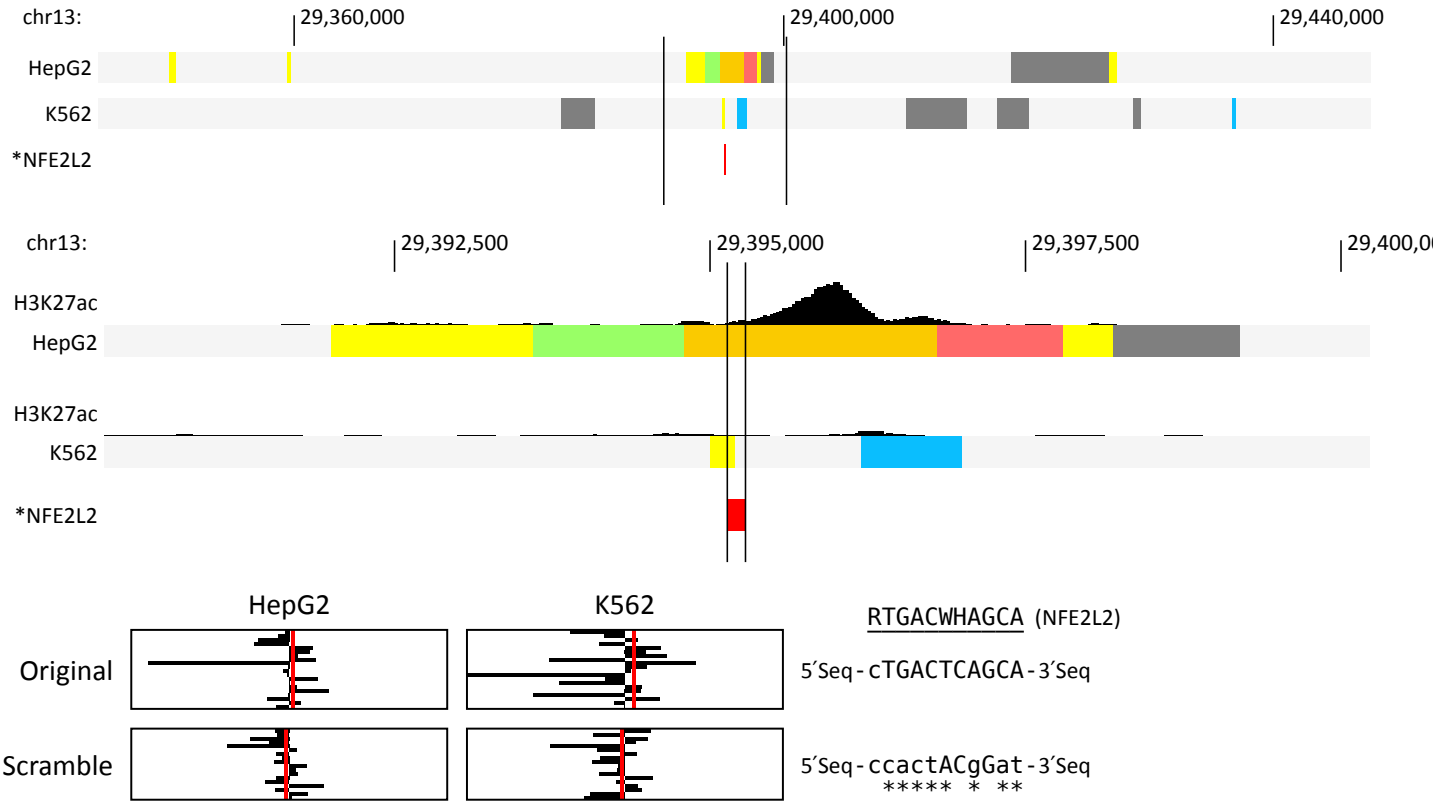
3′Seq = aatgcctggagaggaaaagcaccacccaatgtccagctcagccgagaacacatccccgggtctcaga

919 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr13 29395204 29395214 - (hg18)



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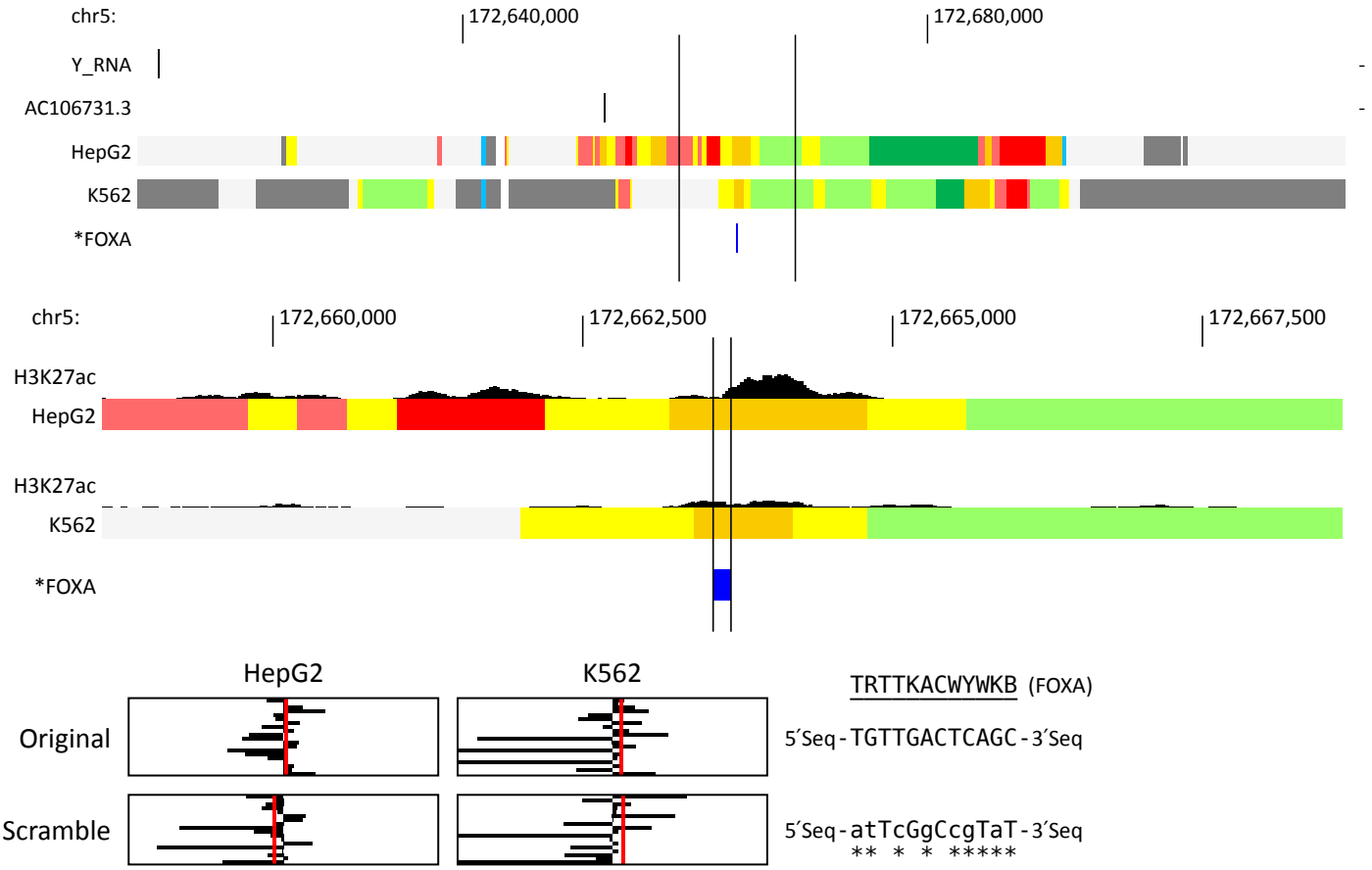
920 FOXA in HepG2 enhancer

chr5 172663619 172663630 - (hg18)



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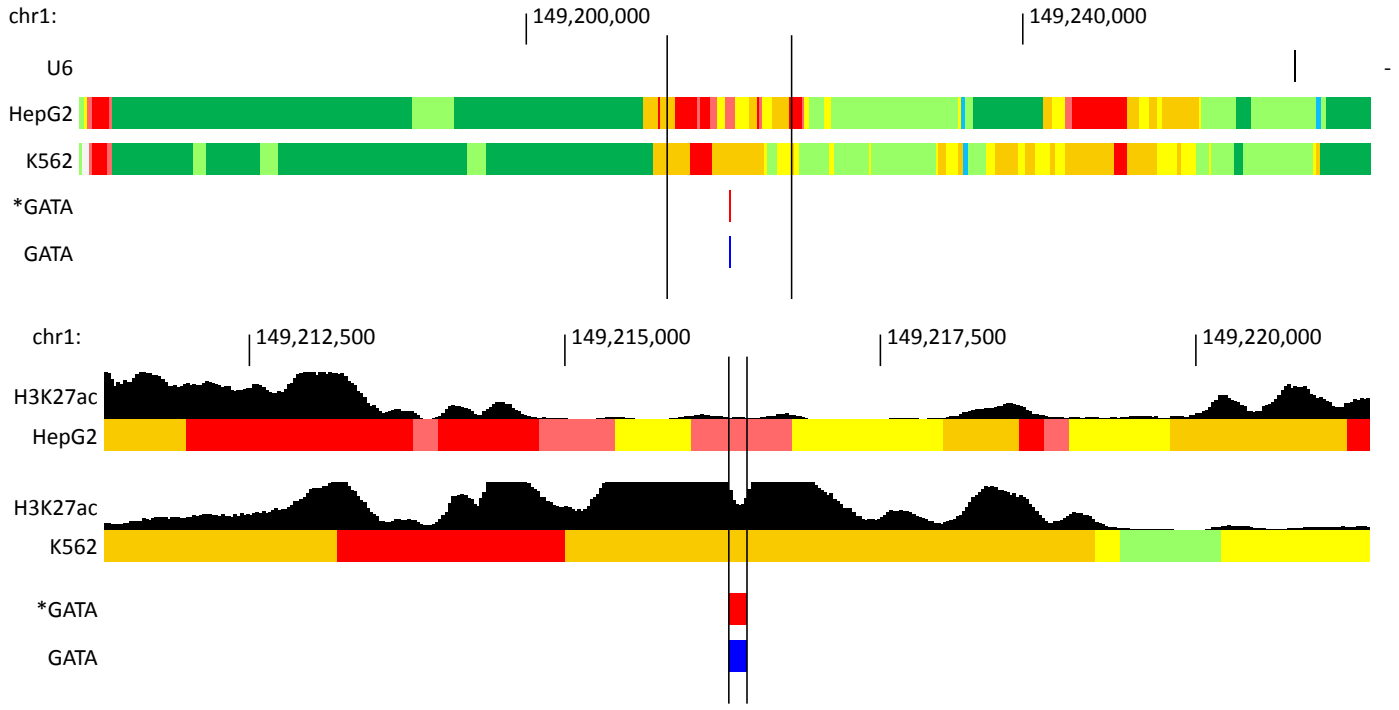
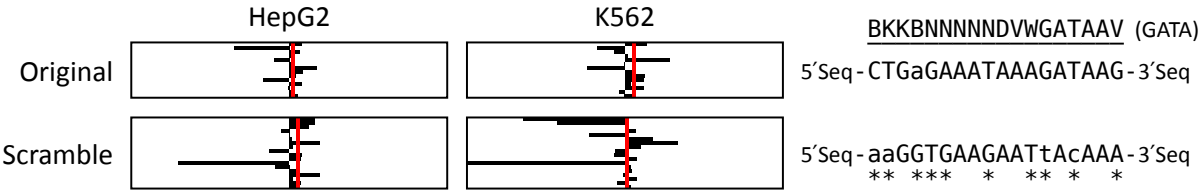
921 GATA in K562 enhancer (conserved at 60% confidence)

chr1 149216363 149216380 + (hg18)



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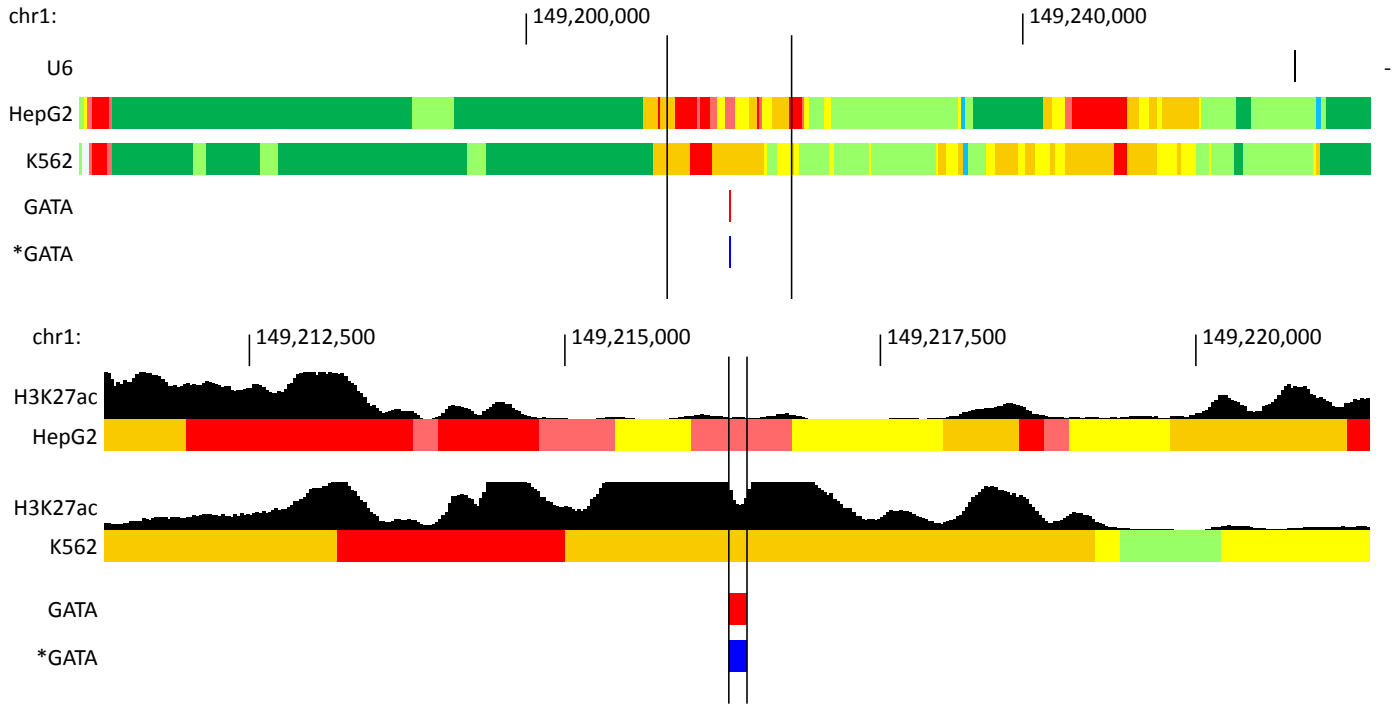
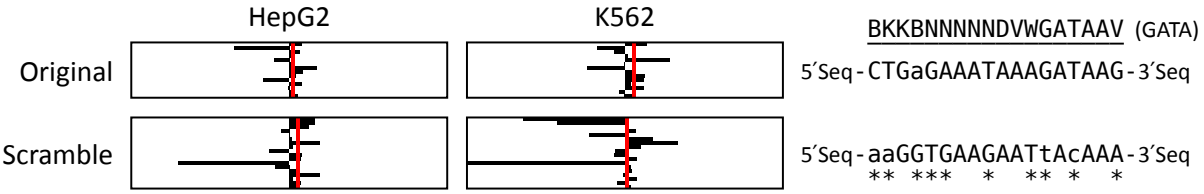
922 GATA in K562 enhancer

chr1 149216363 149216380 + (hg18)





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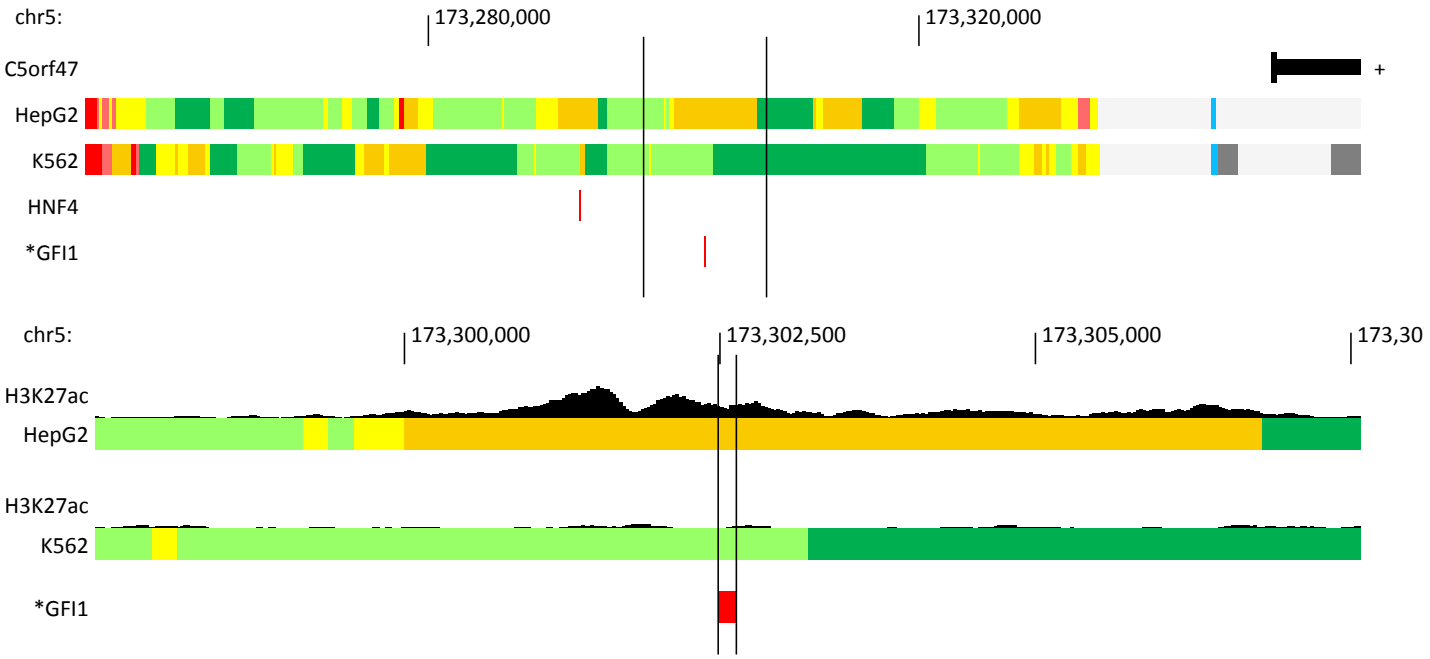
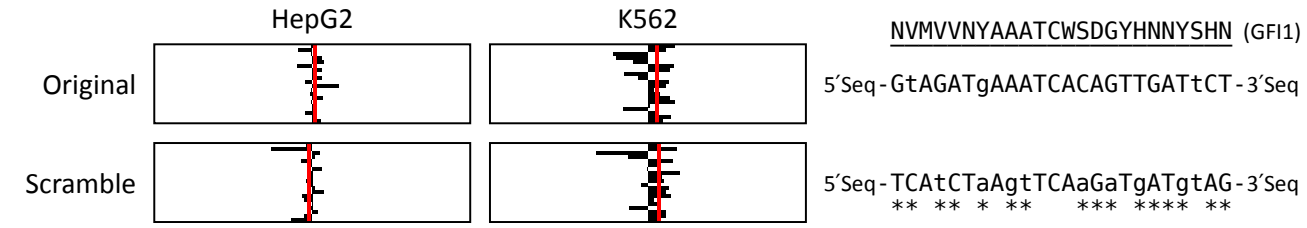
923 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr5 173302547 173302570 + (hg18)





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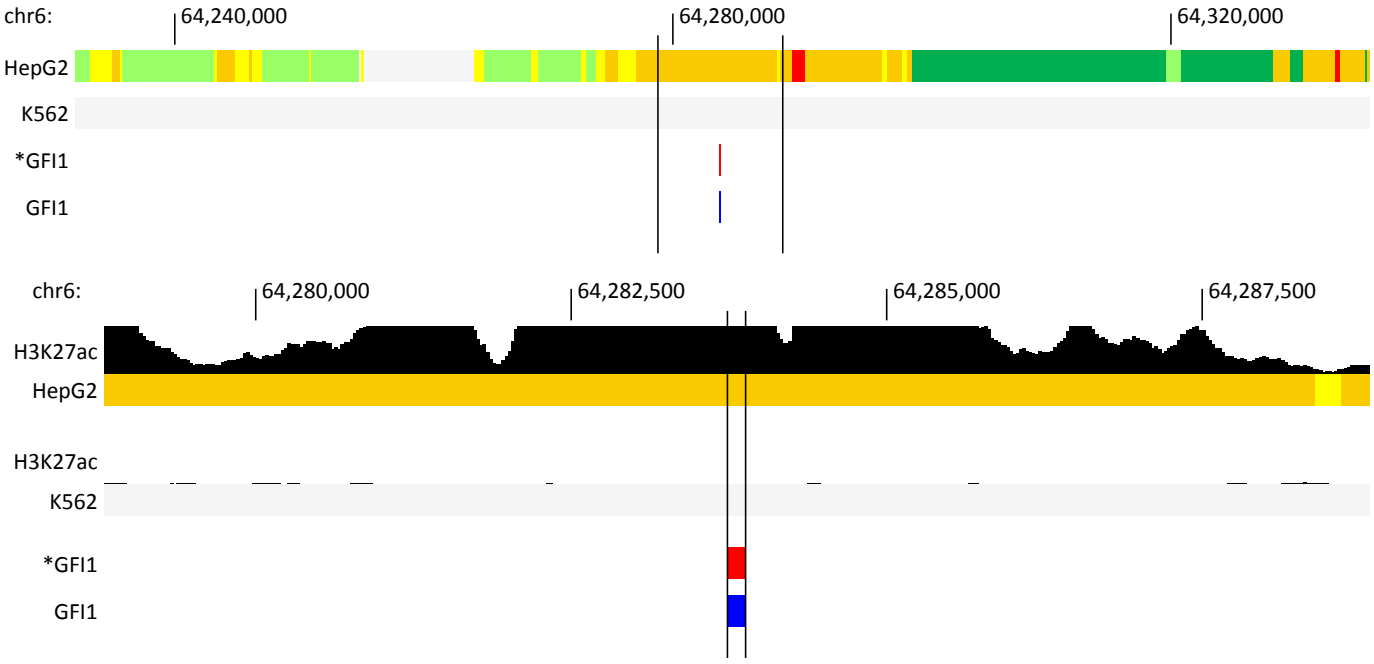
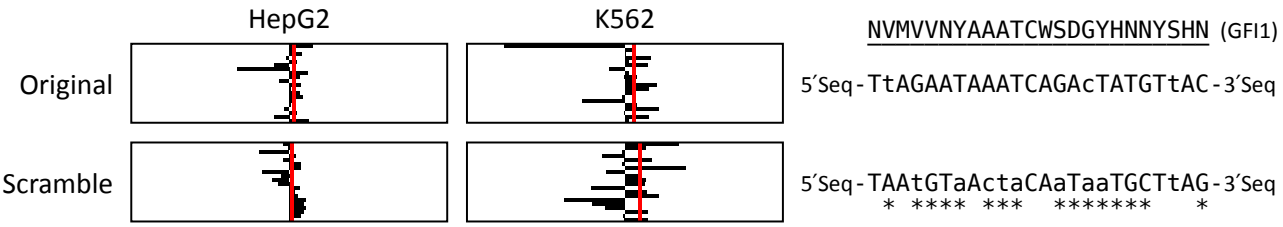
924 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 64283799 64283822 - (hg18)





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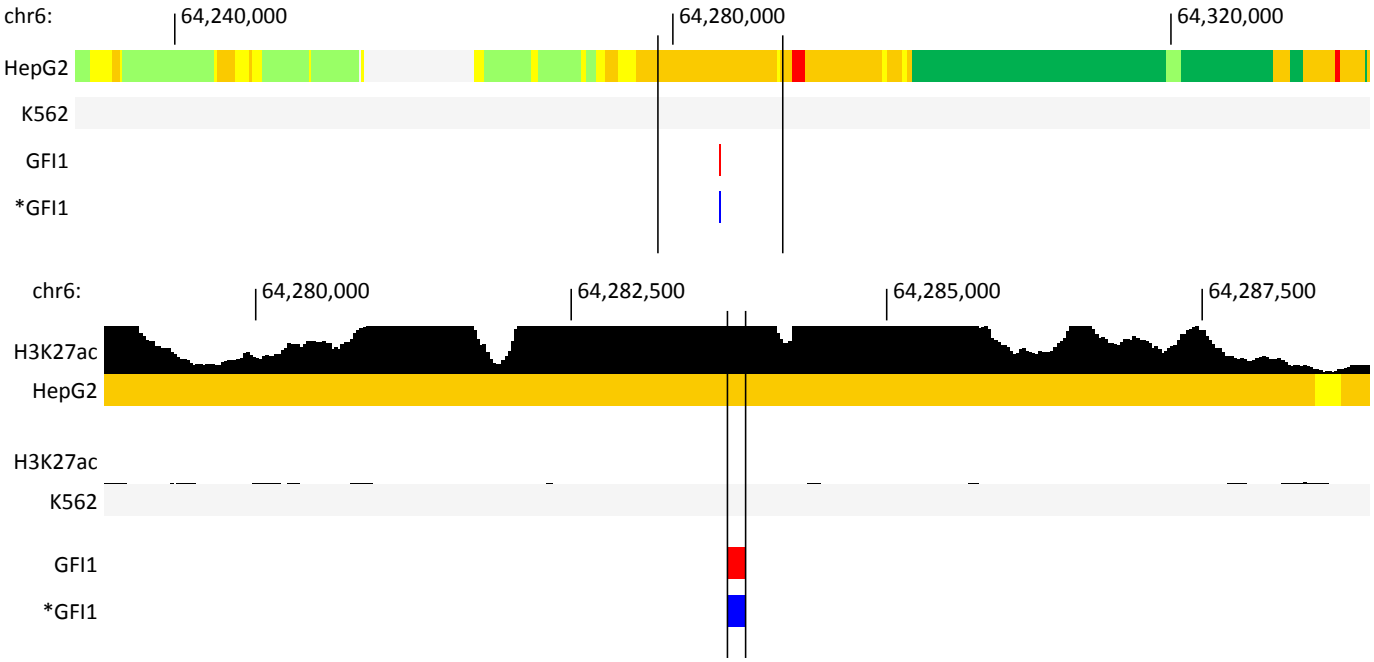
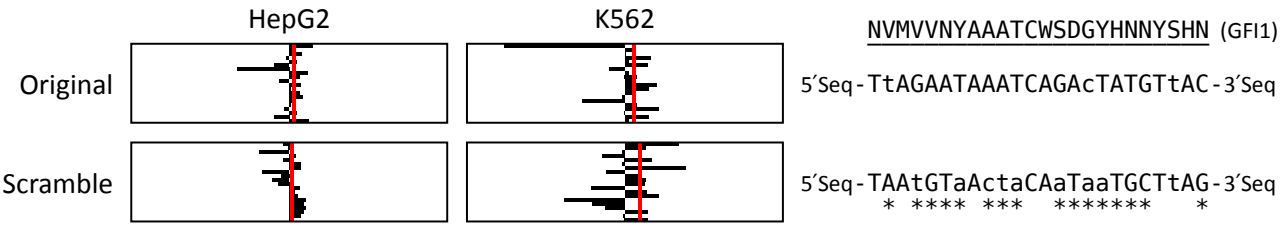
925 GFI1 in HepG2 enhancer

chr6 64283799 64283822 - (hg18)





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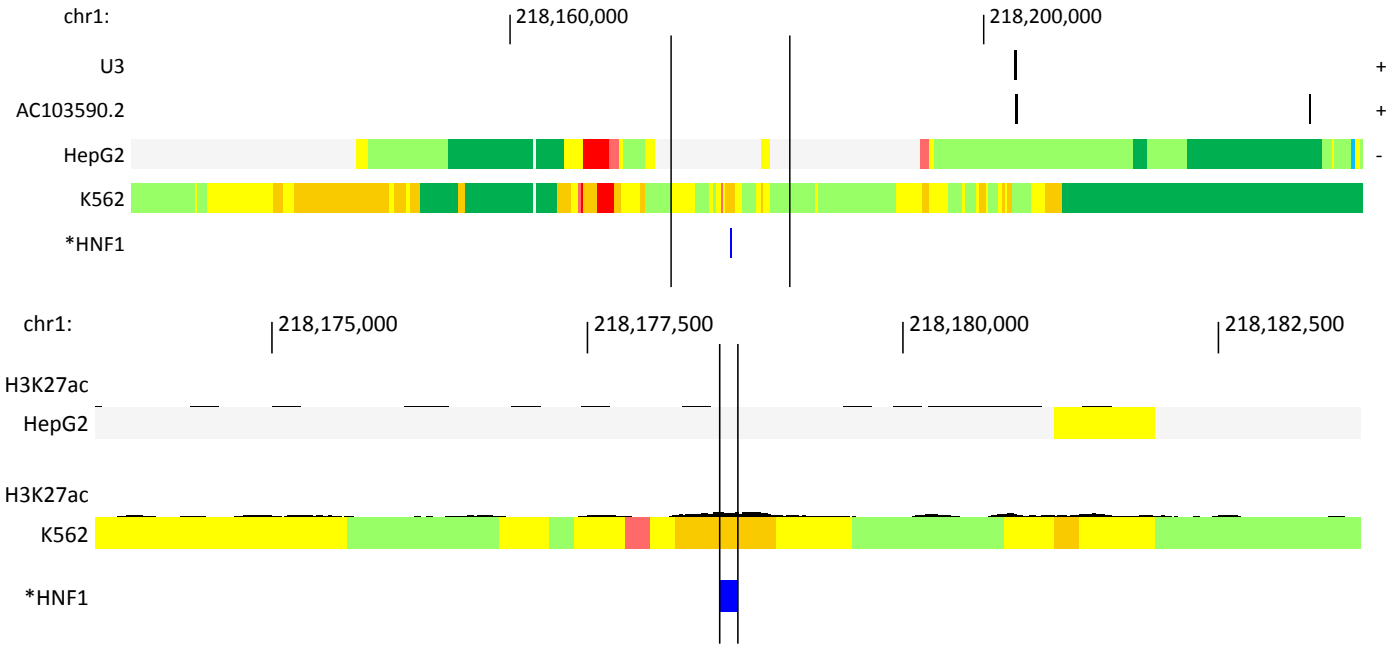
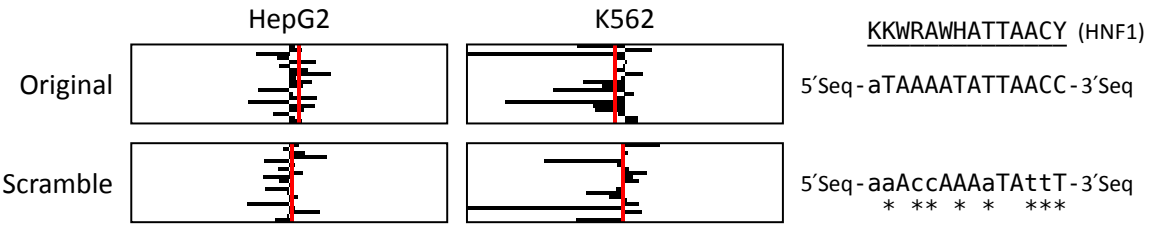
926 HNF1 in K562 enhancer

chr1 218178614 218178627 - (hg18)





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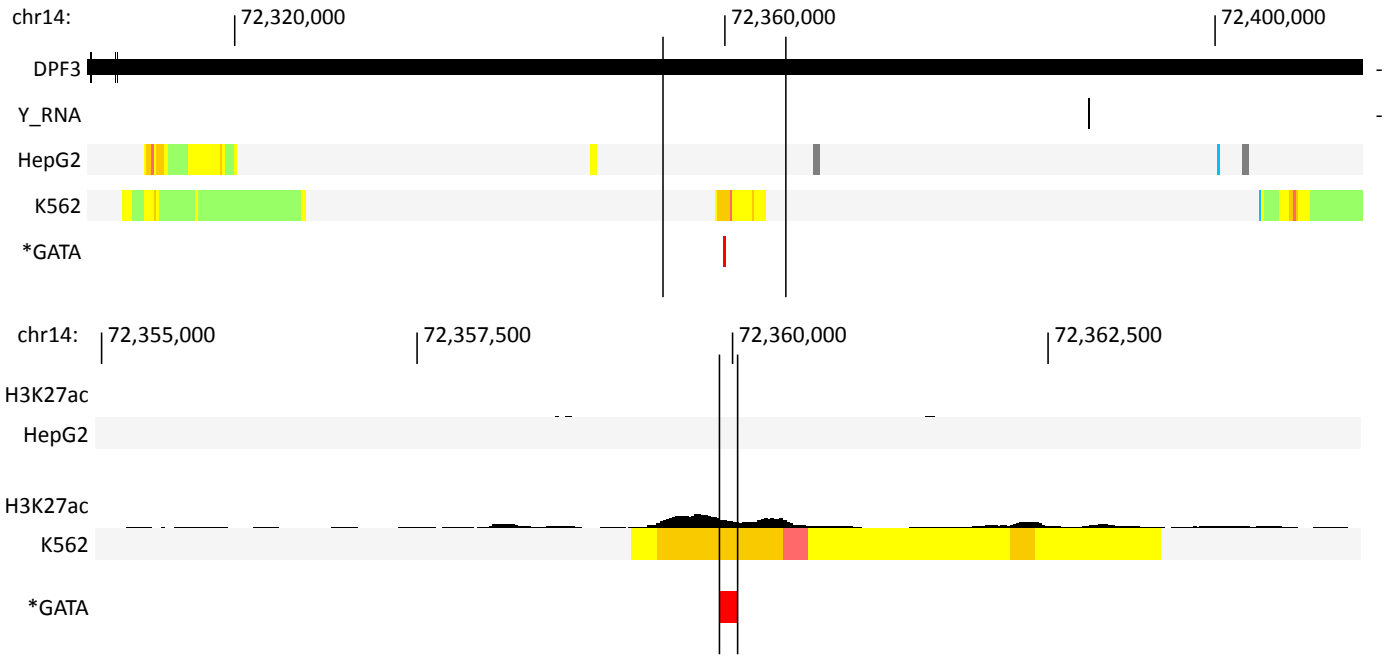
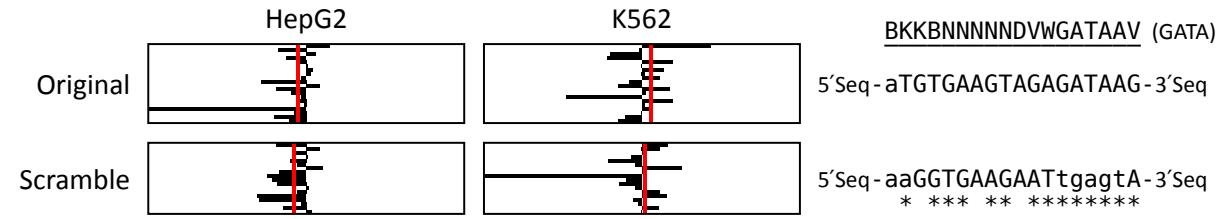
3′Seq = tgattactgatattgaaggatatggcttagacatgtagtggcaaagagcttcctaatcgtccacc

927 GATA in K562 enhancer (conserved at 70% confidence)

chr14 72359960 72359977 + (hg18)





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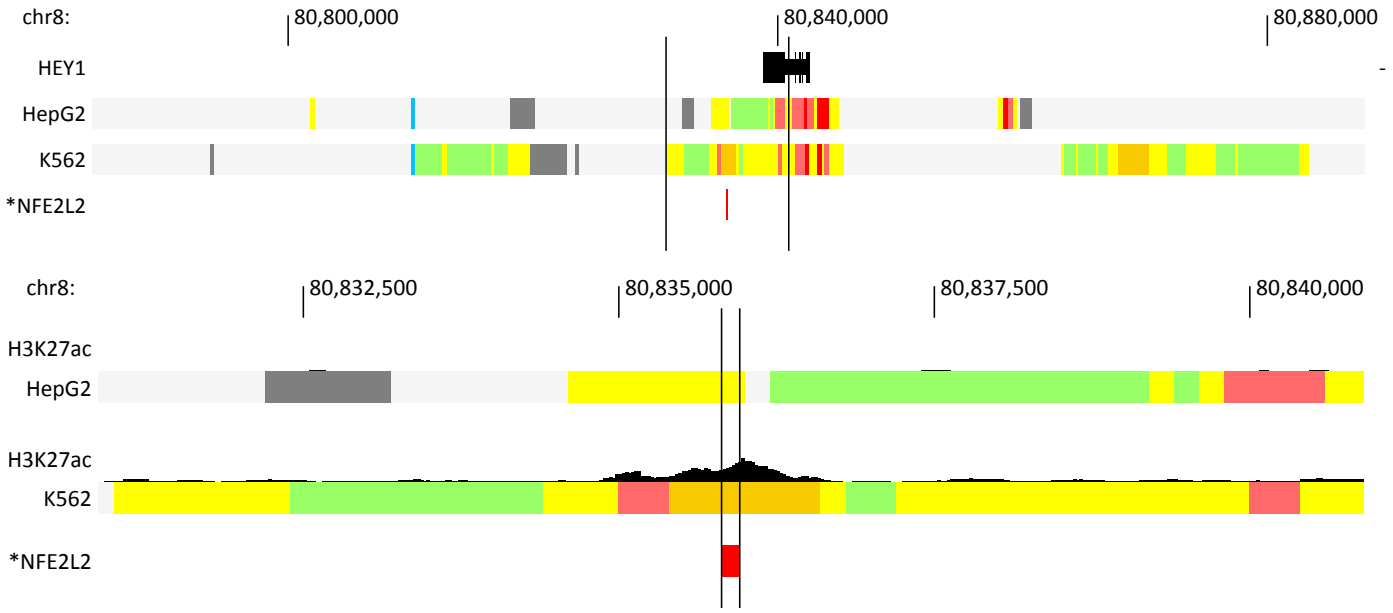
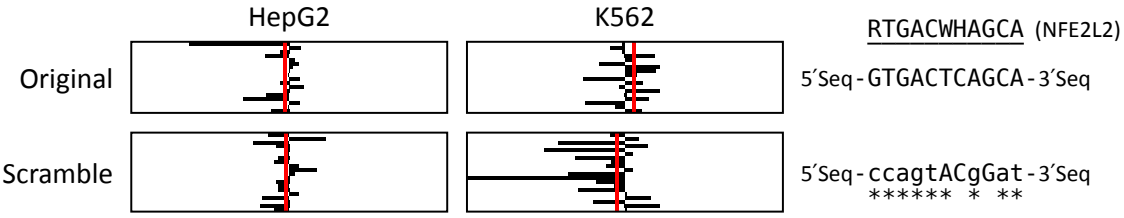
928 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 80835881 80835891 - (hg18)





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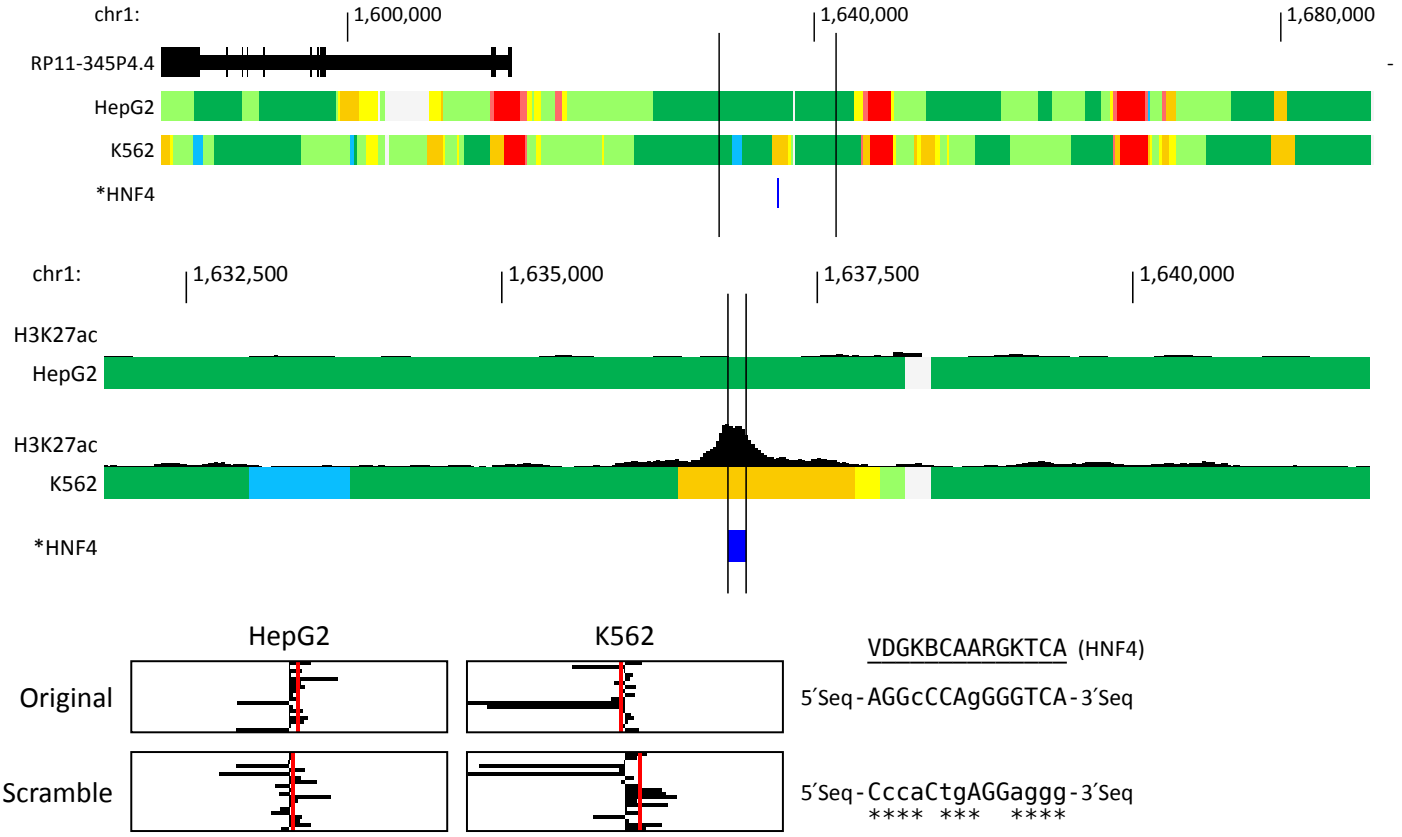
929 HNF4 in K562 enhancer

chr1 1636858 1636871 - (hg18)



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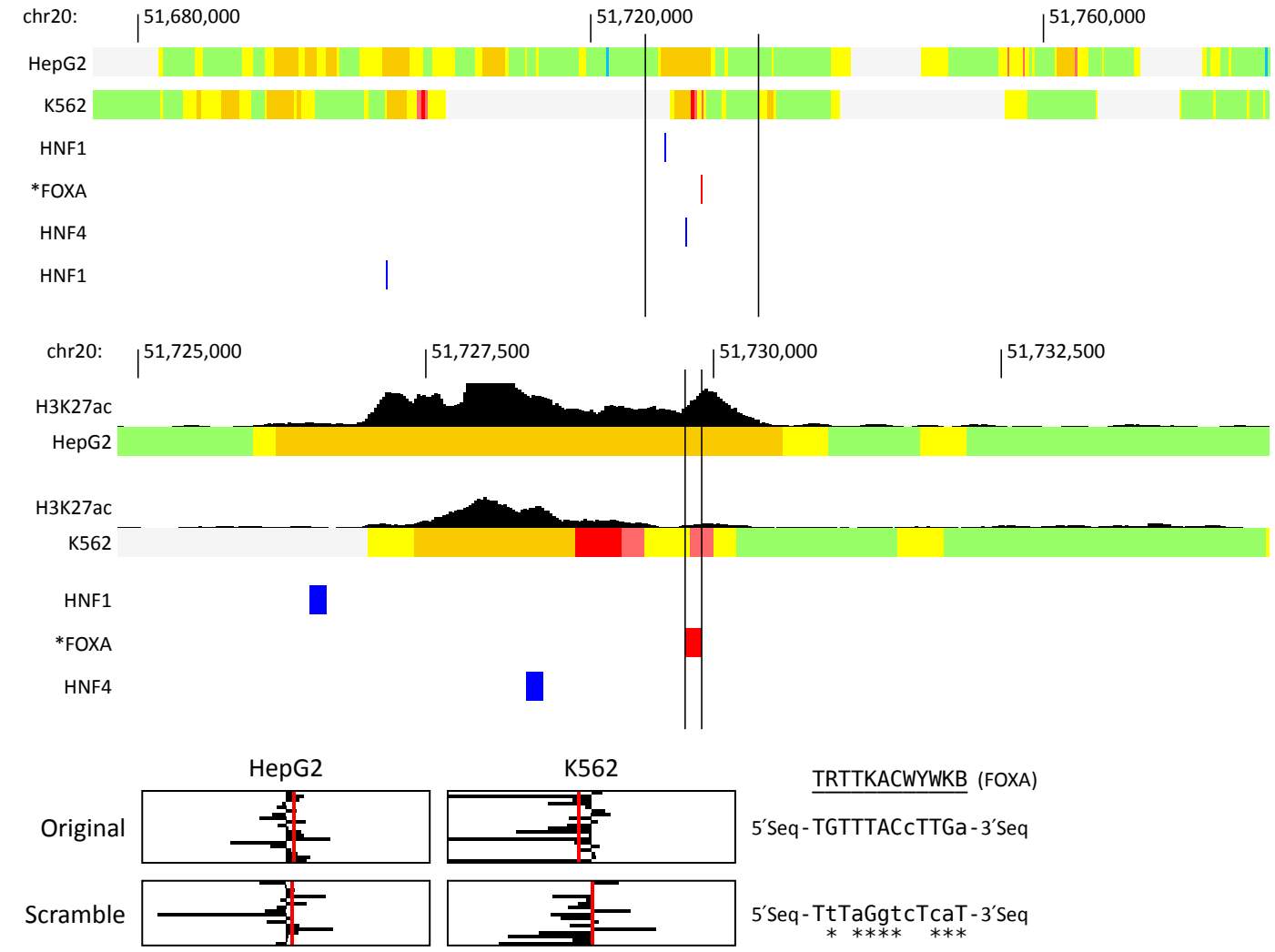
930 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 51729820 51729831 + (hg18)



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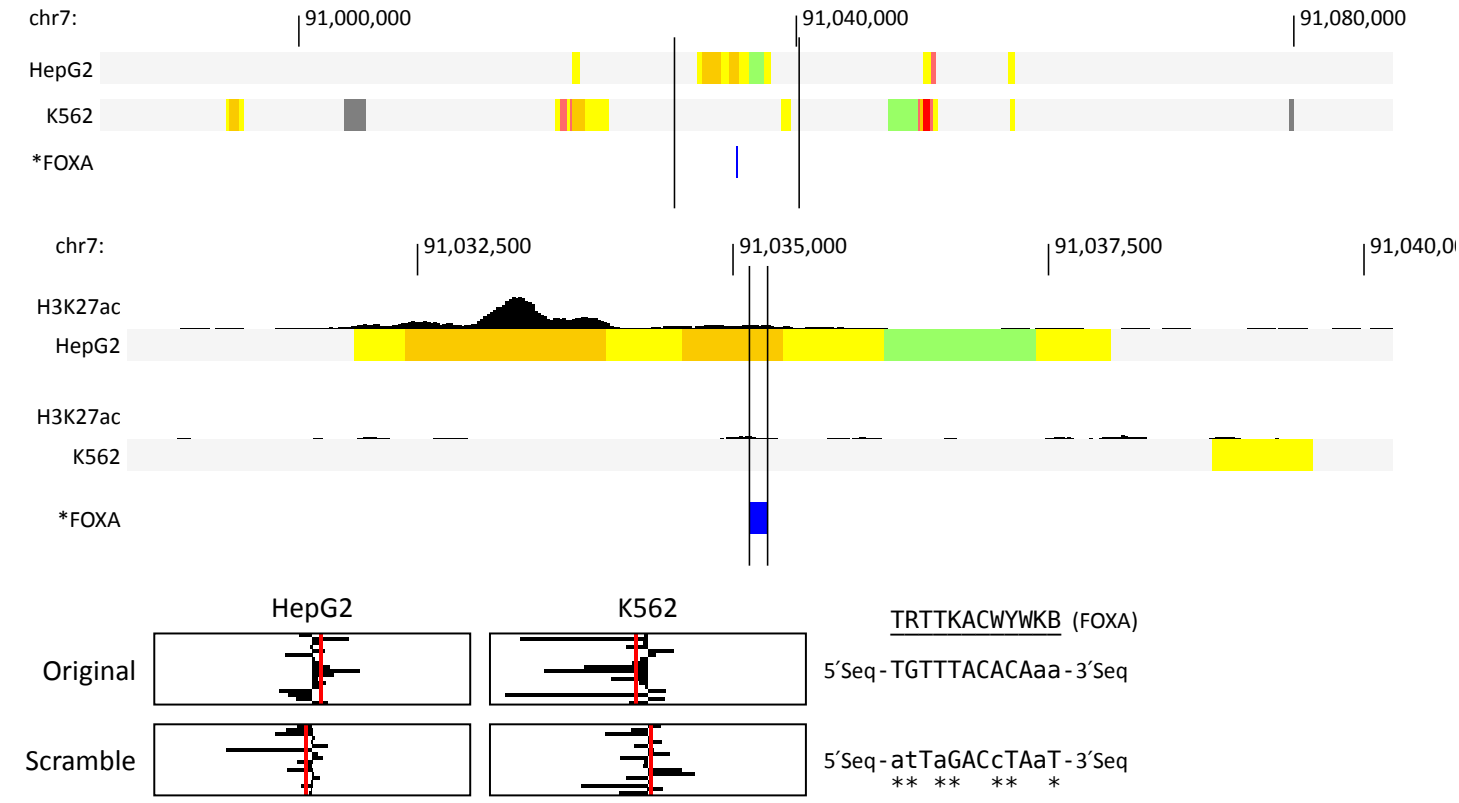
931 FOXA in HepG2 enhancer

chr7 91035197 91035208 - (hg18)



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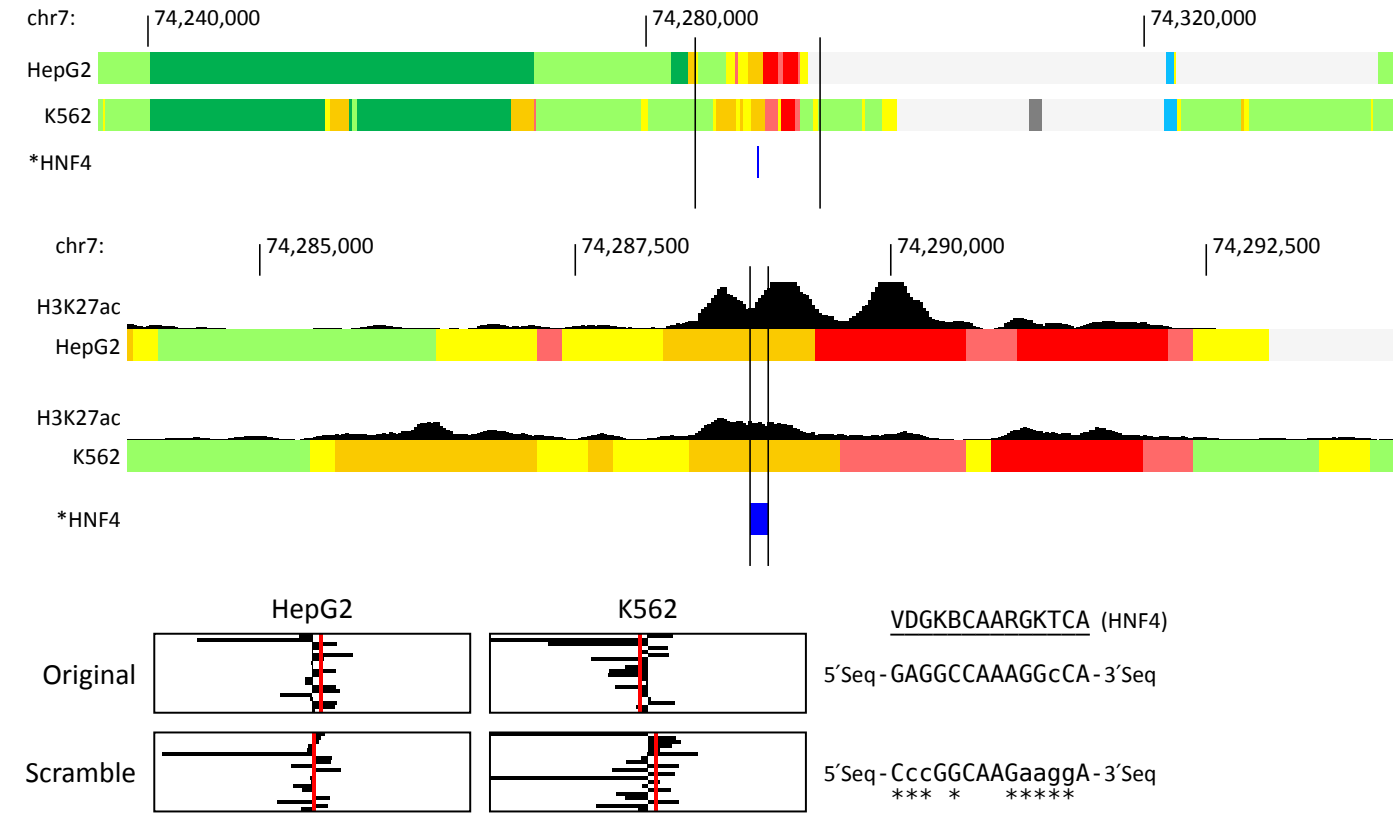
932 HNF4 in HepG2 enhancer

chr7 74288951 74288964 - (hg18)



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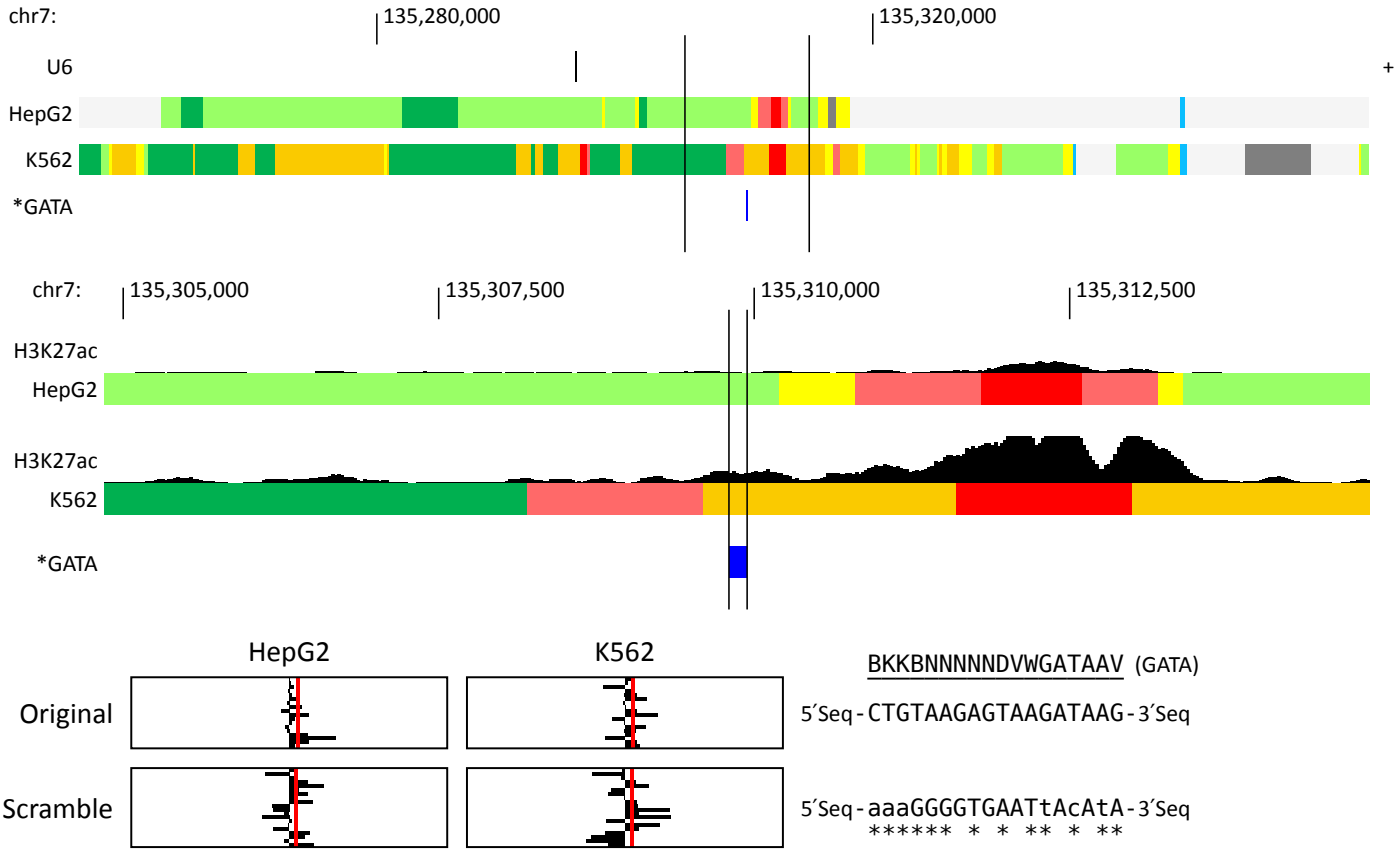
933 GATA in K562 enhancer

chr7 135309864 135309881 - (hg18)



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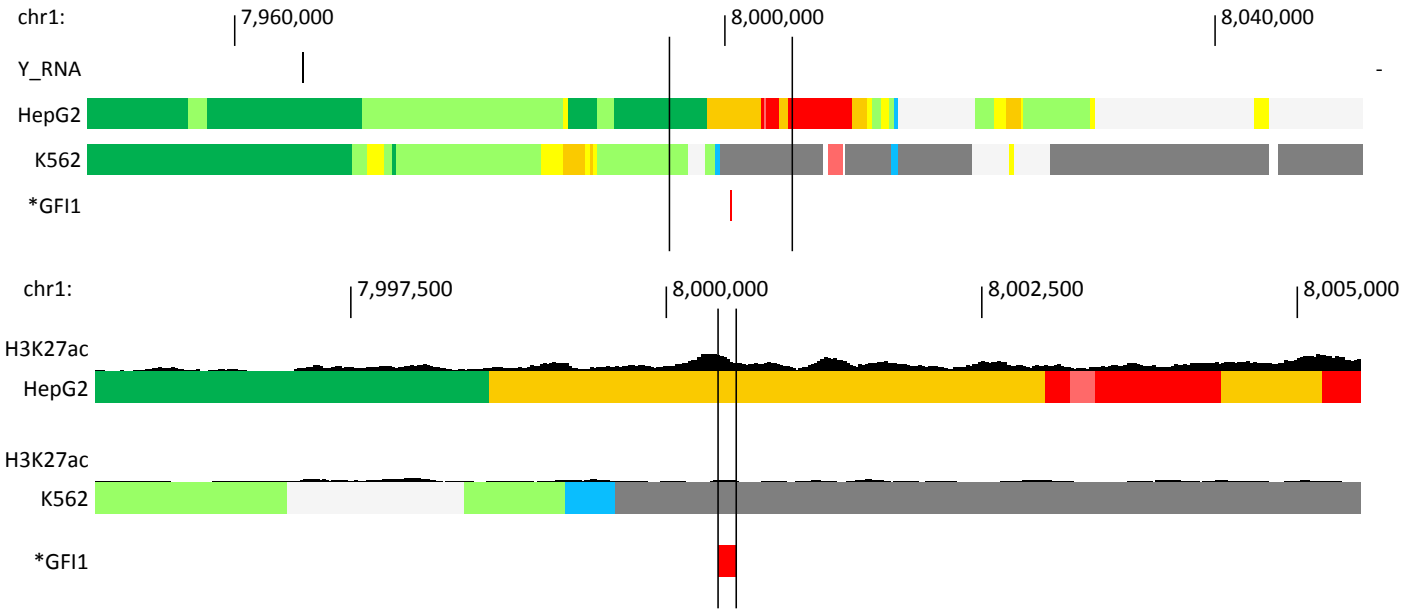
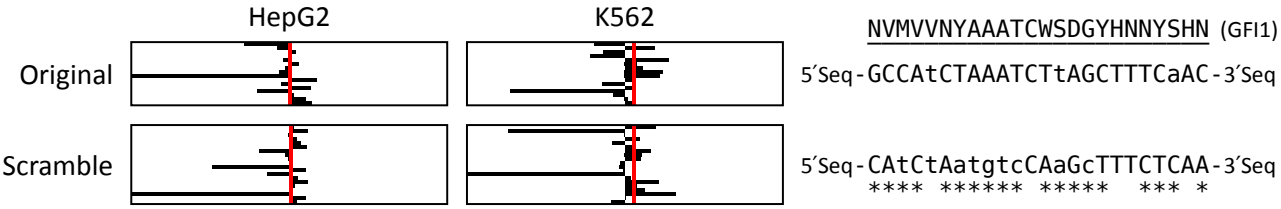
3′Seq = cattttagtattcccctcctcctcctttttttttggaaacagggtttttttgtttttgtttt

934 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 8000471 8000494 + (hg18)





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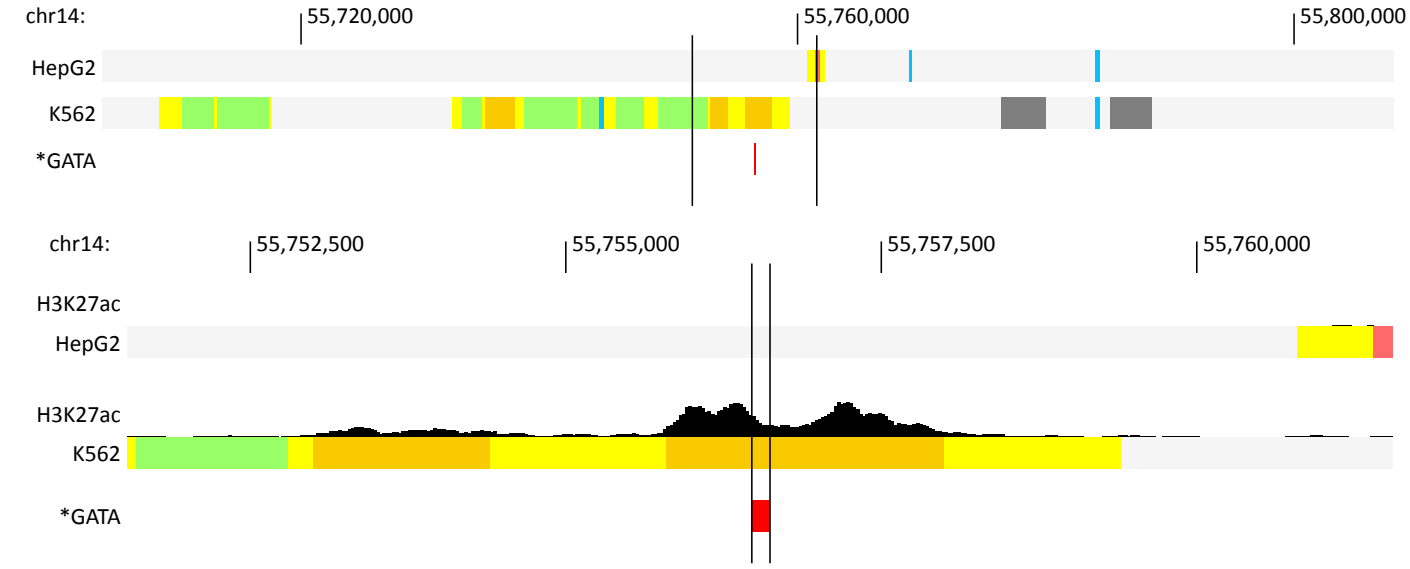
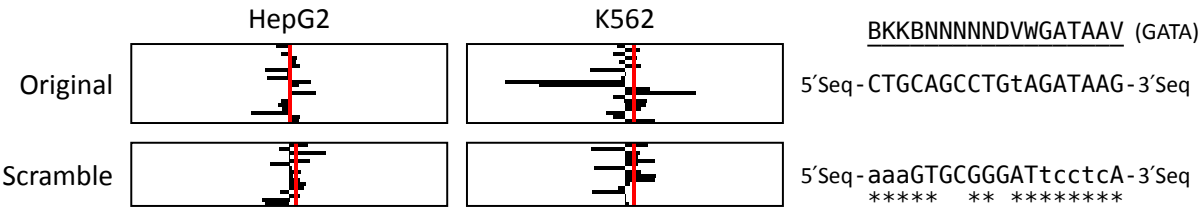
3′Seq = agaatgattgtgtaactatcgcctctgcagaaattgccttggaattctaaacttacattt

935 GATA in K562 enhancer (conserved at 60% confidence)

chr14 55756538 55756555 - (hg18)





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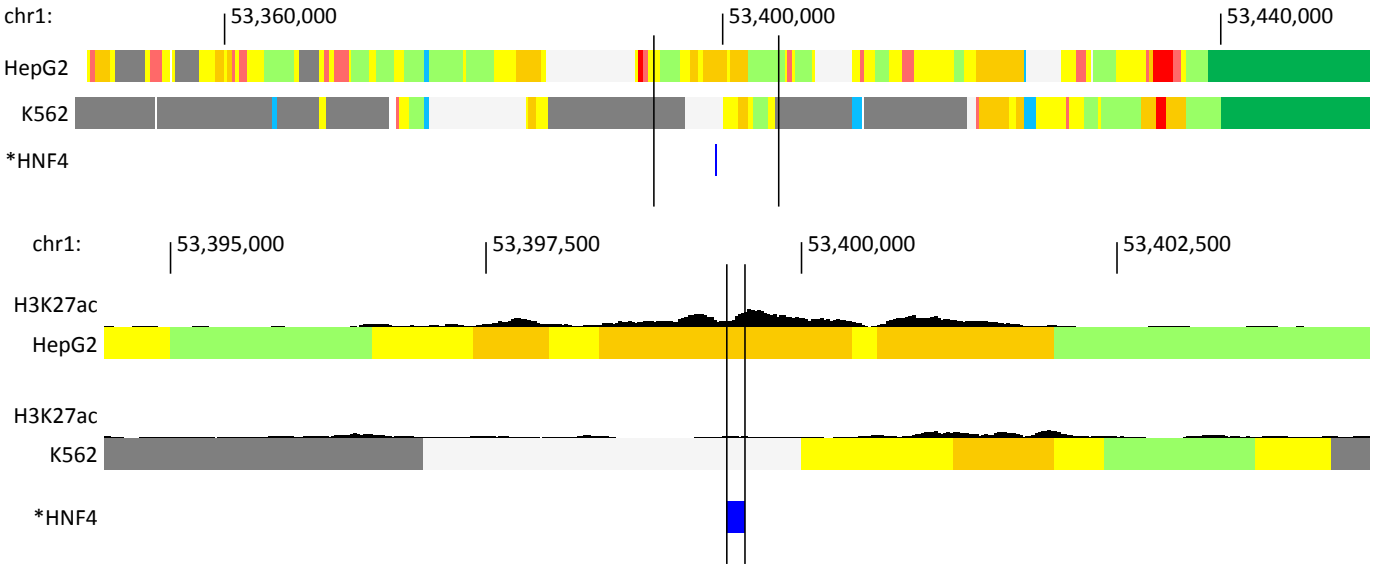
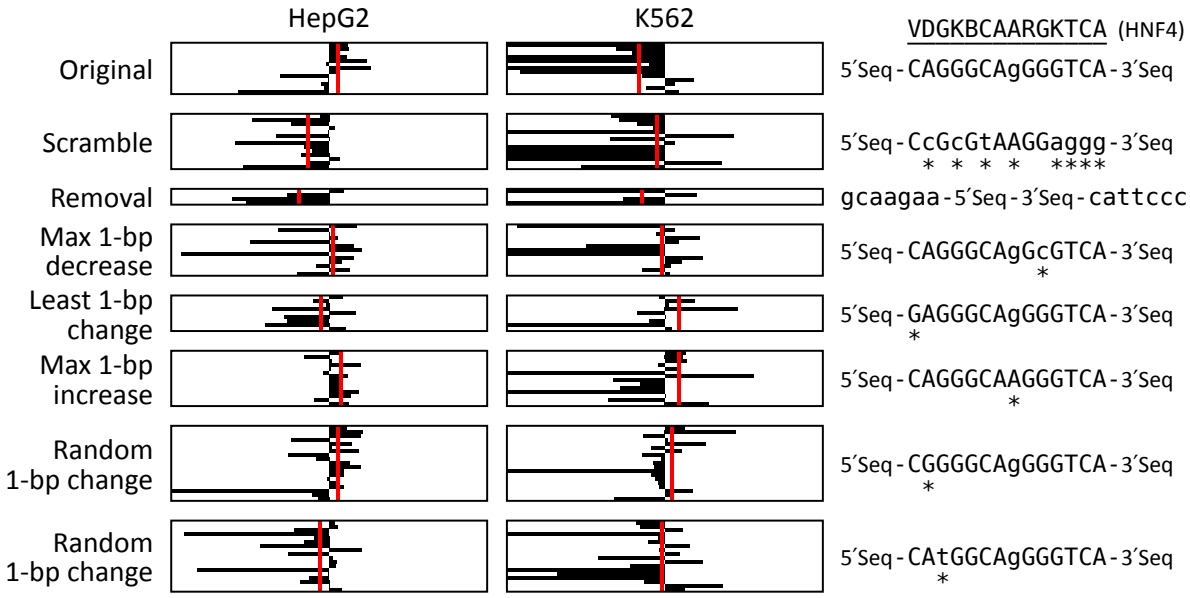
936 HNF4 in HepG2 enhancer

chr1 53399474 53399487 + (hg18)





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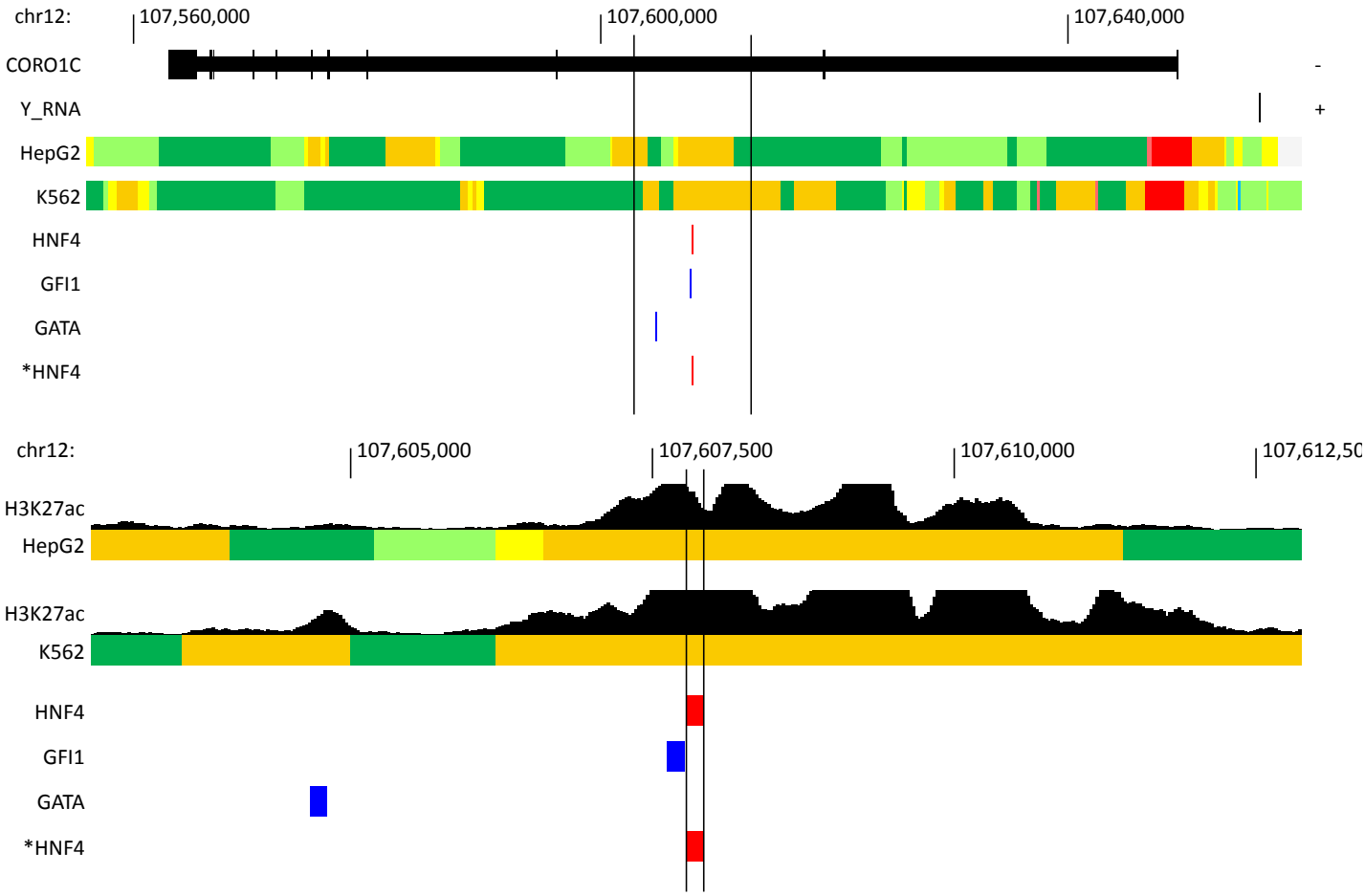
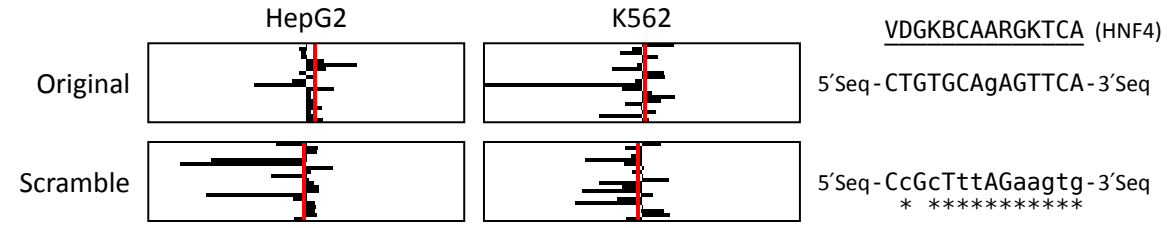
937 HNF4 in K562 enhancer (conserved at 50% confidence)

chr12 107607847 107607860 + (hg18)





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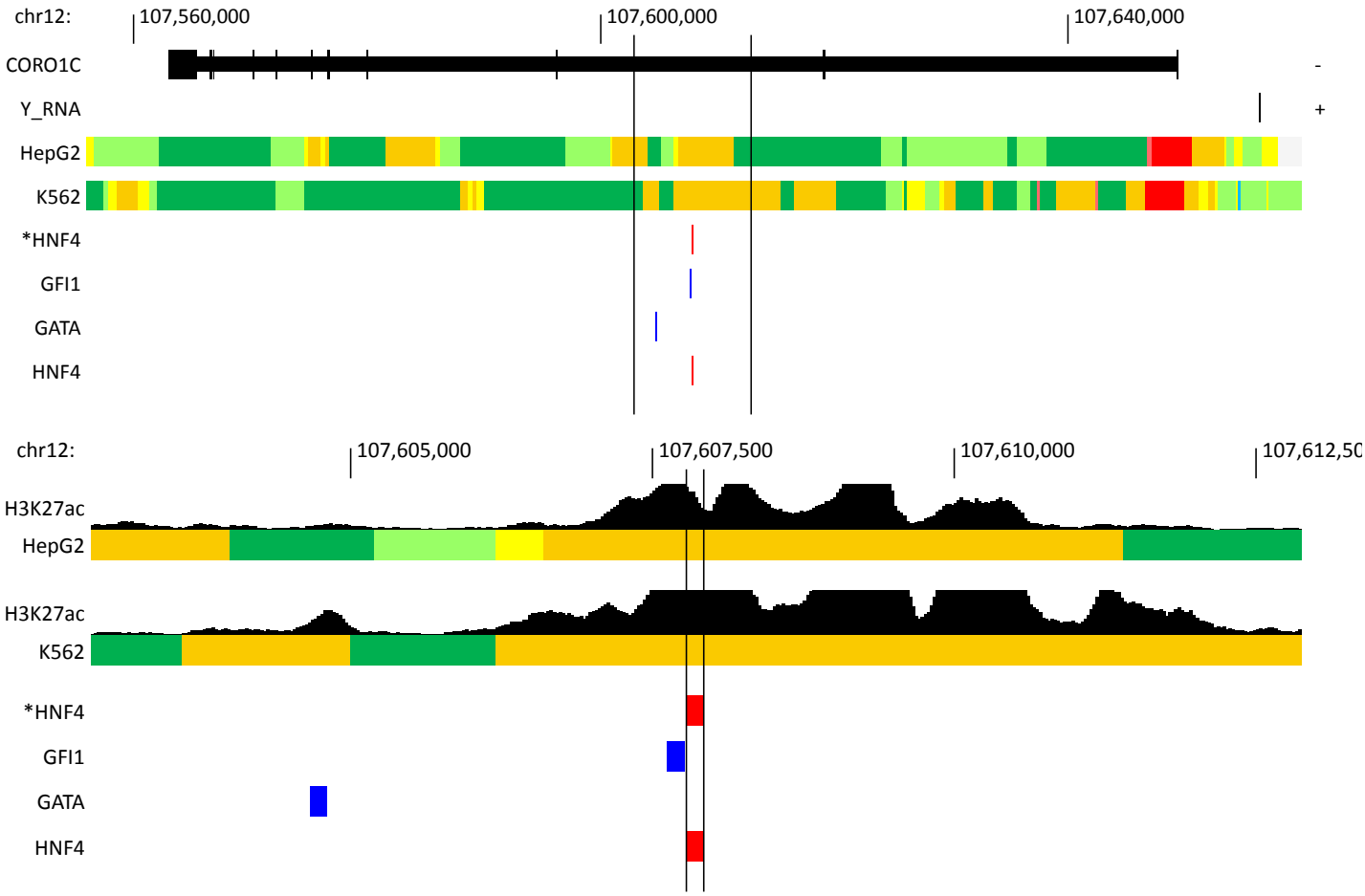
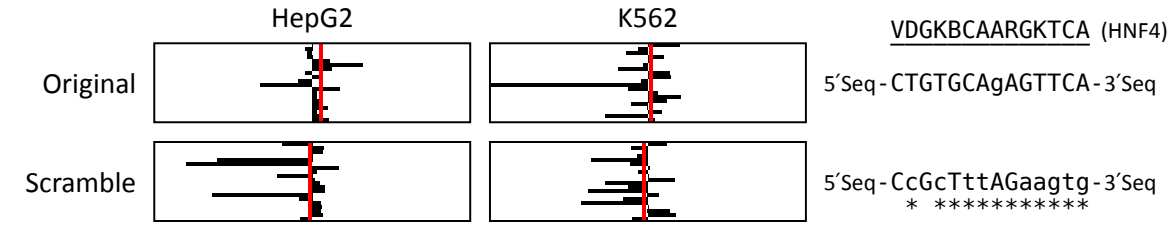
938 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 107607847 107607860 + (hg18)





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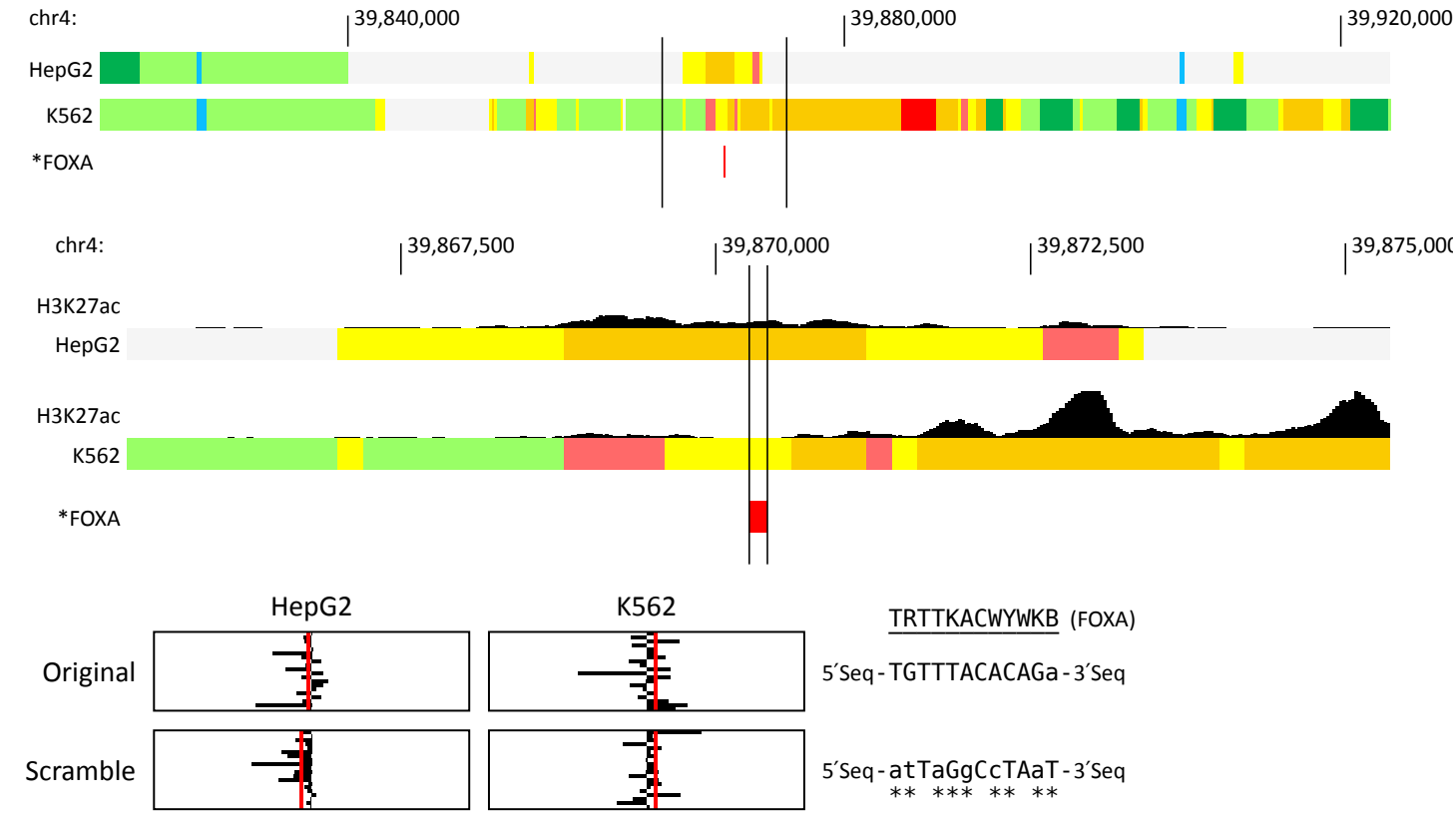
3′Seq = aaggagtcaaaagcgtatctattgaagtgggttttccatttttttcaacttccttttttcttatga

939 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr4 39870333 39870344 - (hg18)



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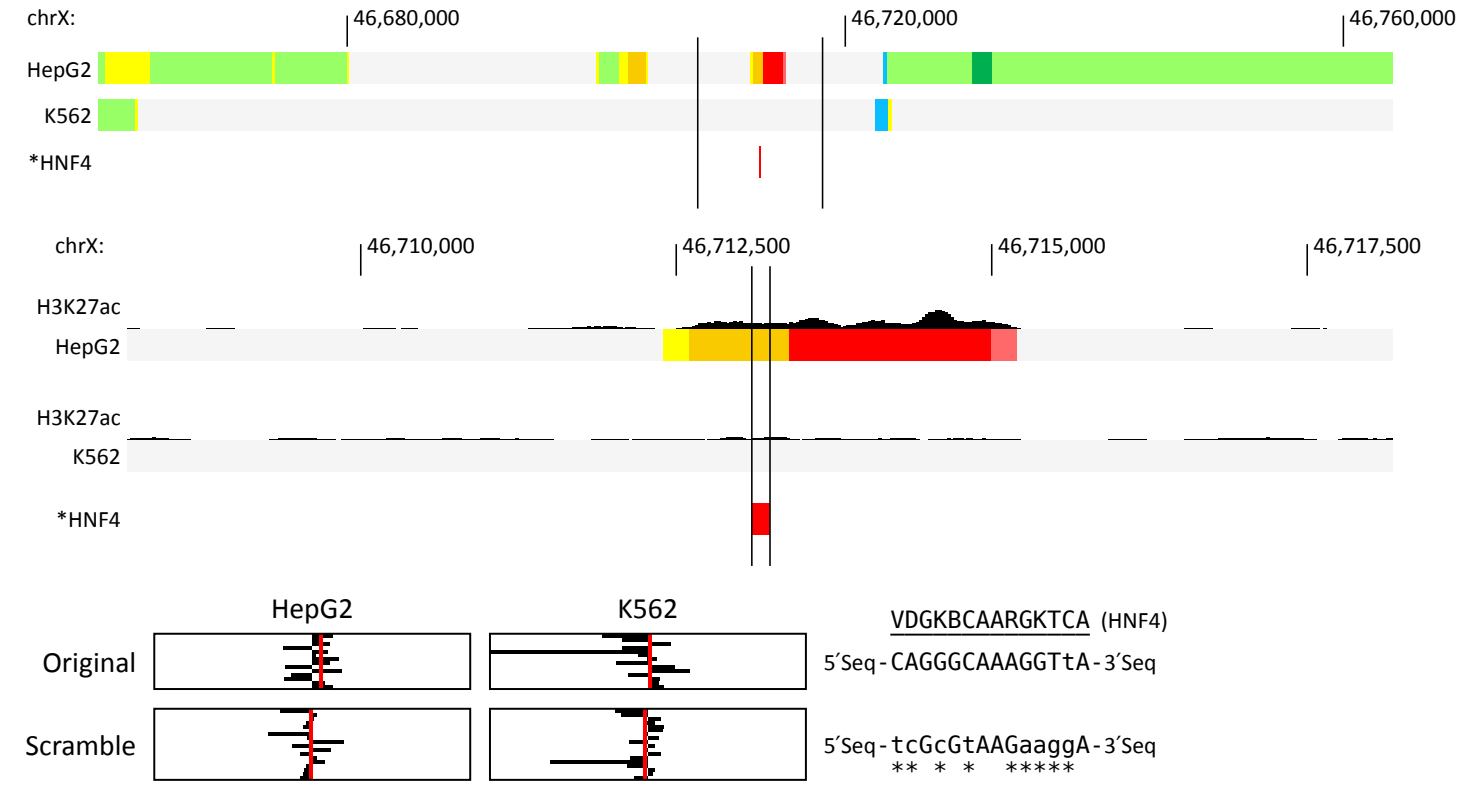
940 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chrX 46713165 46713178 + (hg18)



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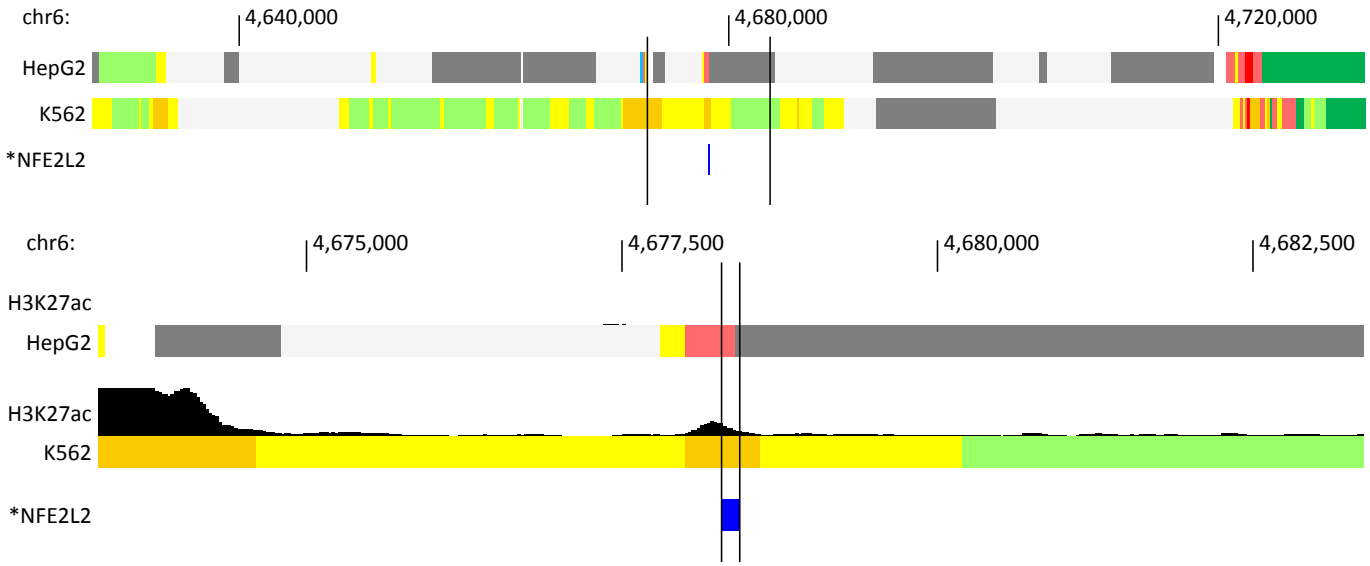
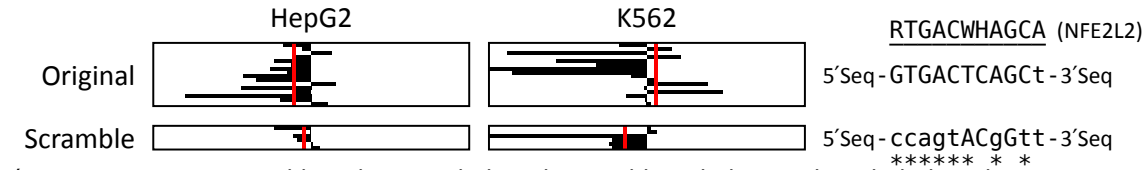
3′Seq = ctggaaaacagcaggacagaagcaagagactacgacagagaggcagggccaaggaaaacaacgag

941 NFE2L2 in K562 enhancer

chr6 4678356 4678366 + (hg18)





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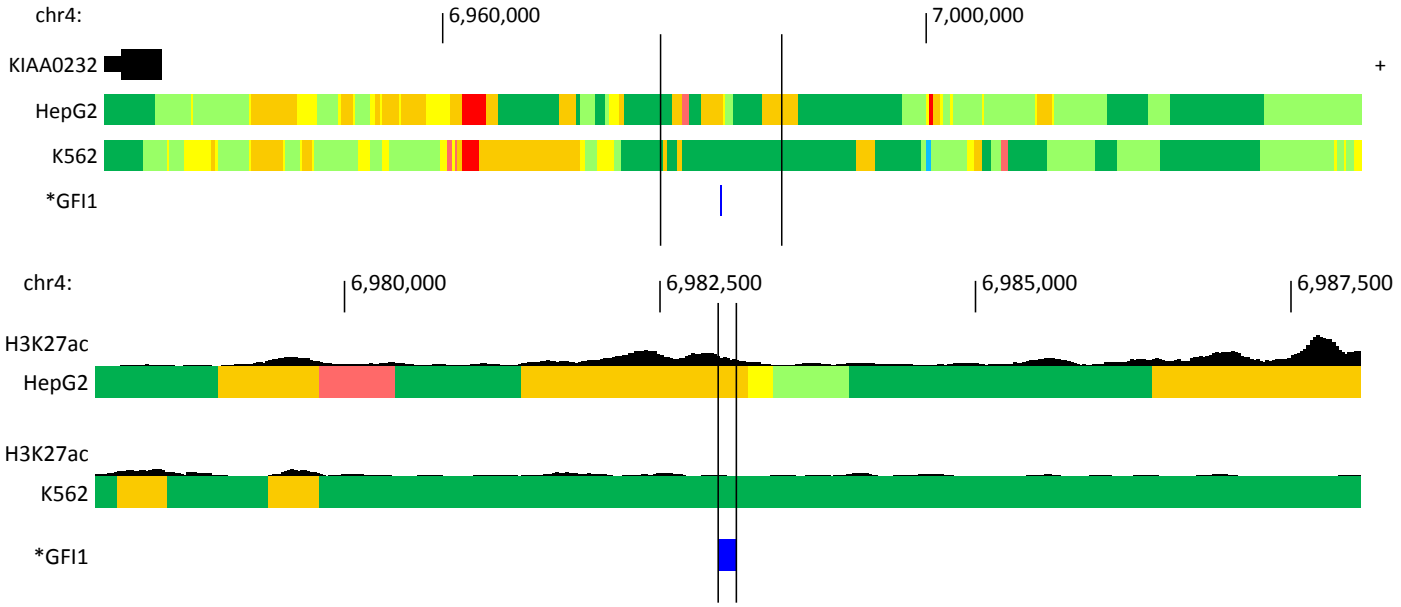
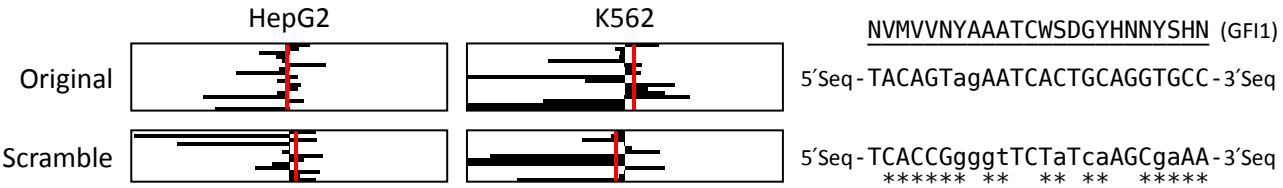
942 GFI1 in HepG2 enhancer

chr4 6983022 6983045 + (hg18)





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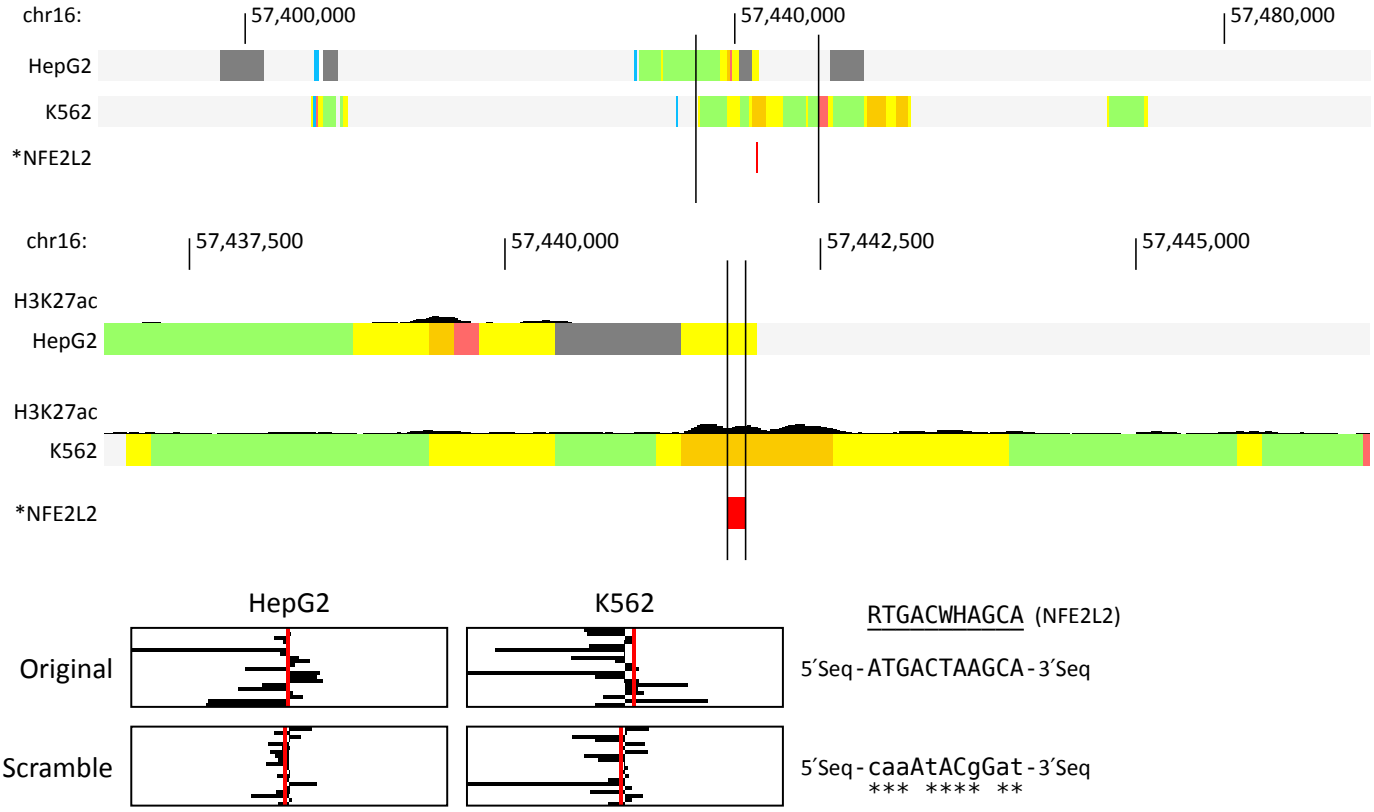
3′Seq = tcctggaggccttgagccagagagaagcagaaaggactttagcaagcaaggaactcgtag

943 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr16 57441830 57441840 + (hg18)



RTGACWHAGCA (NFE2L2)

5′Seq-ATGACTAAGCA-3′Seq

5′Seq-caaAtACgGat-3′Seq

*** **** **

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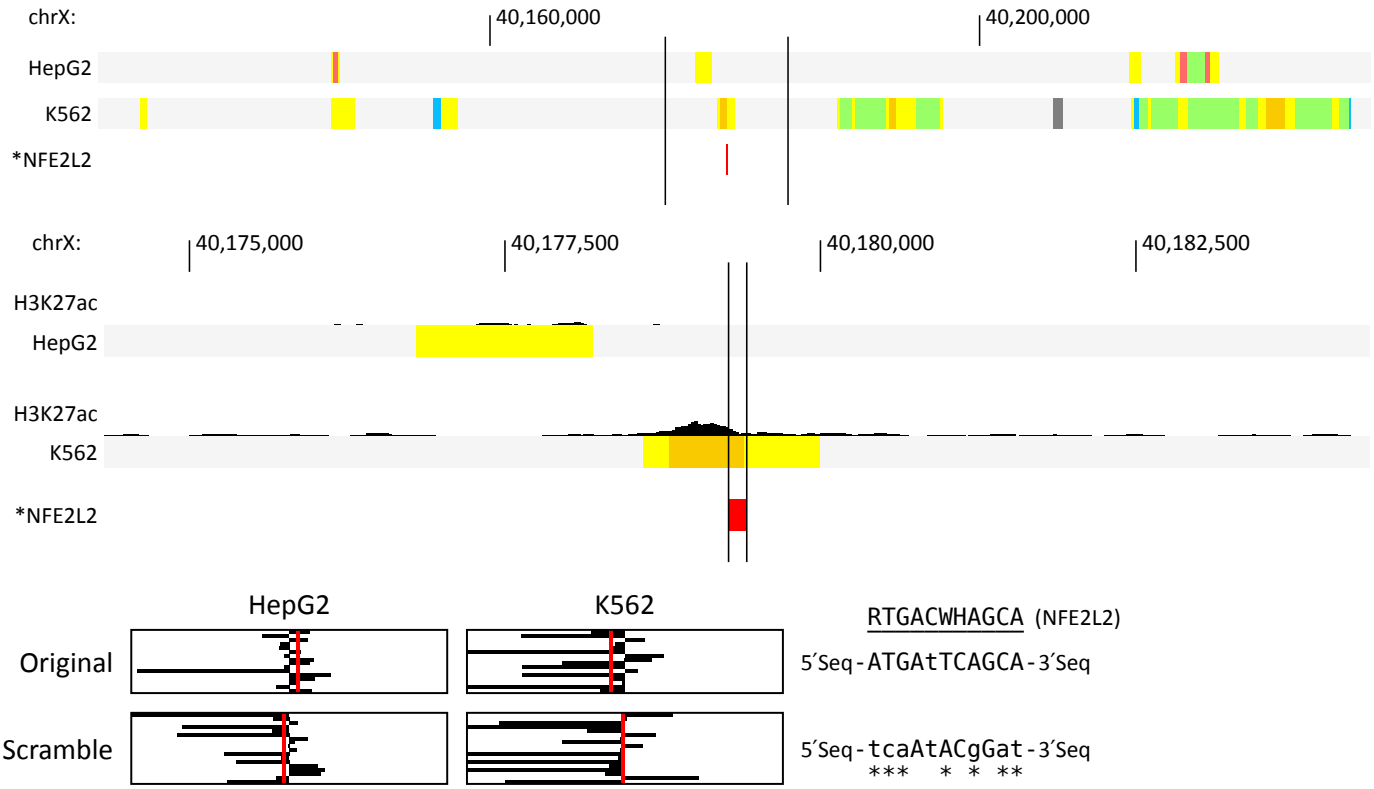
3′Seq = gattttcccaattaaaccatcatttacaaccctgctcatcccaaacgtgtaaataagcttcctttgg

944 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chrX 40179339 40179349 + (hg18)



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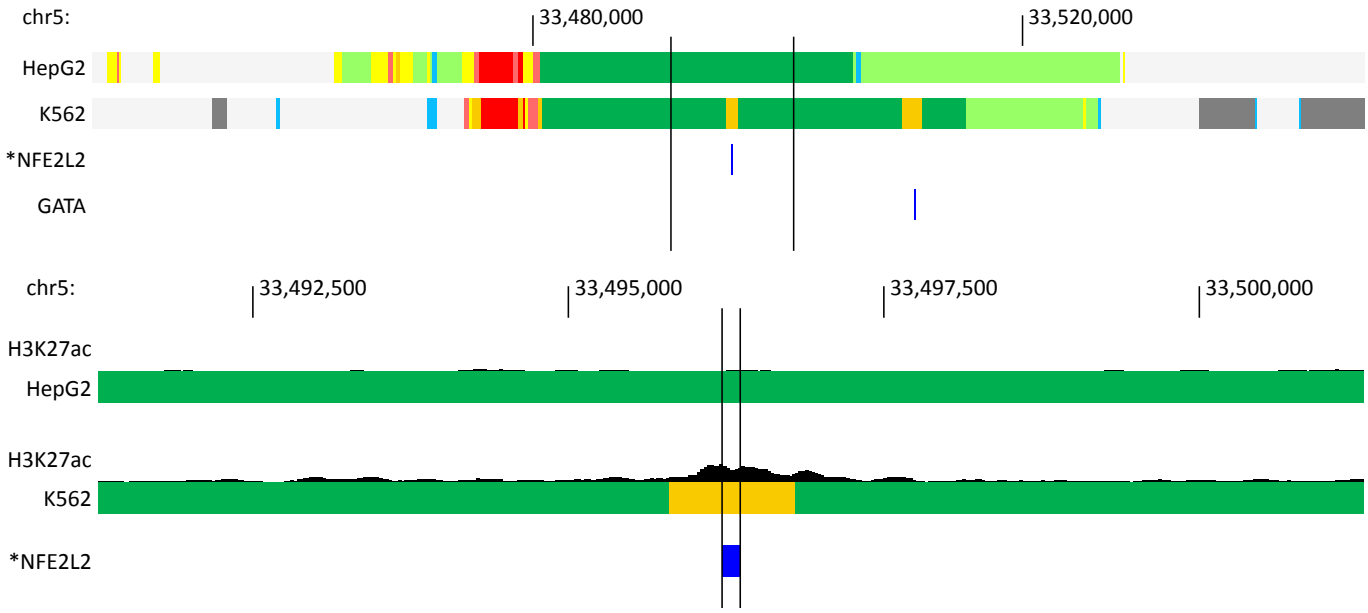
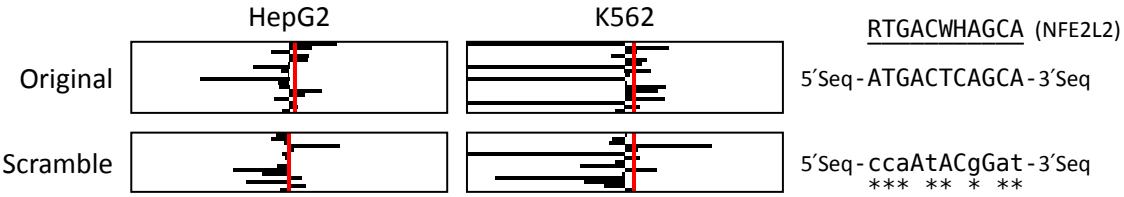
945 NFE2L2 in K562 enhancer

chr5 33496285 33496295 + (hg18)





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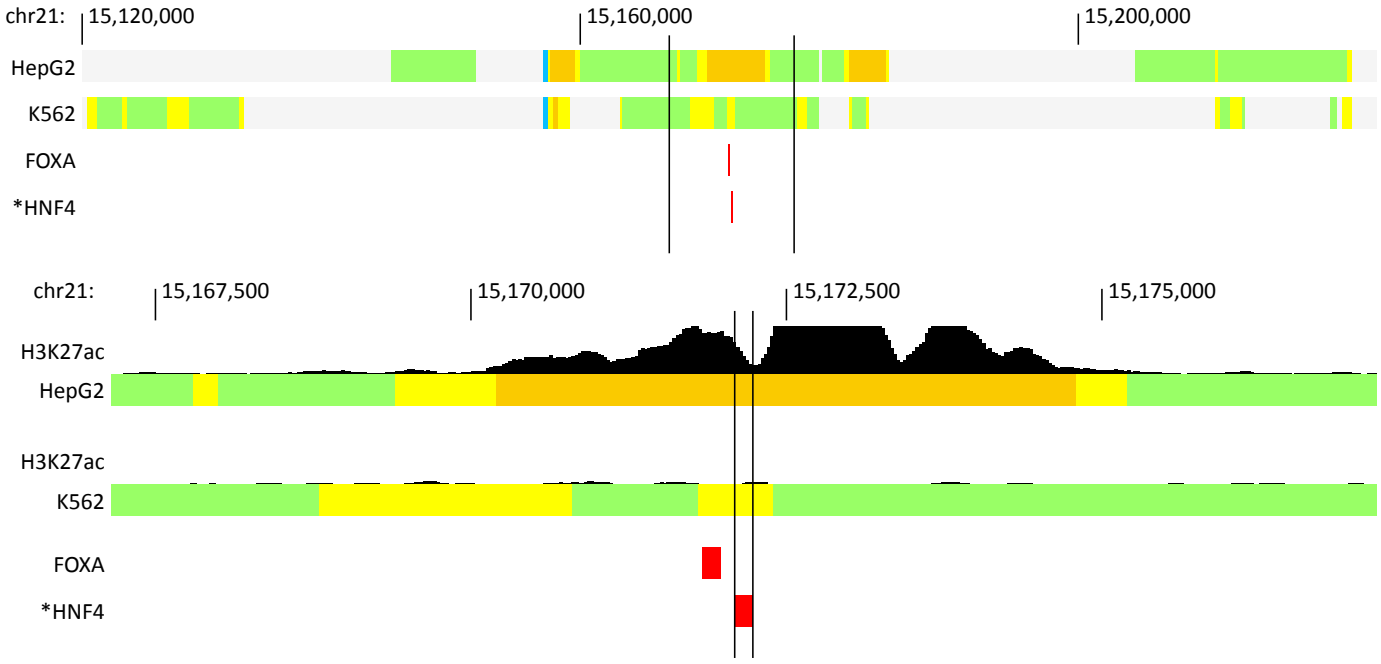
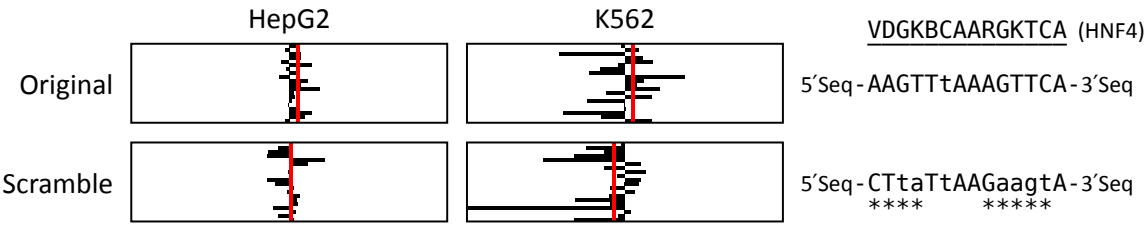
946 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr21 15172156 15172169 - (hg18)





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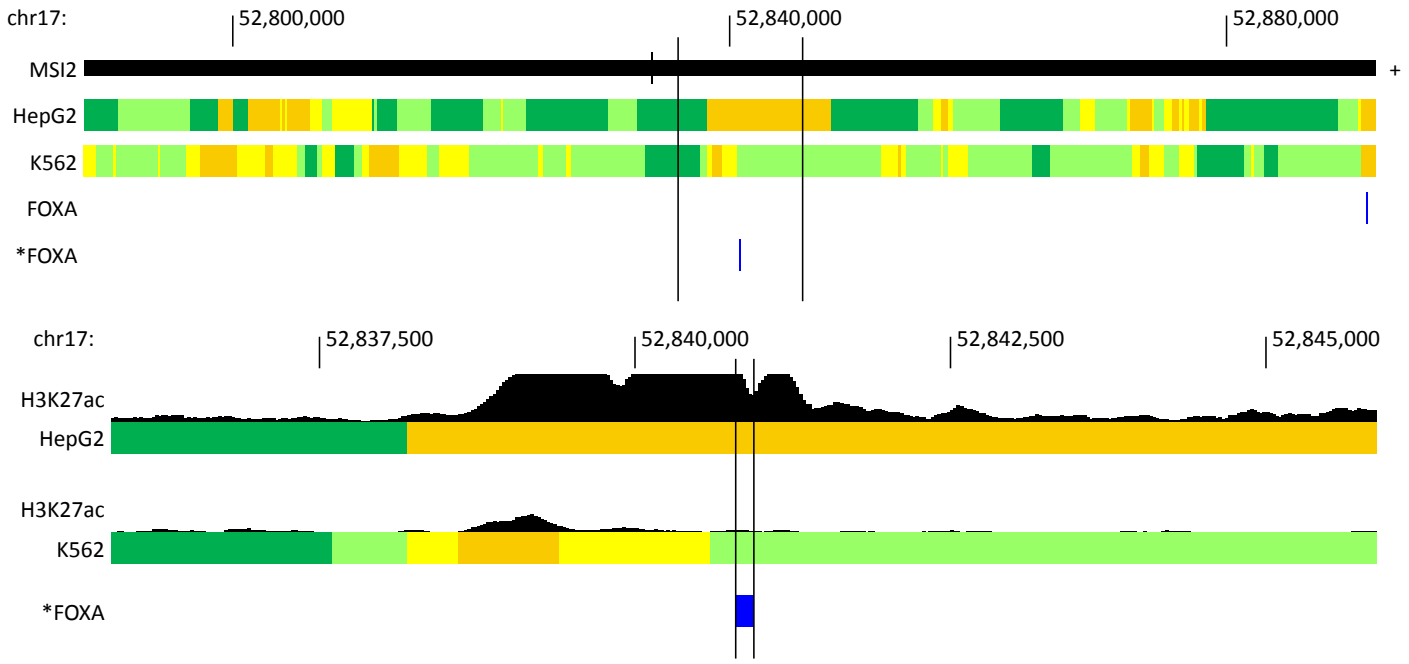
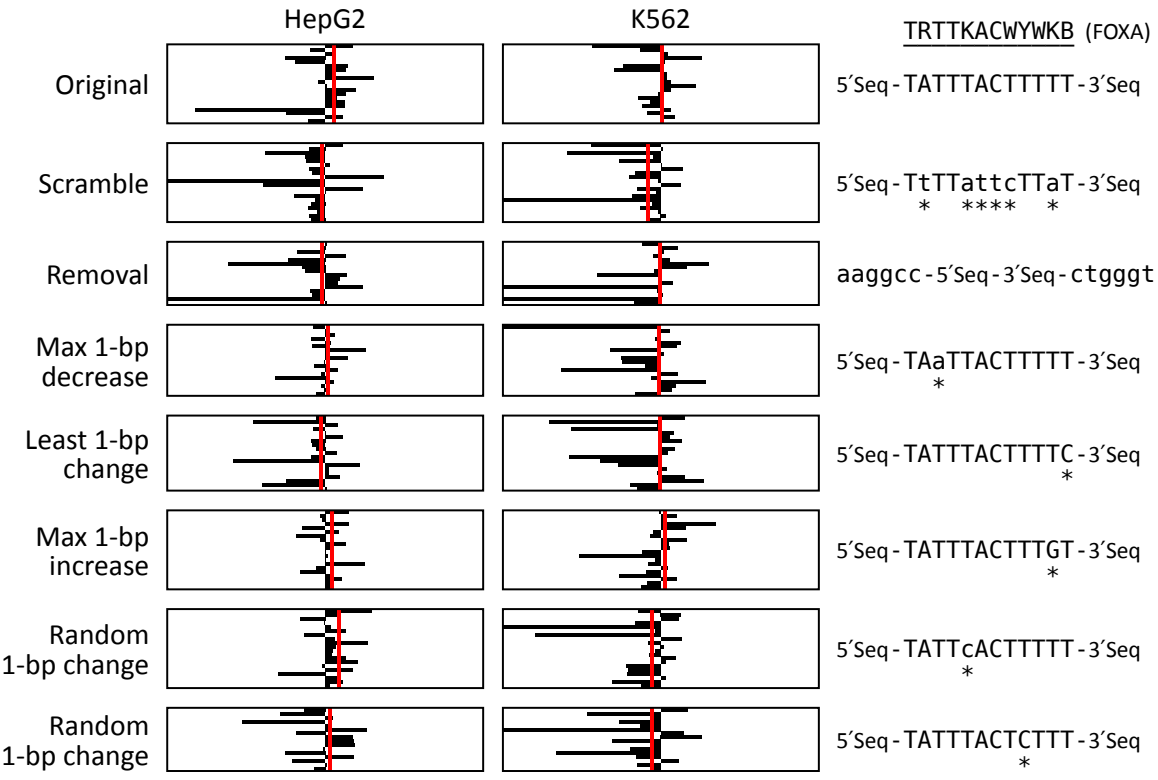
947 FOXA in HepG2 enhancer

chr17 52840865 52840876 + (hg18)





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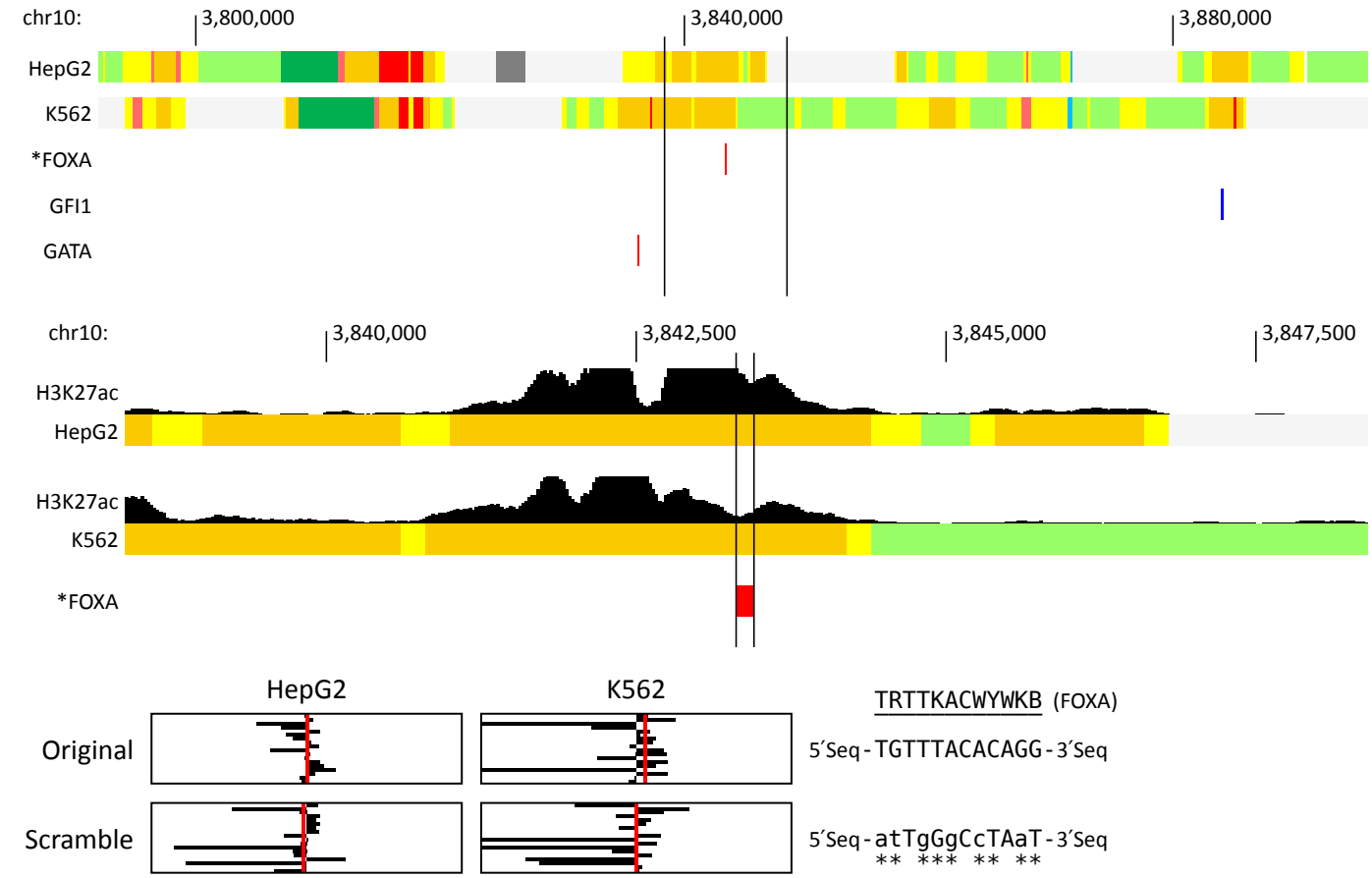
3′Seq = ctgctgcggcaaggagaggagagccagcggtaggggagcccttgggcacaaaggagttaatgagcc

948 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr10 3843373 3843384 - (hg18)



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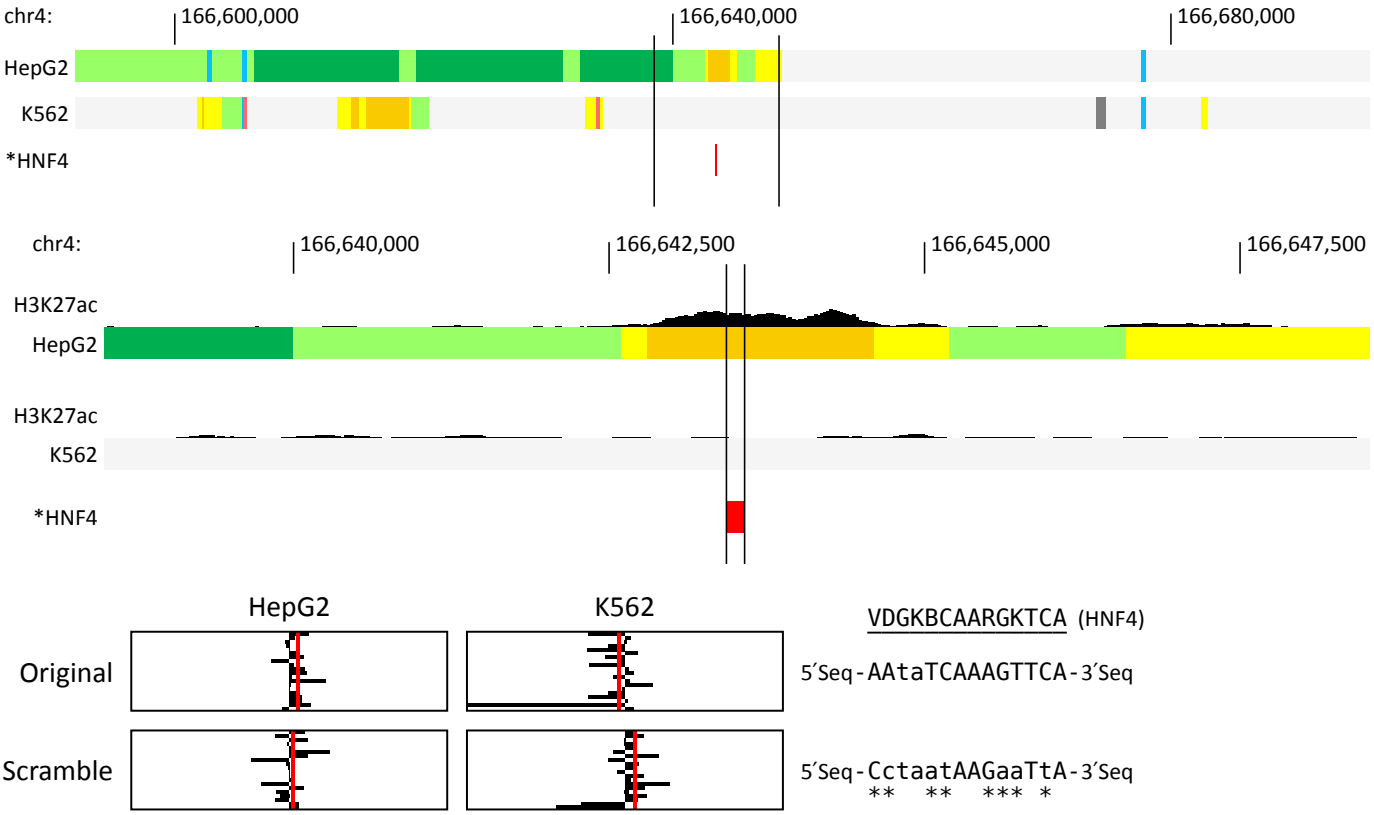
3′Seq = aaaagcaaaaccatttgacattagttaagactttaattttactctttgagcaaagcaagctatata

949 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr4 166643496 166643509 - (hg18)



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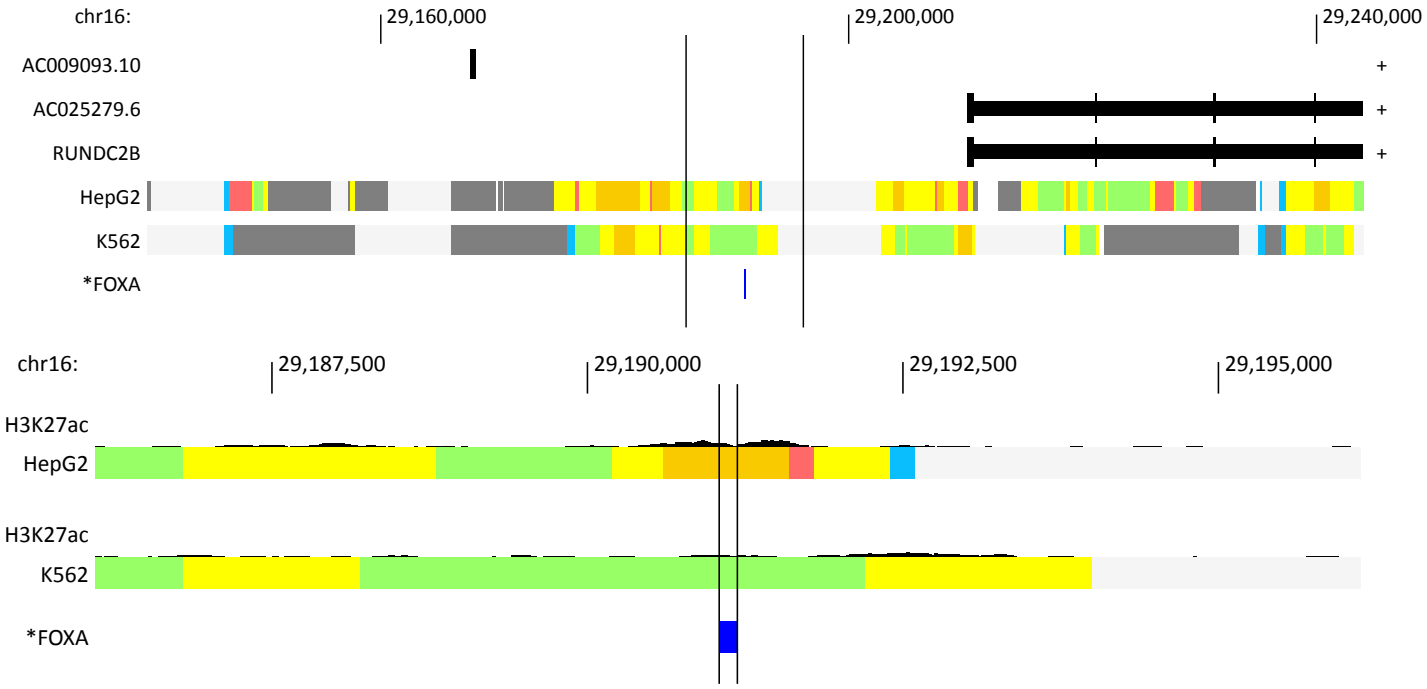
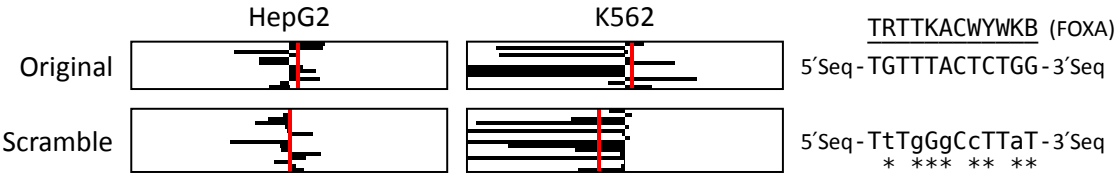
950 FOXA in HepG2 enhancer

chr16 29191111 29191122 + (hg18)





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5′Seq-TtTgGgCcTTaT-3′Seq

* *** ** **

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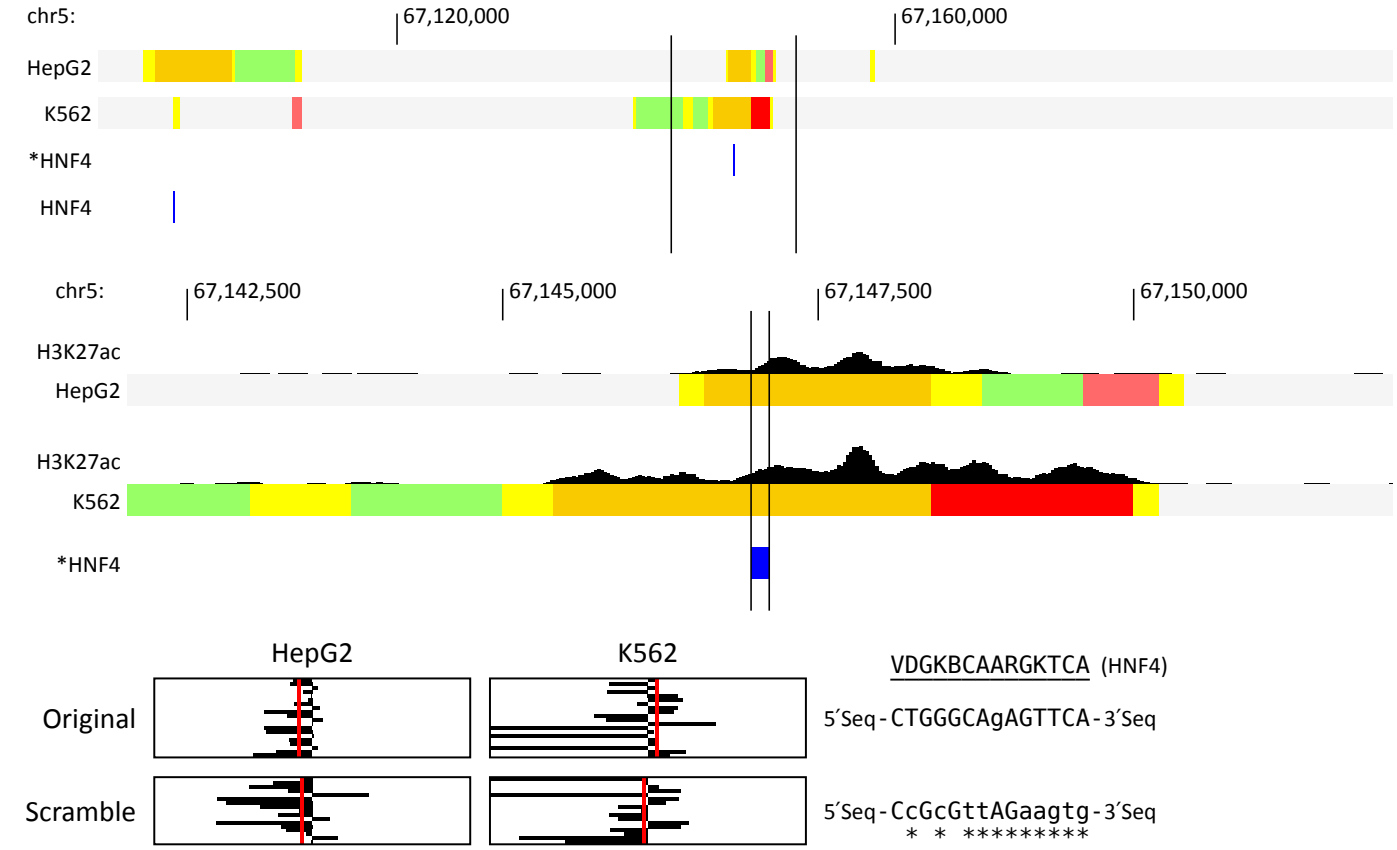
951 HNF4 in HepG2 enhancer

chr5 67147034 67147047 + (hg18)



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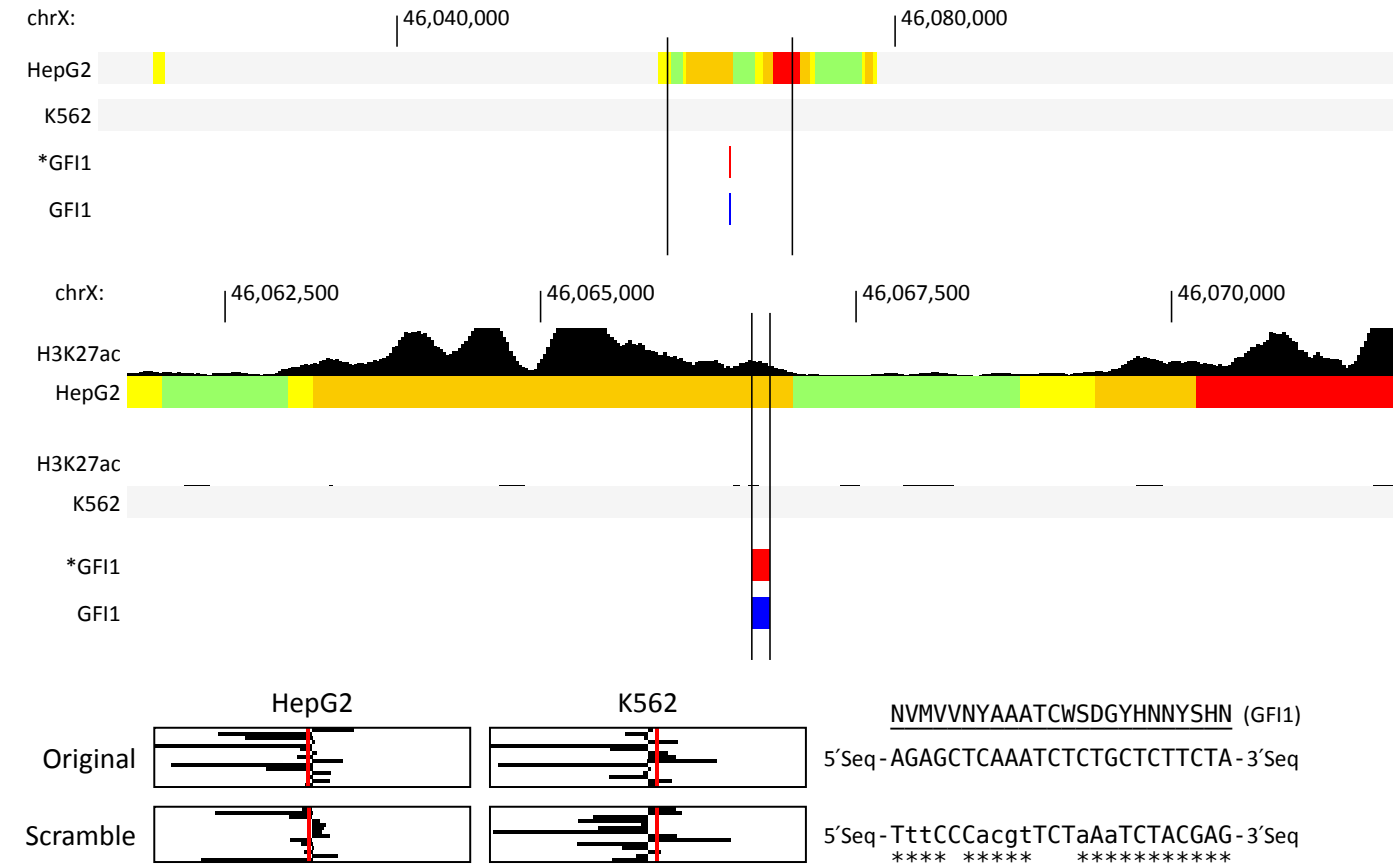
952 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chrX 46066735 46066758 + (hg18)



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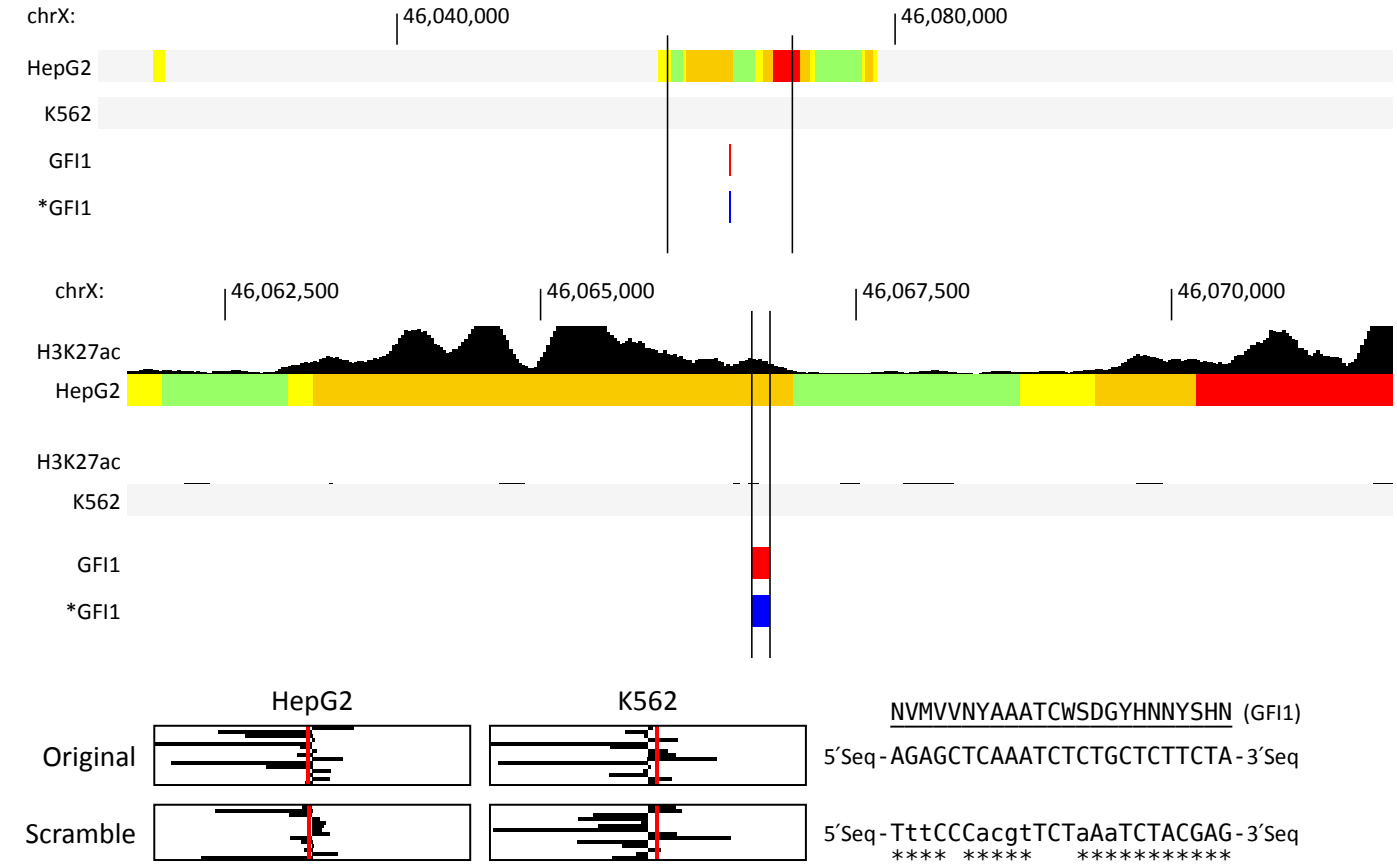
953 GFI1 in HepG2 enhancer

chrX 46066735 46066758 + (hg18)



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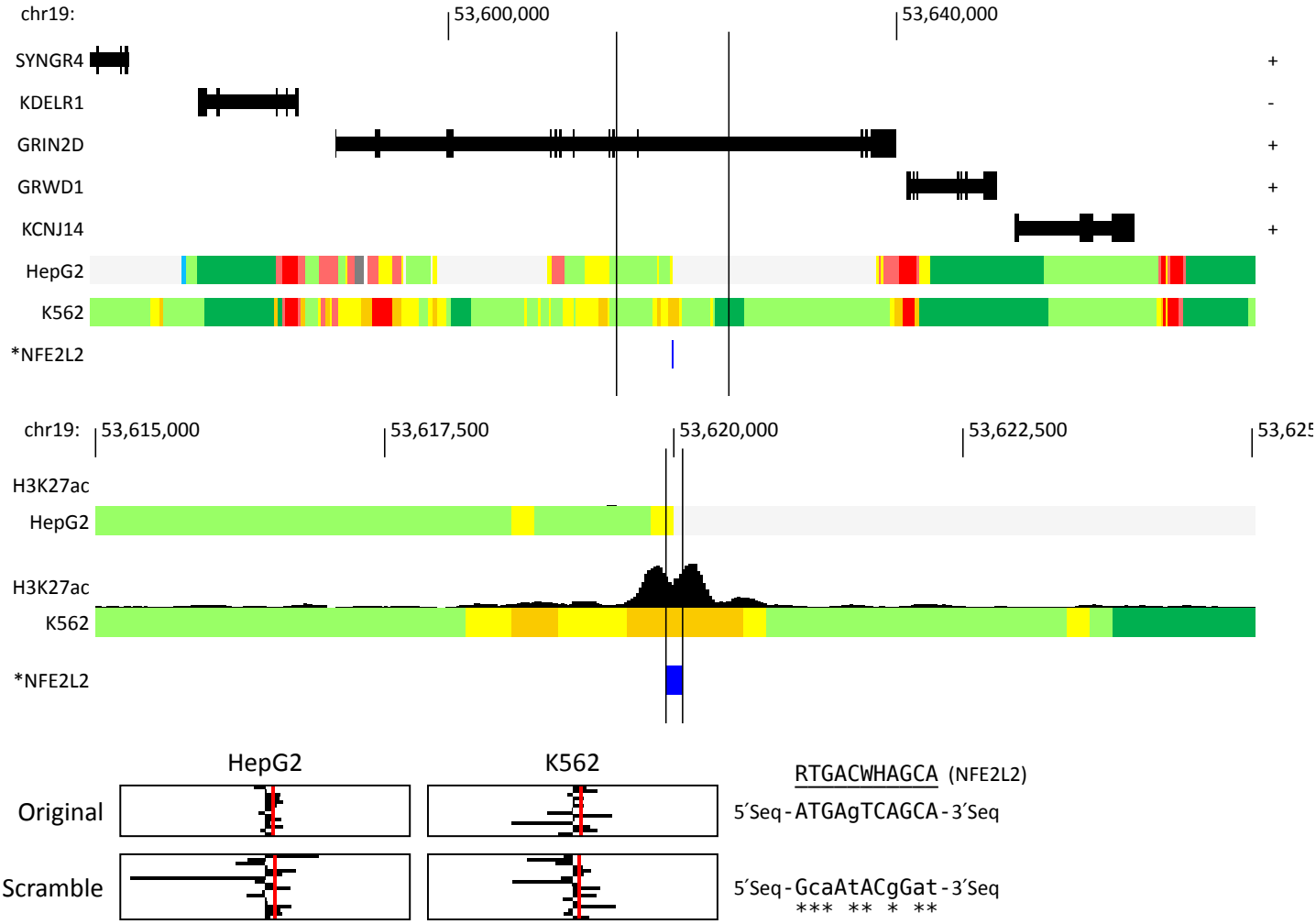
954 NFE2L2 in K562 enhancer

chr19 53619999 53620009 - (hg18)



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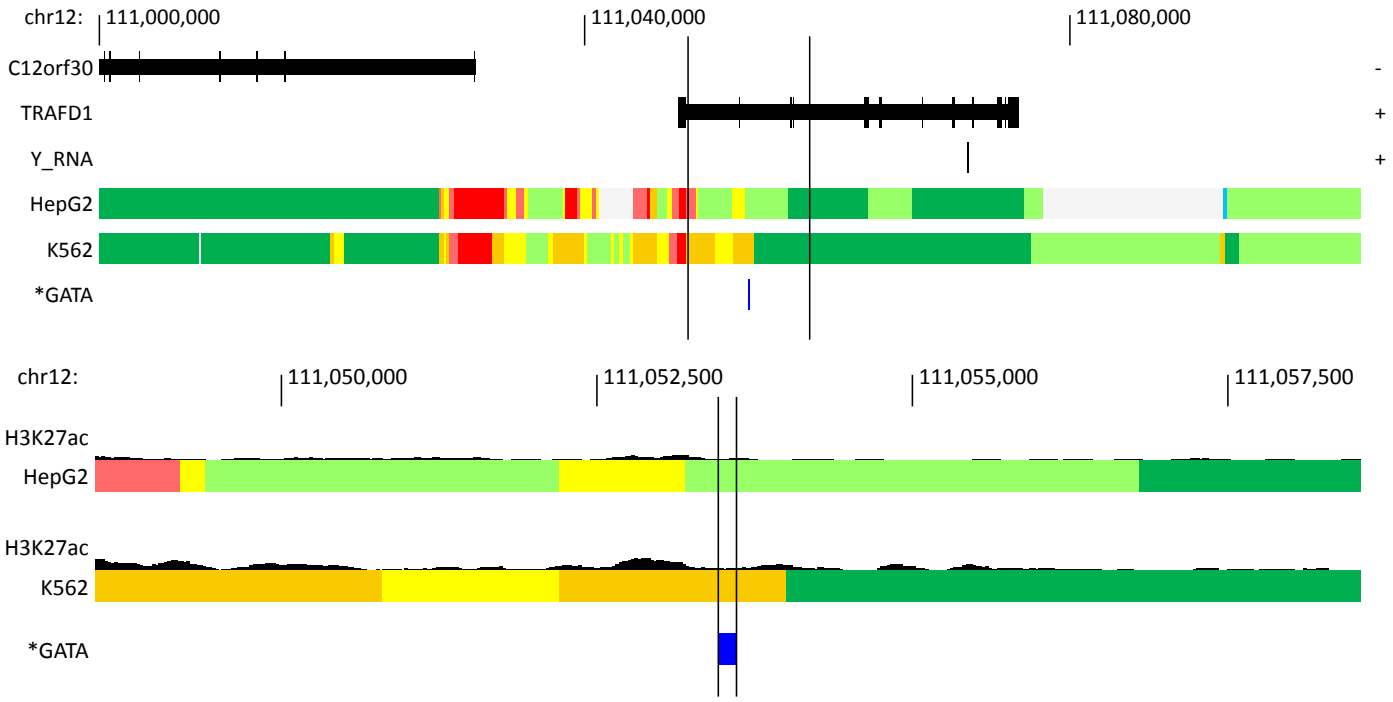
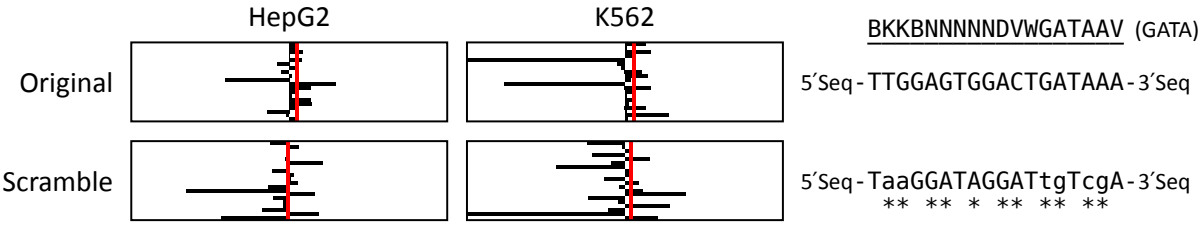
955 GATA in K562 enhancer

chr12 111053526 111053543 - (hg18)





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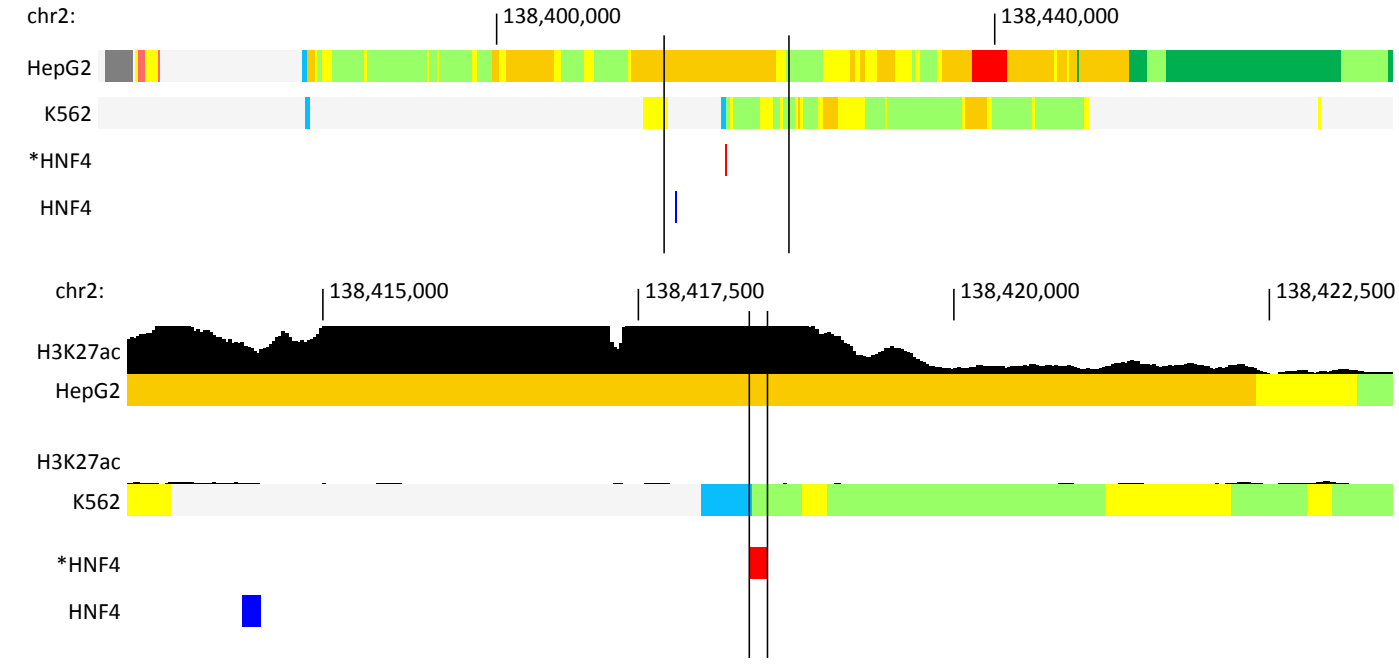
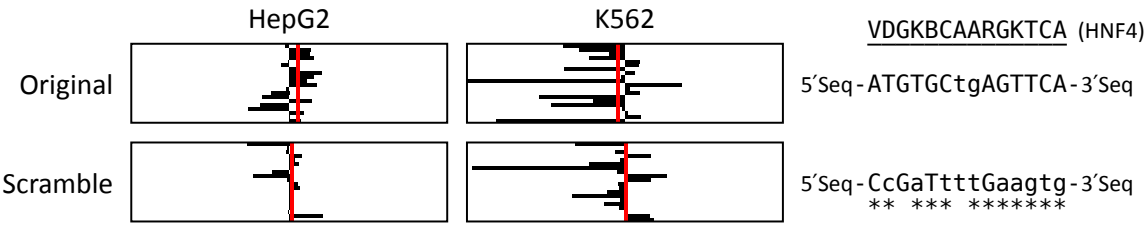
956 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 138418445 138418458 + (hg18)





5′Seq = ttatttagtaacccacagtttggaaatgttatgctcatggggtgcaacgttaattaatgaacagcc
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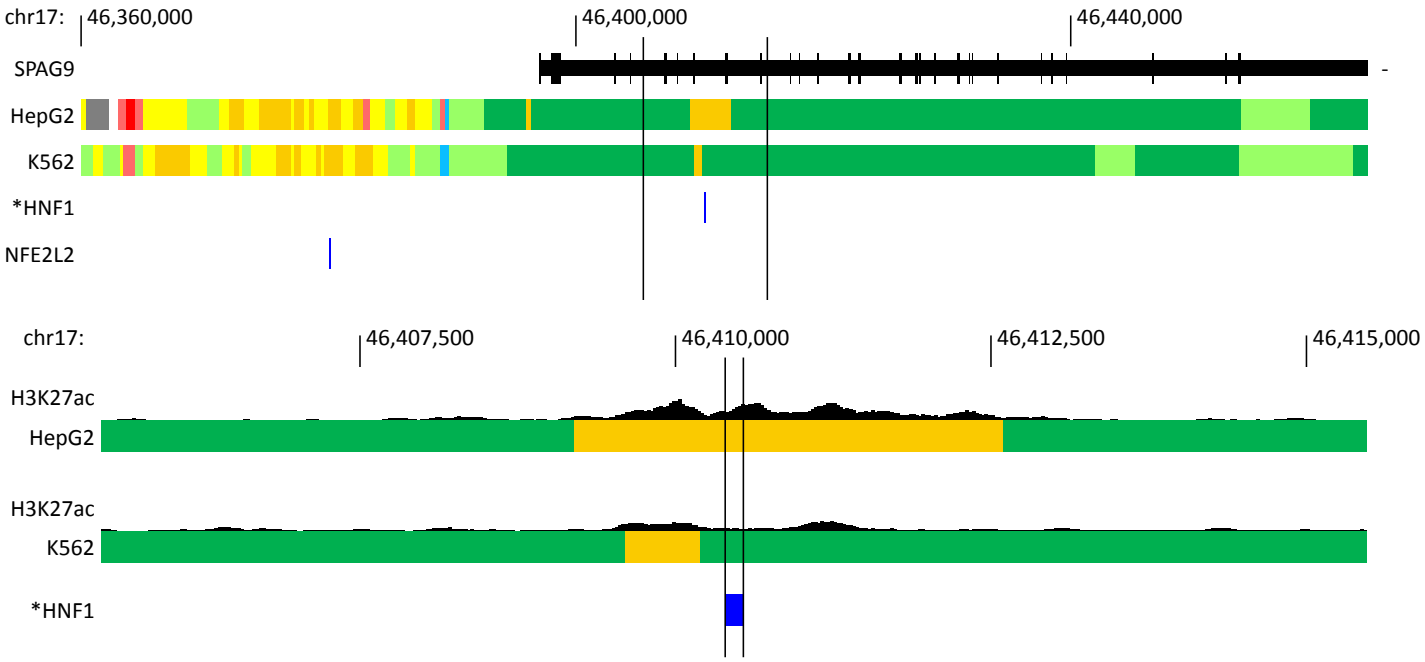
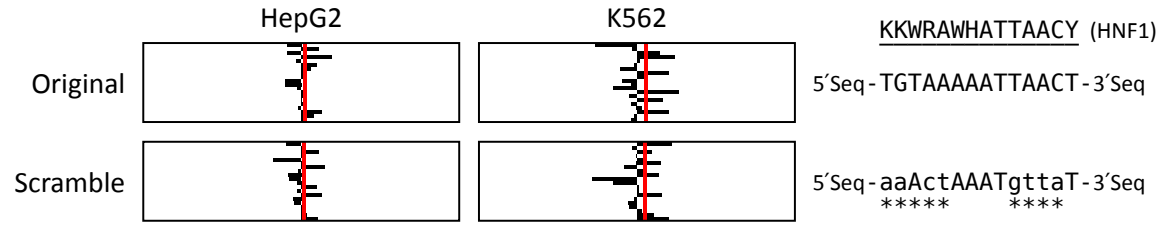
957 HNF1 in HepG2 enhancer

chr17 46410460 46410473 - (hg18)





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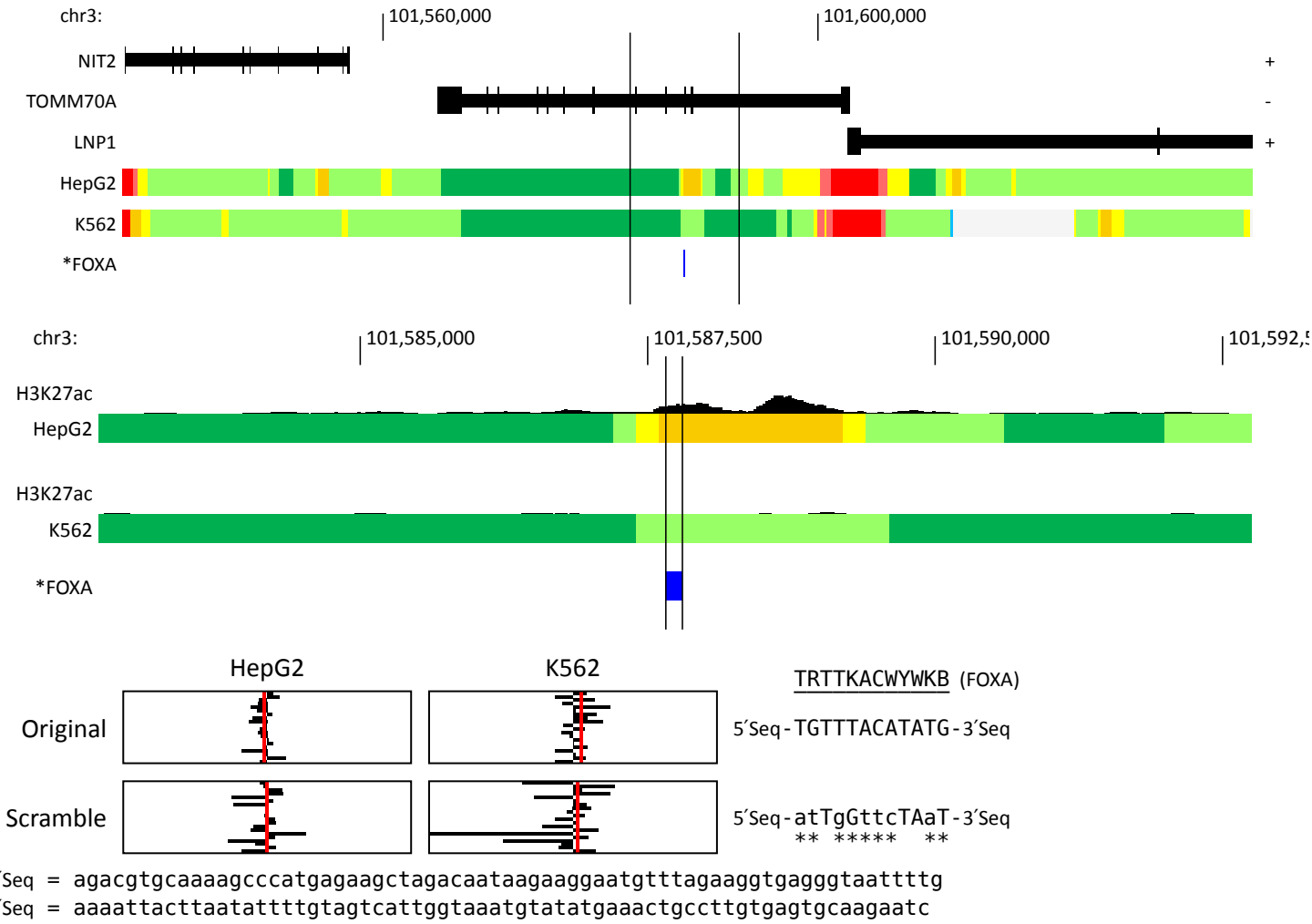
958 FOXA in HepG2 enhancer

chr3 101587725 101587736 - (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACATATG-3′Seq

5′Seq-atTgGttcTAaT-3′Seq

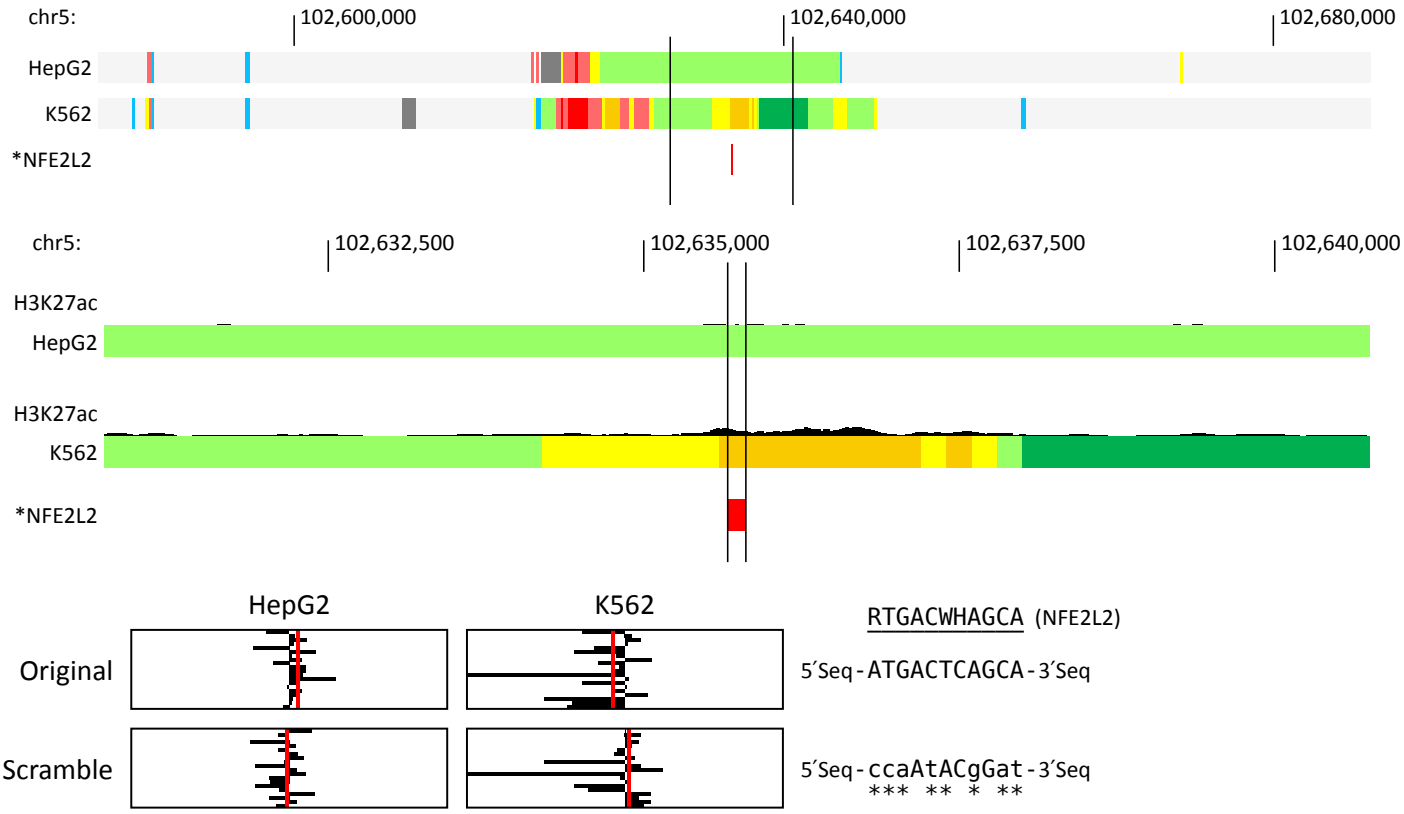
** ***** **

5′Seq = agacgtgcaaaagcccatgagaagctagacaataagaaggaatgtttagaaggtgagggtaattttg

3′Seq = aaaattacttaatattttgtagtcattggtaaatgtatatgaaactgccttgtgagtgcaagaatc

959 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr5 102635732 102635742 - (hg18)



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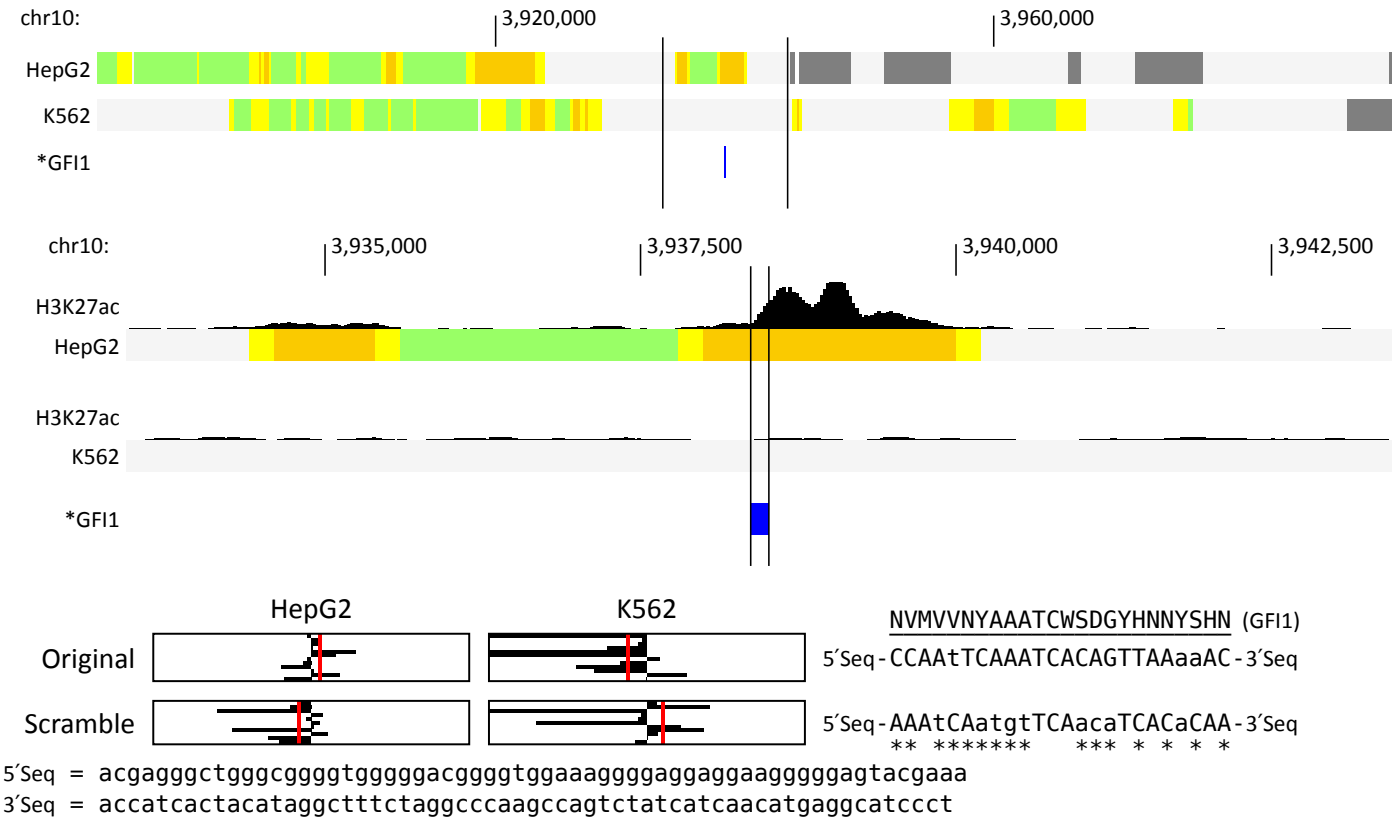
960 GFI1 in HepG2 enhancer

chr10 3938434 3938457 + (hg18)



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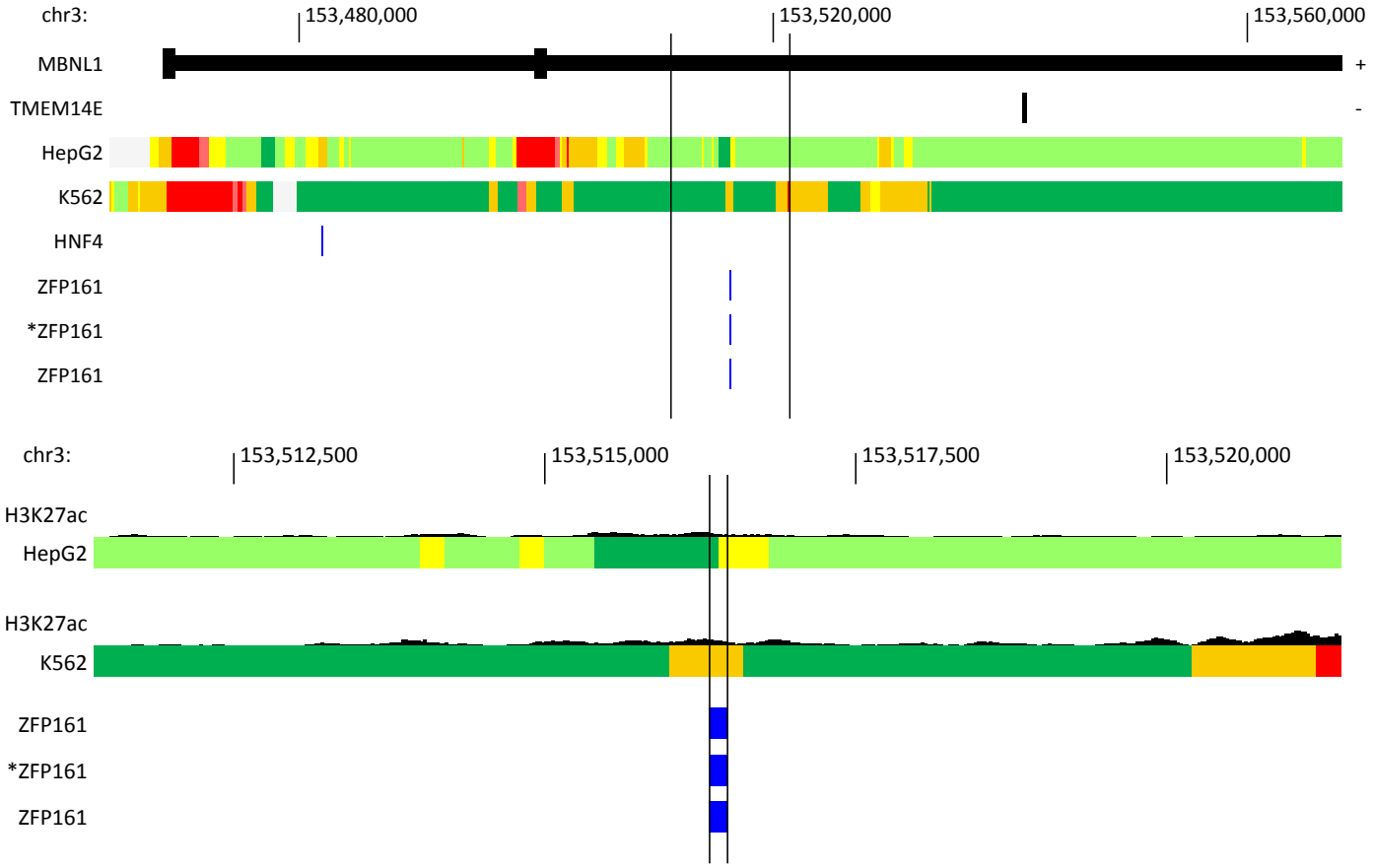
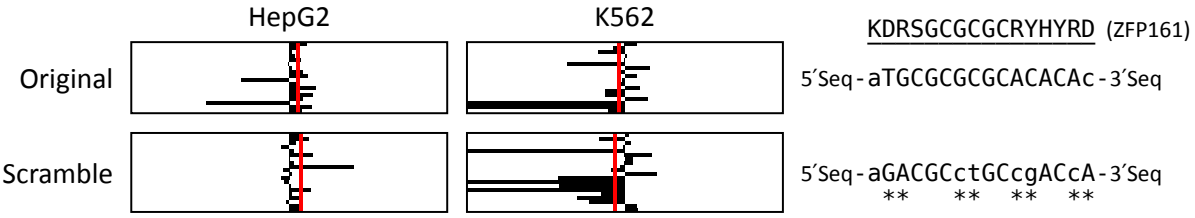
961 ZFP161 in K562 enhancer

chr3 153516390 153516405 + (hg18)





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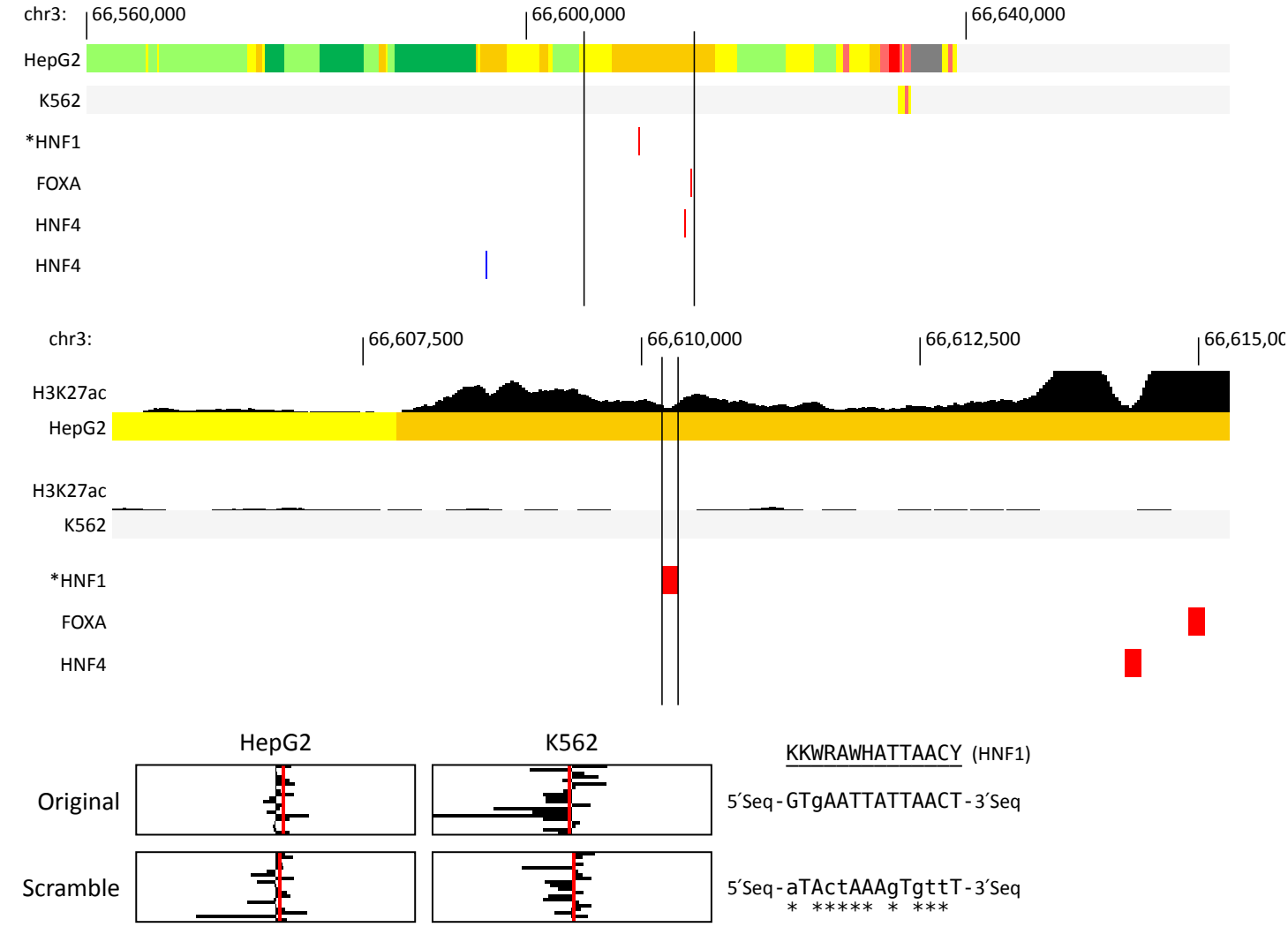
962 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr3 66610250 66610263 - (hg18)



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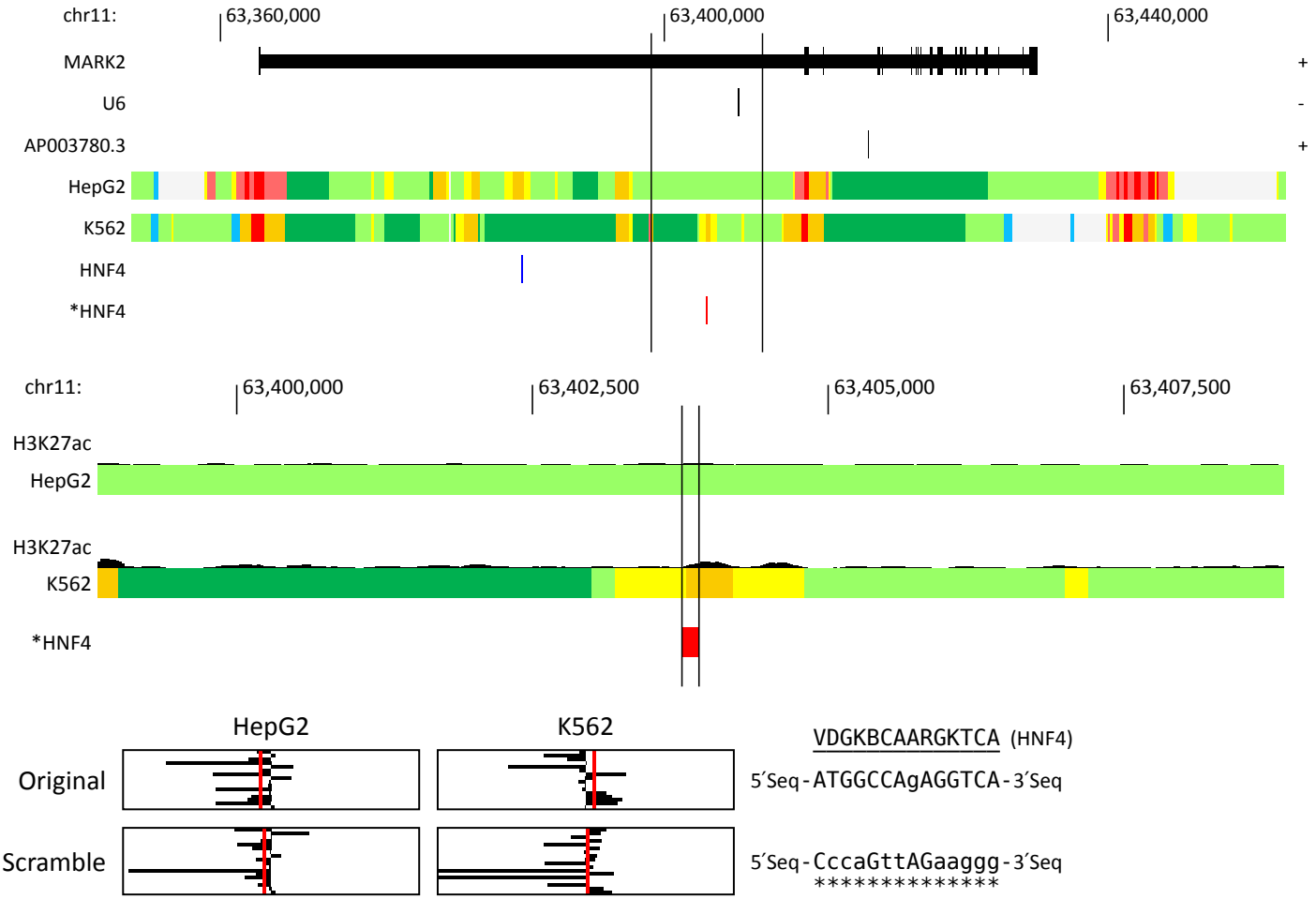
963 HNF4 in K562 enhancer (conserved at 50% confidence)

chr11 63403830 63403843 - (hg18)



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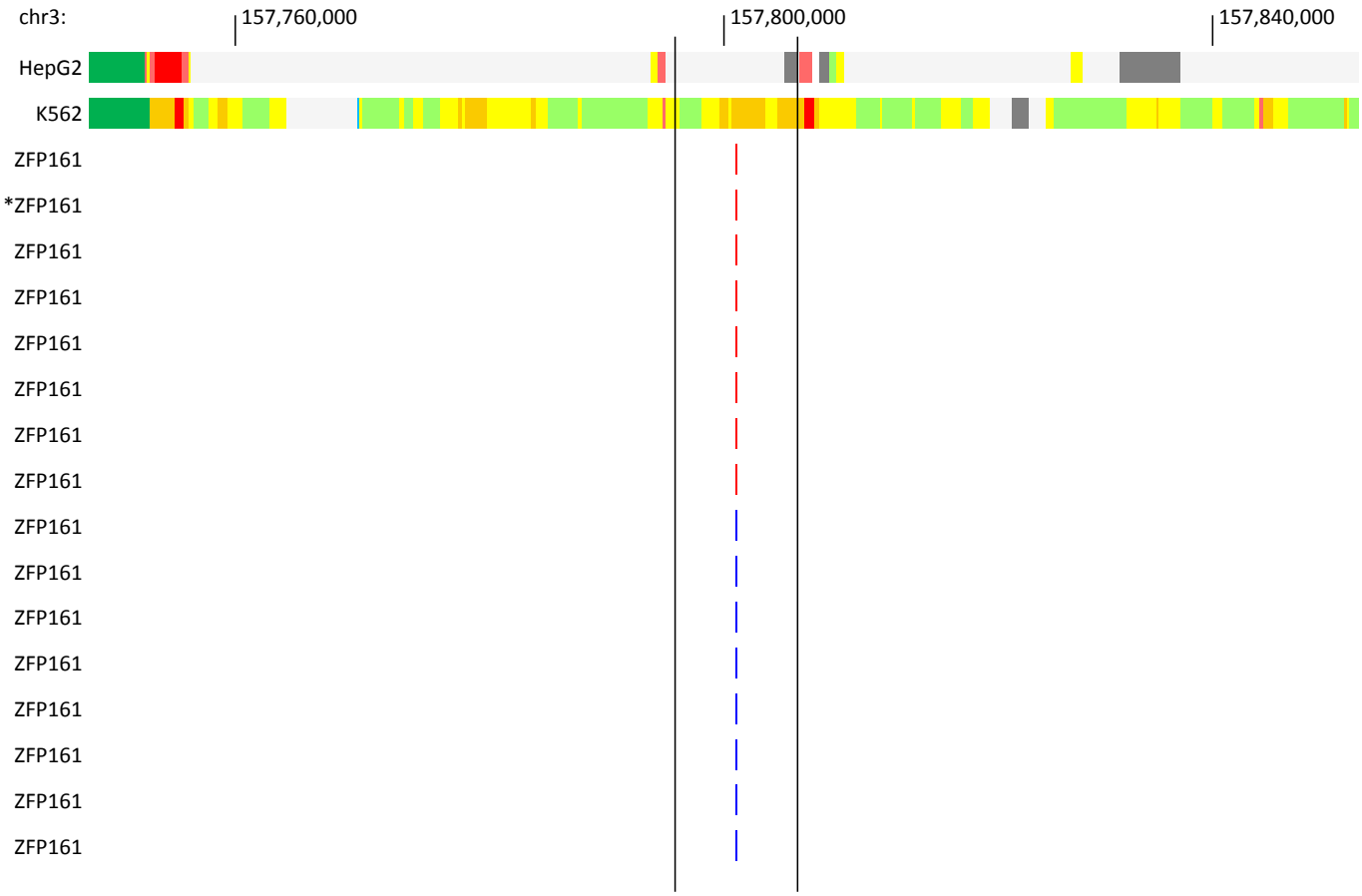
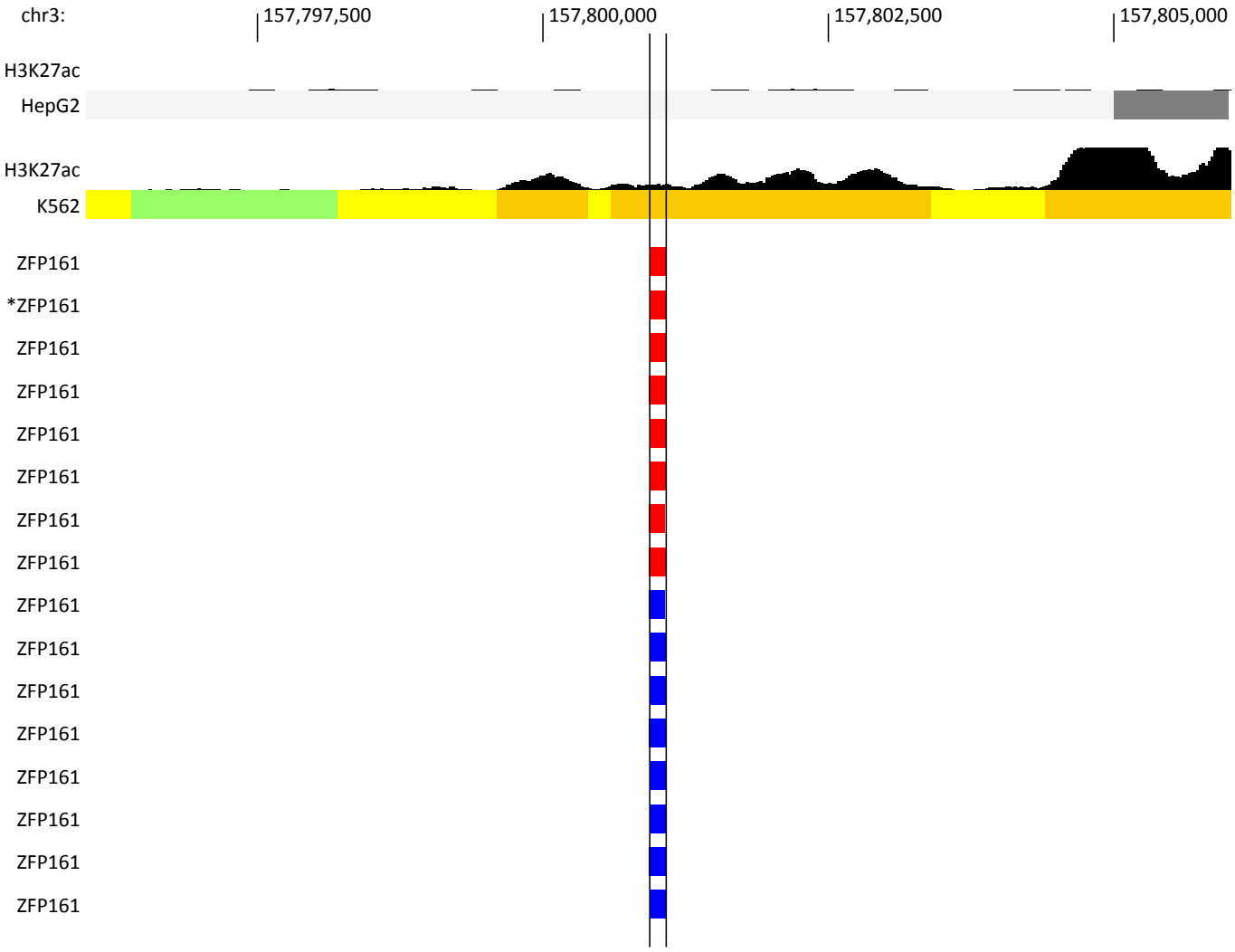
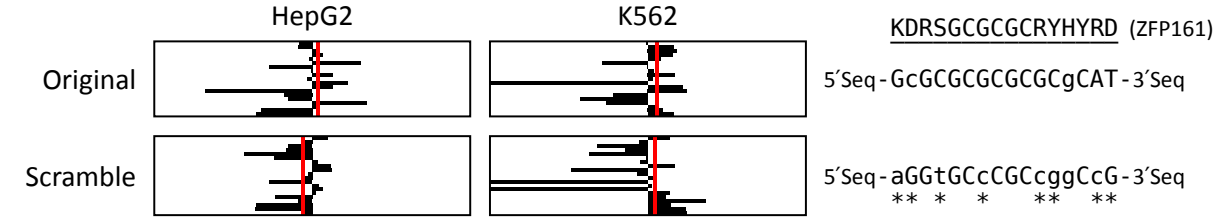
964 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr3 157801001 157801016 + (hg18)







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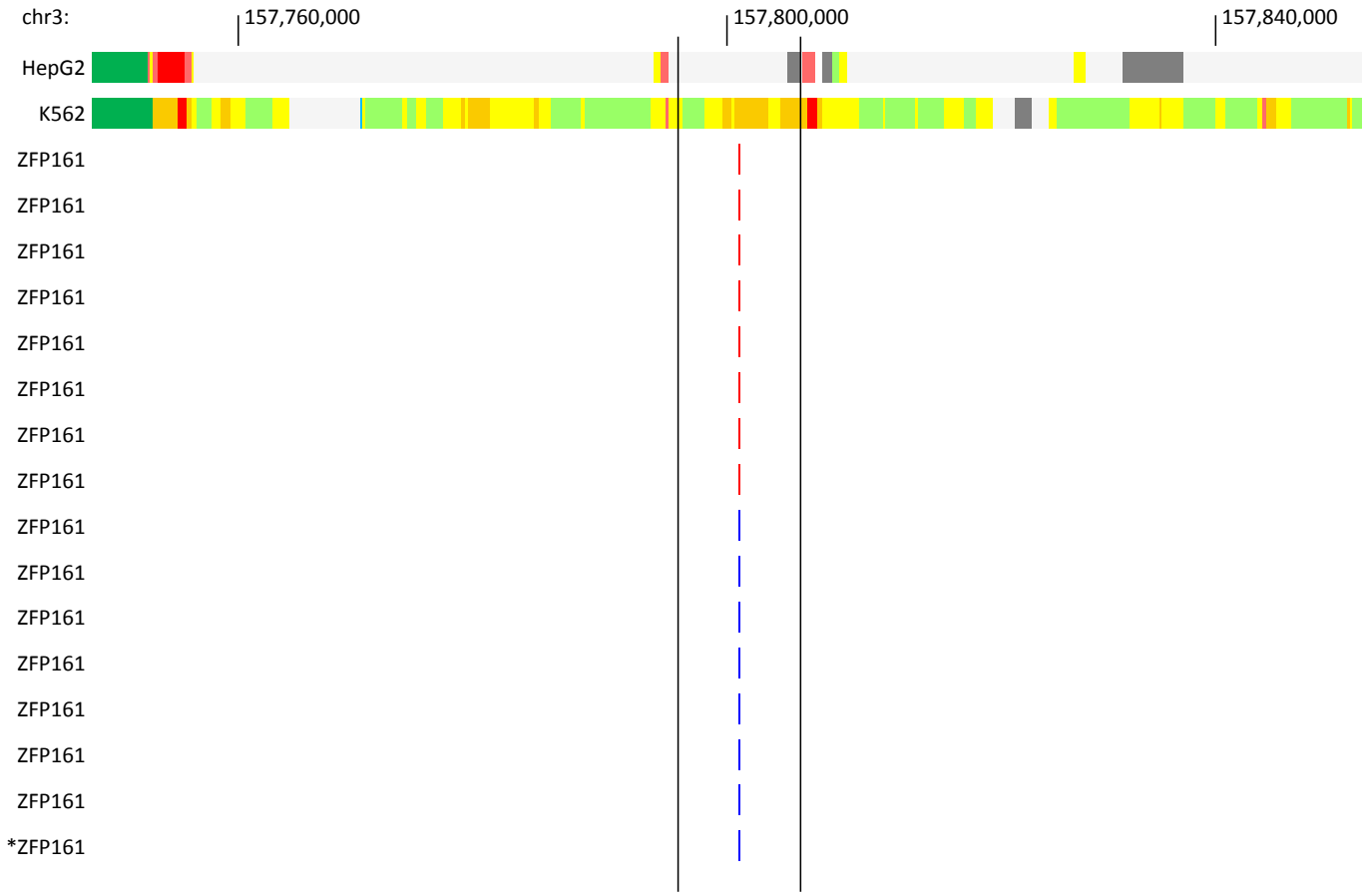
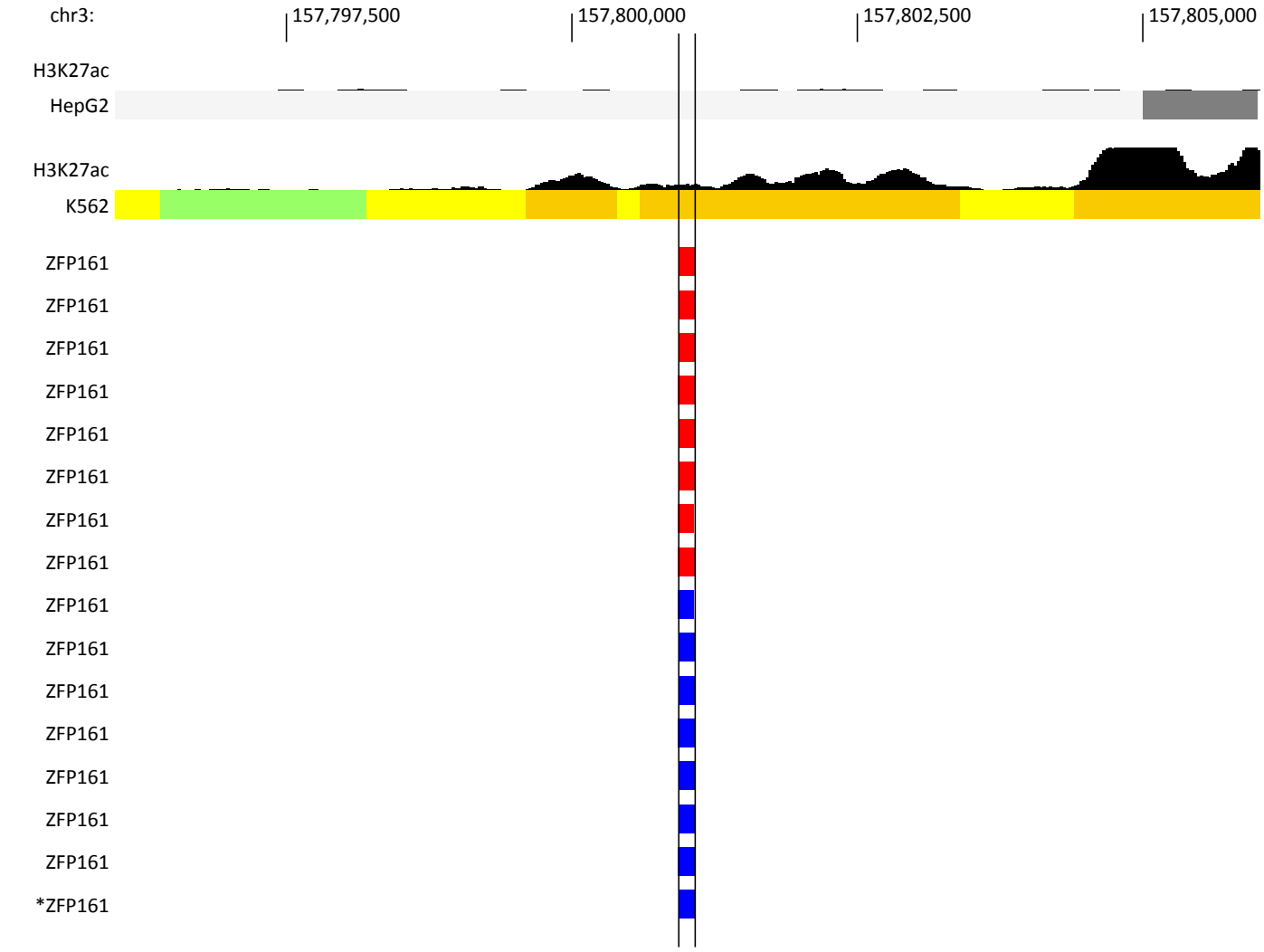
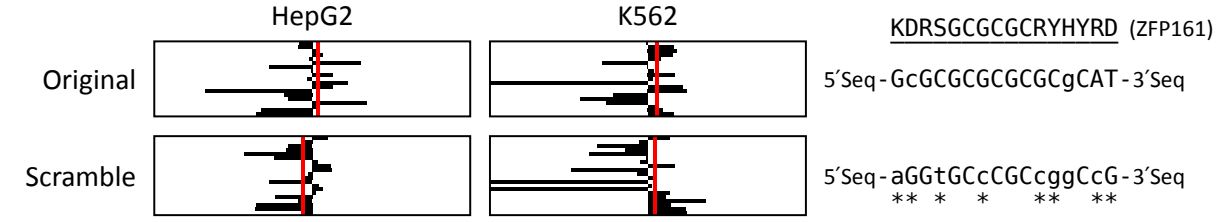
965 ZFP161 in K562 enhancer

chr3 157801001 157801016 + (hg18)







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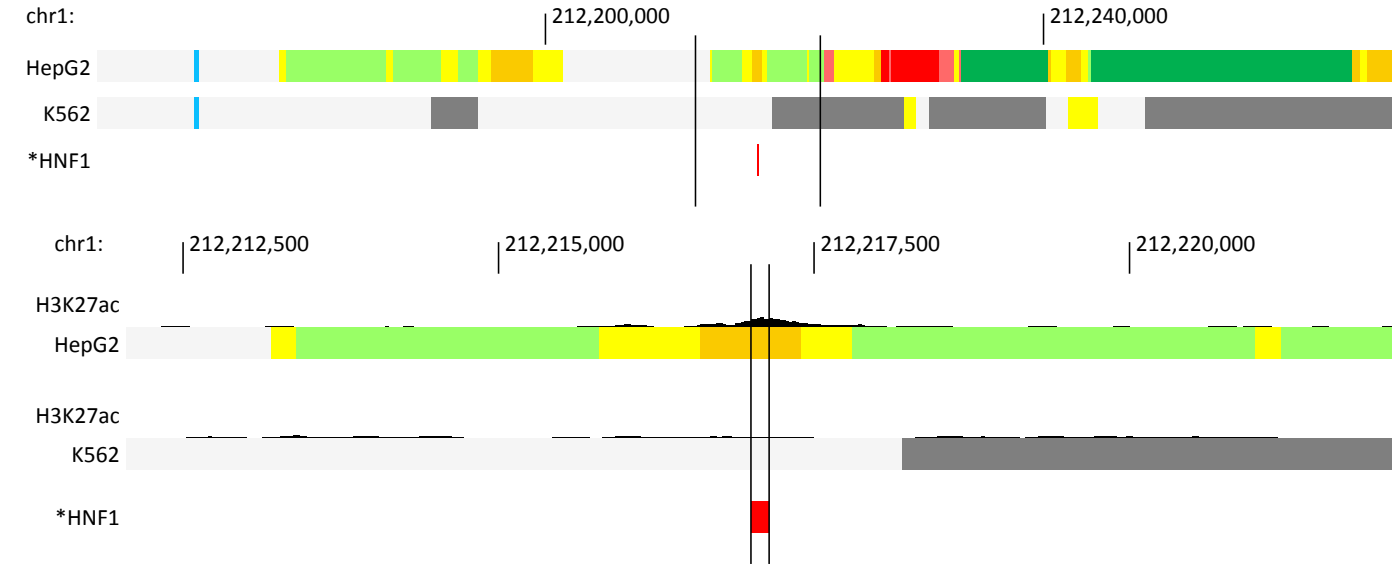
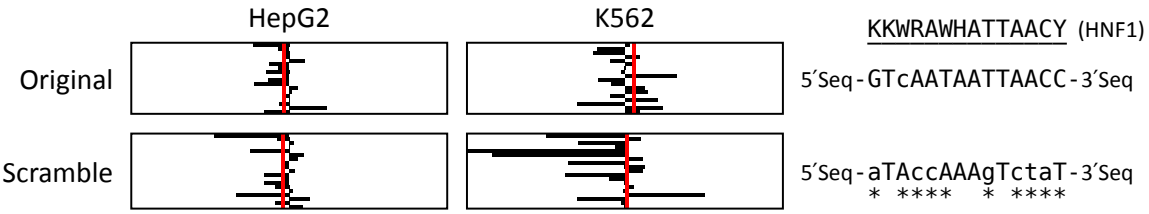
966 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 212217066 212217079 - (hg18)





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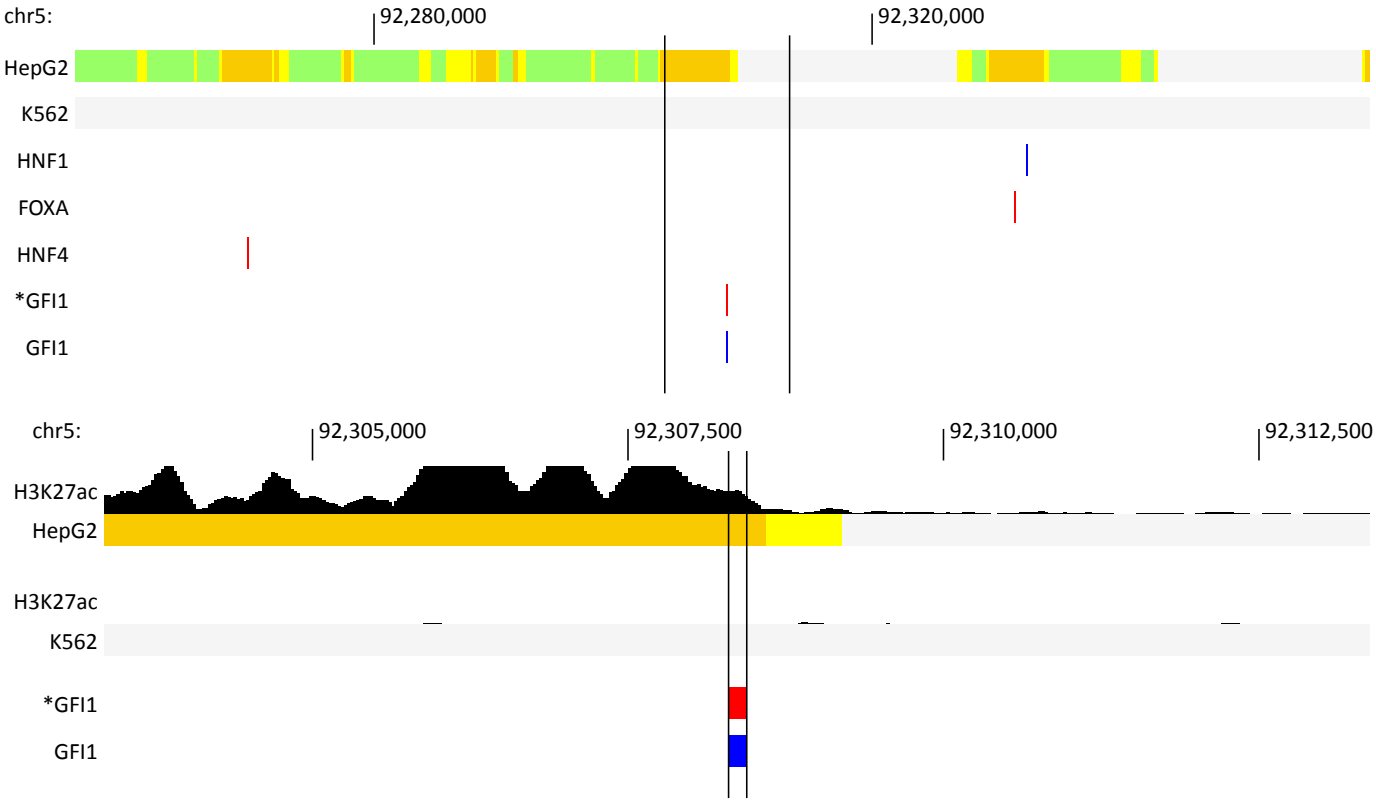
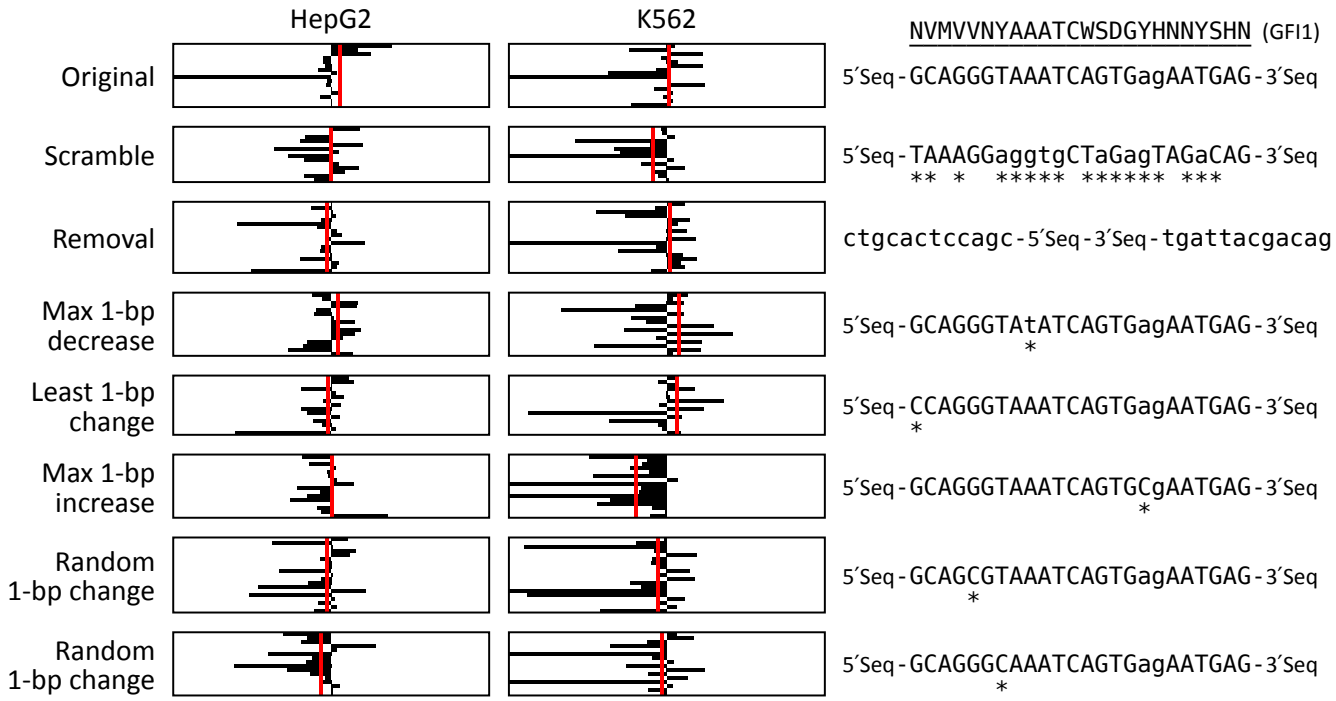
967 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr5 92308358 92308381 + (hg18)





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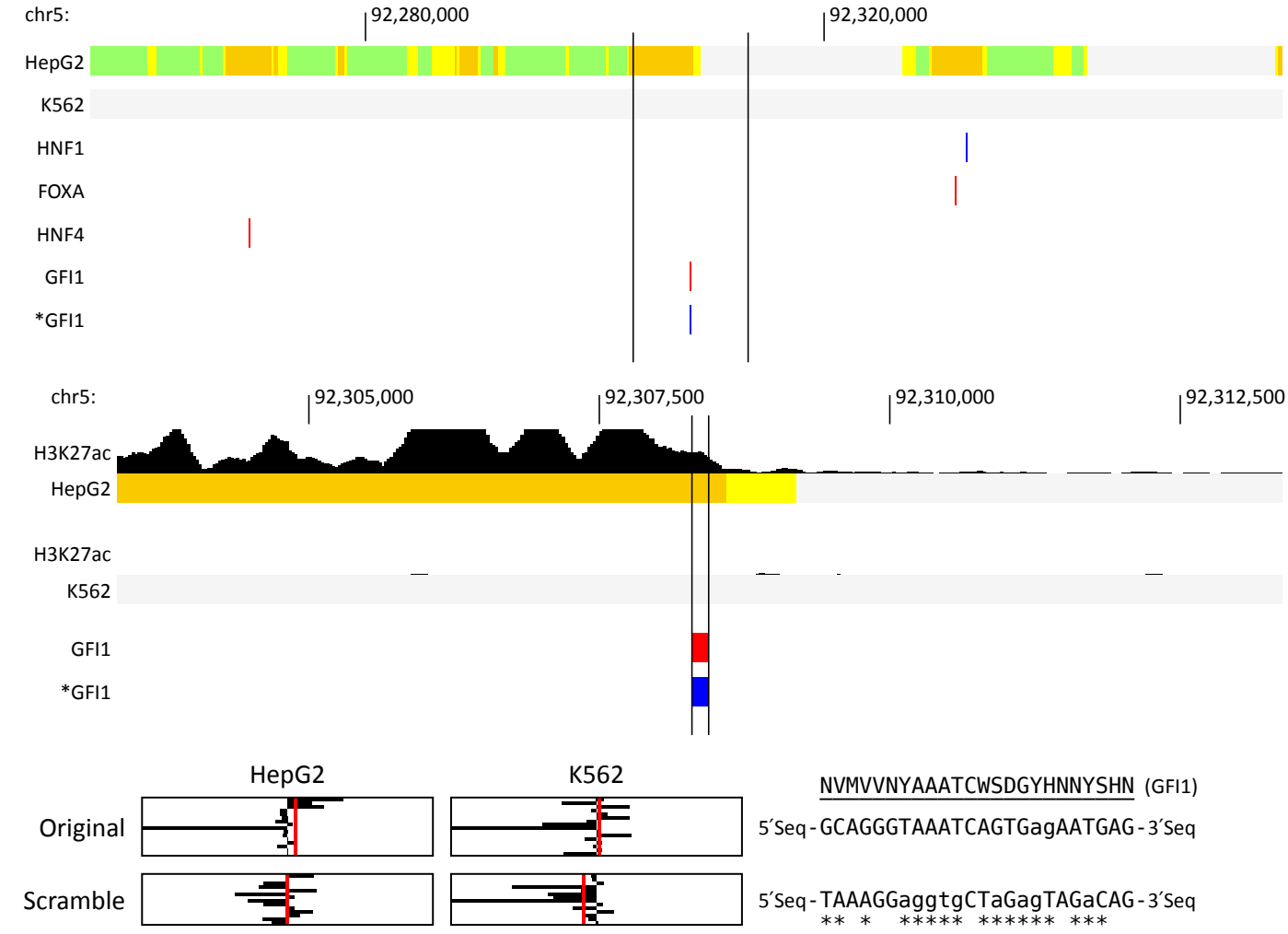
968 GFI1 in HepG2 enhancer

chr5 92308358 92308381 + (hg18)



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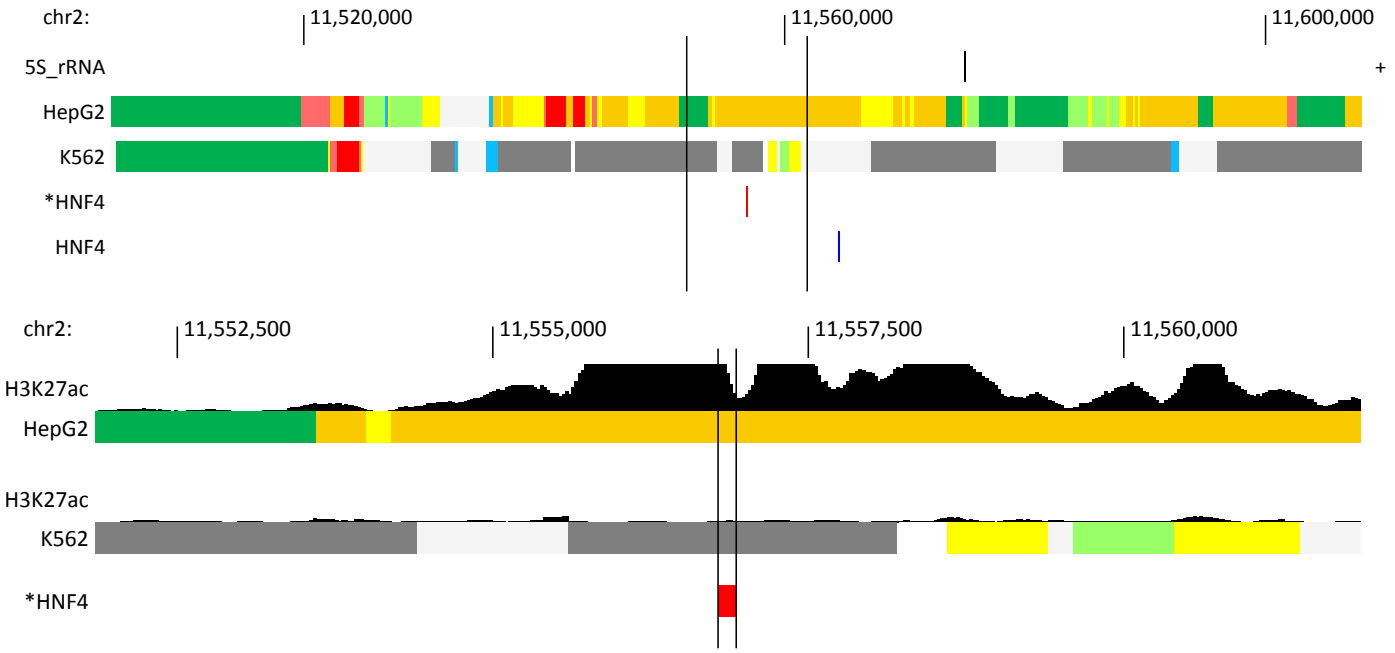
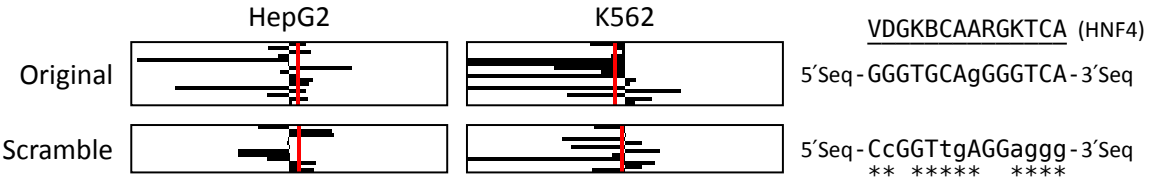
3′Seq = atgatcagagaaggcttaagggaggaggtagaaaataaaggacaccttggaggatgtgta

969 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 11556851 11556864 + (hg18)





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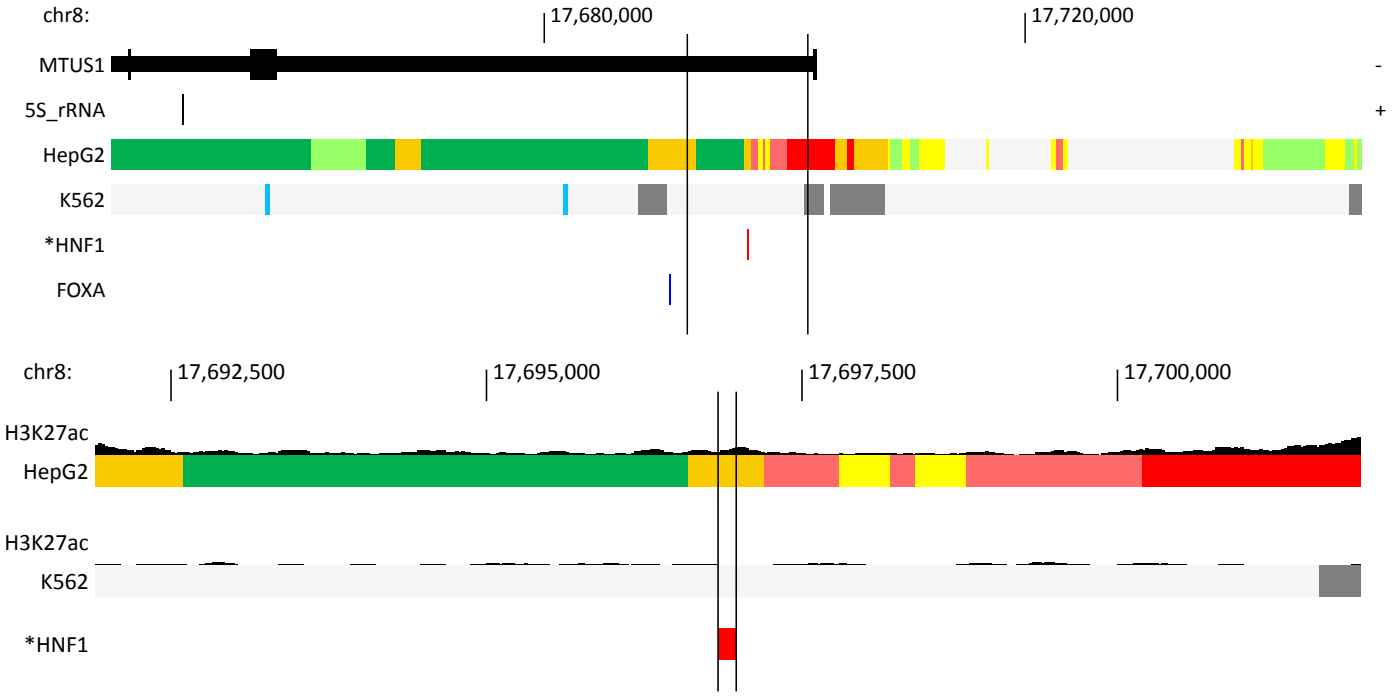
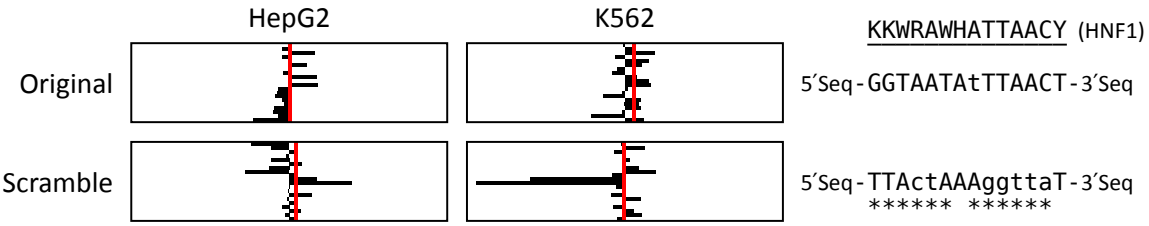
970 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr8 17696901 17696914 - (hg18)





KKWRAWHATTAACY (HNF1)

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5′Seq-TTActAAAggttaT-3′Seq

****** ******

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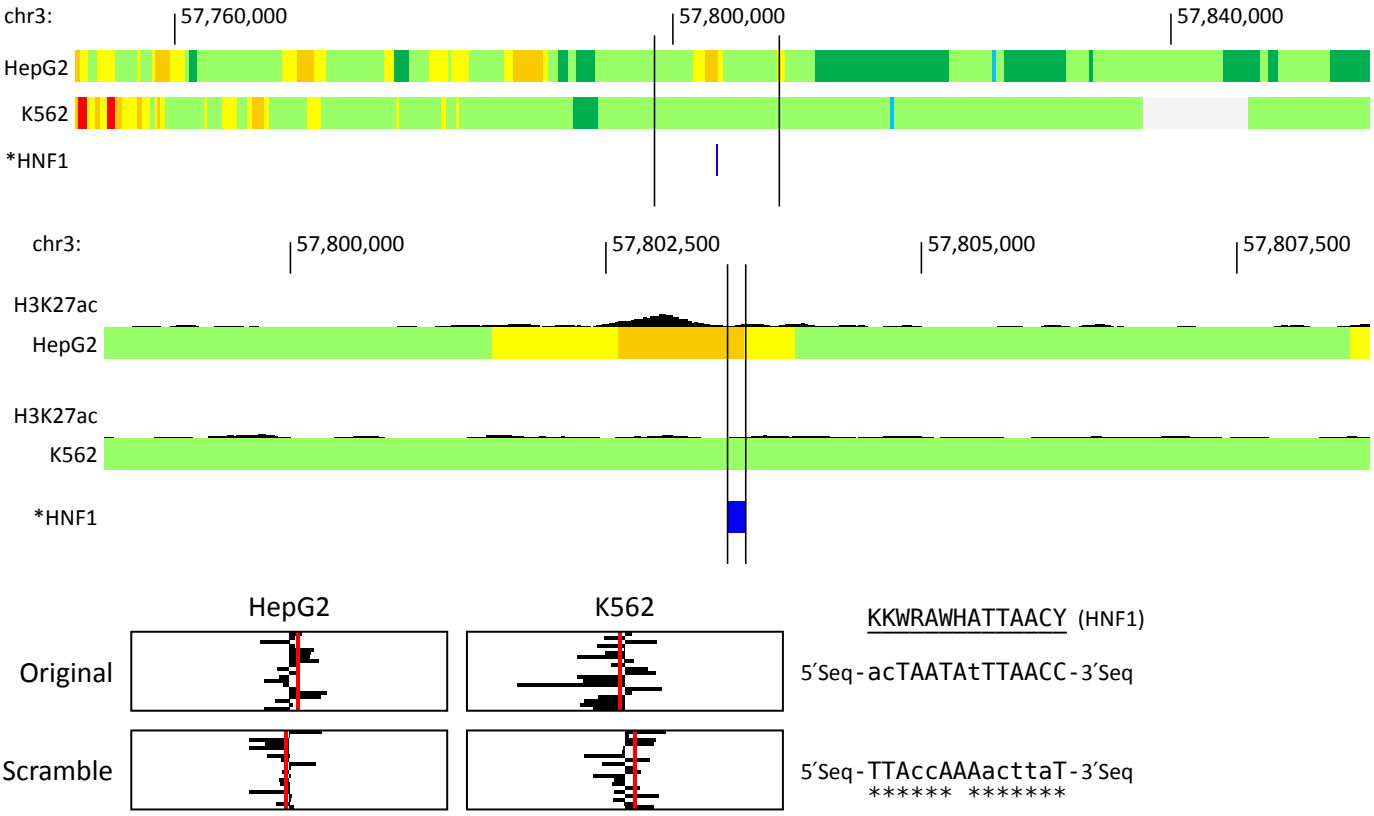
971 HNF1 in HepG2 enhancer

chr3 57803530 57803543 - (hg18)



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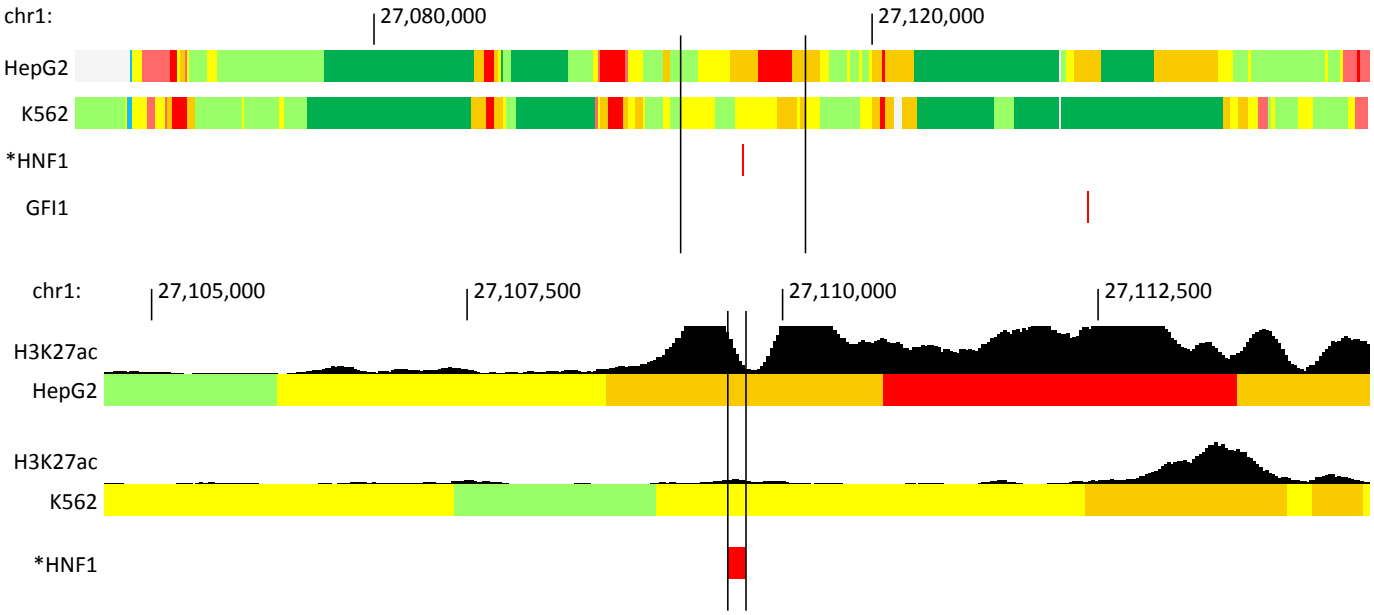
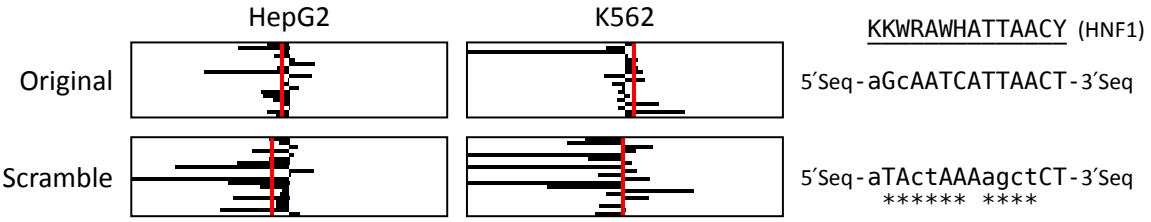
972 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 27109632 27109645 + (hg18)





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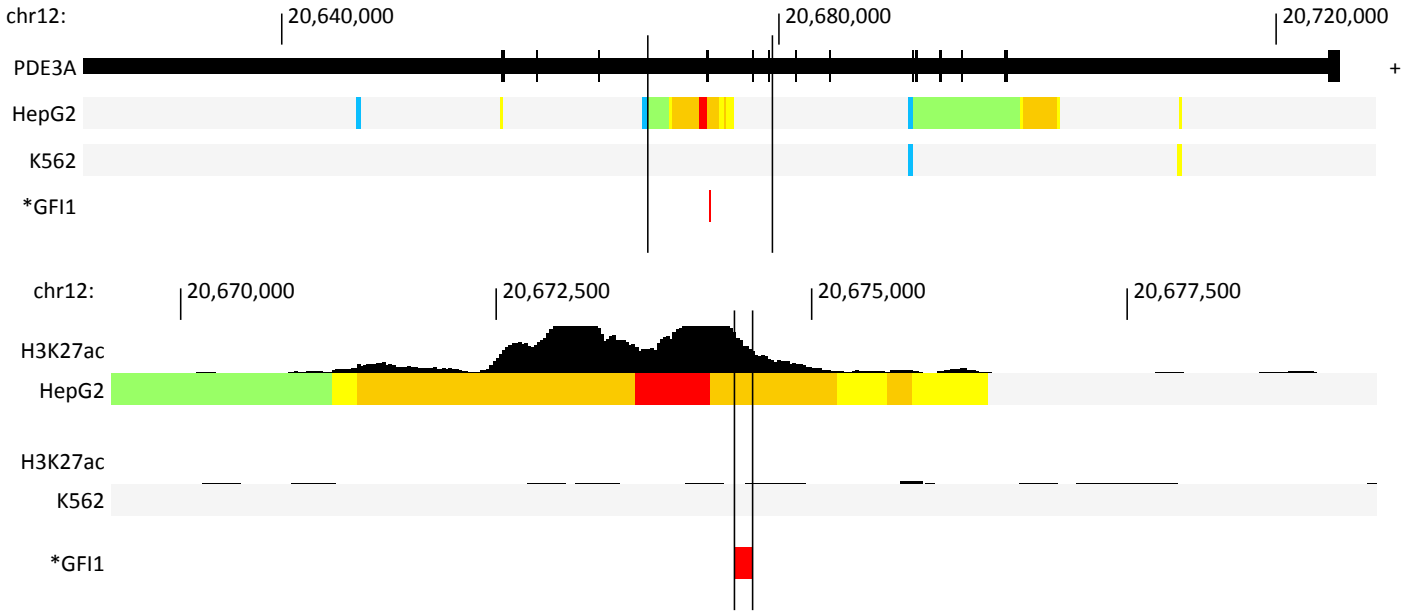
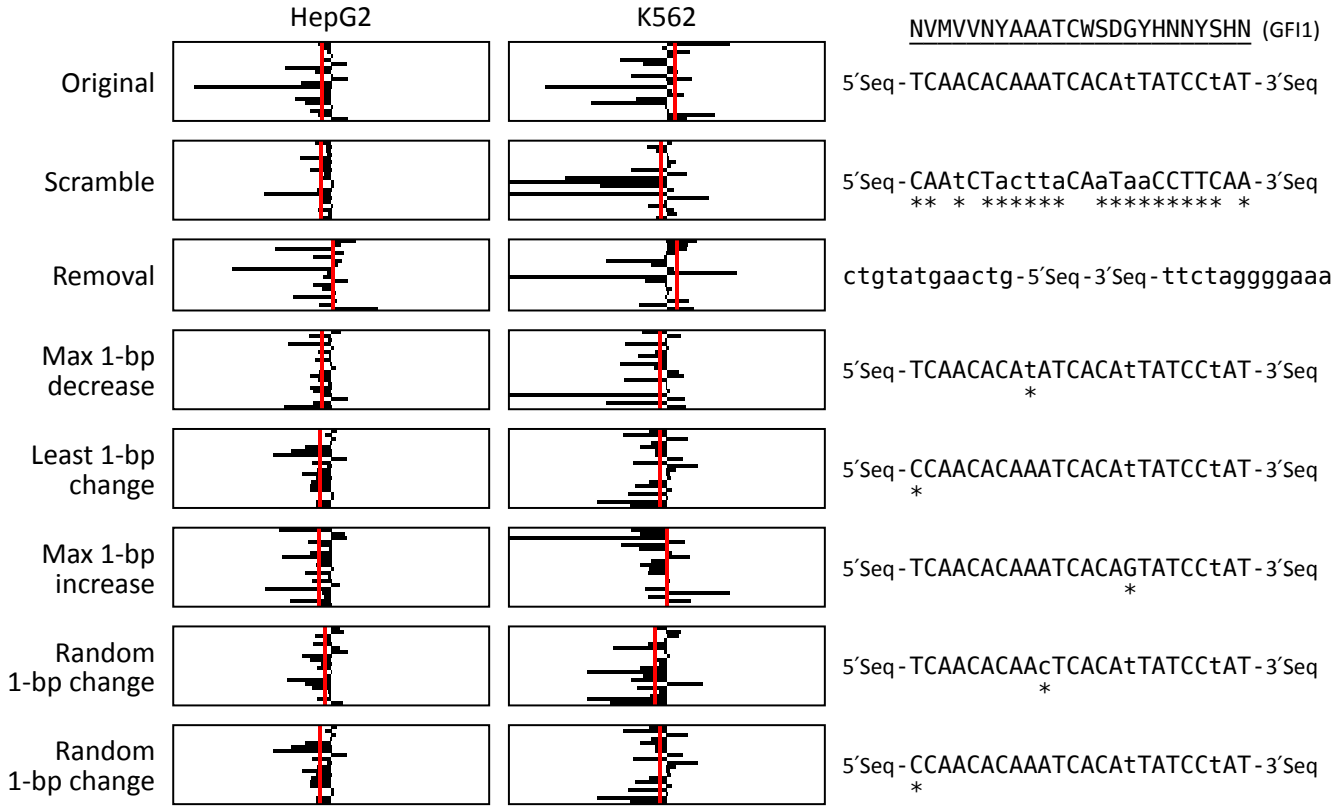
973 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr12 20674449 20674472 - (hg18)





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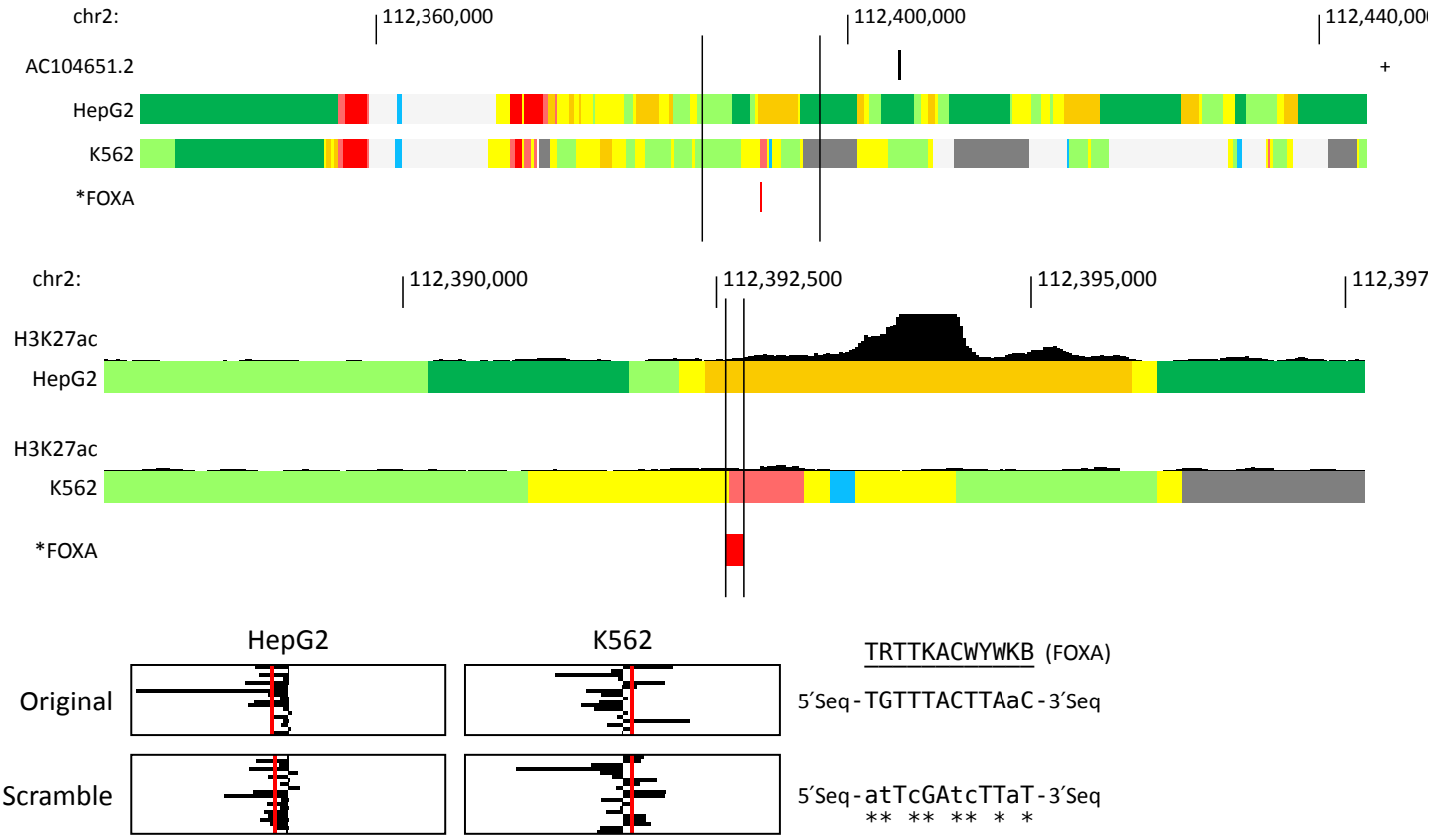
974 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 112392640 112392651 - (hg18)



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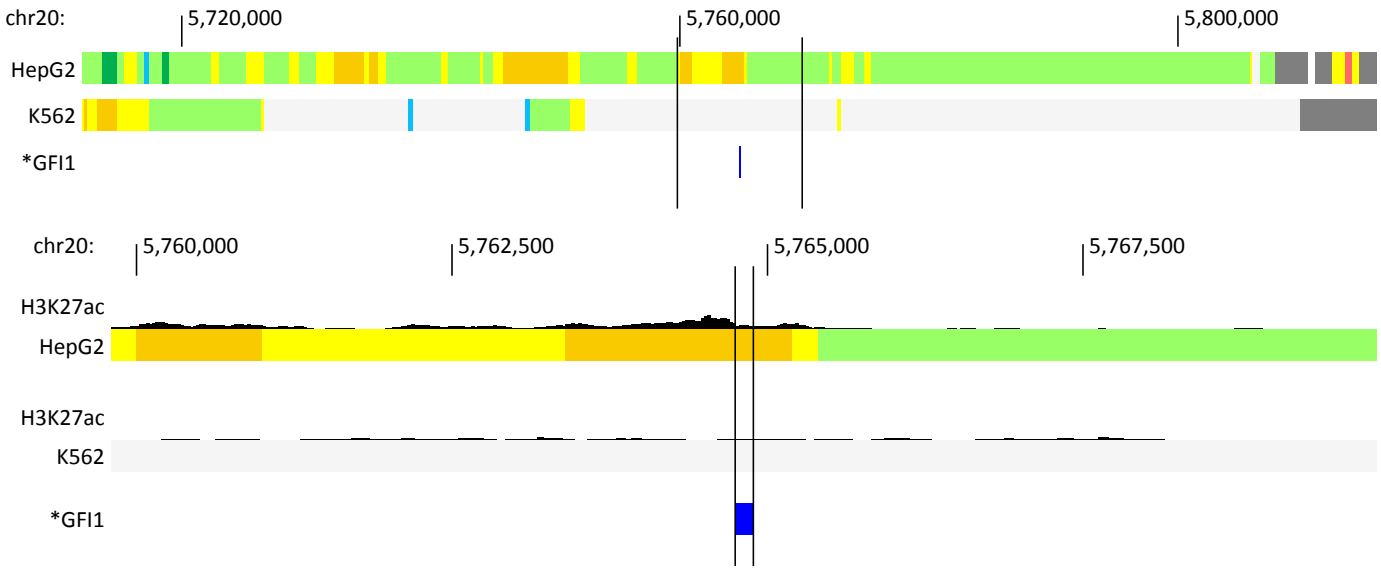
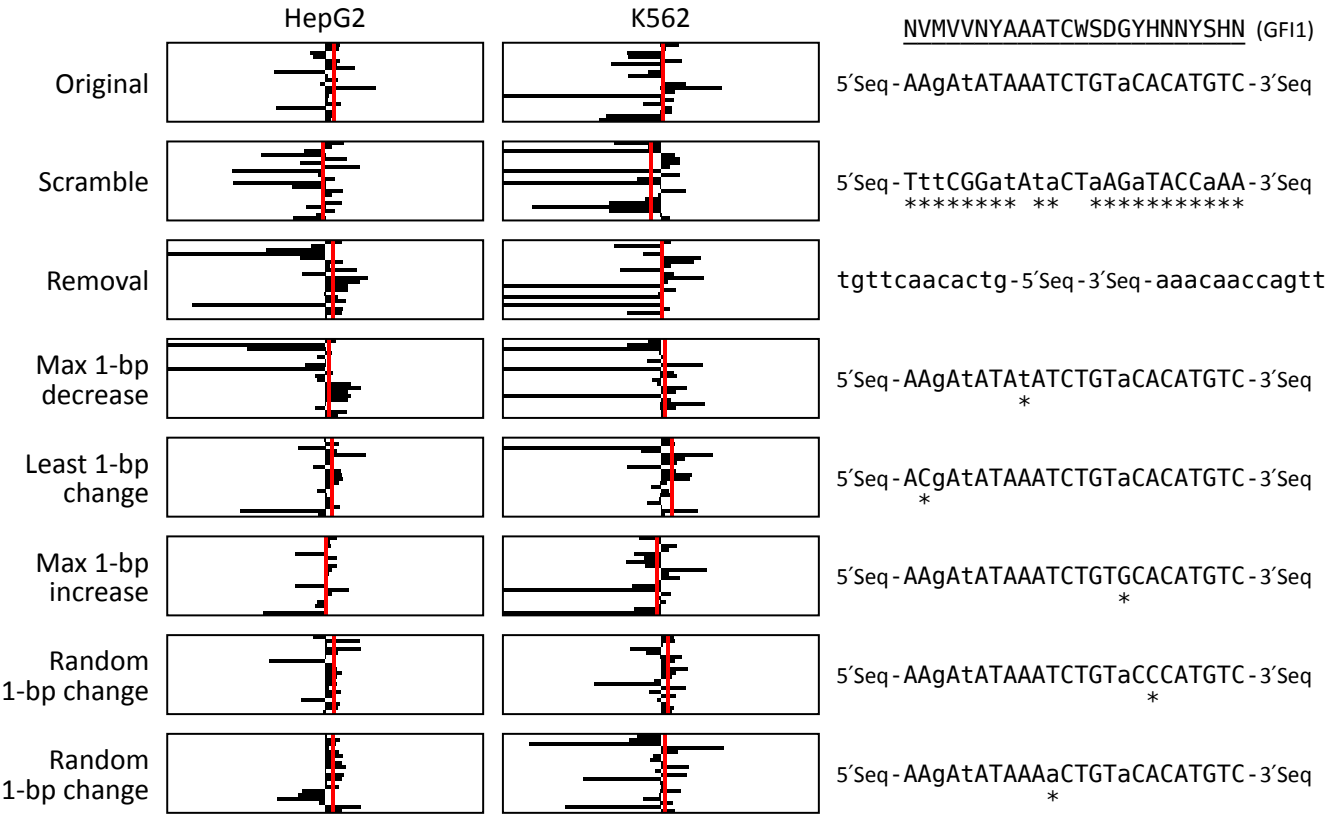
975 GFI1 in HepG2 enhancer

chr20 5764805 5764828 - (hg18)





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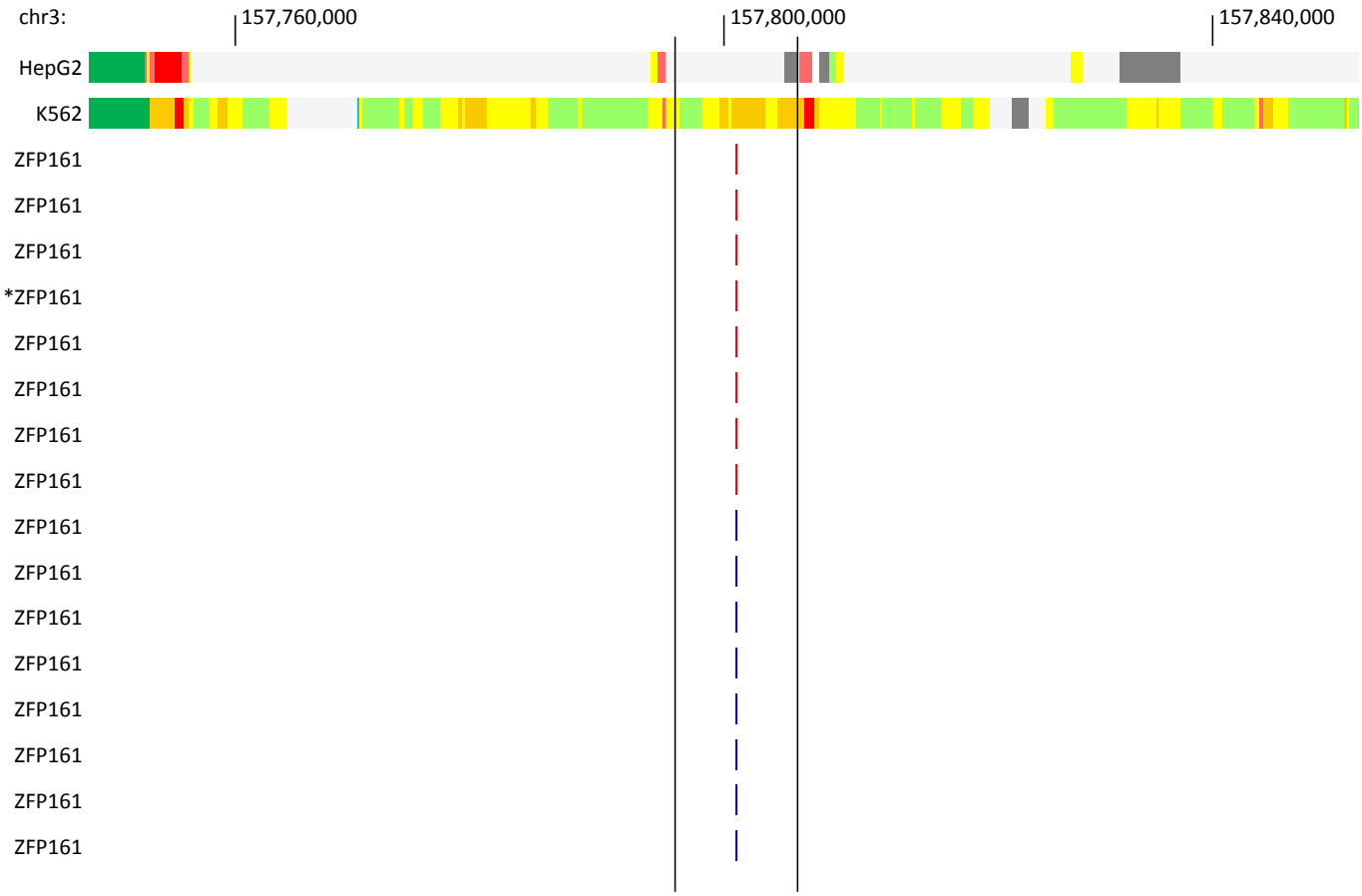
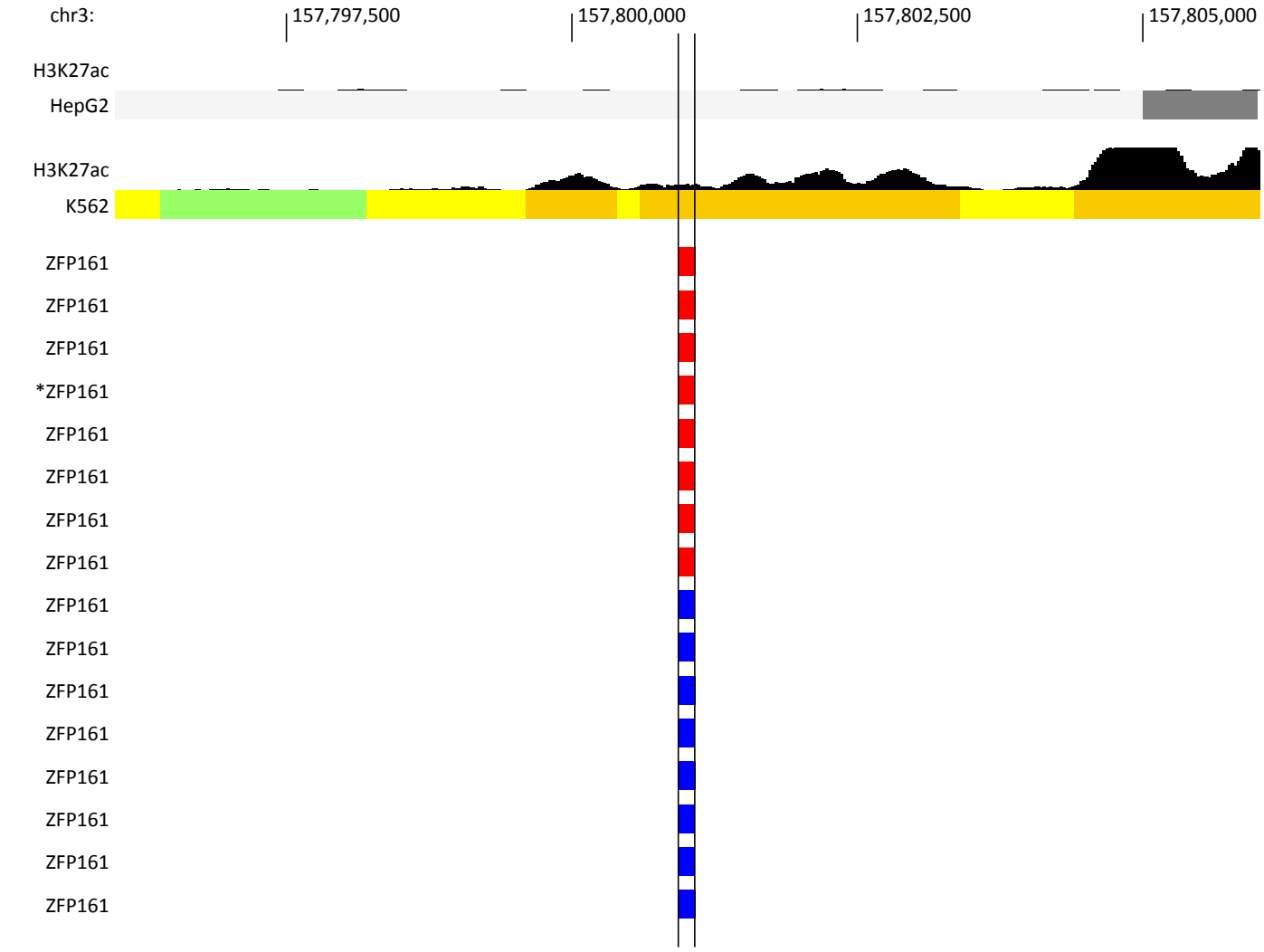
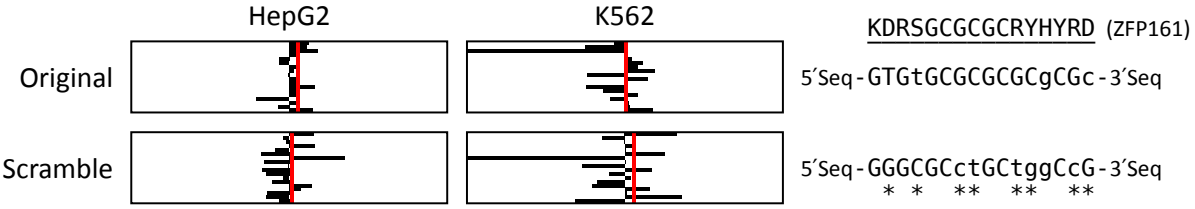
3′Seq = tcagctcaaccaaaggaagcagctcatgttgttgaaaaaaatcaaaagcttaaaaaaaaa

976 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr3 157800997 157801012 + (hg18)







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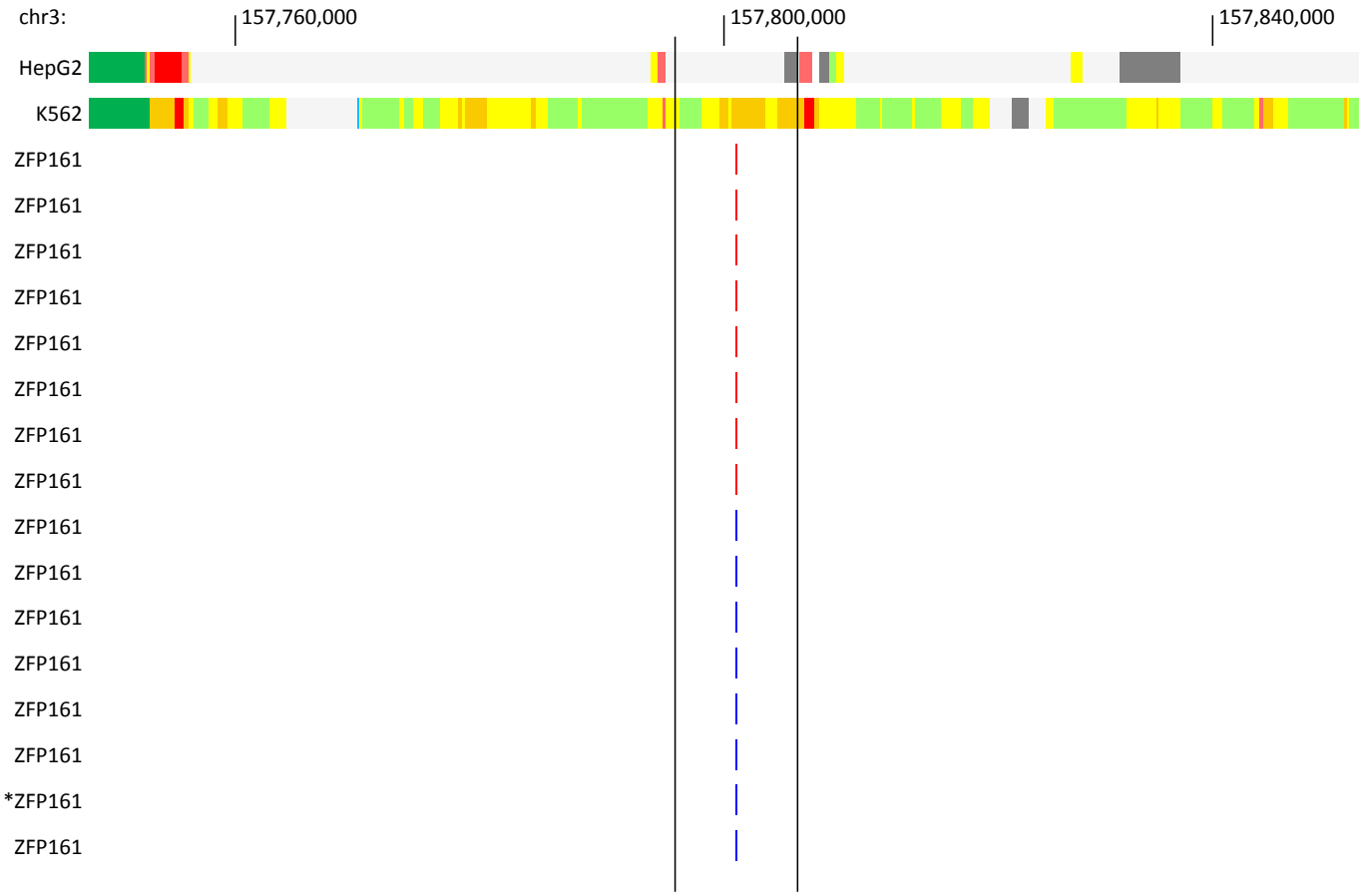
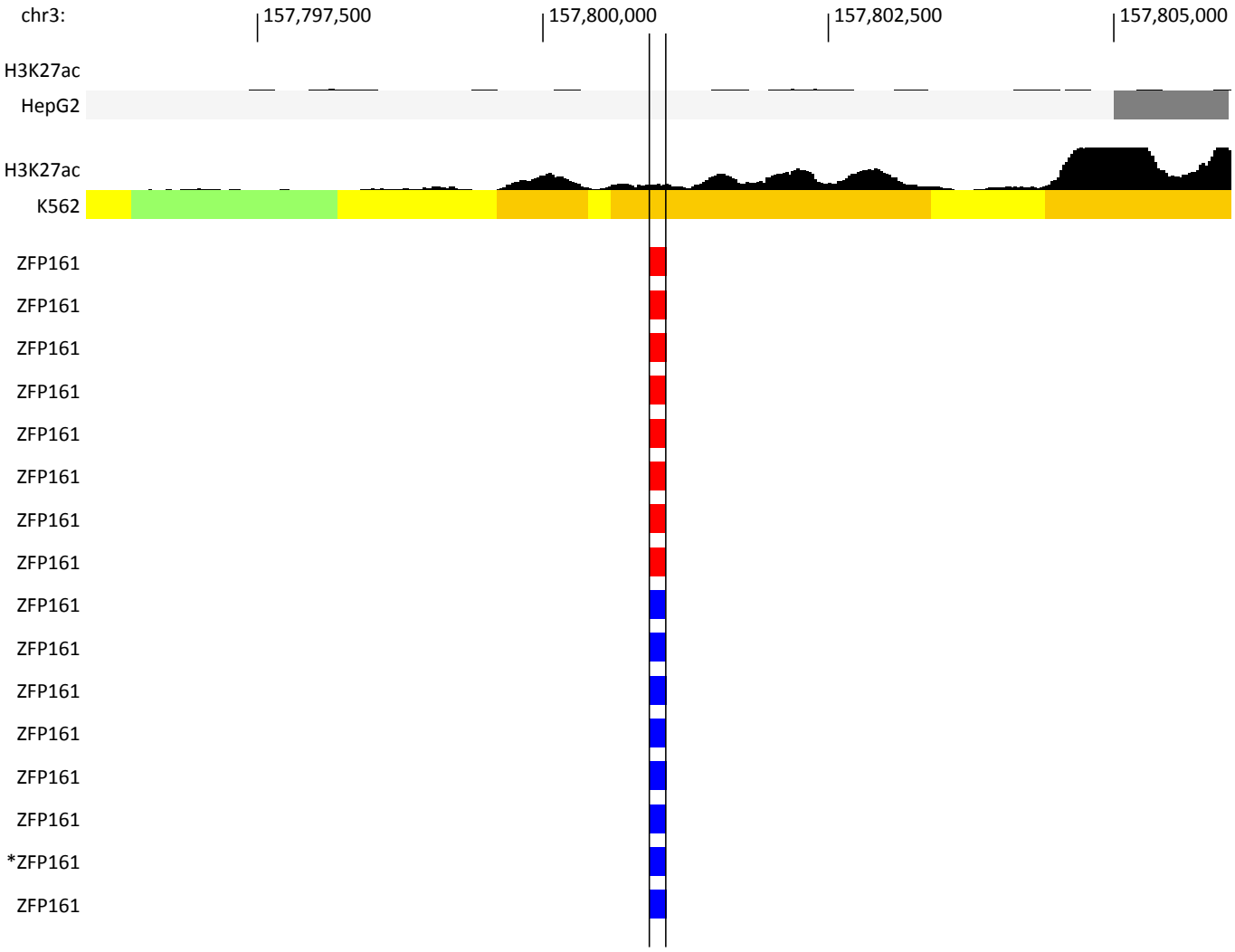
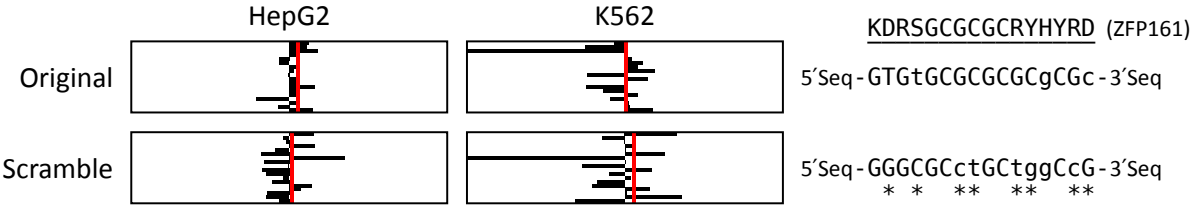
977 ZFP161 in K562 enhancer

chr3 157800997 157801012 + (hg18)







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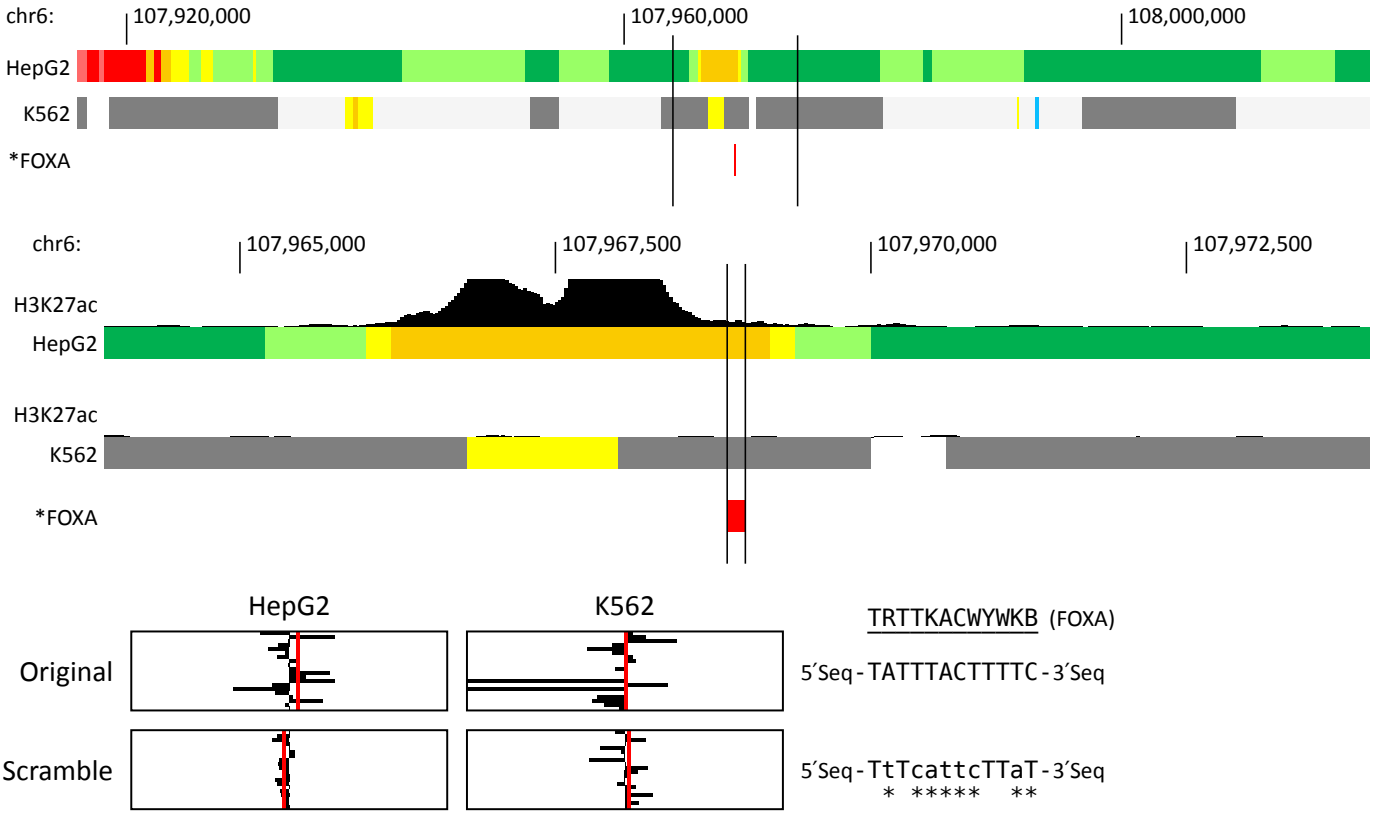
978 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr6 107968928 107968939 - (hg18)



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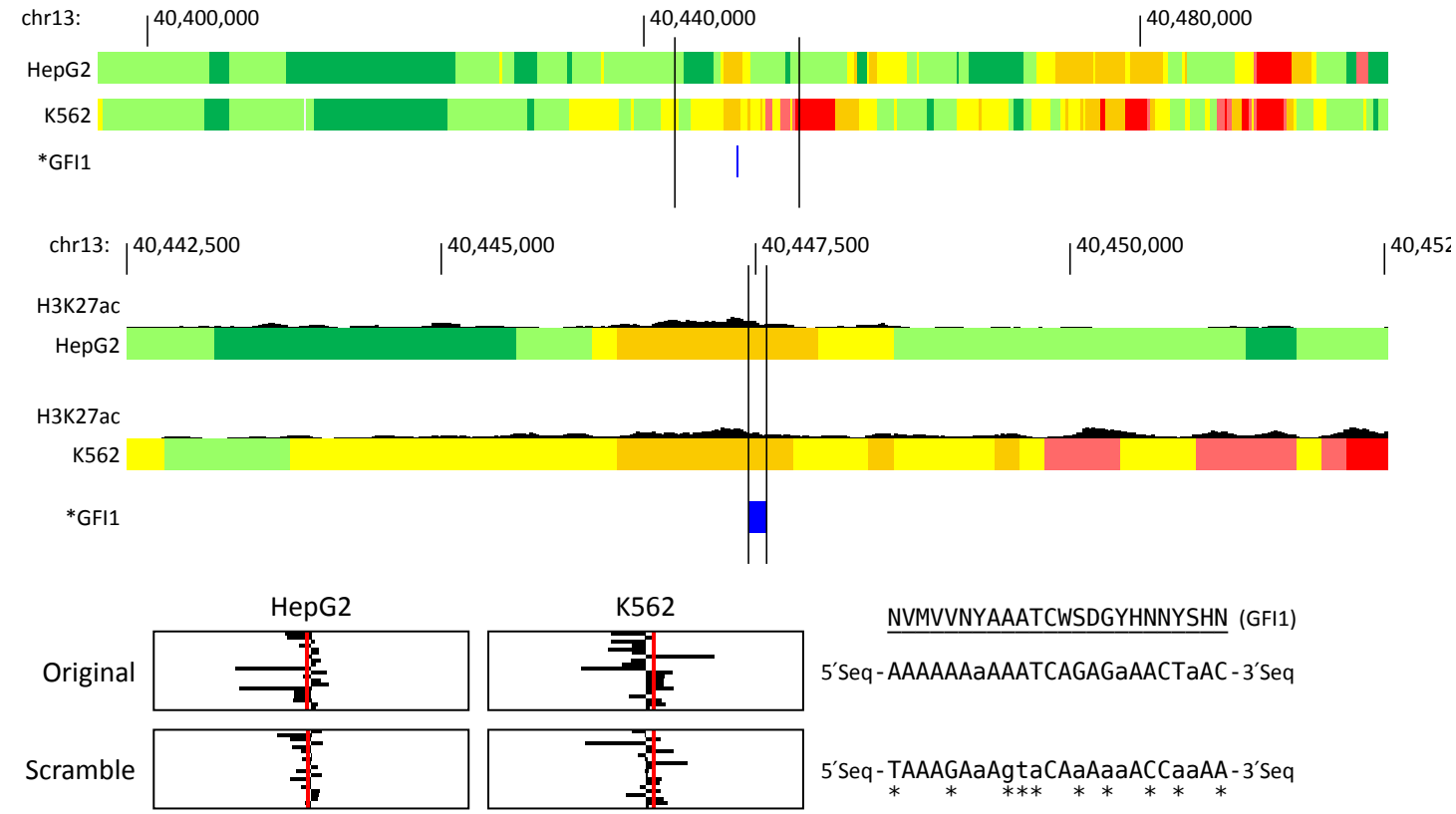
979 GFI1 in HepG2 enhancer

chr13 40447504 40447527 - (hg18)



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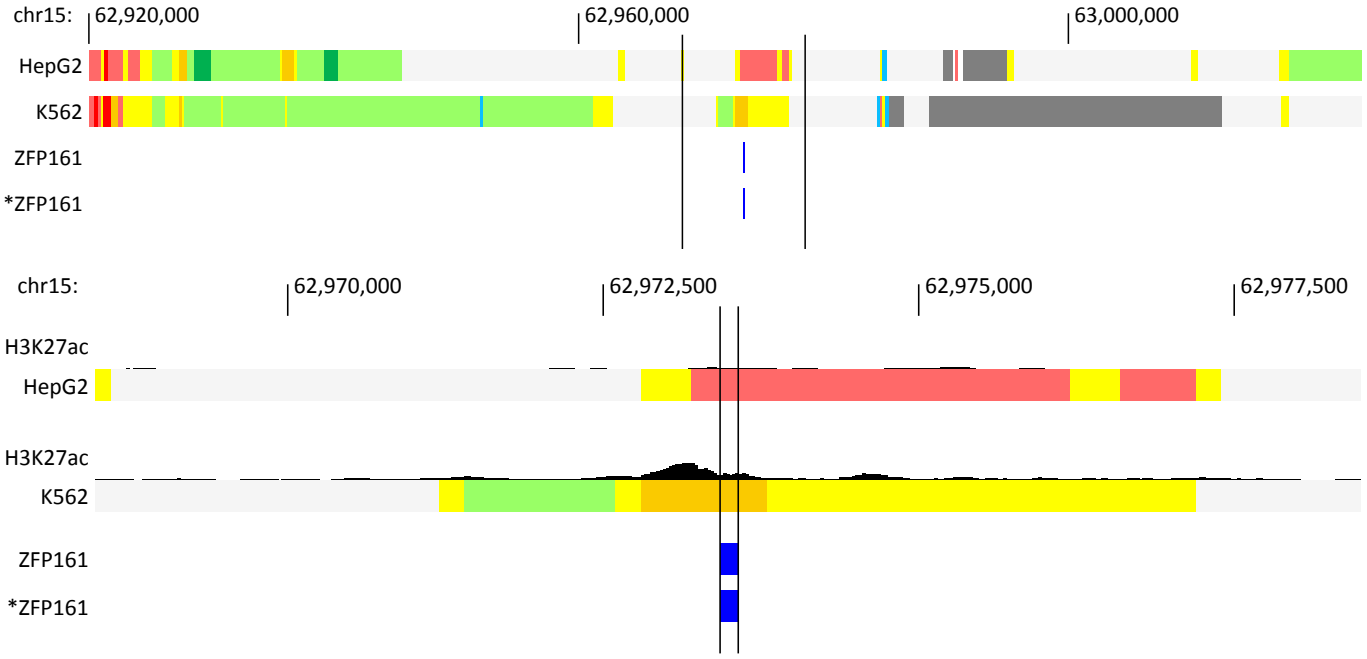
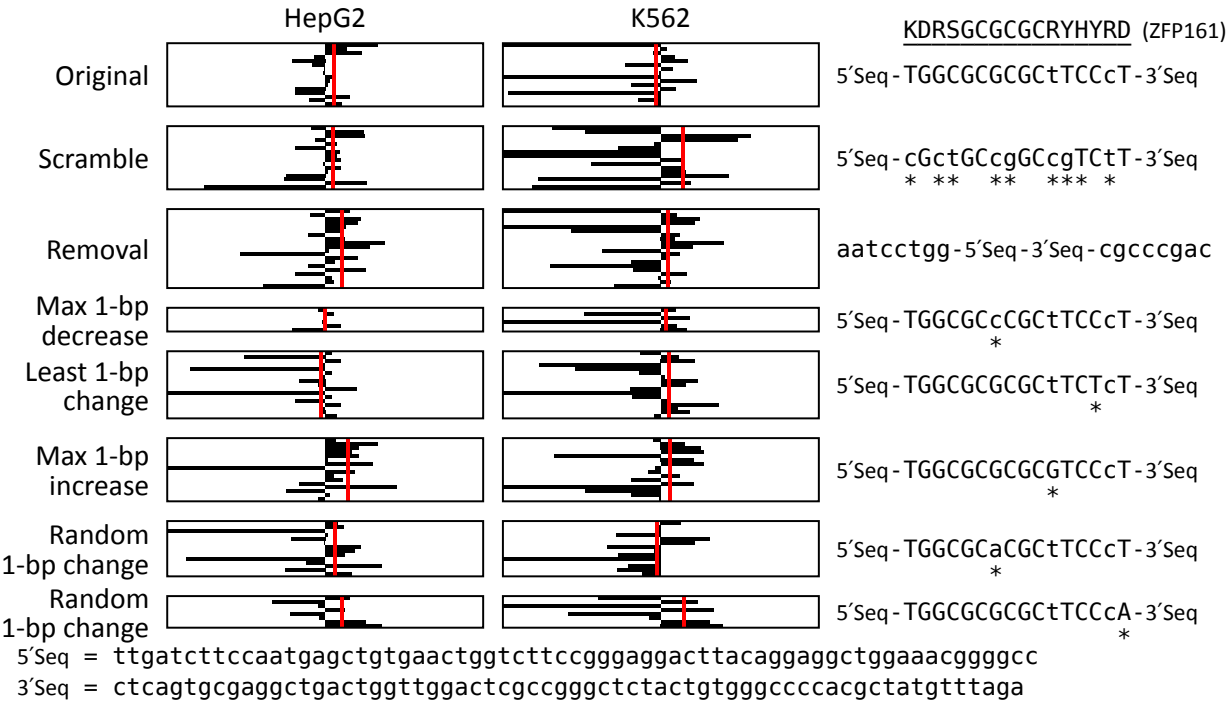
980 ZFP161 in K562 enhancer

chr15 62973491 62973506 + (hg18)





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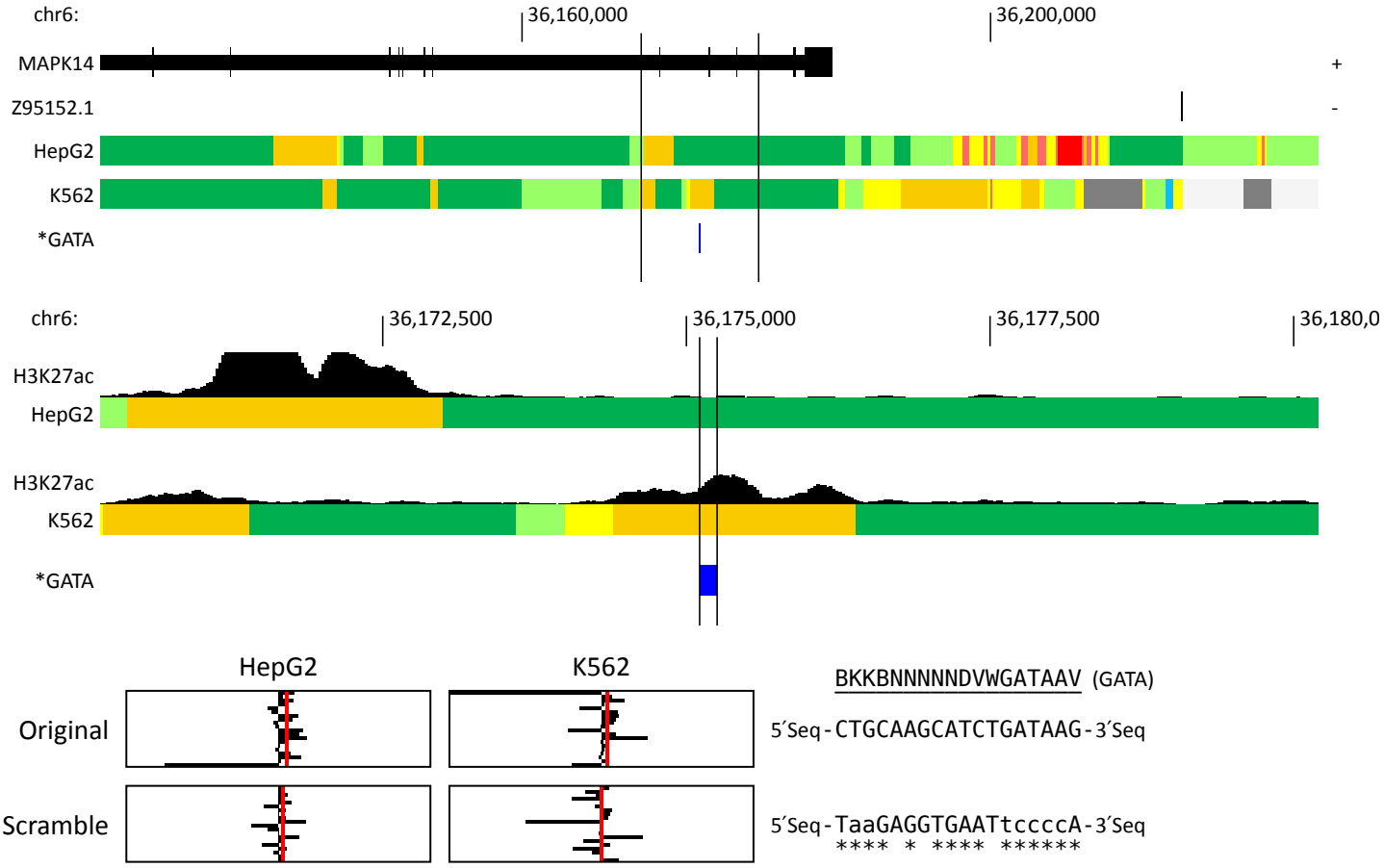
981 GATA in K562 enhancer

chr6 36175173 36175190 - (hg18)



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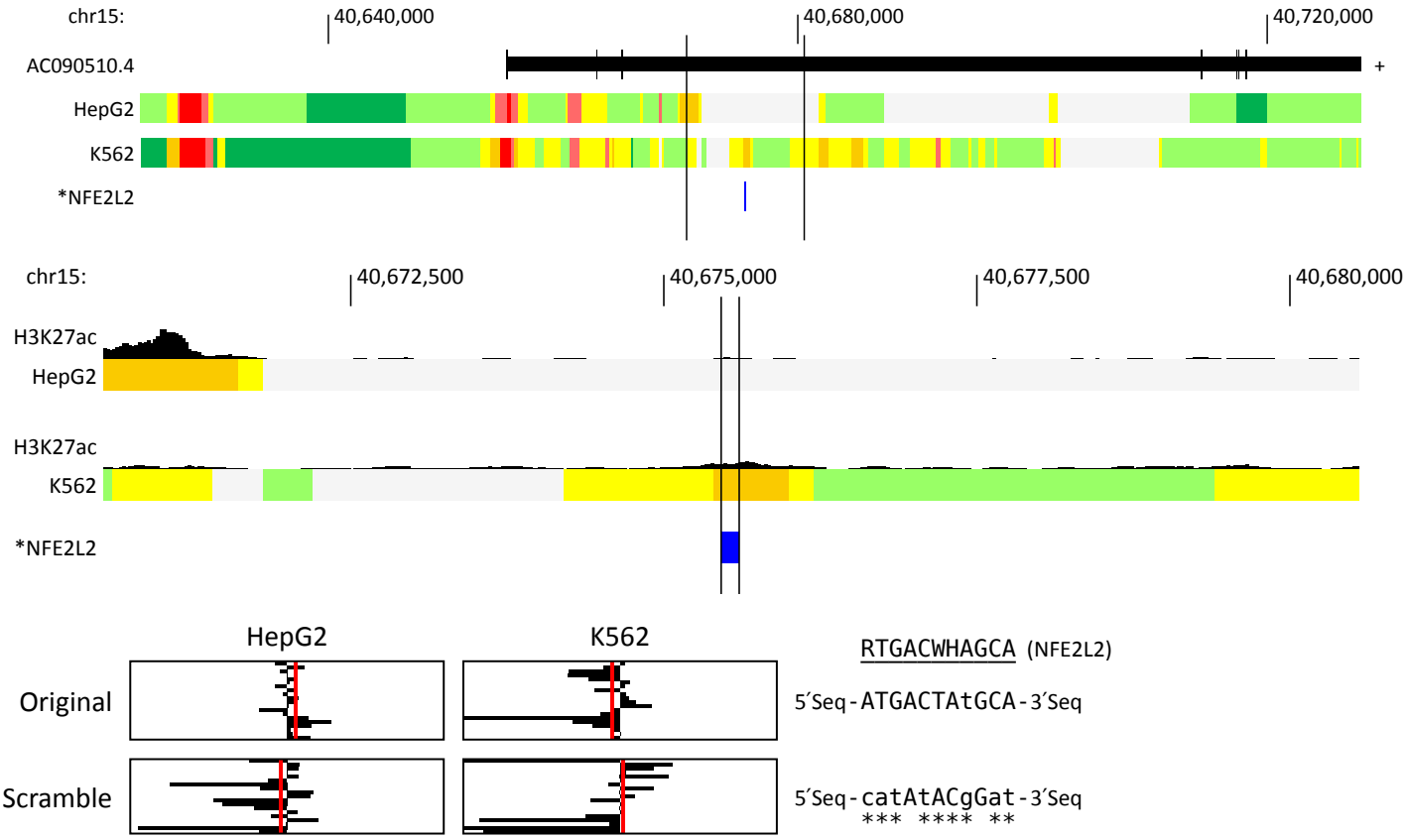
982 NFE2L2 in K562 enhancer

chr15 40675525 40675535 + (hg18)



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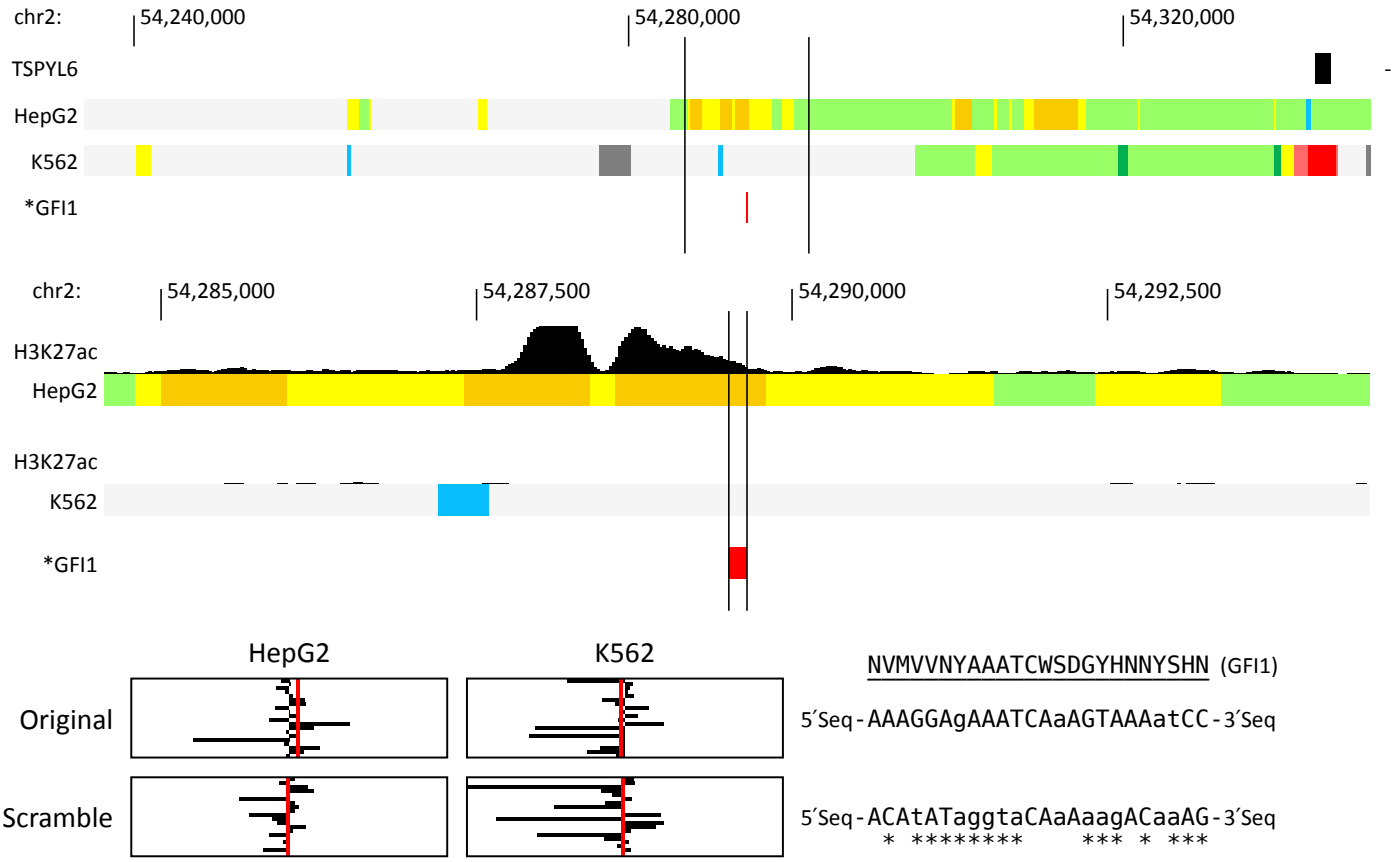
983 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 54289560 54289583 - (hg18)



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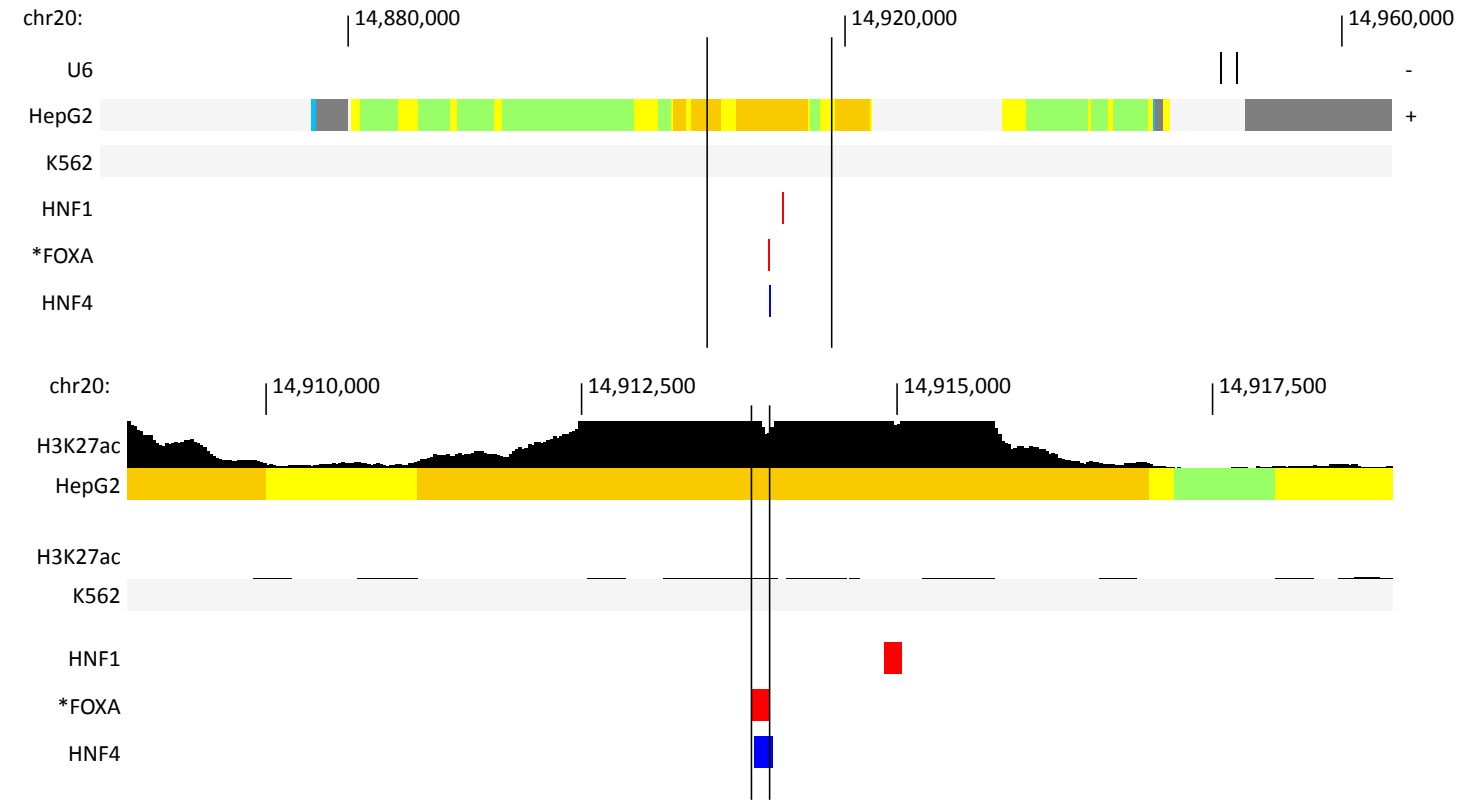
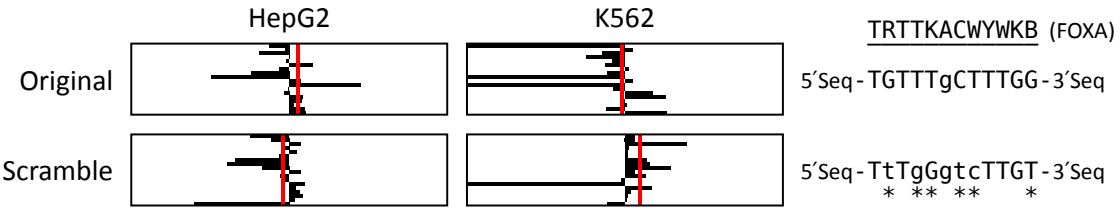
984 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 14913913 14913924 - (hg18)





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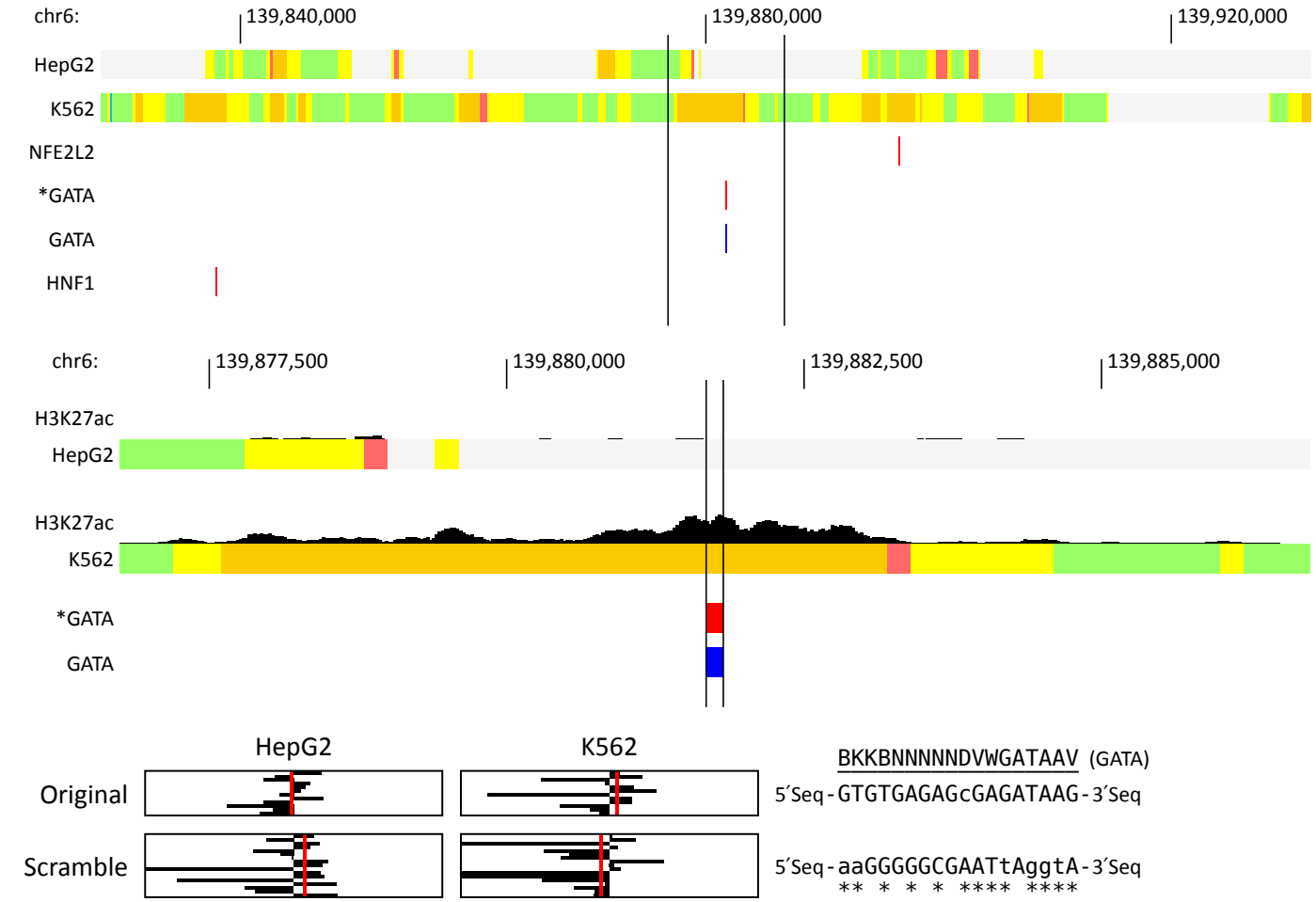
985 GATA in K562 enhancer (conserved at 60% confidence)

chr6 139881741 139881758 - (hg18)



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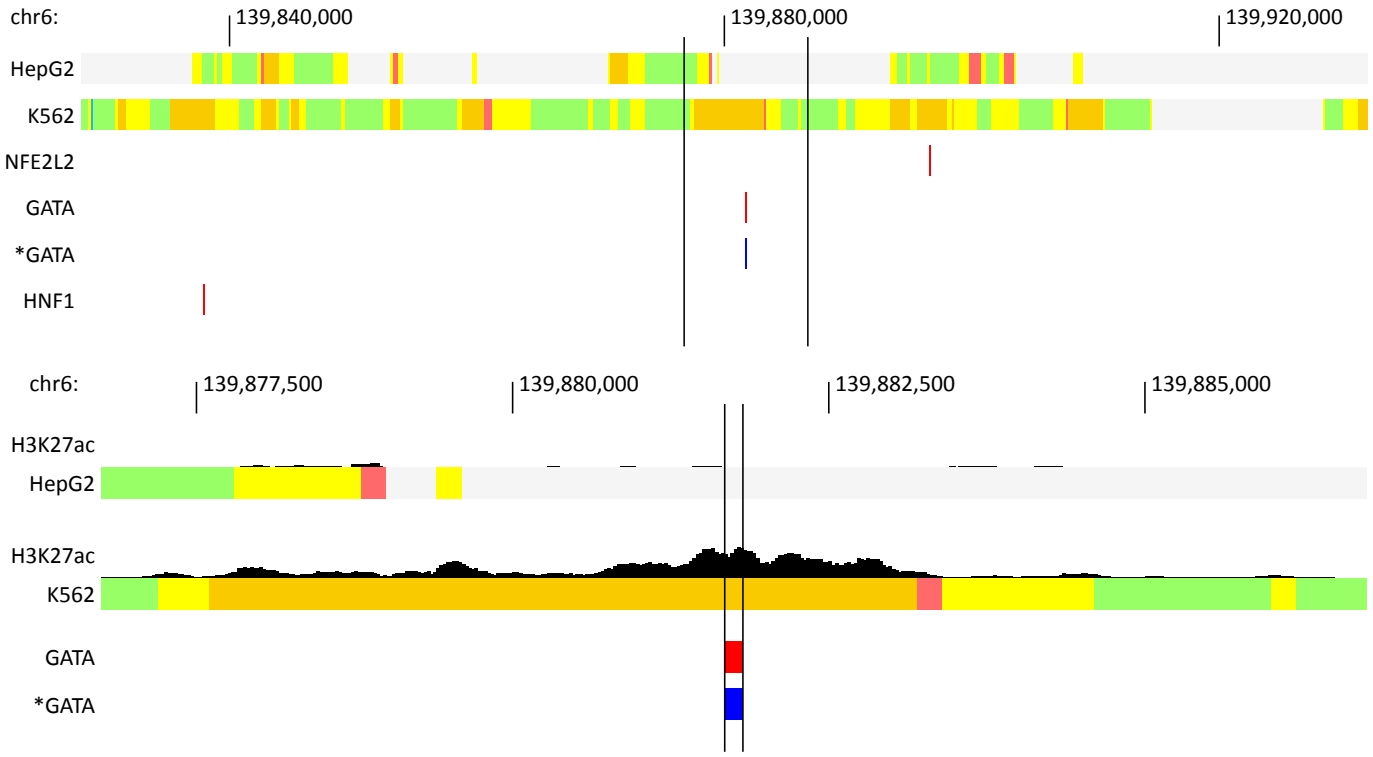
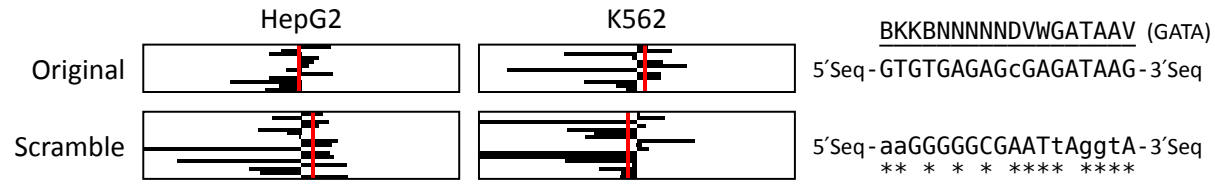
986 GATA in K562 enhancer

chr6 139881741 139881758 - (hg18)





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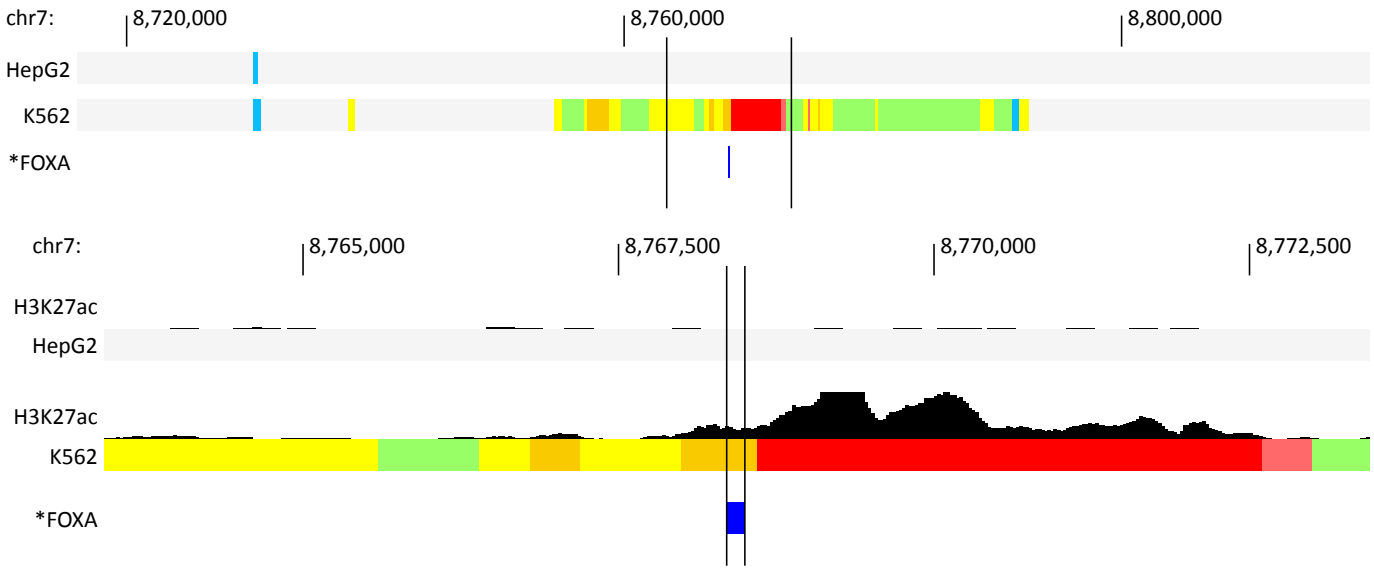
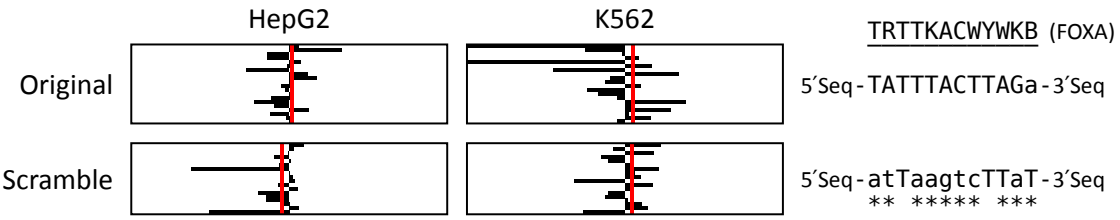
987 FOXA in K562 enhancer

chr7 8768424 8768435 + (hg18)





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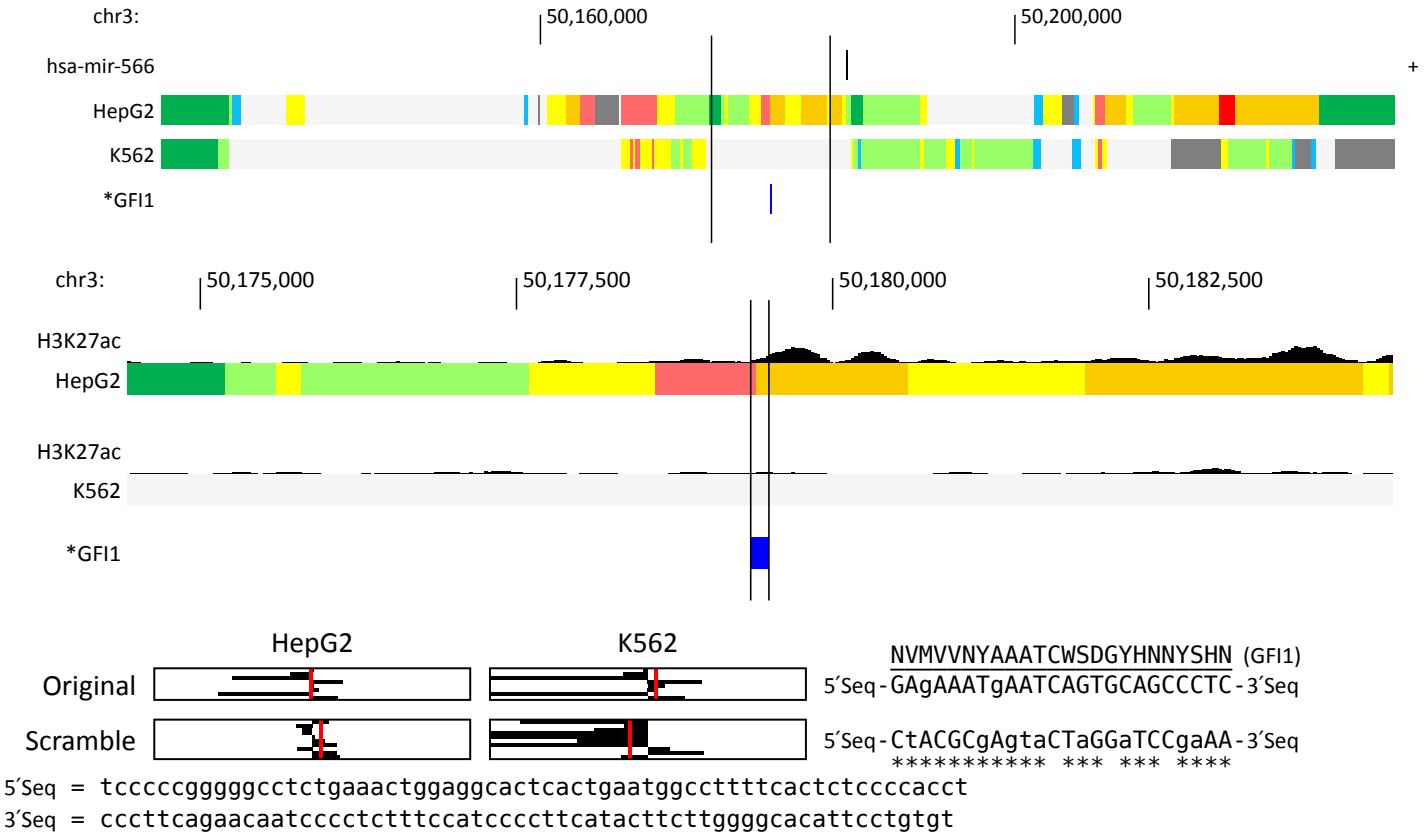
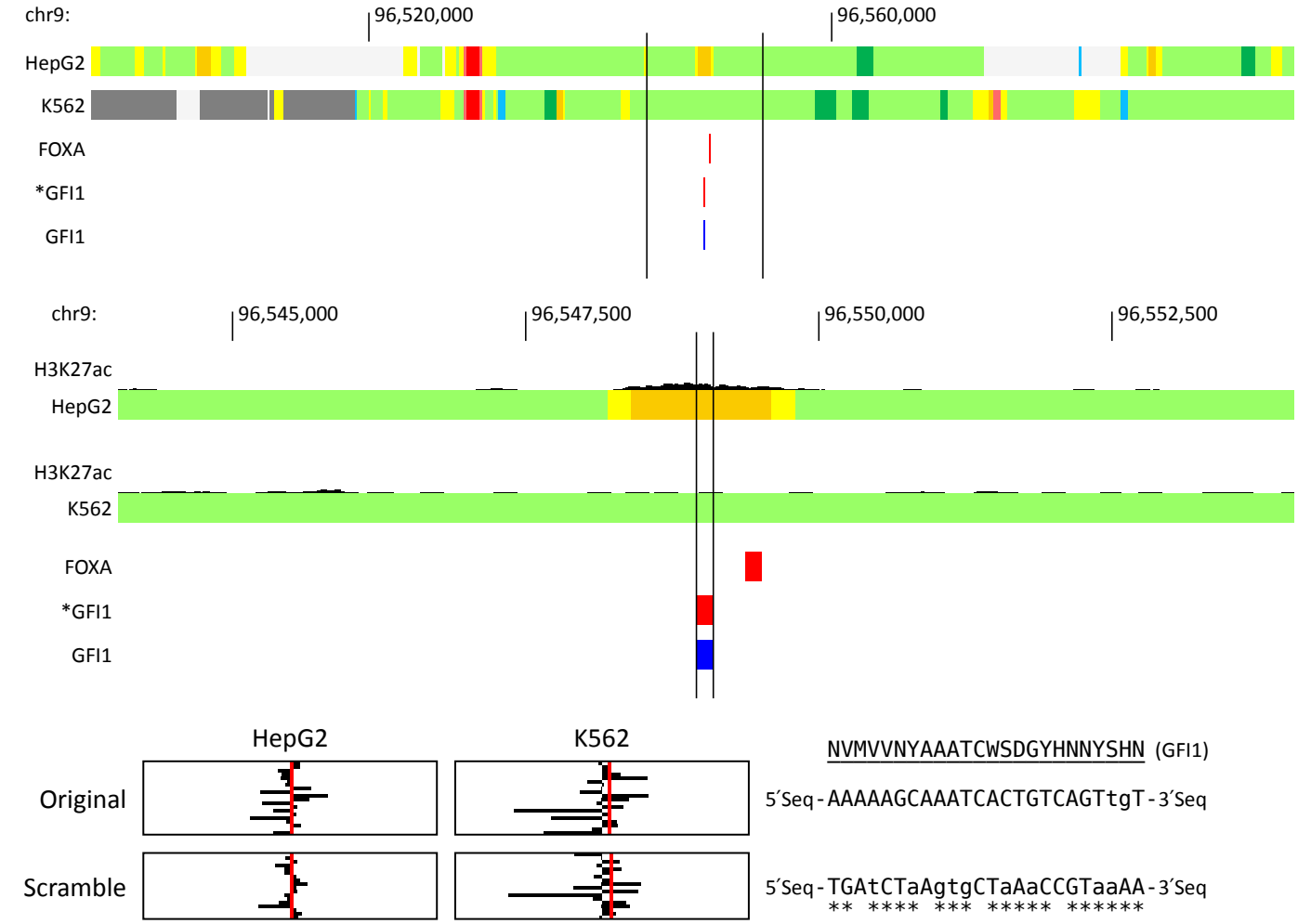
988 GFI1 in HepG2 enhancer

chr3 50179413 50179436 + (hg18)



989 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr9 96549017 96549040 - (hg18)



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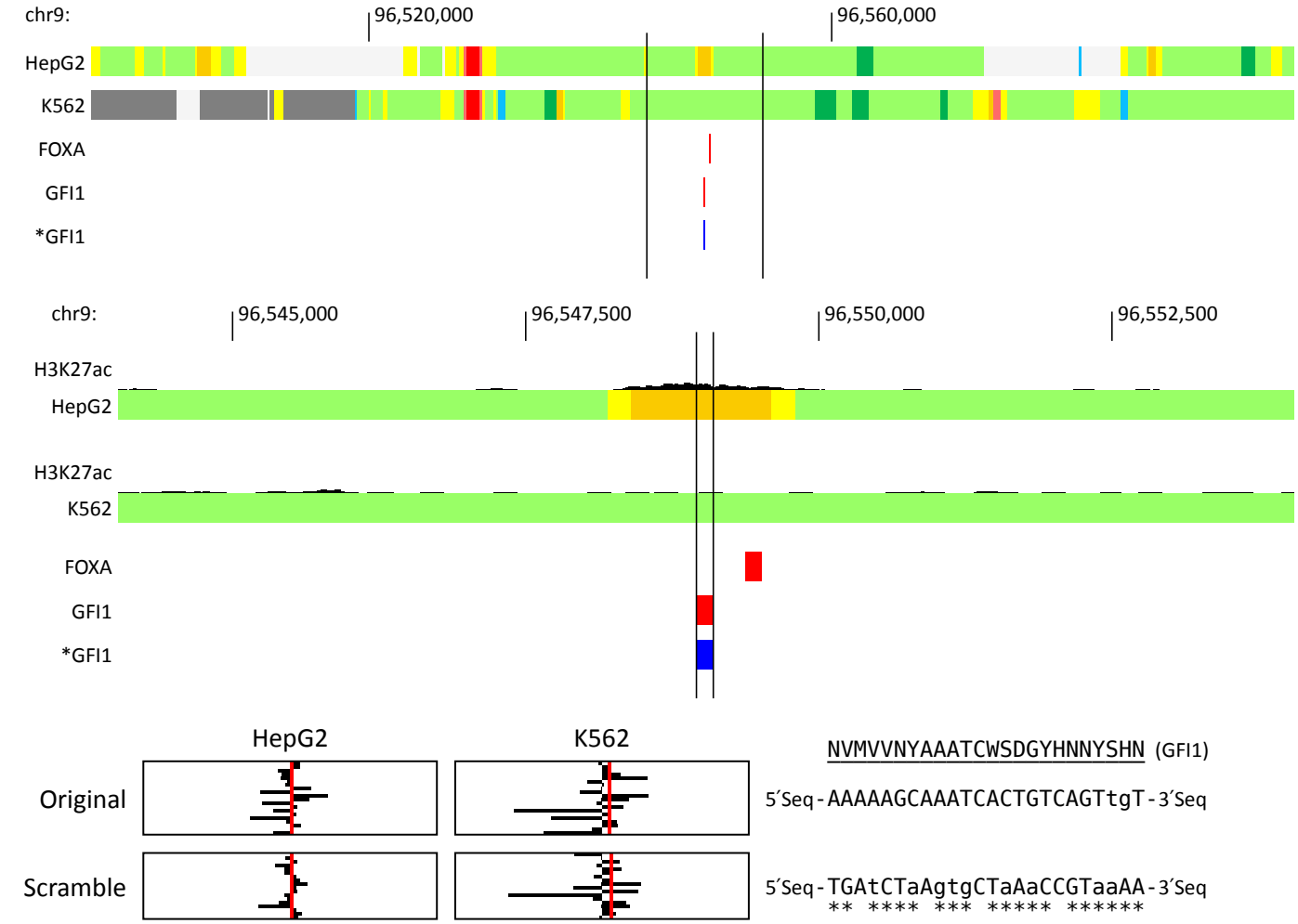
990 GFI1 in HepG2 enhancer

chr9 96549017 96549040 - (hg18)



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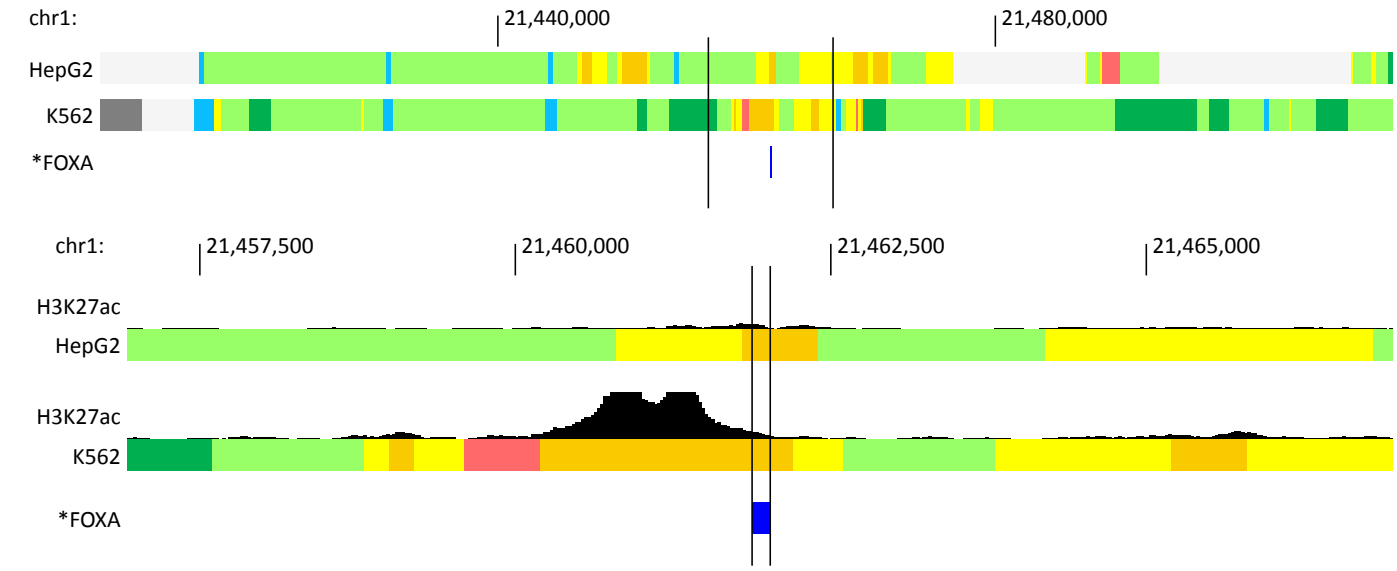
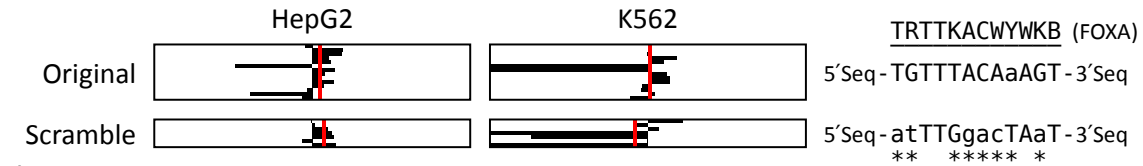
991 FOXA in K562 enhancer

chr1 21461943 21461954 + (hg18)





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5′Seq-atTTGgacTAaT-3′Seq

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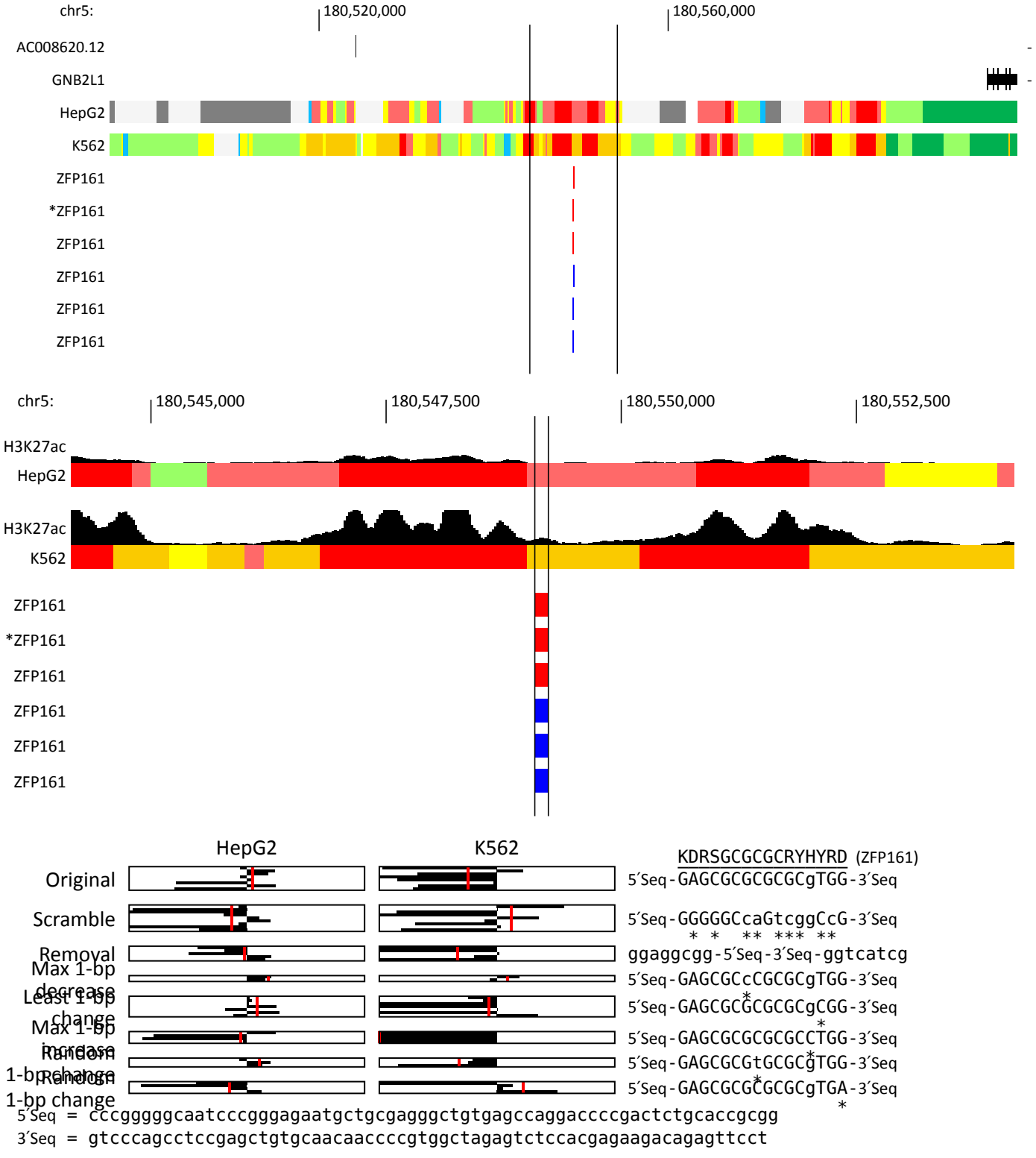
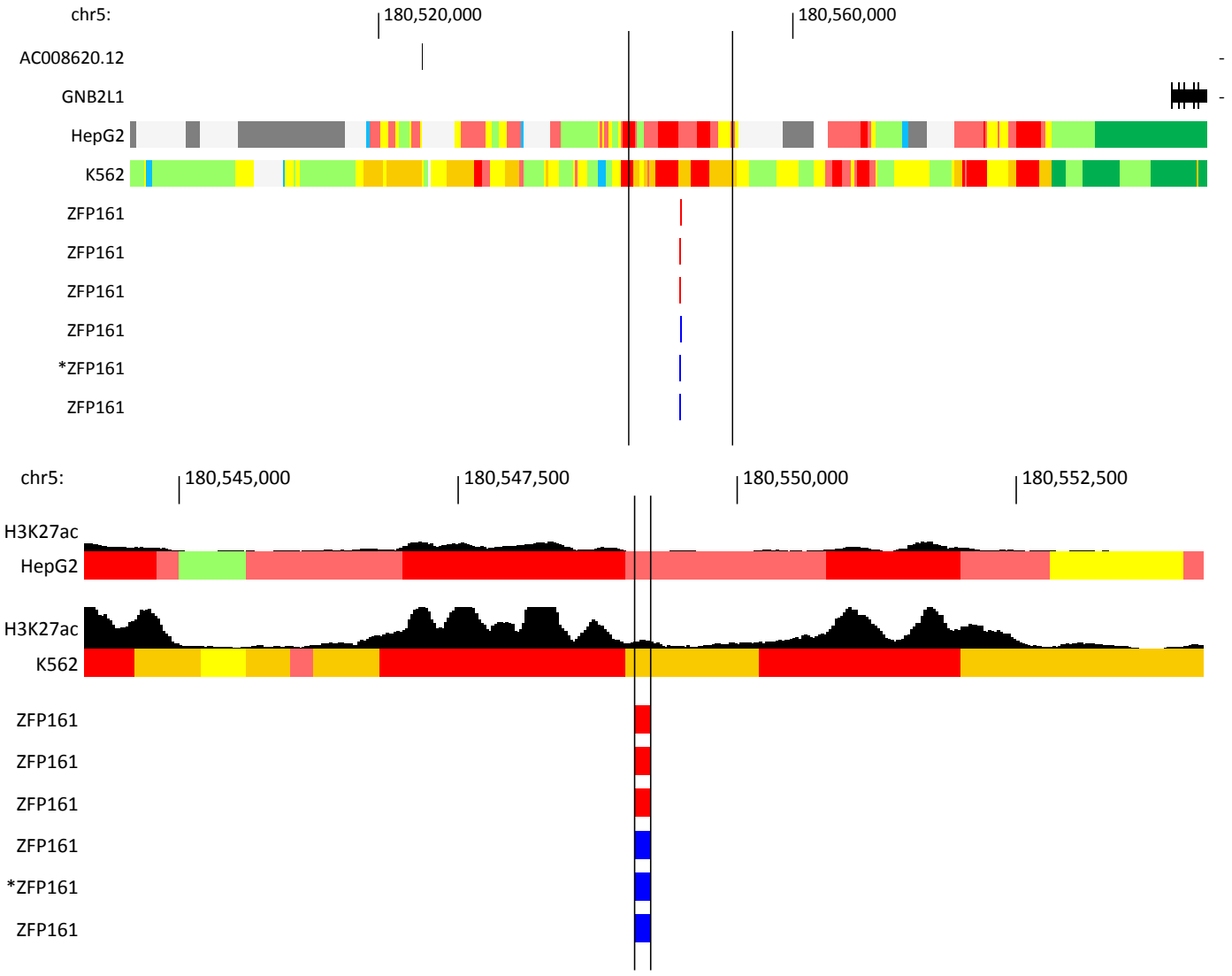
992 ZFP161 in K562 enhancer (conserved at 40% confidence)

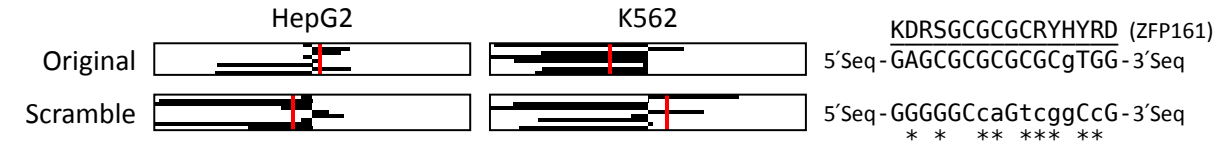
chr5 180549146 180549161 - (hg18)



993 ZFP161 in K562 enhancer

chr5 180549146 180549161 - (hg18)





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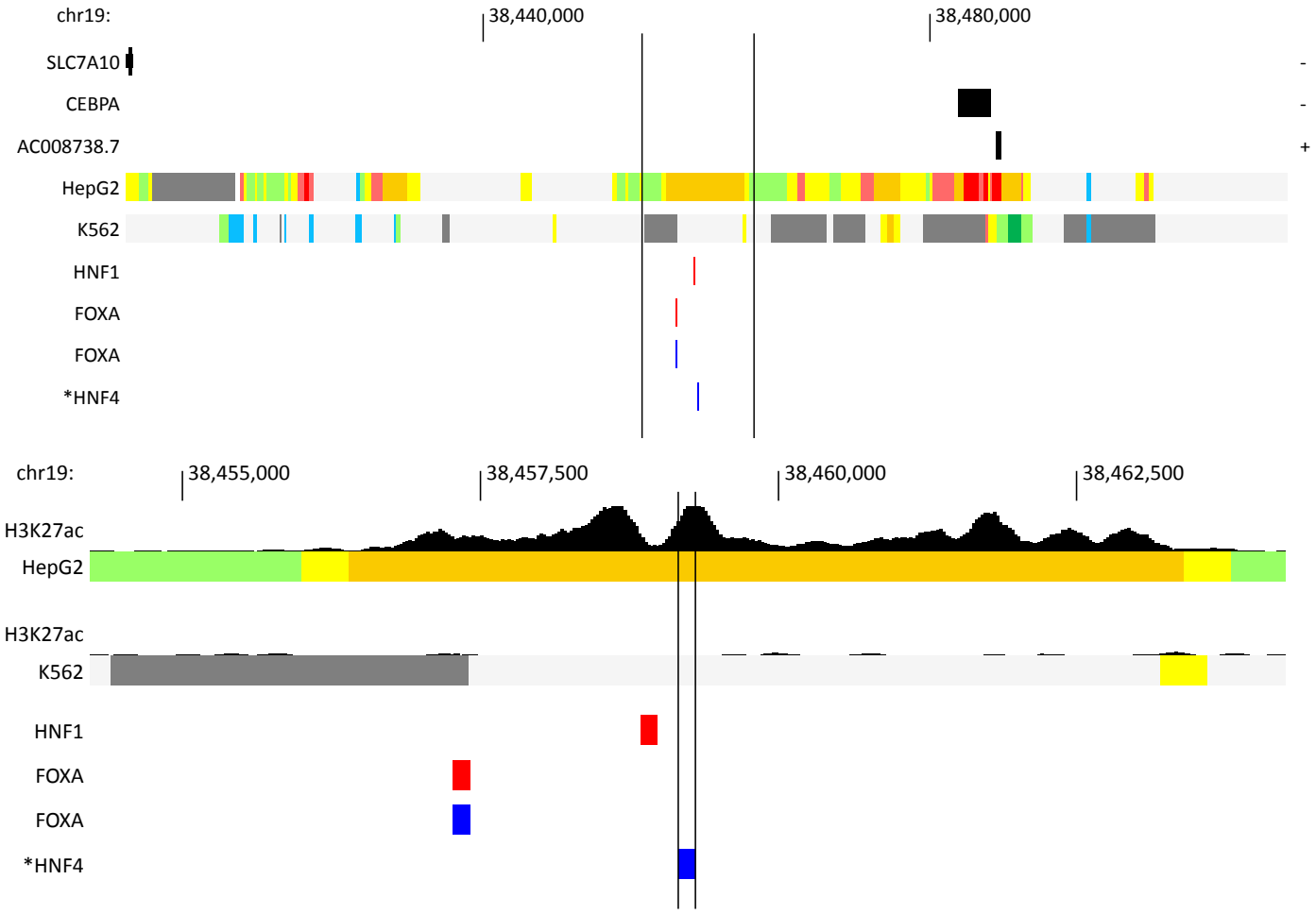
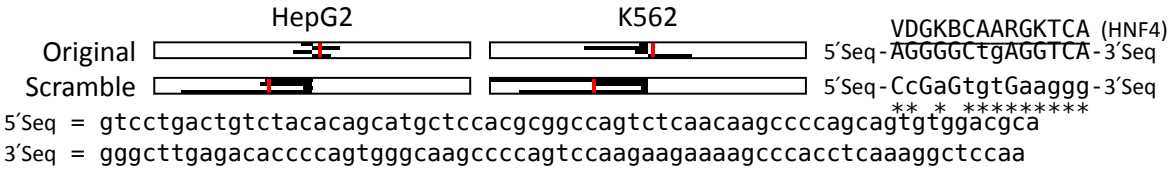
994 HNF4 in HepG2 enhancer

chr19 38459225 38459238 - (hg18)





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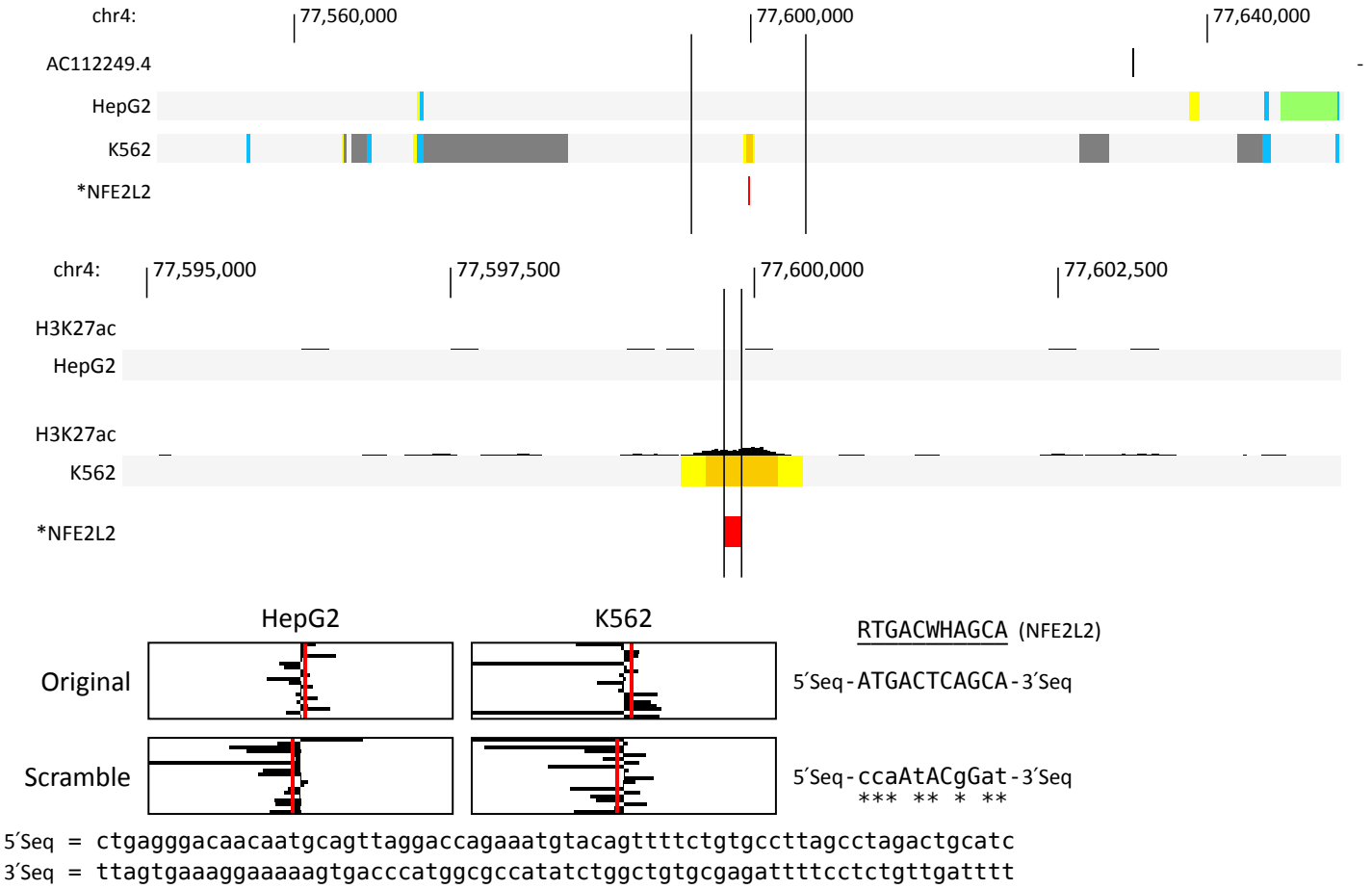
3′Seq = gggcttgagacaccccagtgggcaagccccagtccaagaagaaaagcccacctcaaaggctccaa

995 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr4 77599818 77599828 - (hg18)



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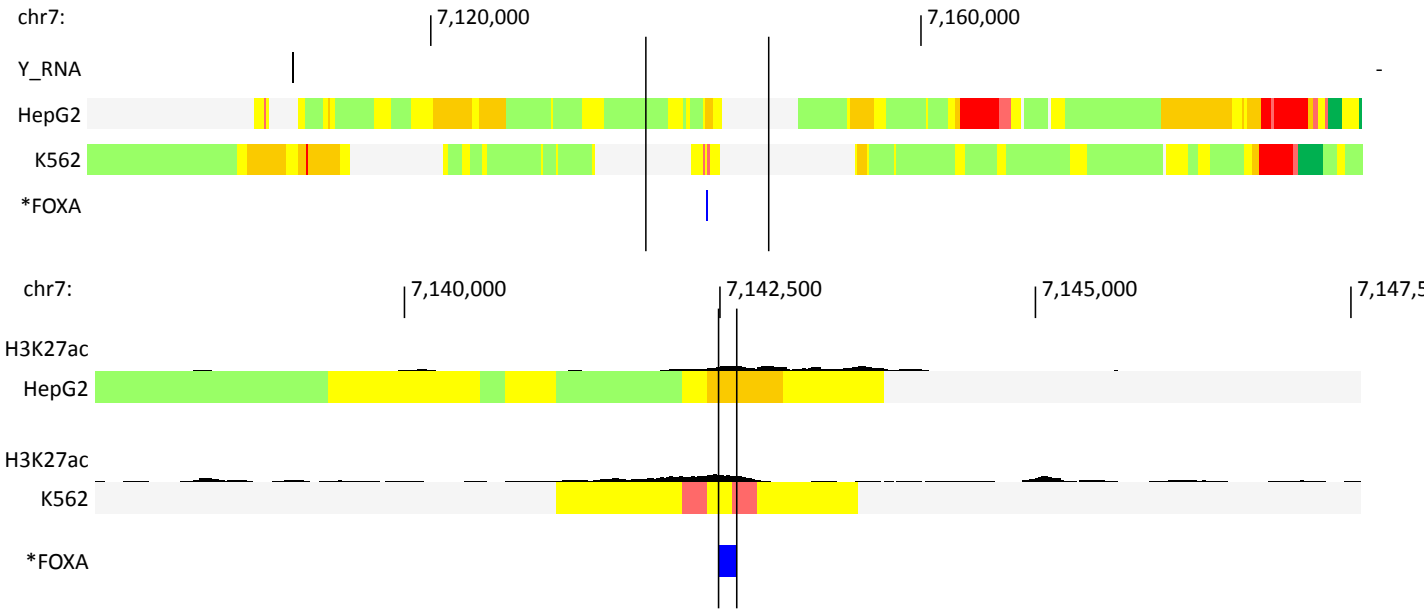
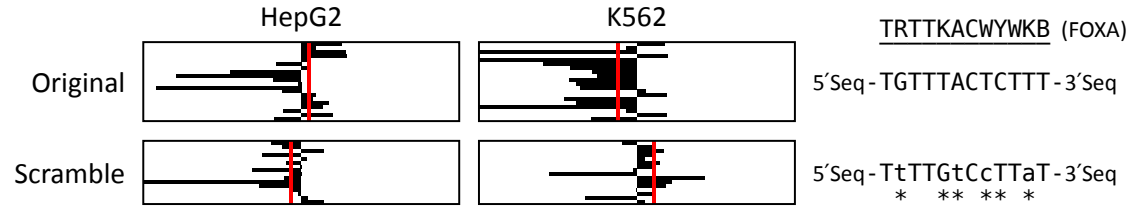
996 FOXA in HepG2 enhancer

chr7 7142556 7142567 - (hg18)





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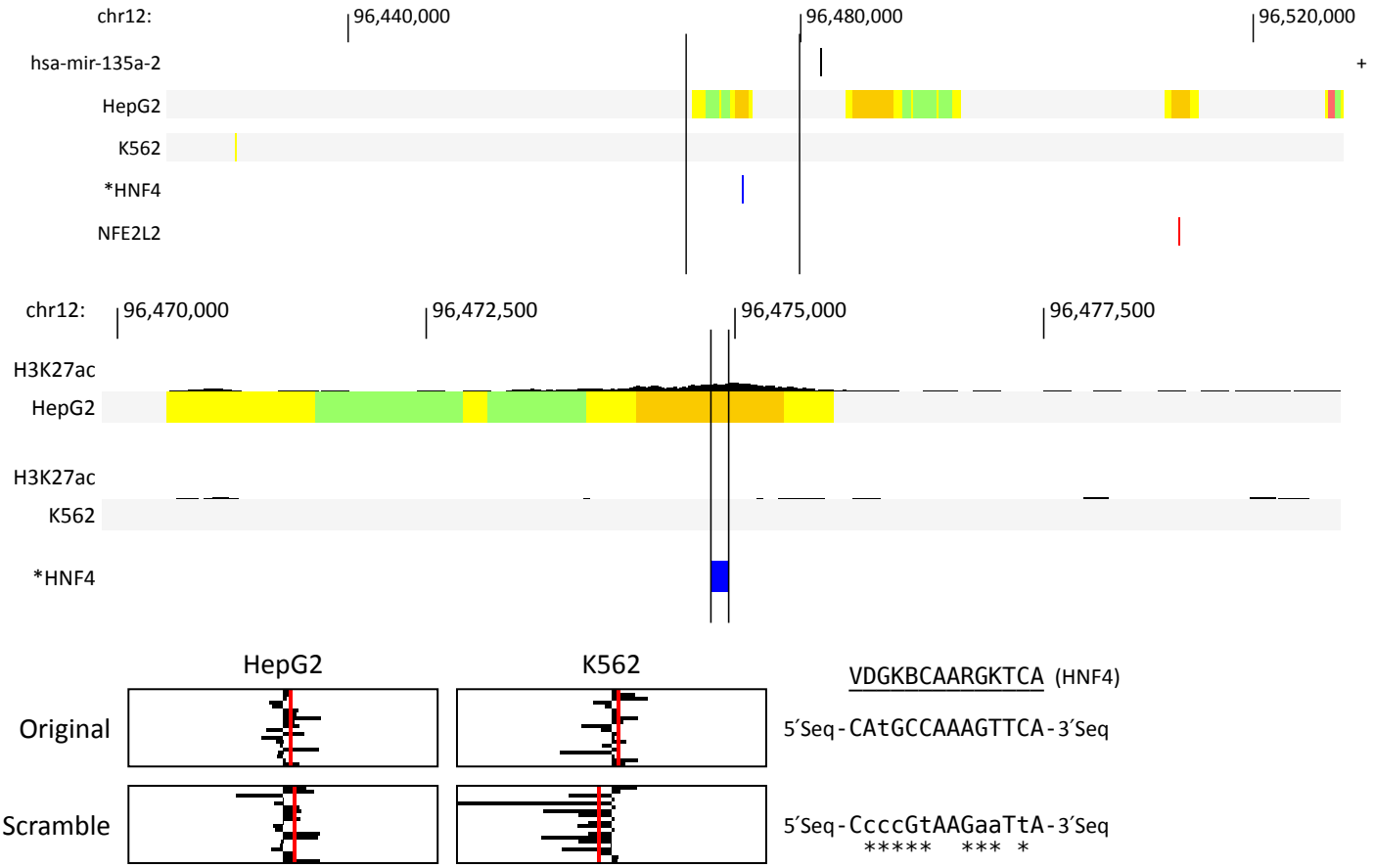
997 HNF4 in HepG2 enhancer

chr12 96474871 96474884 + (hg18)



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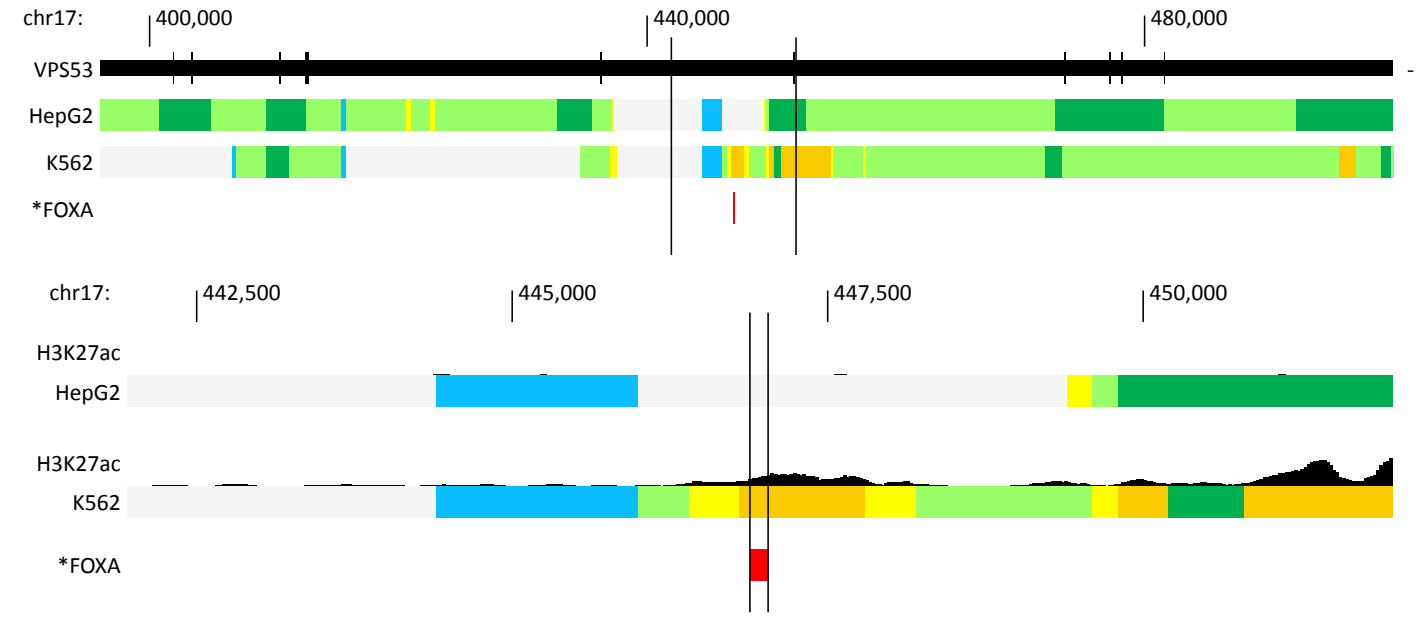
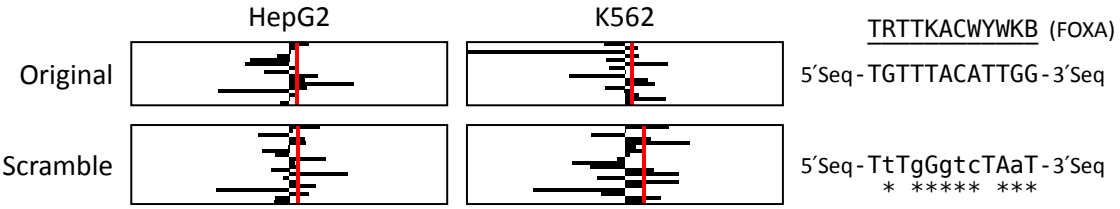
998 FOXA in K562 enhancer (conserved at 50% confidence)

chr17 446951 446962 - (hg18)





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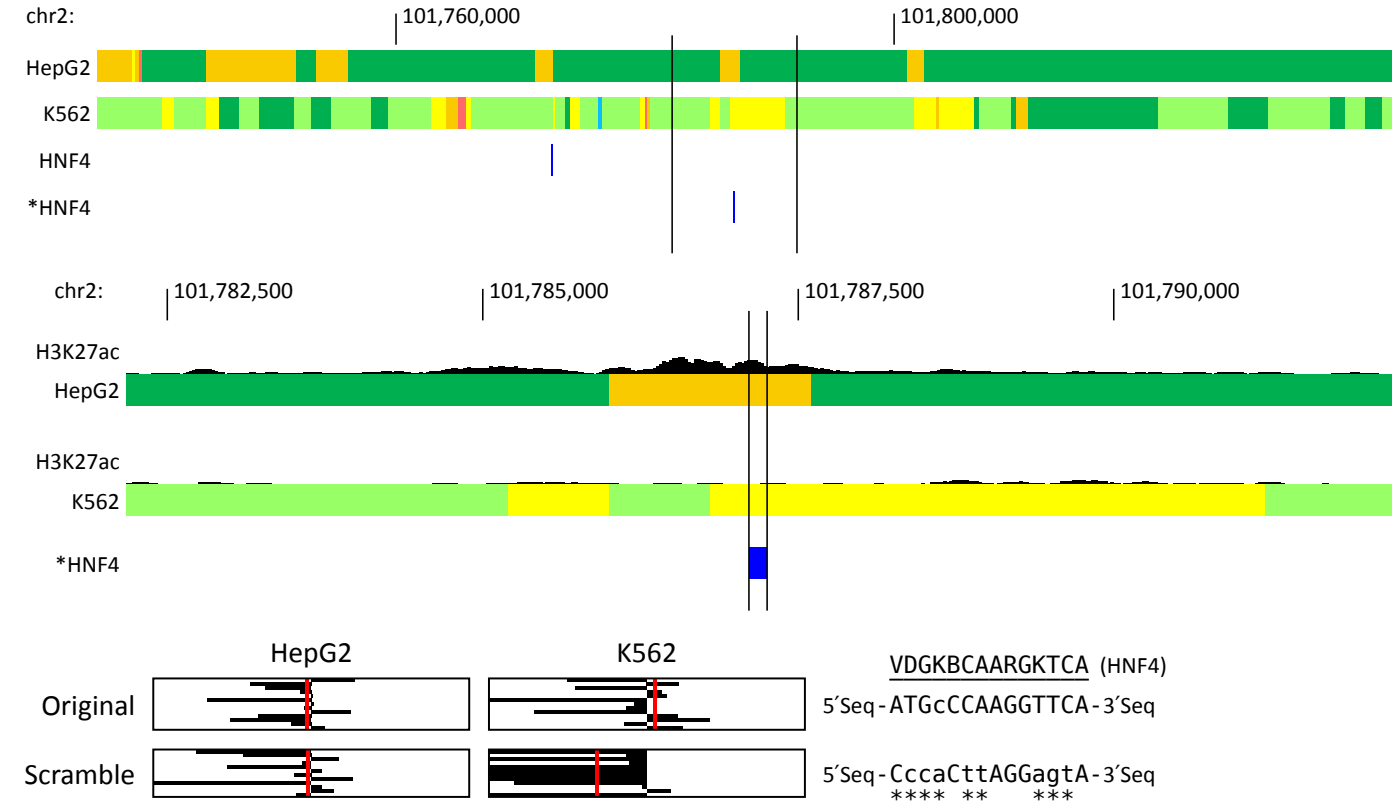
999 HNF4 in HepG2 enhancer

chr2 101787175 101787188 - (hg18)



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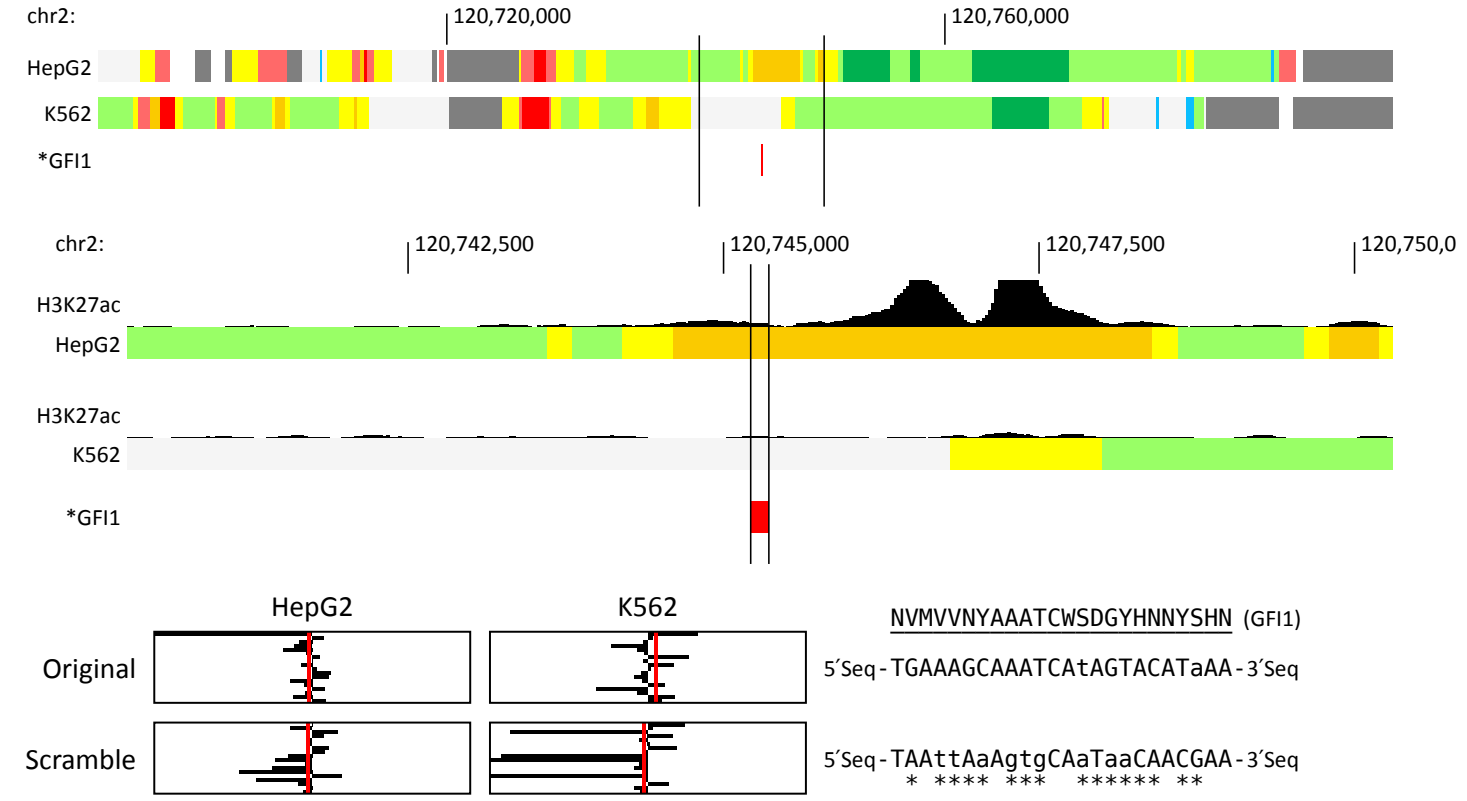
1000 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 120745276 120745299 - (hg18)



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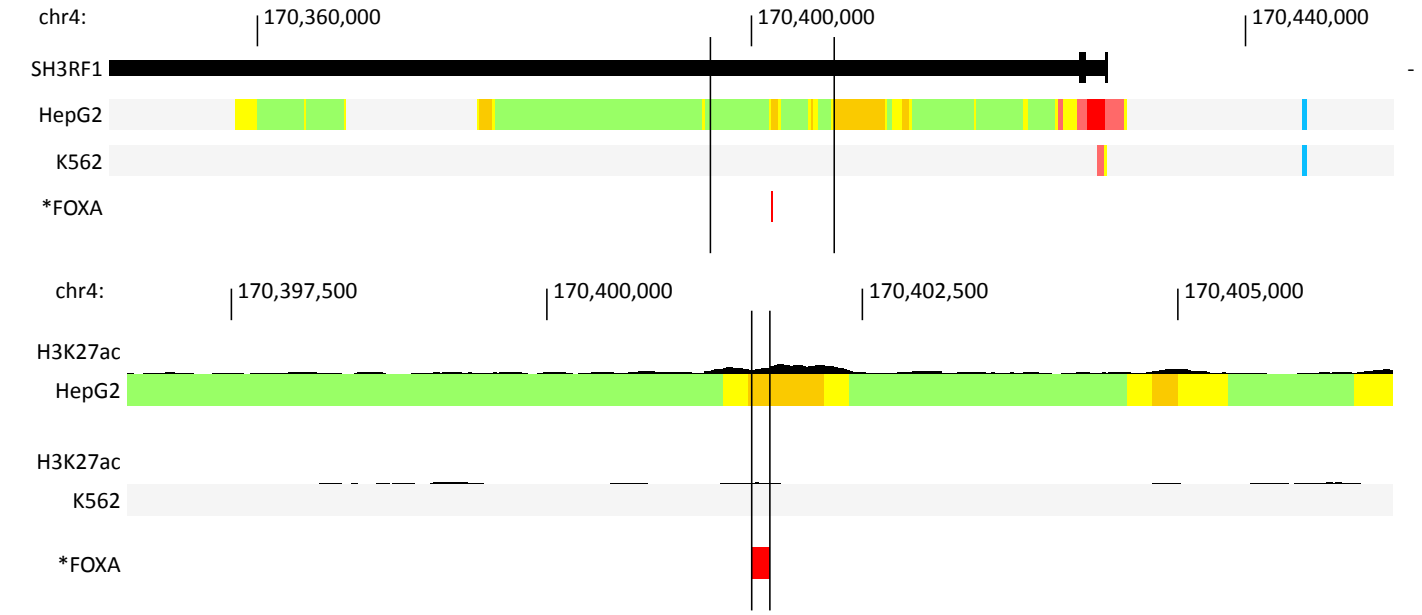
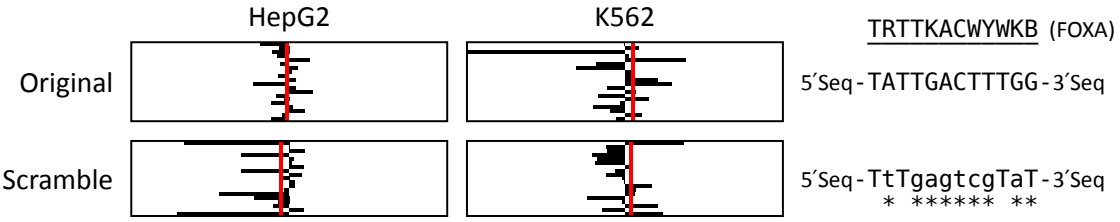
1001 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr4 170401690 170401701 - (hg18)





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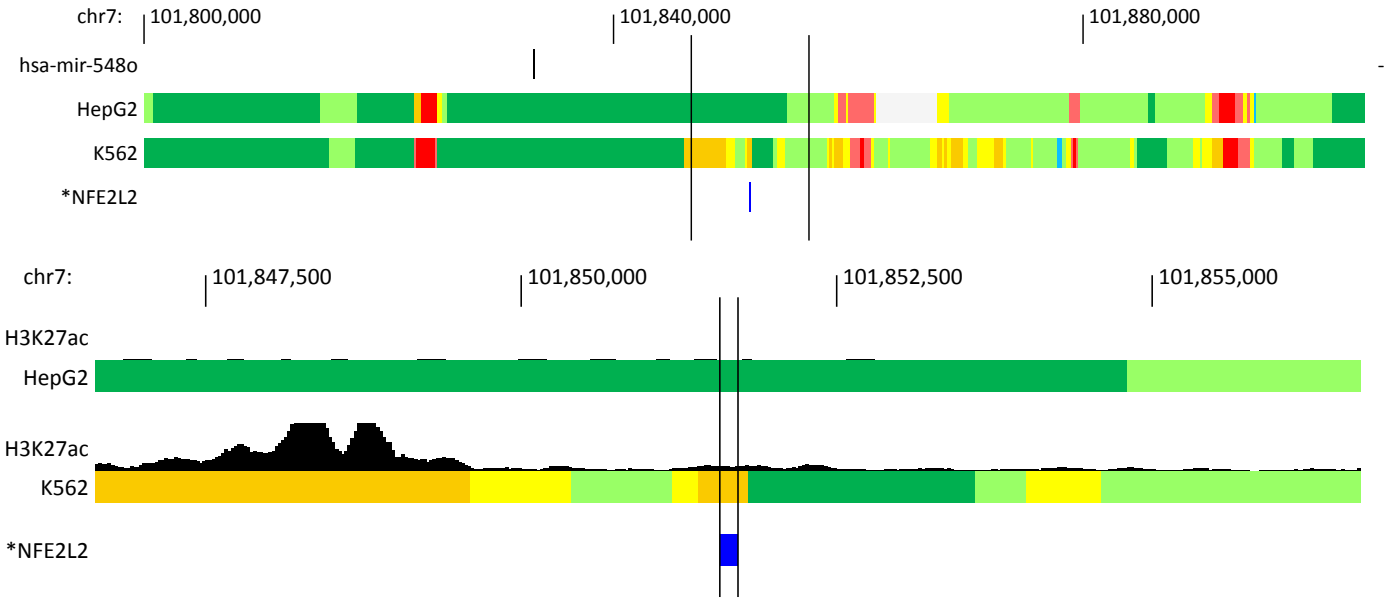
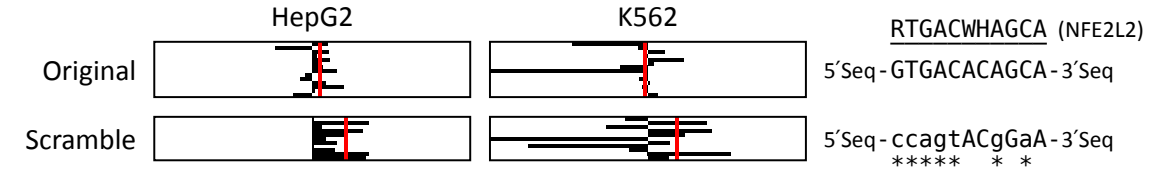
1002 NFE2L2 in K562 enhancer

chr7 101851641 101851651 + (hg18)





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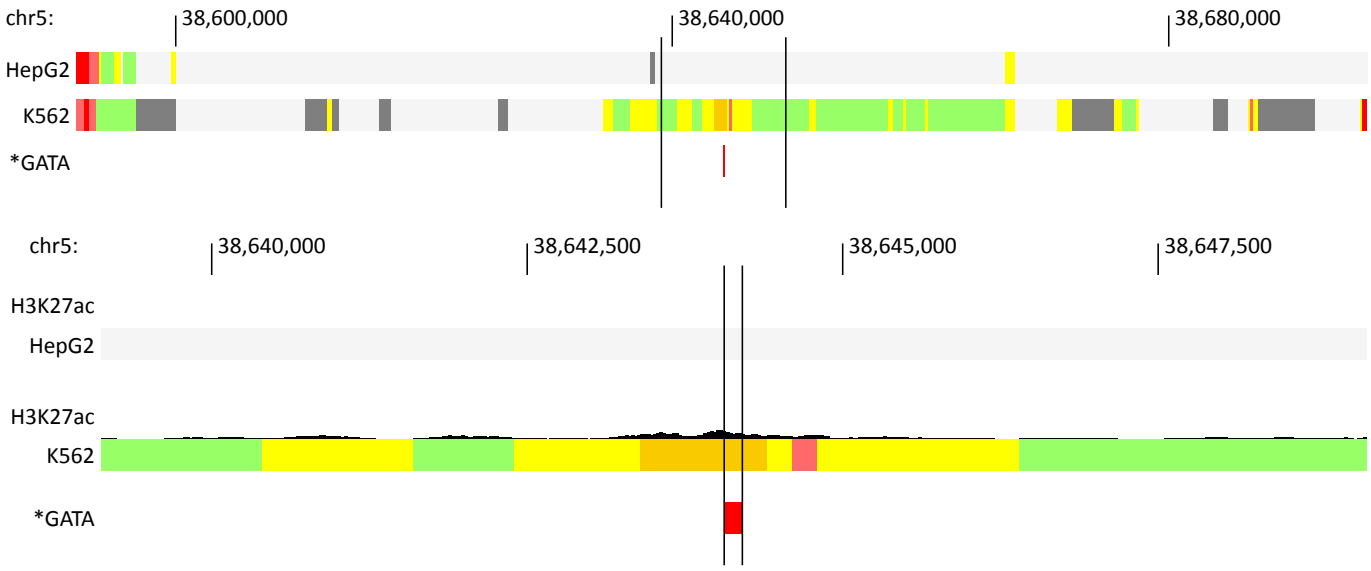
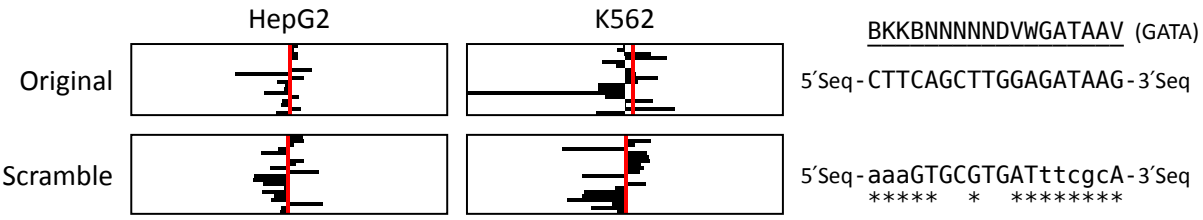
1003 GATA in K562 enhancer (conserved at 60% confidence)

chr5 38644125 38644142 - (hg18)





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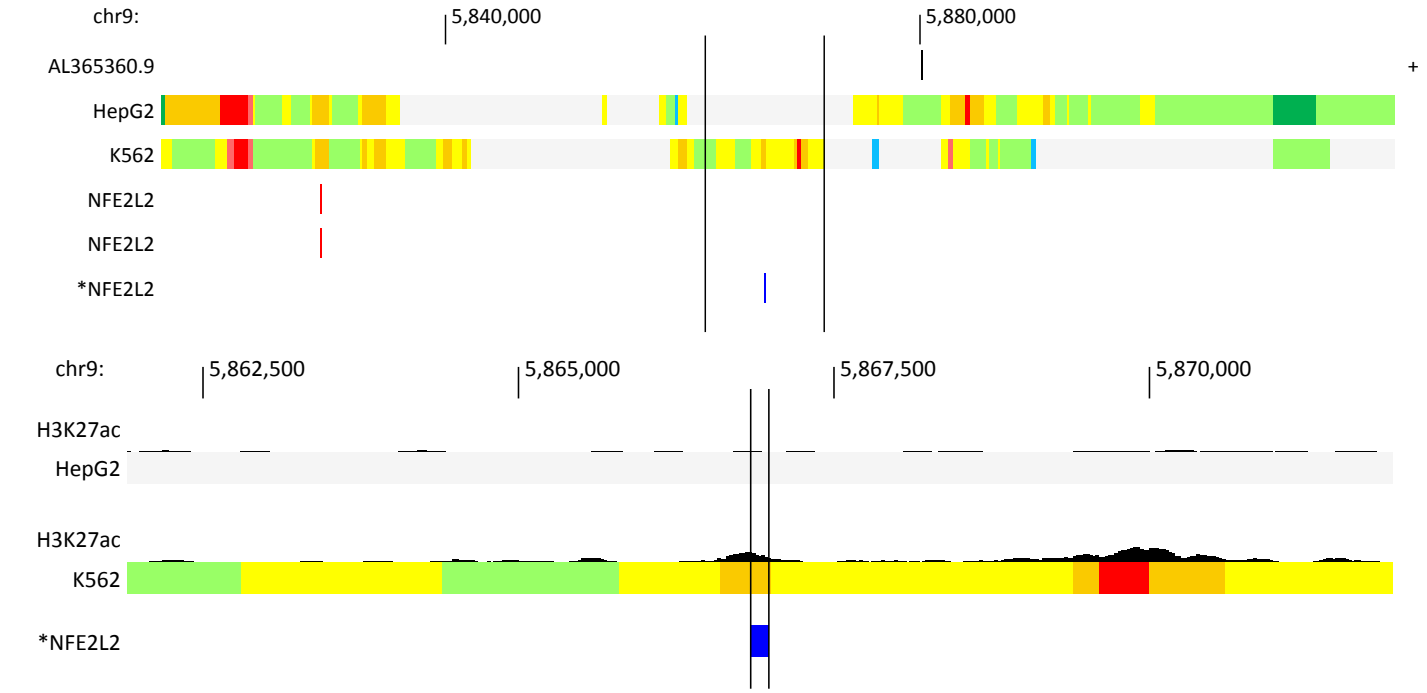
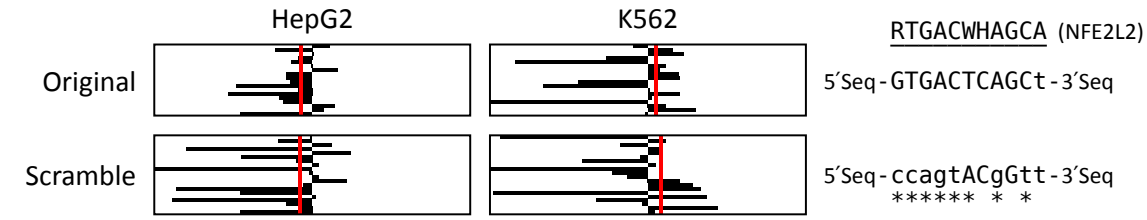
1004 NFE2L2 in K562 enhancer

chr9 5866907 5866917 + (hg18)





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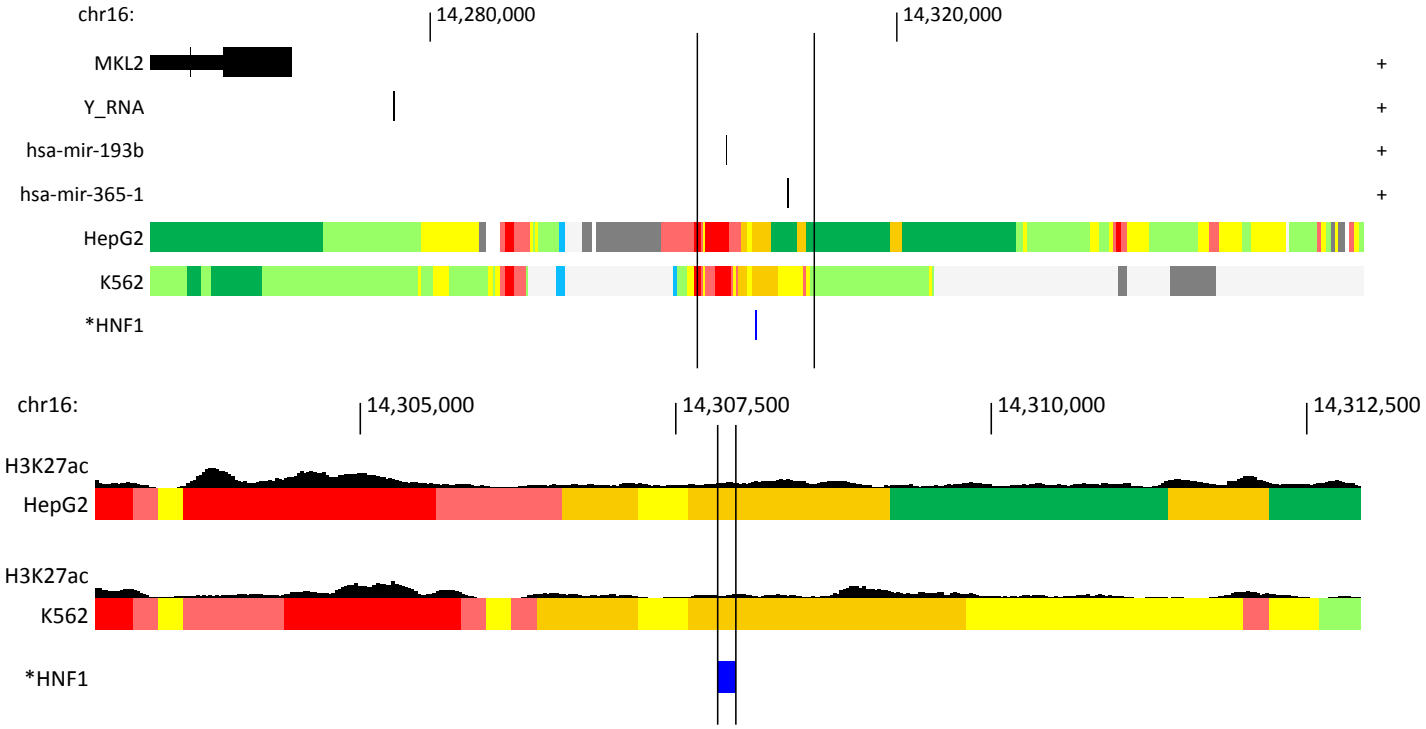
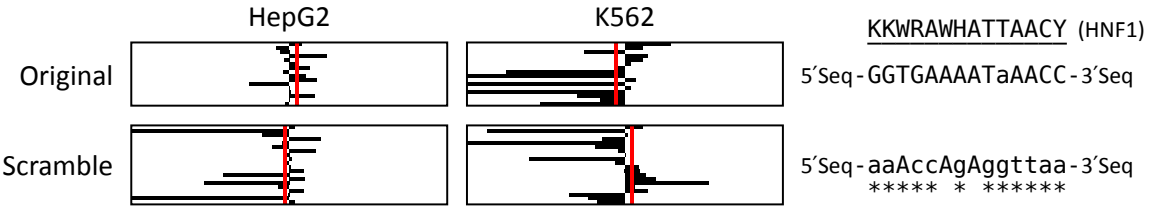
1005 HNF1 in K562 enhancer

chr16 14307898 14307911 + (hg18)





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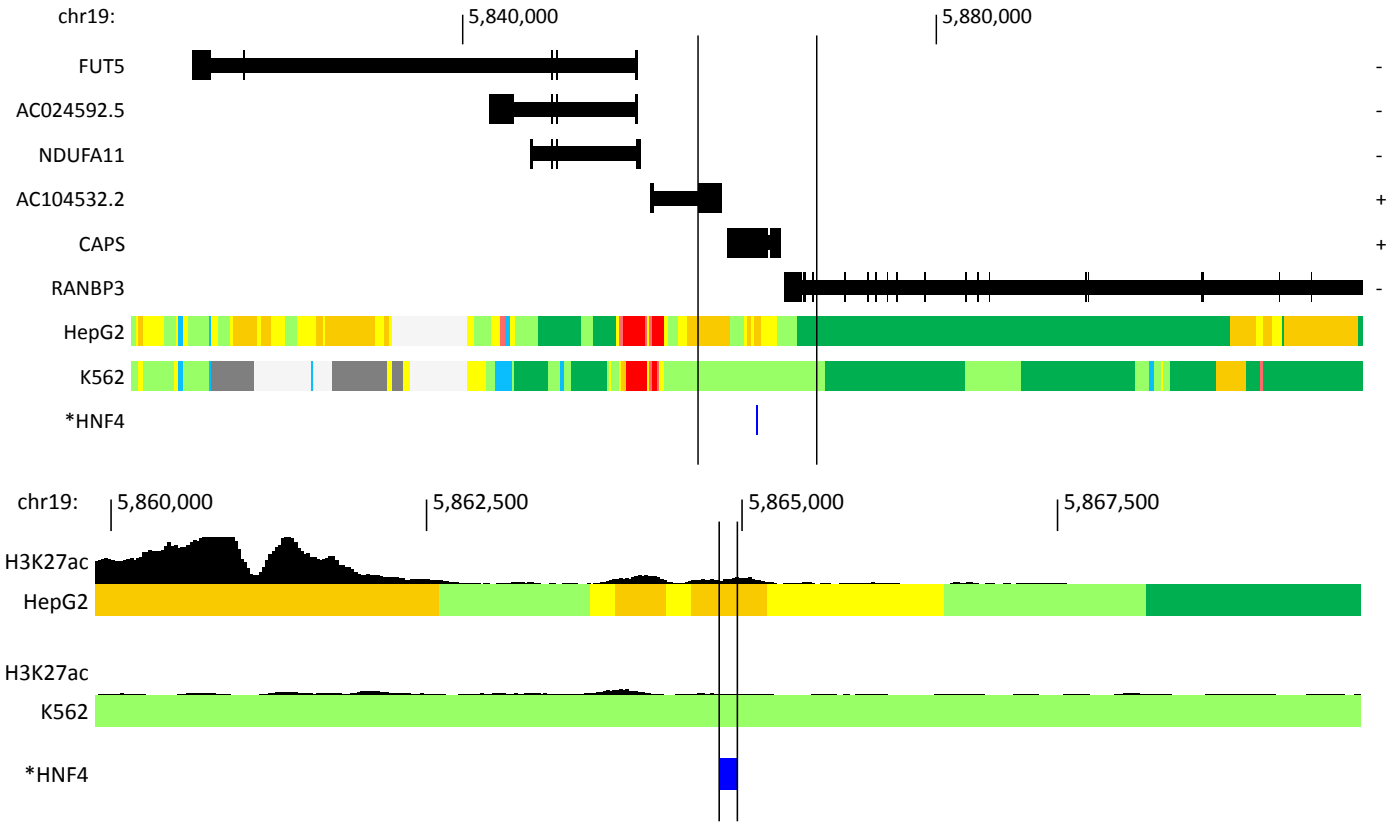
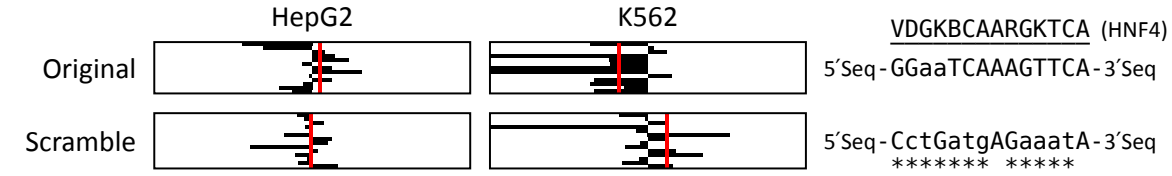
1006 HNF4 in HepG2 enhancer

chr19 5864885 5864898 - (hg18)





VDGKBCAARGKTCA (HNF4)

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5′Seq-CctGatgAGaaatA-3′Seq

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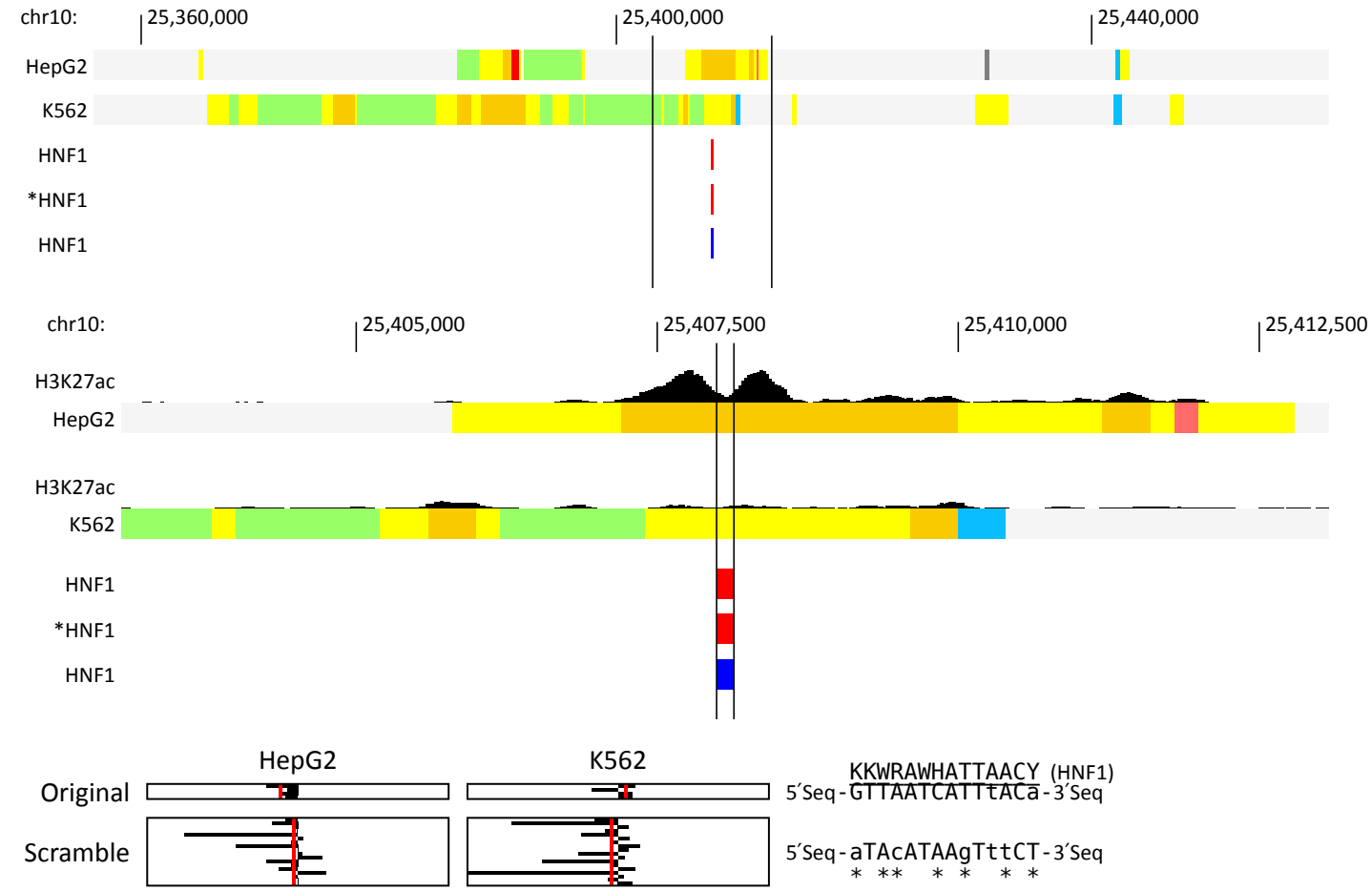
1007 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr10 25408059 25408072 + (hg18)



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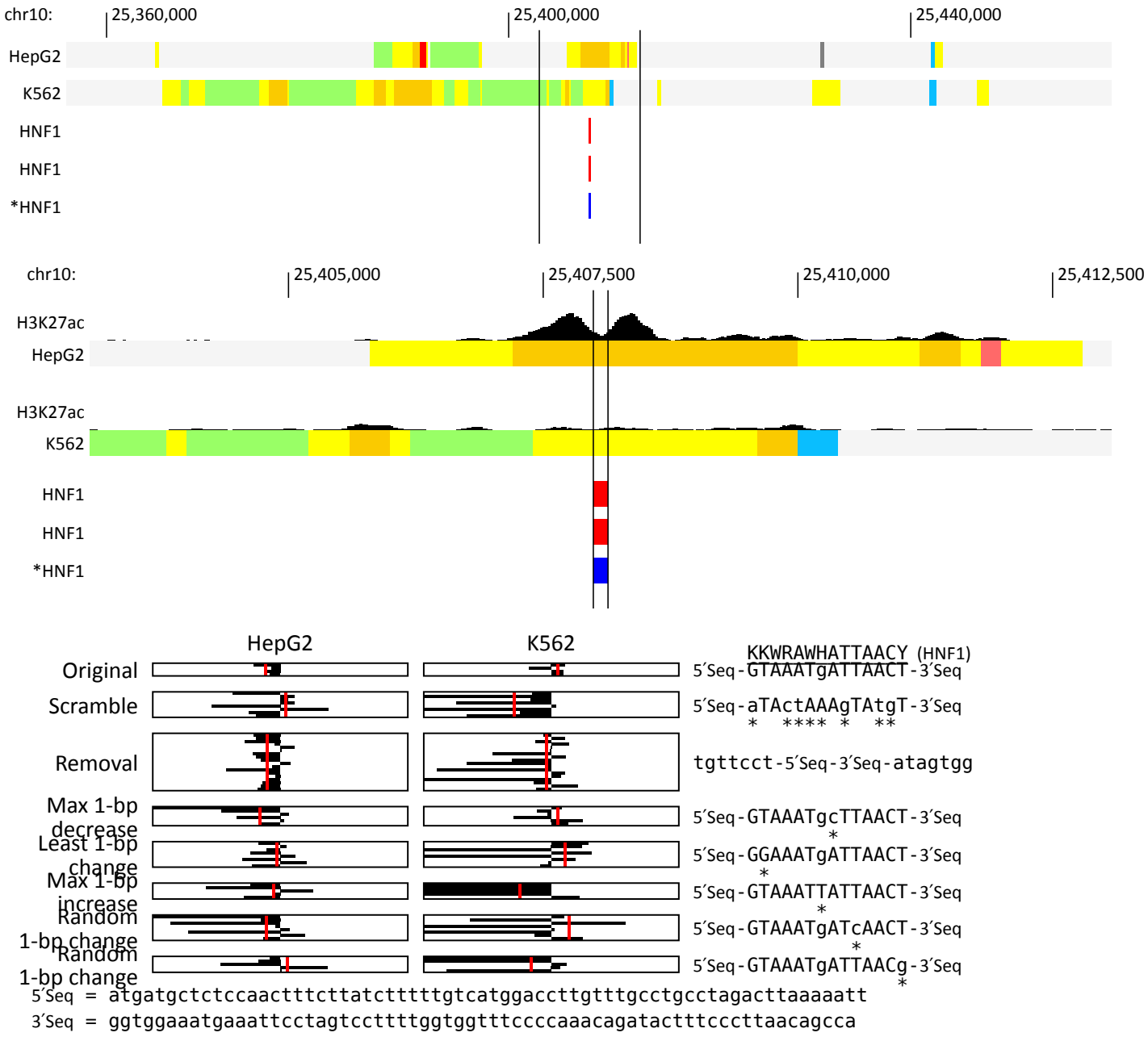
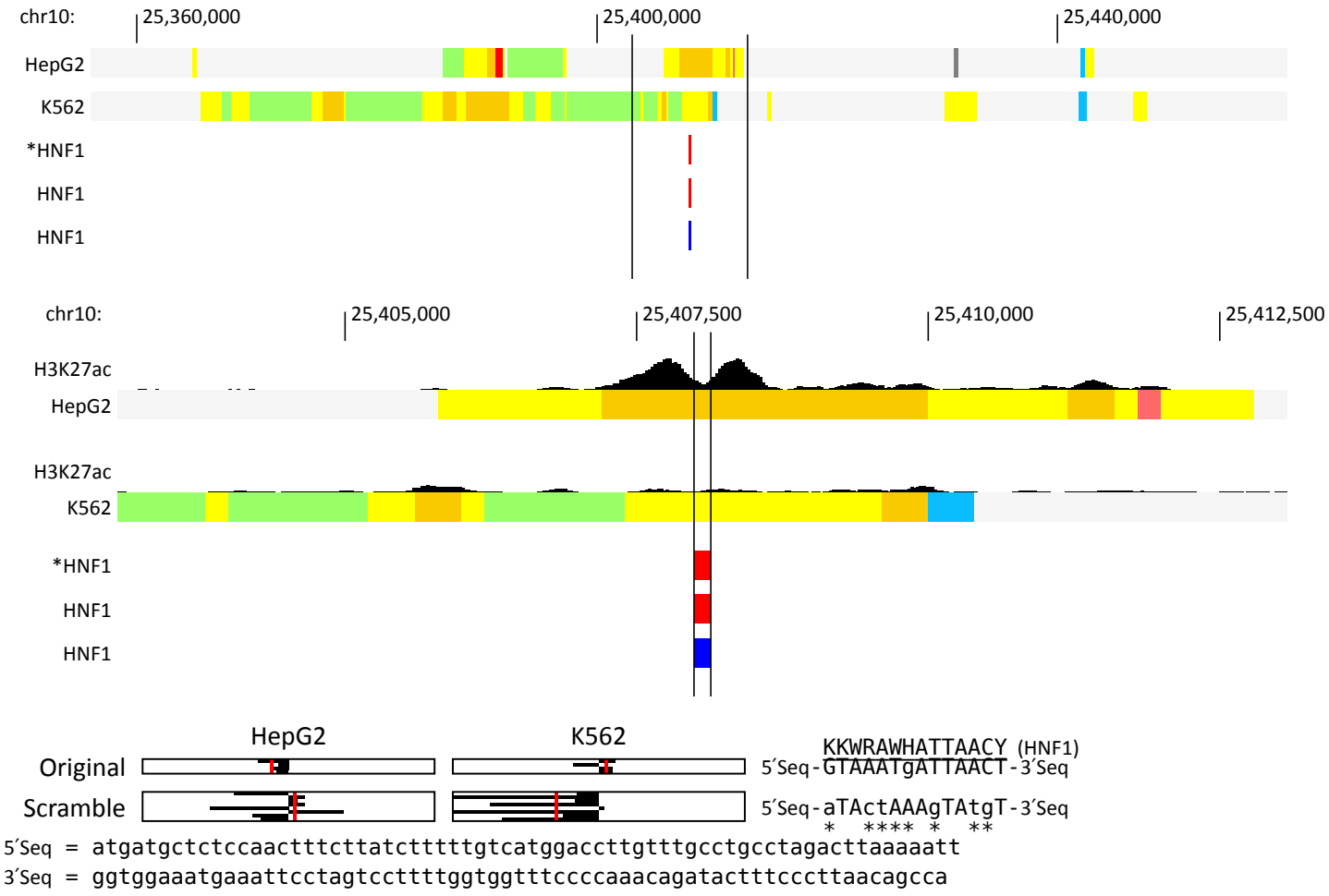
1008 HNF1 in HepG2 enhancer

chr10 25408058 25408071 - (hg18)



1009 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 25408058 25408071 - (hg18)



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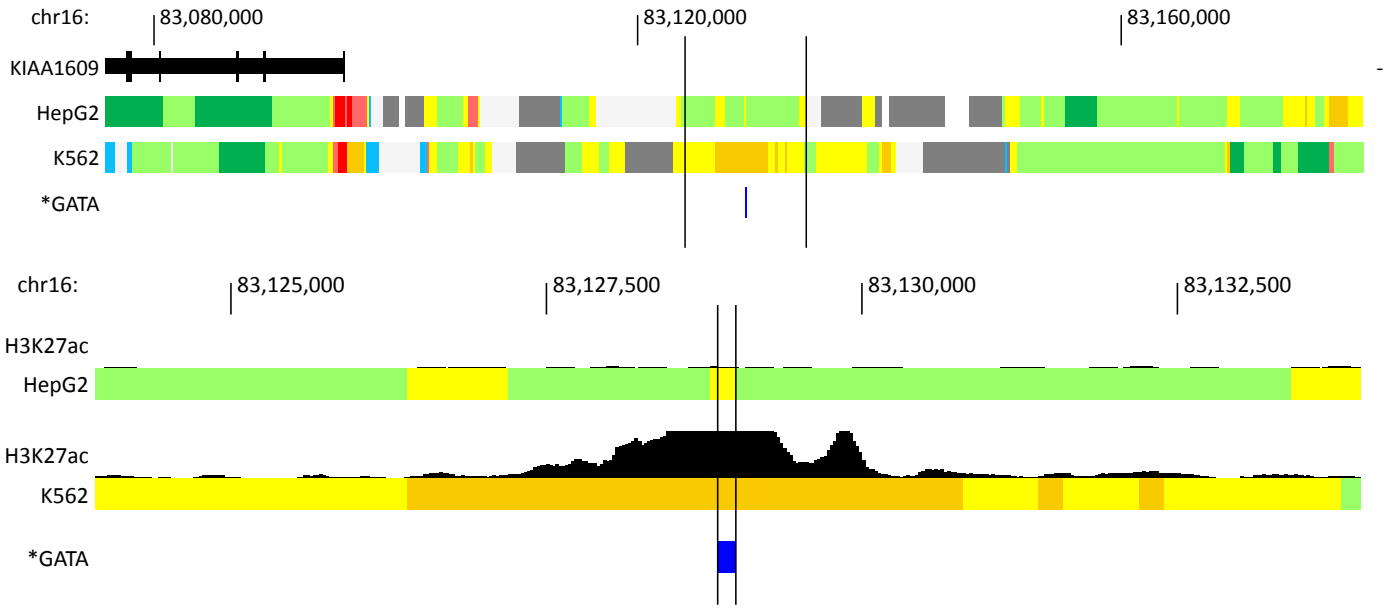
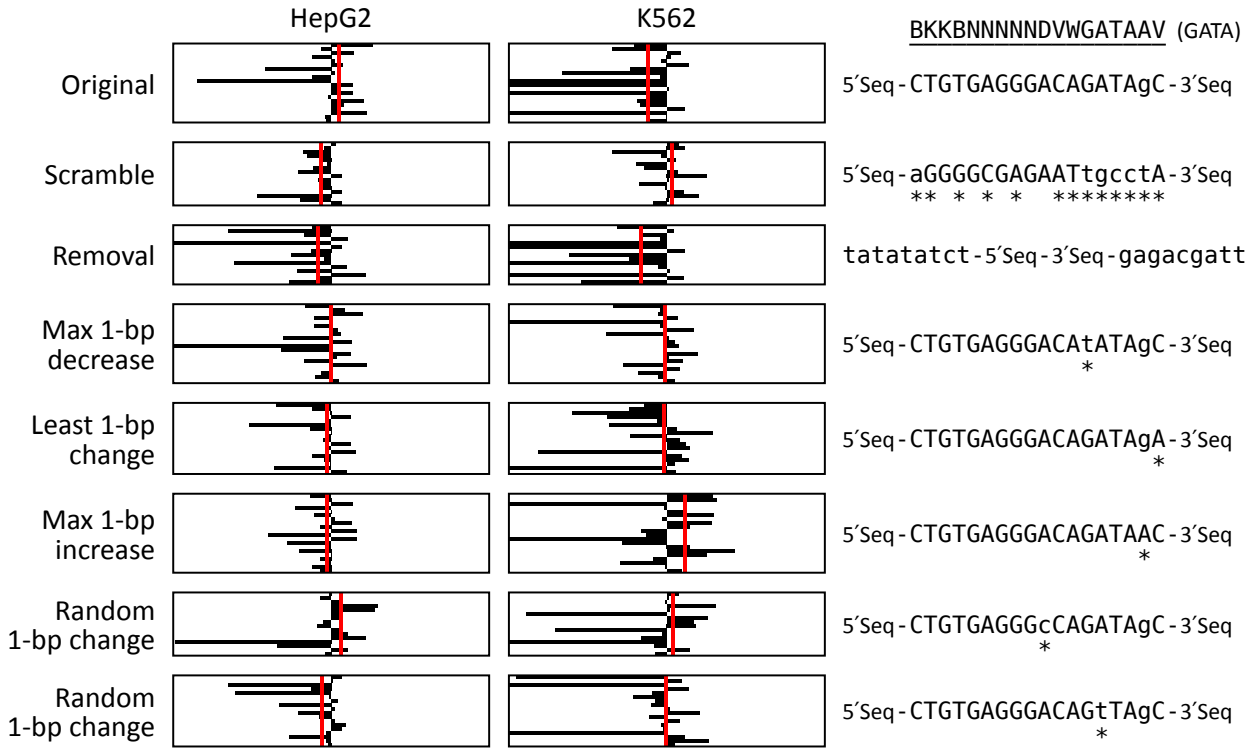
1010 GATA in K562 enhancer

chr16 83128921 83128938 + (hg18)





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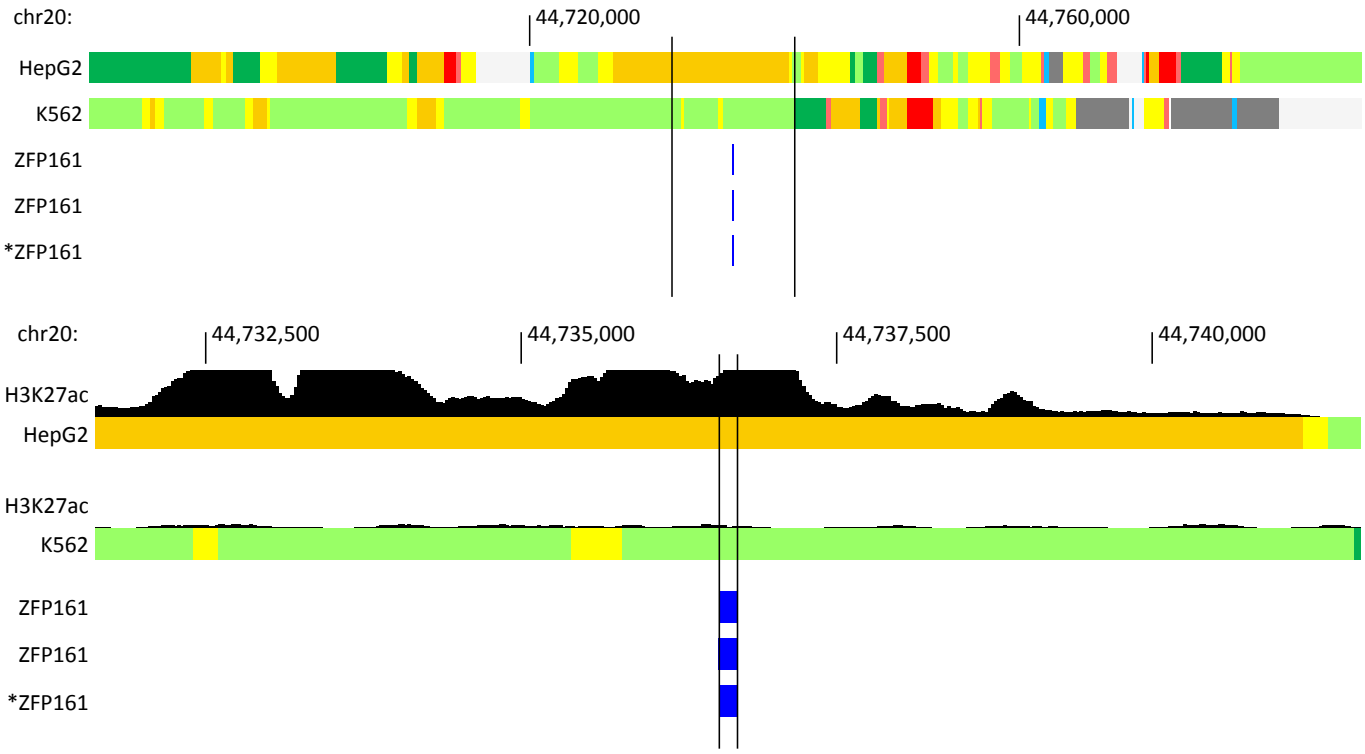
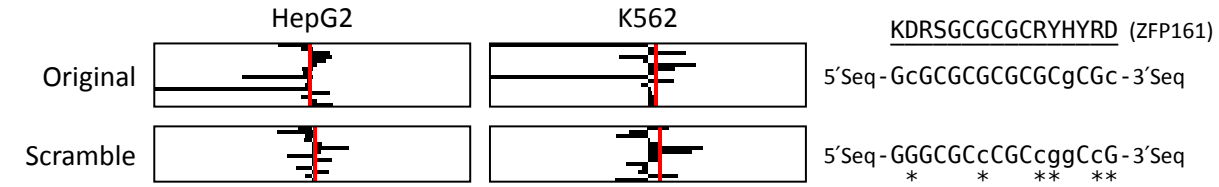
1011 ZFP161 in HepG2 enhancer

chr20 44736635 44736650 + (hg18)





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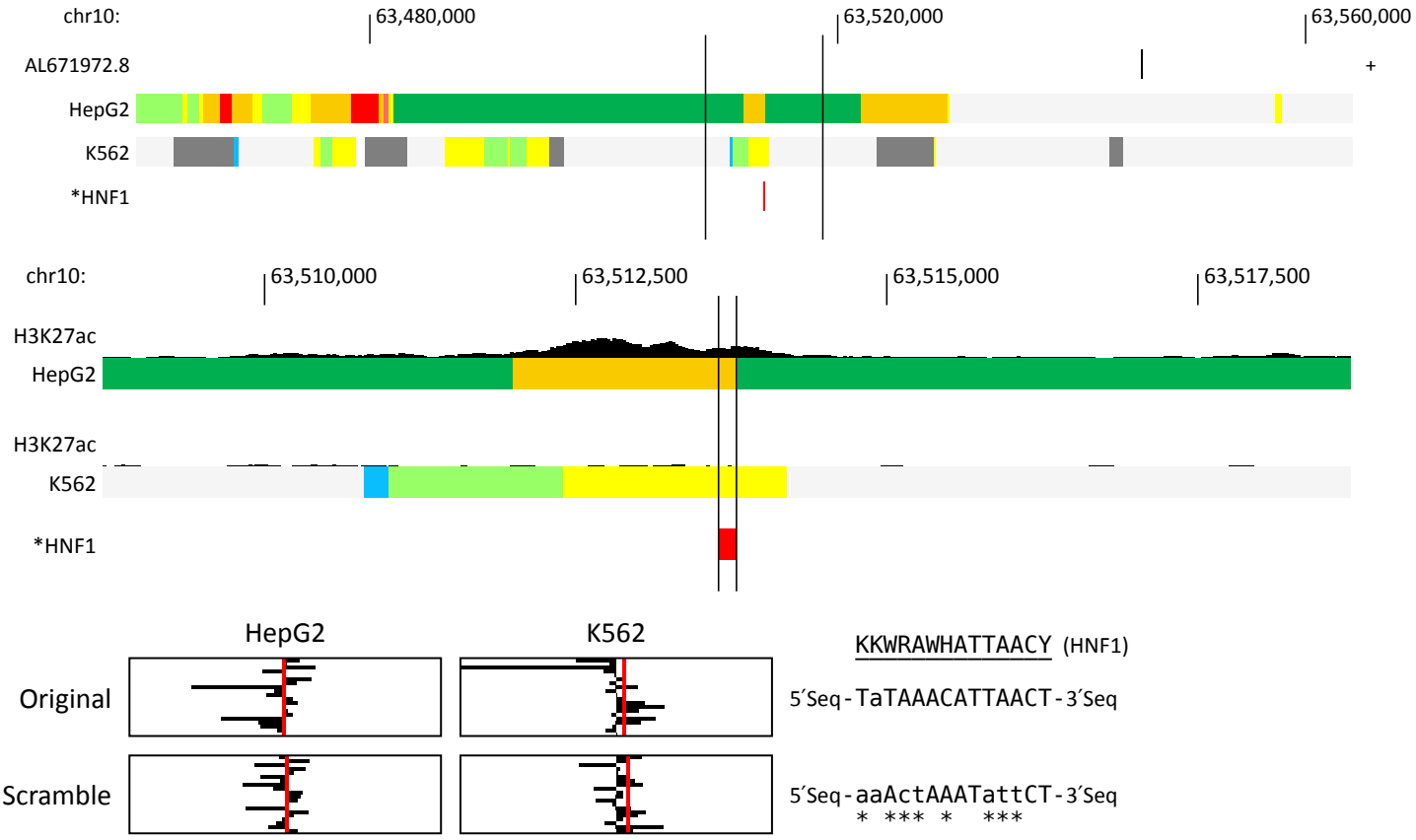
1012 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 63513714 63513727 + (hg18)



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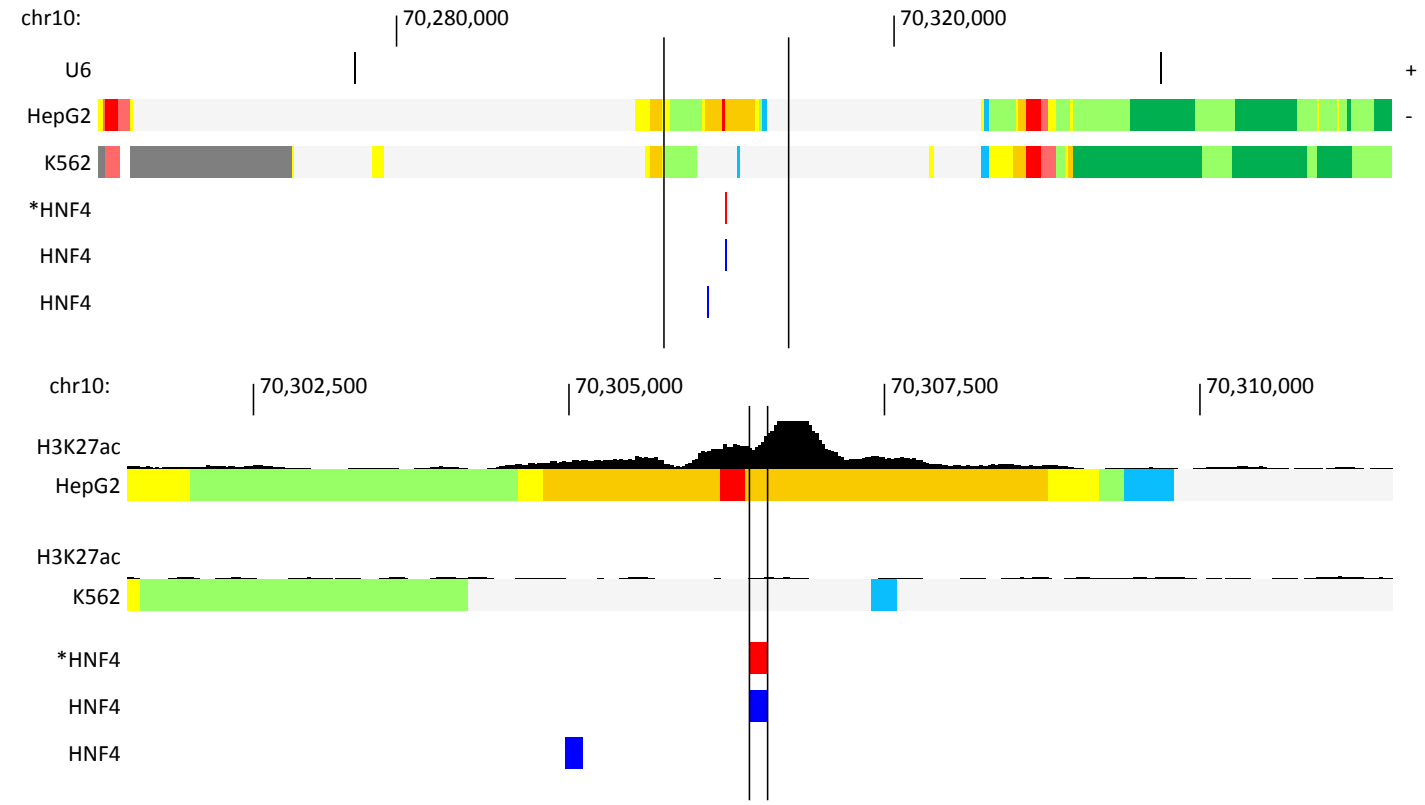
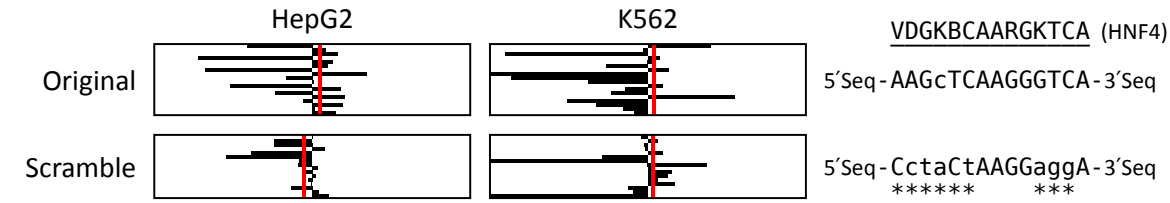
1013 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr10 70306496 70306509 + (hg18)





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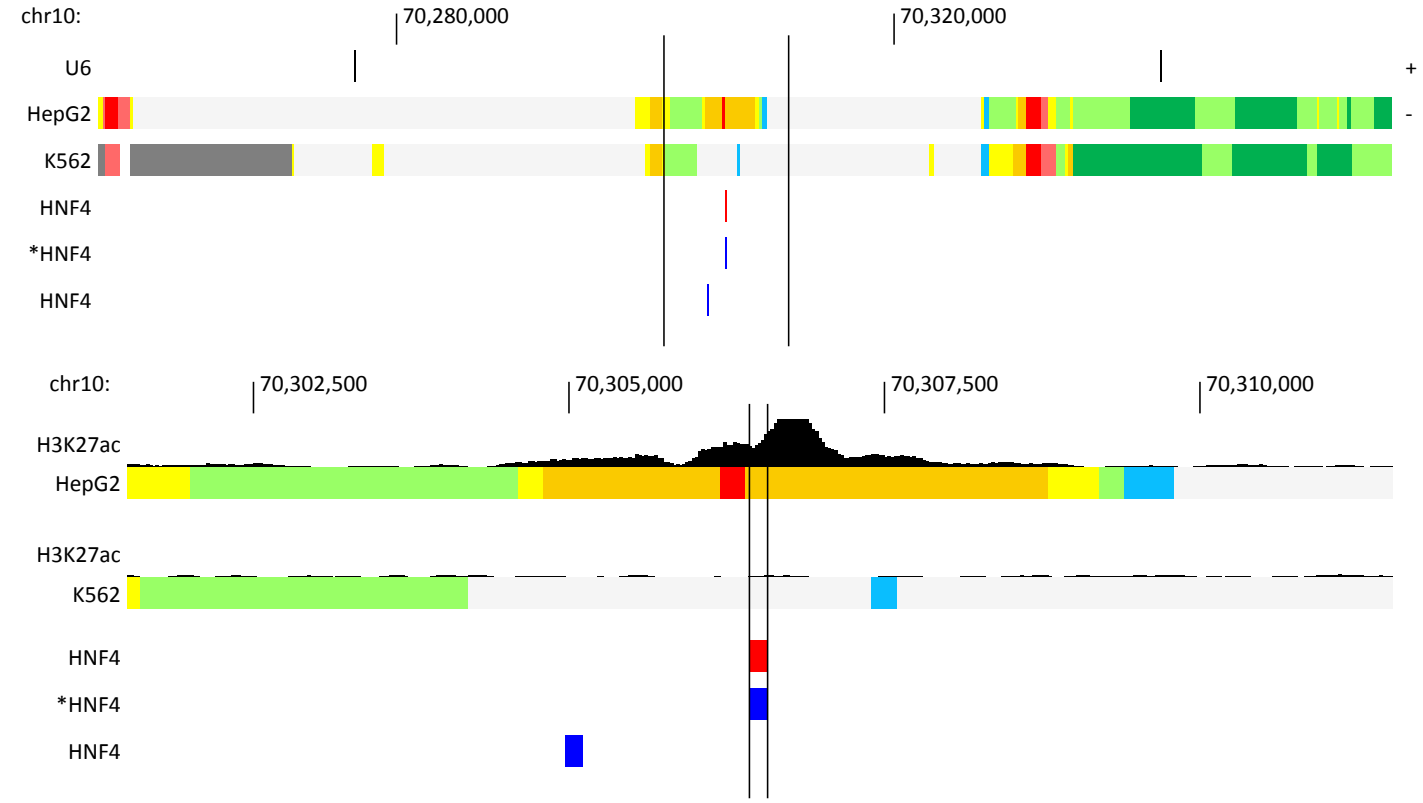
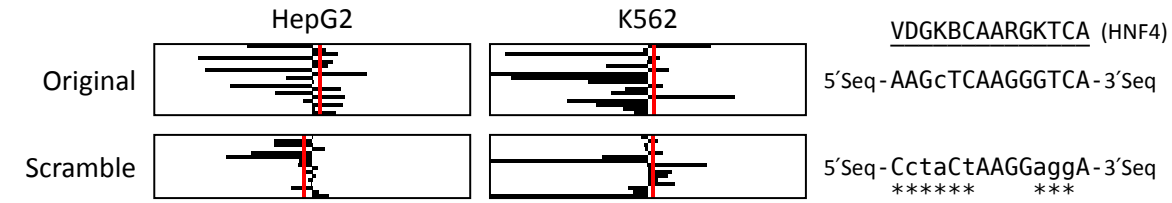
1014 HNF4 in HepG2 enhancer

chr10 70306496 70306509 + (hg18)





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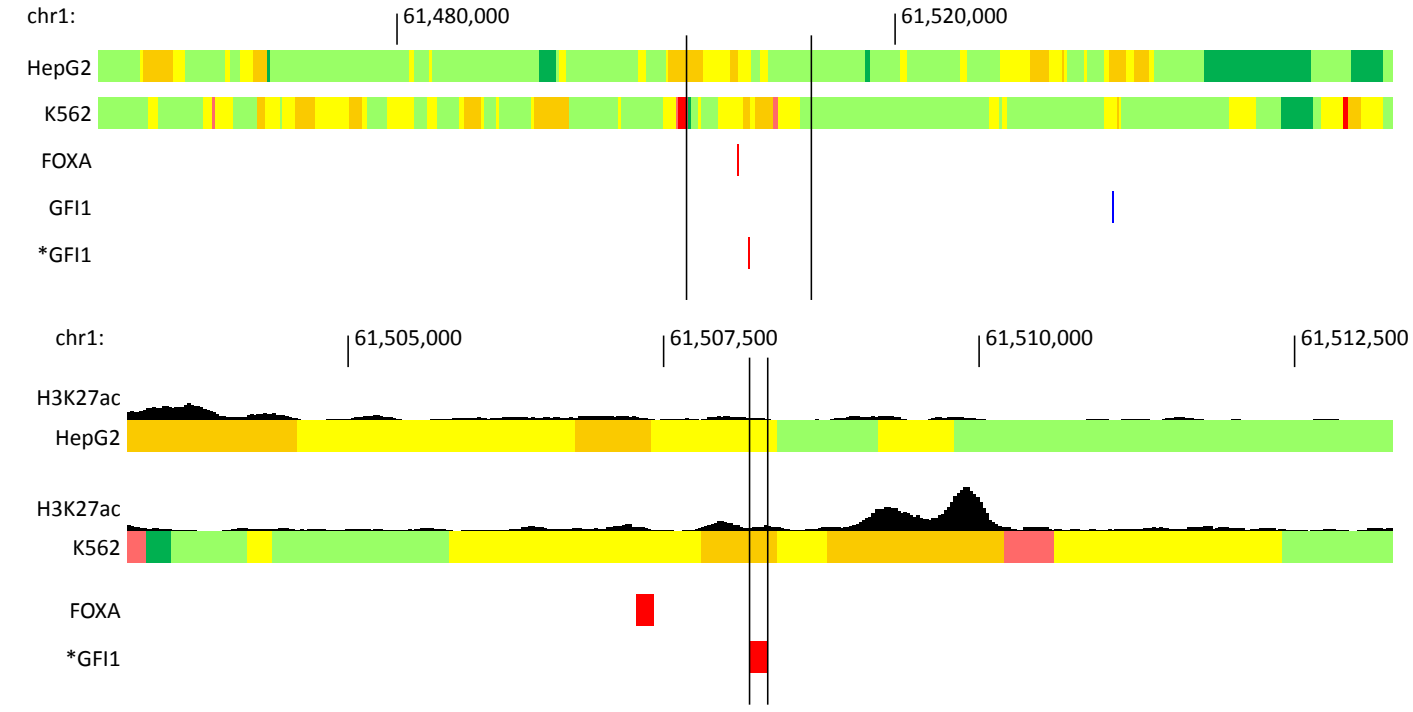
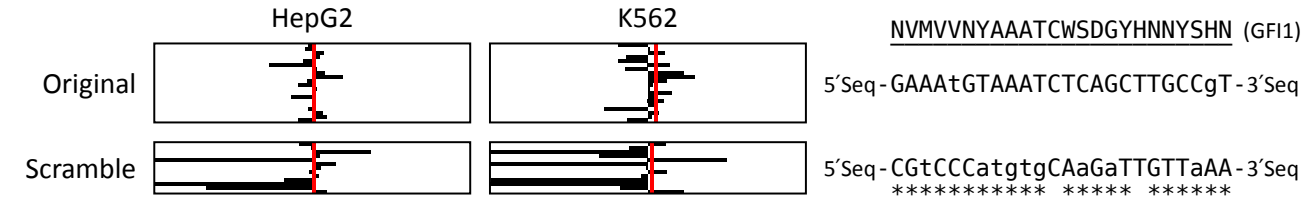
1015 GFI1 in K562 enhancer (conserved at 40% confidence)

chr1 61508242 61508265 - (hg18)





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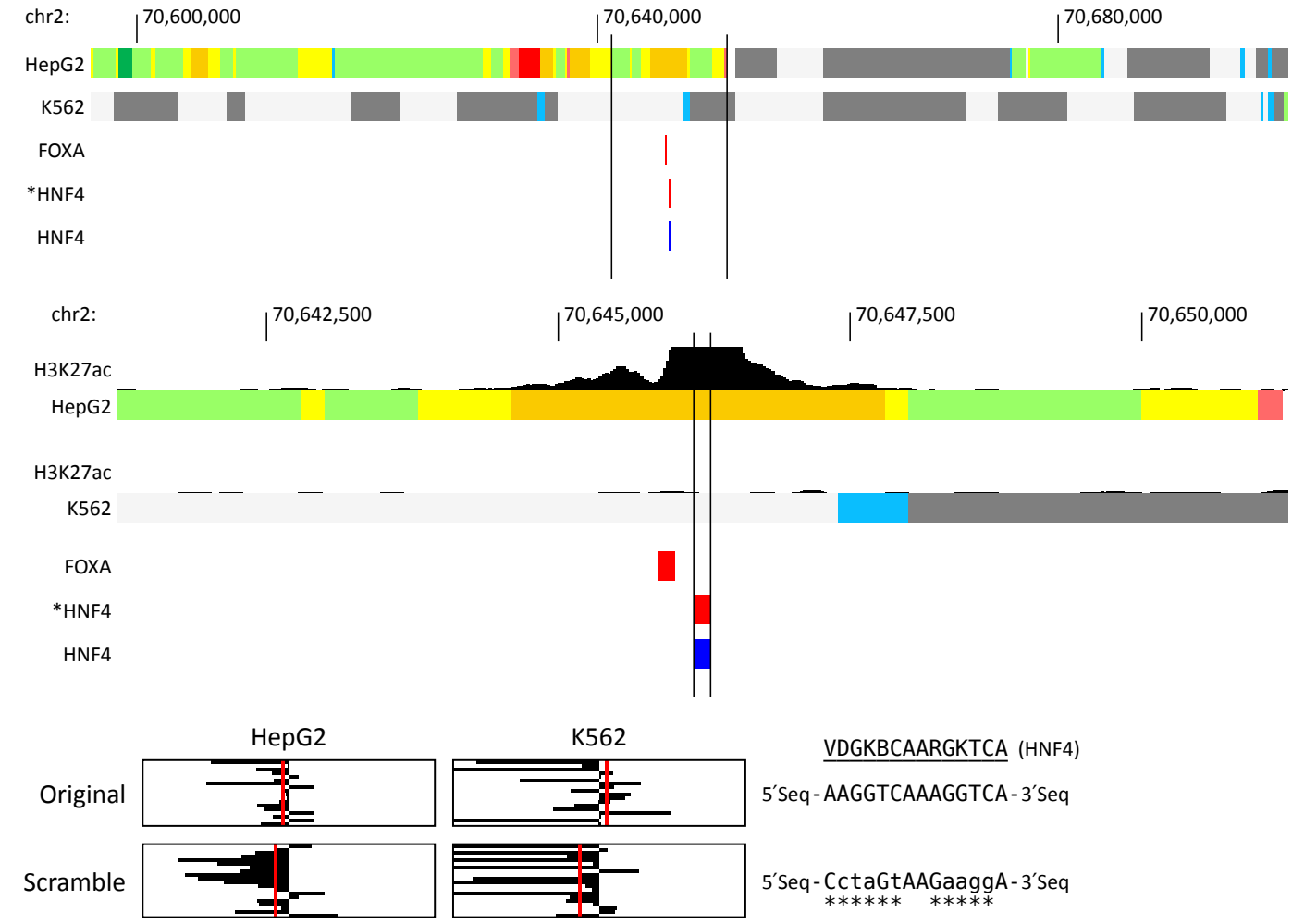
1016 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 70646227 70646240 - (hg18)



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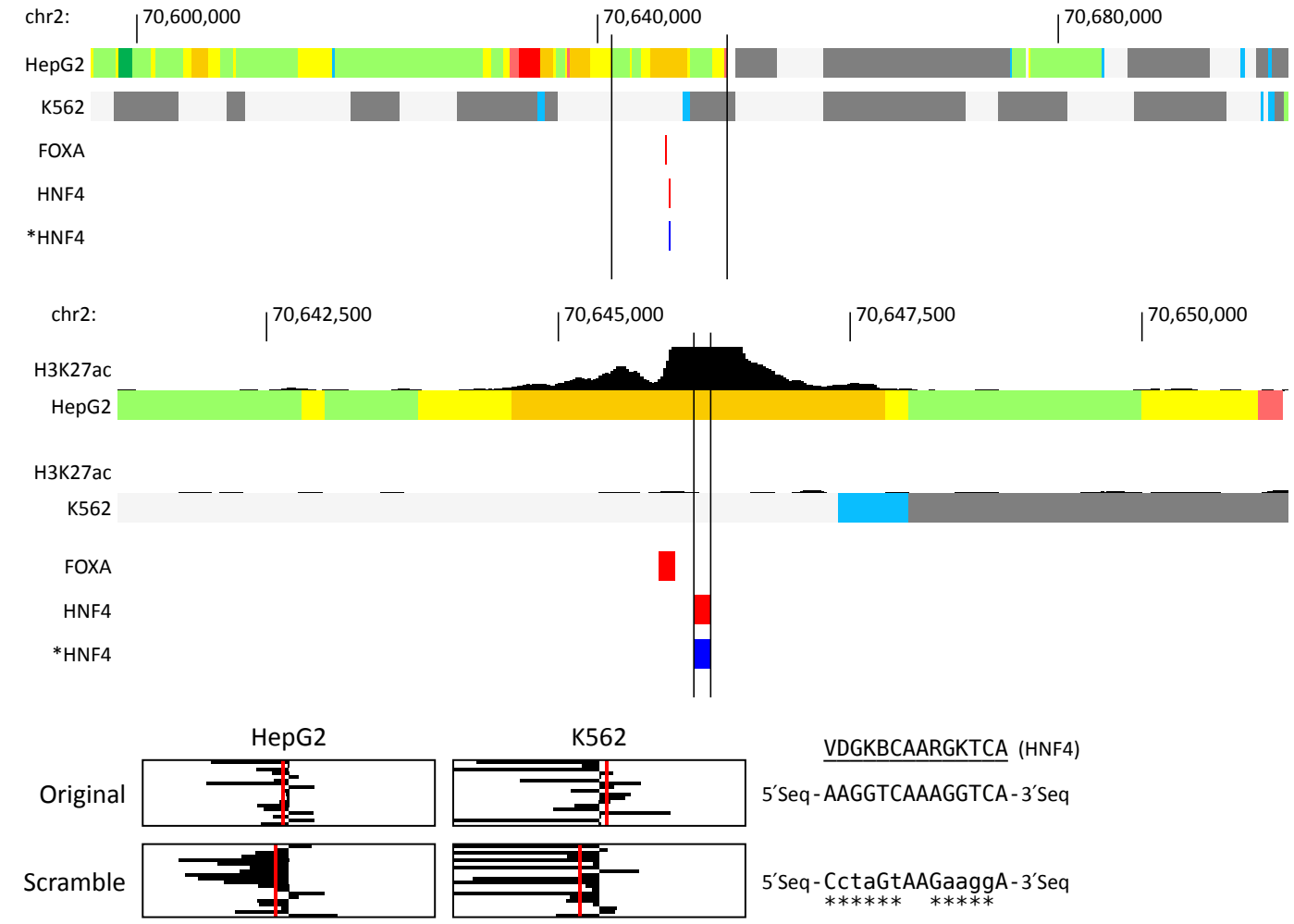
1017 HNF4 in HepG2 enhancer

chr2 70646227 70646240 - (hg18)



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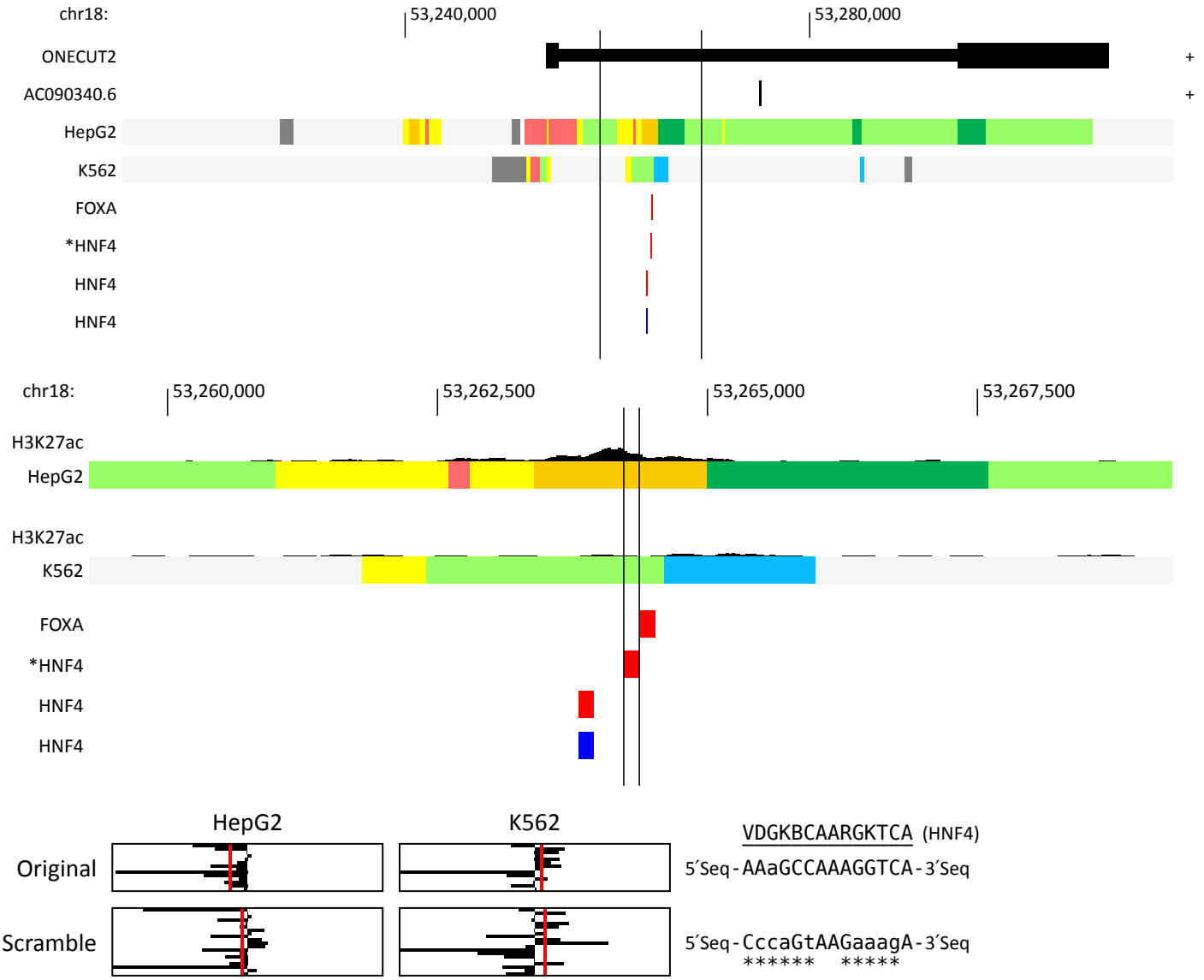
1018 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr18 53264291 53264304 + (hg18)



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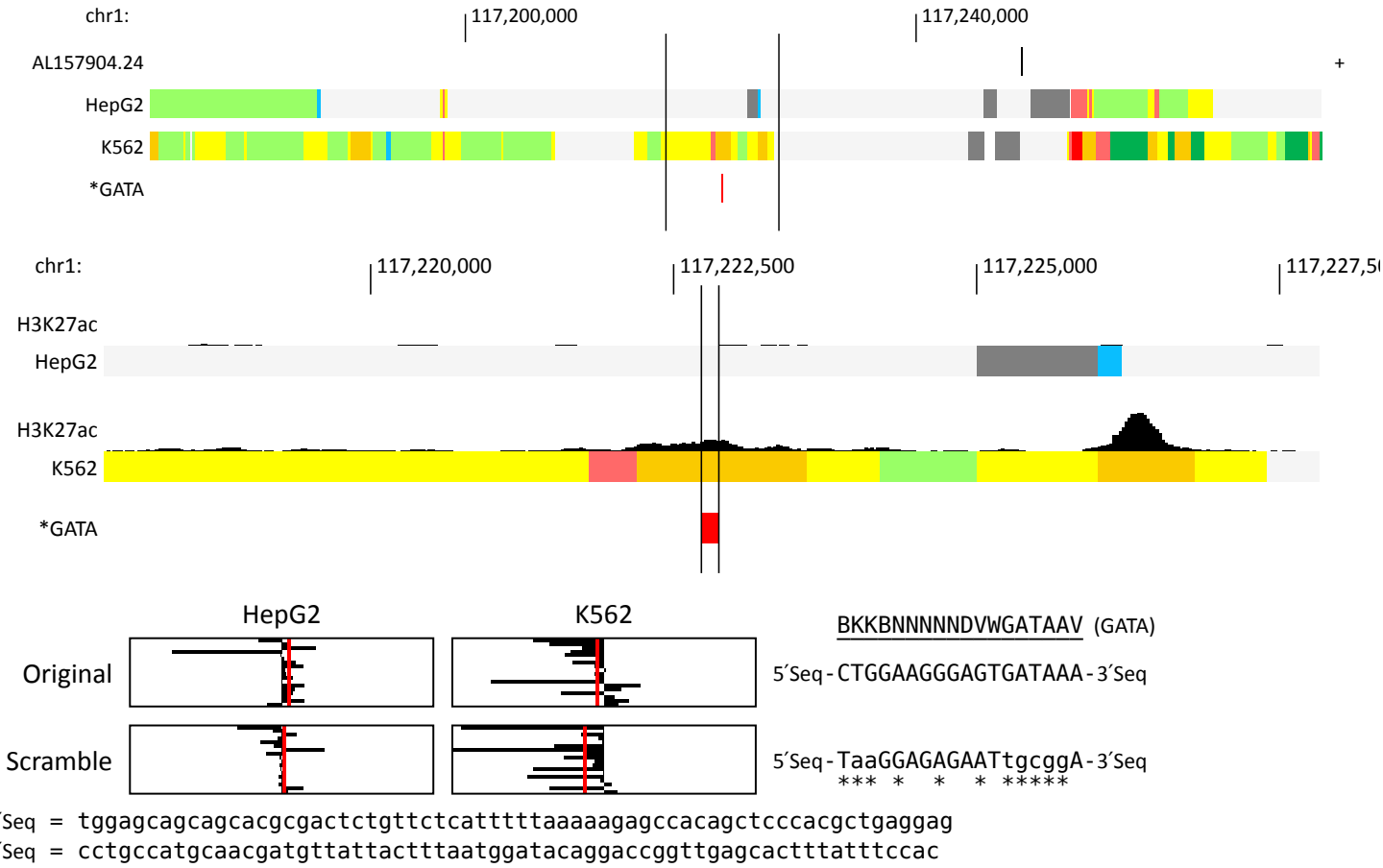
1019 GATA in K562 enhancer (conserved at 60% confidence)

chr1 117222793 117222810 + (hg18)



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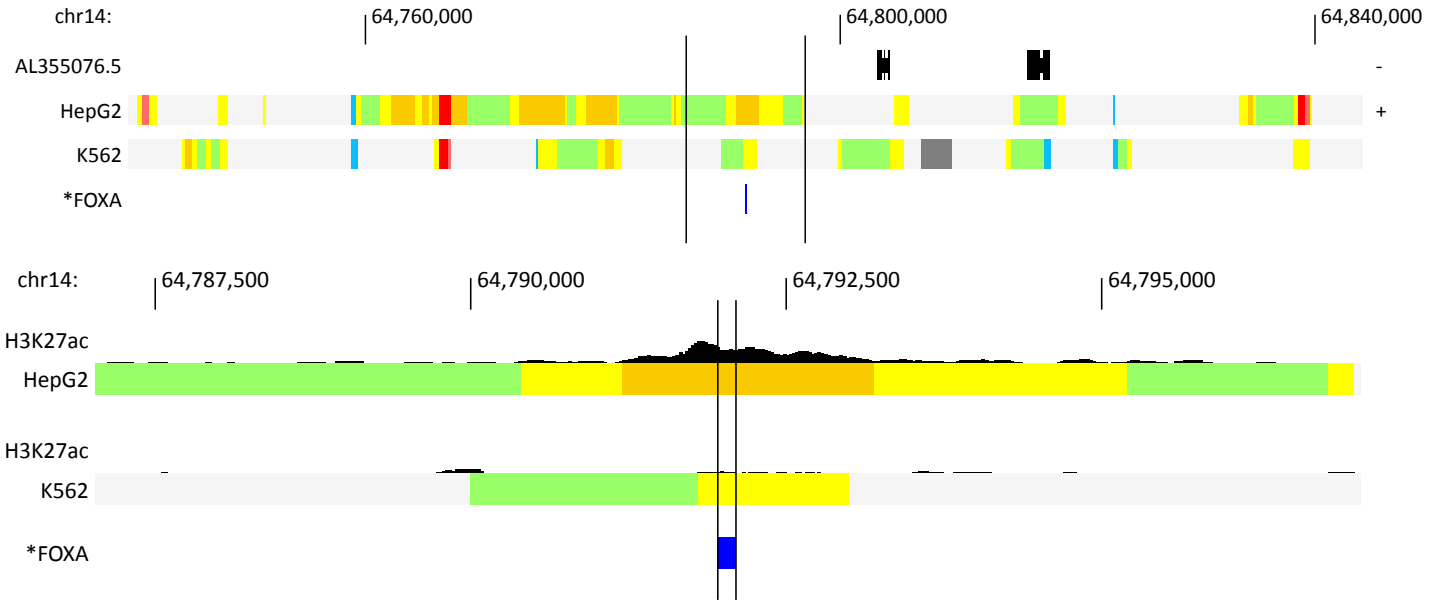
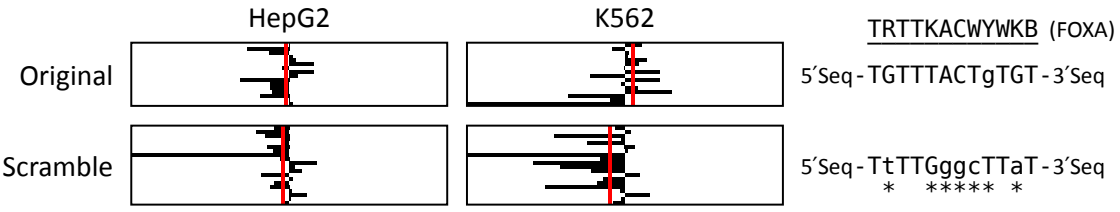
1020 FOXA in HepG2 enhancer

chr14 64792025 64792036 - (hg18)





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5′Seq-TtTTGggcTTaT-3′Seq

* ***** *

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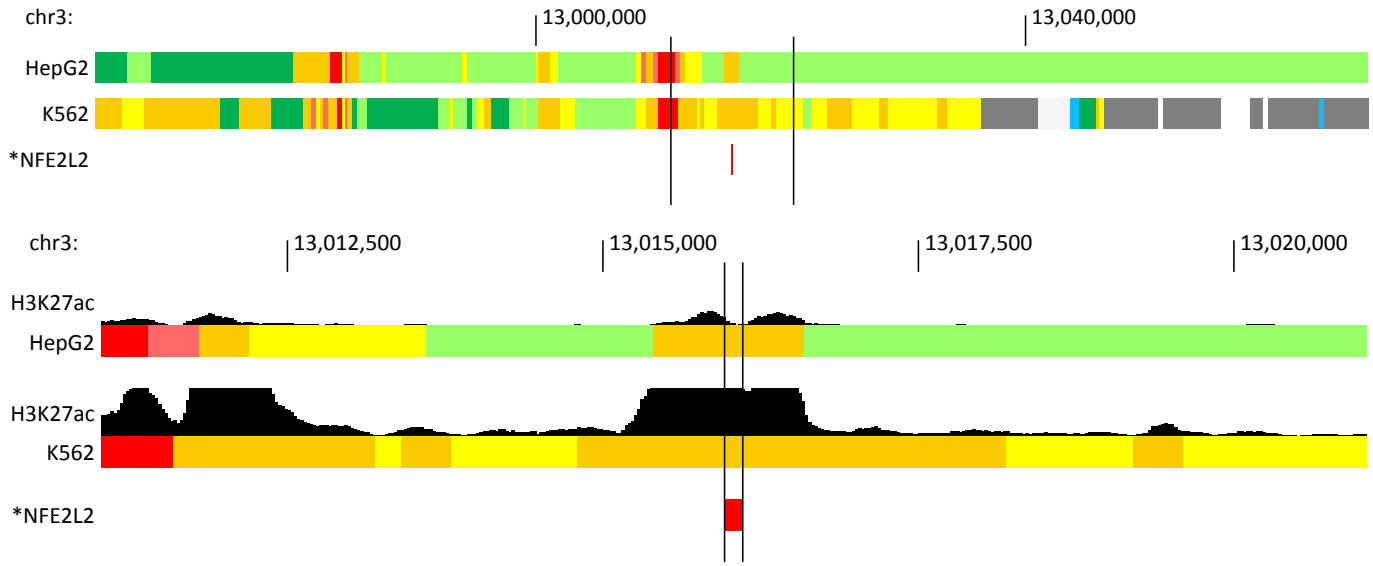
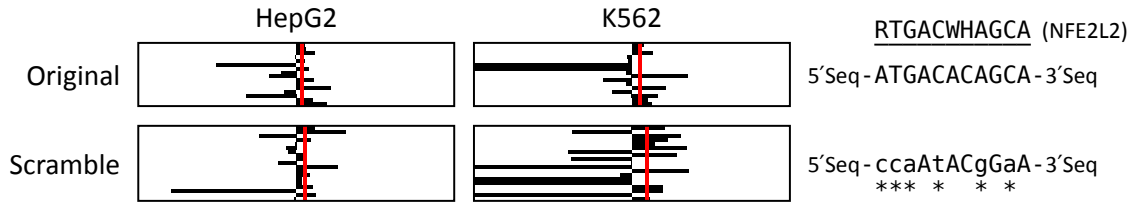
1021 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr3 13016031 13016041 + (hg18)





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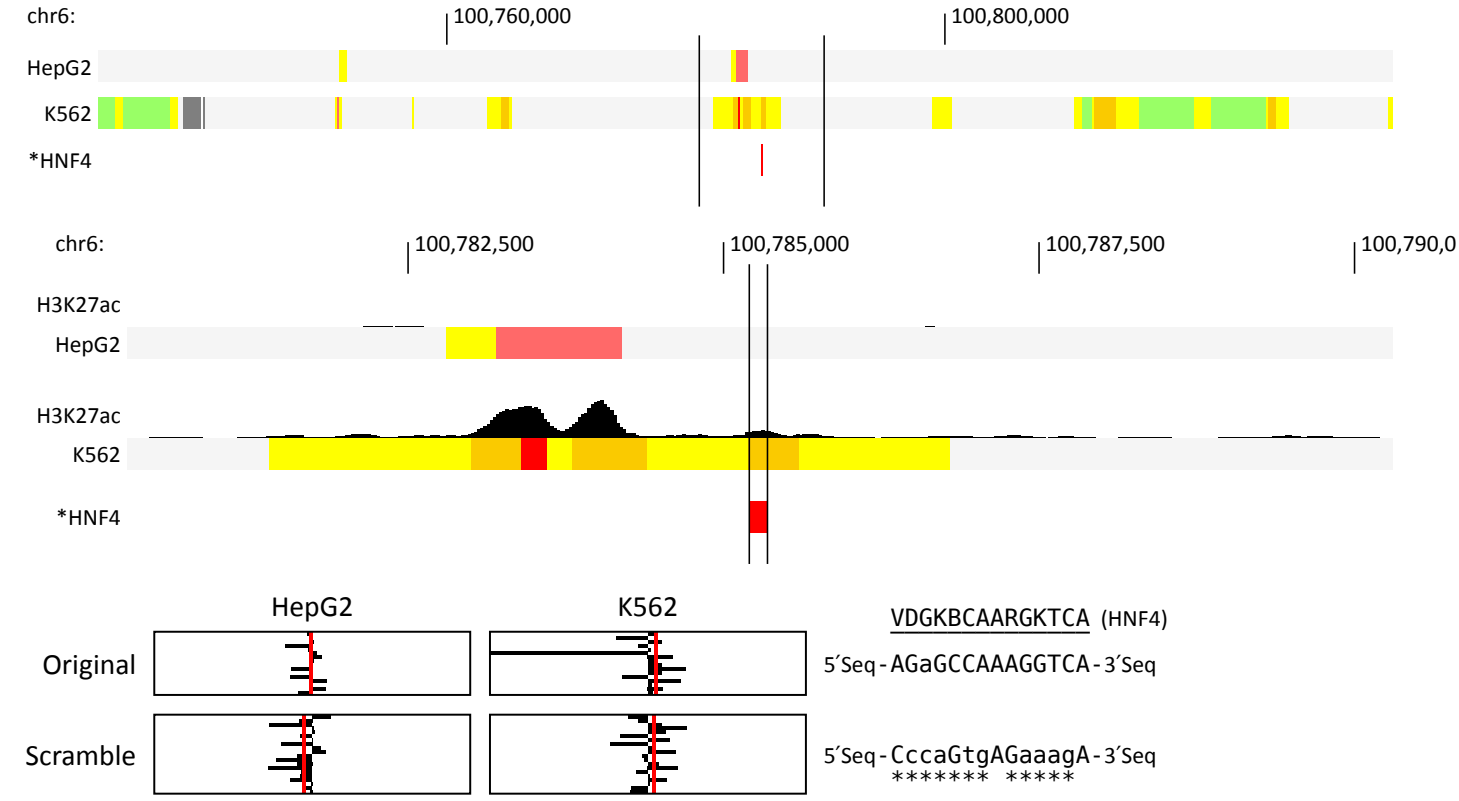
chr6 100785270 100785283 + (hg18)



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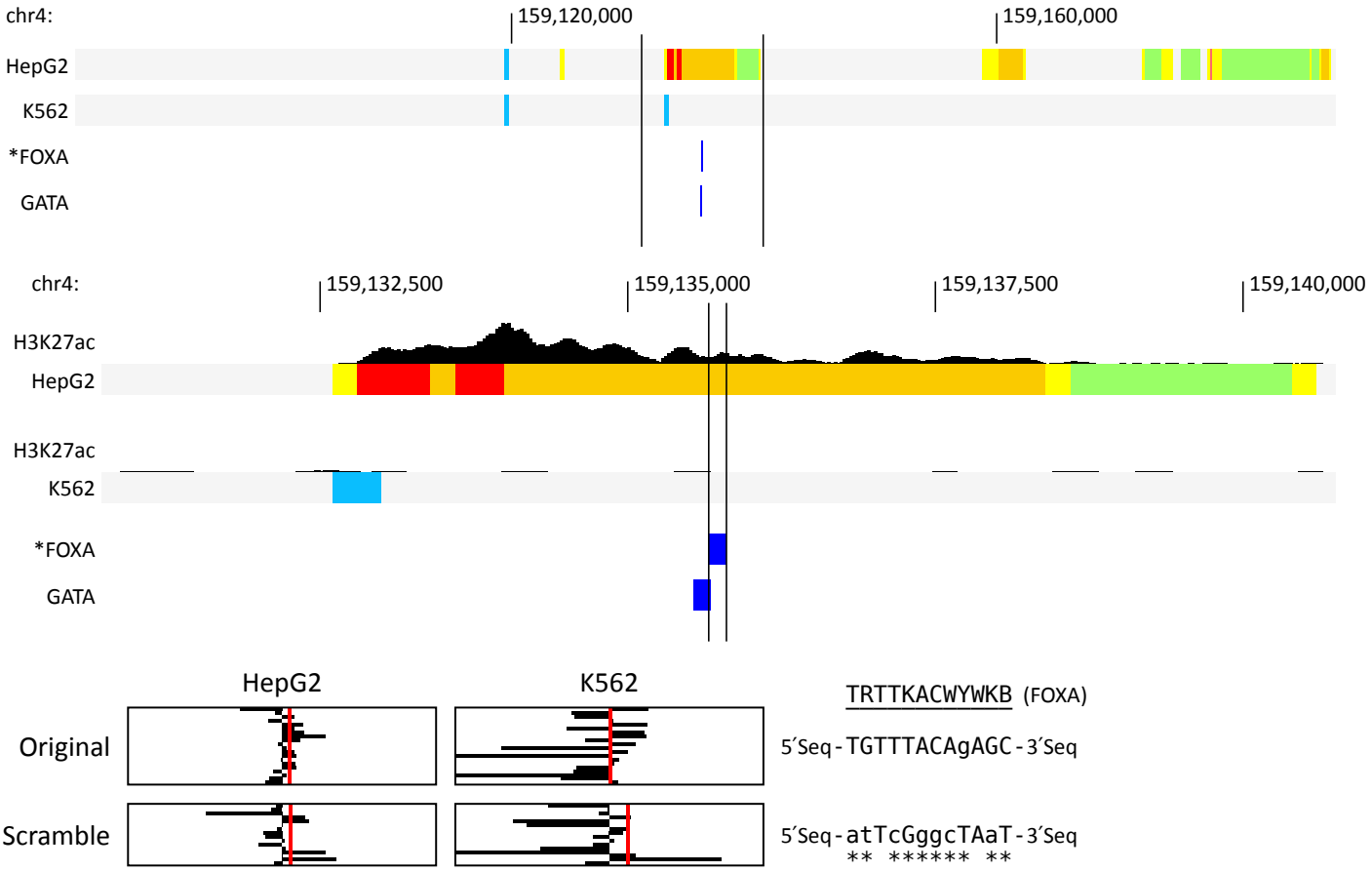
1023 FOXA in HepG2 enhancer

chr4 159135725 159135736 + (hg18)



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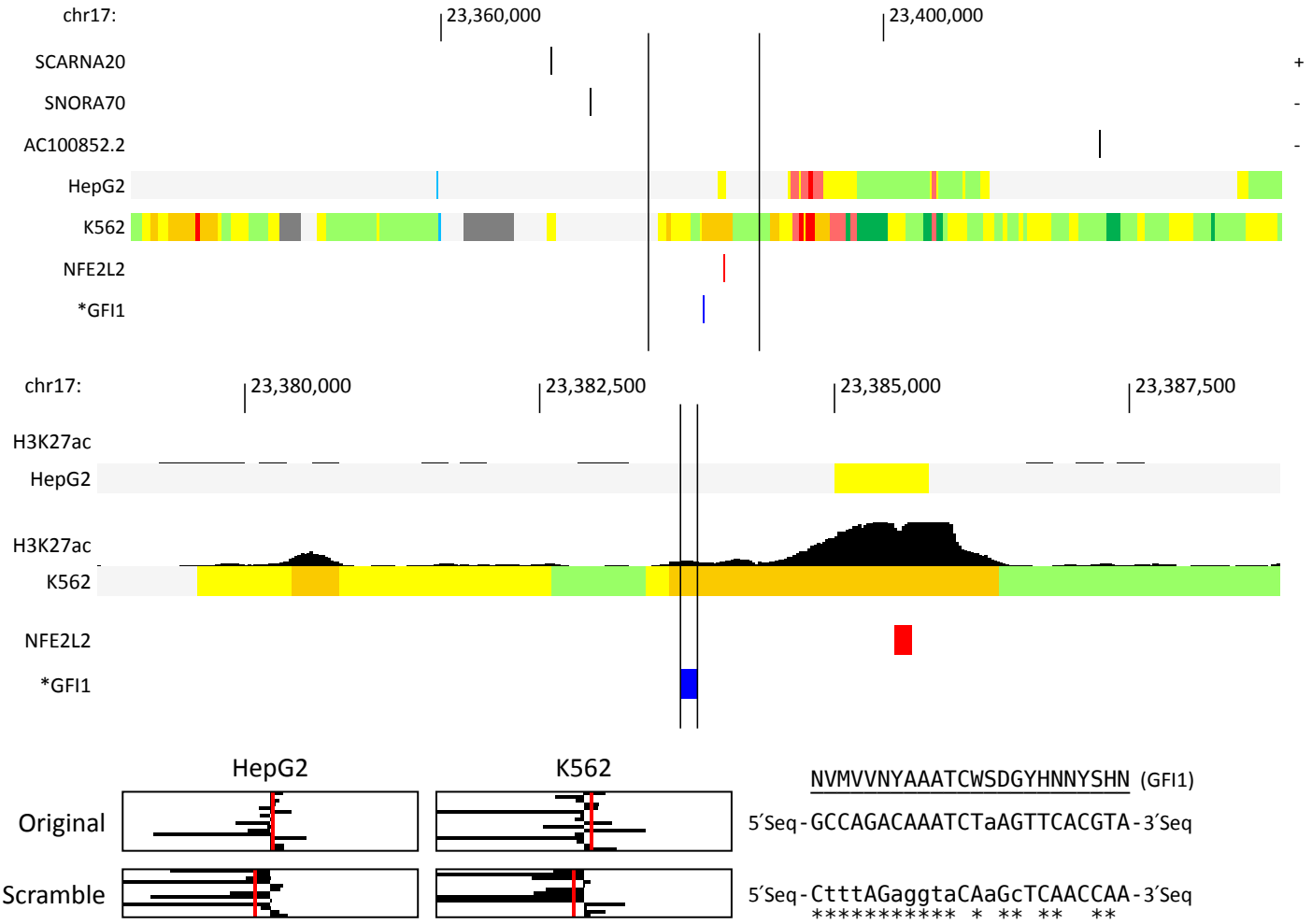
1024 GFI1 in K562 enhancer

chr17 23383755 23383778 - (hg18)



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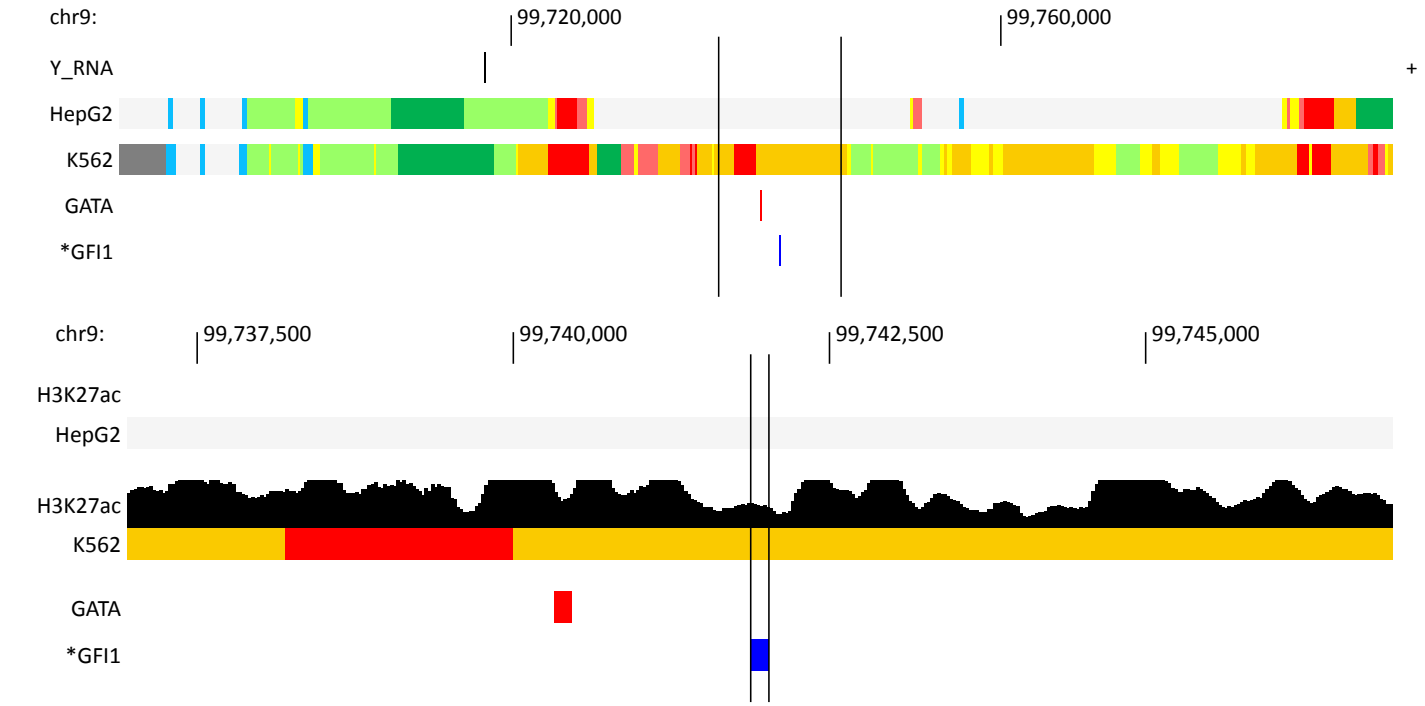
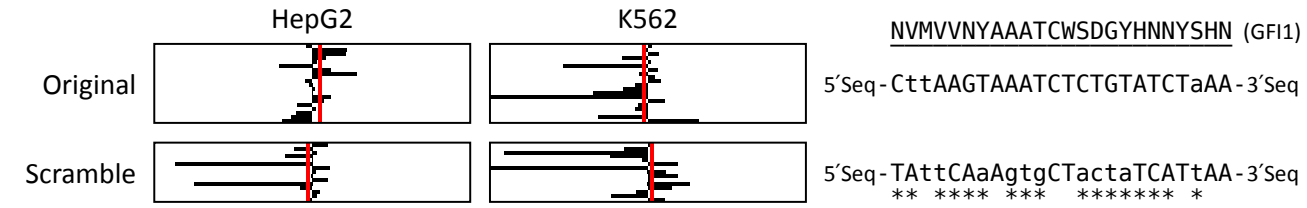
chr9 99741938 99741961 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

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5′Seq-TAttCAaAgtgCTactaTCATtAA-3′Seq

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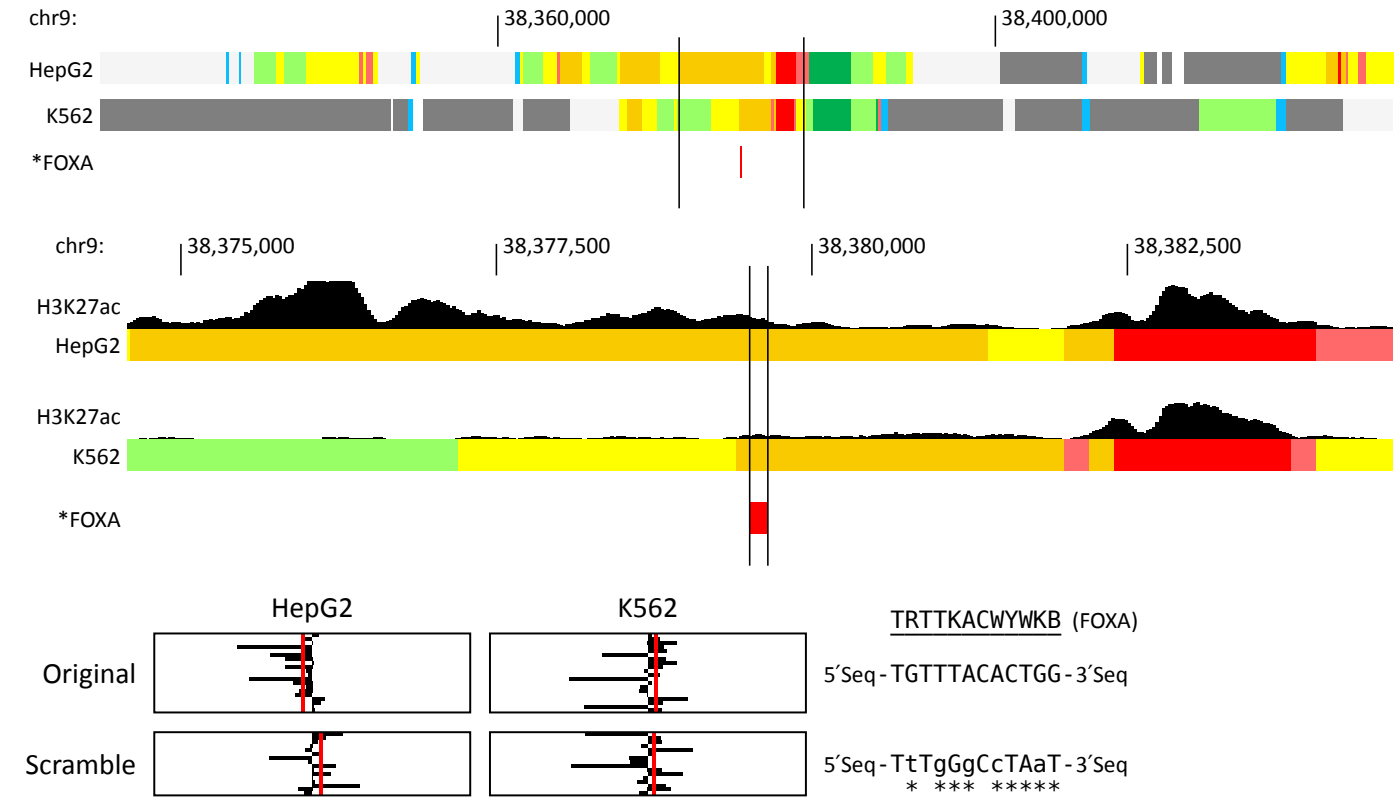
1026 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr9 38379574 38379585 - (hg18)



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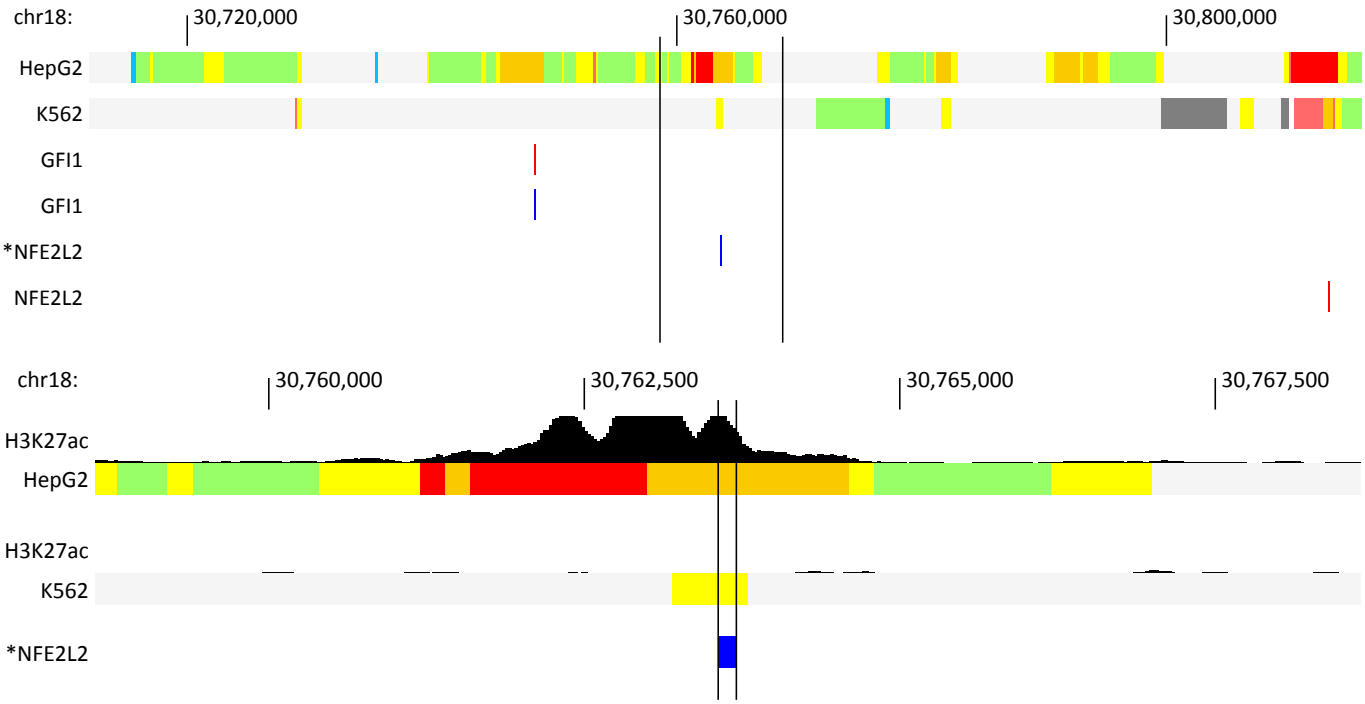
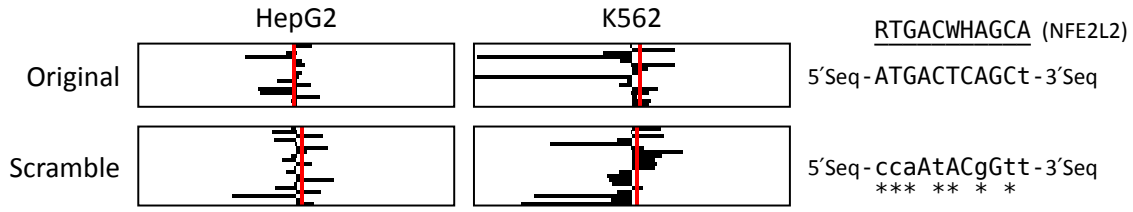
1027 NFE2L2 in HepG2 enhancer

chr18 30763628 30763638 - (hg18)





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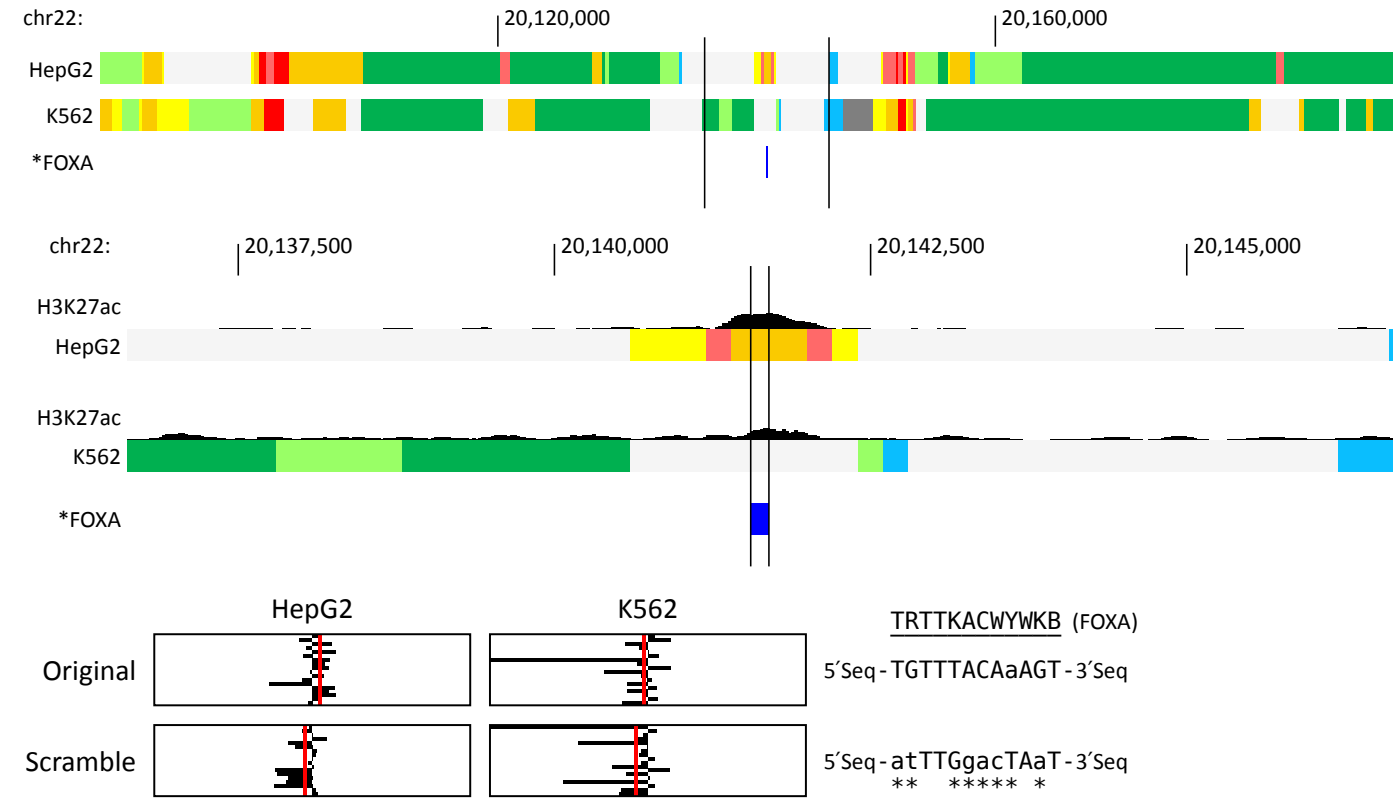
1028 FOXA in HepG2 enhancer

chr22 20141619 20141630 - (hg18)



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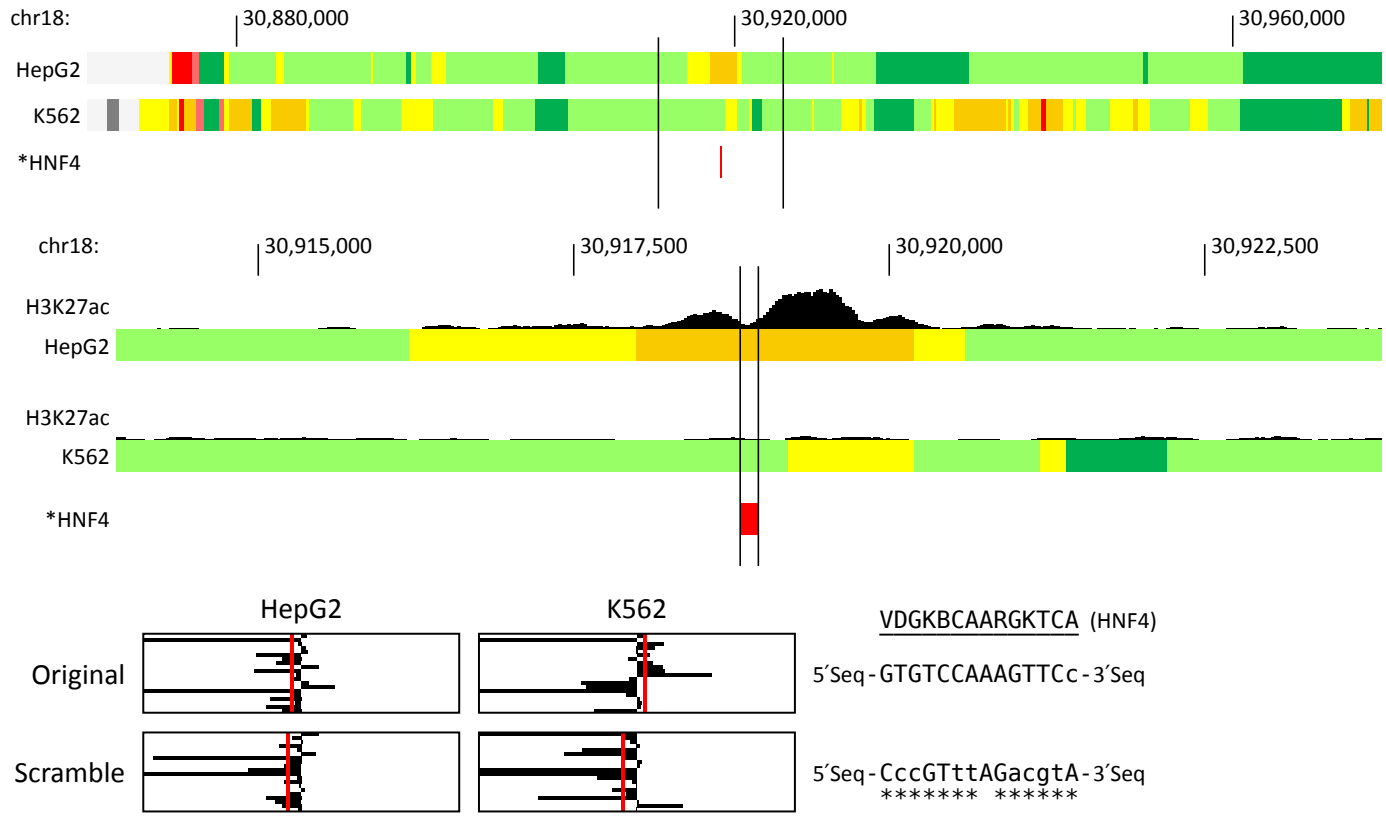
1029 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr18 30918885 30918898 + (hg18)



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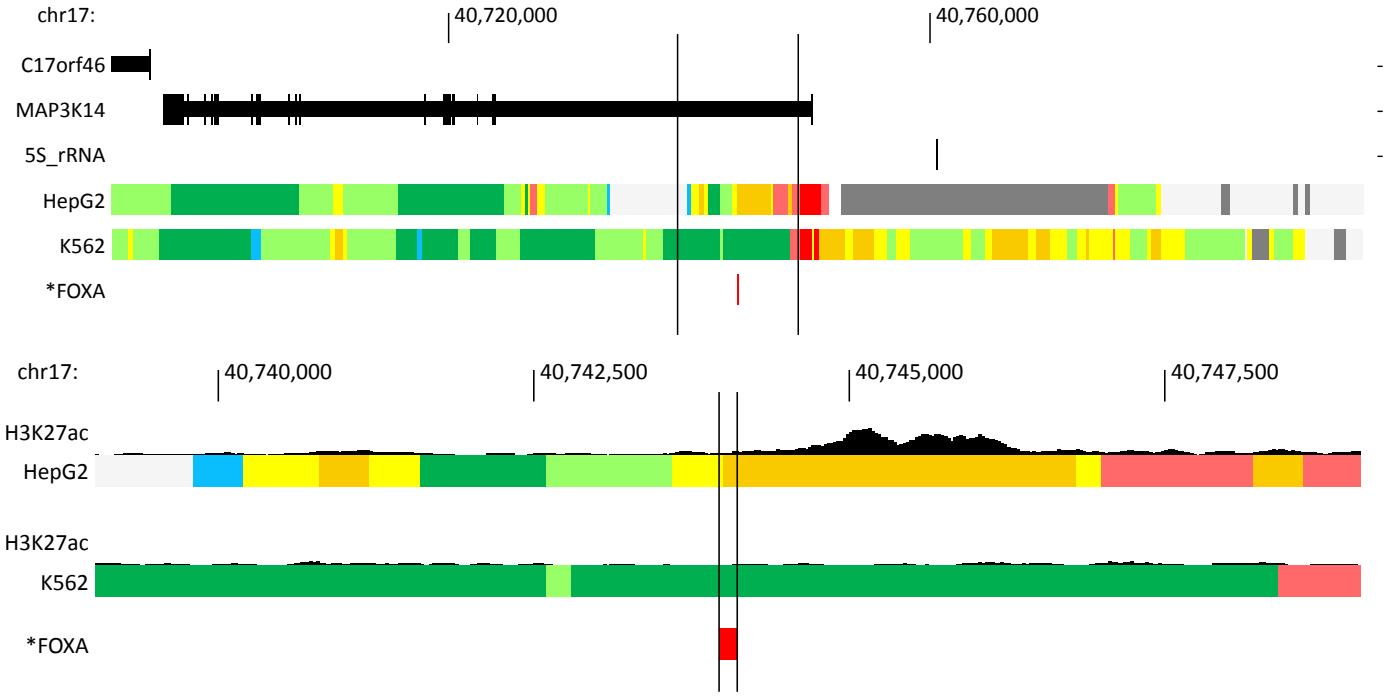
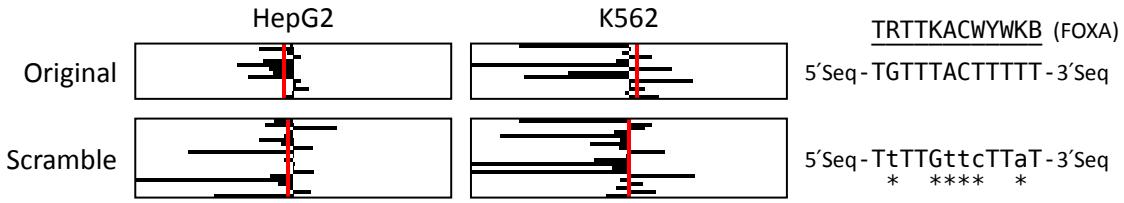
1030 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 40744035 40744046 + (hg18)





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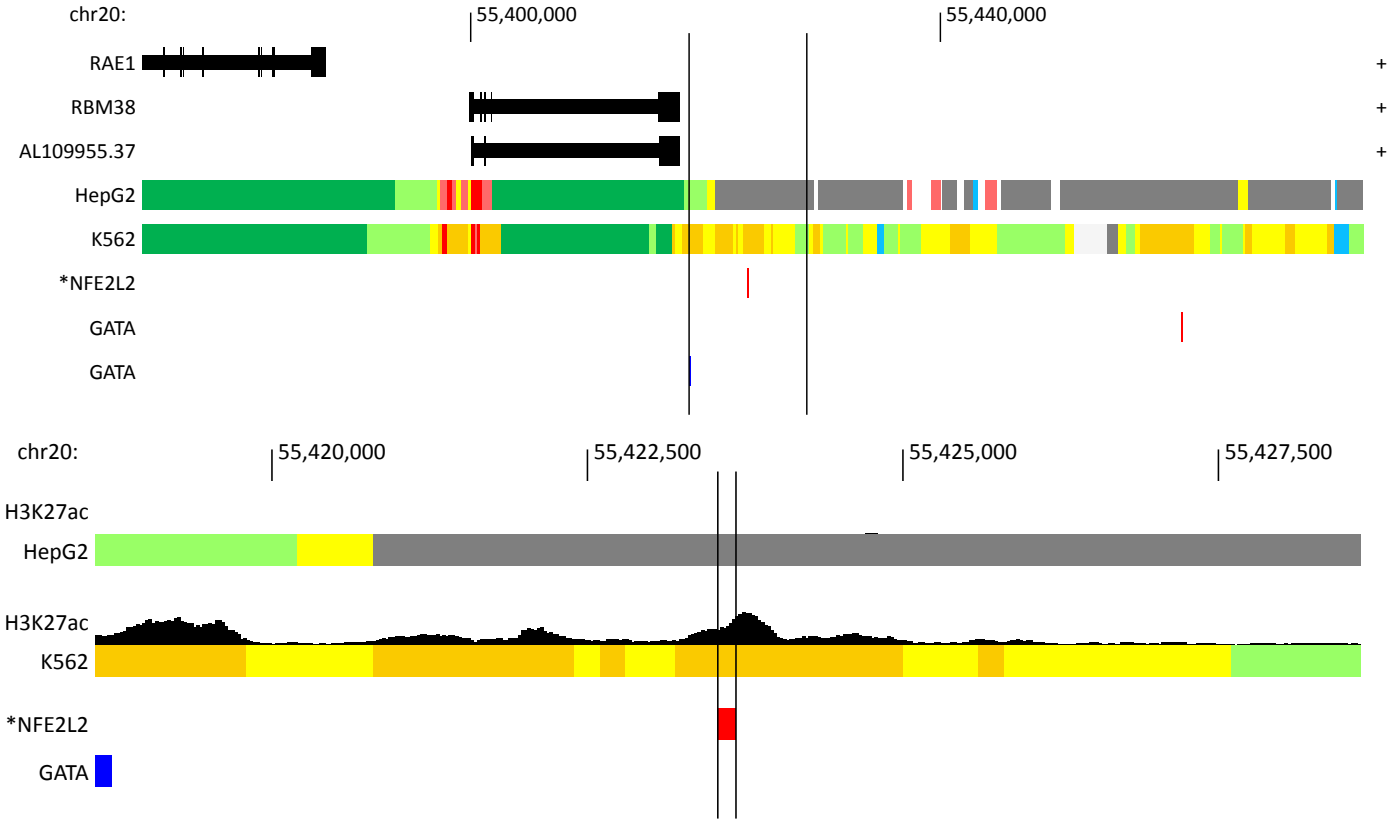
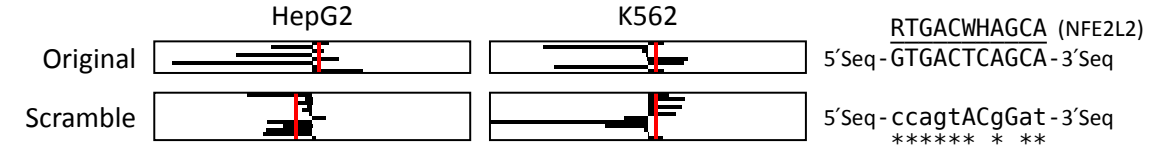
1031 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 55423600 55423610 - (hg18)





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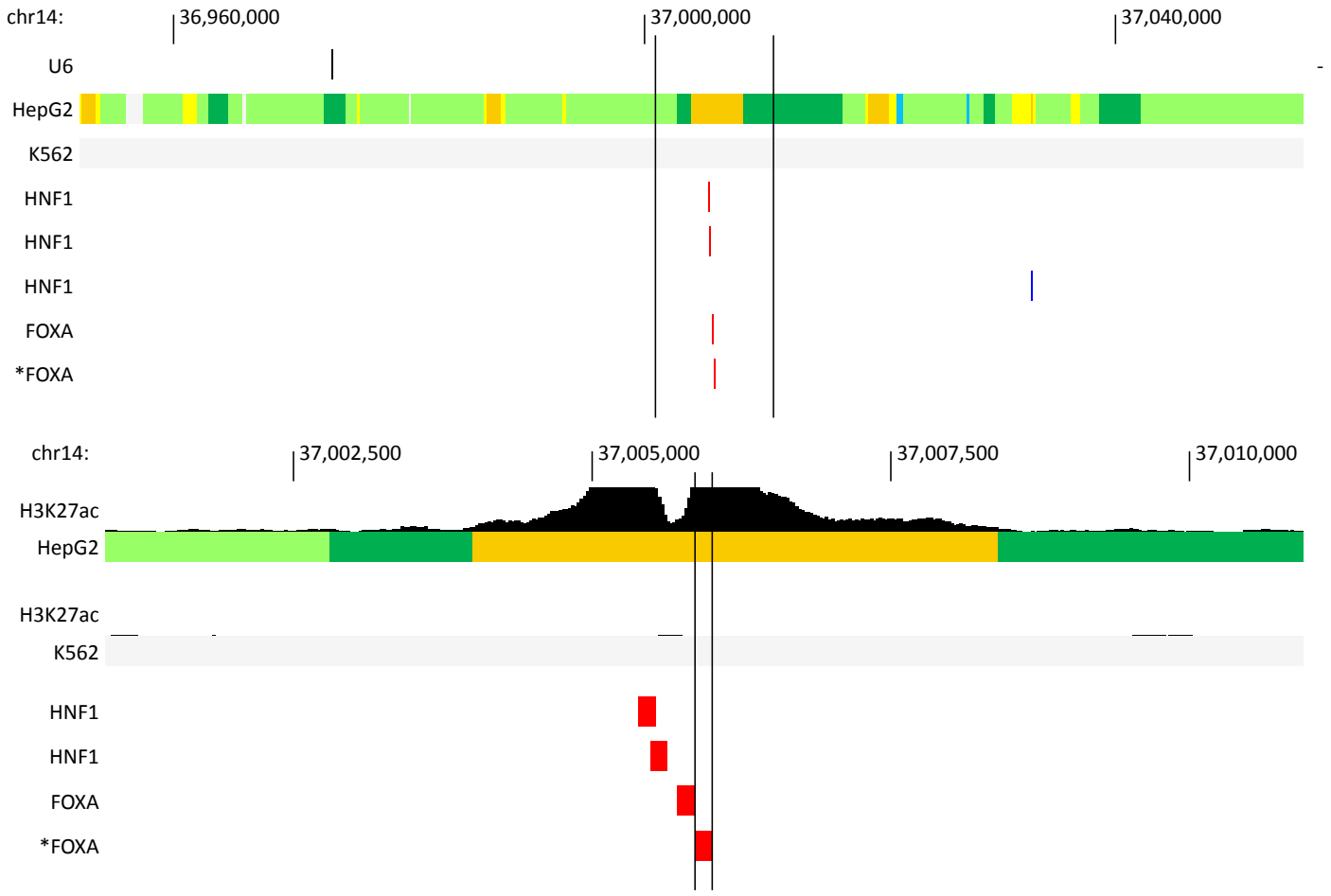
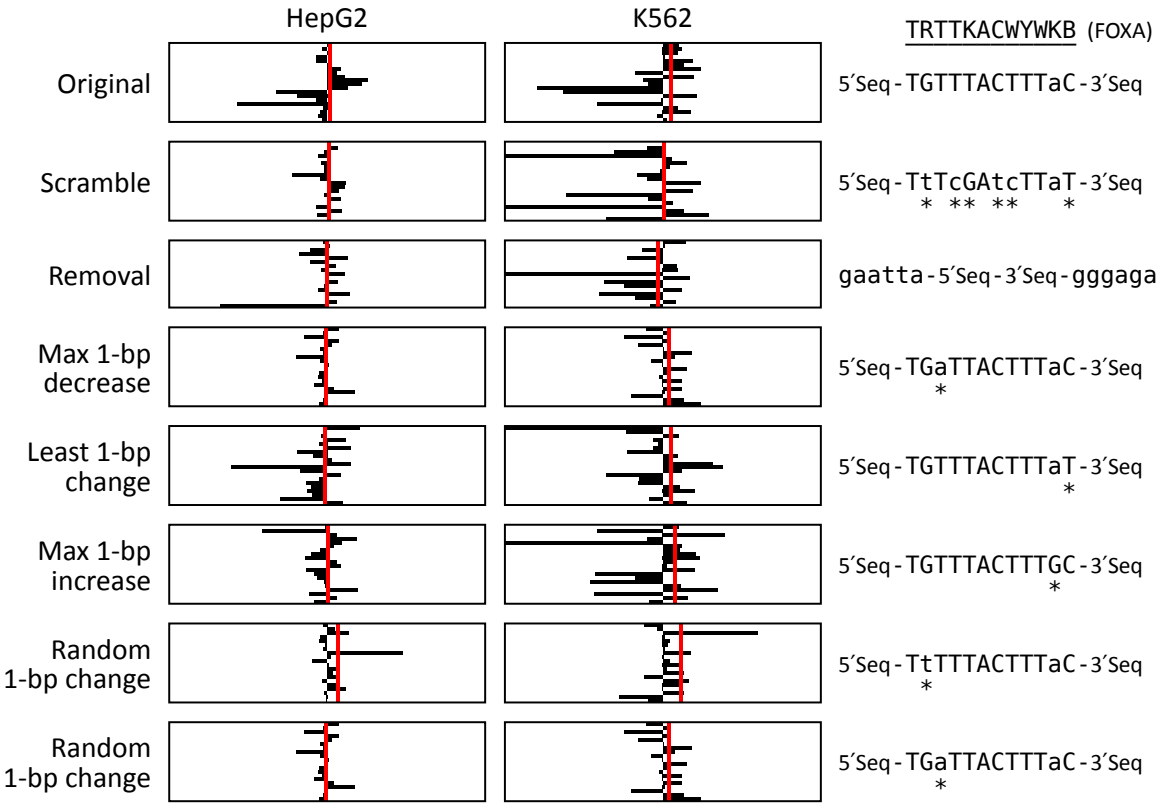
1032 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr14 37005928 37005939 - (hg18)





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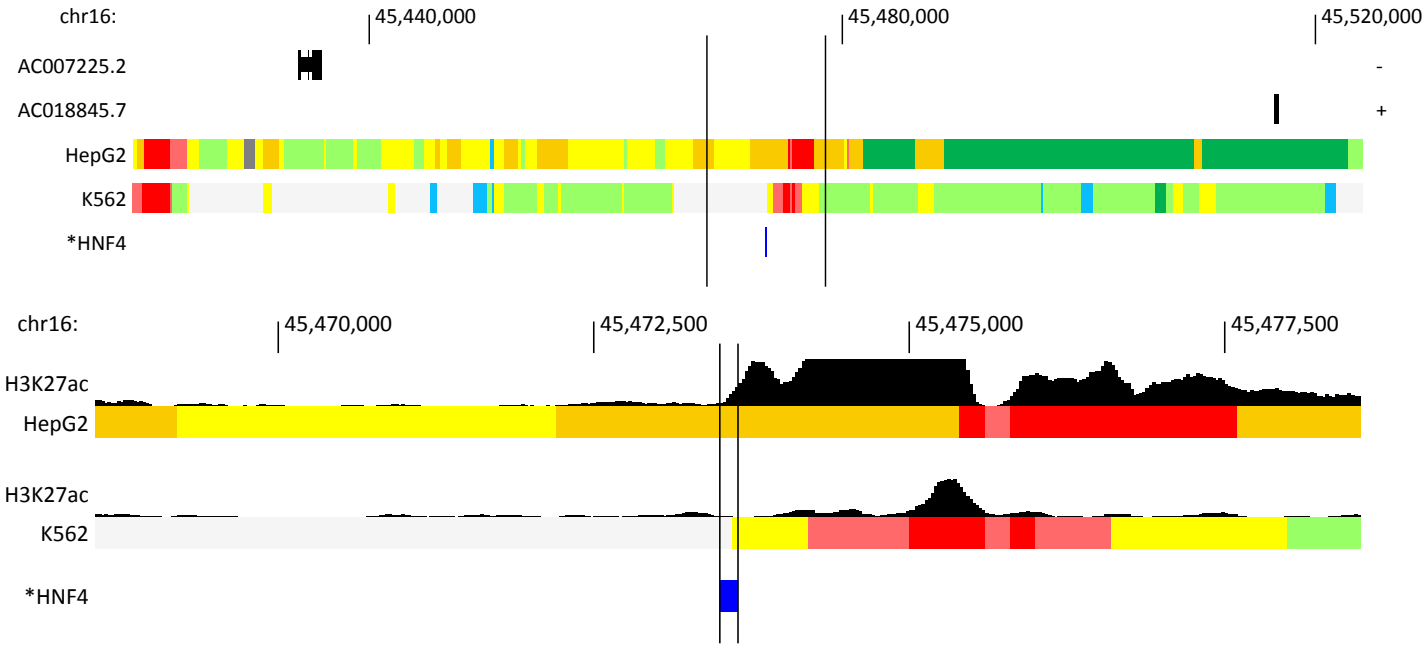
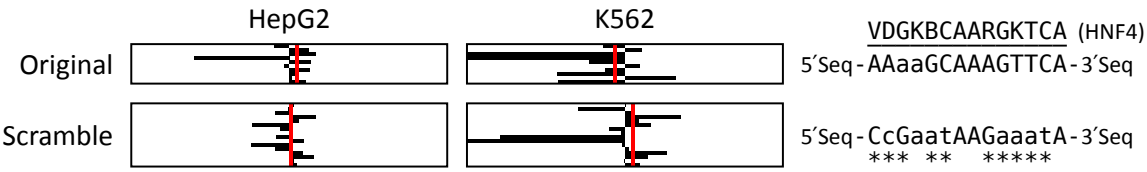
1033 HNF4 in HepG2 enhancer

chr16 45473565 45473578 + (hg18)





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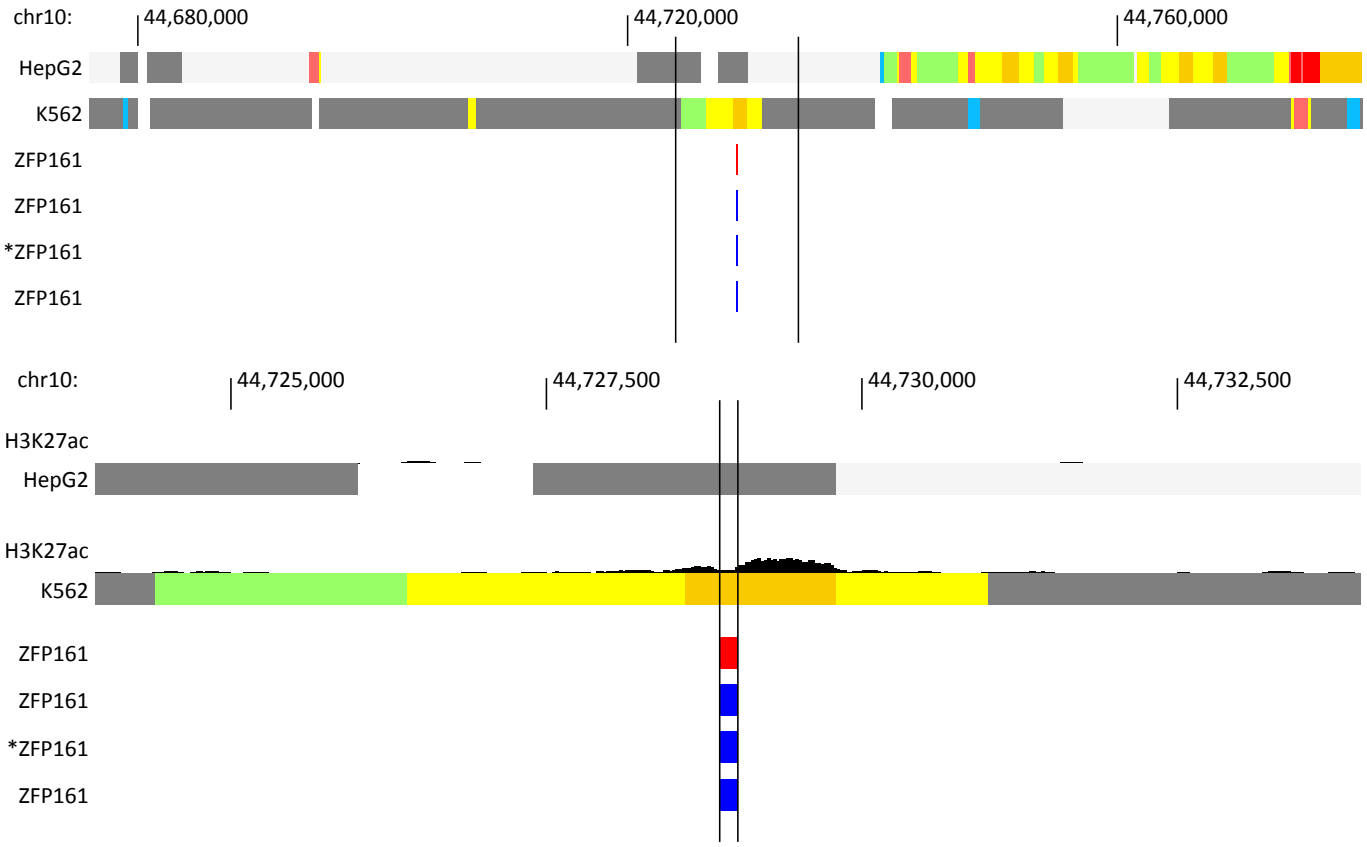
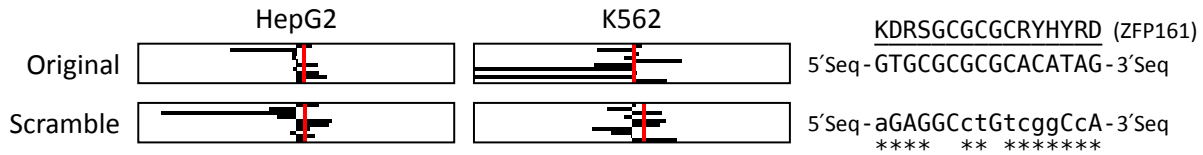
1034 ZFP161 in K562 enhancer

chr10 44728938 44728953 + (hg18)





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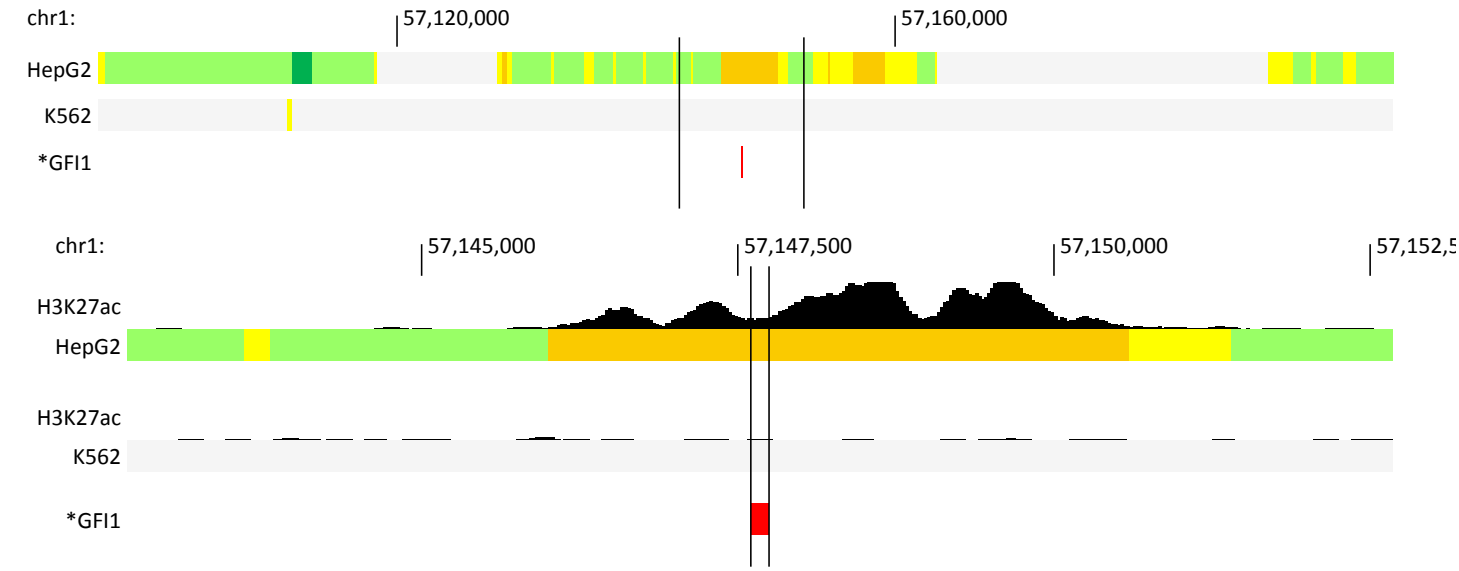
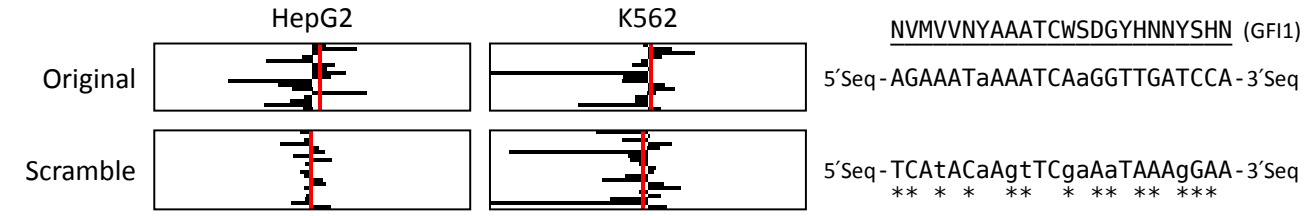
1035 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 57147664 57147687 - (hg18)





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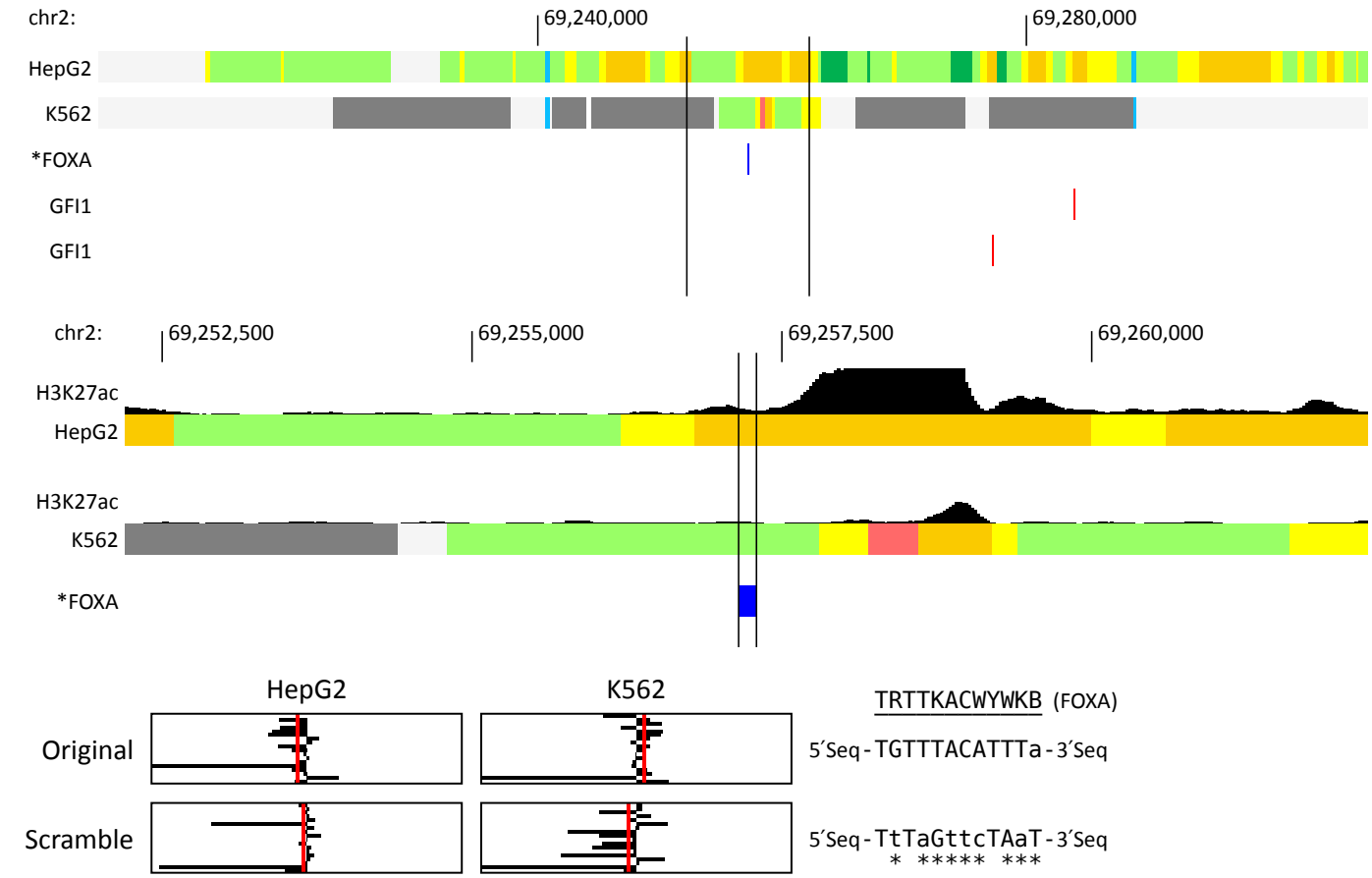
1036 FOXA in HepG2 enhancer

chr2 69257218 69257229 - (hg18)



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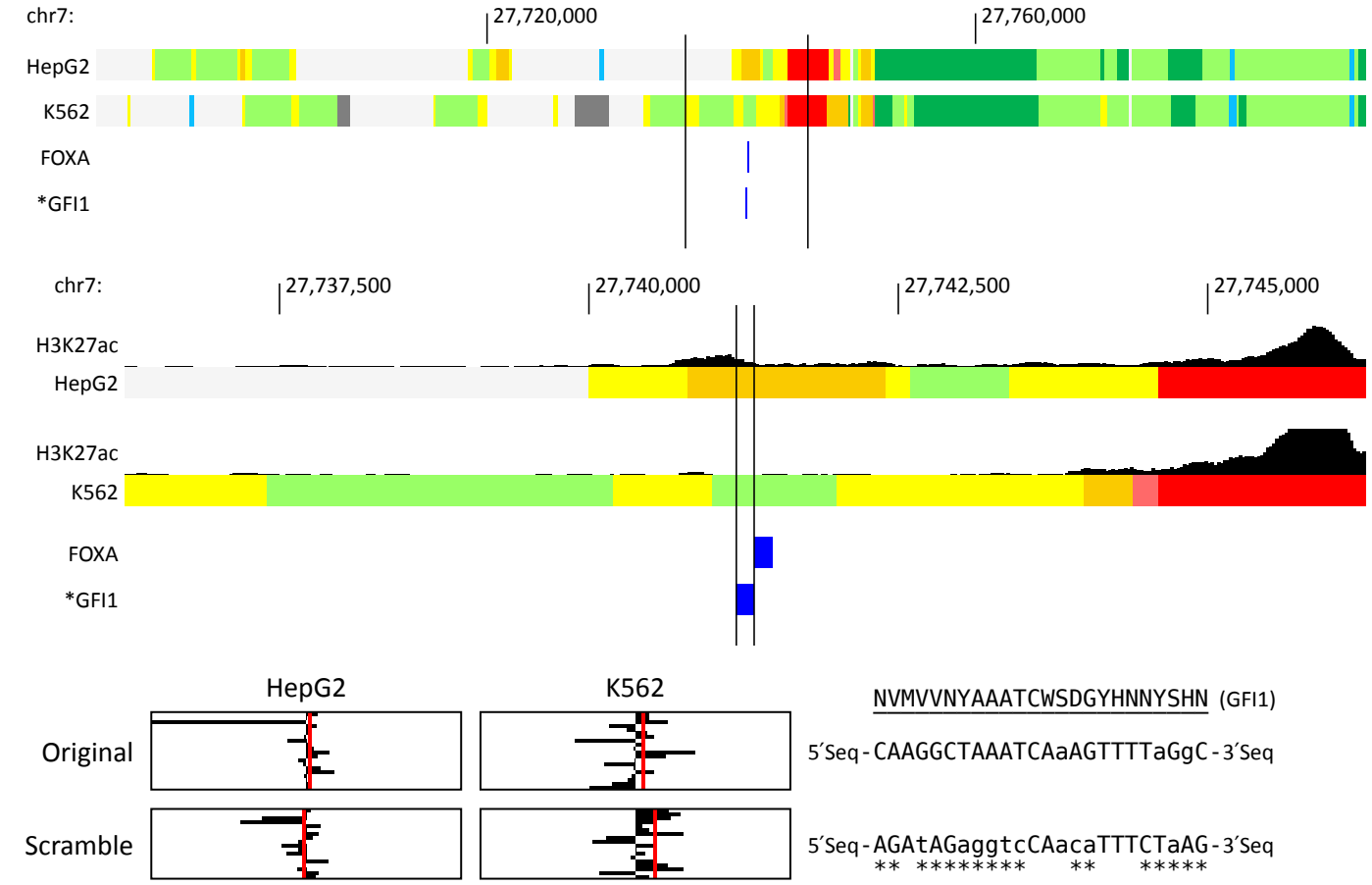
1037 GFI1 in HepG2 enhancer

chr7 27741252 27741275 - (hg18)



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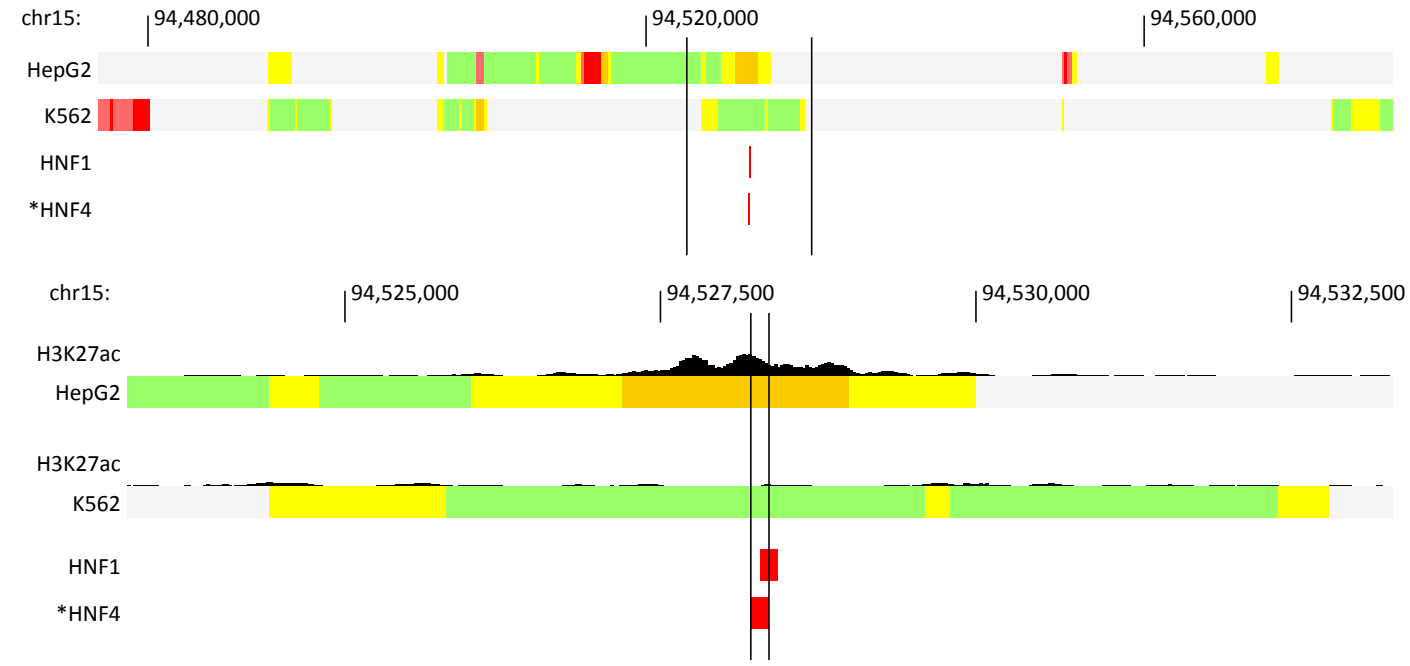
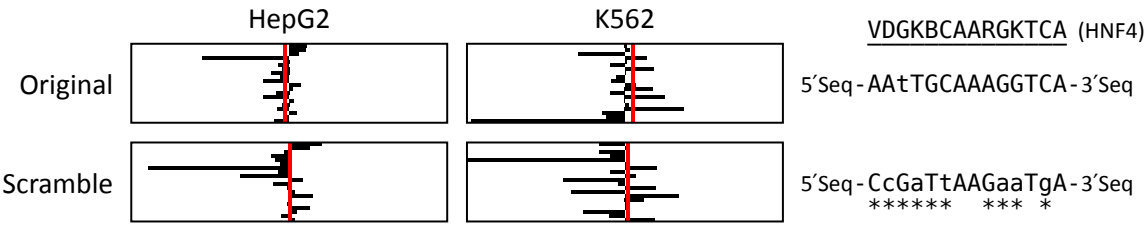
1038 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr15 94528282 94528295 + (hg18)





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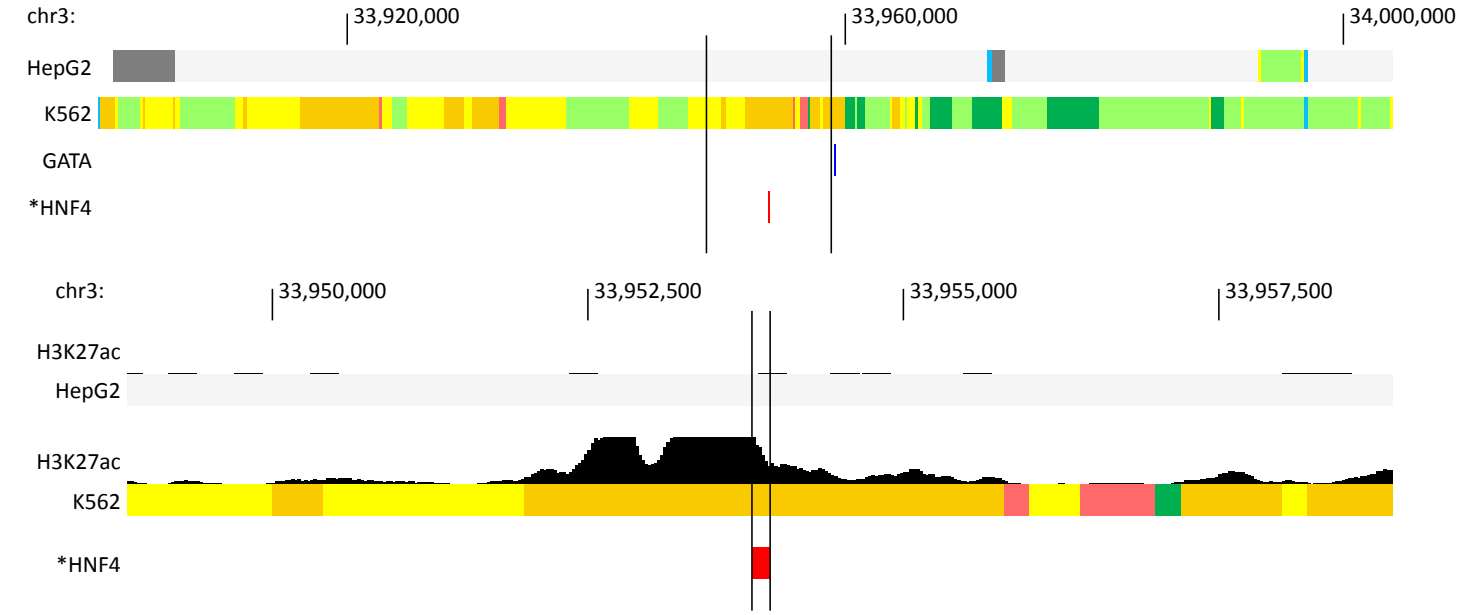
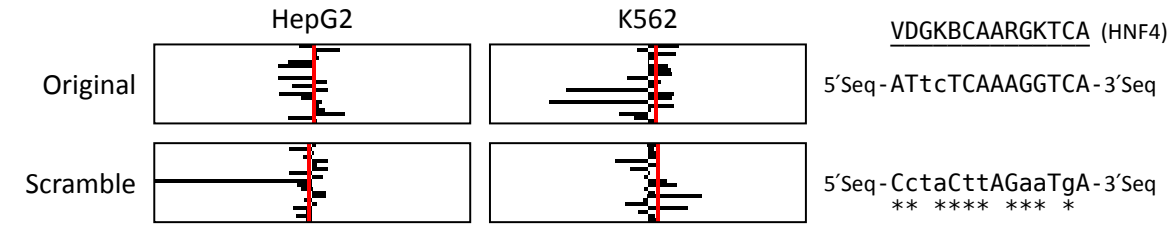
3′Seq = tcaatgagtaaacagatattaatggttagccggataactggtacataaacaggtcacattaataa

1039 HNF4 in K562 enhancer (conserved at 60% confidence)

chr3 33953866 33953879 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-ATtcTCAAAGGTCA-3′Seq

5′Seq-CctaCttAGaaTgA-3′Seq

** **** *** *

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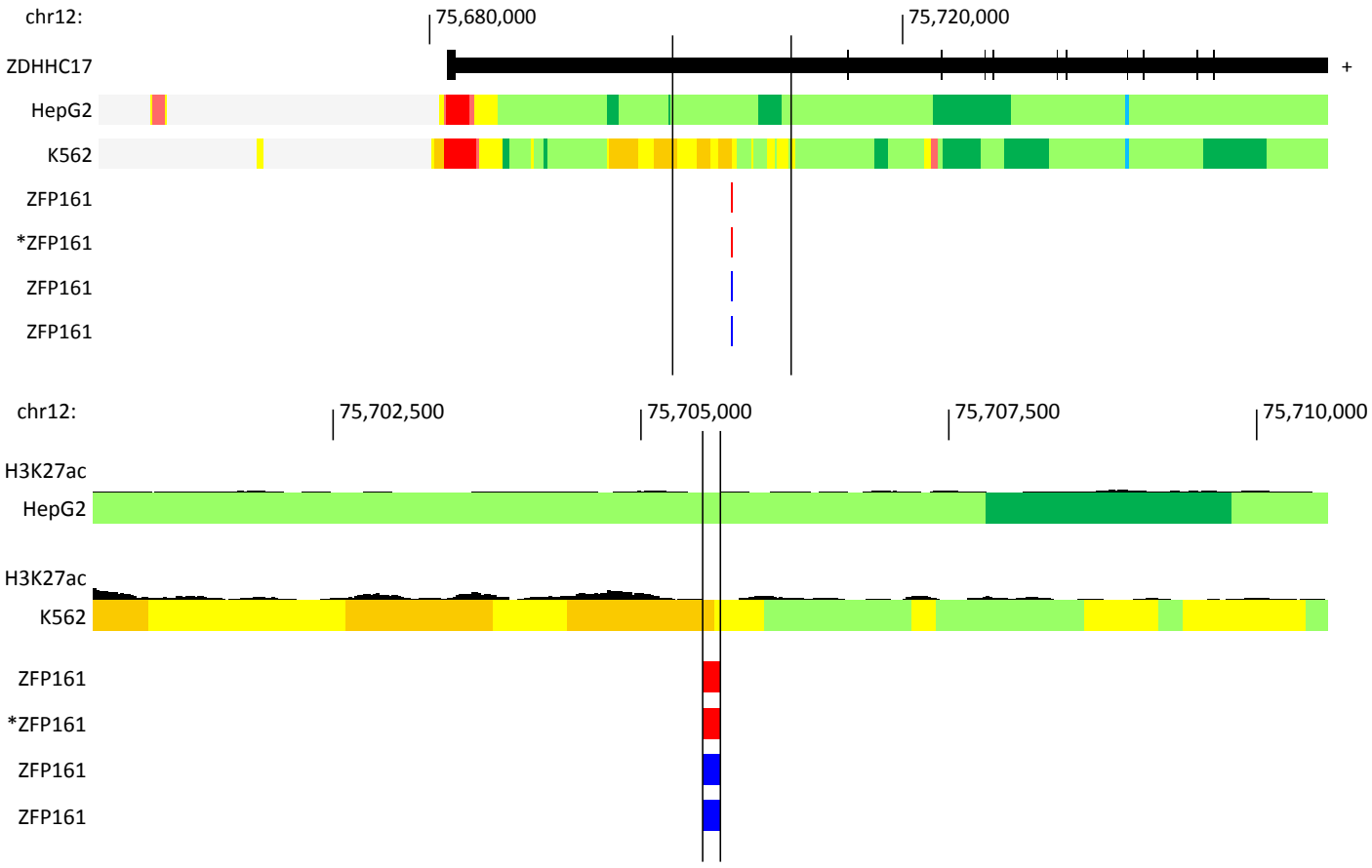
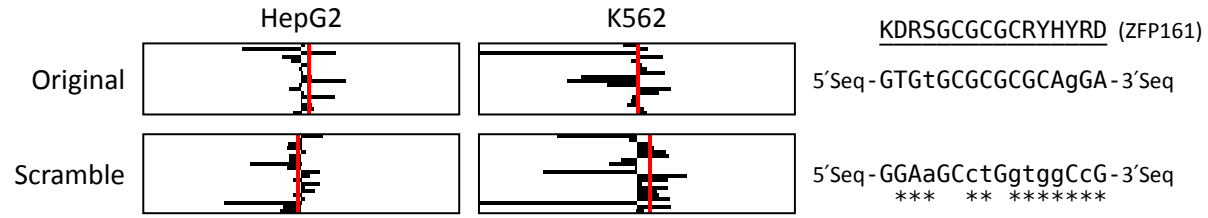
3′Seq = taatctgaatacattttctttttcttcttttttagggcaatagggatagaattcaaaacaattaaaa

1040 ZFP161 in K562 enhancer (conserved at 10% confidence)

chr12 75705566 75705581 + (hg18)





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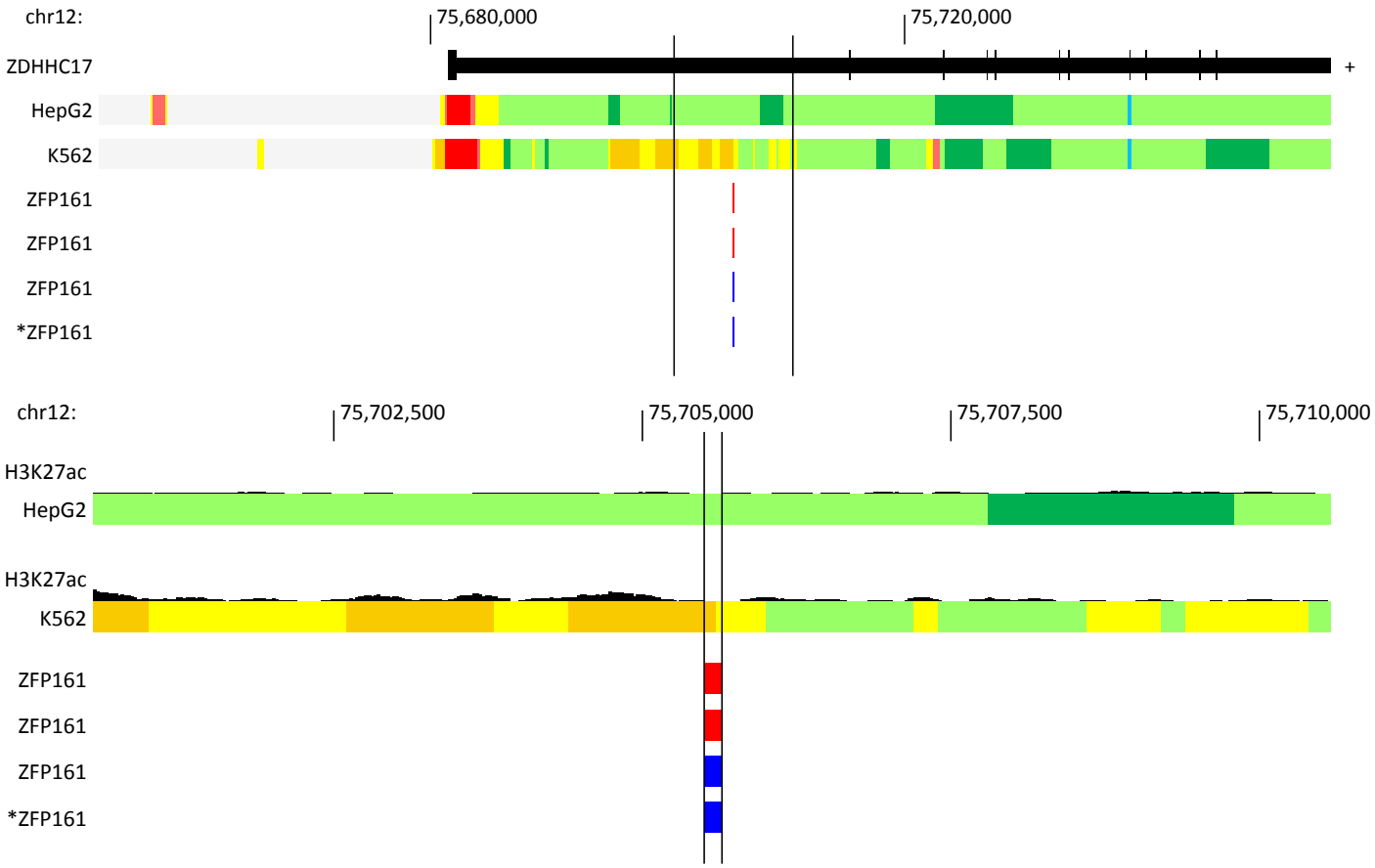
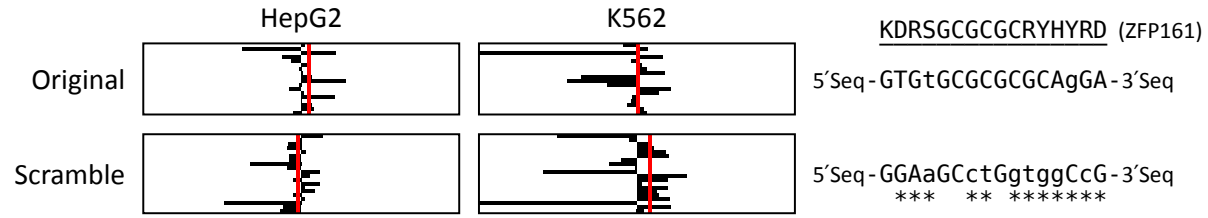
1041 ZFP161 in K562 enhancer

chr12 75705566 75705581 + (hg18)





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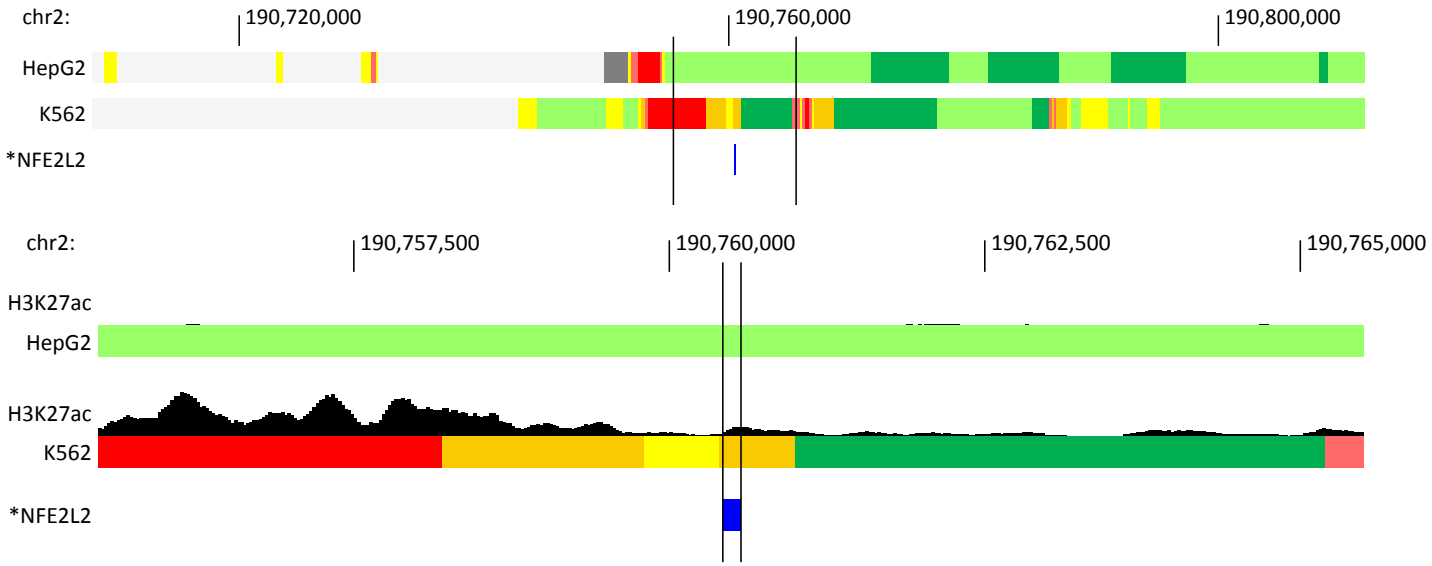
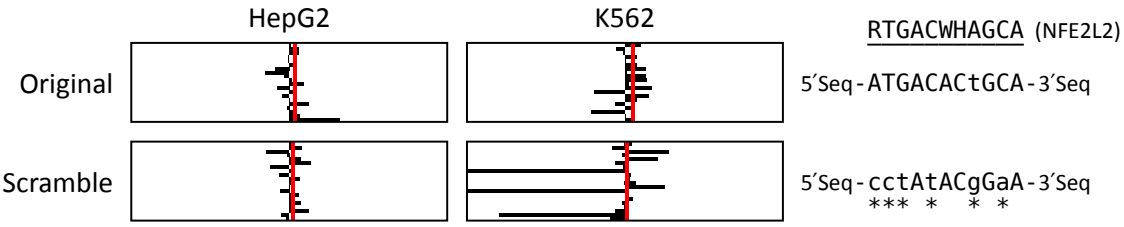
1042 NFE2L2 in K562 enhancer

chr2 190760491 190760501 + (hg18)





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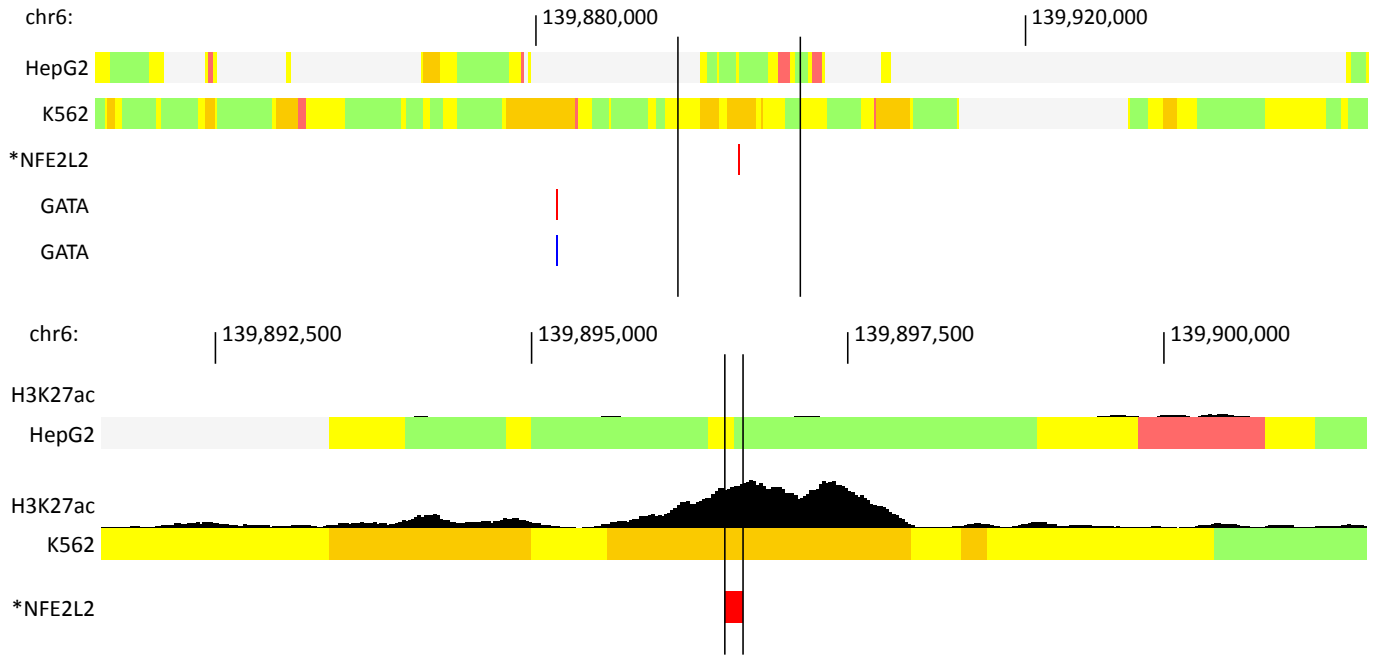
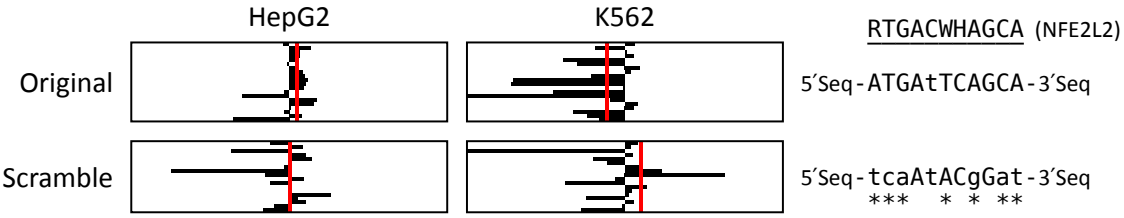
1043 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 139896595 139896605 - (hg18)





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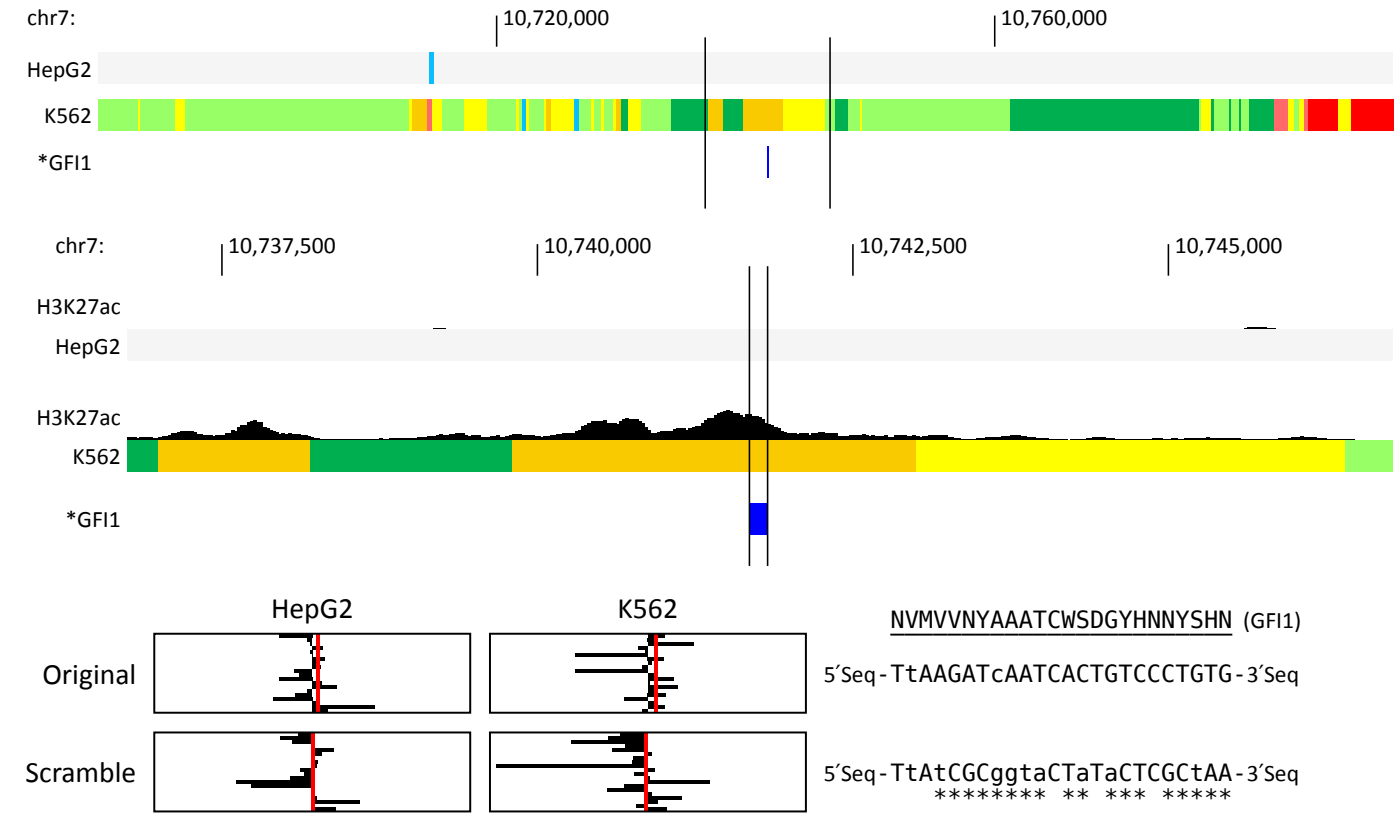
1044 GFI1 in K562 enhancer

chr7 10741741 10741764 - (hg18)



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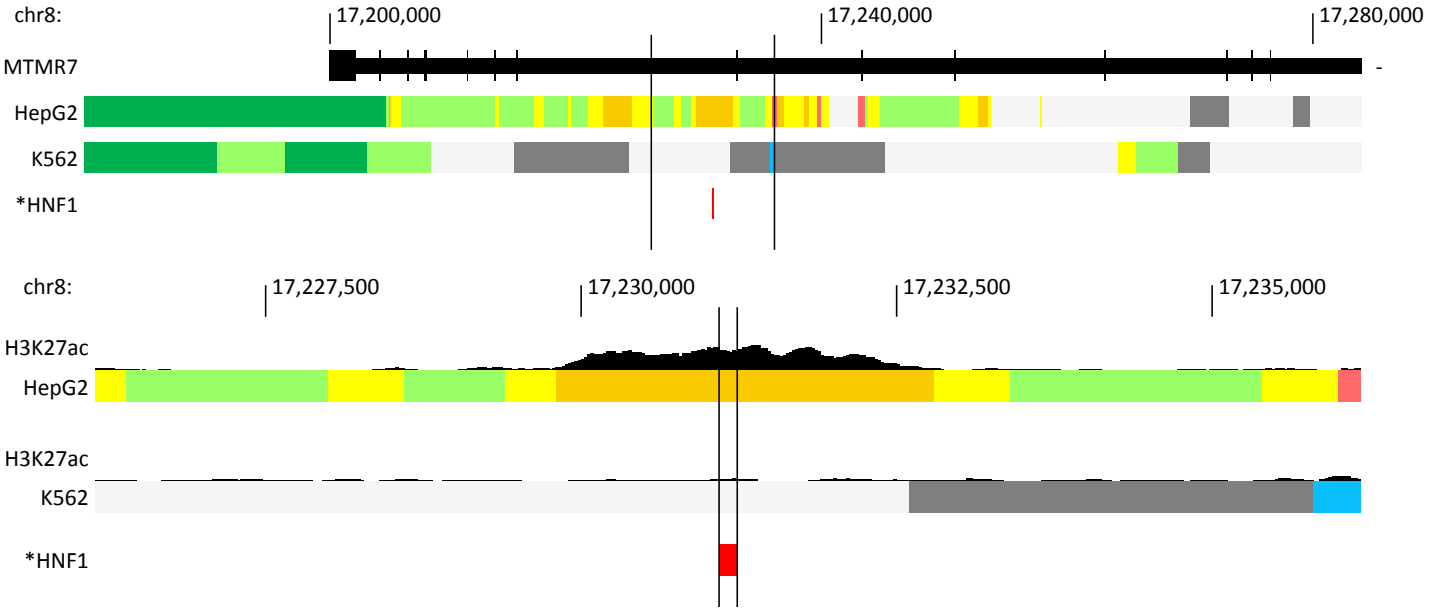
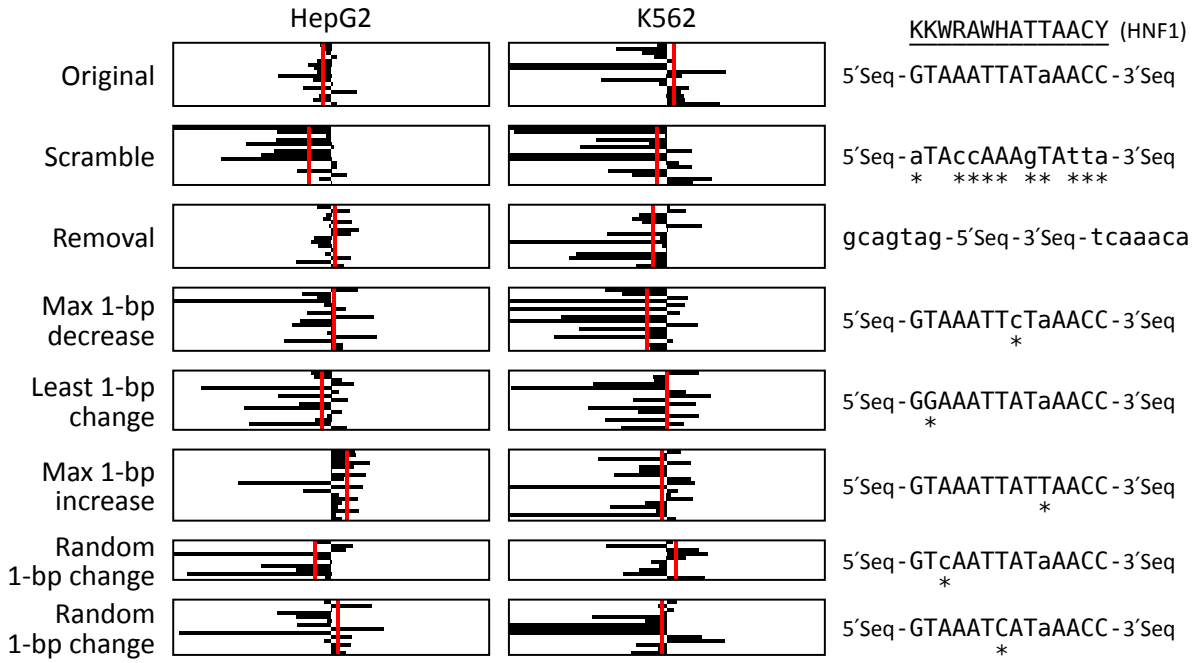
1045 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr8 17231159 17231172 - (hg18)





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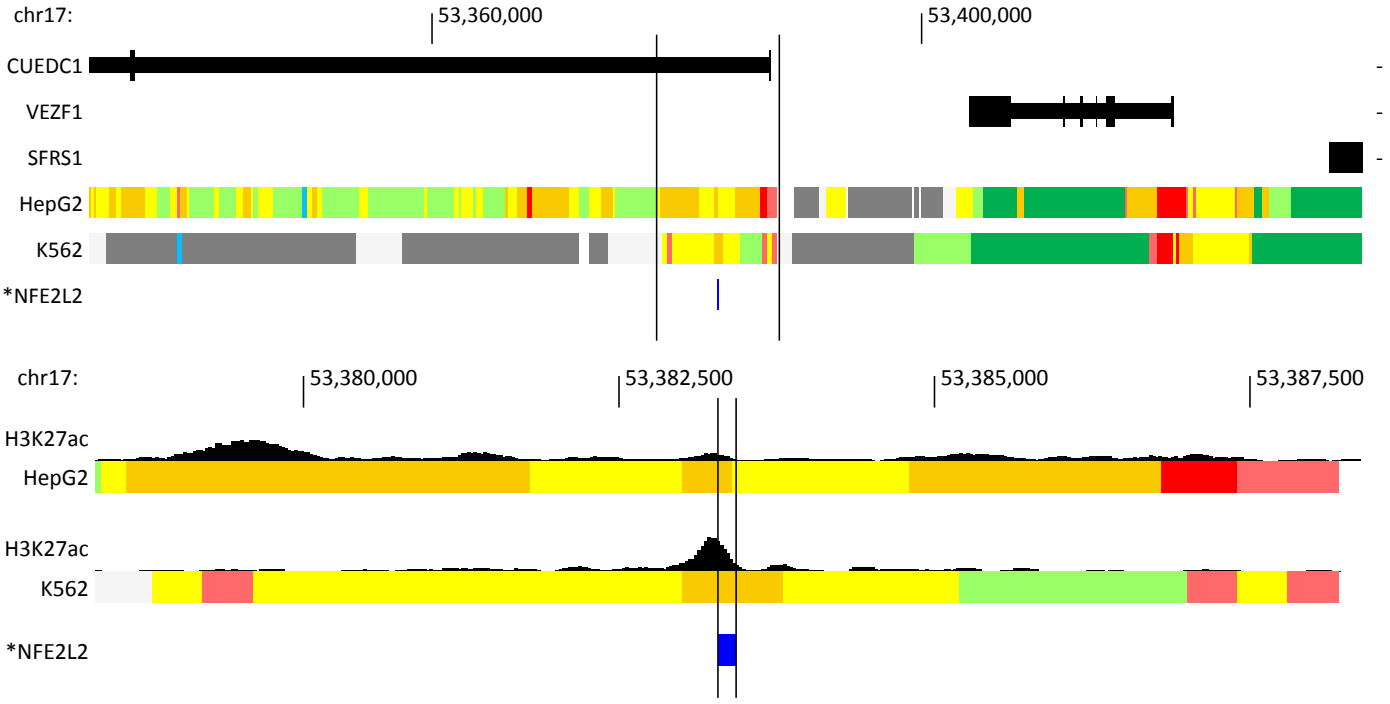
1046 NFE2L2 in K562 enhancer

chr17 53383351 53383361 - (hg18)



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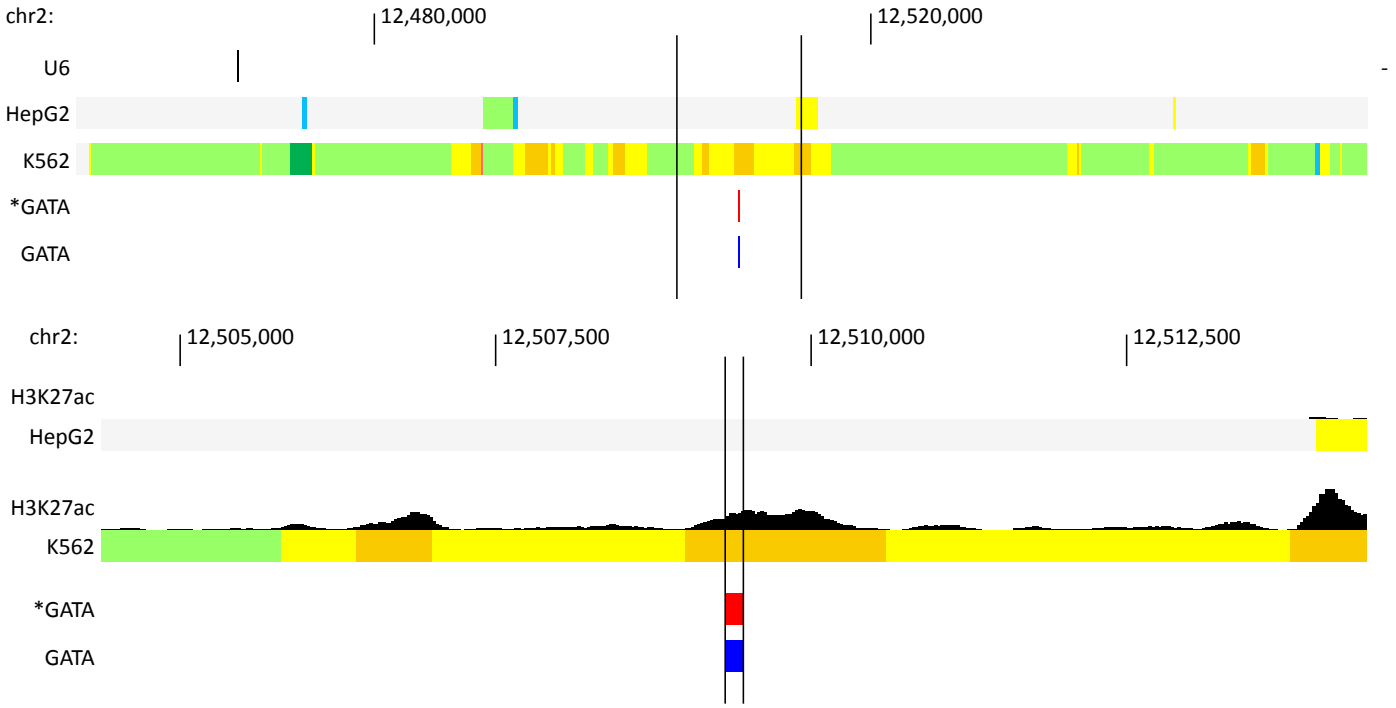
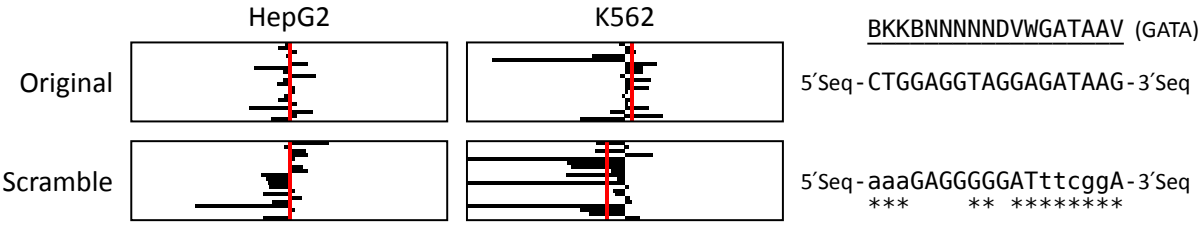
1047 GATA in K562 enhancer (conserved at 60% confidence)

chr2 12509383 12509400 + (hg18)





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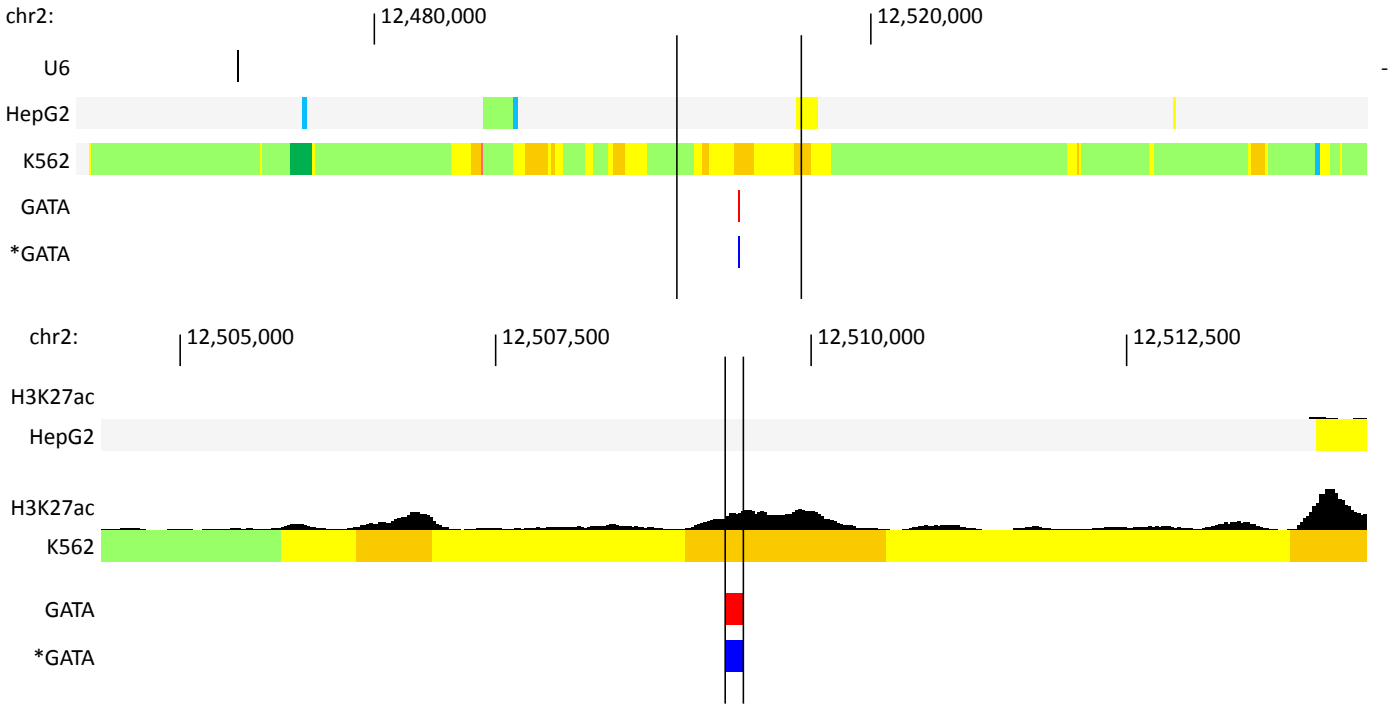
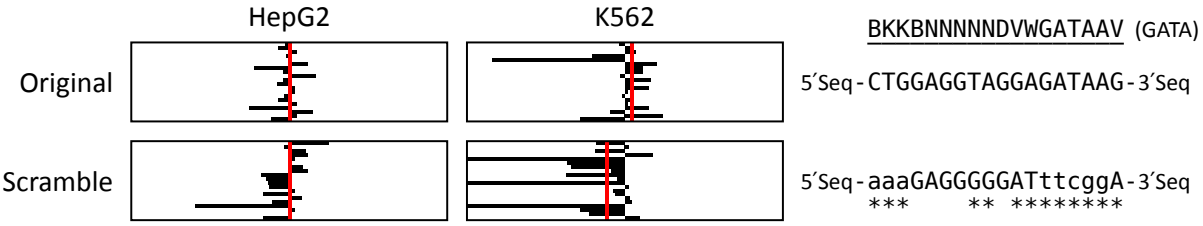
1048 GATA in K562 enhancer

chr2 12509383 12509400 + (hg18)





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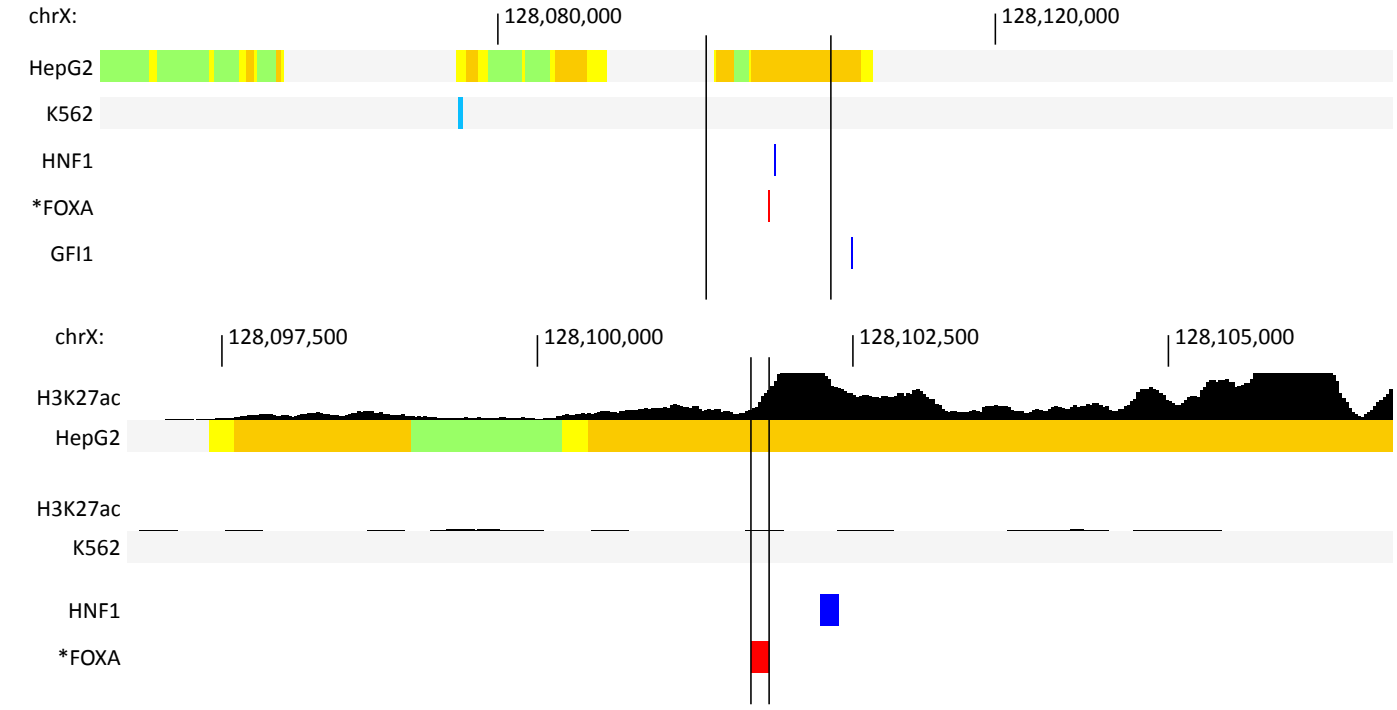
1049 FOXA in HepG2 enhancer (conserved at 40% confidence)

chrX 128101759 128101770 - (hg18)



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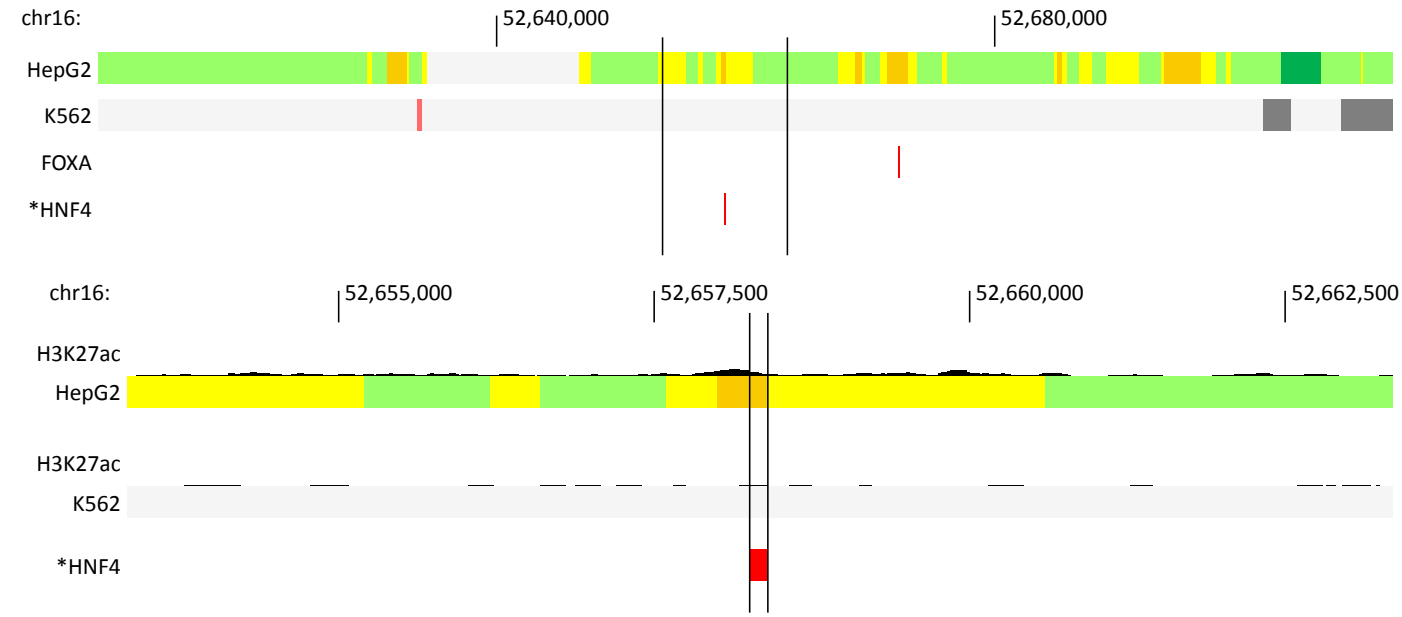
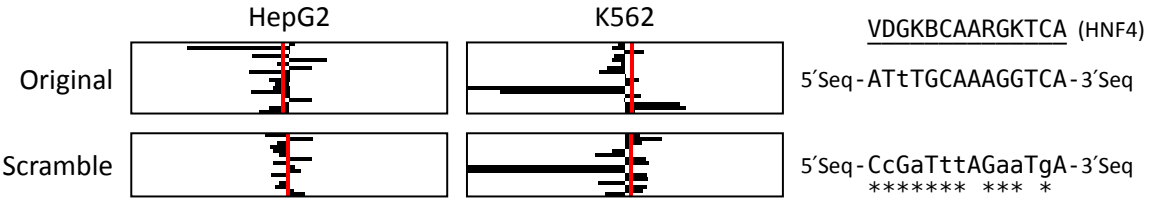
1050 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr16 52658323 52658336 + (hg18)





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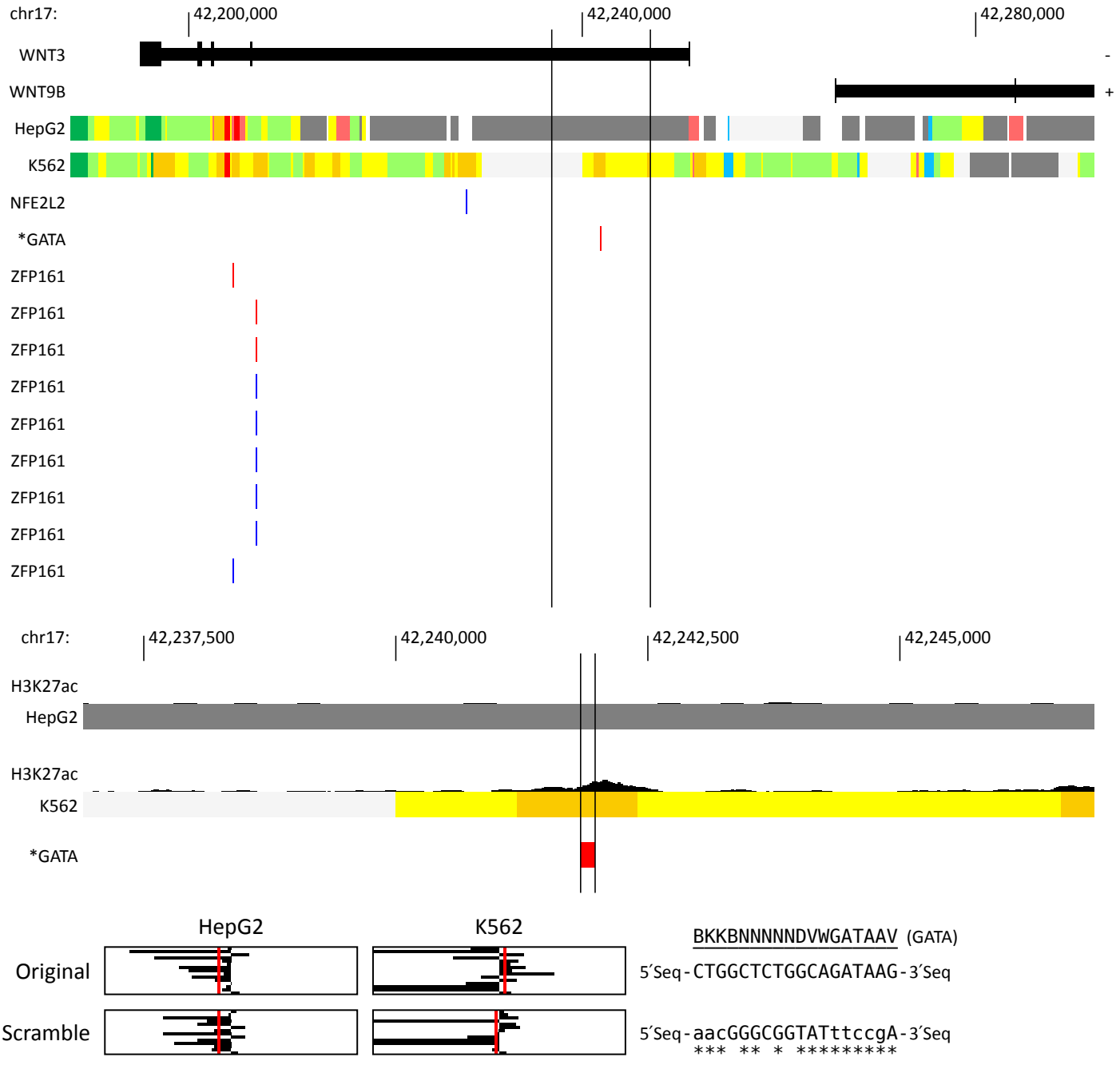
1051 GATA in K562 enhancer (conserved at 60% confidence)

chr17 42241897 42241914 + (hg18)



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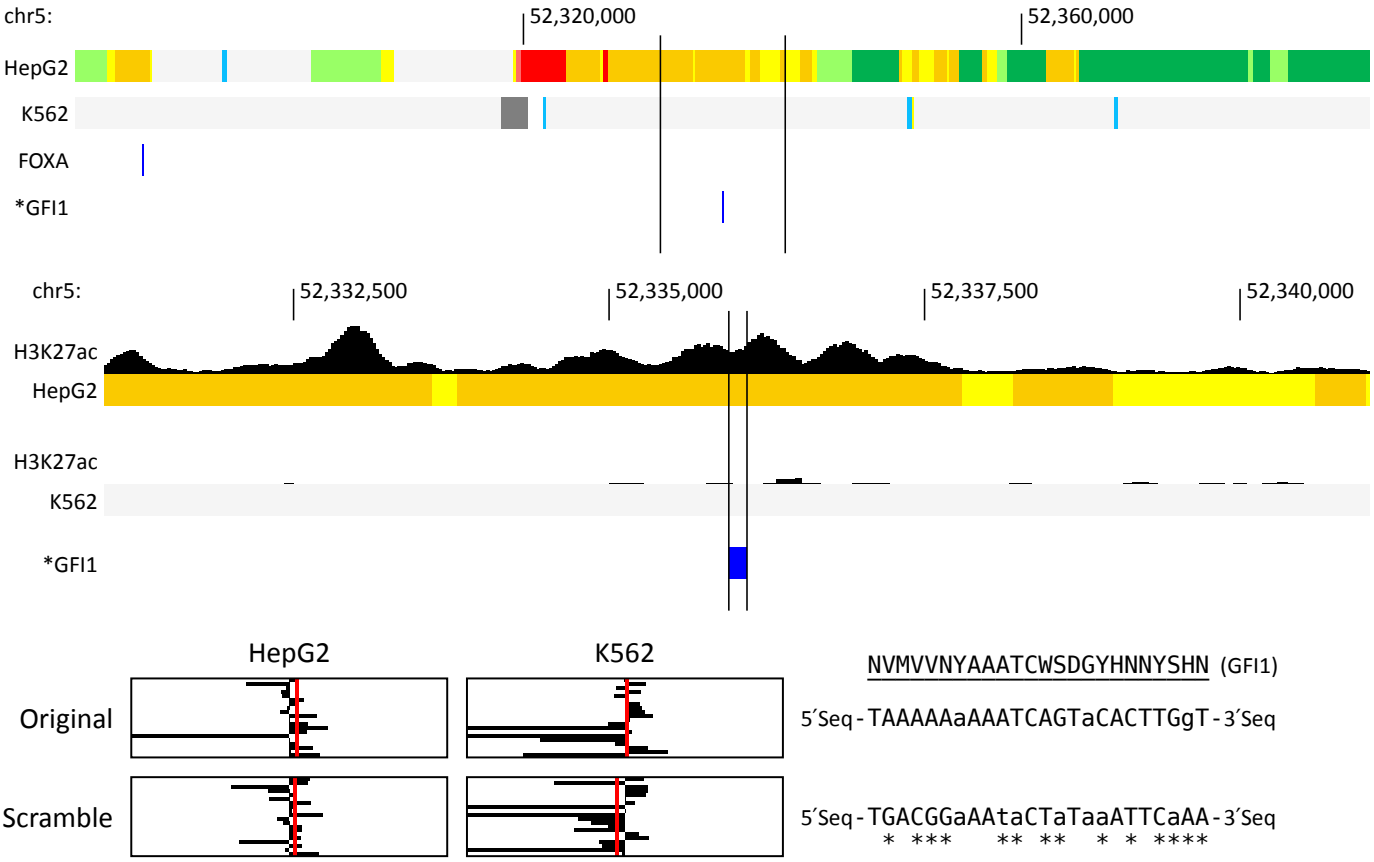
1052 GFI1 in HepG2 enhancer

chr5 52336010 52336033 + (hg18)



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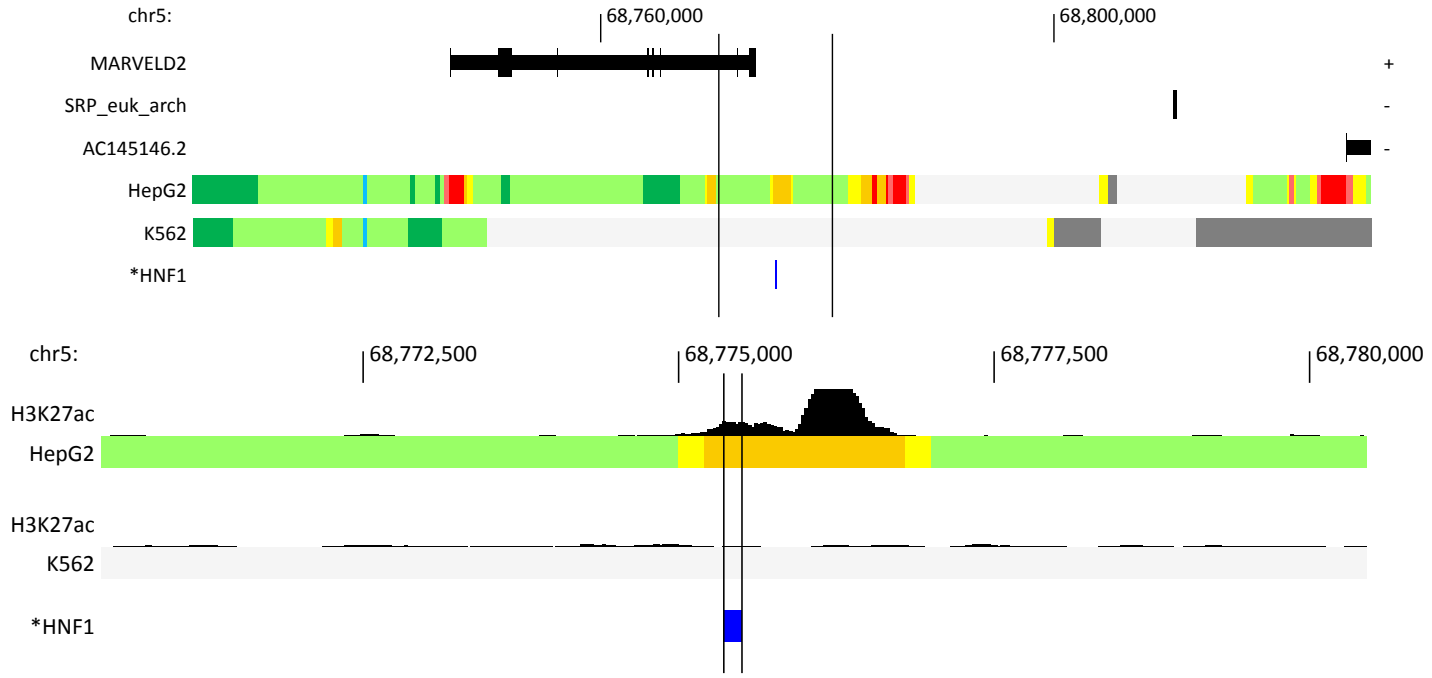
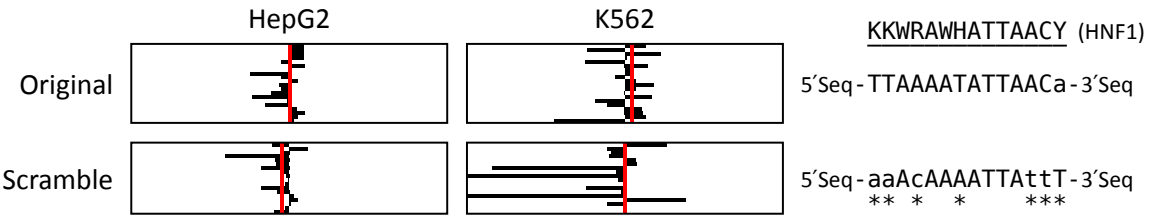
1053 HNF1 in HepG2 enhancer

chr5 68775424 68775437 - (hg18)





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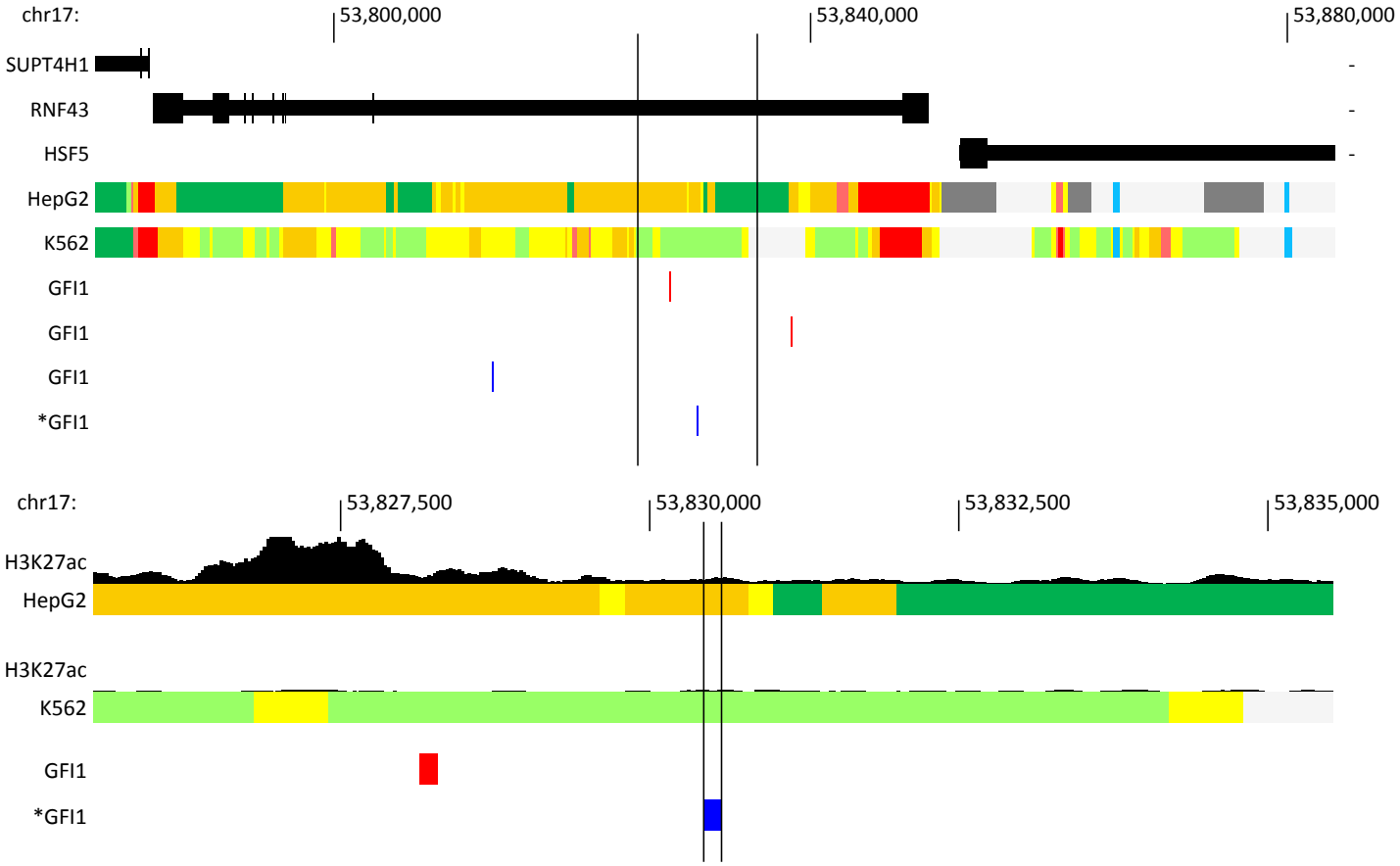
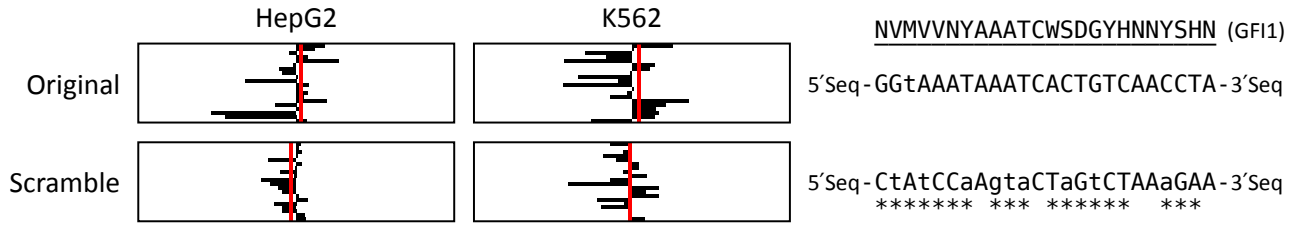
1054 GFI1 in HepG2 enhancer

chr17 53830498 53830521 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-GGtAAATAAATCACTGTCAACCTA-3′Seq

5′Seq-CtAtCCaAgtaCTaGtCTAAaGAA-3′Seq

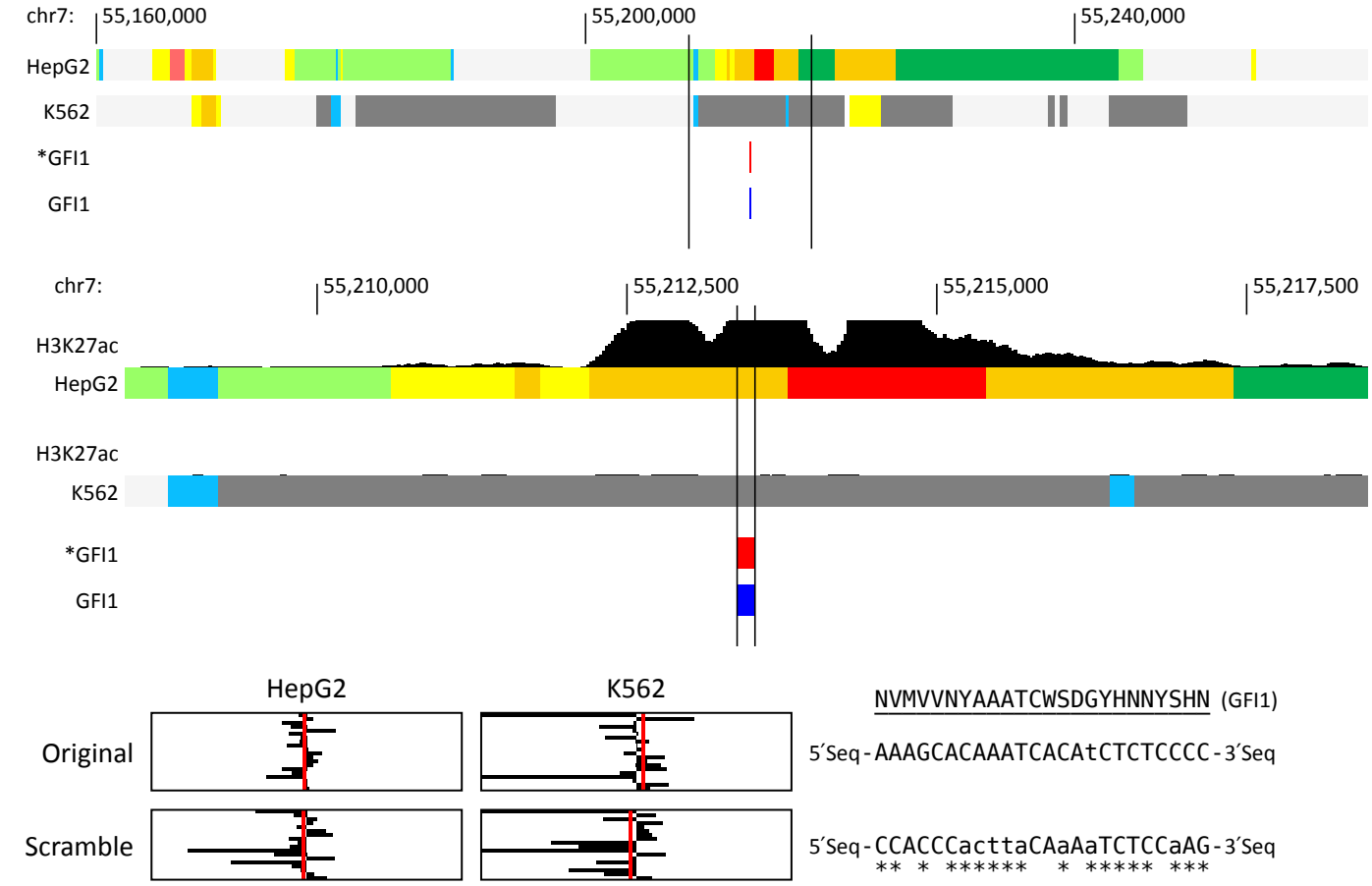
******* *** ****** ***

5′Seq = attgaagaaaggatttcaacagtacagattgaatttttaaggacttcctggtcttcagaaa

3′Seq = aaaggaagaagctgaggcaaaattaatataagtggagagcttatttgagccaagtttaag

1055 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr7 55213450 55213473 - (hg18)



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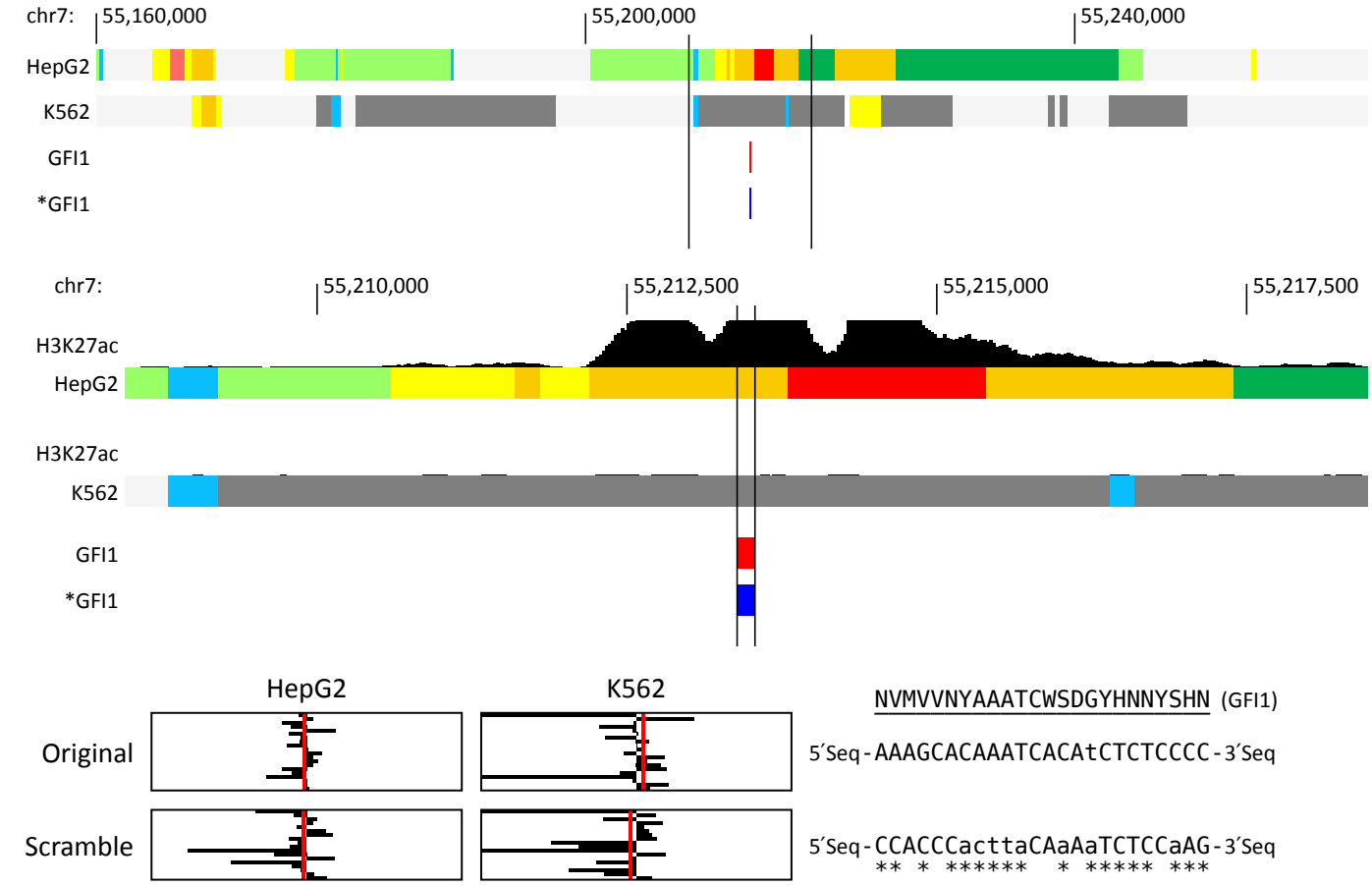
1056 GFI1 in HepG2 enhancer

chr7 55213450 55213473 - (hg18)



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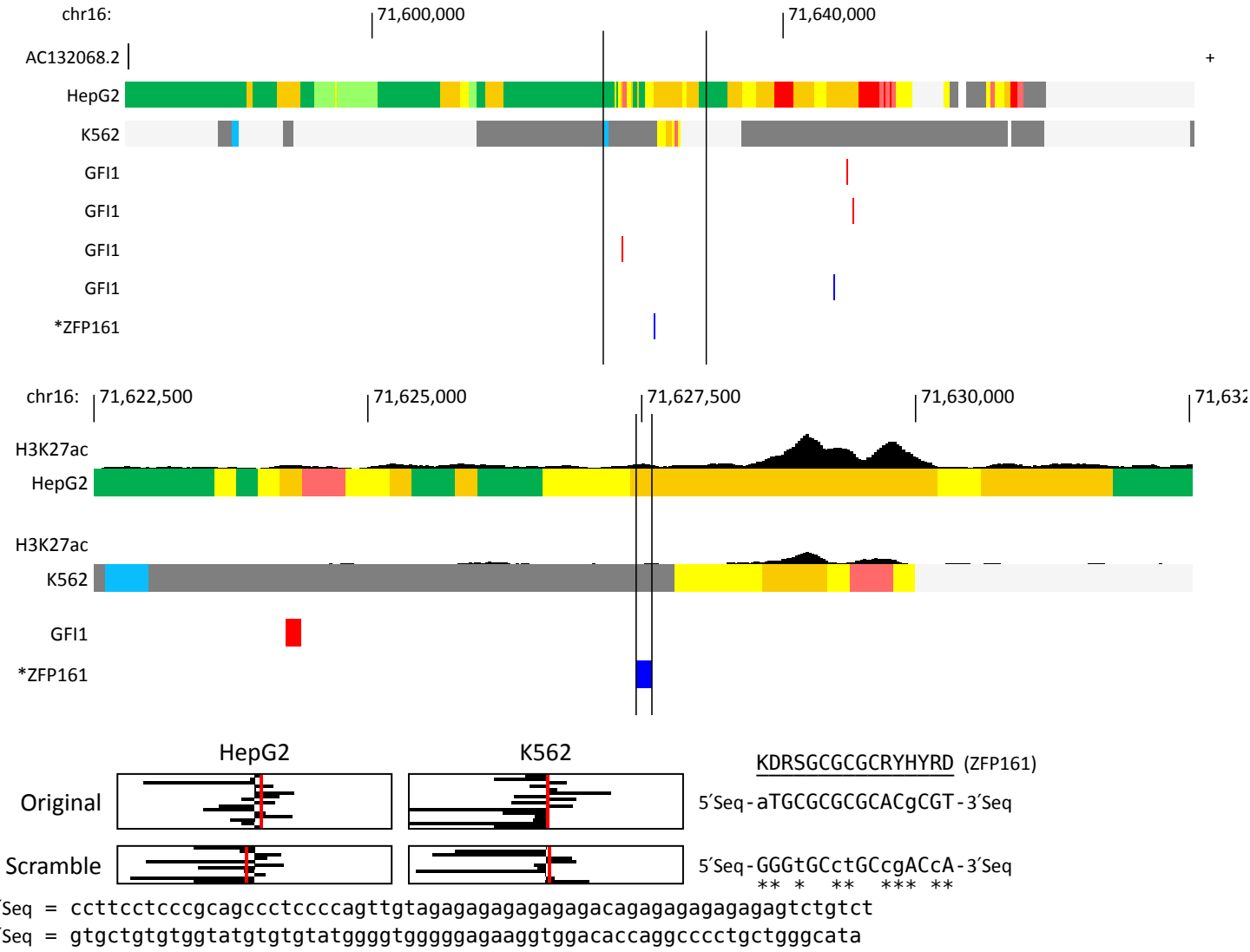
1057 ZFP161 in HepG2 enhancer

chr16 71627514 71627529 - (hg18)



KDRSGCGCGCRYHYRD (ZFP161)

5′Seq-aTGCGCGCGCACgCGT-3′Seq

5′Seq-GGGtGCctGCcgACcA-3′Seq

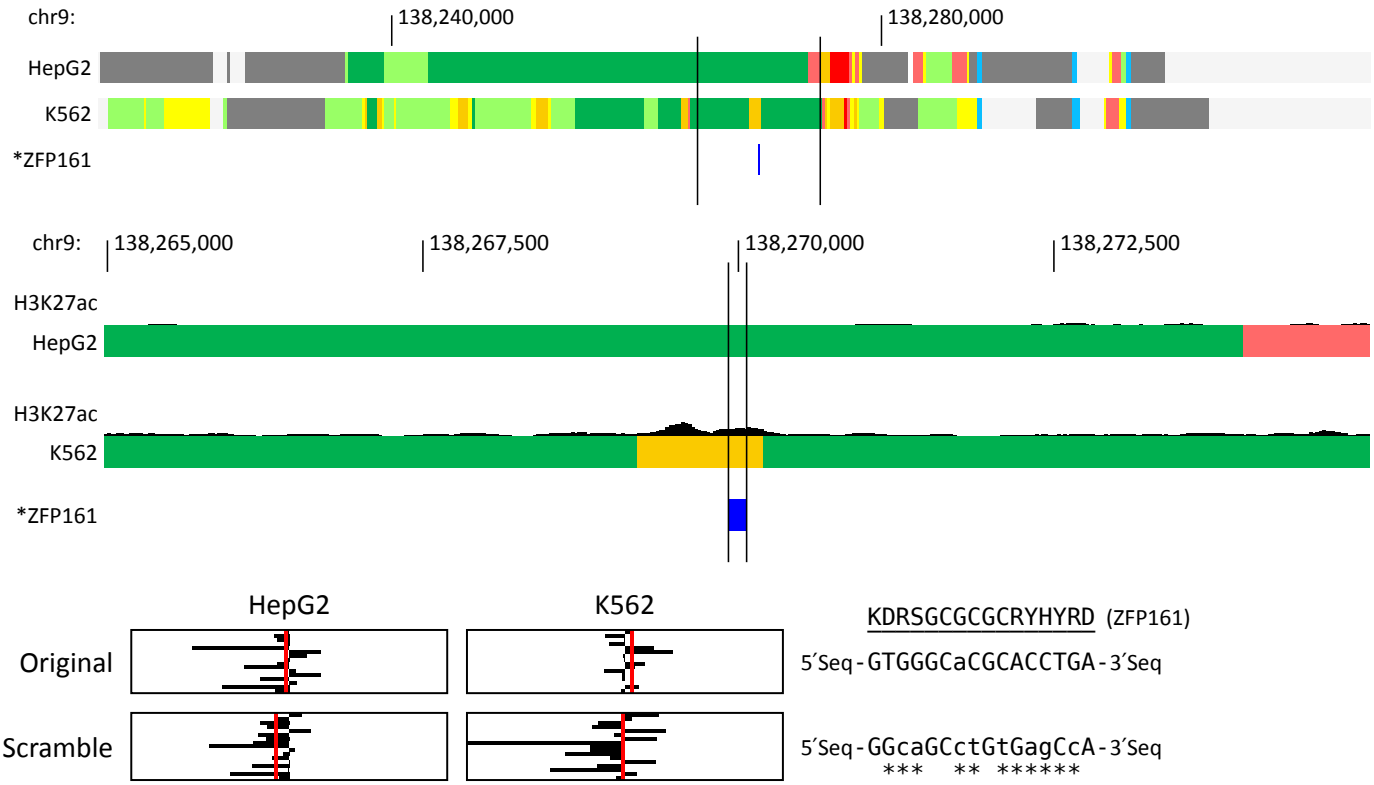
** * ** *** **

5′Seq = ccttcctcccgcagccctccccagttgtagagagagagagagacagagagagagagtctgtct

3′Seq = gtgctgtgtggtatgtgtgtatggggtgggggagaaggtggacaccaggcccctgctgggcata

1058 ZFP161 in K562 enhancer

chr9 138269986 138270001 - (hg18)



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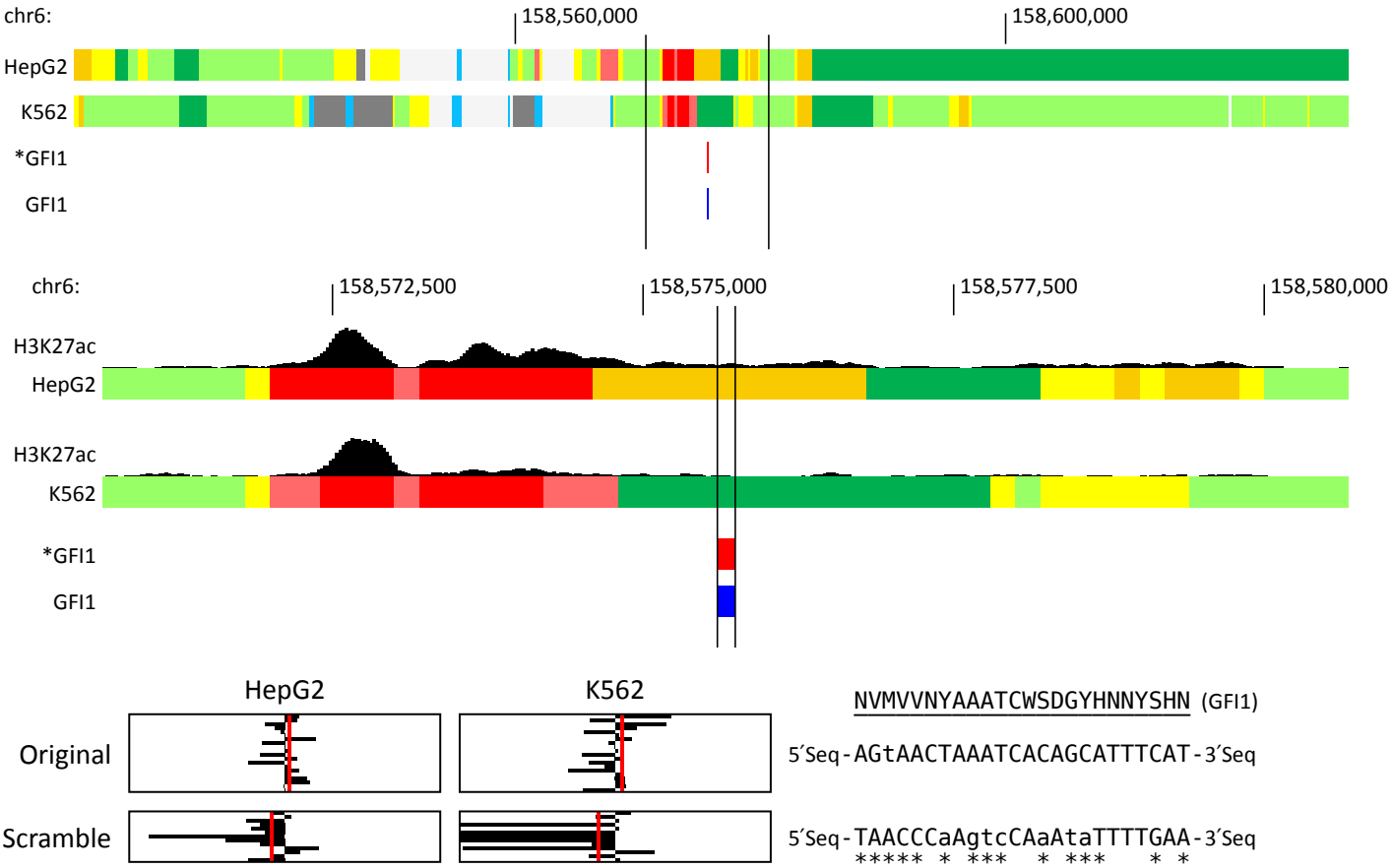
1059 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 158575659 158575682 - (hg18)



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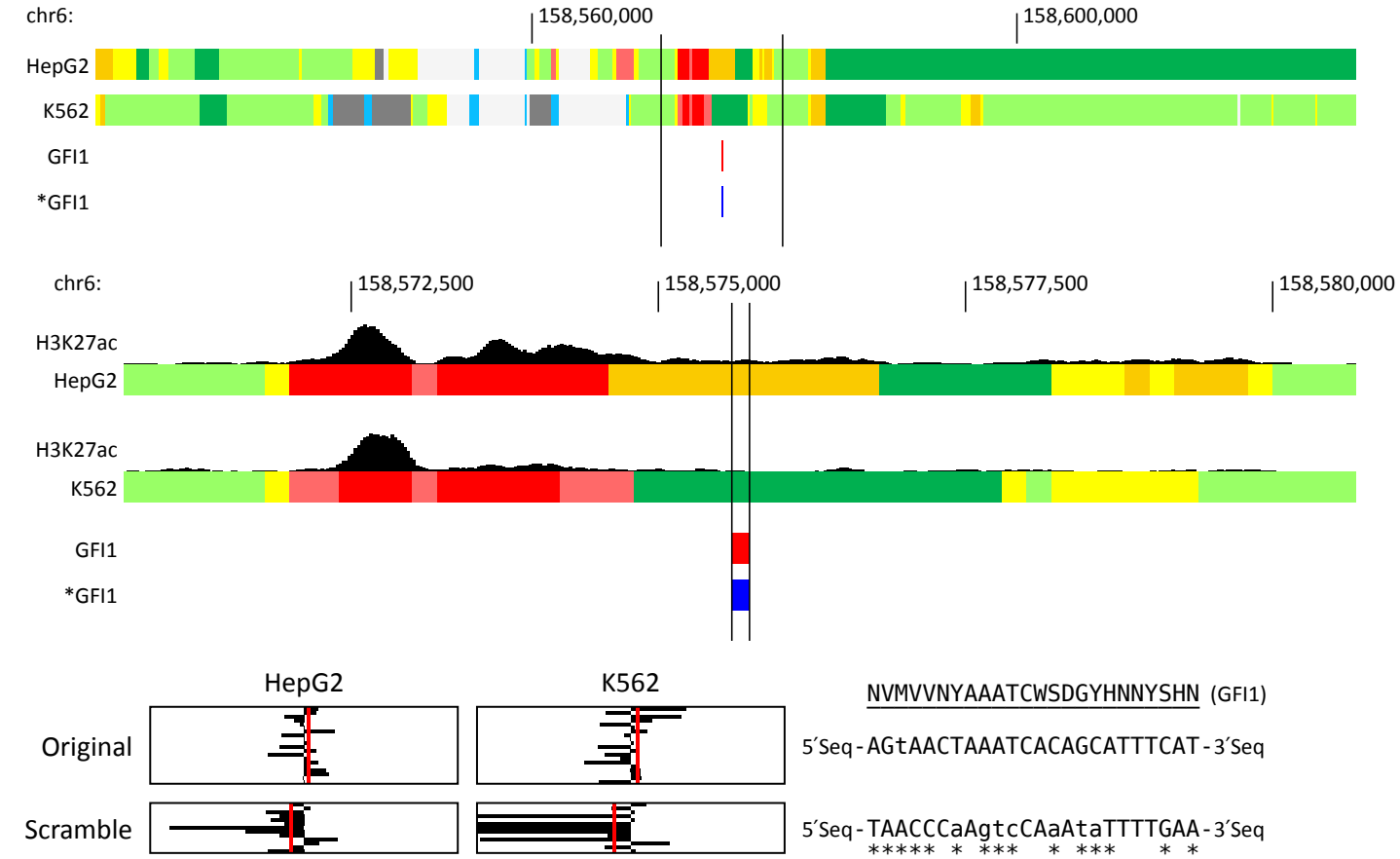
1060 GFI1 in HepG2 enhancer

chr6 158575659 158575682 - (hg18)

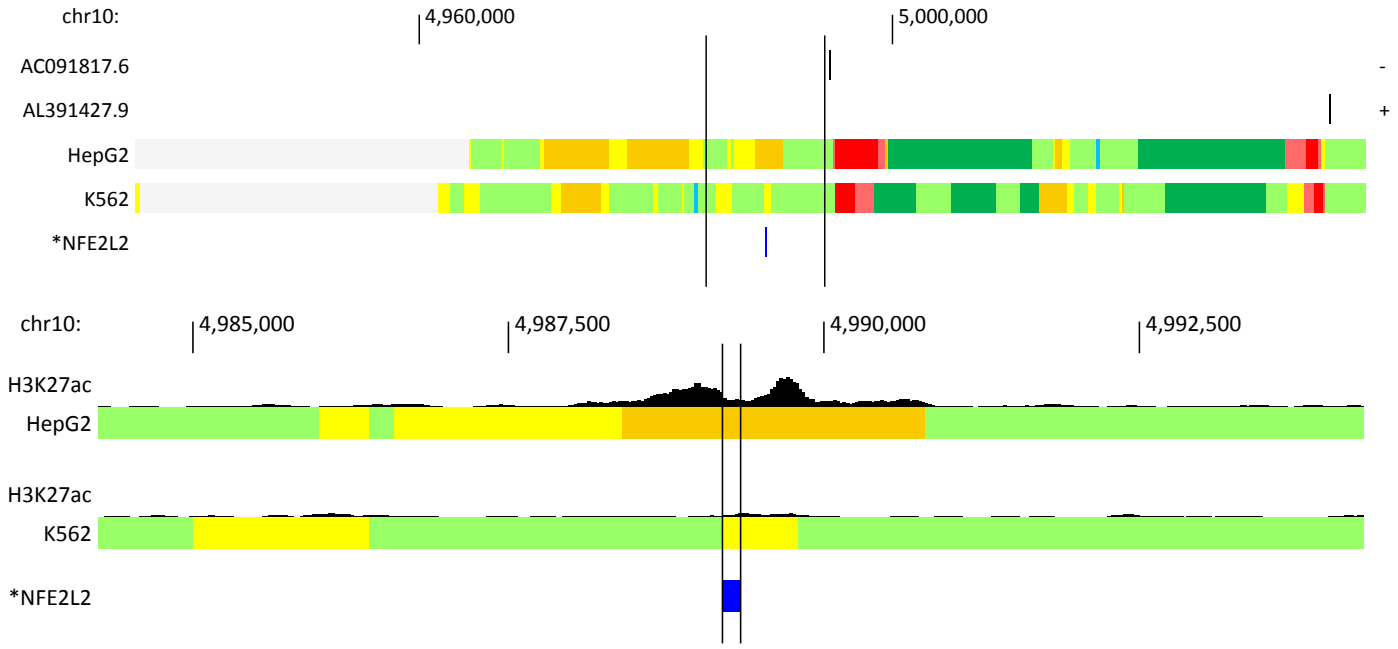


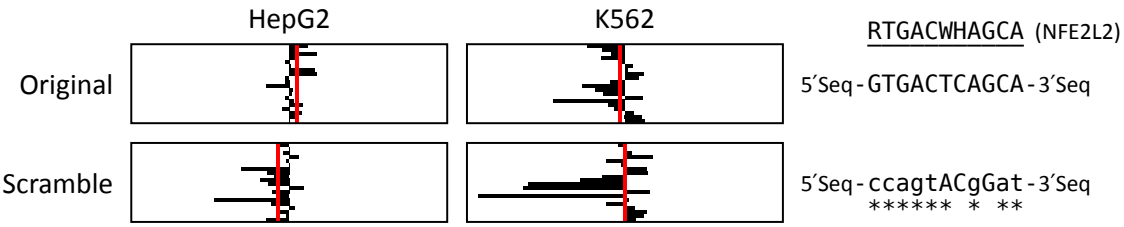
5′Seq = tttctgtaaggcttttggtaatactgaaatgctgcacagaatgctaaacagaaacccatgc

3′Seq = aagaggttgtactcagtttttaaatgcattttacaaatcacatgcatagctgagccactc

1061 NFE2L2 in HepG2 enhancer

chr10 4989263 4989273 - (hg18)





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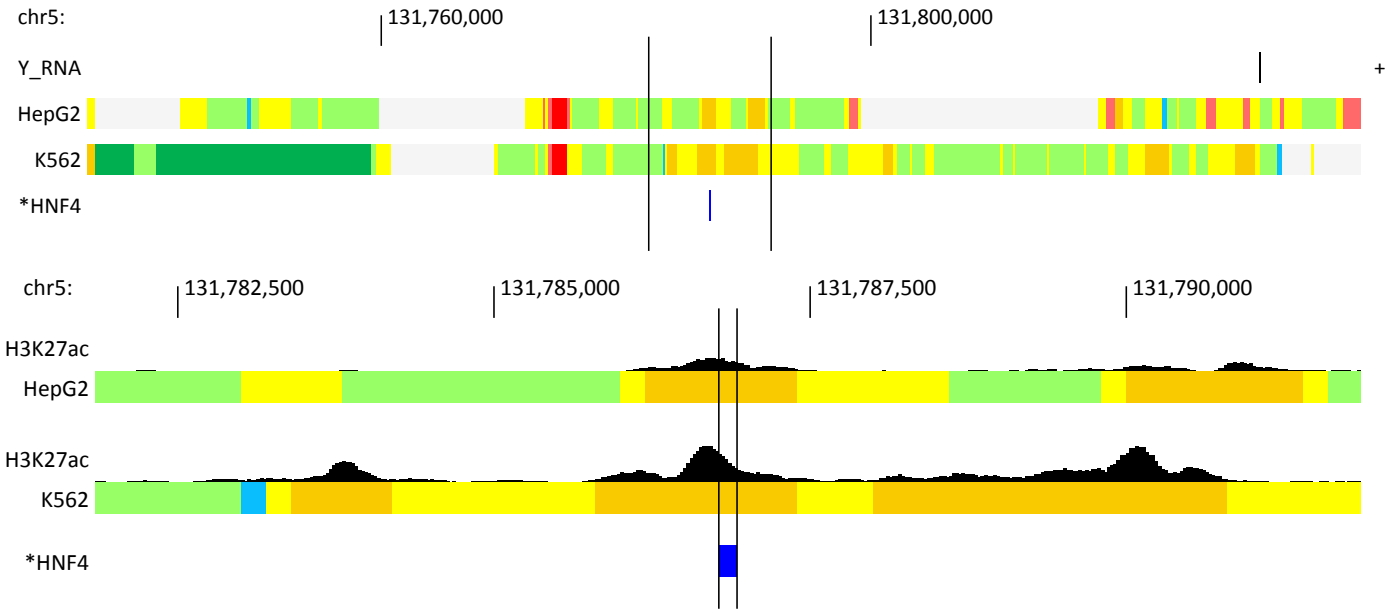
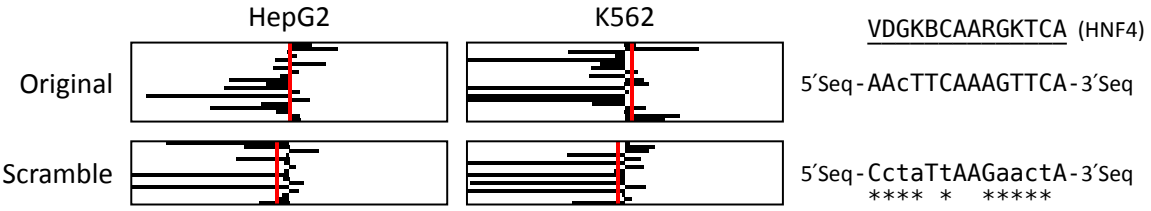
3′Seq = gcttgcacaccttgcgaccactcctggataggtcaacaagcaggggaggttgtaaagagaaaagtat

1062 HNF4 in HepG2 enhancer

chr5 131786844 131786857 - (hg18)





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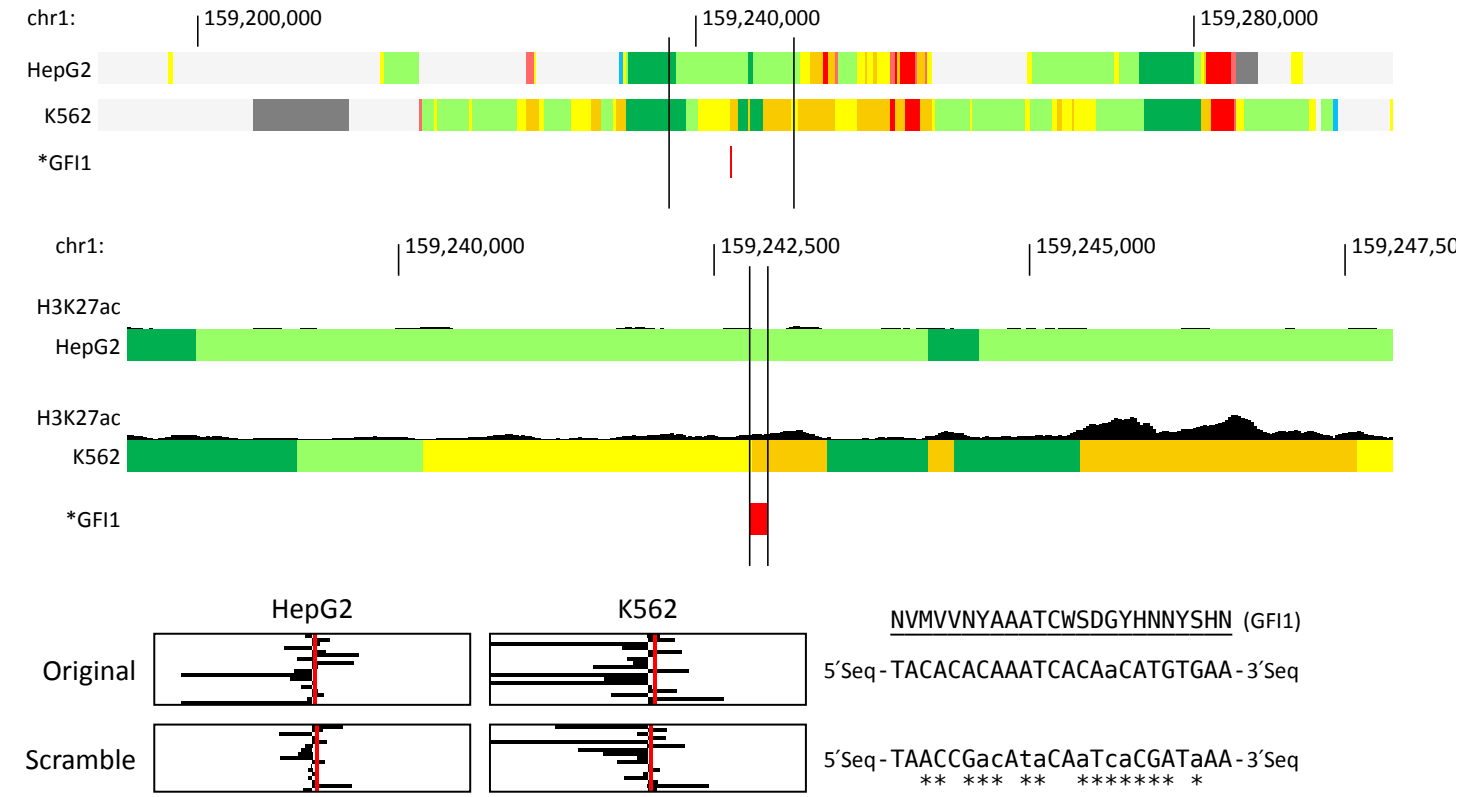
3′Seq = actcctcgaacttcaaacttcaaatccccaactcctcctgcctatgctggacgattagggcagta

1063 GFI1 in K562 enhancer (conserved at 40% confidence)

chr1 159242843 159242866 + (hg18)



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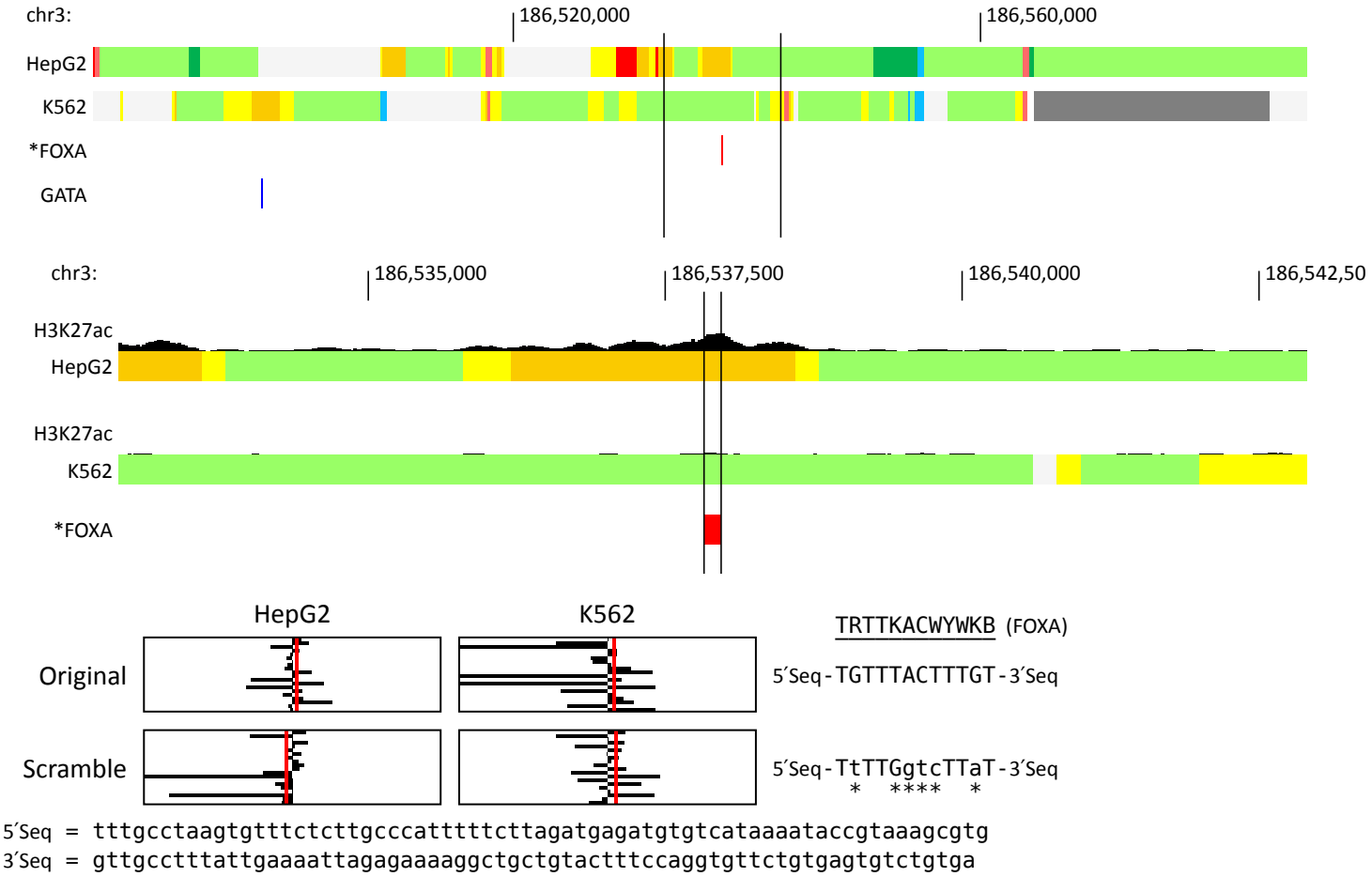
1064 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 186537894 186537905 - (hg18)



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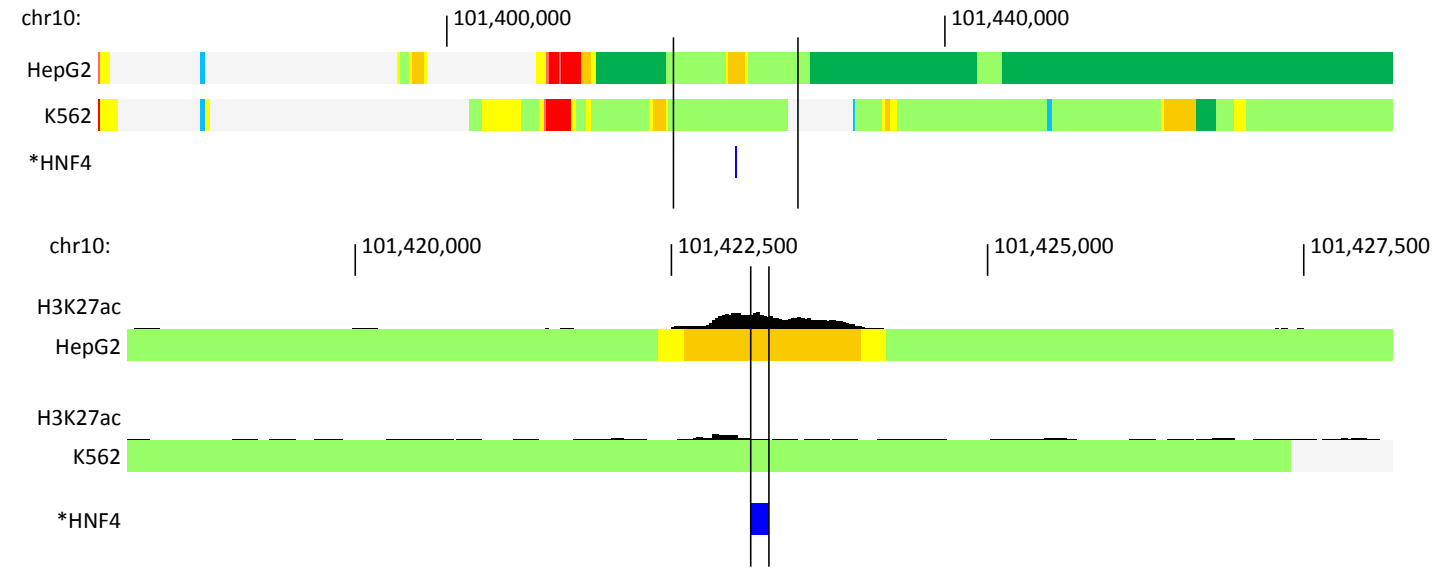
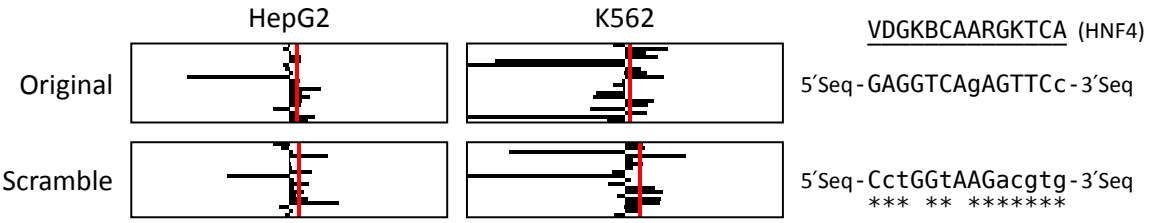
1065 HNF4 in HepG2 enhancer

chr10 101423193 101423206 + (hg18)





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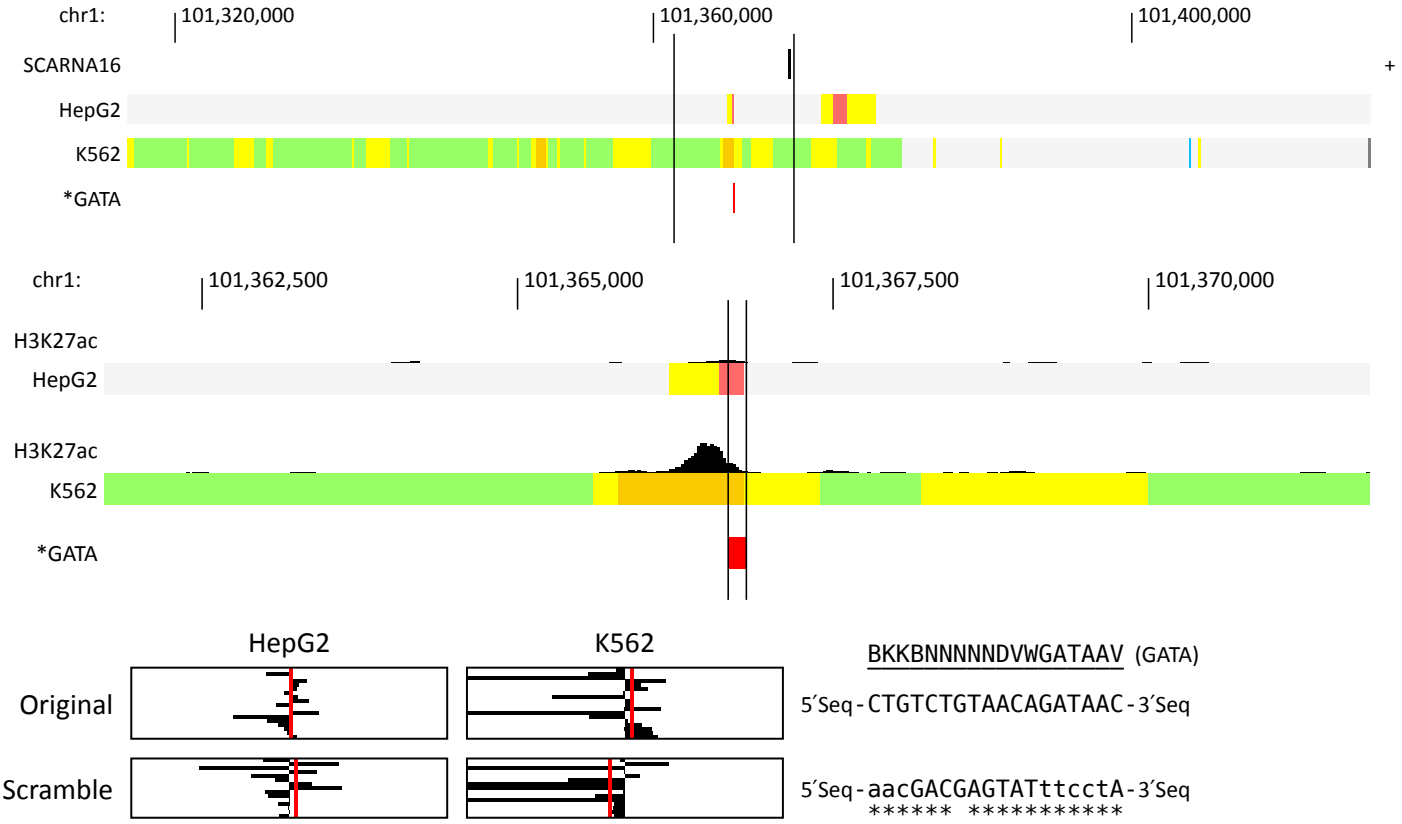
3′Seq = aggaaaaggtaatatggctactgcccagaggggaaaactgttctttagttactagtttgtatgca

1066 GATA in K562 enhancer (conserved at 60% confidence)

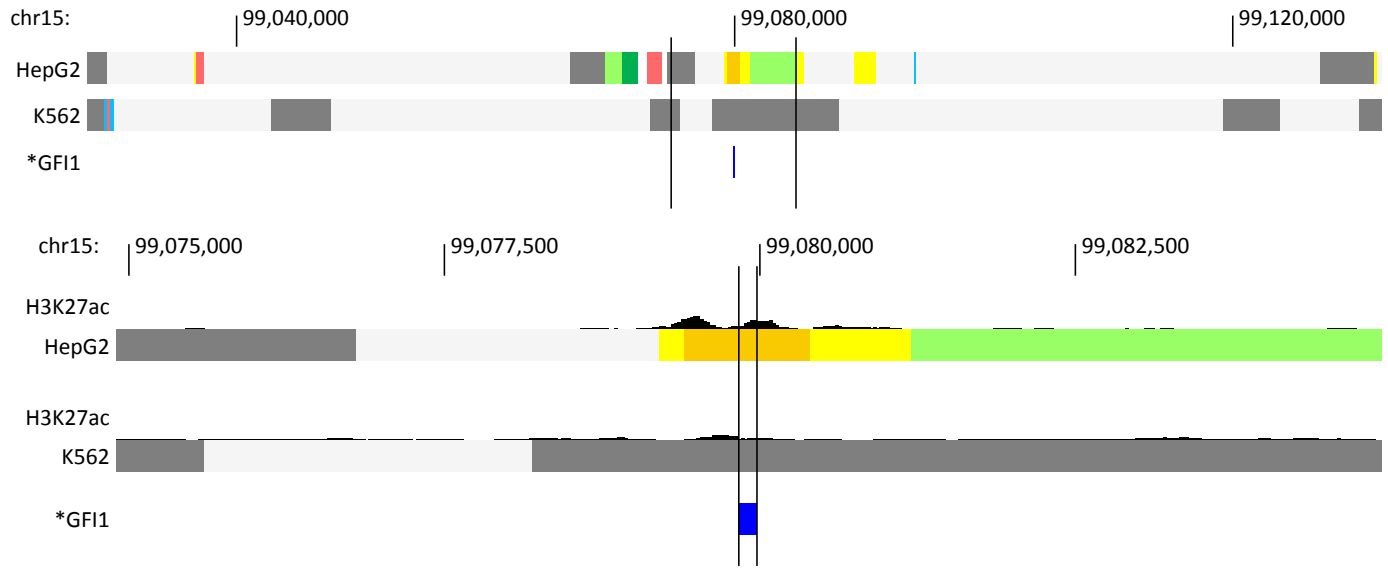
chr1 101366733 101366750 + (hg18)

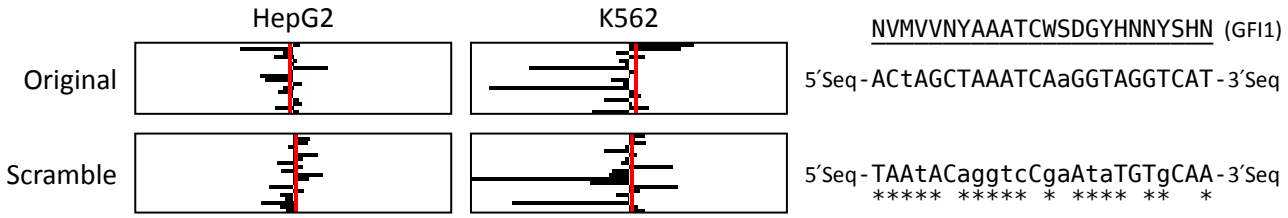


5′Seq = tctcatgcatctgacttcaatgtttttcatagtcttcaaatgaactttgtatgaaacagagcag
3′Seq = agcaaagcacccaggtcatagaccagtgtggtcagccgccccttcctaagctgcagtctgctt

1067 GFI1 in HepG2 enhancer

chr15 99079894 99079917 + (hg18)





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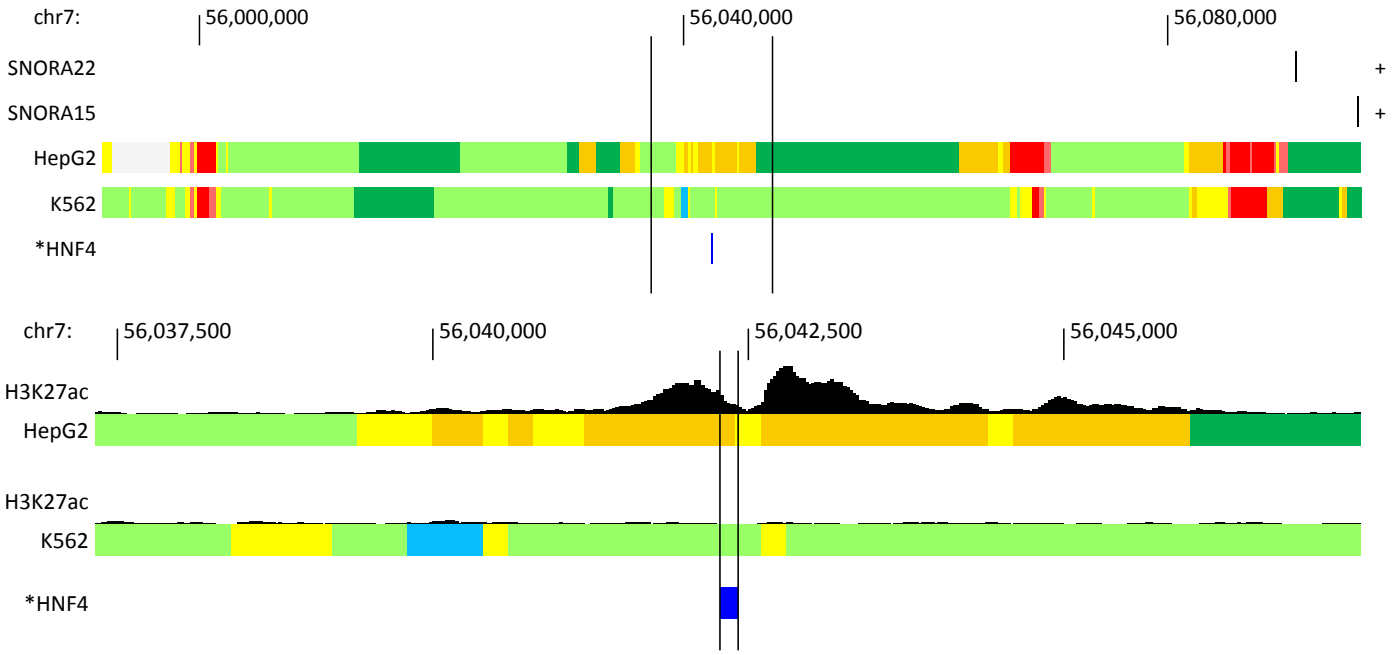
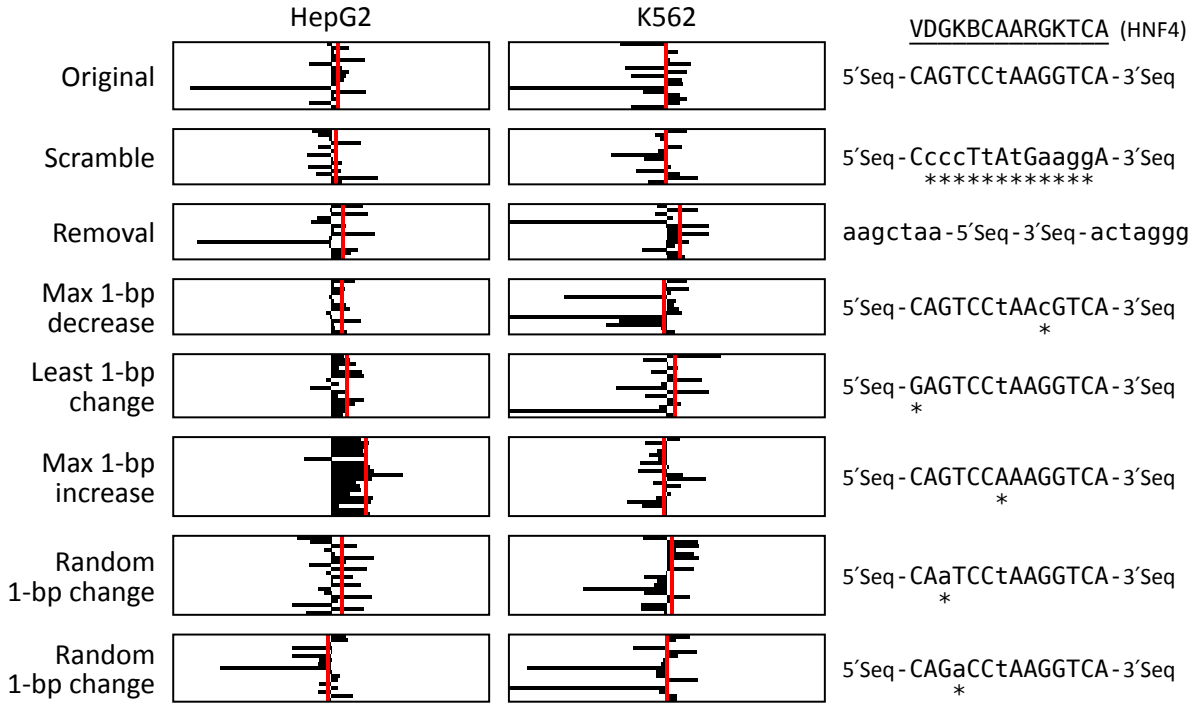
1068 HNF4 in HepG2 enhancer

chr7 56042341 56042354 - (hg18)





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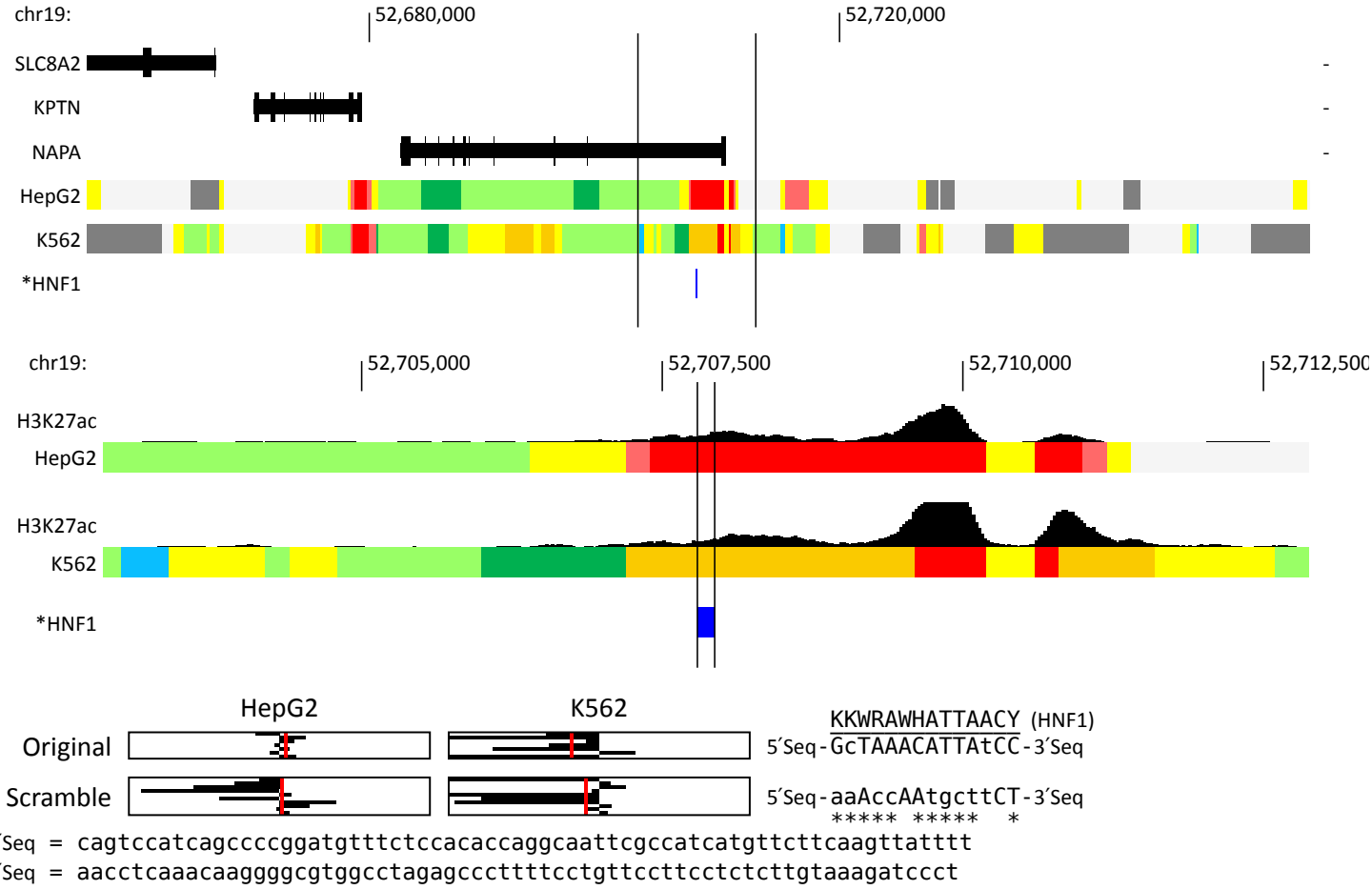
3′Seq = gcagtatagaaactgctgtccttttttttttttttttttttttttgagatggtgtctcgctctgtc

1069 HNF1 in K562 enhancer

chr19 52707858 52707871 + (hg18)



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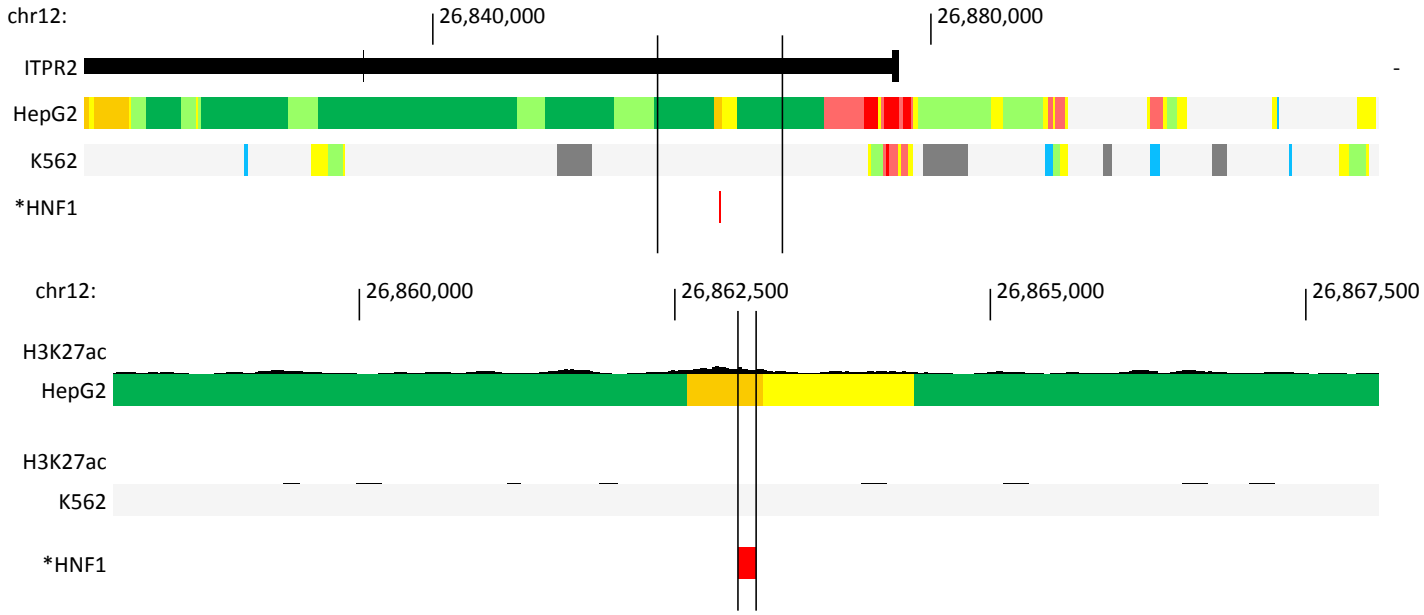
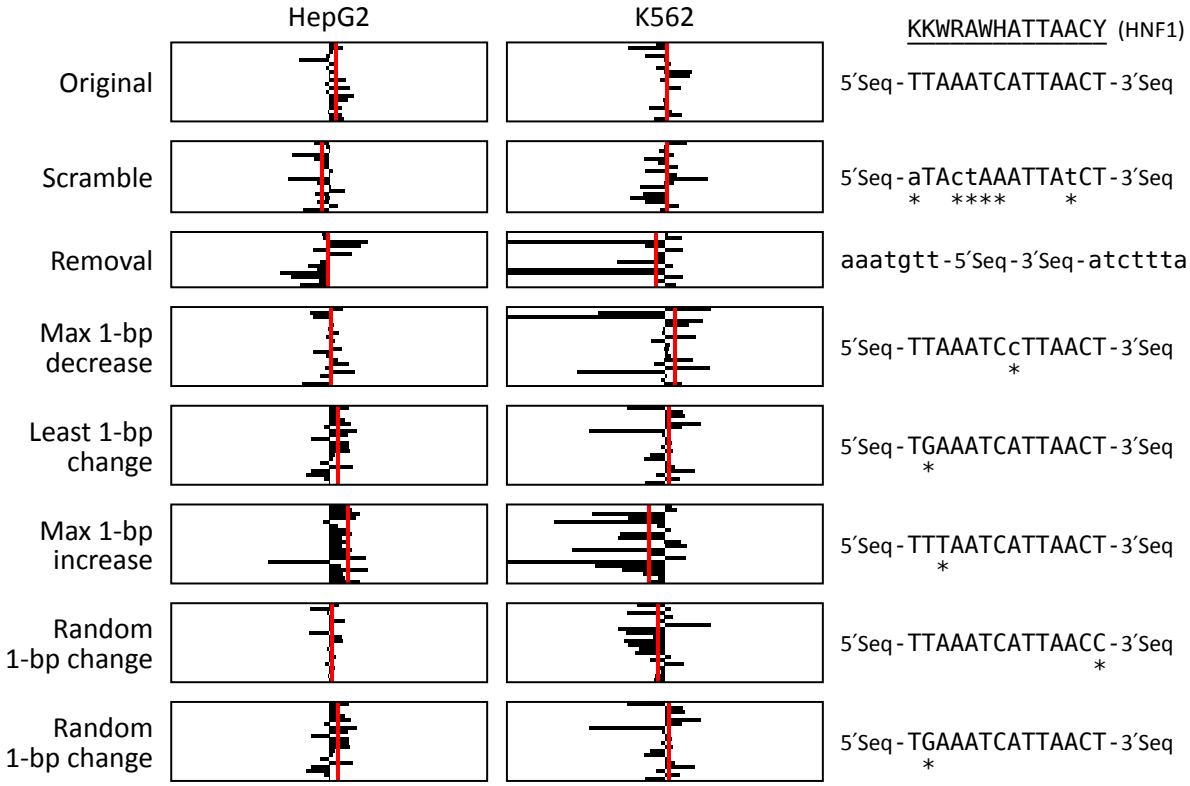
3′Seq = aacctcaaacaaggggcgtggcctagagccctttttcctgttccttcctctcttgtaaagatccct

1070 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr12 26863066 26863079 + (hg18)





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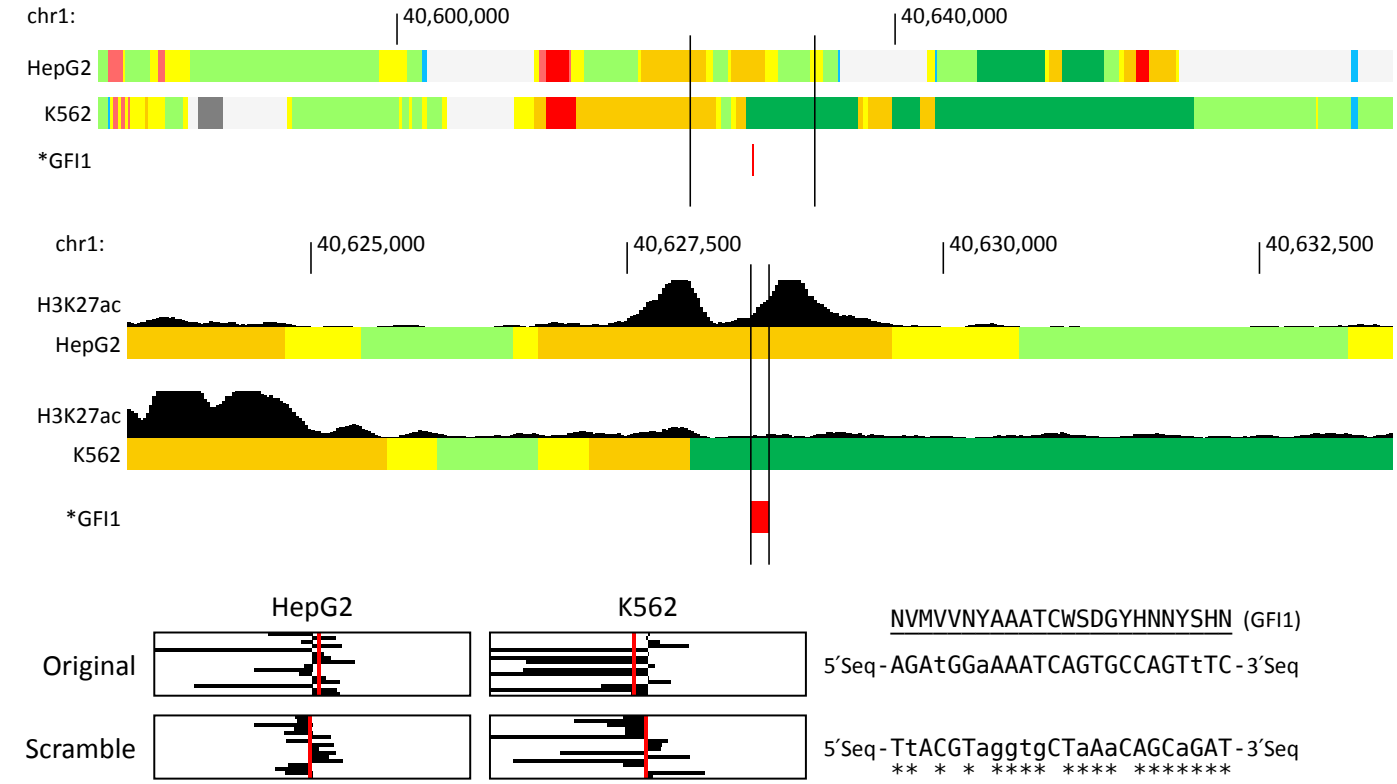
1071 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 40628539 40628562 - (hg18)



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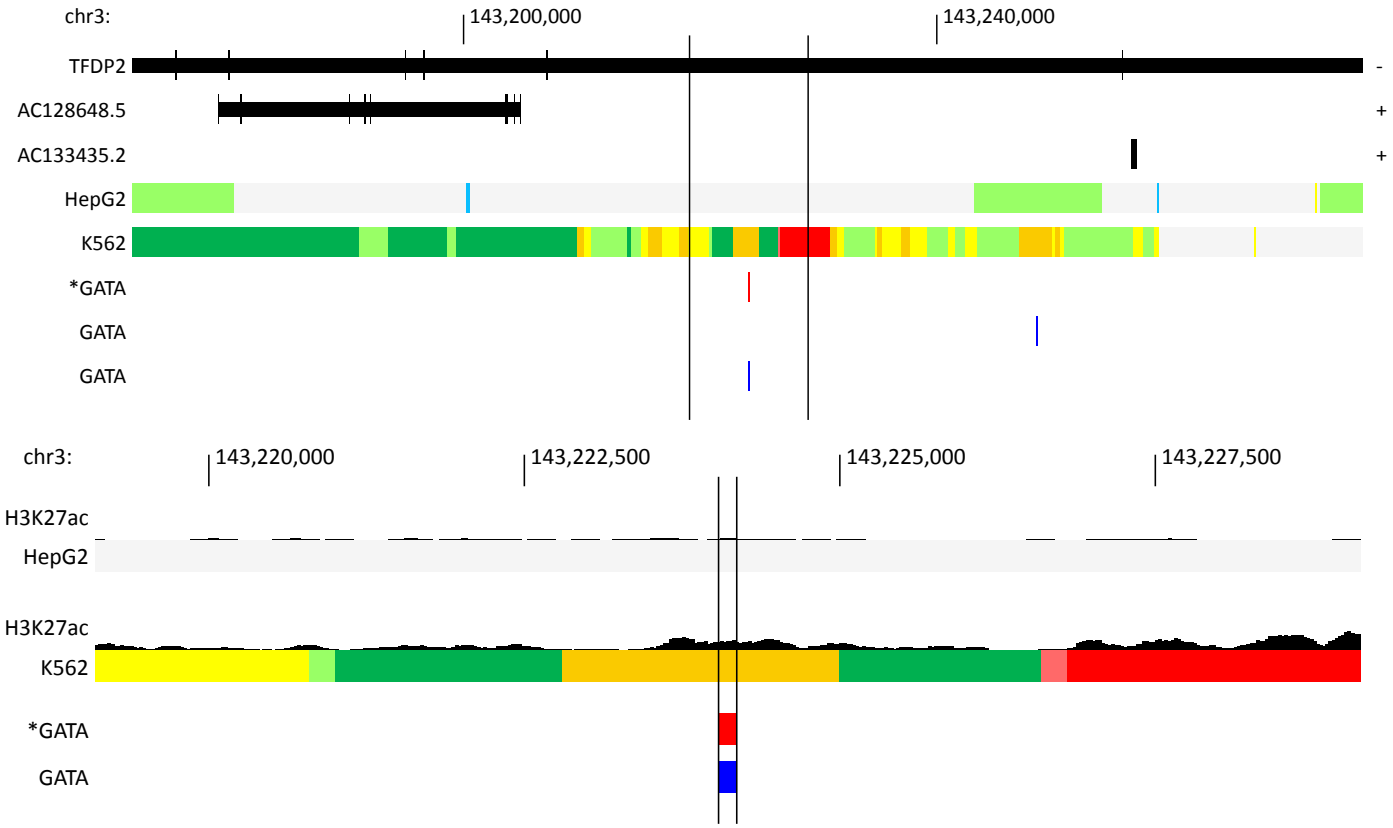
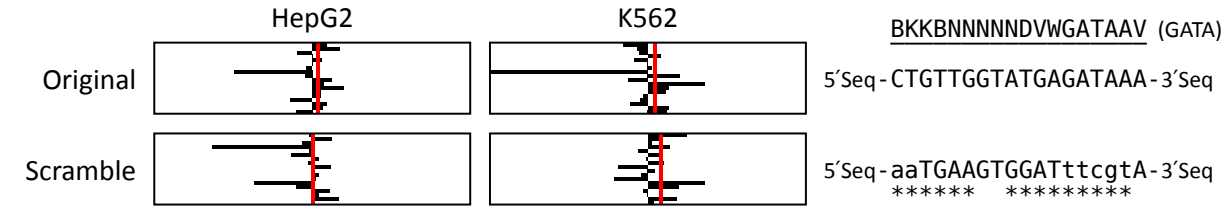
1072 GATA in K562 enhancer (conserved at 60% confidence)

chr3 143224103 143224120 - (hg18)





BKKBNNNNNDVWGATAAV (GATA)

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5′Seq-aaTGAAGTGGATttcgtA-3′Seq

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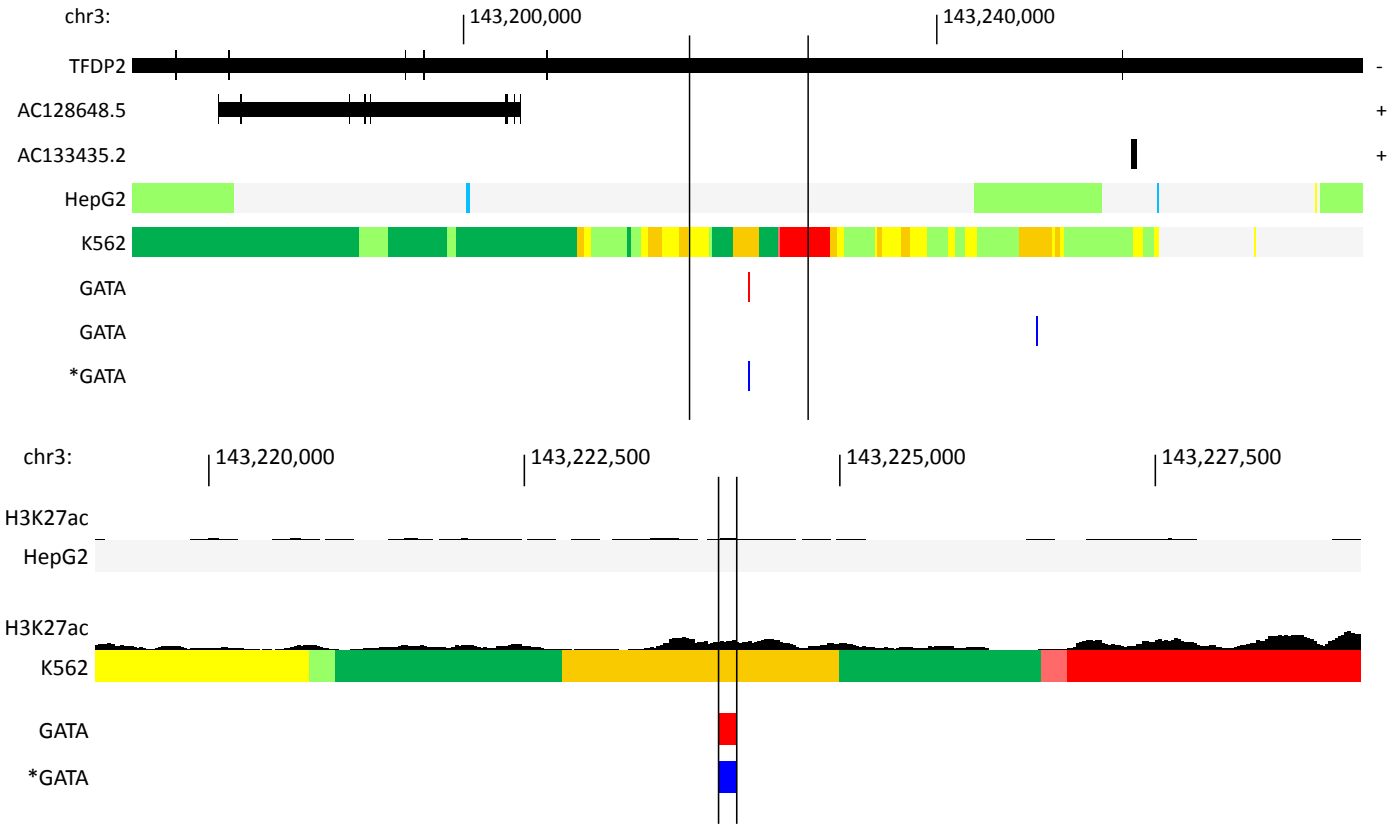
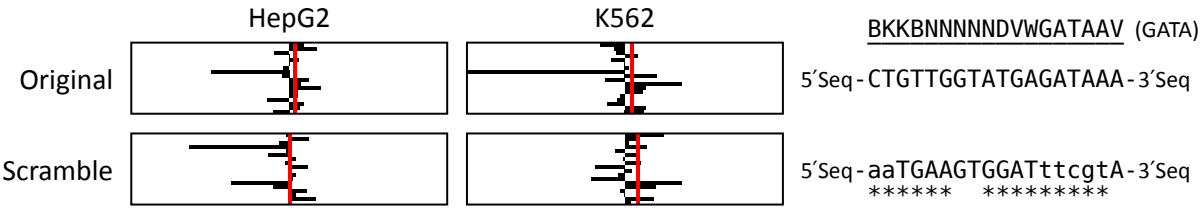
1073 GATA in K562 enhancer

chr3 143224103 143224120 - (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGTTGGTATGAGATAAA-3′Seq

5′Seq-aaTGAAGTGGATttcgtA-3′Seq

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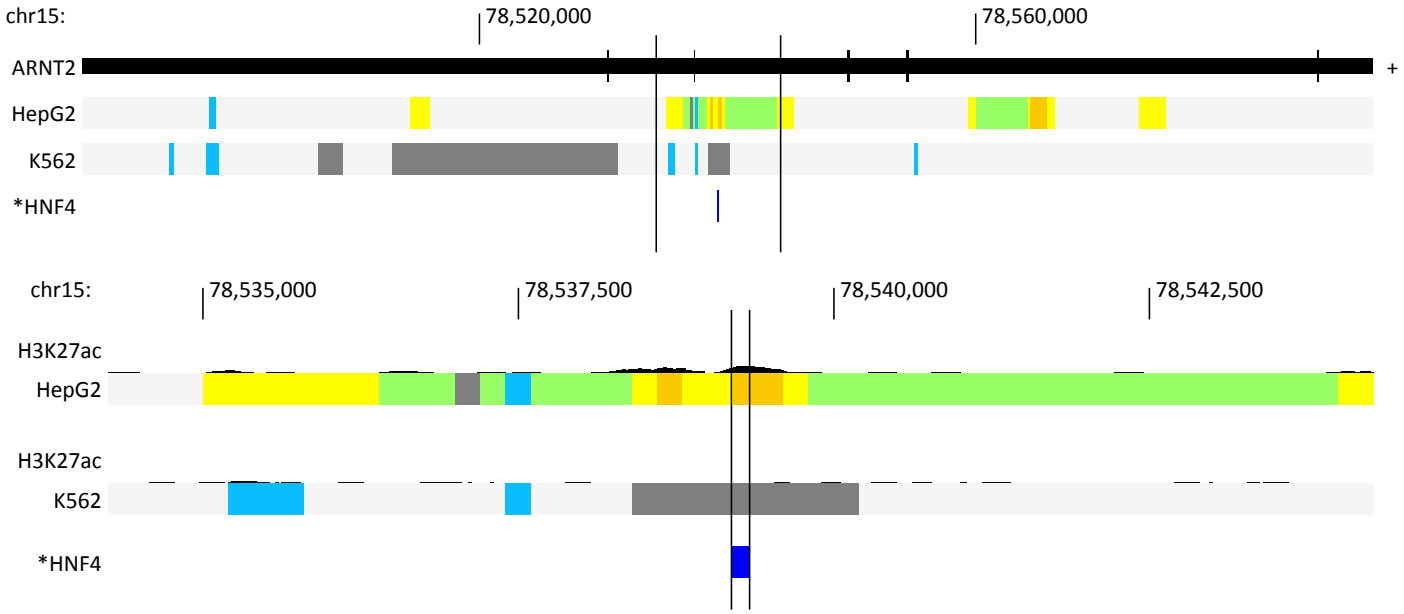
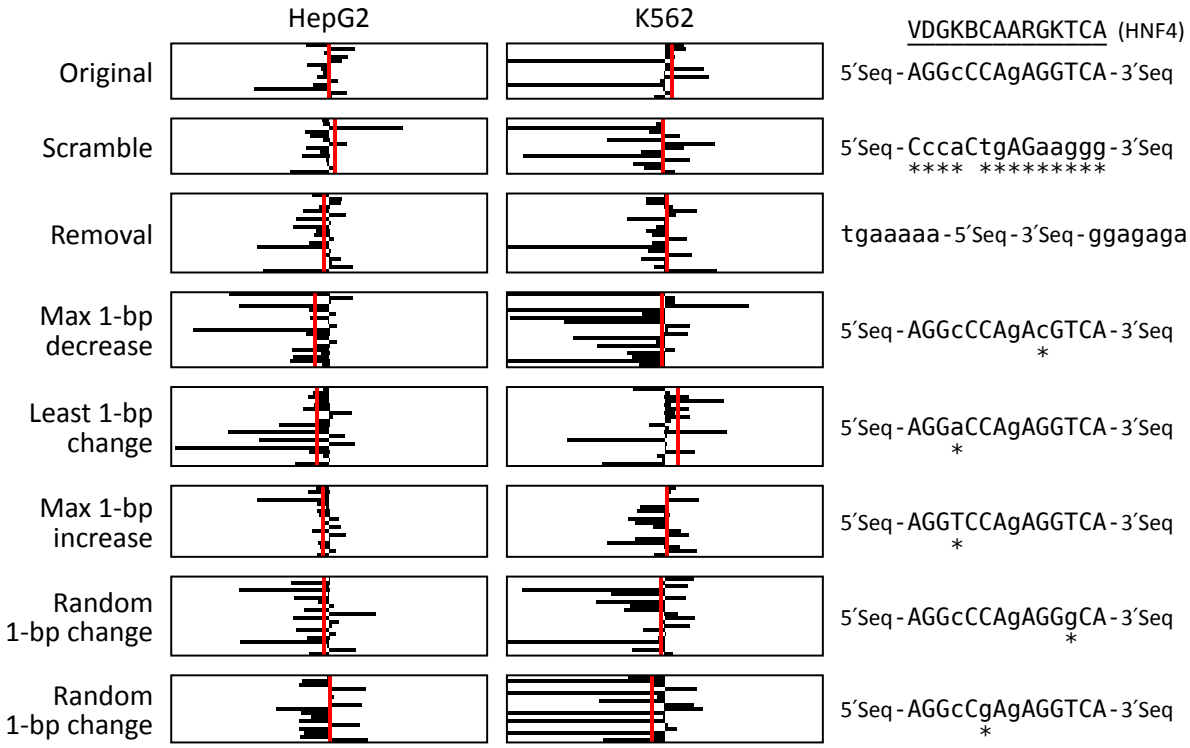
1074 HNF4 in HepG2 enhancer

chr15 78539254 78539267 + (hg18)





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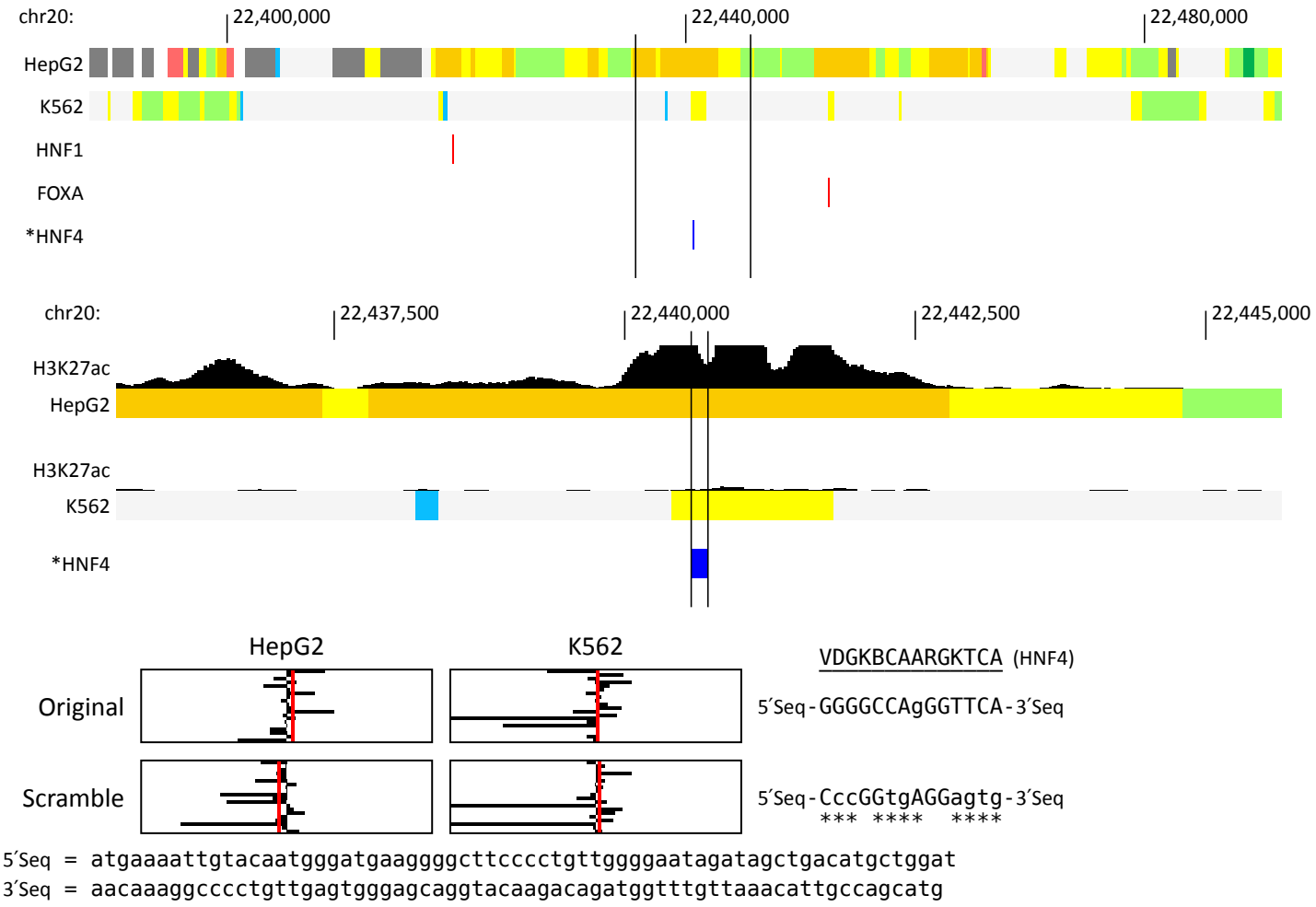
1075 HNF4 in HepG2 enhancer

chr20 22440638 22440651 + (hg18)



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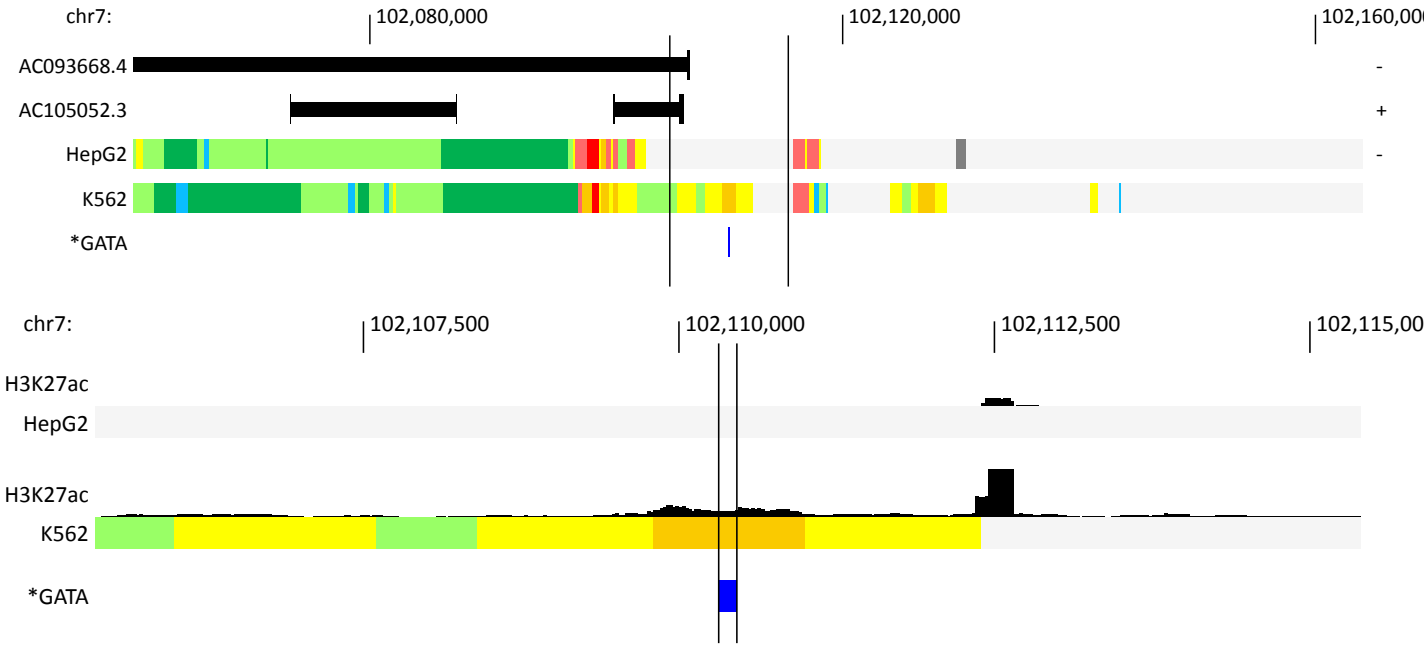
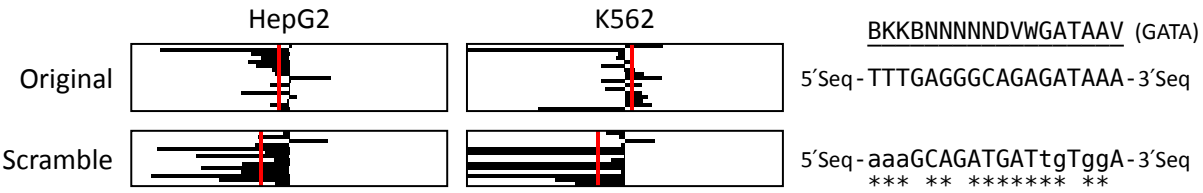
1076 GATA in K562 enhancer

chr7 102110379 102110396 + (hg18)





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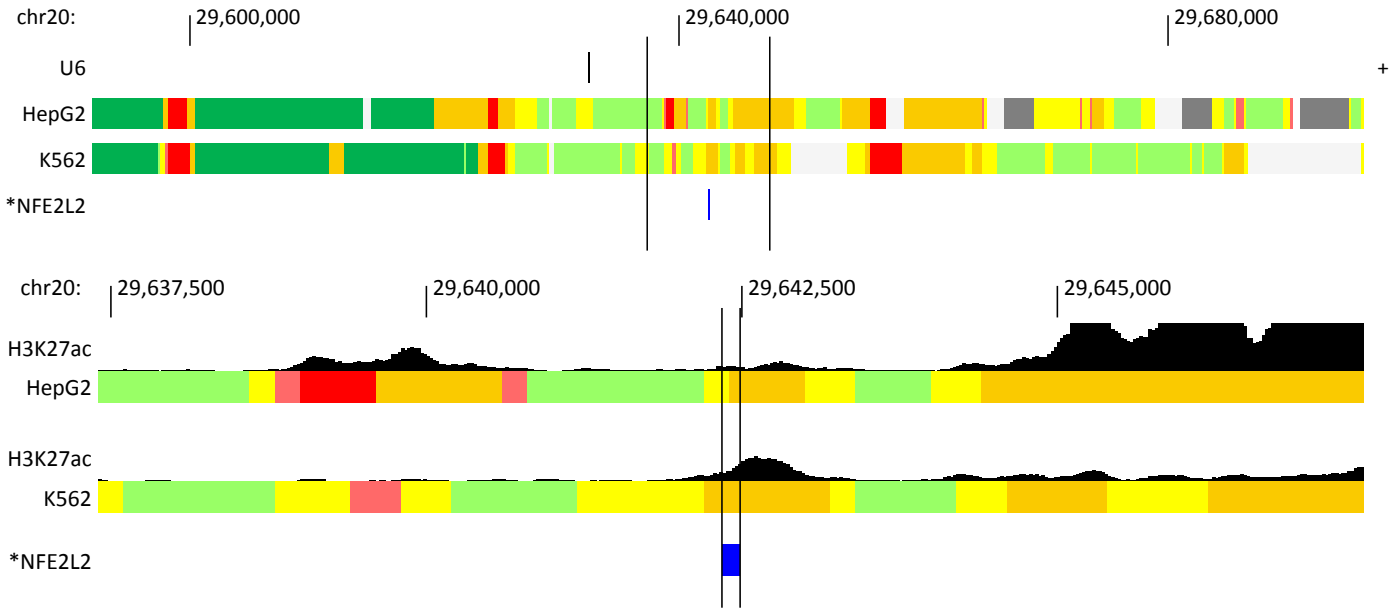
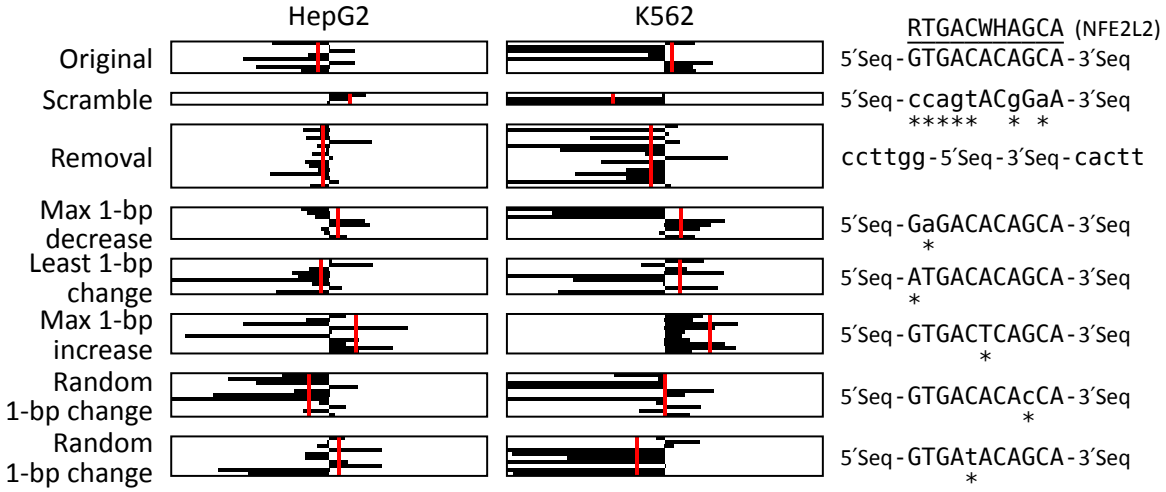
1077 NFE2L2 in K562 enhancer

chr20 29642409 29642419 + (hg18)





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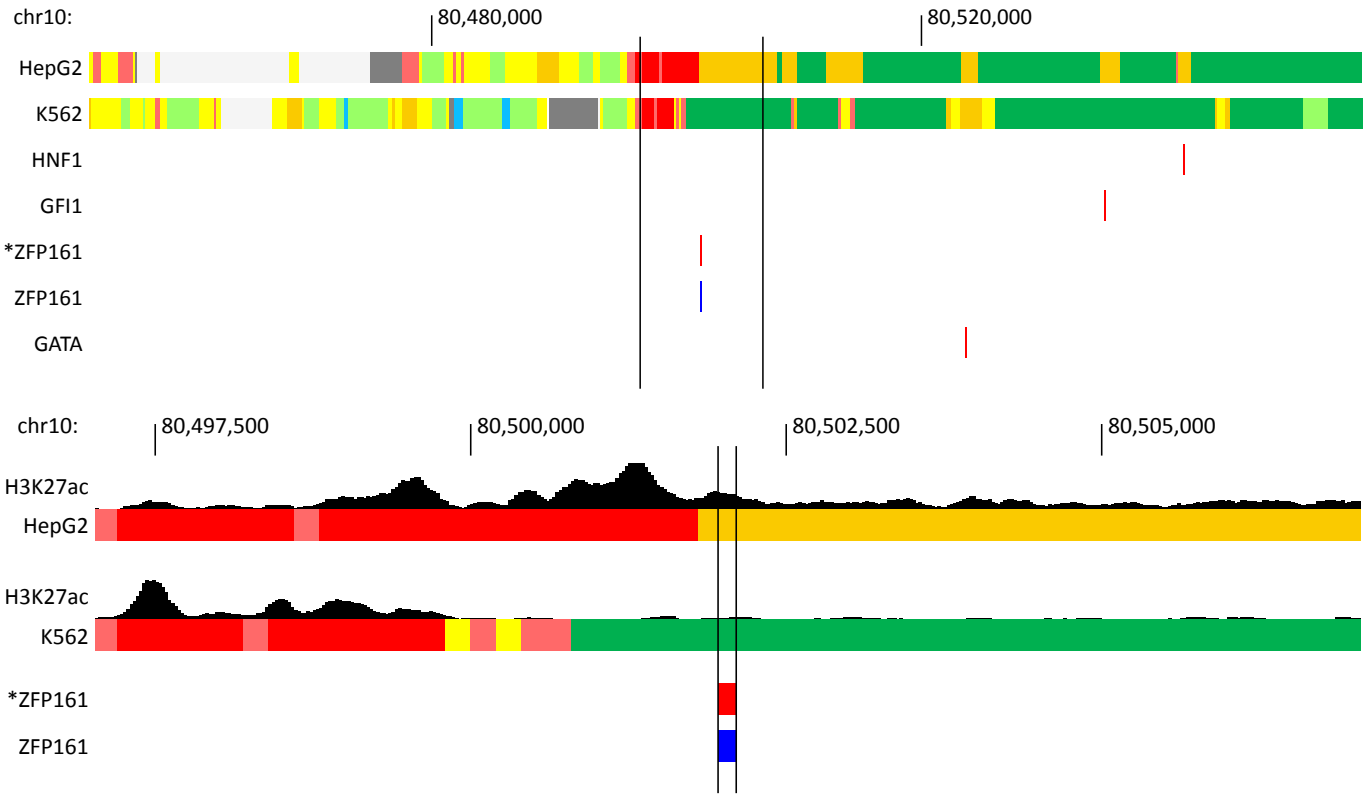
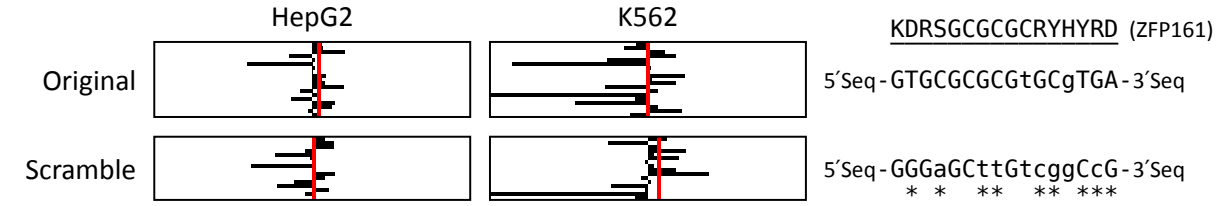
1078 ZFP161 in HepG2 enhancer (conserved at 10% confidence)

chr10 80502025 80502040 - (hg18)





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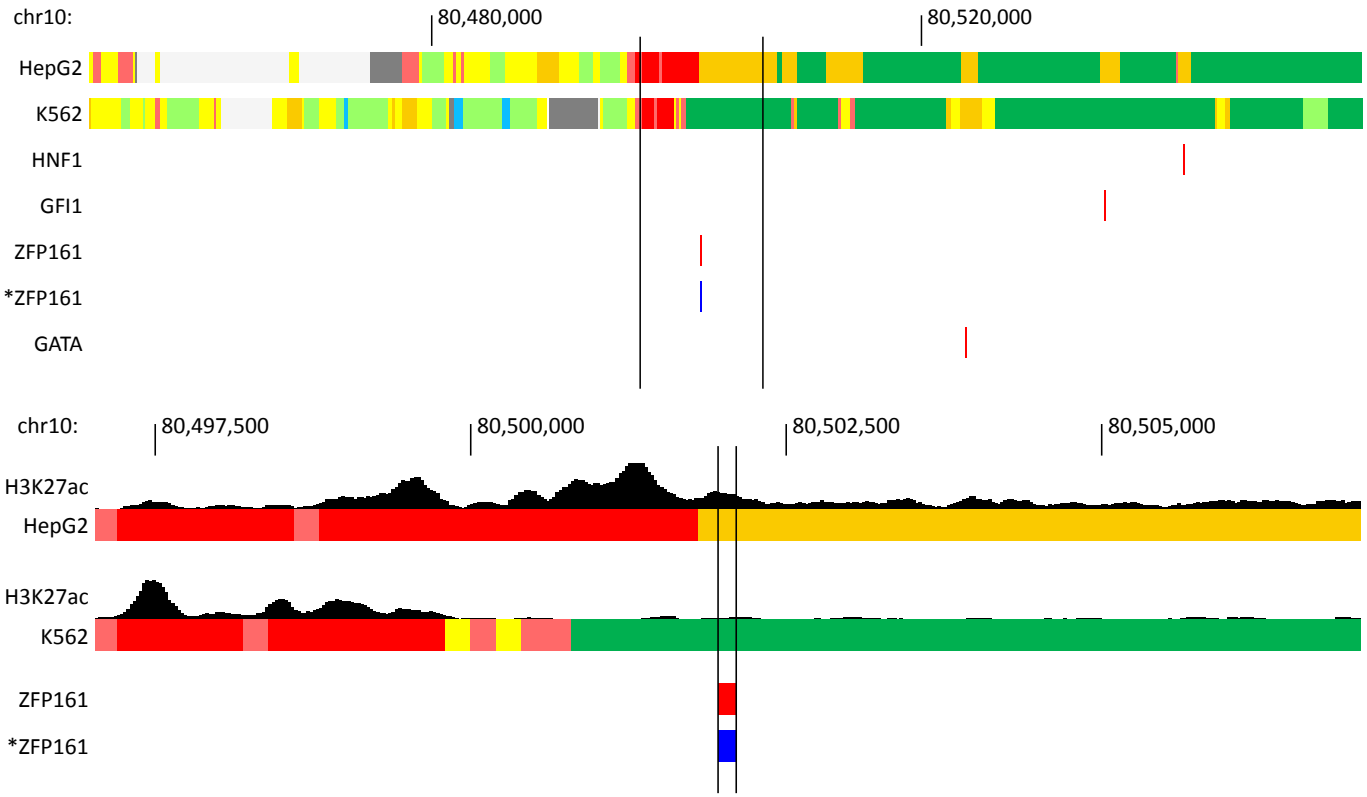
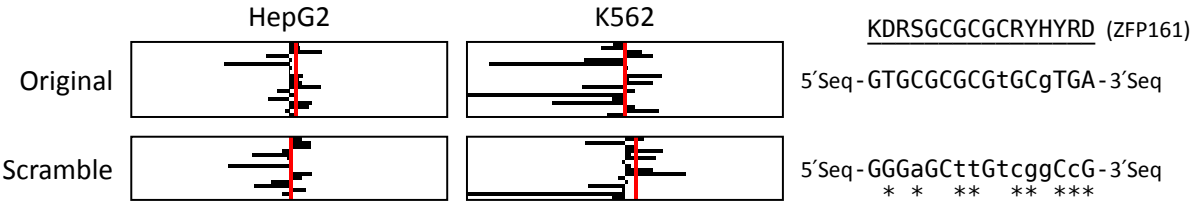
1079 ZFP161 in HepG2 enhancer

chr10 80502025 80502040 - (hg18)





KDRSGCGCGCRYHYRD (ZFP161)

5′Seq-GTGCGCGCGtGCgTGA-3′Seq

5′Seq-GGGaGCttGtcggCcG-3′Seq

* * ** ** ***

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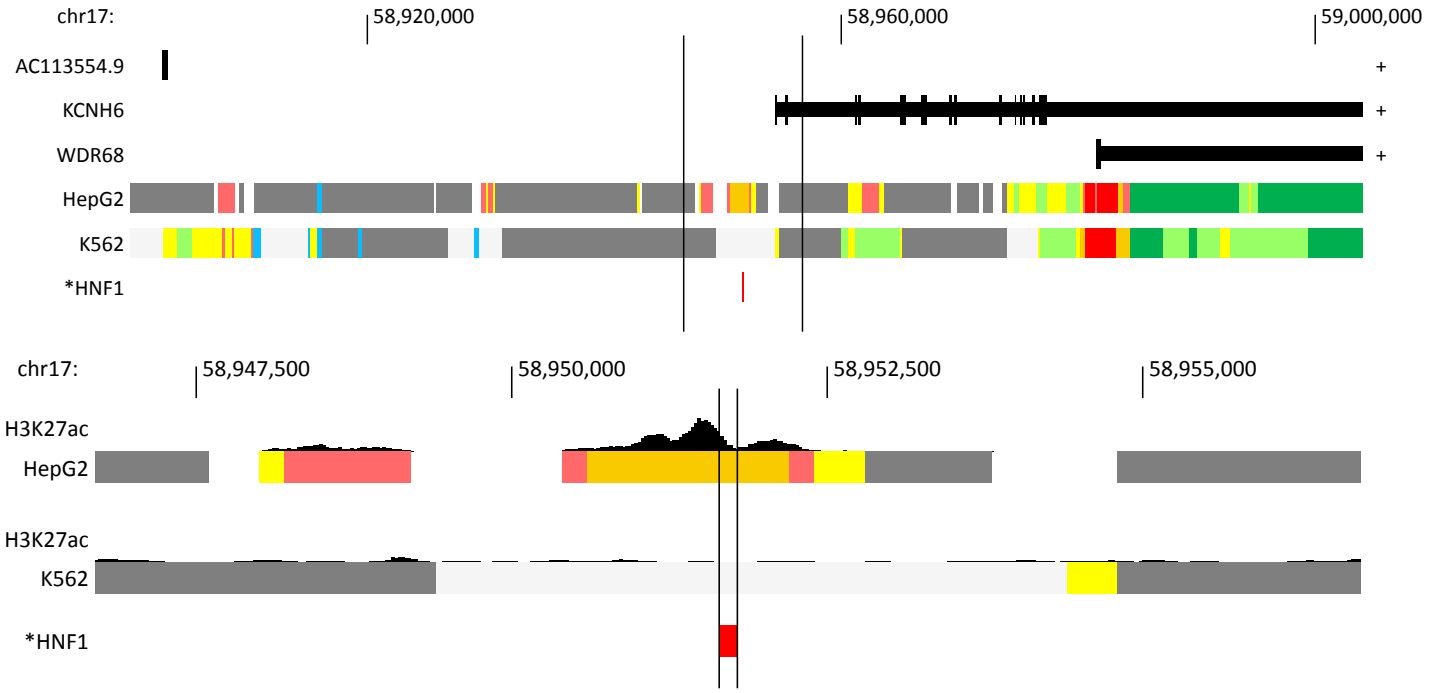
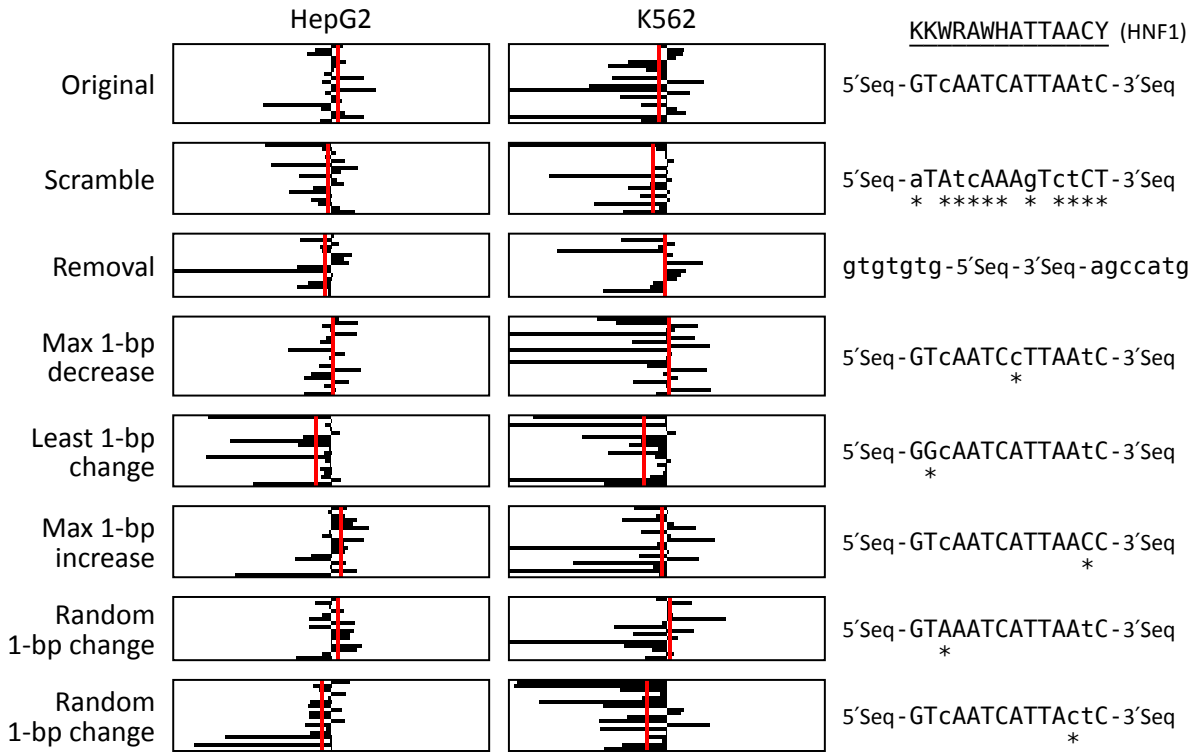
3′Seq = gggagaaactggttctgtcgccaaaccccgcagtctctggacctttcttcattttgcccctggc

1080 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr17 58951710 58951723 - (hg18)





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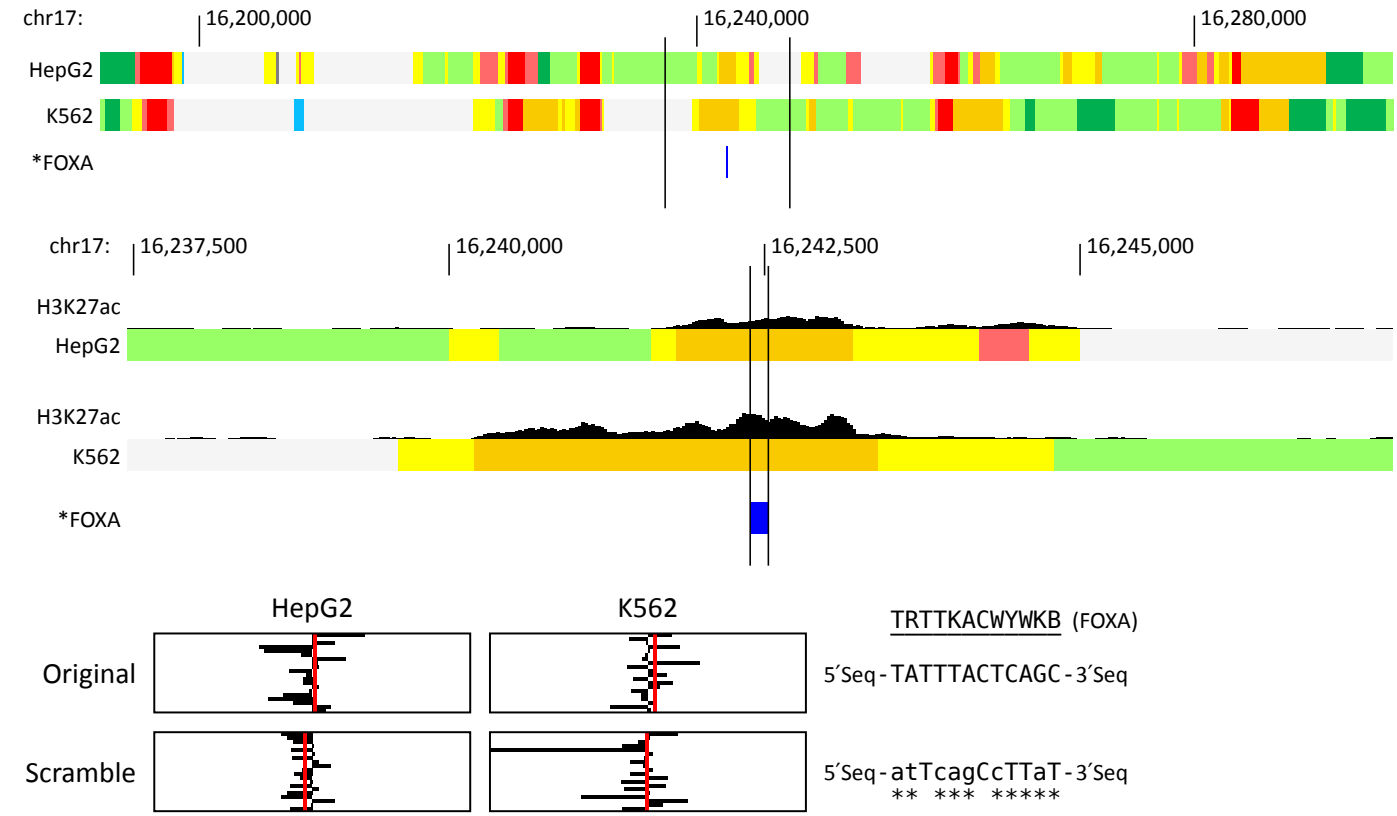
1081 FOXA in HepG2 enhancer

chr17 16242453 16242464 - (hg18)



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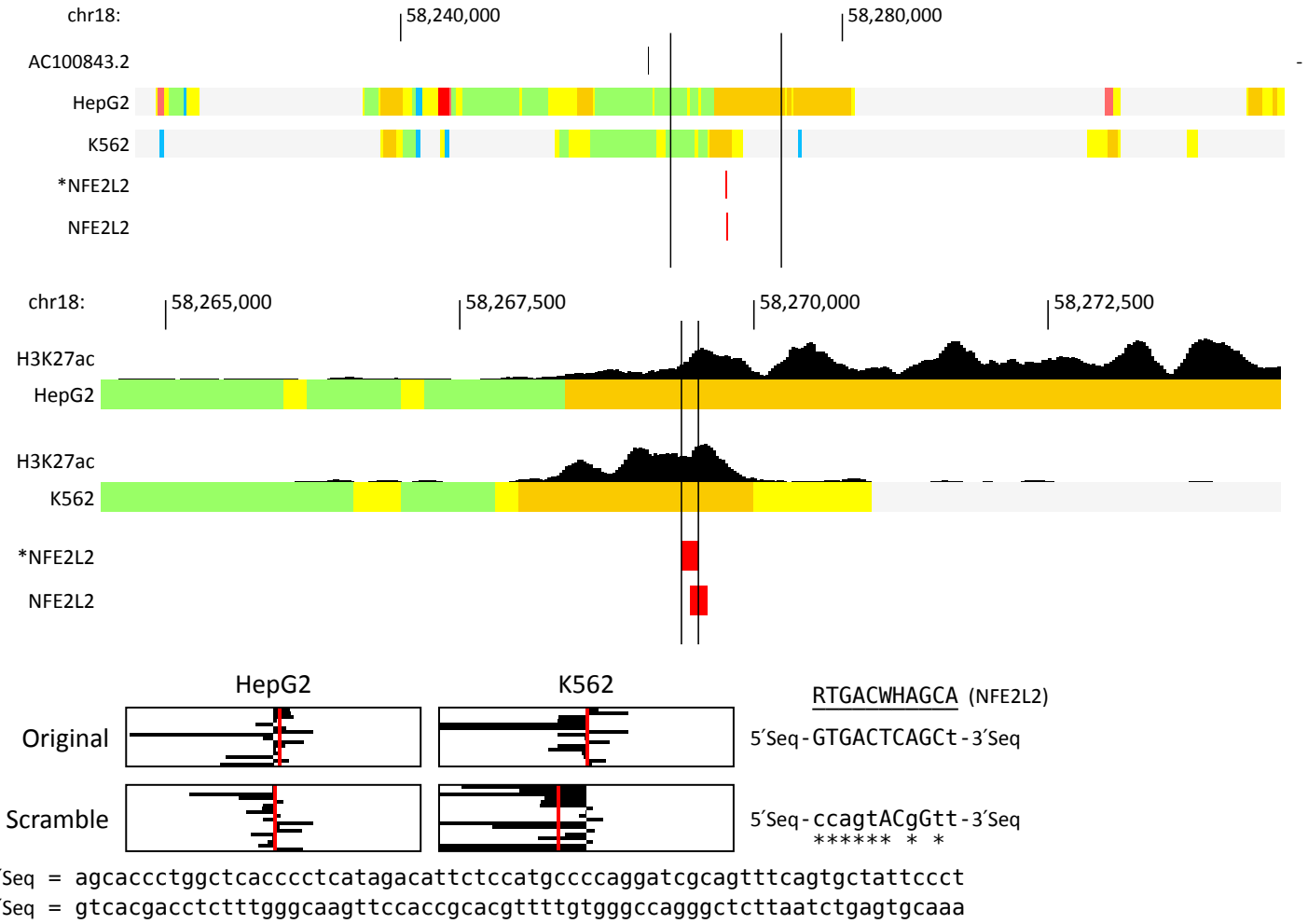
1082 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr18 58269451 58269461 - (hg18)



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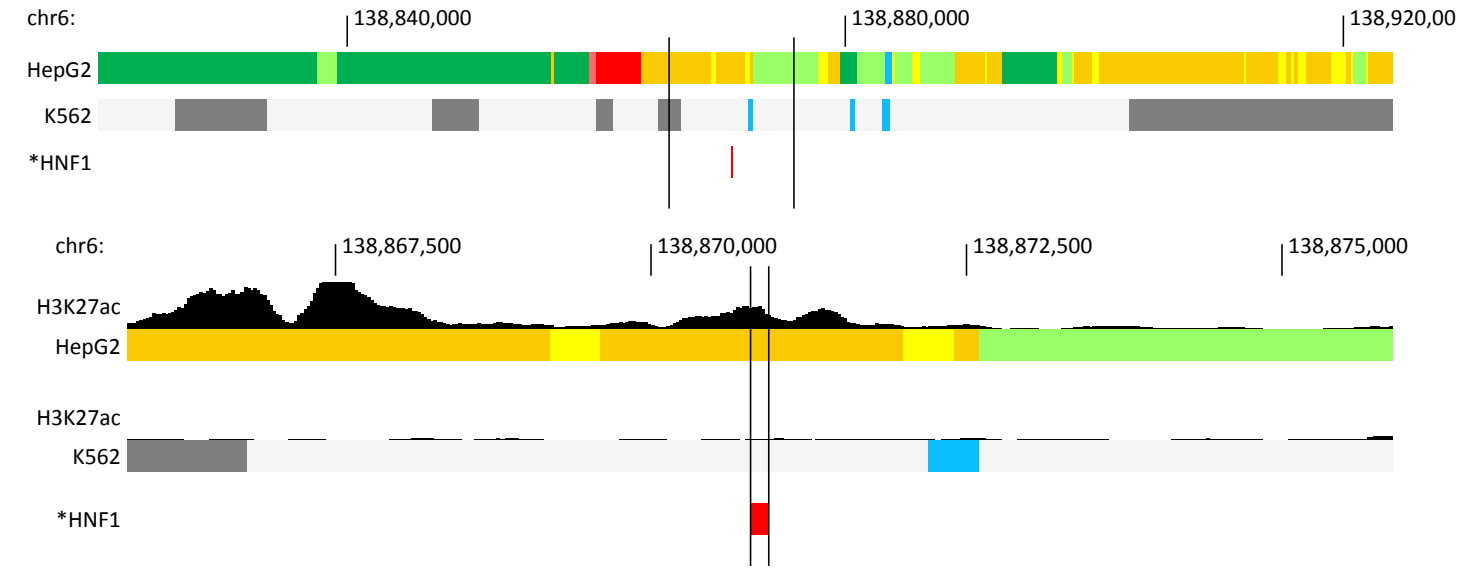
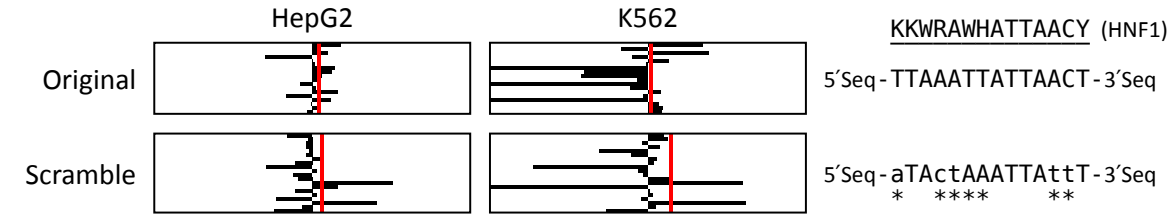
1083 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 138870855 138870868 - (hg18)





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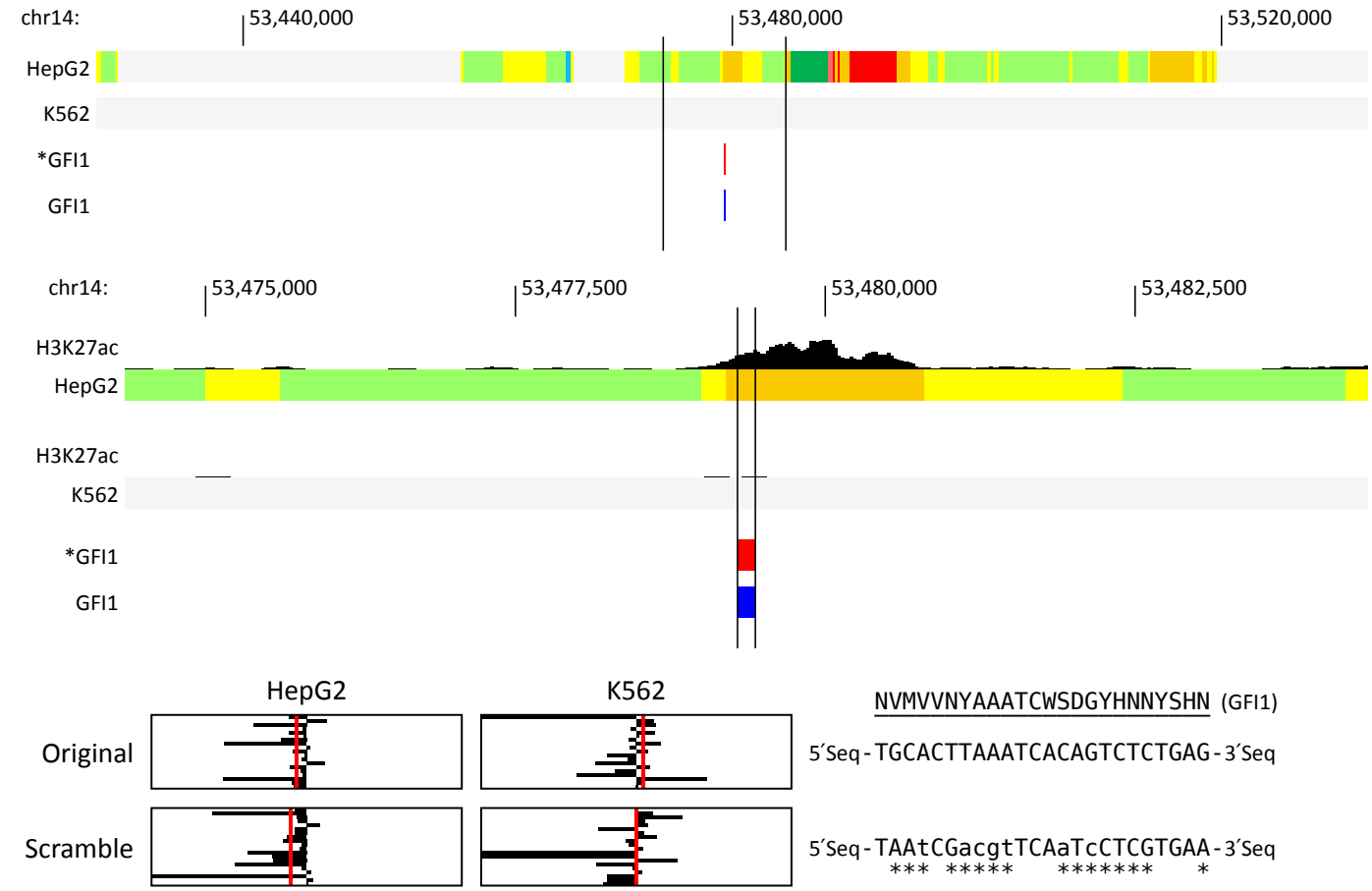
1084 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 53479353 53479376 - (hg18)



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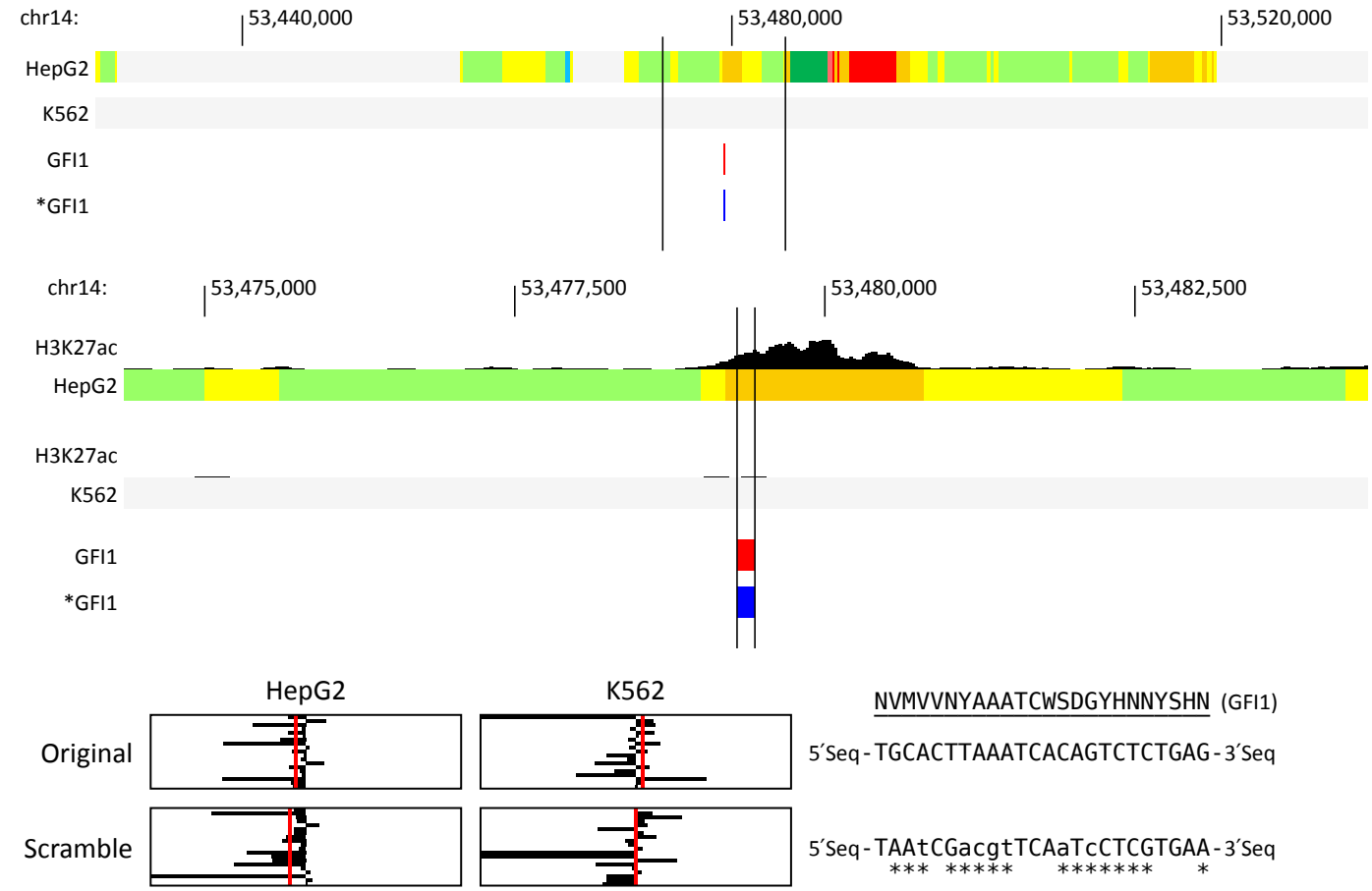
1085 GFI1 in HepG2 enhancer

chr14 53479353 53479376 - (hg18)



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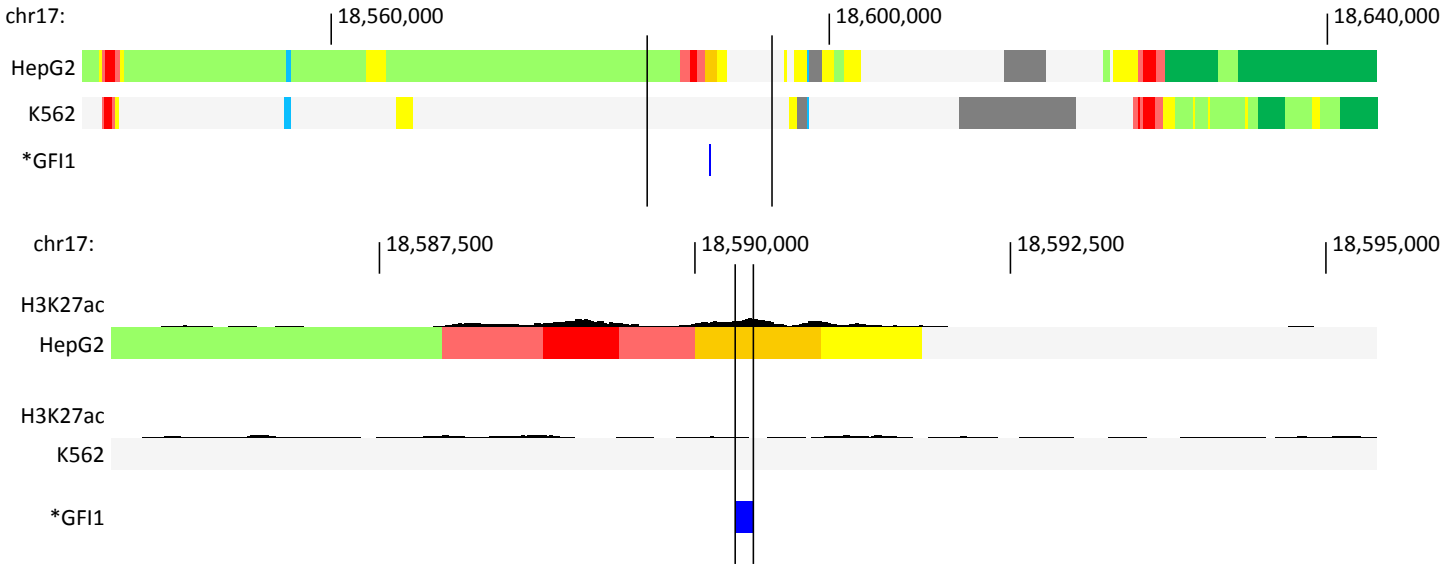
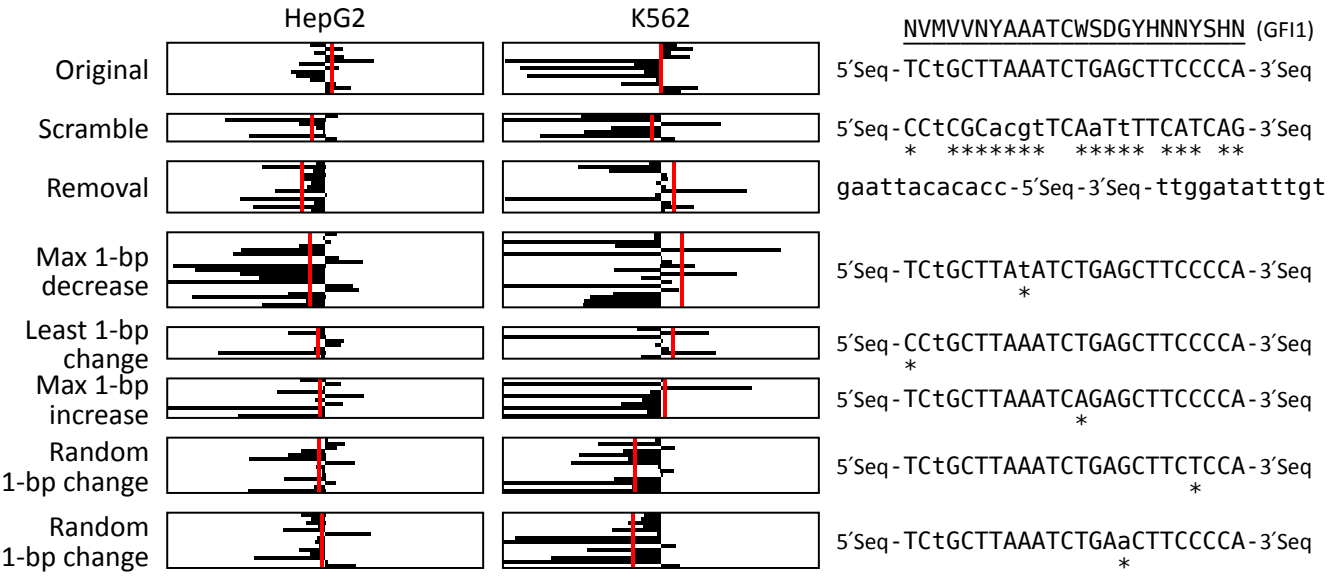
1086 GFI1 in HepG2 enhancer

chr17 18590380 18590403 - (hg18)





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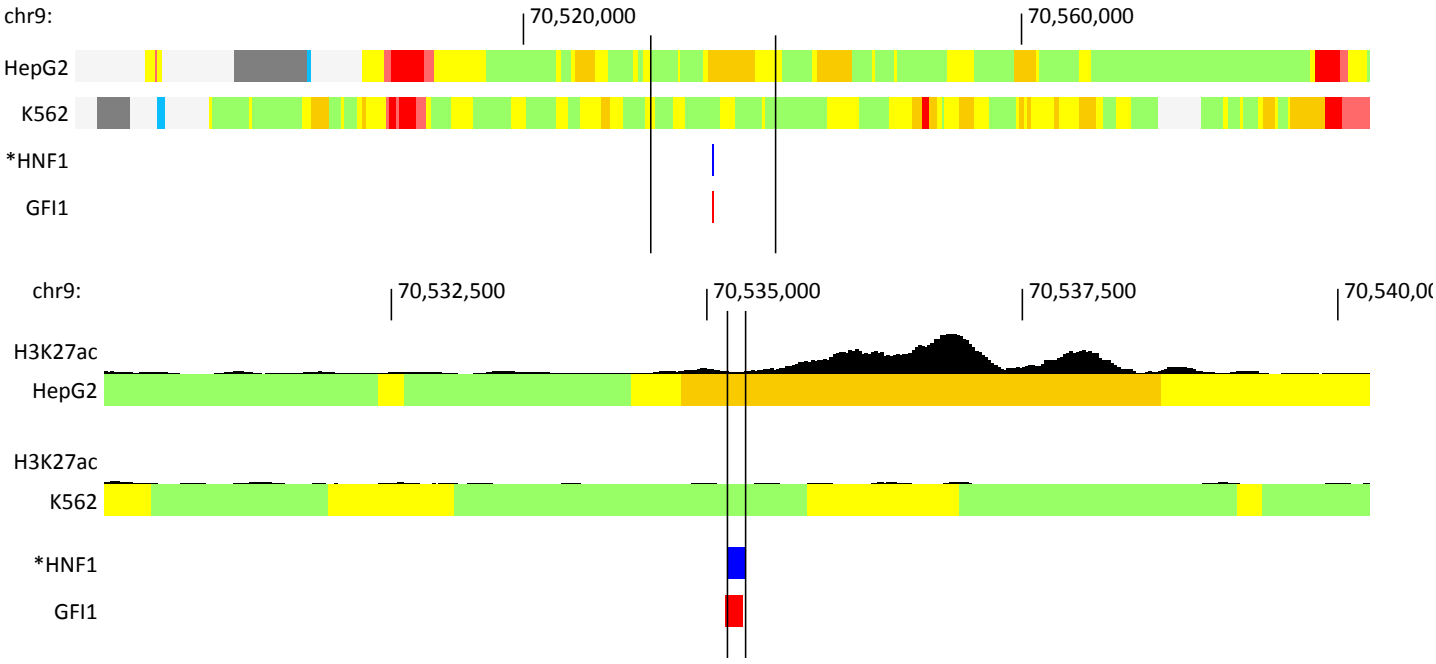
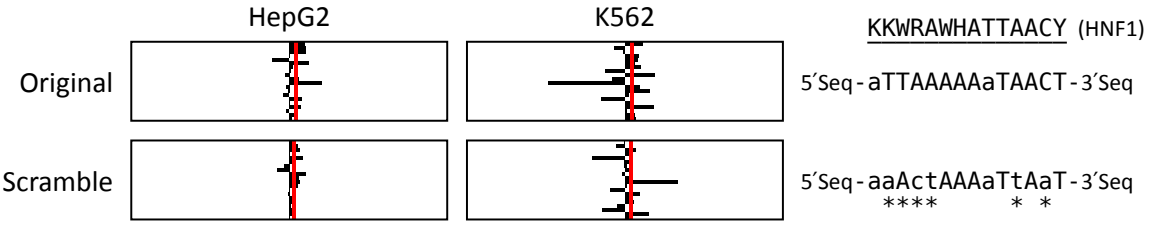
1087 HNF1 in HepG2 enhancer

chr9 70535229 70535242 + (hg18)





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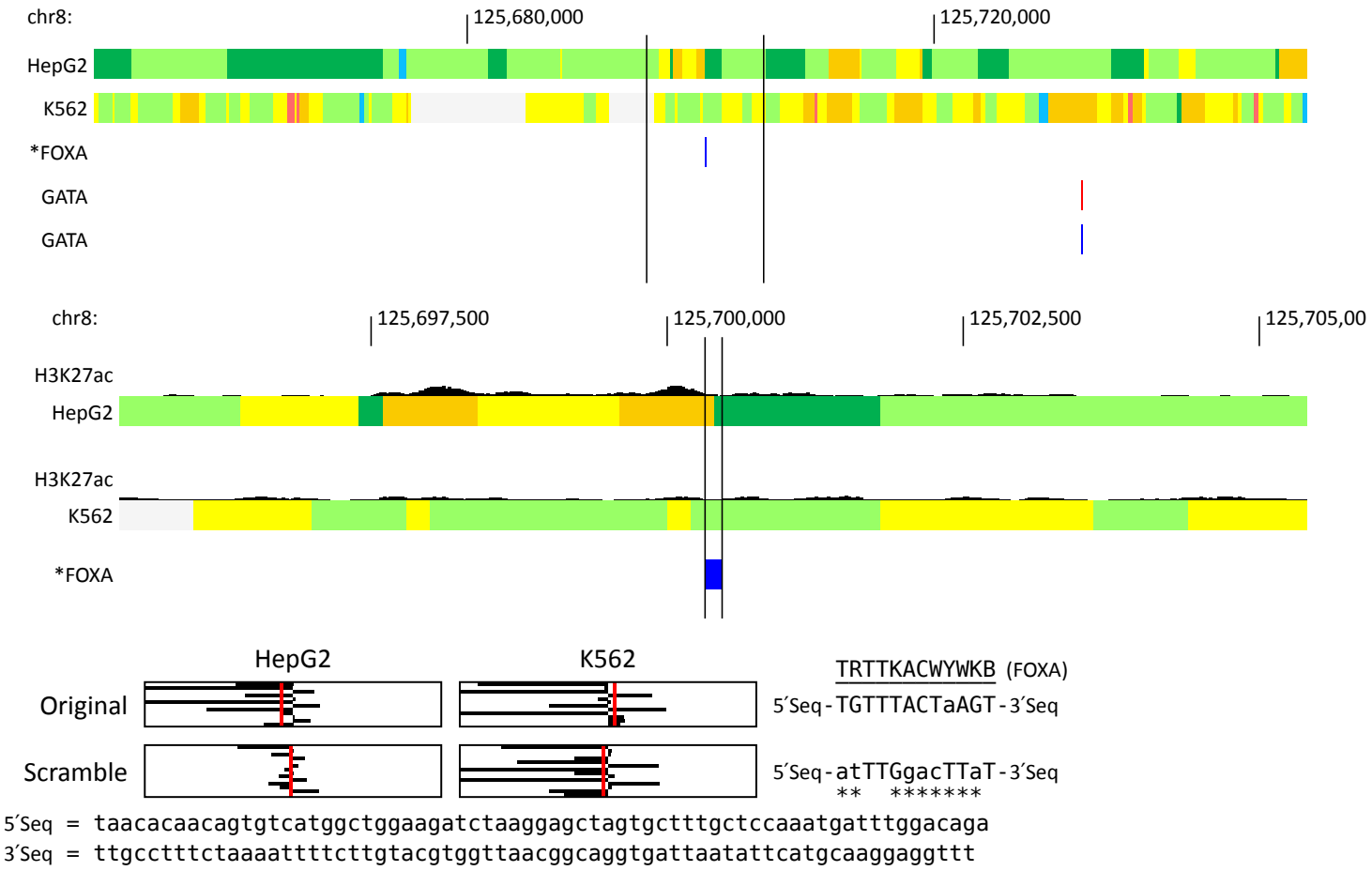
1088 FOXA in HepG2 enhancer

chr8 125700387 125700398 + (hg18)



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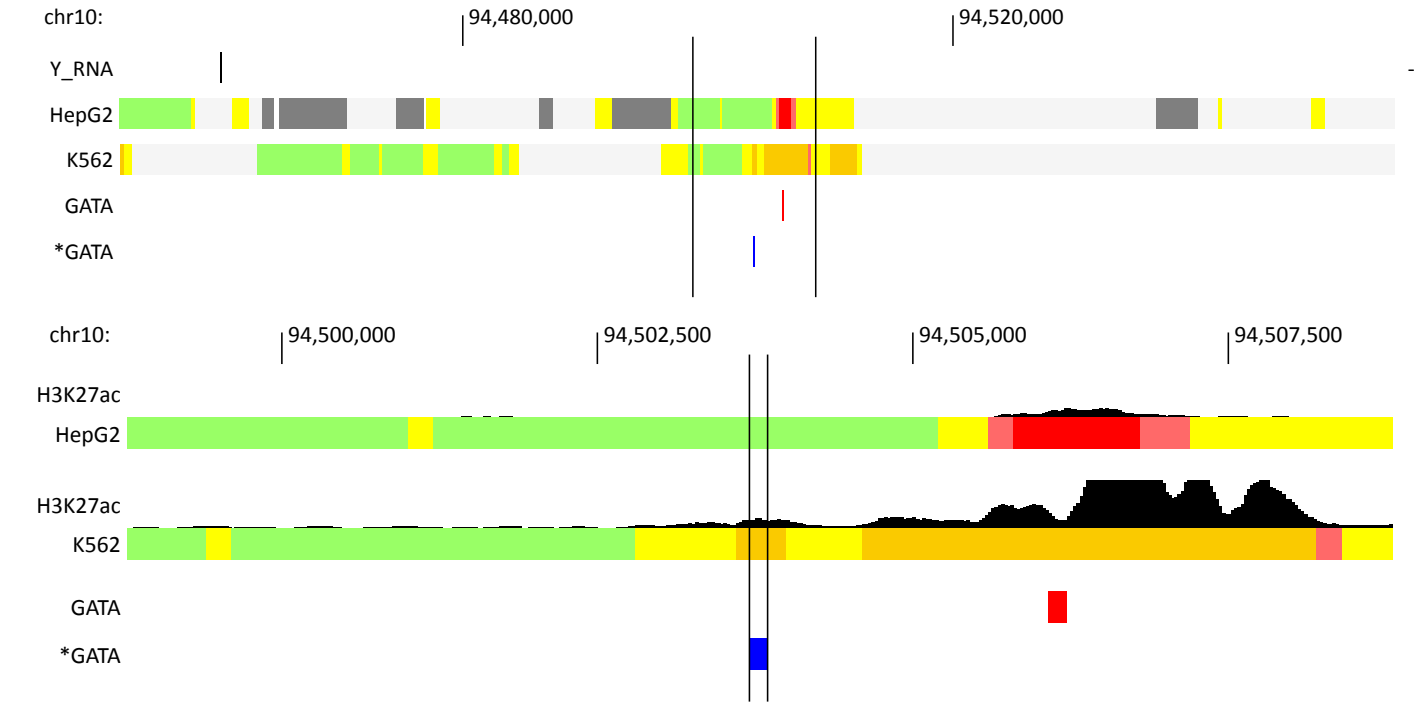
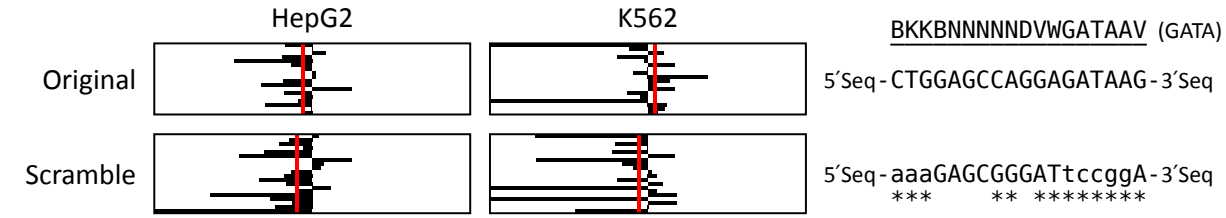
1089 GATA in K562 enhancer

chr10 94503769 94503786 + (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGGAGCCAGGAGATAAG-3′Seq

5′Seq-aaaGAGCGGGATtccggA-3′Seq

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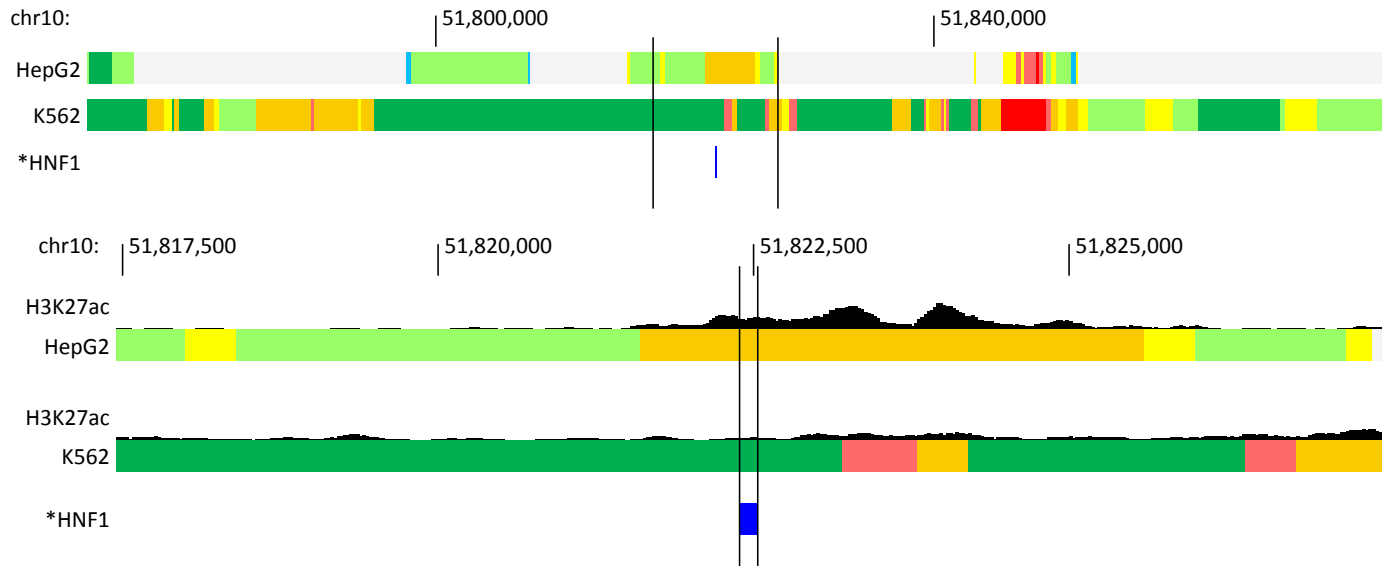
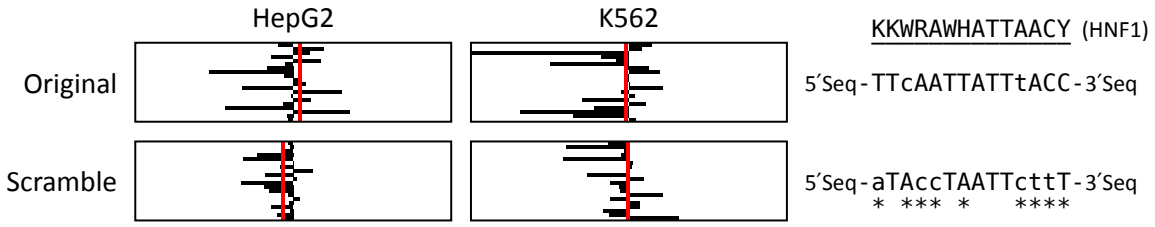
1090 HNF1 in HepG2 enhancer

chr10 51822455 51822468 - (hg18)





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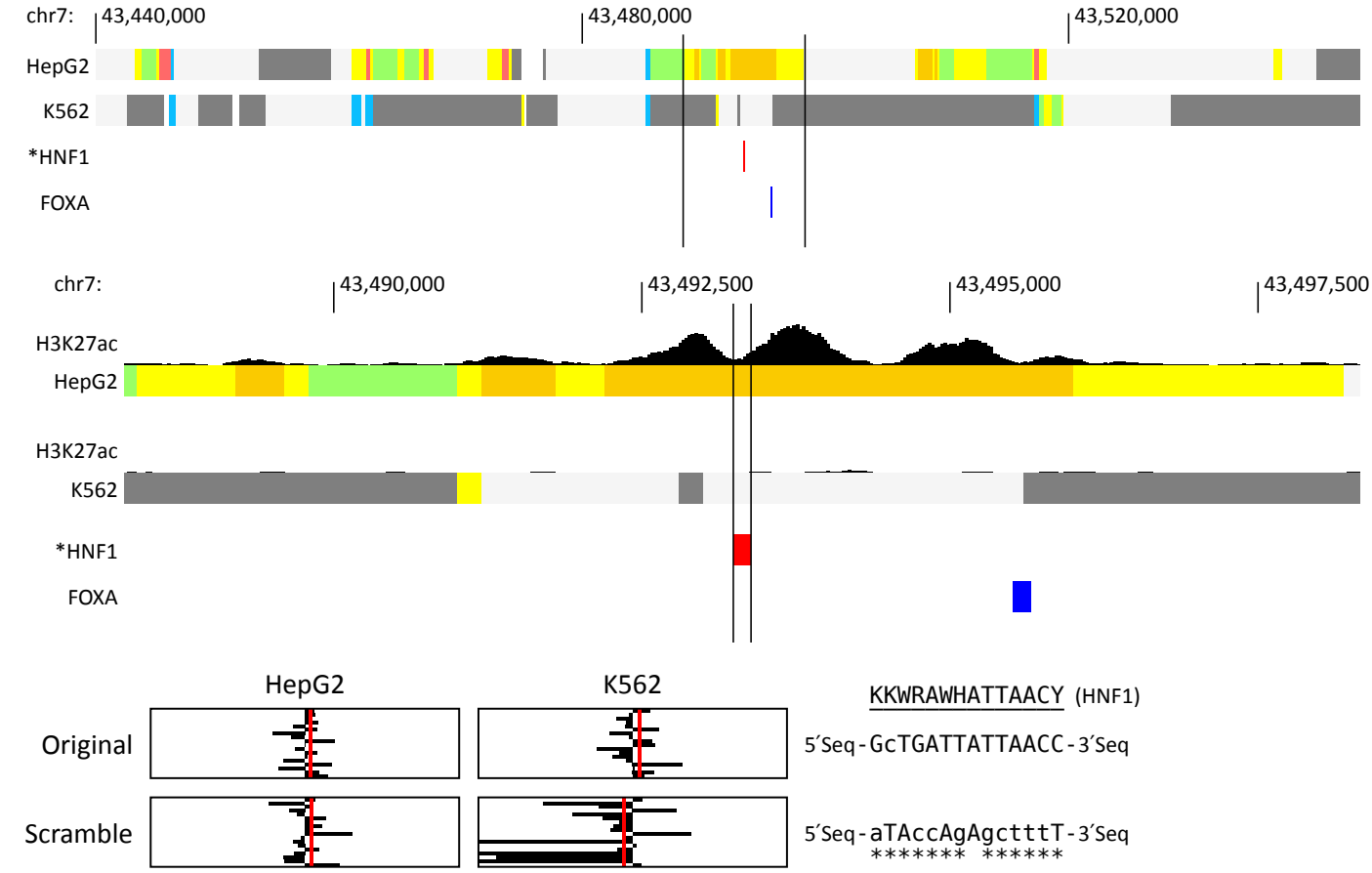
1091 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr7 43493308 43493321 + (hg18)



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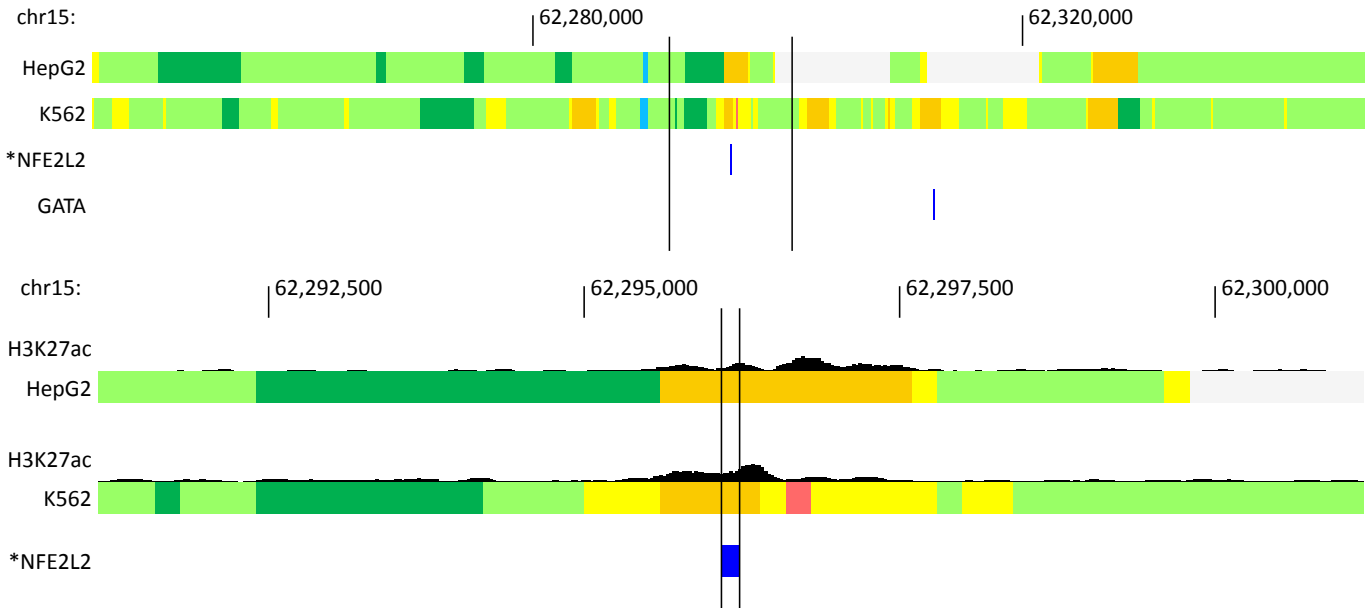
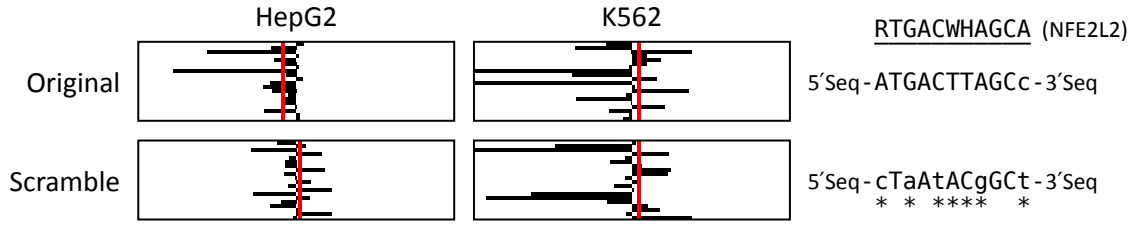
1092 NFE2L2 in HepG2 enhancer

chr15 62296155 62296165 - (hg18)





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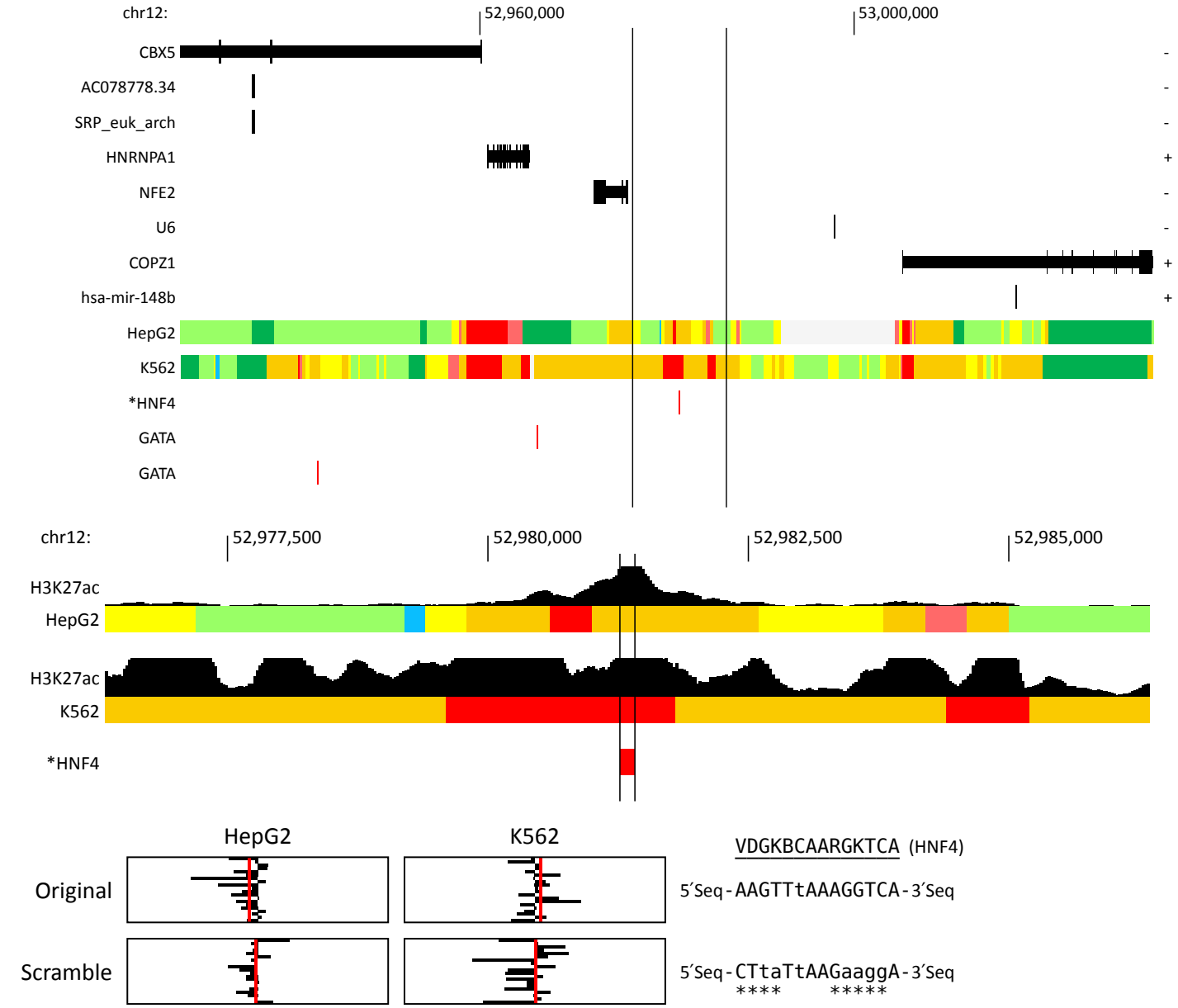
1093 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 52981333 52981346 - (hg18)



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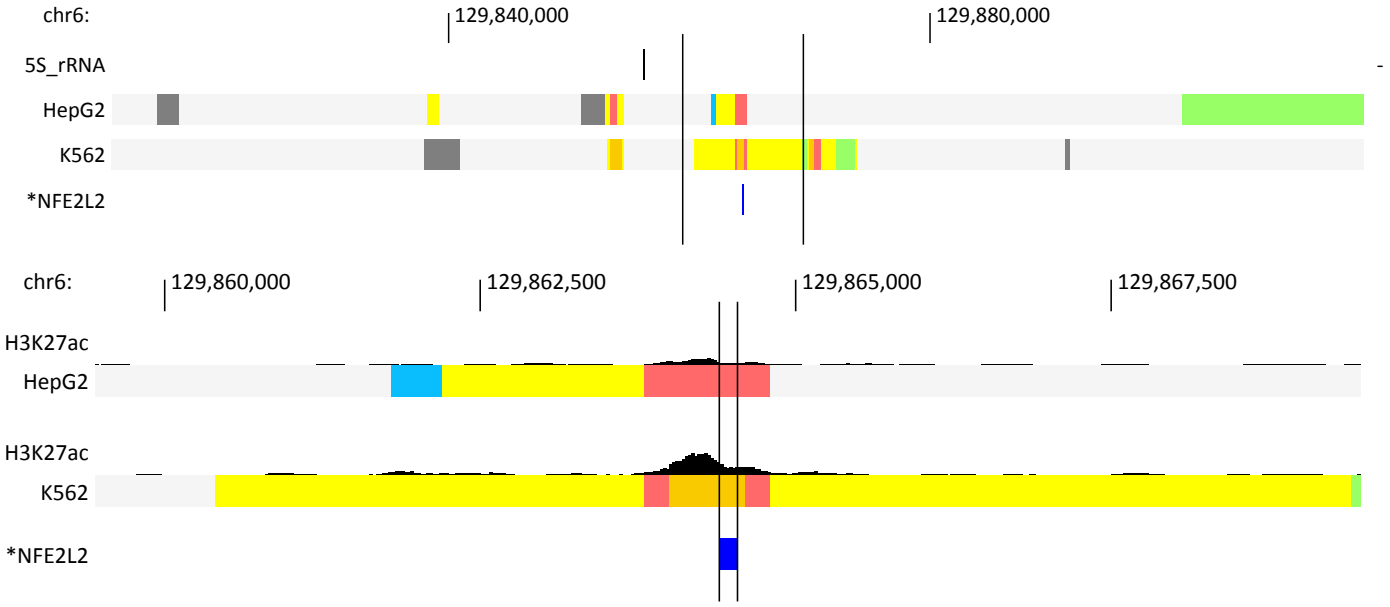
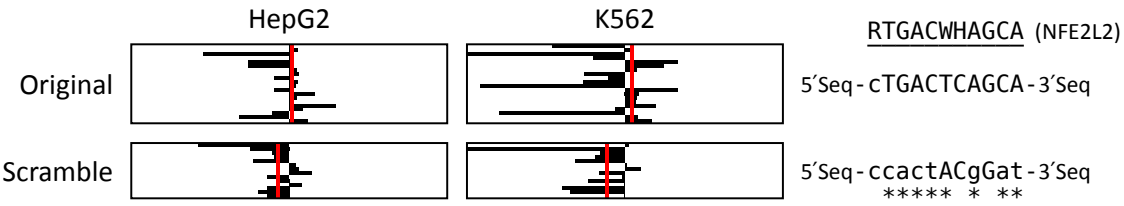
1094 NFE2L2 in K562 enhancer

chr6 129864462 129864472 - (hg18)





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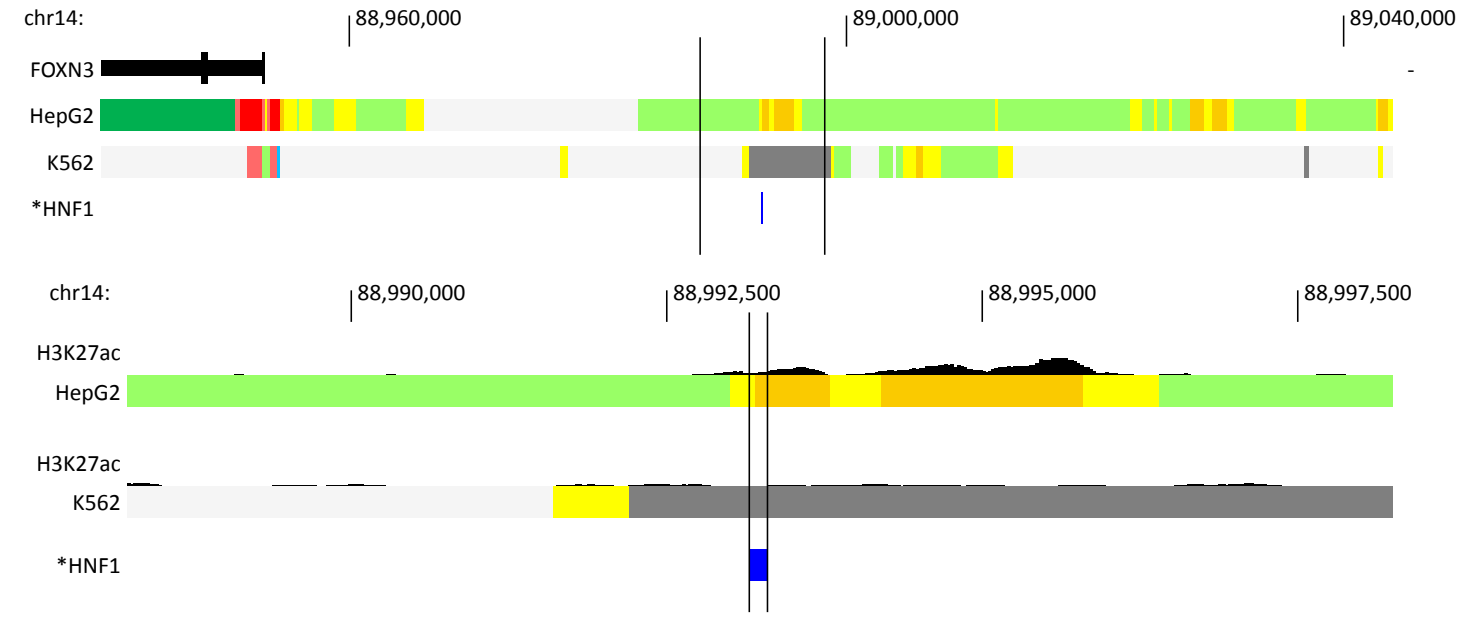
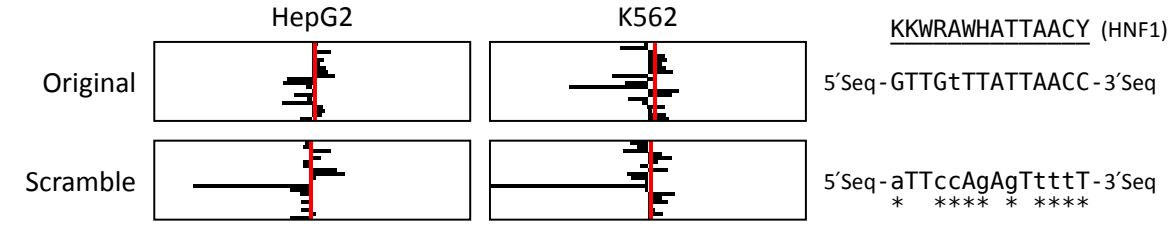
1095 HNF1 in HepG2 enhancer

chr14 88993220 88993233 - (hg18)





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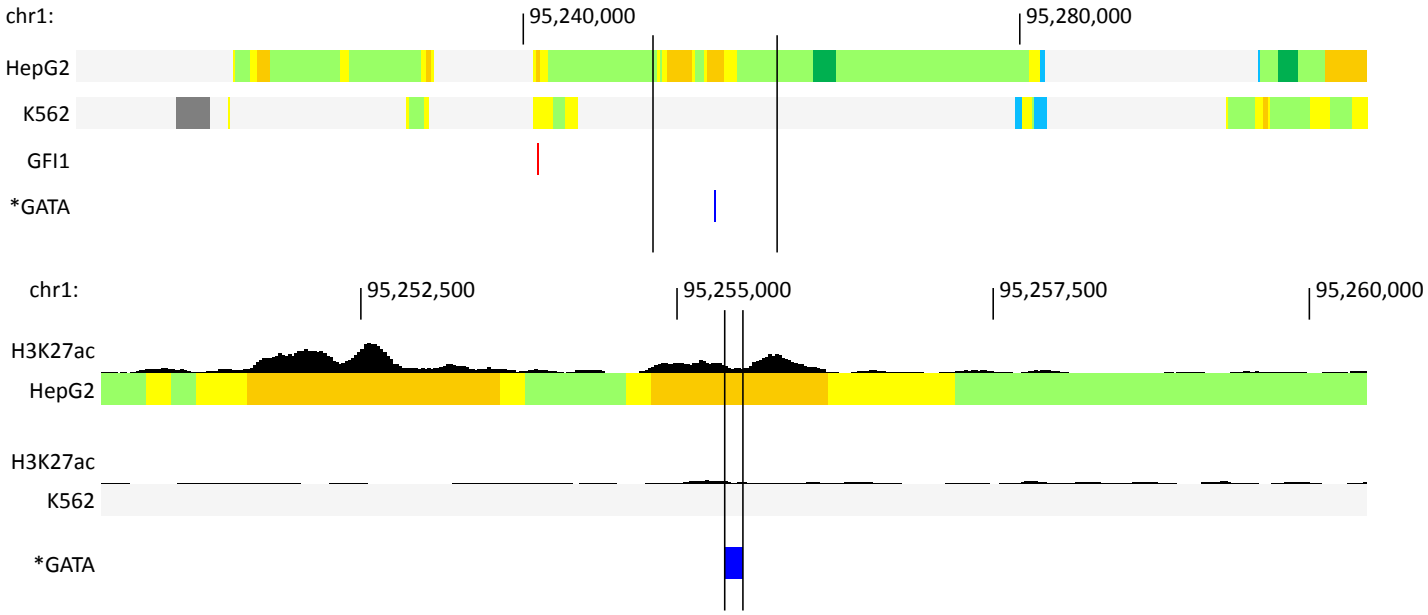
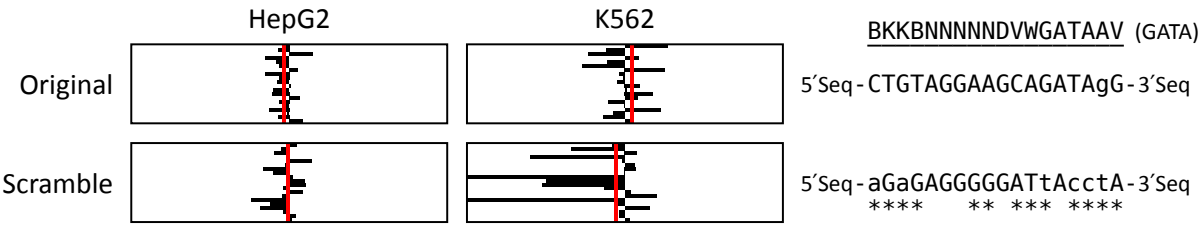
1096 GATA in HepG2 enhancer

chr1 95255441 95255458 - (hg18)





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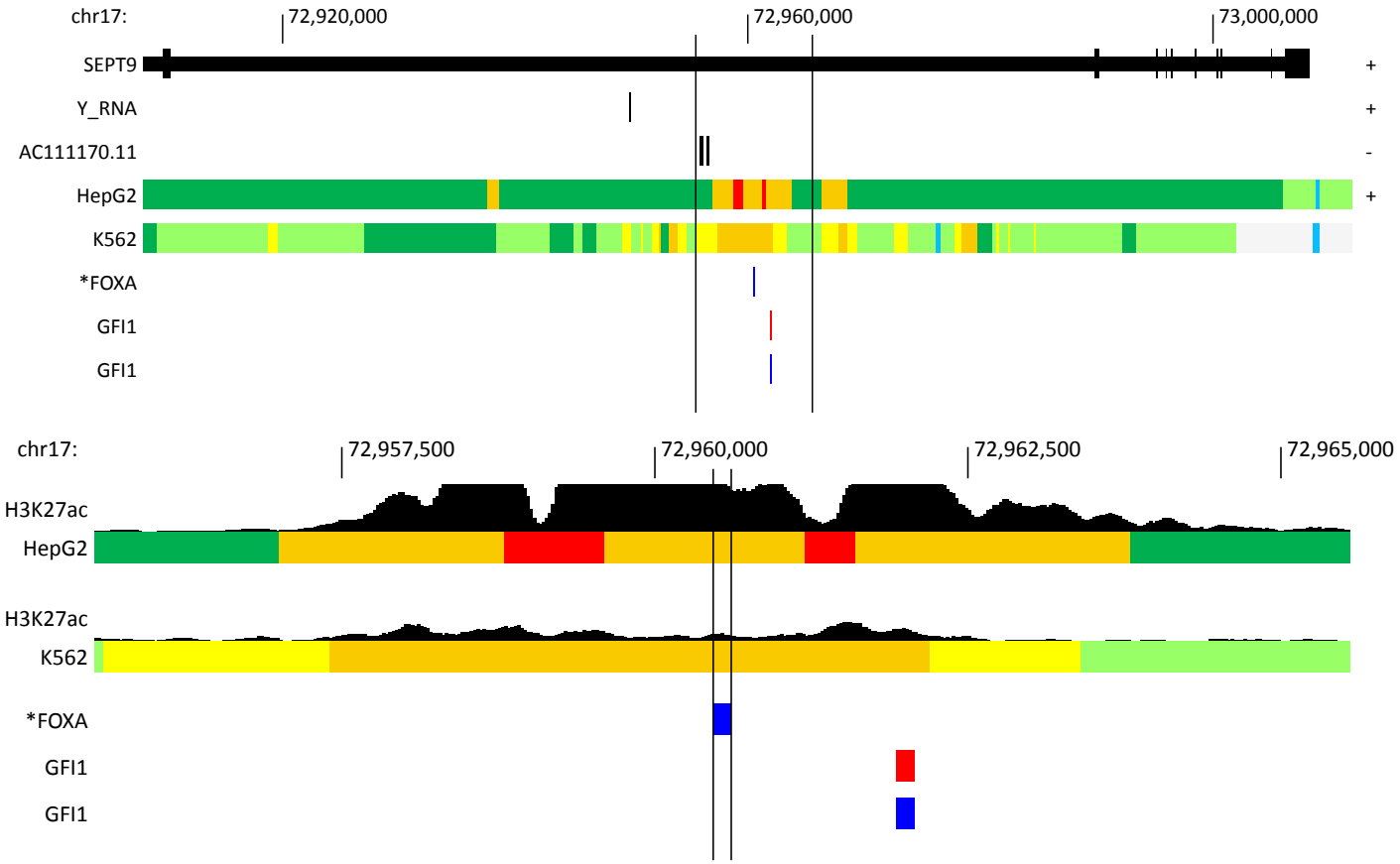
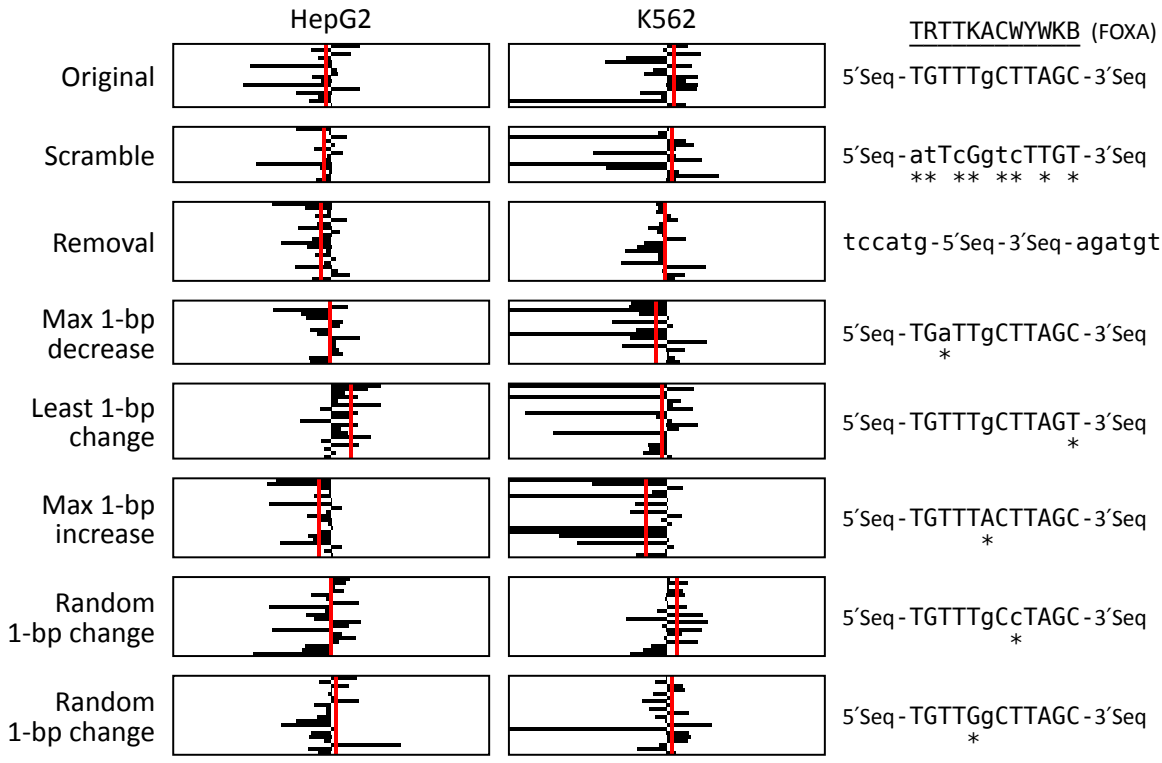
1097 FOXA in HepG2 enhancer

chr17 72960533 72960544 + (hg18)





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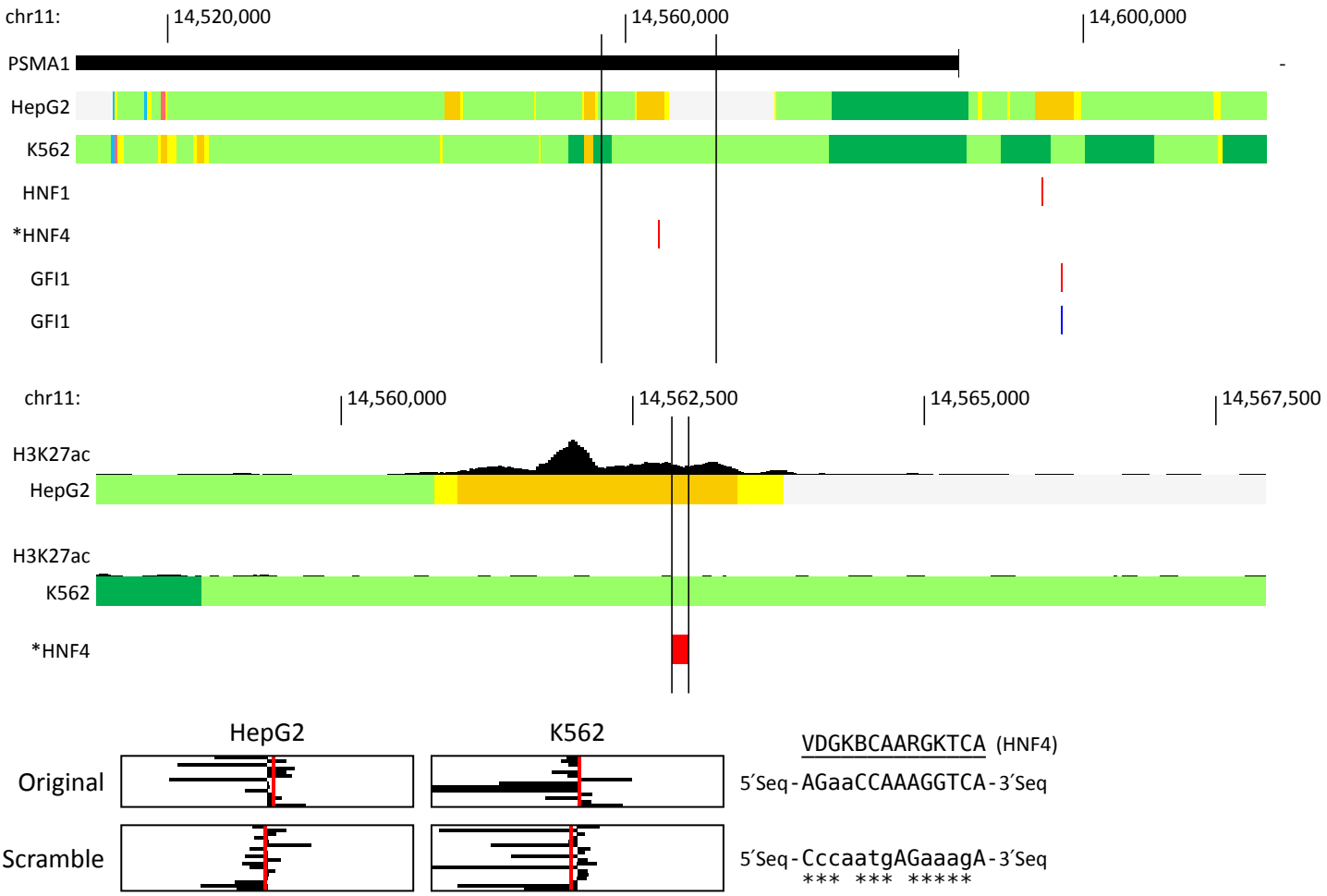
1098 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr11 14562901 14562914 - (hg18)



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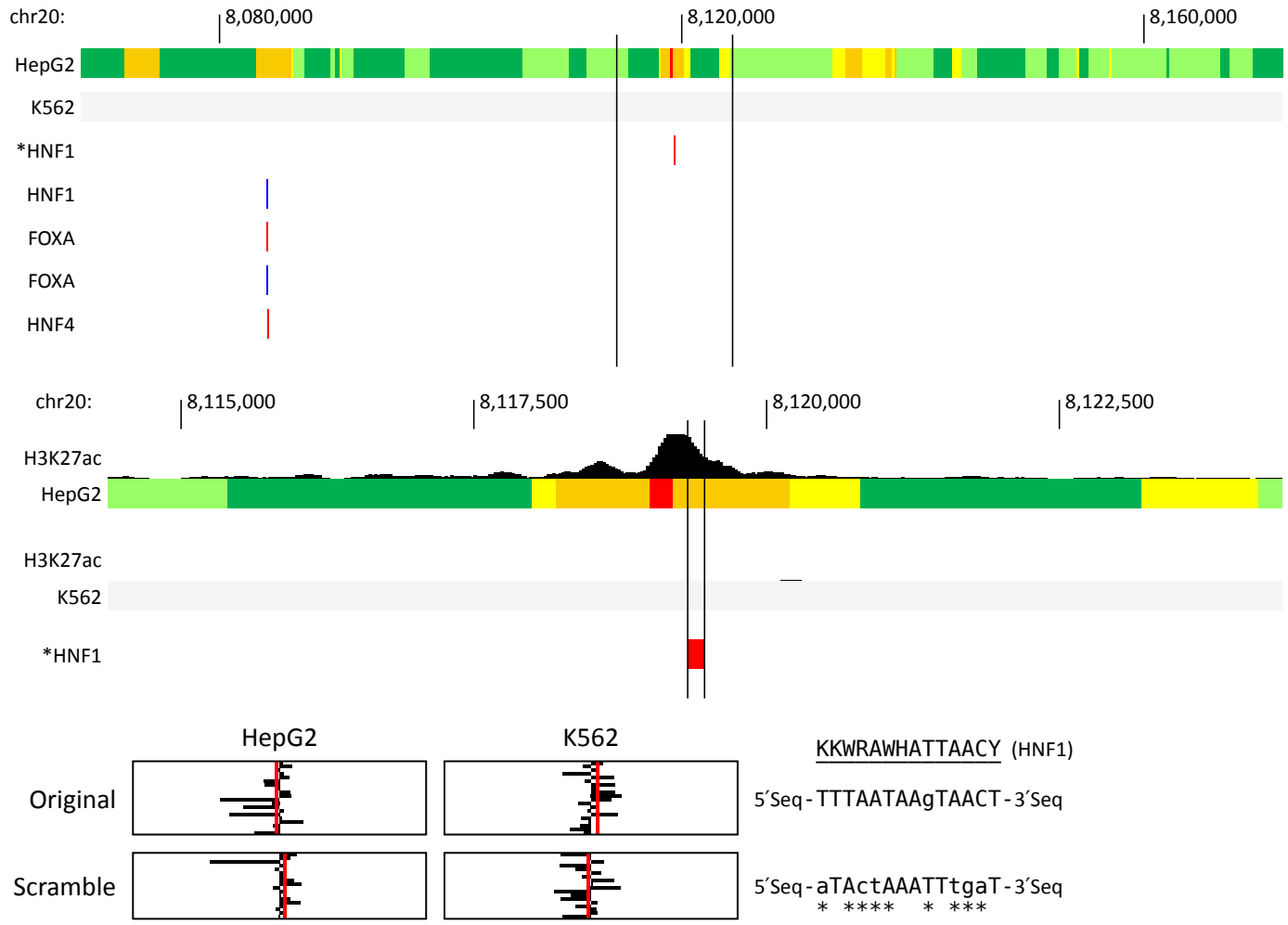
1099 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr20 8119392 8119405 + (hg18)



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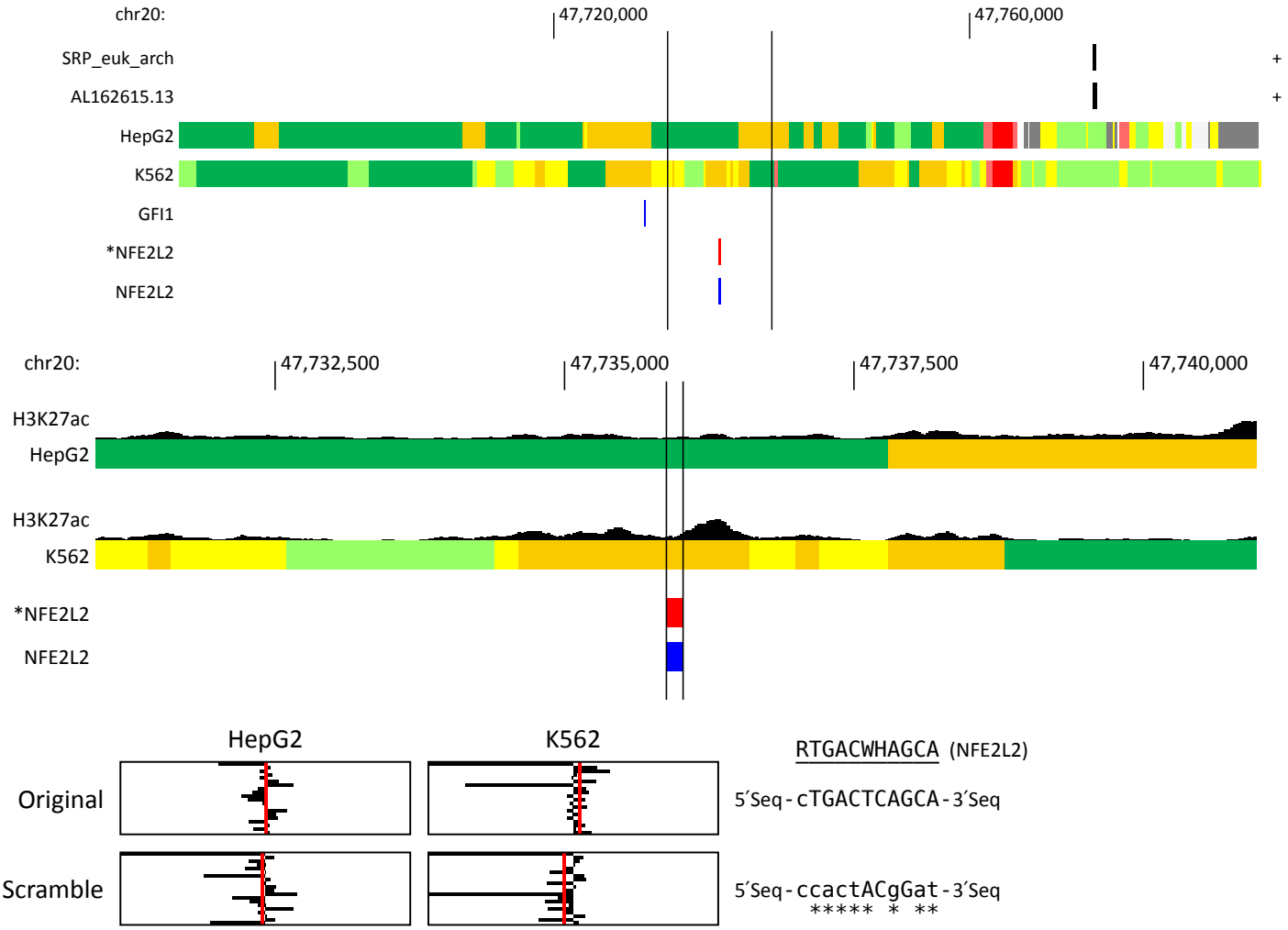
1100 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 47735947 47735957 + (hg18)



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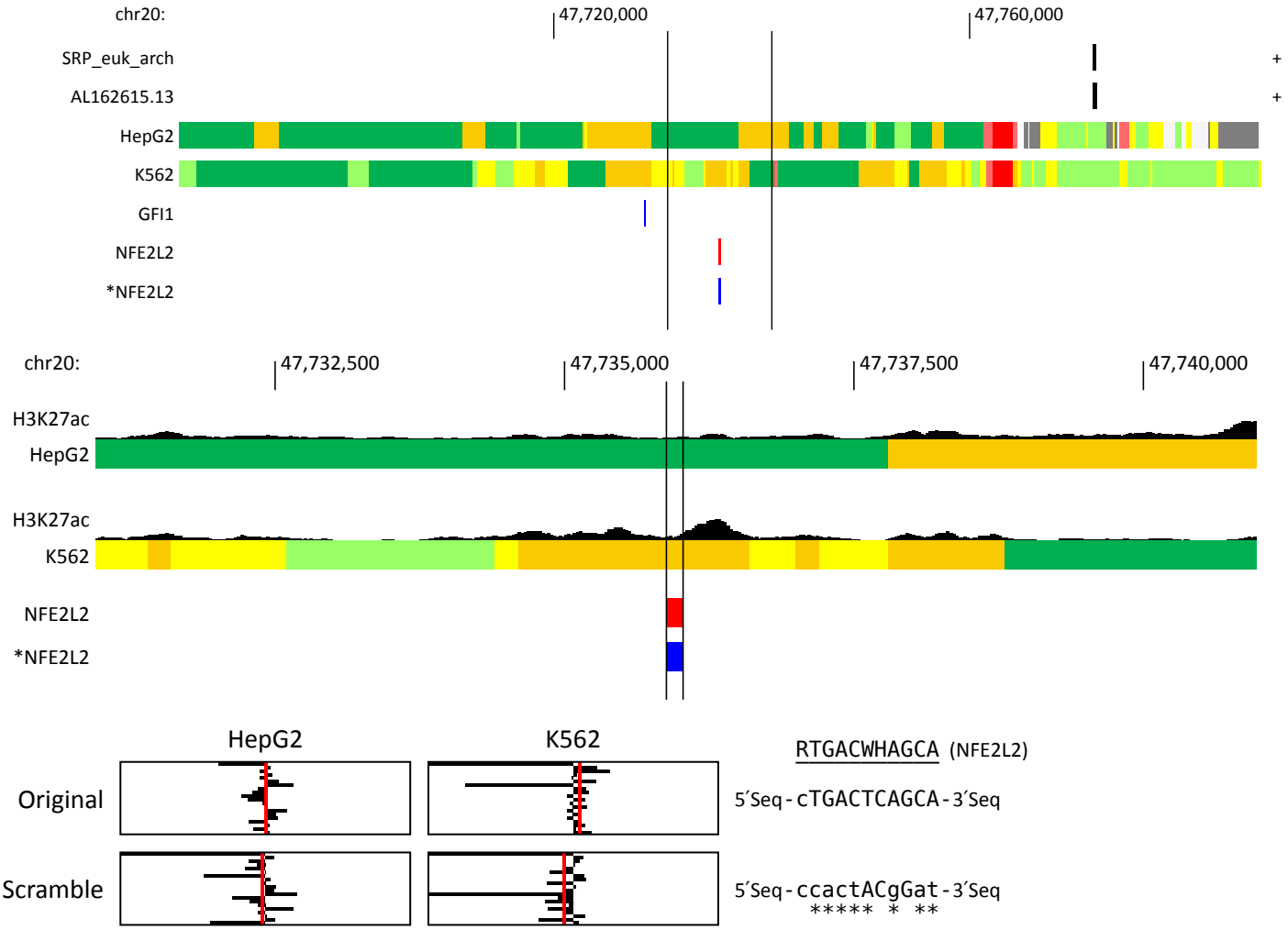
1101 NFE2L2 in K562 enhancer

chr20 47735947 47735957 + (hg18)



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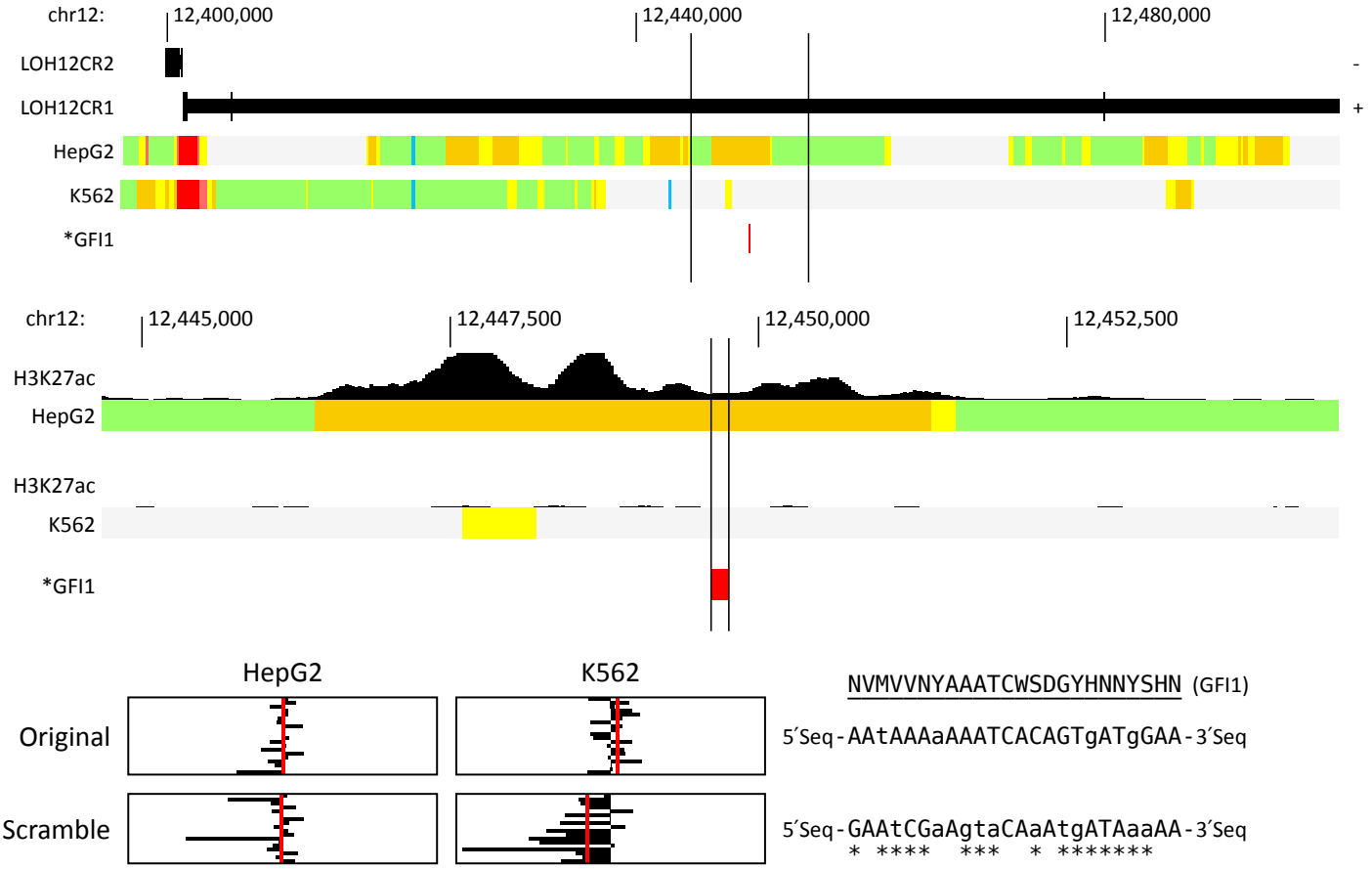
1102 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr12 12449676 12449699 - (hg18)



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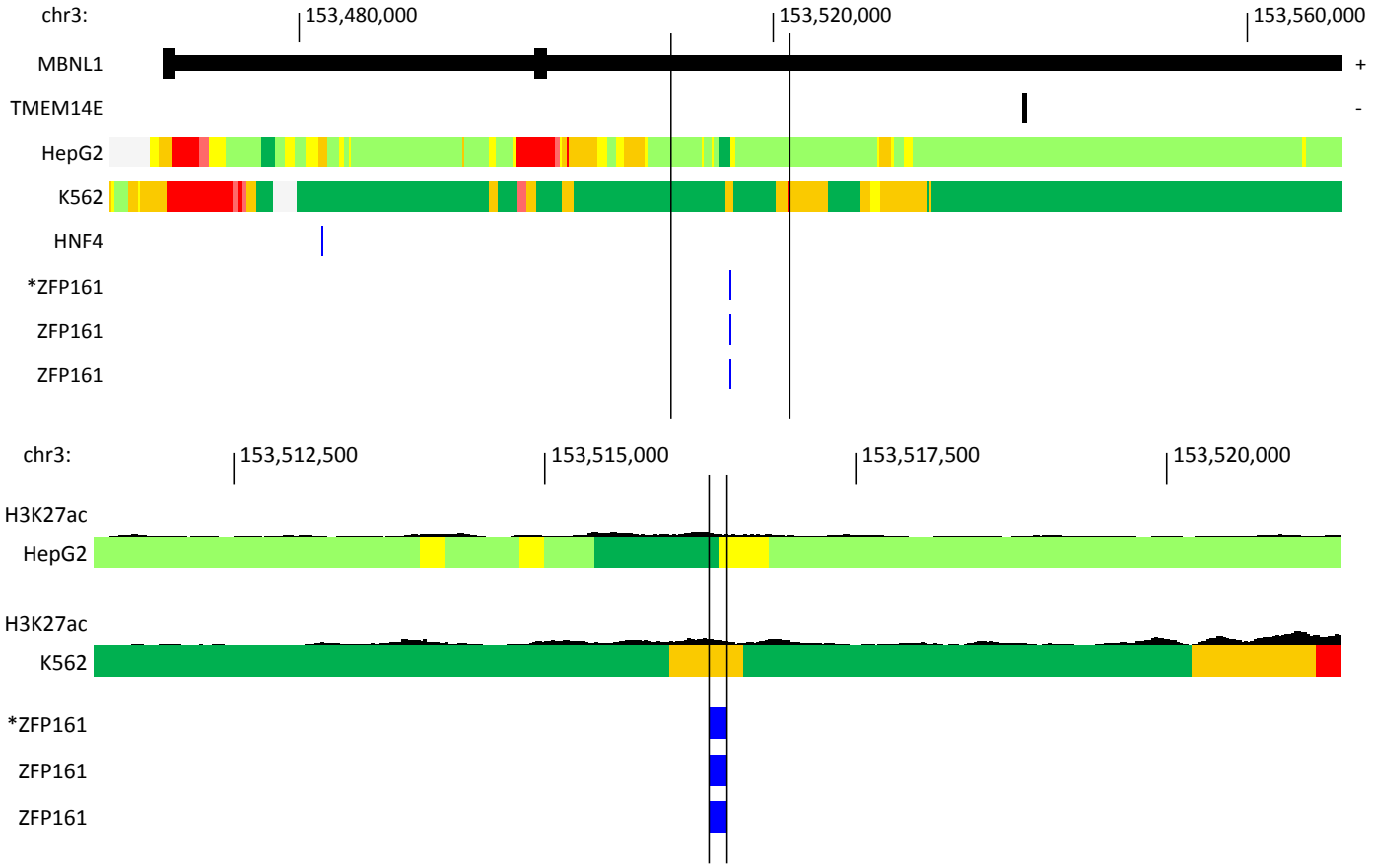
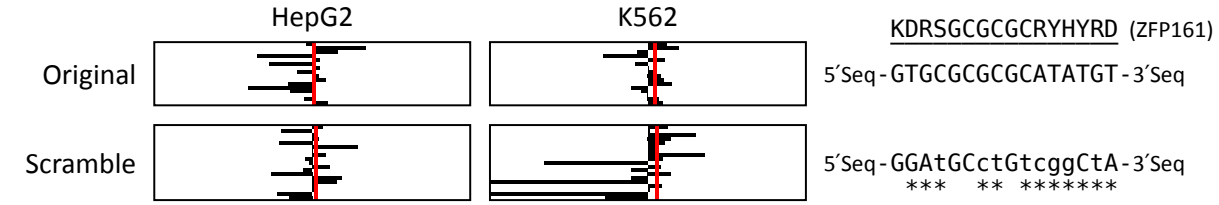
1103 ZFP161 in K562 enhancer

chr3 153516386 153516401 - (hg18)





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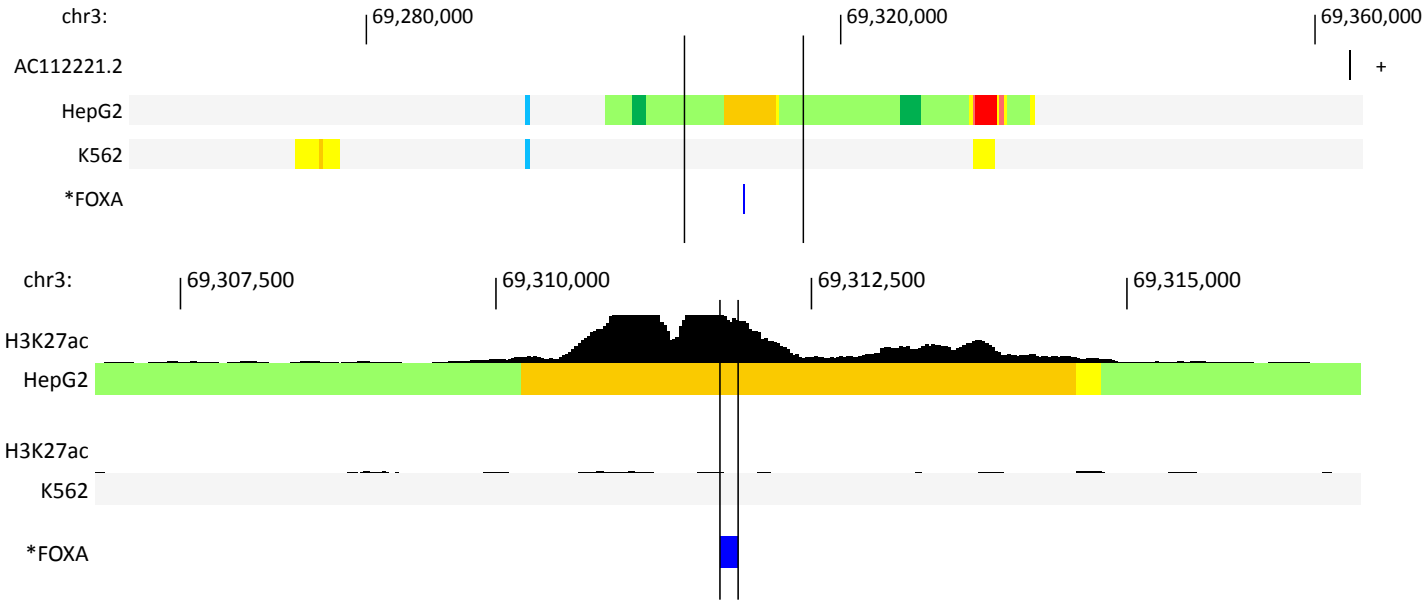
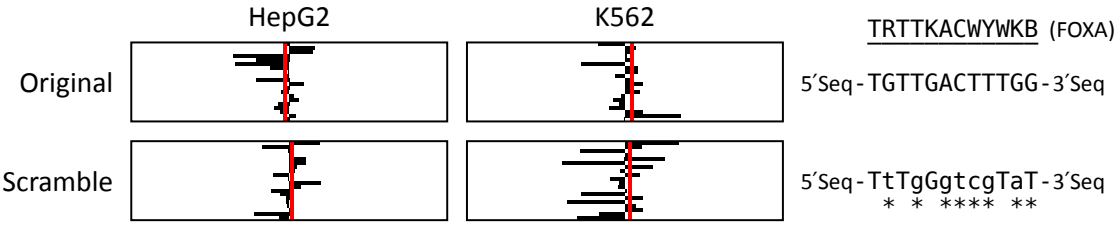
1104 FOXA in HepG2 enhancer

chr3 69311842 69311853 - (hg18)





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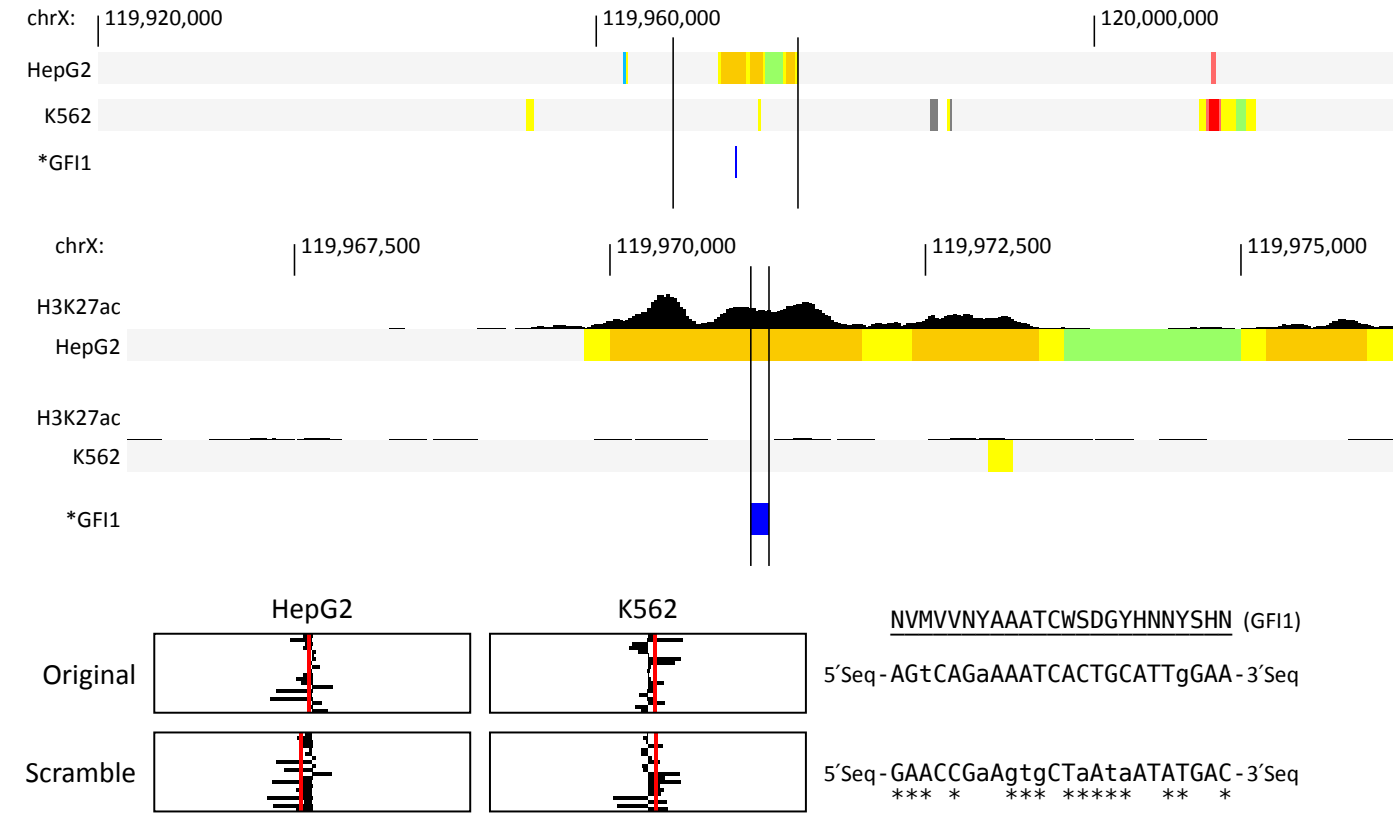
1105 GFI1 in HepG2 enhancer

chrX 119971177 119971200 + (hg18)



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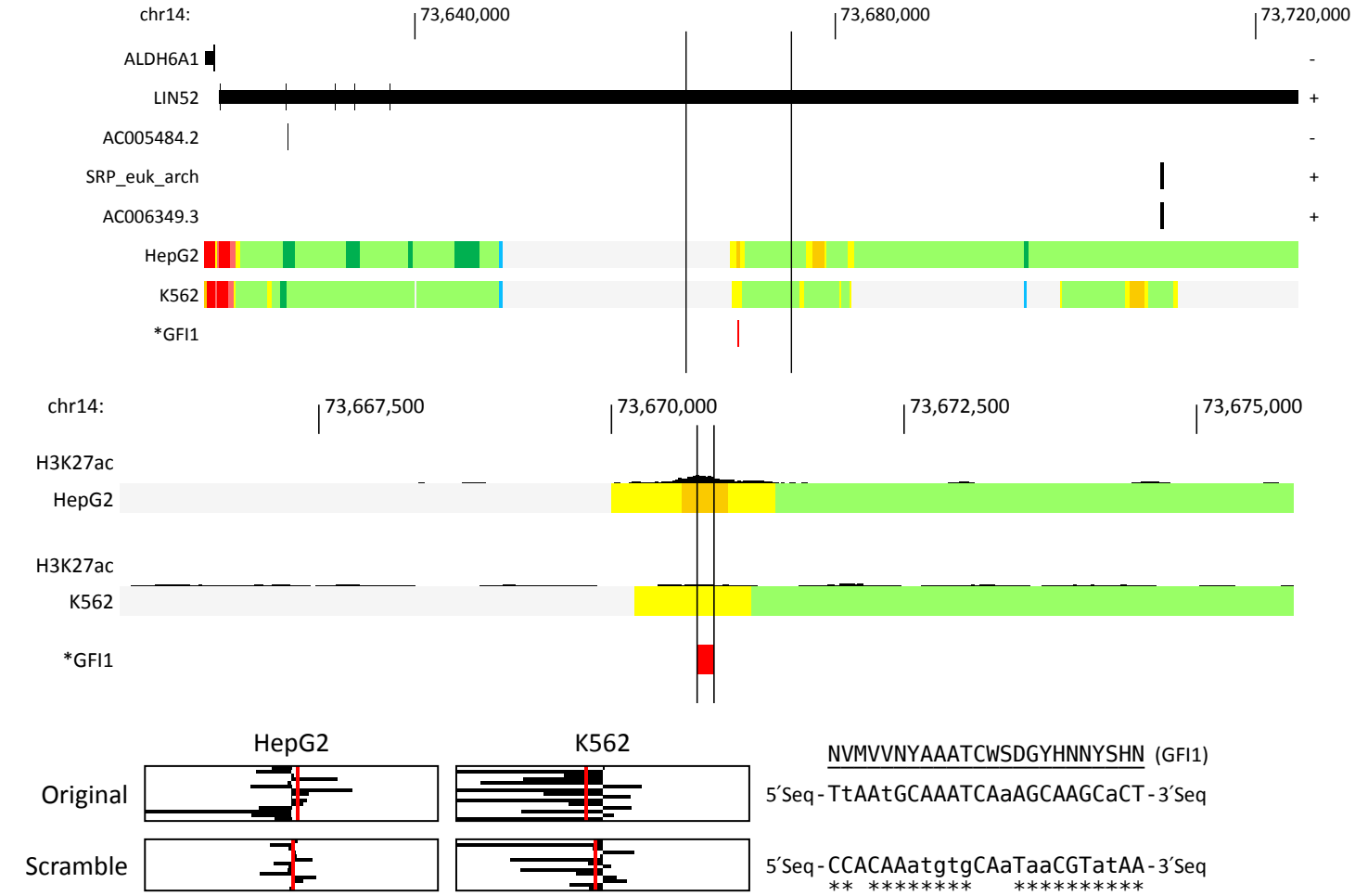
1106 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 73670793 73670816 - (hg18)



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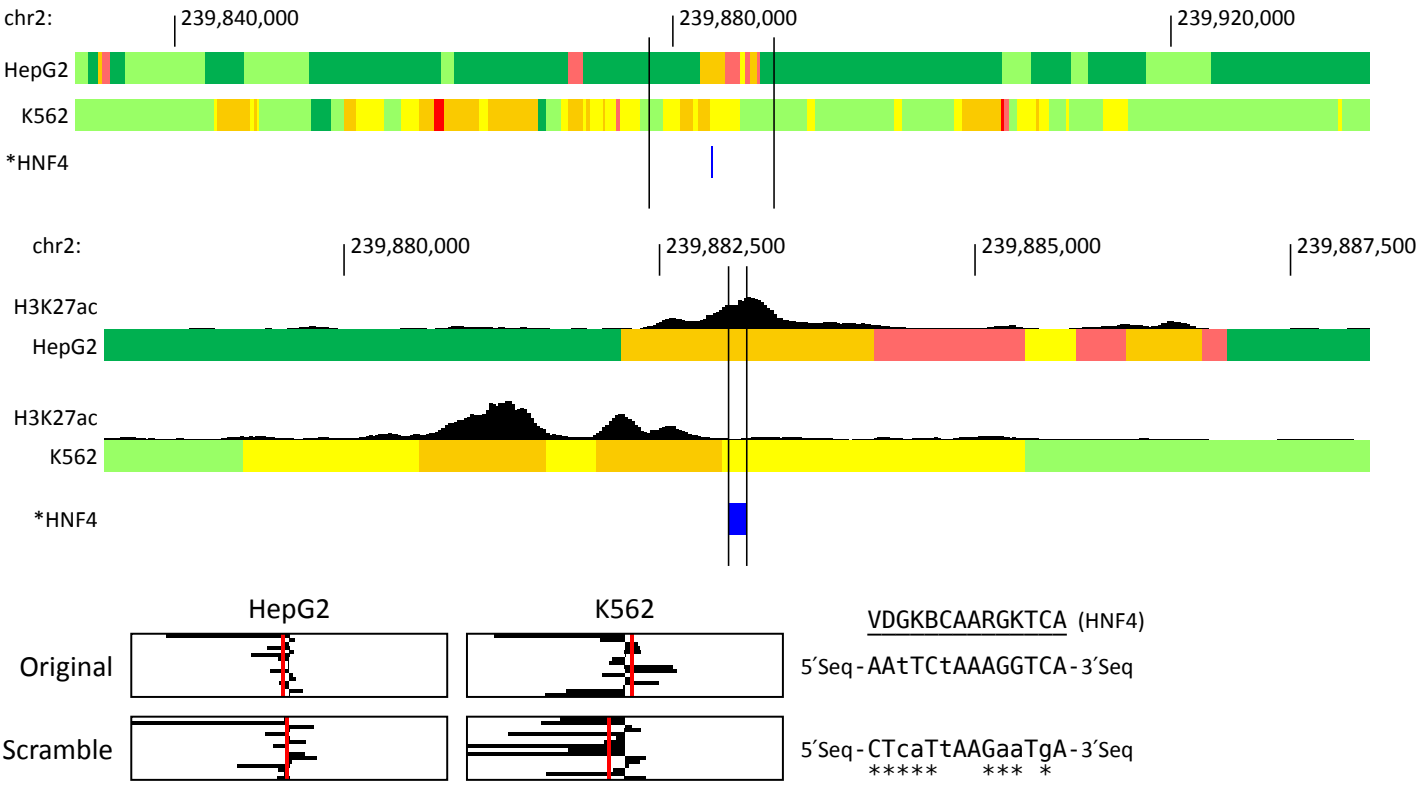
1107 HNF4 in HepG2 enhancer

chr2 239883113 239883126 + (hg18)



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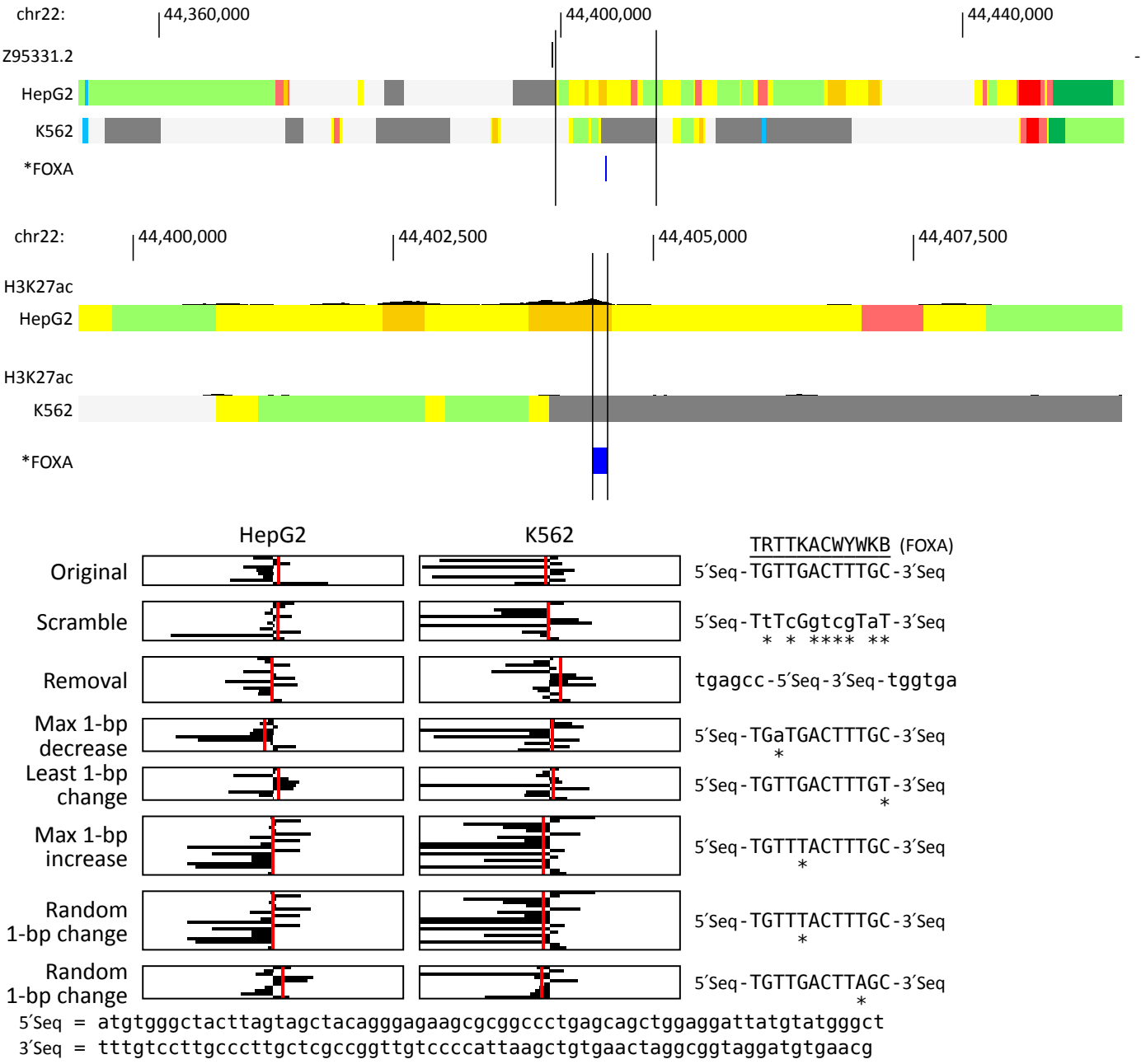
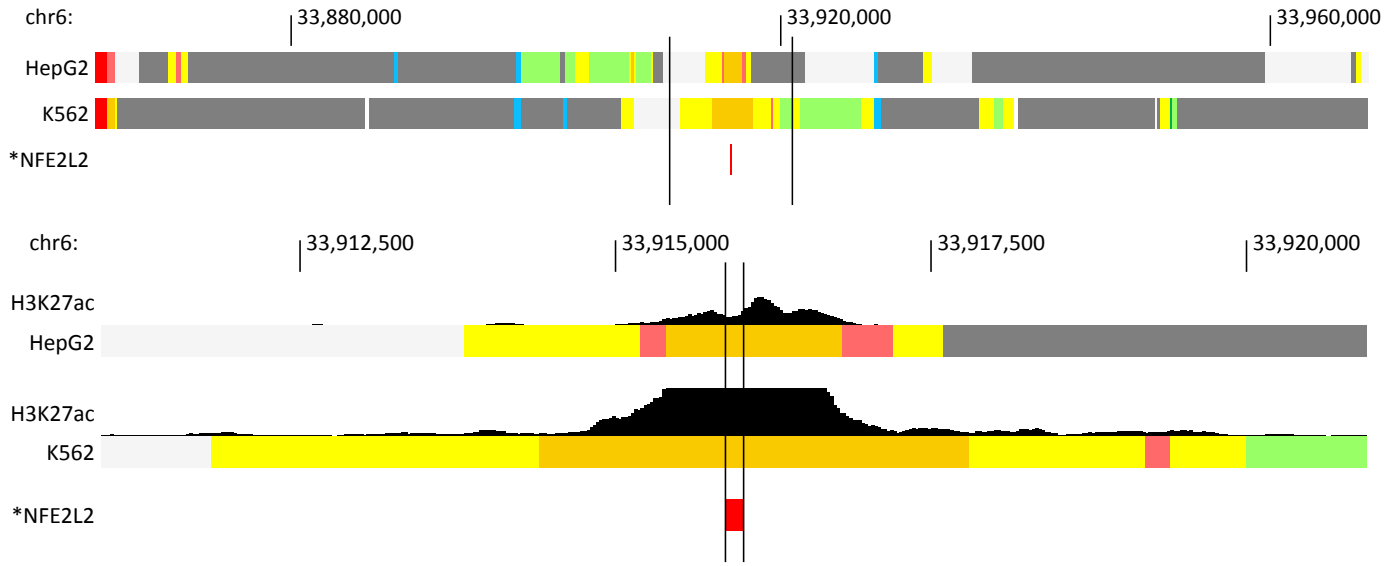
1108 FOXA in HepG2 enhancer

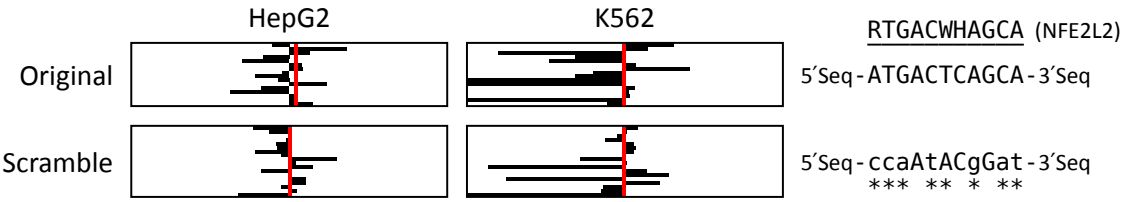
chr22 44404483 44404494 + (hg18)



1109 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr6 33915938 33915948 + (hg18)





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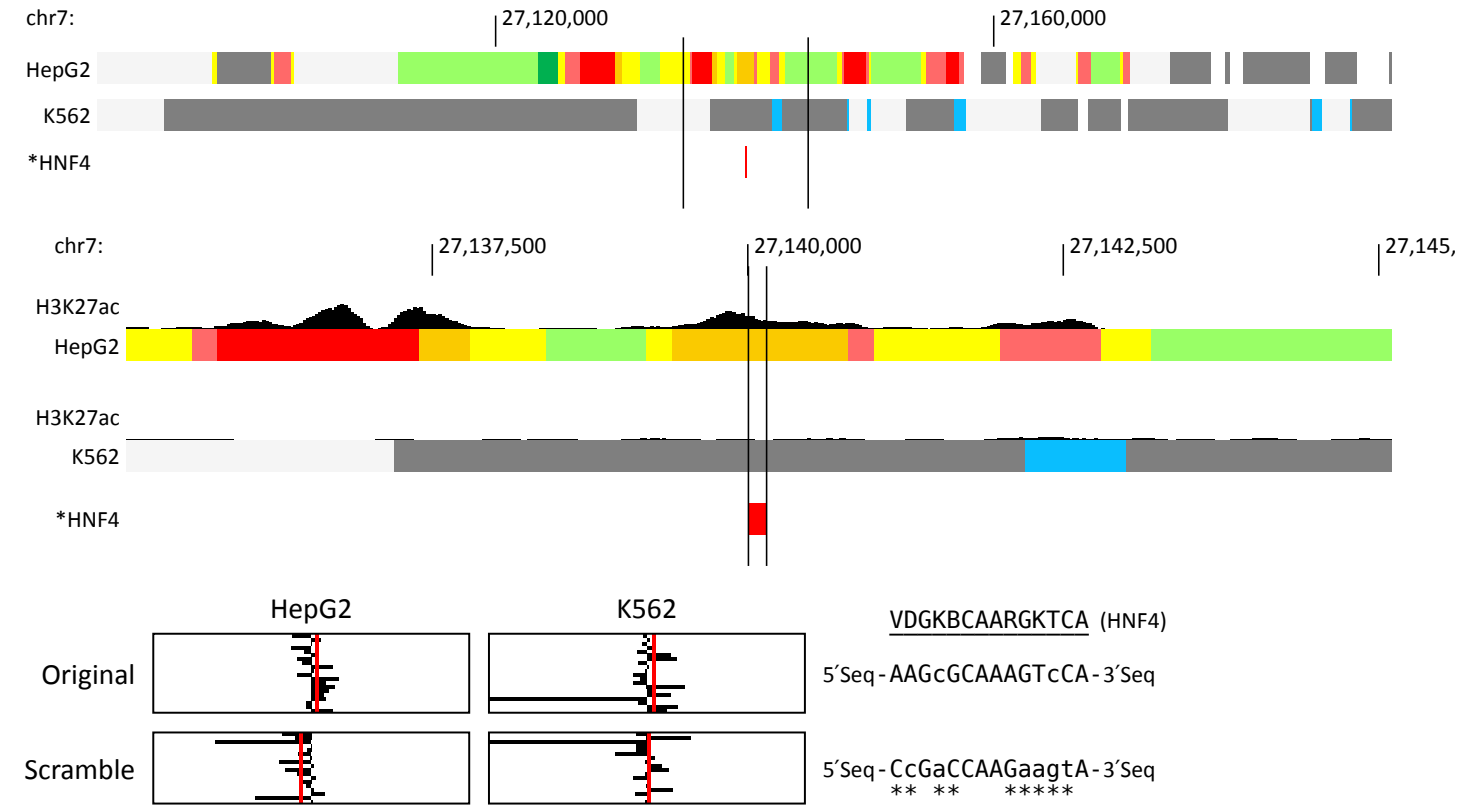
1110 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr7 27140071 27140084 - (hg18)



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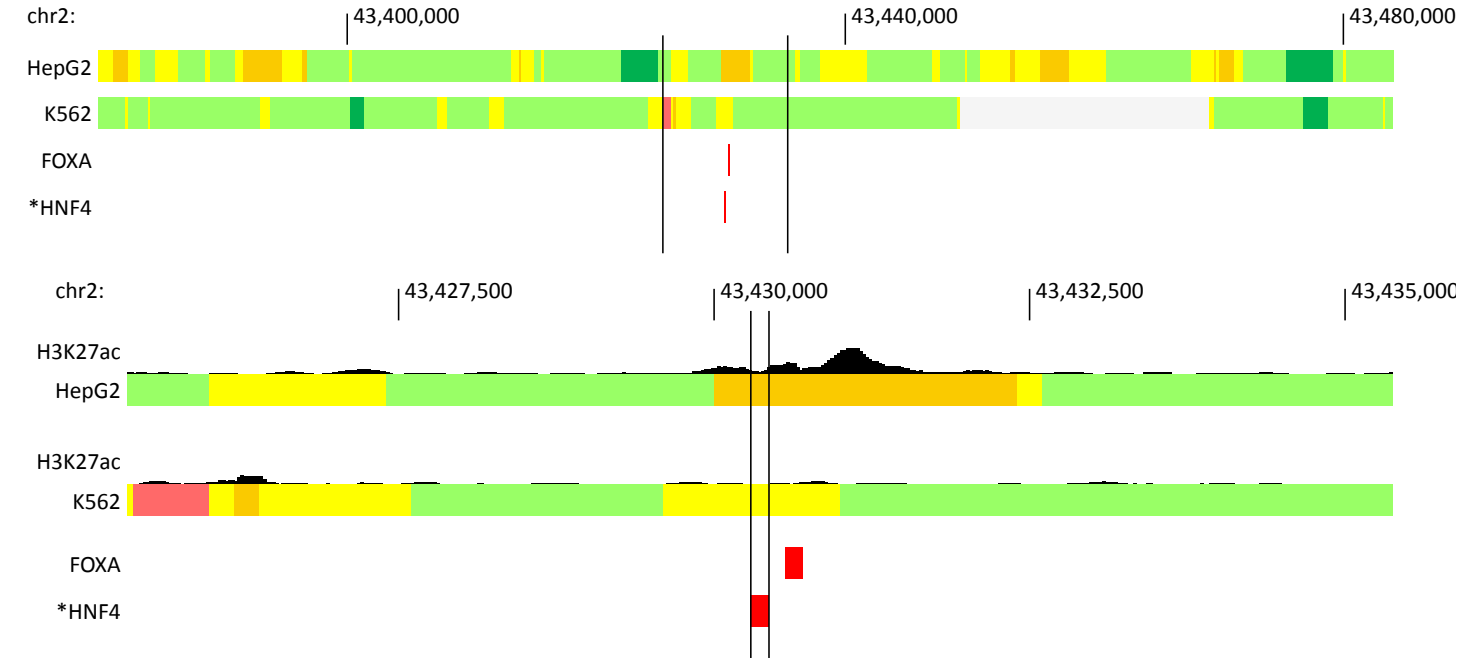
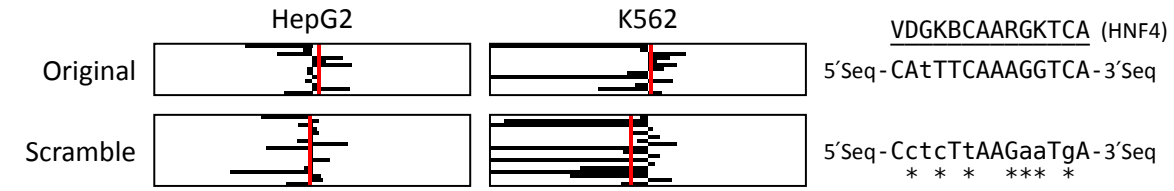
1111 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 43430357 43430370 + (hg18)





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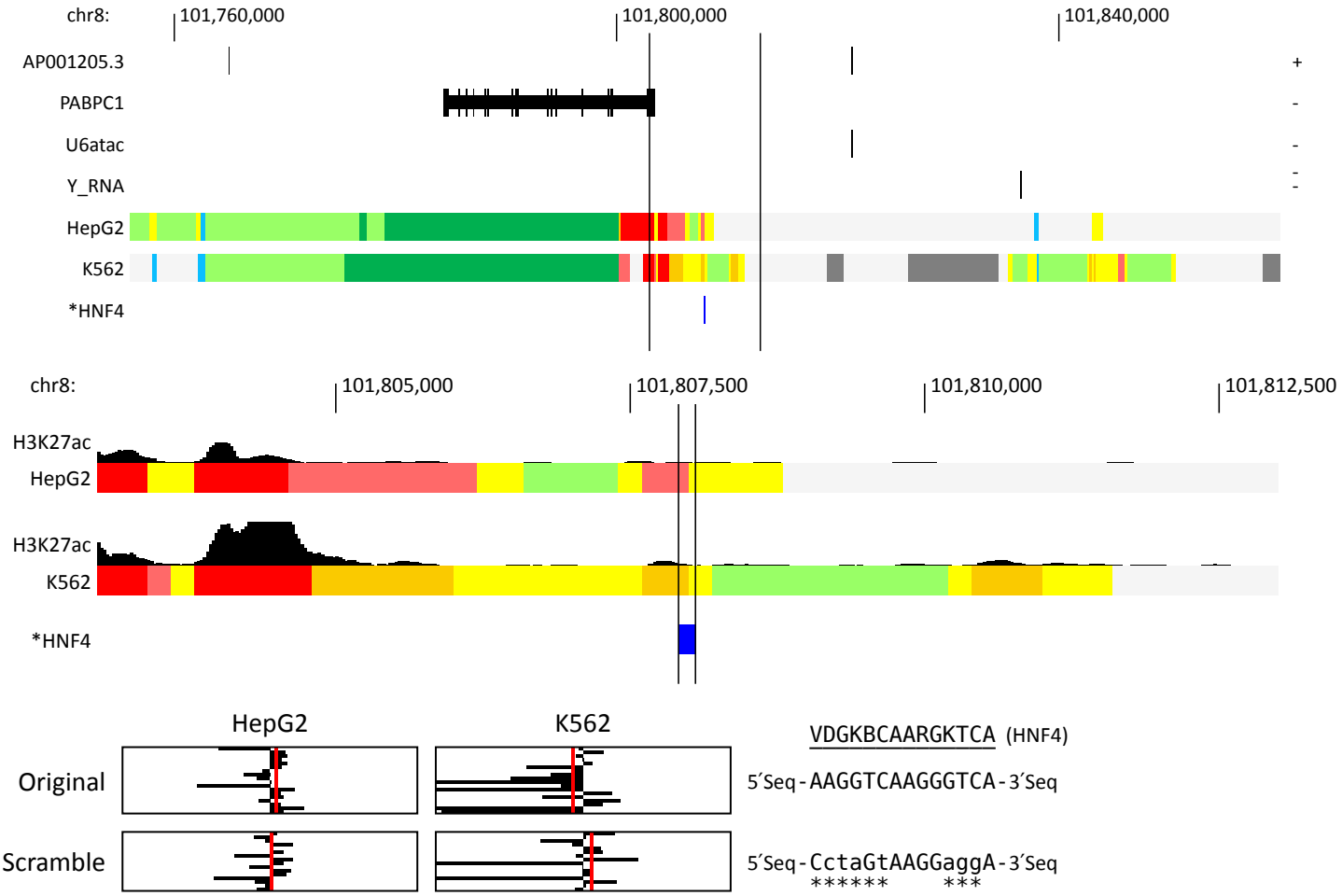
3′Seq = gatataaatgggggaaatgtatcgtaatcattaaaaacctcaaattctgaagattaaaaaacctg

1112 HNF4 in K562 enhancer

chr8 101807976 101807989 + (hg18)



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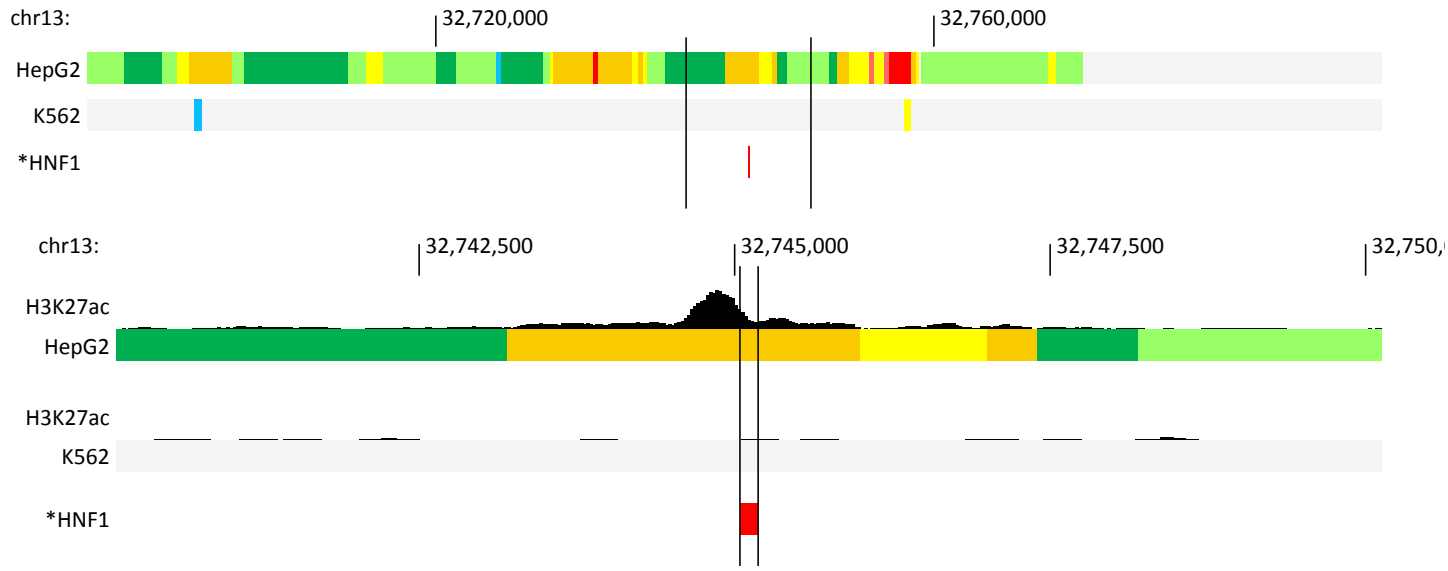
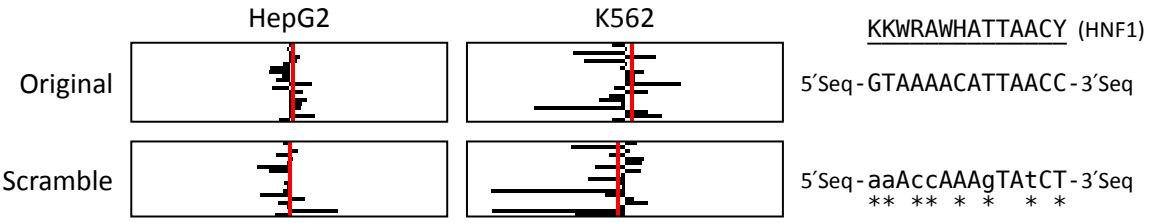
1113 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr13 32745108 32745121 - (hg18)





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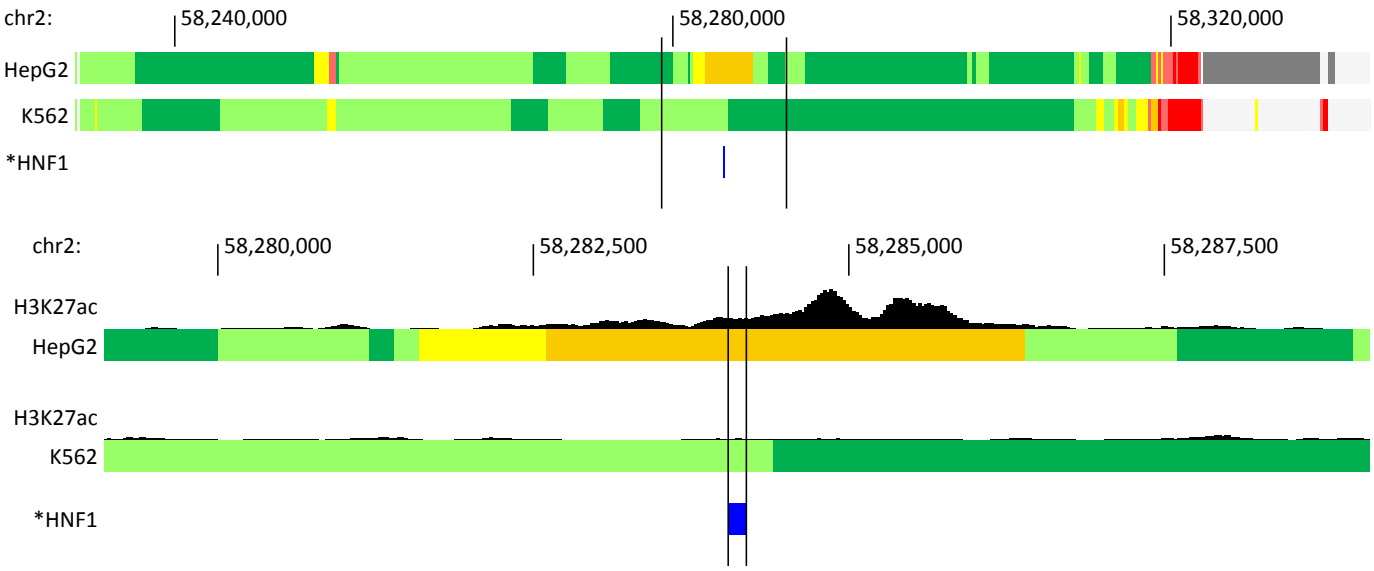
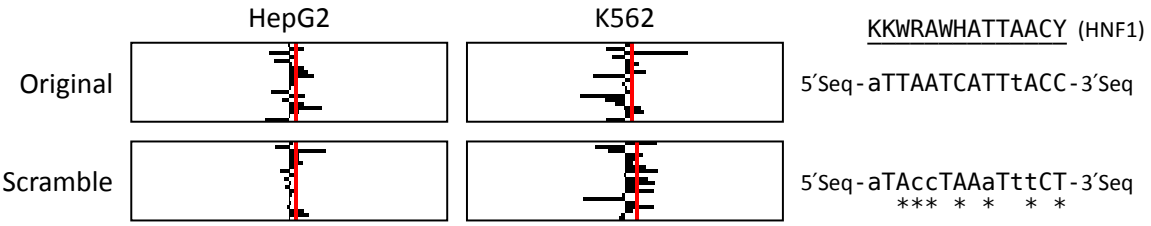
1114 HNF1 in HepG2 enhancer

chr2 58284110 58284123 - (hg18)





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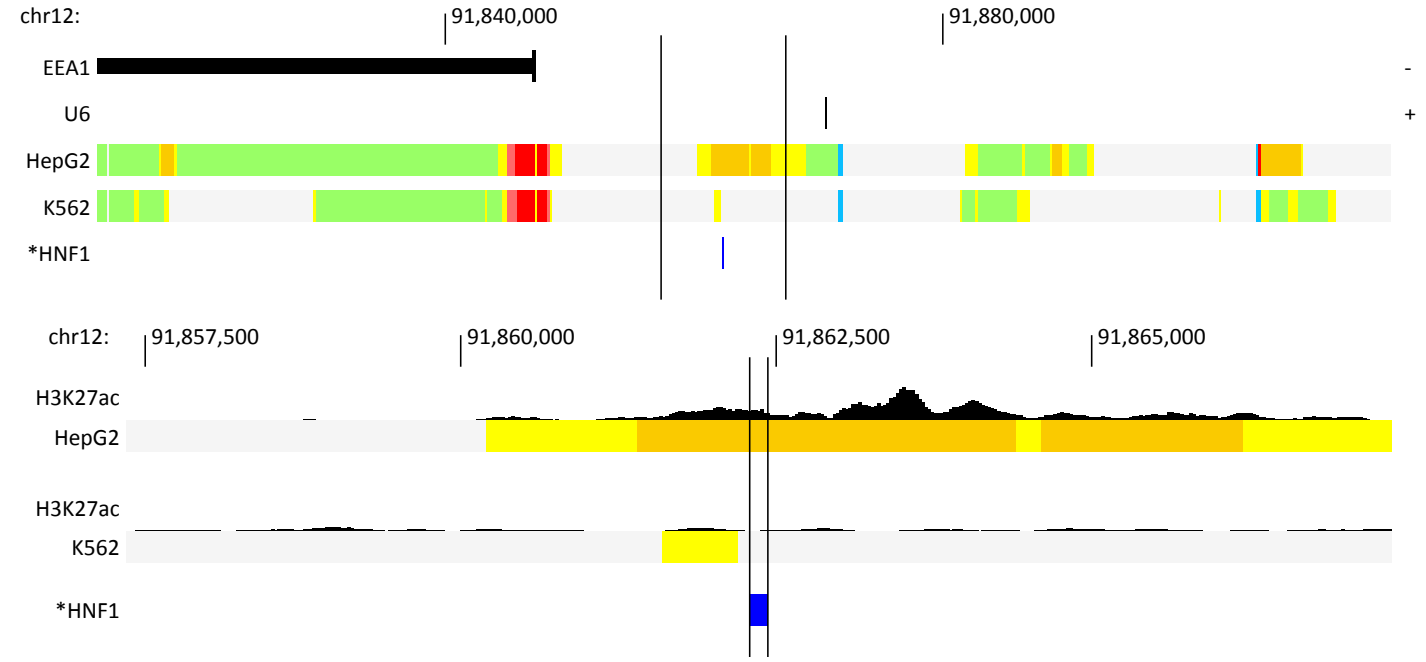
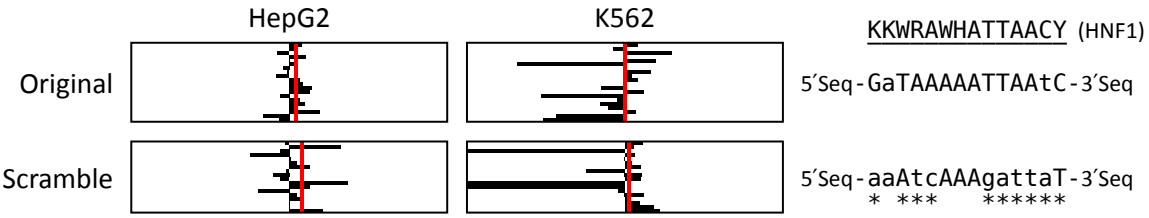
1115 HNF1 in HepG2 enhancer

chr12 91862356 91862369 + (hg18)





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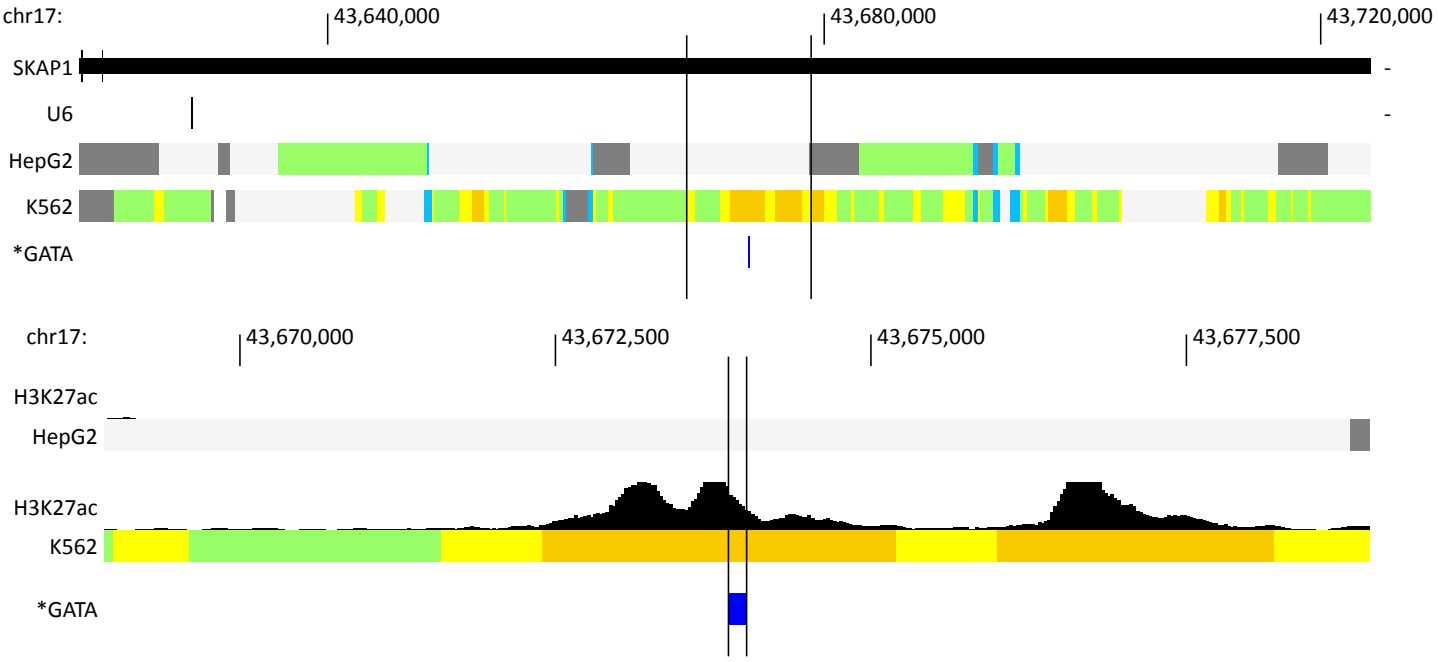
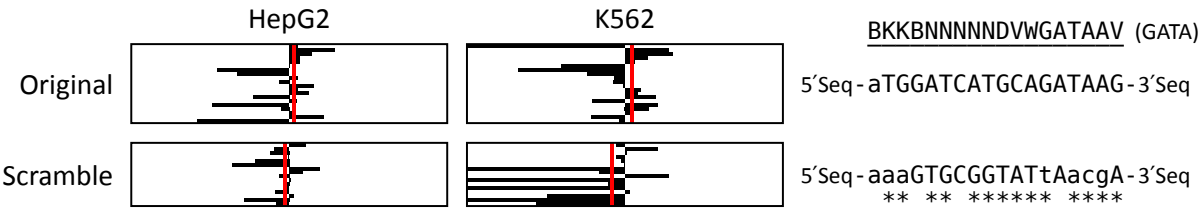
3′Seq = aatattttgactttaaagaagctttgtgtttctttttaaaatcaatgttttgactttaaagaagc

1116 GATA in K562 enhancer

chr17 43673935 43673952 + (hg18)





5′Seq = tgtatggttaaatcatgcacatttgtgcctcagctgacacaaaaagcagacccagatgcctcac
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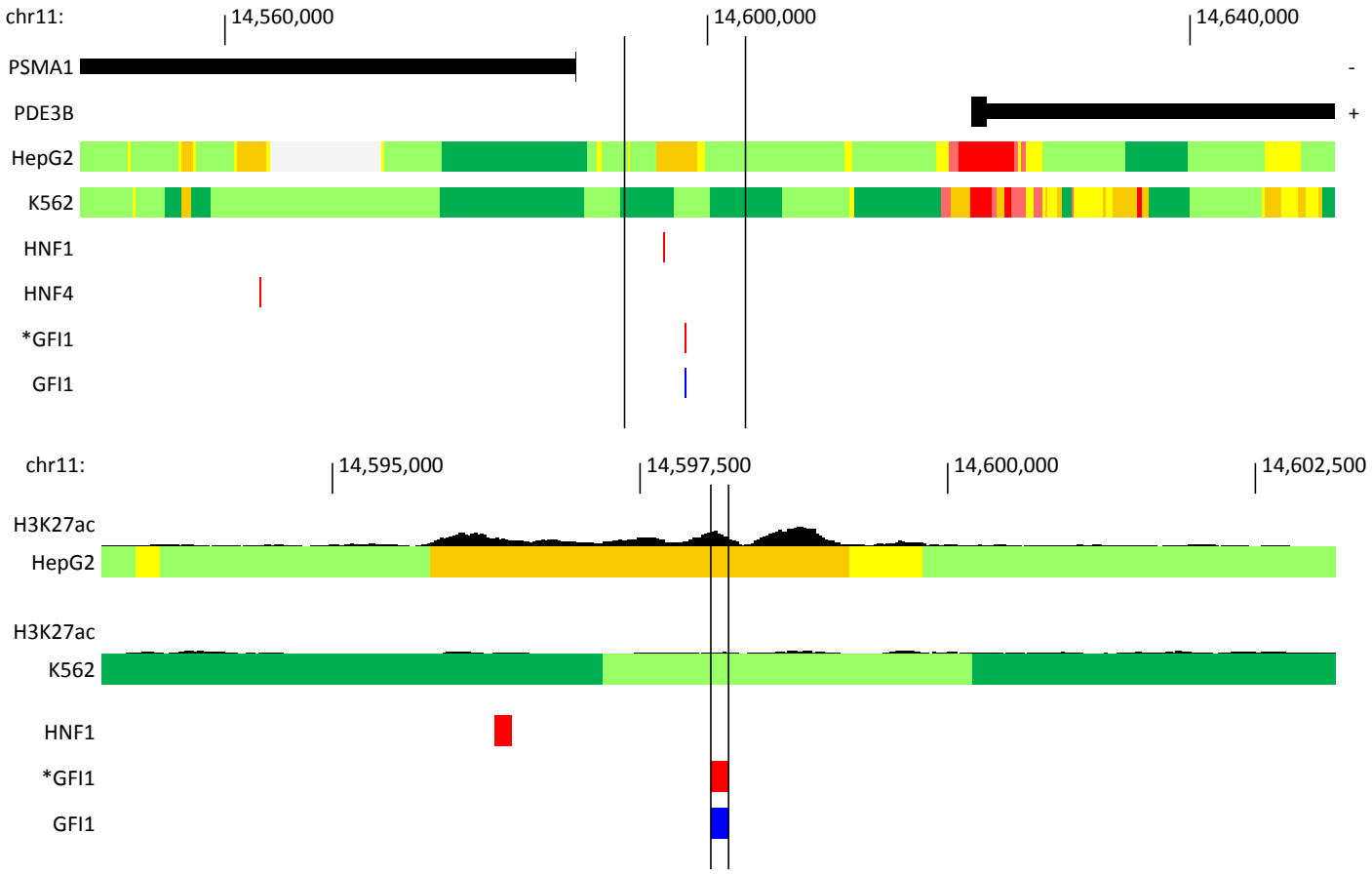
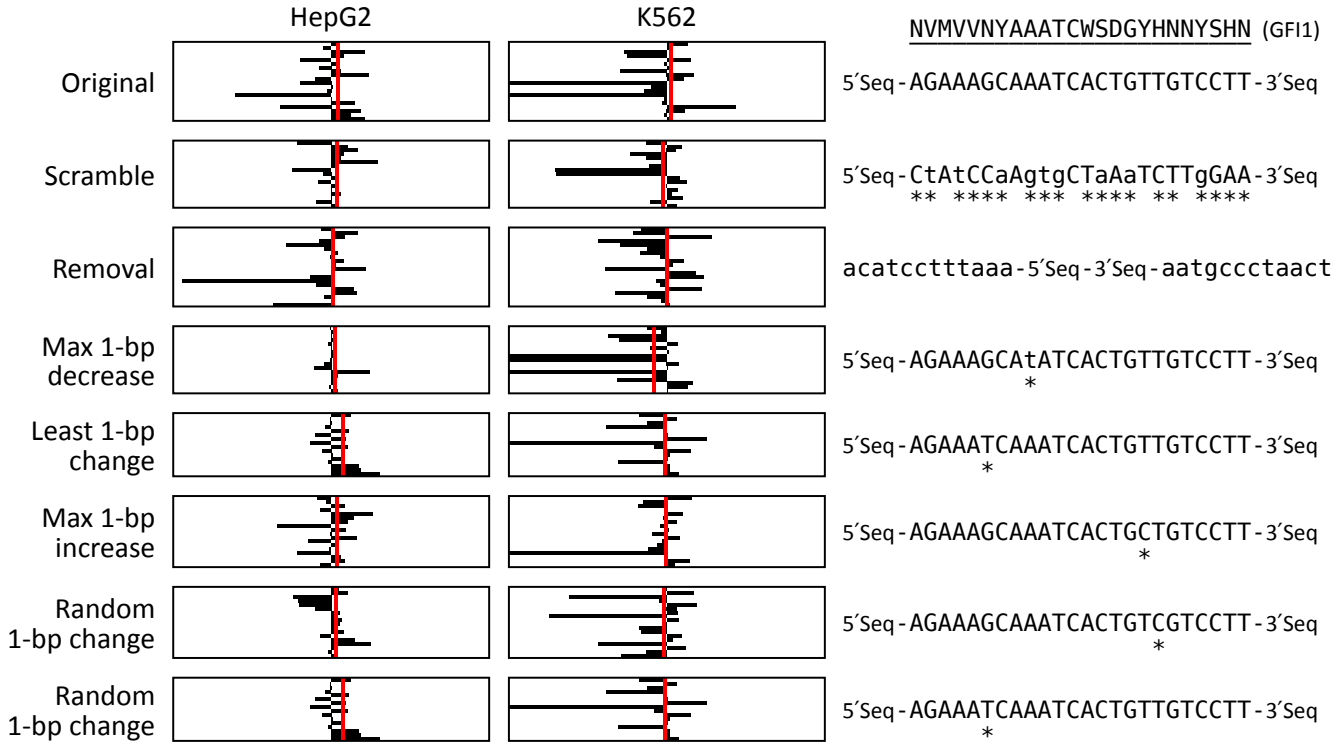
1117 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr11 14598136 14598159 - (hg18)





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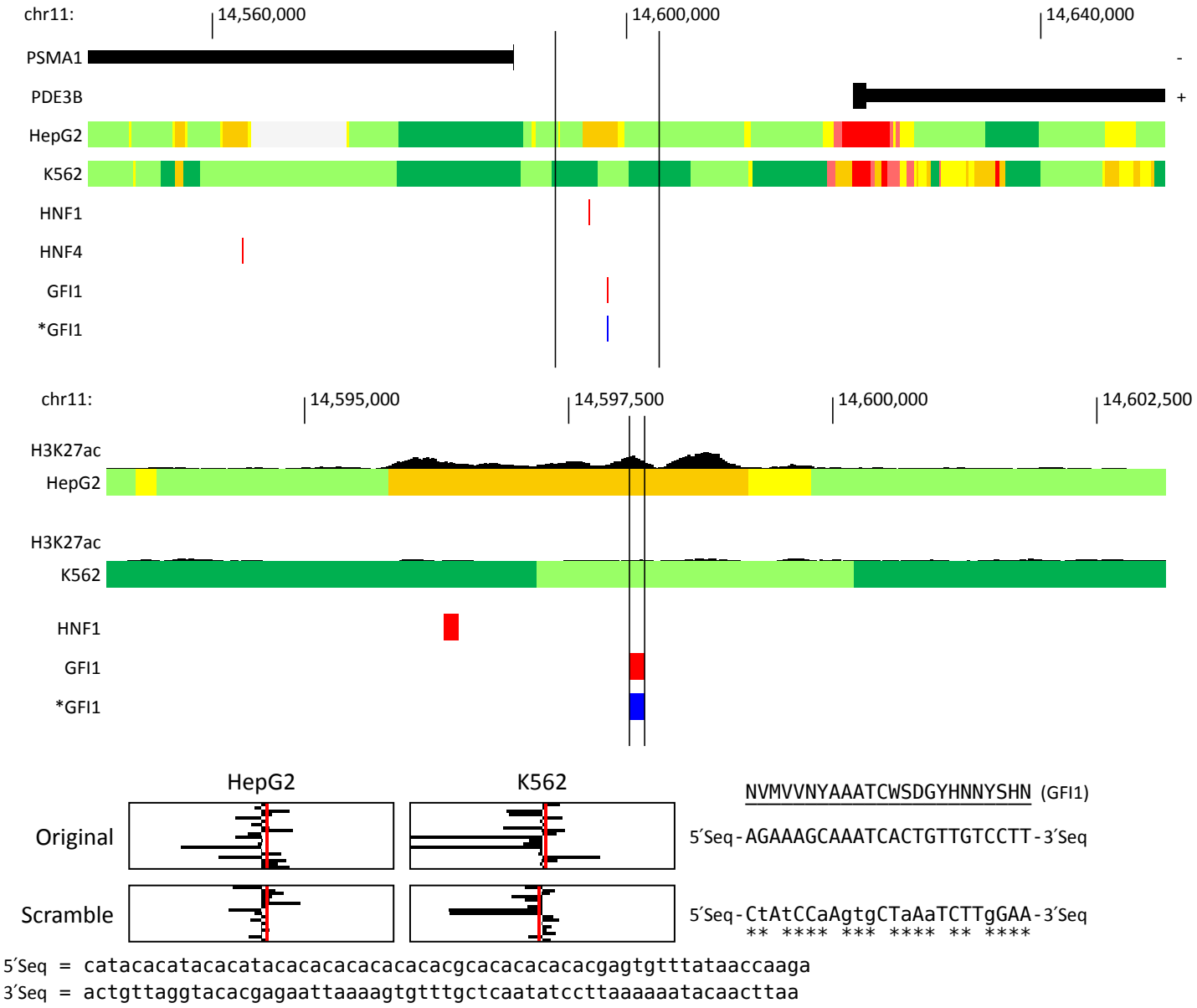
1118 GFI1 in HepG2 enhancer

chr11 14598136 14598159 - (hg18)



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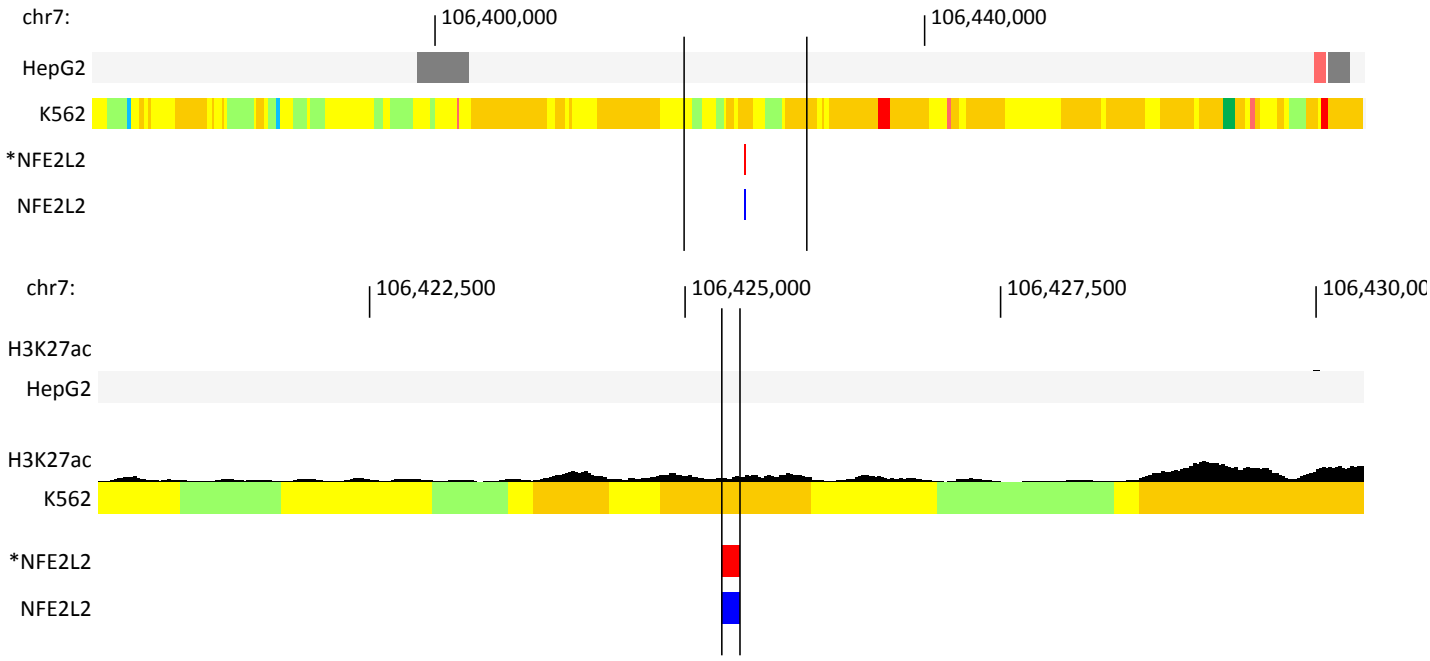
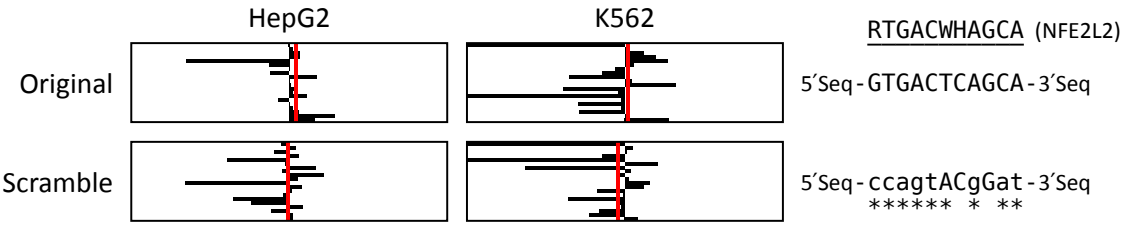
3′Seq = actgttaggtacacgagaattaaaagtgtttgctcaatatccttaaaaaatacaacttaa

1119 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 106425358 106425368 + (hg18)





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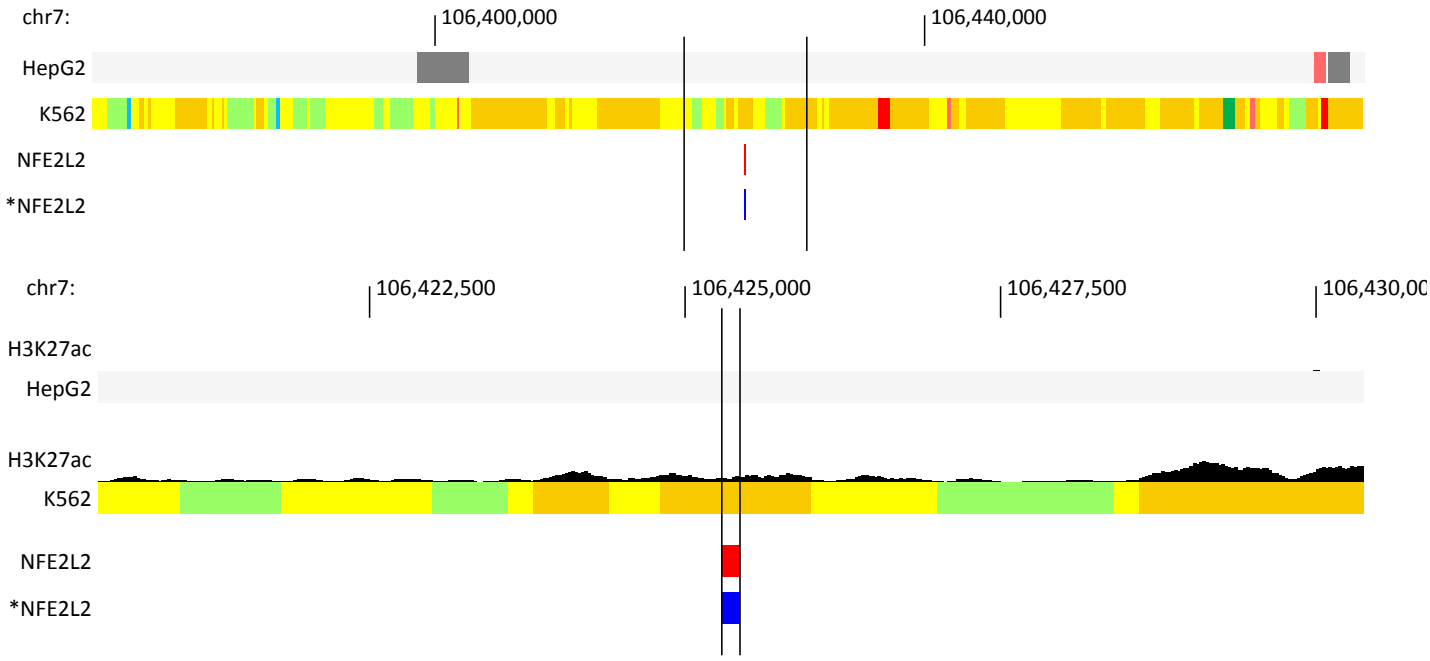
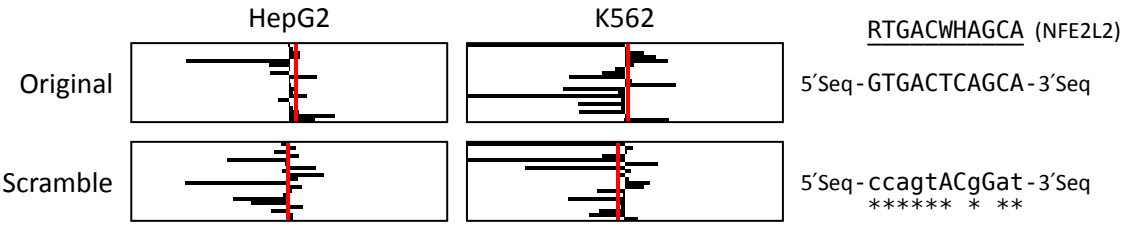
1120 NFE2L2 in K562 enhancer

chr7 106425358 106425368 + (hg18)





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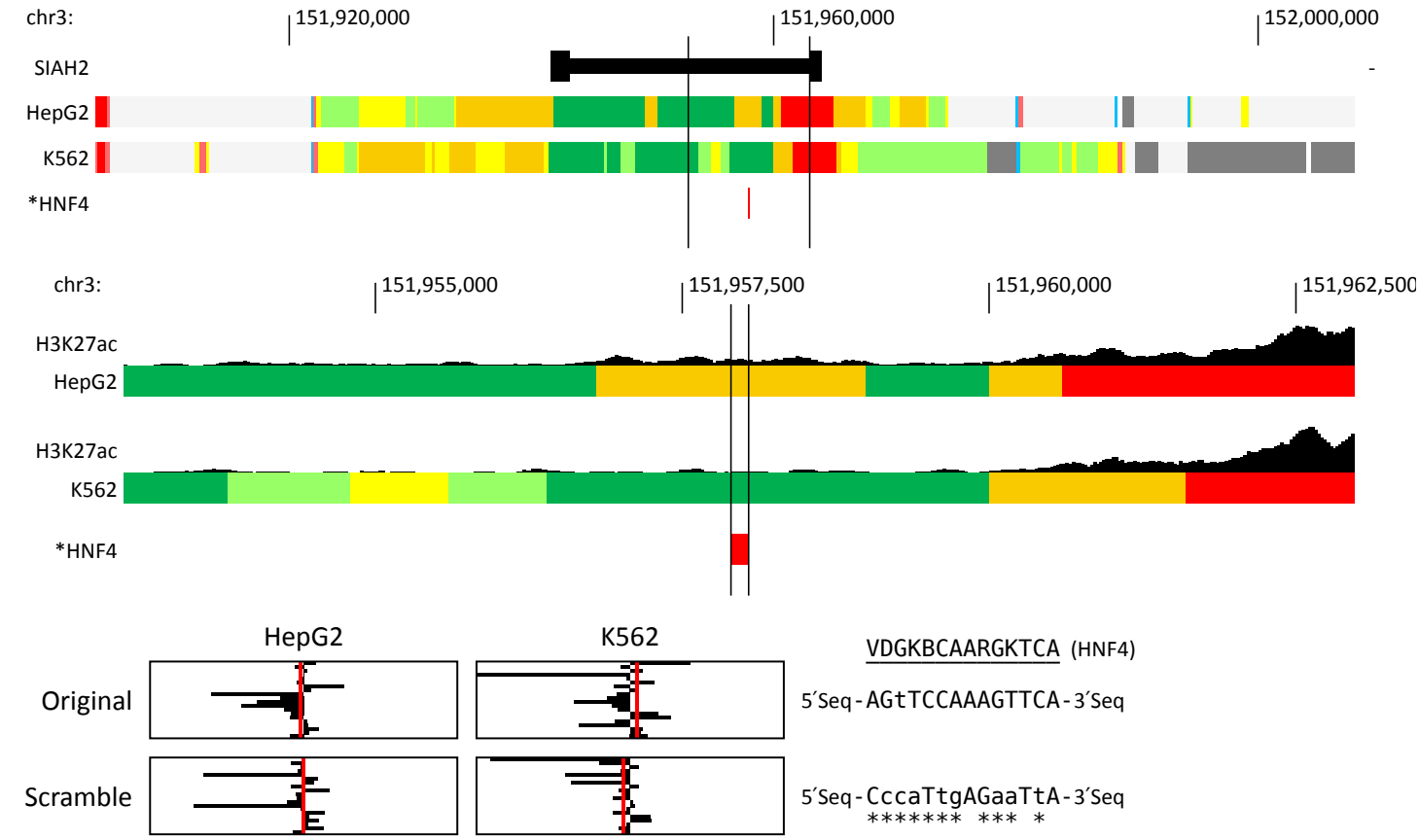
1121 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr3 151957963 151957976 + (hg18)



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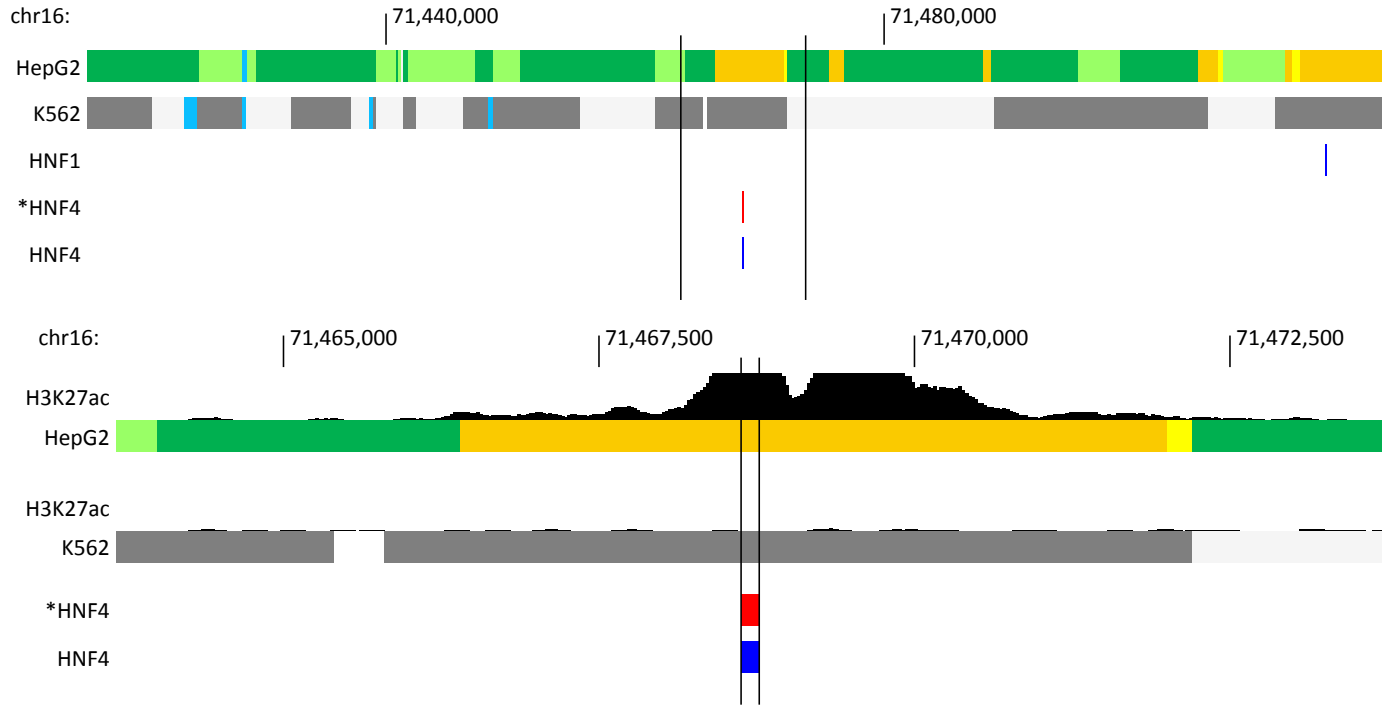
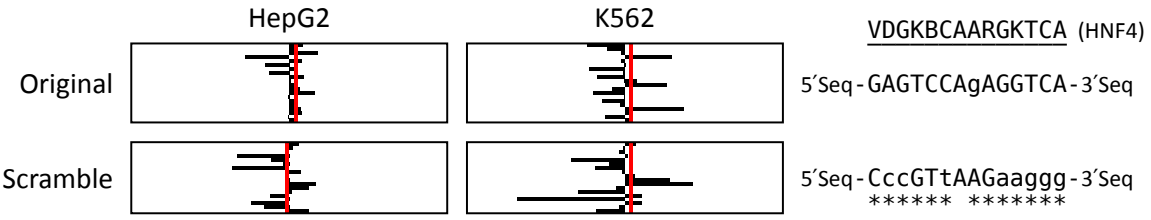
1122 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr16 71468692 71468705 - (hg18)





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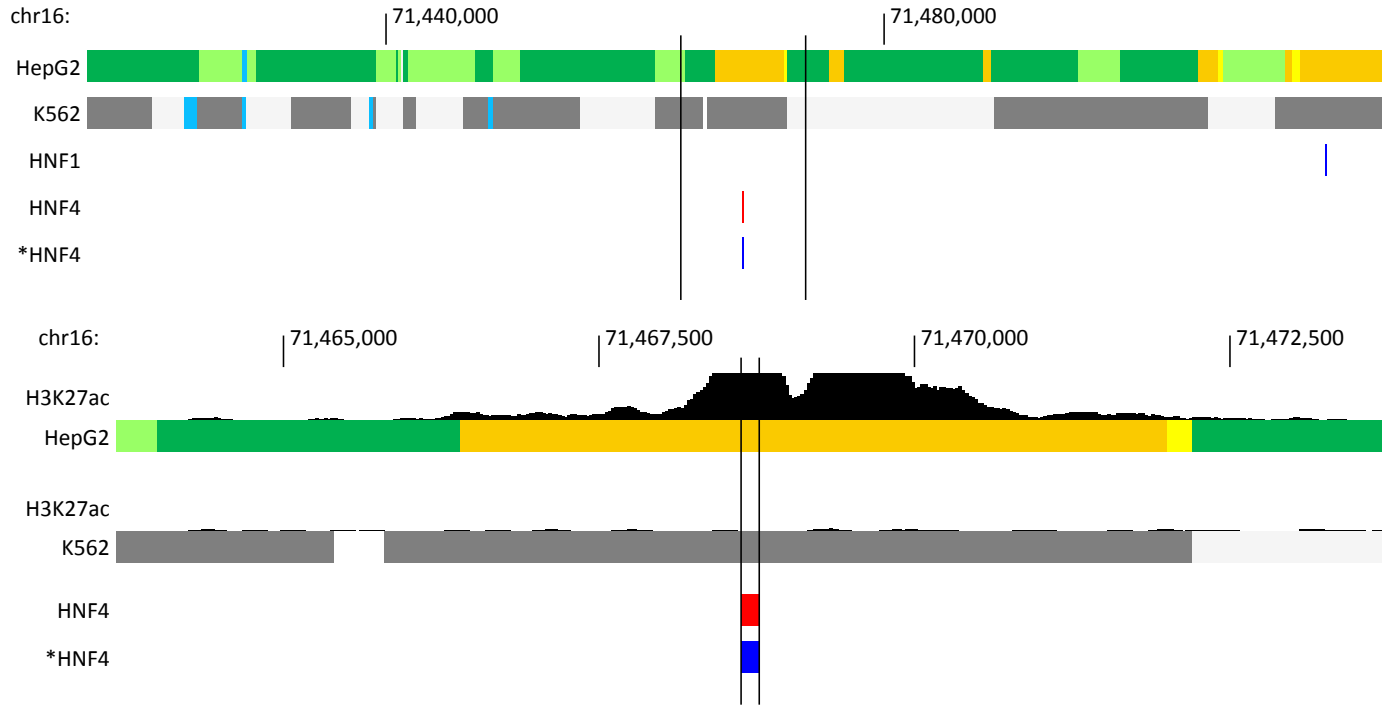
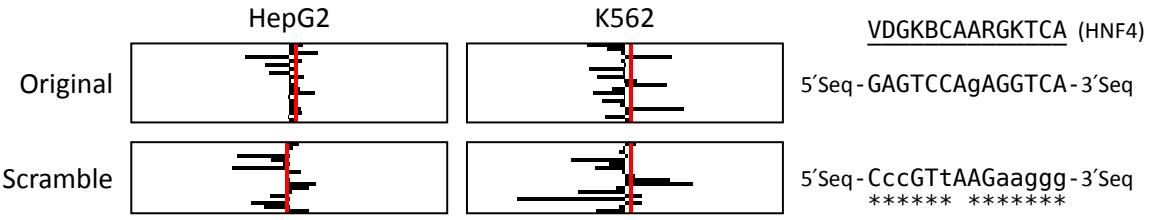
1123 HNF4 in HepG2 enhancer

chr16 71468692 71468705 - (hg18)





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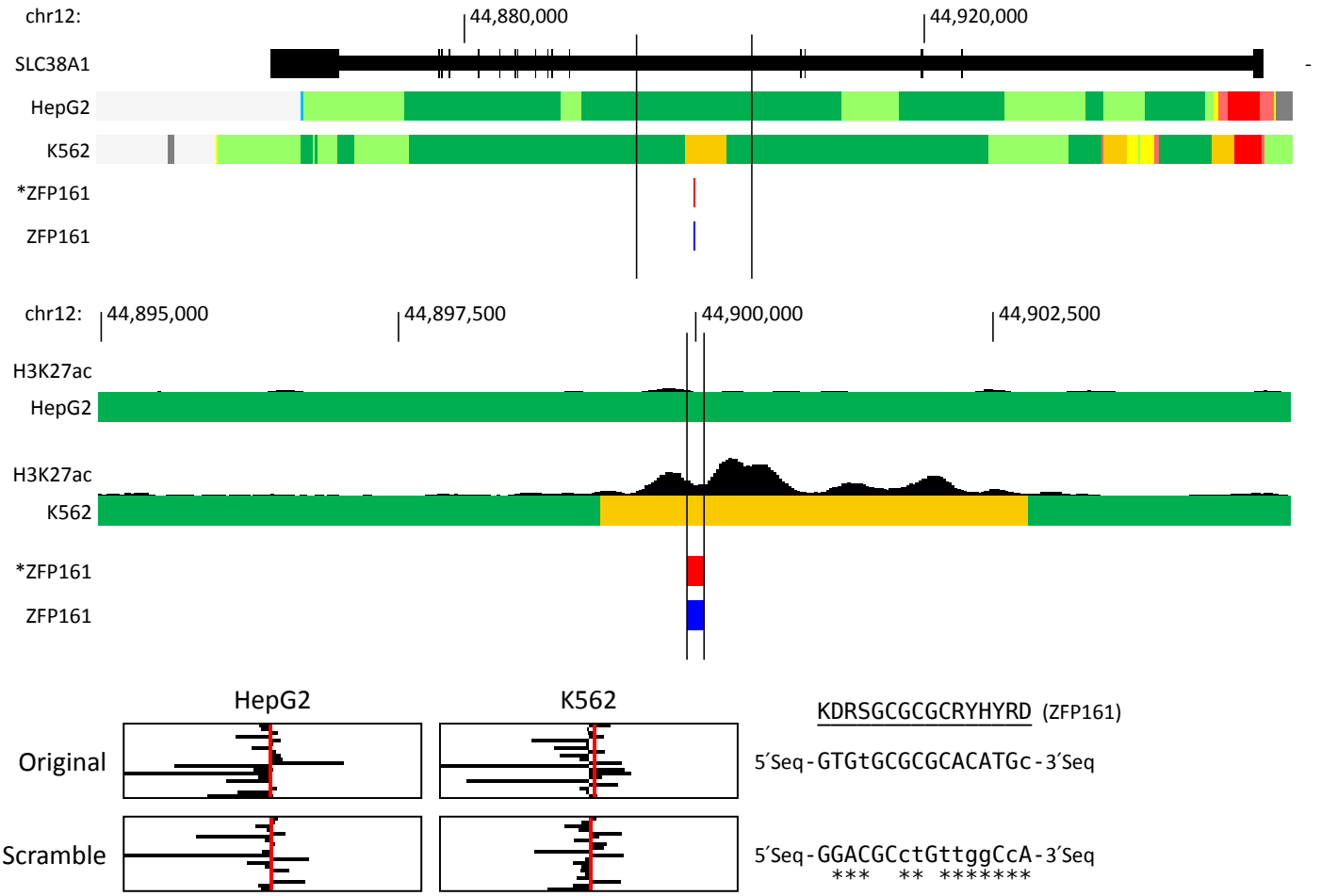
1124 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr12 44899991 44900006 - (hg18)



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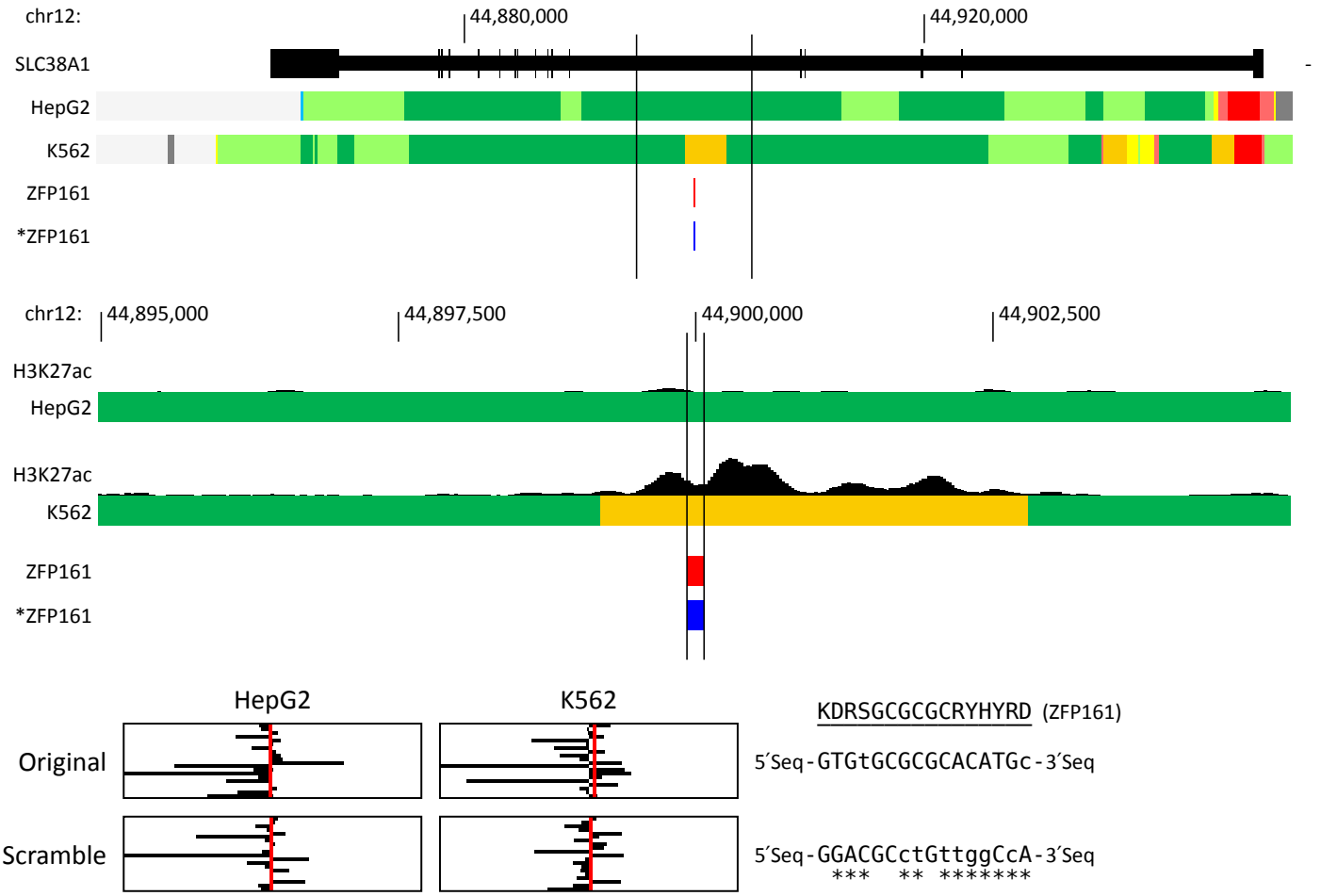
1125 ZFP161 in K562 enhancer

chr12 44899991 44900006 - (hg18)



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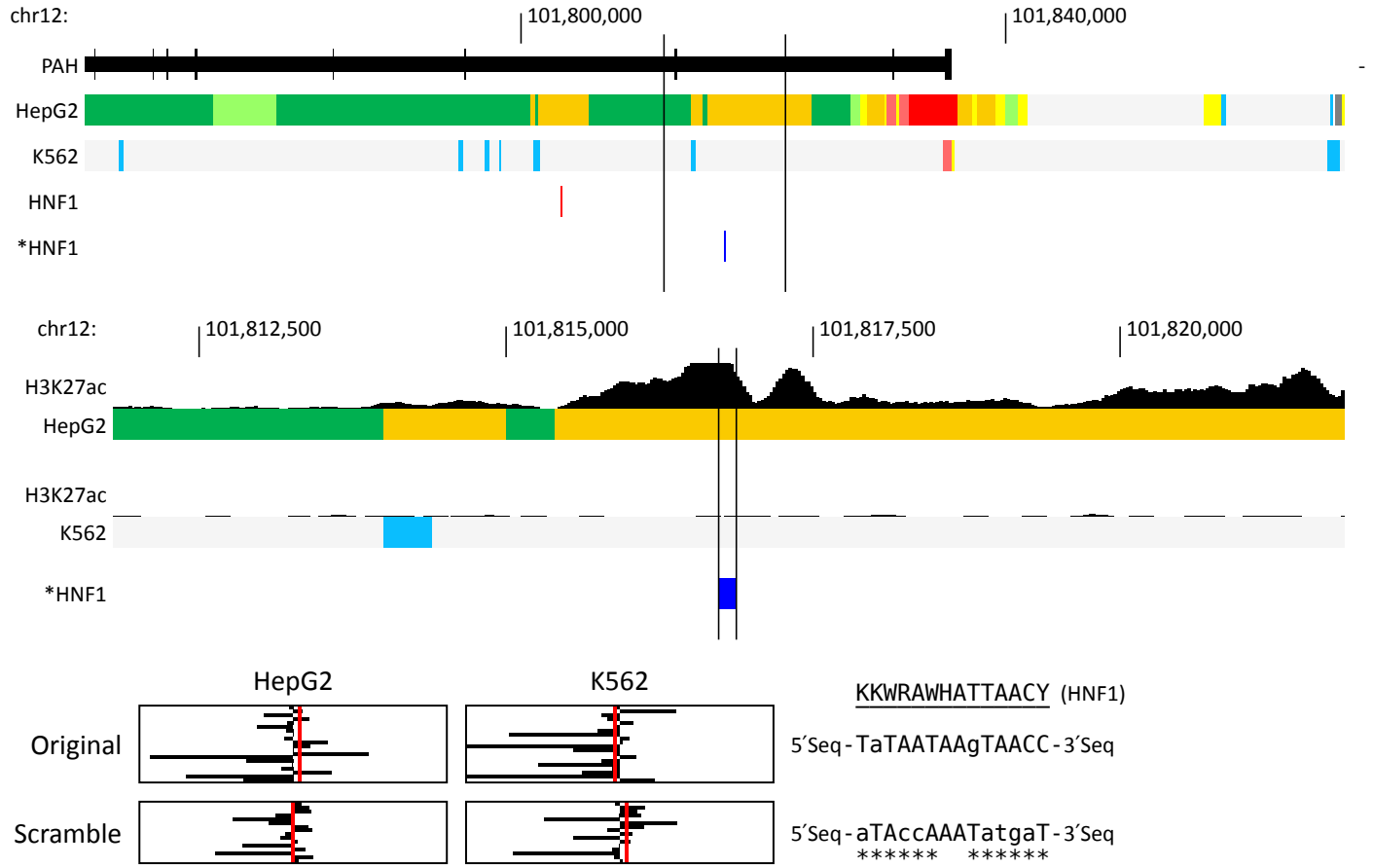
1126 HNF1 in HepG2 enhancer

chr12 101816797 101816810 + (hg18)



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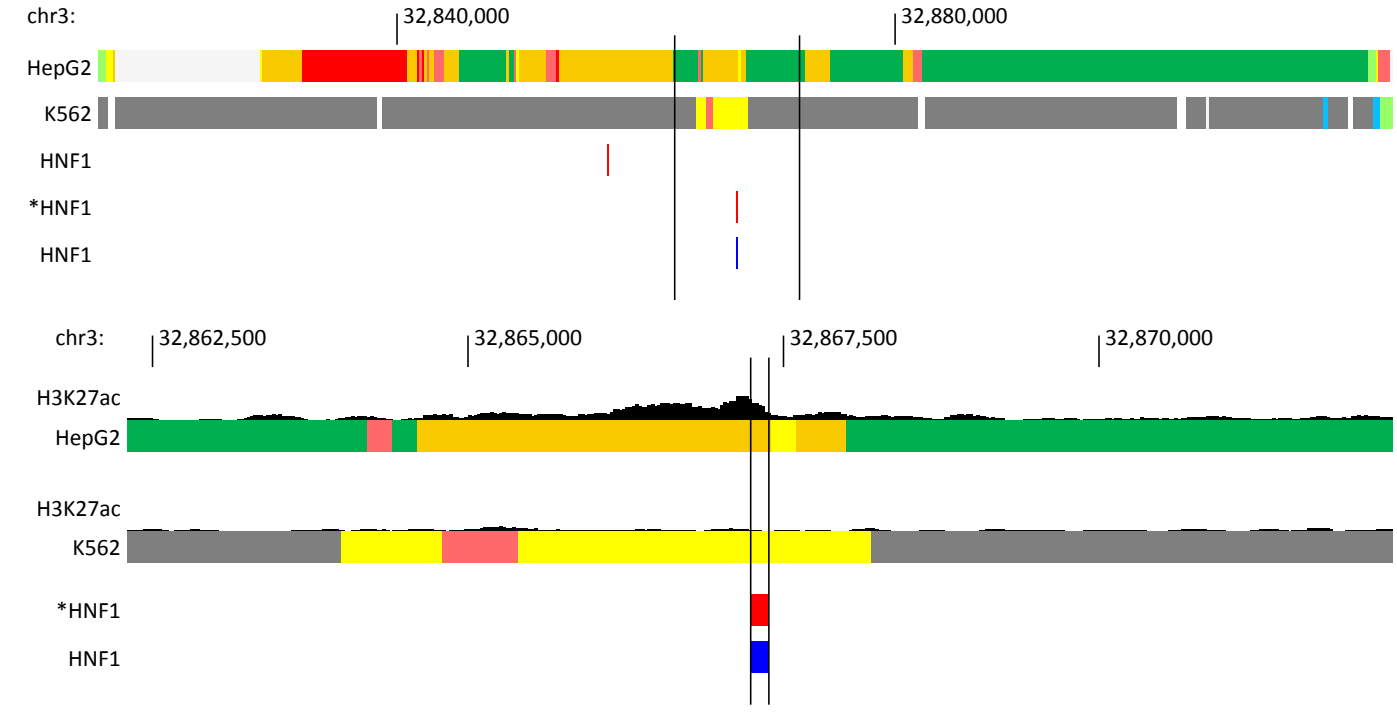
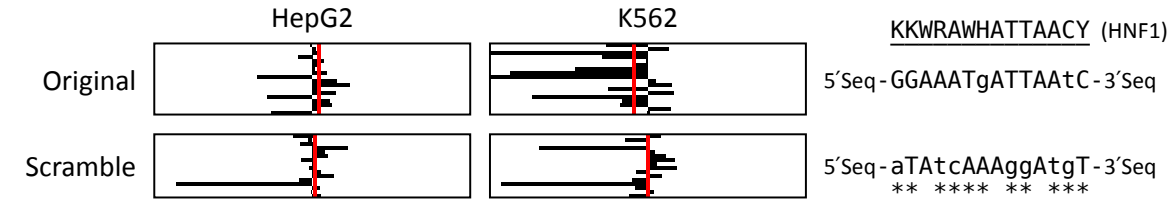
1127 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr3 32867306 32867319 - (hg18)





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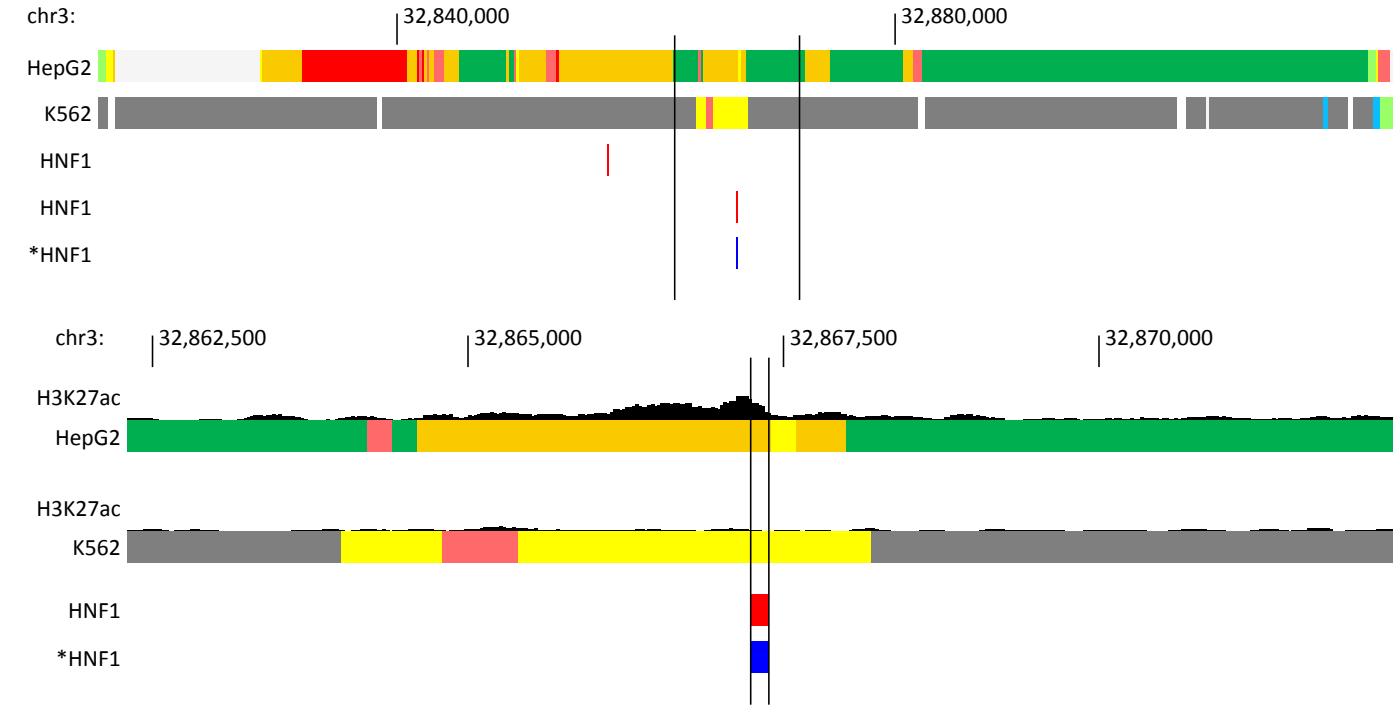
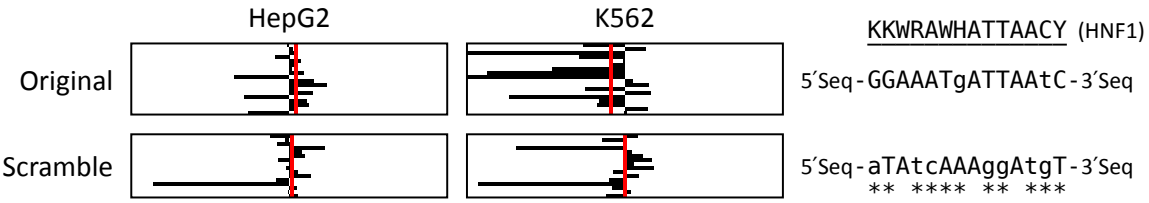
1128 HNF1 in HepG2 enhancer

chr3 32867306 32867319 - (hg18)





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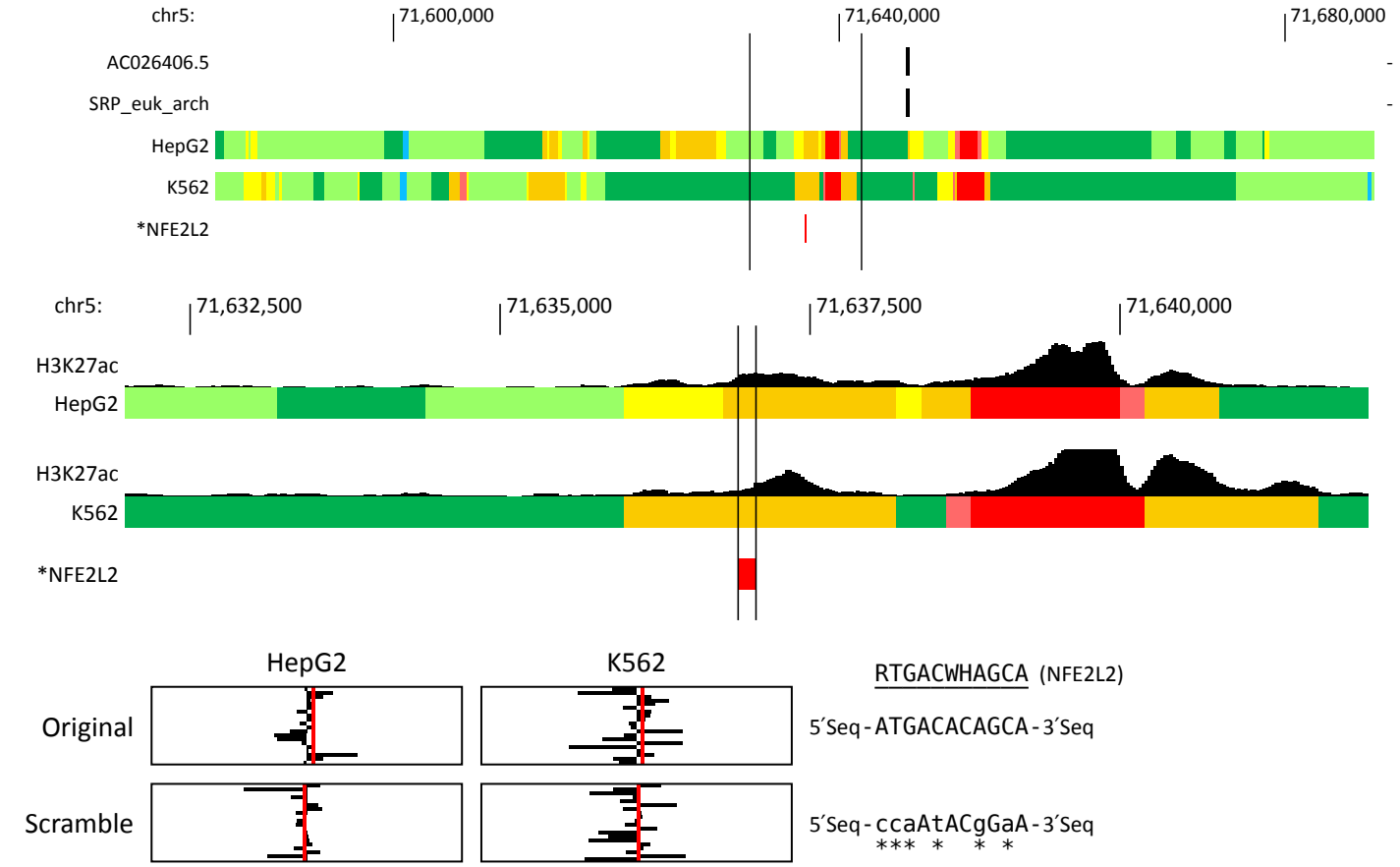
1129 NFE2L2 in K562 enhancer (conserved at 60% confidence)

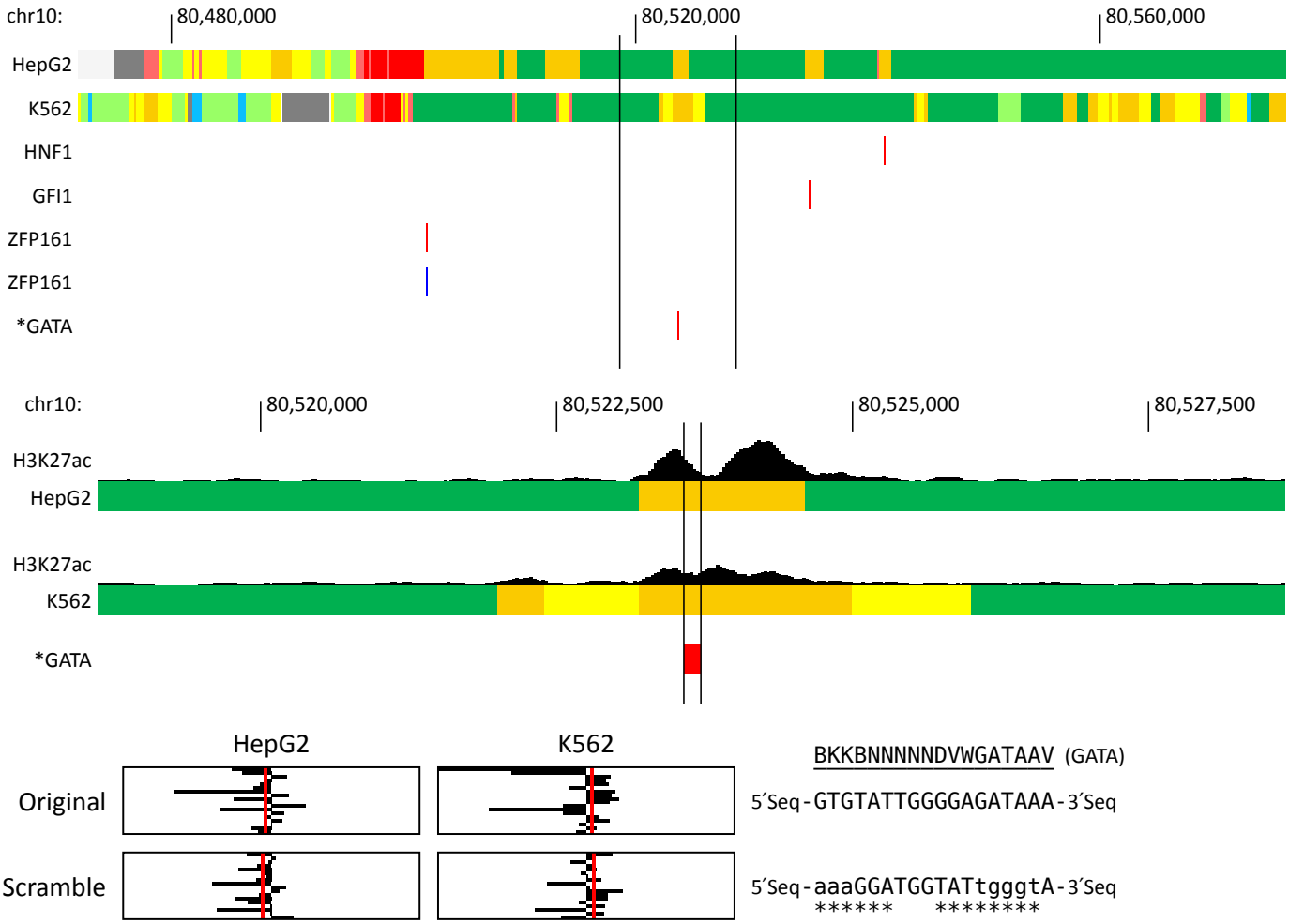
chr5 71636987 71636997 + (hg18)



5′Seq = ctccatcaggcctcaagagcaggatctgaaatattcatgcaaaaagccaaaggcctctacagctgaa
3′Seq = aaactaaatctcagctaaaatggaagaagtgtctgtaagagacagacctgaatgcaaatgtgtcaag

1130 GATA in K562 enhancer (conserved at 60% confidence)

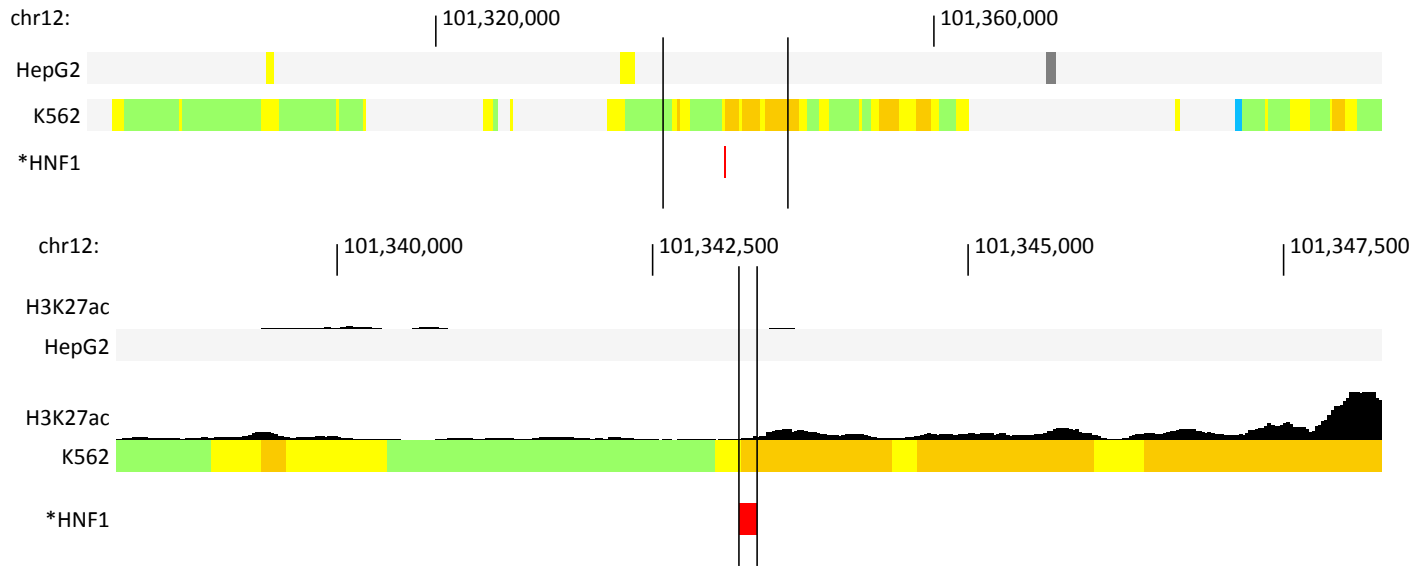
chr10 80523639 80523656 + (hg18)

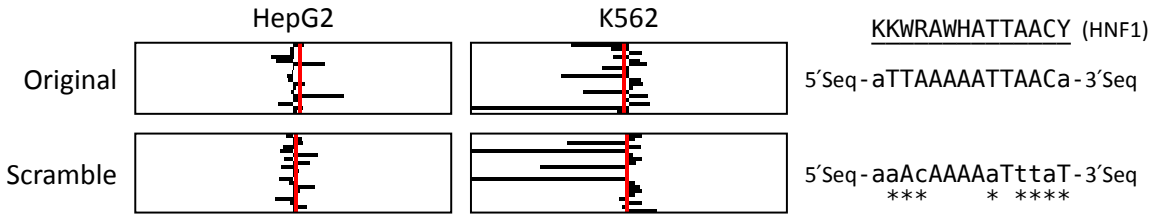


5′Seq = gccgcaagcactctgcagacagacagtcttcctctttctaggaggtgtgggtgcagaggacttt
3′Seq = agagcccgtttgggatgatttttatcagctcgagcaagtcggtttgacttacaggaagaagcc

1131 HNF1 in K562 enhancer (conserved at 60% confidence)

chr12 101343250 101343263 - (hg18)

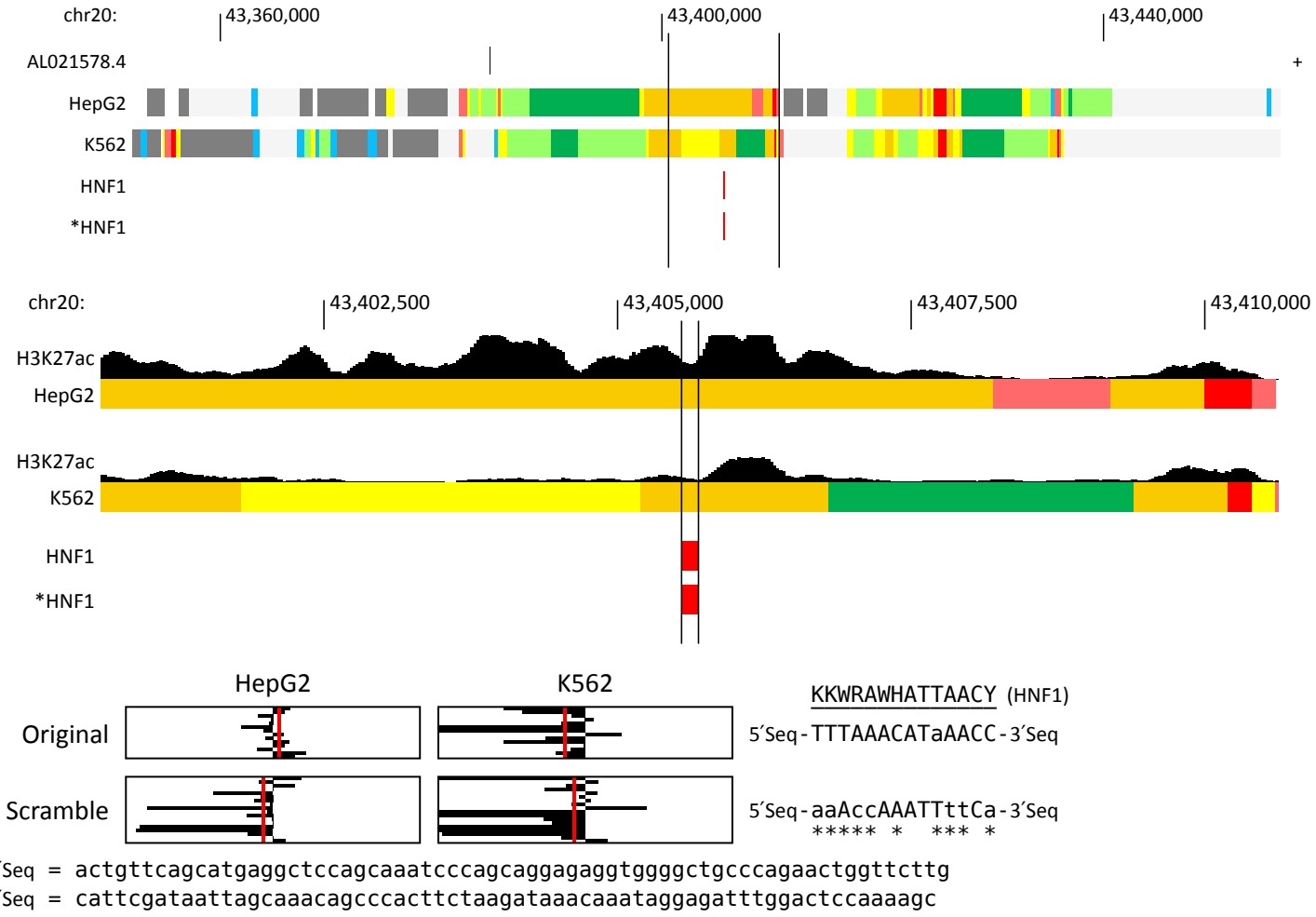




5′Seq = gccataattcctagaaaaagatgaccttgtccaattgagaggtagtgagaccagcaaacactggca
3′Seq = caggccaaaagtgaaatcgatgcctaaatttgataggttttcaagaaaagtttatgacatgcagt

1132 HNF1 in K562 enhancer (conserved at 60% confidence)

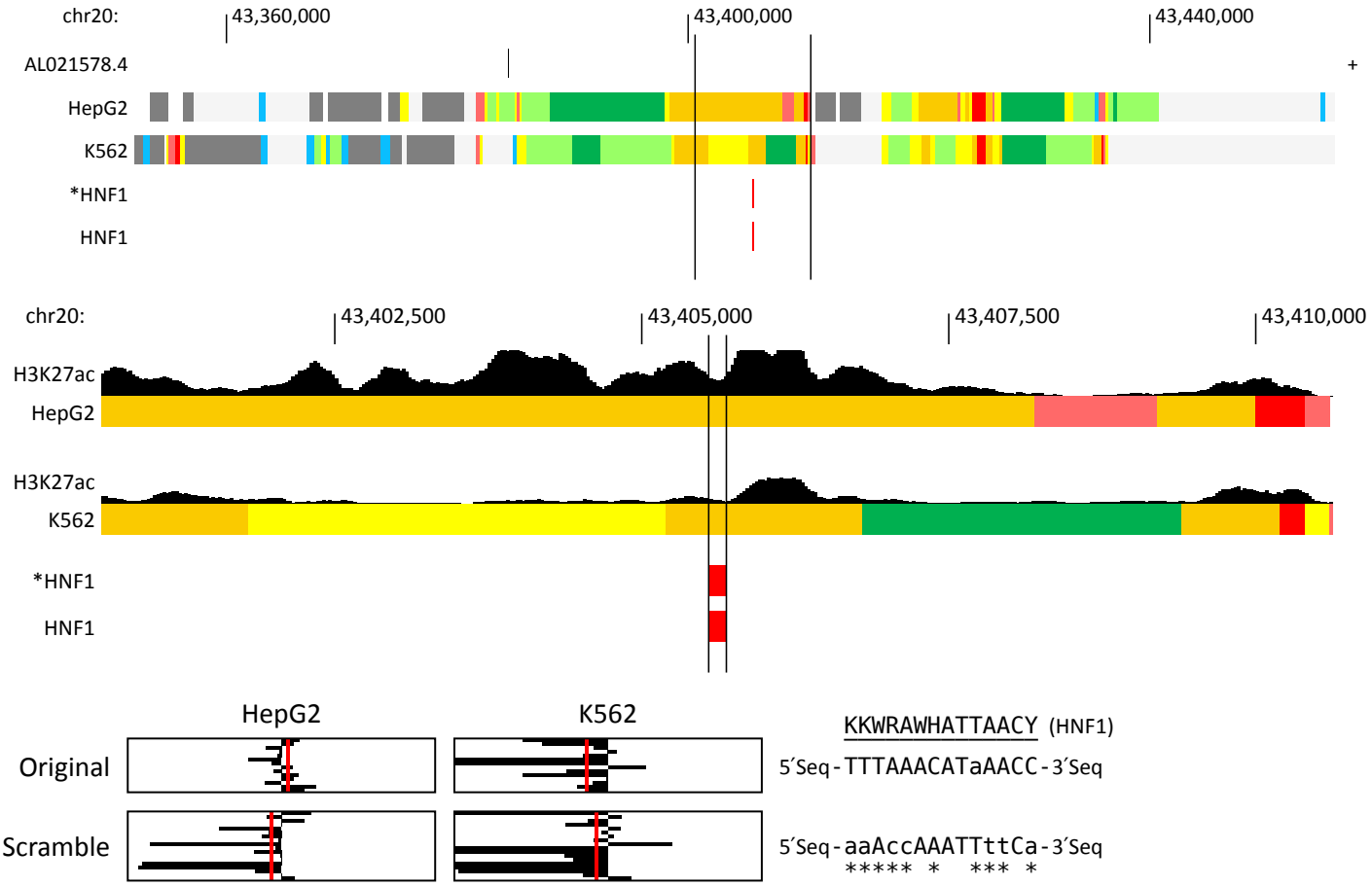
chr20 43405611 43405624 + (hg18)



5′Seq = actgttcagcatgaggctccagcaaatcccagcaggagaggtggggctgcccagaactggttcttg
3′Seq = cattcgataattagcaaacagcccacttctaagataaacaaataggagatttggactccaaaagc

1133 HNF1 in HepG2 enhancer (conserved at 60% confidence)

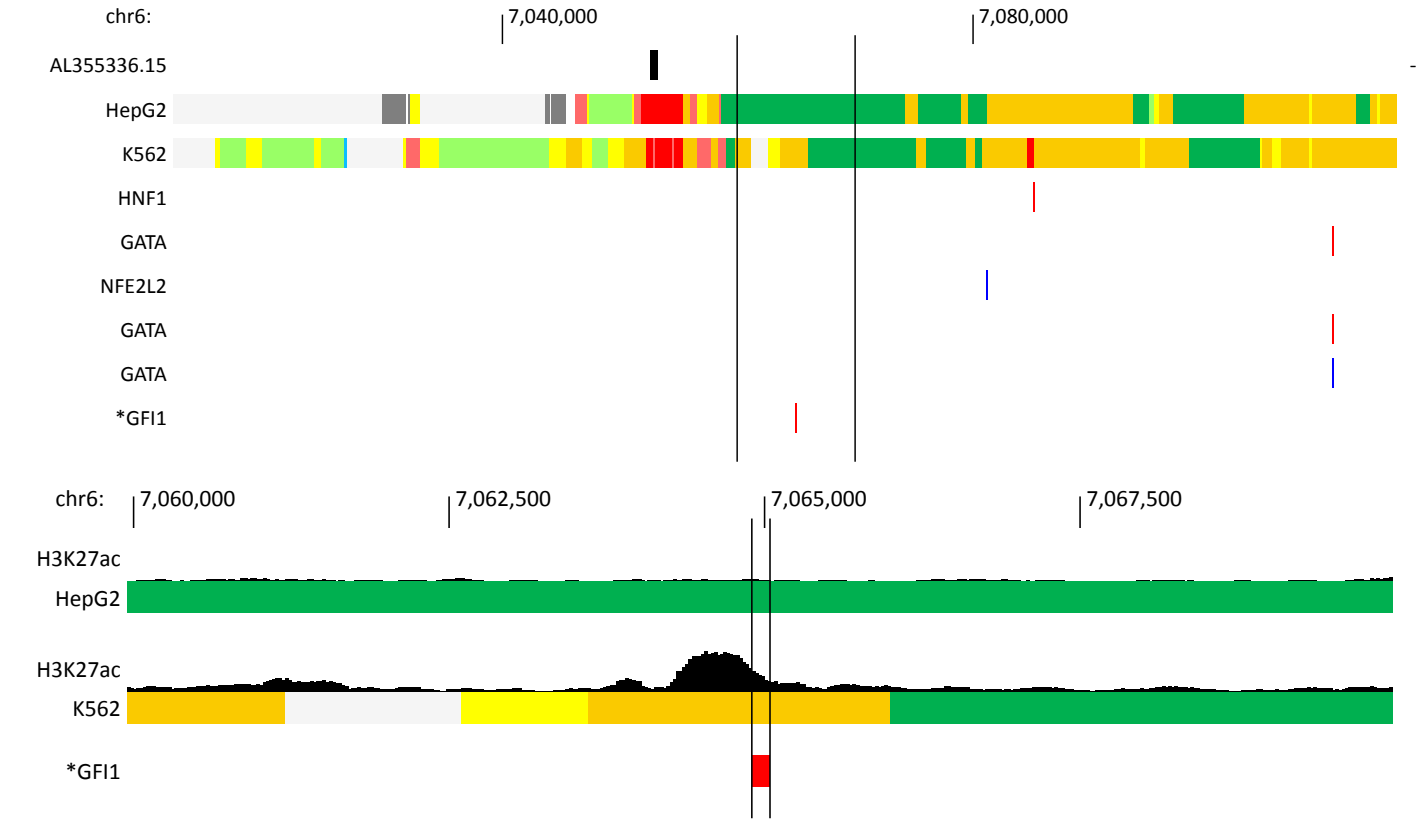
chr20 43405611 43405624 + (hg18)

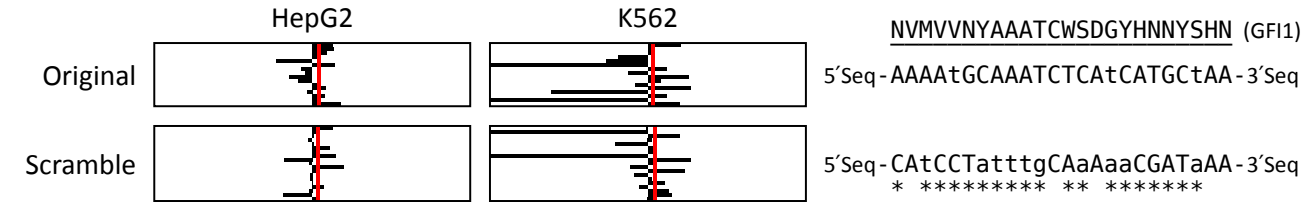


5′Seq = actgttcagcatgaggctccagcaaatcccagcaggagaggtggggctgcccagaactggttcttg
3′Seq = cattcgataattagcaaacagcccacttctaagataaacaaataggagatttggactccaaaagc

1134 GFI1 in K562 enhancer (conserved at 40% confidence)

chr6 7064960 7064983 - (hg18)

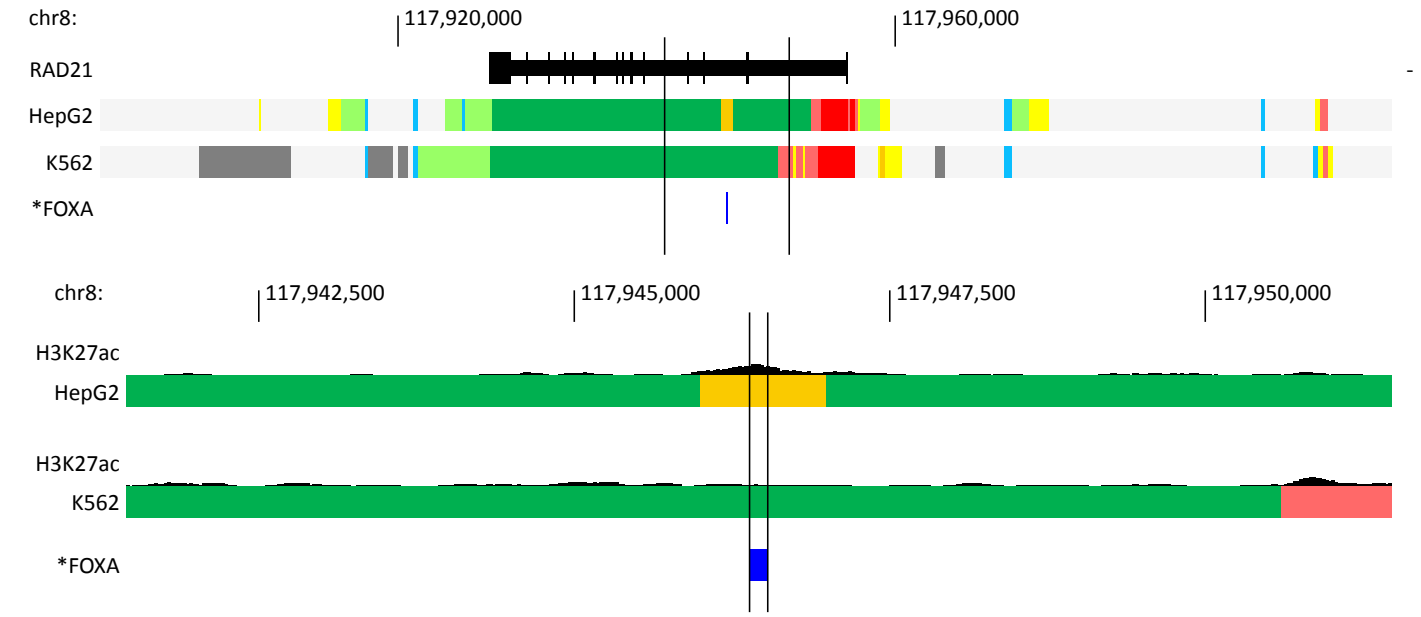


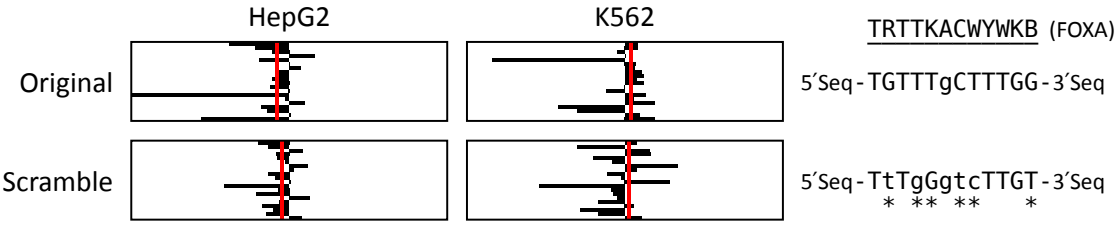


5′Seq = ggcaaacagttgcttccttctagccaggtctattctcaactctgggtaggaataatcttta
3′Seq = tctggcctaacacttttcgtagcttcccagagttcctagcagcctgctctagcccttatc

1135 FOXA in HepG2 enhancer

chr8 117946456 117946467 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTgCTTTGG-3′Seq

5′Seq-TtTgGgtcTTGT-3′Seq

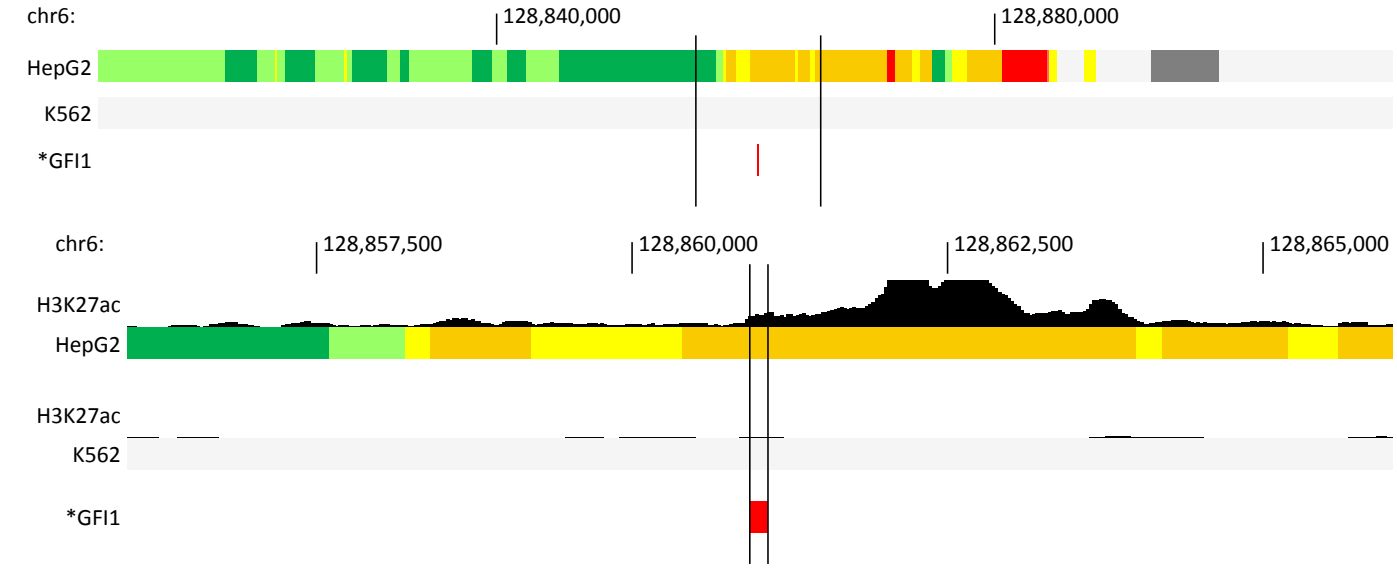
* ** ** *

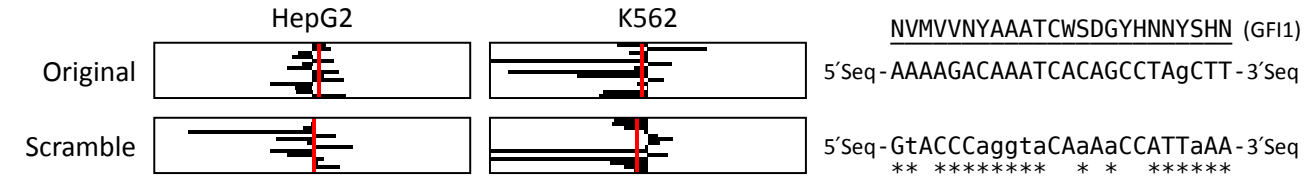
5′Seq = gcttttatctatttggtaacaggatgtaaagatatttccacagagtgaacgggcctgaaatttctaa

3′Seq = tgtgcagttcttgttgtgaaaatgtcagtttagttgtttagcataagtgtcacacgtggctcattt

1136 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 128860994 128861017 + (hg18)

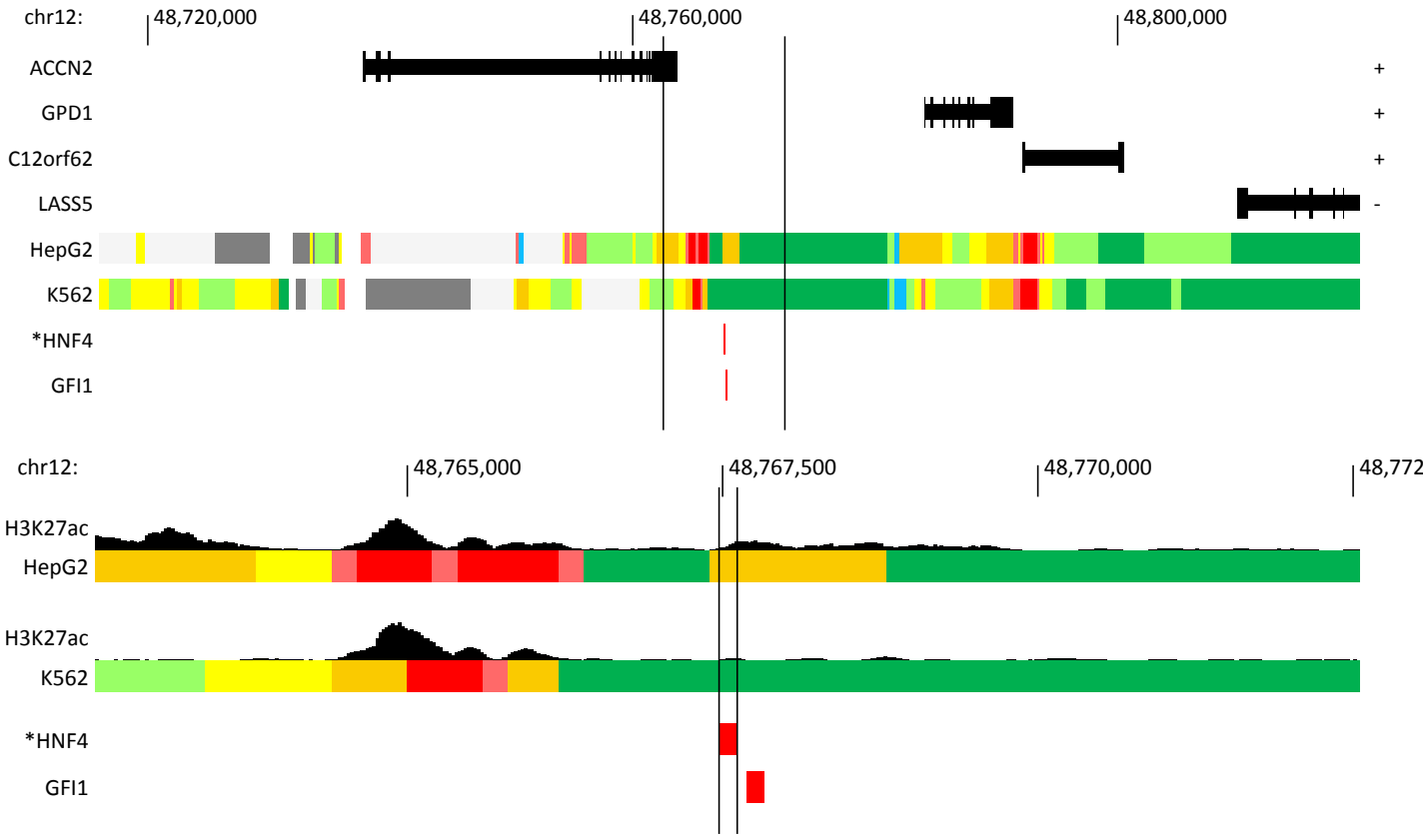


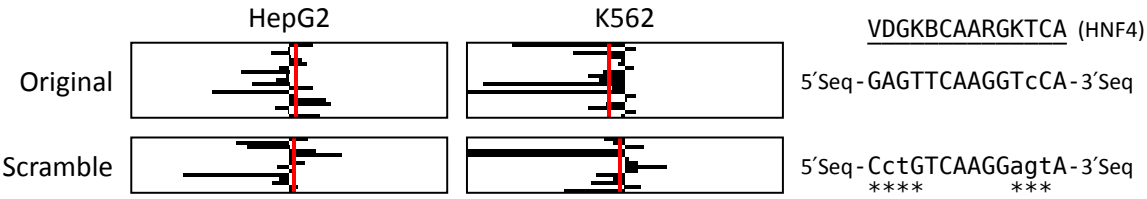


5′Seq = aaatcccctgaaactgtagtcatcctgcttccttaacacccttttttctgtcaagaatgtta
3′Seq = ccattccaagcattctcccatccaaactacggacagtttccagtttcaaaacagaaccct

1137 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 48767538 48767551 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-GAGTTCAAGGTcCA-3′Seq

5′Seq-CctGTCAAGGagtA-3′Seq

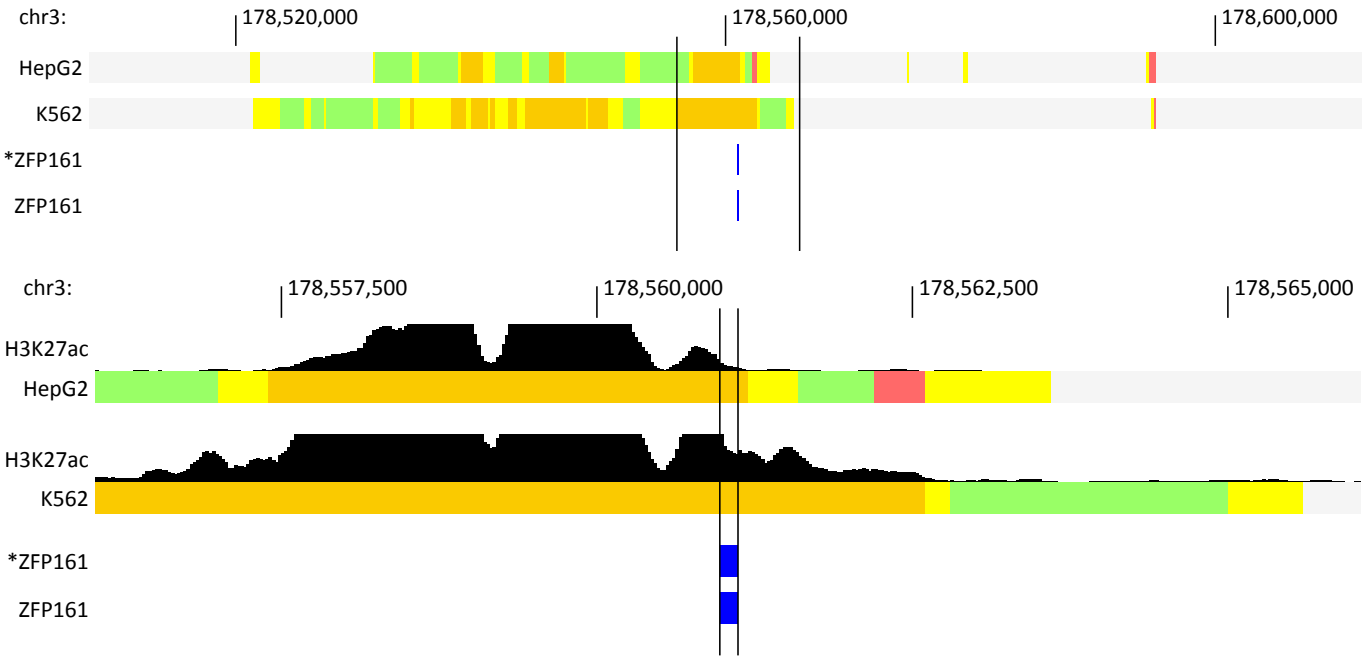
**** ***

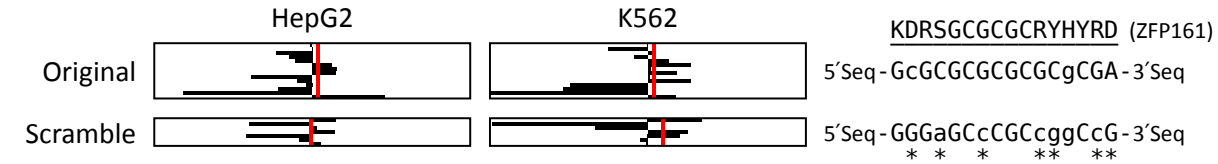
5′Seq = cgaggatggggaagggacggtggcttcctgggagcttcgggtagaaggacggctcctggaggatgt

3′Seq = caatggttggcatctagggtgggagctgctgggaatgaacagtgttgtctggtcagcaggaagcc

1138 ZFP161 in K562 enhancer

chr3 178561039 178561054 + (hg18)



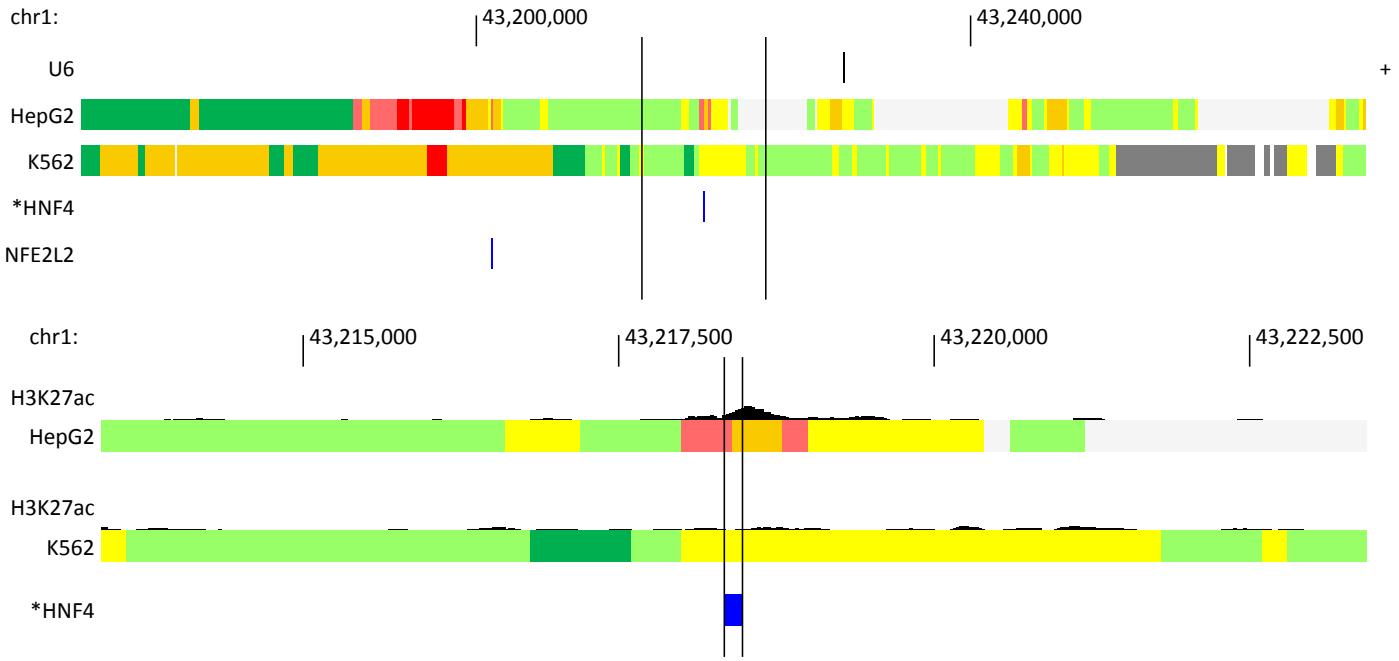


5′Seq = ctttttttttttttgagactcttggagtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgtgc

3′Seq = ttctctgttatgtaatcgccatcacgggtgattaggtcttctaggtctttccctccagggctga

1139 HNF4 in HepG2 enhancer

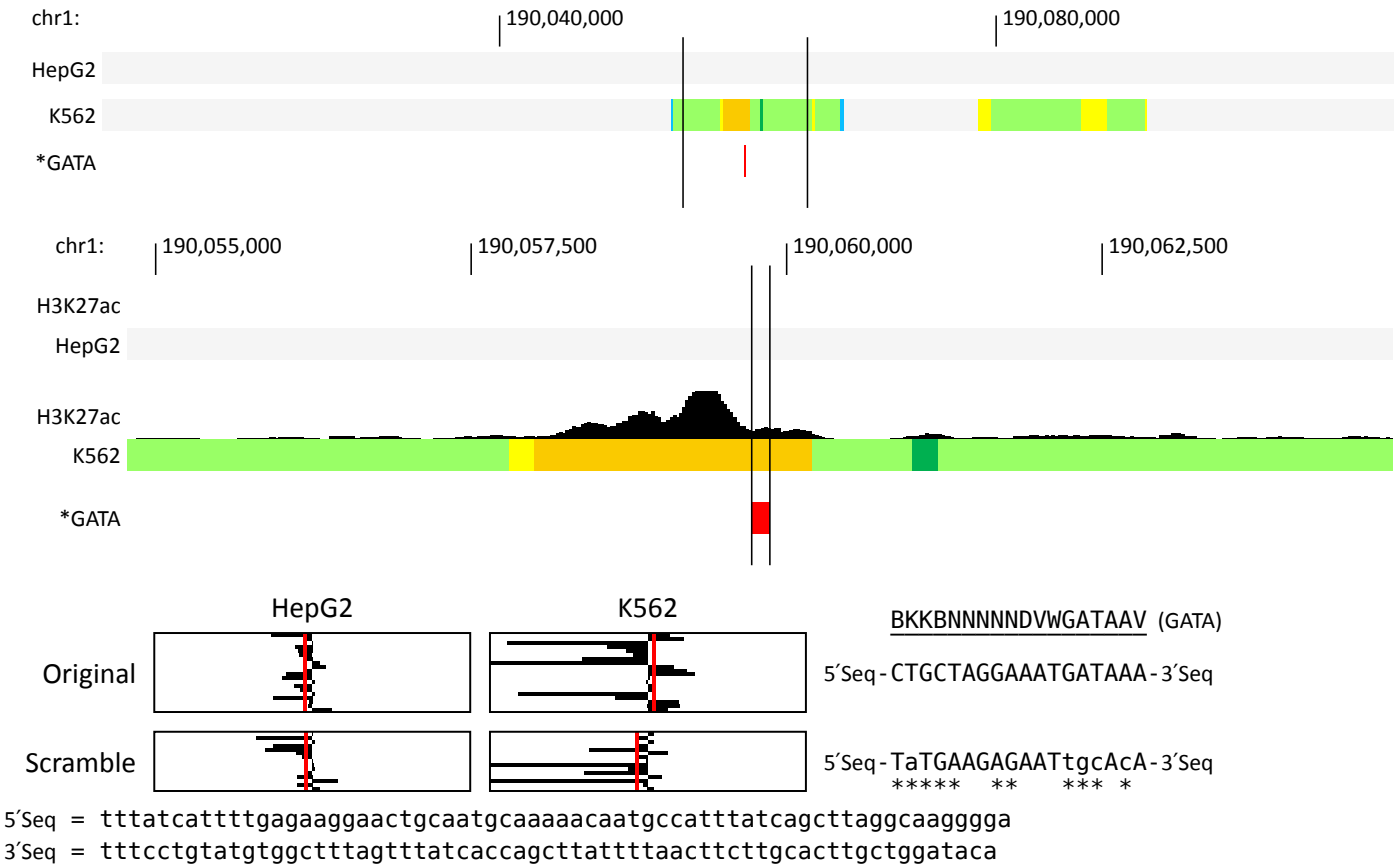
chr1 43218403 43218416 + (hg18)



5′Seq = tgcagctgcatctgtgtctagcgattgggaaggtccacagcaggactccagctcatacctgggagt
3′Seq = gcctagggaagagcccccaagagccaggctgggtgtcaggtggggcccttgtcctgaagggagaa

1140 GATA in K562 enhancer (conserved at 60% confidence)

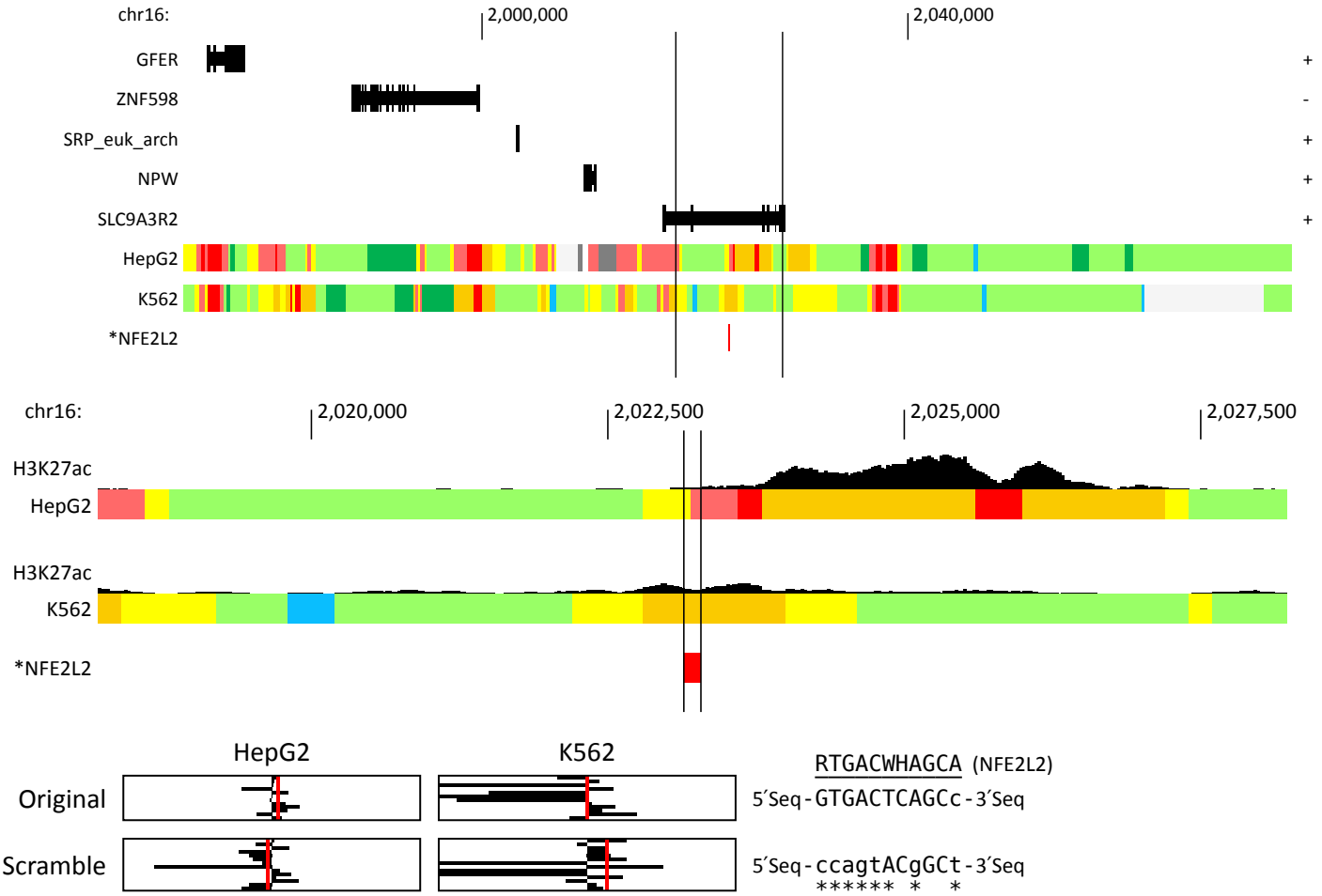
chr1 190059787 190059804 + (hg18)



5′Seq = tttatcattttgagaaggaactgcaatgcaaaaacaatgccatttatcagcttaggcaagggga
3′Seq = tttcctgtatgtggctttagtttatcaccagcttattttaacttcttgcacttgctggataca

1141 NFE2L2 in K562 enhancer (conserved at 60% confidence)

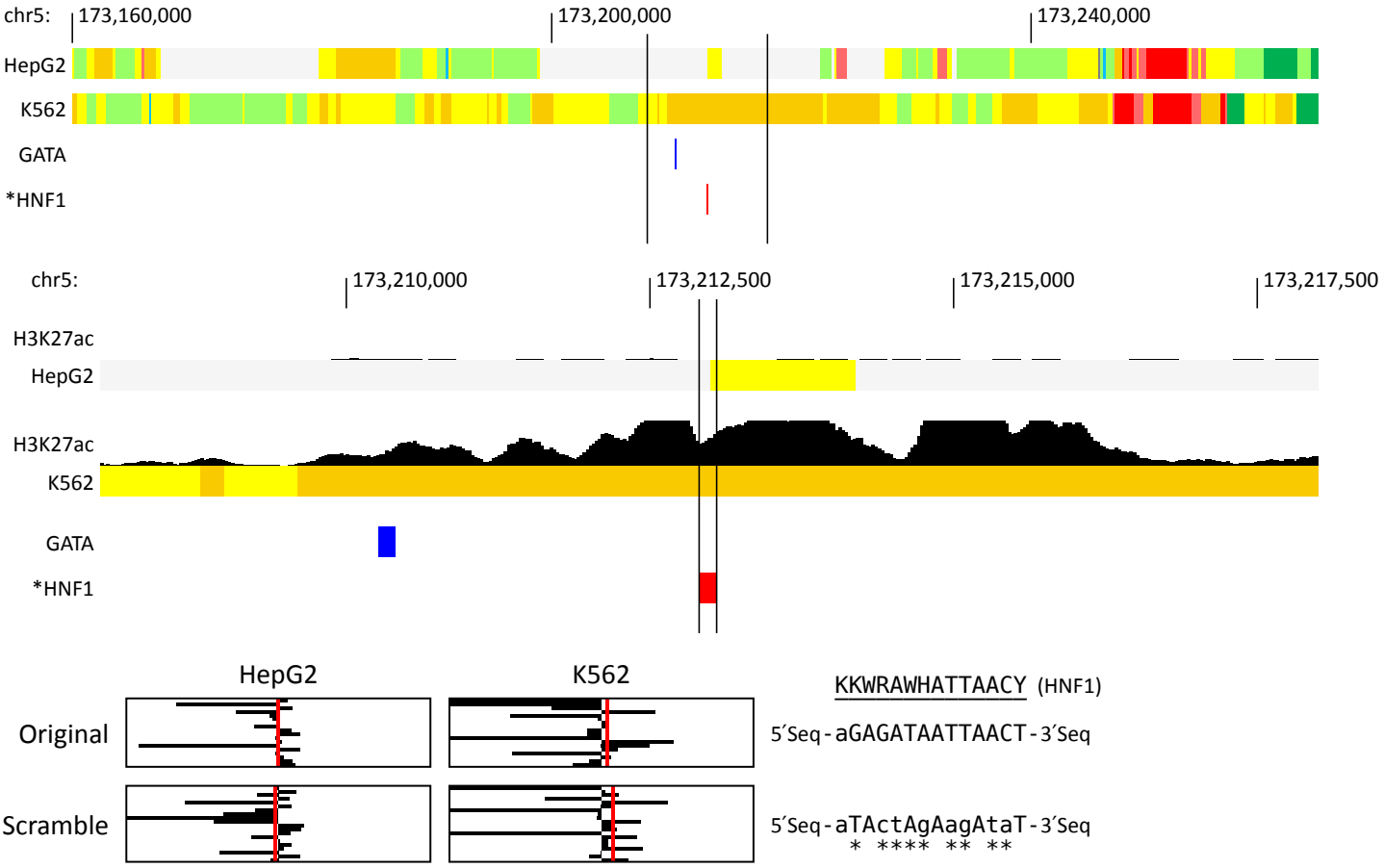
chr16 2023208 2023218 + (hg18)



5′Seq = tgggtgggggcgccaggctggagccttcgcaggggagcgggctcagtcatcaccctgctccccaga
3′Seq = cccacgtccccacccatccccggggagccagggccgcagagggaggtagataagtggggtggcagcc

1142 HNF1 in K562 enhancer (conserved at 60% confidence)

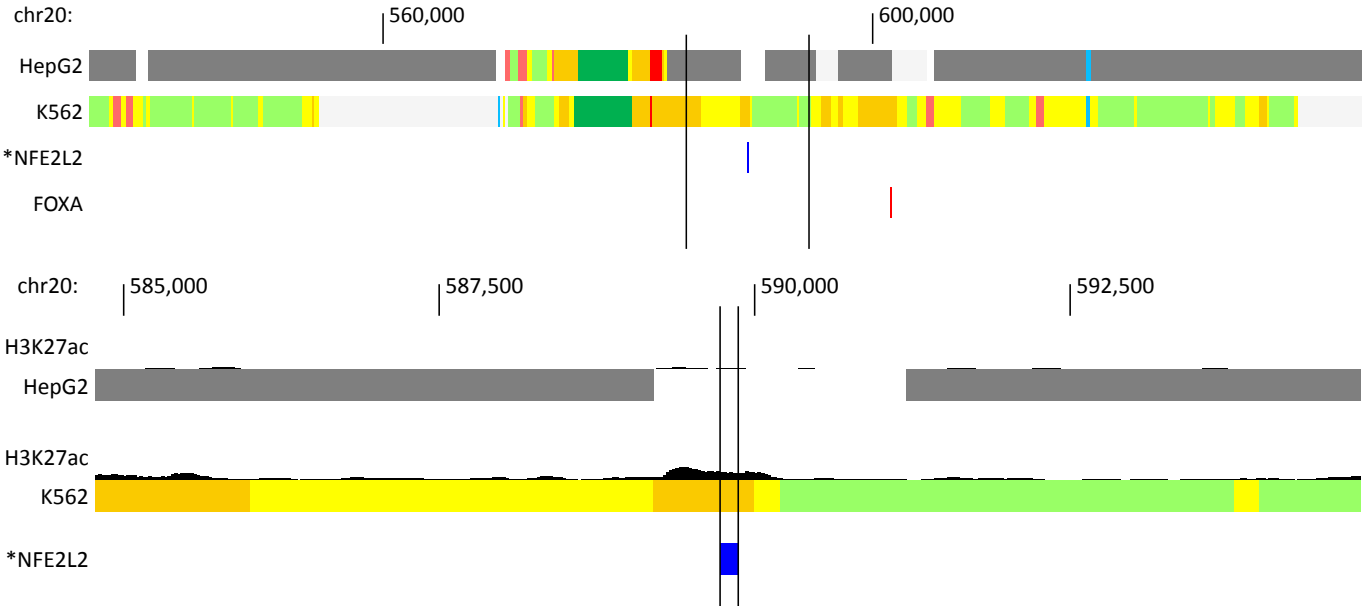
chr5 173212971 173212984 + (hg18)



5′Seq = agacttggataaattatgcctcaactccatgtcataaaaggtacagagggaattgtacagcatatt
3′Seq = ccaagtagaatcagggctgccagaattcaggaaggactctgtgagtcaatctcaccctaaaaagg

1143 NFE2L2 in K562 enhancer

chr20 589793 589803 + (hg18)

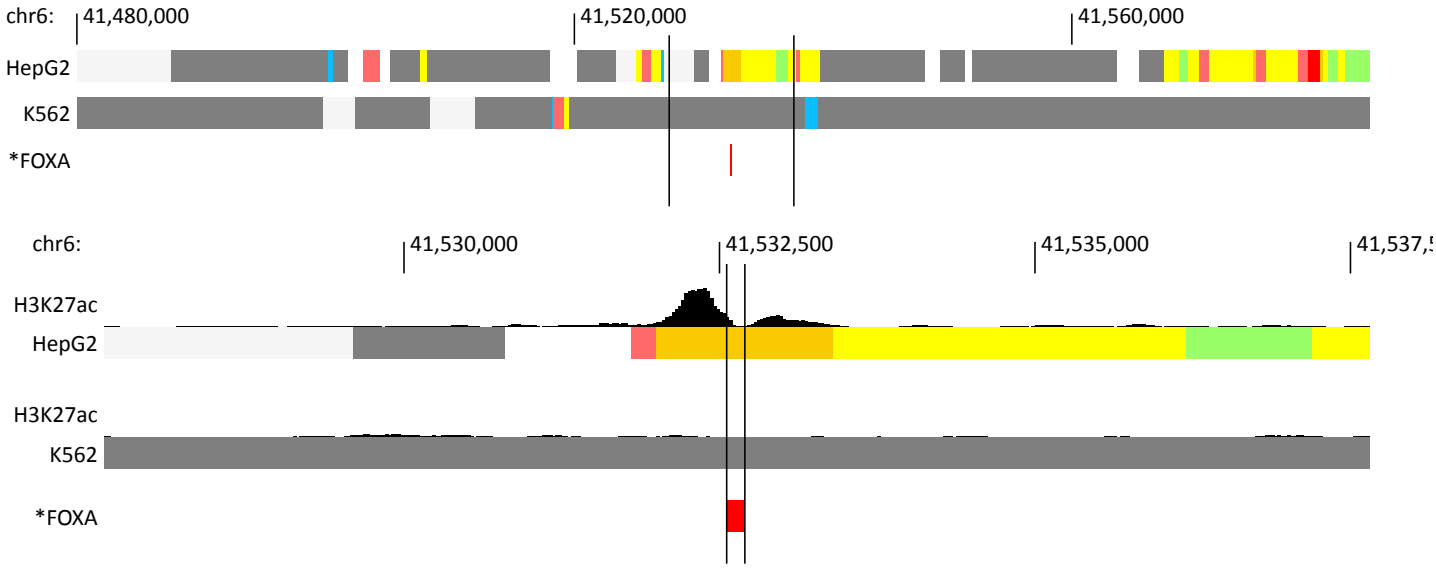


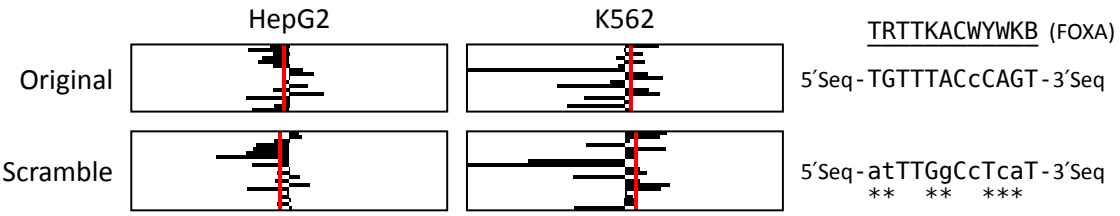
5′Seq = acaactttccagctgagccaaagtcaacctttttgcctgcttccactcactgaatatgtgaccatat

3′Seq = gagcagtagggggtgaactggggaagattatagggttgtaaactggctgtcaacagacacatgtgg

1144 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr6 41532624 41532635 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACcCAGT-3′Seq

5′Seq-atTTGgCcTcaT-3′Seq

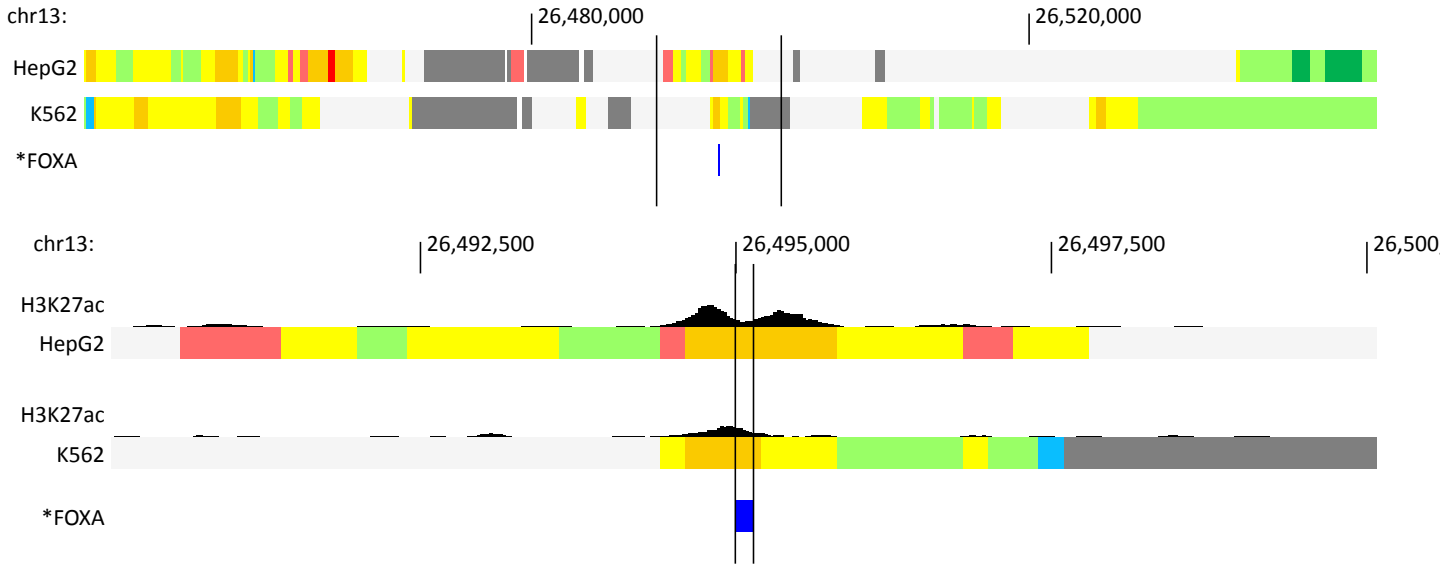
** ** ***

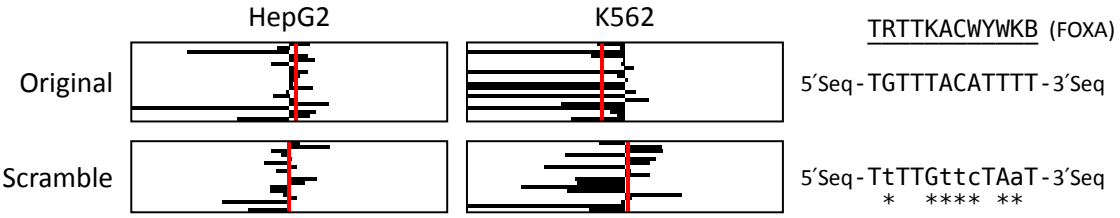
5′Seq = ttatttttccttattgactttctccaaataaacccctgcccagcagaaaggggctcccagcagcagc

3′Seq = gtttgcgataaagaggcttctccatagcaacaggtggcaatgtgcagctctcggggaacatggcag

1145 FOXA in HepG2 enhancer

chr13 26495062 26495073 + (hg18)

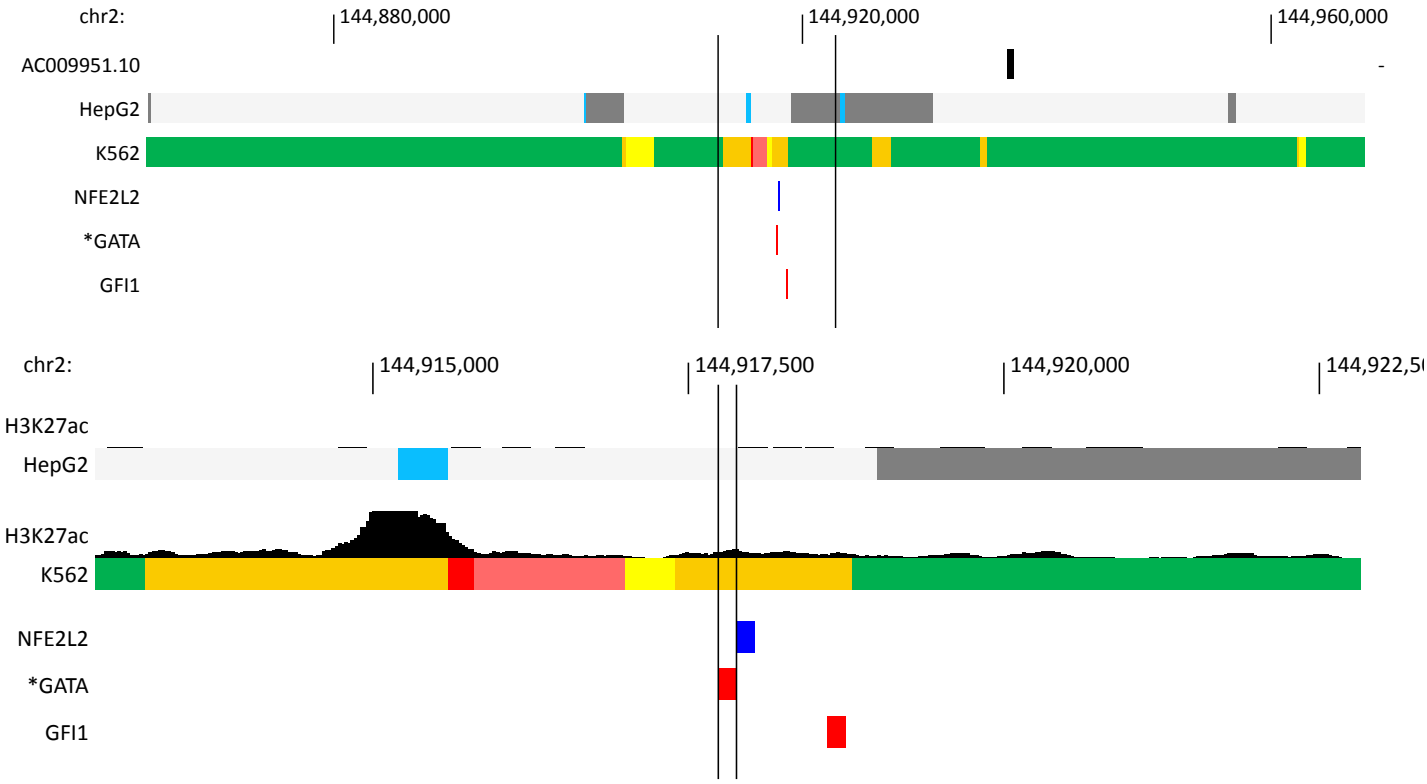


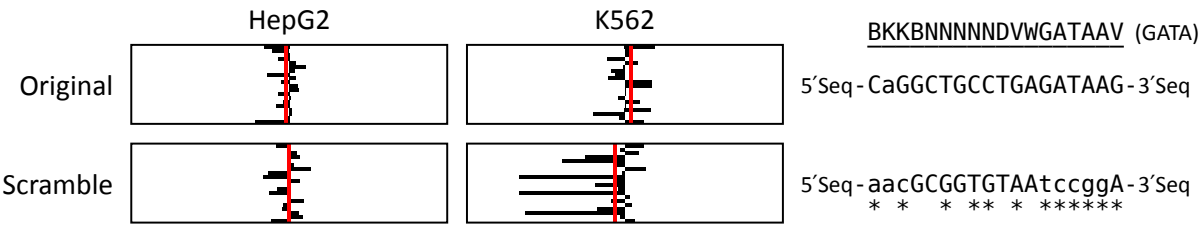


5′Seq = ctcttgccctgggccctgaccagcacttgtcaggaggggagggagtgtgtttgaacatccacagatg
3′Seq = ggagacatttaccagcagaaacaagcctcggtactctgcccaagttccatgcgttgacagtagcaa

1146 GATA in K562 enhancer (conserved at 60% confidence)

chr2 144917801 144917818 + (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CaGGCTGCCTGAGATAAG-3′Seq

5′Seq-aacGCGGTGTAAtccggA-3′Seq

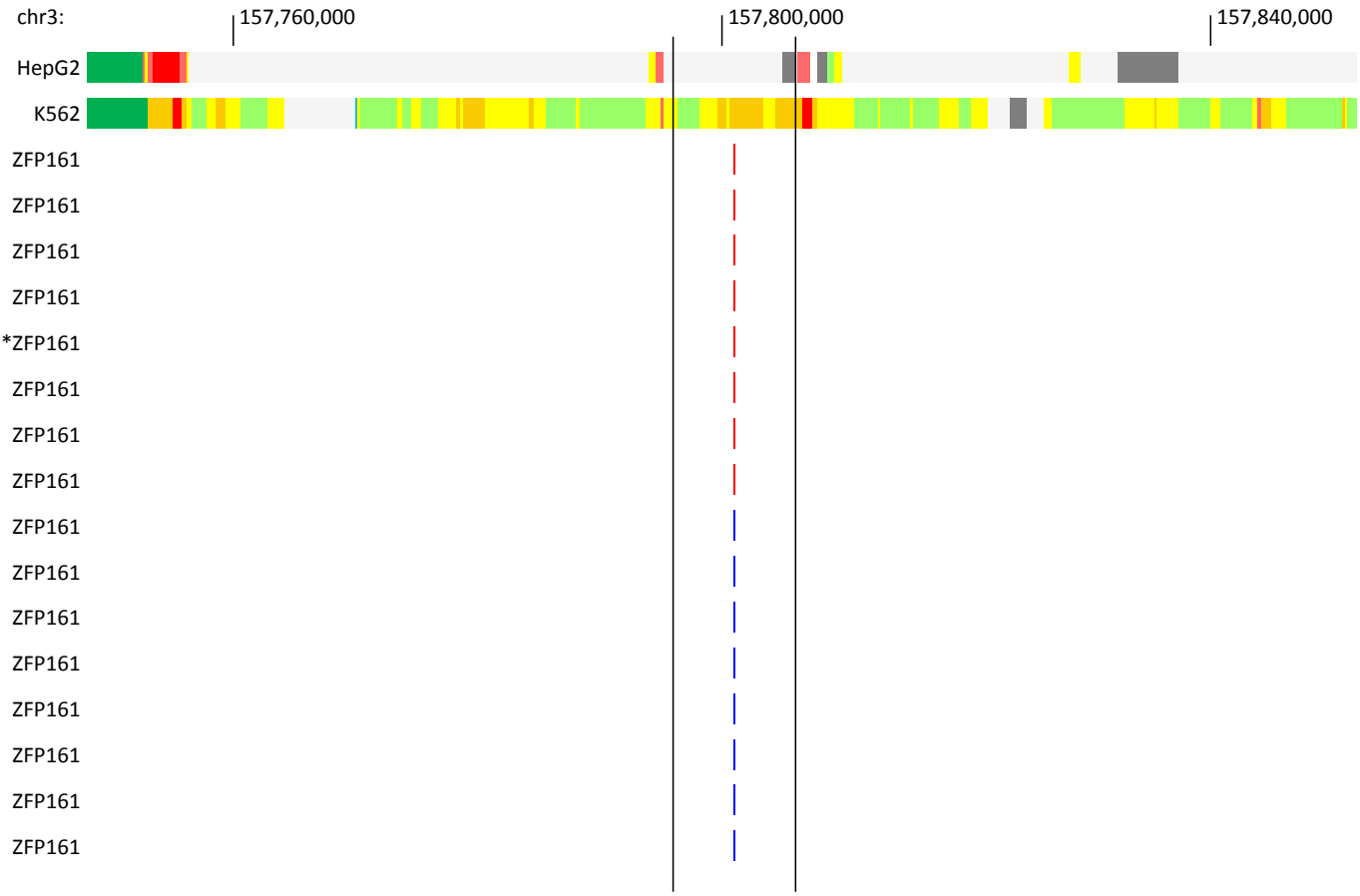
* * * ** * ******

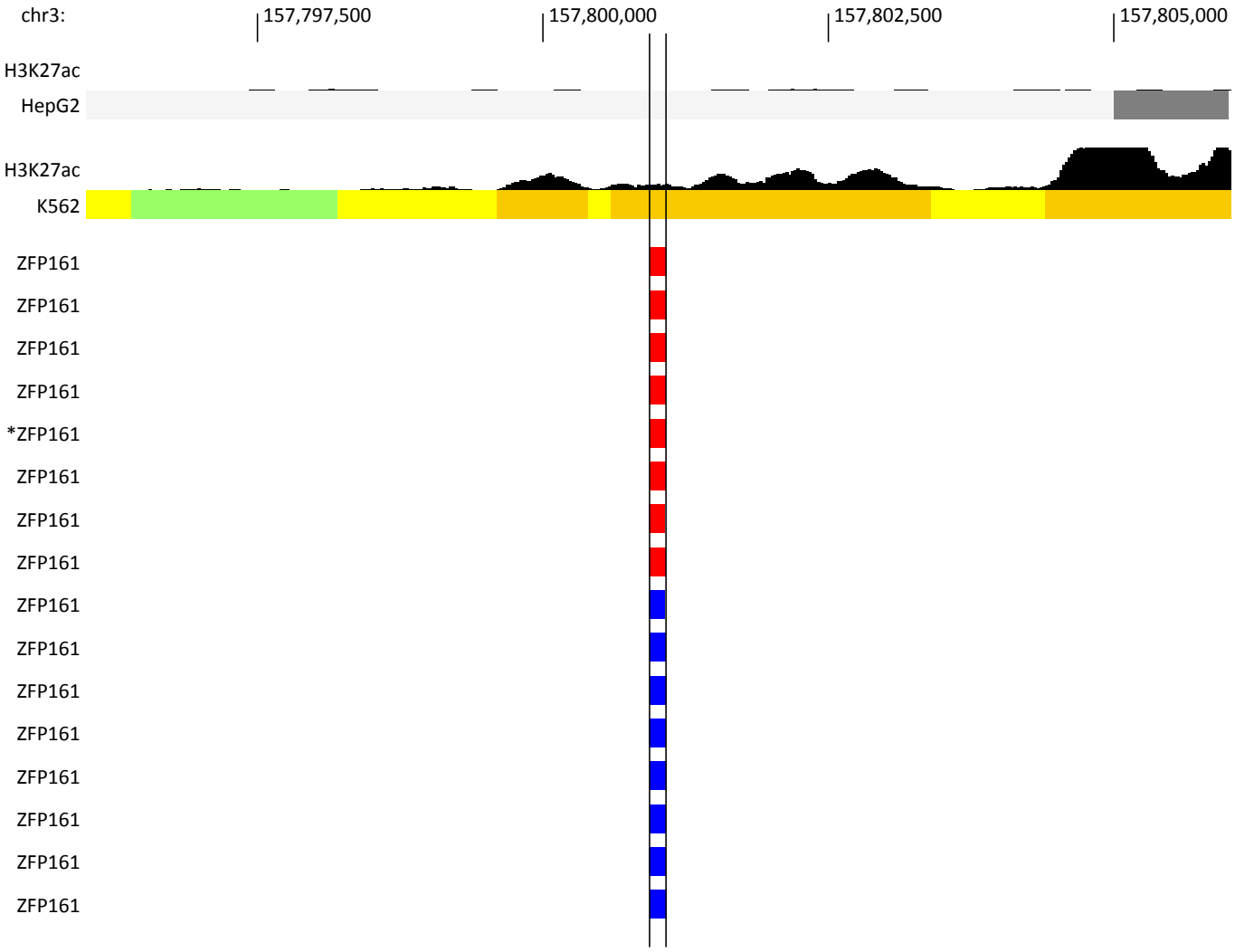
5′Seq = catgaaacaccacagtatttgttctcacagattcctttcacttttcgctccccaccaaaactgt

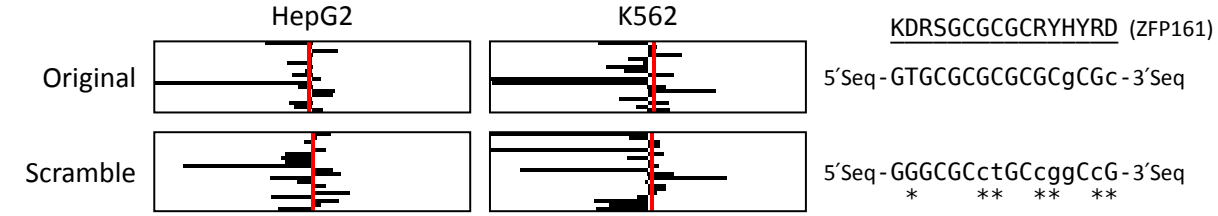
3′Seq = ggaaggttaaaaacaaagttattcaaggttgttgtgcattcttgtcctgaacgaaagcaagct

1147 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr3 157800999 157801014 + (hg18)





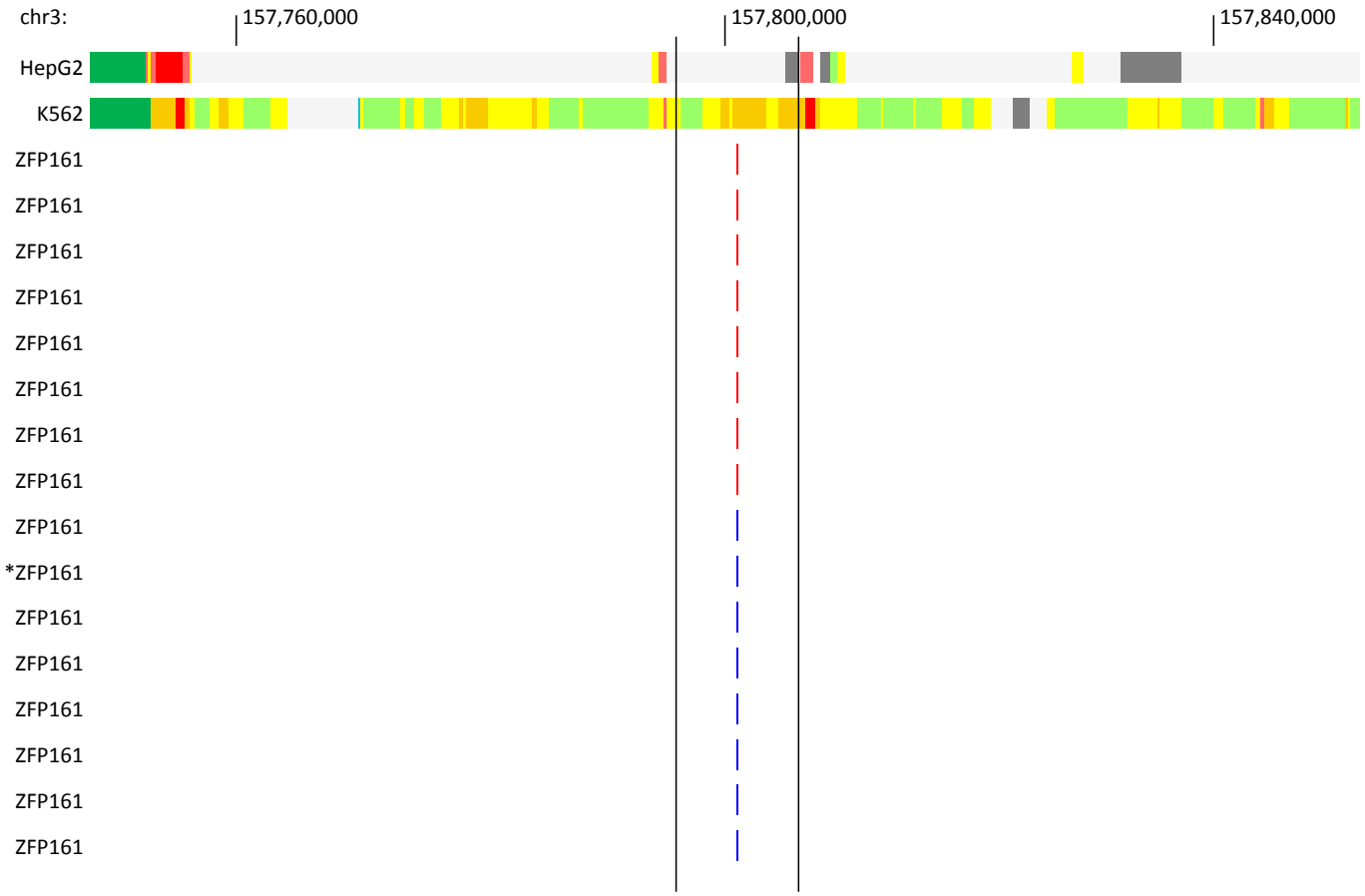


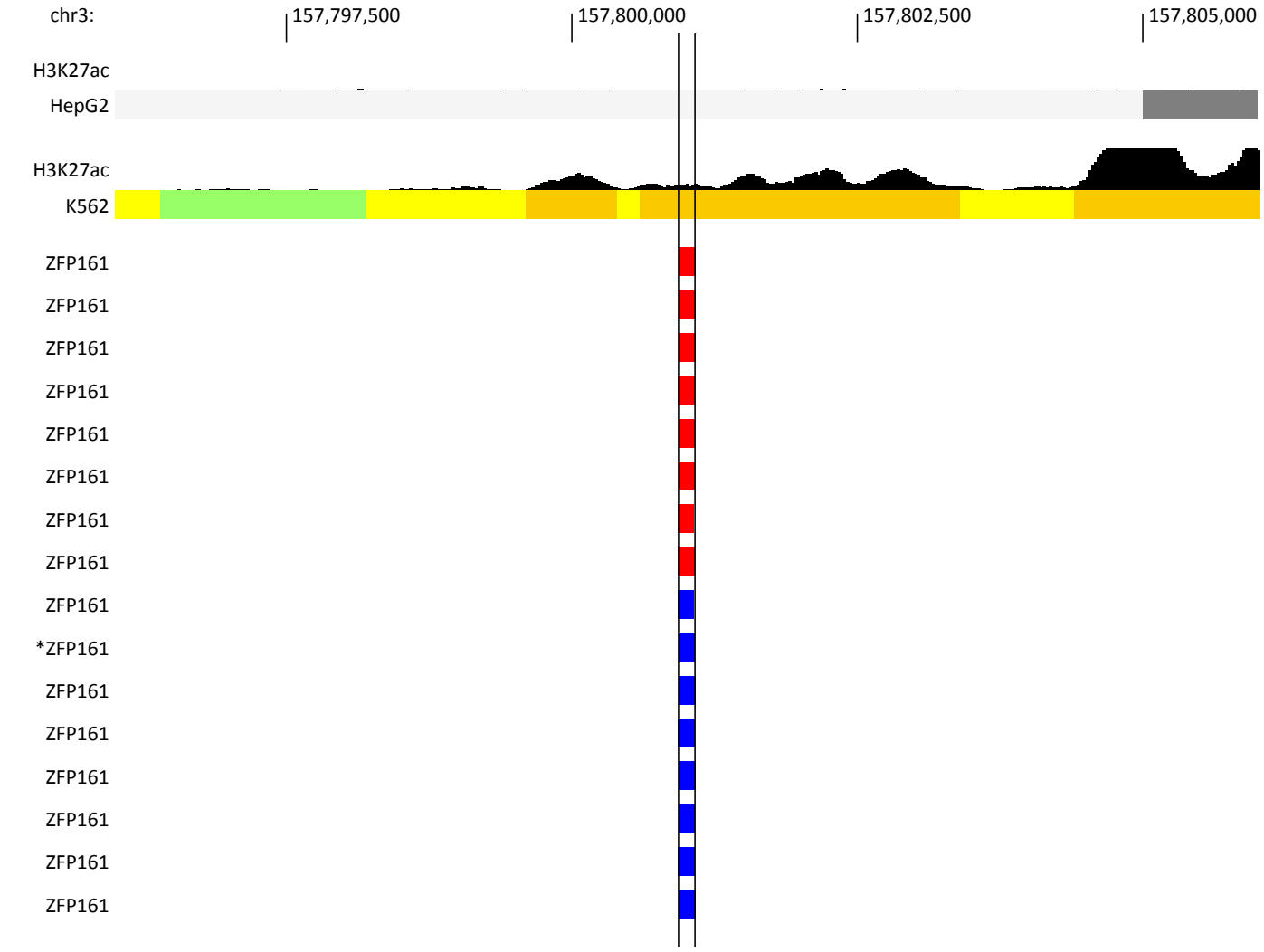
5′Seq = ttccagcttgggtgacagagtgagaccctgtttcaaaaaaaaaaaaaaaaagtgtgtgtgtgtgt

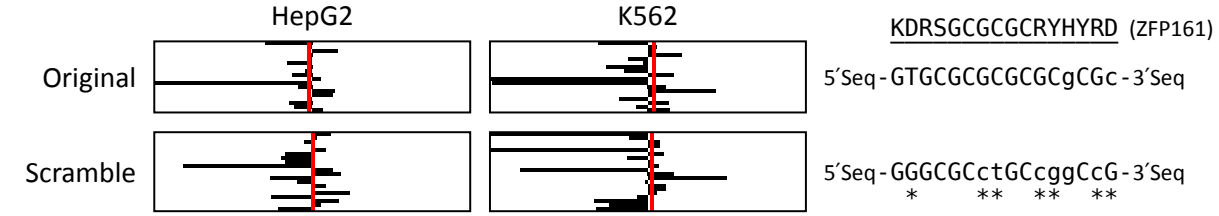
3′Seq = atgcactgggaaagacaggataatgagagaacaatgttgaacttgatcacatccctaagaagga

1148 ZFP161 in K562 enhancer

chr3 157800999 157801014 + (hg18)



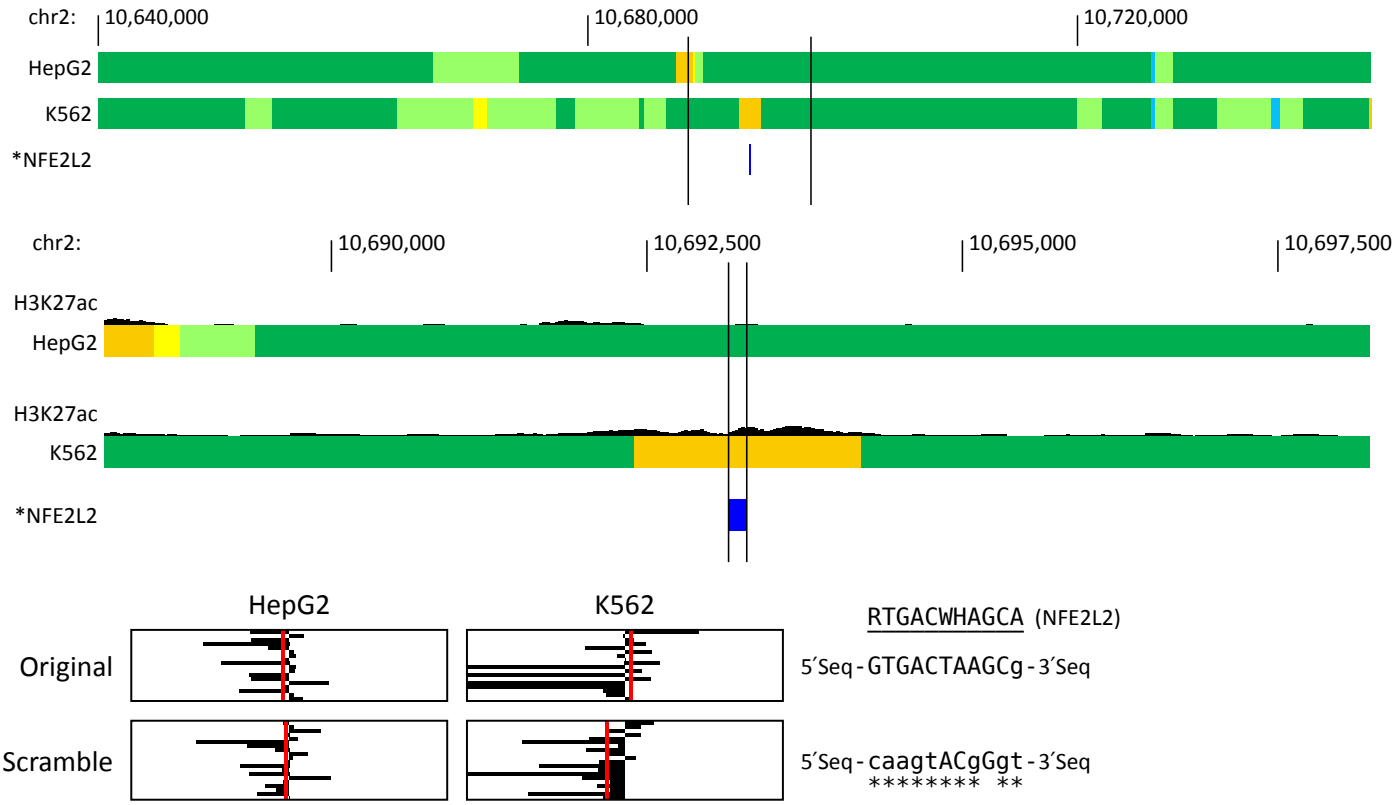




5′Seq = ttccagcttgggtgacagagtgagaccctgtttcaaaaaaaaaaaaaaaaagtgtgtgtgtgtgt
3′Seq = atgcactgggaaagacaggataatgagagaacaatgttgaacttgatcacatccctaagaagga

1149 NFE2L2 in K562 enhancer

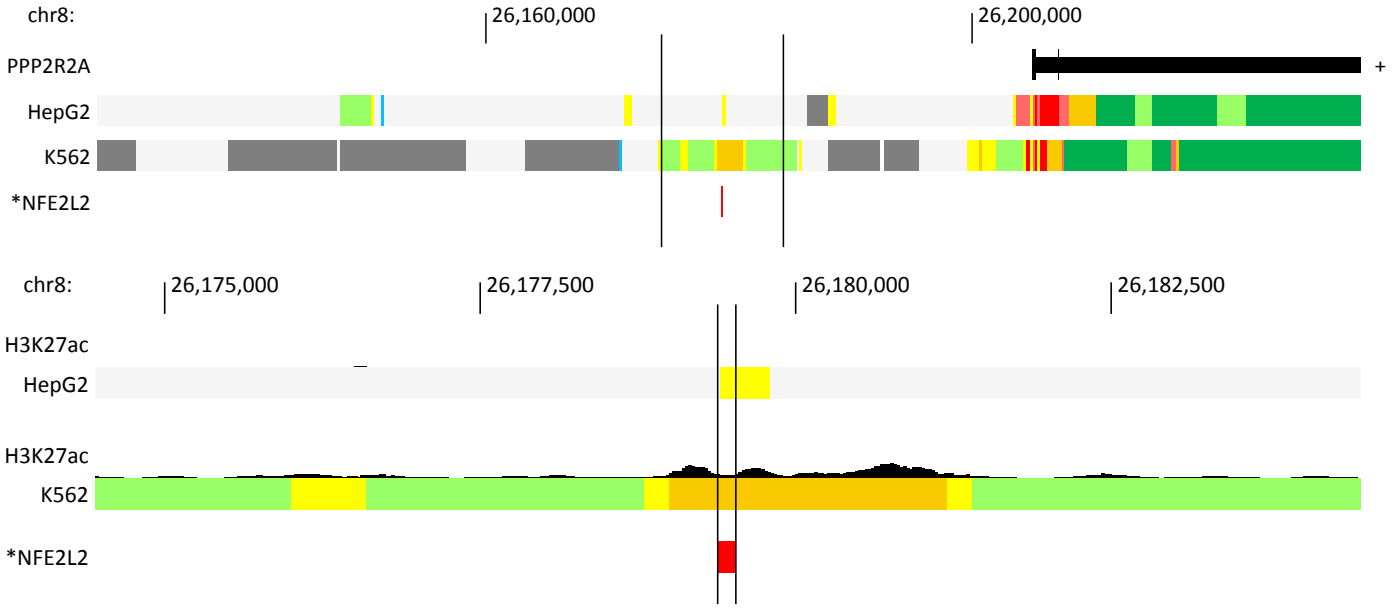
chr2 10693214 10693224 - (hg18)

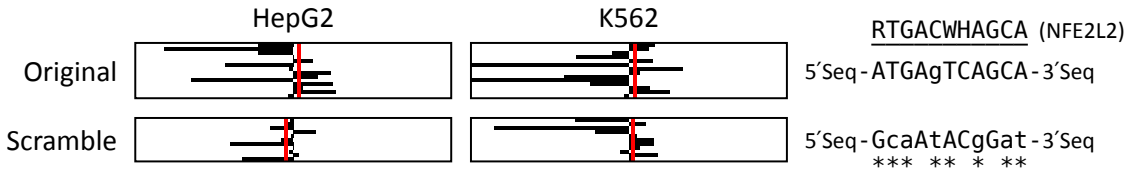


5′Seq = tctctattgtacactcaccgcccttgtgagcttacaatctaggtgaggggtggtgataaacagatct
3′Seq = ctgtgaaggaaggcagcagggttcagtggcttcctacgcattttccctaagtcaagggtcaggcact

1150 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 26179449 26179459 + (hg18)





5′Seq = aaactctcatttccctttacaagctggaaaacaaaatataaacttgtcttccatctcatggcaggag
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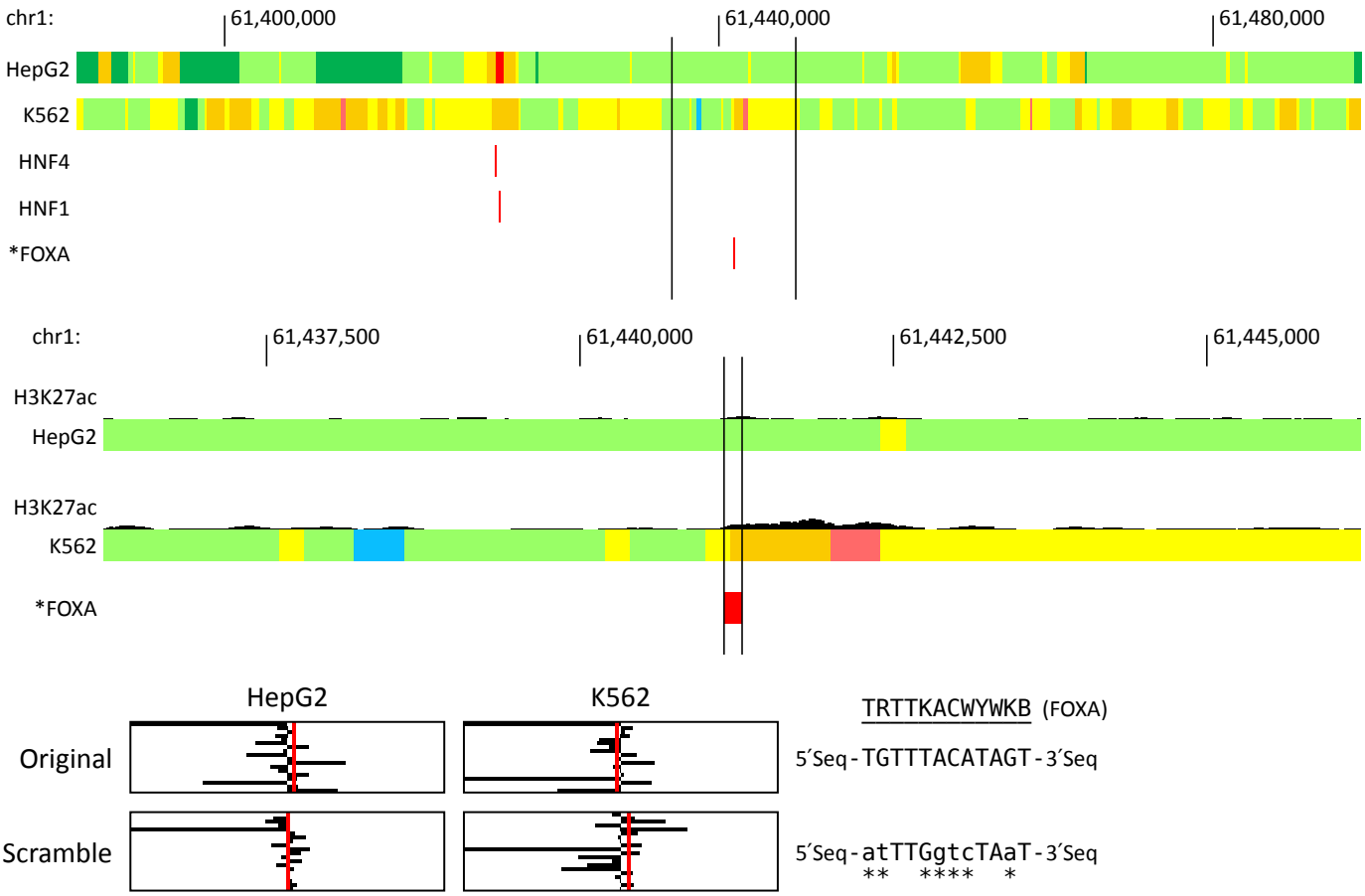
1151 FOXA in K562 enhancer (conserved at 50% confidence)

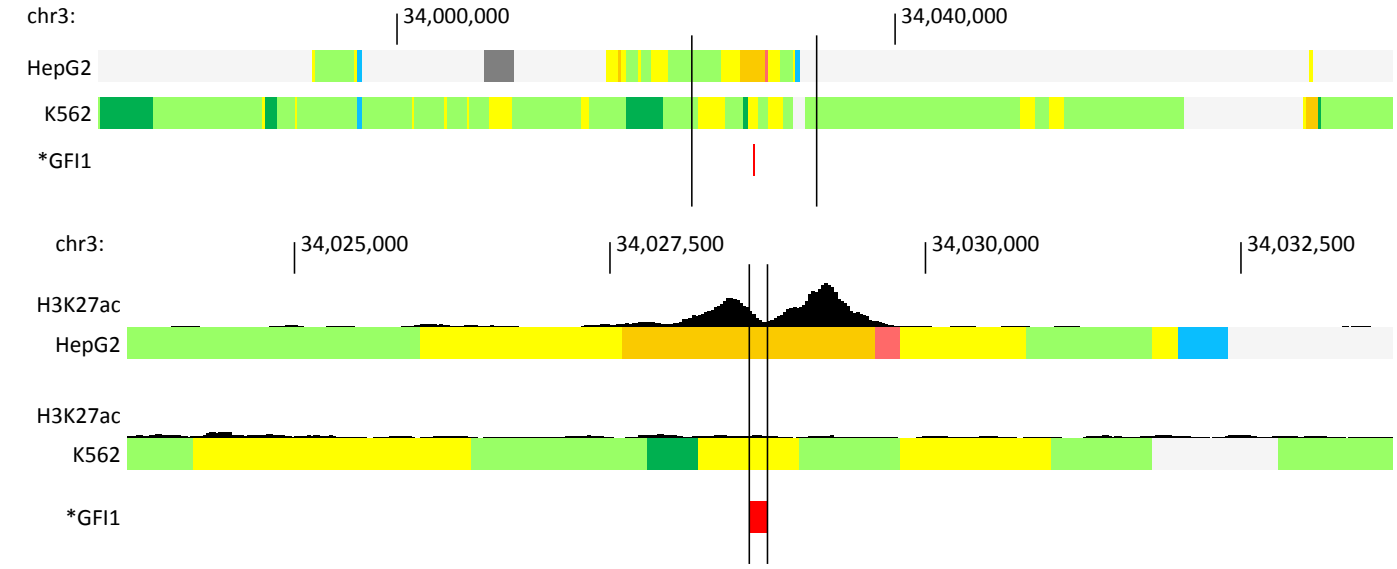
chr1 61441216 61441227 - (hg18)

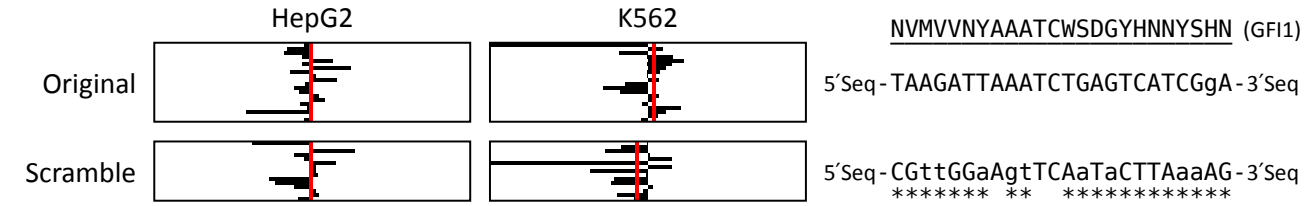


5′Seq = cctccacaaaattgcactataattcaaaataagtgaagcaacaattggacggatgaccagtttttgt
3′Seq = ttaatgcacaaatgtgcagtttccatgattttcagaatgacgtgatttacatgaggctttaacaat

1152 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr3 34028665 34028688 + (hg18)





5′Seq = taatattctttgtgtctgtgtggctggctctaataatcctgcaagcttacagggtcactgt
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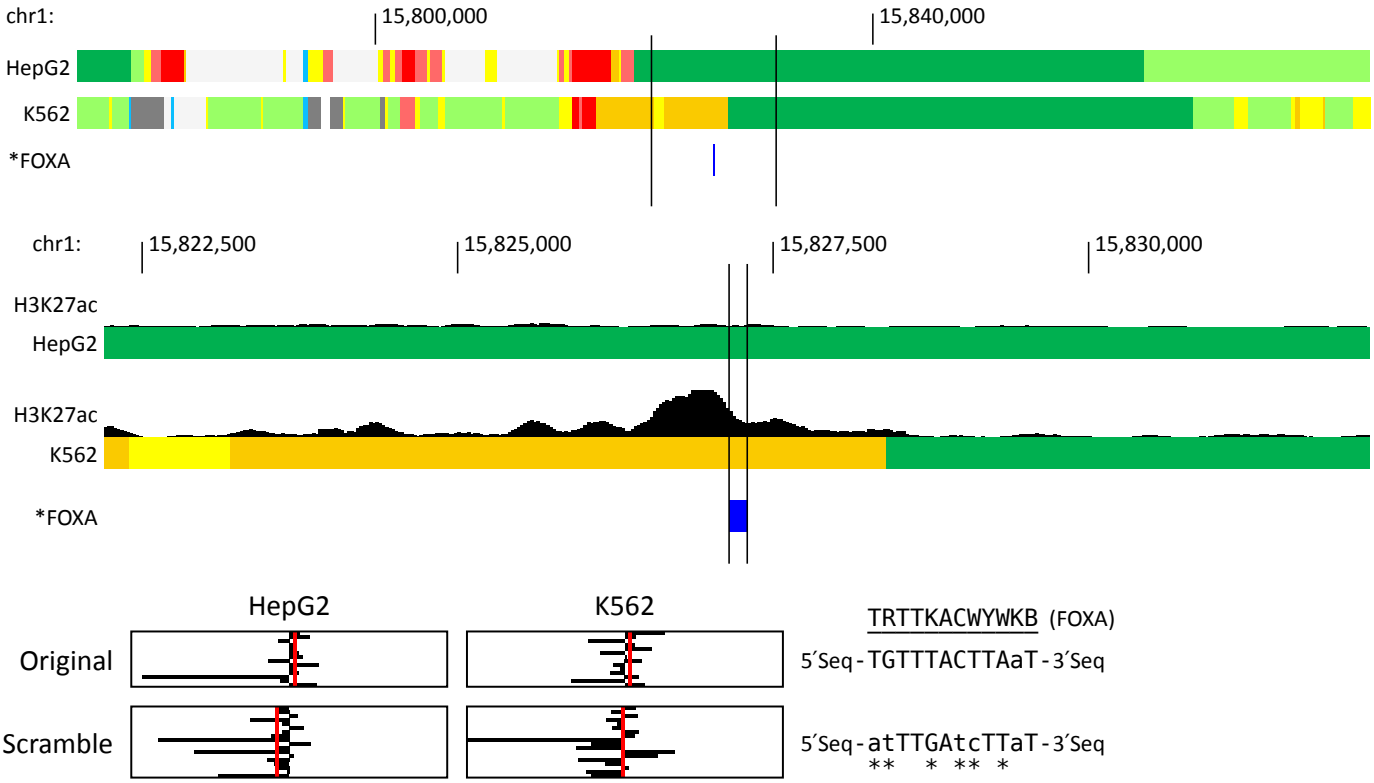
1153 FOXA in K562 enhancer

chr1 15827218 15827229 - (hg18)



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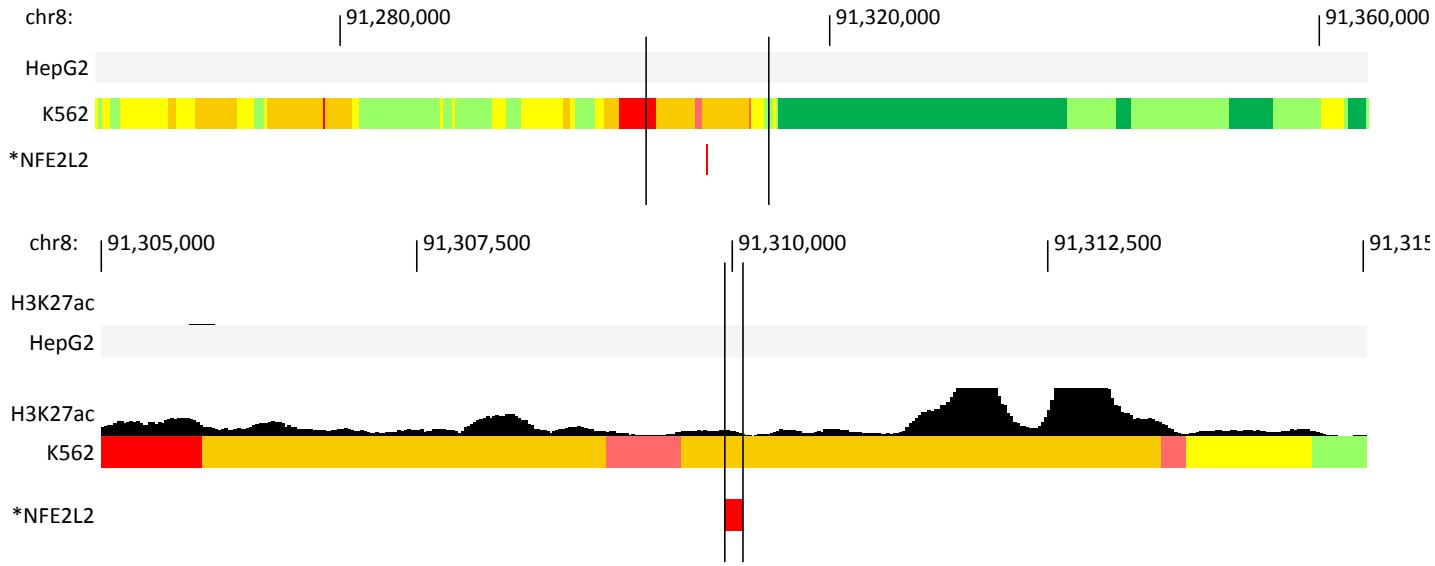
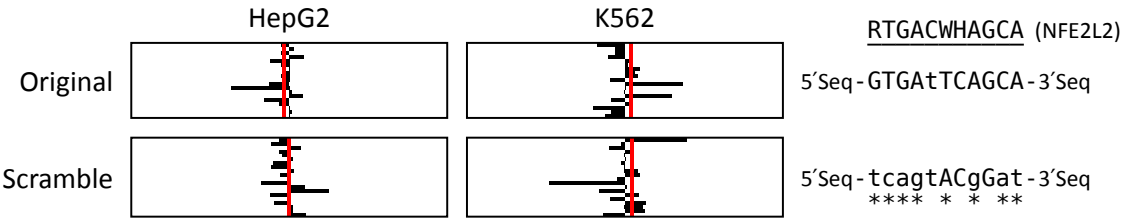
1154 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 91310008 91310018 + (hg18)





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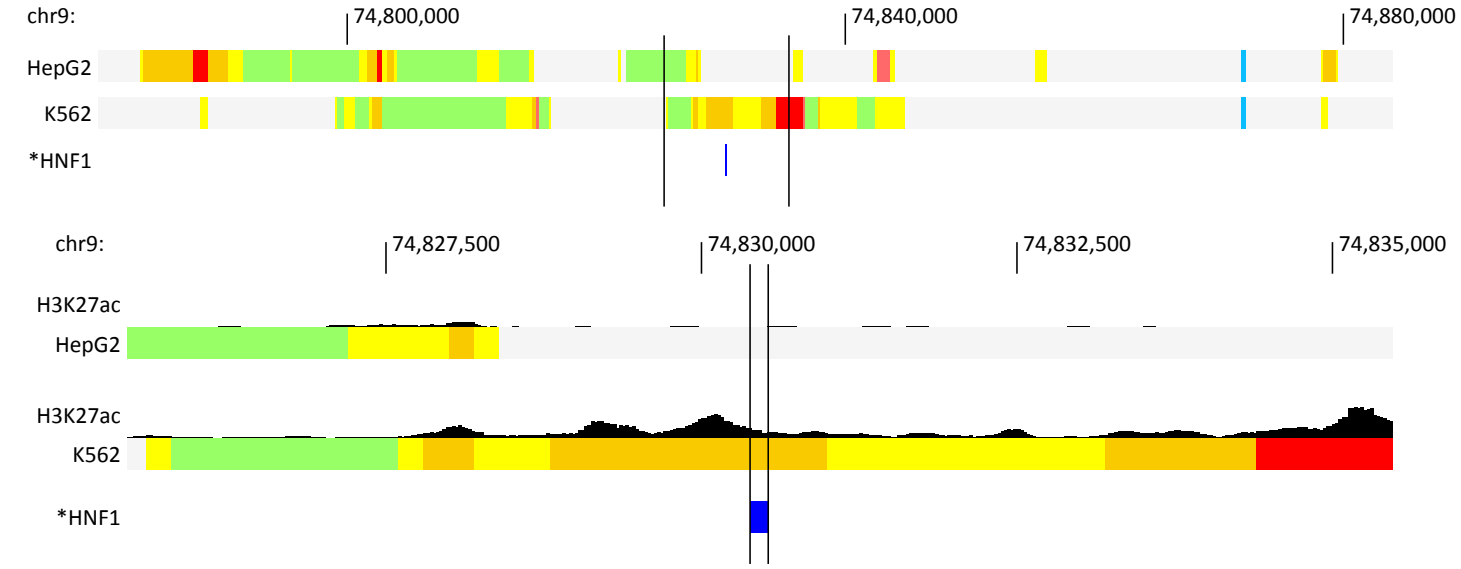
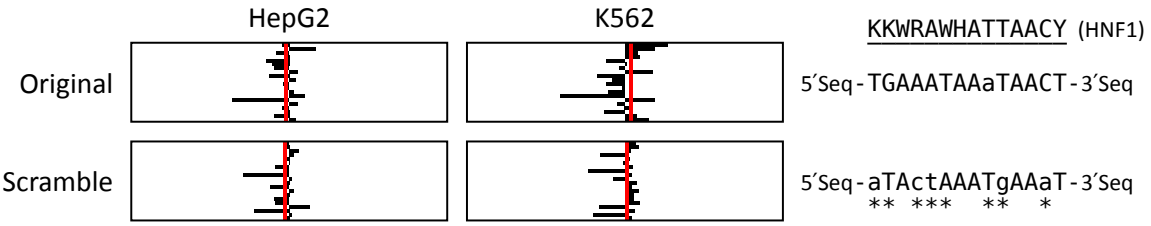
1155 HNF1 in K562 enhancer

chr9 74830451 74830464 + (hg18)





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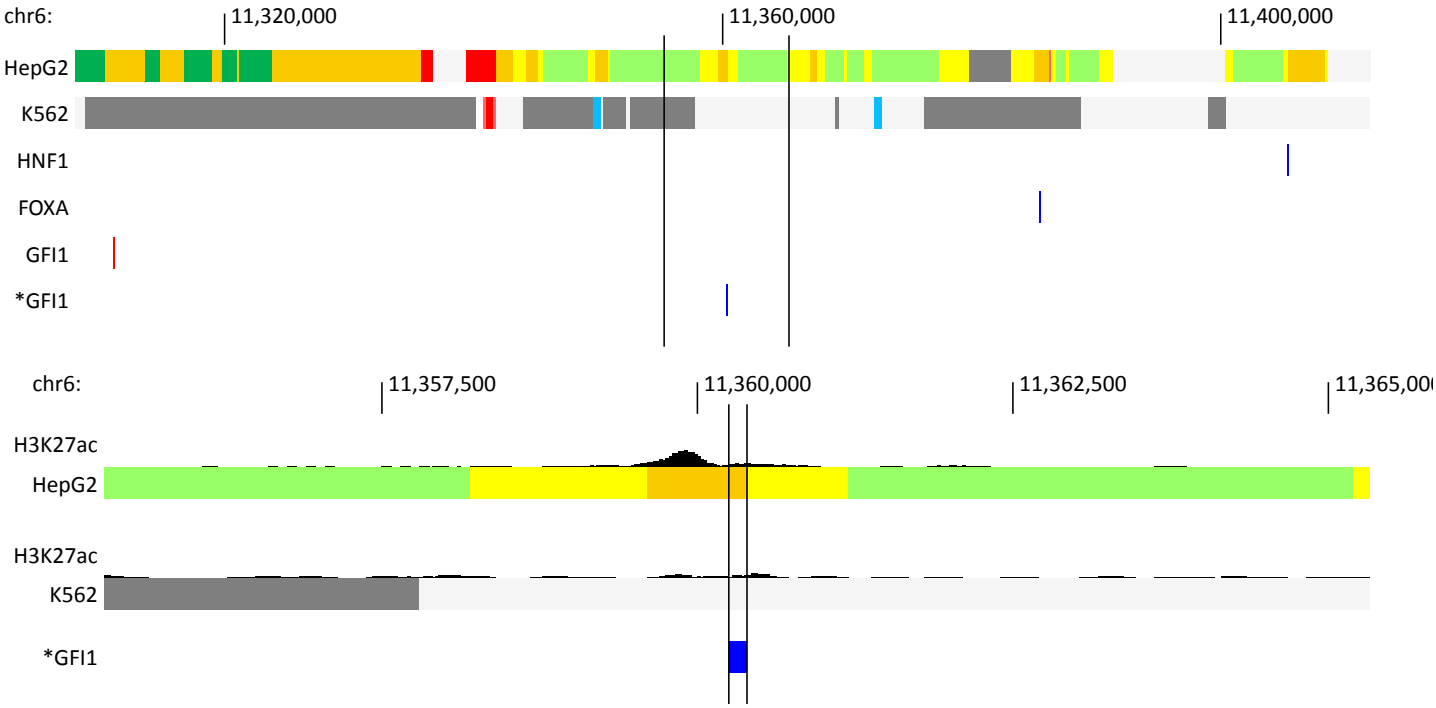
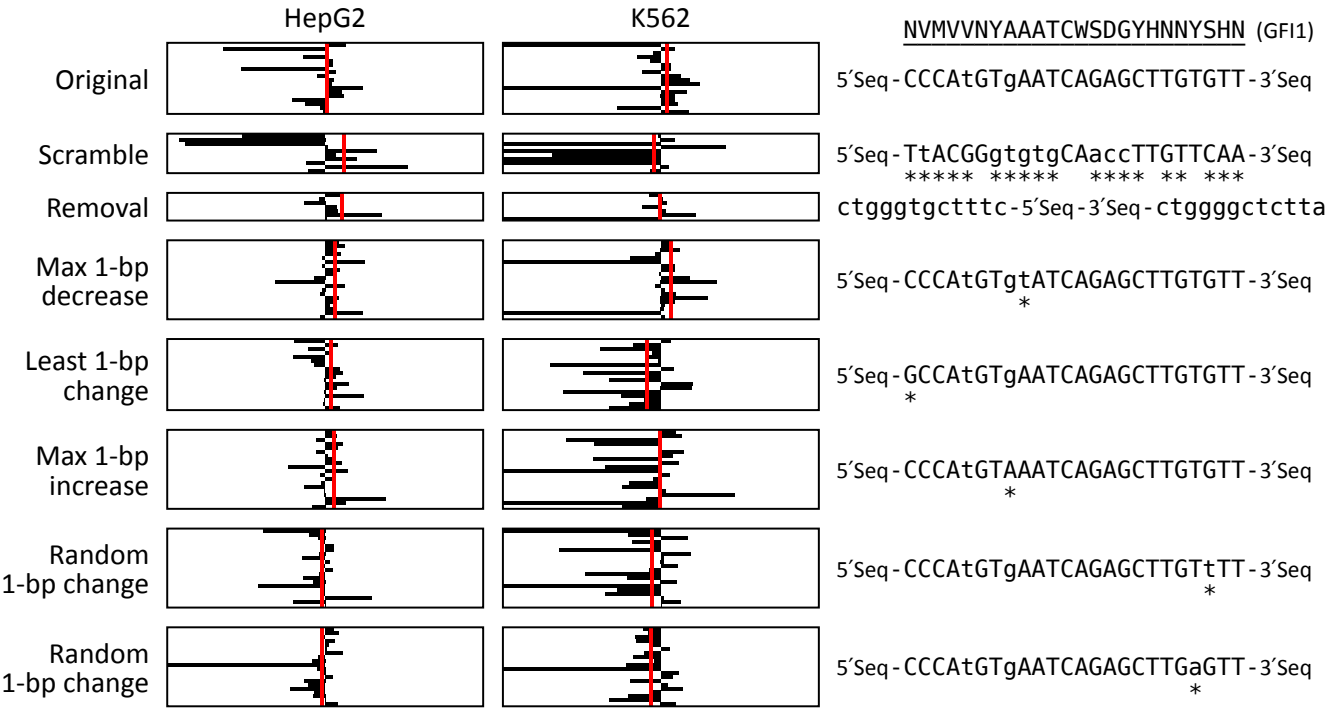
1156 GFI1 in HepG2 enhancer

chr6 11360310 11360333 + (hg18)





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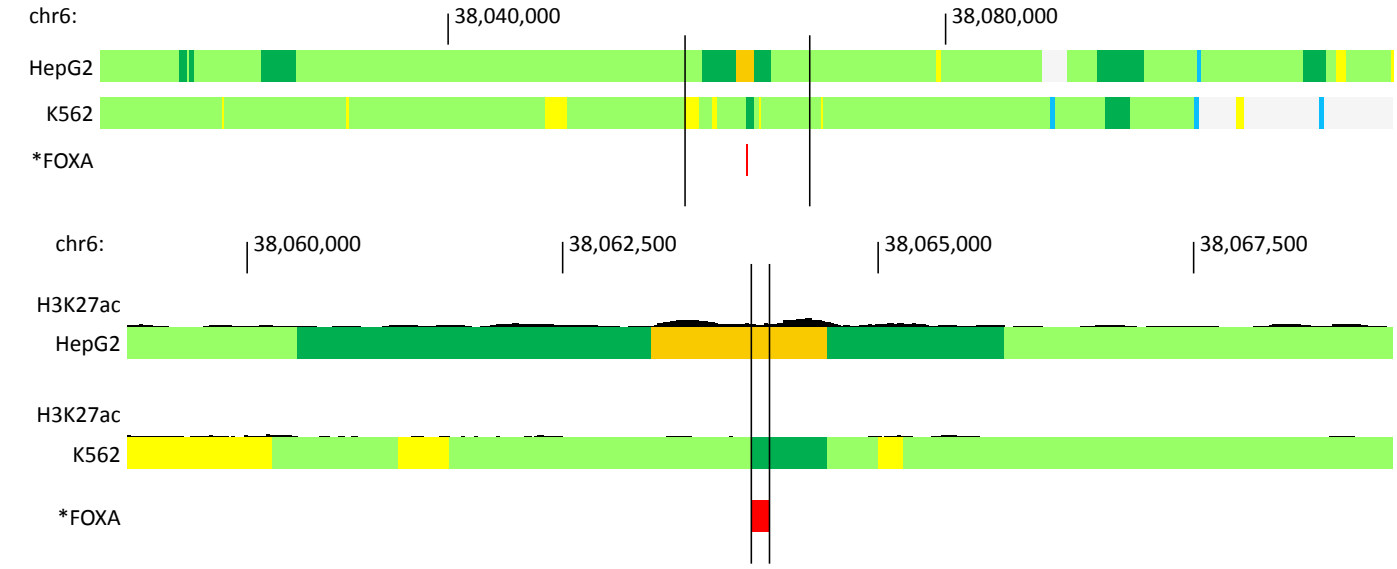
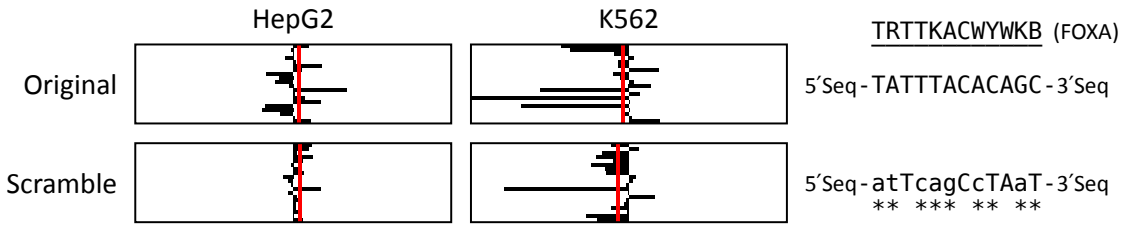
3′Seq = aatatcttctagctgggcgctgtagtgctctctcagccagatcttcatttcatgtctgtc

1157 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr6 38064062 38064073 - (hg18)





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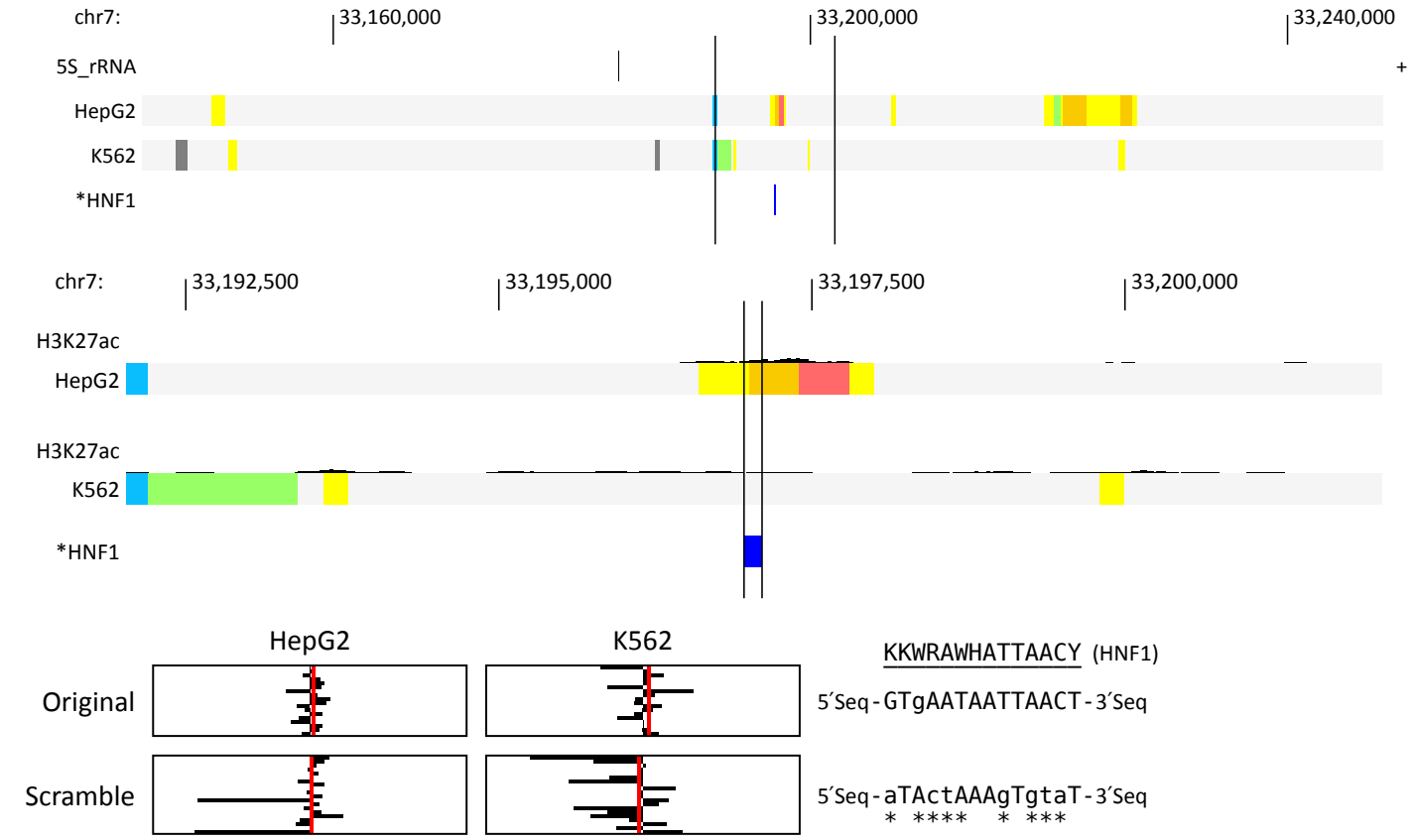
1158 HNF1 in HepG2 enhancer

chr7 33197024 33197037 + (hg18)



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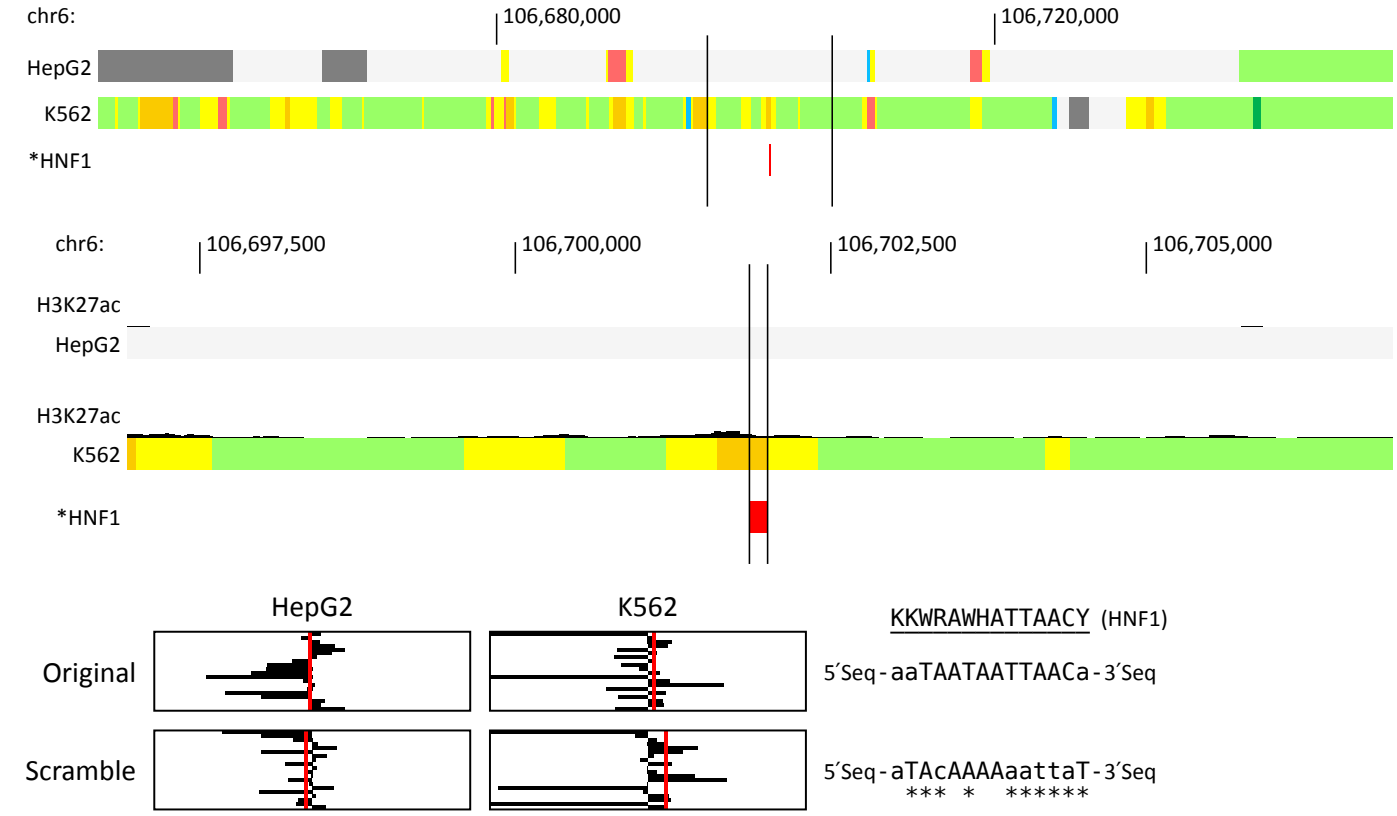
1159 HNF1 in K562 enhancer (conserved at 60% confidence)

chr6 106701921 106701934 + (hg18)



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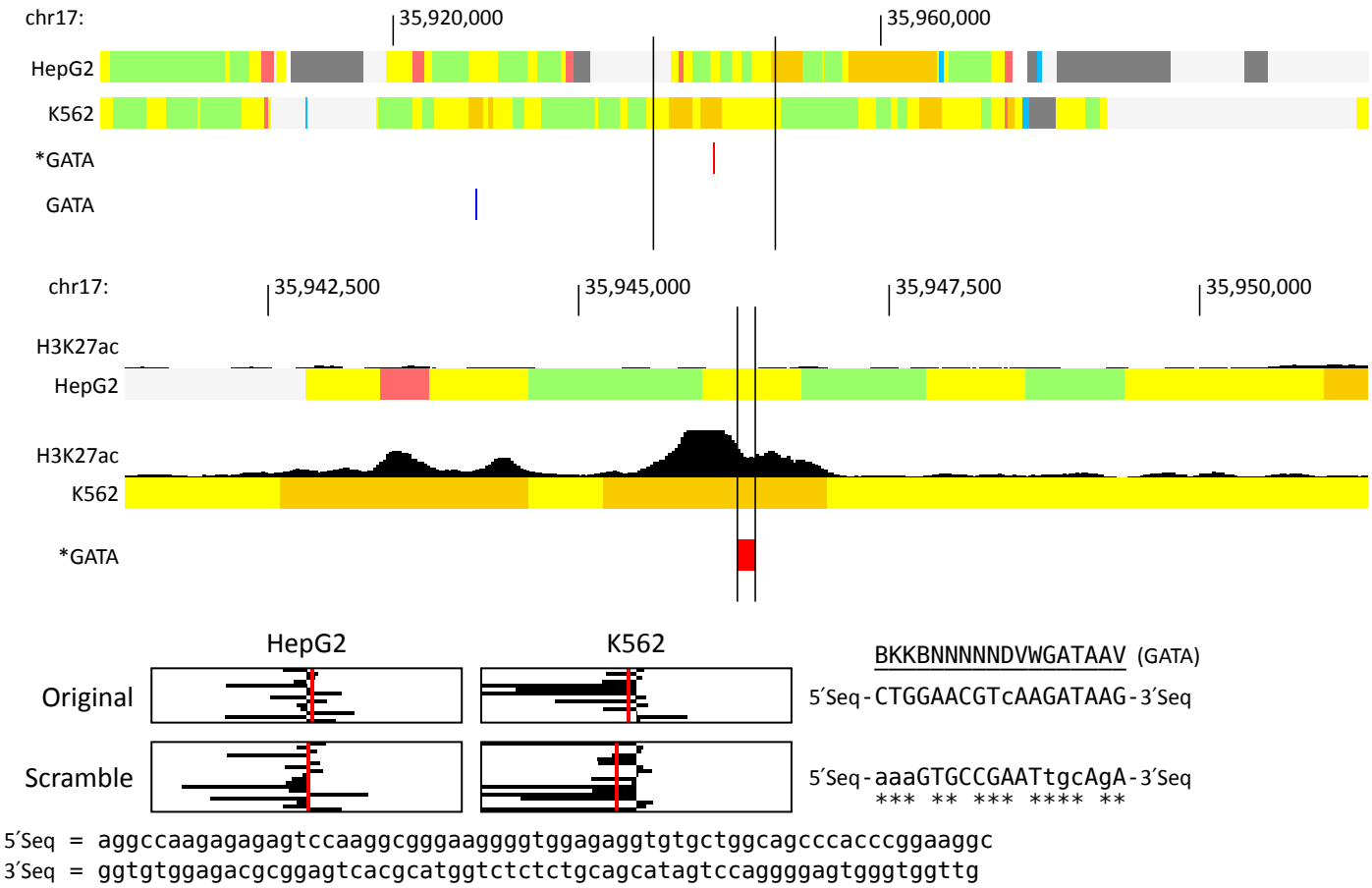
1160 GATA in K562 enhancer (conserved at 60% confidence)

chr17 35946342 35946359 + (hg18)



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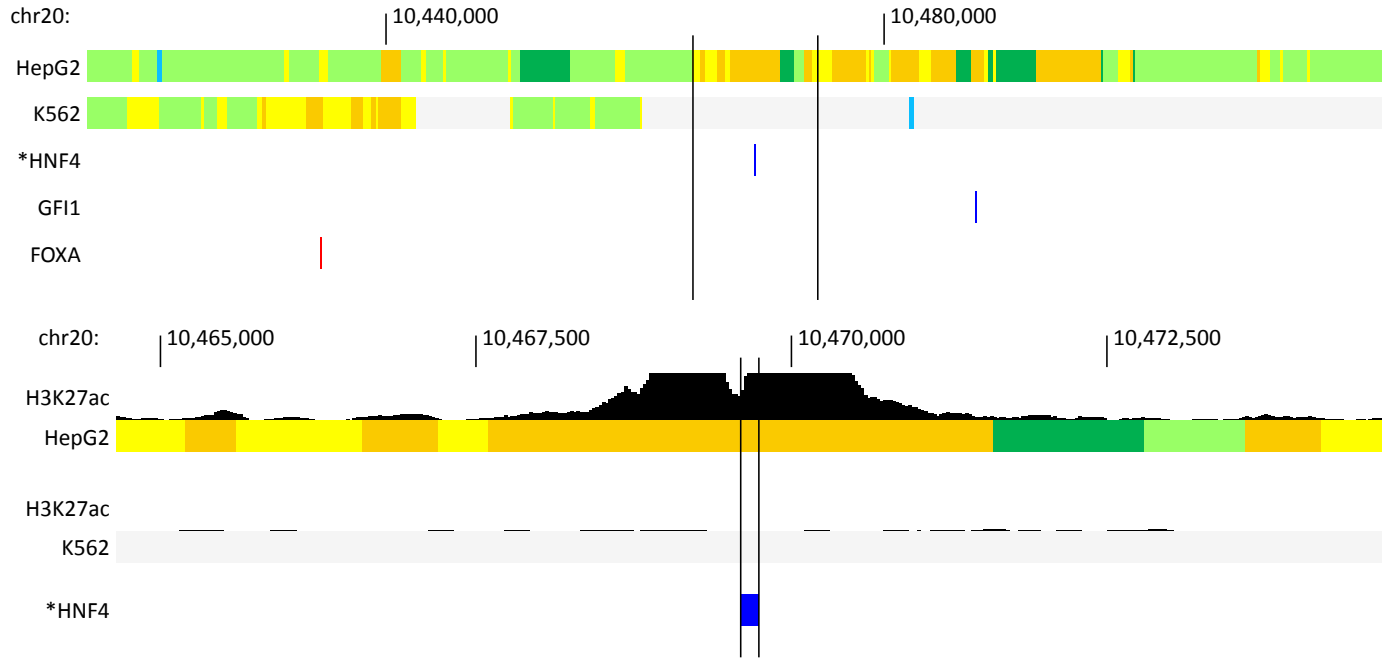
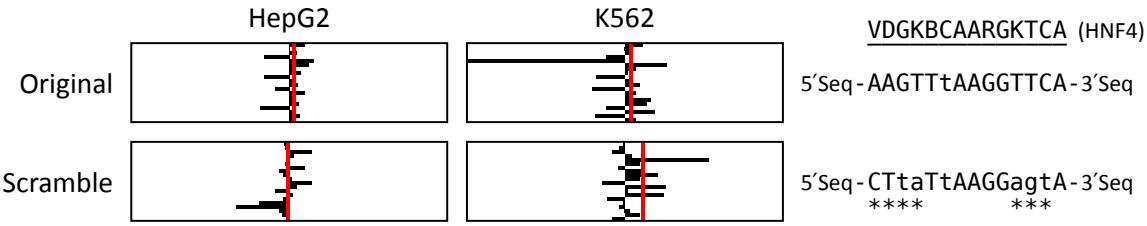
1161 HNF4 in HepG2 enhancer

chr20 10469664 10469677 + (hg18)





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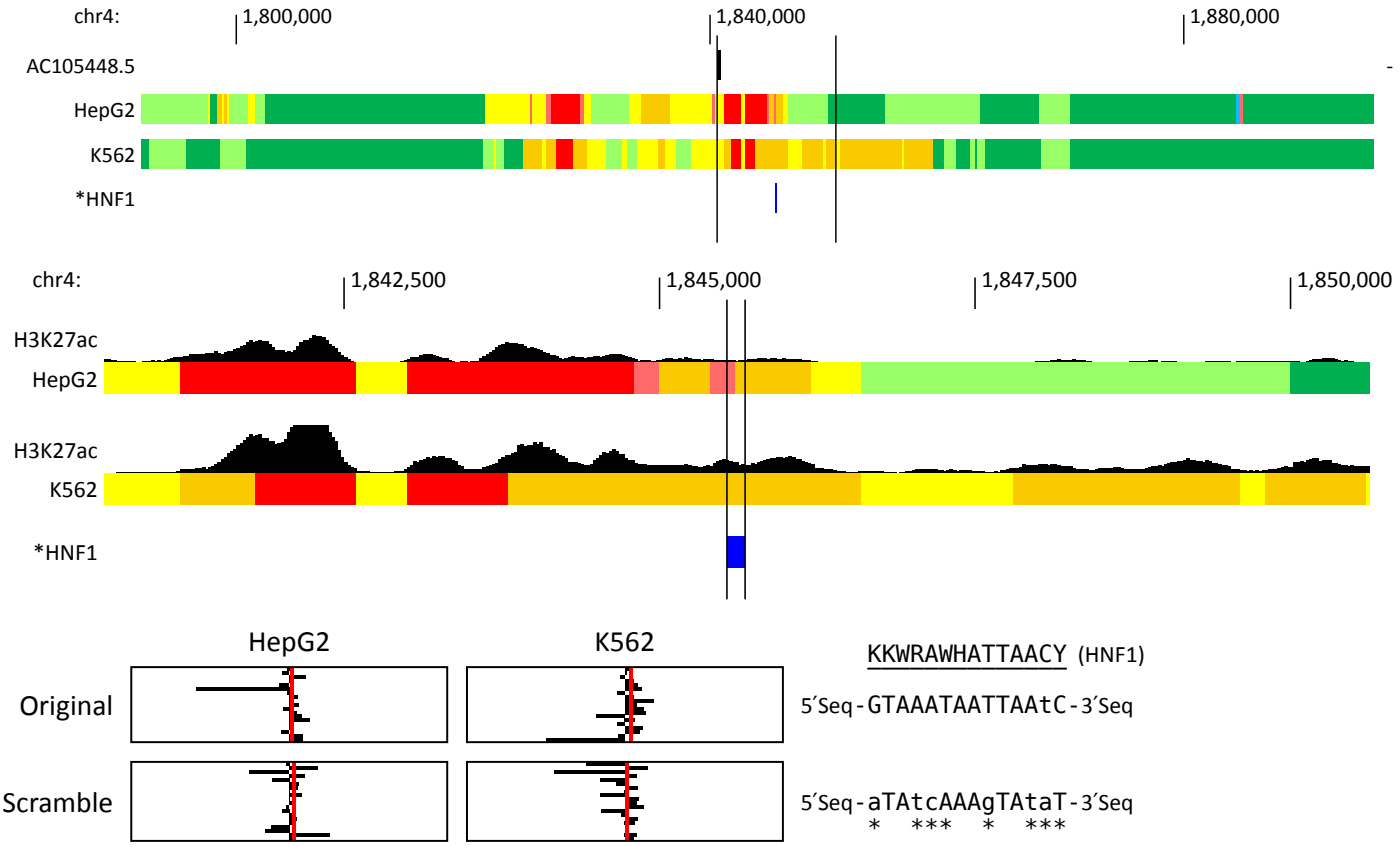
1162 HNF1 in K562 enhancer

chr4 1845600 1845613 + (hg18)



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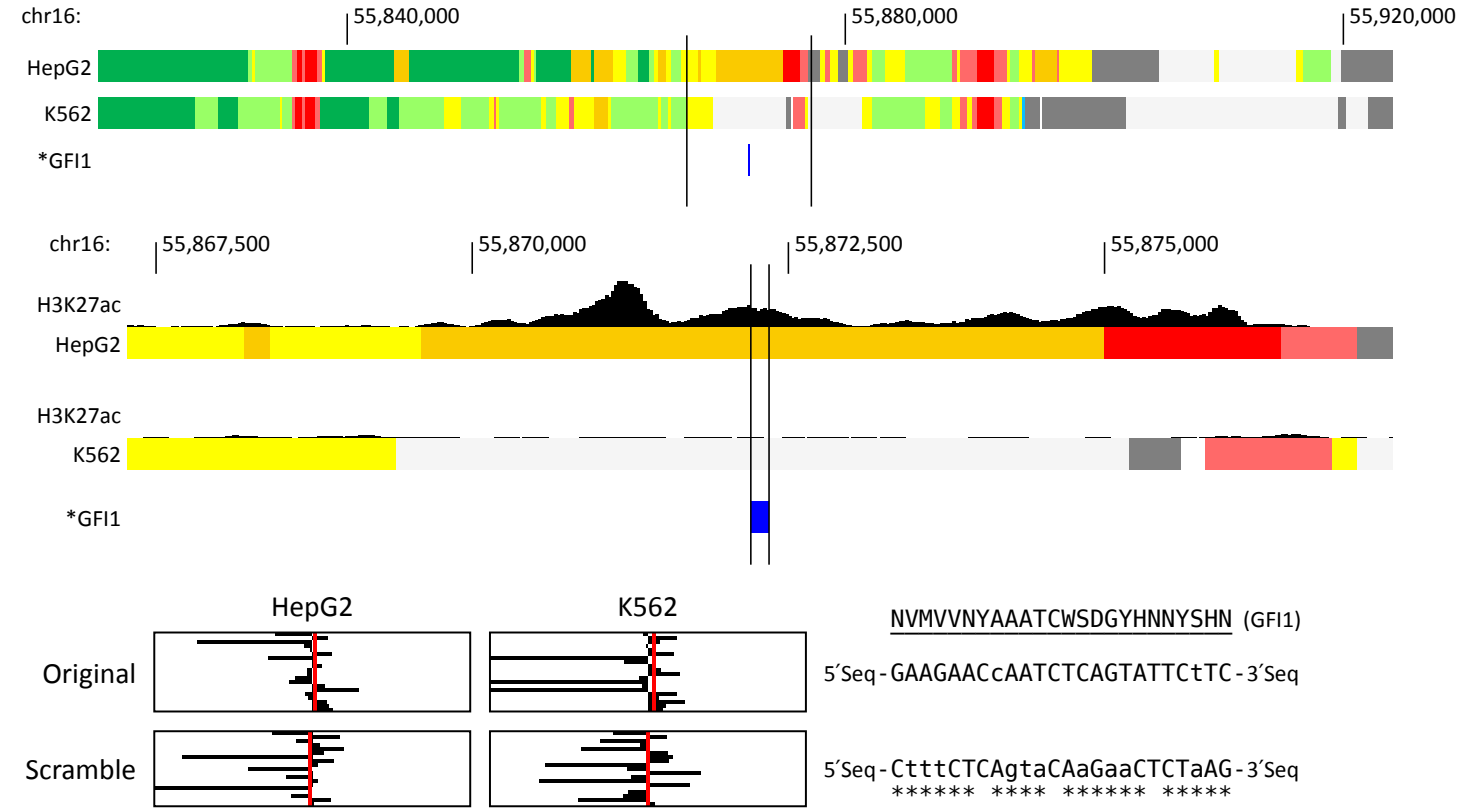
1163 GFI1 in HepG2 enhancer

chr16 55872264 55872287 - (hg18)



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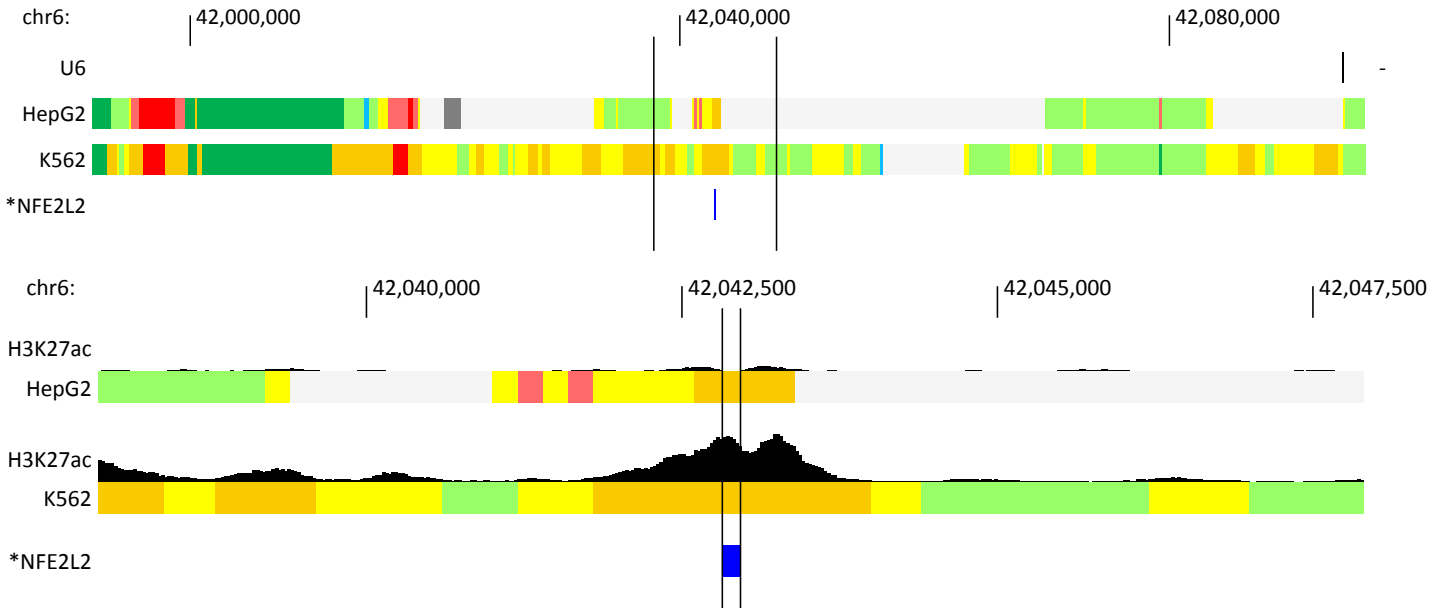
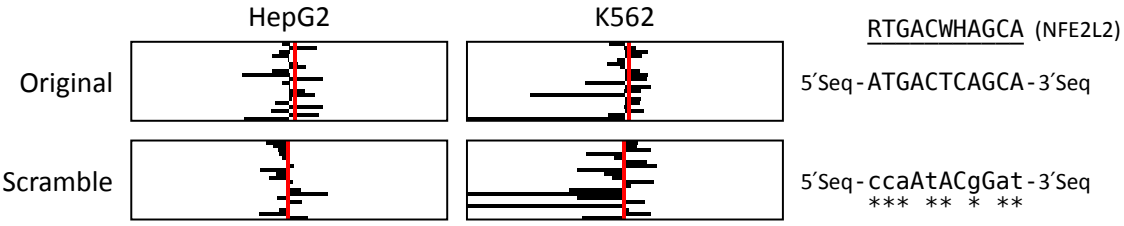
1164 NFE2L2 in K562 enhancer

chr6 42042887 42042897 - (hg18)





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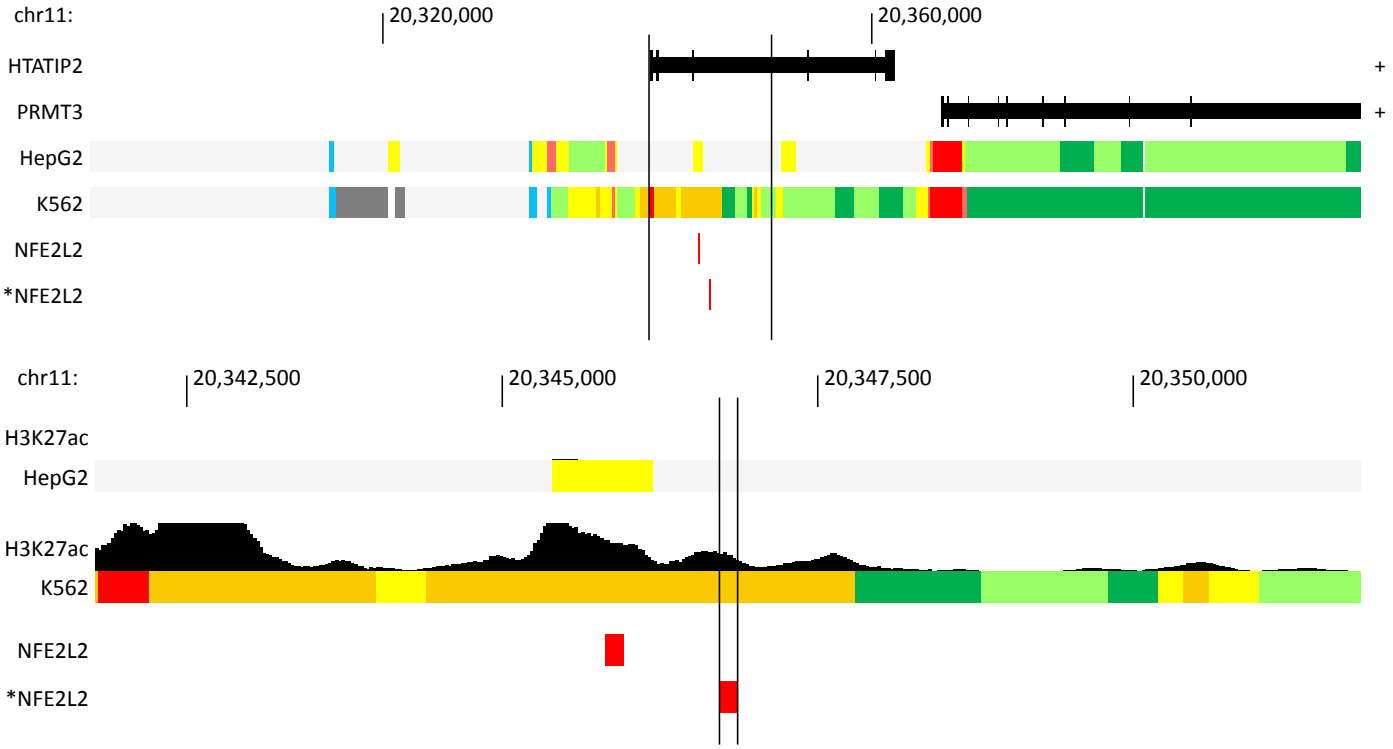
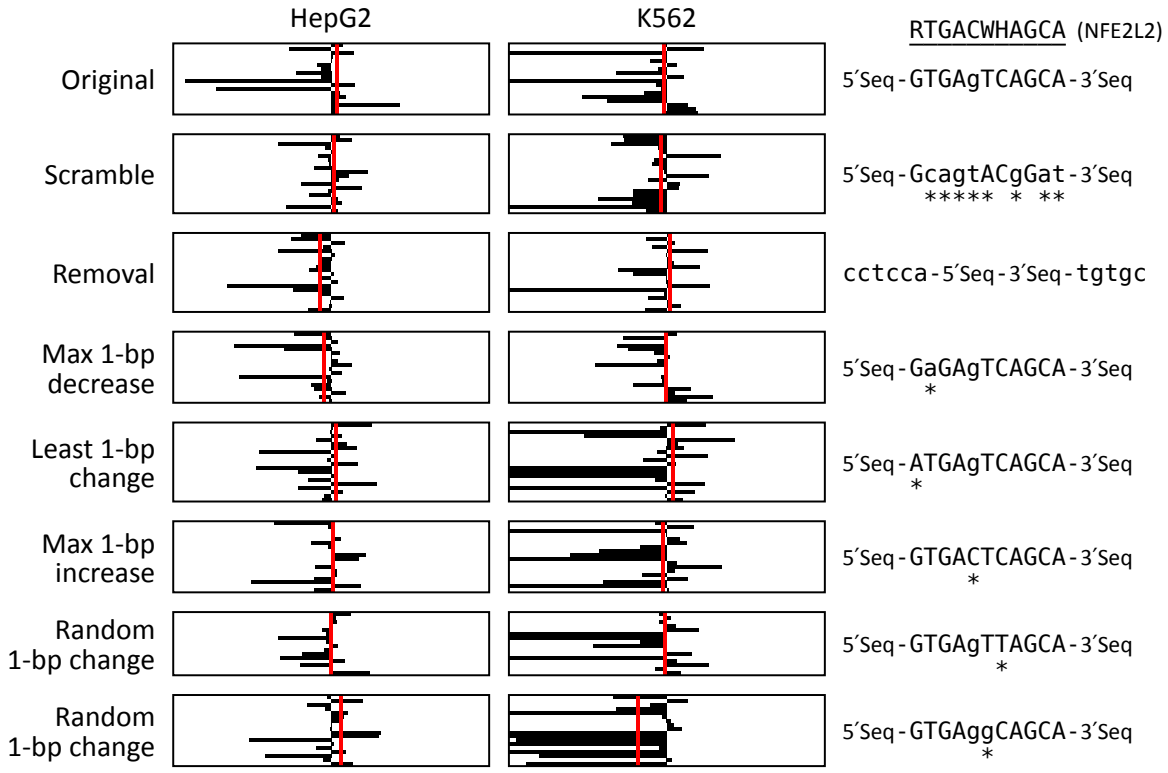
1165 NFE2L2 in K562 enhancer (conserved at 70% confidence)

chr11 20346788 20346798 + (hg18)





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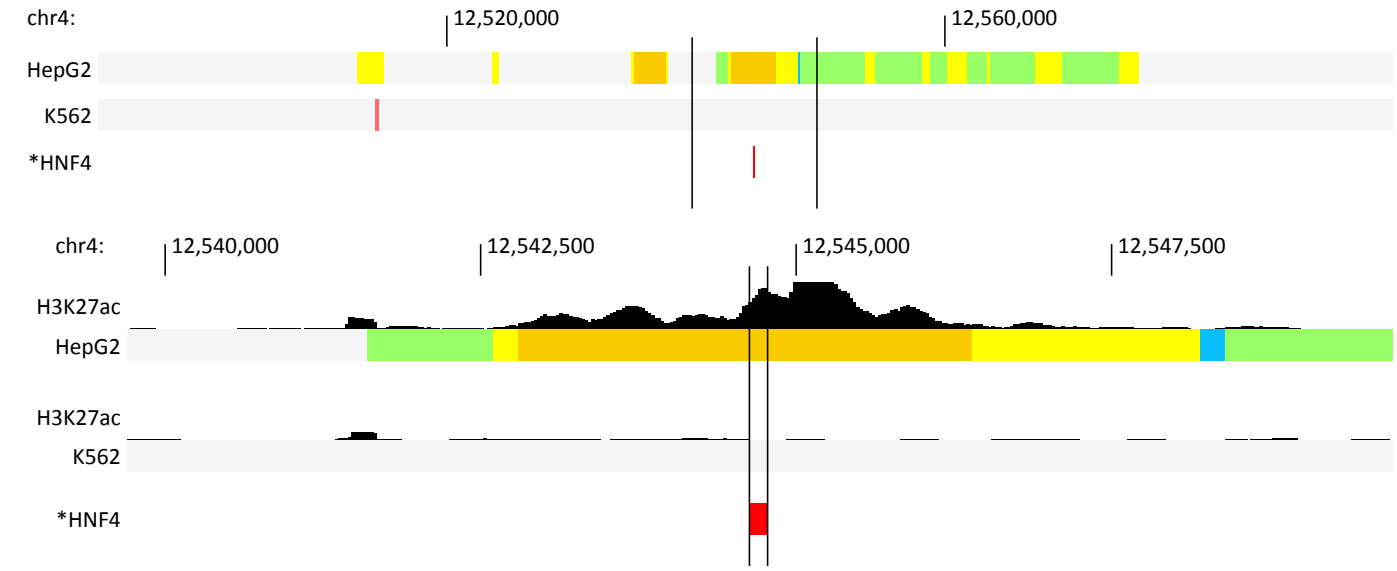
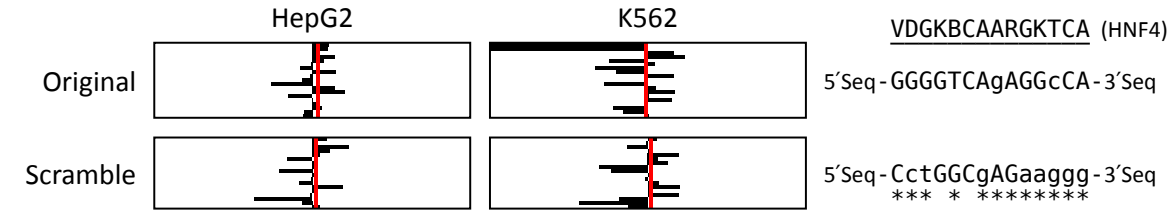
1166 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr4 12544696 12544709 + (hg18)





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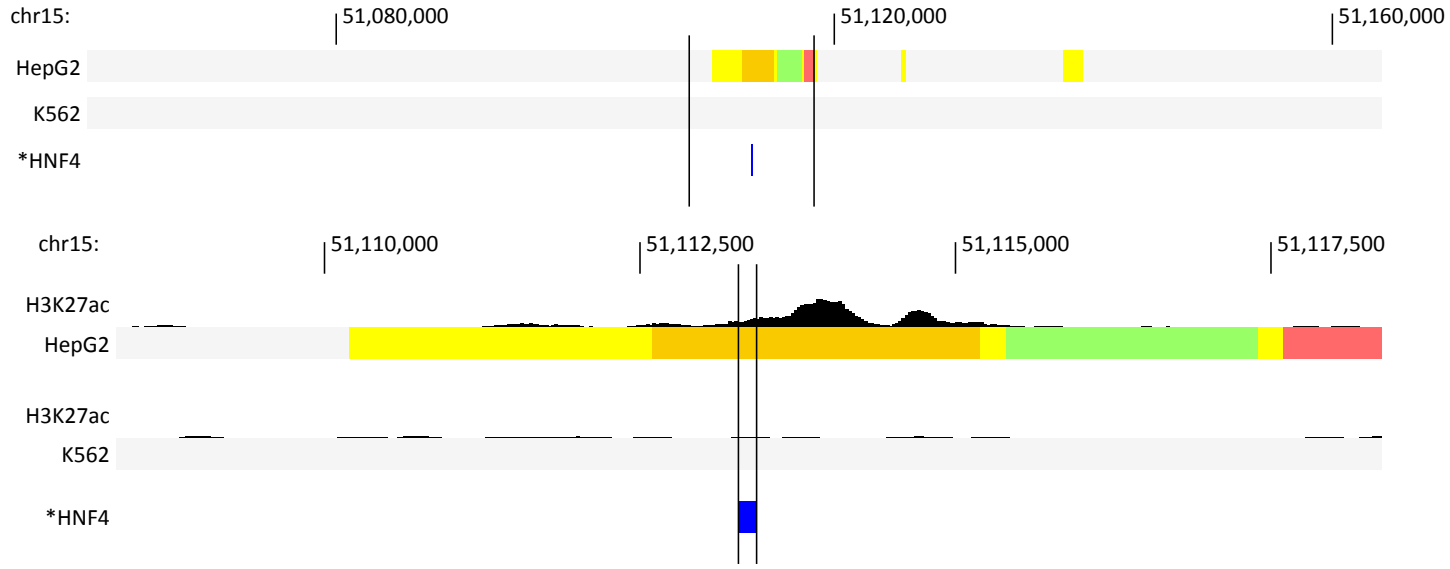
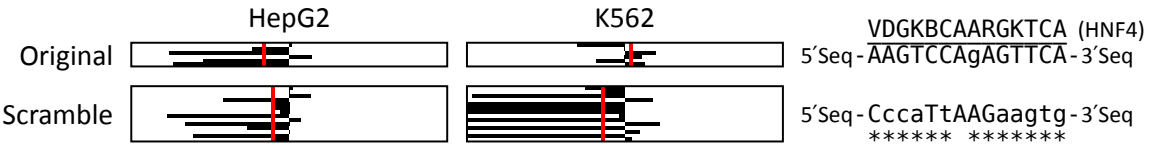
1167 HNF4 in HepG2 enhancer

chr15 51113346 51113359 - (hg18)





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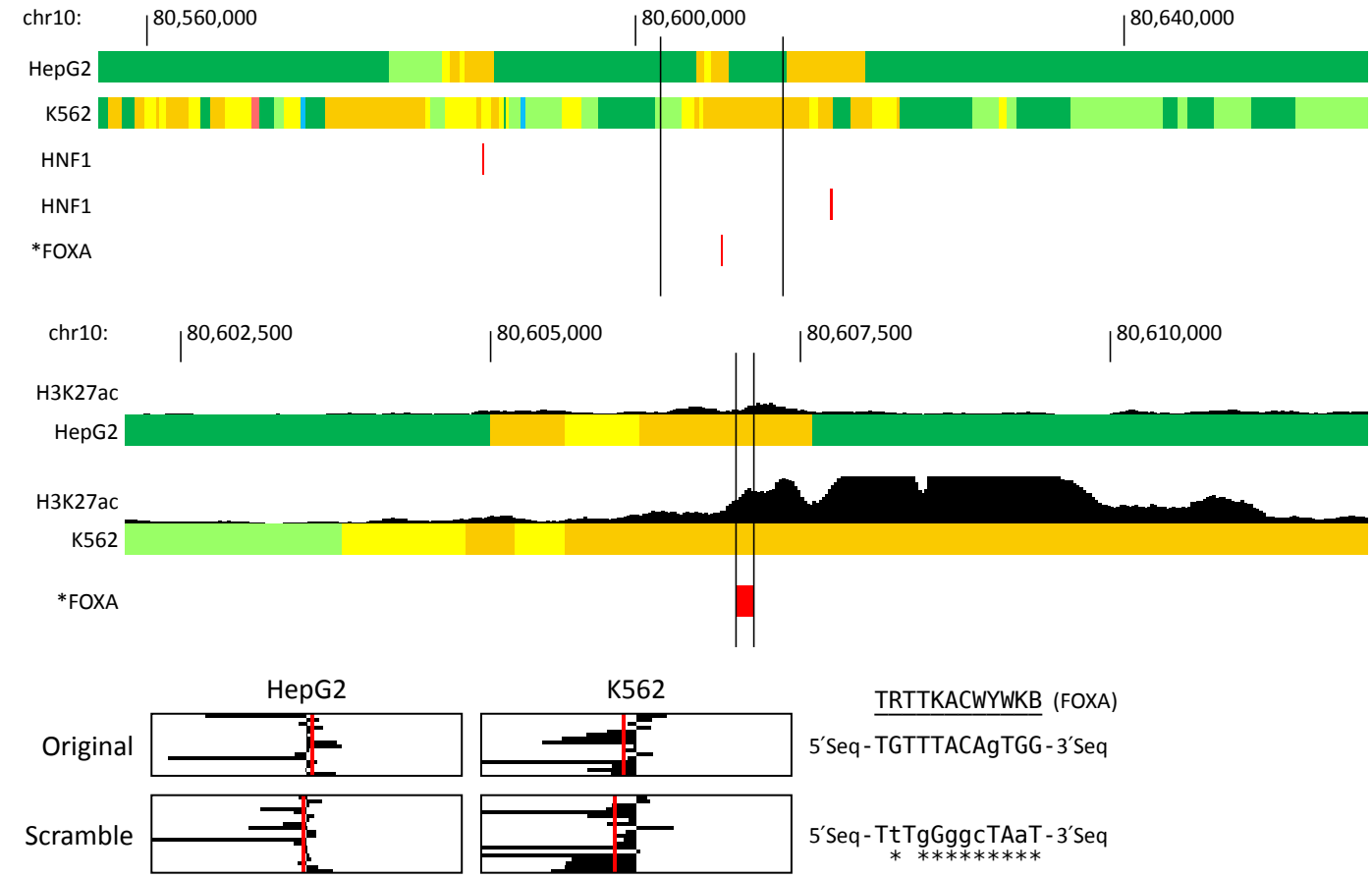
1168 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr10 80607047 80607058 - (hg18)



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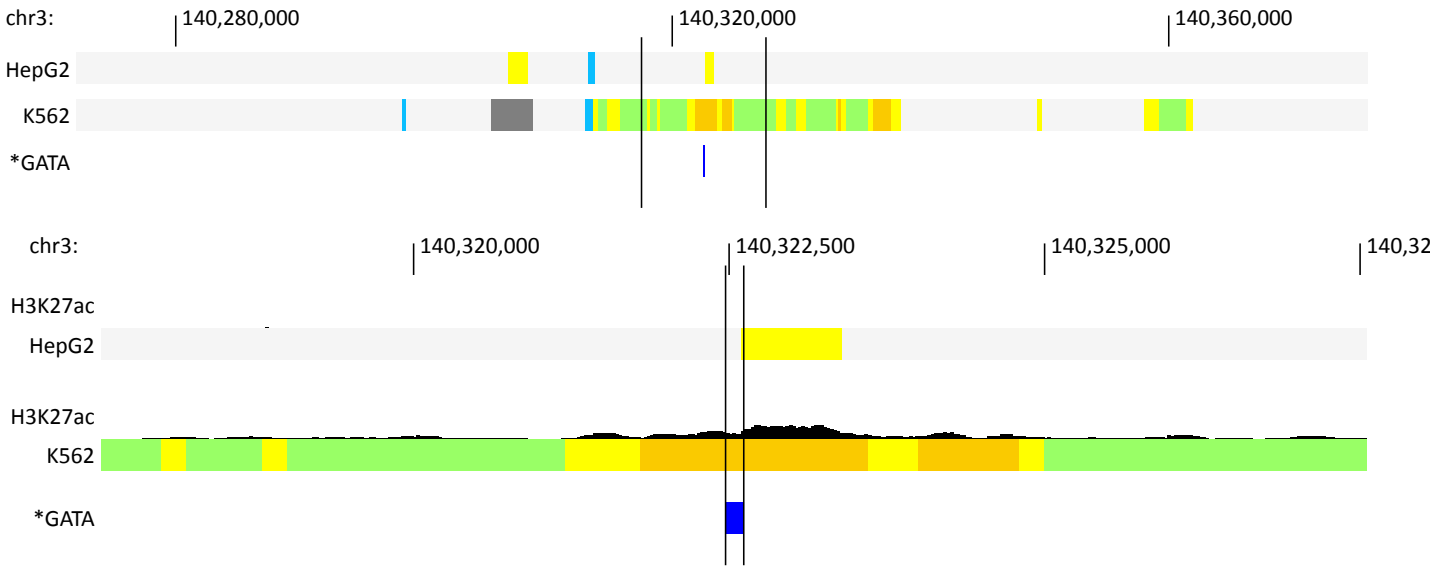
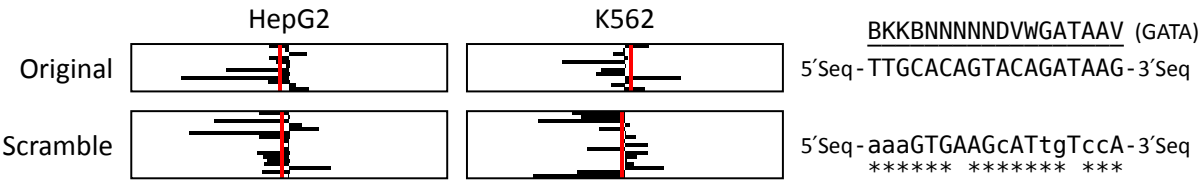
1169 GATA in K562 enhancer

chr3 140322536 140322553 + (hg18)





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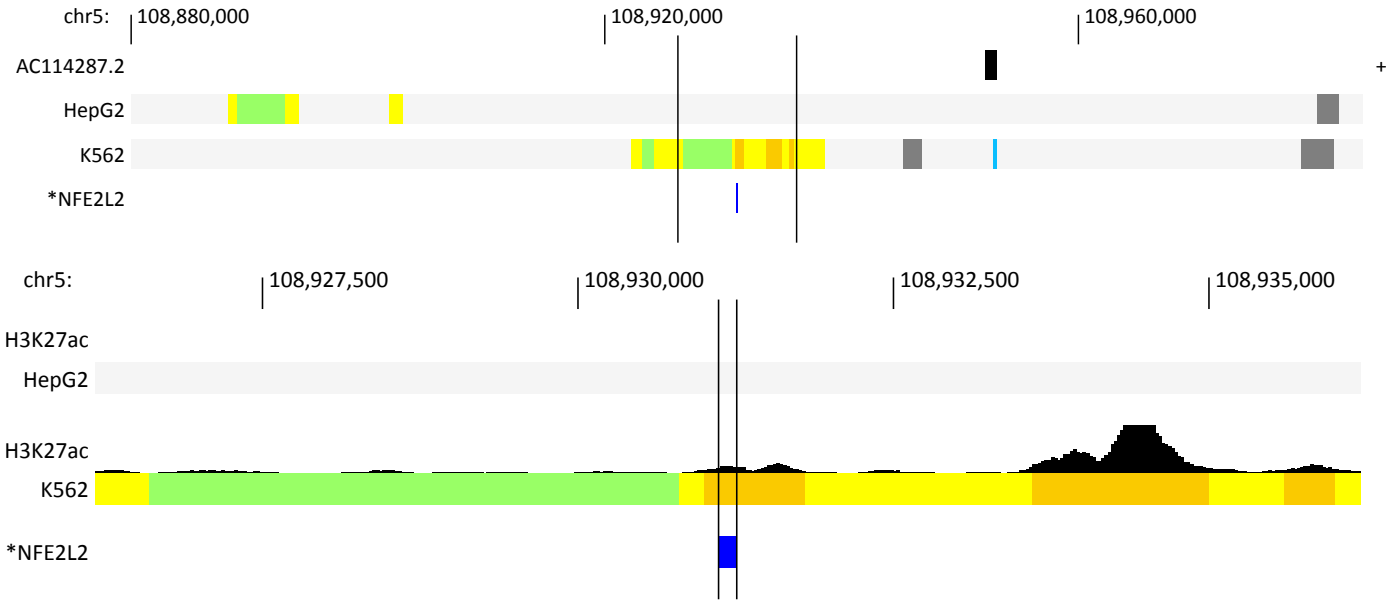
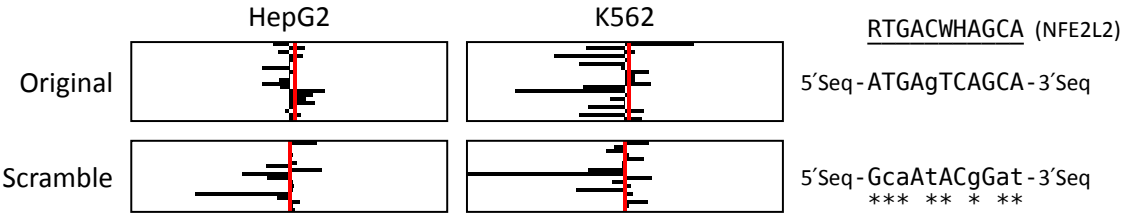
1170 NFE2L2 in K562 enhancer

chr5 108931181 108931191 + (hg18)





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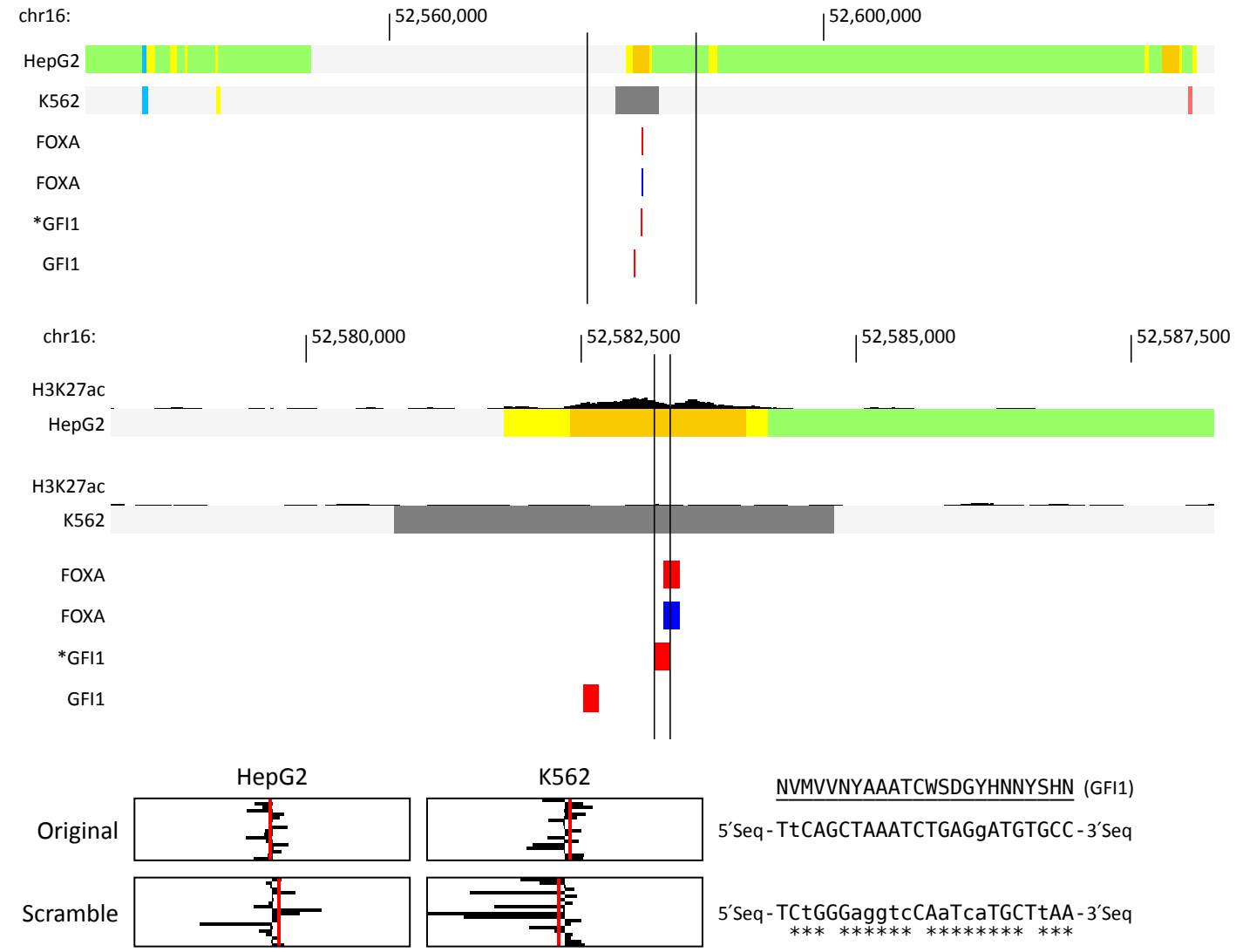
1171 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr16 52583226 52583249 - (hg18)



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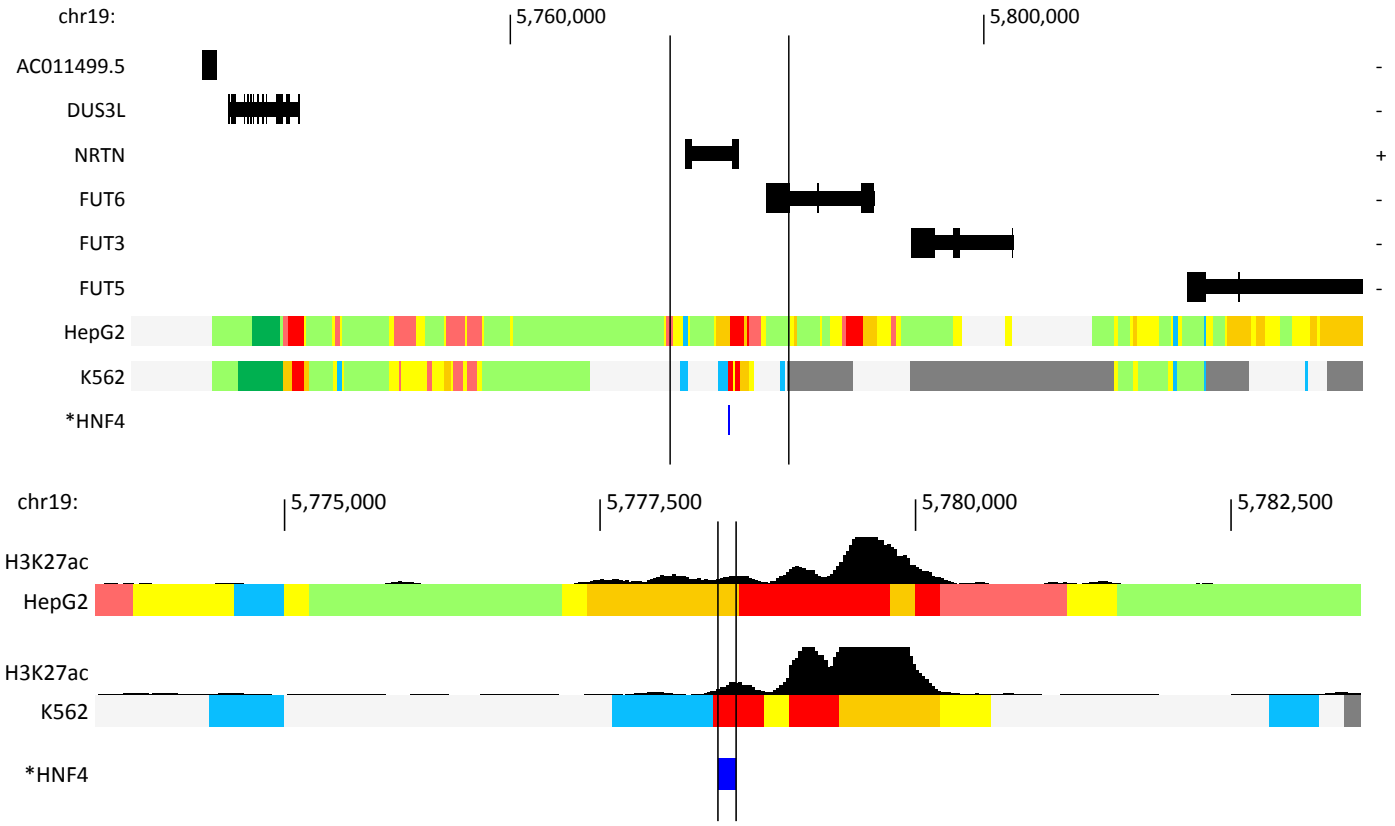
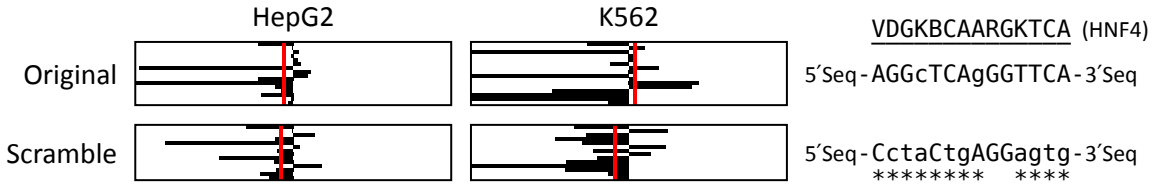
1172 HNF4 in HepG2 enhancer

chr19 5778500 5778513 + (hg18)





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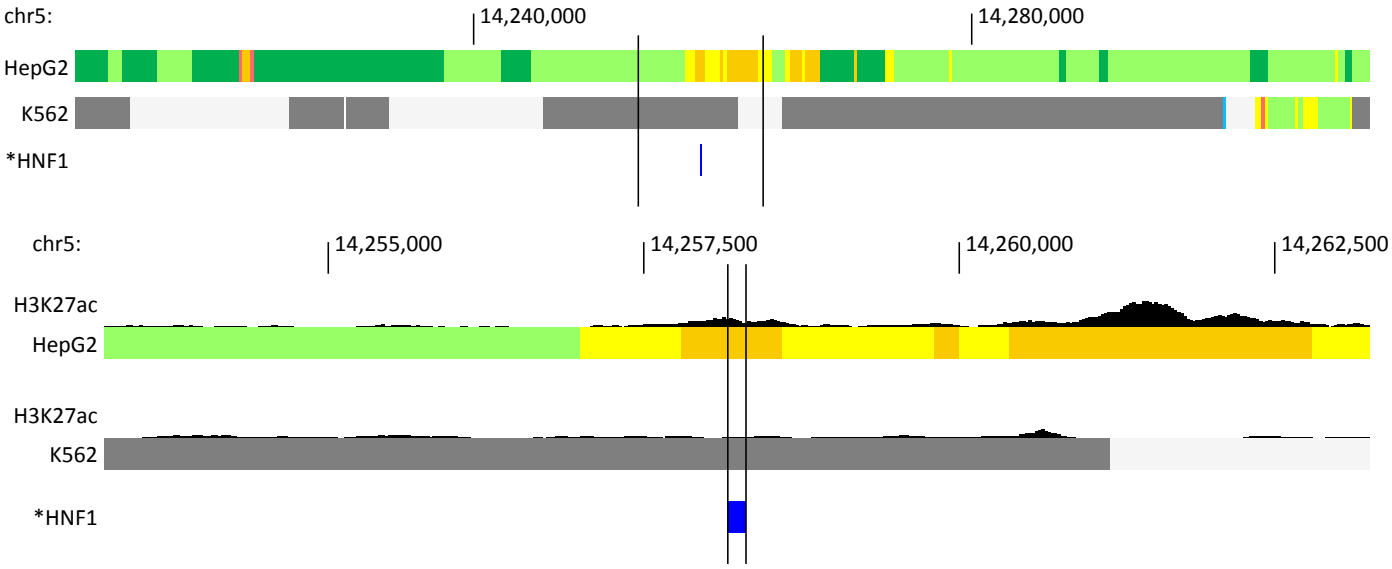
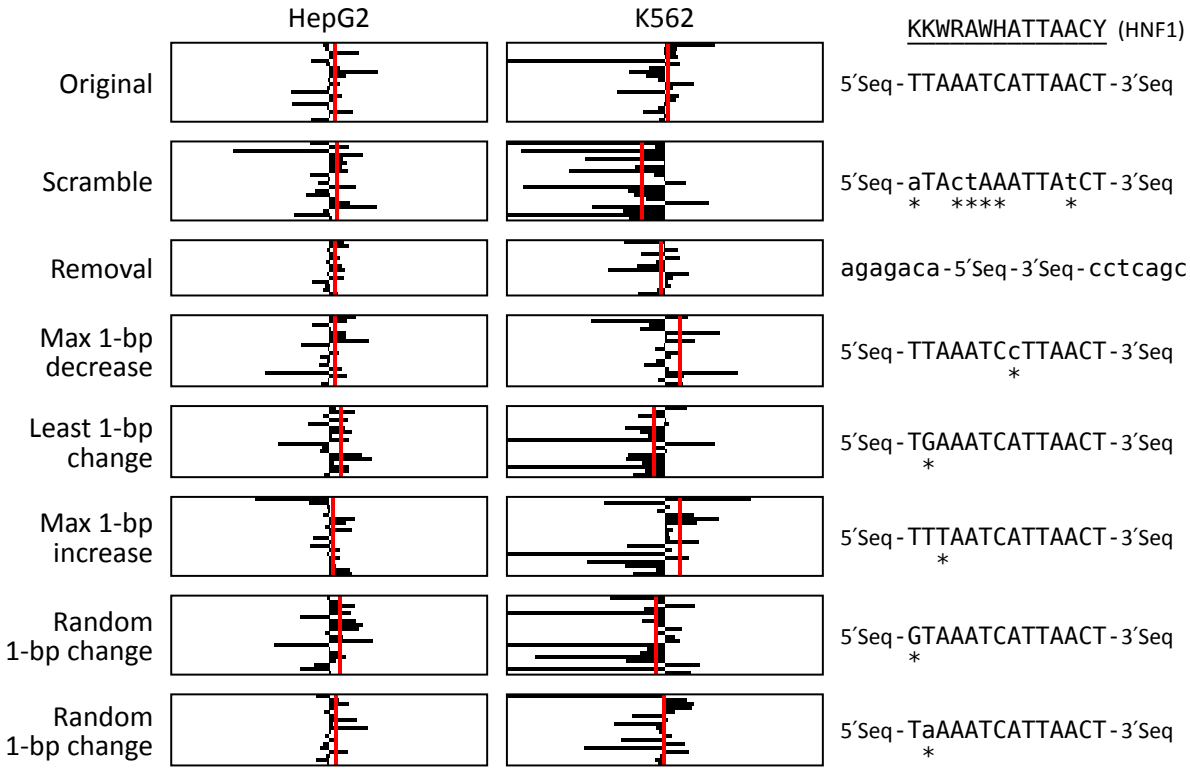
1173 HNF1 in HepG2 enhancer

chr5 14258232 14258245 + (hg18)





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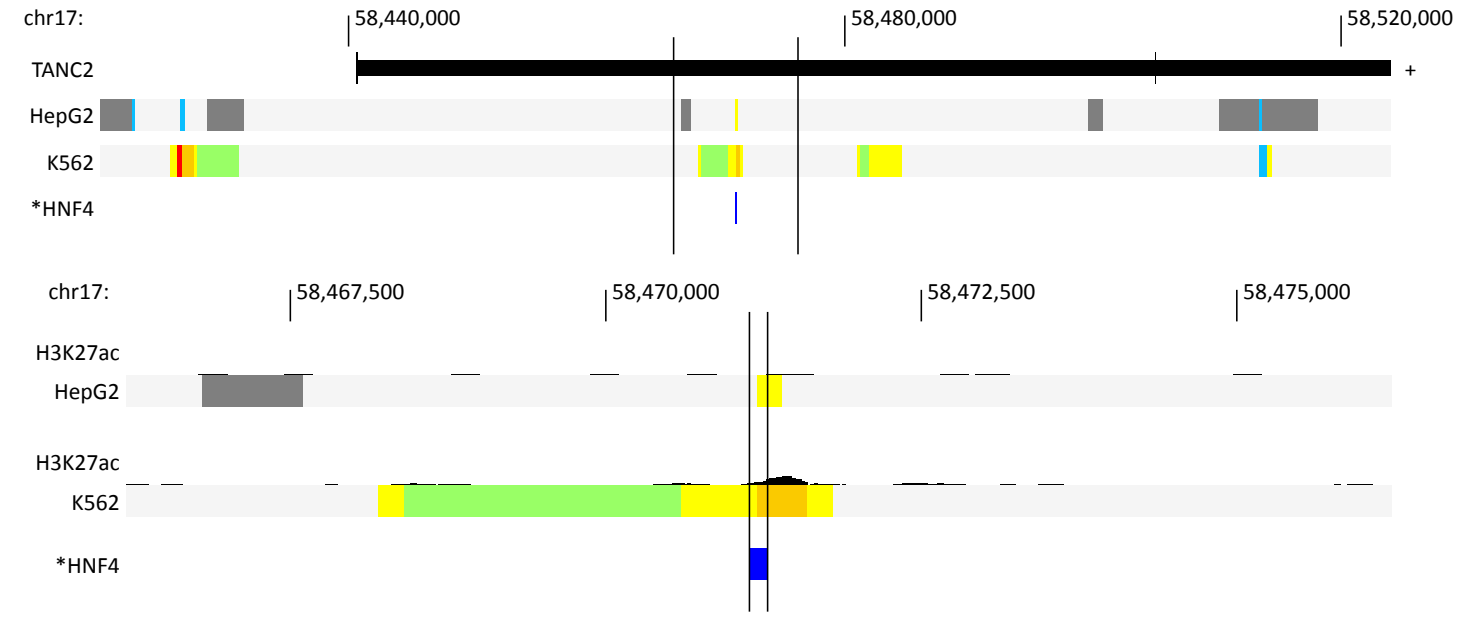
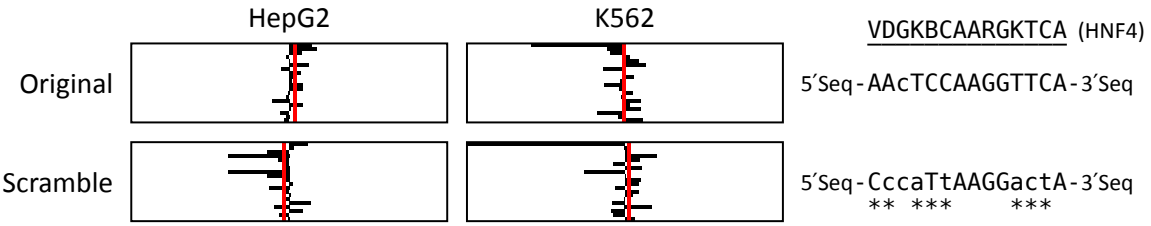
1174 HNF4 in K562 enhancer

chr17 58471204 58471217 - (hg18)





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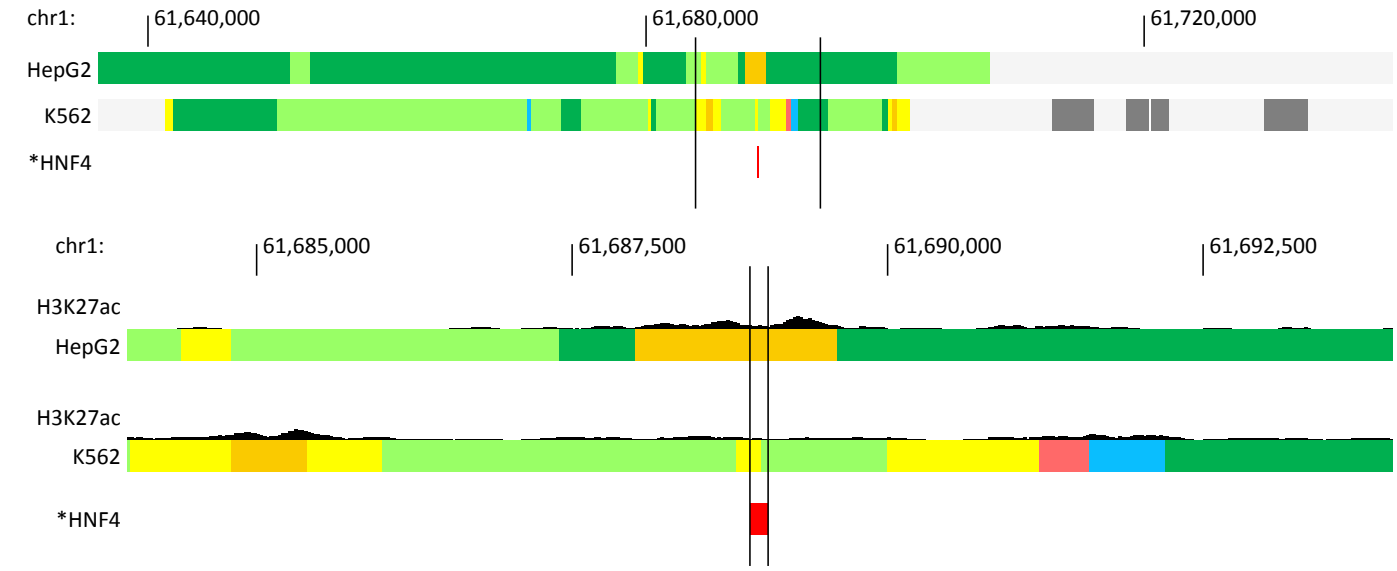
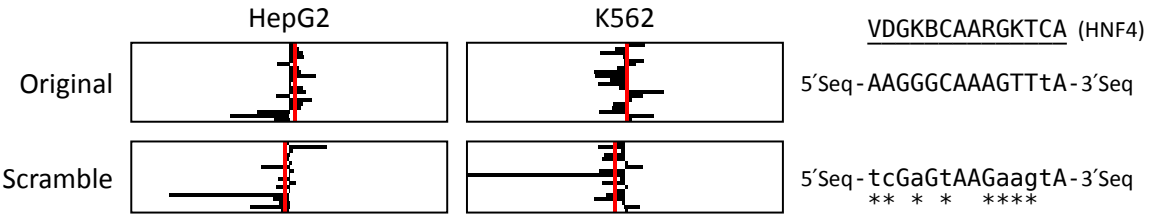
1175 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr1 61688975 61688988 - (hg18)





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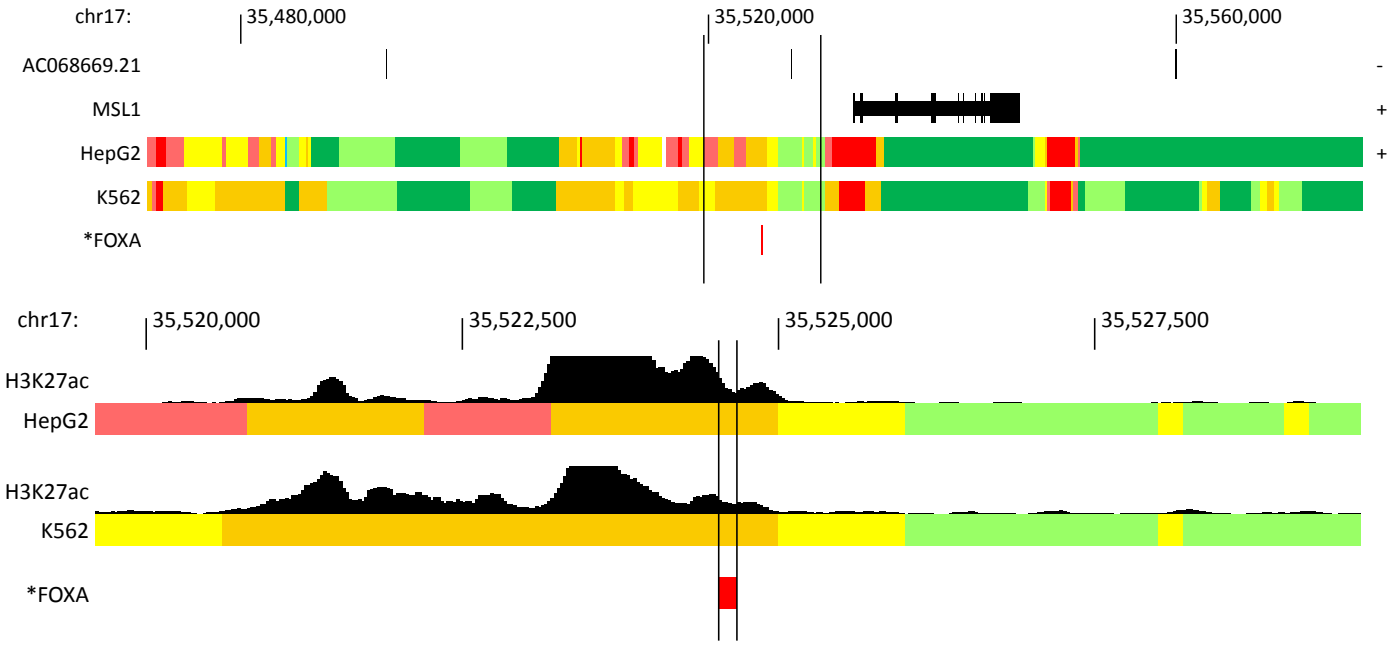
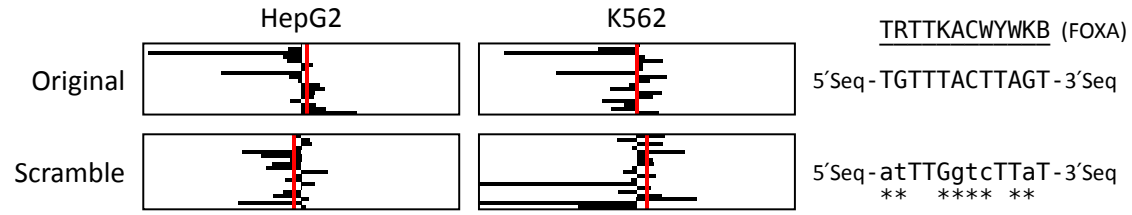
1176 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 35524594 35524605 + (hg18)





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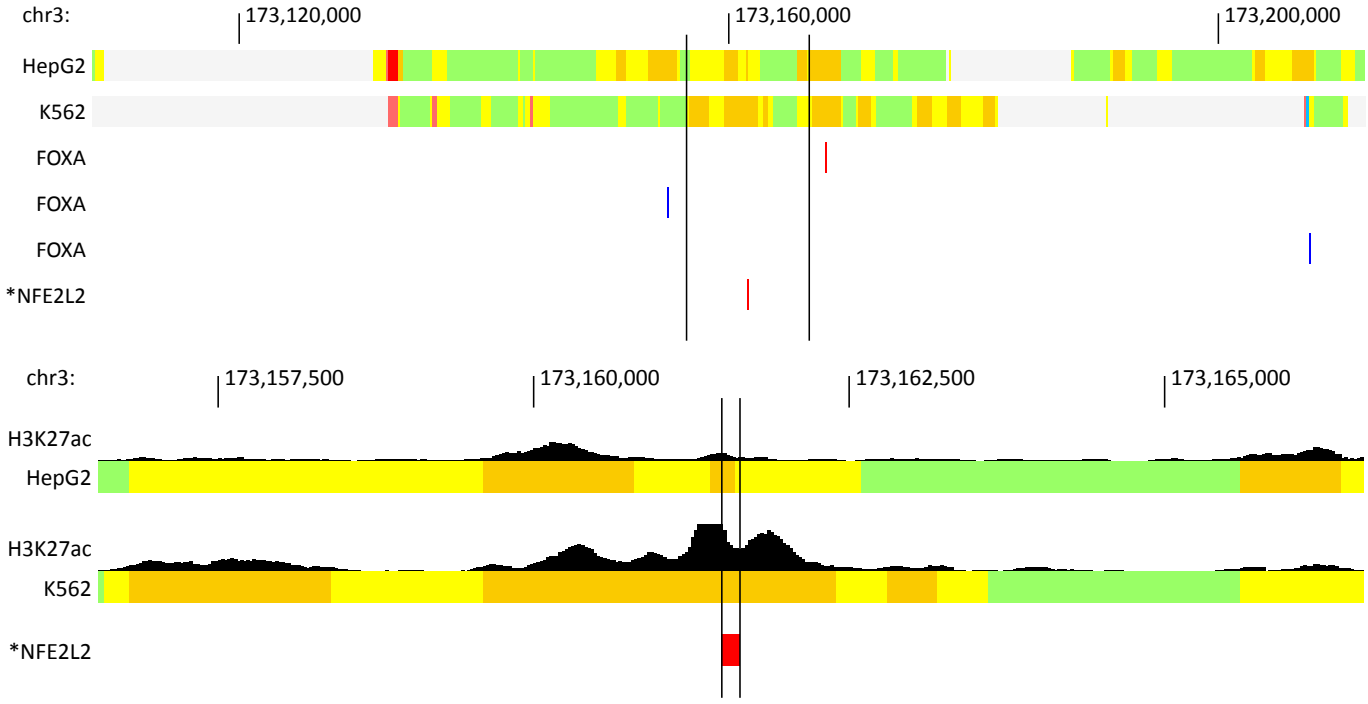
1177 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr3 173161558 173161568 - (hg18)



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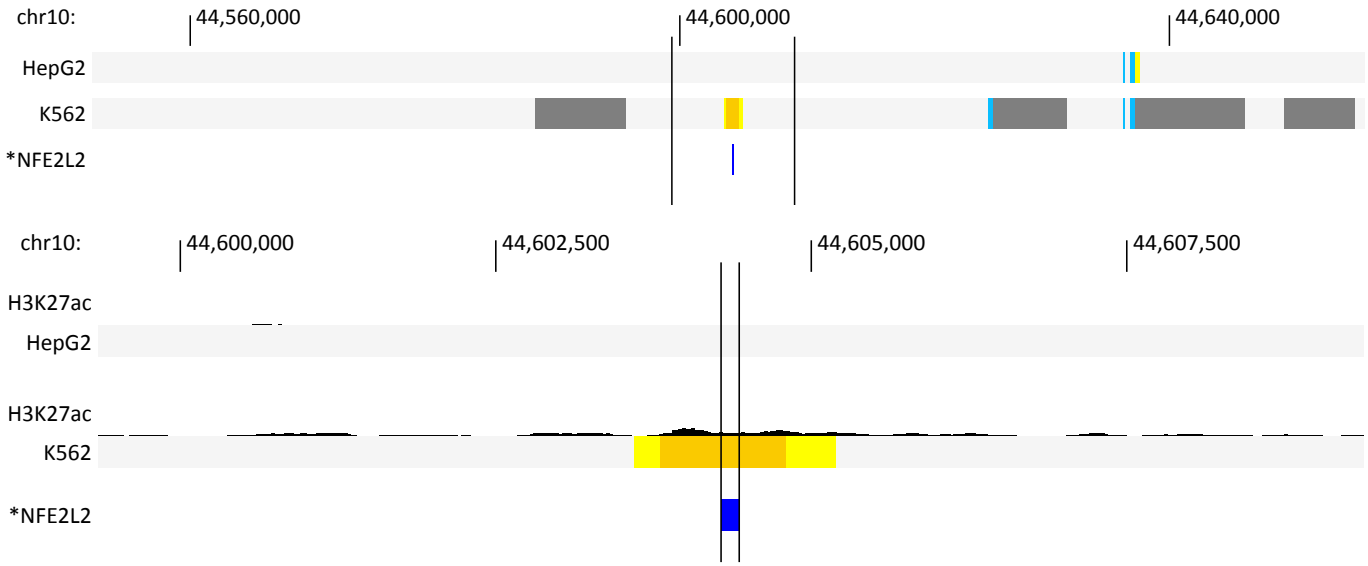
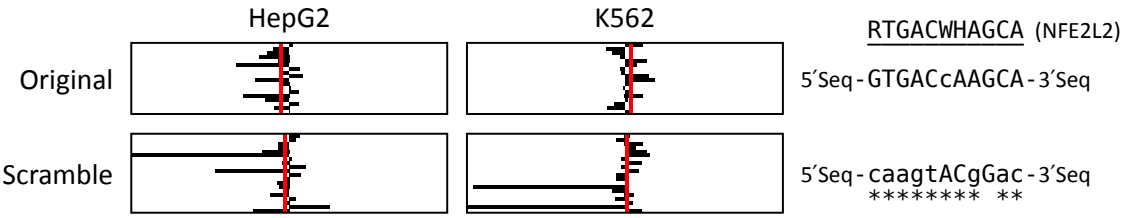
3′Seq = ggtaacagcaaagccccataagccaccctgtggaaacgcccatgaggtccaccctctcaggcaagtt

1178 NFE2L2 in K562 enhancer

chr10 44604352 44604362 - (hg18)

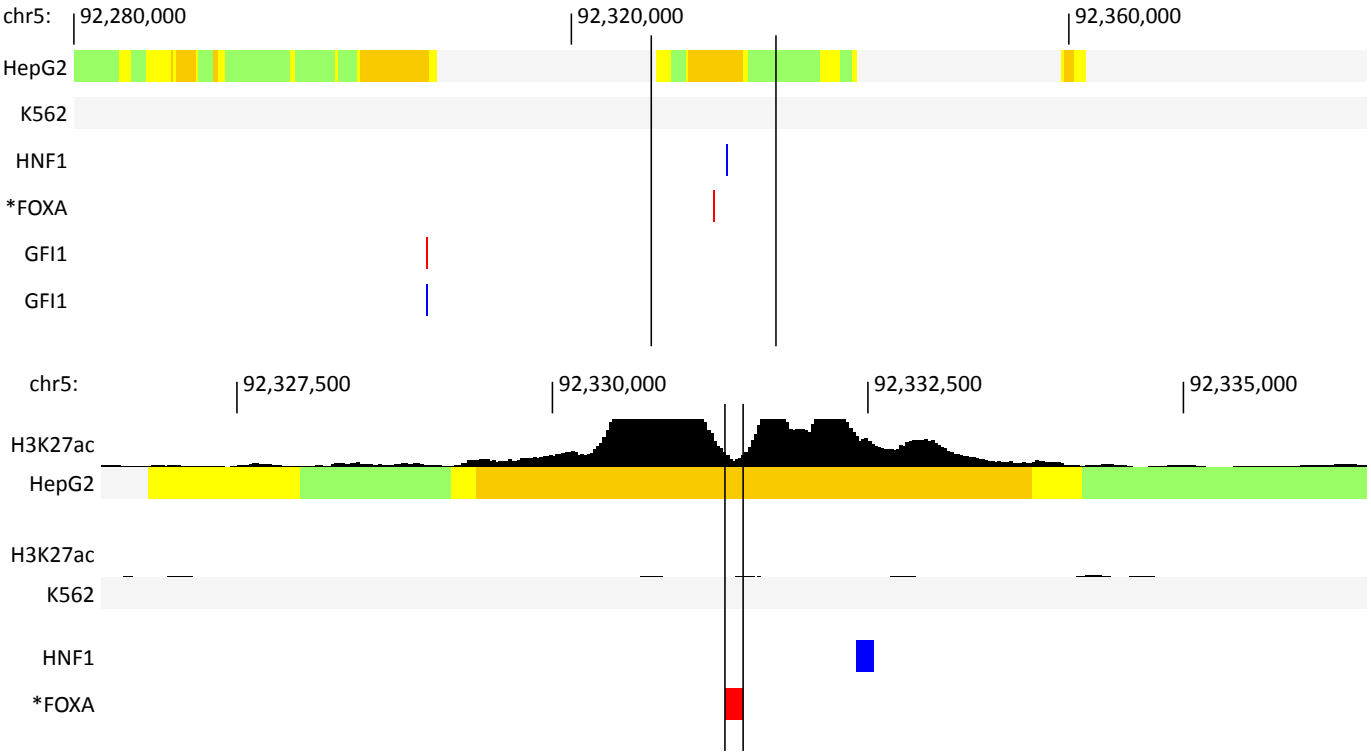


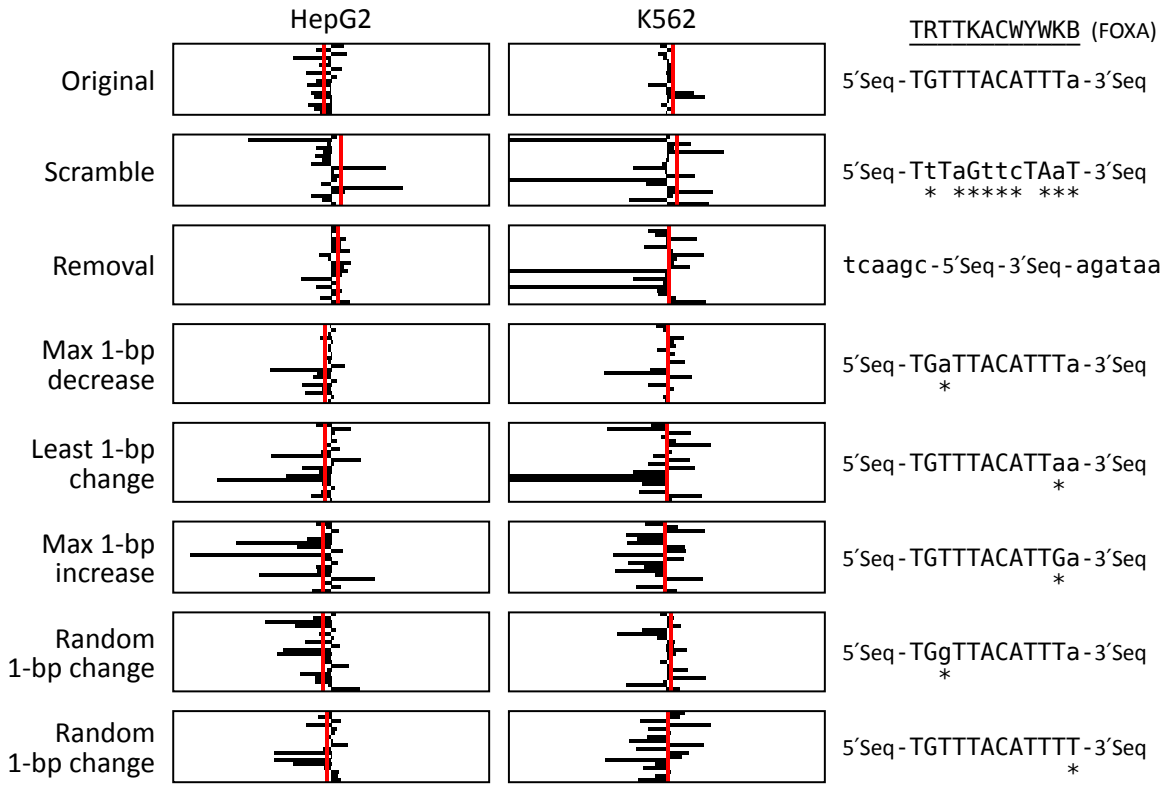


5′Seq = ttcatgtaacccttgtccataatccctcaagataagatgttttcatgttaagttaaaataggatcag
3′Seq = attgctcaaggtctgtcagataattatgcattggagaggtgattggaaggcaggtccctctgattct

1179 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr5 92331434 92331445 - (hg18)





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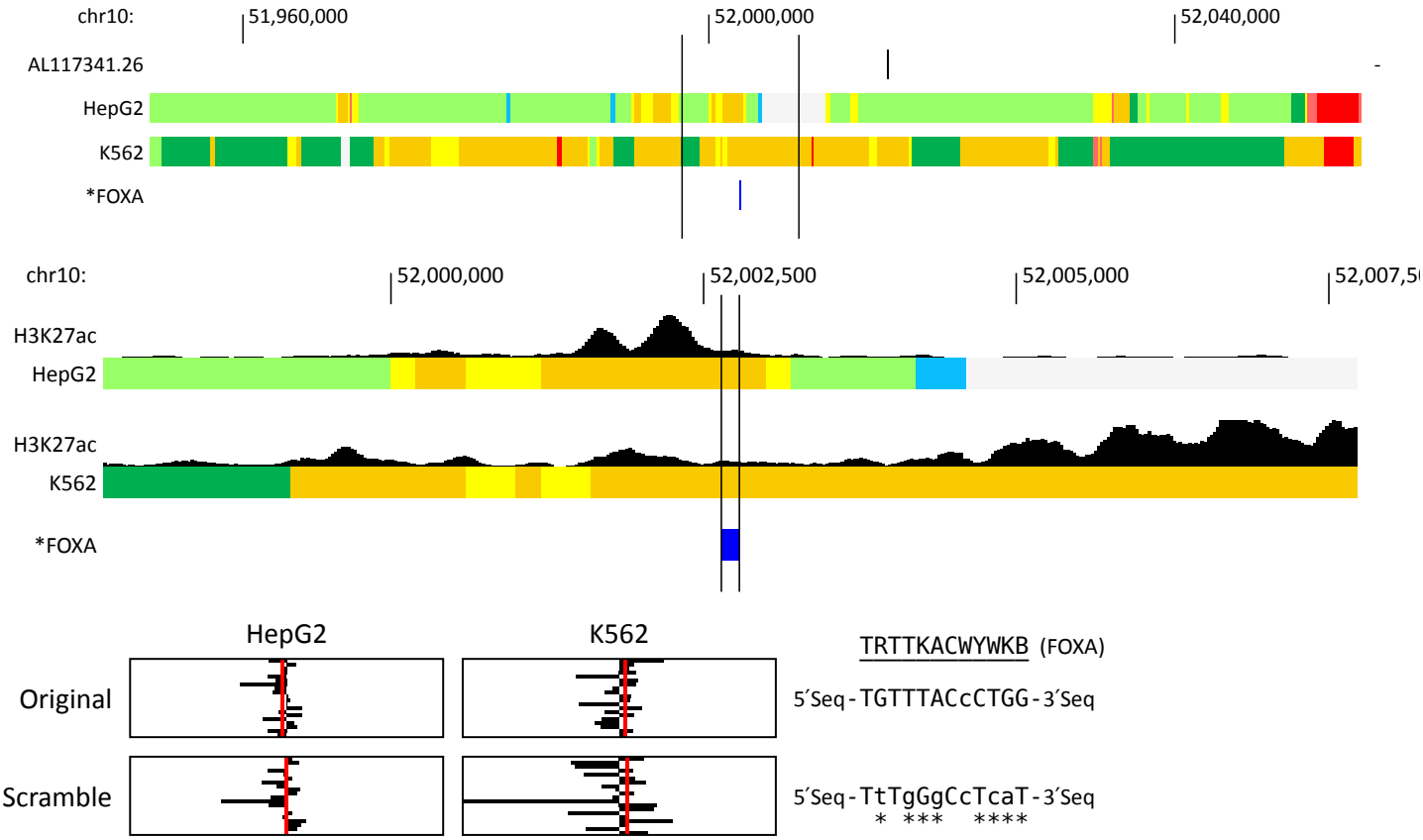
3′Seq = ggcttttagcagaaataccgaagtgattttgcaagtccttttggtatactgaaaaactggaaatgt

1180 FOXA in HepG2 enhancer

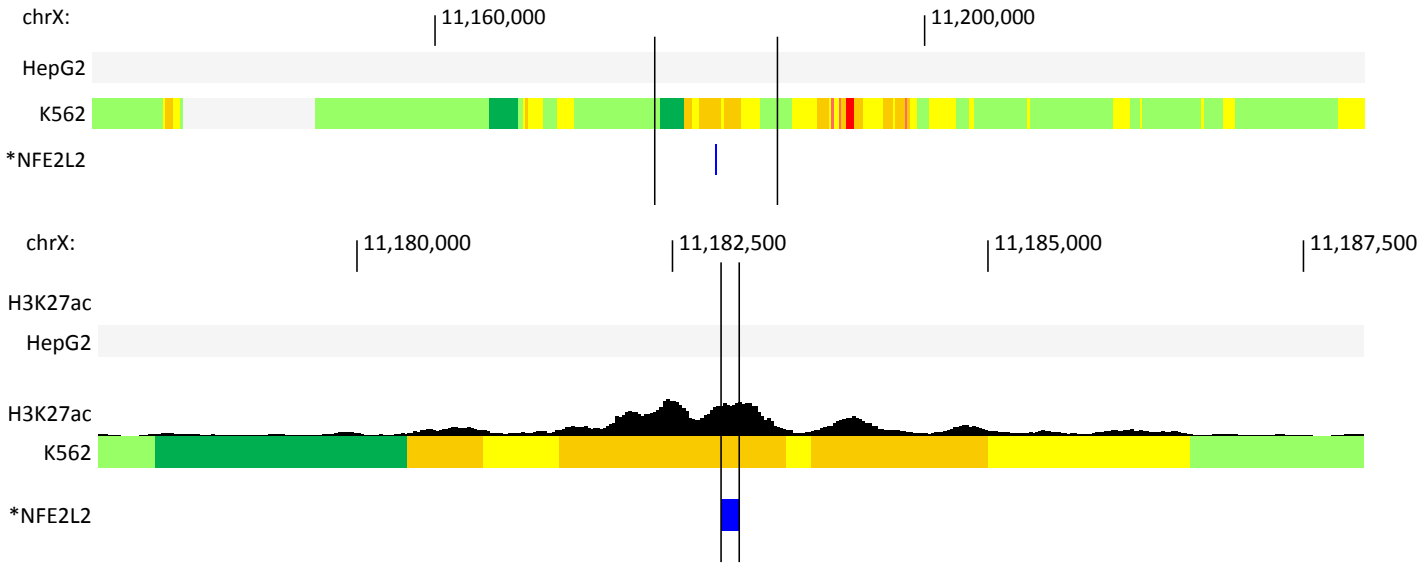
chr10 52002709 52002720 - (hg18)

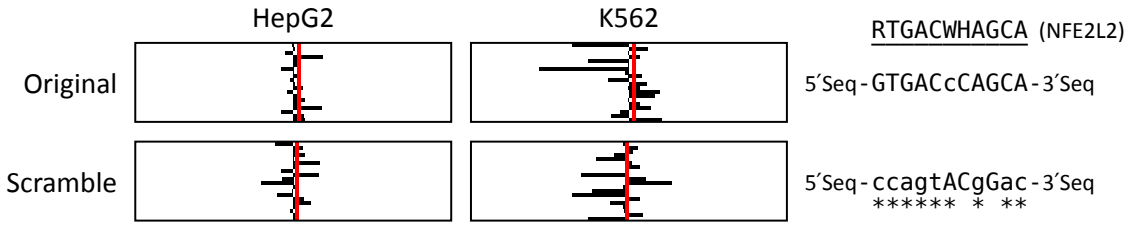


5′Seq = tagatgctttttctgcagctattgagatgatcatgtgatttgggccaaactttcaaggtacatagaa
3′Seq = tgcaacagtgataatagggacagaaagttctgagaggaaagctagtctaggggtgctaggtcttct

1181 NFE2L2 in K562 enhancer

chrX 11182952 11182962 - (hg18)

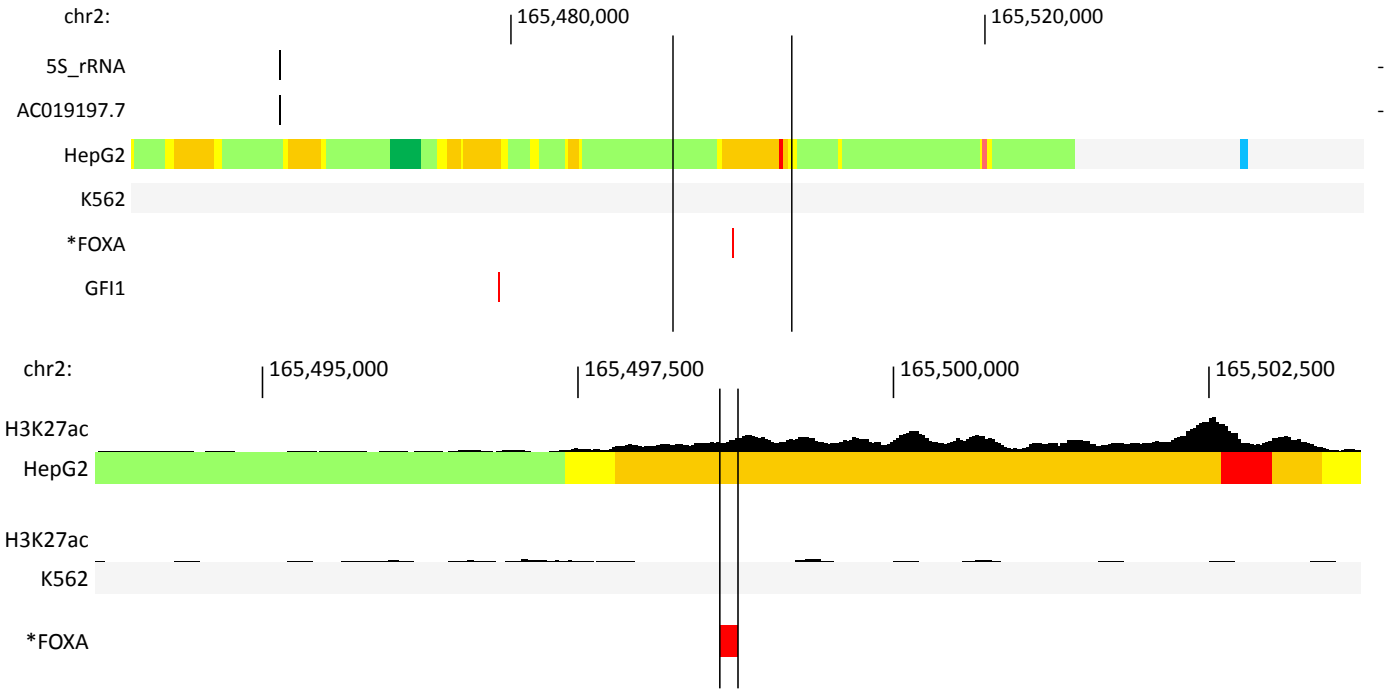


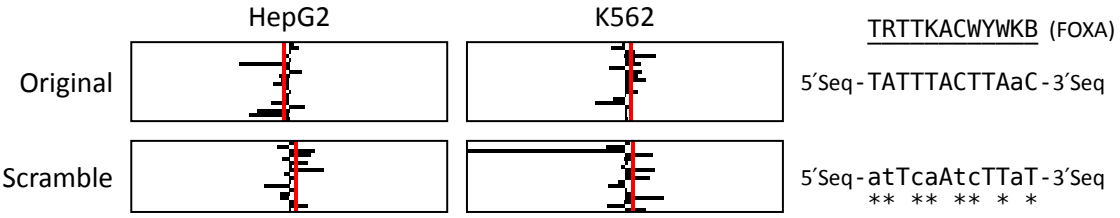


5′Seq = gtaggaccctcacagtatctttctacatagtttcctcaggcctatatgcataatgagataagatcat
3′Seq = gatacttgagattttgacatttgcaactaactgagaaaatccacagtgaactaaaagaggatttgac

1182 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 165498691 165498702 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTTACTTAaC-3′Seq

5′Seq-atTcaAtcTTaT-3′Seq

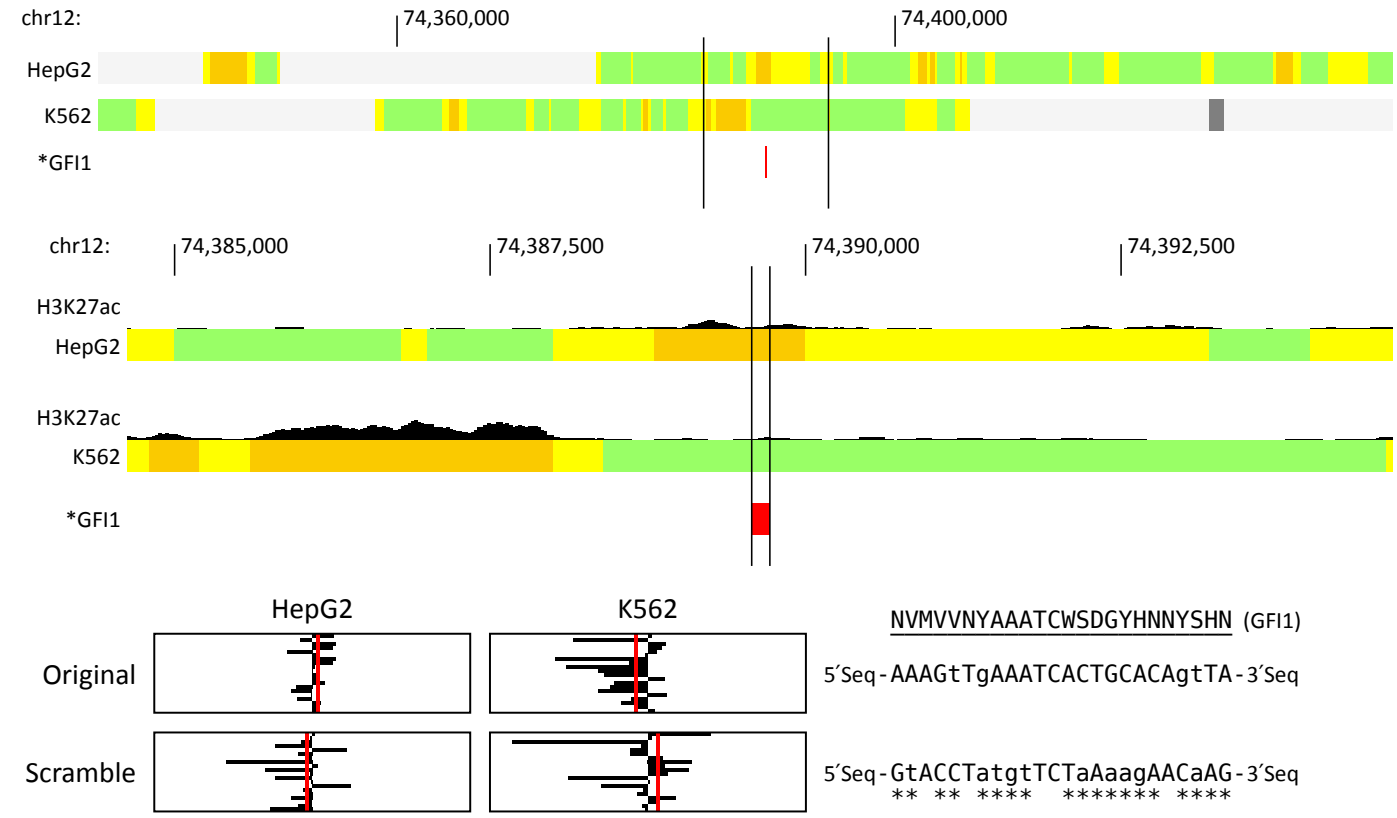
** ** ** * *

5′Seq = ctgtctgaccttcctctagtagtgatacaatattttatctgagcctttgaaatgtaatagcaaggat

3′Seq = tctttcaatatttagatgttaaagaagtatgtttttttaatactgtgccacctttttatgtctgtttg

1183 GFI1 in HepG2 enhancer (conserved at 40% confidence)

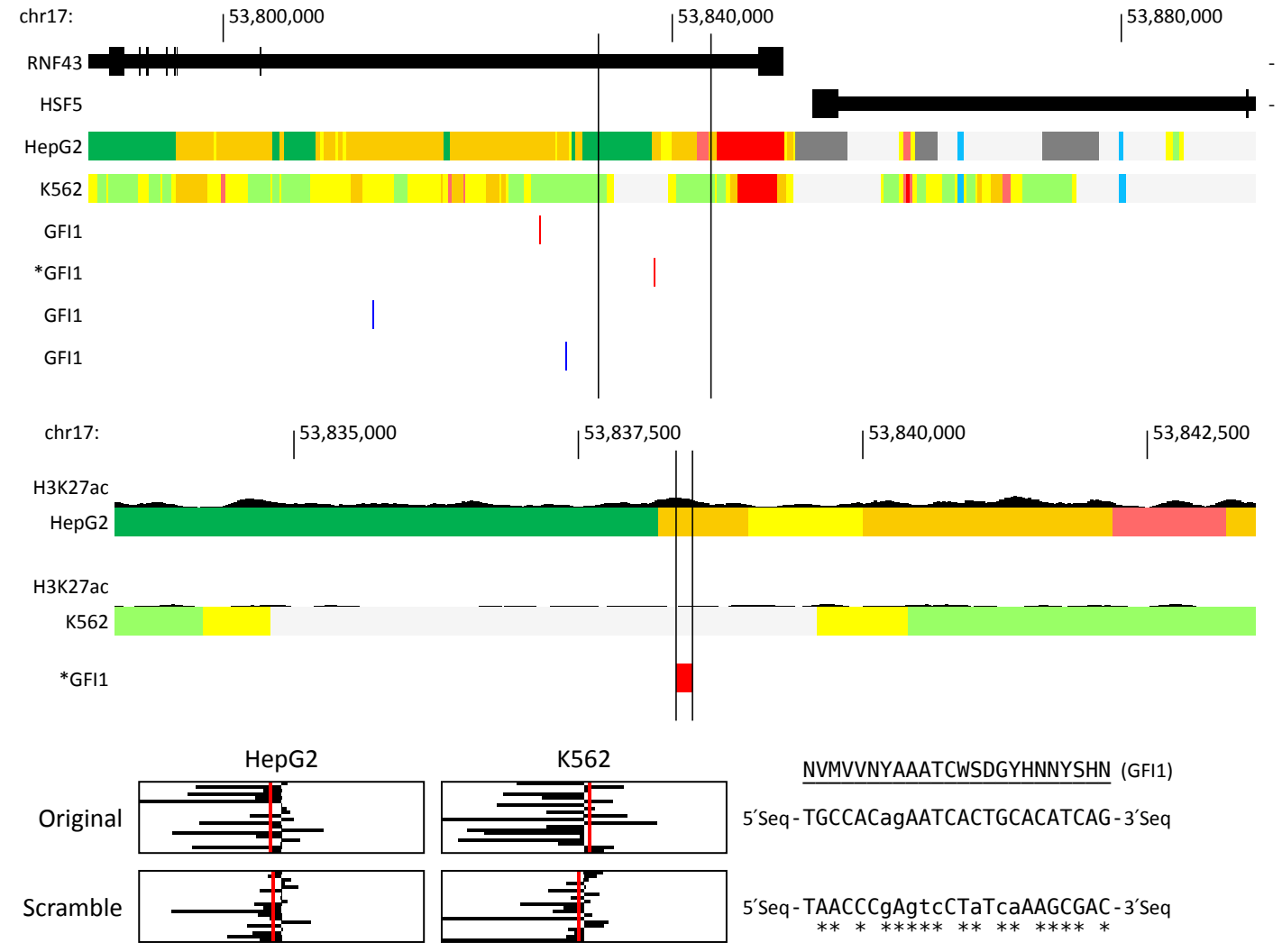
chr12 74389634 74389657 + (hg18)



5′Seq = ttttgtttttctacagccttgagtagctgagttggaatcatcccagaattaggaccaaatt
3′Seq = tttcaatggacaggagcacagtgctaatgaggtcagggtcaggactccagactgcccgac

1184 GFI1 in HepG2 enhancer (conserved at 40% confidence)

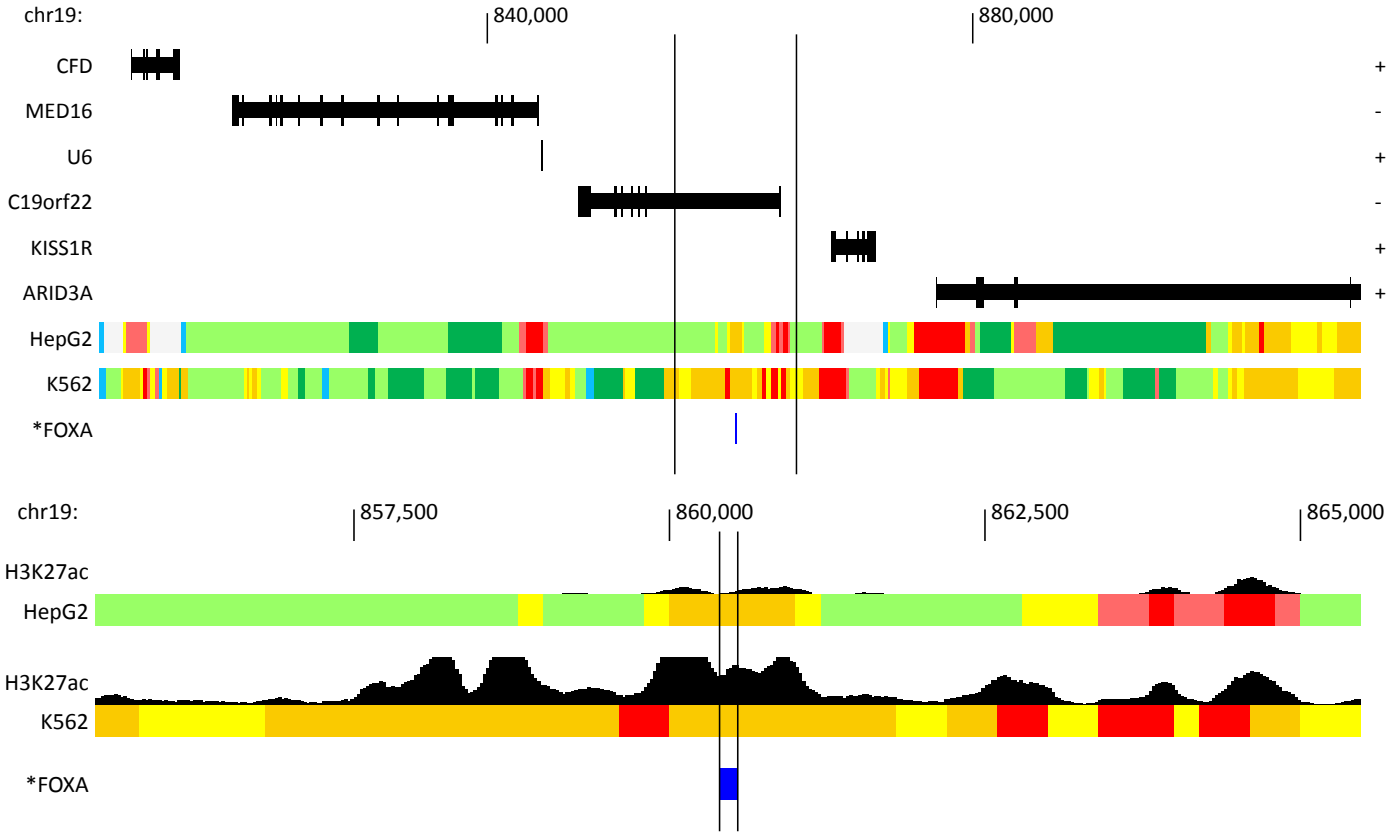
chr17 53838420 53838443 - (hg18)

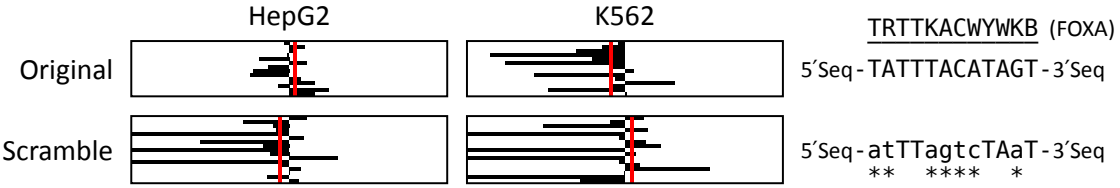


5′Seq = agaccaaaaatacctcaccacagtttagcaatactttacgtggtgcatgtgtcatttattc
3′Seq = gtggtctgtagtcctggatcttctcagagcaatatcacctctttataaagtctaggctaa

1185 FOXA in HepG2 enhancer

chr19 860464 860475 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTTACATAGT-3′Seq

5′Seq-atTTagtcTAaT-3′Seq

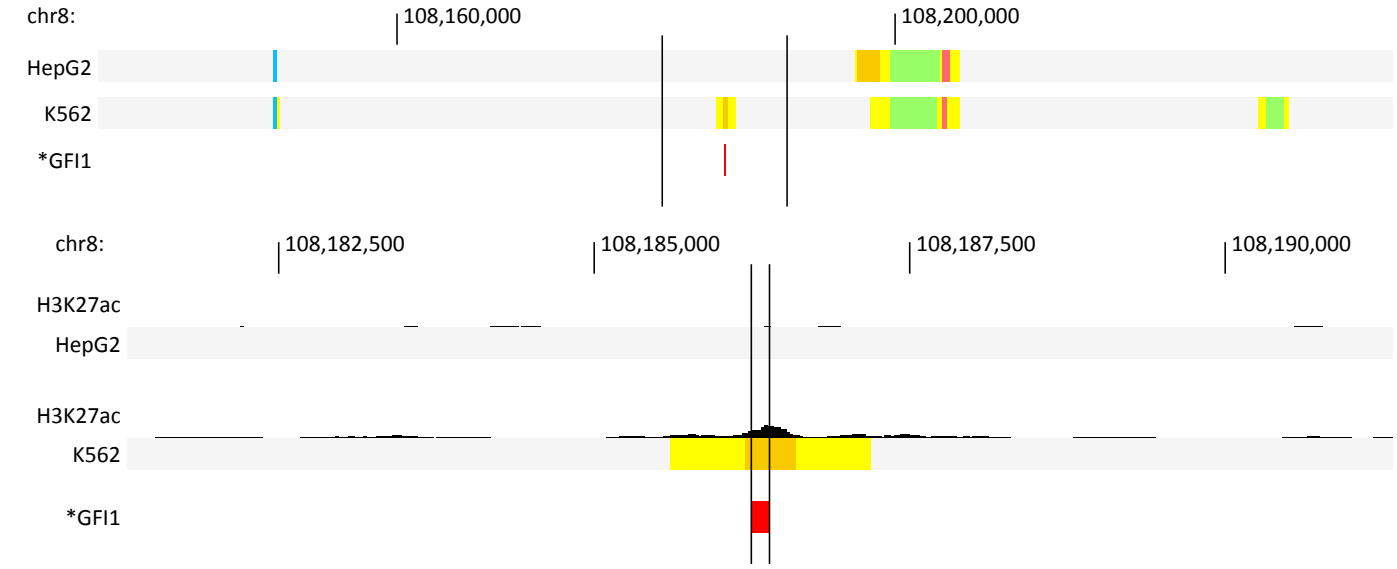
** **** *

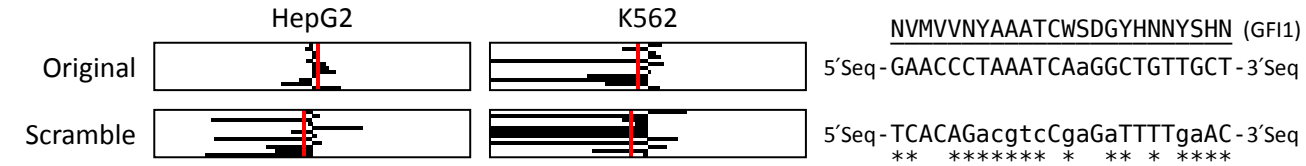
5′Seq = ccccaccaggacacagctggcaggtaaacacccagagactgacggctgagagcggaaacatgagtg

3′Seq = tacataggagtcactacacctgggcttcaagaccagggtgccaggcgtggtggttcacgcctgcaa

1186 GFI1 in K562 enhancer (conserved at 40% confidence)

chr8 108186306 108186329 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-GAACCCTAAATCAaGGCTGTTGCT-3′Seq

5′Seq-TCACAGacgtcCgaGaTTTTgaAC-3′Seq

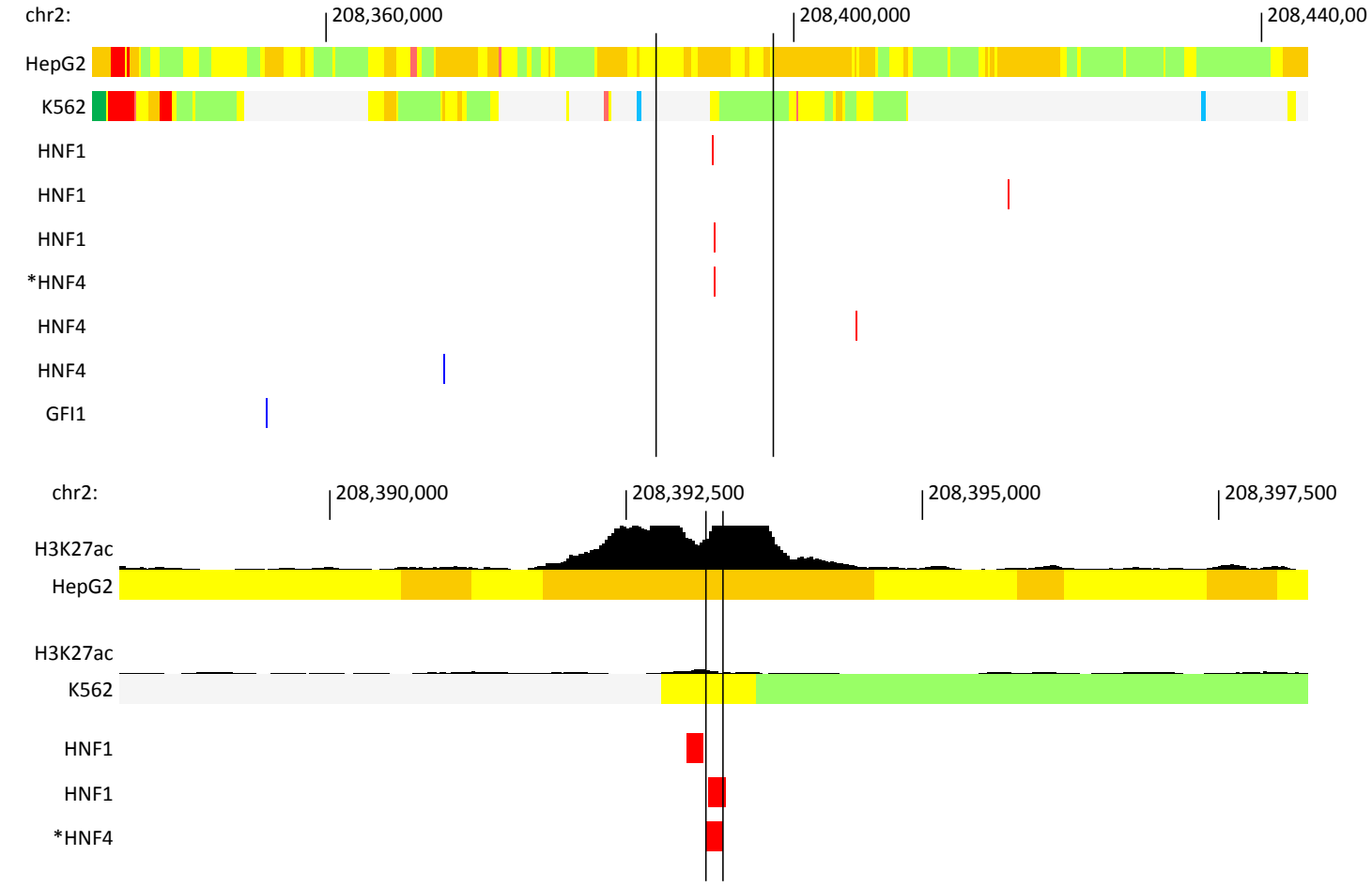
** ****** * ** * ****

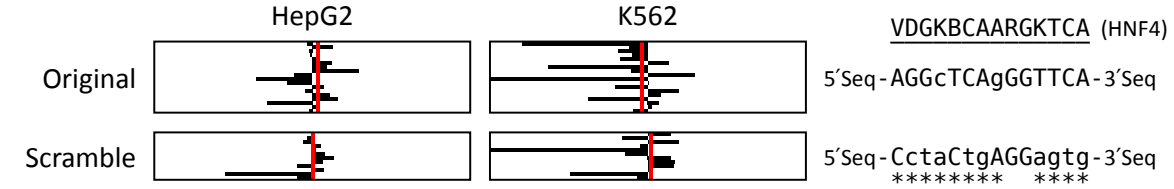
5′Seq = ttaaaaaaatgtgttggcatgaccagcatgtaatgtaggaattaattcttgcttgtggttt

3′Seq = attagtgactctgtaactttgcctcaaacttttccaggaagagagctttccttattgcca

1187 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 208393239 208393252 + (hg18)

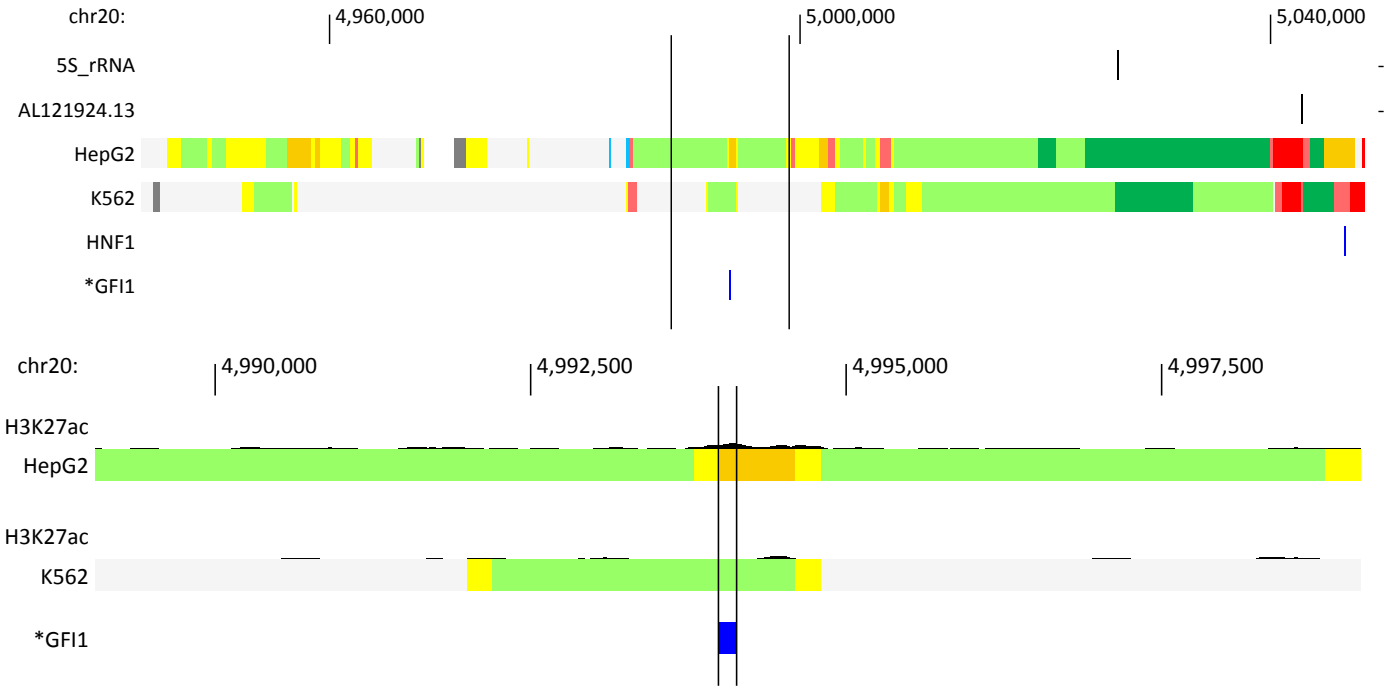


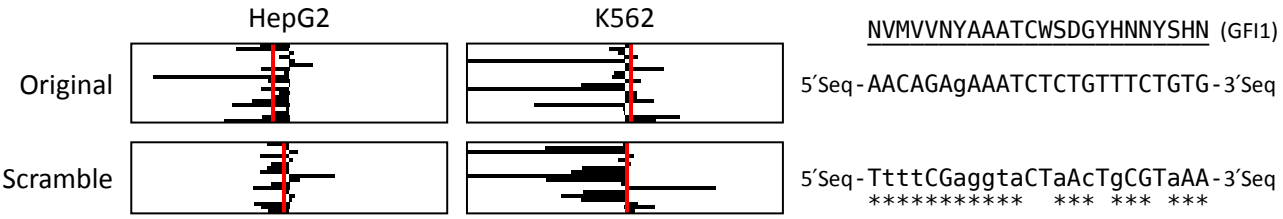


5′Seq = ccgatttcctgagggtggagtgggaggggccaggcataaacttgtttaggtgtgtcttagggtgta
3′Seq = tcttggtaaatgttttaccagaagaacctttctagtctctttccatgtcttcctttgggaaag

1188 GFI1 in HepG2 enhancer

chr20 4994049 4994072 + (hg18)





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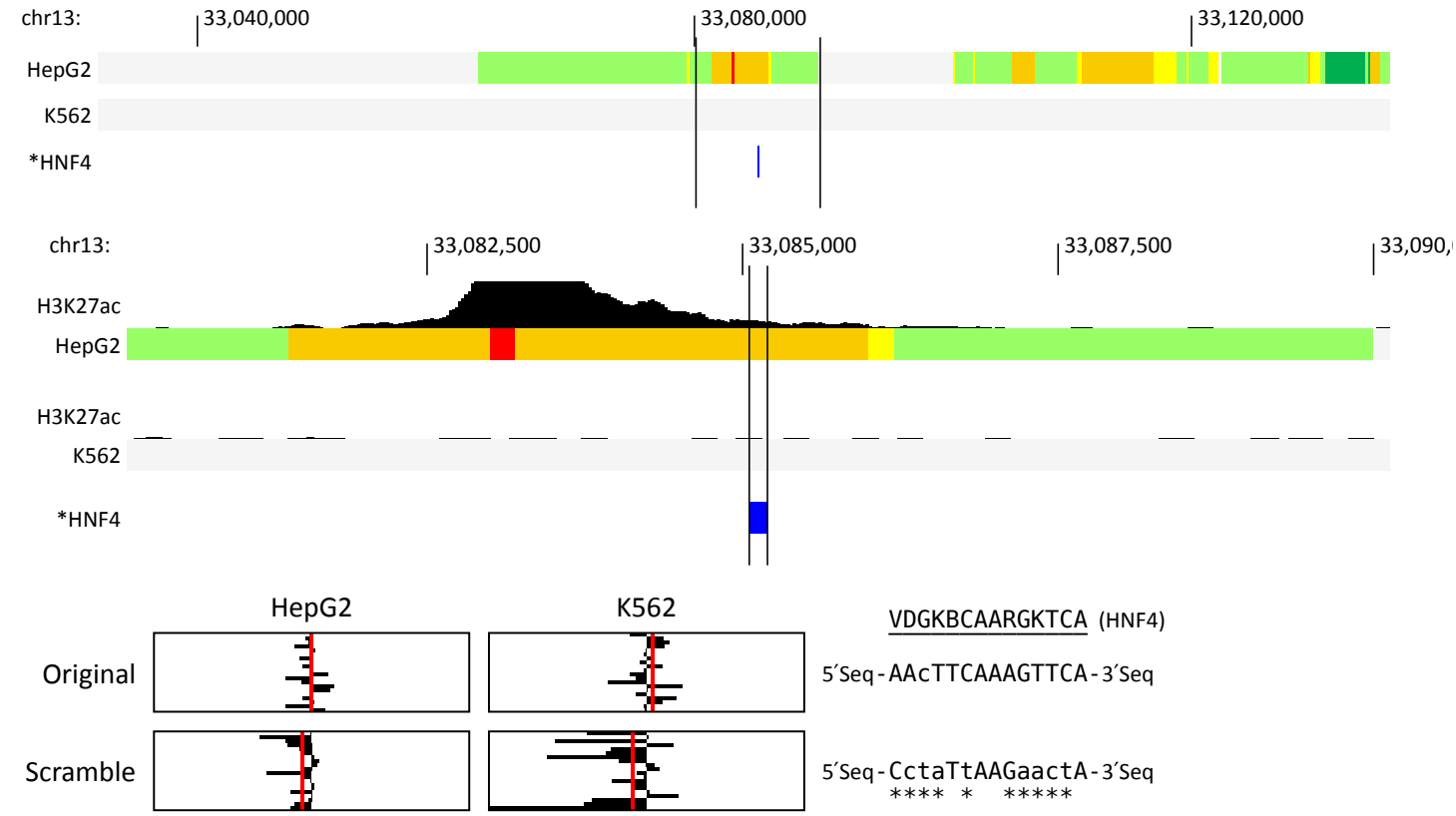
1189 HNF4 in HepG2 enhancer

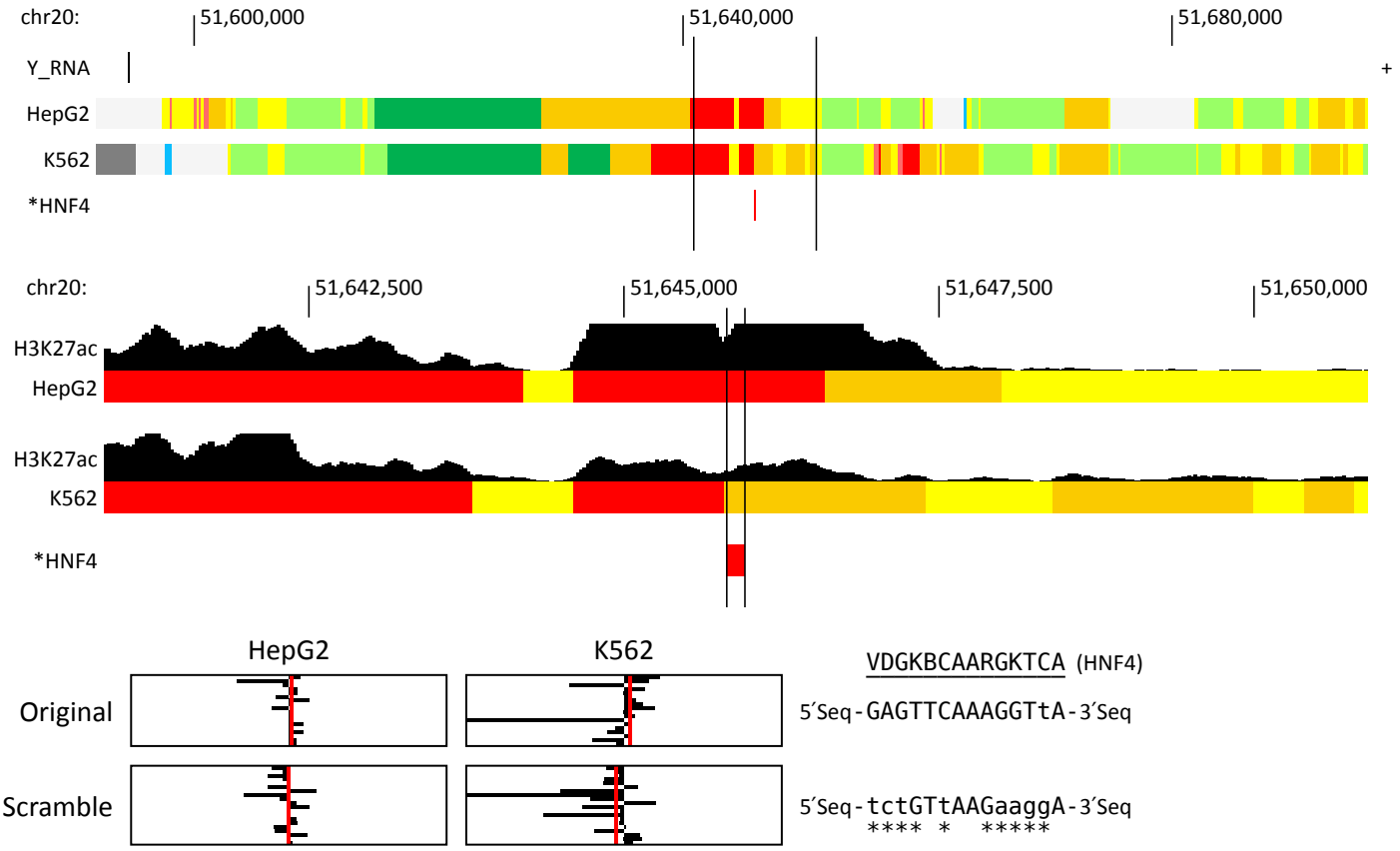
chr13 33085119 33085132 + (hg18)



5′Seq = aagttgcctaaaggctcgtcttccagtcatttttttcctctttagatctgaaagaactcttttgagc
3′Seq = aattgtggtattaagtttgagttgaaatgggtcctttctctttttctcagaattatactgaaatg

1190 HNF4 in K562 enhancer (conserved at 60% confidence)

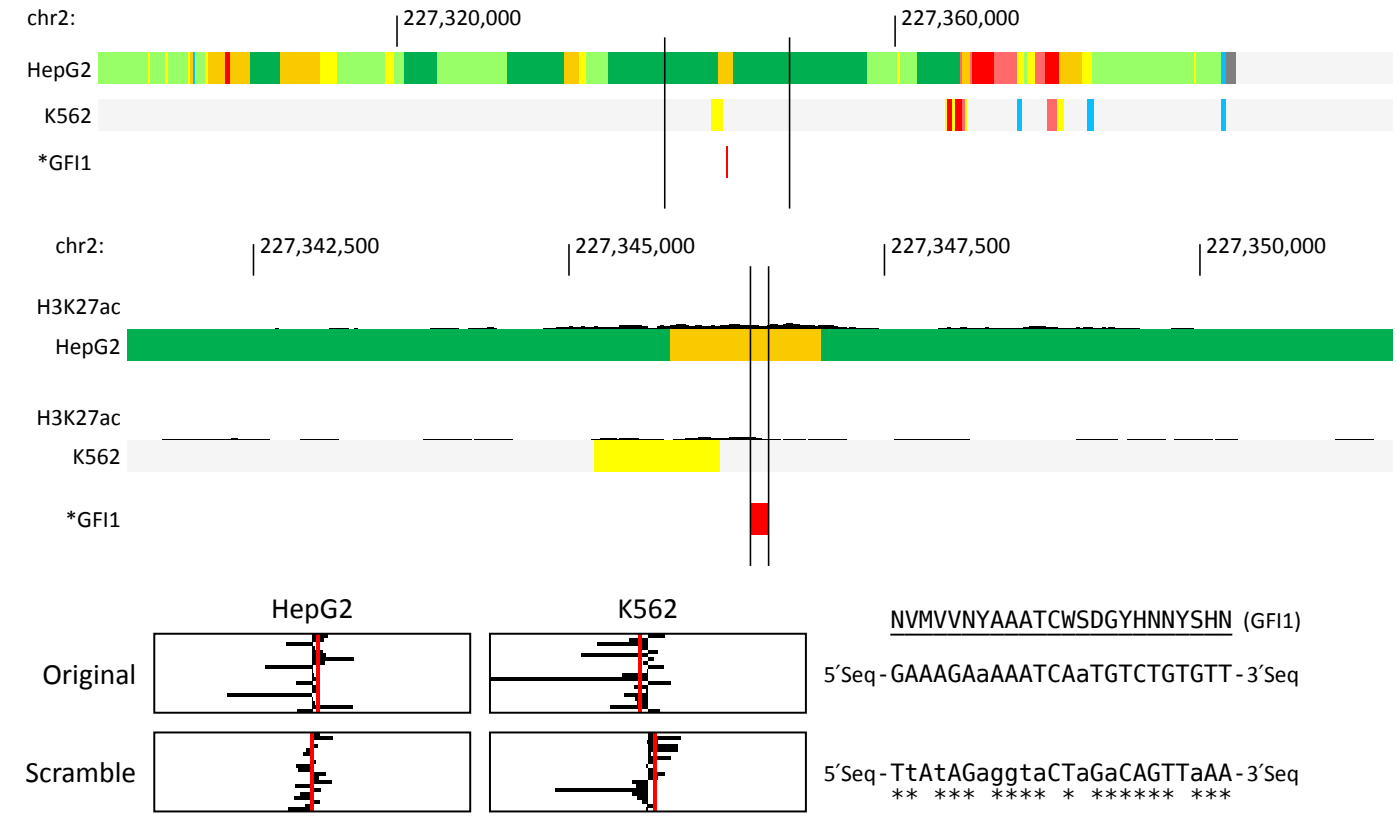
chr20 51645882 51645895 - (hg18)



5′Seq = tgctcgattttgacactagaatttttaactatcagtgctattgtgtttacagcattcaaggtctcg
3′Seq = tccattaacatgtagaatgaggttacacttcaggctcaacctggttccacttggtcatagtttct

1191 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 227346499 227346522 + (hg18)



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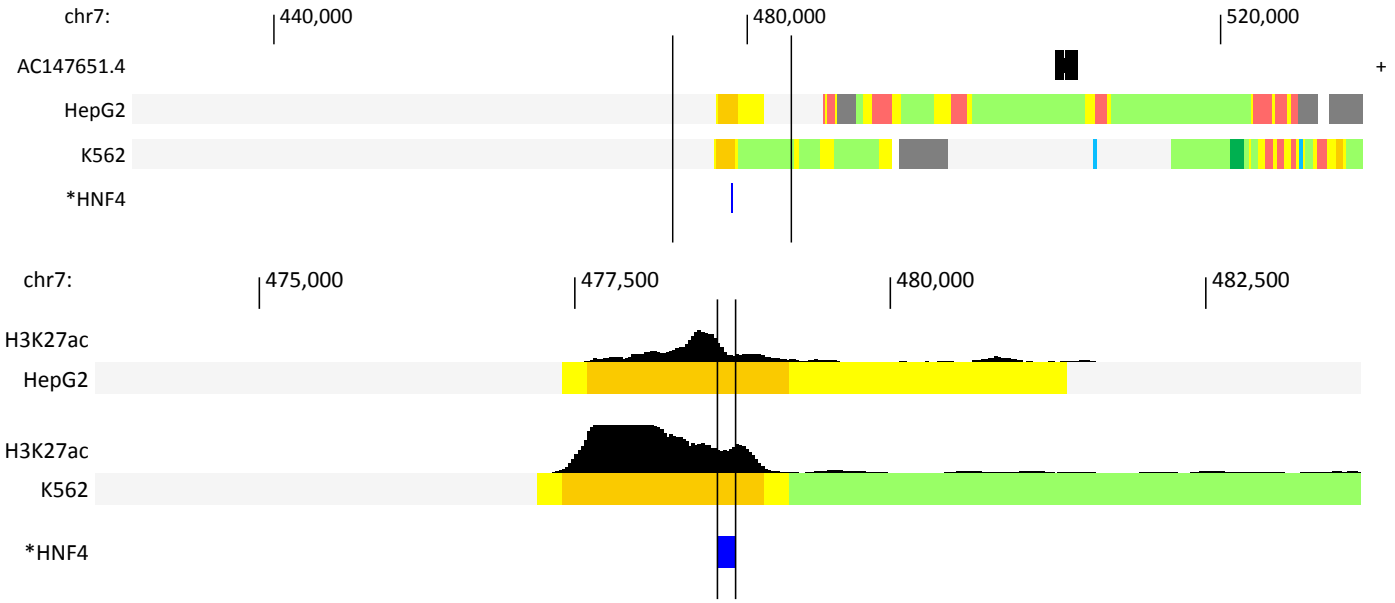
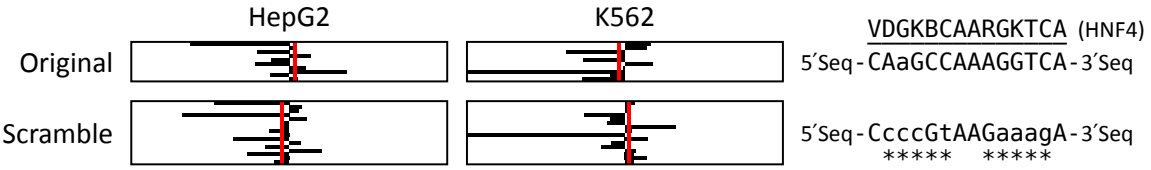
1192 HNF4 in K562 enhancer

chr7 478696 478709 - (hg18)





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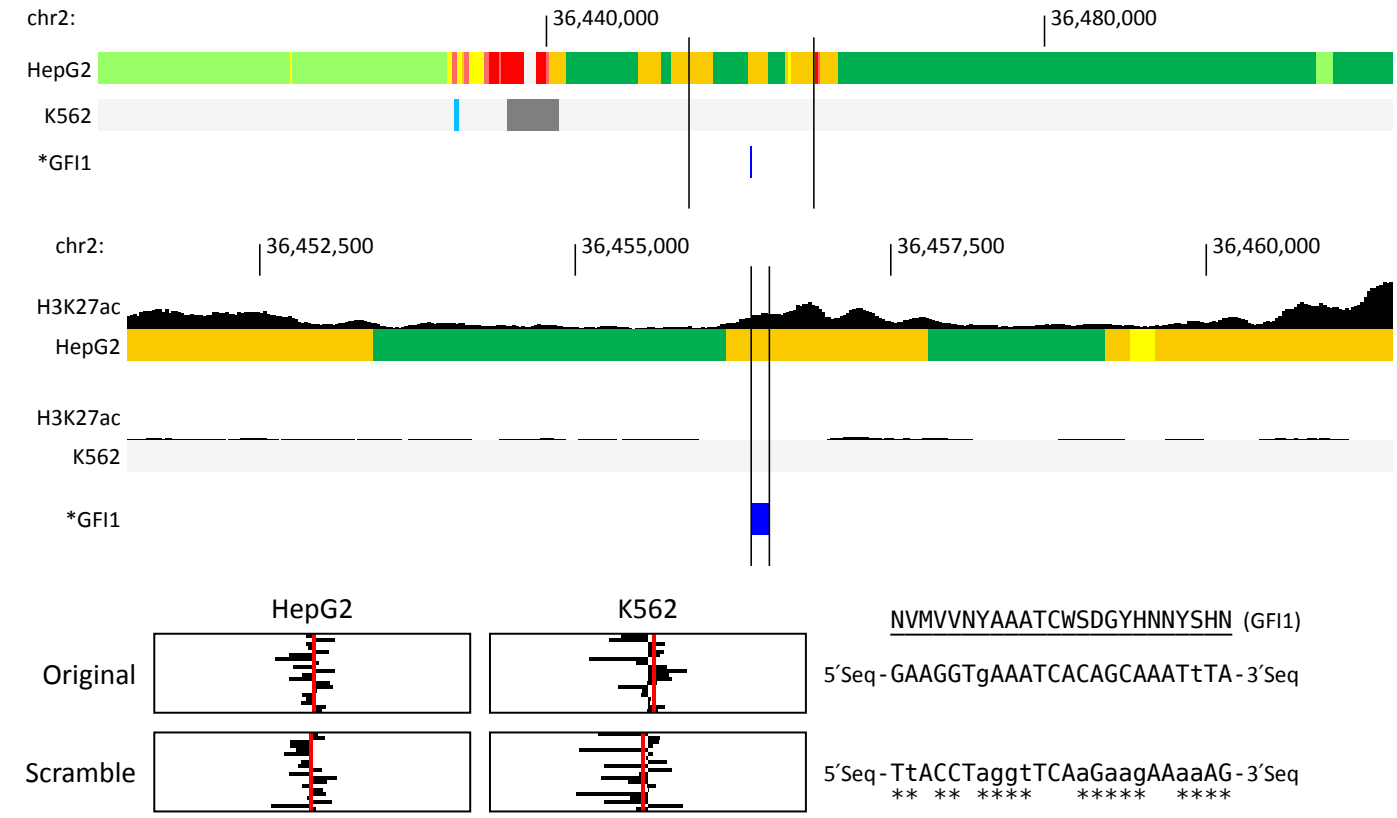
1193 GFI1 in HepG2 enhancer

chr2 36456455 36456478 + (hg18)



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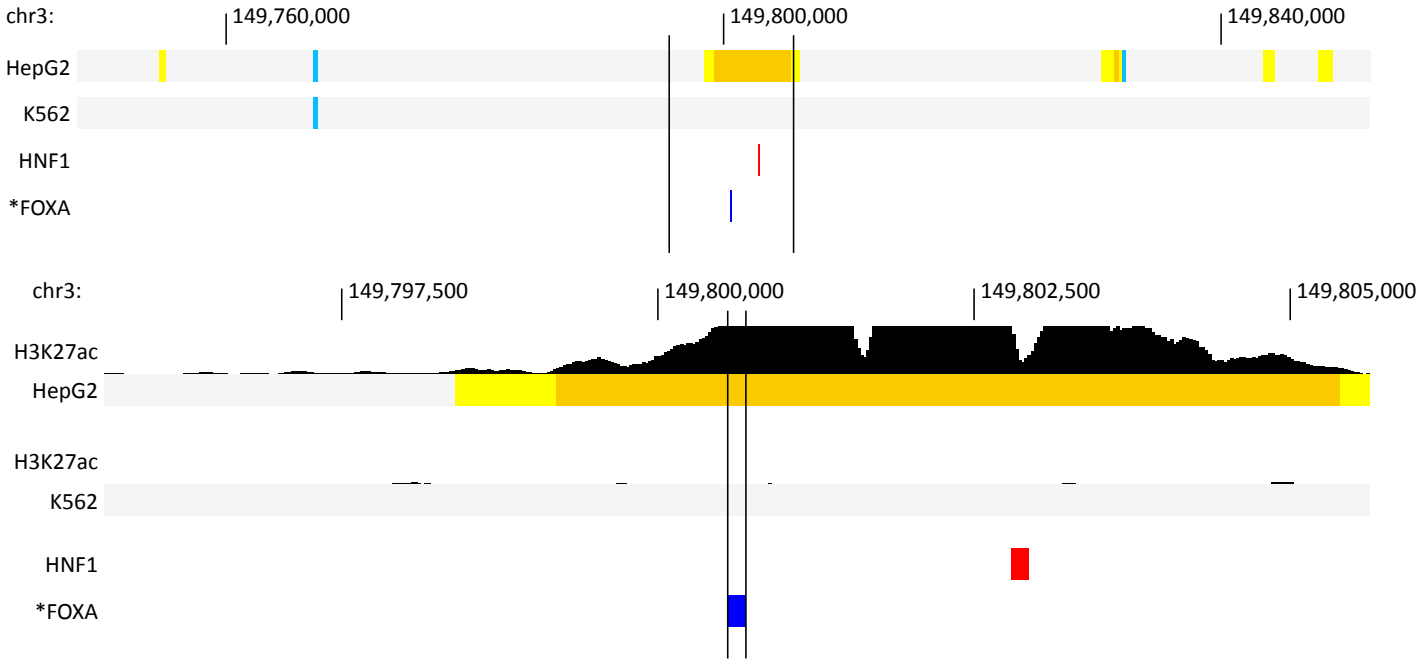
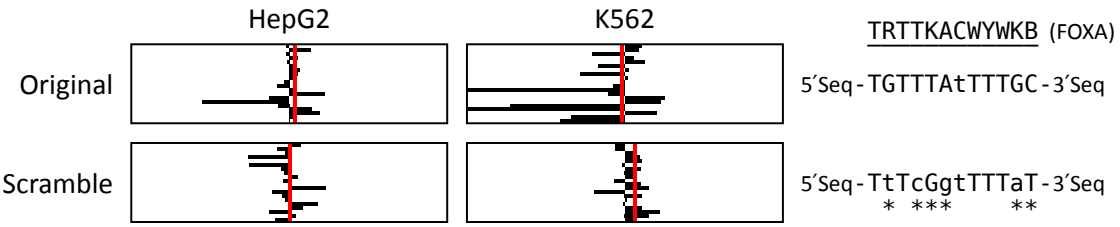
1194 FOXA in HepG2 enhancer

chr3 149800619 149800630 + (hg18)





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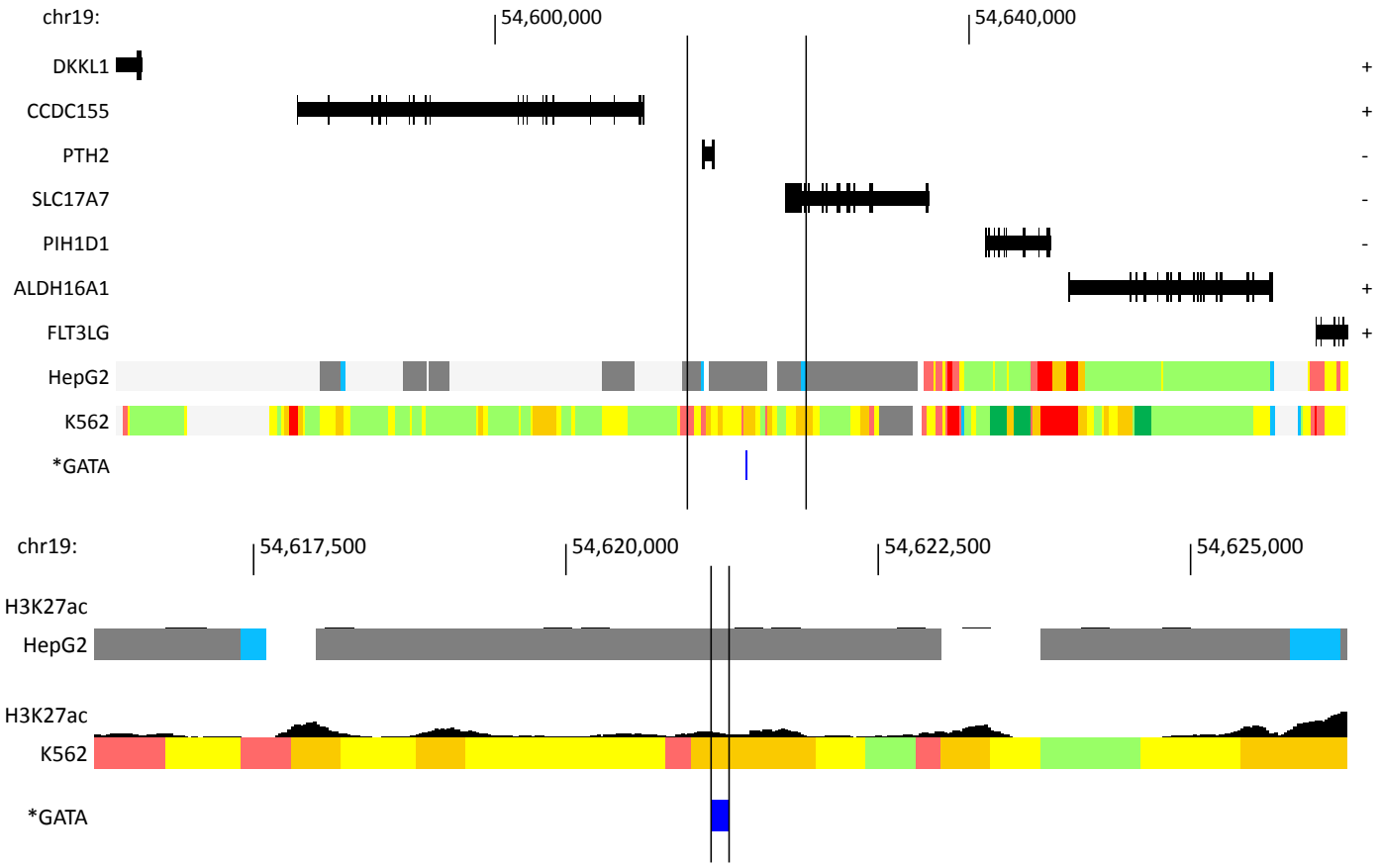
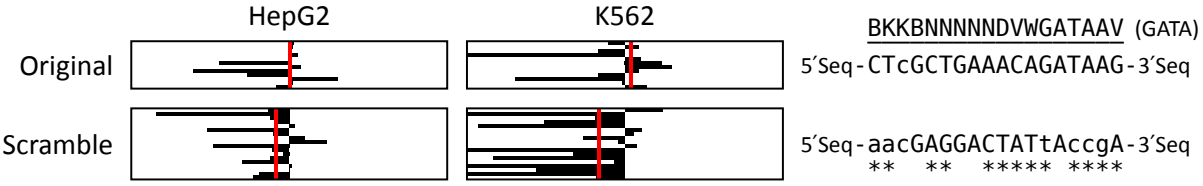
1195 GATA in K562 enhancer

chr19 54621226 54621243 + (hg18)





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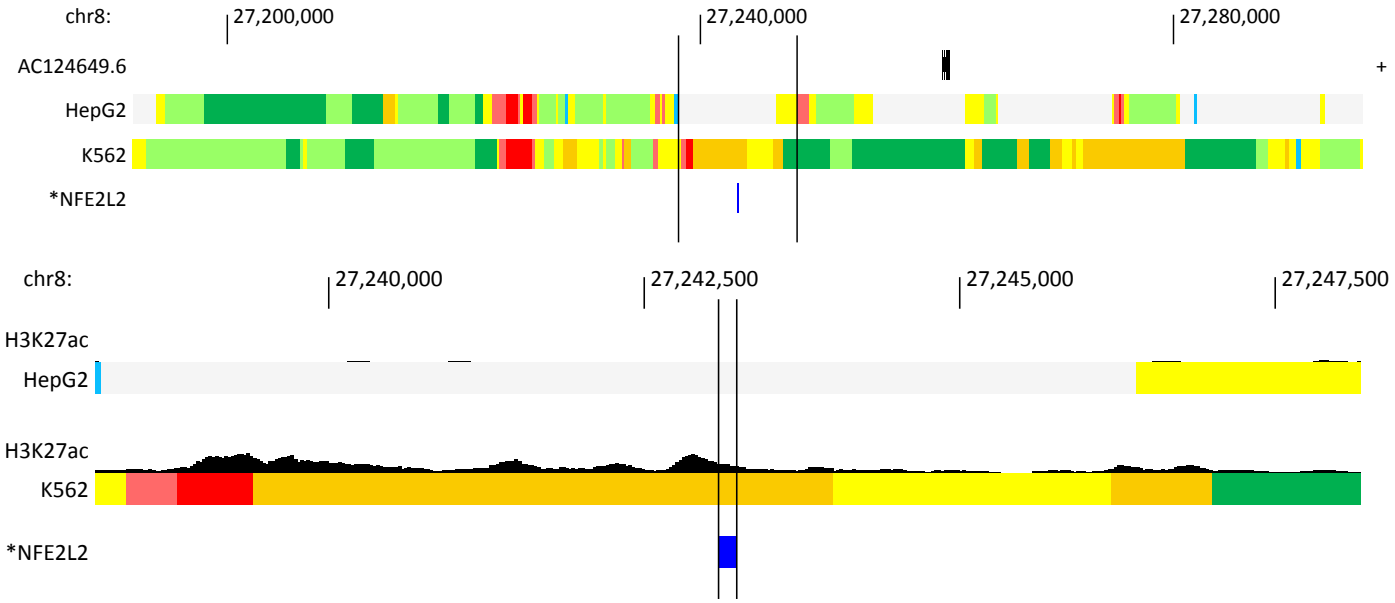
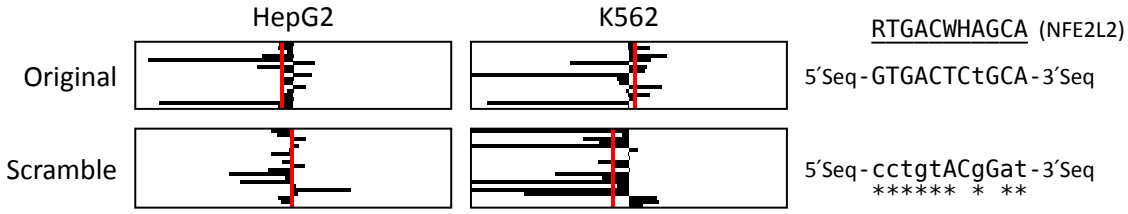
3′Seq = gaaattaactacgactcccaagtagccccgcgcctcagtctctcttggctacctgggccatcg

1196 NFE2L2 in K562 enhancer

chr8 27243156 27243166 + (hg18)





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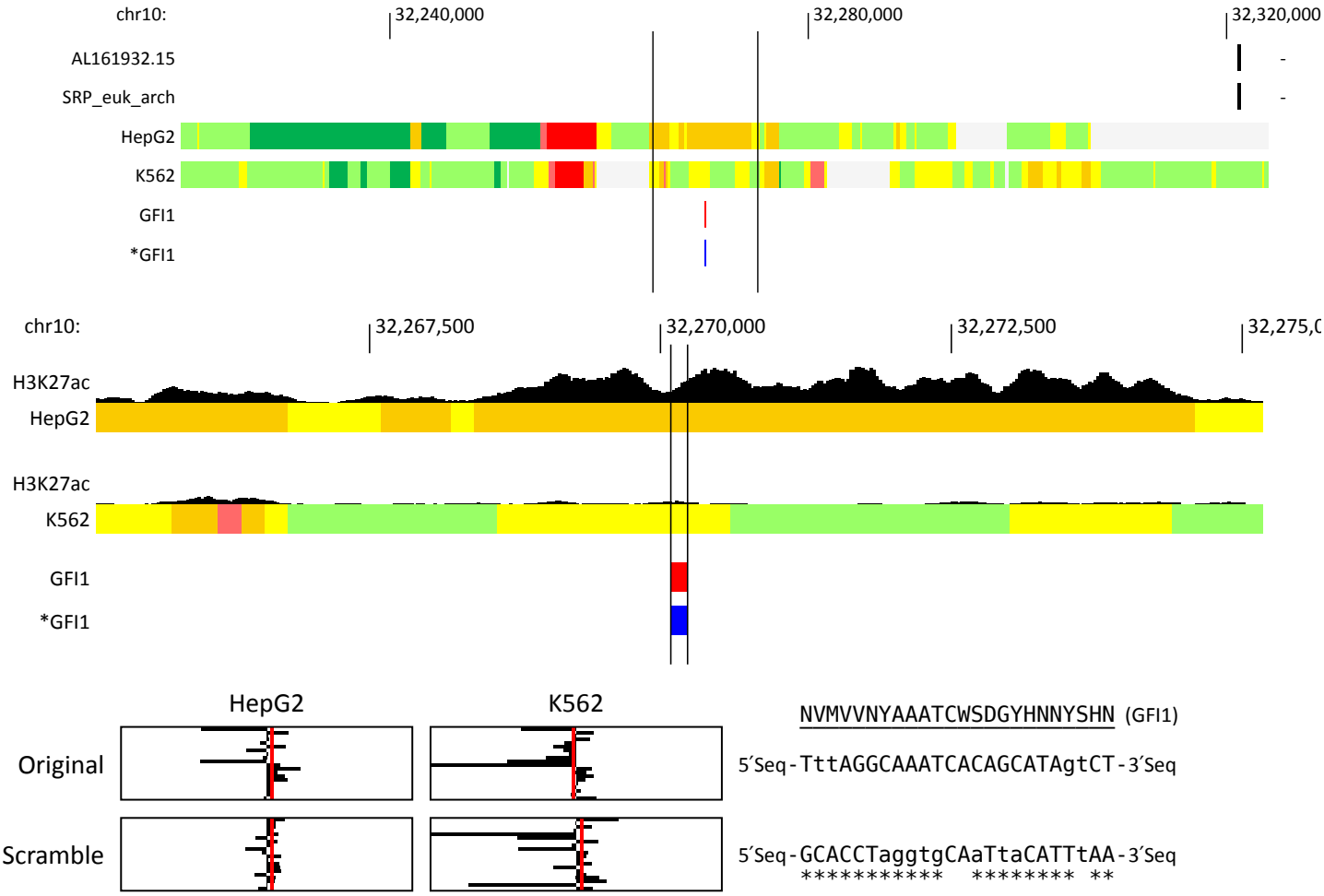
1197 GFI1 in HepG2 enhancer

chr10 32270150 32270173 + (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-TttAGGCAAATCACAGCATAgtCT-3′Seq

5′Seq-GCACCTaggtgCAaTtaCATTtAA-3′Seq

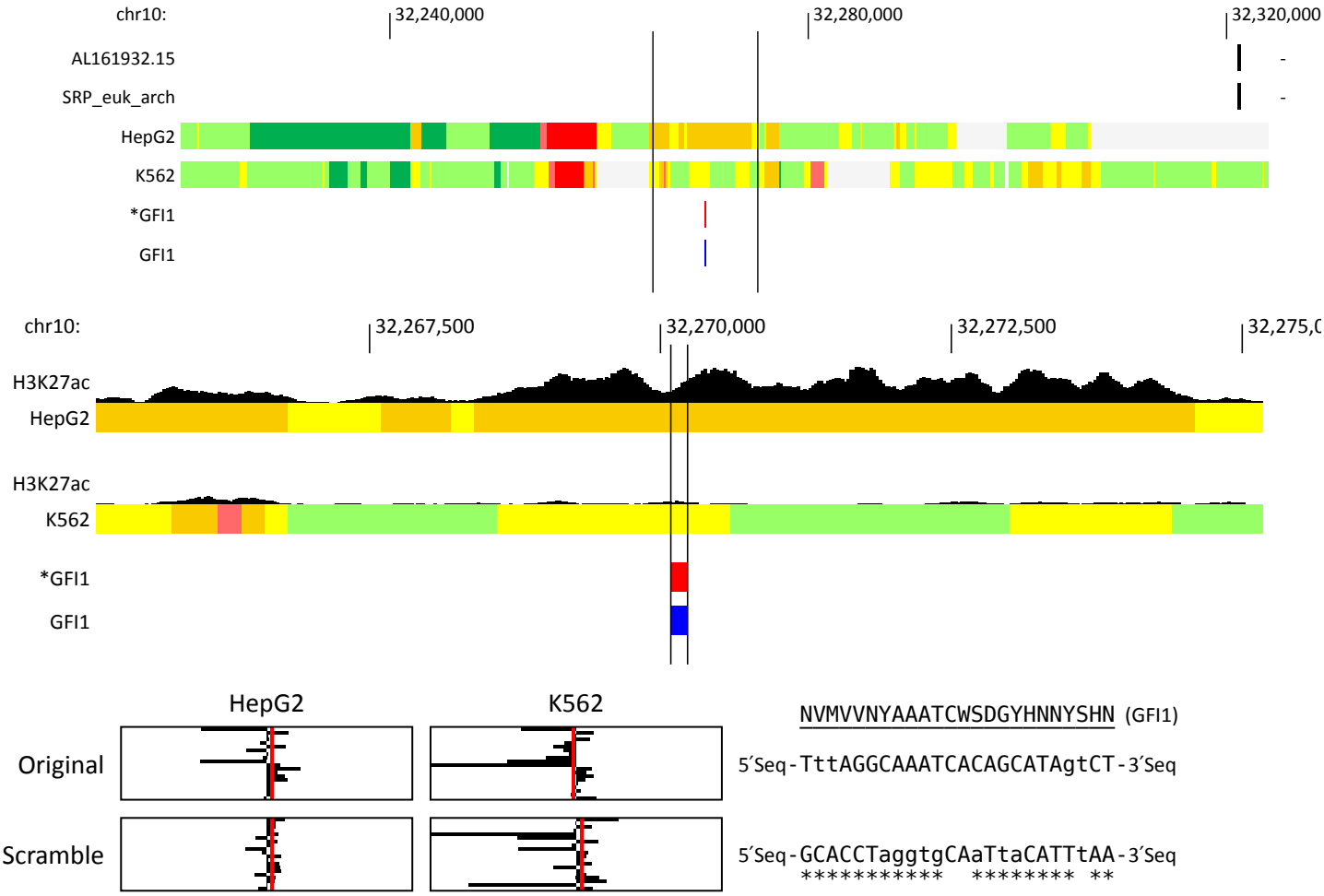
********** ******** **

5′Seq = ttttgagacaaatgttcacttcatgactaatgcagagccttgatctctcatcttttgtct

3′Seq = tcactttgatctttggggtgtaaggtcagtgggaaggtttaaagctttgaacgttttttt

1198 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr10 32270150 32270173 + (hg18)



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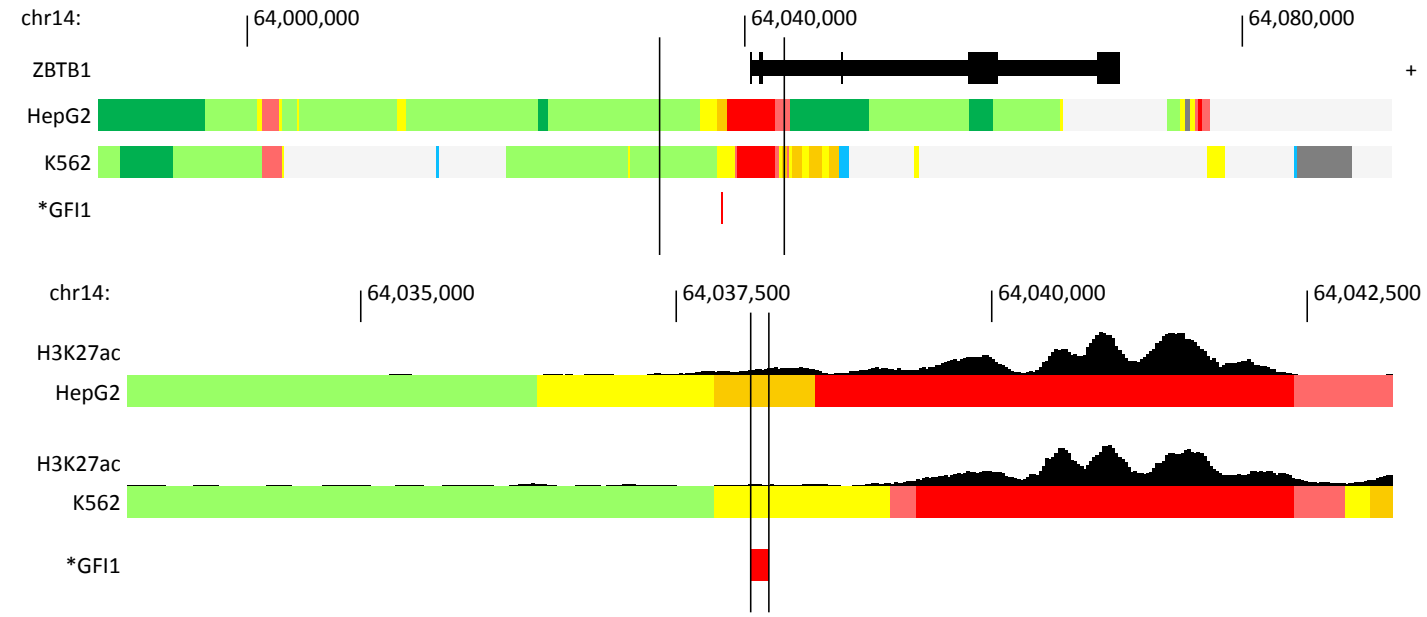
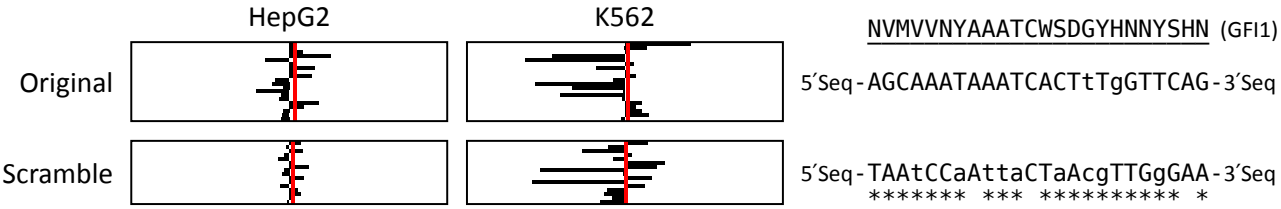
3′Seq = tcactttgatctttggggtgtaaggtcagtgggaaggtttaaagctttgaacgttttttt

1199 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 64038151 64038174 + (hg18)





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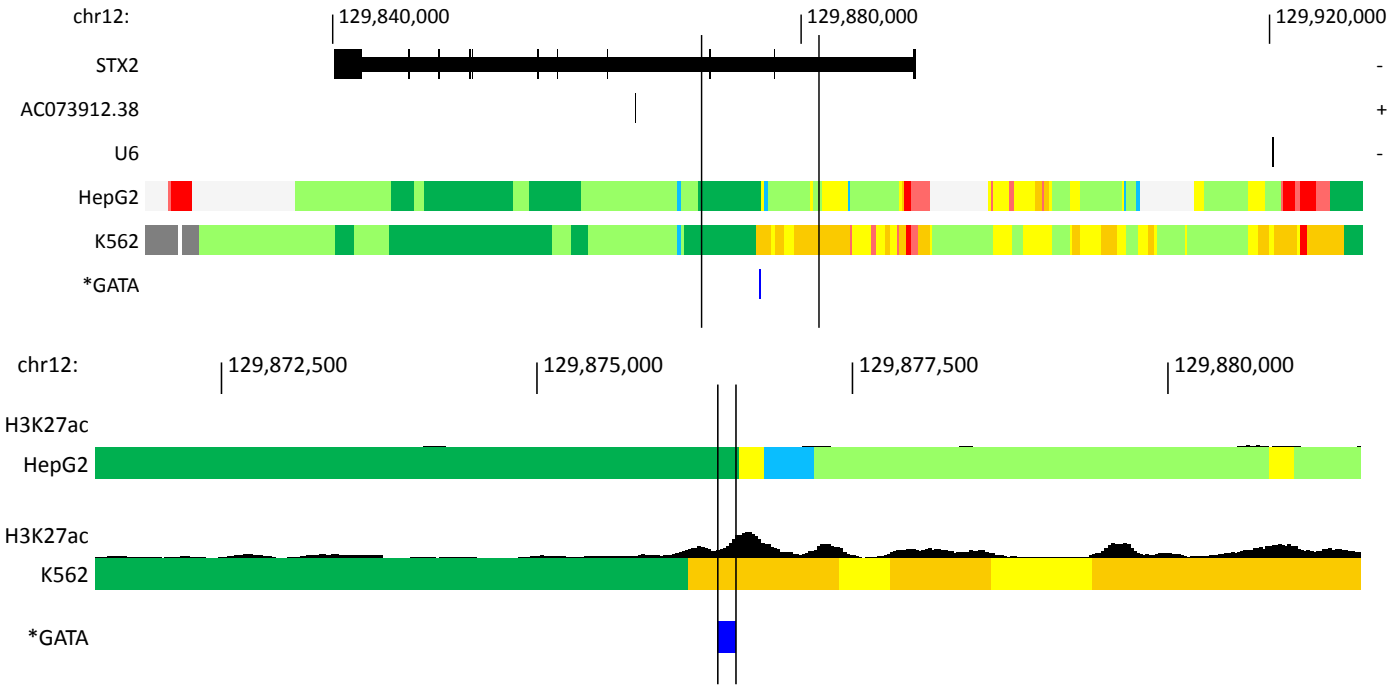
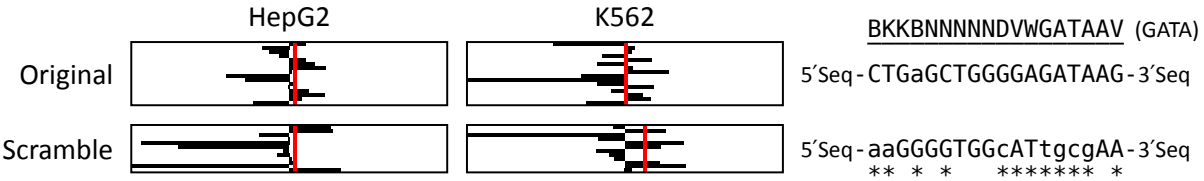
1200 GATA in K562 enhancer

chr12 129876497 129876514 + (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGaGCTGGGGAGATAAG-3′Seq

5′Seq-aaGGGGTGGcATtgcgAA-3′Seq

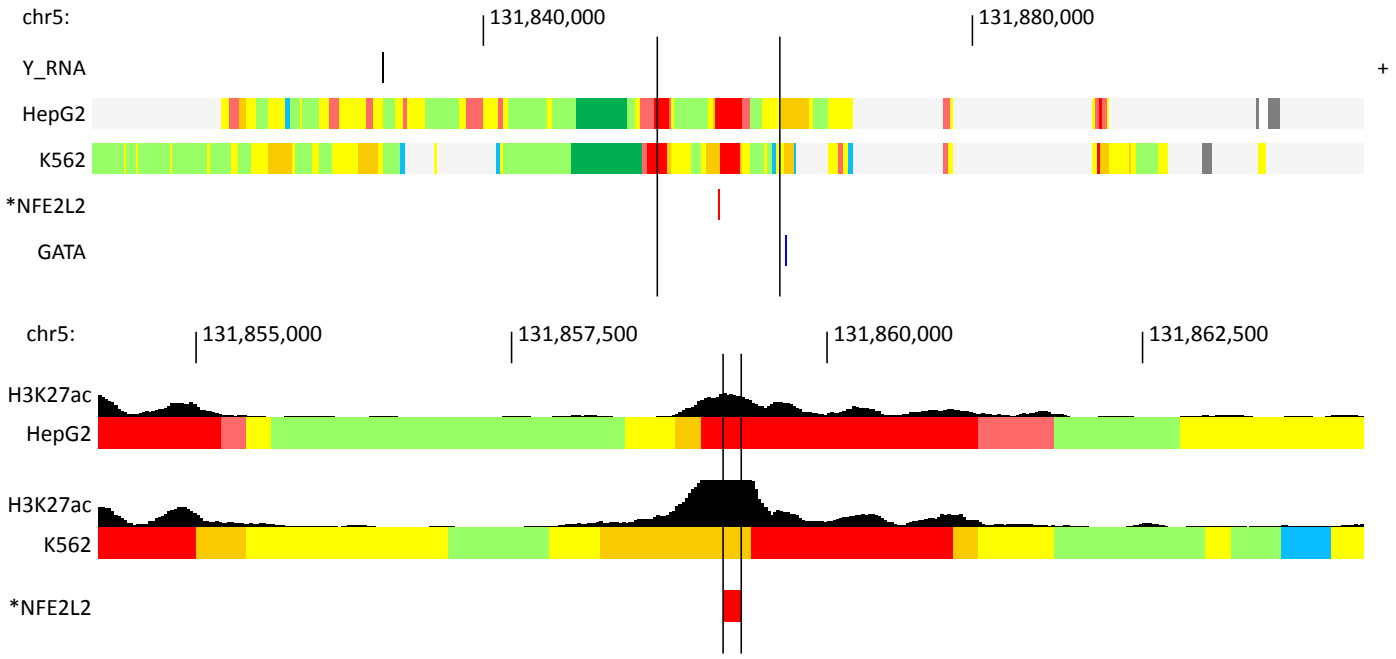
** * * ******* *

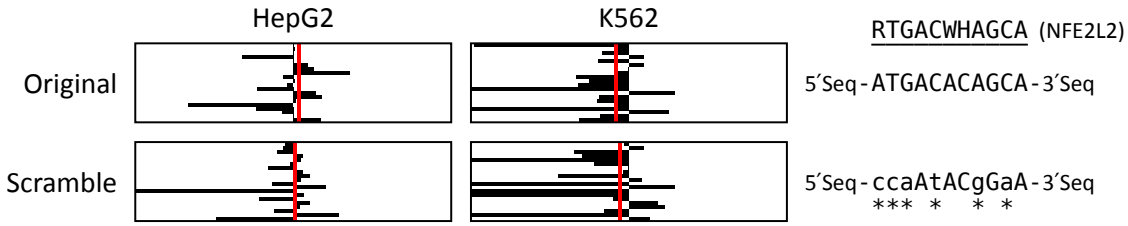
5′Seq = ttaagcaacattagatcagataattcttaggtttgagaatttcagcagggcctaagcccaagag

3′Seq = caggaggggaggcctcacacctcagataggatcccagcaccgccaggccgccacattttaaa

1201 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr5 131859243 131859253 + (hg18)





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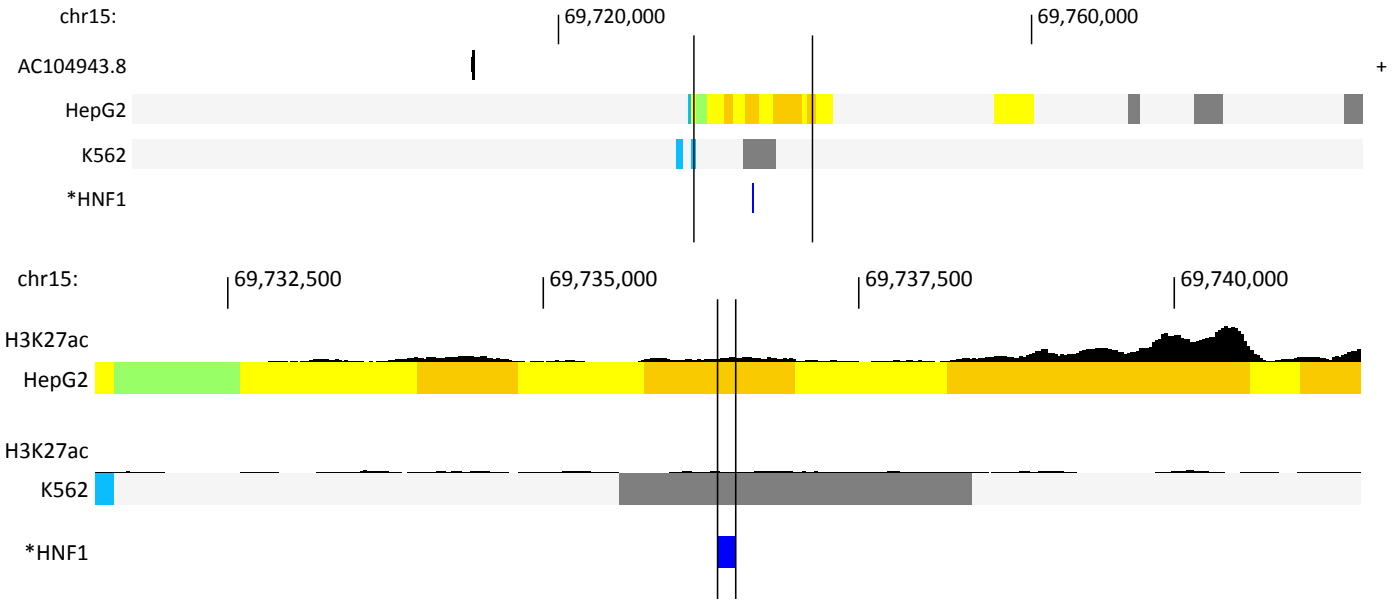
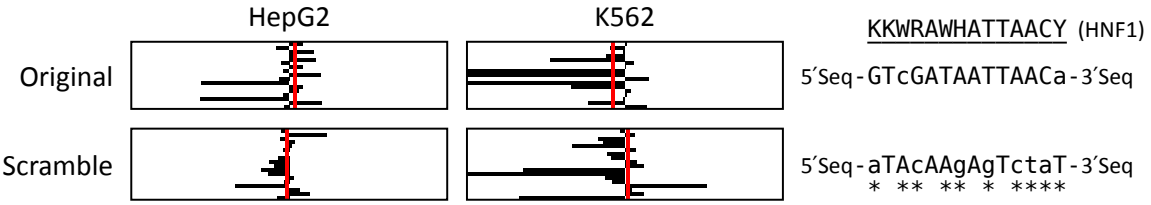
1202 HNF1 in HepG2 enhancer

chr15 69736447 69736460 - (hg18)





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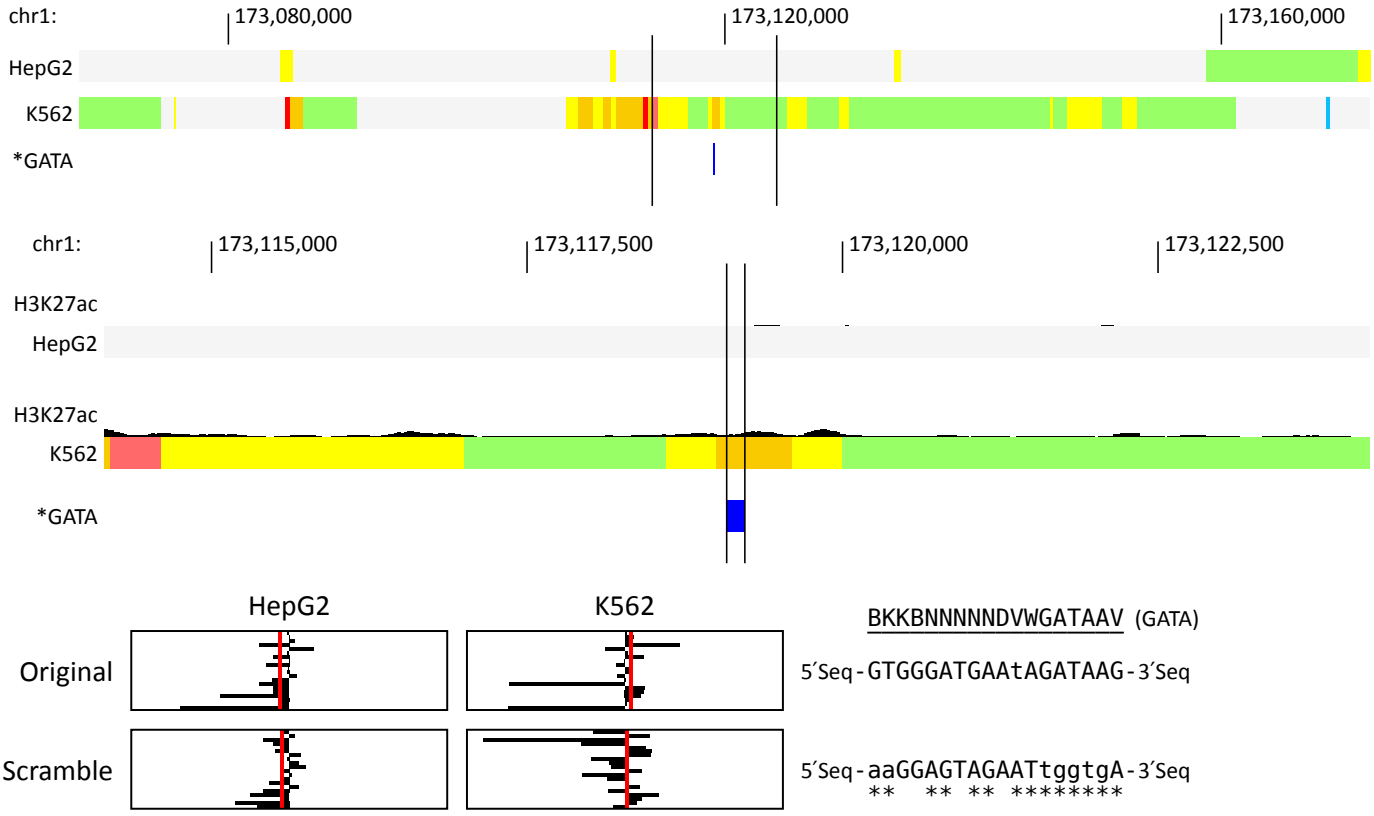
1203 GATA in K562 enhancer

chr1 173119146 173119163 + (hg18)



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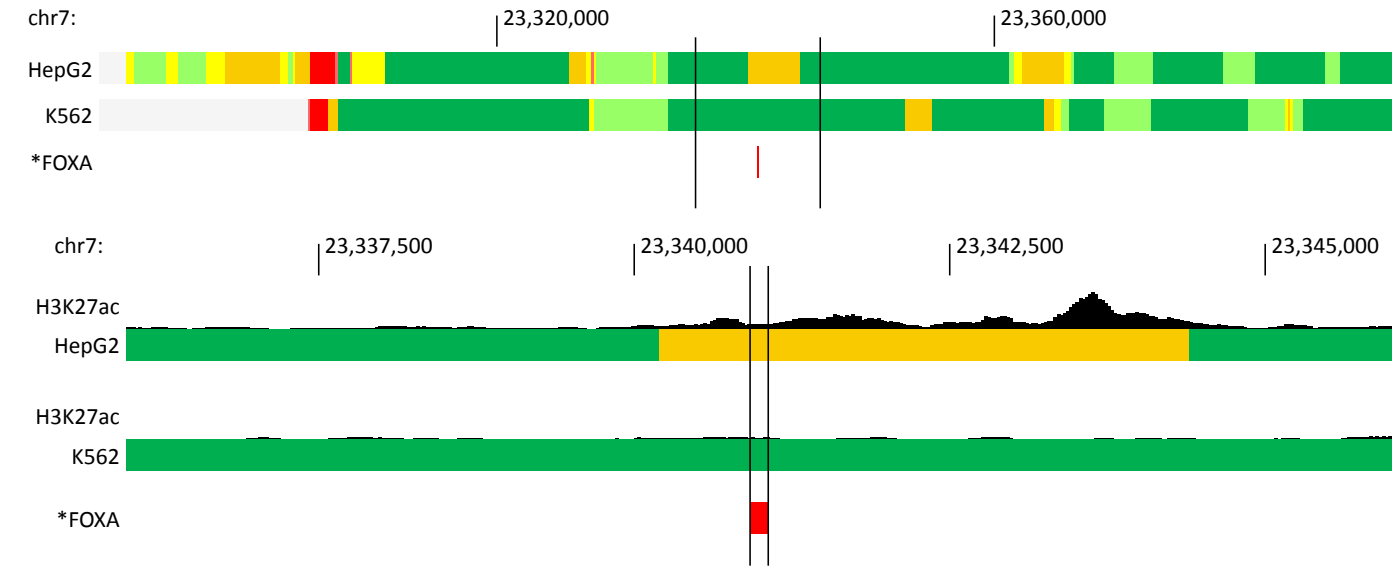
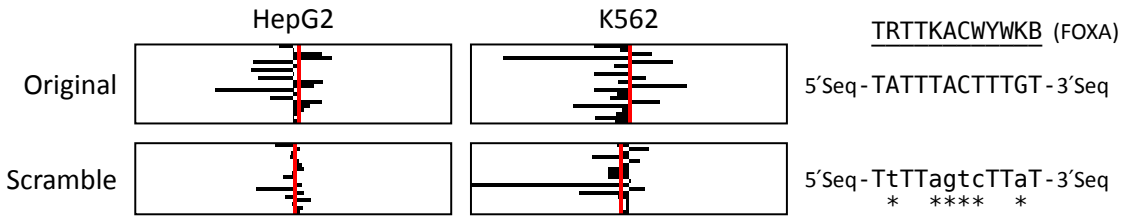
1204 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr7 23340985 23340996 + (hg18)





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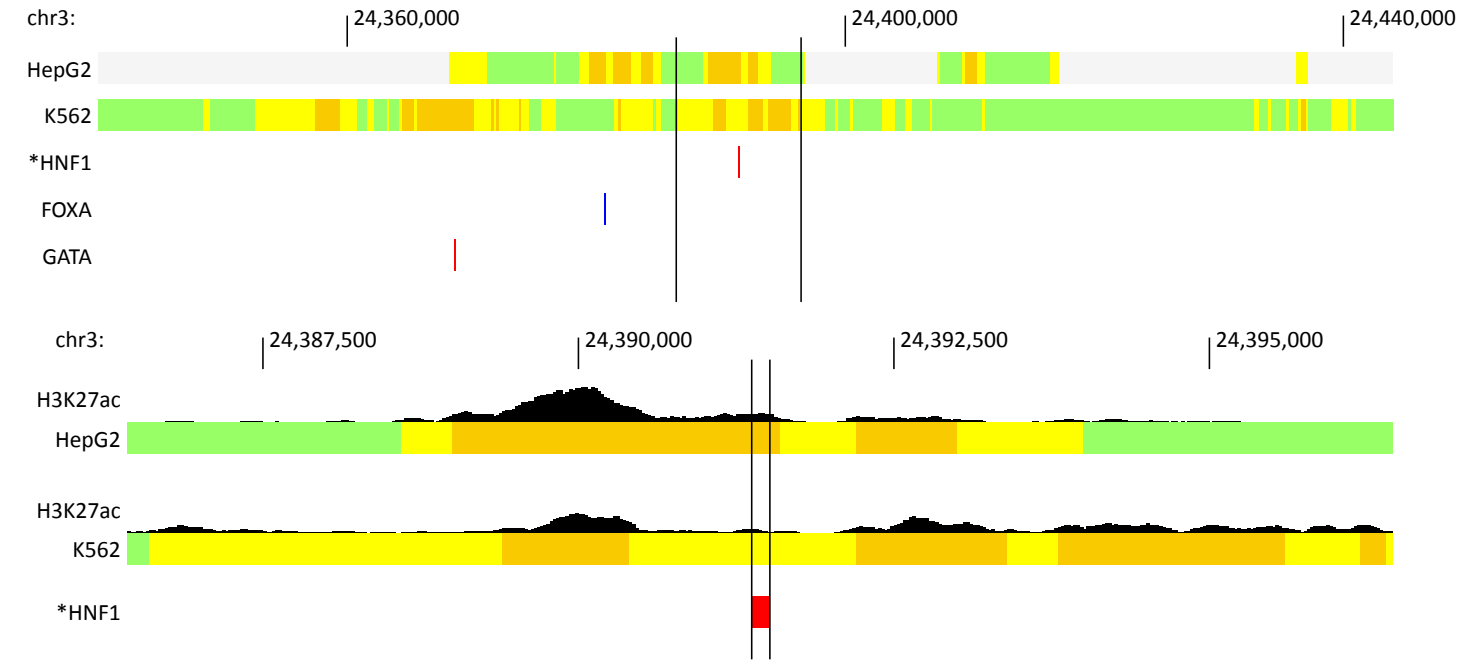
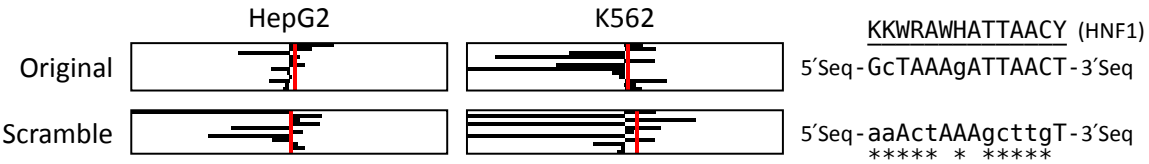
1205 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr3 24391439 24391452 - (hg18)





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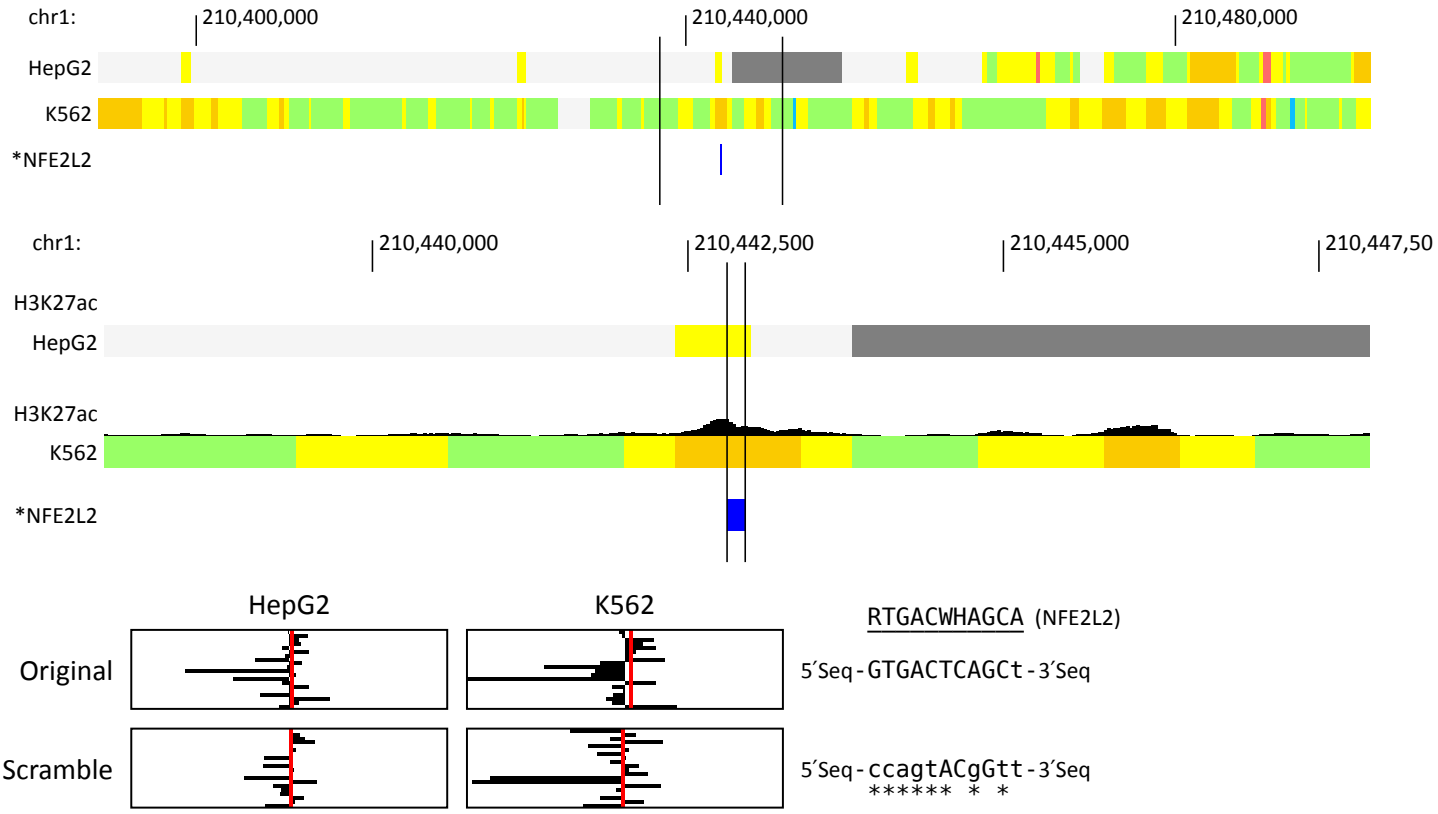
1206 NFE2L2 in K562 enhancer

chr1 210442877 210442887 + (hg18)



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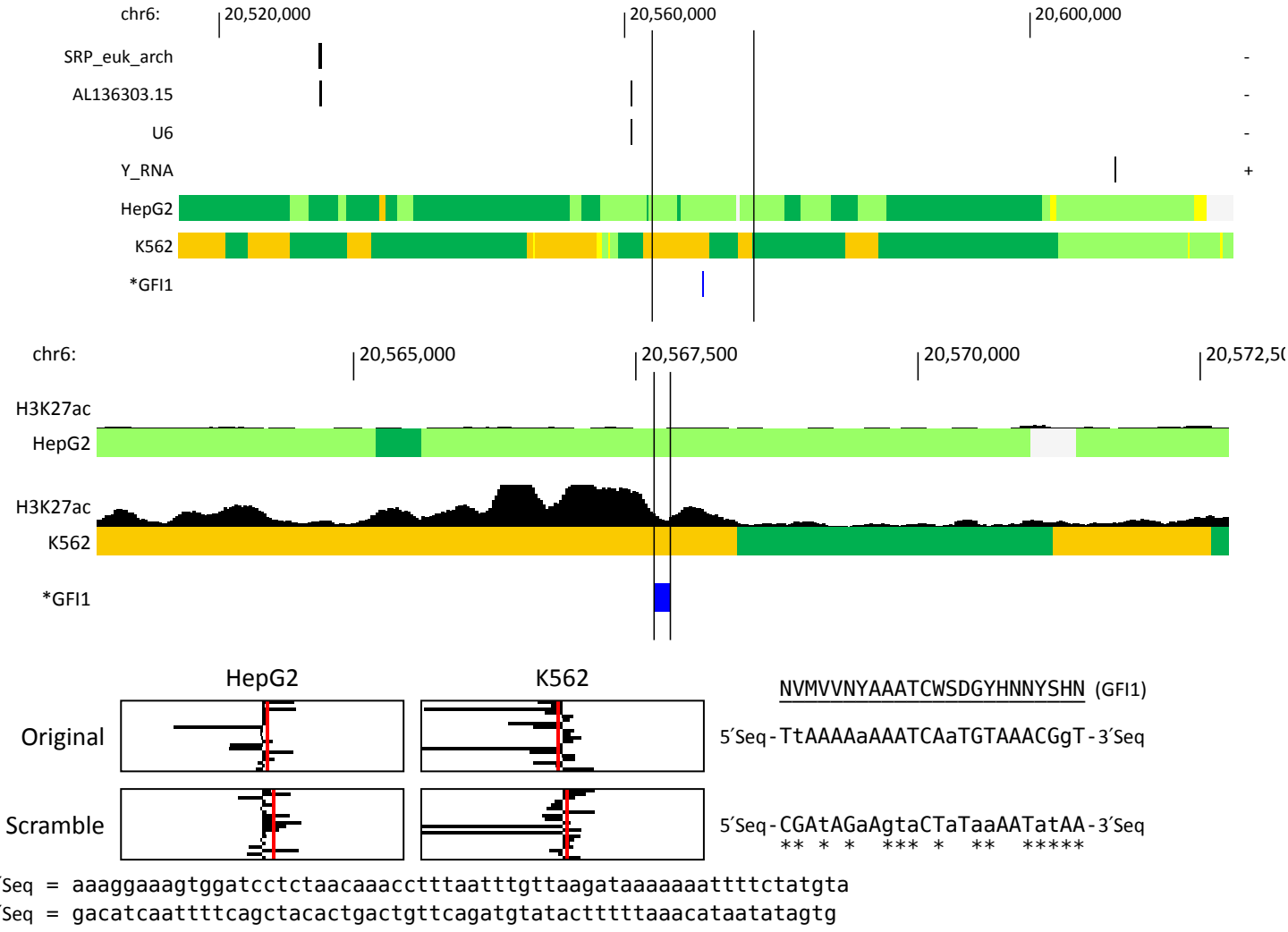
1207 GFI1 in K562 enhancer

chr6 20567723 20567746 - (hg18)



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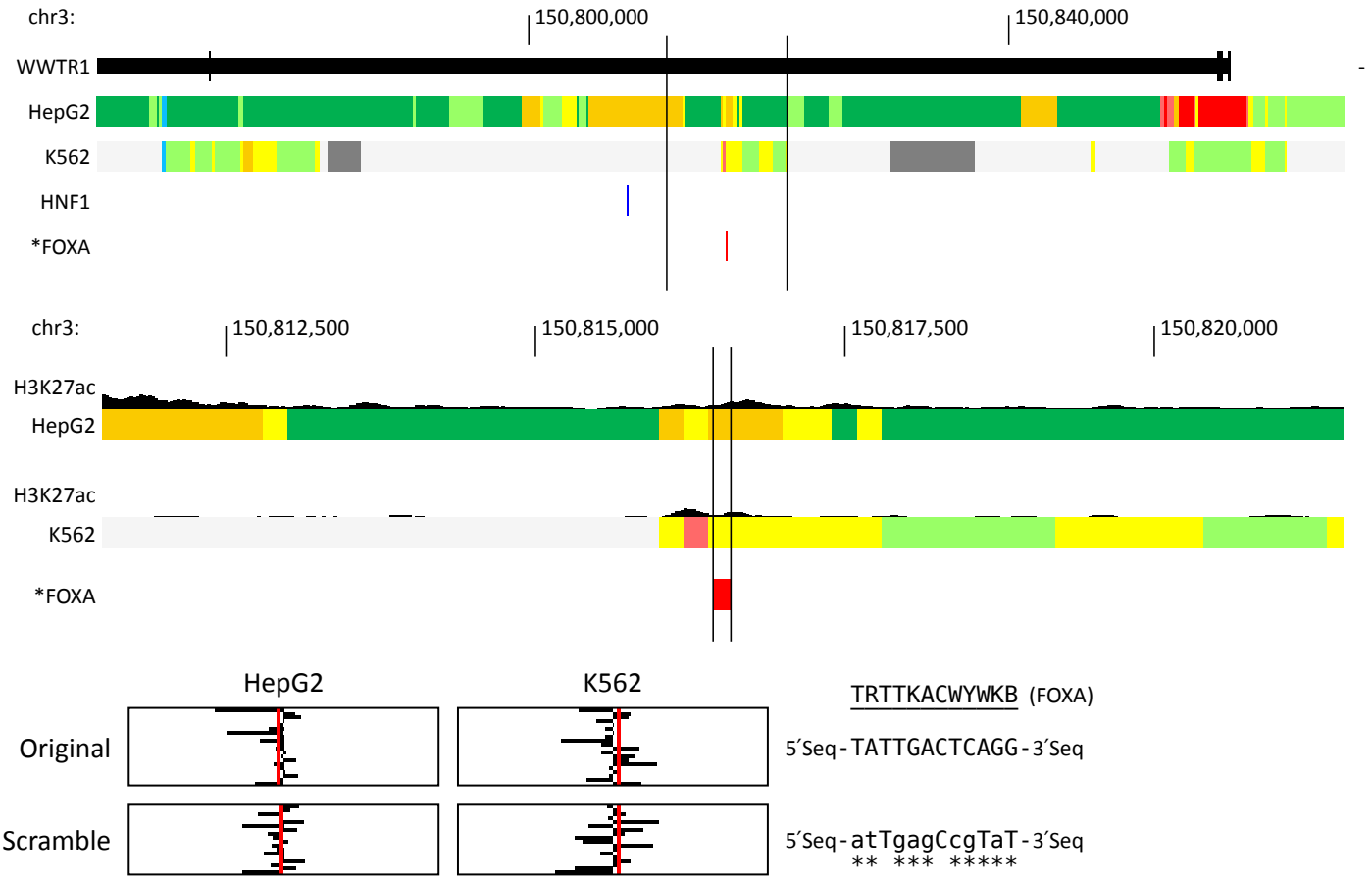
1208 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 150816503 150816514 - (hg18)



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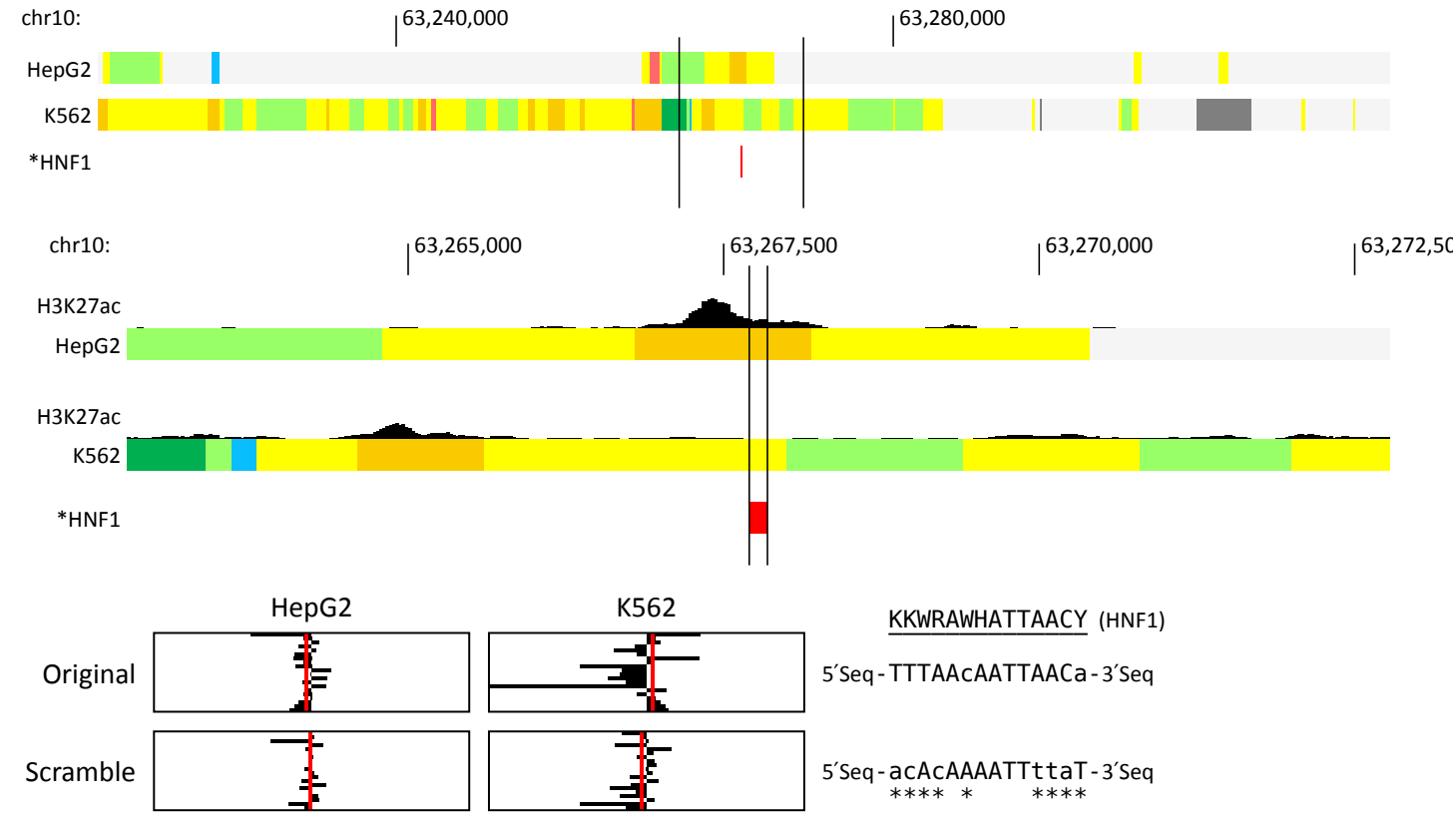
1209 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 63267769 63267782 - (hg18)



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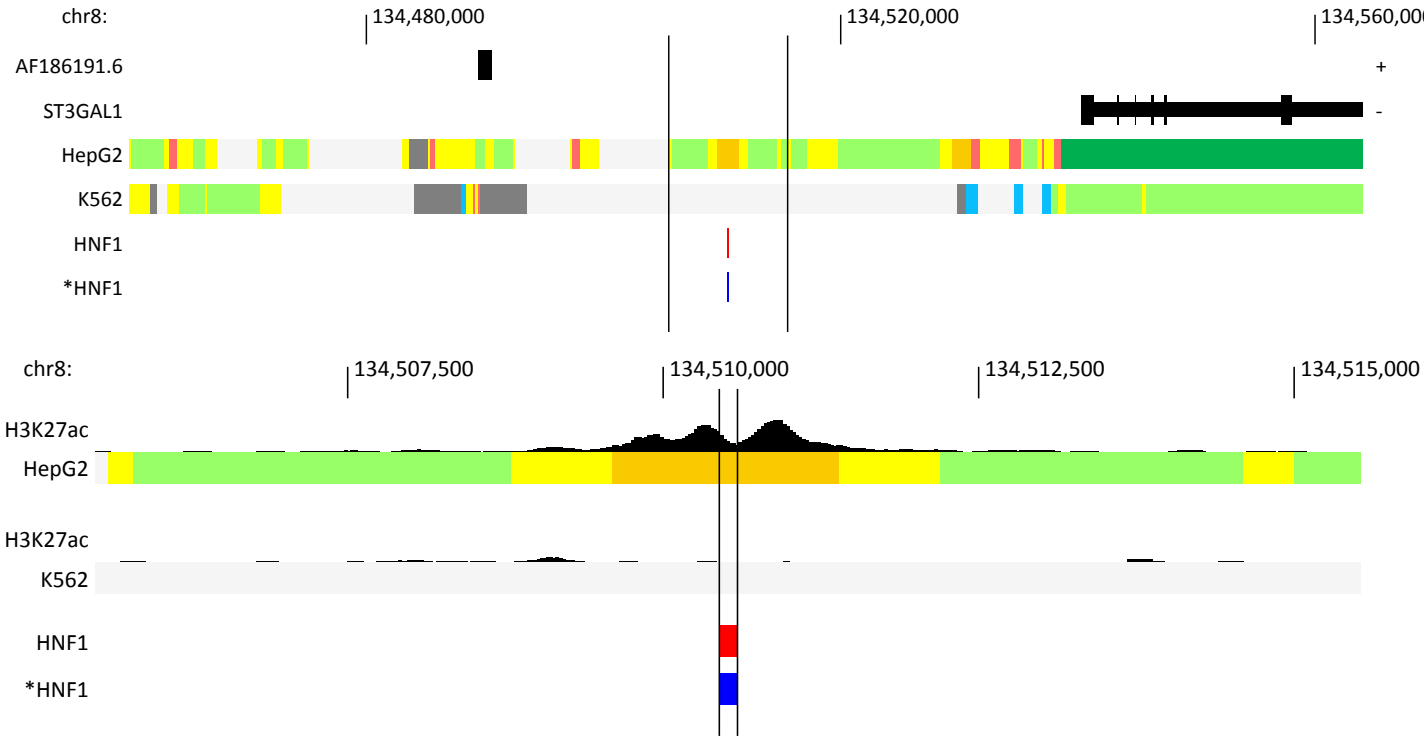
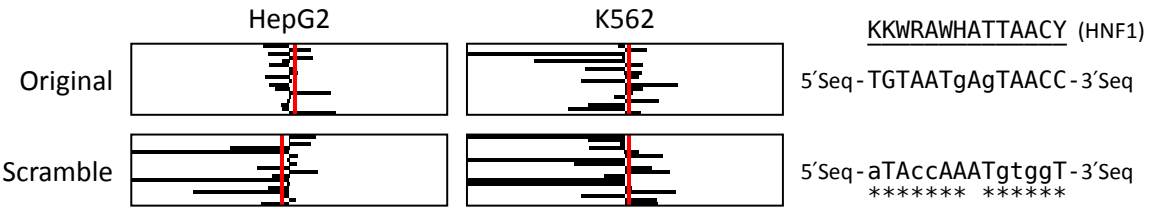
1210 HNF1 in HepG2 enhancer

chr8 134510511 134510524 - (hg18)





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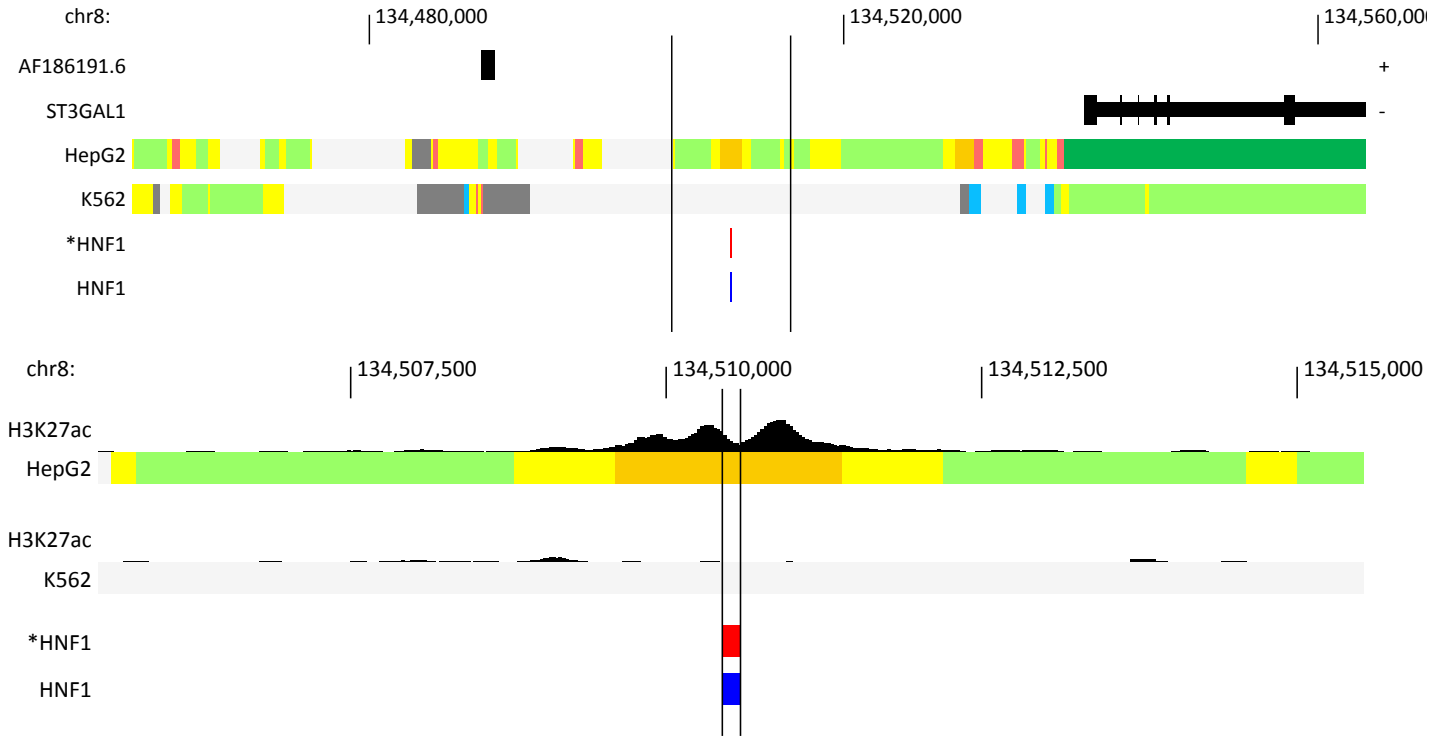
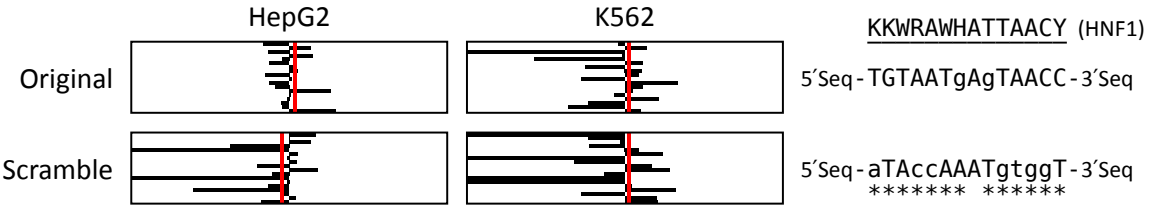
1211 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr8 134510511 134510524 - (hg18)





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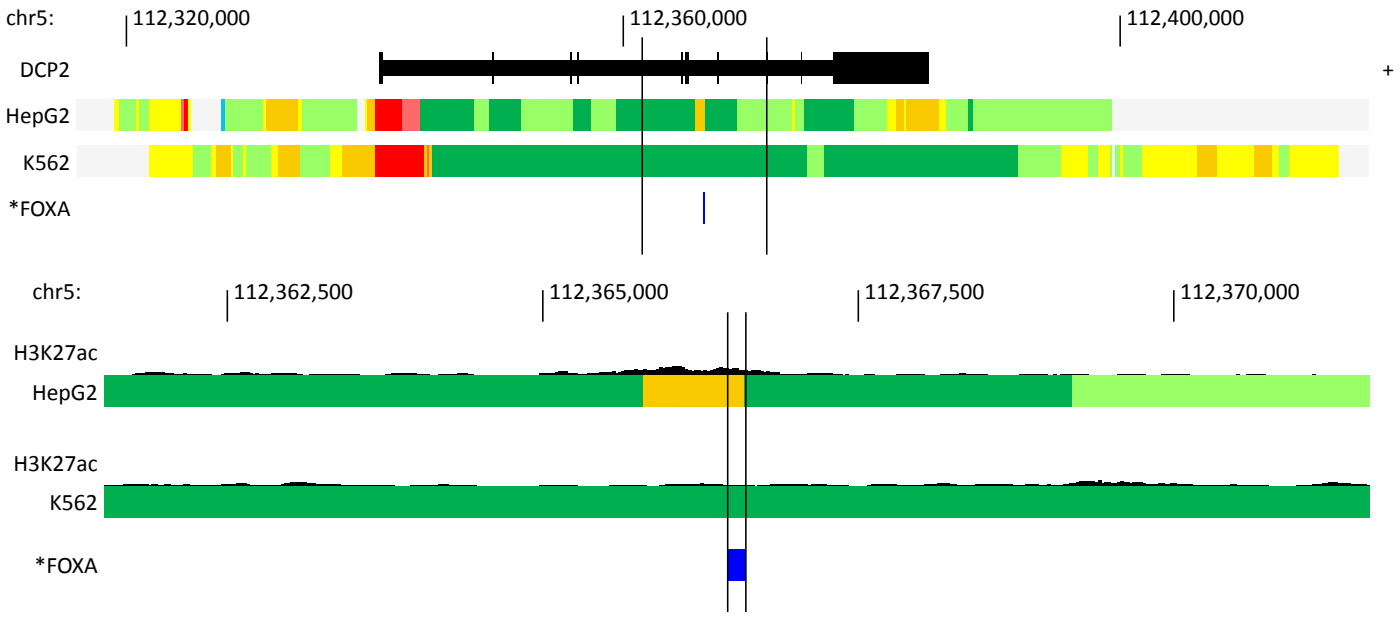
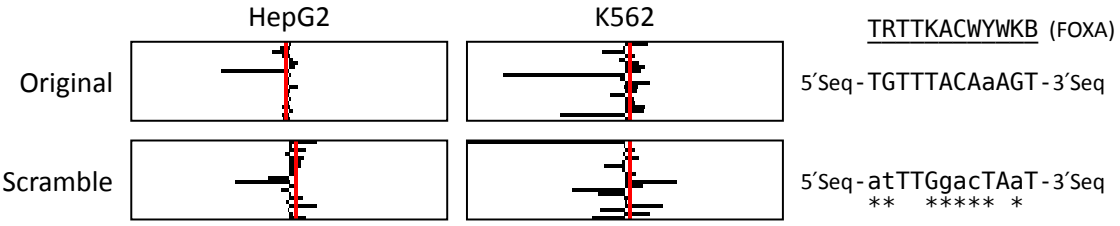
1212 FOXA in HepG2 enhancer

chr5 112366532 112366543 + (hg18)





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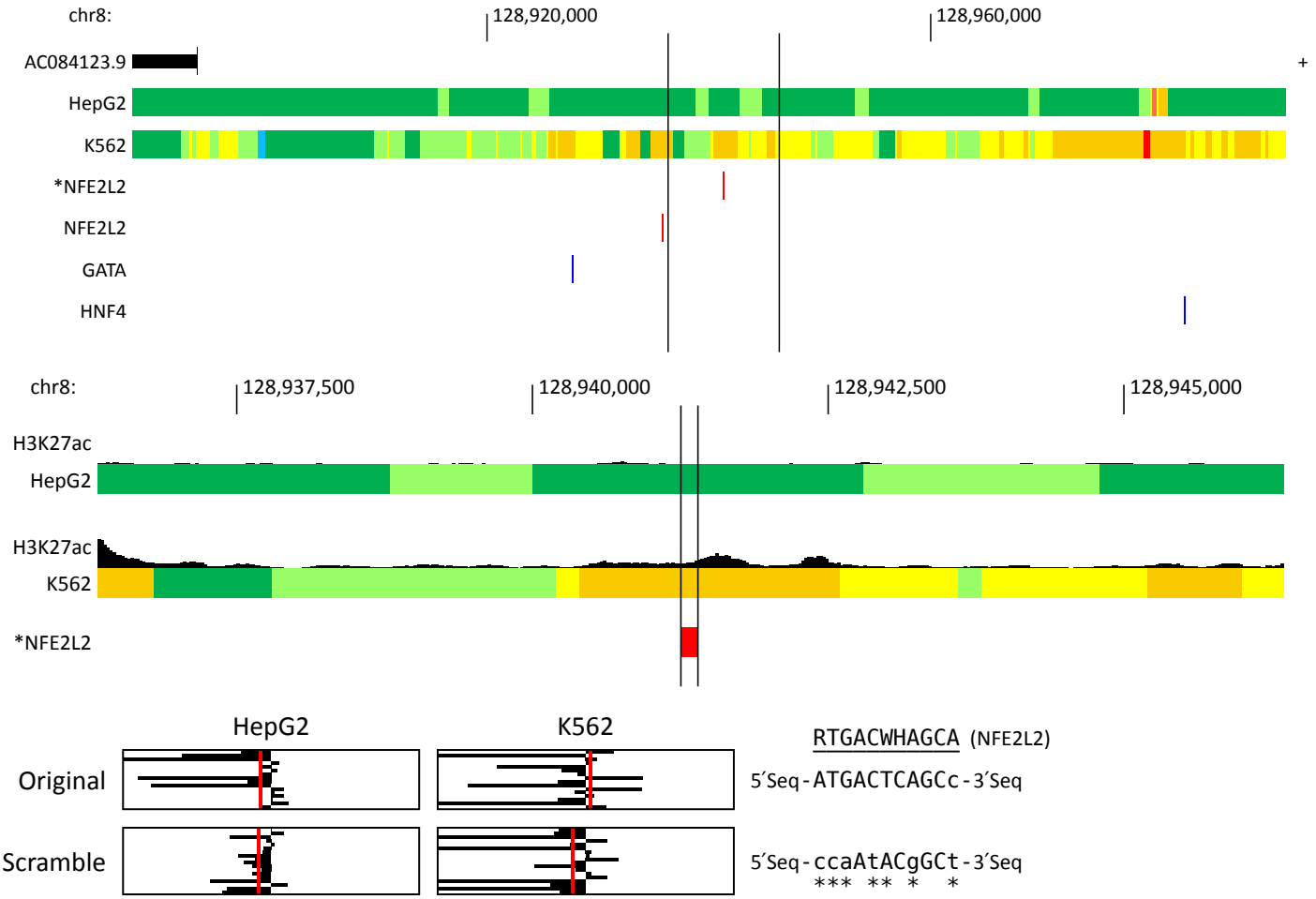
1213 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 128941322 128941332 - (hg18)



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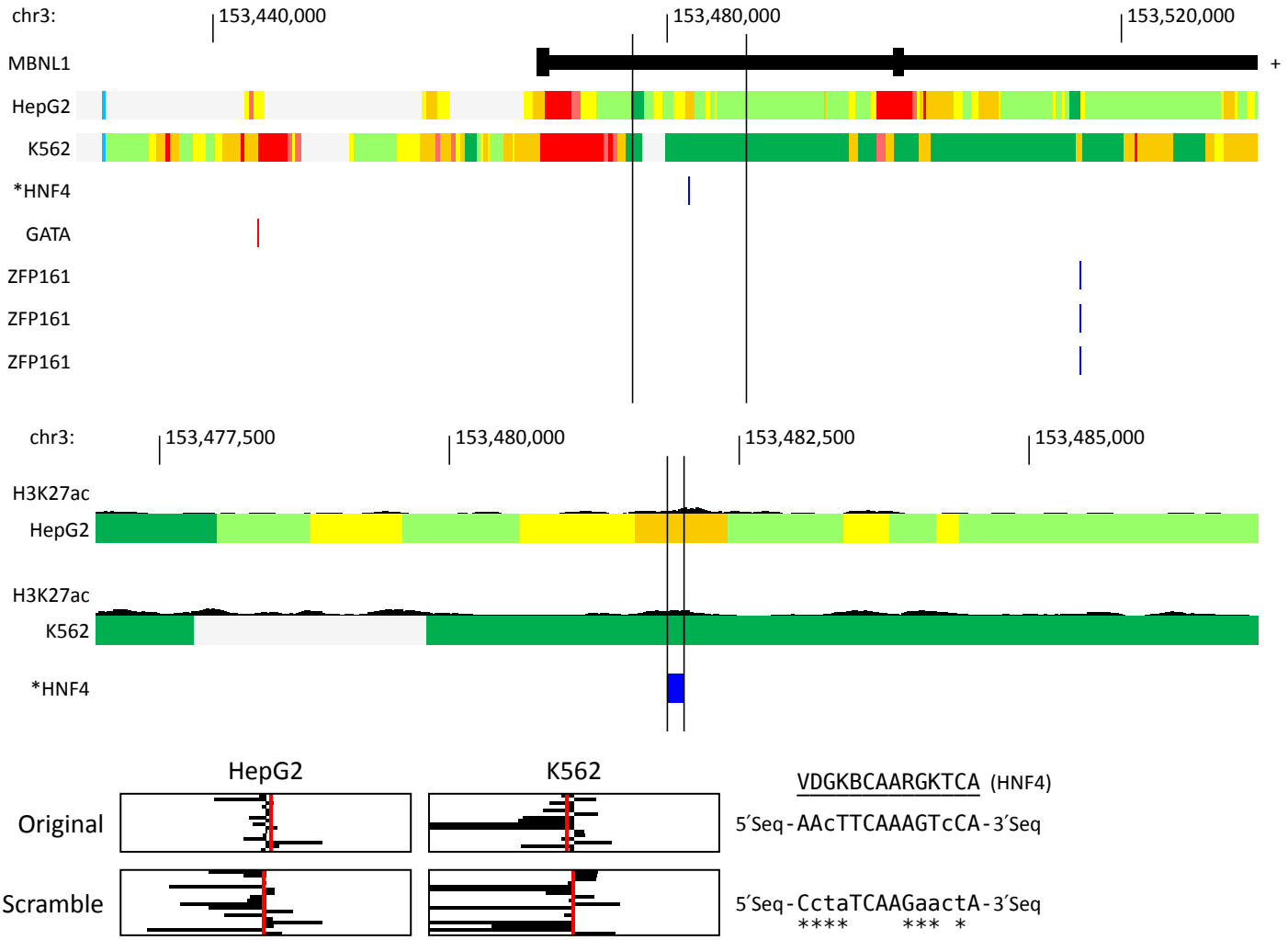
1214 HNF4 in HepG2 enhancer

chr3 153481946 153481959 - (hg18)



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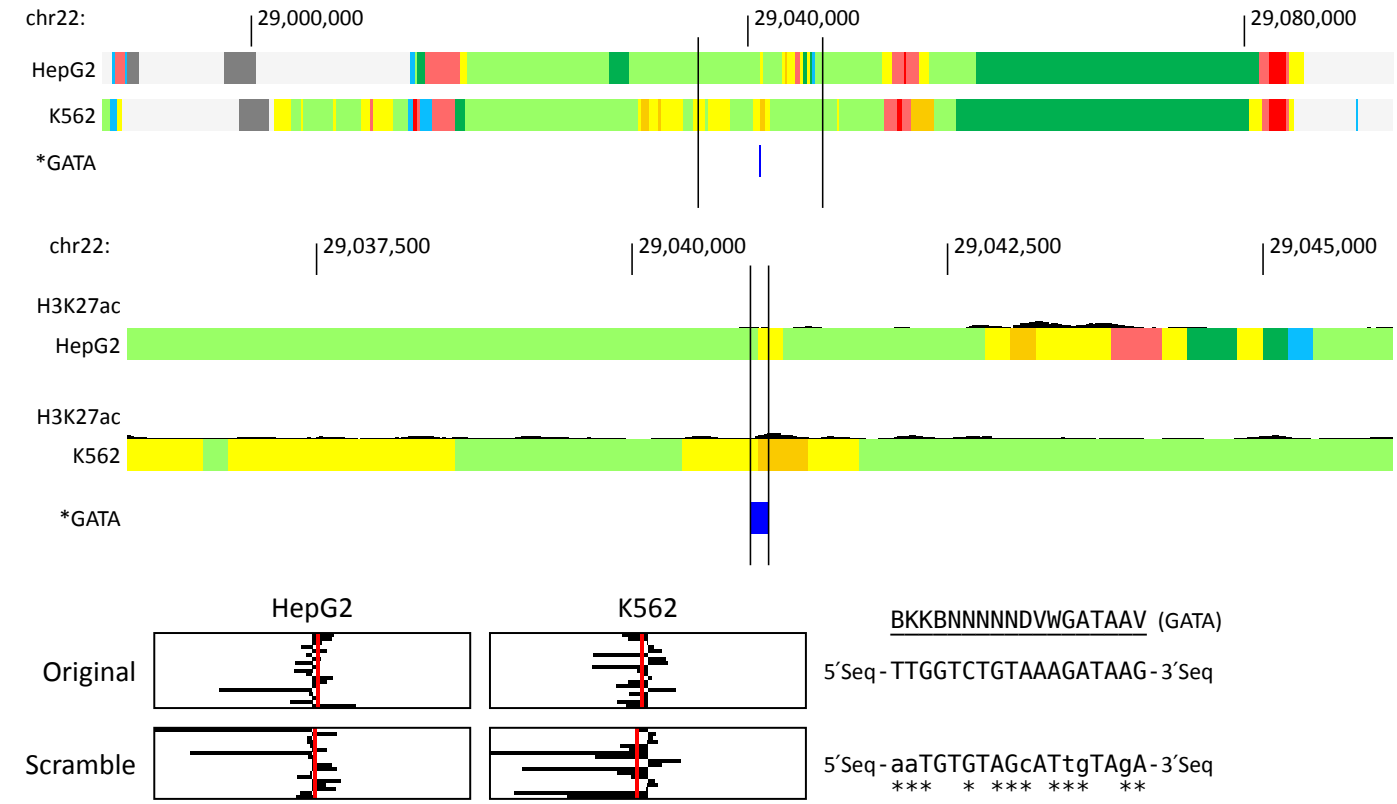
1215 GATA in K562 enhancer

chr22 29041002 29041019 - (hg18)



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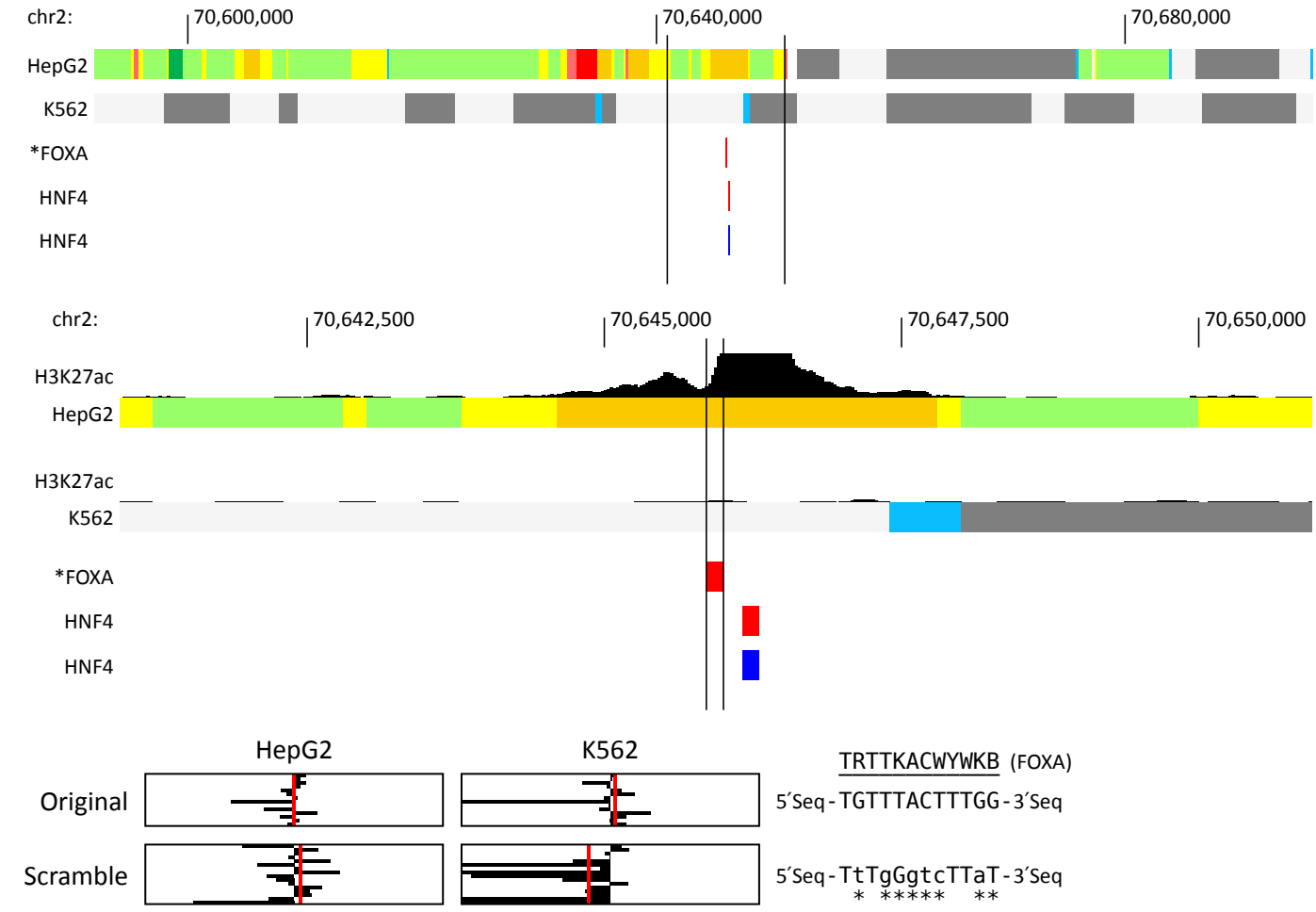
1216 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 70645925 70645936 + (hg18)



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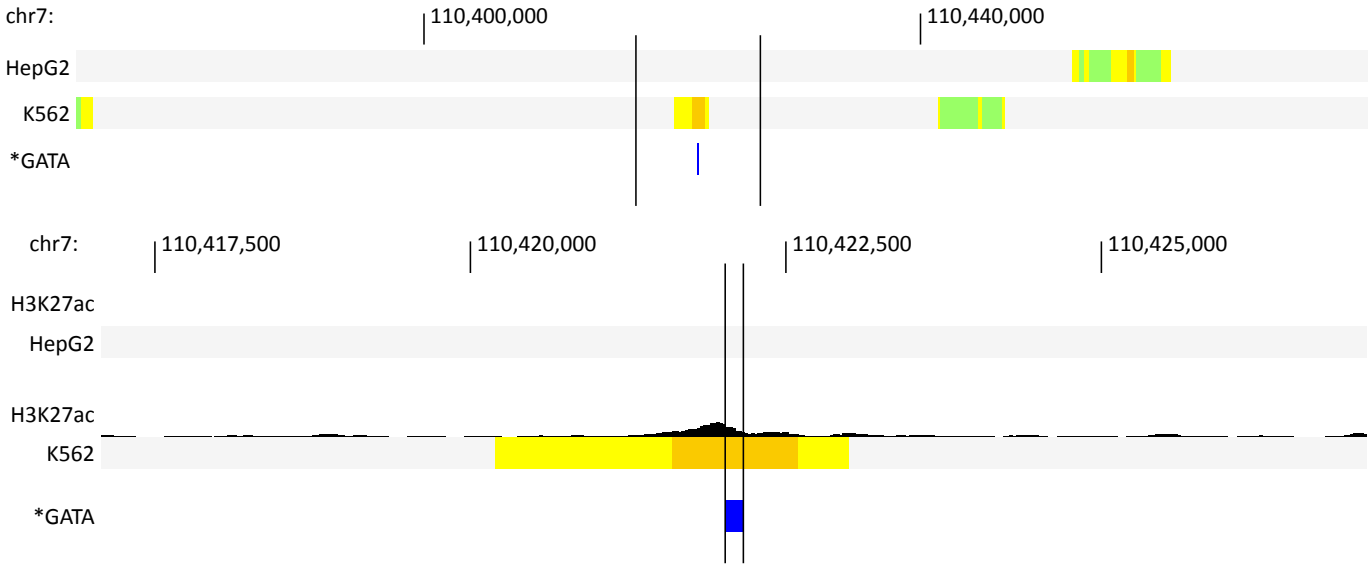
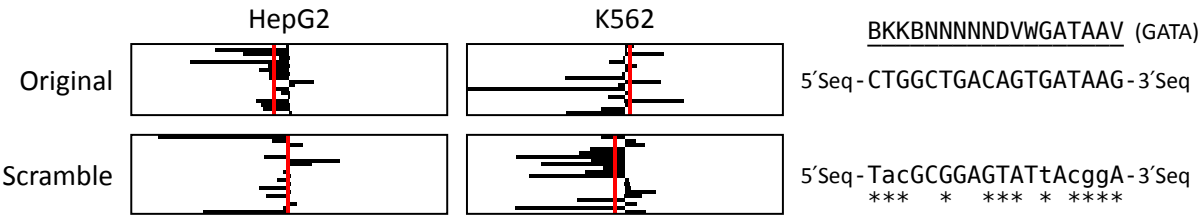
1217 GATA in K562 enhancer

chr7 110422083 110422100 + (hg18)





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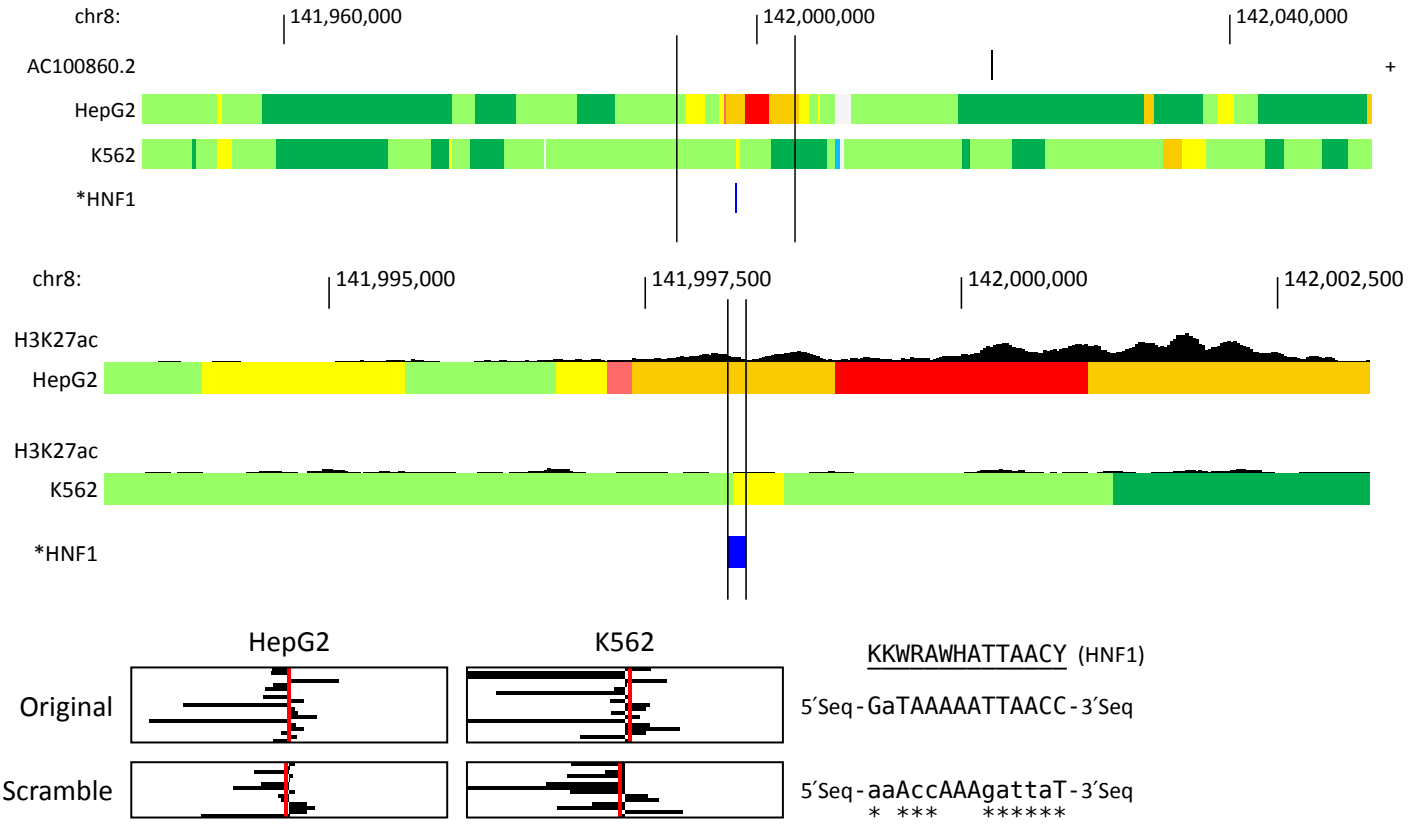
1218 HNF1 in HepG2 enhancer

chr8 141998219 141998232 + (hg18)



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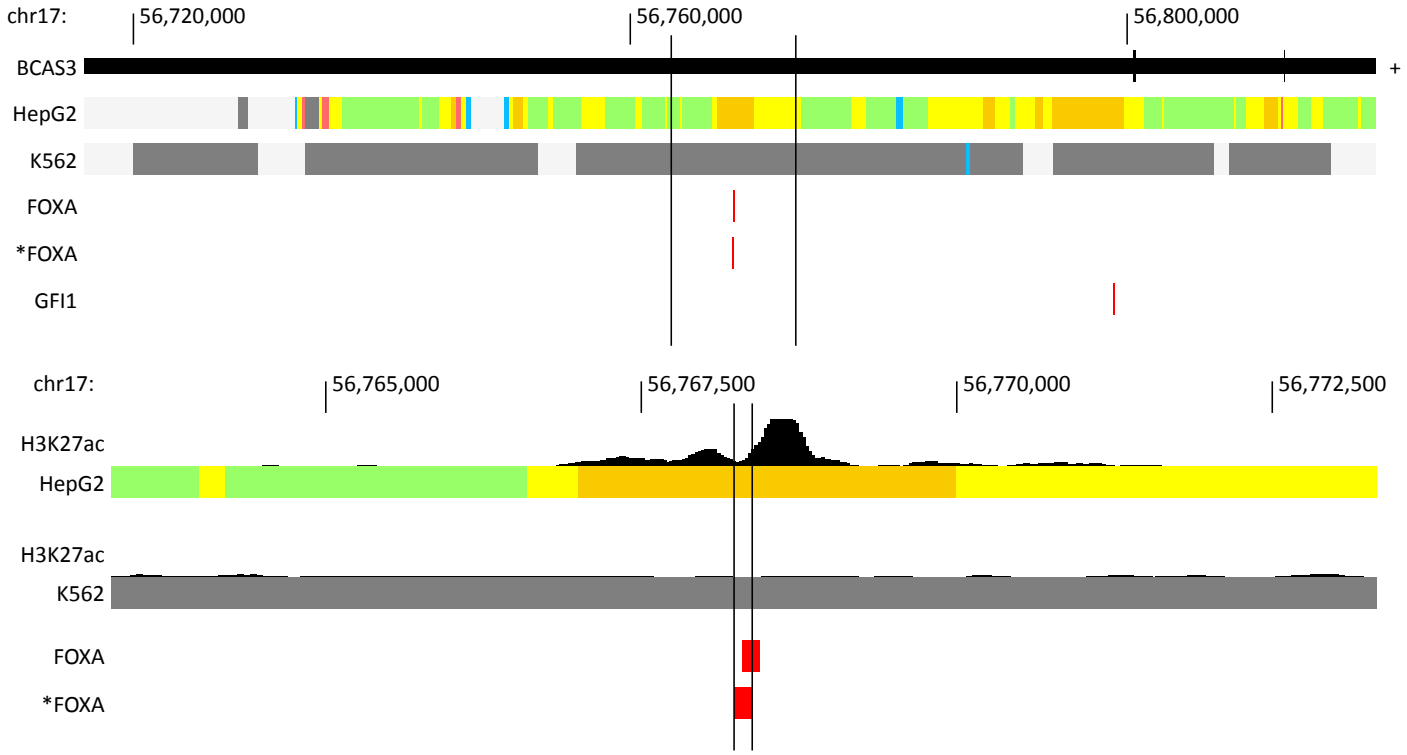
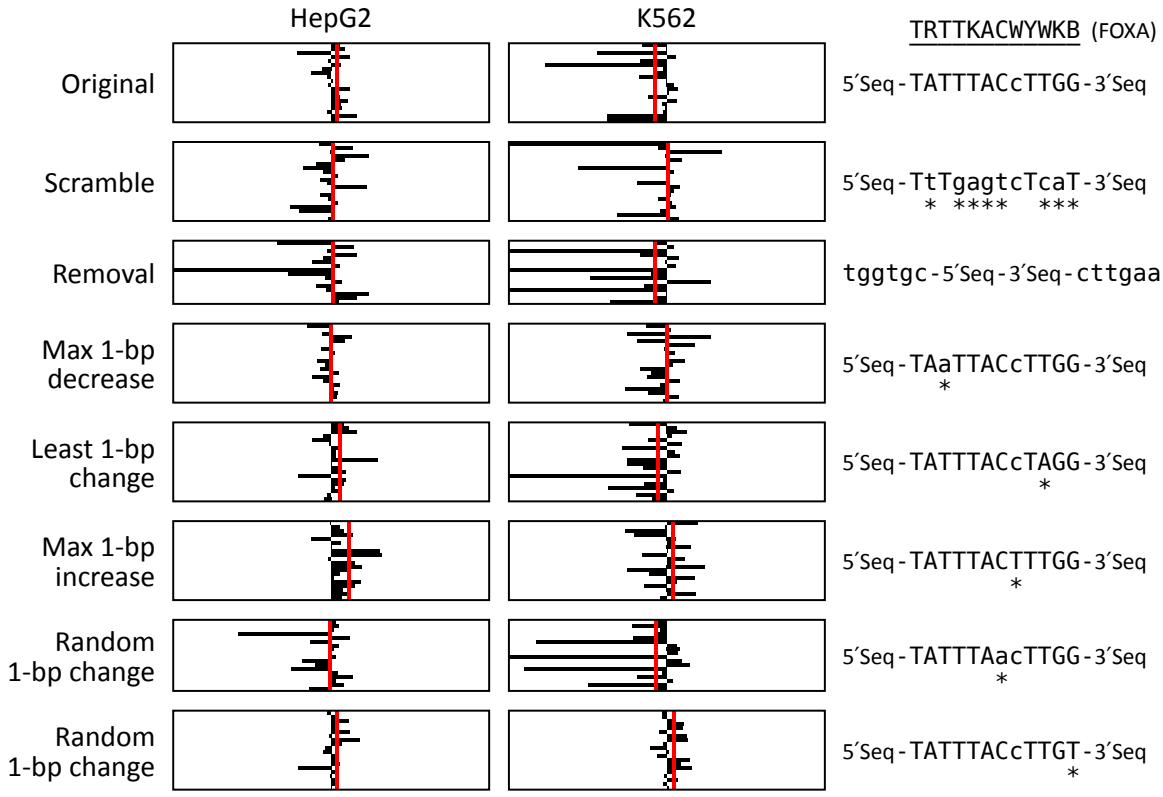
1219 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr17 56768302 56768313 + (hg18)





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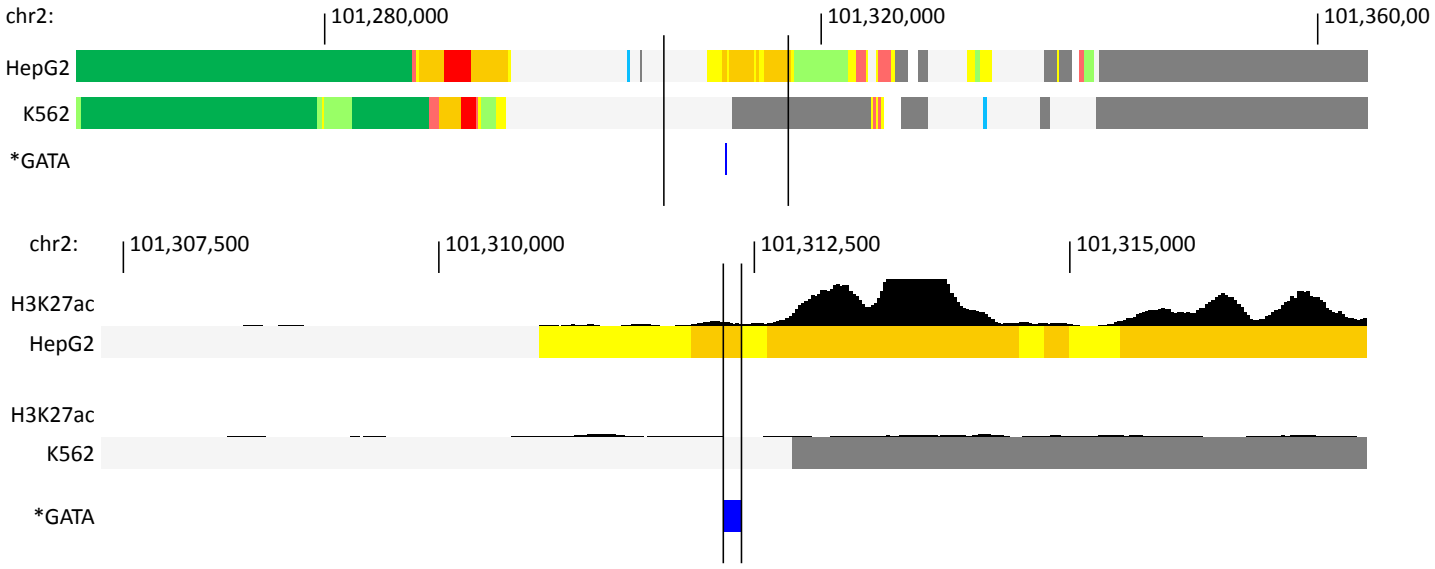
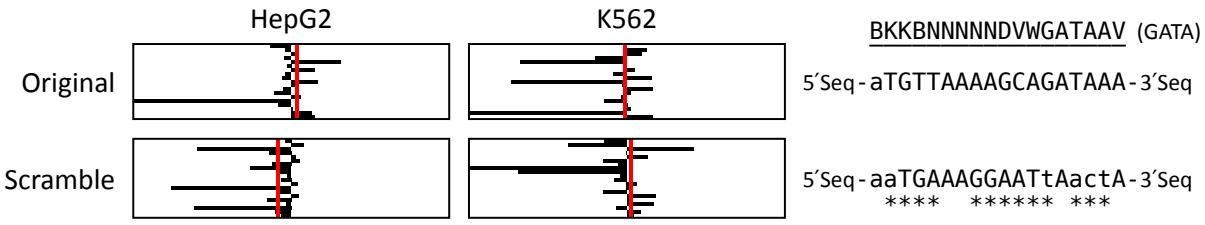
1220 GATA in HepG2 enhancer

chr2 101312318 101312335 - (hg18)





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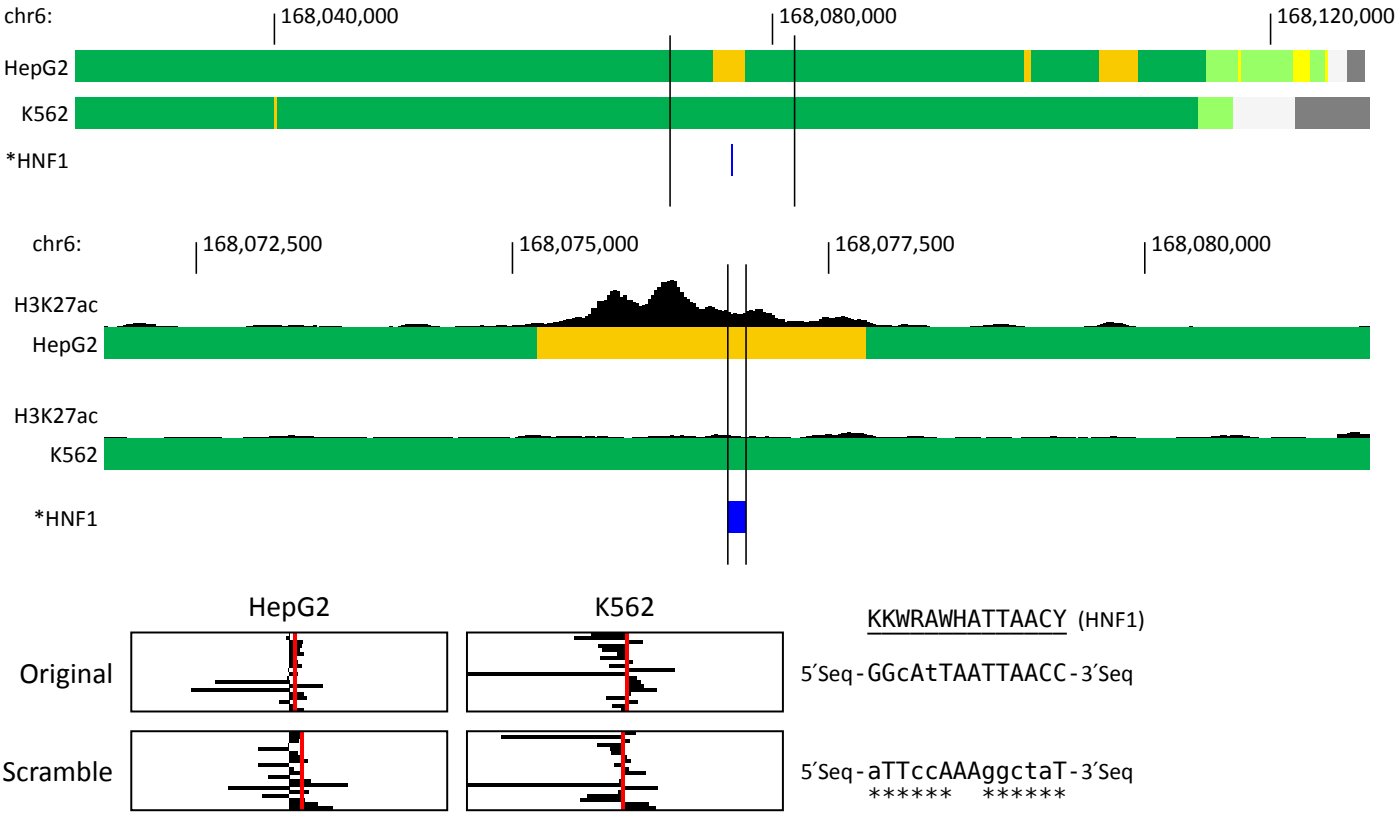
1221 HNF1 in HepG2 enhancer

chr6 168076769 168076782 - (hg18)



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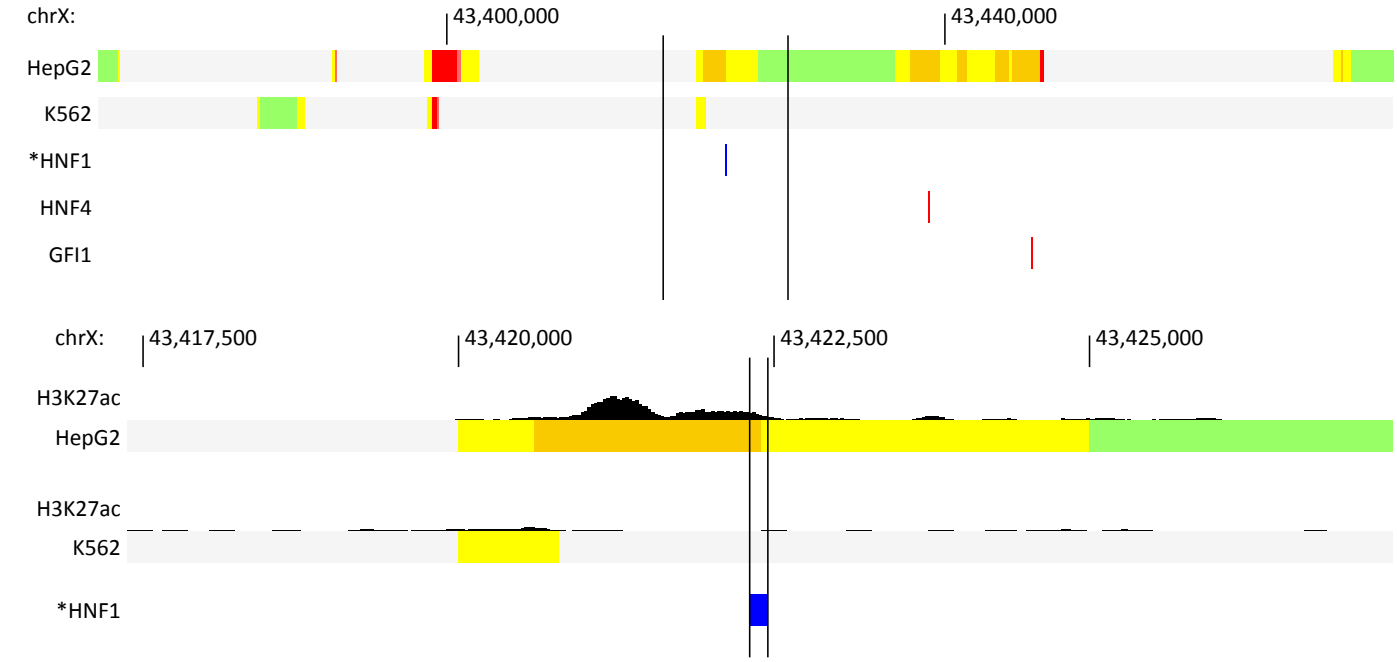
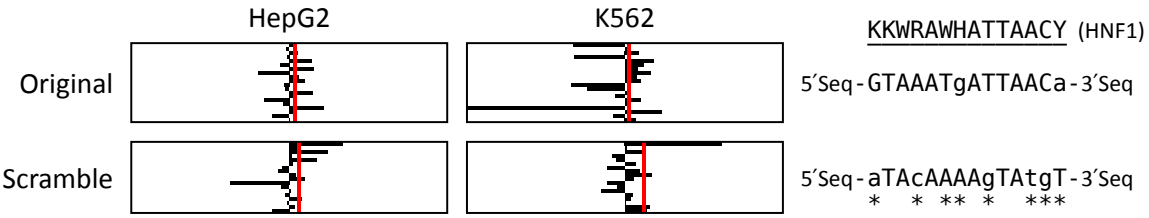
1222 HNF1 in HepG2 enhancer

chrX 43422373 43422386 - (hg18)





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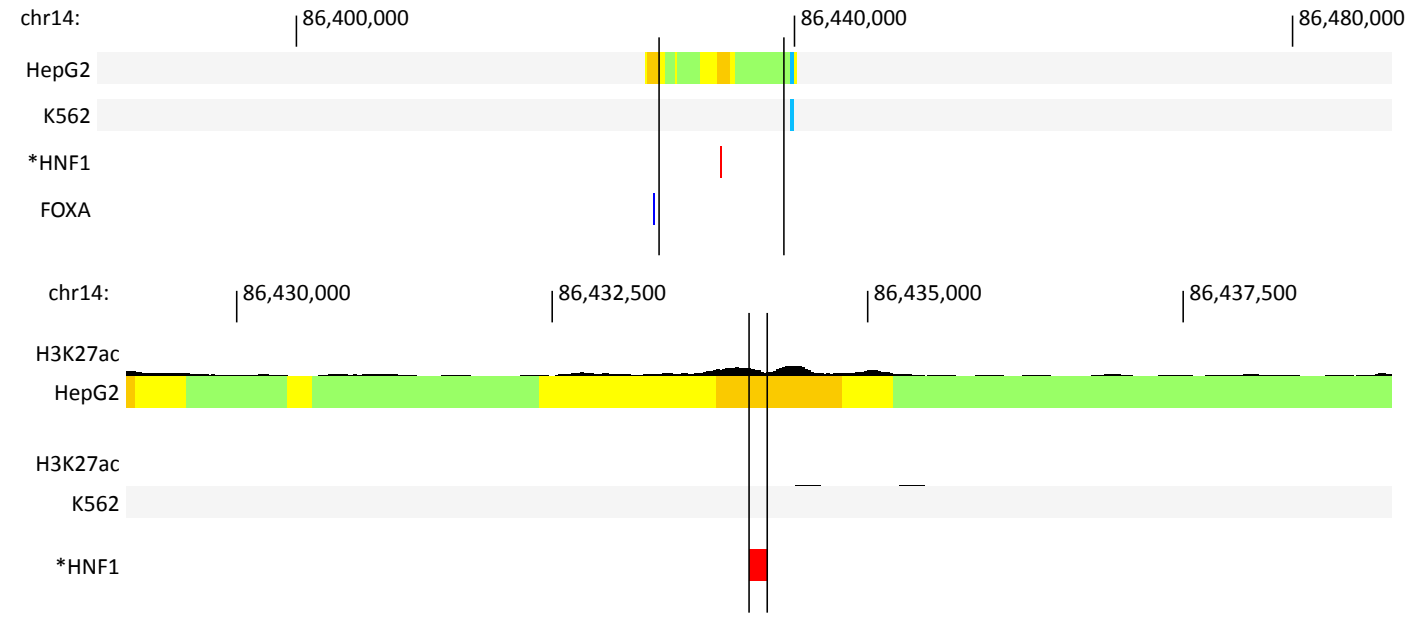
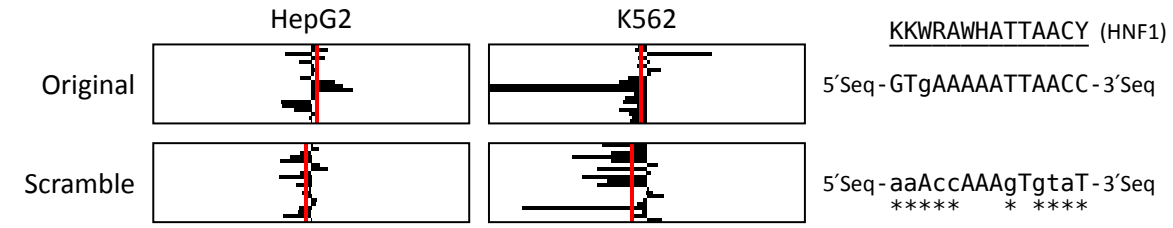
1223 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr14 86434126 86434139 + (hg18)





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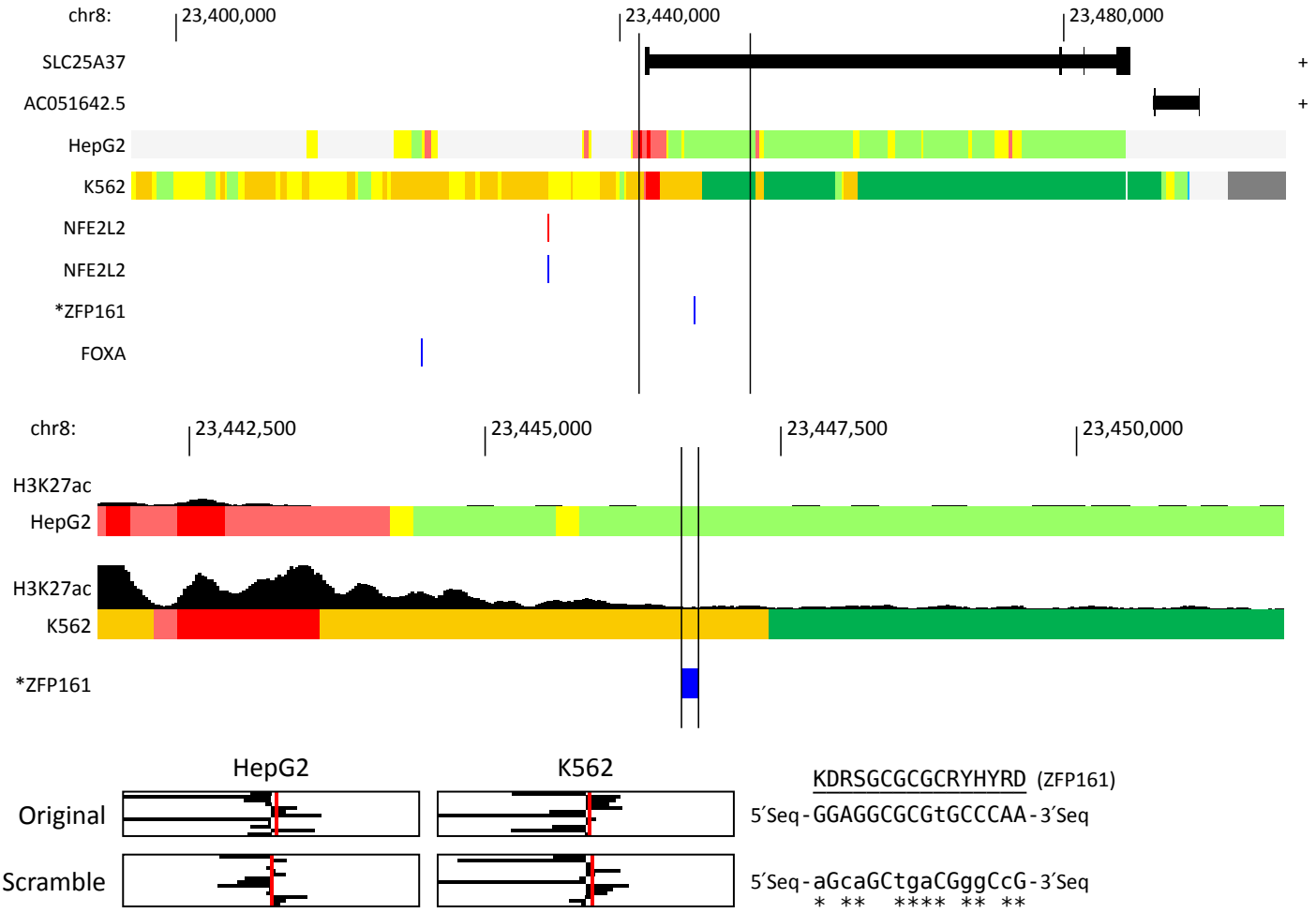
1224 ZFP161 in K562 enhancer

chr8 23446725 23446740 + (hg18)



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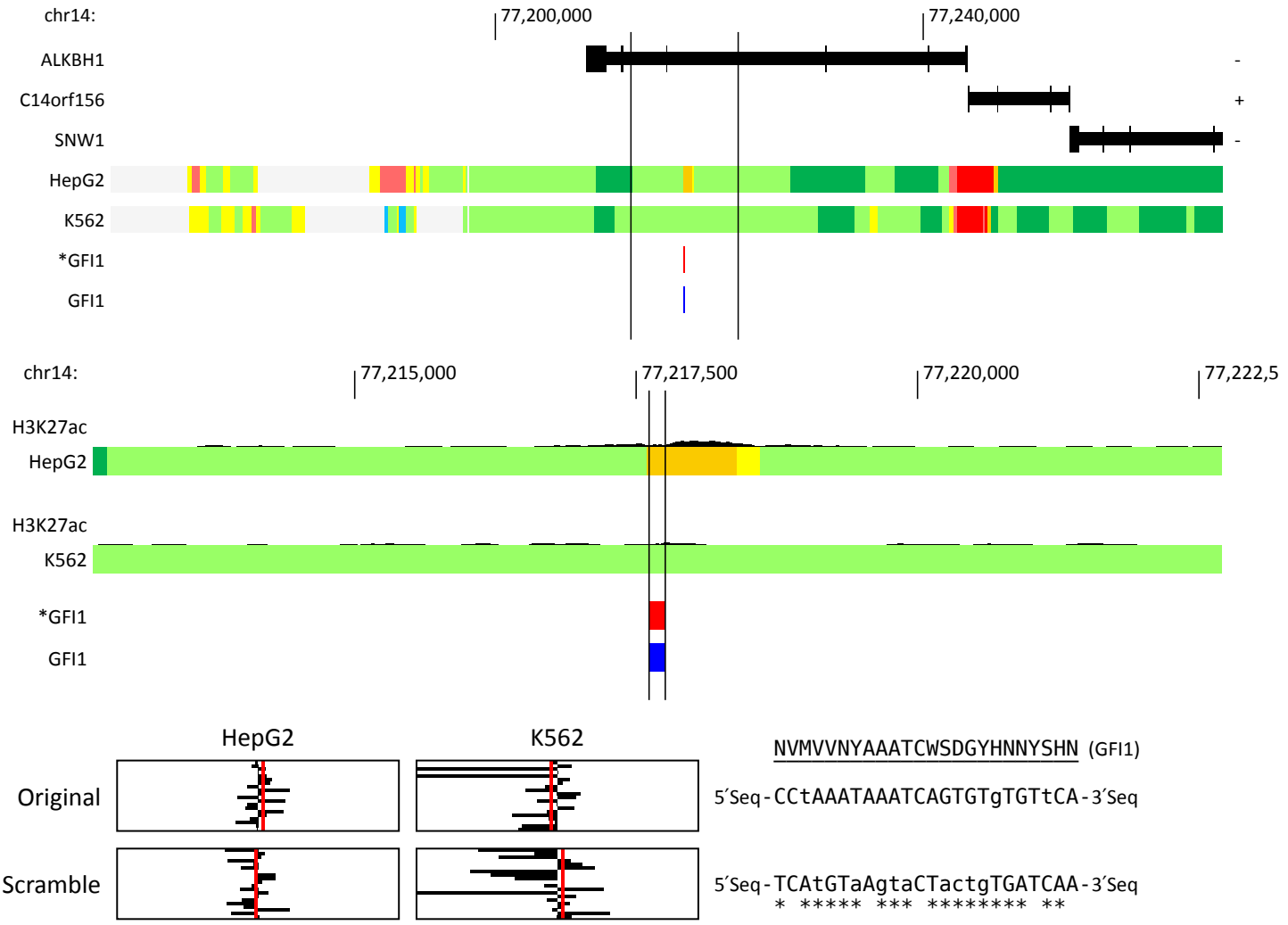
1225 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 77217676 77217699 - (hg18)



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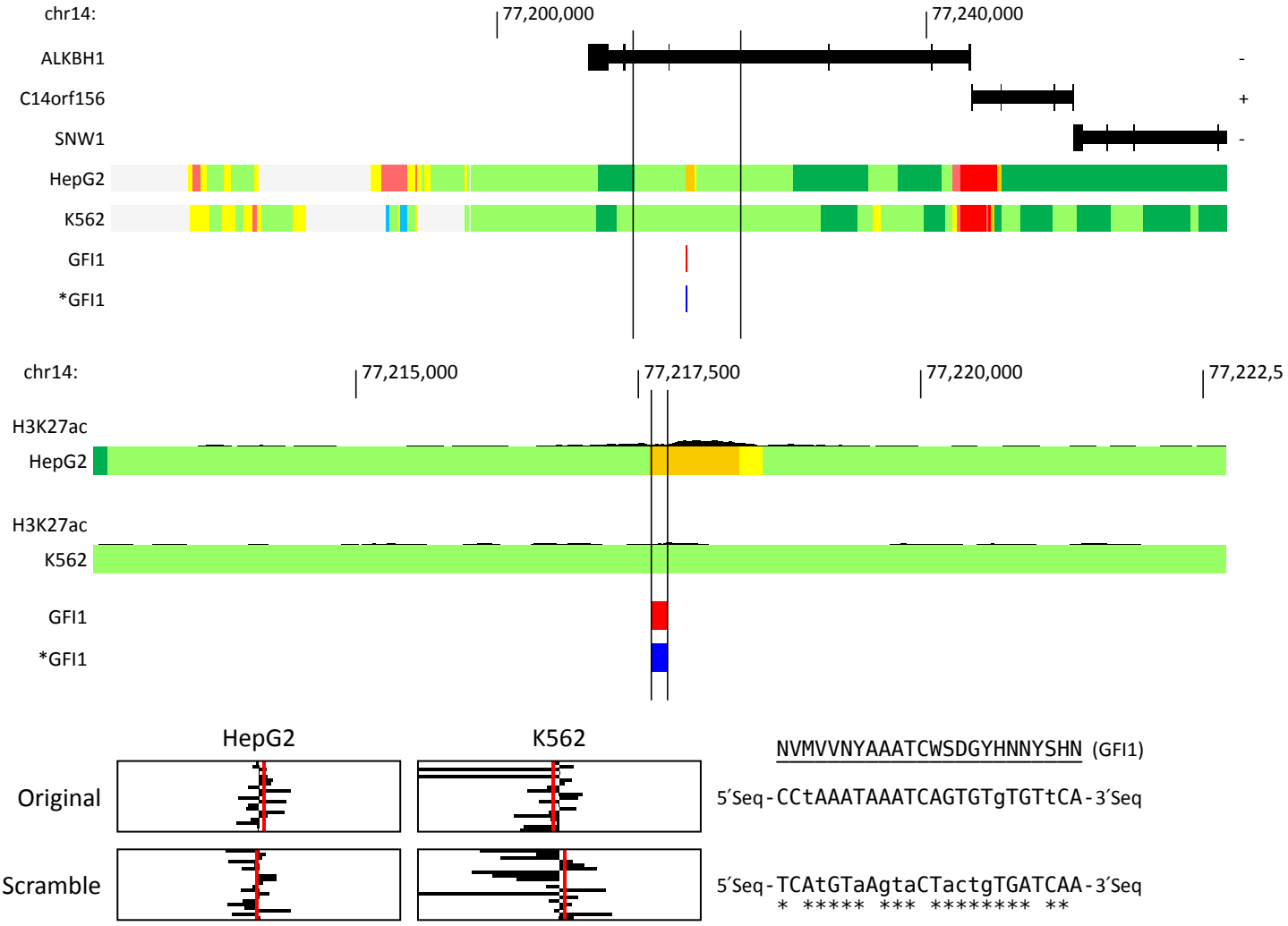
1226 GFI1 in HepG2 enhancer

chr14 77217676 77217699 - (hg18)



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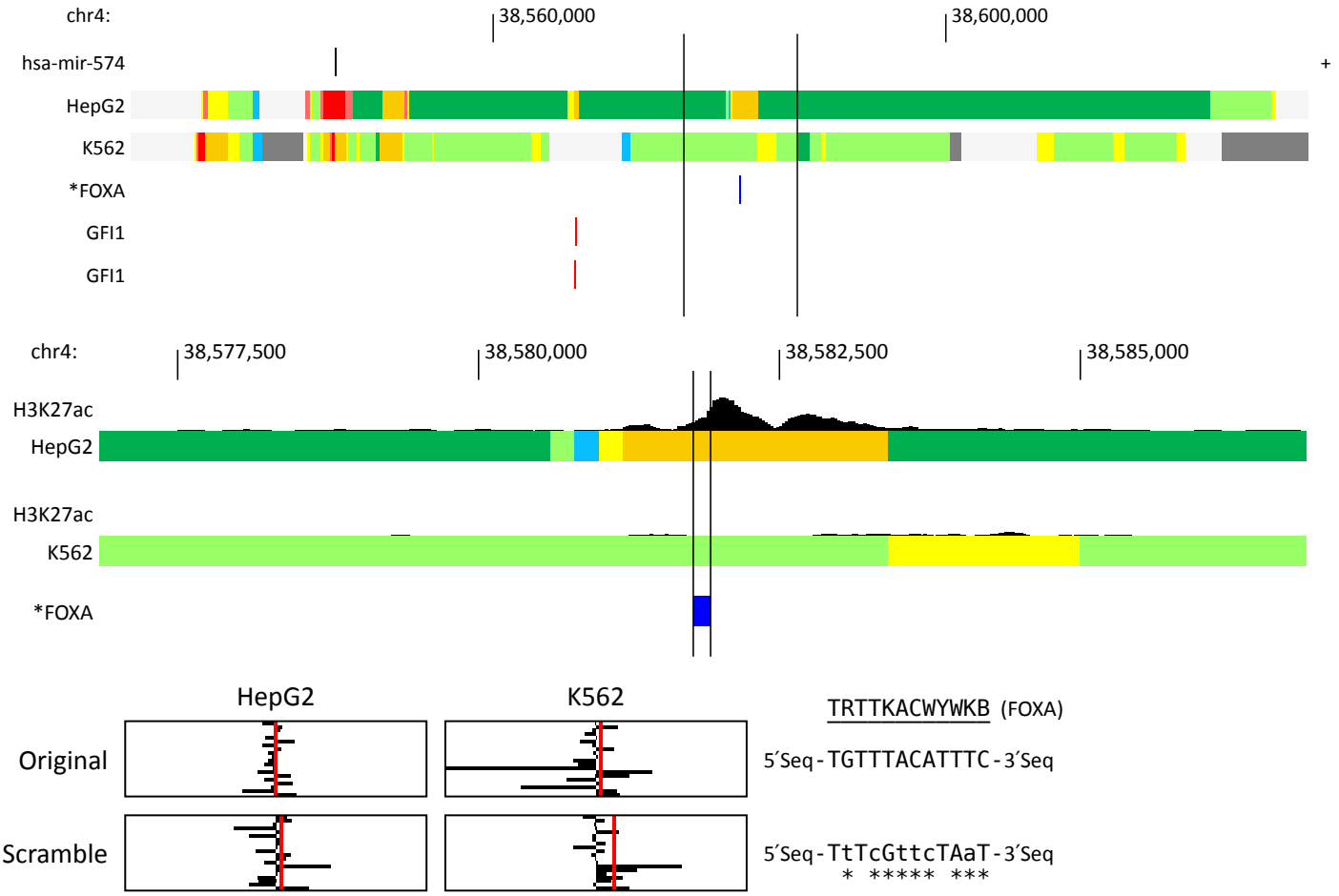
1227 FOXA in HepG2 enhancer

chr4 38581851 38581862 + (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACATTTC-3′Seq

5′Seq-TtTcGttcTAaT-3′Seq

* ***** ***

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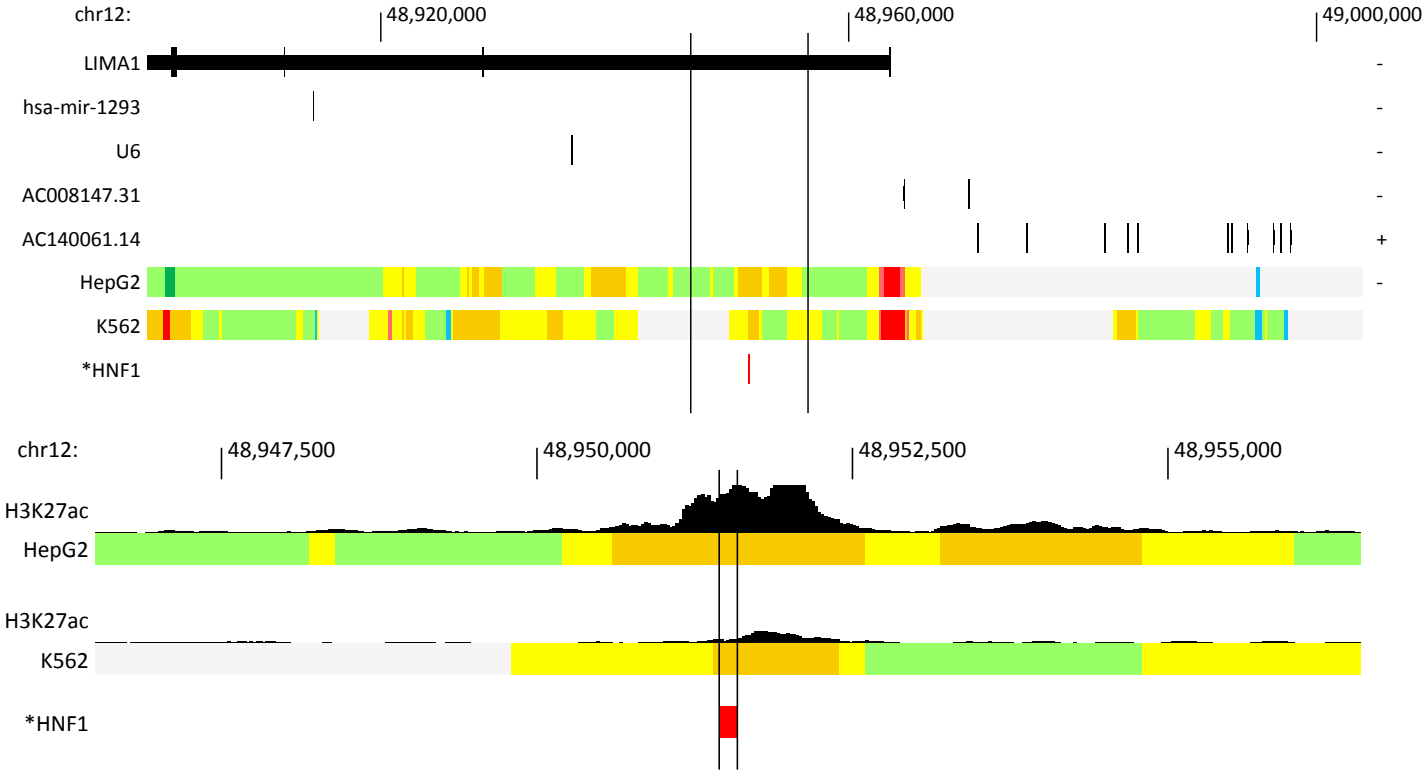
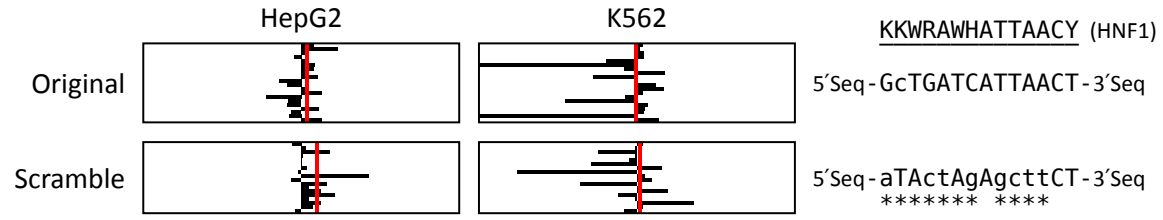
3′Seq = agggttttctaggtagtgtataaggacaggtgatttccattggacataattccttctacatttgtc

1228 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr12 48951510 48951523 + (hg18)





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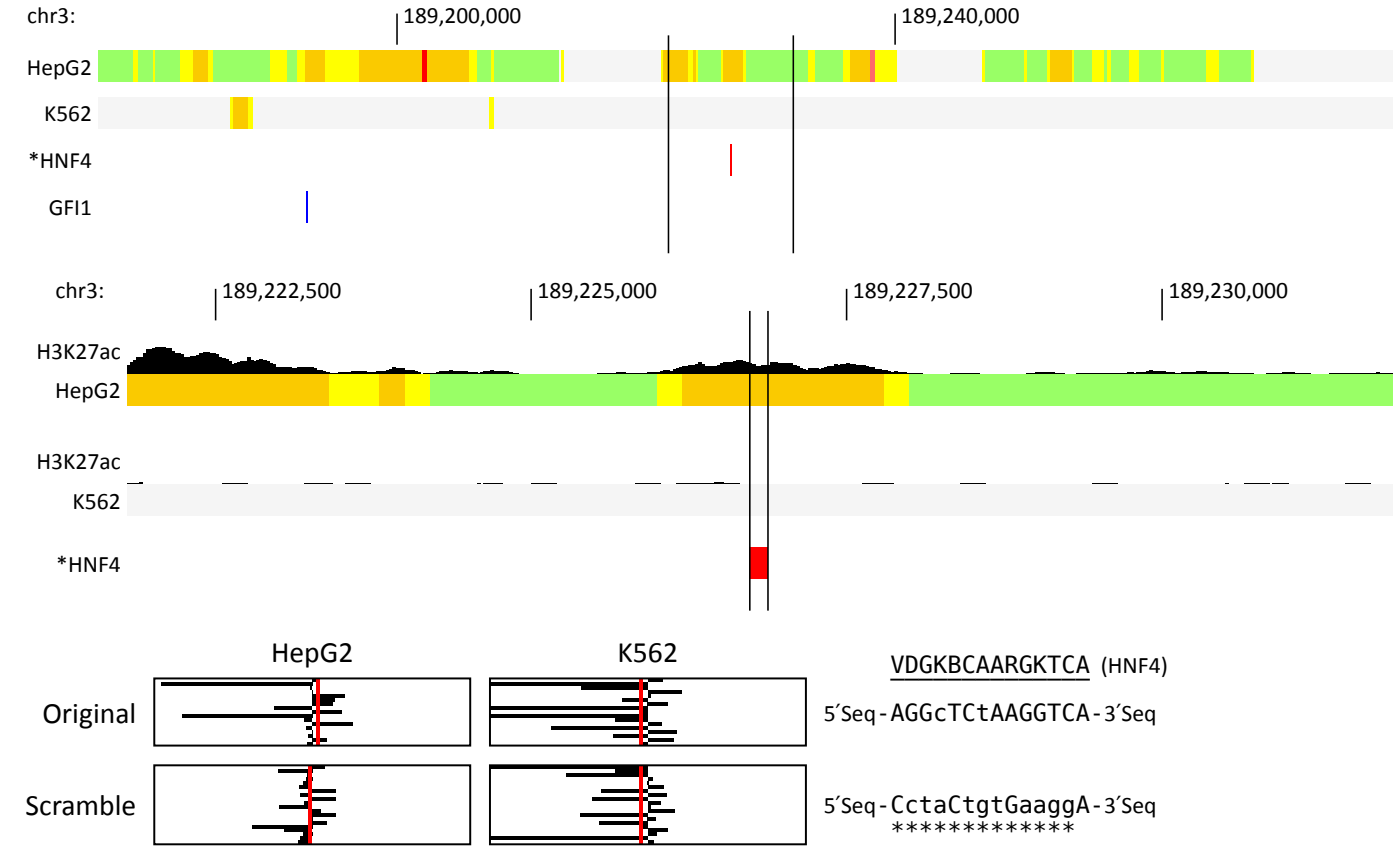
3′Seq = tattctaagggcaaacataatccaacgaagtgaggttttcttatttttccagtagtttttttca

1229 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr3 189226799 189226812 + (hg18)



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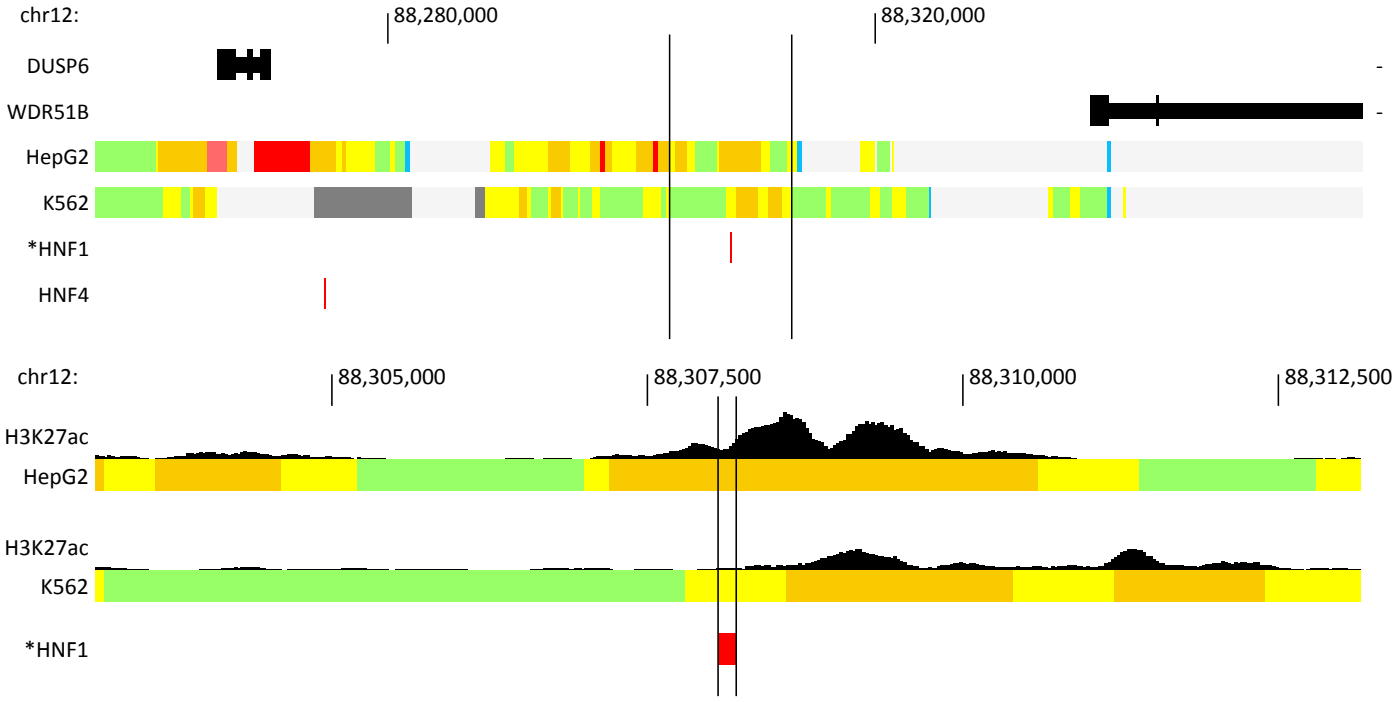
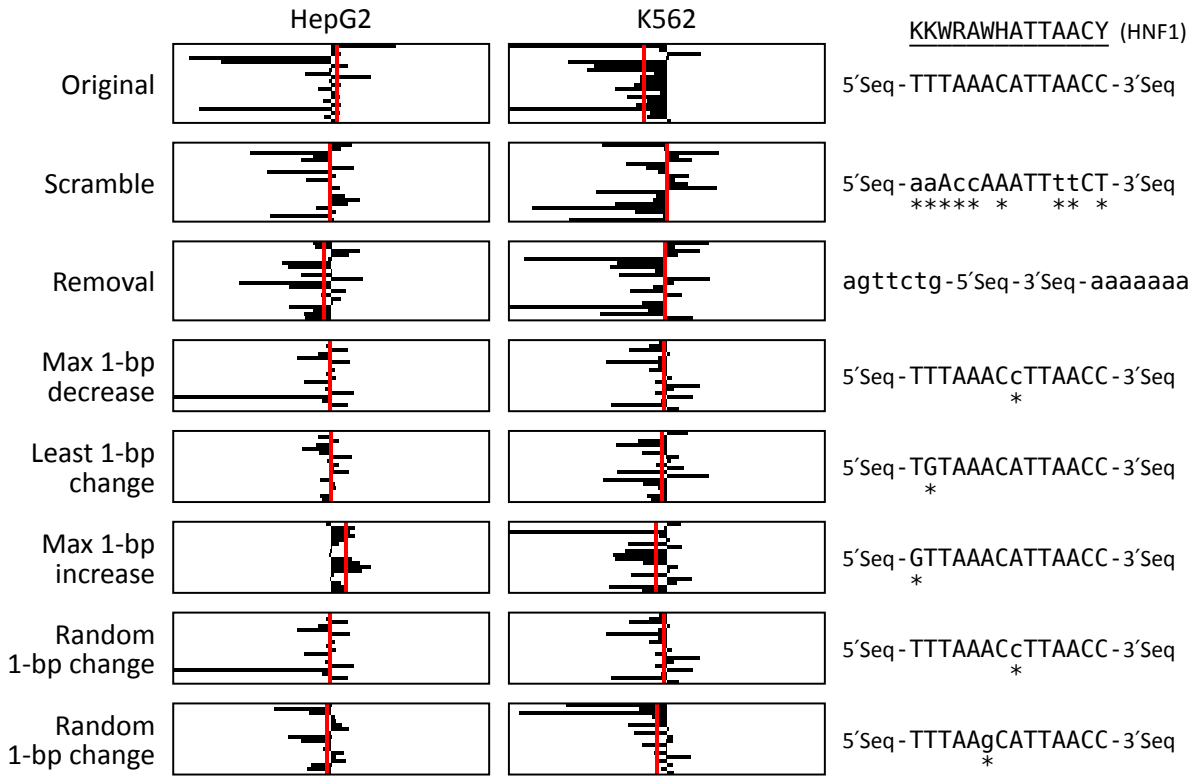
1230 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr12 88308126 88308139 - (hg18)





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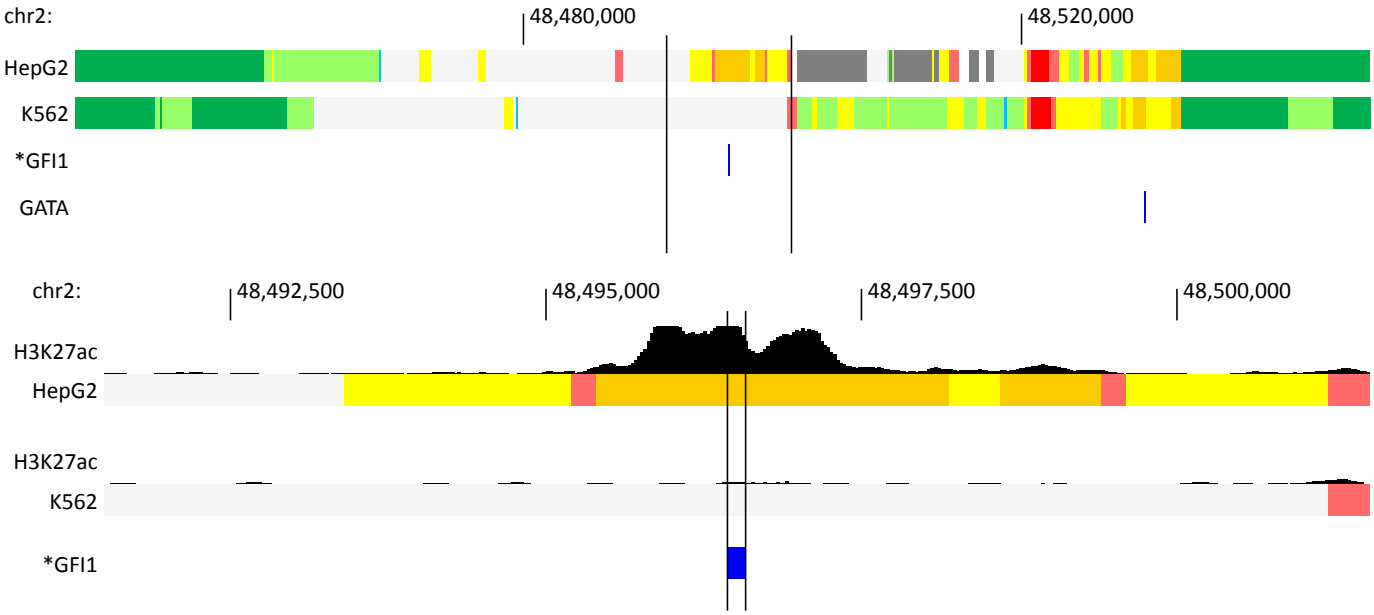
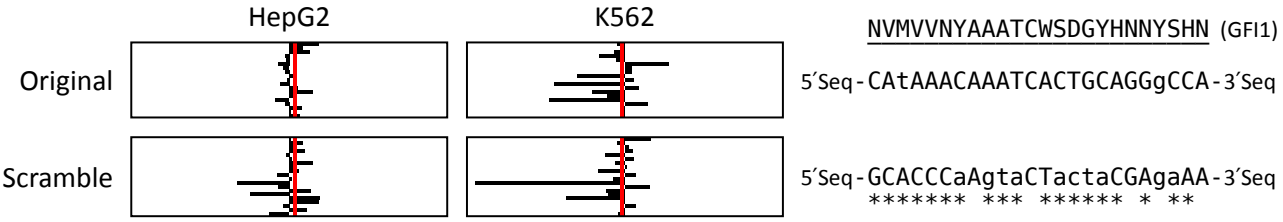
1231 GFI1 in HepG2 enhancer

chr2 48496499 48496522 + (hg18)





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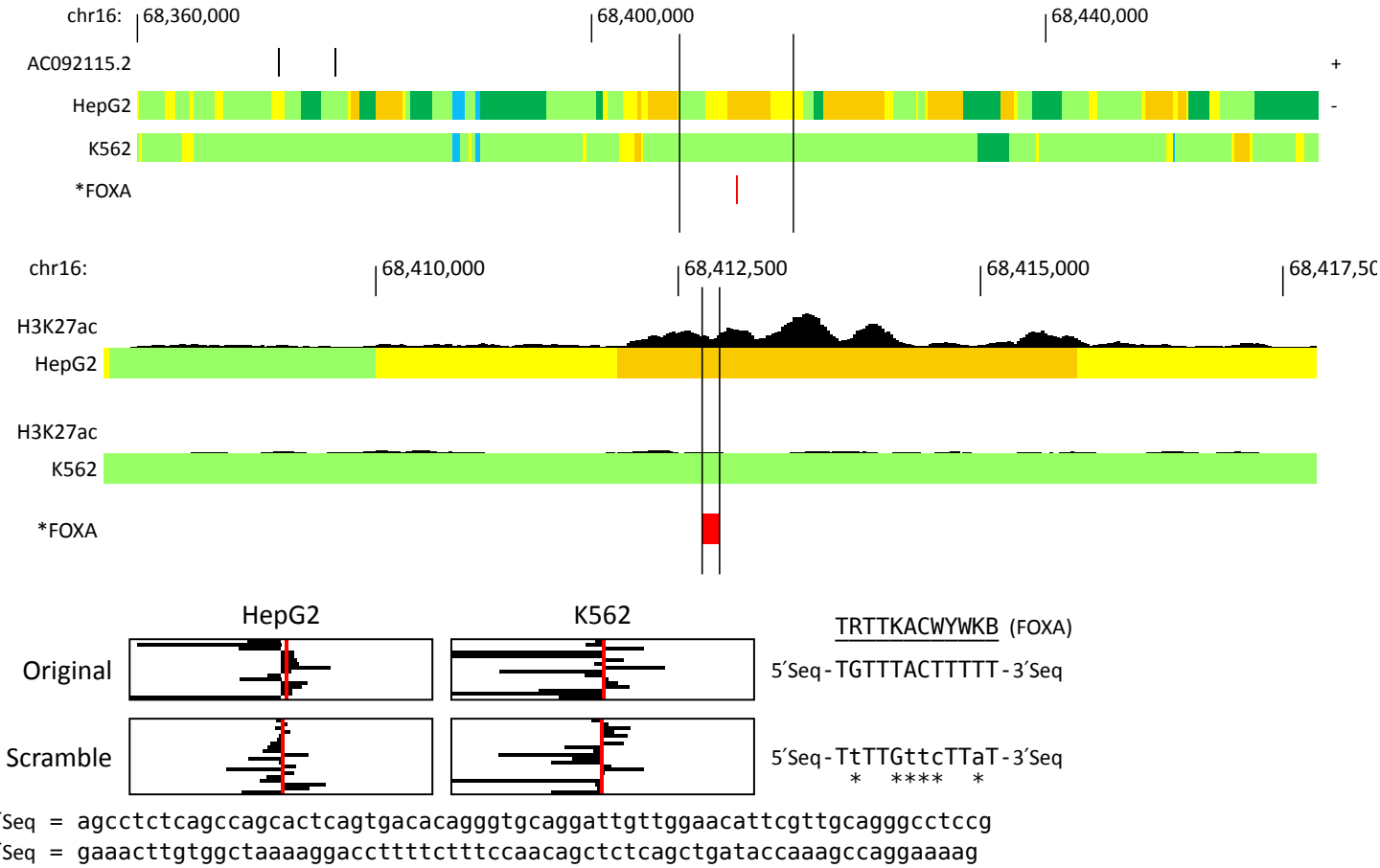
1232 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr16 68412765 68412776 - (hg18)



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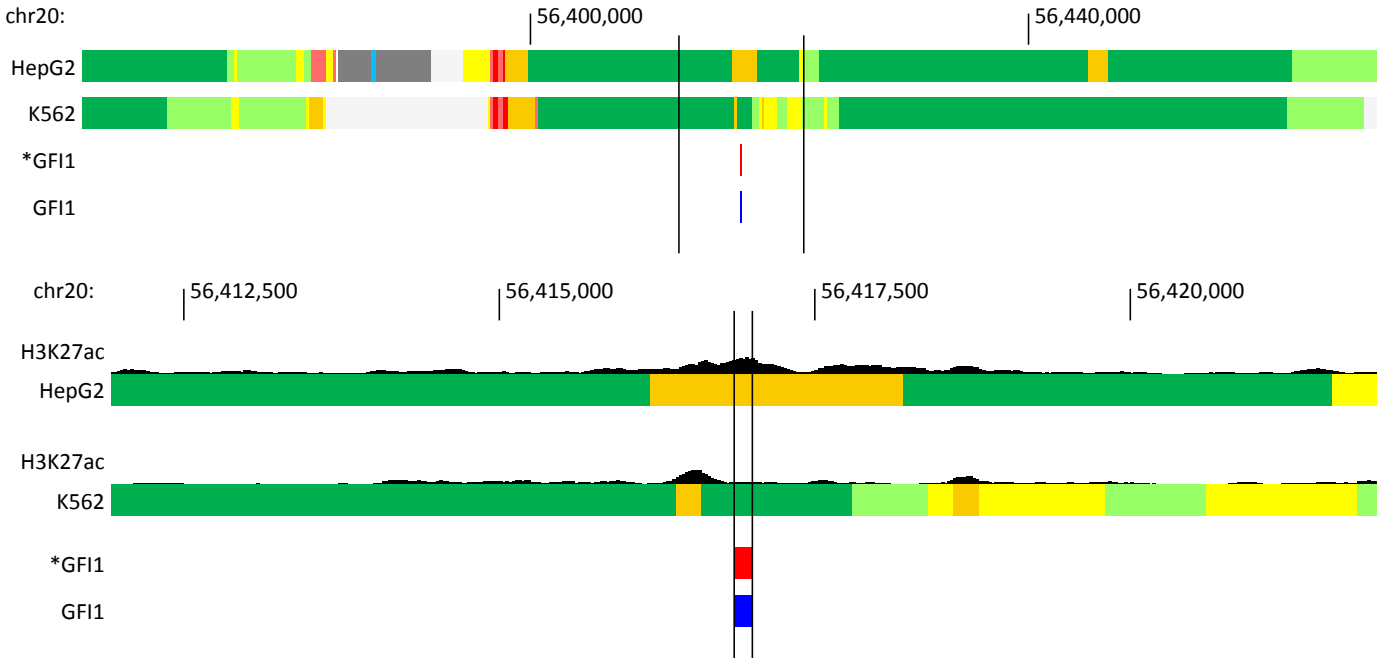
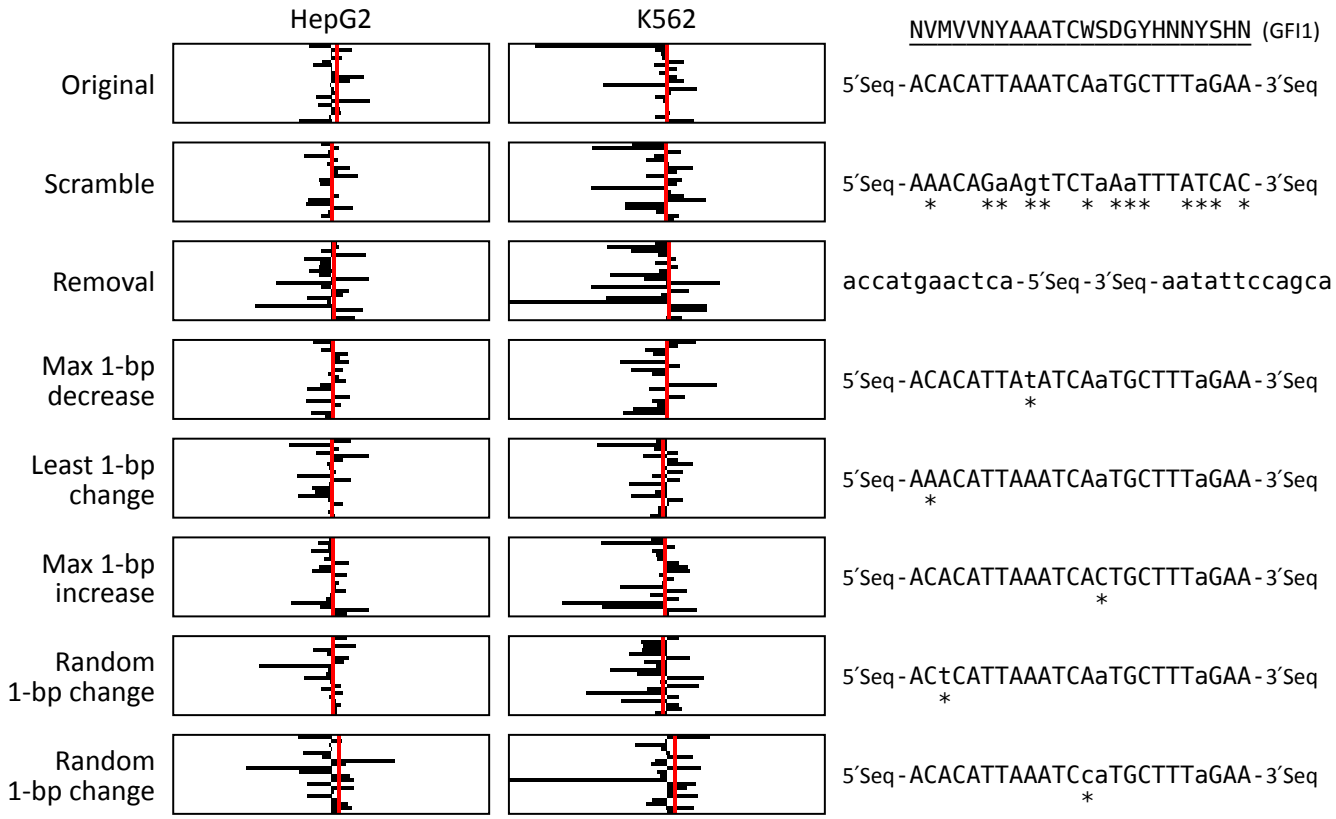
3′Seq = gaaacttgtggctaaaaggacctttctttccaacagctctcagctgataccaaagccaggaaaag

1233 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr20 56416922 56416945 - (hg18)





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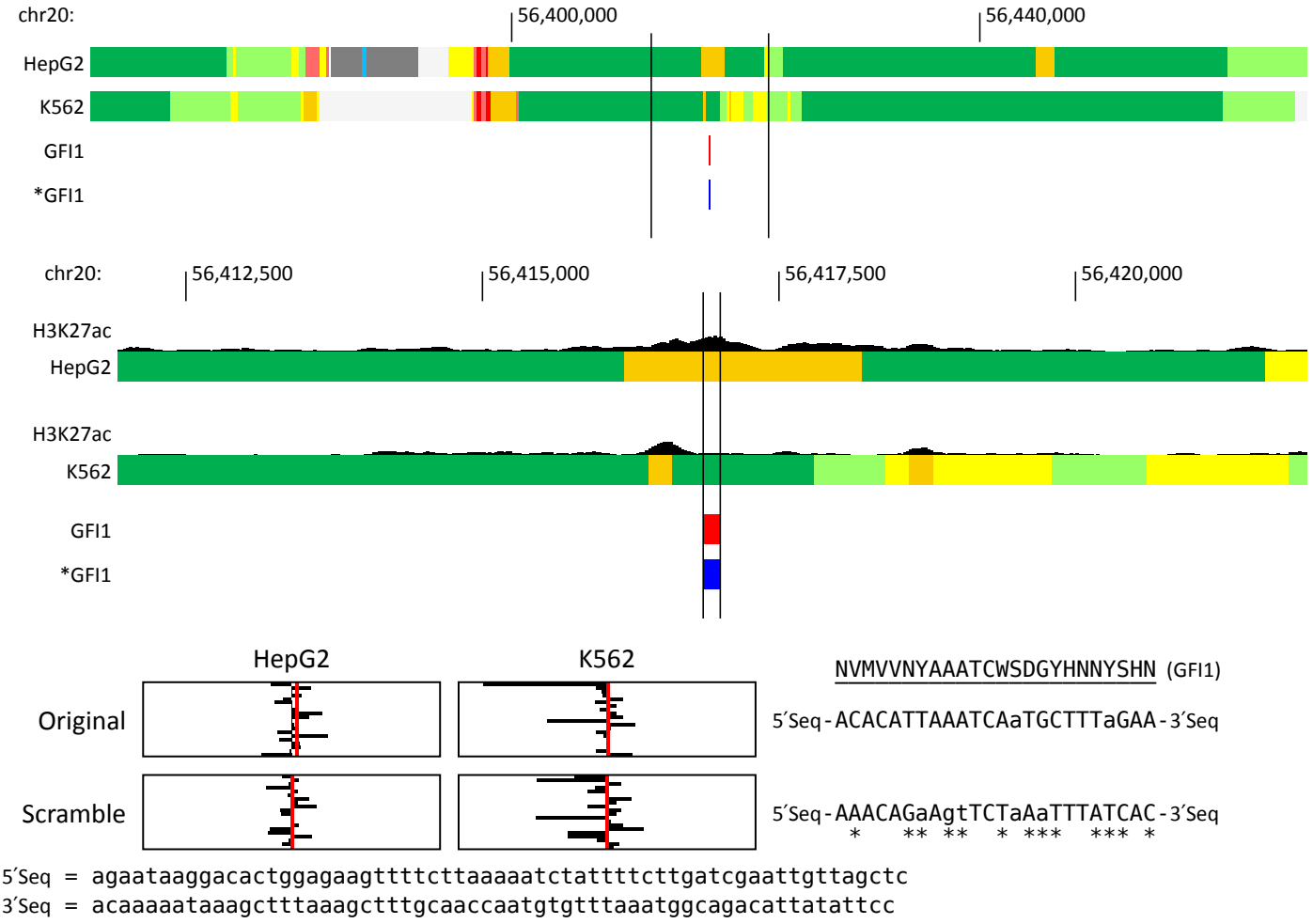
1234 GFI1 in HepG2 enhancer

chr20 56416922 56416945 - (hg18)



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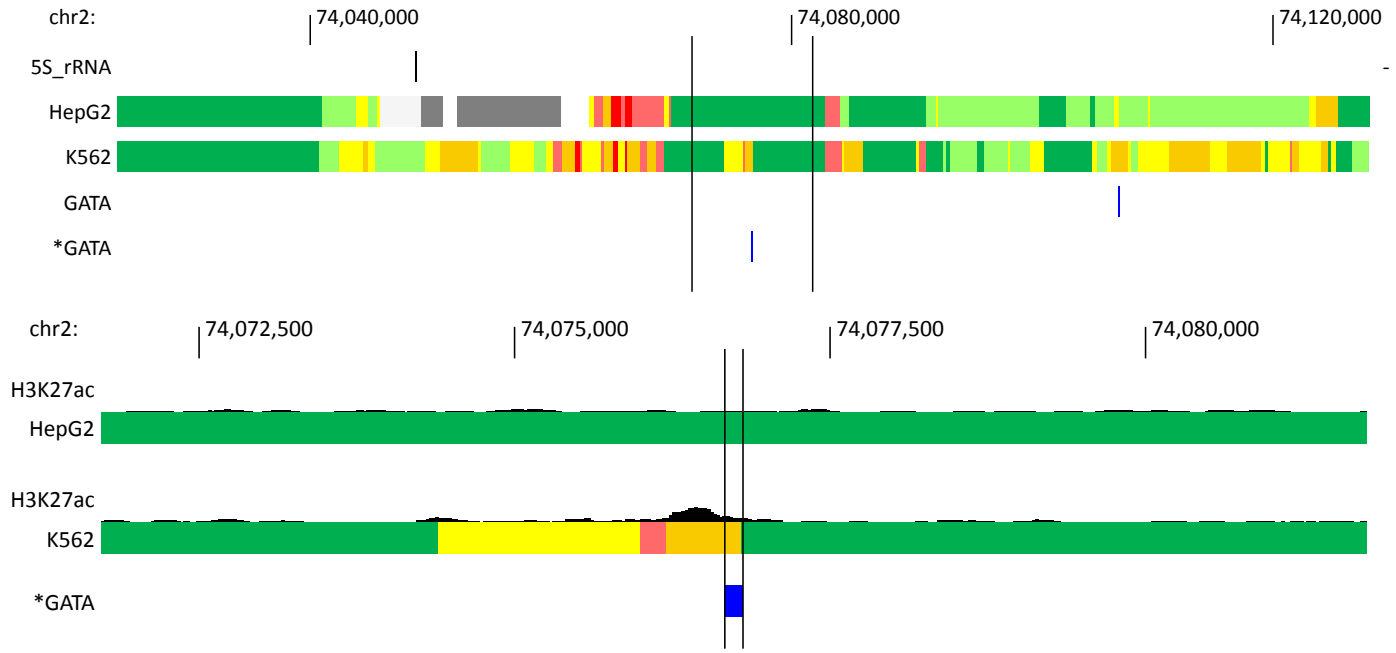
1235 GATA in K562 enhancer

chr2 74076730 74076747 - (hg18)



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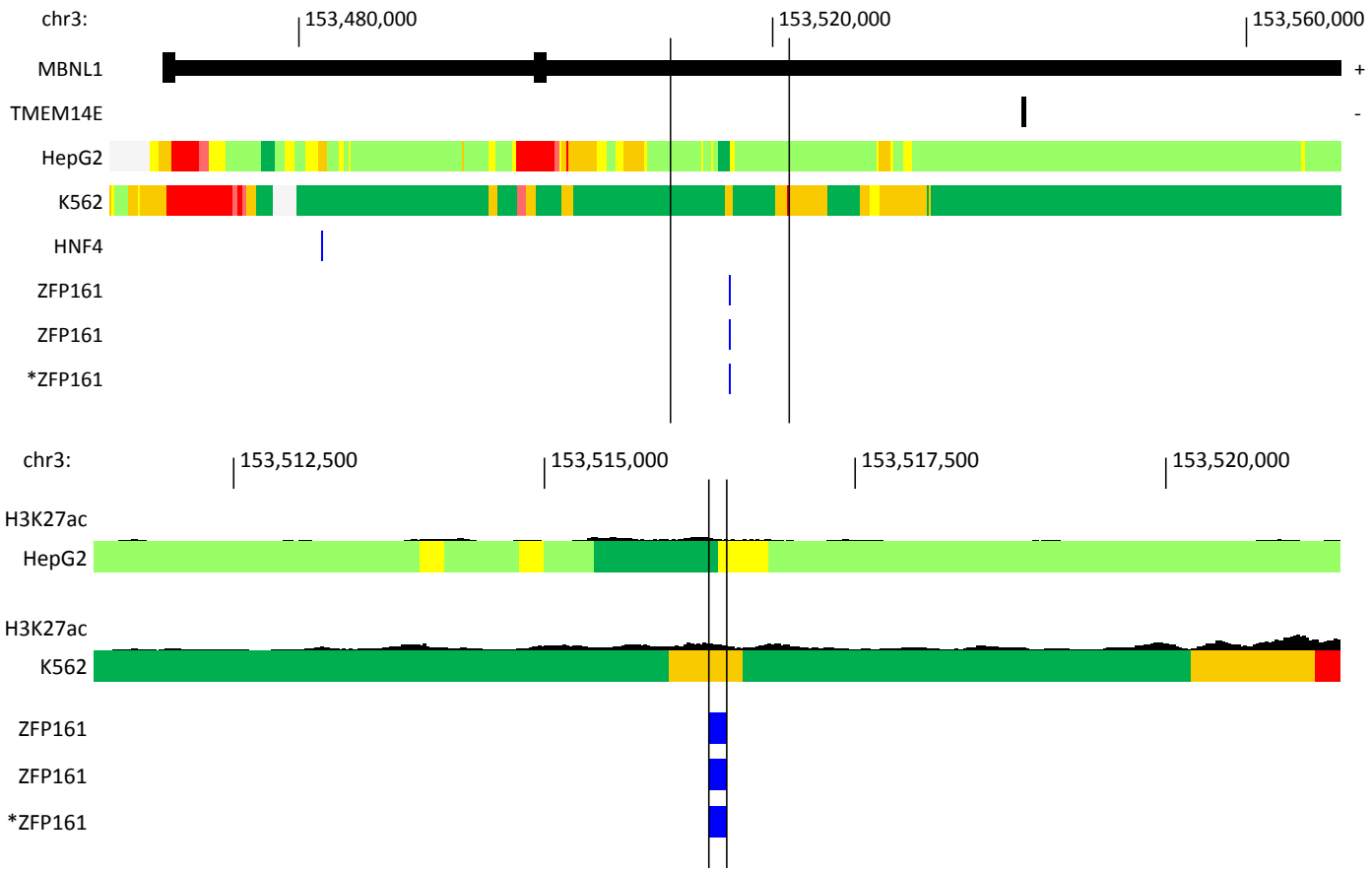
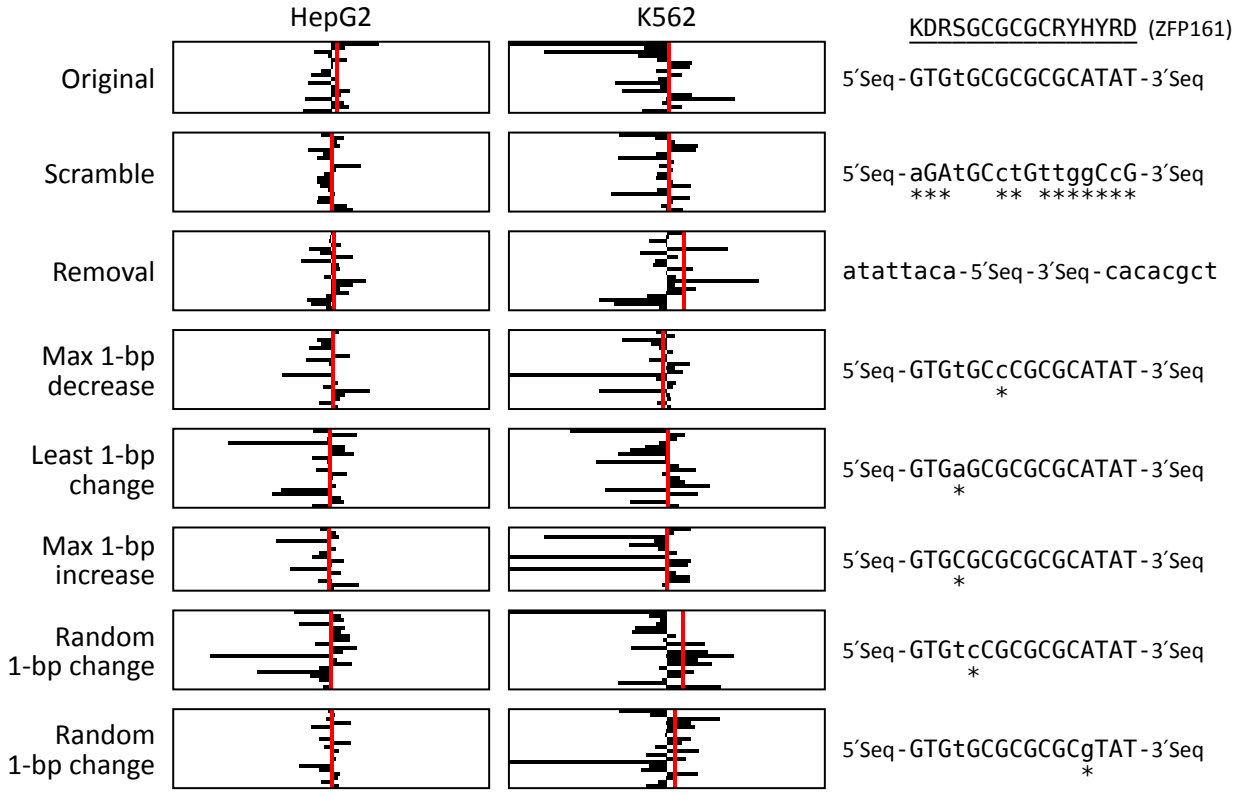
1236 ZFP161 in K562 enhancer

chr3 153516388 153516403 - (hg18)





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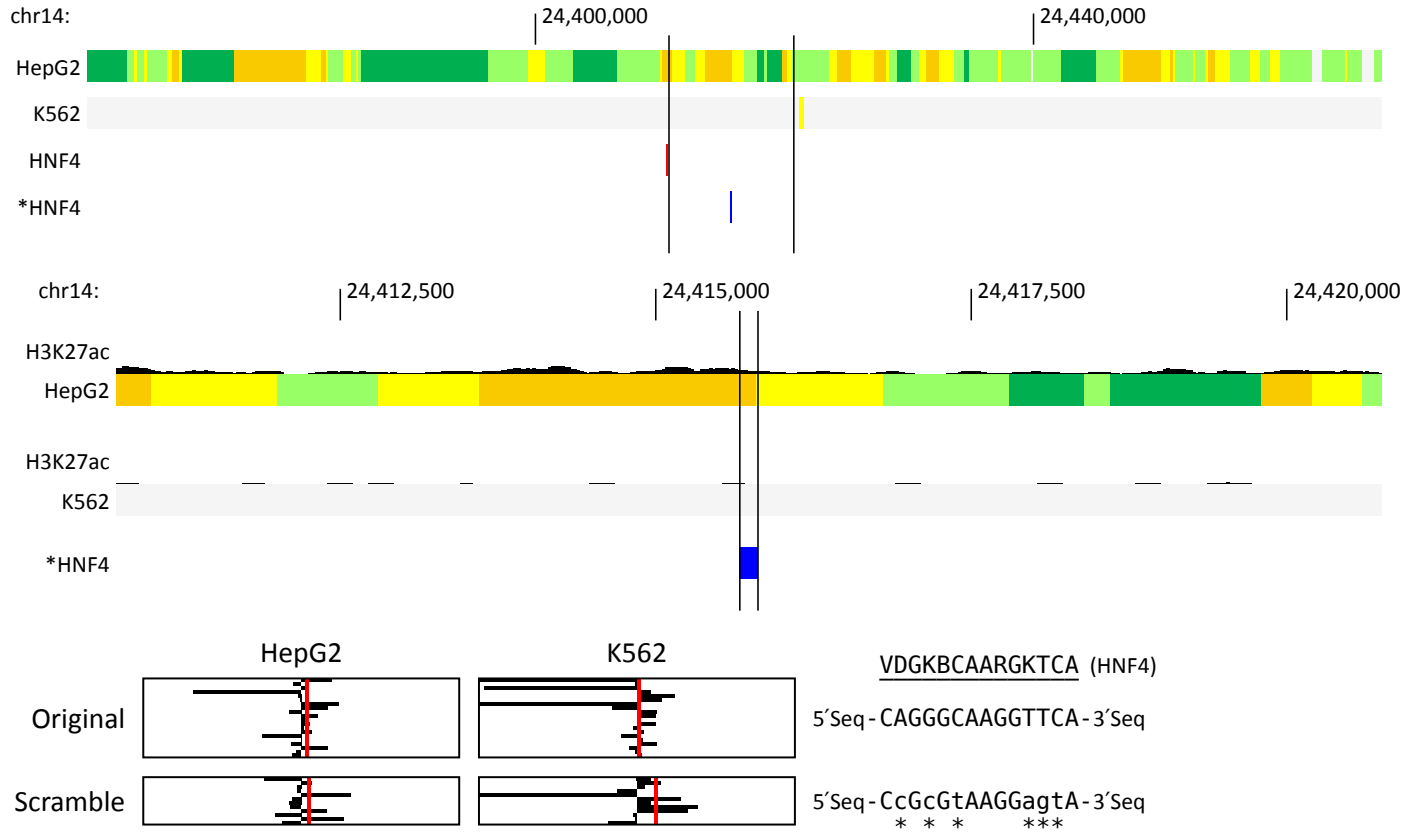
1237 HNF4 in HepG2 enhancer

chr14 24415732 24415745 + (hg18)



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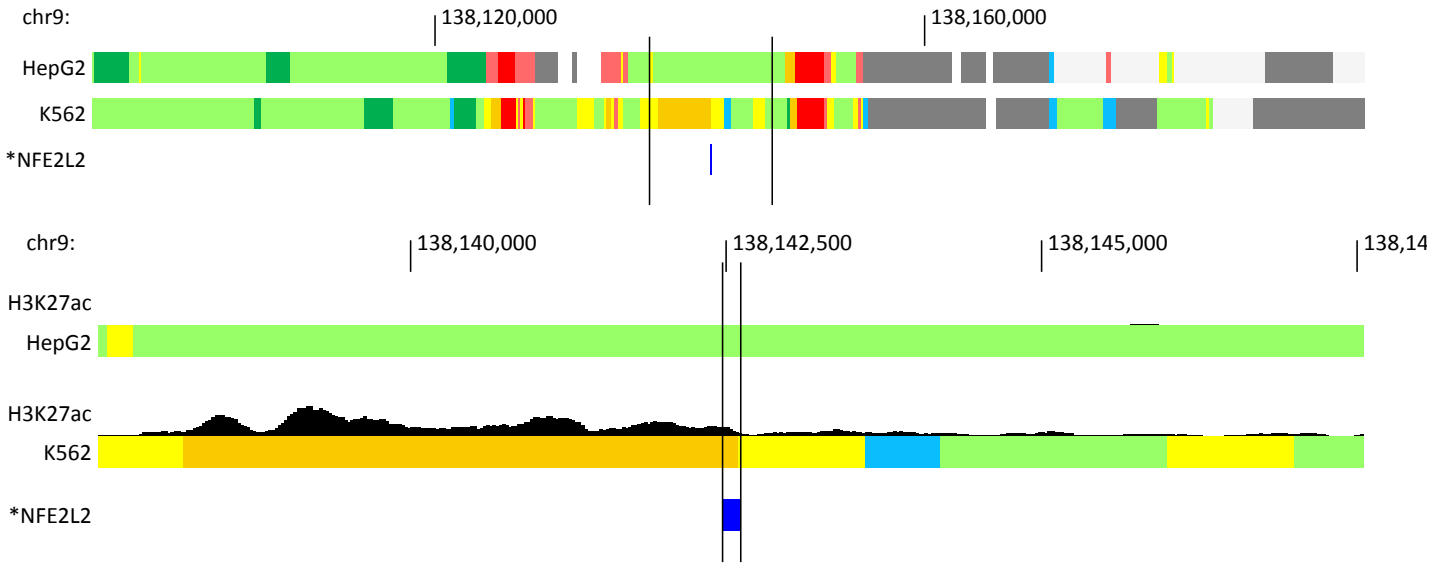
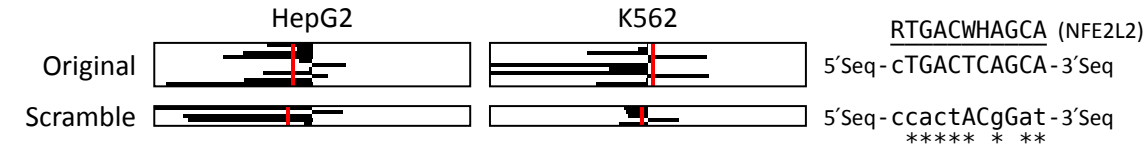
1238 NFE2L2 in K562 enhancer

chr9 138142539 138142549 + (hg18)



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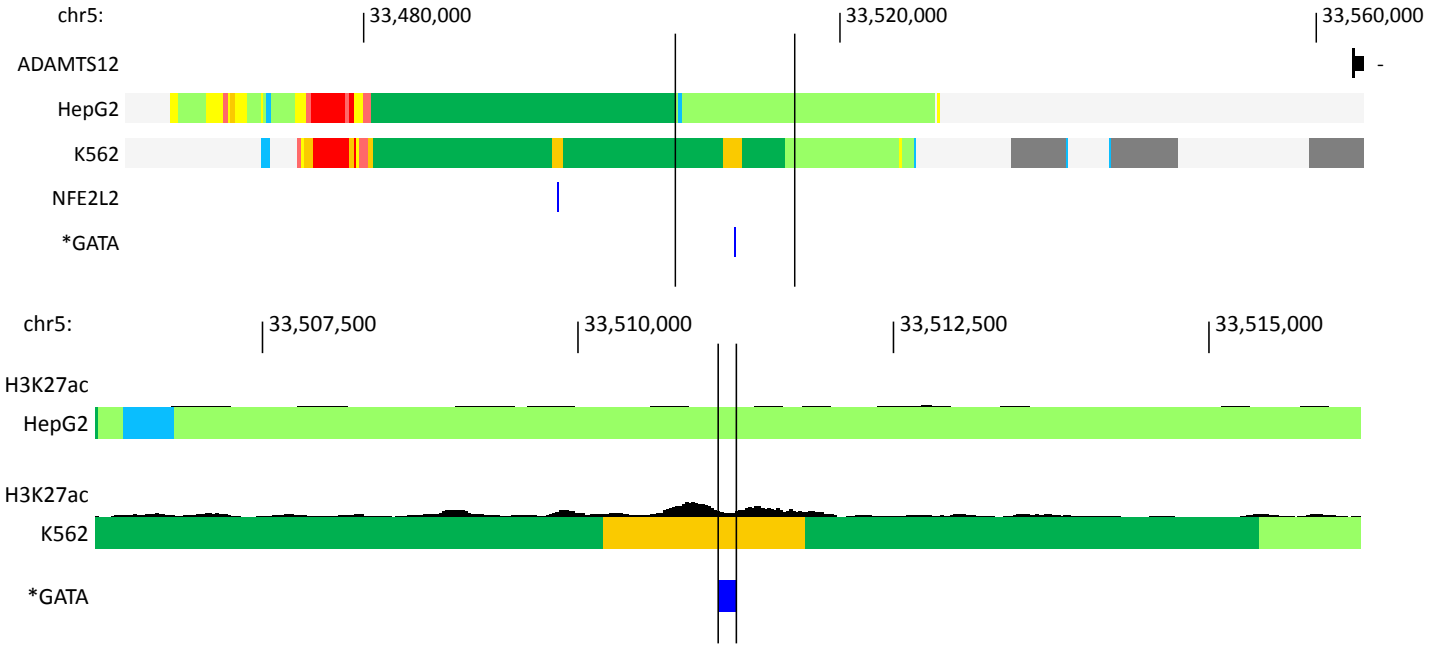
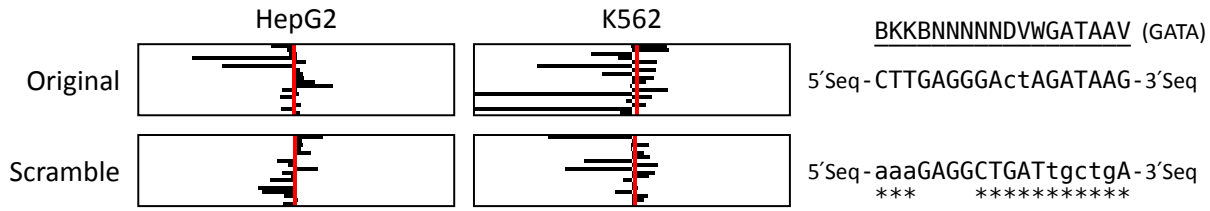
1239 GATA in K562 enhancer

chr5 33511175 33511192 - (hg18)





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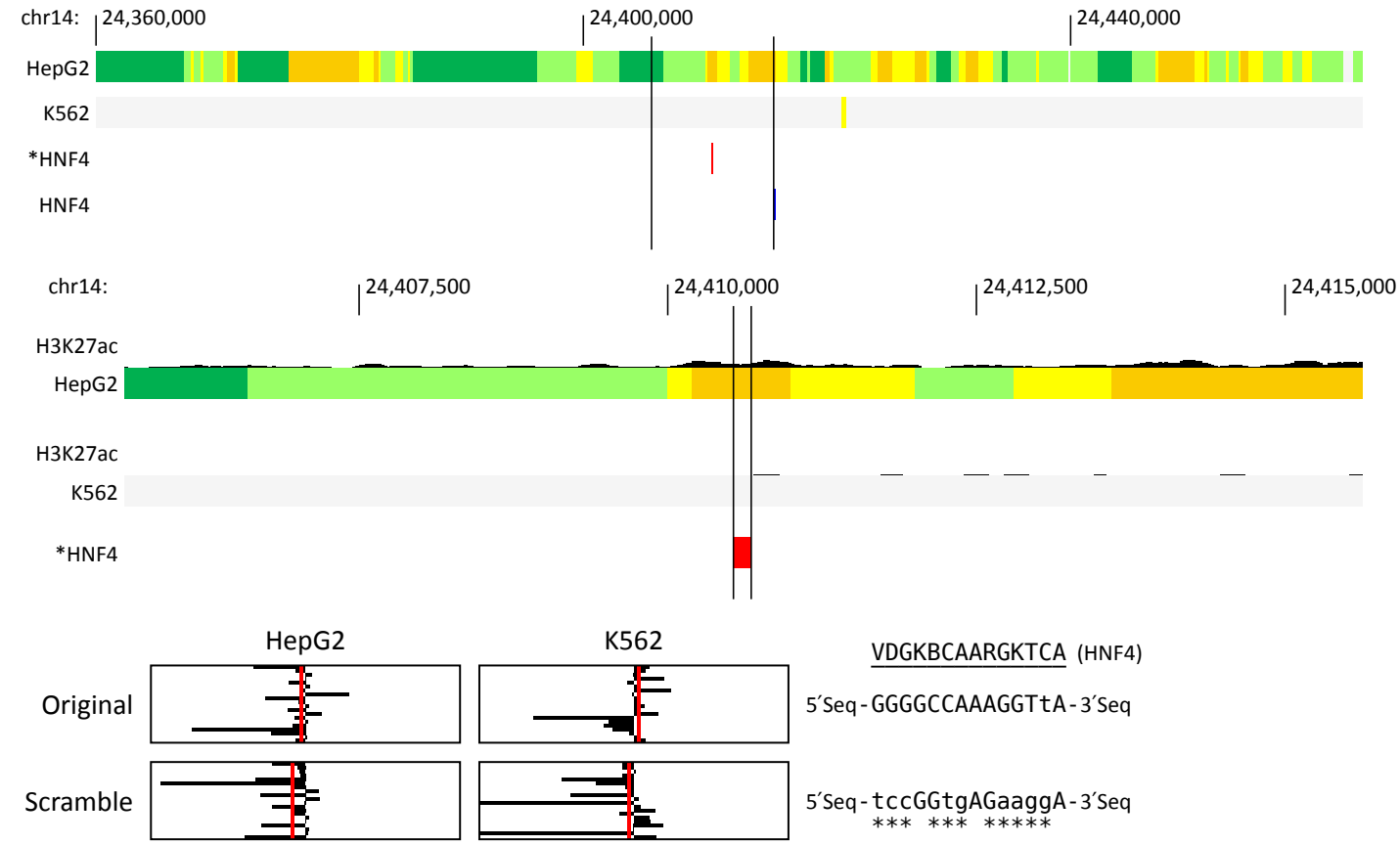
1240 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 24410598 24410611 + (hg18)



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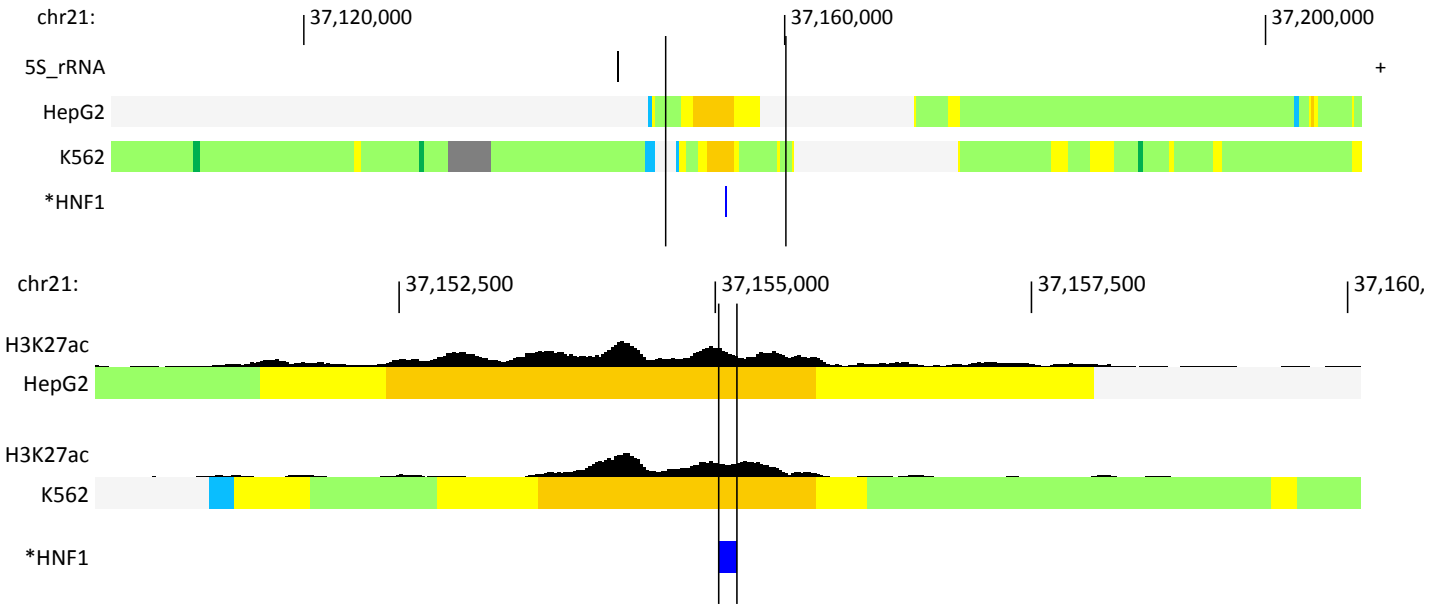
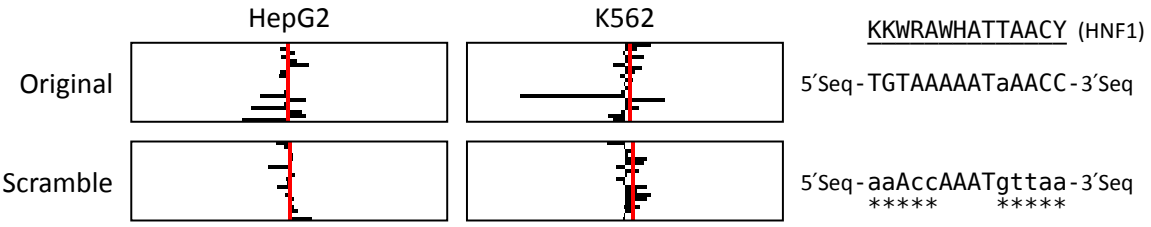
1241 HNF1 in HepG2 enhancer

chr21 37155093 37155106 - (hg18)





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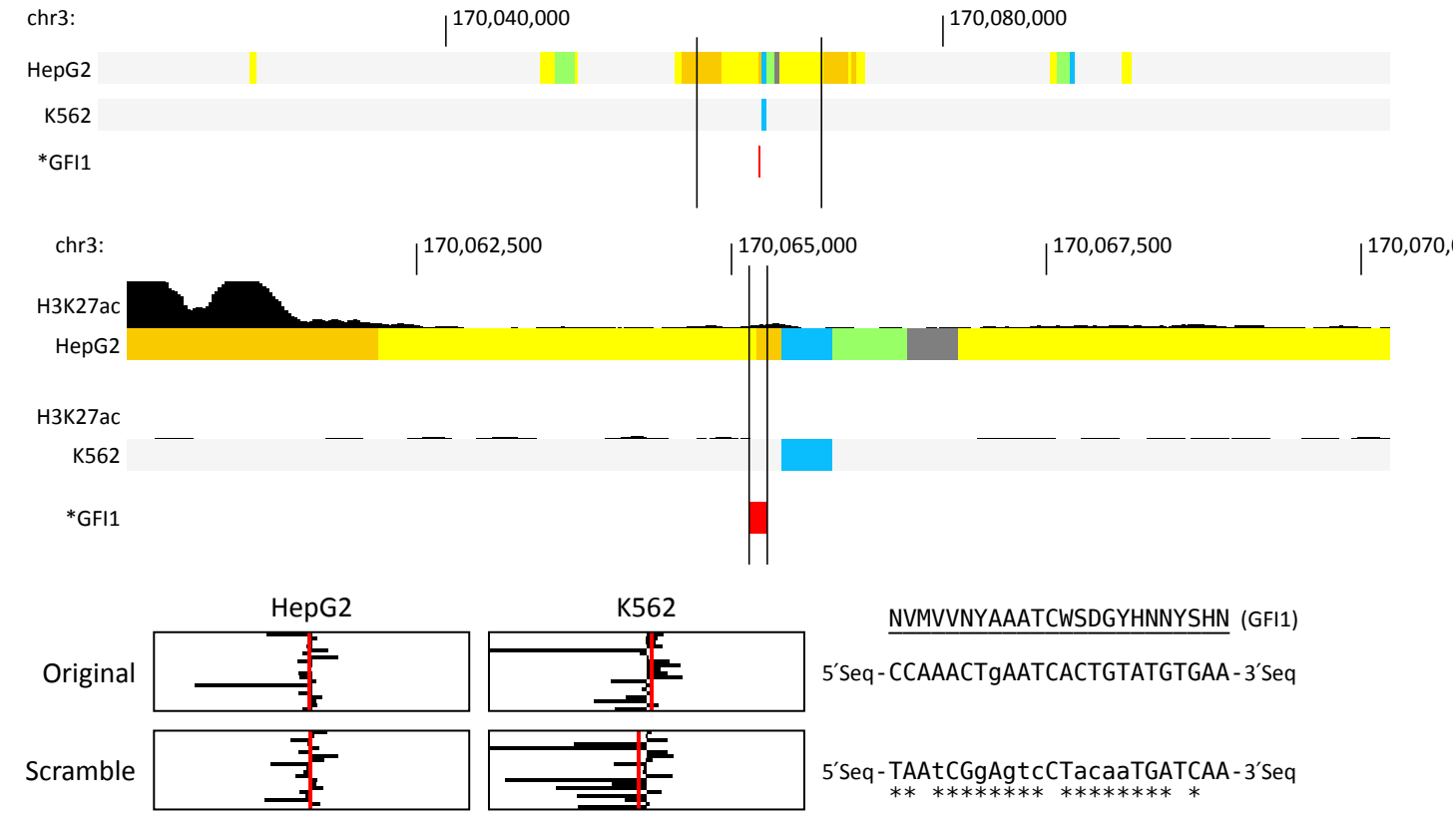
1242 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr3 170065201 170065224 - (hg18)



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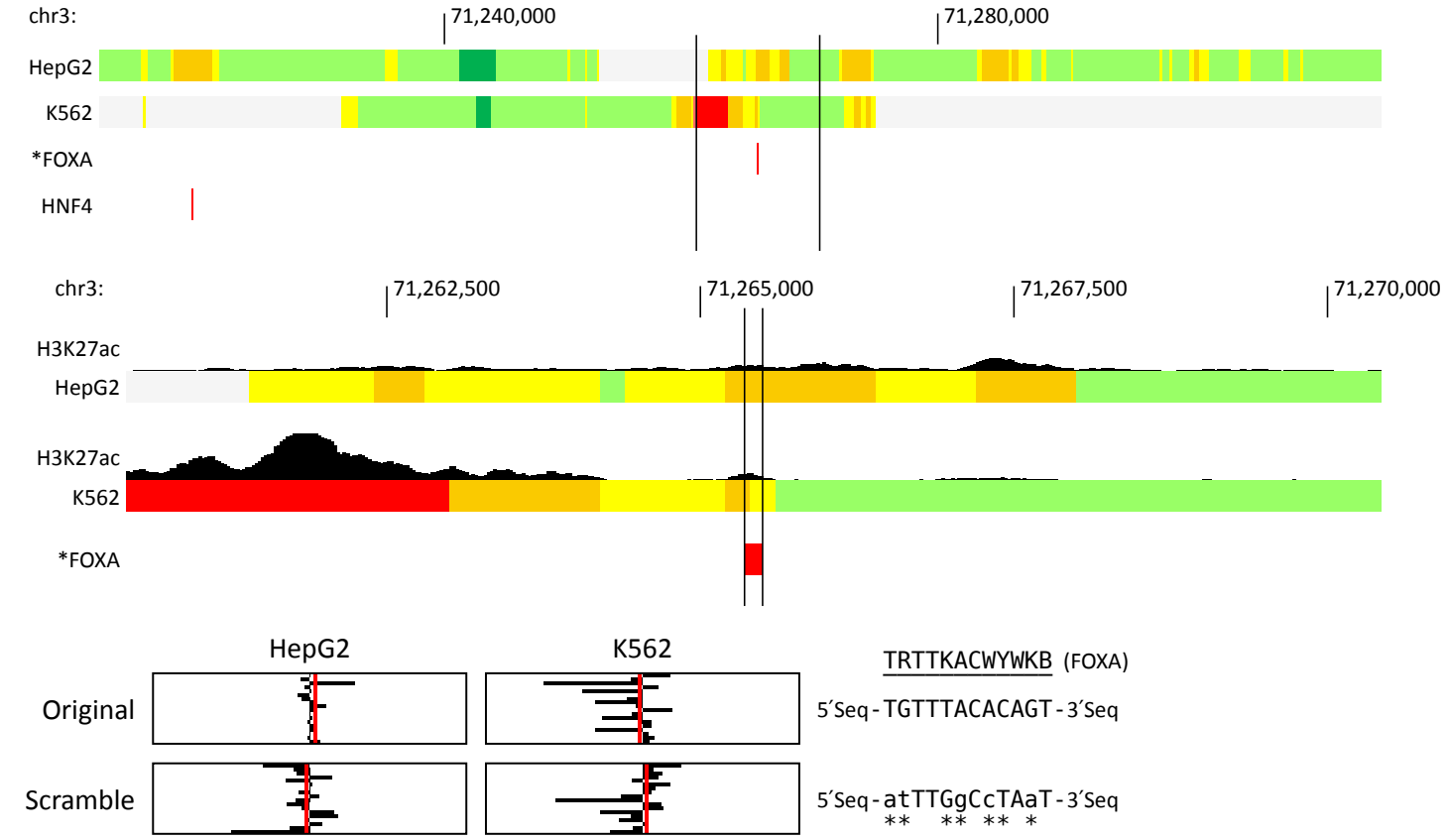
1243 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr3 71265419 71265430 + (hg18)



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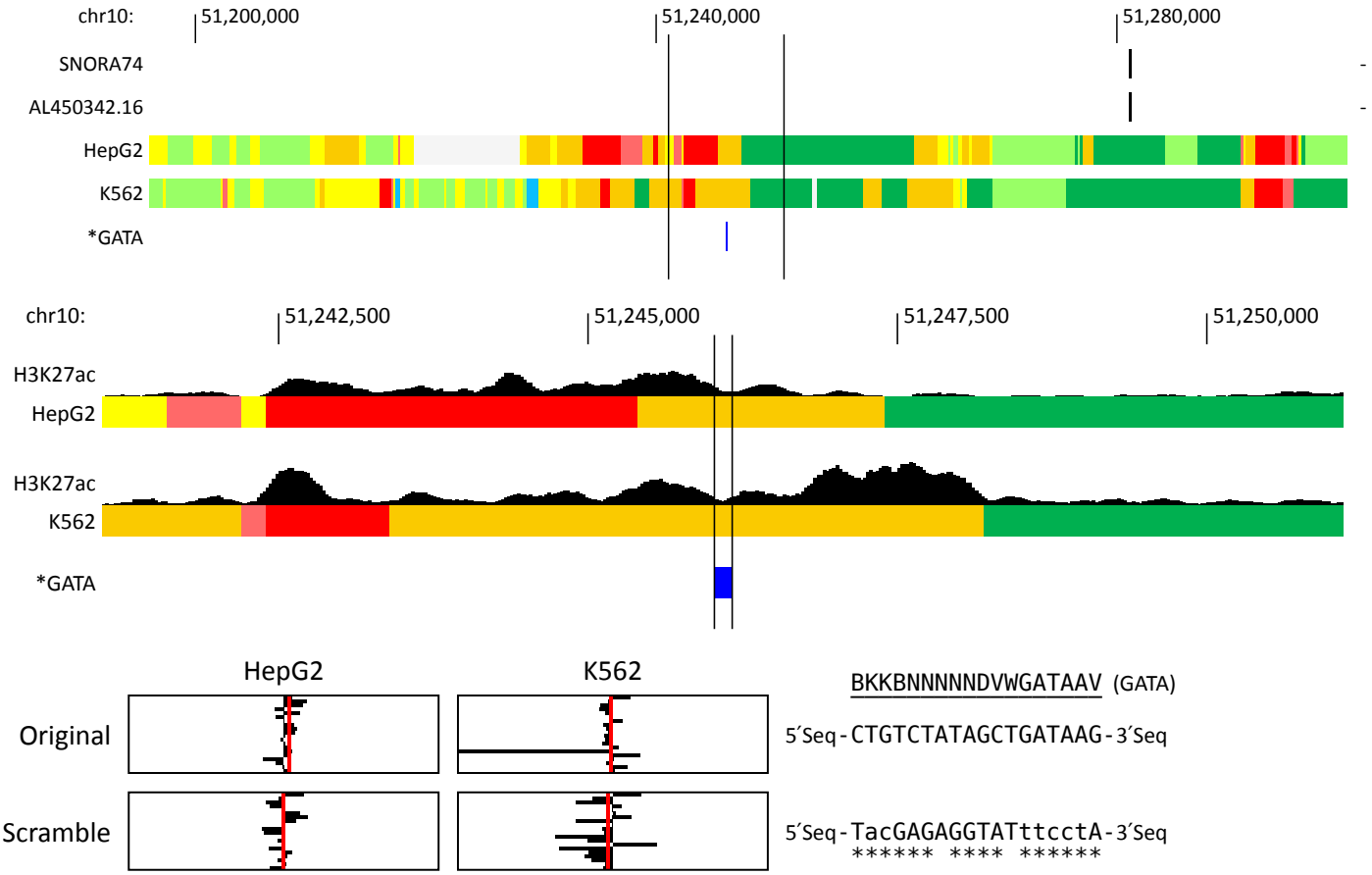
1244 GATA in K562 enhancer

chr10 51246085 51246102 + (hg18)



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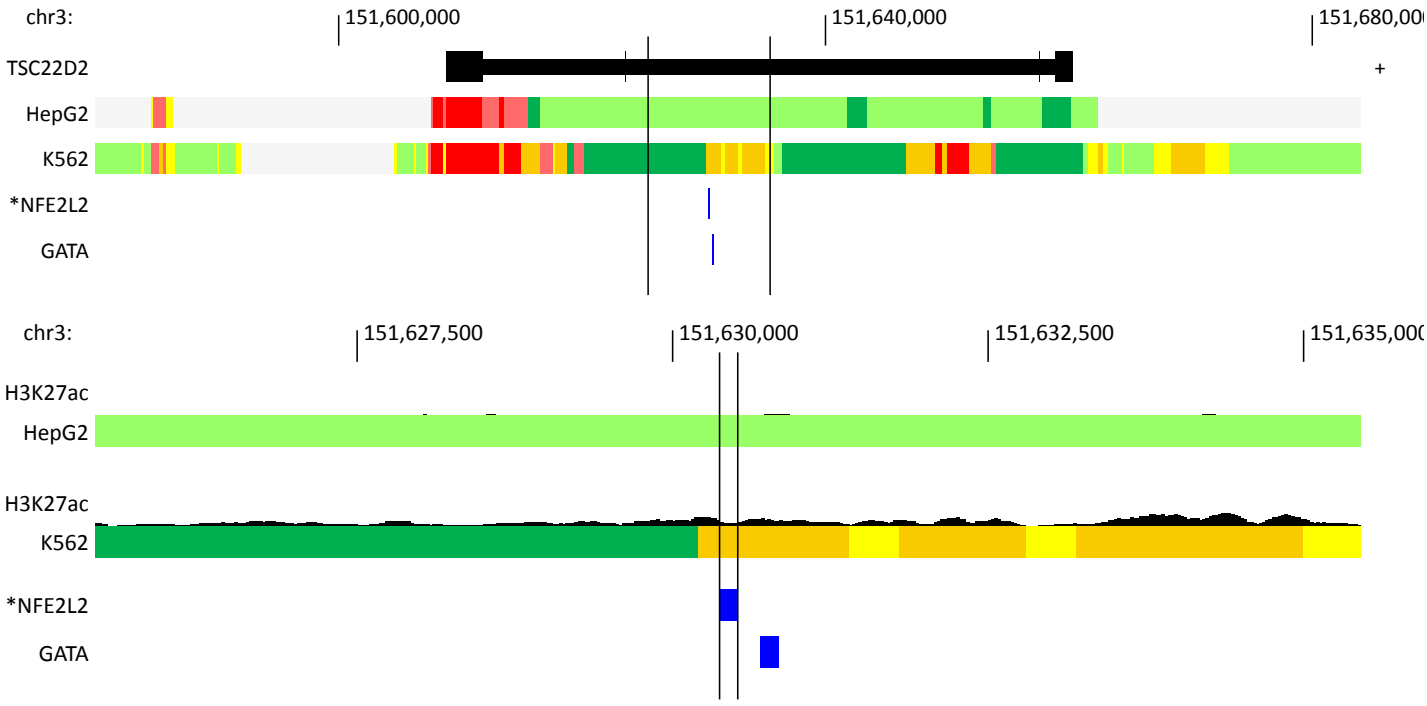
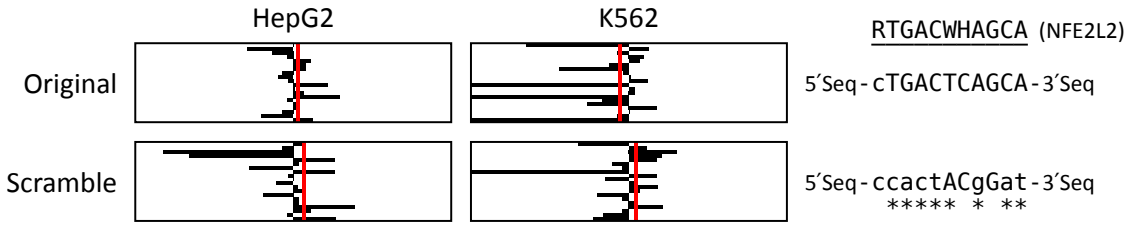
3′Seq = ggcaaagtccaatgtgtgaactcttgctgtagtctactcttattgtgtaatattaatacttgt

1245 NFE2L2 in K562 enhancer

chr3 151630439 151630449 + (hg18)





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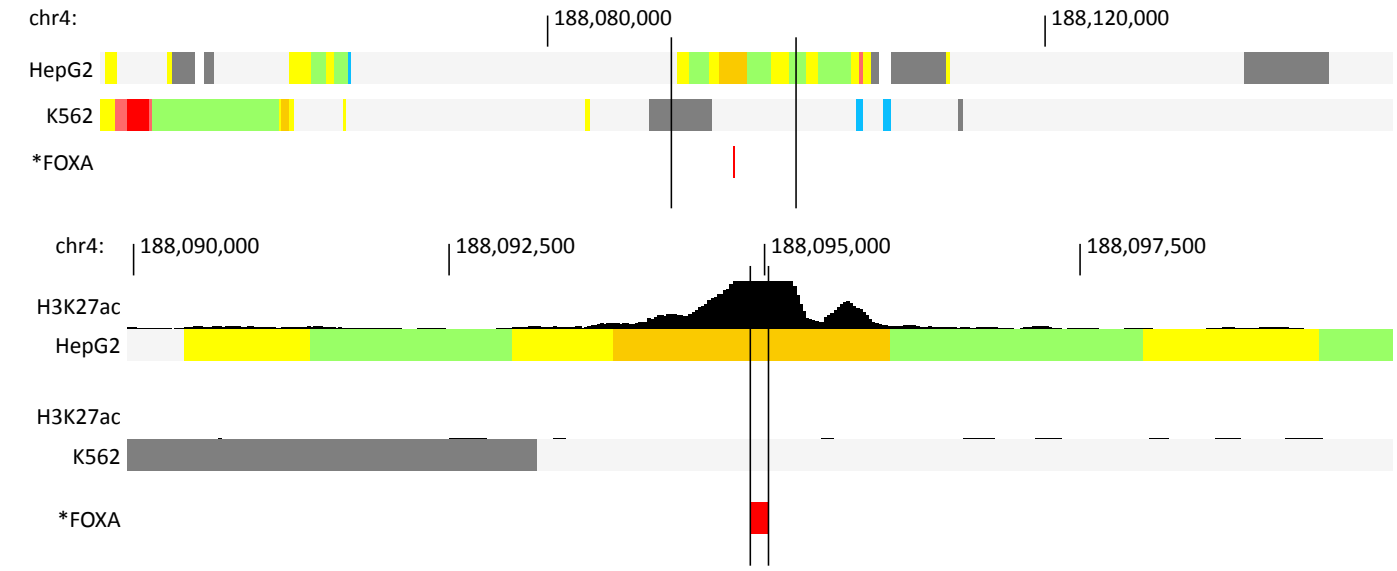
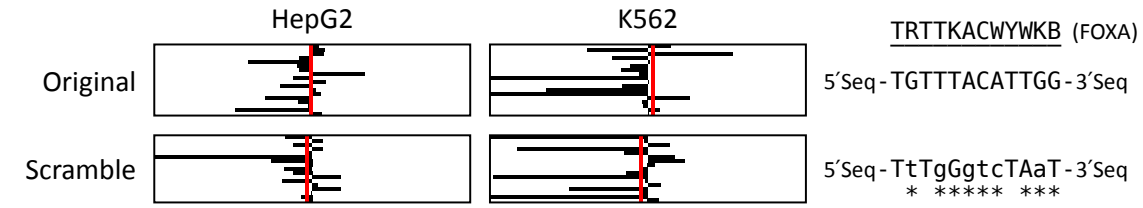
3′Seq = aaagtttgttctcctataattaaatactagaagaaacaataagatttagtaactgctttcagtgagc

1246 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr4 188094954 188094965 + (hg18)





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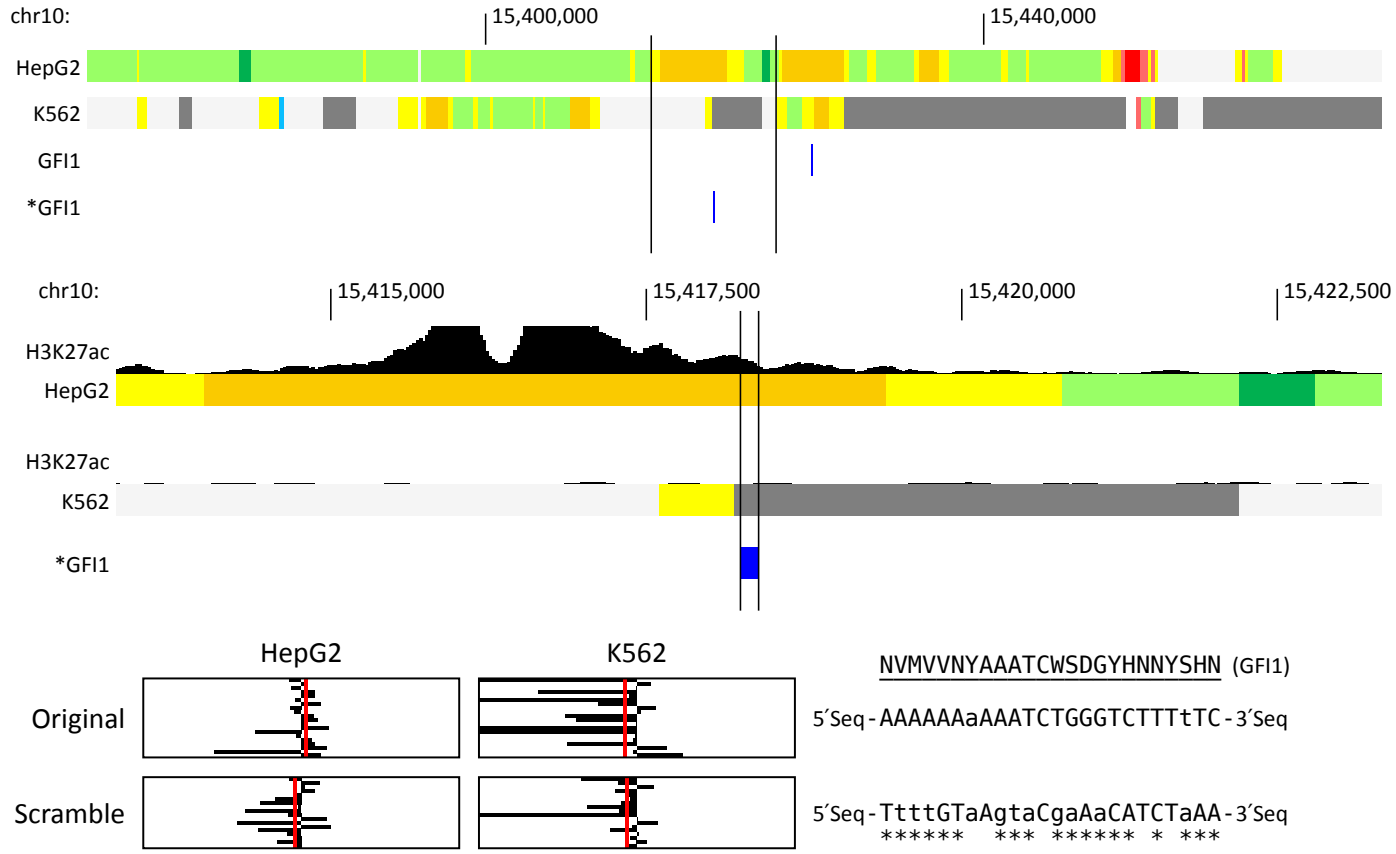
3′Seq = aatttcaaaagctgacaatatctttccttccttcctgctccttgatgtagtgaaaggtcttccctg

1247 GFI1 in HepG2 enhancer

chr10 15418307 15418330 - (hg18)



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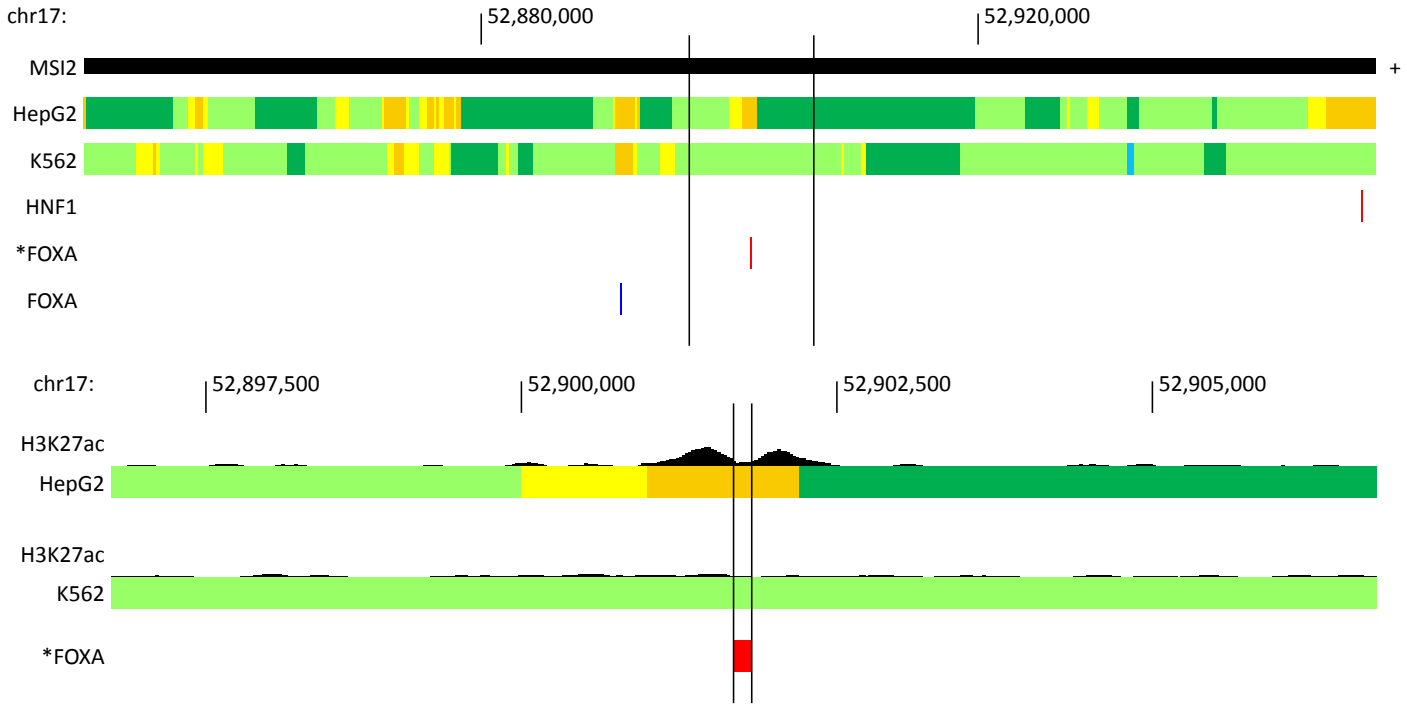
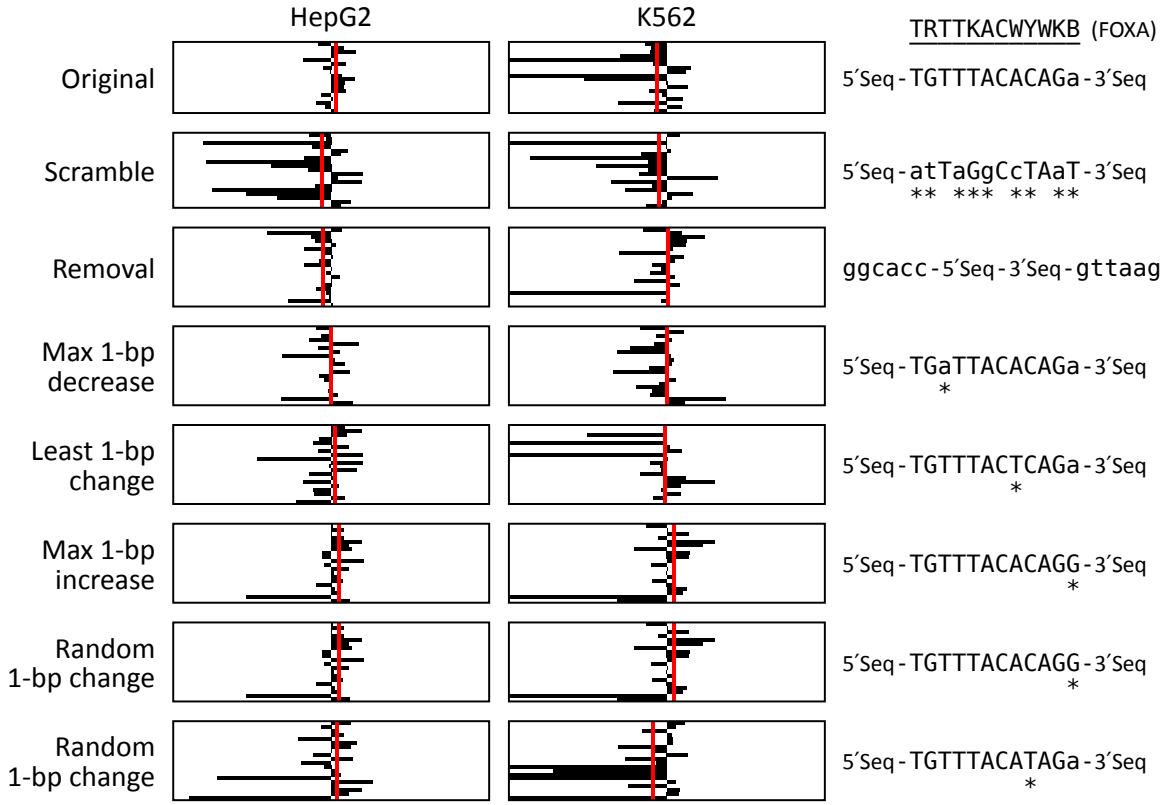
3′Seq = agcccagttatgccttaggaggaacgtgtgcataataccacaagccccatcaacctgggg

1248 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr17 52901748 52901759 - (hg18)





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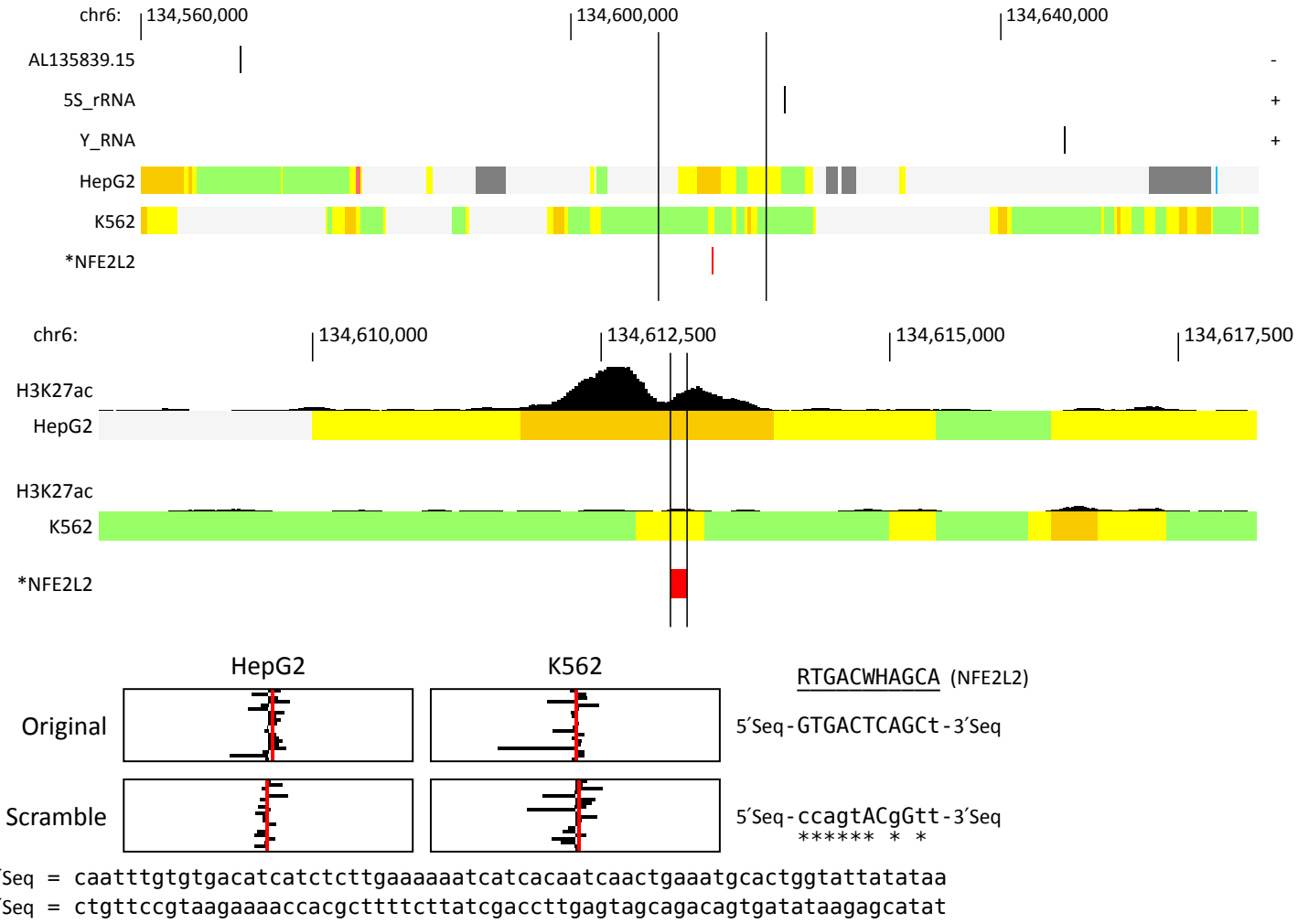
3′Seq = aataatagcccaactgtgatgggttctaaatctccattacagtgaaagatttgaaggactaaagca

1249 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr6 134613167 134613177 - (hg18)



RTGACWHAGCA (NFE2L2)

5′Seq-GTGACTCAGCt-3′Seq

5′Seq-ccagtACgGtt-3′Seq

****** * *

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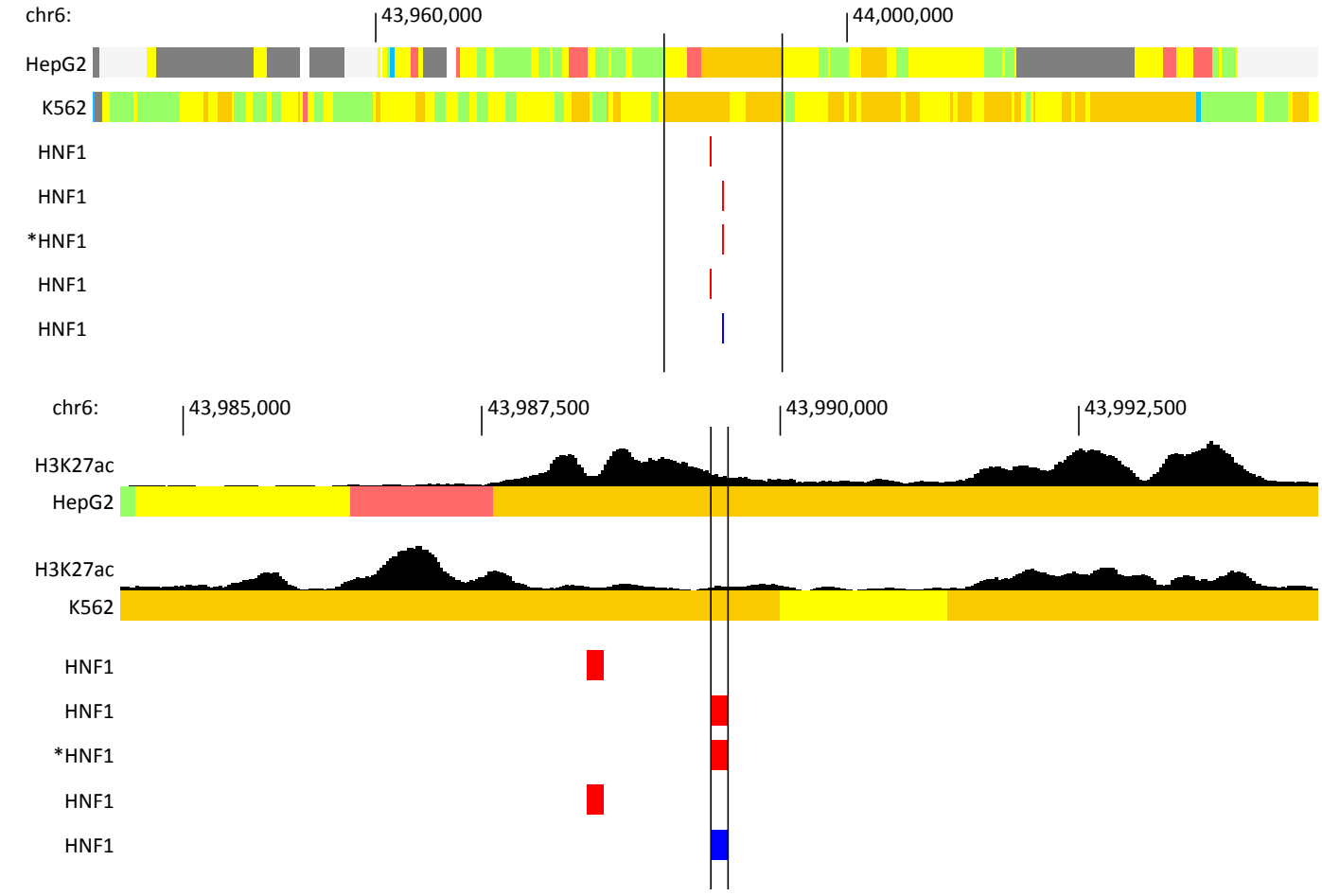
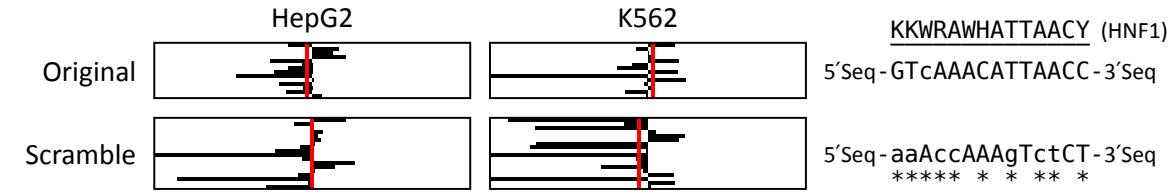
3′Seq = ctgttccgtaagaaaaccacgcttttcttatcgaccttgagtagcagacagtgatataagagcatat

1250 HNF1 in K562 enhancer (conserved at 60% confidence)

chr6 43989485 43989498 - (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GTcAAACATTAACC-3′Seq

5′Seq-aaAccAAAgTctCT-3′Seq

***** * * ** *

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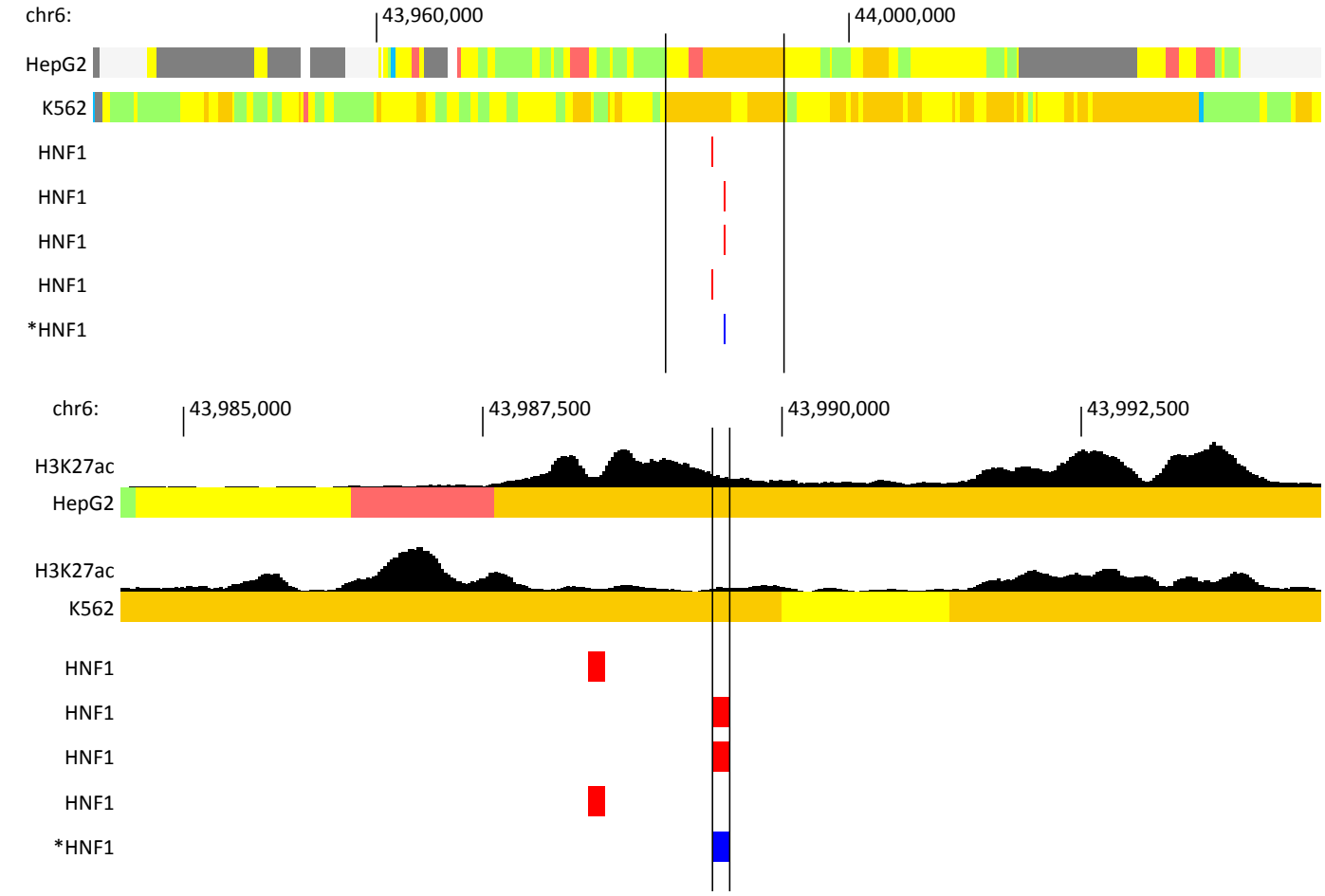
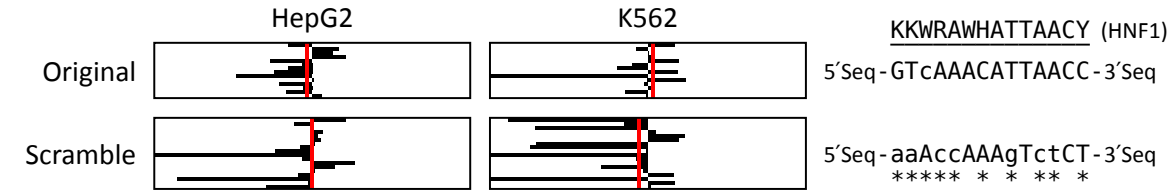
1251 HNF1 in K562 enhancer

chr6 43989485 43989498 - (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GTcAAACATTAACC-3′Seq

5′Seq-aaAccAAAgTctCT-3′Seq

***** * * ** *

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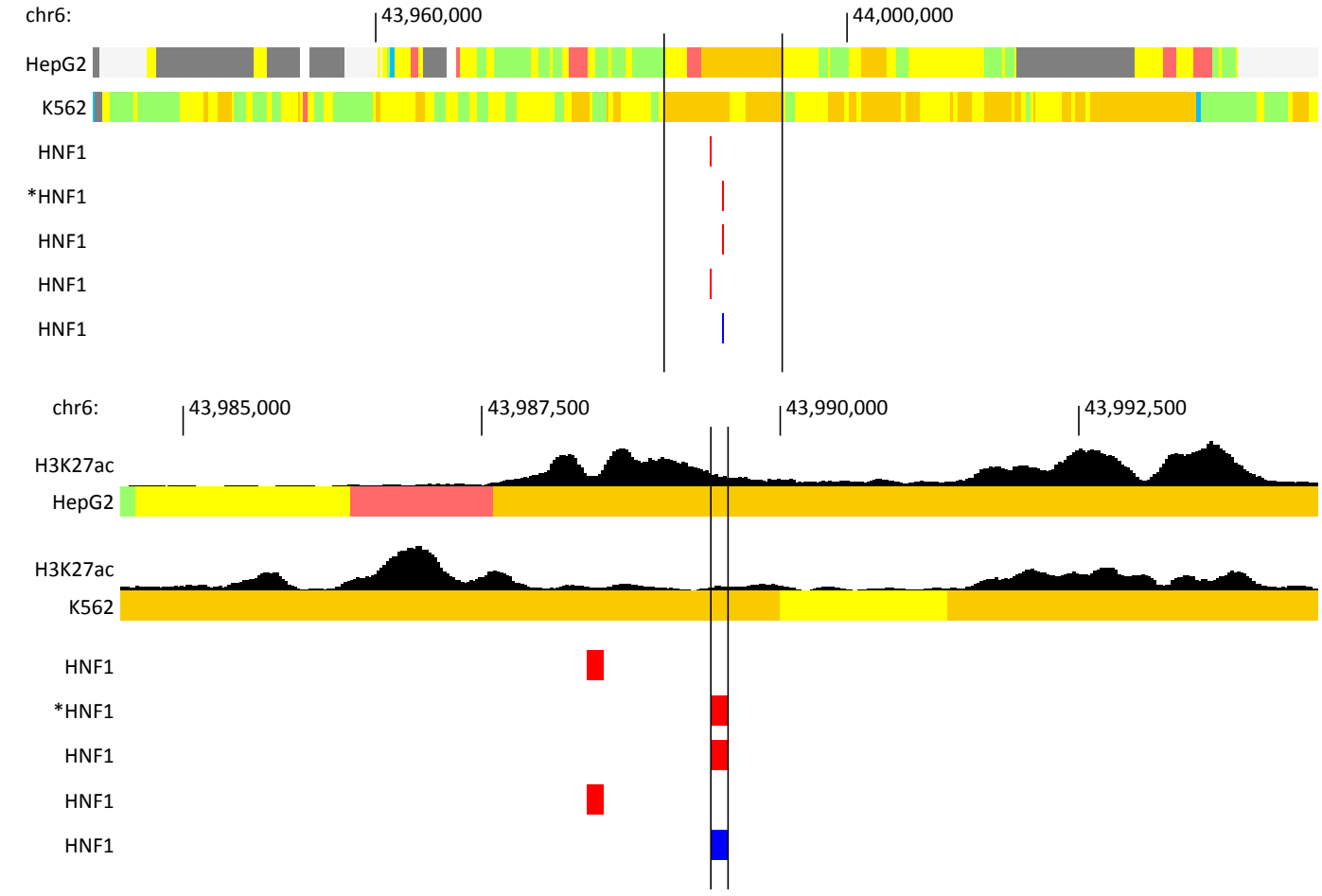
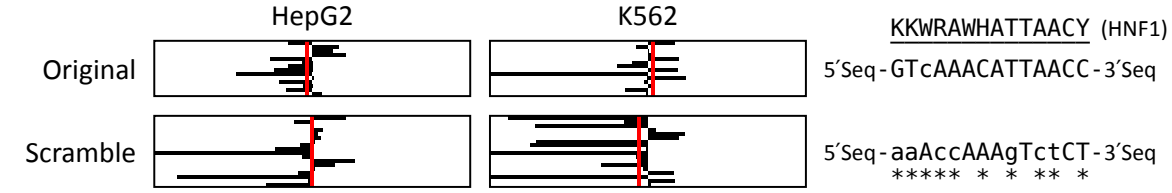
3′Seq = tgcagggcctggtgtgccagccacggtgtcccttcccaggccacctggccaccaacatgtggctg

1252 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 43989485 43989498 - (hg18)





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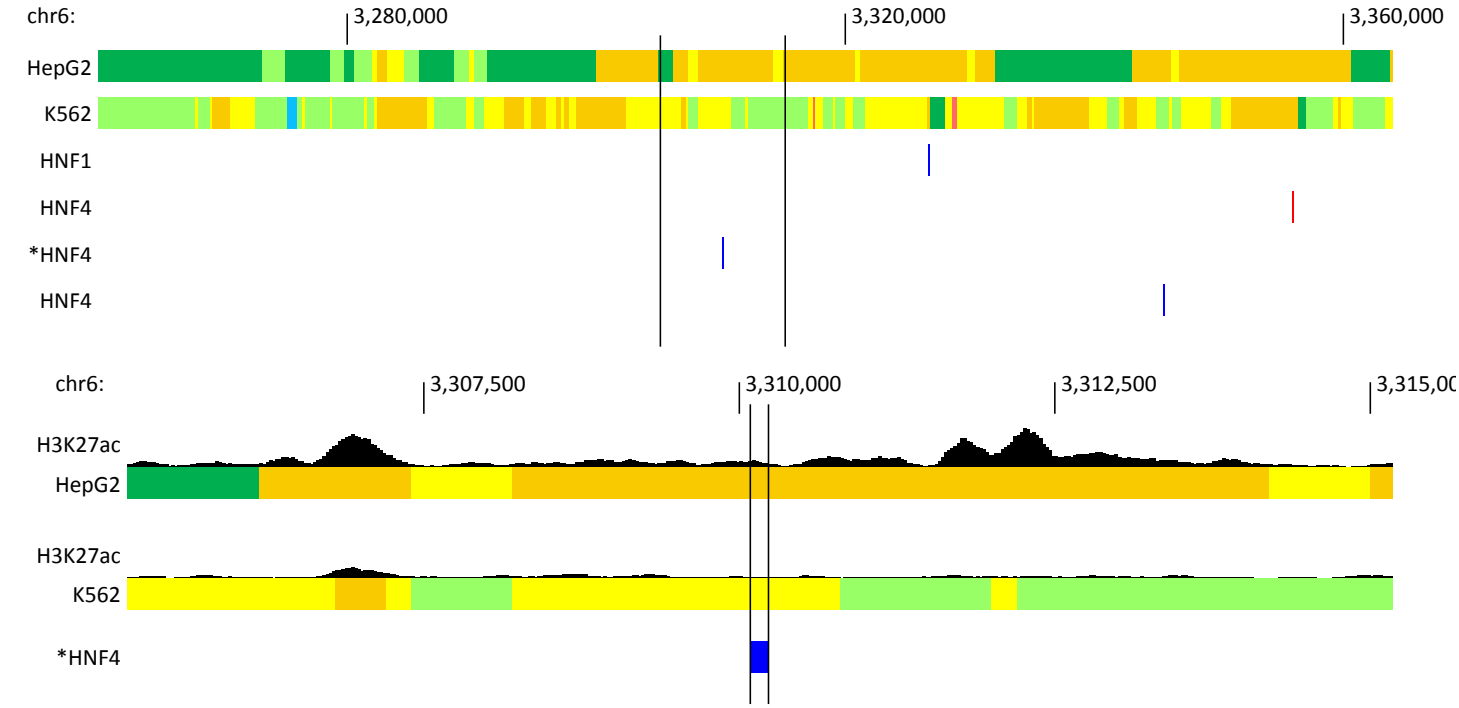
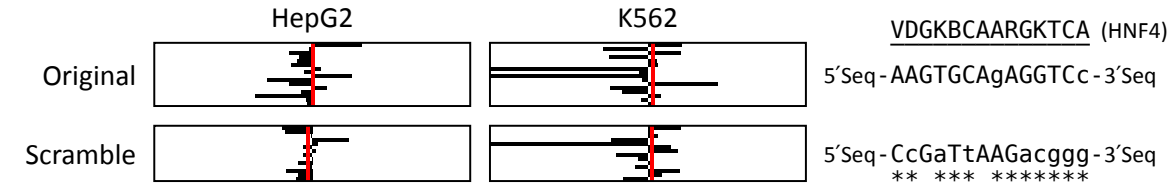
1253 HNF4 in HepG2 enhancer

chr6 3310153 3310166 + (hg18)





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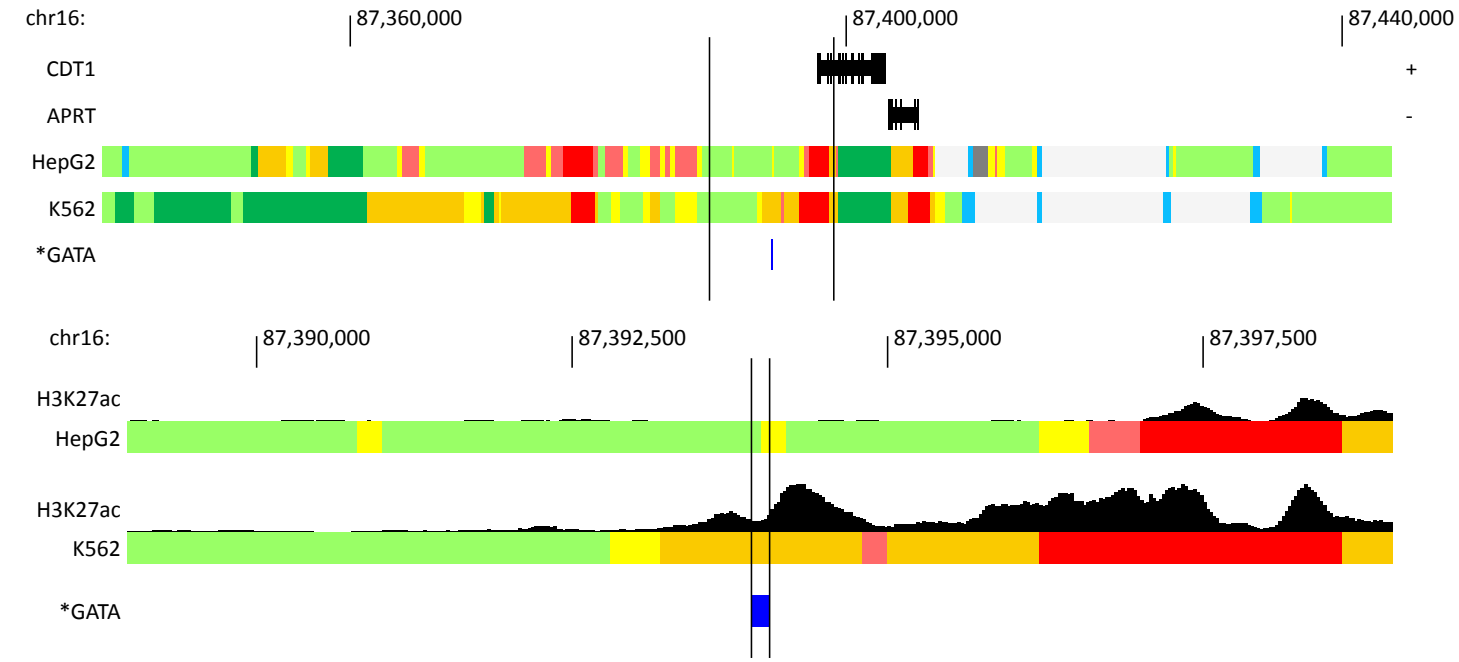
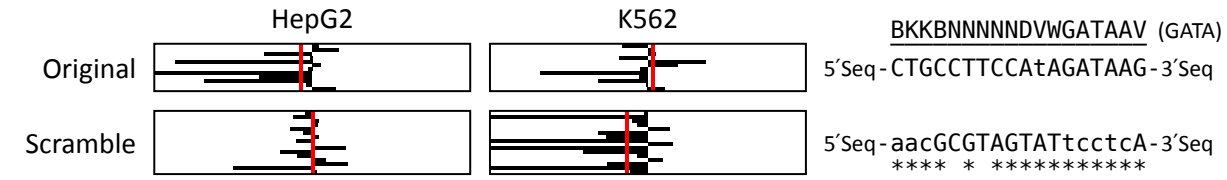
3′Seq = ctggaatgatctgagccccagggagccaaggggacattaaagggccgagggaatgaggcacaggt

1254 GATA in K562 enhancer

chr16 87393985 87394002 - (hg18)

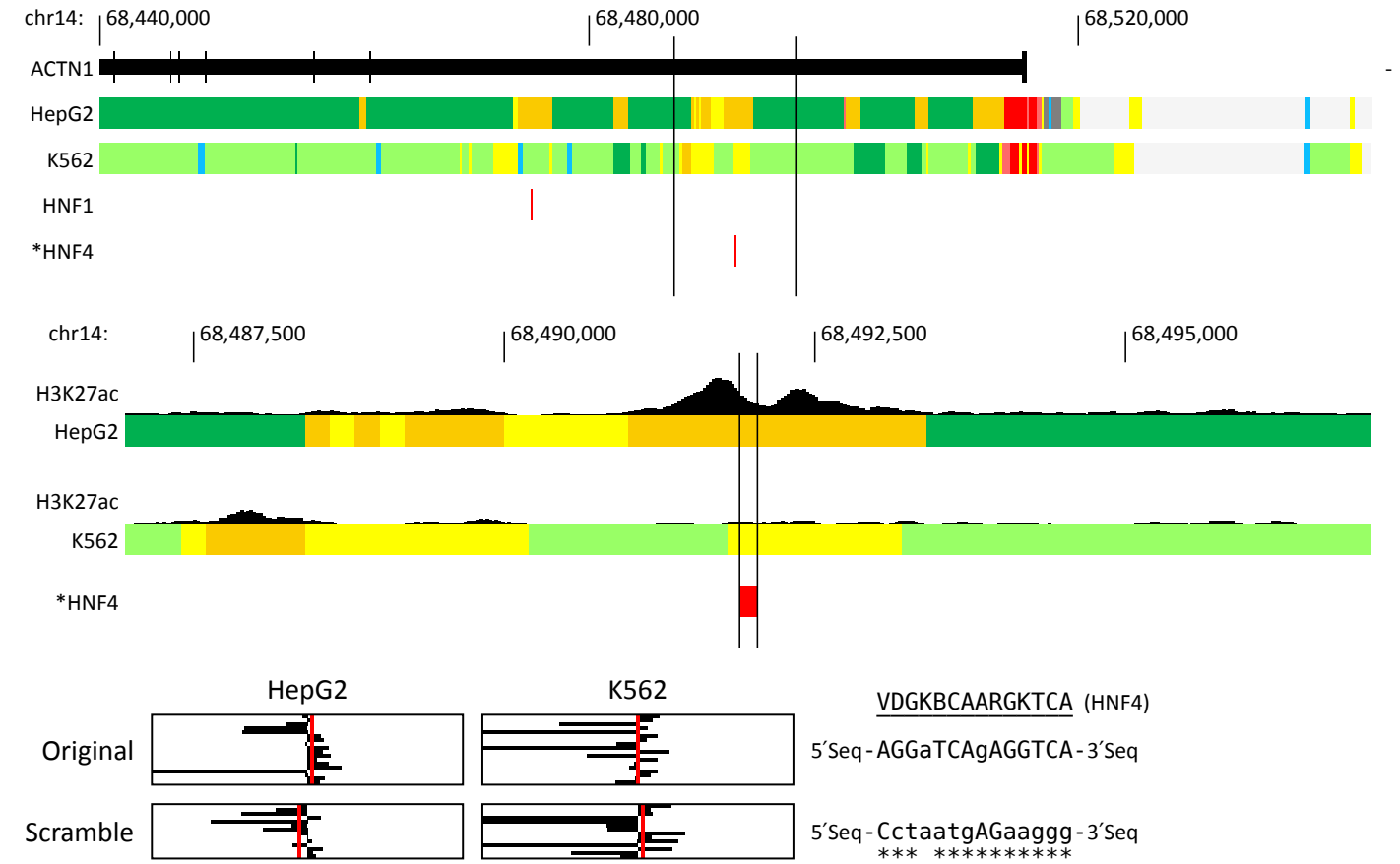




5′Seq = gcggcacttaaccacaagcaactgctccacatctggctgctggtgcaaccgtttggcccggtcc
3′Seq = ctgatggacaggatgctgccagaagcgtctccaaggccttcaaaatgccaaggcgactccagc

1255 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 68491960 68491973 + (hg18)



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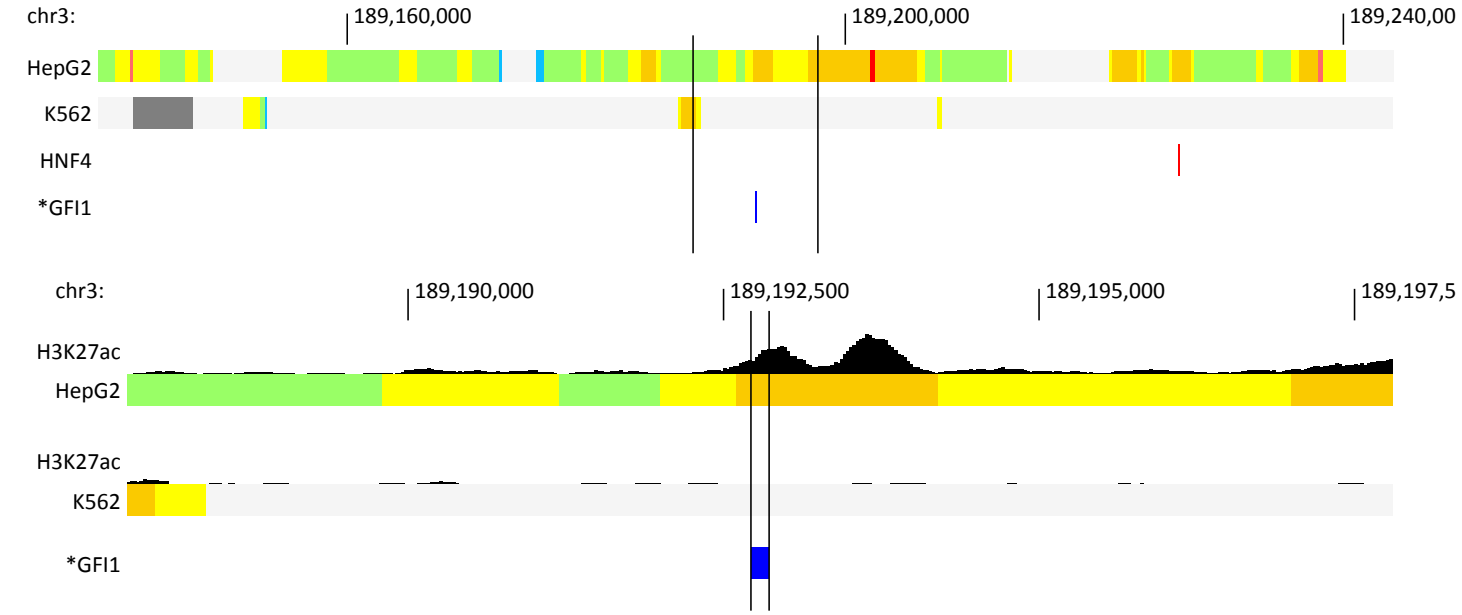
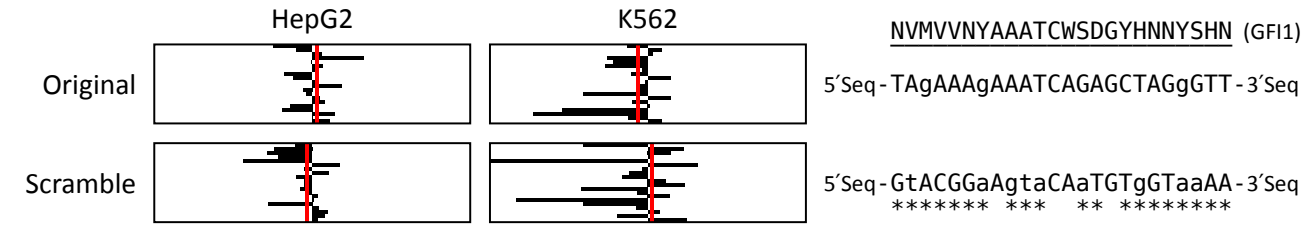
1256 GFI1 in HepG2 enhancer

chr3 189192778 189192801 + (hg18)





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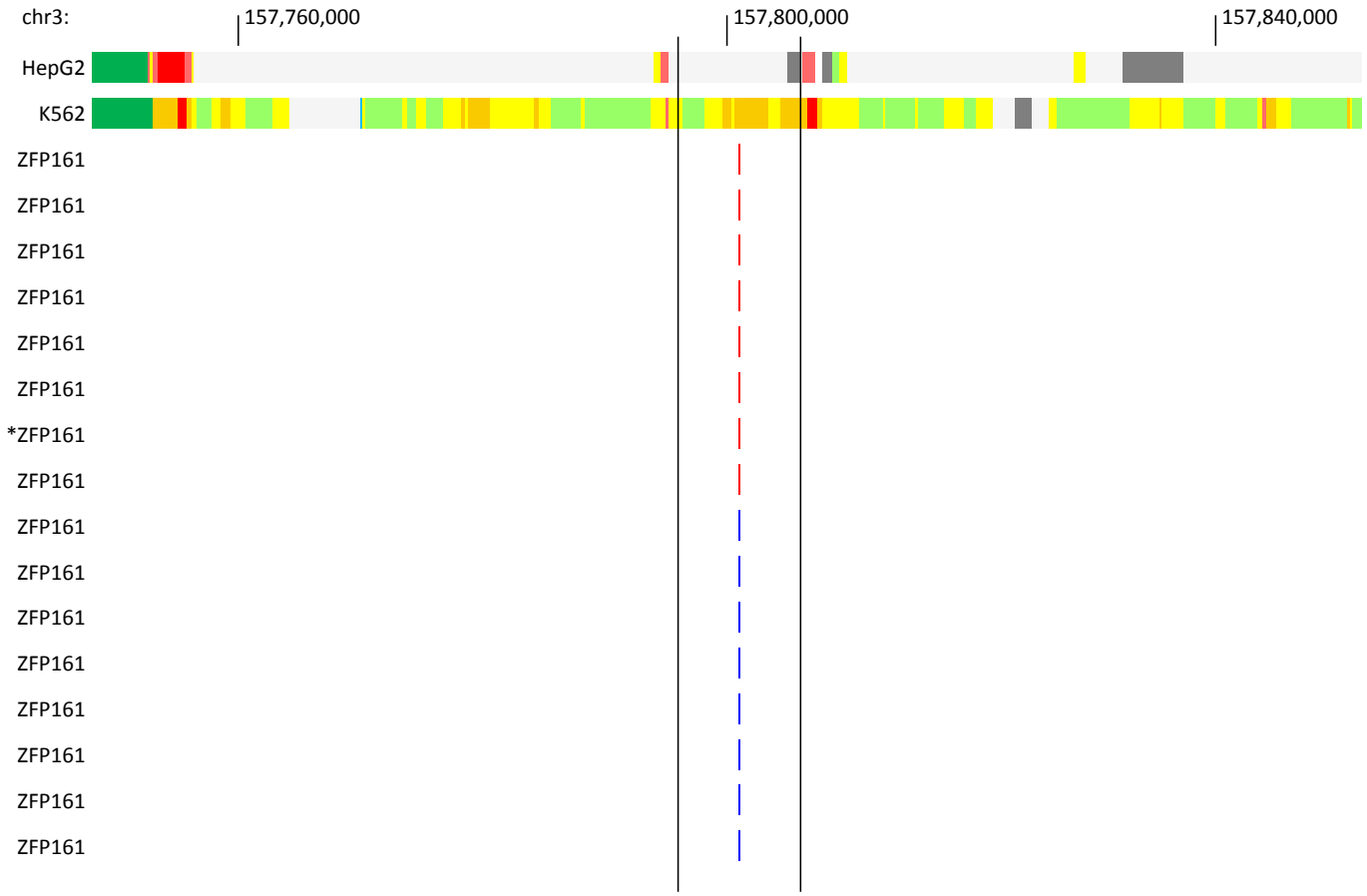
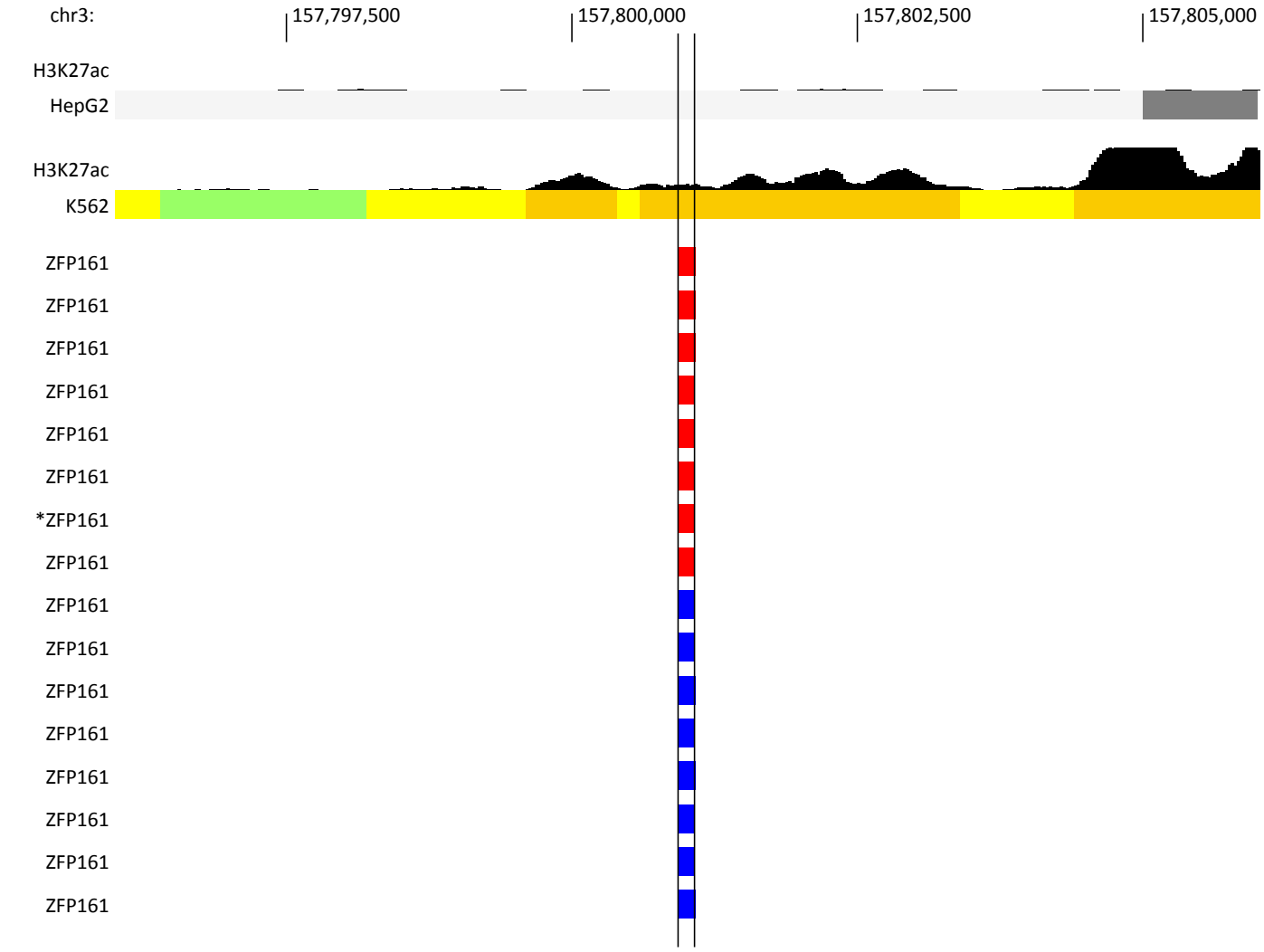
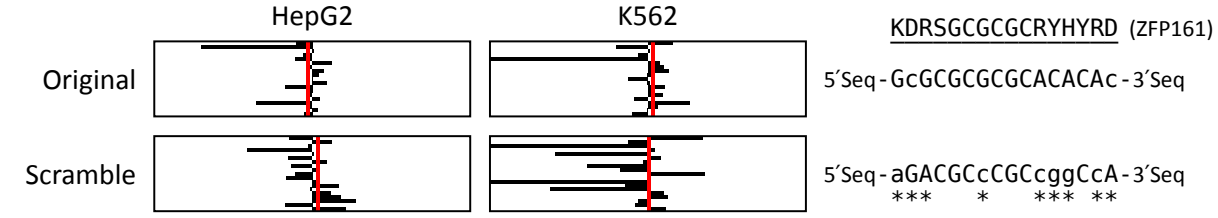
1257 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr3 157800995 157801010 - (hg18)







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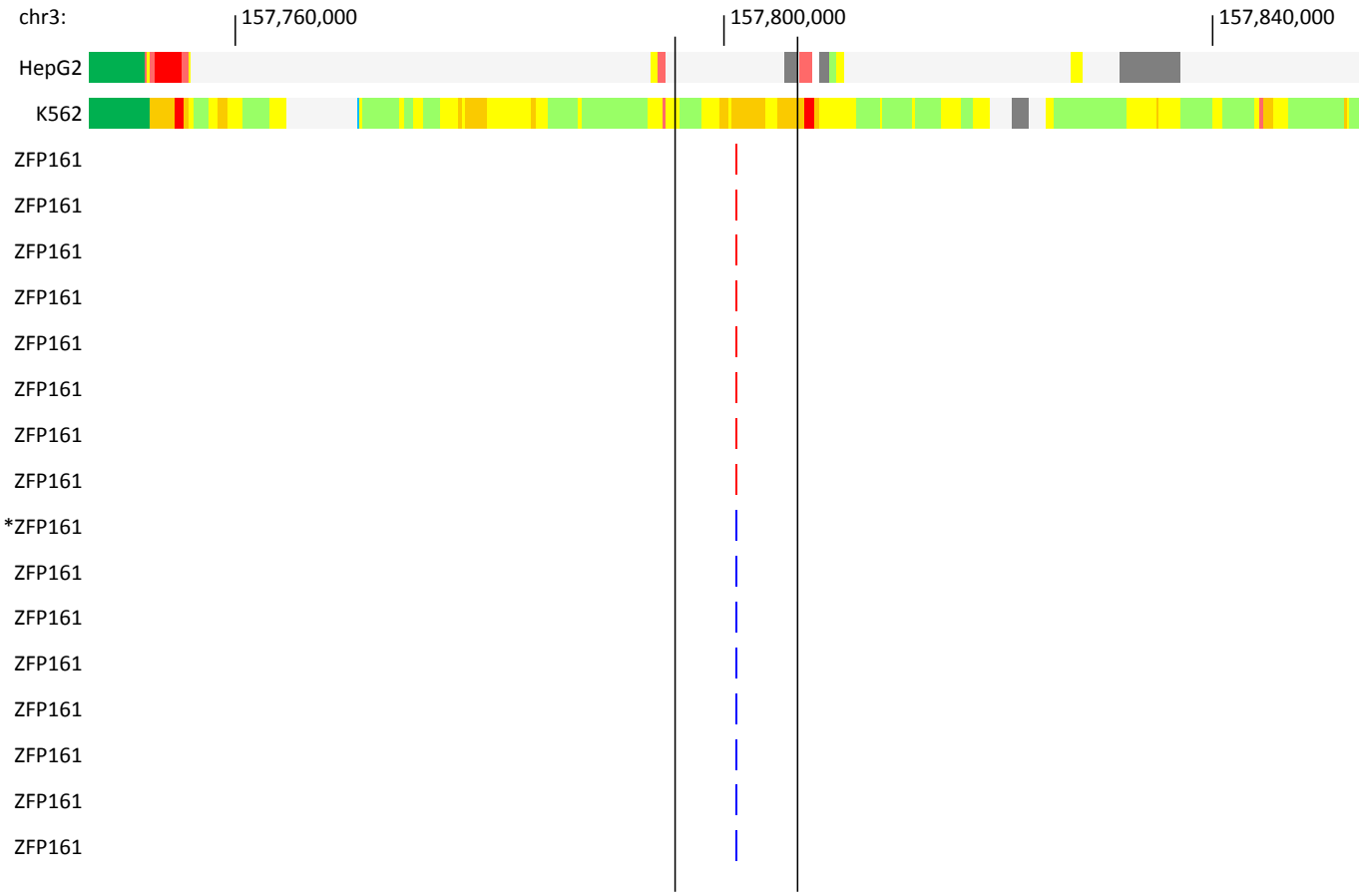
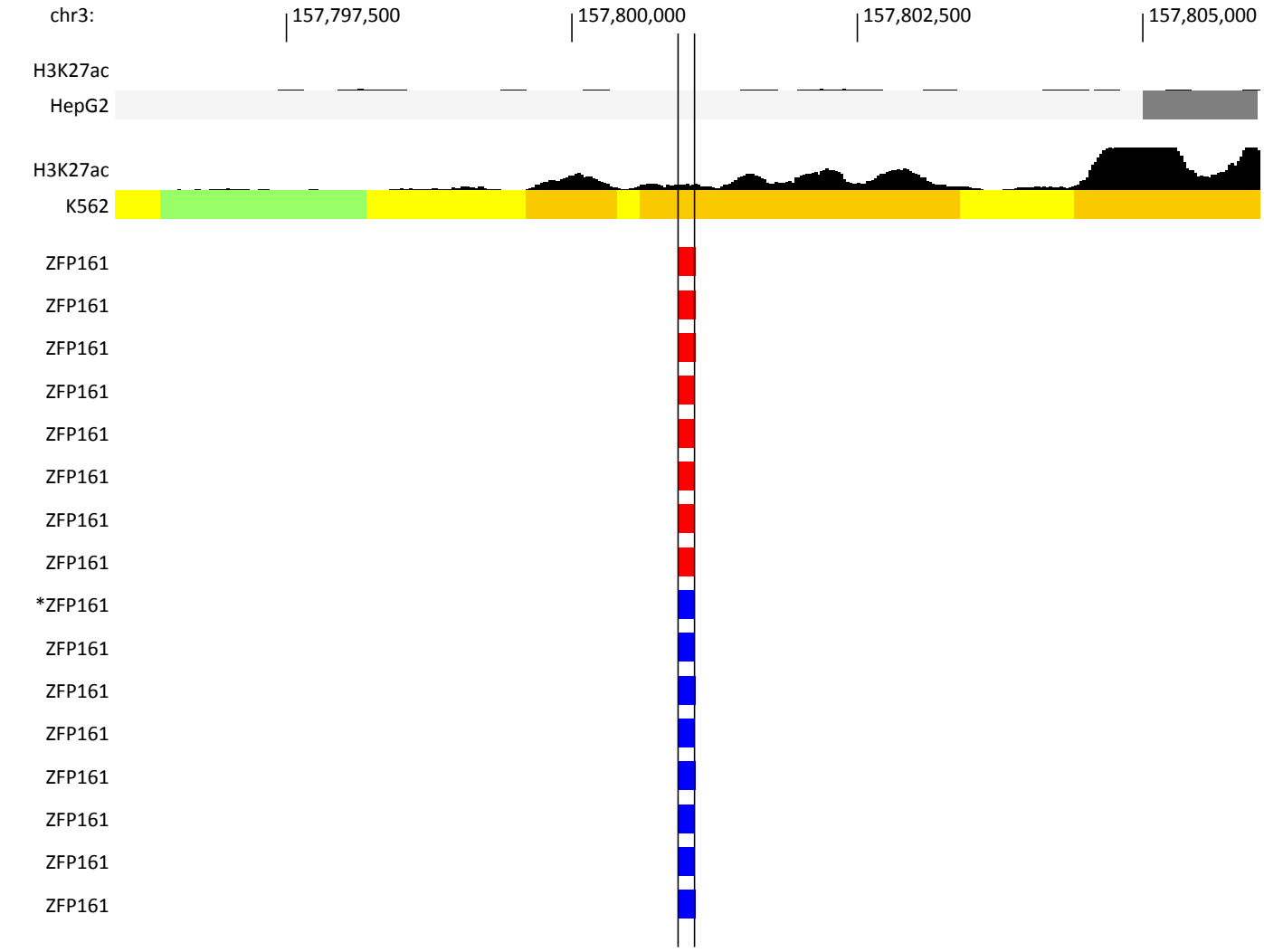
1258 ZFP161 in K562 enhancer

chr3 157800995 157801010 - (hg18)





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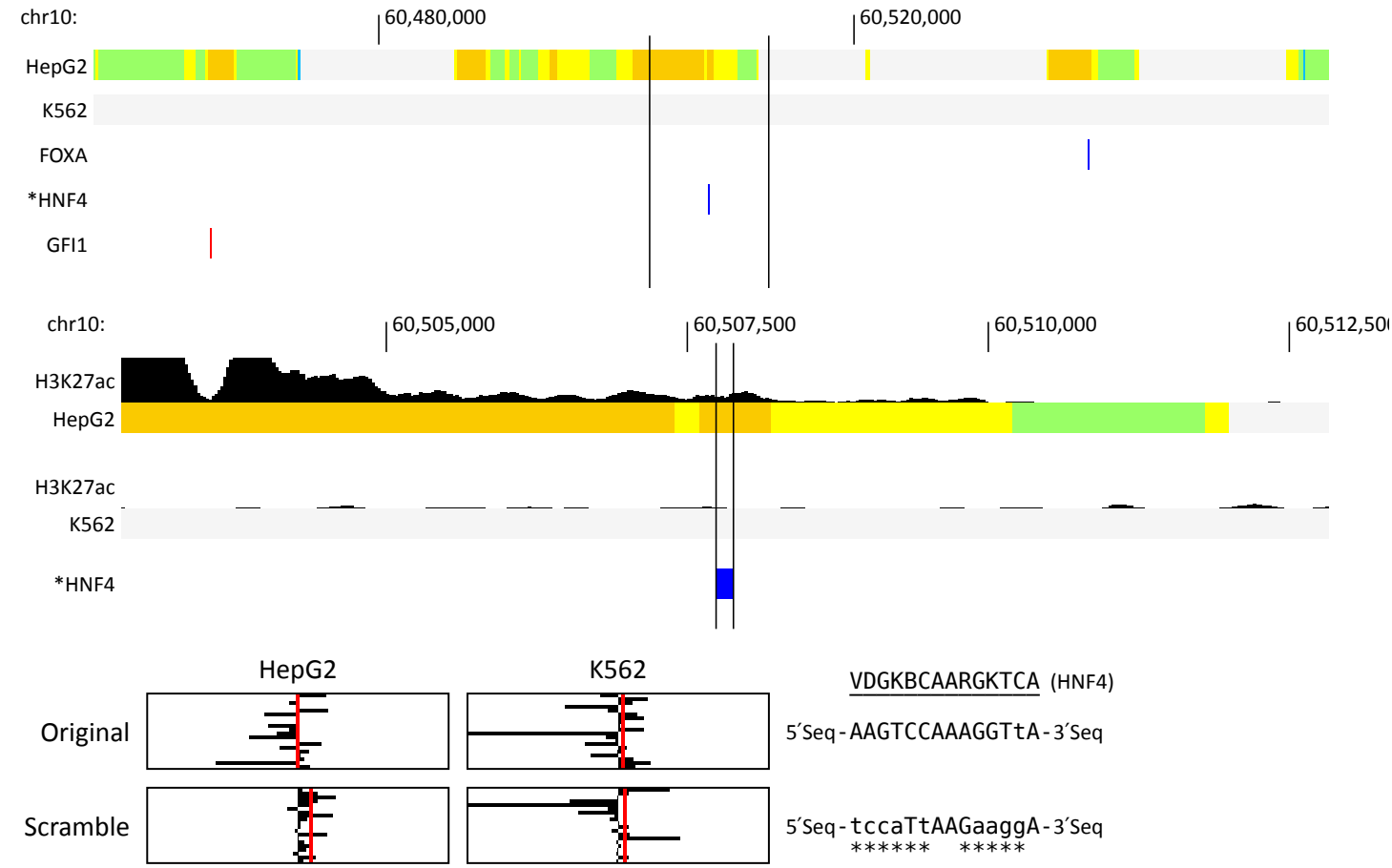
1259 HNF4 in HepG2 enhancer

chr10 60507805 60507818 - (hg18)



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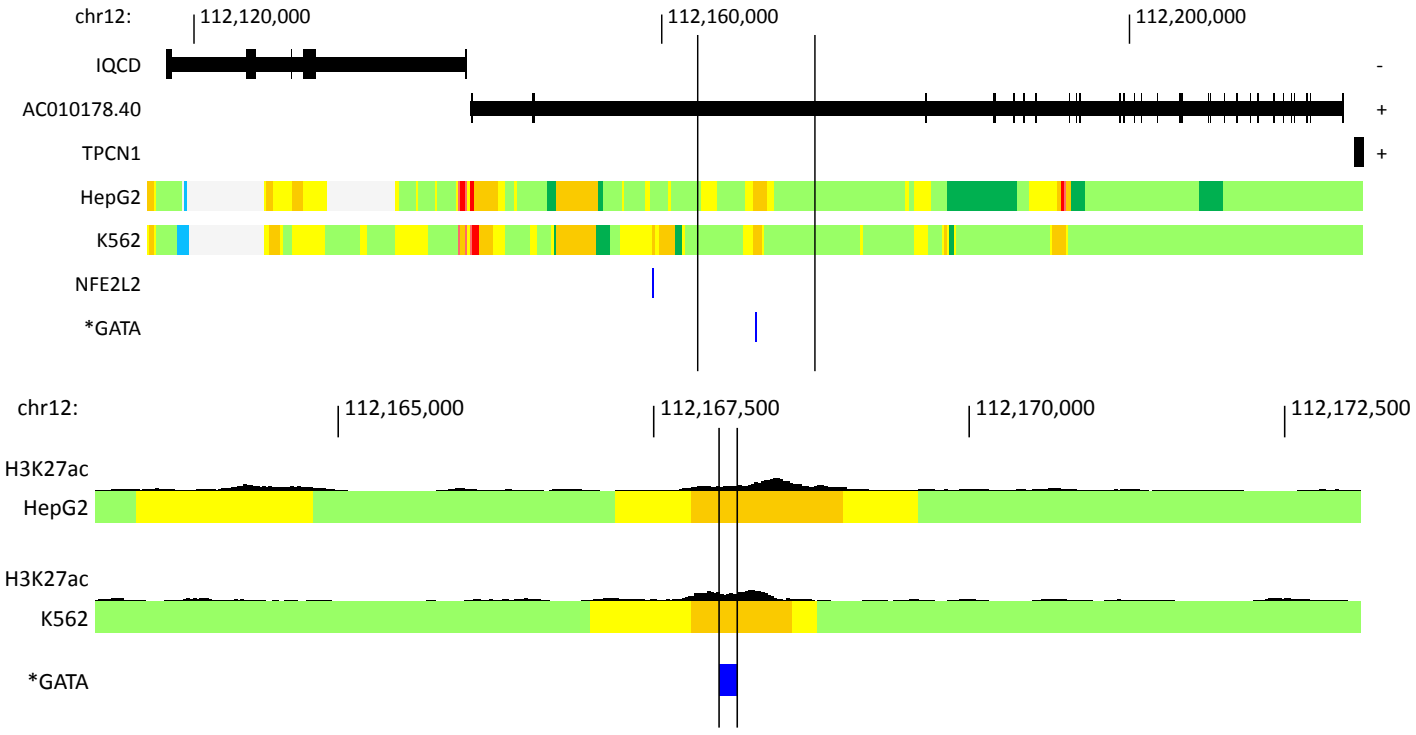
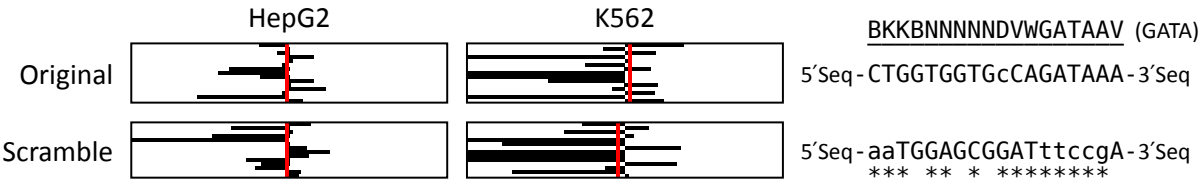
1260 GATA in K562 enhancer

chr12 112168082 112168099 - (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGGTGGTGcCAGATAAA-3′Seq

5′Seq-aaTGGAGCGGATttccgA-3′Seq

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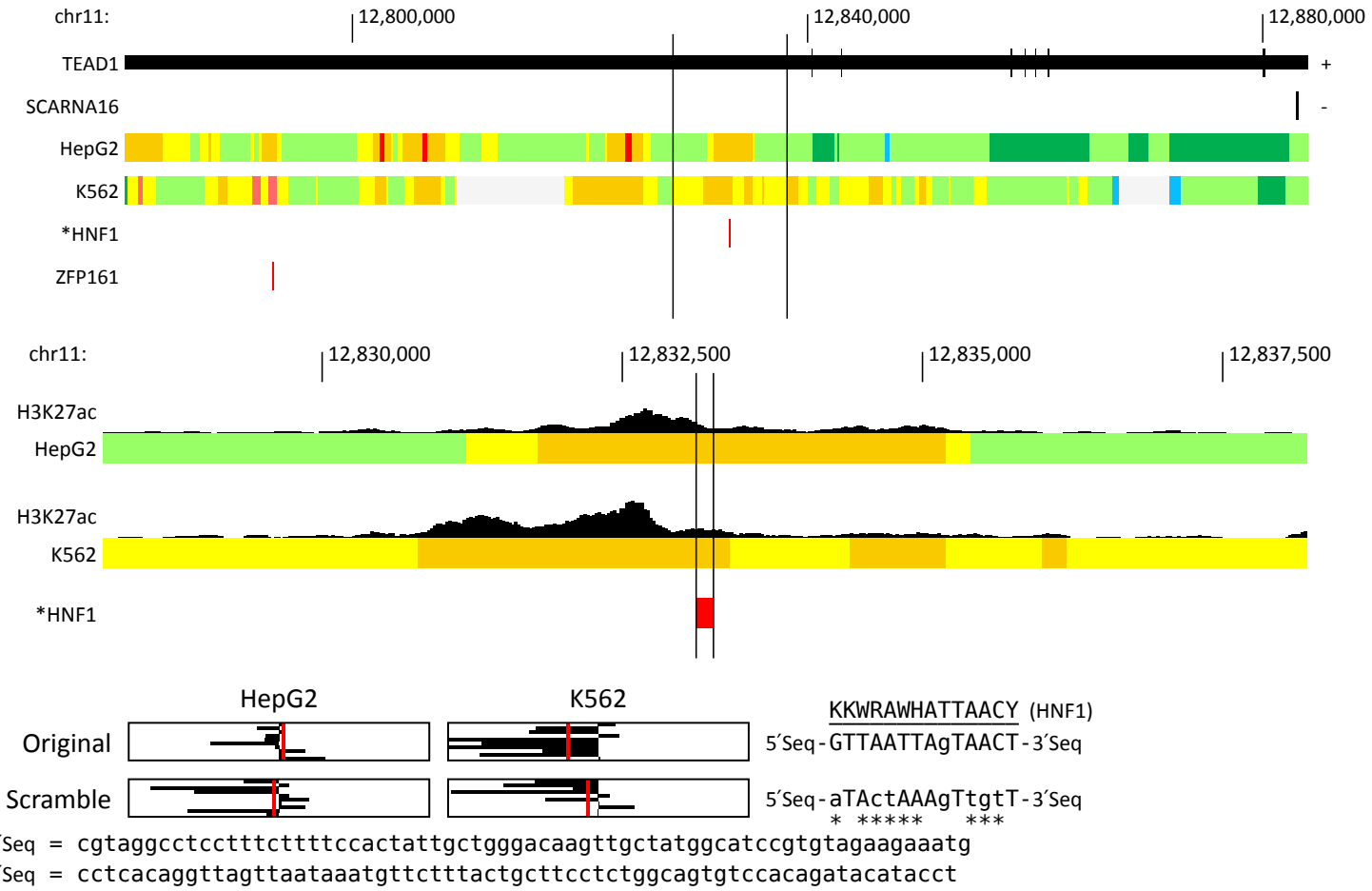
3′Seq = tagaaacagtttccatatgccagctataaagatgcactggggaggagcaggaaagaacaggca

1261 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr11 12833181 12833194 + (hg18)



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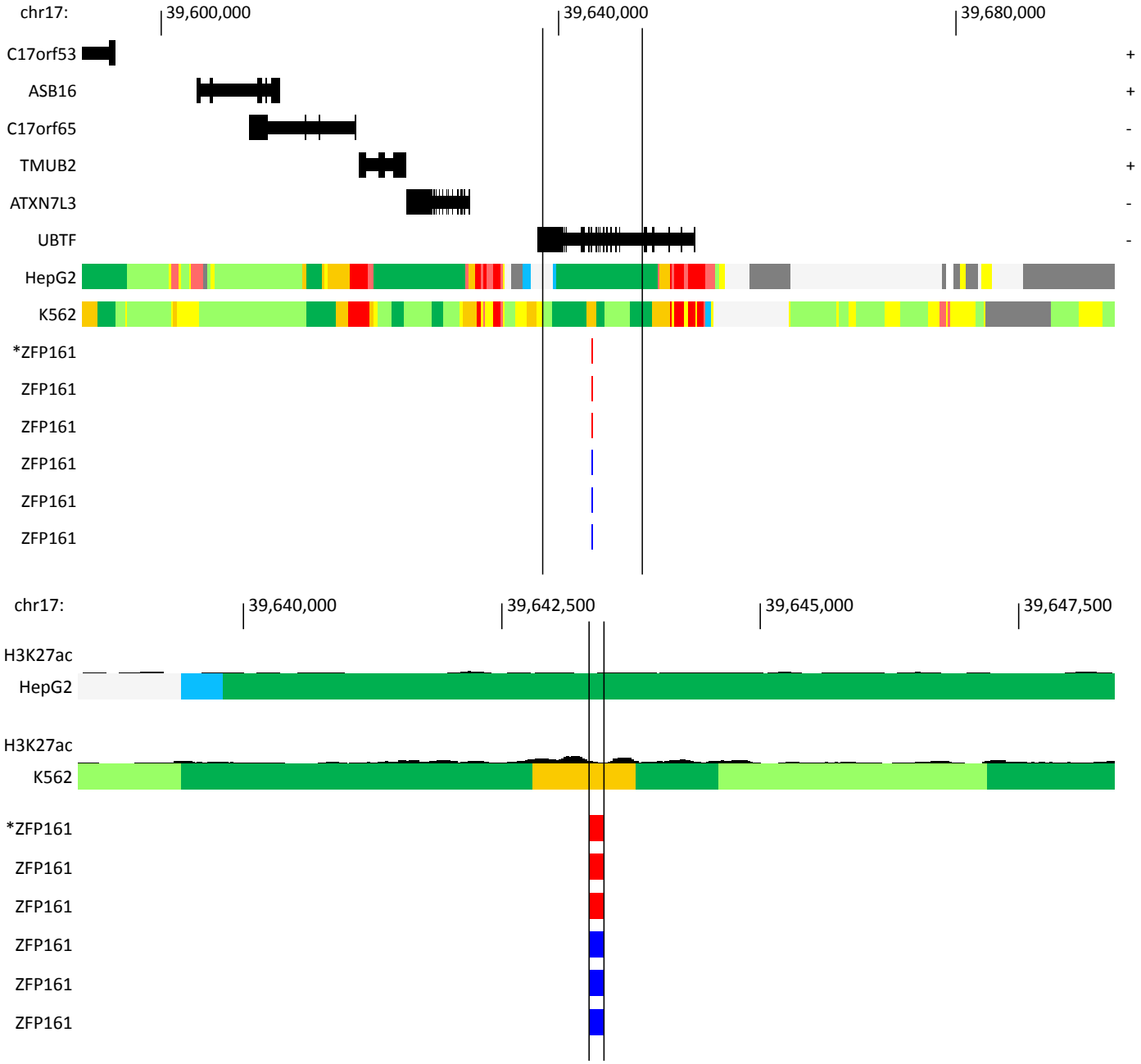
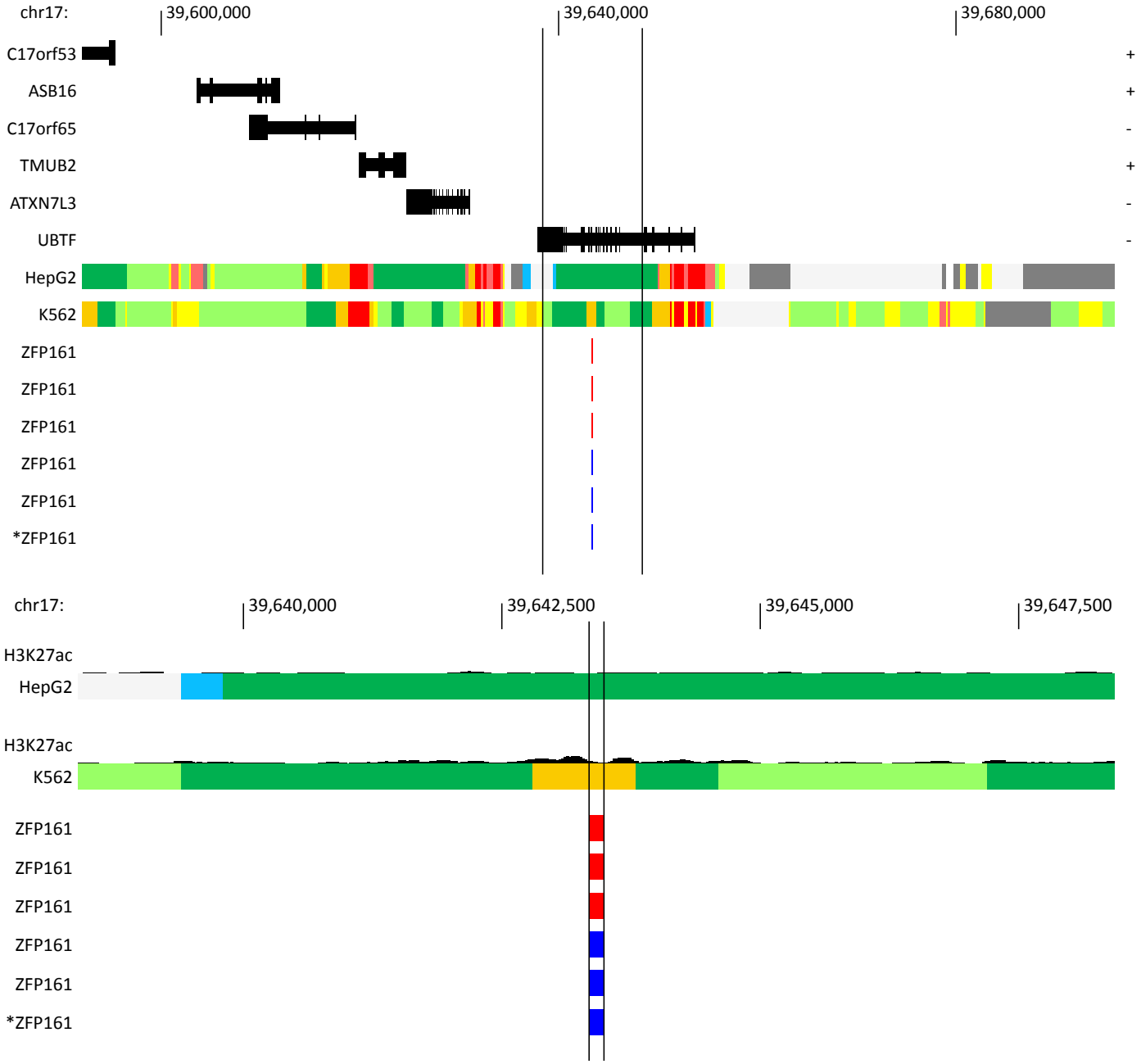
1262 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr17 39643409 39643424 - (hg18)



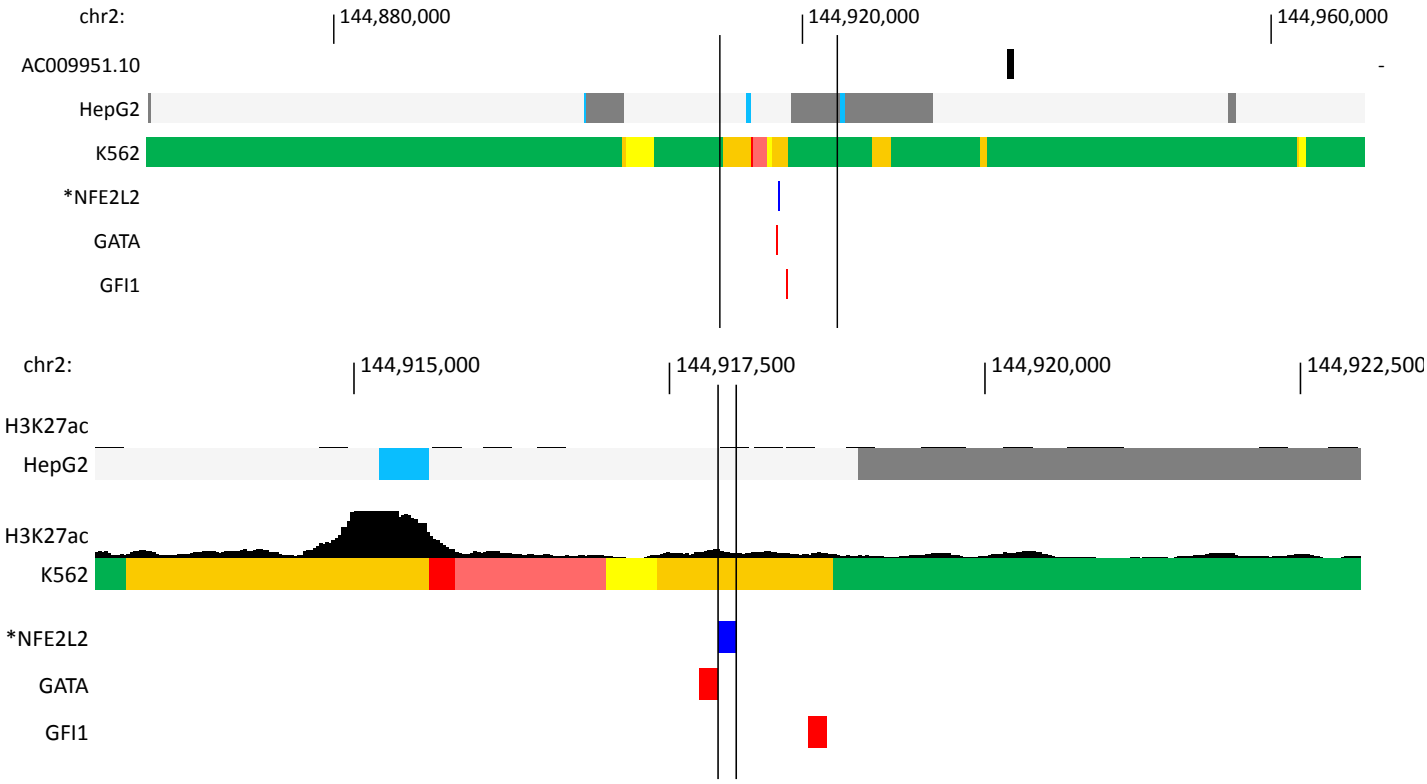
1263 ZFP161 in K562 enhancer

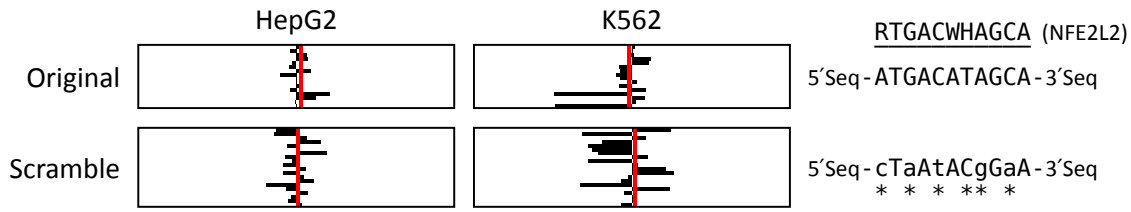
chr17 39643409 39643424 - (hg18)



1264 NFE2L2 in K562 enhancer

chr2 144917952 144917962 + (hg18)





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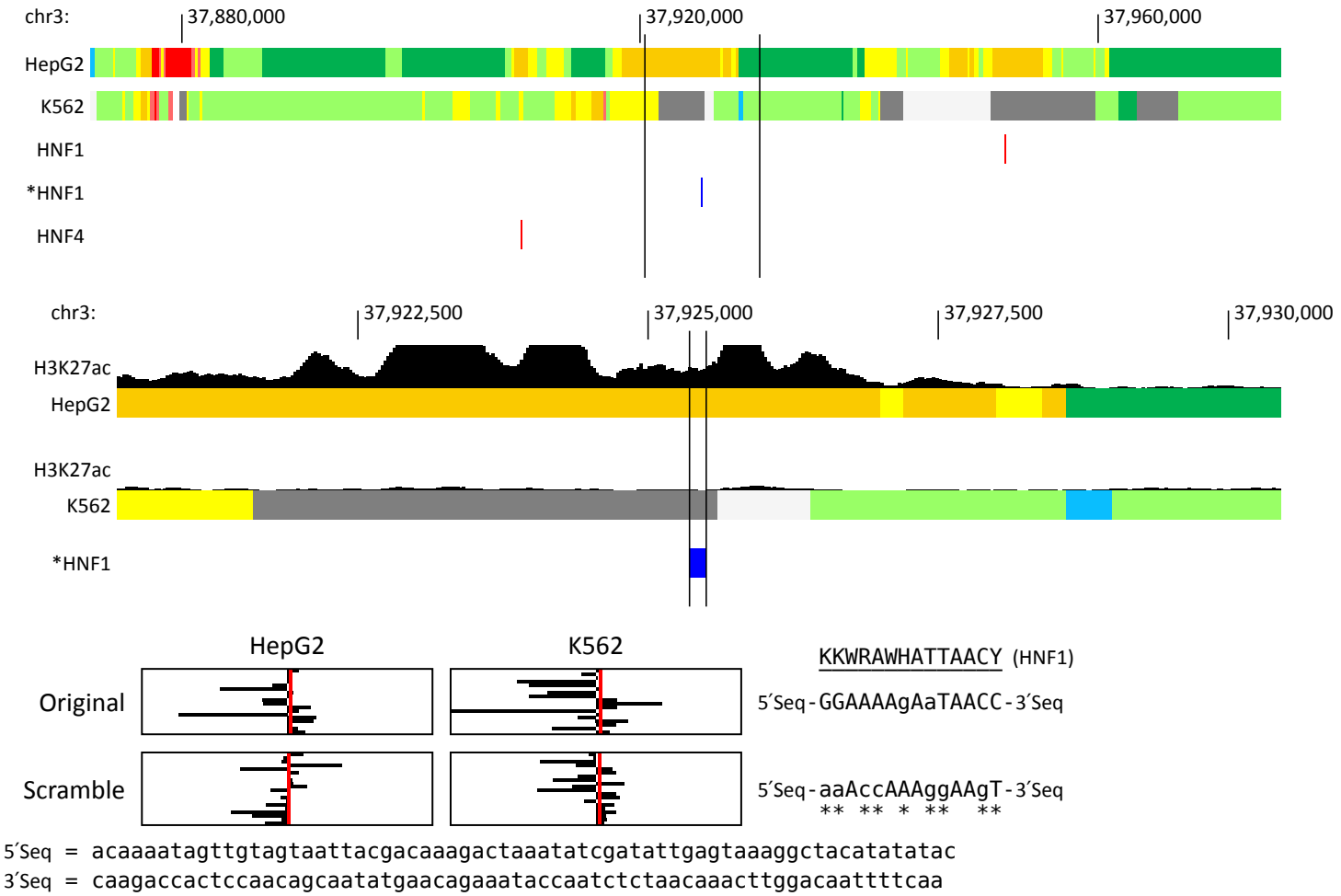
1265 HNF1 in HepG2 enhancer

chr3 37925423 37925436 - (hg18)



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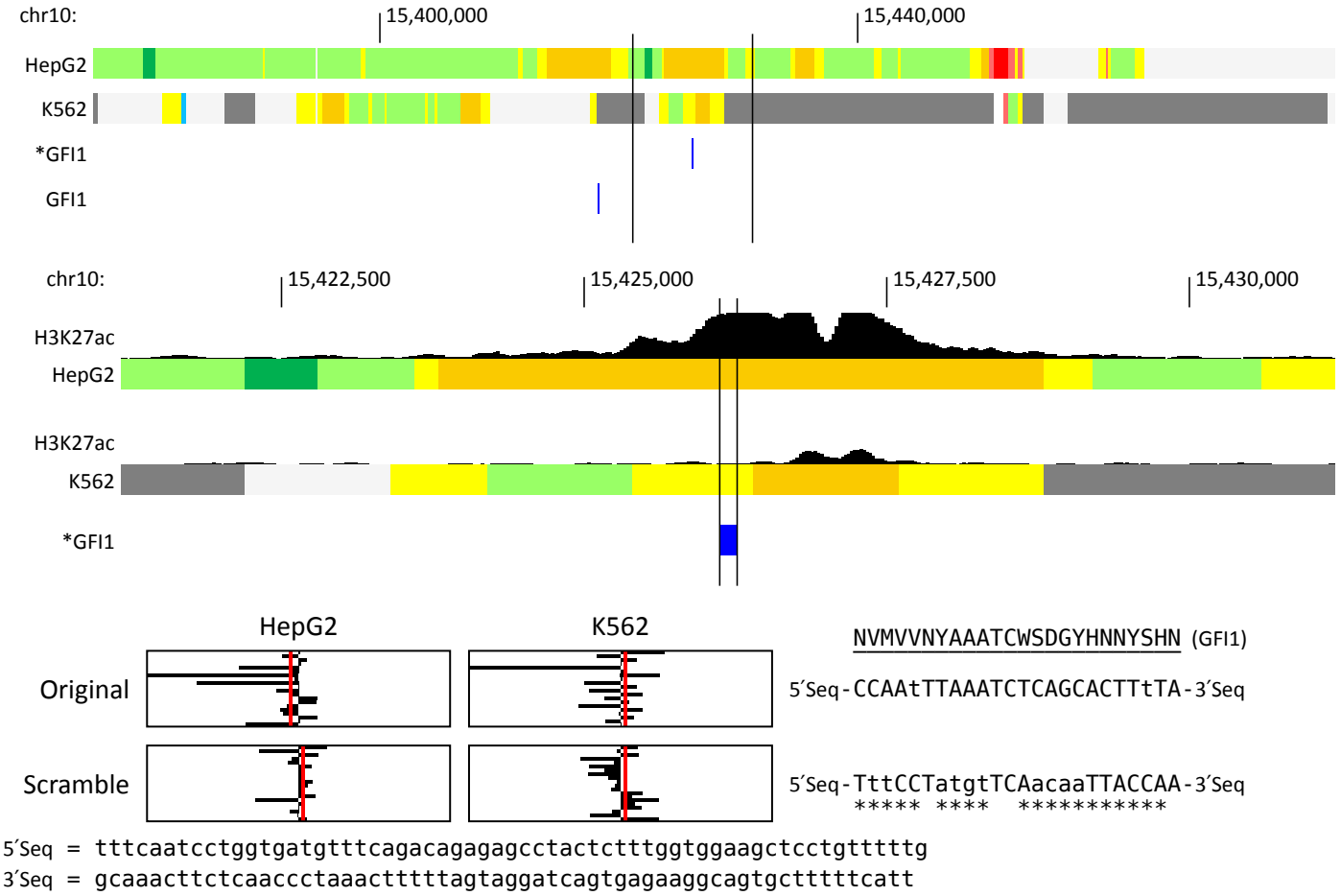
1266 GFI1 in HepG2 enhancer

chr10 15426181 15426204 - (hg18)



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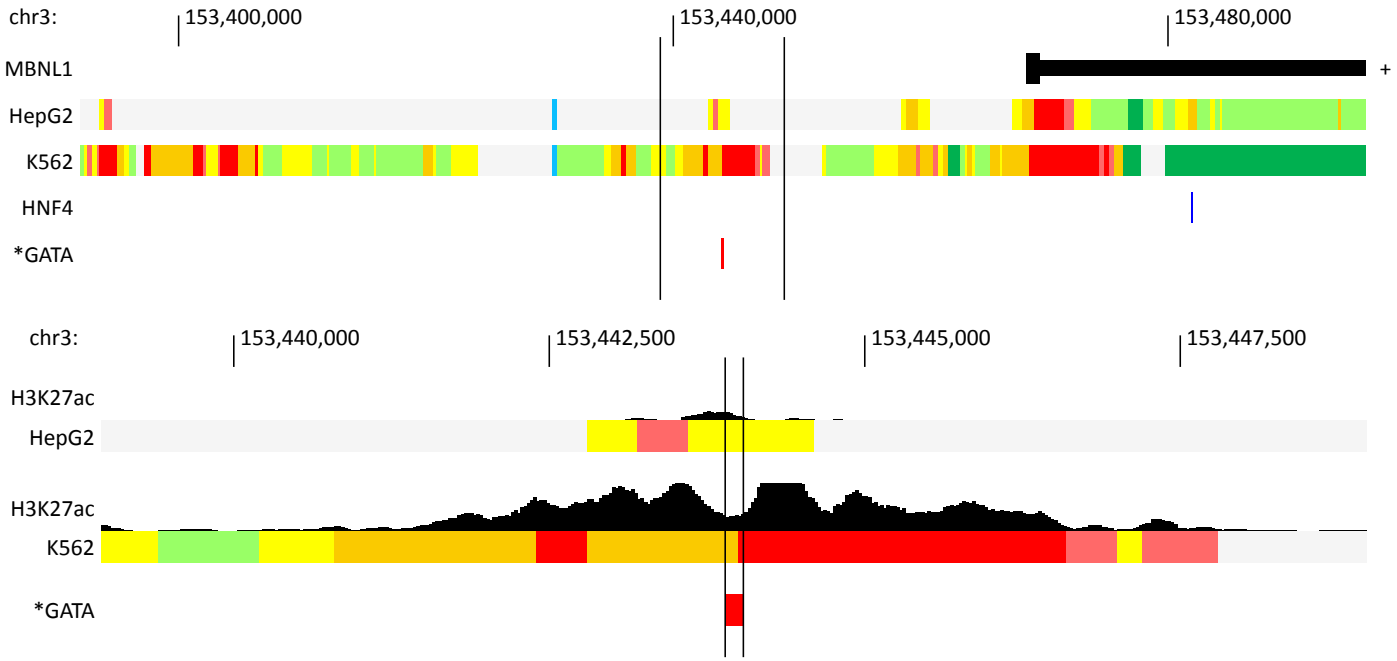
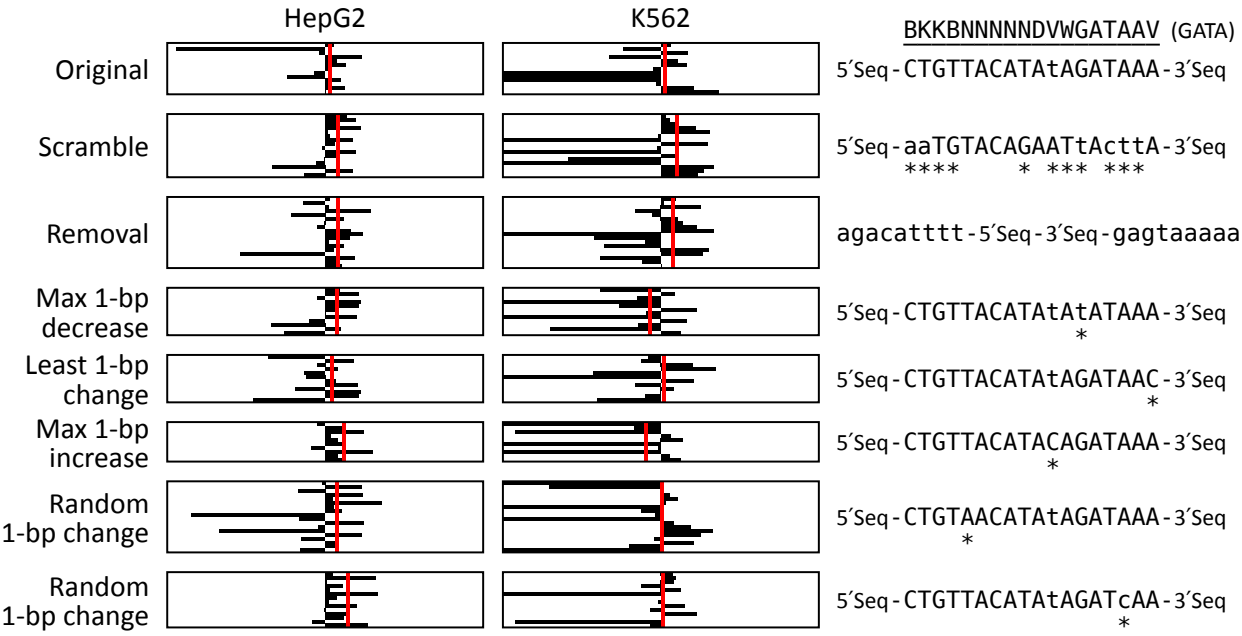
1267 GATA in K562 enhancer (conserved at 70% confidence)

chr3 153443958 153443975 - (hg18)





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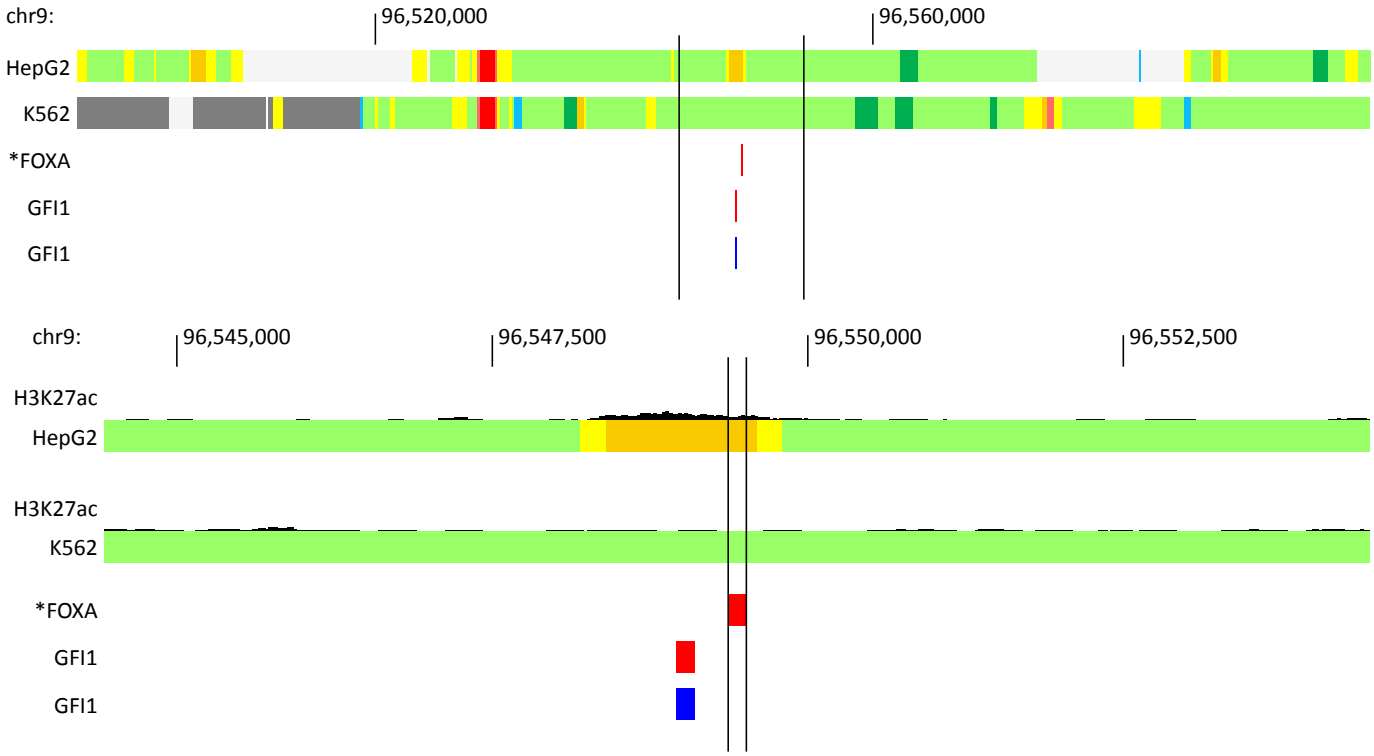
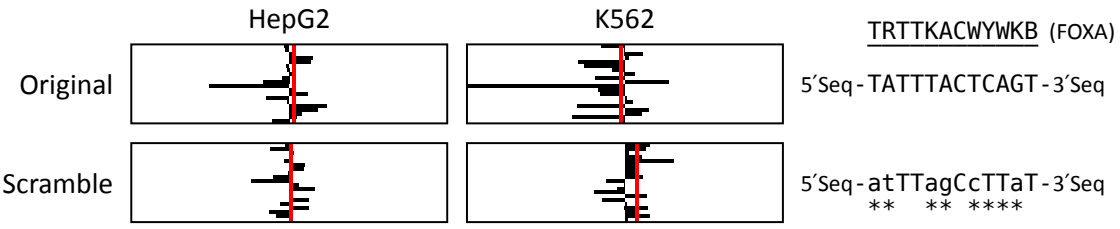
3′Seq = gcactgcaaaactgaaactgttacttacacatgaactatggtctttcactacttcagccacaa

1268 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr9 96549436 96549447 + (hg18)





TRTTKACWYWKB (FOXA)

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5′Seq-atTTagCcTTaT-3′Seq

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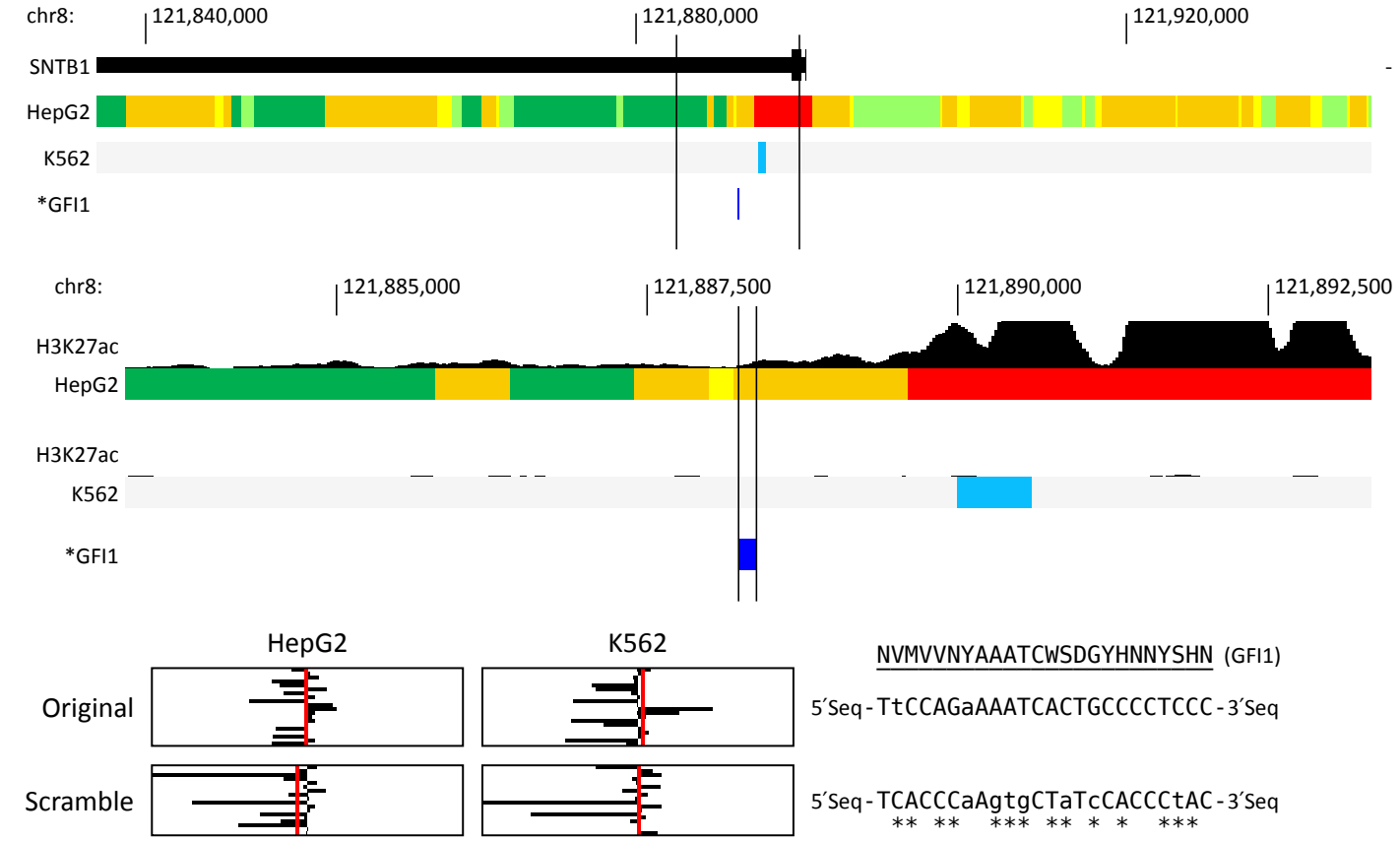
1269 GFI1 in HepG2 enhancer

chr8 121888297 121888320 + (hg18)



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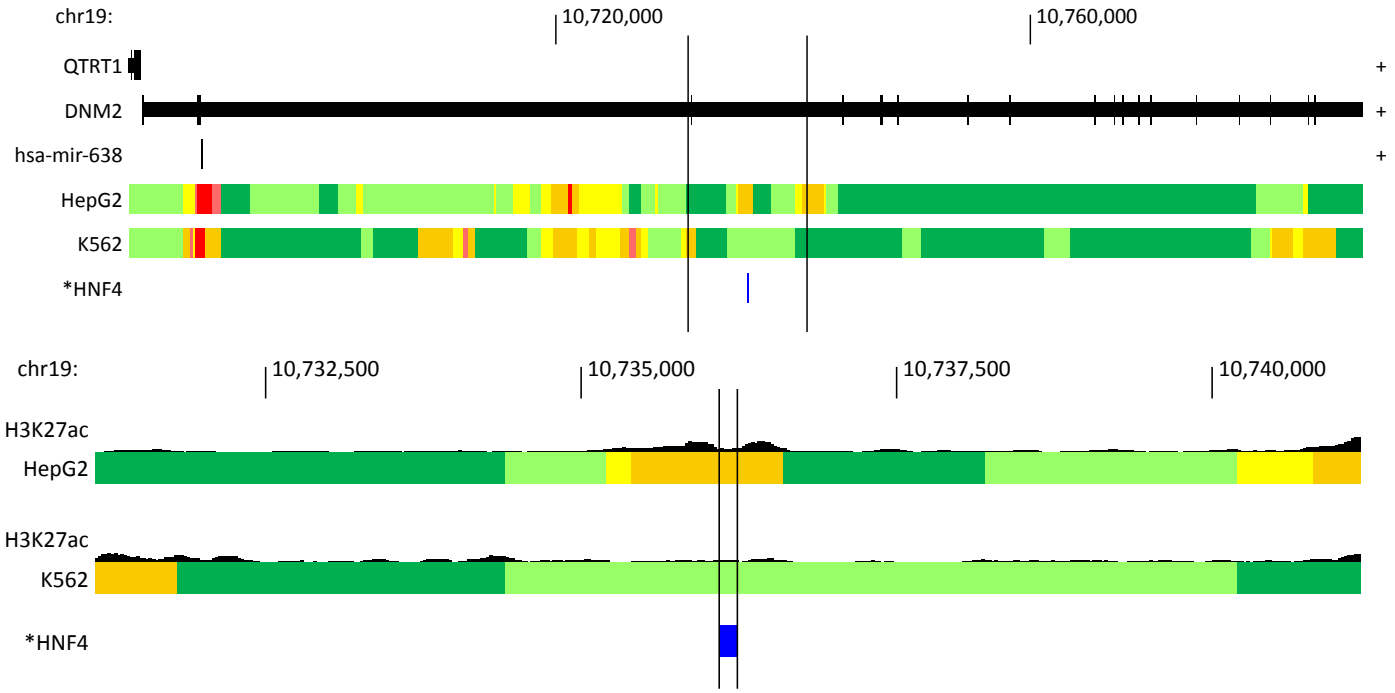
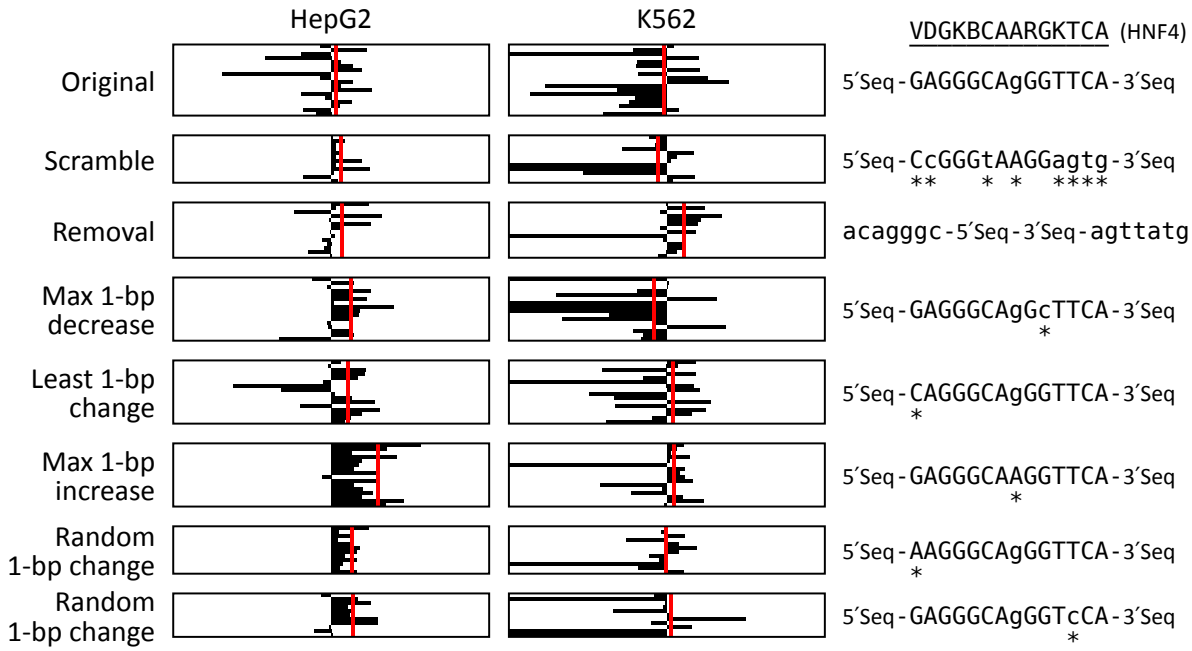
1270 HNF4 in HepG2 enhancer

chr19 10736160 10736173 - (hg18)





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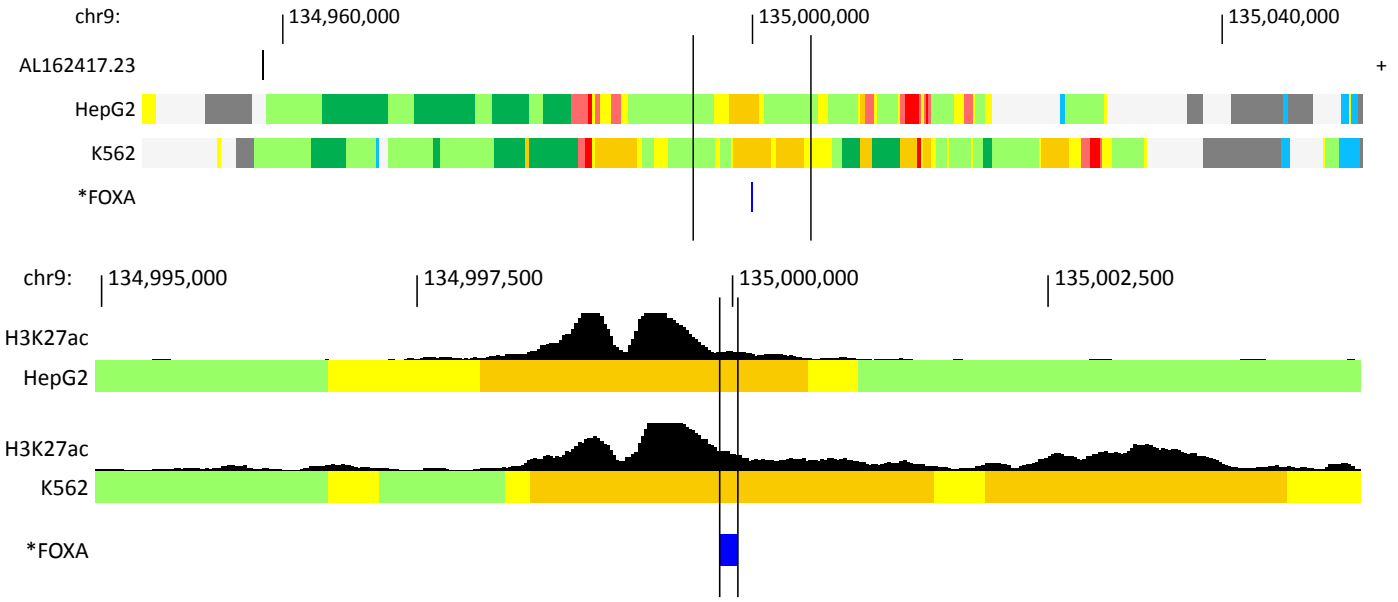
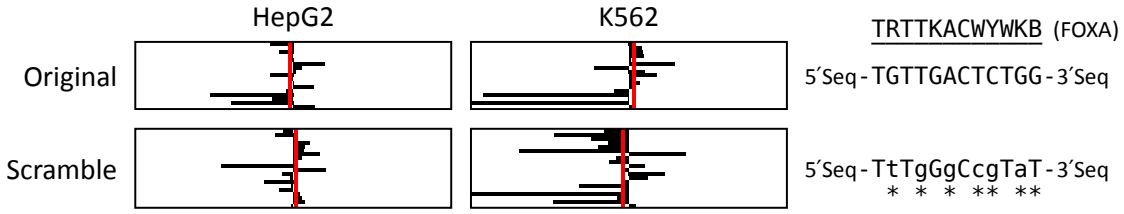
1271 FOXA in HepG2 enhancer

chr9 134999965 134999976 - (hg18)





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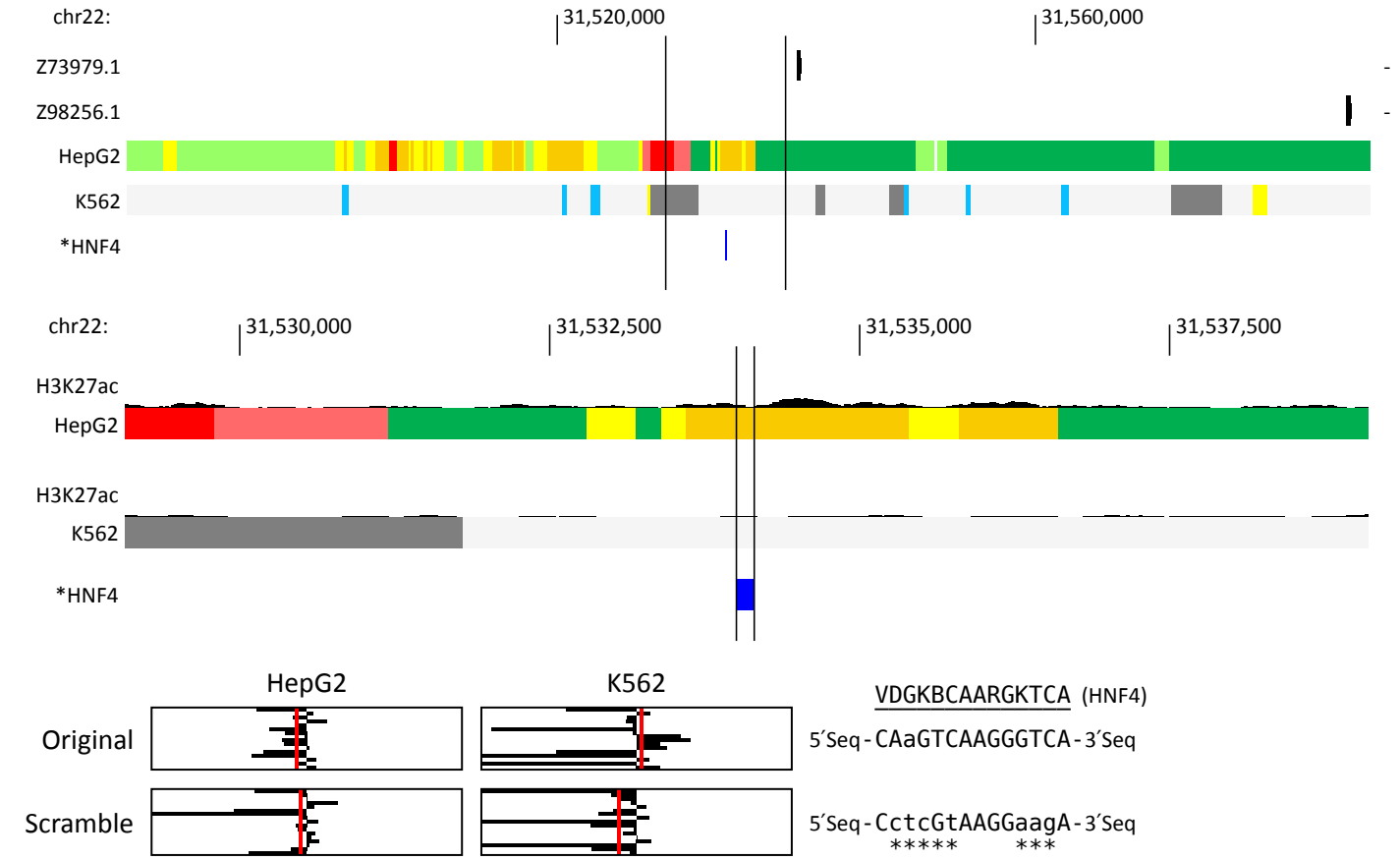
1272 HNF4 in HepG2 enhancer

chr22 31534072 31534085 - (hg18)



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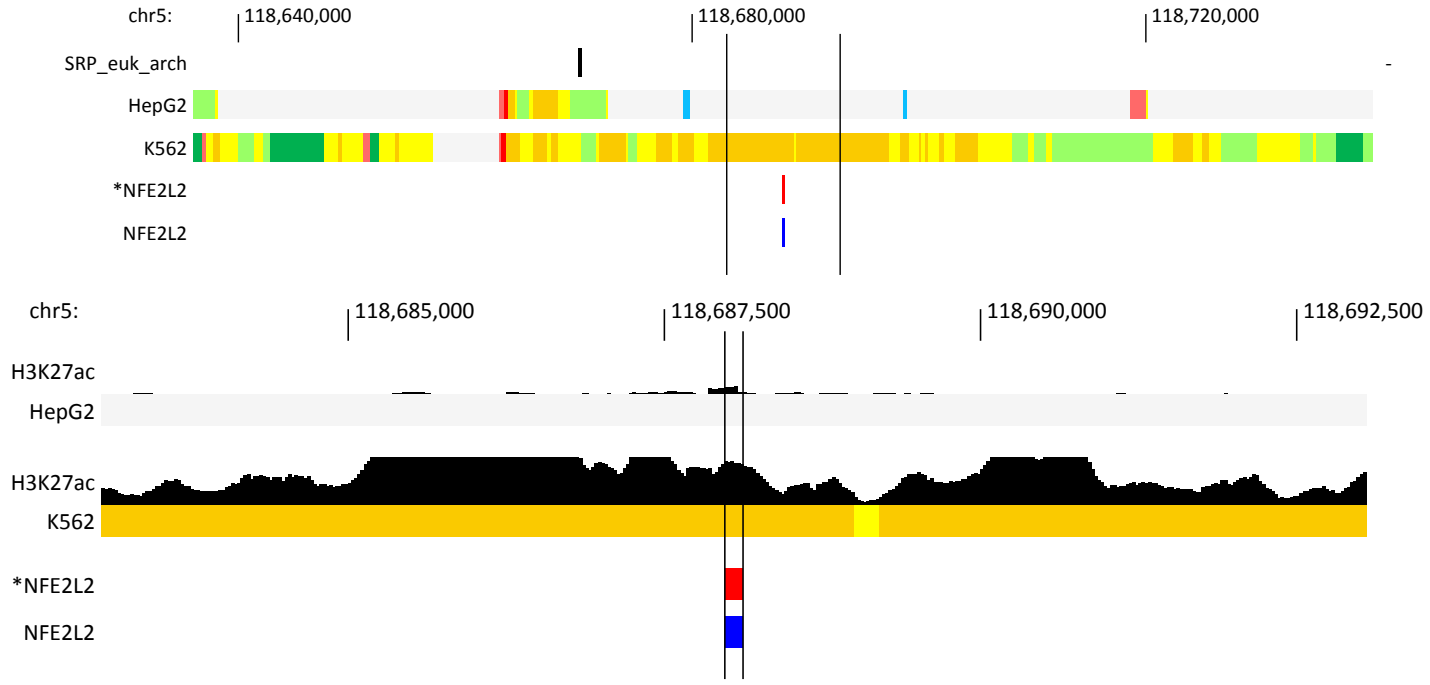
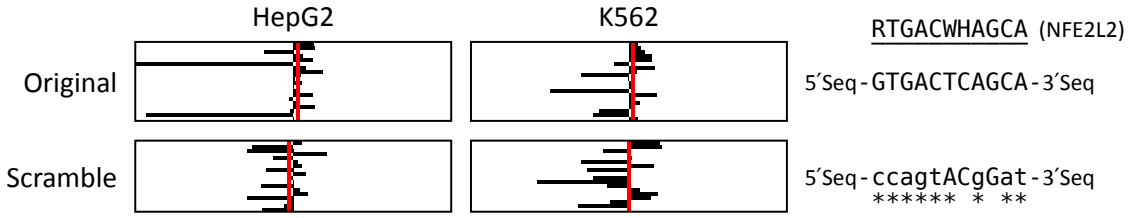
1273 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr5 118688045 118688055 - (hg18)





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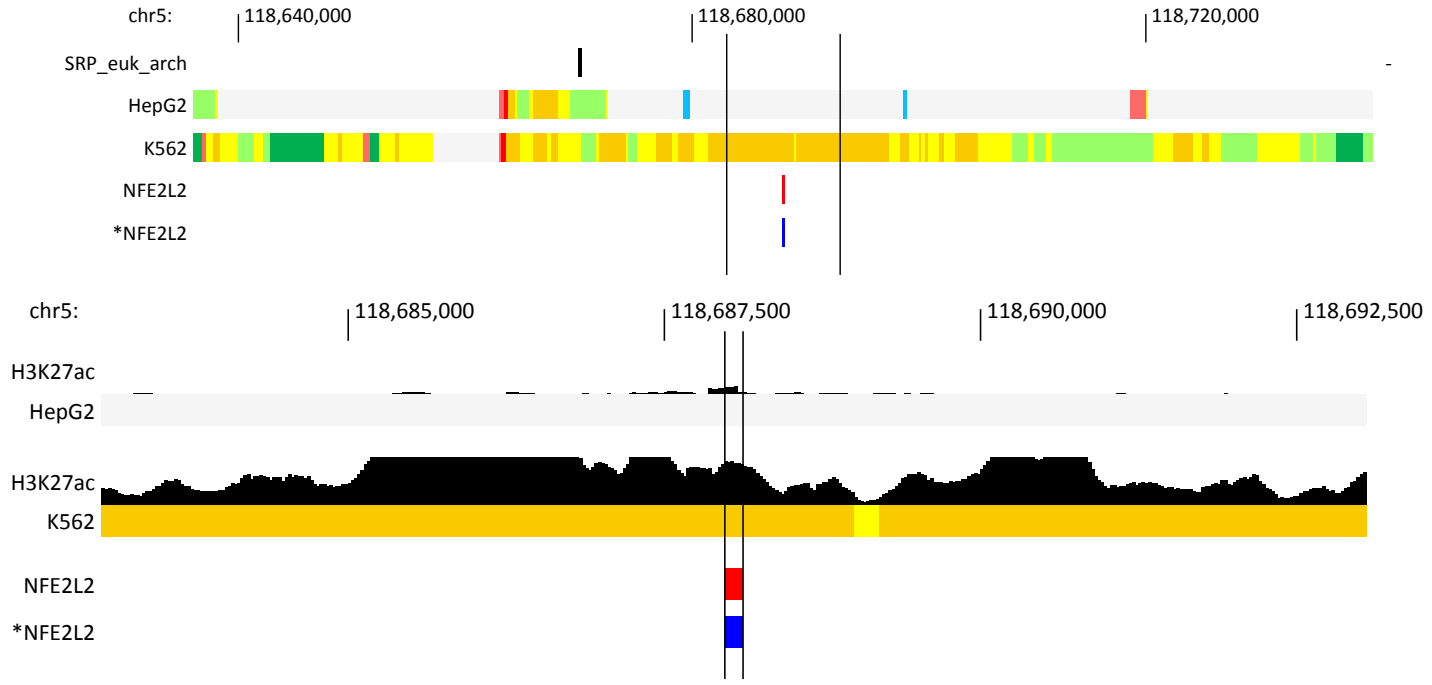
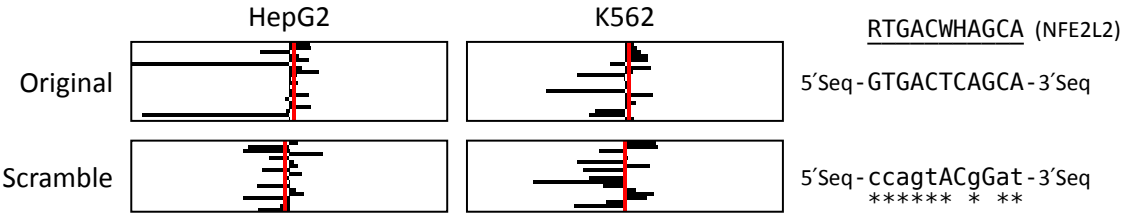
1274 NFE2L2 in K562 enhancer

chr5 118688045 118688055 - (hg18)





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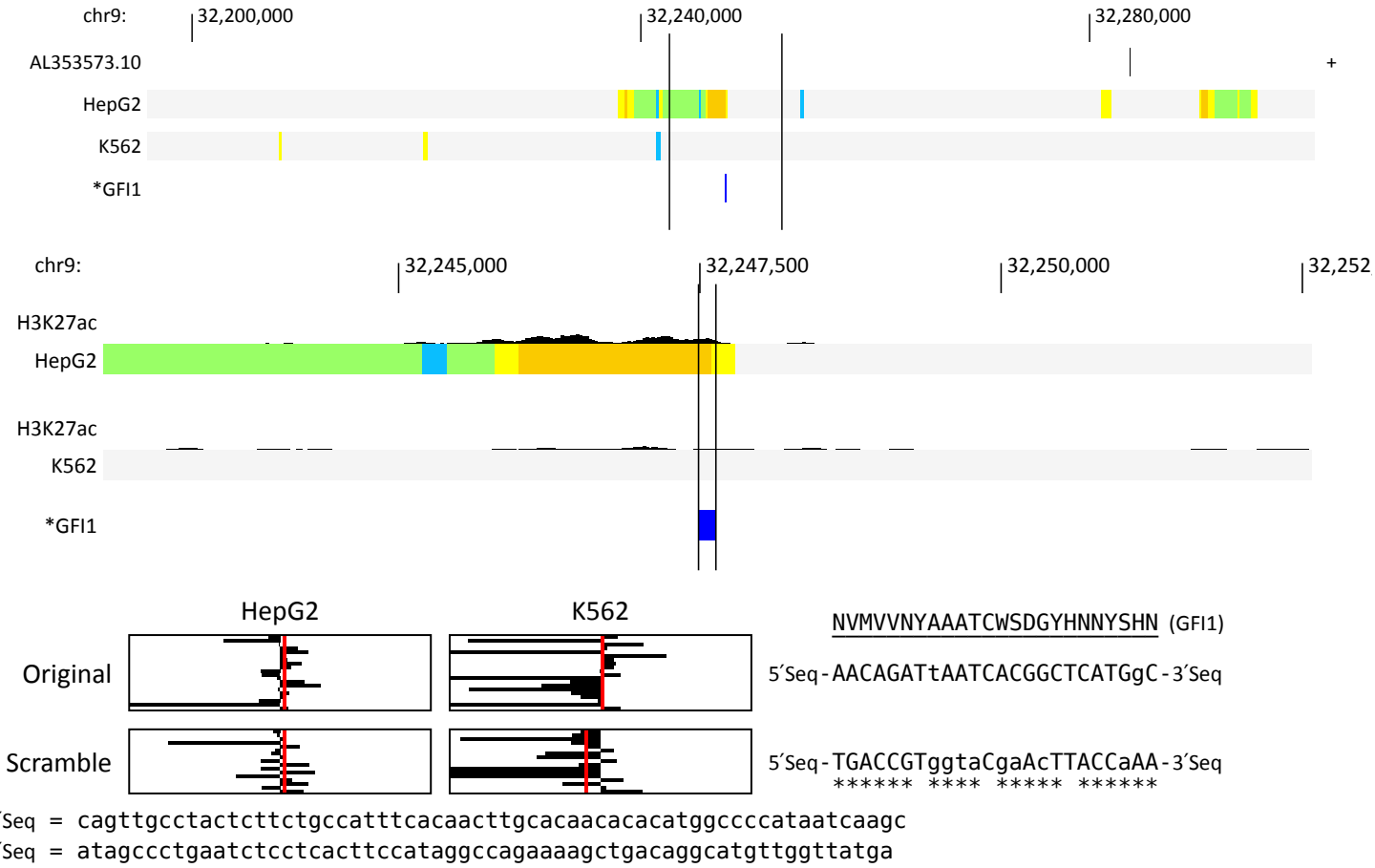
1275 GFI1 in HepG2 enhancer

chr9 32247550 32247573 + (hg18)



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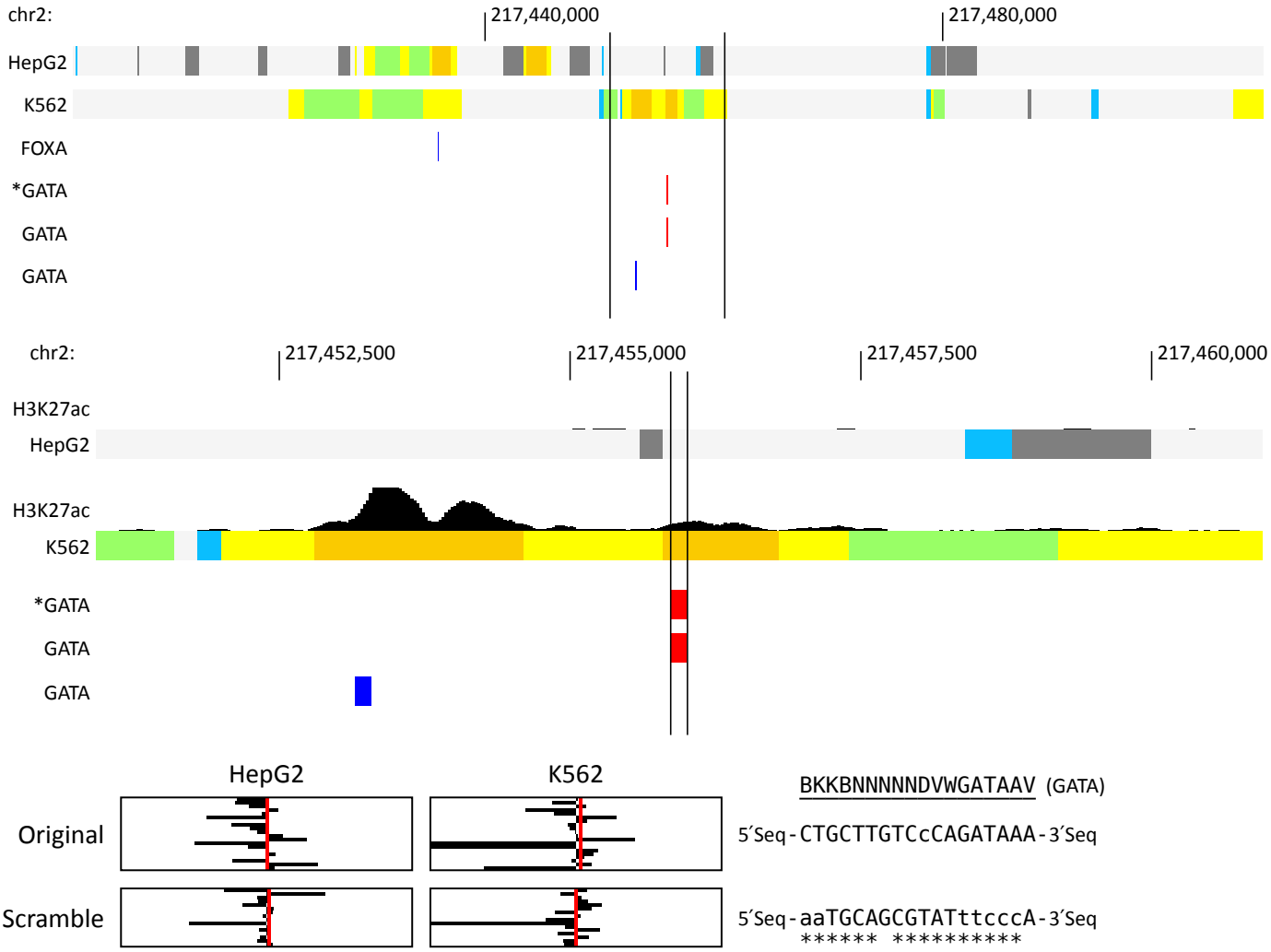
3′Seq = atagccctgaatctcctcacttccataggccagaaaagctgacaggcatgttggttatga

1276 GATA in K562 enhancer (conserved at 60% confidence)

chr2 217455929 217455946 + (hg18)



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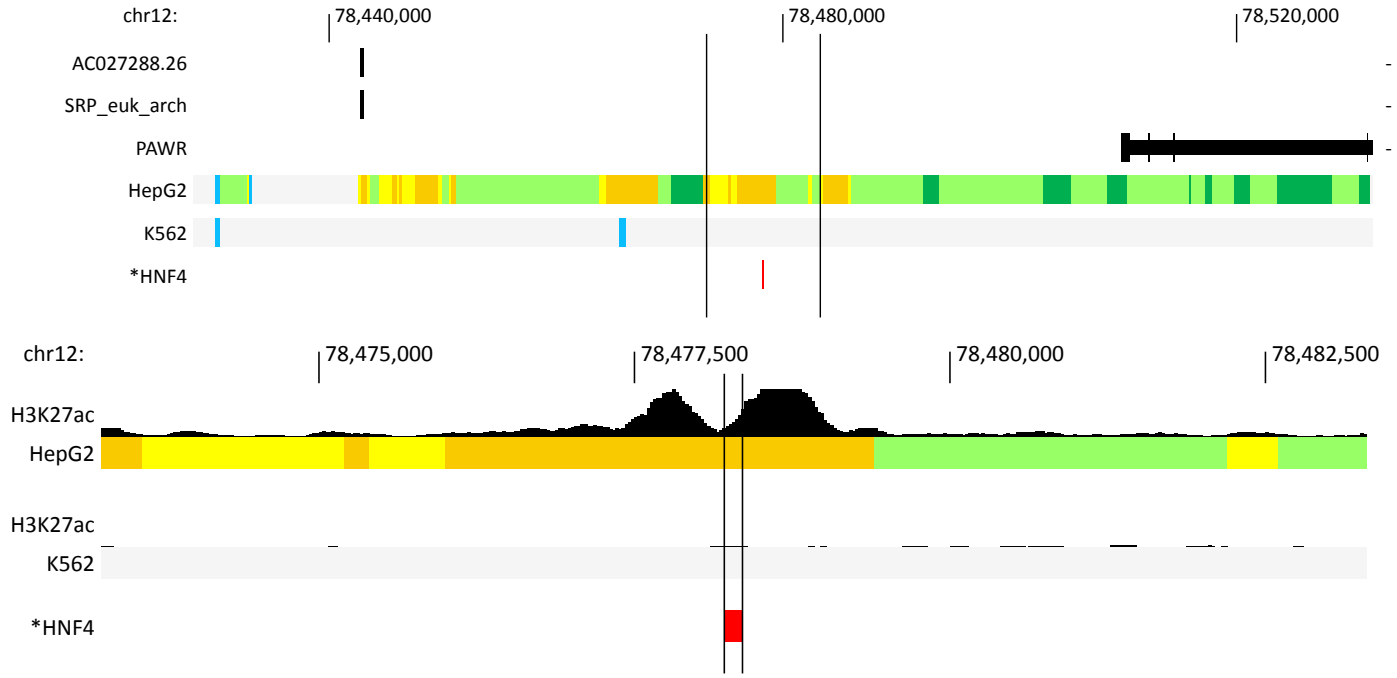
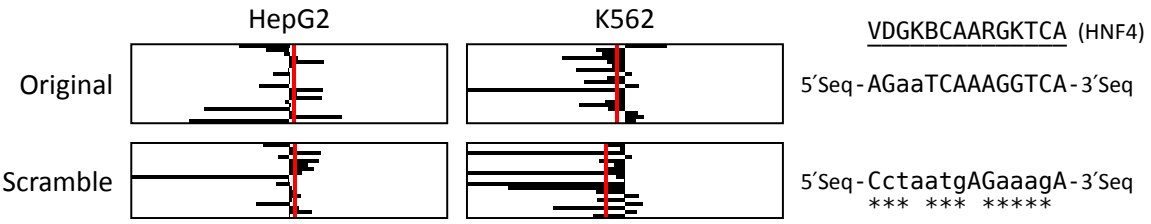
1277 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 78478278 78478291 + (hg18)





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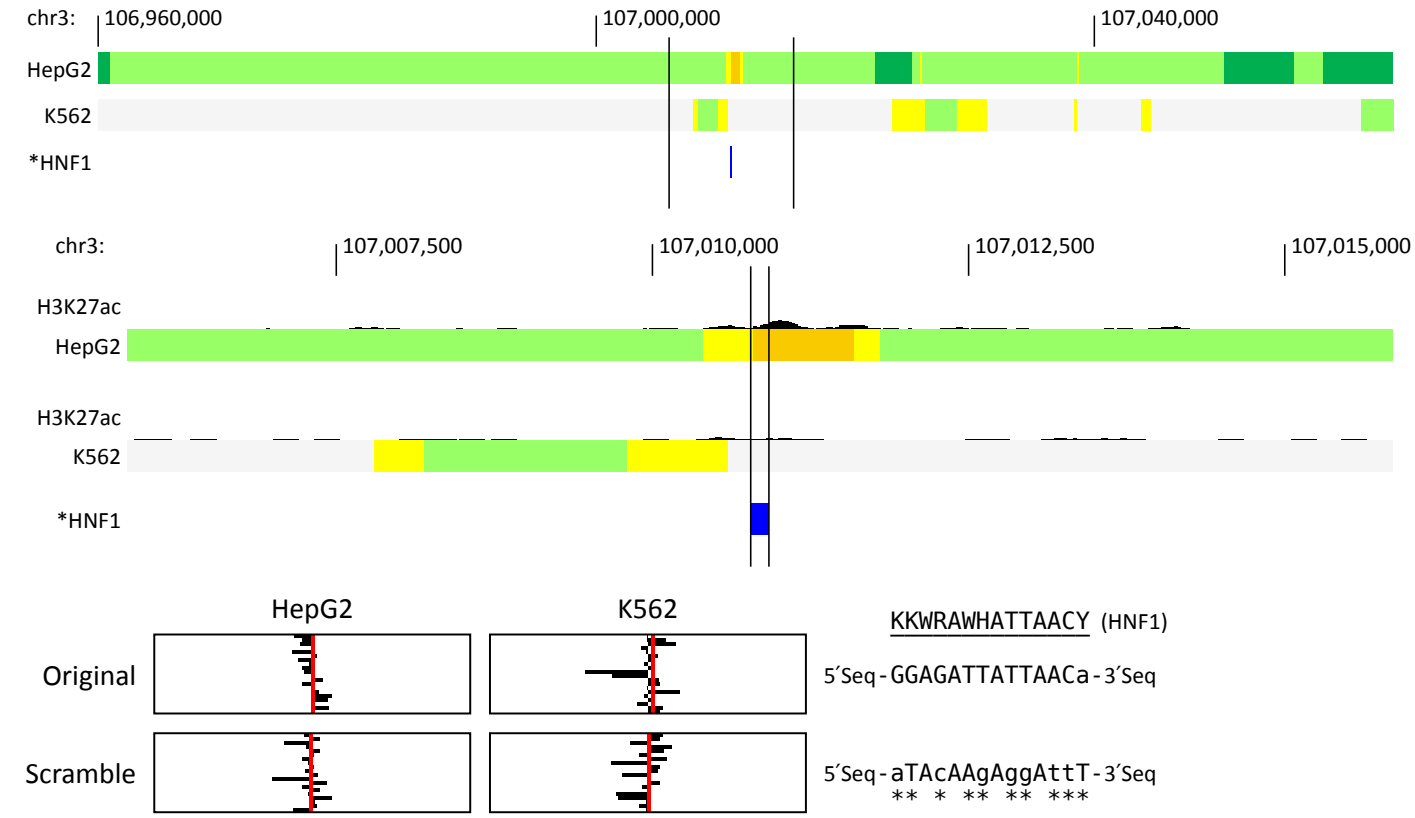
1278 HNF1 in HepG2 enhancer

chr3 107010843 107010856 + (hg18)



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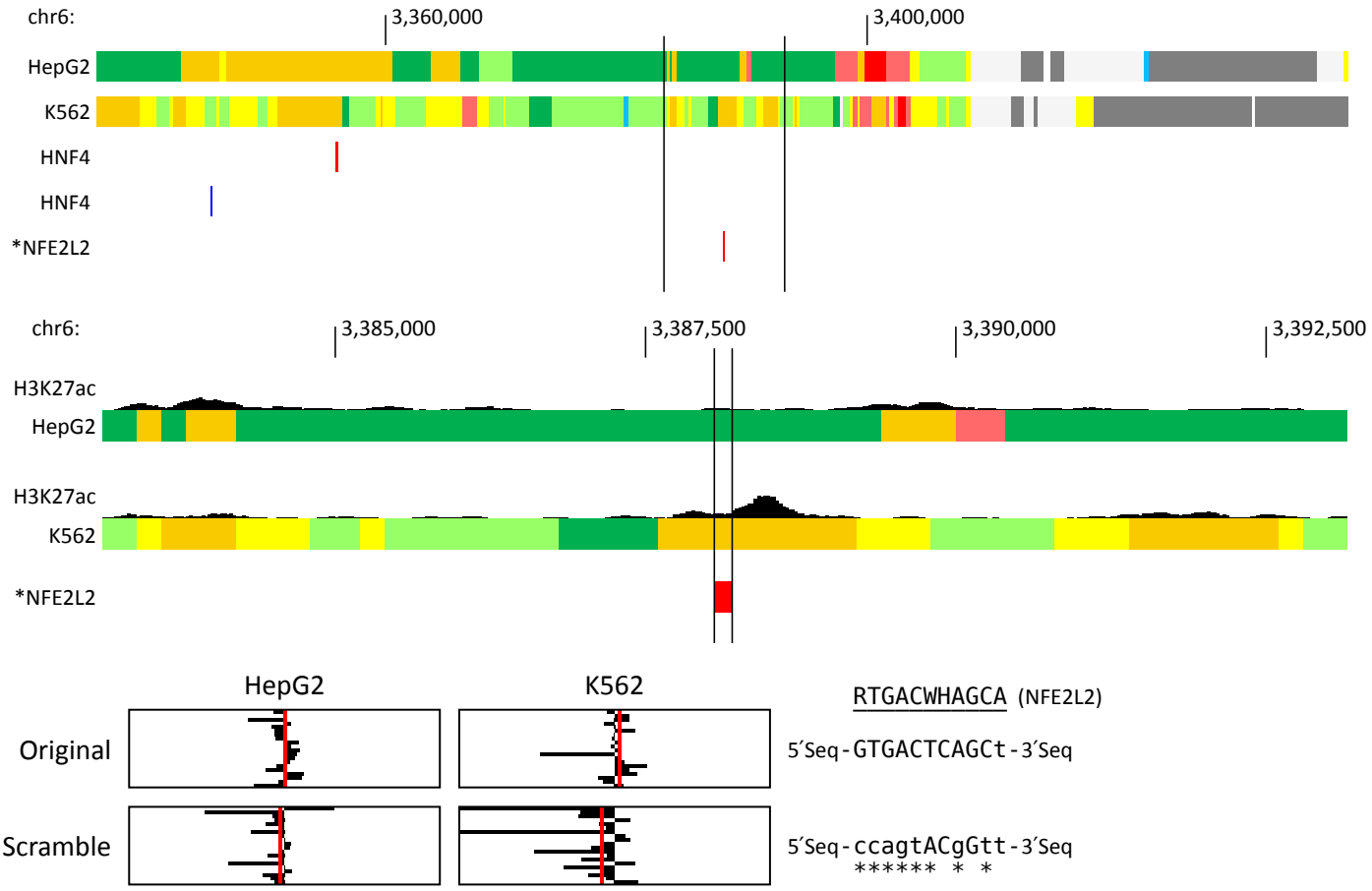
1279 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 3388121 3388131 + (hg18)



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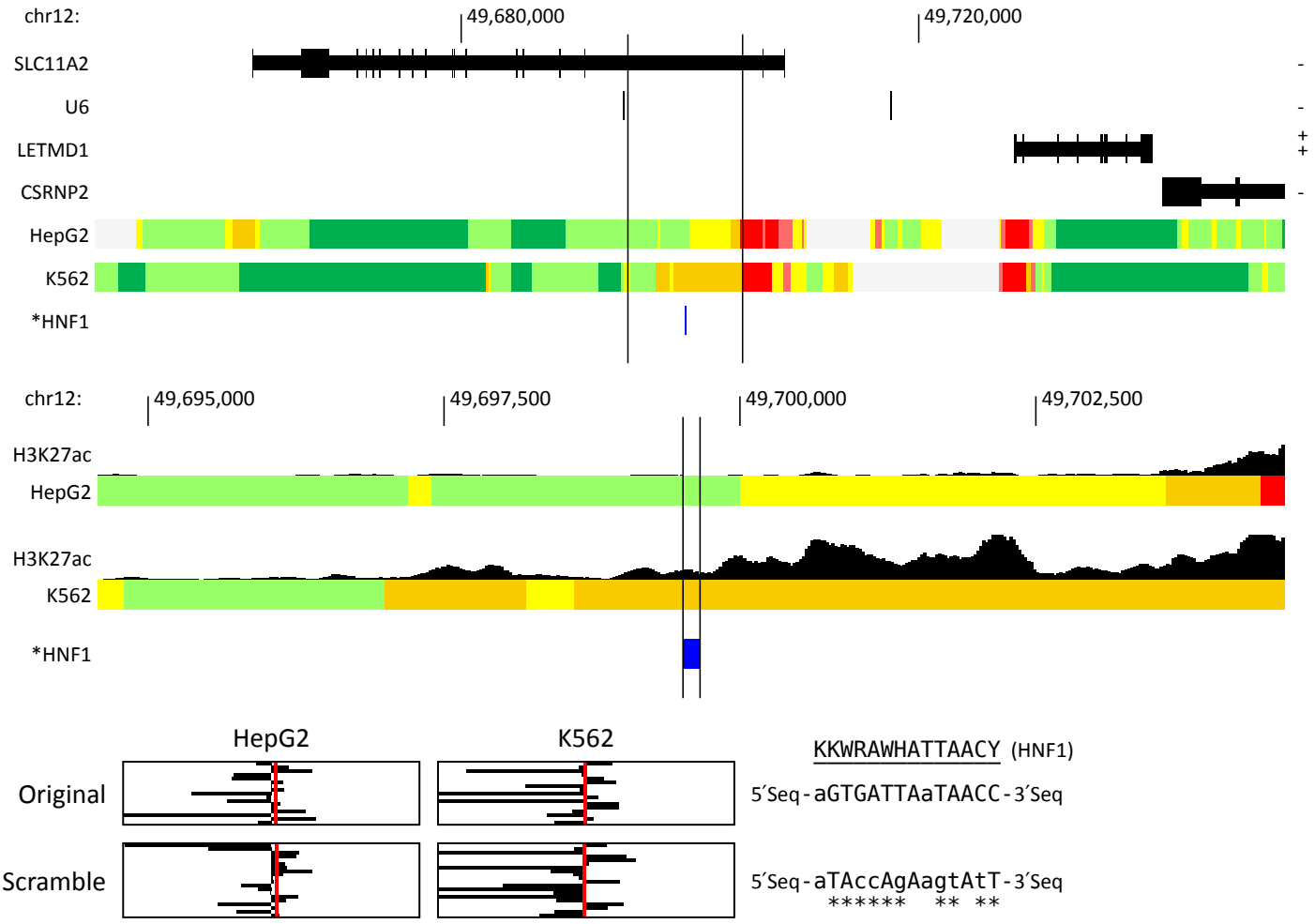
1280 HNF1 in K562 enhancer

chr12 49699585 49699598 - (hg18)



KKWRAWHATTAACY (HNF1)

5′Seq-aGTGATTAaTAACC-3′Seq

5′Seq-aTAccAgAagtAtT-3′Seq

****** ** **

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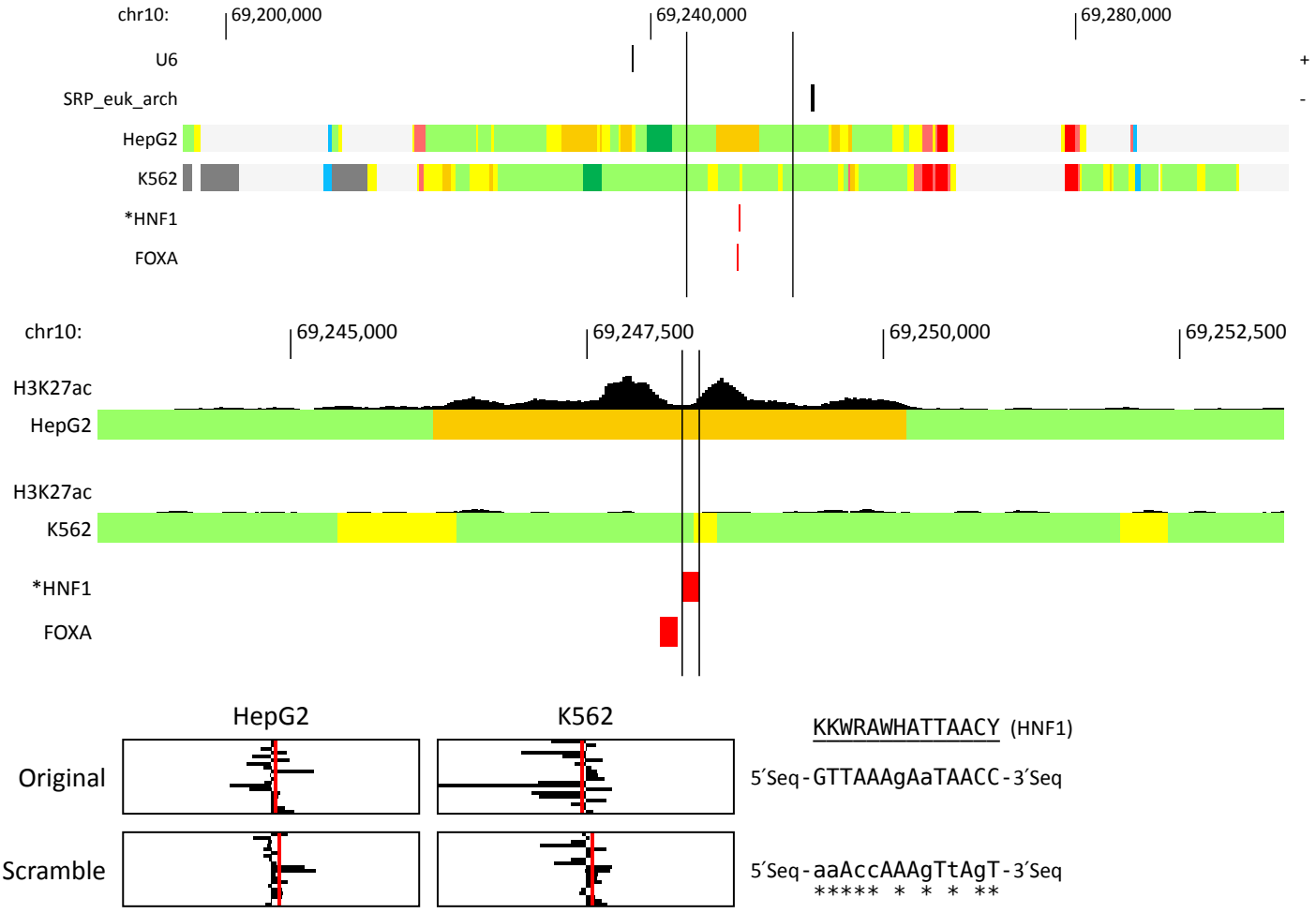
3′Seq = ttcctcattaaaatacatagggttcagaaaataattagctctgtttgagctgctagaatatttca

1281 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr10 69248369 69248382 + (hg18)



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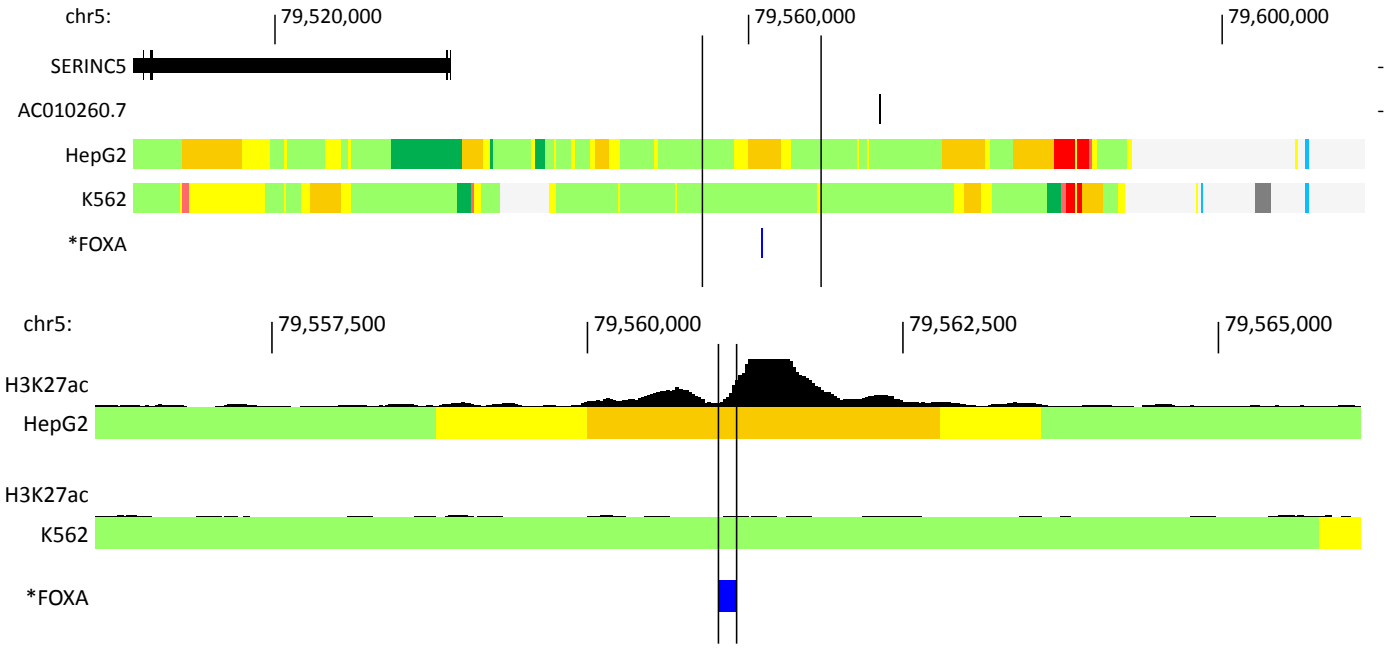
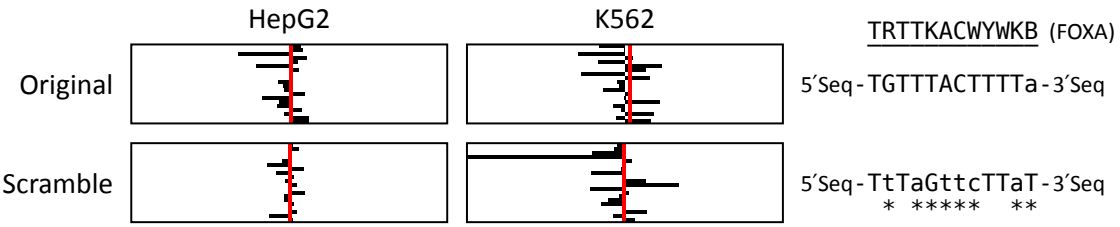
1282 FOXA in HepG2 enhancer

chr5 79561105 79561116 - (hg18)





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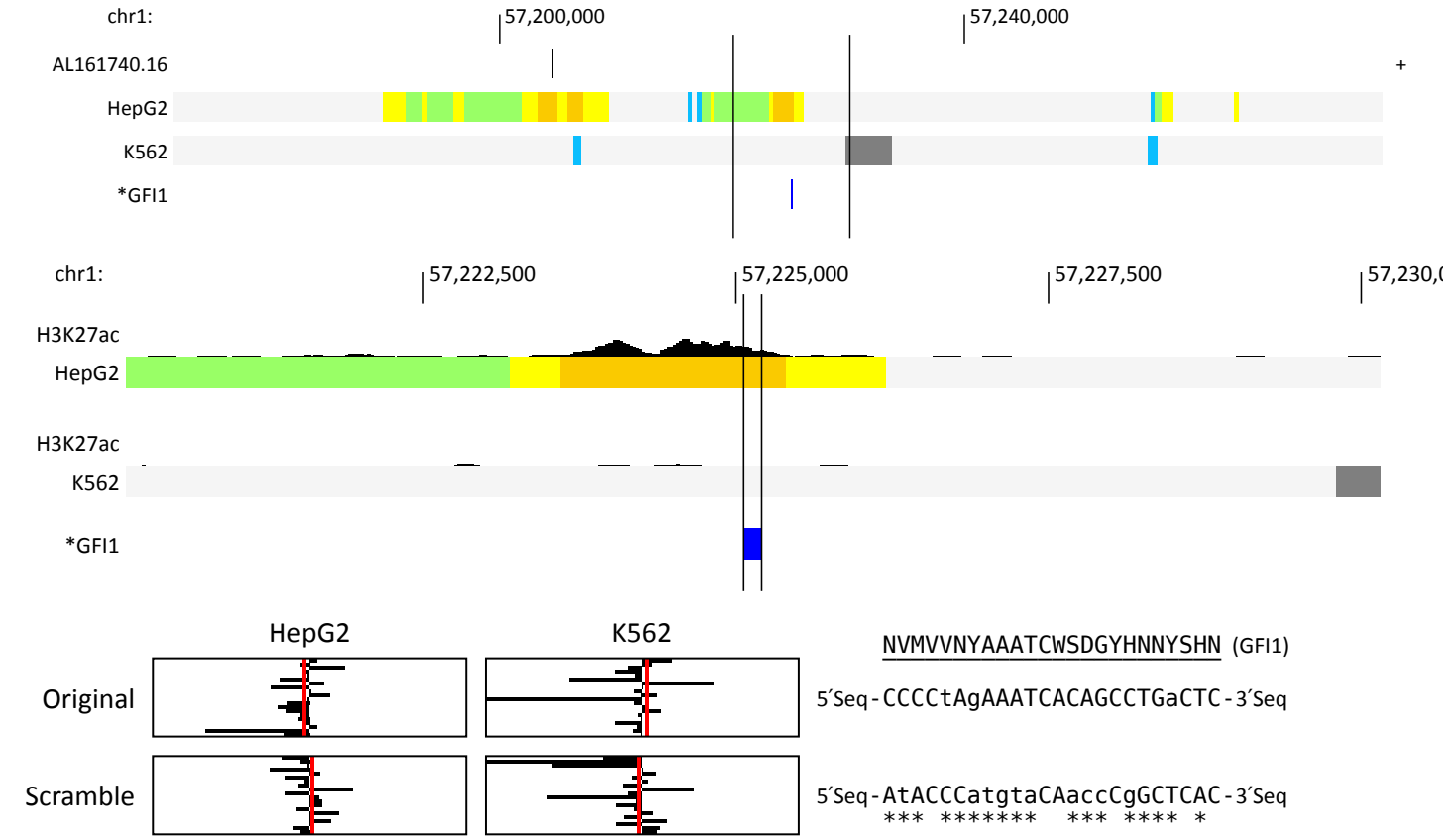
1283 GFI1 in HepG2 enhancer

chr1 57225123 57225146 + (hg18)



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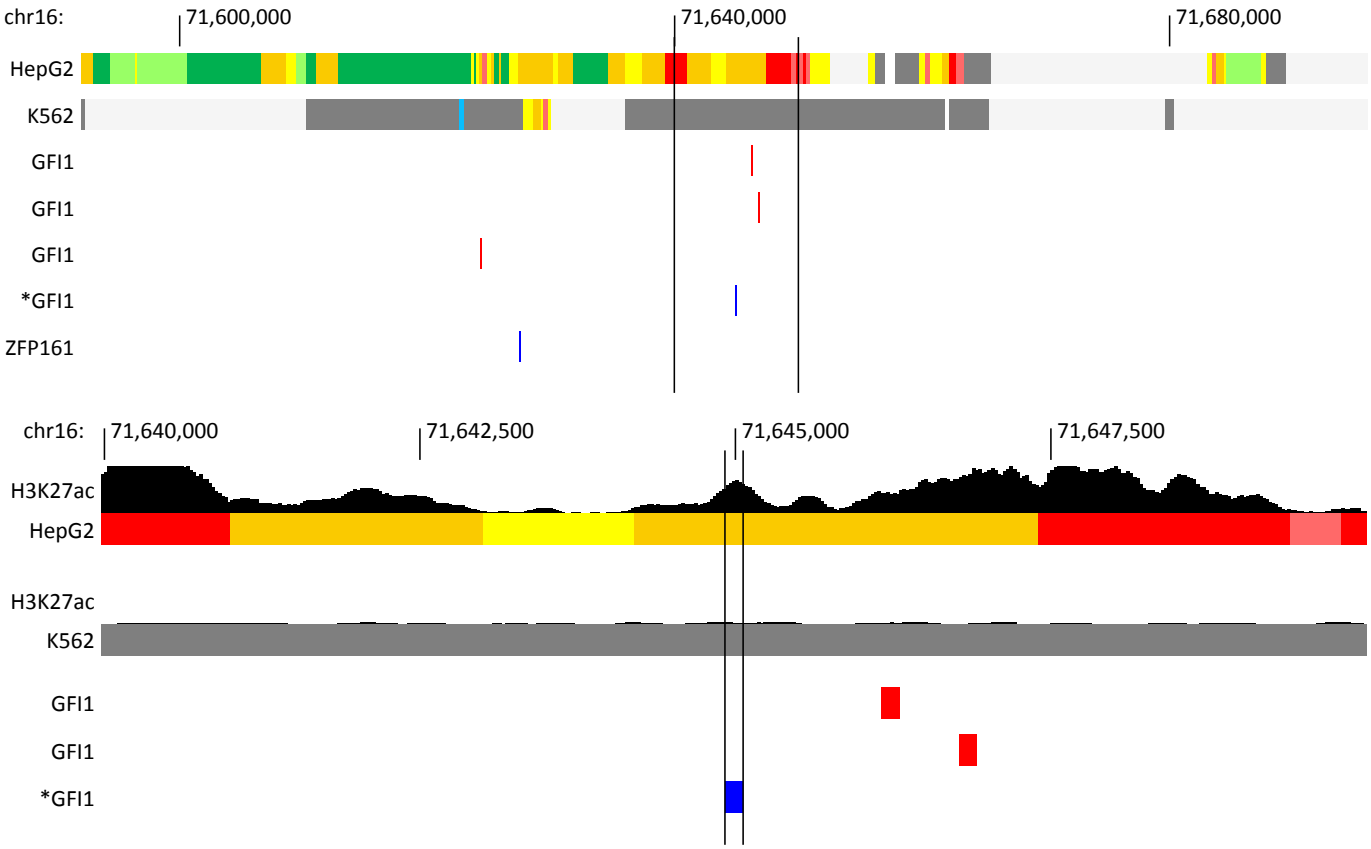
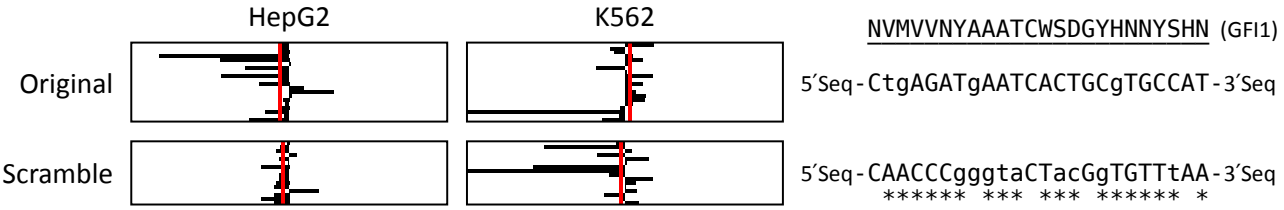
1284 GFI1 in HepG2 enhancer

chr16 71644978 71645001 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-CtgAGATgAATCACTGCgTGCCAT-3′Seq

5′Seq-CAACCCgggtaCTacGgTGTTtAA-3′Seq

****** *** *** ****** *

5′Seq = taaagacacagacaaggtgtggcaggggcaaagtgggggaggtgttacaaagaaaggaag

3′Seq = gaaaataccagggcgagtggatgtcggagtgtttaaccagatttgaagctggaagcatct

1285 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr18 53831883 53831894 - (hg18)

TRTTKACWYWKB (FOXA)

5′Seq-TGTTGACTTTGC-3′Seq

5′Seq-TtTcGgtcgTaT-3′Seq

* * **** **

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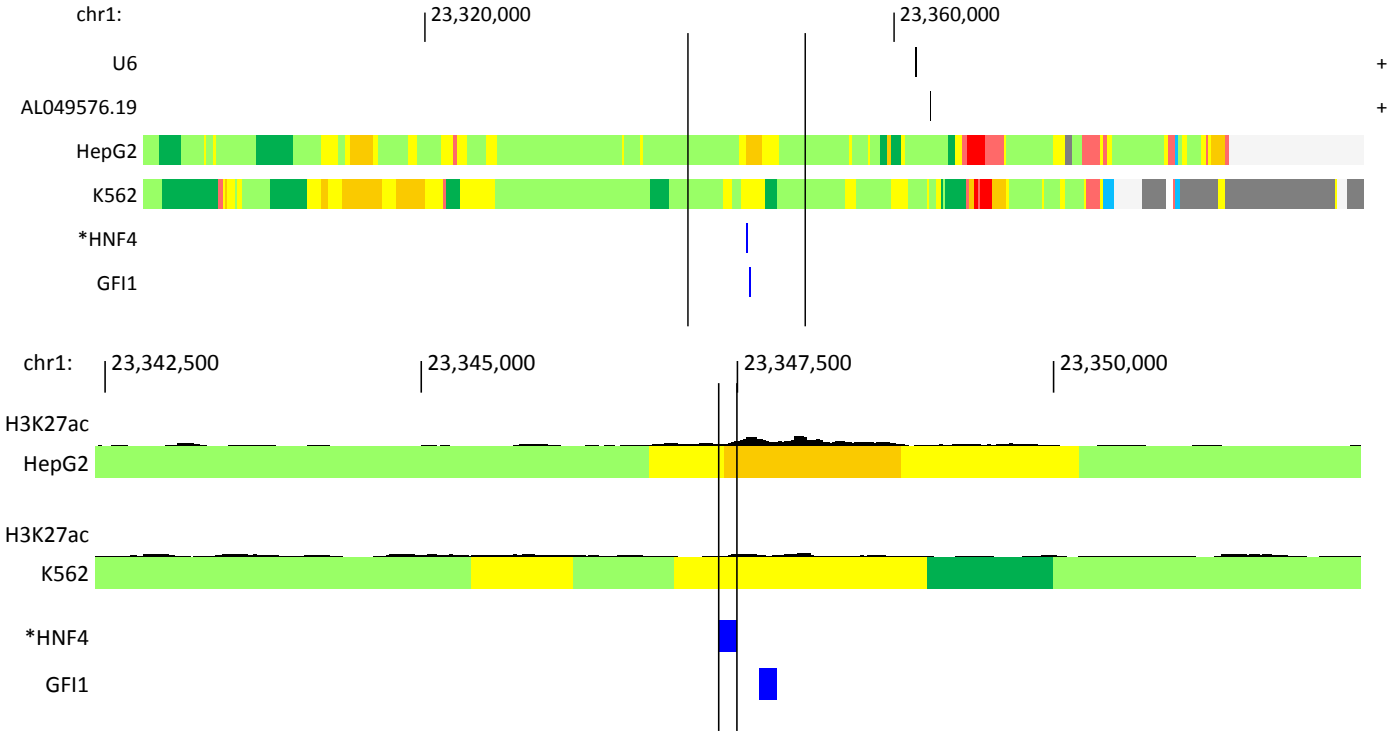
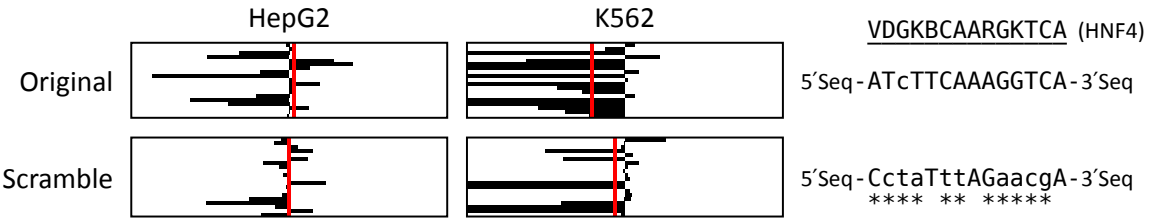
3′Seq = caccactttagtcattatttactttgggatagataatgtgagtcaaaactttaaaggtggtgccca

1286 HNF4 in HepG2 enhancer

chr1 23347418 23347431 + (hg18)





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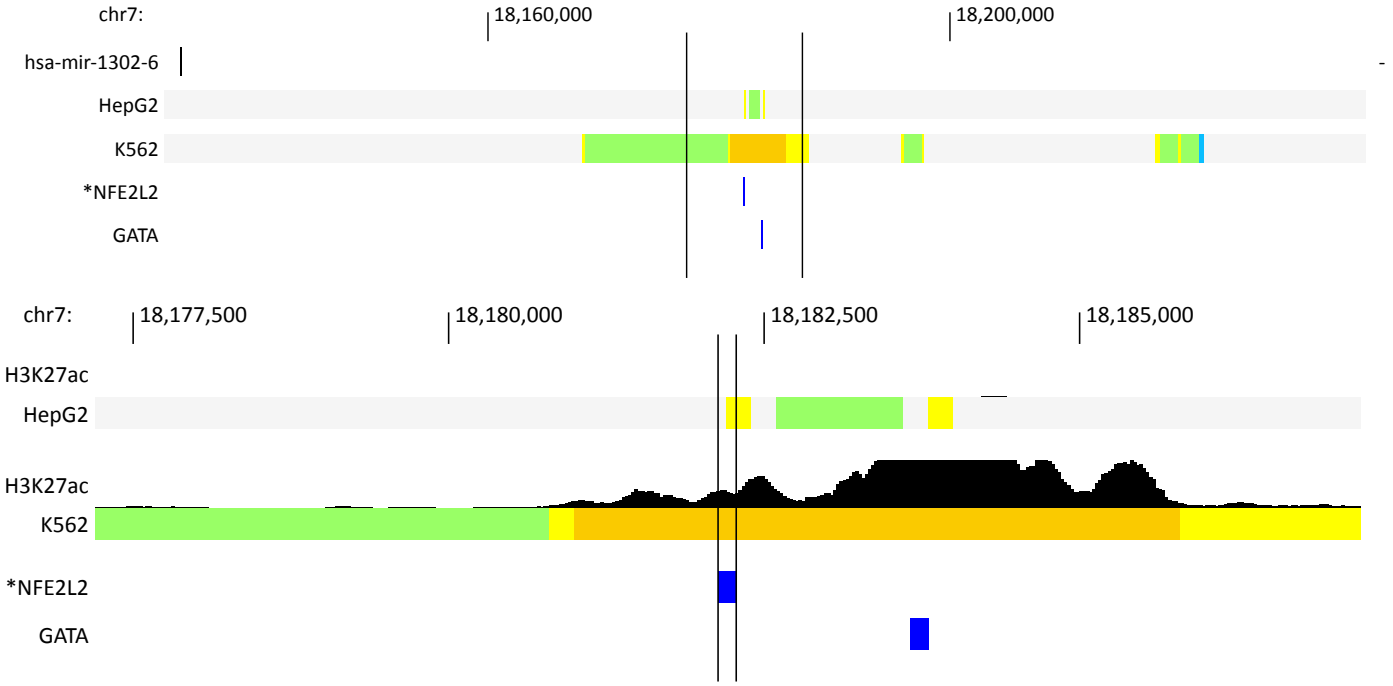
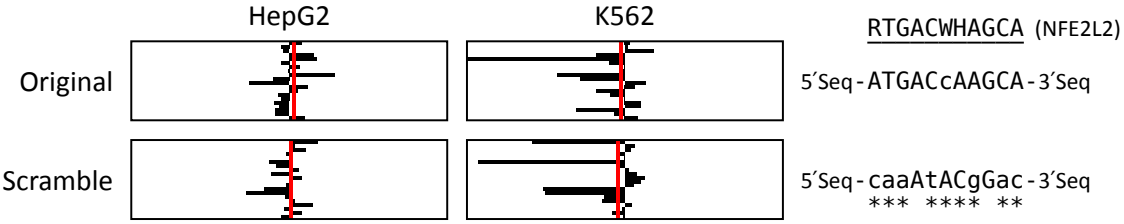
1287 NFE2L2 in K562 enhancer

chr7 18182202 18182212 + (hg18)





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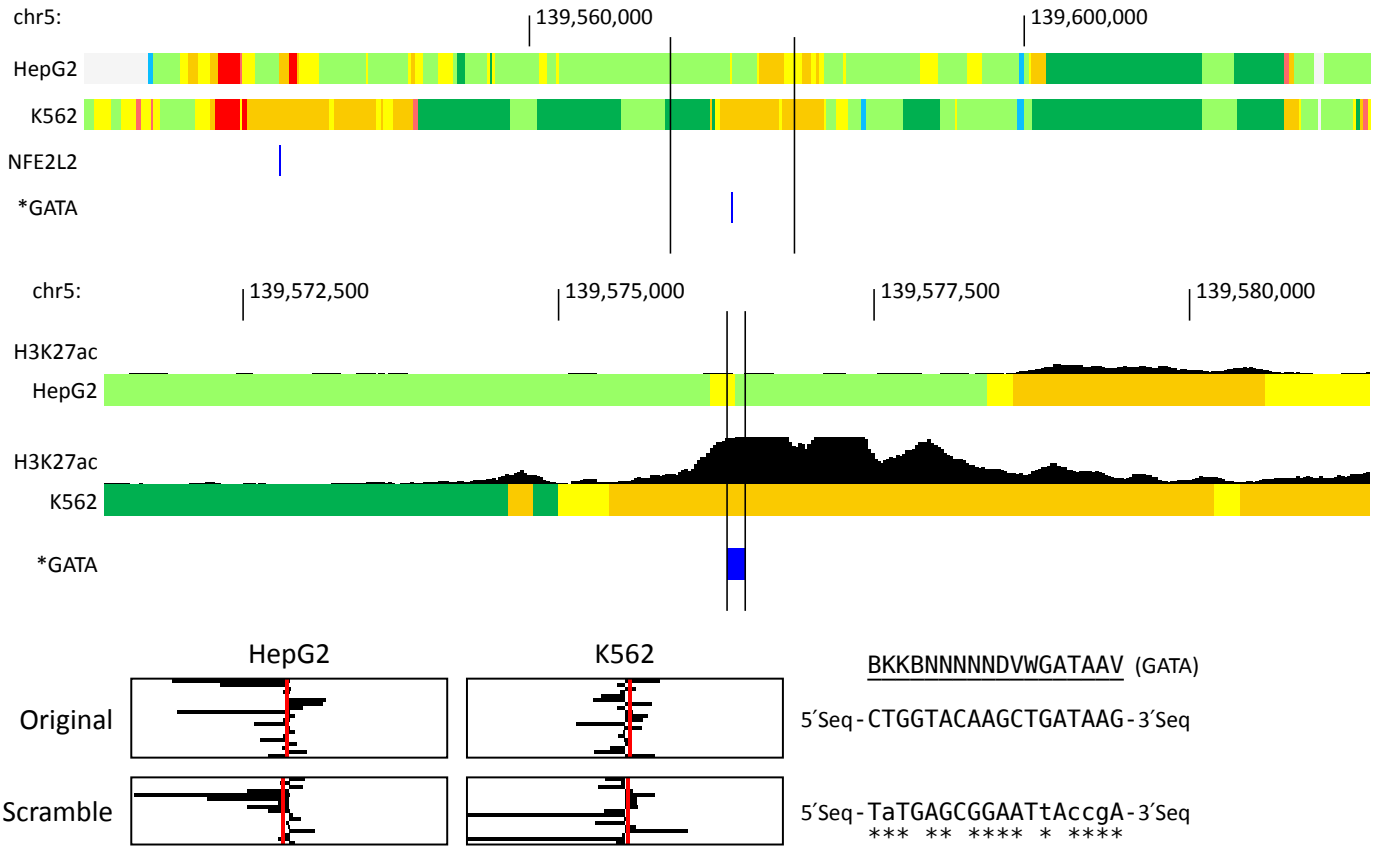
1288 GATA in K562 enhancer

chr5 139576399 139576416 - (hg18)



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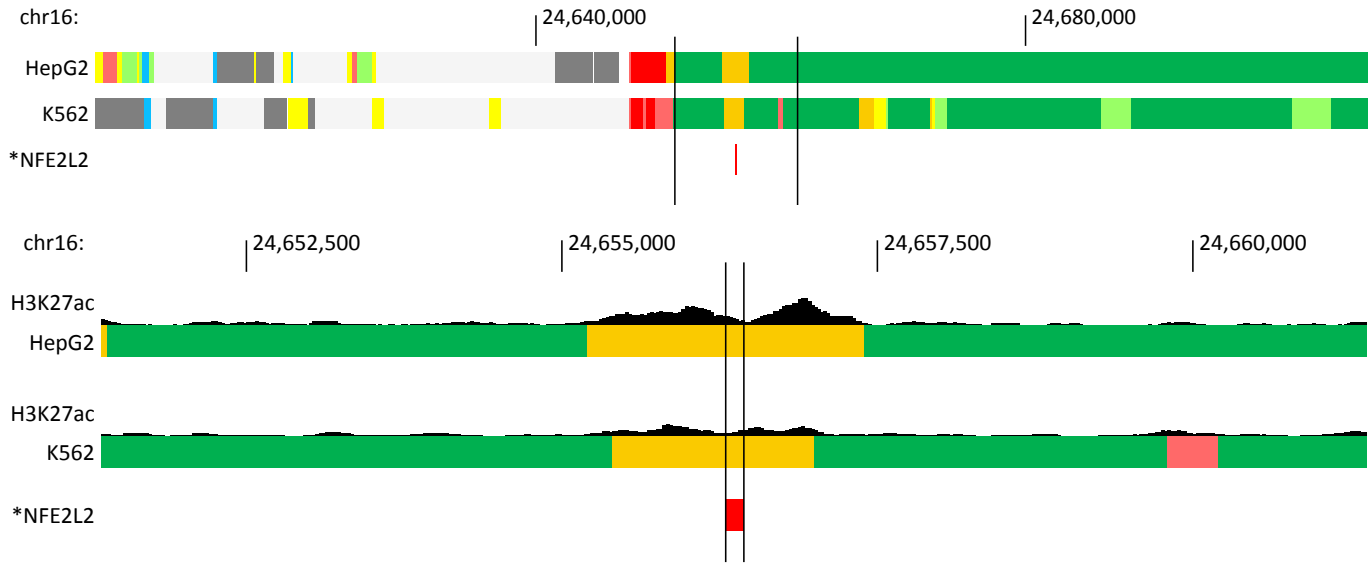
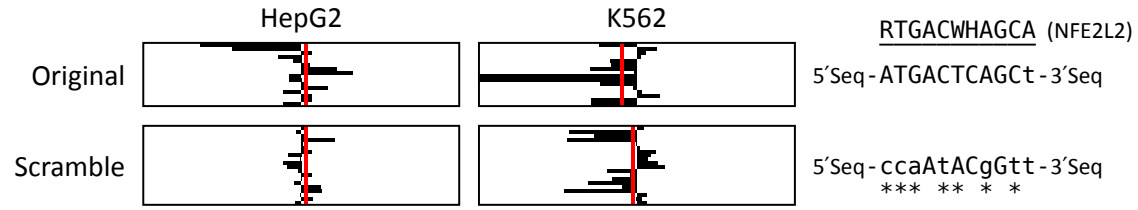
1289 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr16 24656365 24656375 + (hg18)





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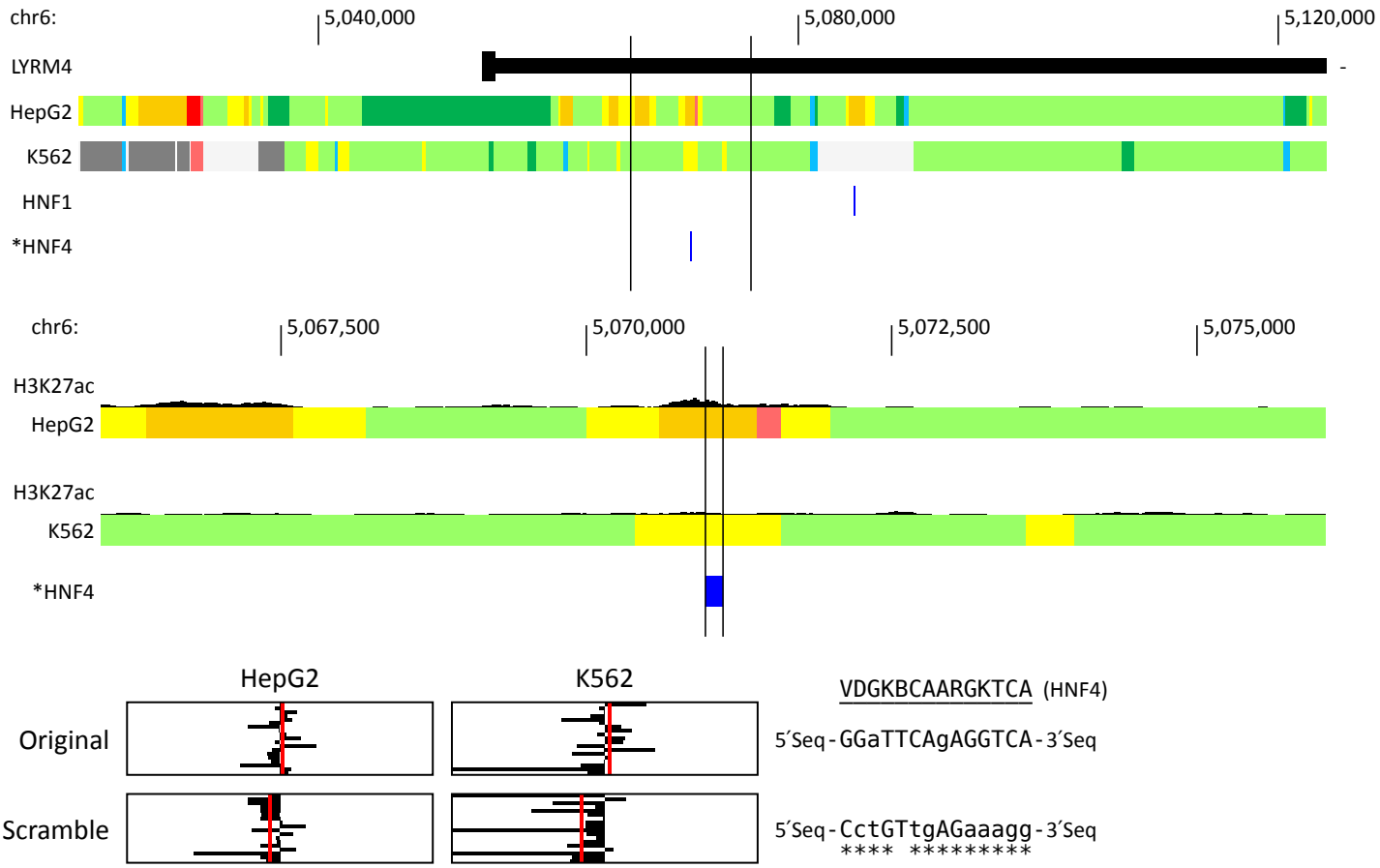
3′Seq = gacttcccgtttcaaatggaatgttcaaaacagattgaaacctggttgaagaattttatactttgaa

1290 HNF4 in HepG2 enhancer

chr6 5071041 5071054 - (hg18)



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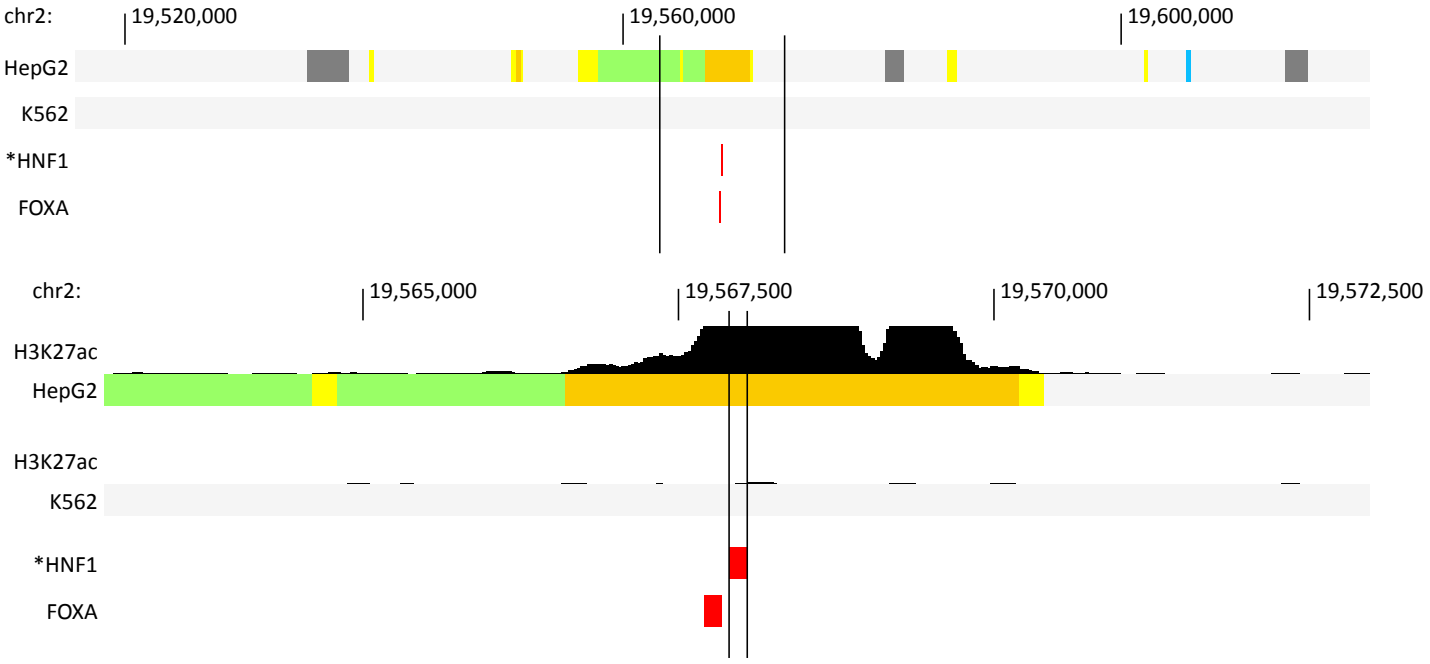
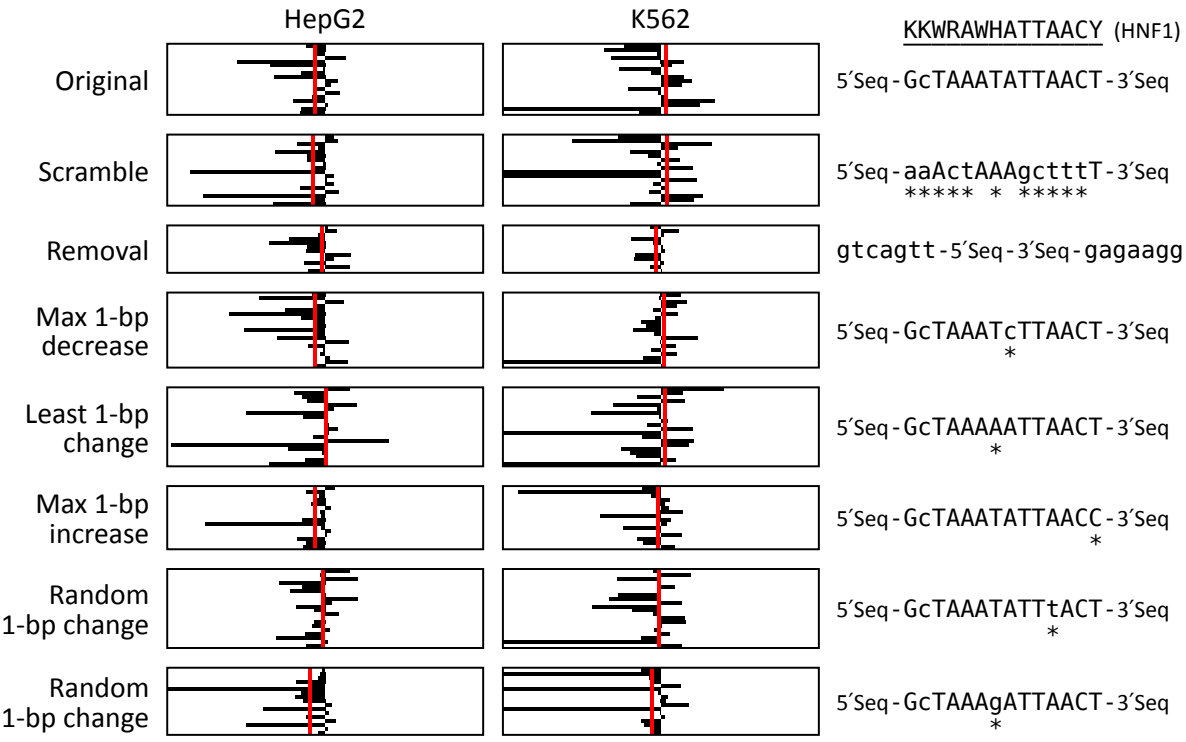
1291 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr2 19567967 19567980 - (hg18)





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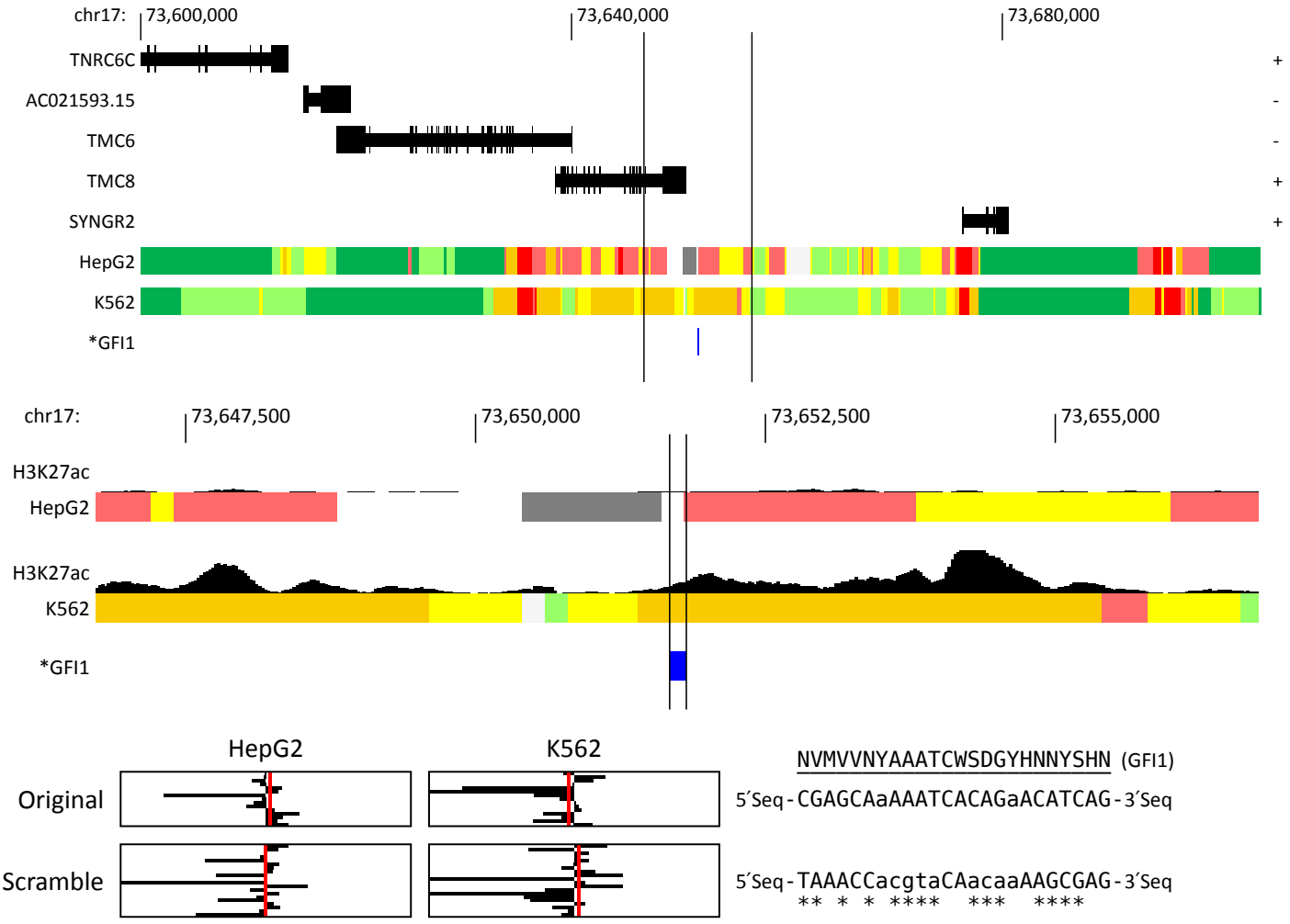
1292 GFI1 in K562 enhancer

chr17 73651735 73651758 + (hg18)



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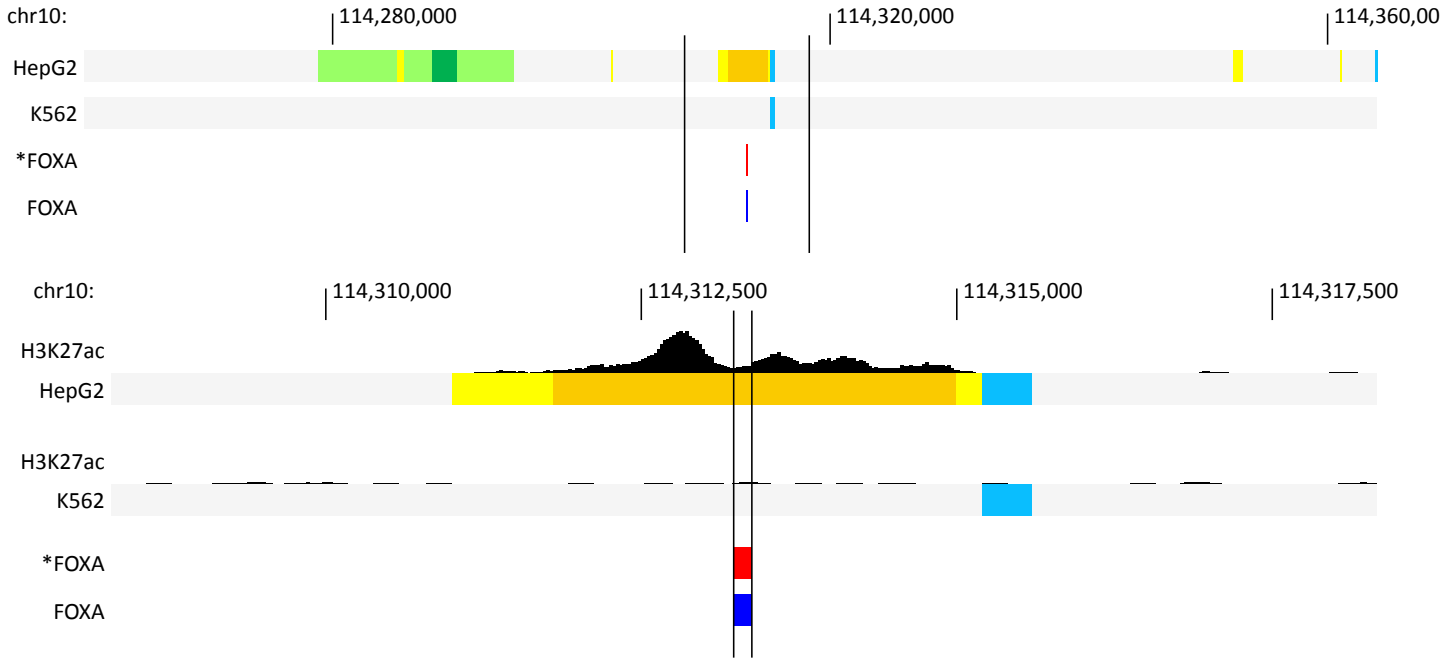
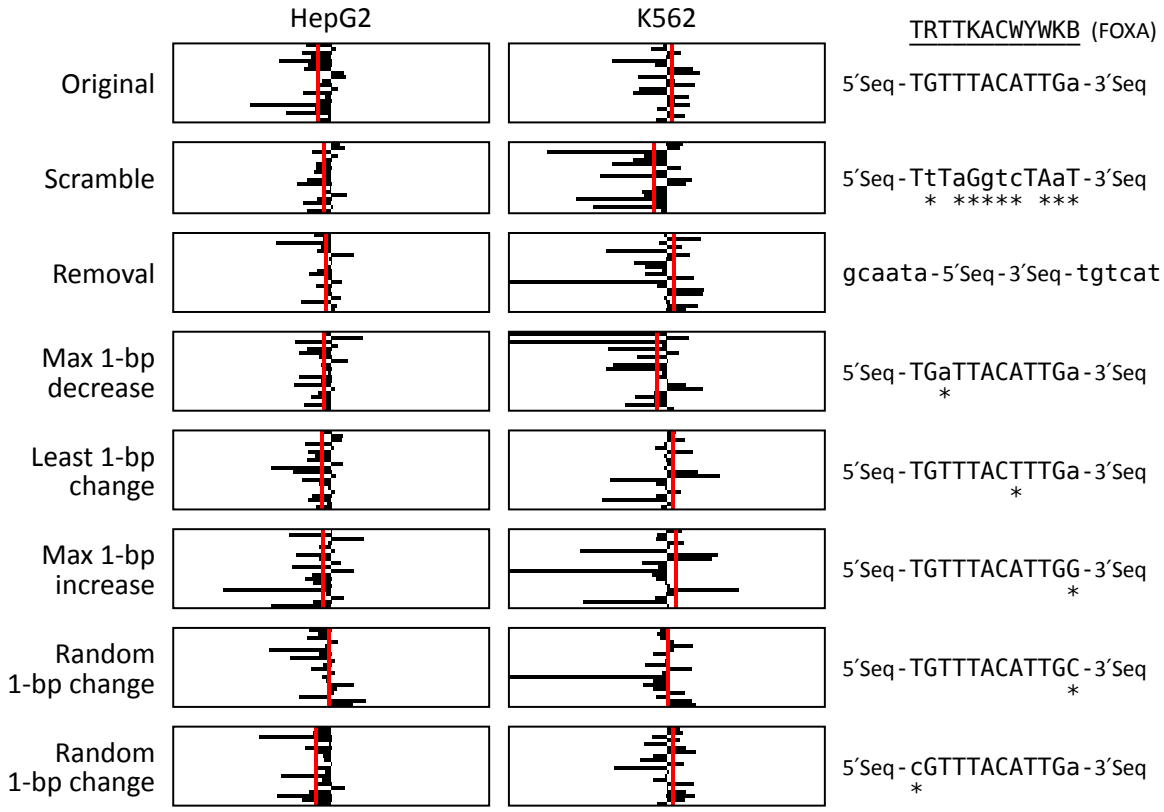
1293 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr10 114313299 114313310 + (hg18)





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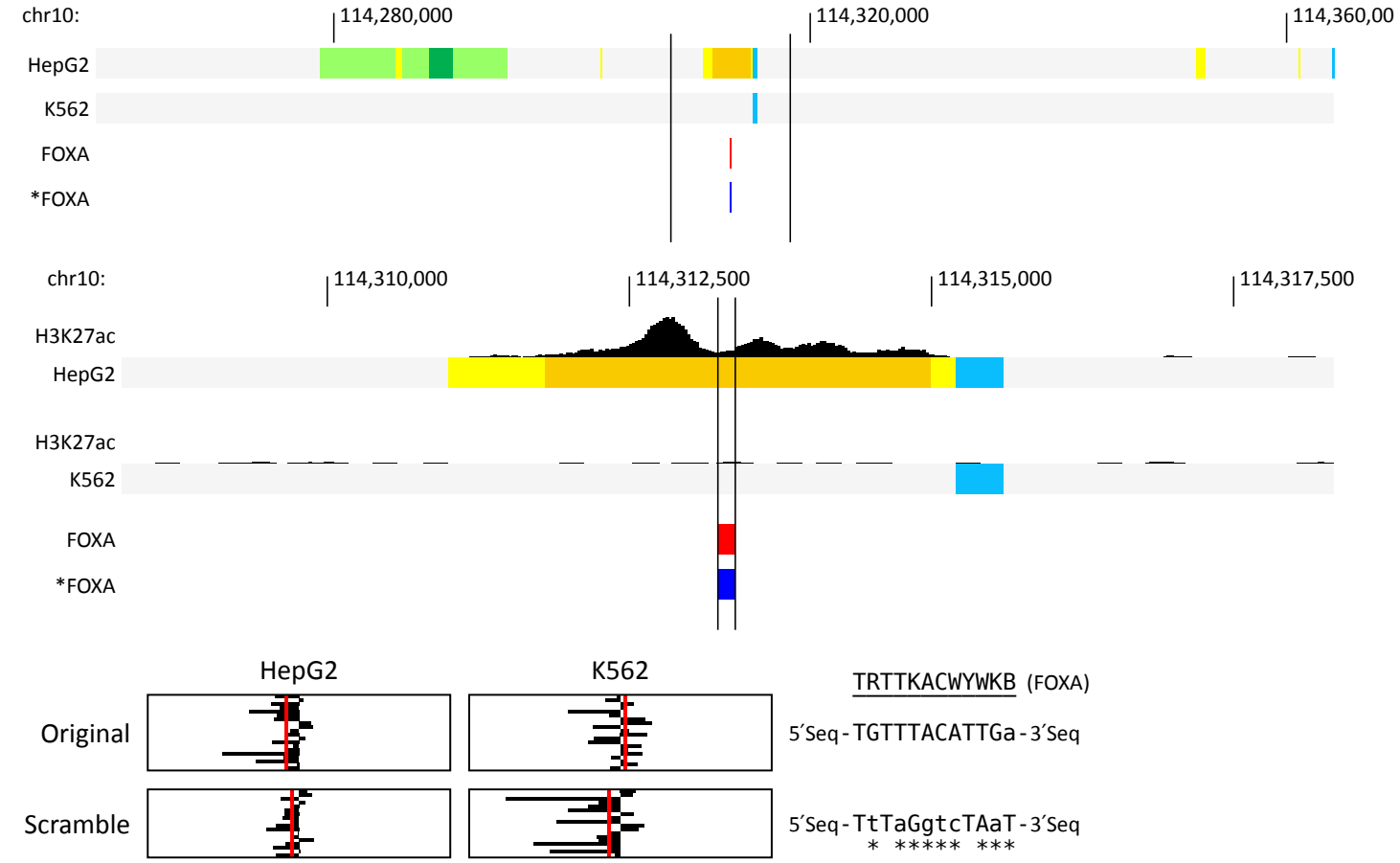
1294 FOXA in HepG2 enhancer

chr10 114313299 114313310 + (hg18)



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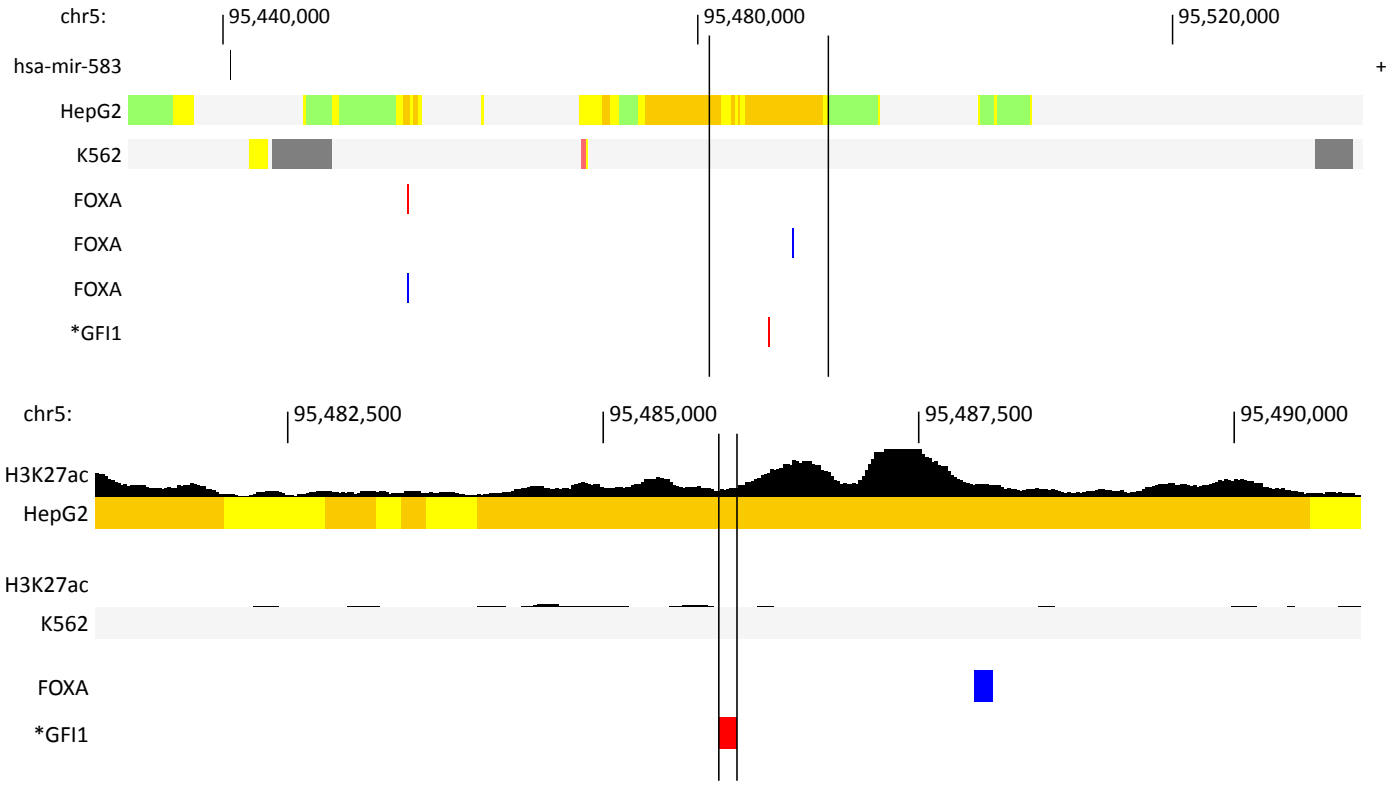
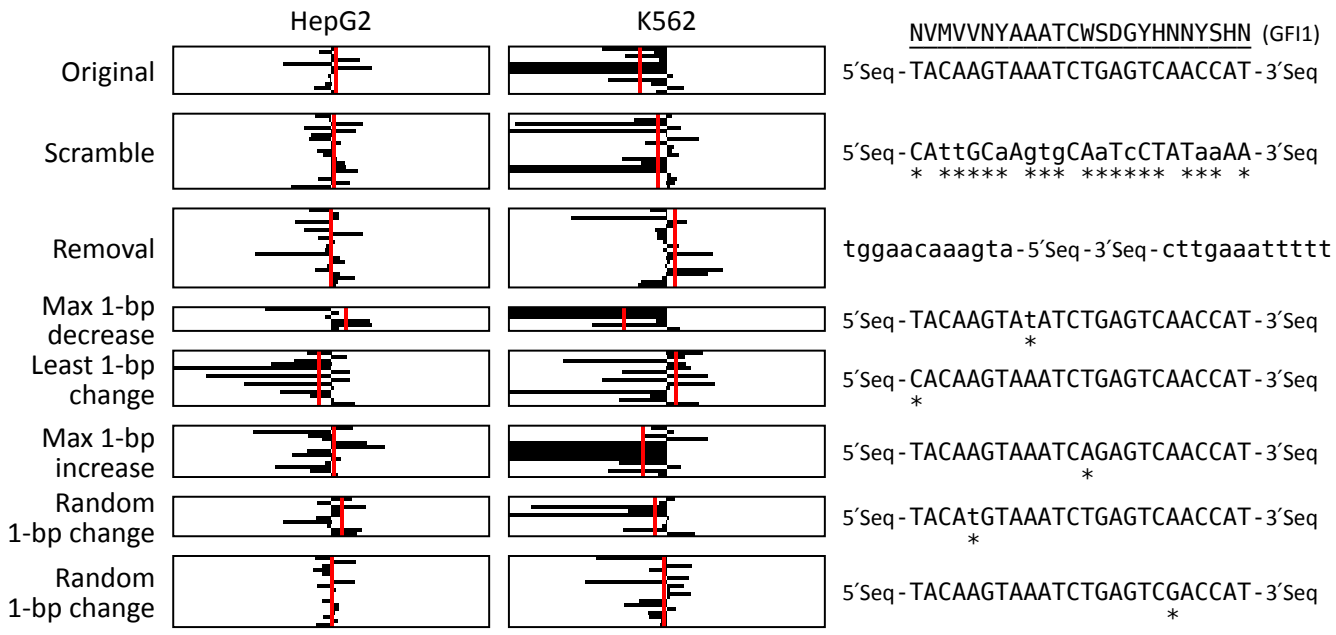
1295 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr5 95485977 95486000 - (hg18)





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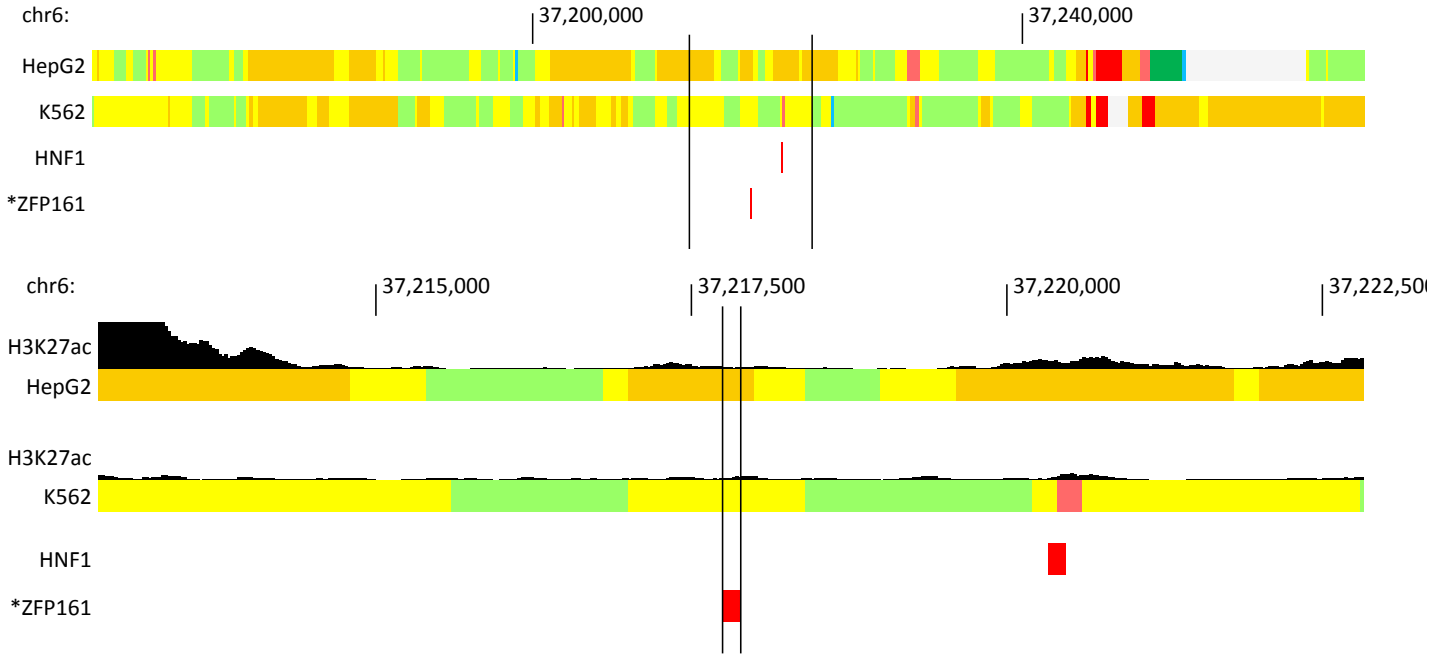
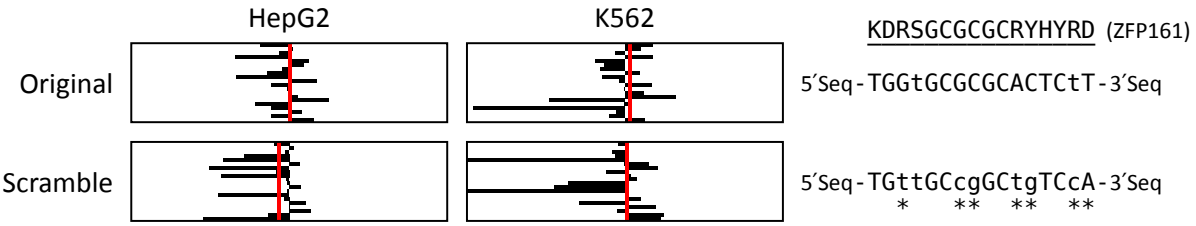
1296 ZFP161 in HepG2 enhancer (conserved at 10% confidence)

chr6 37217812 37217827 - (hg18)





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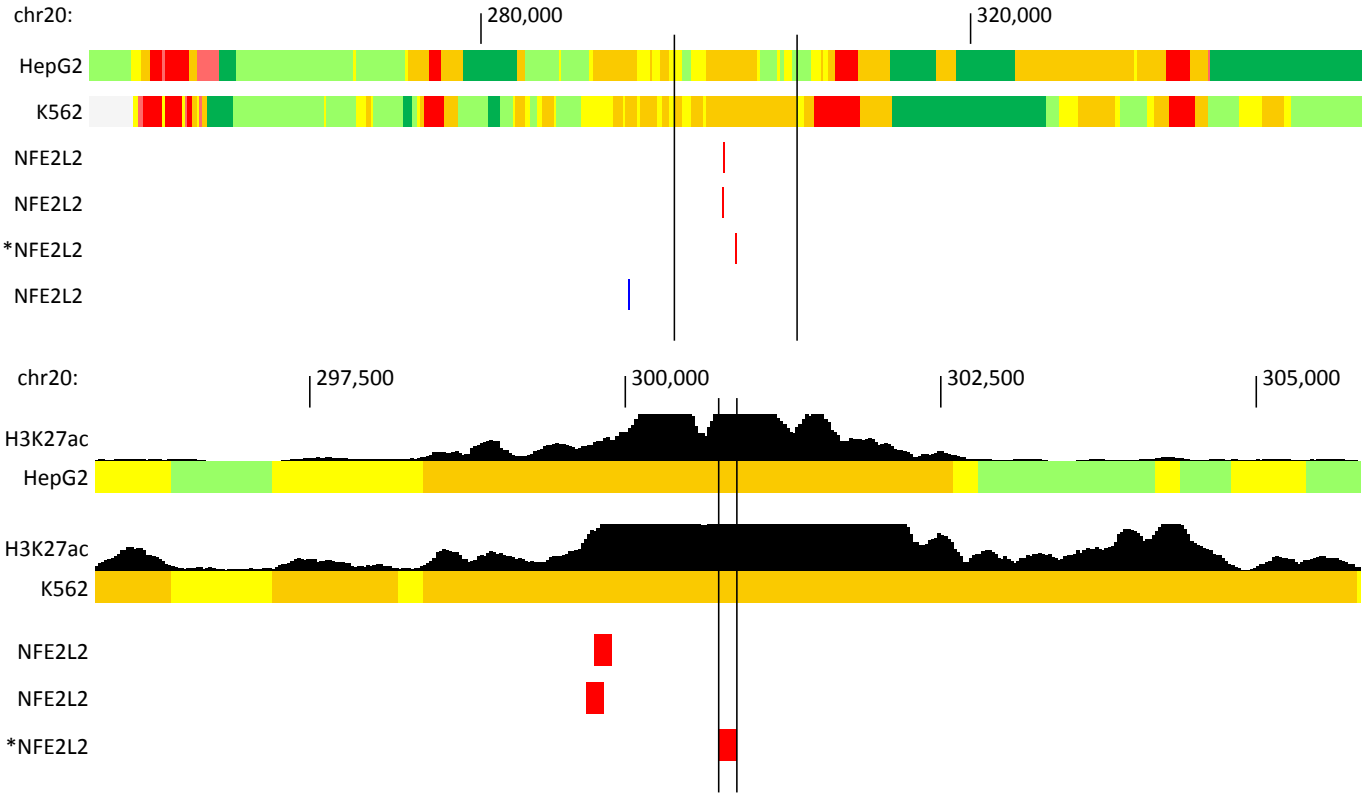
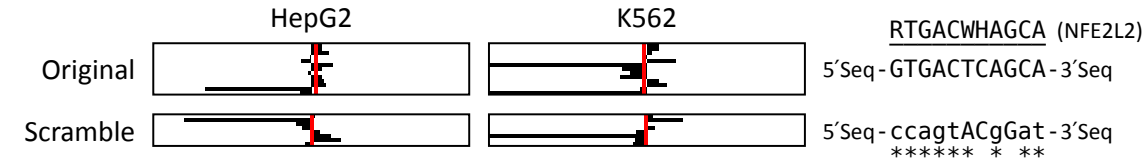
1297 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 300807 300817 + (hg18)





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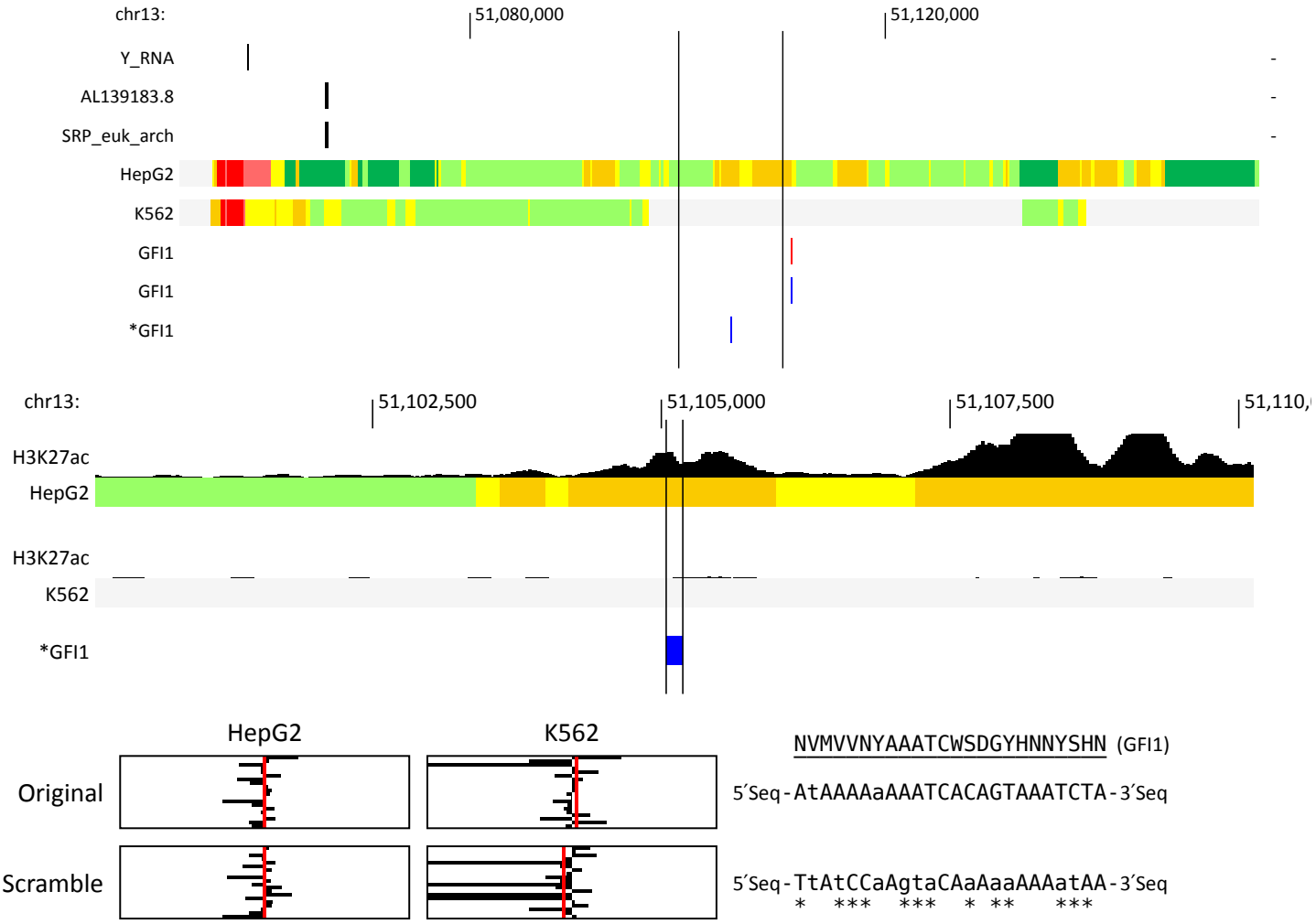
1298 GFI1 in HepG2 enhancer

chr13 51105103 51105126 - (hg18)



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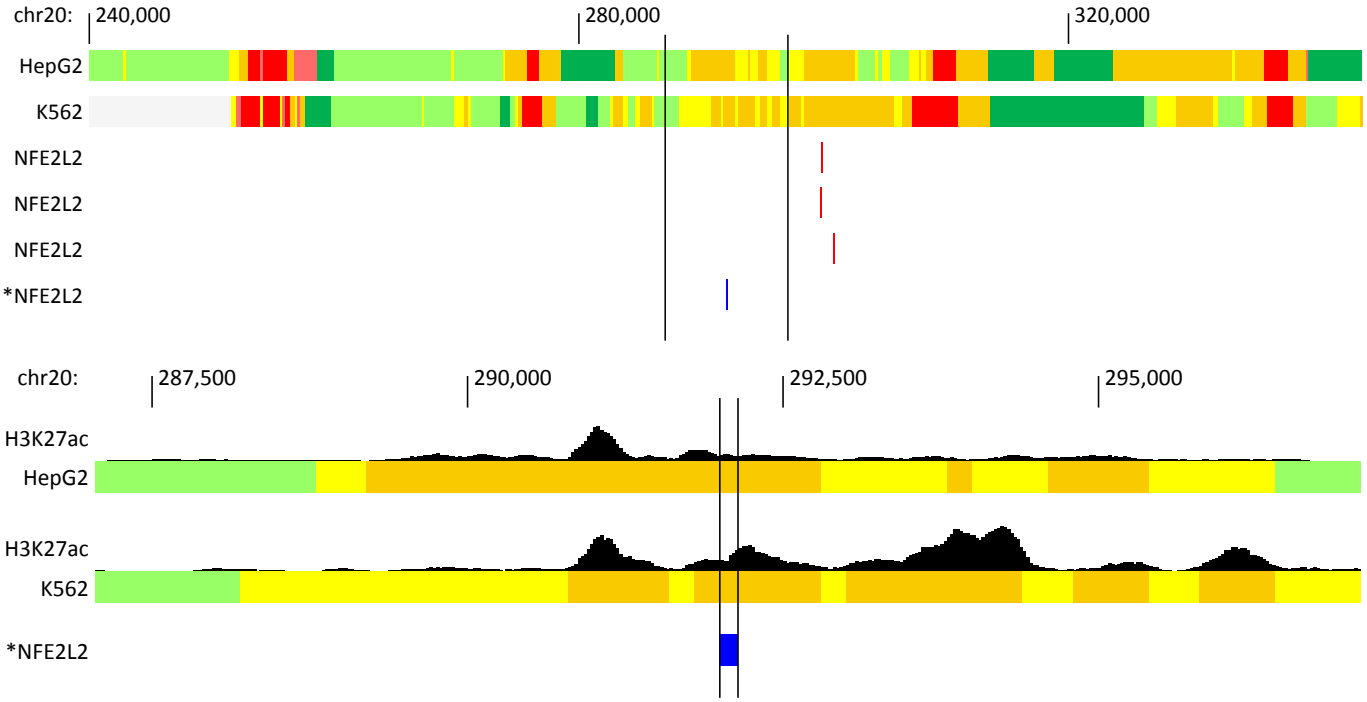
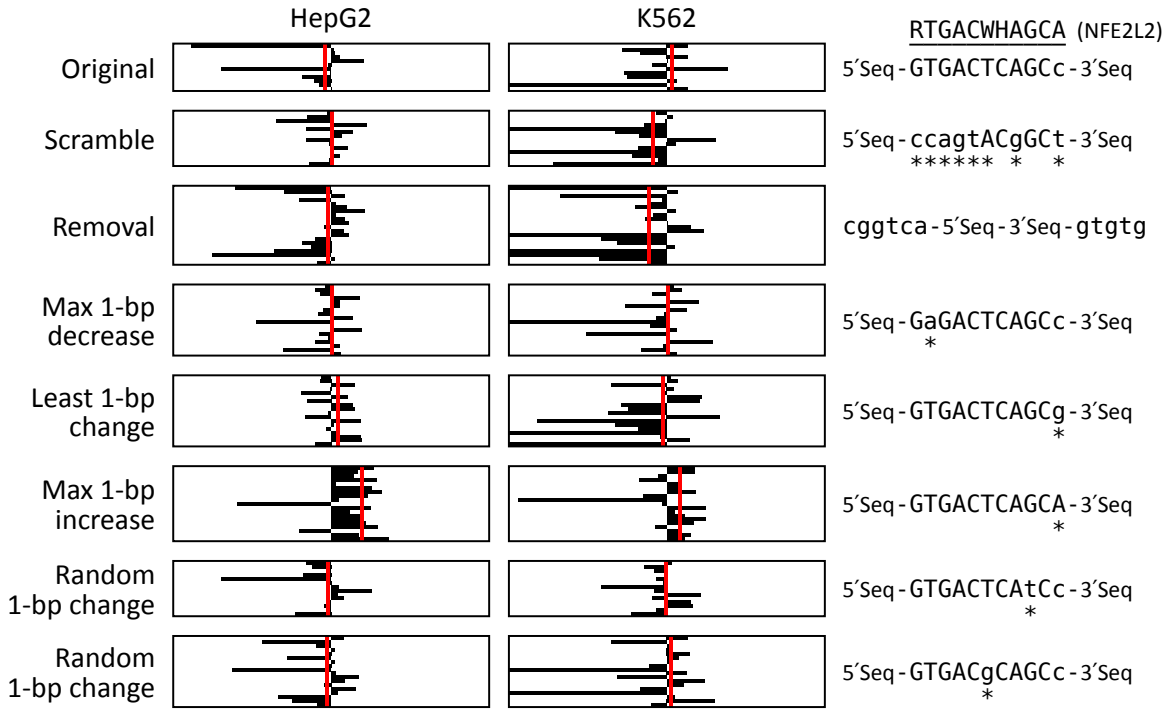
1299 NFE2L2 in K562 enhancer

chr20 292066 292076 + (hg18)





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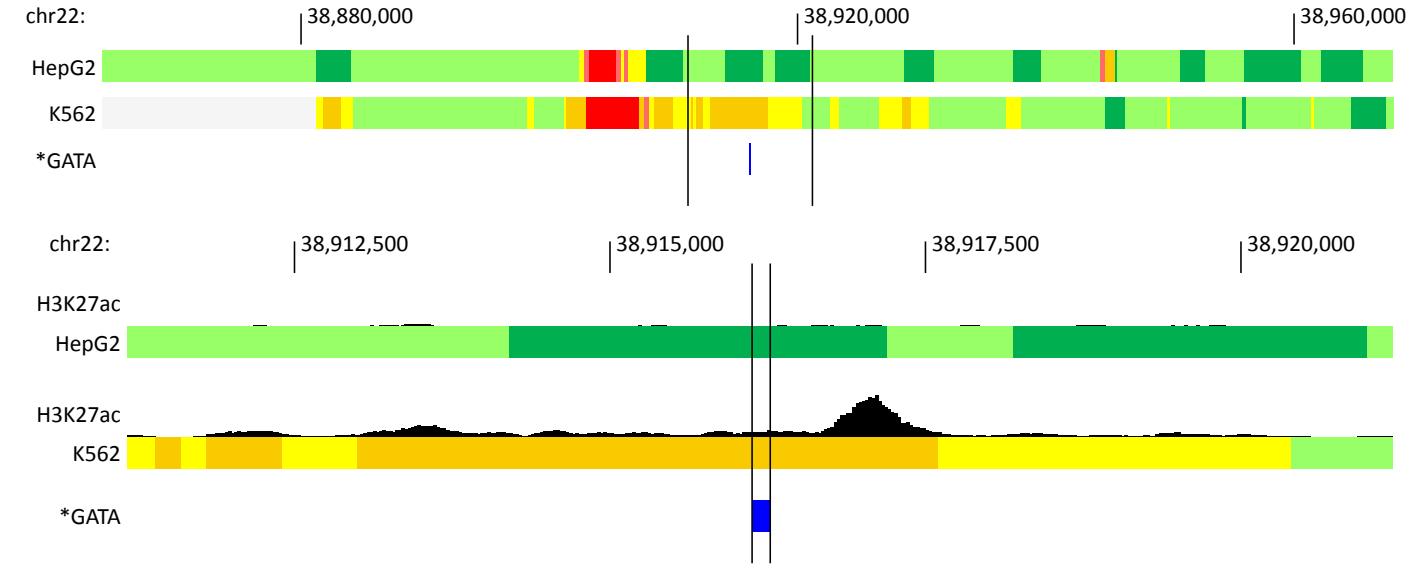
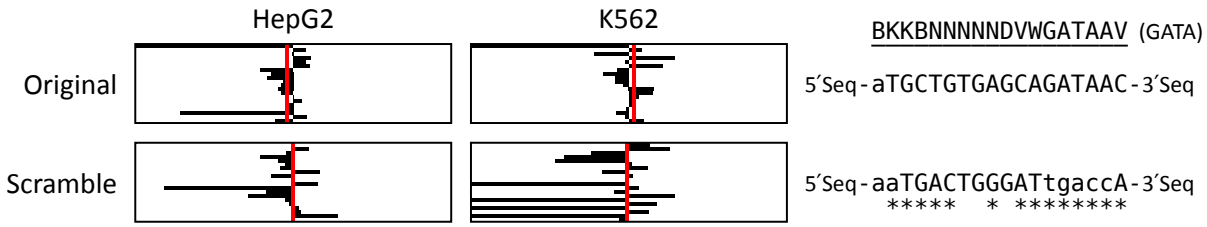
1300 GATA in K562 enhancer

chr22 38916190 38916207 + (hg18)





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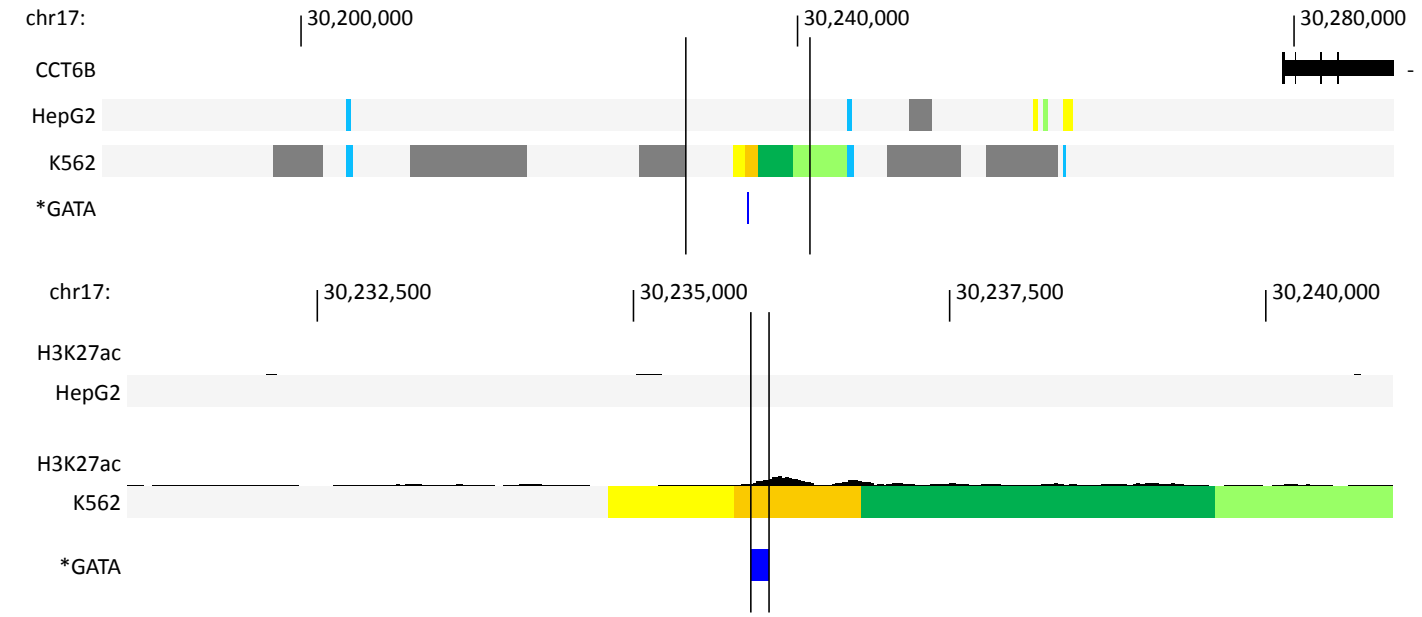
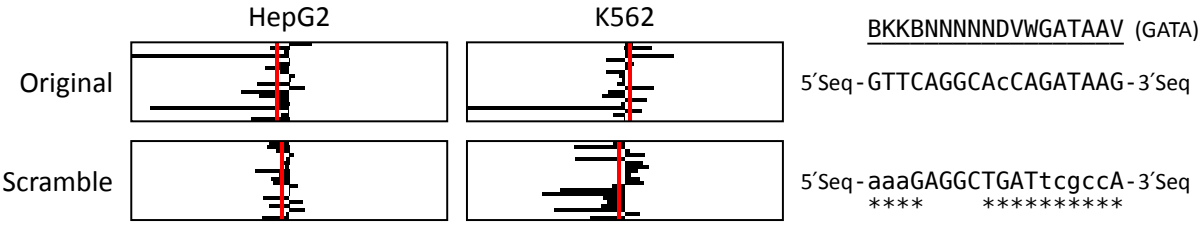
1301 GATA in K562 enhancer

chr17 30235992 30236009 + (hg18)





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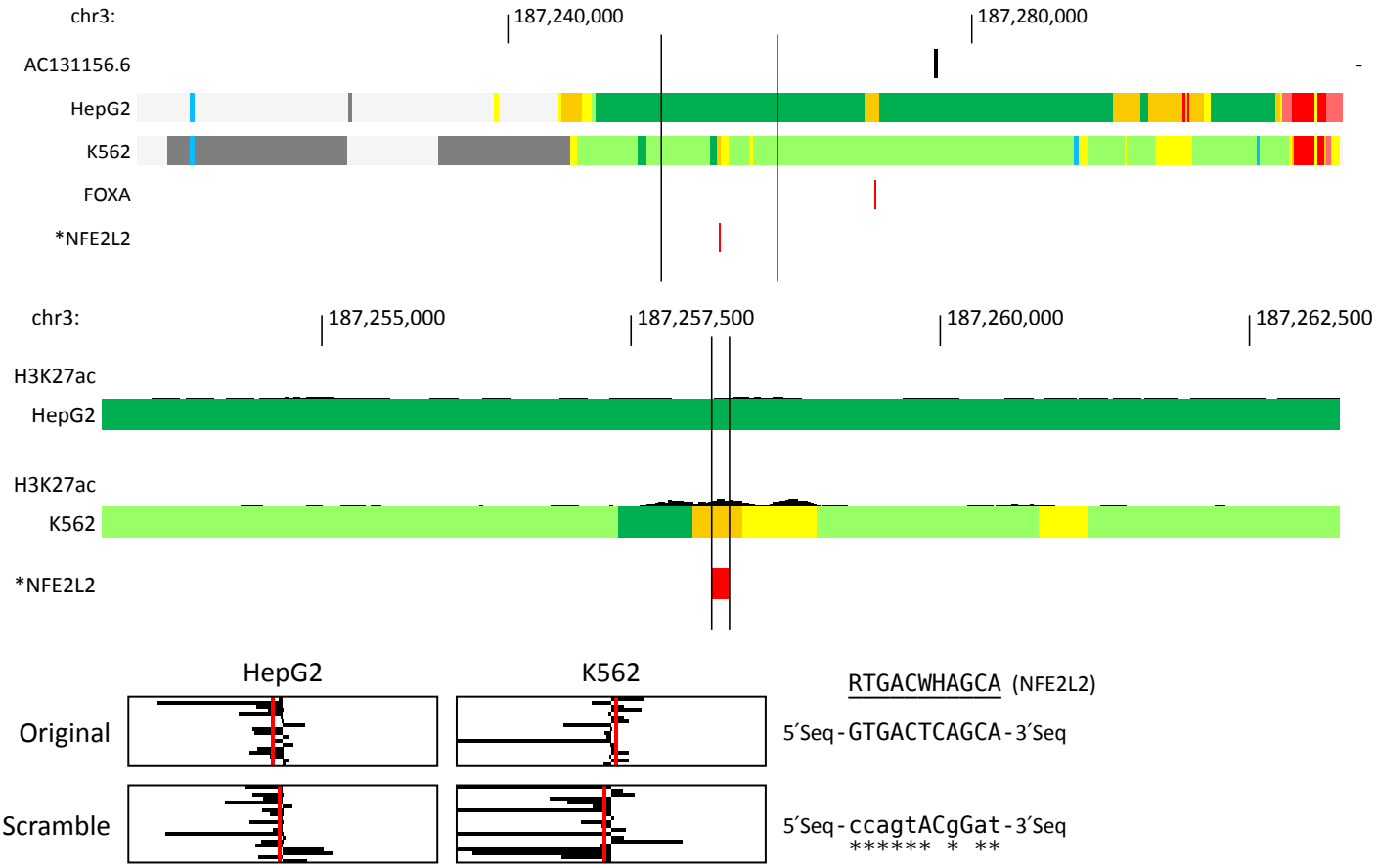
1302 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr3 187258219 187258229 - (hg18)



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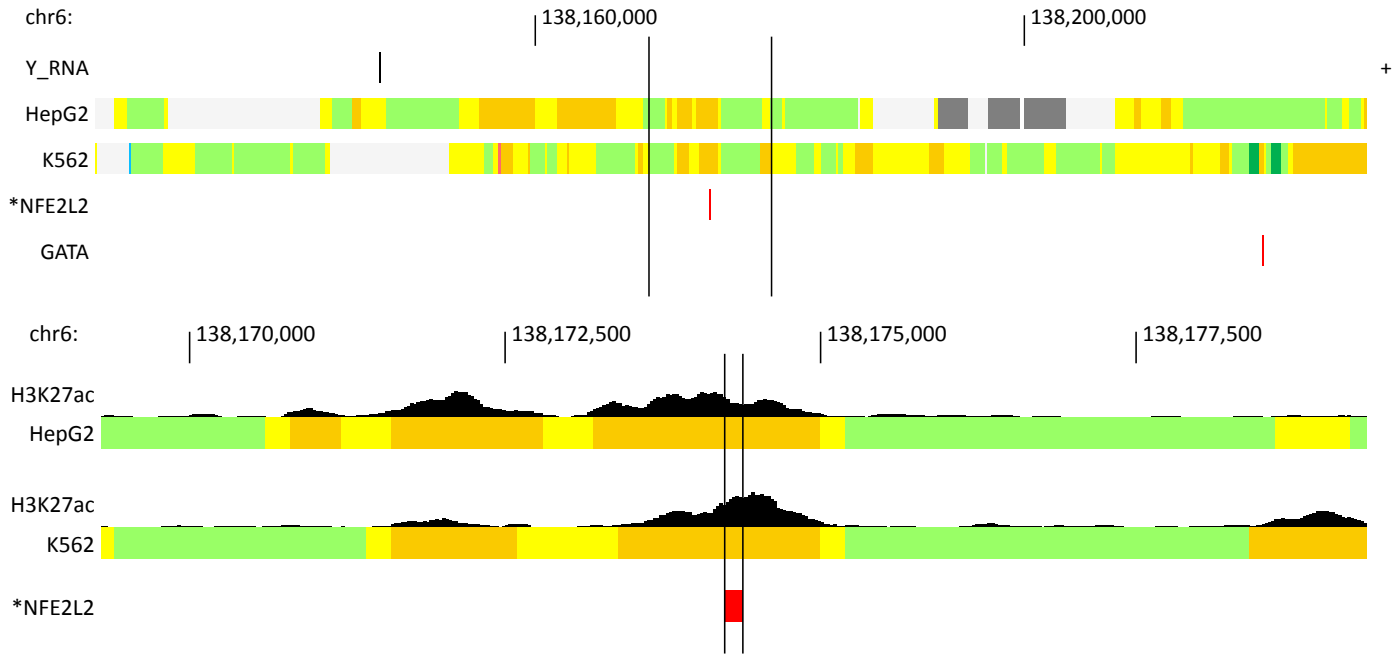
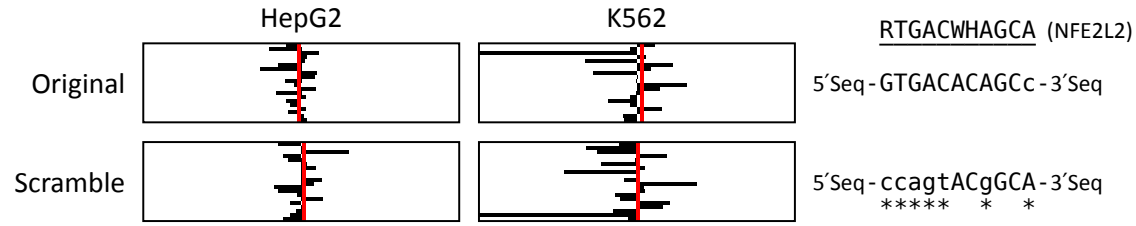
3′Seq = cttccctgcagtcttagctgtaaaagcaggaattgatgctgctctgactgaggcgcaggtgattaca

1303 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 138174307 138174317 + (hg18)





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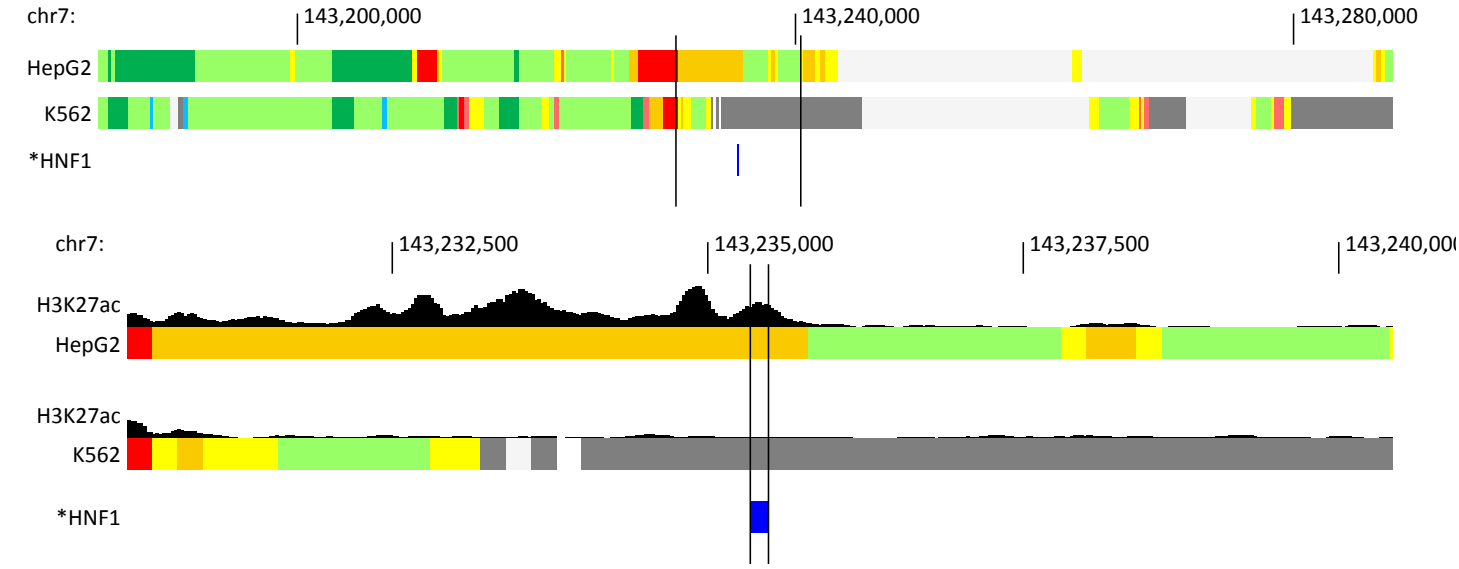
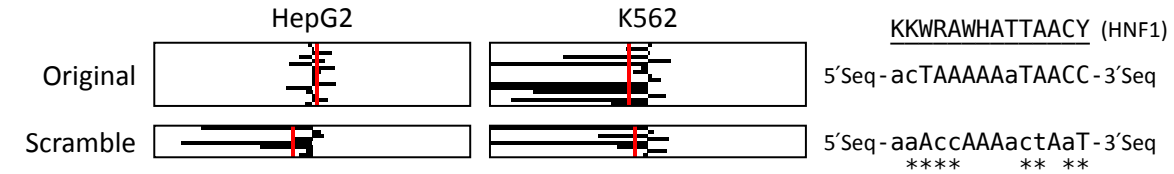
3′Seq = ctacaaattgccttctttatttccttttcttaaaaagtacgttcagtctactctggactttcccatc

1304 HNF1 in HepG2 enhancer

chr7 143235403 143235416 - (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-acTAAAAAaTAACC-3′Seq

5′Seq-aaAccAAAactAaT-3′Seq

**** ** **

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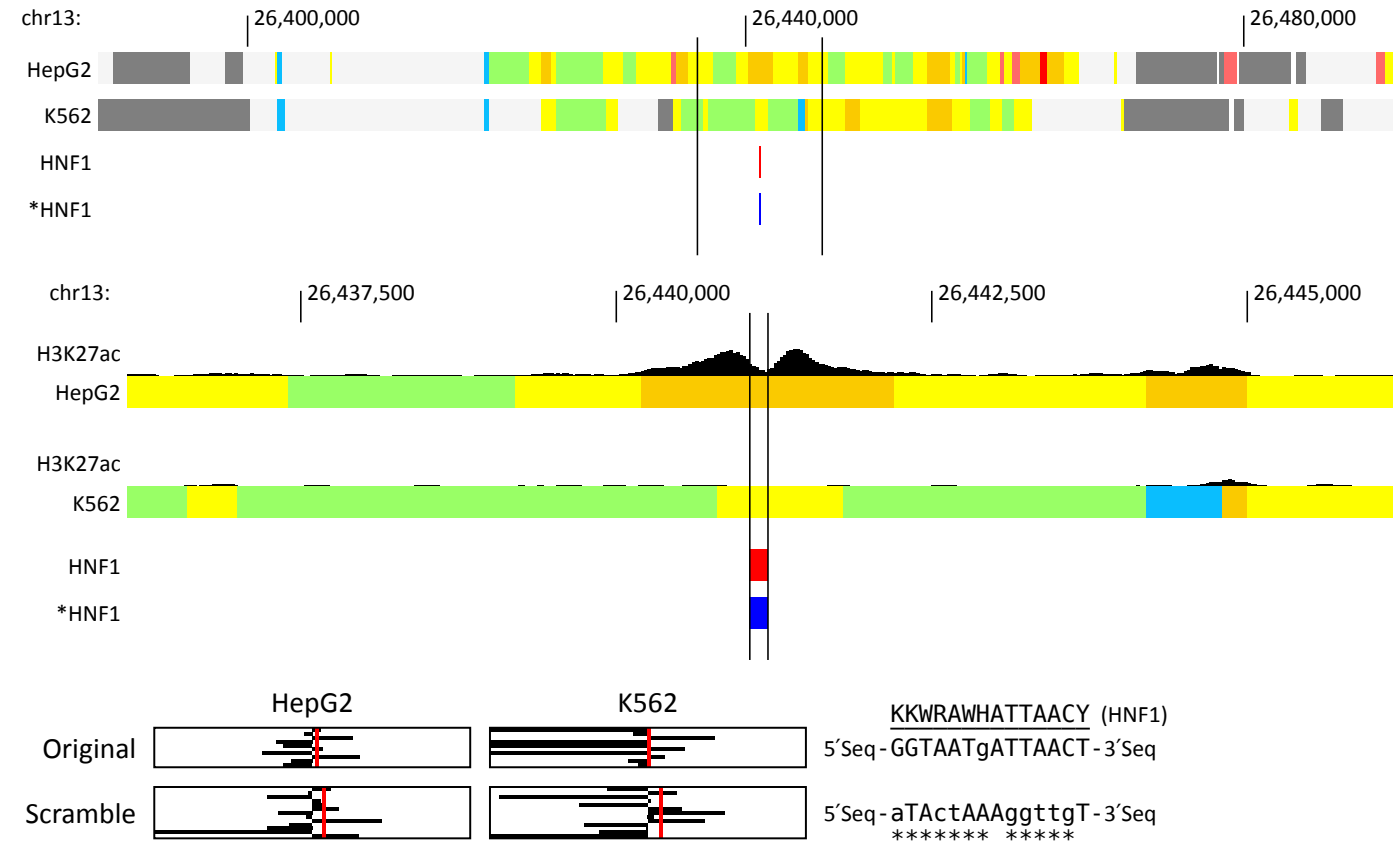
3′Seq = cagcatcattcatagtttccaccattcatgggtactgttccttaatgggatatcccccaatcacg

1305 HNF1 in HepG2 enhancer

chr13 26441124 26441137 + (hg18)



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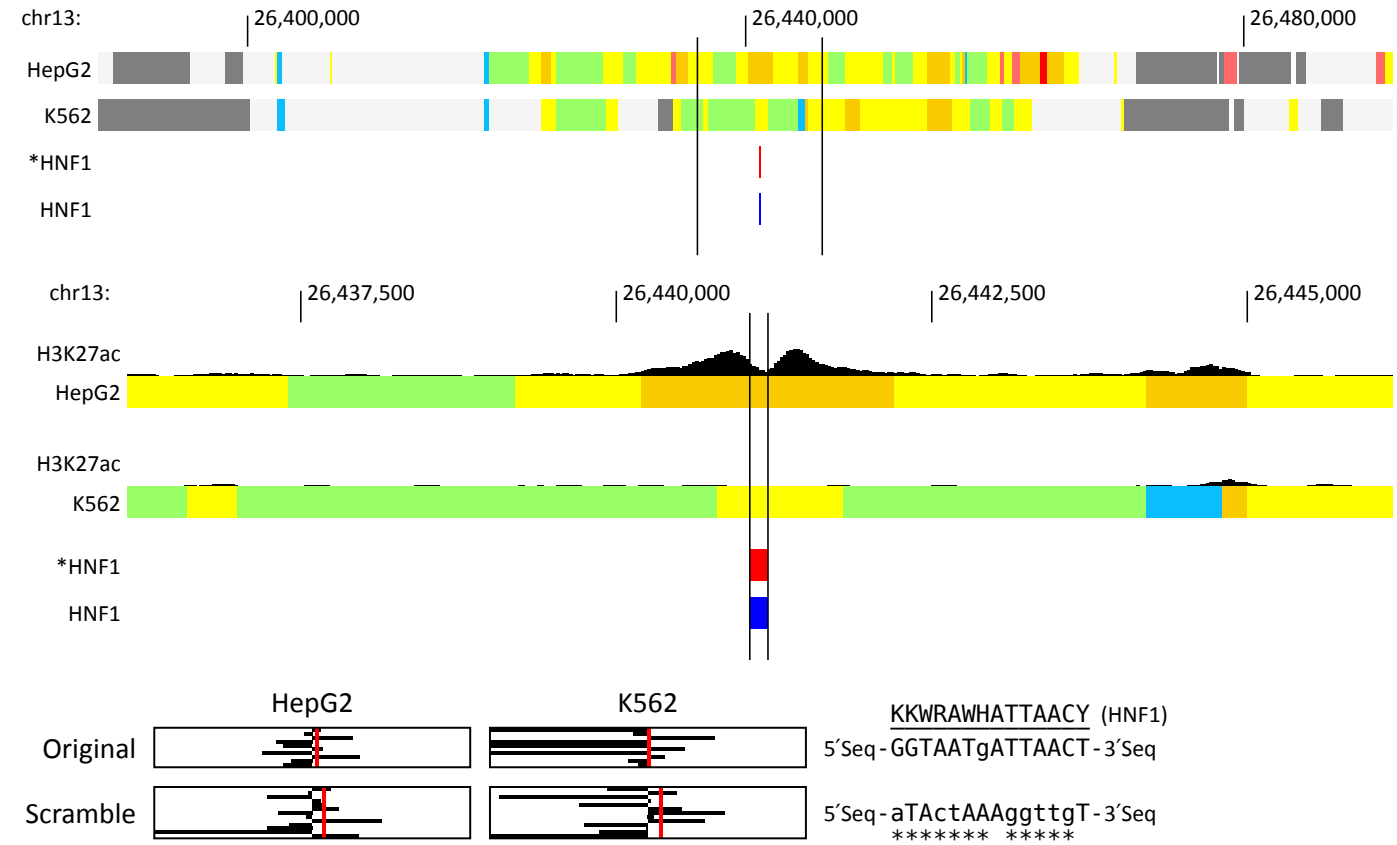
3′Seq = ggcatccaggggtcctggaggtcagagcgataatgagaaagtttccctgaactctctcaagtgca

1306 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr13 26441124 26441137 + (hg18)



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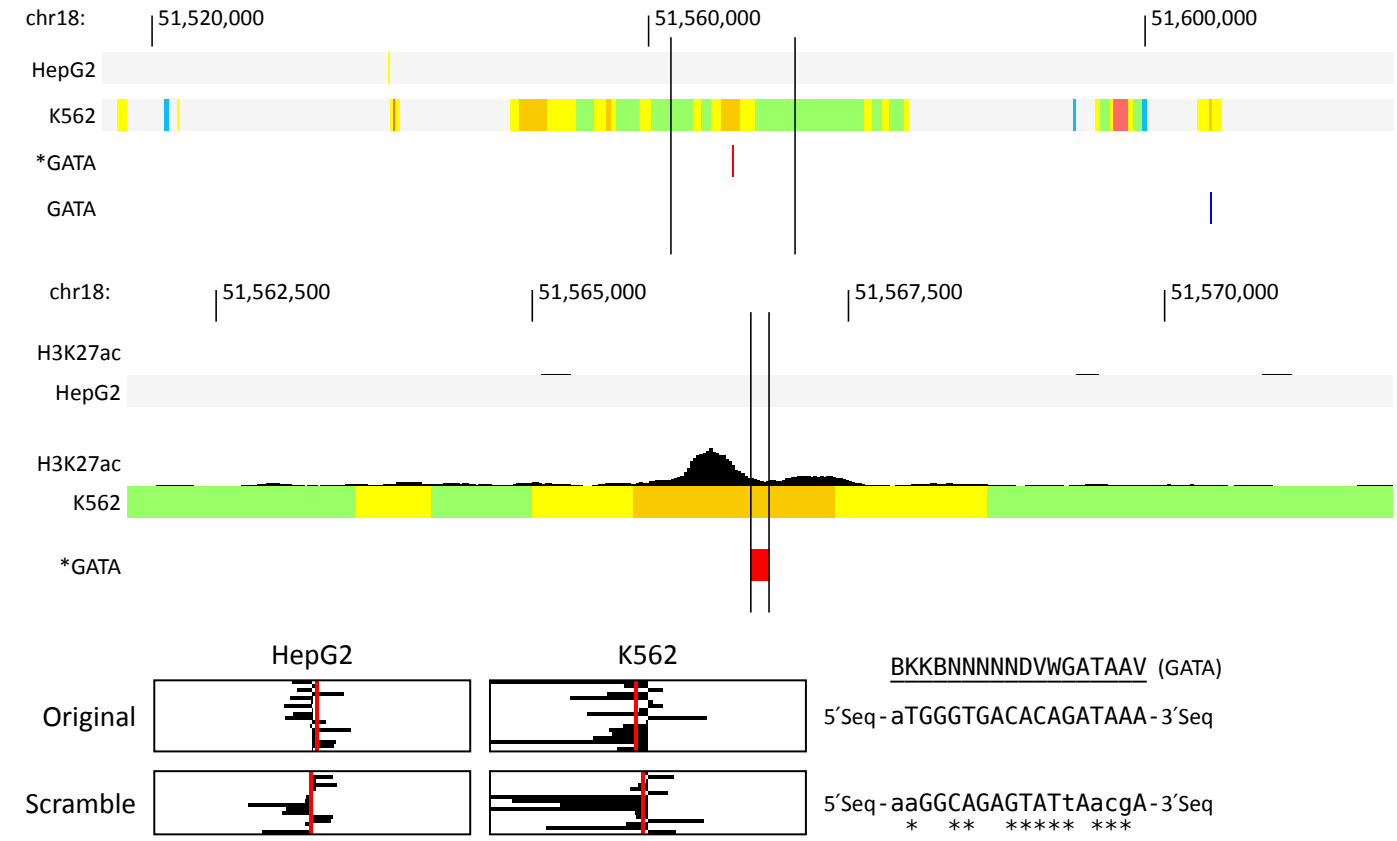
3′Seq = ggcatccaggggtcctggaggtcagagcgataatgagaaagtttccctgaactctctcaagtgca

1307 GATA in K562 enhancer (conserved at 60% confidence)

chr18 51566792 51566809 - (hg18)



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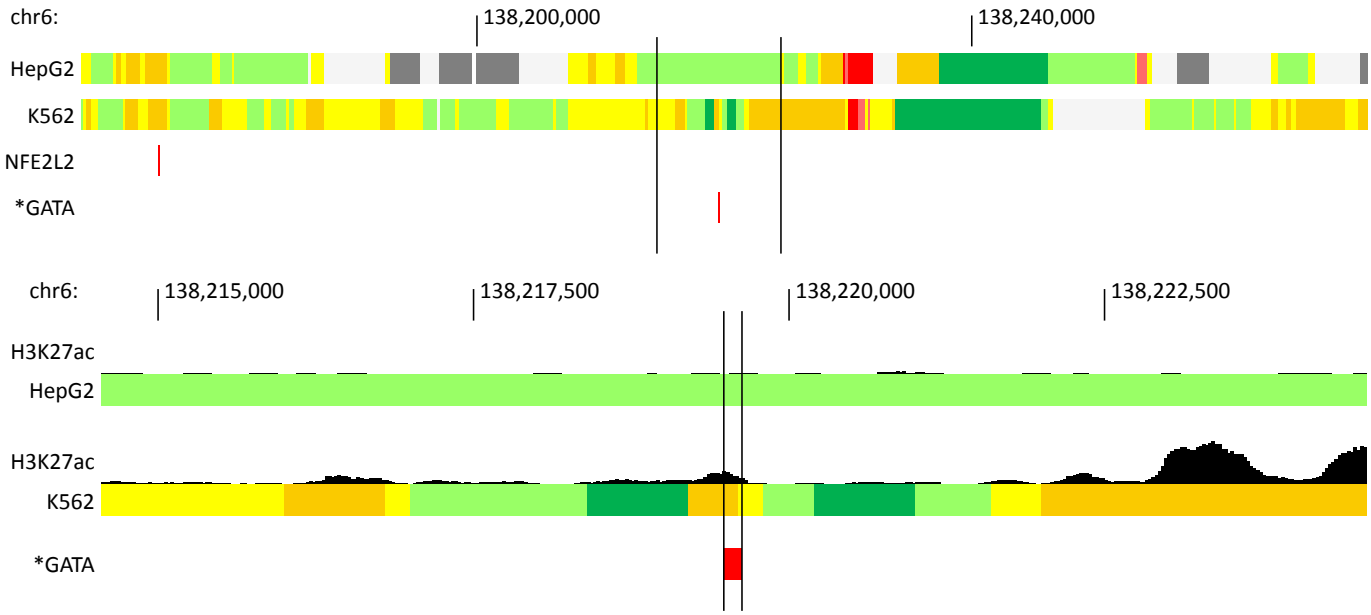
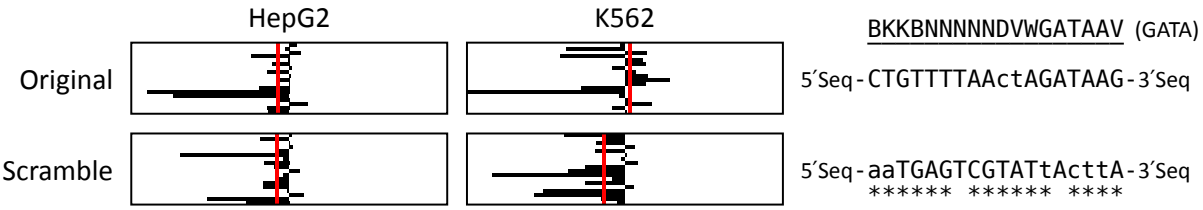
3′Seq = gtactgacaaaagccccaggtgggcttaaaatgcctcctcatgcctgggagtgttggaggctg

1308 GATA in K562 enhancer (conserved at 60% confidence)

chr6 138219547 138219564 - (hg18)





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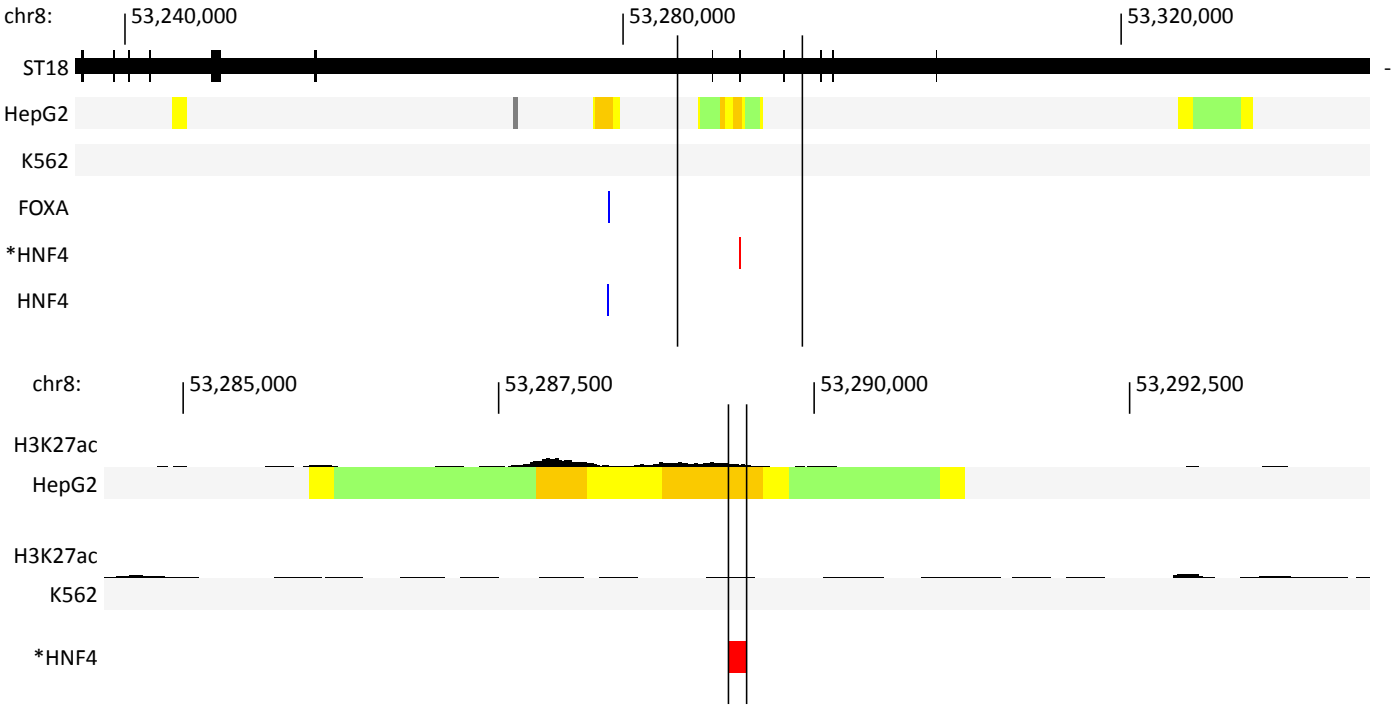
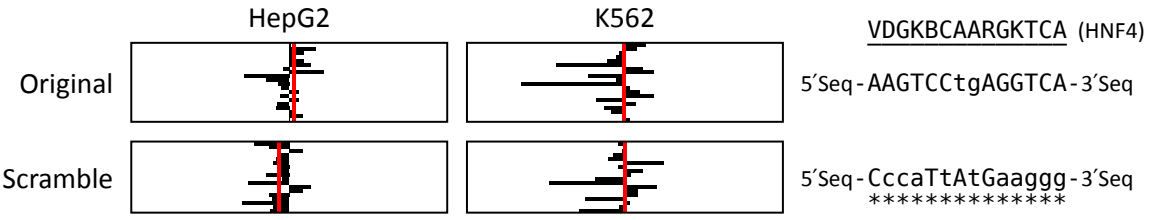
3′Seq = agctctgccttcatttccttttgtgaactgacttgggatgttgccacatgcccttcaactact

1309 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr8 53289387 53289400 + (hg18)





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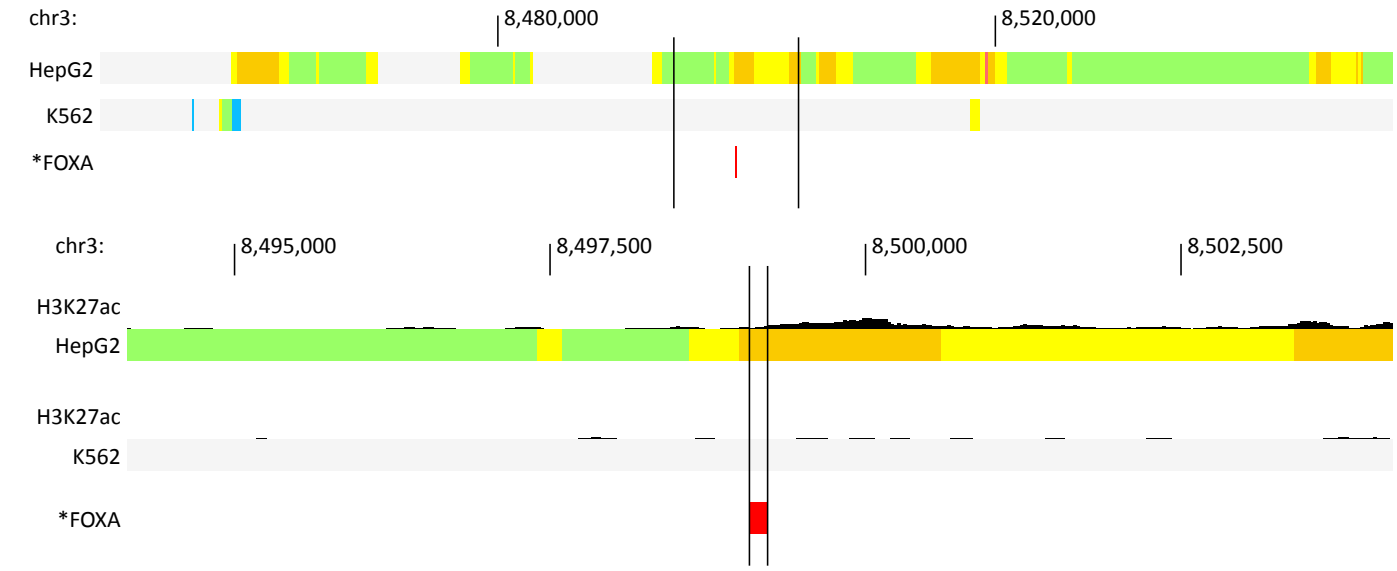
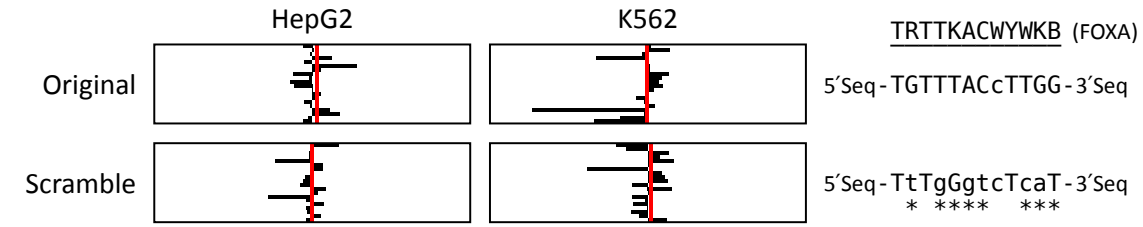
3′Seq = ttcctttgacattgaccaaaatatgaaaacatgtaattagaagttctgaaggtcattatgaaaaa

1310 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 8499147 8499158 - (hg18)





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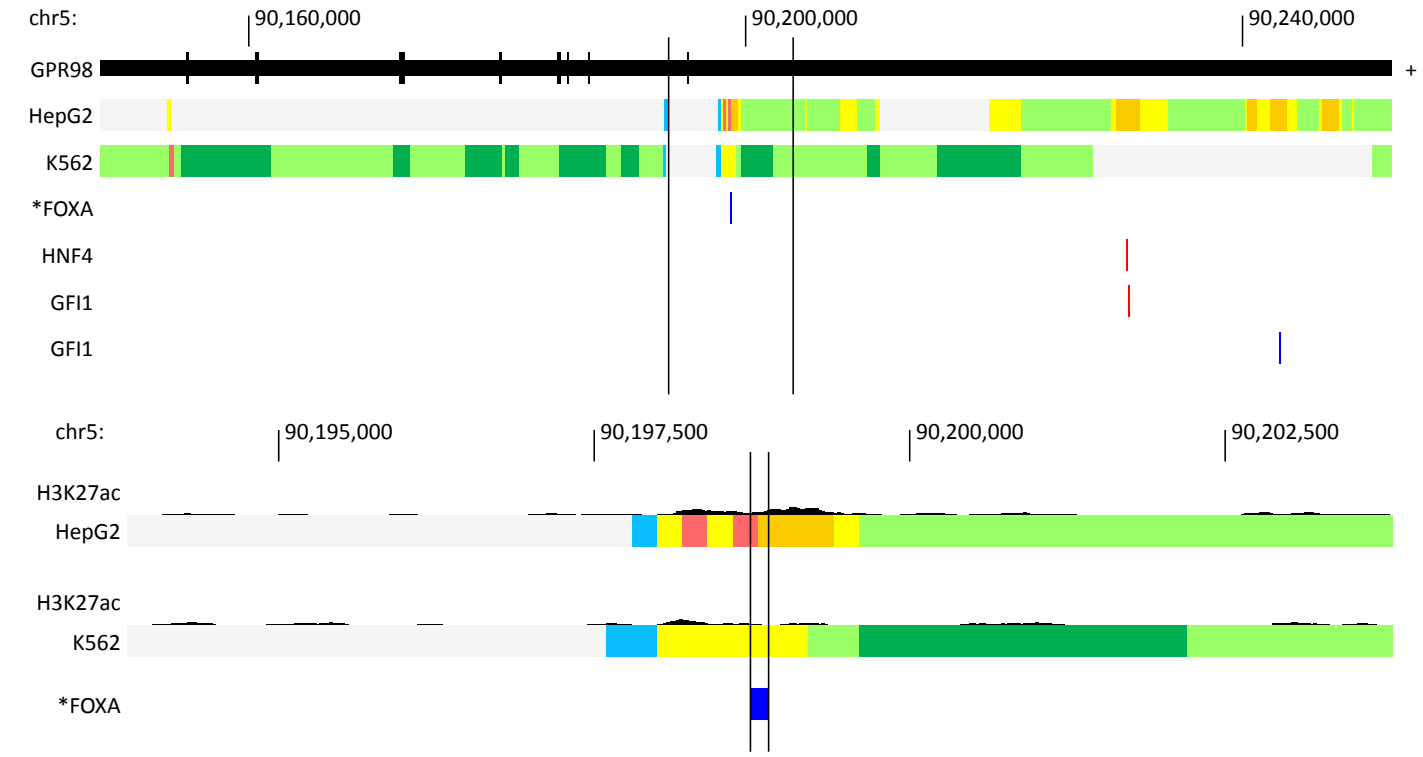
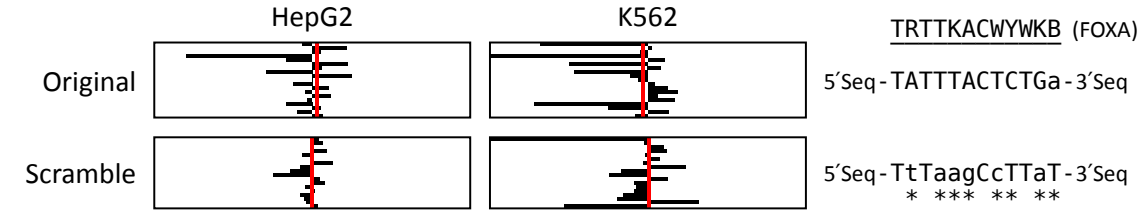
3′Seq = agaccaacatcaacacaattaggtttcaatatcaacaacatgggagggttggaagtcaggaacagc

1311 FOXA in HepG2 enhancer

chr5 90198805 90198816 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTTACTCTGa-3′Seq

5′Seq-TtTaagCcTTaT-3′Seq

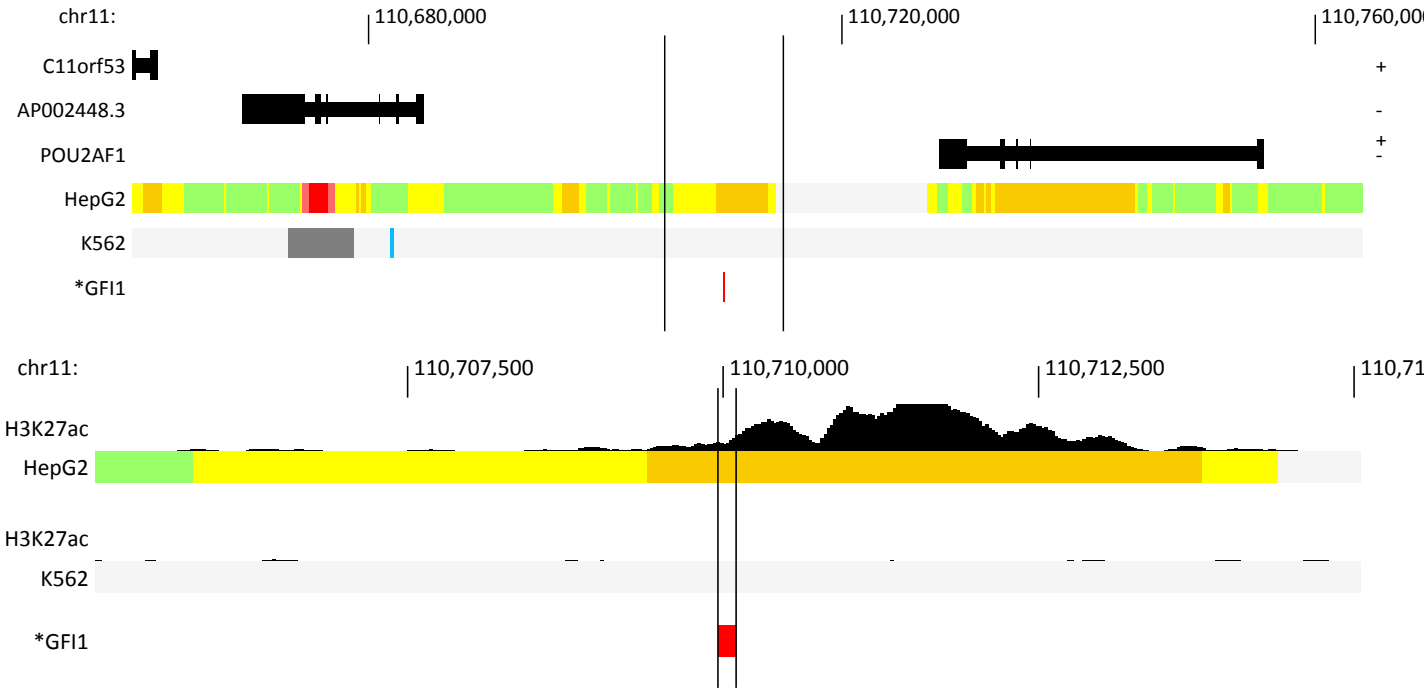
* *** ** **

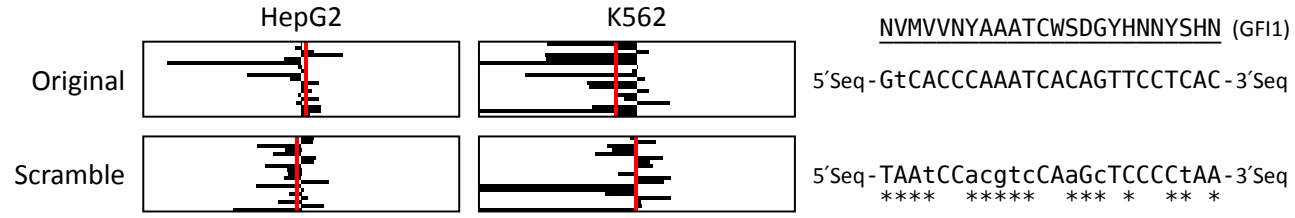
5′Seq = caatcctccaaatctaaaaaaagaacagaagtttcctcatagaaaacatgatgaaaagatagaactg

3′Seq = ttaataatacttaacaagggaaaatatttgtttttcttctctatggtttgttatttgtacagcata

1312 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr11 110710020 110710043 - (hg18)

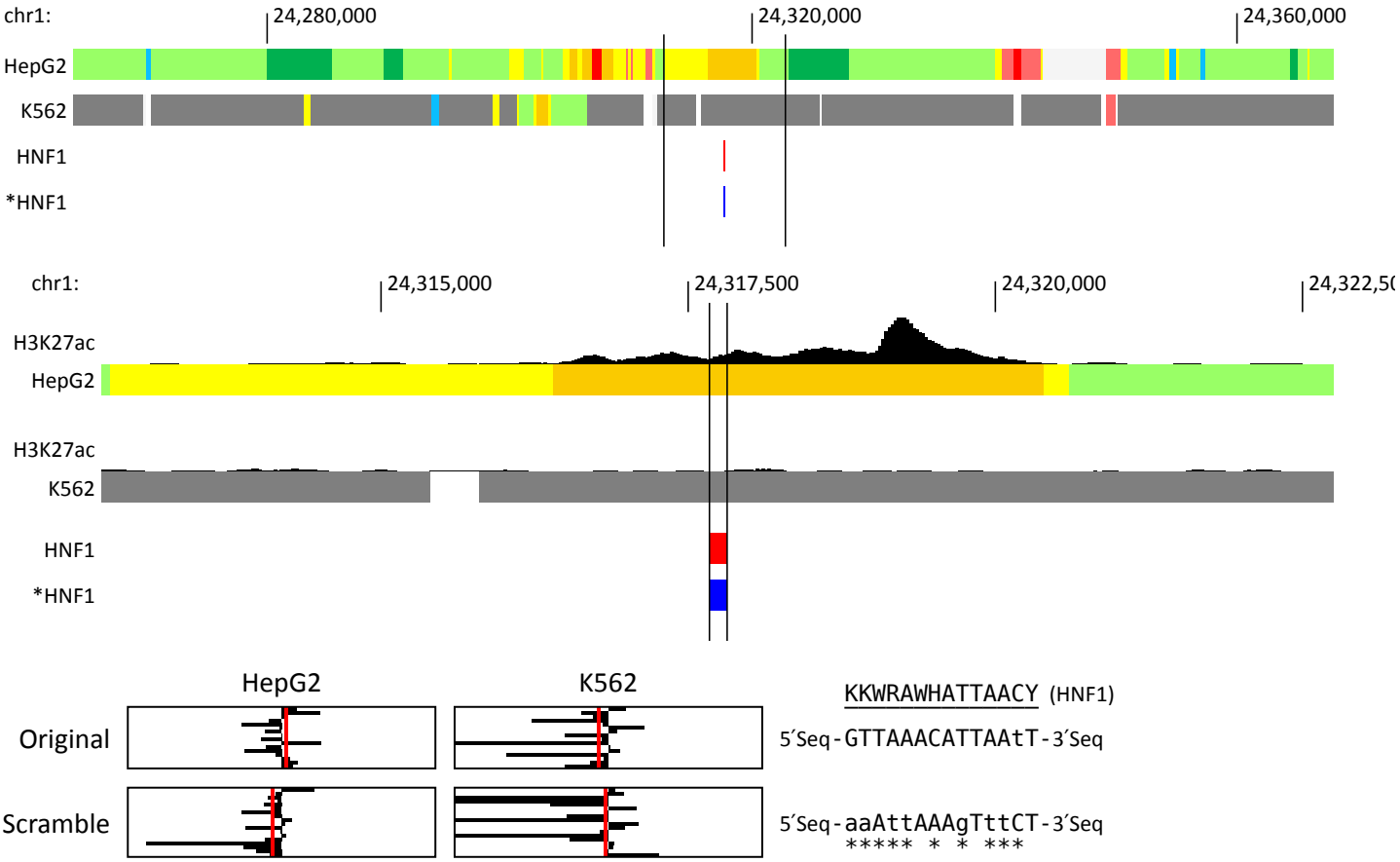




5′Seq = atagaagtcctggaggtggattggactatttagtacttcctgacagatctcctccagcaca
3′Seq = aggactttgggagcaatgaaagctcccaataatgaccgattgcttattatgctctaggca

1313 HNF1 in HepG2 enhancer

chr1 24317739 24317752 + (hg18)



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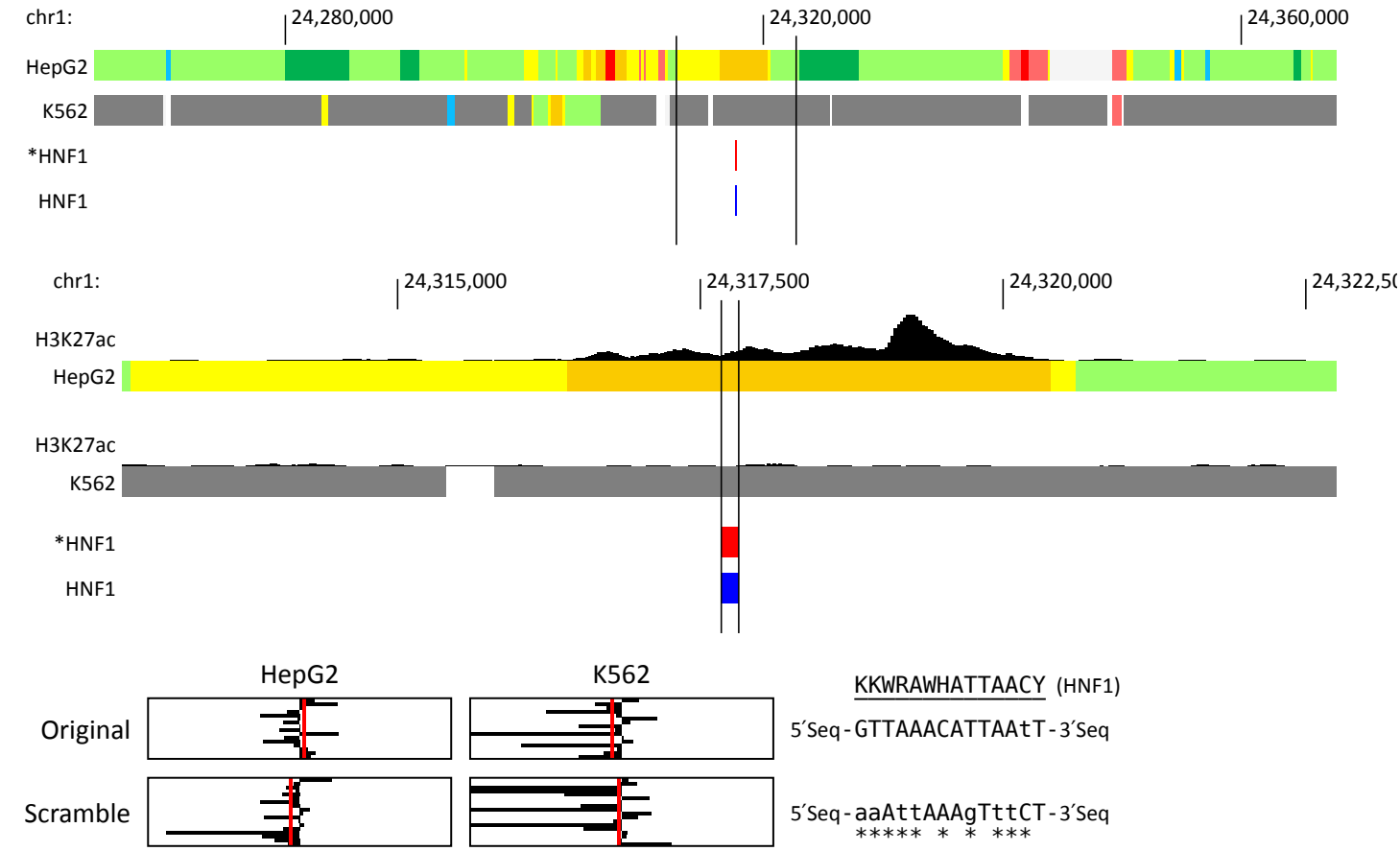
3′Seq = accatcagataagaacaccaccacctgtcactgtgtcccaggaaaggggaggggtggggaagaga

1314 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 24317739 24317752 + (hg18)



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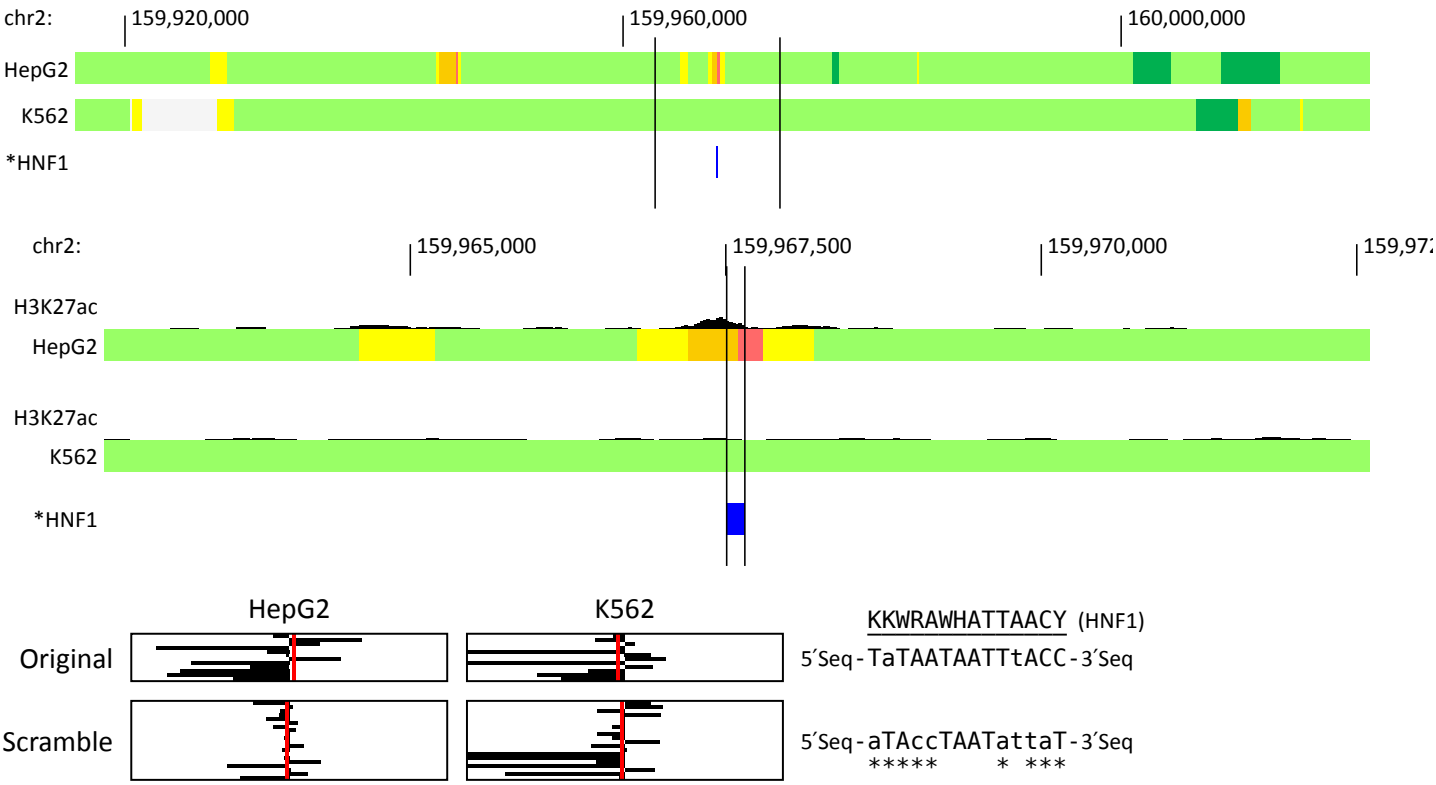
3′Seq = accatcagataagaacaccaccacctgtcactgtgtcccaggaaaggggaggggtggggaagaga

1315 HNF1 in HepG2 enhancer

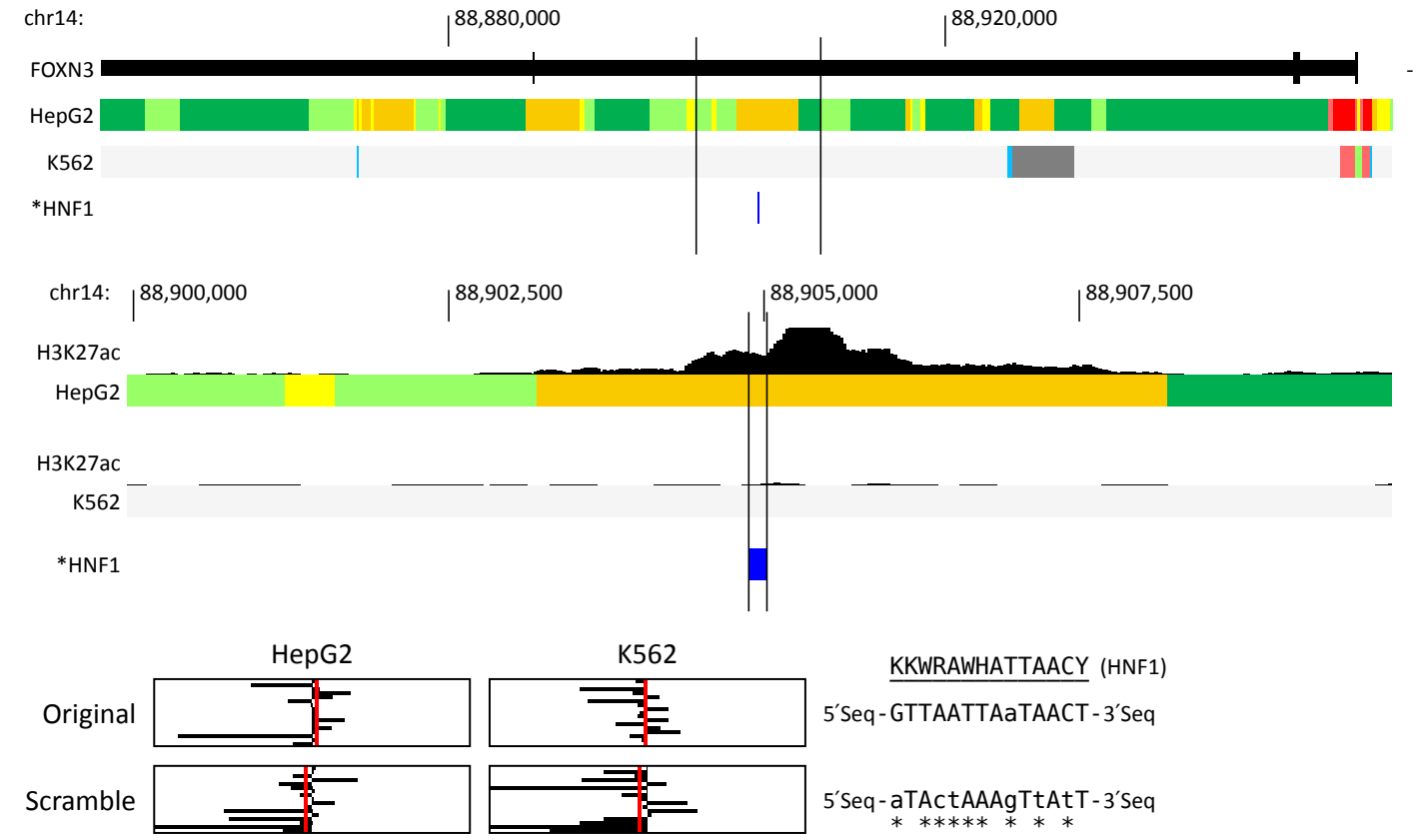
chr2 159967573 159967586 - (hg18)



5′Seq = aagatattaaatgtaaagtgaccggctcagtggctgagtactcaacattacaaagttaacctgtat
3′Seq = atgtttatctgcatgctaatgataacactaccaaatatgtatggatatatataaaagtcacttga

1316 HNF1 in HepG2 enhancer

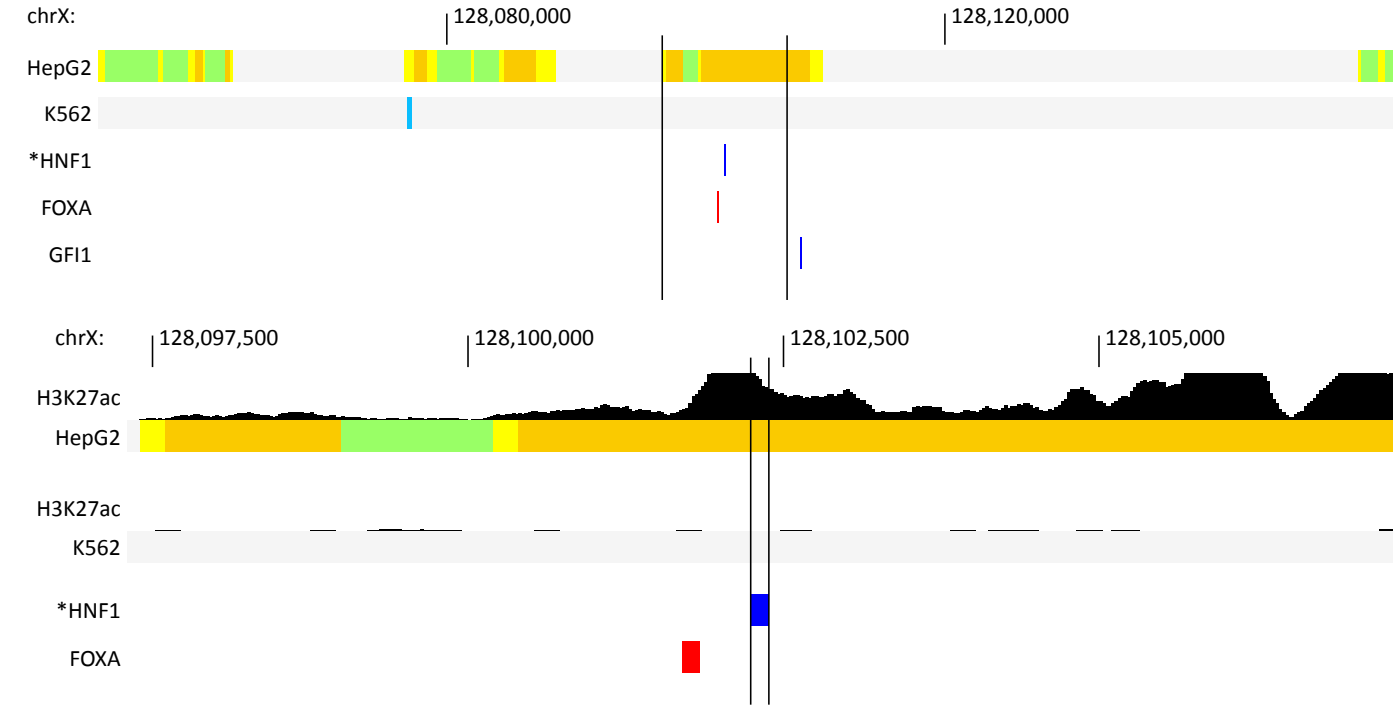
chr14 88904945 88904958 + (hg18)

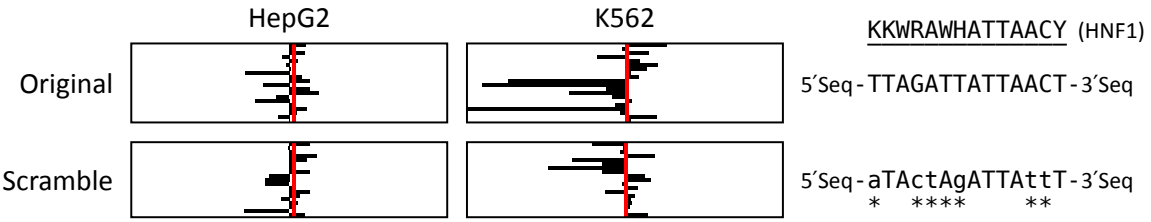


5′Seq = gctgagaactcactgcaacctggggcacagaacagtcctcctgagagtcaacccaaagctcatcca
3′Seq = gacgtgatagccaacgagagggctatgggagagaaactccgccaggggttaagagttacttgatt

1317 HNF1 in HepG2 enhancer

chrX 128102306 128102319 + (hg18)





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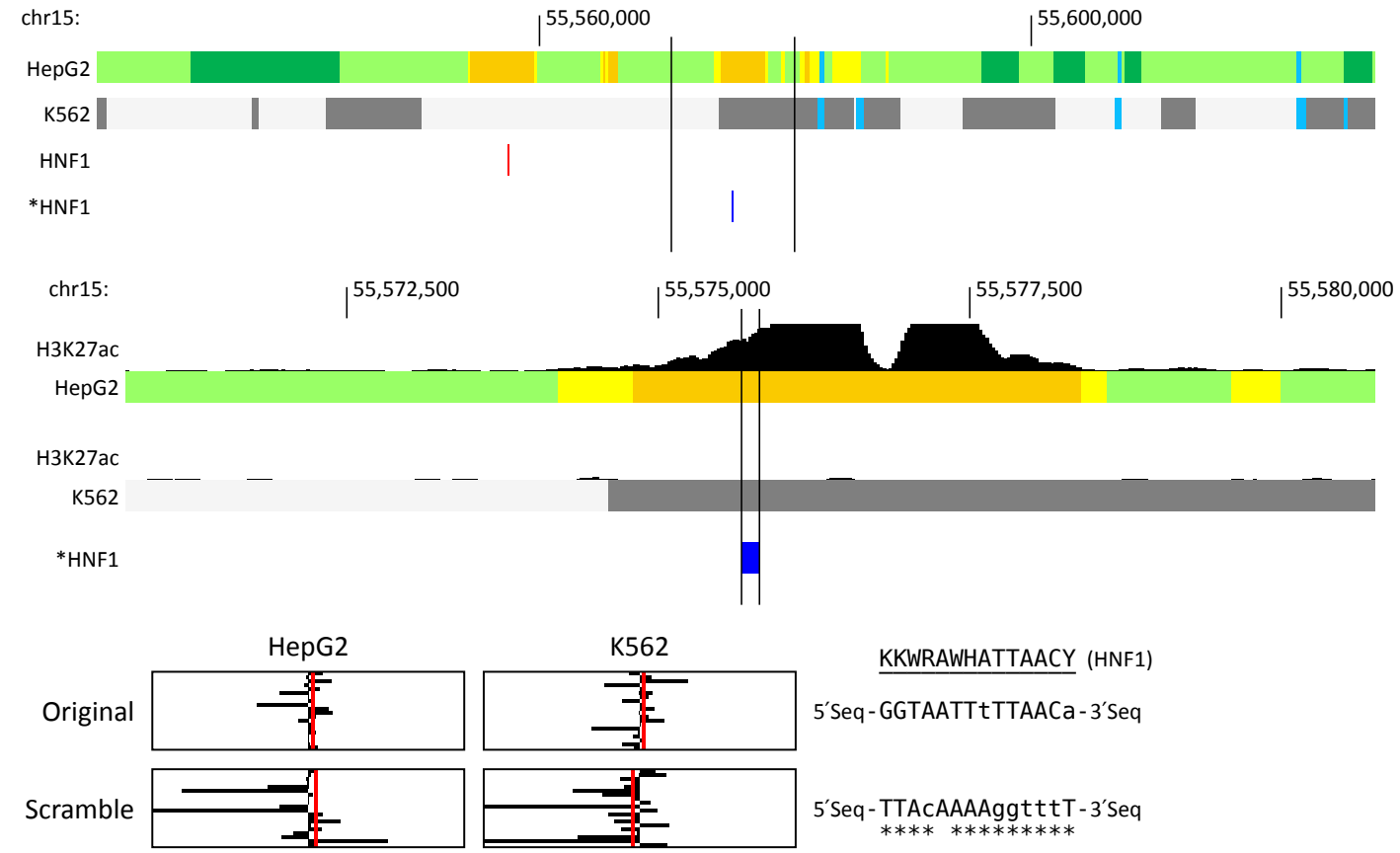
3′Seq = ctgccgatattatcctatattattgatttcaacatttgggtcaaaaagatttttggagtctgagc

1318 HNF1 in HepG2 enhancer

chr15 55575734 55575747 + (hg18)



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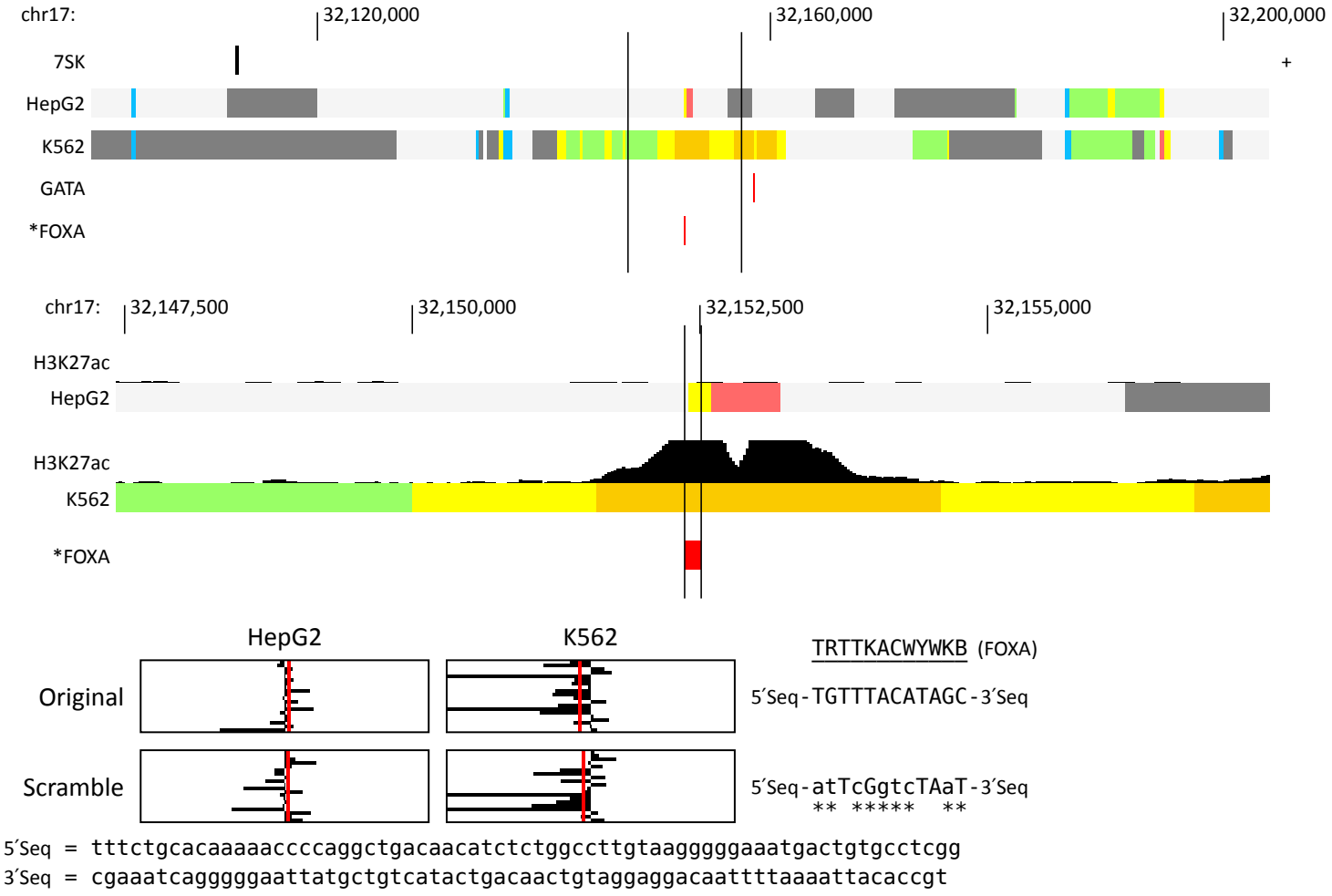
3′Seq = gaattacctattgagaagatcaagagttgtgcttgacctgatatttgggttgagccctgccttct

1319 FOXA in K562 enhancer (conserved at 50% confidence)

chr17 32152434 32152445 - (hg18)



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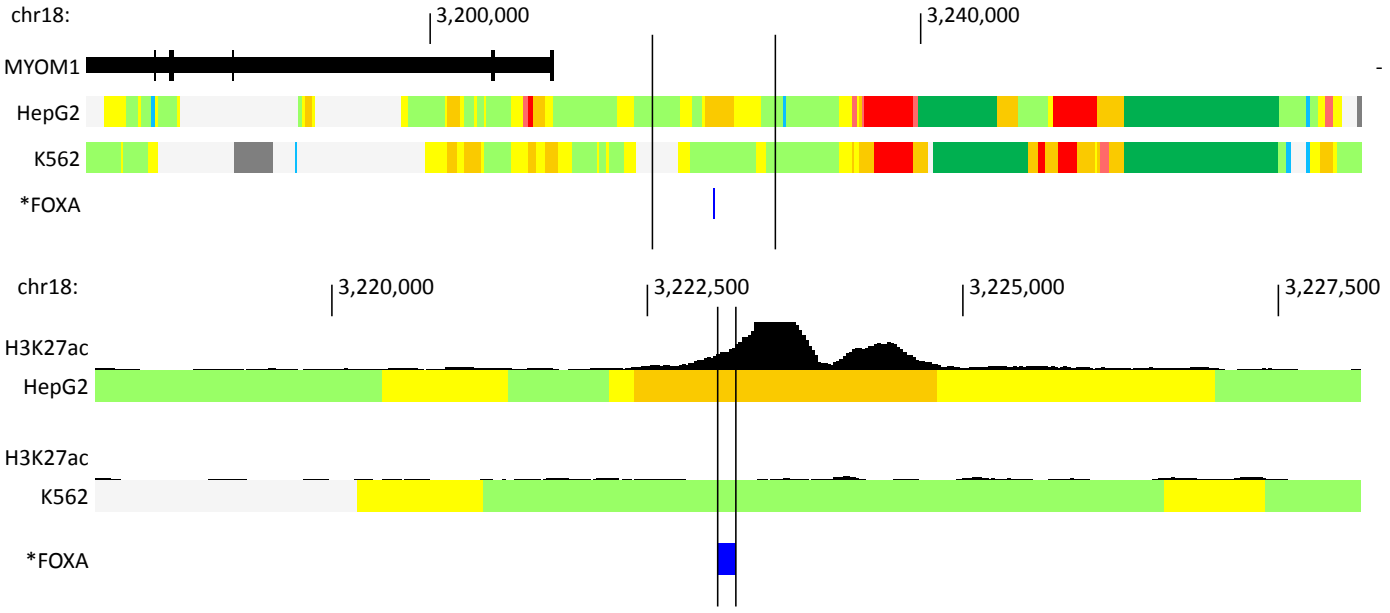
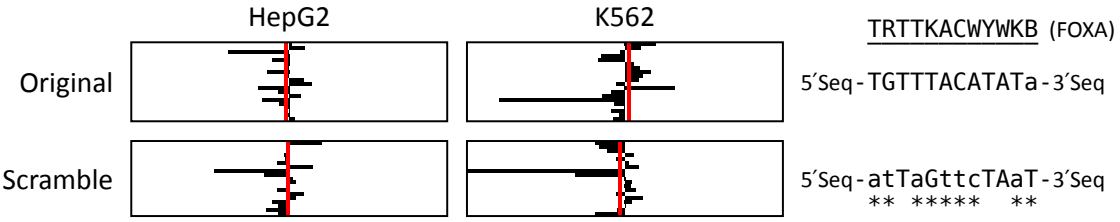
1320 FOXA in HepG2 enhancer

chr18 3223124 3223135 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACATATa-3′Seq

5′Seq-atTaGttcTAaT-3′Seq

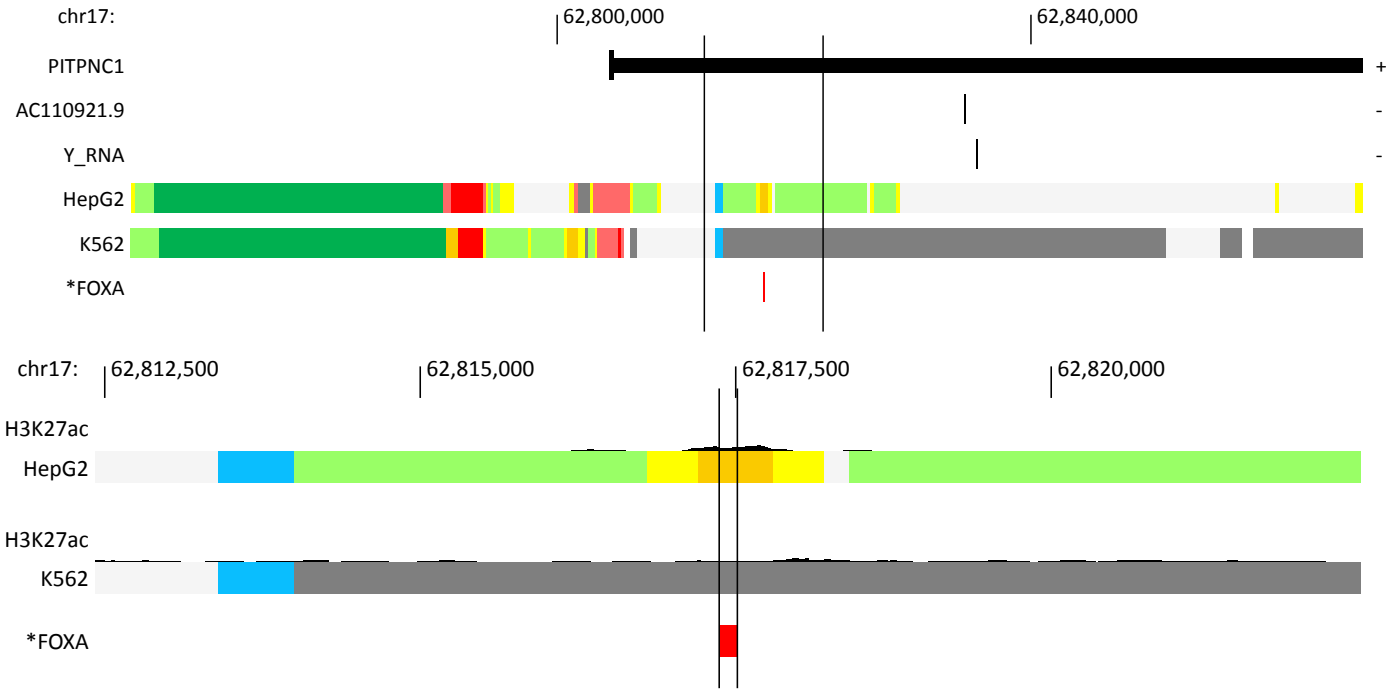
** ***** **

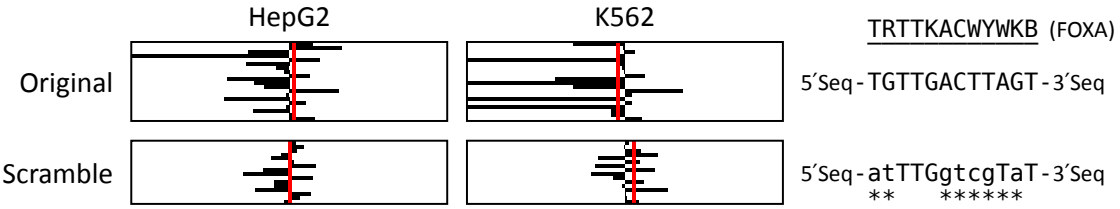
5′Seq = aggtccaaaaataaatttttgtggtacataggtagtagaagtggccagattagccatagacagatct

3′Seq = aaggcacaataaaaactattgtccaaggcaggggagaacaatgcataaaatctttaatatatctat

1321 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 62817436 62817447 + (hg18)





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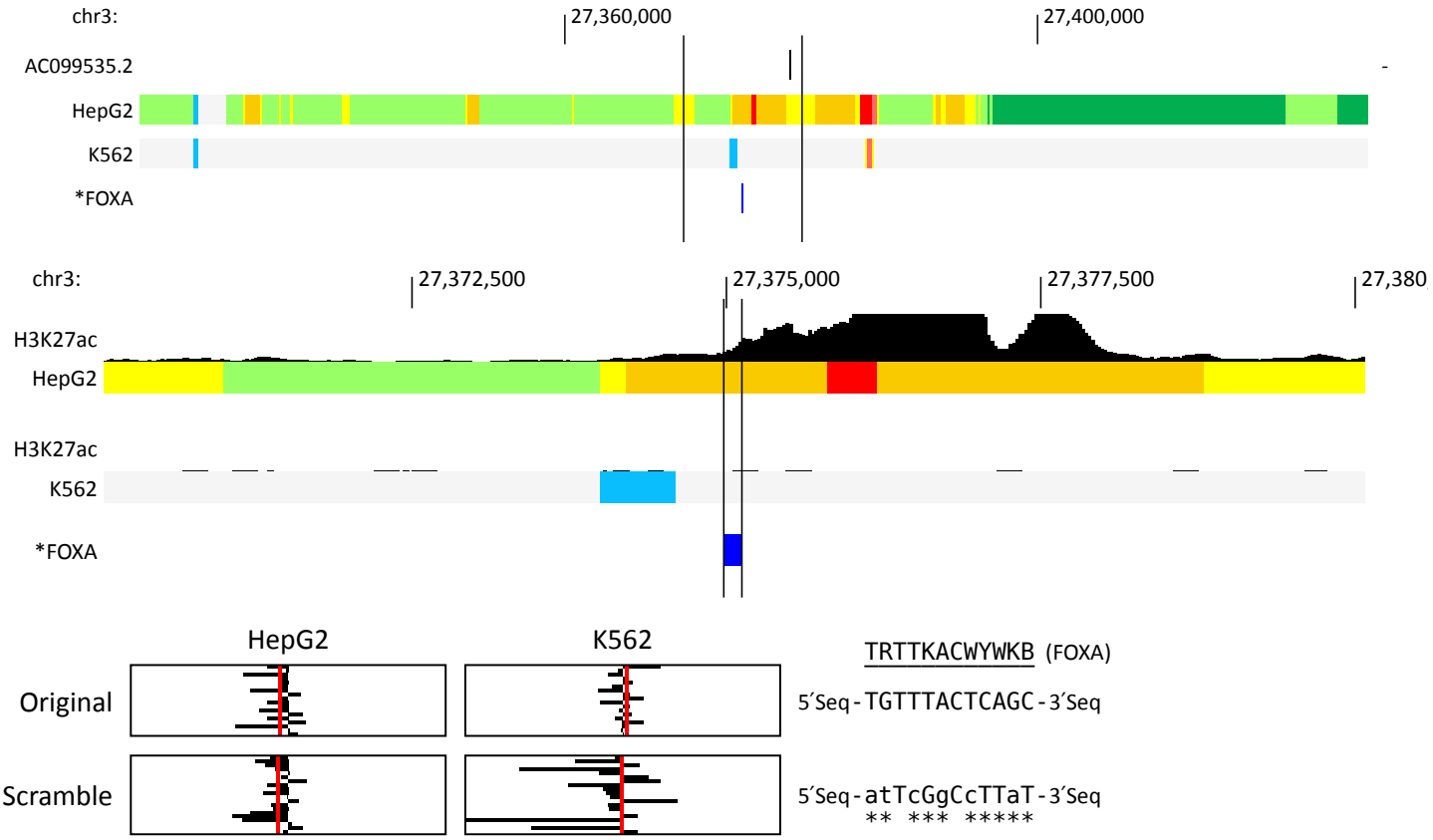
3′Seq = aatactgaagccagagctcaccaagattctgacatcaagcatgaaagtgactaattctttcatttc

1322 FOXA in HepG2 enhancer

chr3 27375046 27375057 - (hg18)



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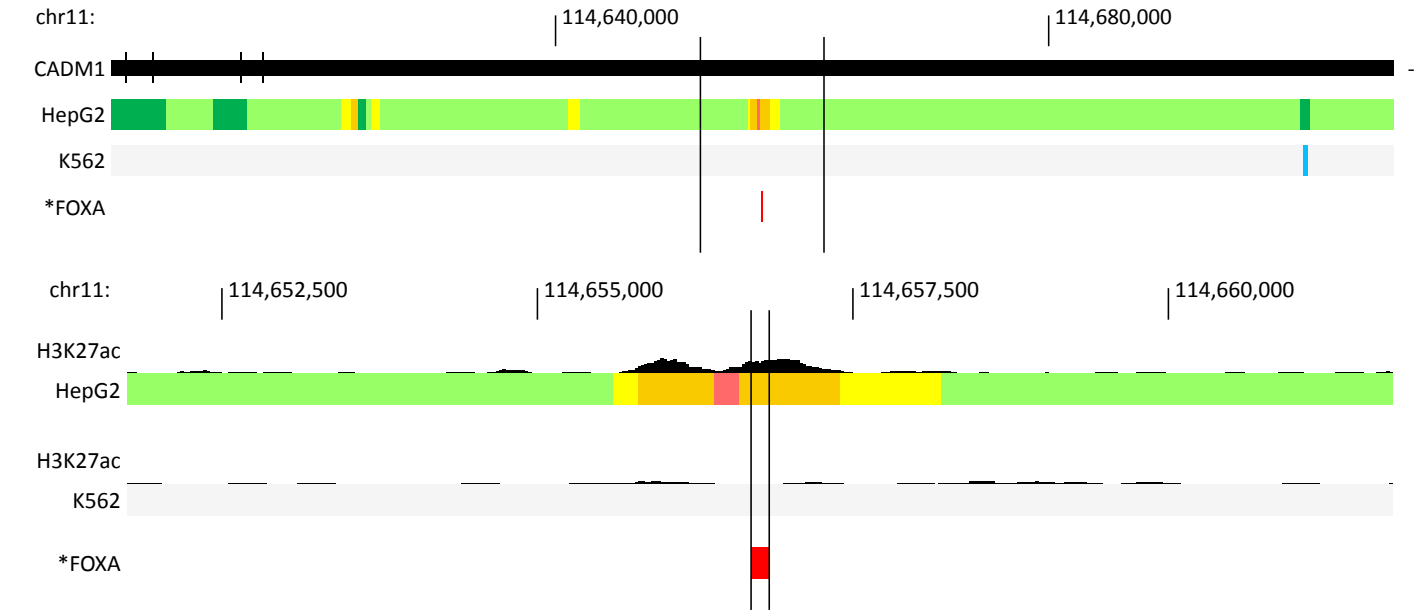
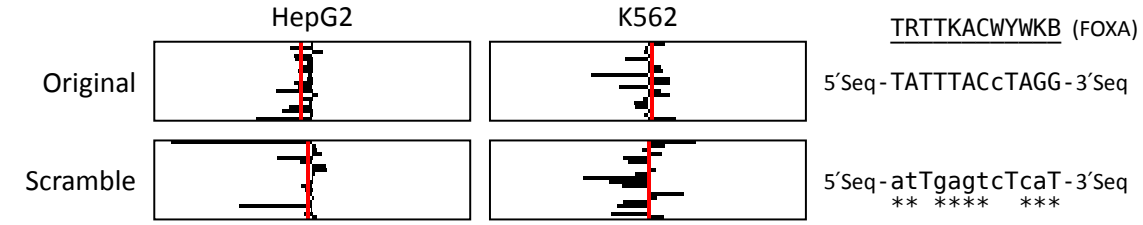
3′Seq = aattaccaagacatcacgagcaaatgaggggcctctctagggacttctttagcattaacccaaatt

1323 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr11 114656760 114656771 + (hg18)

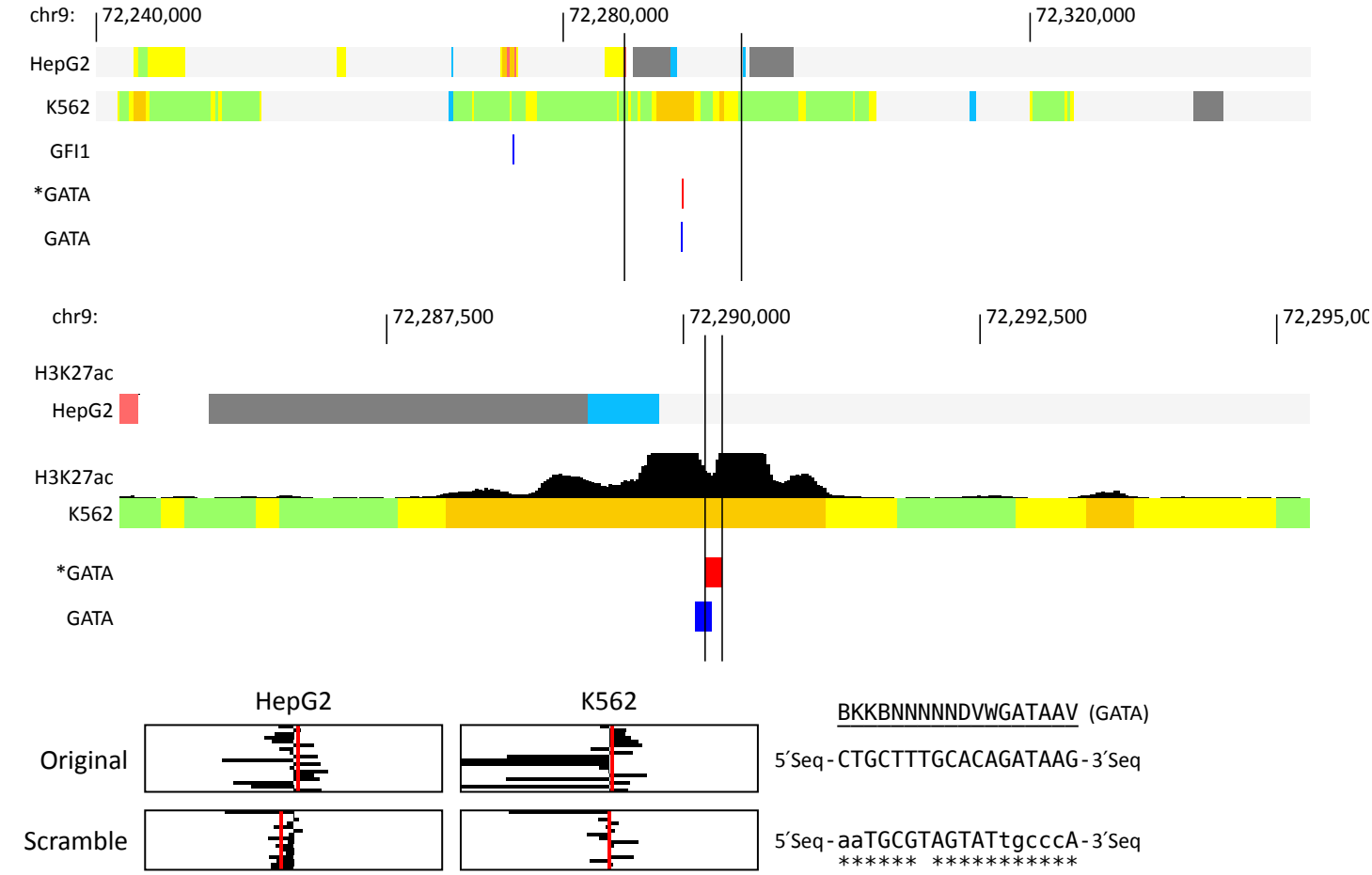




5′Seq = tggcagacaggaggatgtcaagaagatacattttctatcaagatgtggctttatcaacgagtttact
3′Seq = aatttggtctttcagtgattaatgacgaggaattctaccatgagaagtgacctatccttaatgcgt

1324 GATA in K562 enhancer (conserved at 60% confidence)

chr9 72290247 72290264 - (hg18)



BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGCTTTGCACAGATAAG-3′Seq

5′Seq-aaTGCGTAGTATtgcccA-3′Seq

****** **********

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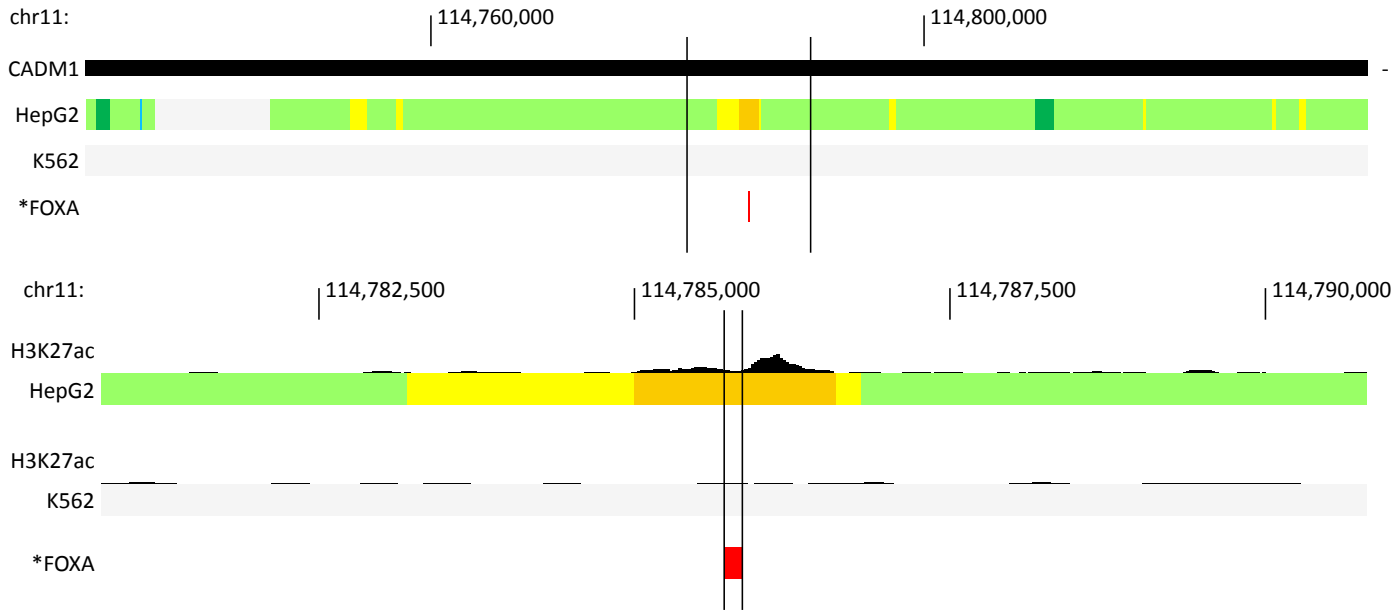
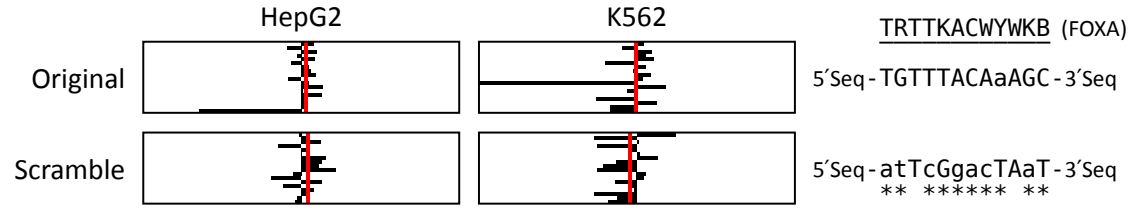
1325 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr11 114785778 114785789 + (hg18)

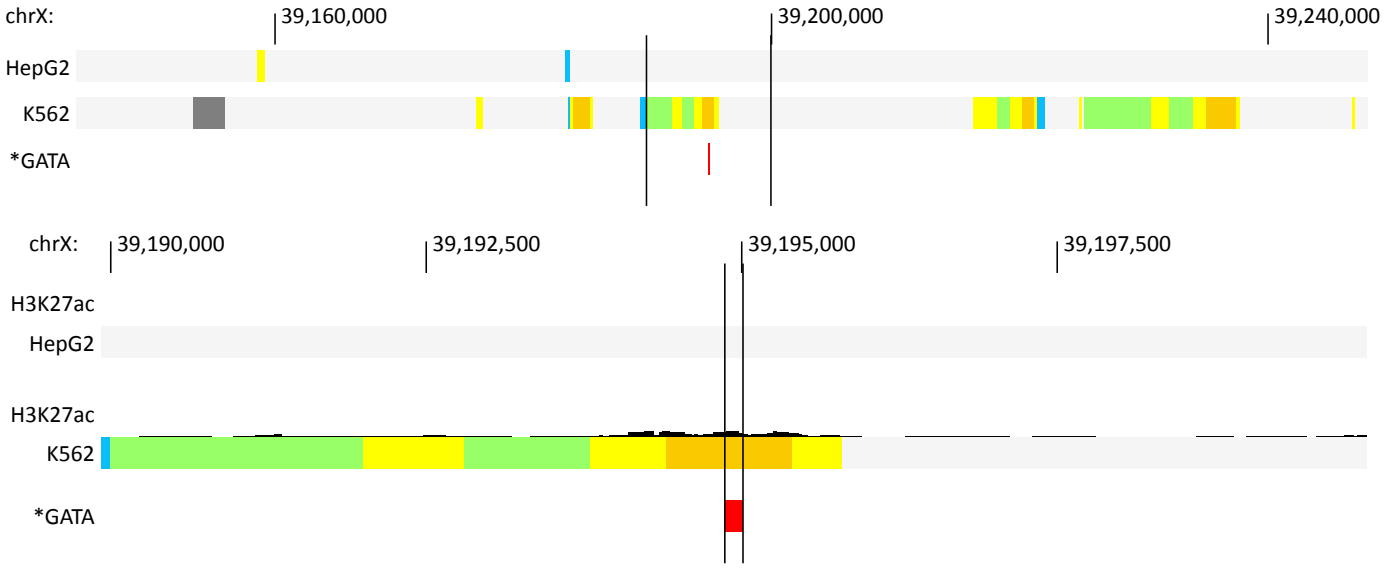


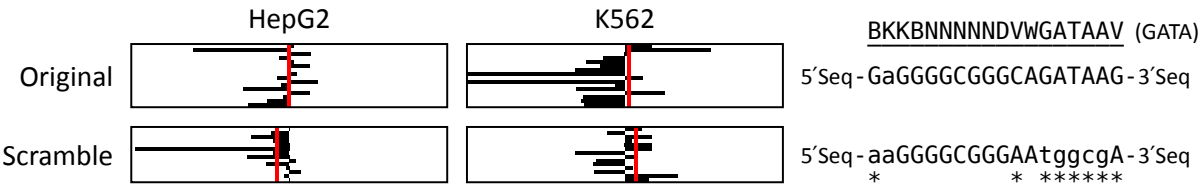


5′Seq = tagggcagggataaatttcaagctggcaaaagtccaaacccaacagttgcagctgtagtagctgcct
3′Seq = aattcaggaagcttttagagggcagagtgcaccagacagaaggggtctgtacgcaaaacatggat

1326 GATA in K562 enhancer (conserved at 60% confidence)

chrX 39194930 39194947 + (hg18)





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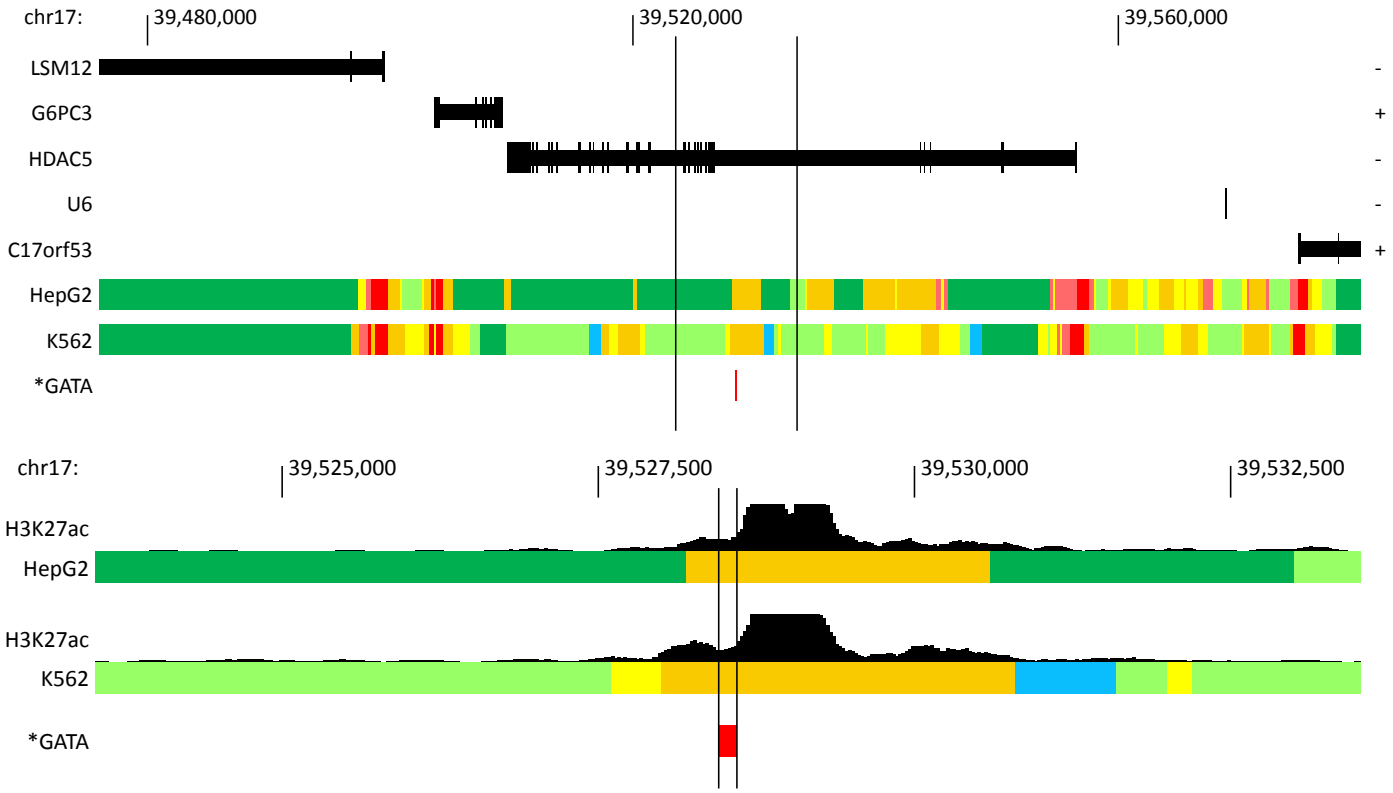
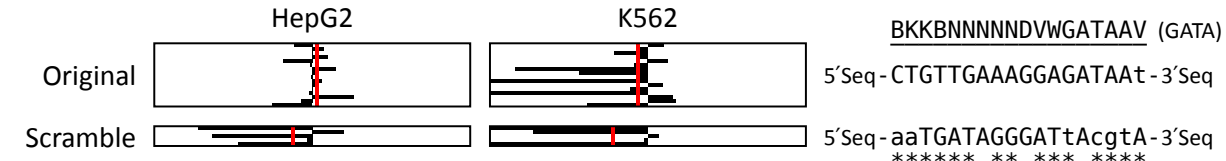
3′Seq = ggccccactttggggttcagtgcgcggtggaggtgaaggctgcagtgtttacagtagagagac

1327 GATA in K562 enhancer (conserved at 60% confidence)

chr17 39528516 39528533 - (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGTTGAAAGGAGATAAt-3′Seq

5′Seq-aaTGATAGGGATtAcgtA-3′Seq

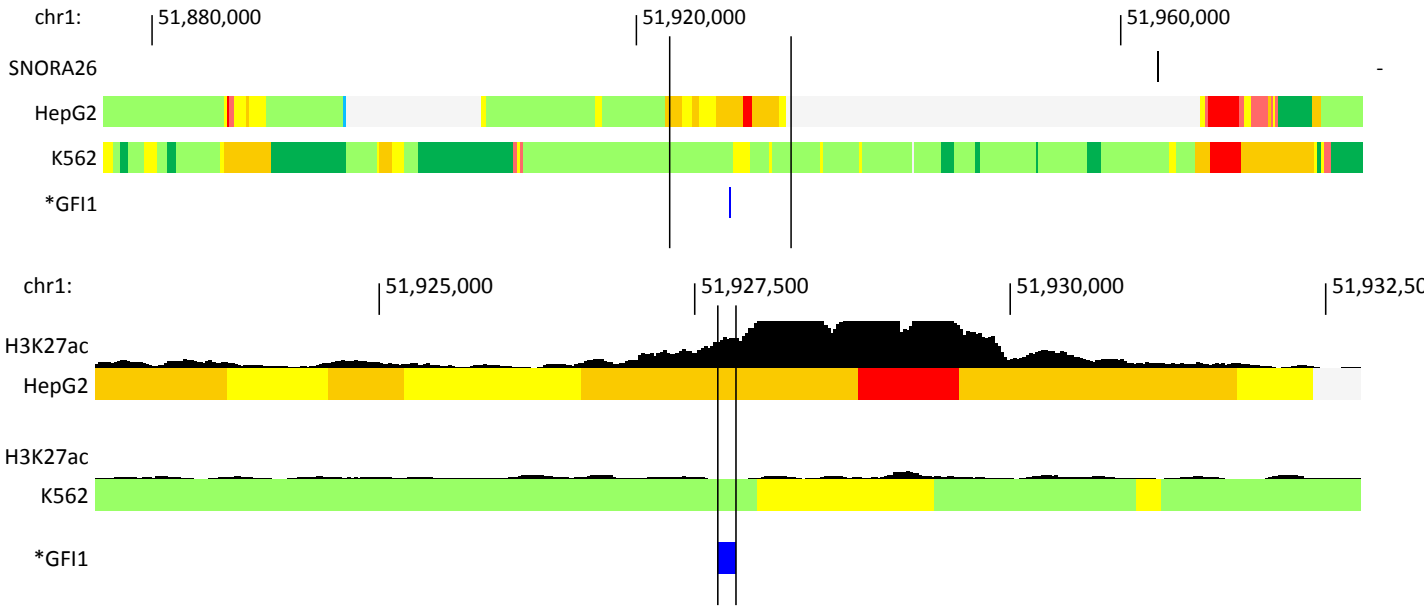
****** ** *** ****

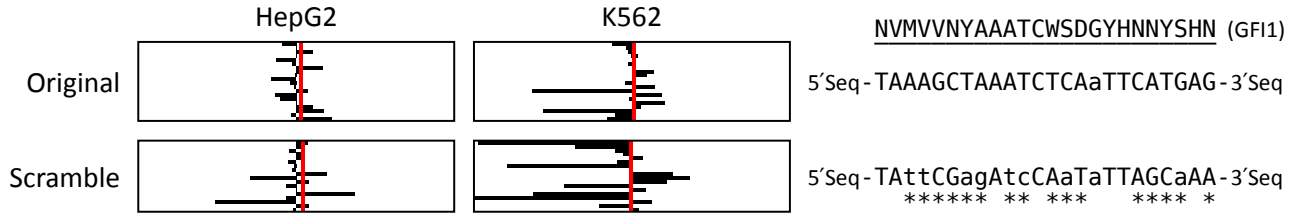
5′Seq = caggcacagctgctgtttggctcactctatatatagcggcattttcagggtaattacaataaaa

3′Seq = ccagcaaaggaagcgagtcttgactcccagccccctcctgtccctggcttggtgcagccctgc

1328 GFI1 in HepG2 enhancer

chr1 51927744 51927767 - (hg18)

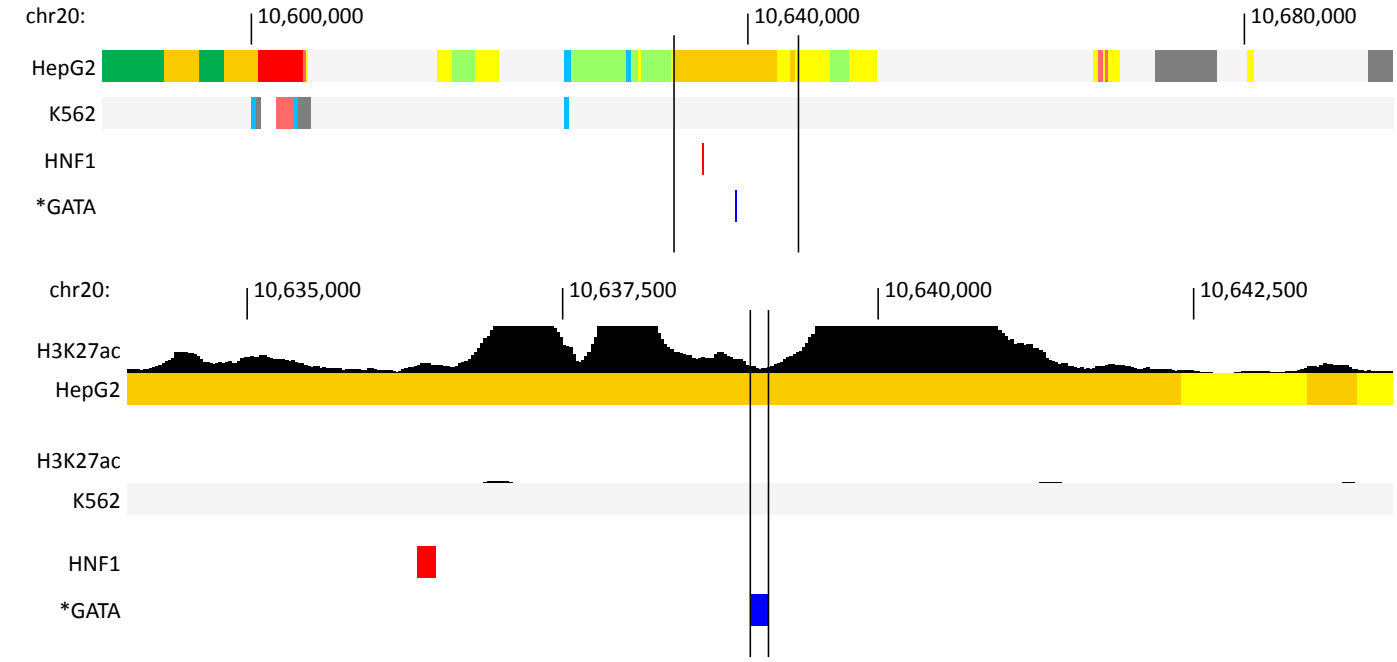


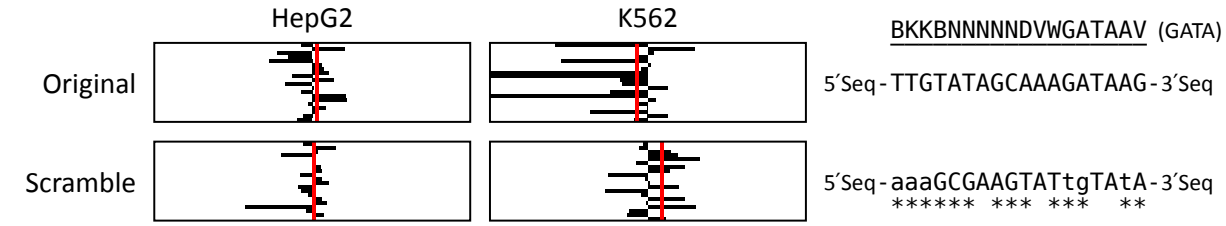


5′Seq = ctttaacatattctggggaagaaaagagaaagaagaatgacaggaggtaattagaagaagc
3′Seq = ggaaaatatagaacttcaaaaatacctgcccattgattaccaaggctaagagtttcagaa

1329 GATA in HepG2 enhancer

chr20 10639051 10639068 - (hg18)

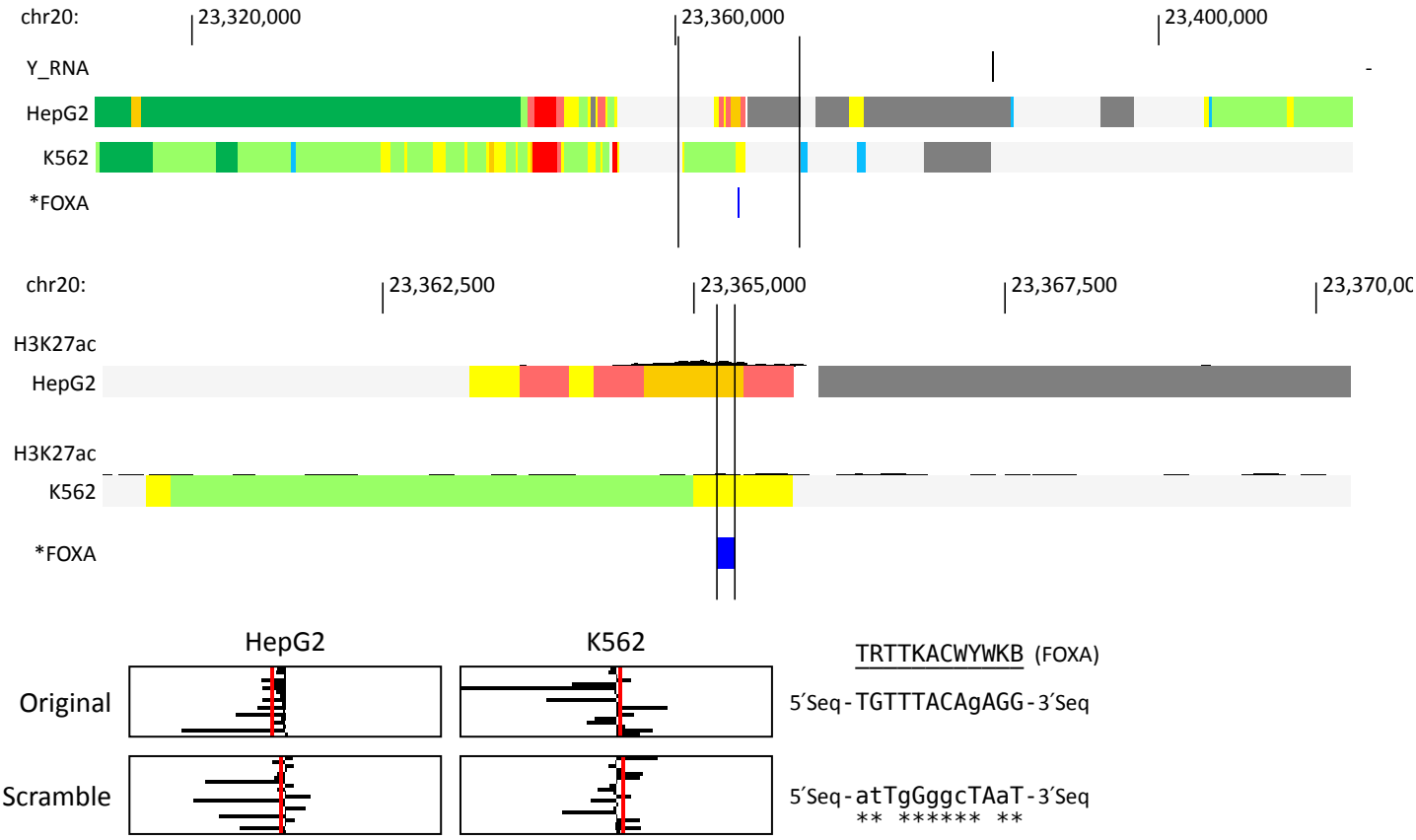




5′Seq = tttcatacaaatataatgtacccttattctaatttttgatgtccttatagaatctggaataagt
3′Seq = aaacaacttcctgggaaaagggcatttatgatctaaaattatctaaaatatcgcataccaaaa

1330 FOXA in HepG2 enhancer

chr20 23365252 23365263 + (hg18)



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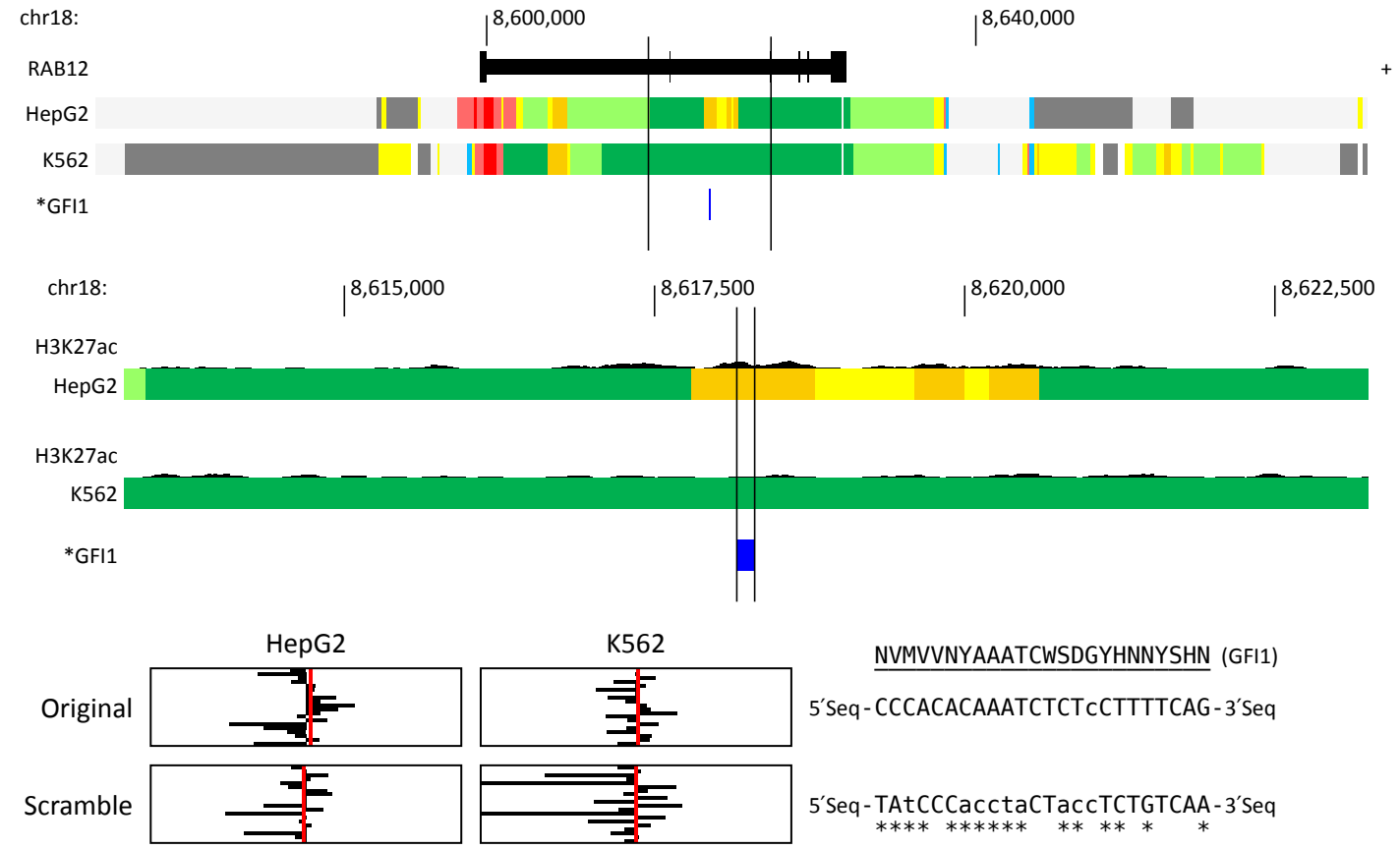
3′Seq = attatttgtttccccagaatgatcagaaaatttcagatagcagatgtcggctgatgaagagagtgt

1331 GFI1 in HepG2 enhancer

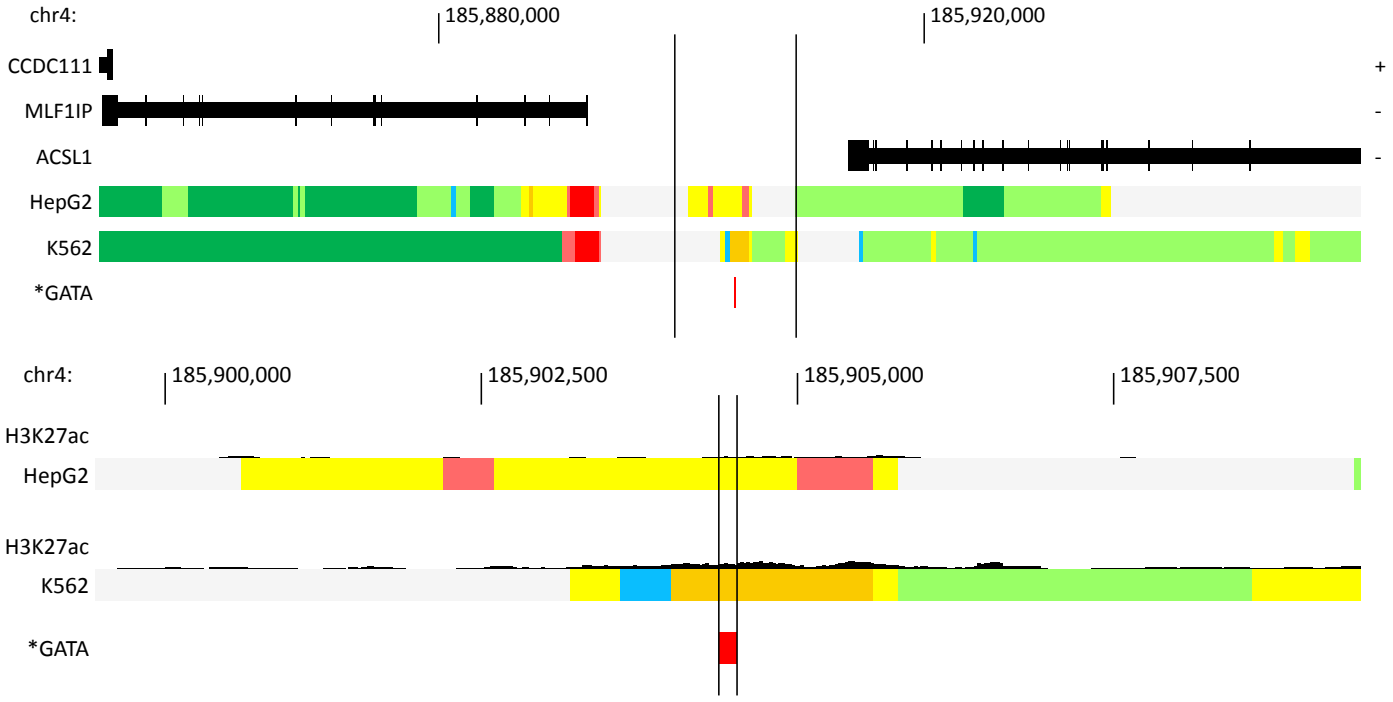
chr18 8618224 8618247 - (hg18)

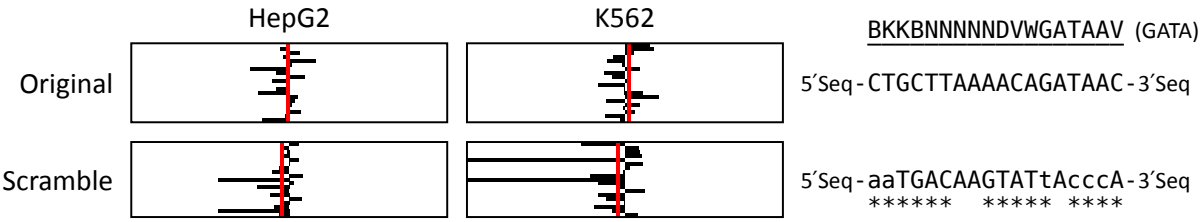


5′Seq = atgttgattccattcagcaagtatttcttaaatatctaccgtgtgccagcaccataaaaat
3′Seq = aaaattagattacatcaatgcactgatcatgctttcacctttctatgaaaaggcagaatc

1332 GATA in K562 enhancer (conserved at 60% confidence)

chr4 185904442 185904459 - (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGCTTAAAACAGATAAC-3′Seq

5′Seq-aaTGACAAGTATTtAcccA-3′Seq

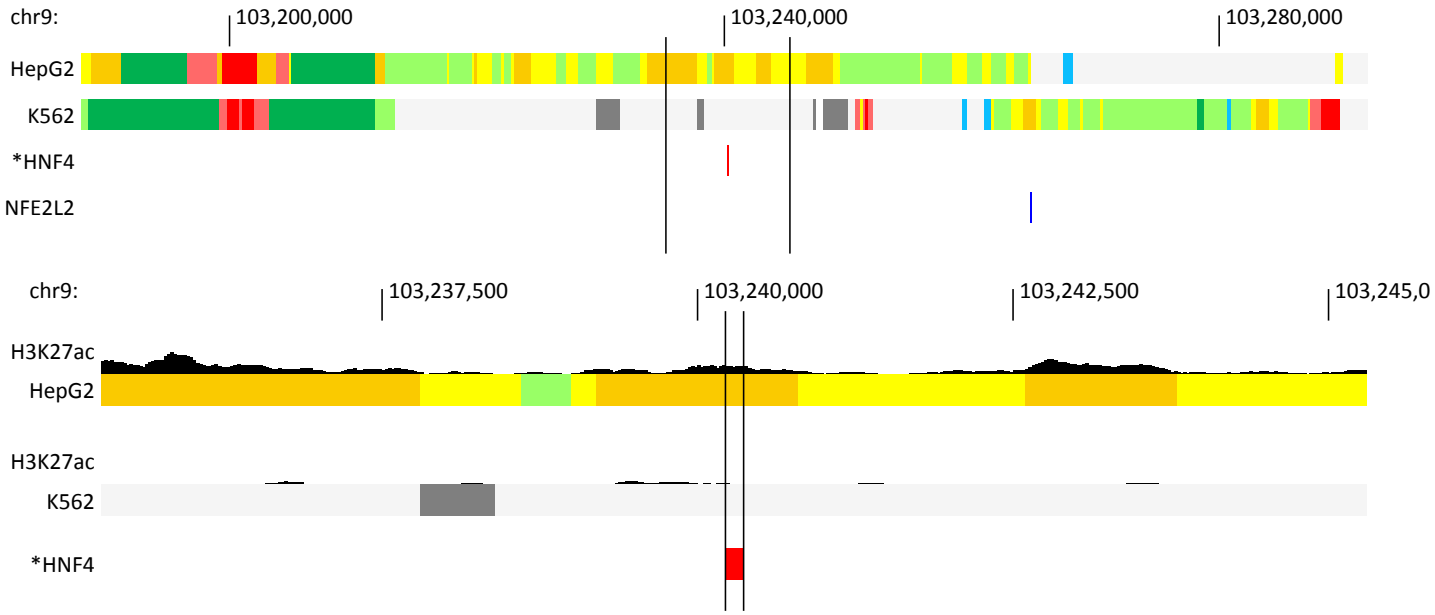
****** ***** ****

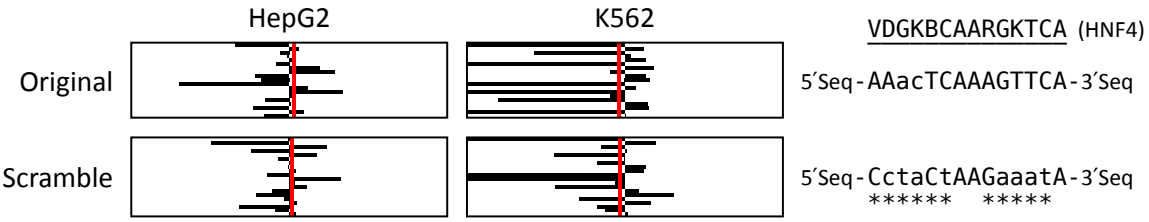
5′Seq = tgccctcctgggatgtgttaagtctgttttgtagtgttatagttacagaggttgaacaacgggt

3′Seq = ttcattaaactgccaagttgagtgagatattcctgtgtactcagtaattagtaactgctgtag

1333 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr9 103240287 103240300 + (hg18)

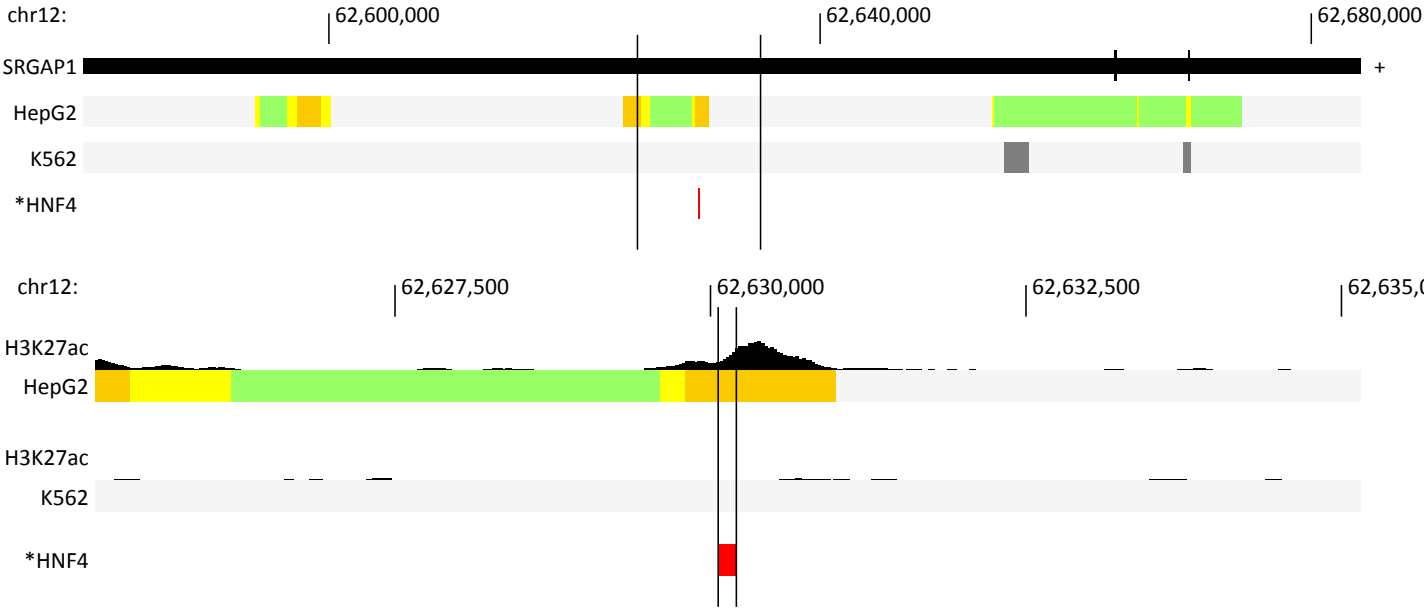


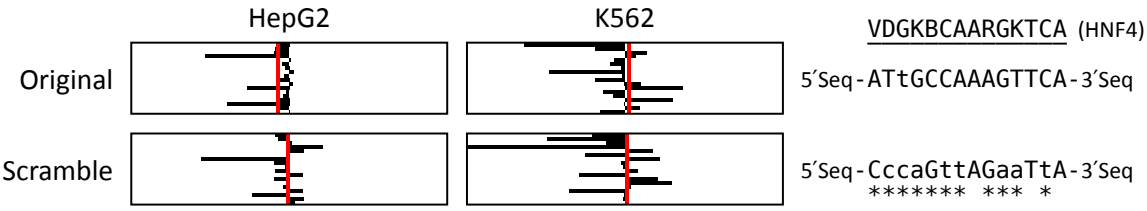


5′Seq = gctgccacttgctgctgttcttgtagcatcagcatttgcccacctctggggcttgatgtgcaactg
3′Seq = ggaaaacaaagctaagggcttactggaccttagagaaacagcaactcttgaccaacatacactgc

1334 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr12 62630127 62630140 - (hg18)

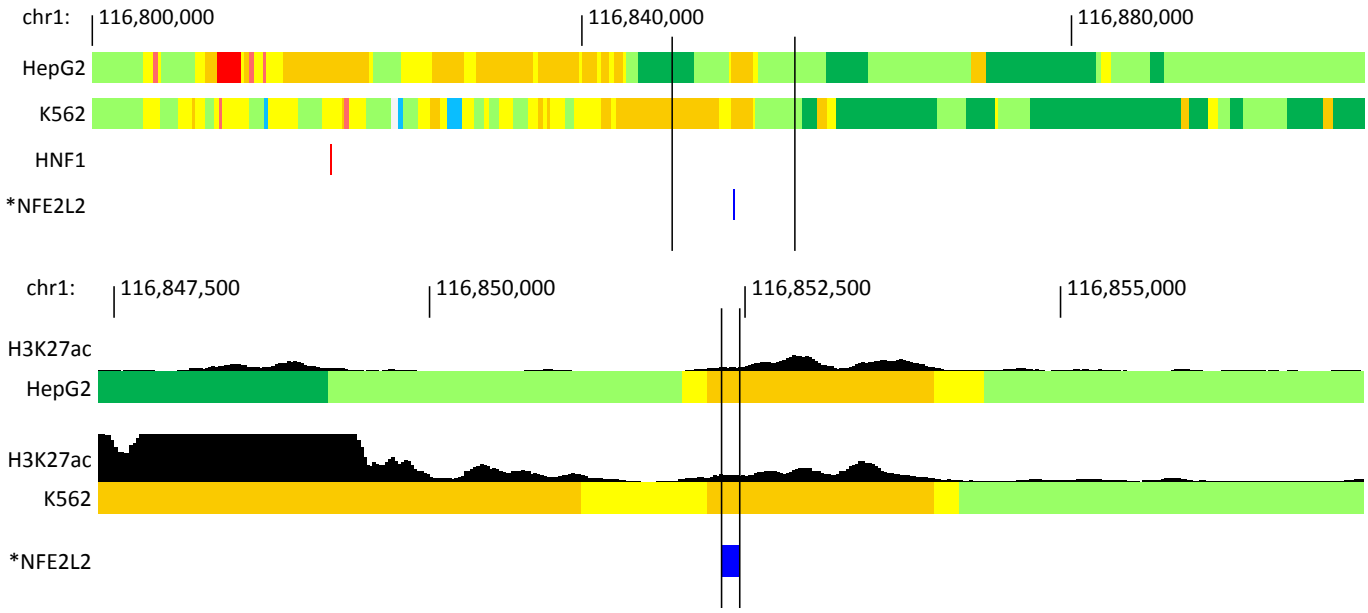


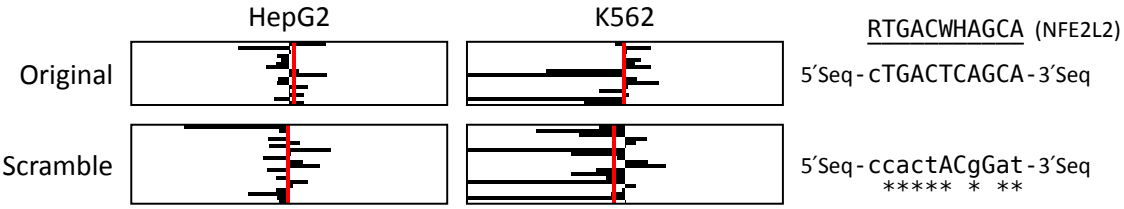


5′Seq = tatgtctttcaataagtttattcacattctagccagctgcaaaacaggattgagagccaagttcct
3′Seq = ctcttcaaaccggcagcctgaggtctgataaccagttaaaatgctcaacacaatcaccgcctttt

1335 NFE2L2 in K562 enhancer

chr1 116852381 116852391 - (hg18)

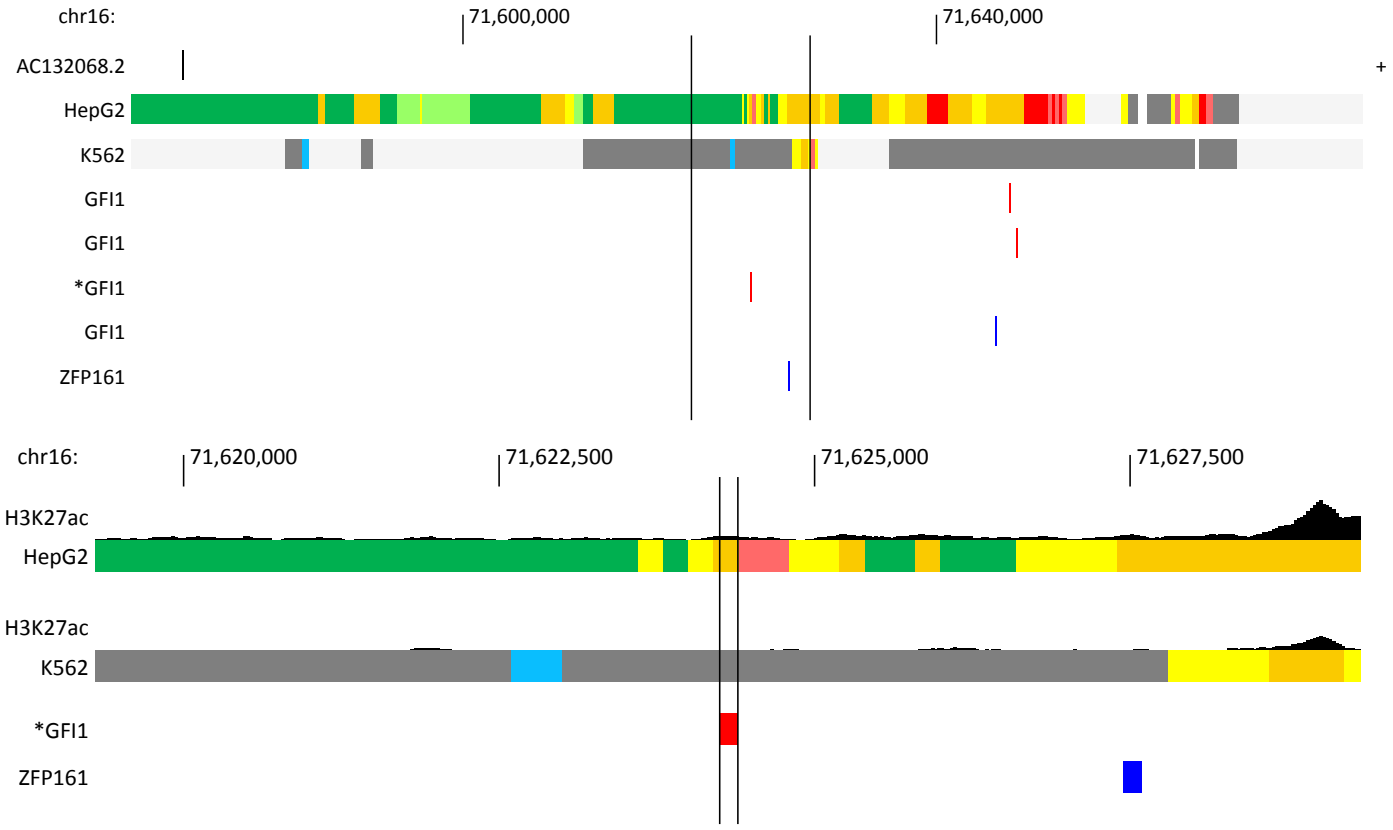


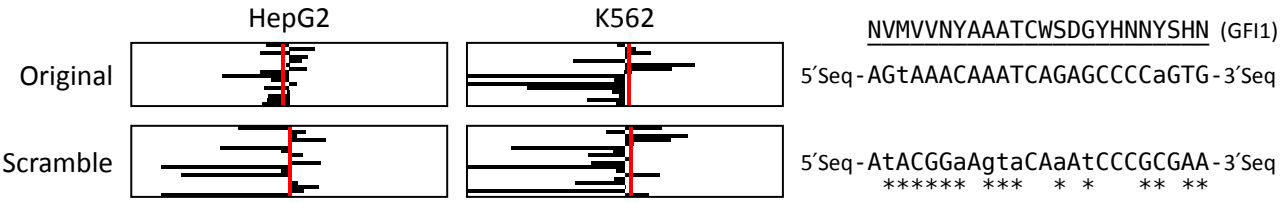


5′Seq = cctgacaggctagttacccactcatcaactcatggcacatgaggattttcagtgctgctactaggaa
3′Seq = ggttacatgacccggggctcactgaatgctcaggccagaaggatgcccatgccttccaggatgccac

1336 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr16 71624309 71624332 + (hg18)



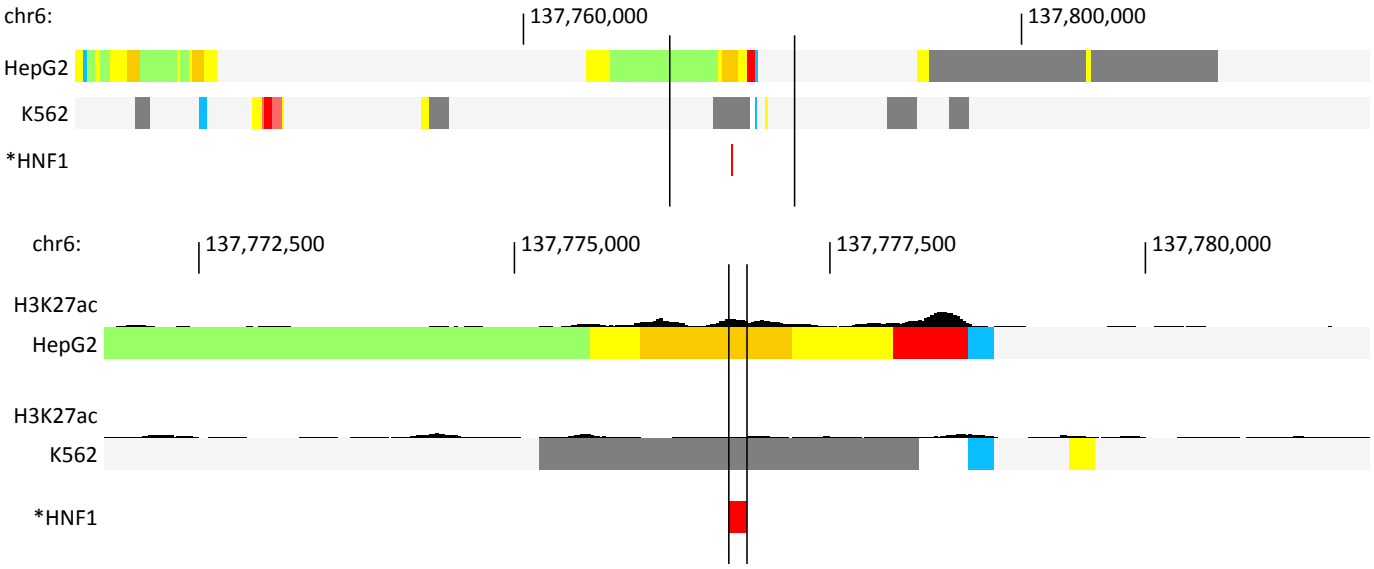


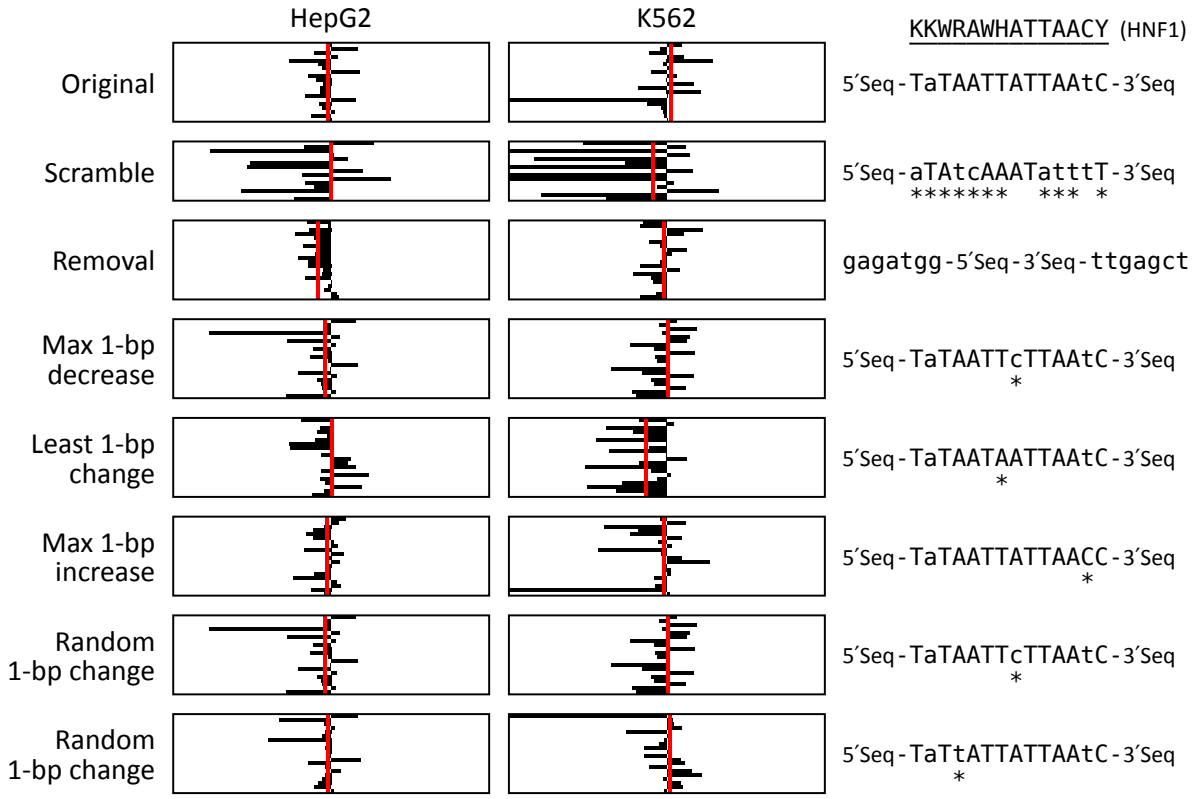
5′Seq = tcagacccttaagcatataaaaccggagaggttgaactgtttacattcacctaatgctcc

3′Seq = gagggggtttcaggcagggctgcggccagaccccactgggtgccaggcagcaggagcagg

1337 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 137776765 137776778 + (hg18)



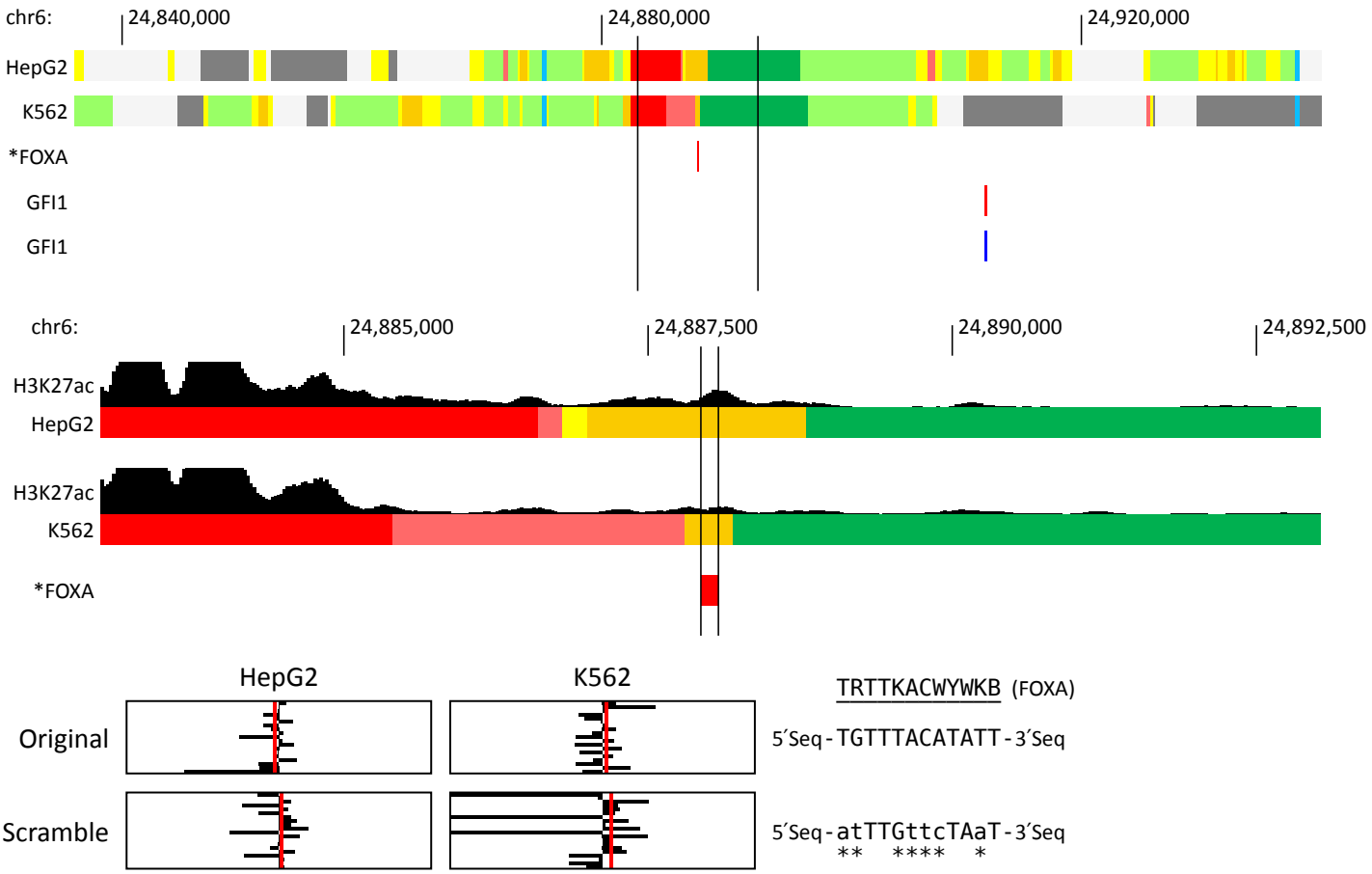


5′Seq = gcatttatggcaccataaatcaagggattaaaccatacacgagcagctggcacatgtgctaataac

3′Seq = atgtcaatttcacacccttcaaatttatgctatgtgctttctgtaggaaagccatccctggcgcc

1338 FOXA in HepG2 enhancer (conserved at 40% confidence)

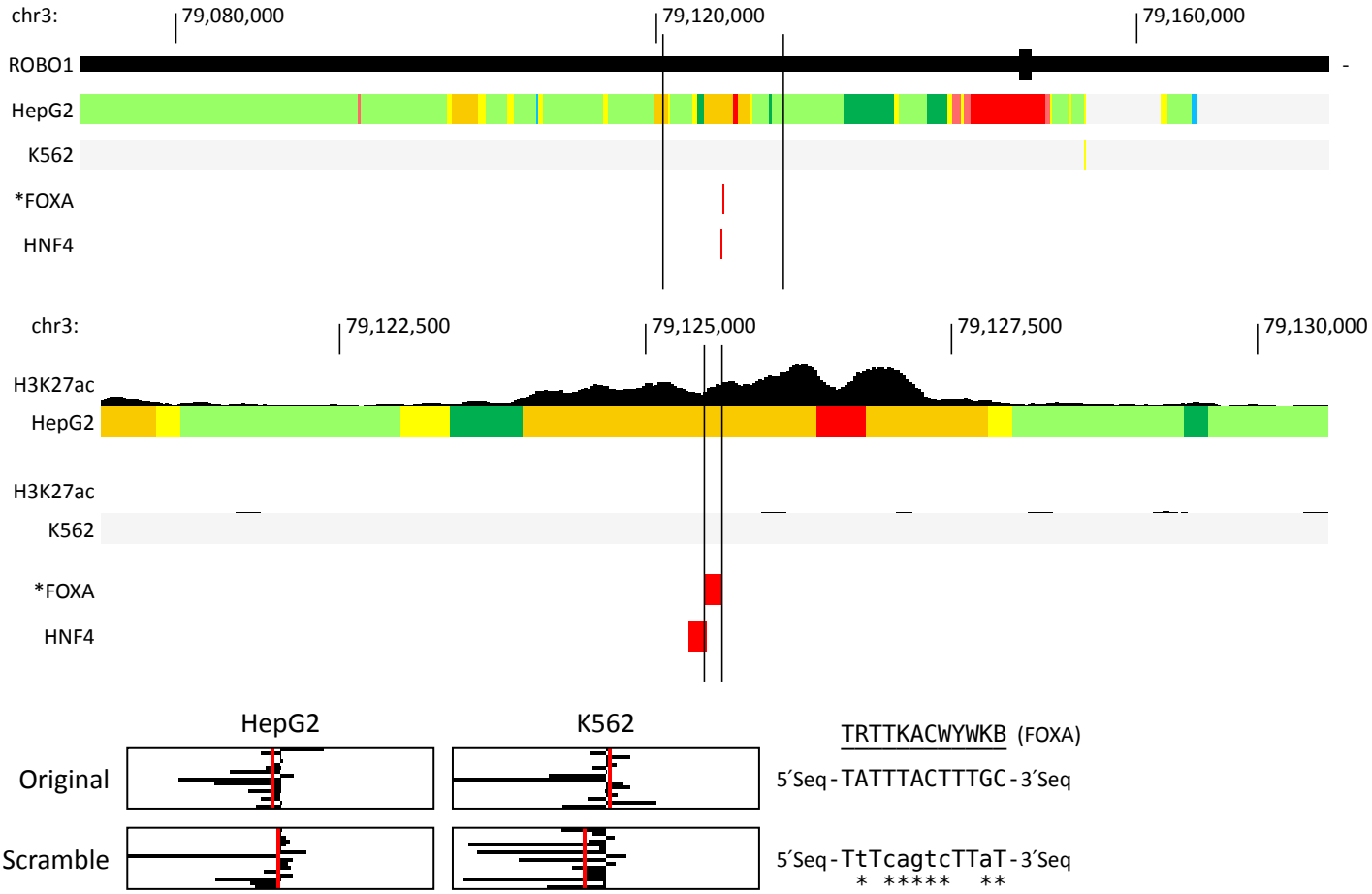
chr6 24888001 24888012 + (hg18)



5′Seq = gcagtataactaatgatattttgcaaaaataggagagaactttcagatcatgaaatatacaggaagt
3′Seq = acaaggaaggcaatattttcaccaaaacaatagcttgggcattttagagtattttagtatgcctca

1339 FOXA in HepG2 enhancer (conserved at 40% confidence)

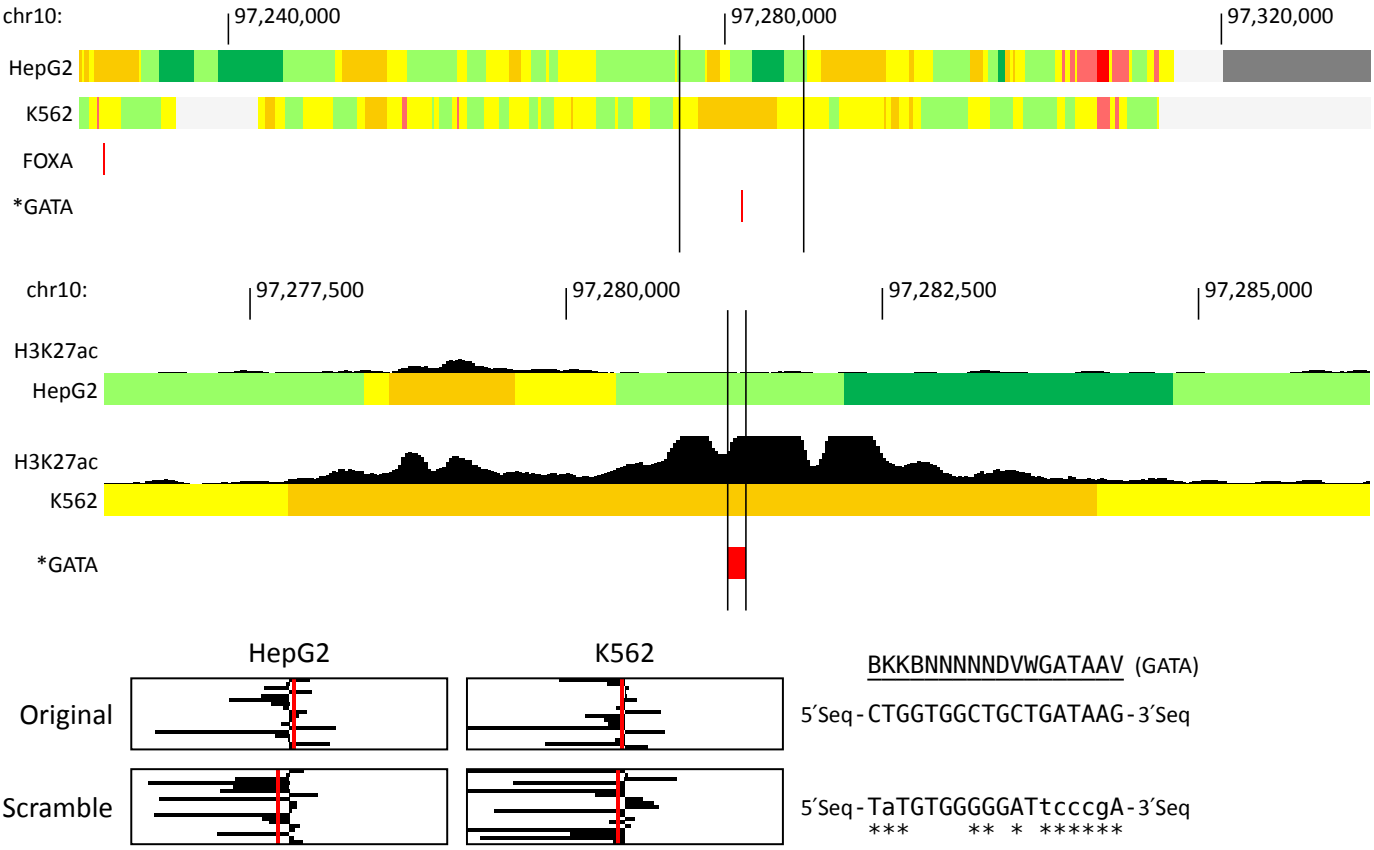
chr3 79125547 79125558 + (hg18)



5′Seq = tacaacgtgaatcacaccagatcgggtggctgtgtttttttgaaggatccattggcccaaatgaaaac
3′Seq = ccataattgttaattcctatgaggcttttgctgtgttatttagttttccagggcttccaaagtgaa

1340 GATA in K562 enhancer (conserved at 70% confidence)

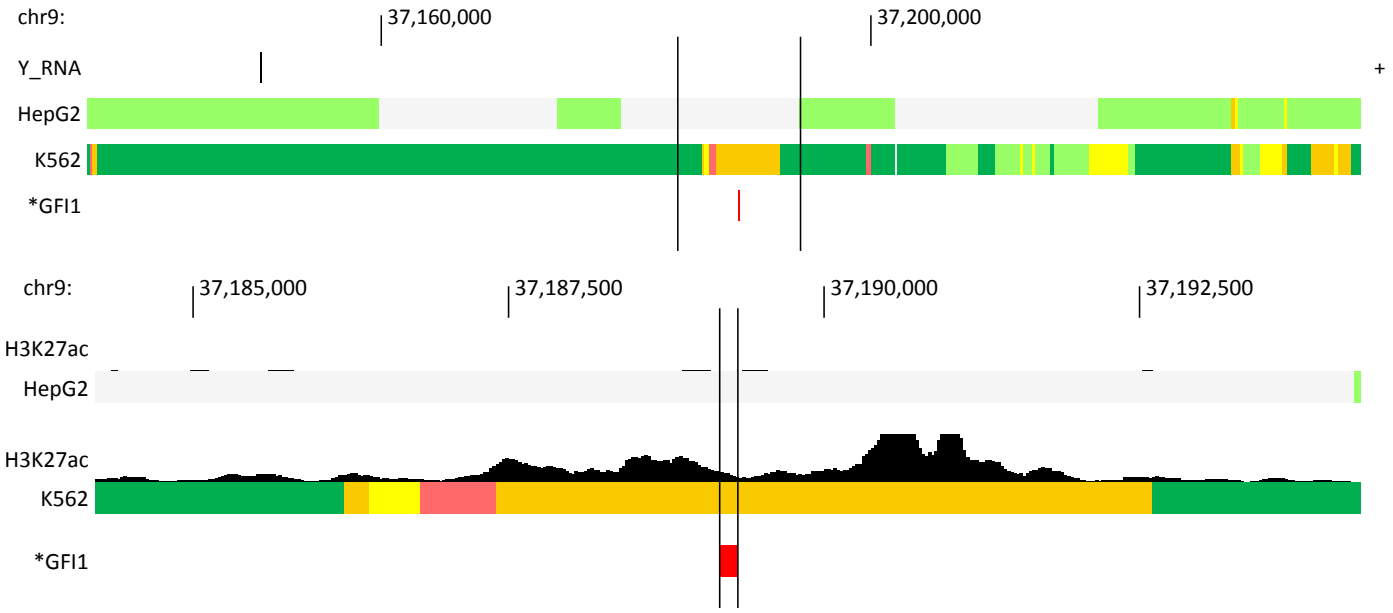
chr10 97281341 97281358 + (hg18)

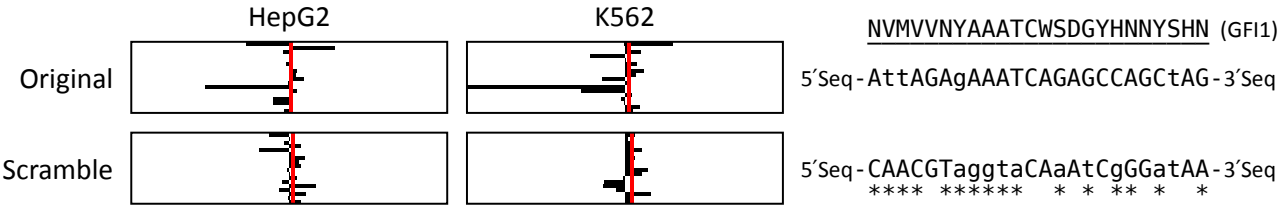


5′Seq = tttggaactcttttgacactaaaacctctttccctgagaacctgccttcaggggcaaaacaagg
3′Seq = ccacagcgtggcatggagaagcagcacggactttcaacgaggcagcccccgtcccgggtccac

1341 GFI1 in K562 enhancer (conserved at 40% confidence)

chr9 37189234 37189257 - (hg18)

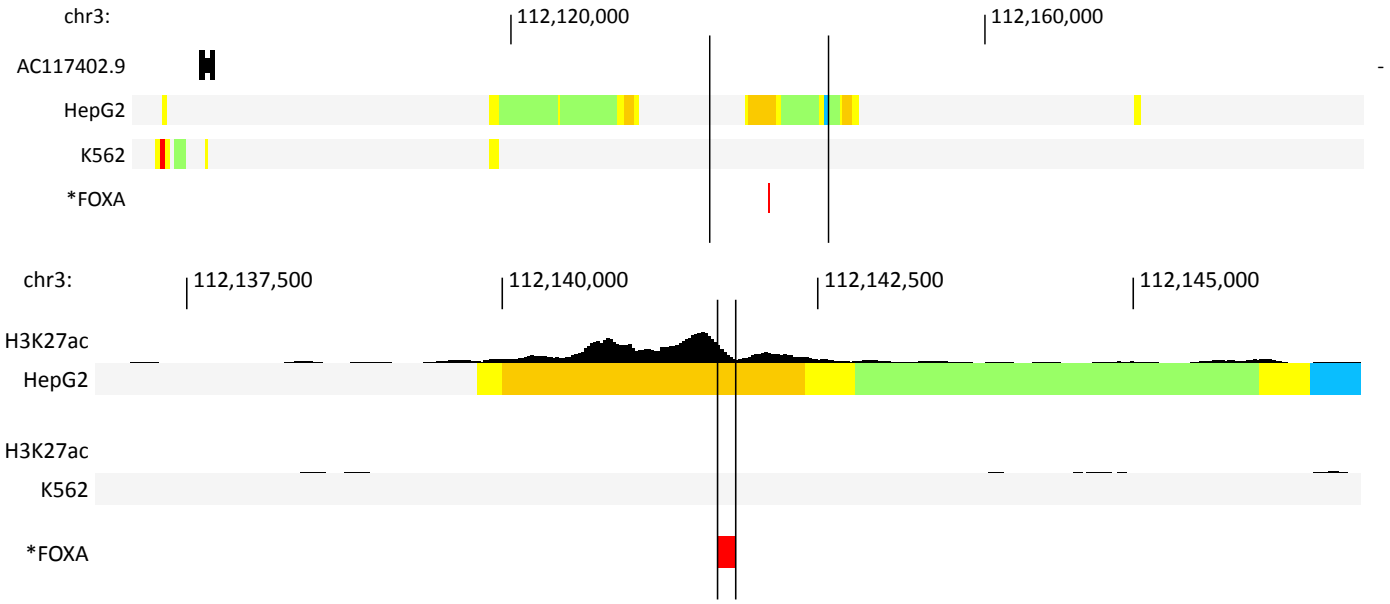


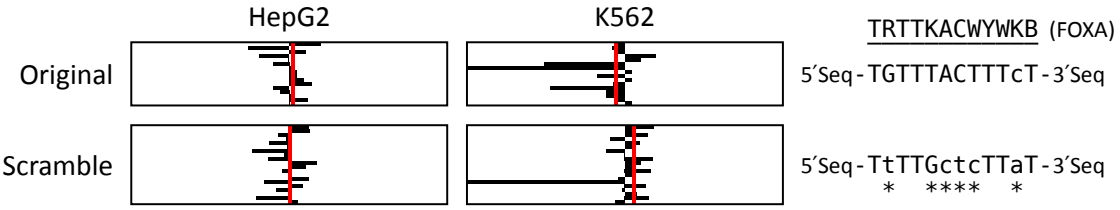


5′Seq = agaaaagaaaaaagaaaaagaaacagtagaaaccaagaatgacagaacagcaaagacaaga
3′Seq = gctacaaactagcagcttgtgtctttttctttgctgtttgttctttaaacaggaaaac

1342 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 112141773 112141784 + (hg18)

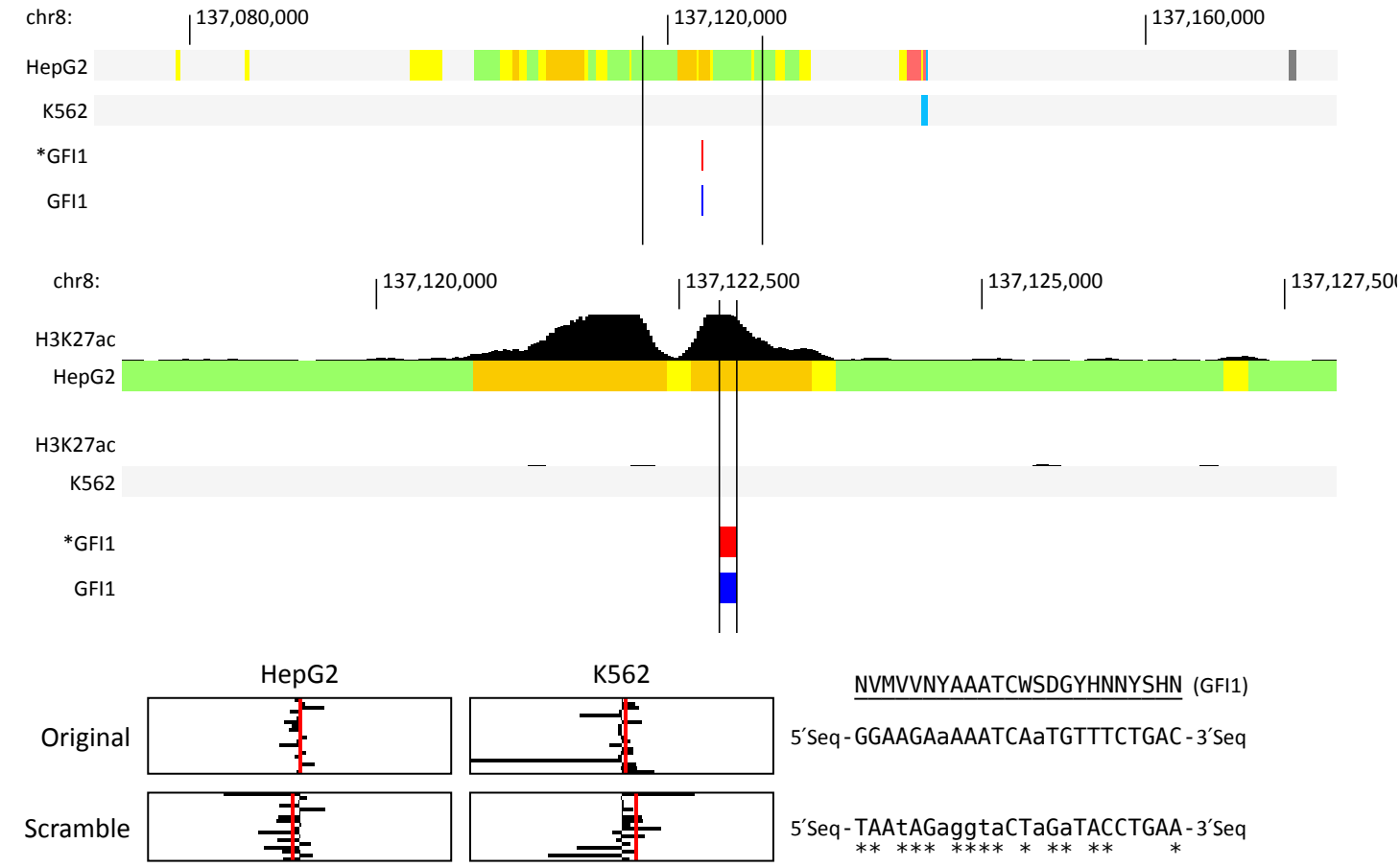




5′Seq = gttttccctaacaccaccttcatgaaacactctggttgctttgcaattgttgtctgtagctcagctt
3′Seq = gaggttgctgattaactgacatgttttctgtcaagtgaaatttacagacacattaccatgtttgac

1343 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr8 137122893 137122916 - (hg18)



5′Seq = ctaaaagtgtcaaaagcaaactggcacagtaaaggatatgaggtcagaaaatgaaaggaaa
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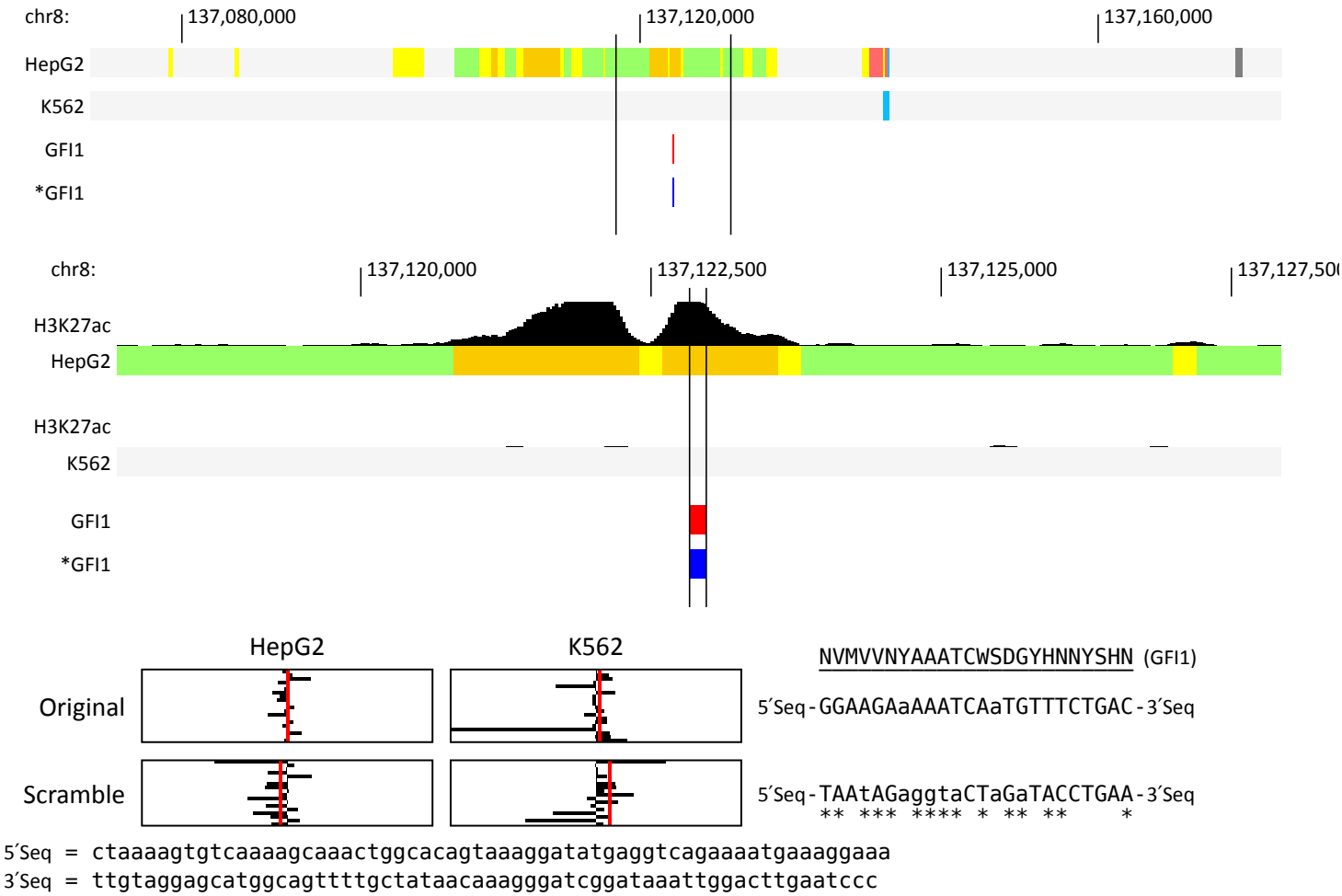
1344 GFI1 in HepG2 enhancer

chr8 137122893 137122916 - (hg18)



5′Seq = ctaaaagtgtcaaaagcaaactggcacagtaaaggatatgaggtcagaaaatgaaaggaaa
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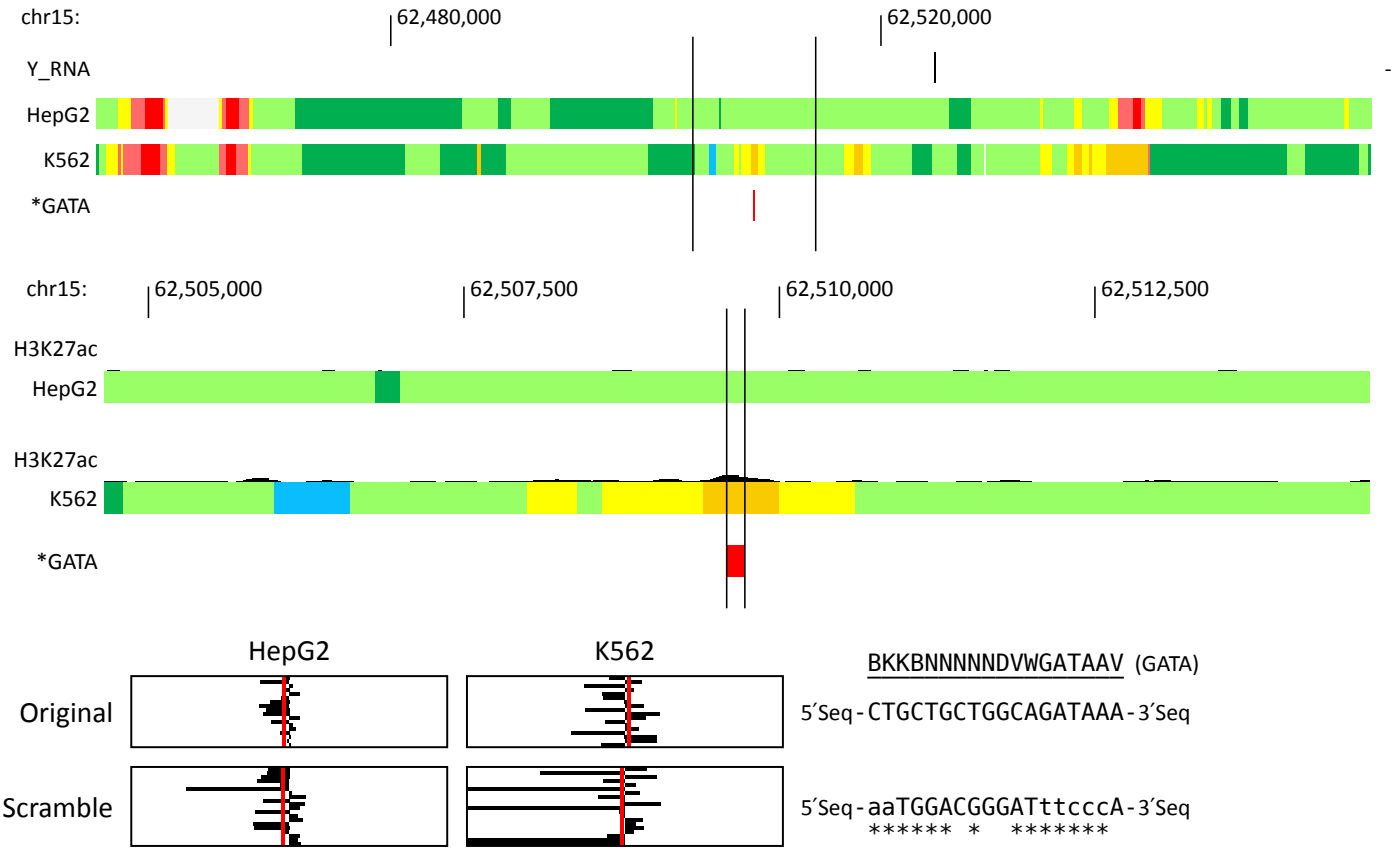
1345 GATA in K562 enhancer (conserved at 60% confidence)

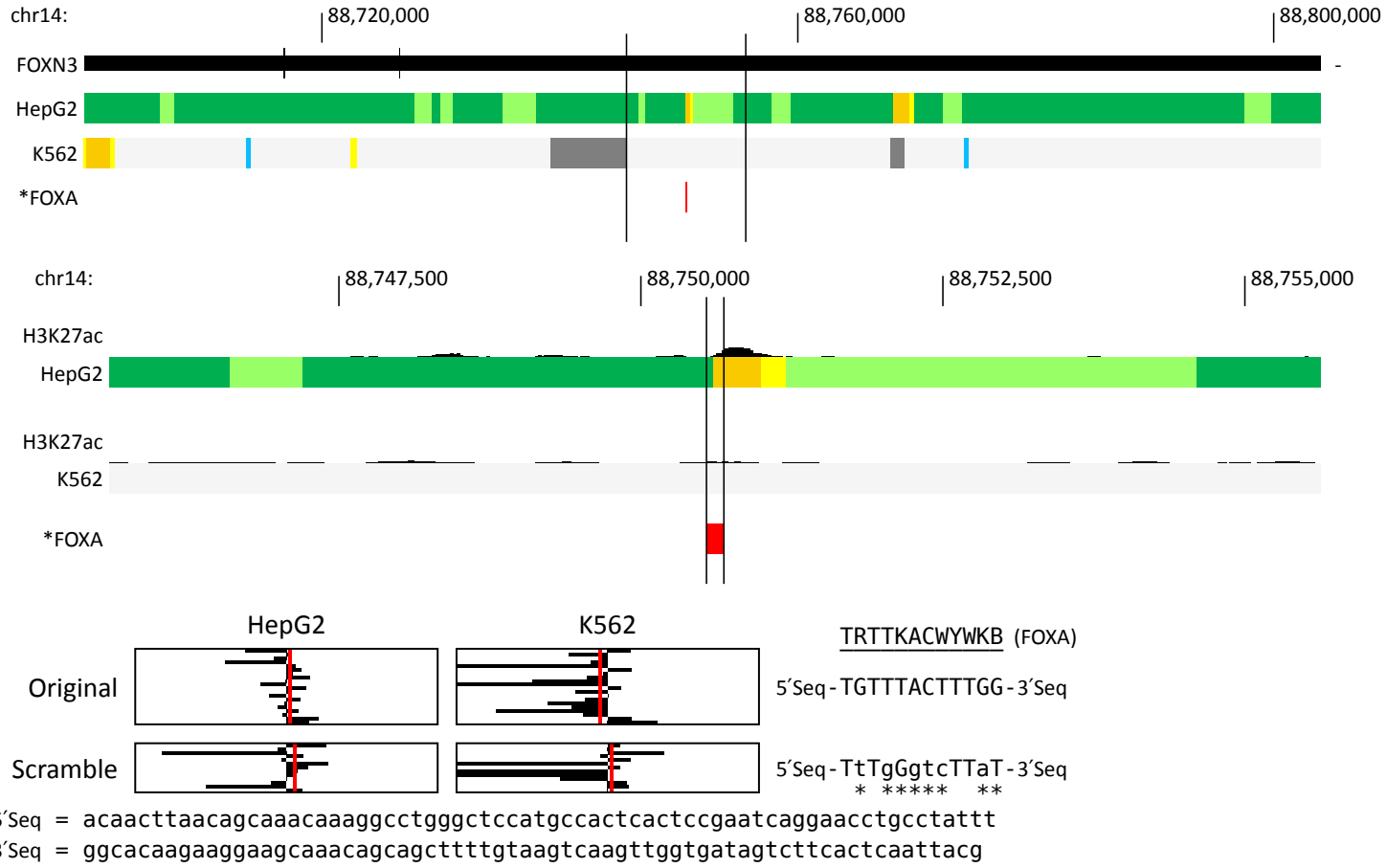
chr15 62509646 62509663 - (hg18)



5′Seq = caaaccacagccttgatgcattgttgcagtcaacatcctccctgctgtttttgagagcttacat
3′Seq = atgctggcaaacagcatgggctccttccaggggaatcacaggagaagctttaacgagatggct

1346 FOXA in HepG2 enhancer (conserved at 40% confidence)

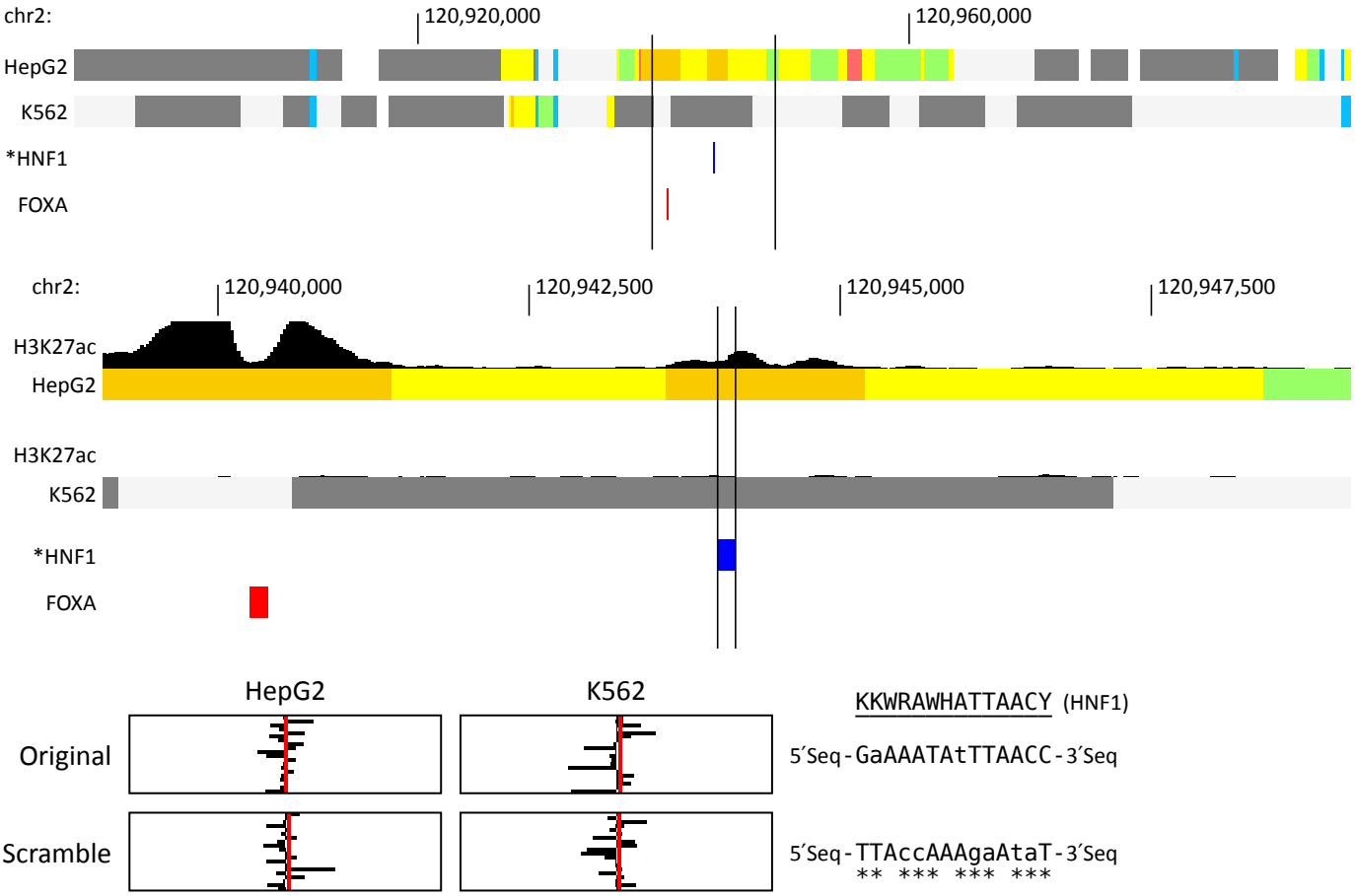
chr14 88750610 88750621 + (hg18)



5′Seq = acaacttaacagcaaacaaaggcctgggctccatgccactcactccgaatcaggaacctgcctattt
3′Seq = ggcacaagaaggaagcaaacagcagcttttgtaagtcaagttggtgatagtcttcactcaattacg

1347 HNF1 in HepG2 enhancer

chr2 120944081 120944094 - (hg18)



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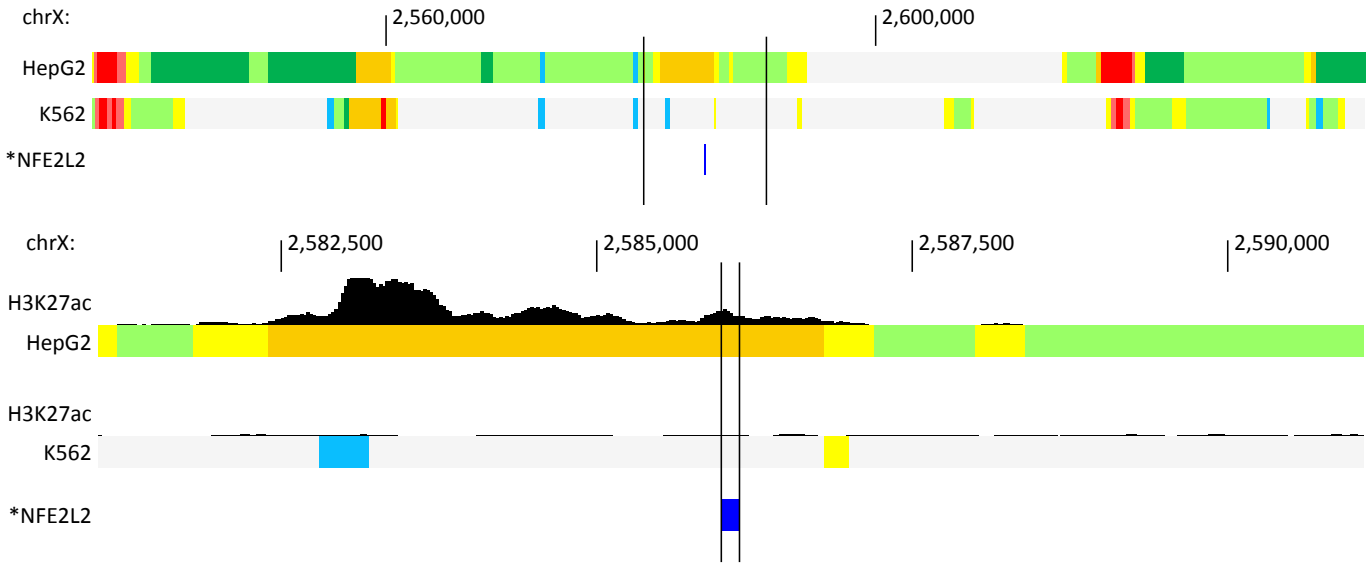
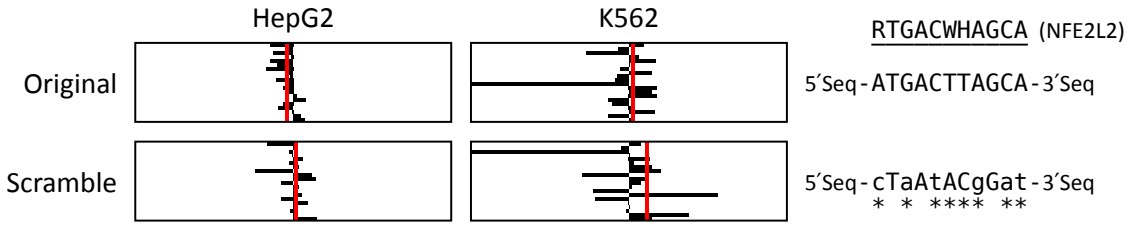
1348 NFE2L2 in HepG2 enhancer

chrX 2586054 2586064 + (hg18)





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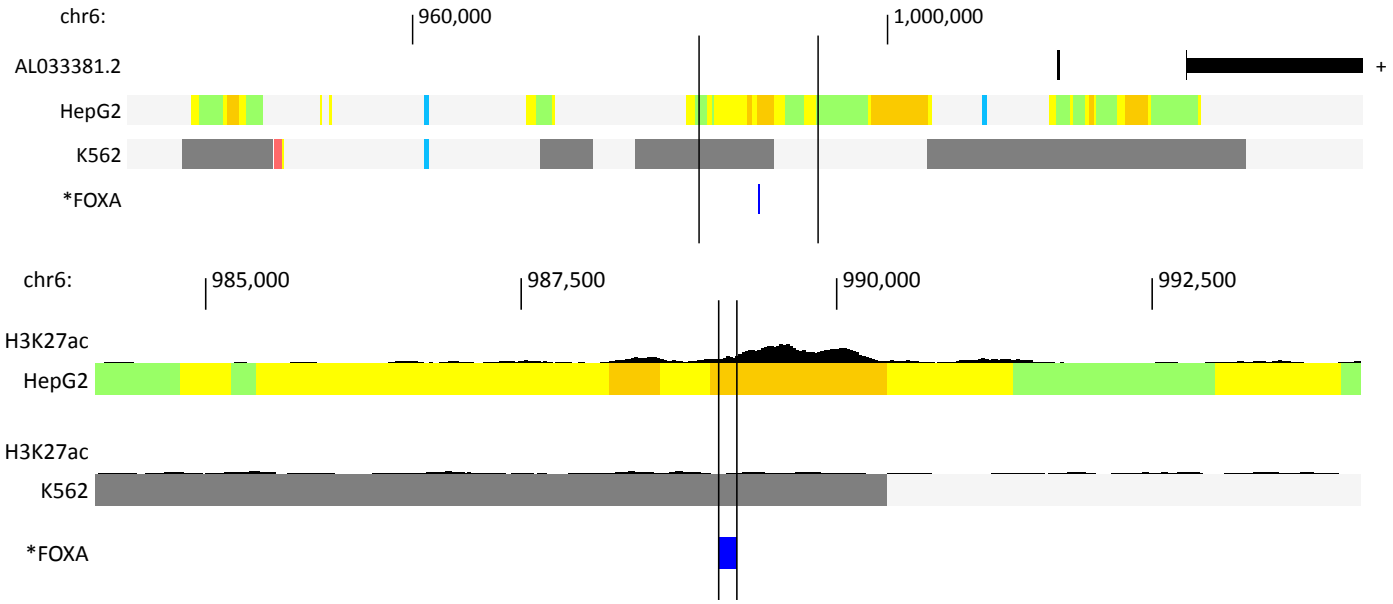
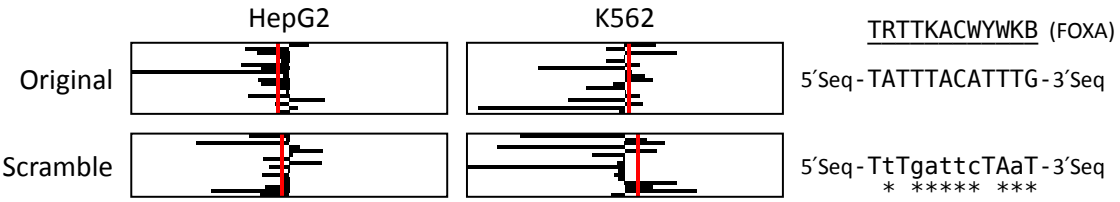
3′Seq = gttgcccaggcgaggggaaccacttccaacaggtgggactaatcattcagggttttcgaaagttctc

1349 FOXA in HepG2 enhancer

chr6 989132 989143 - (hg18)





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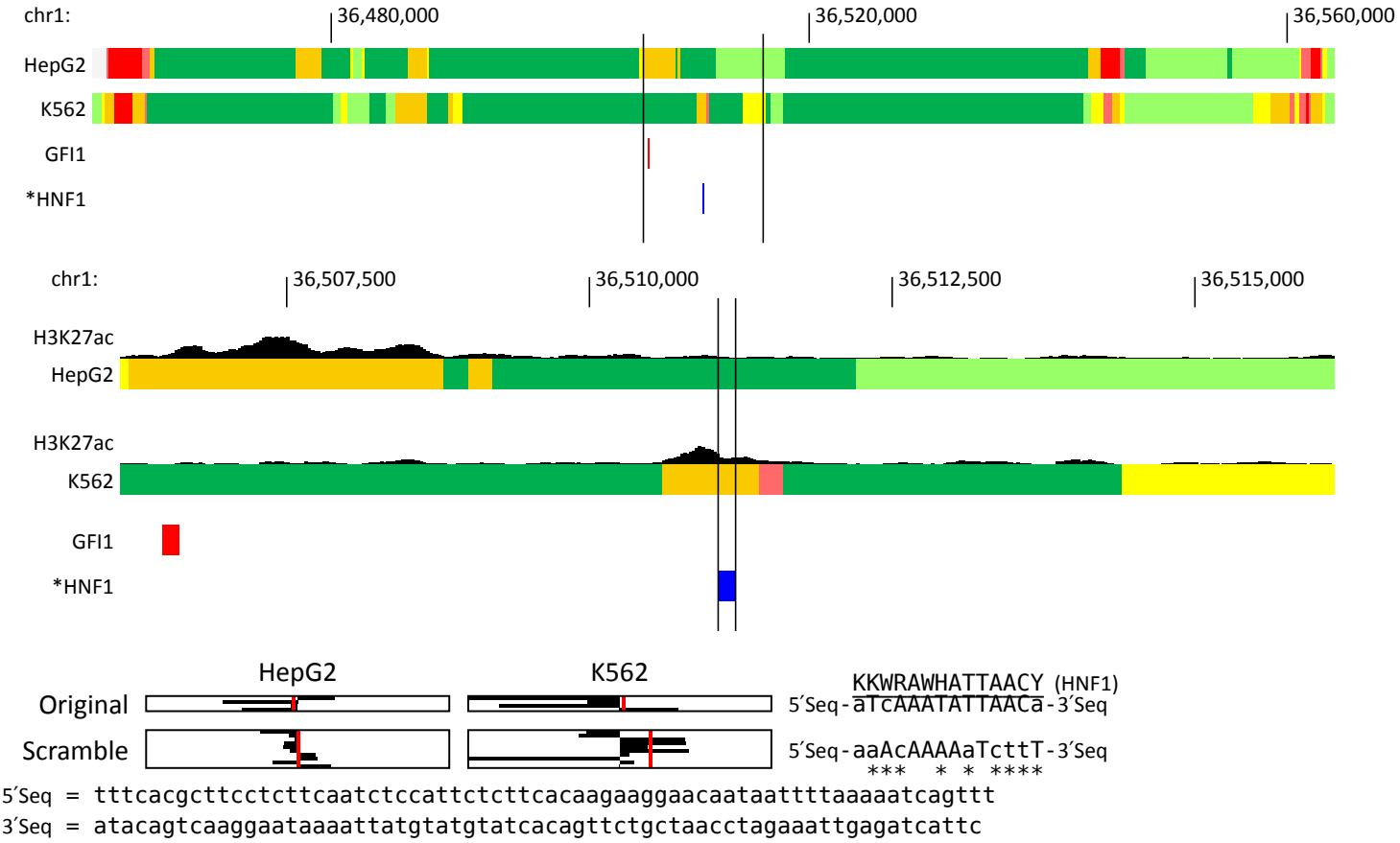
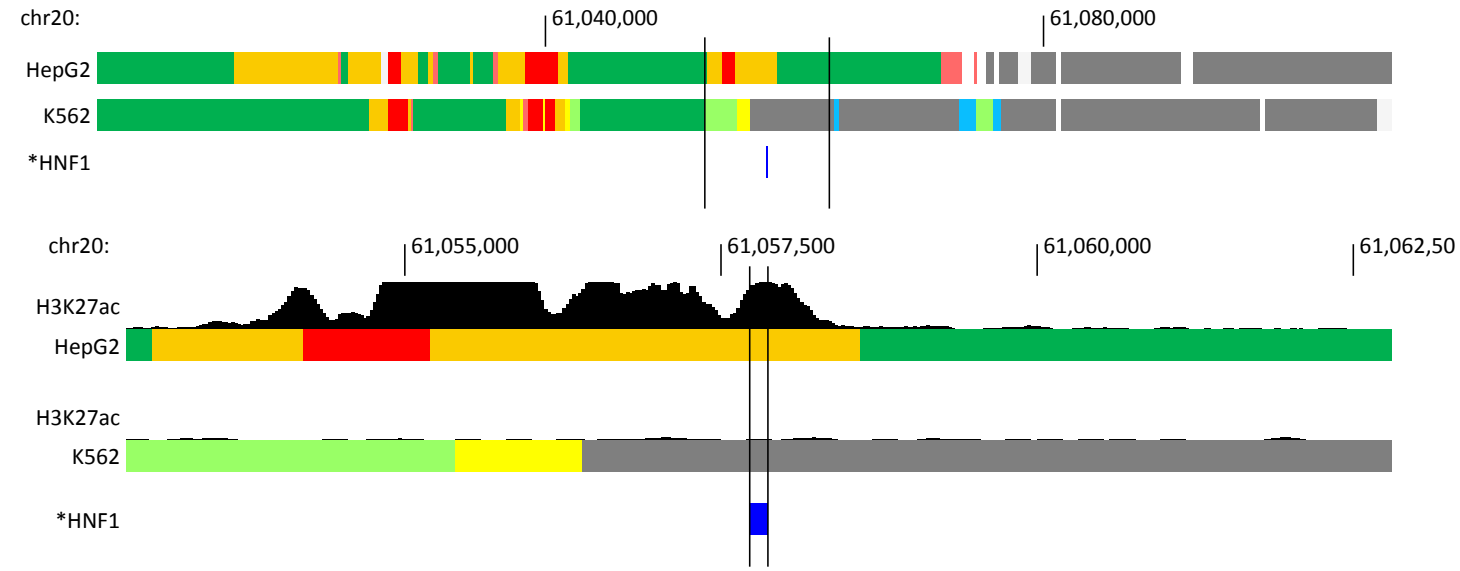
1350 HNF1 in K562 enhancer

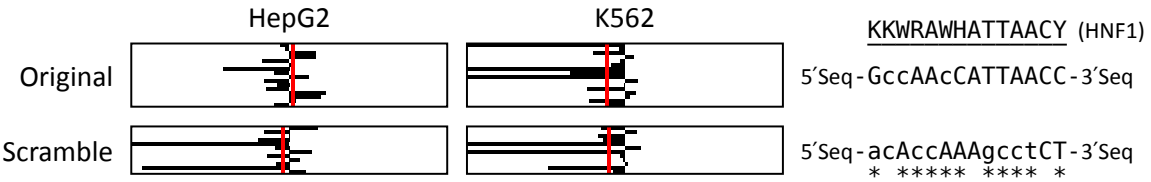
chr1 36511129 36511142 - (hg18)



1351 HNF1 in HepG2 enhancer

chr20 61057793 61057806 - (hg18)





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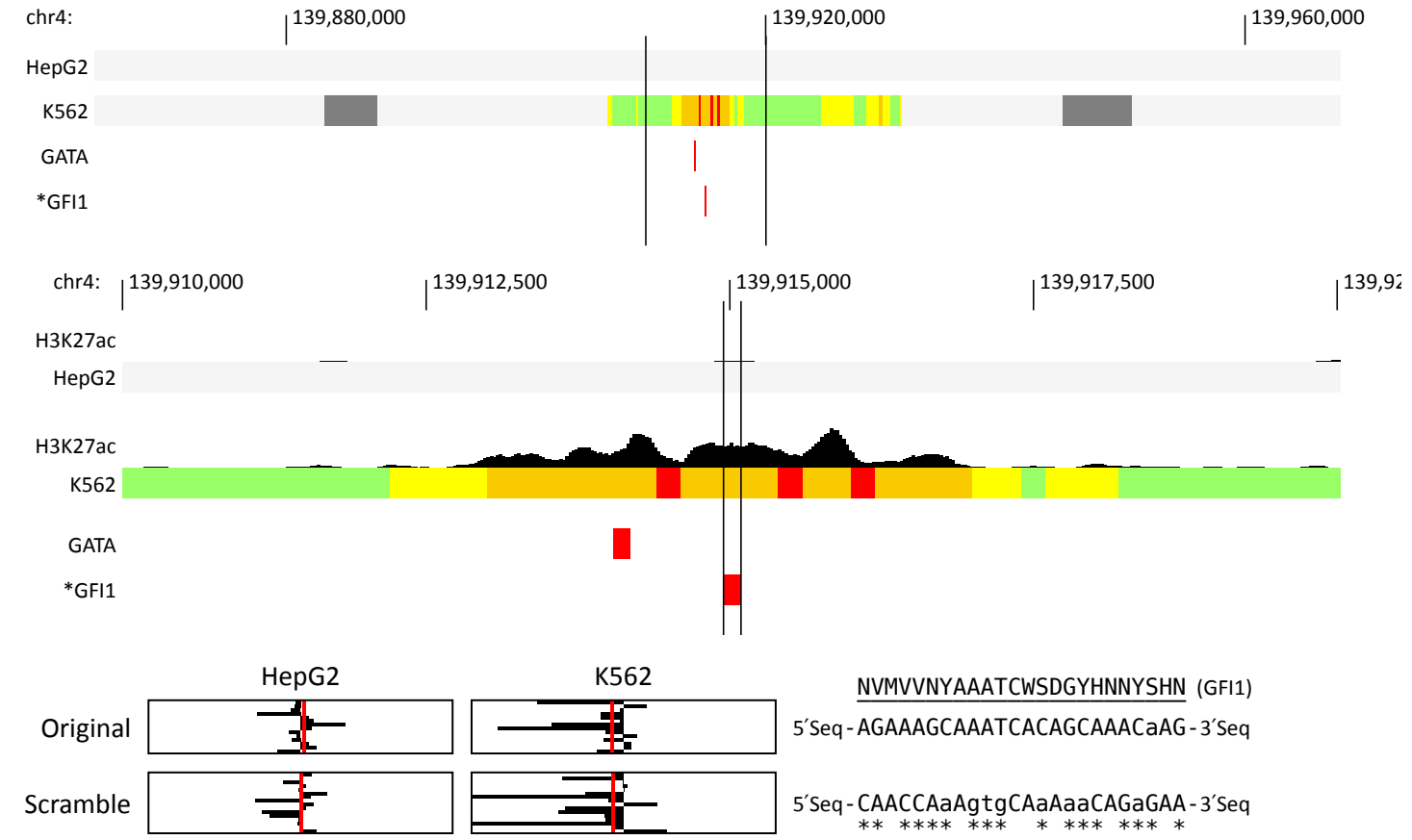
3′Seq = cctggagtttggagaaagttgtgtgggaggaagtgctgtctgtcctggaacttggcagtgagtgt

1352 GFI1 in K562 enhancer (conserved at 40% confidence)

chr4 139915009 139915032 + (hg18)



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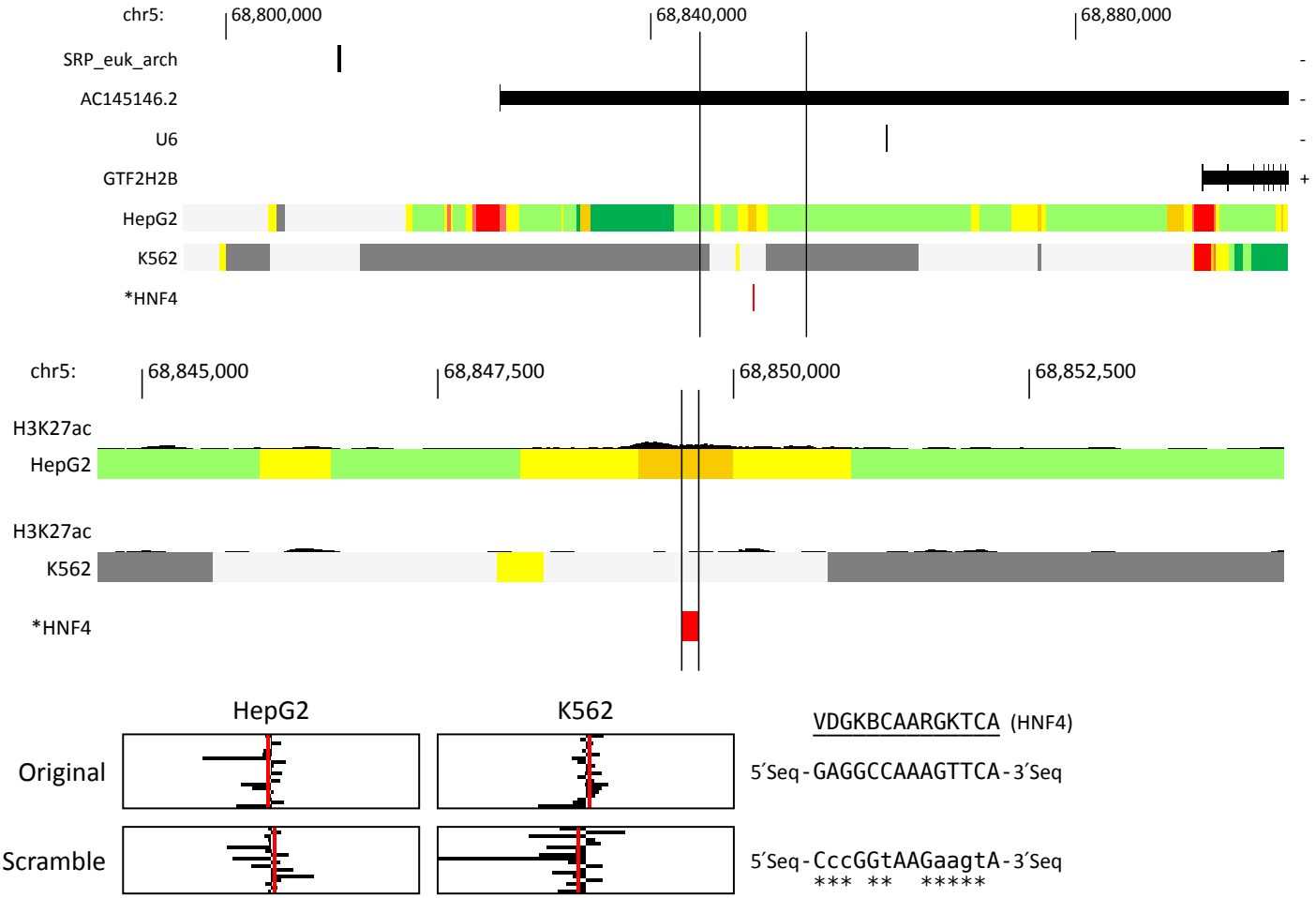
3′Seq = acagcagacaacaacaaaagagaagaatccacaaaattctggaagatgaaaaggaggtgg

1353 HNF4 in HepG2 enhancer (conserved at 50% confidence)

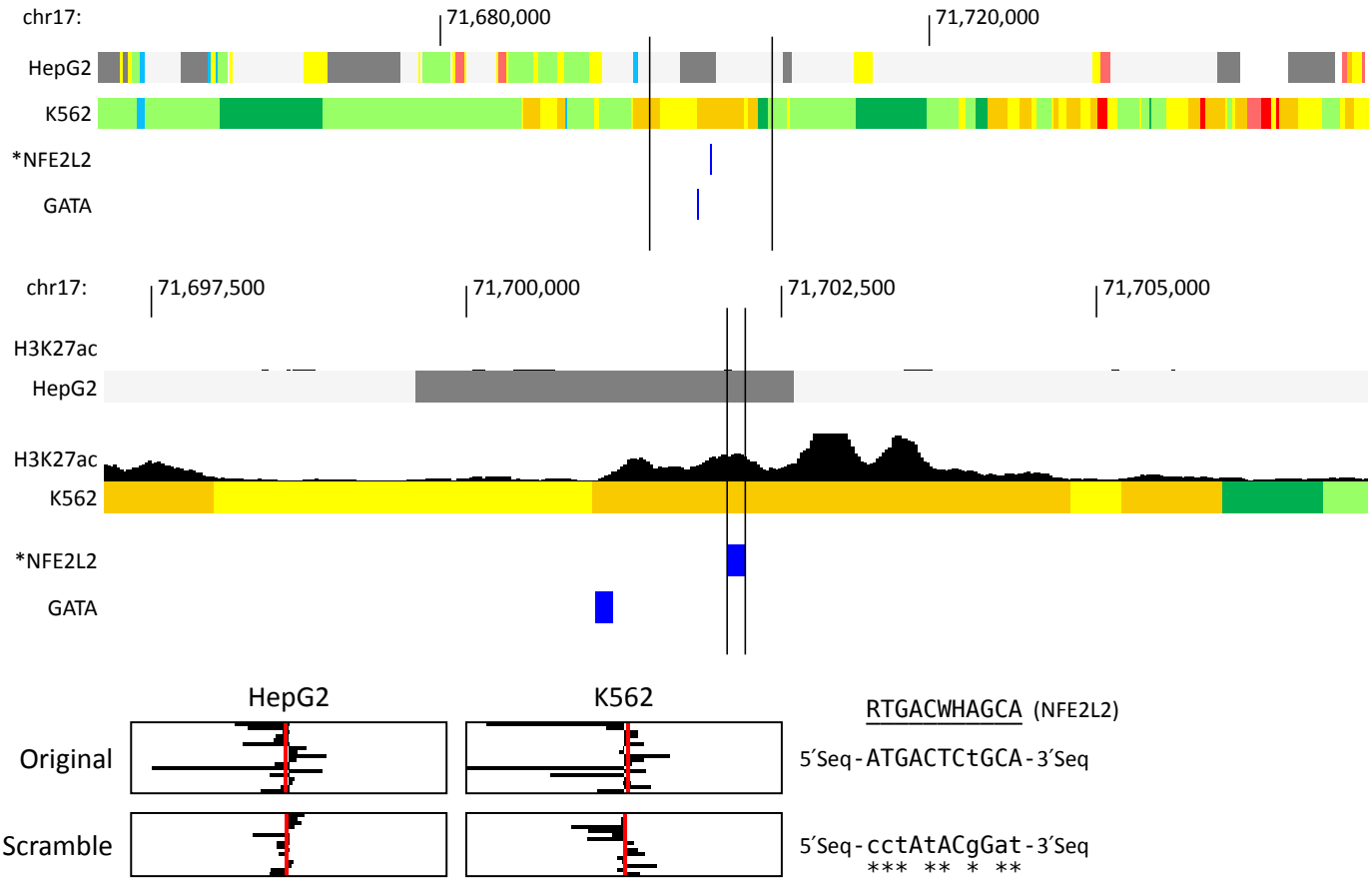
chr5 68849628 68849641 - (hg18)



5′Seq = atcttttgccaaattatcaaaagcaactagaactgattaaaccttcatgacagtaaaatcagatga
3′Seq = ctgggactctaatattactggcattggtctcccttgagtcgggtttgttgttttaagcctcttg

1354 NFE2L2 in K562 enhancer

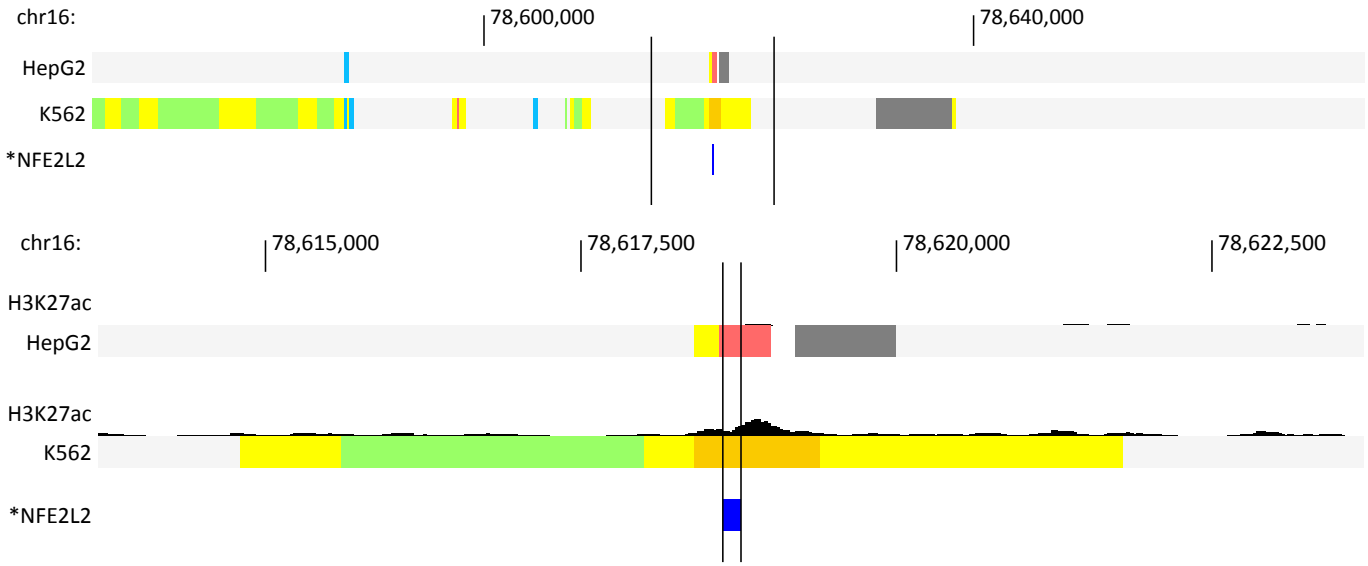
chr17 71702136 71702146 + (hg18)

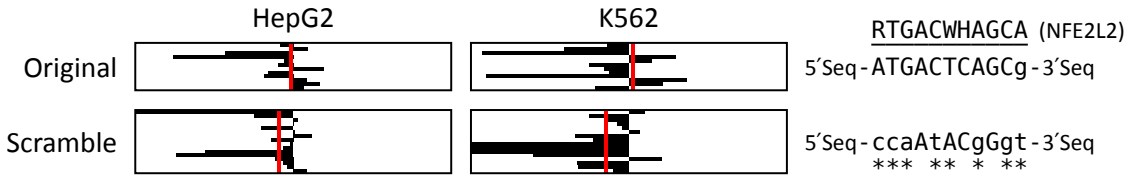


5′Seq = caaatacatcagaaatagtgaagccagtctgatggtgggaagggcggtaaattcactagagcctgag
3′Seq = ggctctgctgaaagacccccgaaagcaggacgcttcttagtgggctgtgaagtggatagtttaaacc

1355 NFE2L2 in K562 enhancer

chr16 78618691 78618701 + (hg18)

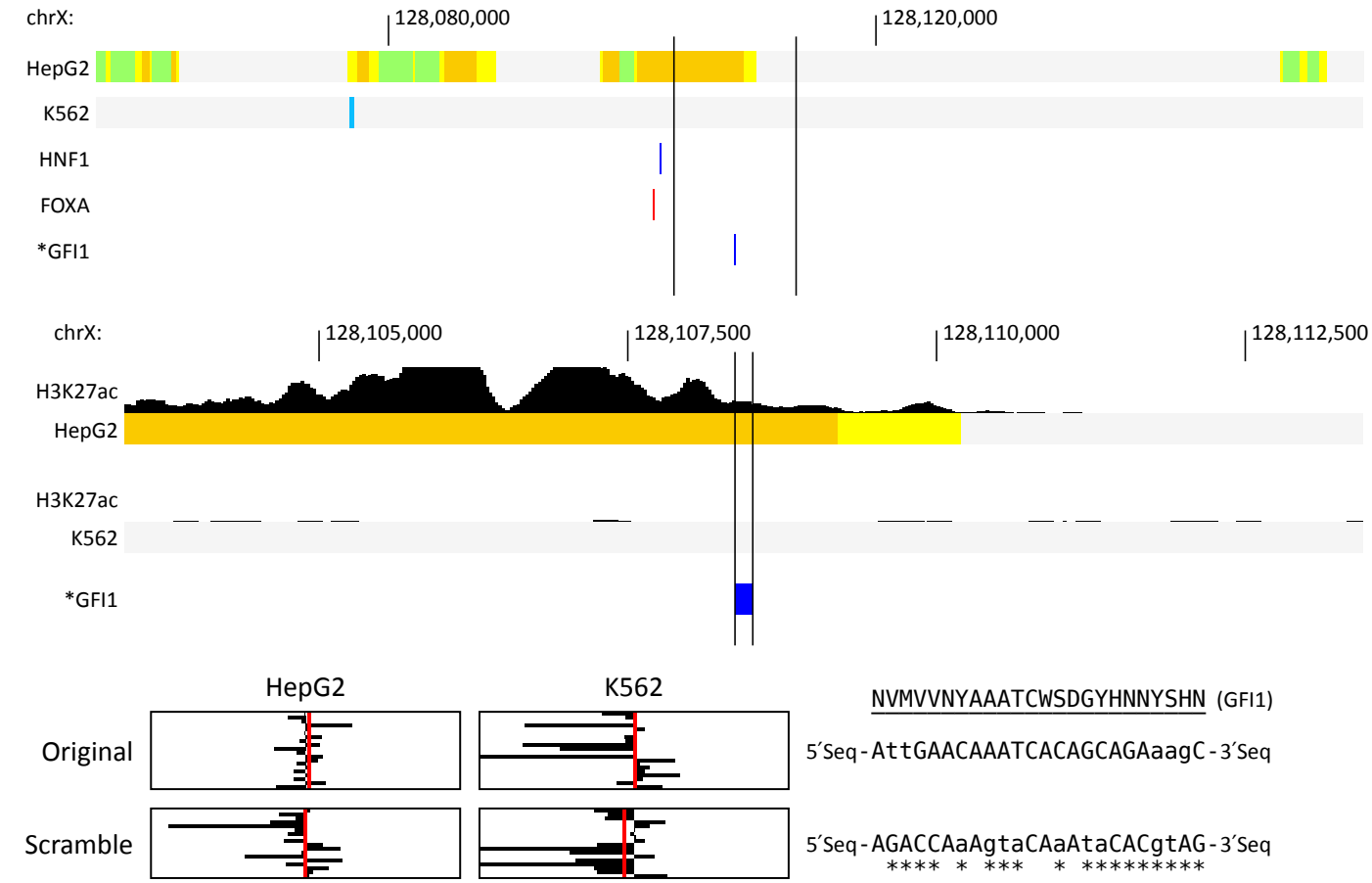




5′Seq = cccggggcatctccgccaggctgtagagtttcccacctgccctgatccctgtctgaatagagatagc
3′Seq = ccggggaaagggtggttctctctgtctagctgatgtcctcagctccaggaagctctgggcttgcggc

1356 GFI1 in HepG2 enhancer

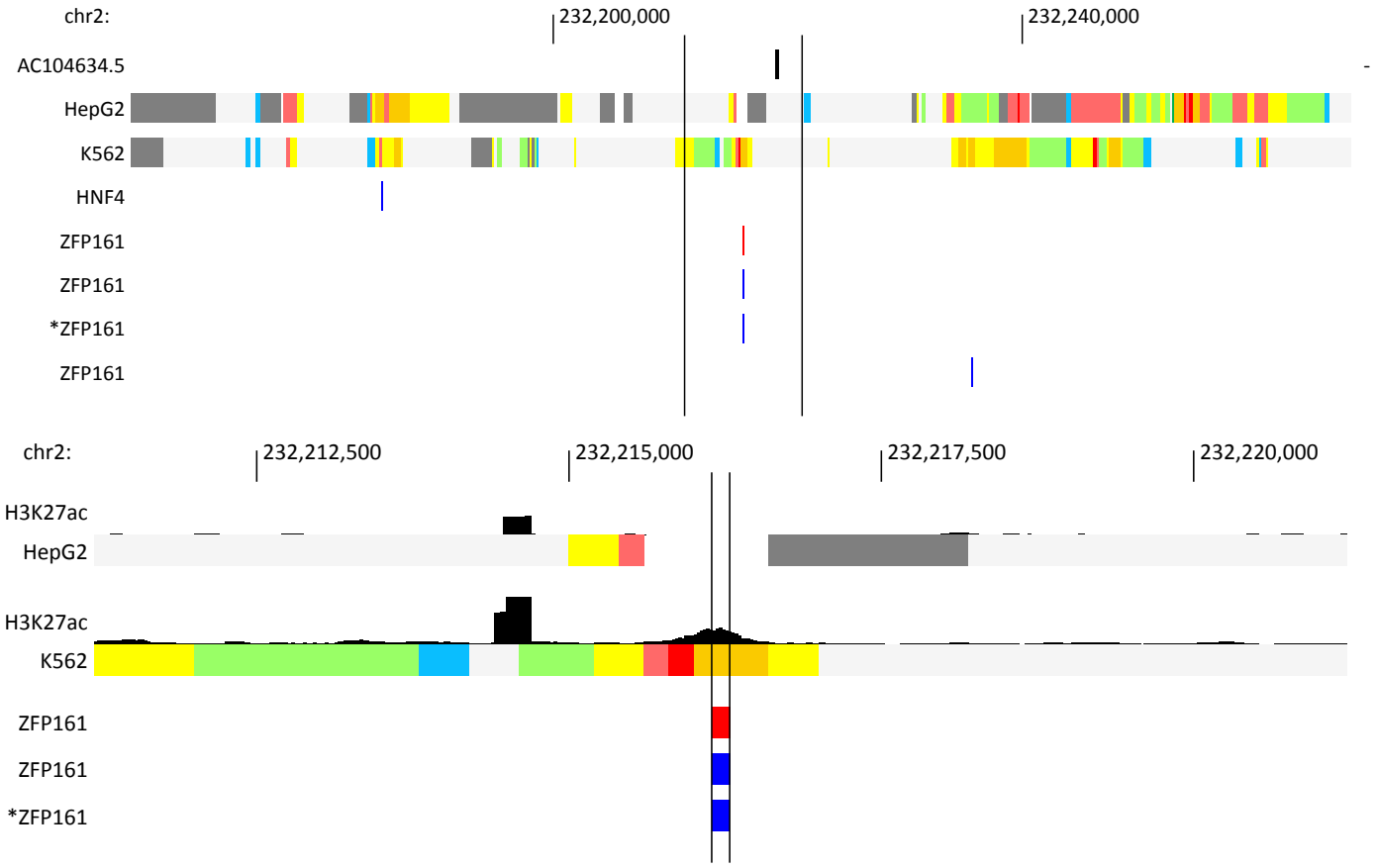
chrX 128108429 128108452 + (hg18)

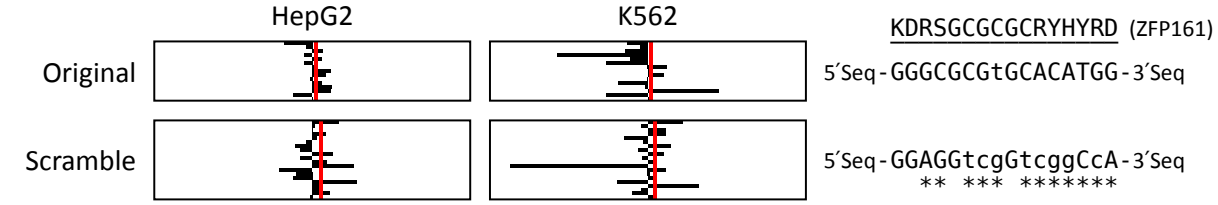


5′Seq = gatgagaagatattgaataaagcagcccagcagaccagagccaaagacatcttgatgtaaa
3′Seq = agcctcatttatttgatagaggcattaatttcaggatggggaaaaggagagagatgatgg

1357 ZFP161 in K562 enhancer

chr2 232216207 232216222 - (hg18)

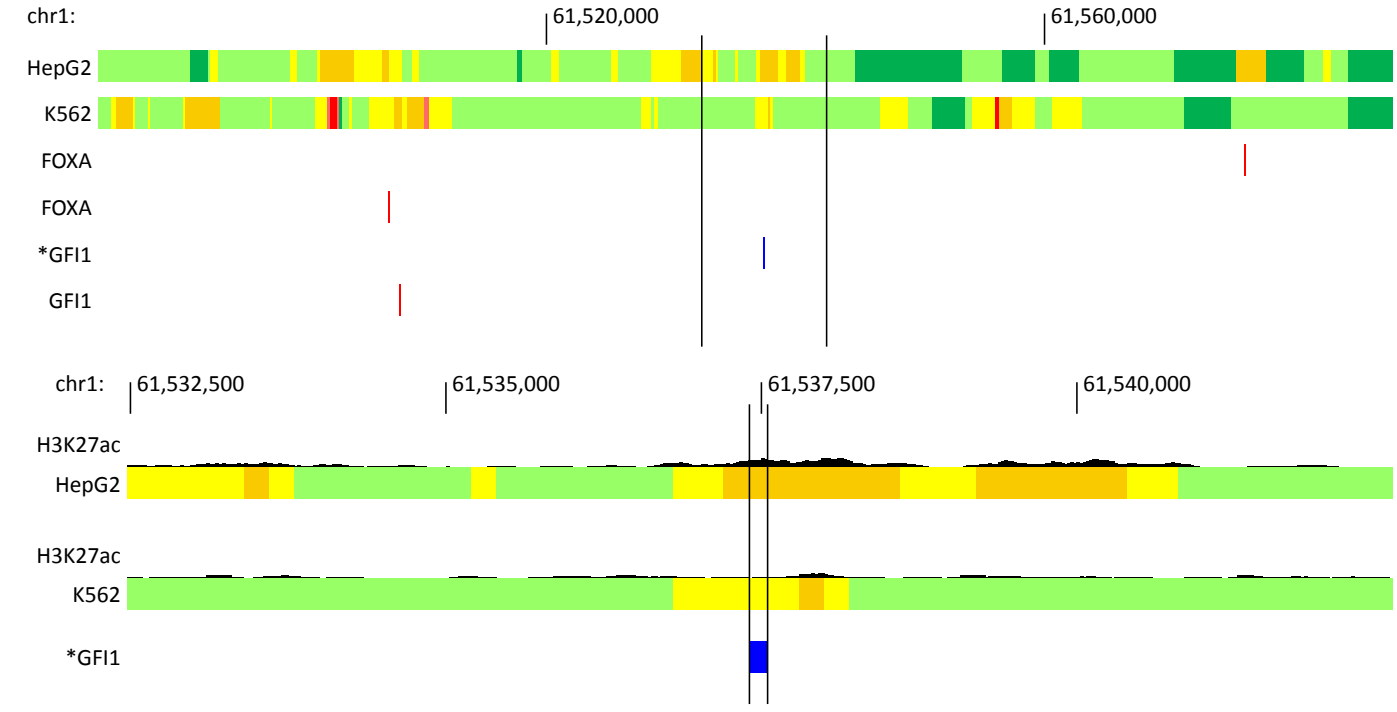


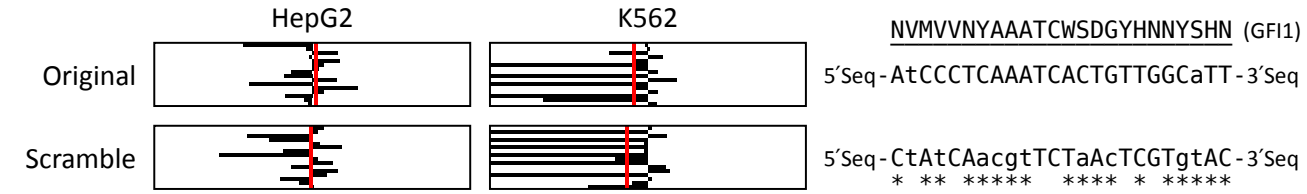


5′Seq = gttcacgtggctgactctccacaaacggctgtaggacaagcatgtttctgtctgtgaagttagtg
3′Seq = ggtccctggttctgaaatttgttagggtggaggatttttctggccttggtctttcttccattcc

1358 GFI1 in HepG2 enhancer

chr1 61537466 61537489 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AtCCCTCAAATCACTGTTGGCaTT-3′Seq

5′Seq-CtAtCAacgtTCTaAcTCGTgtAC-3′Seq

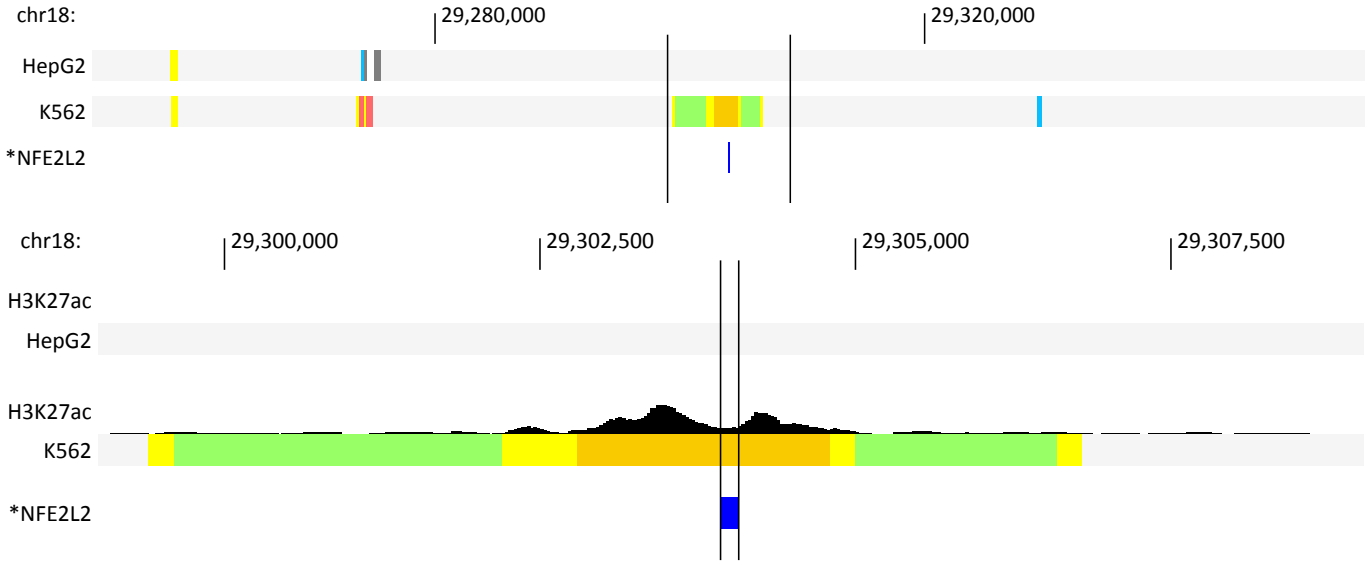
* ** ***** **** * *****

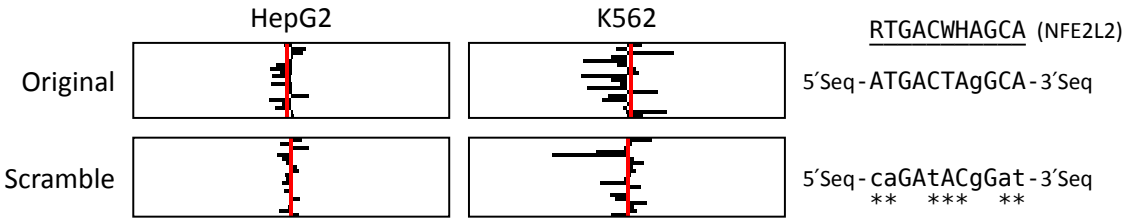
5′Seq = tctaagtgctgaatttttccttccttgacagattcccatccggtatcaagaggctctaaag

3′Seq = tagtgccattccagcaattttgcatcttgatctttttattgattagaattttaccttcct

1359 NFE2L2 in K562 enhancer

chr18 29303998 29304008 - (hg18)





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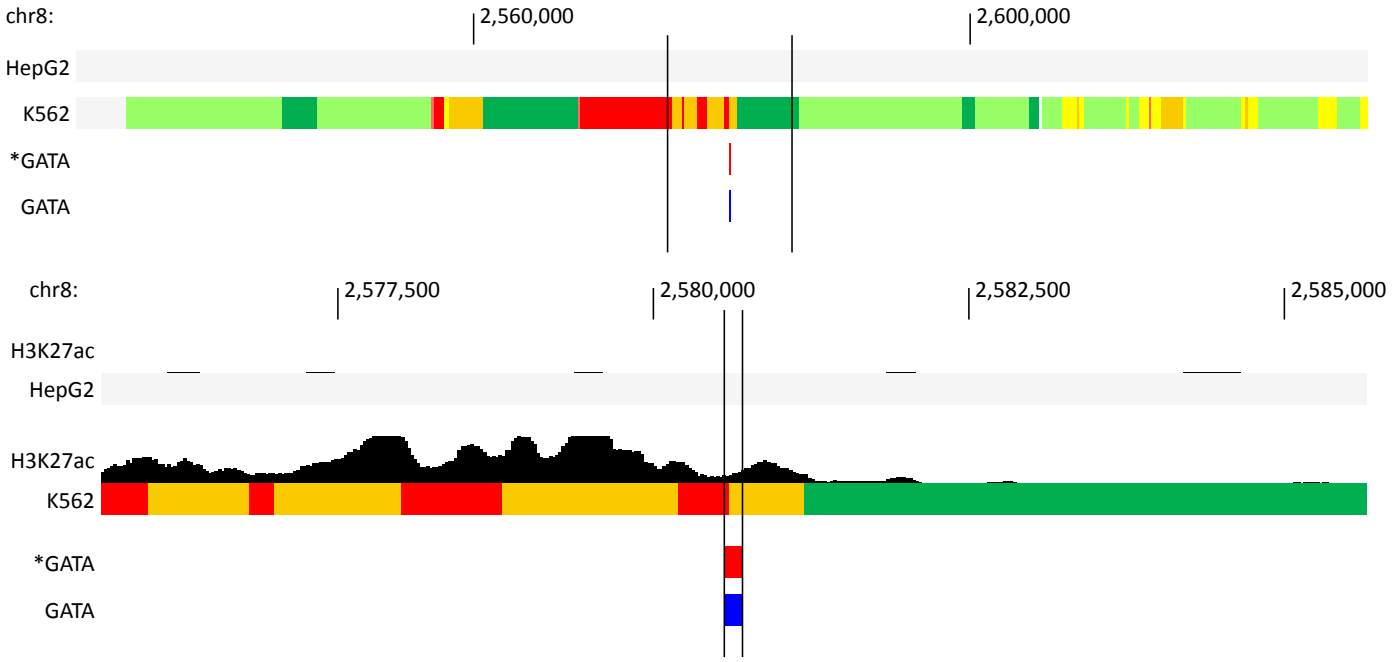
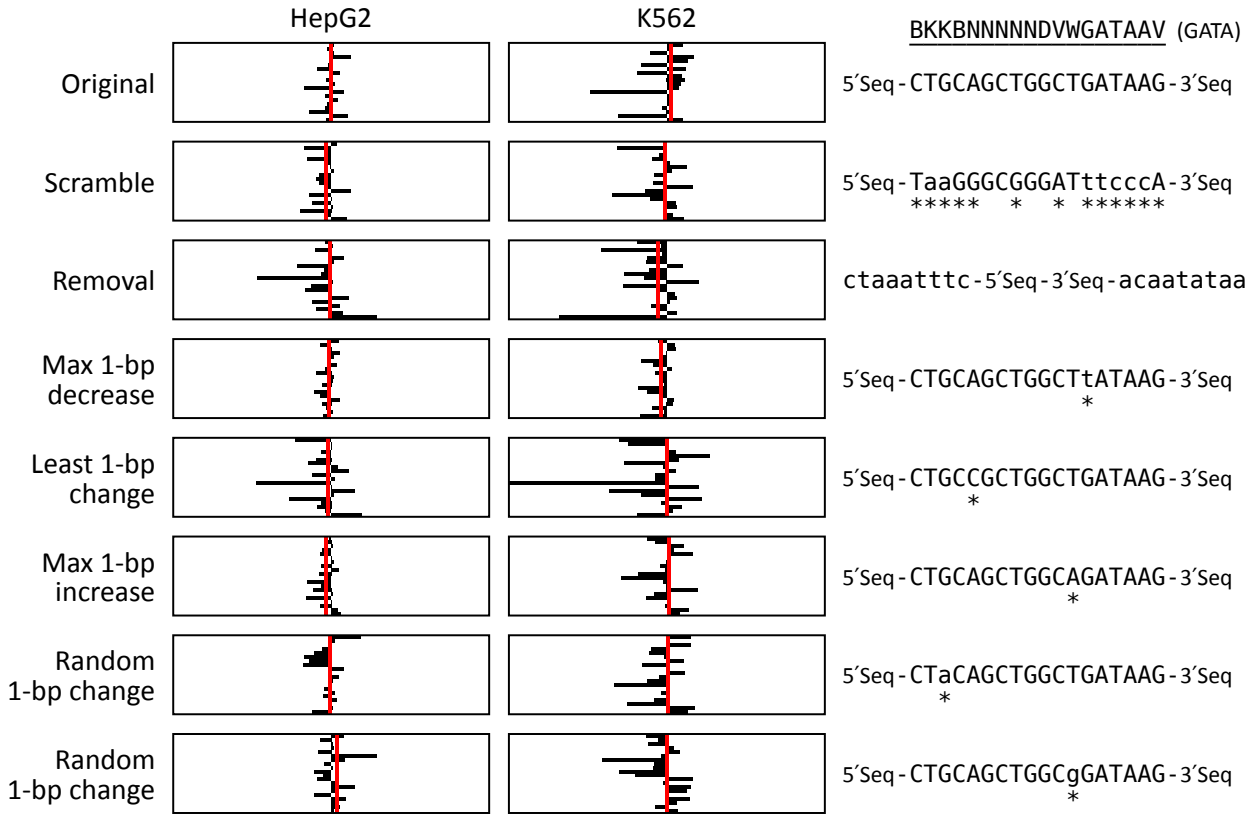
3′Seq = gtacagctgagaaggctatgtgacccaatgatcaagaacattttggggagtggtgtgactagtcgcc

1360 GATA in K562 enhancer (conserved at 70% confidence)

chr8 2580626 2580643 + (hg18)



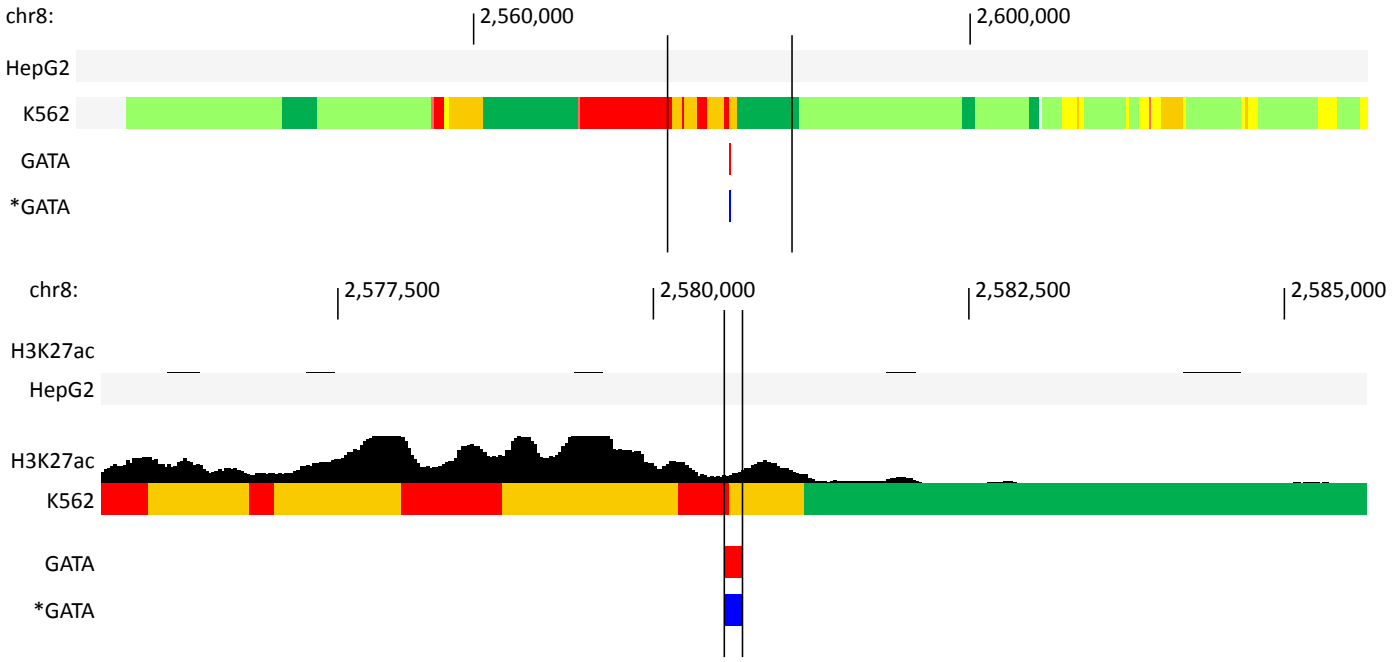


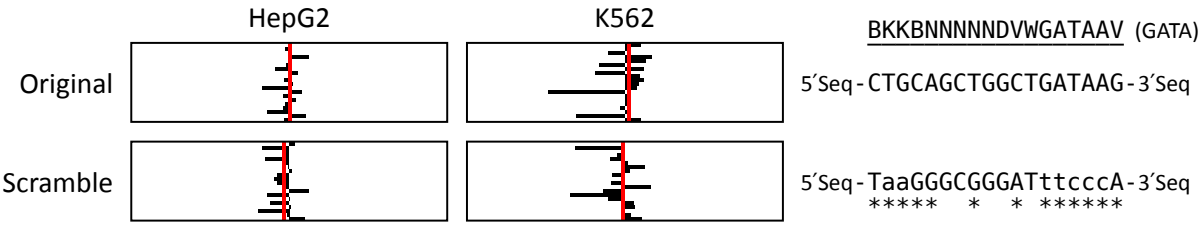
5′Seq = gaaaggagatagactatttctttaccagagaatataatattcaacagaaatactagcaccaagt

3′Seq = aaggacaatgagagcaatacagctcaaagtggttccagggaatatgaactacttaaaccgaac

1361 GATA in K562 enhancer

chr8 2580626 2580643 + (hg18)

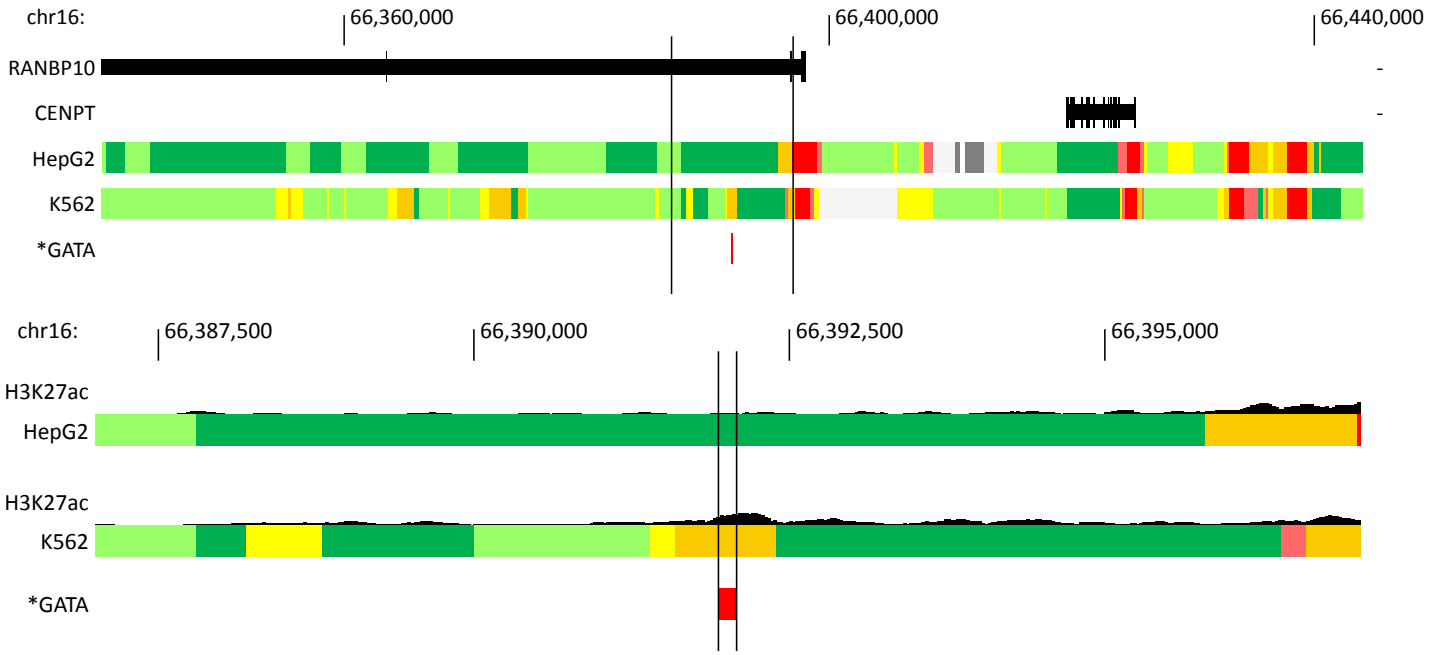


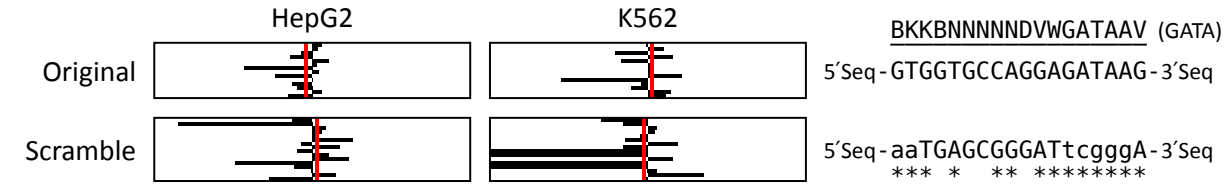


5′Seq = gaaaggagatagactatttctttaccagagaatataatattcaacagaaatactagcaccaagt
3′Seq = aaggacaatgagagcaatacagctcaaagtggttccagggaatatgaactacttaaaccgaac

1362 GATA in K562 enhancer (conserved at 60% confidence)

chr16 66392002 66392019 - (hg18)





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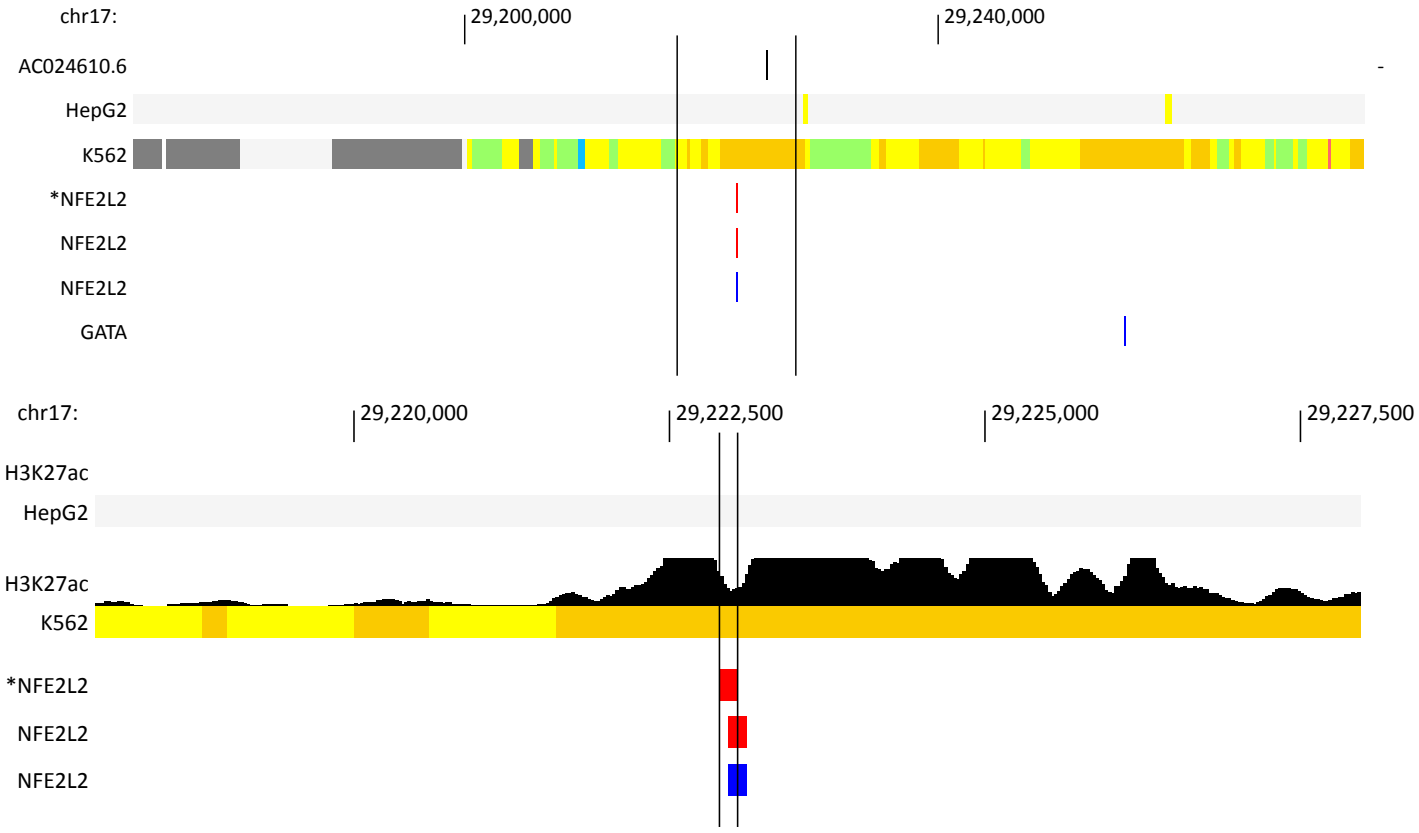
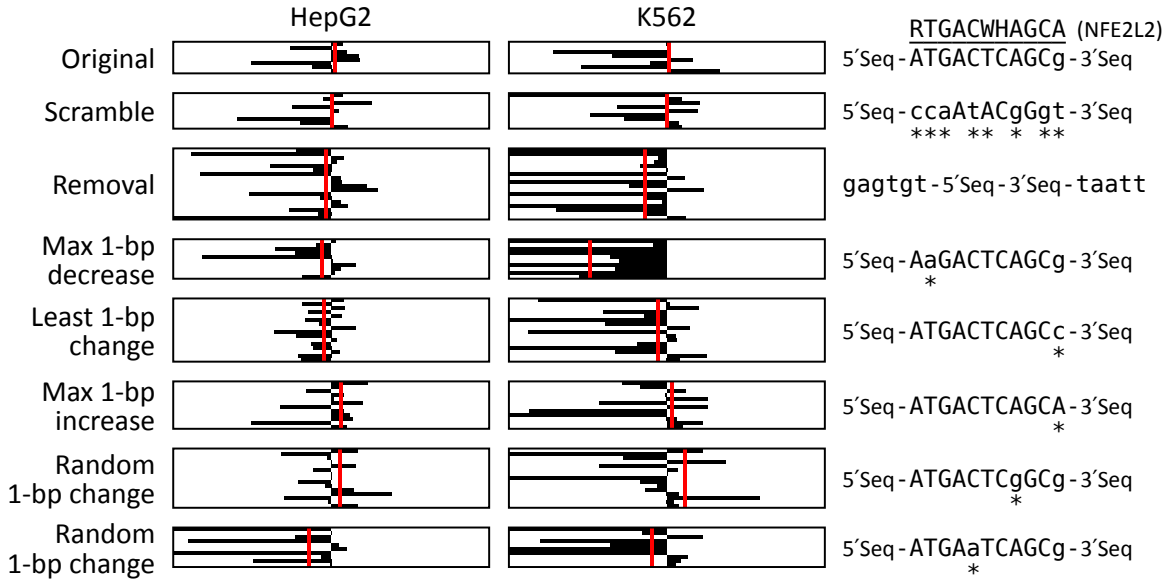
3′Seq = gggcatccaggtctgtctttctaggaagcgaaggagggcctgaagctgagggtccctggggag

1363 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr17 29222963 29222973 - (hg18)



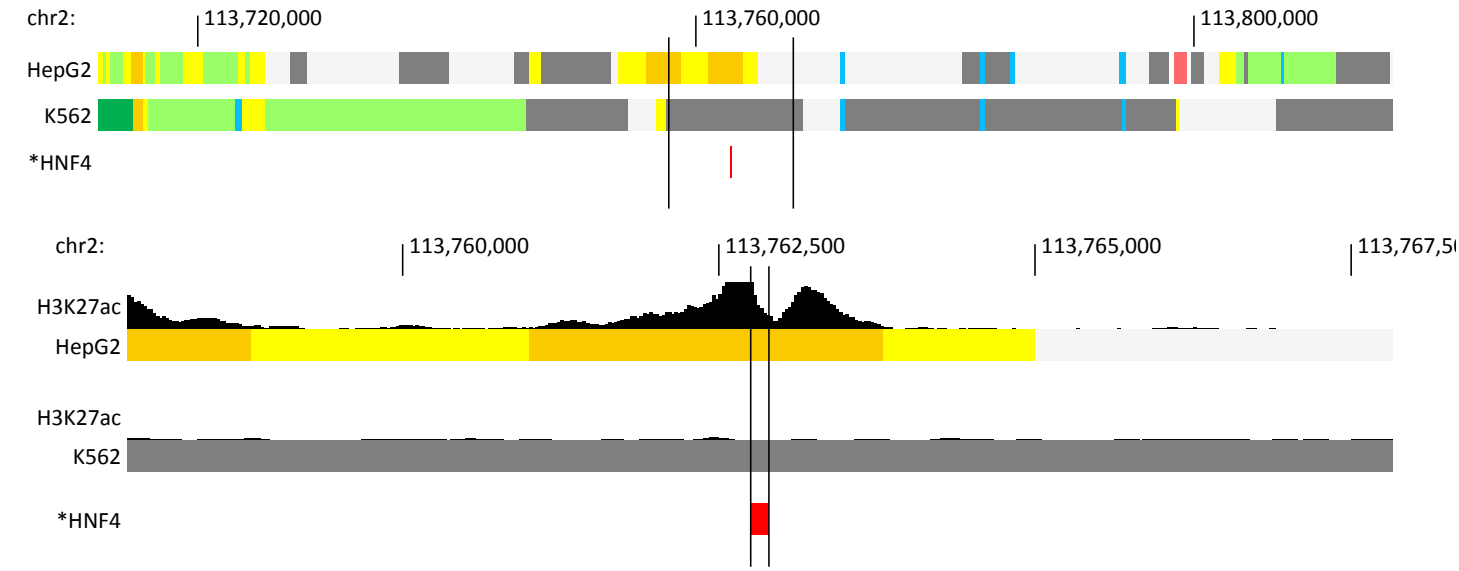


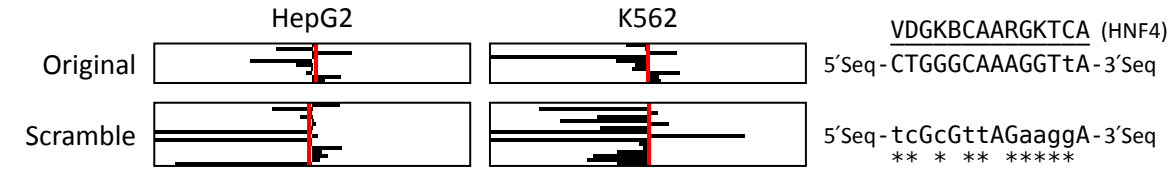
5′Seq = gactcagcccaaaacctcaccccacccagaggtgtgtacagctgacagactaattaccccctttgcc

3′Seq = cccagtgctgcctgtctgccgccagctcatcatccagagactgtttactatcacctccagccataca

1364 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 113762818 113762831 + (hg18)





5′Seq = tgggagacagccagaccagtctcctcctcatcggcactcagtctcaccaccaaaggctccaaatct
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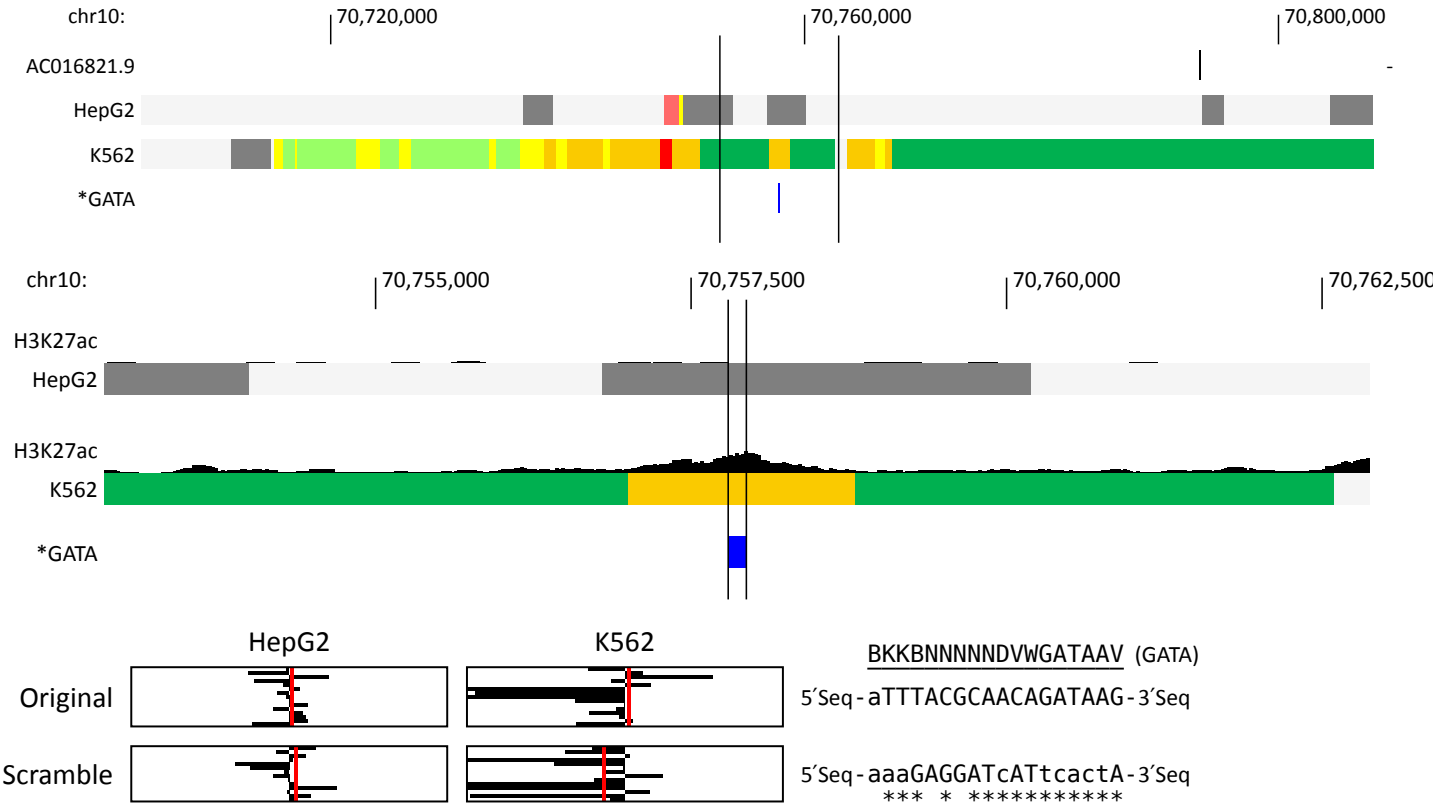
1365 GATA in K562 enhancer

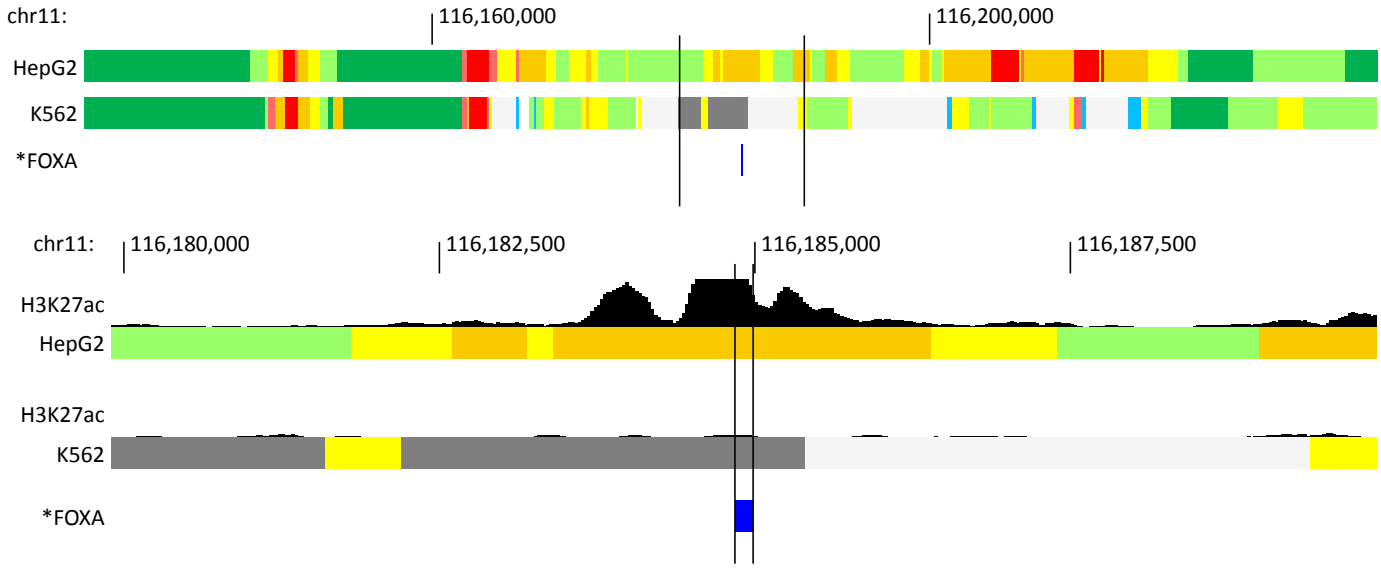
chr10 70757858 70757875 - (hg18)

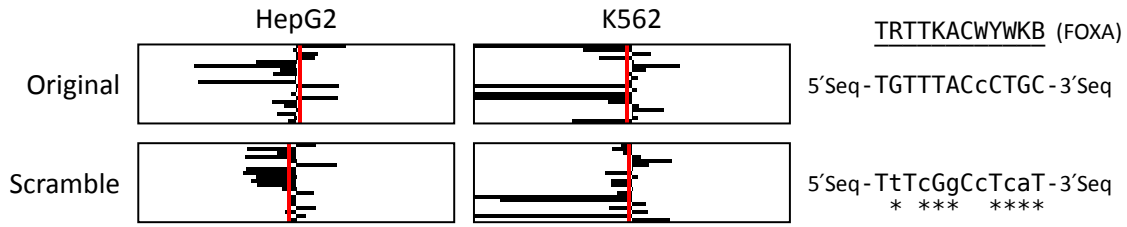


5′Seq = tccttttacggaagacggtctgagaggctgctggcttgagttttctctgagcagagctgggcac
3′Seq = cctgccctacccgggtcggatccacccgggaagagagaaagtgtgtgcaagtgaaagctcaca

1366 FOXA in HepG2 enhancer

chr11 116184909 116184920 + (hg18)





5′Seq = gcagaaccagttctgagtgatagccaggacagcaggtcctcgggtcctcaggcttgccactacaacc
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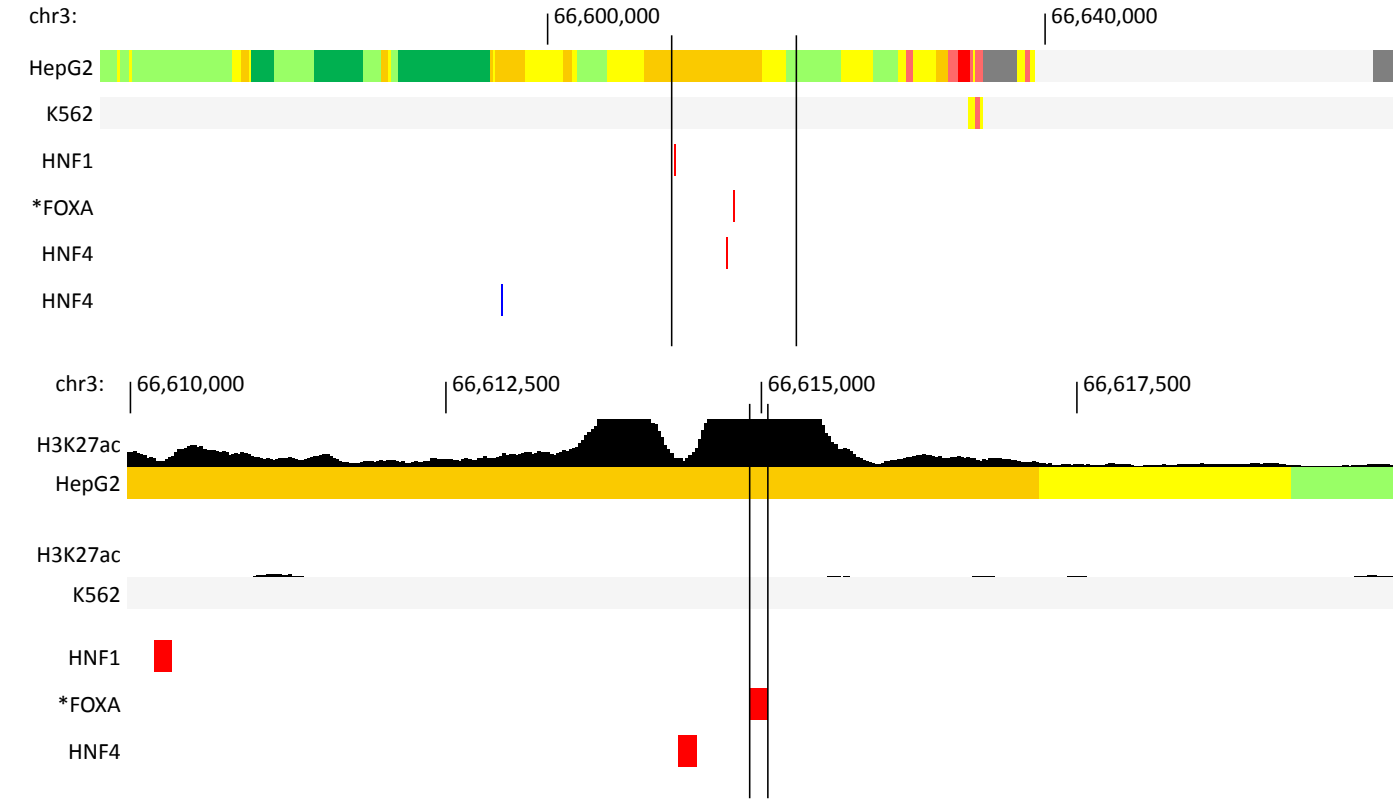
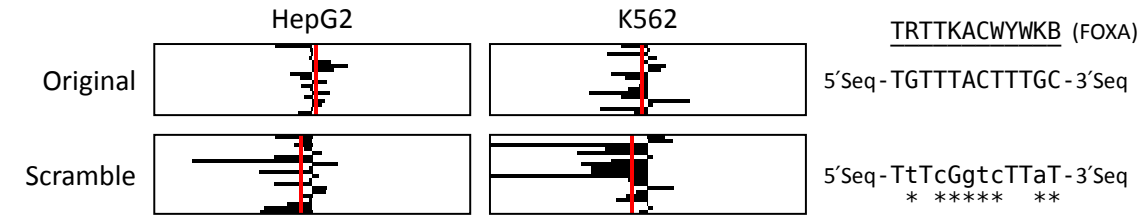
1367 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 66614974 66614985 + (hg18)





5′Seq = ctcgttcagtgcactacttttacttttcaaagcacatgcatacaatgacaactcactttcgagacca
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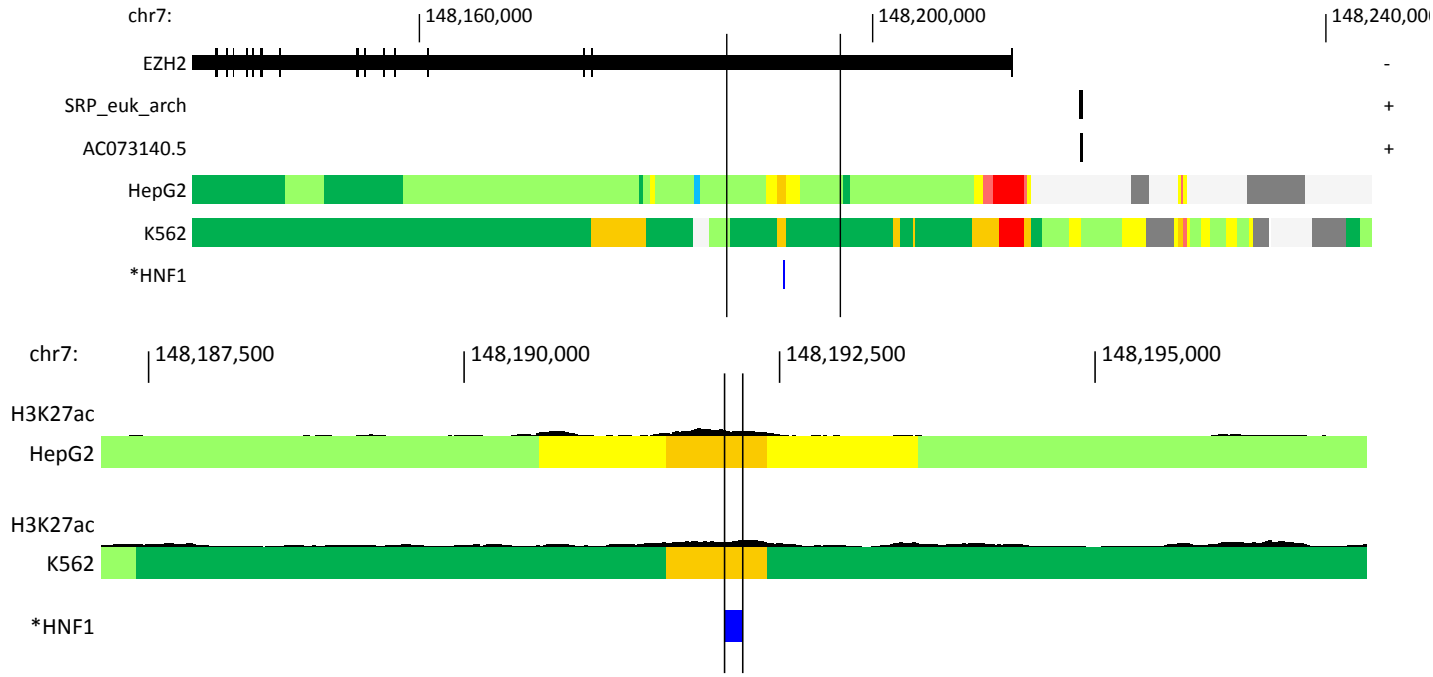
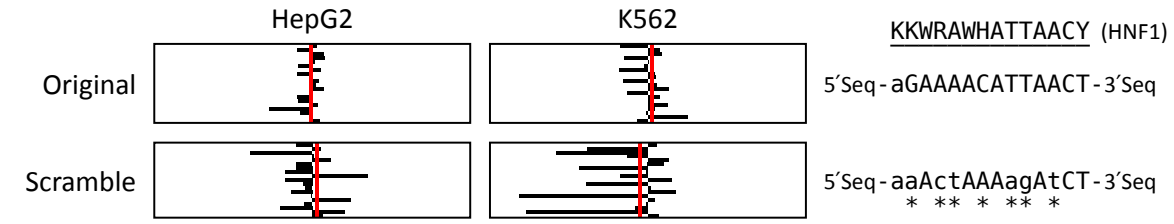
1368 HNF1 in HepG2 enhancer

chr7 148192130 148192143 + (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-aGAAAACATTAACT-3′Seq

5′Seq-aaActAAAagAtCT-3′Seq

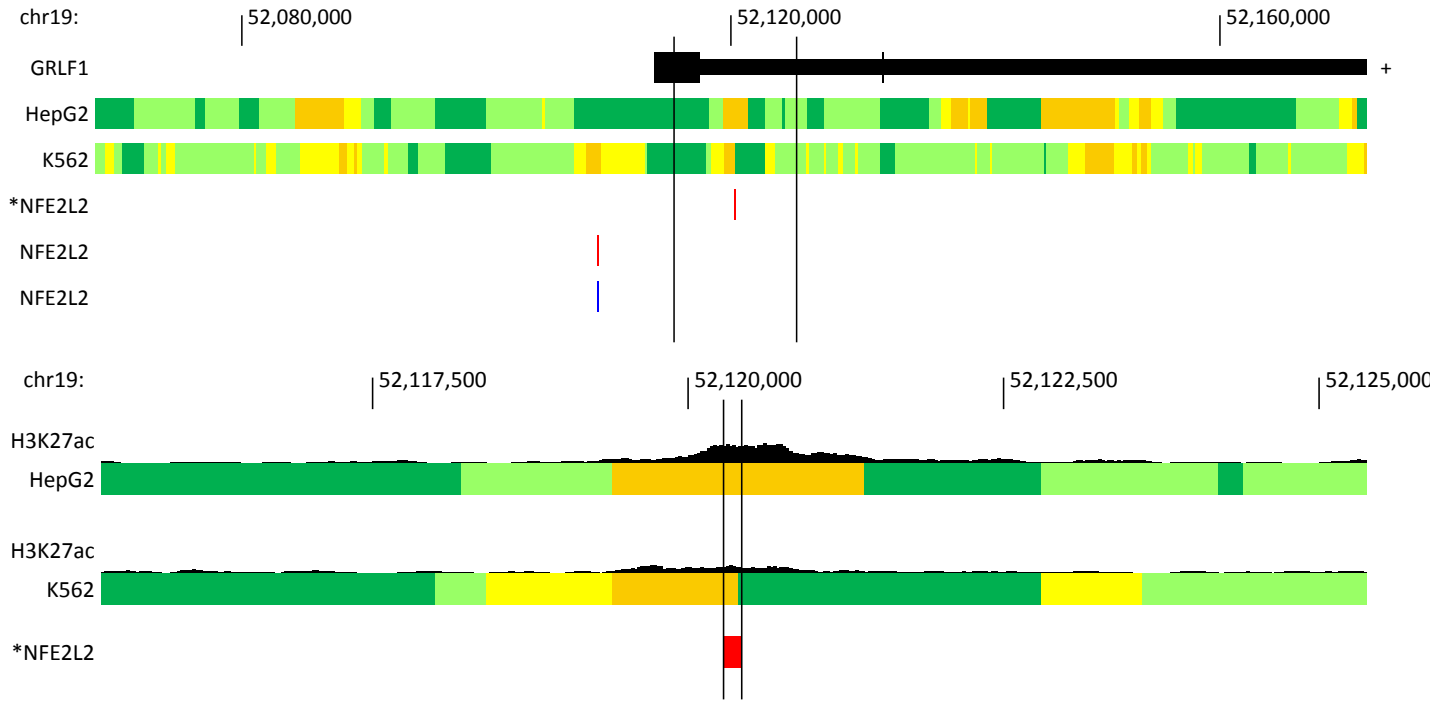
* ** * ** *

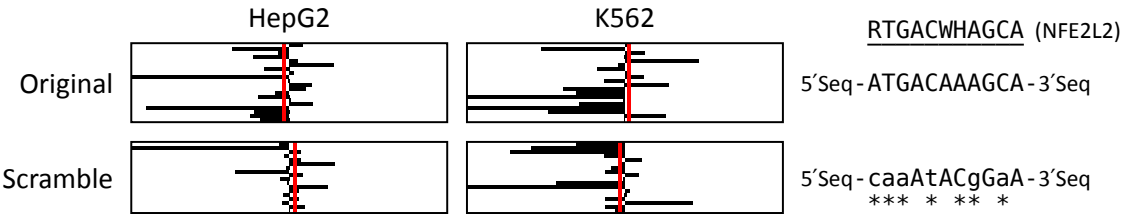
5′Seq = ctgtagtgctaaaaagttcaaaggcaaaggaaagttatactaatttagcaatcttagctgaatgat

3′Seq = tgaccgttgcagcaaaagtgagtagattctgcagtgatatattttccacaacagtaagatcactt

1369 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr19 52120348 52120358 - (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq-ATGACAAAGCA-3′Seq

5′Seq-caaAtACgGaA-3′Seq

*** * ** *

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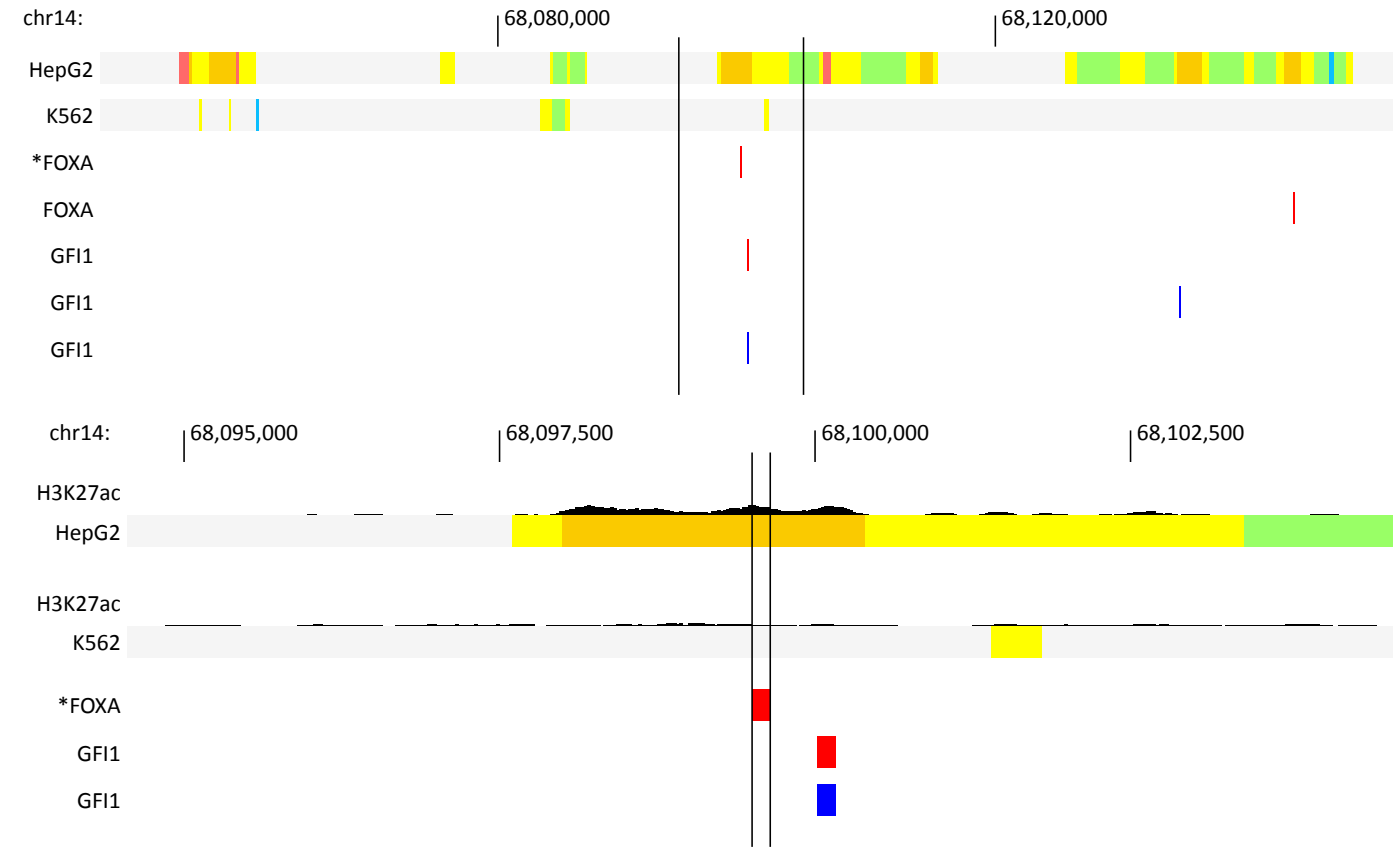
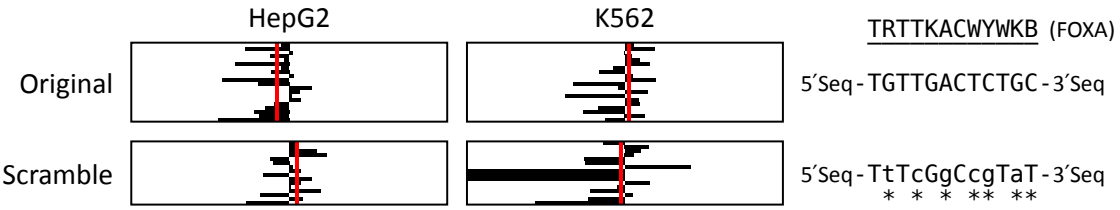
3′Seq = actaccctcatttcaaagcaccattttccaaggcaggaaaagaaaatttcaccttctagtcactctt

1370 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 68099568 68099579 + (hg18)





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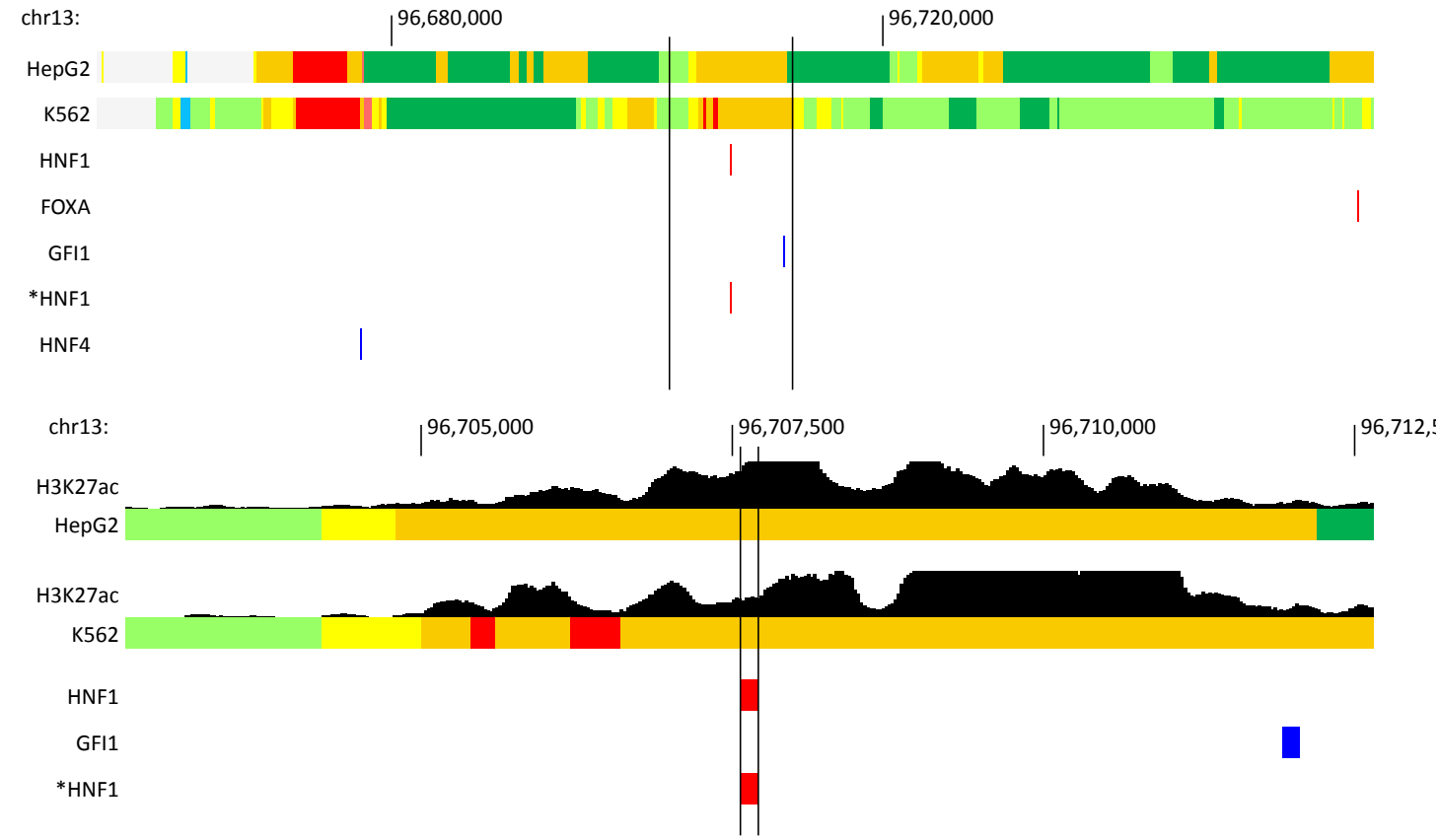
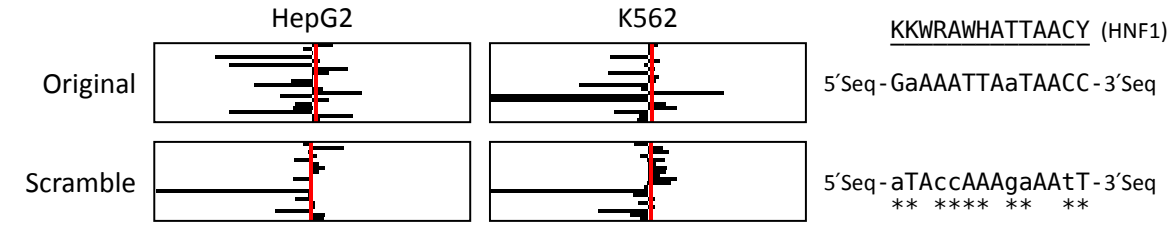
3′Seq = cgggttcagagagggcttcacatttgacttggcgaaggagagaagttctttatttccctcagcctc

1371 HNF1 in K562 enhancer (conserved at 60% confidence)

chr13 96707631 96707644 - (hg18)





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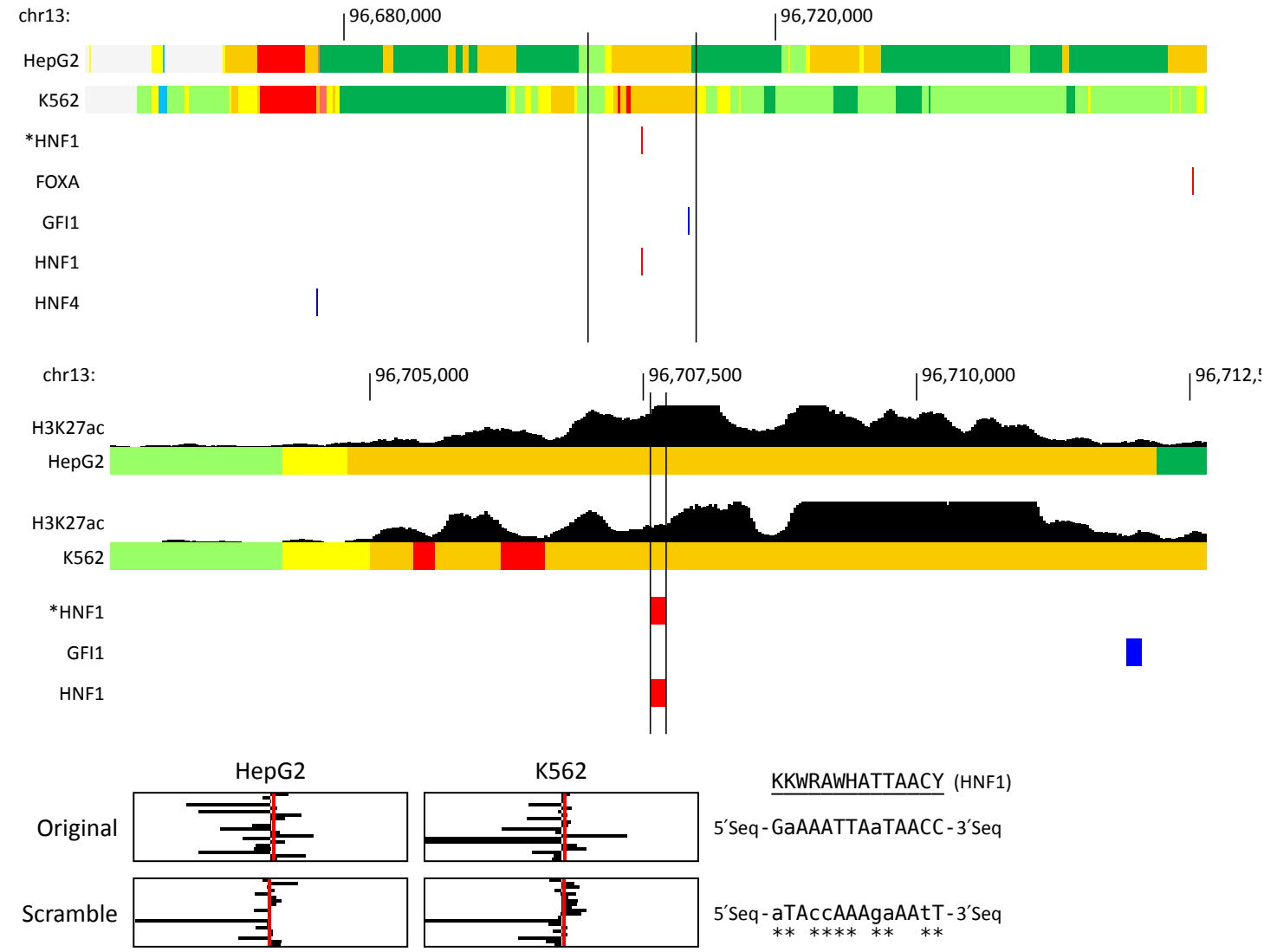
3′Seq = tggcctaacctgtgataccaccctcaagacaagctctcaagttacttgttcattattttccaaaa

1372 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr13 96707631 96707644 - (hg18)



5′Seq = tgcatttctttcaaaaacatatccatttccctgtaagtgtttttaagaggcatactgctgagtag
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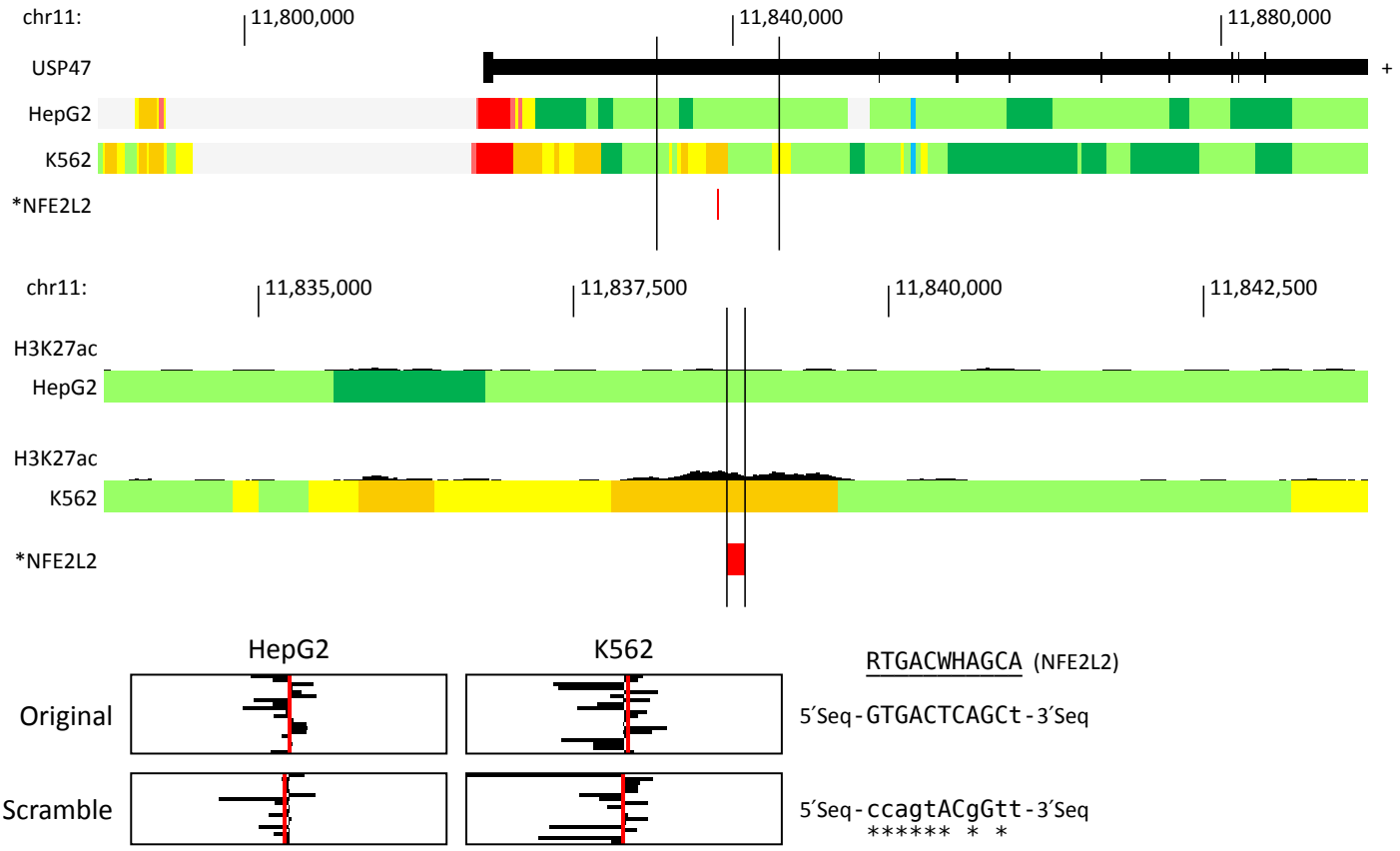
1373 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr11 11838784 11838794 - (hg18)



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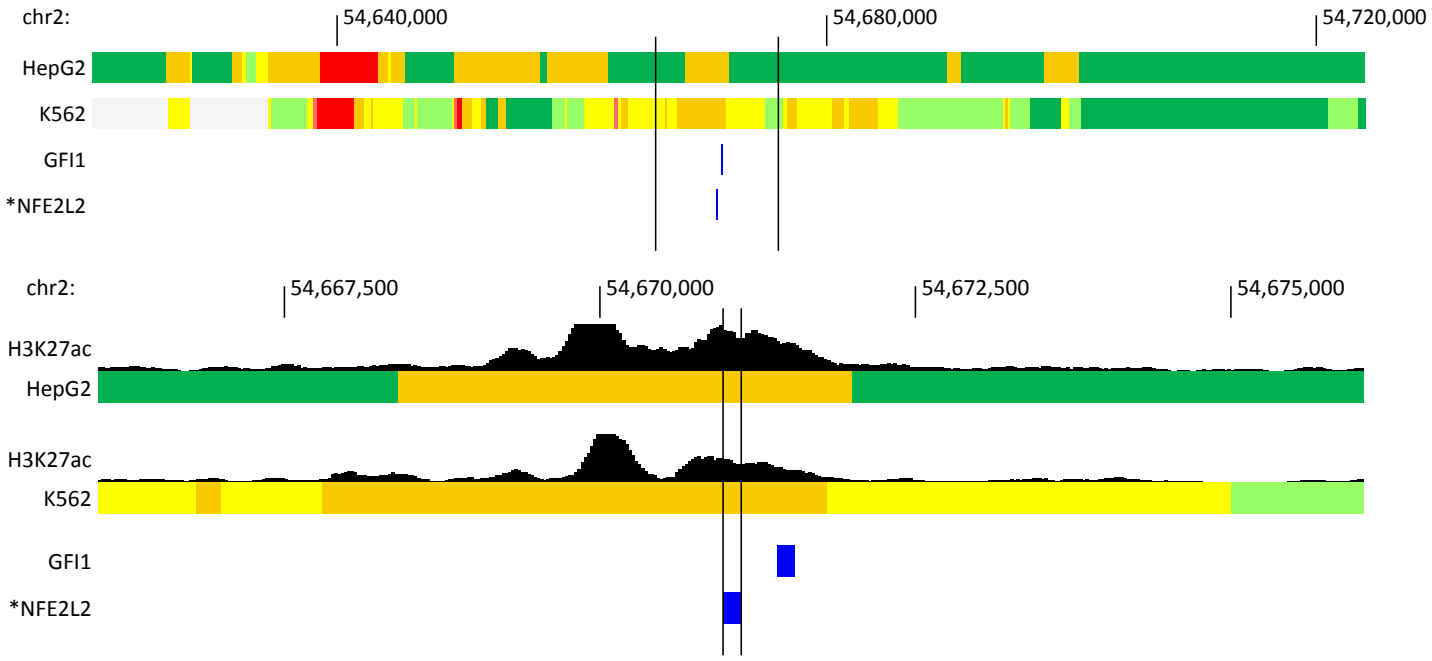
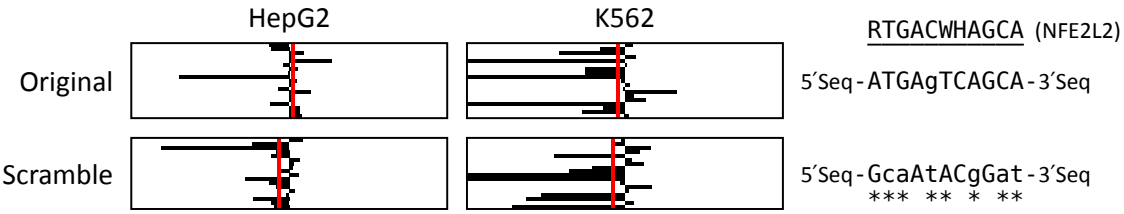
1374 NFE2L2 in K562 enhancer

chr2 54671043 54671053 - (hg18)





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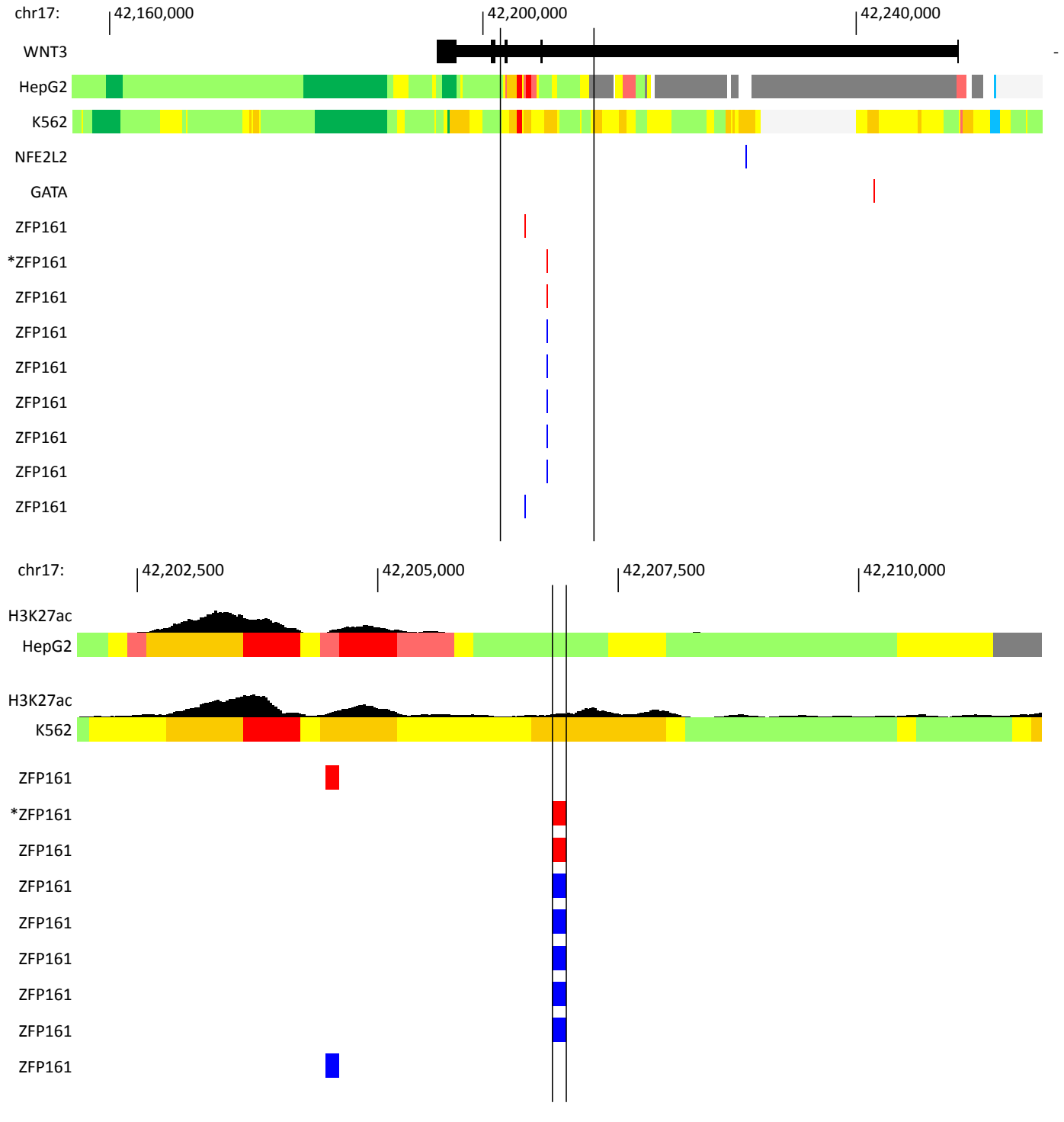
1375 ZFP161 in K562 enhancer (conserved at 10% confidence)

chr17 42206881 42206896 - (hg18)



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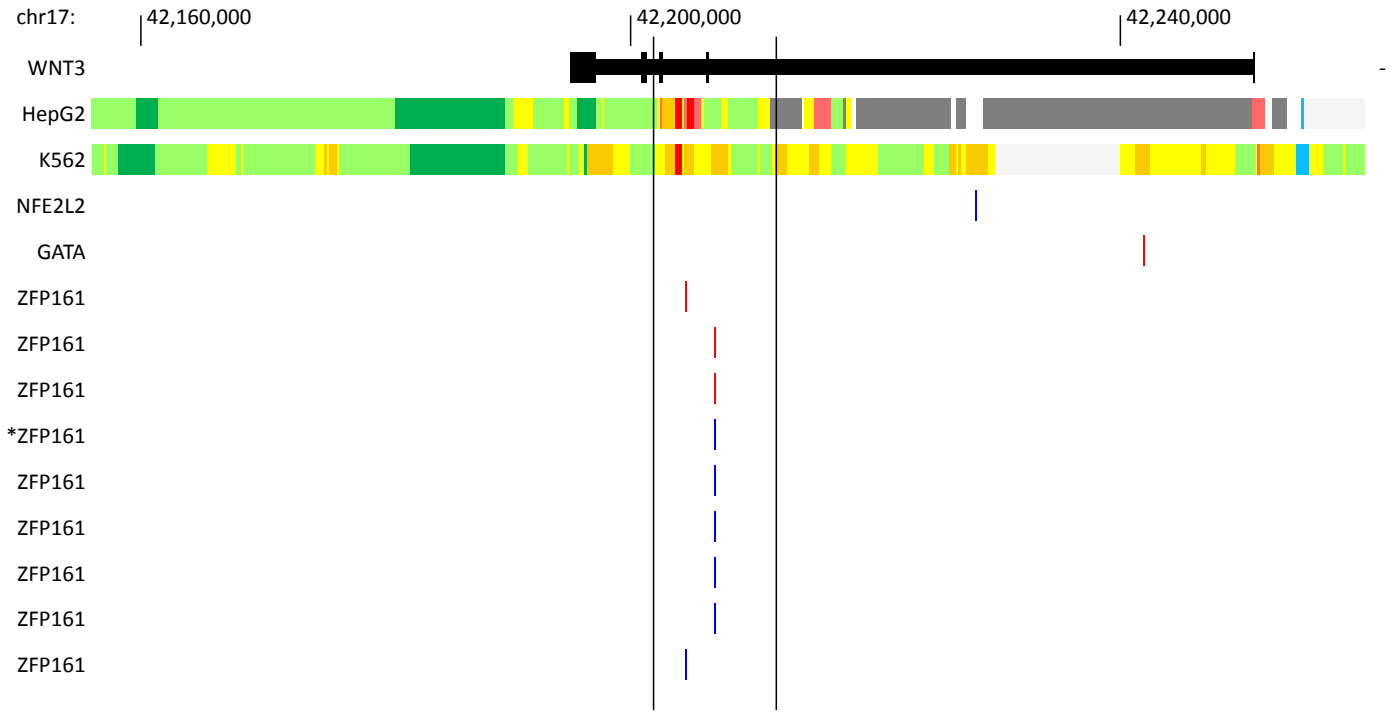
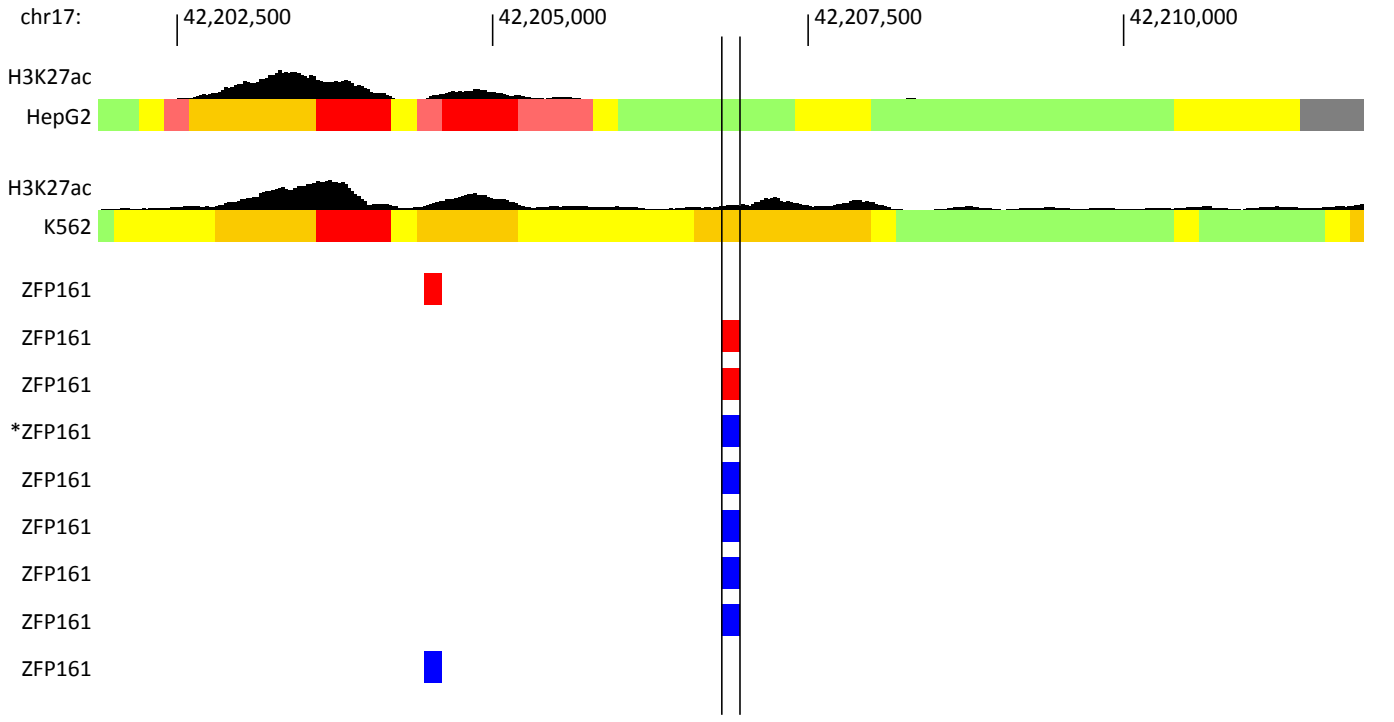
1376 ZFP161 in K562 enhancer

chr17 42206881 42206896 - (hg18)





KDRSGCGCGCRYHYRD (ZFP161)

5′Seq-GTGtGCGCGCGCgCGc-3′Seq

5′Seq-GGGCGCctGCtggCcG-3′Seq

* * ** ** **

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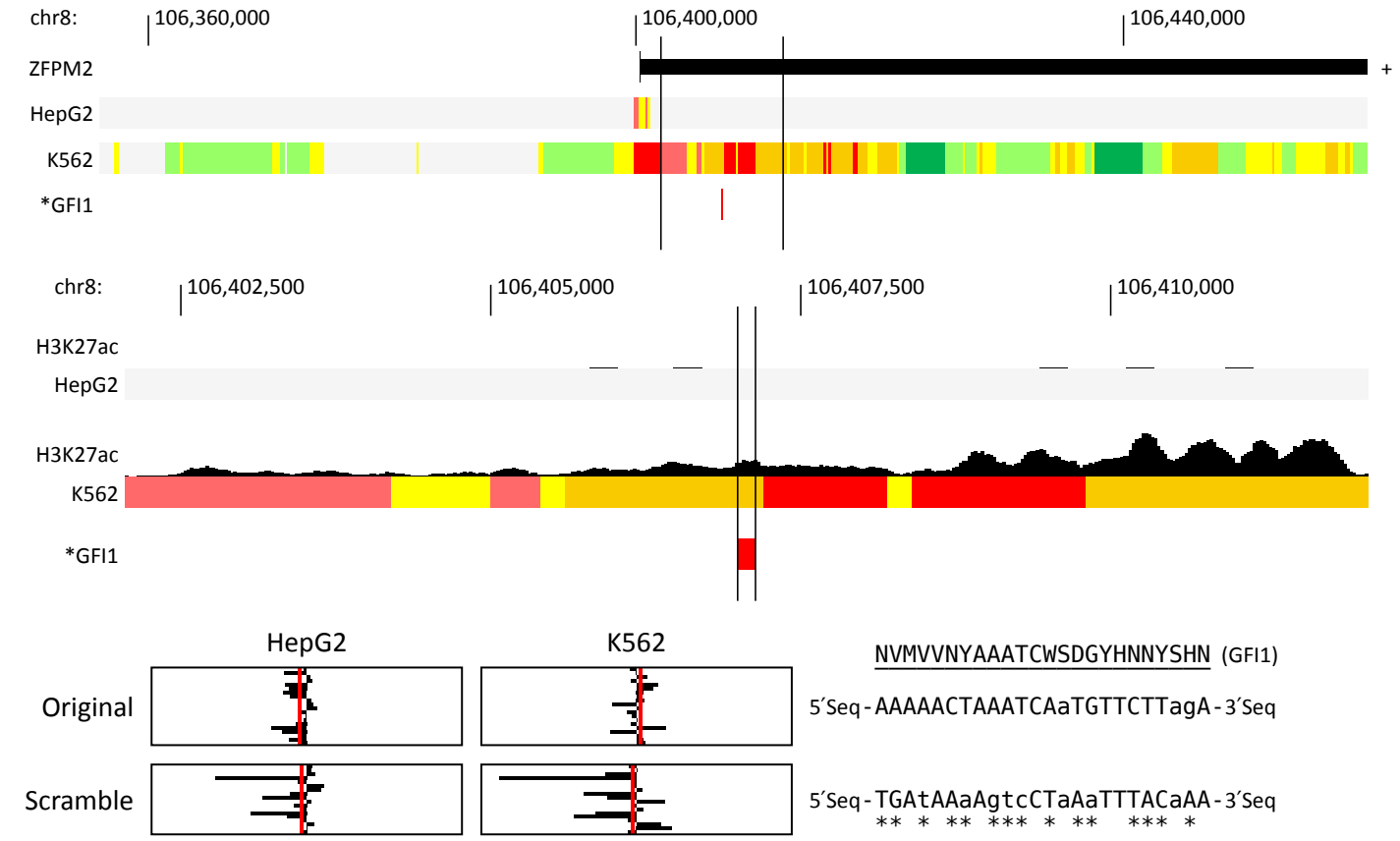
1377 GFI1 in K562 enhancer (conserved at 40% confidence)

chr8 106407052 106407075 - (hg18)



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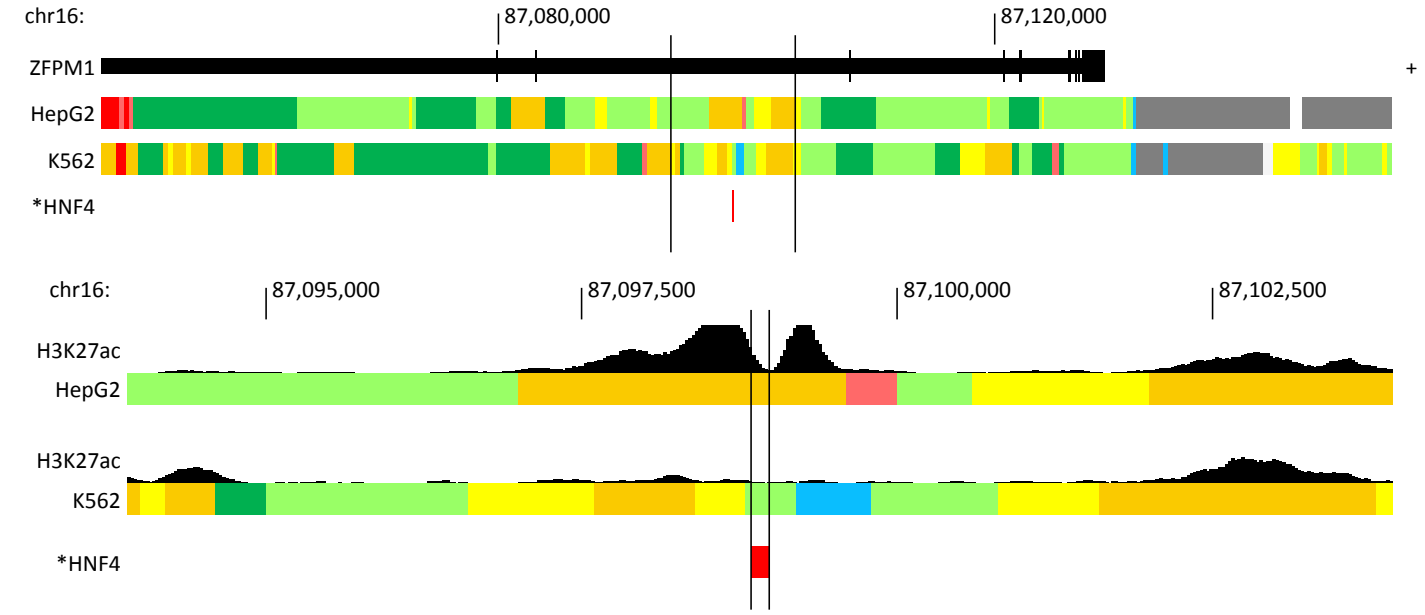
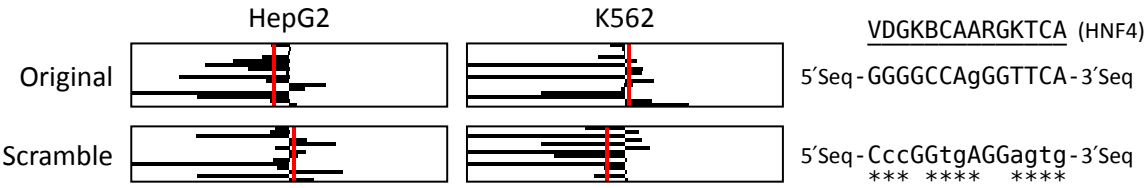
1378 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr16 87098909 87098922 + (hg18)





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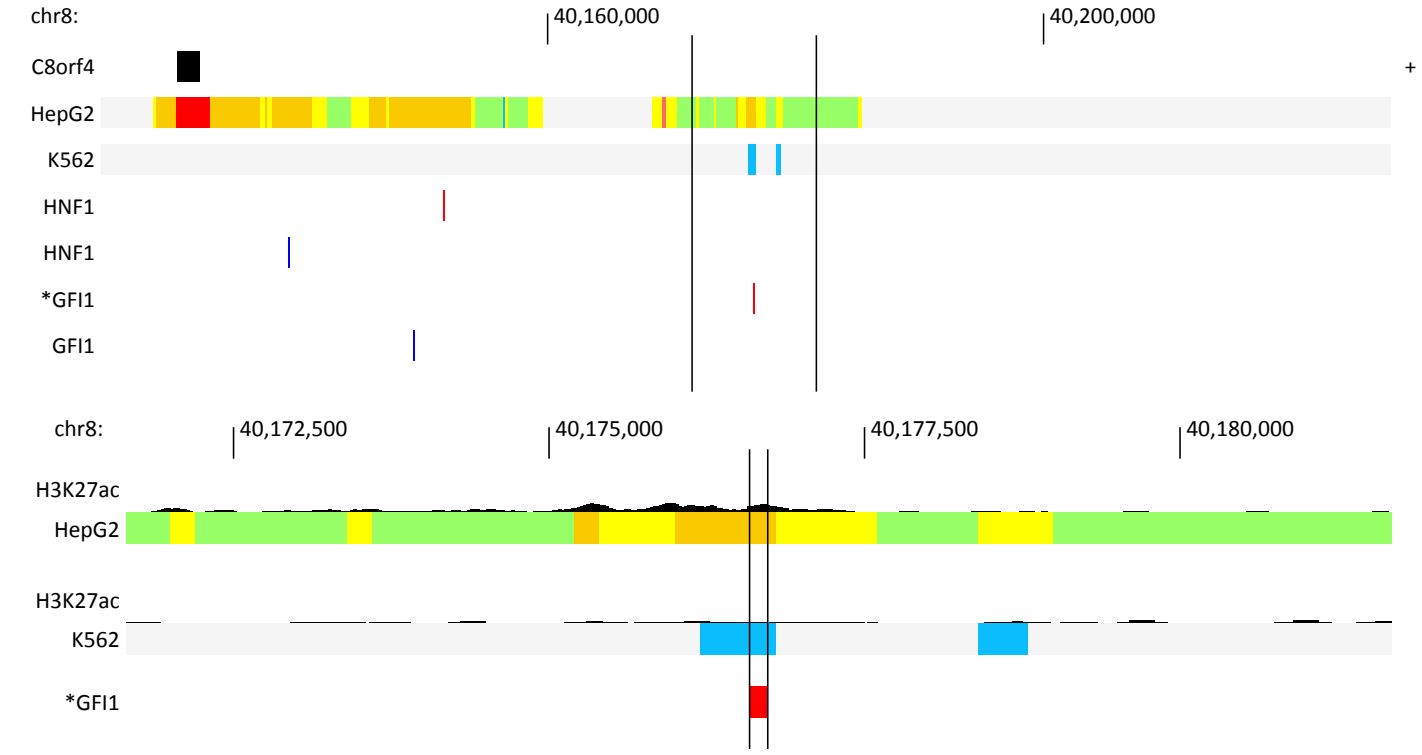
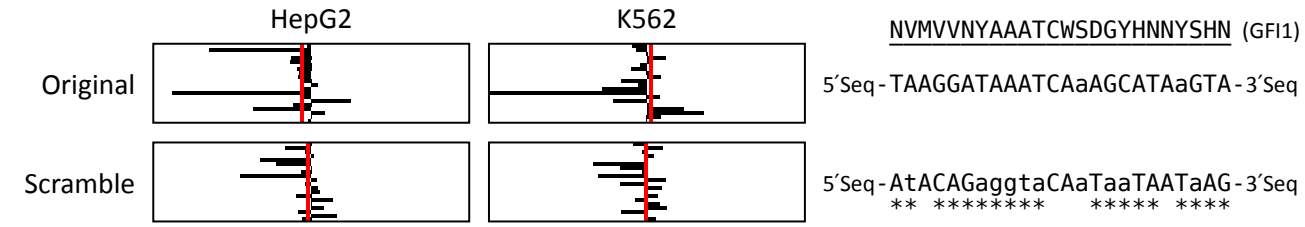
1379 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr8 40176650 40176673 + (hg18)





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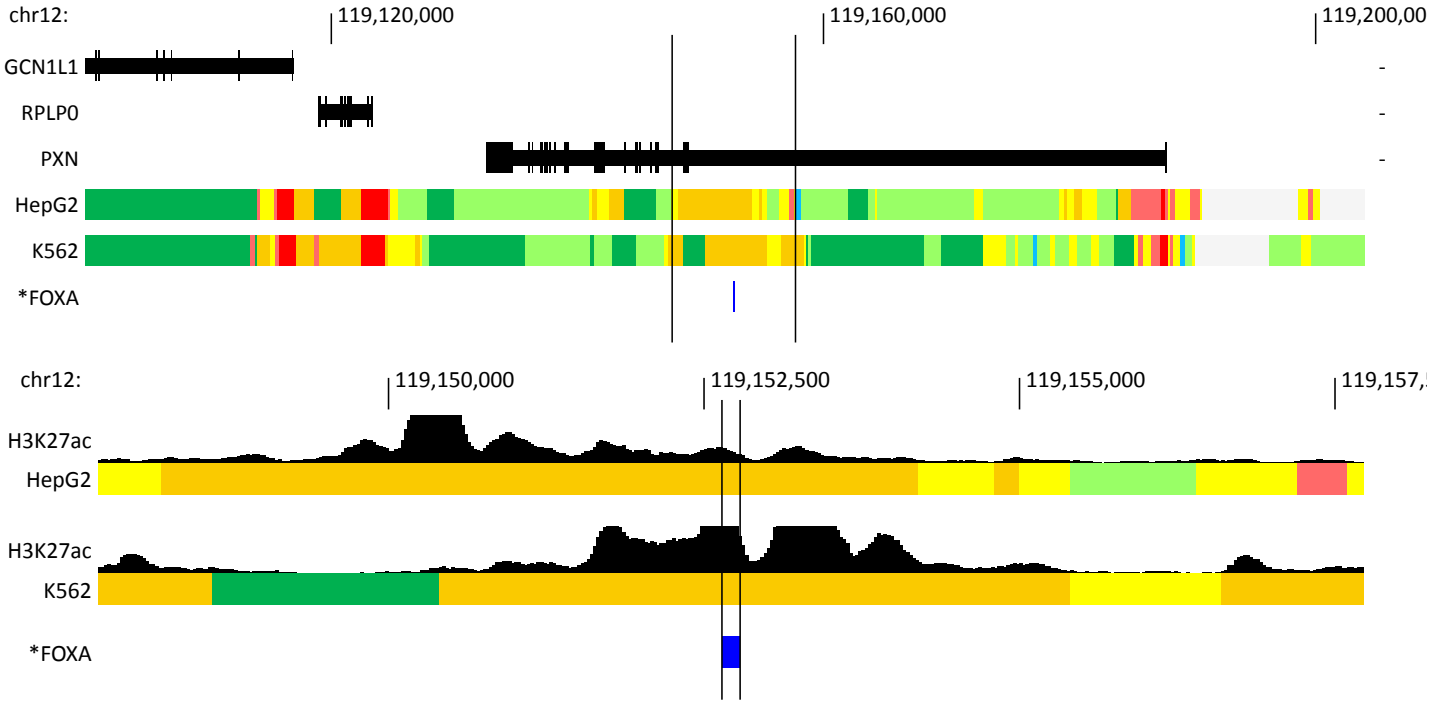
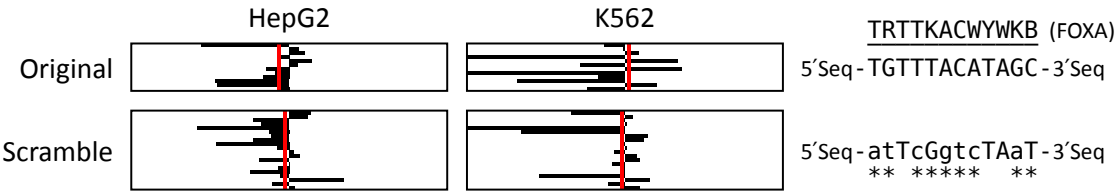
1380 FOXA in HepG2 enhancer

chr12 119152709 119152720 - (hg18)





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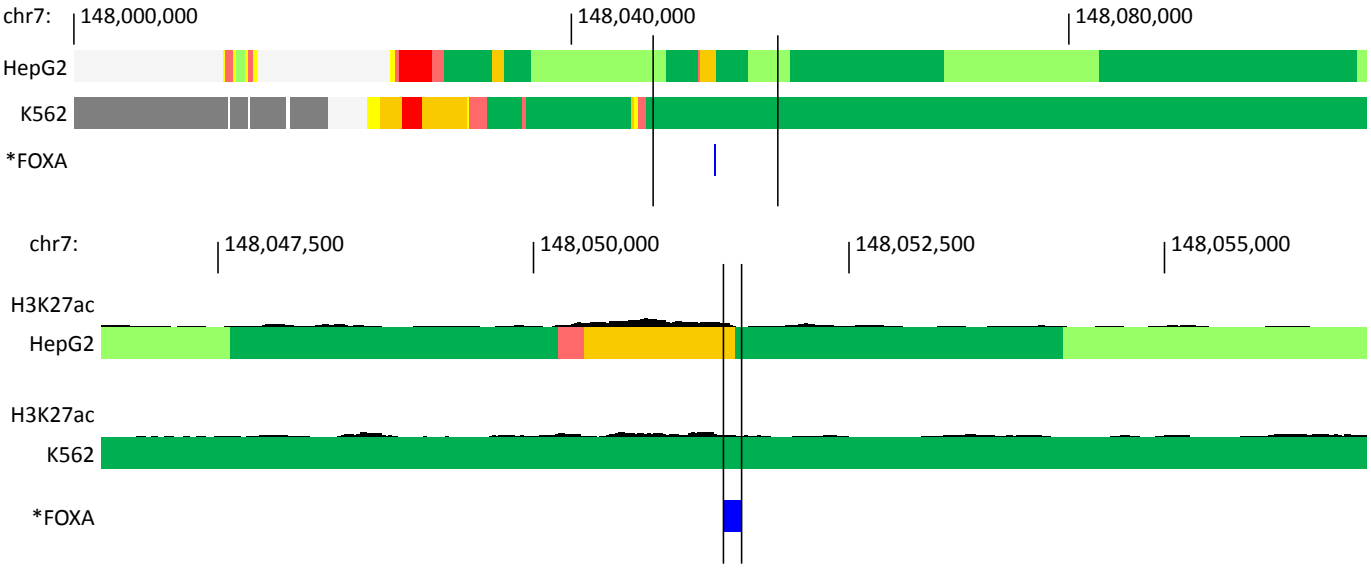
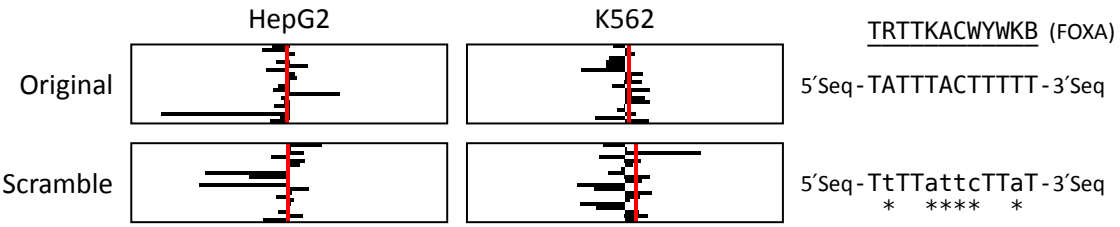
1381 FOXA in HepG2 enhancer

chr7 148051572 148051583 - (hg18)





5′Seq = cctaacaaaaagctttcaagtatttacttttaacaattataatactgcaacaagcagccttataag
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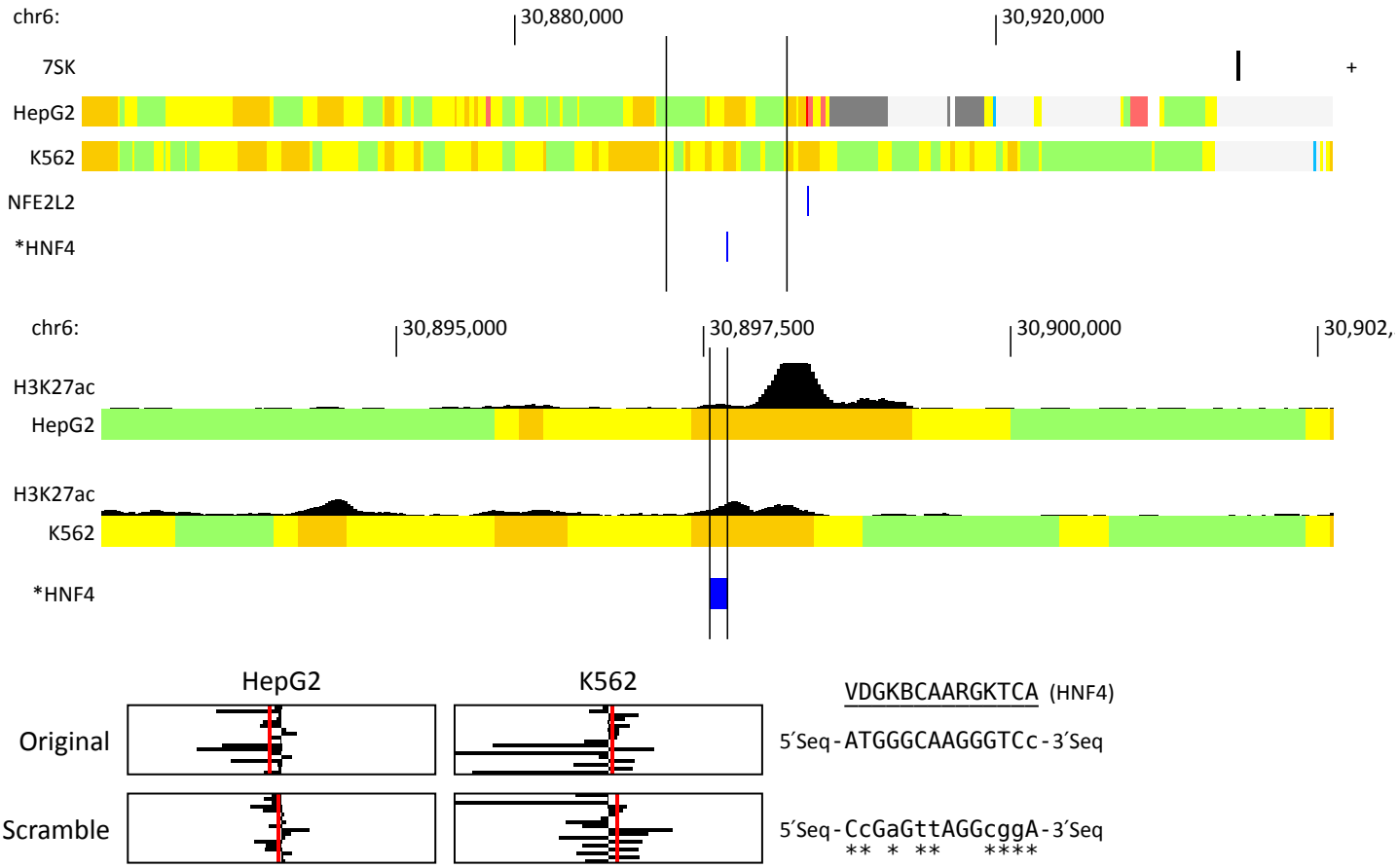
1382 HNF4 in K562 enhancer

chr6 30897617 30897630 + (hg18)



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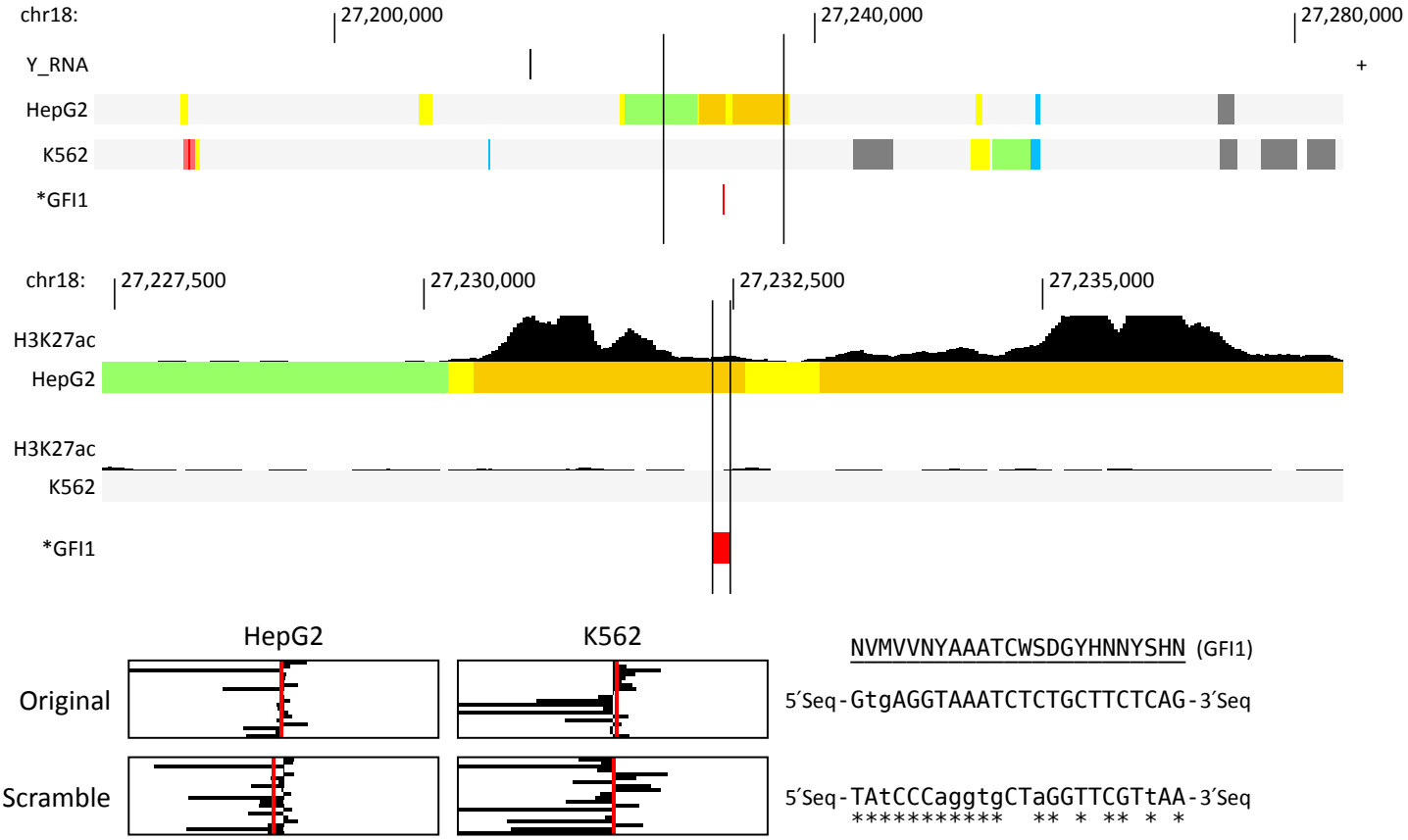
1383 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr18 27232393 27232416 - (hg18)



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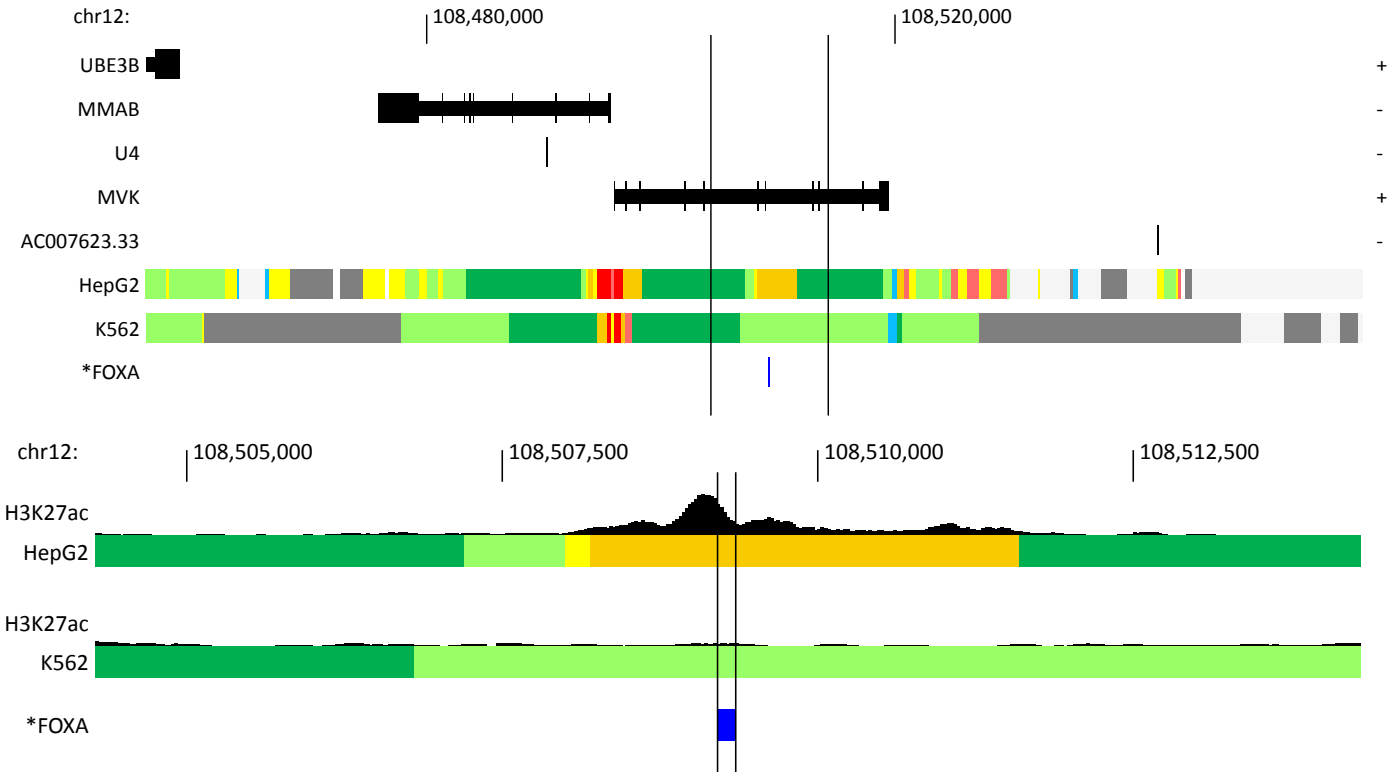
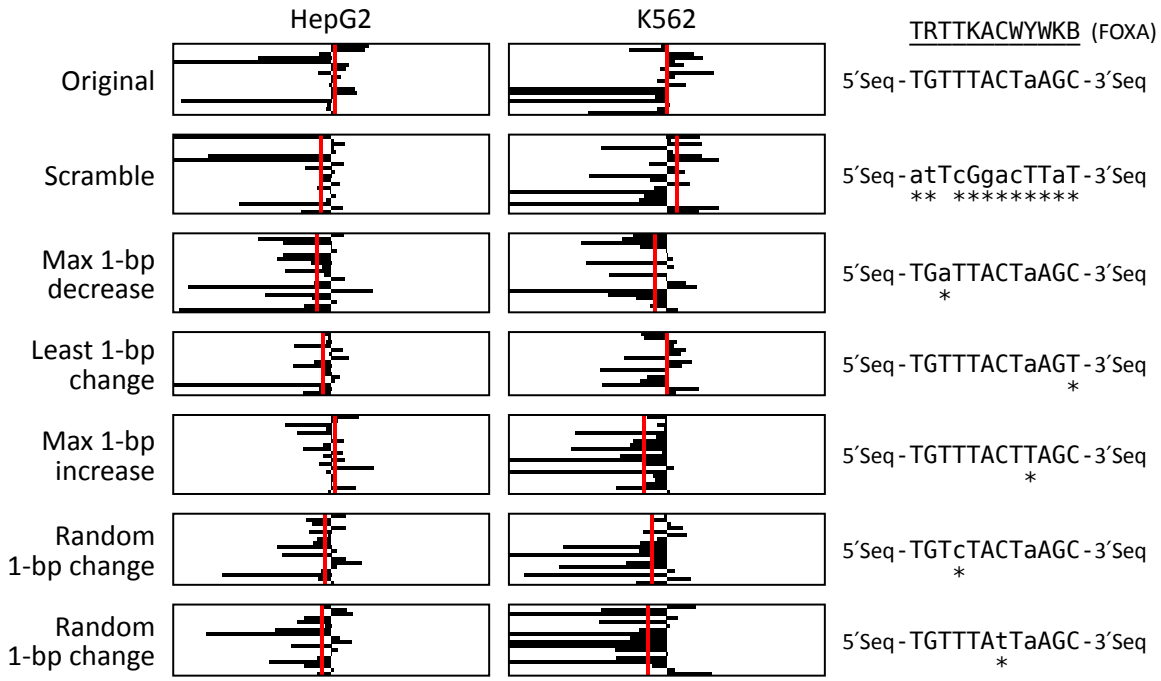
1384 FOXA in HepG2 enhancer

chr12 108509273 108509284 - (hg18)





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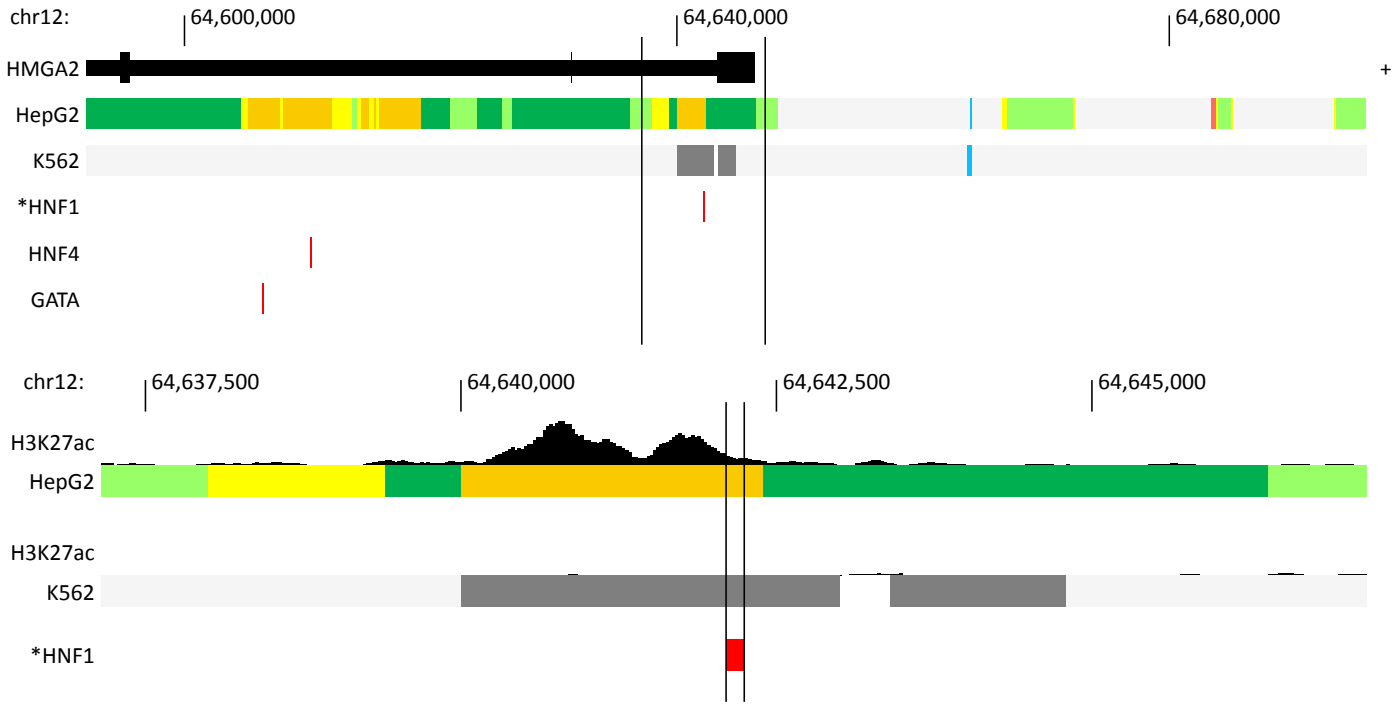
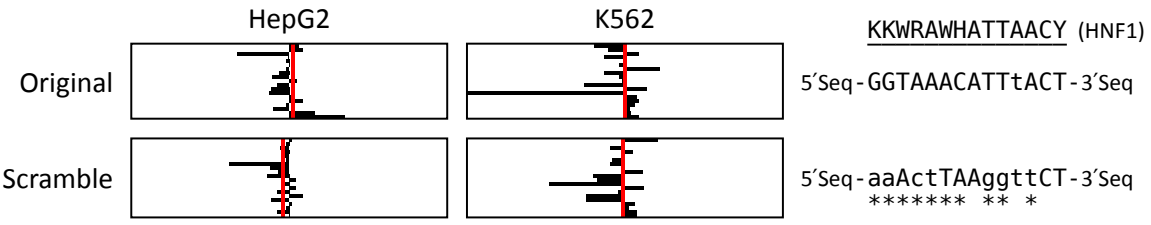
1385 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr12 64642167 64642180 - (hg18)





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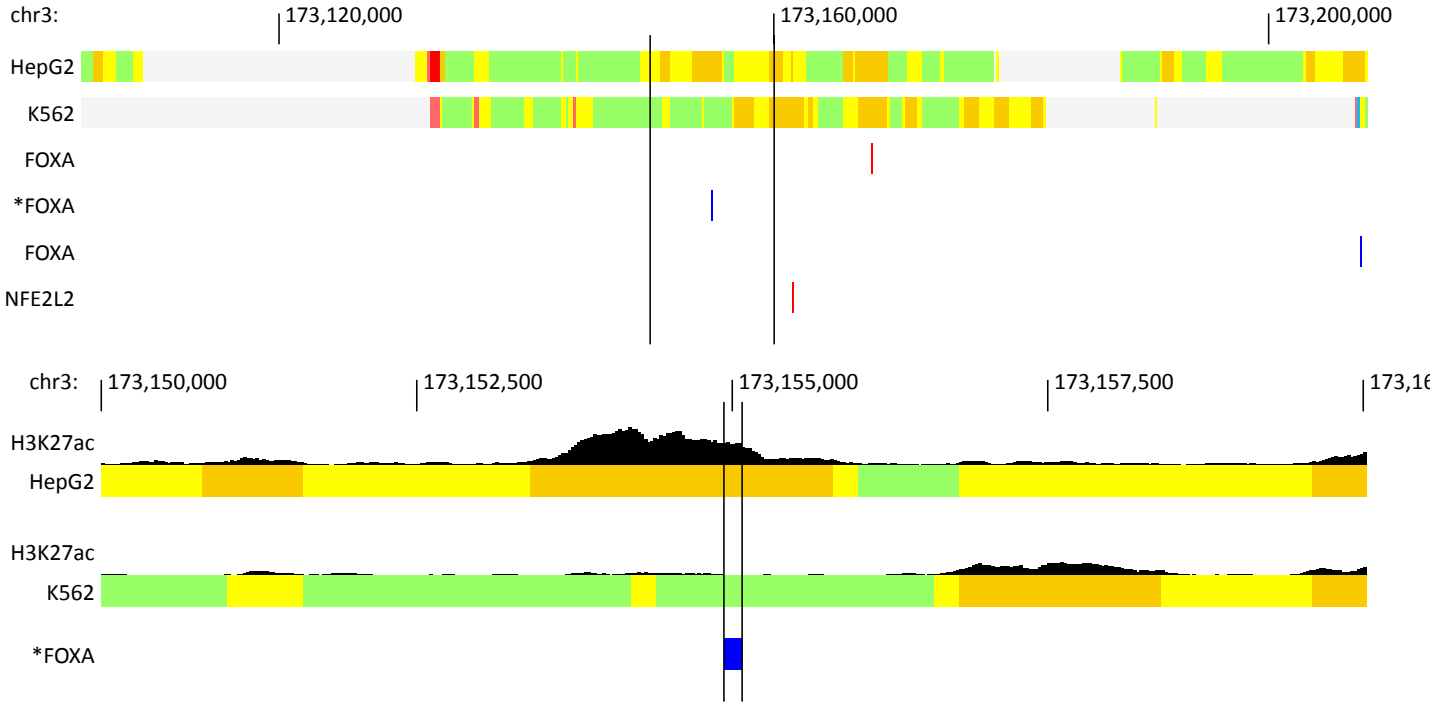
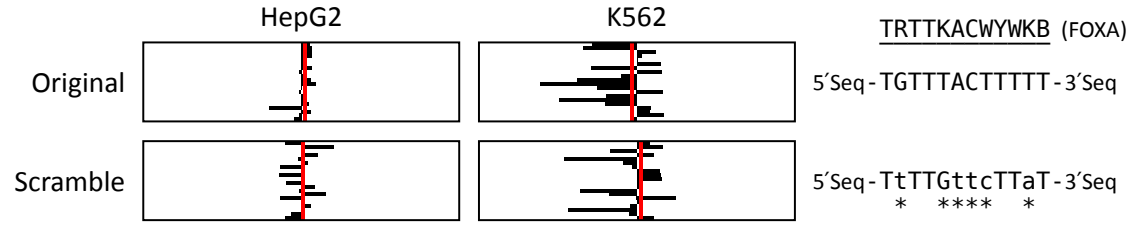
1386 FOXA in HepG2 enhancer

chr3 173155001 173155012 + (hg18)





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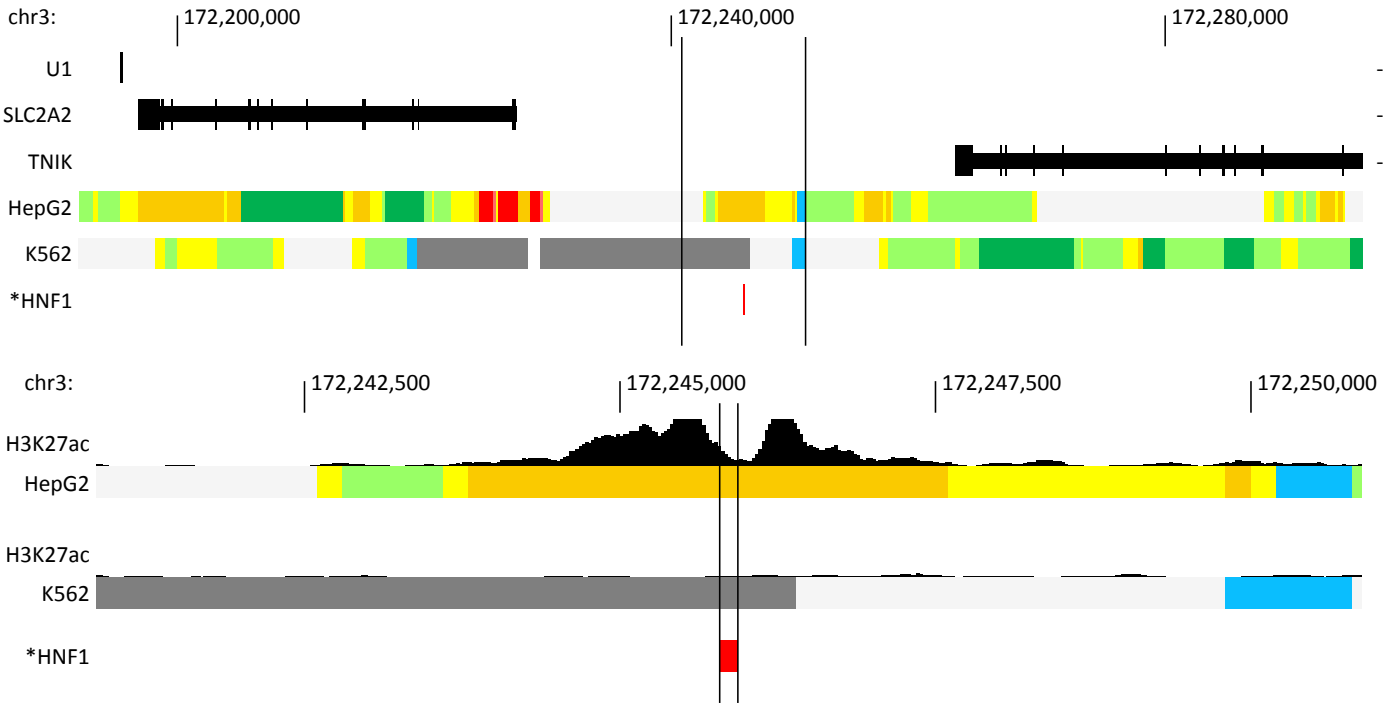
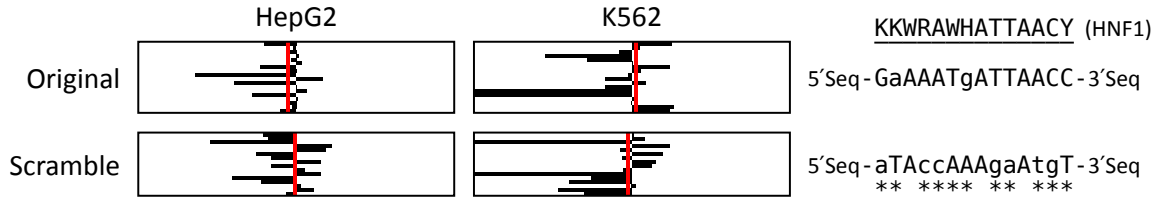
1387 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr3 172245856 172245869 - (hg18)





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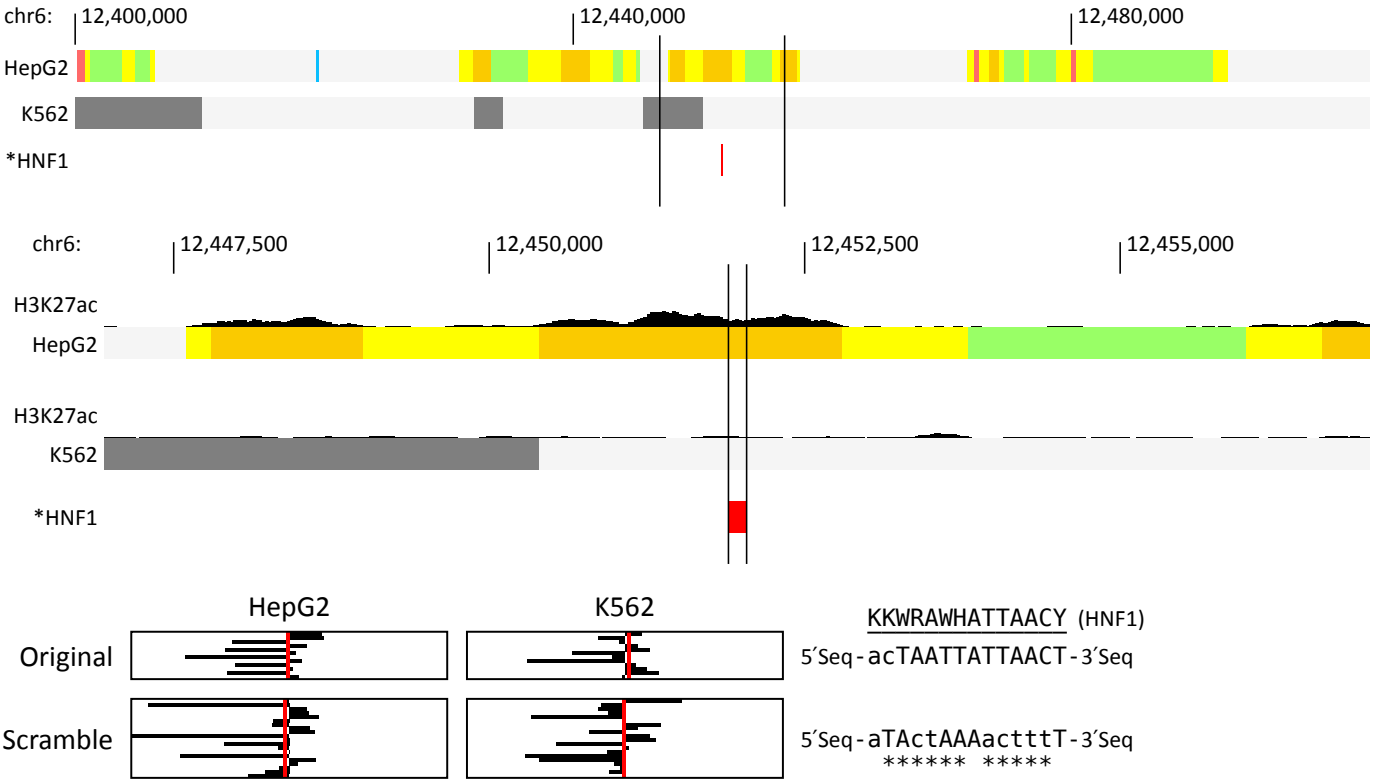
1388 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 12451962 12451975 + (hg18)



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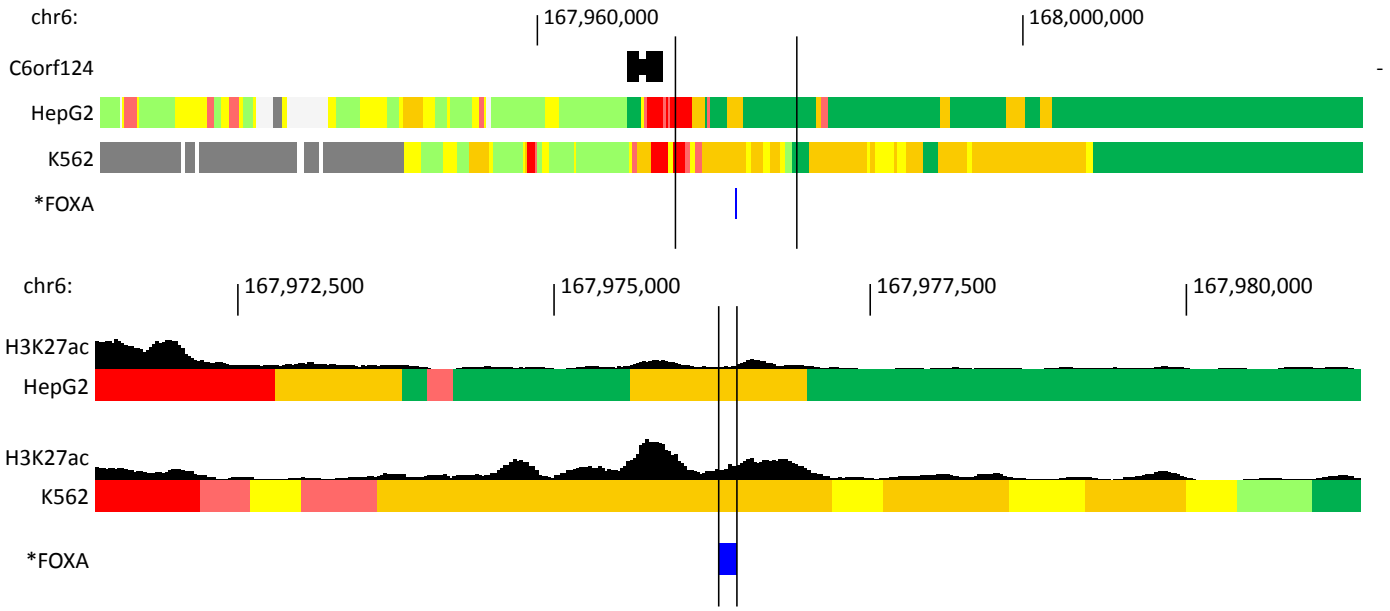
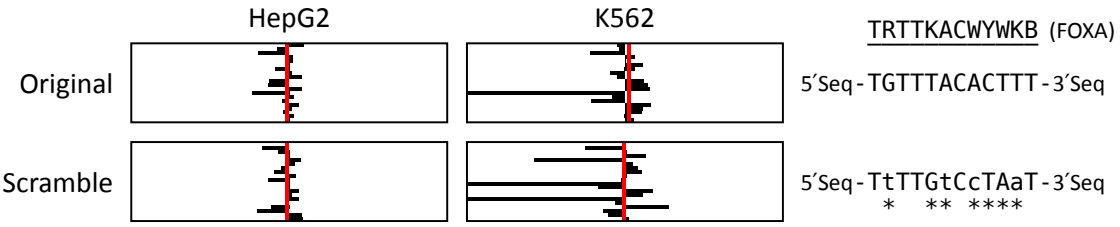
1389 FOXA in HepG2 enhancer

chr6 167976369 167976380 + (hg18)





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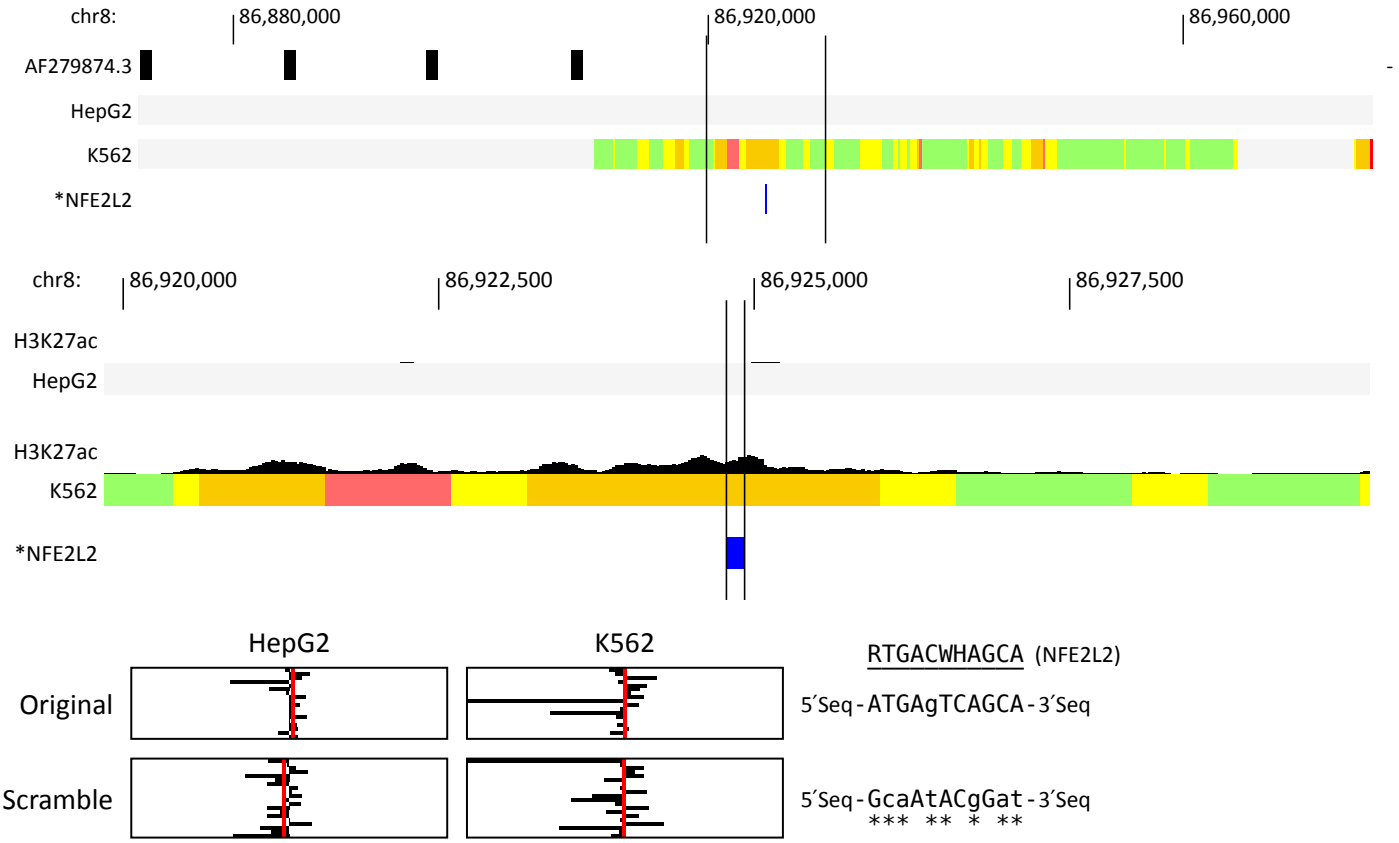
1390 NFE2L2 in K562 enhancer

chr8 86924847 86924857 - (hg18)



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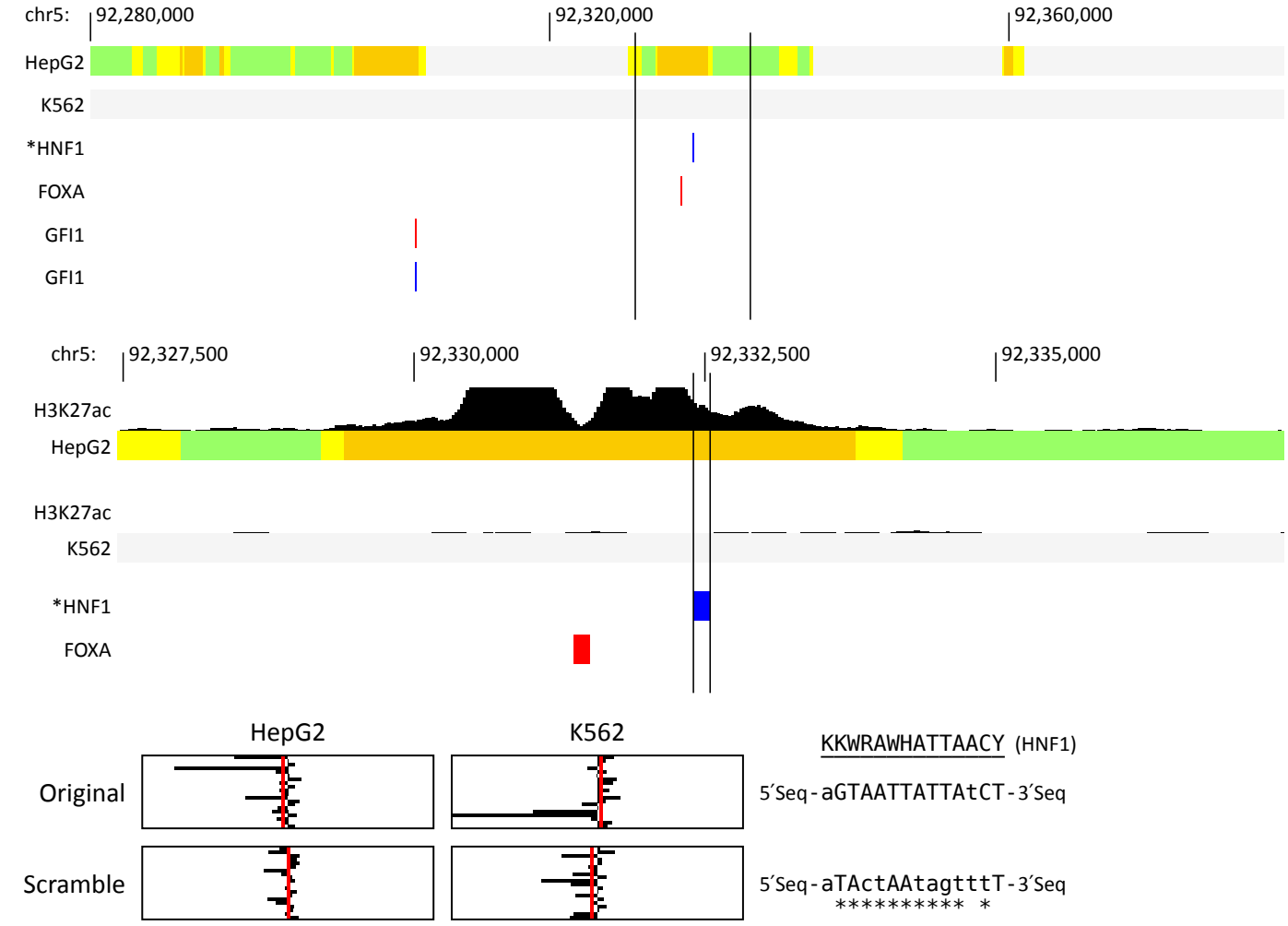
1391 HNF1 in HepG2 enhancer

chr5 92332467 92332480 + (hg18)



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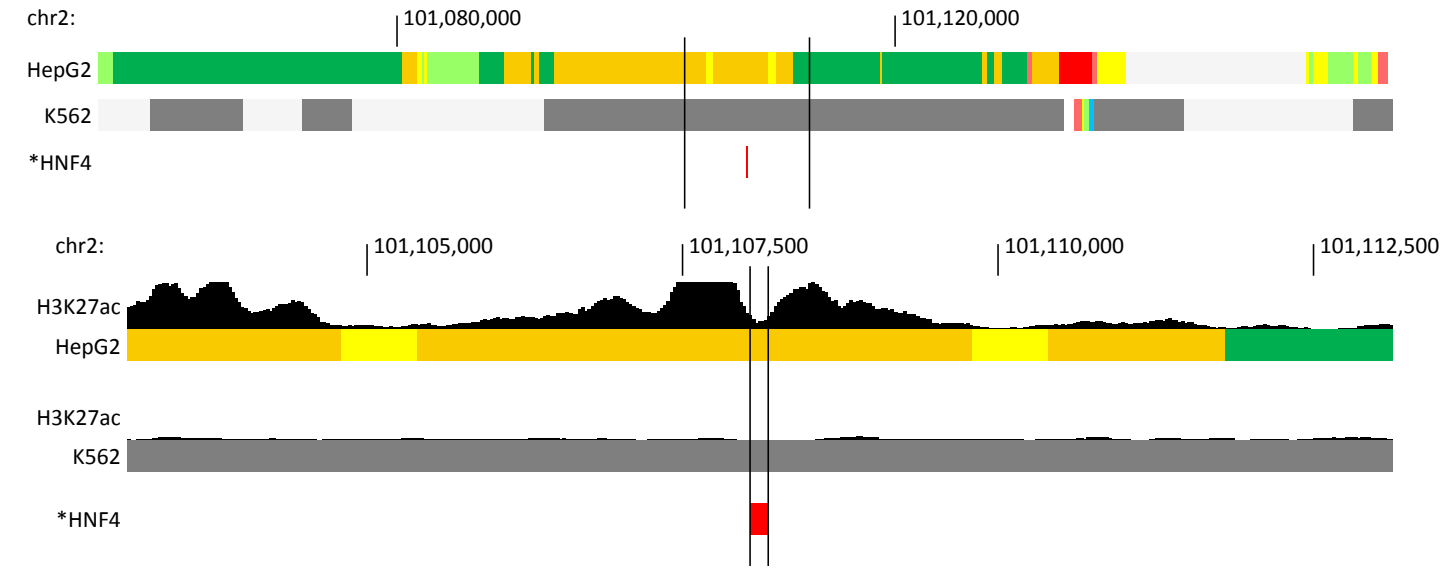
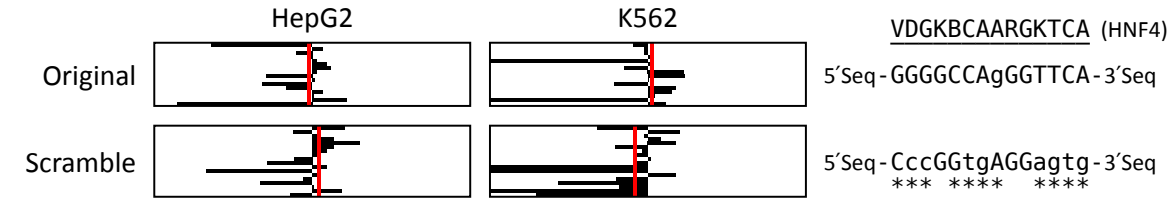
1392 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 101108101 101108114 + (hg18)





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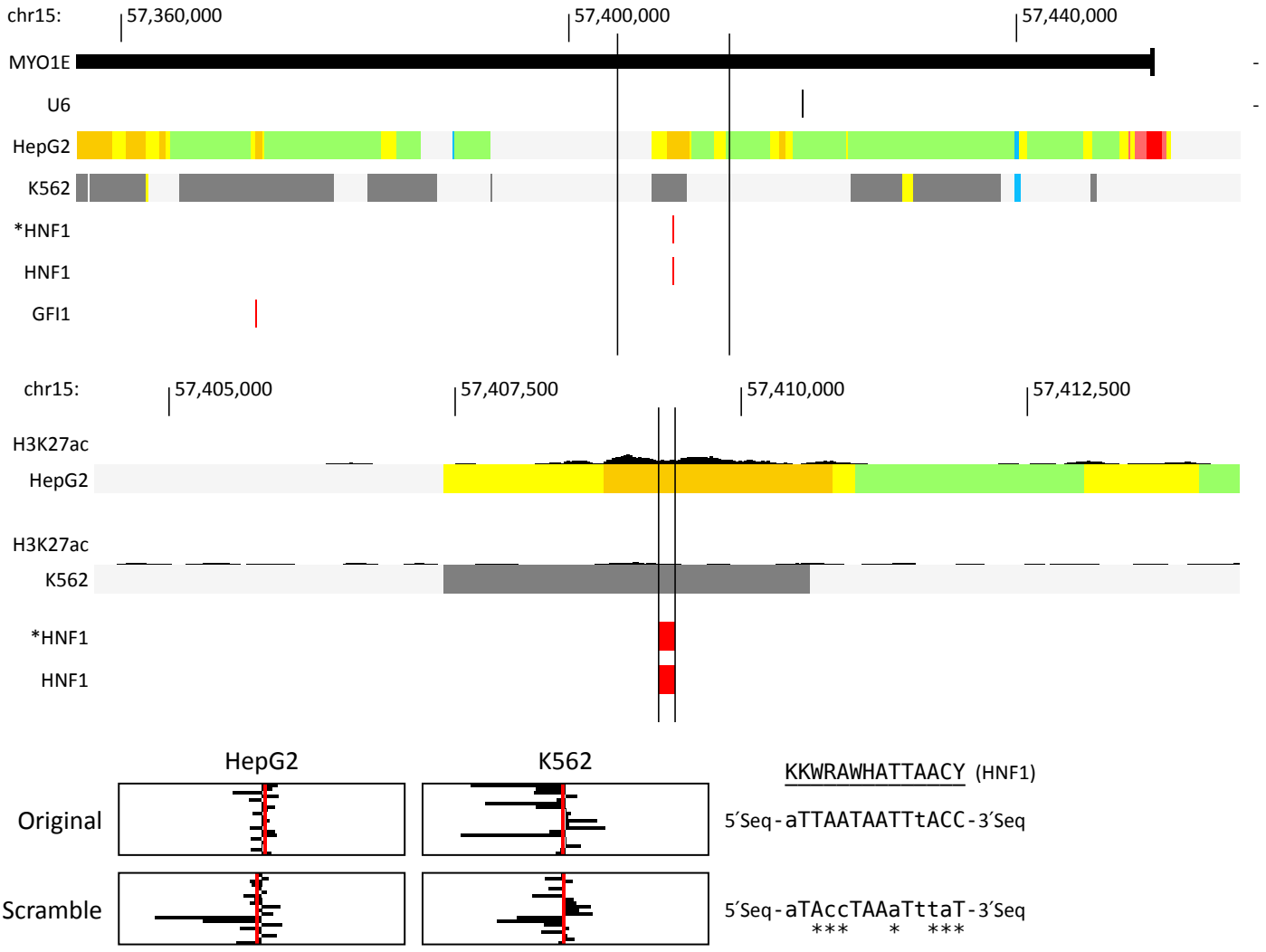
1393 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr15 57409344 57409357 + (hg18)



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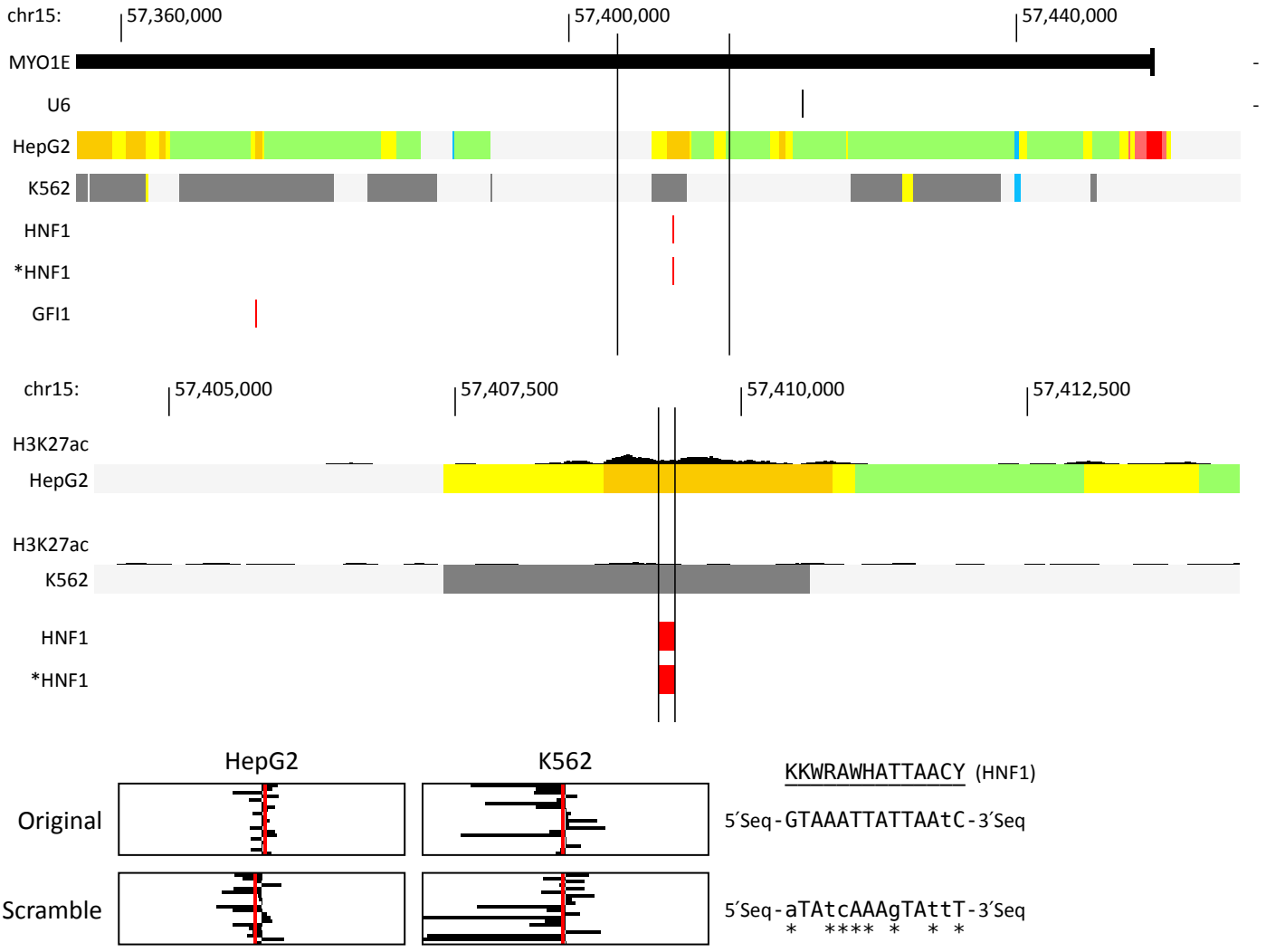
1394 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr15 57409343 57409356 - (hg18)



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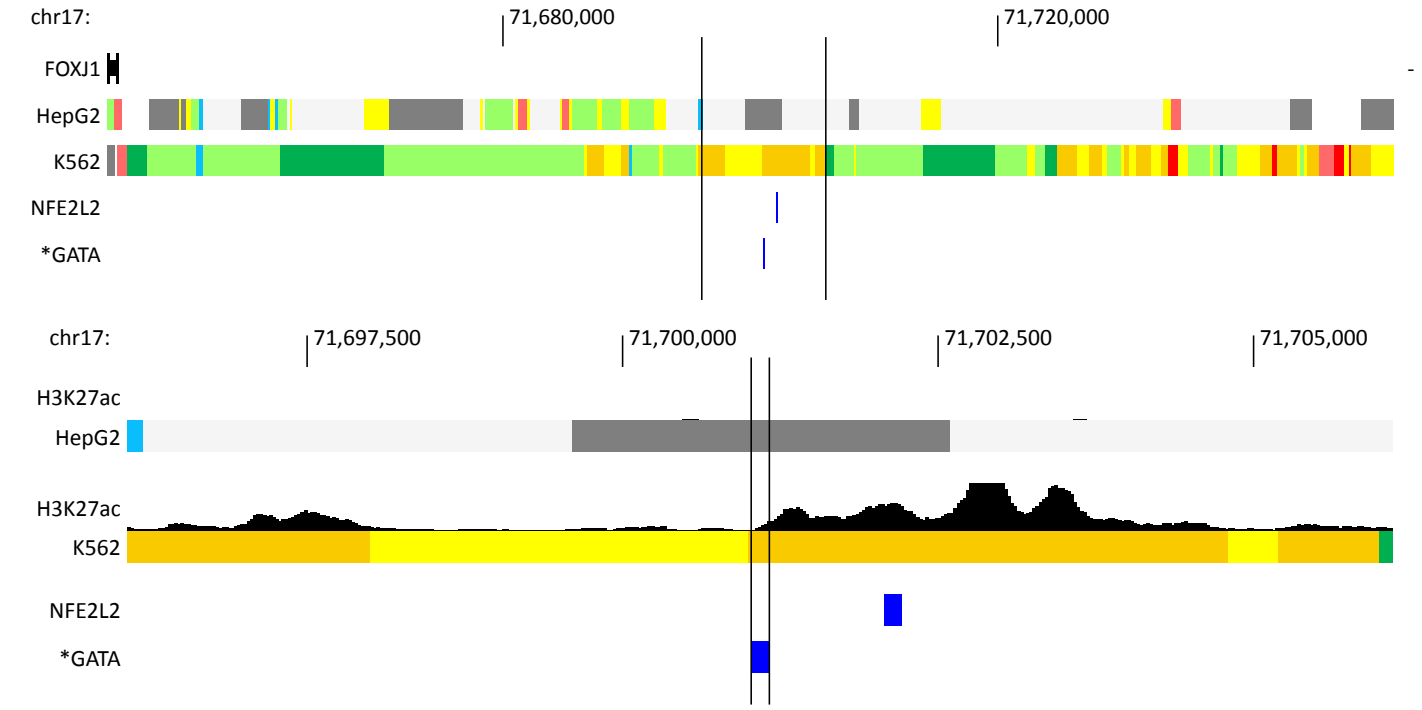
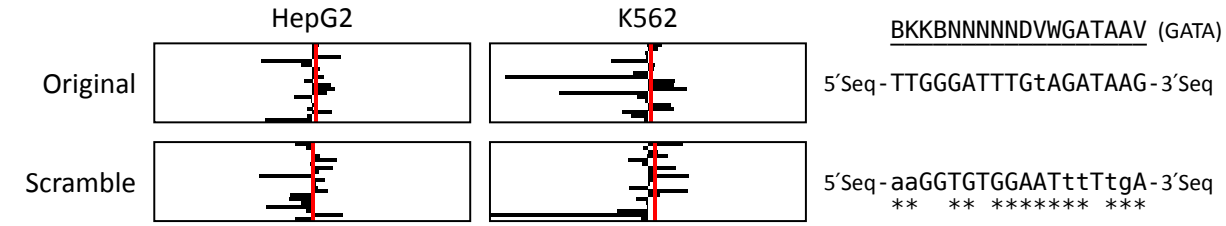
1395 GATA in K562 enhancer

chr17 71701083 71701100 - (hg18)





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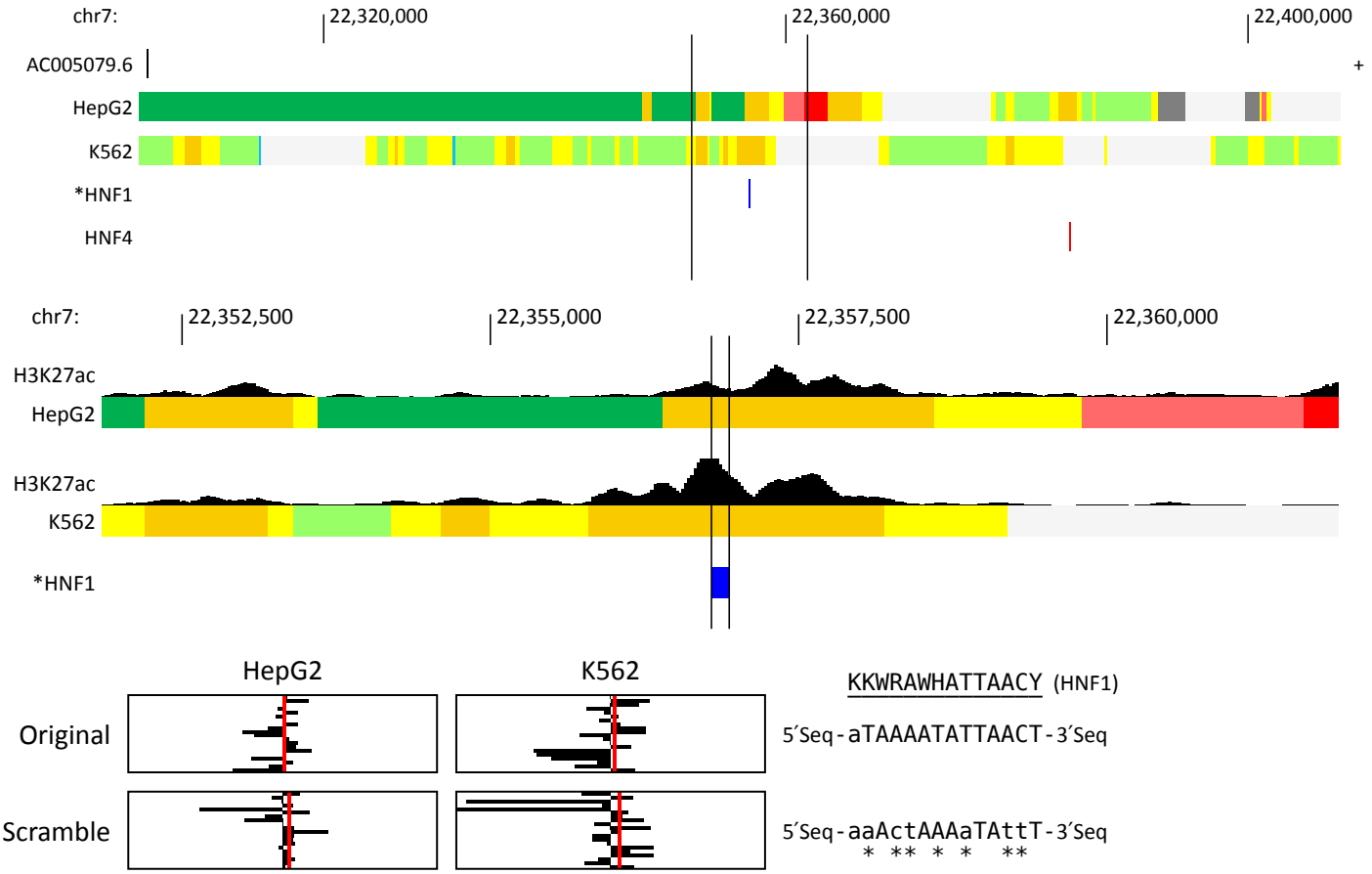
1396 HNF1 in HepG2 enhancer

chr7 22356859 22356872 + (hg18)



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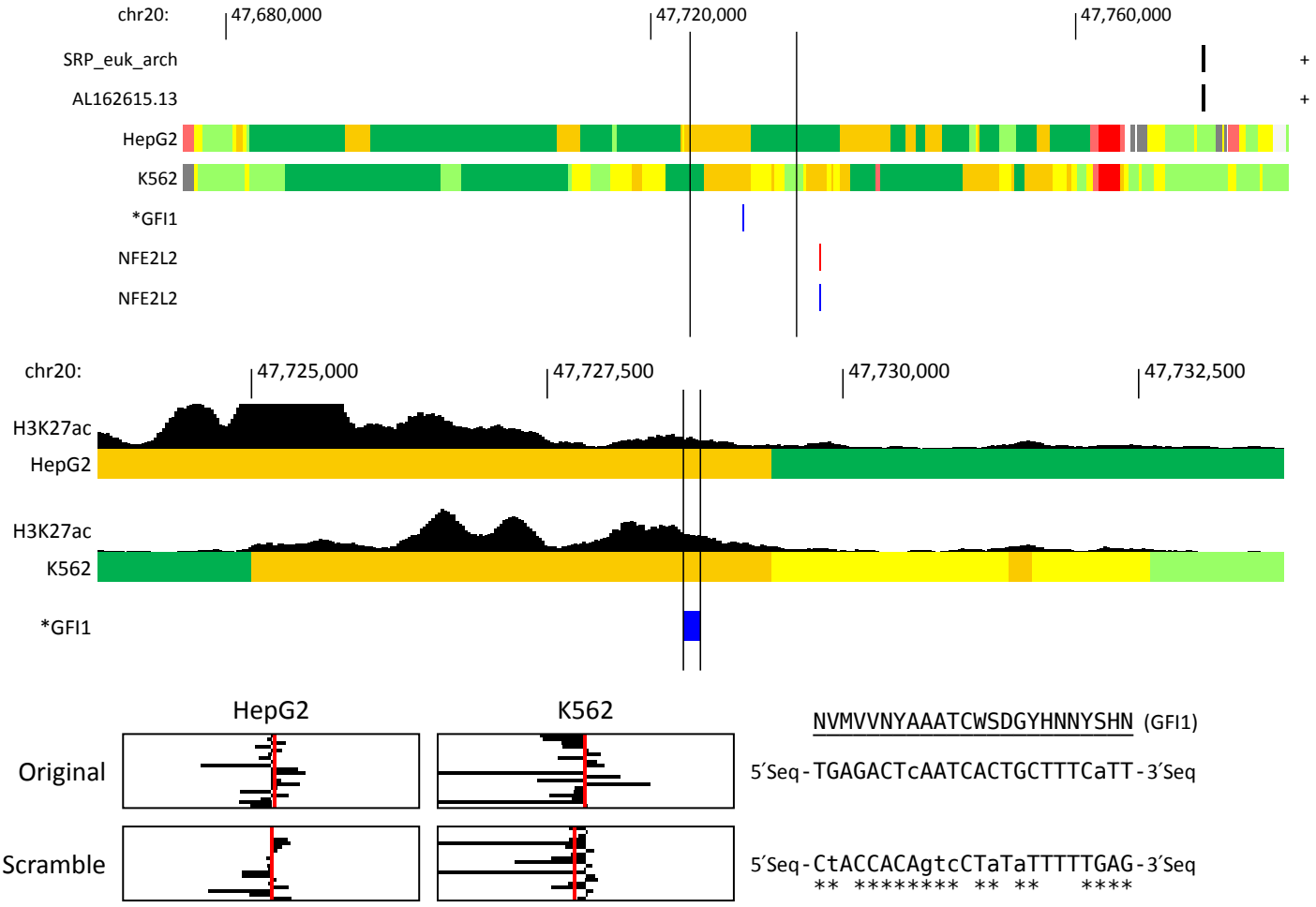
1397 GFI1 in HepG2 enhancer

chr20 47728712 47728735 + (hg18)



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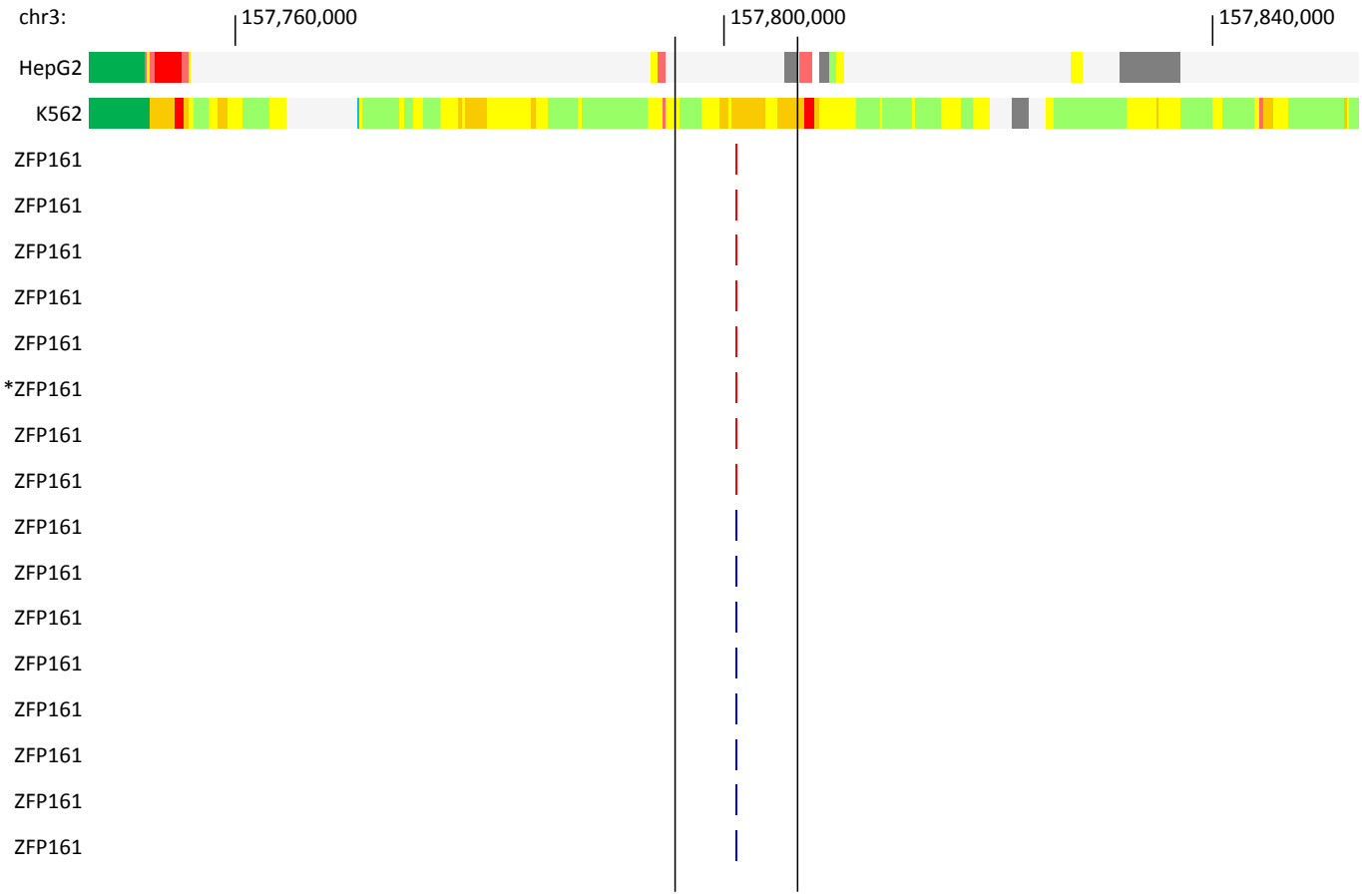
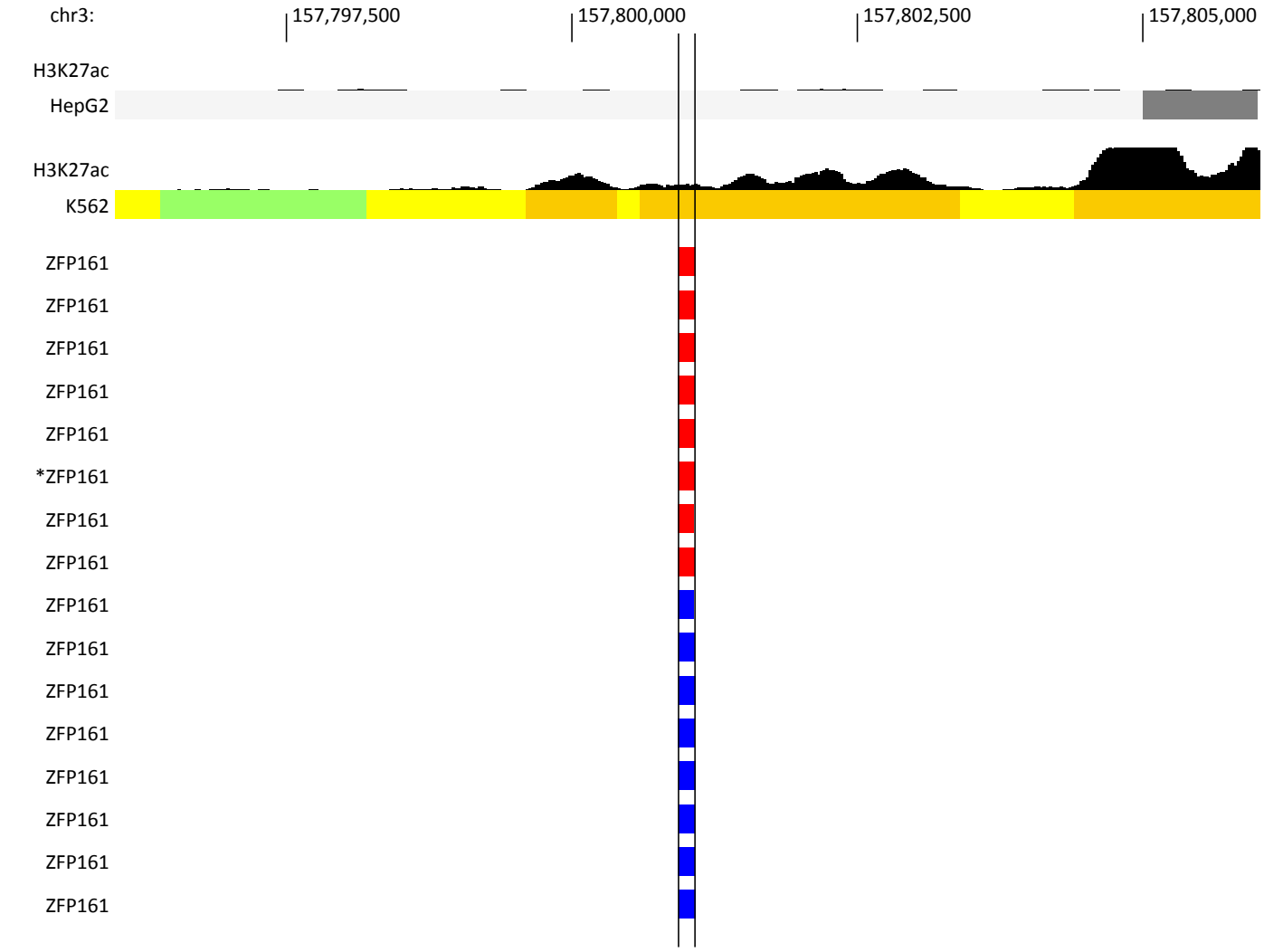
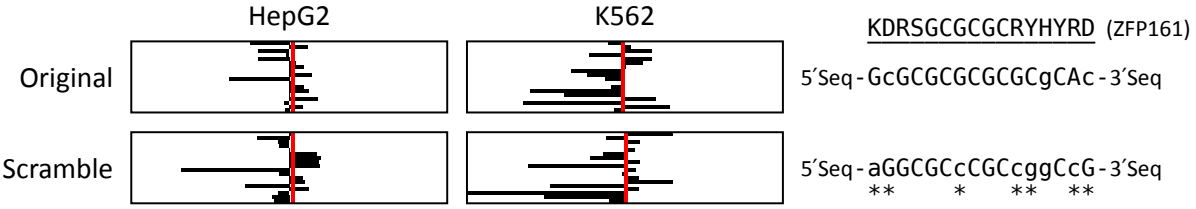
1398 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr3 157800999 157801014 - (hg18)







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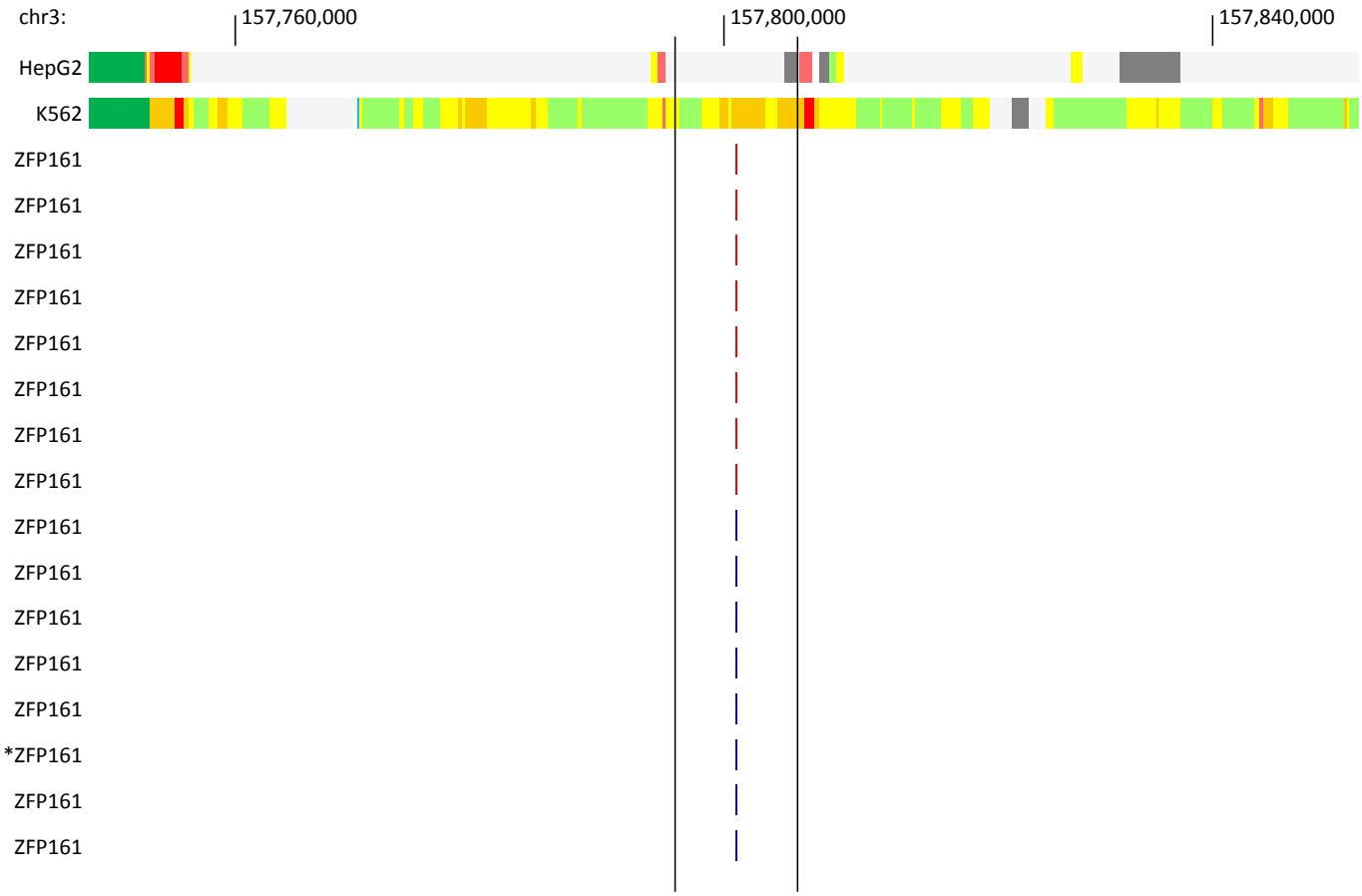
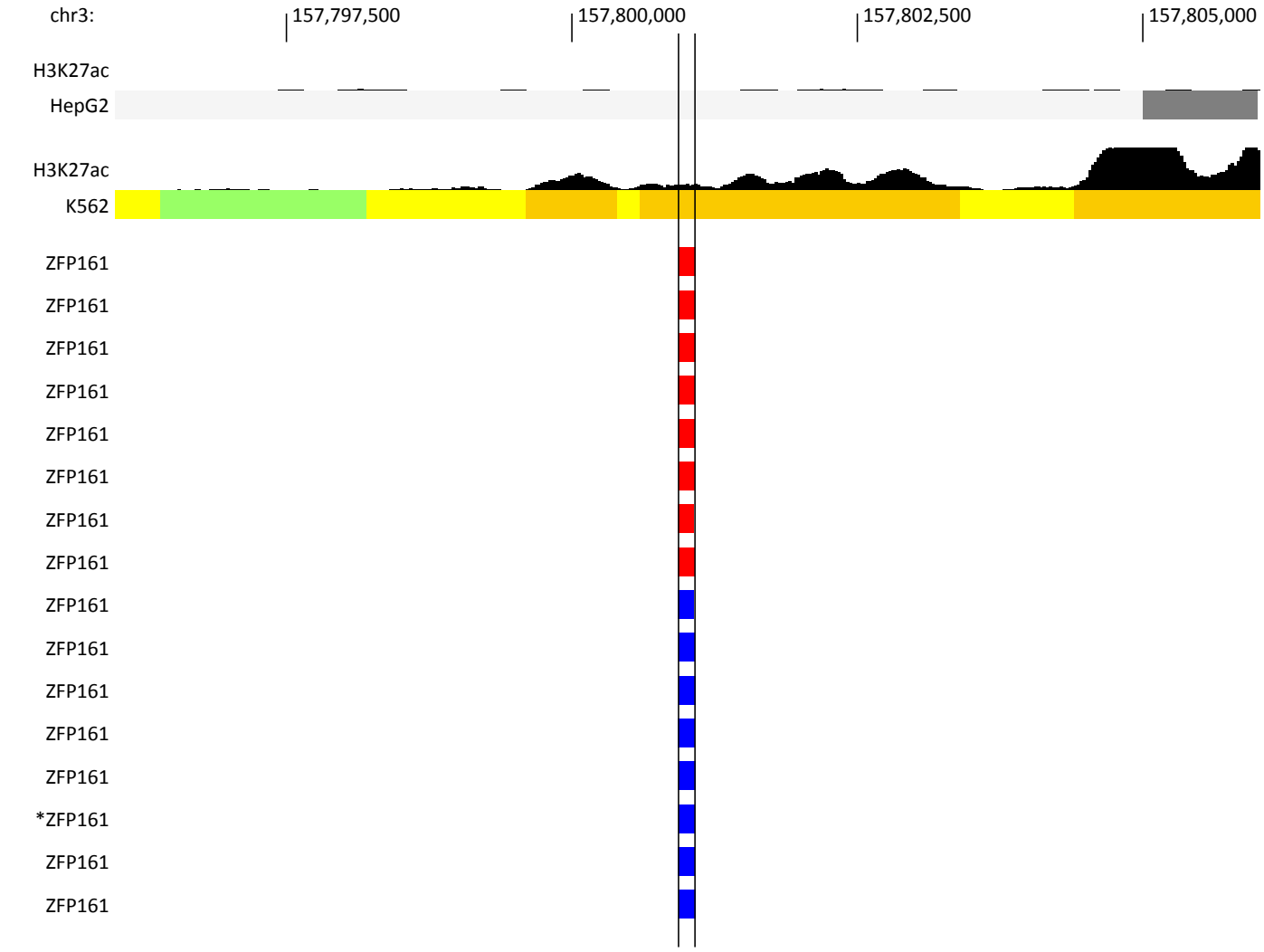
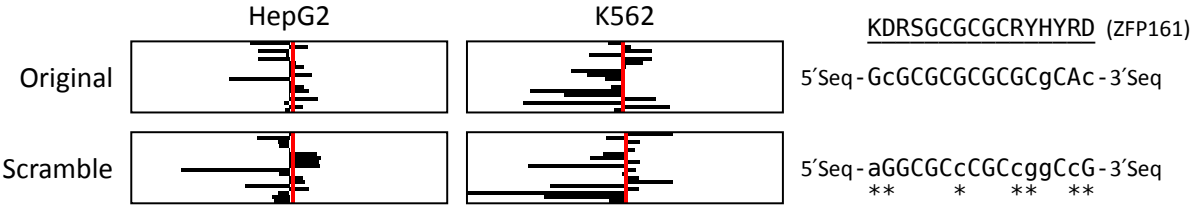
1399 ZFP161 in K562 enhancer

chr3 157800999 157801014 - (hg18)



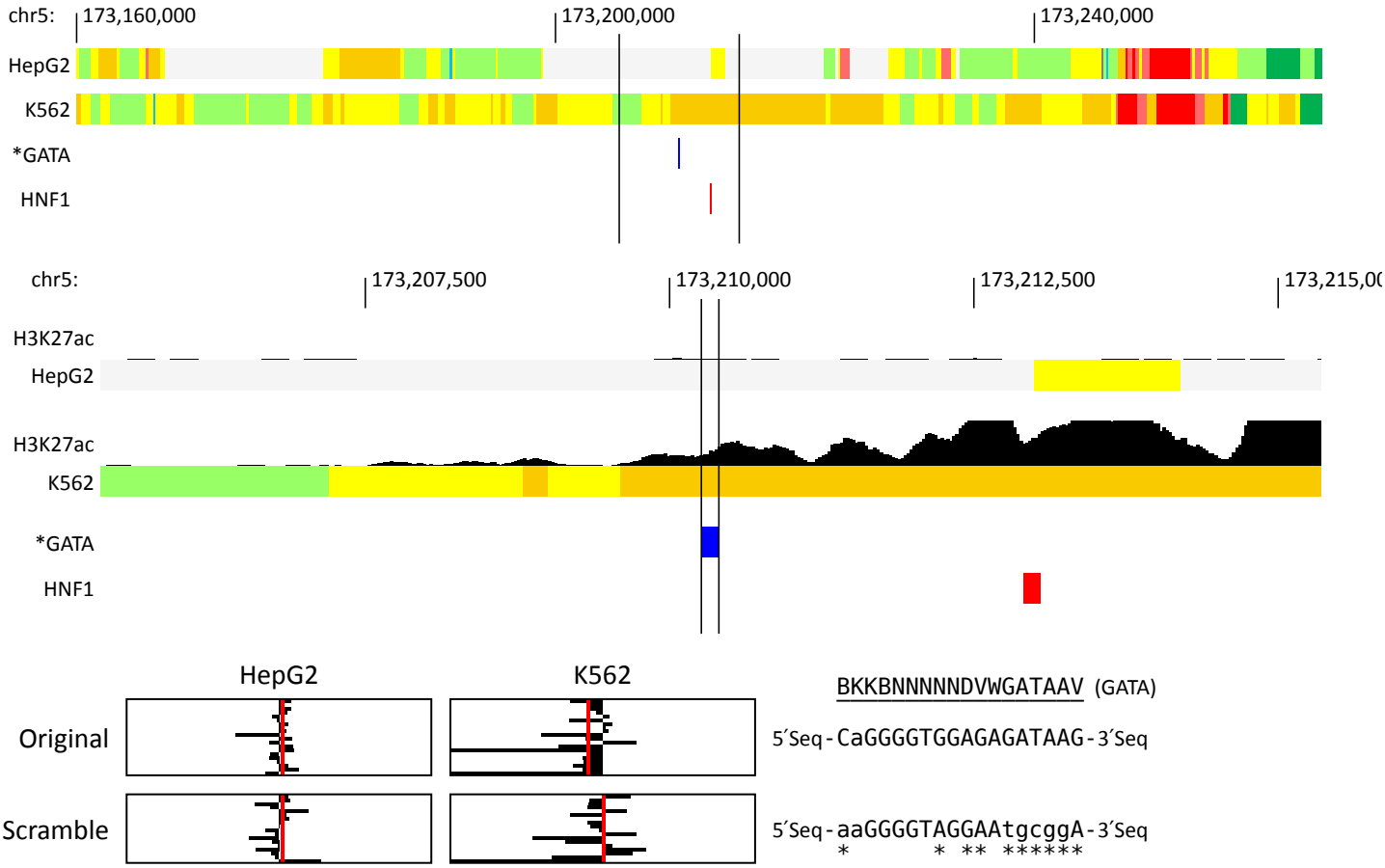




5′Seq = ttccttcttagggatgtgatcaagttcaacattgttctctcattatcctgtctttcccagtgcat
3′Seq = acacacacacacacttttttttttttttttttgaaacagggtctcactctgtcacccaagctgga

1400 GATA in K562 enhancer

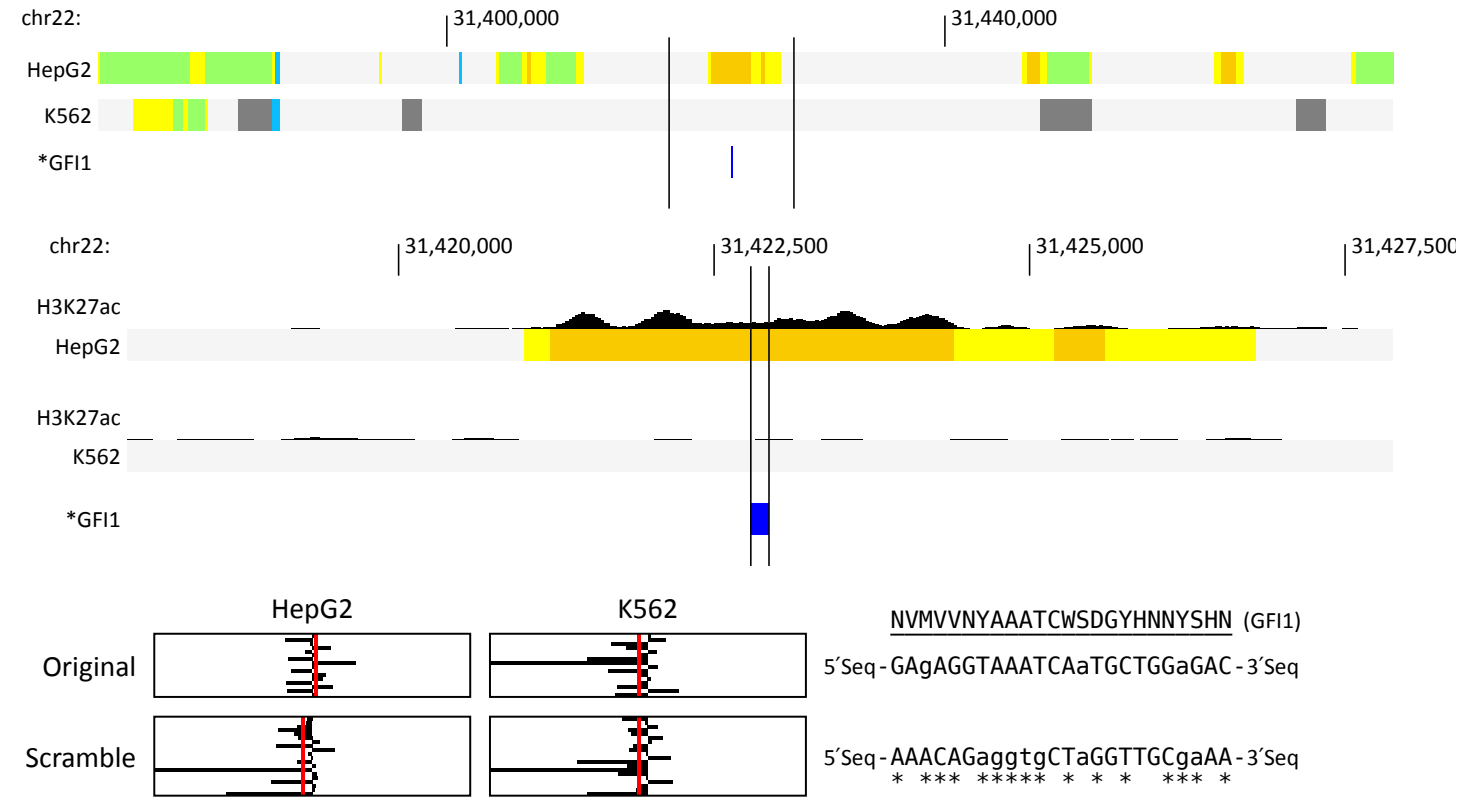
chr5 173210325 173210342 - (hg18)



5′Seq = agtctgagcaggcatttaatgaacaaatgcagaagcaccccaaggatccgagaggaaactgcca
3′Seq = aagcctcagagccccactccgggtgctcttttcaaggcttcttgttataggaaaaatgtgatt

1401 GFI1 in HepG2 enhancer

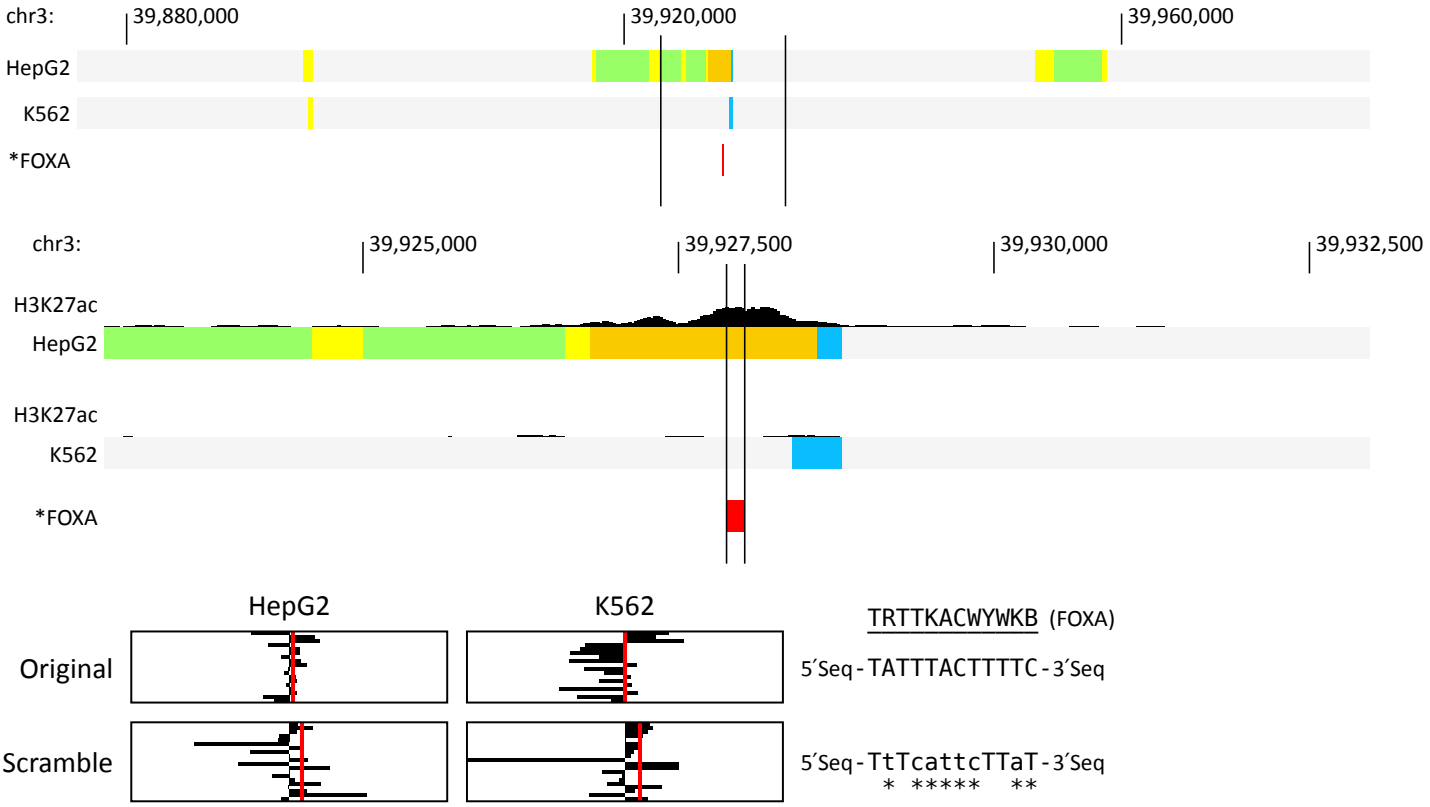
chr22 31422852 31422875 - (hg18)



5′Seq = ggttgggcagcaggaagcaggctgcaccacaggcaaagctagaatgaaatttcattctggg
3′Seq = aggagacacaagccttgagccaaaccatgataagaaggggaaacagagaaaaaagaatgg

1402 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 39927948 39927959 + (hg18)



5′Seq = cataatcccactttctttaataacagttttctactaggttgcttttatggctccaagttcctgatct
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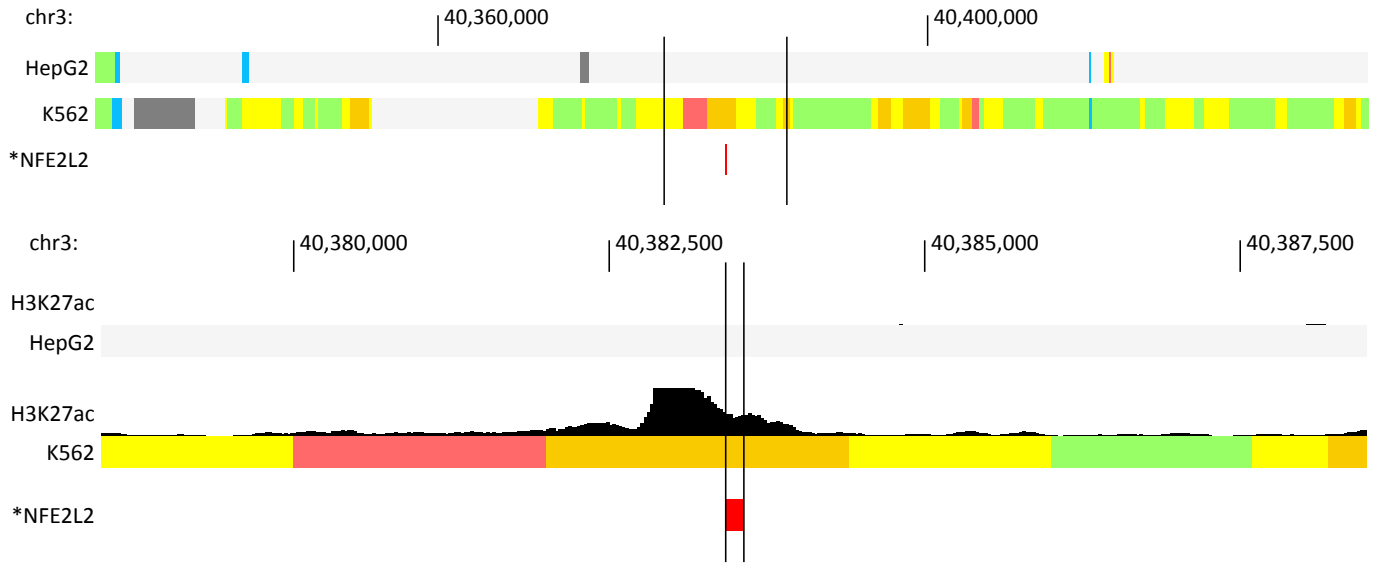
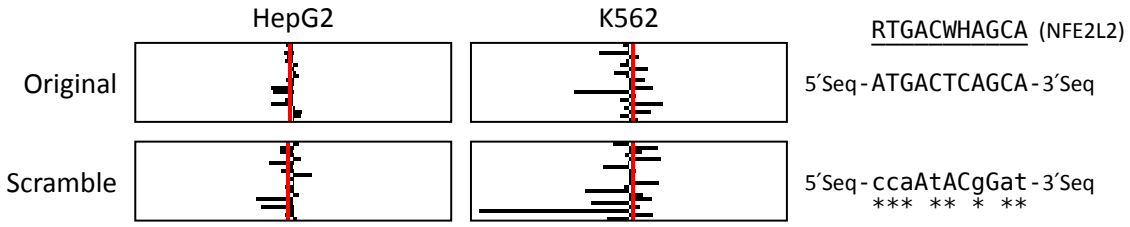
1403 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr3 40383490 40383500 + (hg18)

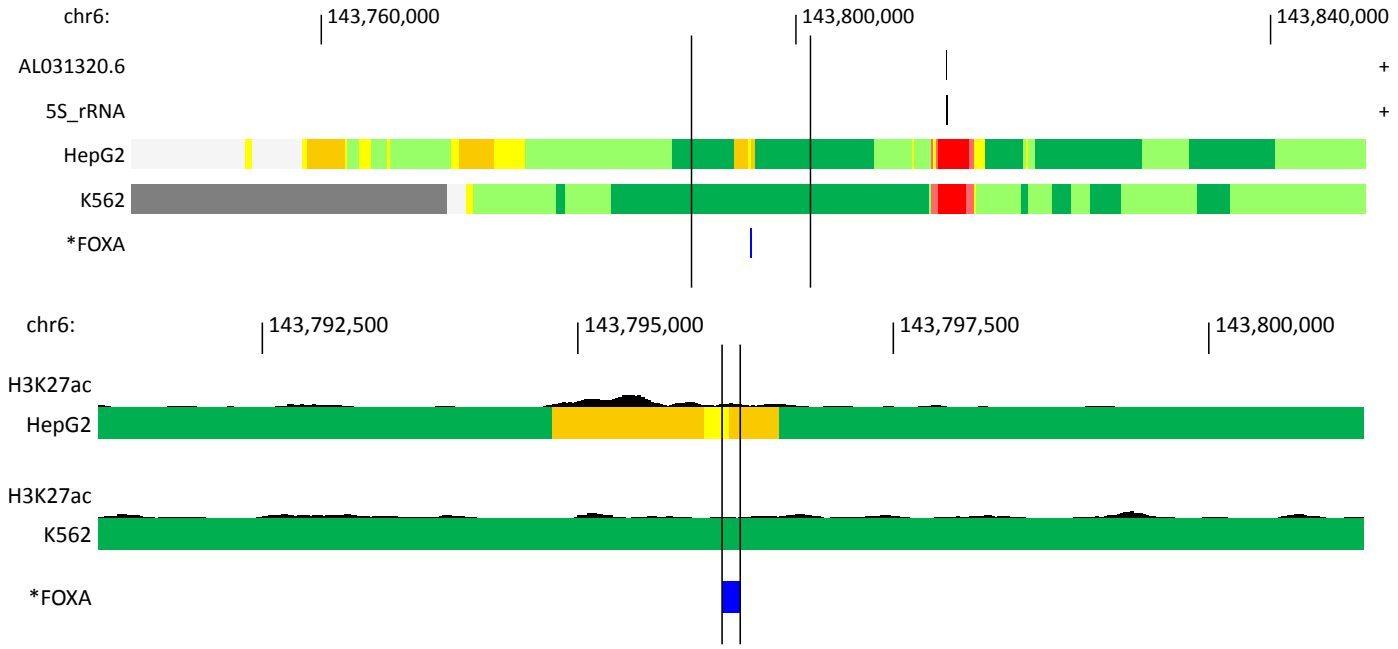


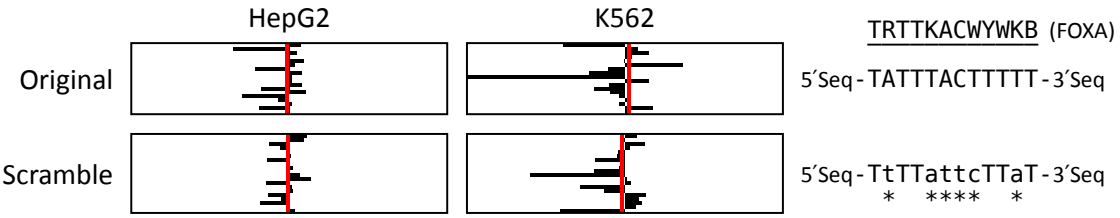


5′Seq = aatgtagccaactggctcaagatgttgccttacccgaaaccttgcaattagagattgtagaacattc
3′Seq = catctattcacagtgcaggctgtttatttctggttttgtattcaatgtgtcaccaaaaagtgcaagc

1404 FOXA in HepG2 enhancer

chr6 143796210 143796221 + (hg18)





5′Seq = ccaaagagctgtaactttactcattttccatttacaatcagaatatcataaaggatttcttacttct
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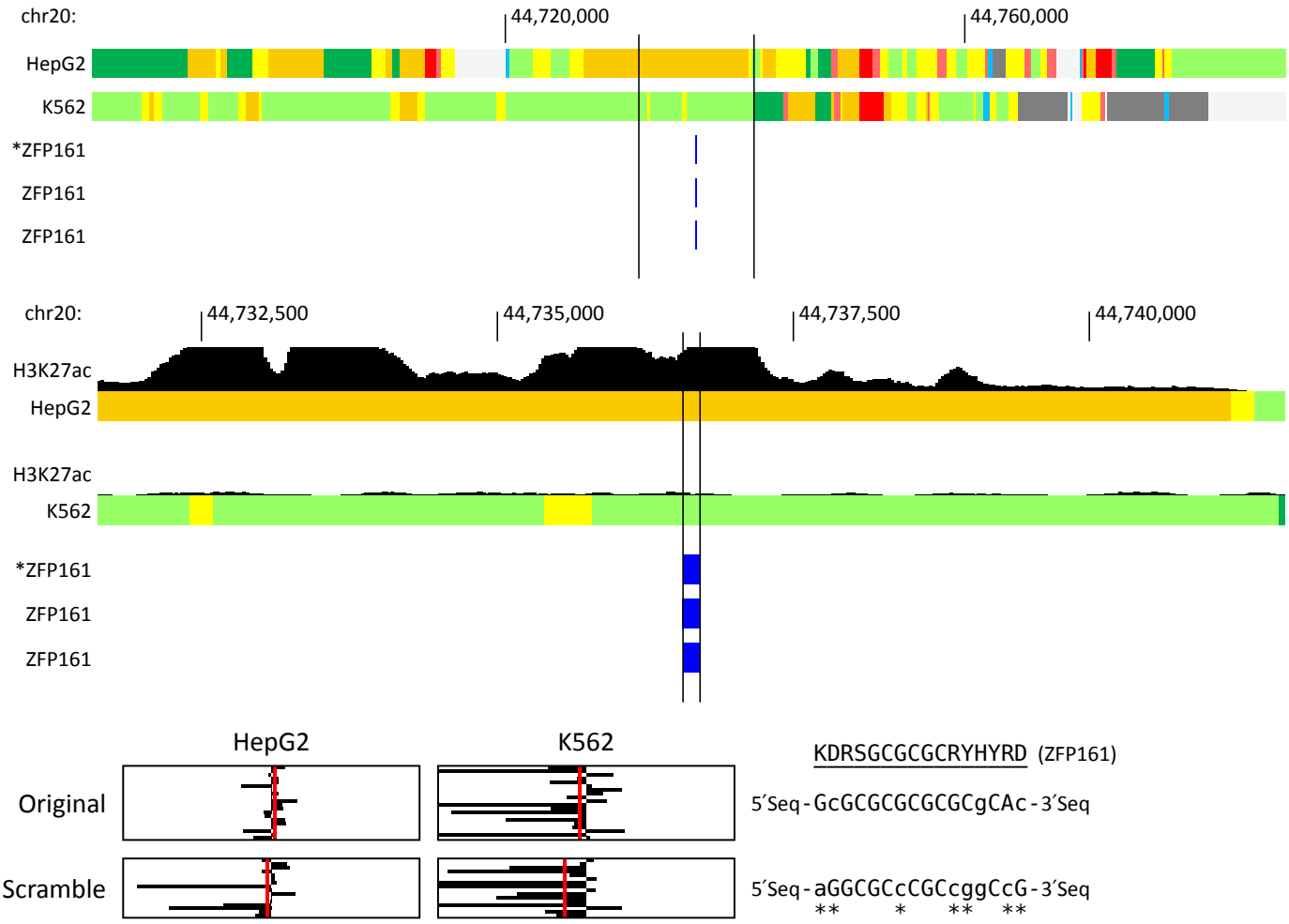
1405 ZFP161 in HepG2 enhancer

chr20 44736633 44736648 - (hg18)

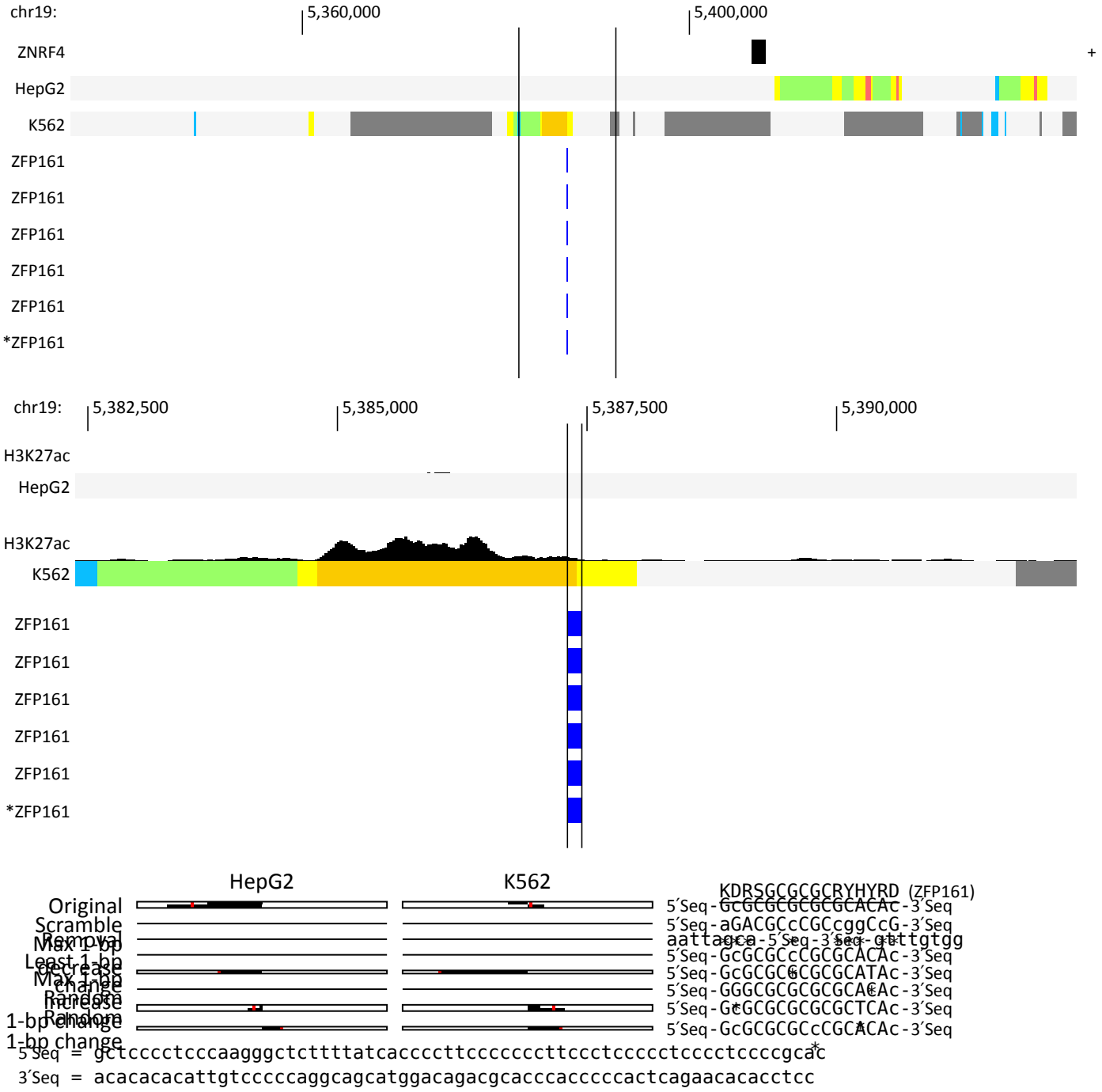


5′Seq = ttcctctgattccttccactcctccaaacaaacacacacacacacacacacacacacacacacacgc

3′Seq = tccccacctacccactgtctcccctgctggaggcaaaacagagtatagtcctggcctgaggttt

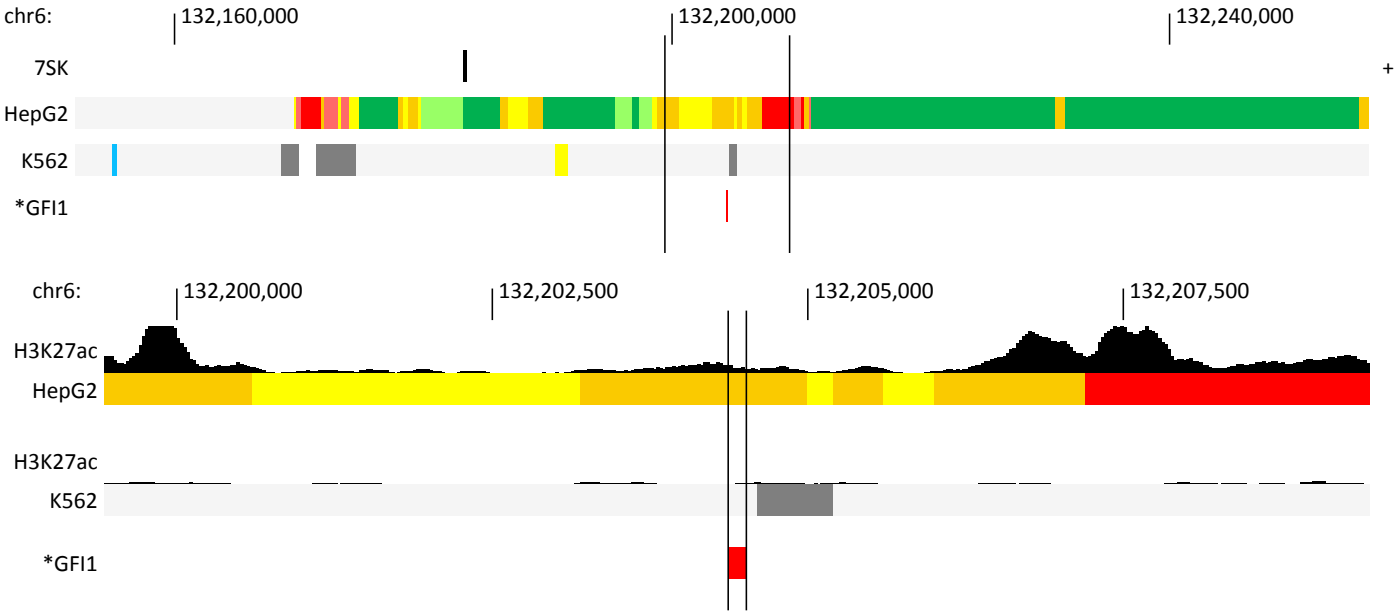
1406 ZFP161 in K562 enhancer

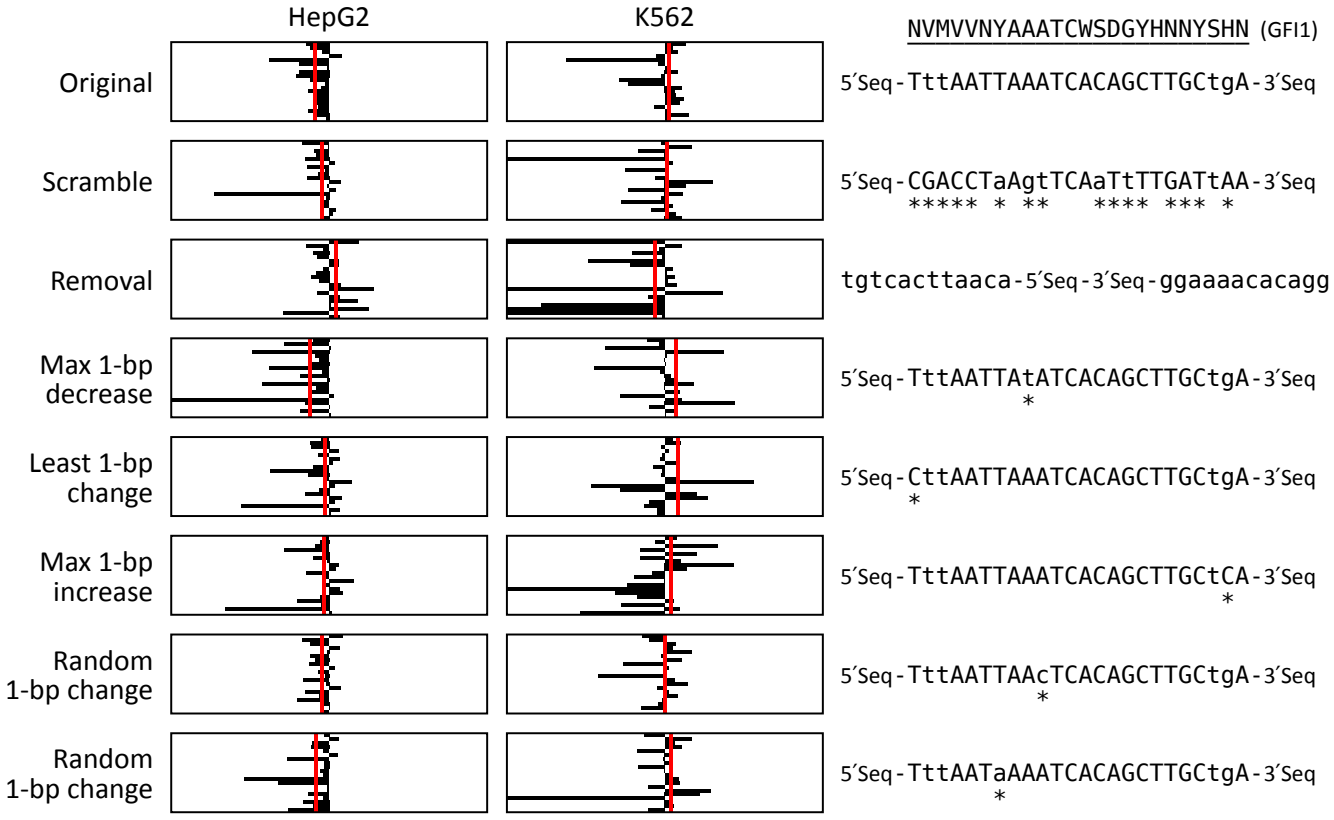
chr19 5387369 5387384 - (hg18)



1407 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 132204430 132204453 + (hg18)





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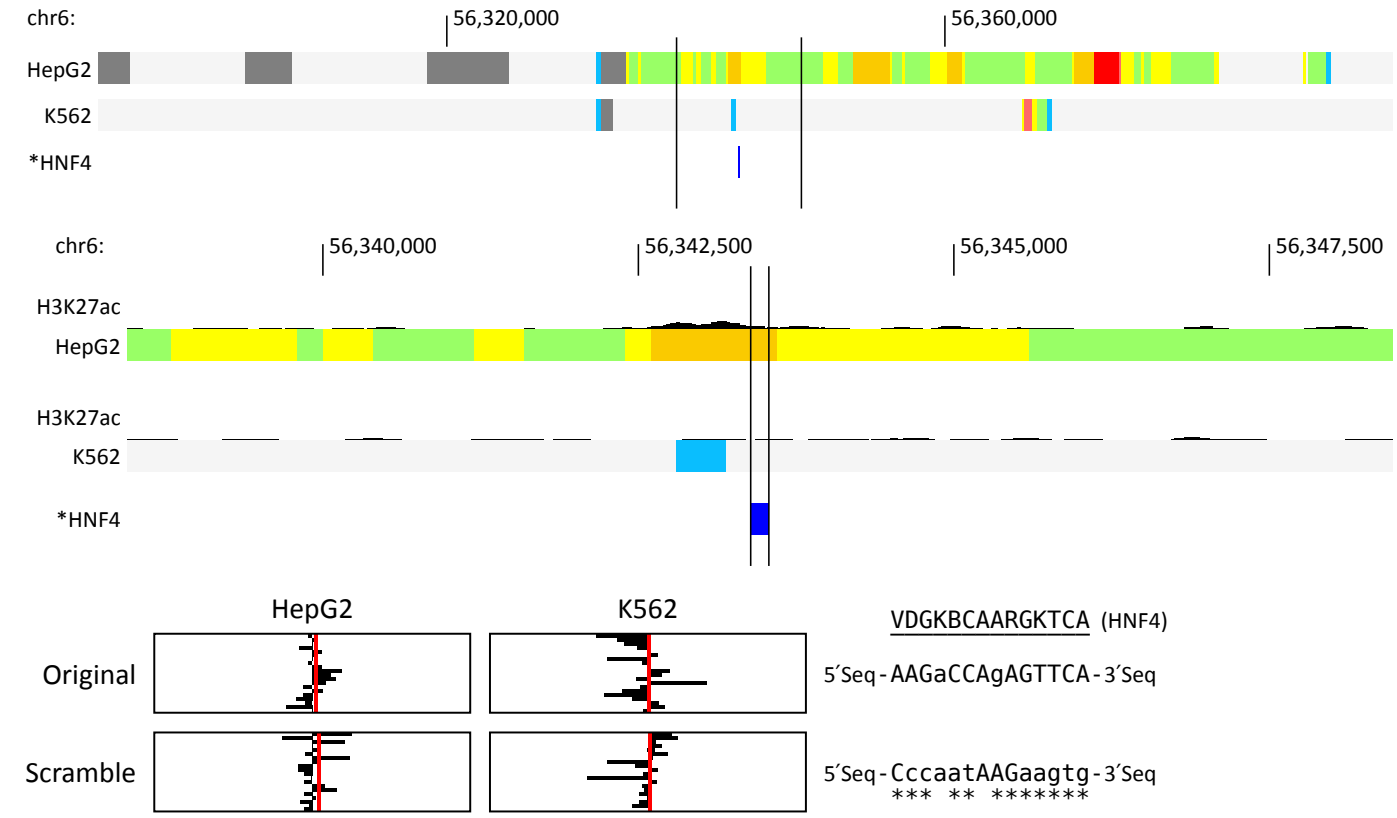
3′Seq = tgttcagcttaacgattatttgttgaatgtttactttgtgcaaggcaccatgctagatgt

1408 HNF4 in HepG2 enhancer

chr6 56343456 56343469 - (hg18)



5′Seq = ctcagtttaattatgagcaattgtttgggctgtgatgtgaagaaatattagagaatggaaaaaaag
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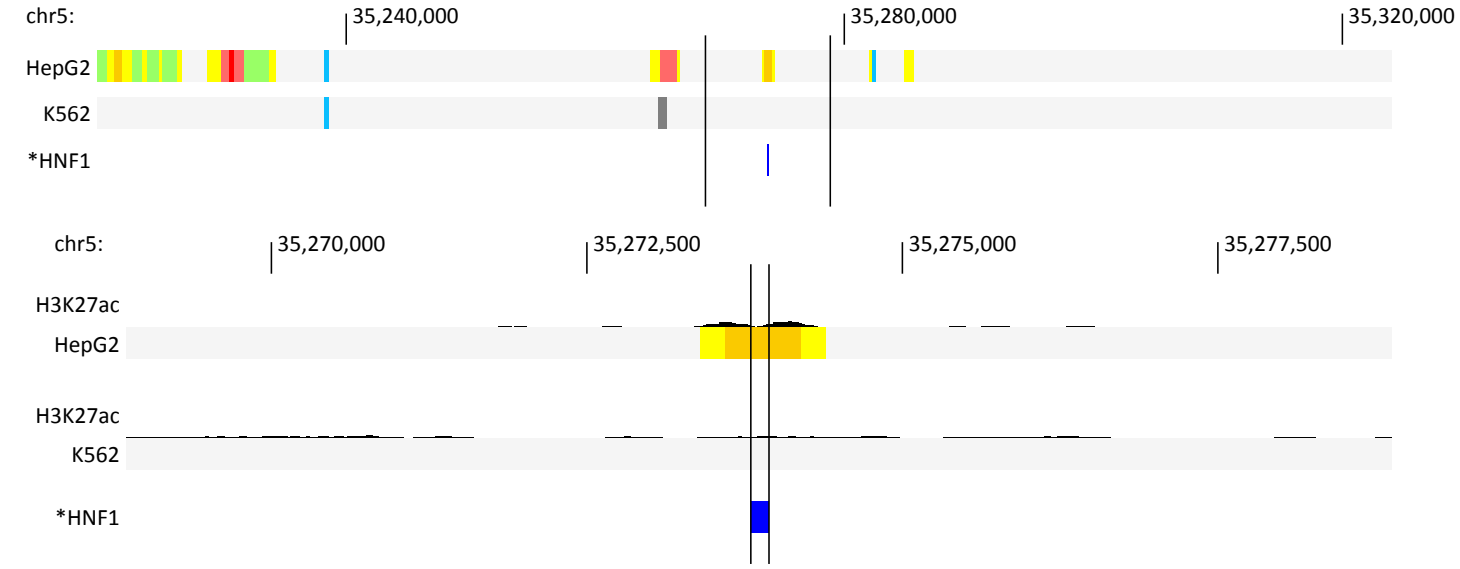
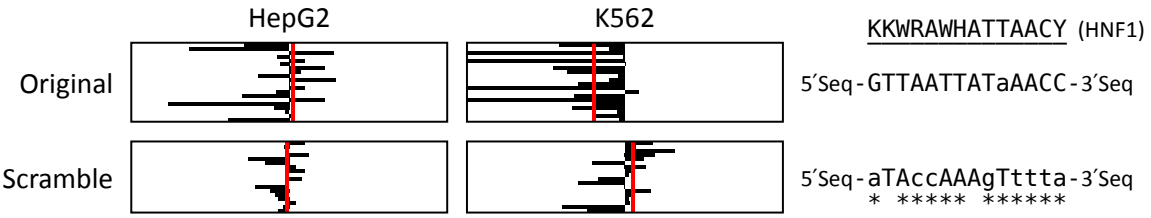
1409 HNF1 in HepG2 enhancer

chr5 35273865 35273878 + (hg18)





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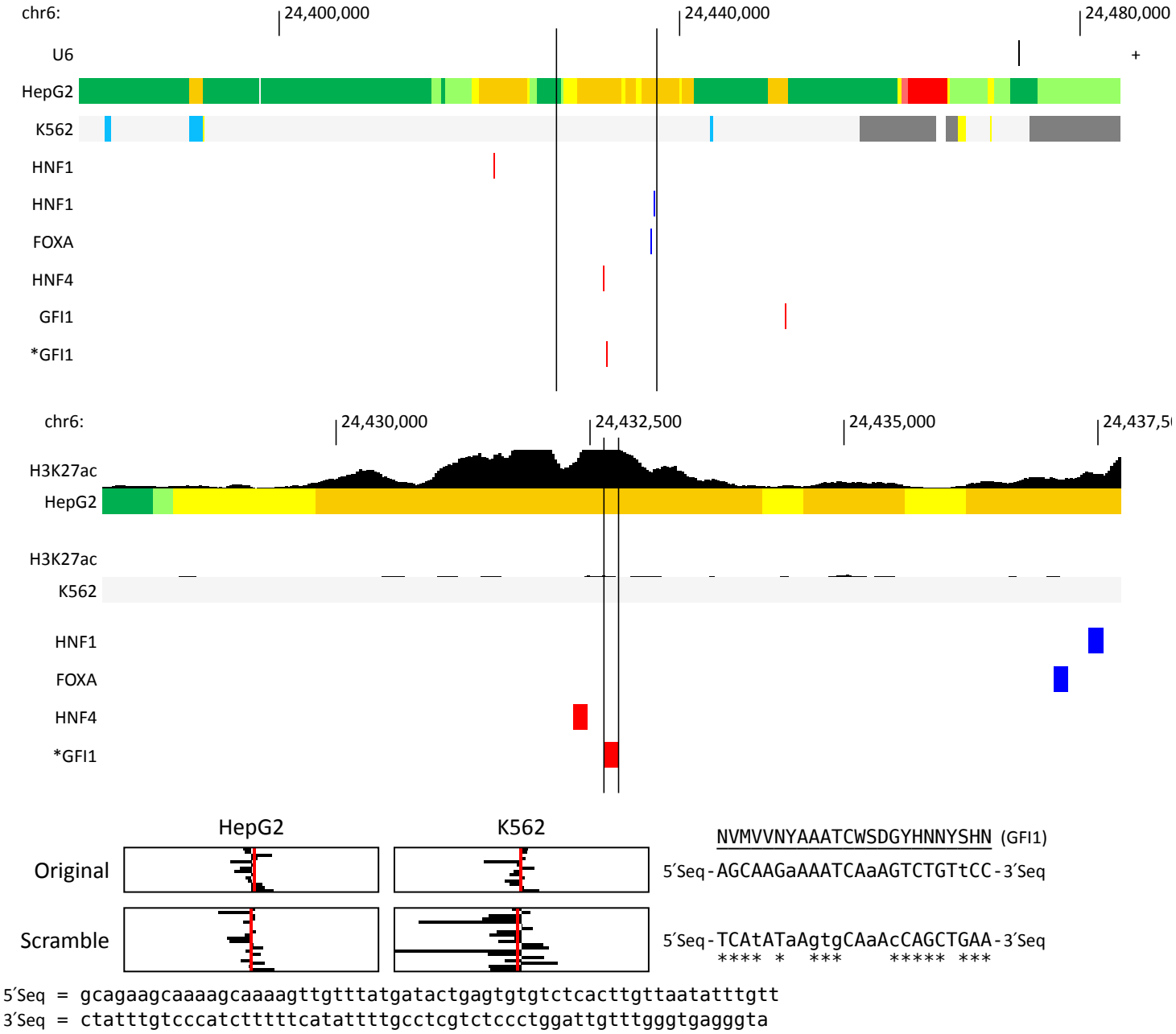
1410 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 24432698 24432721 + (hg18)



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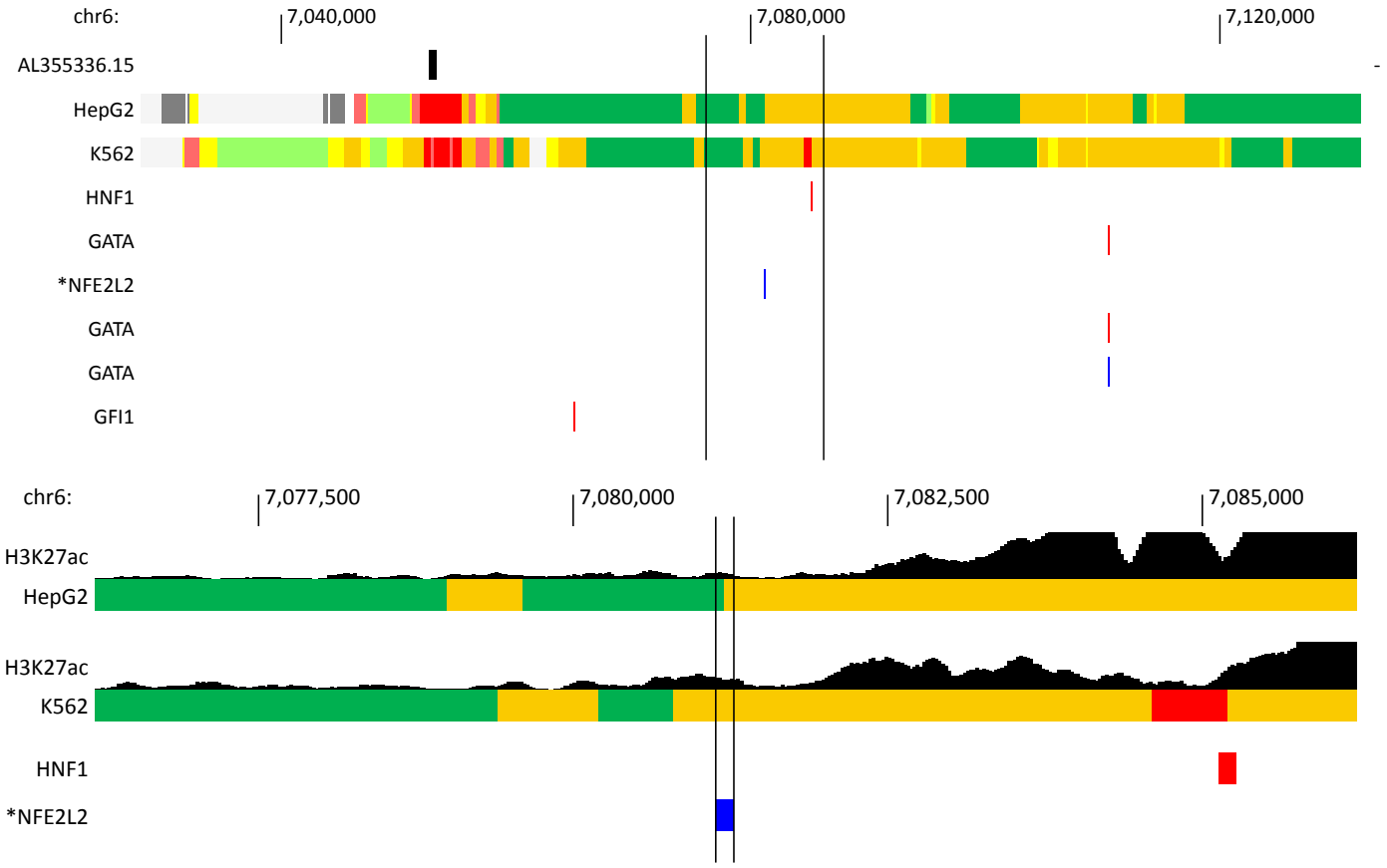
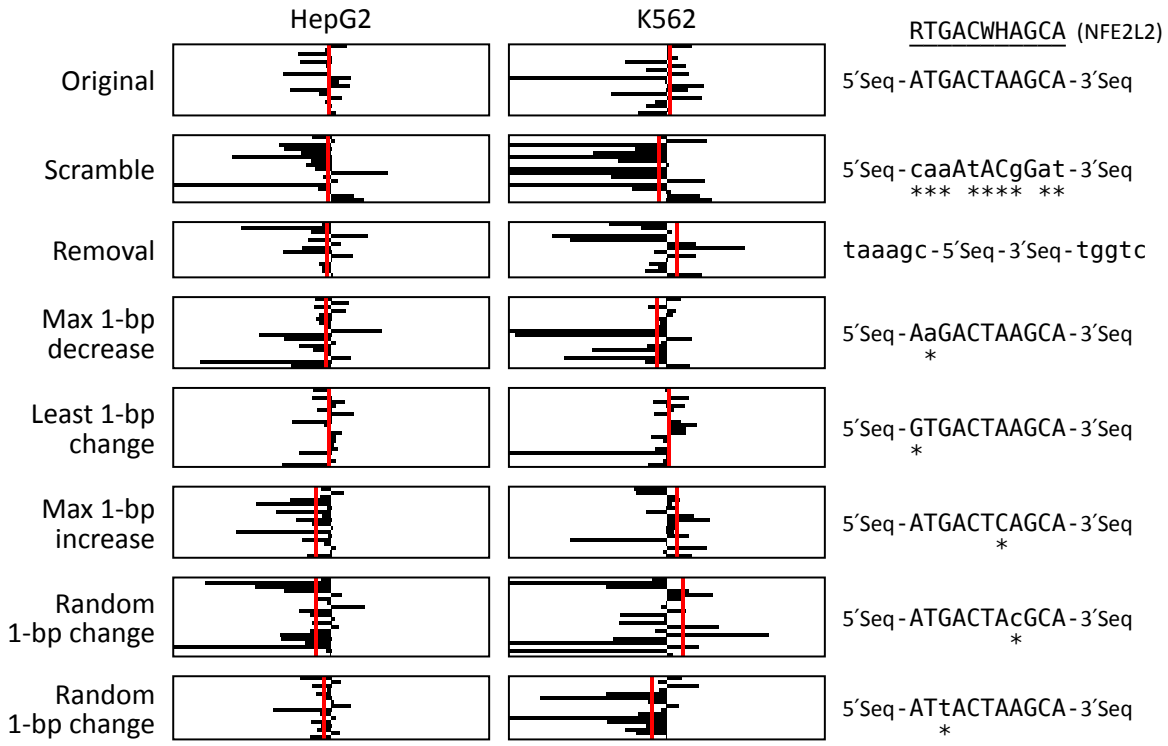
3′Seq = ctatttgtcccatctttttcatattttgcctcgtctccctggattgtttgggtgagggta

1411 NFE2L2 in K562 enhancer

chr6 7081200 7081210 + (hg18)





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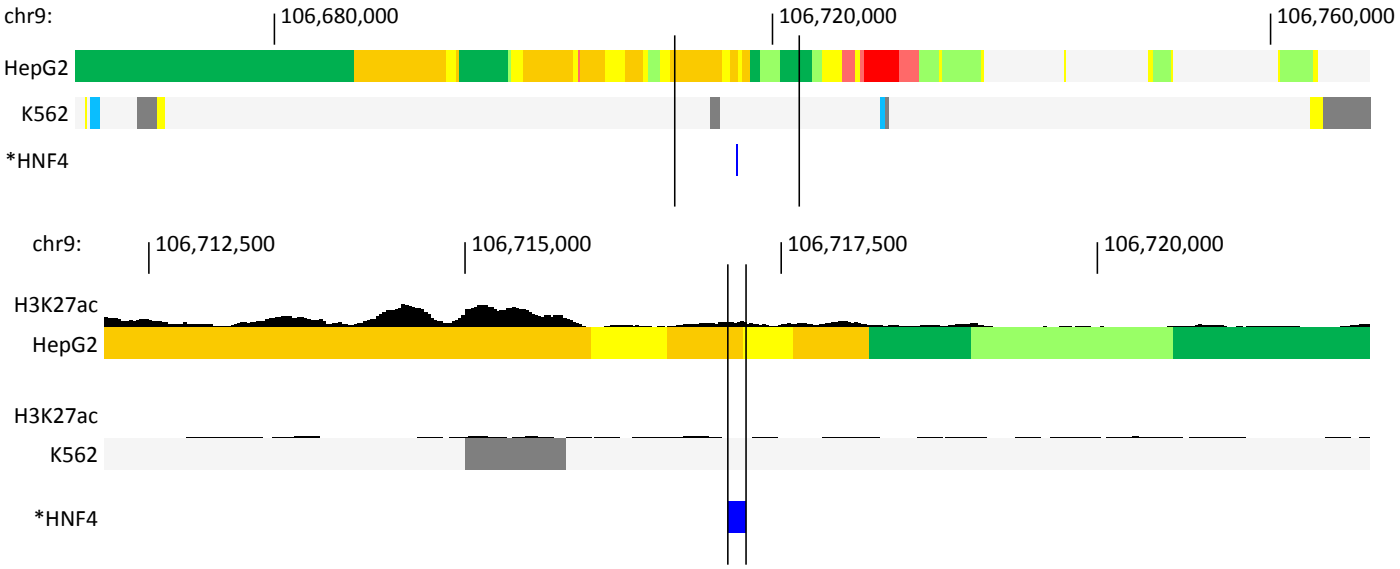
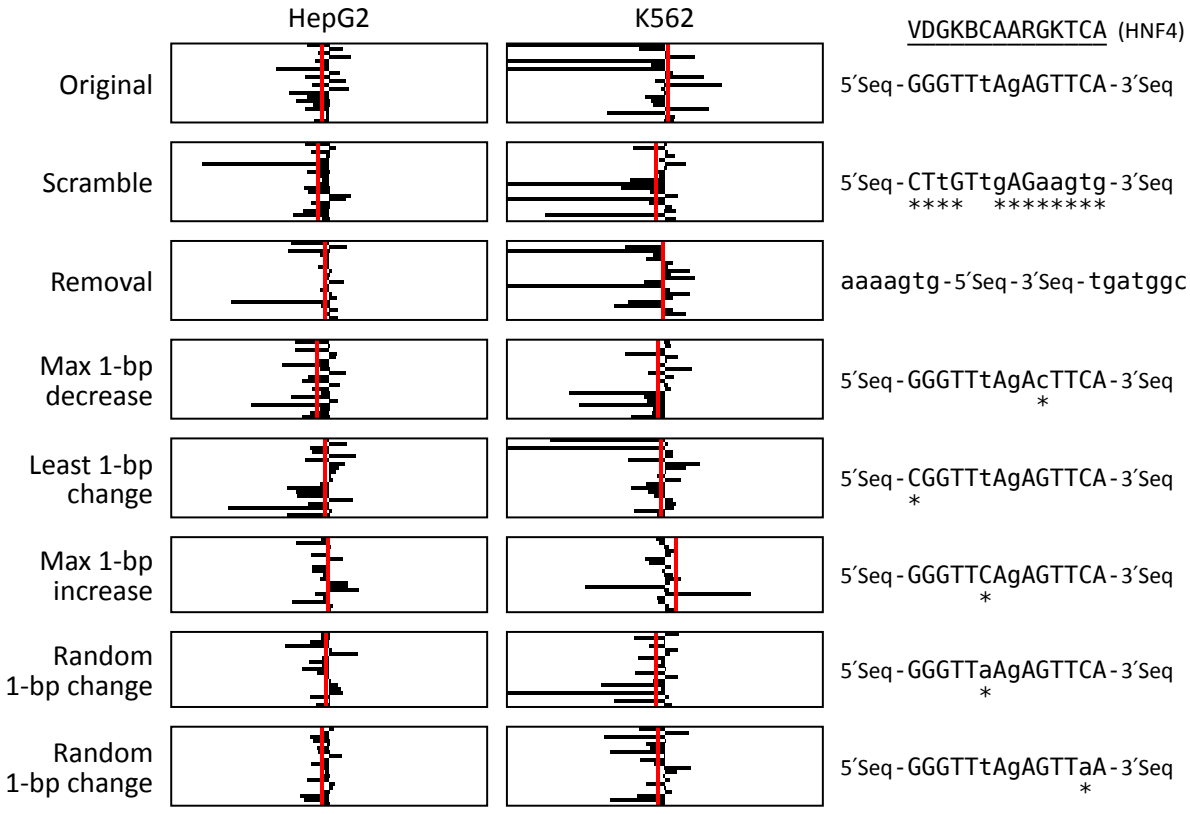
1412 HNF4 in HepG2 enhancer

chr9 106717144 106717157 - (hg18)





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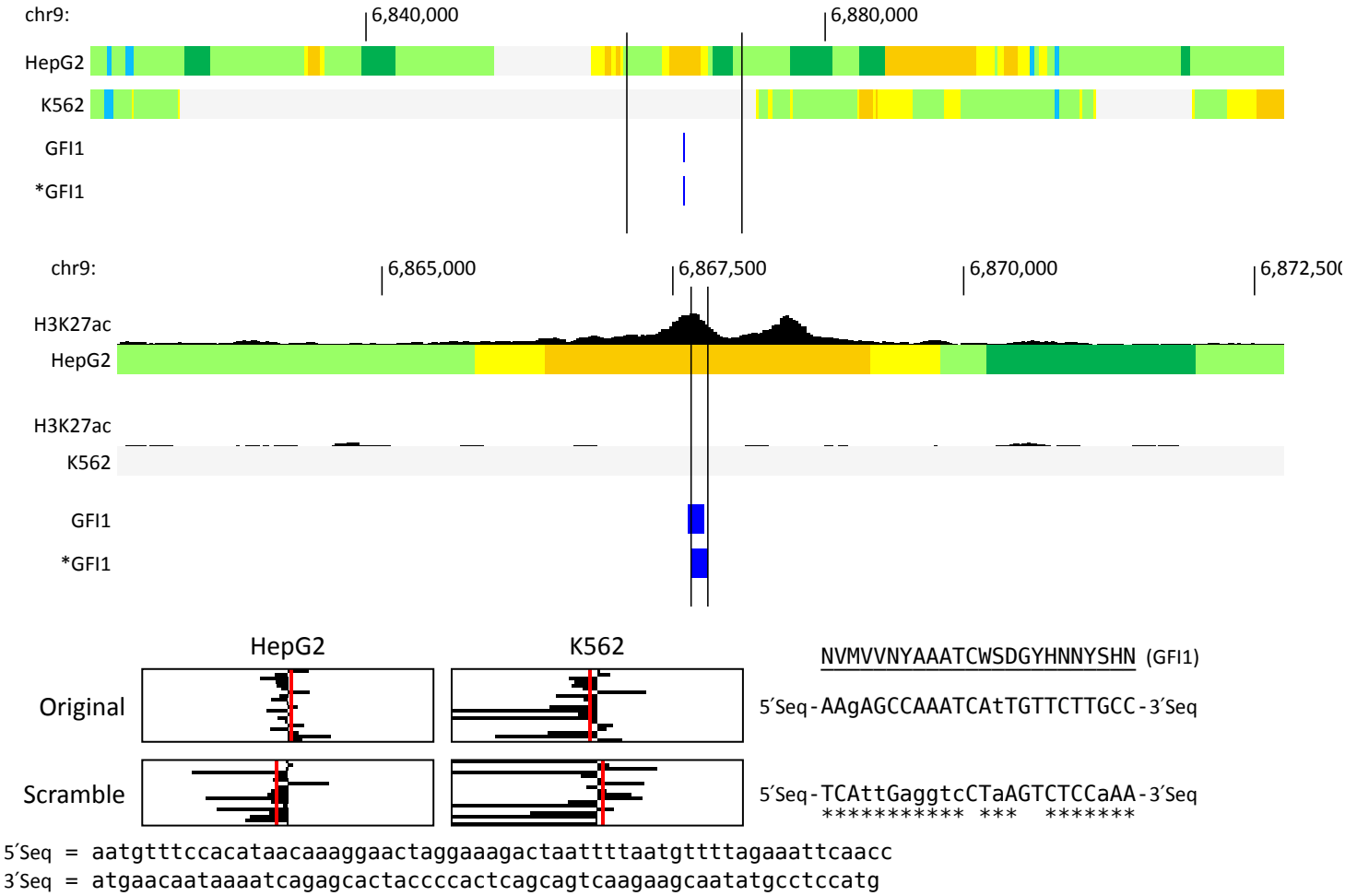
3′Seq = aggctctttaccagtgctgacaatcttatactctaggttgaacctccggggaaggtgcccttgct

1413 GFI1 in HepG2 enhancer

chr9 6867718 6867741 - (hg18)



5′Seq = aatgtttccacataacaaaggaactaggaaagactaattttaatgttttagaaattcaacc
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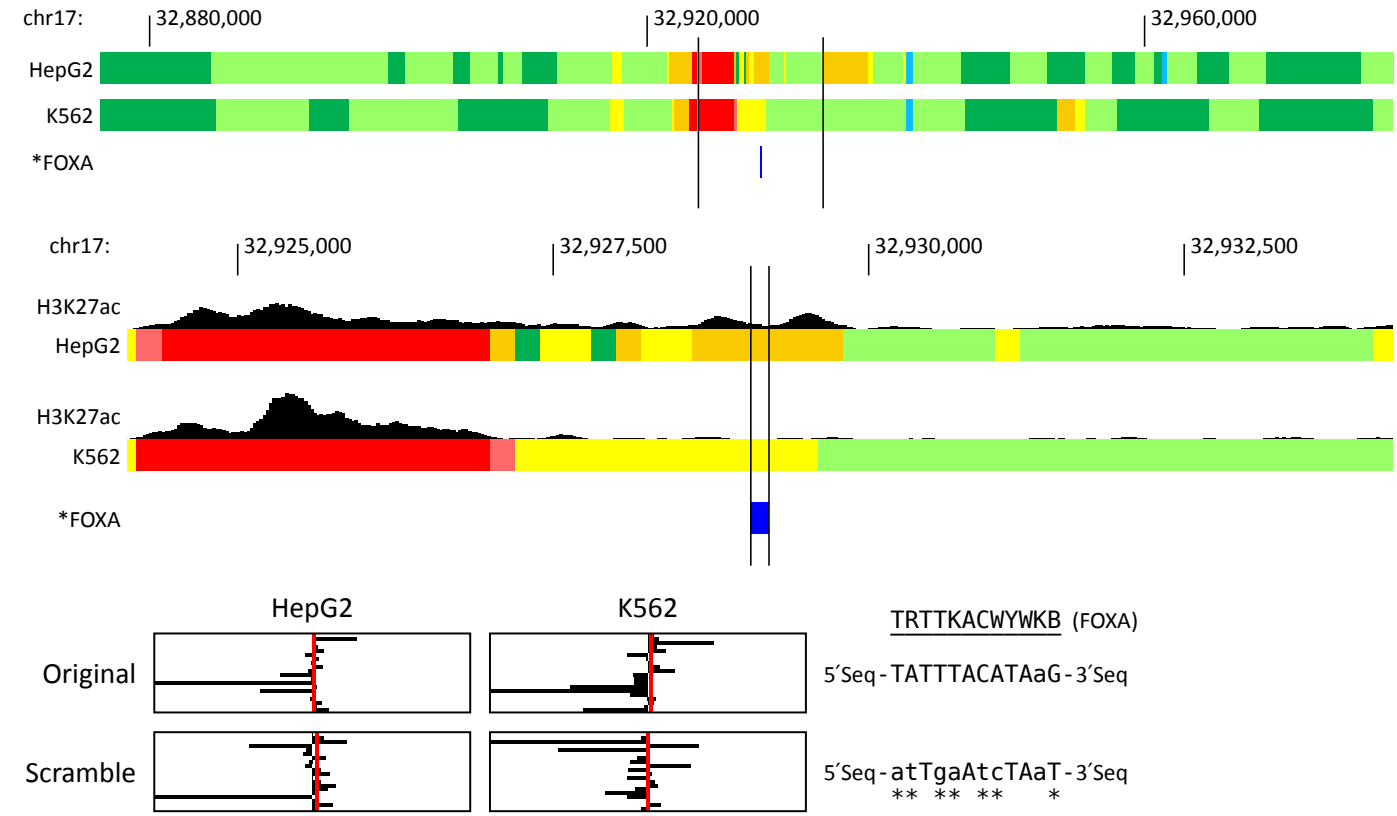
1414 FOXA in HepG2 enhancer

chr17 32929133 32929144 + (hg18)



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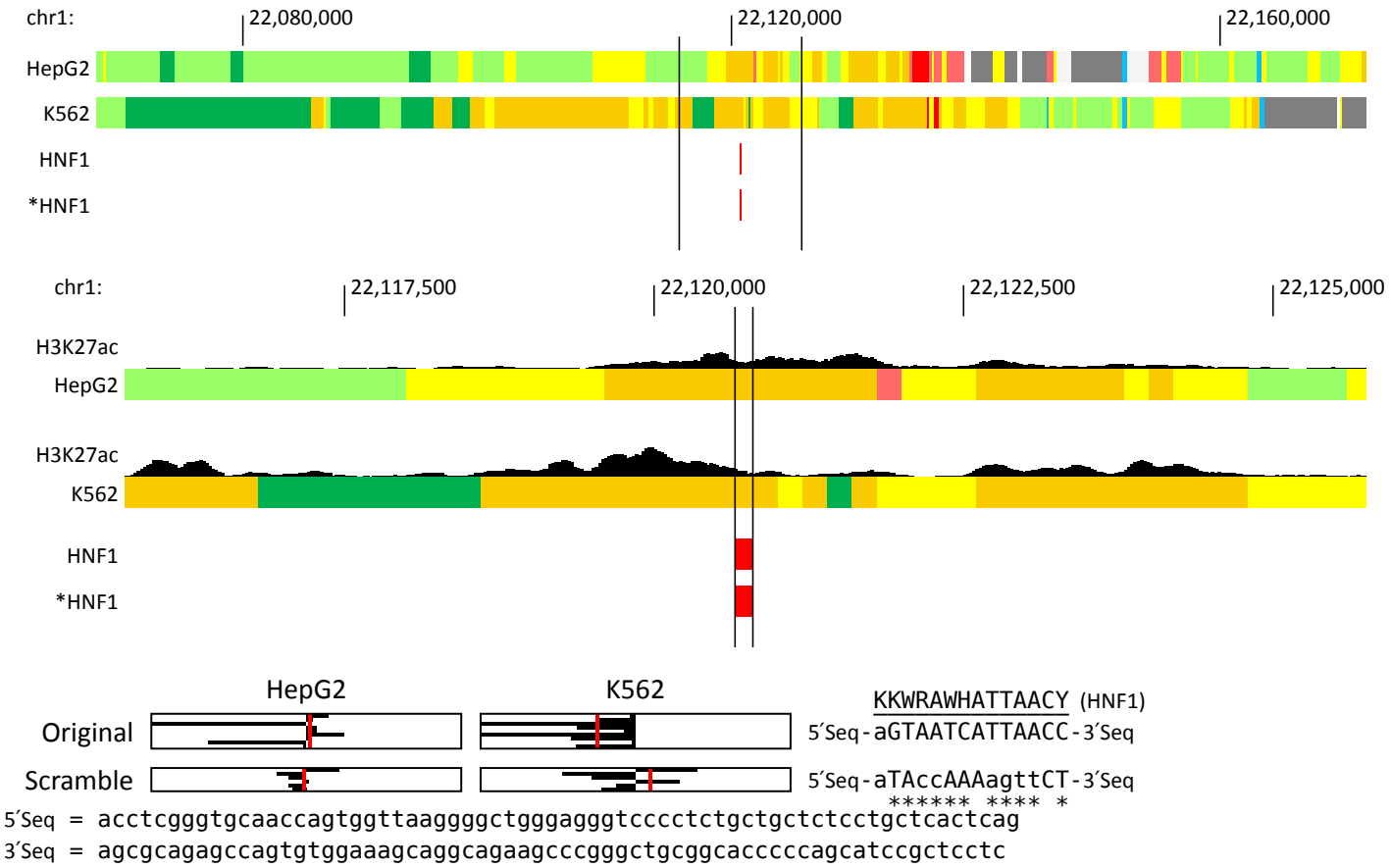
3′Seq = tcacaaagacttttttgctcattatagtaaagatttttttttcagattctctaaaataatgataatt

1415 HNF1 in K562 enhancer (conserved at 60% confidence)

chr1 22120720 22120733 + (hg18)



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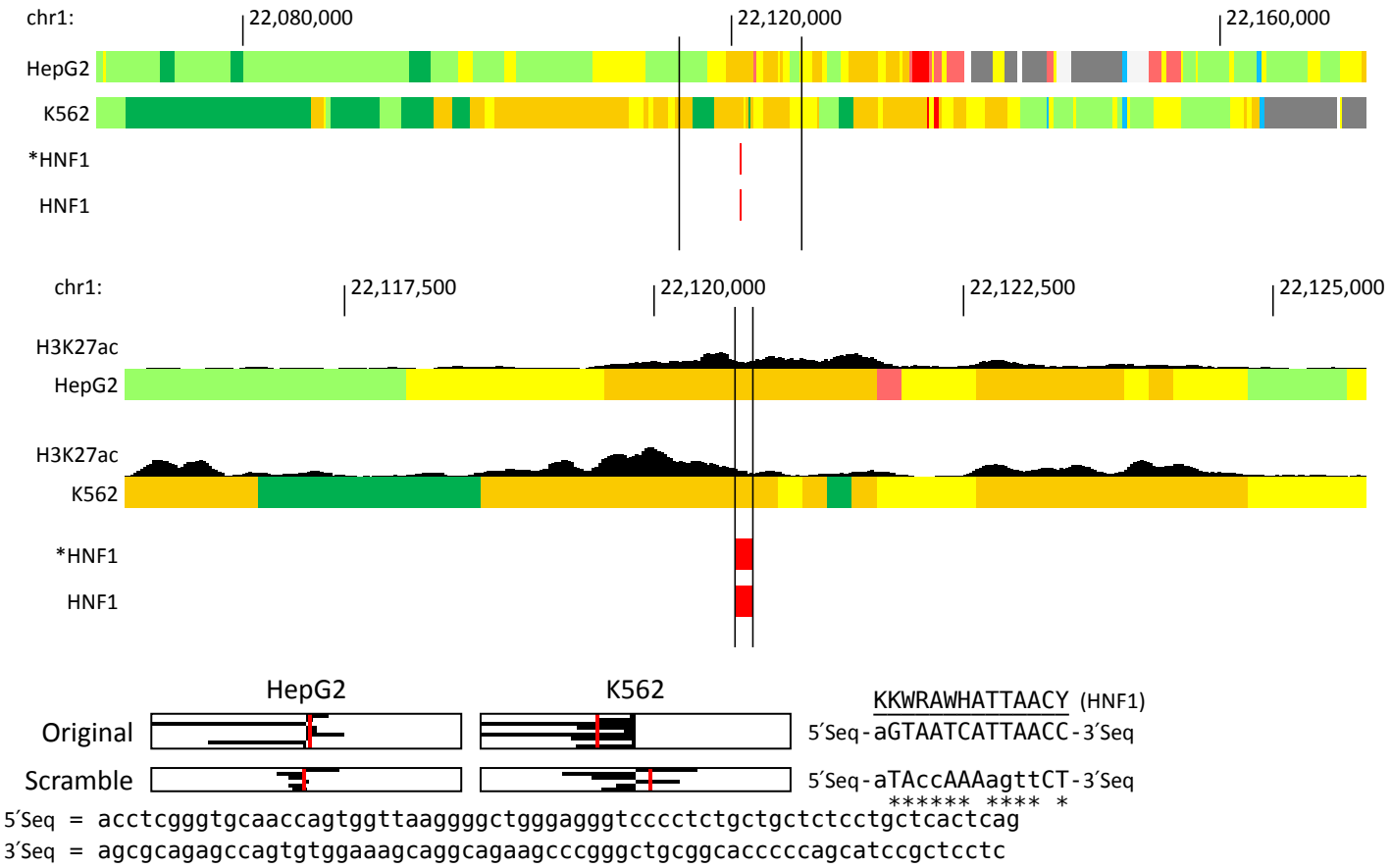
3′Seq = agcgcagagccagtgtggaaagcaggcagaagcccgggctgcggcacccccagcatccgctcctc

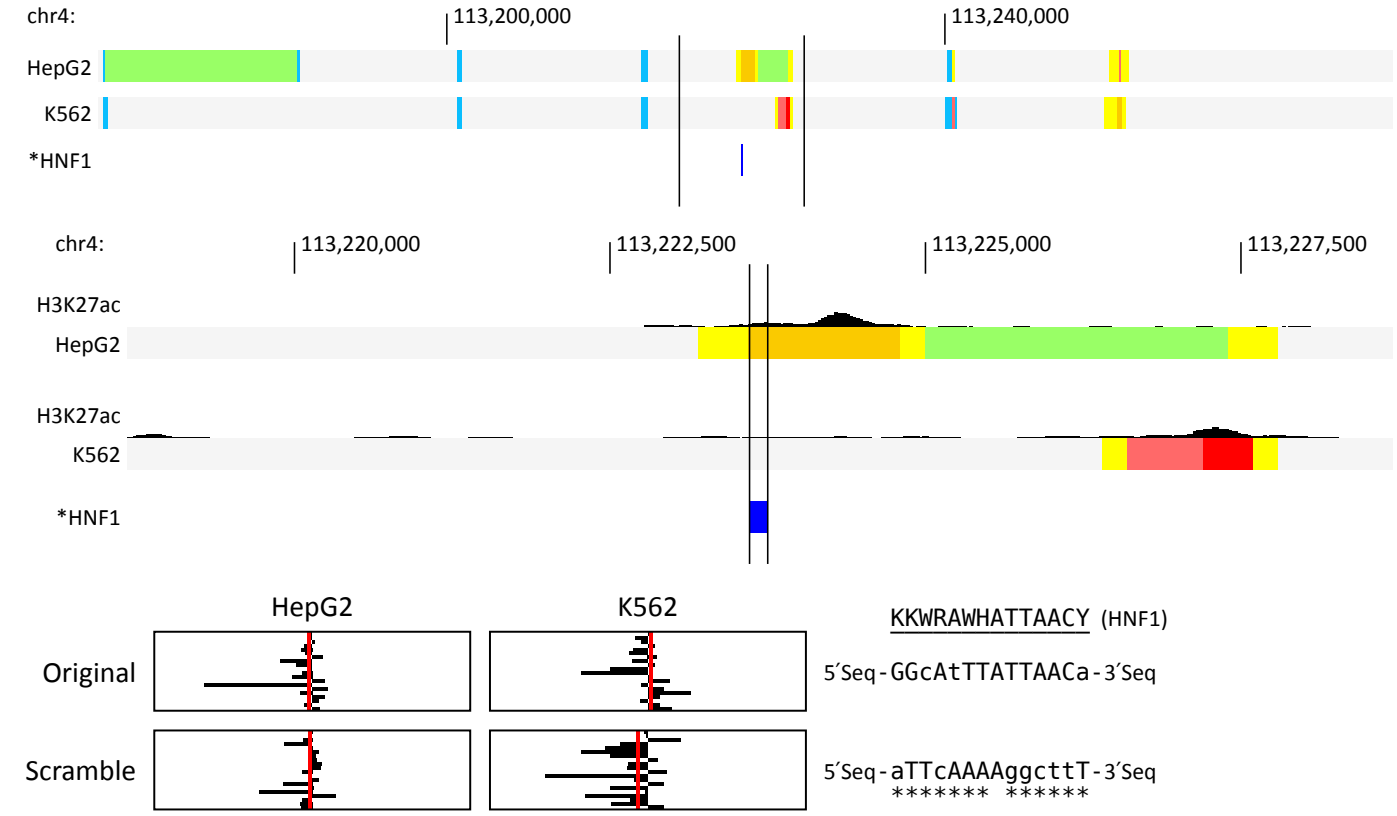
1416 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 22120720 22120733 + (hg18)



1417 HNF1 in HepG2 enhancer

chr4 113223672 113223685 + (hg18)



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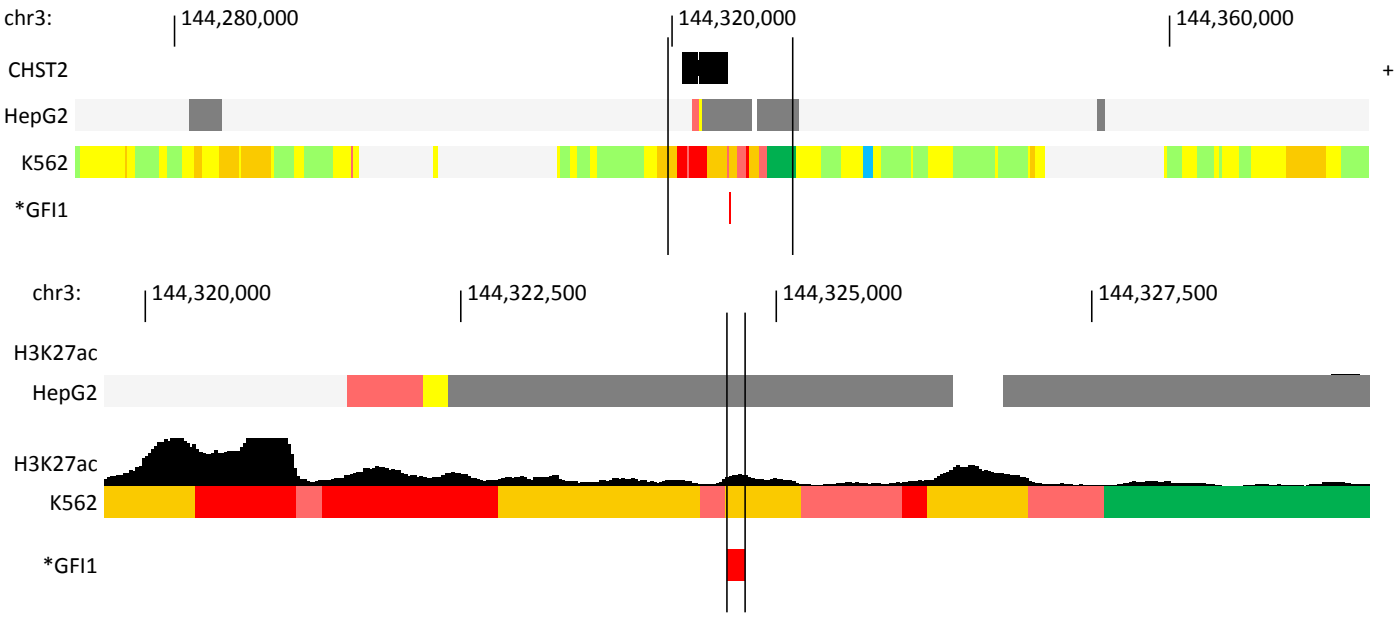
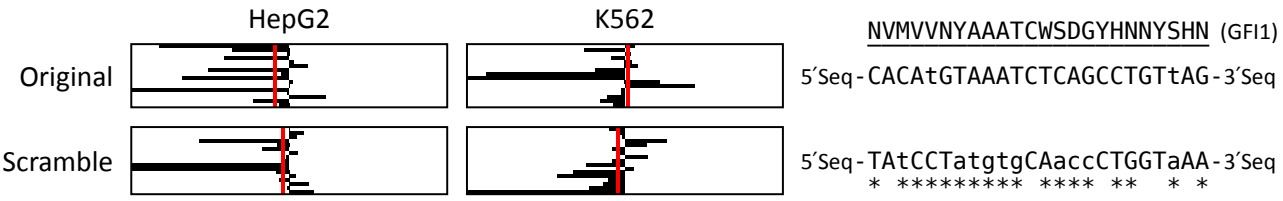
3′Seq = ggatatttctattactcacatgaaaaagagttcgtgaggcttttaggtacacccacctgcactgc

1418 GFI1 in K562 enhancer (conserved at 40% confidence)

chr3 144324670 144324693 + (hg18)





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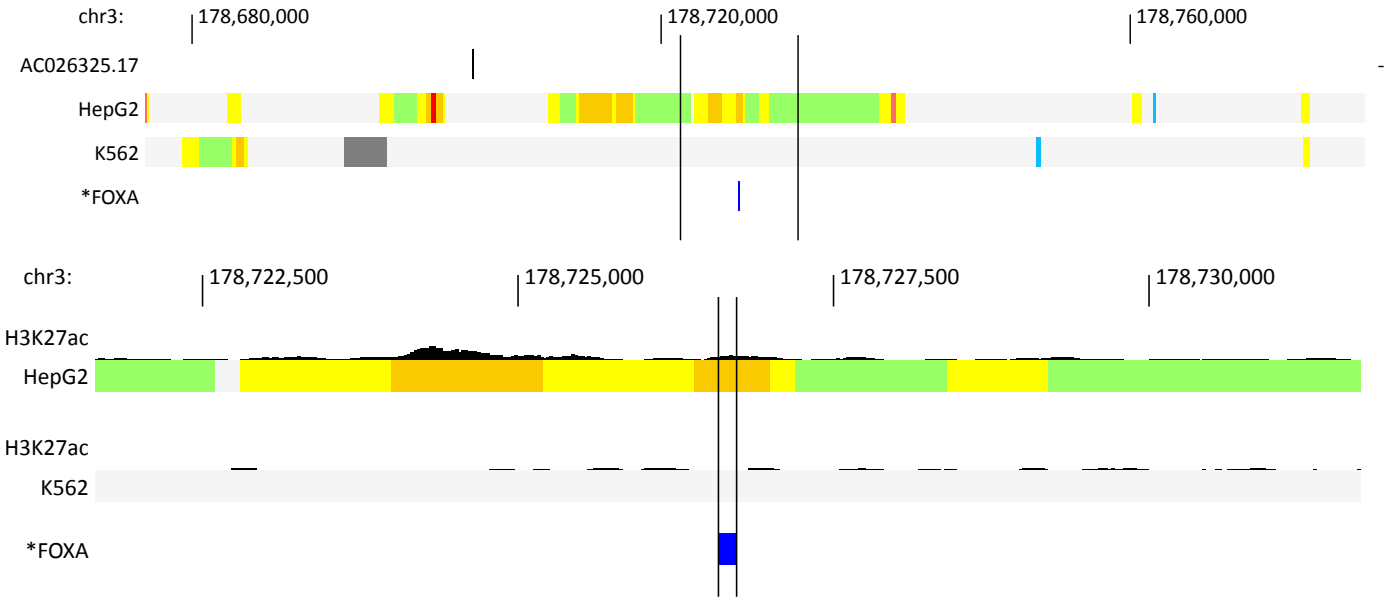
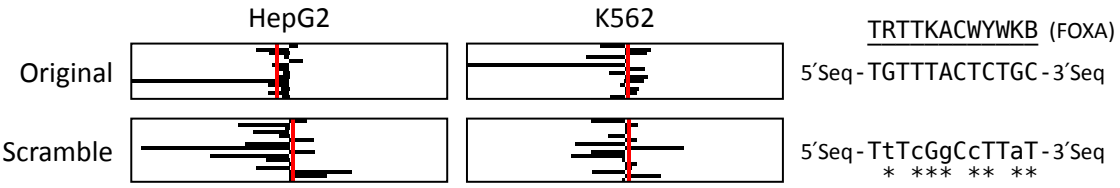
1419 FOXA in HepG2 enhancer

chr3 178726655 178726666 - (hg18)





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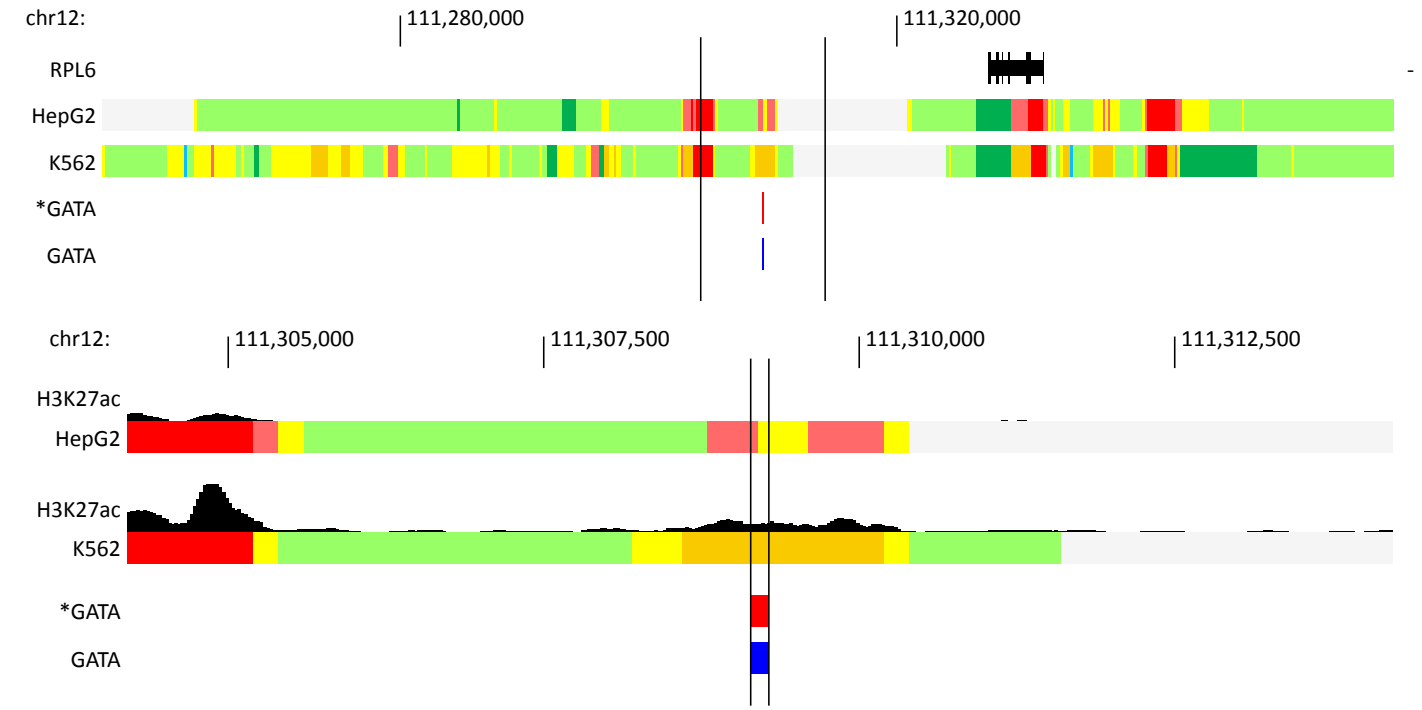
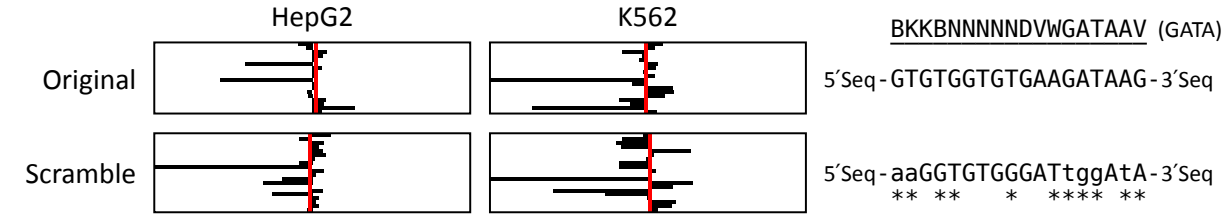
1420 GATA in K562 enhancer (conserved at 60% confidence)

chr12 111309204 111309221 + (hg18)





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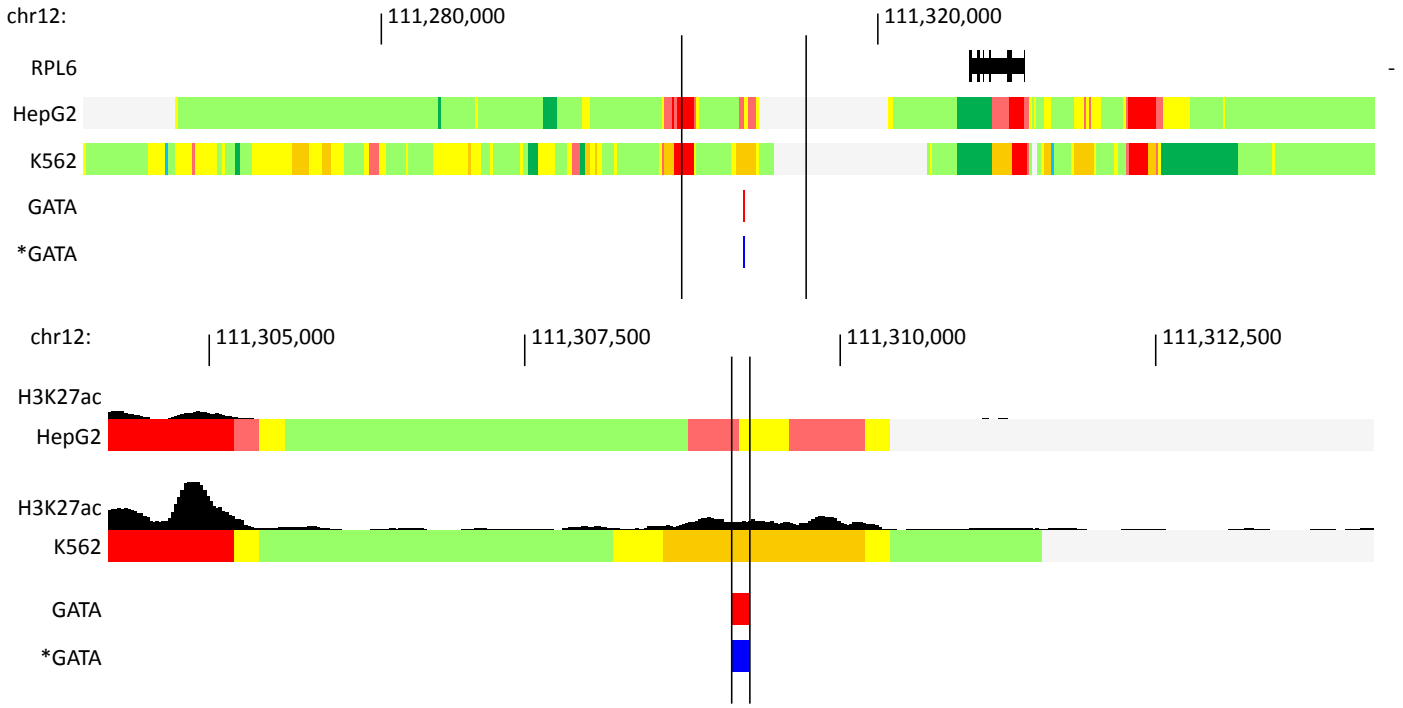
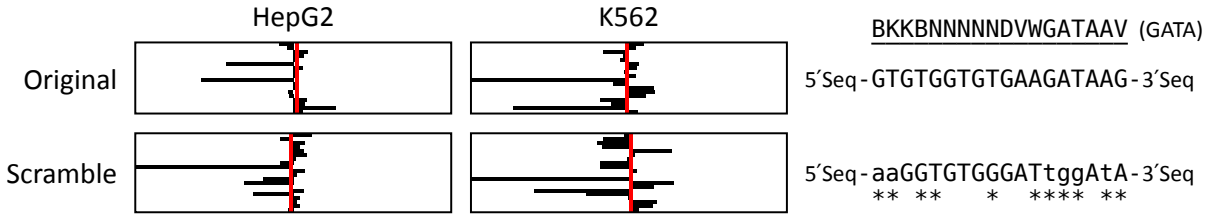
1421 GATA in K562 enhancer

chr12 111309204 111309221 + (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-GTGTGGTGTGAAGATAAG-3′Seq

5′Seq-aaGGTGTGGGATtggAtA-3′Seq

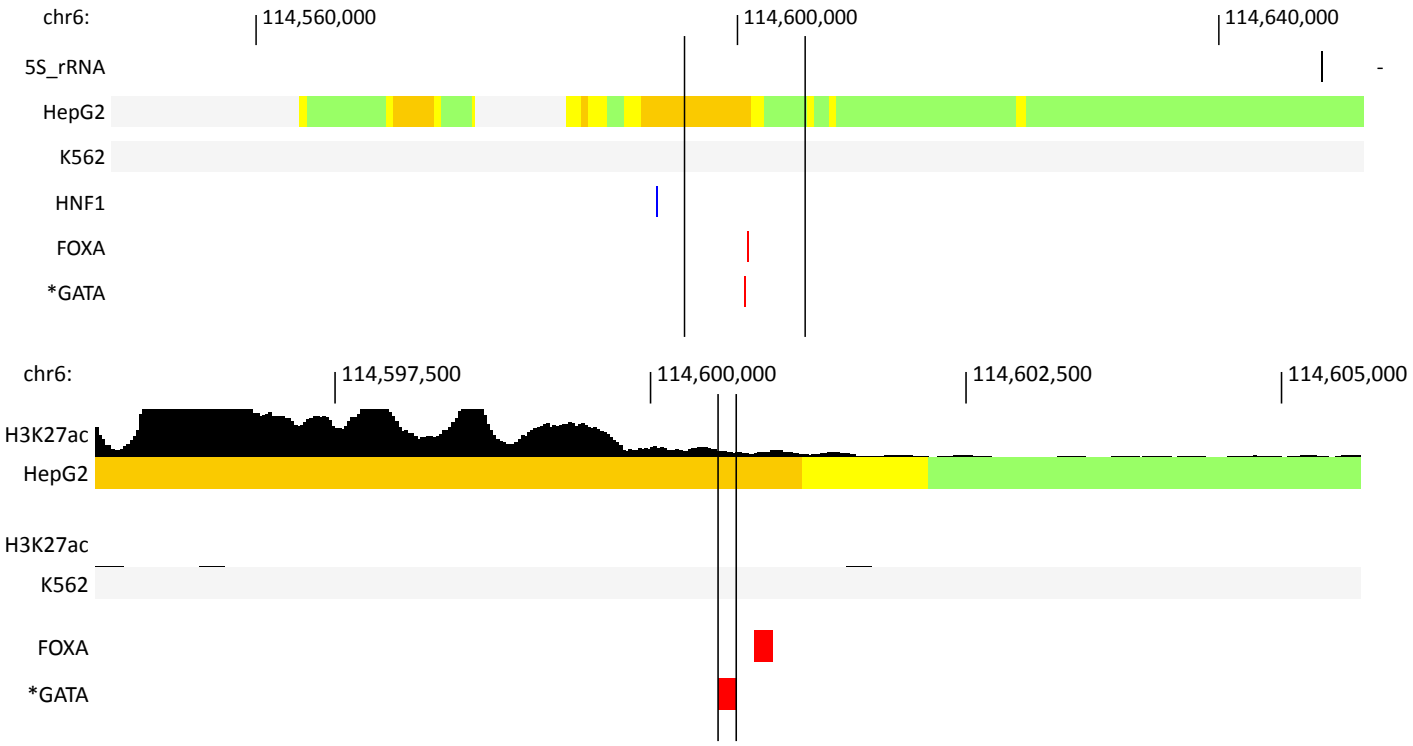
** ** * **** **

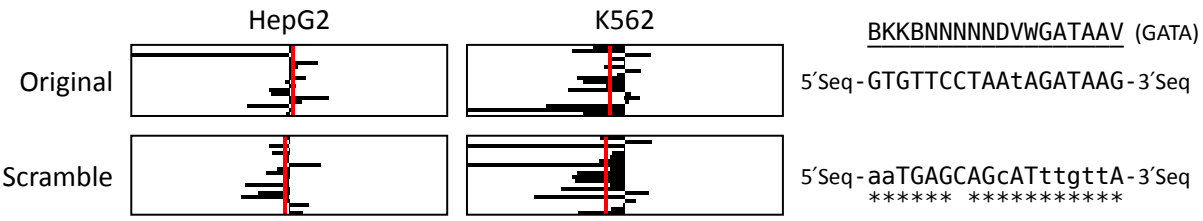
5′Seq = ttttctataccagctgactgtctaaaatgacttcgtaatccttcctgggtccaaaaatatgtga

3′Seq = tggtccttgataaactttattagagcttaaaggtggttttagatgaggcagccatgttaattt

1422 GATA in HepG2 enhancer (conserved at 70% confidence)

chr6 114600599 114600616 + (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-GTGTTCCTAAtAGATAAG-3′Seq

5′Seq-aaTGAGCAGcATttgttA-3′Seq

****** **********

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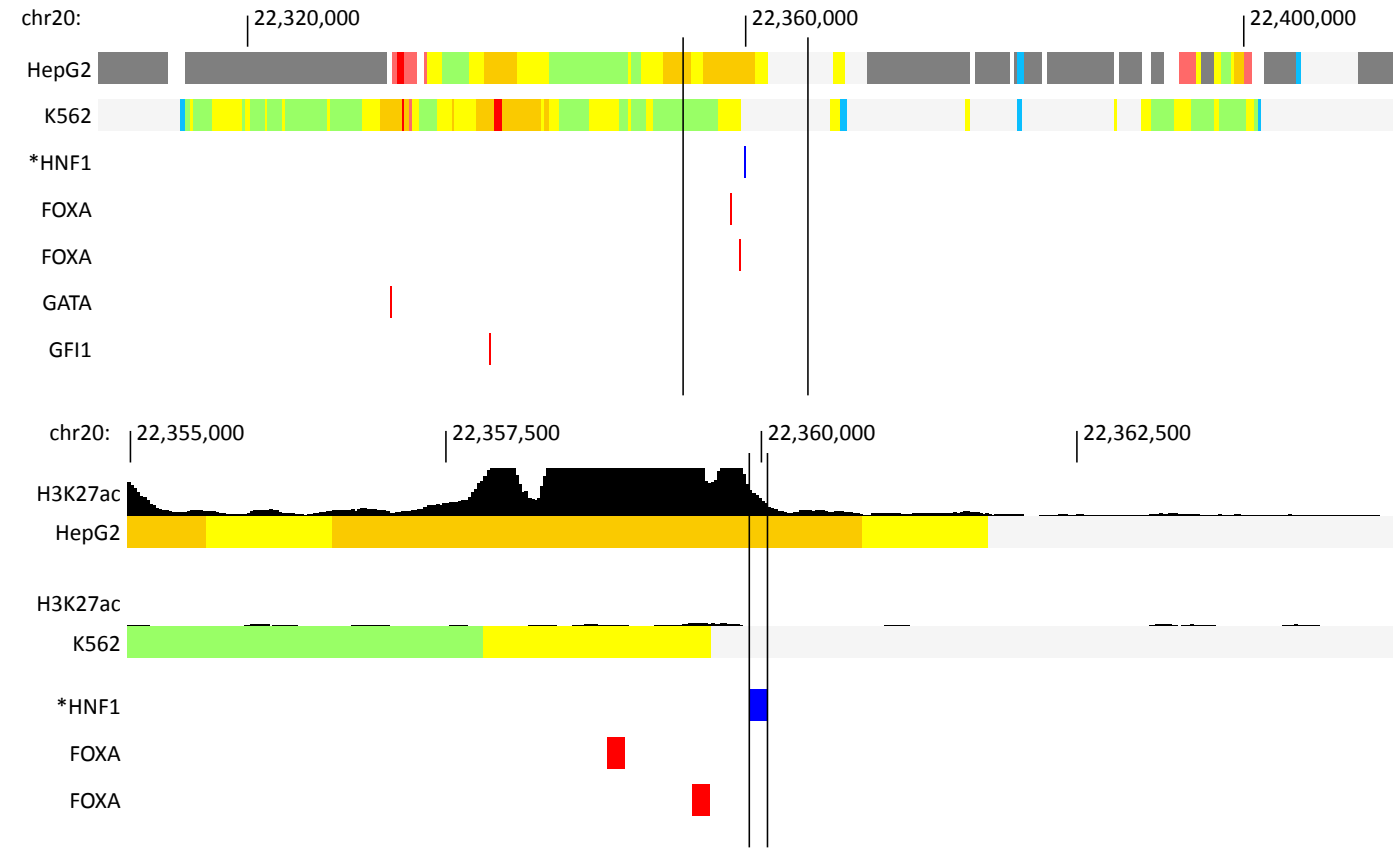
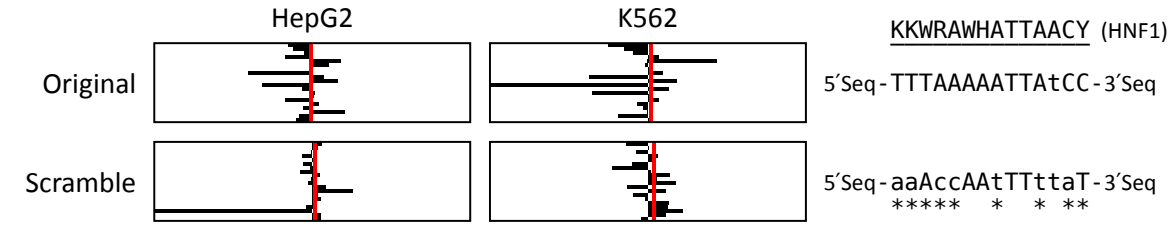
3′Seq = ggaattgttgcttcacatataattacattgagtctaacagtagacatagccacctatatcatc

1423 HNF1 in HepG2 enhancer

chr20 22359970 22359983 + (hg18)





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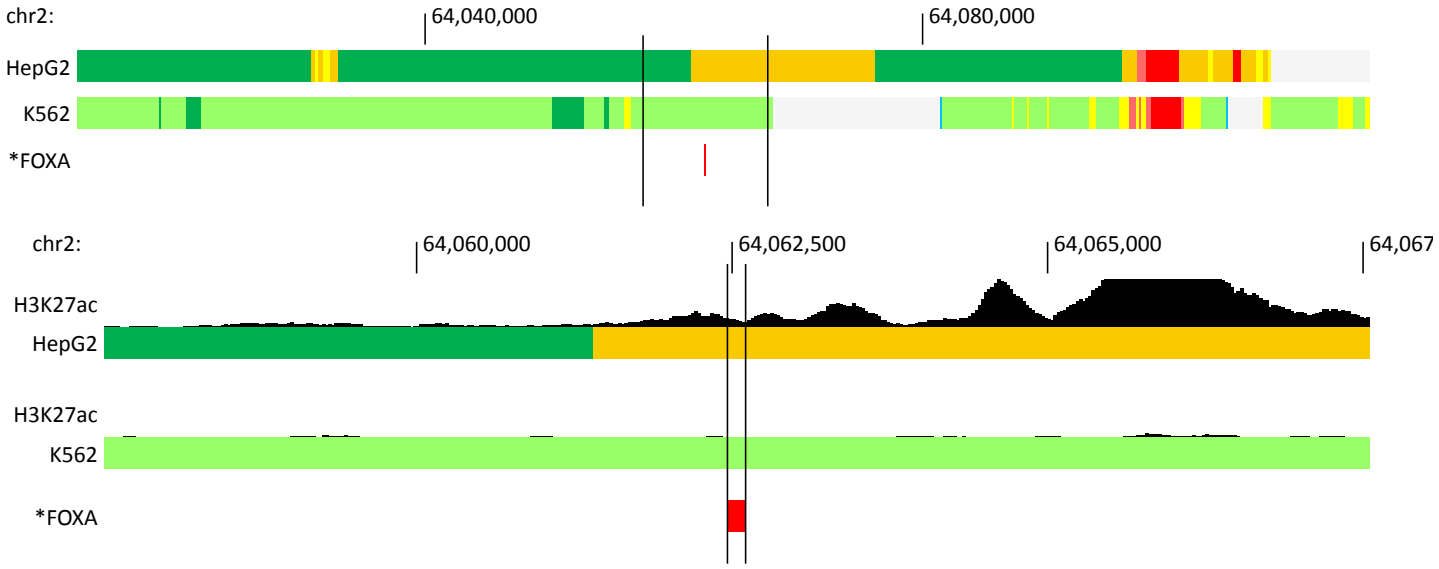
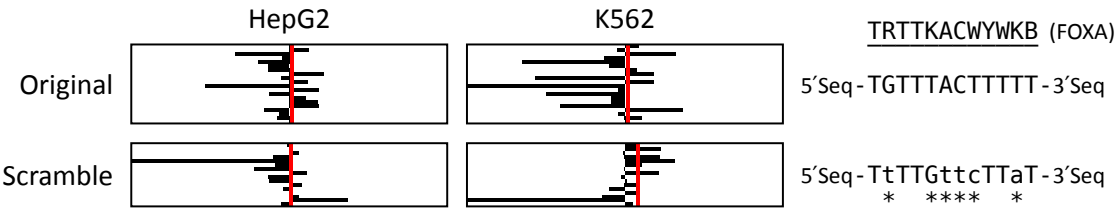
3′Seq = ataggtcttagtaccaacagtcattttactgcacagaagtttctcagctcccttctcttatttaa

1424 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 64062530 64062541 - (hg18)





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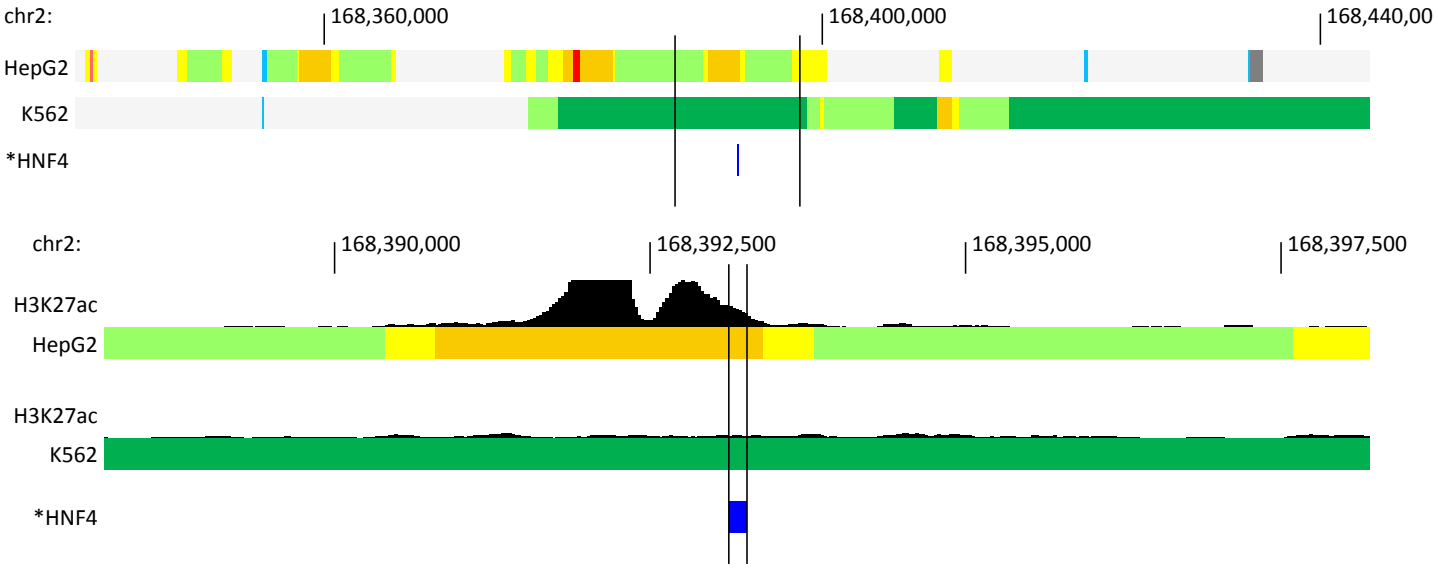
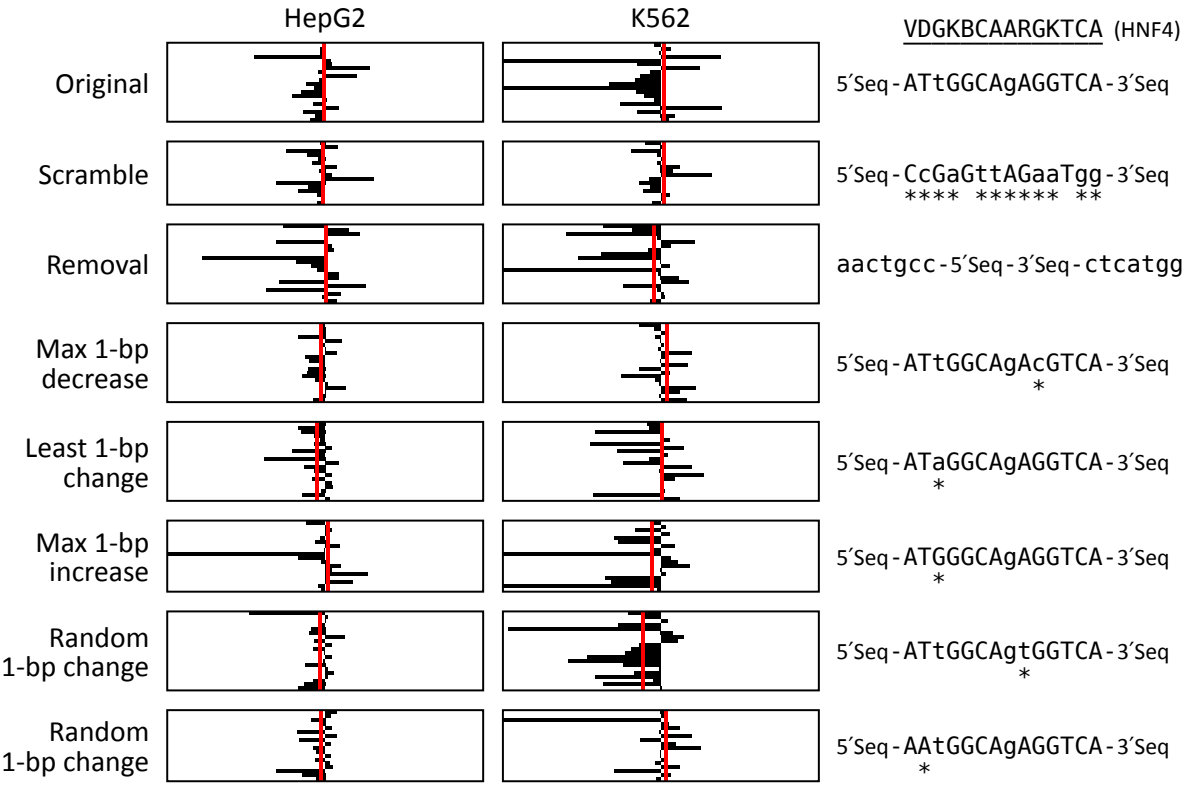
1425 HNF4 in HepG2 enhancer

chr2 168393190 168393203 + (hg18)





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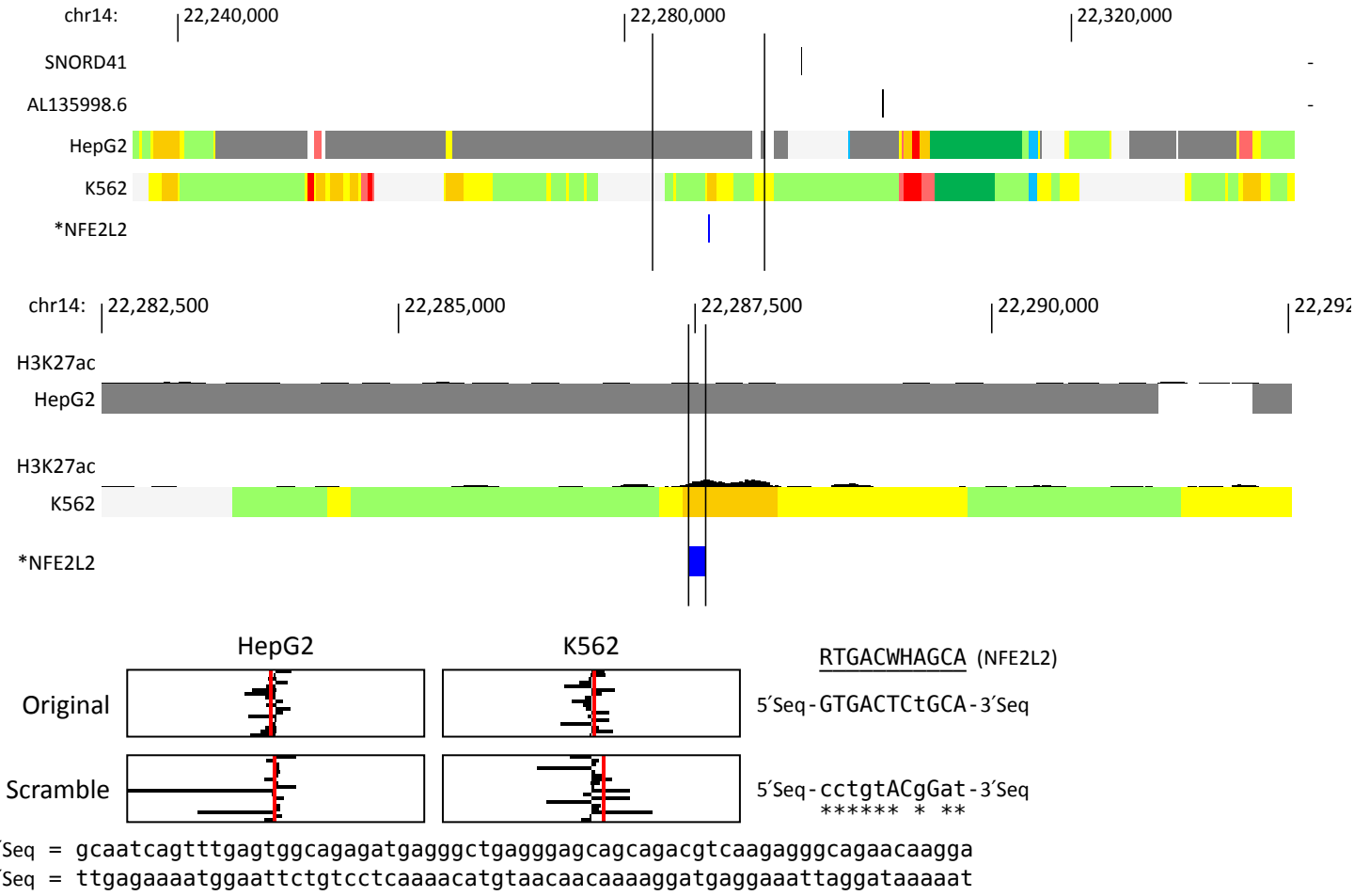
1426 NFE2L2 in K562 enhancer

chr14 22287512 22287522 + (hg18)



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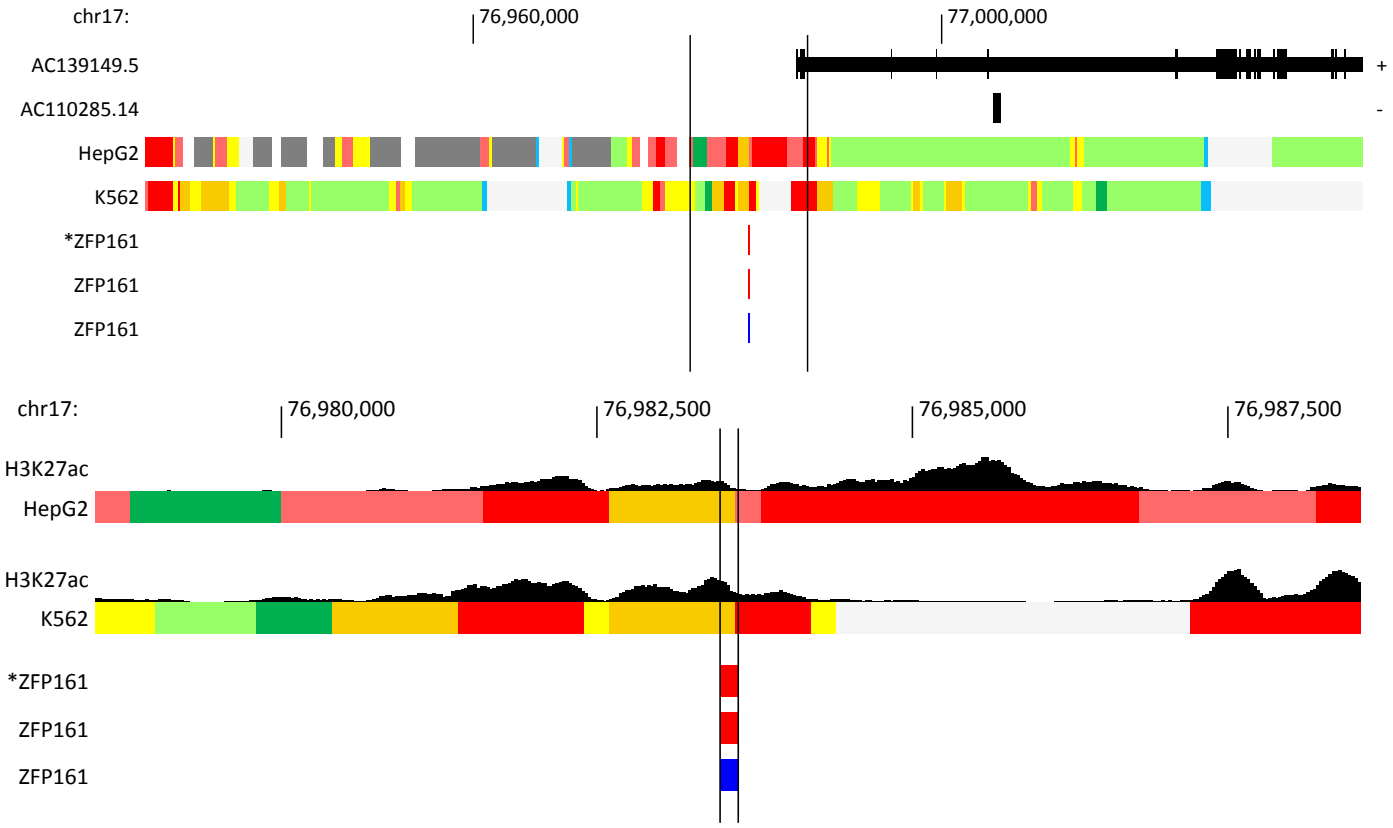
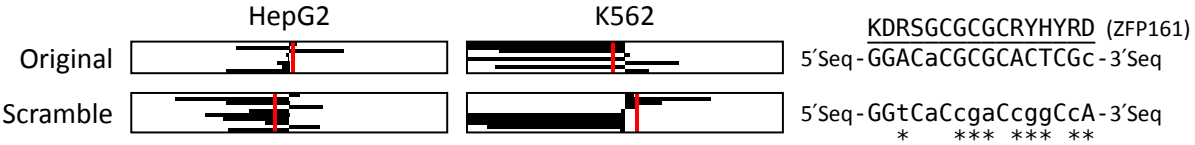
1427 ZFP161 in HepG2 enhancer (conserved at 10% confidence)

chr17 76983541 76983556 + (hg18)





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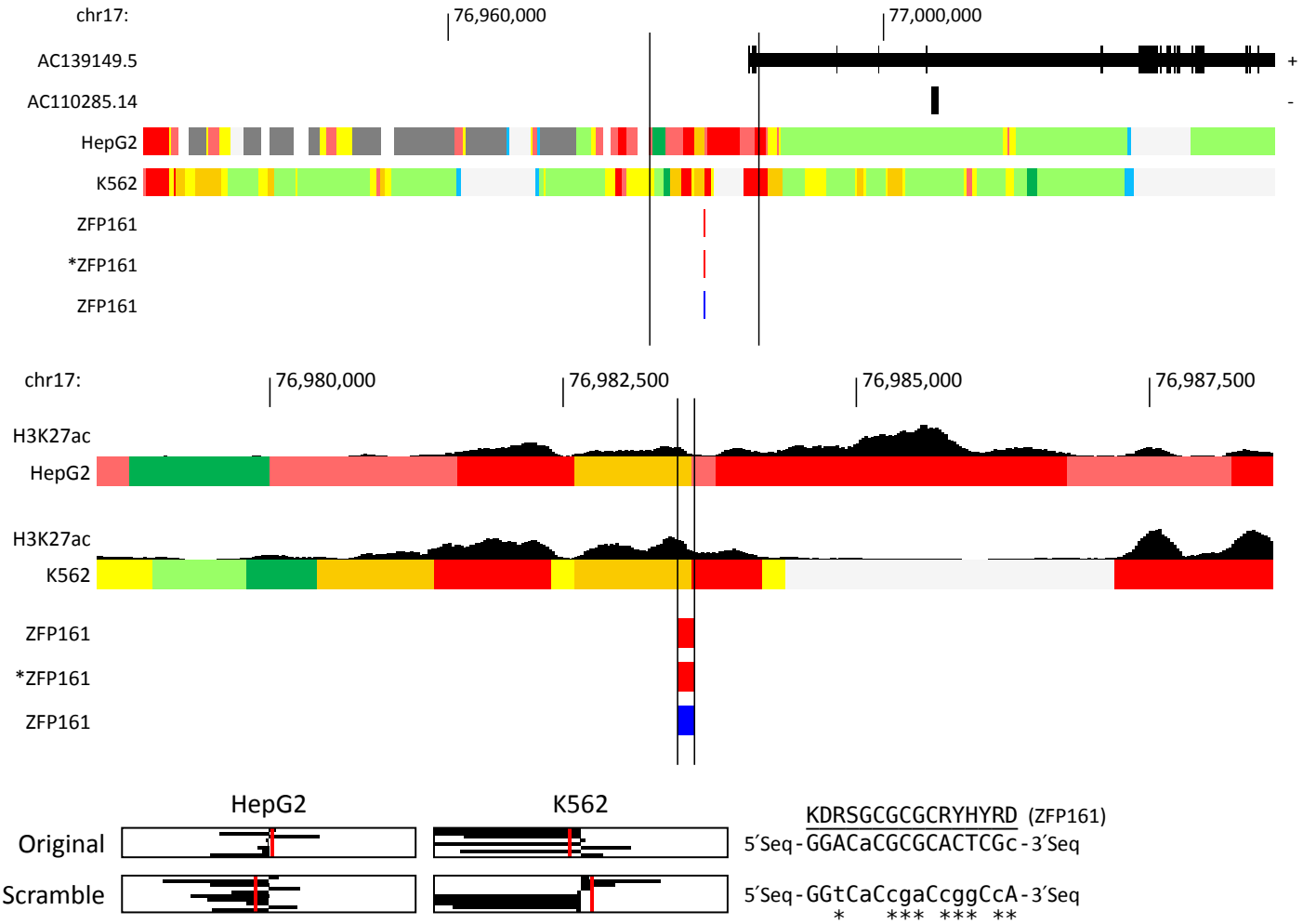
1428 ZFP161 in K562 enhancer (conserved at 10% confidence)

chr17 76983541 76983556 + (hg18)



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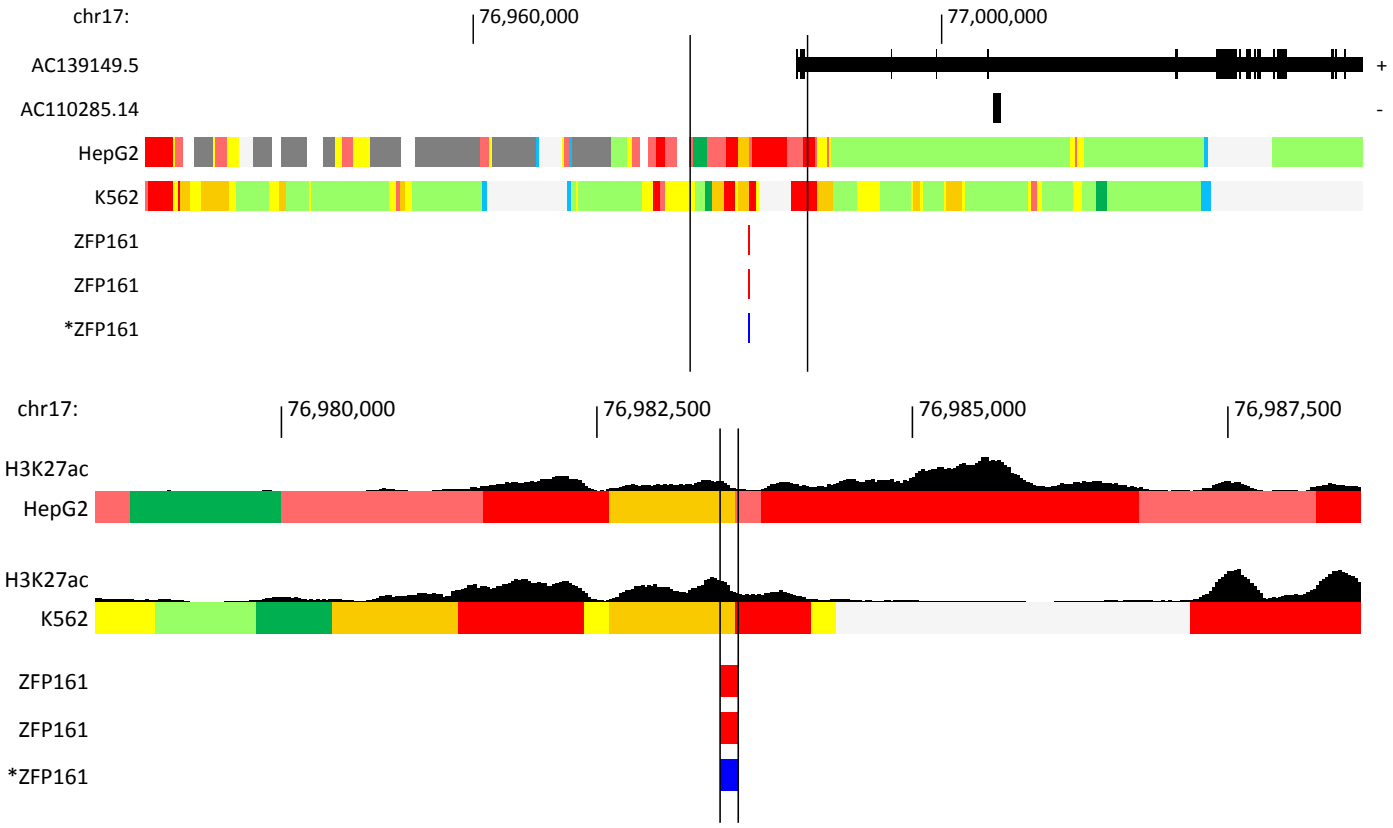
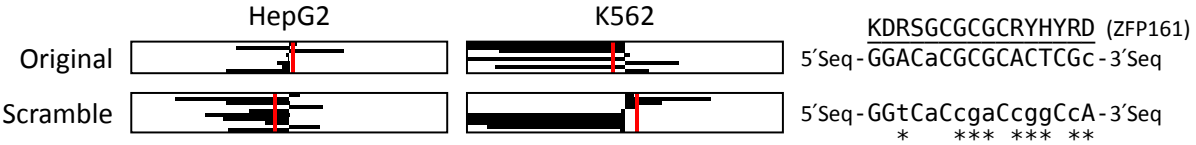
1429 ZFP161 in K562 enhancer

chr17 76983541 76983556 + (hg18)





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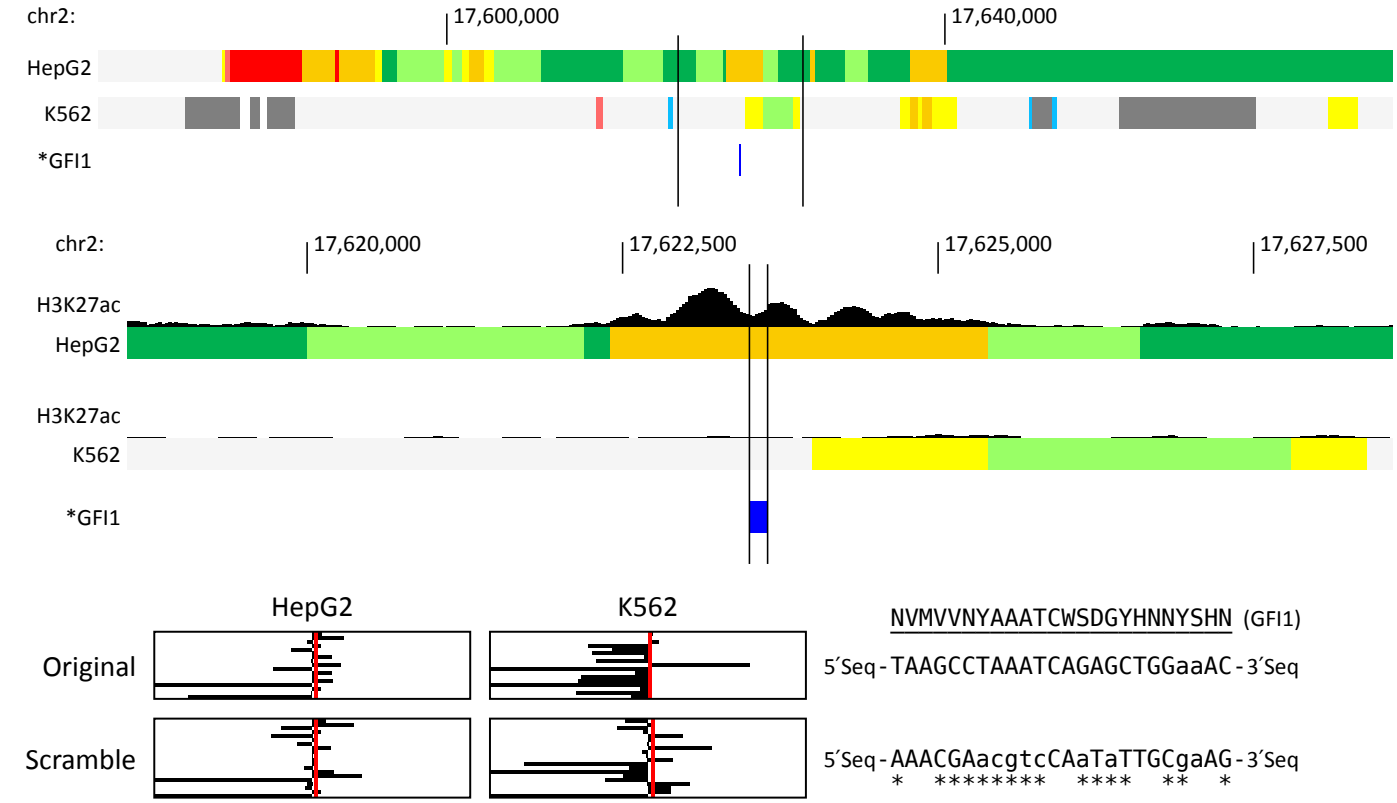
1430 GFI1 in HepG2 enhancer

chr2 17623566 17623589 + (hg18)



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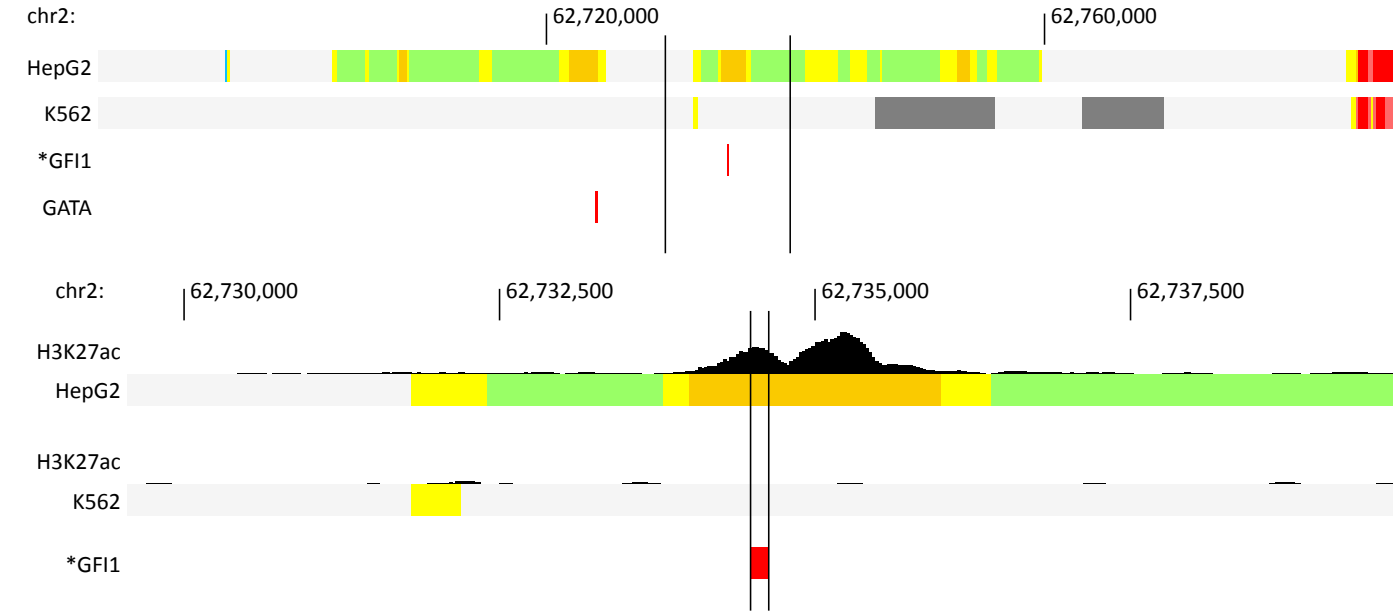
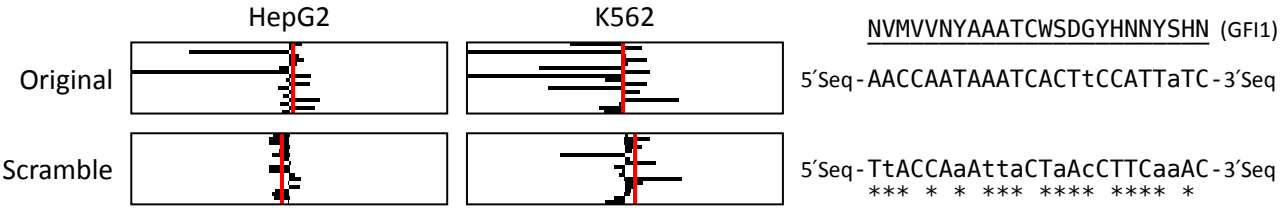
1431 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 62734550 62734573 - (hg18)





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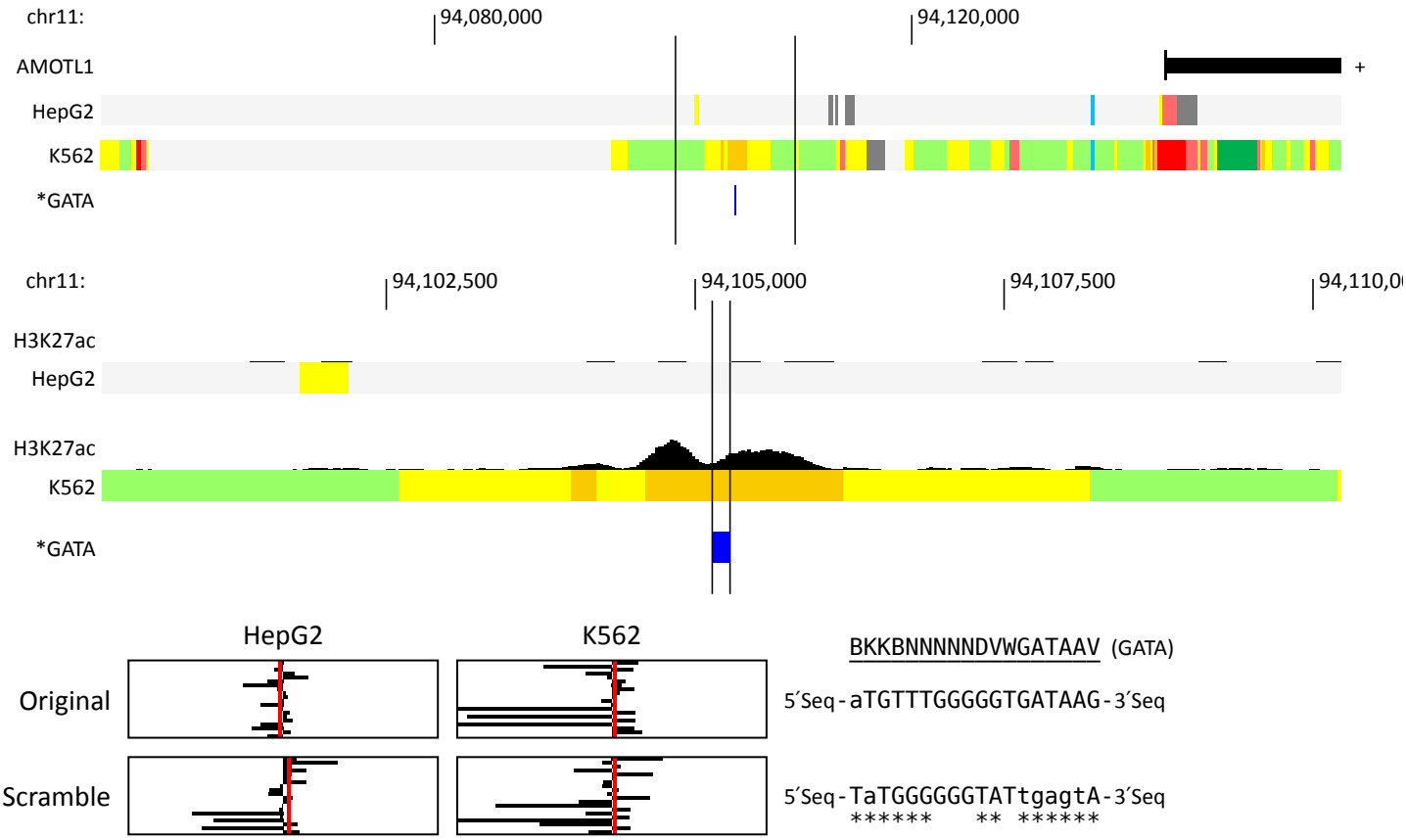
1432 GATA in K562 enhancer

chr11 94105202 94105219 + (hg18)



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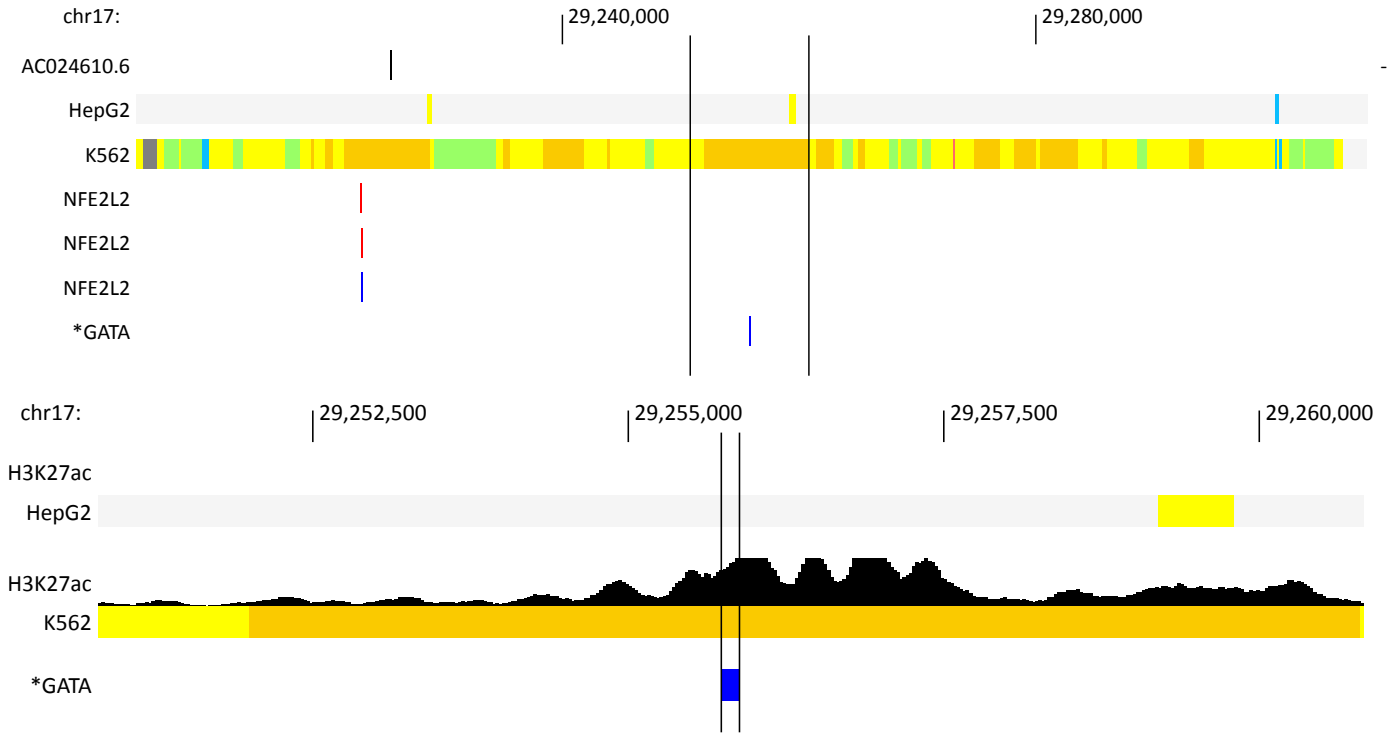
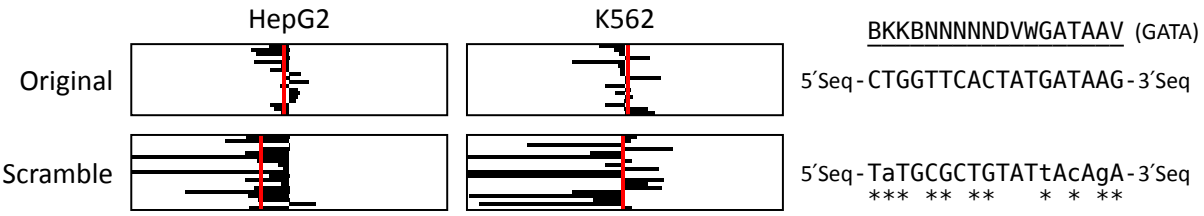
1433 GATA in K562 enhancer

chr17 29255801 29255818 + (hg18)





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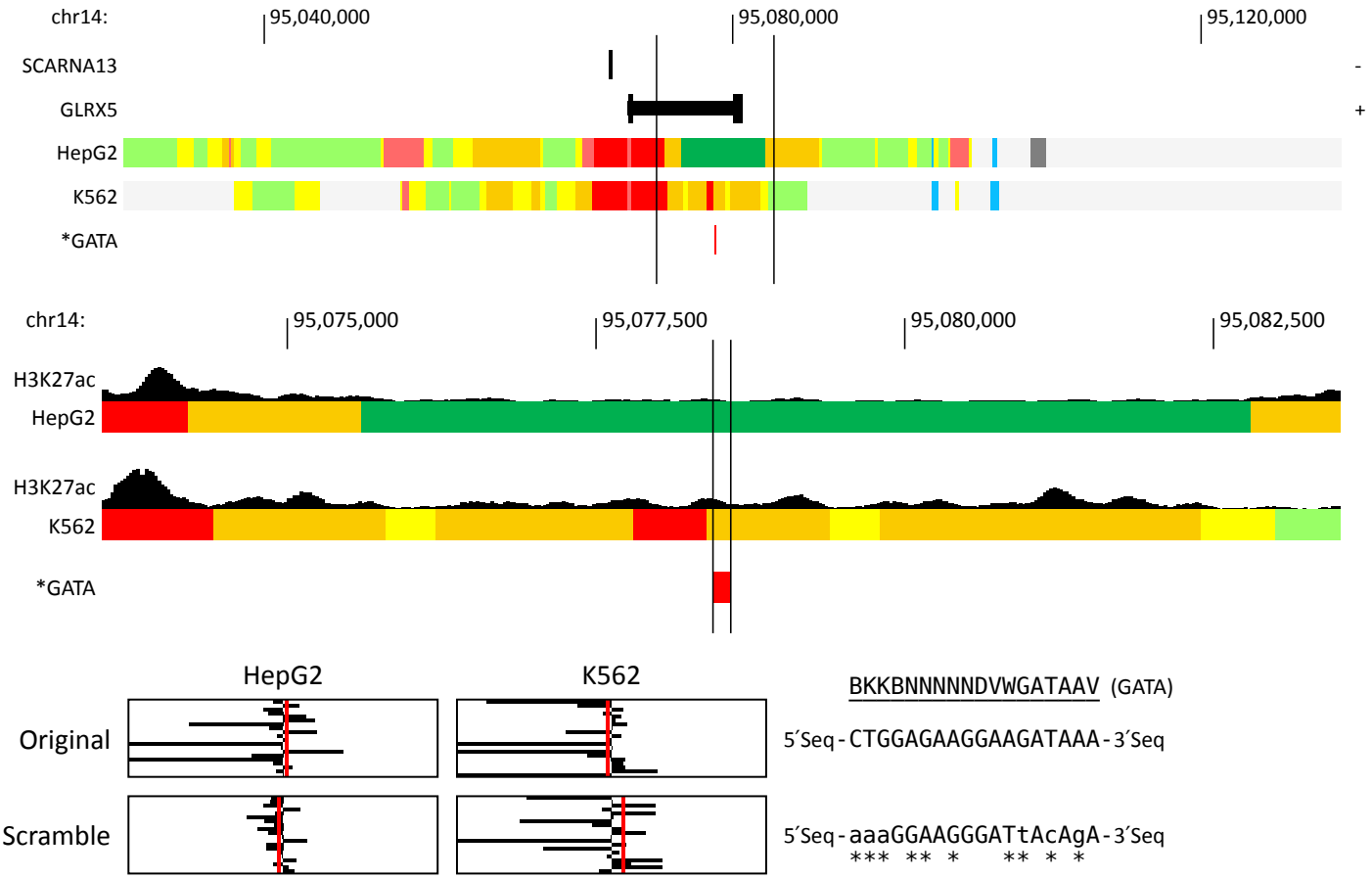
1434 GATA in K562 enhancer (conserved at 60% confidence)

chr14 95078511 95078528 + (hg18)



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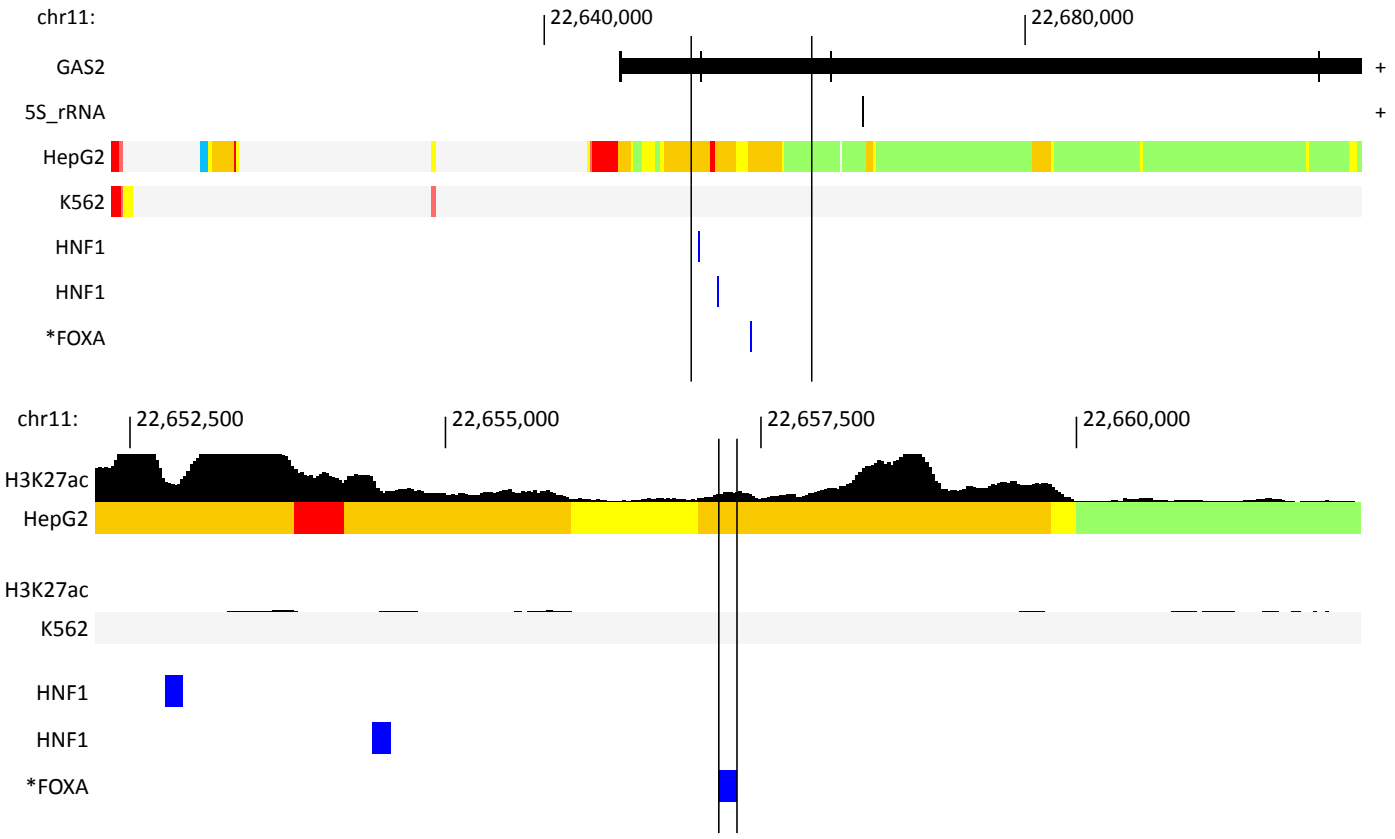
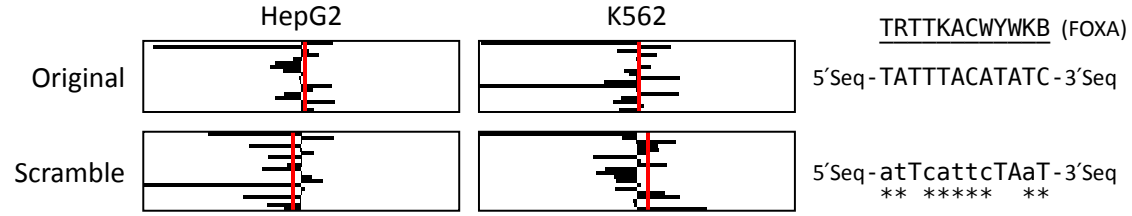
1435 FOXA in HepG2 enhancer

chr11 22657233 22657244 + (hg18)





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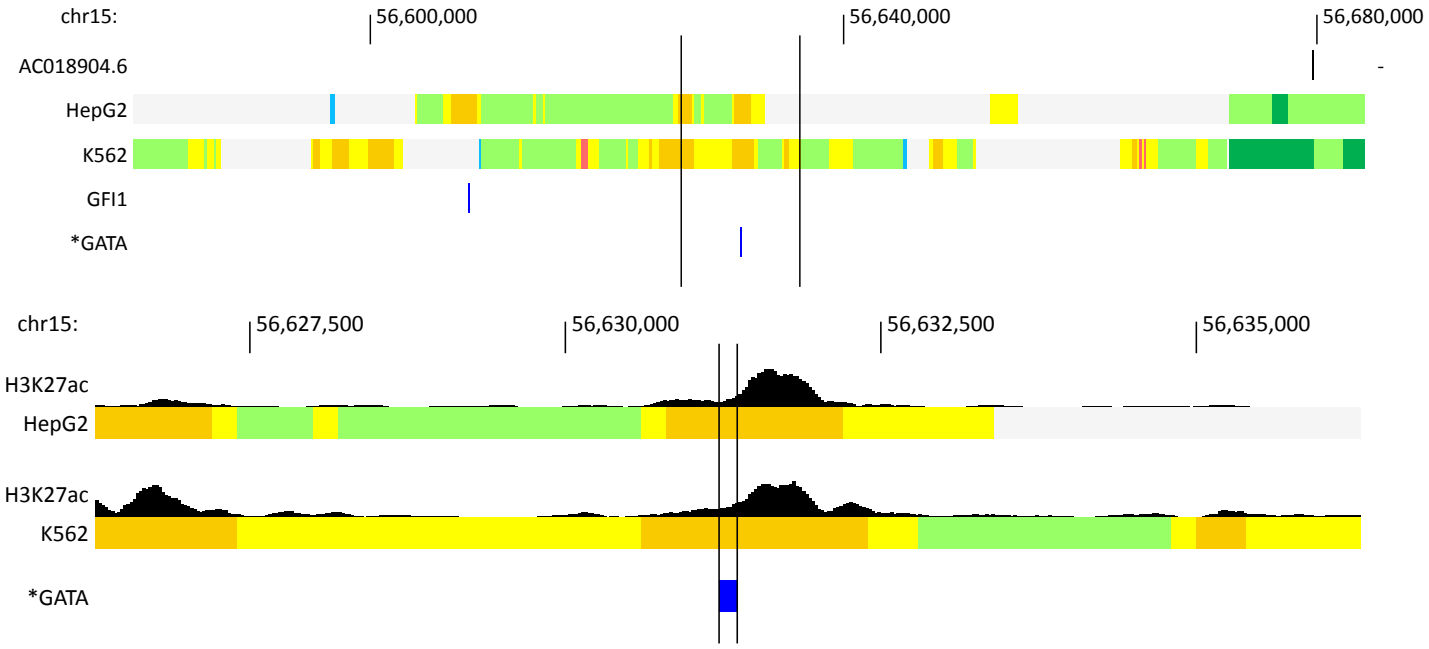
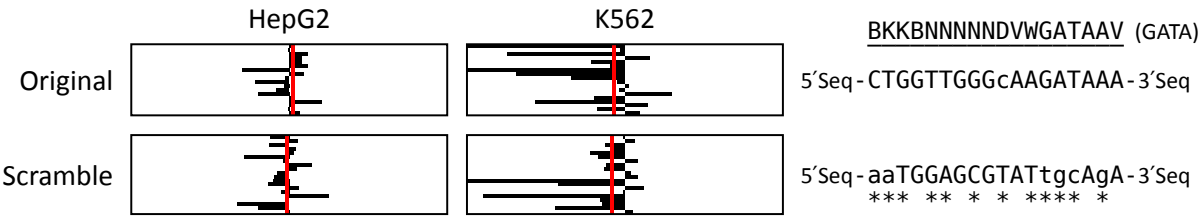
1436 GATA in K562 enhancer

chr15 56631282 56631299 + (hg18)





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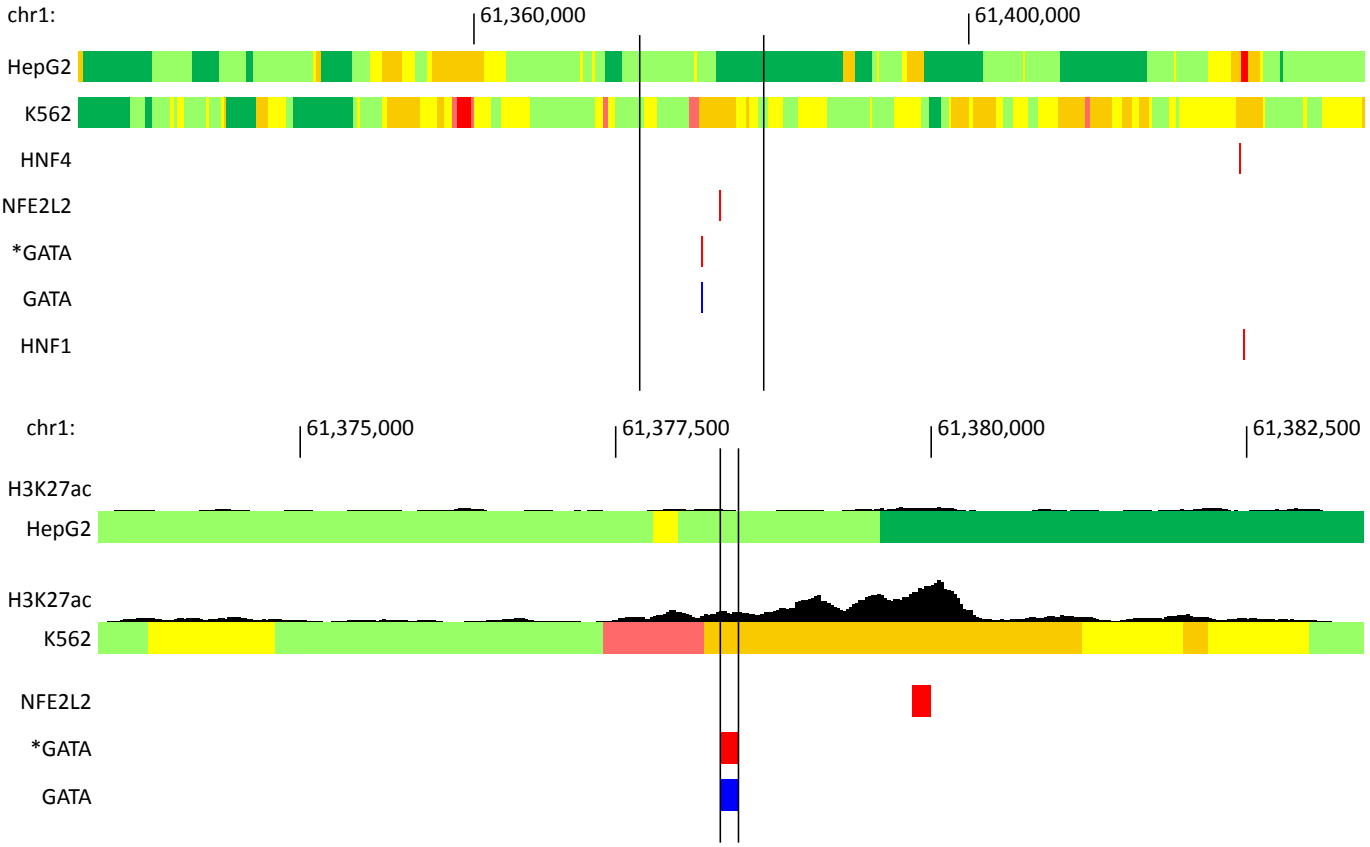
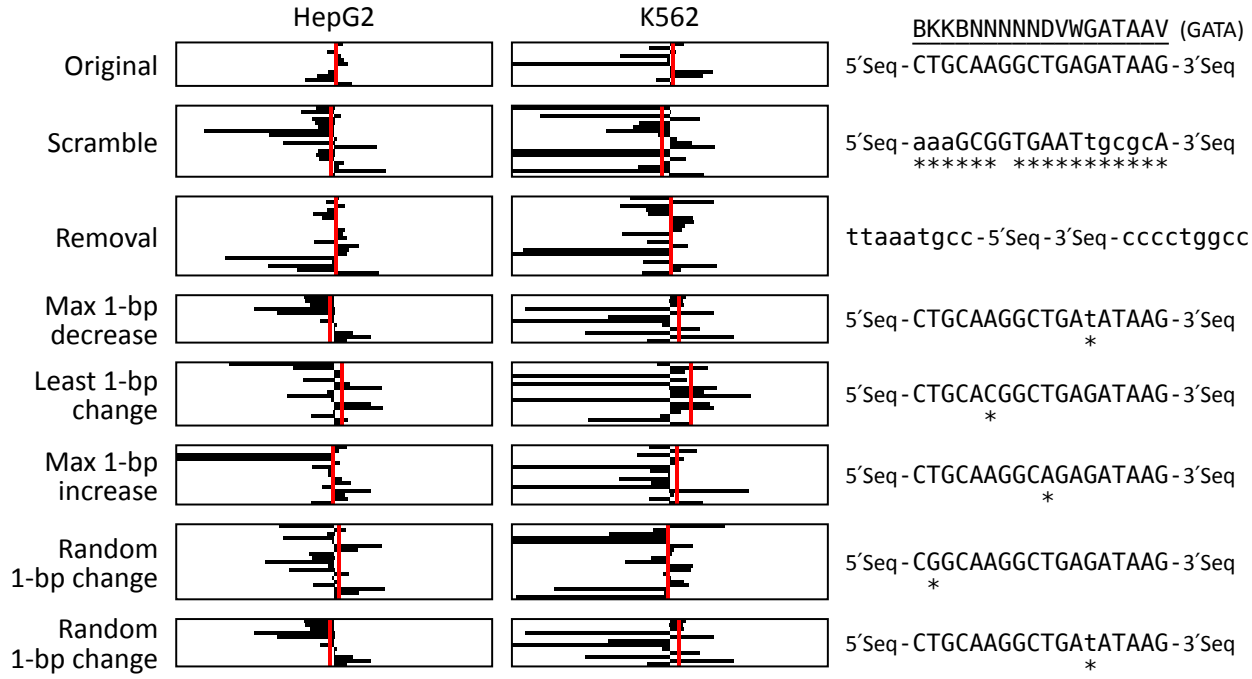
1437 GATA in K562 enhancer (conserved at 80% confidence)

chr1 61378393 61378410 + (hg18)





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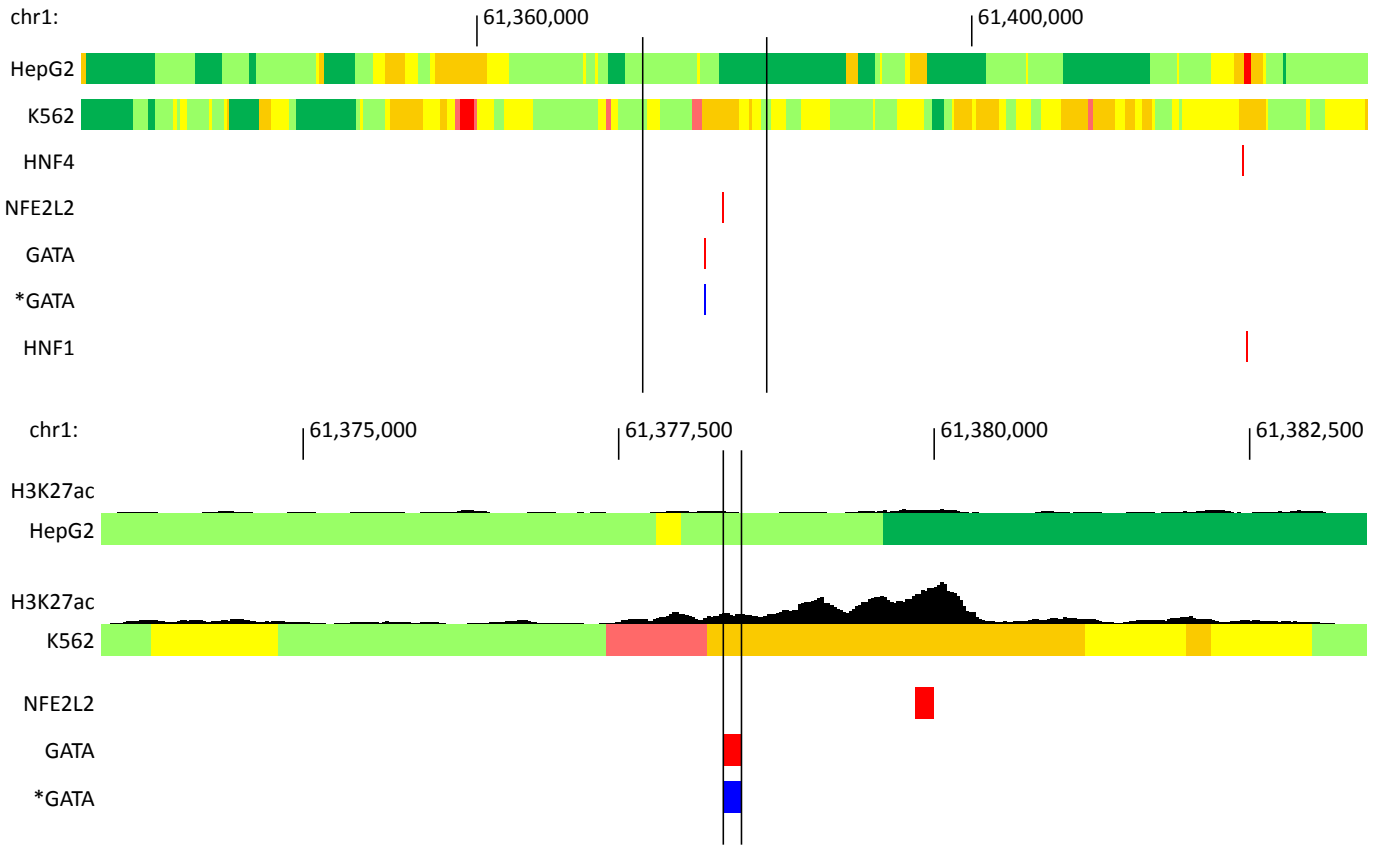
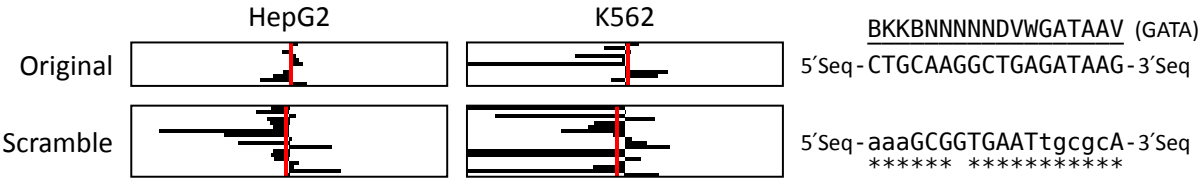
1438 GATA in K562 enhancer

chr1 61378393 61378410 + (hg18)





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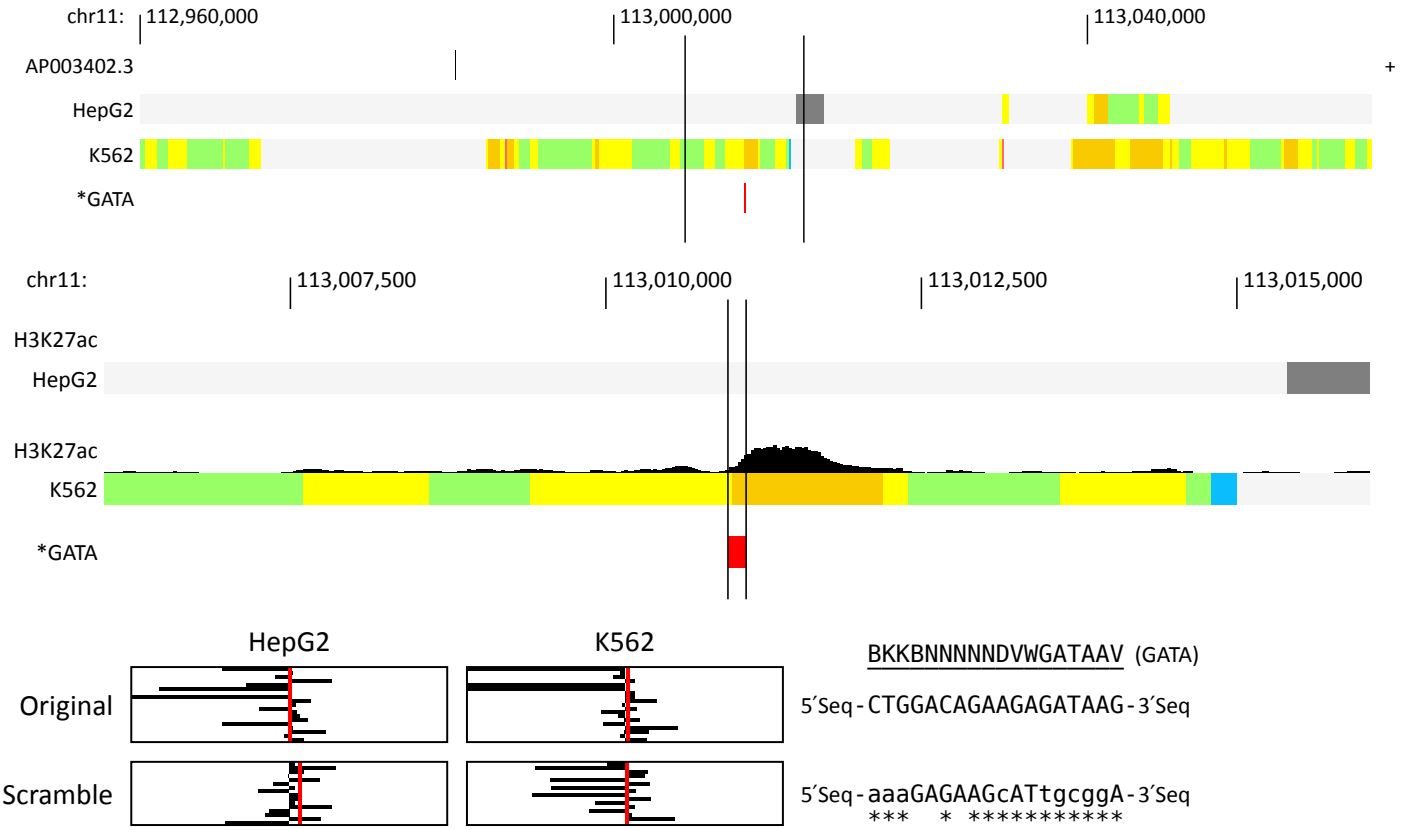
1439 GATA in K562 enhancer (conserved at 60% confidence)

chr11 113011031 113011048 + (hg18)



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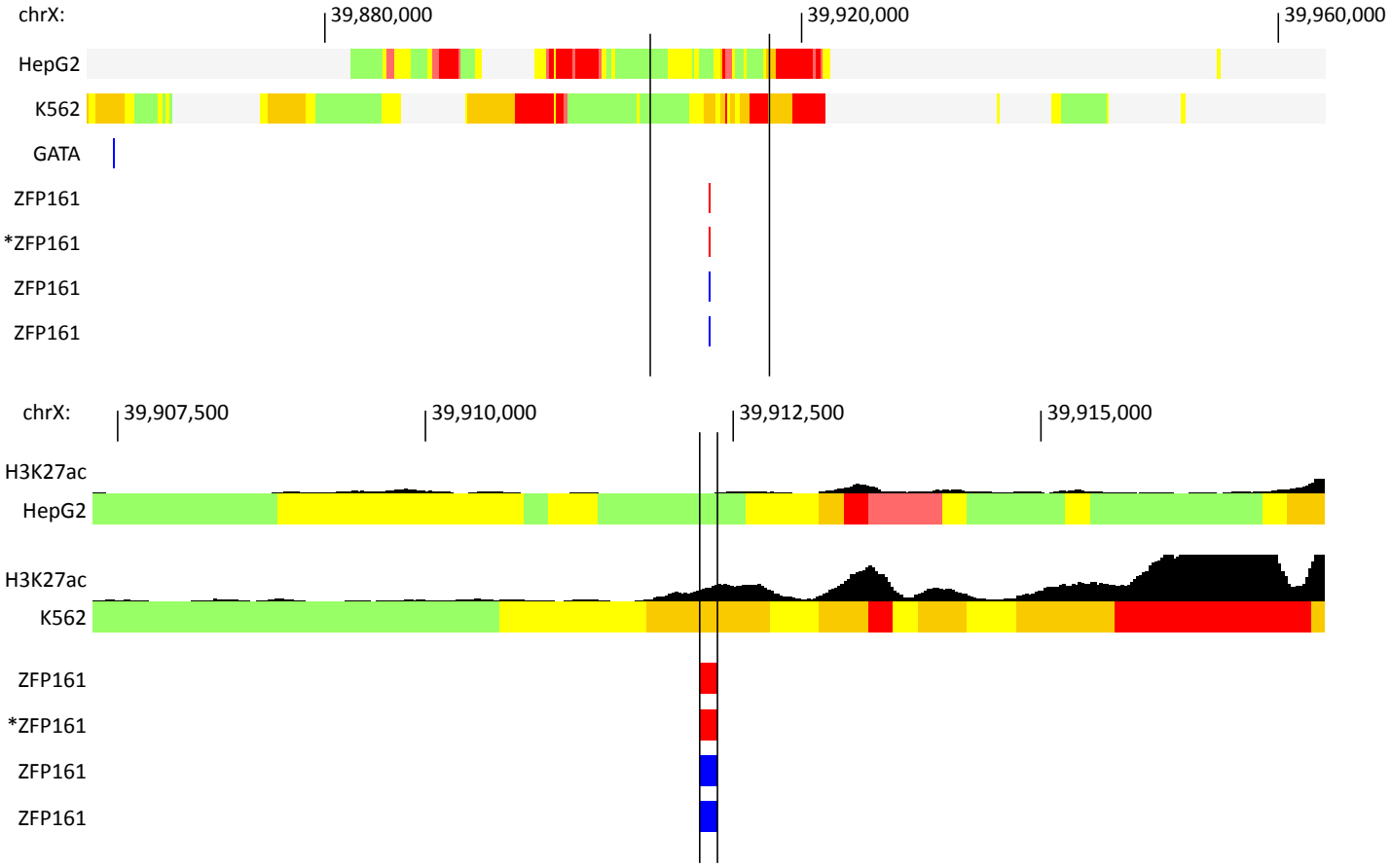
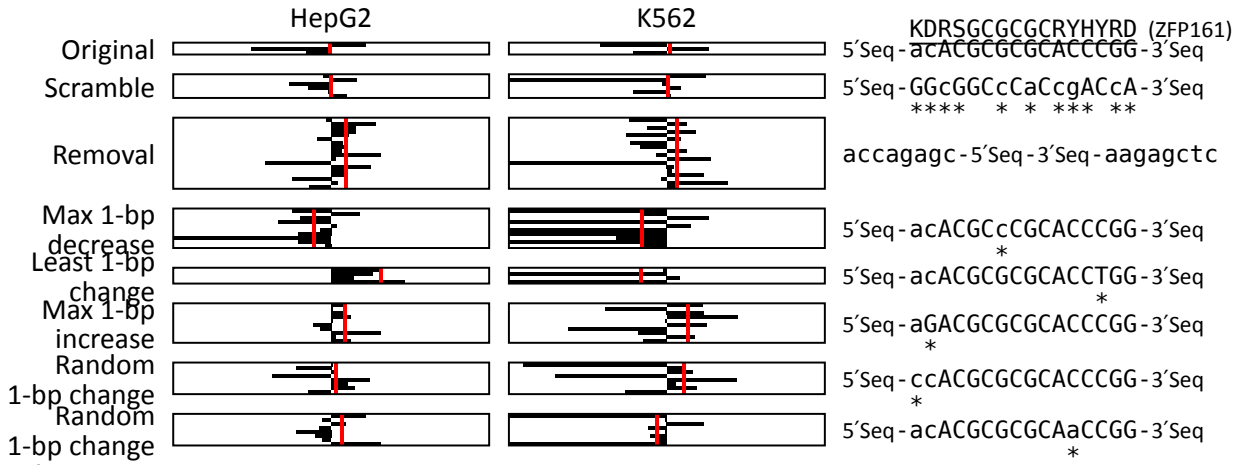
1440 ZFP161 in K562 enhancer (conserved at 60% confidence)

chrX 39912293 39912308 + (hg18)





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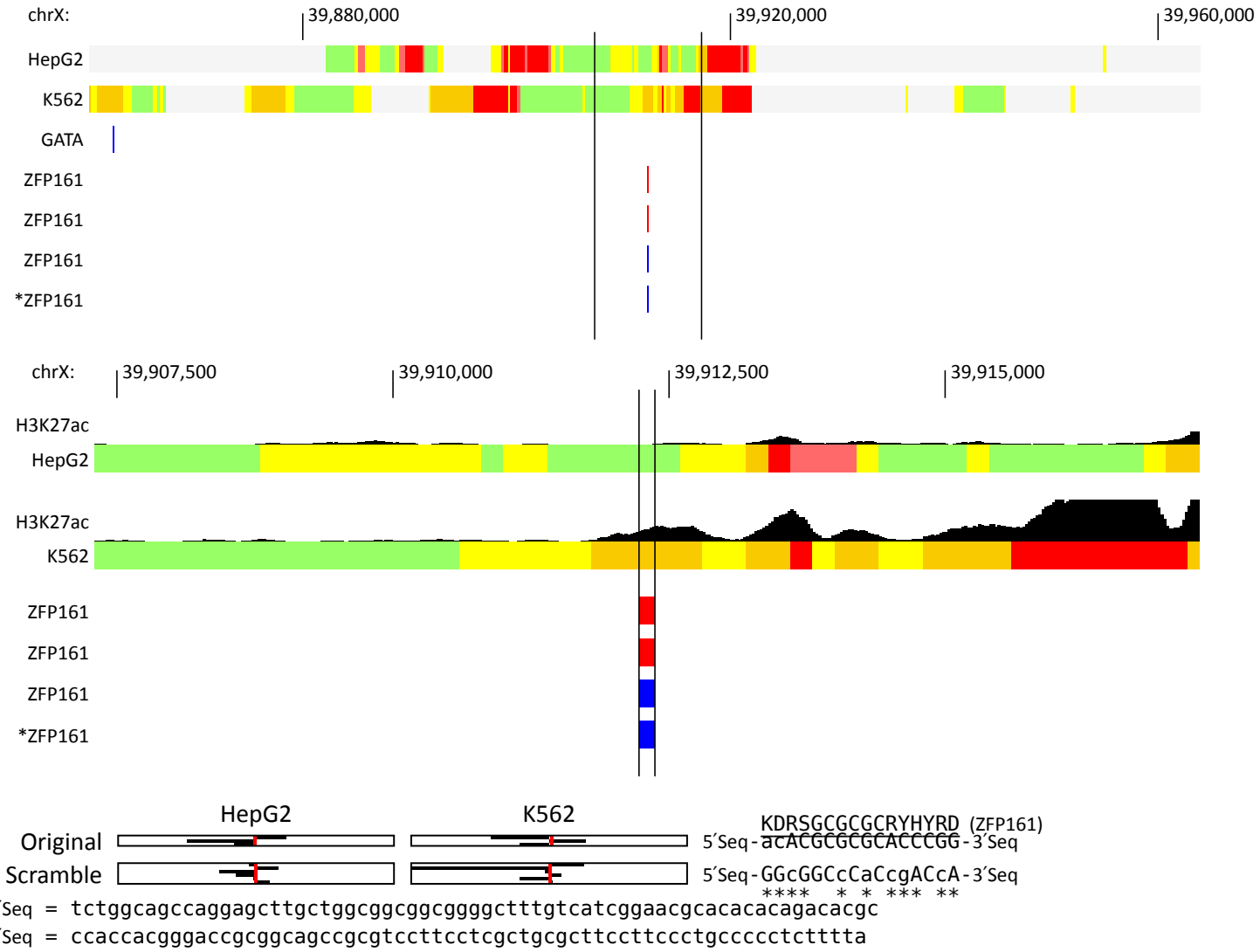

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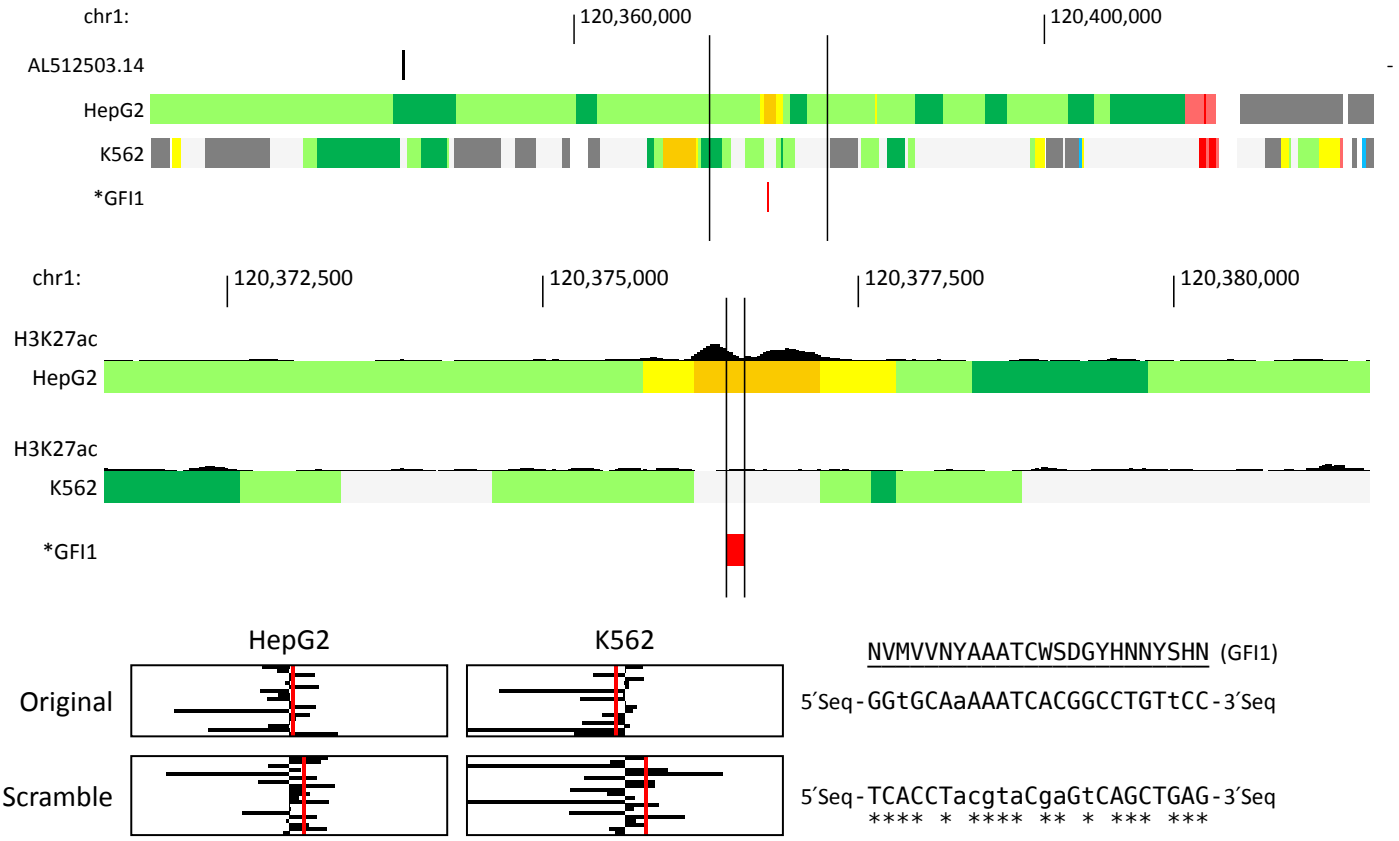
1442 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 120376516 120376539 + (hg18)



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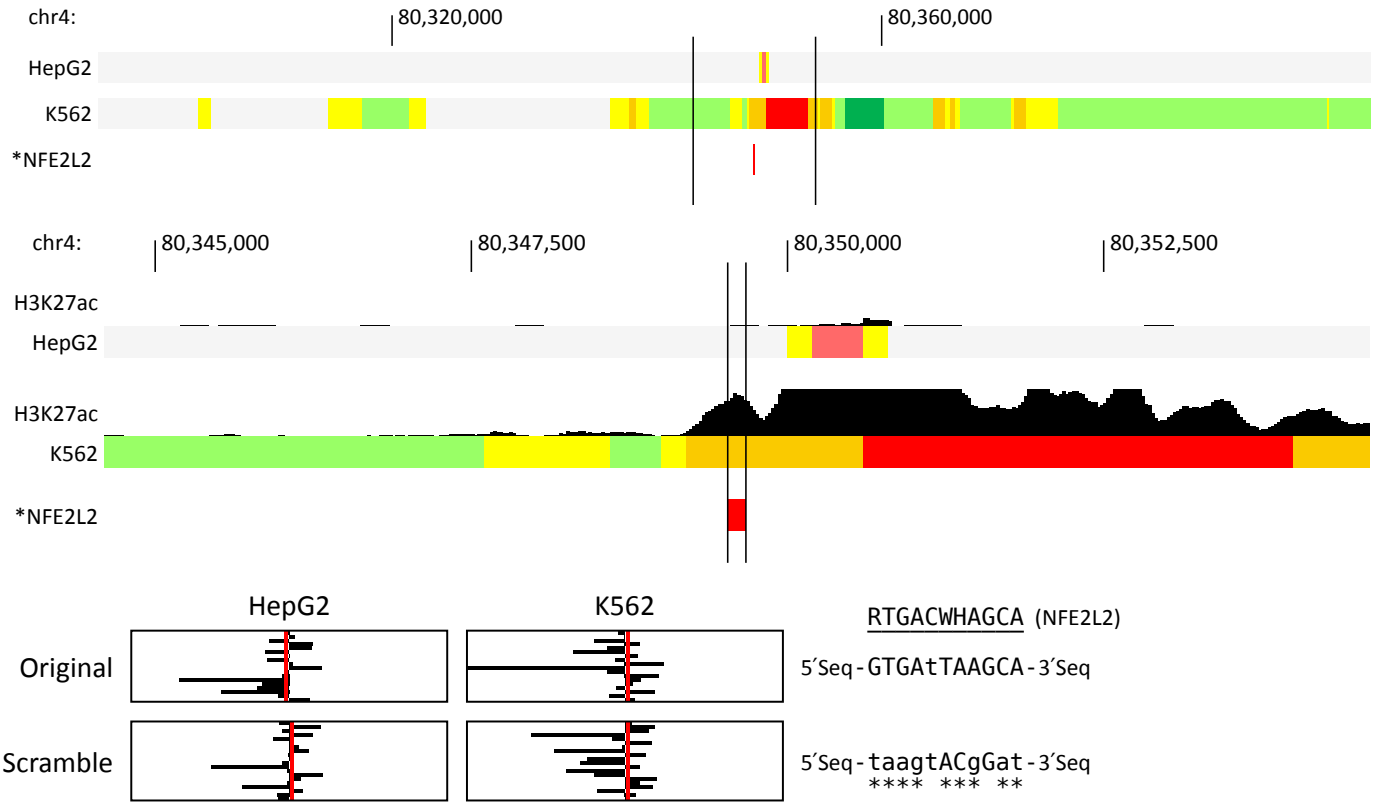
1443 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr4 80349594 80349604 - (hg18)



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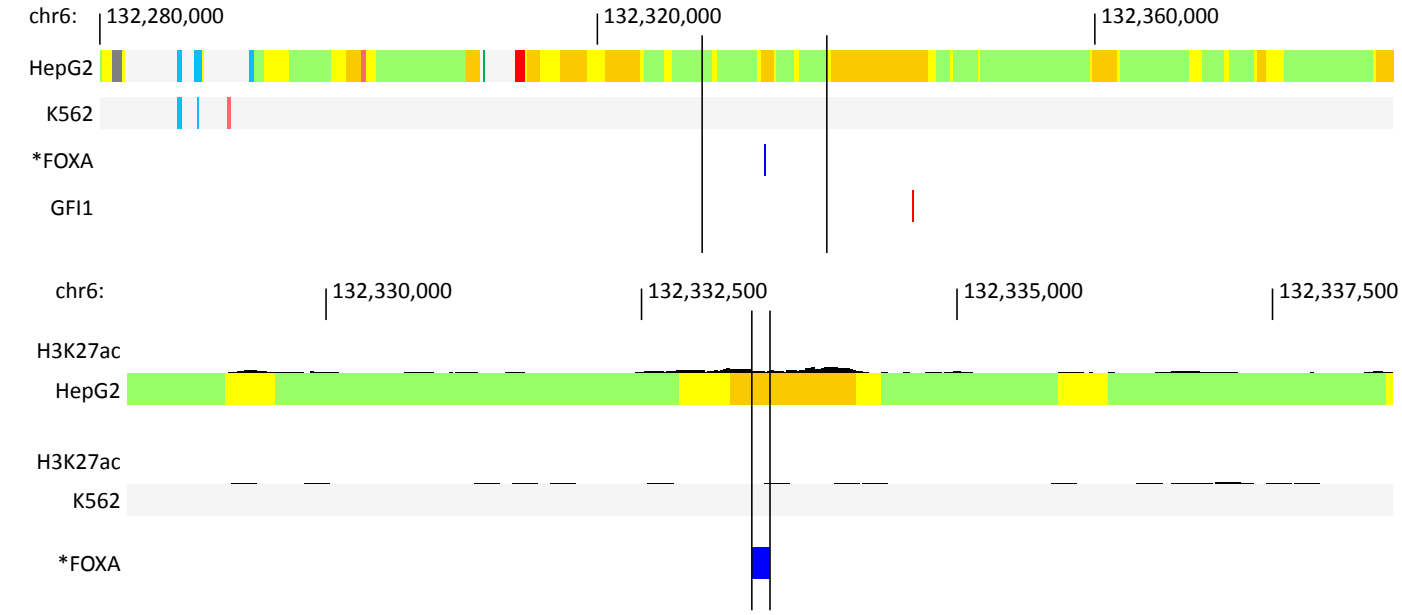
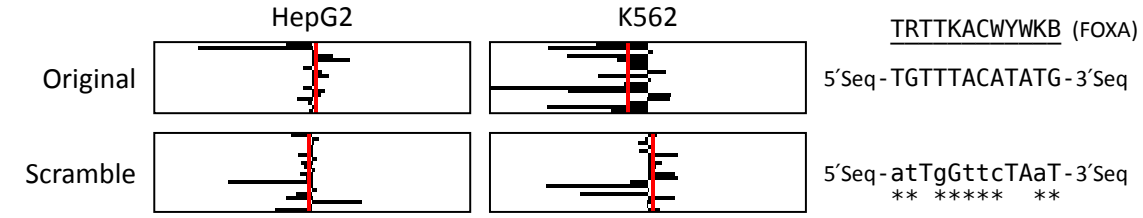
1444 FOXA in HepG2 enhancer

chr6 132333441 132333452 + (hg18)





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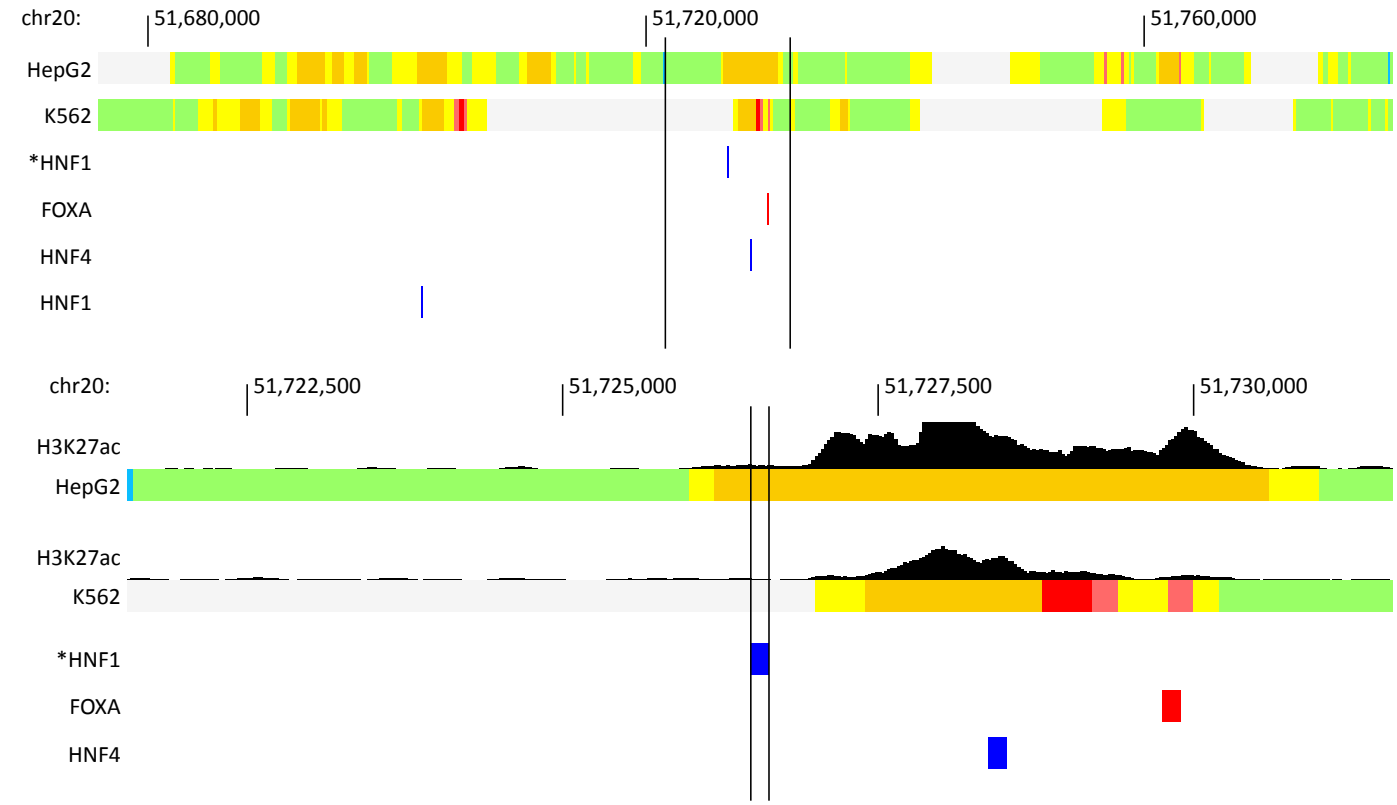
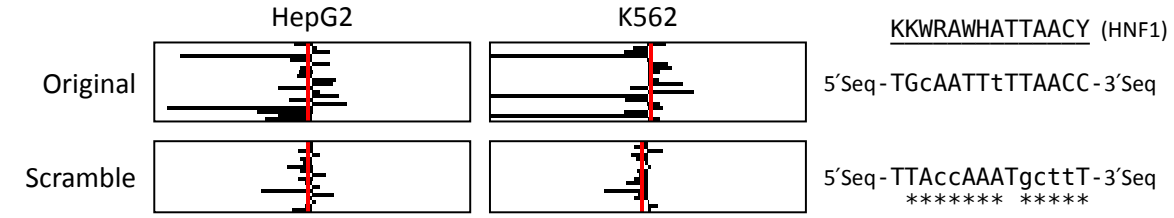
1445 HNF1 in HepG2 enhancer

chr20 51726557 51726570 + (hg18)





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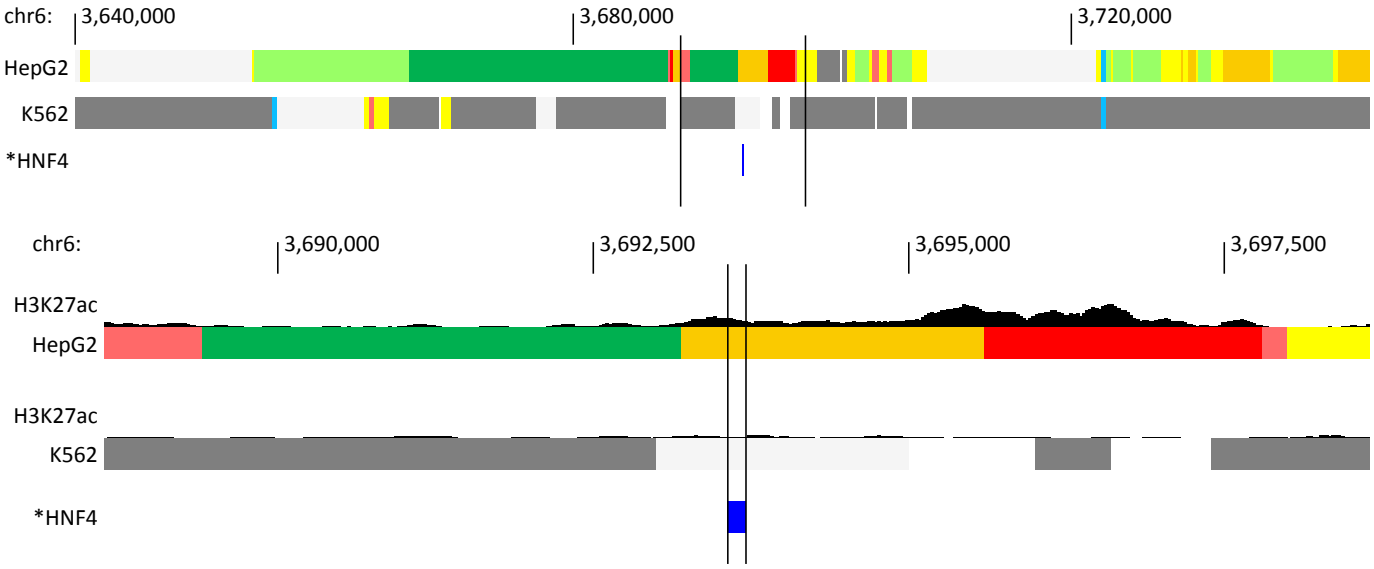
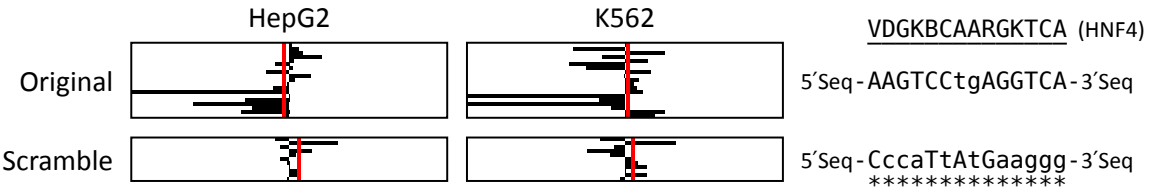
1446 HNF4 in HepG2 enhancer

chr6 3693632 3693645 + (hg18)





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5′Seq-CccaTtAtGaaggg-3′Seq

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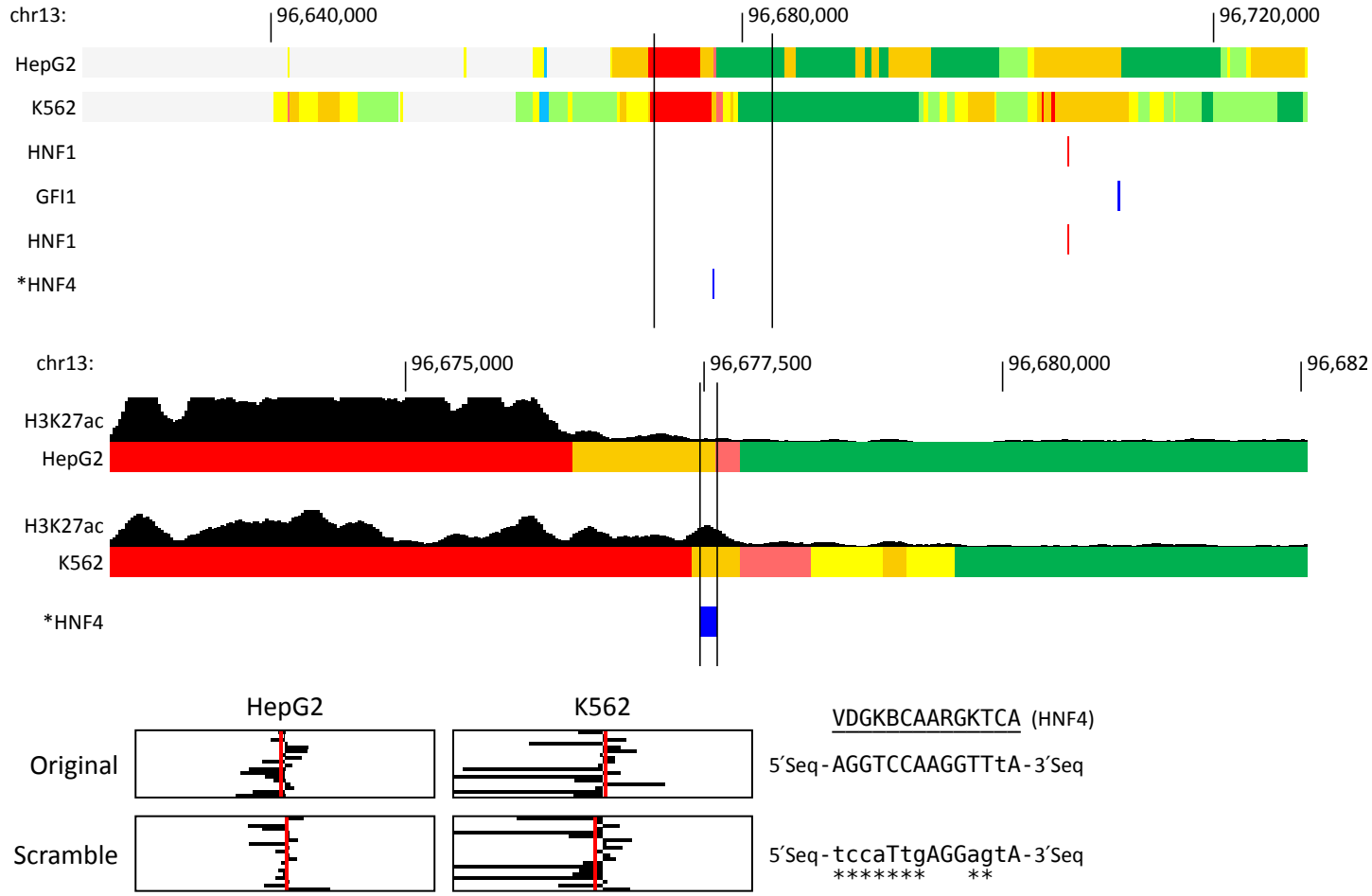
1447 HNF4 in K562 enhancer

chr13 96677532 96677545 + (hg18)



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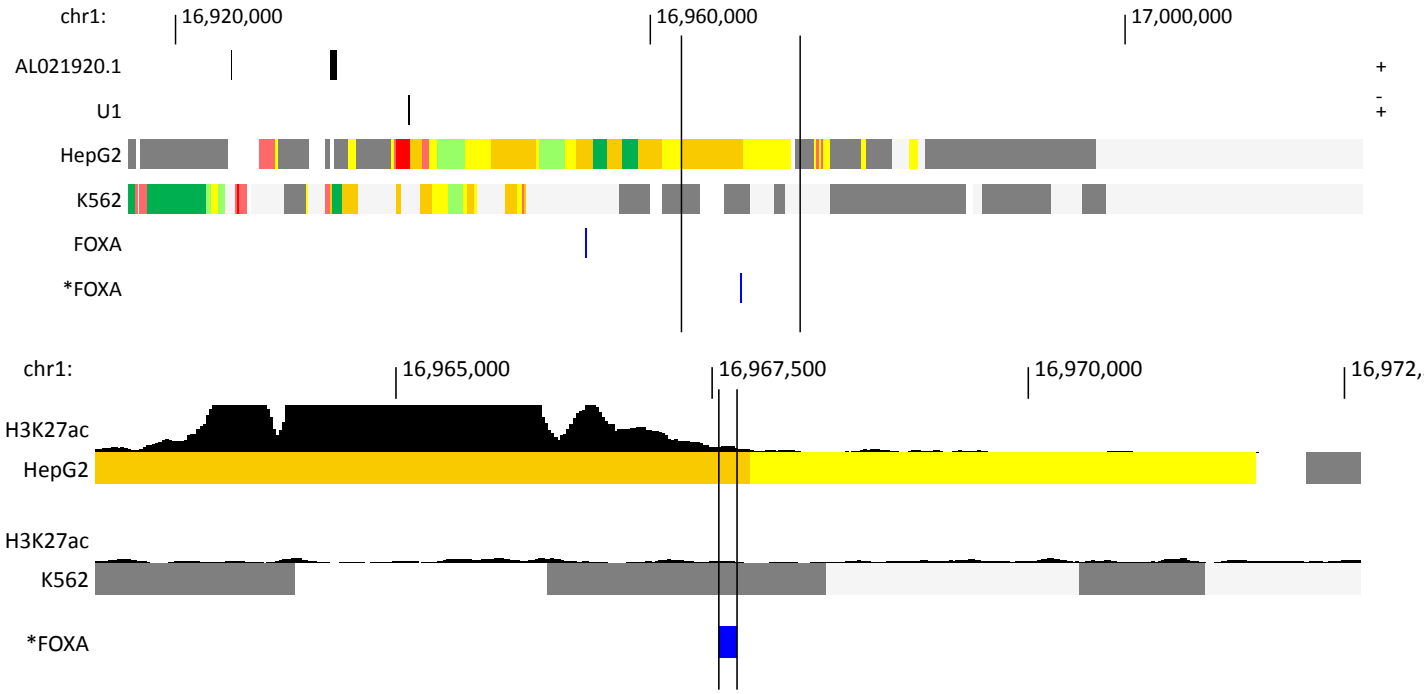
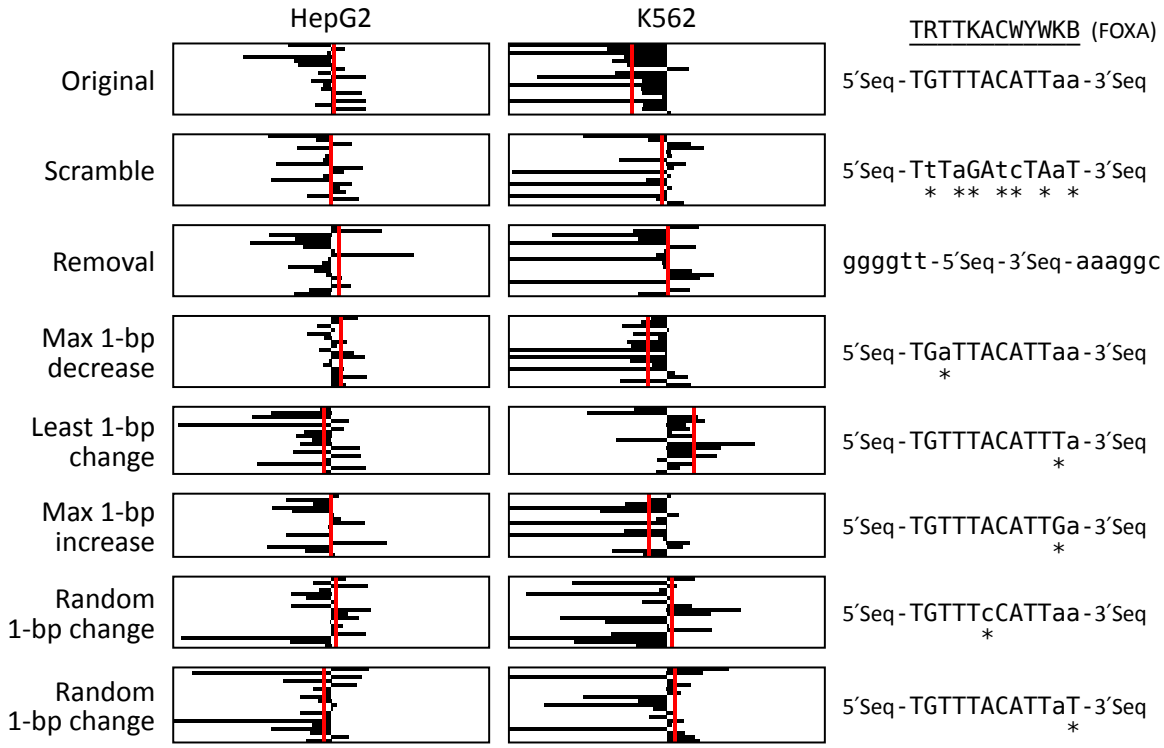
1448 FOXA in HepG2 enhancer

chr1 16967620 16967631 + (hg18)





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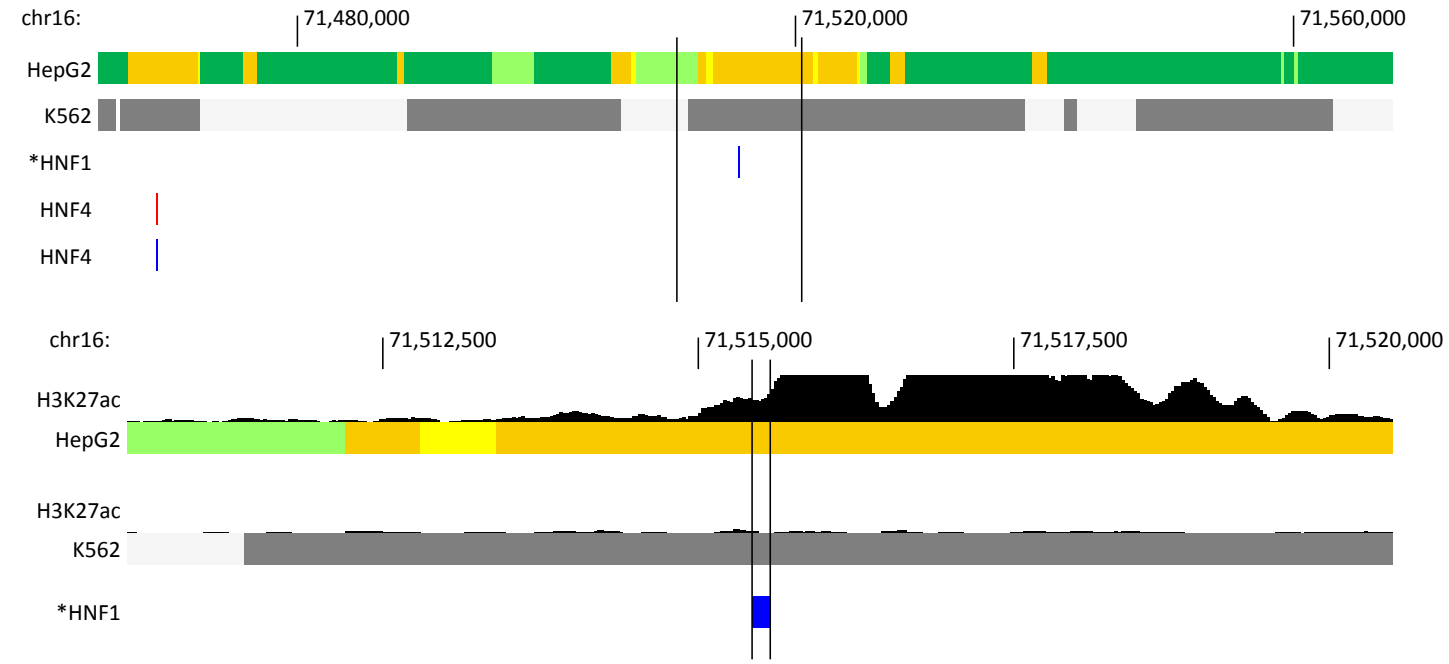
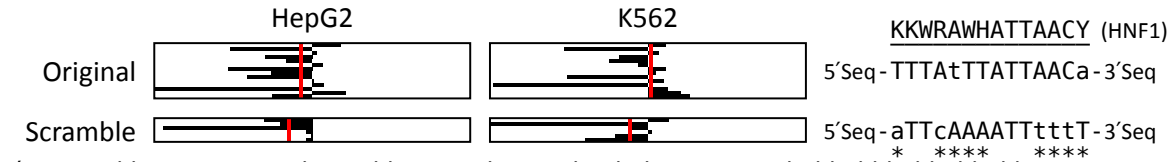
1449 HNF1 in HepG2 enhancer

chr16 71515492 71515505 + (hg18)



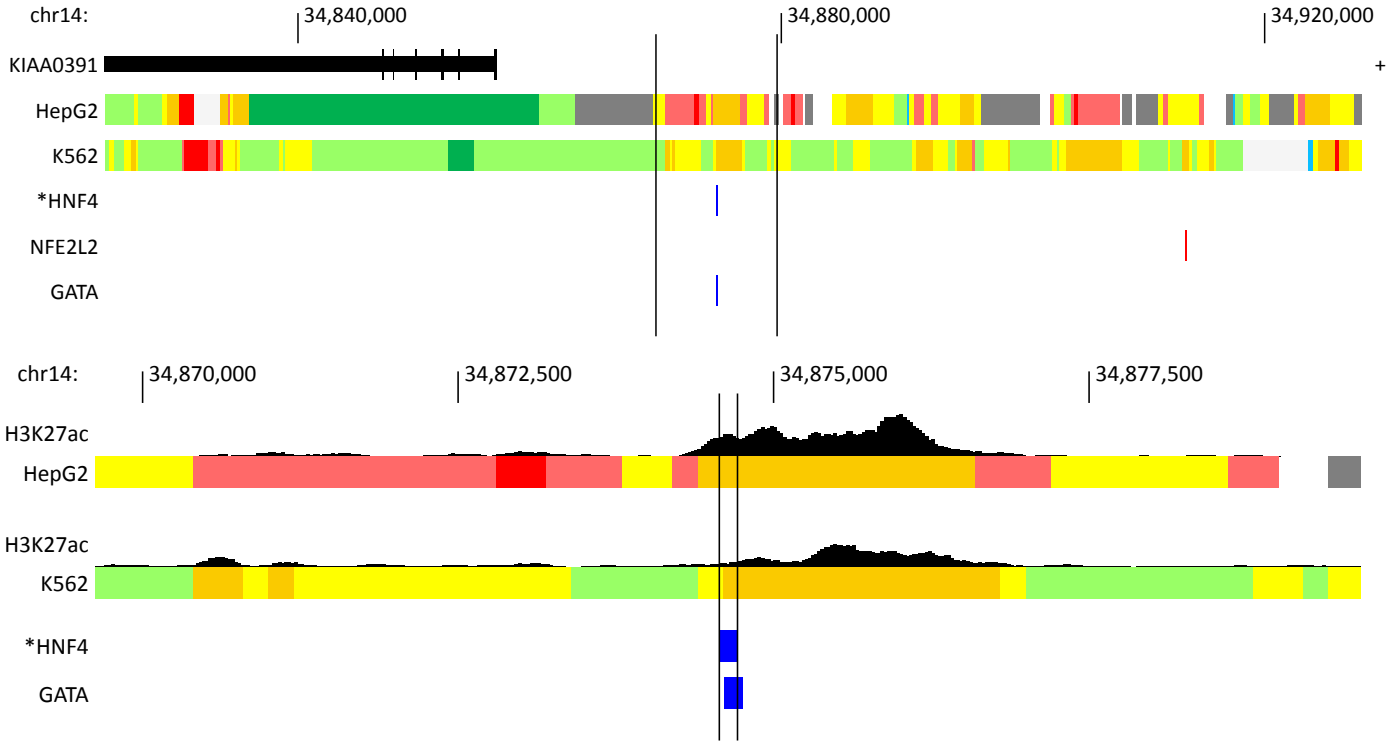


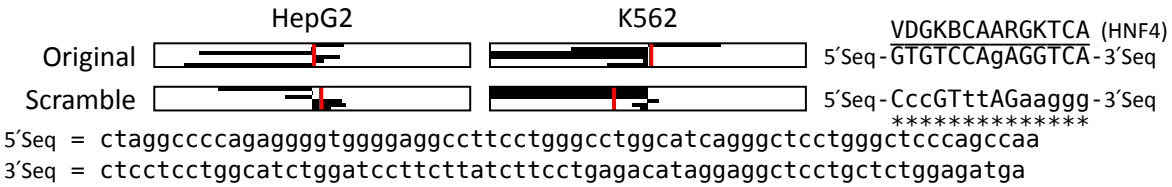
5′Seq = cttgccccaggcactcaagttcagcagtcaaaatgctataaaacacactgttctttcttcttgtta

3′Seq = tcaaggagaggctcacattttgtctttcagagttggttgcaataggttagacctctttgaagcca

1450 HNF4 in HepG2 enhancer

chr14 34874636 34874649 + (hg18)





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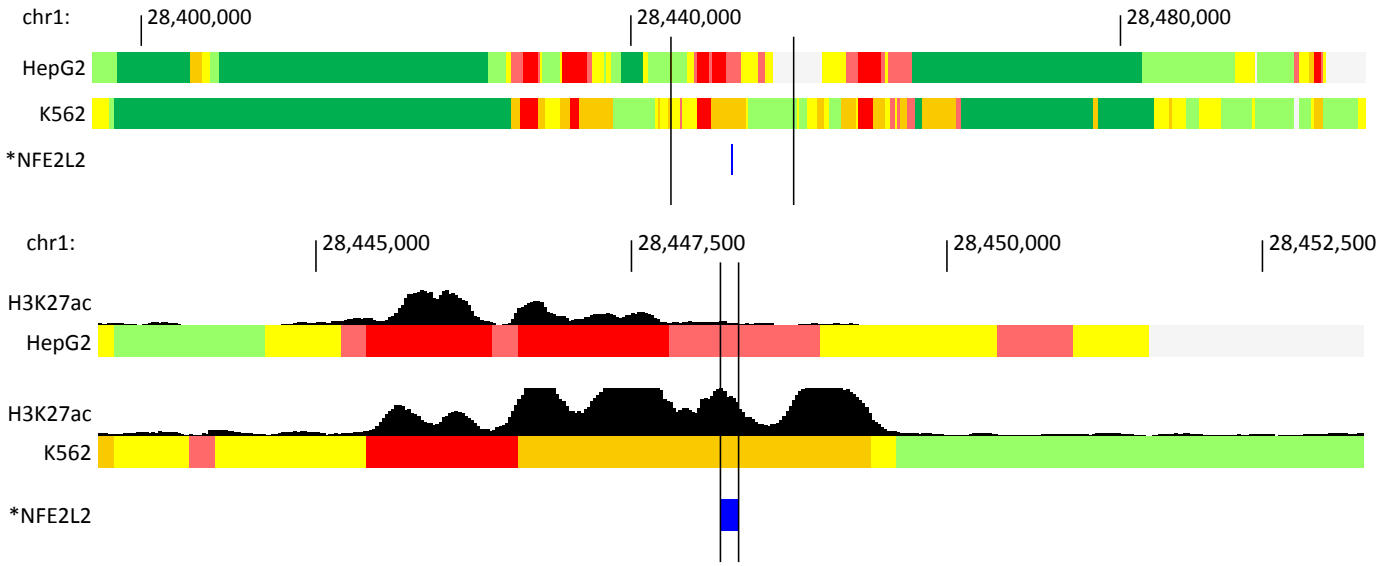
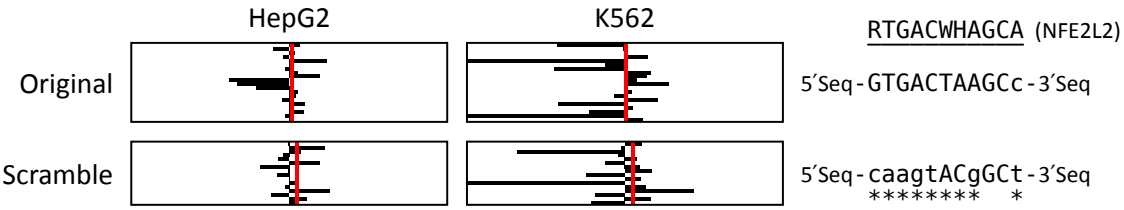
3′Seq = ctcctcctggcatctggatccttcttatcttcctgagacataggaggctcctgctctggagatga

1451 NFE2L2 in K562 enhancer

chr1 28448272 28448282 + (hg18)





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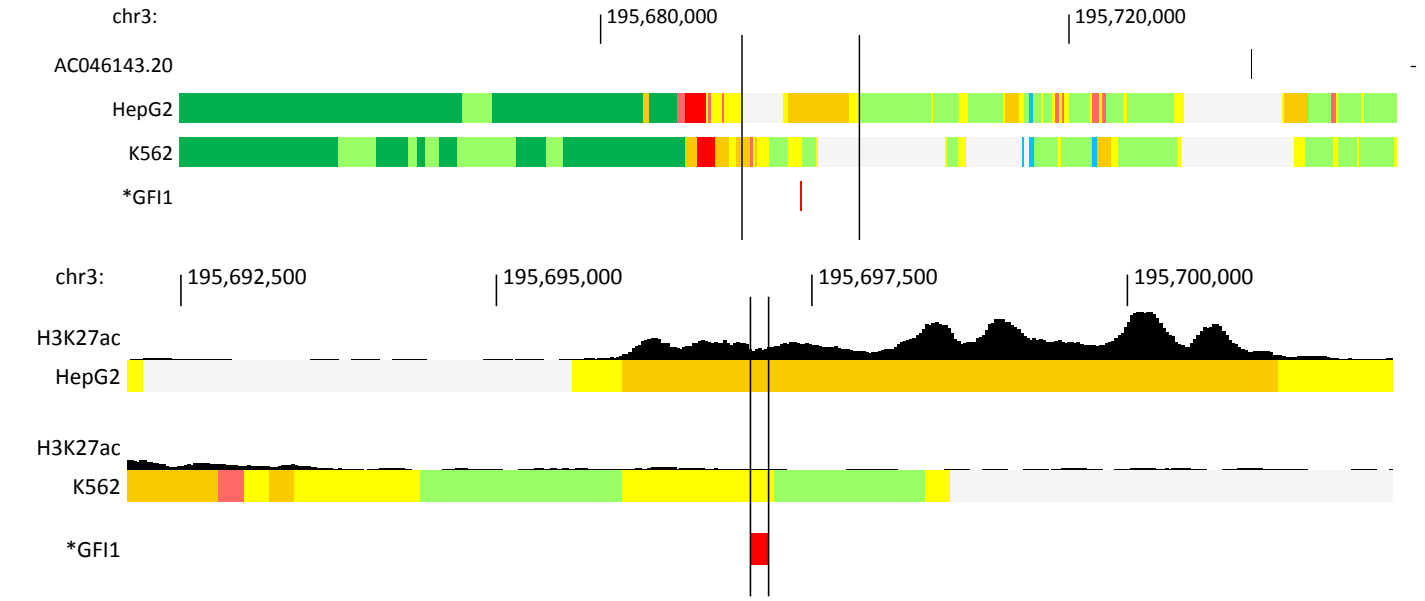
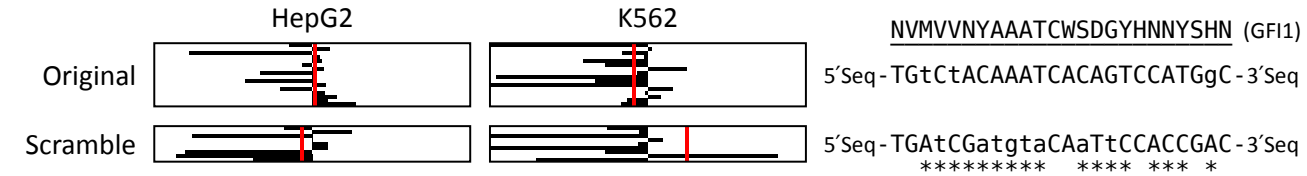
3′Seq = ttgaaggatgggtcttctttggctttatcaaaccaattggagtggaacttctttcctgaaagttccc

1452 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr3 195697074 195697097 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-TGtCtACAAATCACAGTCCATGgC-3′Seq

5′Seq-TGAtCGatgtaCAaTtCCACCGAC-3′Seq

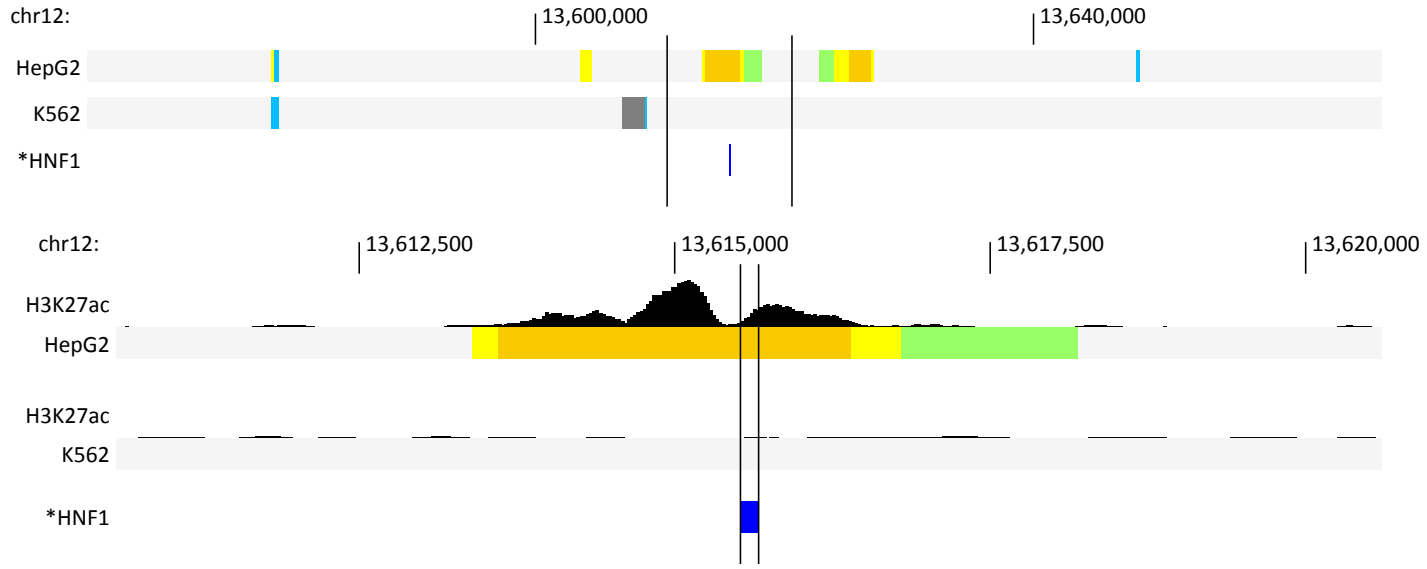
********* **** *** *

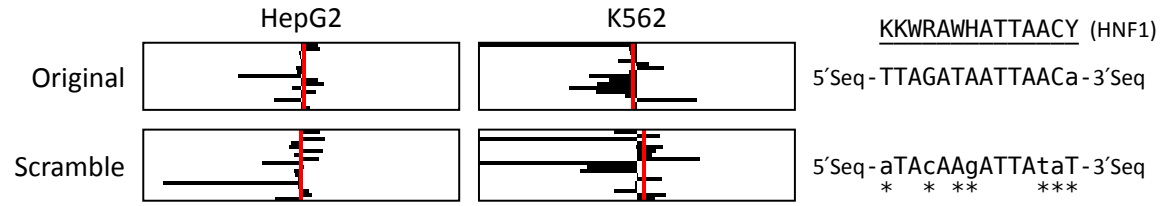
5′Seq = ggccagtgtgtgtgtgtgtgtactggaatgggaacagagagcaggactgttaagtcaga

3′Seq = catcactgacttgtttctgtctctaaacaaagcatgtaaaaactgtttgcctctgccatg

1453 HNF1 in HepG2 enhancer

chr12 13615587 13615600 - (hg18)





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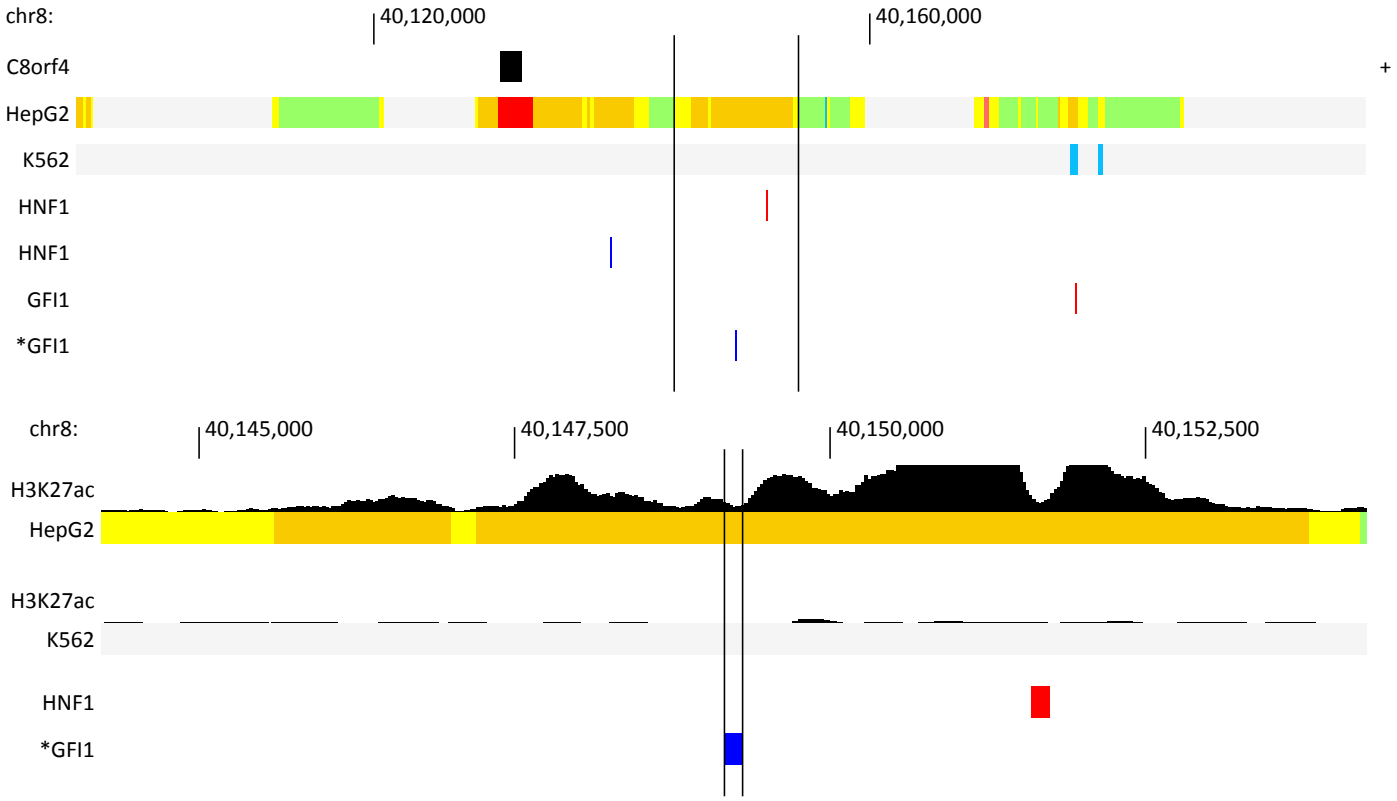
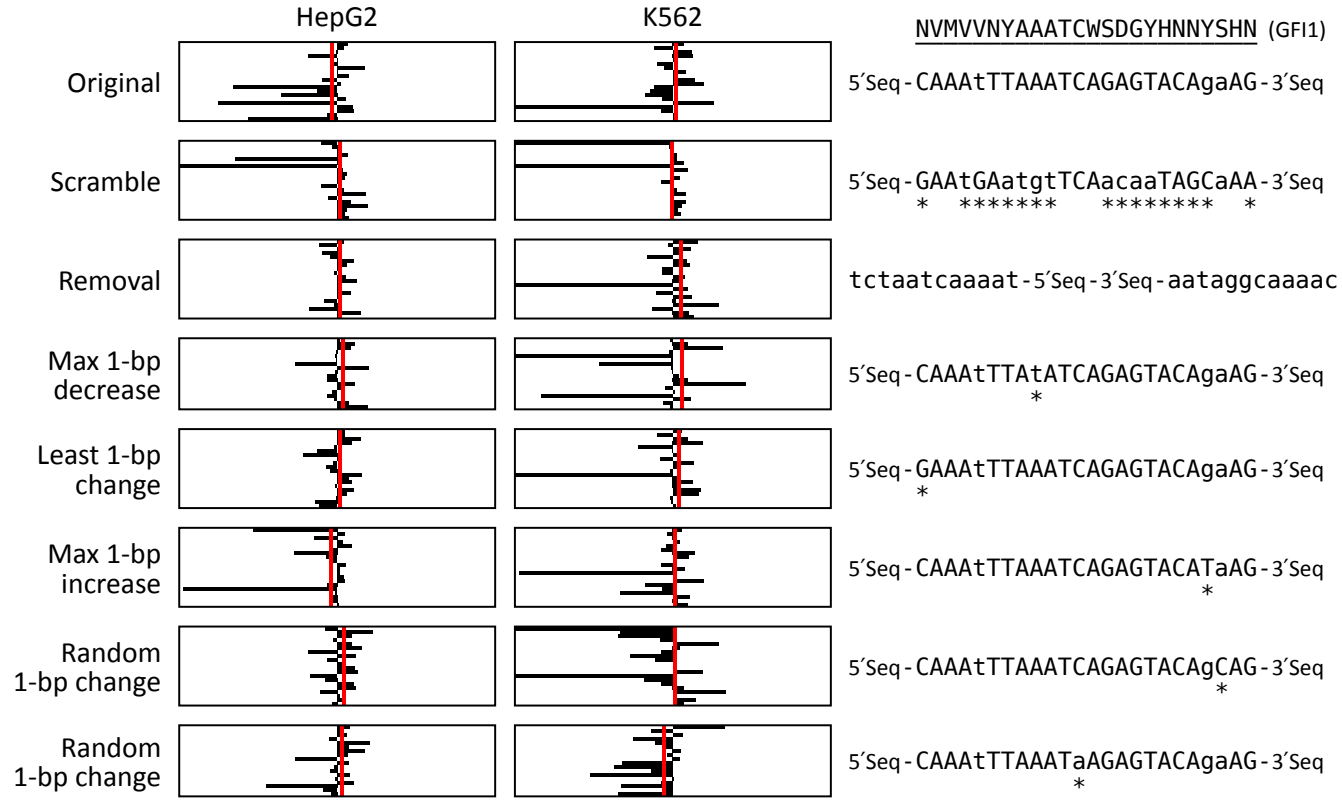
1454 GFI1 in HepG2 enhancer

chr8 40149224 40149247 - (hg18)



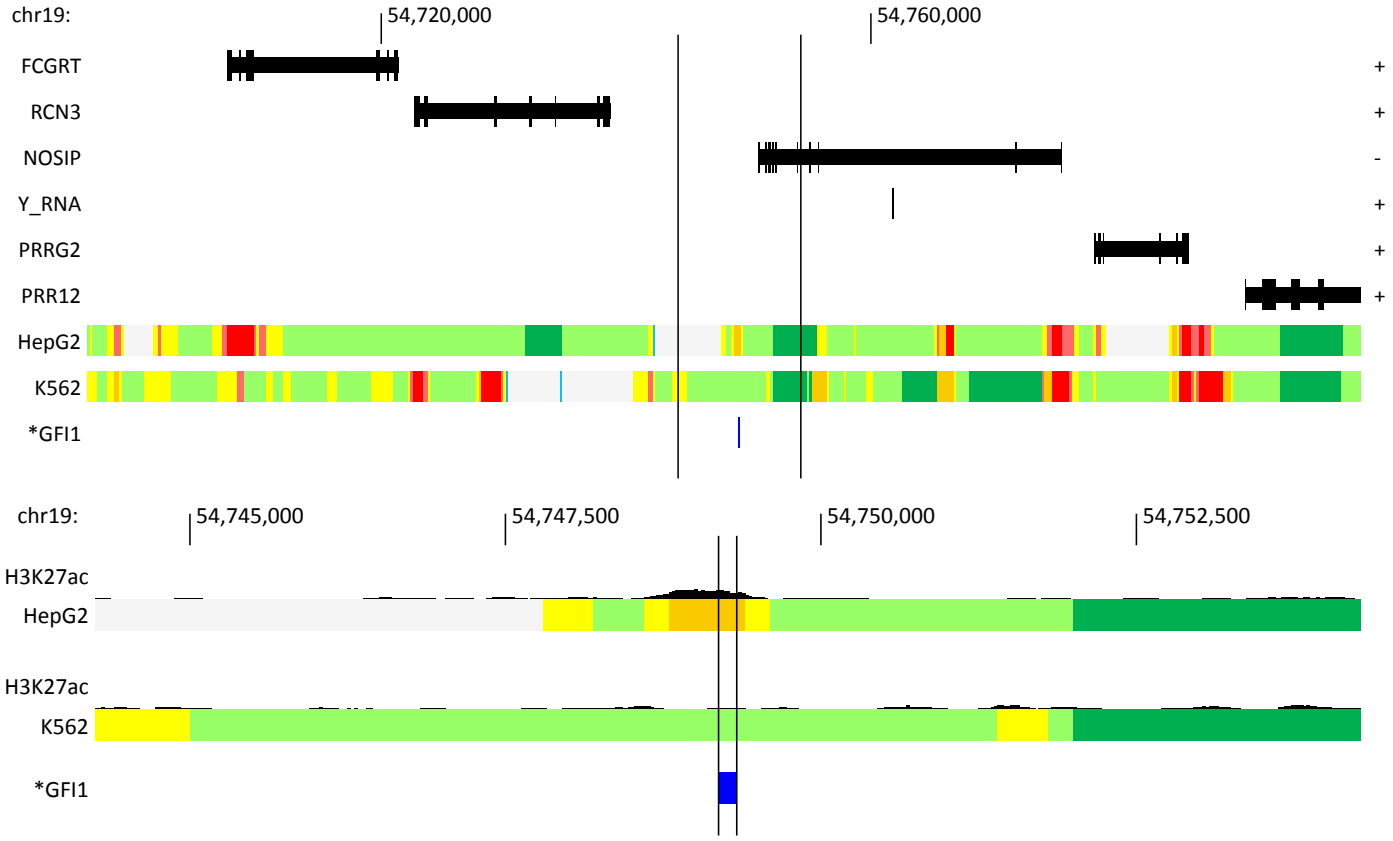


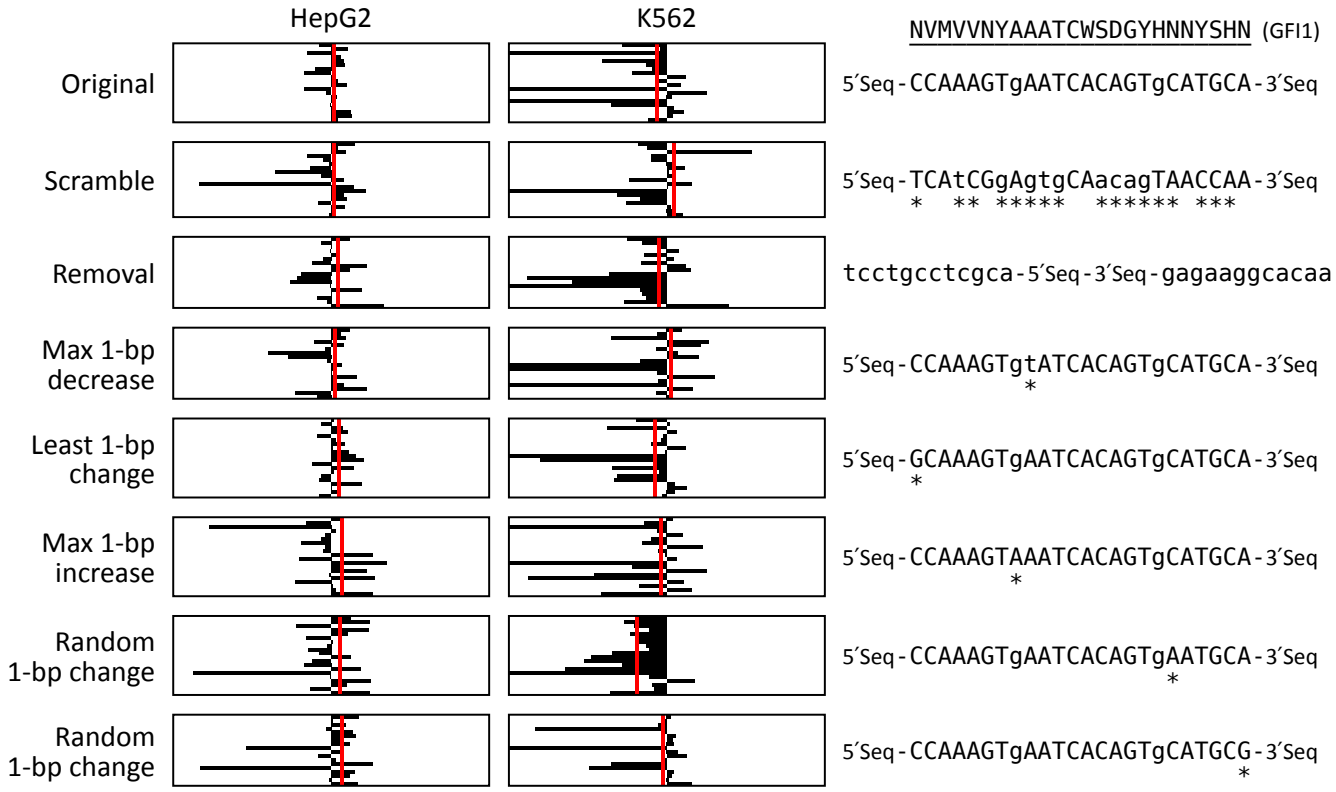
5′Seq = aaaaaatgaaaatgaaagtatttggaatctgaaatcttgattgtttttgttttgatgcctt

3′Seq = gagtggaaattcttaagacaagttacttataggctcacgtatagaagagcaagcctctga

1455 GFI1 in HepG2 enhancer

chr19 54749250 54749273 - (hg18)





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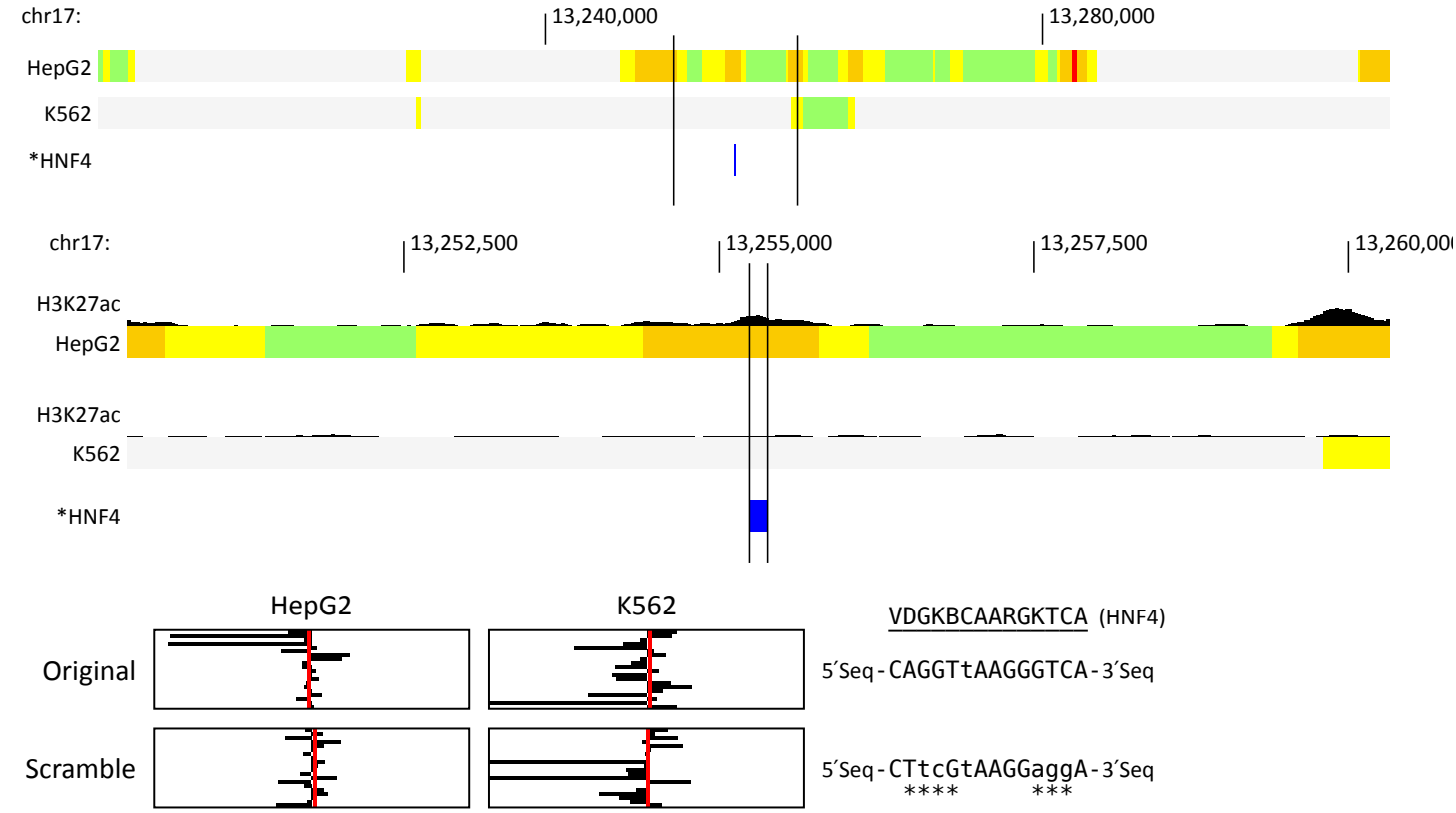
3′Seq = ccatcctgttcagtgagtaatacttttccactccccaggctggagtgcaatggcatgatc

1456 HNF4 in HepG2 enhancer

chr17 13255312 13255325 - (hg18)



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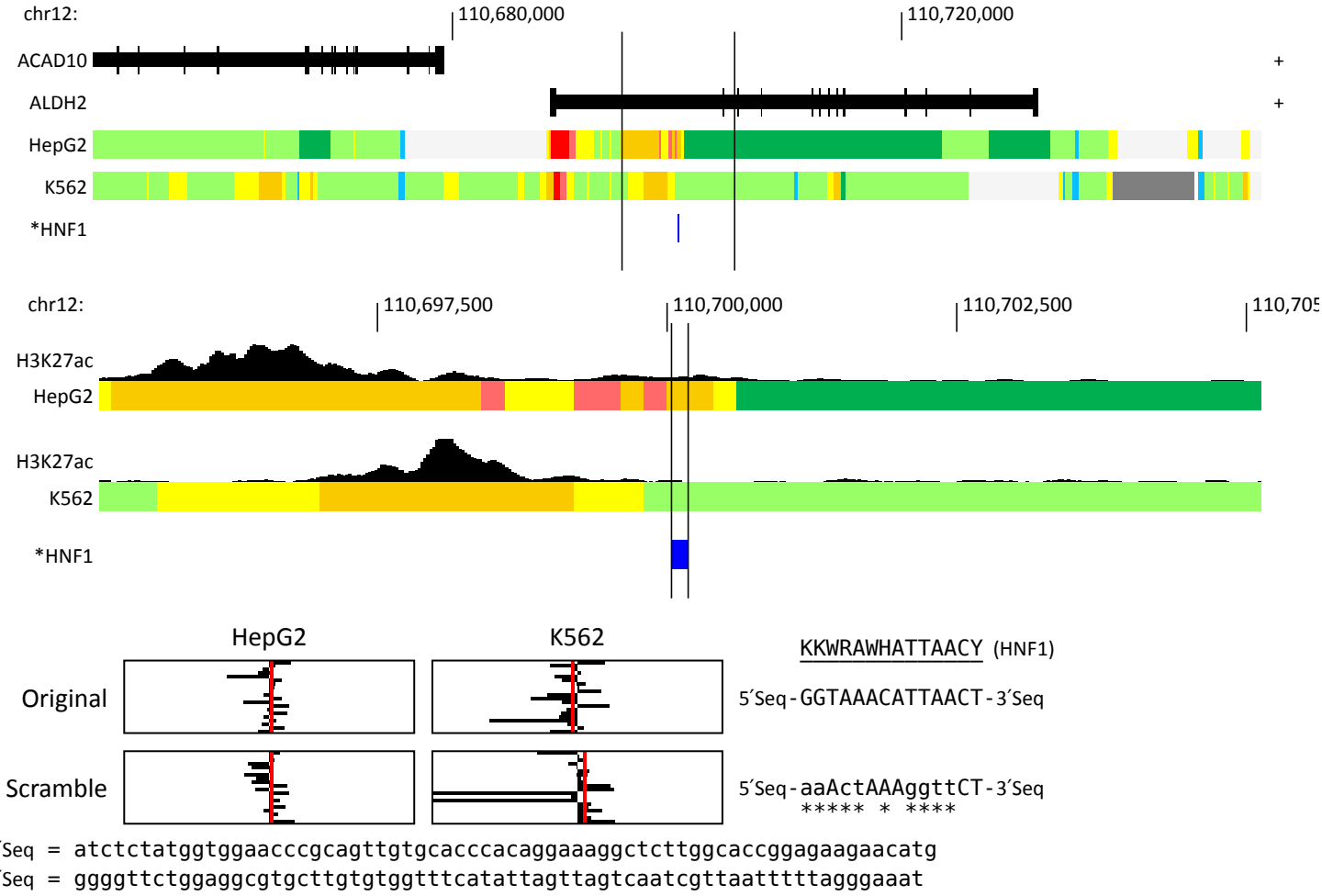
3′Seq = aatgtggccttcaaacacaaatttttctagccttgtgtctggaatgaattagcagctaaagtaaa

1457 HNF1 in HepG2 enhancer

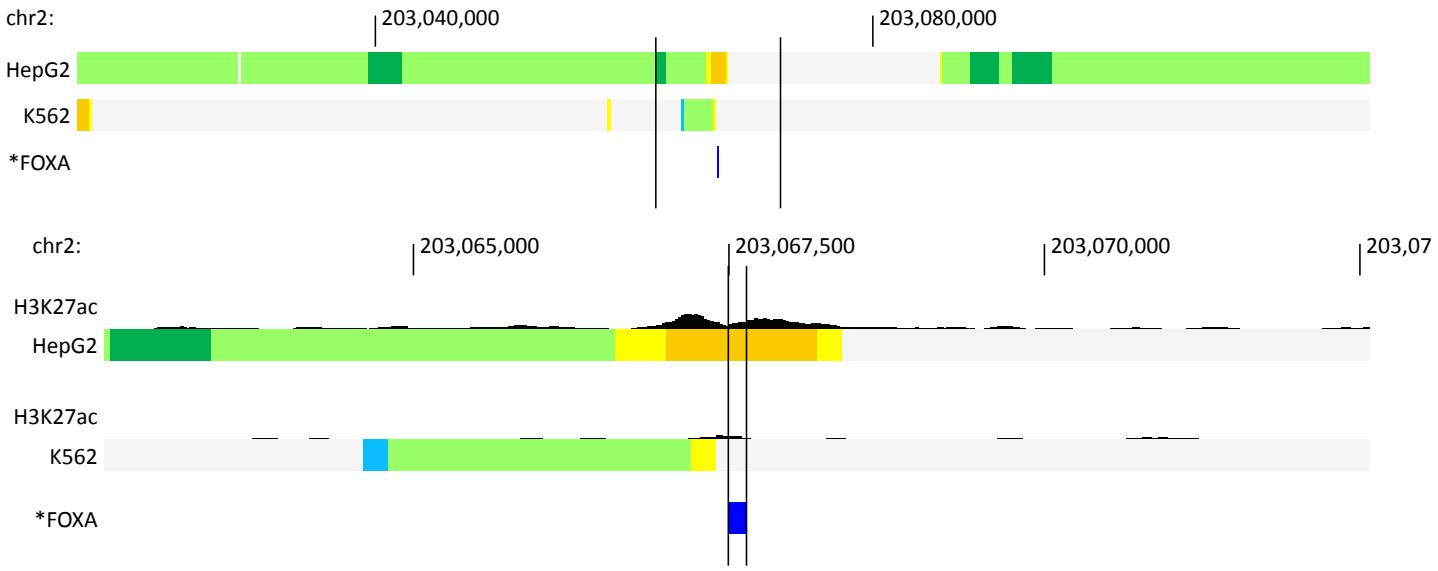
chr12 110700104 110700117 - (hg18)

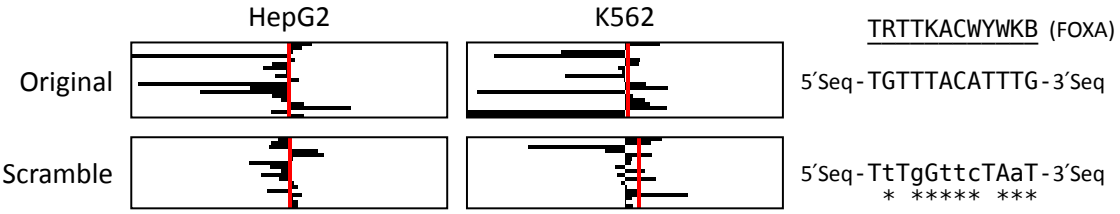


5′Seq = atctctatggtggaacccgcagttgtgcacccacaggaaaggctcttggcaccggagaagaacatg
3′Seq = ggggttctggaggcgtgcttgtgtggtttcatattagttagtcaatcgttaatttttagggaaat

1458 FOXA in HepG2 enhancer

chr2 203067562 203067573 + (hg18)





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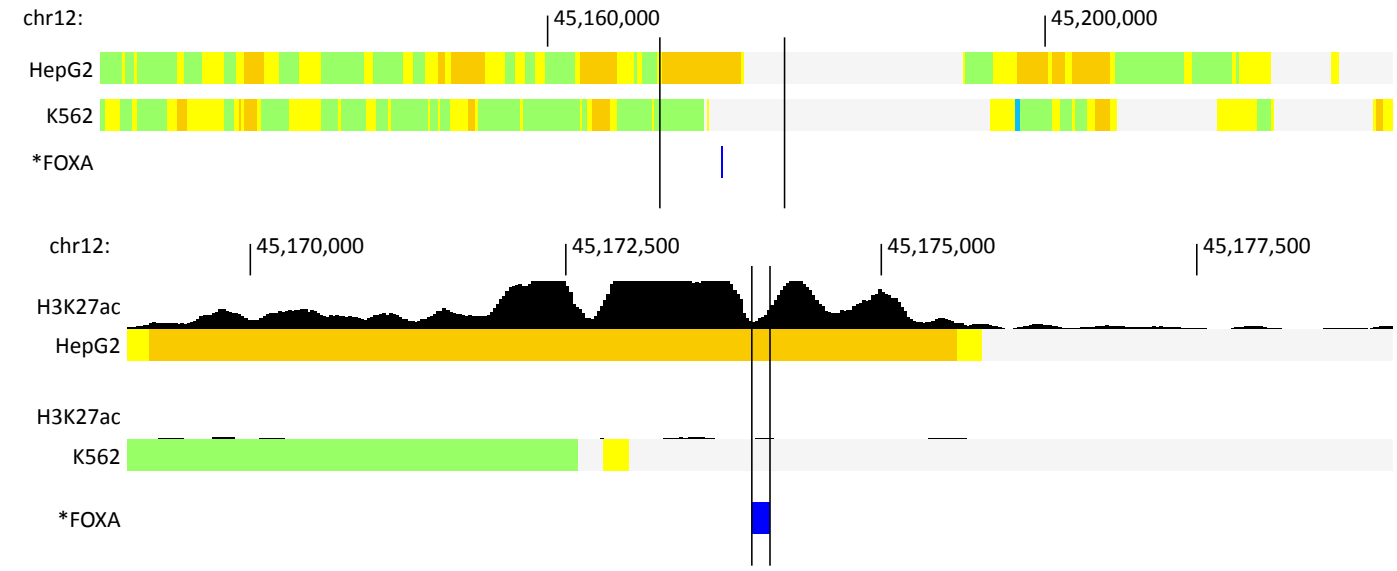
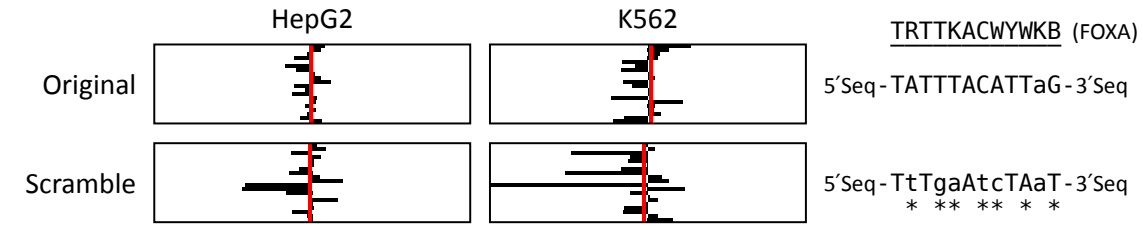
3′Seq = gctgagtatttaactgagaaaacttaatagggaagaaaaagagggtttattagaggtaggagaaca

1459 FOXA in HepG2 enhancer

chr12 45174041 45174052 + (hg18)

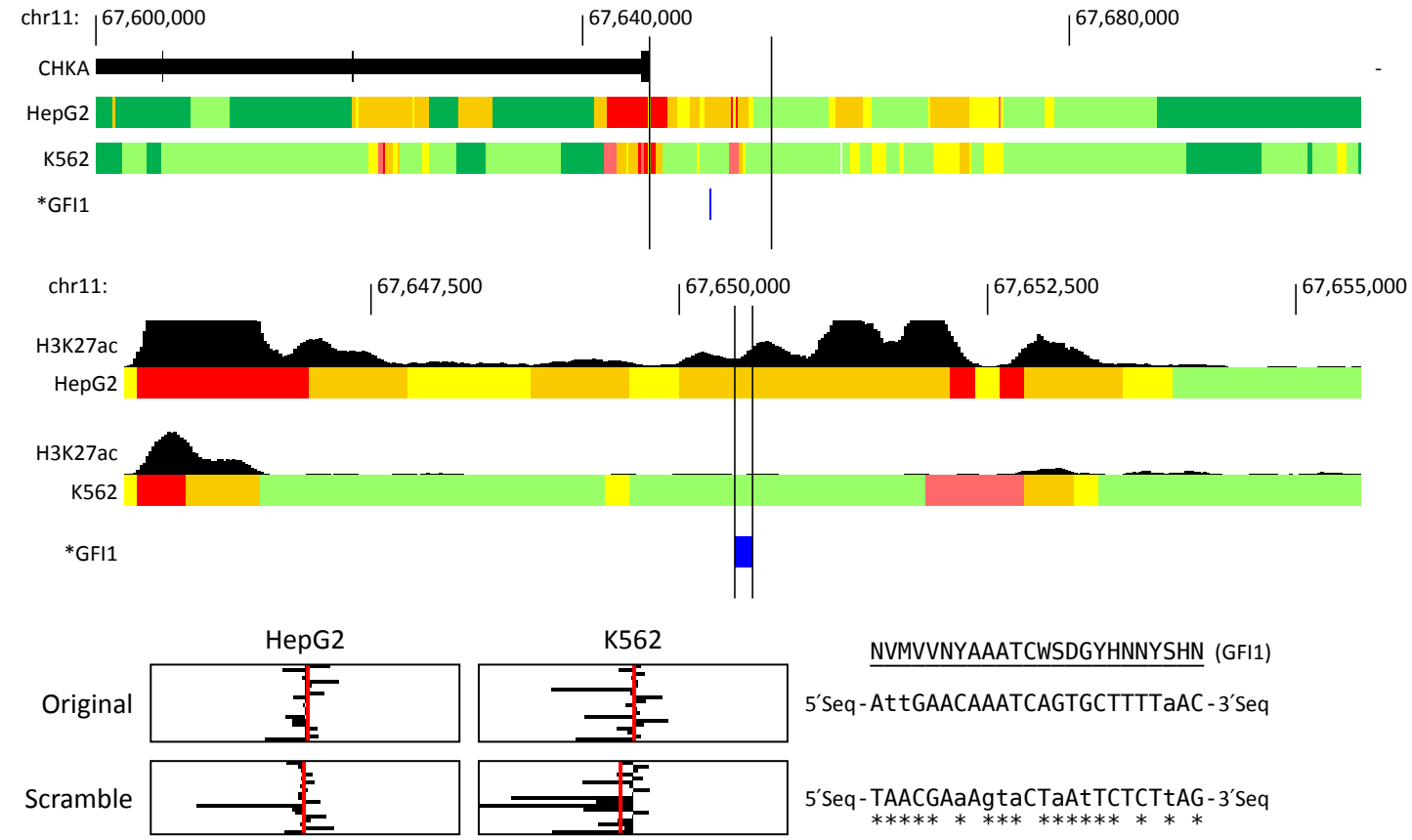




5′Seq = aatccataacccagaggcaaaggtaatgacgtgtgtataatcaccacttgaattttctgctccactg
3′Seq = agggaaacaaatcttgtaatatgtacgtgctttccattaaggatgcagcacaaatatcaacagtgt

1460 GFI1 in HepG2 enhancer

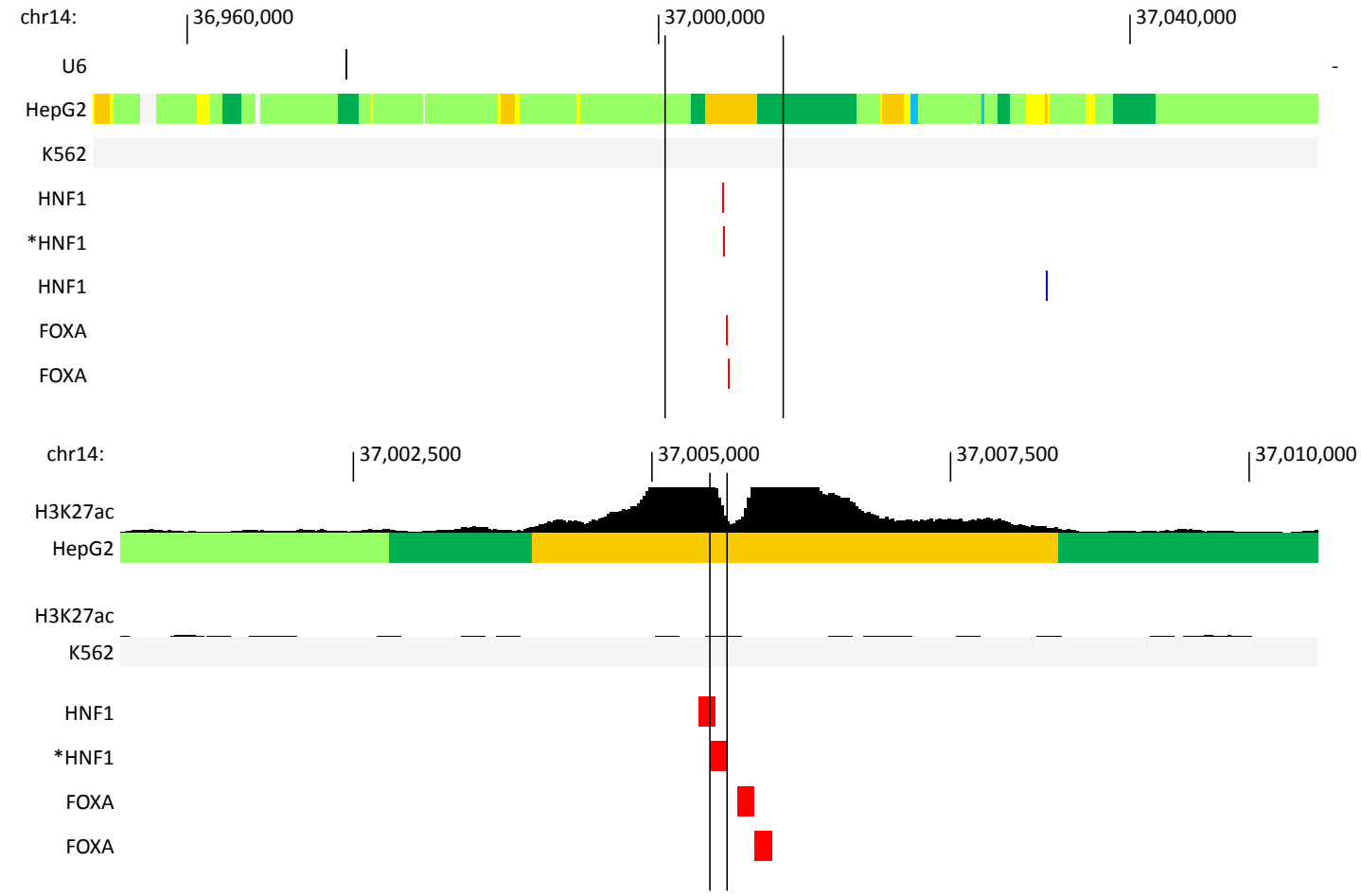
chr11 67650511 67650534 + (hg18)

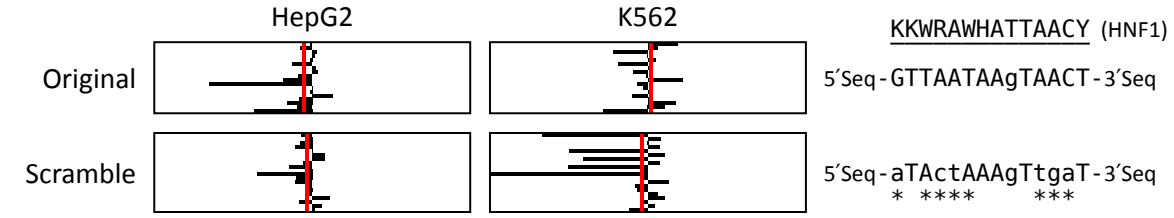


5′Seq = aaaaaaaaaaagaaacatctcgacagggttaccaaaactggggcatgtttgaaatacttaa
3′Seq = acacatgcaaaagtcccattcaagataattttgcaattctcaaggtaatagagggattac

1461 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr14 37005551 37005564 + (hg18)





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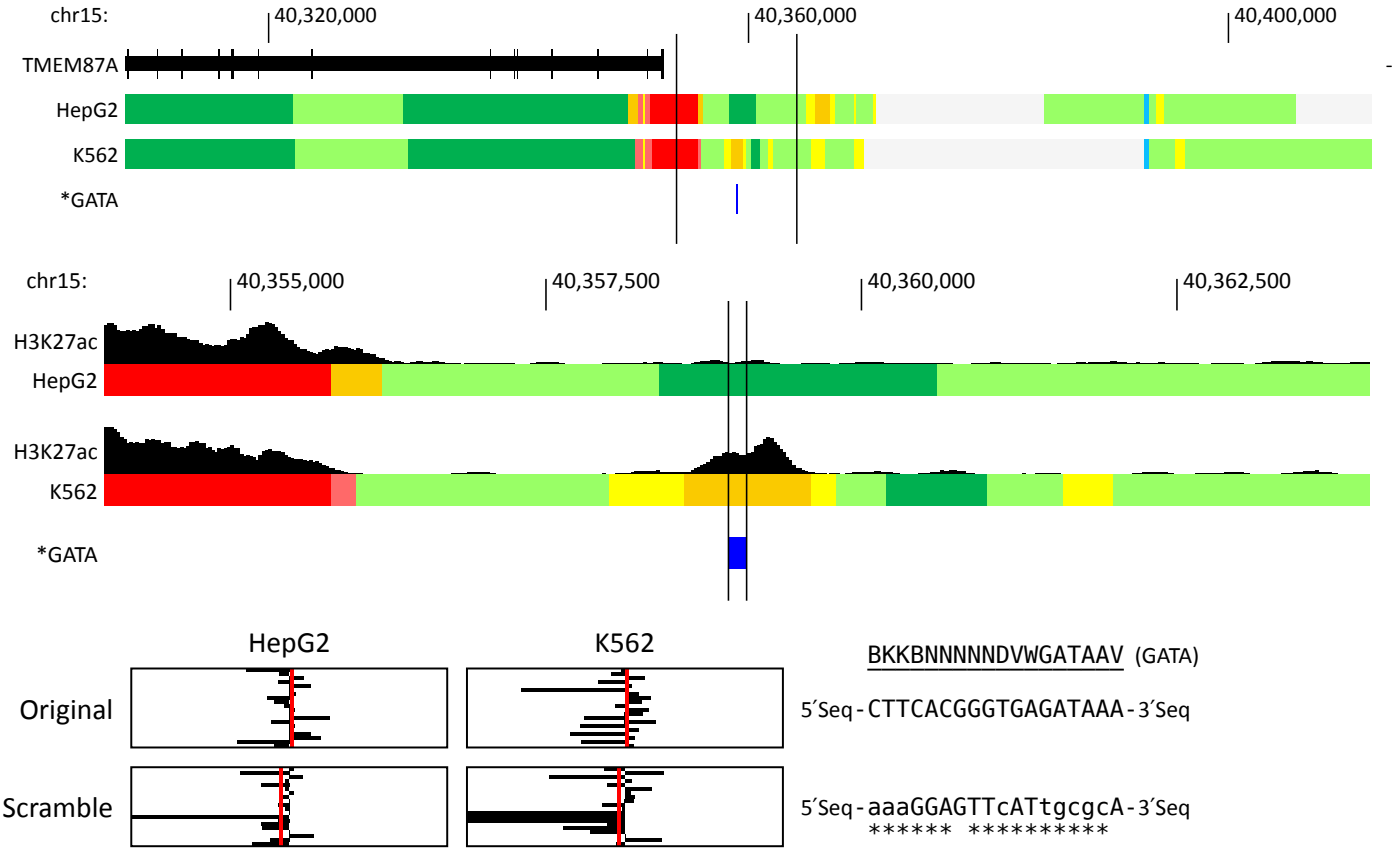
3′Seq = tcaggtattacatgtagagcactctacattcttgtcaaatcttttcgctgaagatgacctgaaaa

1462 GATA in K562 enhancer

chr15 40359010 40359027 - (hg18)



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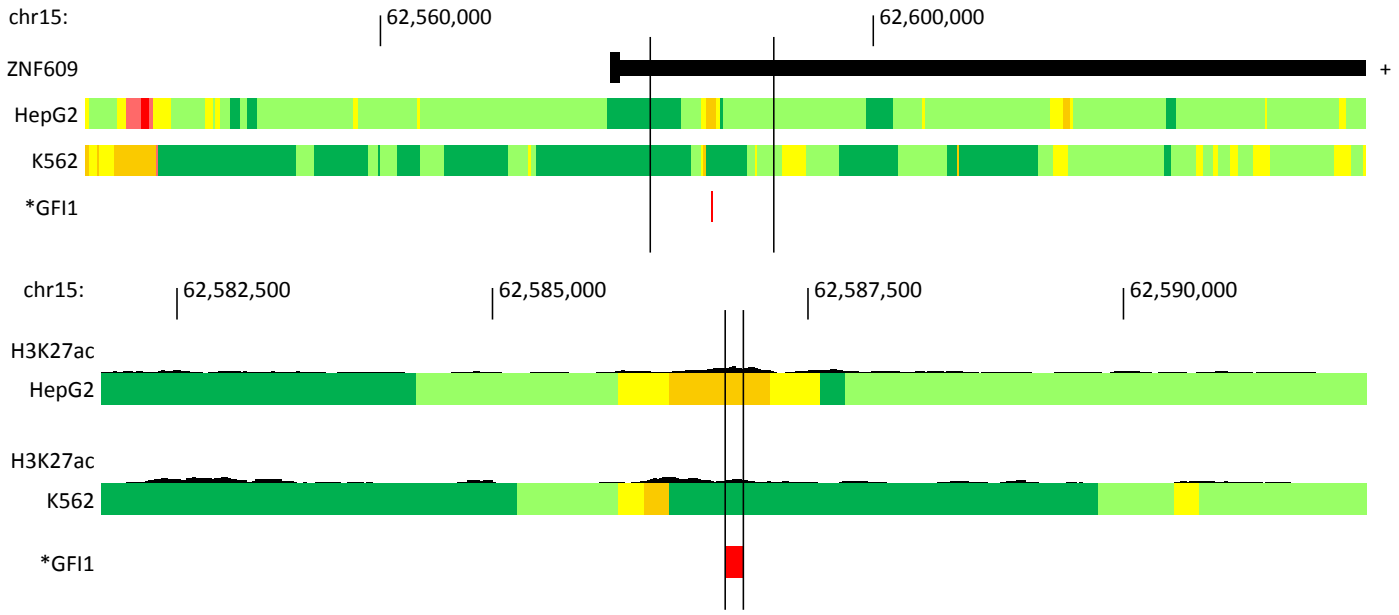
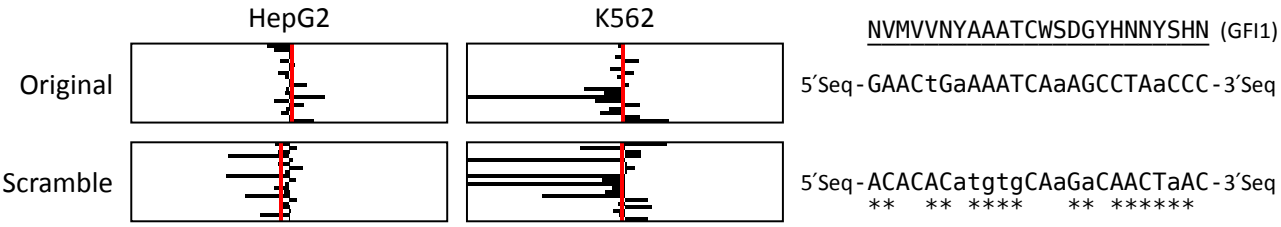
3′Seq = gcacttaagatatacttccctaaccctctcactaggcaaaaactatggtaacctctagtgaag

1463 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr15 62586905 62586928 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-GAACtGaAAATCAaAGCCTAaCCC-3′Seq

5′Seq-ACACACatgtgCAaGaCAACTaAC-3′Seq

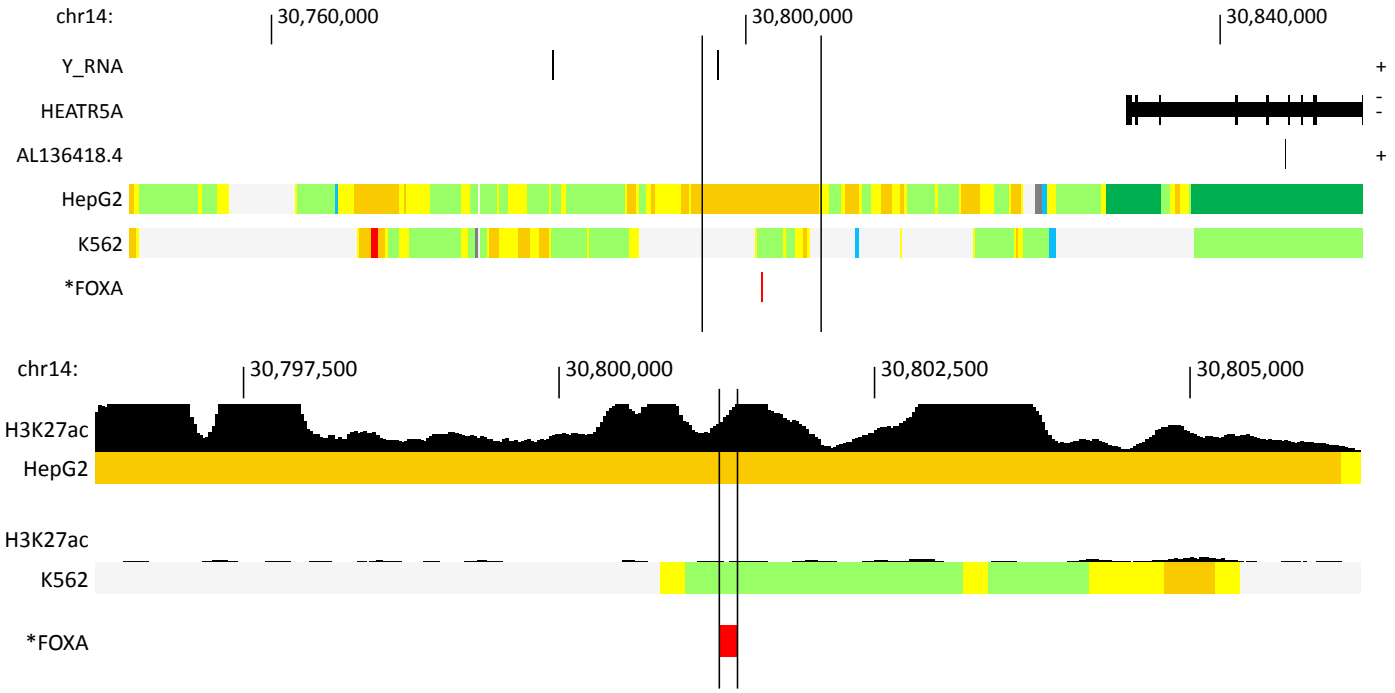
** ** **** ** ******

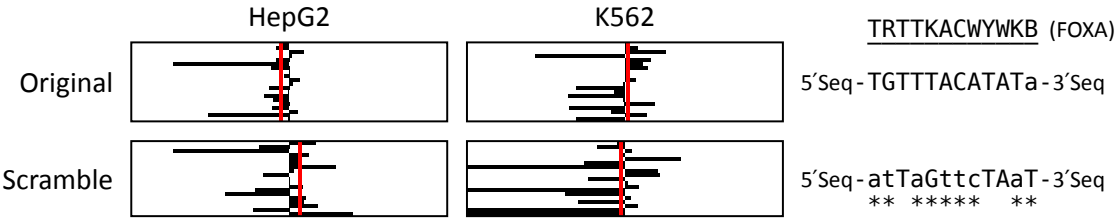
5′Seq = ctcattctatacatatacacagagatacaacatgctcatacacacaaataactctccacag

3′Seq = catggtttttaagtgagcaagtccaatttccttctttgtagctcttgacacatgctggct

1464 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 30801337 30801348 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACATATa-3′Seq

5′Seq-atTaGttcTAaT-3′Seq

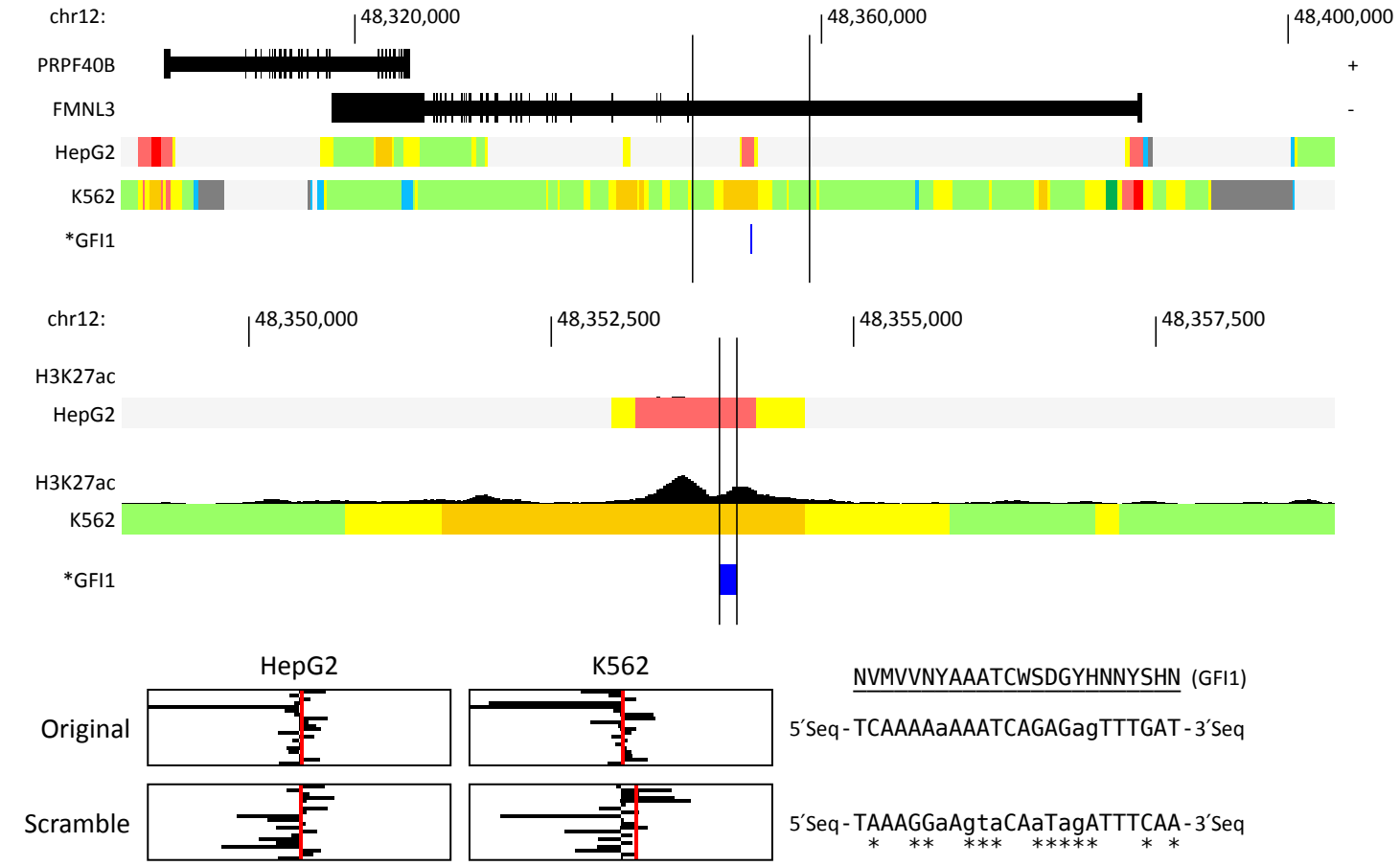
** ***** **

5′Seq = aggaaacttagccaaaagctcatgagttaattatctggagactaattatgactcaaatgaaaattcc

3′Seq = accaagatctagtcacatgaatatctacagaagatatttttggtgctgcatggtcaccatgggaga

1465 GFI1 in K562 enhancer

chr12 48353952 48353975 + (hg18)



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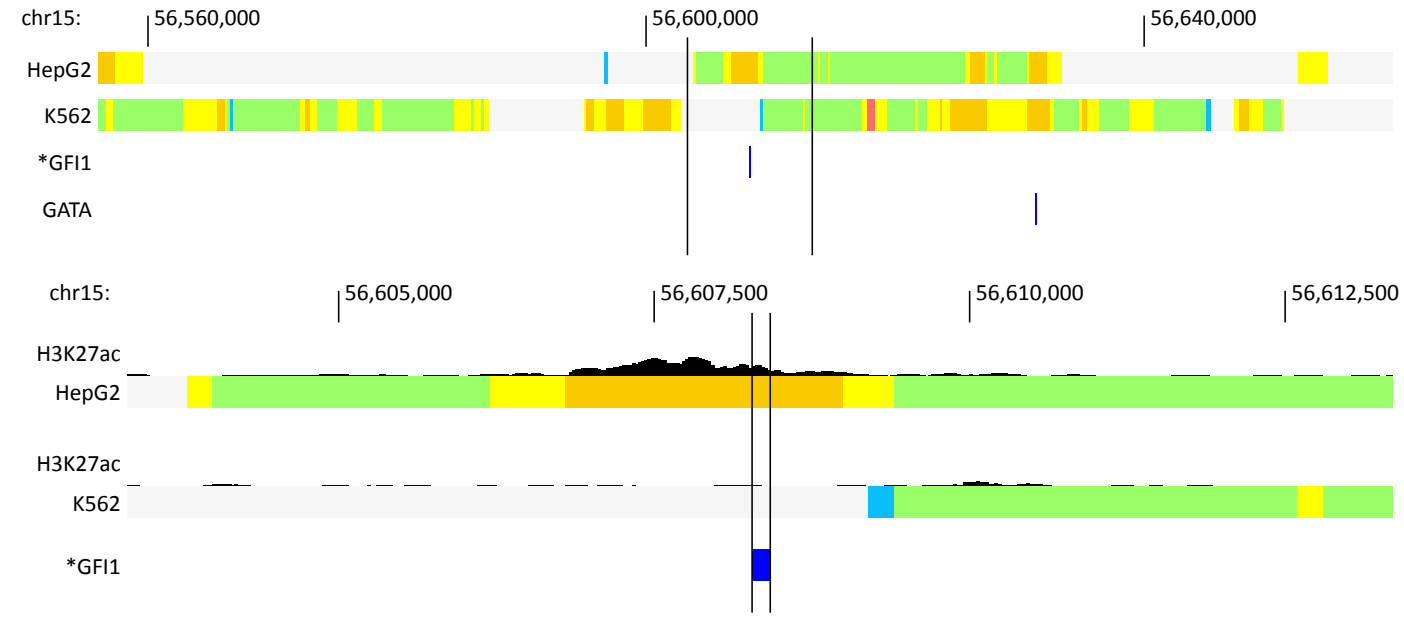
3′Seq = caaaggtccaagagctaaaattttaaaaggtccagacatgggaagtacggcagcccctcc

1466 GFI1 in HepG2 enhancer

chr15 56608337 56608360 - (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AAAAGGaAAATCAGGGCCACTCCG-3′Seq

5′Seq-TCACGCaggtgCgaAaCACGaaAA-3′Seq

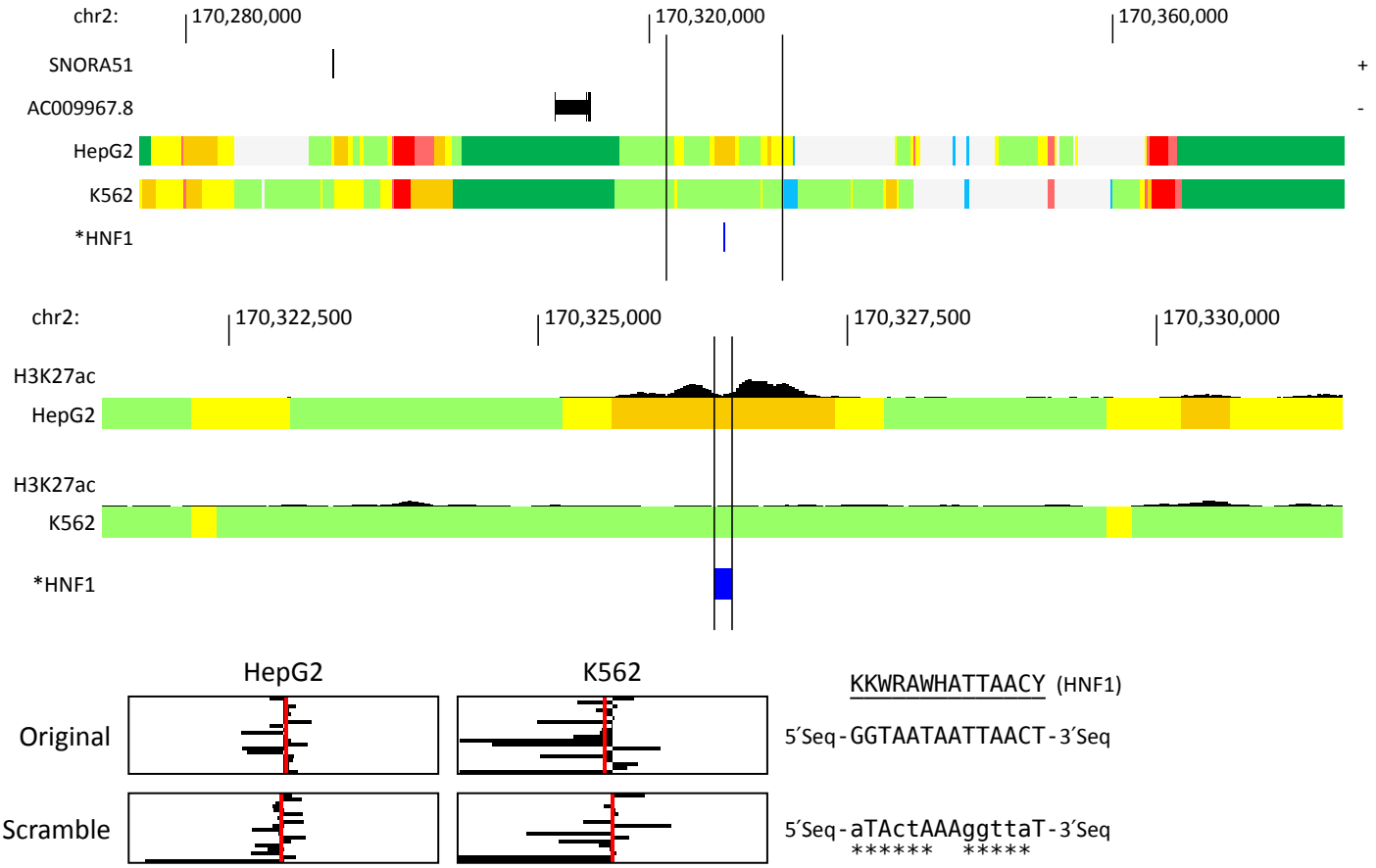
** * * **** **** *******

5′Seq = cctgggtgccctggcaggtagggacaggcactgctttagtattggcagtgattgtacctgt

3′Seq = tcctccaggtcagctgccagaagatgaattgggtgccttatactcagtgagaaaagaaga

1467 HNF1 in HepG2 enhancer

chr2 170326490 170326503 - (hg18)



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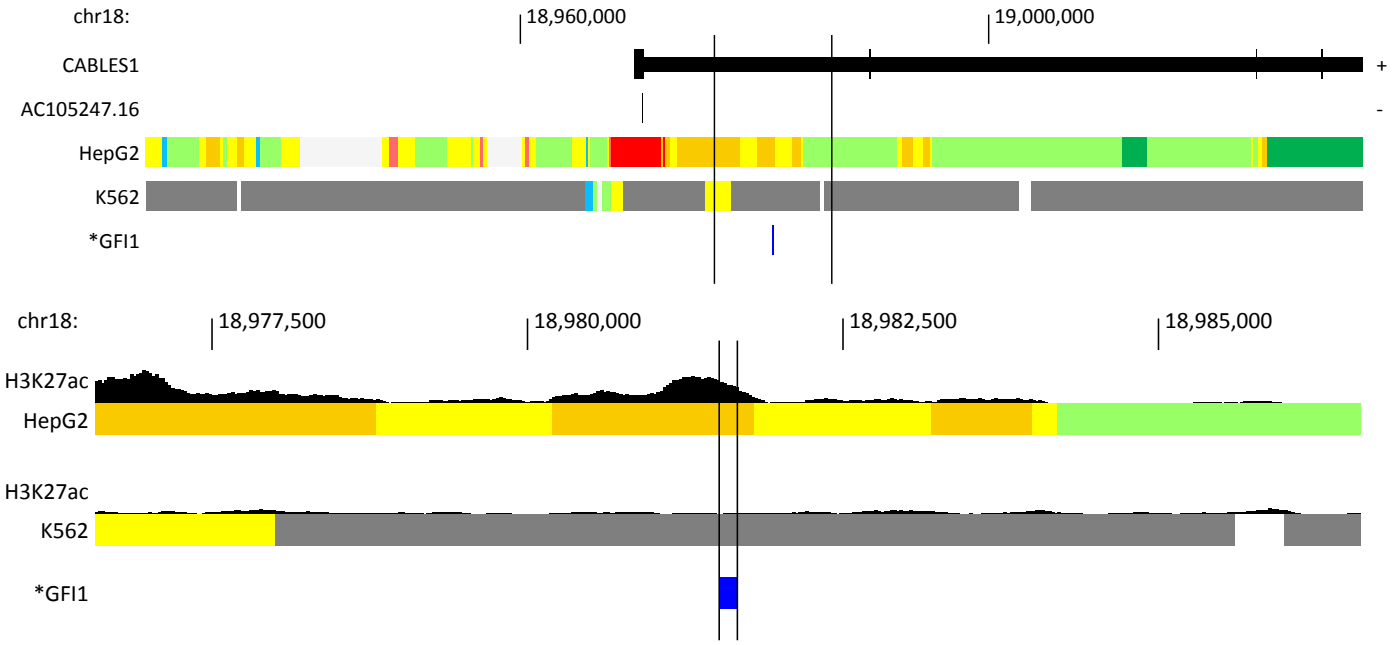
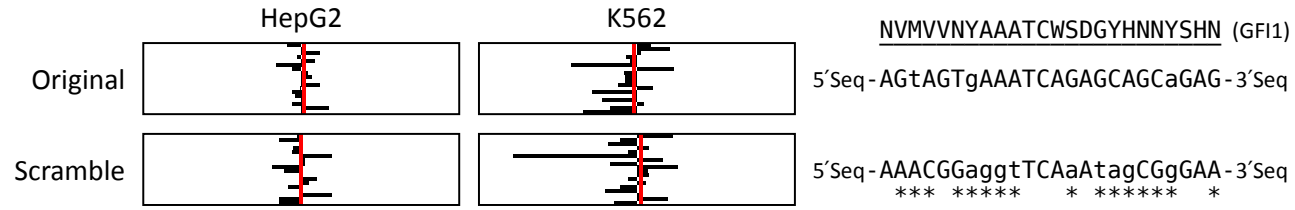
1468 GFI1 in HepG2 enhancer

chr18 18981580 18981603 + (hg18)





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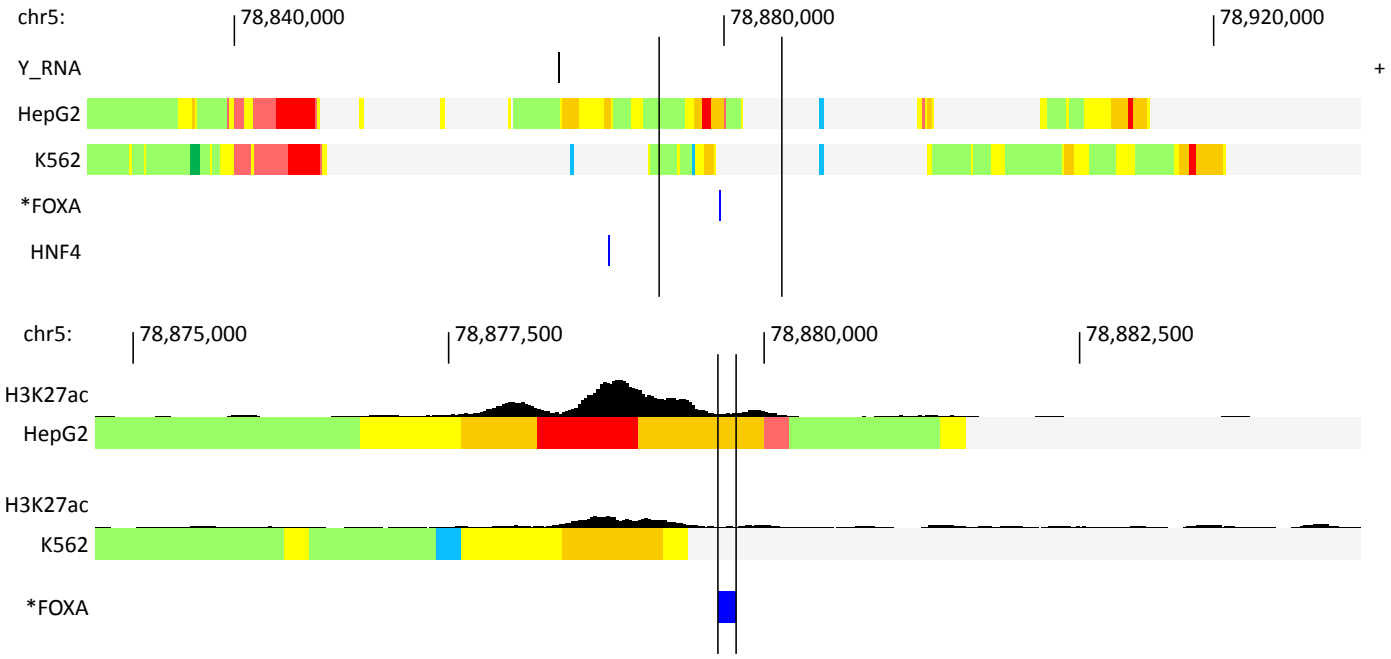
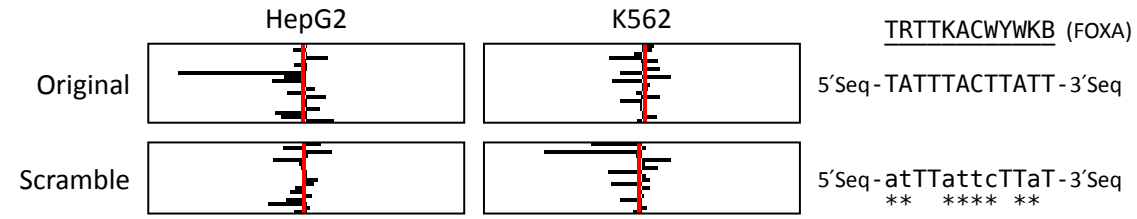
3′Seq = agaaacagtacccctctgtttggtgctgcattttgcccctgcttacgctggaatcgtgac

1469 FOXA in HepG2 enhancer

chr5 78879701 78879712 - (hg18)

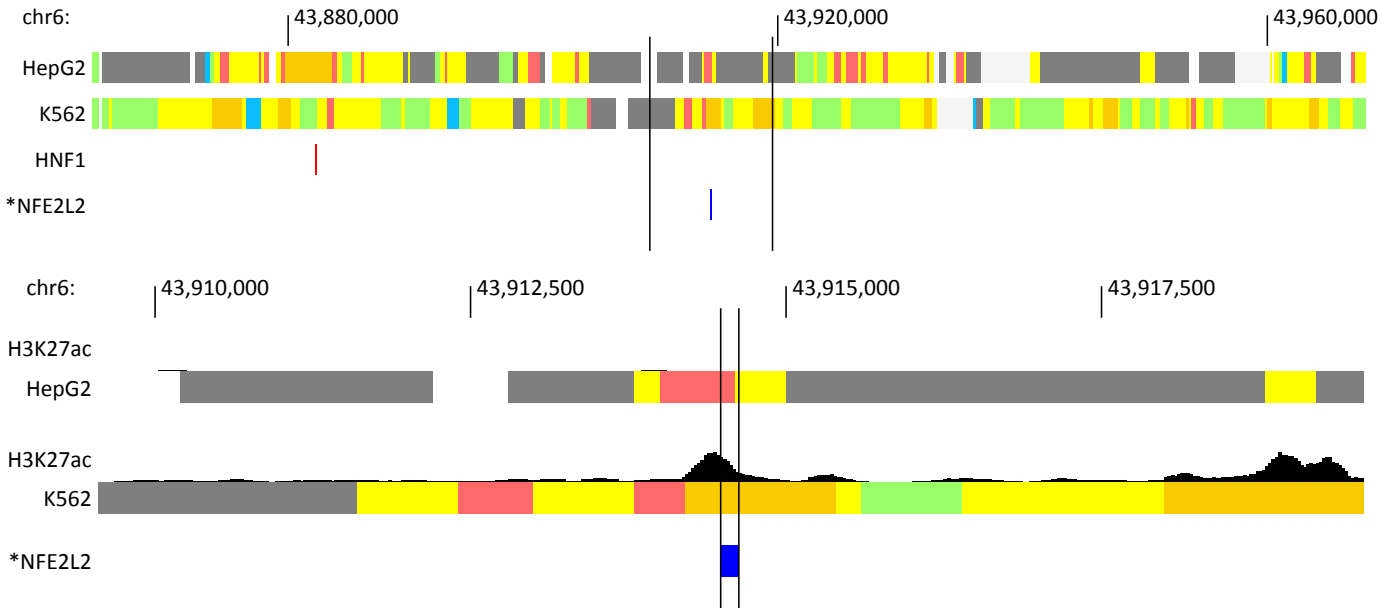


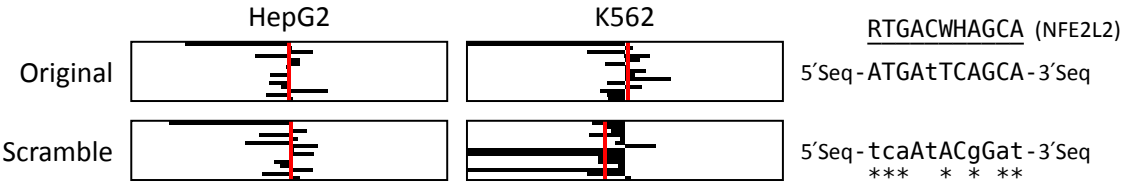


5′Seq = ctgggccctgattccagttaaaccagaatttccaggggtgggacccaggcatgagtacttattcatt
3′Seq = ttgcaatcaatcatgttttcattttcttctttctttttcccttcctgtacaccttctttctctctt

1470 NFE2L2 in K562 enhancer

chr6 43914549 43914559 - (hg18)





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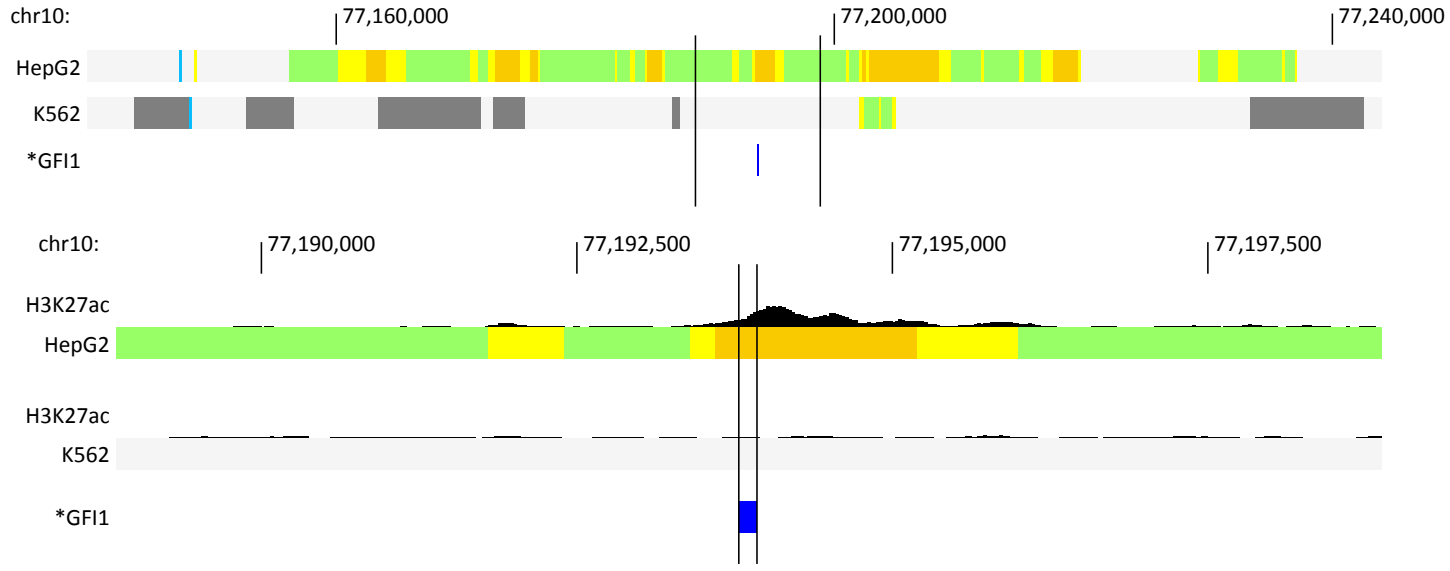
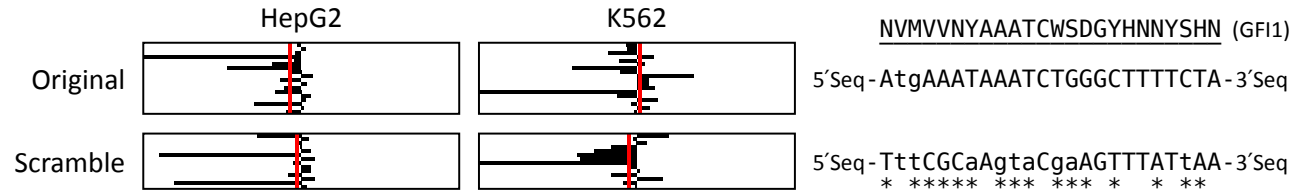
3′Seq = ctgaggcctgcacagcactctgacttctgtggaagactcaggacagggctcctcagaatcaacagac

1471 GFI1 in HepG2 enhancer

chr10 77193844 77193867 - (hg18)





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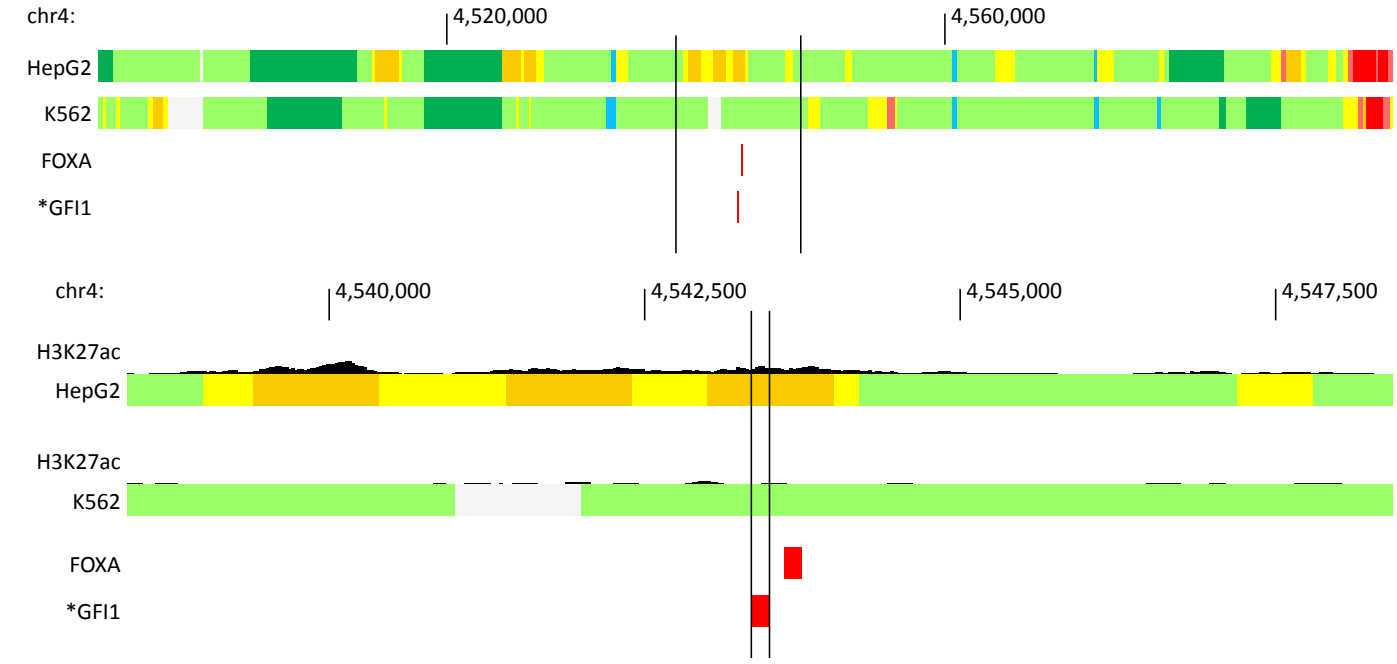
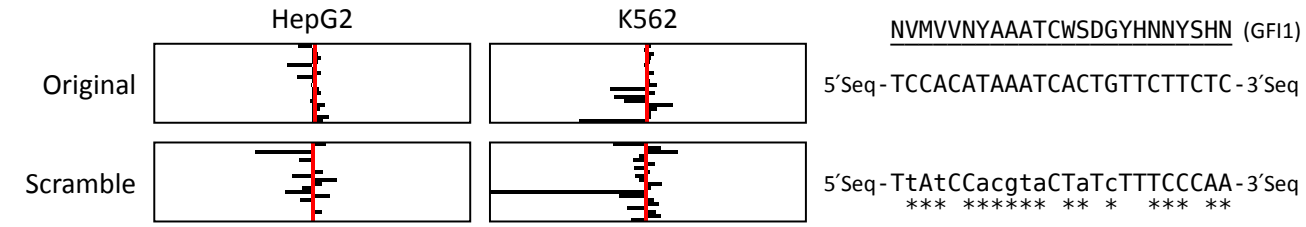
3′Seq = ccagccccaccctcagccgggtctccatgcgaccagattcactggcaagcagttcctgaa

1472 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr4 4543406 4543429 + (hg18)





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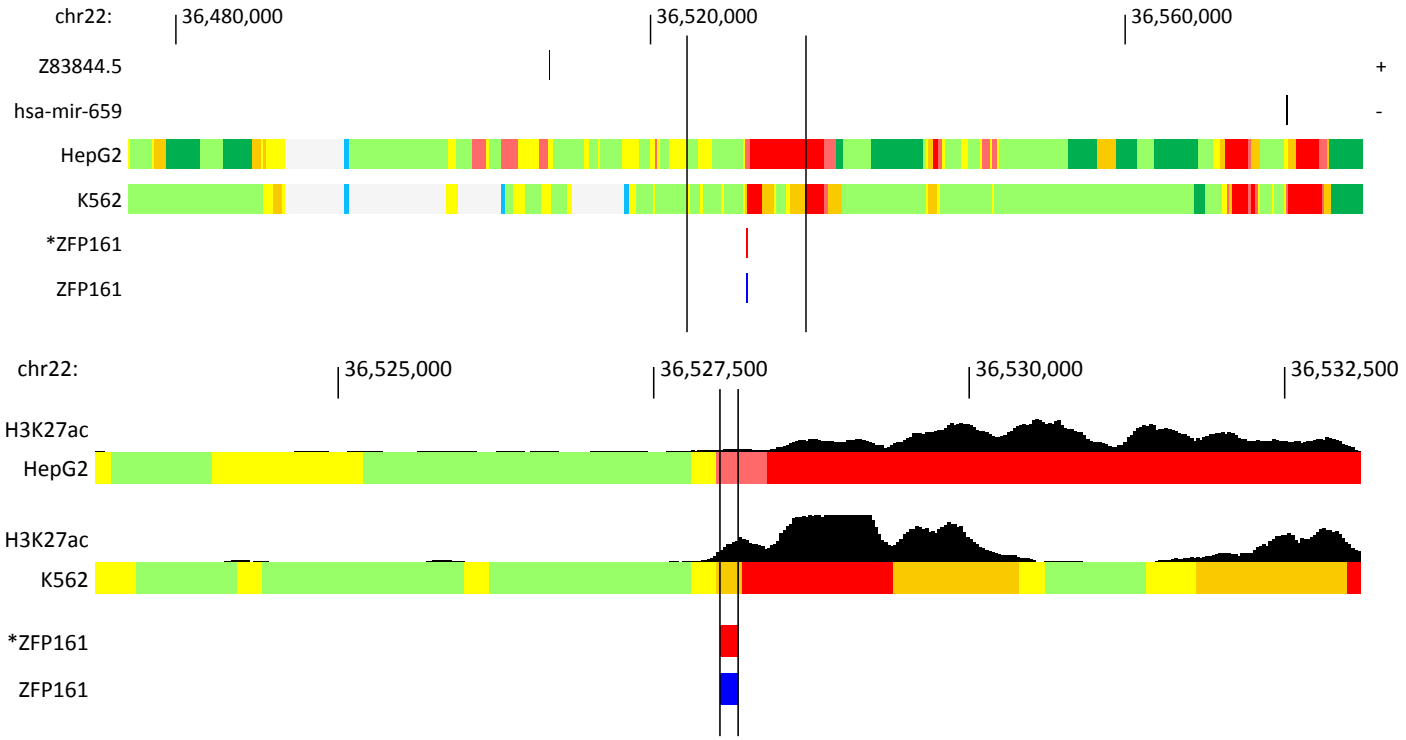
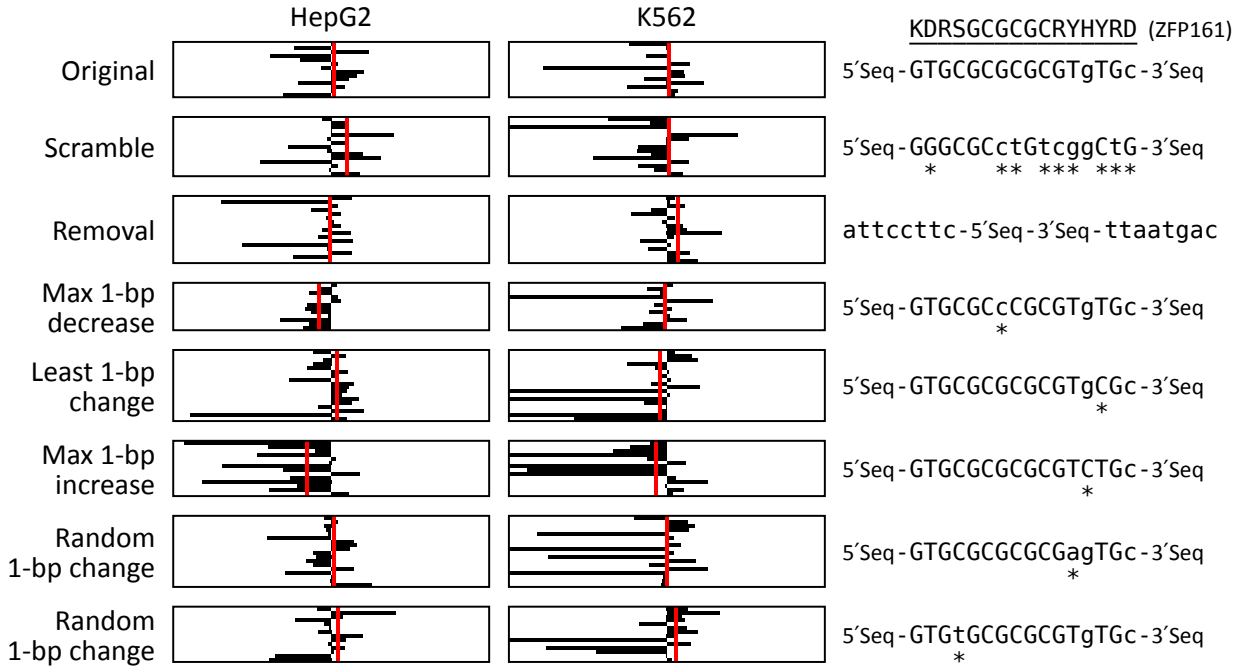
3′Seq = tctgcaaatacattttagagaaaacattatttaatgttacatctgactttaatagagttt

1473 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr22 36528090 36528105 - (hg18)





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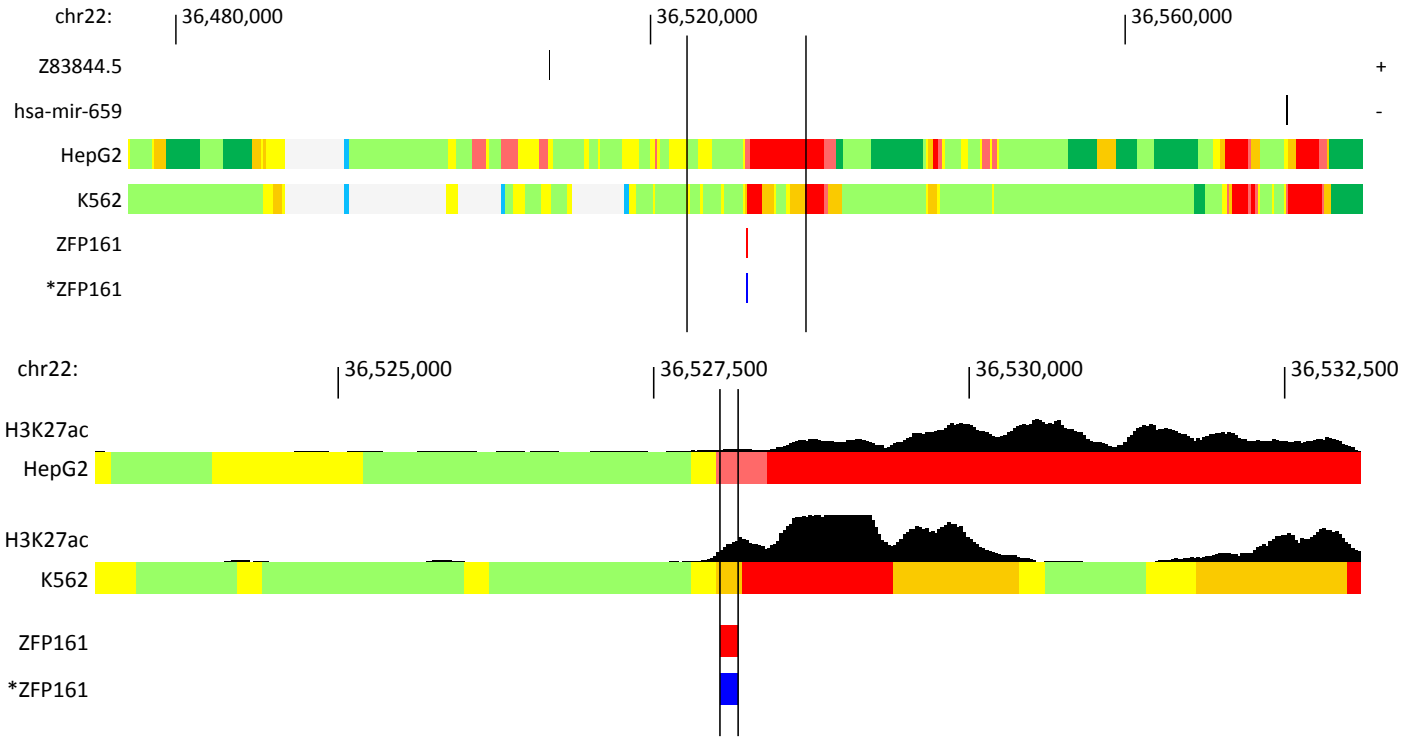
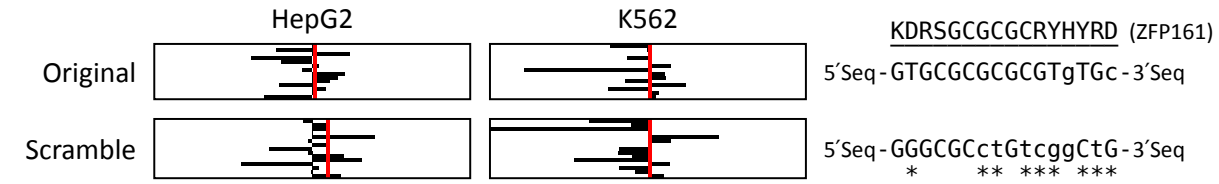
3′Seq = ctgagcccttggcacgtgacacctccacgttacagacaggaggctcccacccccacccctatgt

1474 ZFP161 in K562 enhancer

chr22 36528090 36528105 - (hg18)





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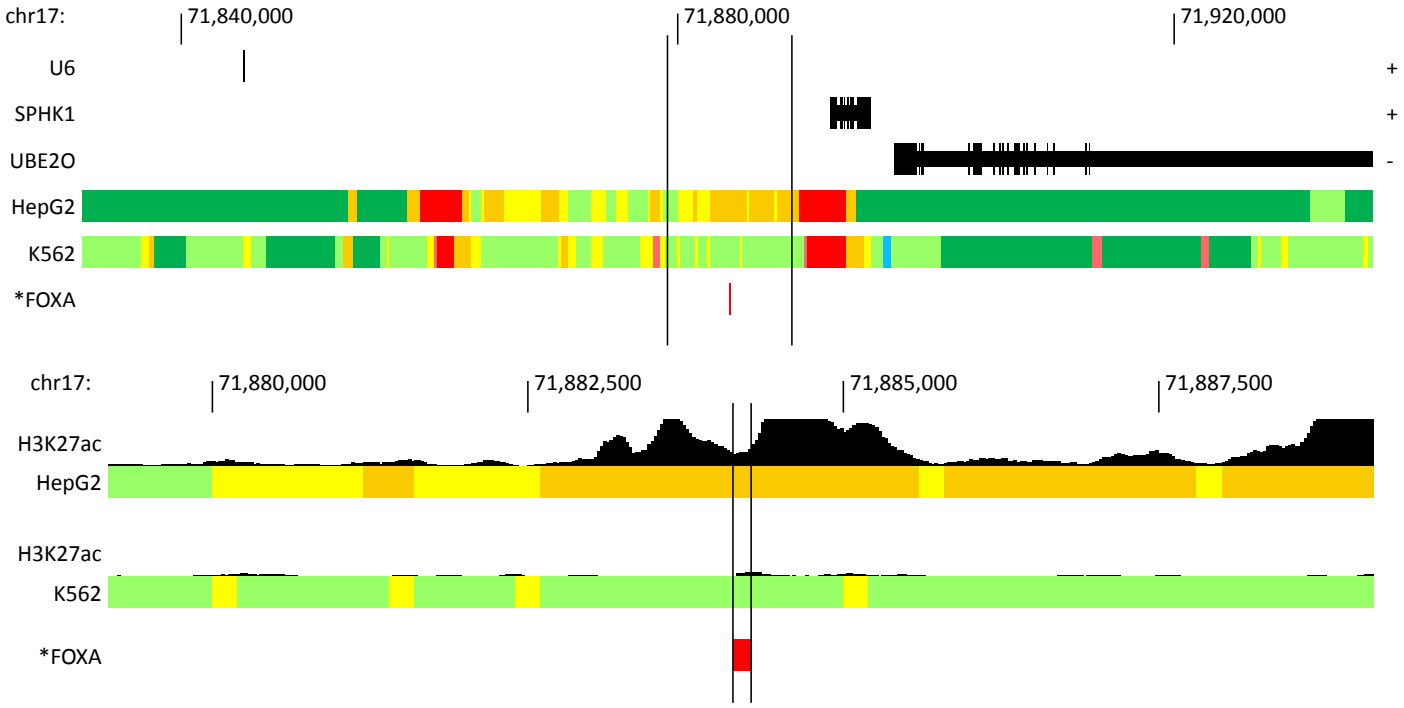
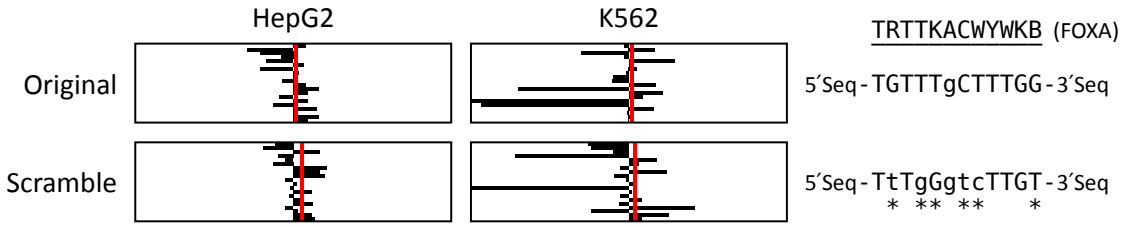
1475 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 71884192 71884203 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTgCTTTGG-3′Seq

5′Seq-TtTgGgtcTTGT-3′Seq

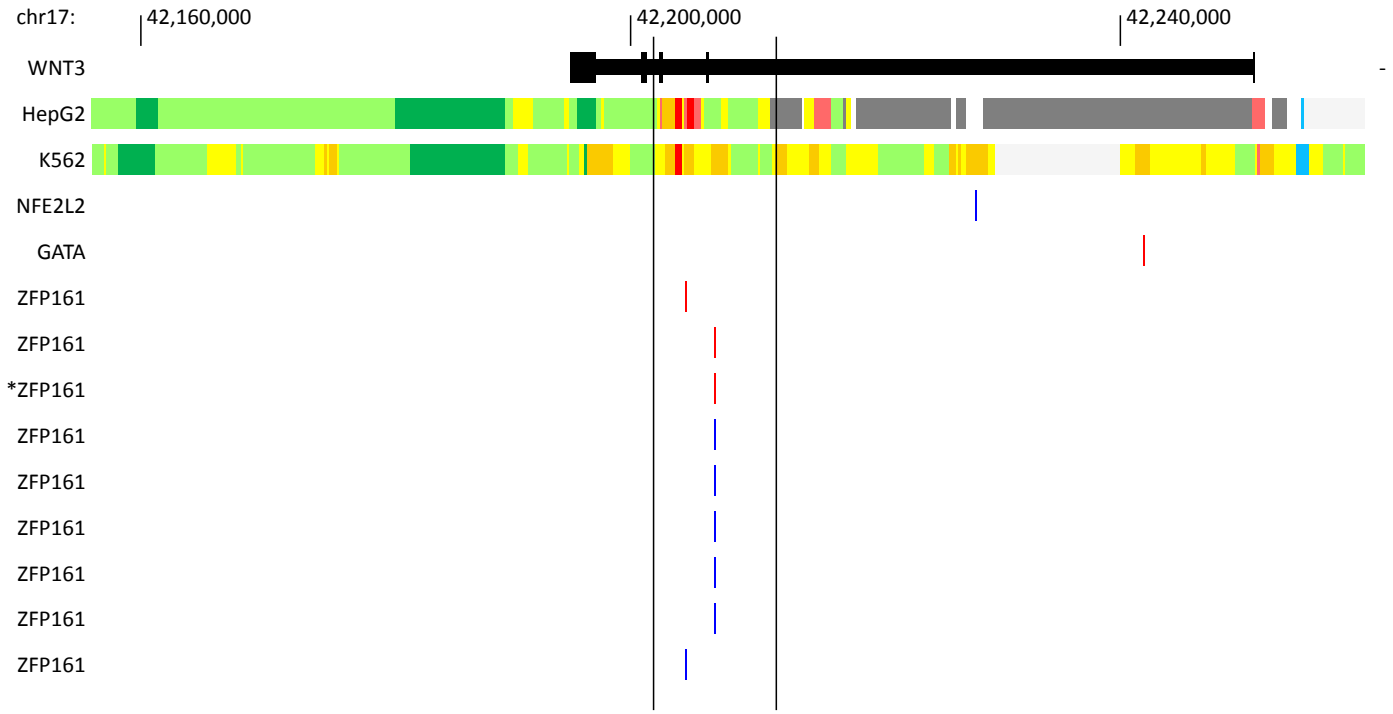
* ** ** *

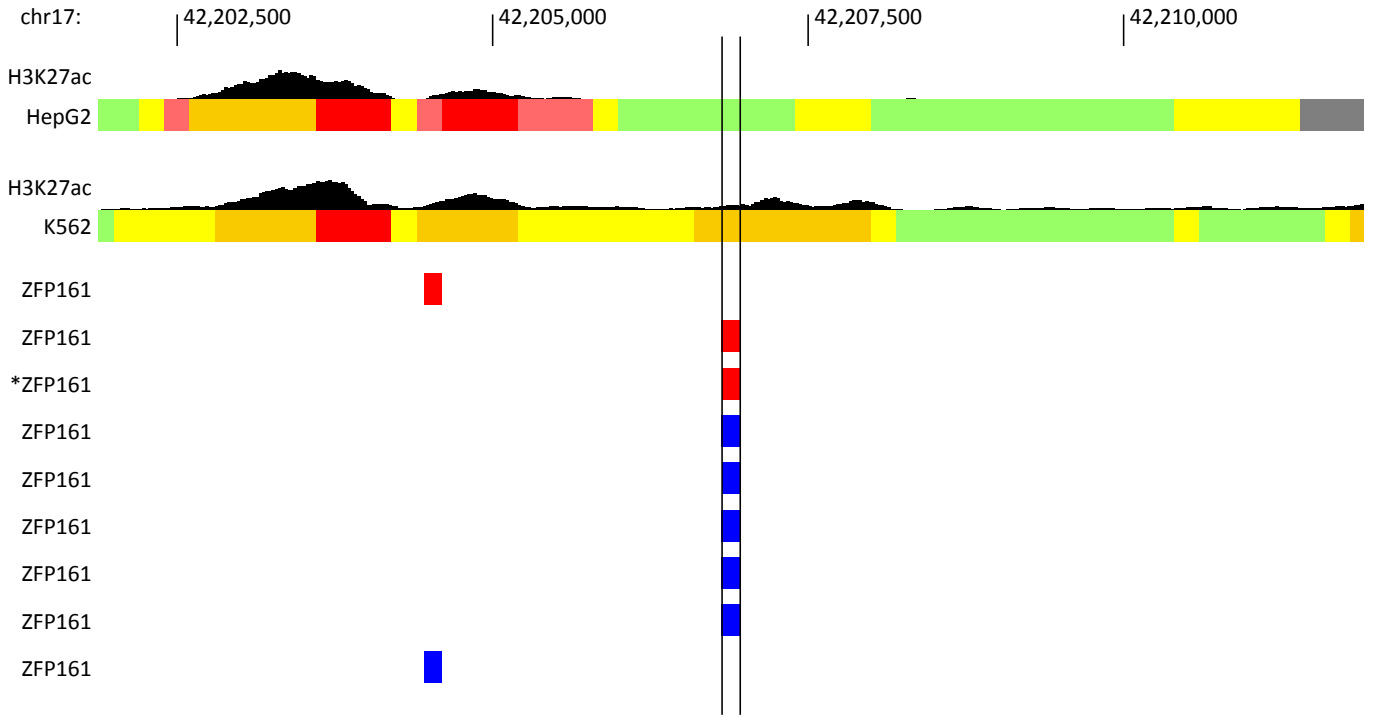
5′Seq = gtggaaacagcccaggccattagtgcaaatcccctgcctggcccagggccacgttcagcccactgtc

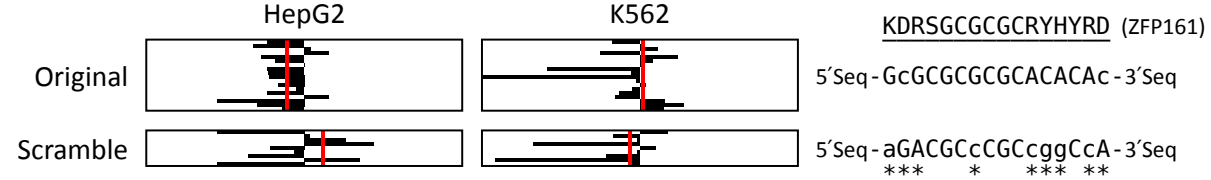
3′Seq = gacccacccaaggtcacattttagcttttgagaaatgtgaaagtggaaaacattgcaaaacaaaaa

1476 ZFP161 in K562 enhancer (conserved at 10% confidence)

chr17 42206883 42206898 + (hg18)







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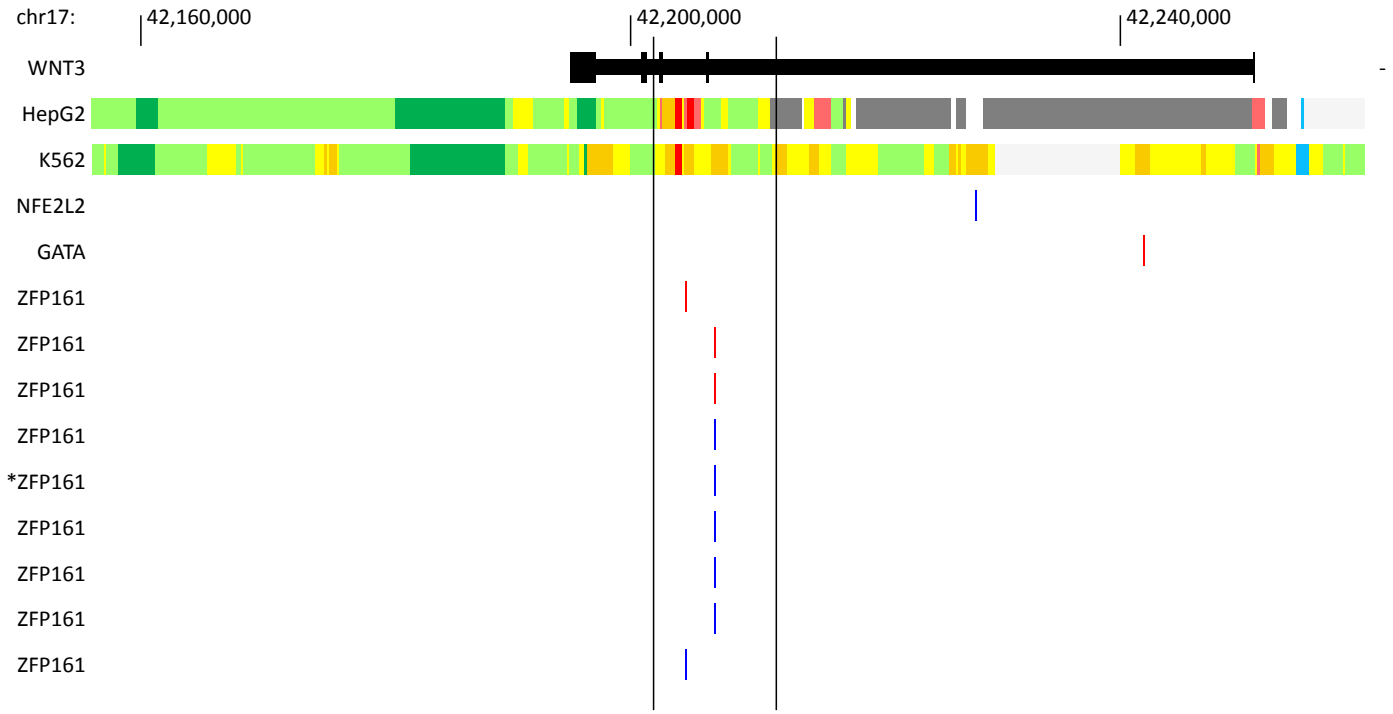
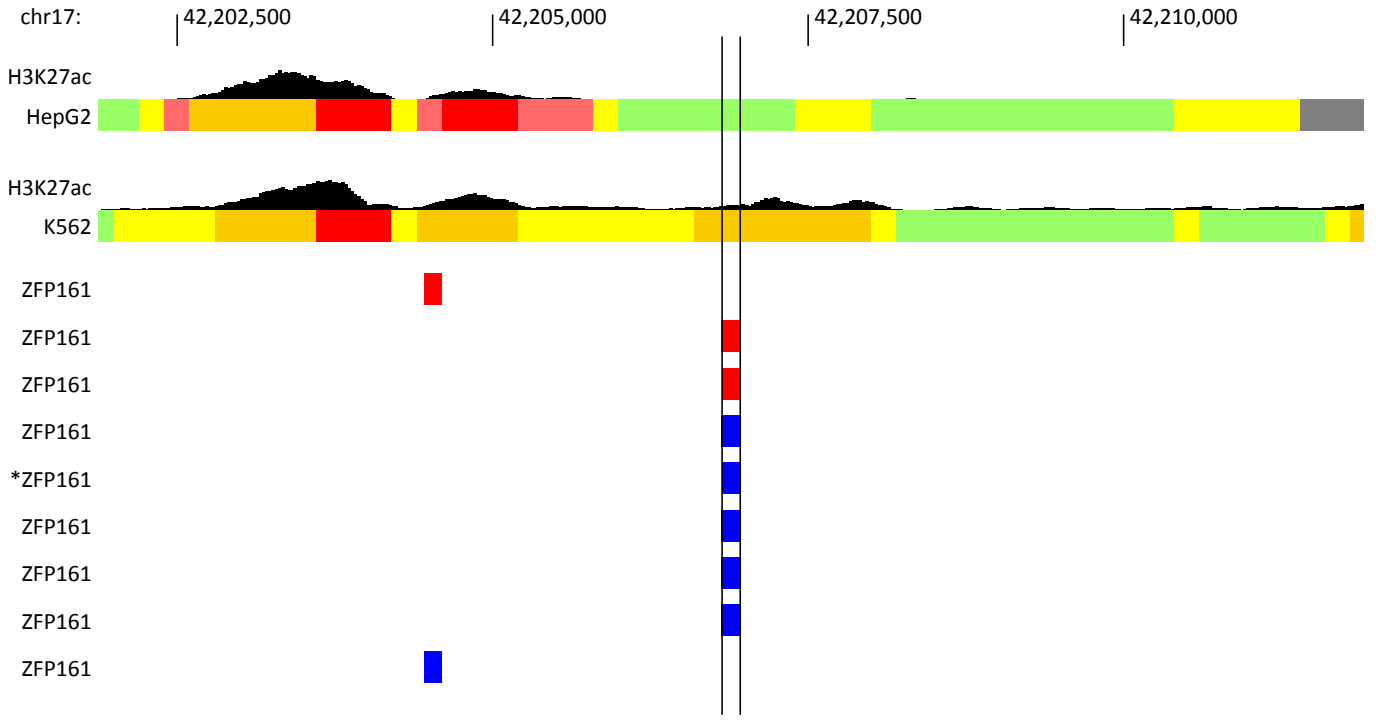
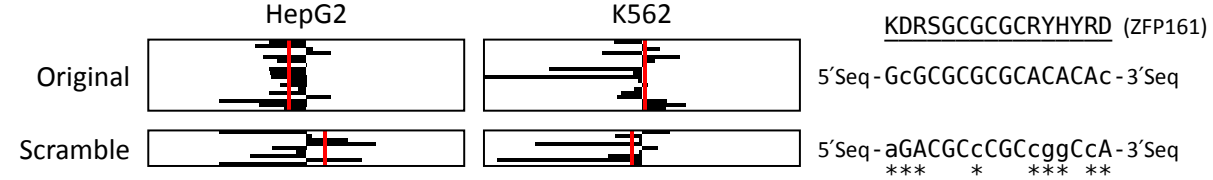
1477 ZFP161 in K562 enhancer

chr17 42206883 42206898 + (hg18)







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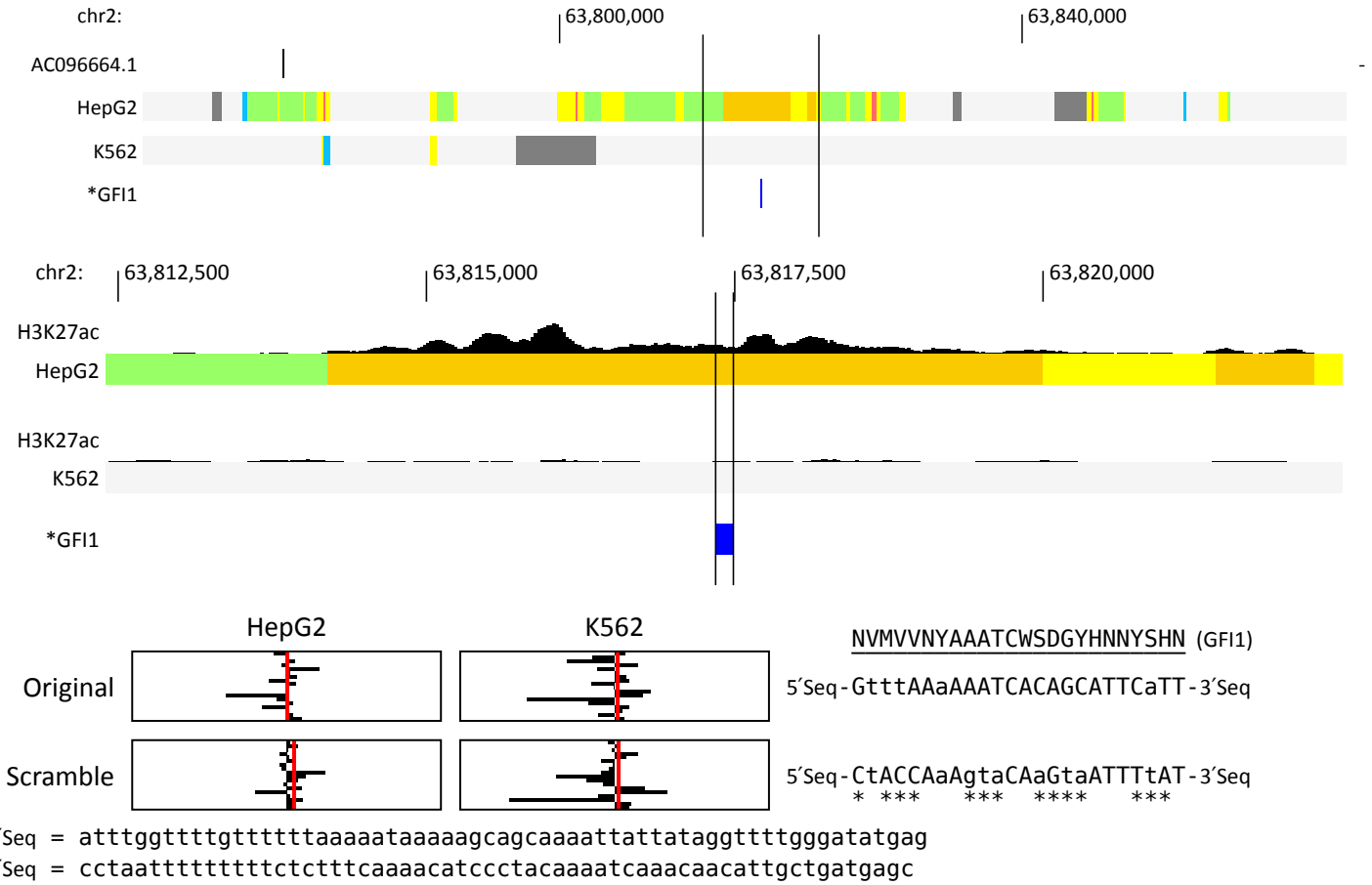
3′Seq = acacactacccttggcaatgccctcagcctcttccctgcgatggtgccagcccagcccagagcc

1478 GFI1 in HepG2 enhancer

chr2 63817406 63817429 - (hg18)



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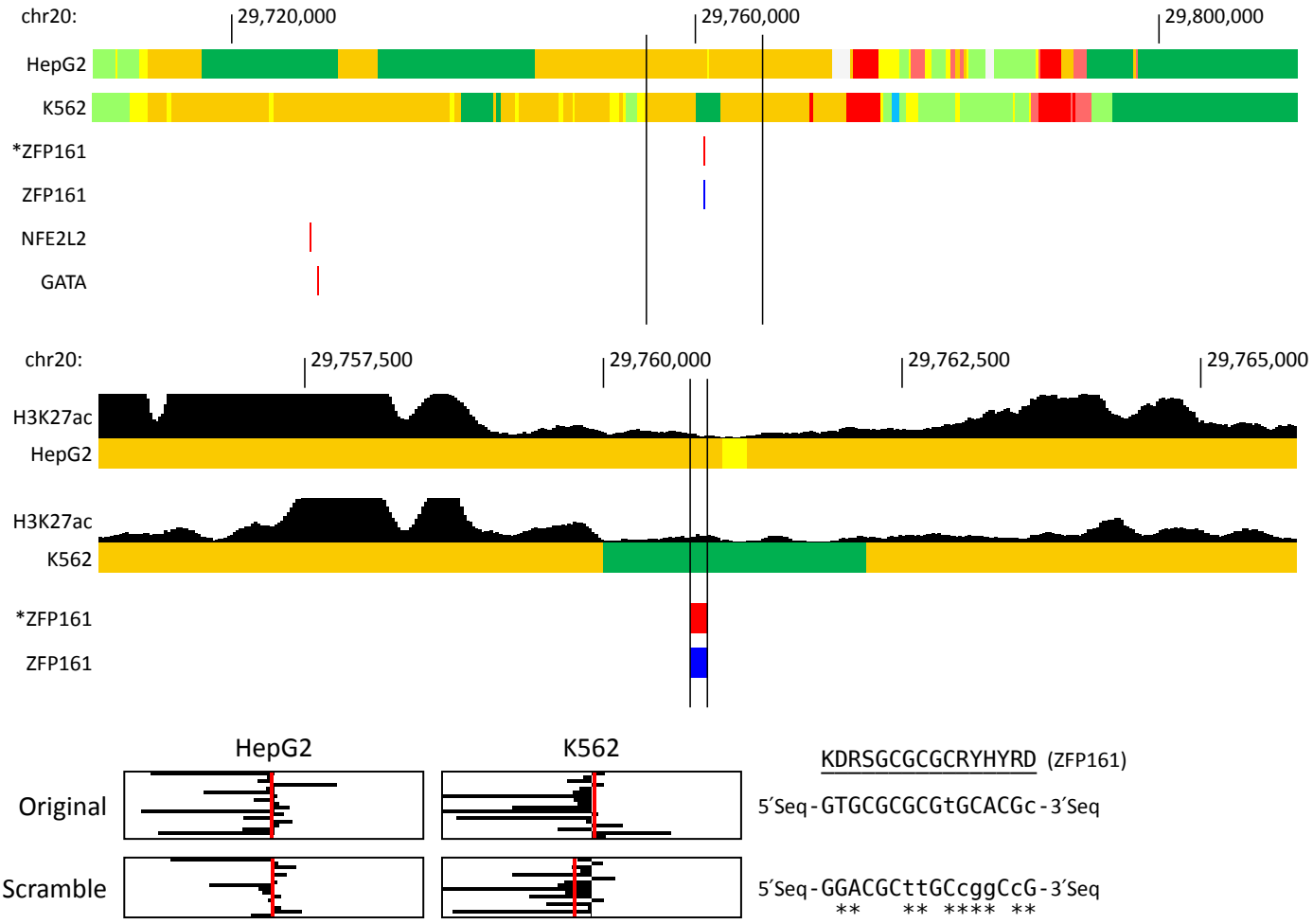
3′Seq = cctaatttttttttctctttcaaaacatccctacaaaatcaaacaacattgctgatgagc

1479 ZFP161 in HepG2 enhancer (conserved at 10% confidence)

chr20 29760791 29760806 + (hg18)



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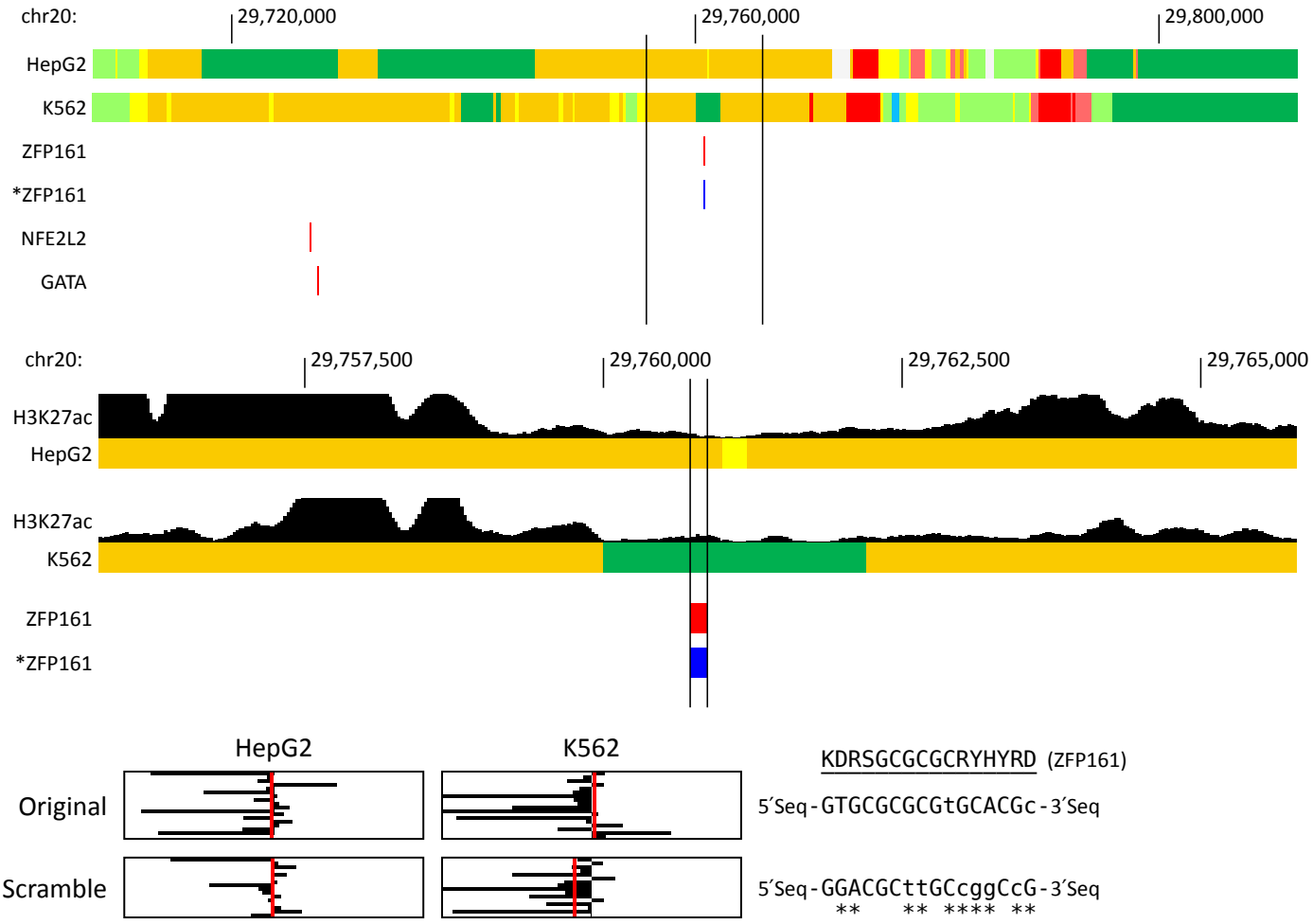
3′Seq = gtgtgtaactagcctgatctttttggtgtgtgtgtgtgtggcagagtctccctctgtcgcccaa

1480 ZFP161 in HepG2 enhancer

chr20 29760791 29760806 + (hg18)



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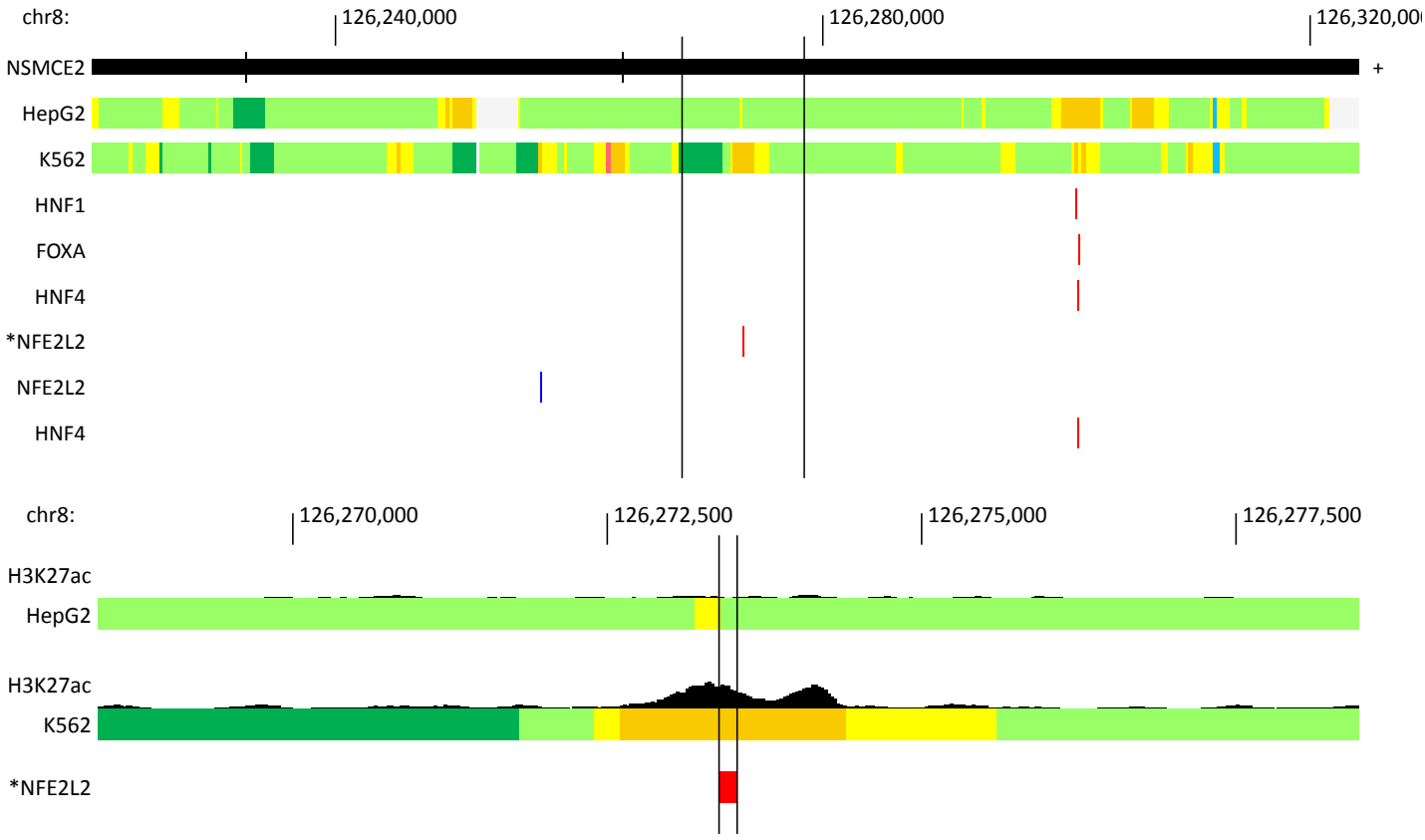
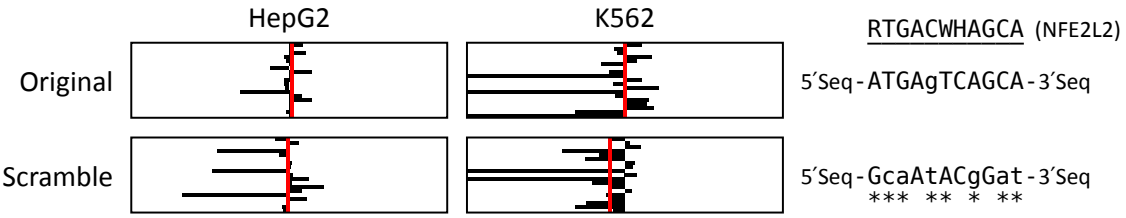
3′Seq = gtgtgtaactagcctgatctttttggtgtgtgtgtgtgtggcagagtctccctctgtcgcccaa

1481 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 126273456 126273466 + (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq-ATGAgTCAGCA-3′Seq

5′Seq-GcaAtACgGat-3′Seq

*** ** * **

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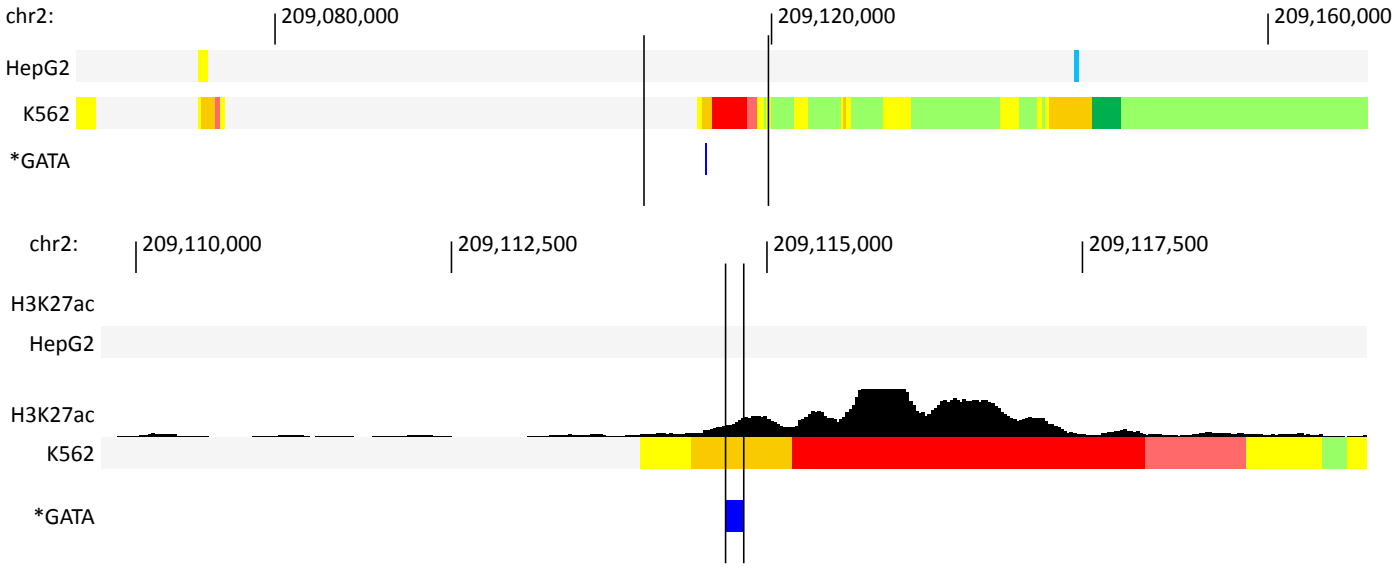
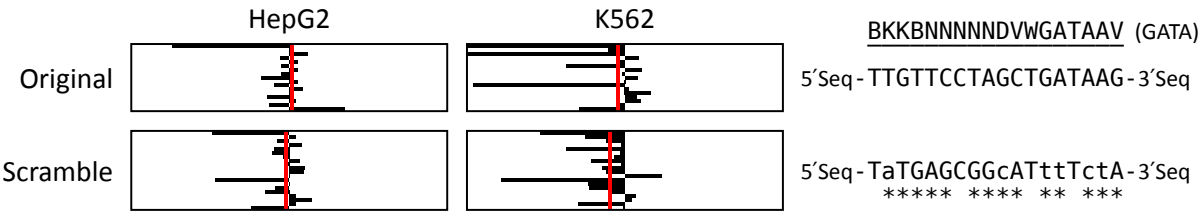
3′Seq = gcaagtttaaacacaaactgtgaactctgggtgtttctctcattgtgacttattttaagagagtatg

1482 GATA in K562 enhancer

chr2 209114736 209114753 - (hg18)





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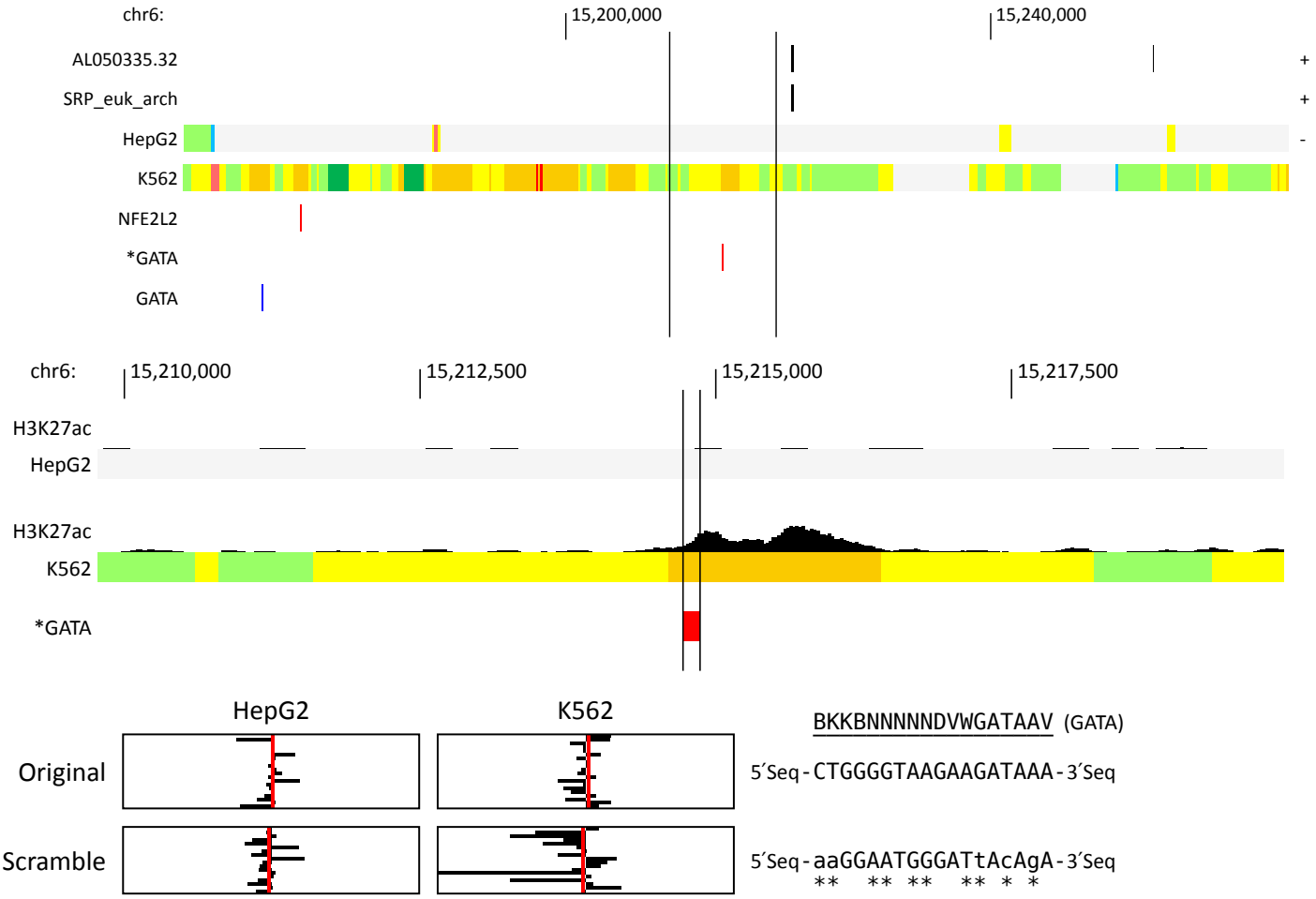
3′Seq = aaaacattacctcaactacttacattttctttgacacagaatgttgatgagtttcataagaaa

1483 GATA in K562 enhancer (conserved at 70% confidence)

chr6 15214787 15214804 - (hg18)



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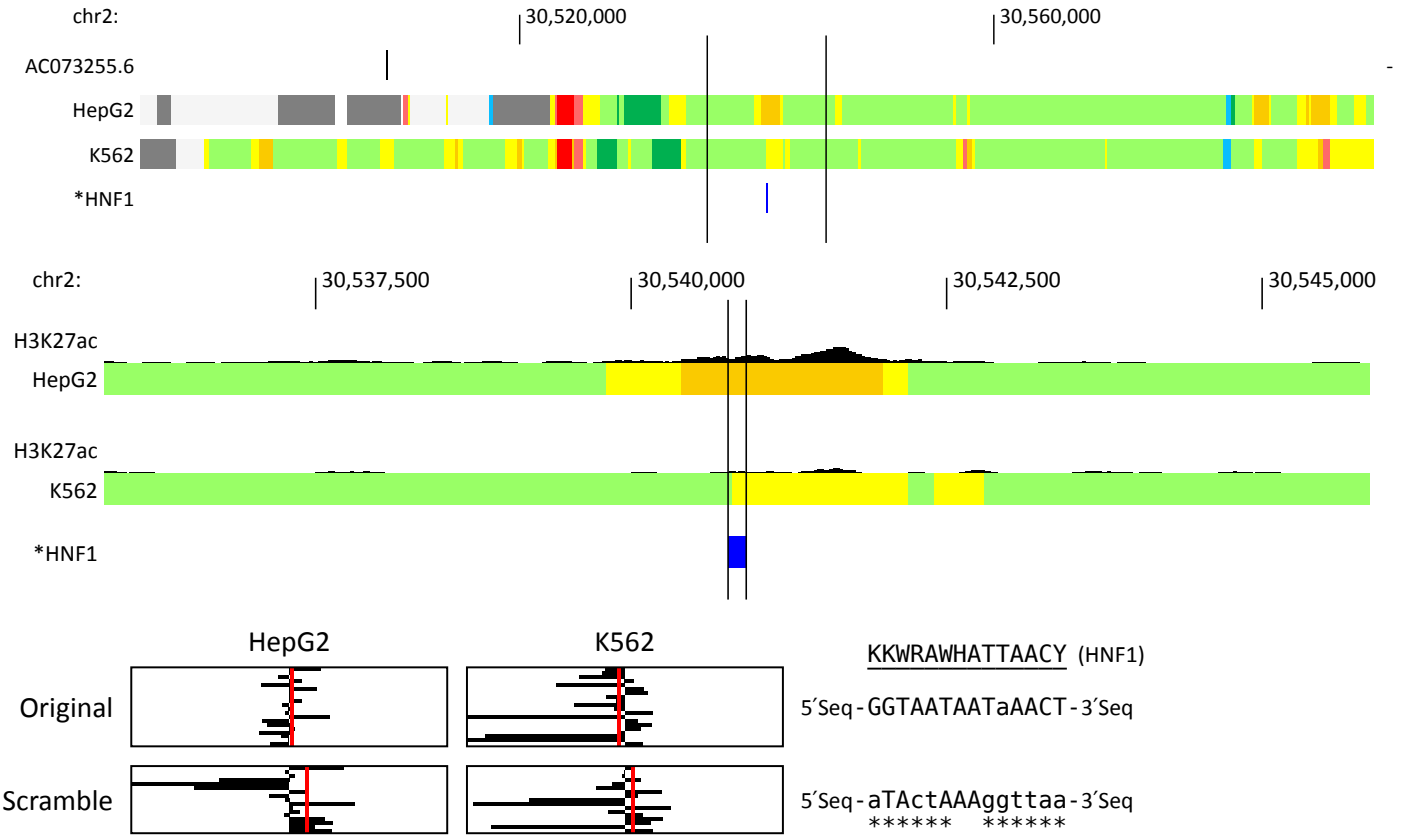
1484 HNF1 in HepG2 enhancer

chr2 30540834 30540847 - (hg18)



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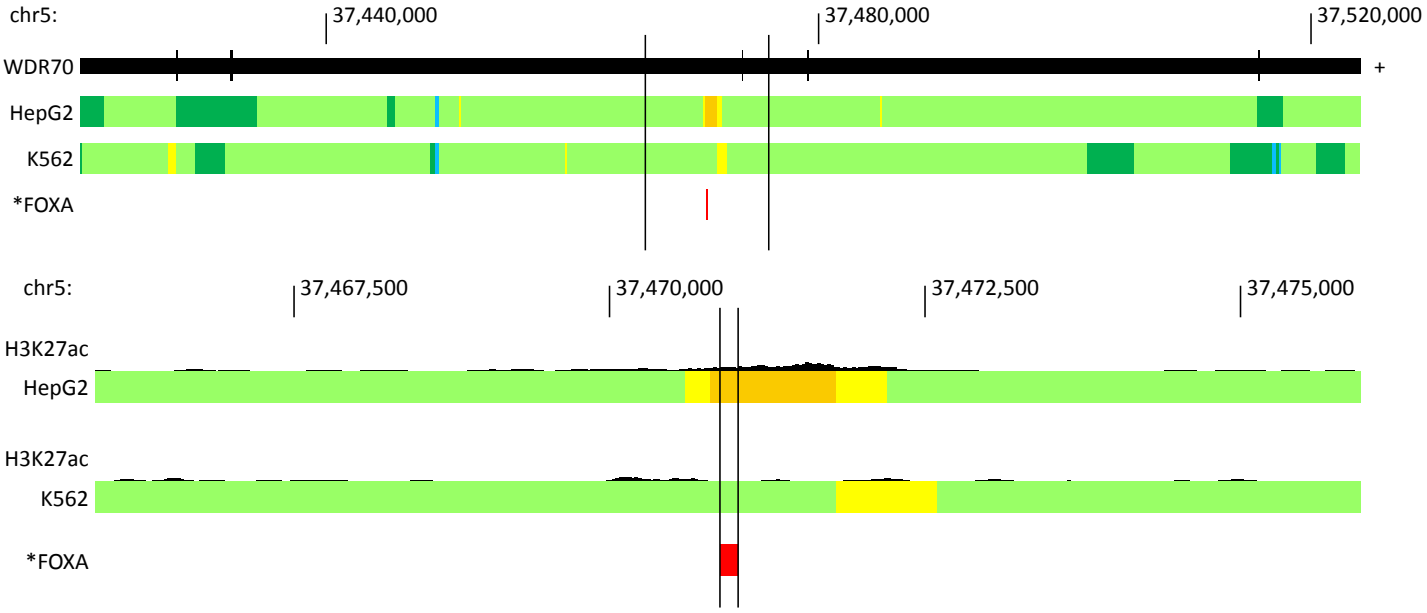
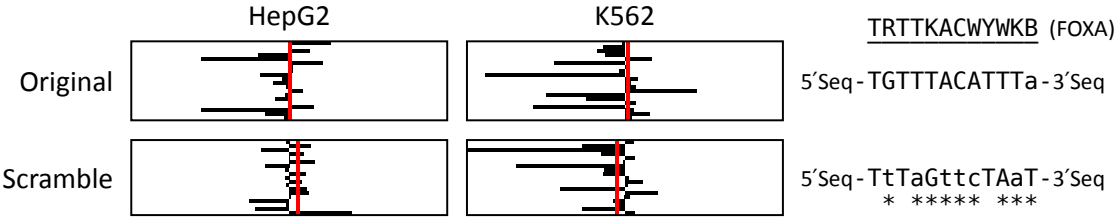
3′Seq = aagttttaaataaatttgagacaaactactttccaaaggcagcaaaatttatttttatcctcta

1485 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr5 37470942 37470953 - (hg18)





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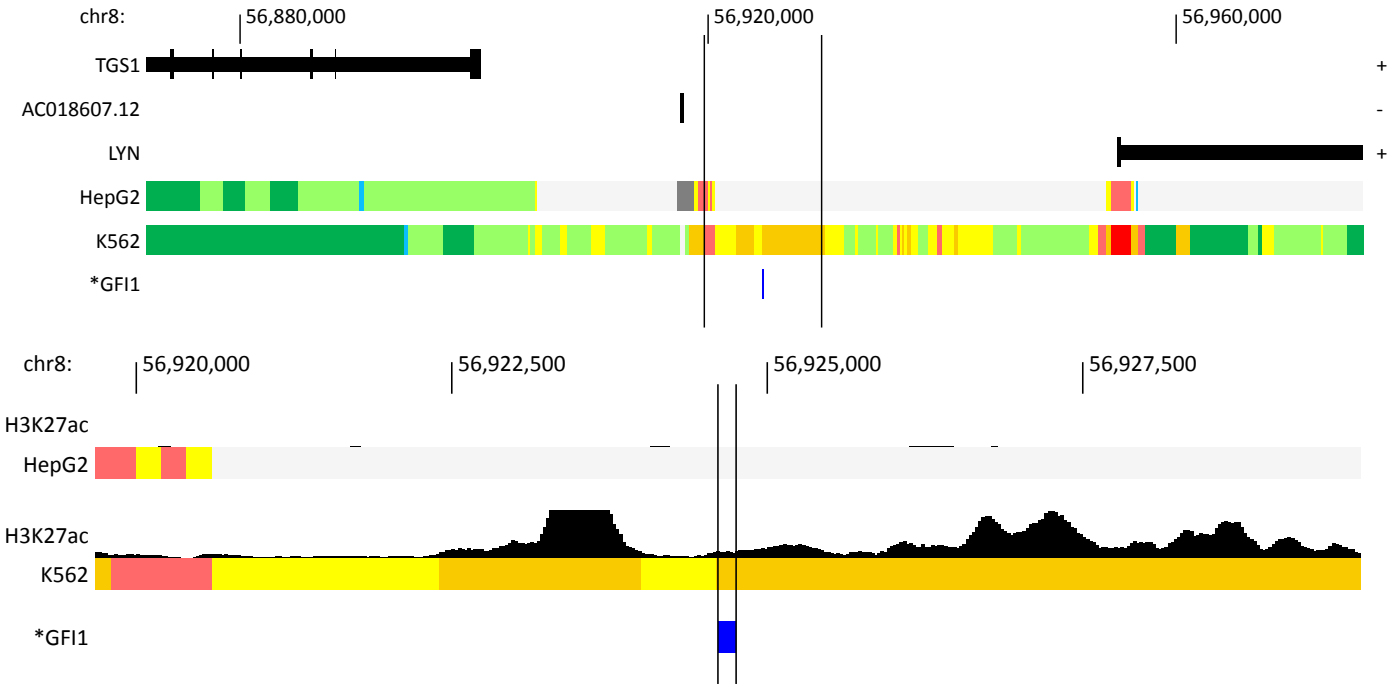
1486 GFI1 in K562 enhancer

chr8 56924670 56924693 - (hg18)



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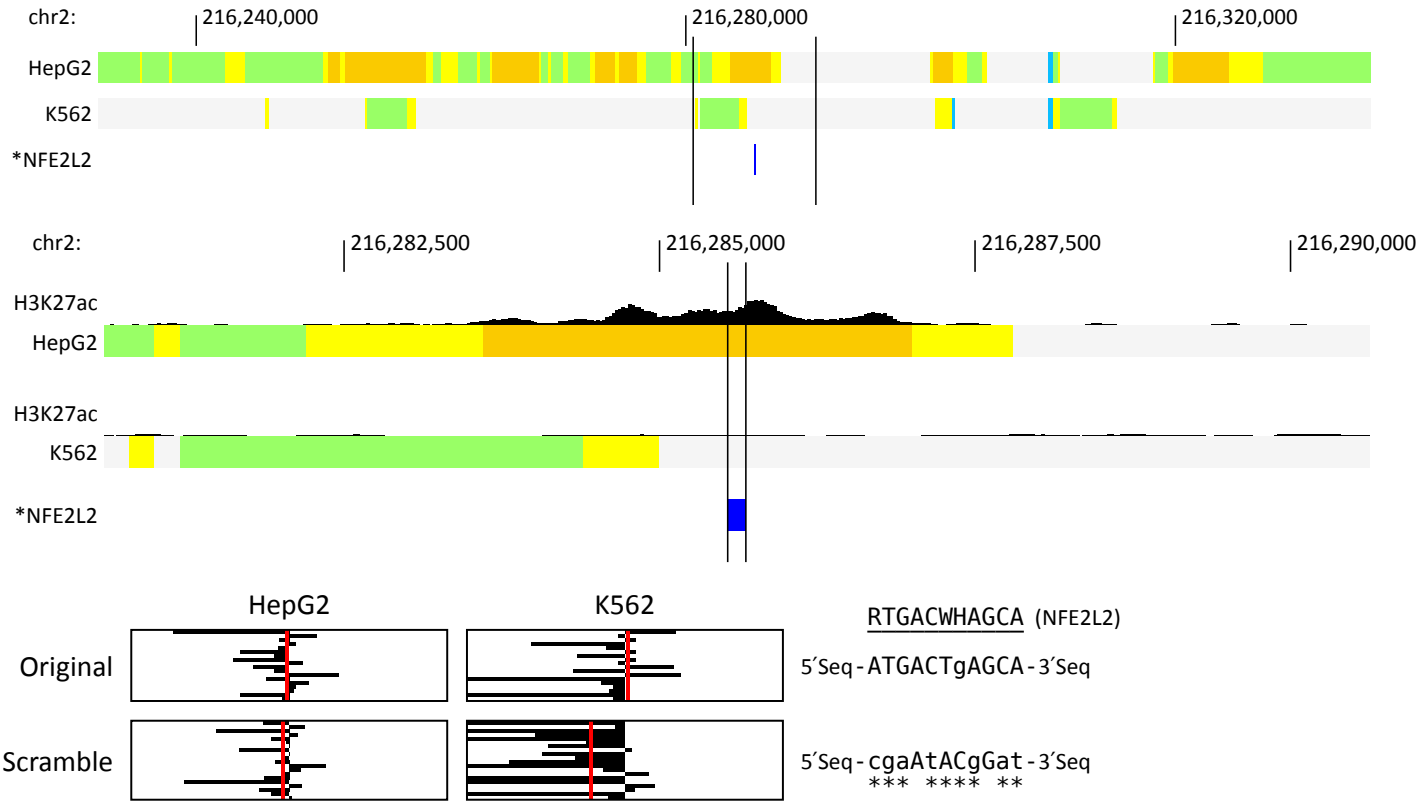
1487 NFE2L2 in HepG2 enhancer

chr2 216285607 216285617 - (hg18)



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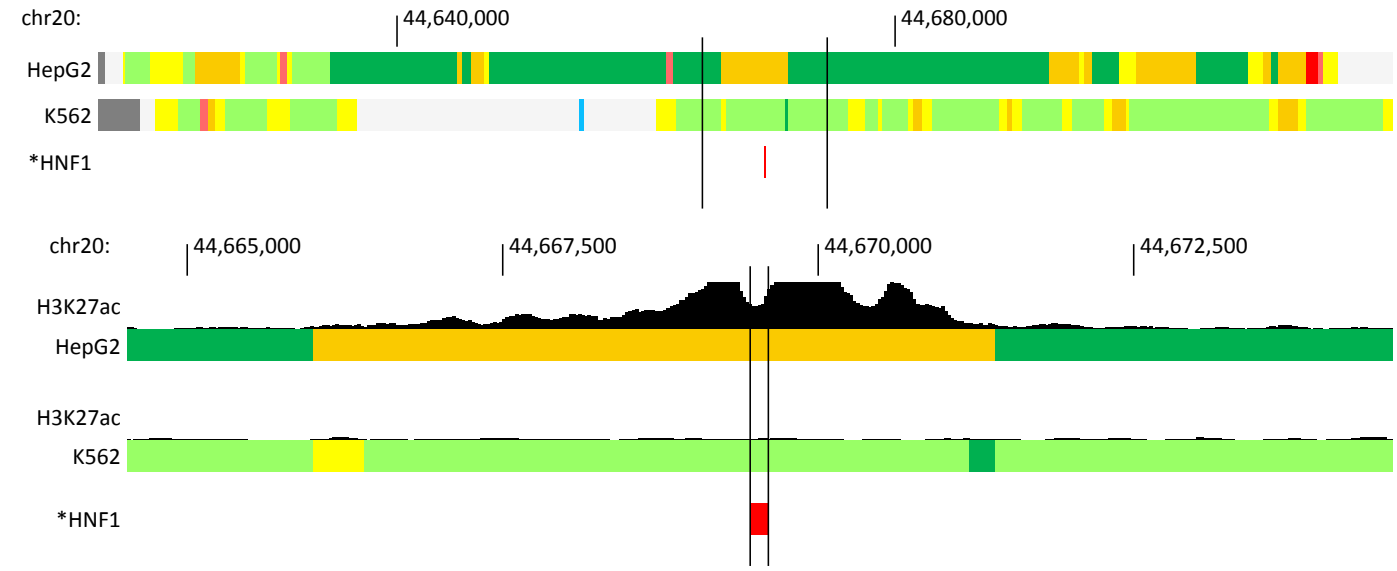
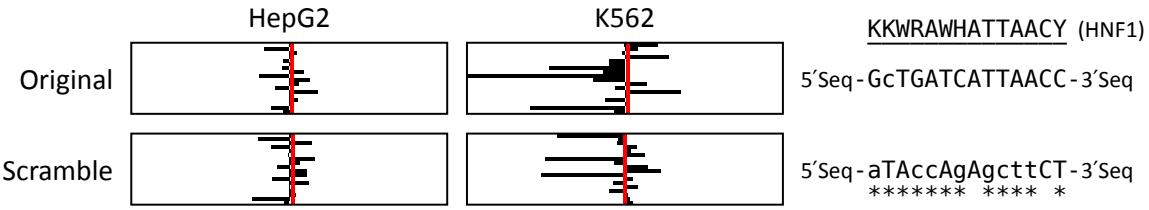
1488 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr20 44669527 44669540 + (hg18)





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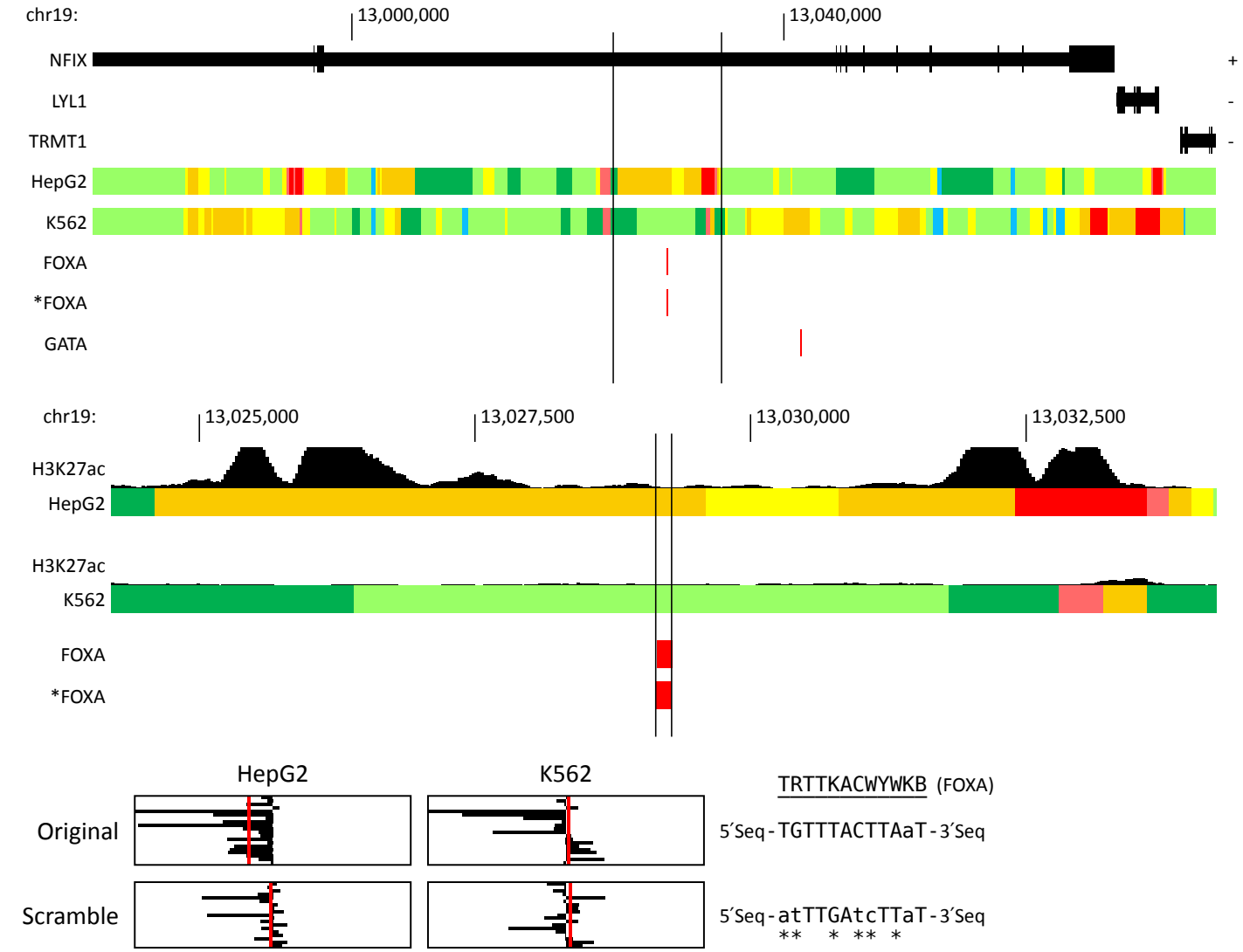
3′Seq = aattcctgctcctccctgatcccatggcctgtaaaggtaggtatctatcccaacccccaggatcc

1489 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr19 13029207 13029218 + (hg18)



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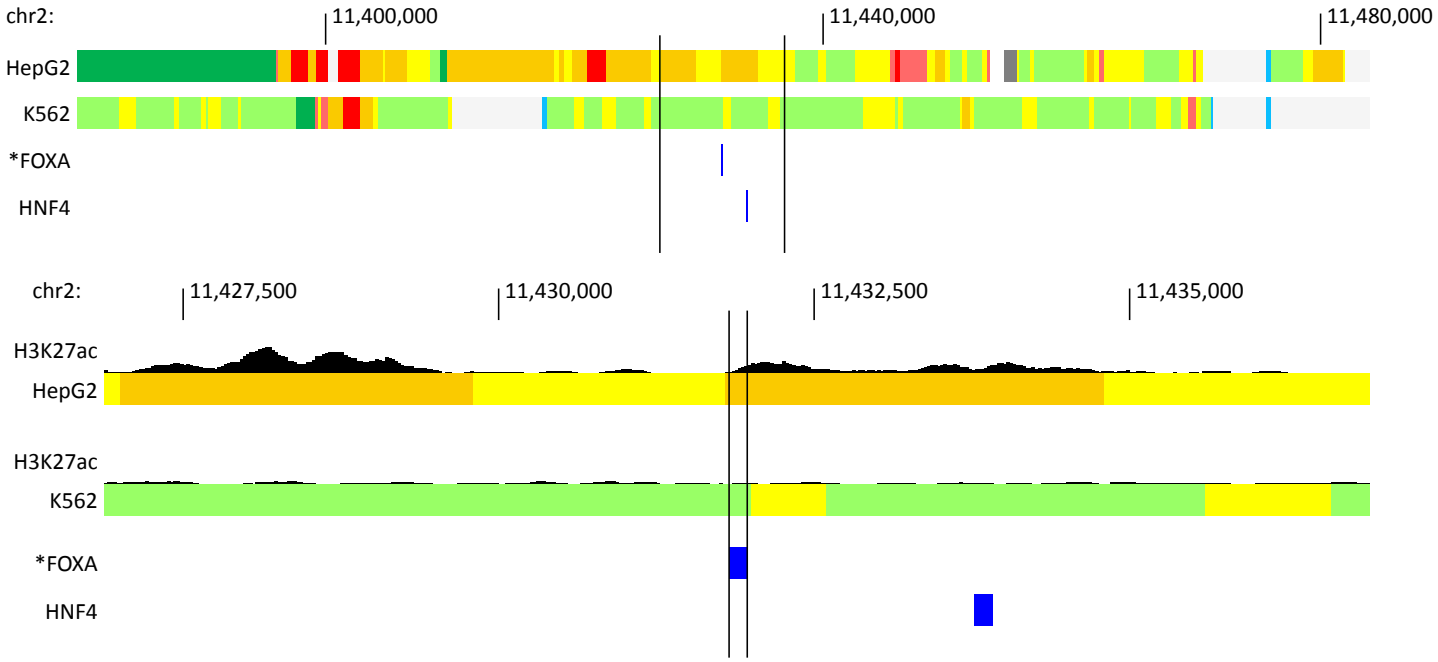
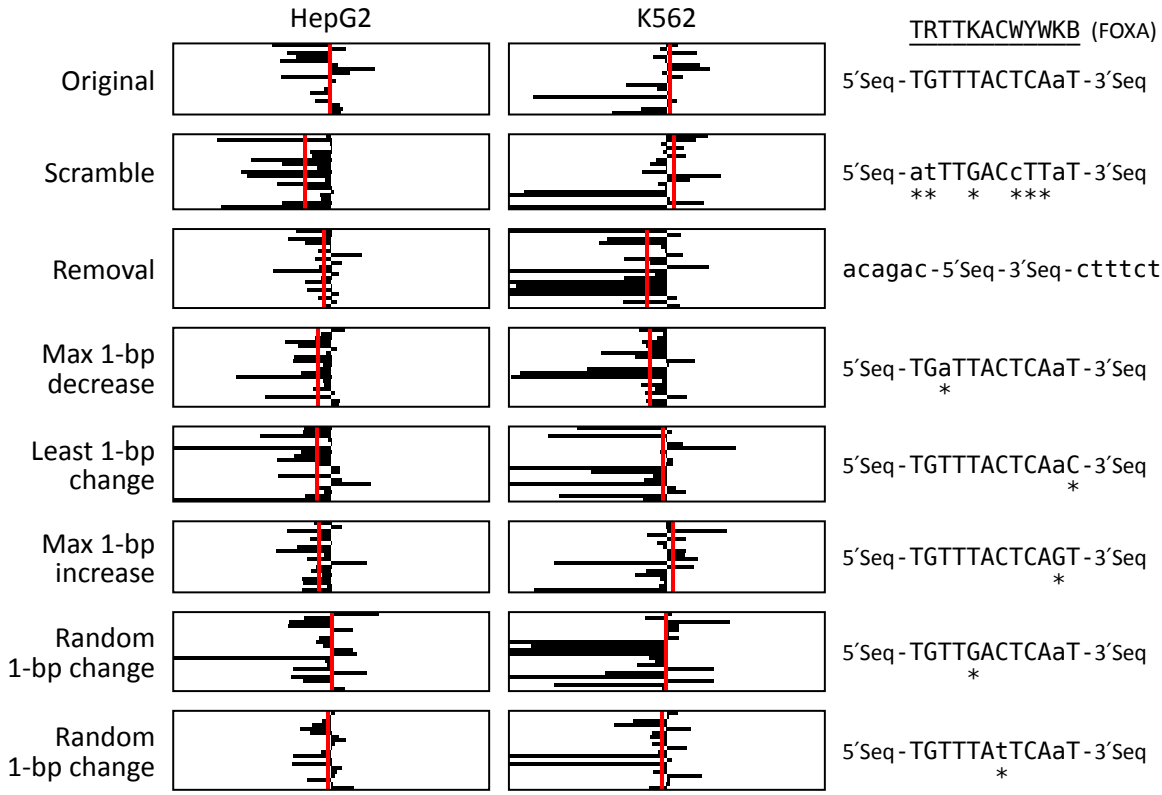
1490 FOXA in HepG2 enhancer

chr2 11431893 11431904 - (hg18)





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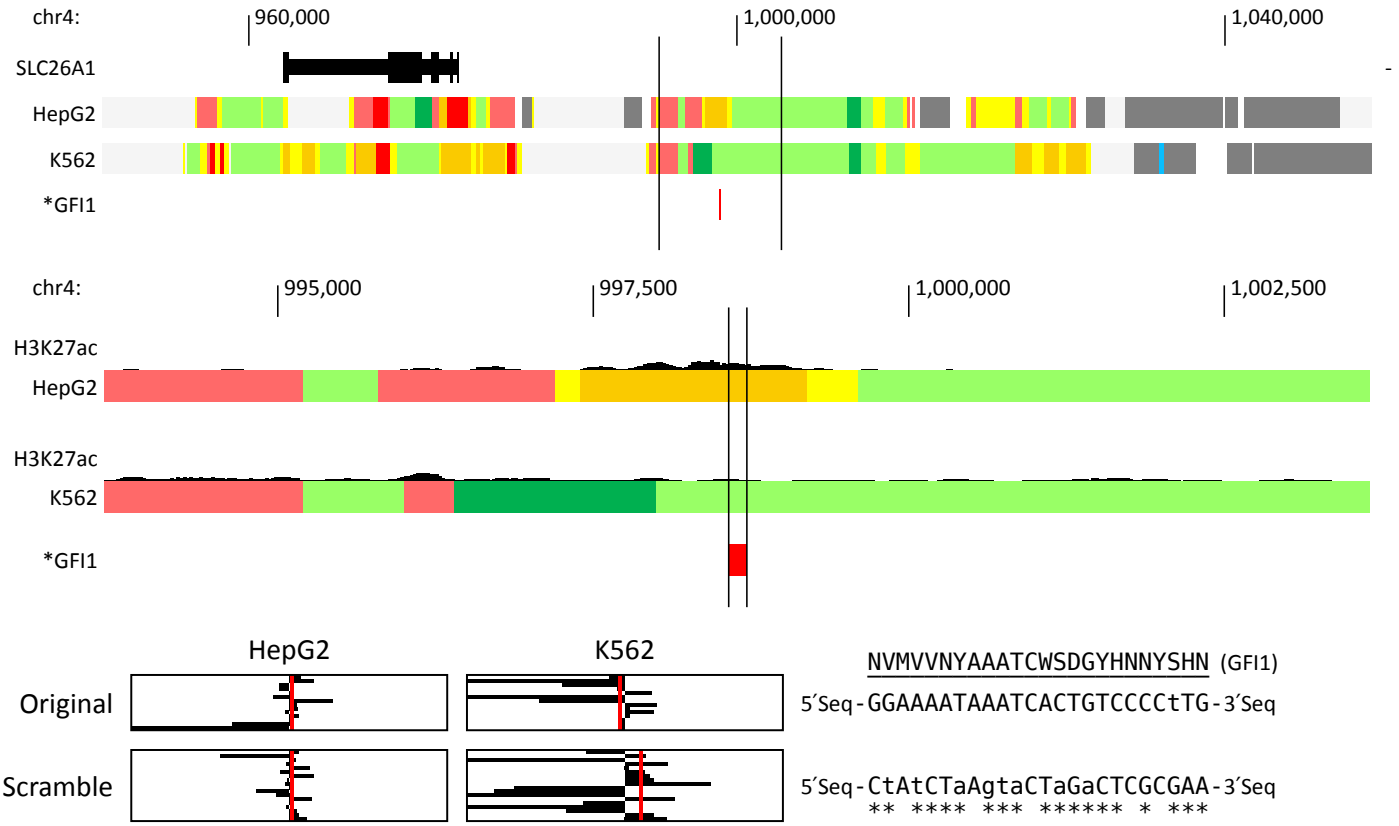
1491 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr4 998634 998657 + (hg18)



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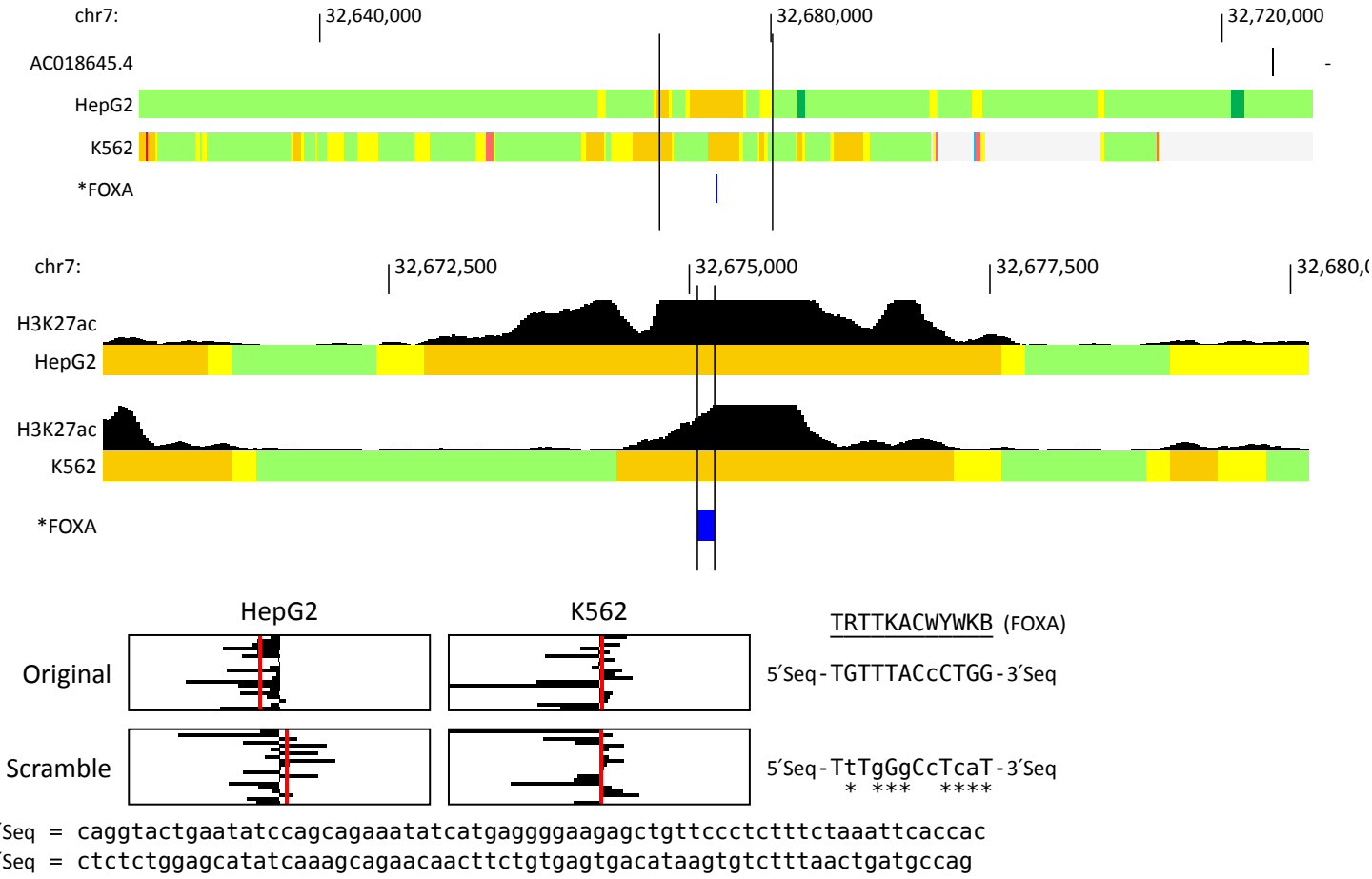
1492 FOXA in K562 enhancer

chr7 32675134 32675145 - (hg18)



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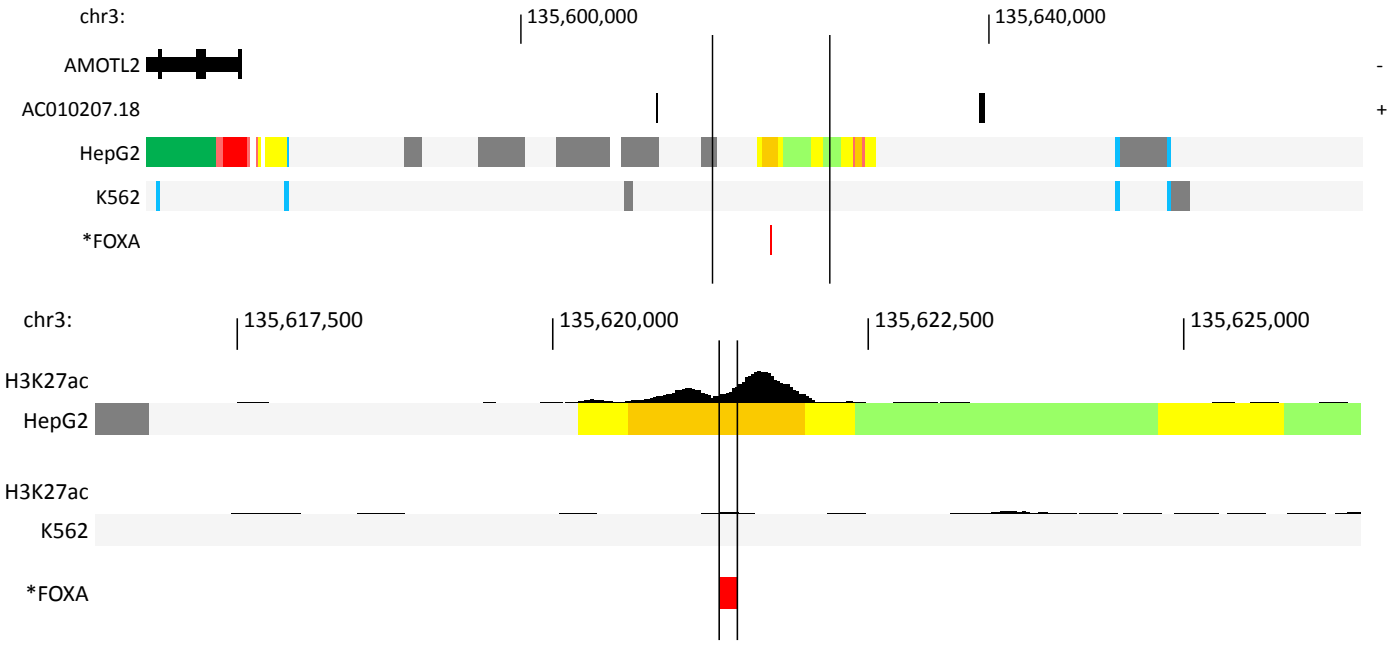
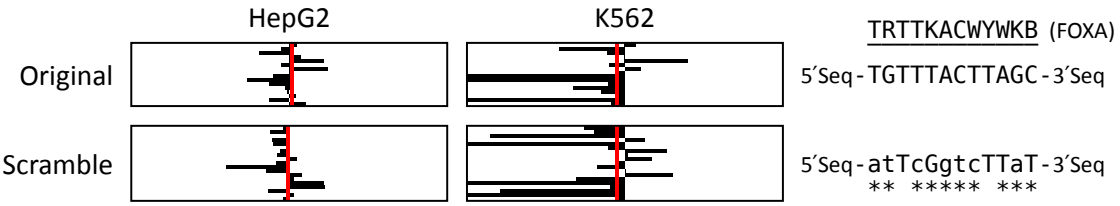
1493 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 135621386 135621397 + (hg18)





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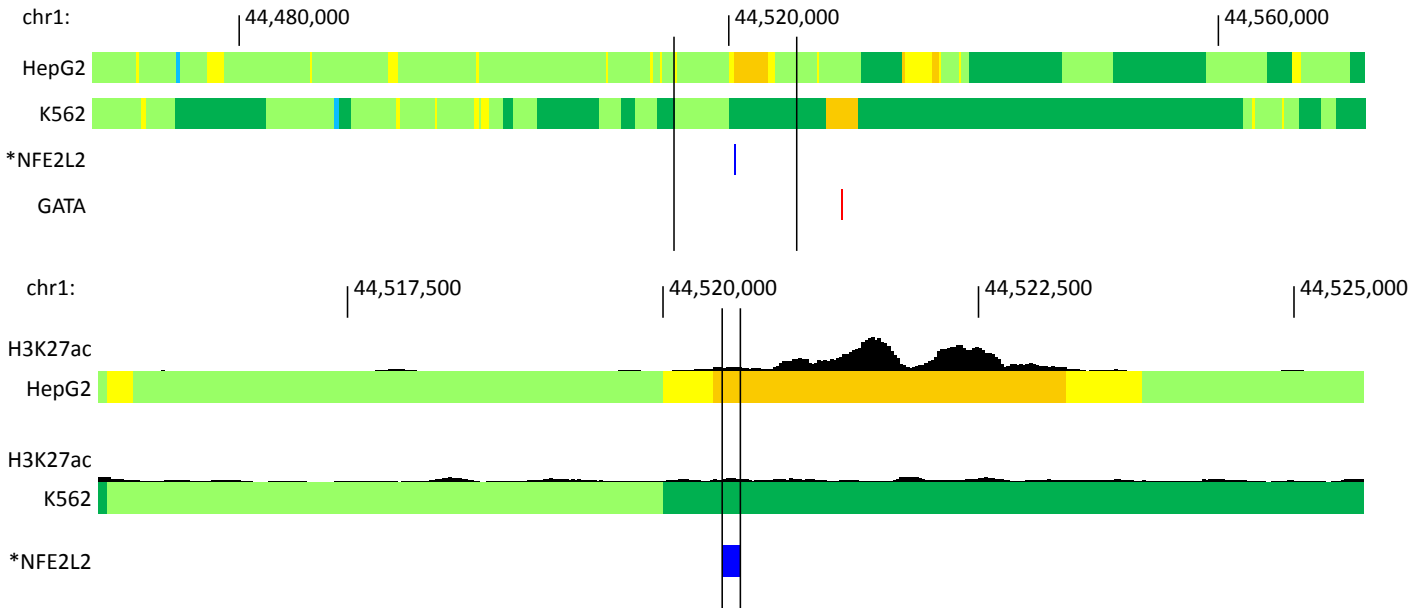
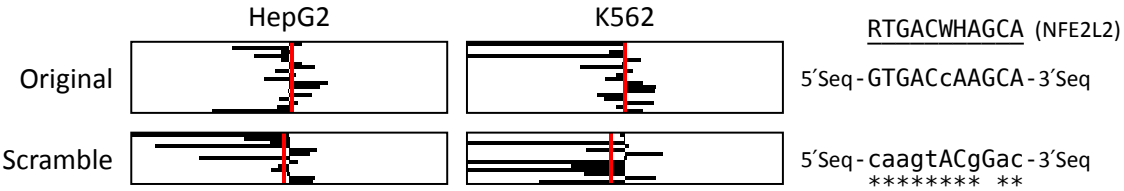
1494 NFE2L2 in HepG2 enhancer

chr1 44520536 44520546 + (hg18)





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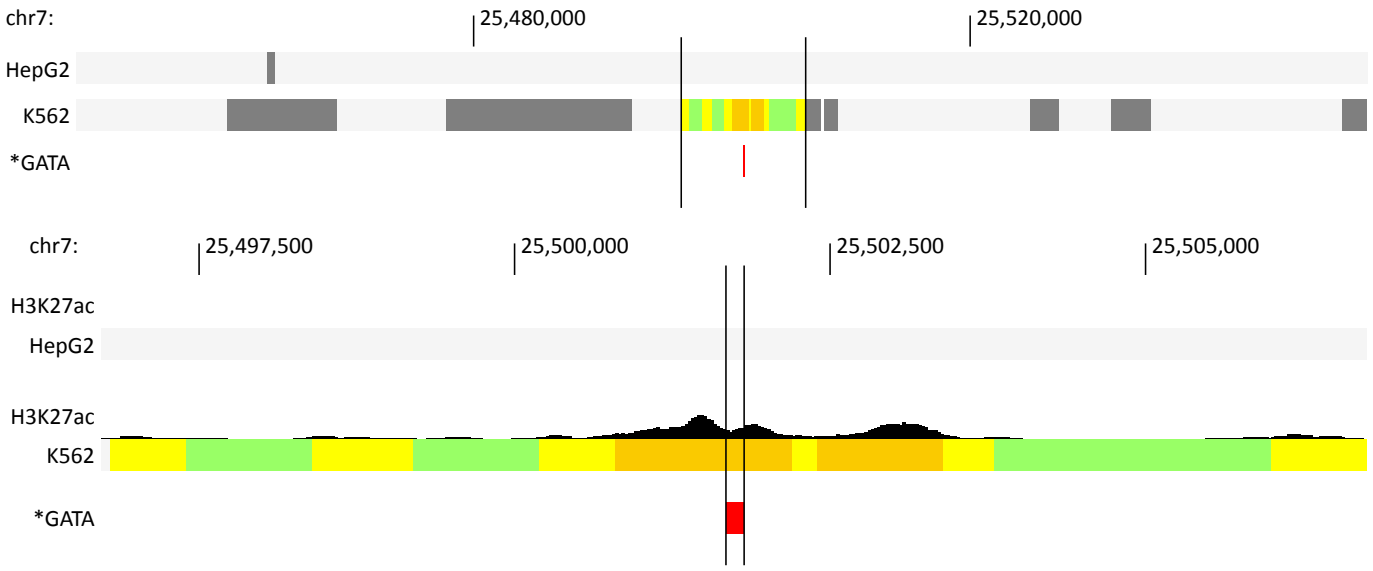
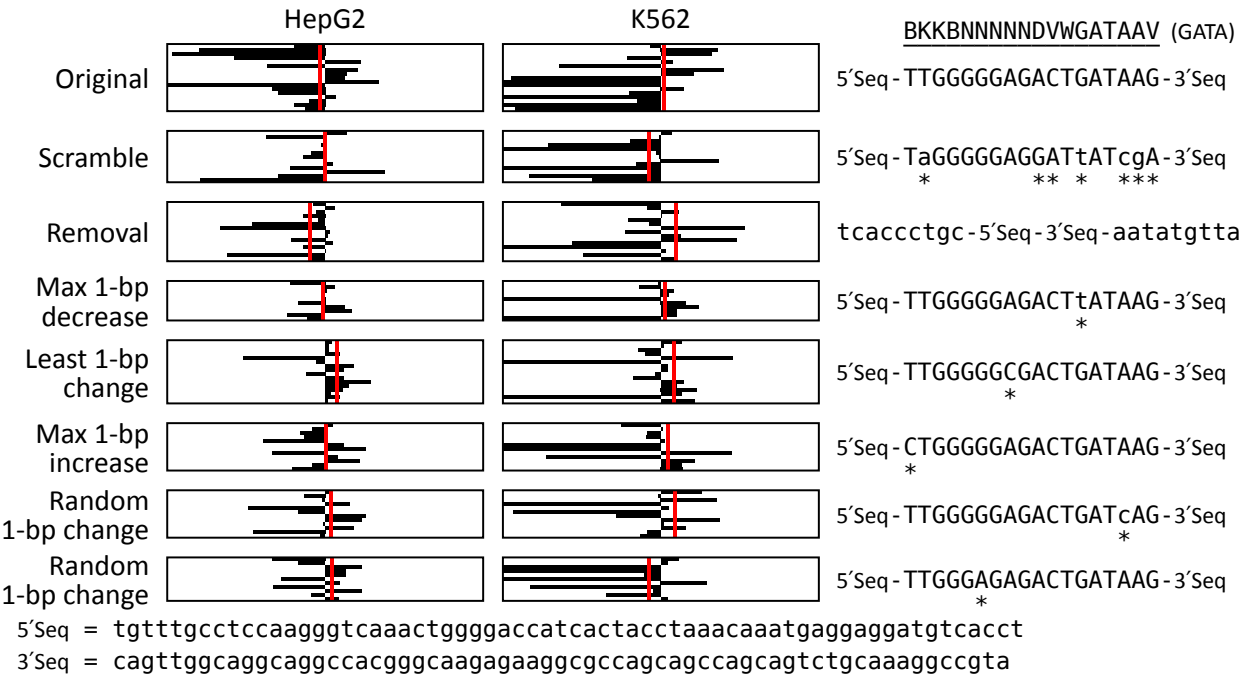
1495 GATA in K562 enhancer (conserved at 70% confidence)

chr7 25501739 25501756 + (hg18)





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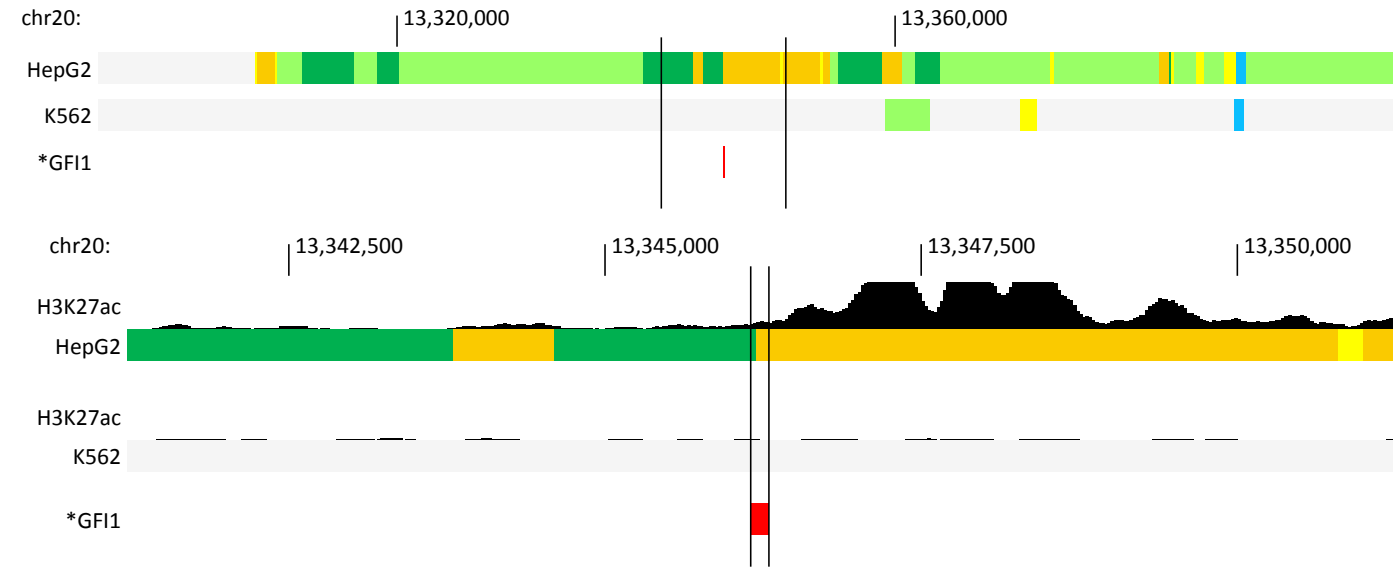
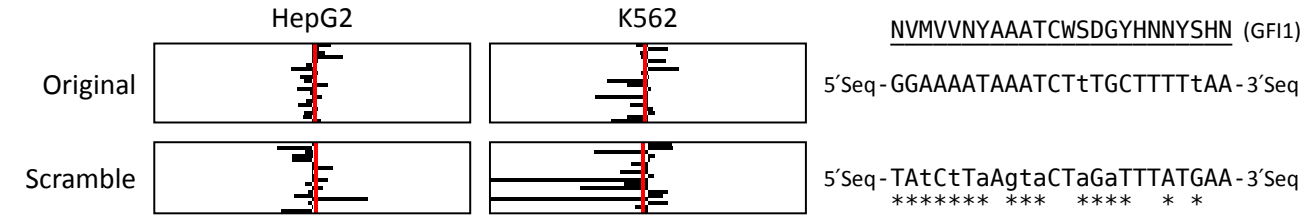
1496 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr20 13346213 13346236 + (hg18)





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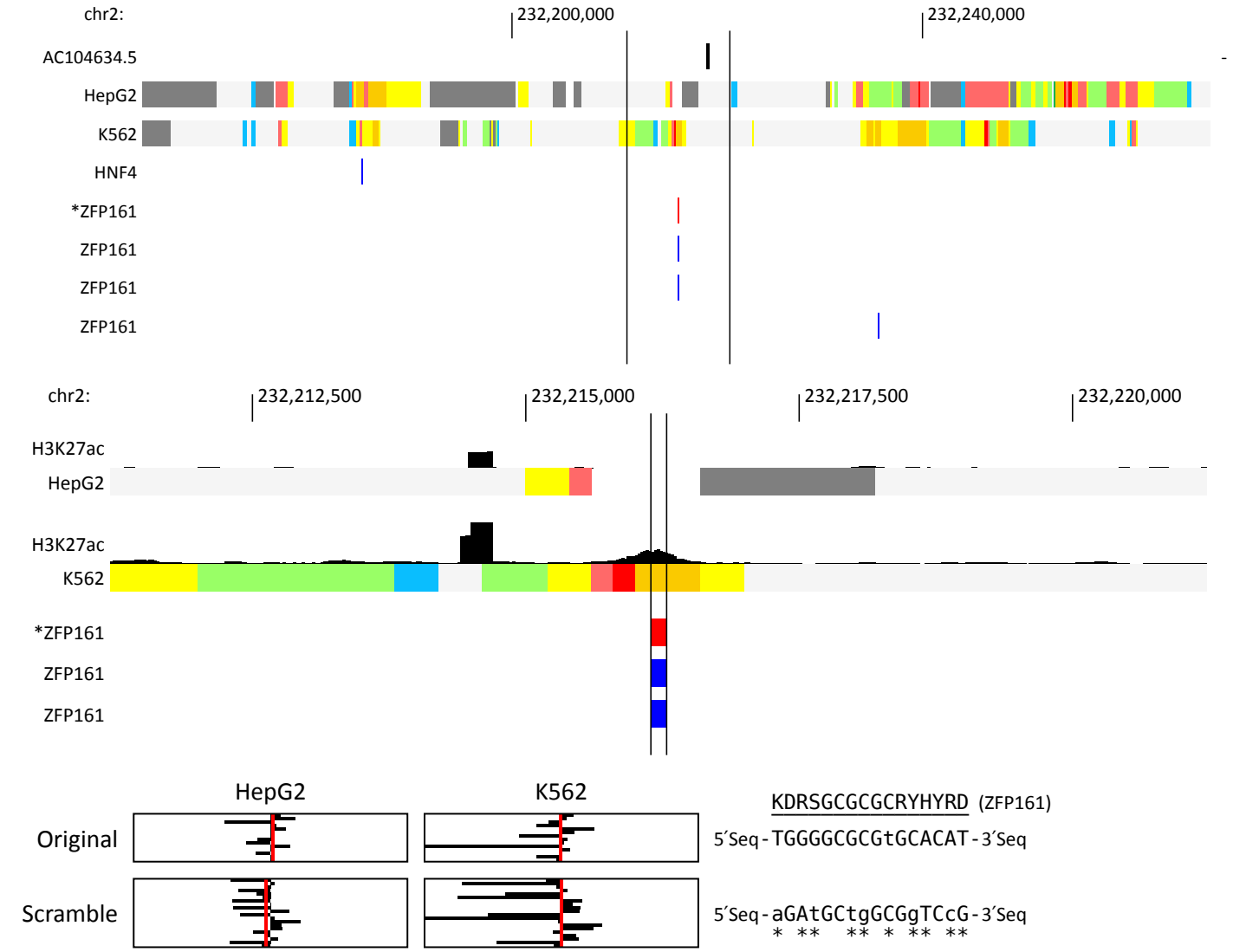
1497 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr2 232216209 232216224 - (hg18)



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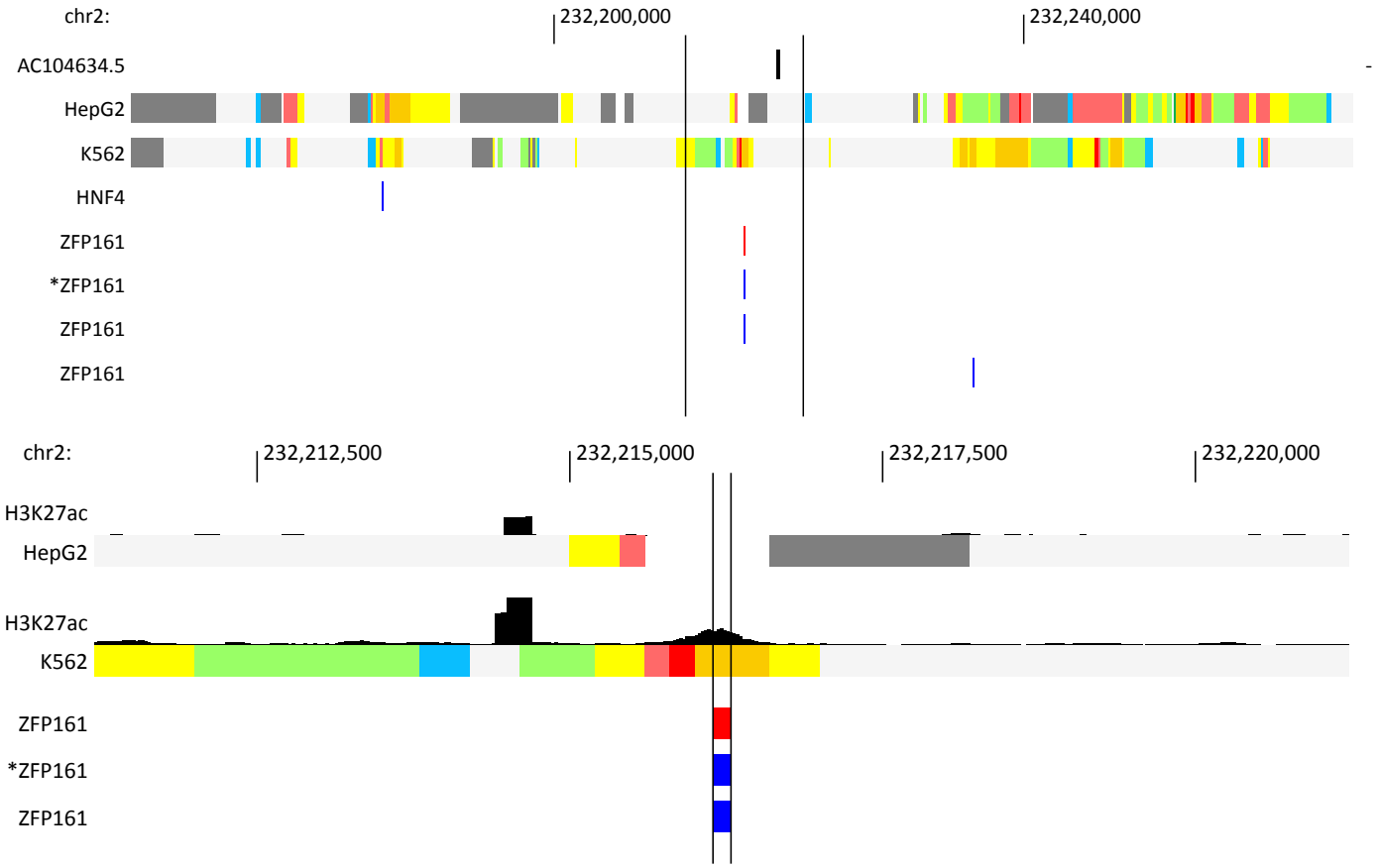
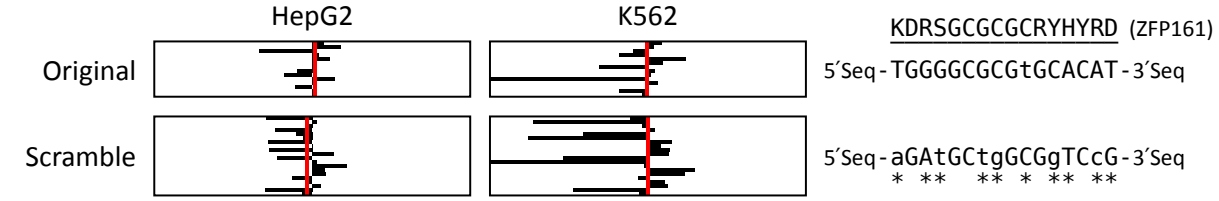
1498 ZFP161 in K562 enhancer

chr2 232216209 232216224 - (hg18)





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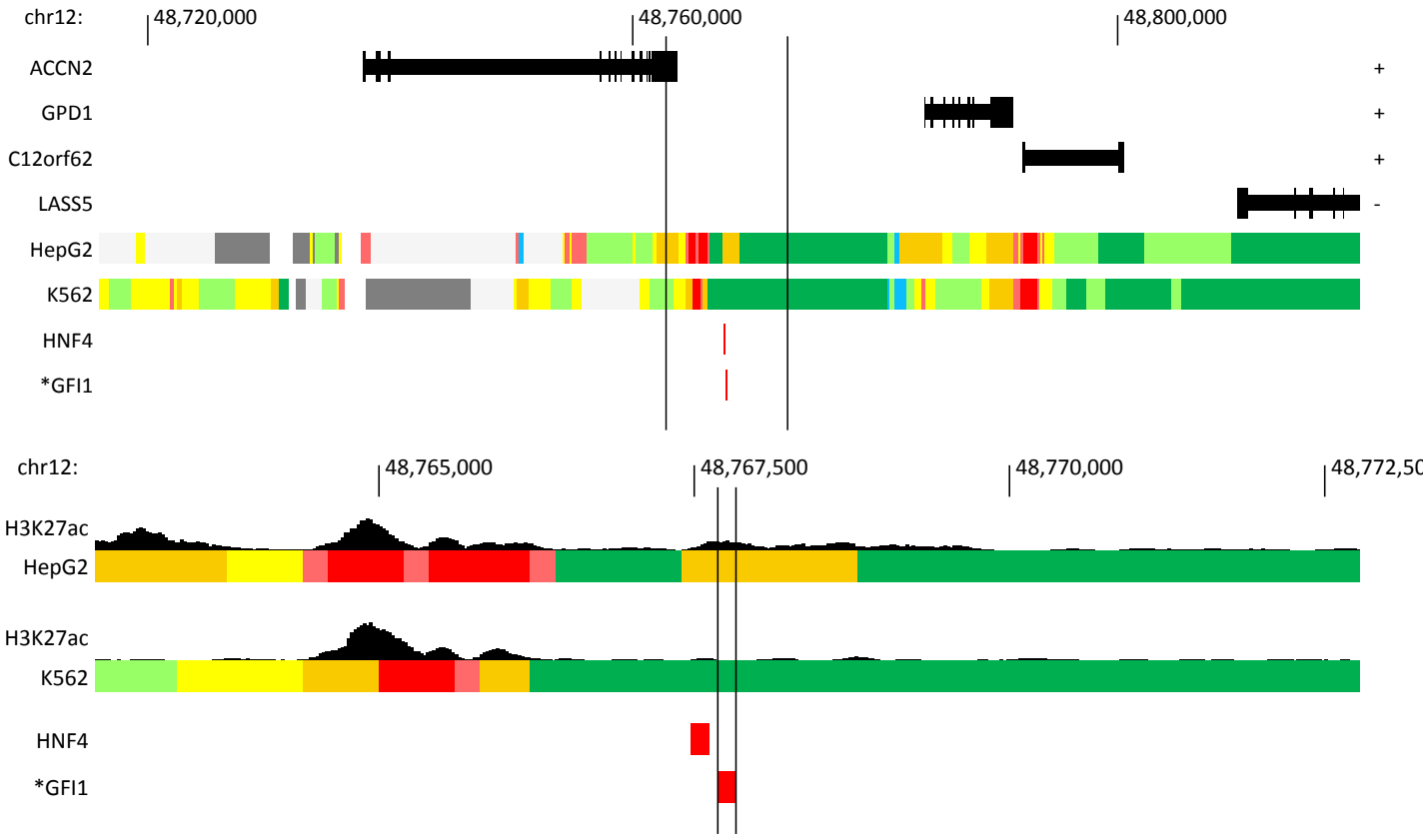
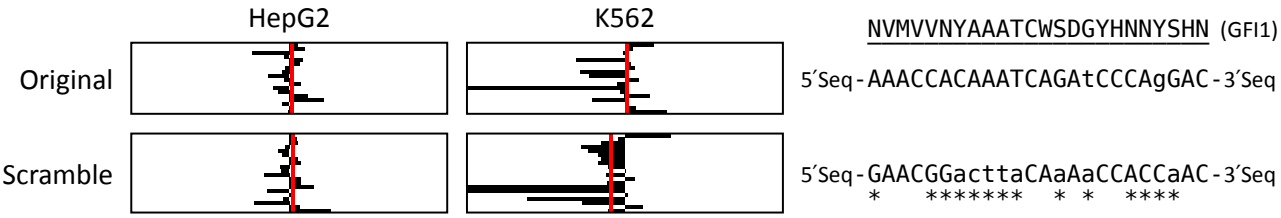
1499 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr12 48767748 48767771 - (hg18)





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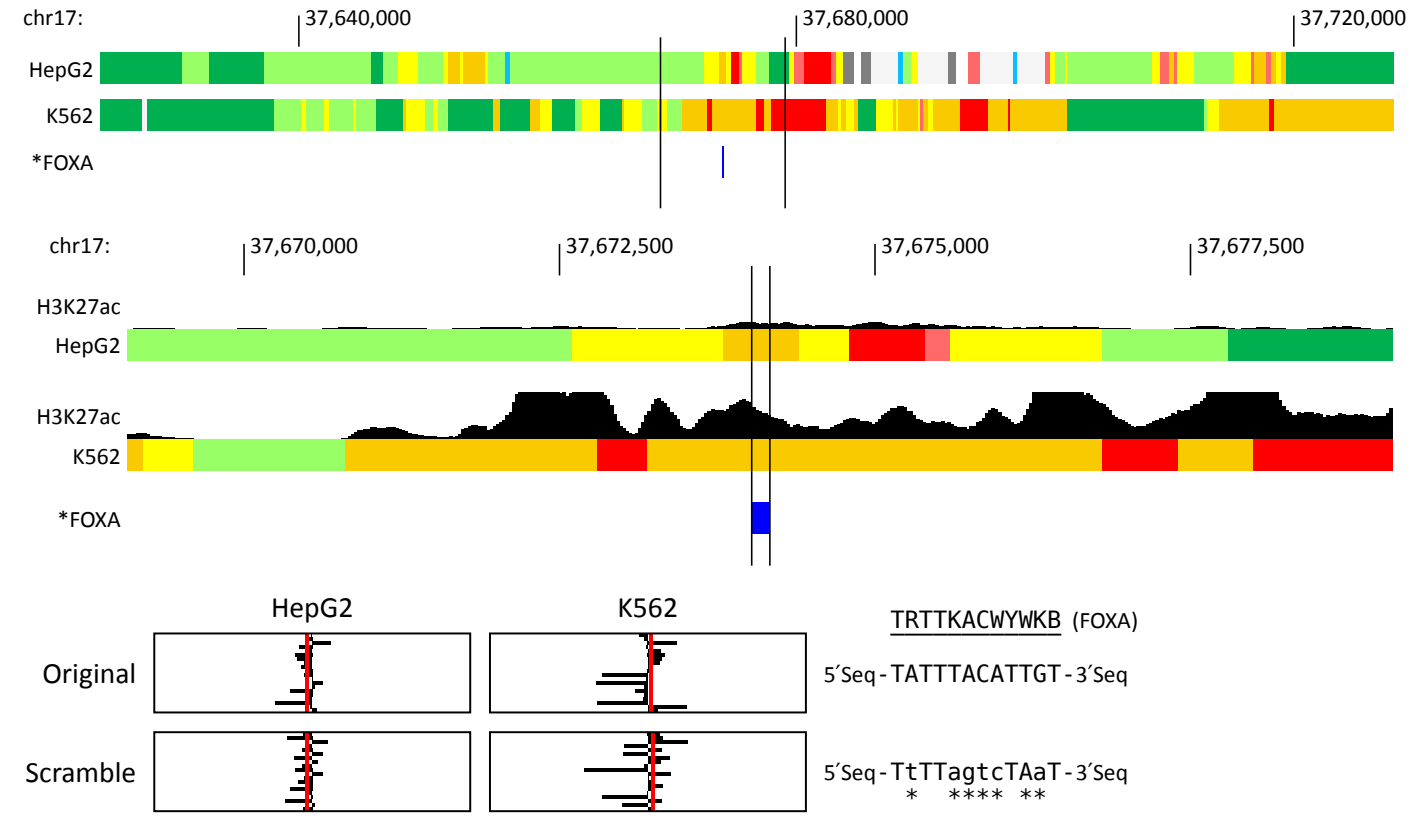
1500 FOXA in HepG2 enhancer

chr17 37674090 37674101 + (hg18)



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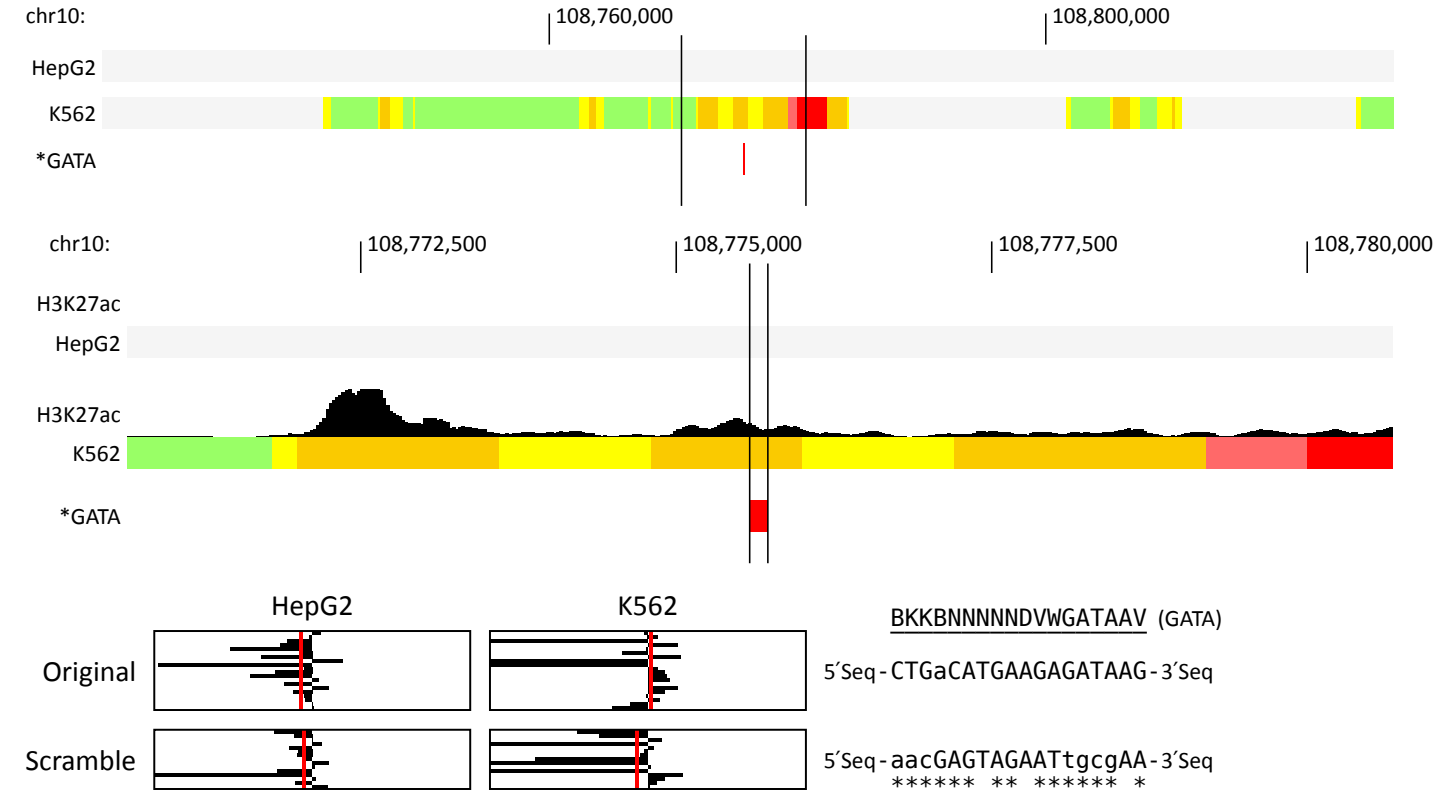
1501 GATA in K562 enhancer (conserved at 60% confidence)

chr10 108775646 108775663 + (hg18)



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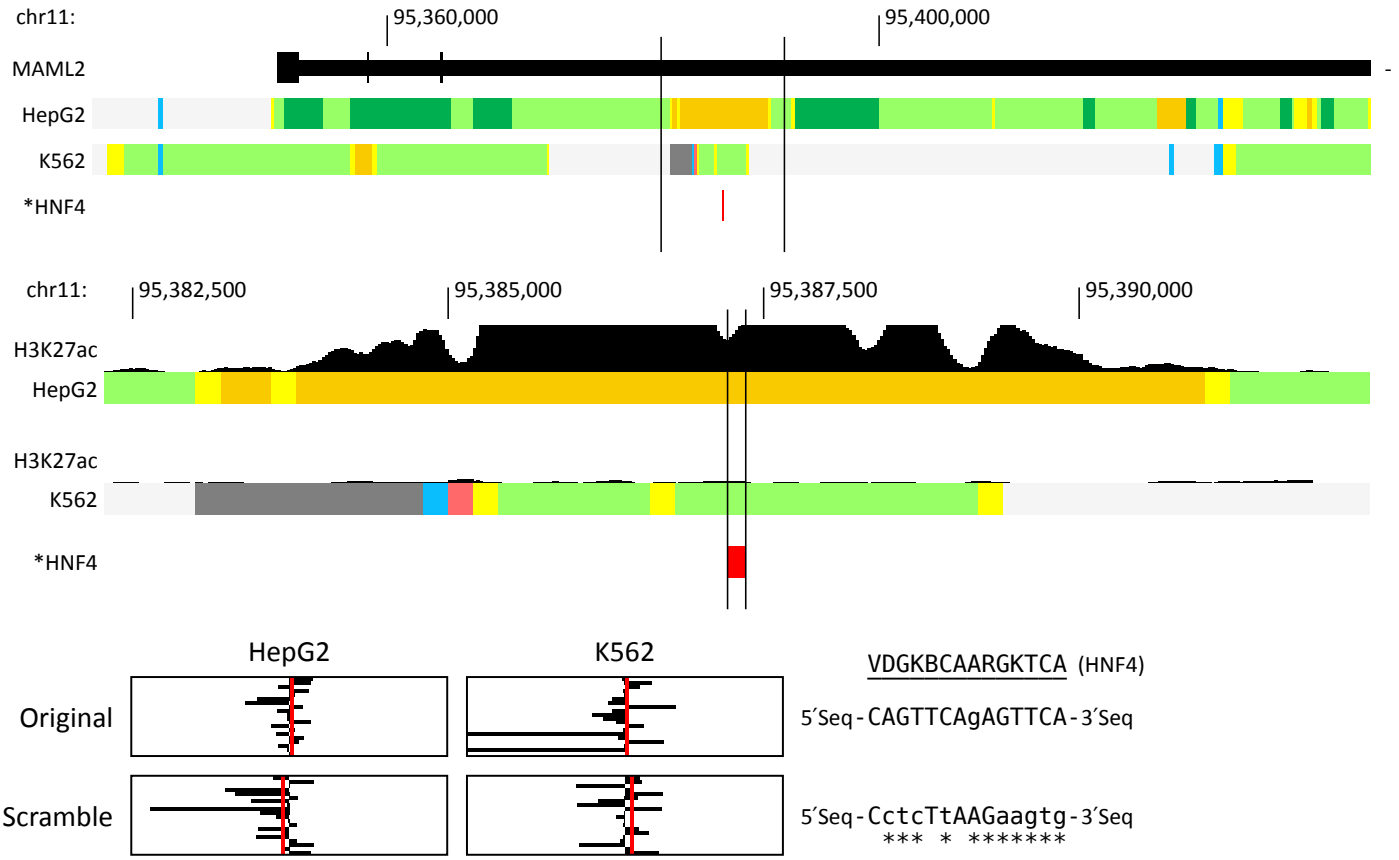
1502 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr11 95387280 95387293 - (hg18)



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5′Seq-CctcTtAAGaagtg-3′Seq

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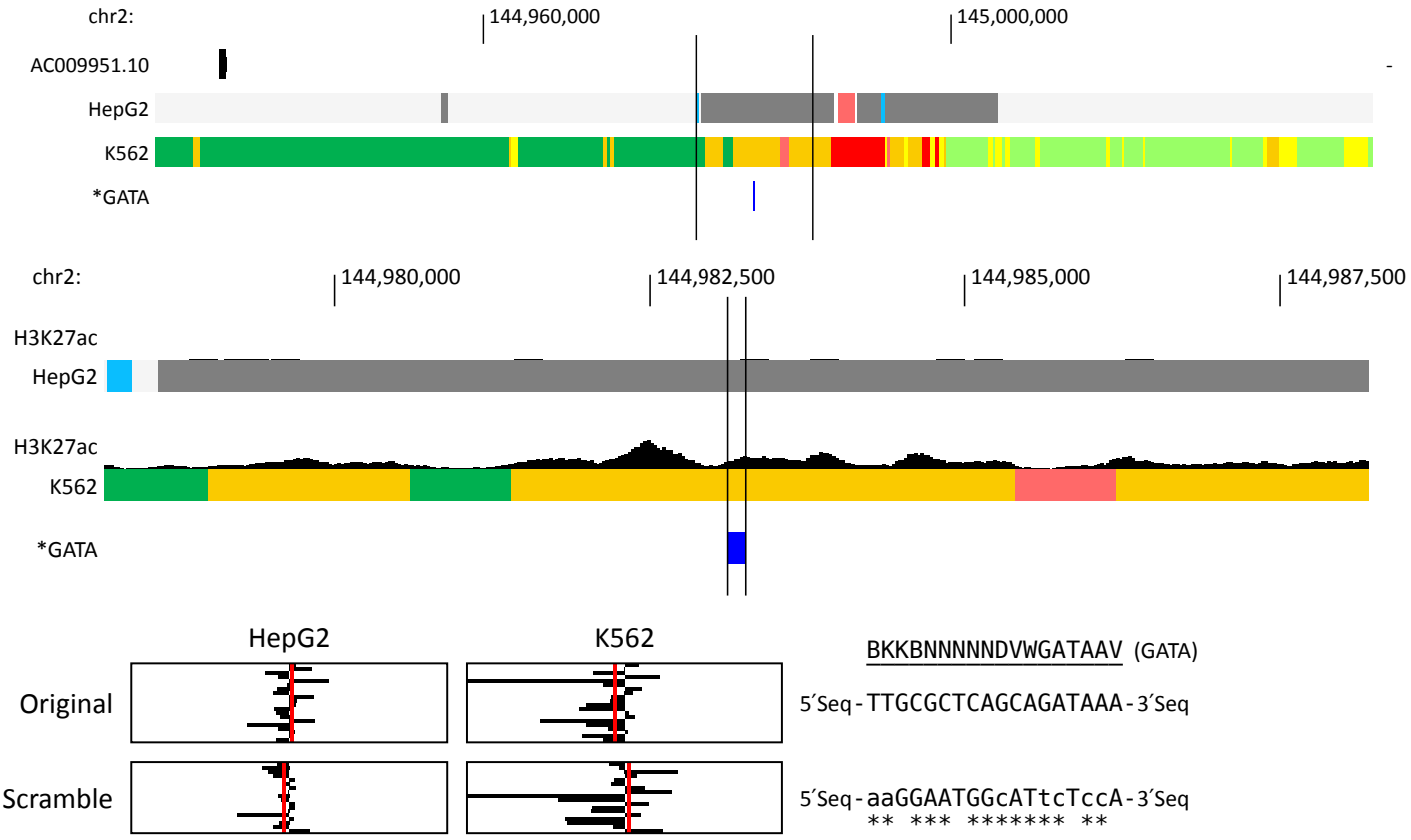
chr2 144983186 144983203 - (hg18)



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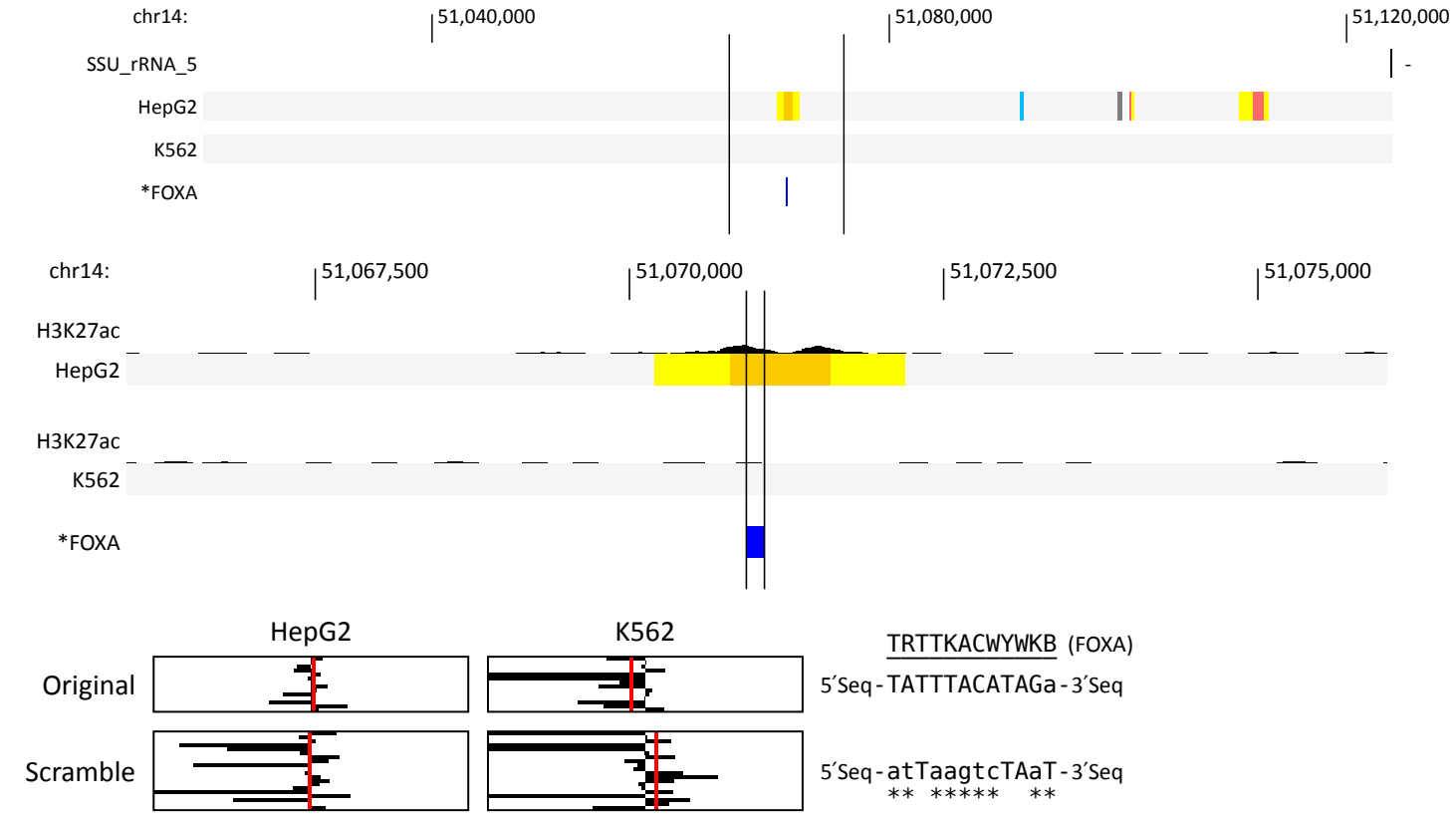
1504 FOXA in HepG2 enhancer

chr14 51070997 51071008 - (hg18)



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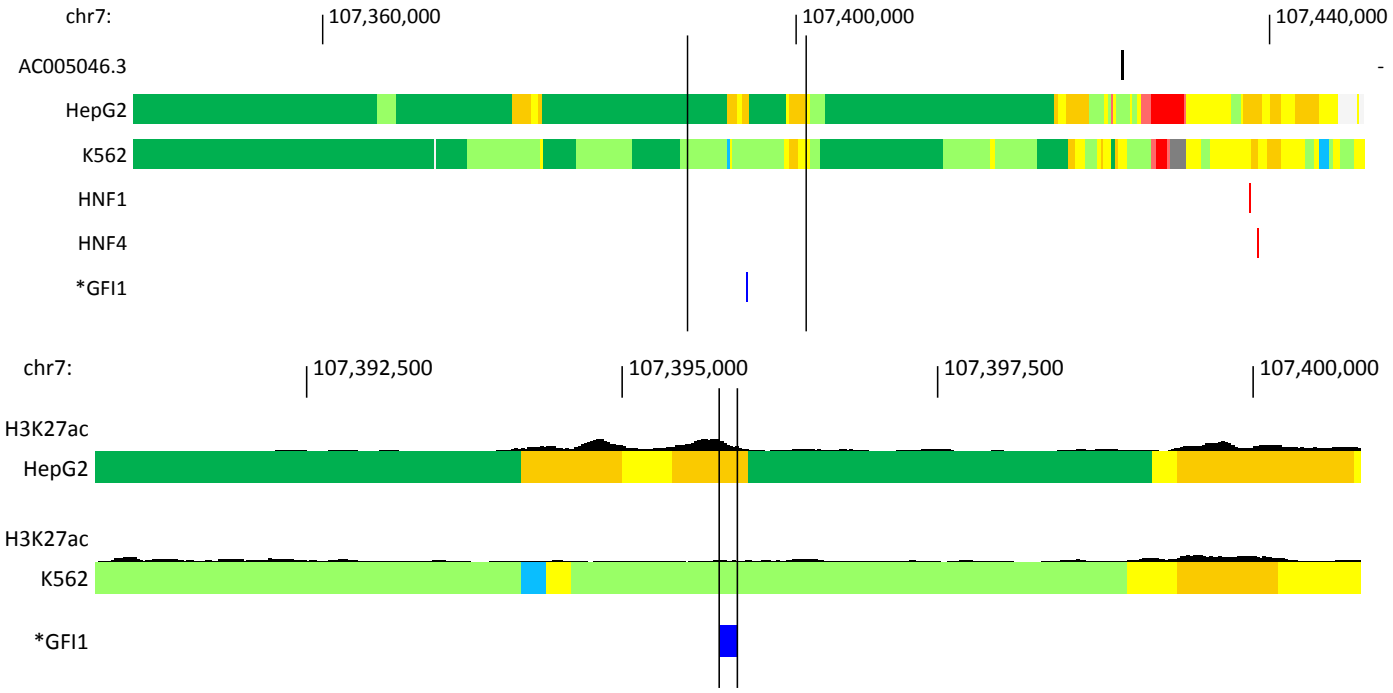
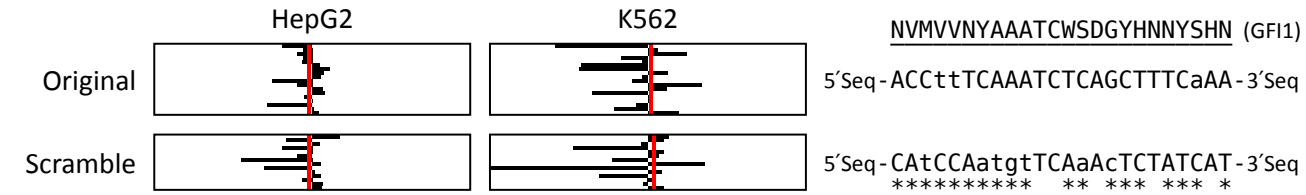
1505 GFI1 in HepG2 enhancer

chr7 107395830 107395853 + (hg18)





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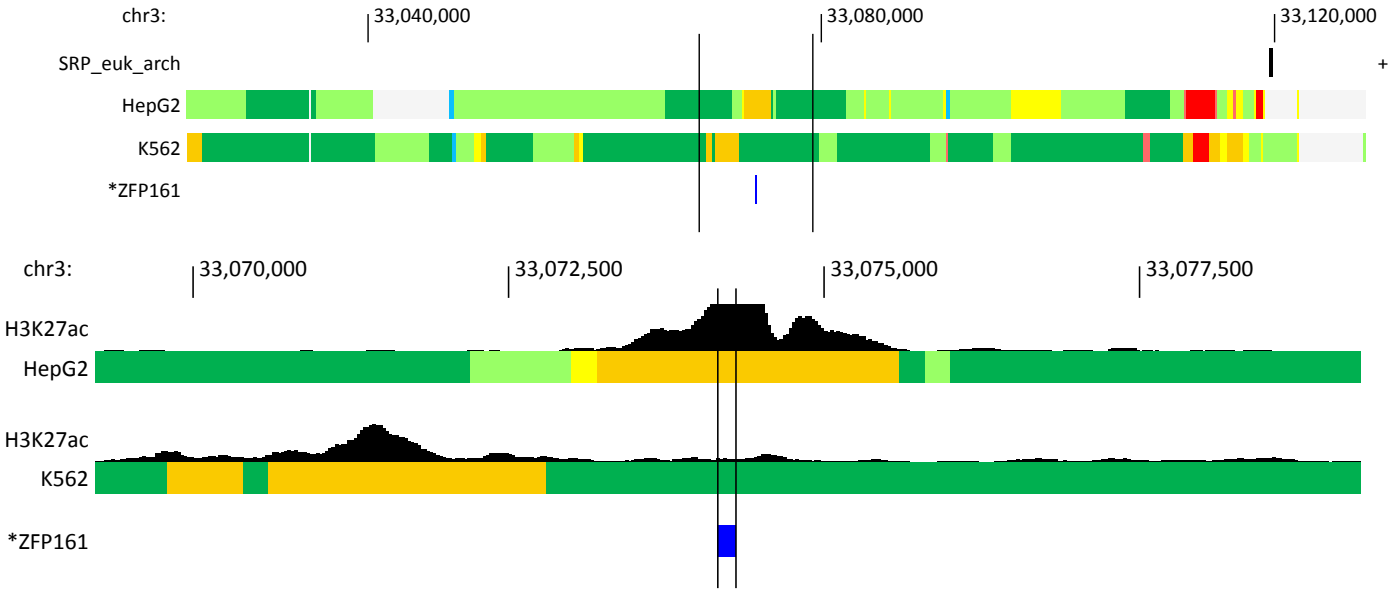
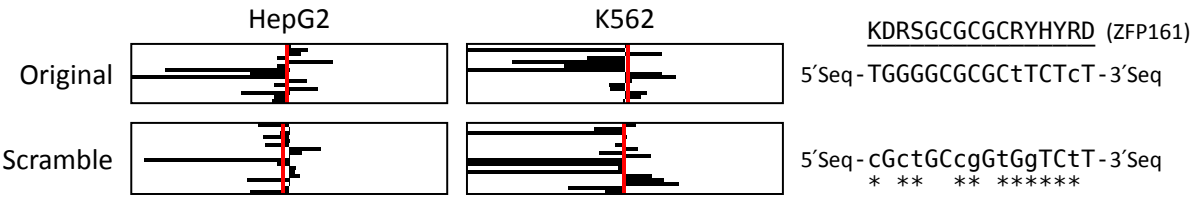
1506 ZFP161 in HepG2 enhancer

chr3 33074223 33074238 - (hg18)





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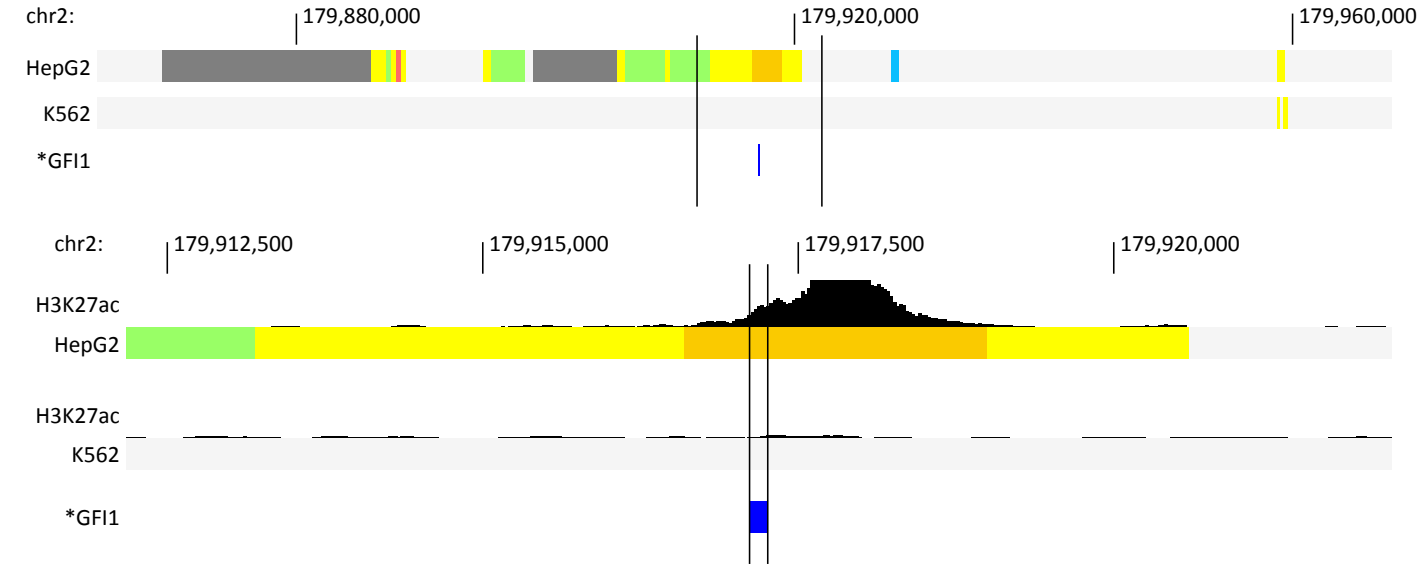
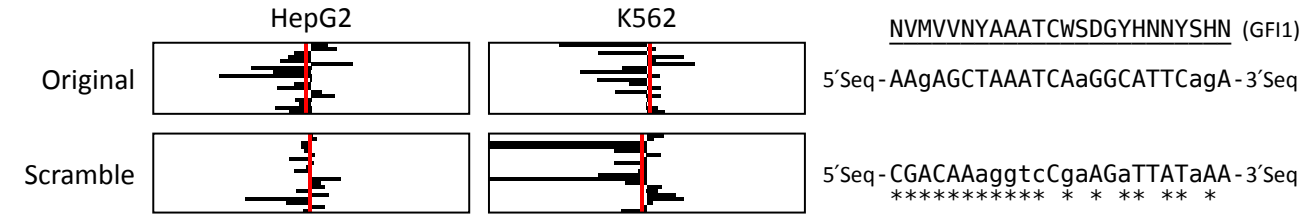
1507 GFI1 in HepG2 enhancer

chr2 179917175 179917198 + (hg18)





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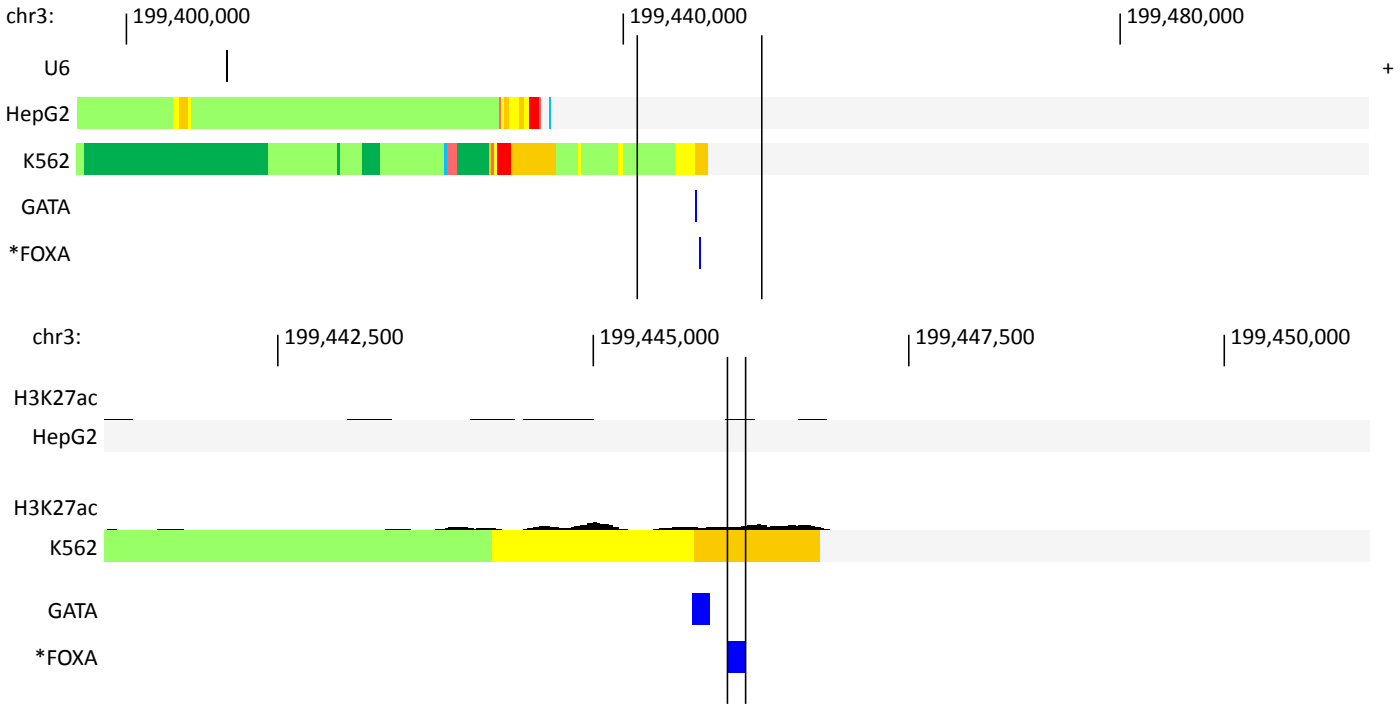
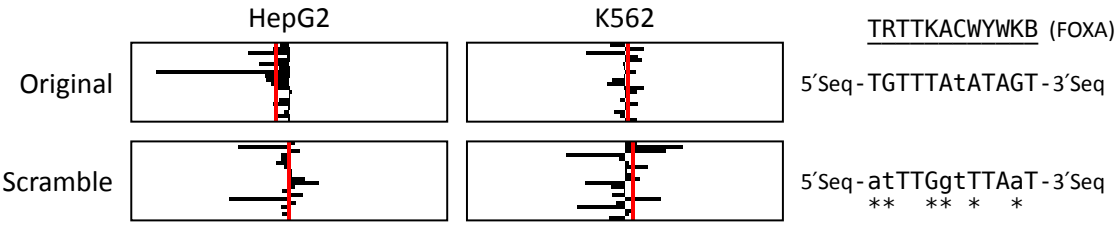
1508 FOXA in K562 enhancer

chr3 199446130 199446141 - (hg18)





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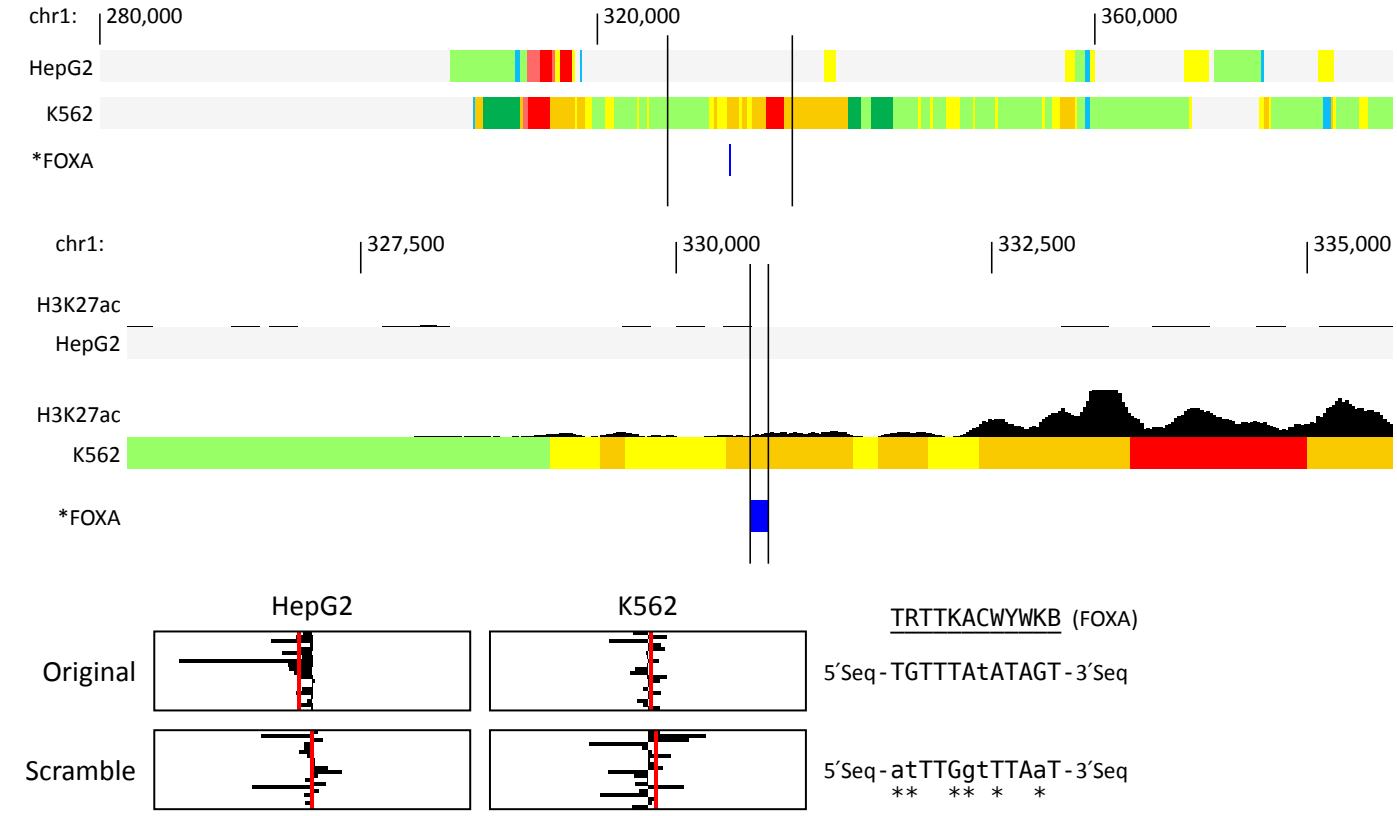
1509 FOXA in K562 enhancer

chr1 330653 330664 - (hg18)



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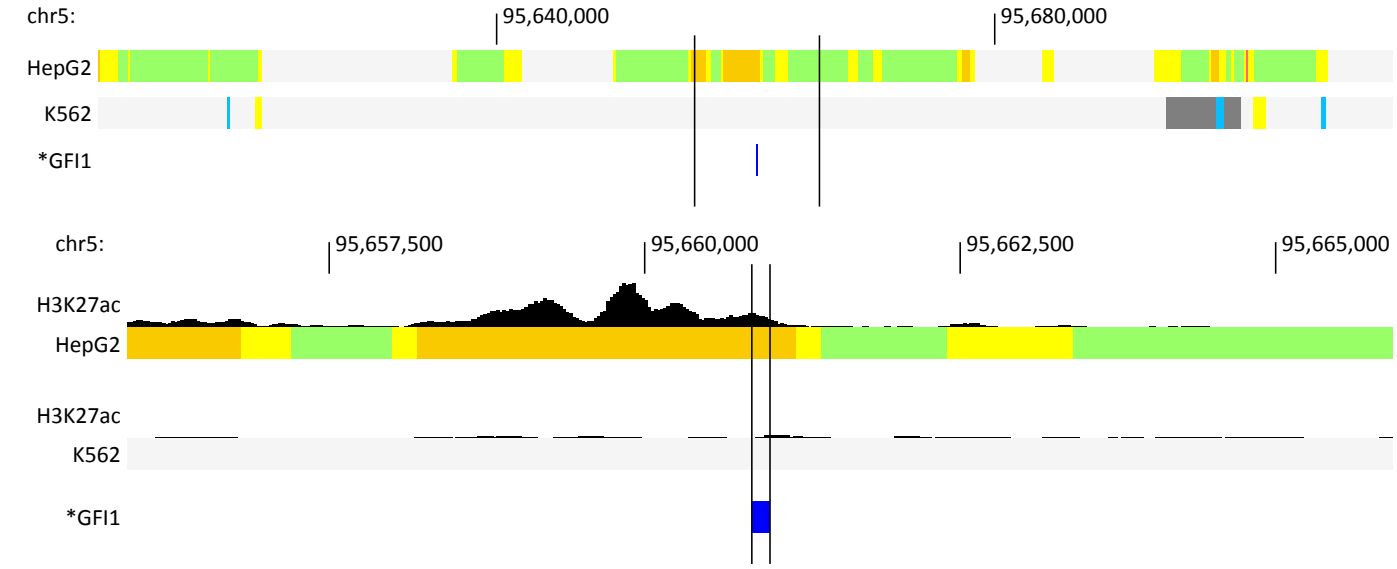
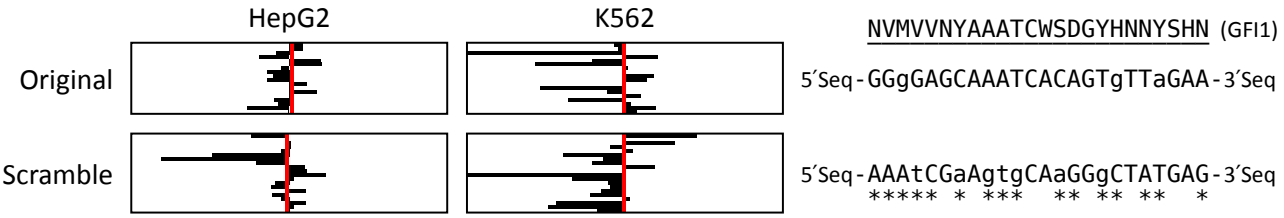
1510 GFI1 in HepG2 enhancer

chr5 95660910 95660933 + (hg18)





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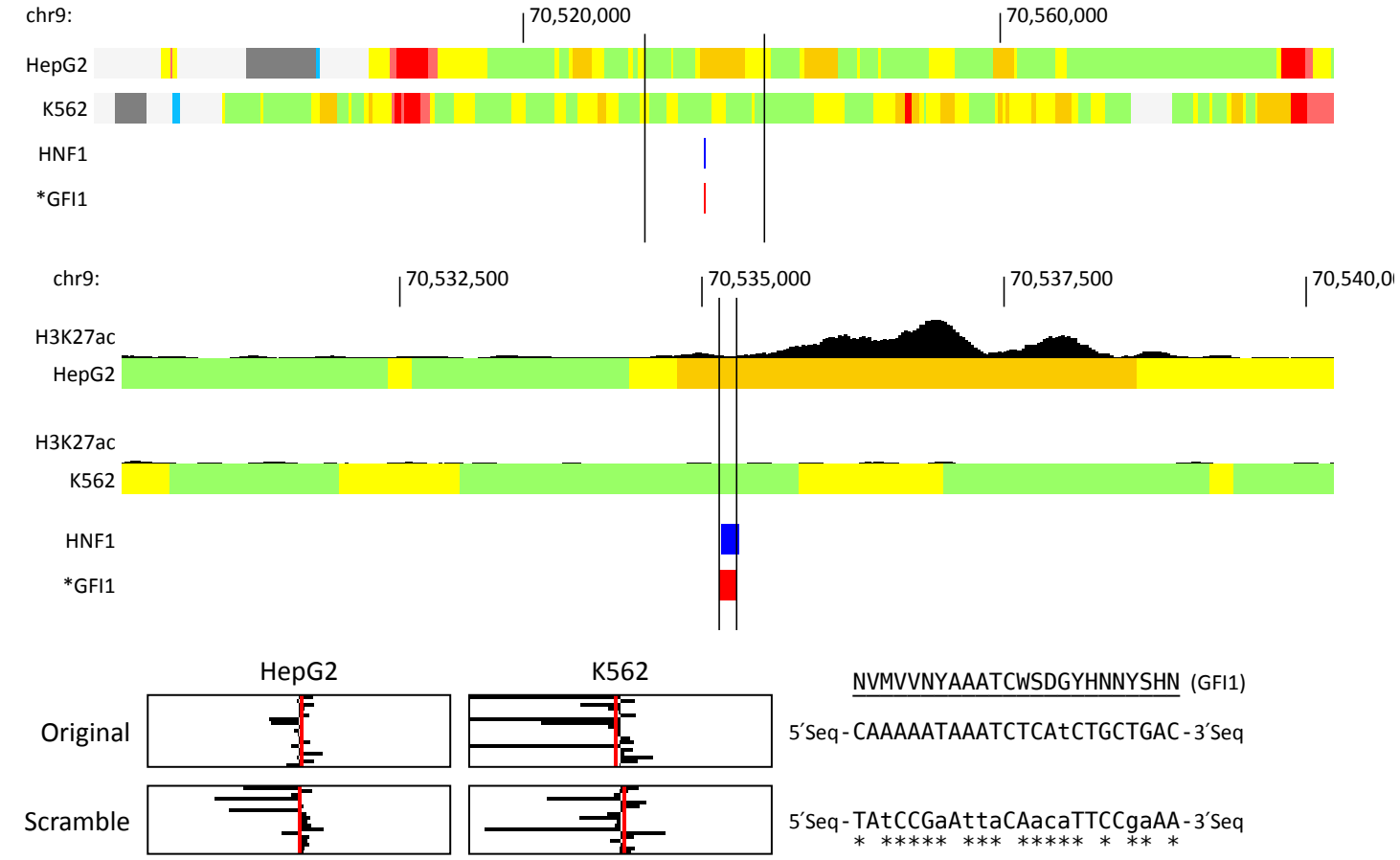
1511 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr9 70535204 70535227 - (hg18)



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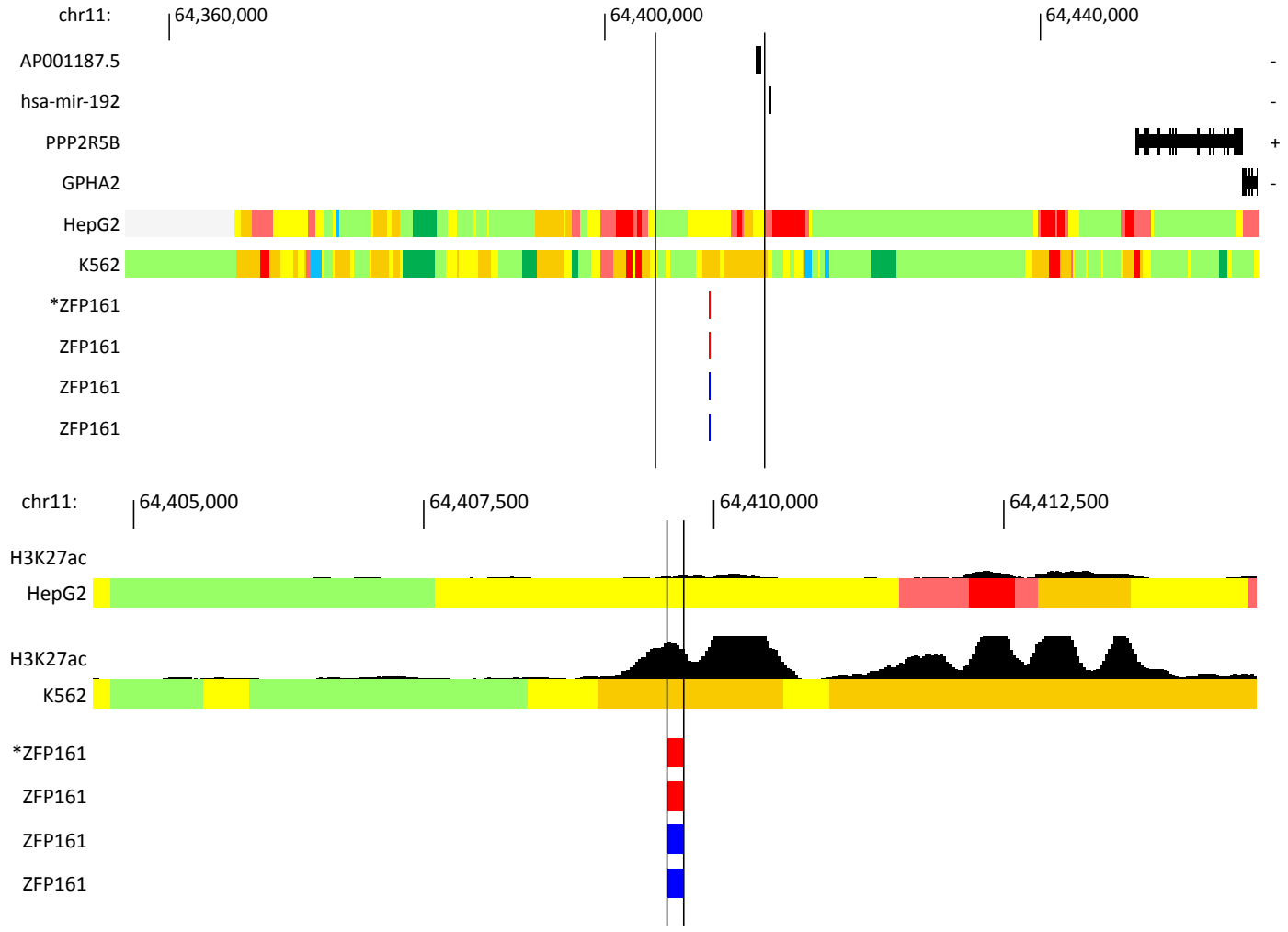
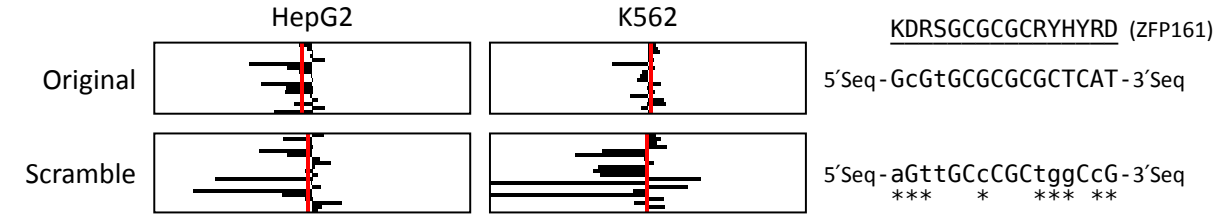
1512 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr11 64409662 64409677 - (hg18)





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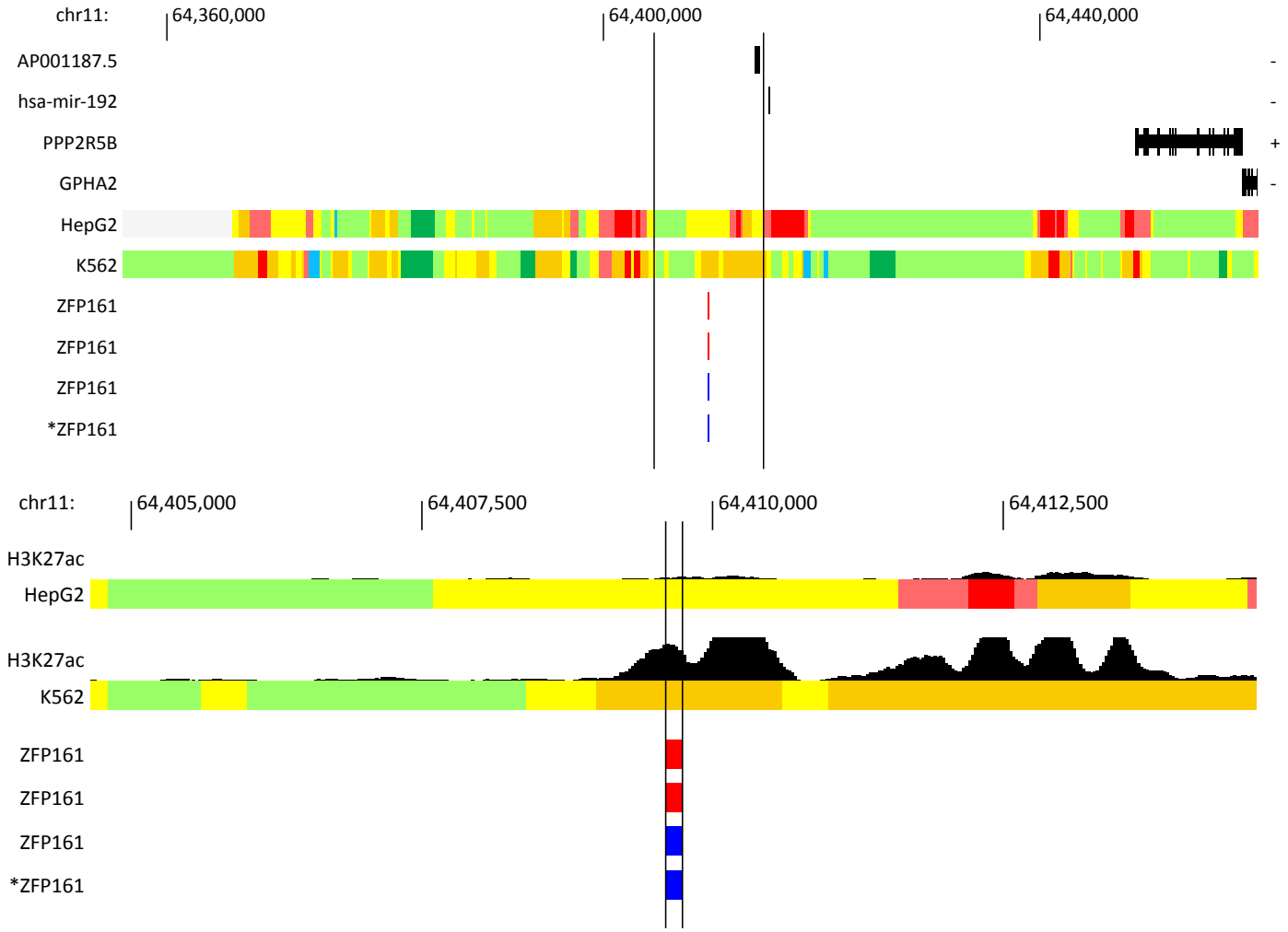
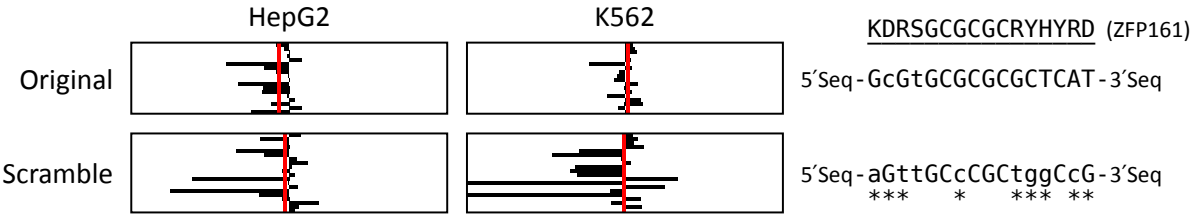
1513 ZFP161 in K562 enhancer

chr11 64409662 64409677 - (hg18)





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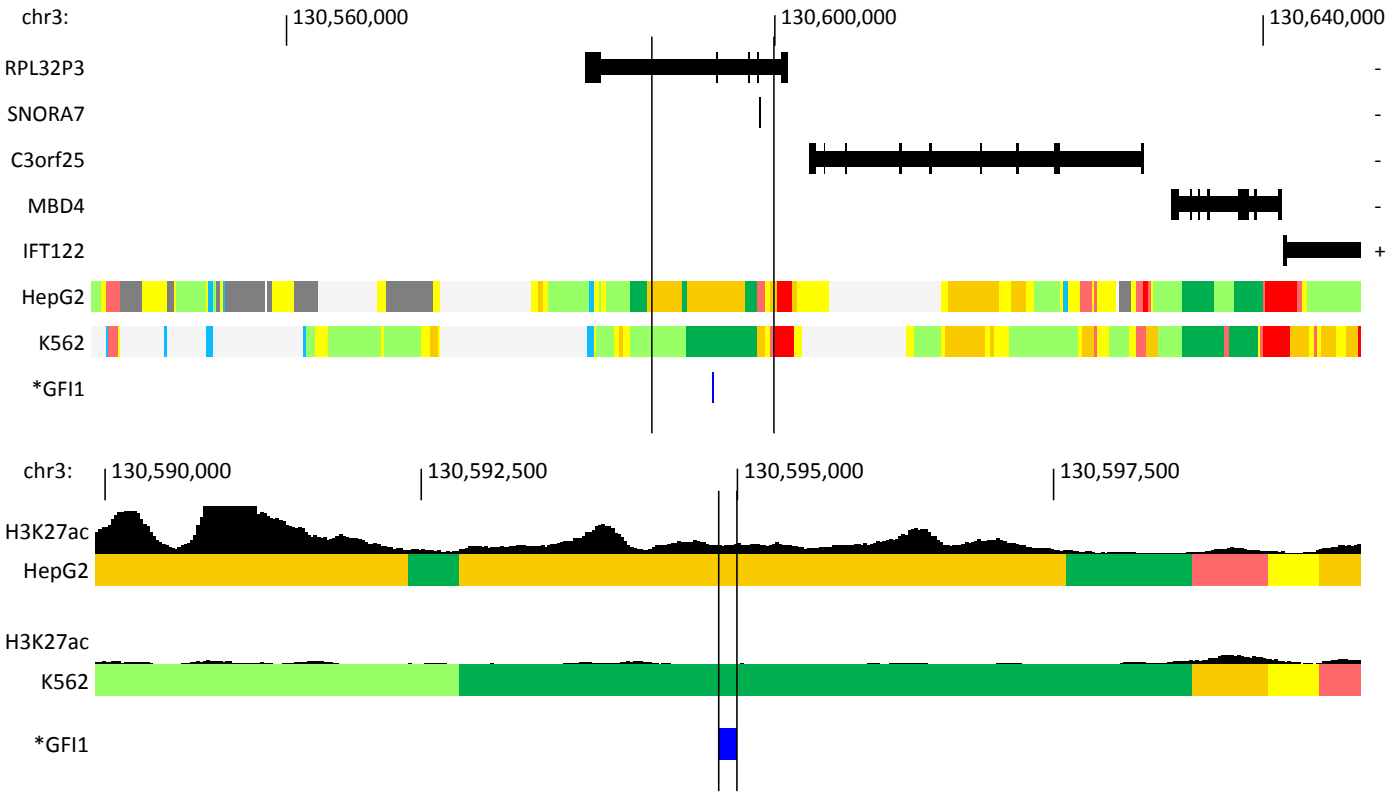
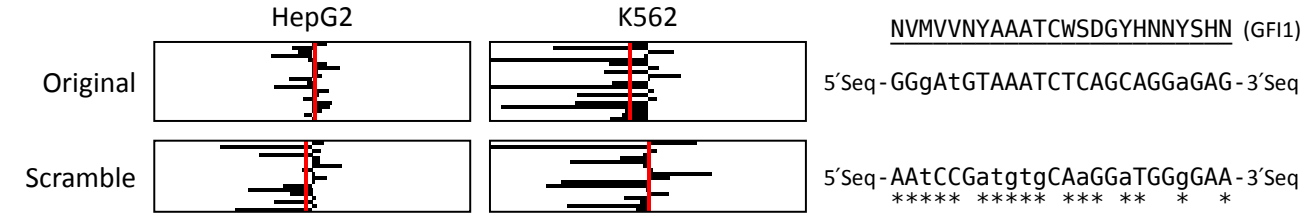
1514 GFI1 in HepG2 enhancer

chr3 130594913 130594936 + (hg18)





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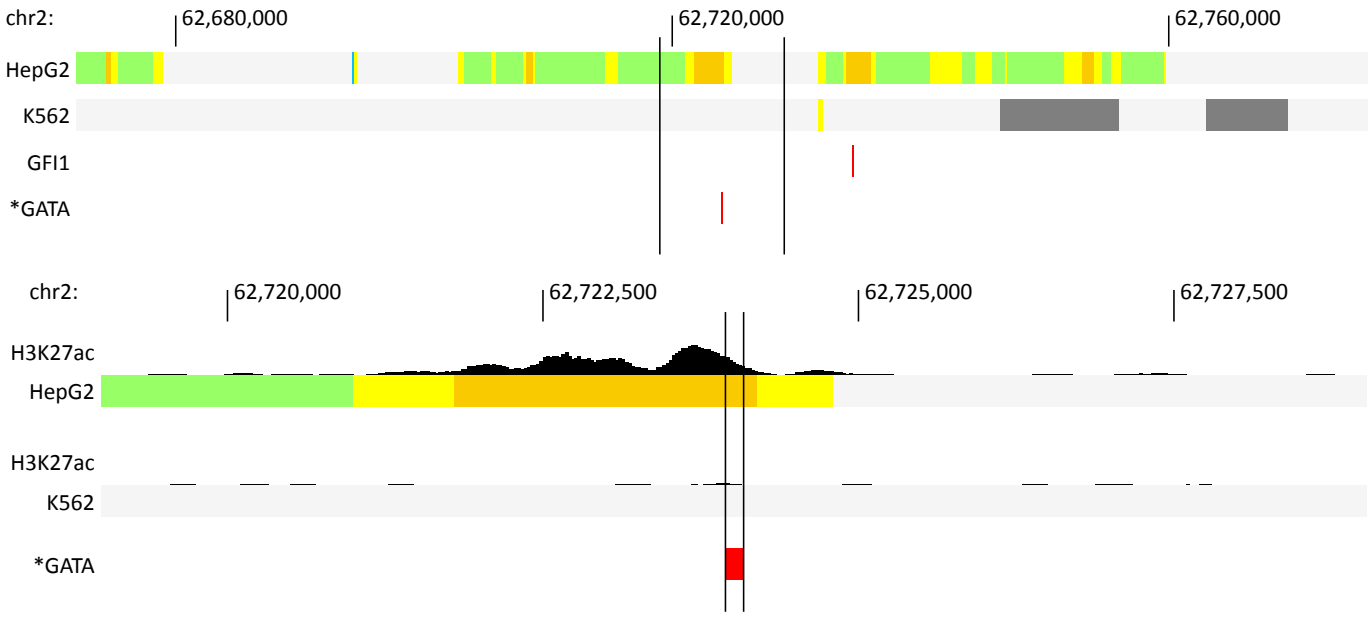
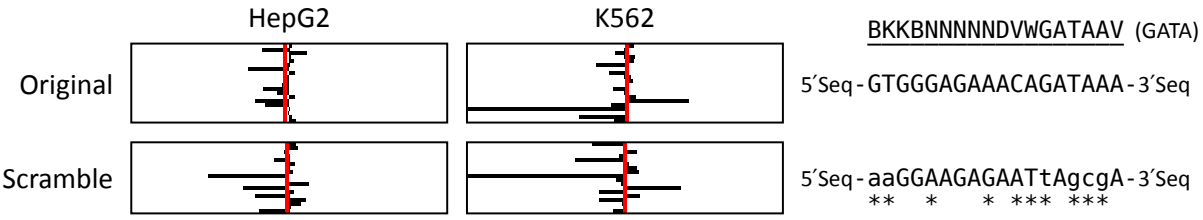
1515 GATA in HepG2 enhancer (conserved at 70% confidence)

chr2 62724010 62724027 - (hg18)





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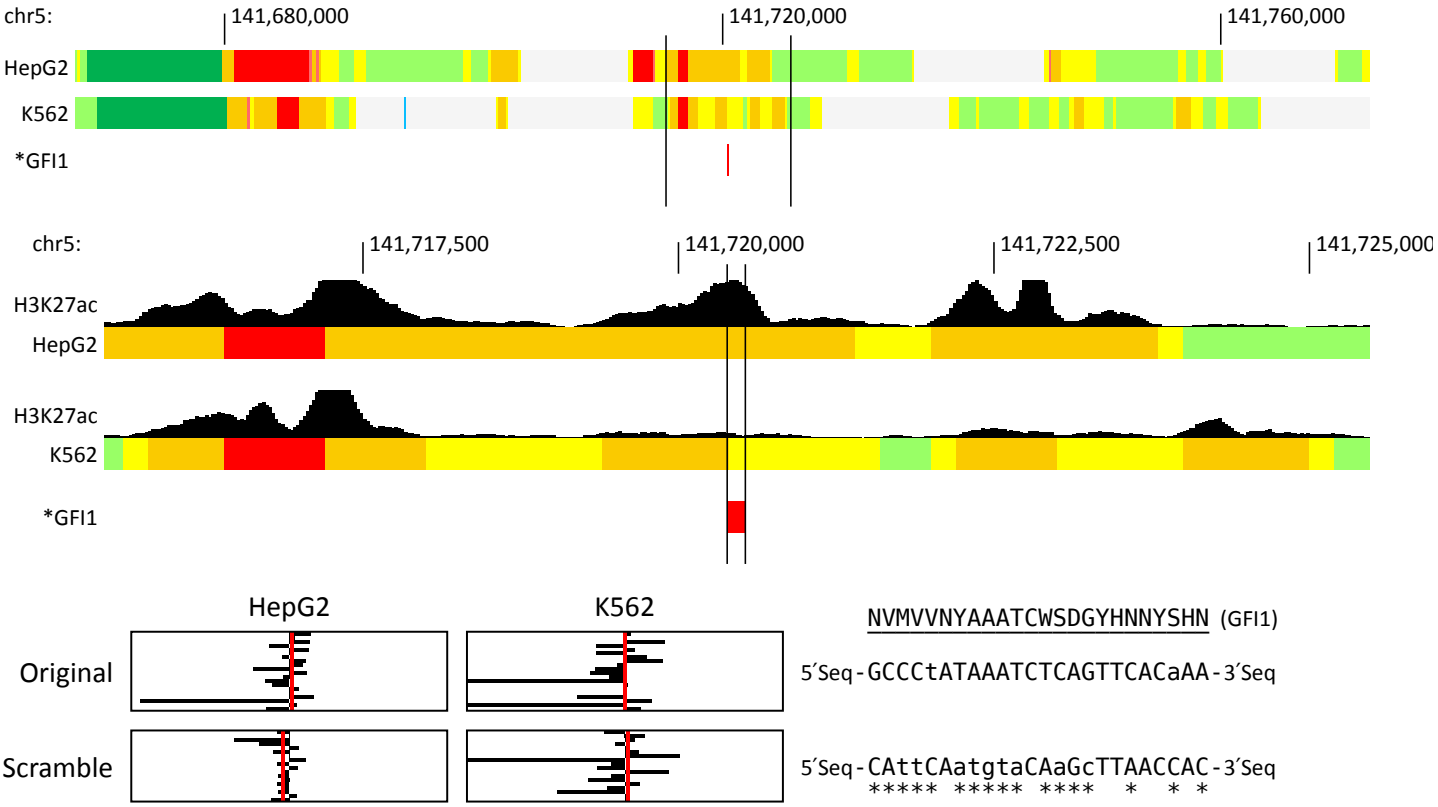
1516 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr5 141720447 141720470 - (hg18)



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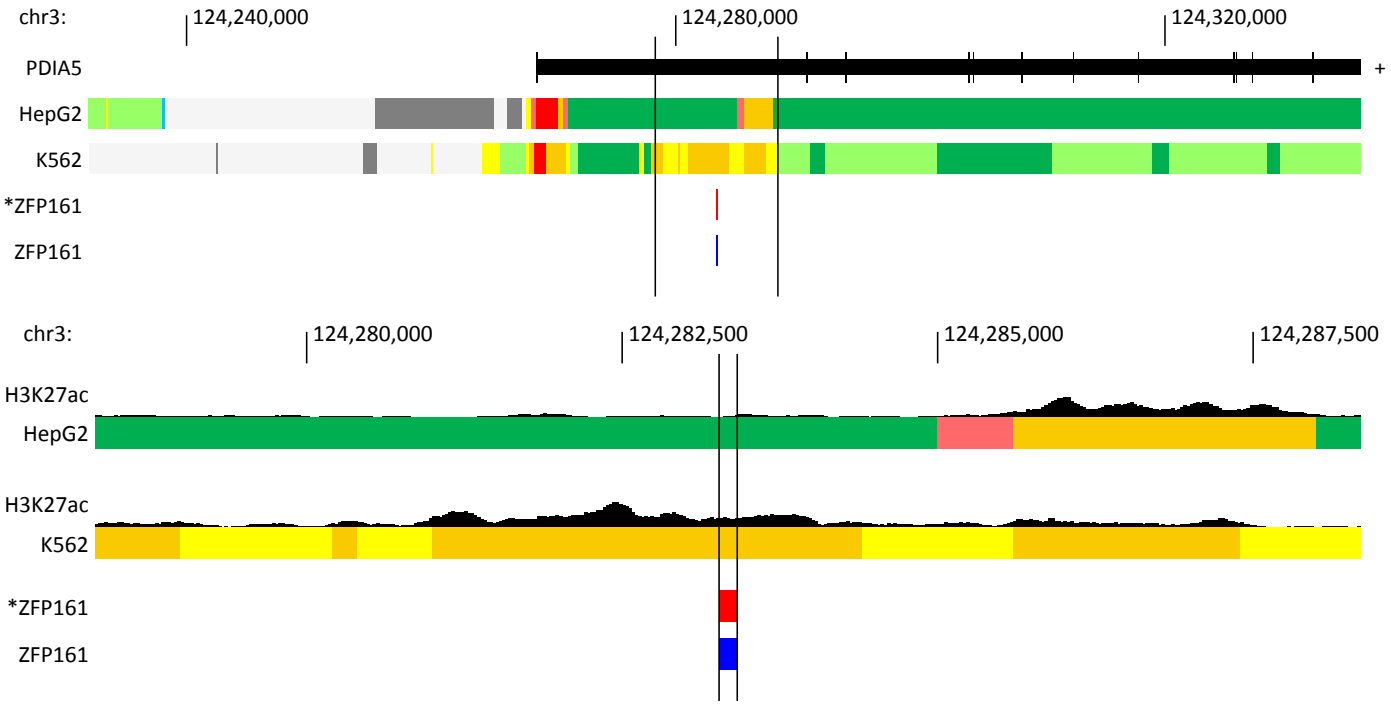
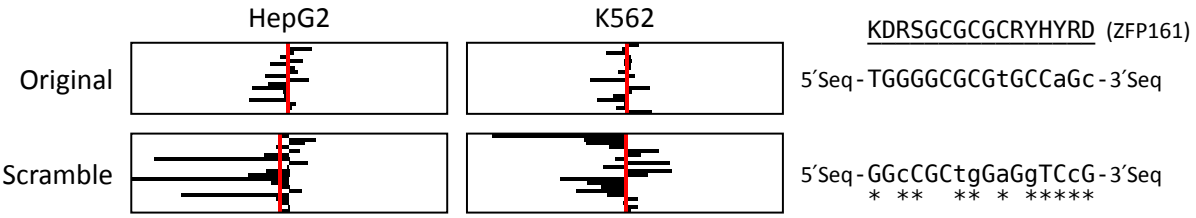
1517 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr3 124283333 124283348 - (hg18)





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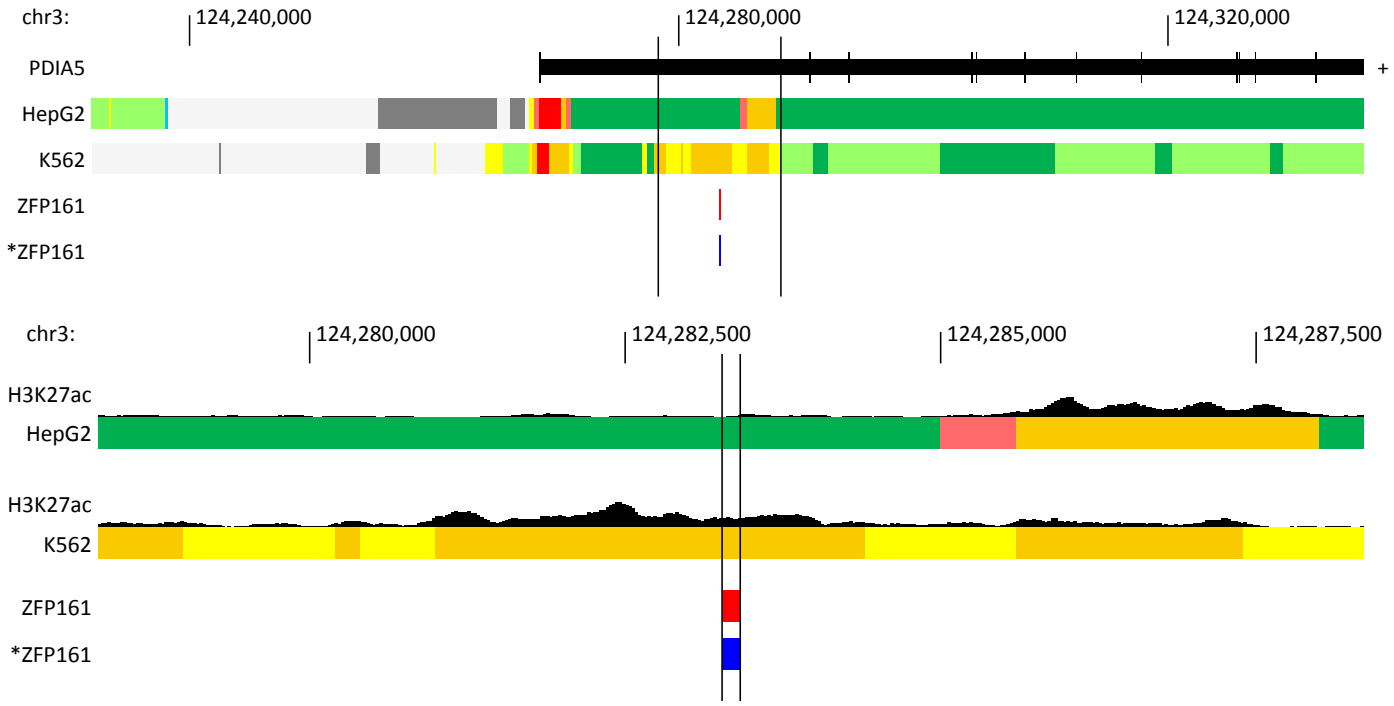
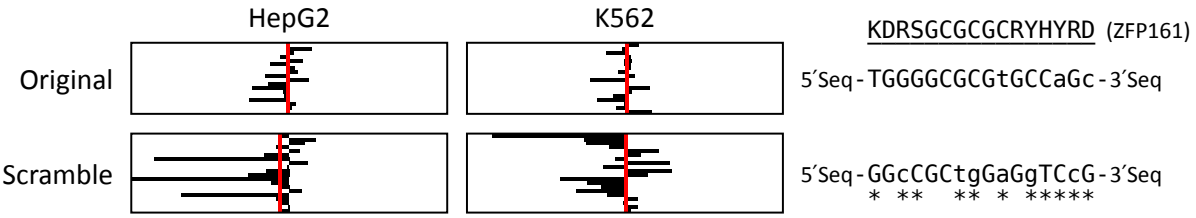
1518 ZFP161 in K562 enhancer

chr3 124283333 124283348 - (hg18)





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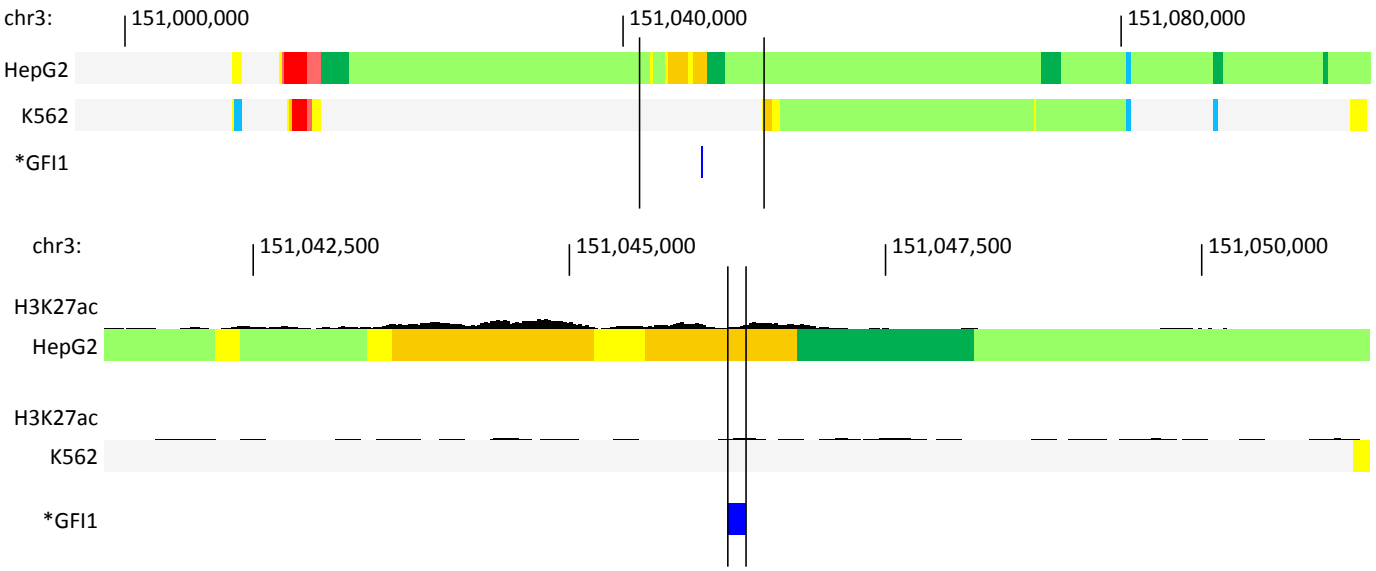
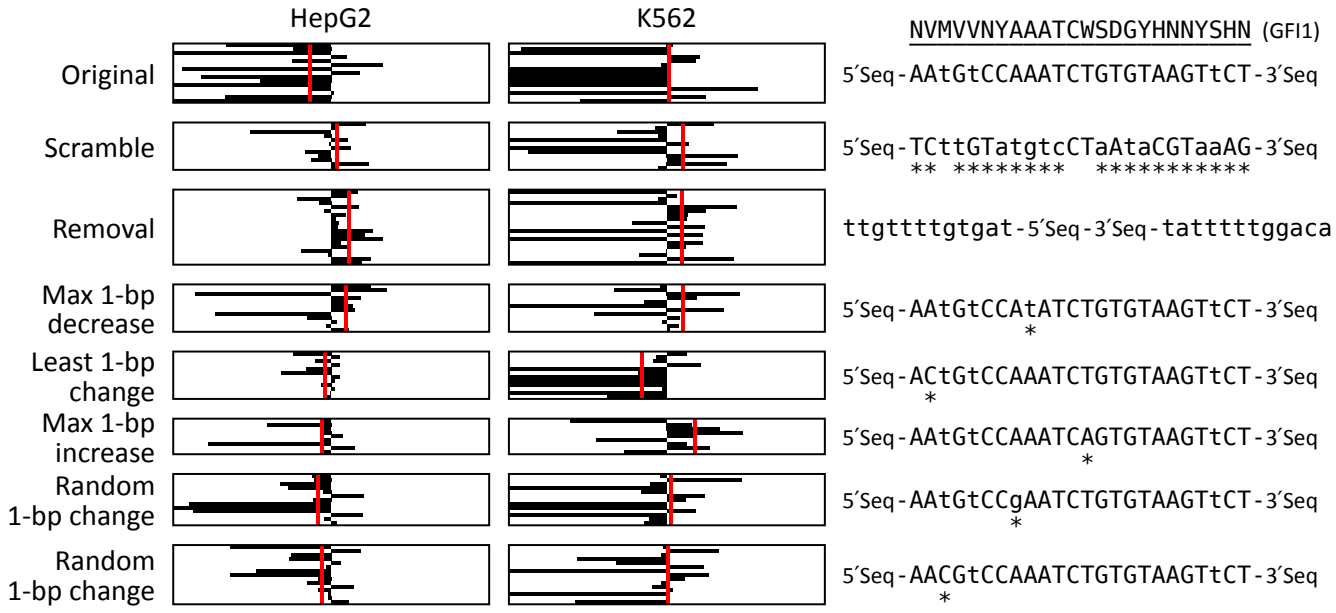
1519 GFI1 in HepG2 enhancer

chr3 151046314 151046337 + (hg18)





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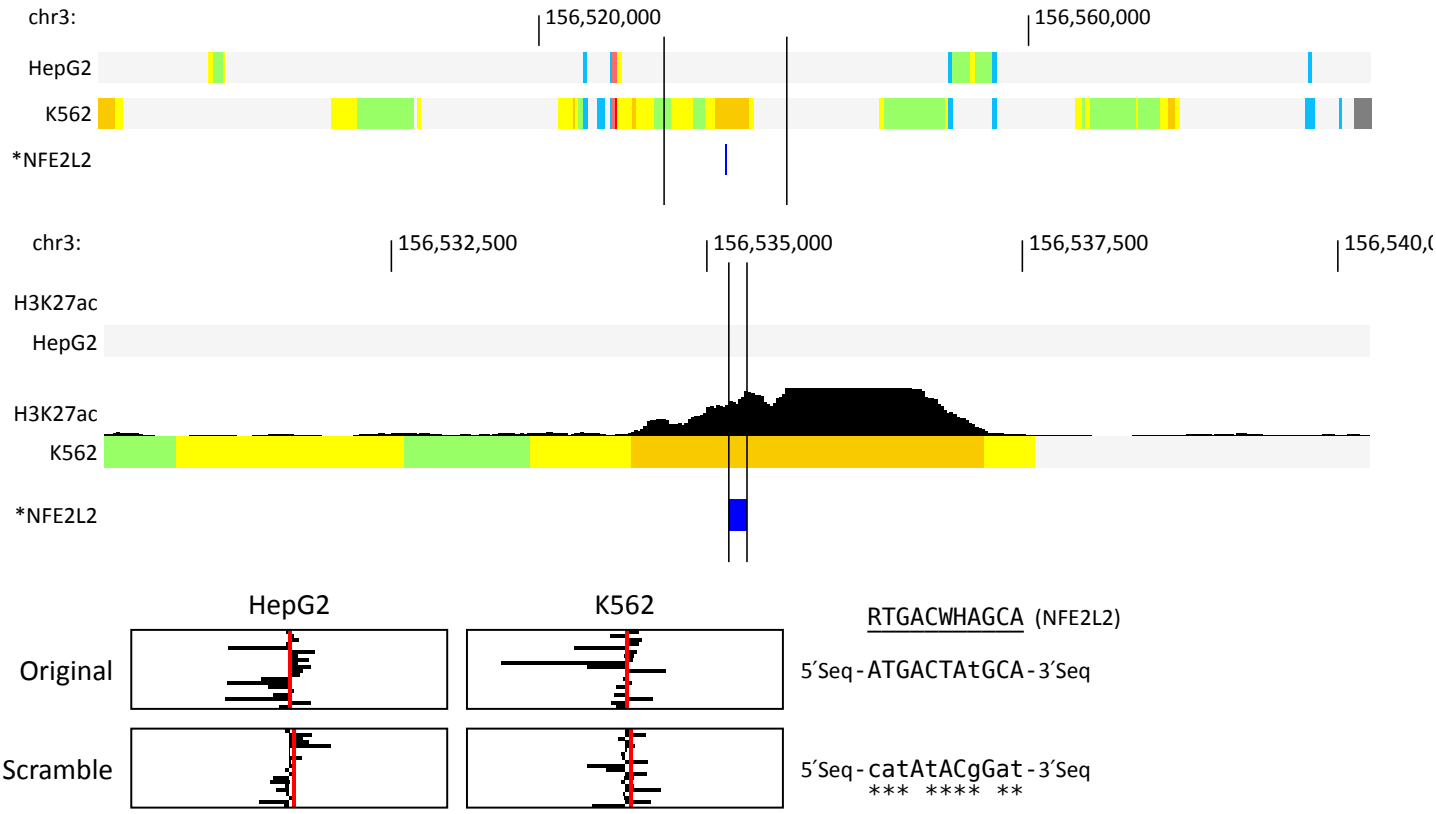
1520 NFE2L2 in K562 enhancer

chr3 156535241 156535251 - (hg18)



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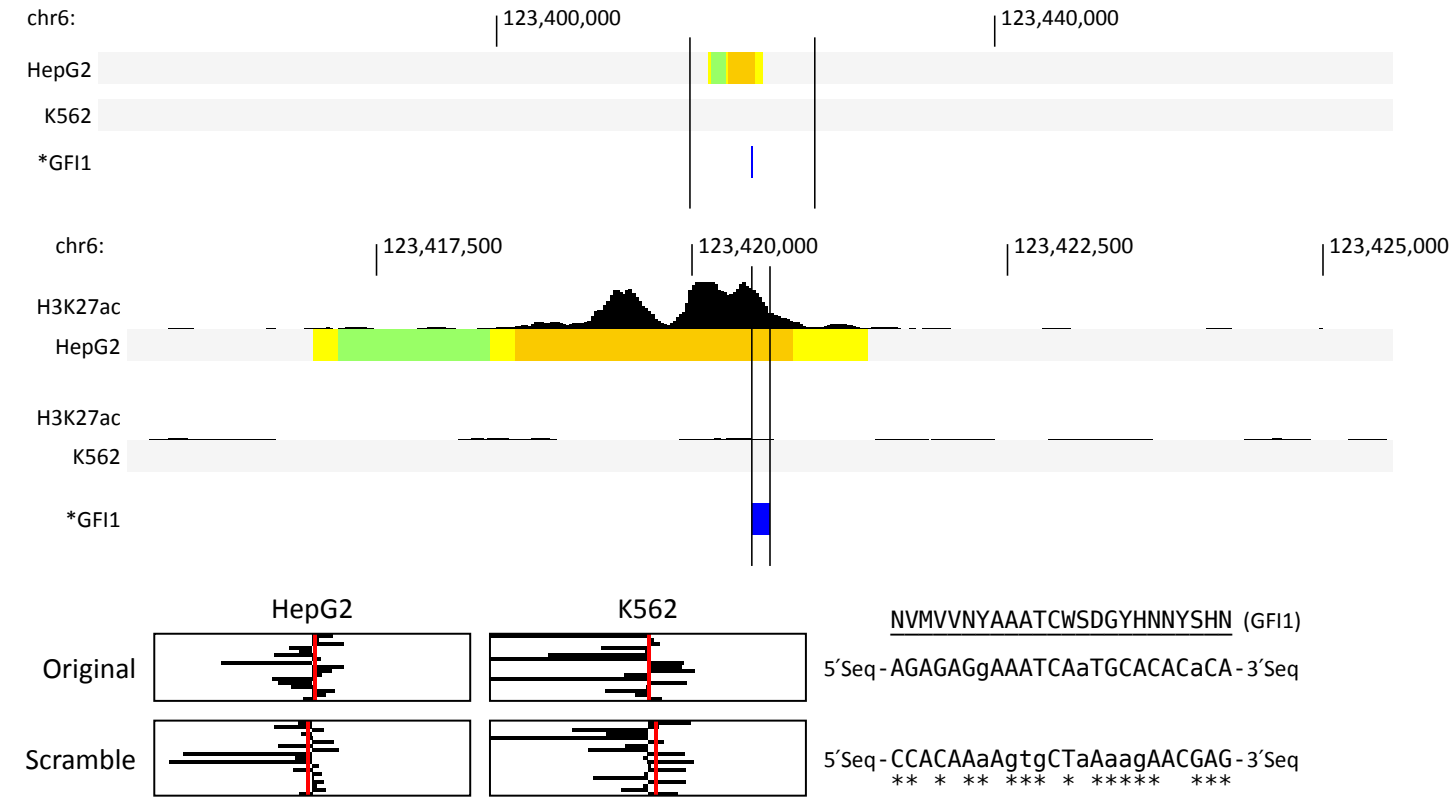
3′Seq = tttattttcttctatctaaaatgtaattccttttctgaatacgttttacaaaacgaataaagtctct

1521 GFI1 in HepG2 enhancer

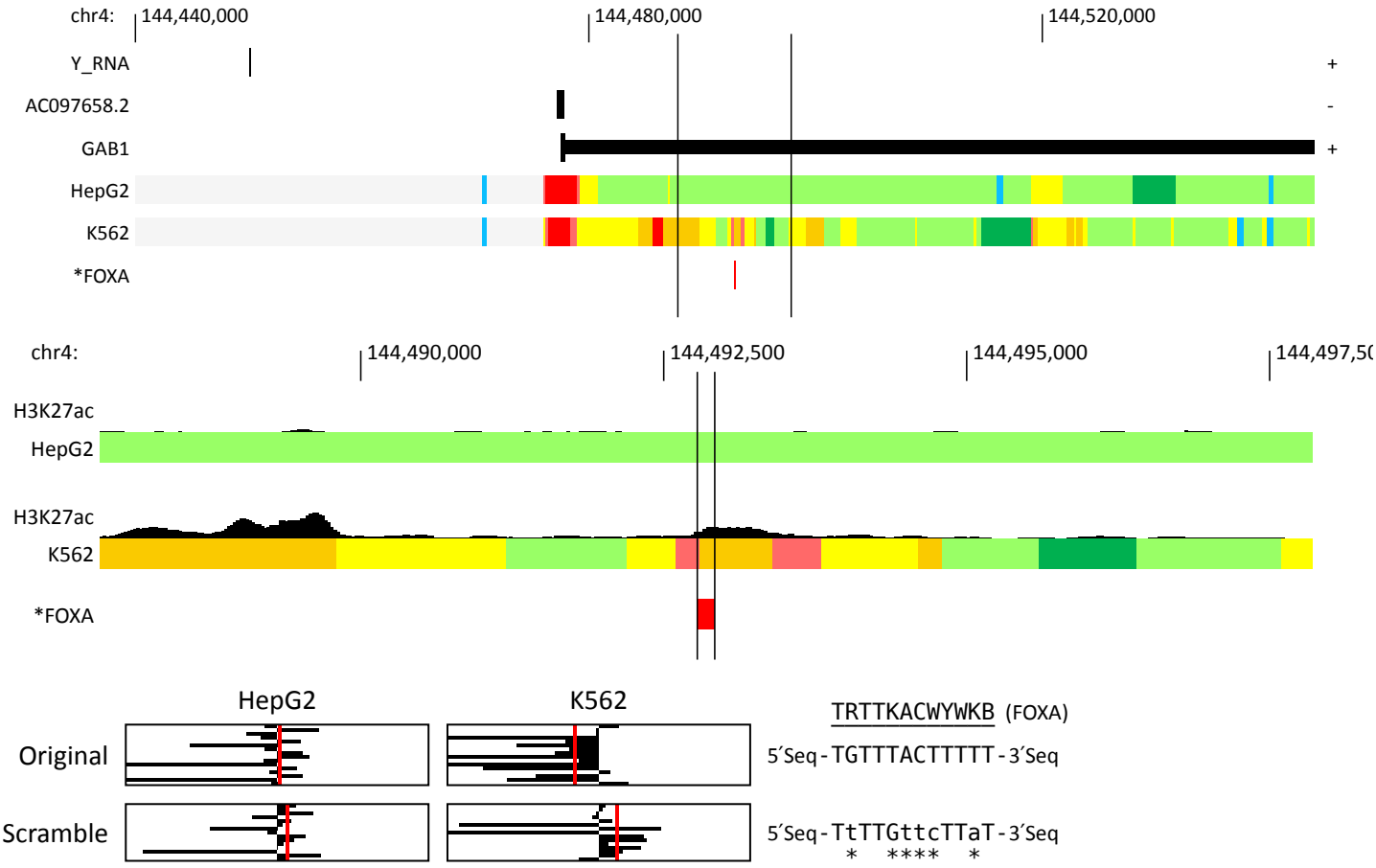
chr6 123420535 123420558 - (hg18)



5′Seq = attagagcagggaaaatttctggcctttccgttctctccaaggagttgtgcagcagcctgg
3′Seq = tactaacaacaatcacaacagaggcagcagcataaaagagaccatcctggccaggcgcaa

1522 FOXA in K562 enhancer (conserved at 40% confidence)

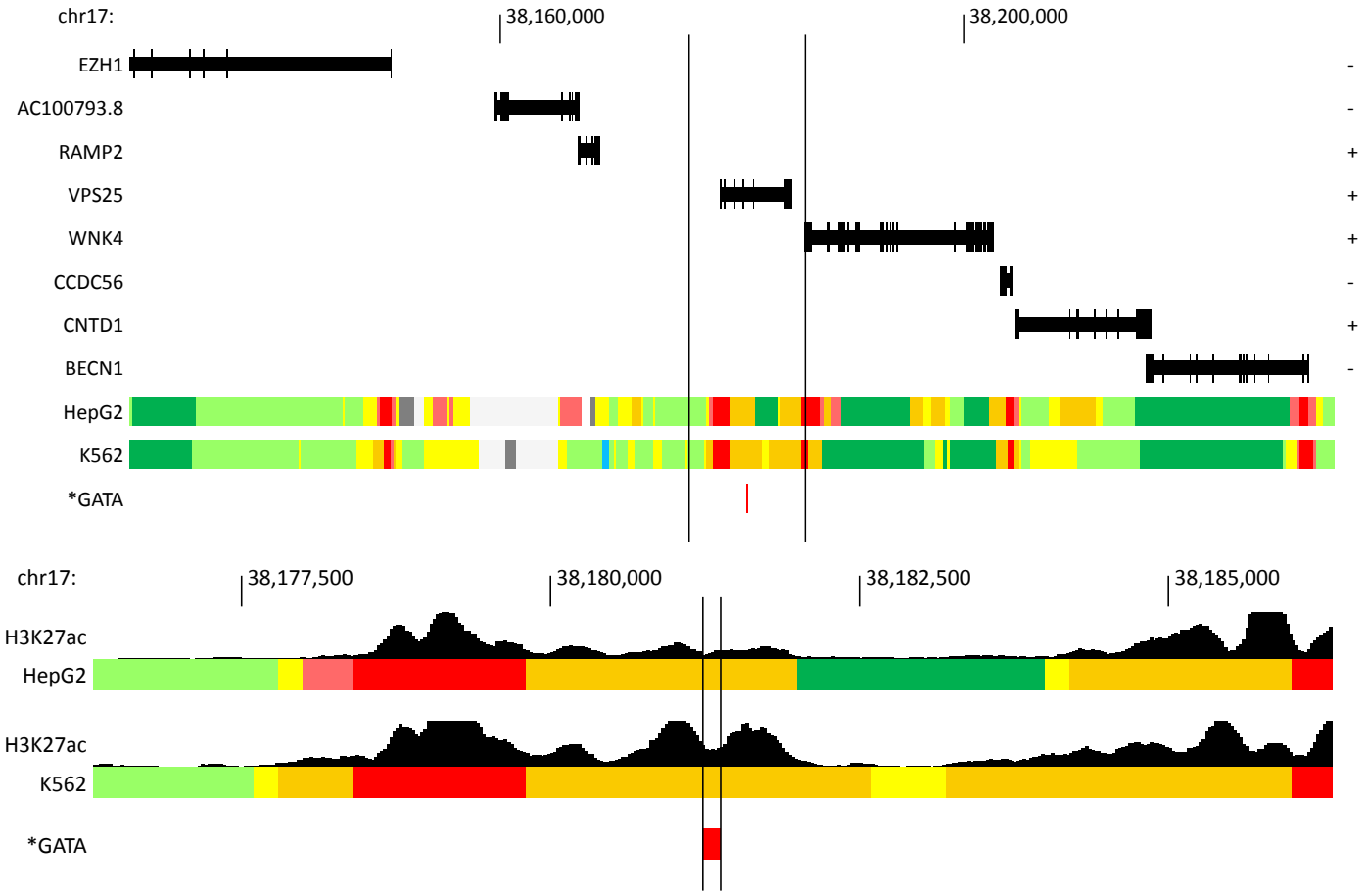
chr4 144492844 144492855 + (hg18)

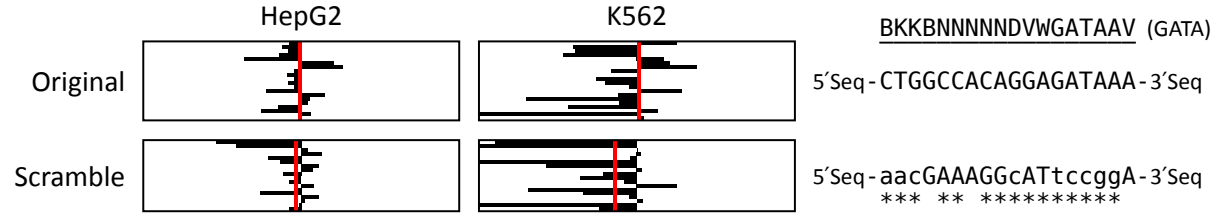


5′Seq = tttattcatgcattttattacctcttggctgcaatatcaccattcattgttcacaagccacccagct
3′Seq = ataaattacatgtaatcaagtcctcttgcaggtctggctactgtaattggcagcagccacagagca

1523 GATA in K562 enhancer (conserved at 60% confidence)

chr17 38181297 38181314 + (hg18)

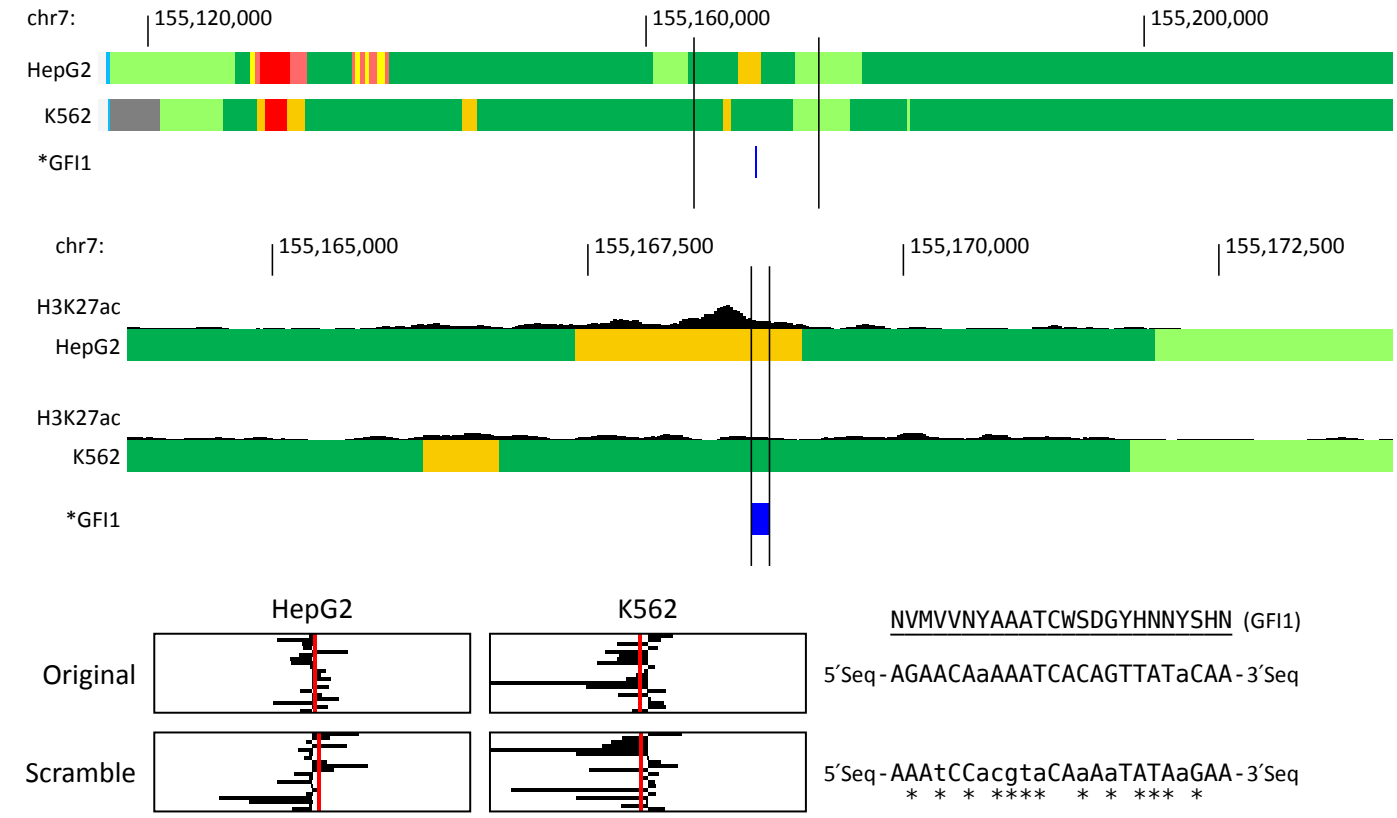




5′Seq = atgtgaggccatatttggagaatgcagaactgggaaccctgagtgctattgttggctggagcct
3′Seq = tggggaaaggaagggaaaaaacctggggccctccccactgcactgttatgggactgtccac

1524 GFI1 in HepG2 enhancer

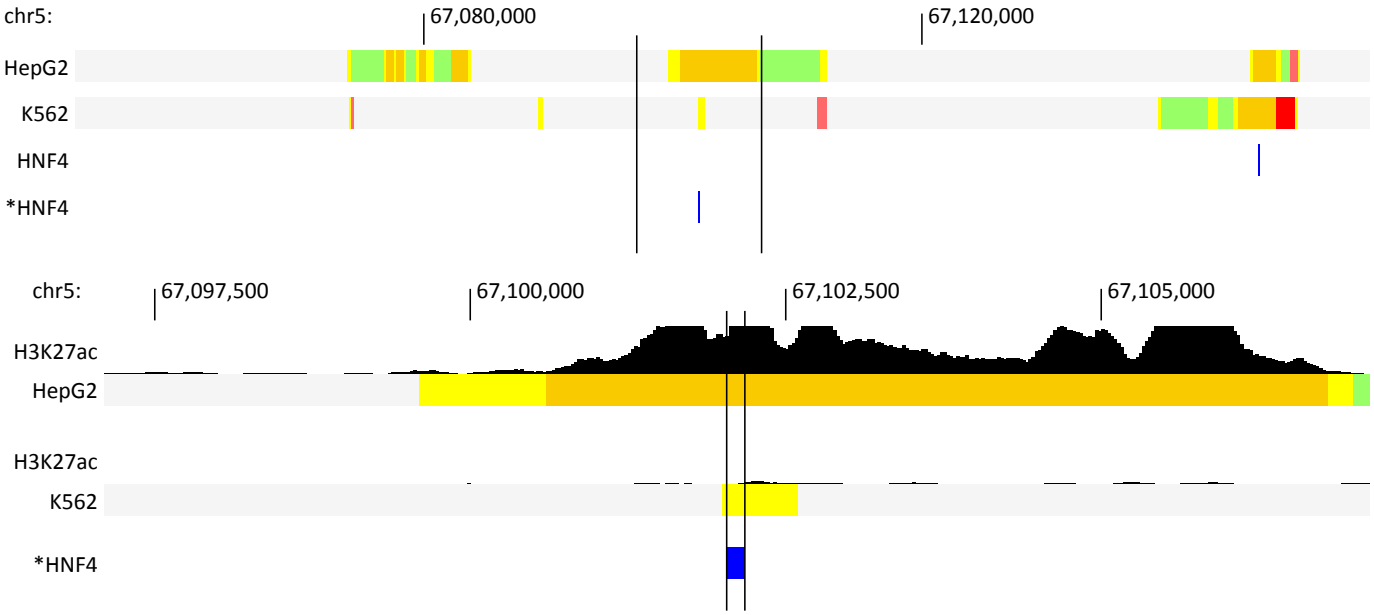
chr7 155168856 155168879 - (hg18)

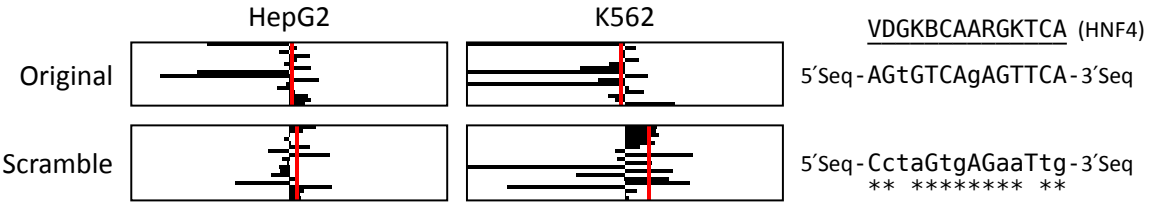


5′Seq = ggttccaacagatccacatttcagagttcaagtcttagagtgggggttaacaacccaaggg
3′Seq = gtcatttaataaactaaaatgccattggggtacacagagacacaatctgctcatgtgttc

1525 HNF4 in HepG2 enhancer

chr5 67102098 67102111 + (hg18)

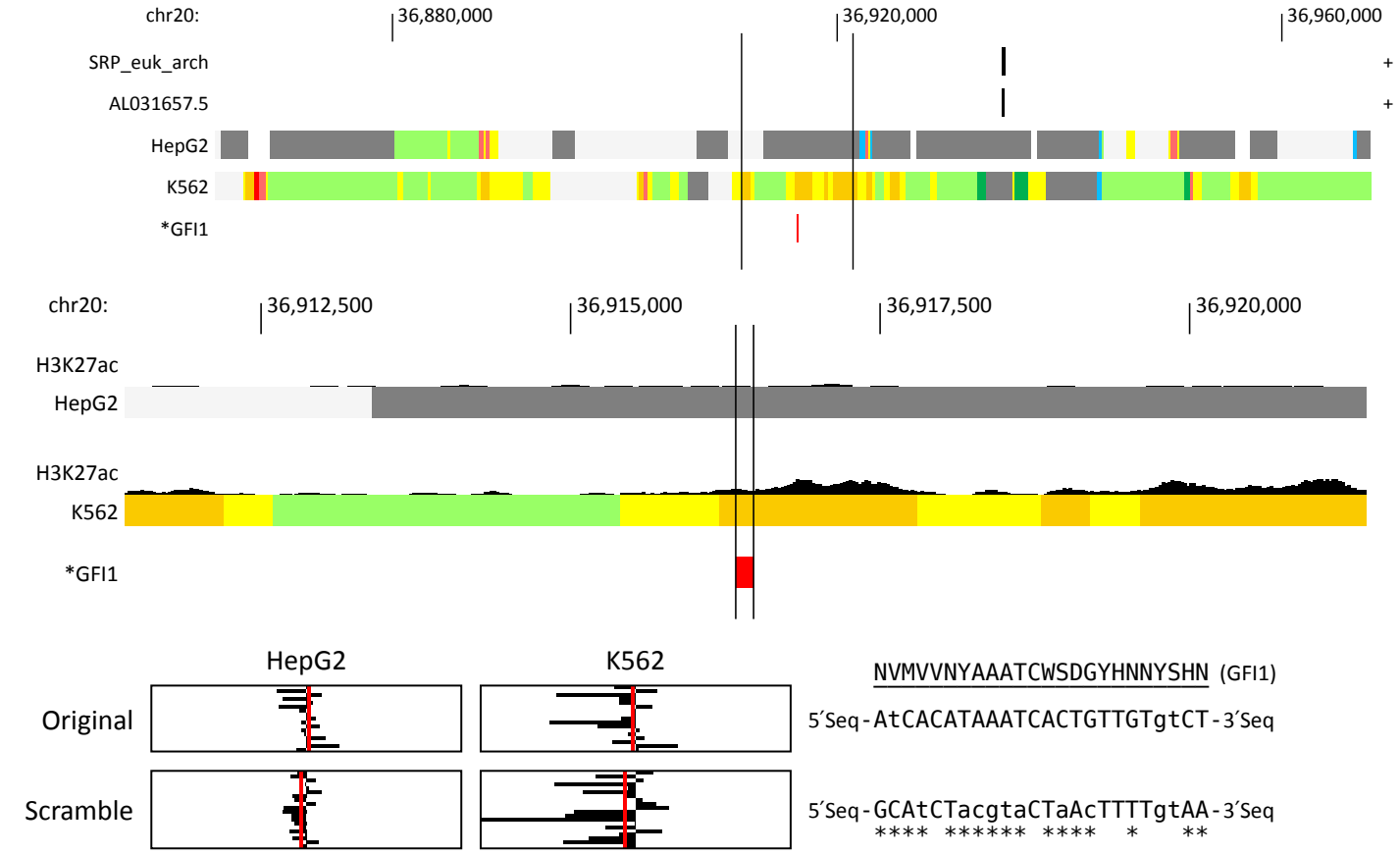




5′Seq = gtggcttcagagcaaaaaacctctaacaaaggccagcagcagaagtgtttggacaatgttgtacgc
3′Seq = gcagttggaaagattgtttctttgccatcaaatattttaaatttctggcaggggtggagtgagag

1526 GFI1 in K562 enhancer (conserved at 40% confidence)

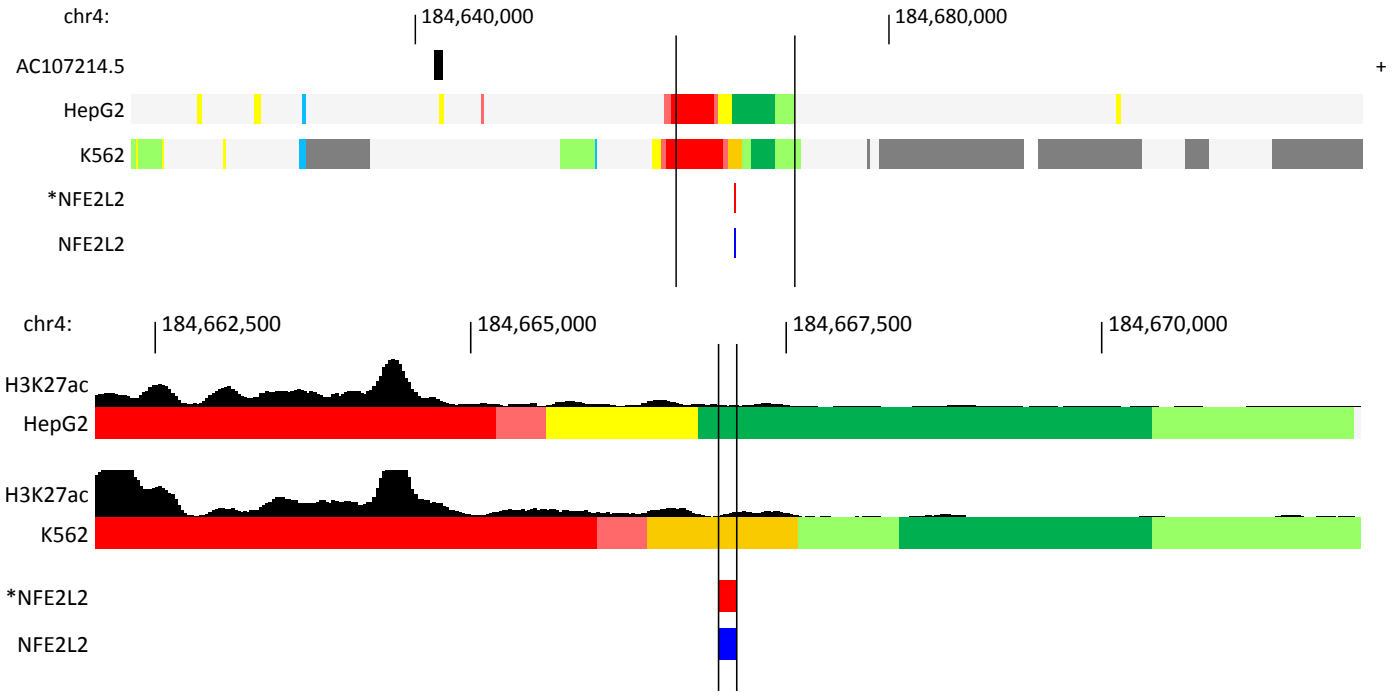
chr20 36916395 36916418 - (hg18)

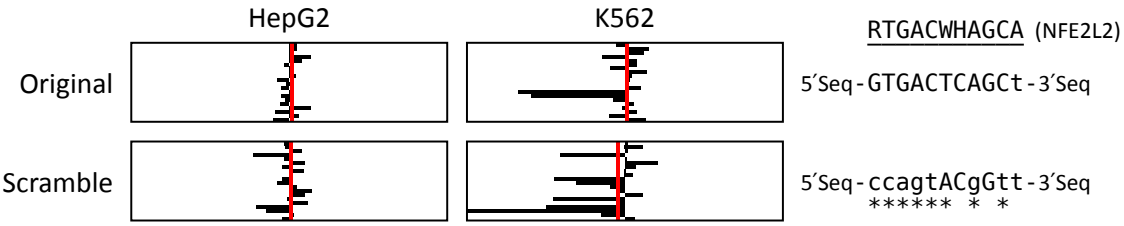


5′Seq = tgttacaacatcaatccagactttaatcccaattattgaaggttcaacataatattataaa
3′Seq = atgcagctaataggctaataaaattaaatcagcatatgcgccattgcccagtgctgaatt

1527 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr4 184667031 184667041 + (hg18)





5′Seq = aaactaatcttaagtaaatttttggtgacatctgaaattatattttcagatttttggataccttcta
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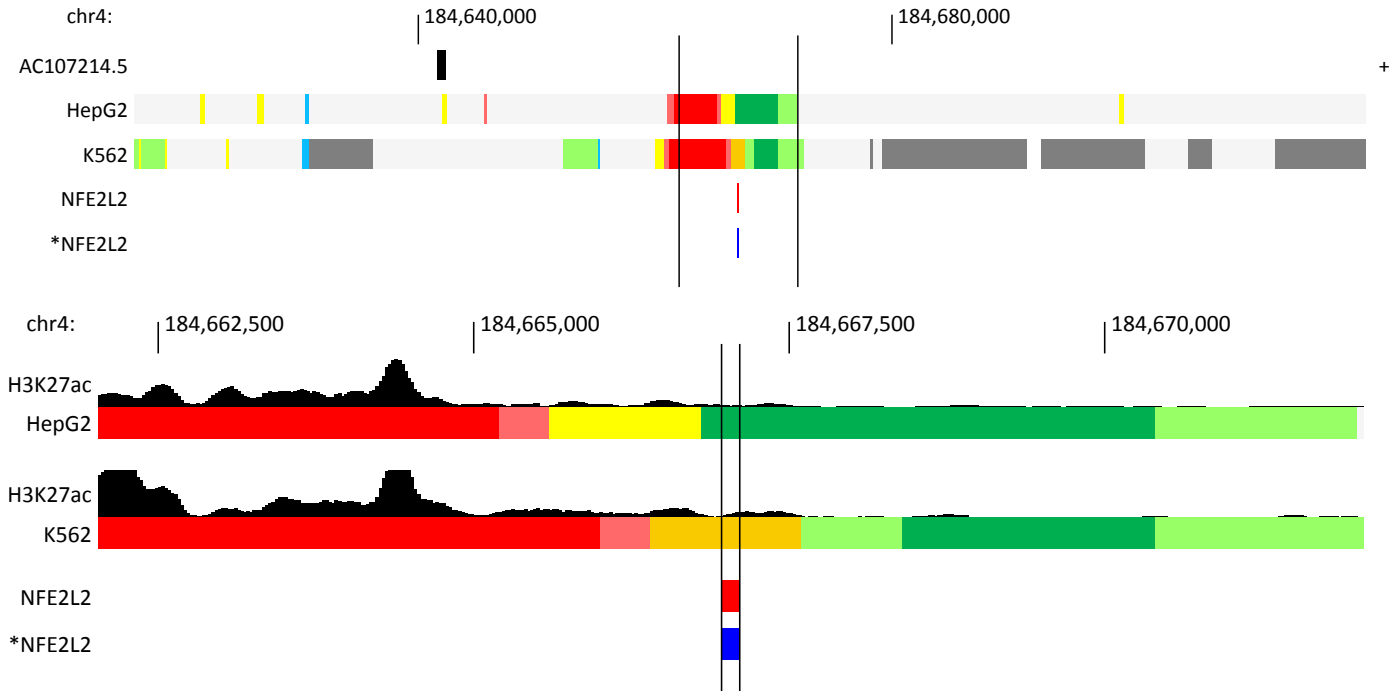
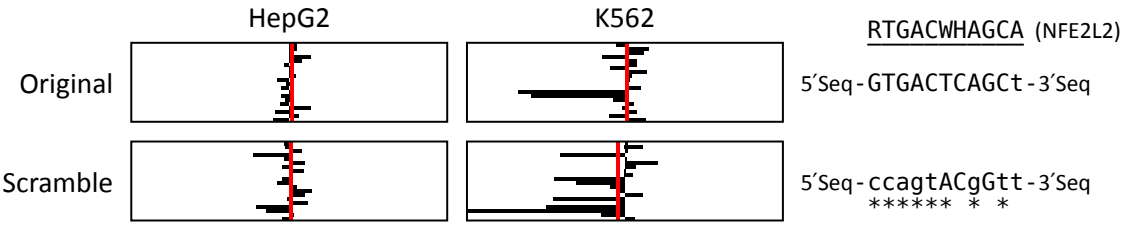
1528 NFE2L2 in K562 enhancer

chr4 184667031 184667041 + (hg18)

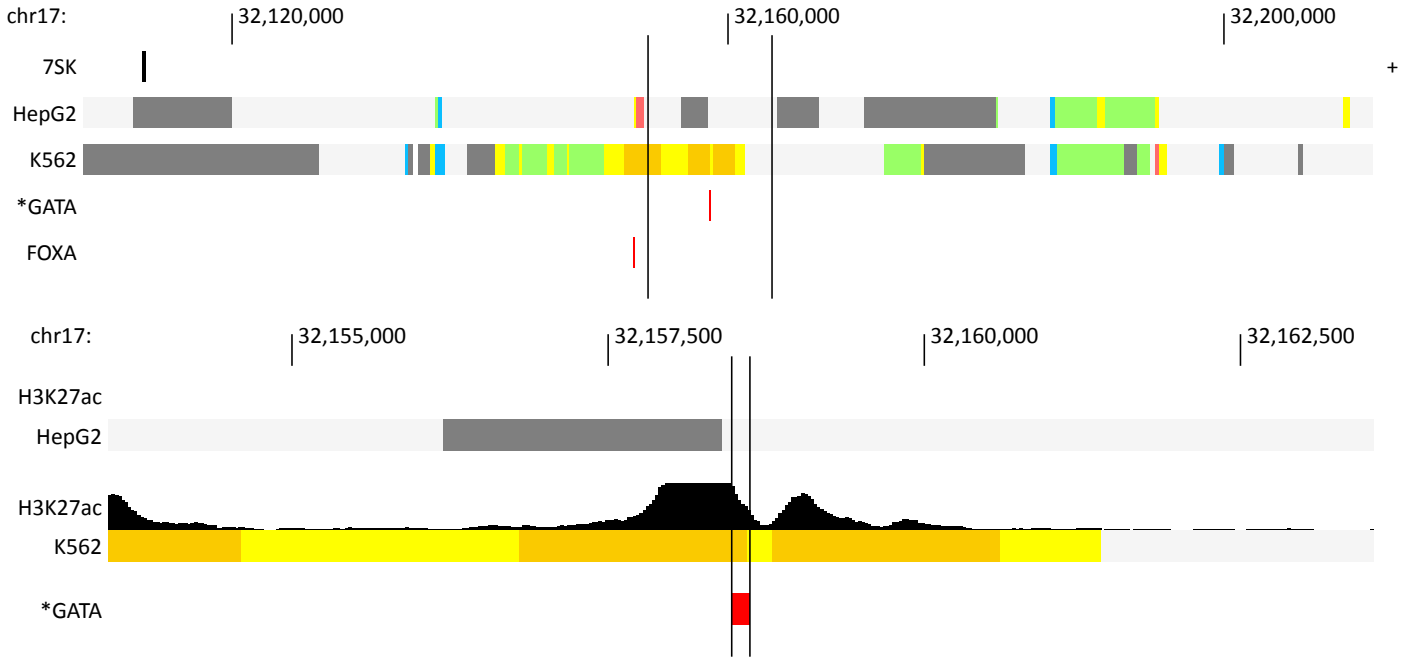


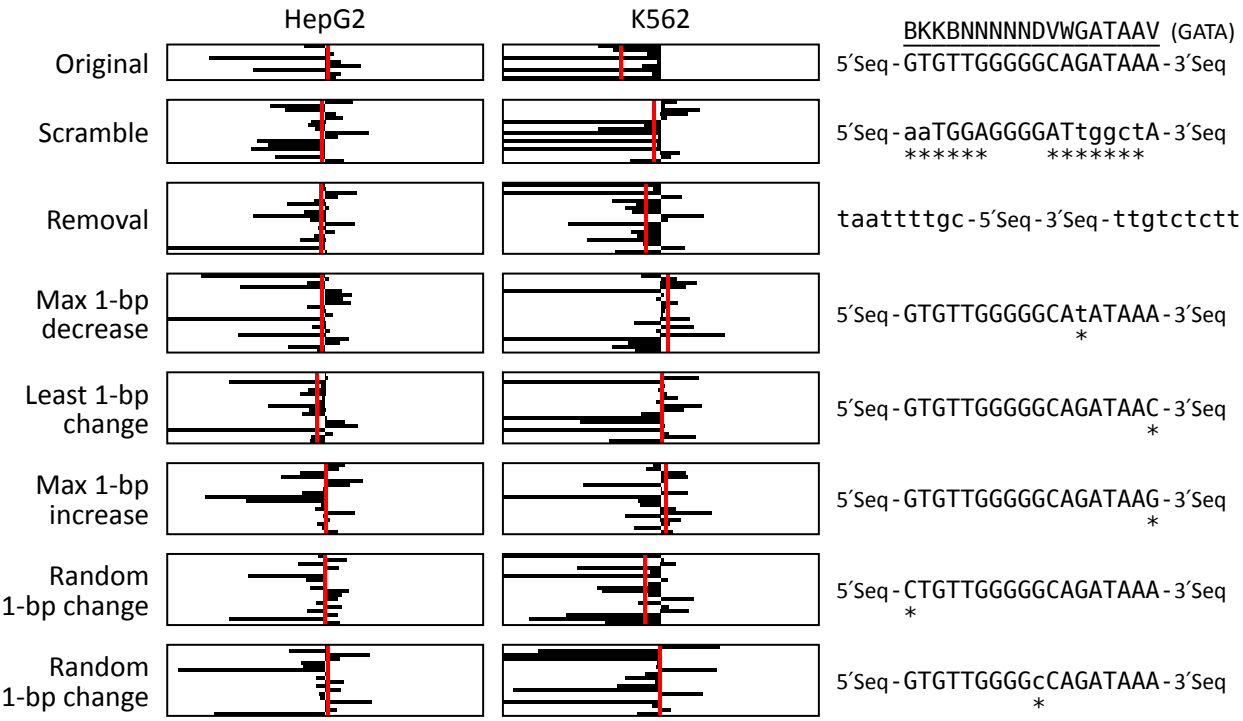


5′Seq = aaactaatcttaagtaaatttttggtgacatctgaaattatattttcagatttttggataccttcta
3′Seq = atttttacttgatttaagtaagtgtattccacgtgccatacaactaaatcagcagttcagaaagctc

1529 GATA in K562 enhancer (conserved at 70% confidence)

chr17 32158541 32158558 - (hg18)





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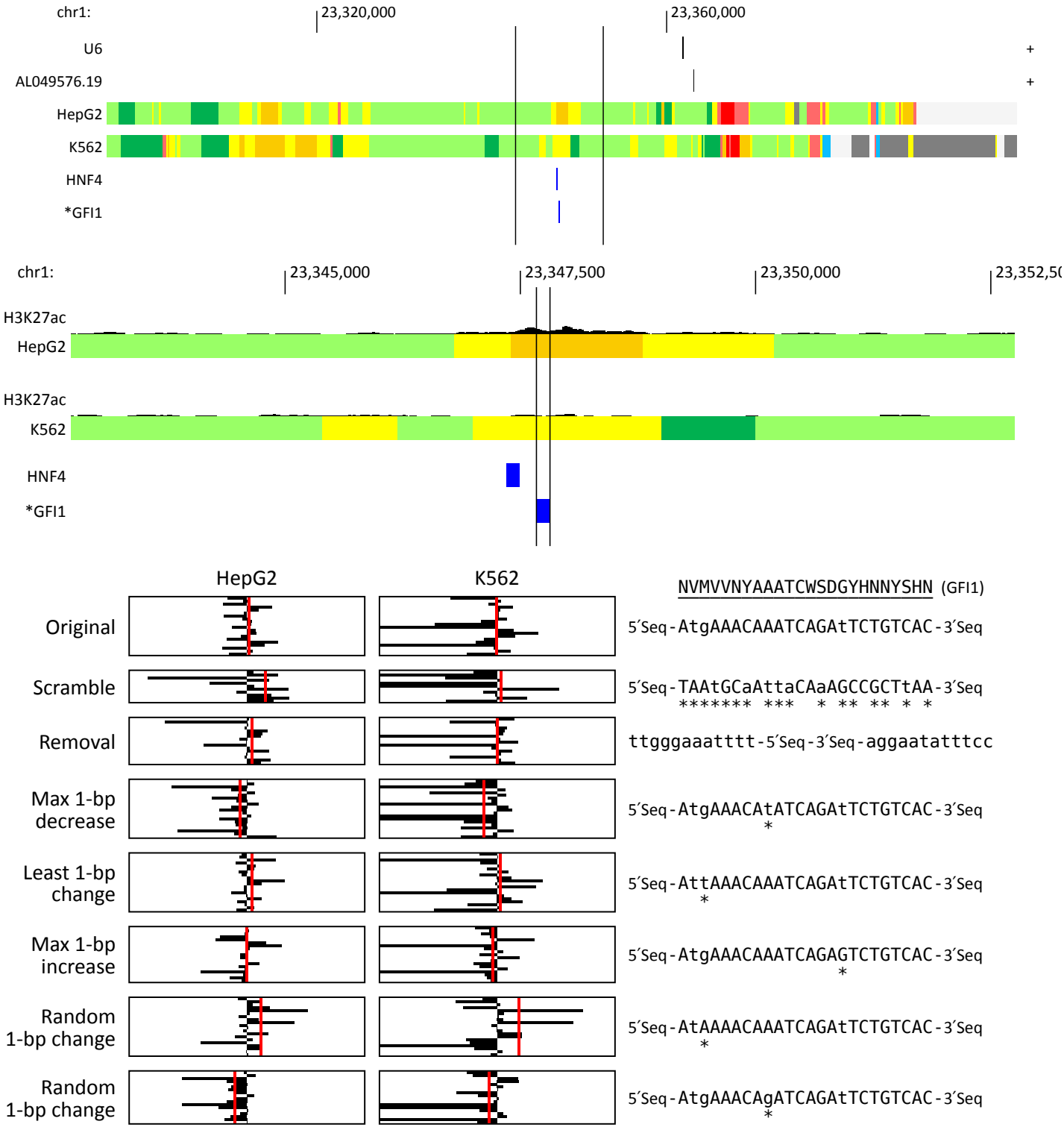
3′Seq = agaattagcagcagccaggggacggaggcctggagaacgggggagaattagaatgtctatct

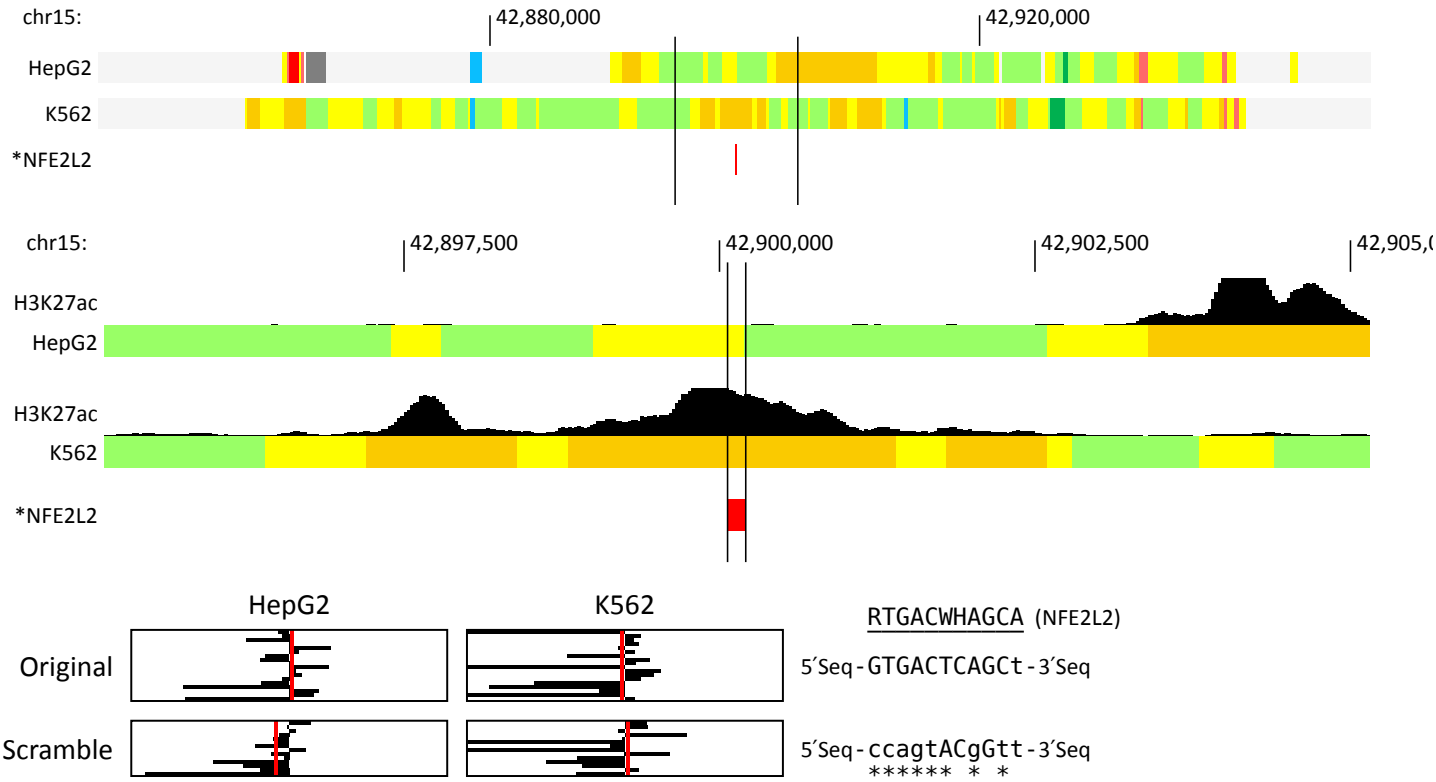
1530 GFI1 in HepG2 enhancer

chr1 23347732 23347755 - (hg18)



1531 NFE2L2 in K562 enhancer (conserved at 60% confidence)

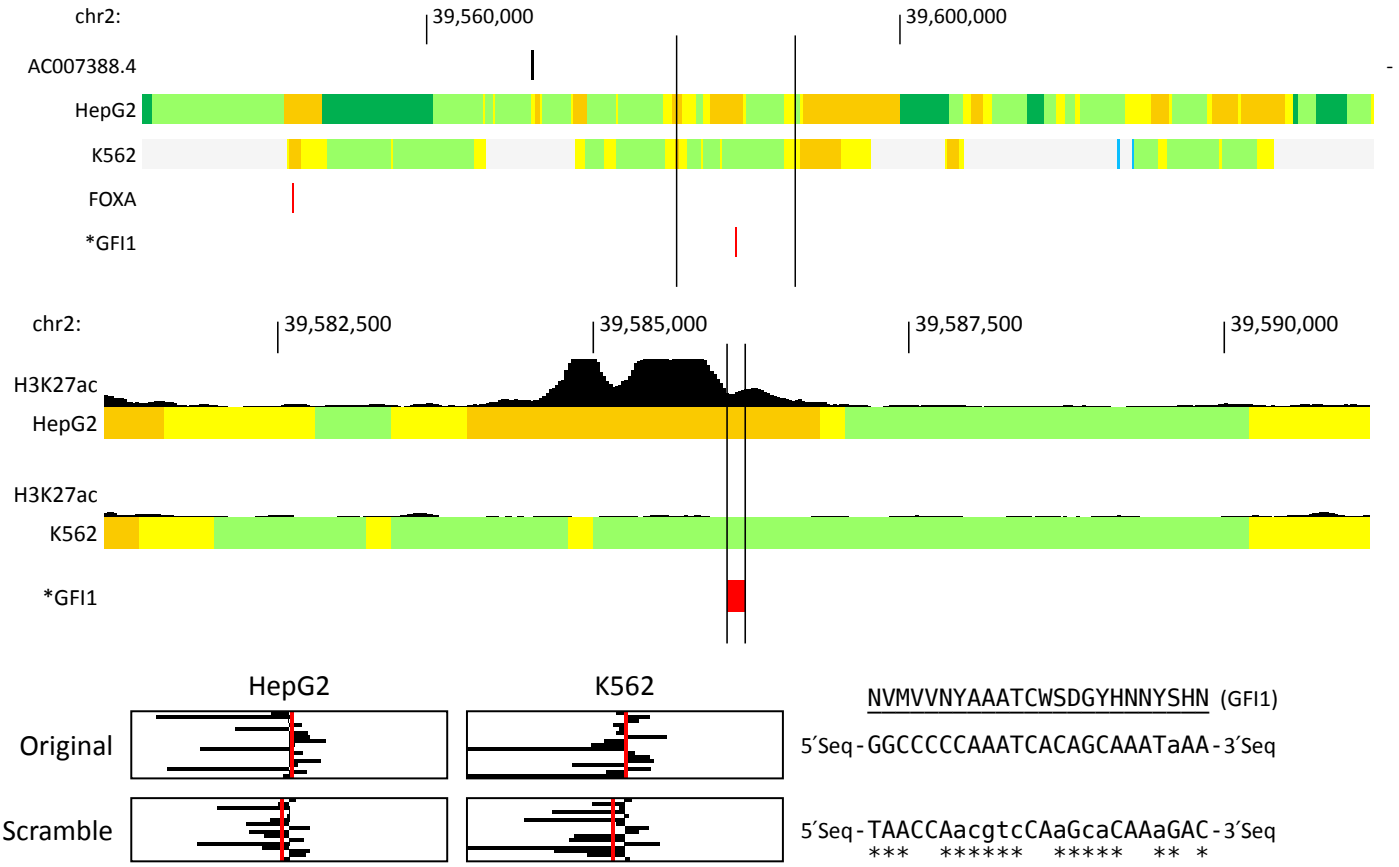
chr15 42900131 42900141 - (hg18)



5′Seq = tgtgagaaggtgaatgcggaaaaagctgggaggcaaggaactagtcatccagggcagactgaagaaa
3′Seq = ctggcctttggggactggggctgctggttctggggagcagctgggctttcagcatagcacagggaca

1532 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 39586121 39586144 - (hg18)



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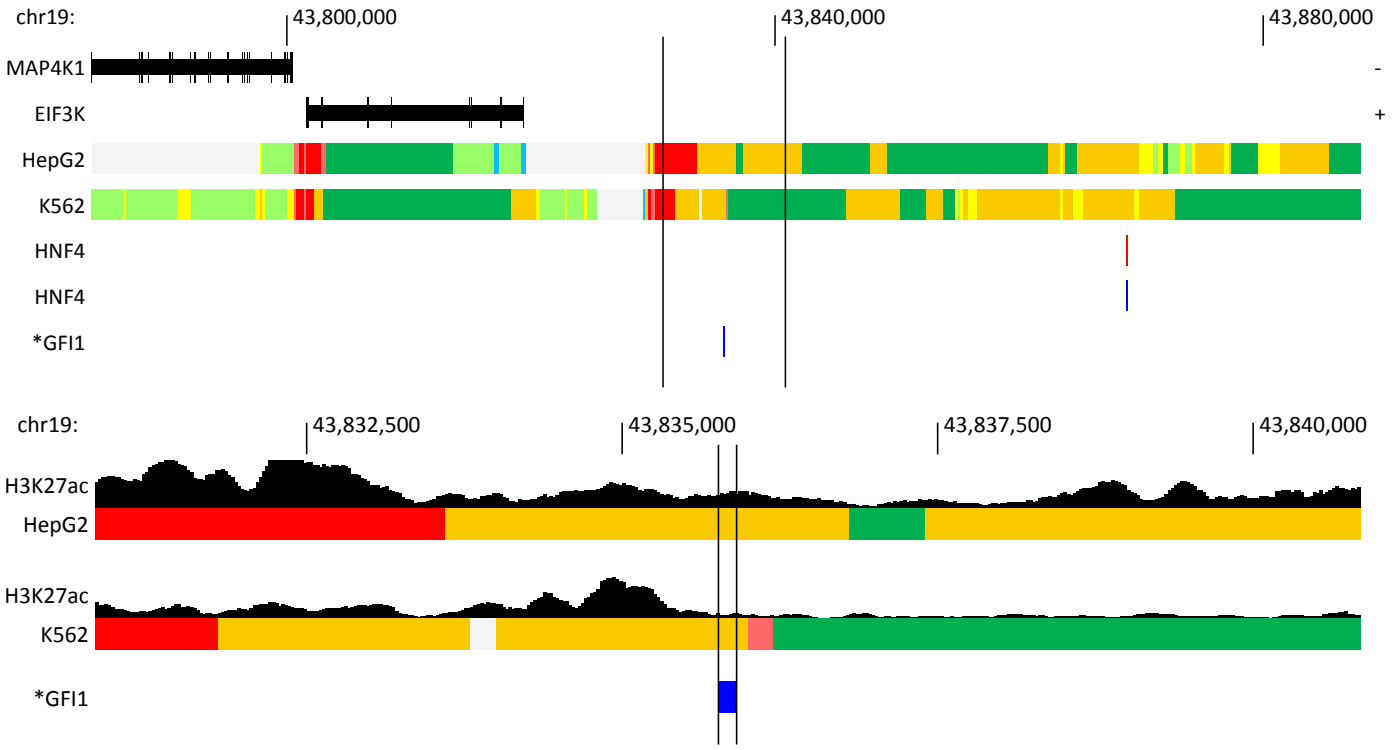
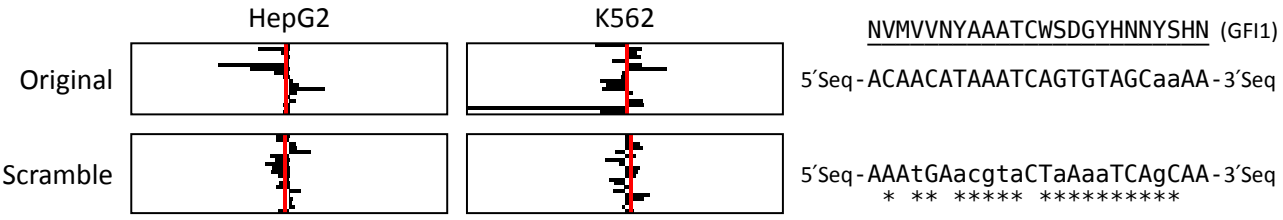
3′Seq = caactgaccctgtatgaaaaaatatatatatattcagaactttccttggatgggtgggtg

1533 GFI1 in HepG2 enhancer

chr19 43835824 43835847 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-ACAACATAAATCAGTGTAGCaaAA-3′Seq

5′Seq-AAAtGAacgtaCTaAaaTCAgCAA-3′Seq

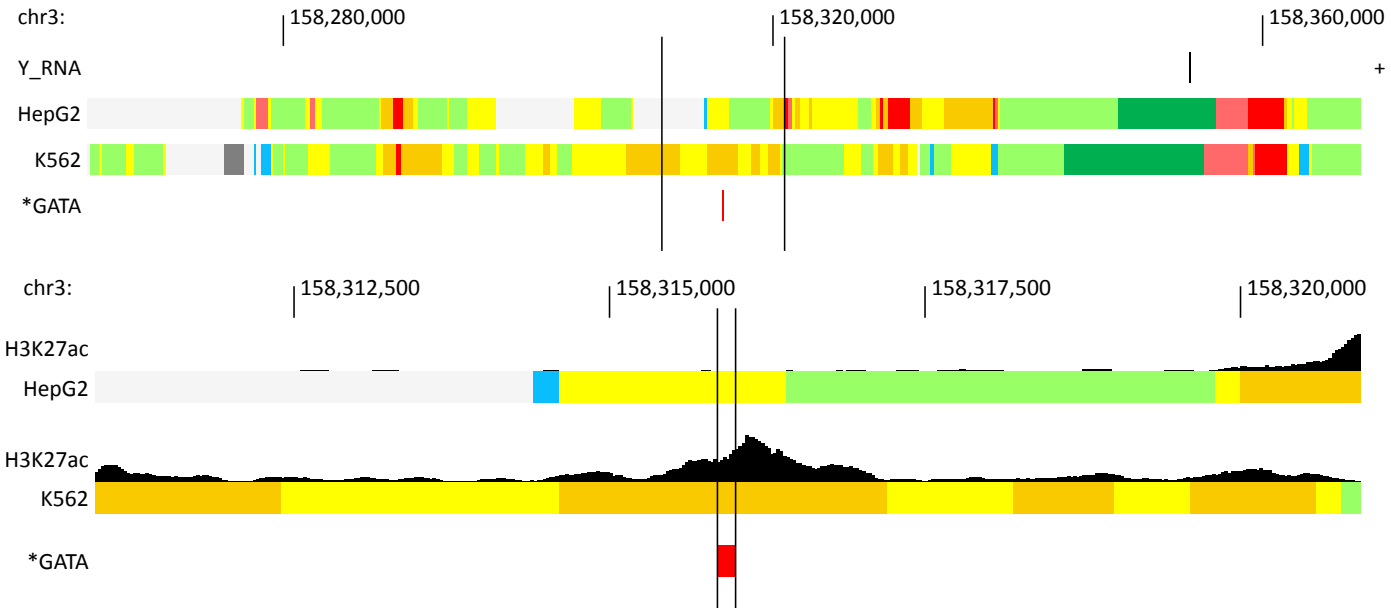
* ** ***** **********

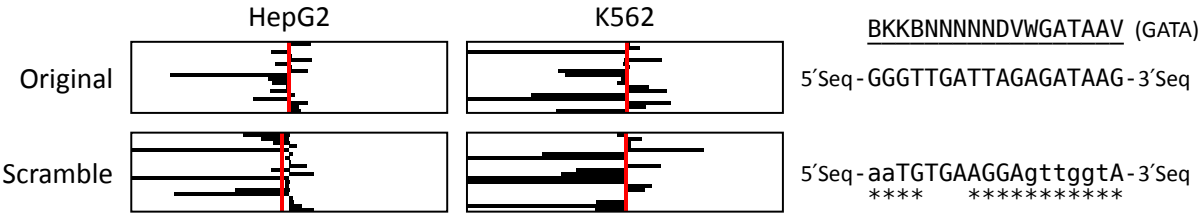
5′Seq = ttttttttttttttttaaagaacaaccctaaggtctggtcaaaggcttgtacaattcccagc

3′Seq = acggaaagtgttcatctcaacggtttcaaattccttgggccttcccaaatcaattctttt

1534 GATA in K562 enhancer (conserved at 60% confidence)

chr3 158315919 158315936 - (hg18)





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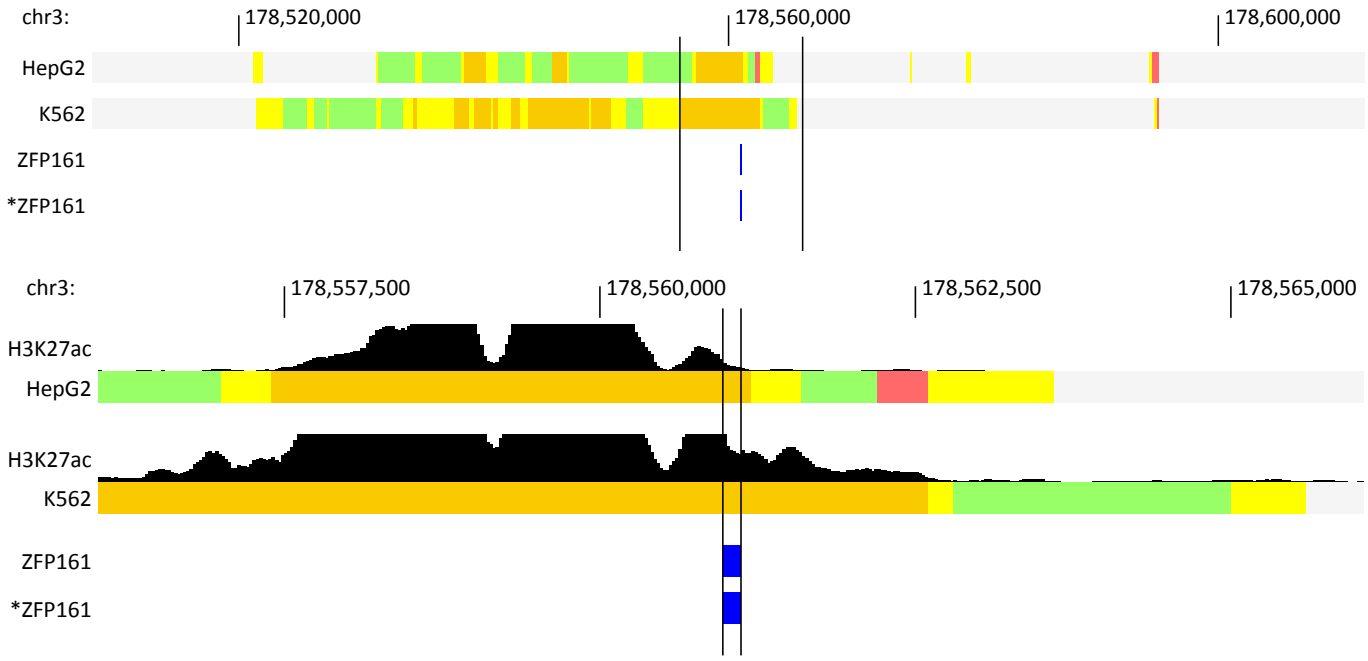
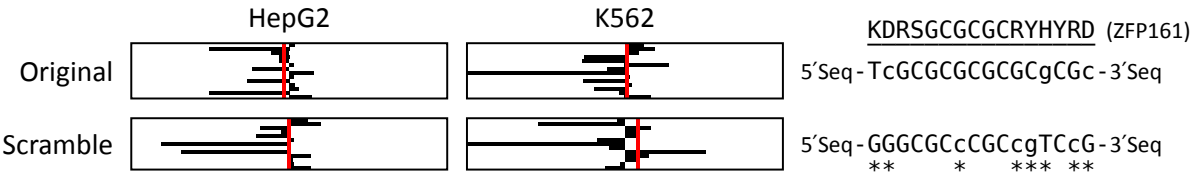
1535 ZFP161 in K562 enhancer

chr3 178561039 178561054 - (hg18)





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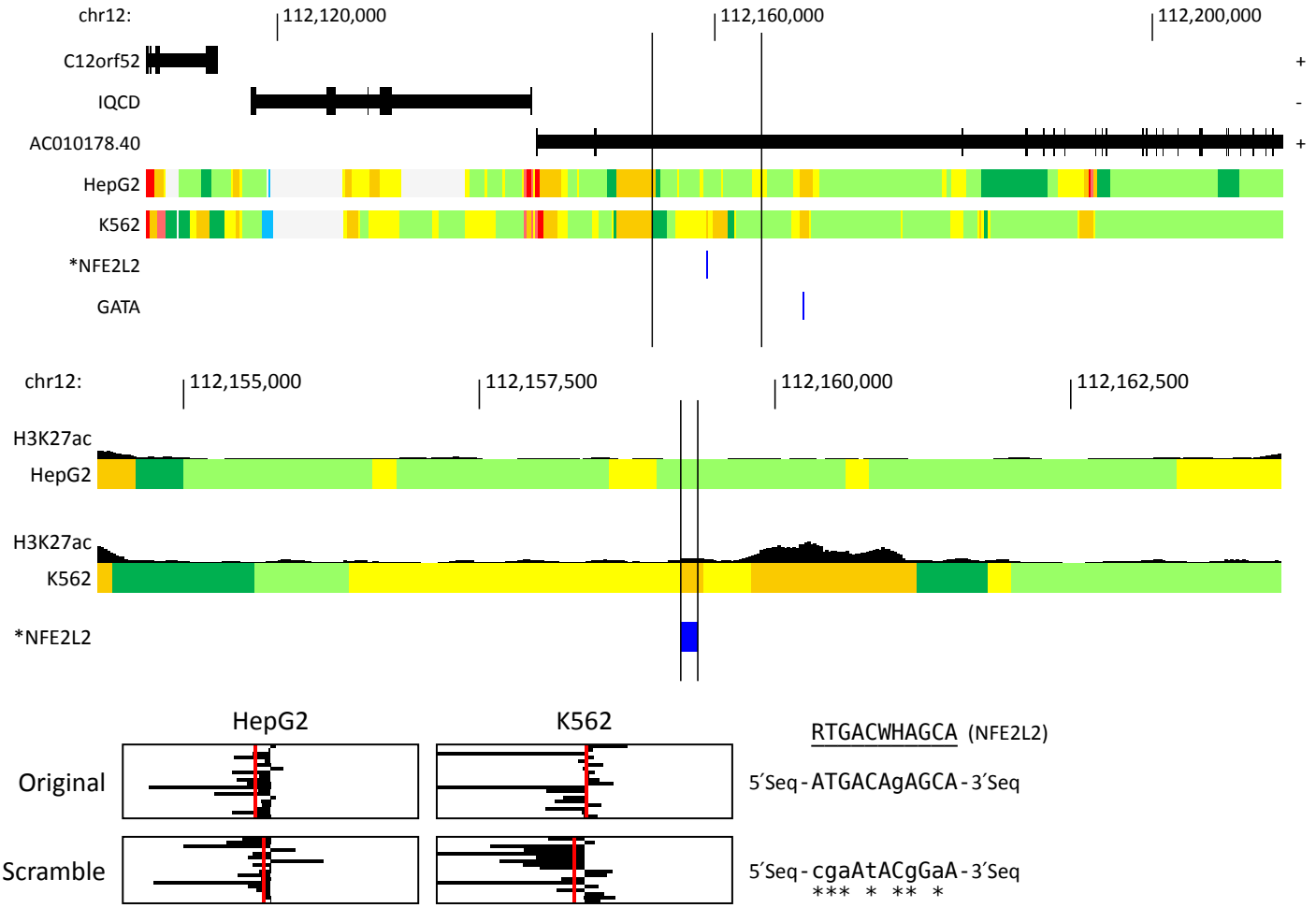
3′Seq = gcacacacacacacacacacacacacacacacacactccaagagtctcaaaaaaaaaaaaaa

1536 NFE2L2 in K562 enhancer

chr12 112159270 112159280 + (hg18)



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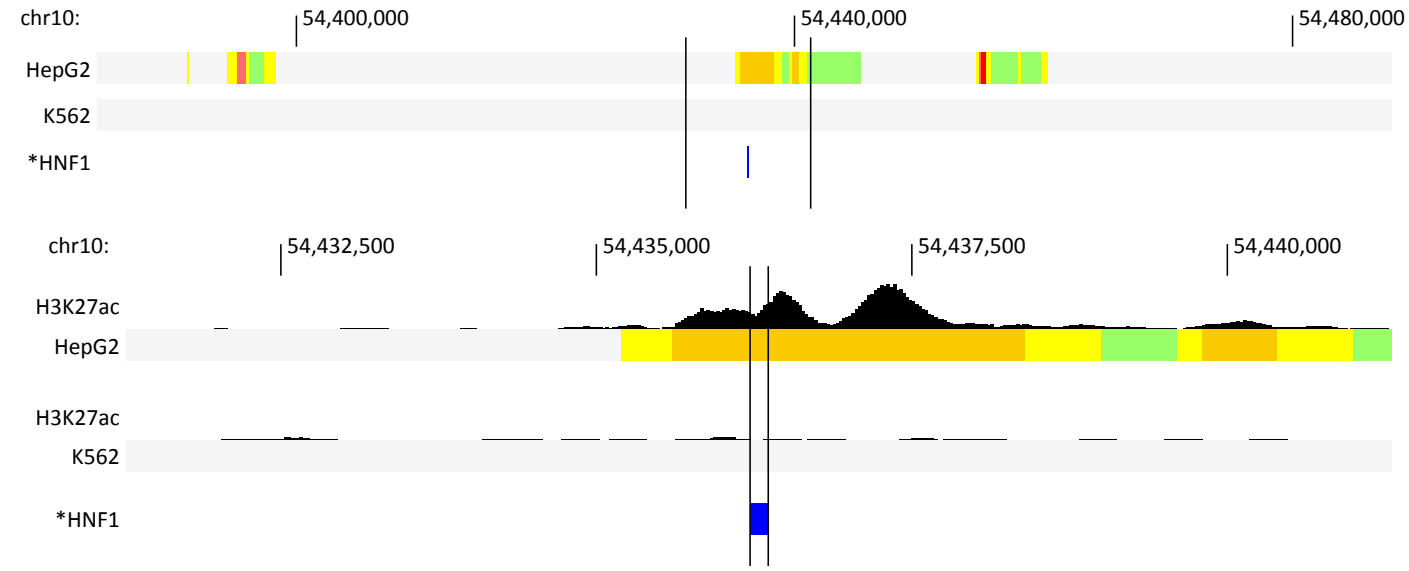
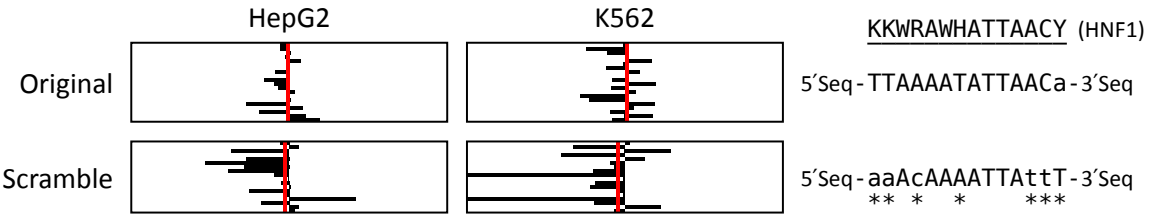
1537 HNF1 in HepG2 enhancer

chr10 54436284 54436297 + (hg18)





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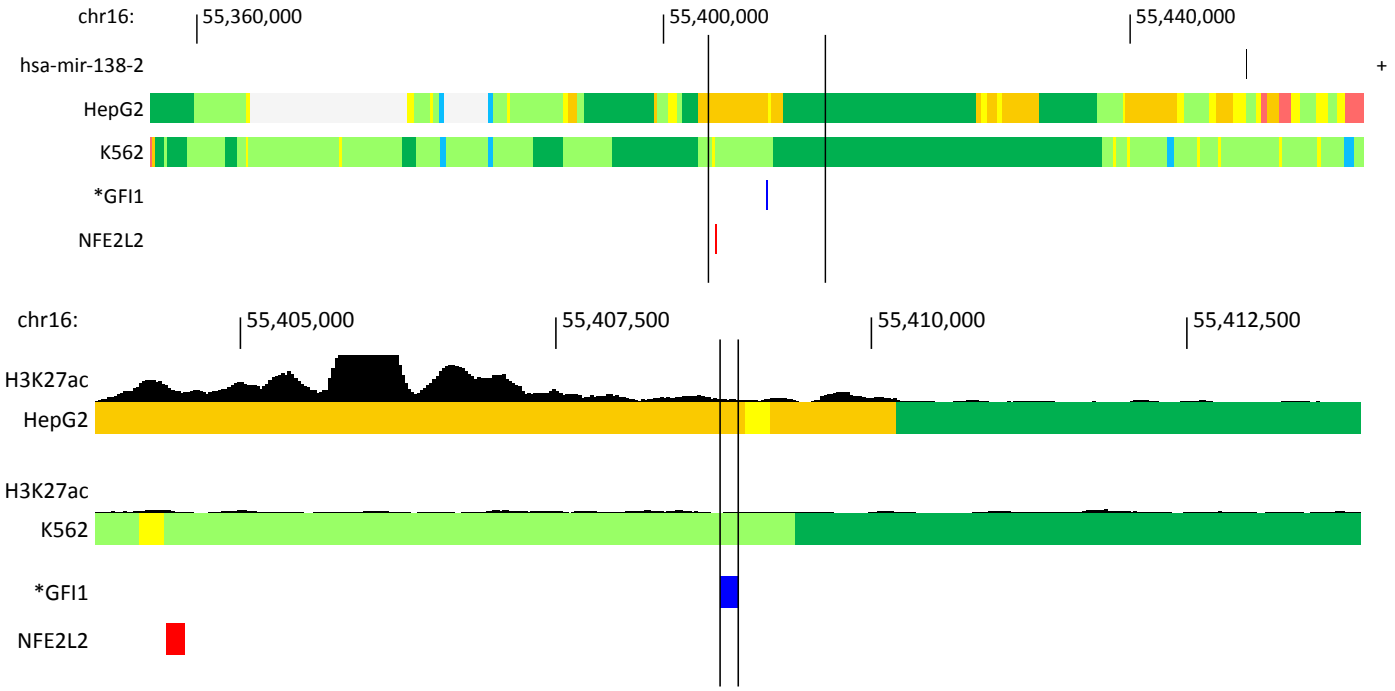
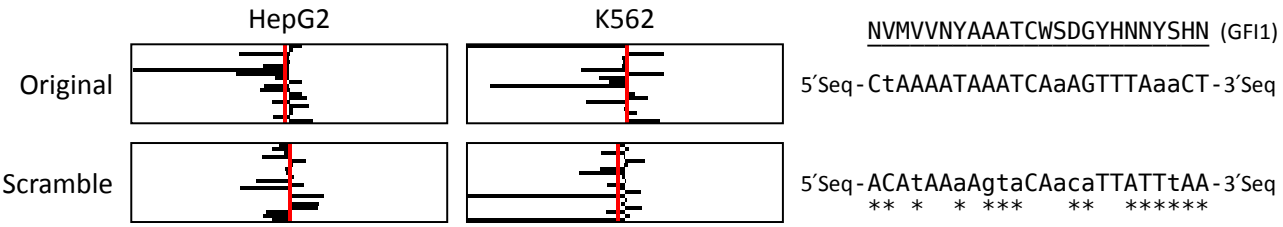
1538 GFI1 in HepG2 enhancer

chr16 55408862 55408885 - (hg18)





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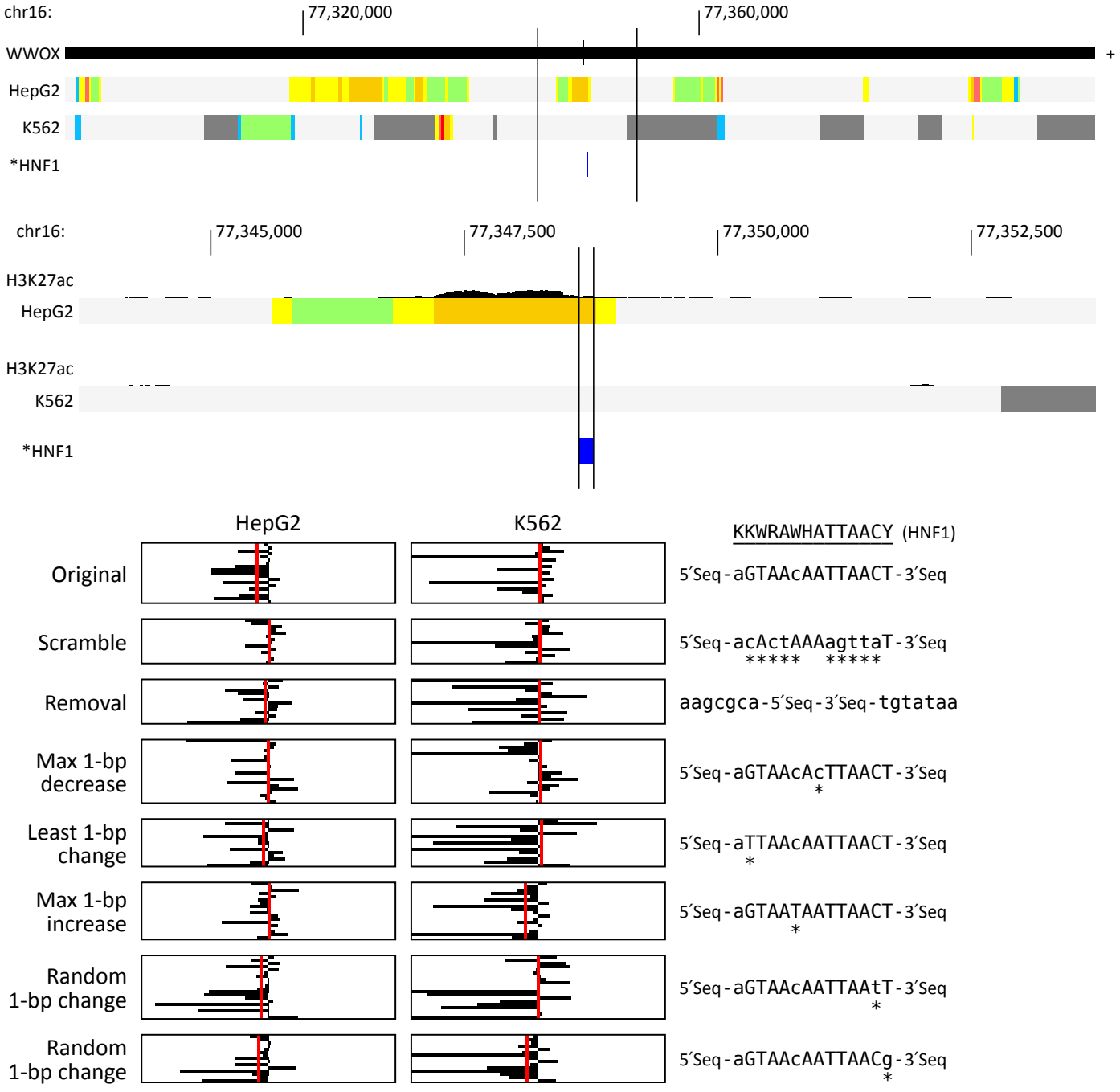
1539 HNF1 in HepG2 enhancer

chr16 77348698 77348711 - (hg18)



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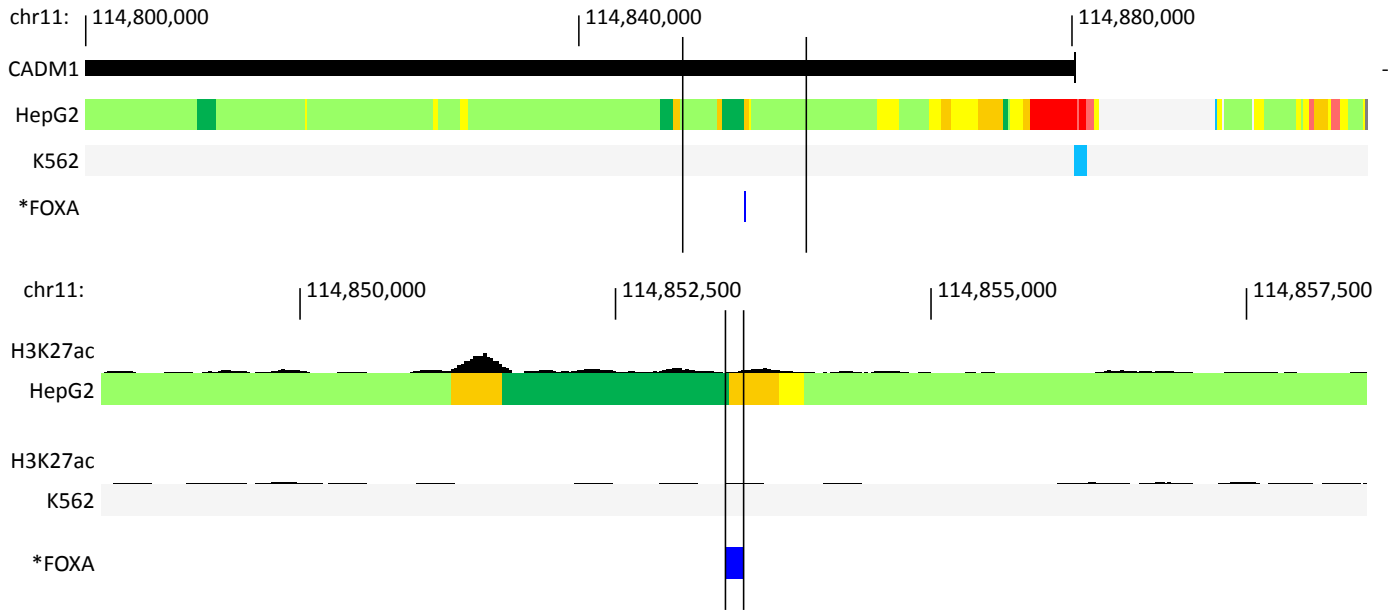
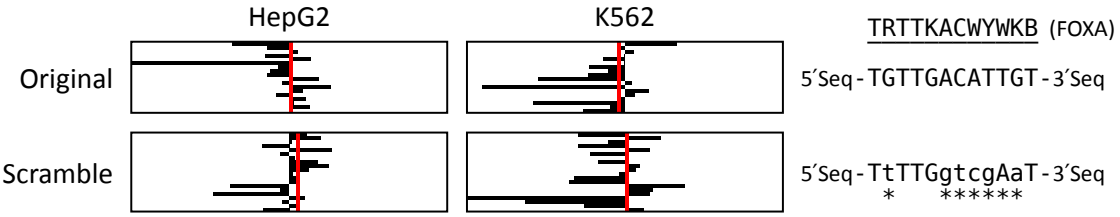
1540 FOXA in HepG2 enhancer

chr11 114853438 114853449 - (hg18)





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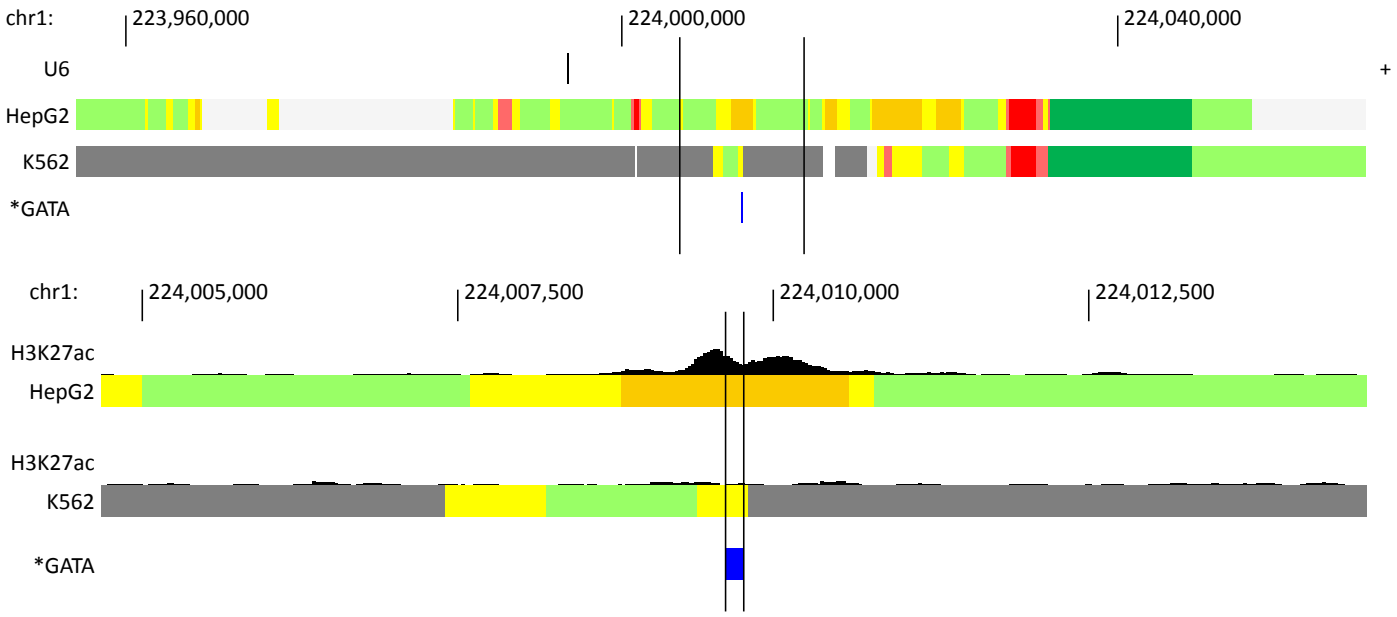
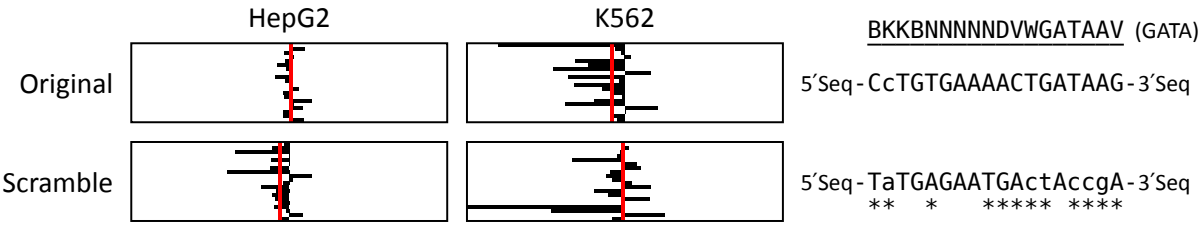
1541 GATA in HepG2 enhancer

chr1 224009686 224009703 - (hg18)





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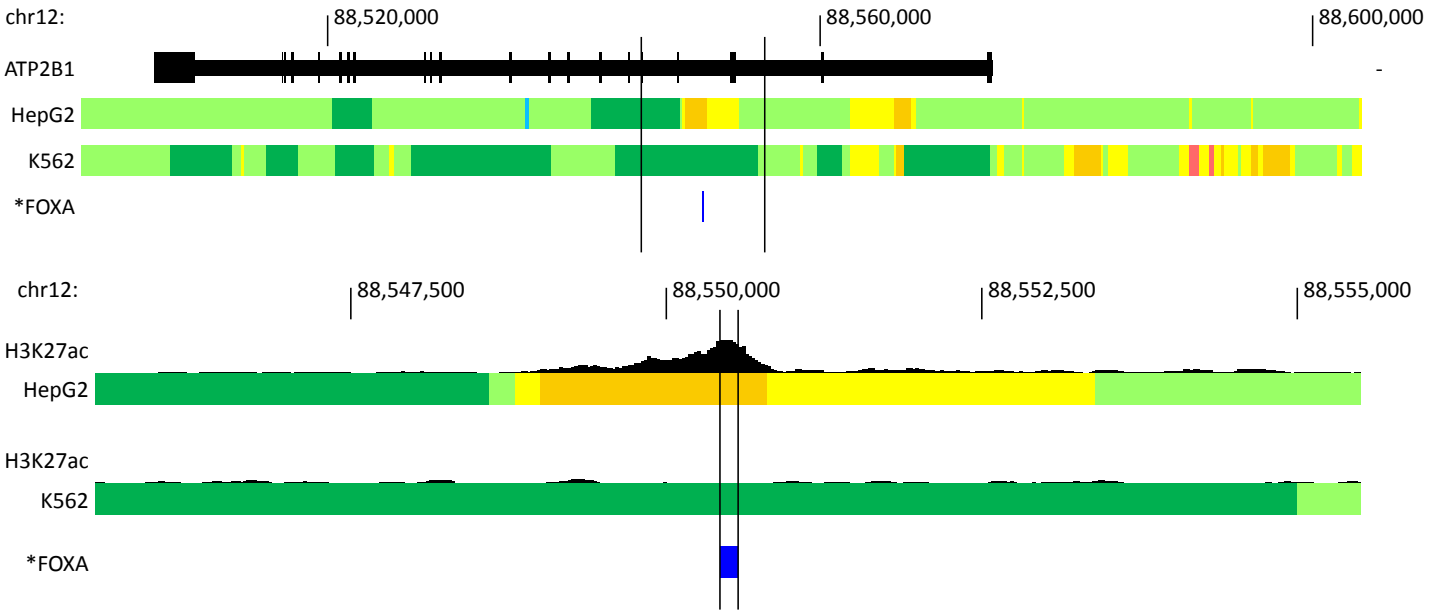
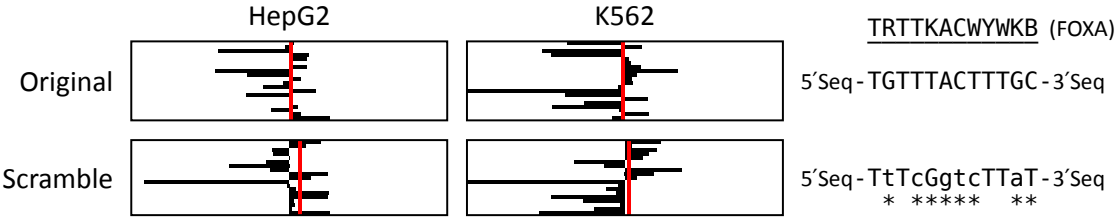
1542 FOXA in HepG2 enhancer

chr12 88550492 88550503 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTTTGC-3′Seq

5′Seq-TtTcGgtcTTaT-3′Seq

* ***** **

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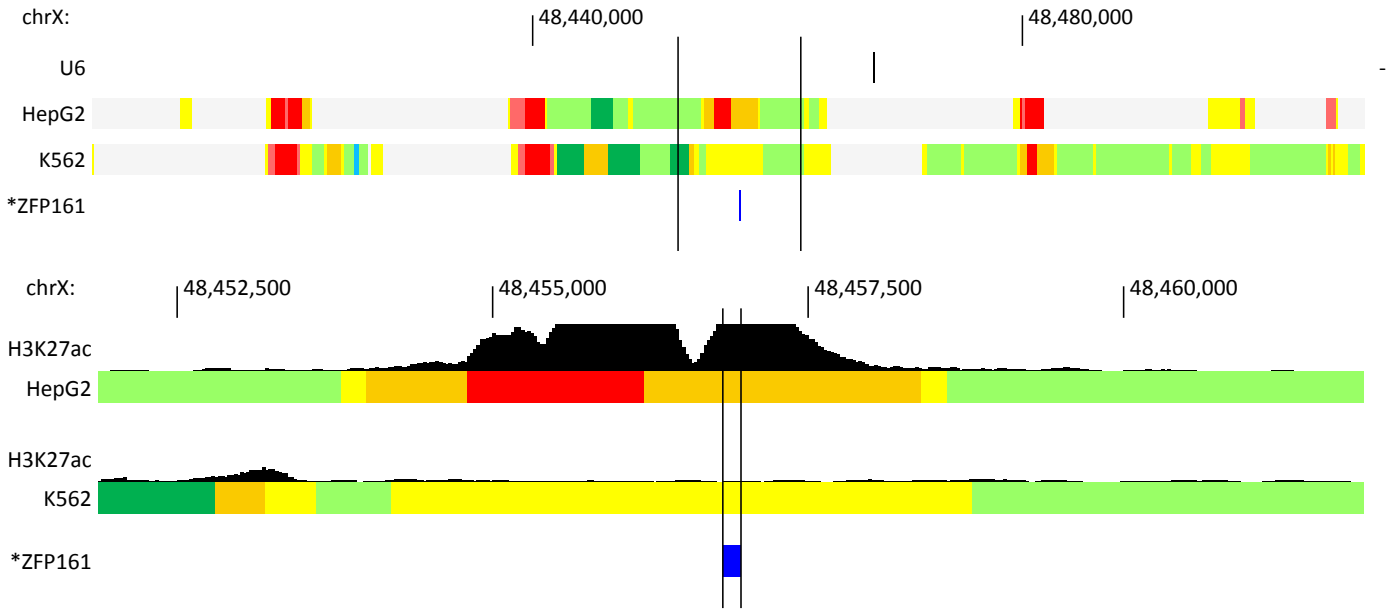
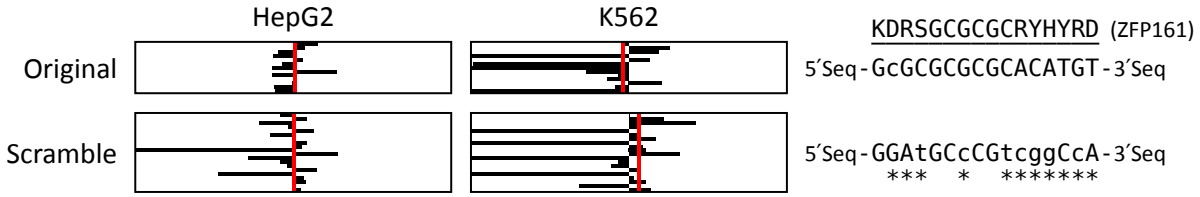
1543 ZFP161 in HepG2 enhancer

chrX 48456889 48456904 - (hg18)





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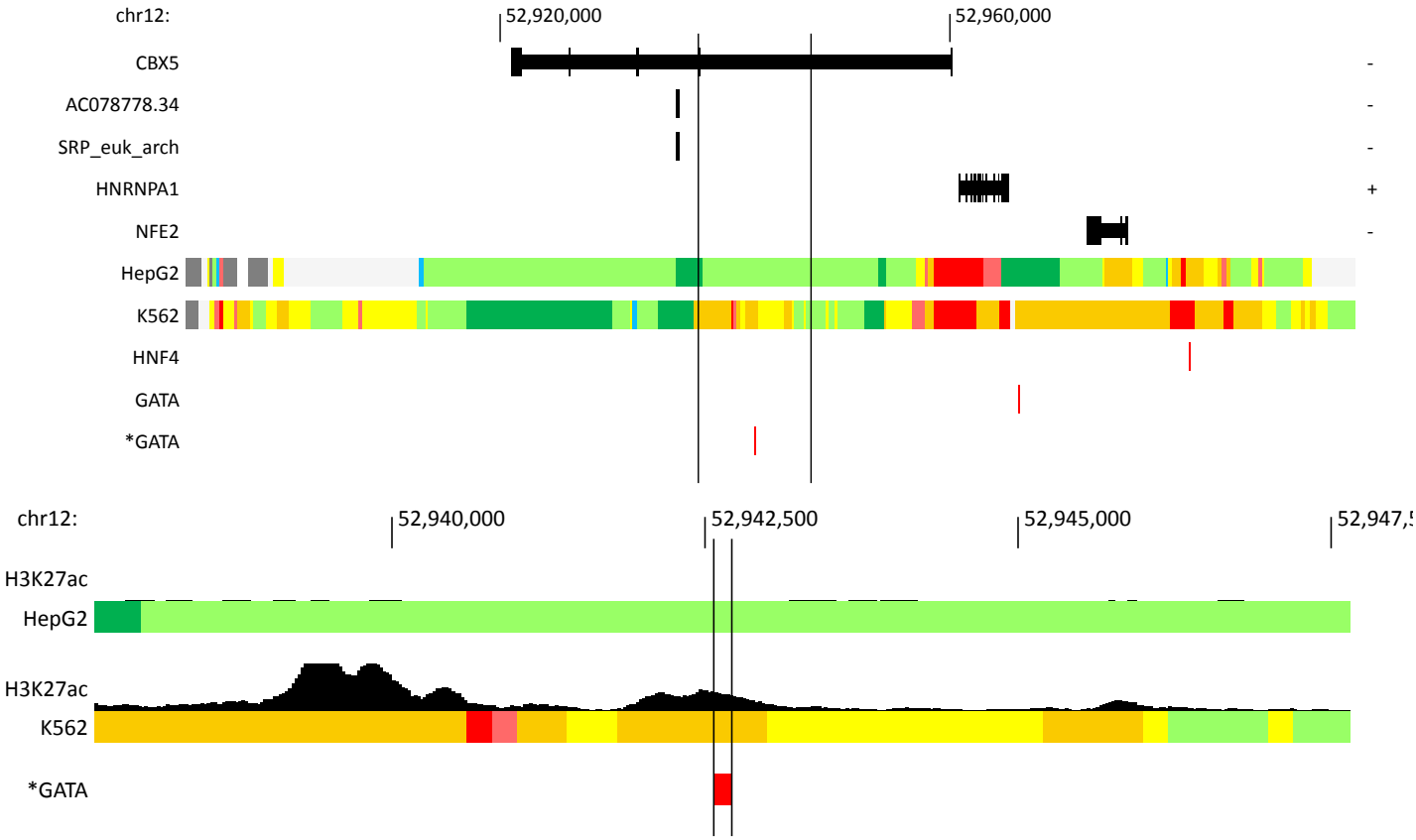
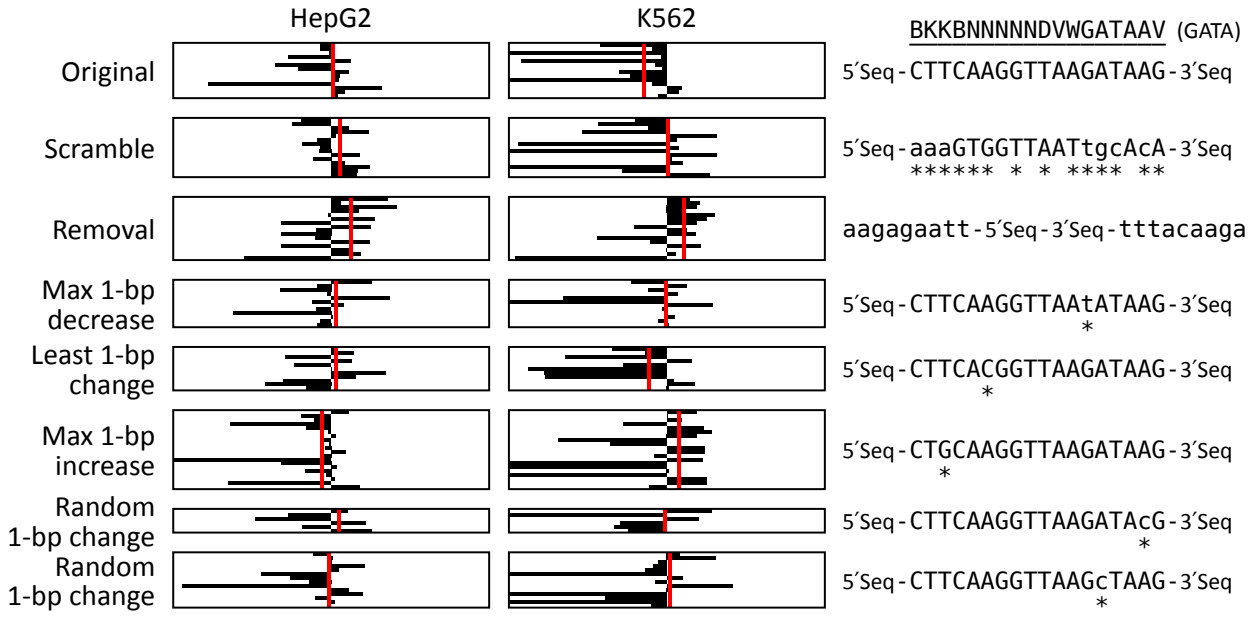
1544 GATA in K562 enhancer (conserved at 80% confidence)

chr12 52942634 52942651 - (hg18)





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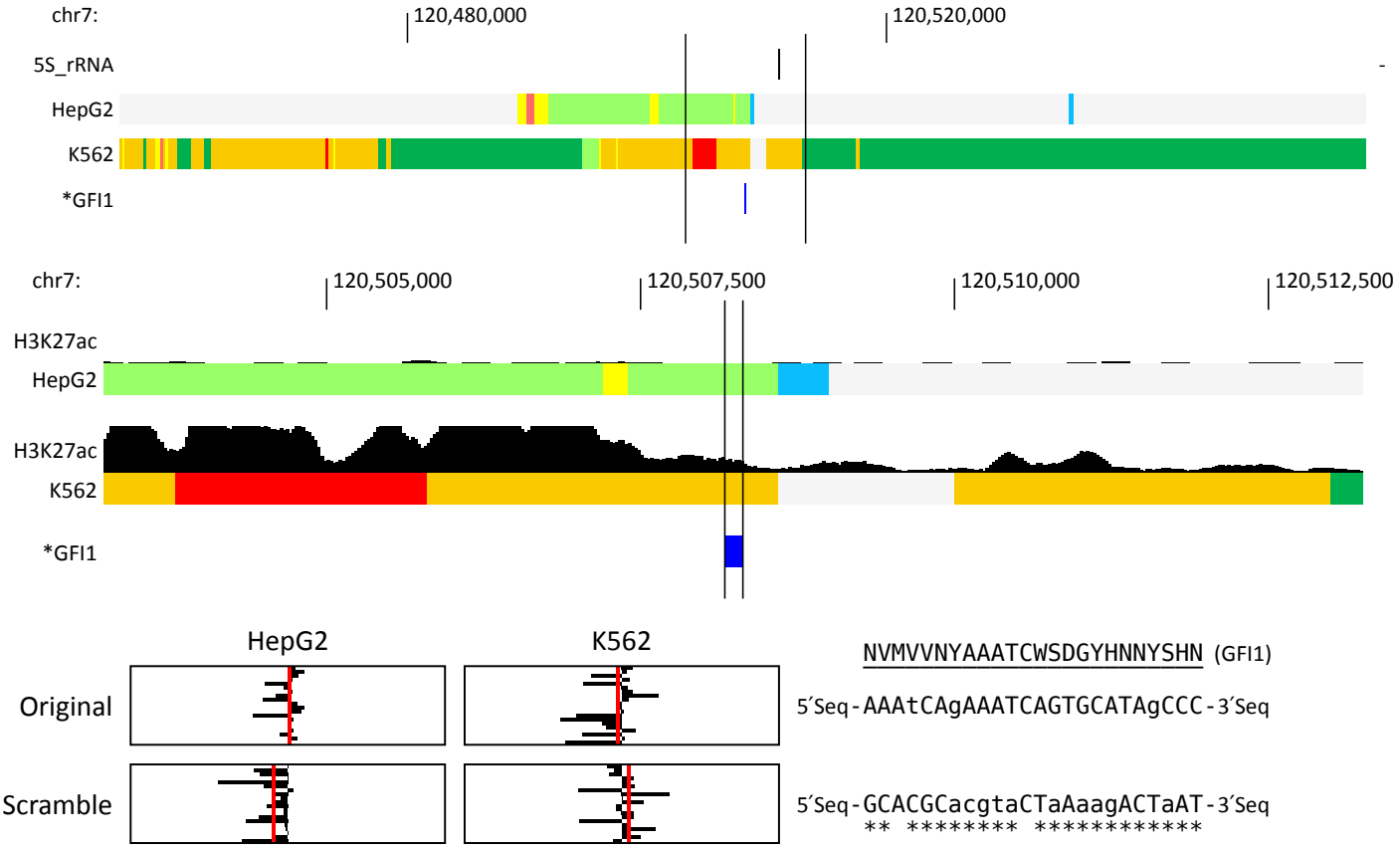
1545 GFI1 in K562 enhancer

chr7 120508232 120508255 - (hg18)



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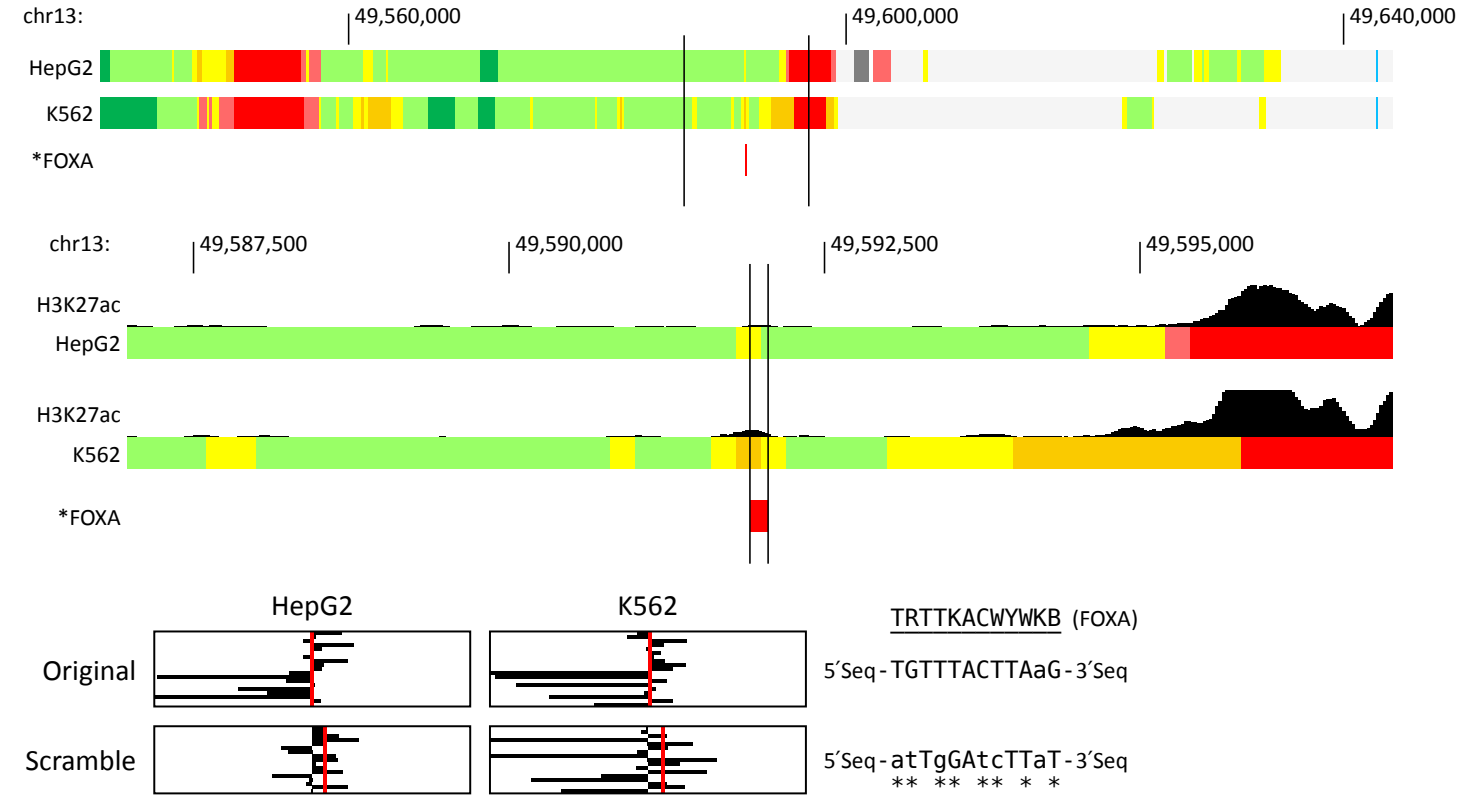
1546 FOXA in K562 enhancer (conserved at 50% confidence)

chr13 49591976 49591987 + (hg18)



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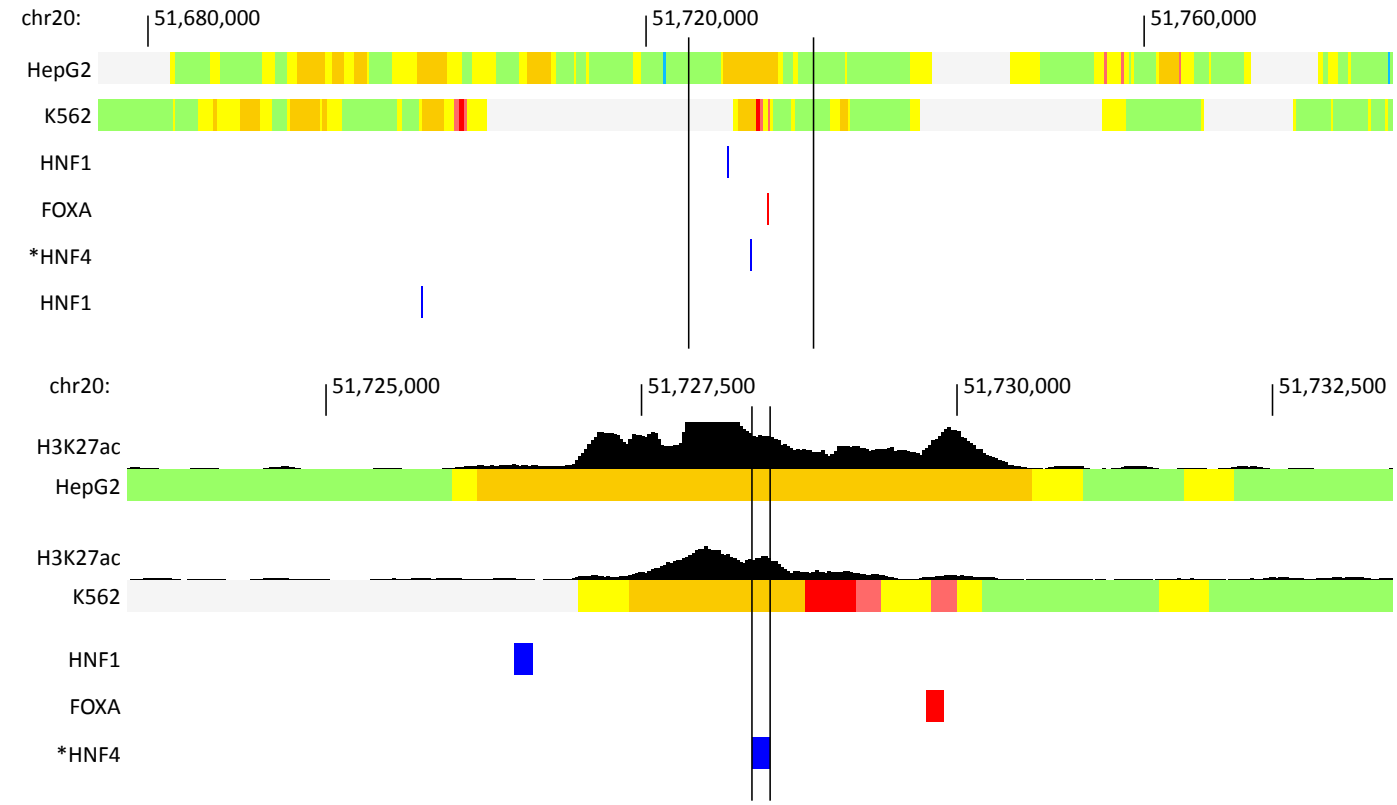
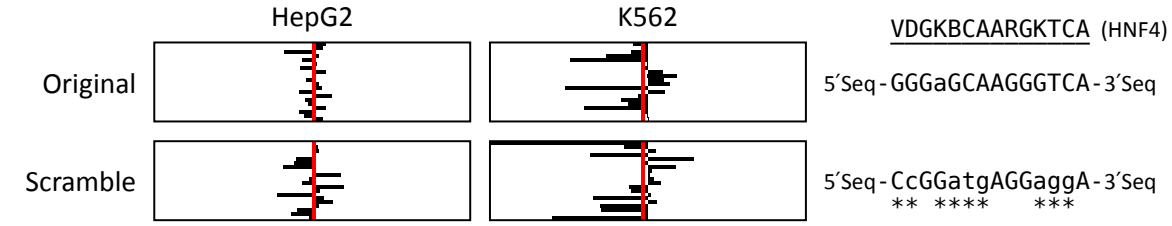
1547 HNF4 in HepG2 enhancer

chr20 51728441 51728454 - (hg18)





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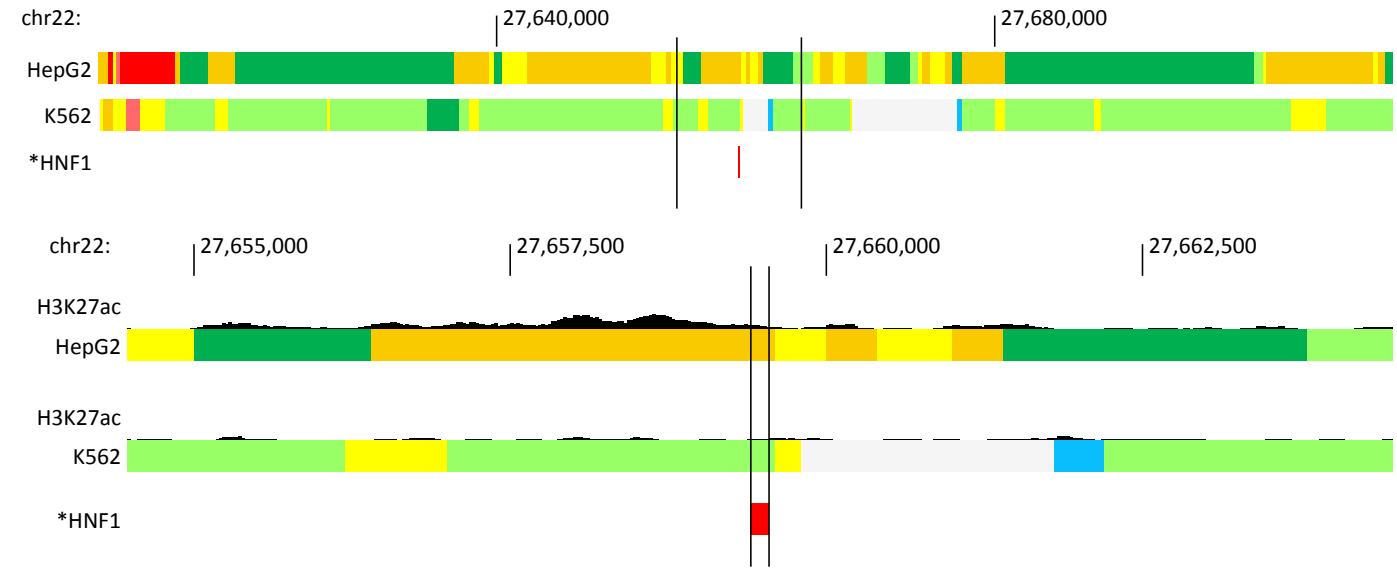
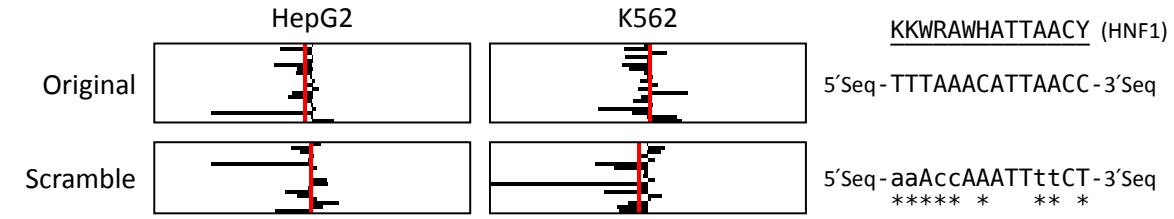
1548 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr22 27659469 27659482 + (hg18)





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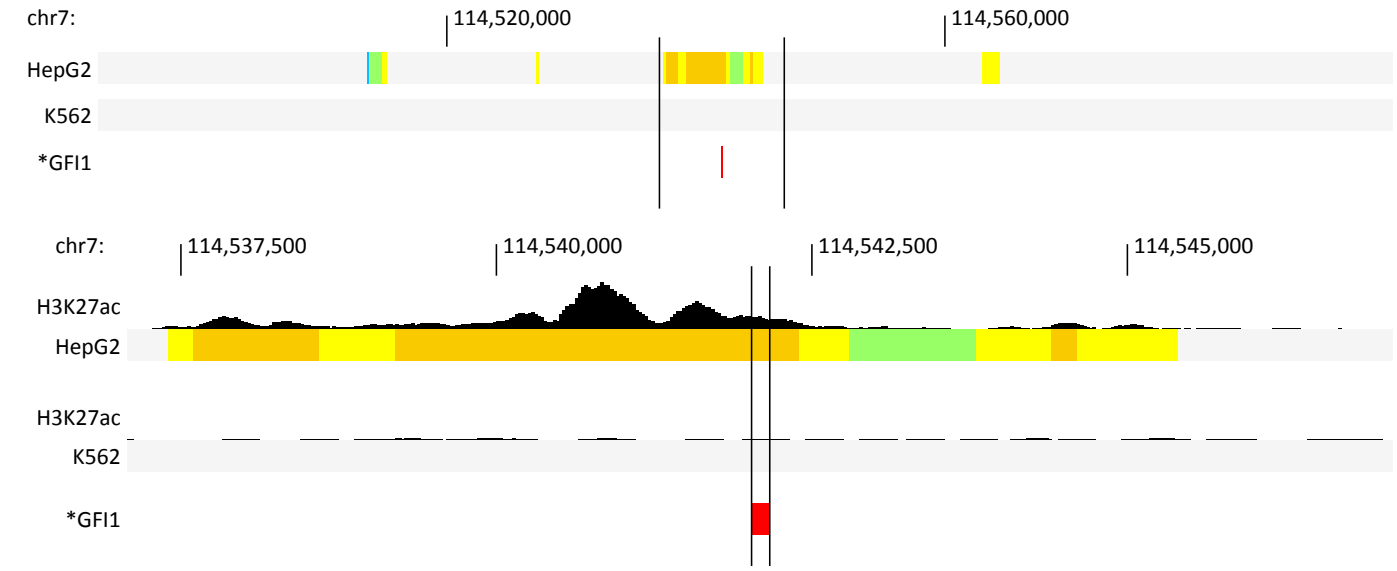
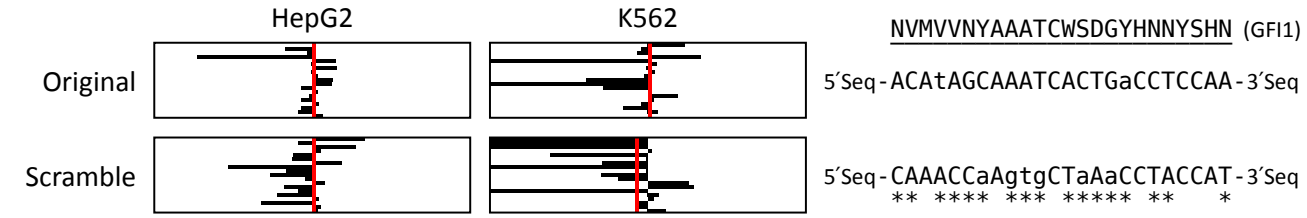
1549 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr7 114542083 114542106 - (hg18)





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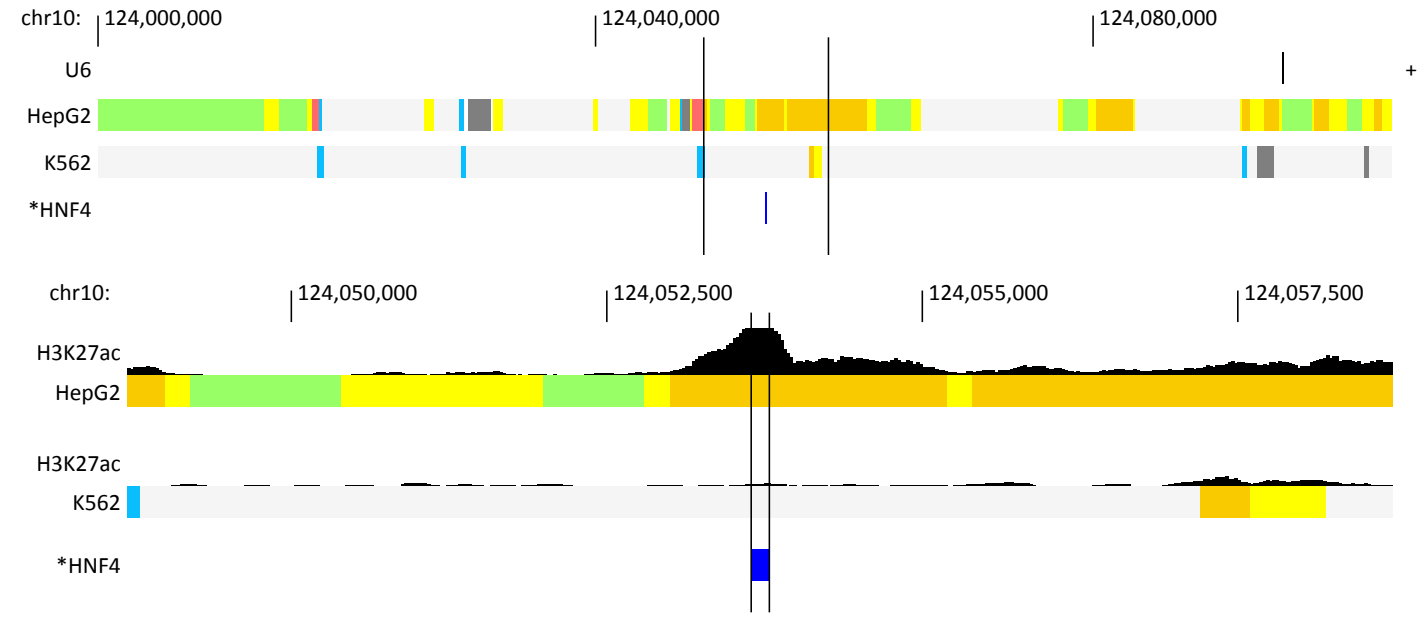
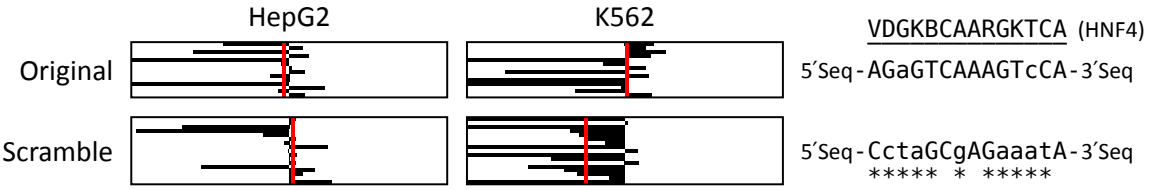
1550 HNF4 in HepG2 enhancer

chr10 124053710 124053723 + (hg18)





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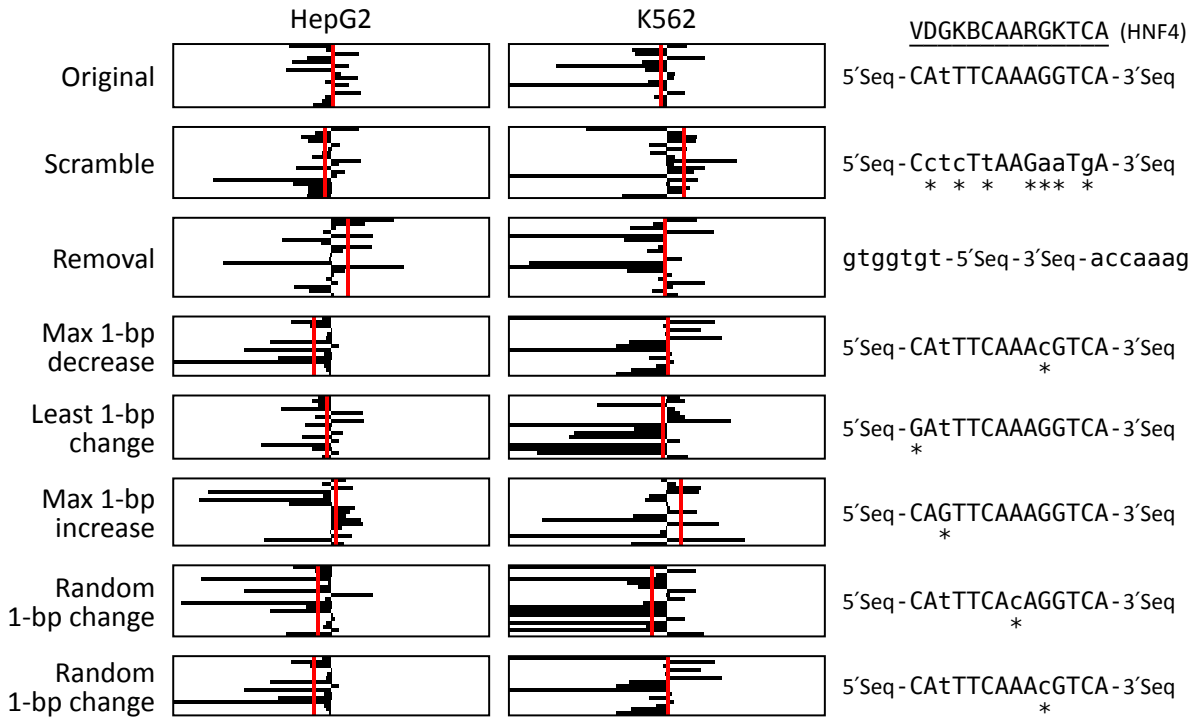
1551 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr15 35115060 35115073 - (hg18)



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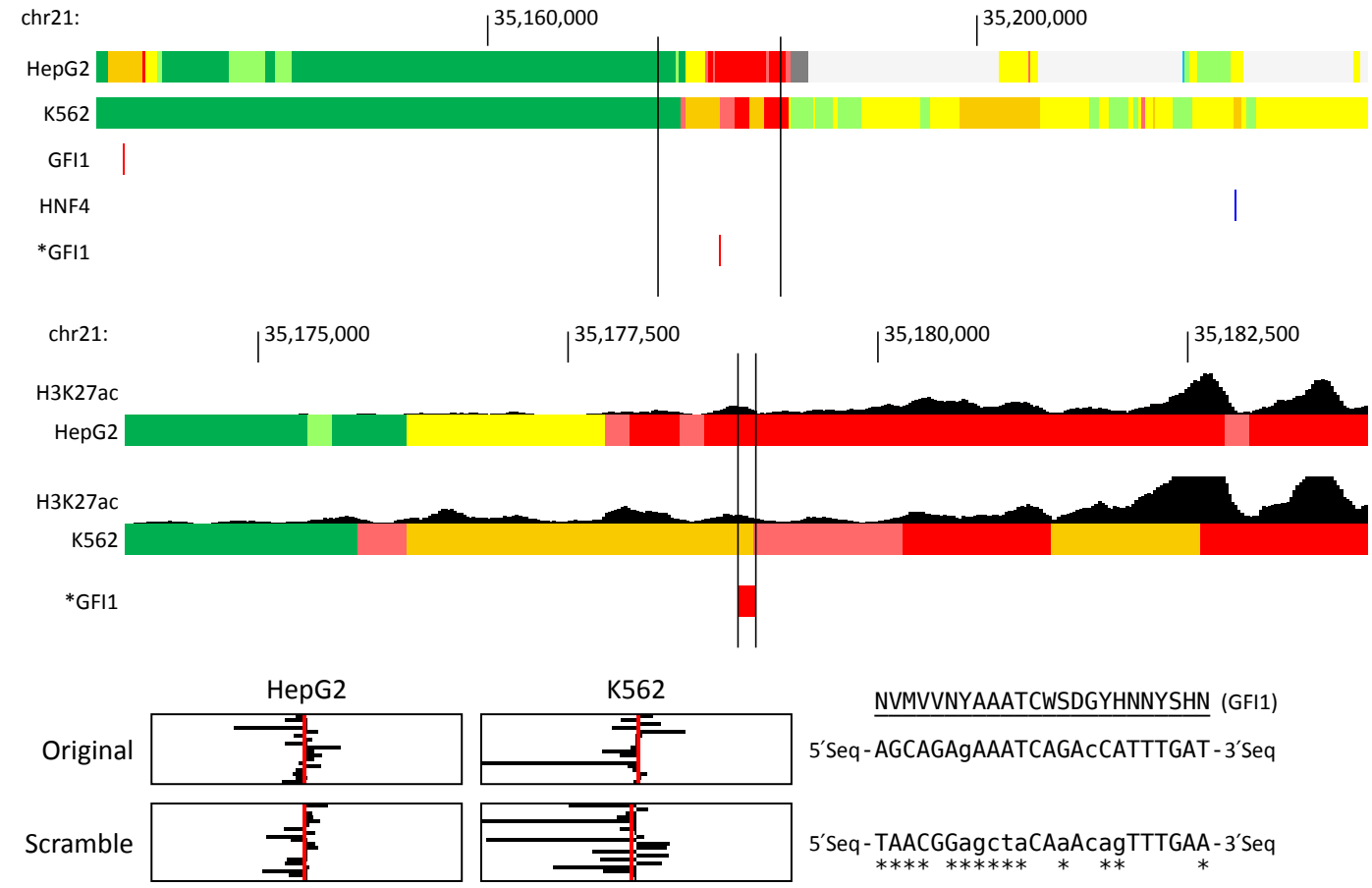
1552 GFI1 in K562 enhancer (conserved at 40% confidence)

chr21 35178932 35178955 - (hg18)



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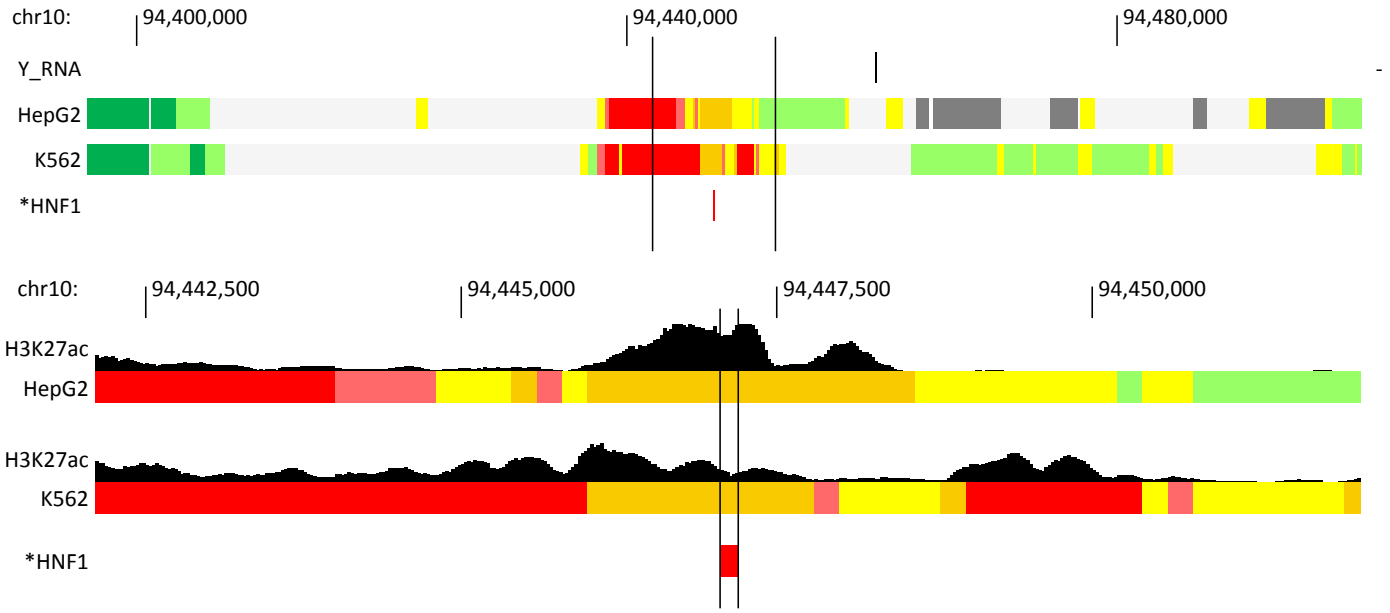
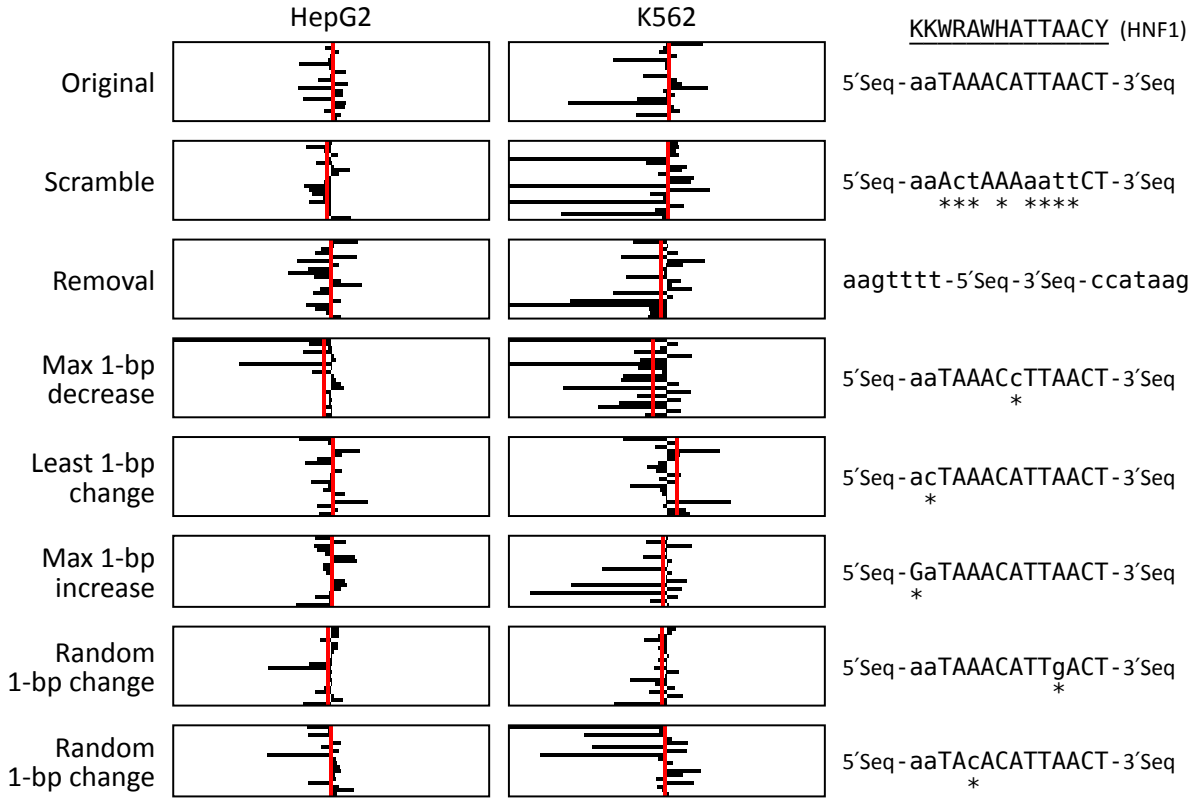
1553 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 94447117 94447130 - (hg18)





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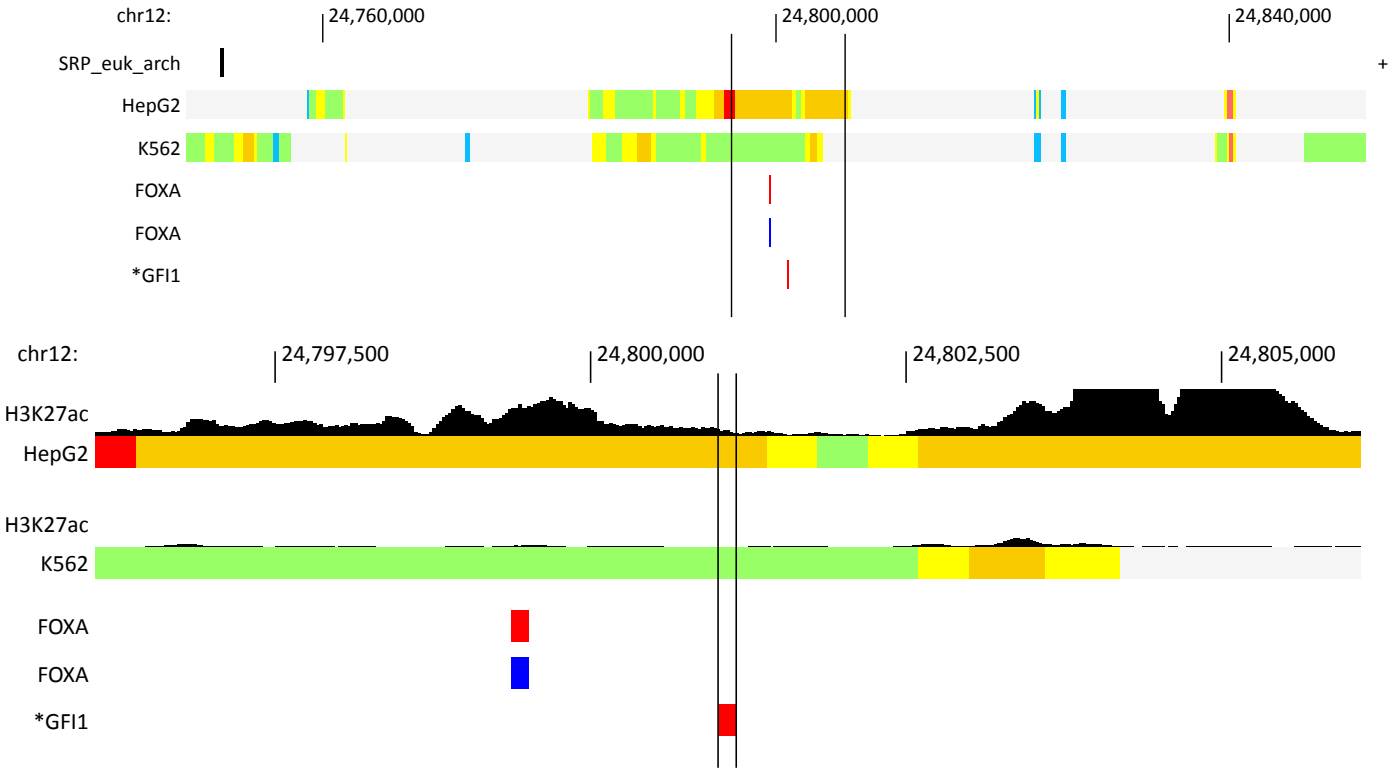
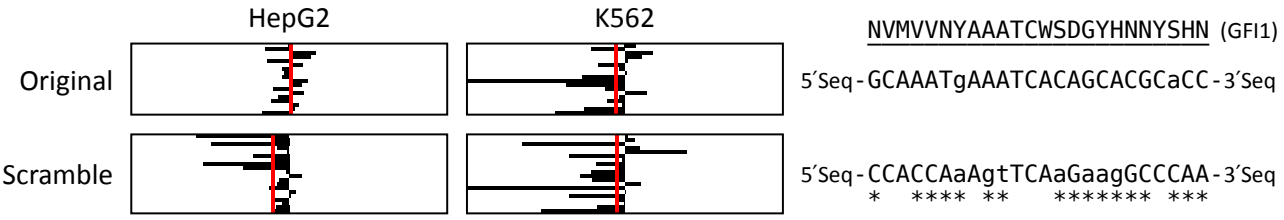
1554 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr12 24801071 24801094 + (hg18)





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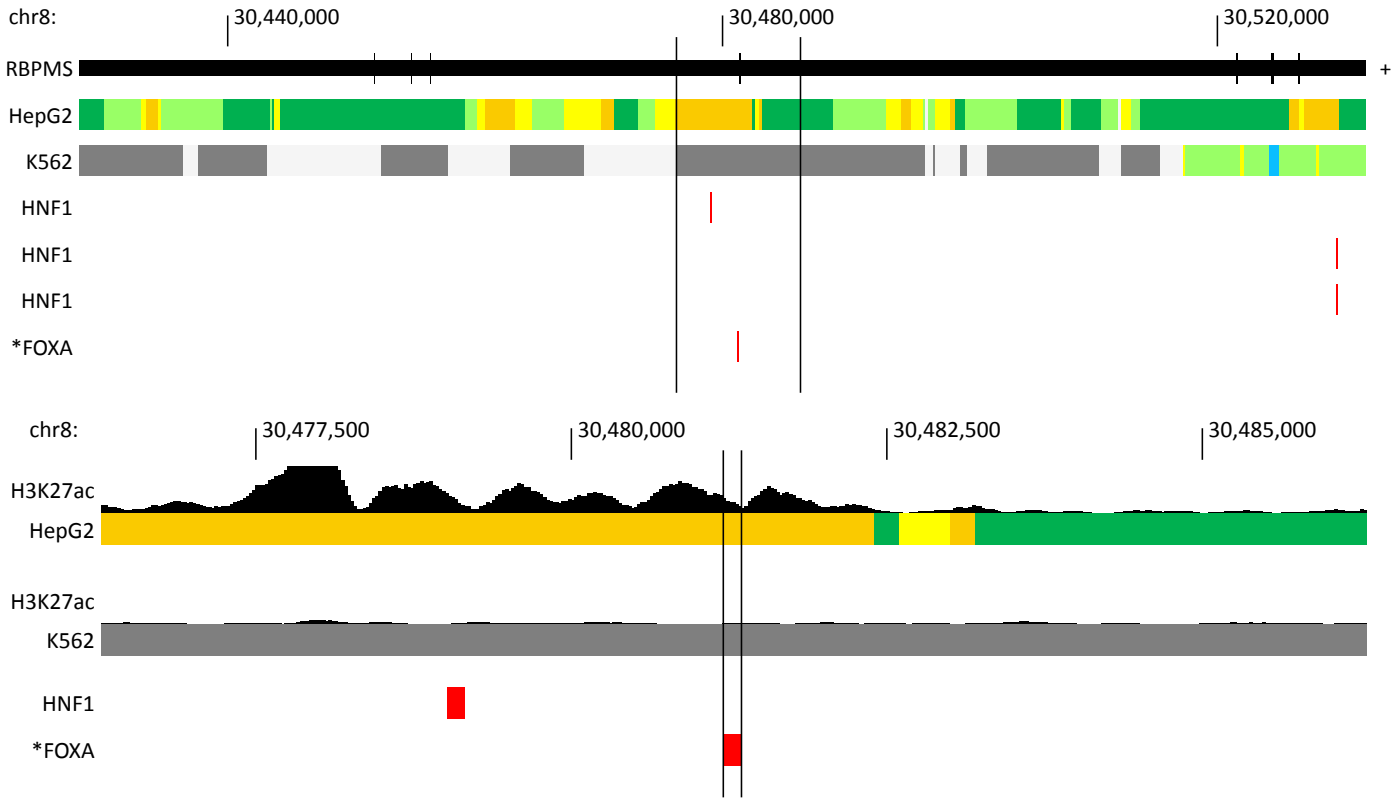
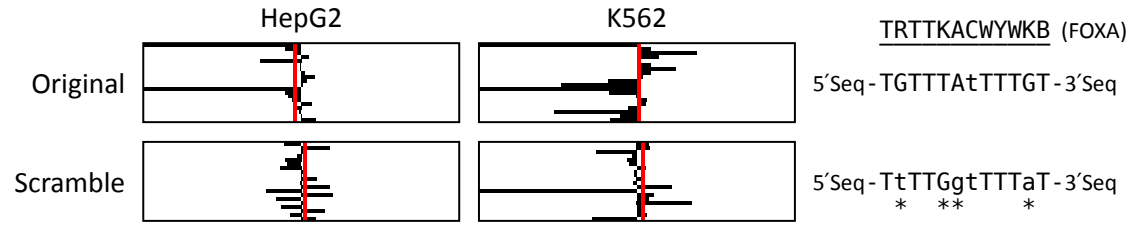
1555 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr8 30481271 30481282 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTAtTTTGT-3′Seq

5′Seq-TtTTGgtTTTaT-3′Seq

* ** *

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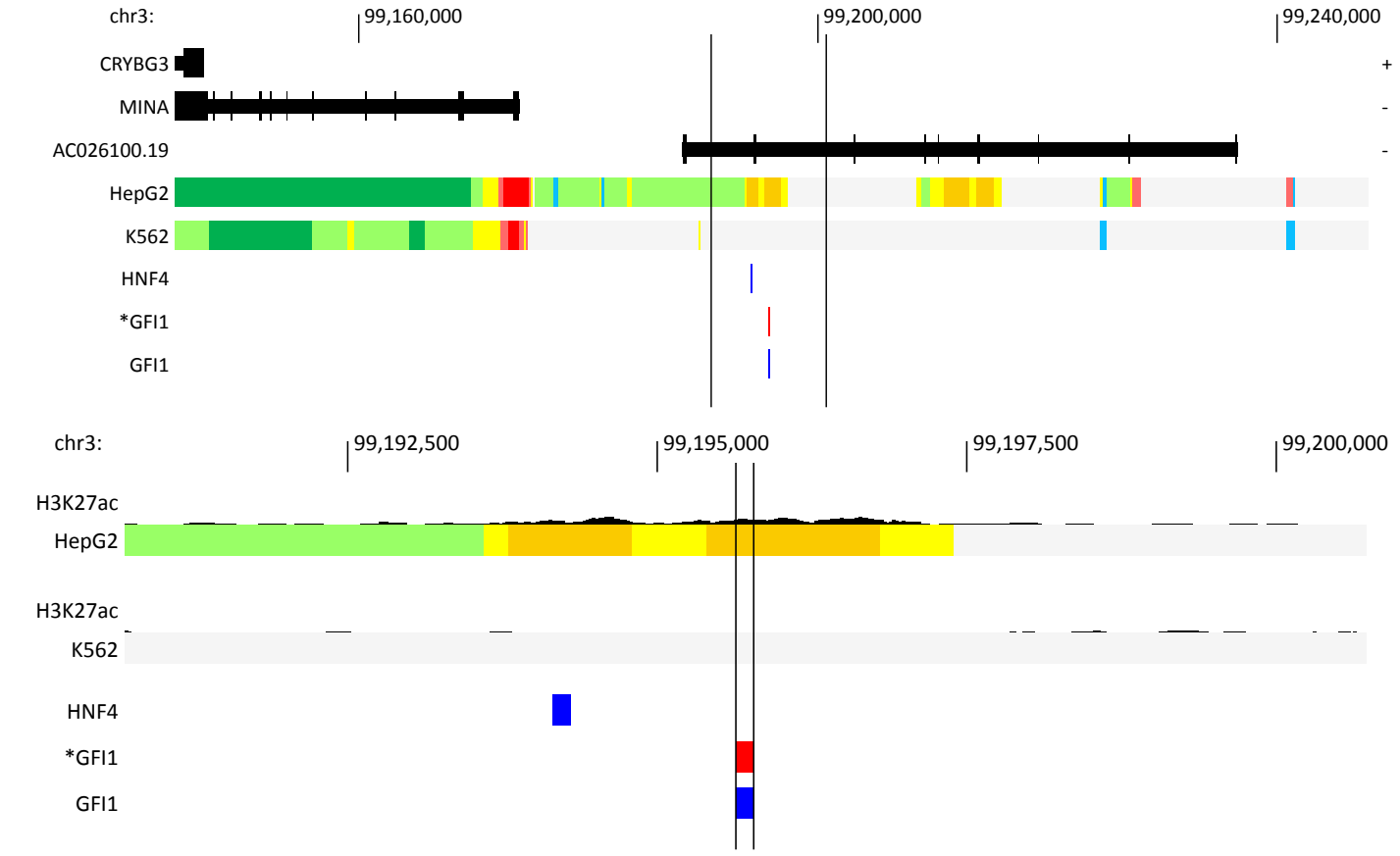
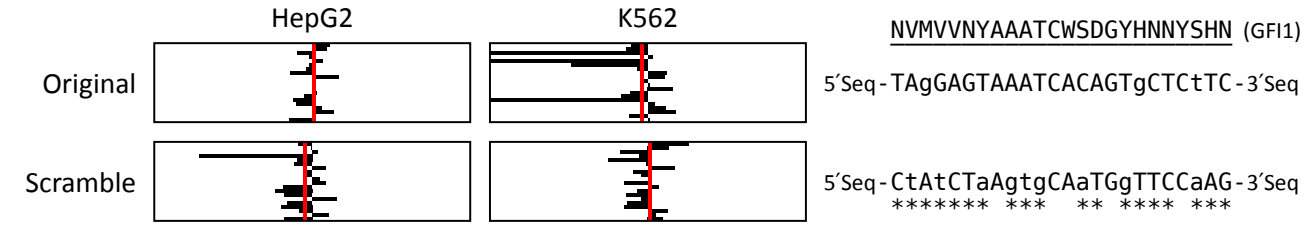
1556 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr3 99195696 99195719 - (hg18)





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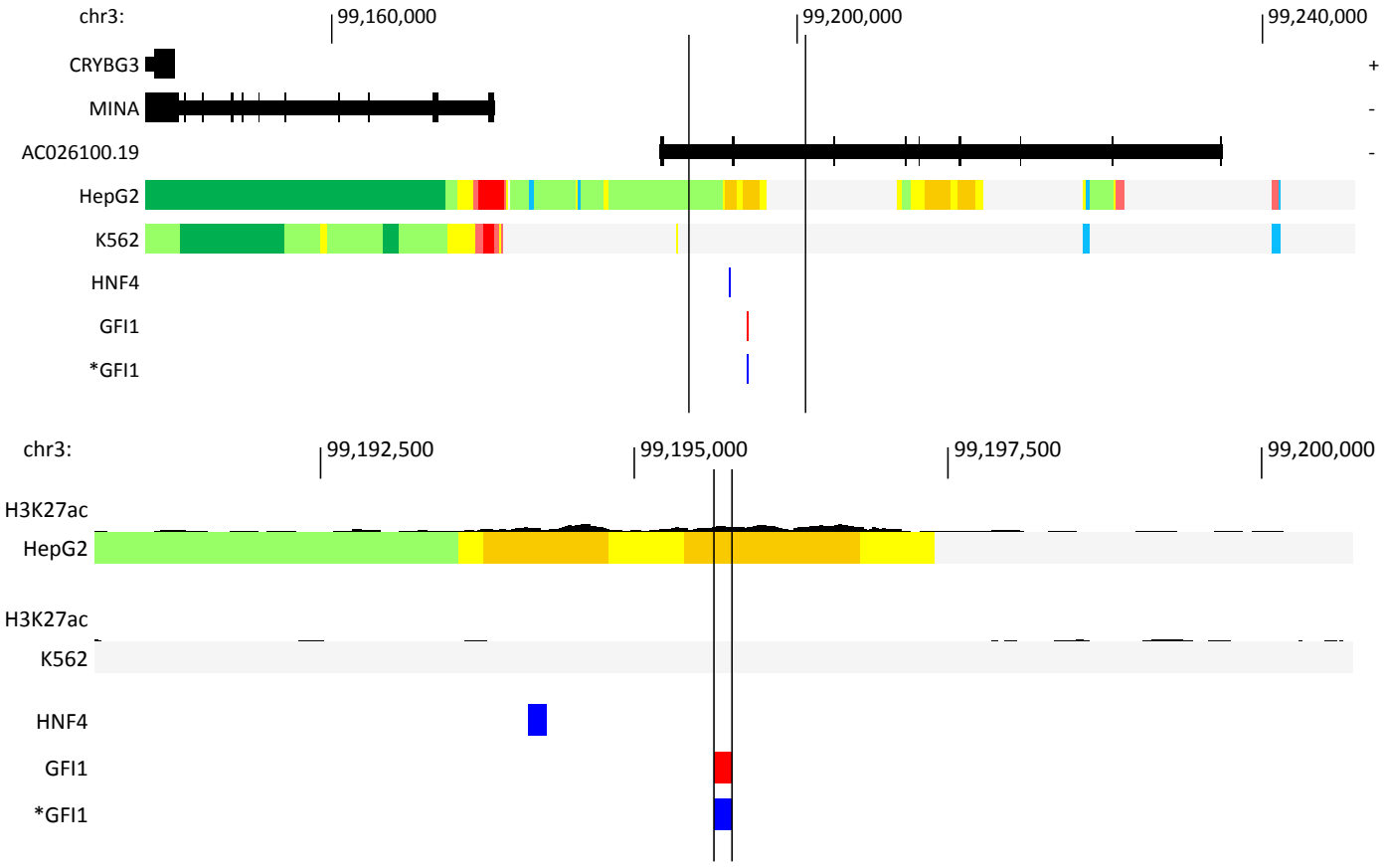
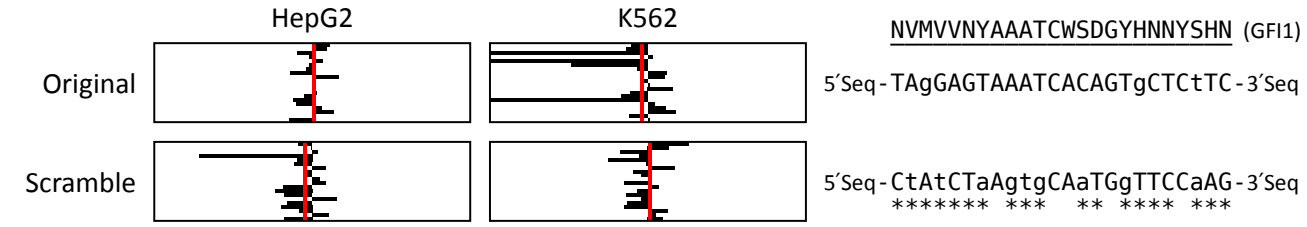
1557 GFI1 in HepG2 enhancer

chr3 99195696 99195719 - (hg18)





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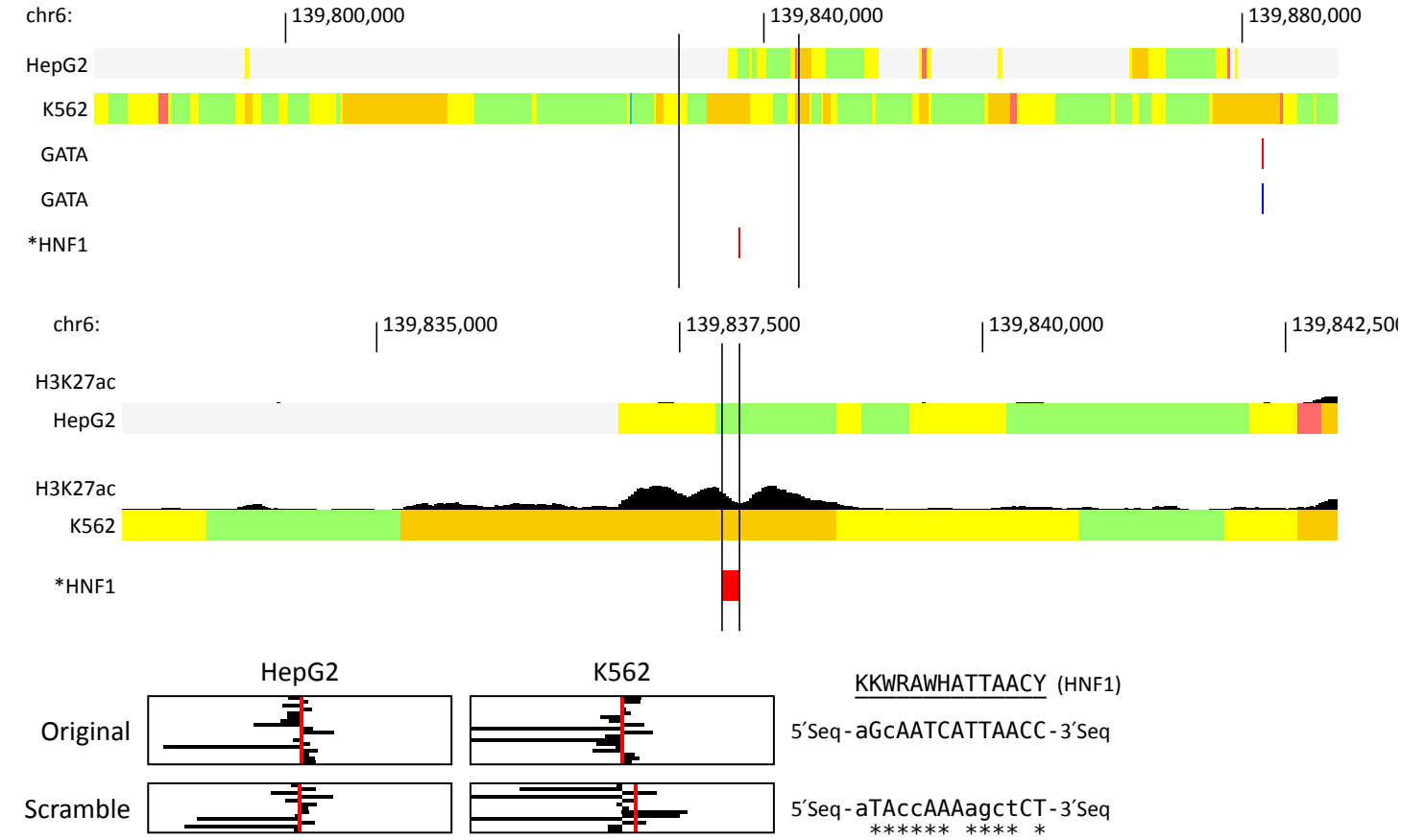
1558 HNF1 in K562 enhancer (conserved at 60% confidence)

chr6 139837916 139837929 + (hg18)



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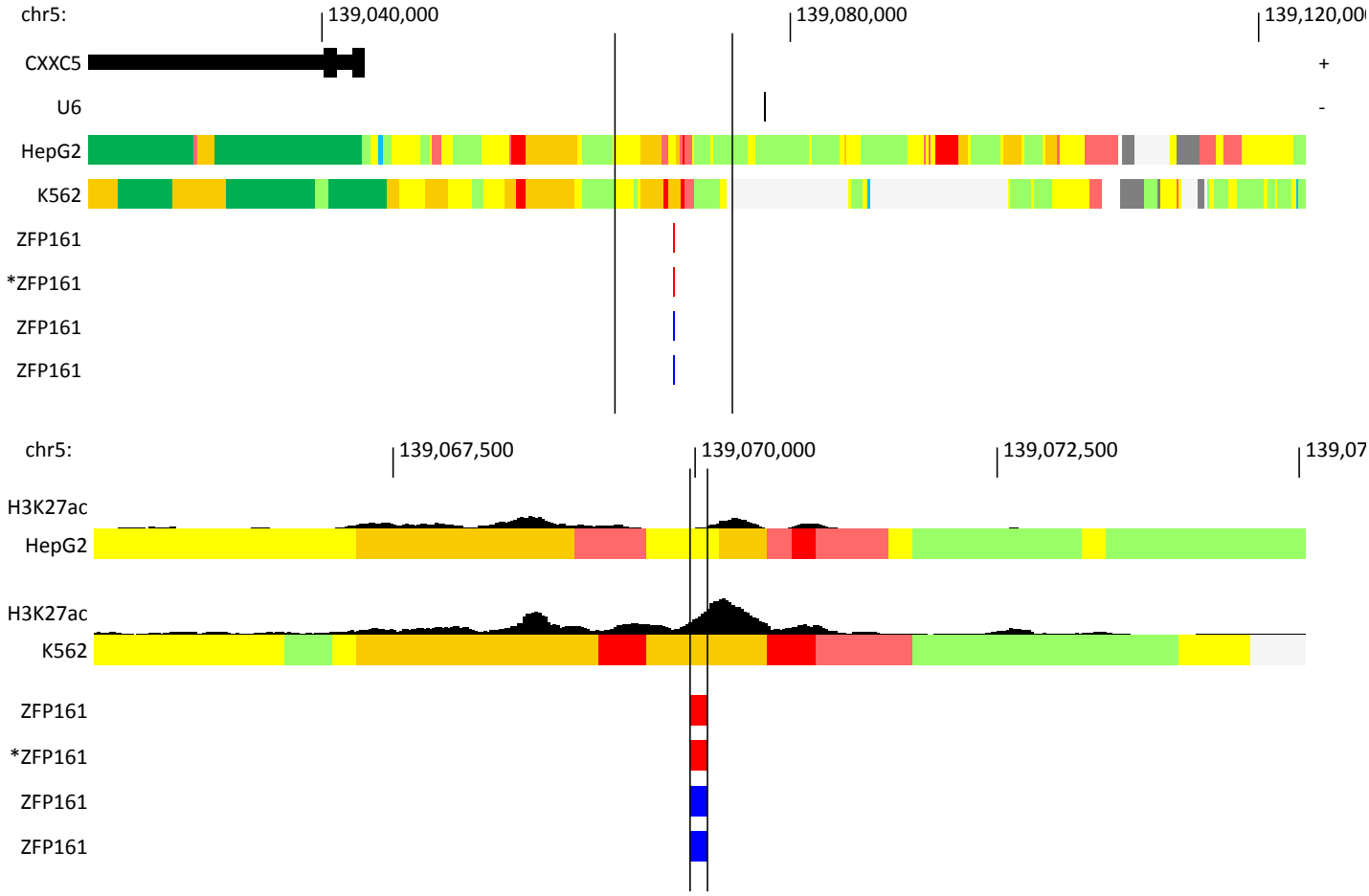
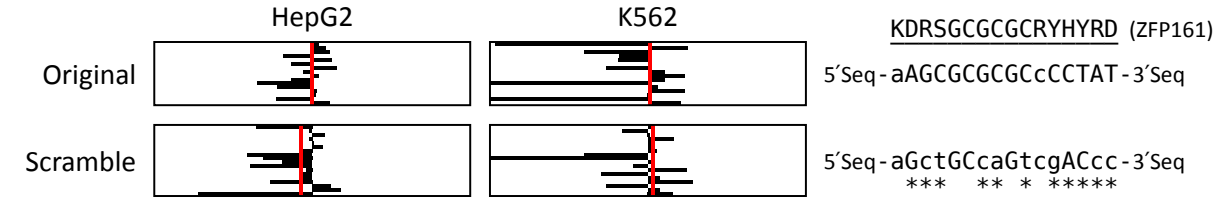
1559 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr5 139070023 139070038 + (hg18)





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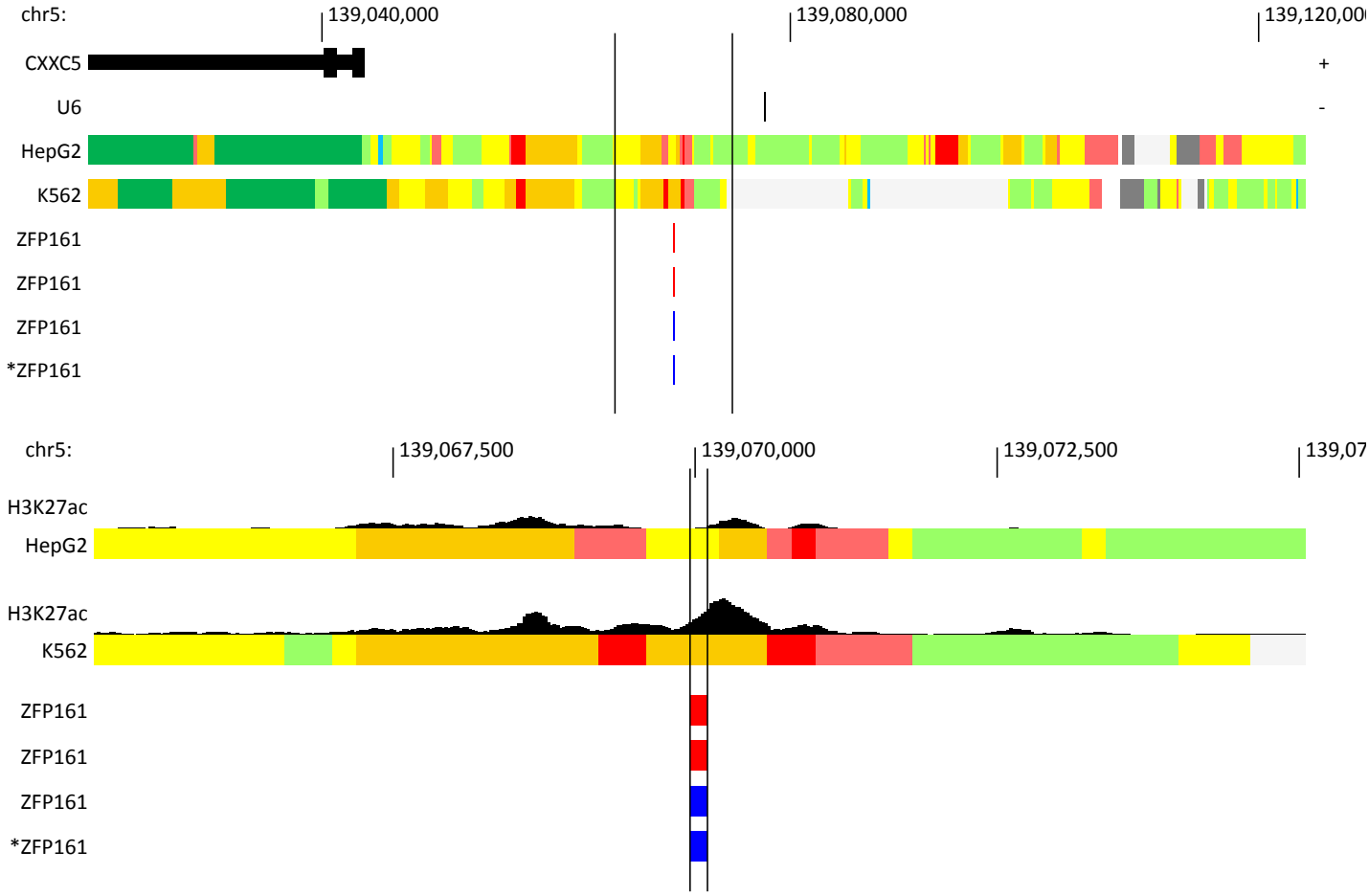
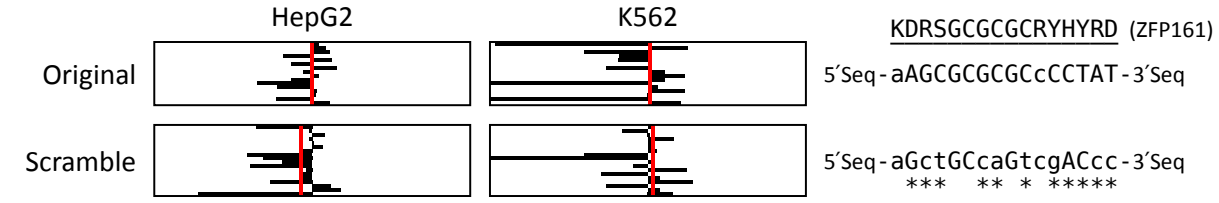
1560 ZFP161 in K562 enhancer

chr5 139070023 139070038 + (hg18)





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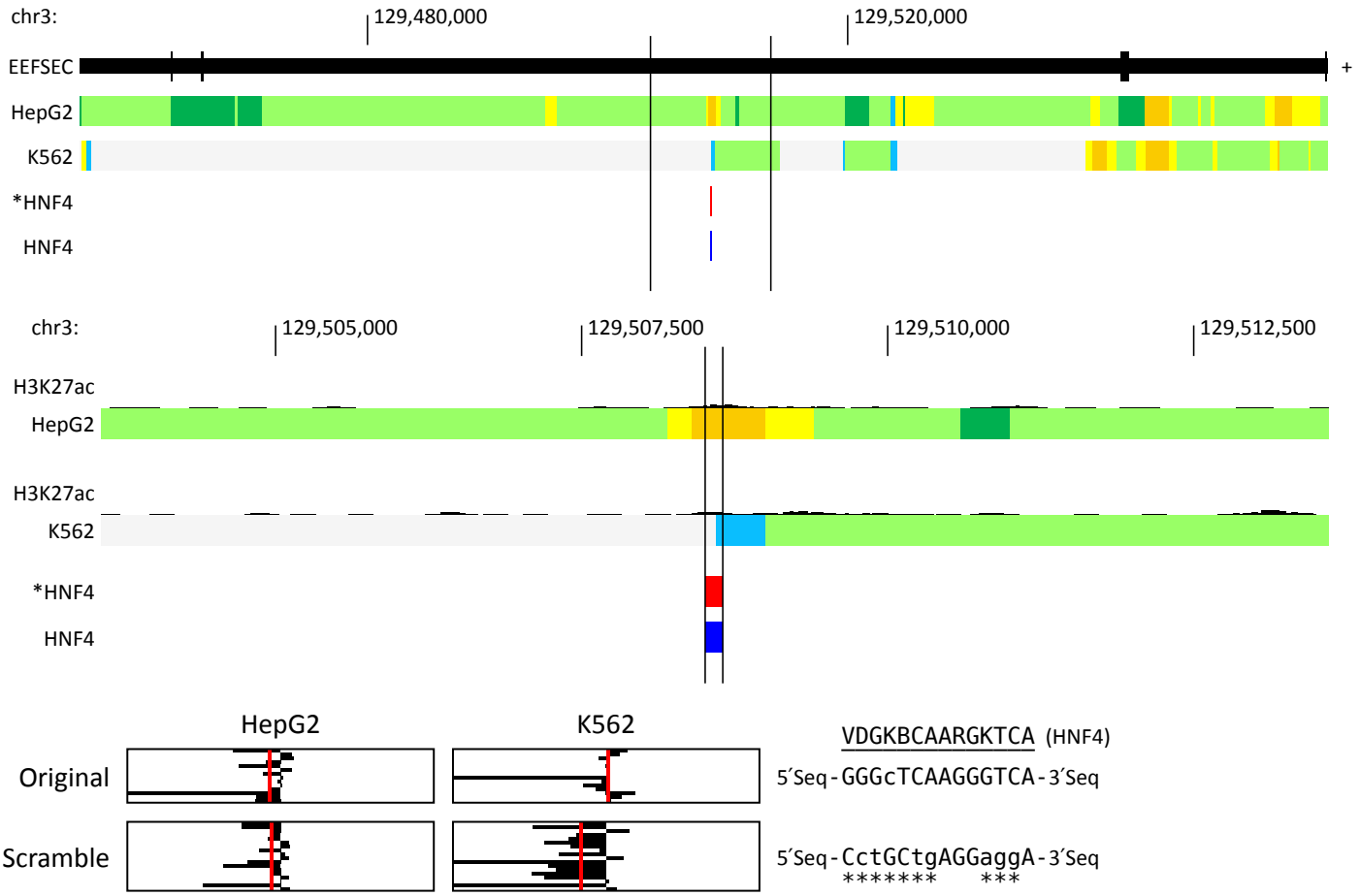
1561 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr3 129508575 129508588 + (hg18)



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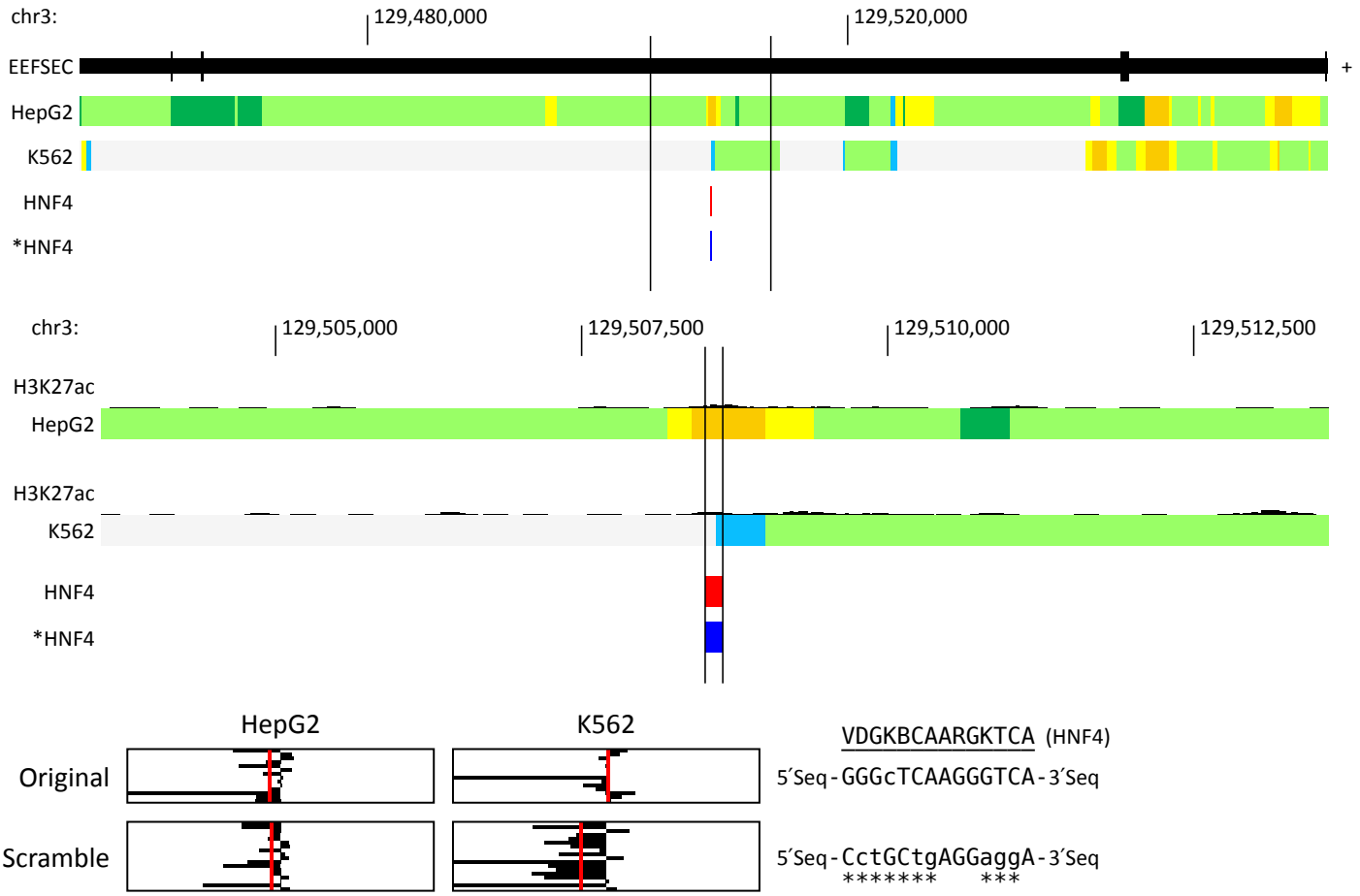
1562 HNF4 in HepG2 enhancer

chr3 129508575 129508588 + (hg18)



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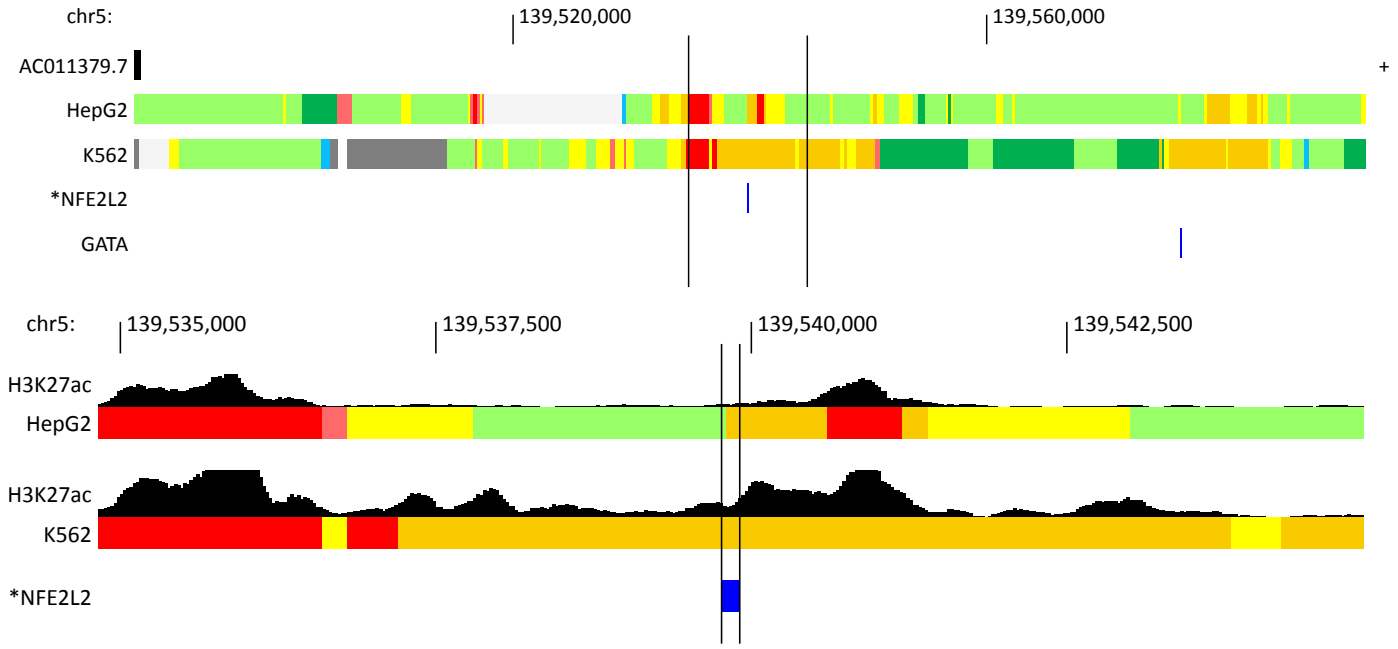
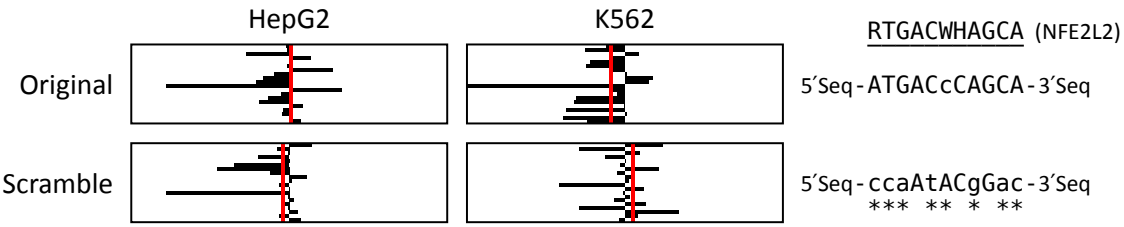
1563 NFE2L2 in K562 enhancer

chr5 139539831 139539841 + (hg18)





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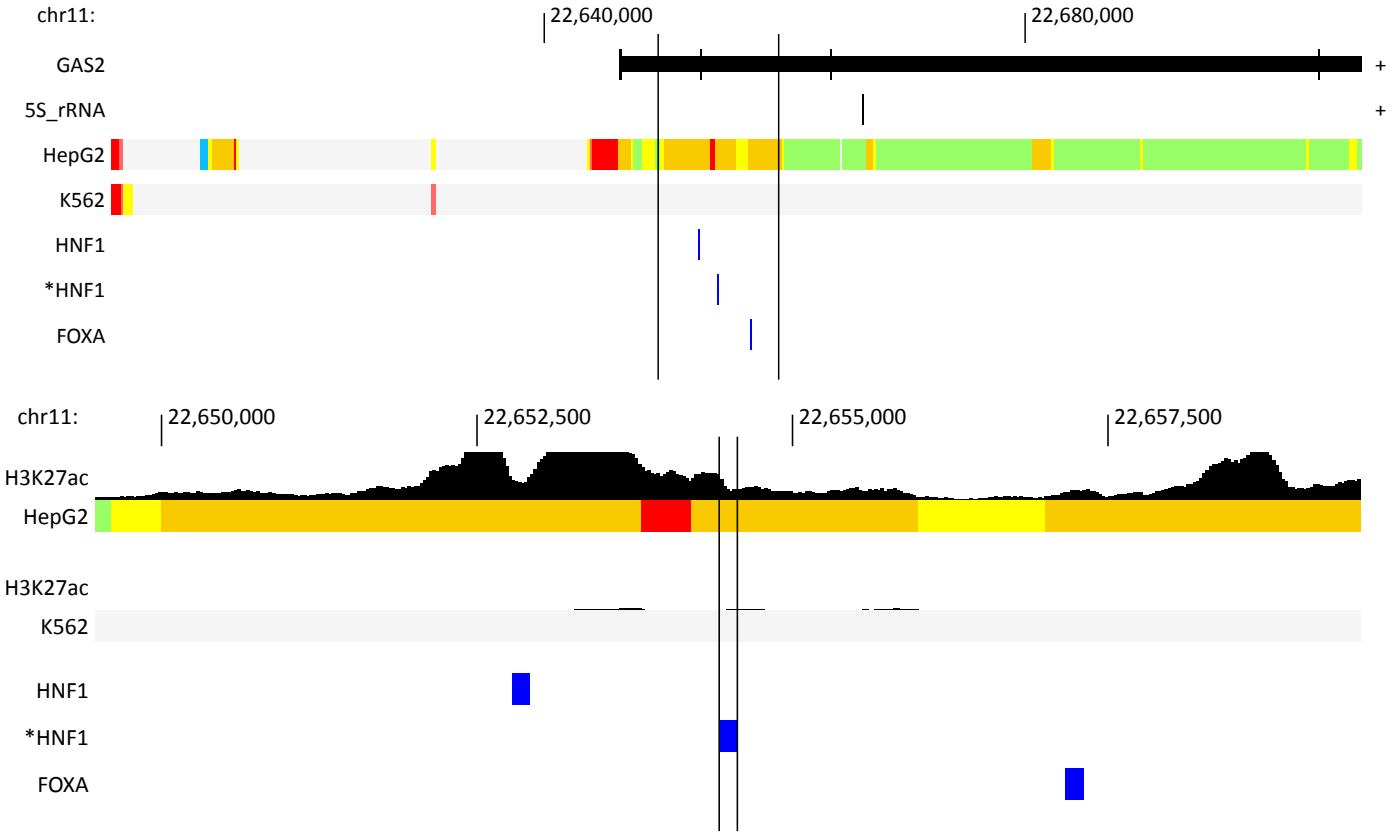
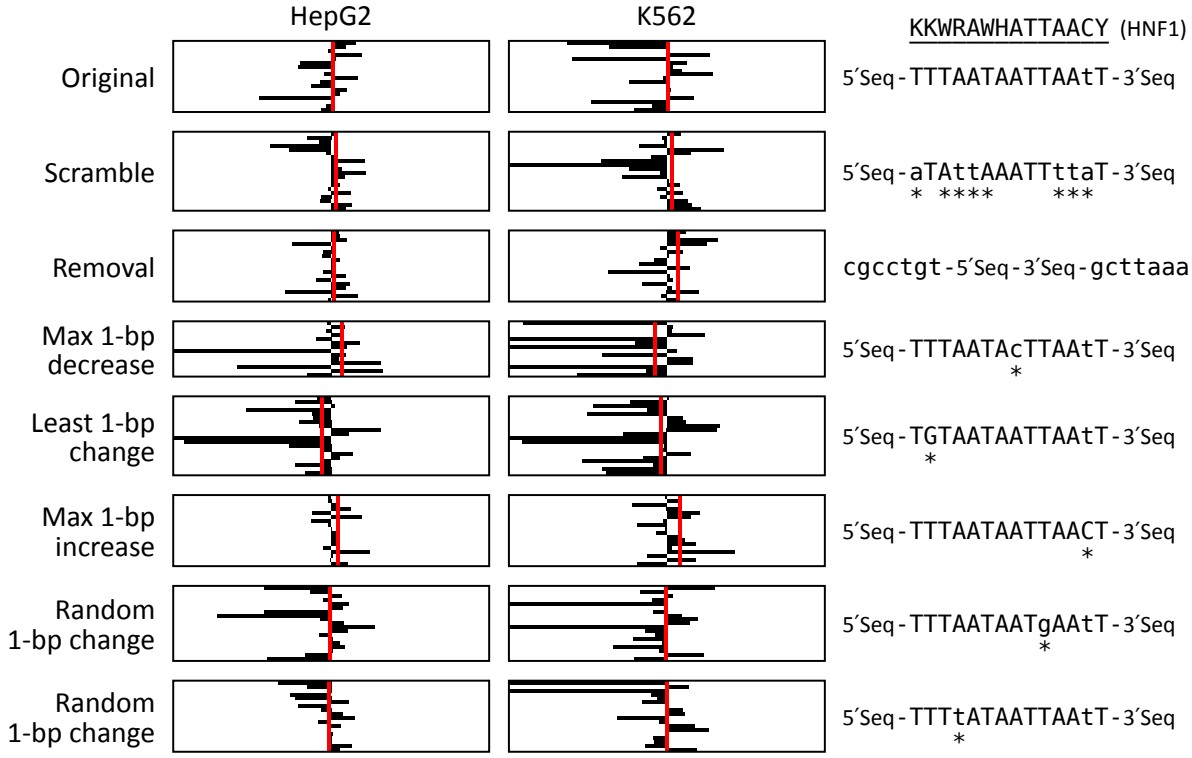
1564 HNF1 in HepG2 enhancer

chr11 22654485 22654498 - (hg18)





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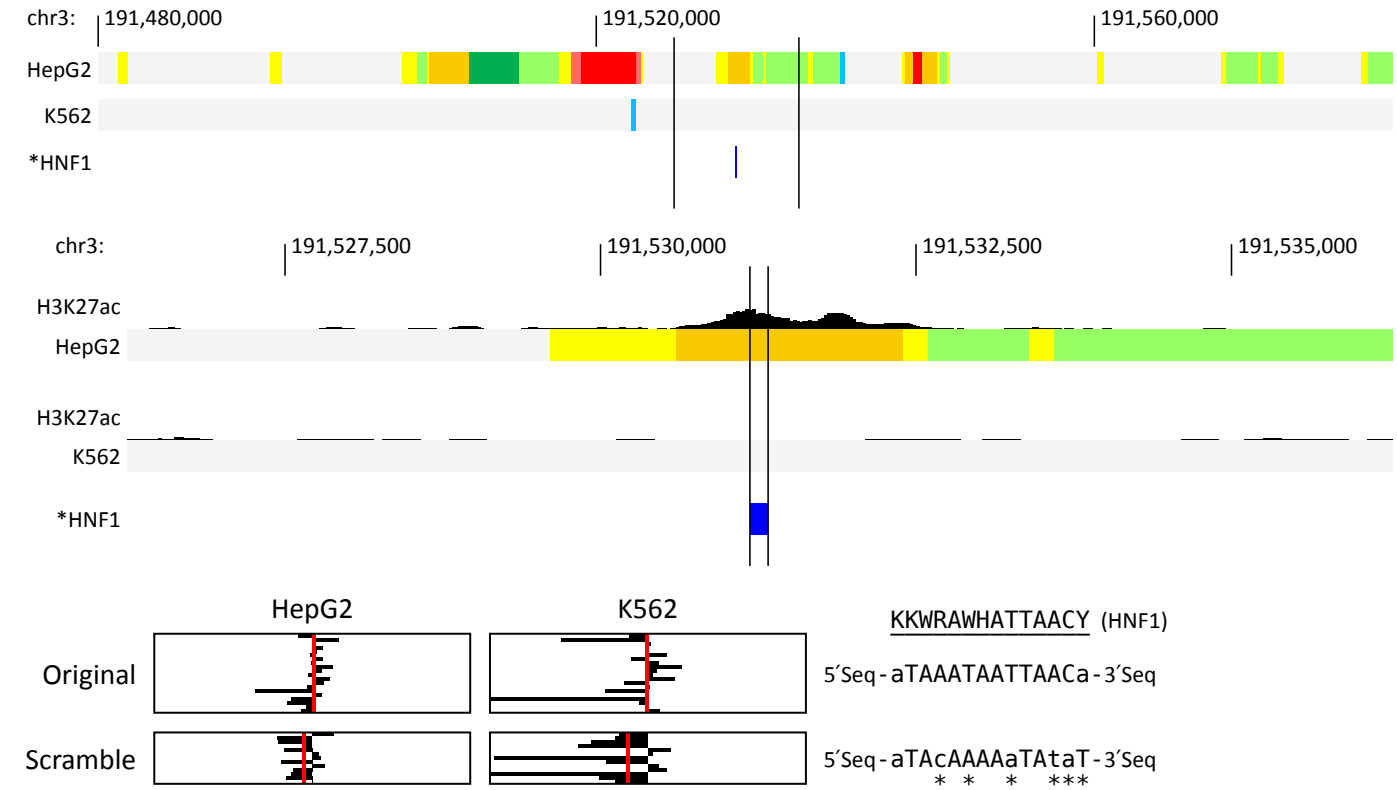
1565 HNF1 in HepG2 enhancer

chr3 191531250 191531263 + (hg18)



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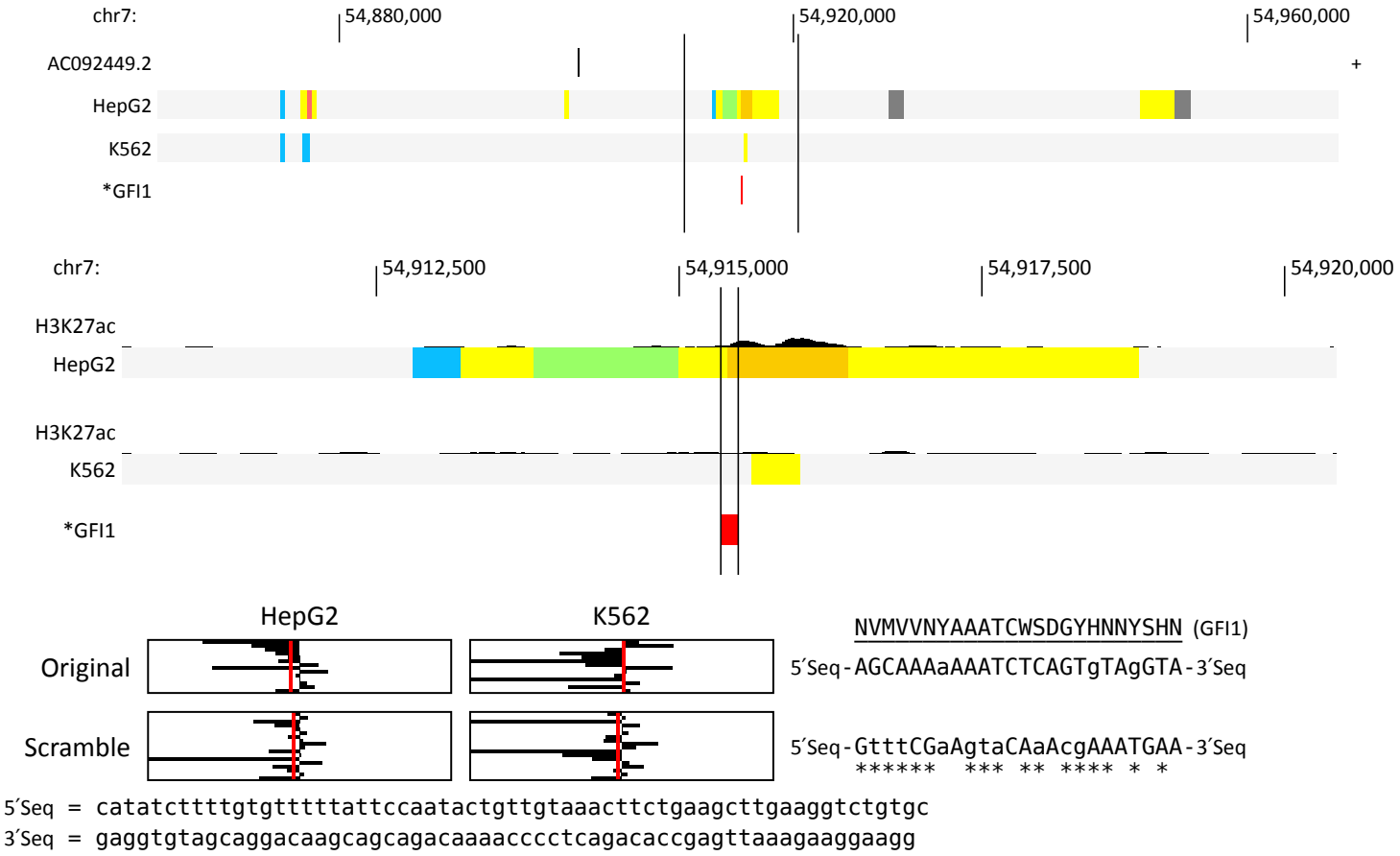
1566 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr7 54915405 54915428 + (hg18)



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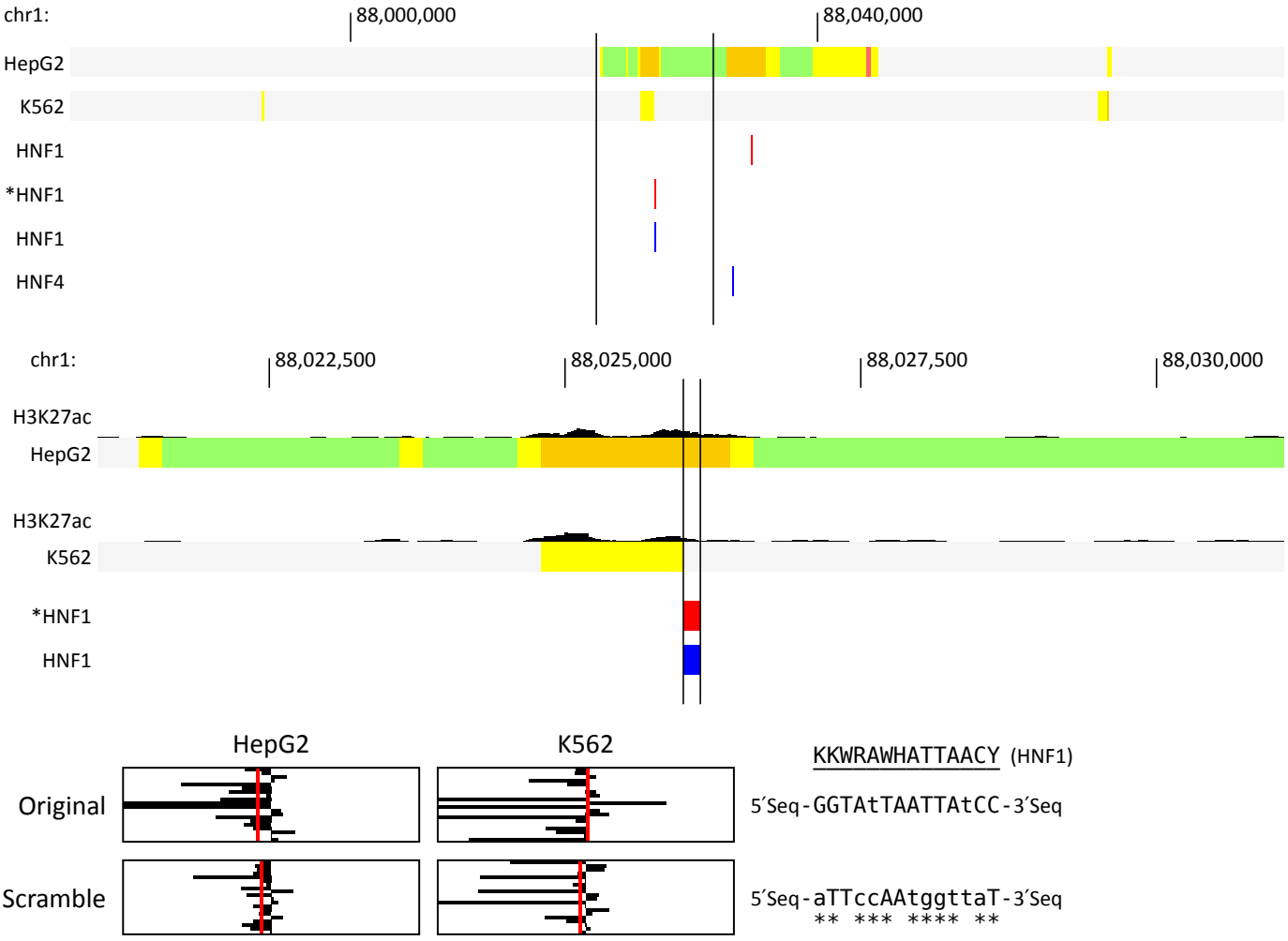
1567 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr1 88026066 88026079 - (hg18)



KKWRAWHATTAACY (HNF1)

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5′Seq-aTTccAAtggttaT-3′Seq

** *** **** **

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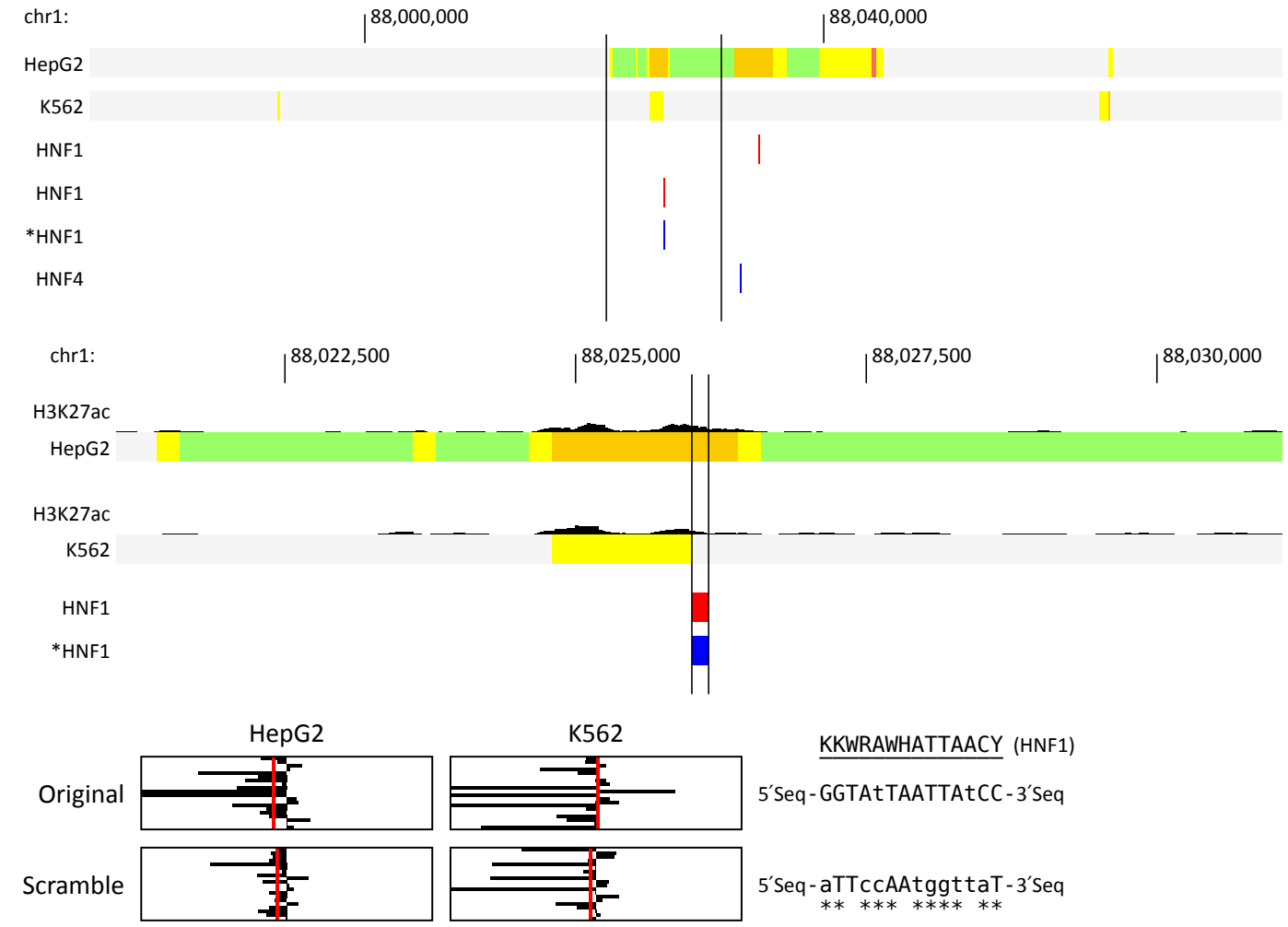
1568 HNF1 in HepG2 enhancer

chr1 88026066 88026079 - (hg18)



KKWRAWHATTAACY (HNF1)

5′Seq-GGTAtTAATTAtCC-3′Seq

5′Seq-aTTccAAtggttaT-3′Seq

** *** **** **

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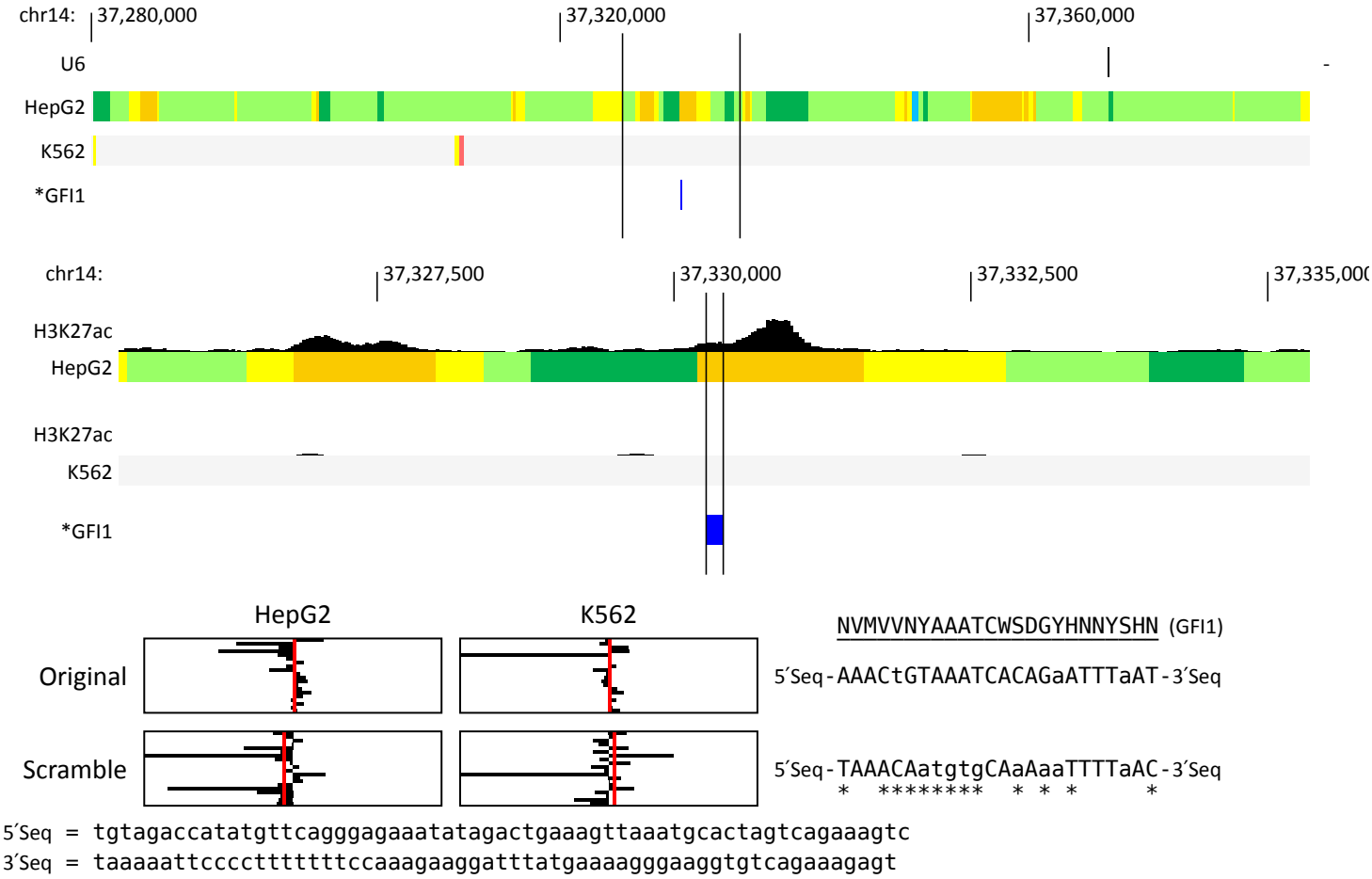
1569 GFI1 in HepG2 enhancer

chr14 37330332 37330355 + (hg18)



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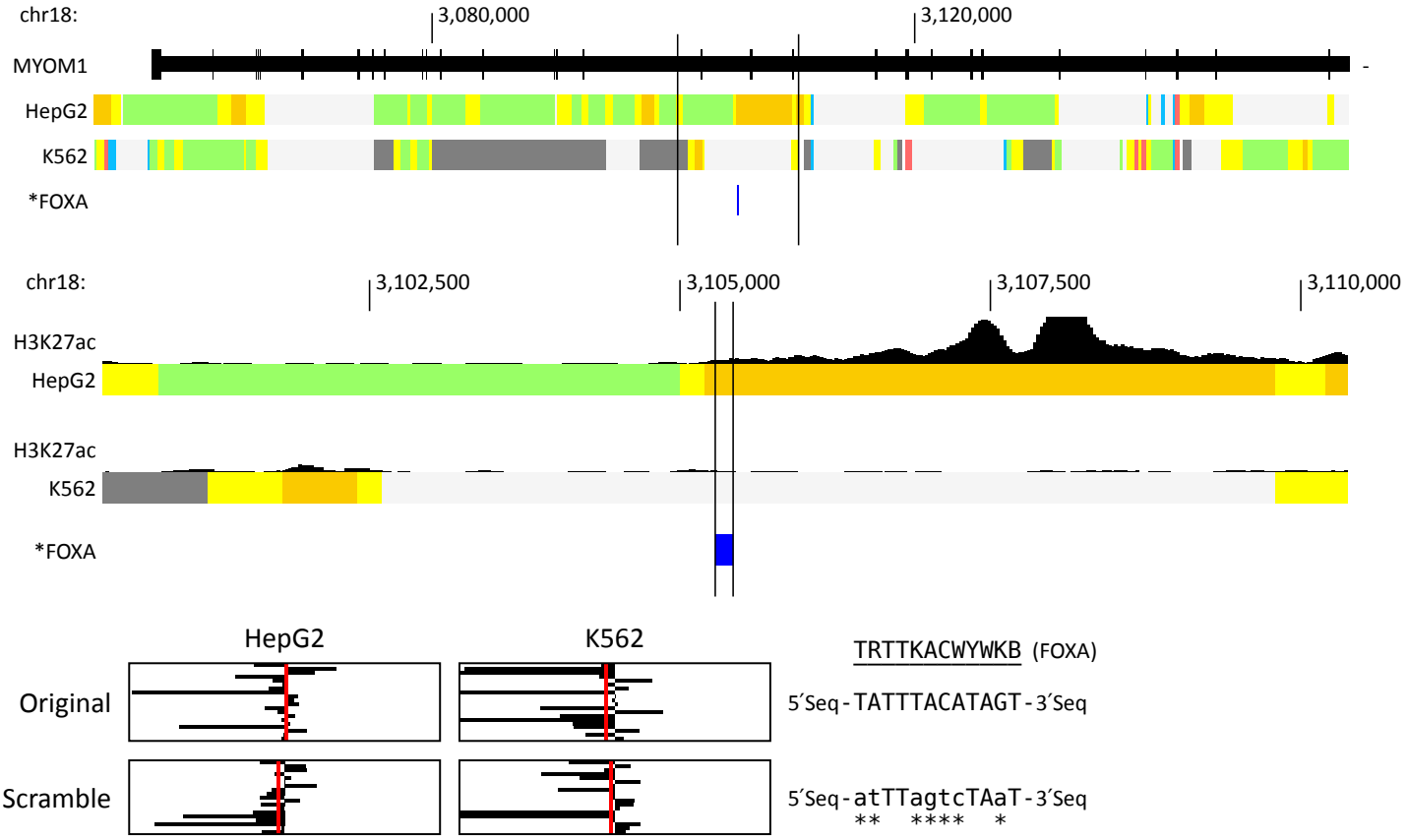
1570 FOXA in HepG2 enhancer

chr18 3105351 3105362 + (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TATTTACATAGT-3′Seq

5′Seq-atTTagtcTAaT-3′Seq

** **** *

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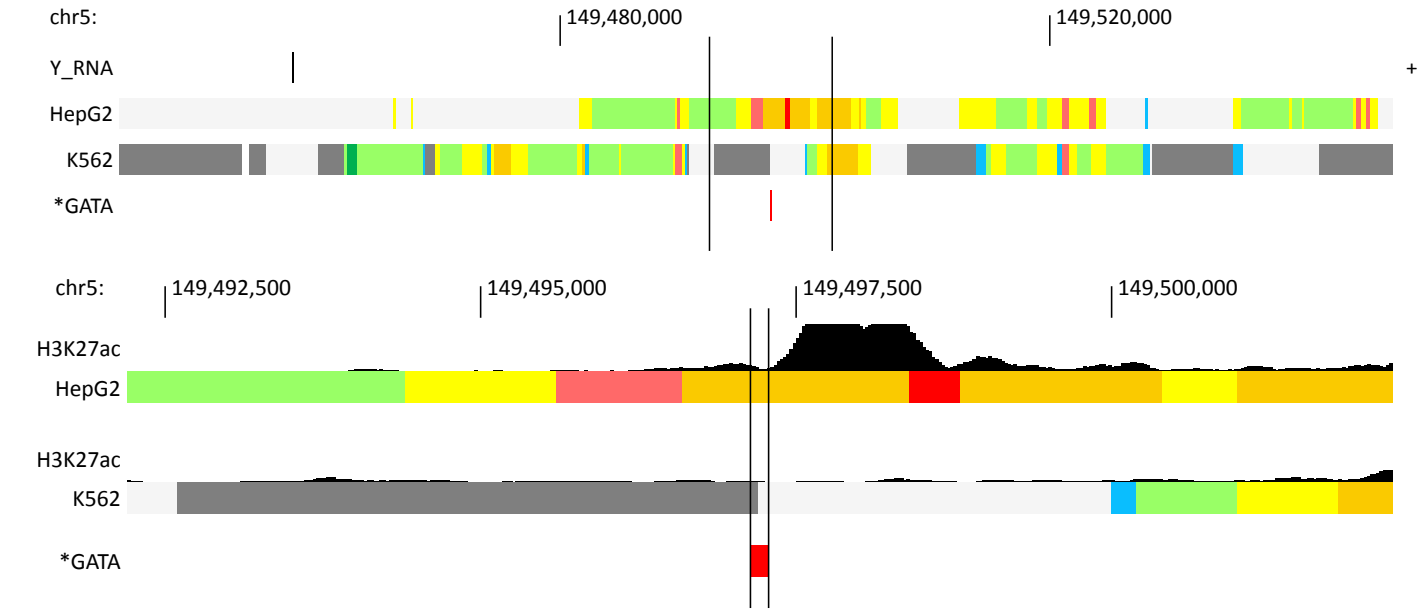
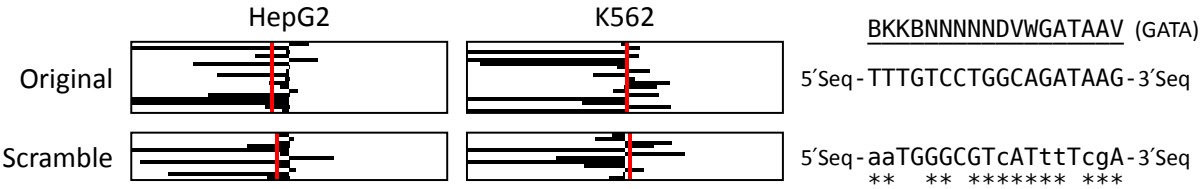
3′Seq = ttagagtggctggaaataccctaaccctggagagtggctgatagatggaagggacttagttcatga

1571 GATA in HepG2 enhancer (conserved at 70% confidence)

chr5 149497202 149497219 - (hg18)





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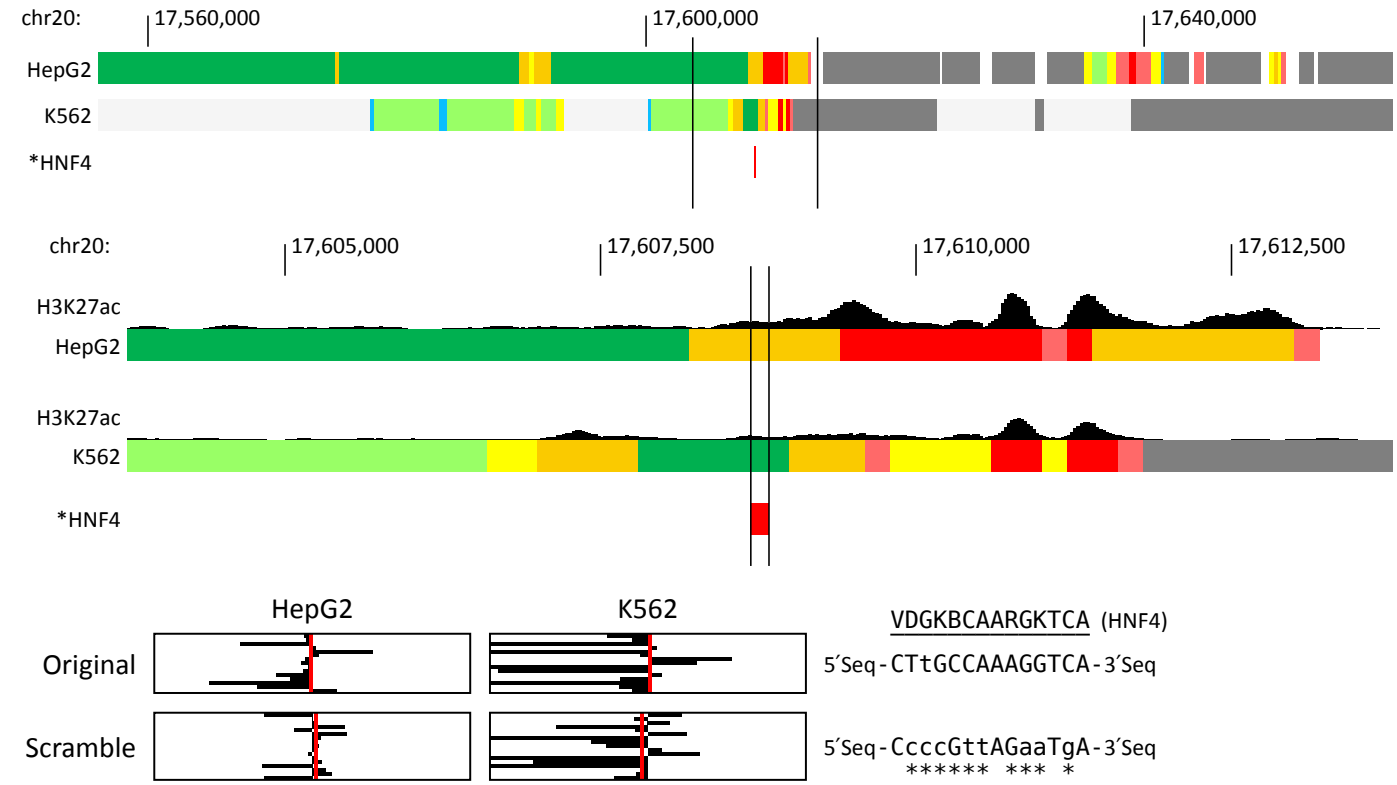
3′Seq = agcctggtattggaactgtcacccggaggacaggctgtcagagctggtaggctactggatacc

1572 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr20 17608757 17608770 - (hg18)



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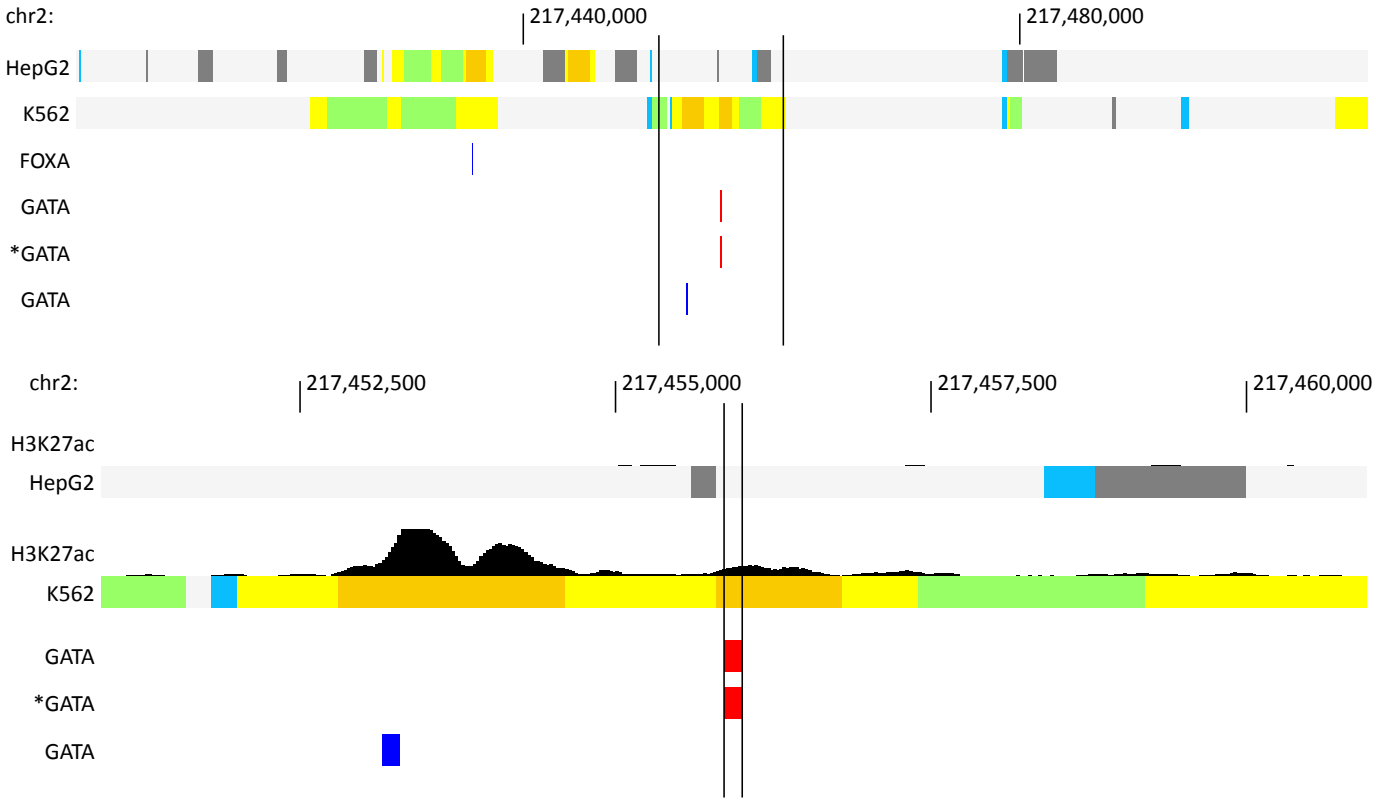
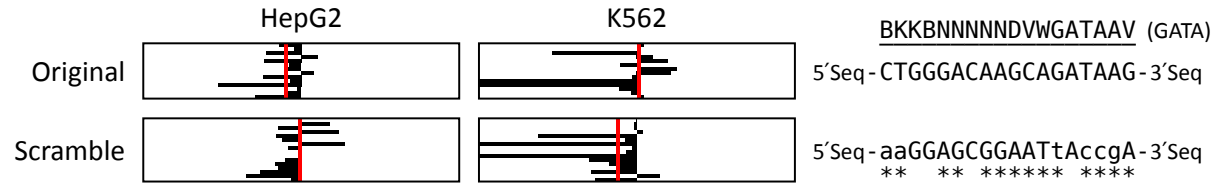
3′Seq = ctcccactatcatatgccaacctctttcccttccagaaagaagcttccggttctgaggtcctgga

1573 GATA in K562 enhancer (conserved at 60% confidence)

chr2 217455924 217455941 - (hg18)





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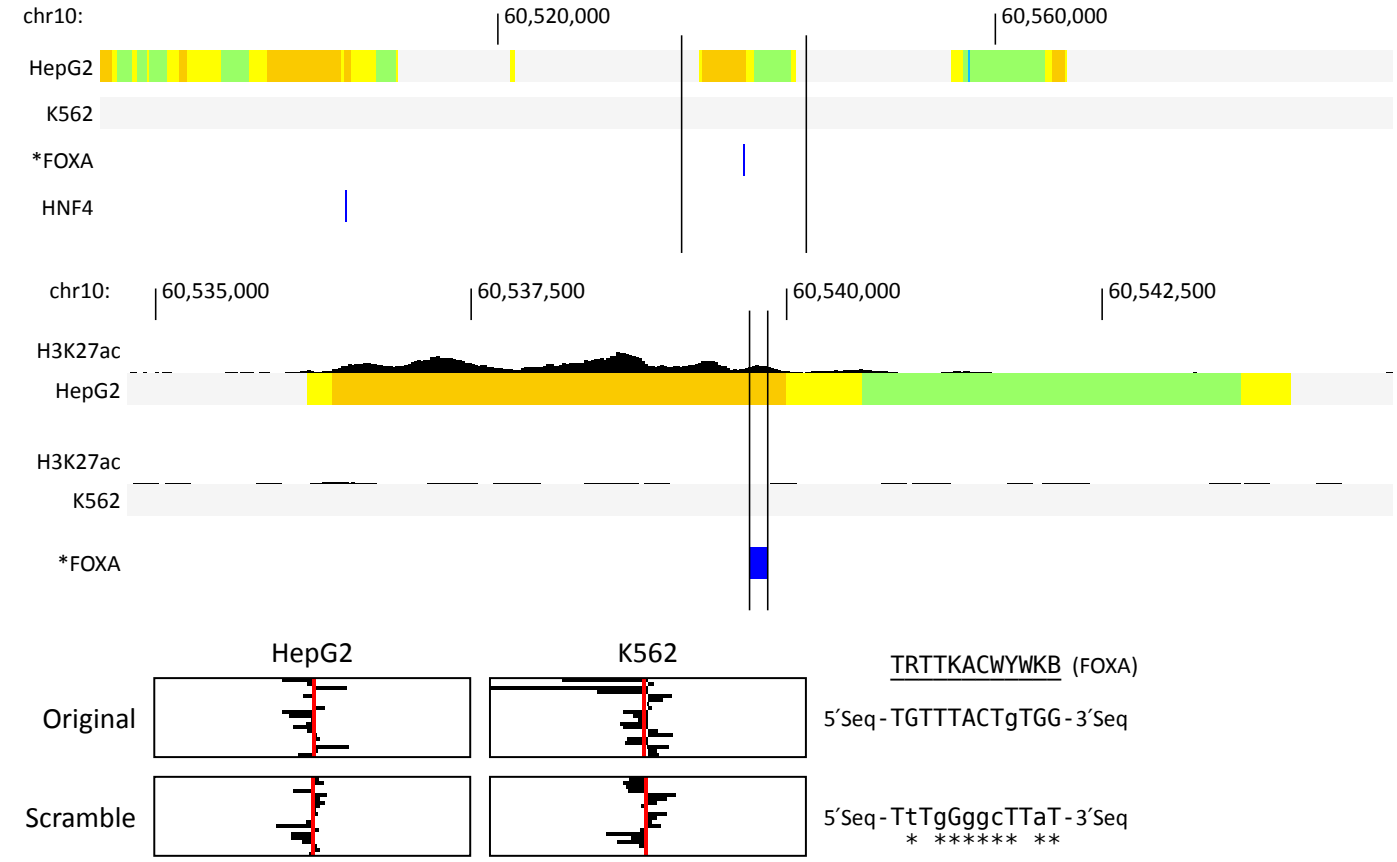
1574 FOXA in HepG2 enhancer

chr10 60539773 60539784 + (hg18)



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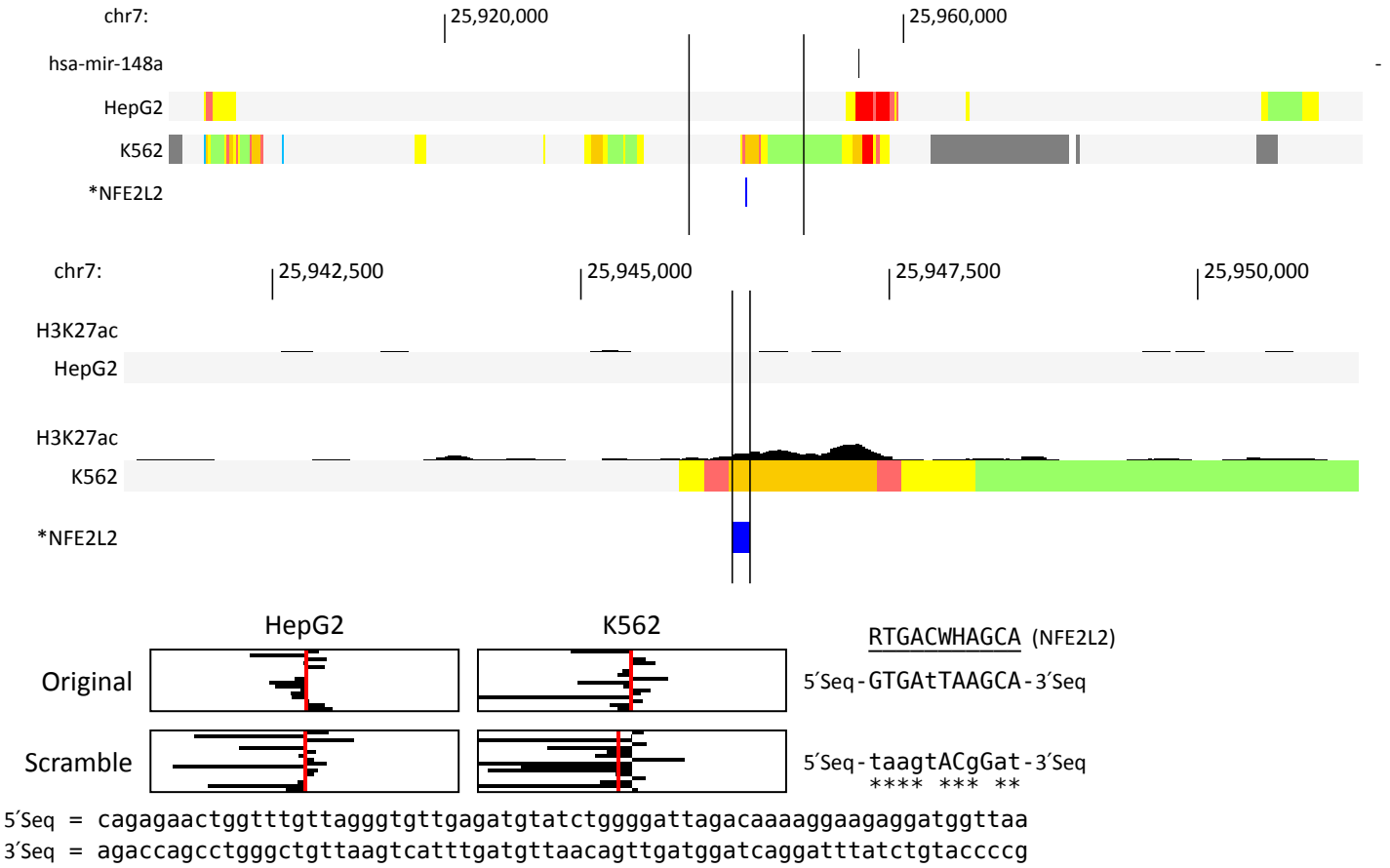
1575 NFE2L2 in K562 enhancer

chr7 25946294 25946304 - (hg18)



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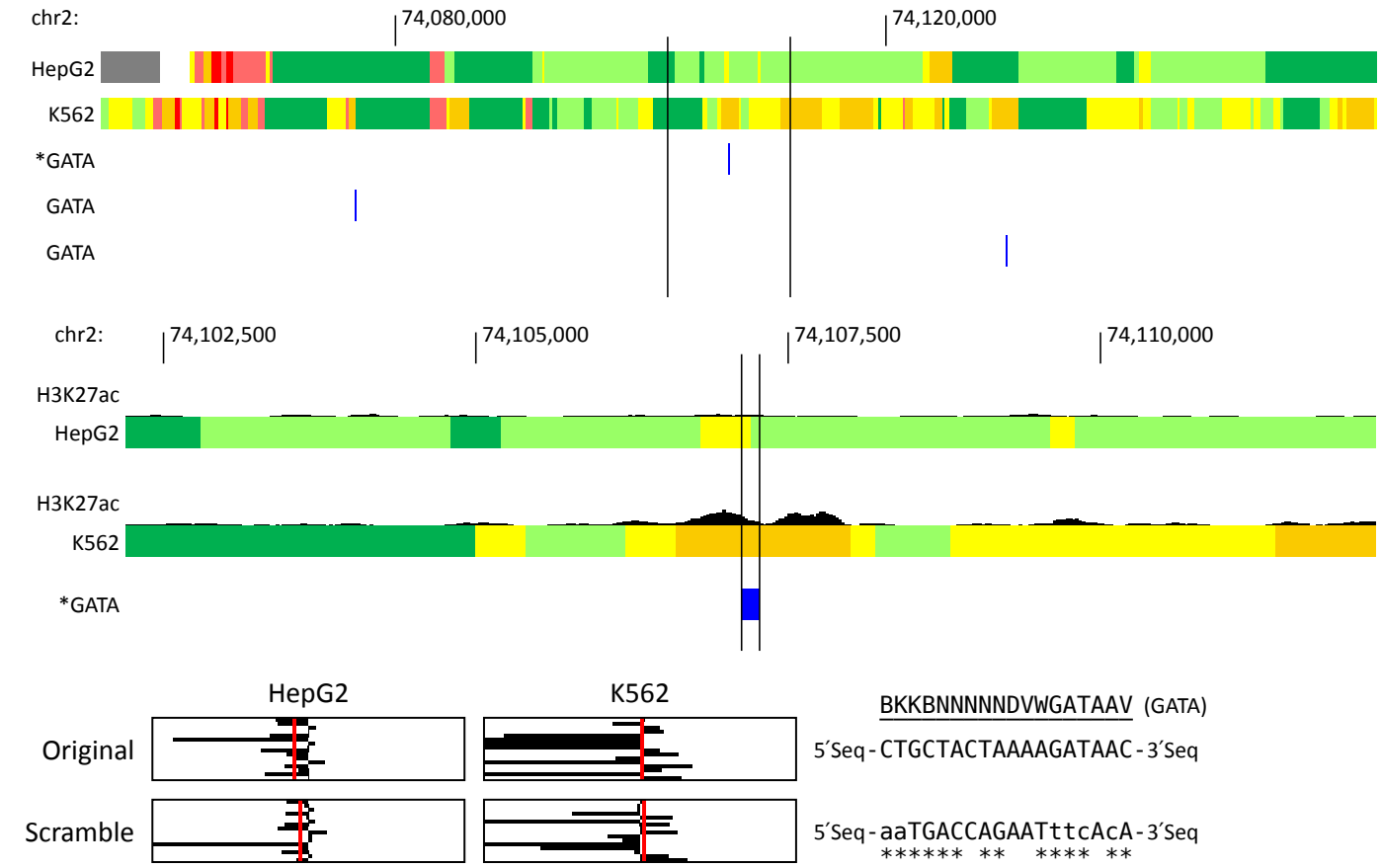
3′Seq = agaccagcctgggctgttaagtcatttgatgttaacagttgatggatcaggatttatctgtaccccg

1576 GATA in K562 enhancer

chr2 74107191 74107208 - (hg18)



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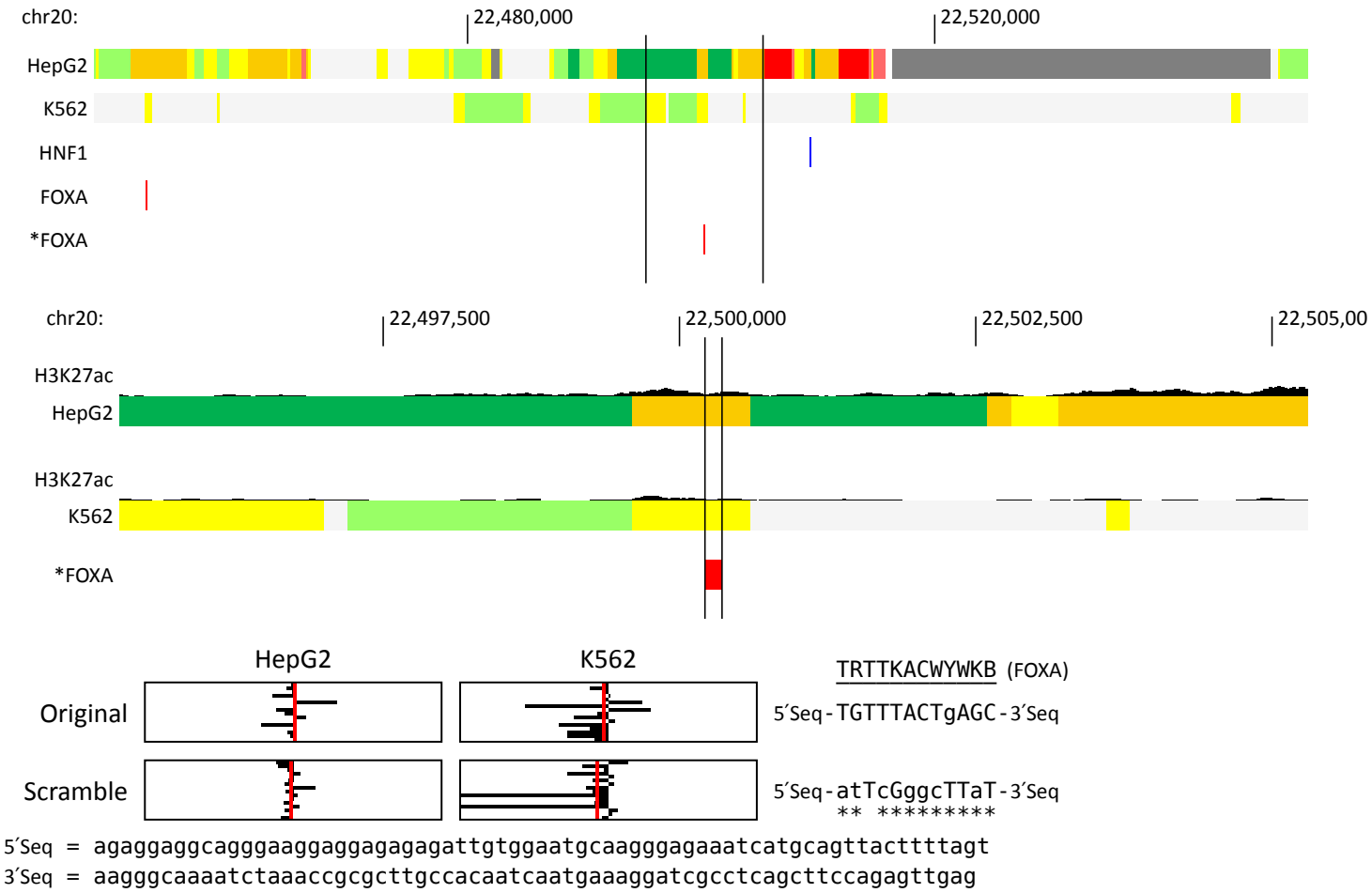
3′Seq = ctaacagtcaattatctgttaagcactgcccttgtaatgcaaataaccactctggaacctcct

1577 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 22500282 22500293 + (hg18)



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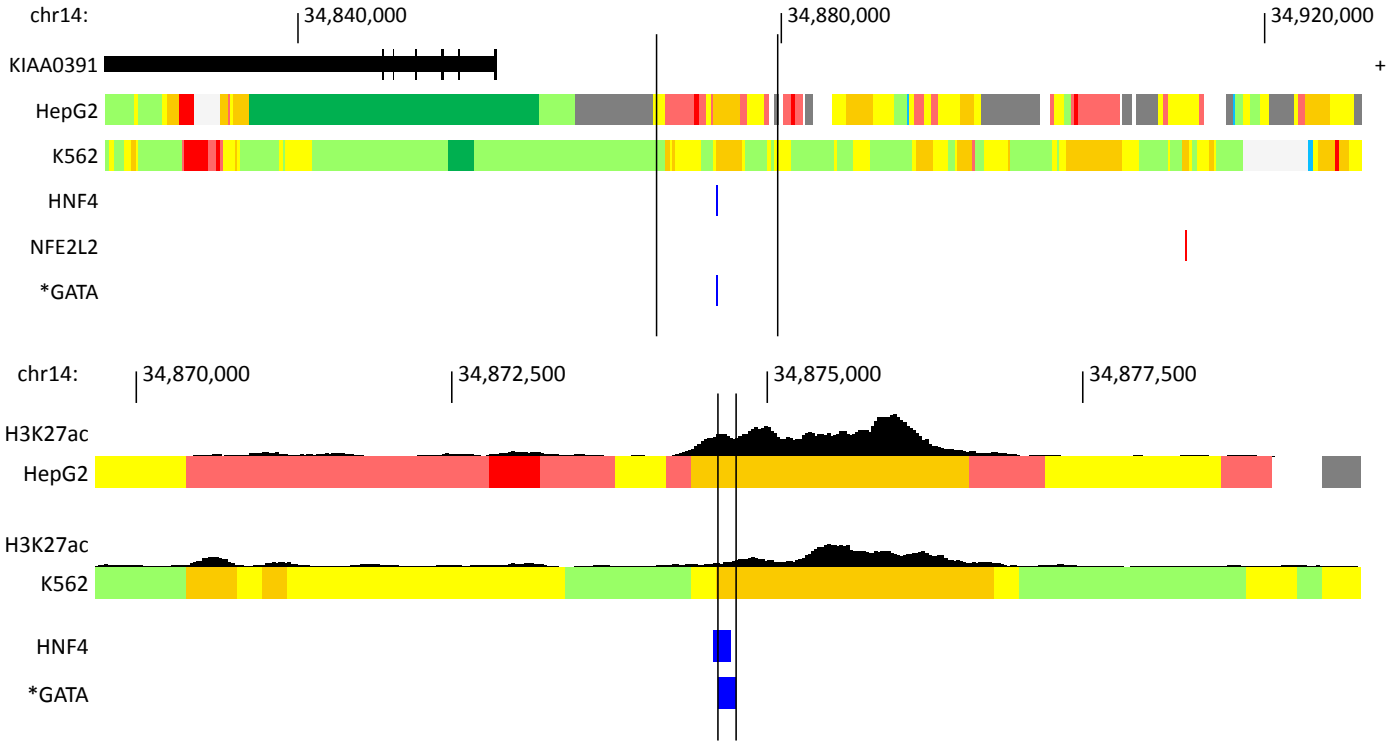
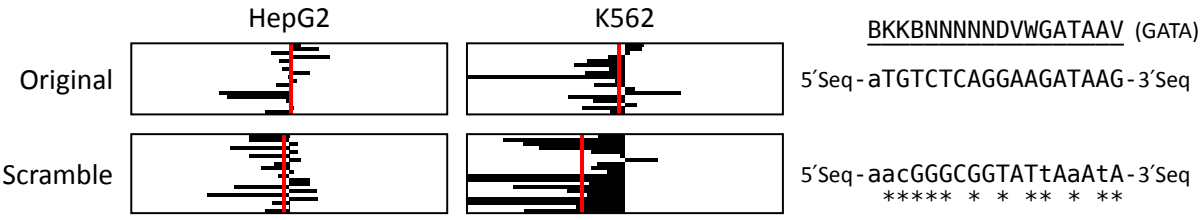
1578 GATA in K562 enhancer

chr14 34874673 34874690 - (hg18)





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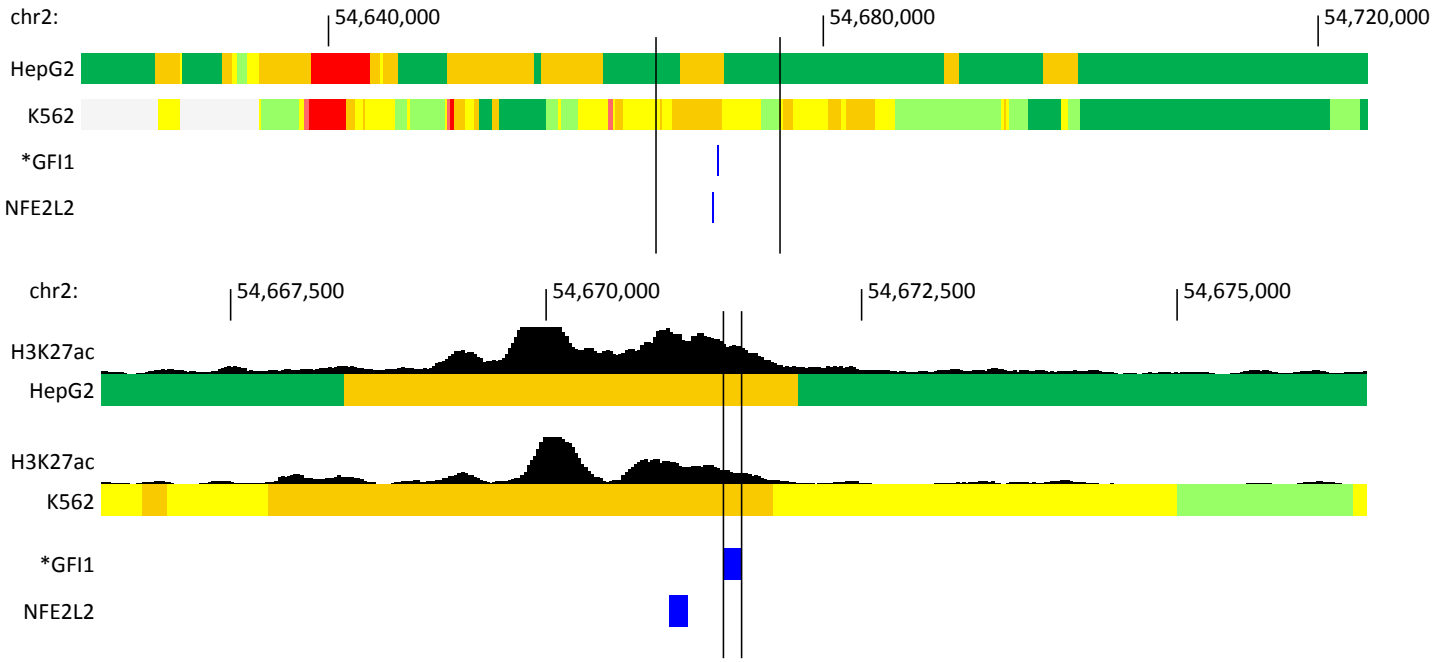
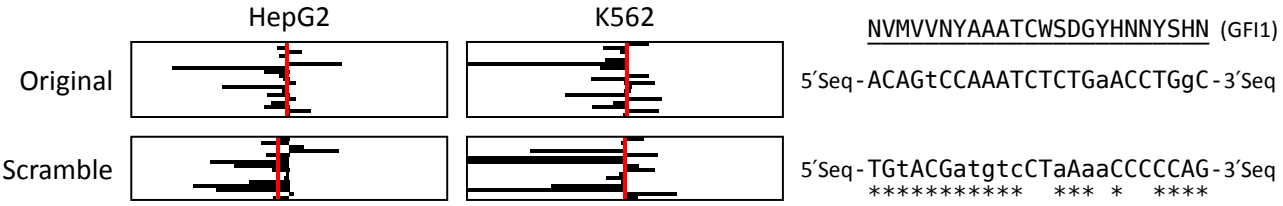
3′Seq = aaggatccagatgccaggaggagtgacctctggacacttggctgggagcccaggagccctgat

1579 GFI1 in HepG2 enhancer

chr2 54671466 54671489 - (hg18)





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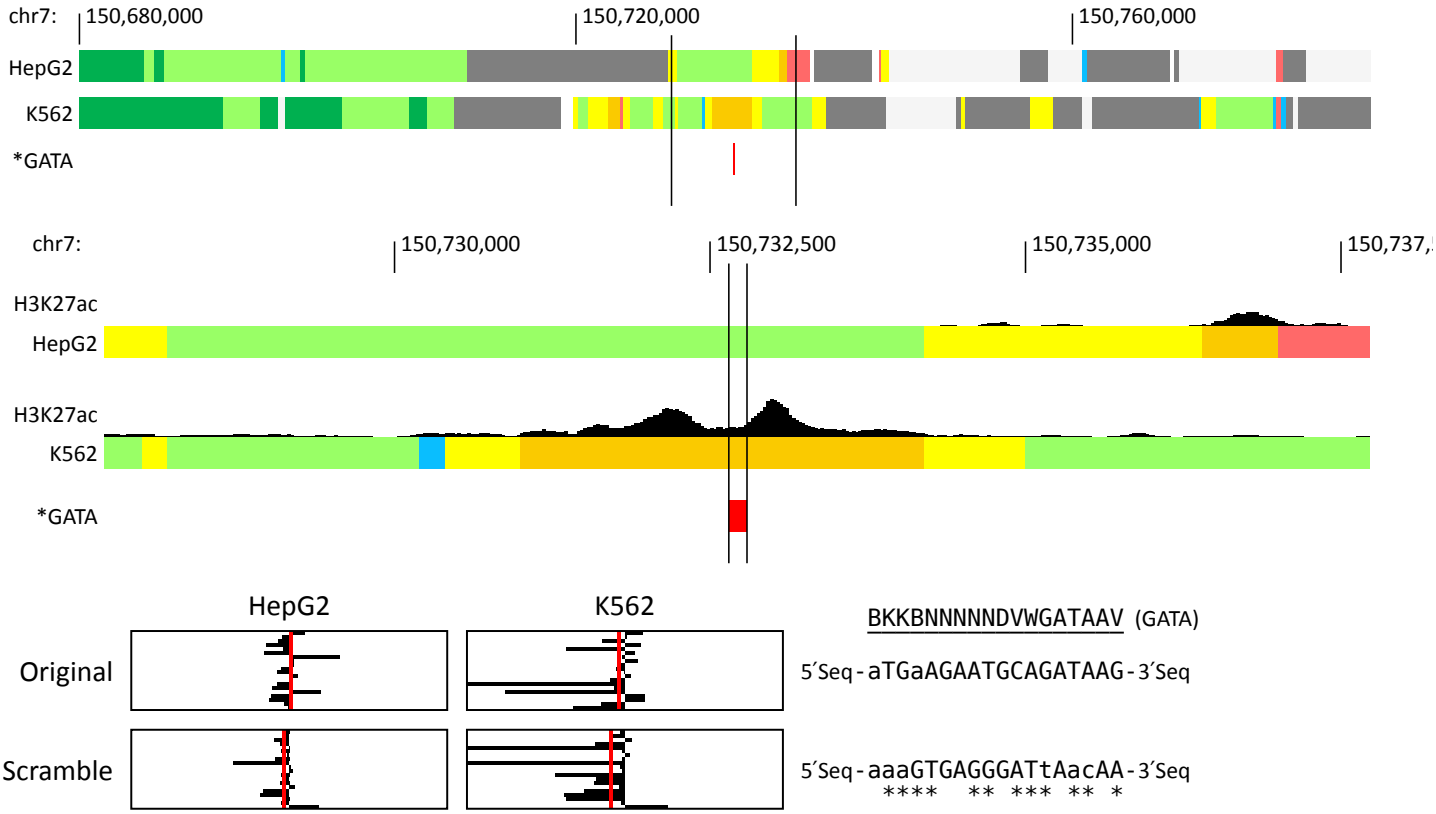
3′Seq = atttaaaggtcccaaacgggctctcctaaggcatcagcttcatctgggaacttccctgac

1580 GATA in K562 enhancer (conserved at 60% confidence)

chr7 150732713 150732730 + (hg18)



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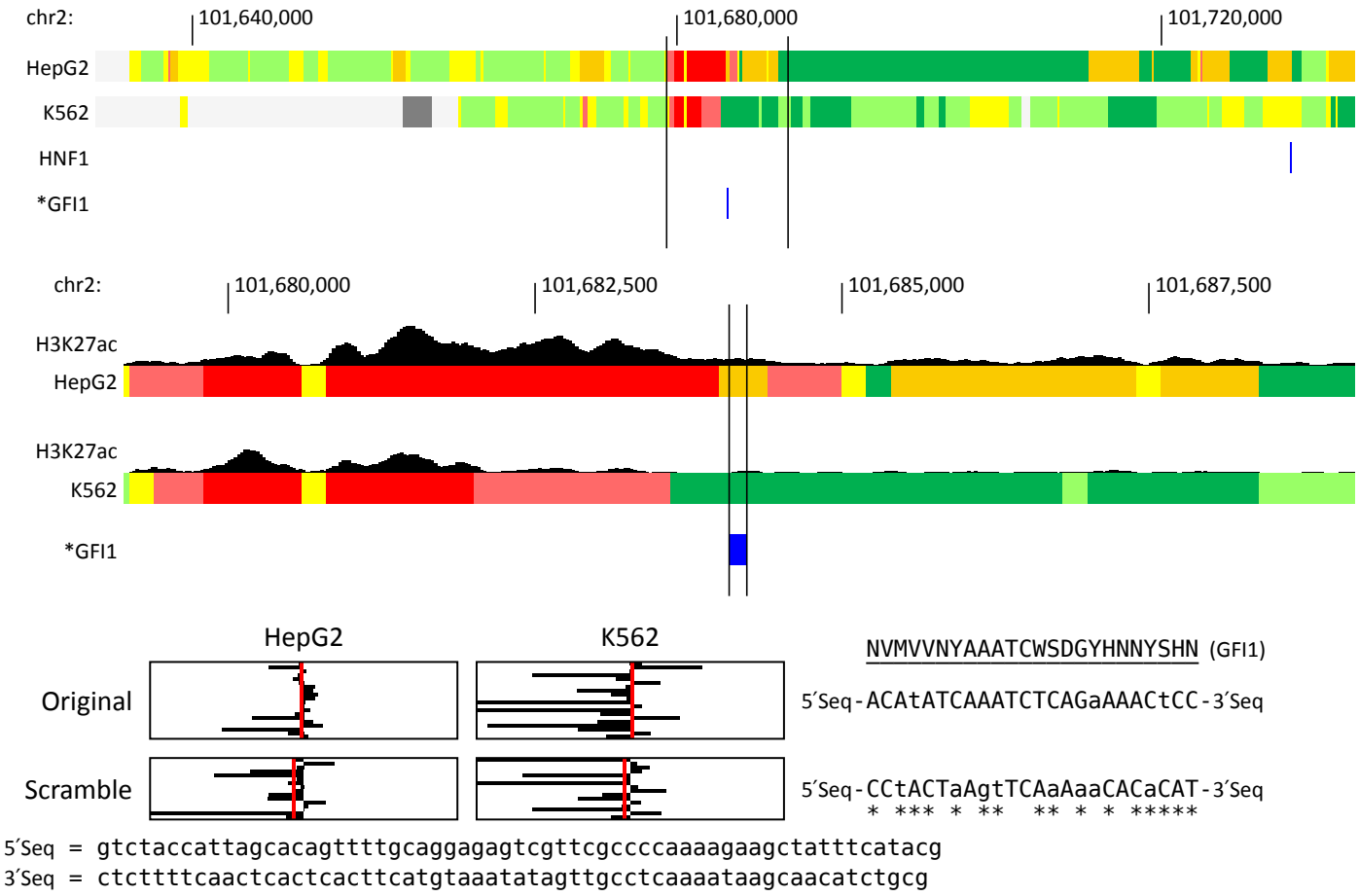
1581 GFI1 in HepG2 enhancer

chr2 101684142 101684165 - (hg18)



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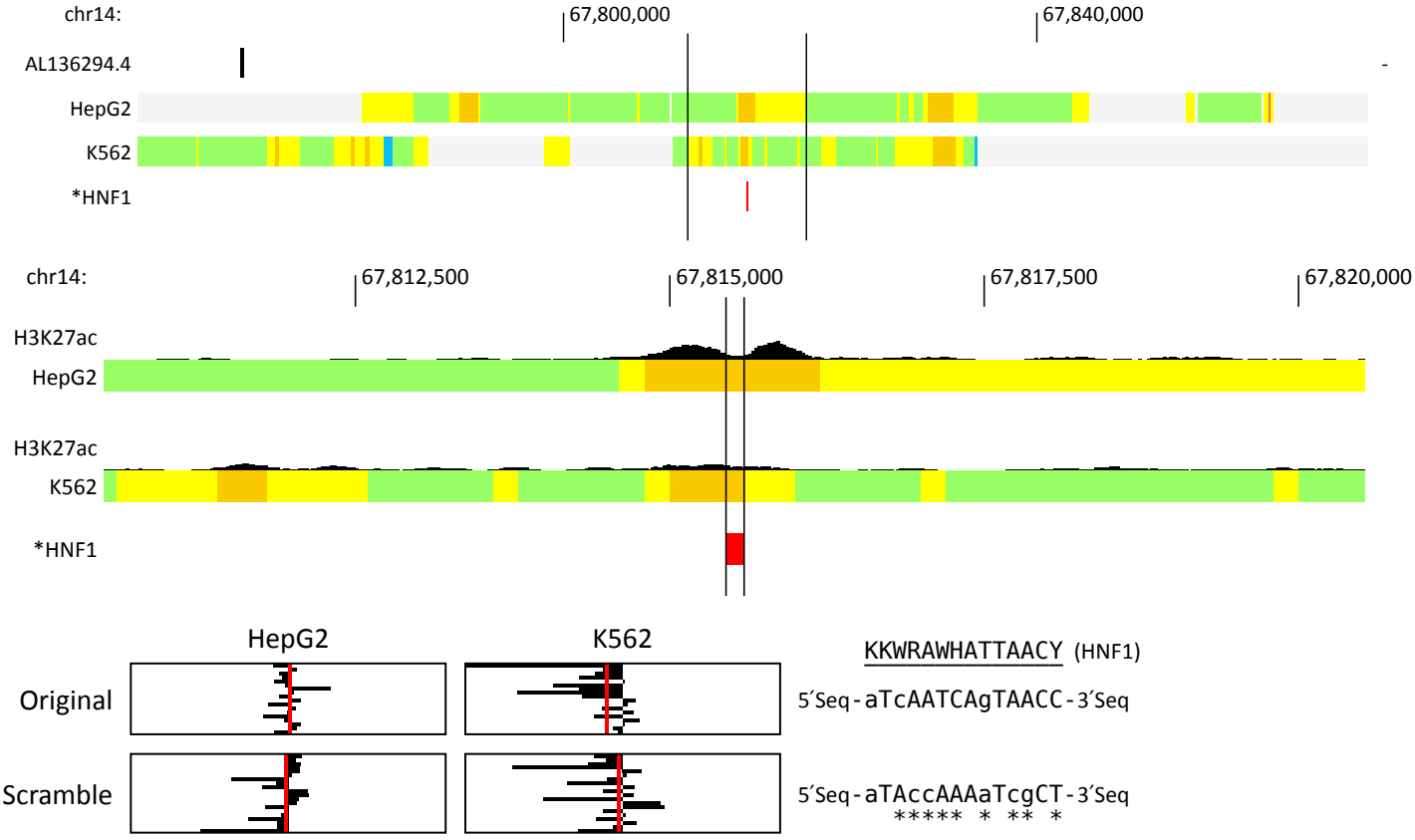
1582 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr14 67815513 67815526 - (hg18)



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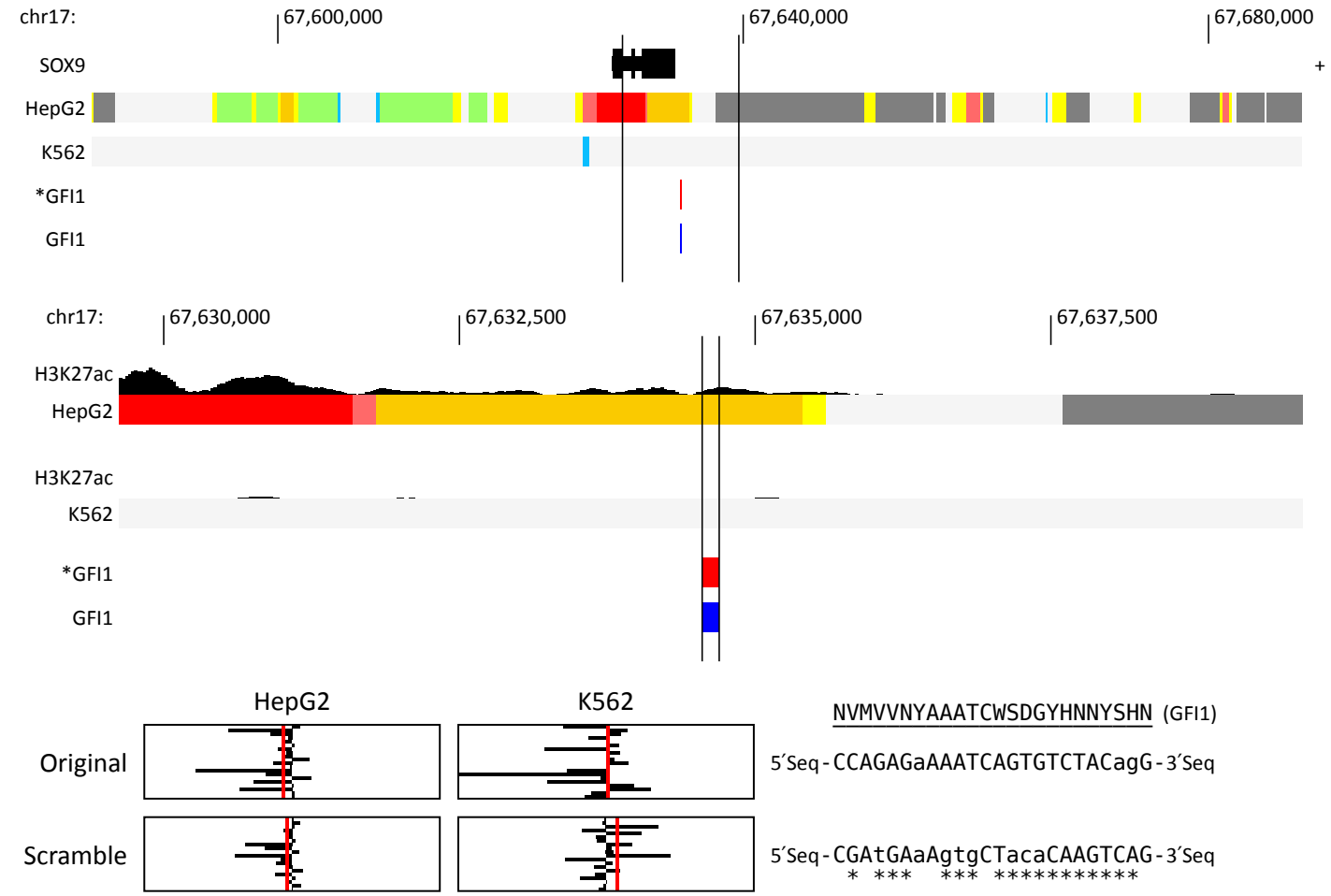
3′Seq = agcagaggaataagctctttgtggaatgtactgagaagcaggaaagaagaaaaaatgaaaagaaa

1583 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr17 67634613 67634636 + (hg18)



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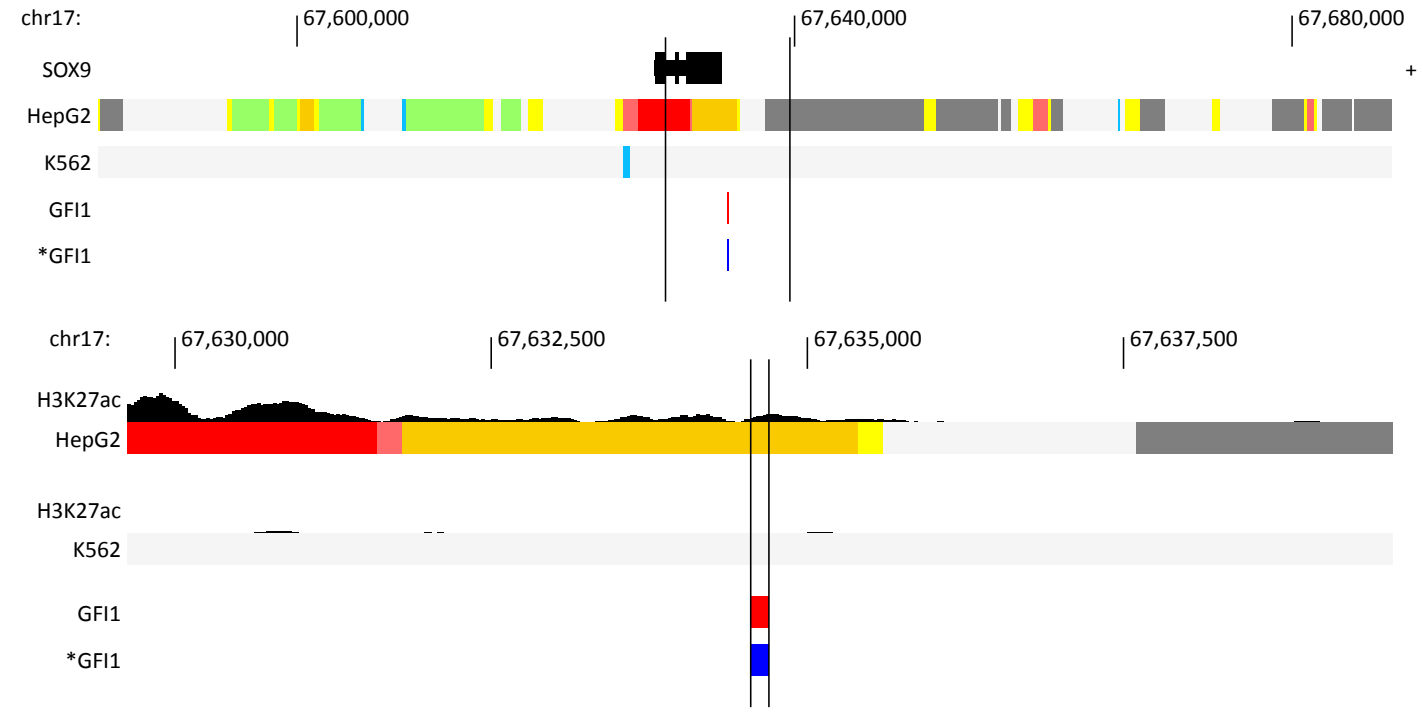
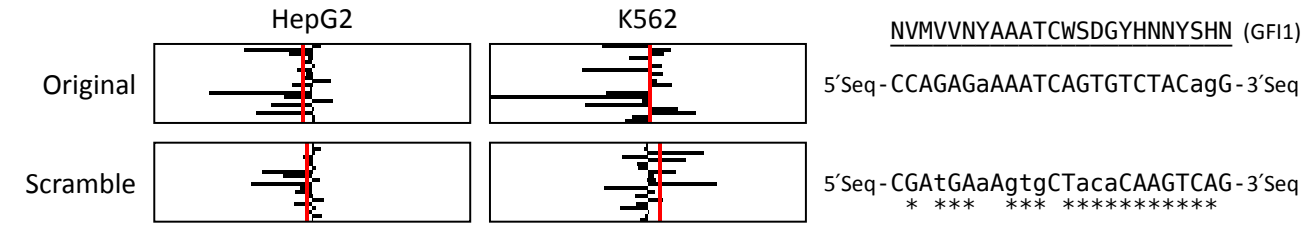
3′Seq = gaaccagagagaagcctgtcgtattaacccattaaatgattcagagccttccagatttct

1584 GFI1 in HepG2 enhancer

chr17 67634613 67634636 + (hg18)





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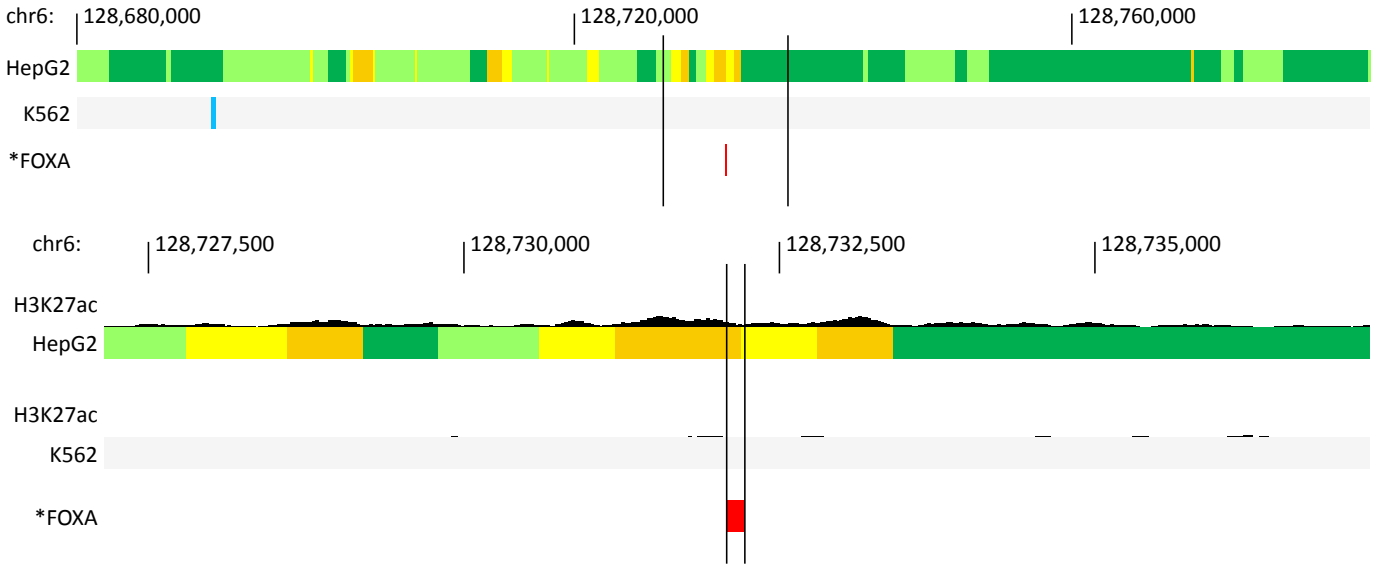
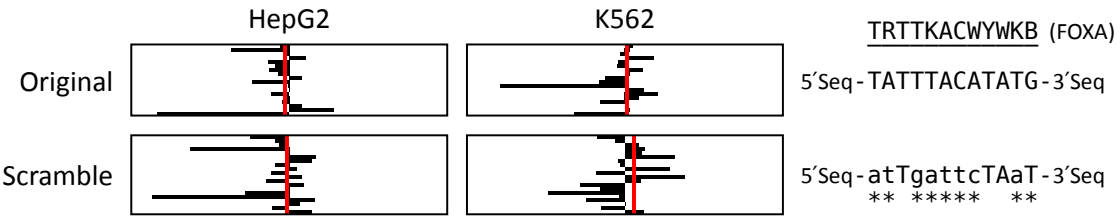
1585 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr6 128732149 128732160 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTTACATATG-3′Seq

5′Seq-atTgattcTAaT-3′Seq

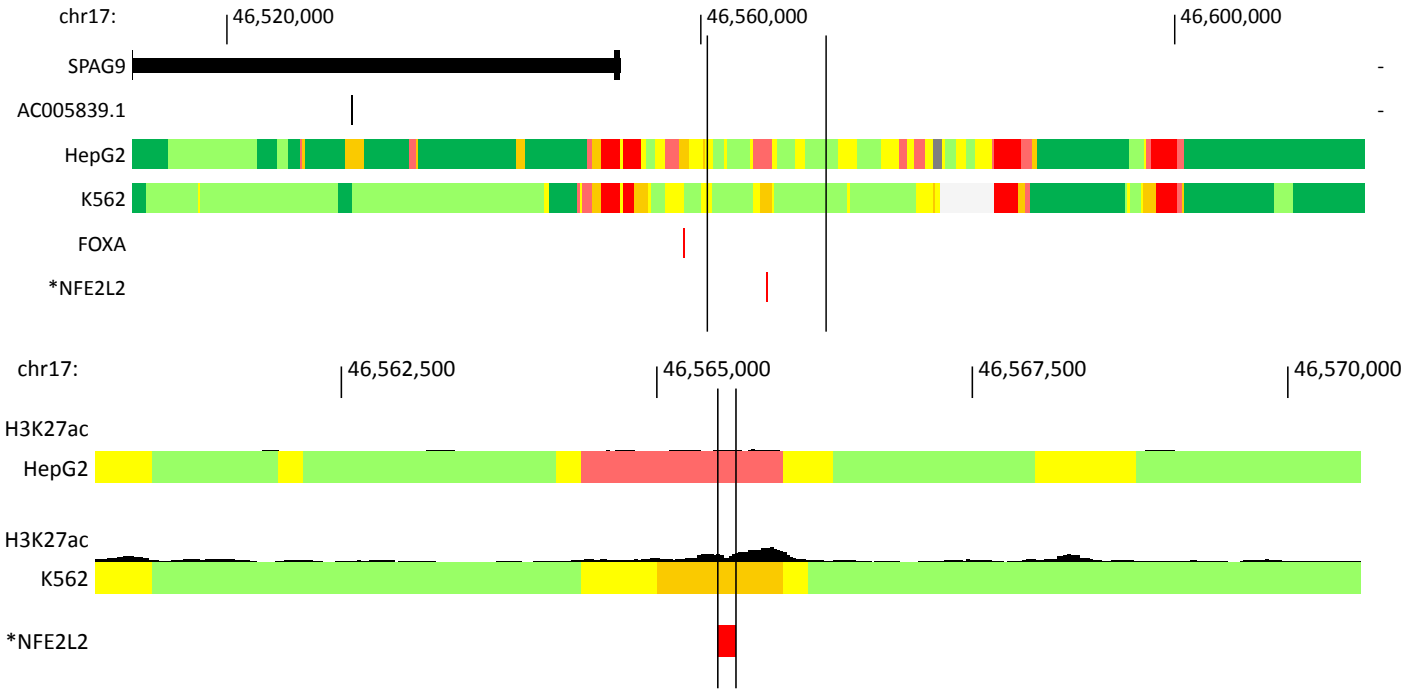
** ***** **

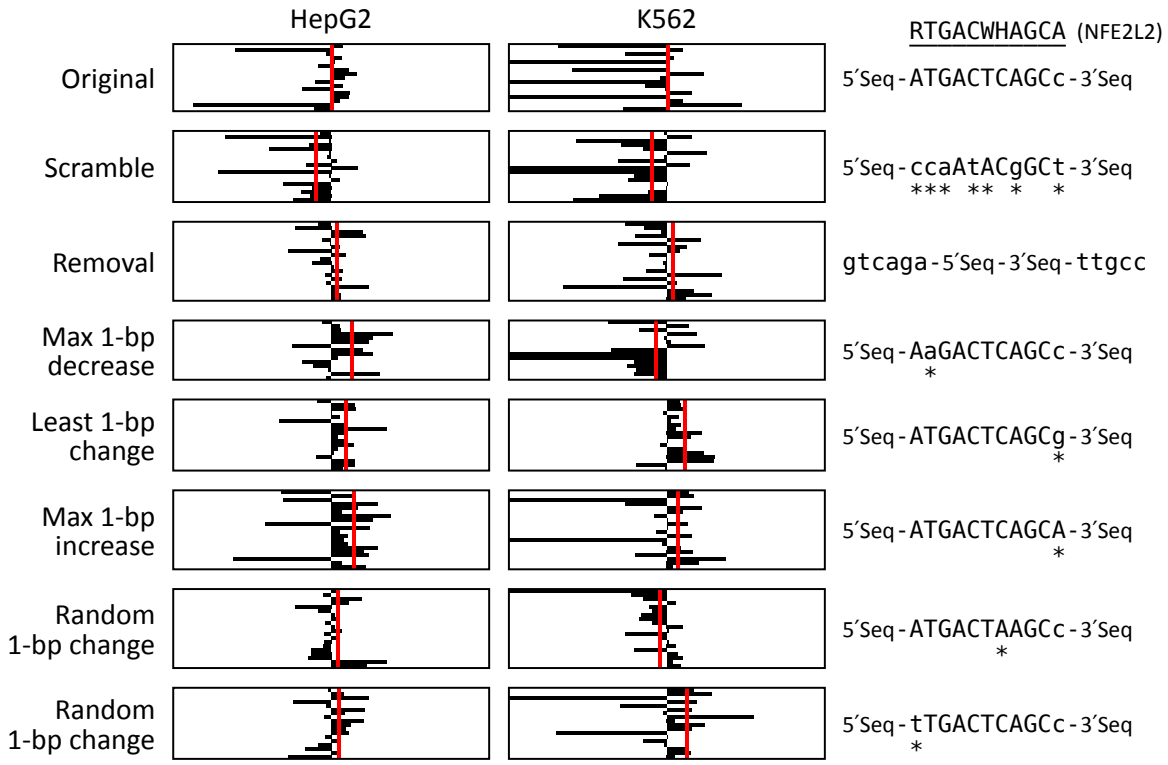
5′Seq = tgtaaaatgtctatctatattgttcttatatctgaggttttacctggggttccctgcctttaaacgt

3′Seq = gaatattttcatttttctcttcaaagttaaactgtactttggaaaagagctcactctctataatca

1586 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr17 46565550 46565560 + (hg18)





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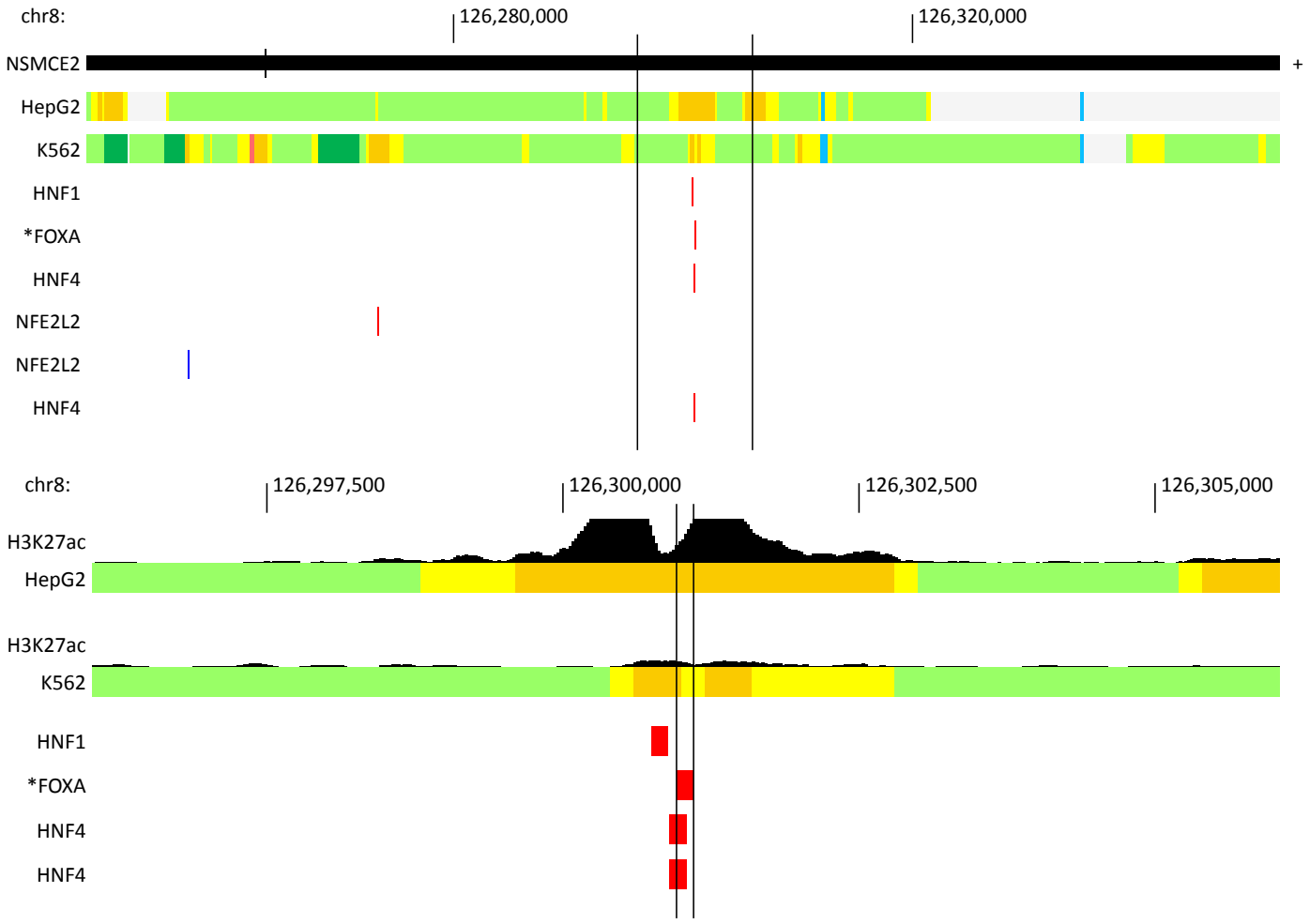
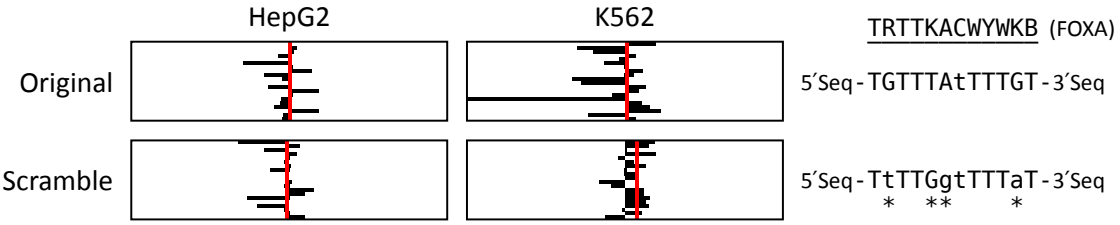
1587 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr8 126301026 126301037 + (hg18)





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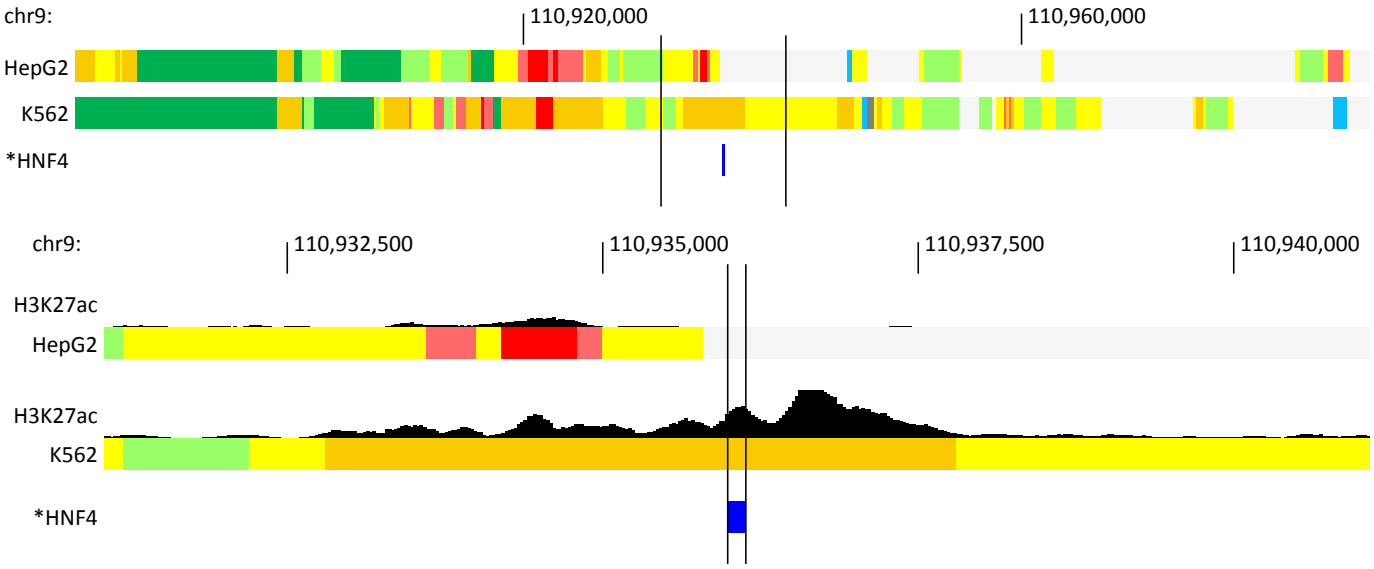
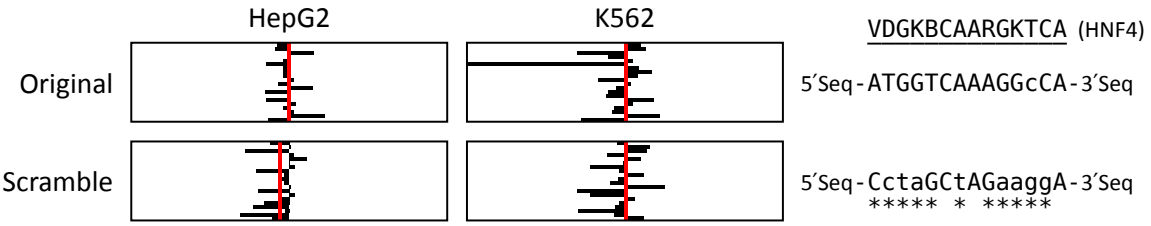
1588 HNF4 in K562 enhancer

chr9 110936056 110936069 + (hg18)





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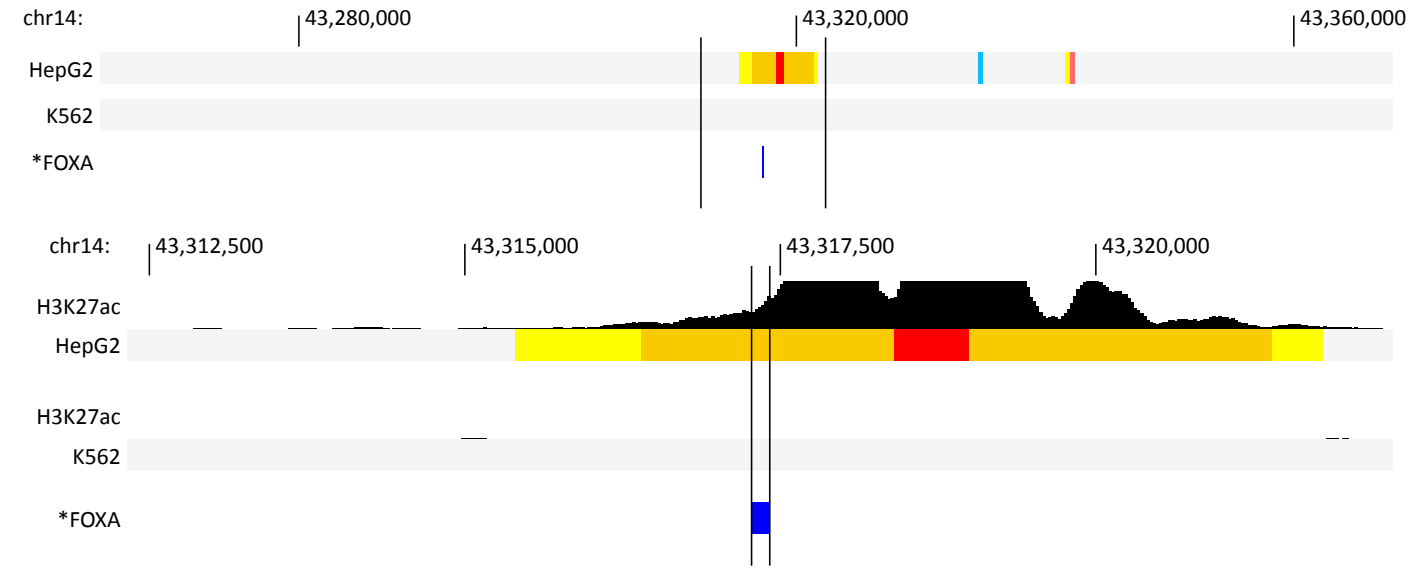
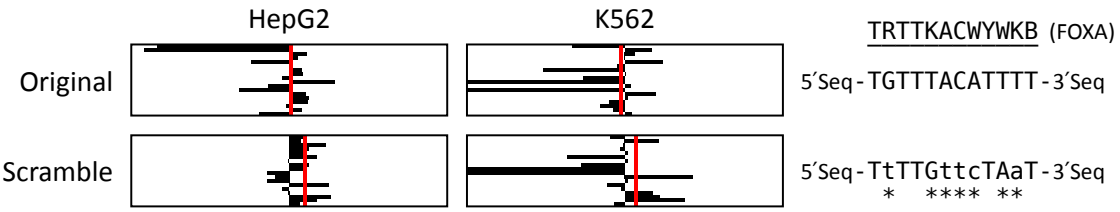
1589 FOXA in HepG2 enhancer

chr14 43317339 43317350 - (hg18)





5′Seq = gctacagataaataaaaataggtttgaaaatactgtggctattttatttacgaaaaacaatttttcc
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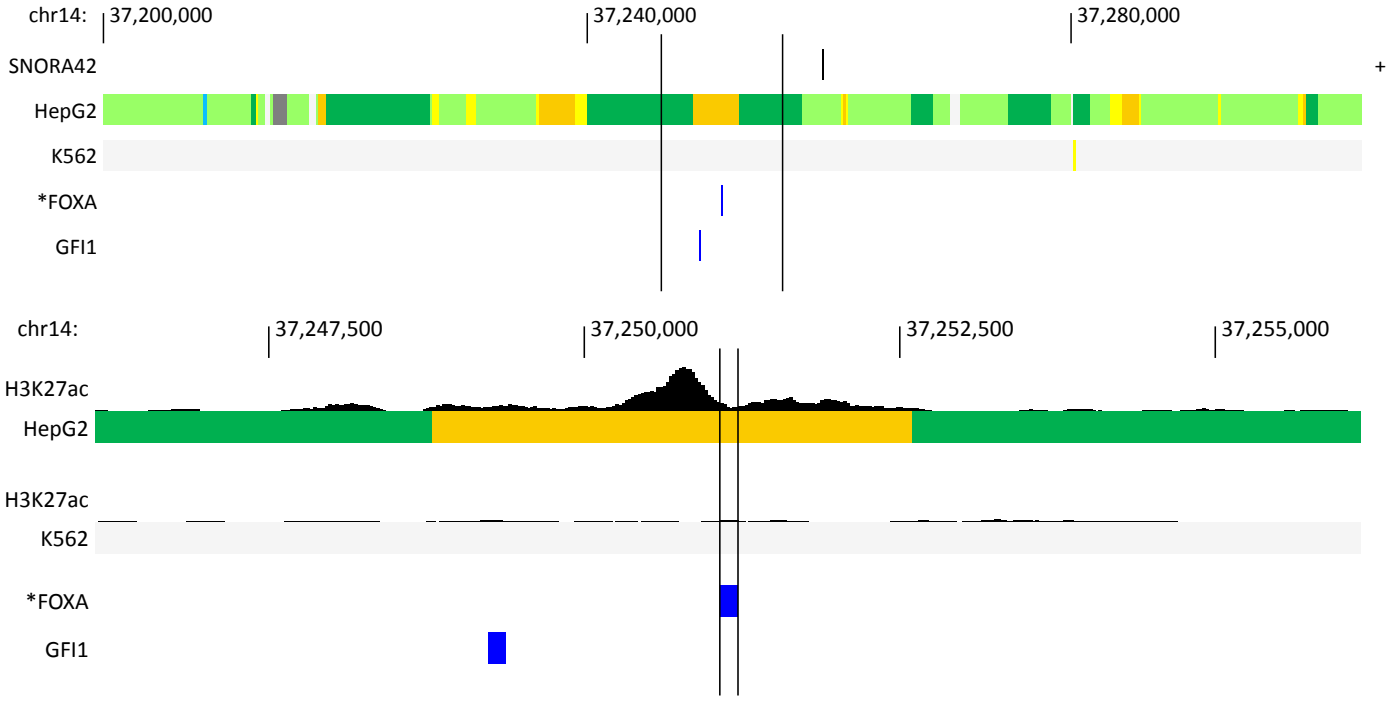
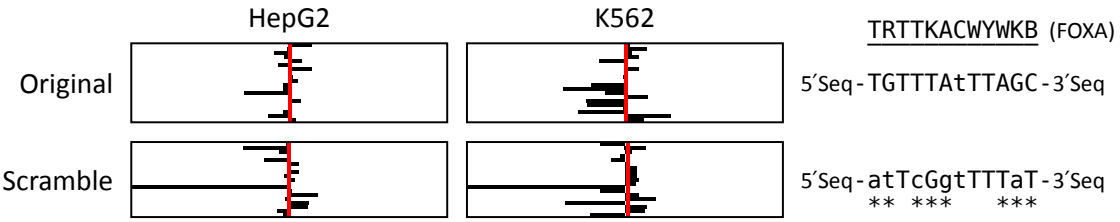
1590 FOXA in HepG2 enhancer

chr14 37251141 37251152 + (hg18)





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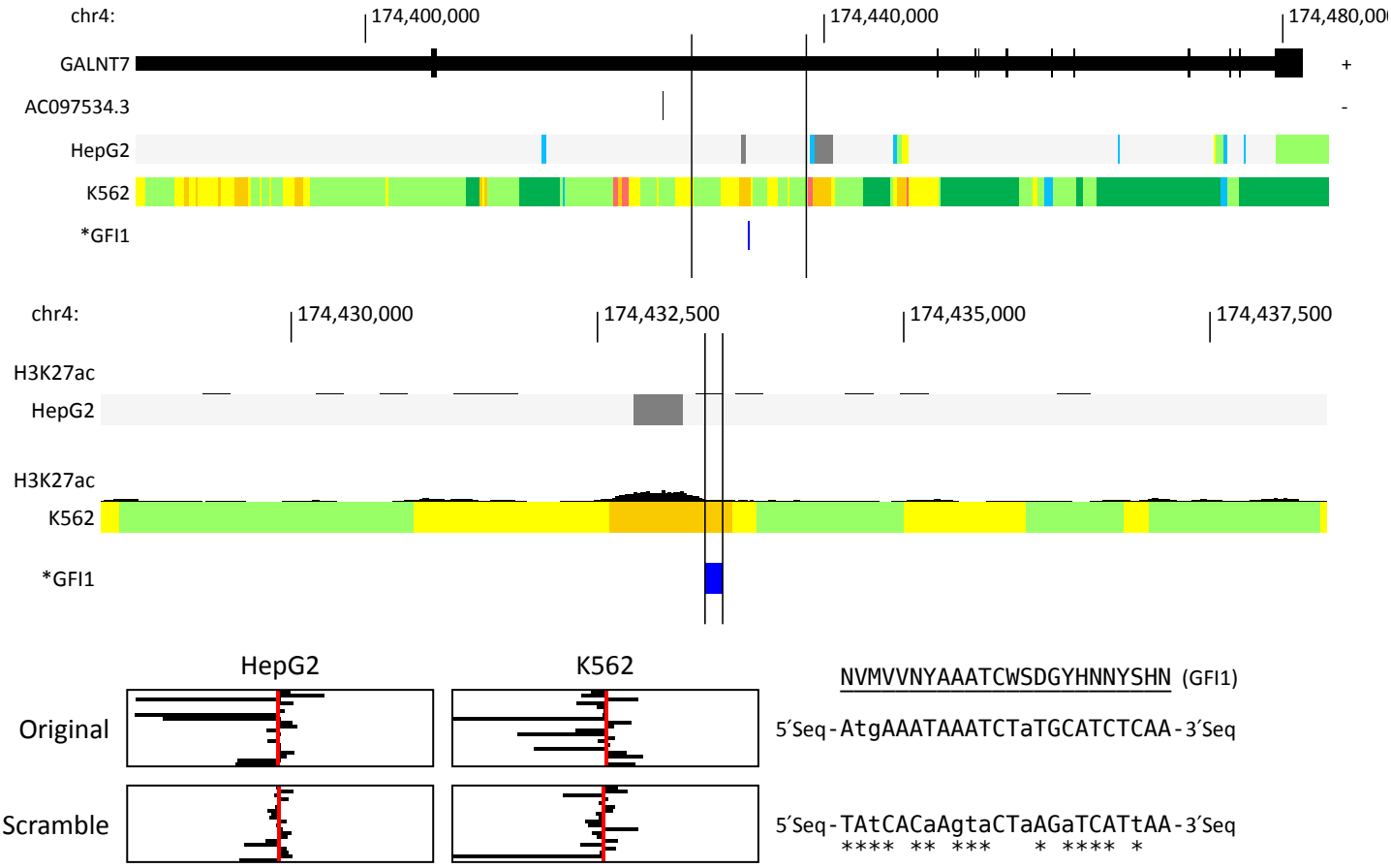
1591 GFI1 in K562 enhancer

chr4 174433439 174433462 + (hg18)



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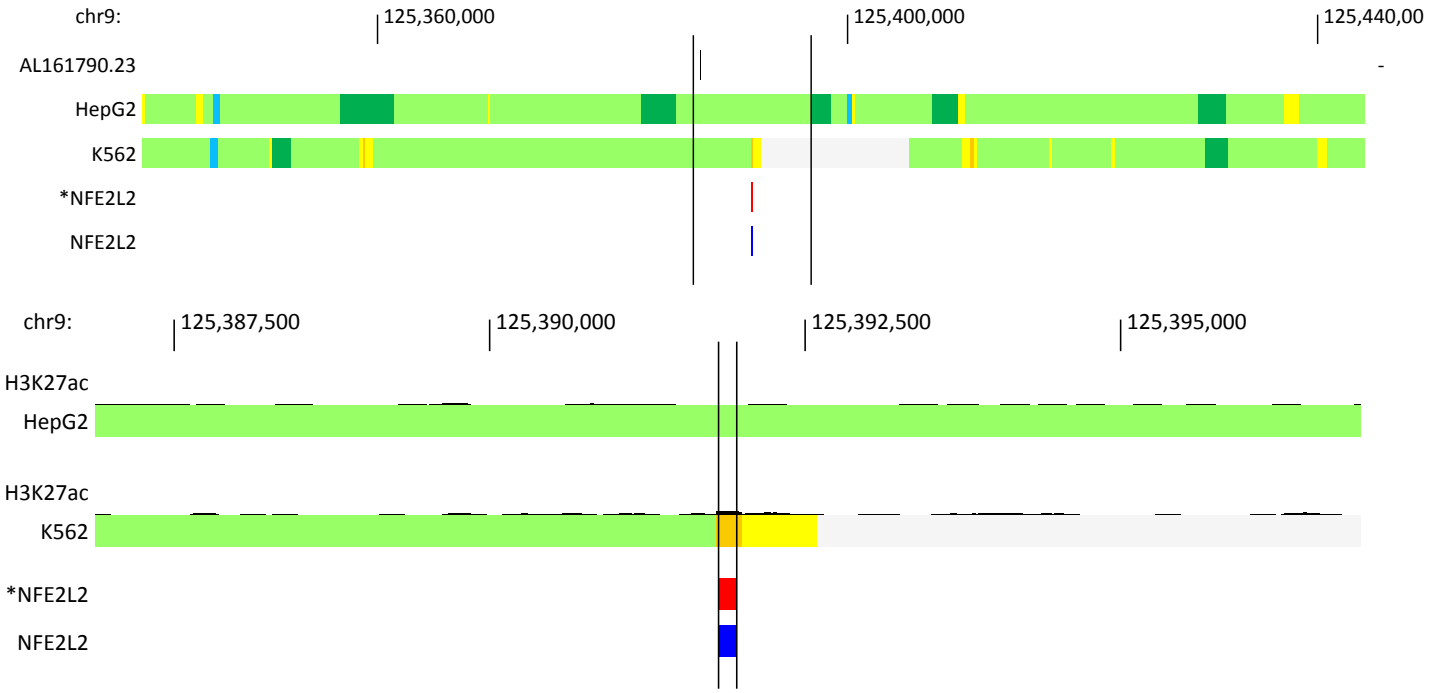
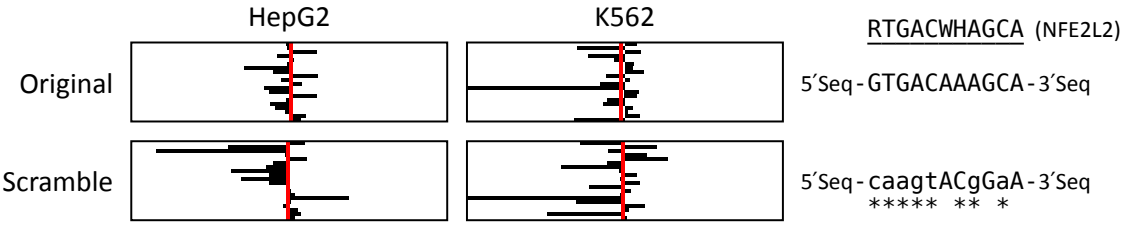
3′Seq = ctctctgcctcagaaaatgaaatctgtcccaggaaaagttcagatgcagtaacctgctag

1592 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr9 125391881 125391891 - (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq - GTGACAAAGCA - 3′Seq

5′Seq - caagtACgGaA - 3′Seq

***** ** *

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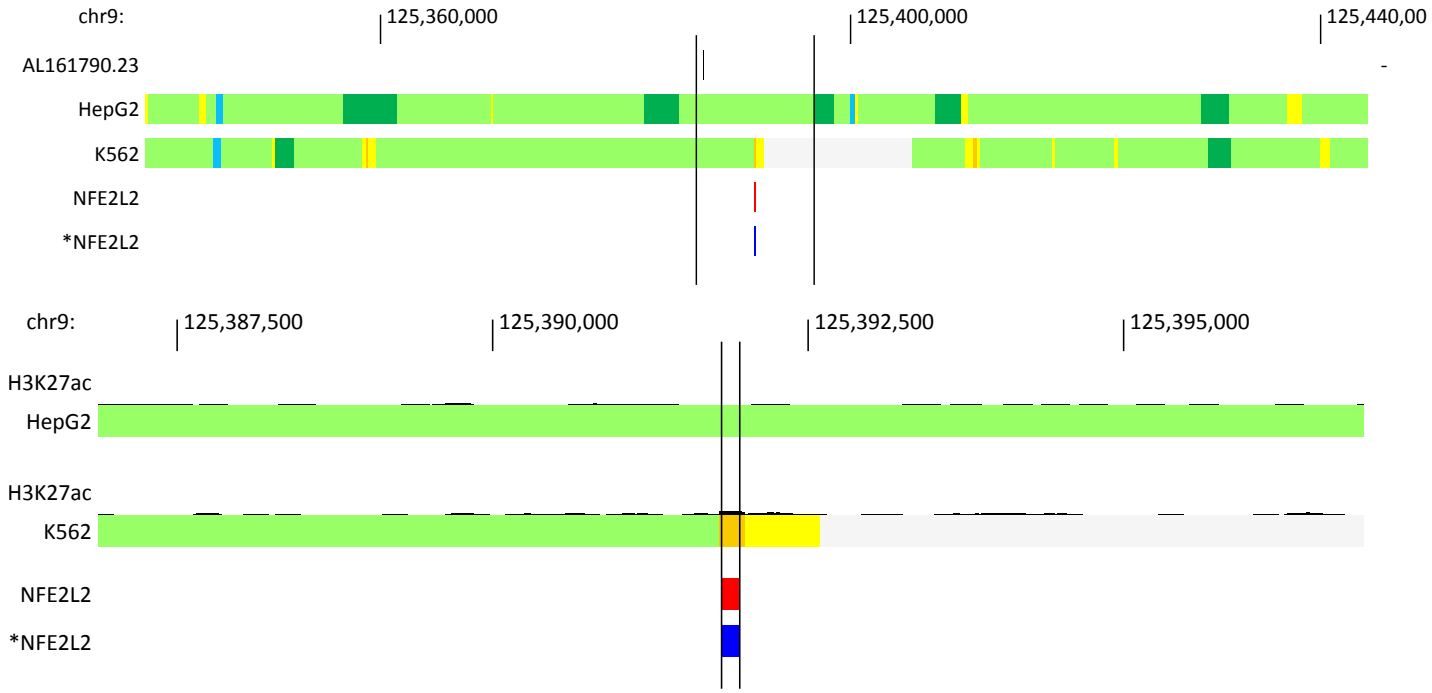
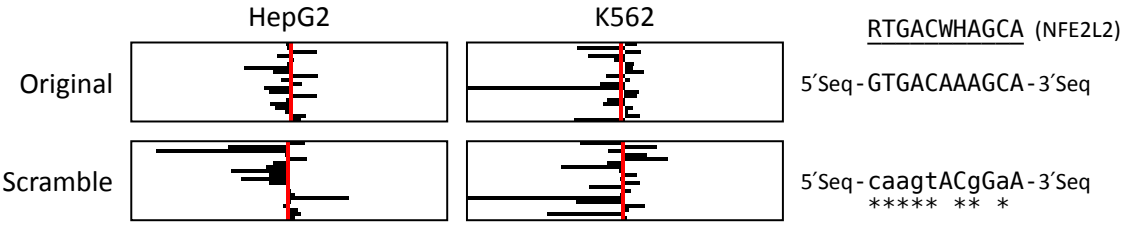
1593 NFE2L2 in K562 enhancer

chr9 125391881 125391891 - (hg18)





RTGACWHAGCA (NFE2L2)

5′Seq - GTGACAAAGCA - 3′Seq

5′Seq - caagtACgGaA - 3′Seq

***** ** *

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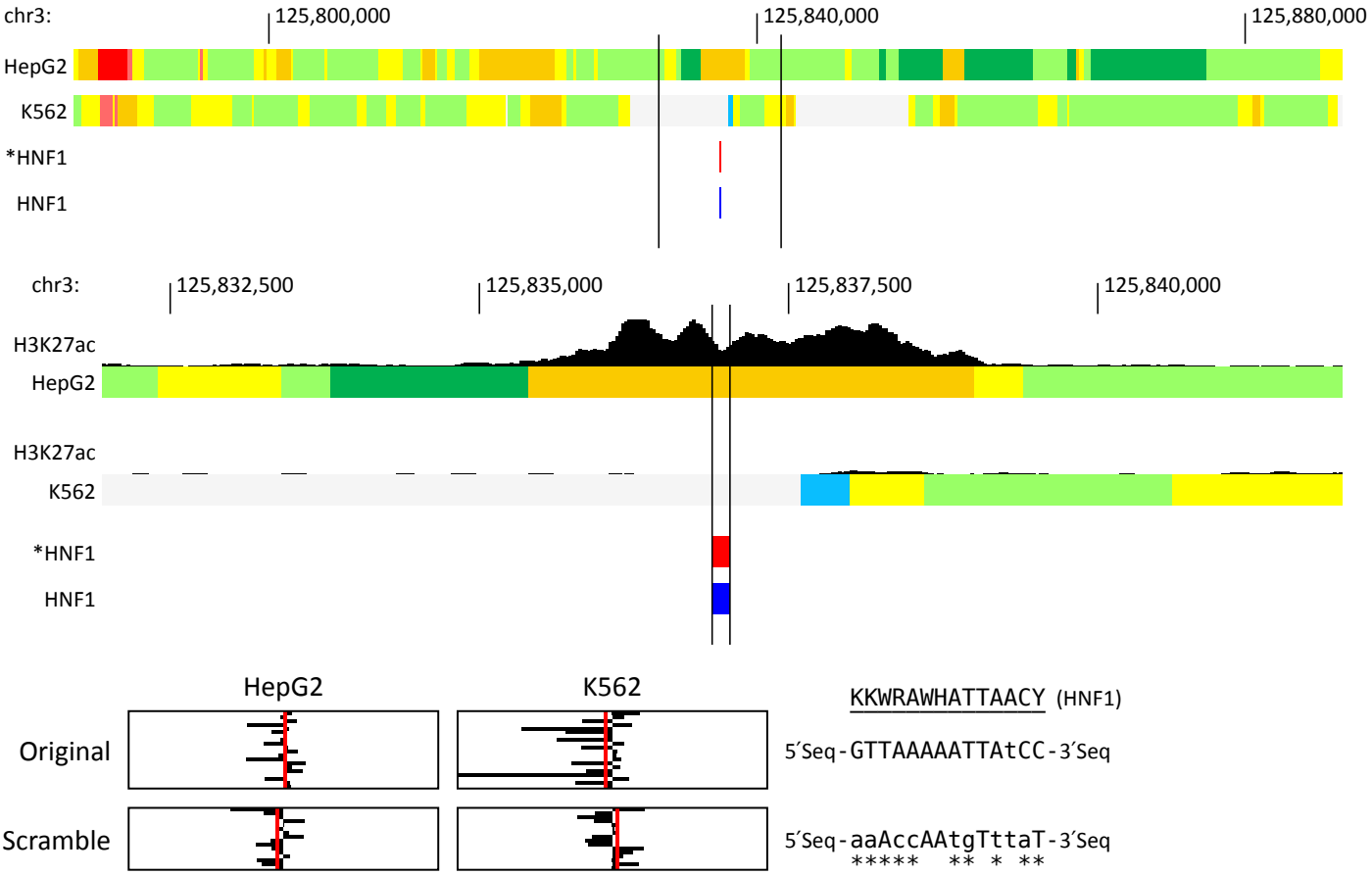
1594 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr3 125836948 125836961 - (hg18)



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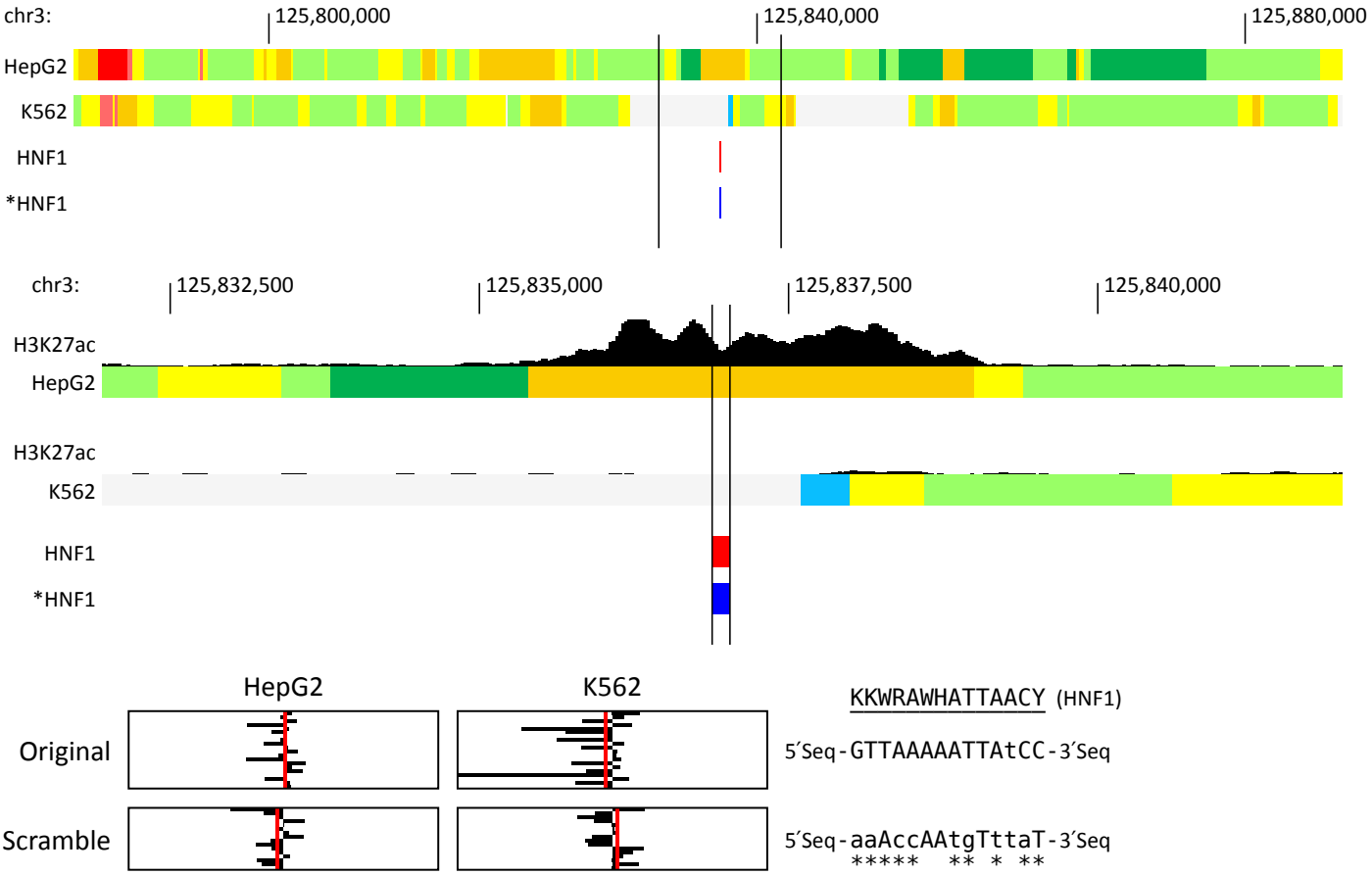
1595 HNF1 in HepG2 enhancer

chr3 125836948 125836961 - (hg18)



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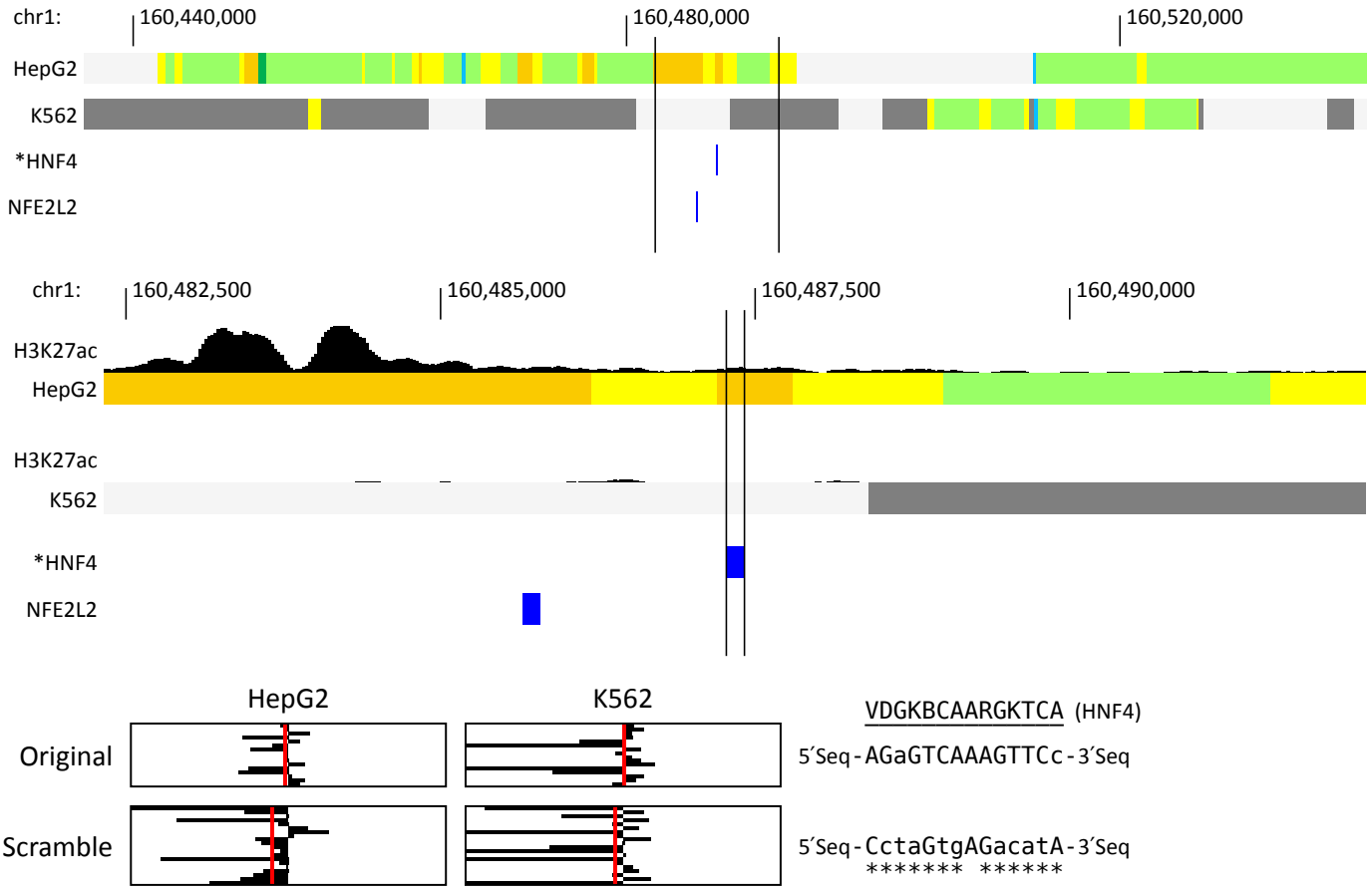
1596 HNF4 in HepG2 enhancer

chr1 160487337 160487350 - (hg18)



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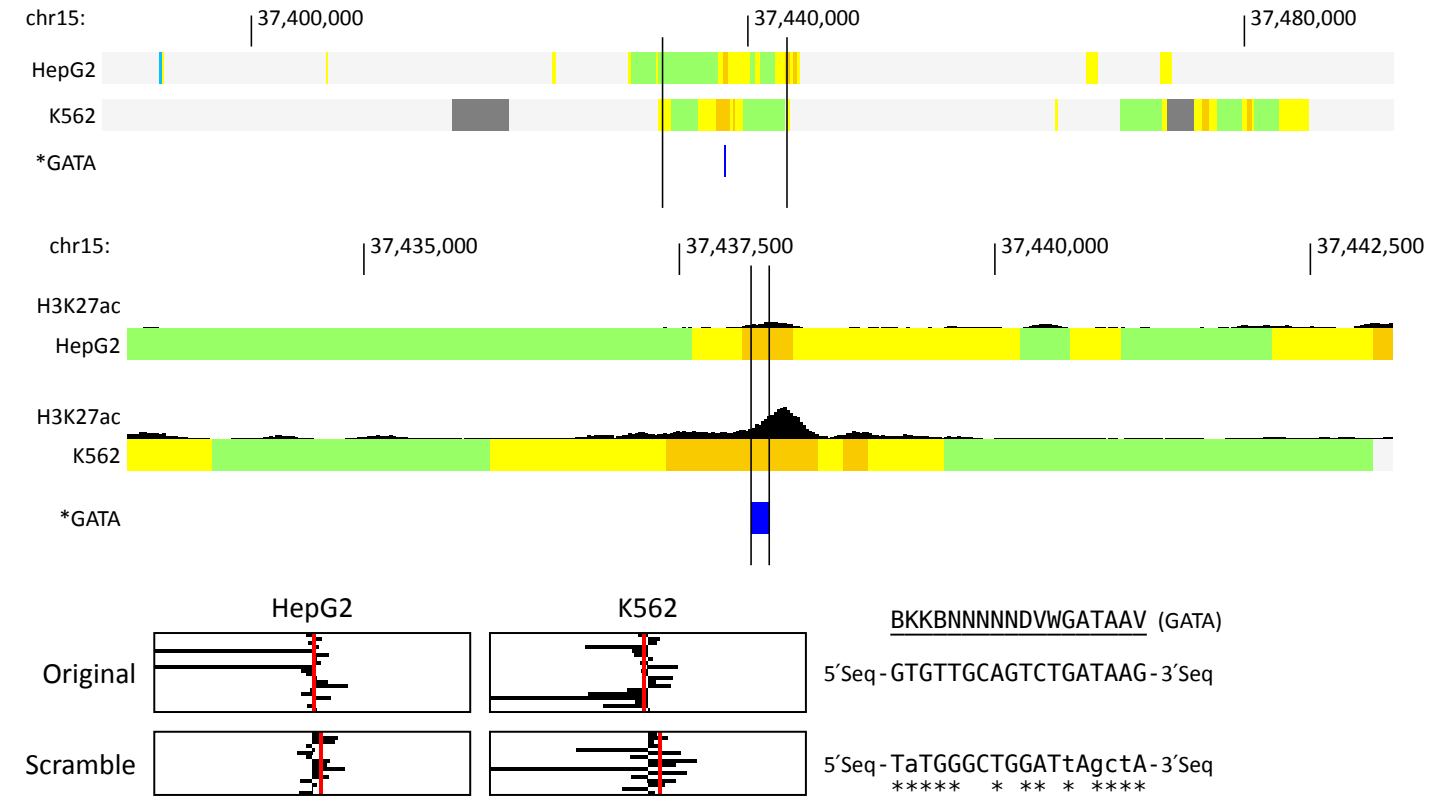
1597 GATA in K562 enhancer

chr15 37438132 37438149 + (hg18)



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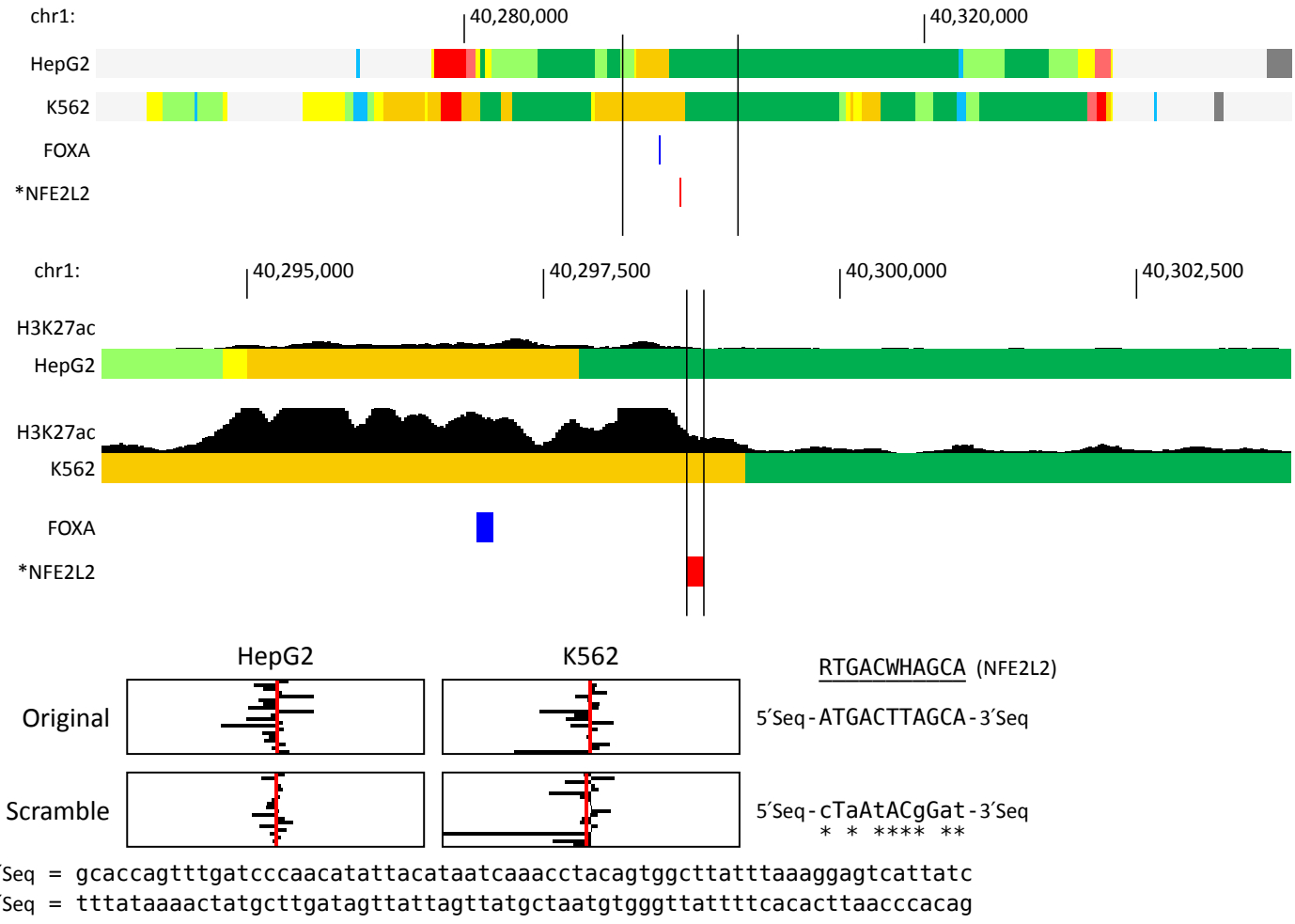
1598 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 40298775 40298785 + (hg18)



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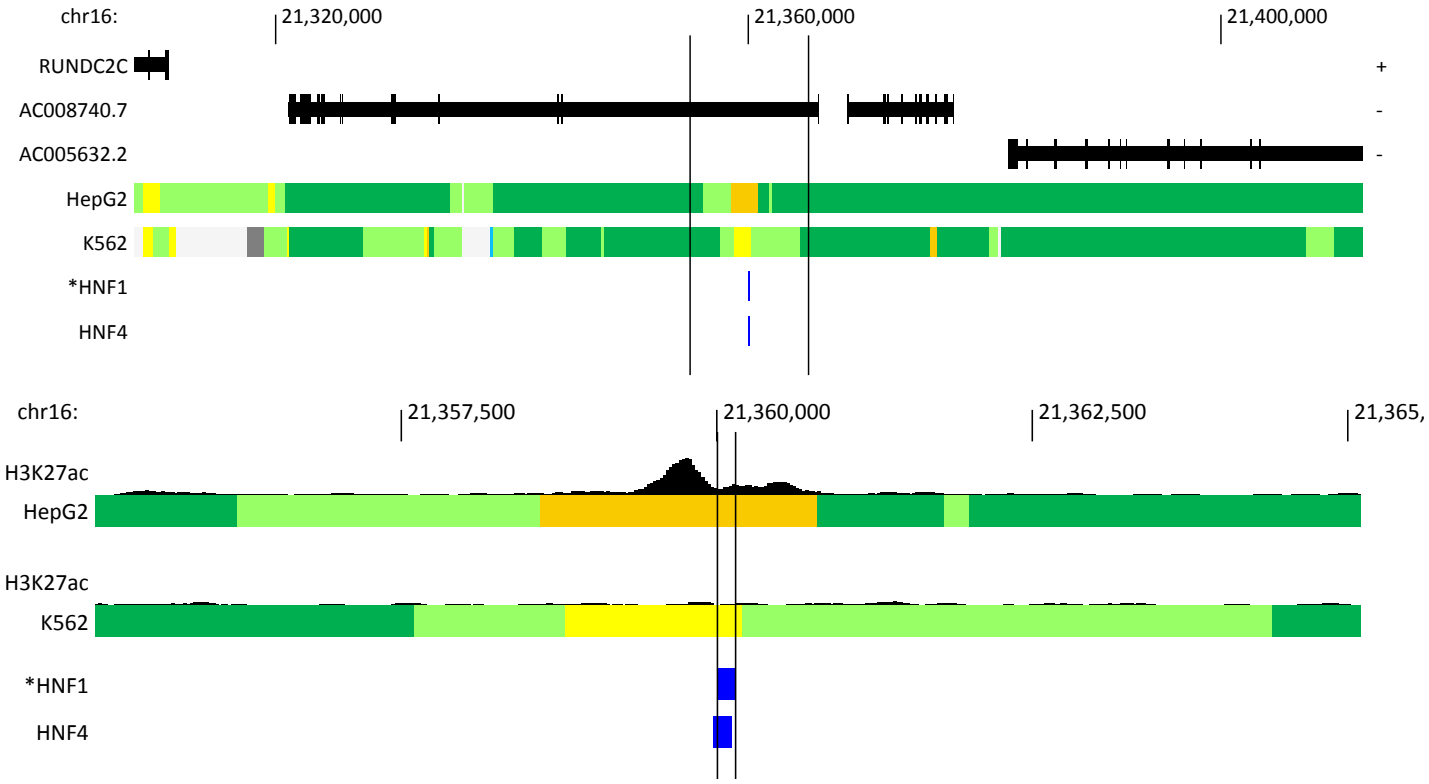
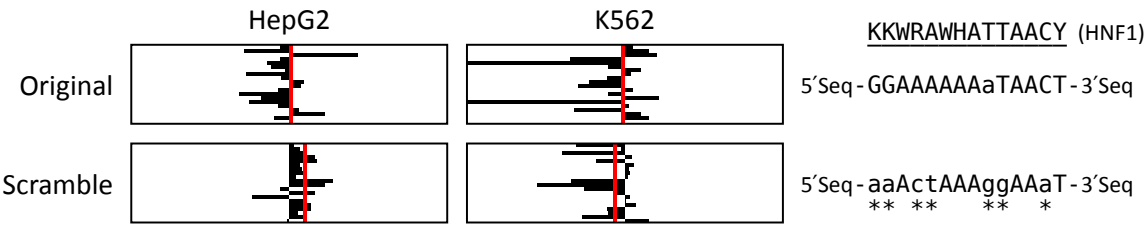
1599 HNF1 in HepG2 enhancer

chr16 21360071 21360084 + (hg18)





KKWRAWHATTAACY (HNF1)

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5′Seq-aaActAAAggAAaT-3′Seq

** ** ** *

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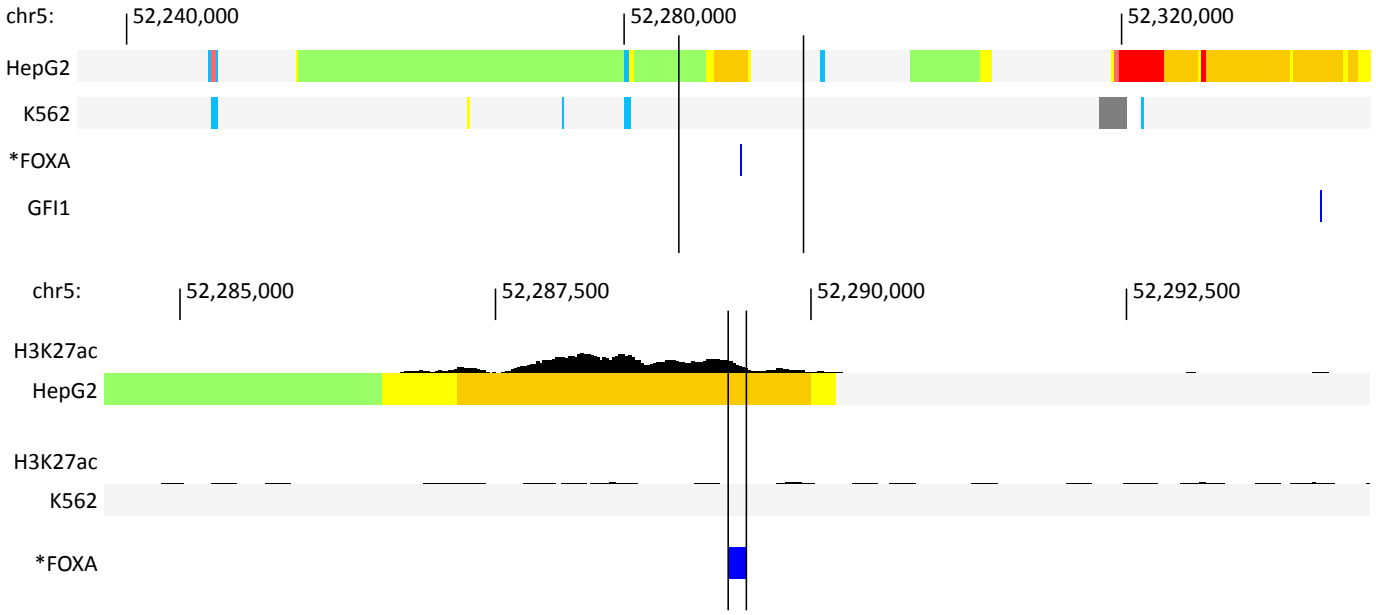
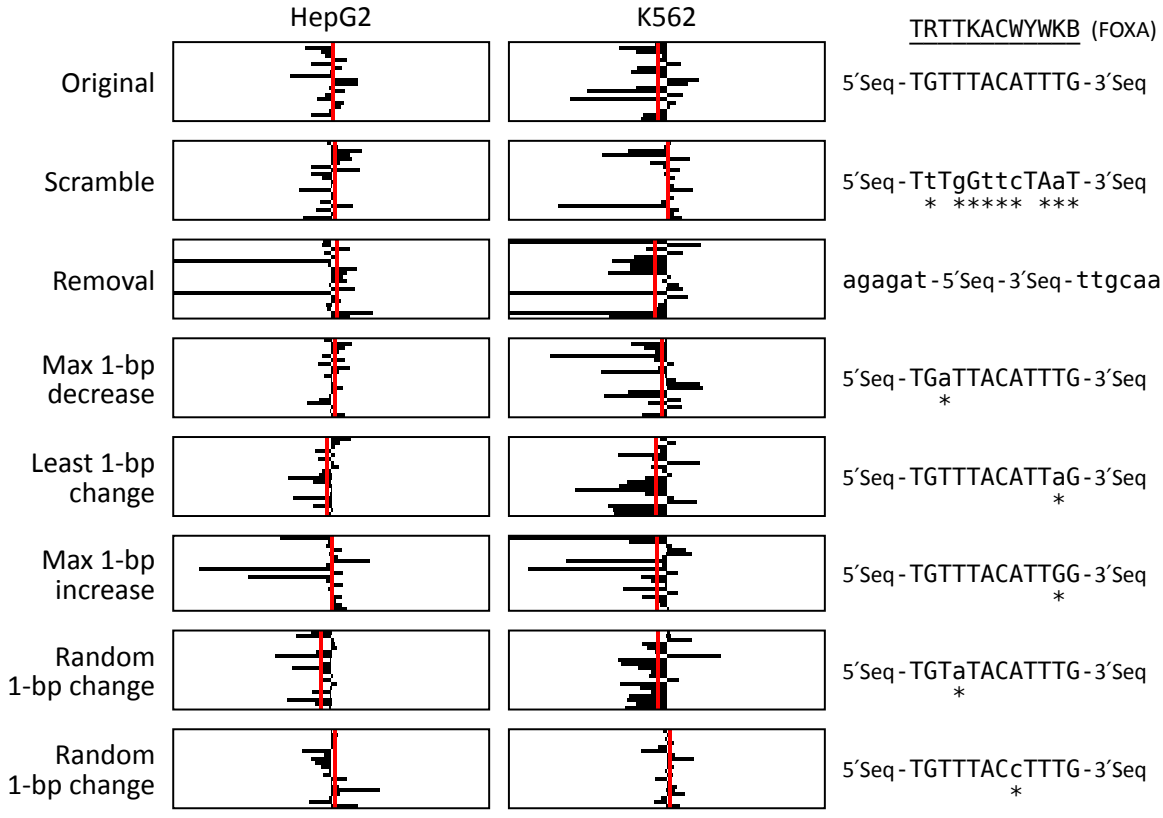
1600 FOXA in HepG2 enhancer

chr5 52289411 52289422 + (hg18)





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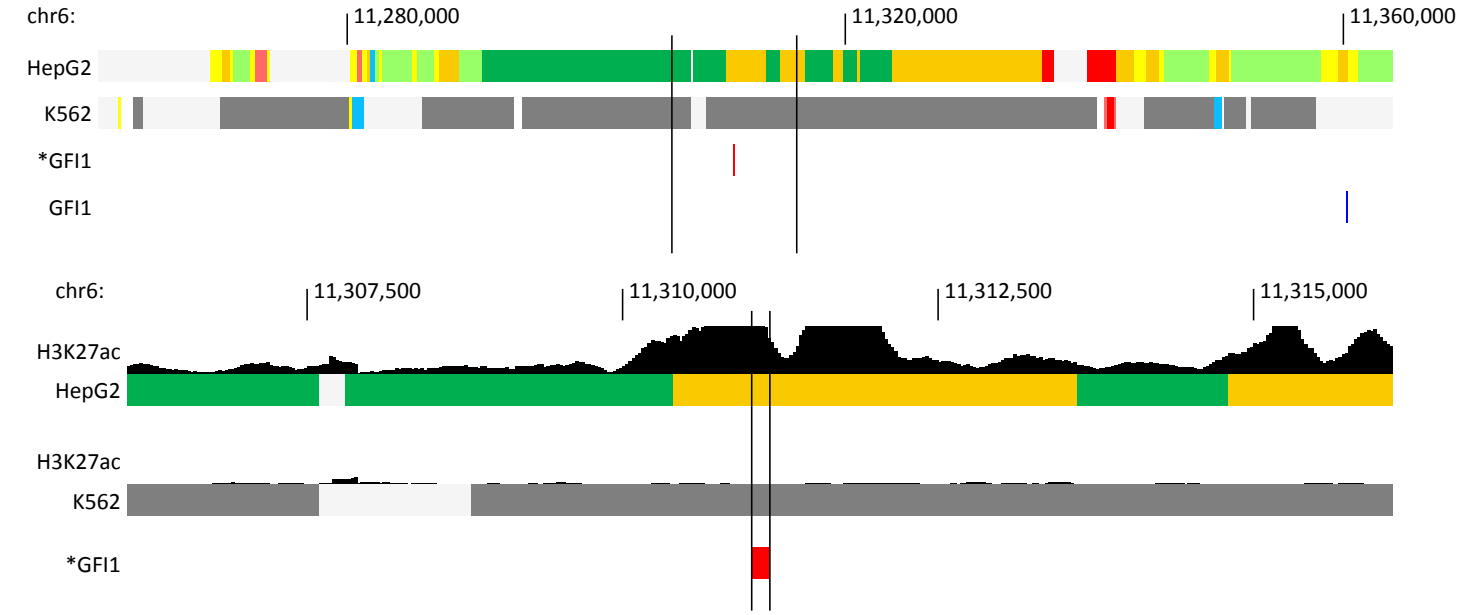
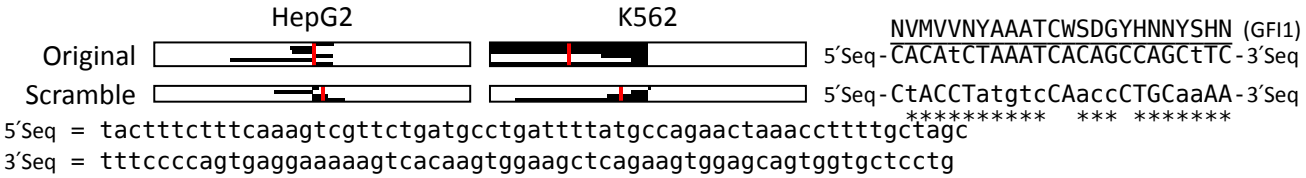
1601 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 11311084 11311107 + (hg18)





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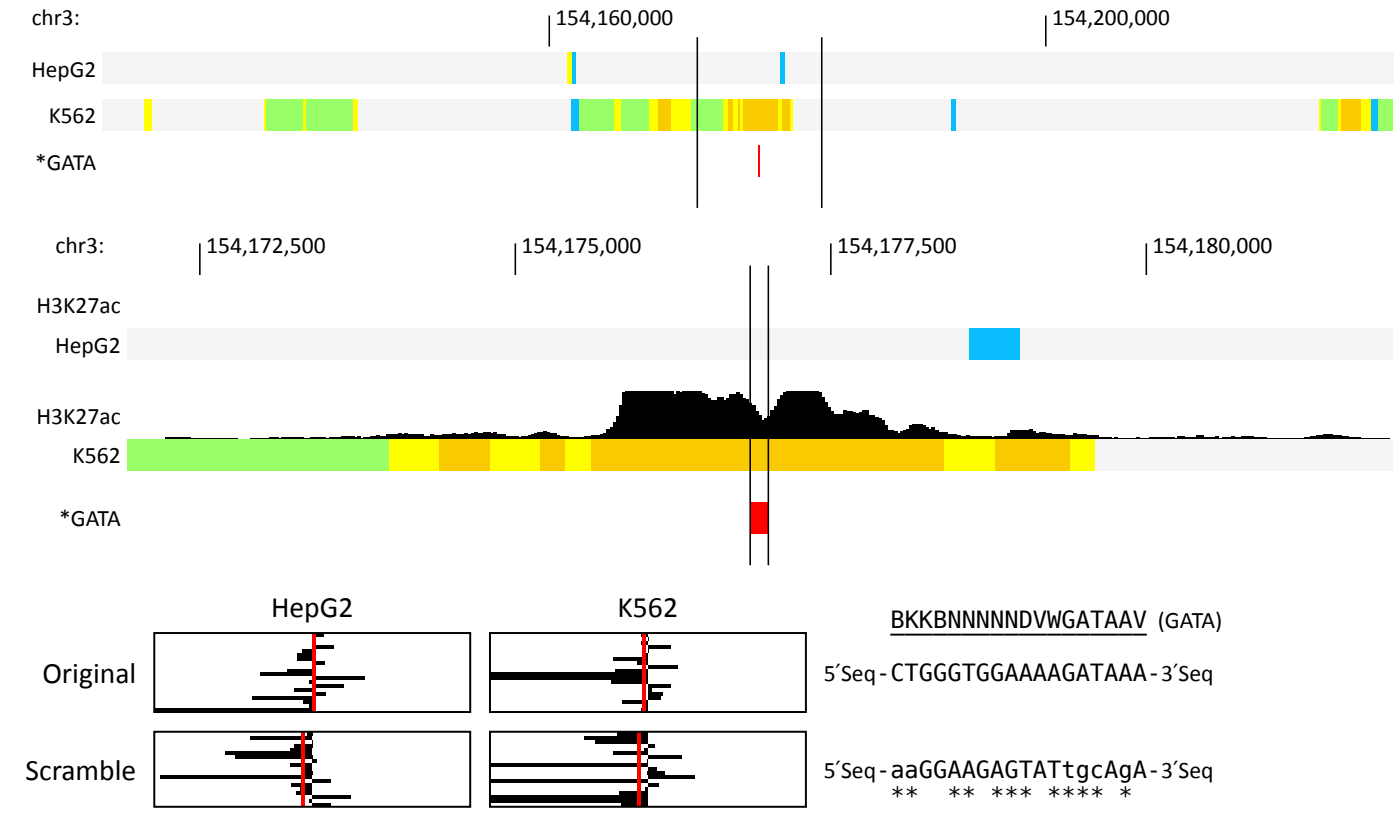
1602 GATA in K562 enhancer (conserved at 60% confidence)

chr3 154176925 154176942 - (hg18)



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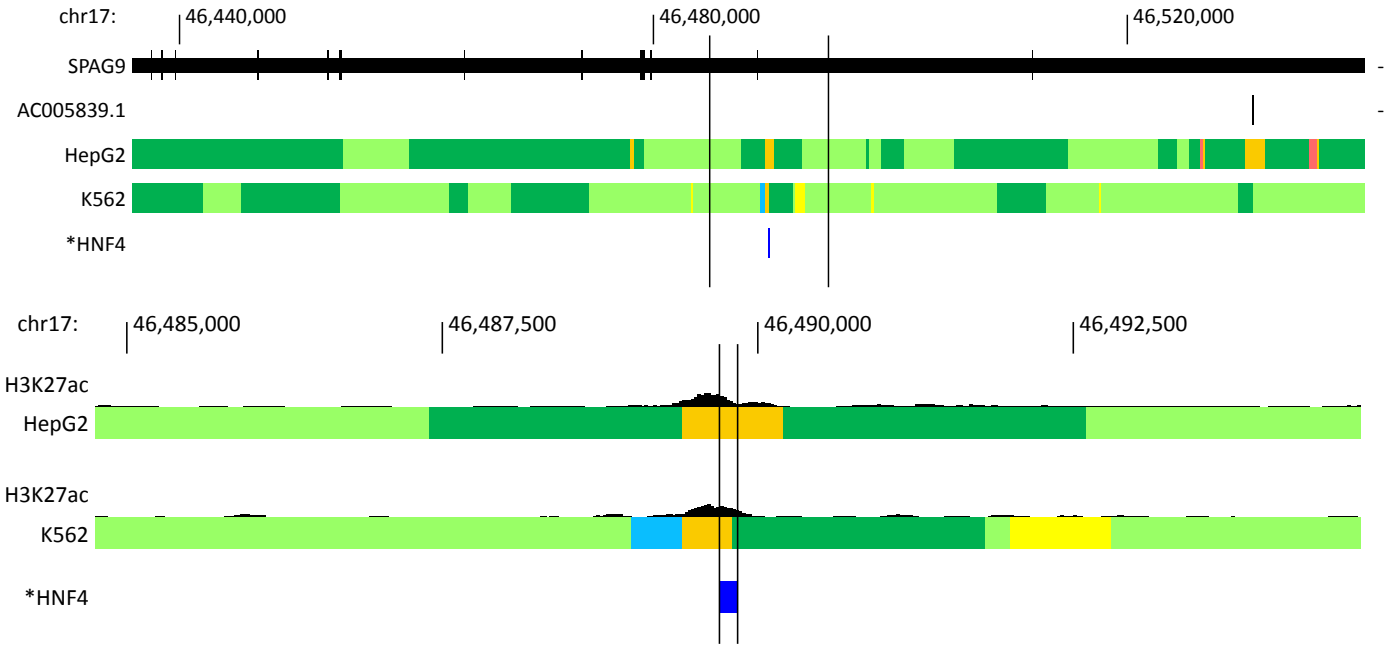
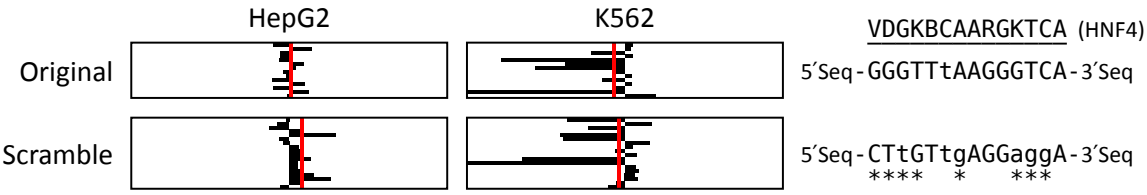
1603 HNF4 in HepG2 enhancer

chr17 46489762 46489775 + (hg18)





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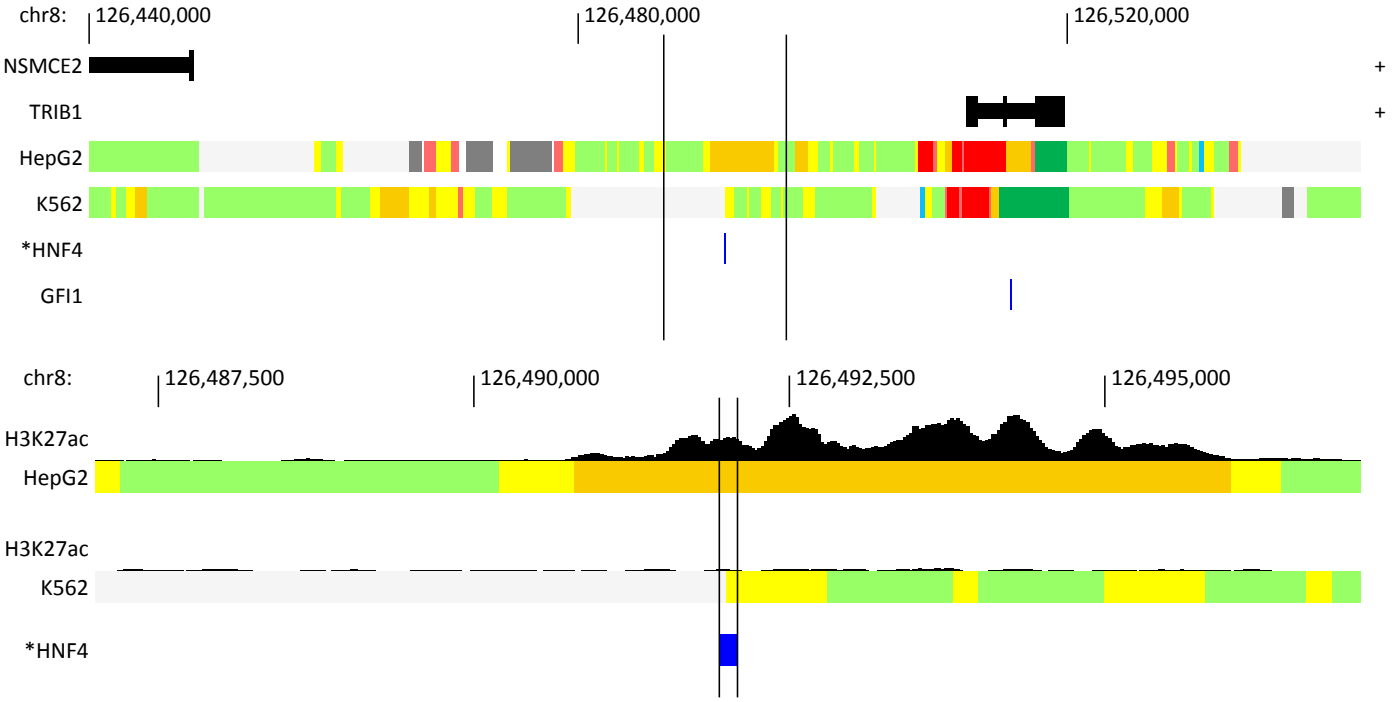
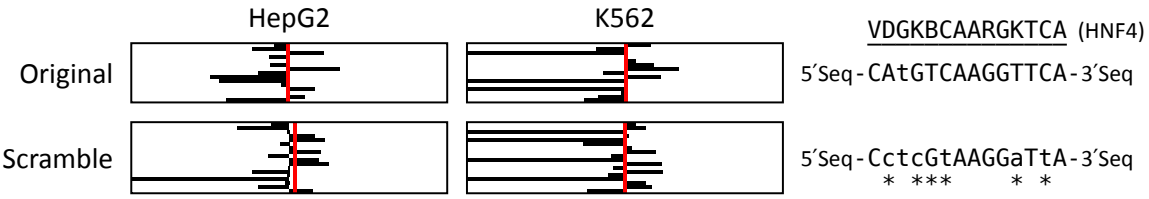
1604 HNF4 in HepG2 enhancer

chr8 126492011 126492024 - (hg18)





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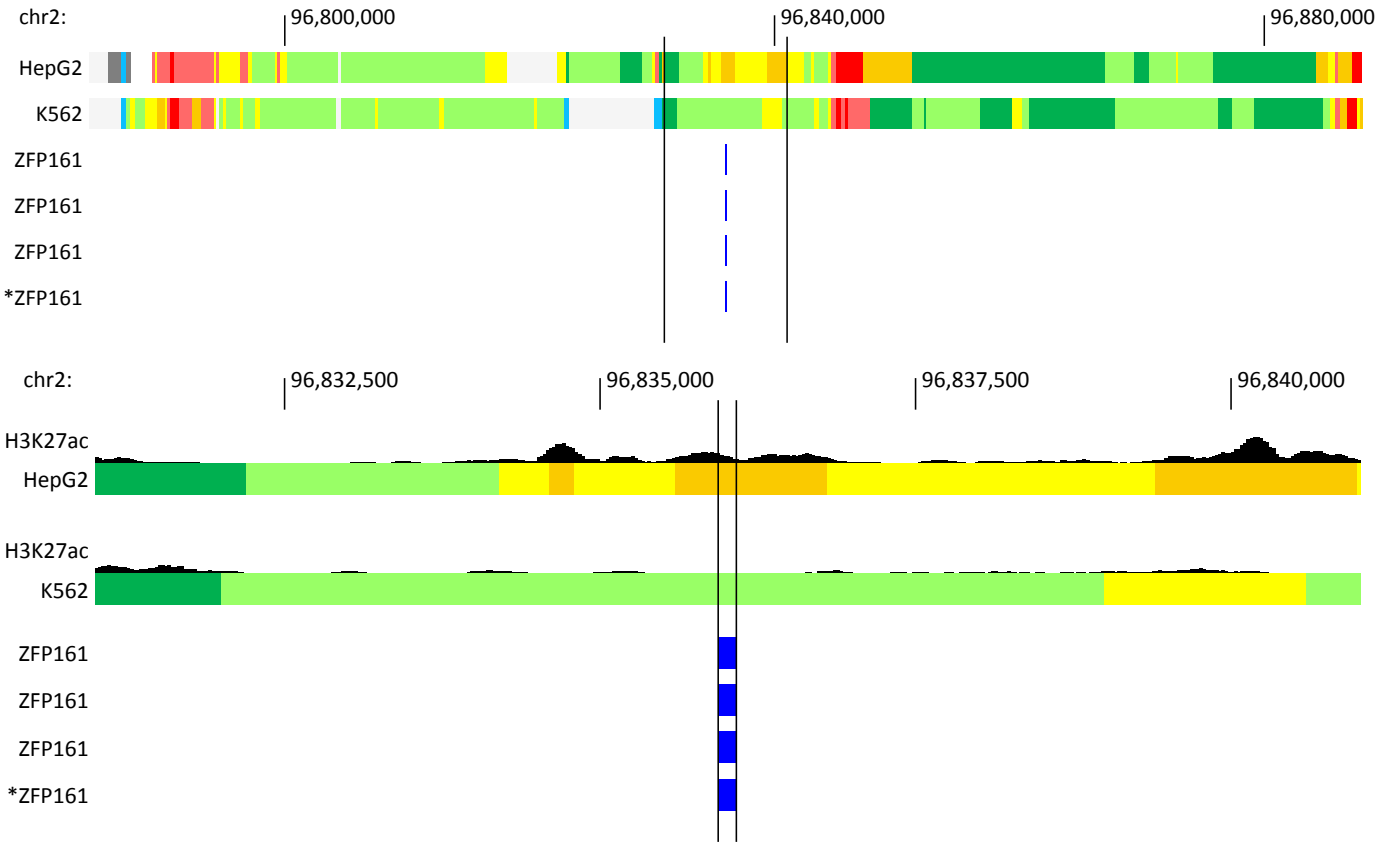
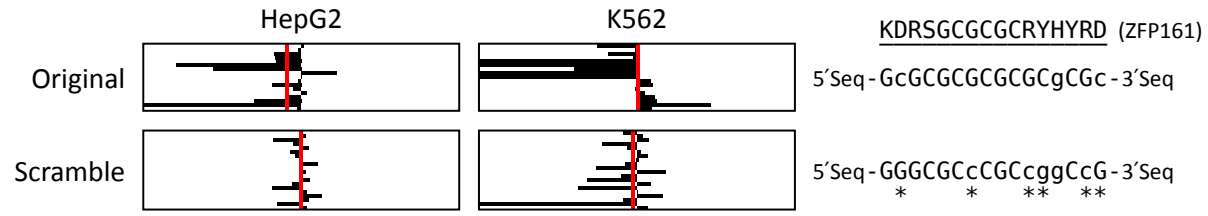
1605 ZFP161 in HepG2 enhancer

chr2 96836001 96836016 + (hg18)





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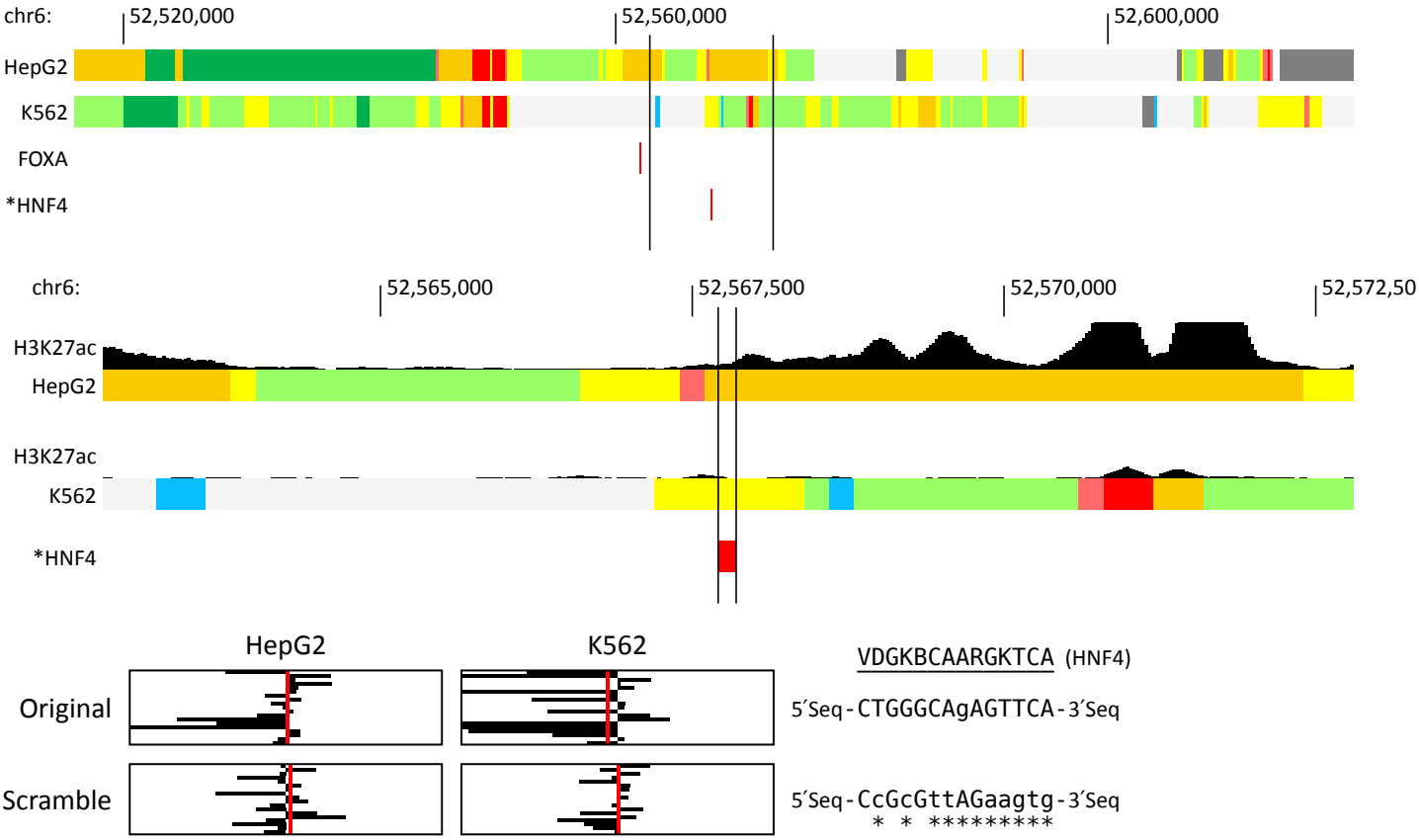
1606 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr6 52567774 52567787 - (hg18)



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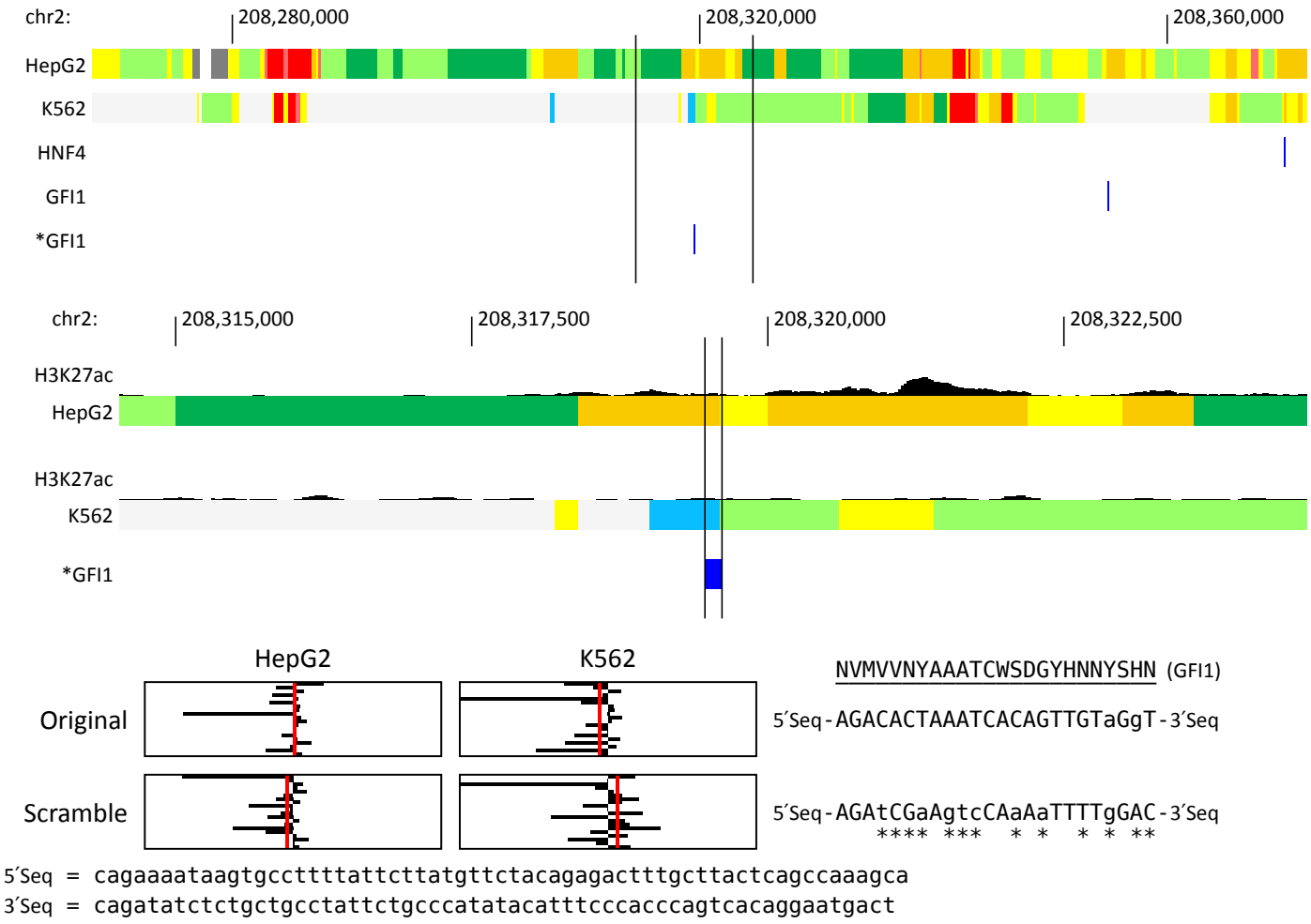
1607 GFI1 in HepG2 enhancer

chr2 208319530 208319553 - (hg18)



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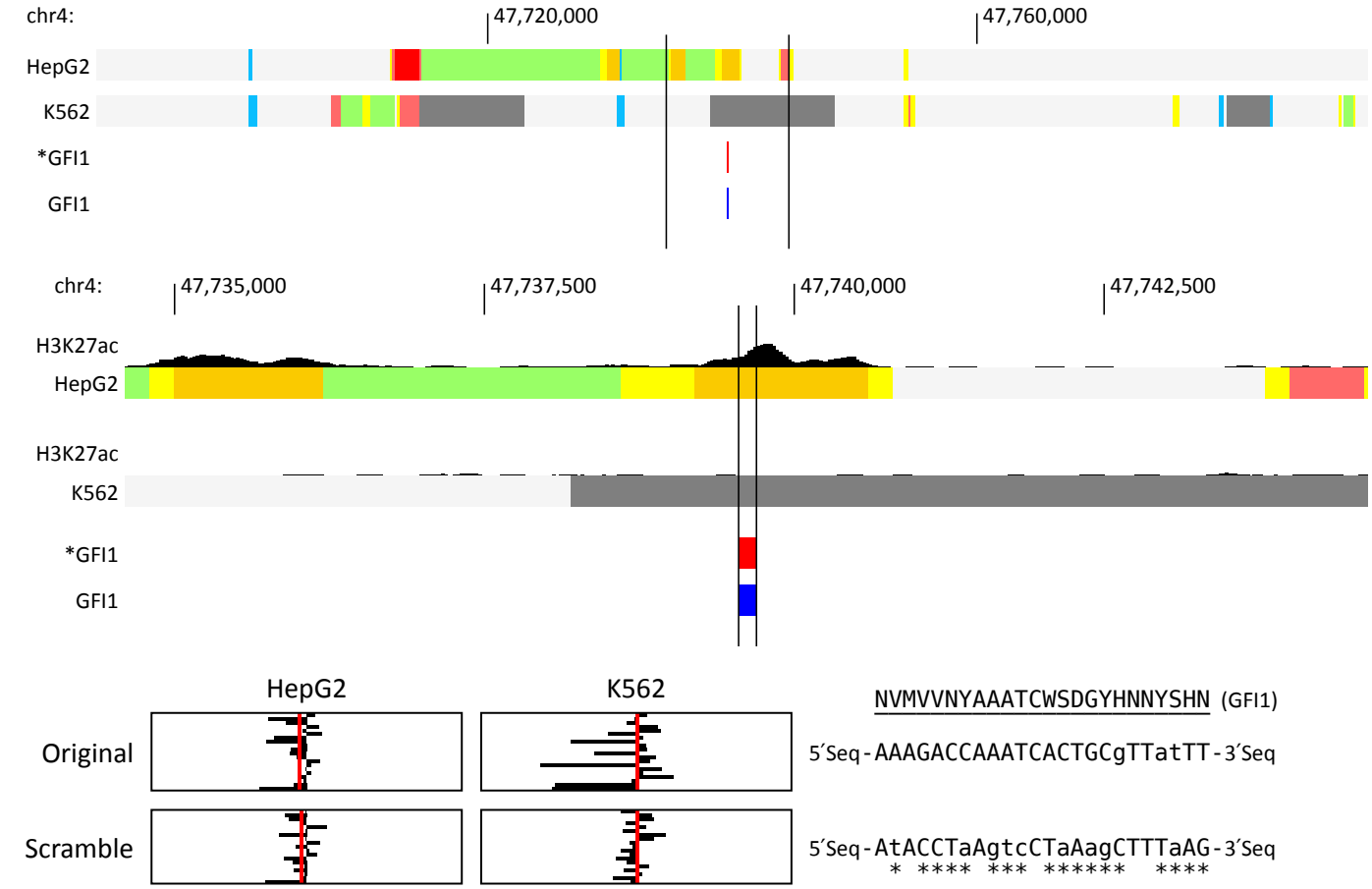
1608 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr4 47739612 47739635 - (hg18)



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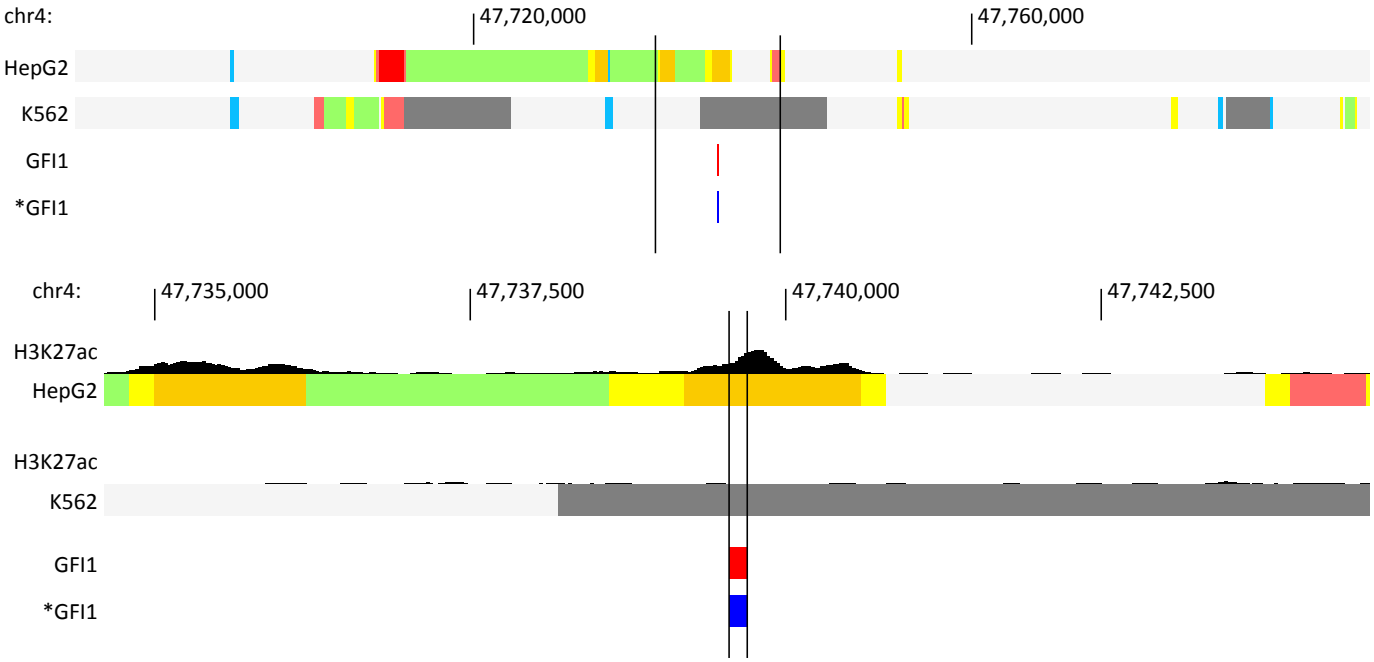
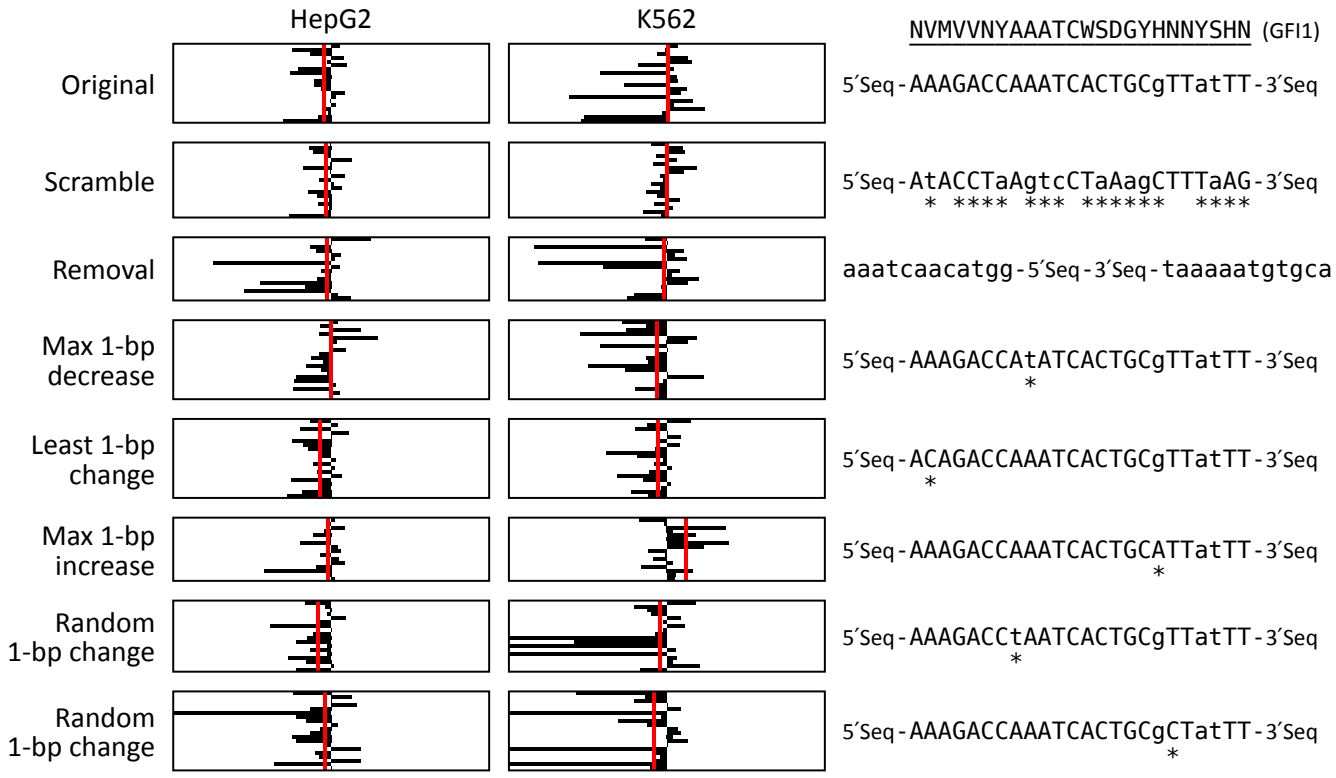
1609 GFI1 in HepG2 enhancer

chr4 47739612 47739635 - (hg18)





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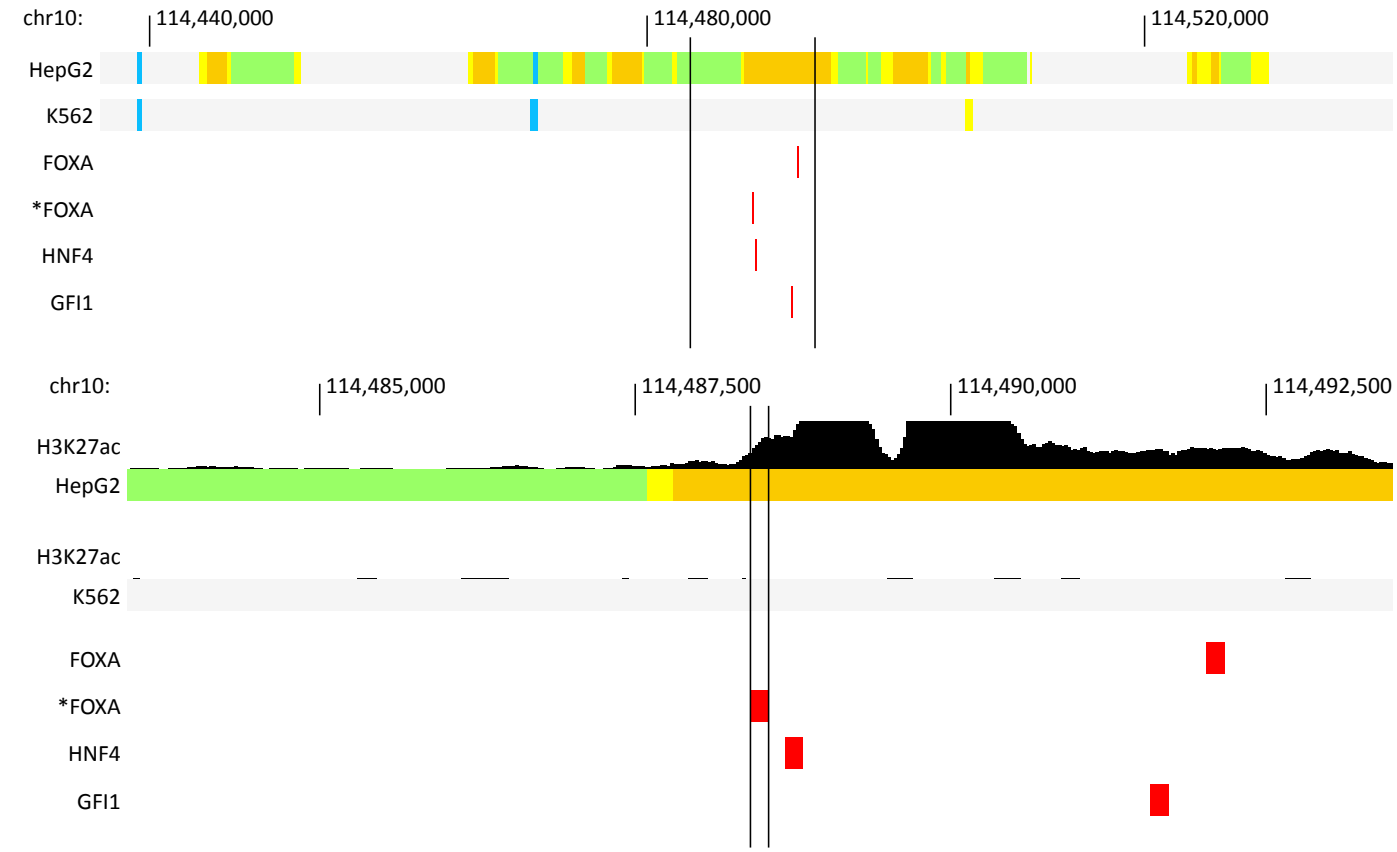
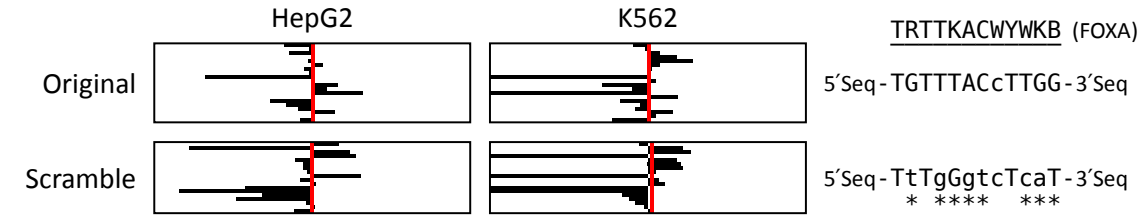
1610 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr10 114488480 114488491 + (hg18)





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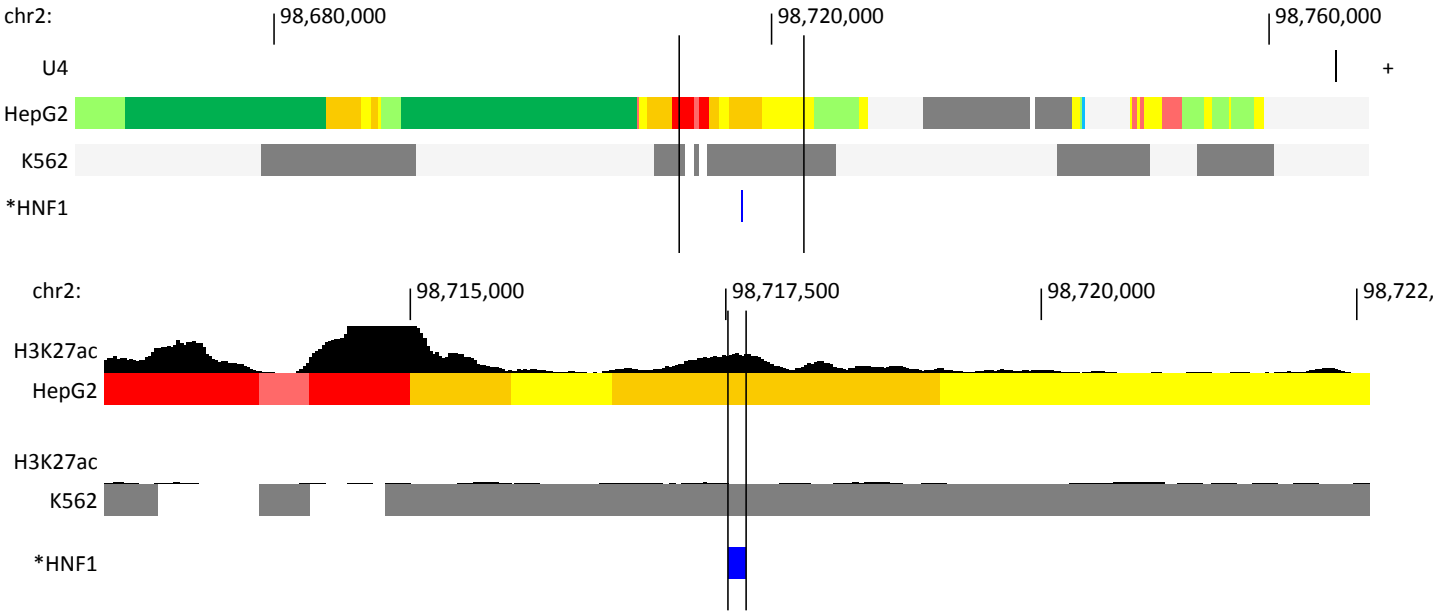
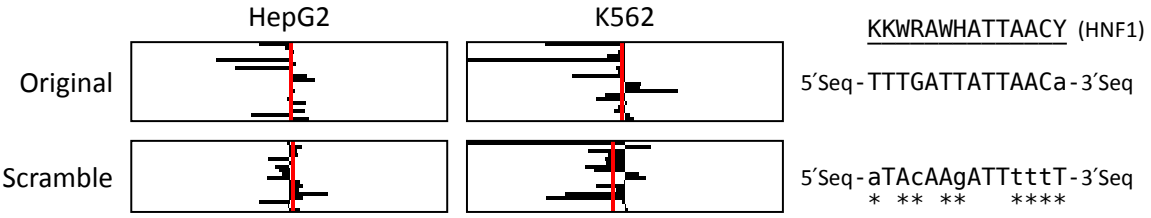
1611 HNF1 in HepG2 enhancer

chr2 98717583 98717596 - (hg18)





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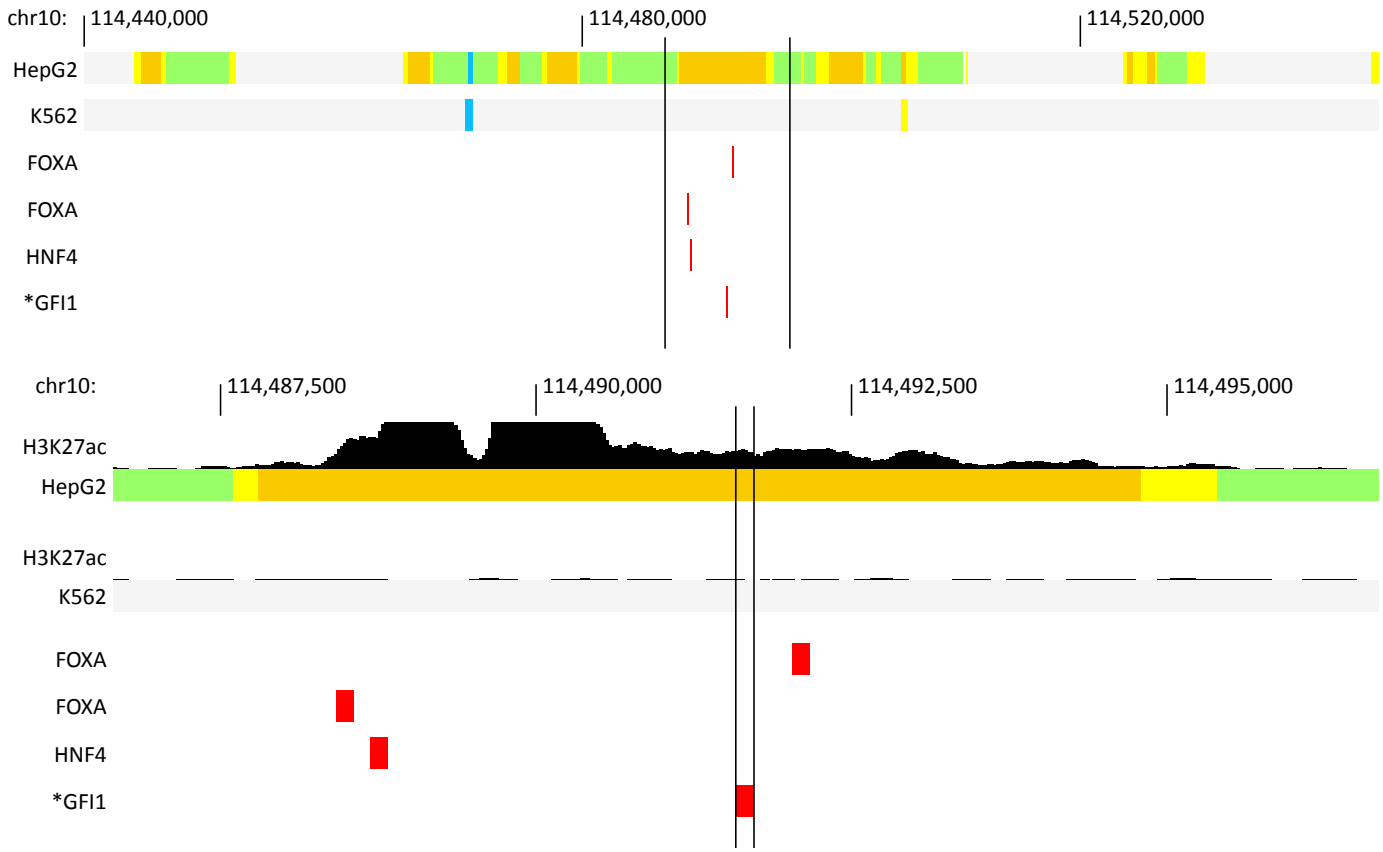
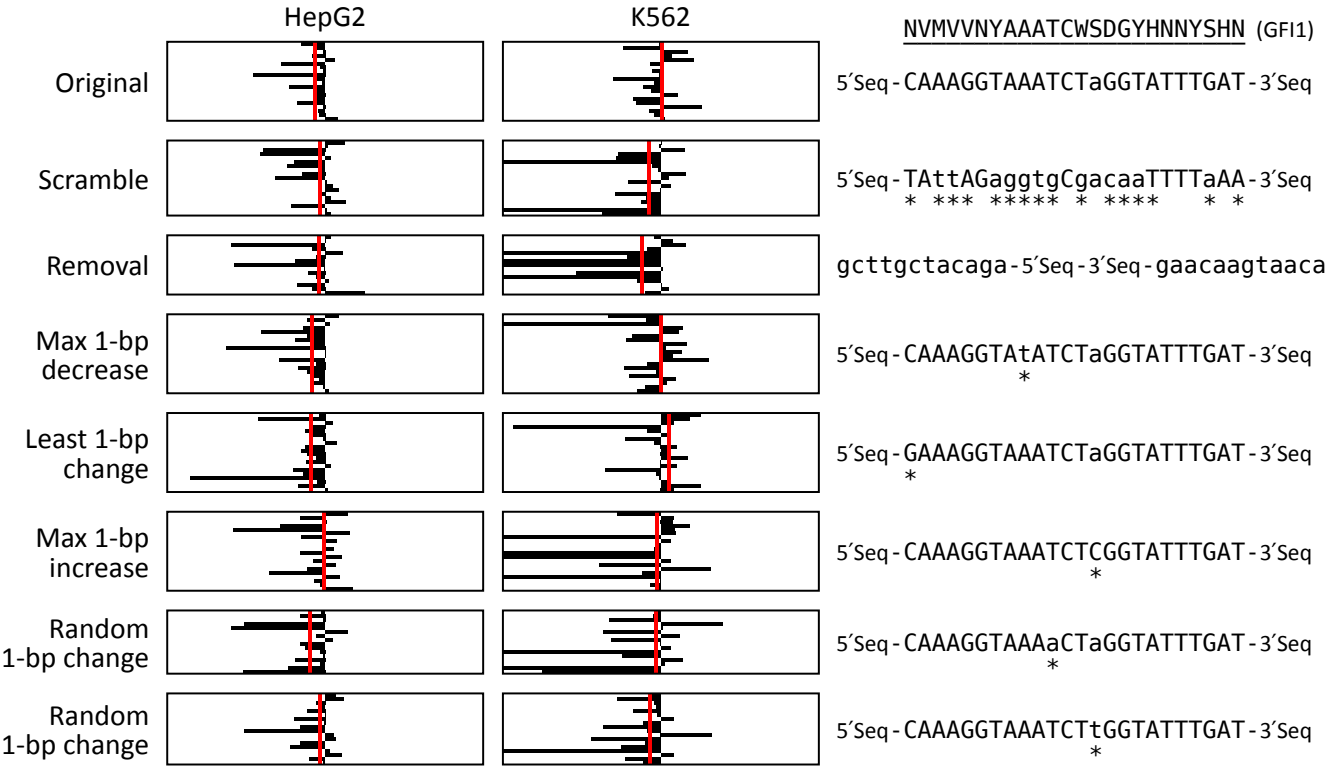
1612 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr10 114491644 114491667 - (hg18)





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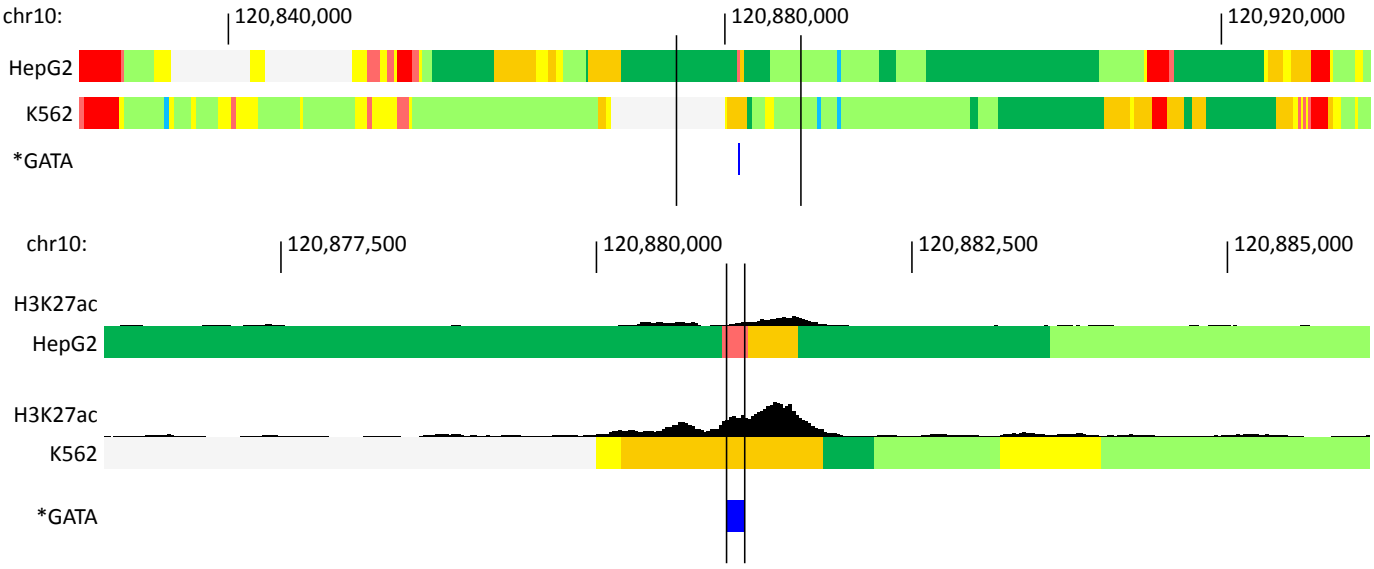
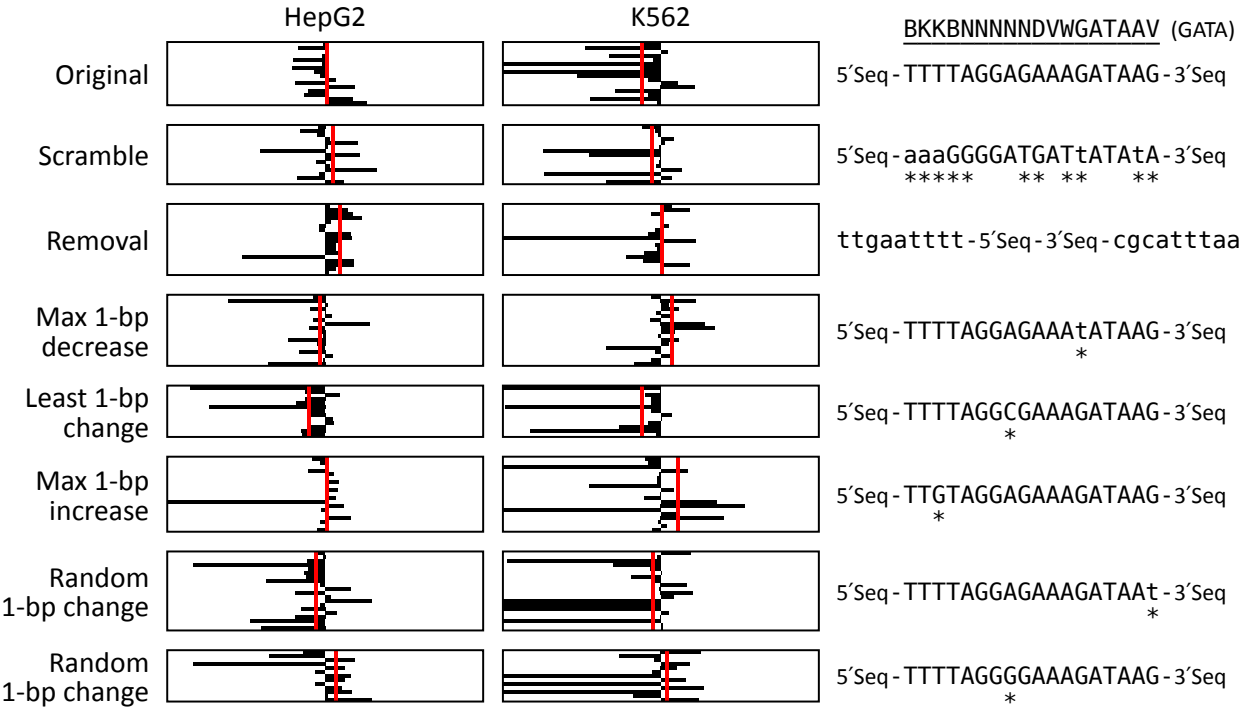
1613 GATA in K562 enhancer

chr10 120881095 120881112 - (hg18)





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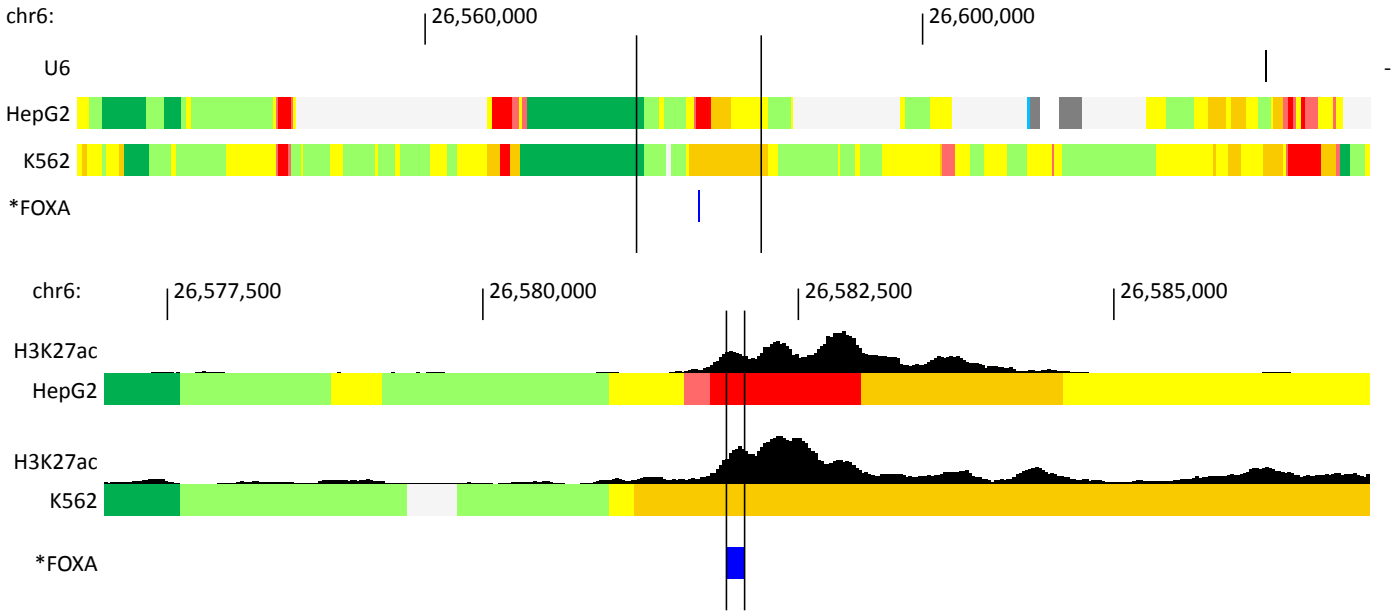
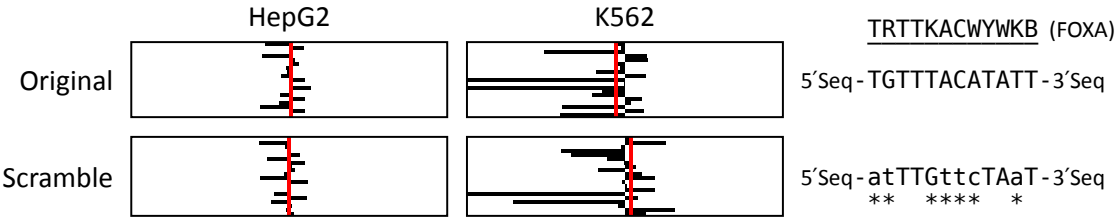
1614 FOXA in K562 enhancer

chr6 26581997 26582008 - (hg18)





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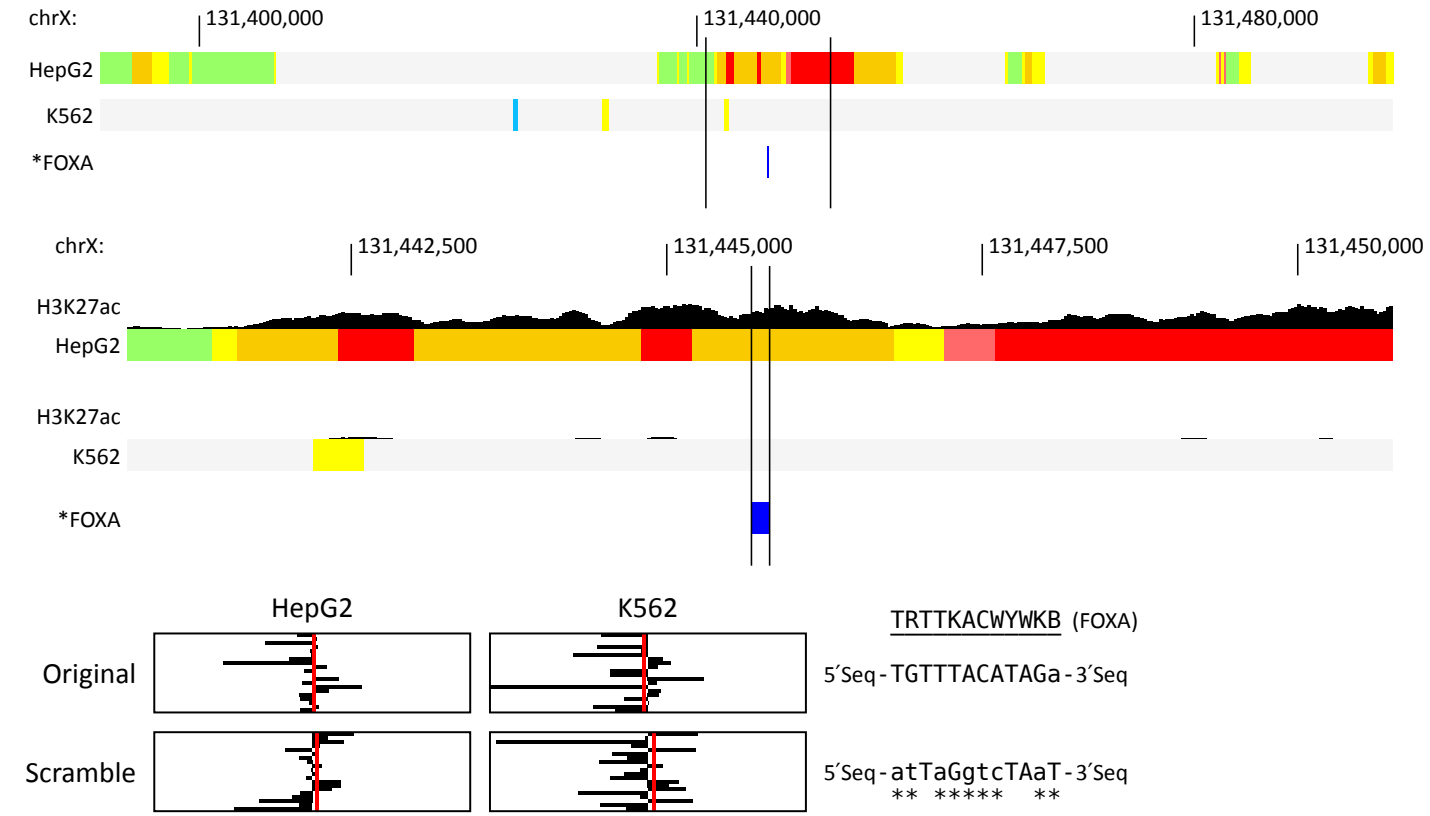
1615 FOXA in HepG2 enhancer

chrX 131445738 131445749 - (hg18)



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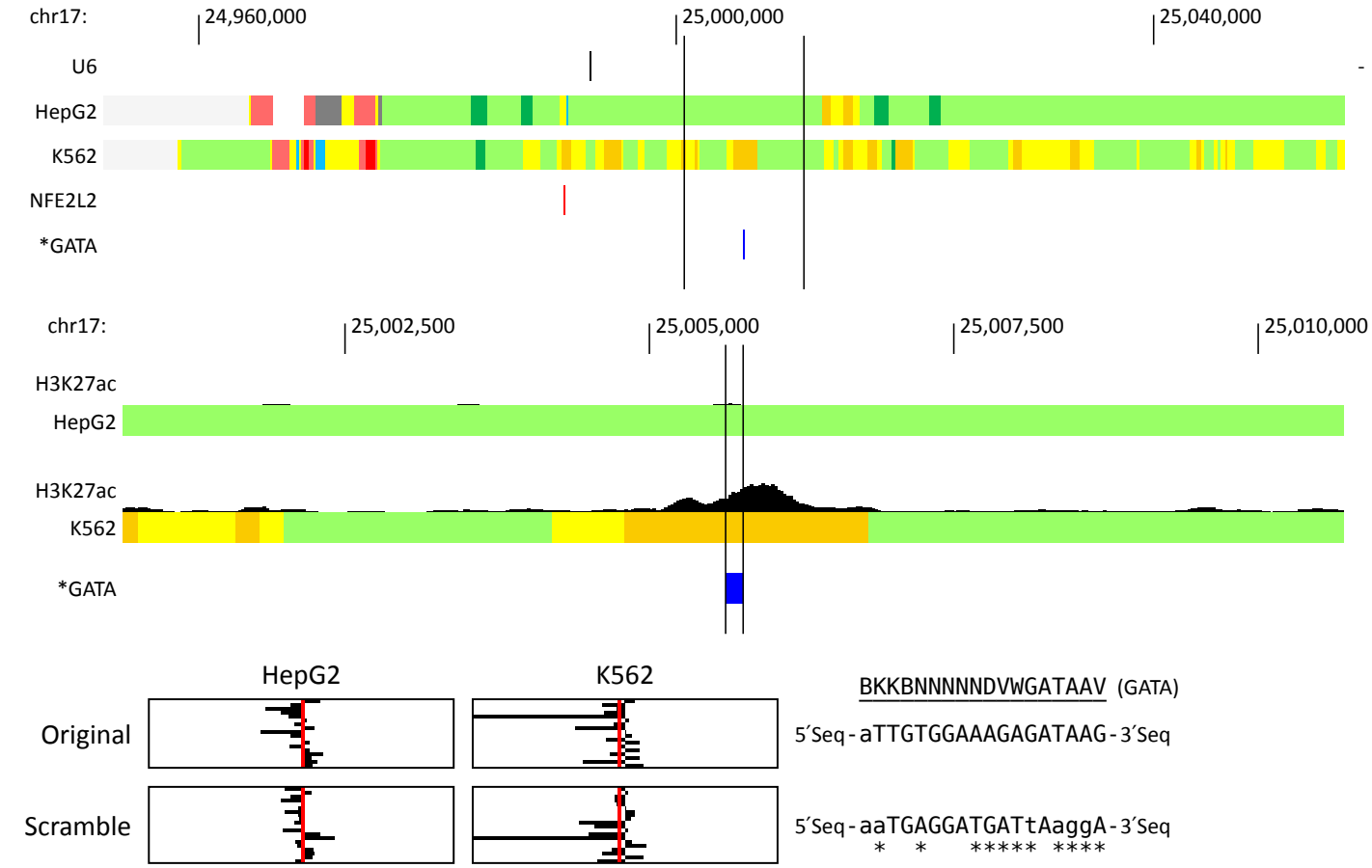
1616 GATA in K562 enhancer

chr17 25005690 25005707 - (hg18)



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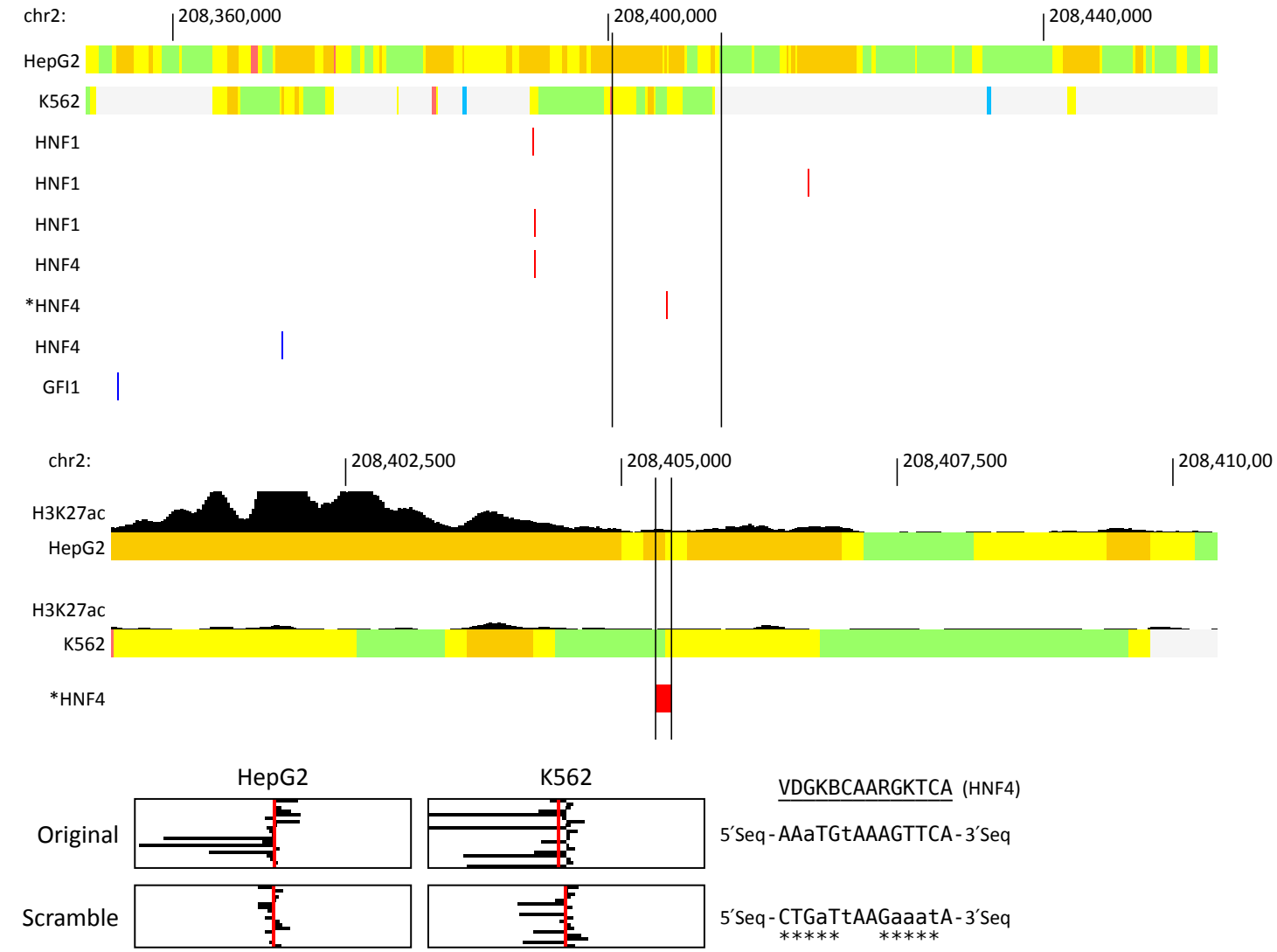
1617 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 208405376 208405389 + (hg18)



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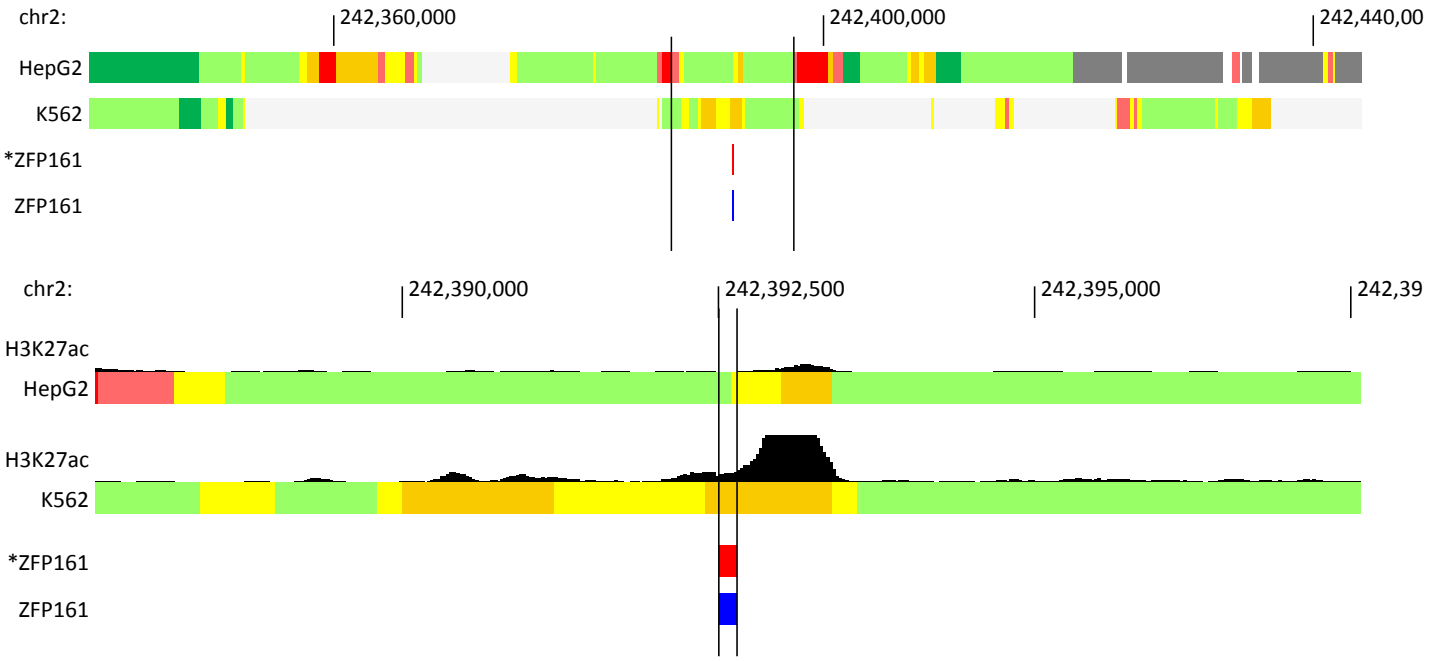
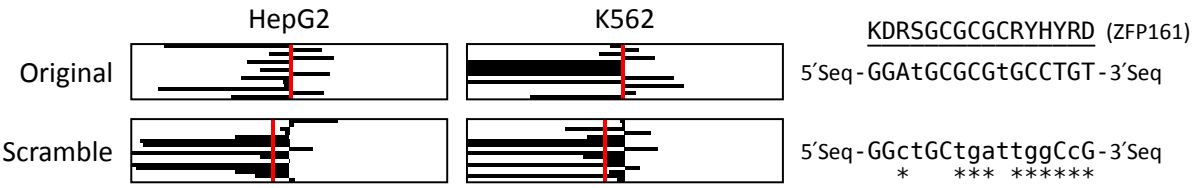
1618 ZFP161 in K562 enhancer (conserved at 20% confidence)

chr2 242392568 242392583 + (hg18)





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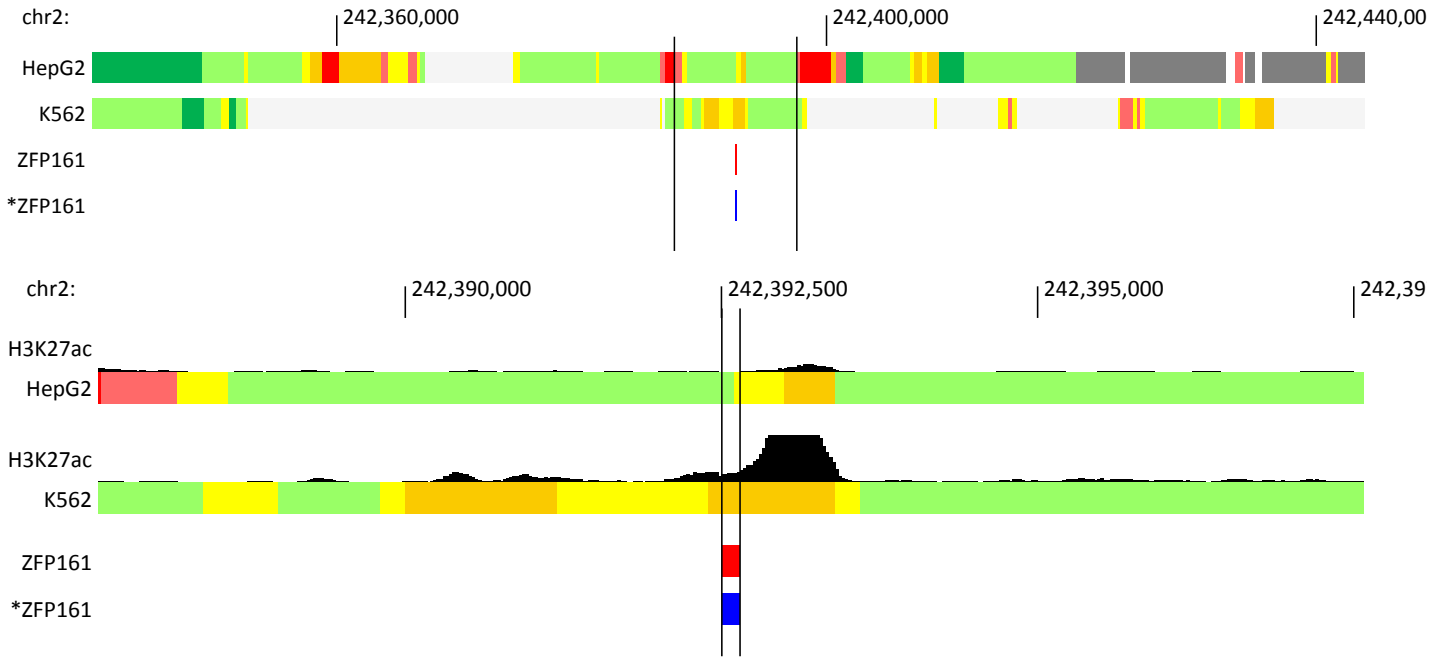
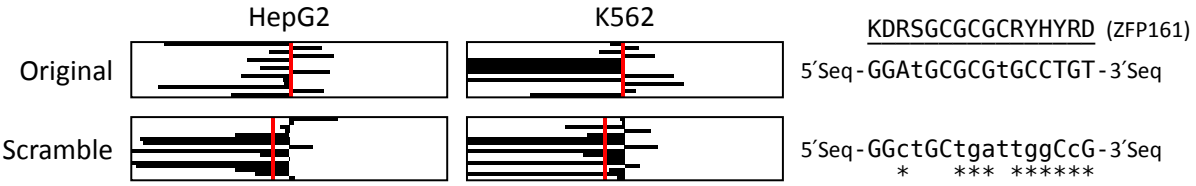
1619 ZFP161 in K562 enhancer

chr2 242392568 242392583 + (hg18)





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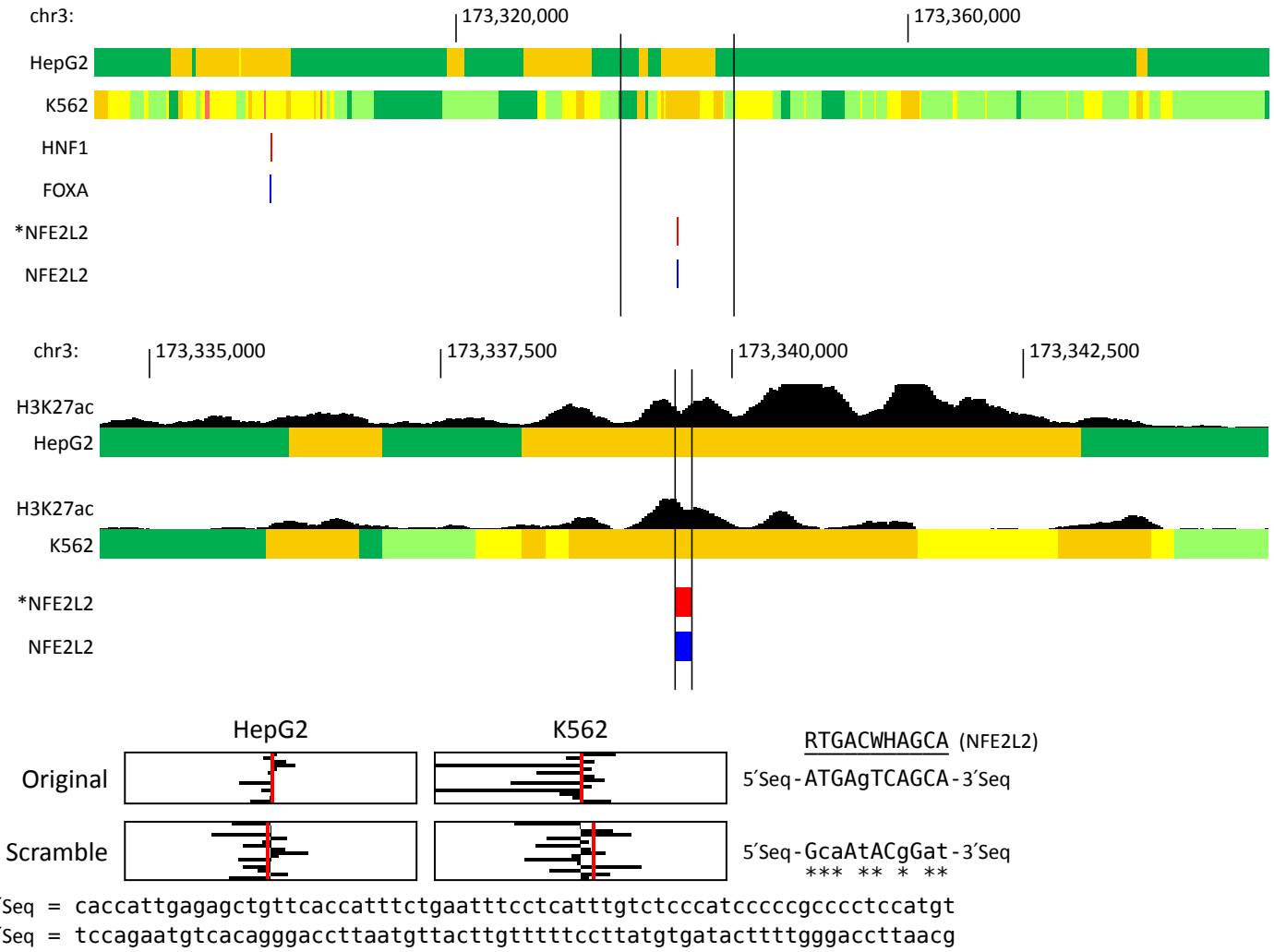
1620 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr3 173339579 173339589 + (hg18)



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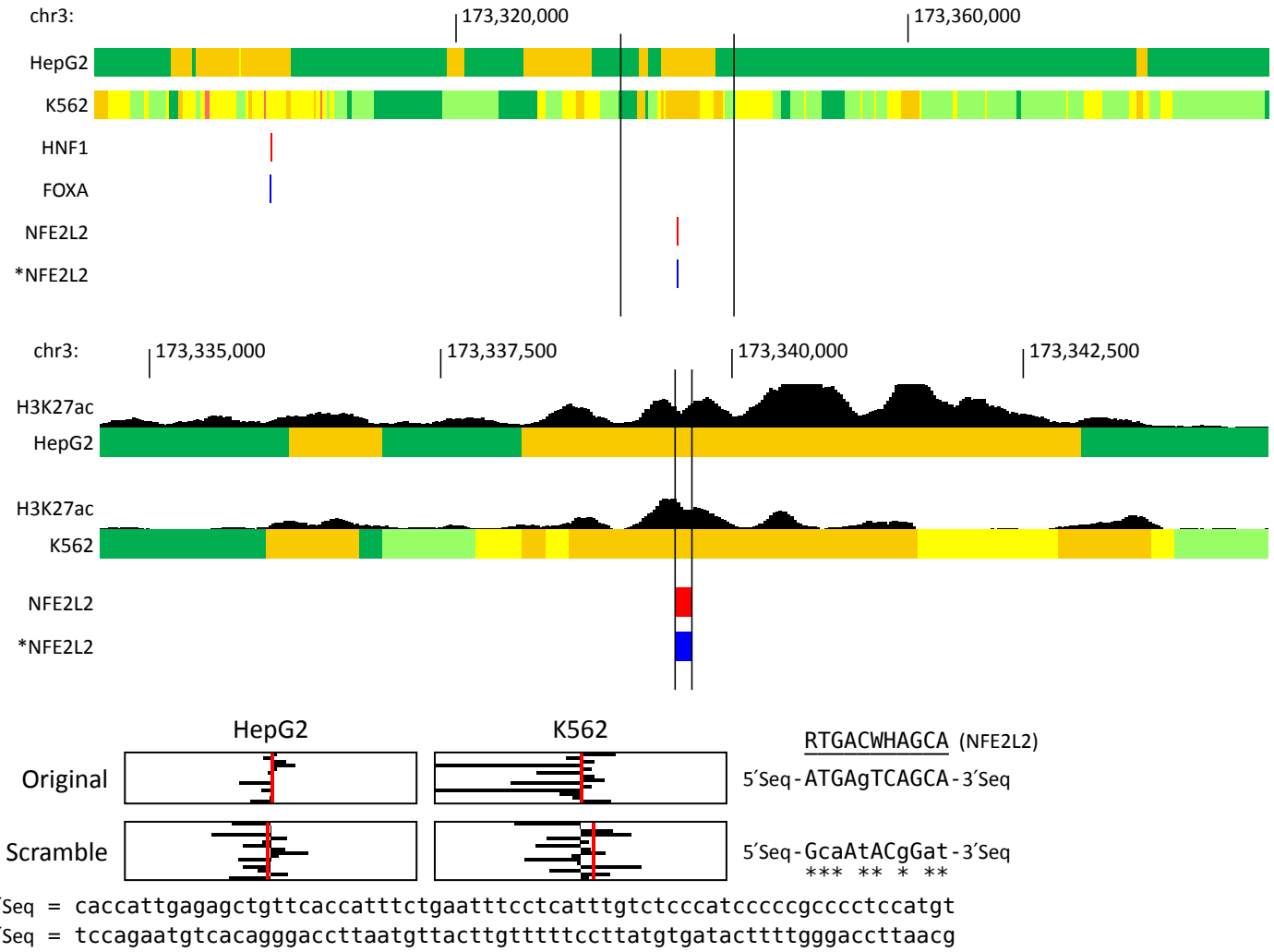
1621 NFE2L2 in K562 enhancer

chr3 173339579 173339589 + (hg18)



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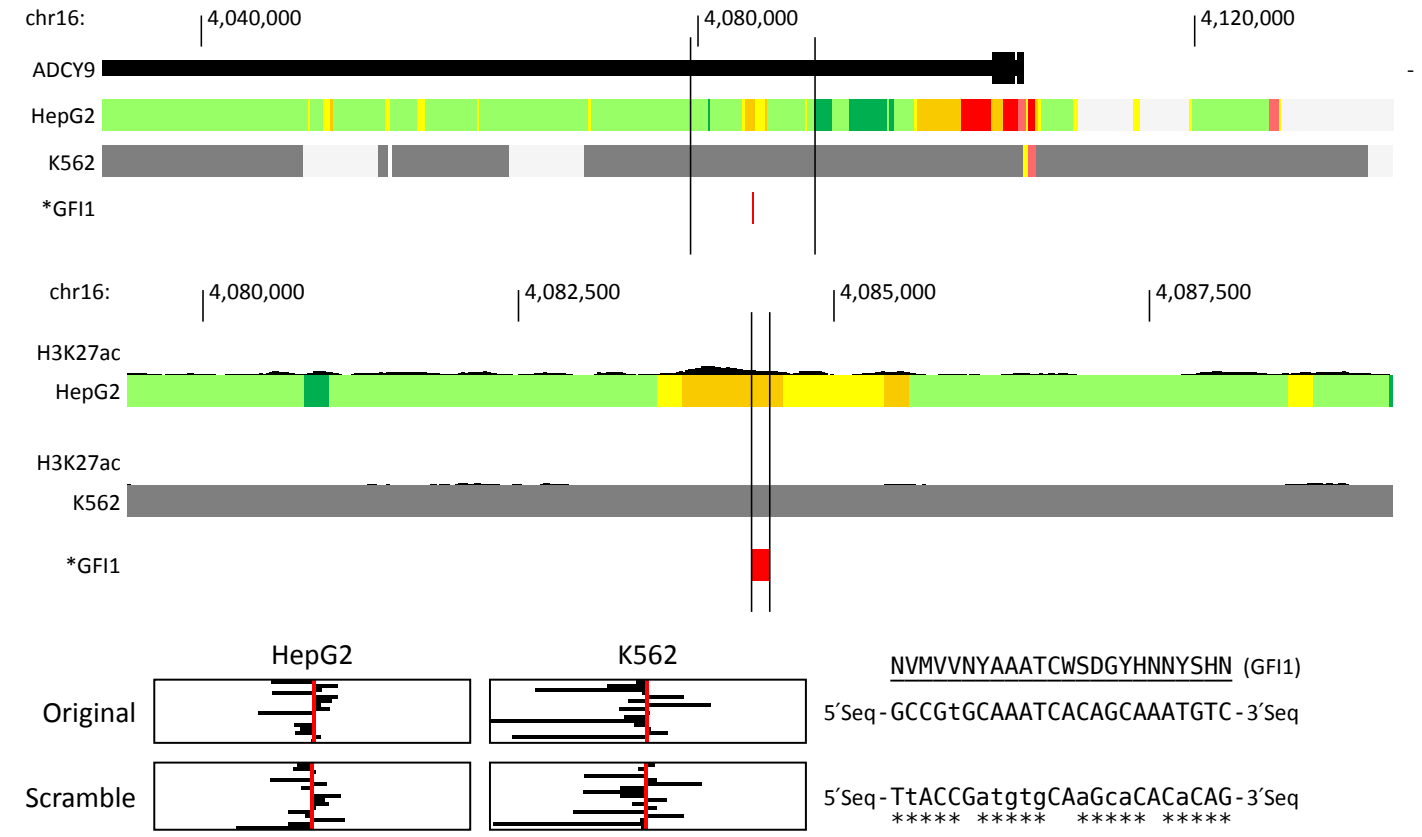
1622 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr16 4084408 4084431 + (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-GCCGtGCAAATCACAGCAAATGTC-3′Seq

5′Seq-TtACCGatgtgCAaGcaCACaCAG-3′Seq

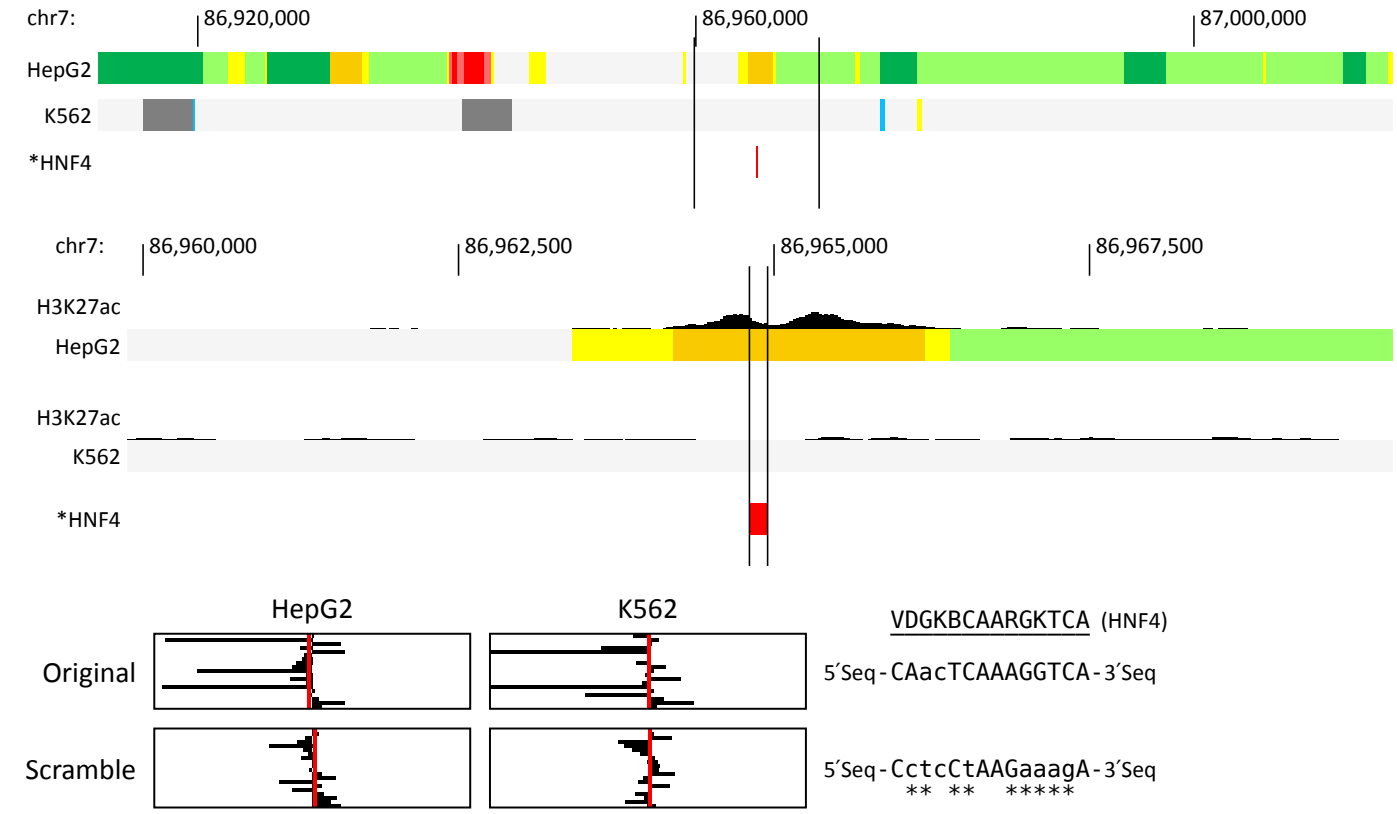
***** ***** ***** *****

5′Seq = agagggcaaaggtatccaatgacaaccctgtccttcagaaccaagtagtgttttcccatca

3′Seq = atgtggctttccagcagcctctttgctgtttgttgaggaaggataagaaaaccatggagg

1623 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr7 86964871 86964884 + (hg18)



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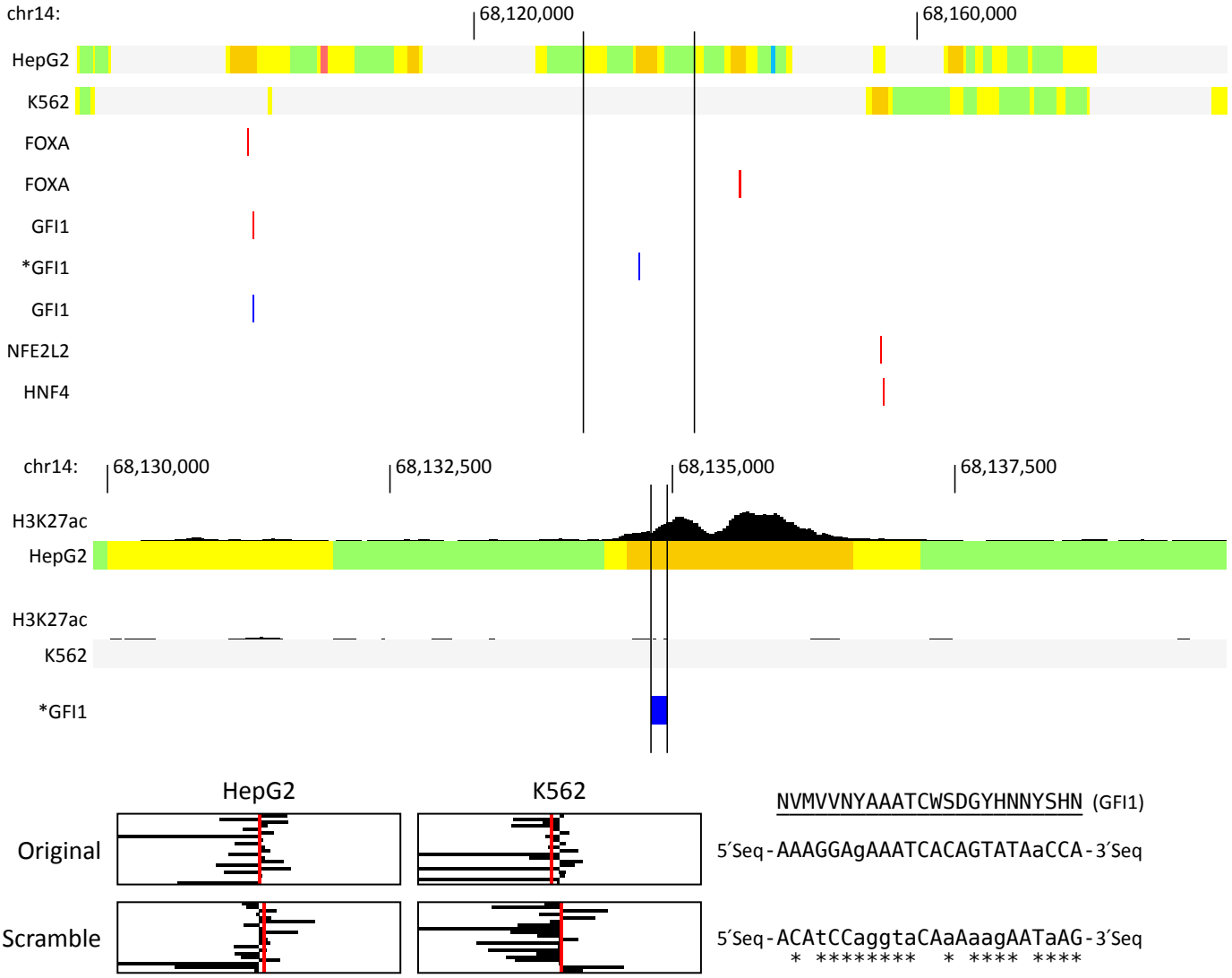
1624 GFI1 in HepG2 enhancer

chr14 68134871 68134894 + (hg18)



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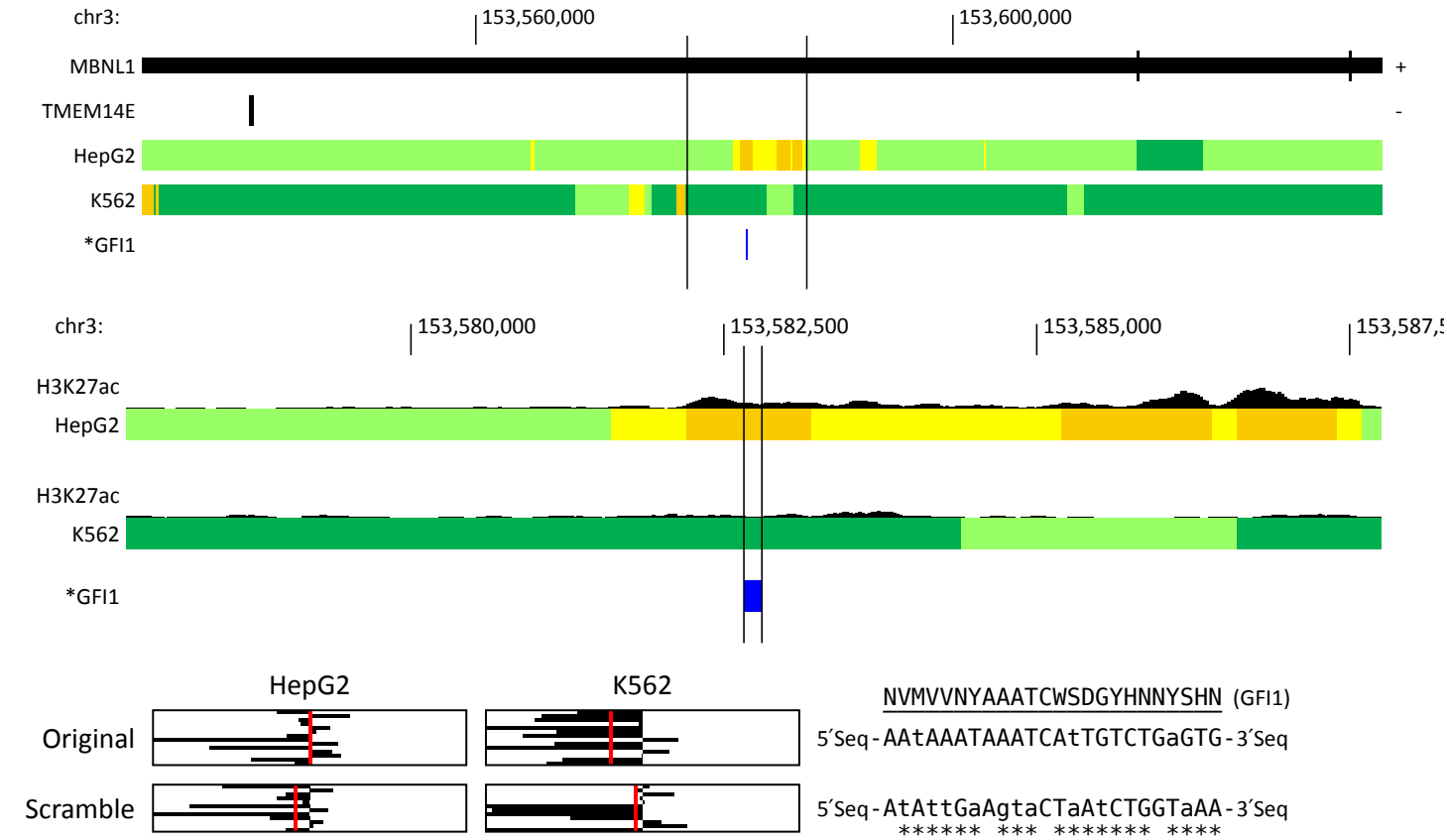
1625 GFI1 in HepG2 enhancer

chr3 153582721 153582744 - (hg18)



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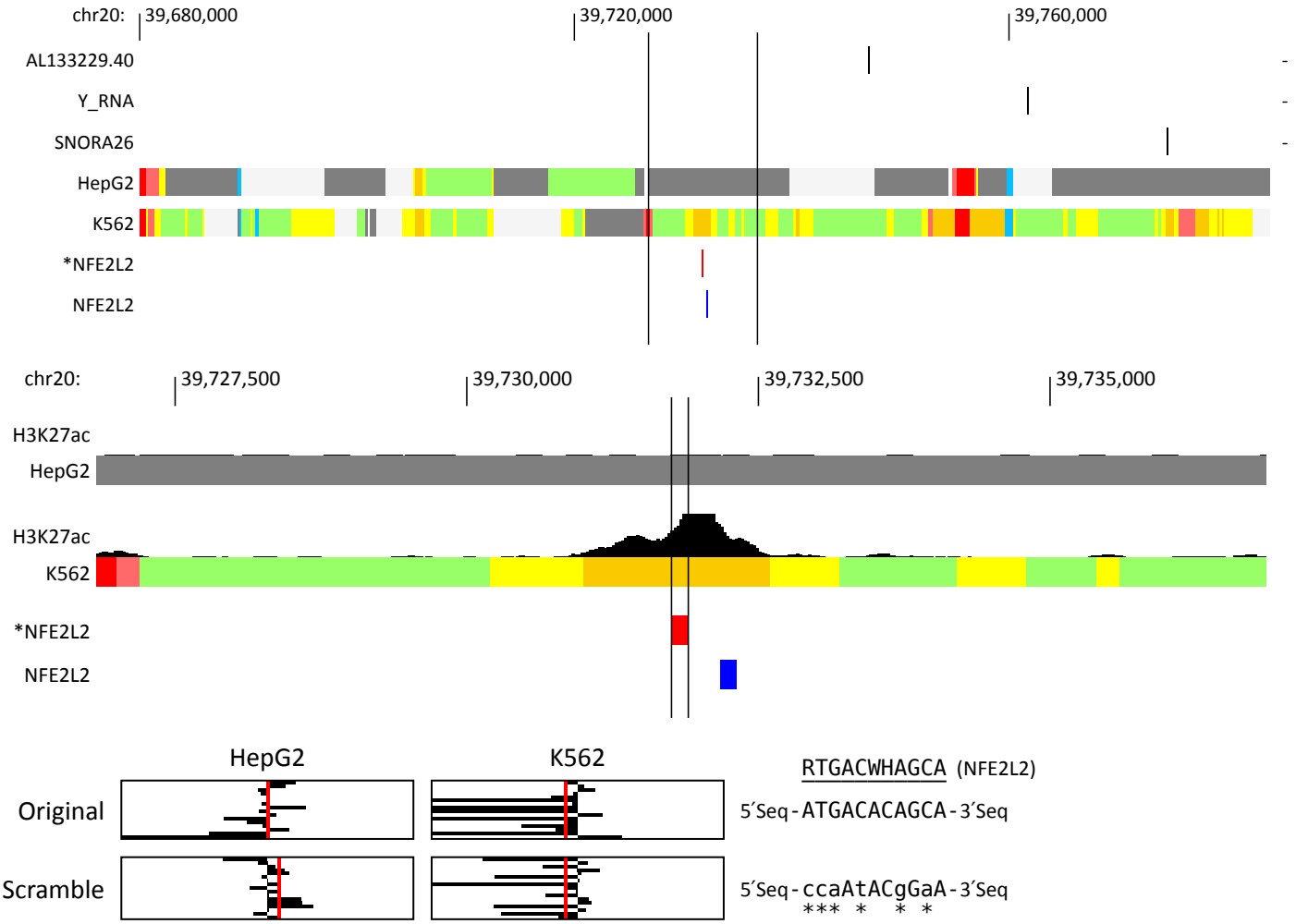
1626 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 39731822 39731832 - (hg18)



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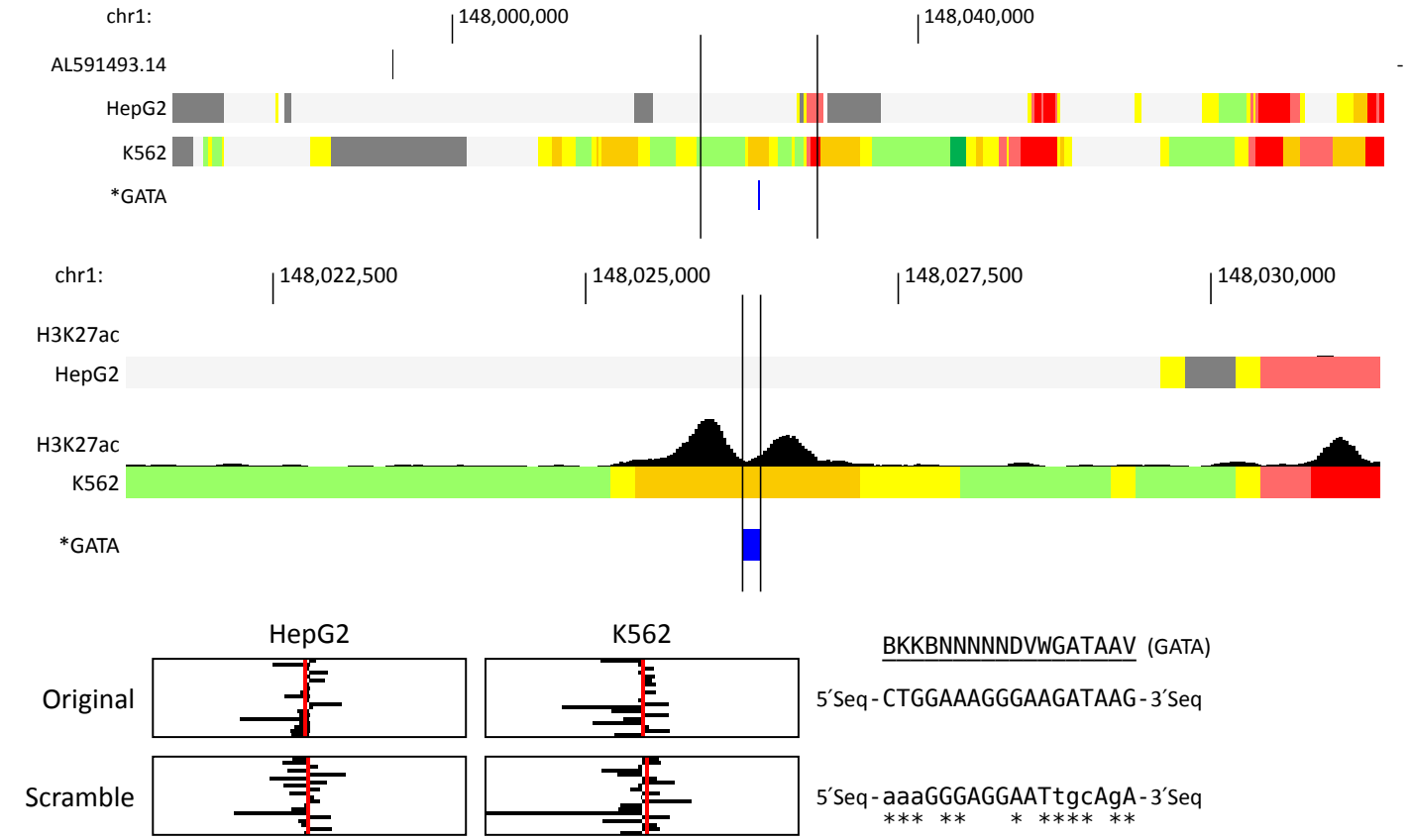
3′Seq = aatttggcagtgcccacagaaactcacgtttctcaatatagtttgtactaacacgttcactgttttc

1627 GATA in K562 enhancer

chr1 148026319 148026336 + (hg18)



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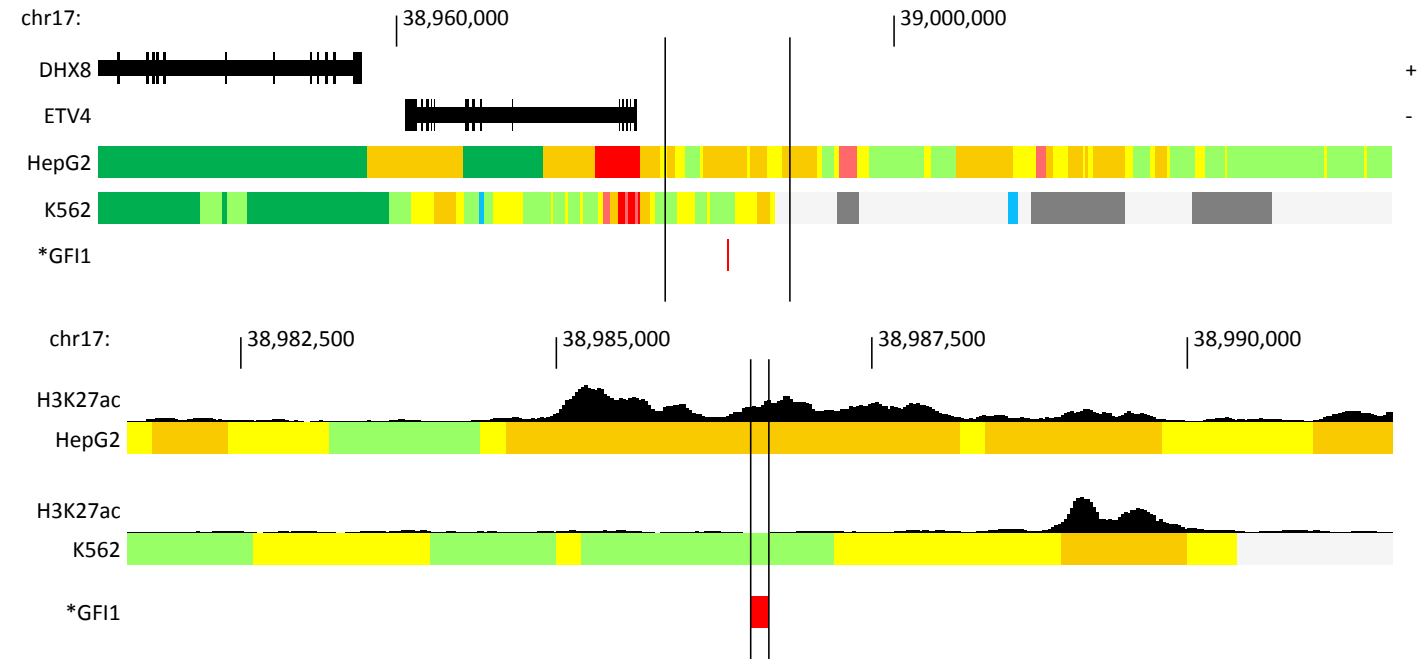
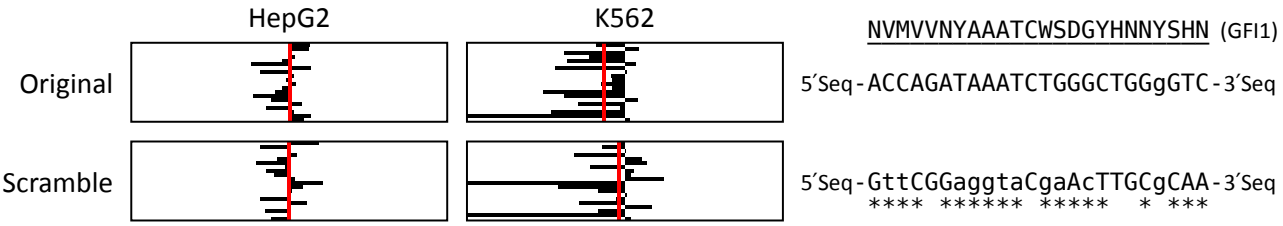
1628 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr17 38986601 38986624 - (hg18)





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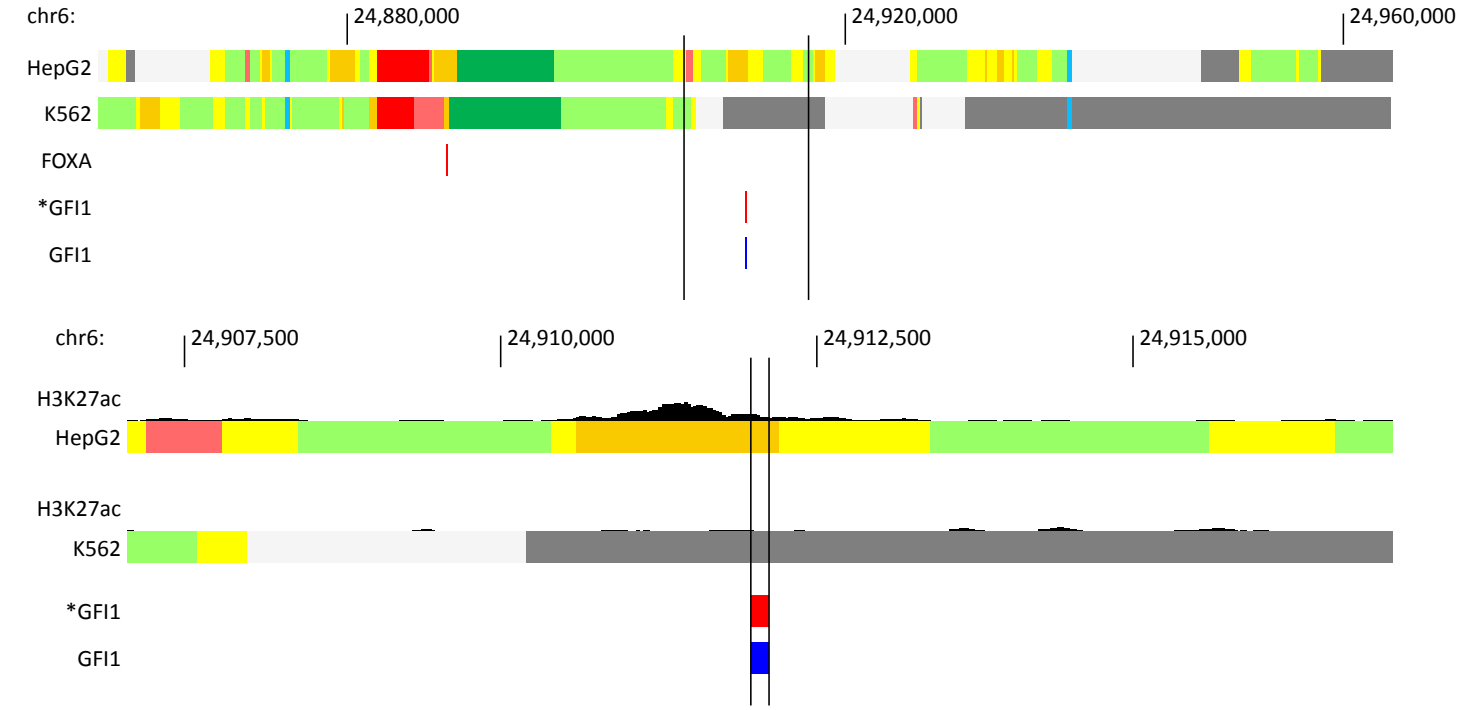
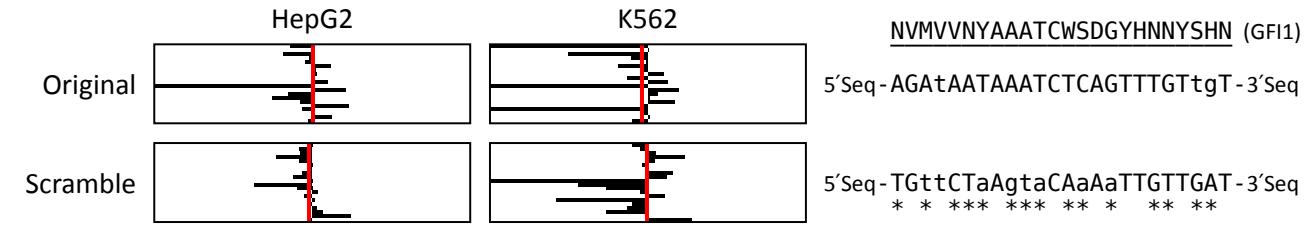
1629 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 24912039 24912062 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AGAtAATAAATCTCAGTTTGTtgT-3′Seq

5′Seq-TGttCTaAgtaCAaAaTTGTTGAT-3′Seq

* * *** *** ** * ** **

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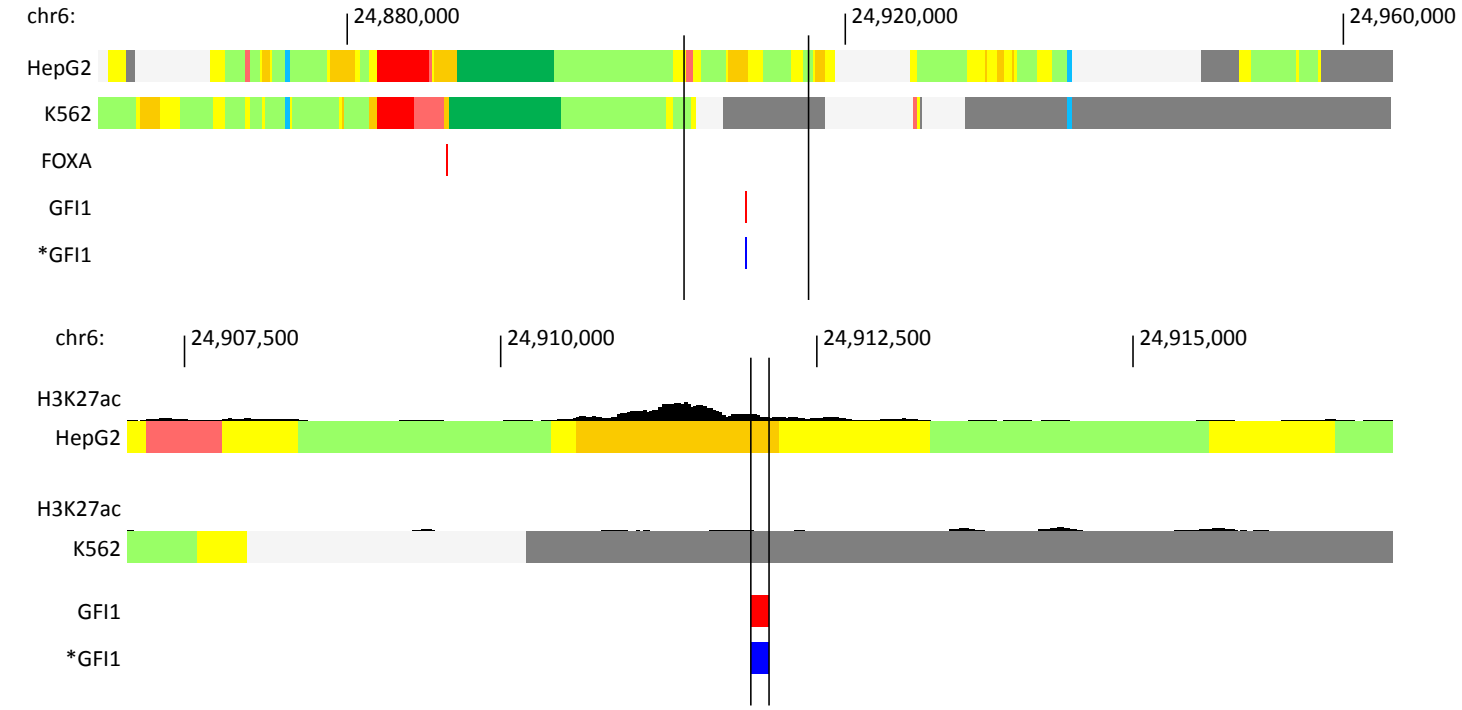
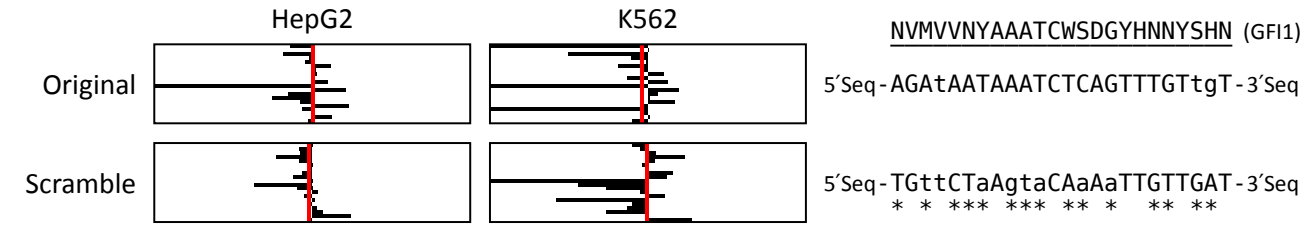
3′Seq = aaagctaattggagagaaaacagctaagtttcactgttgtatctatgagcagagactgtg

1630 GFI1 in HepG2 enhancer

chr6 24912039 24912062 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AGAtAATAAATCTCAGTTTGTtgT-3′Seq

5′Seq-TGttCTaAgtaCAaAaTTGTTGAT-3′Seq

* * *** *** ** * ** **

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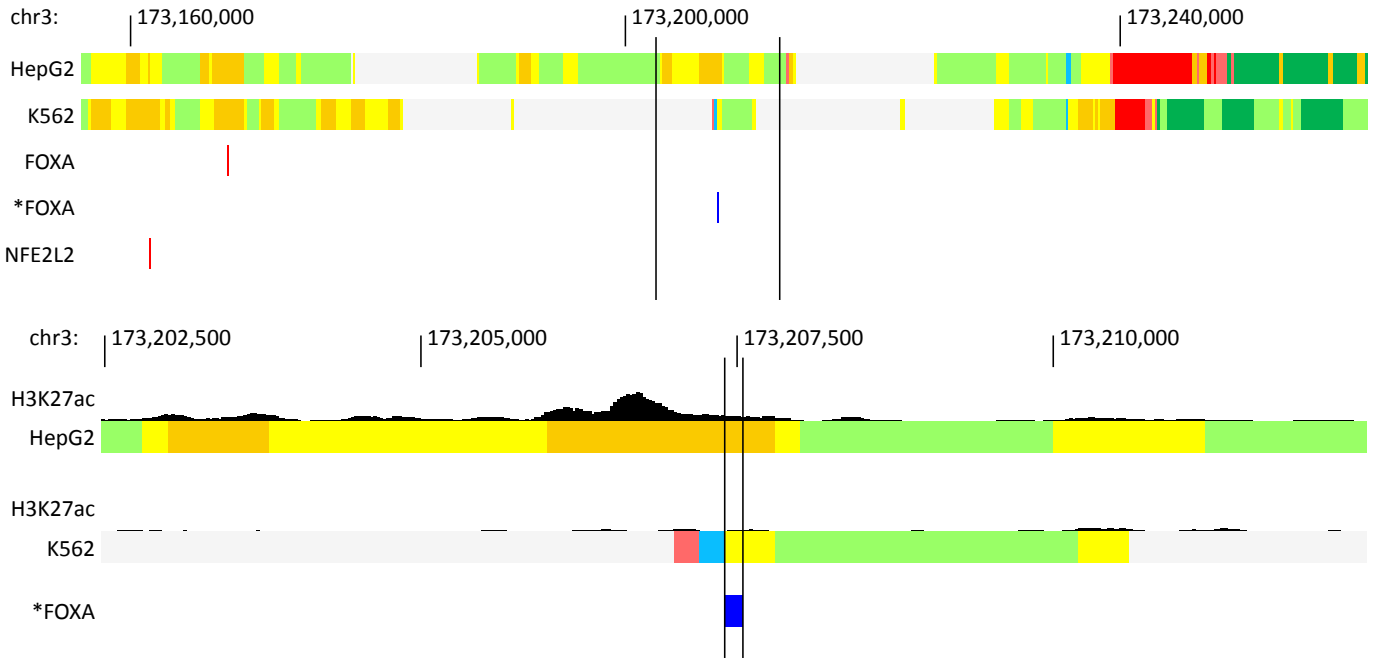
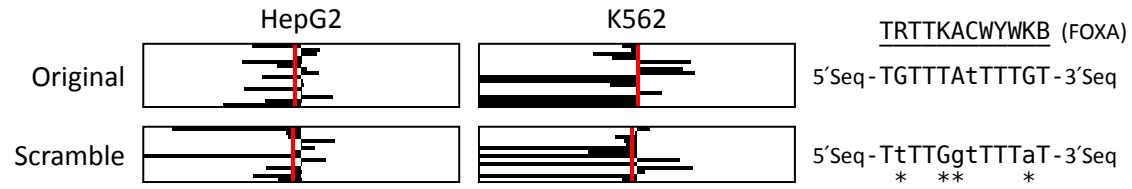
3′Seq = aaagctaattggagagaaaacagctaagtttcactgttgtatctatgagcagagactgtg

1631 FOXA in HepG2 enhancer

chr3 173207469 173207480 - (hg18)





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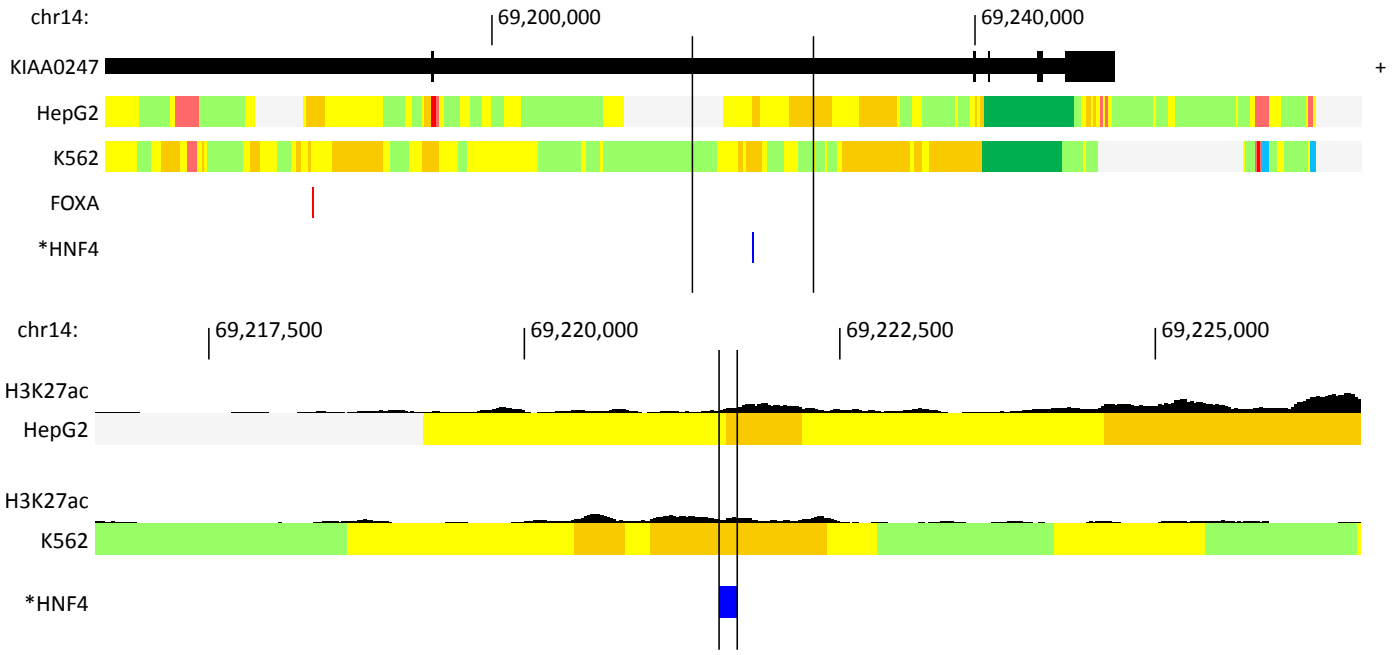
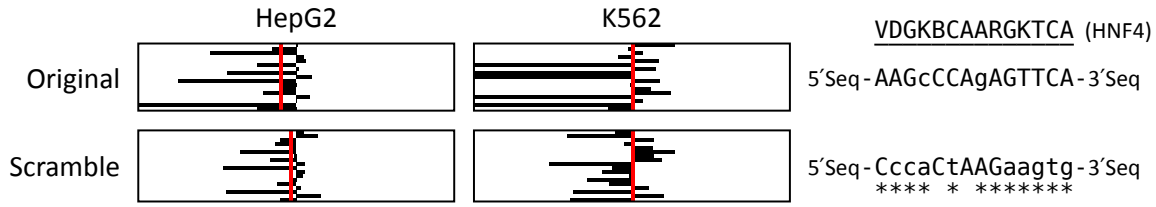
1632 HNF4 in HepG2 enhancer

chr14 69221609 69221622 + (hg18)





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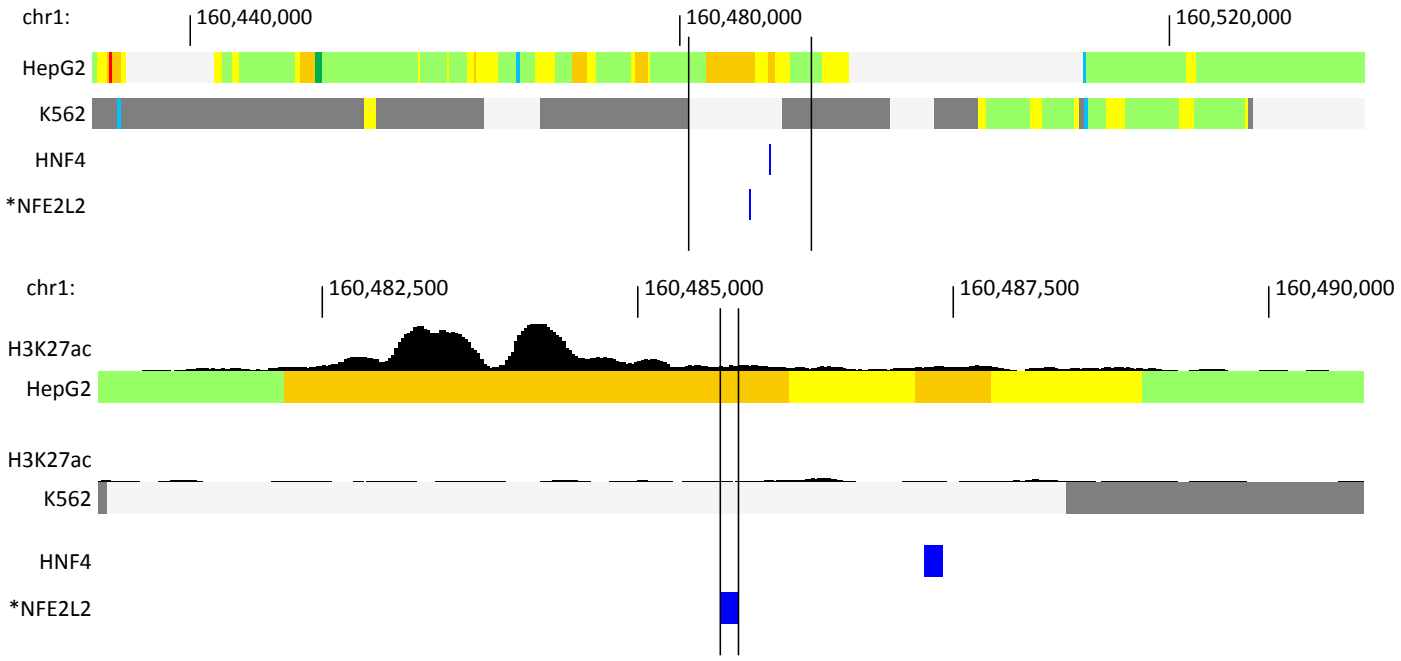
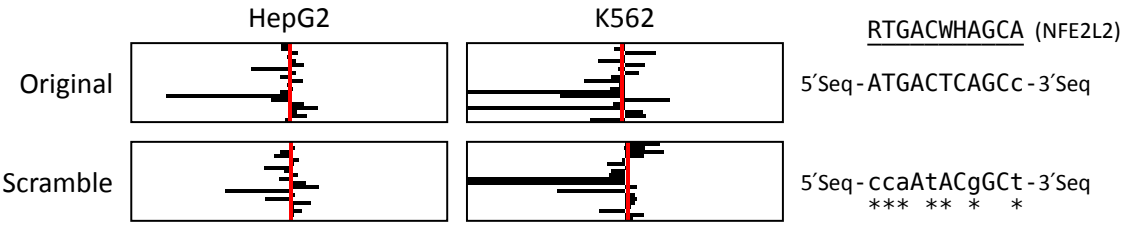
1633 NFE2L2 in HepG2 enhancer

chr1 160485721 160485731 + (hg18)





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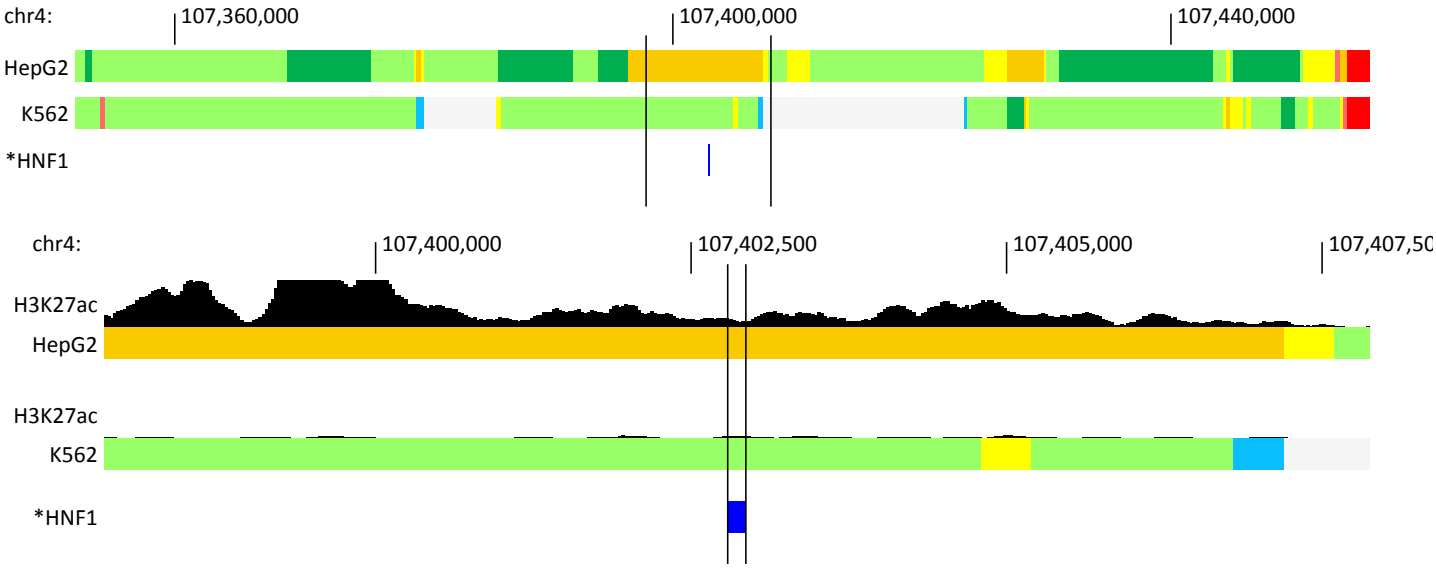
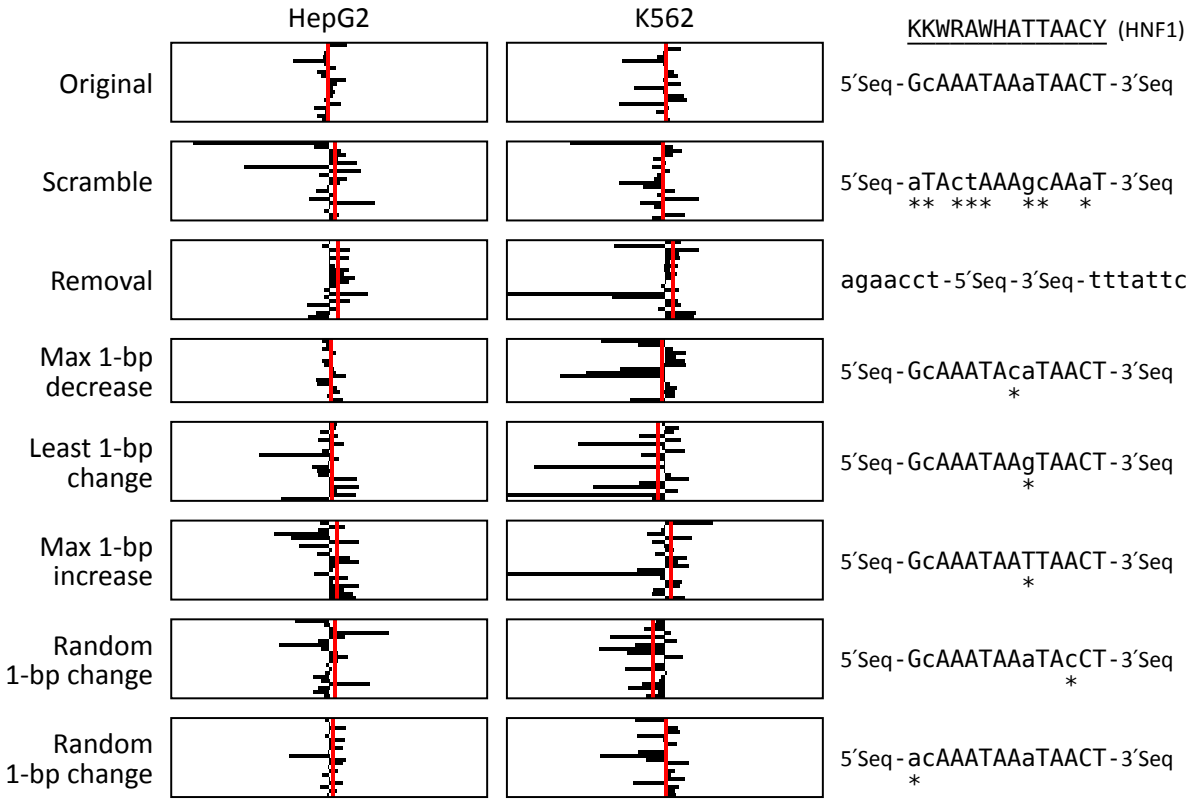
1634 HNF1 in HepG2 enhancer

chr4 107402856 107402869 + (hg18)





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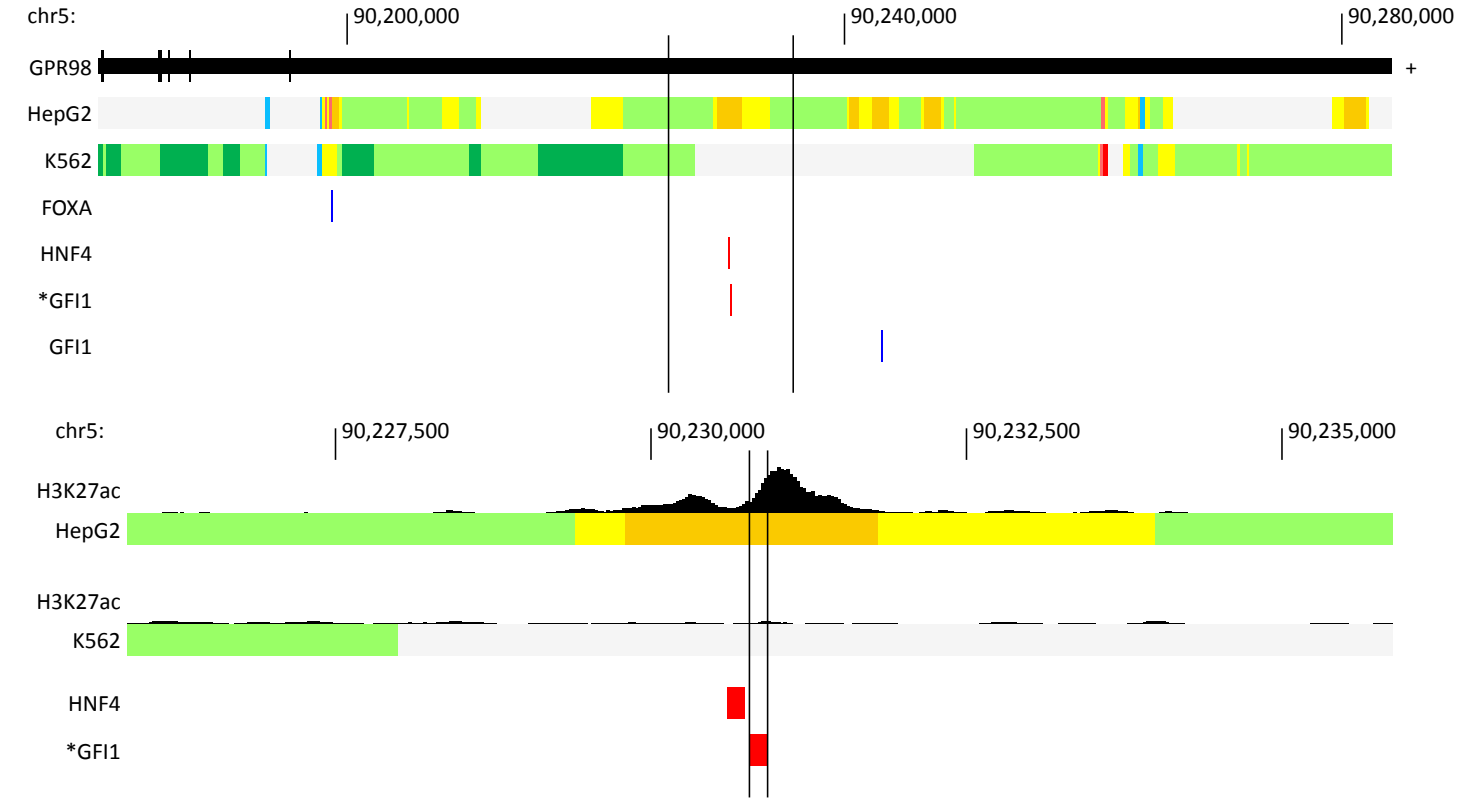
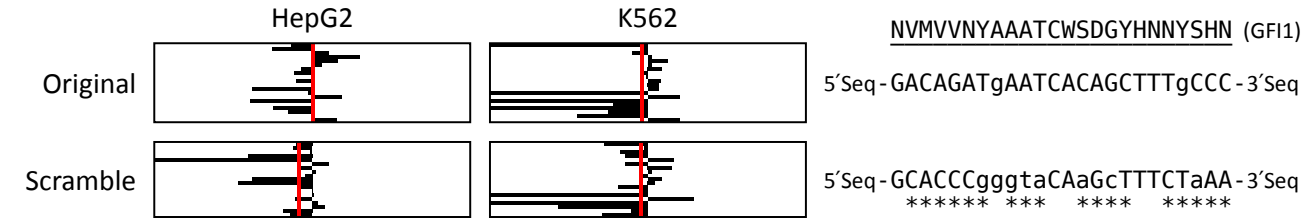
3′Seq = tgttttaacaagtgaaatgtgacctagtgaaaatattcaaaaagttatatttttattgctcctct

1635 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr5 90230841 90230864 + (hg18)





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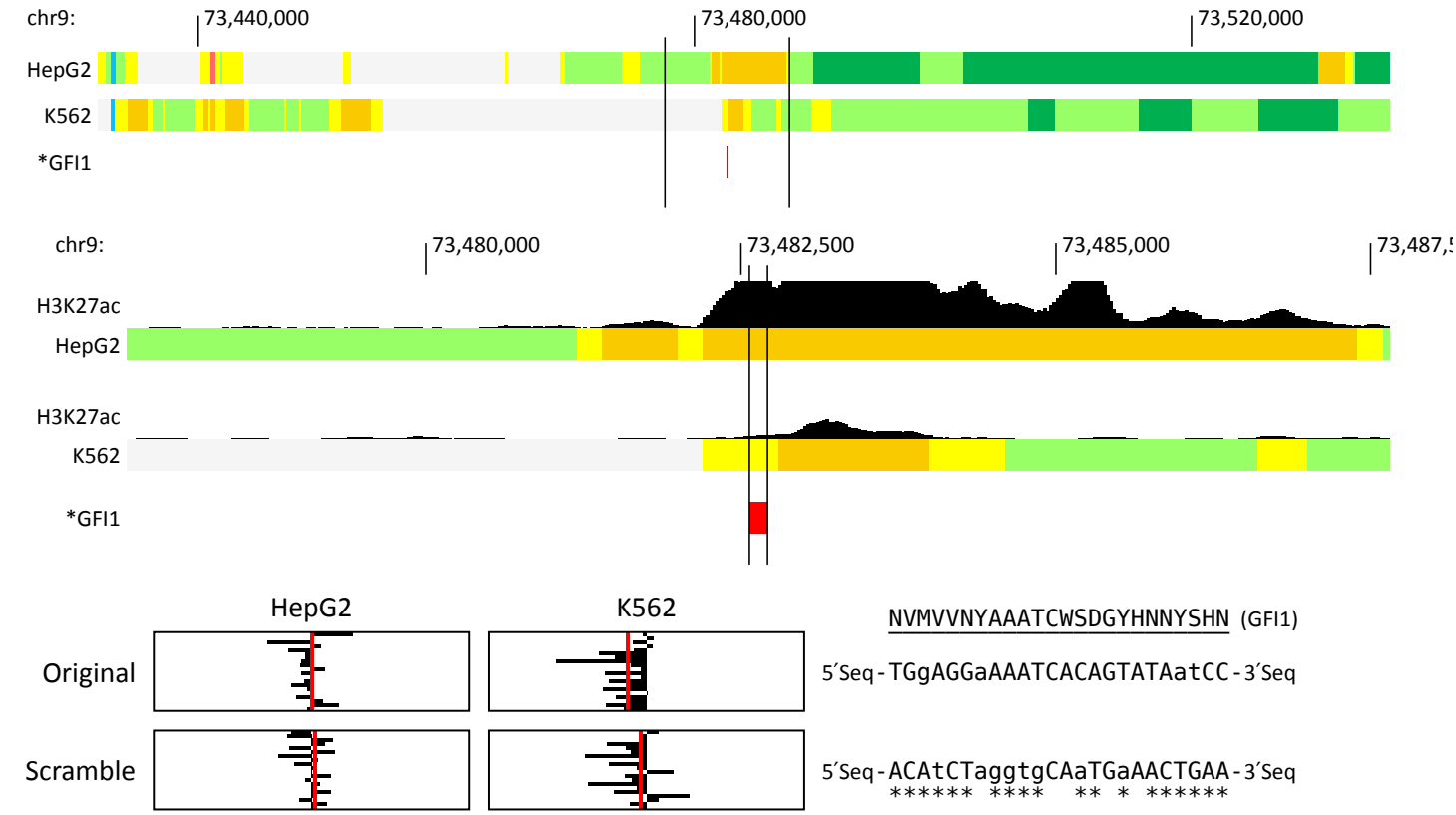
3′Seq = acctgtaatgaggatacactgctggatcccaggttggtcccagactttcagggtggtatt

1636 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr9 73482628 73482651 + (hg18)



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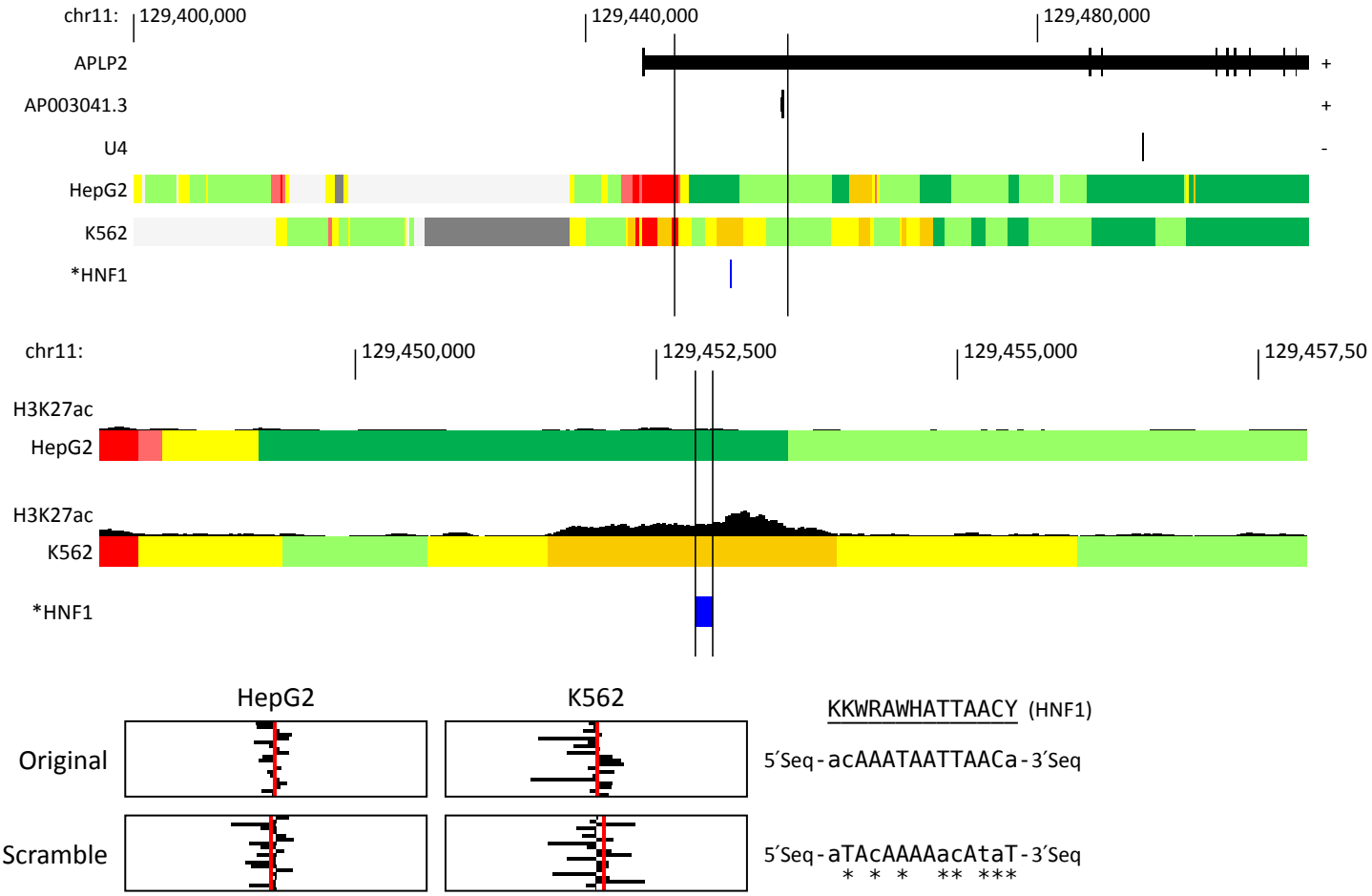
1637 HNF1 in K562 enhancer

chr11 129452890 129452903 - (hg18)



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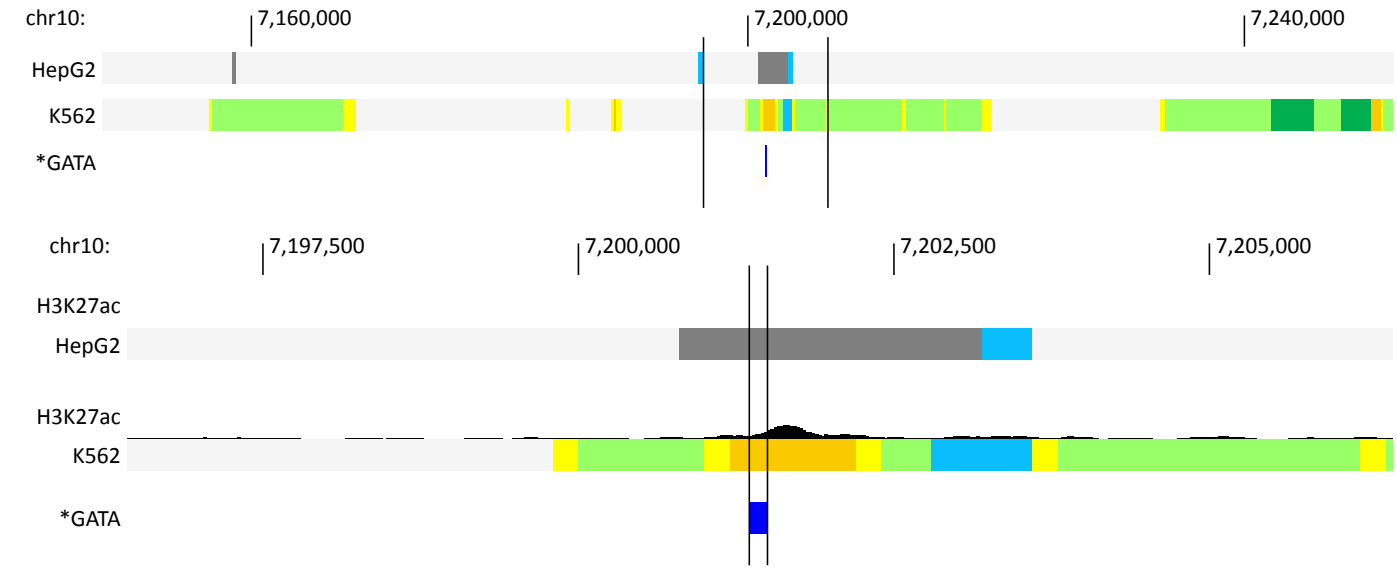
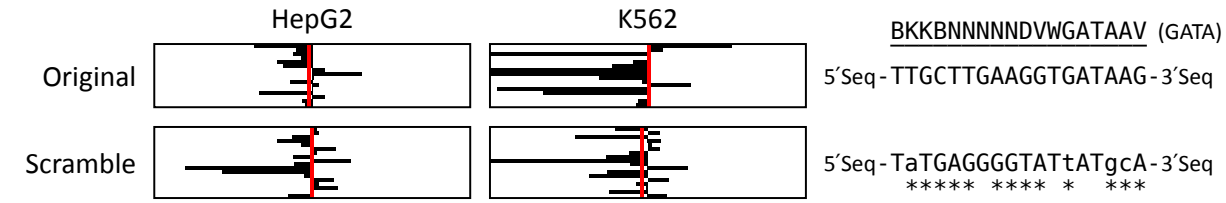
1638 GATA in K562 enhancer

chr10 7201418 7201435 - (hg18)





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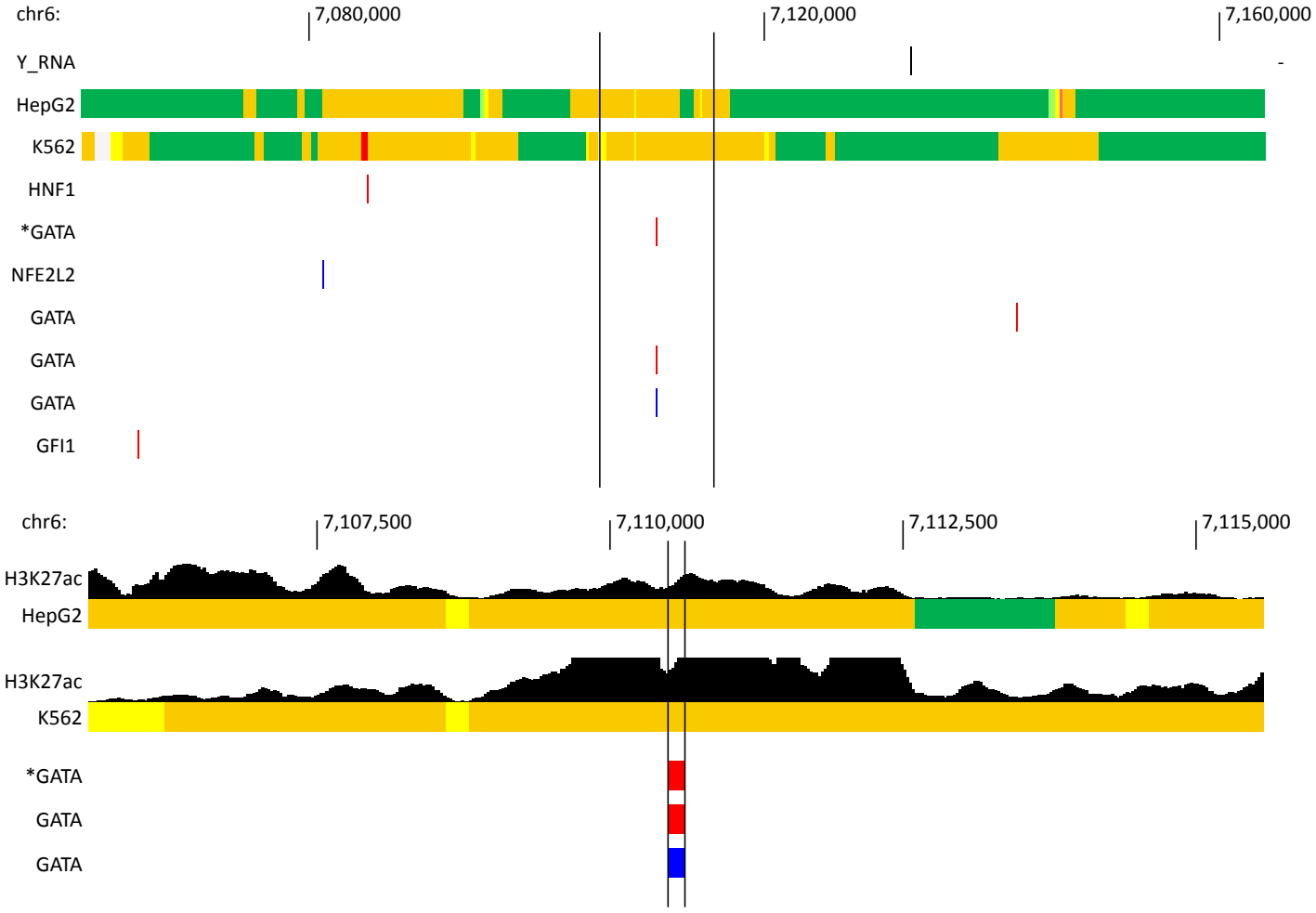
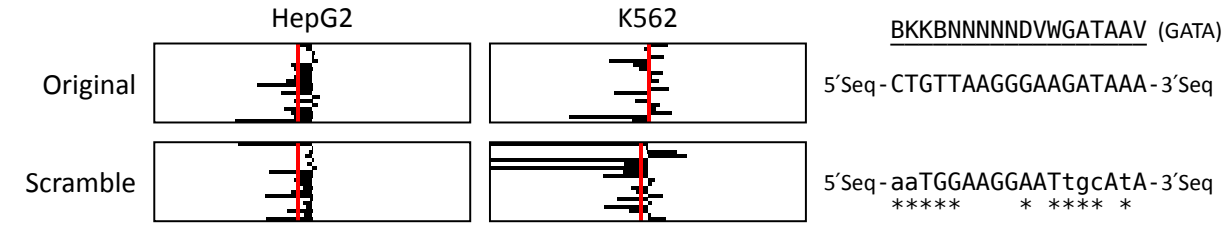
1639 GATA in HepG2 enhancer (conserved at 70% confidence)

chr6 7110559 7110576 + (hg18)





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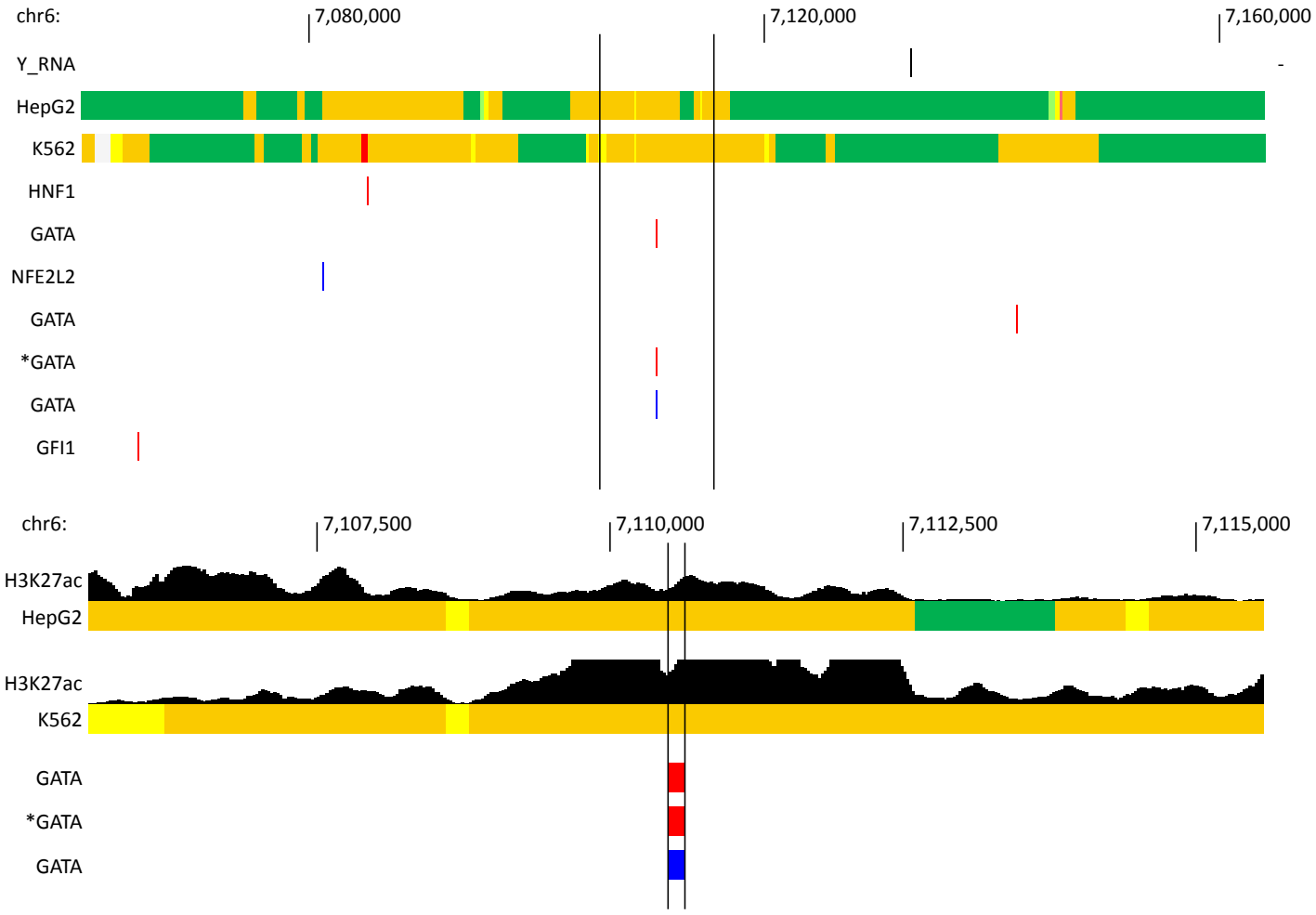
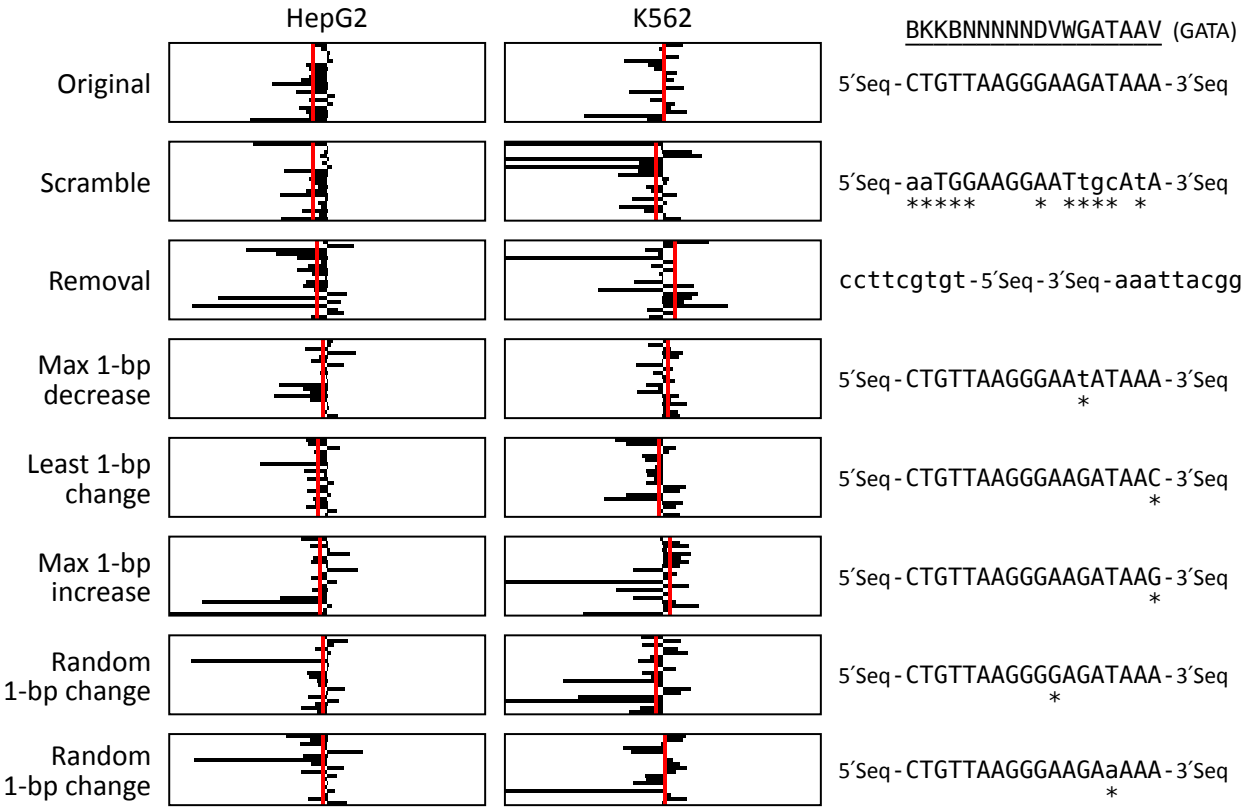
1640 GATA in K562 enhancer (conserved at 70% confidence)

chr6 7110559 7110576 + (hg18)





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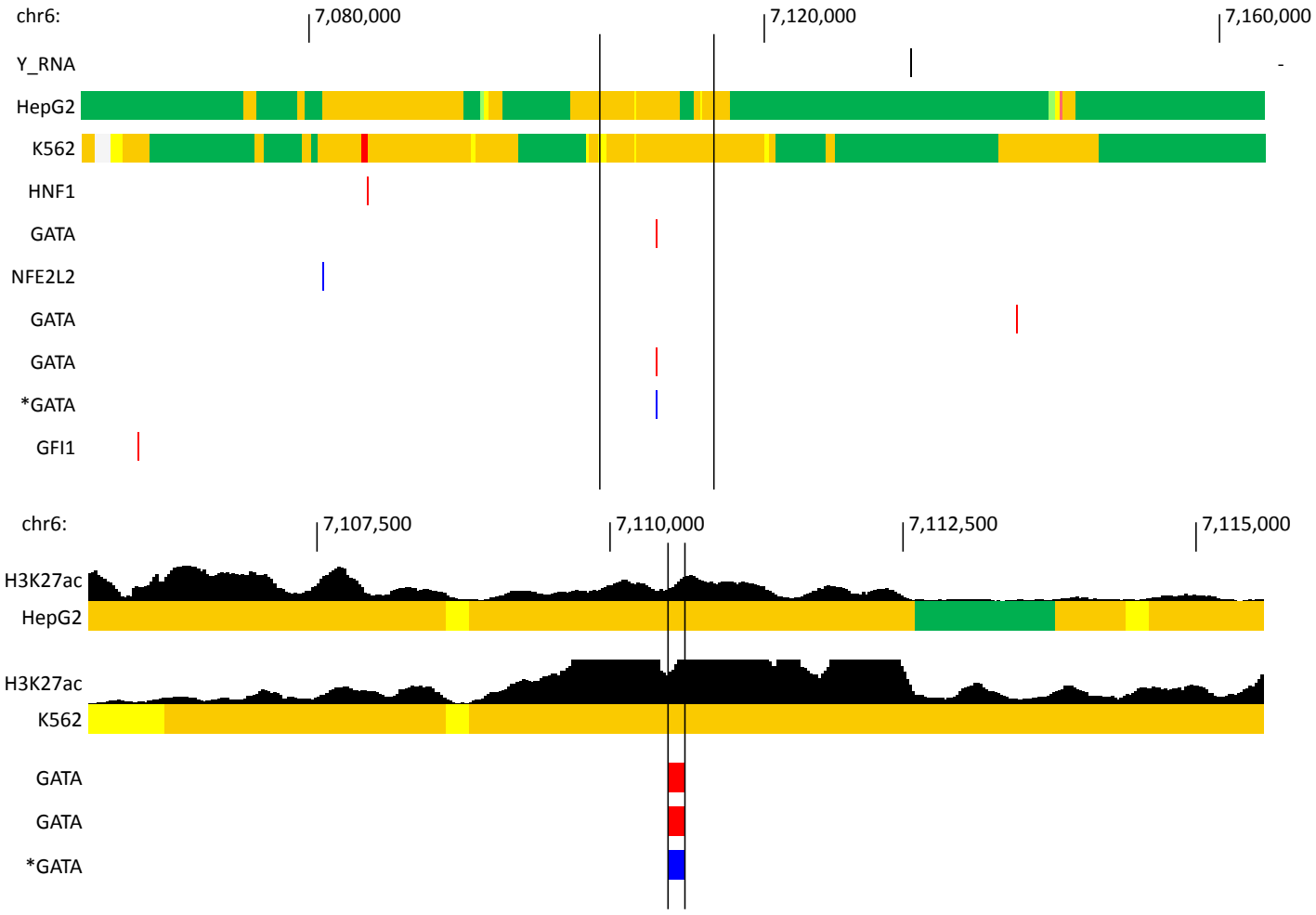
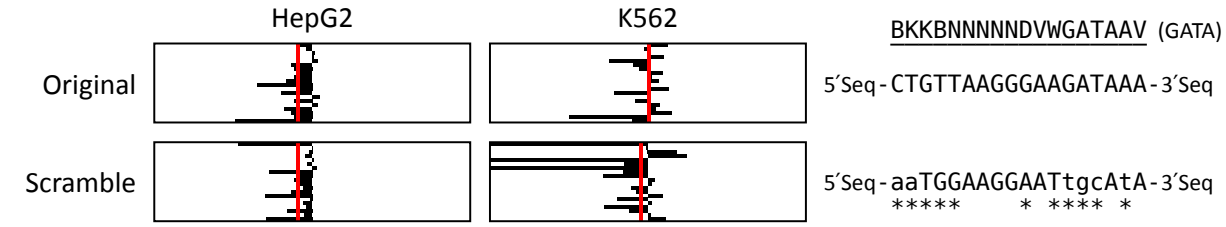
1641 GATA in K562 enhancer

chr6 7110559 7110576 + (hg18)





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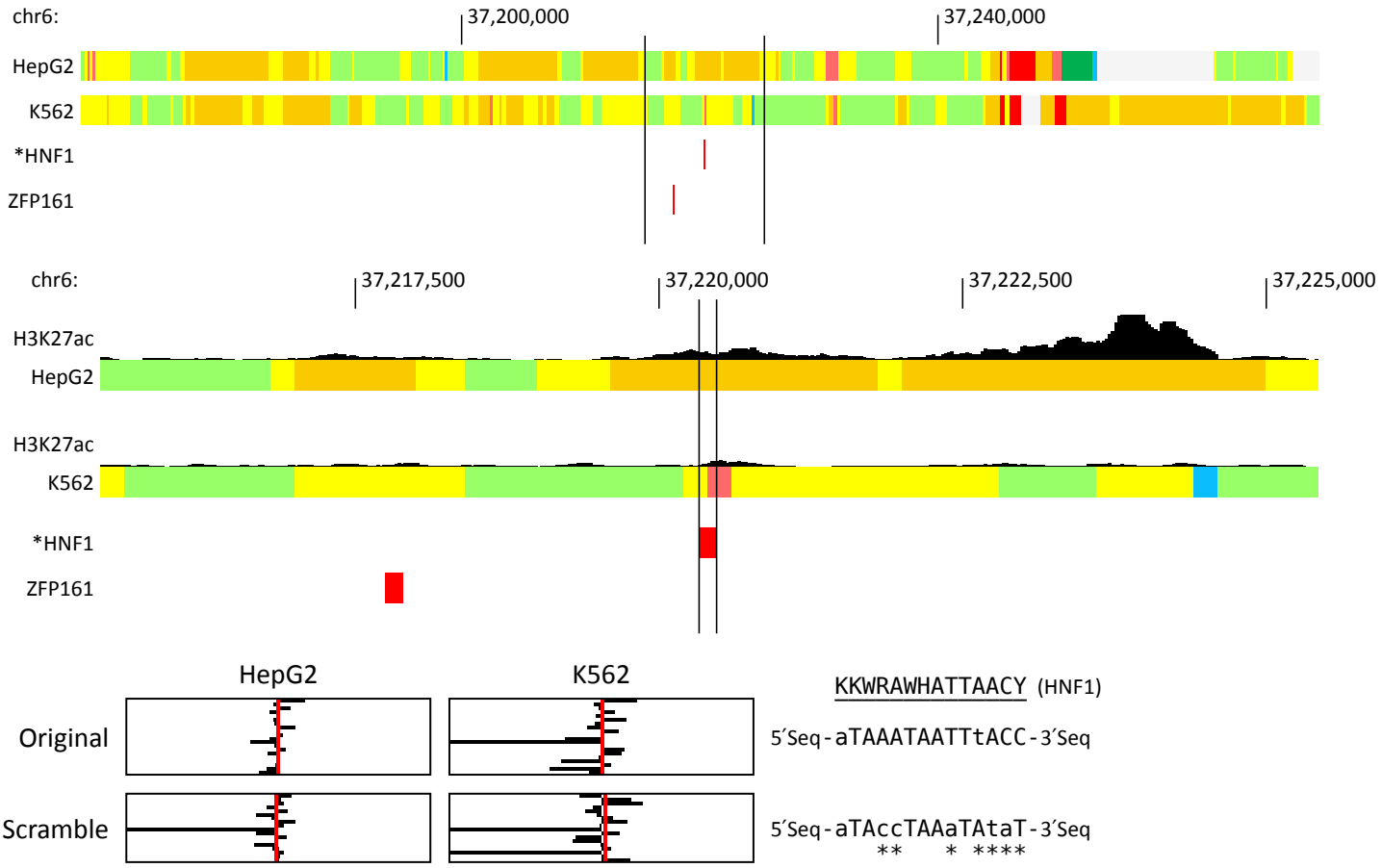
1642 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 37220396 37220409 - (hg18)



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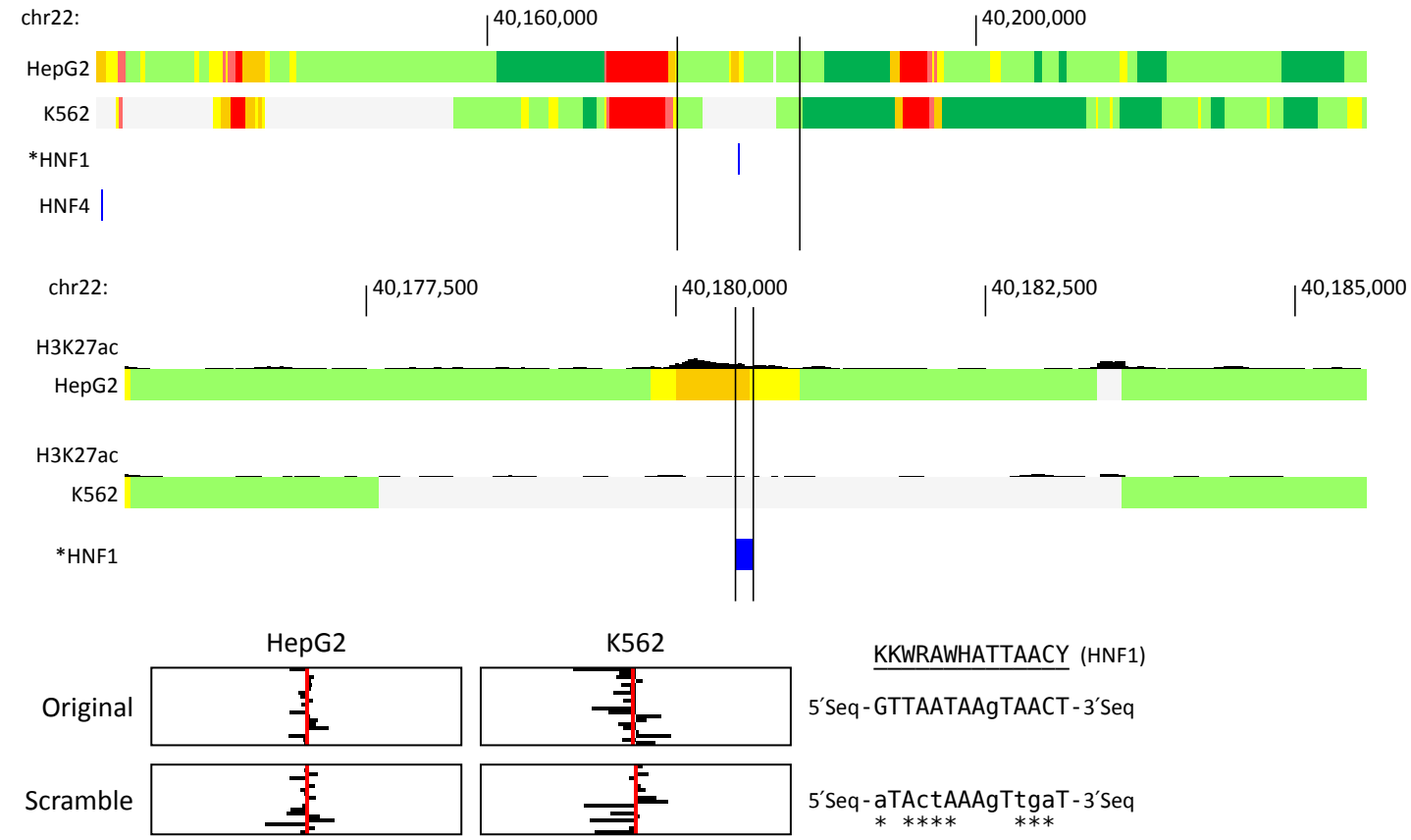
1643 HNF1 in HepG2 enhancer

chr22 40180547 40180560 + (hg18)



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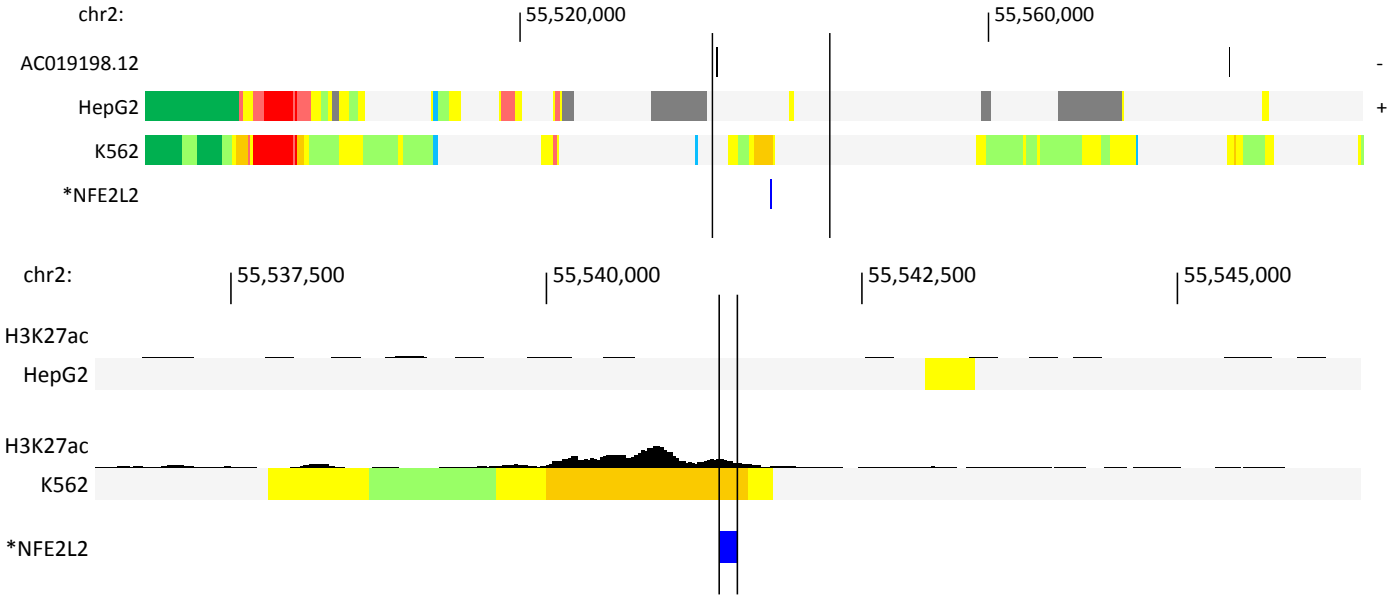
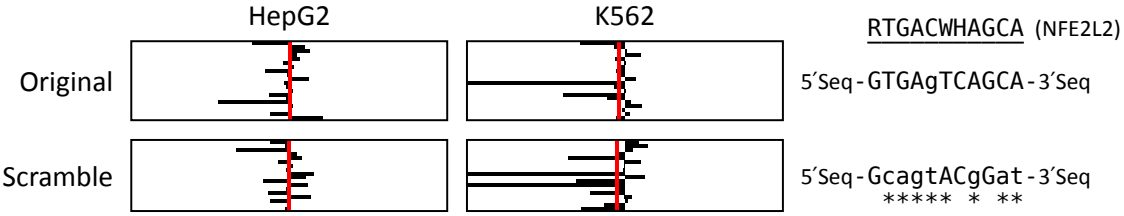
1644 NFE2L2 in K562 enhancer

chr2 55541436 55541446 + (hg18)





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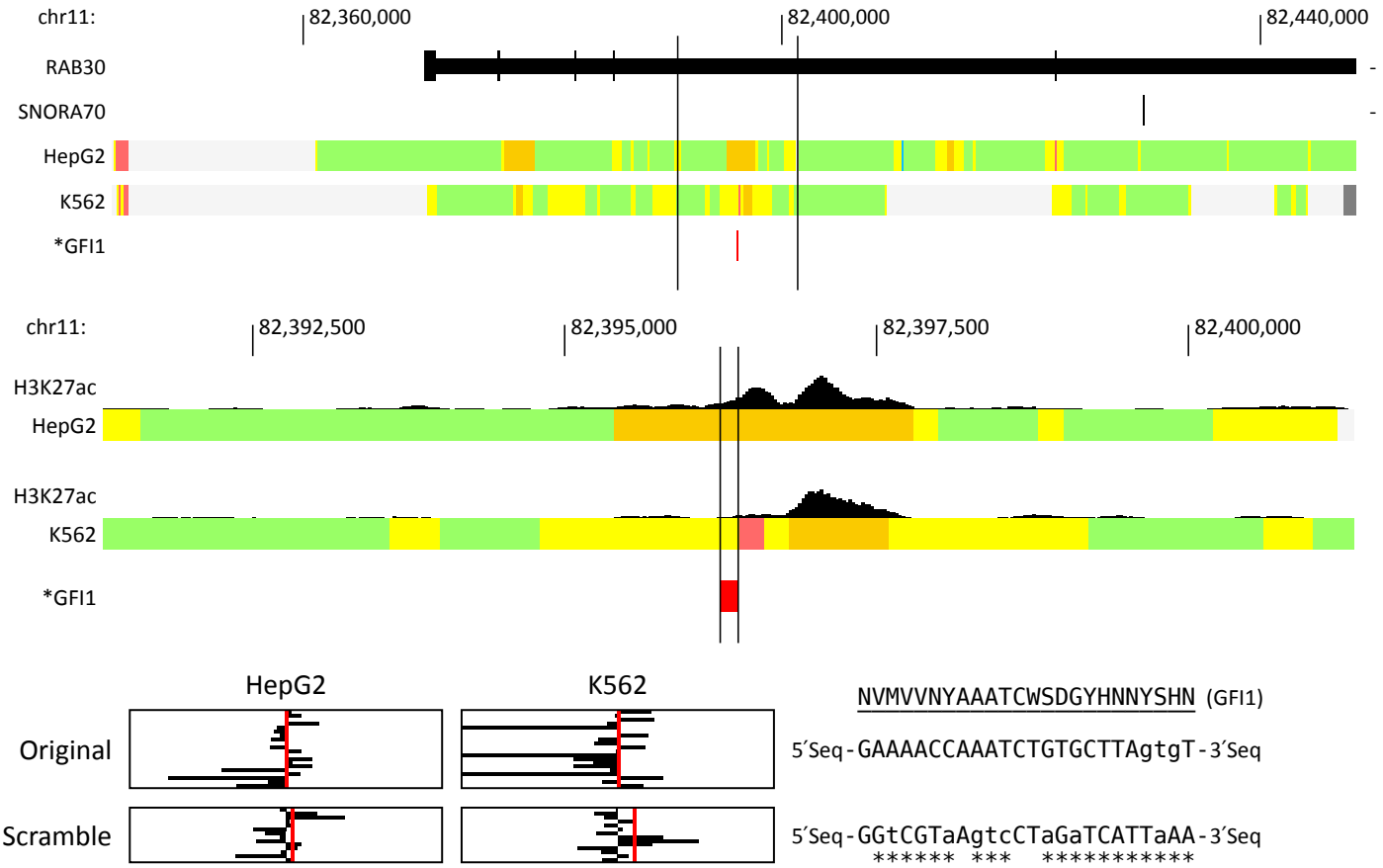
1645 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr11 82396308 82396331 - (hg18)



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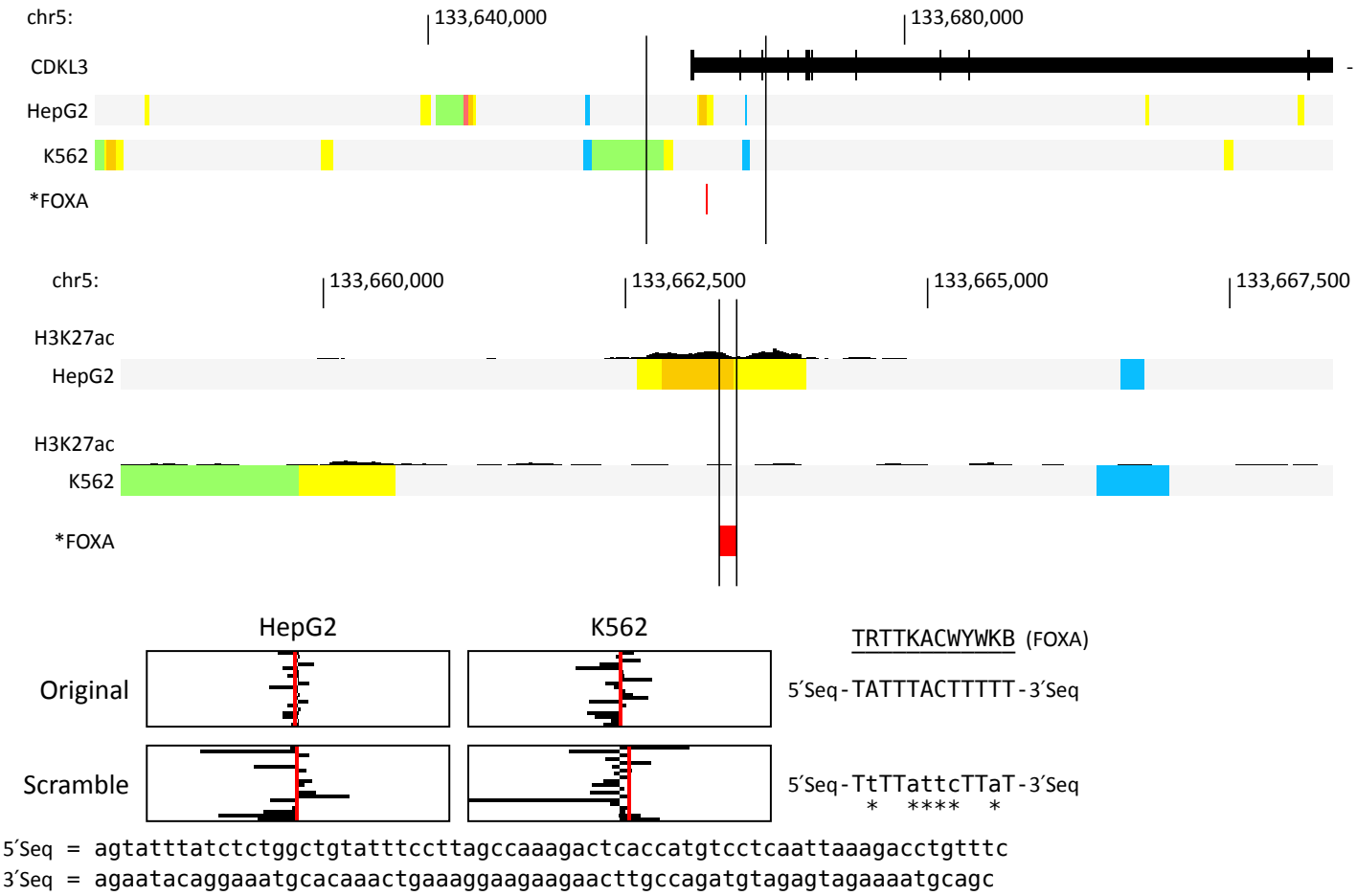
1646 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr5 133663343 133663354 - (hg18)



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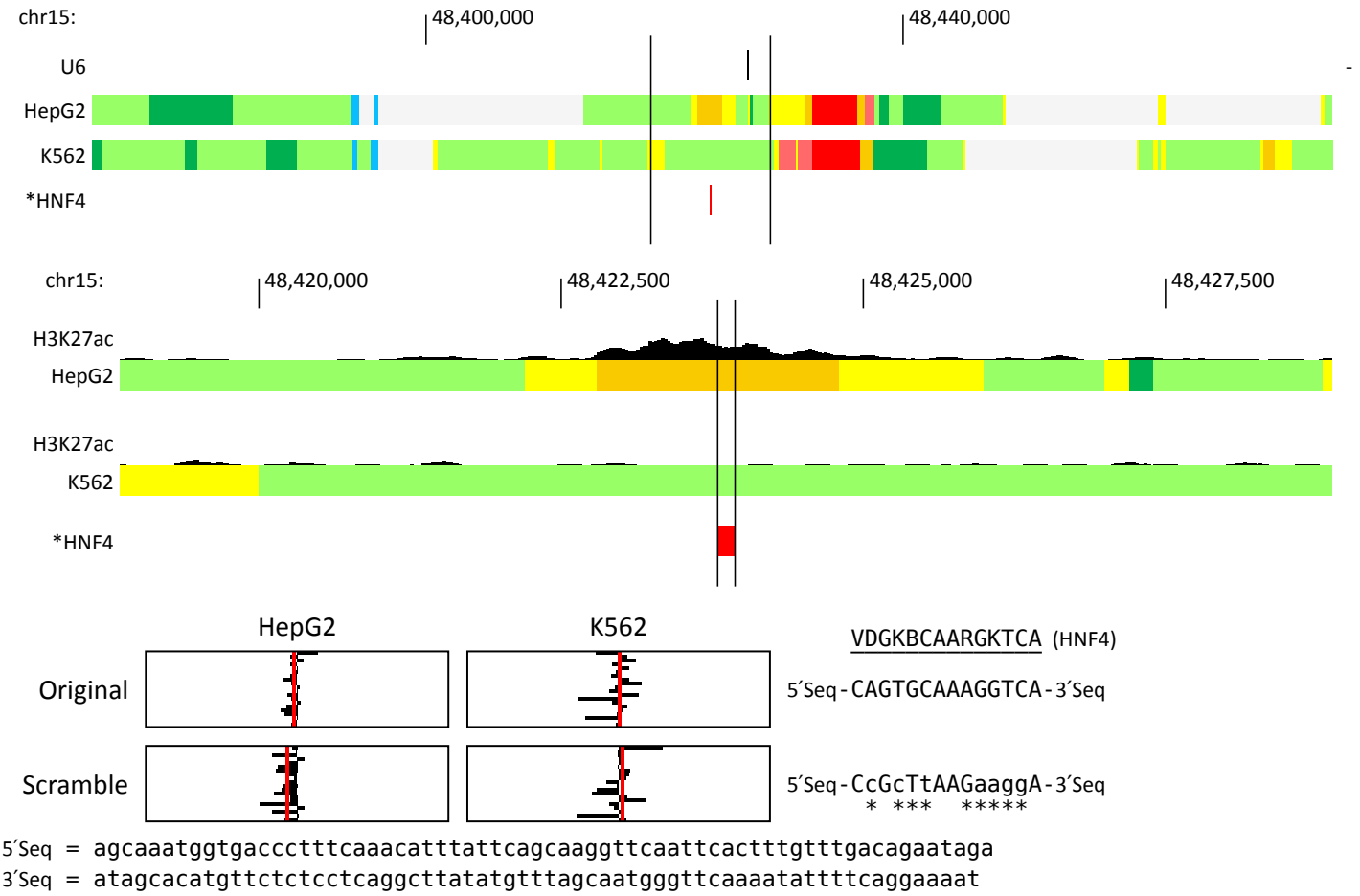
1647 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr15 48423861 48423874 + (hg18)



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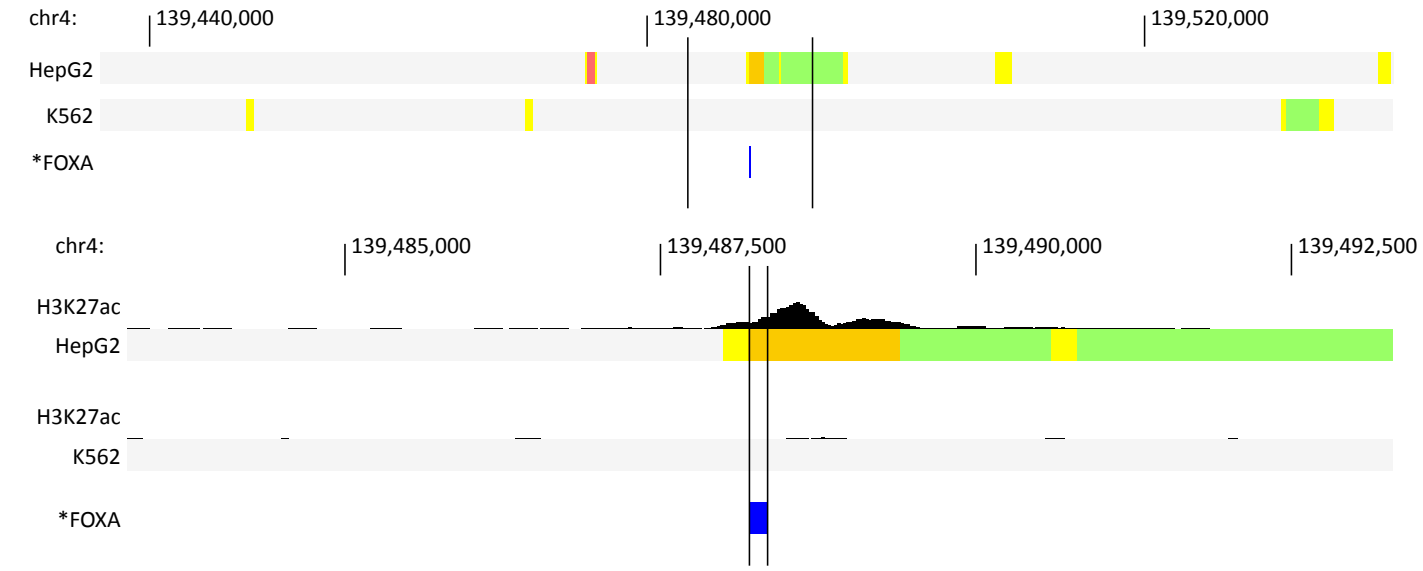
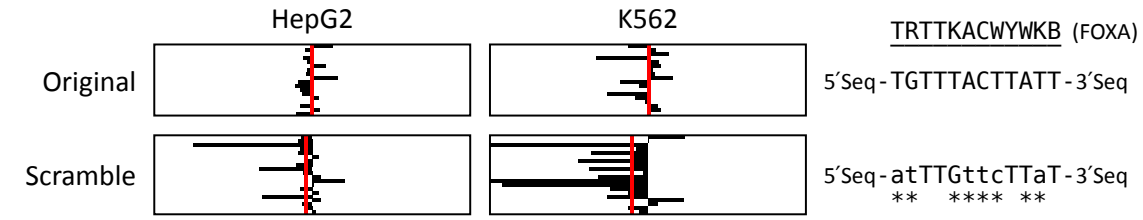
1648 FOXA in HepG2 enhancer

chr4 139488272 139488283 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTTATT-3′Seq

5′Seq-atTTGttcTTaT-3′Seq

** **** **

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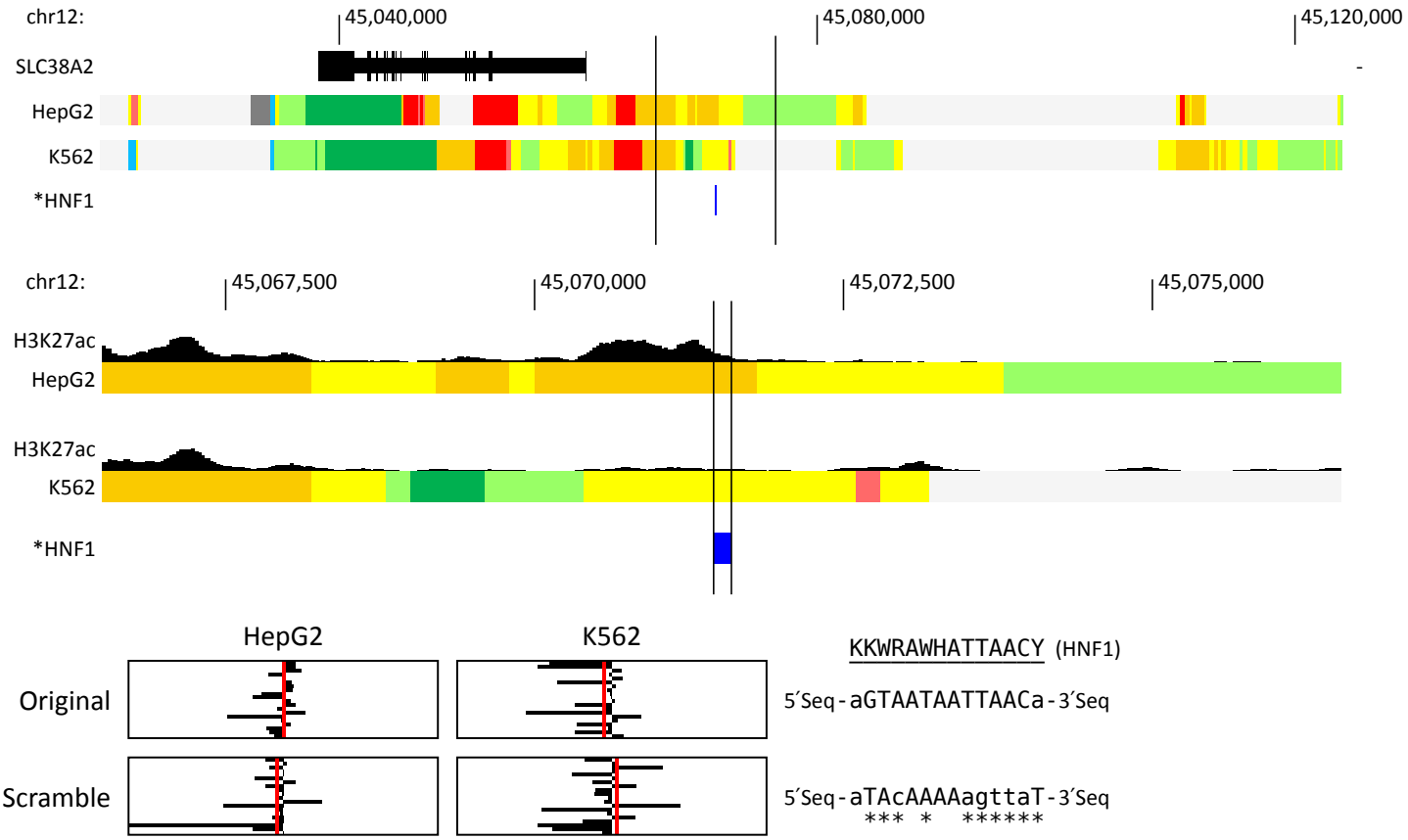
1649 HNF1 in HepG2 enhancer

chr12 45071515 45071528 - (hg18)



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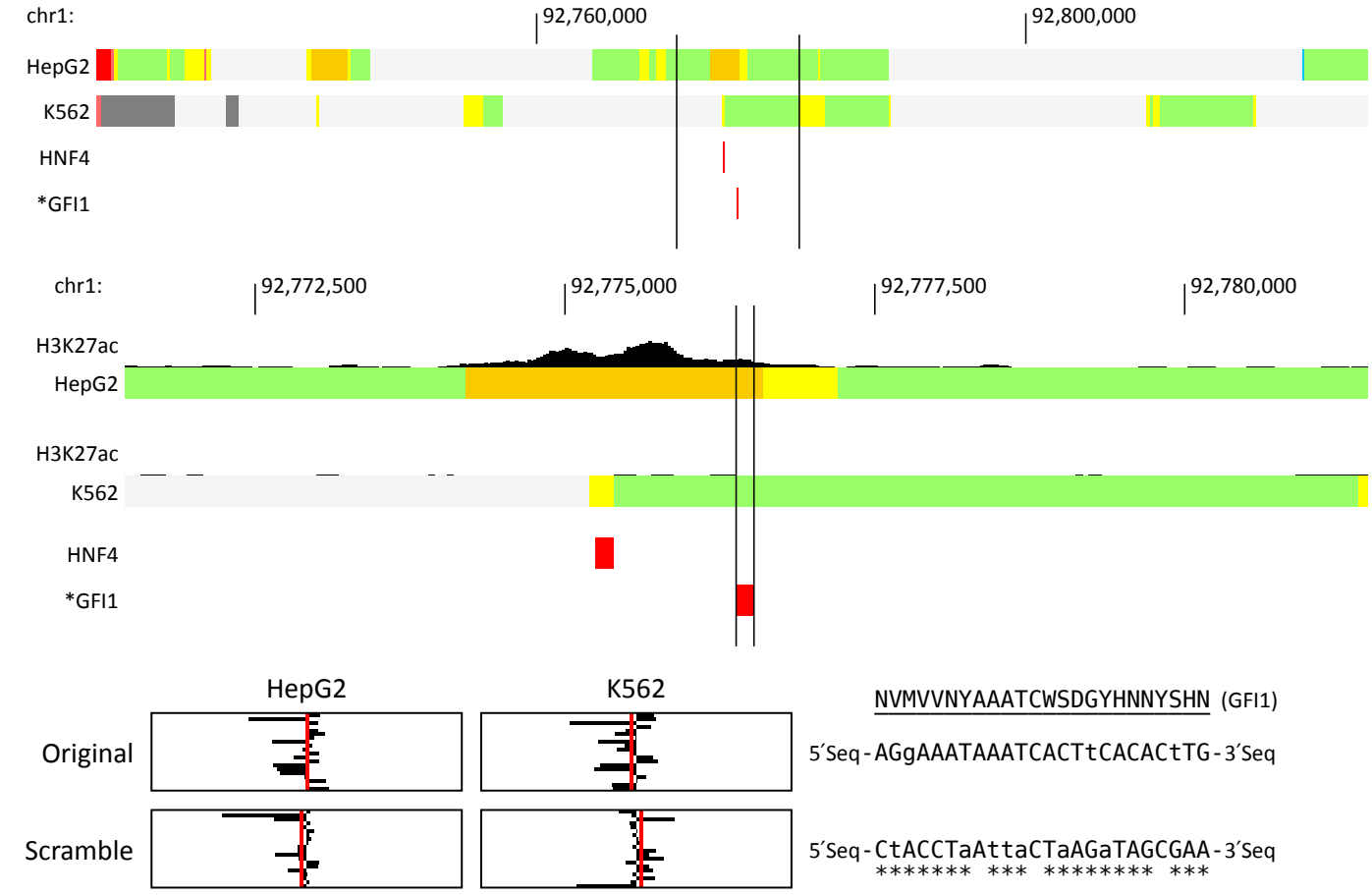
1650 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 92776442 92776465 + (hg18)



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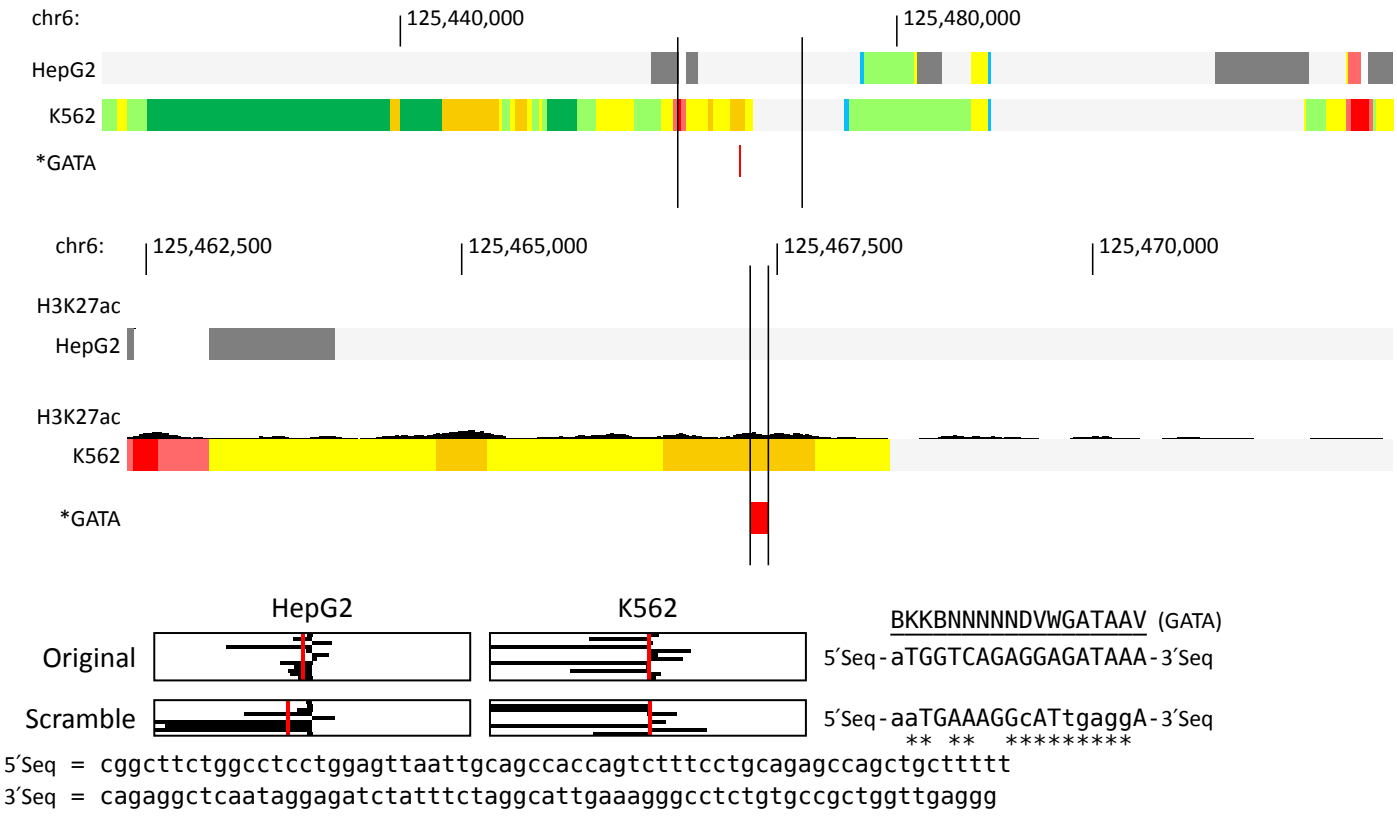
1651 GATA in K562 enhancer (conserved at 60% confidence)

chr6 125467350 125467367 - (hg18)



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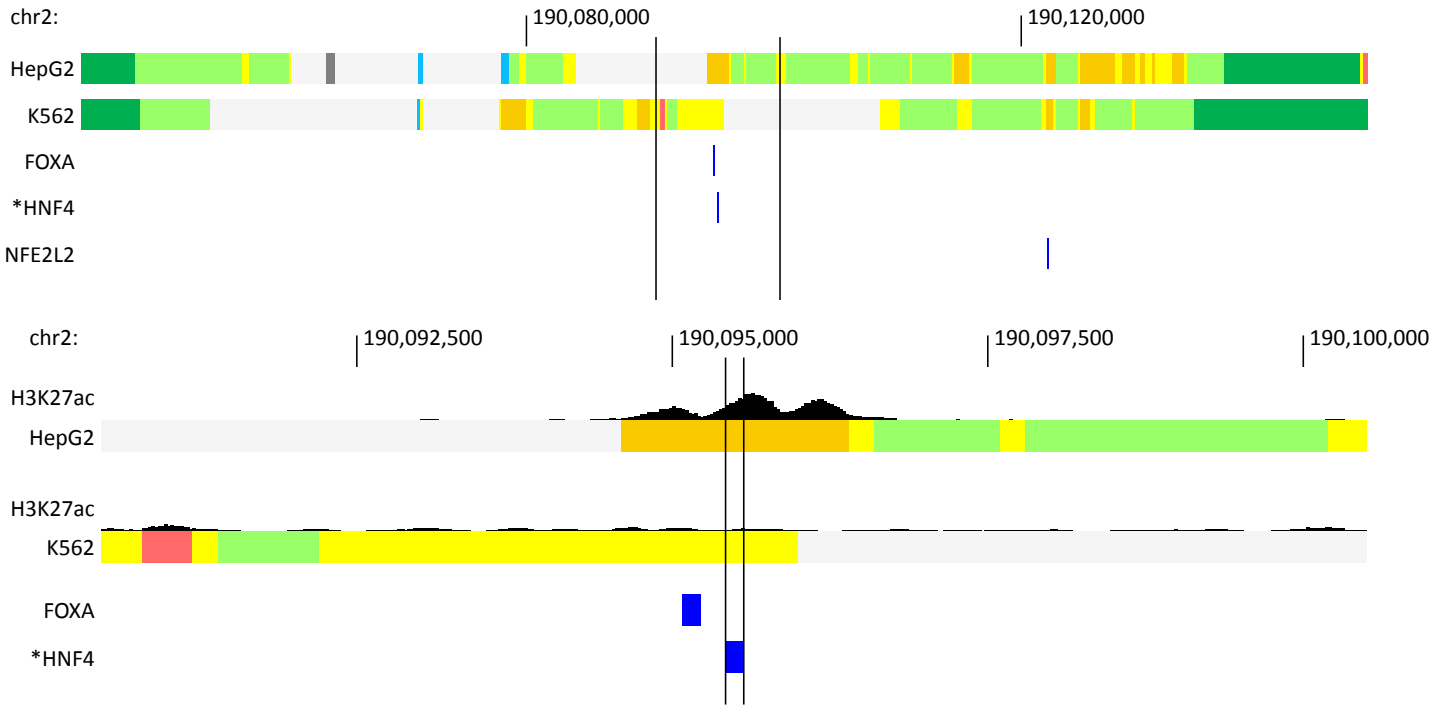
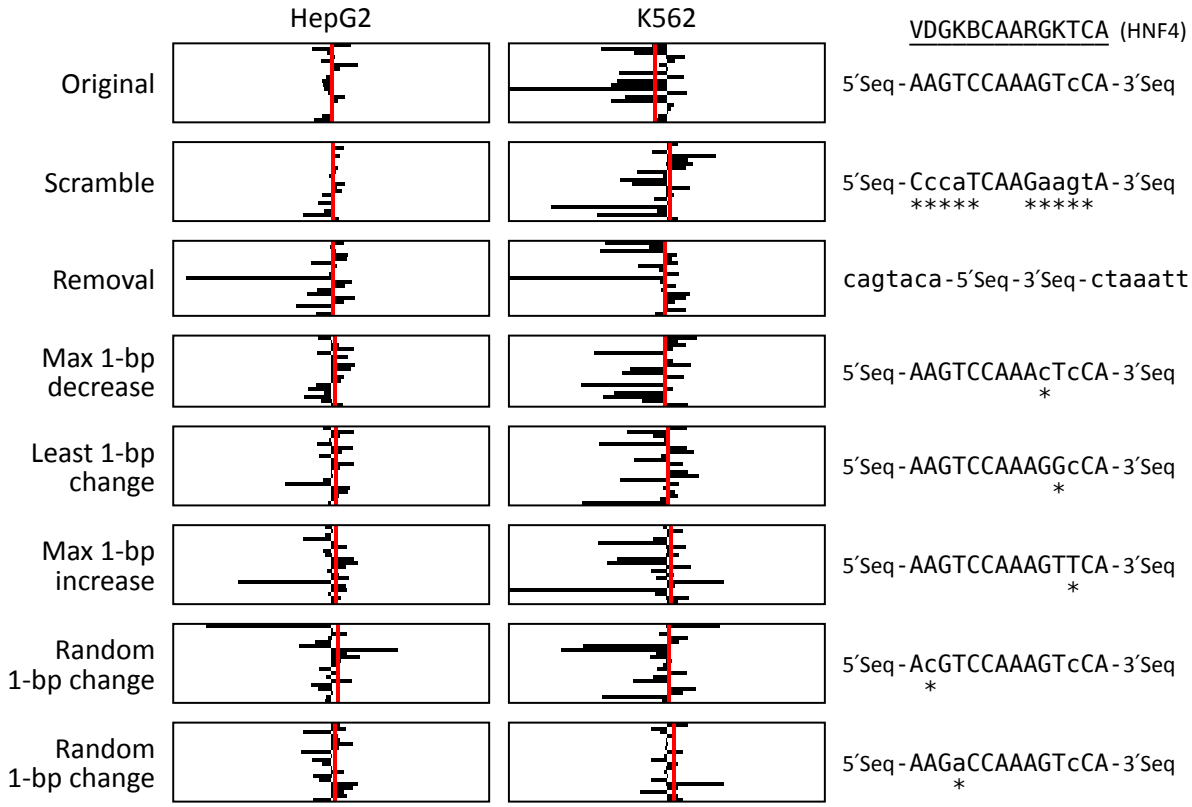
1652 HNF4 in HepG2 enhancer

chr2 190095488 190095501 - (hg18)





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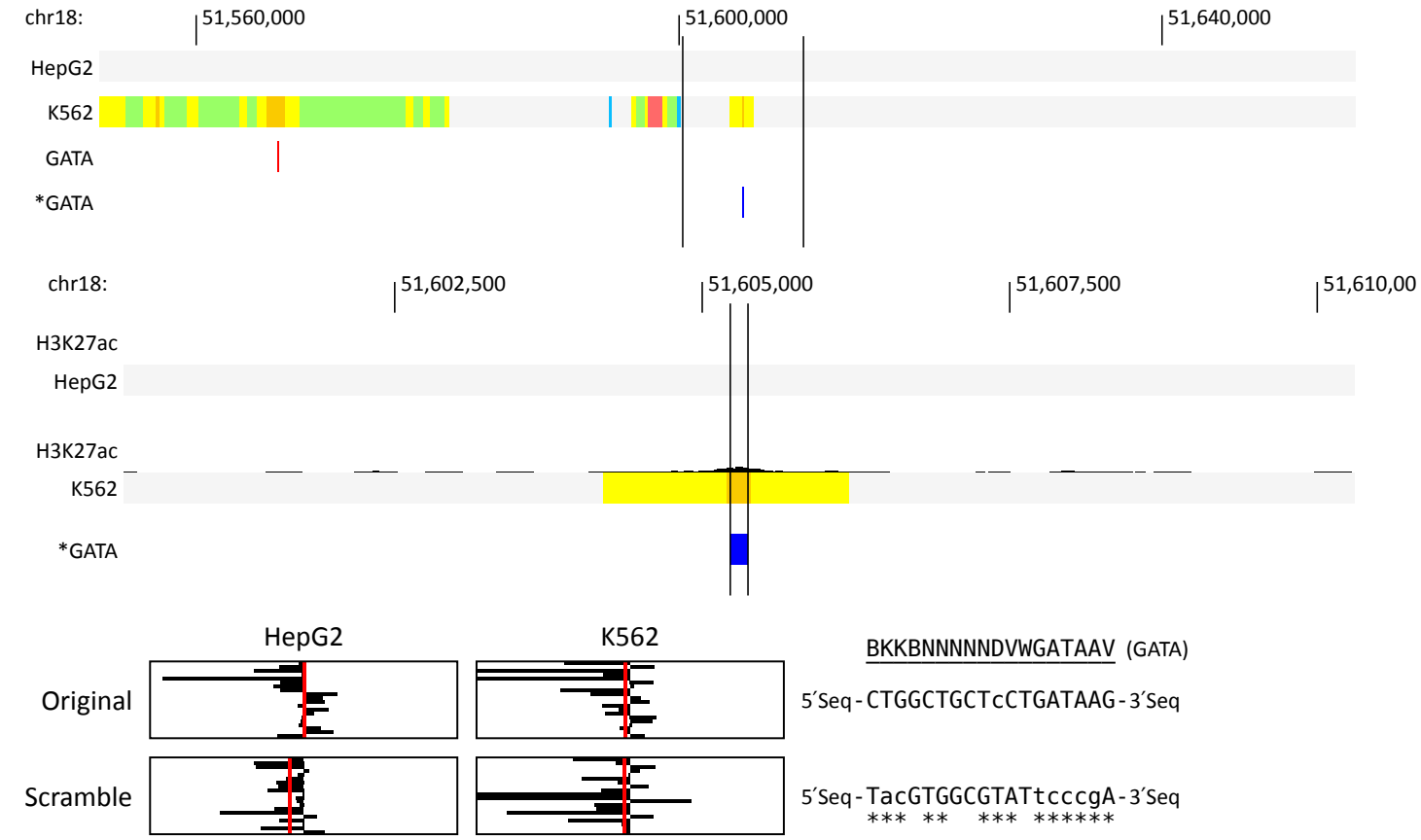
1653 GATA in K562 enhancer

chr18 51605292 51605309 - (hg18)



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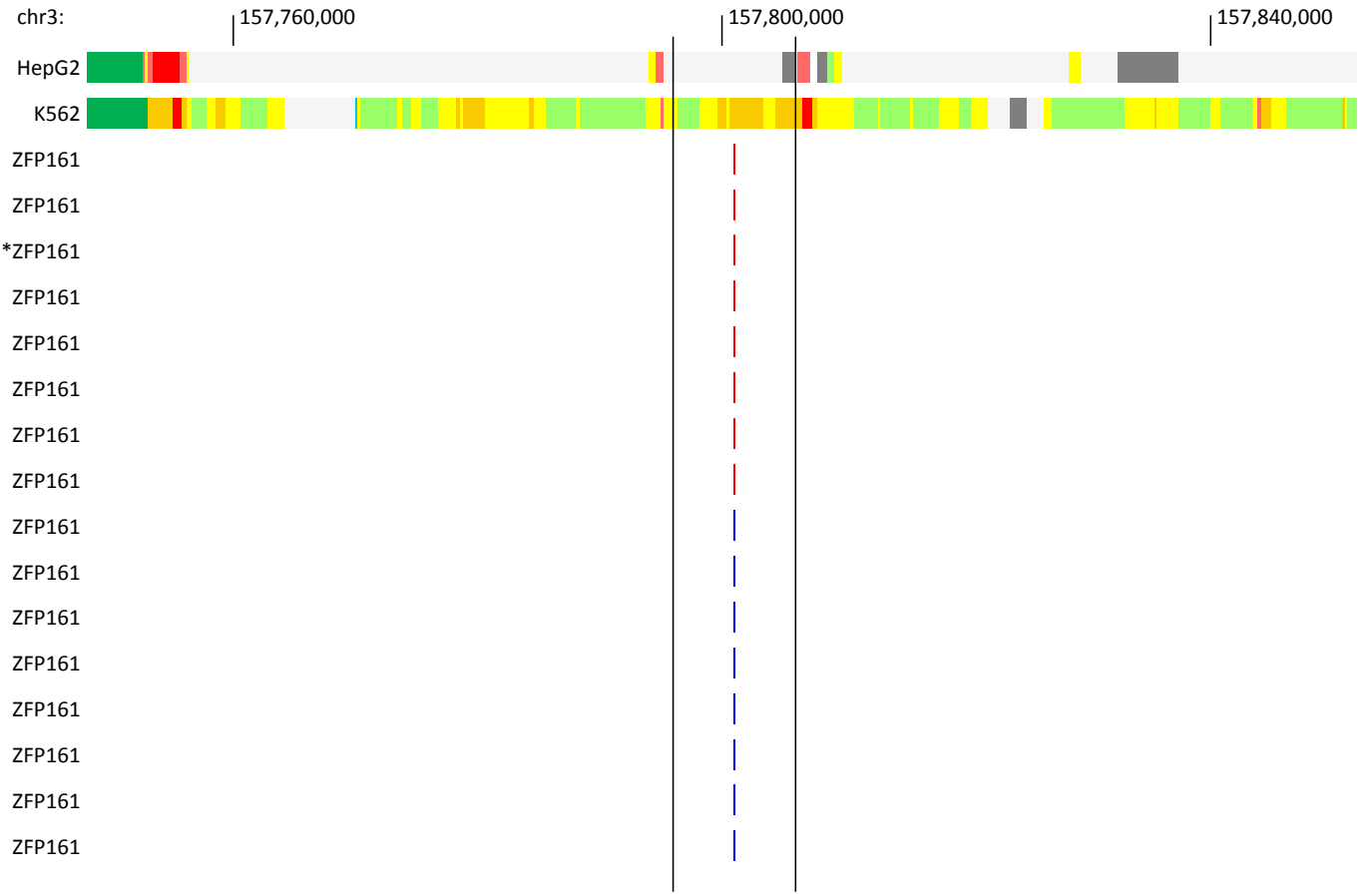
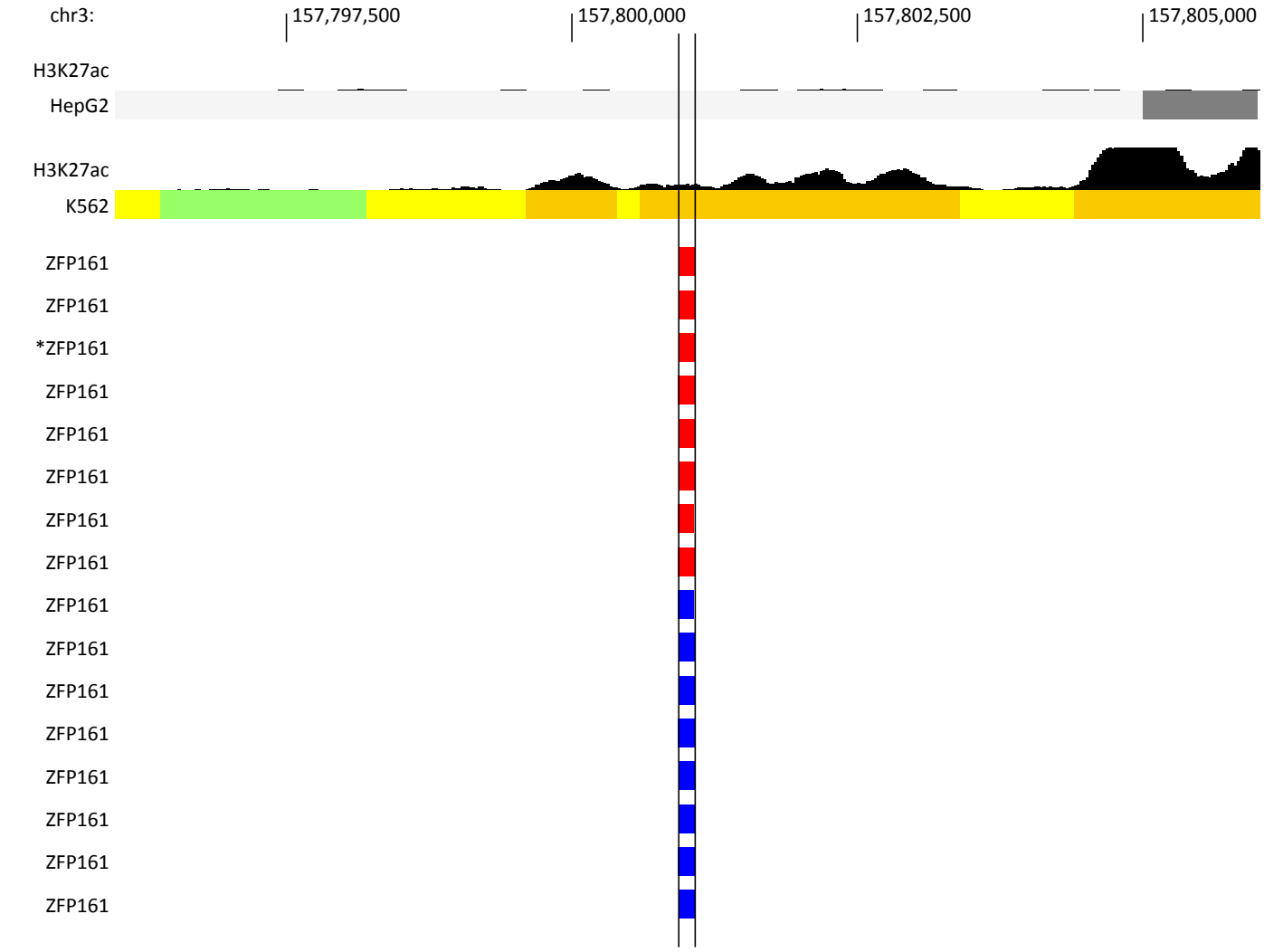
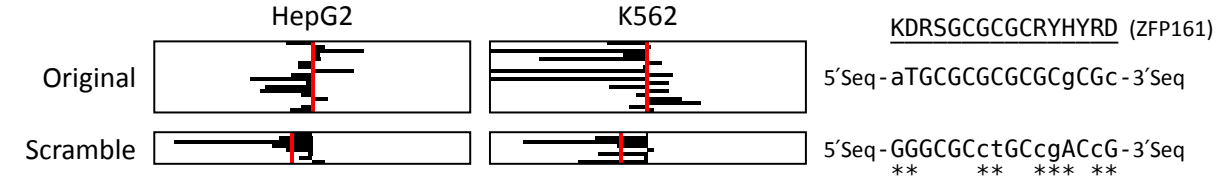
1654 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr3 157801001 157801016 - (hg18)







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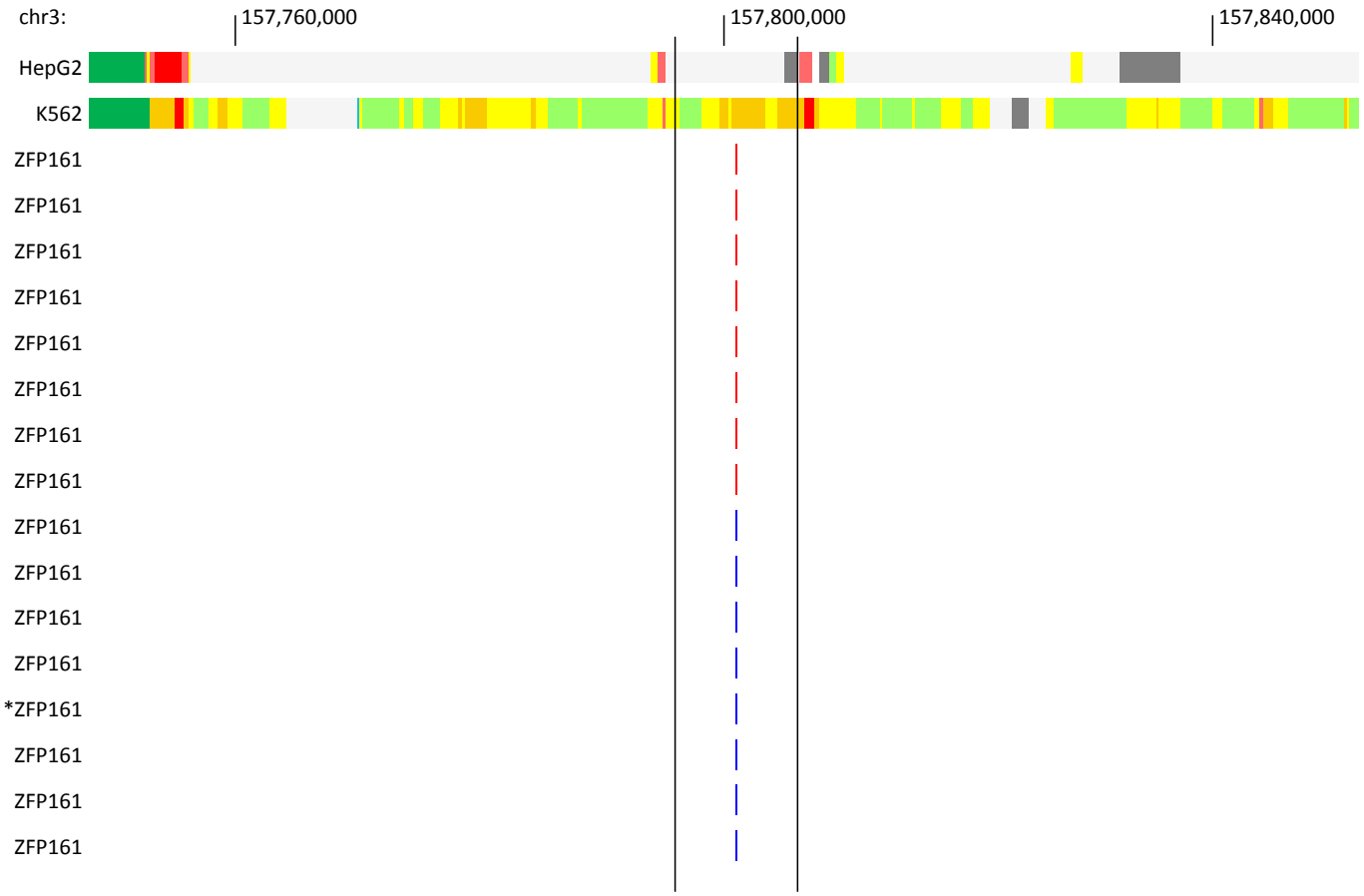
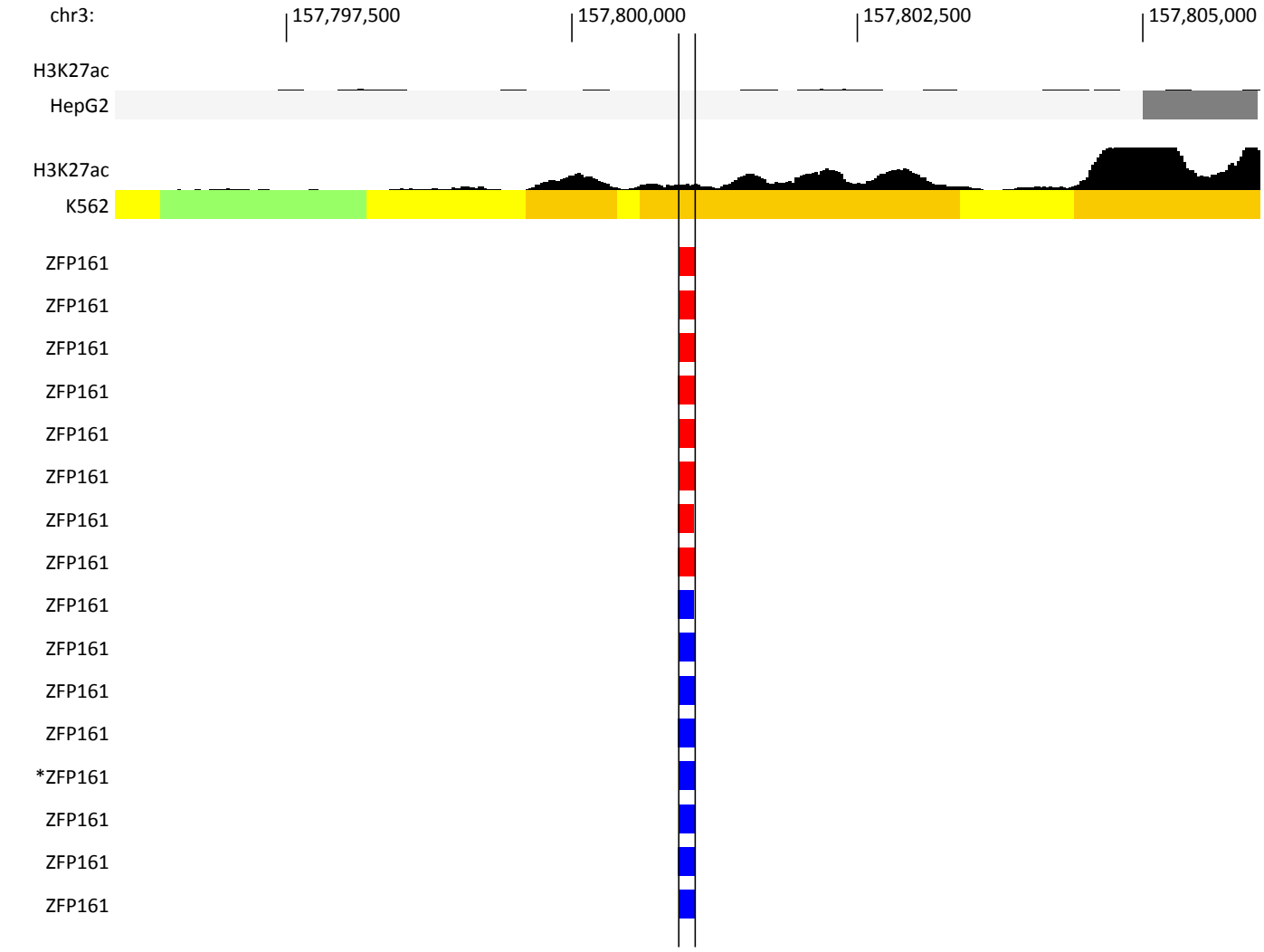
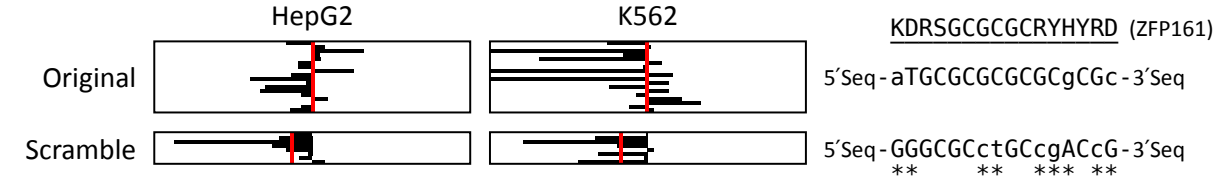
1655 ZFP161 in K562 enhancer

chr3 157801001 157801016 - (hg18)







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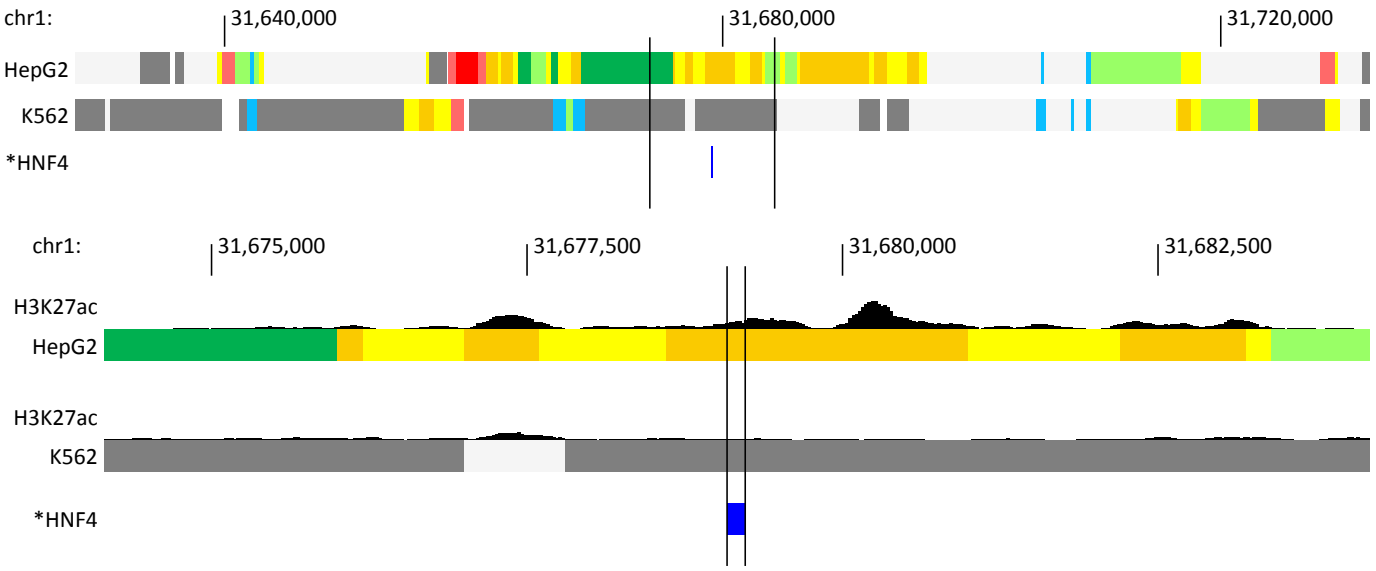
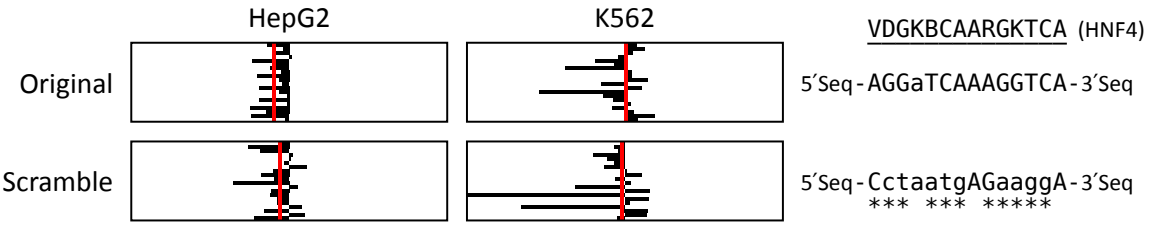
1656 HNF4 in HepG2 enhancer

chr1 31679151 31679164 + (hg18)





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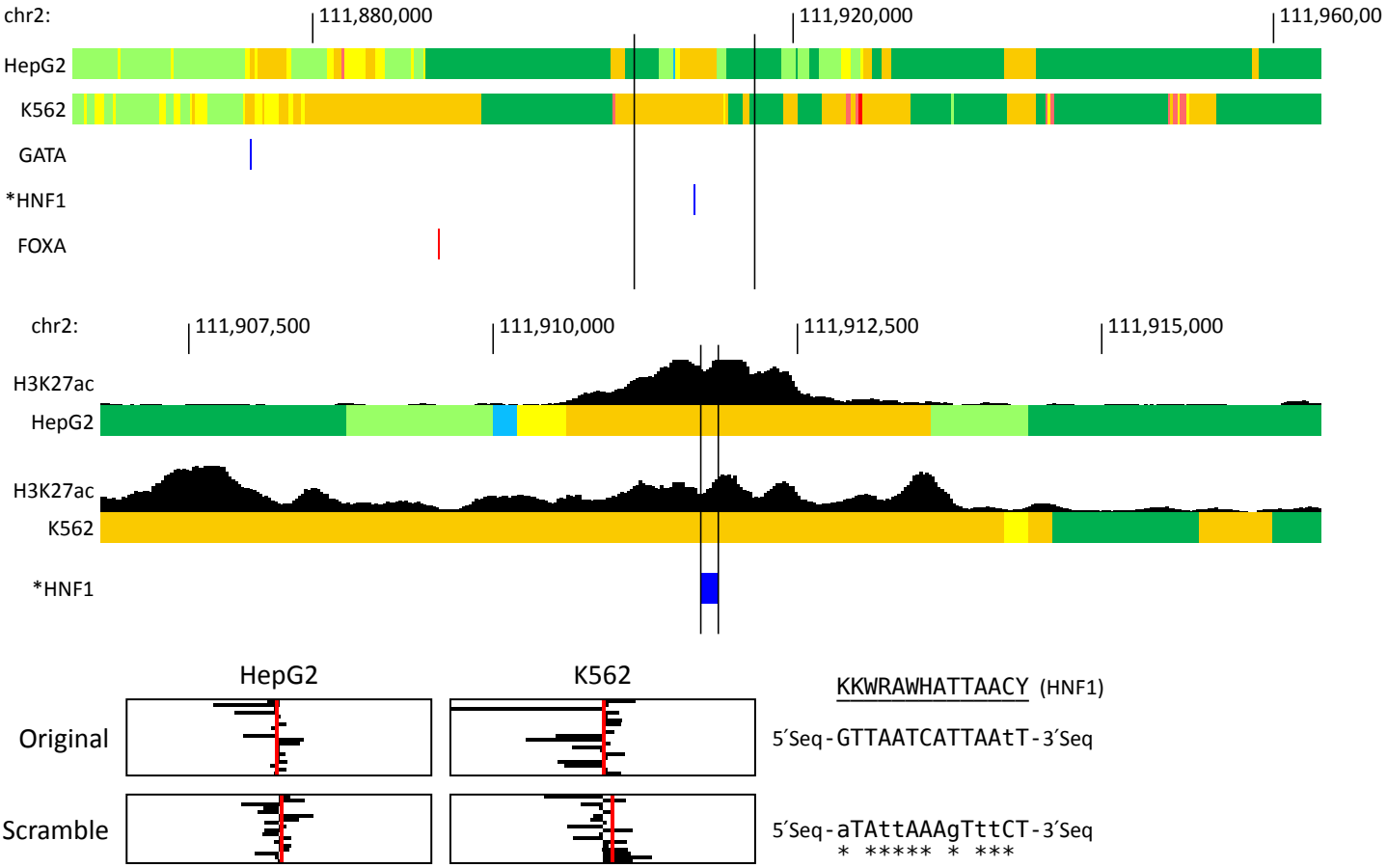
1657 HNF1 in K562 enhancer

chr2 111911772 111911785 - (hg18)



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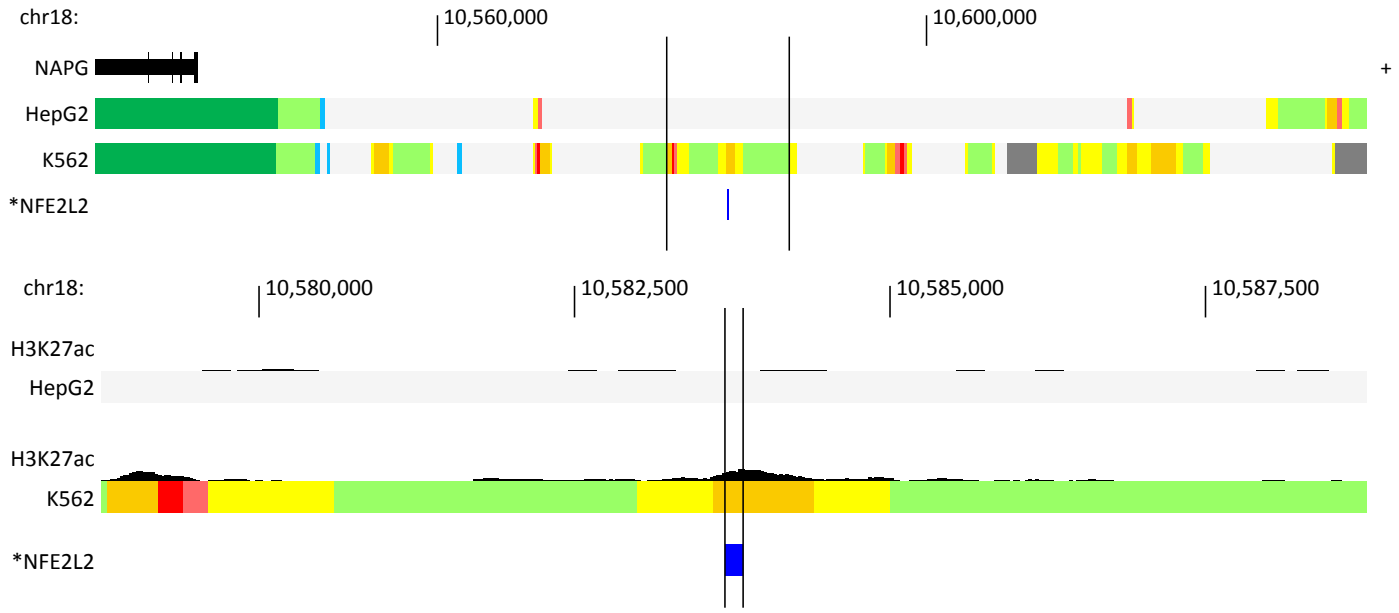
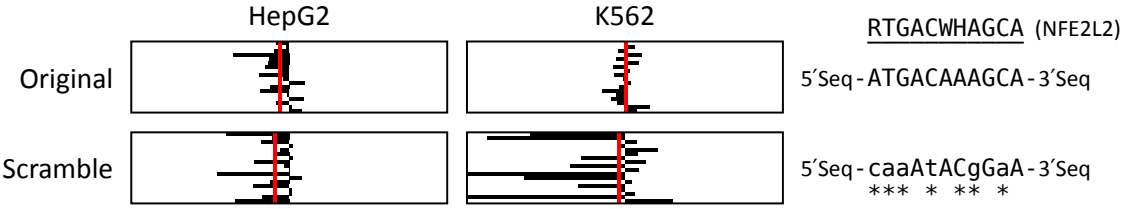
1658 NFE2L2 in K562 enhancer

chr18 10583759 10583769 + (hg18)





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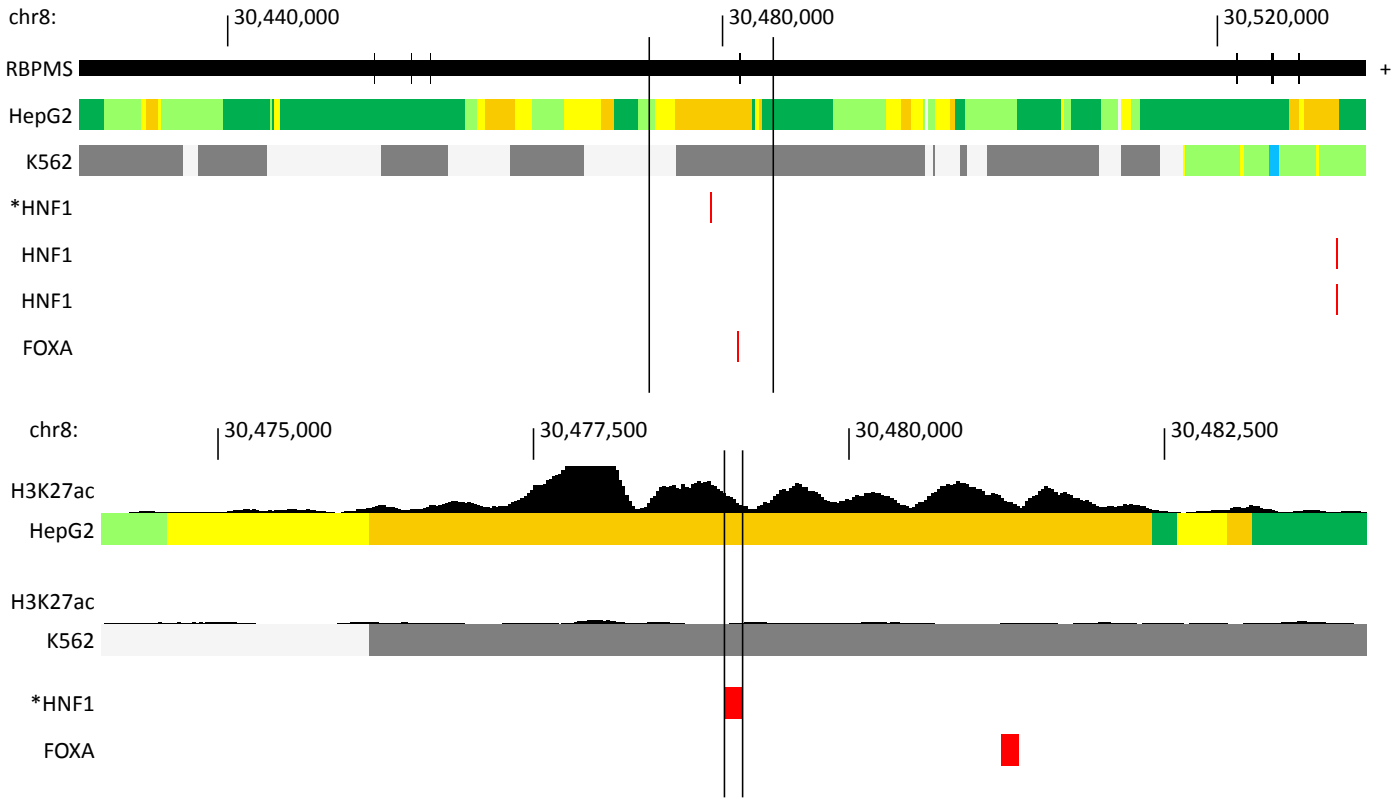
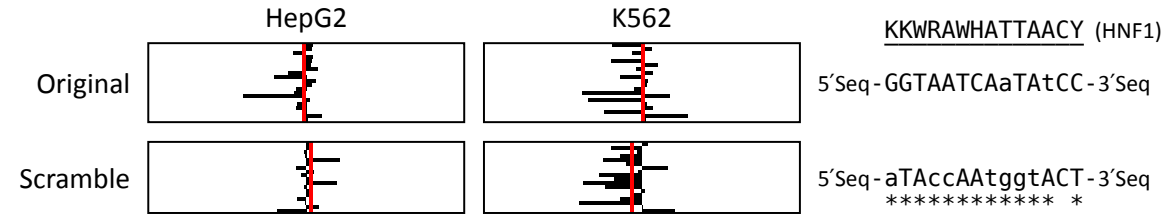
1659 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr8 30479079 30479092 - (hg18)





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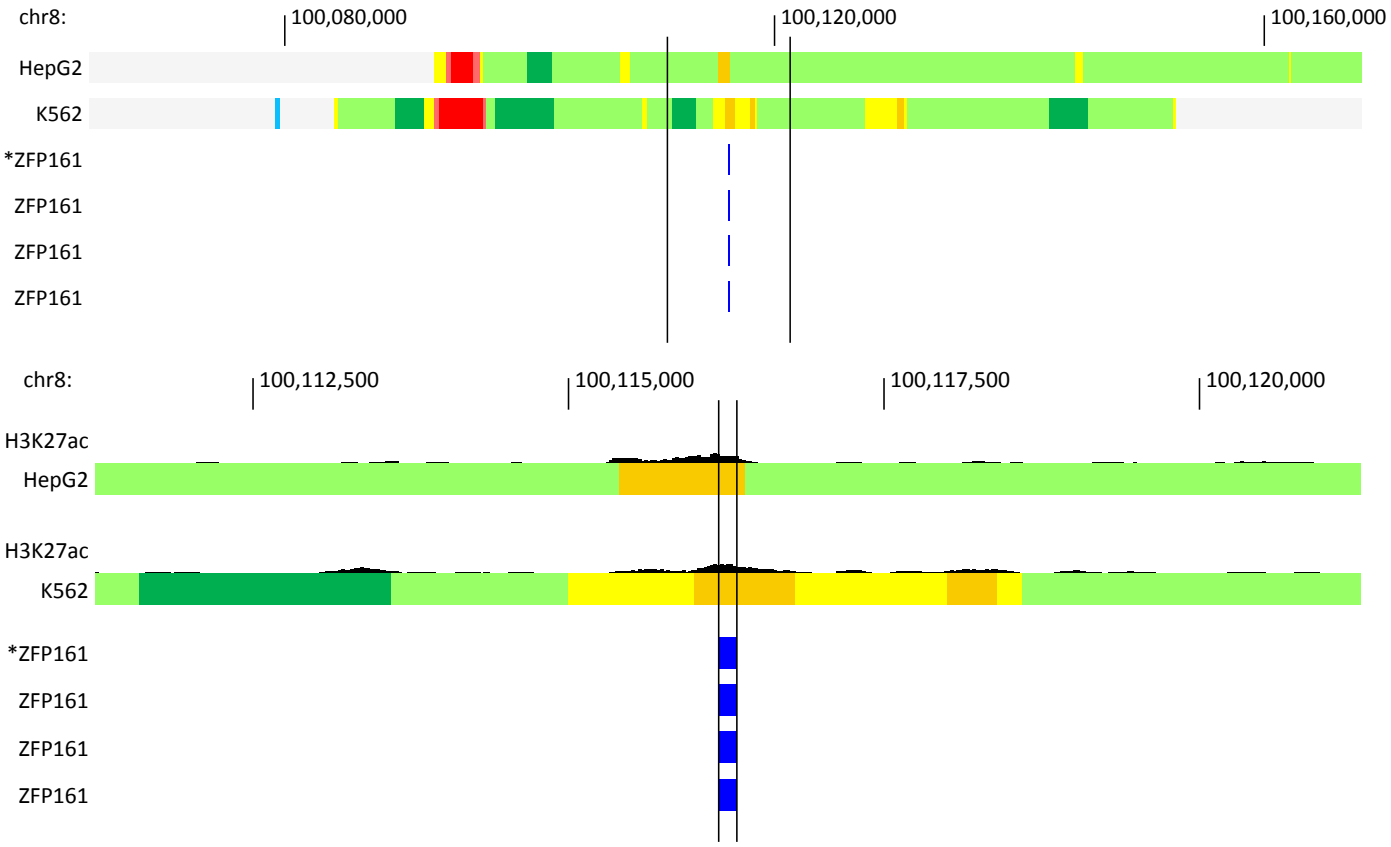
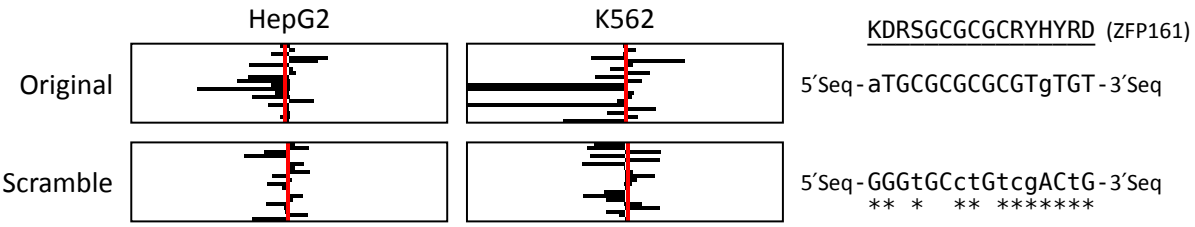
1660 ZFP161 in HepG2 enhancer

chr8 100116255 100116270 + (hg18)





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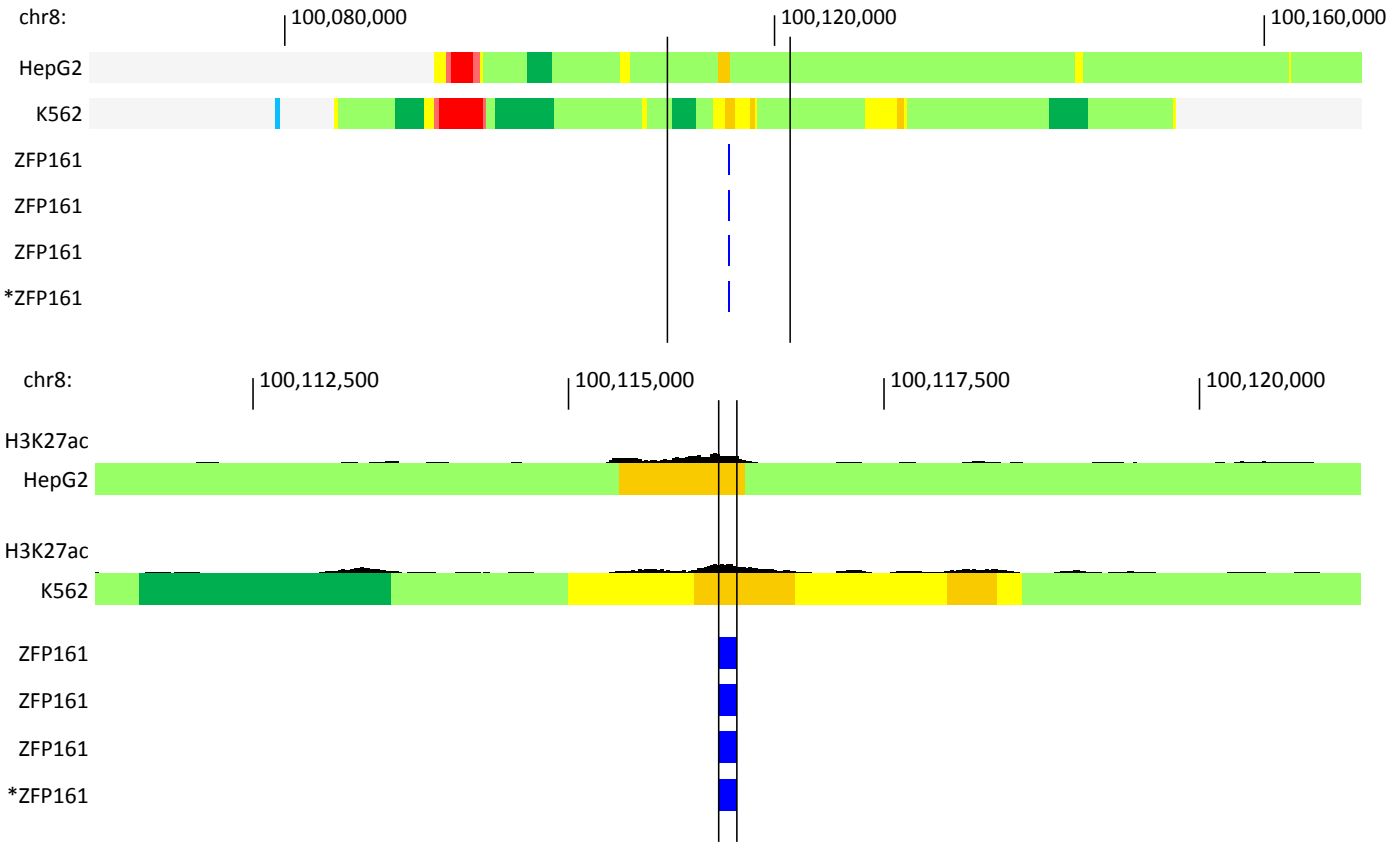
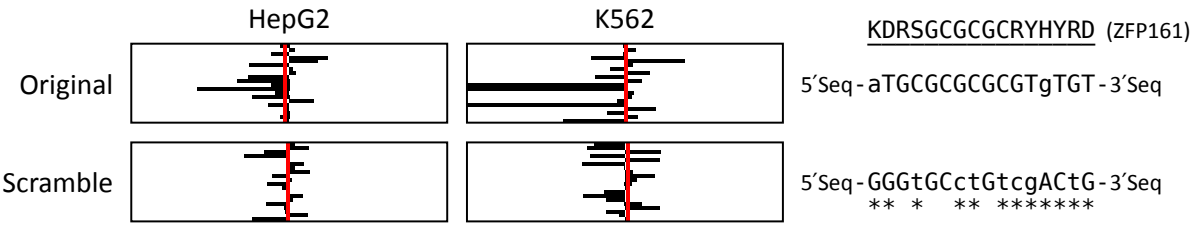
1661 ZFP161 in K562 enhancer

chr8 100116255 100116270 + (hg18)





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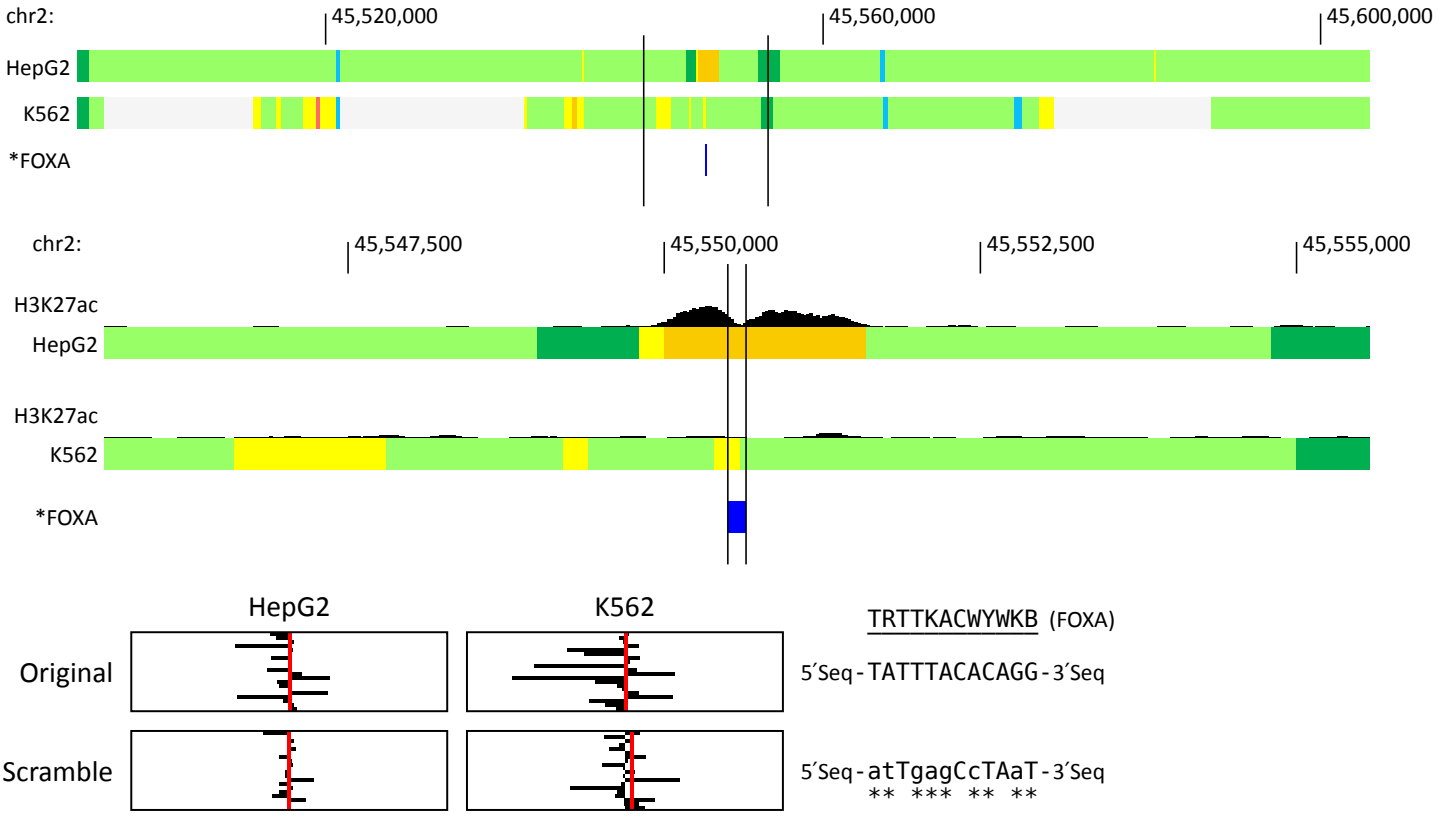
1662 FOXA in HepG2 enhancer

chr2 45550570 45550581 - (hg18)



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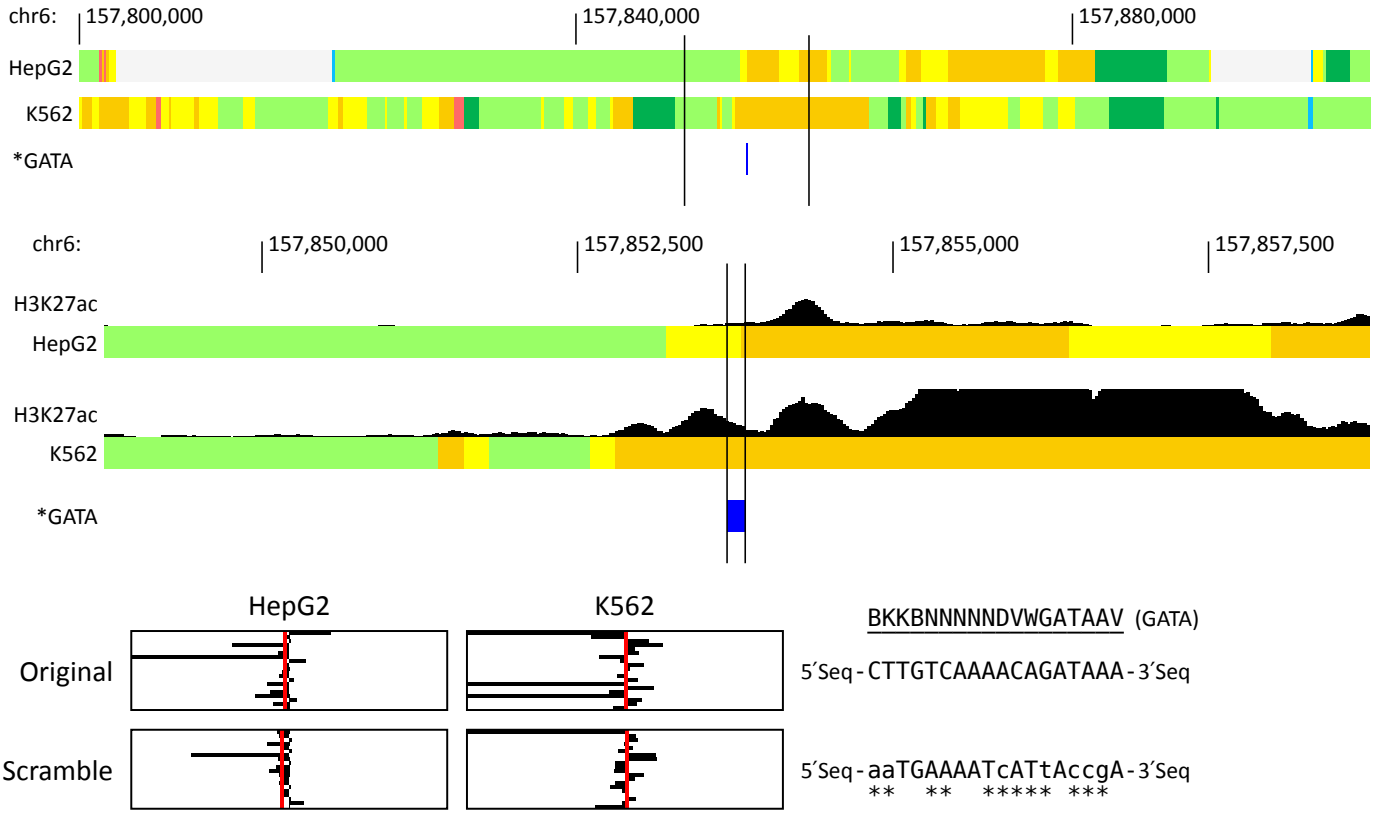
1663 GATA in K562 enhancer

chr6 157853749 157853766 + (hg18)



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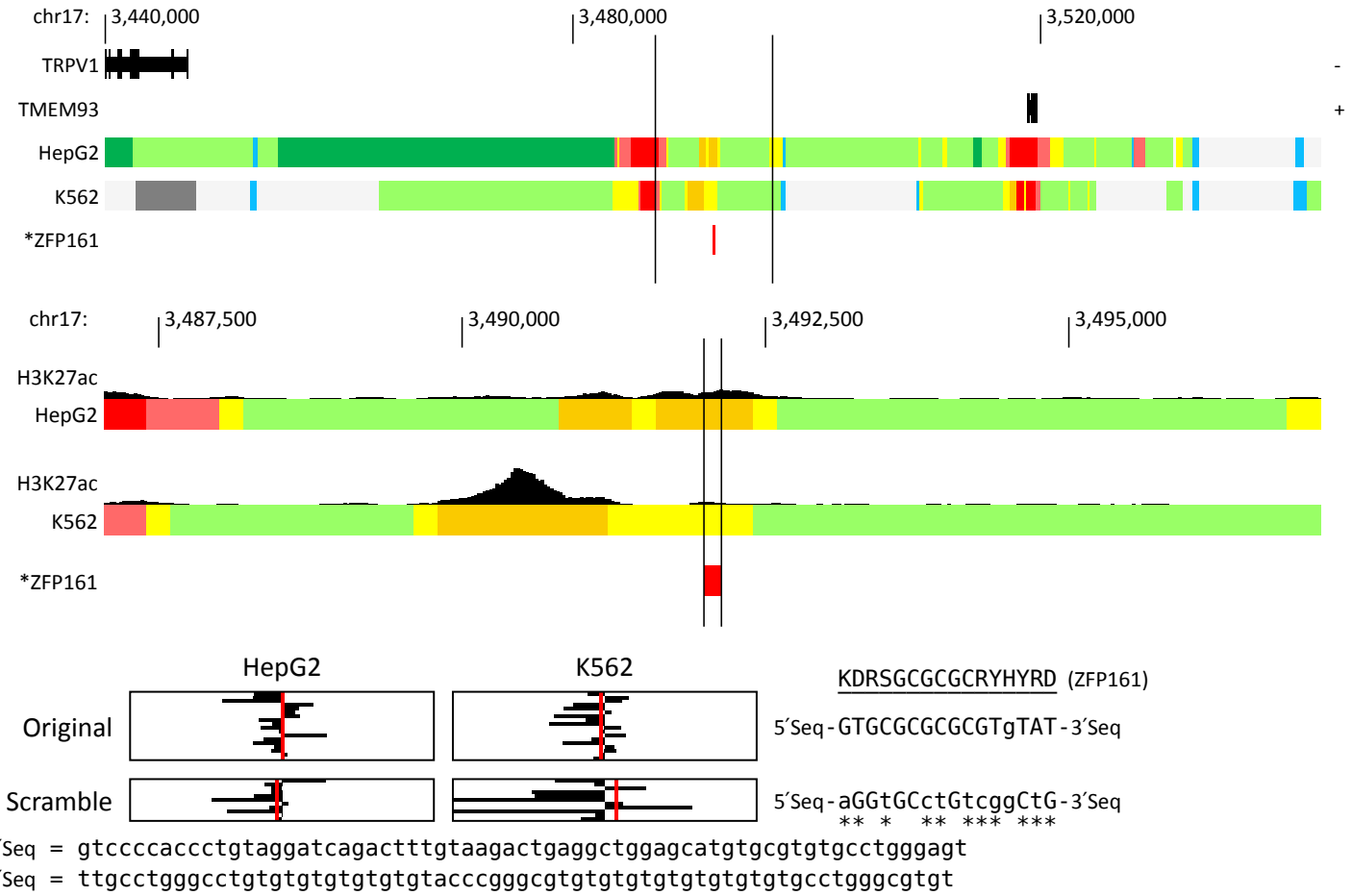
1664 ZFP161 in HepG2 enhancer (conserved at 10% confidence)

chr17 3492058 3492073 + (hg18)



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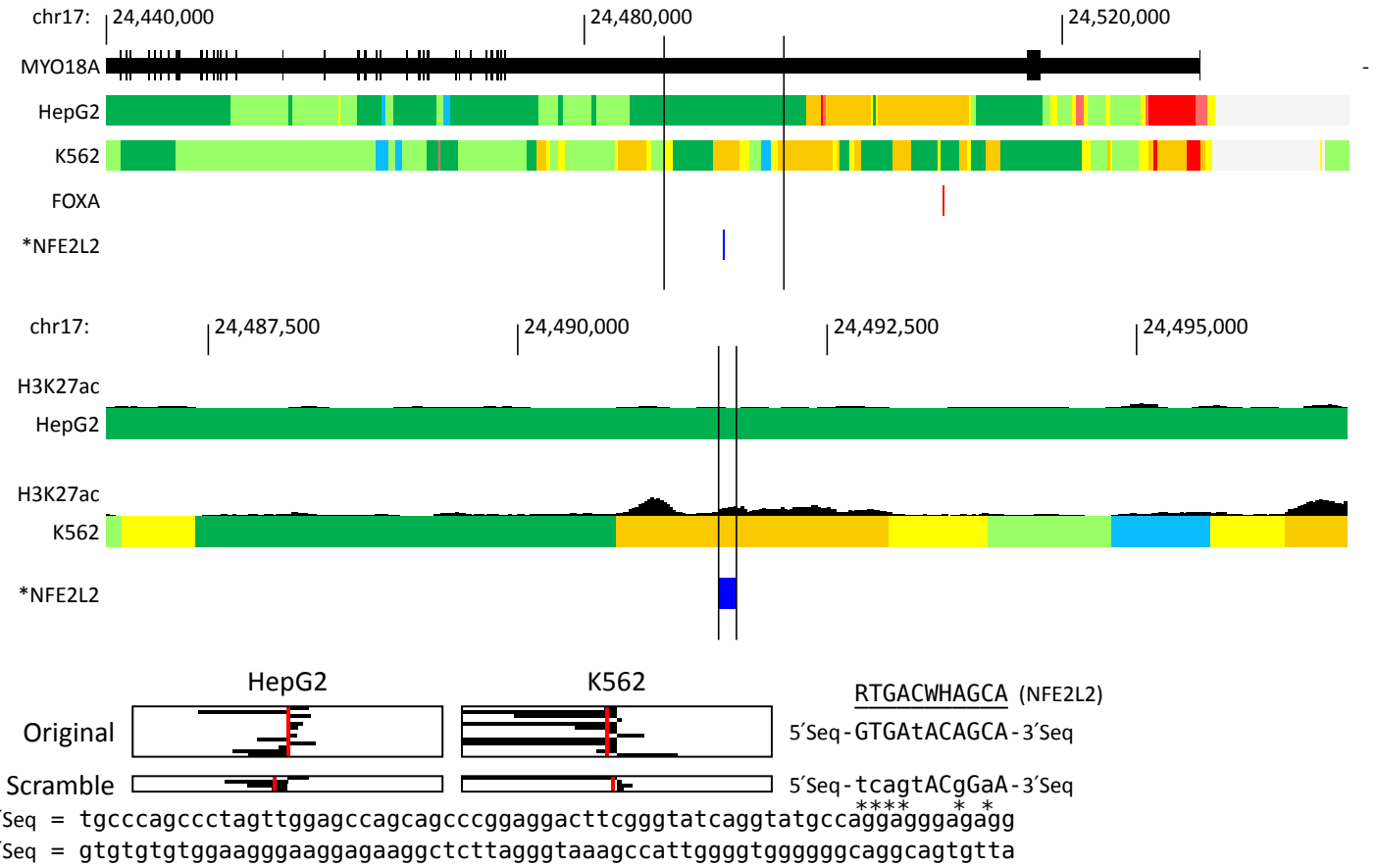
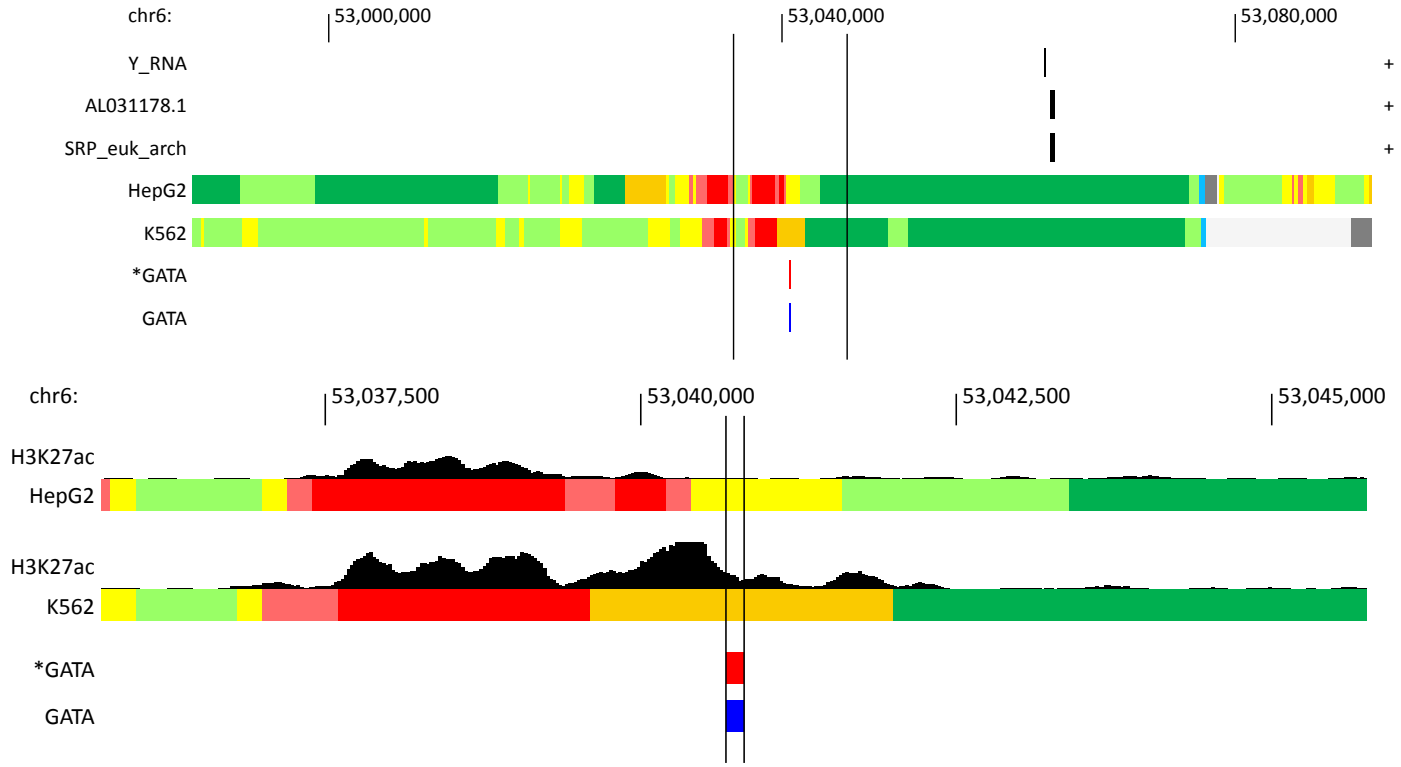
1665 NFE2L2 in K562 enhancer

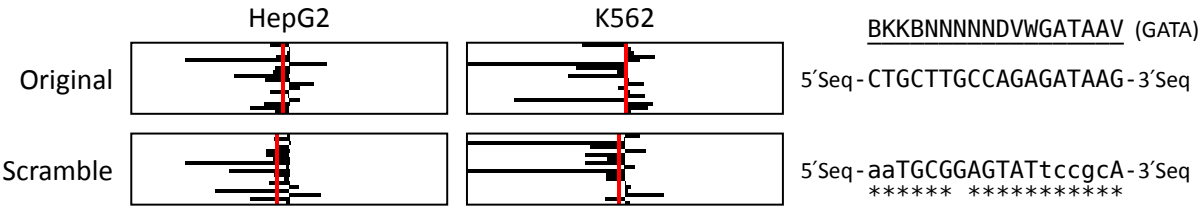
chr17 24491690 24491700 + (hg18)



1666 GATA in K562 enhancer (conserved at 60% confidence)

chr6 53040739 53040756 + (hg18)





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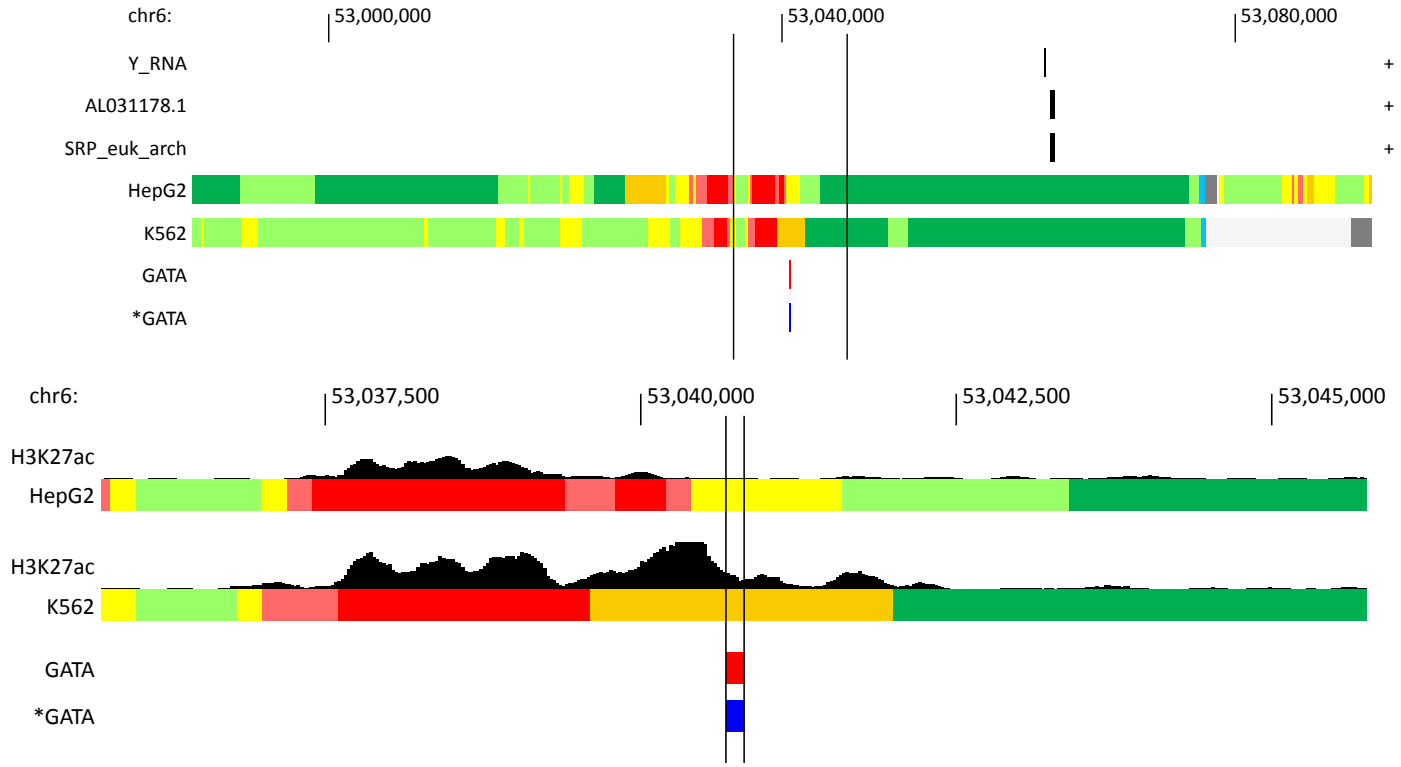
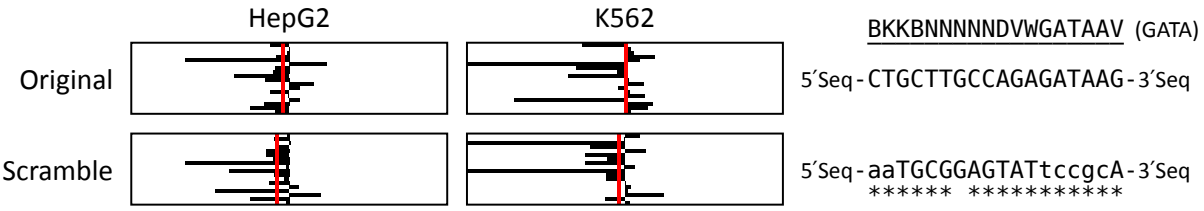
1667 GATA in K562 enhancer

chr6 53040739 53040756 + (hg18)





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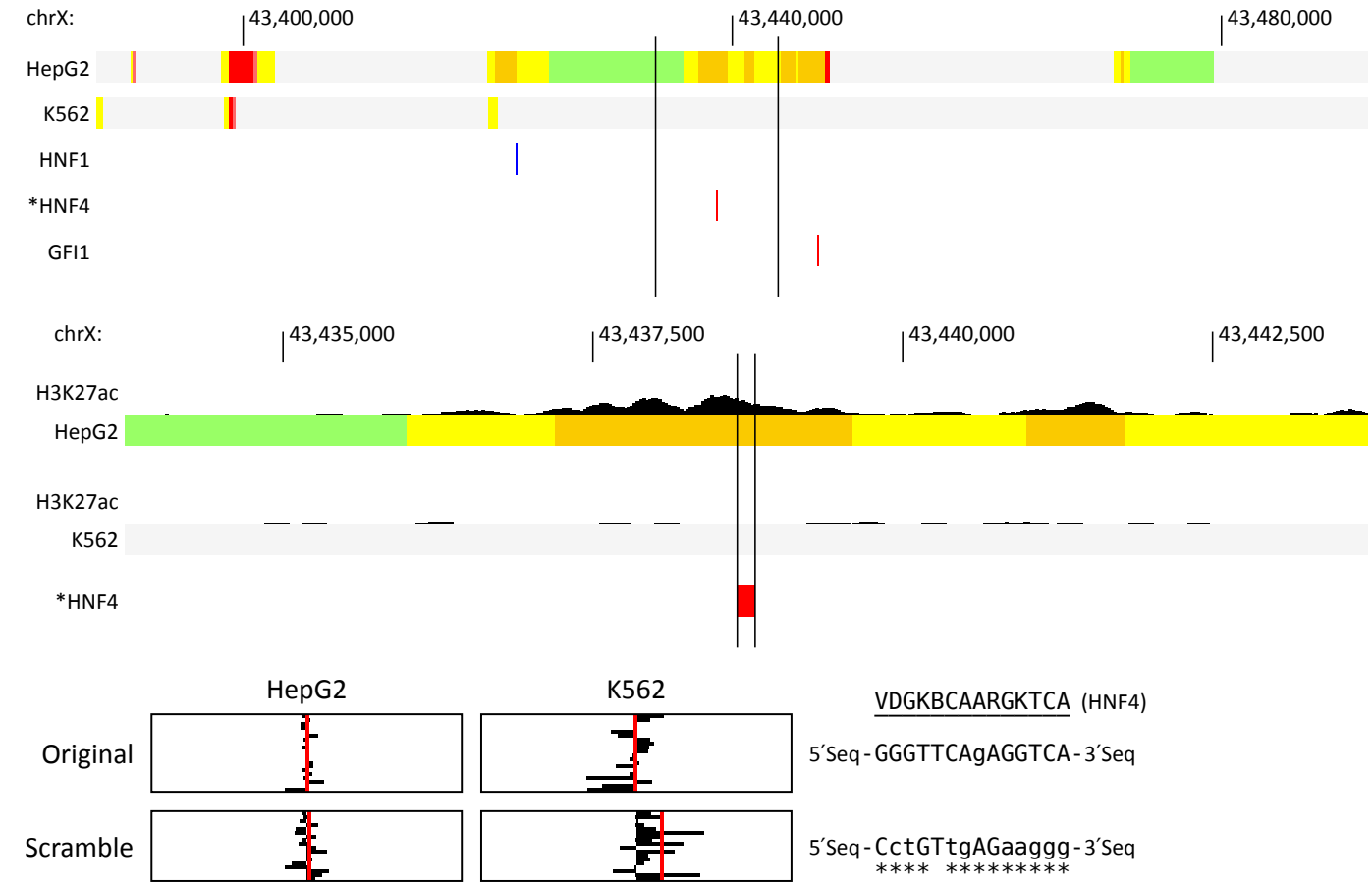
1668 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chrX 43438731 43438744 + (hg18)



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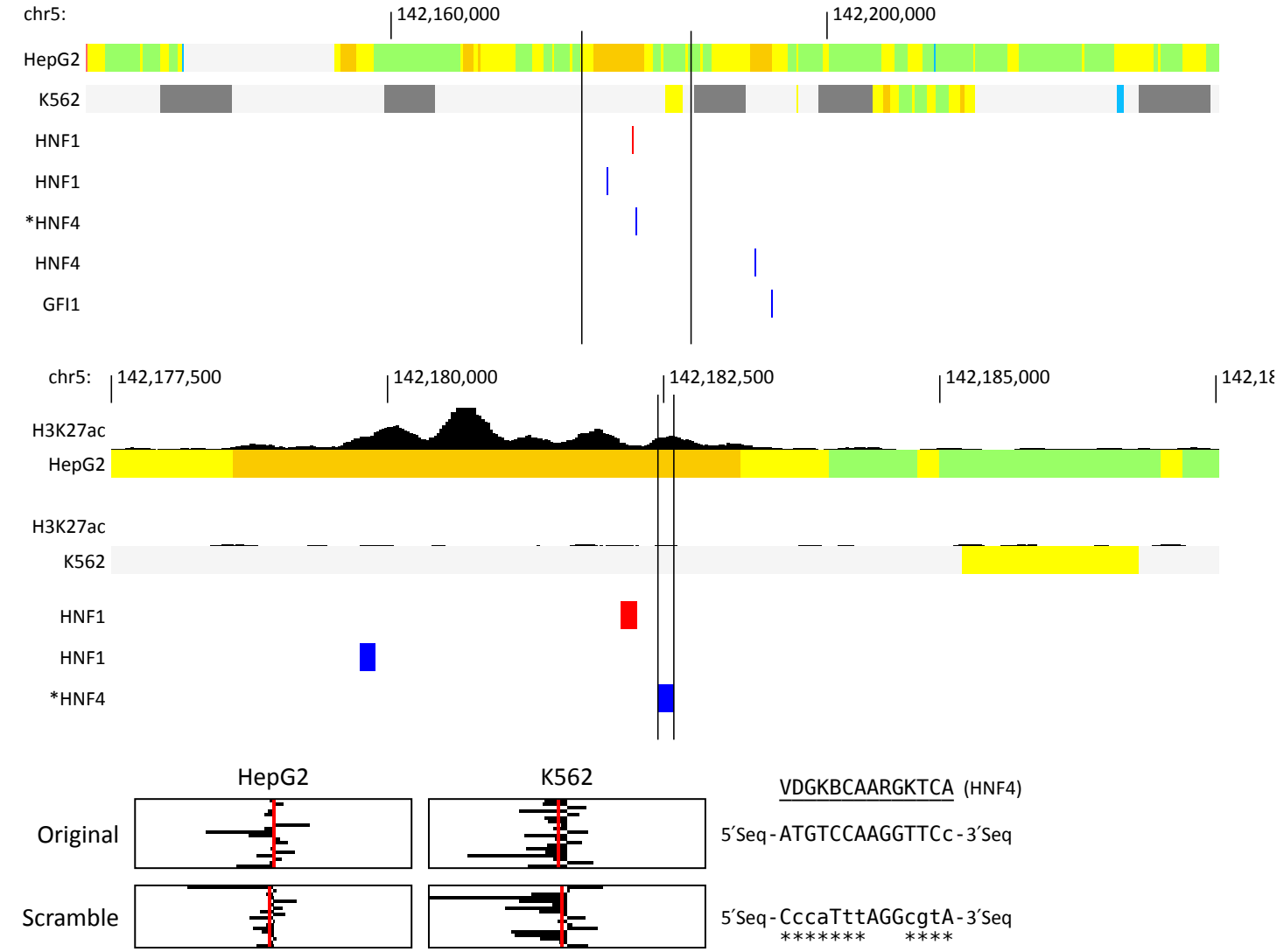
1669 HNF4 in HepG2 enhancer

chr5 142182514 142182527 - (hg18)



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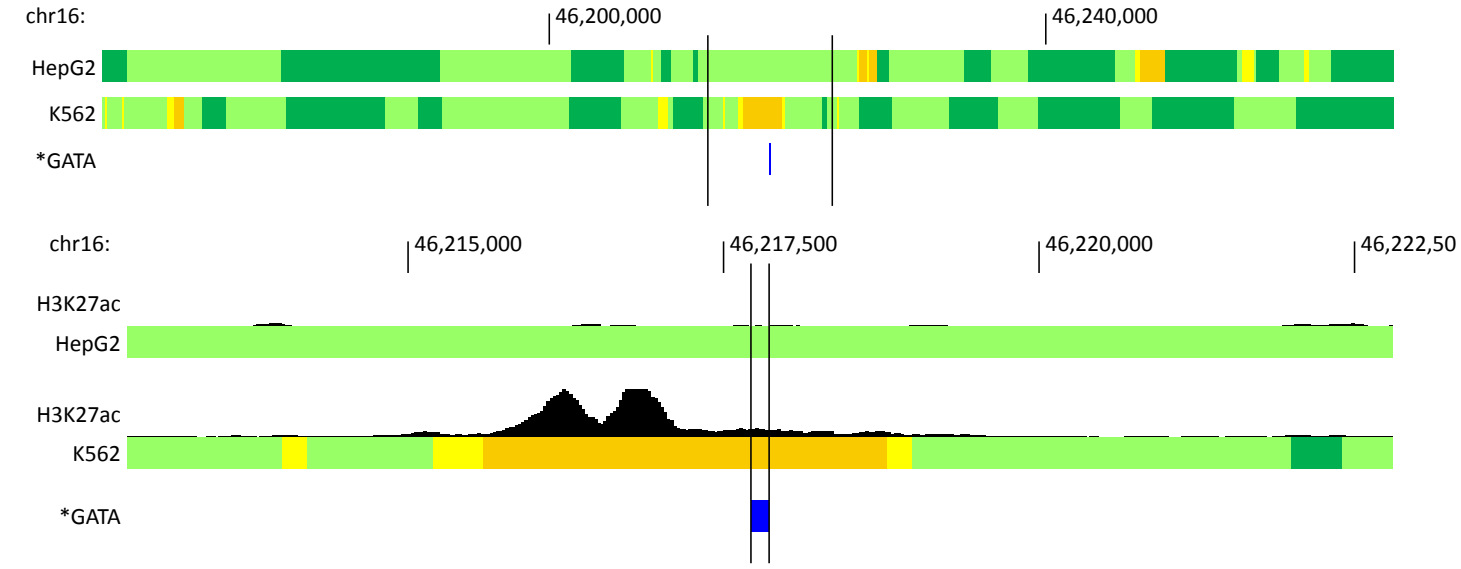
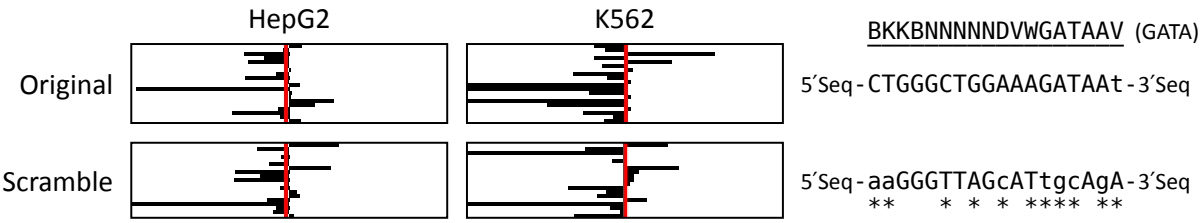
1670 GATA in K562 enhancer

chr16 46217781 46217798 - (hg18)





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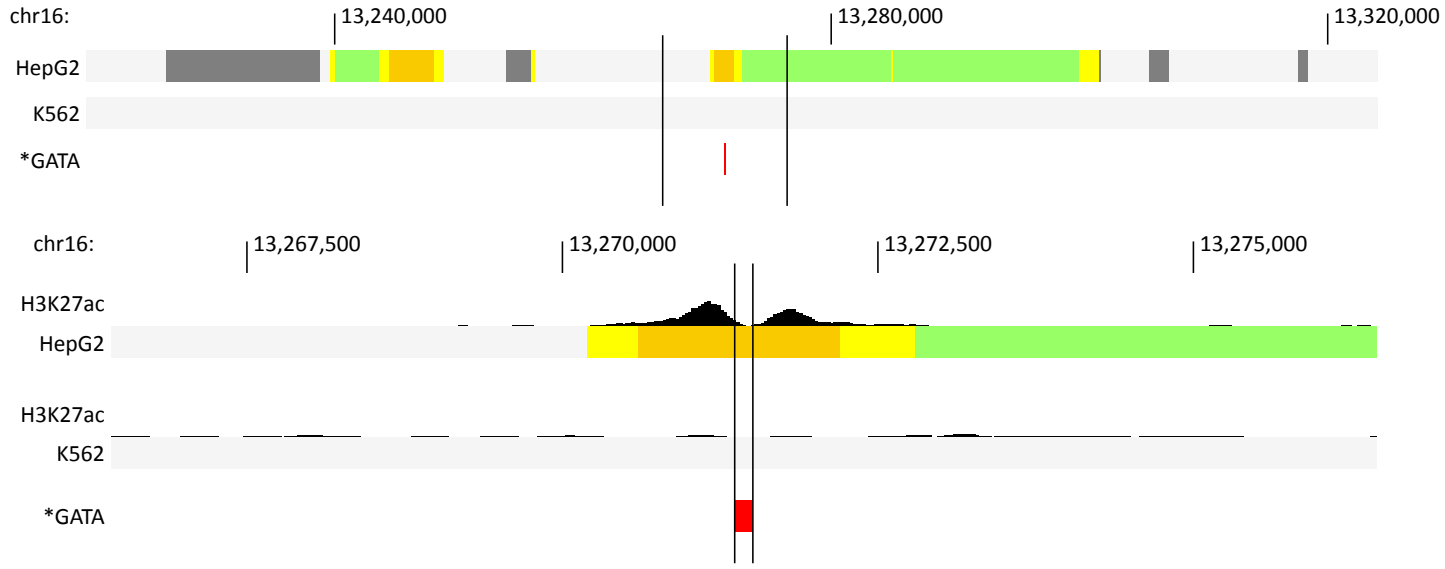
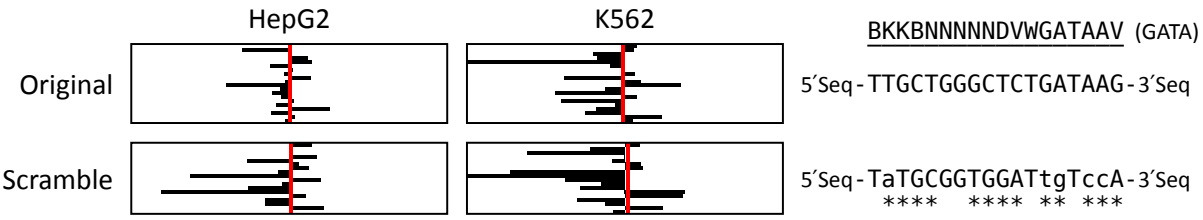
3′Seq = gcaagggccaacttgaggcaagatttatcatcactgggtcaaacccaacaactacagaggcac

1671 GATA in HepG2 enhancer (conserved at 60% confidence)

chr16 13271429 13271446 + (hg18)





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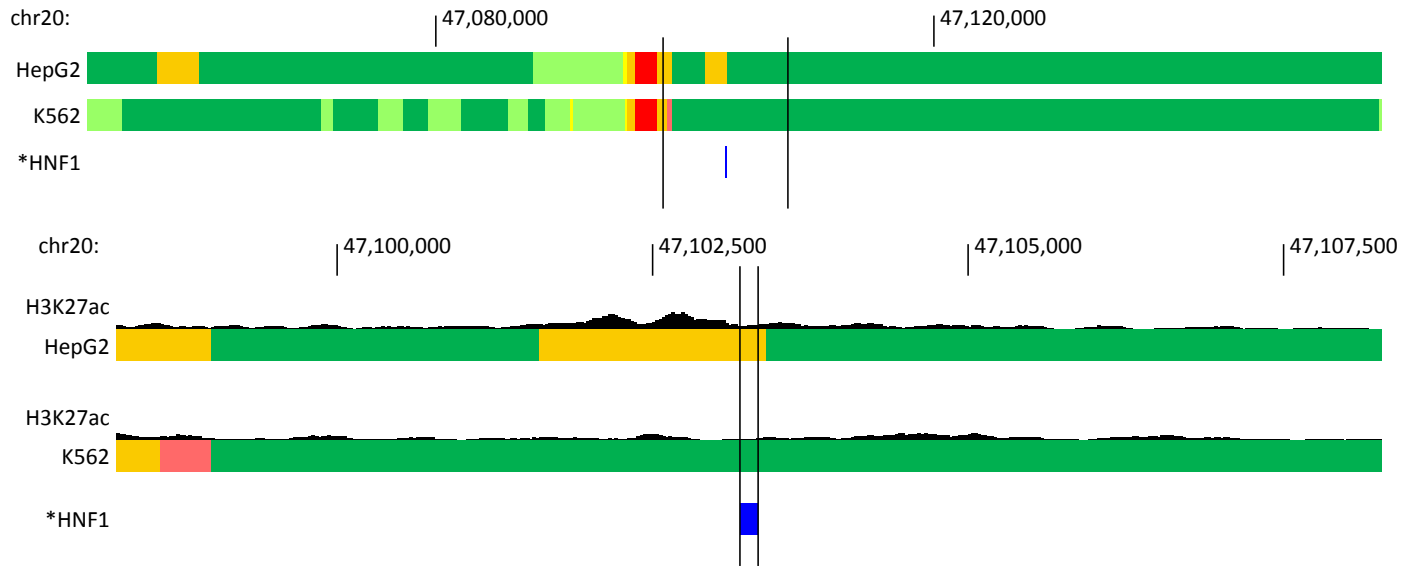
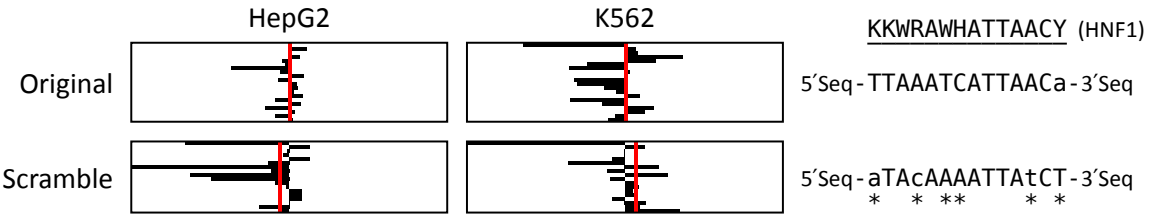
3′Seq = ggcttacatggagcaatgccctgccttgctcaccggactccaacagaatccaactgtttactt

1672 HNF1 in HepG2 enhancer

chr20 47103258 47103271 - (hg18)





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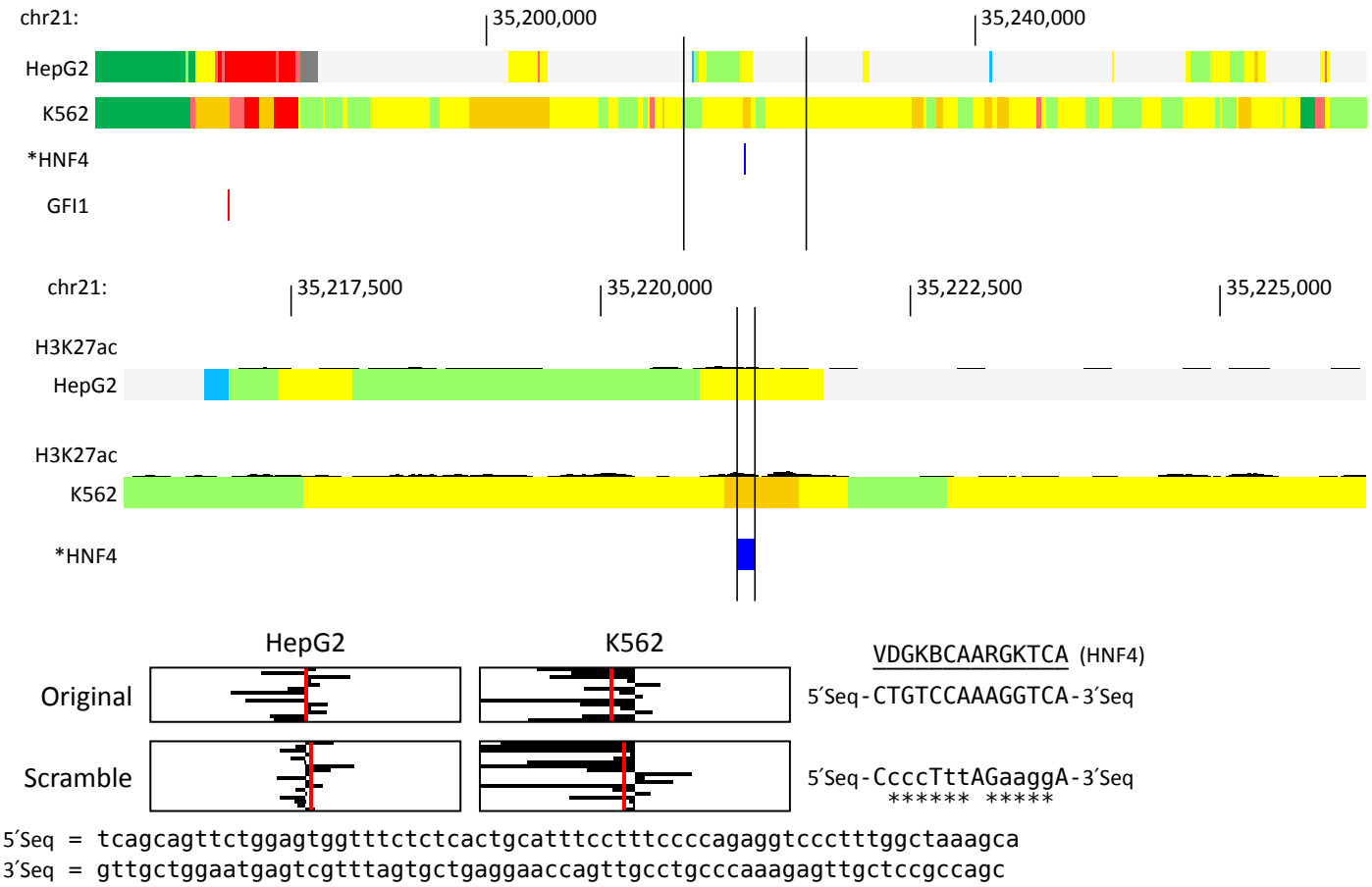
3′Seq = tcagtgtatctgagttaaaggaaattggcctttctttgccatatgcaaatttattctacctttgg

1673 HNF4 in K562 enhancer

chr21 35221167 35221180 + (hg18)



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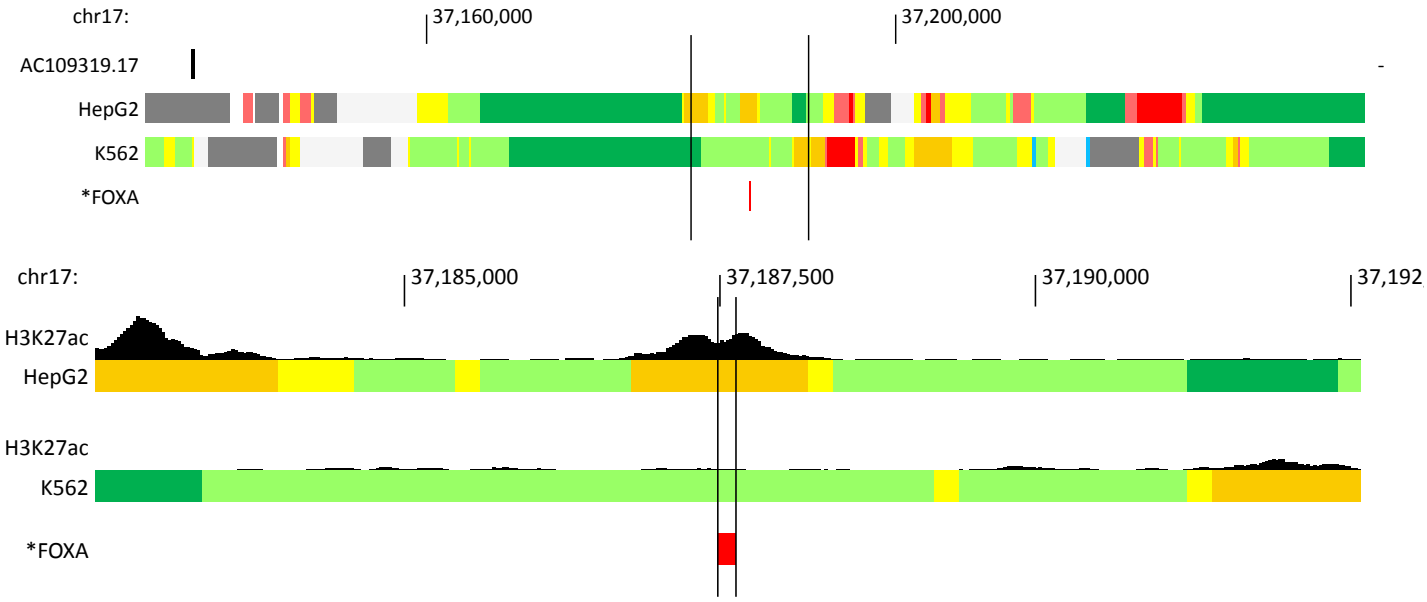
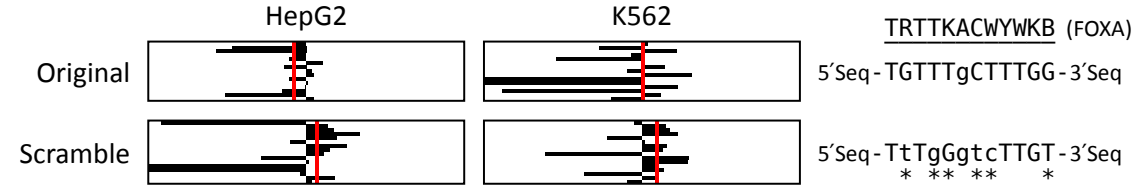
3′Seq = gttgctggaatgagtcgtttagtgctgaggaaccagttgcctgcccaaagagttgctccgccagc

1674 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 37187550 37187561 - (hg18)





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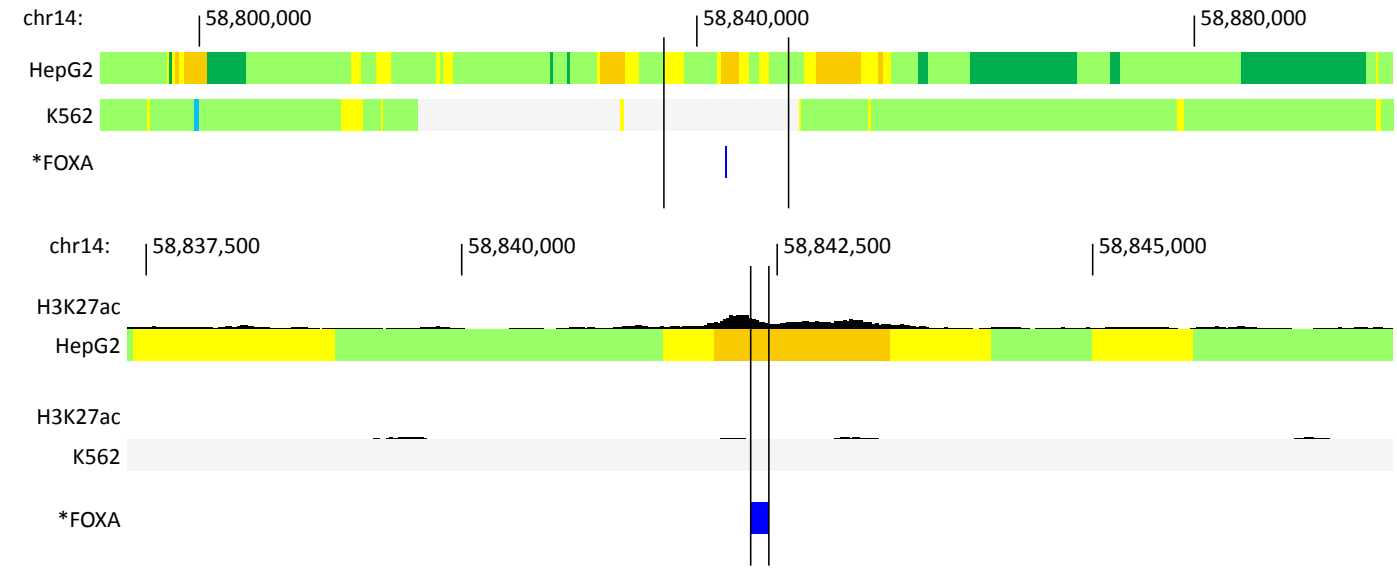
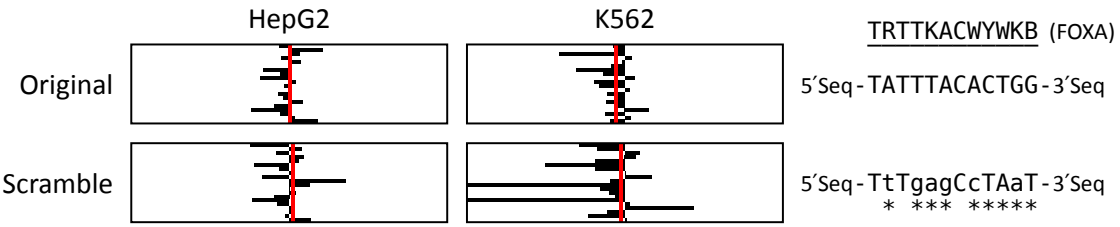
3′Seq = gaaggagcccagaaggaggaaaataaacagcagctgggtcggcaggcctgagcctcccccaggccc

1675 FOXA in HepG2 enhancer

chr14 58842357 58842368 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTTACACTGG-3′Seq

5′Seq-TtTgagCcTAaT-3′Seq

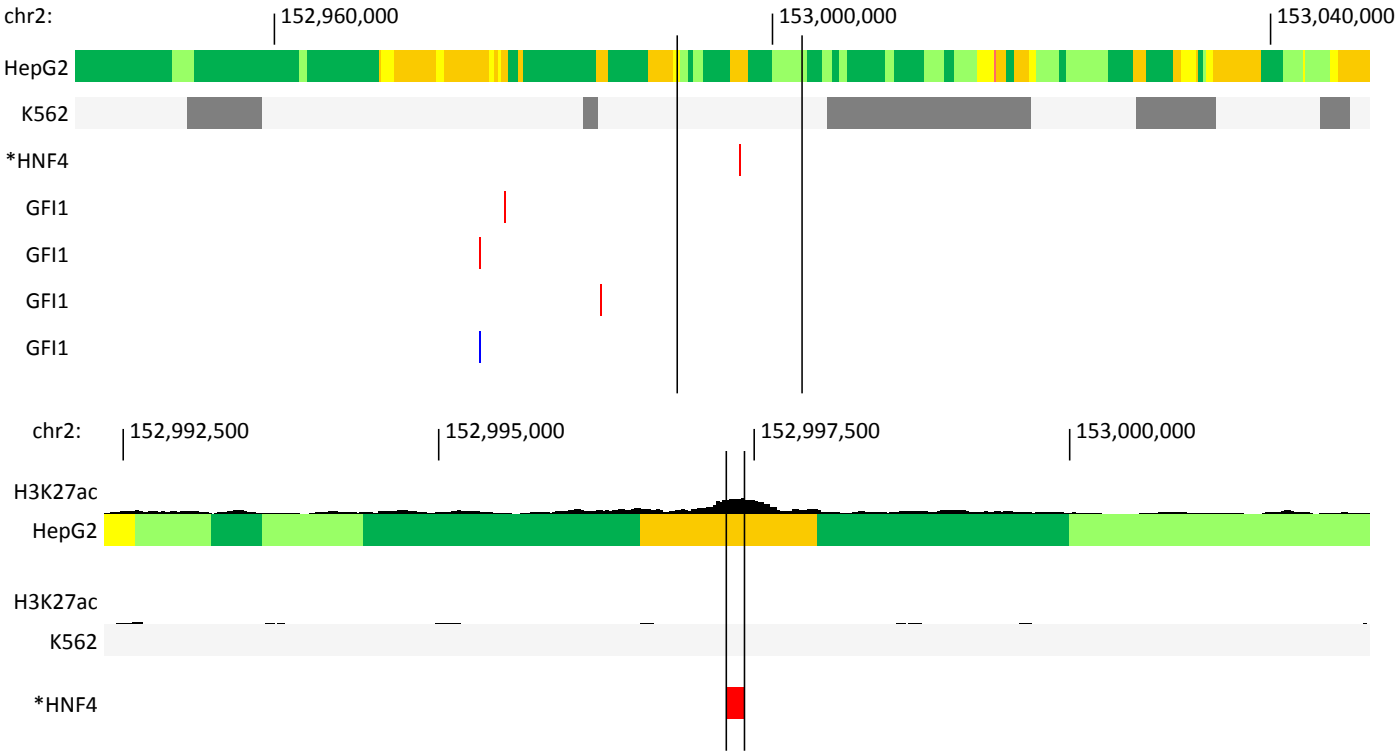
* *** *****

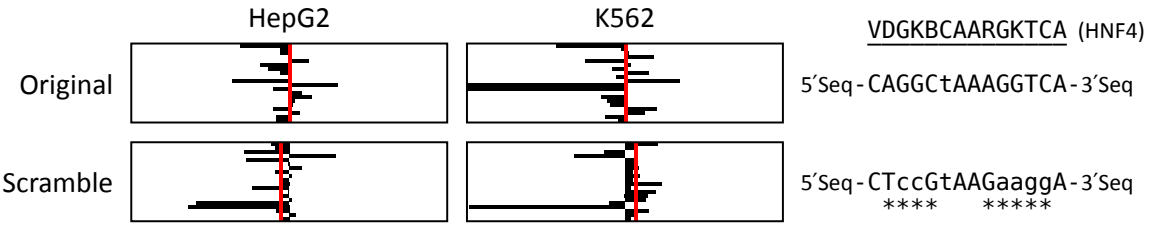
5′Seq = aatcctttgagacatttccttgagagcacaaaatgtcacattaatattttccatatatcacaaactt

3′Seq = taaaaatcagagtttctgaatggcctgaatgaaatagcacatagctattatttatgtcctccccaa

1676 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 152997345 152997358 - (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-CAGGCtAAAGGTCA-3′Seq

5′Seq-CTccGtAAGaaggA-3′Seq

**** *****

5′Seq = acaactgacagaaggtctacttgcaatggcagggaagtctatcctcagaataaatttgcctttctc

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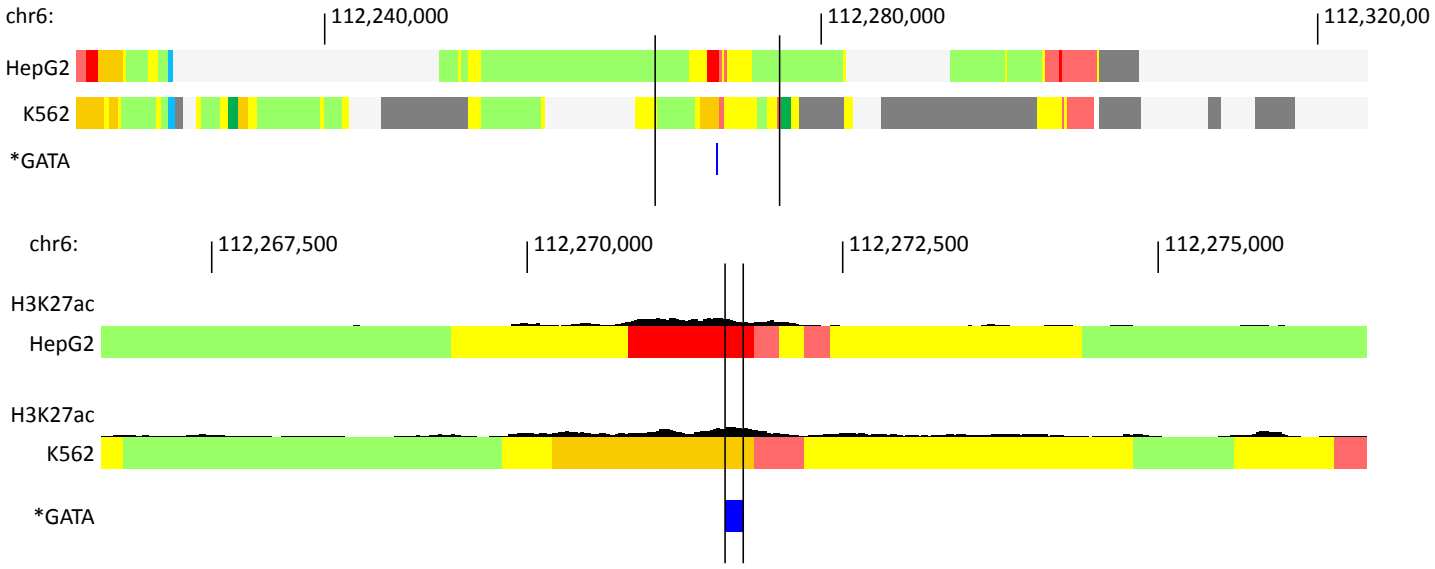
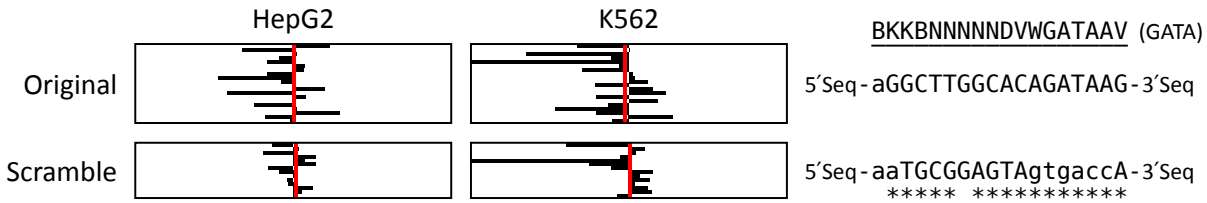
1677 GATA in K562 enhancer

chr6 112271632 112271649 + (hg18)





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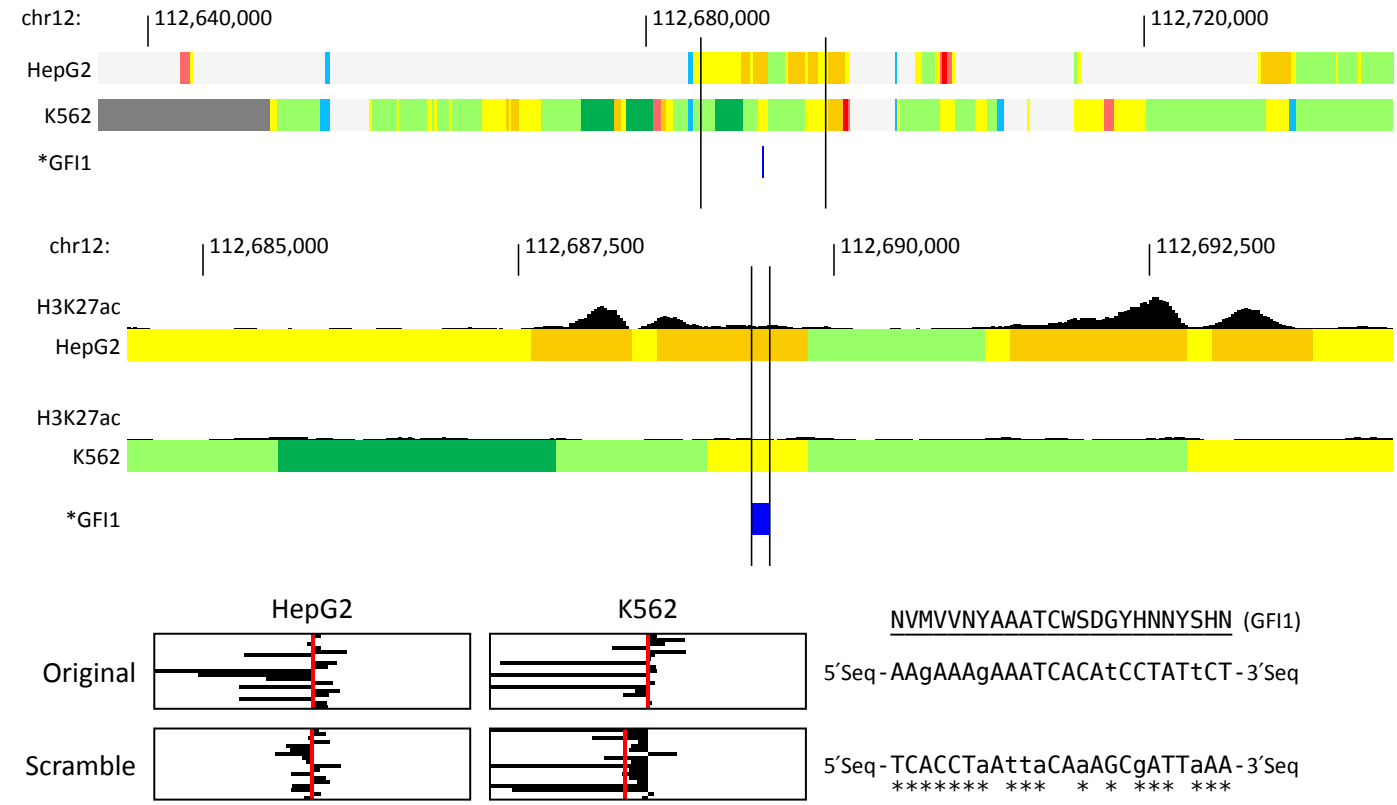
1678 GFI1 in HepG2 enhancer

chr12 112689408 112689431 + (hg18)



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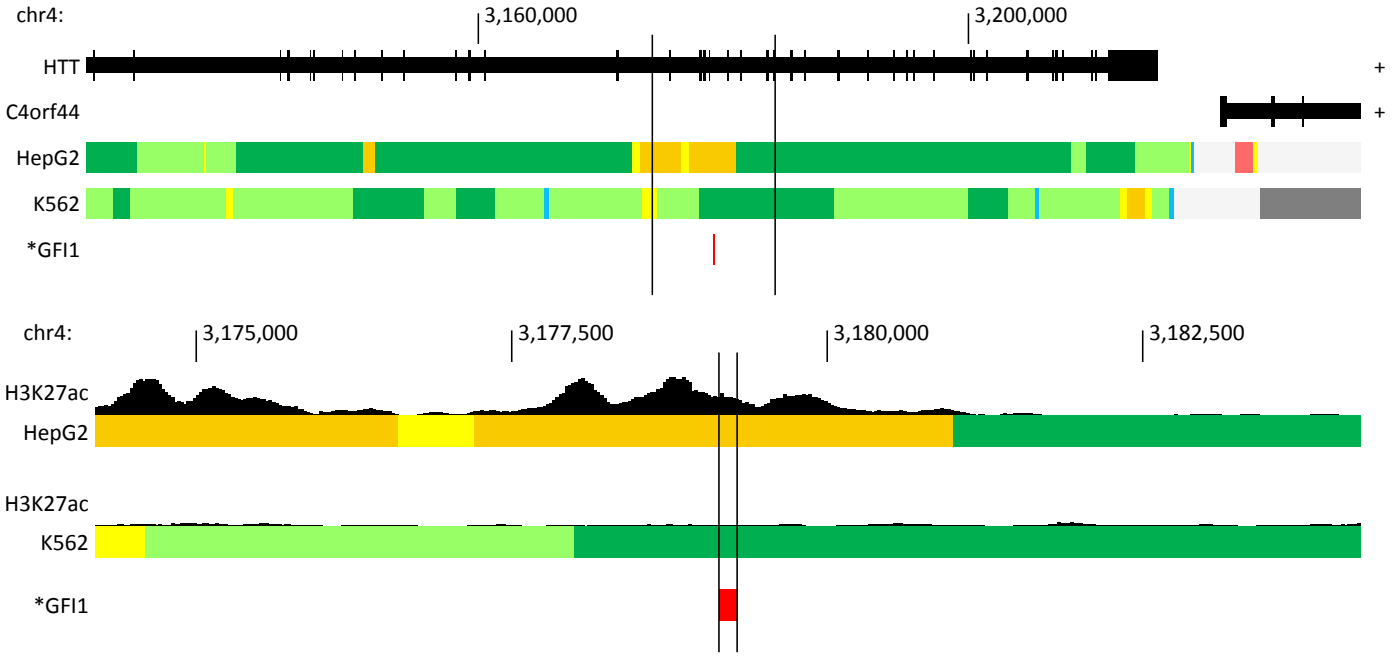
1679 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr4 3179203 3179226 + (hg18)



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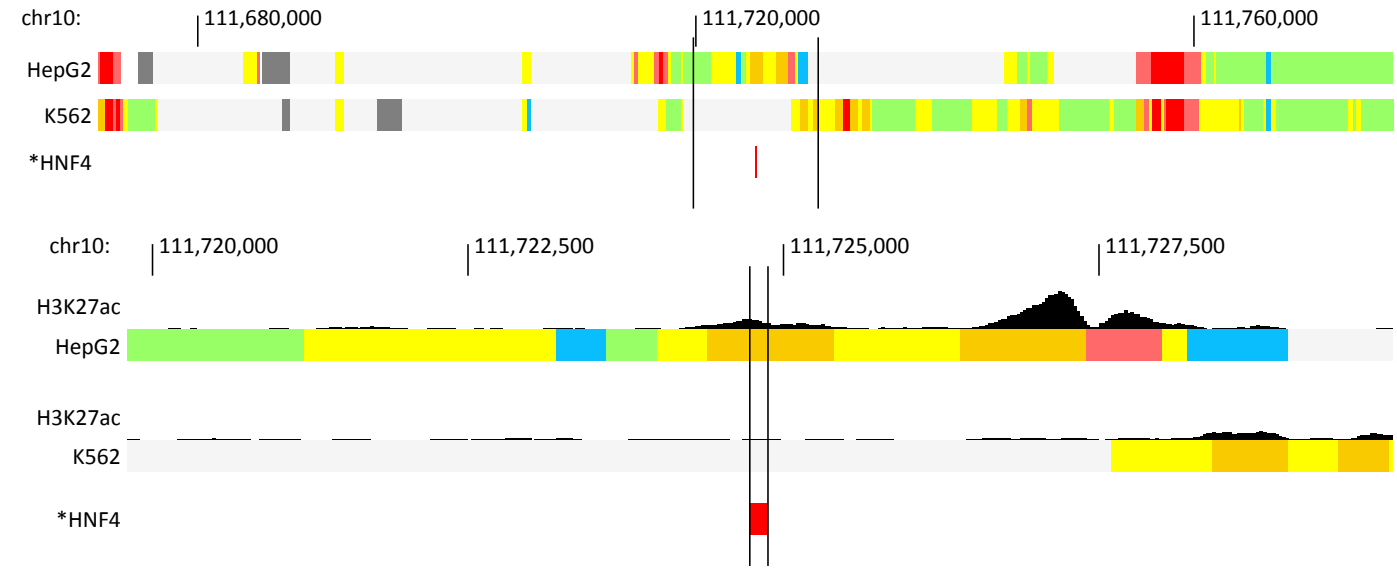
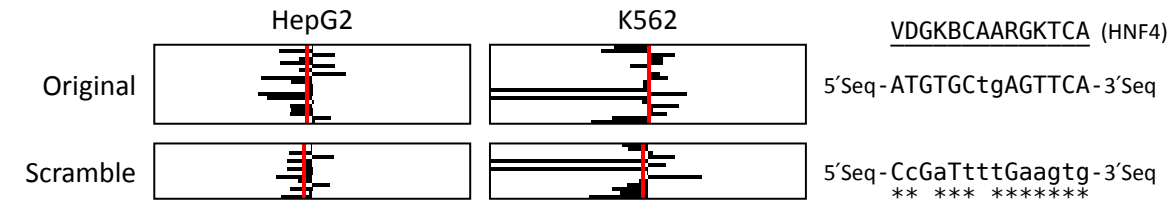
3′Seq = ctaattgctaaacaagagttggcaaatctgagagacattactcaatccttggcatgcagg

1680 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr10 111724799 111724812 + (hg18)





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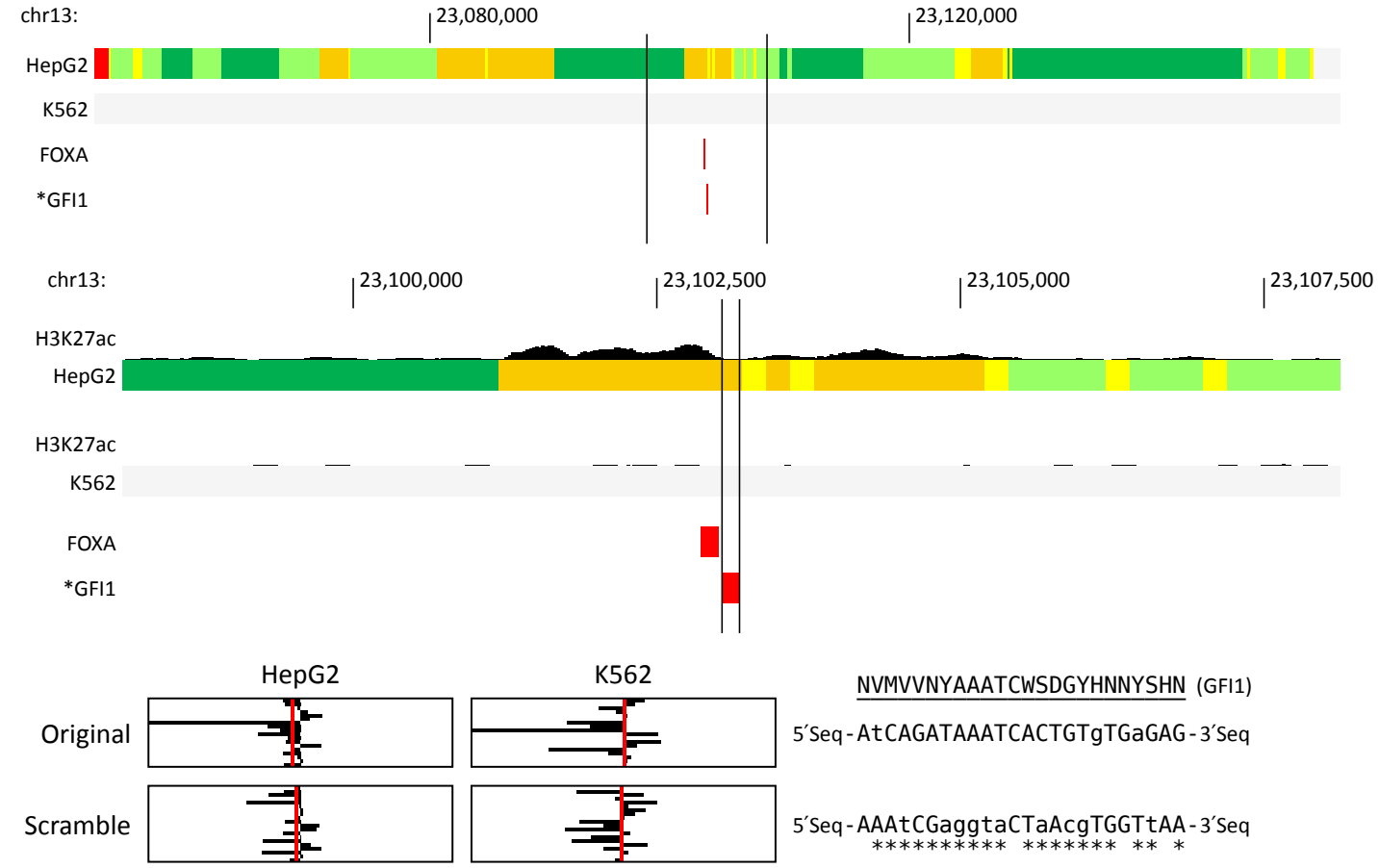
1681 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr13 23103098 23103121 + (hg18)



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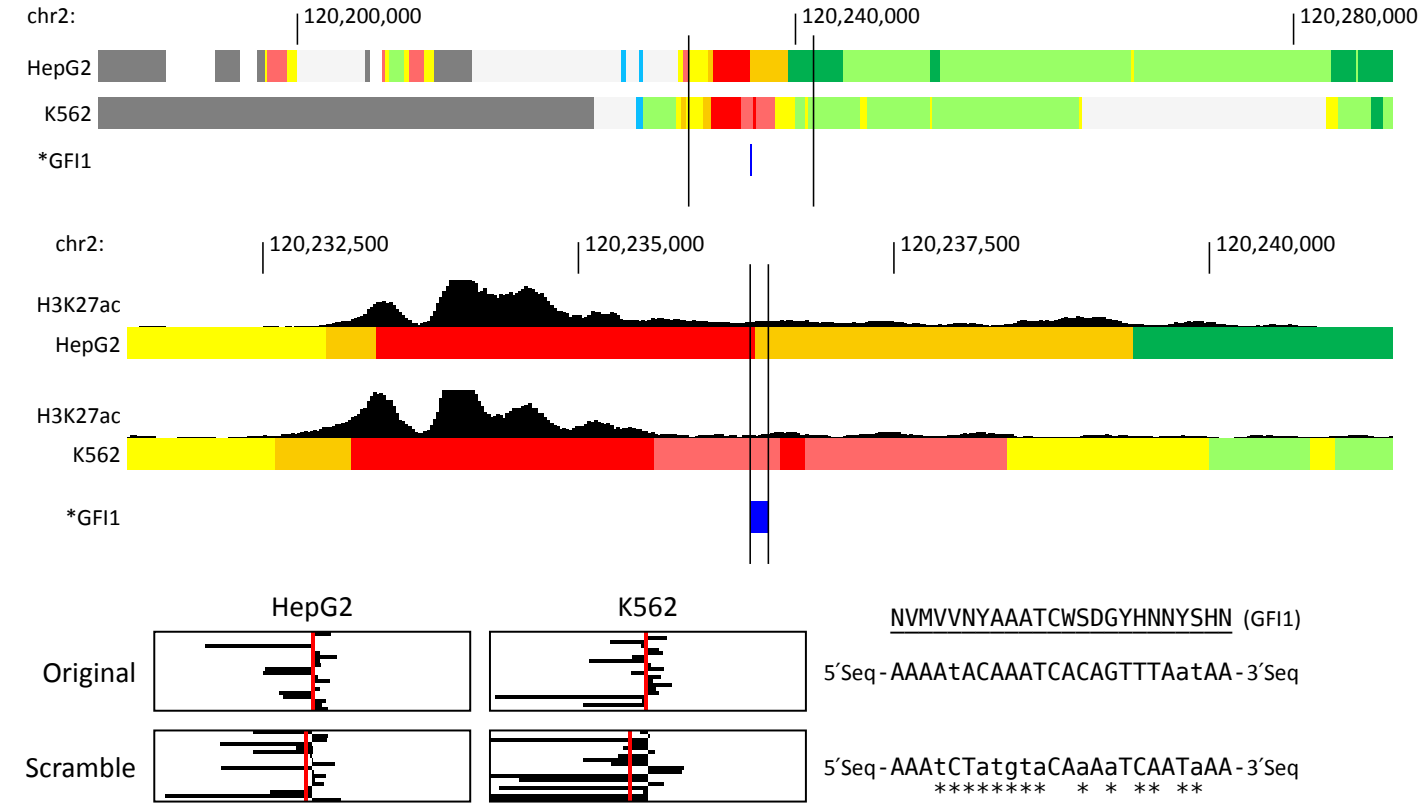
3′Seq = aaaagaaagcctgagctgggctgacctgcaactcttaggaattgtatgtggcttcatagt

1682 GFI1 in HepG2 enhancer

chr2 120236422 120236445 - (hg18)



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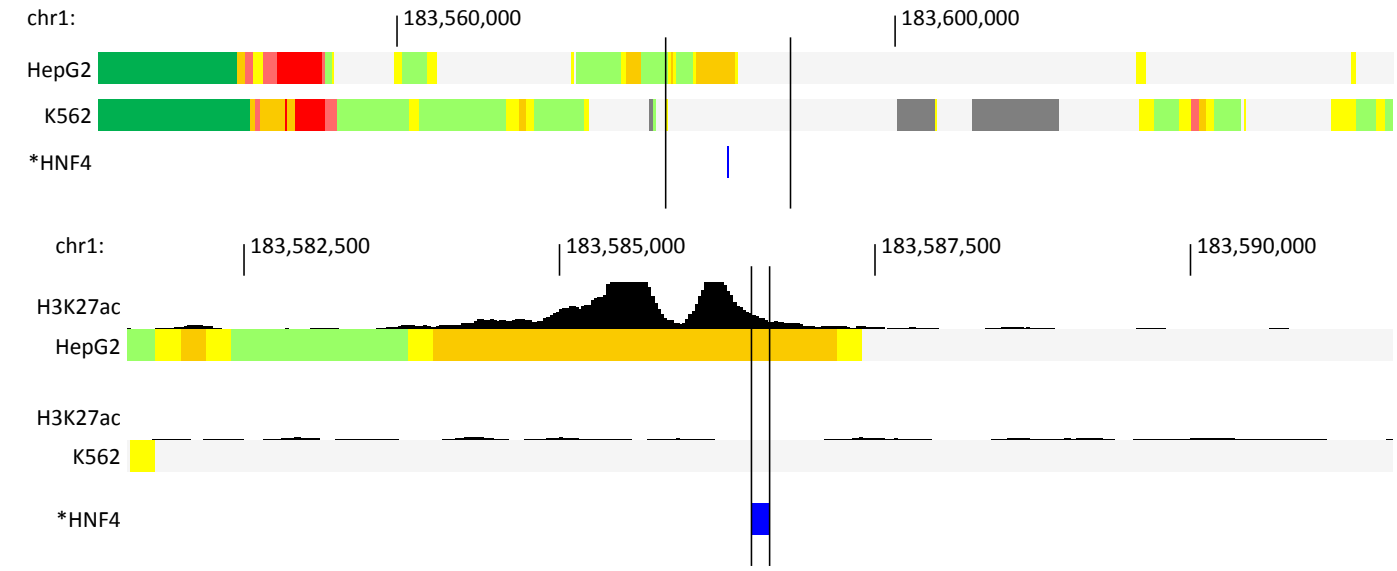
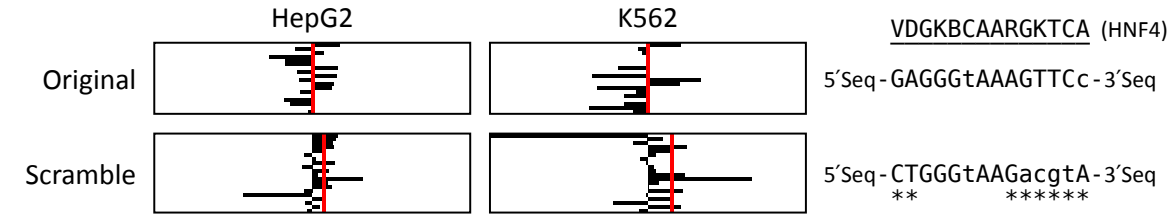
1683 HNF4 in HepG2 enhancer

chr1 183586587 183586600 + (hg18)





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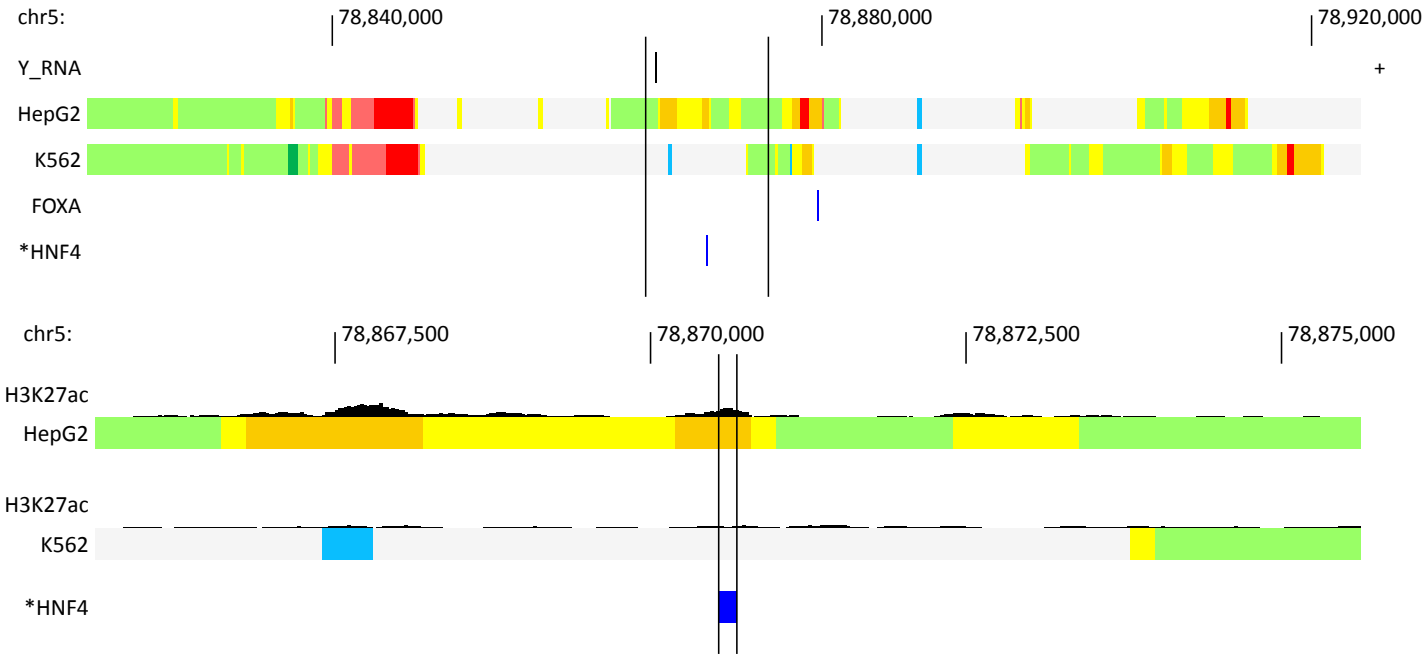
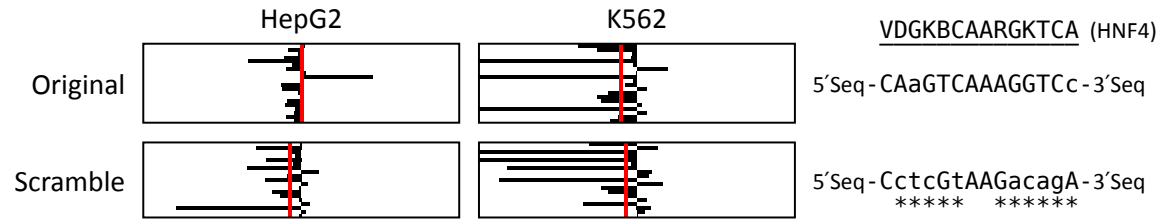
1684 HNF4 in HepG2 enhancer

chr5 78870606 78870619 + (hg18)





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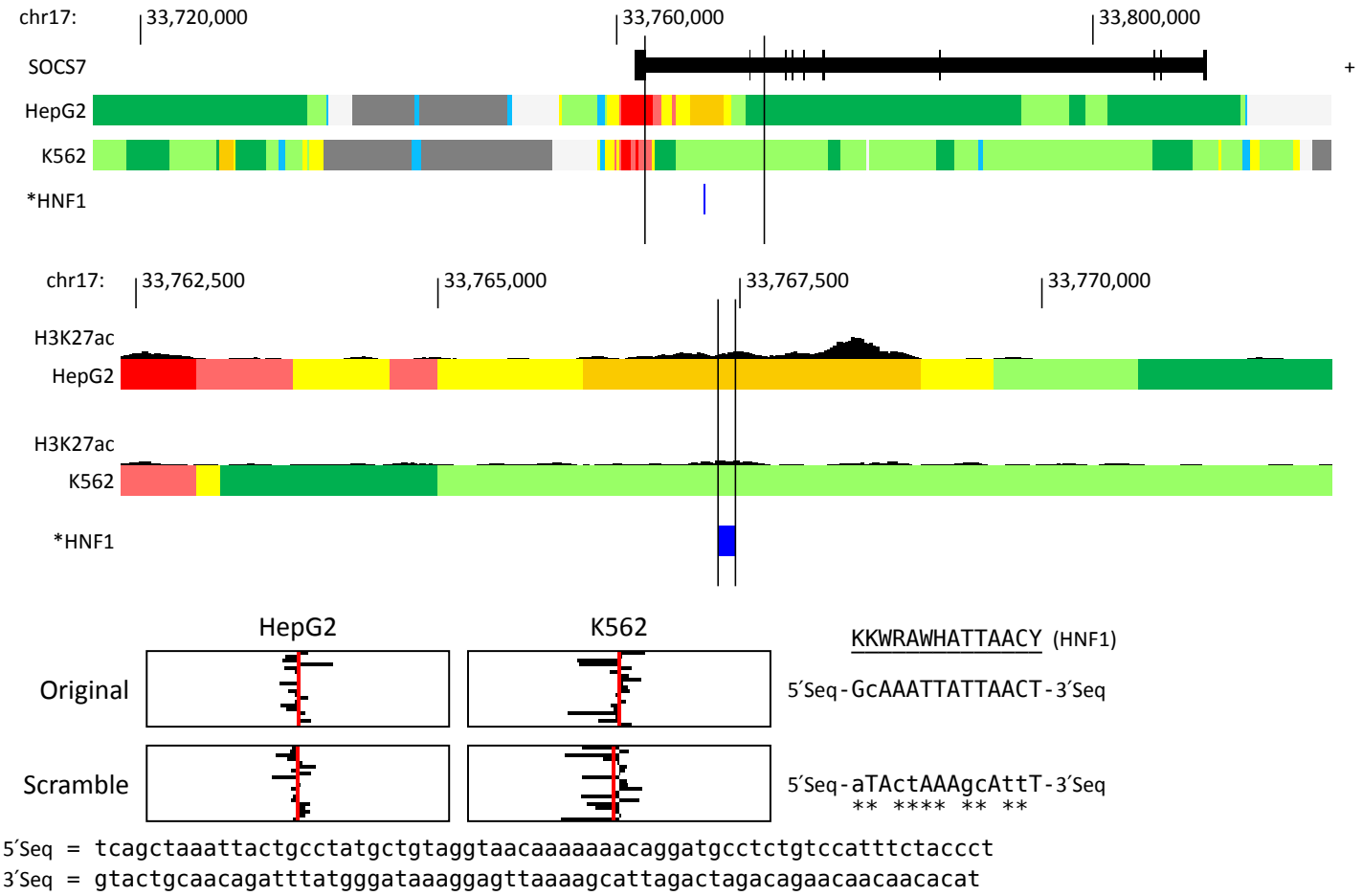
1685 HNF1 in HepG2 enhancer

chr17 33767385 33767398 - (hg18)



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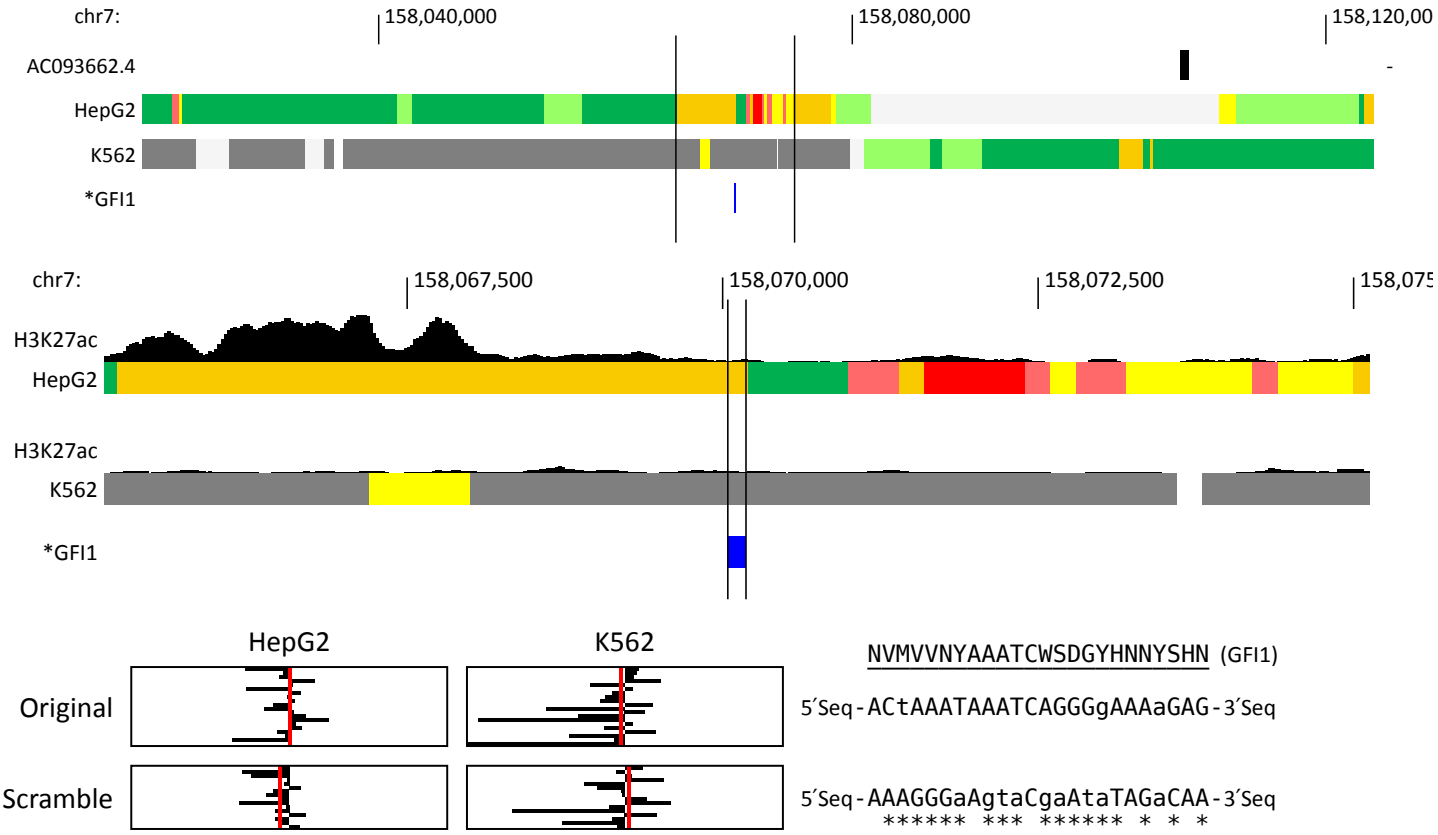
1686 GFI1 in HepG2 enhancer

chr7 158070102 158070125 + (hg18)



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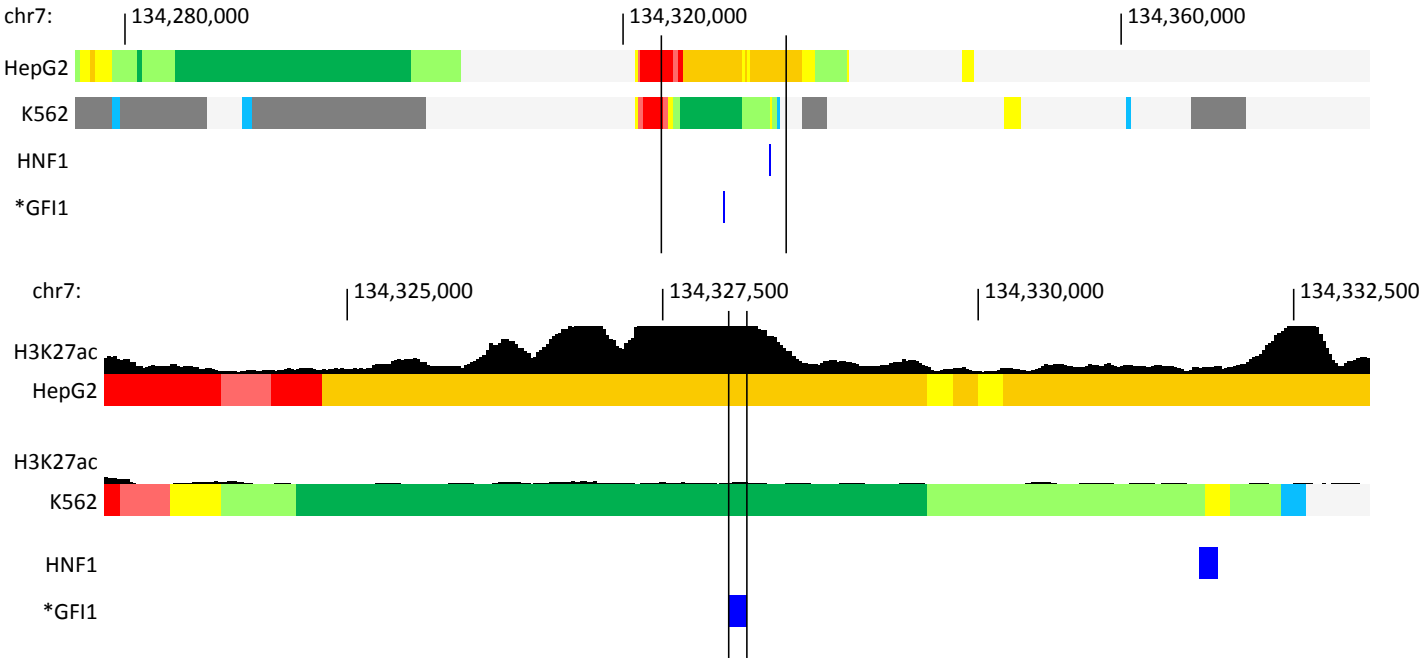
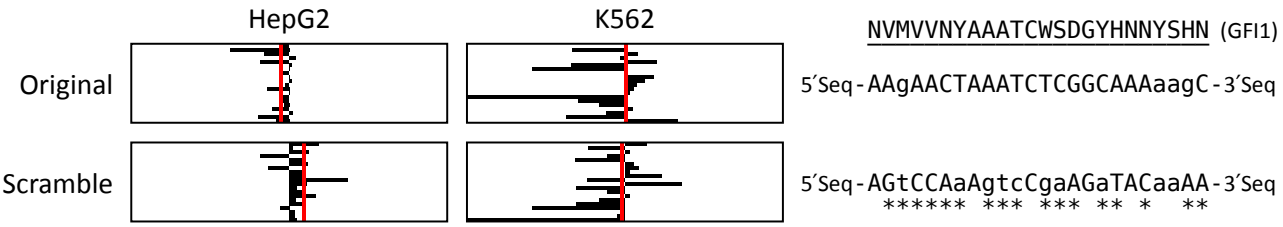
1687 GFI1 in HepG2 enhancer

chr7 134328084 134328107 + (hg18)





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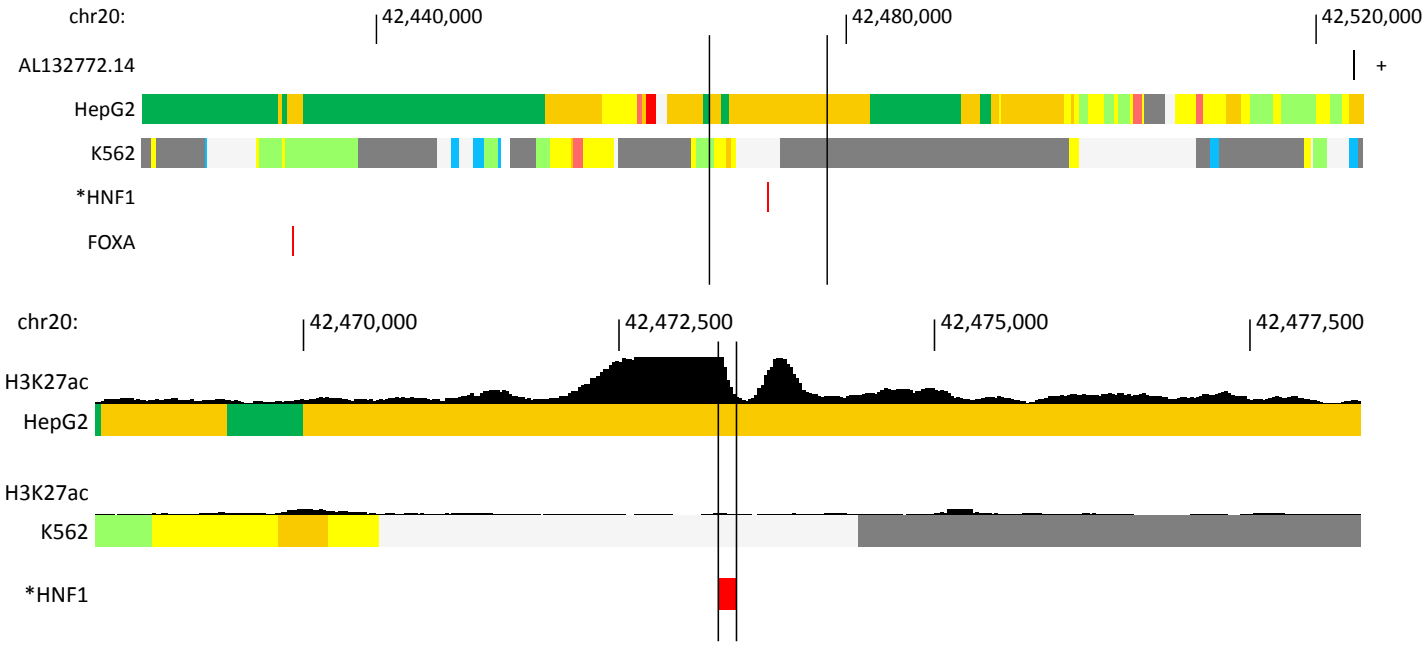
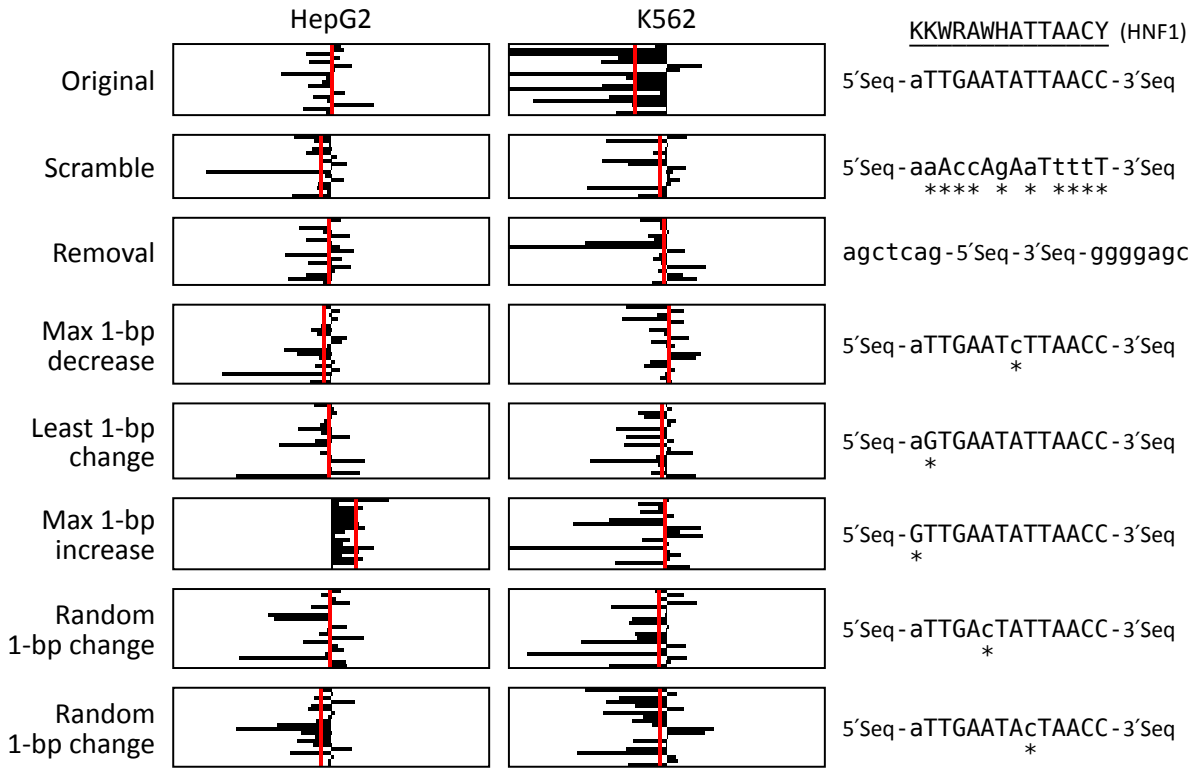
1688 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr20 42473353 42473366 - (hg18)





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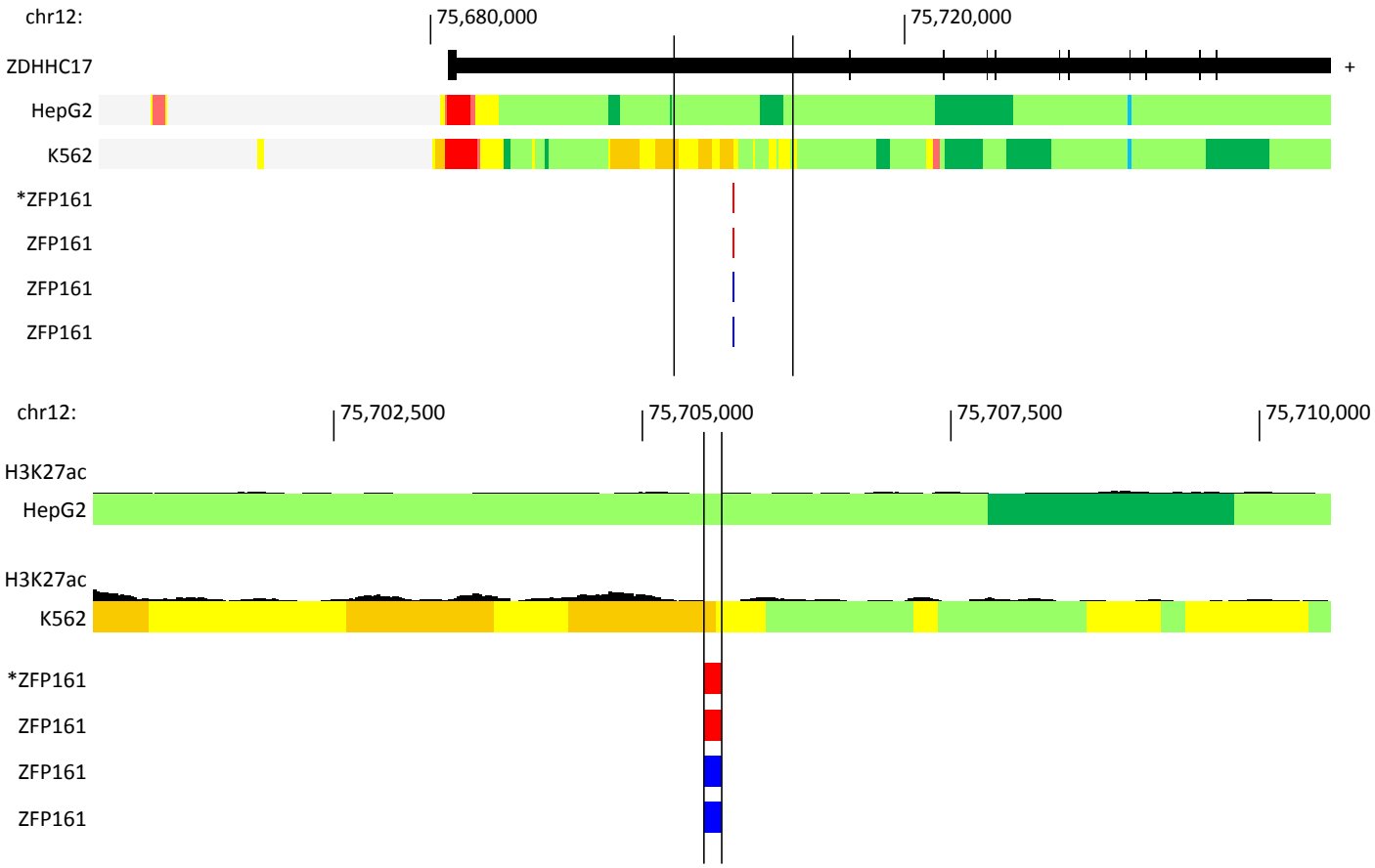
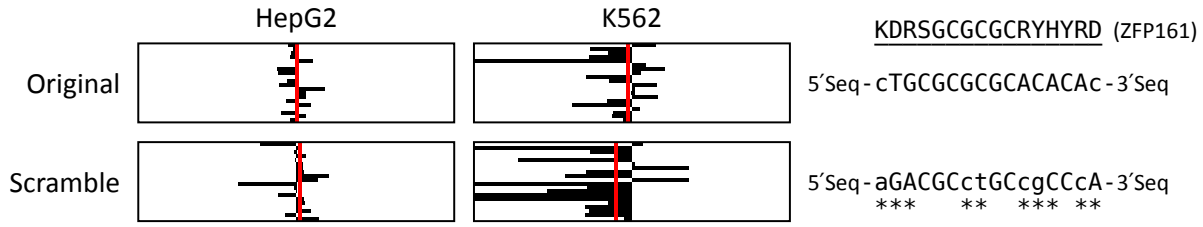
1689 ZFP161 in K562 enhancer (conserved at 10% confidence)

chr12 75705564 75705579 - (hg18)





KDRSGCGCGCRYHYRD (ZFP161)

5′Seq - cTGCGCGCGCACACAc - 3′Seq

5′Seq - aGACGCctGCcgCCcA - 3′Seq

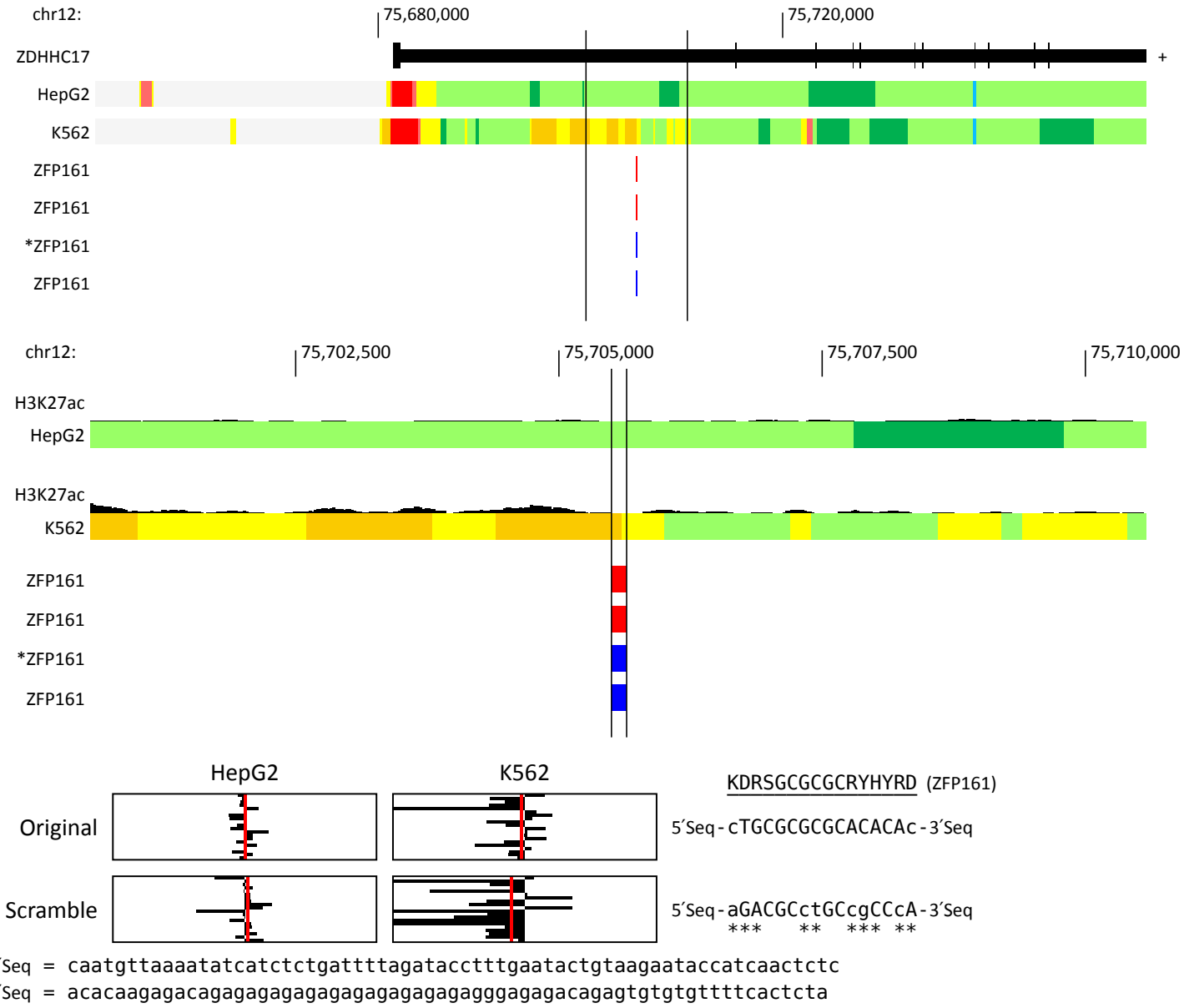
*** ** *** **

5′Seq = caatgttaaaatatcatctctgattttagataccttgaatactgtaagaataccatcaactctc

3′Seq = acacaagagacagagagagagagagagagagagagggagagacagagtgtgtgttttcactcta

1690 ZFP161 in K562 enhancer

chr12 75705564 75705579 - (hg18)



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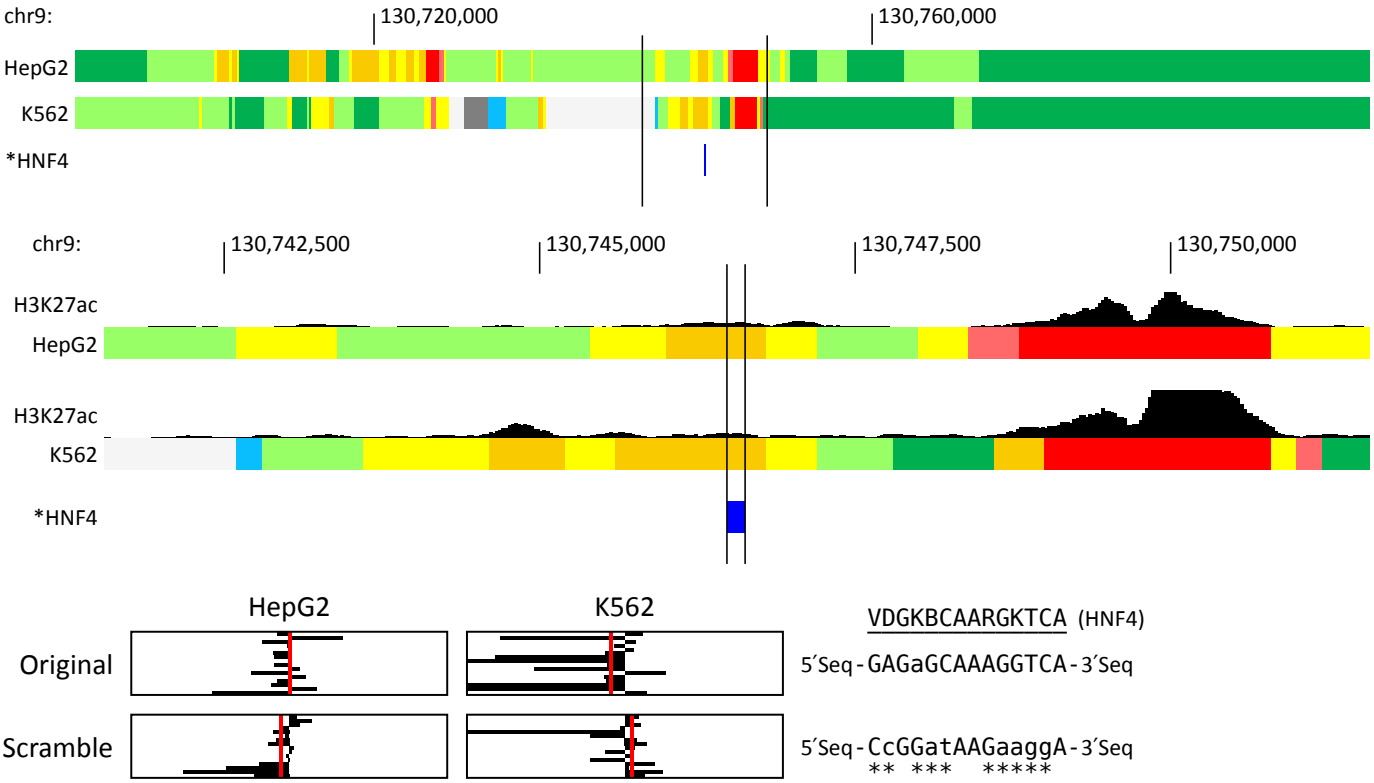
3′Seq = acacaagagacagagagagagagagagagagagagggagagacagagtgtgtgttttcactcta

1691 HNF4 in HepG2 enhancer

chr9 130746550 130746563 + (hg18)



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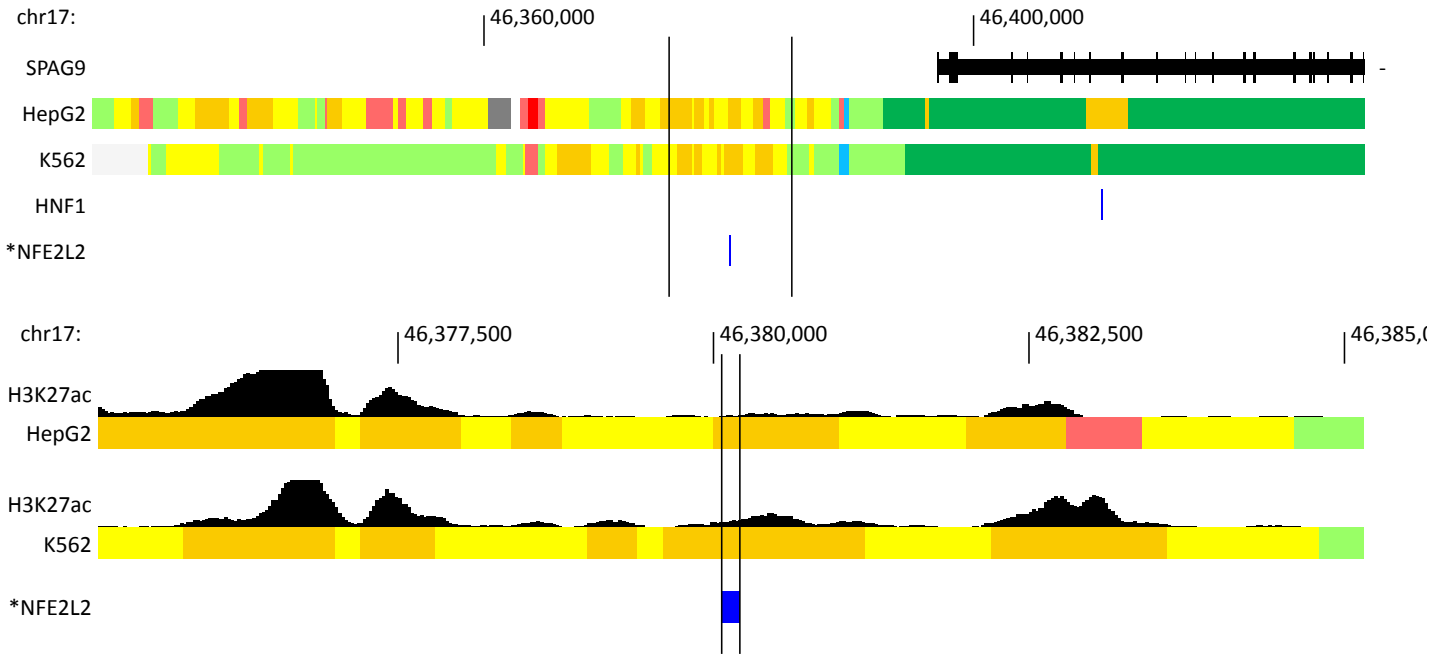
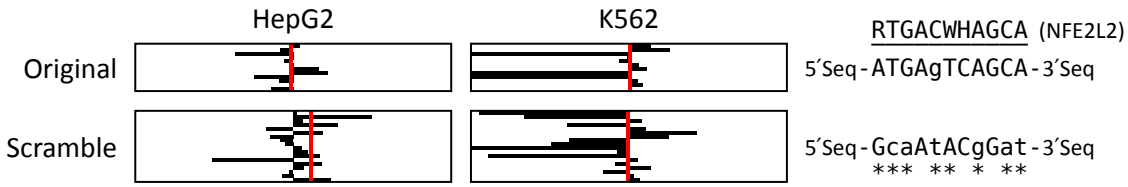
1692 NFE2L2 in K562 enhancer

chr17 46380132 46380142 - (hg18)





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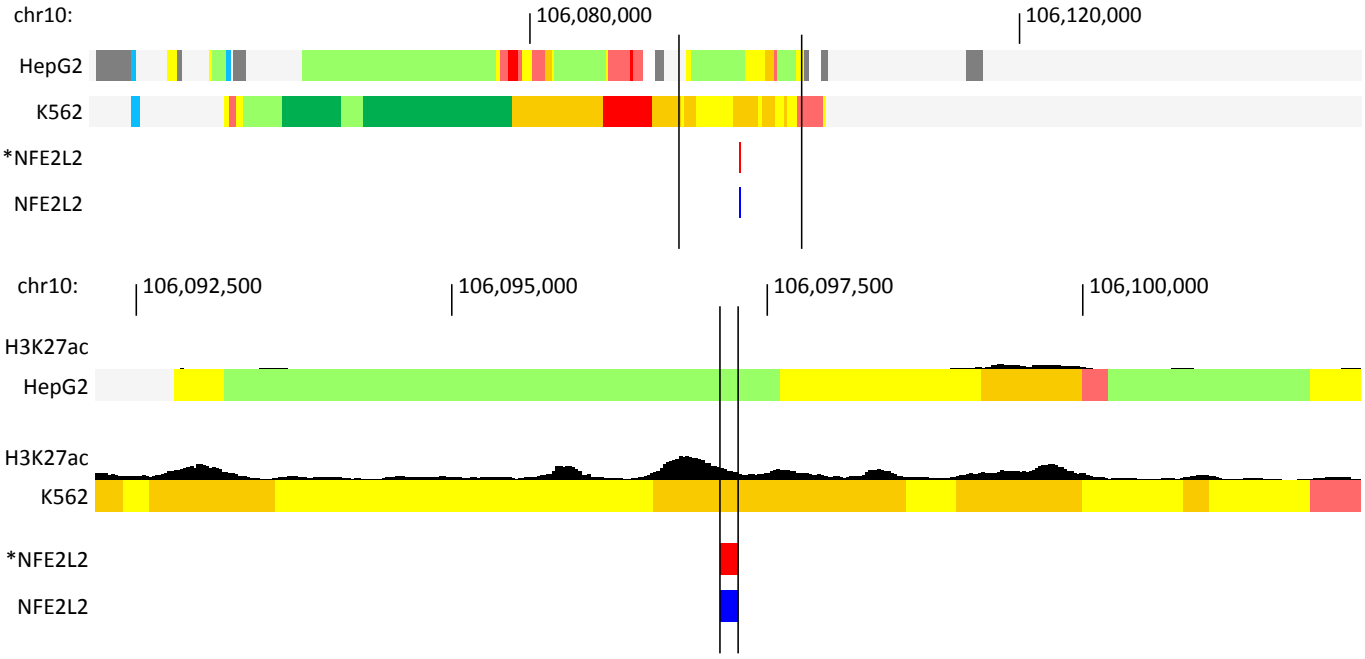
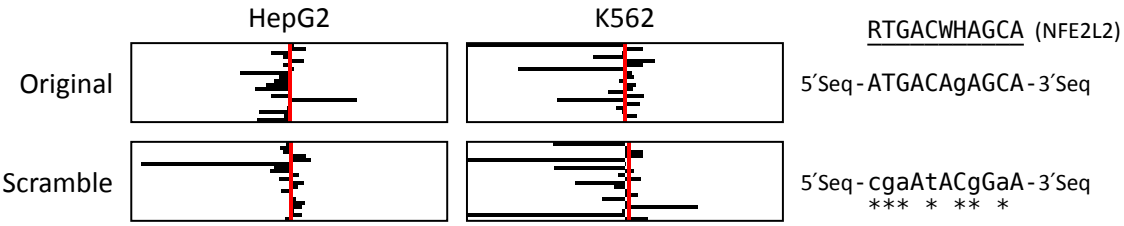
1693 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr10 106097192 106097202 - (hg18)





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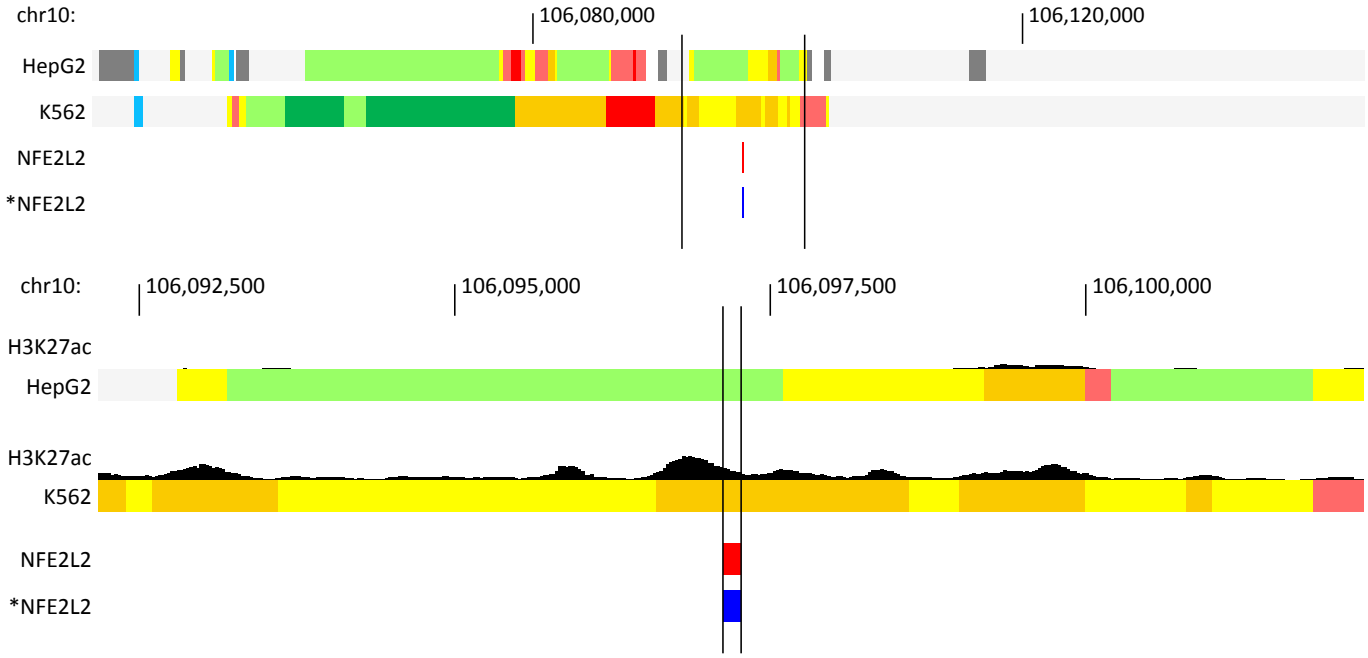
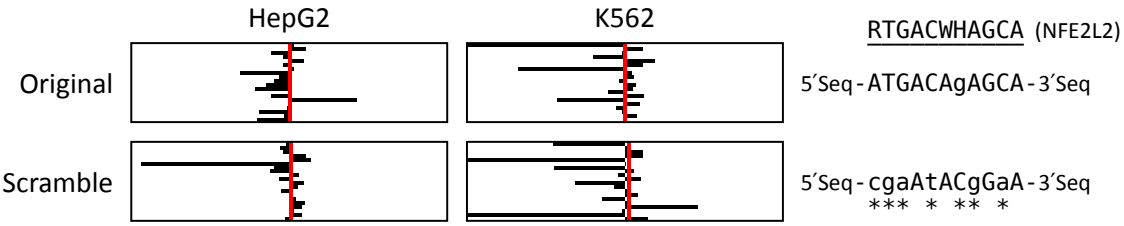
1694 NFE2L2 in K562 enhancer

chr10 106097192 106097202 - (hg18)





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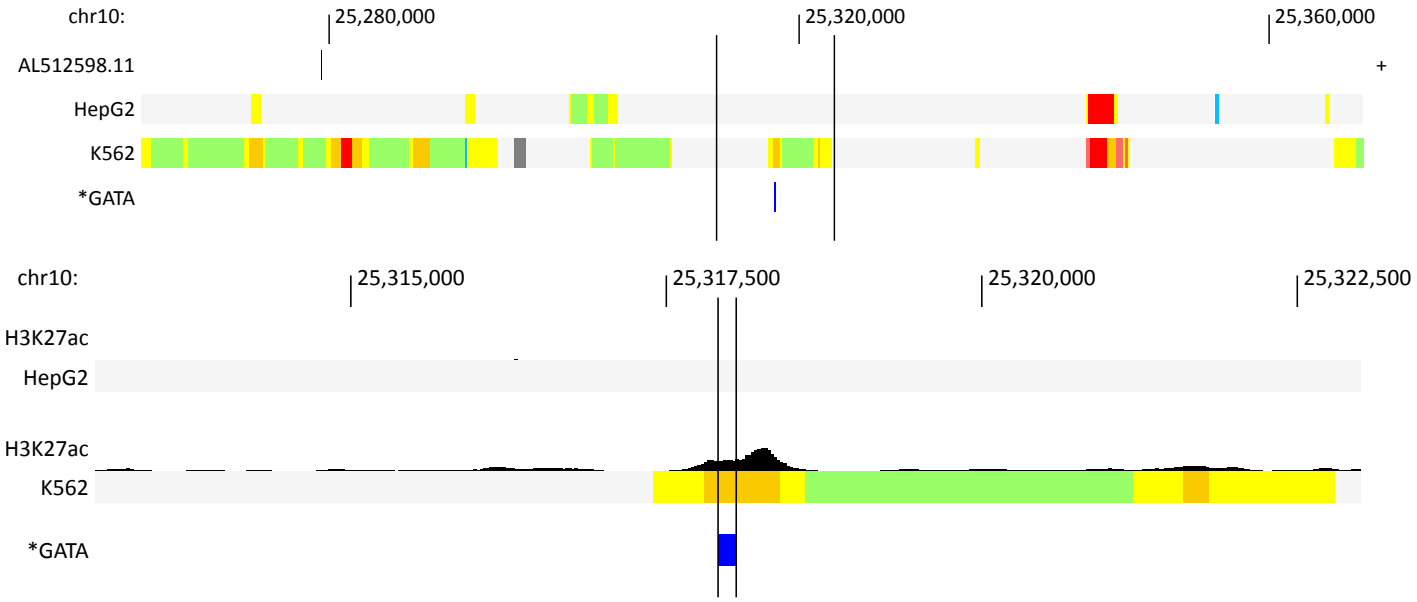
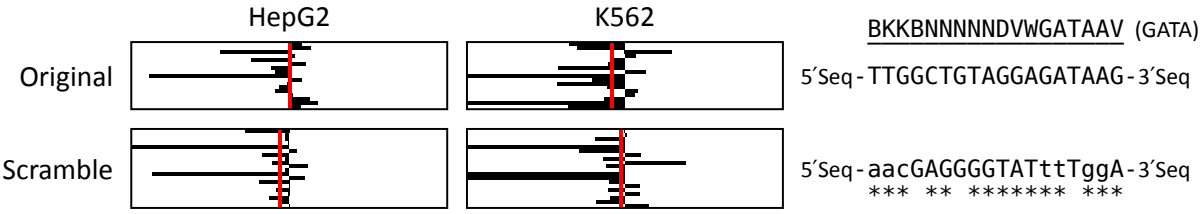
1695 GATA in K562 enhancer

chr10 25317974 25317991 - (hg18)





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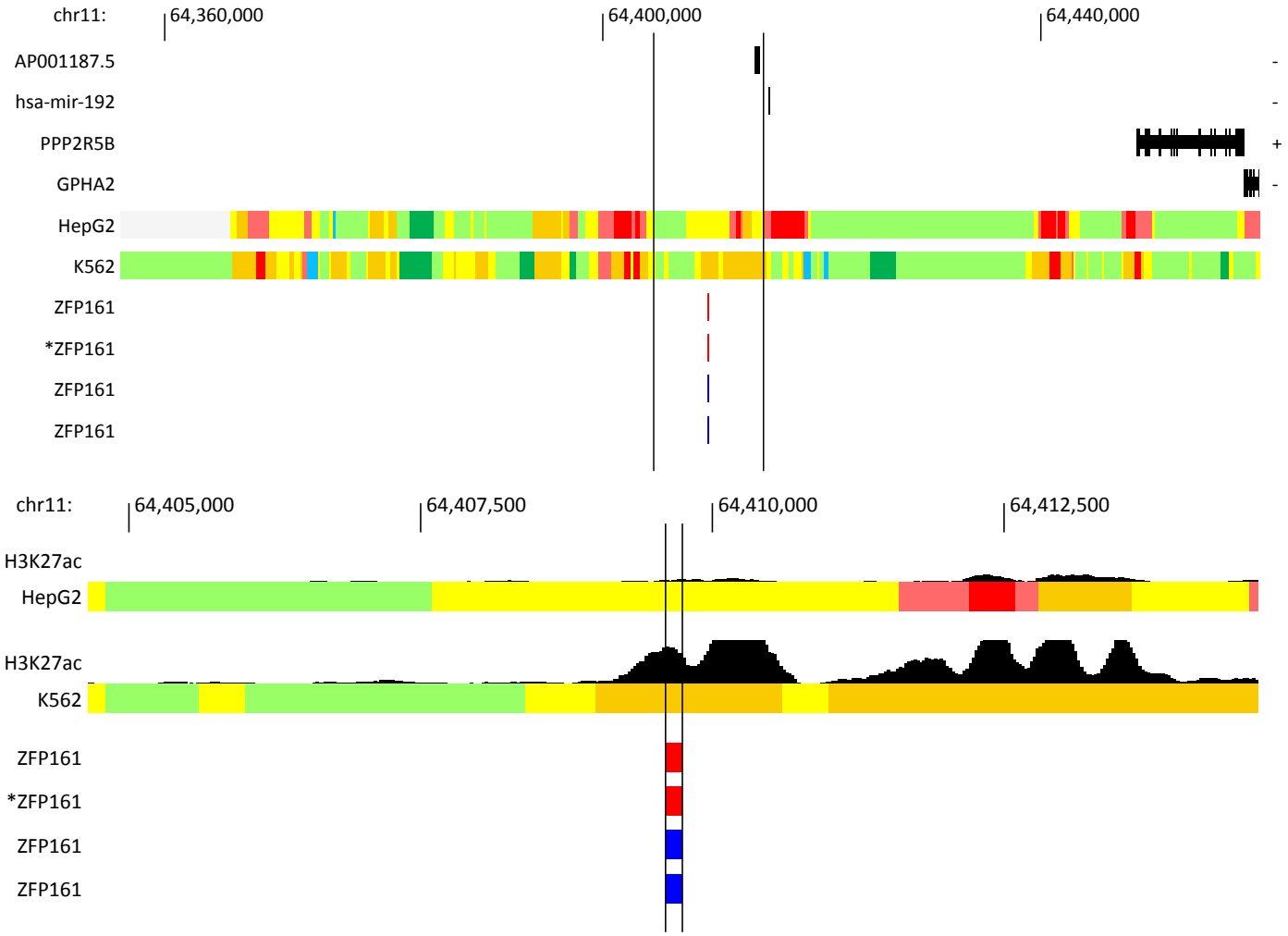
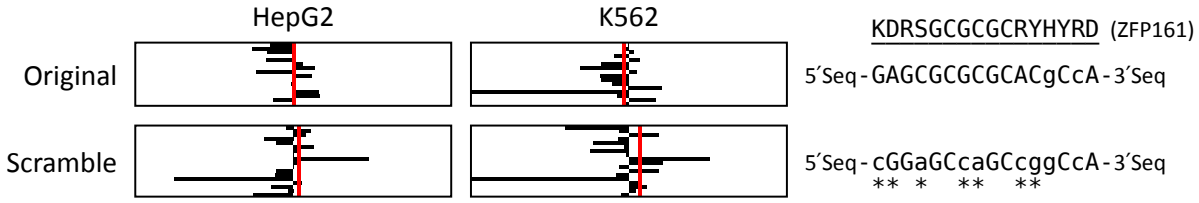
1696 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr11 64409664 64409679 + (hg18)





KDRSGCGCGCRYHYRD (ZFP161)

5′Seq-GAGCGCGCGCACgCcA-3′Seq

5′Seq-cGGaGCcaGCcggCcA-3′Seq

** * ** **

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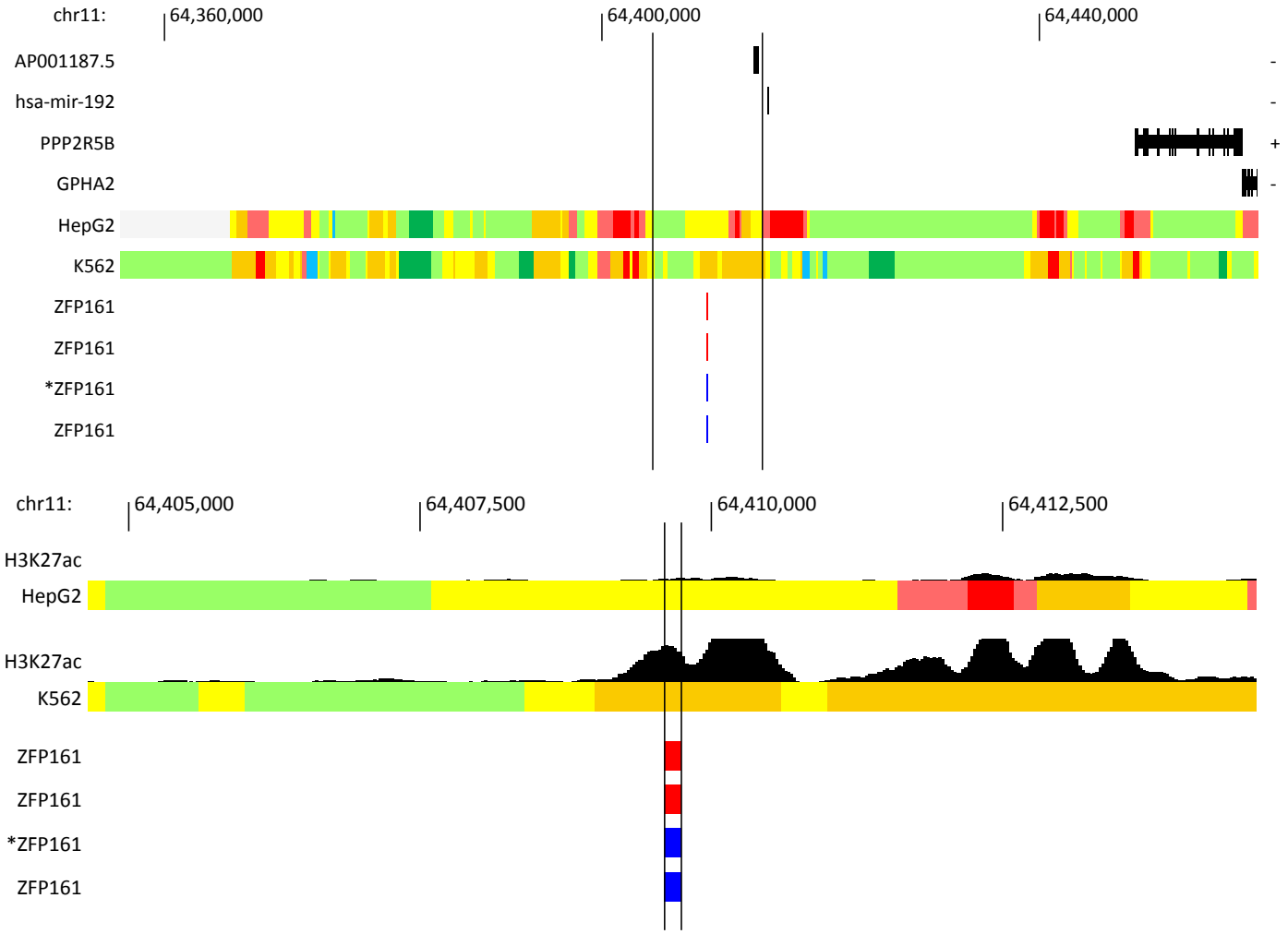
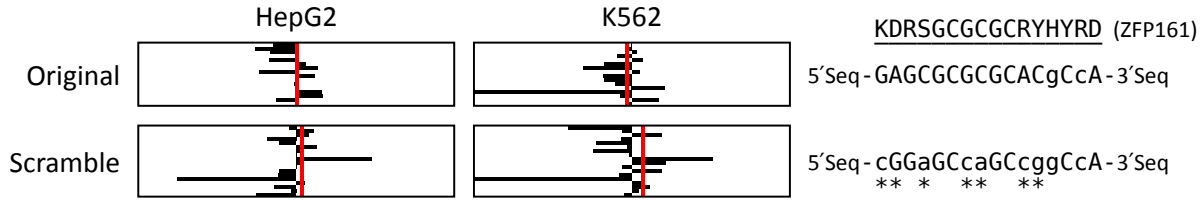
1697 ZFP161 in K562 enhancer

chr11 64409664 64409679 + (hg18)





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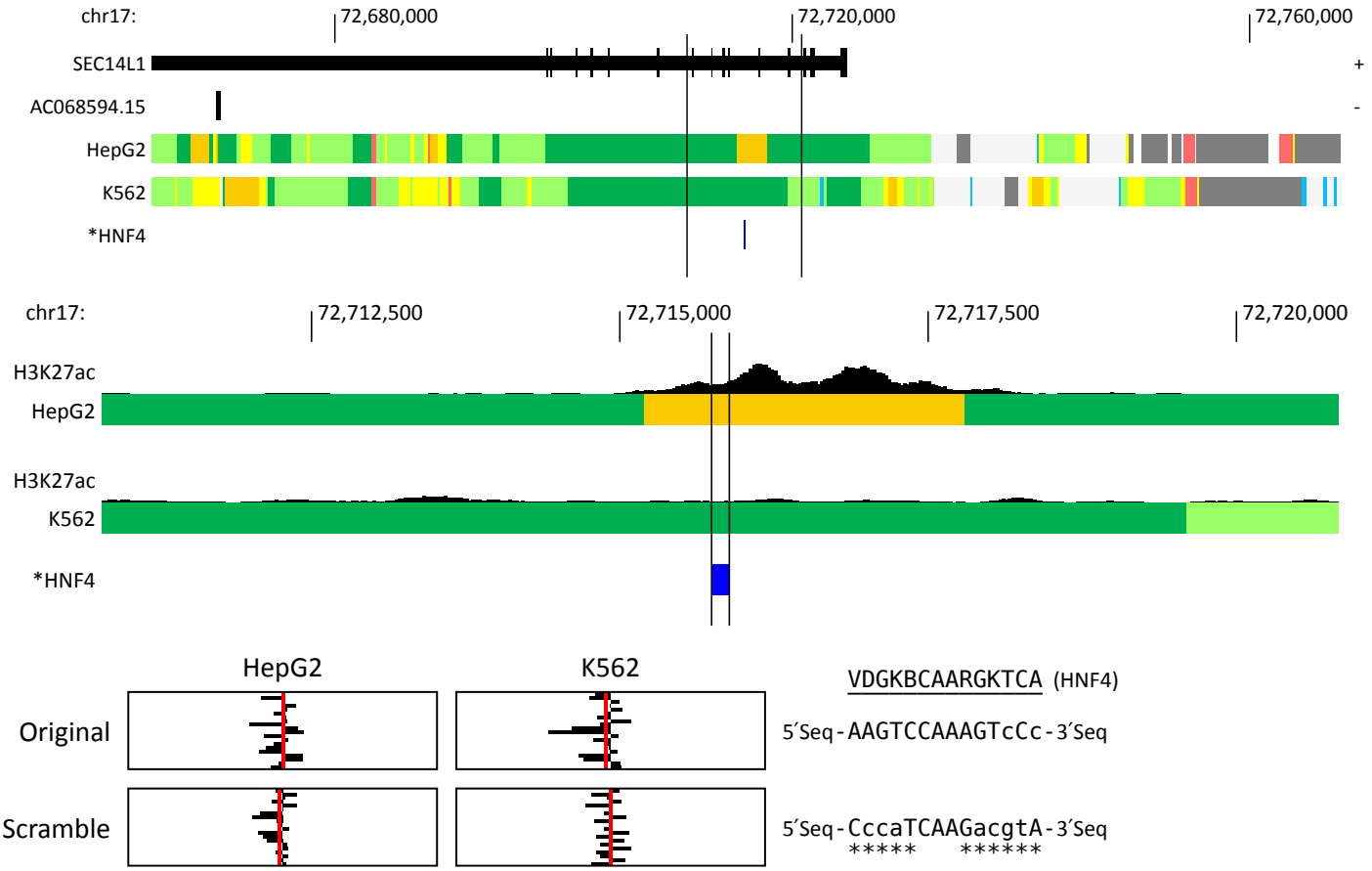
1698 HNF4 in HepG2 enhancer

chr17 72715810 72715823 - (hg18)



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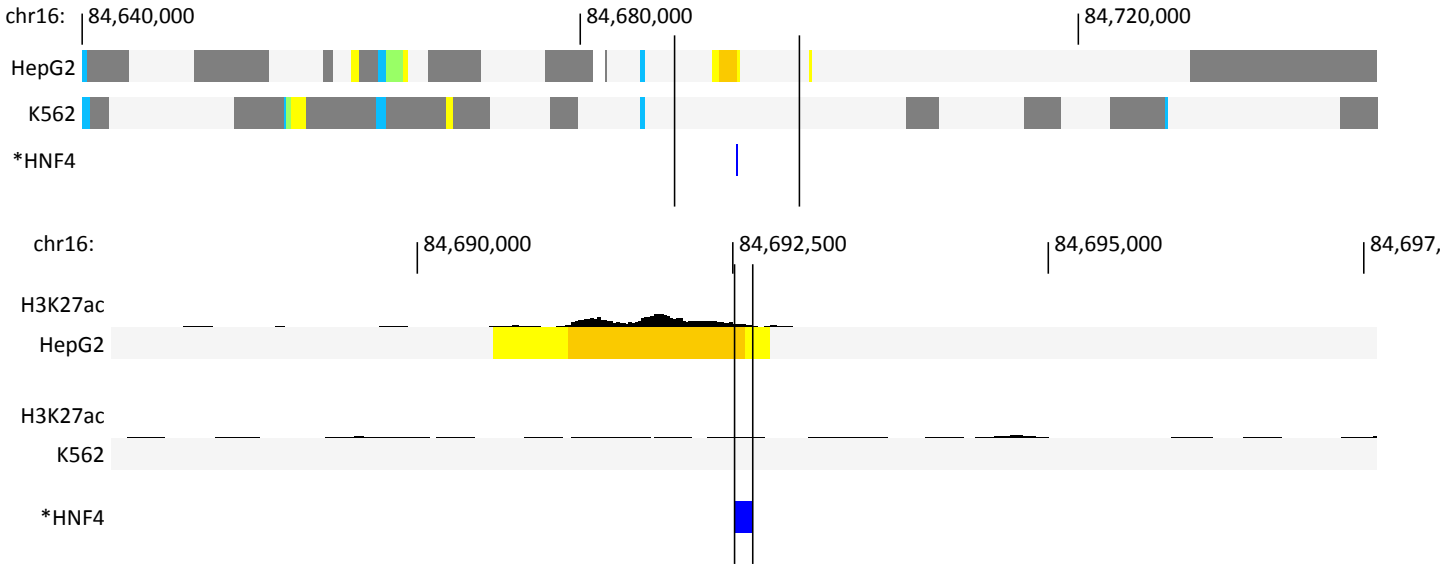
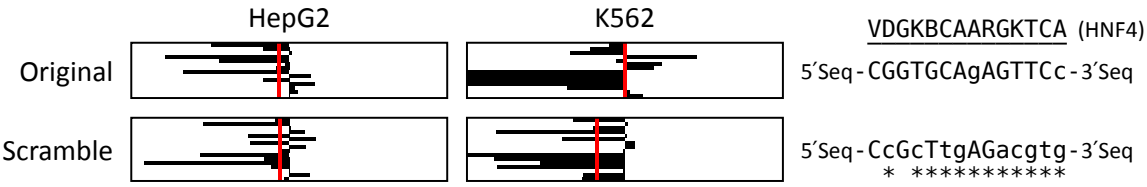
1699 HNF4 in HepG2 enhancer

chr16 84692580 84692593 + (hg18)





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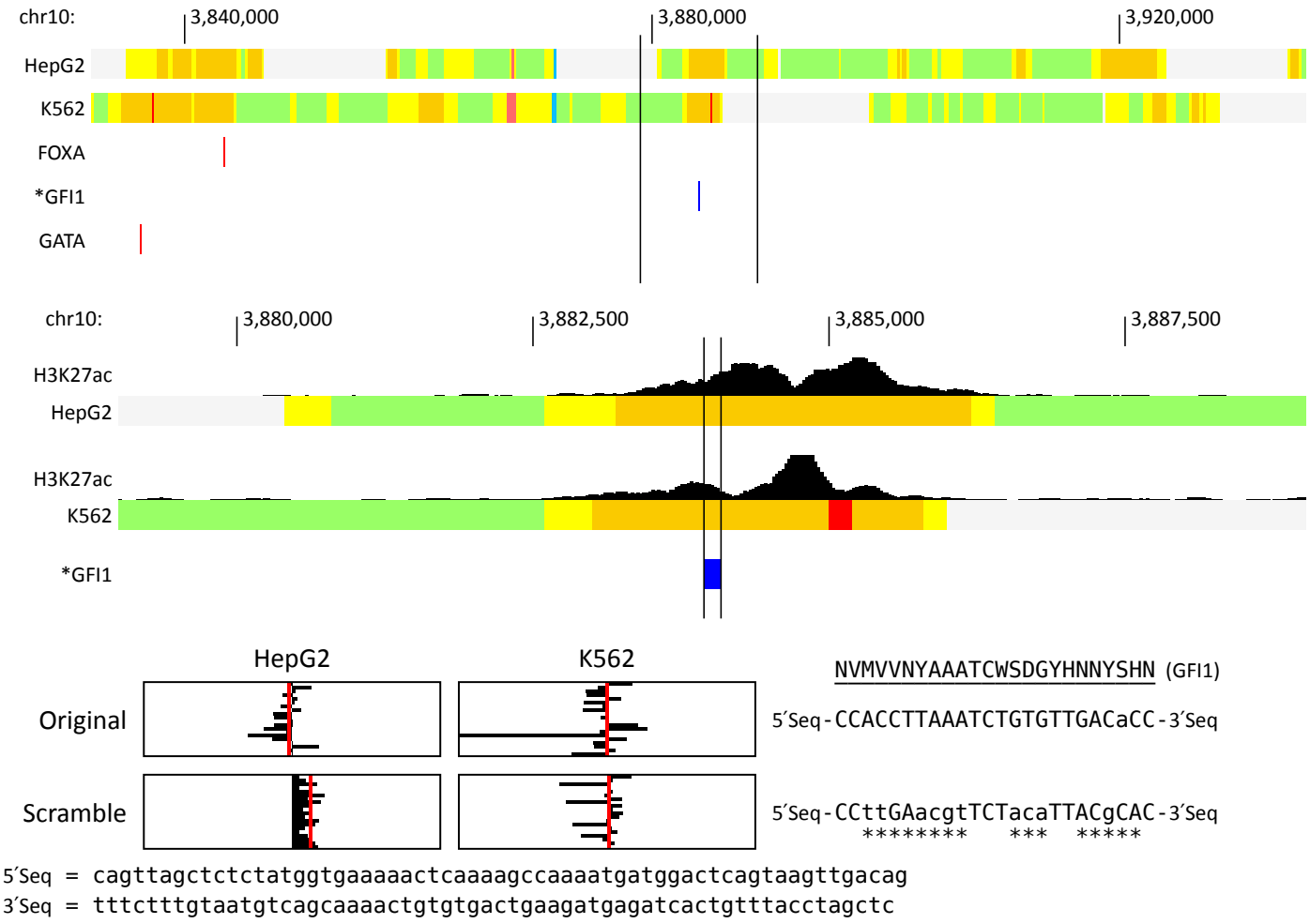
1700 GFI1 in HepG2 enhancer

chr10 3884005 3884028 - (hg18)



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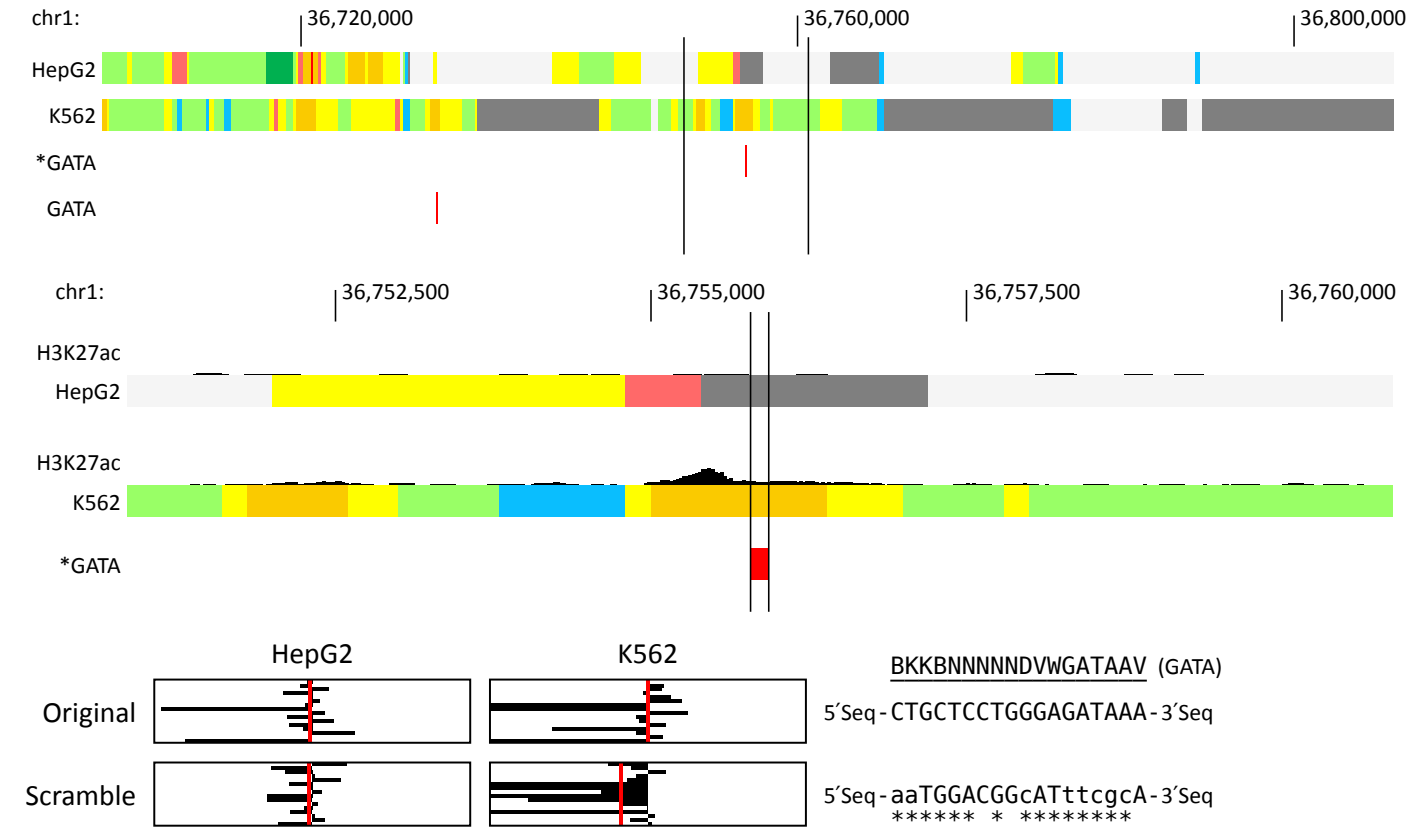
1701 GATA in K562 enhancer (conserved at 60% confidence)

chr1 36755853 36755870 + (hg18)



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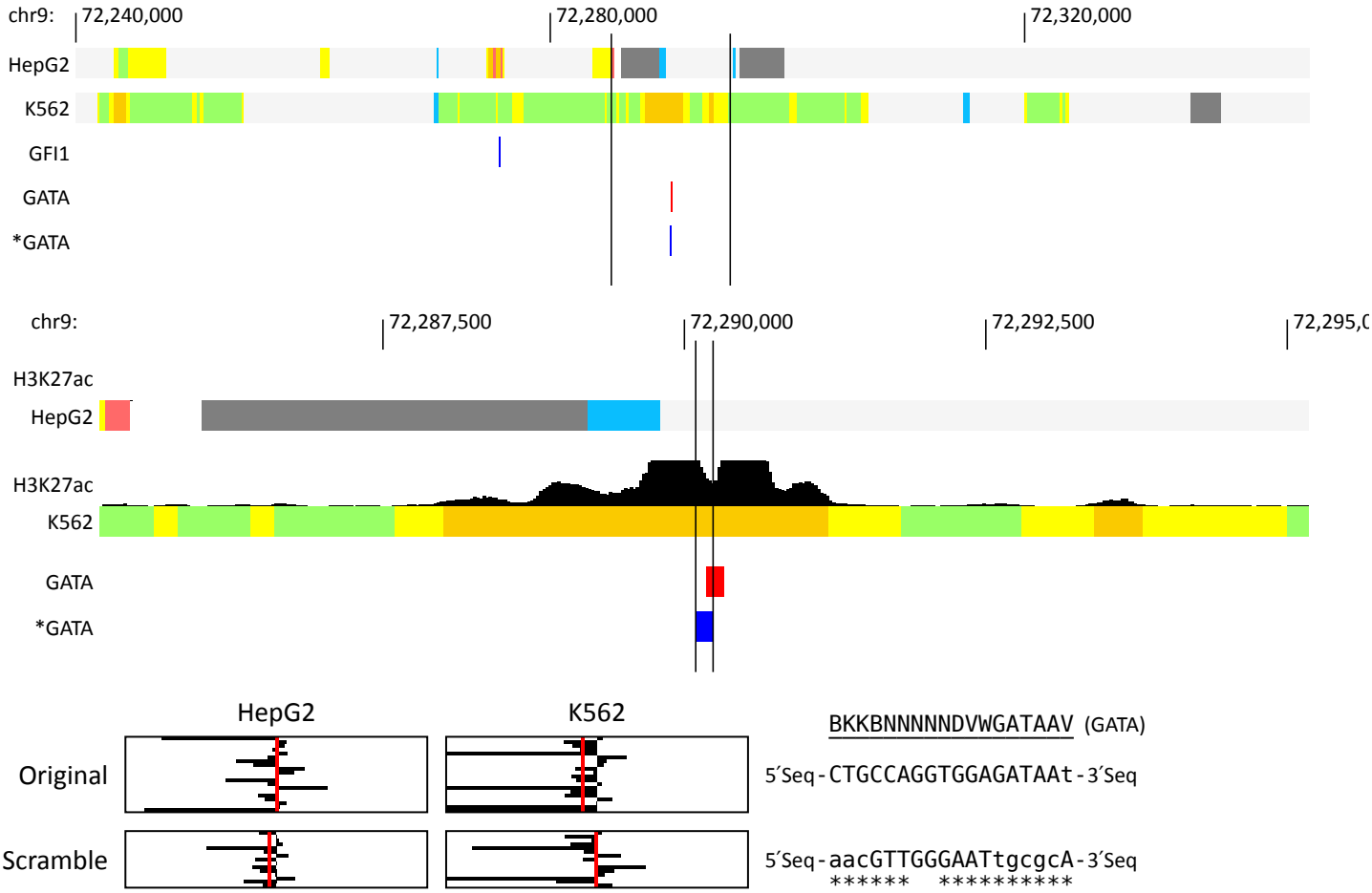
1702 GATA in K562 enhancer

chr9 72290158 72290175 - (hg18)



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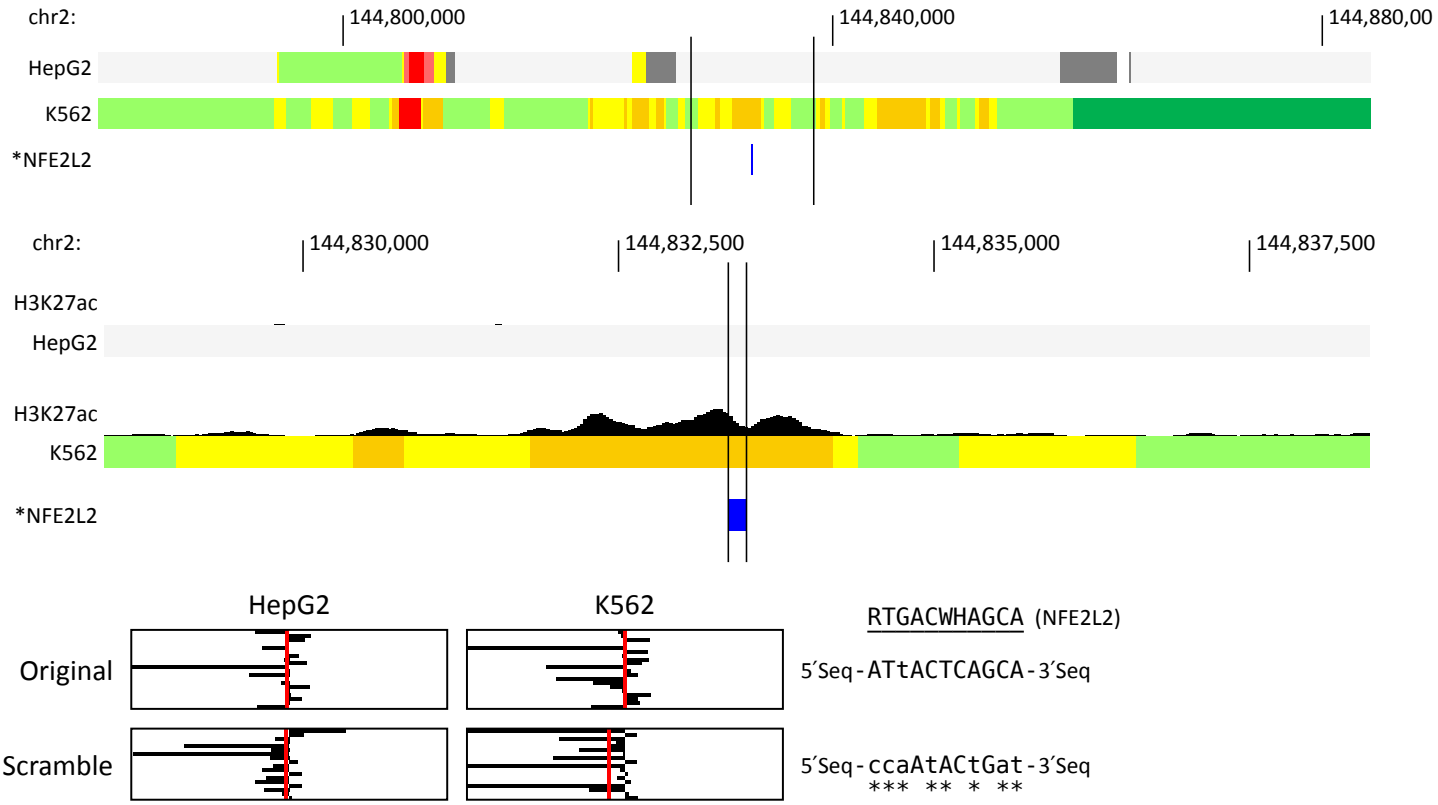
1703 NFE2L2 in K562 enhancer

chr2 144833437 144833447 + (hg18)



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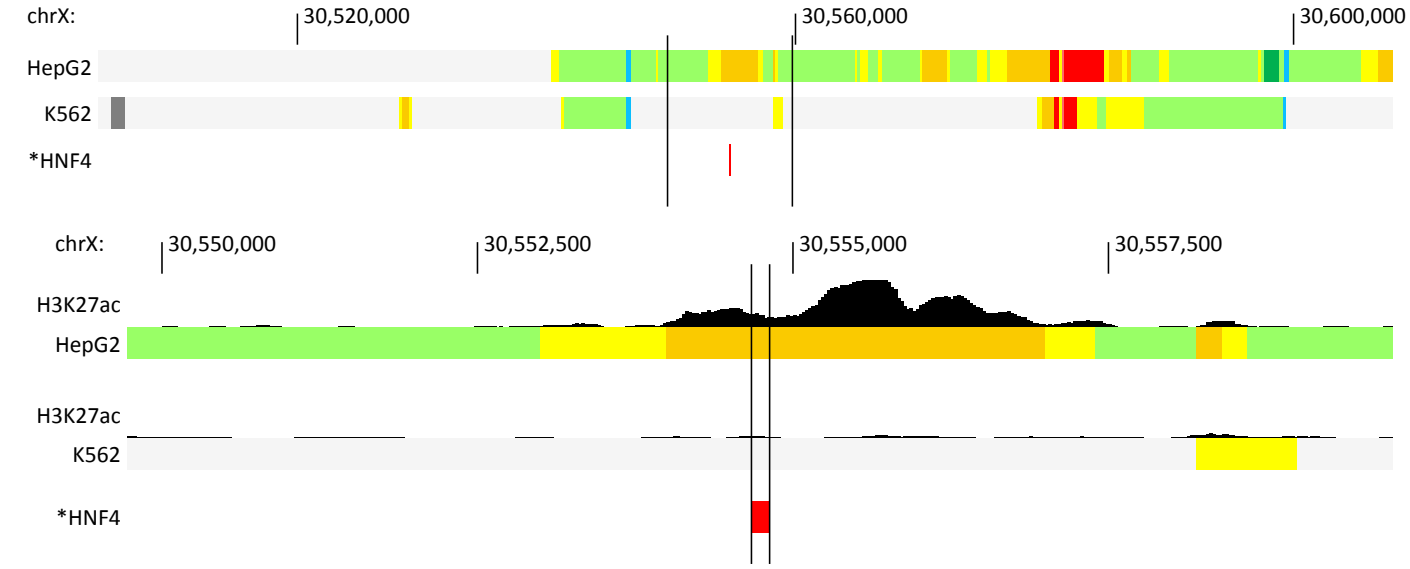
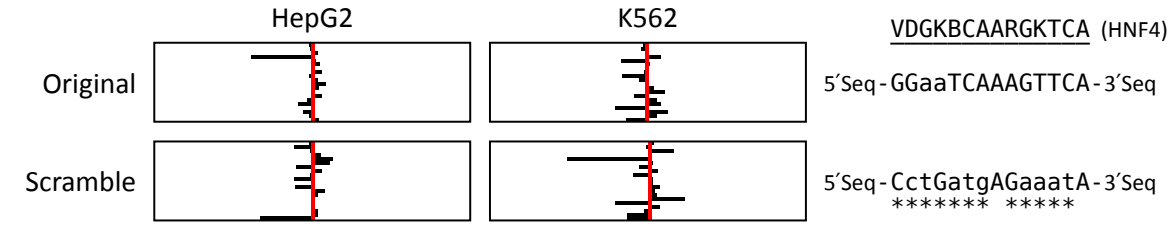
1704 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chrX 30554737 30554750 - (hg18)





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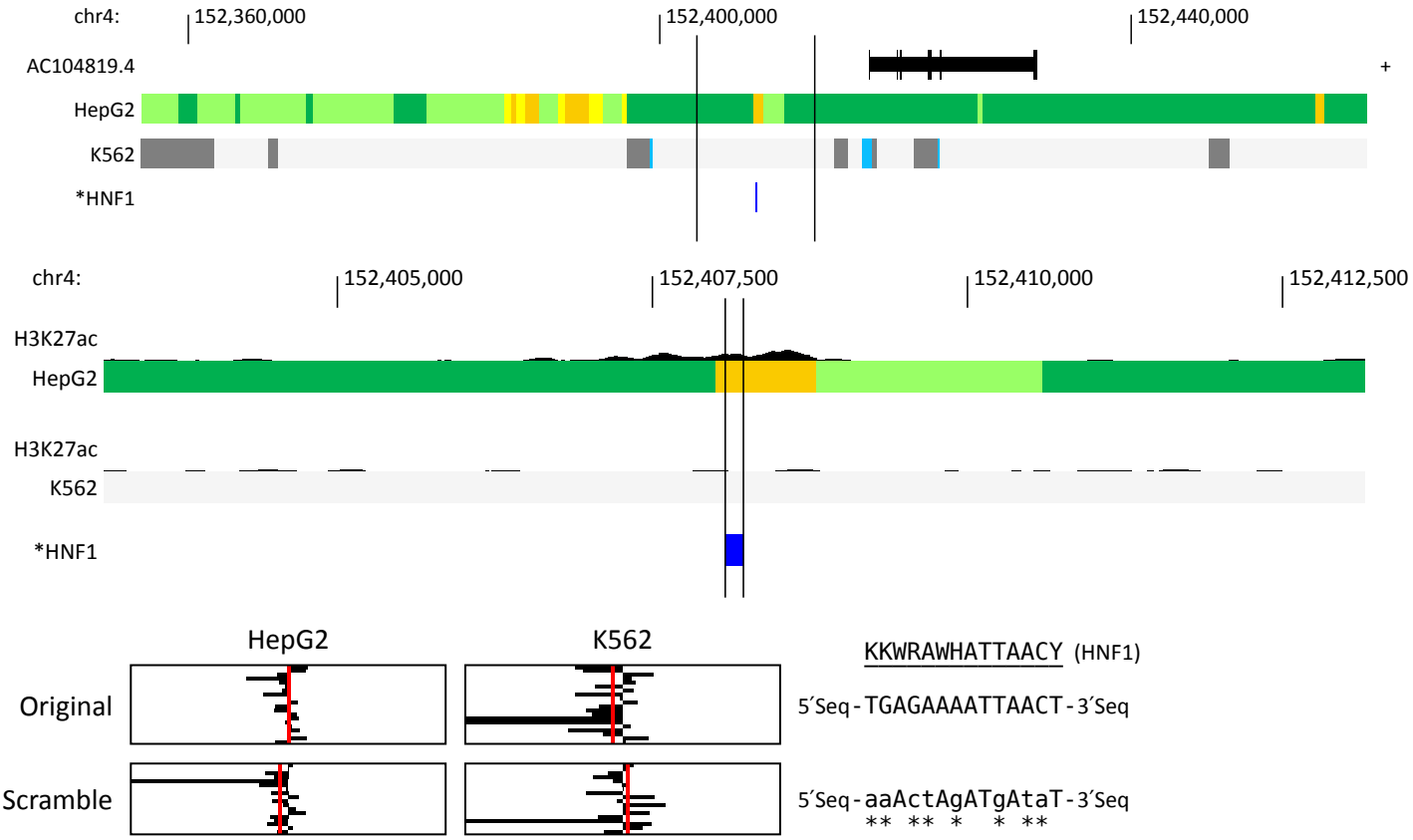
1705 HNF1 in HepG2 enhancer

chr4 152408144 152408157 + (hg18)



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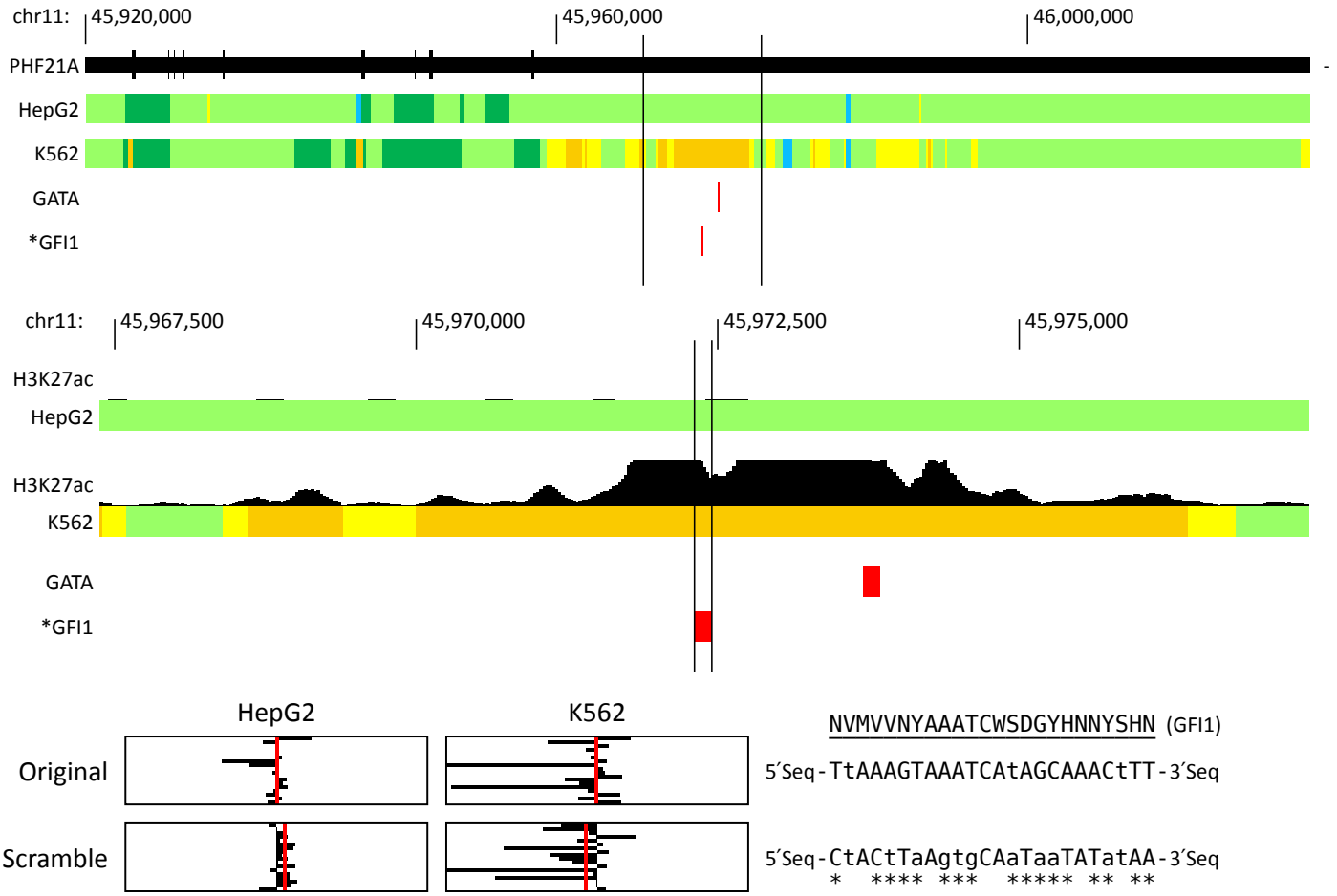
1706 GFI1 in K562 enhancer (conserved at 40% confidence)

chr11 45972368 45972391 + (hg18)



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5′Seq-CtACtTaAgtgCAaTaaTATatAA-3′Seq

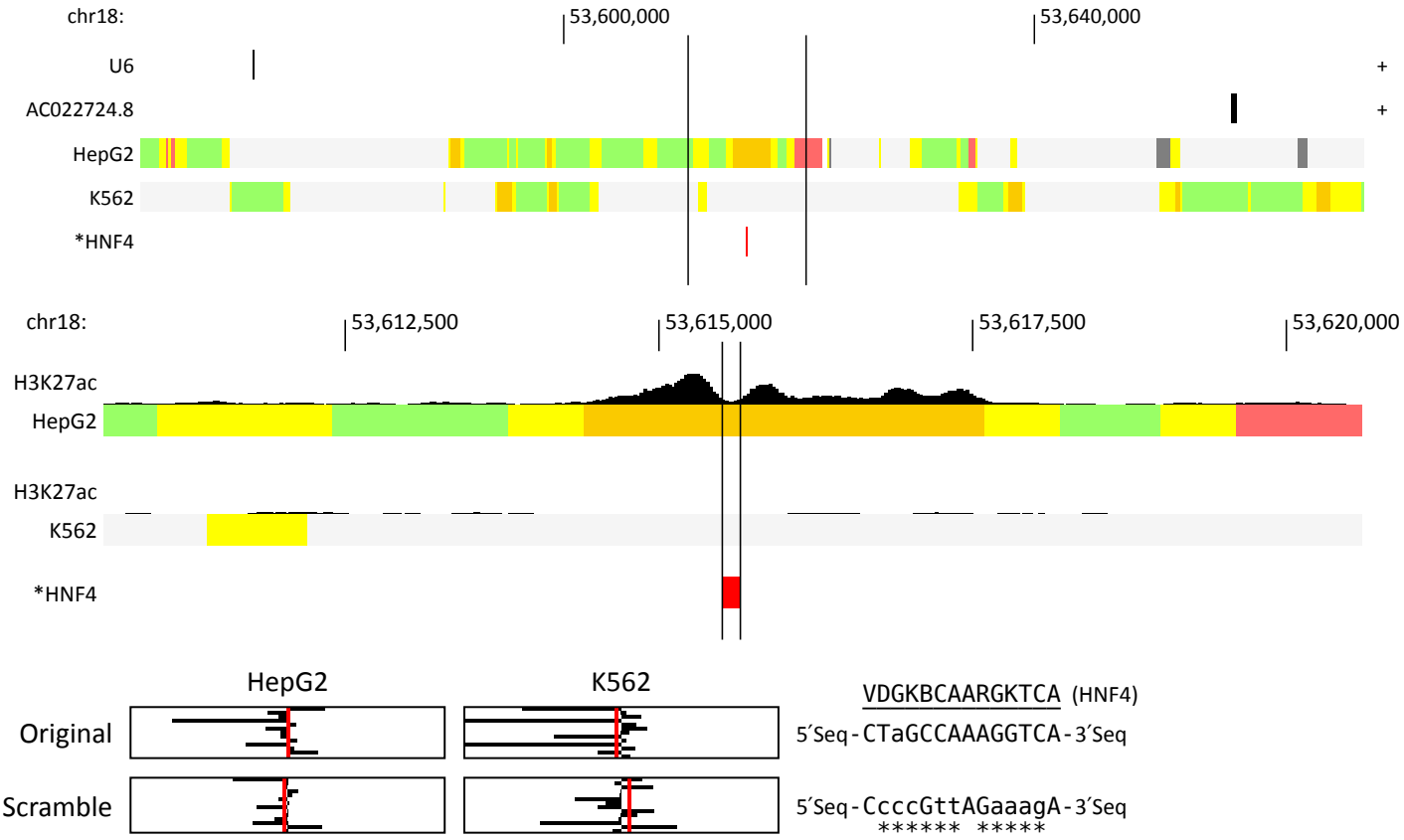
* **** *** ***** ** **

5′Seq = aaaaatggaatggacactggcaacatttagactgggtaaagtgttgggctctggtgggttt

3′Seq = acttaccatccactaaagctggatttaaaaatttgattcactaacagatttatcttactg

1707 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr18 53615571 53615584 + (hg18)



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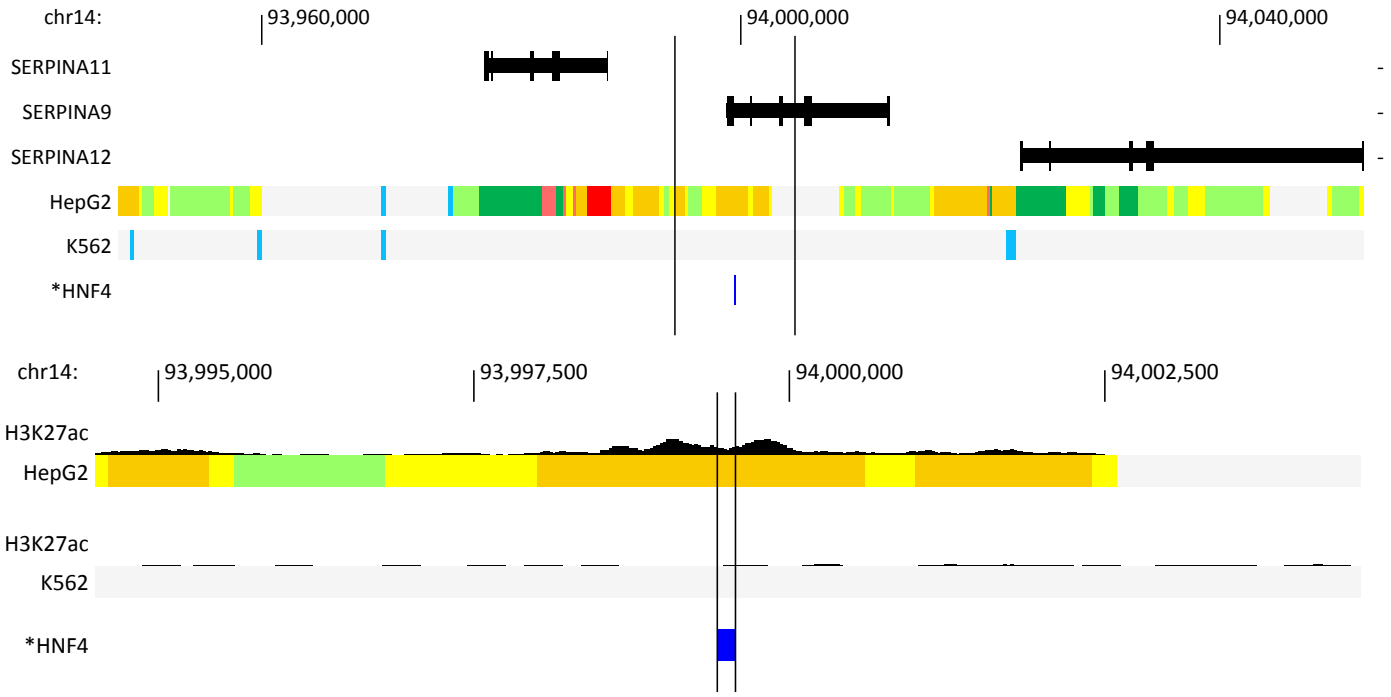
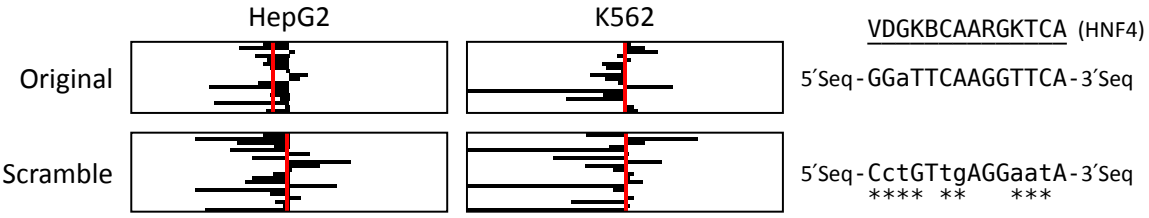
1708 HNF4 in HepG2 enhancer

chr14 93999495 93999508 + (hg18)





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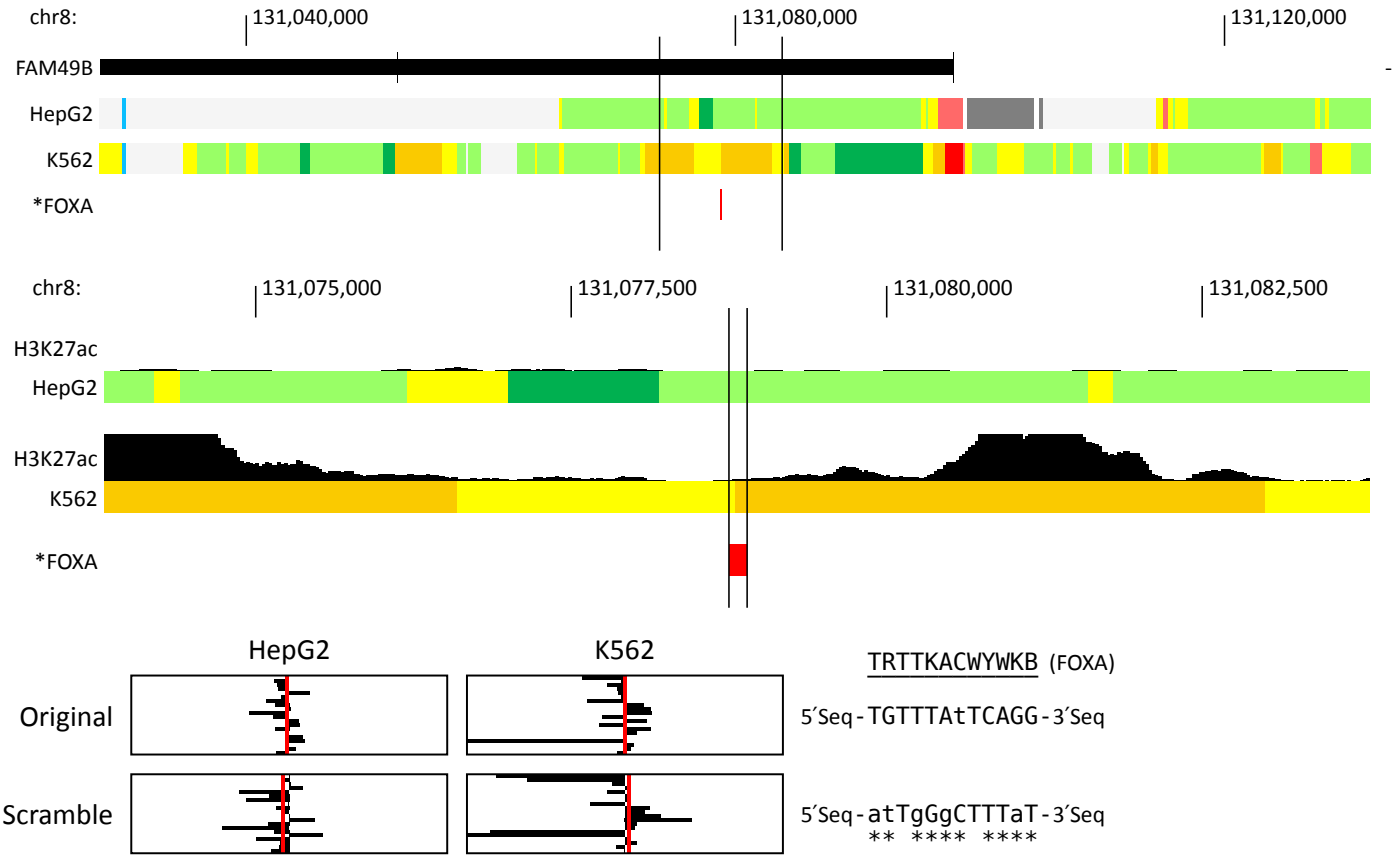
1709 FOXA in K562 enhancer (conserved at 40% confidence)

chr8 131078817 131078828 + (hg18)



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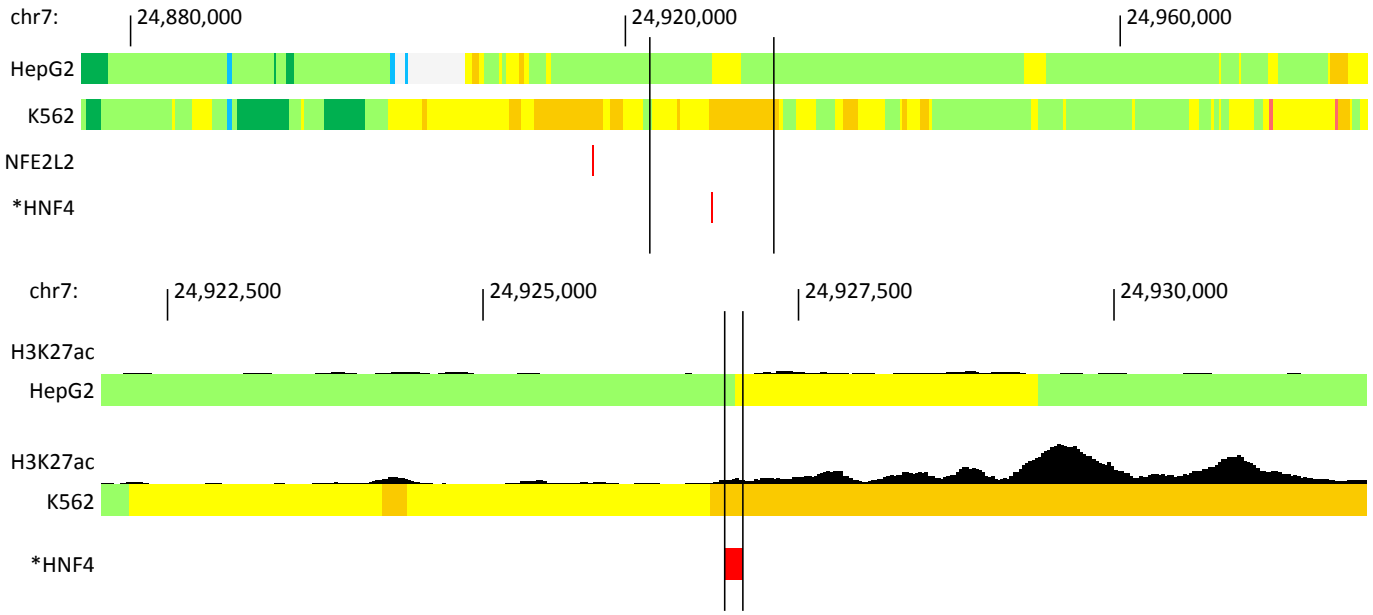
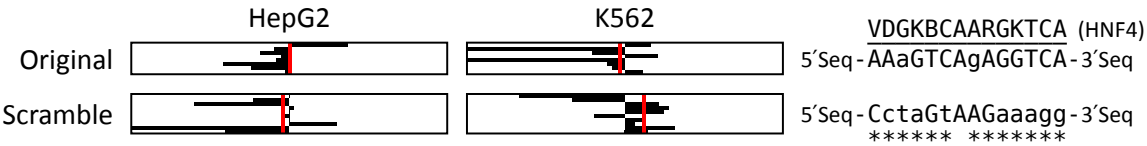
1710 HNF4 in K562 enhancer (conserved at 50% confidence)

chr7 24926981 24926994 + (hg18)





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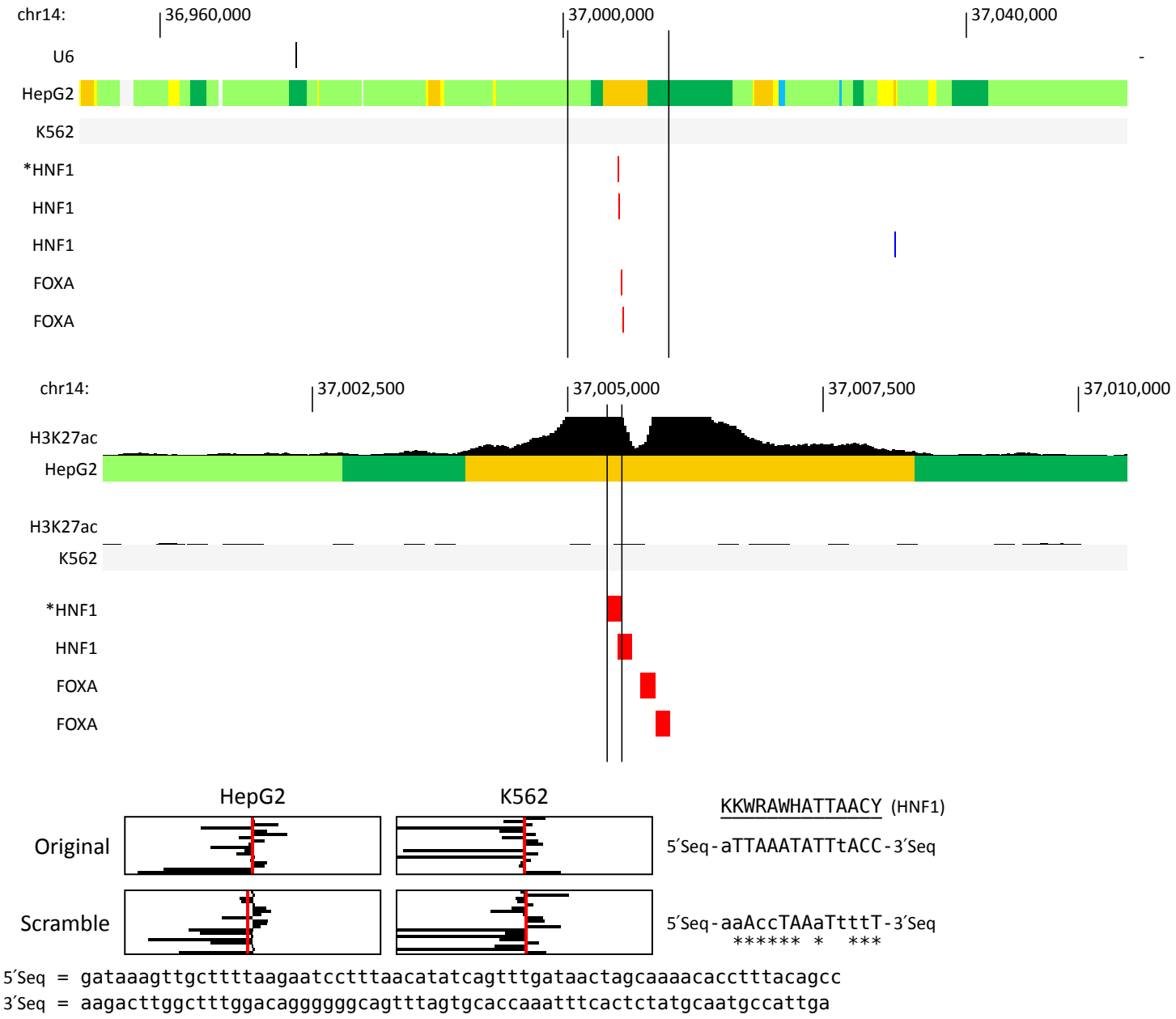
1711 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr14 37005452 37005465 + (hg18)



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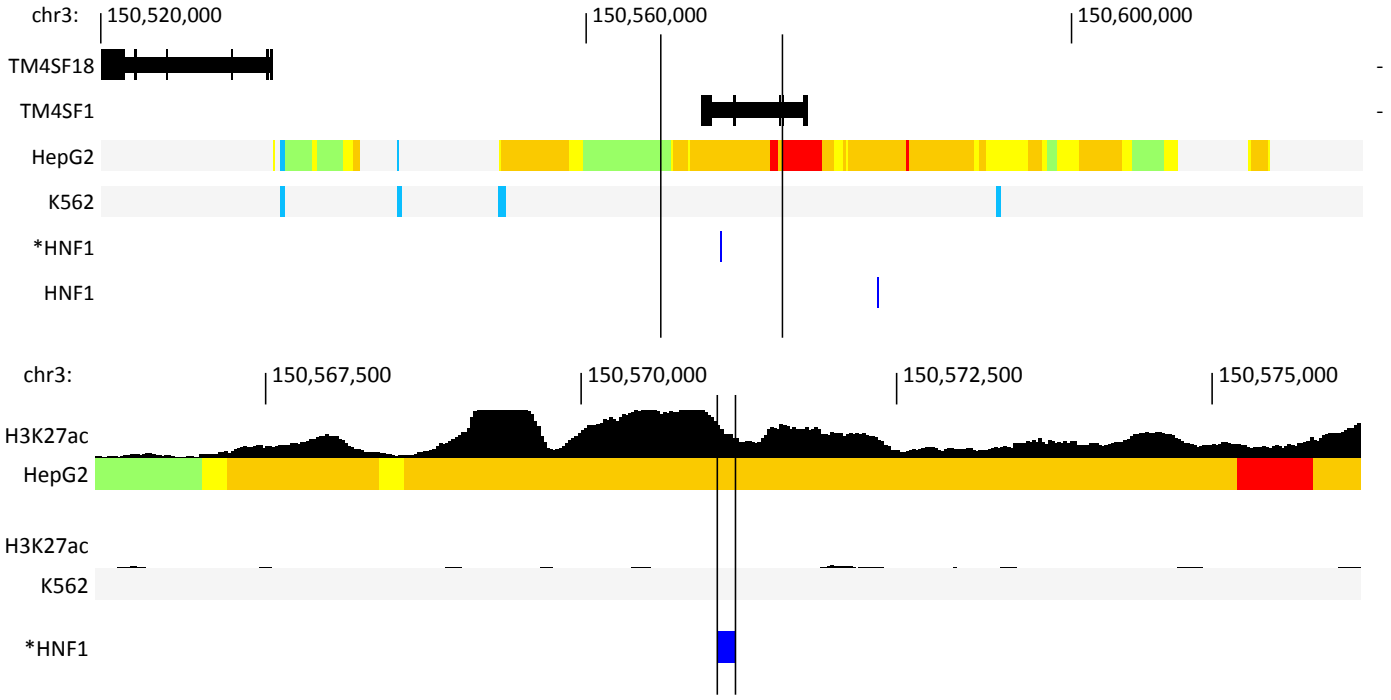
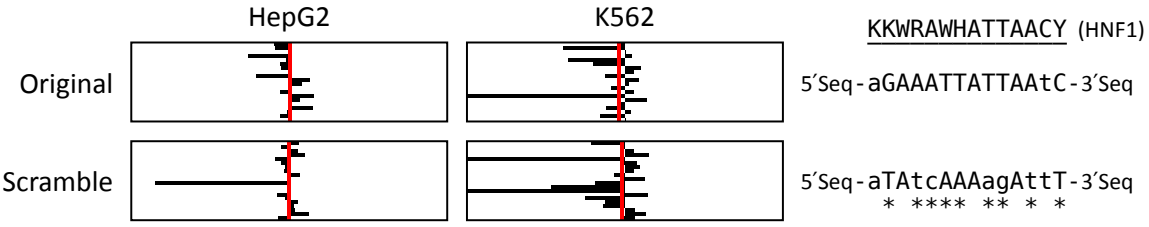
1712 HNF1 in HepG2 enhancer

chr3 150571145 150571158 + (hg18)





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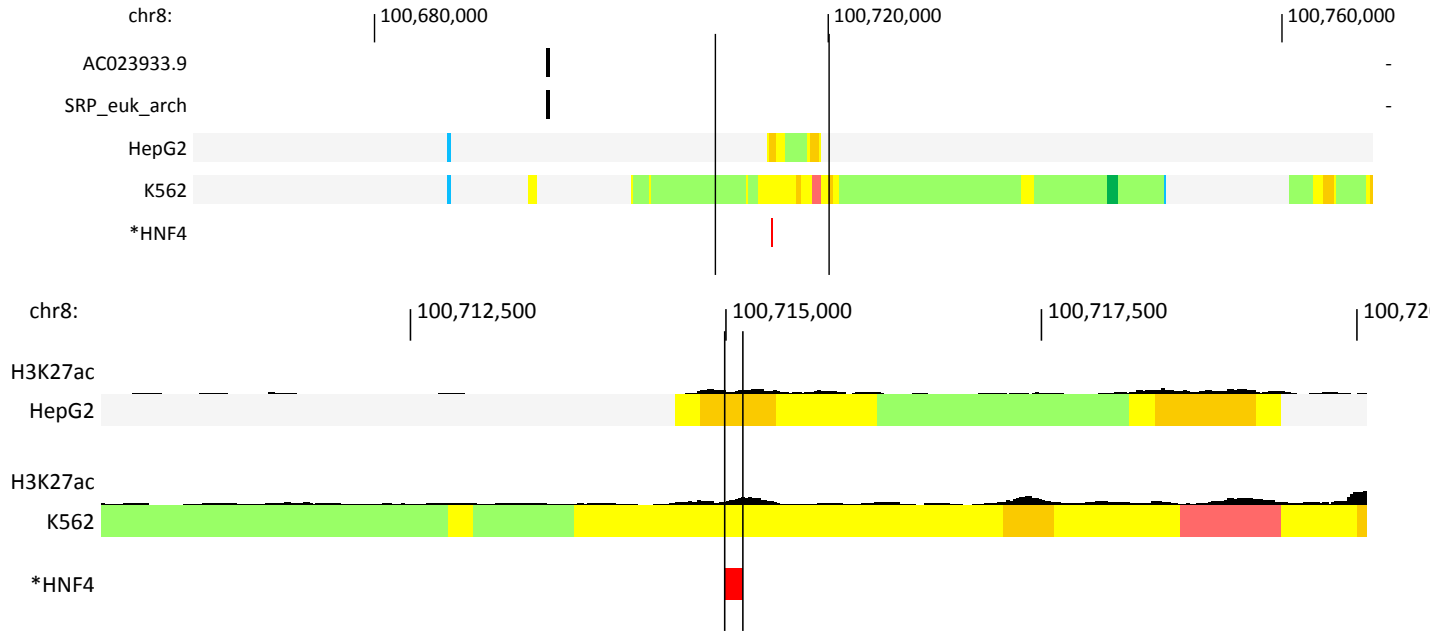
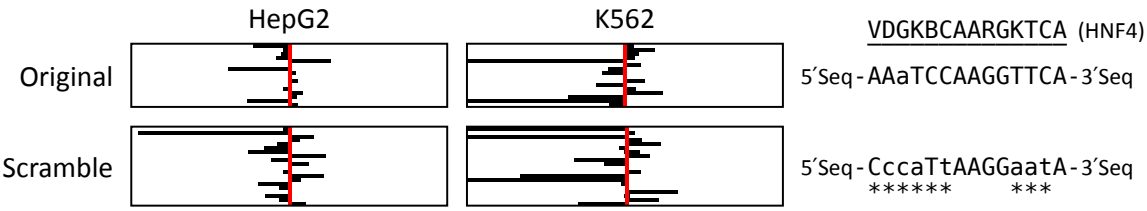
1713 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr8 100715056 100715069 - (hg18)





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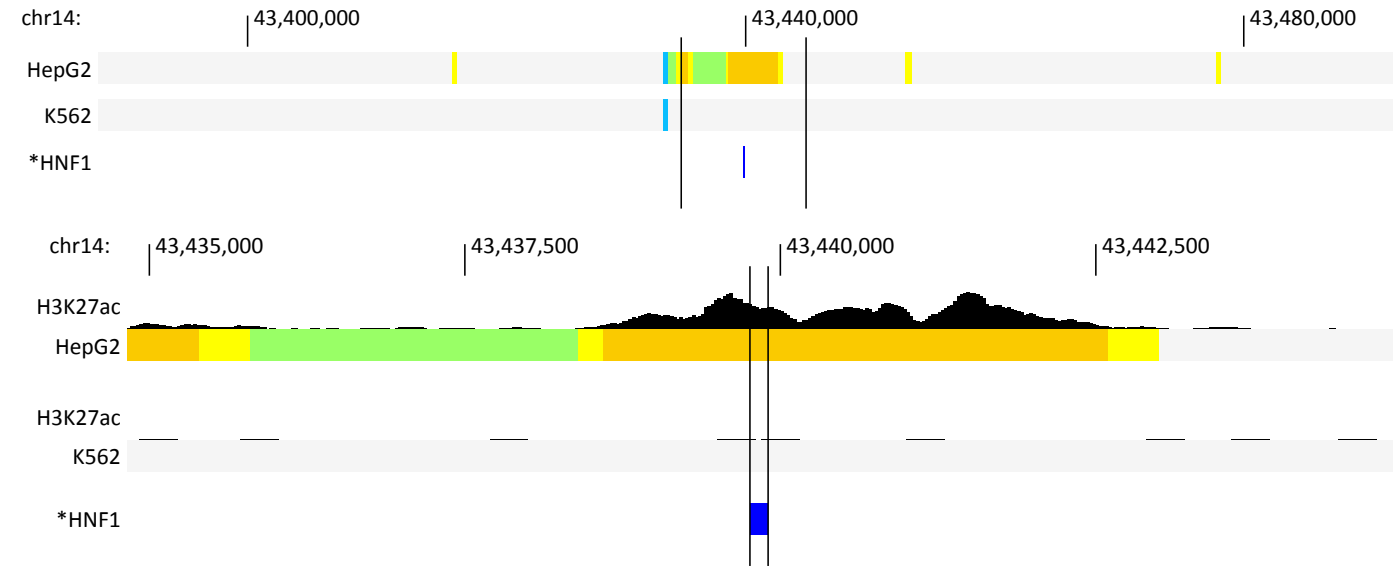
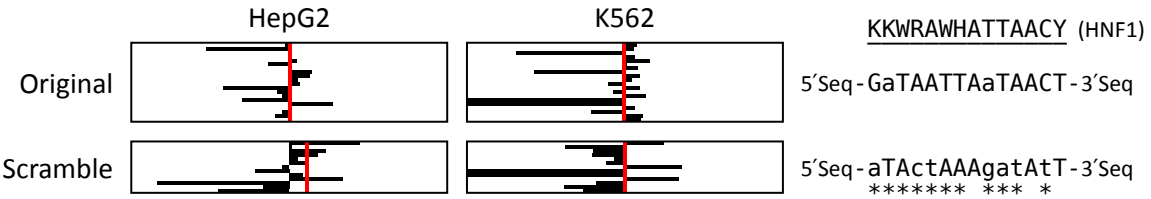
1714 HNF1 in HepG2 enhancer

chr14 43439825 43439838 + (hg18)





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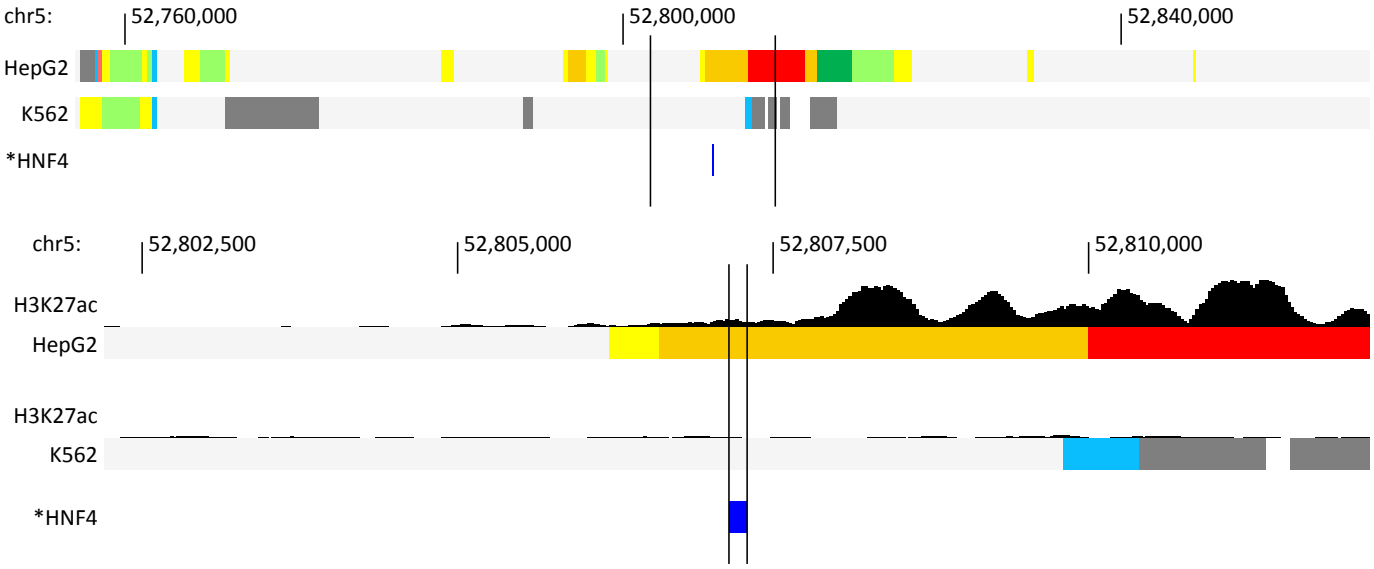
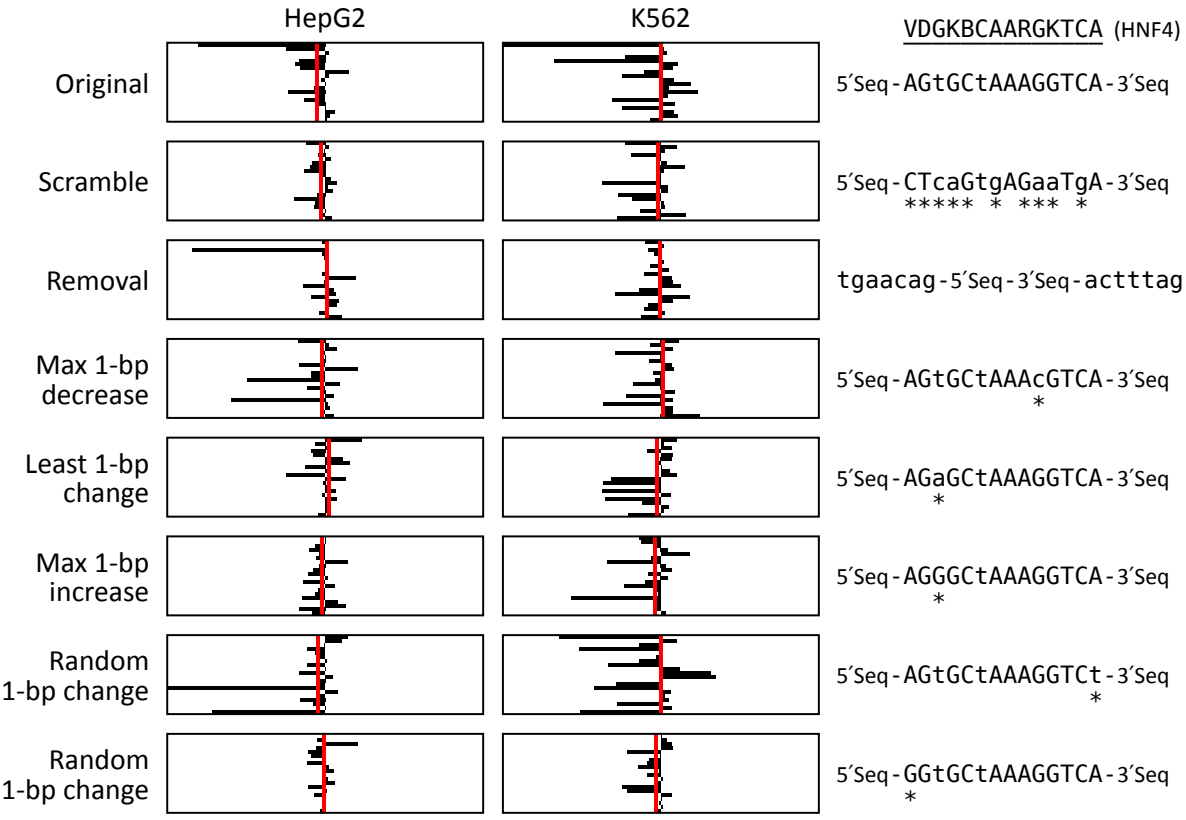
1715 HNF4 in HepG2 enhancer

chr5 52807216 52807229 + (hg18)





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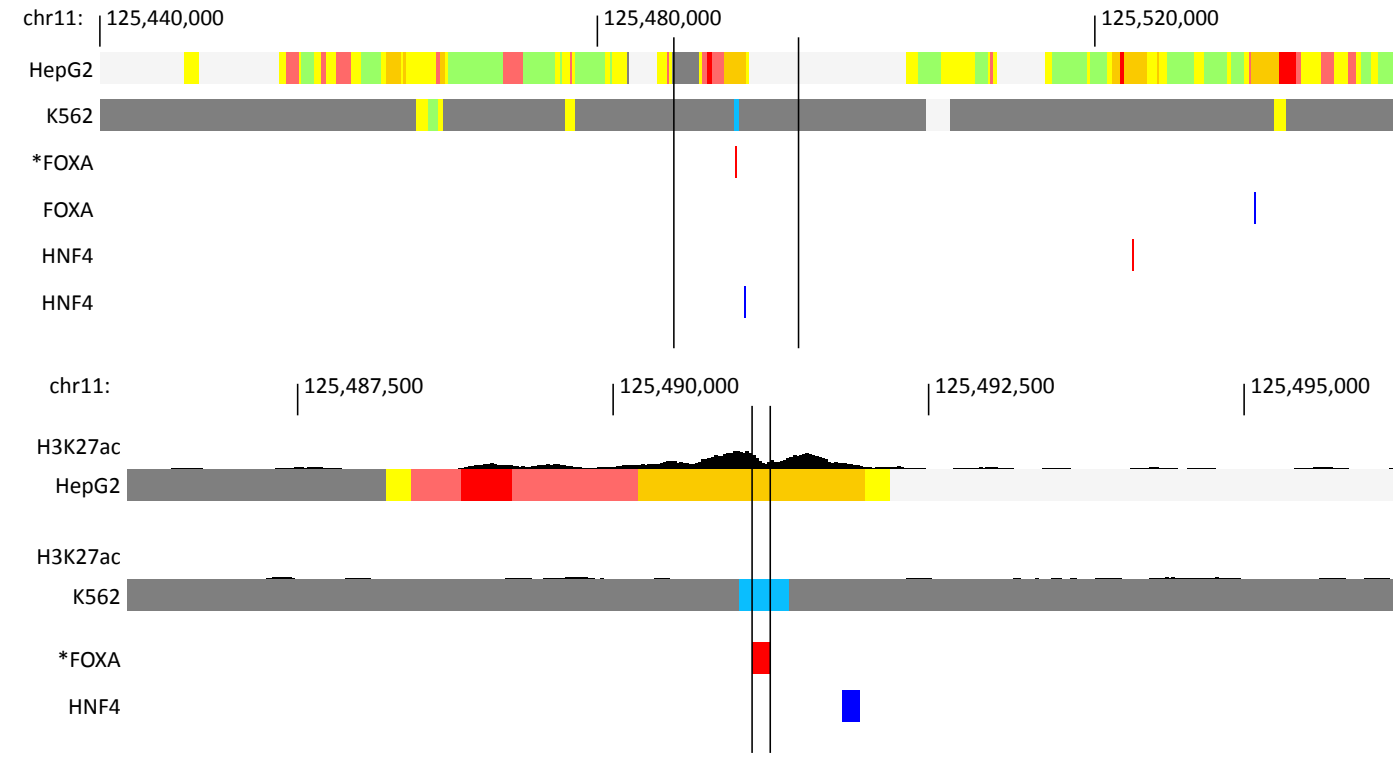
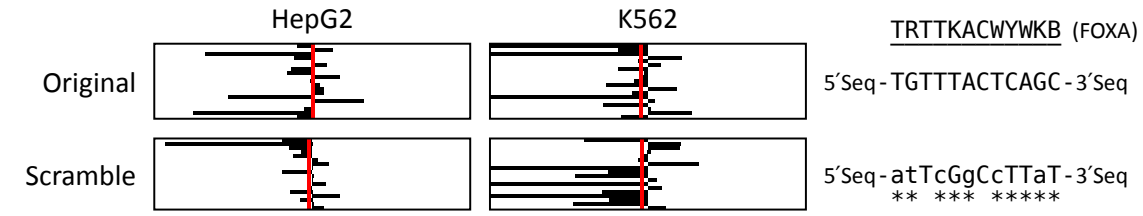
1716 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr11 125491168 125491179 - (hg18)





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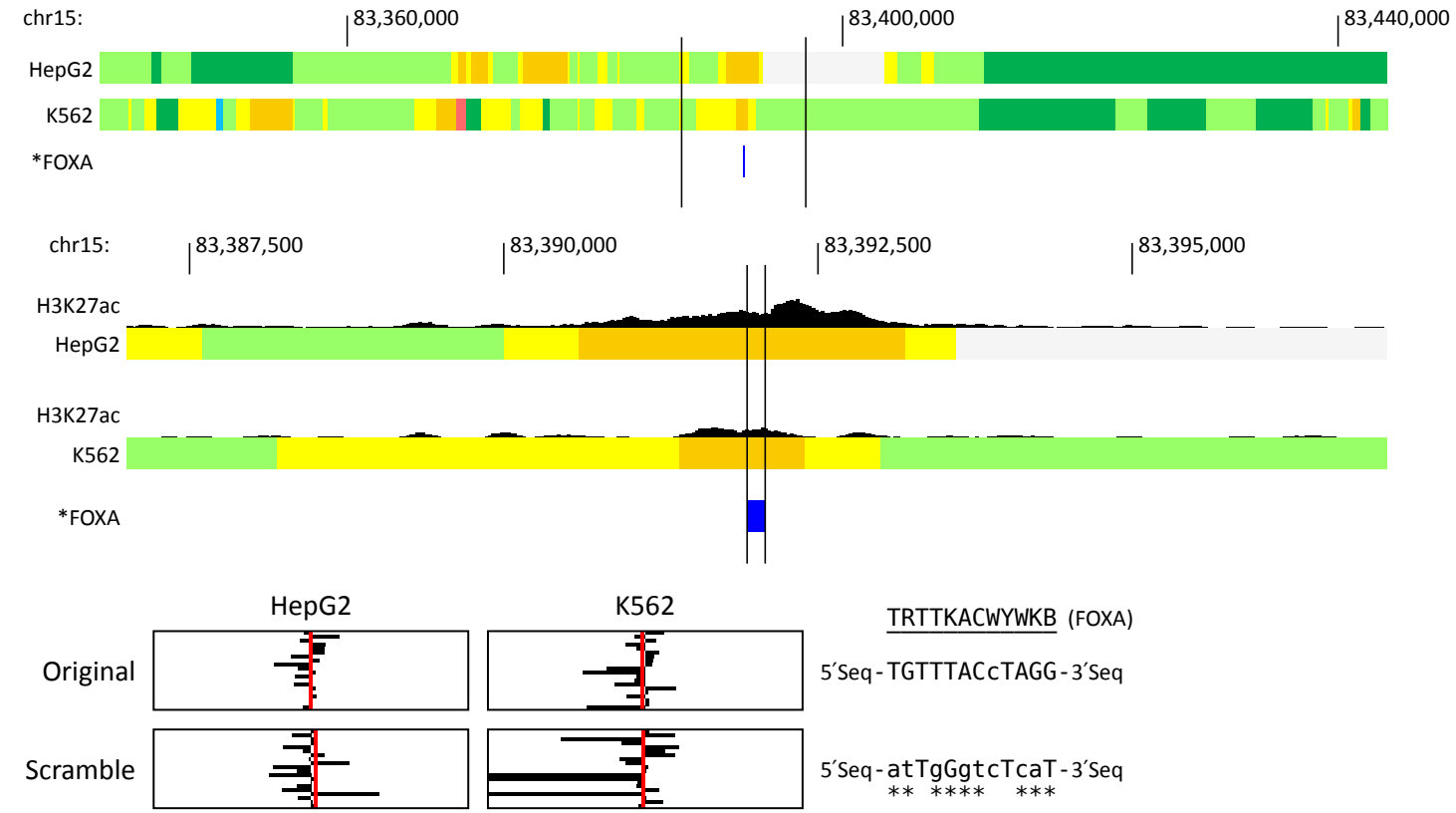
1717 FOXA in HepG2 enhancer

chr15 83392003 83392014 + (hg18)



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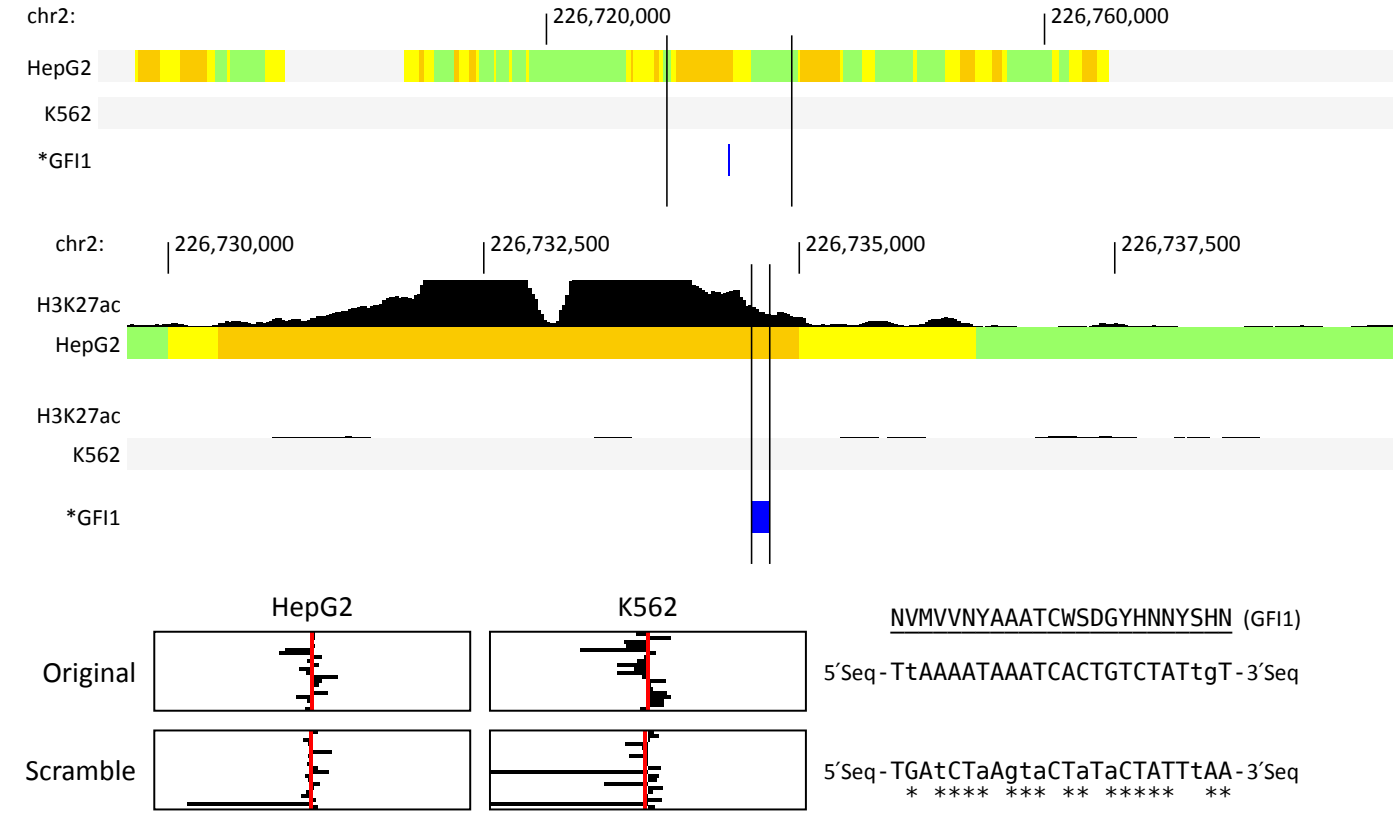
1718 GFI1 in HepG2 enhancer

chr2 226734683 226734706 - (hg18)



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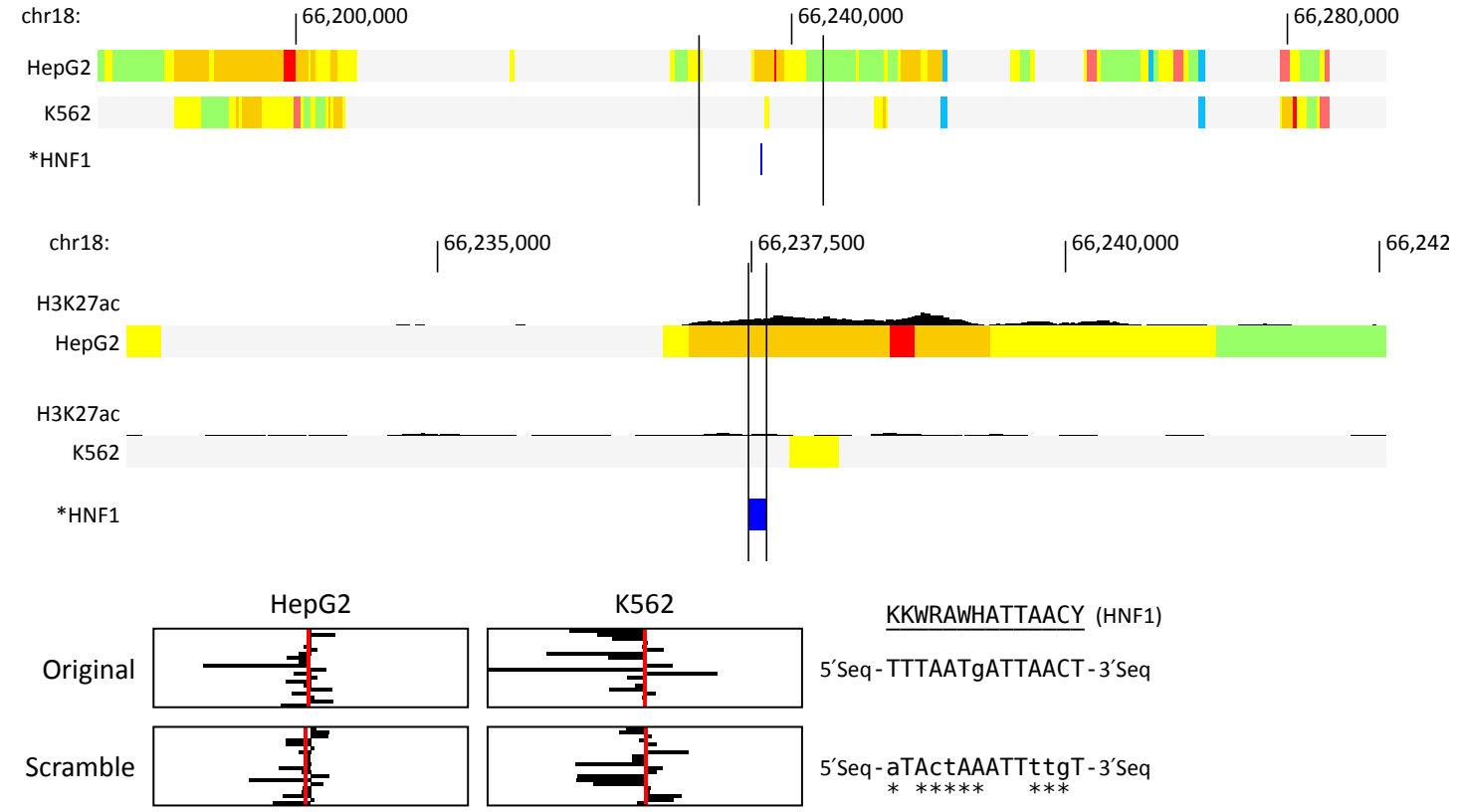
1719 HNF1 in HepG2 enhancer

chr18 66237542 66237555 - (hg18)



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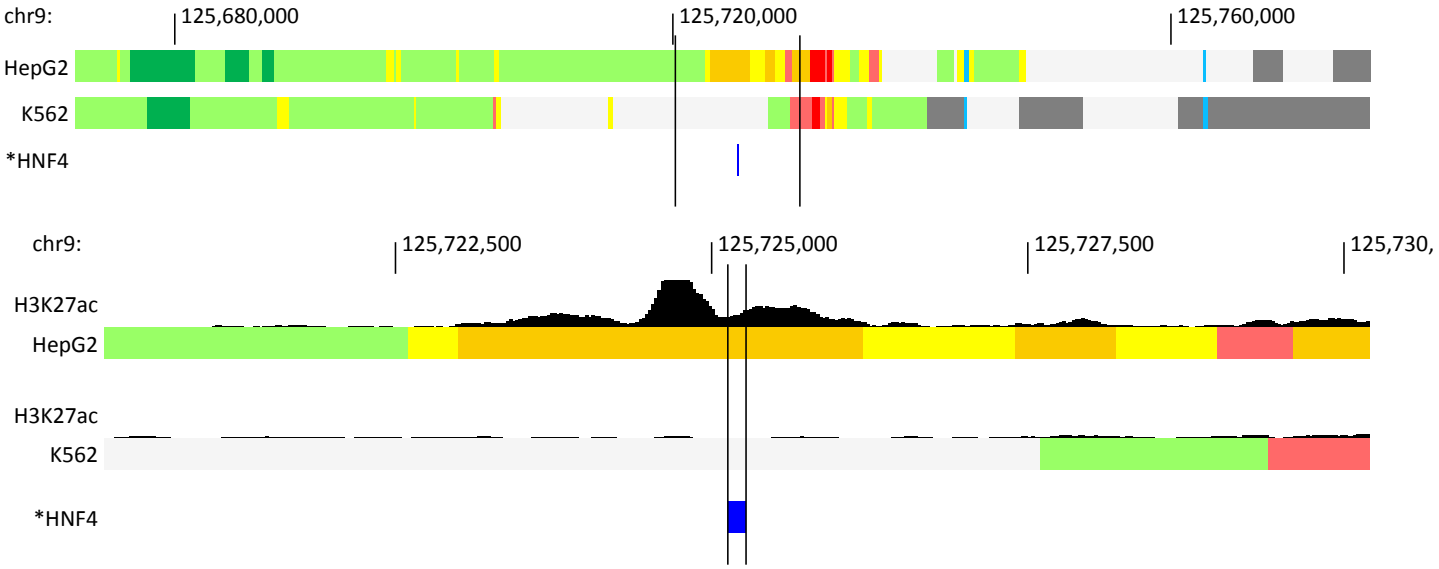
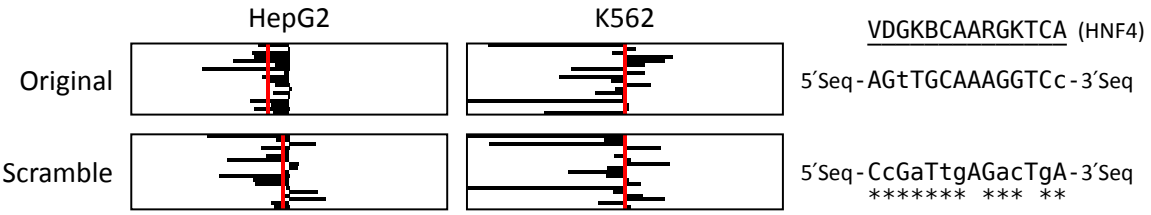
1720 HNF4 in HepG2 enhancer

chr9 125725194 125725207 - (hg18)





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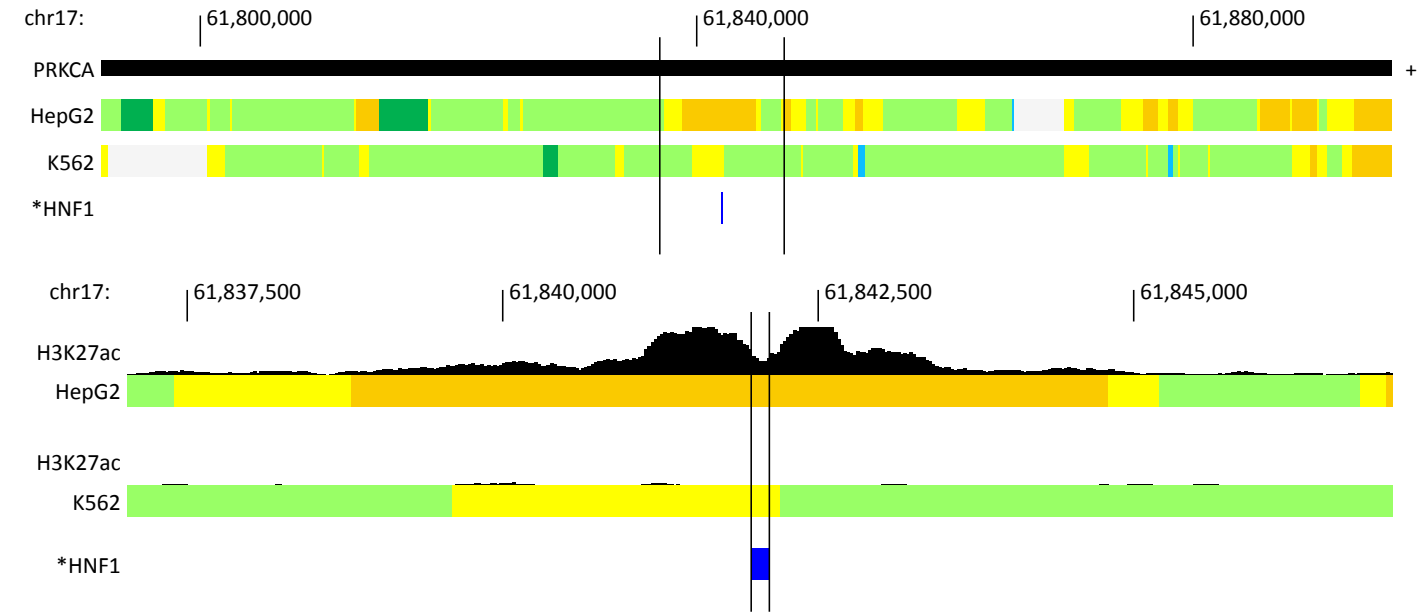
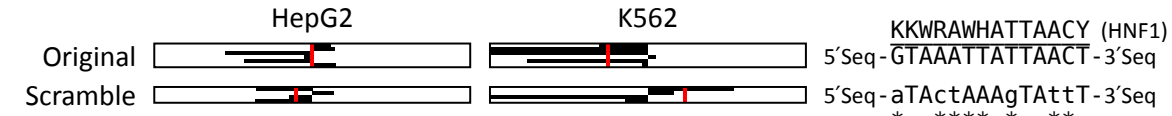
1721 HNF1 in HepG2 enhancer

chr17 61842035 61842048 + (hg18)





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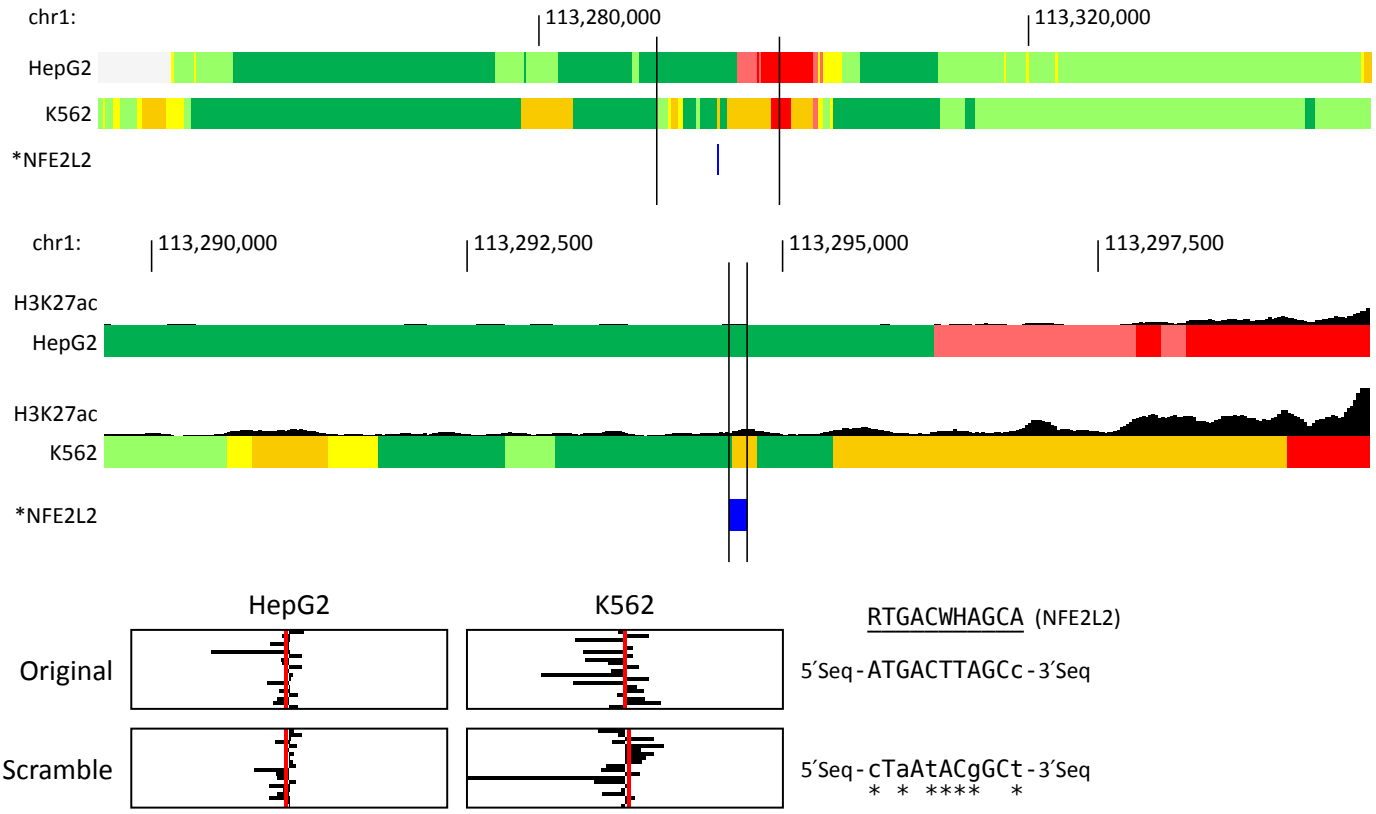
1722 NFE2L2 in K562 enhancer

chr1 113294642 113294652 - (hg18)



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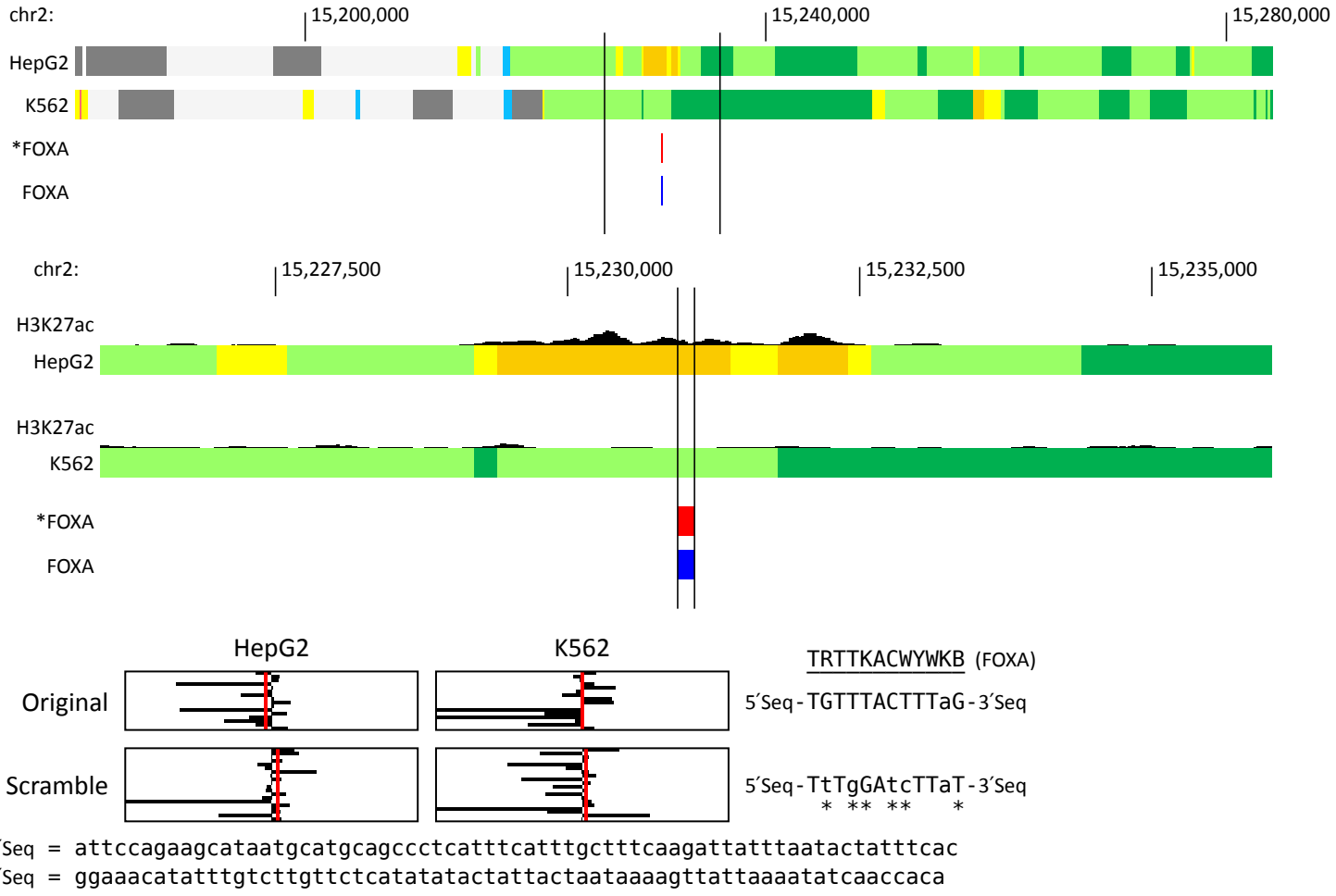
1723 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 15231009 15231020 + (hg18)



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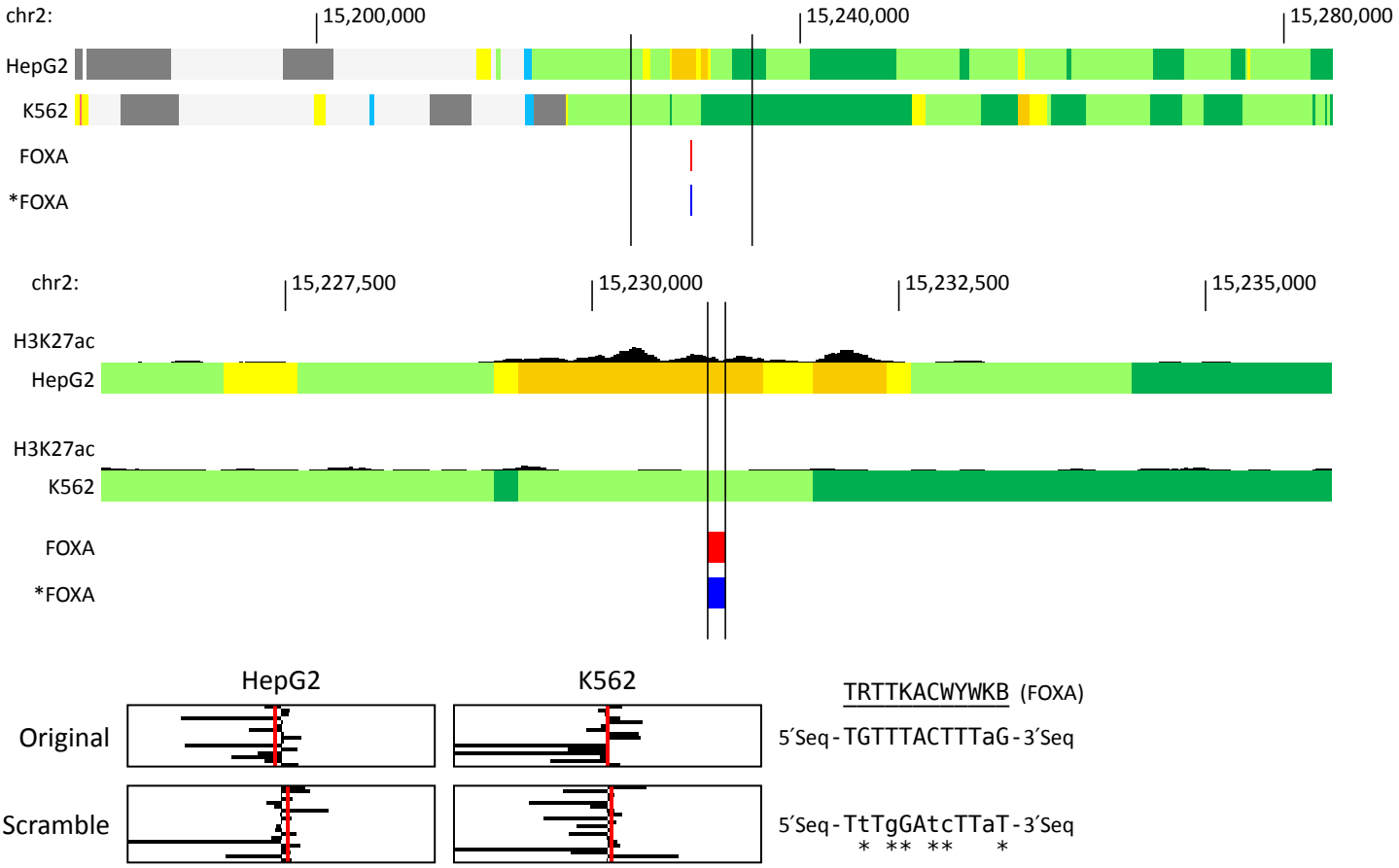
1724 FOXA in HepG2 enhancer

chr2 15231009 15231020 + (hg18)



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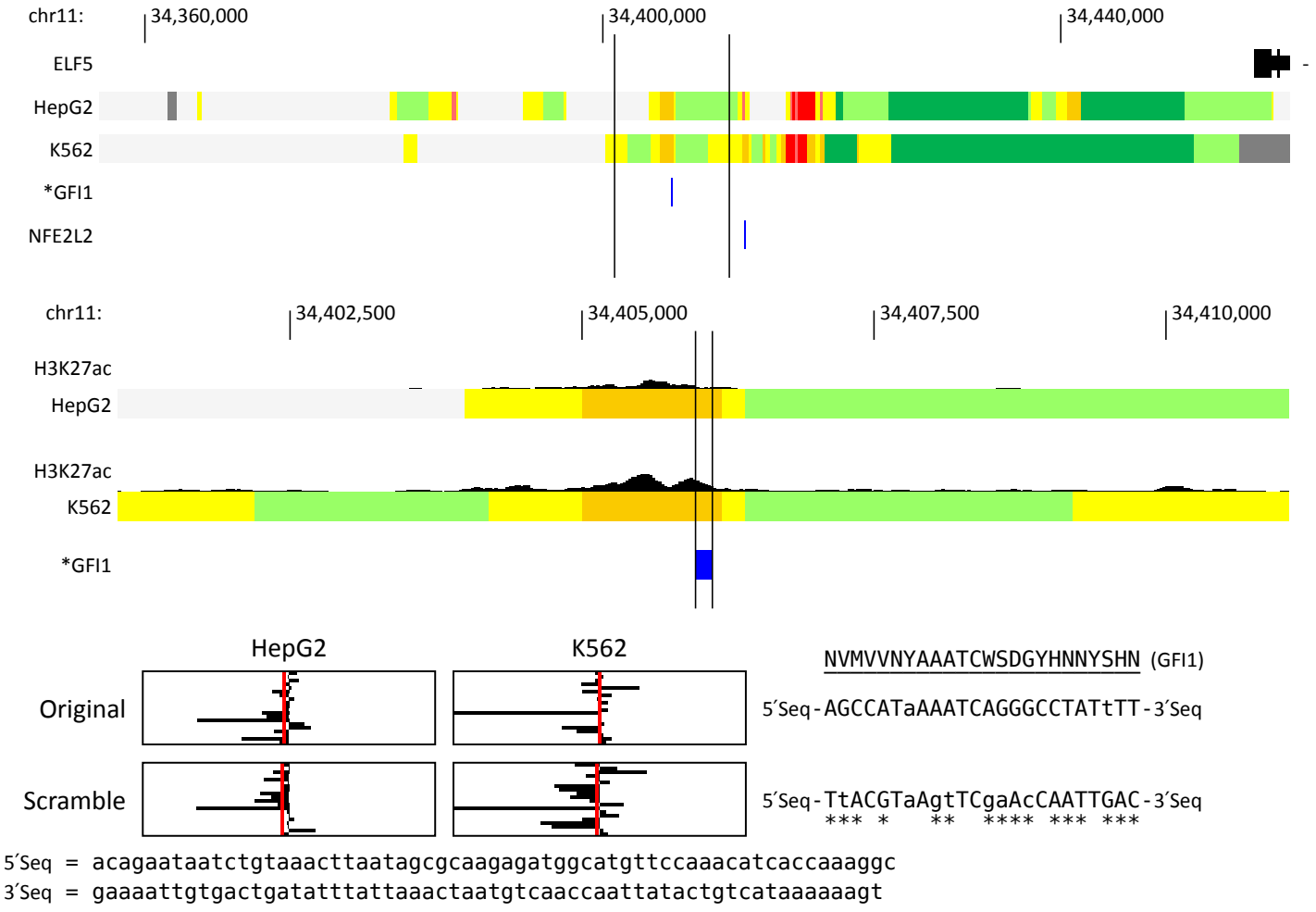
1725 GFI1 in HepG2 enhancer

chr11 34406033 34406056 + (hg18)



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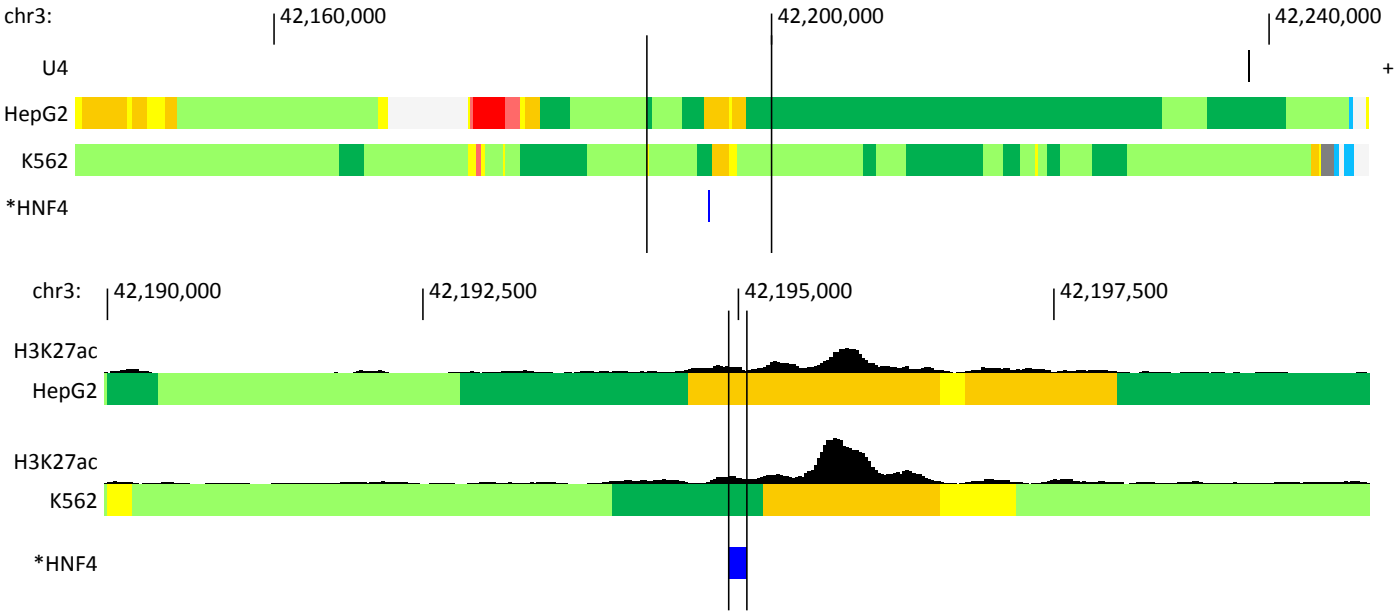
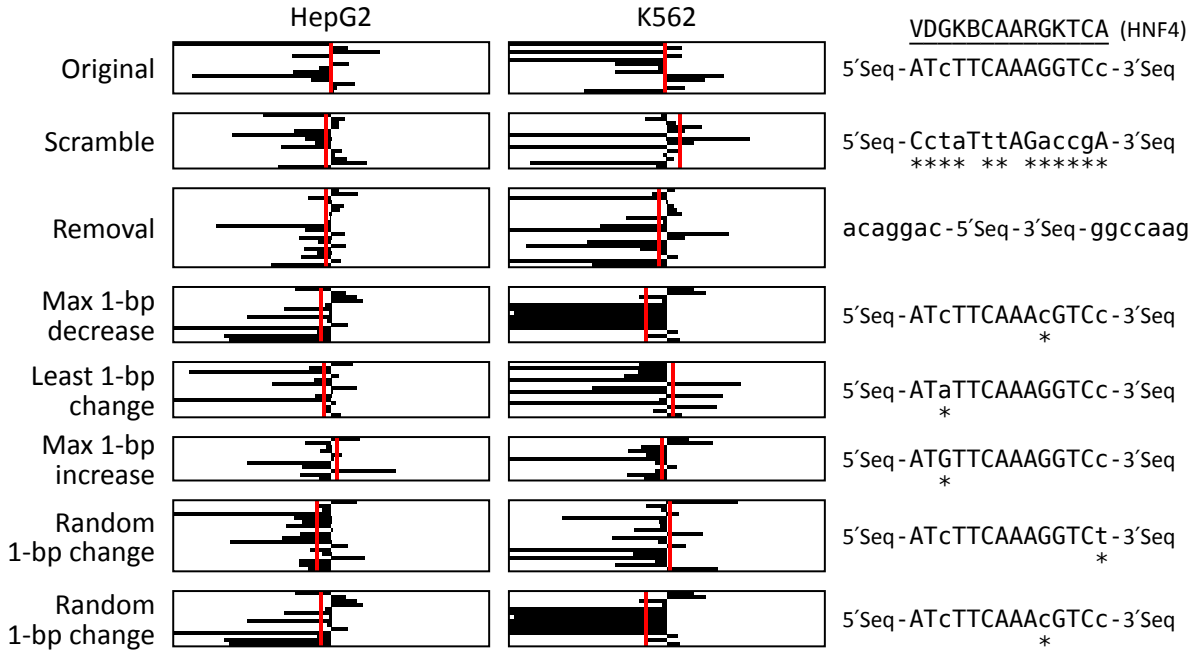
1726 HNF4 in HepG2 enhancer

chr3 42194989 42195002 - (hg18)





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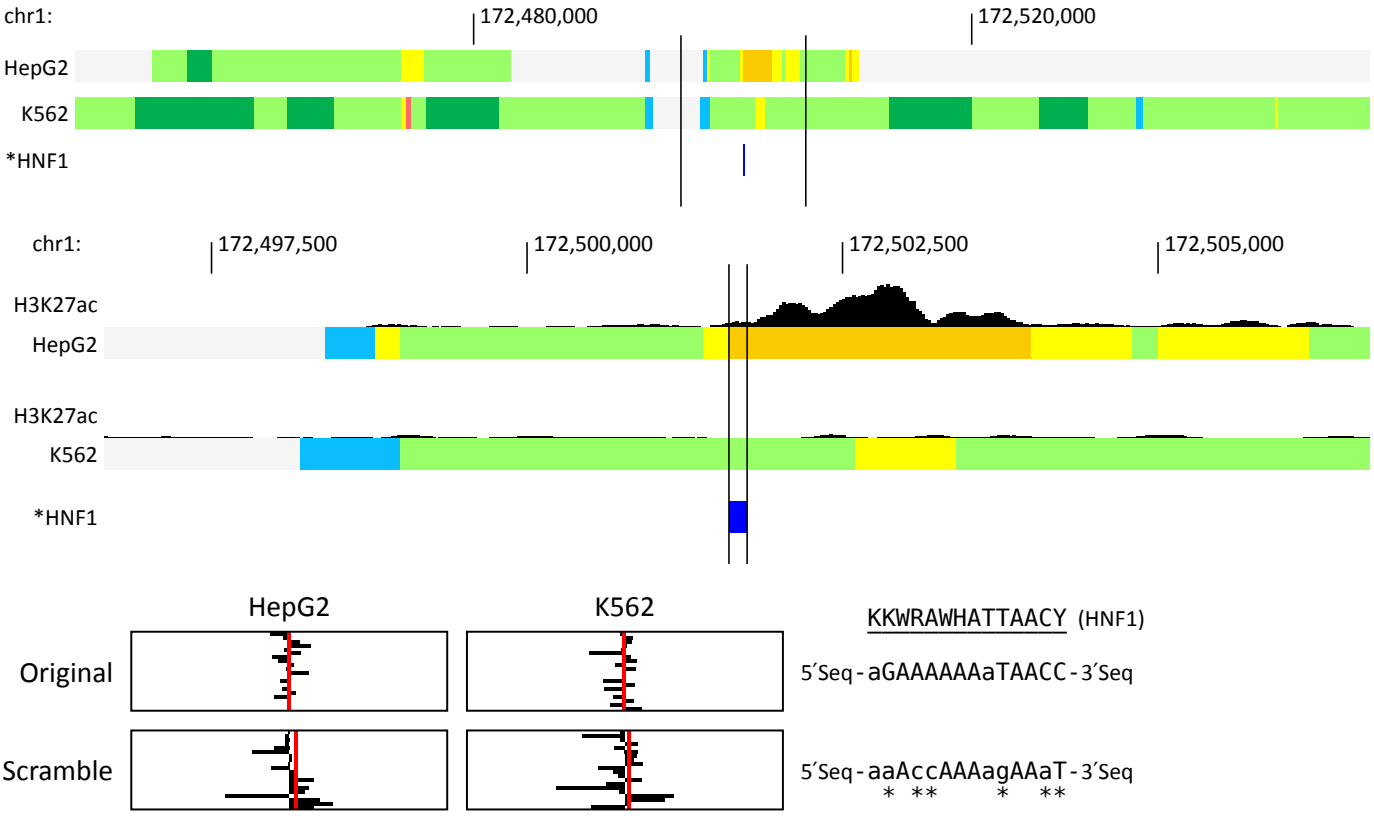
1727 HNF1 in HepG2 enhancer

chr1 172501666 172501679 - (hg18)



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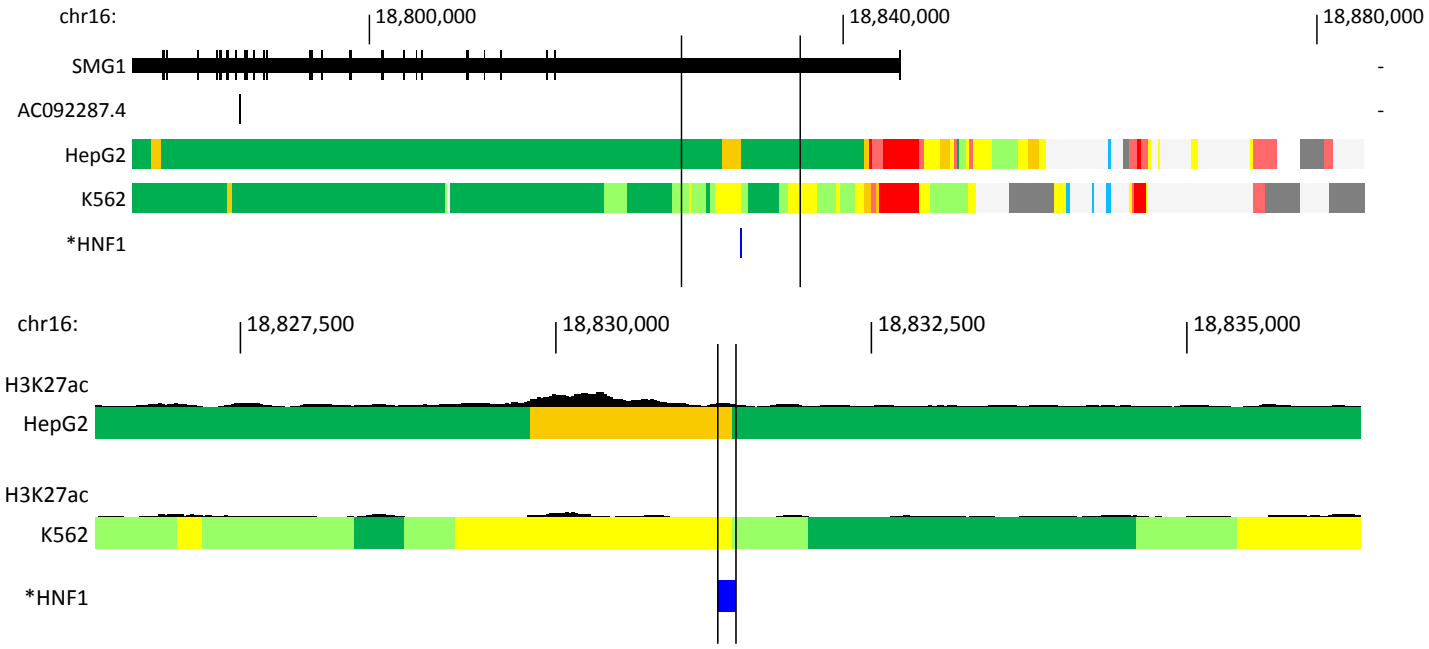
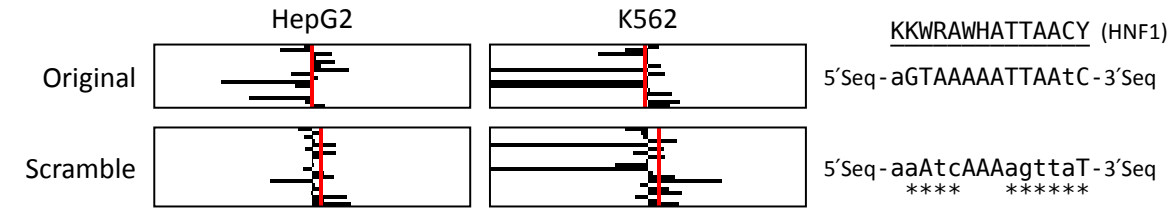
1728 HNF1 in HepG2 enhancer

chr16 18831349 18831362 - (hg18)





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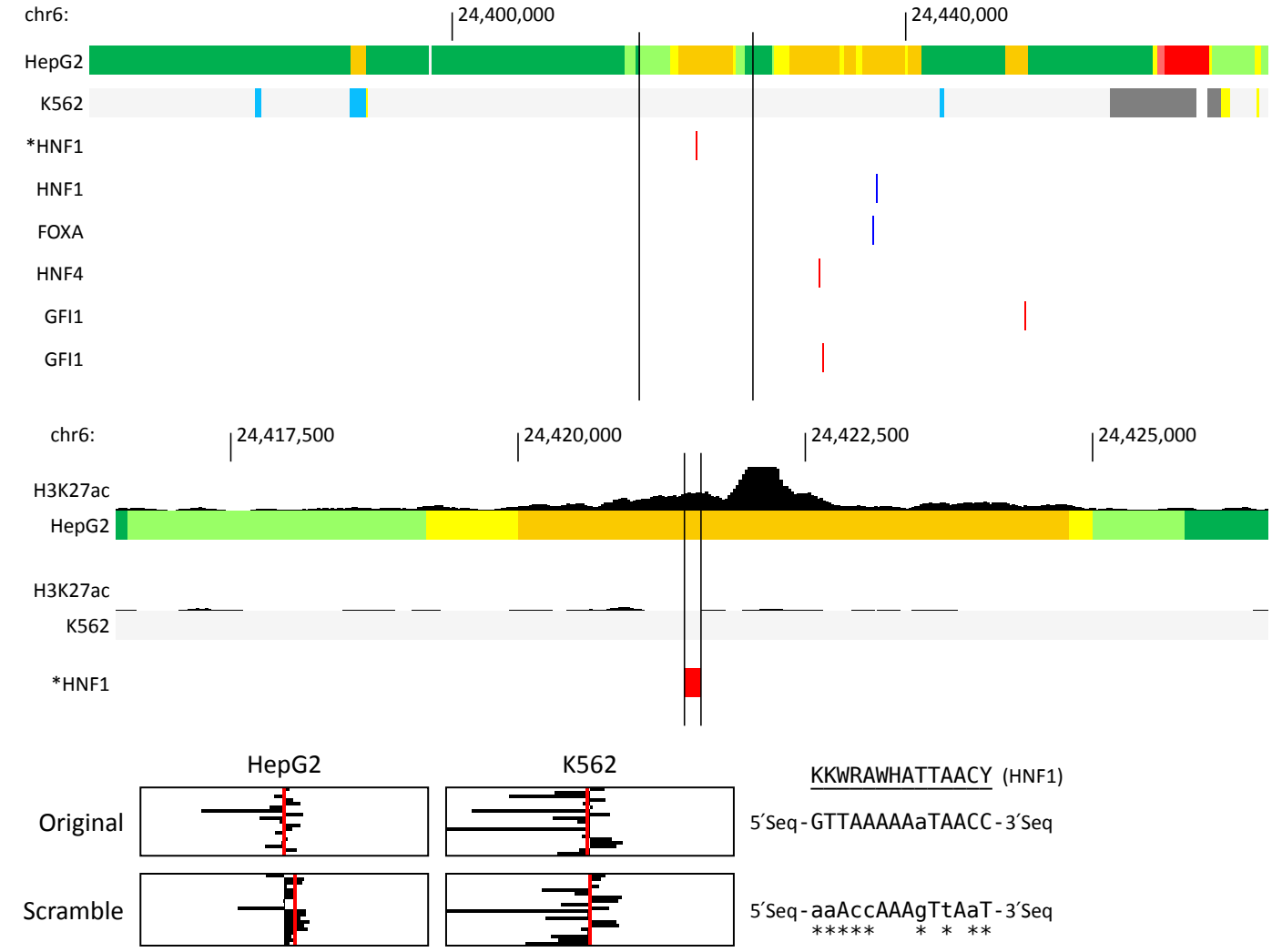
1729 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 24421514 24421527 + (hg18)



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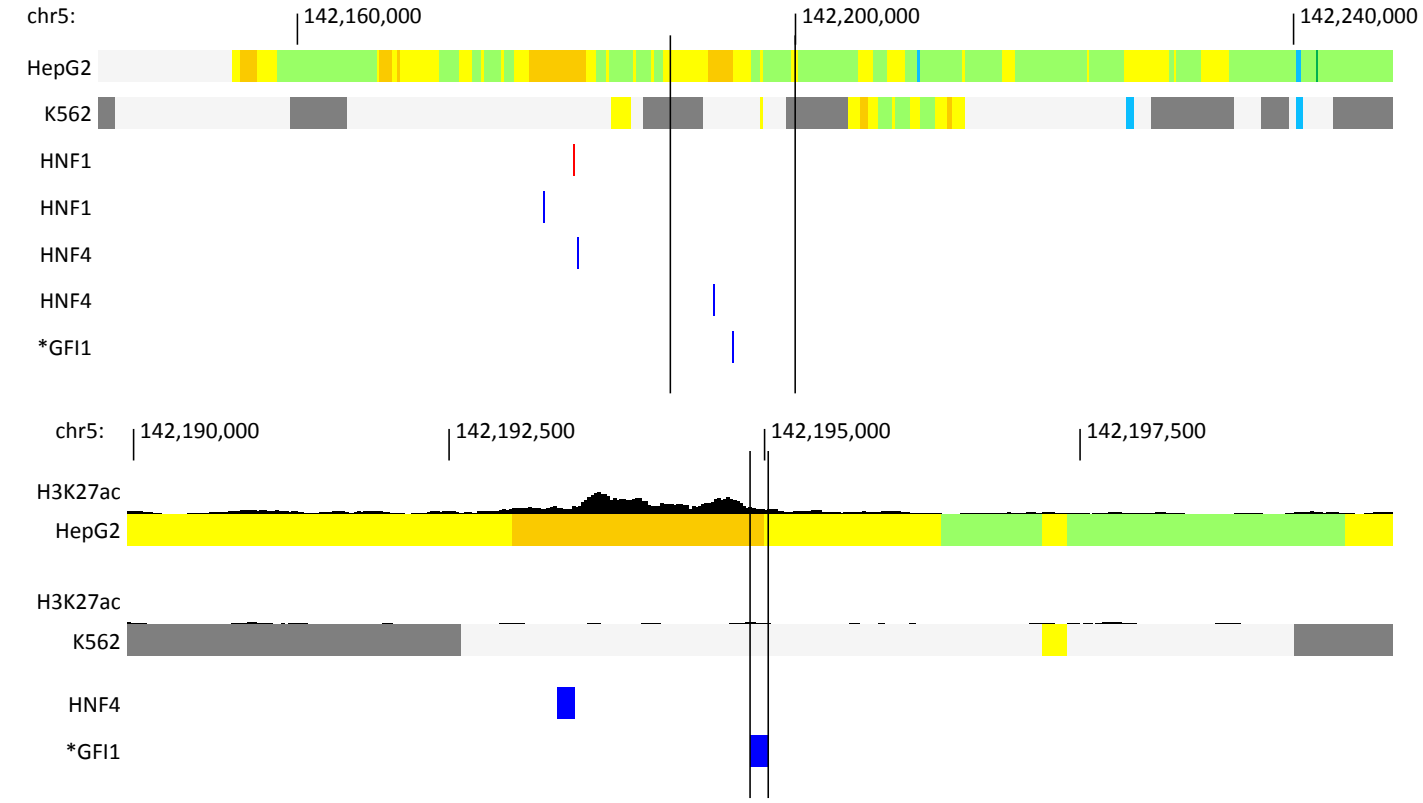
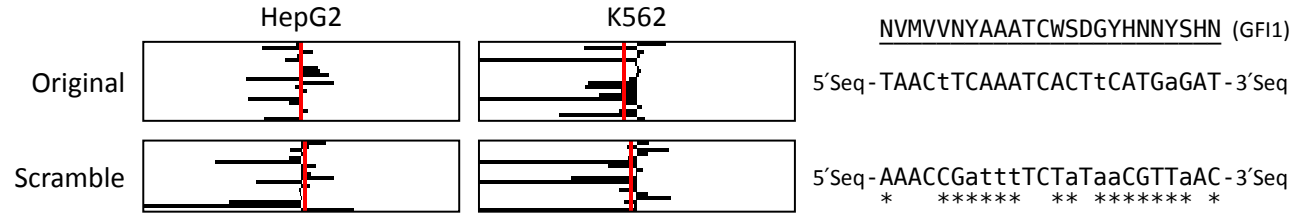
1730 GFI1 in HepG2 enhancer

chr5 142194946 142194969 - (hg18)





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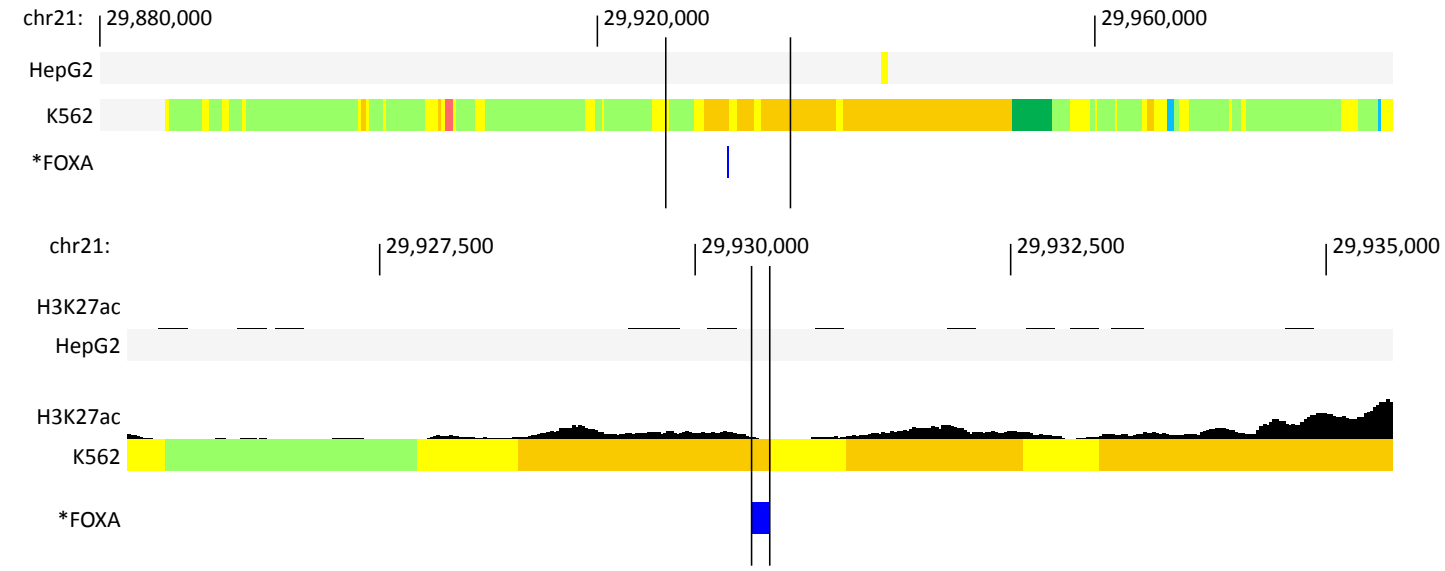
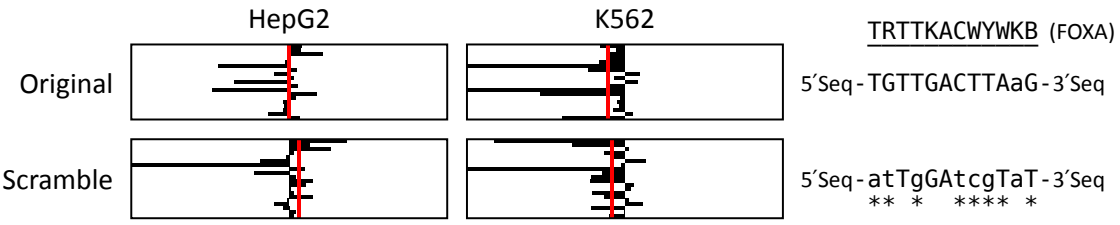
1731 FOXA in K562 enhancer

chr21 29930514 29930525 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTGACTTAaG-3′Seq

5′Seq-atTgGAtcgTaT-3′Seq

** * **** *

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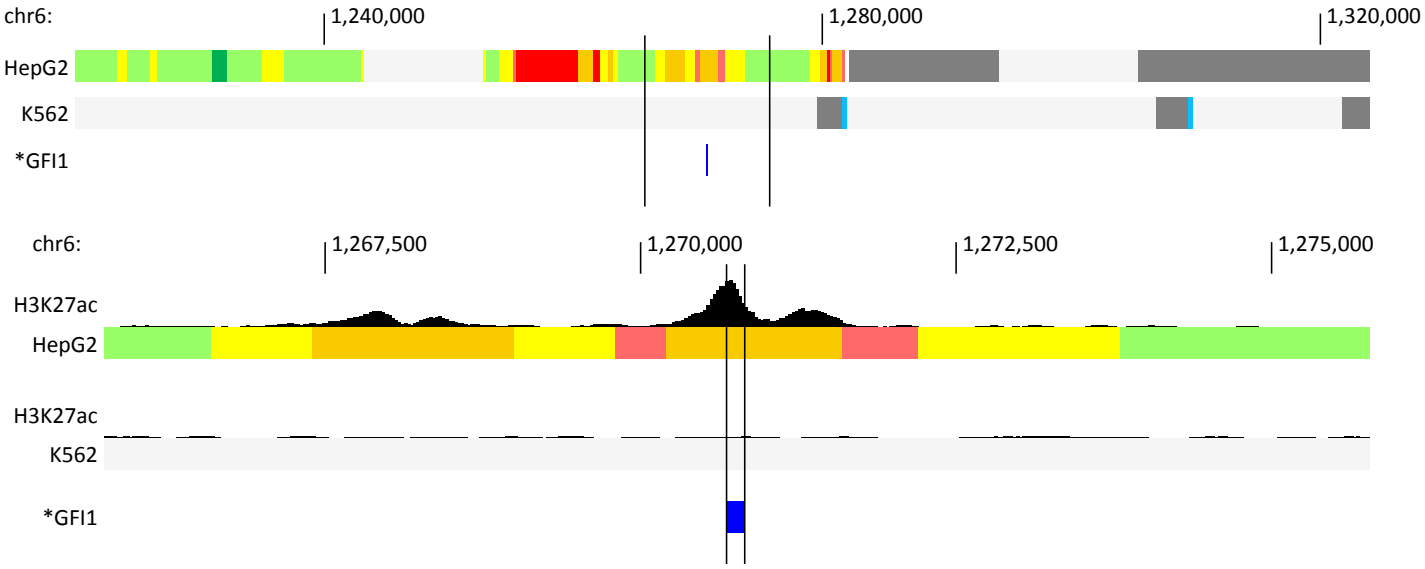
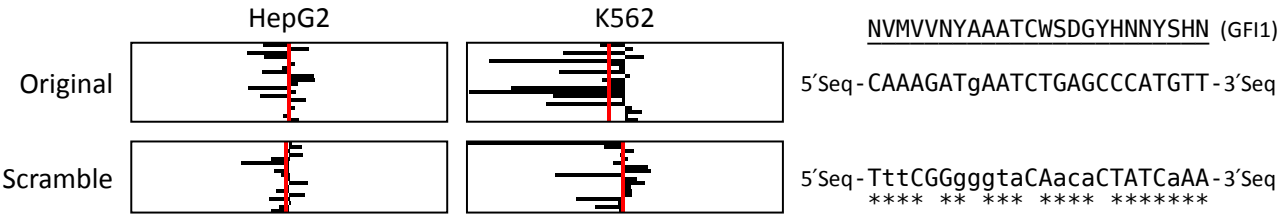
1732 GFI1 in HepG2 enhancer

chr6 1270742 1270765 + (hg18)





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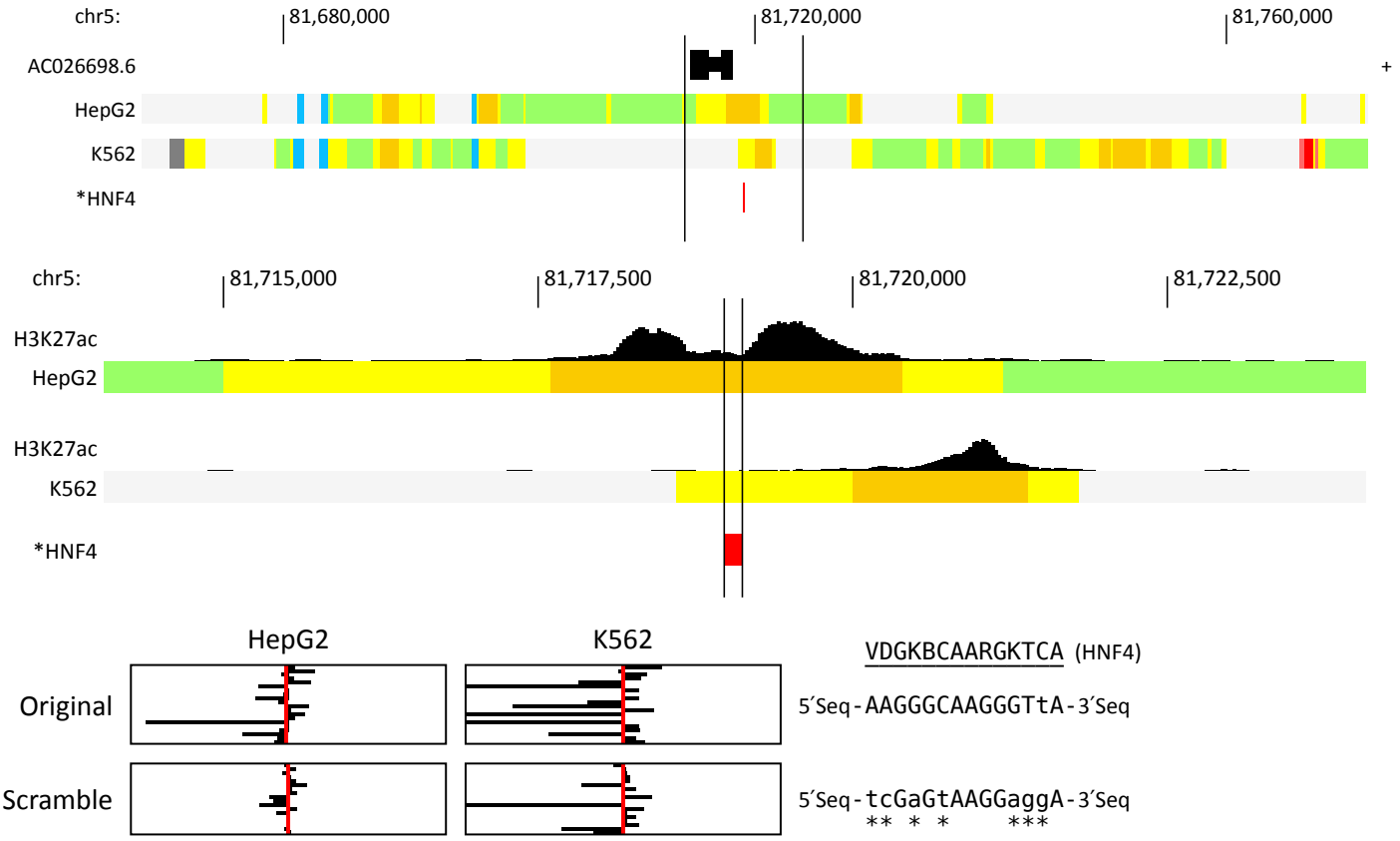
1733 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr5 81719045 81719058 + (hg18)



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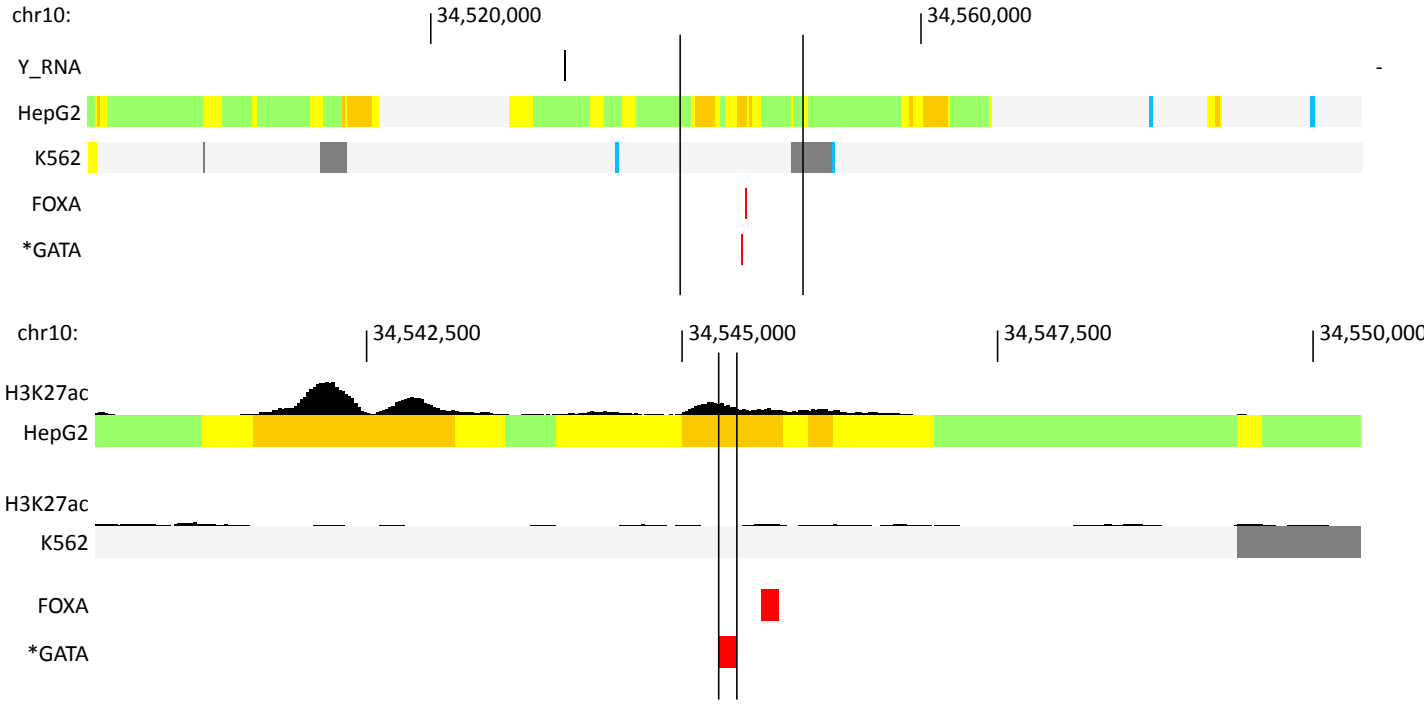
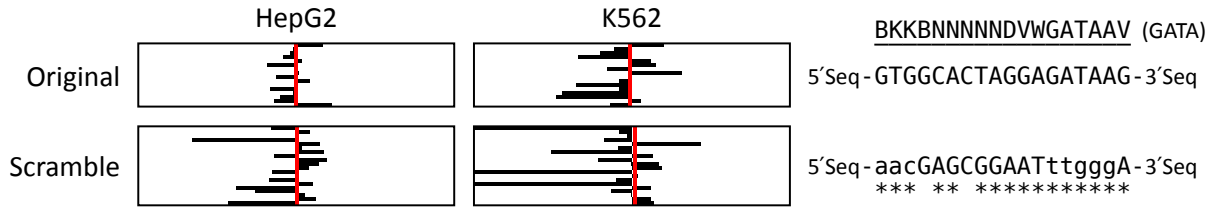
1734 GATA in HepG2 enhancer (conserved at 70% confidence)

chr10 34545354 34545371 - (hg18)





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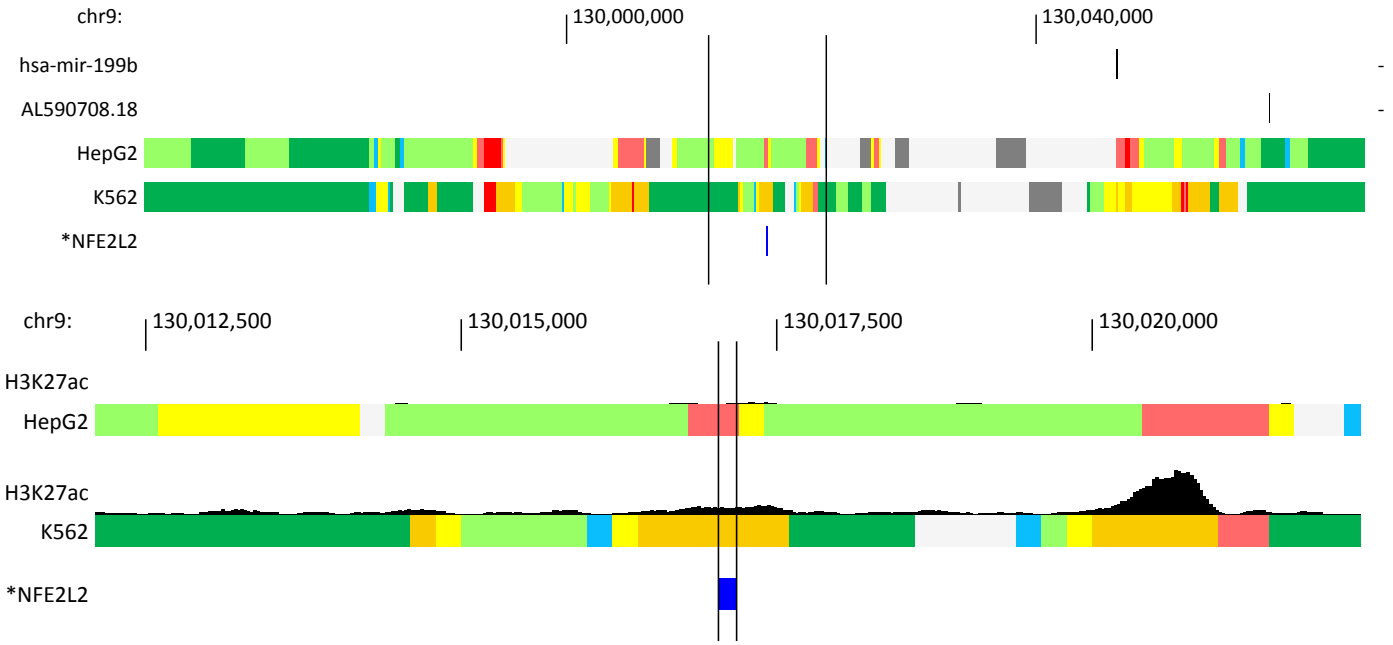
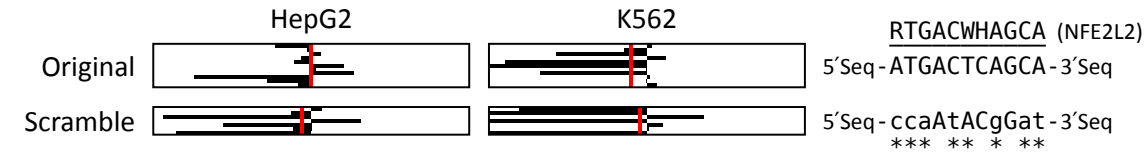
1735 NFE2L2 in K562 enhancer

chr9 130017105 130017115 - (hg18)





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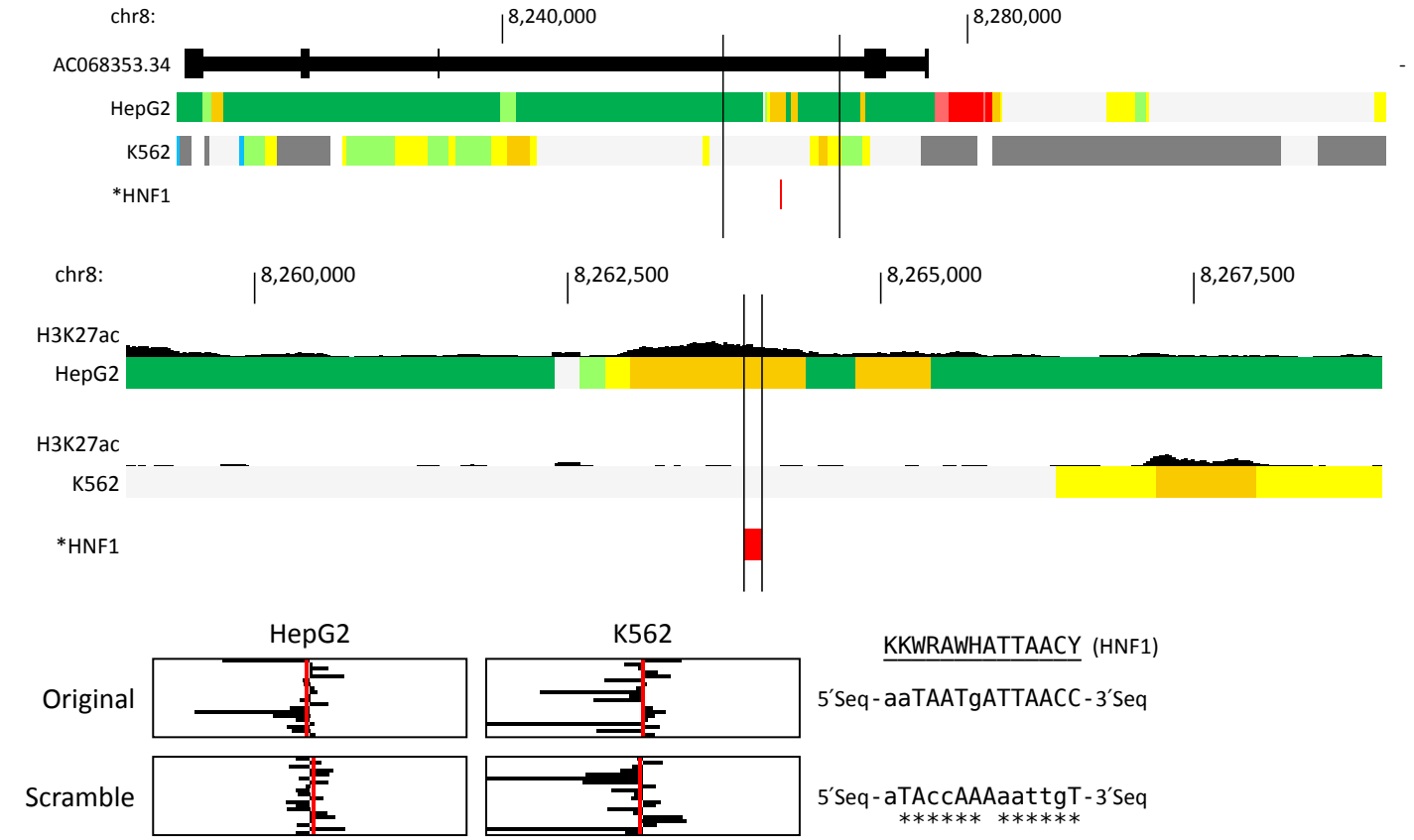
1736 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr8 8263974 8263987 + (hg18)



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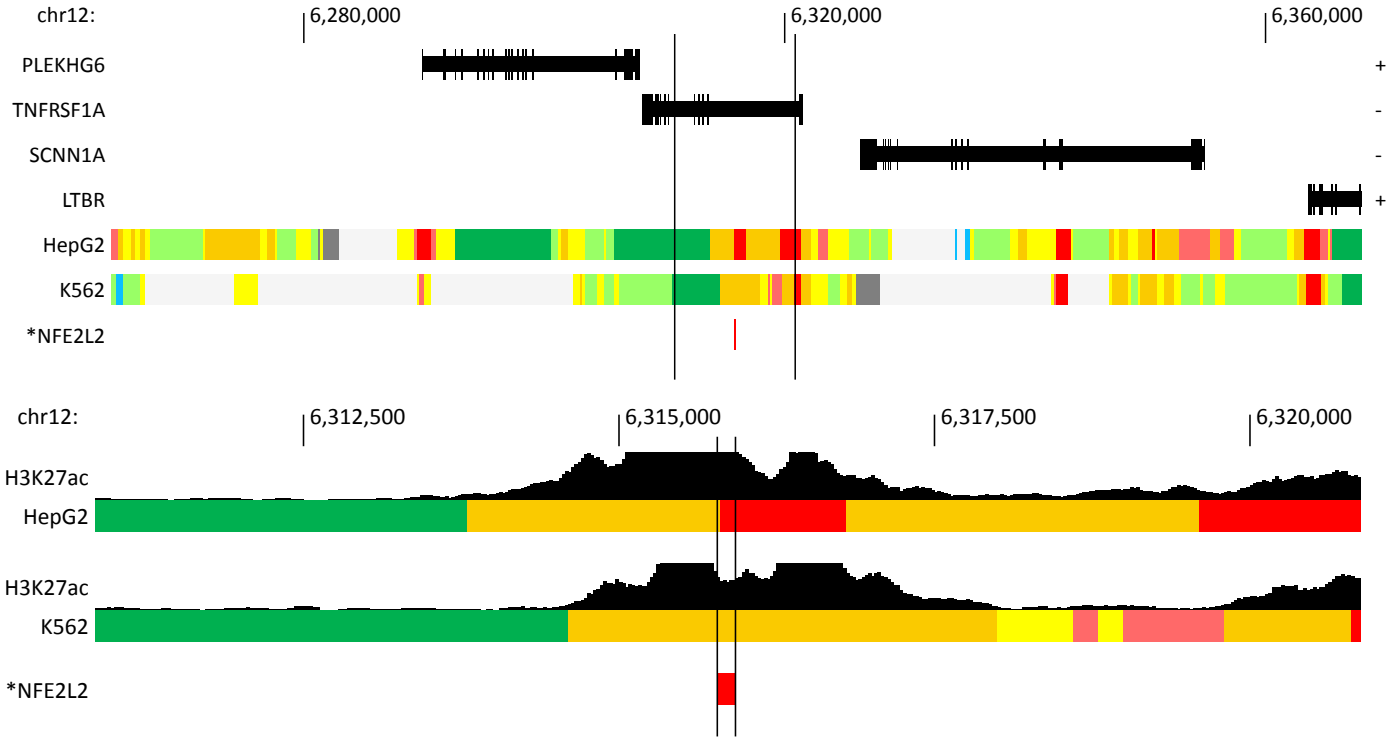
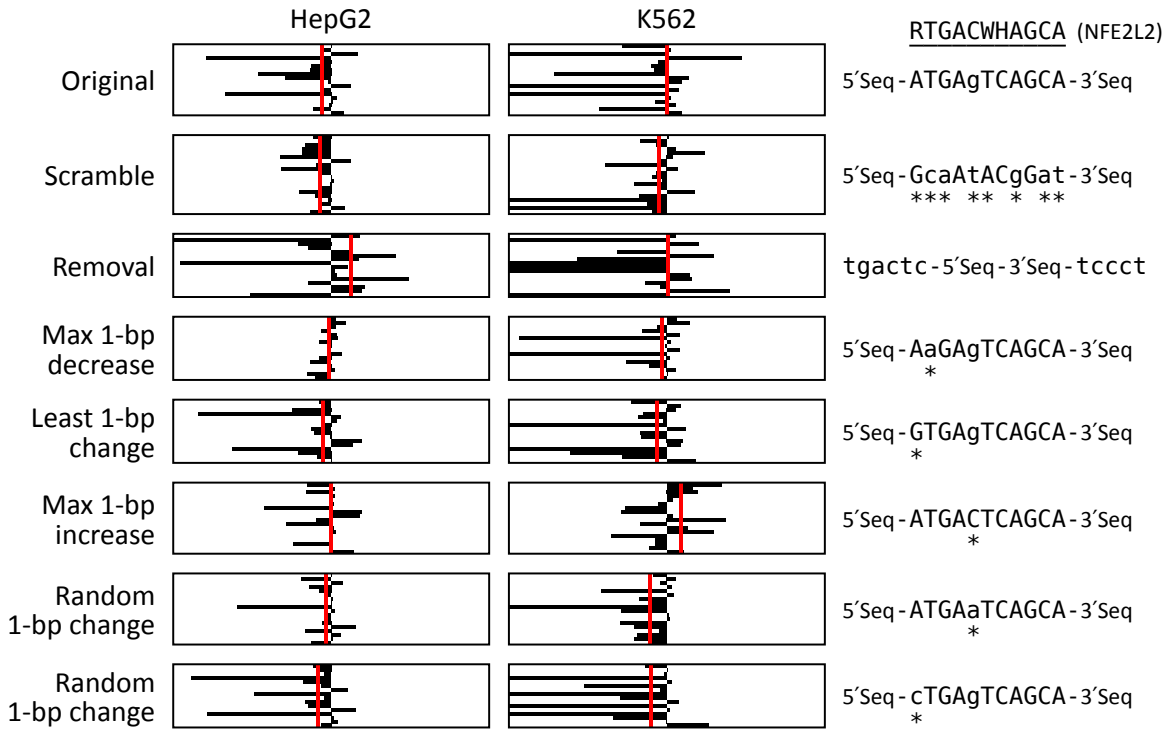
1737 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr12 6315846 6315856 + (hg18)





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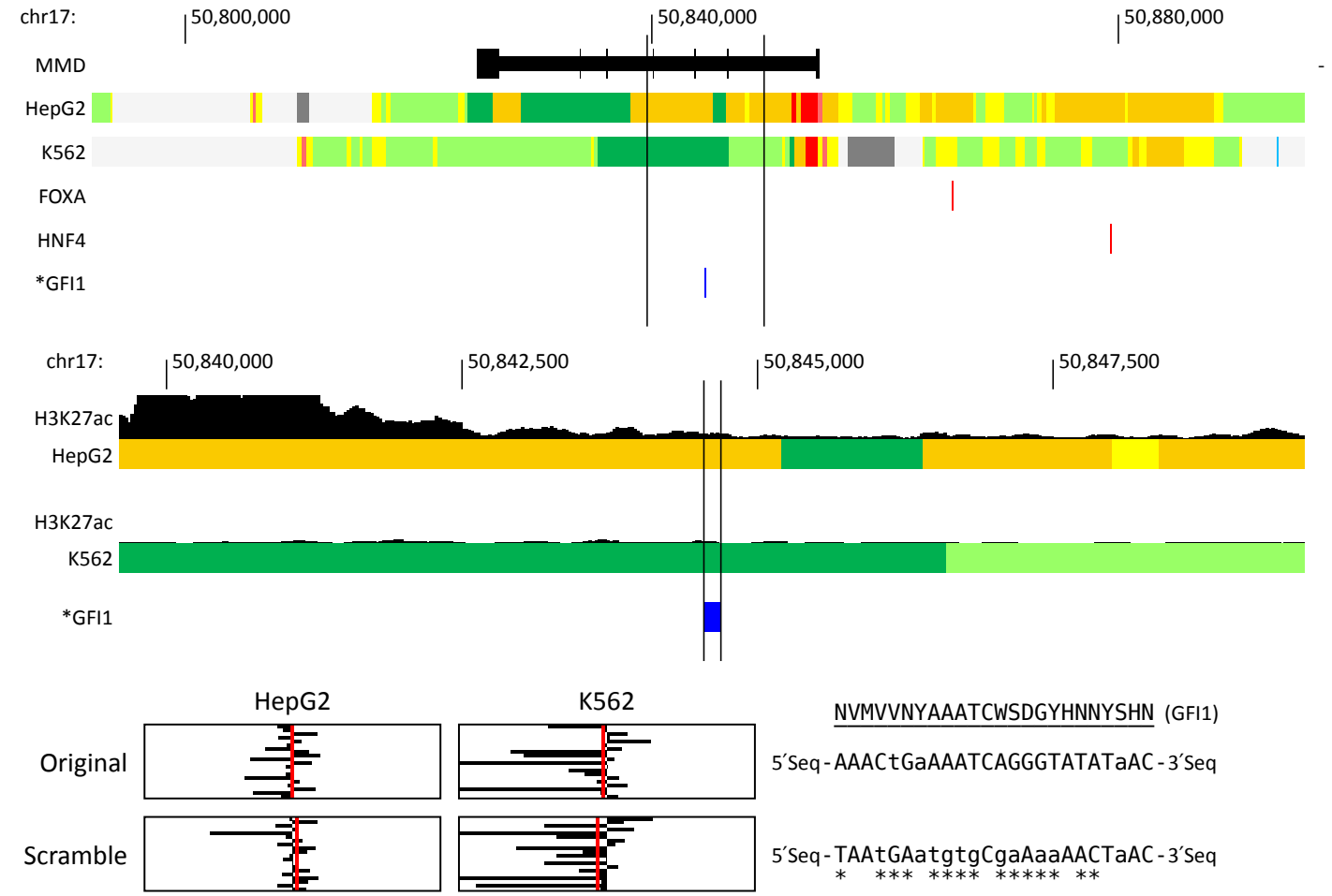
1738 GFI1 in HepG2 enhancer

chr17 50844607 50844630 - (hg18)



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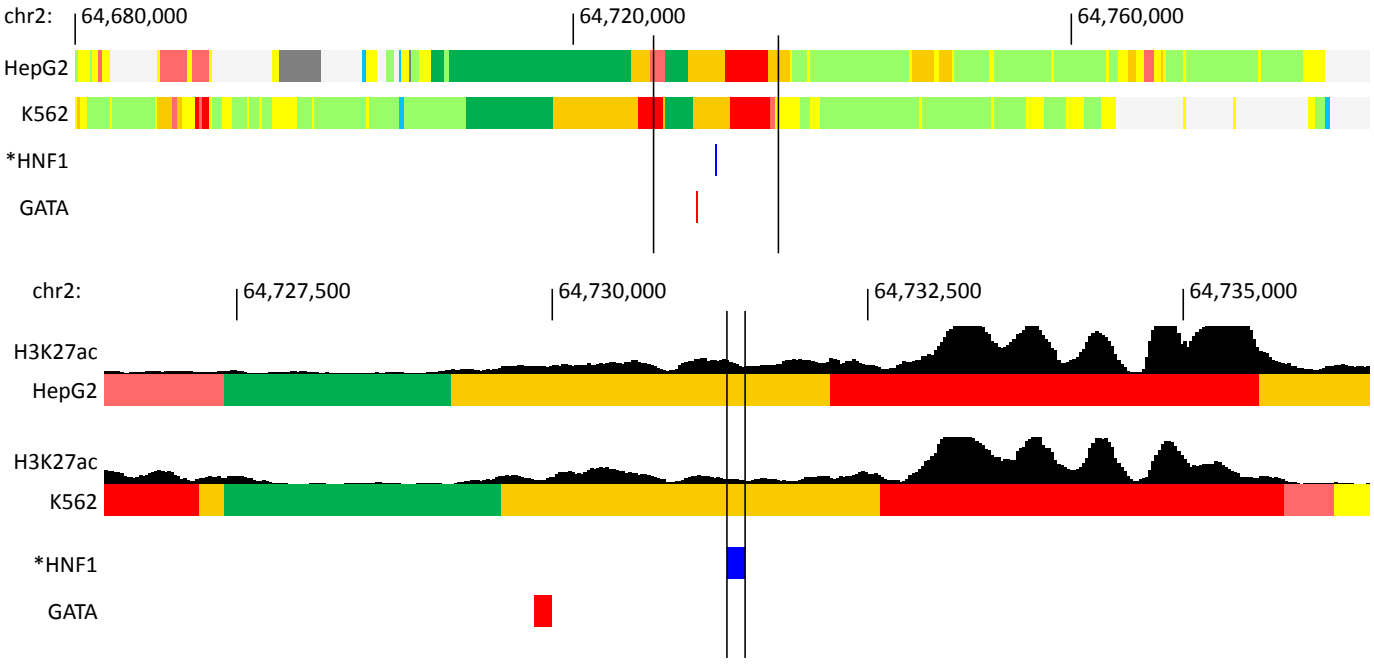
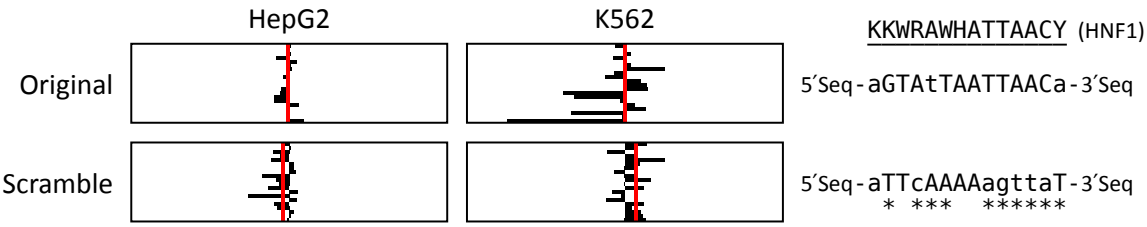
1739 HNF1 in HepG2 enhancer

chr2 64731450 64731463 + (hg18)





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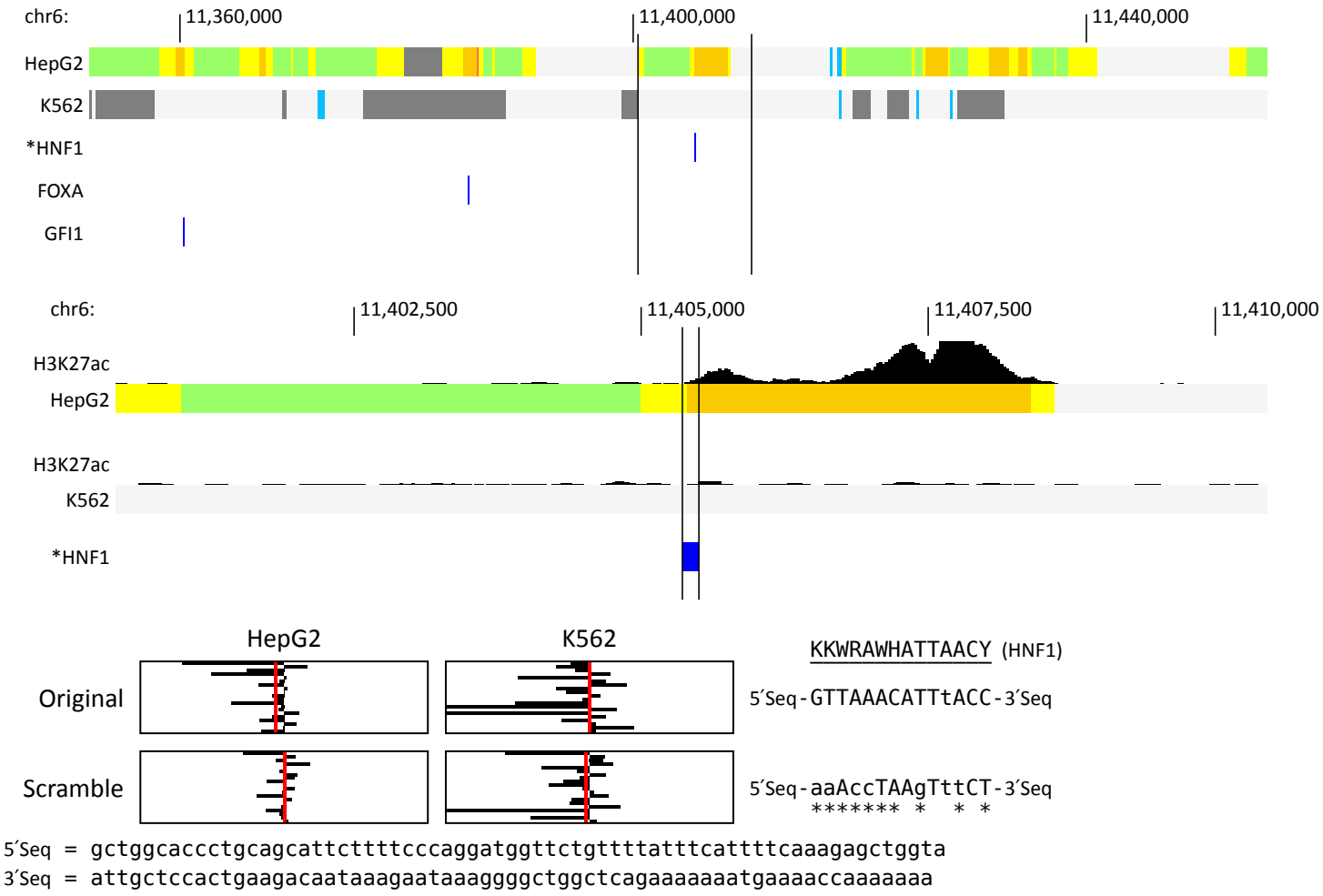
1740 HNF1 in HepG2 enhancer

chr6 11405425 11405438 - (hg18)



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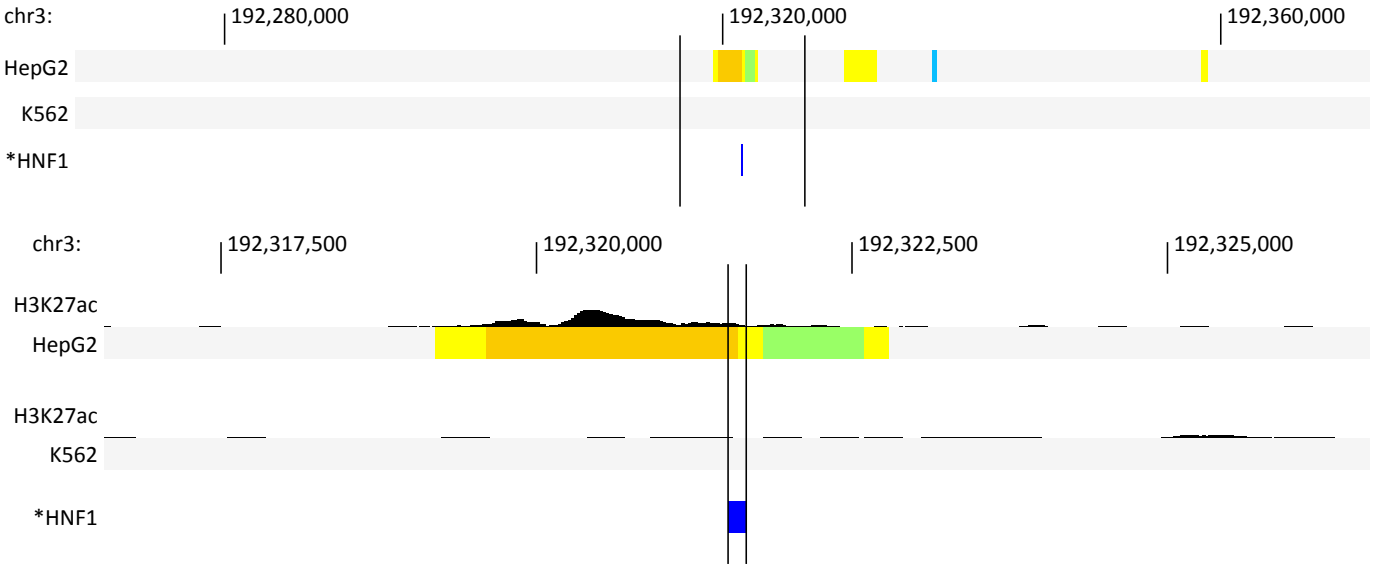
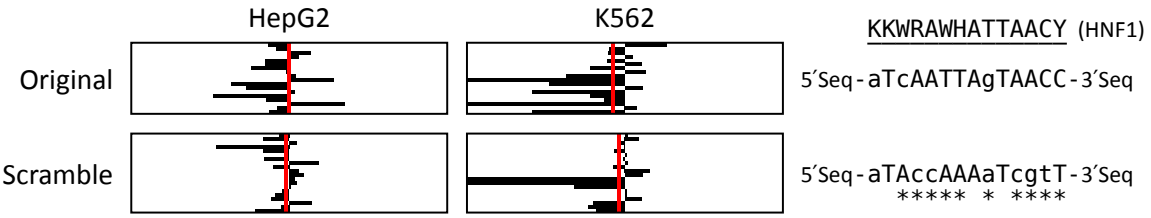
1741 HNF1 in HepG2 enhancer

chr3 192321584 192321597 + (hg18)





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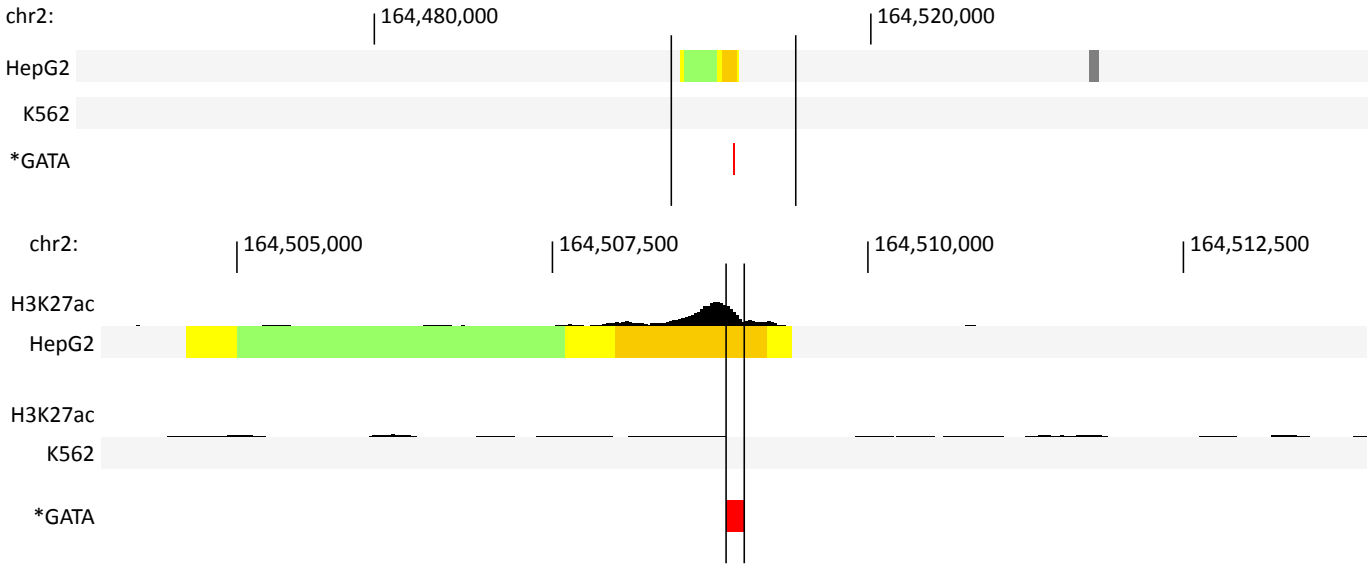
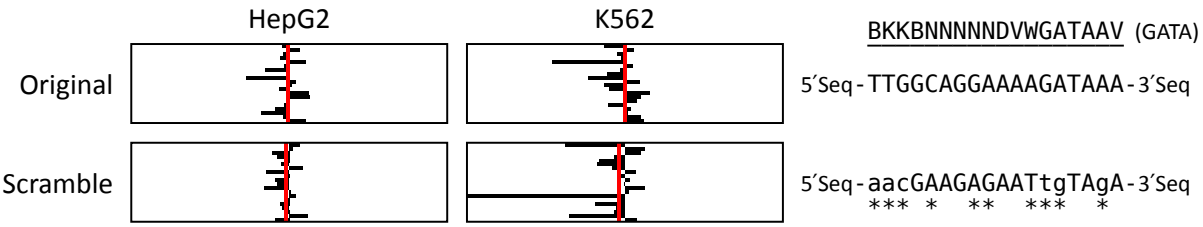
1742 GATA in HepG2 enhancer (conserved at 70% confidence)

chr2 164508940 164508957 + (hg18)





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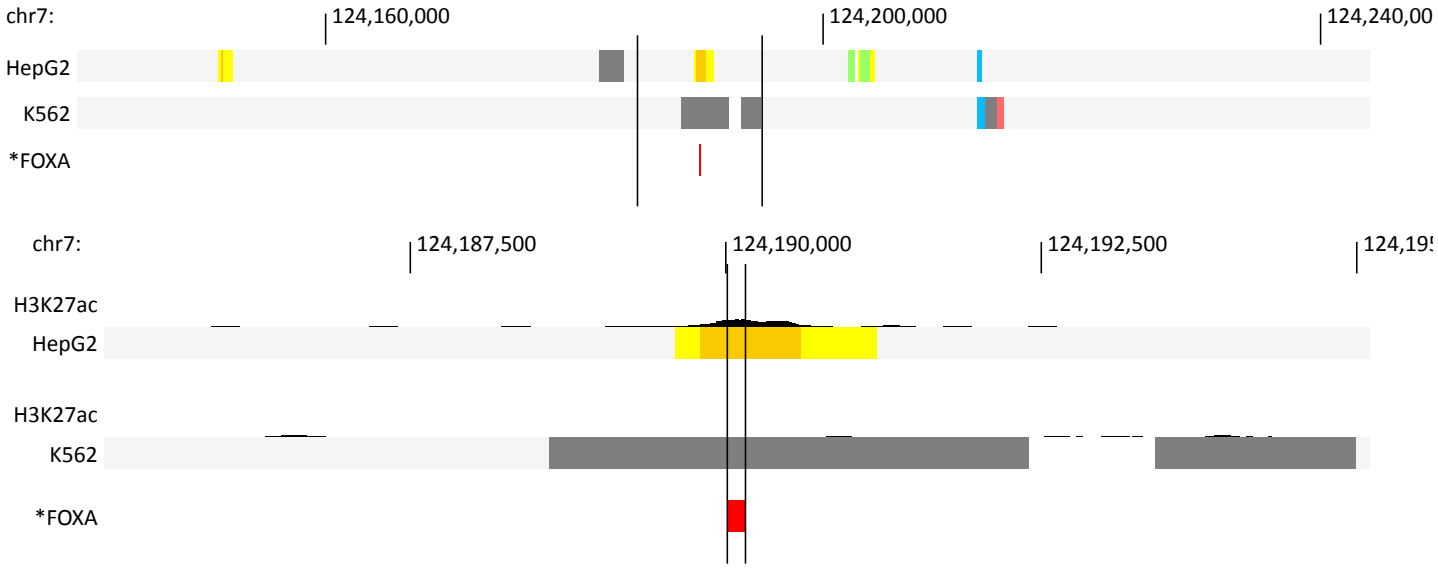
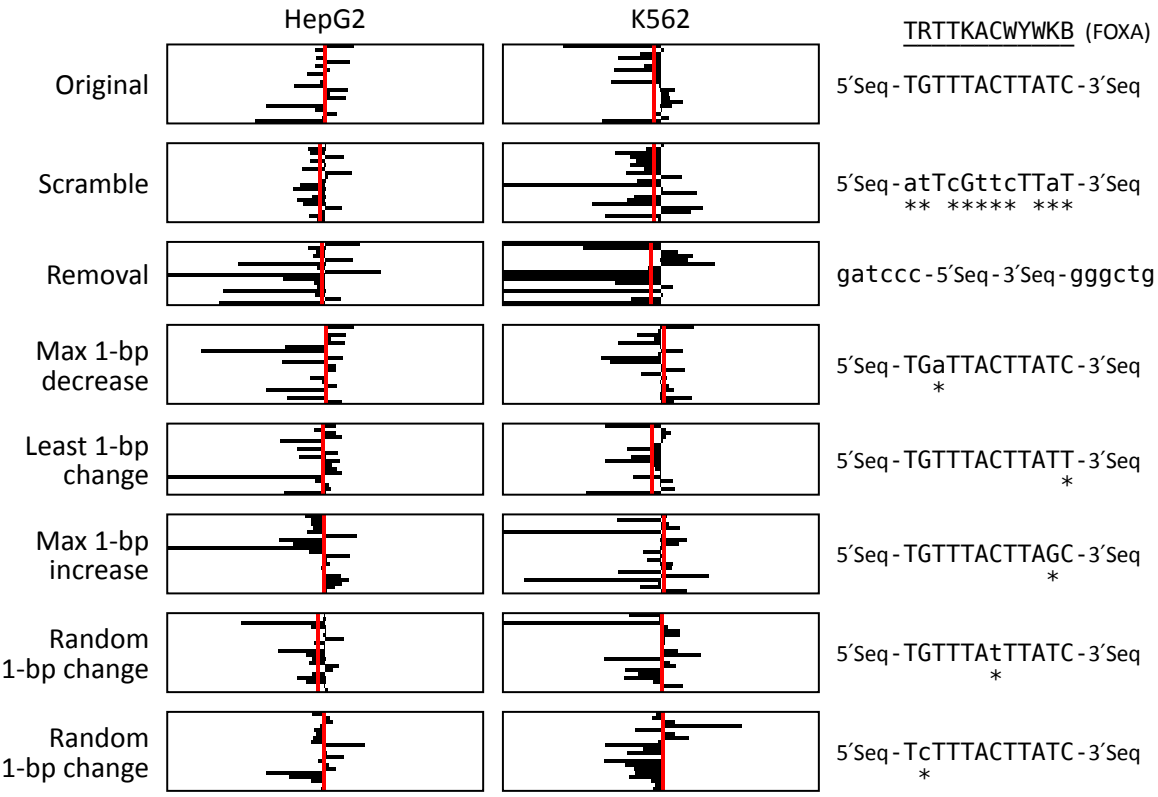
1743 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr7 124190079 124190090 + (hg18)





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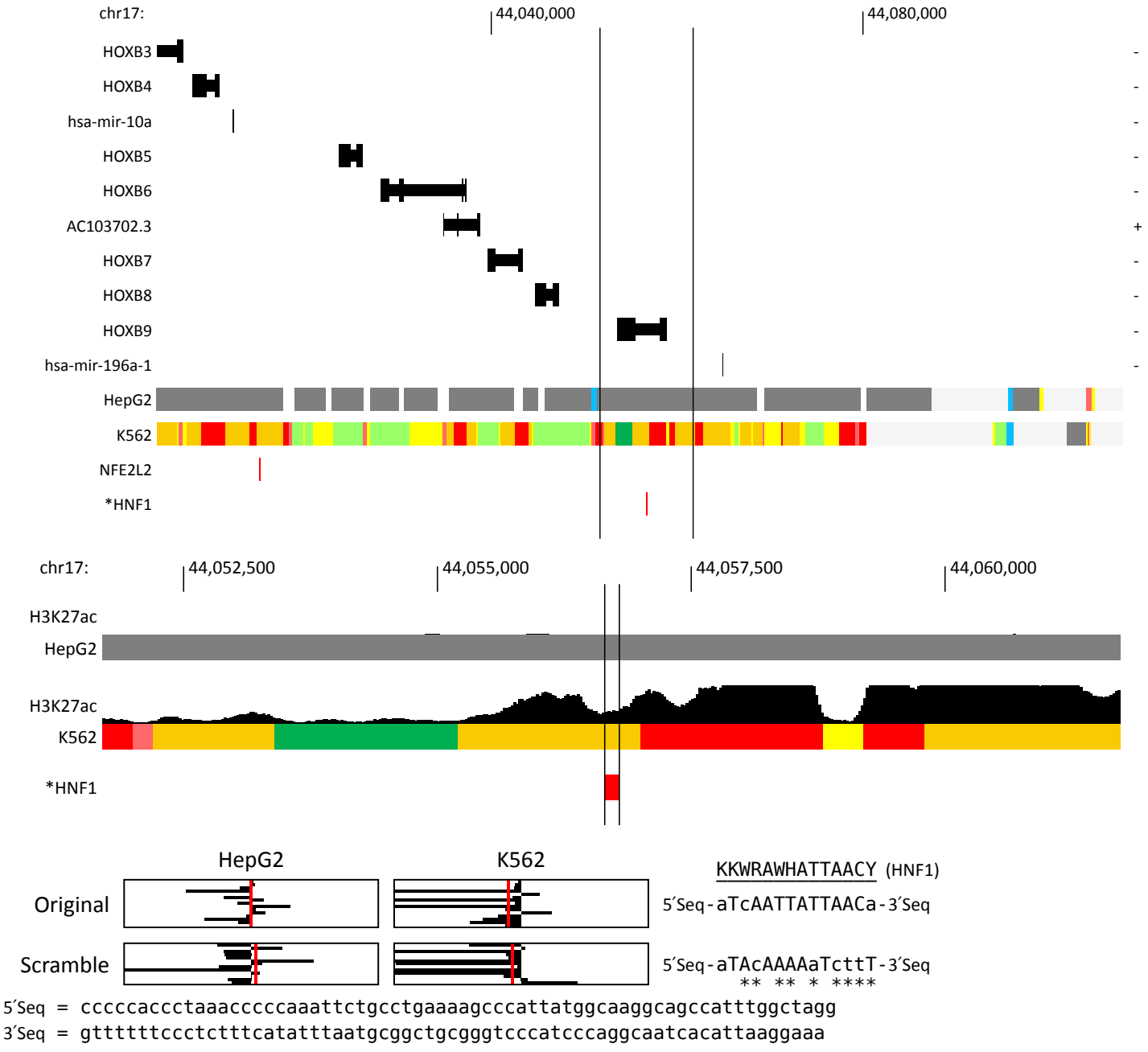
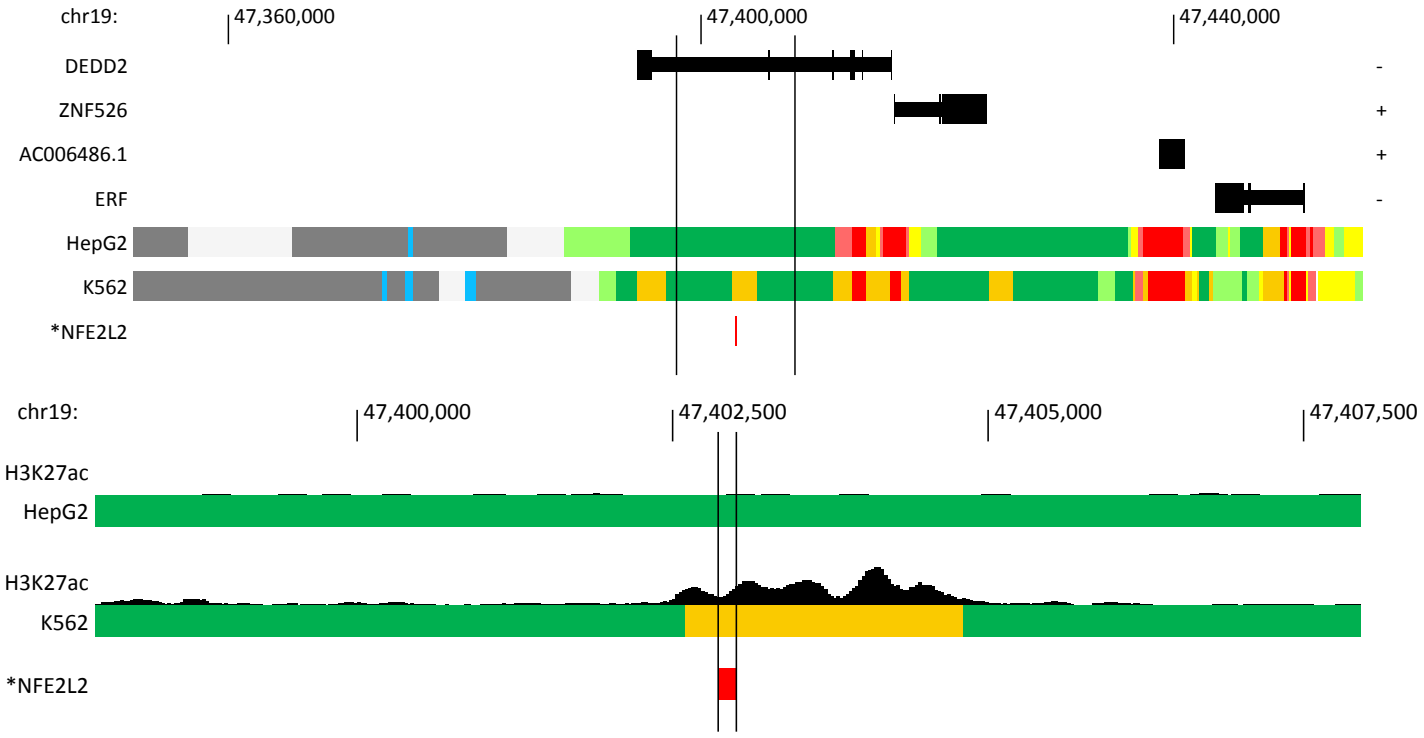
1744 HNF1 in K562 enhancer (conserved at 60% confidence)

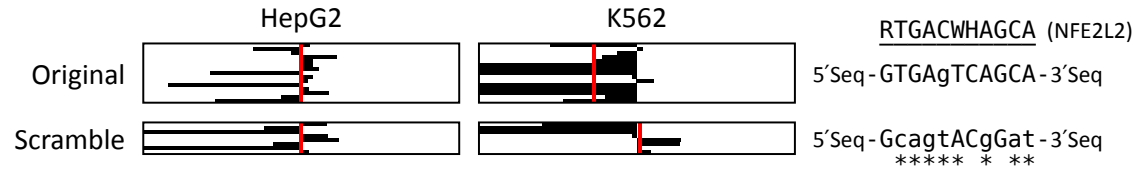
chr17 44056714 44056727 - (hg18)



1745 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr19 47402928 47402938 + (hg18)





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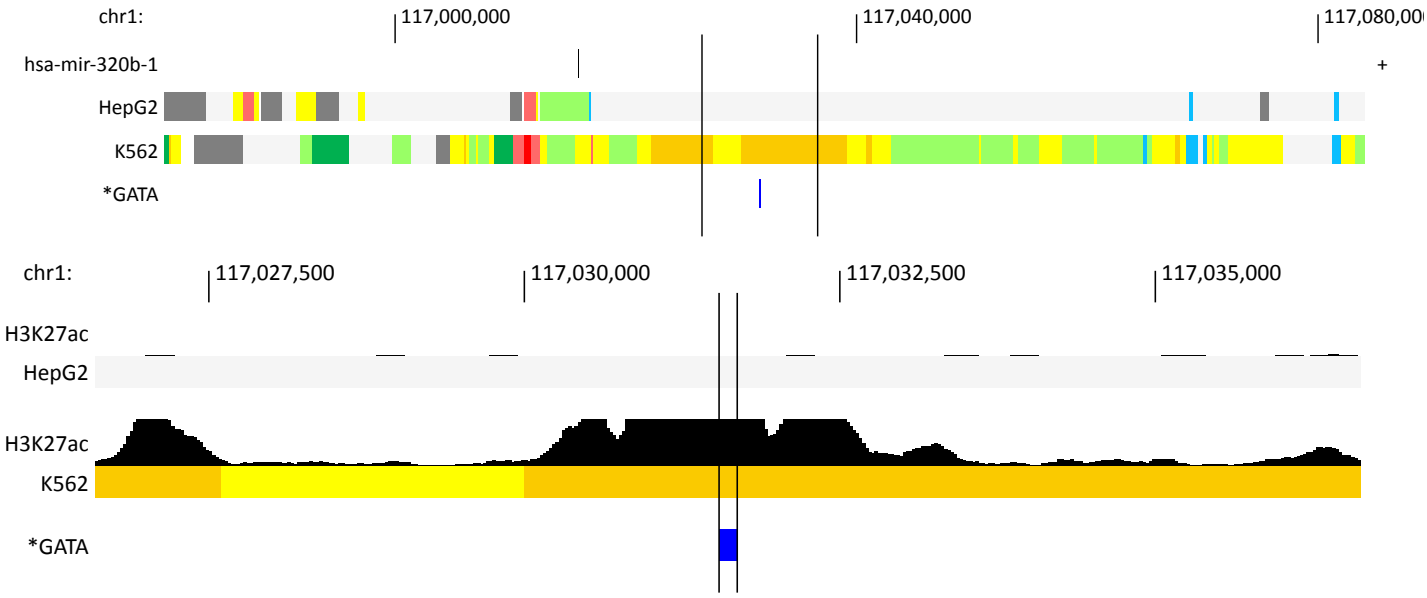
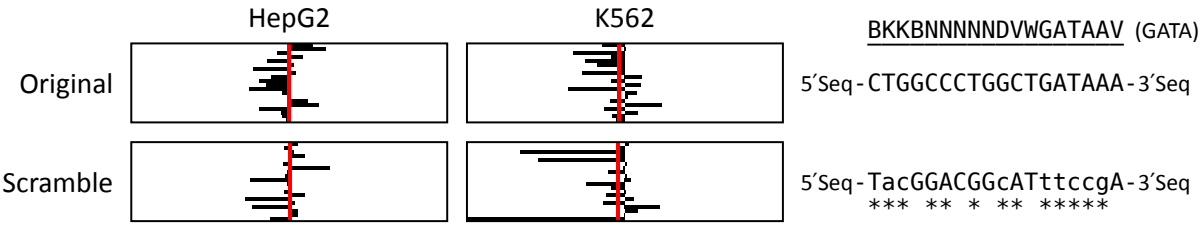
1746 GATA in K562 enhancer

chr1 117031607 117031624 - (hg18)





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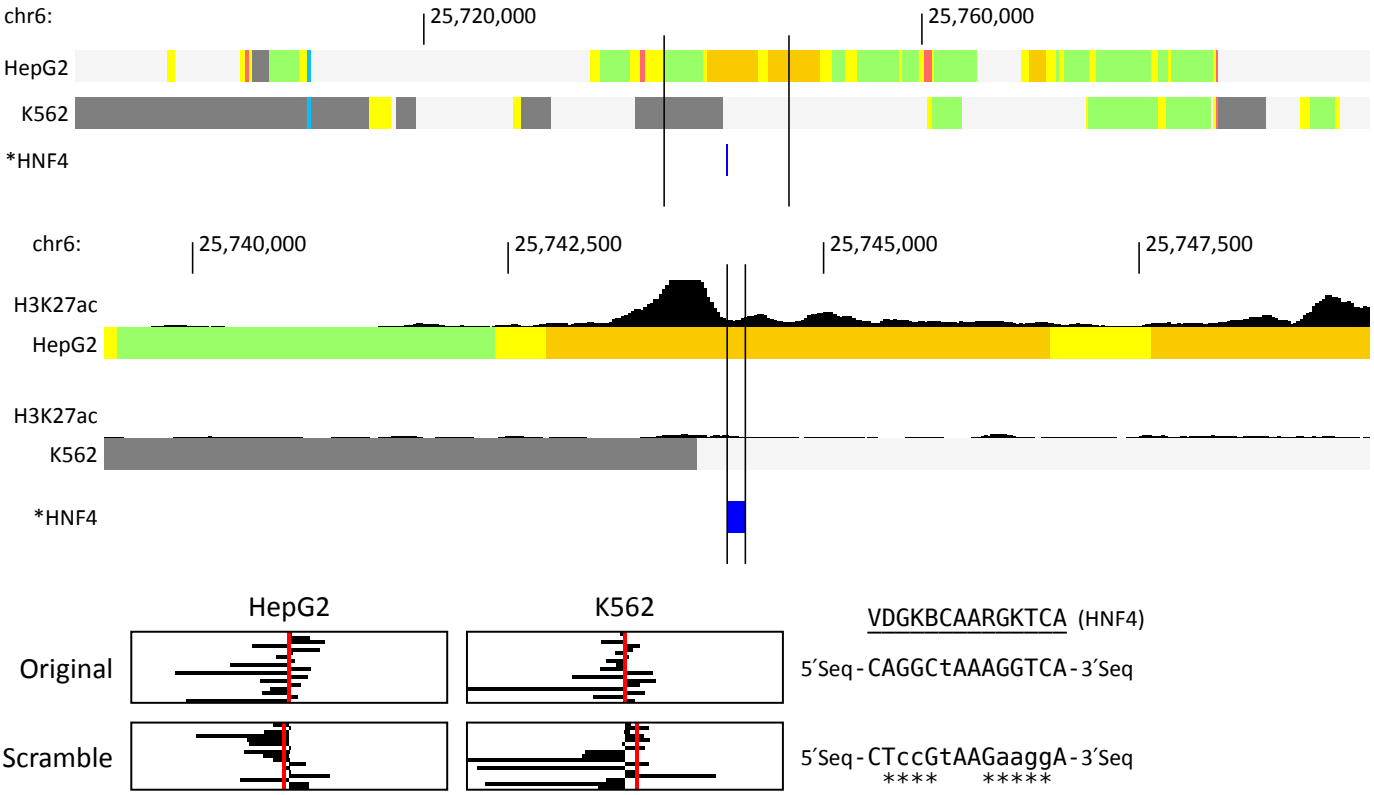
1747 HNF4 in HepG2 enhancer

chr6 25744302 25744315 - (hg18)



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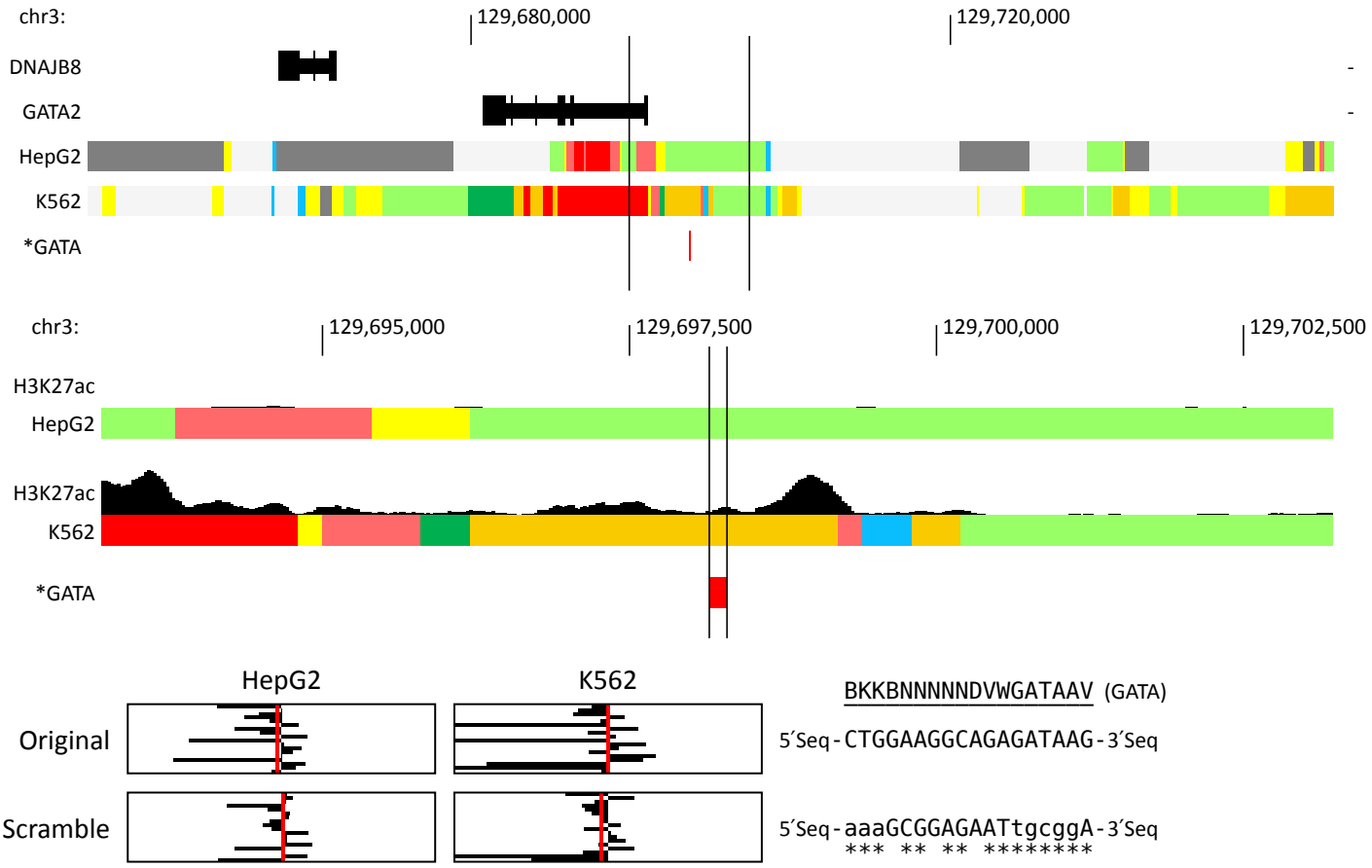
1748 GATA in K562 enhancer (conserved at 60% confidence)

chr3 129698214 129698231 - (hg18)



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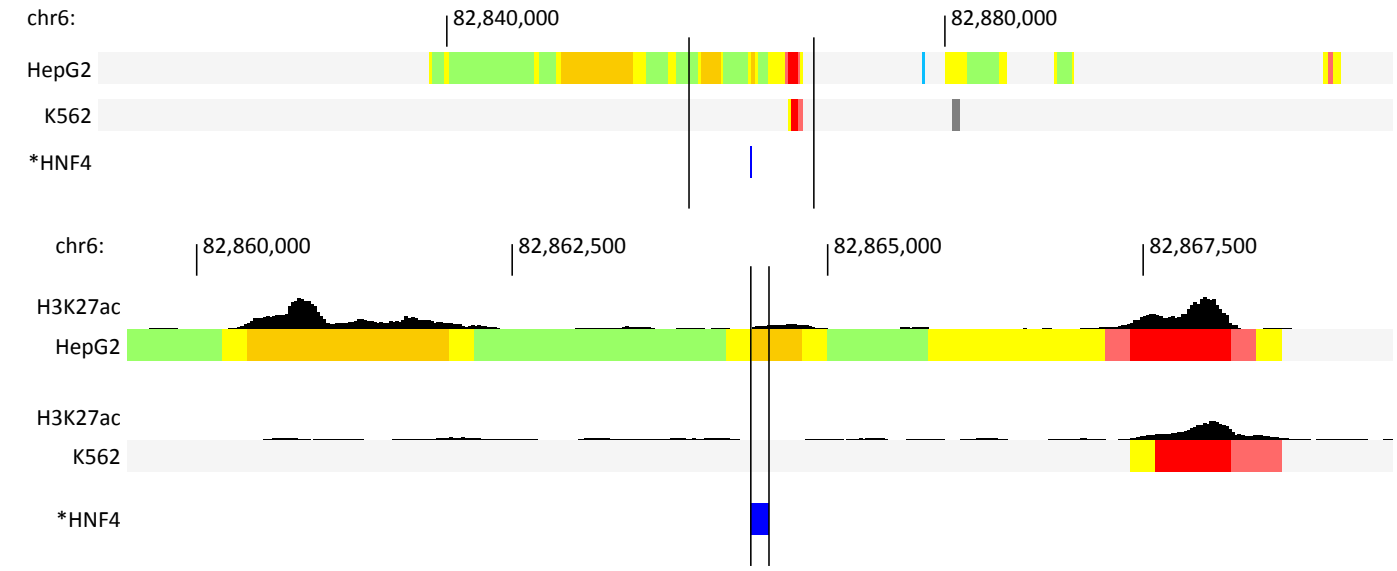
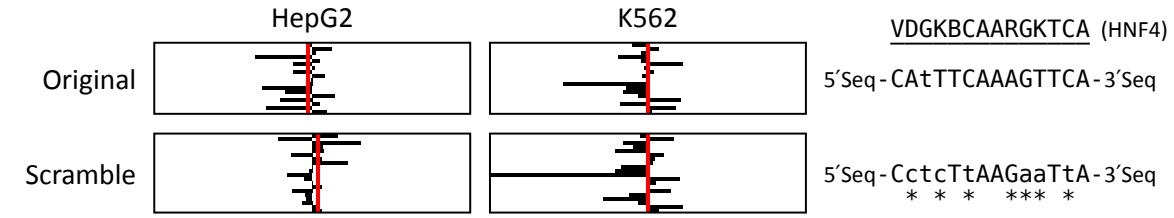
1749 HNF4 in HepG2 enhancer

chr6 82864457 82864470 - (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-CAtTTCAAAGTTCA-3′Seq

5′Seq-CctcTtAAGaaTtA-3′Seq

* * * *** *

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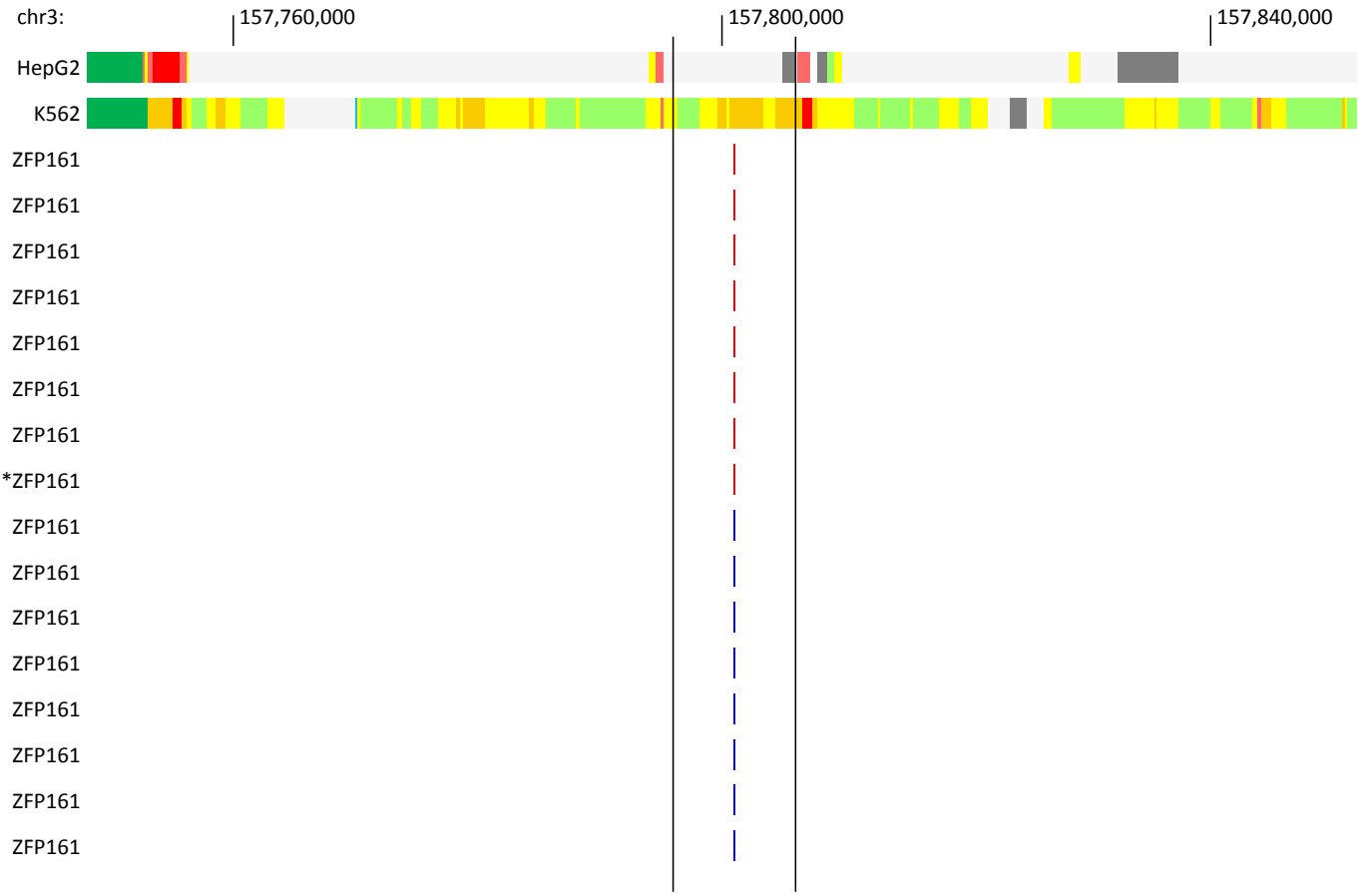
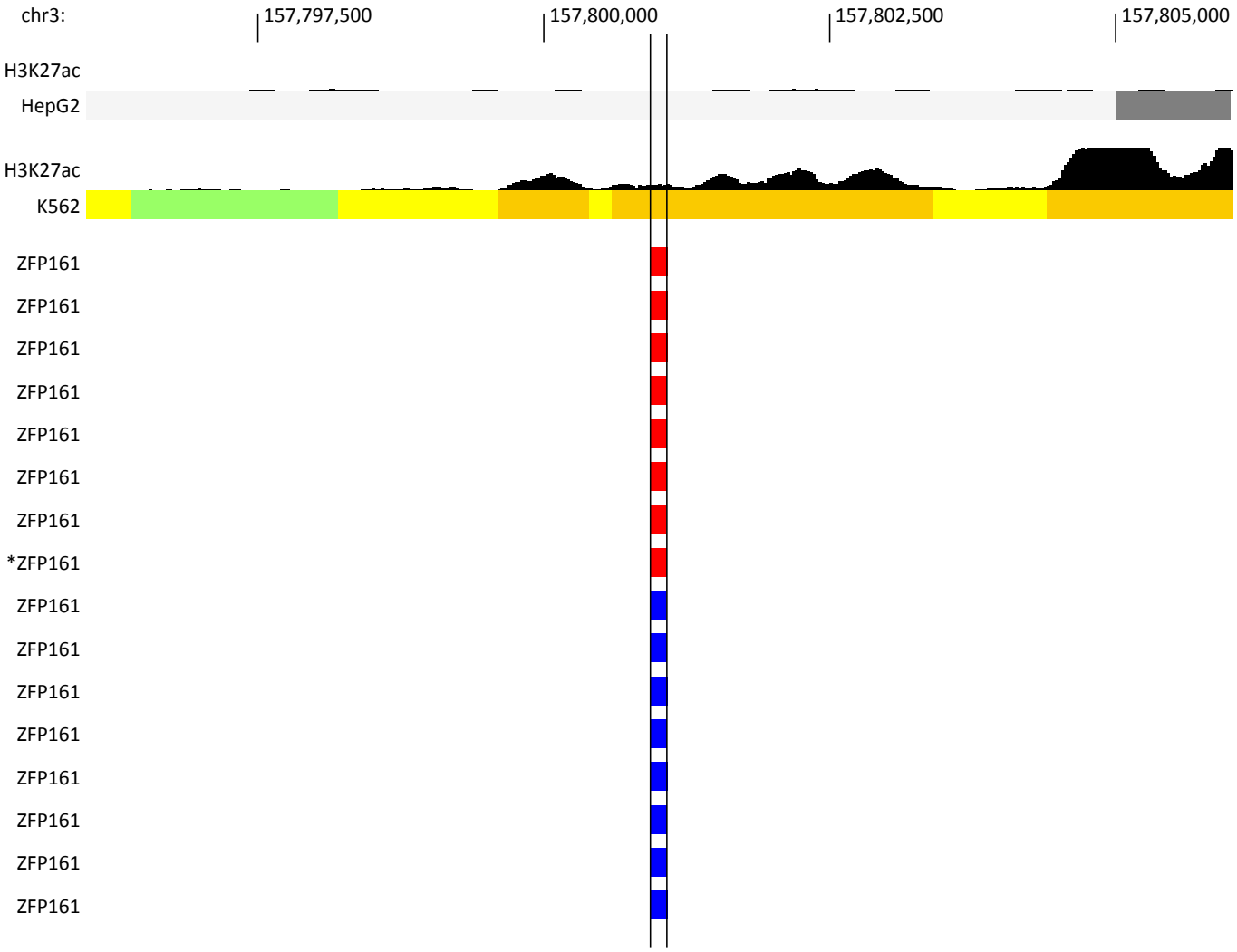
3′Seq = cctcatcagtaagtagtcaatgttattctcactctactattgtactgattgtcattatctcctag

1750 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr3 157800997 157801012 - (hg18)

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157,800,000
157,802,500
157,805,000
H3K27ac
HepG2
H3K27ac
K562
ZFP161
ZFP161
ZFP161
ZFP161
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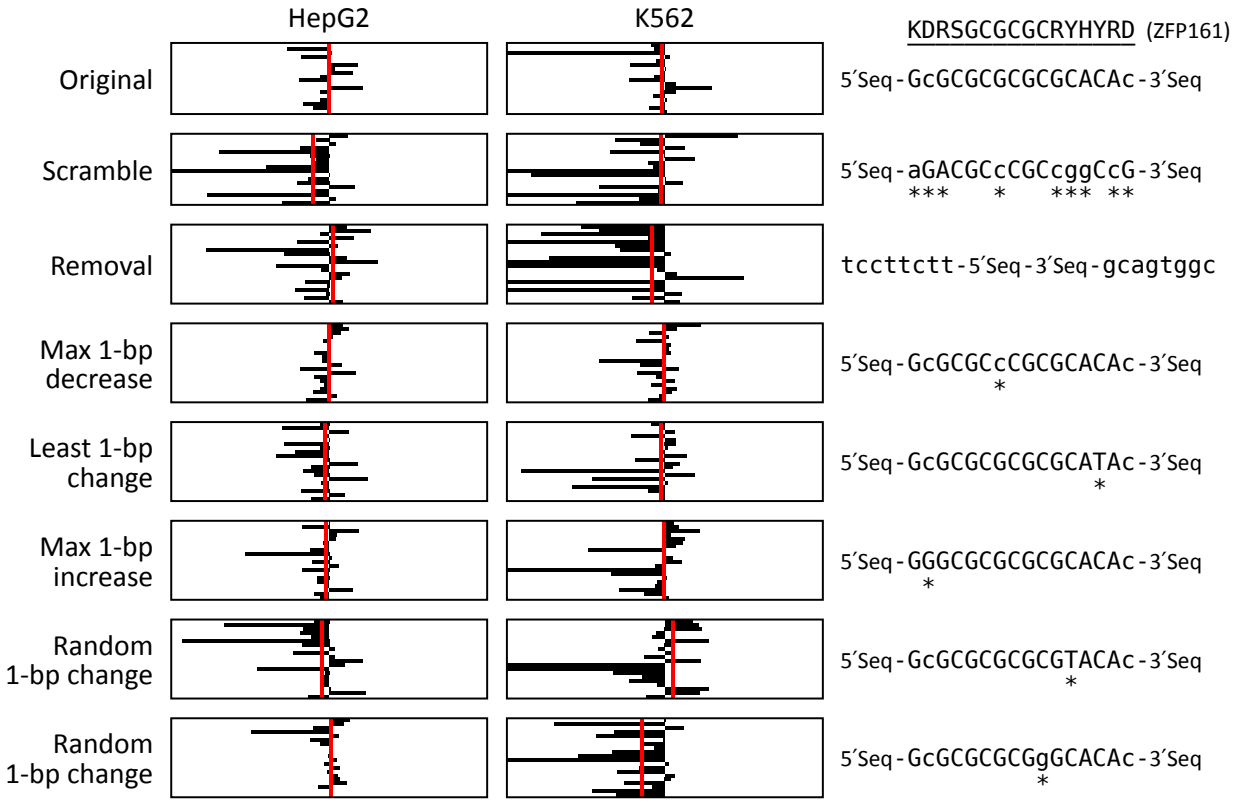
ZFP161



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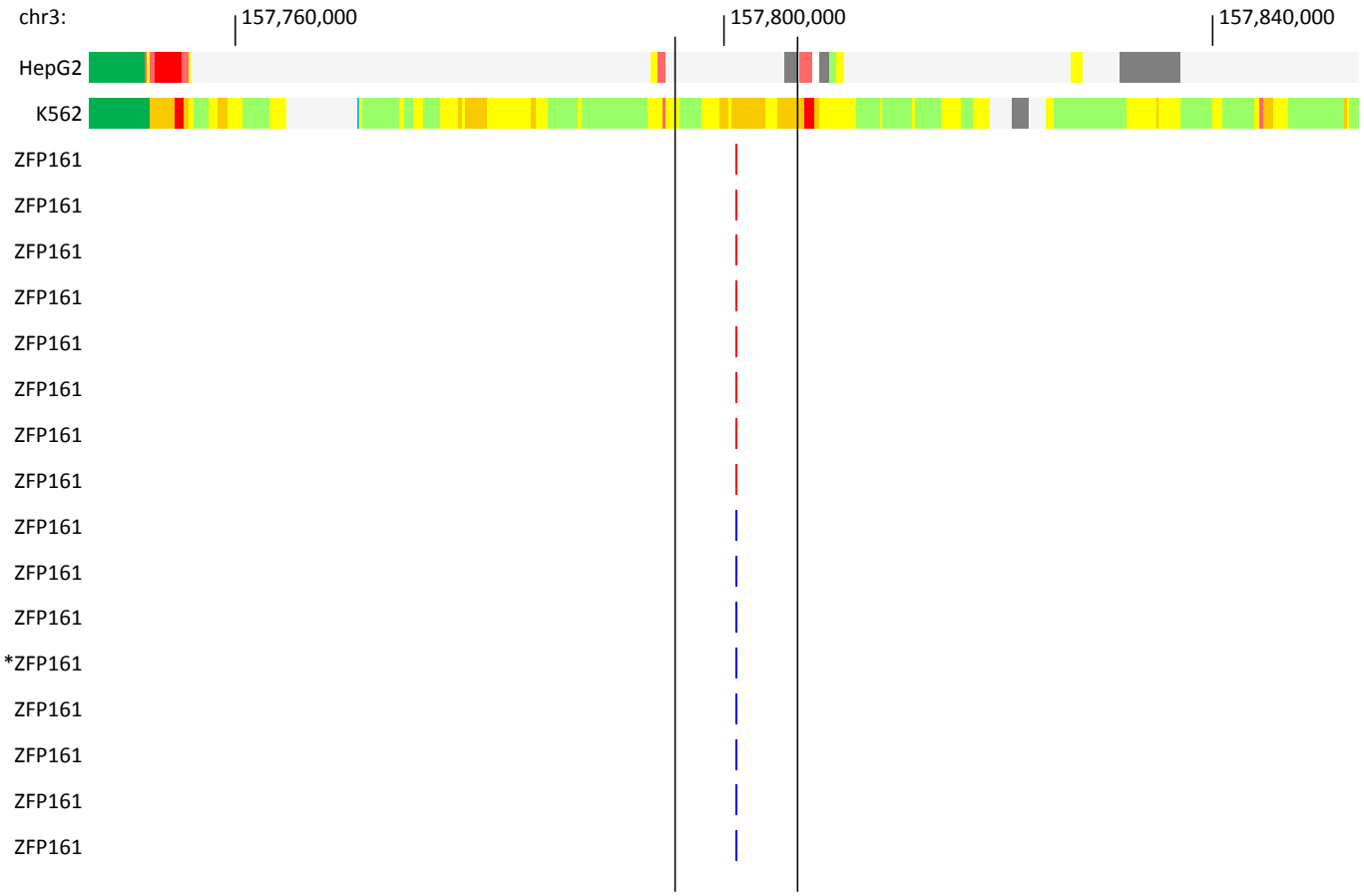
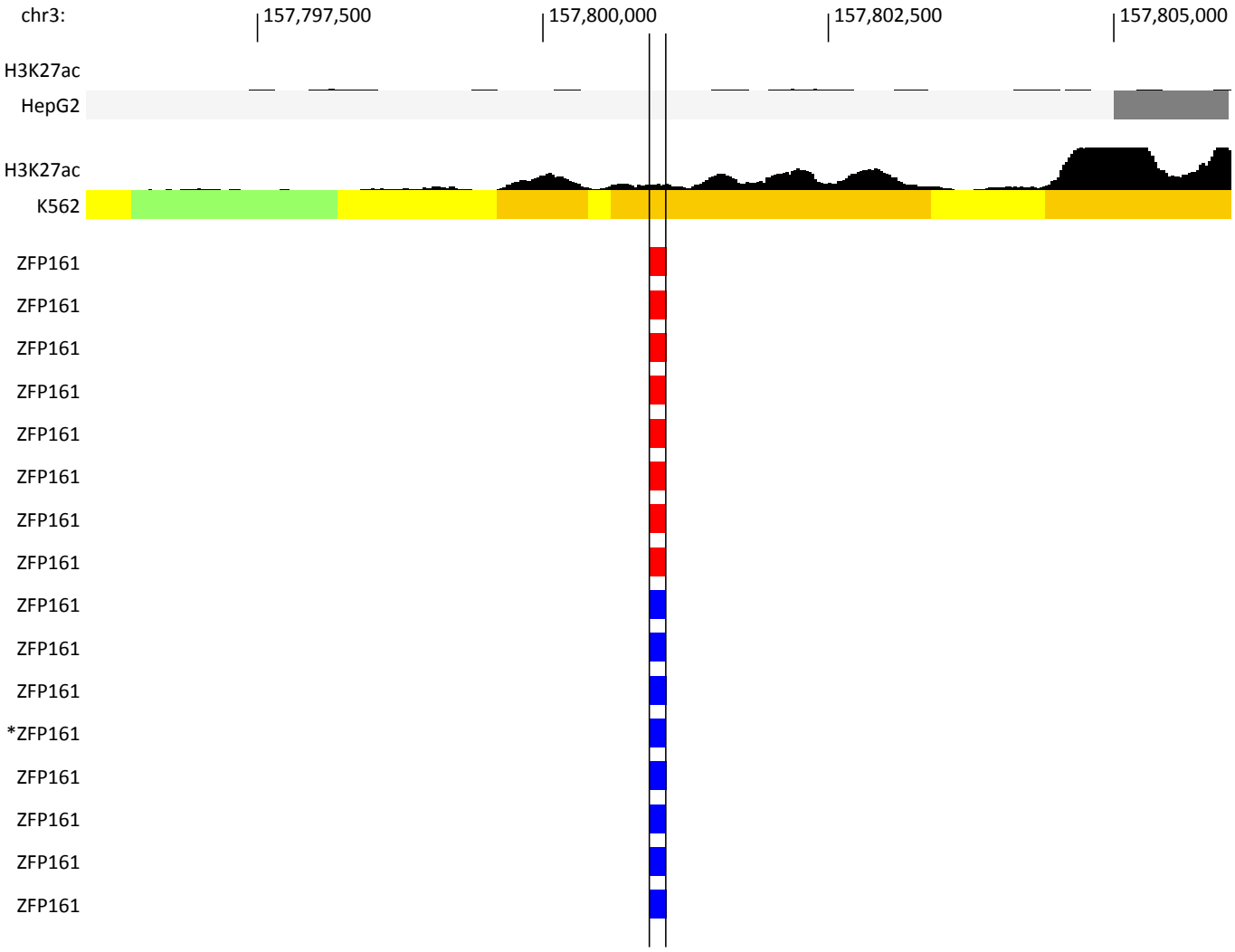
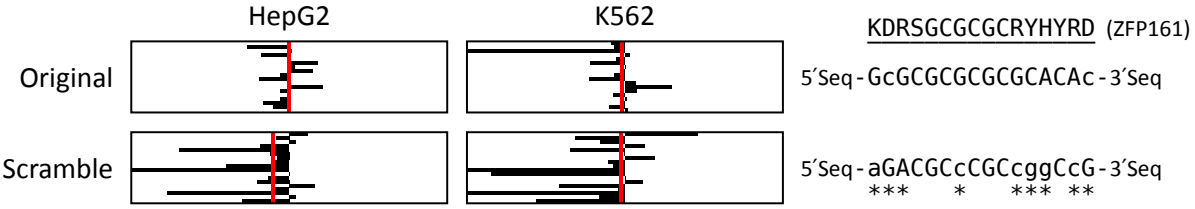
1751 ZFP161 in K562 enhancer

chr3 157800997 157801012 - (hg18)







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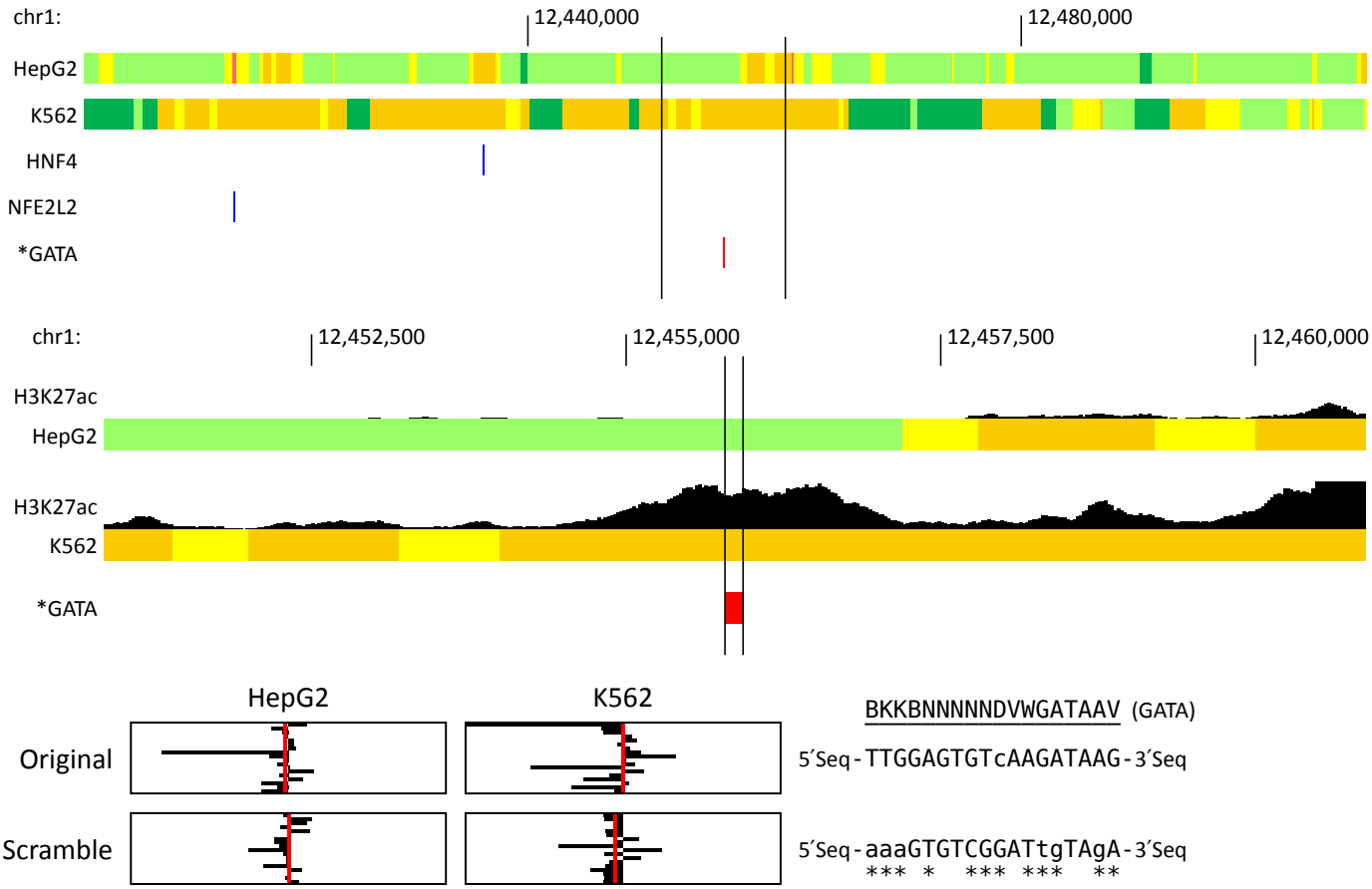
1752 GATA in K562 enhancer (conserved at 60% confidence)

chr1 12455849 12455866 - (hg18)



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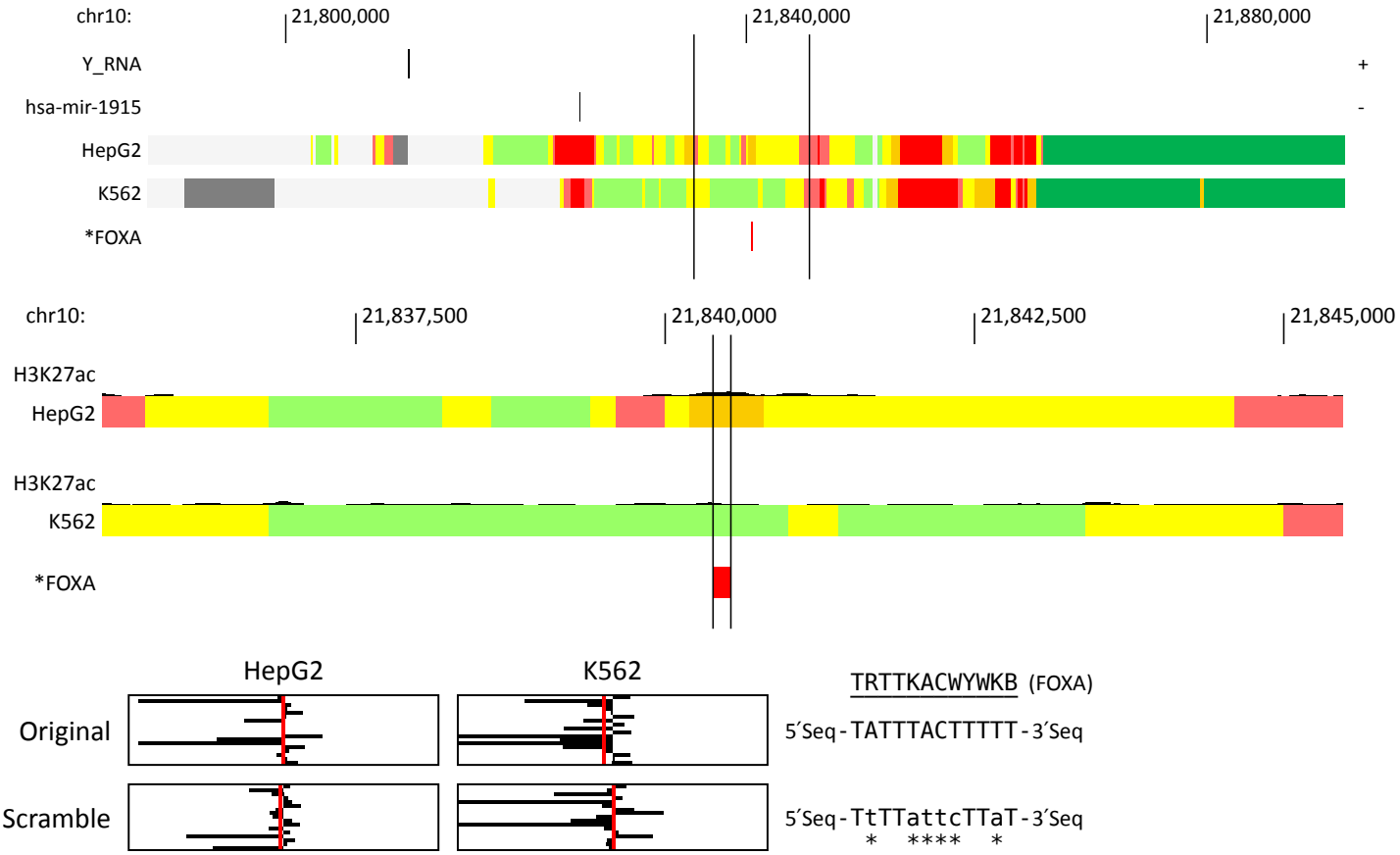
3′Seq = aaaactttcagcaacttcccttggaaactacaaaacacccatcagcacccaggatctaagtac

1753 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr10 21840454 21840465 - (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TATTTACTTTTT-3′Seq

5′Seq-TtTTattcTTaT-3′Seq

* **** *

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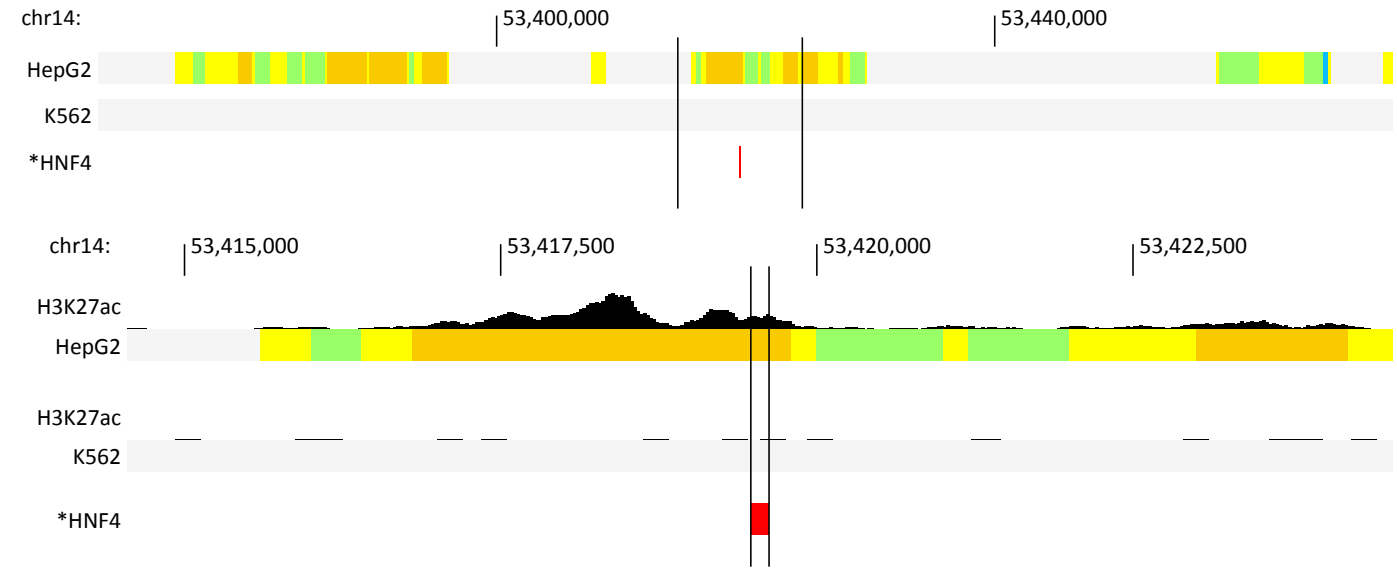
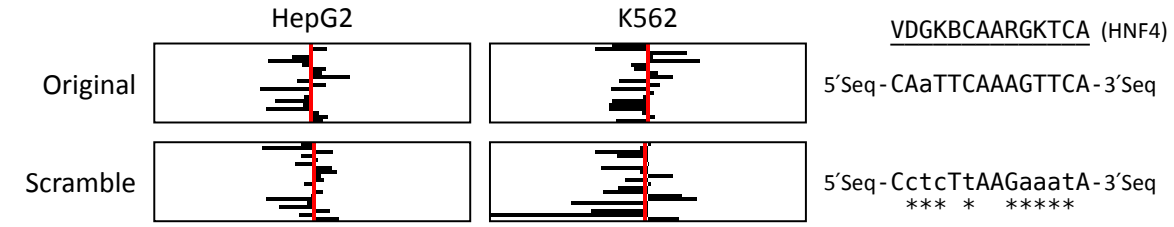
3′Seq = aaagtgggtgttctttttctactggcttacttgattacagtggagtaatctcaataatggttgttta

1754 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 53419544 53419557 + (hg18)





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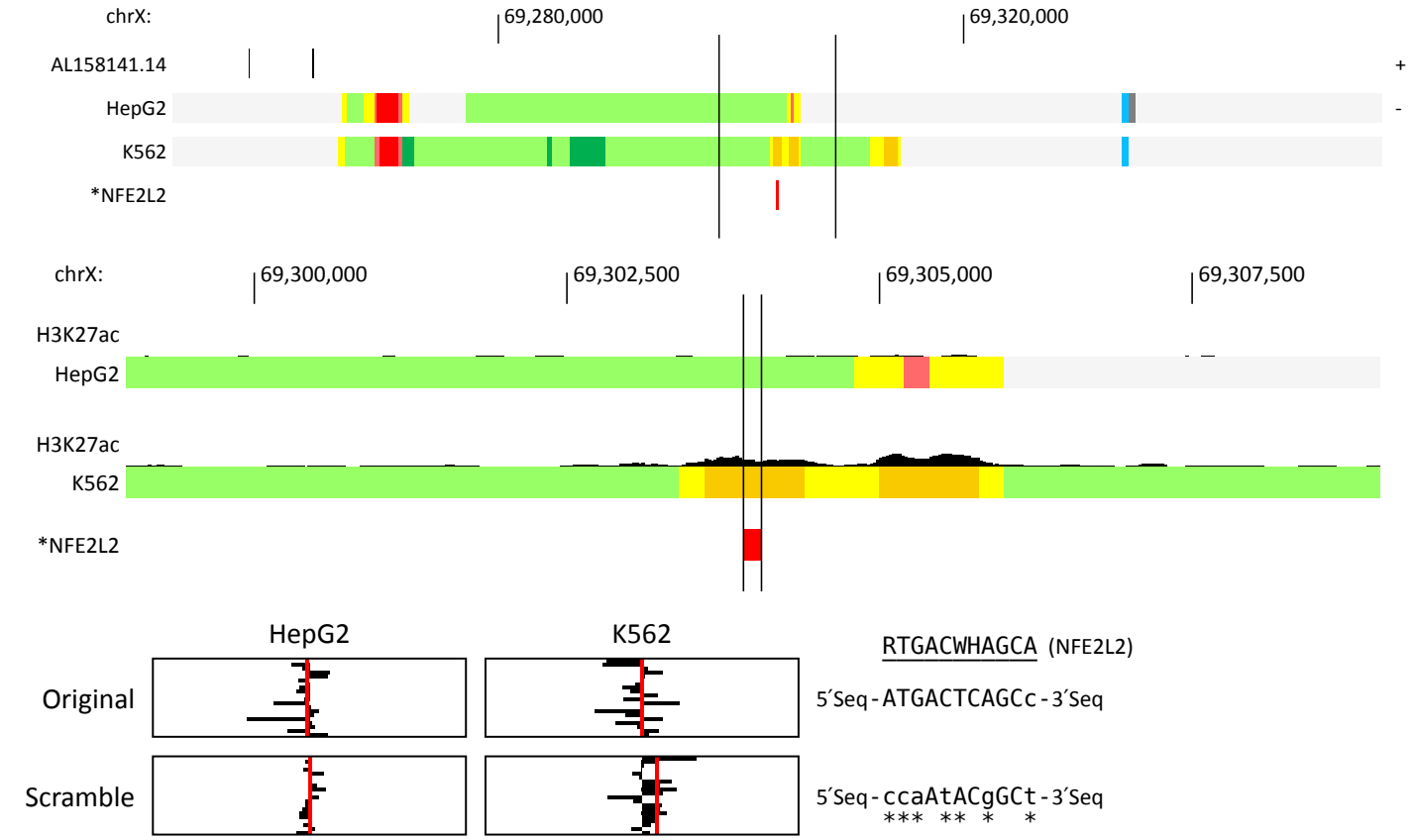
1755 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chrX 69303979 69303989 + (hg18)



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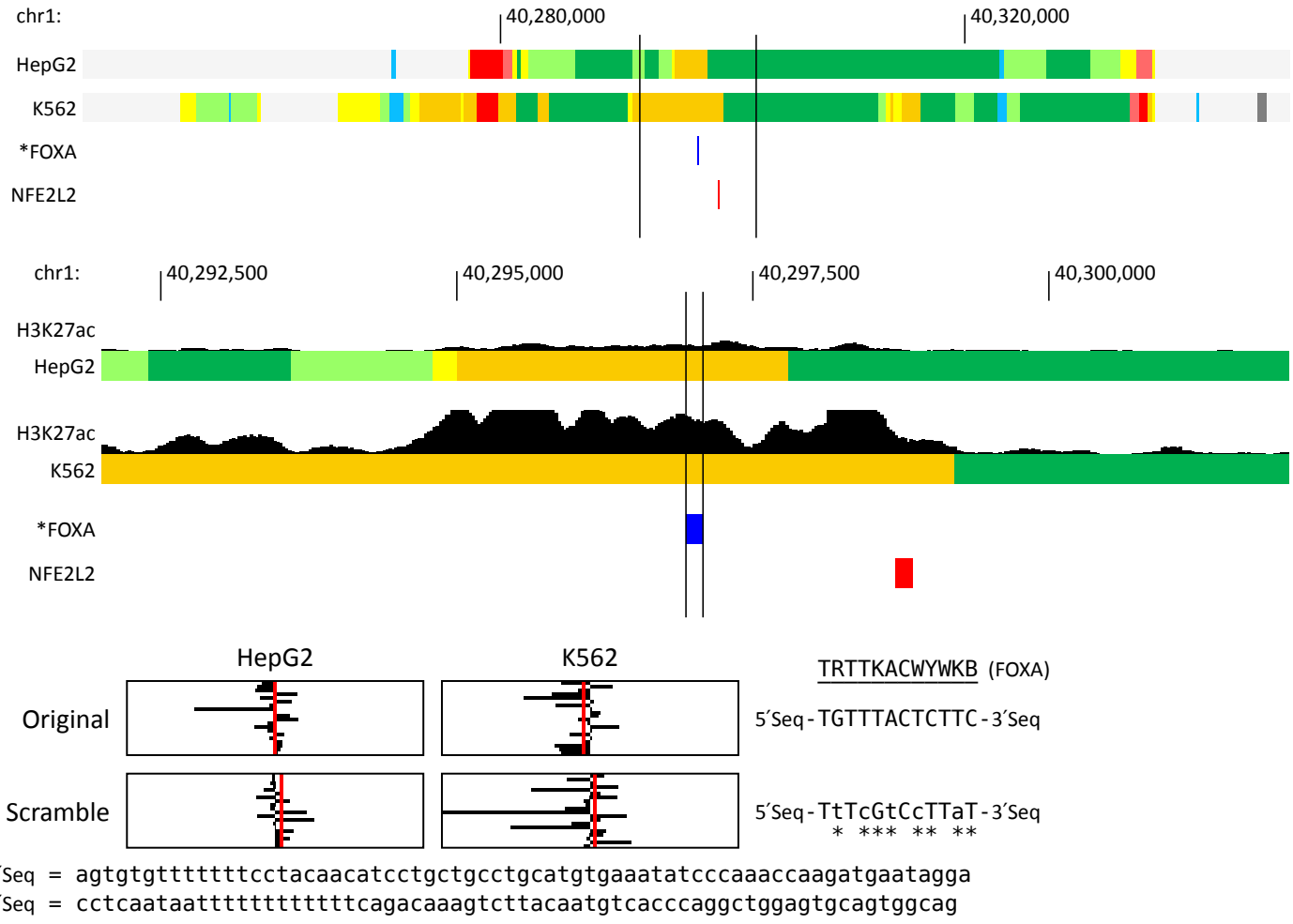
1756 FOXA in HepG2 enhancer

chr1 40297002 40297013 - (hg18)



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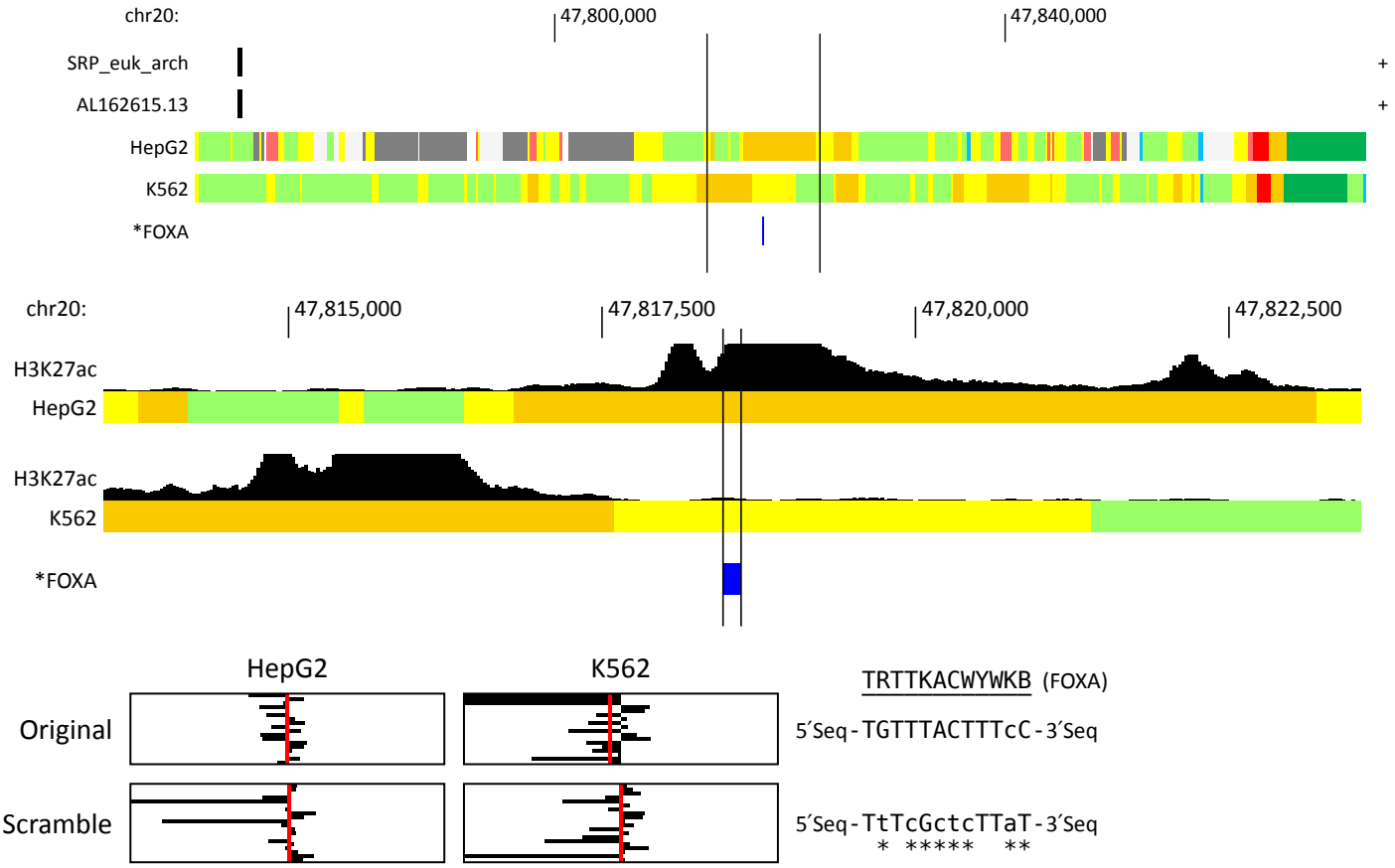
1757 FOXA in HepG2 enhancer

chr20 47818532 47818543 - (hg18)



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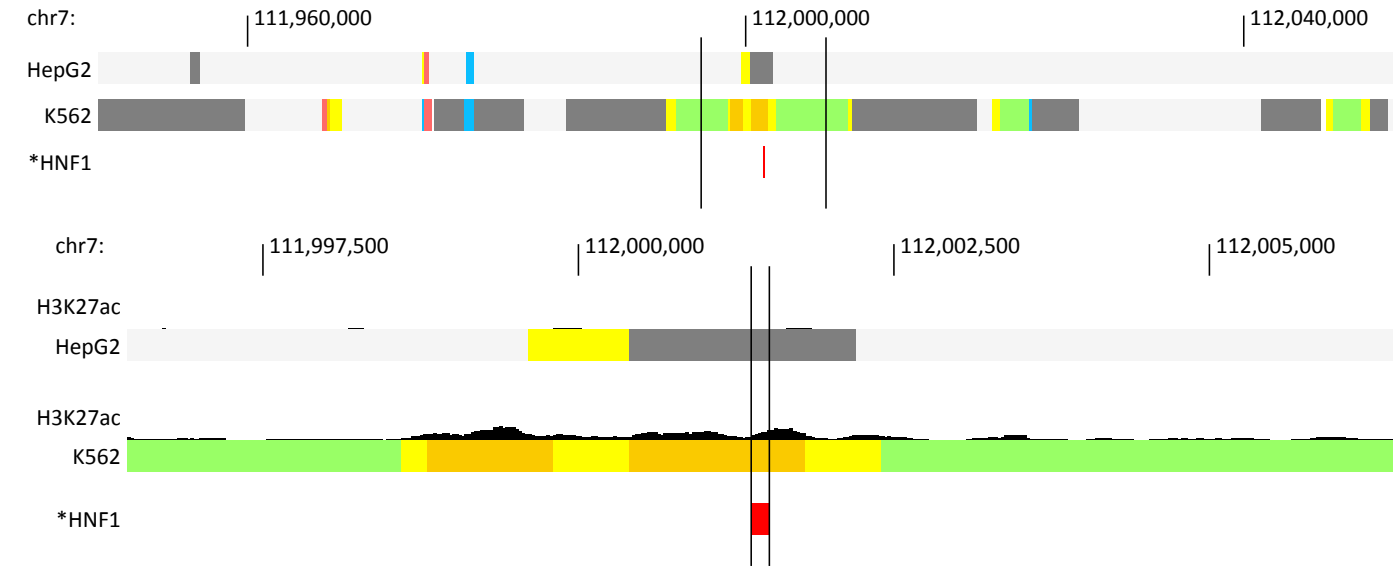
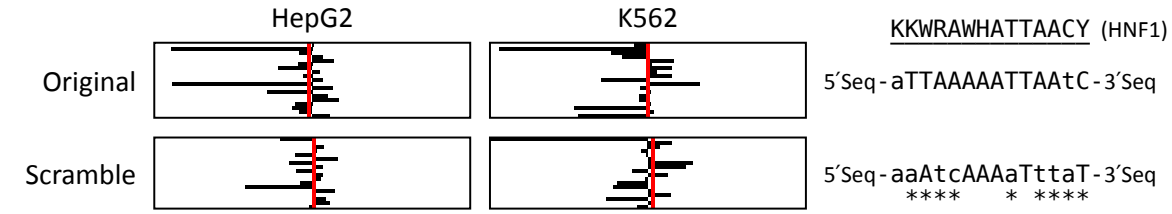
1758 HNF1 in K562 enhancer (conserved at 60% confidence)

chr7 112001435 112001448 - (hg18)





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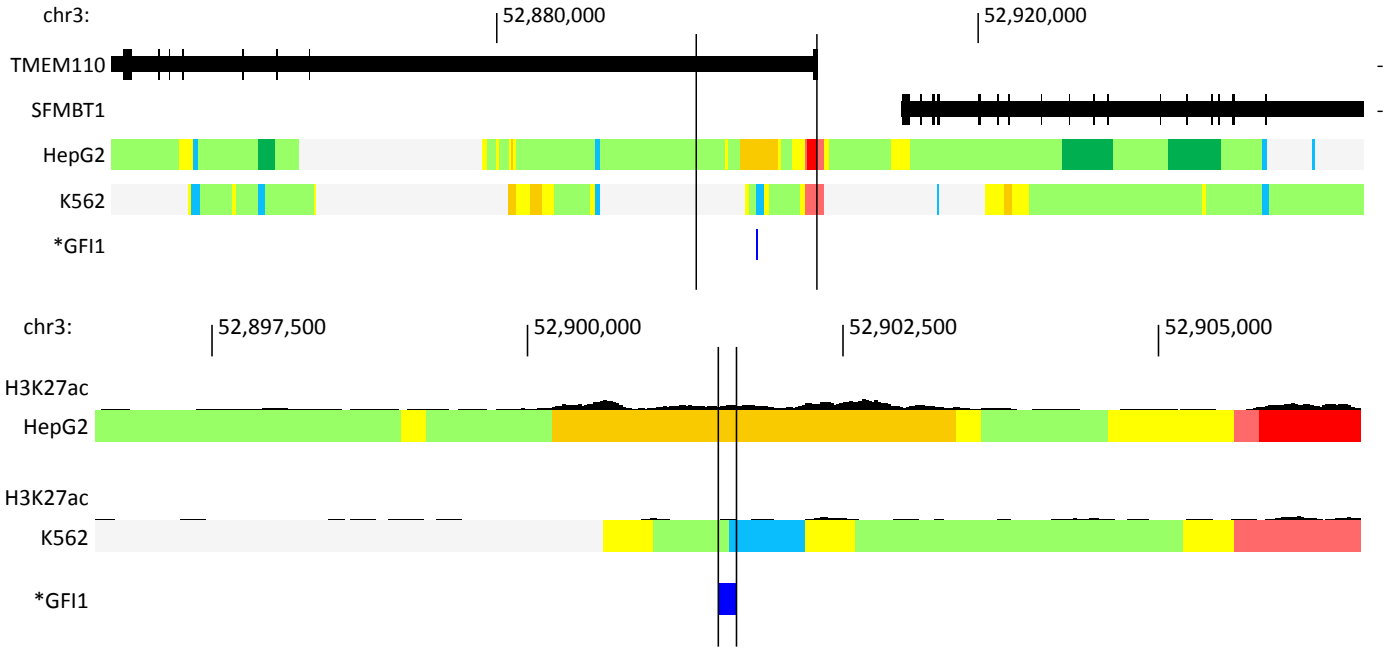
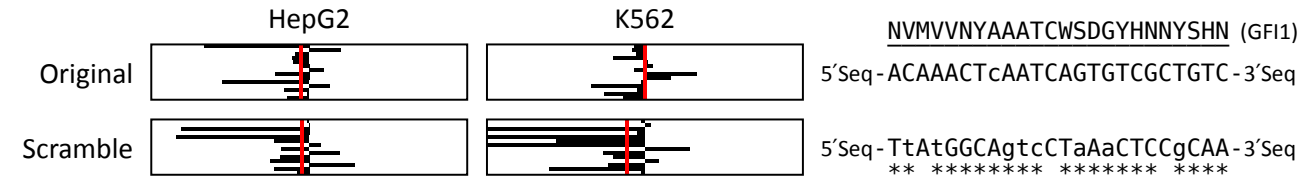
1759 GFI1 in HepG2 enhancer

chr3 52901573 52901596 - (hg18)





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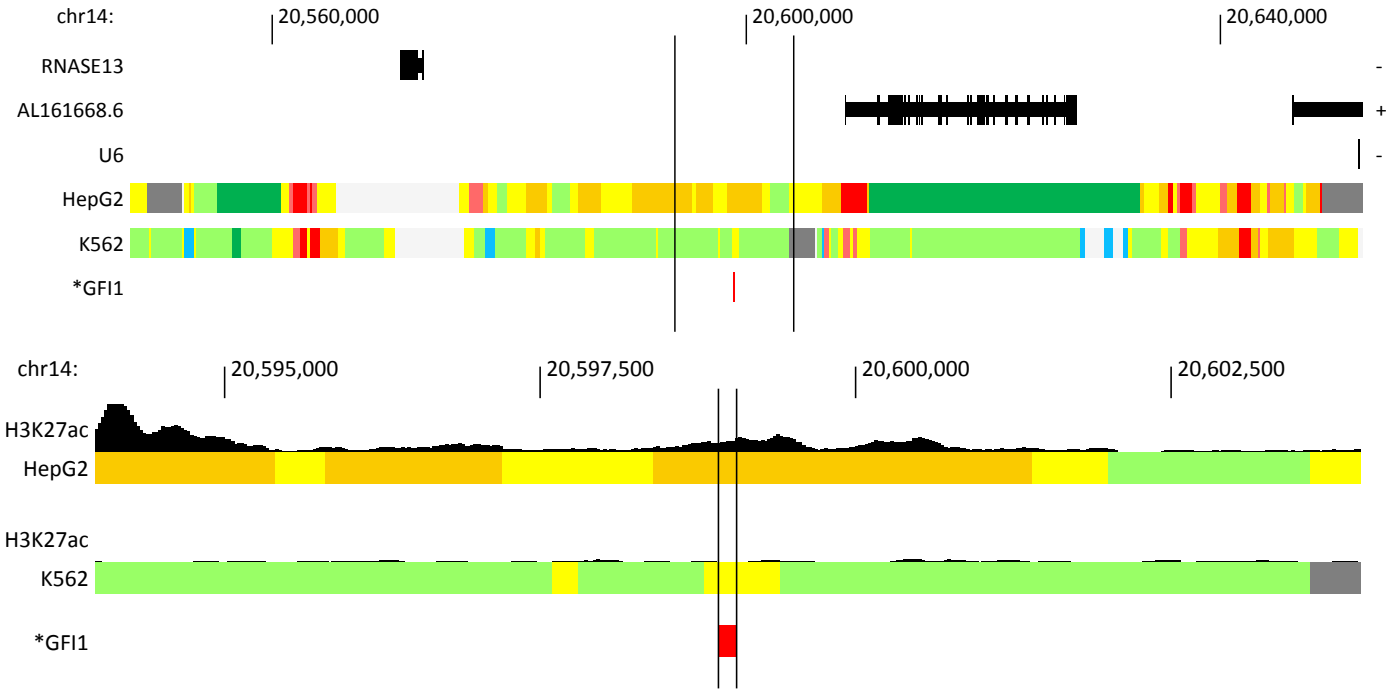
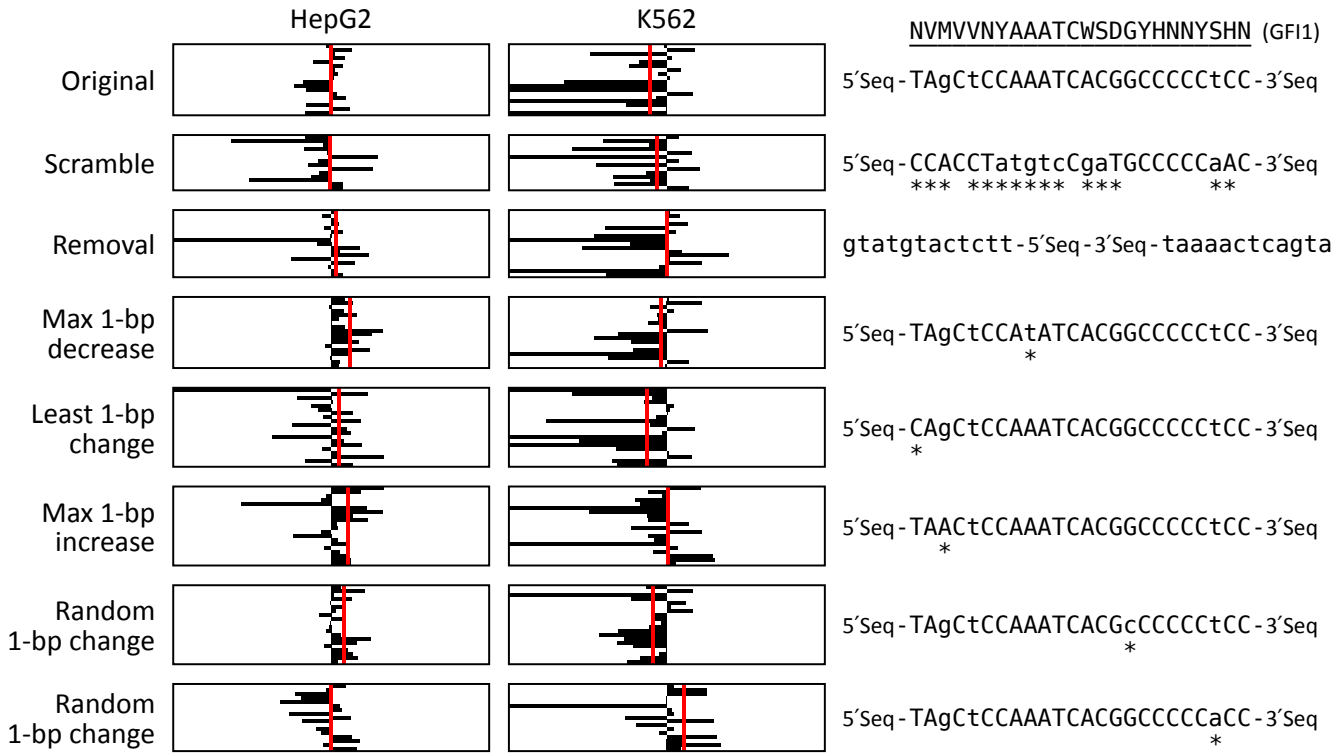
1760 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 20598974 20598997 - (hg18)





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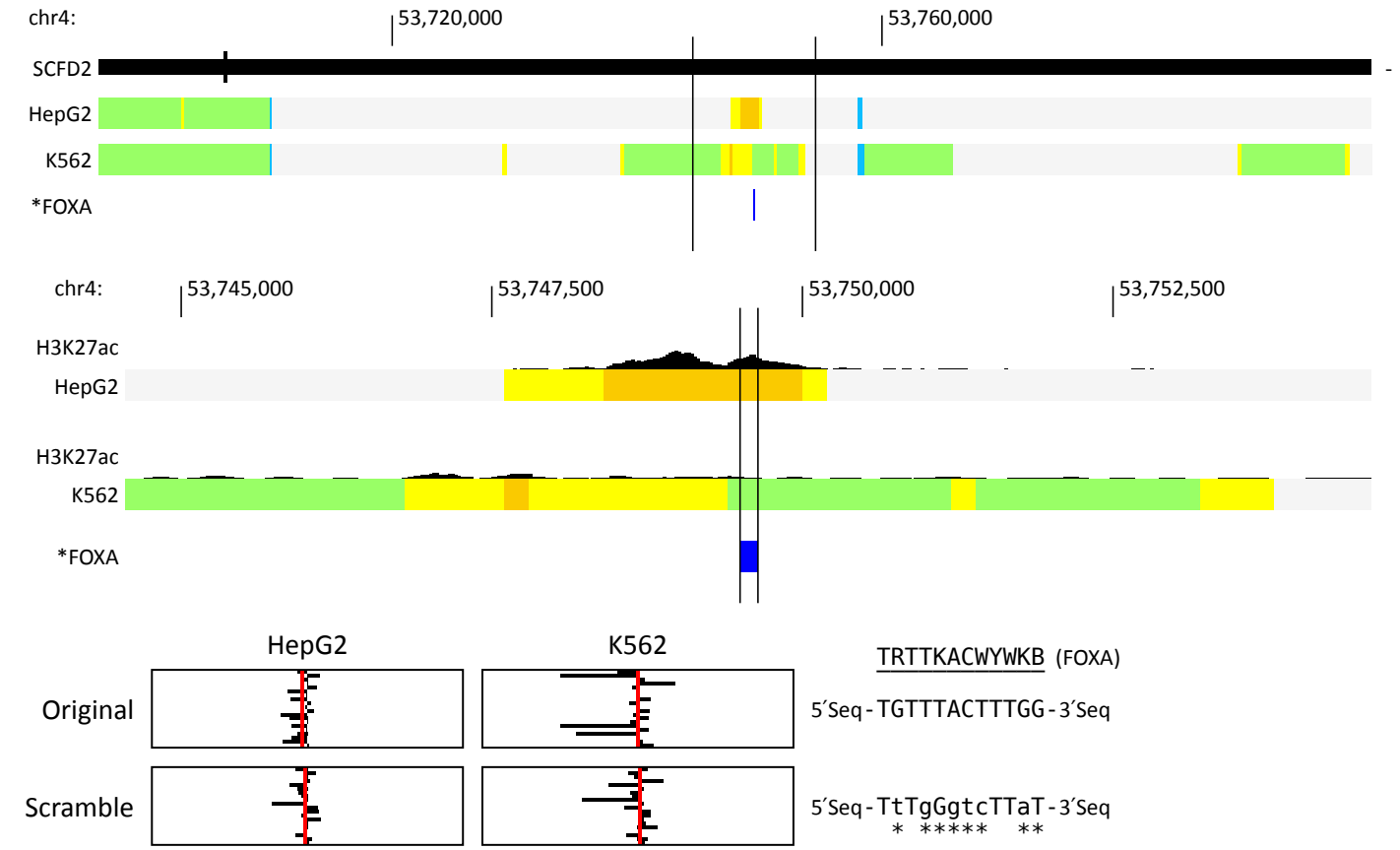
1761 FOXA in HepG2 enhancer

chr4 53749565 53749576 - (hg18)



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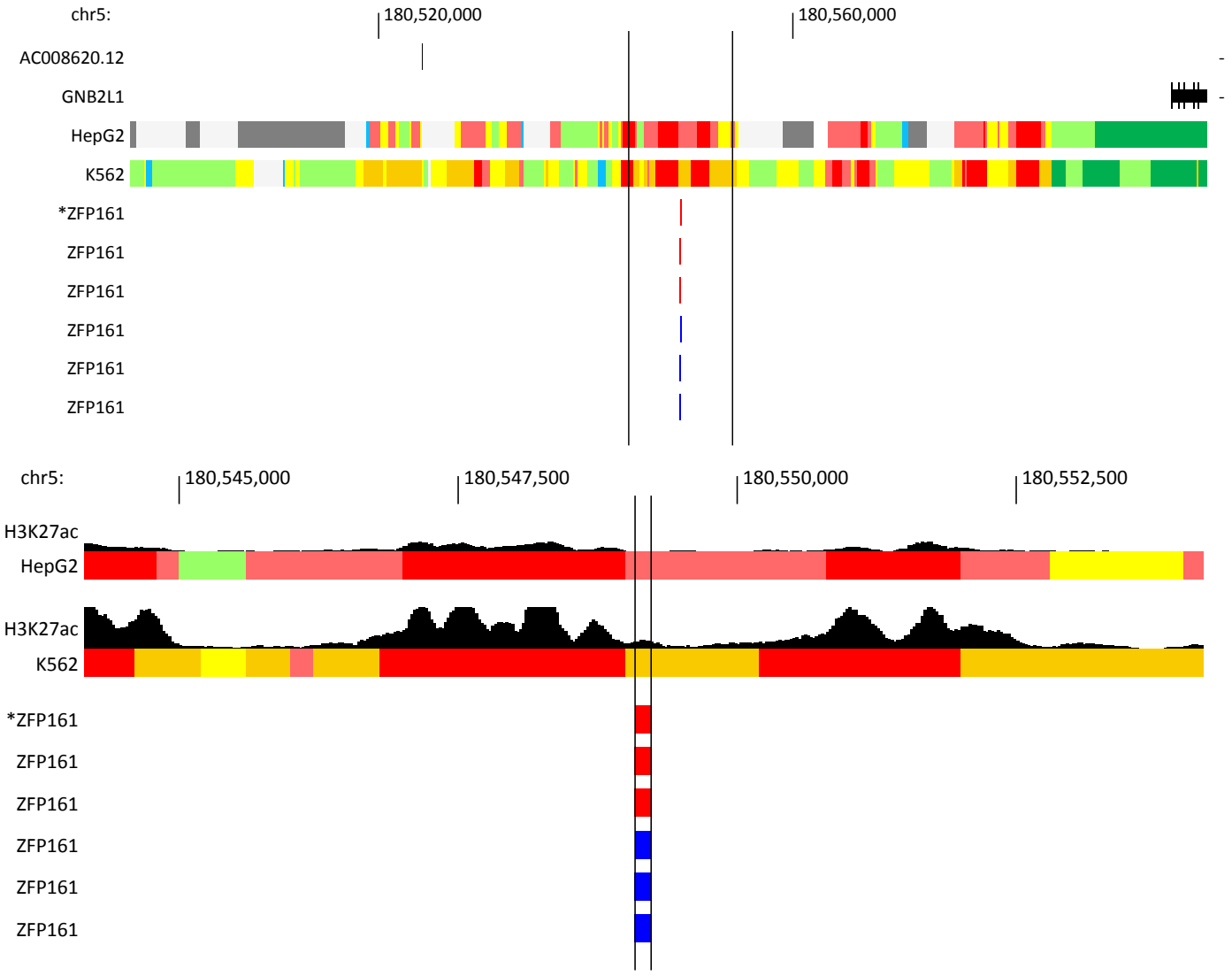
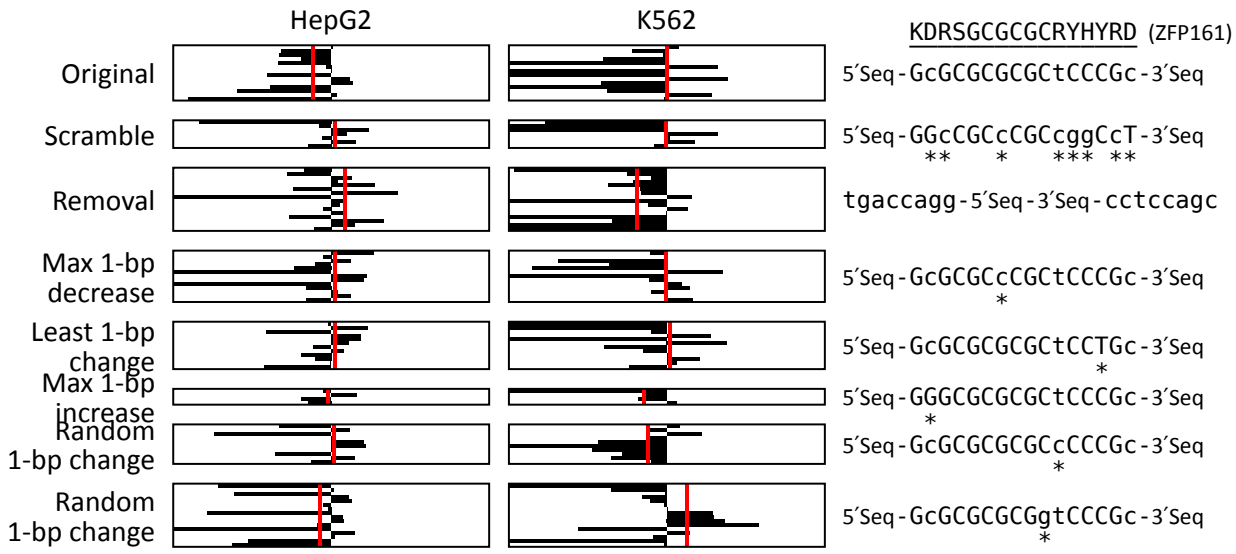
1762 ZFP161 in K562 enhancer (conserved at 50% confidence)

chr5 180549150 180549165 + (hg18)





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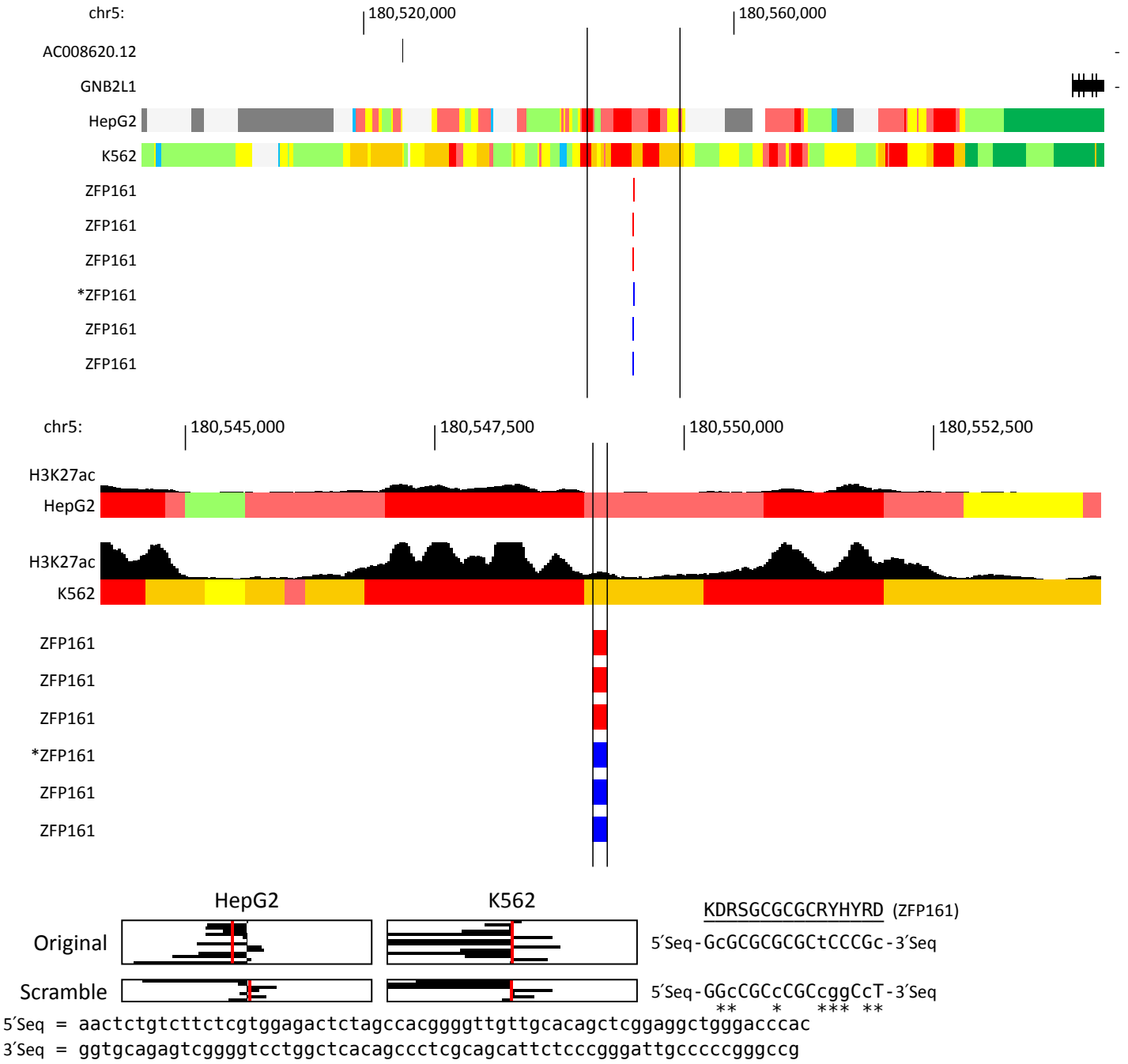
3′Seq = ggtgcagagtcggggtcctggctcacagccctcgcagcattctcccgggattgccccgggccg

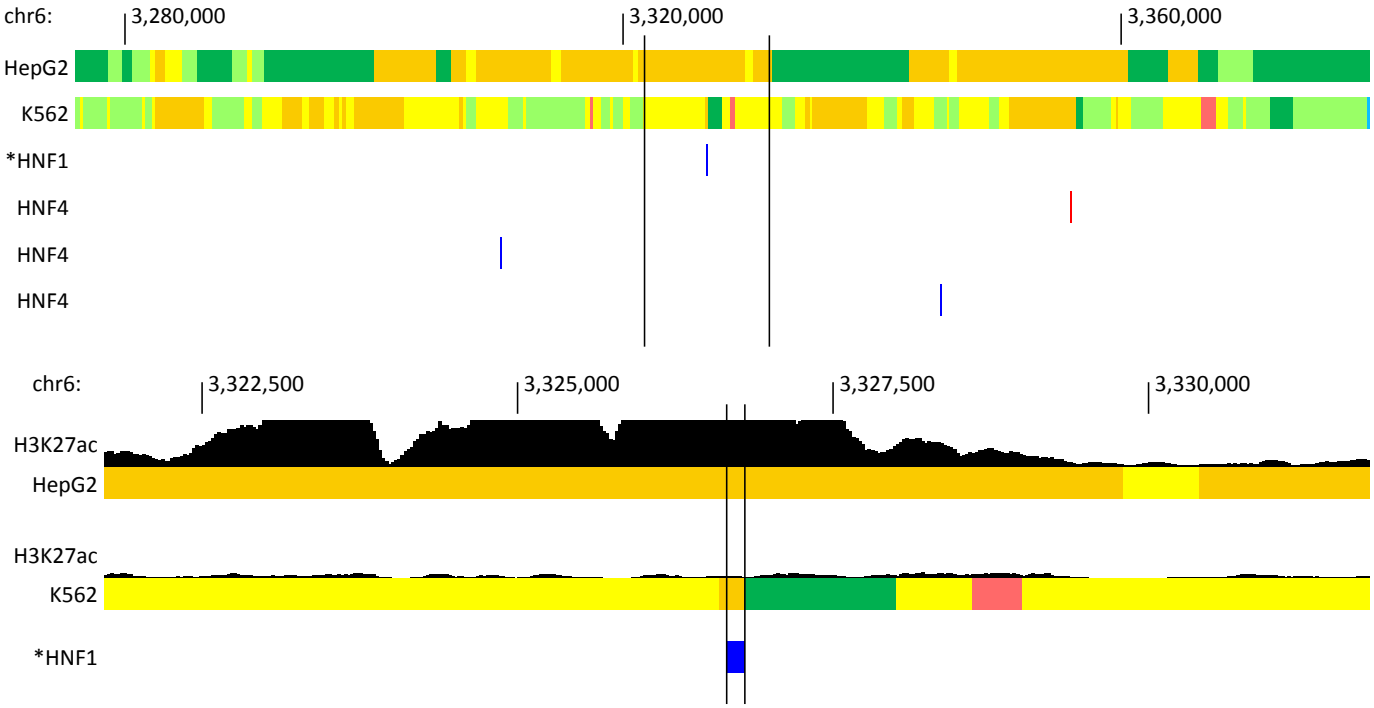
1763 ZFP161 in K562 enhancer

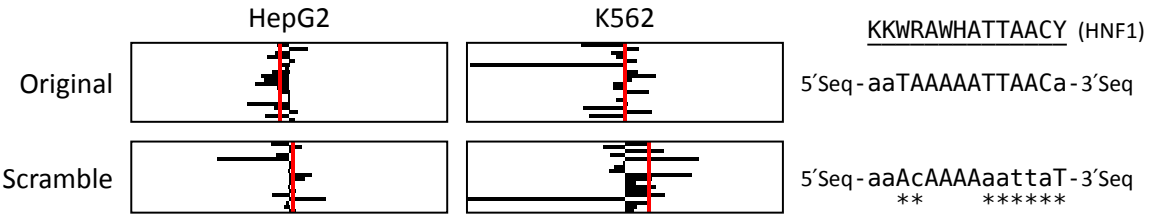
chr5 180549150 180549165 + (hg18)



1764 HNF1 in HepG2 enhancer

chr6 3326723 3326736 + (hg18)





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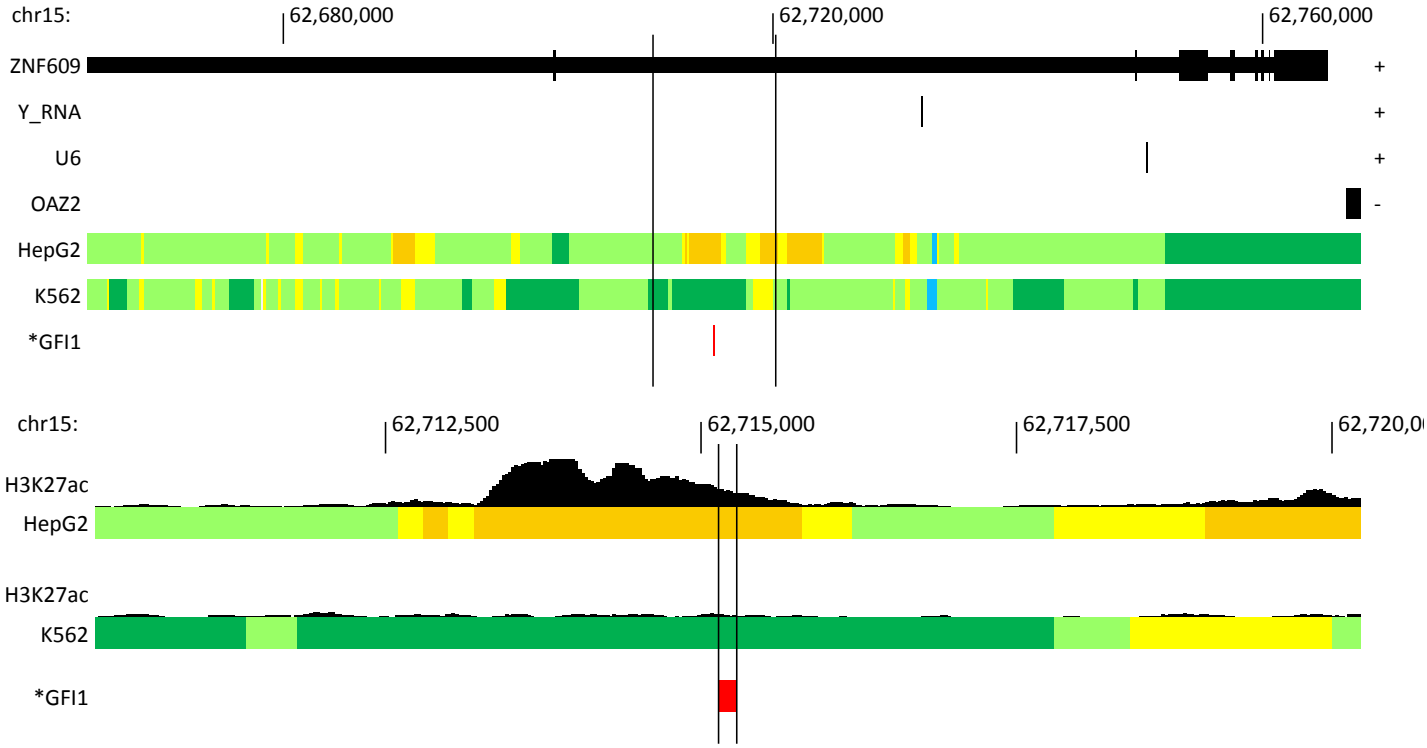
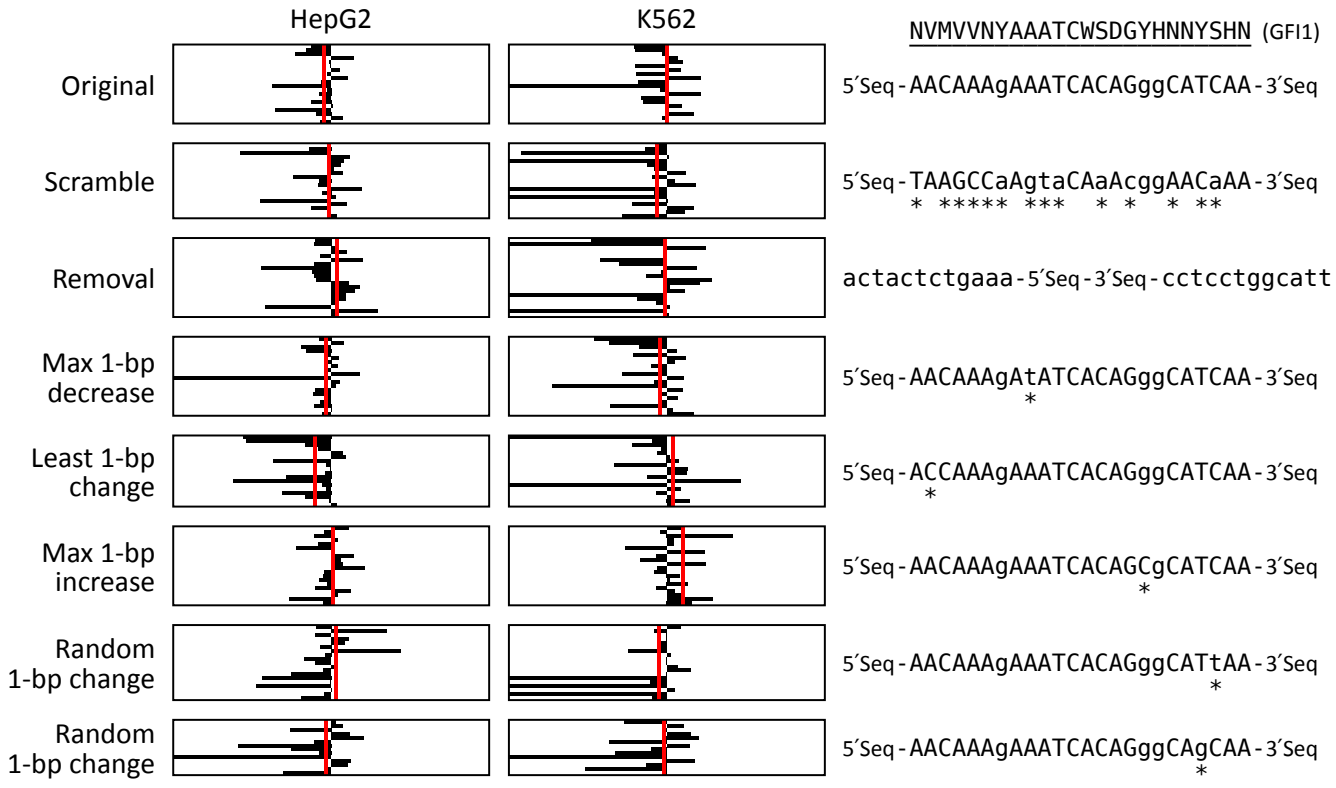
1765 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr15 62715200 62715223 + (hg18)





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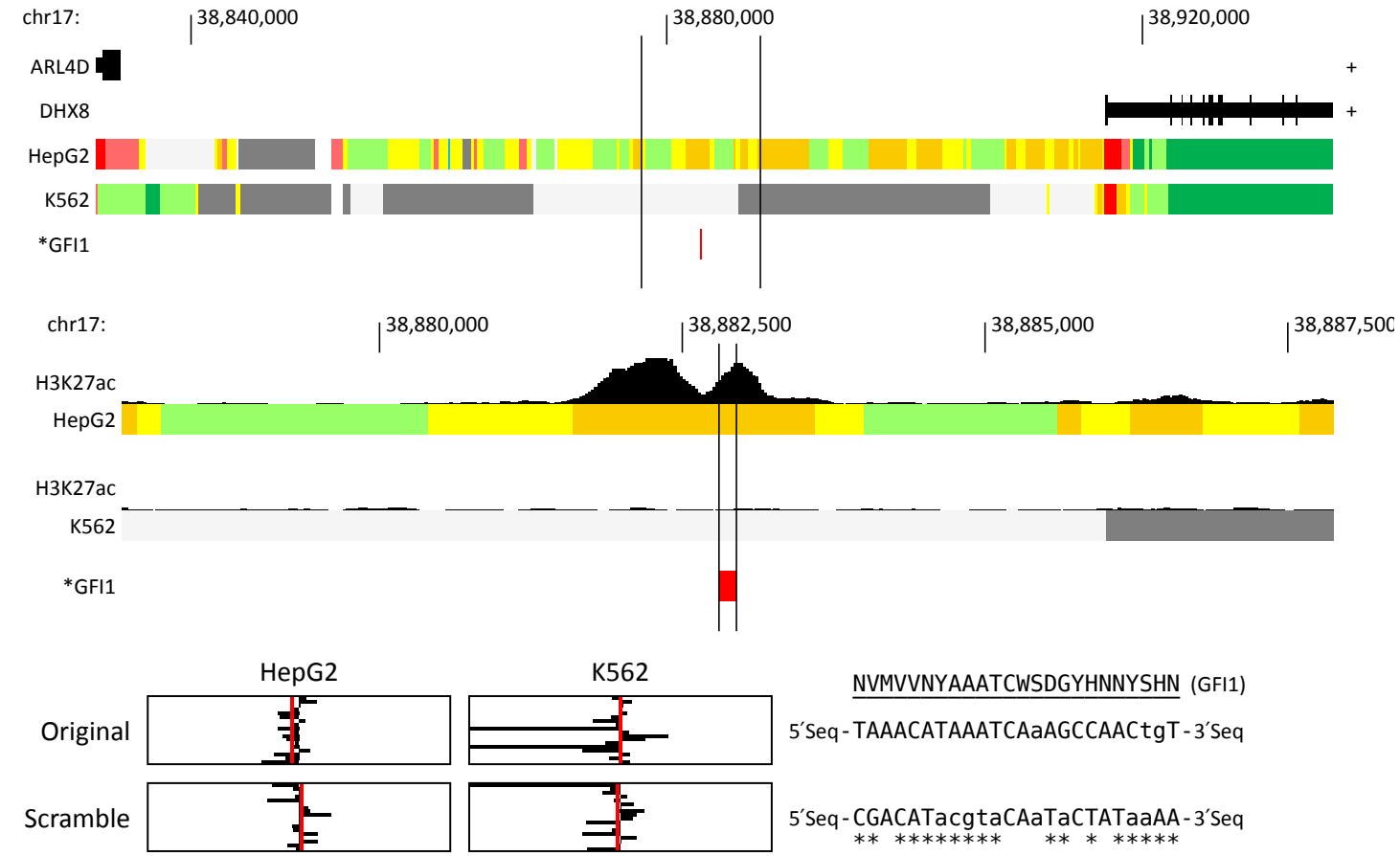
1766 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr17 38882864 38882887 - (hg18)



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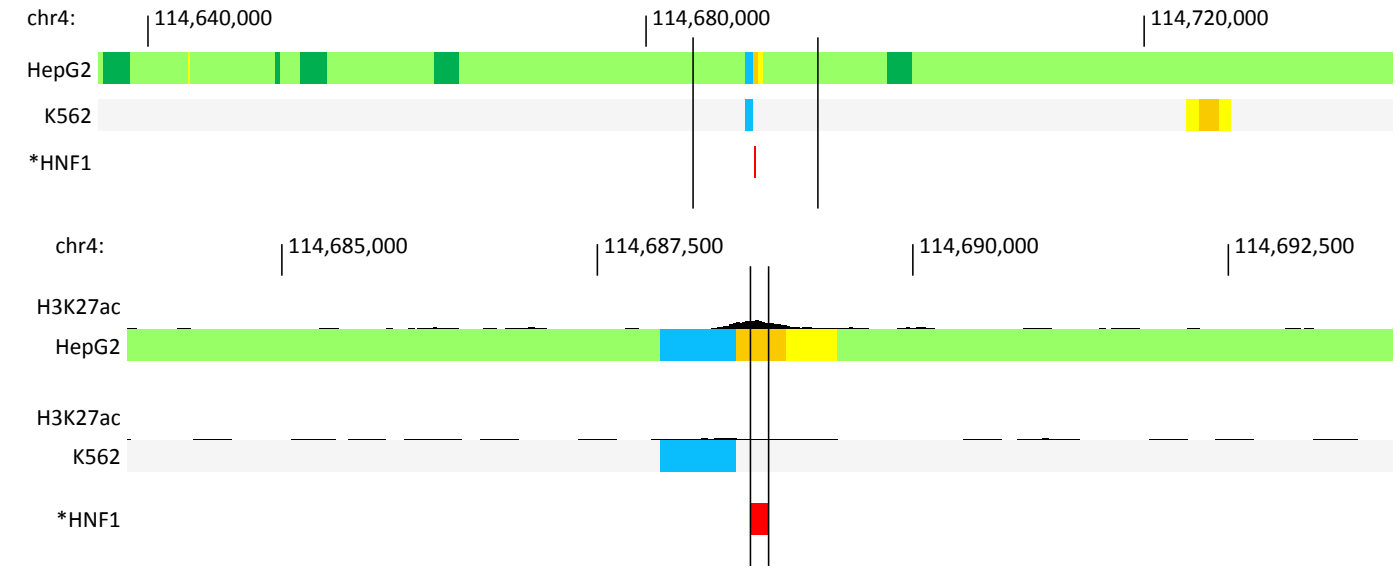
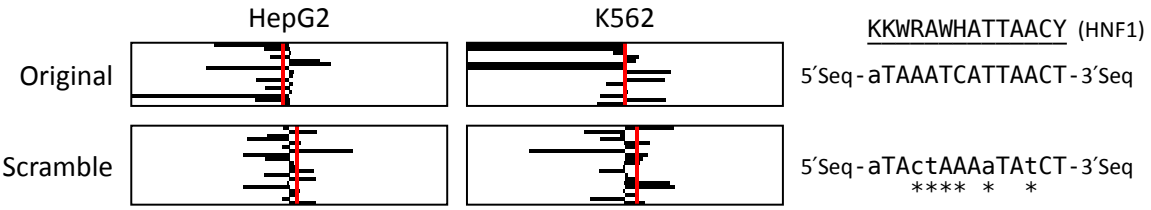
1767 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr4 114688779 114688792 + (hg18)





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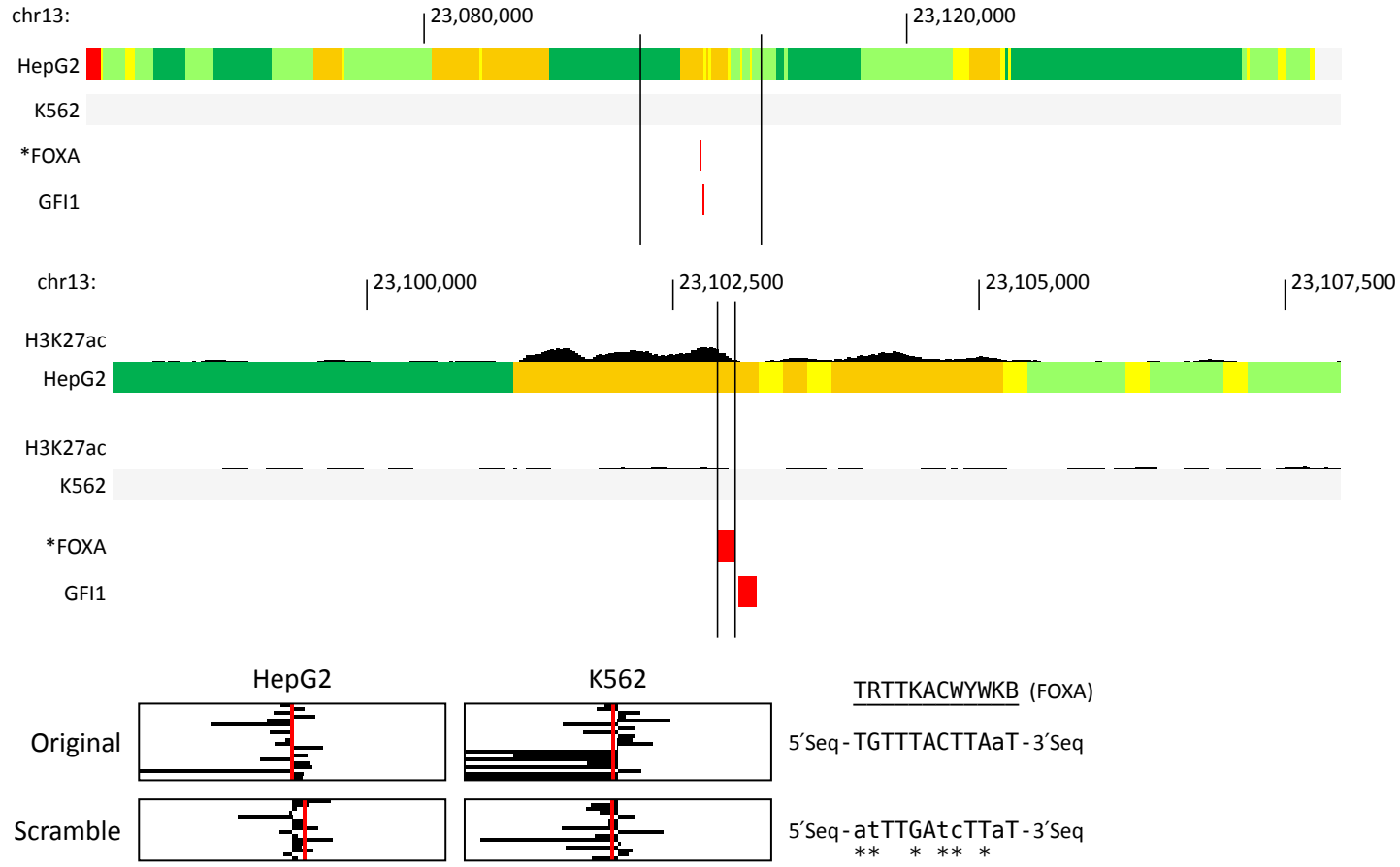
1768 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr13 23102931 23102942 + (hg18)



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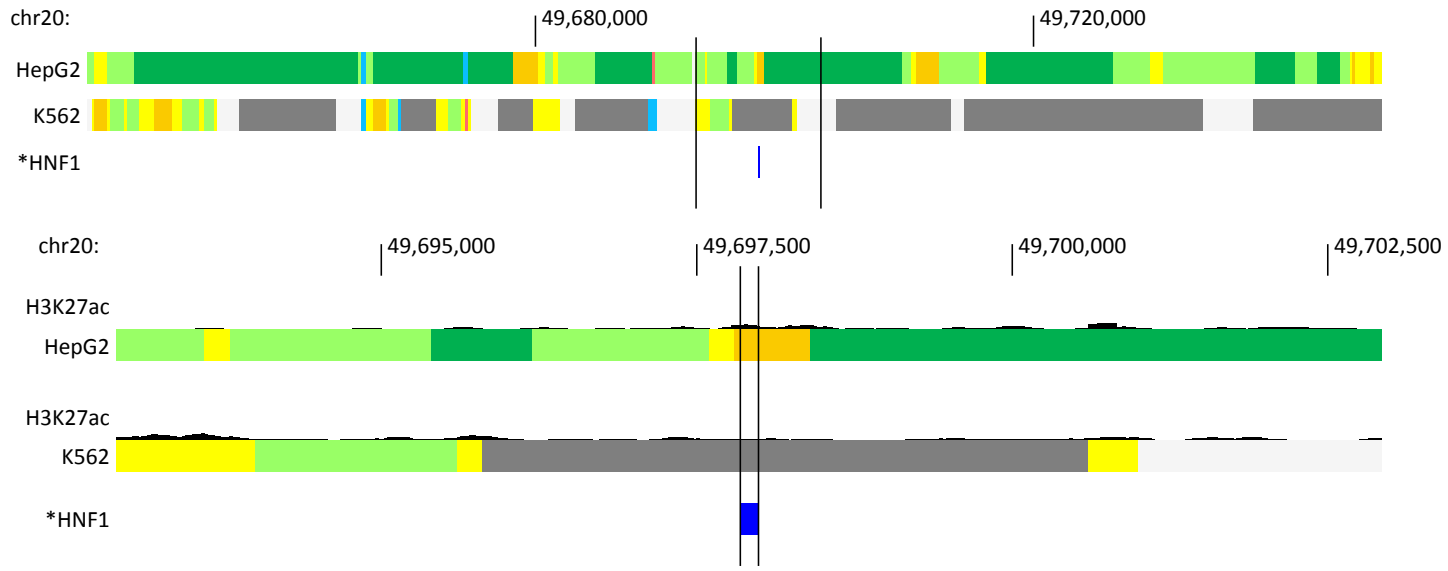
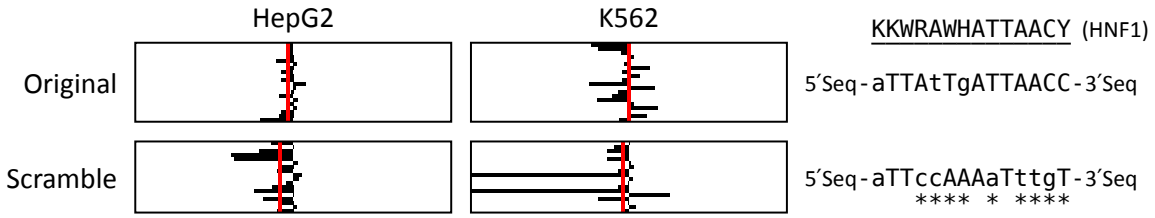
1769 HNF1 in HepG2 enhancer

chr20 49697911 49697924 - (hg18)





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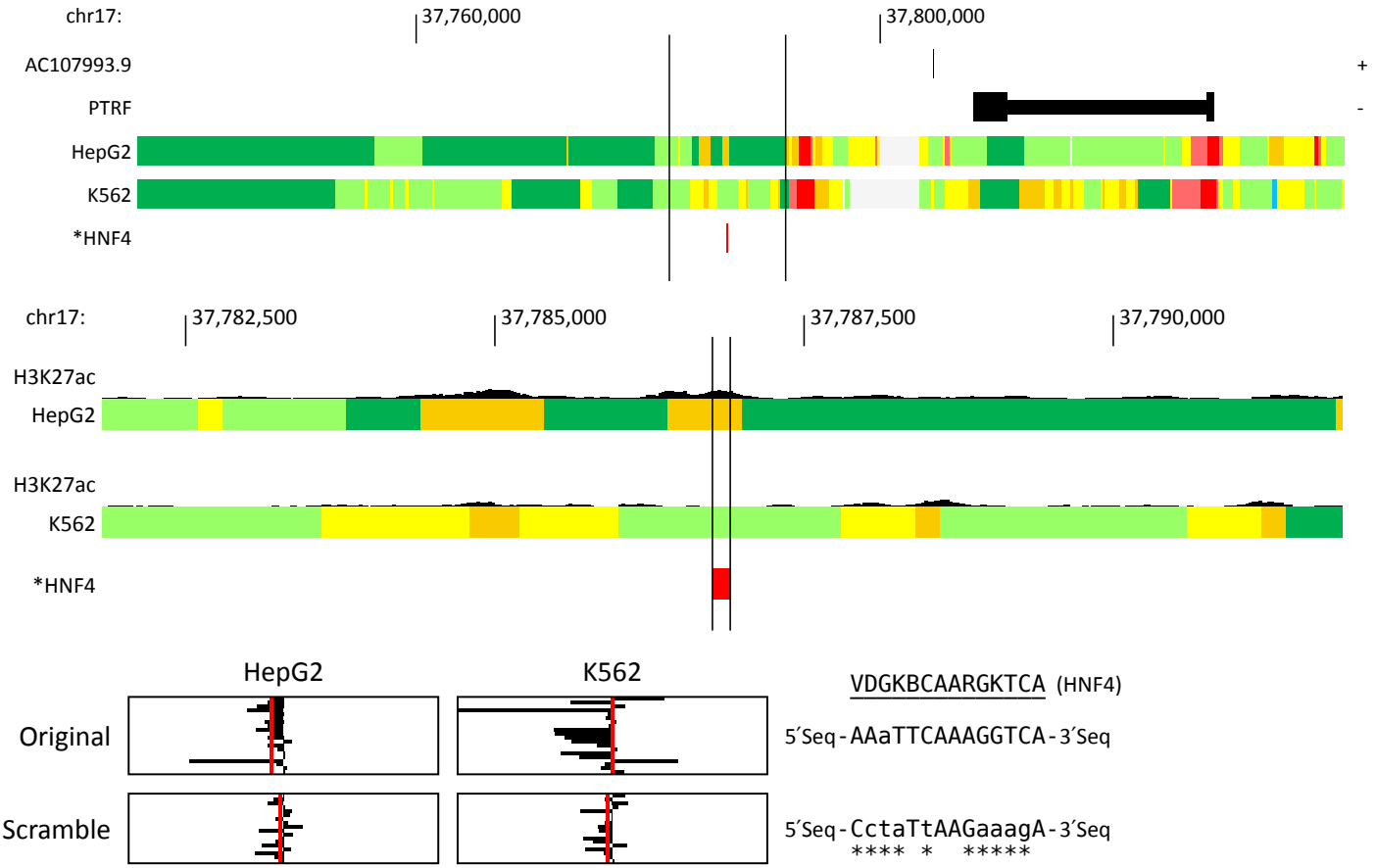
1770 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr17 37786825 37786838 + (hg18)



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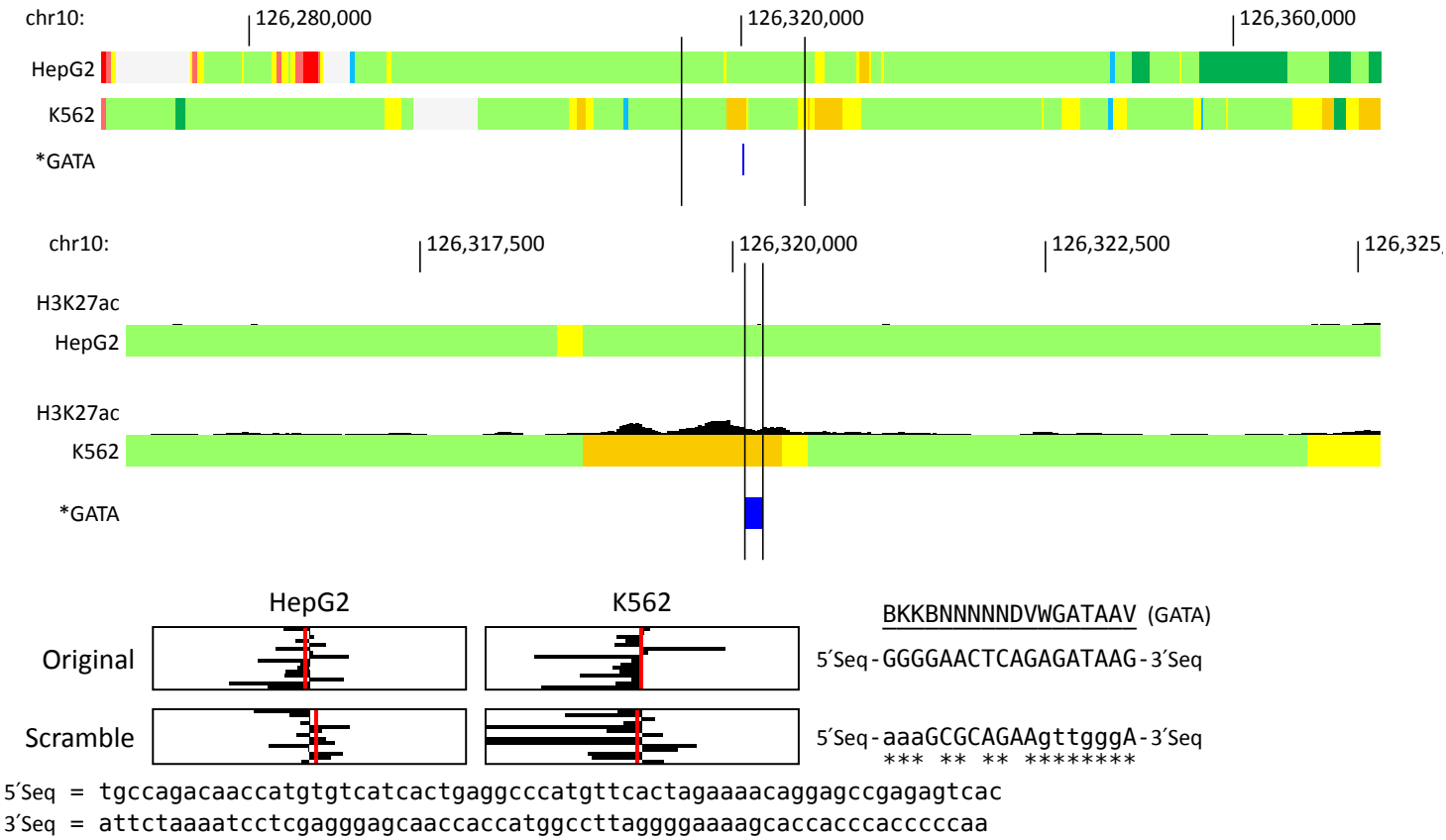
1771 GATA in K562 enhancer

chr10 126320161 126320178 + (hg18)



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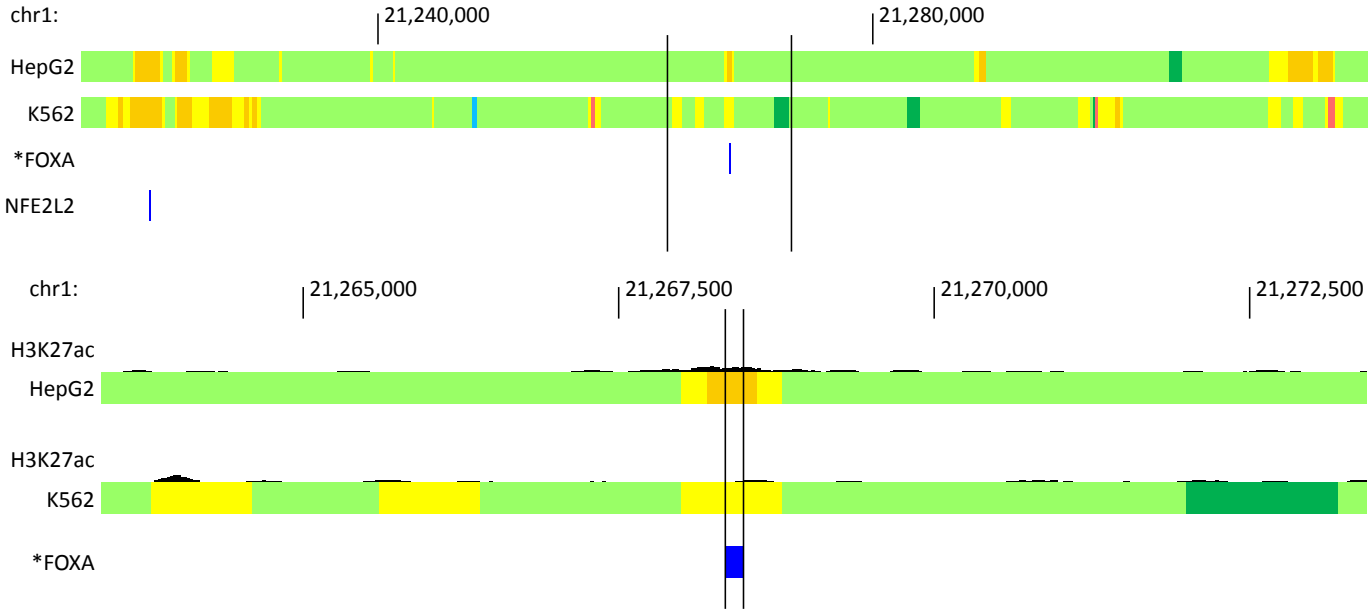
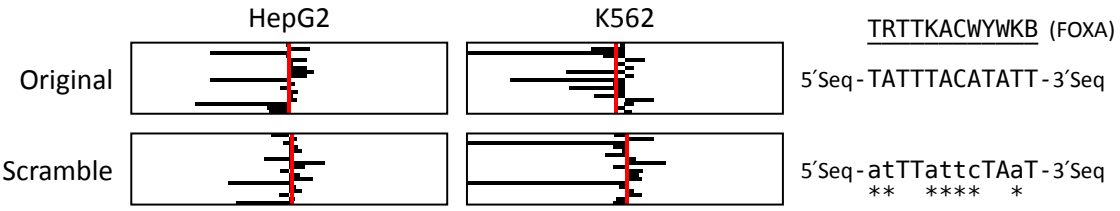
1772 FOXA in HepG2 enhancer

chr1 21268412 21268423 + (hg18)





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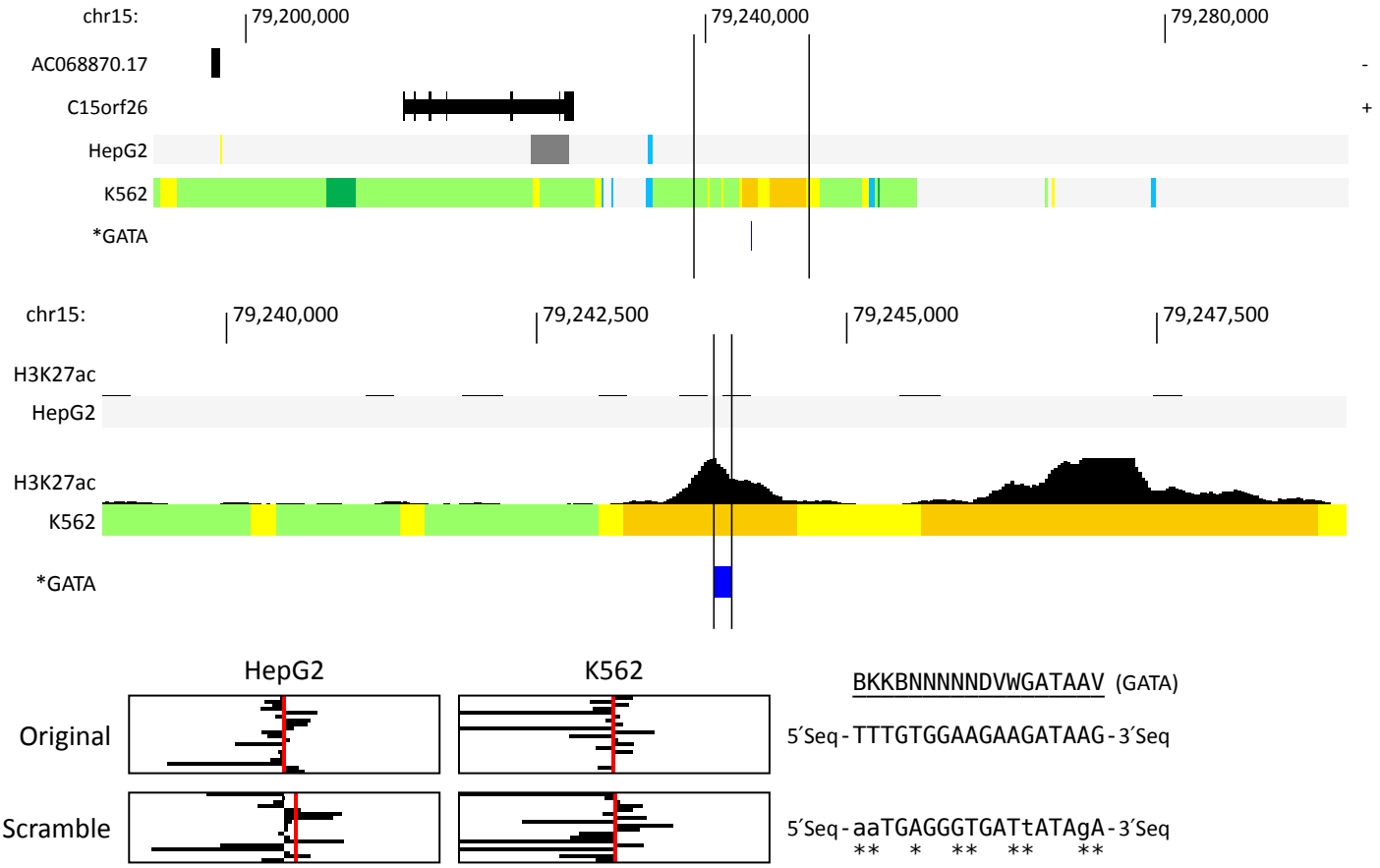
1773 GATA in K562 enhancer

chr15 79243993 79244010 - (hg18)



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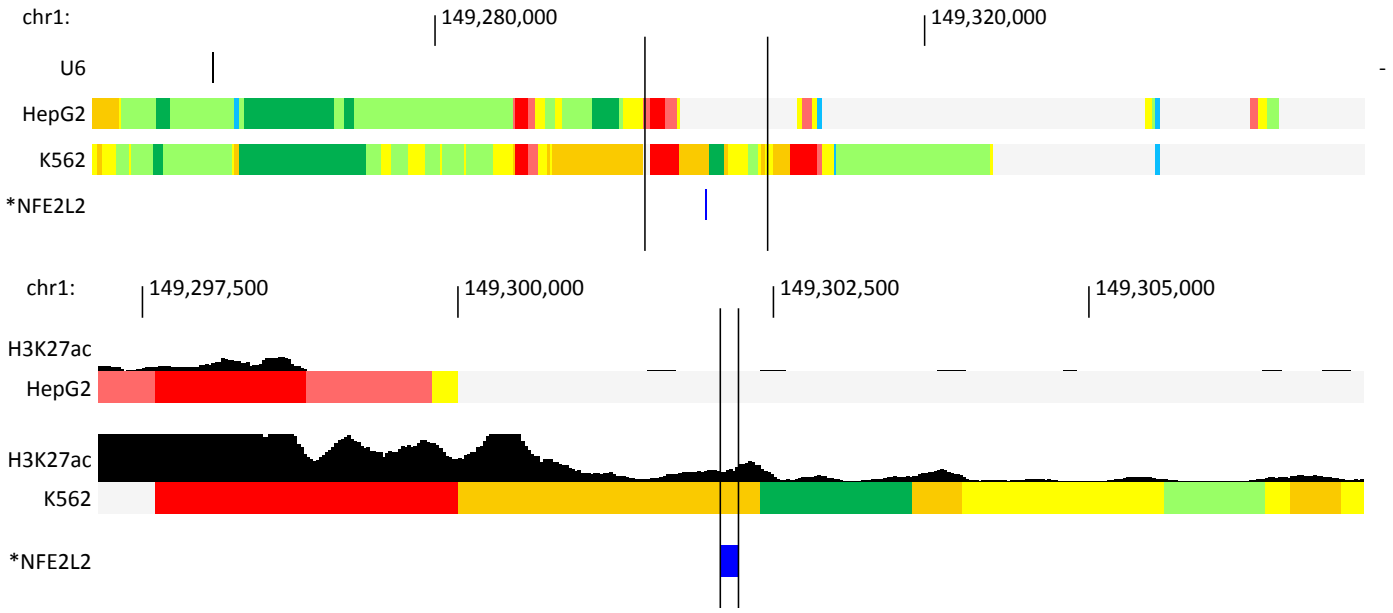
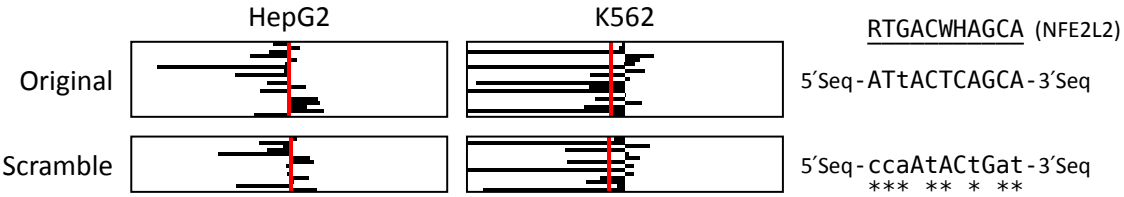
1774 NFE2L2 in K562 enhancer

chr1 149302146 149302156 - (hg18)





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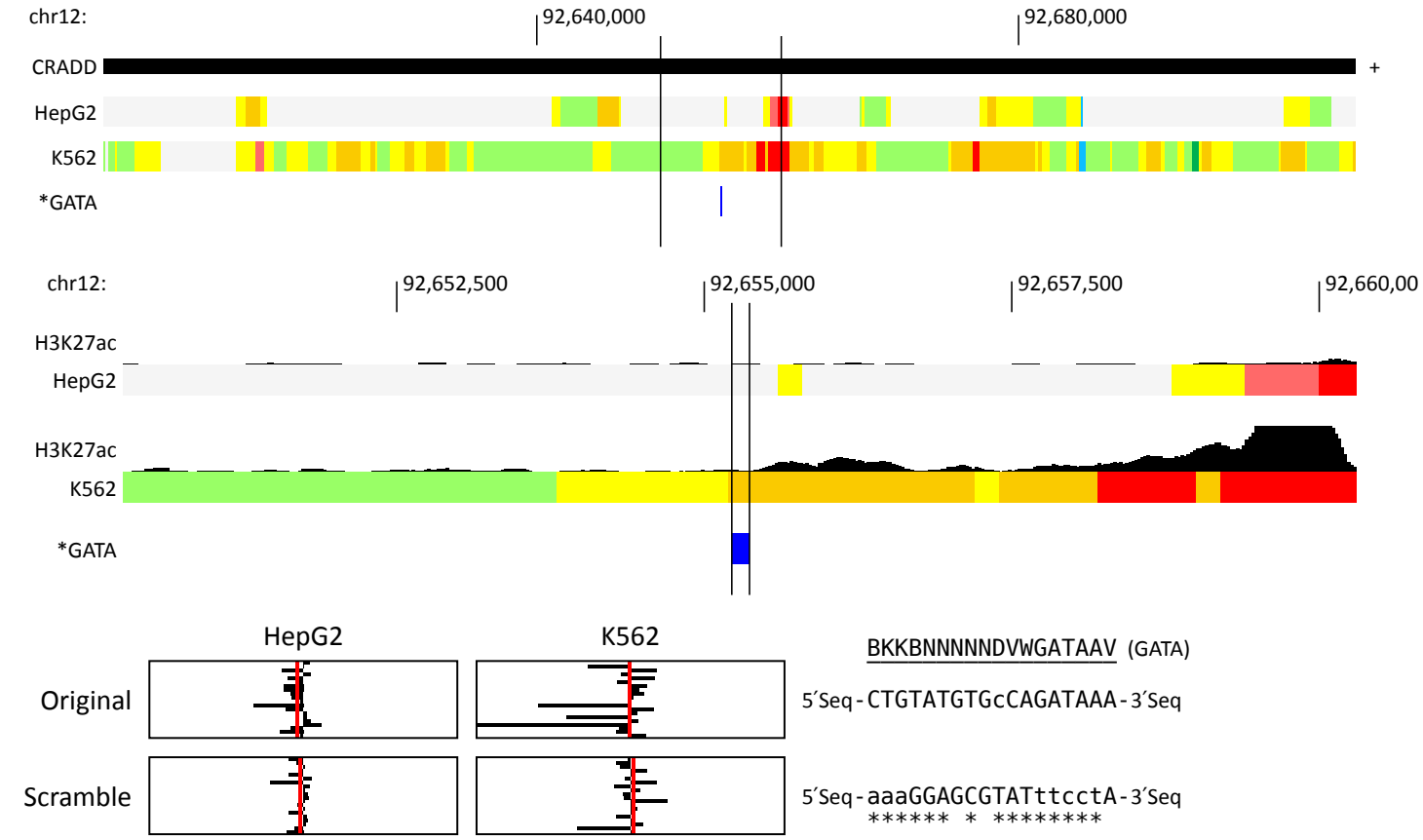
3′Seq = gagaagctgcttagaaggagggtgatgccgggattgcagcagggtcggggagcatgttggaaaggtg

1775 GATA in K562 enhancer

chr12 92655288 92655305 + (hg18)



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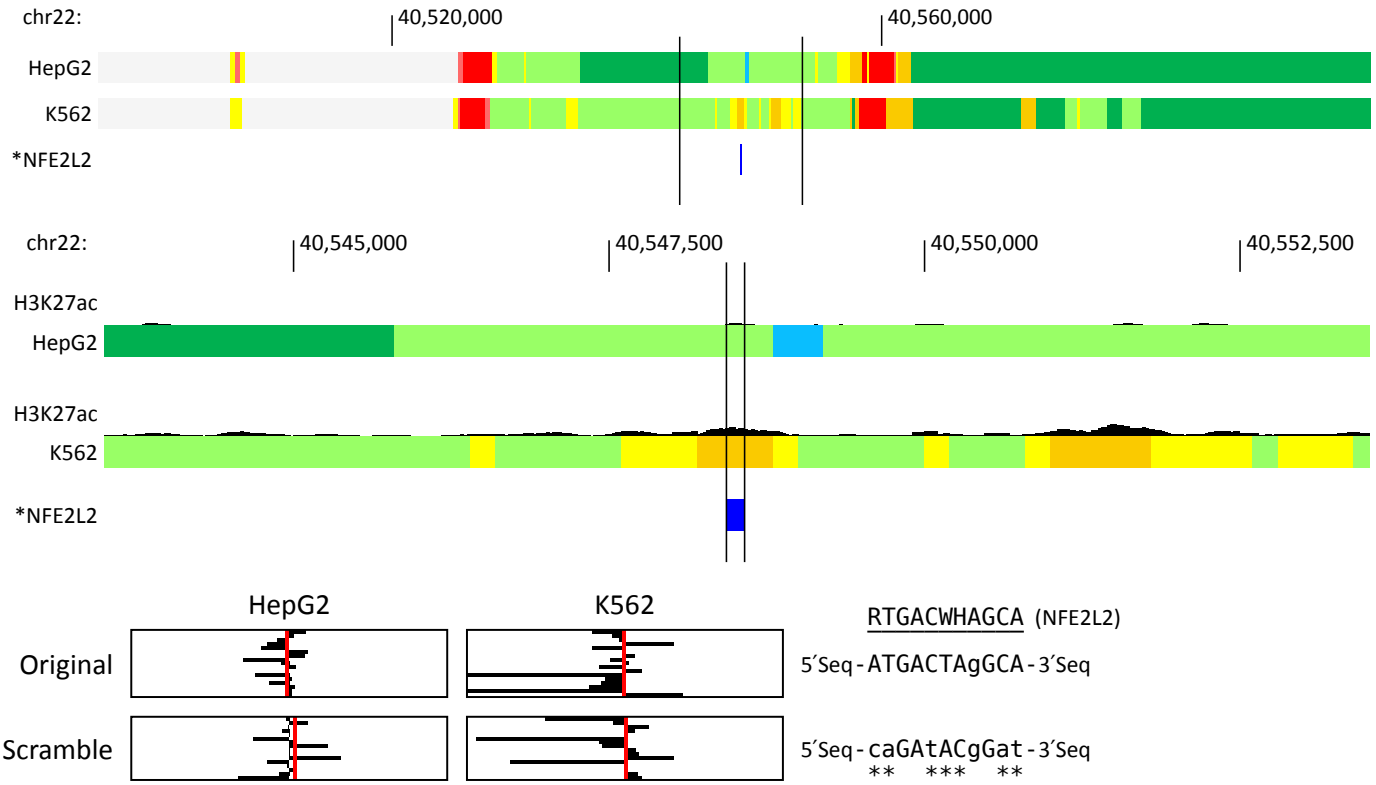
1776 NFE2L2 in K562 enhancer

chr22 40548497 40548507 + (hg18)



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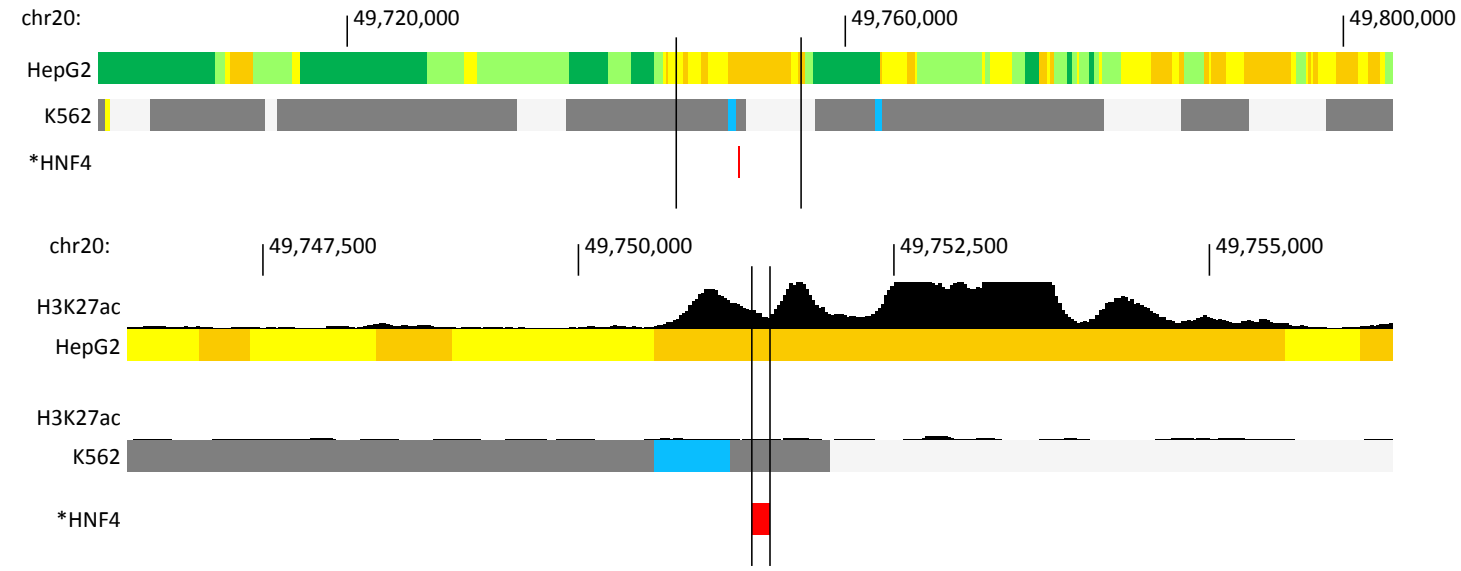
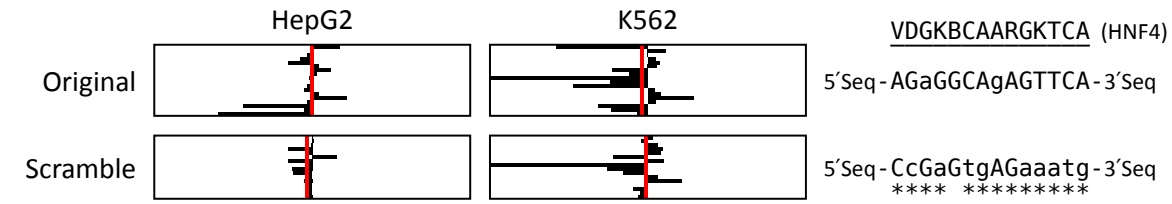
1777 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr20 49751440 49751453 - (hg18)





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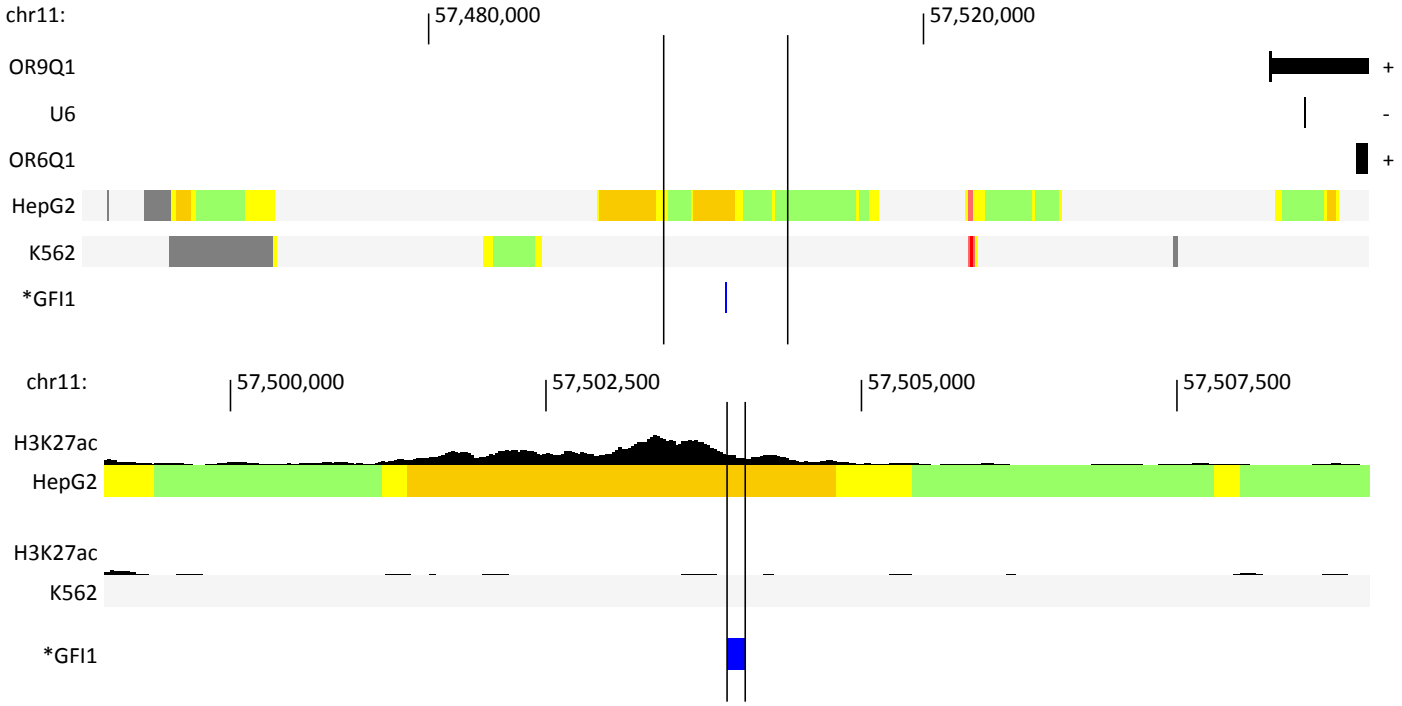
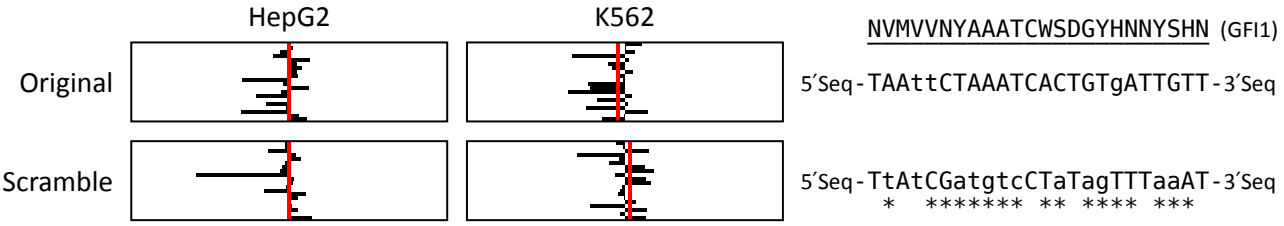
3′Seq = aatgaatggatcataaatcagcactcacttgcagaagggaaaaatctgggtctggtcacttaaaa

1778 GFI1 in HepG2 enhancer

chr11 57503996 57504019 - (hg18)





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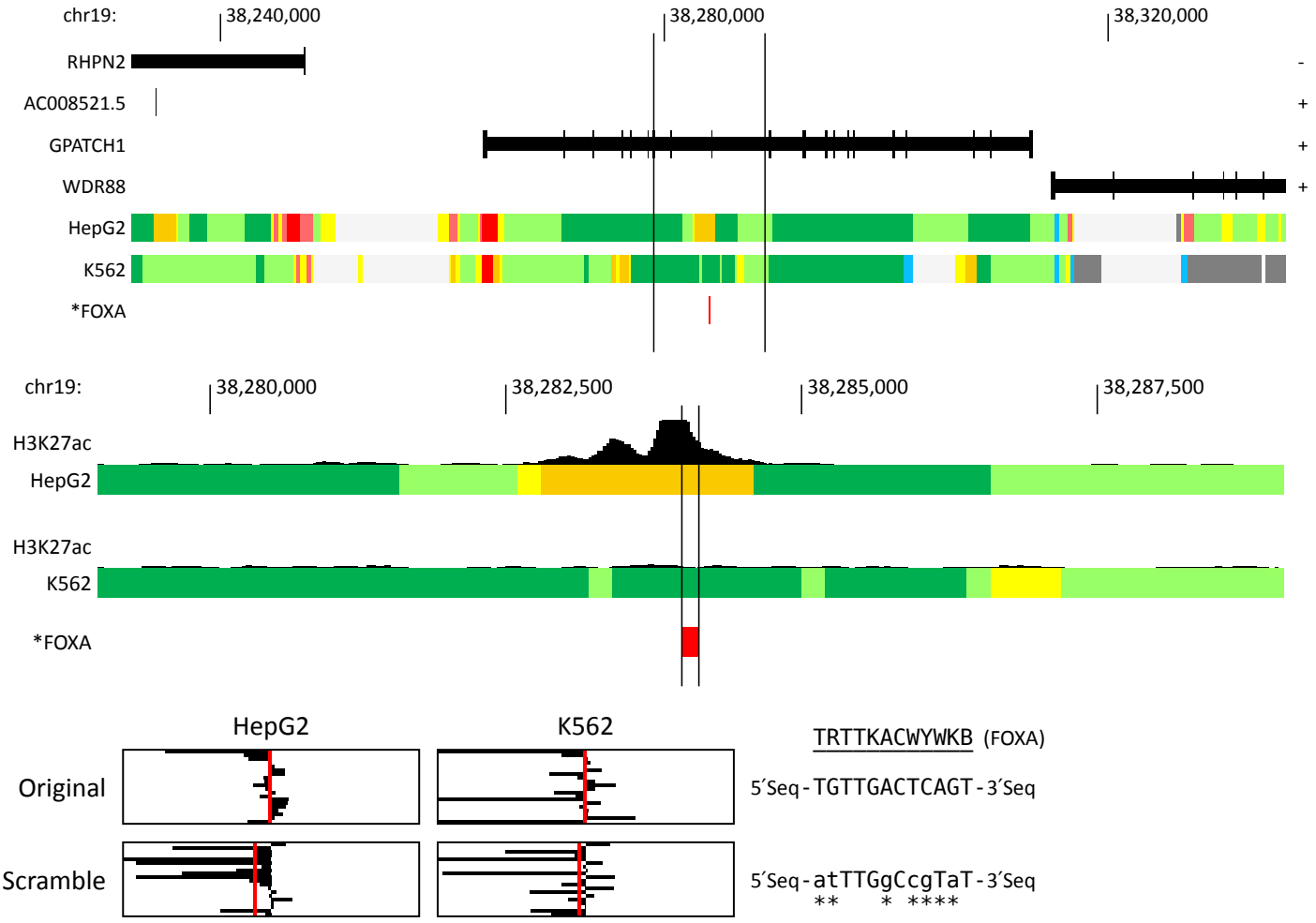
3′Seq = aatctgagtttactgctgggcaaagcagggaaaatatgatccaacacagagaaattcagt

1779 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr19 38284055 38284066 - (hg18)



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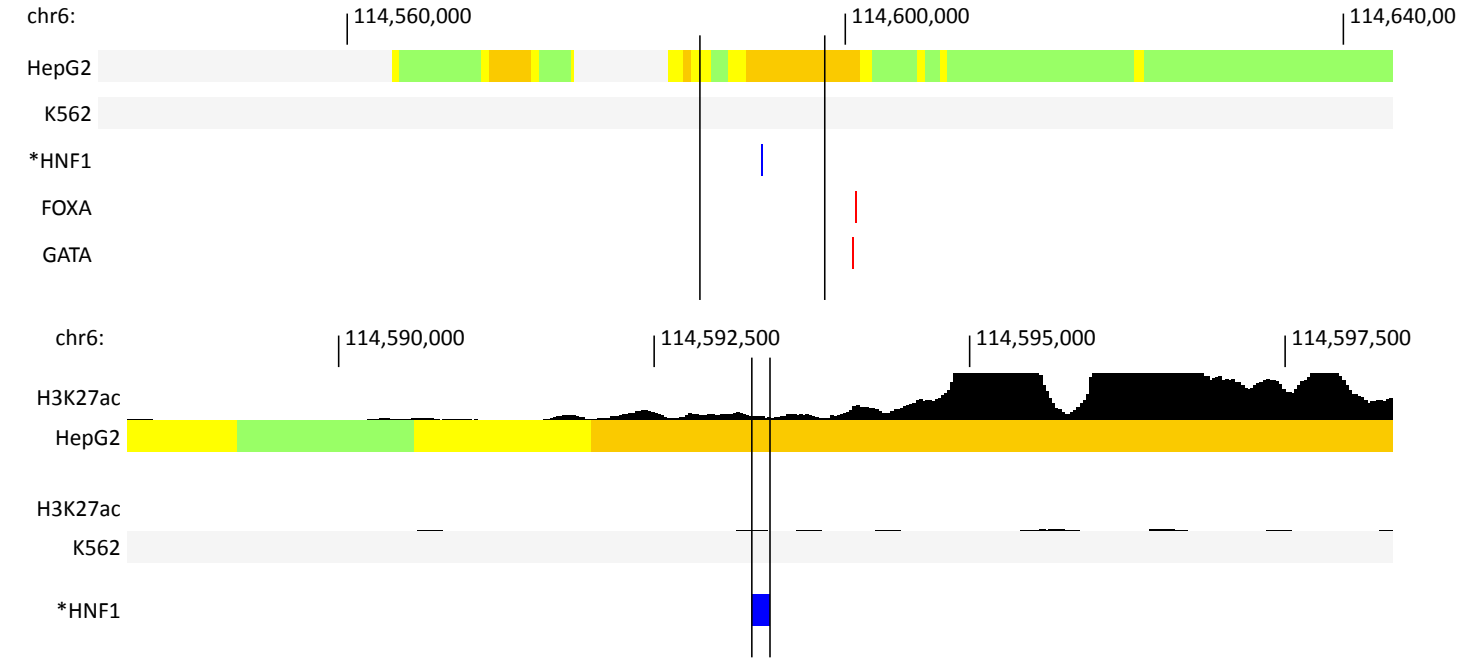
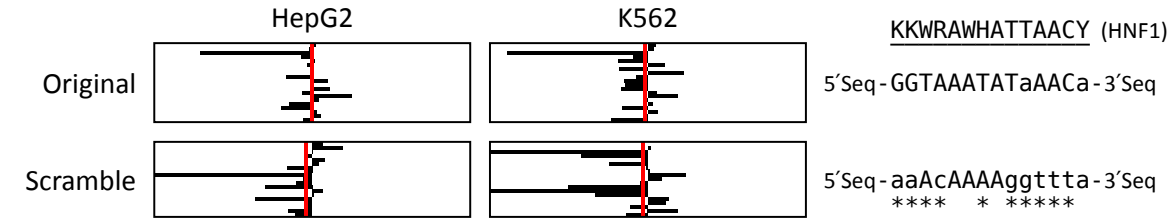
1780 HNF1 in HepG2 enhancer

chr6 114593340 114593353 - (hg18)





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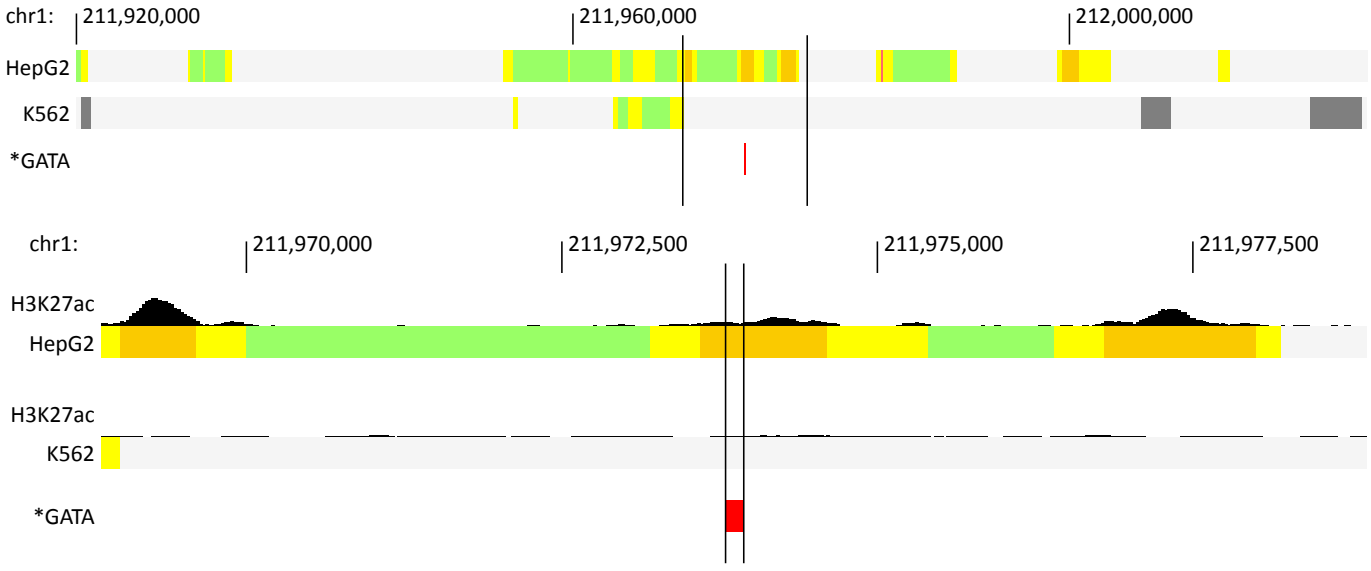
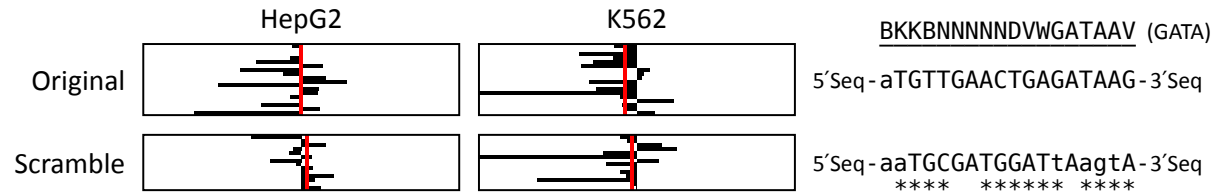
3′Seq = ttgaaaccaaacatccccaaaggatttgaaaaccctggcaggcgatggggaagaagtggaagtaa

1781 GATA in HepG2 enhancer (conserved at 60% confidence)

chr1 211973861 211973878 - (hg18)





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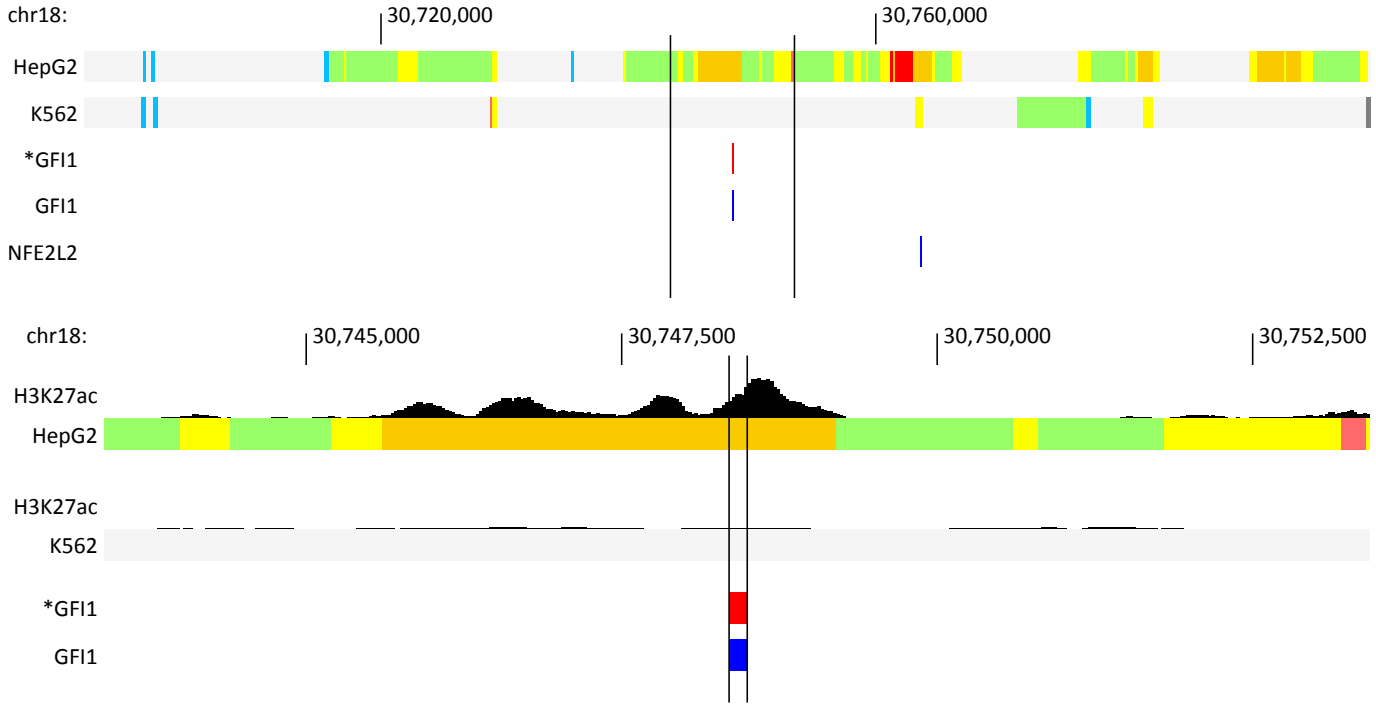
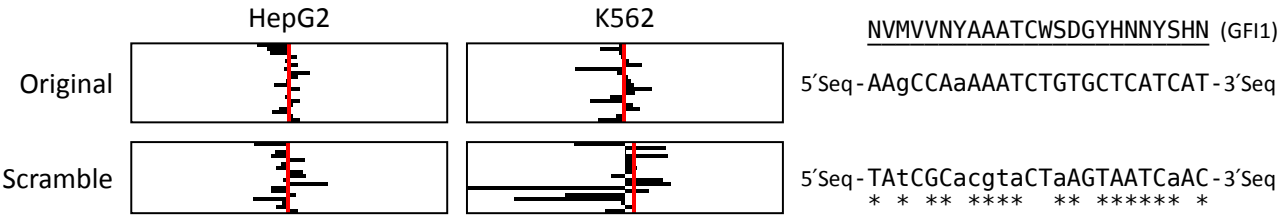
3′Seq = gctacttaataatacaccagttcttgctaaacacaatttctttccacatttcttagtgaaagc

1782 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr18 30748412 30748435 - (hg18)





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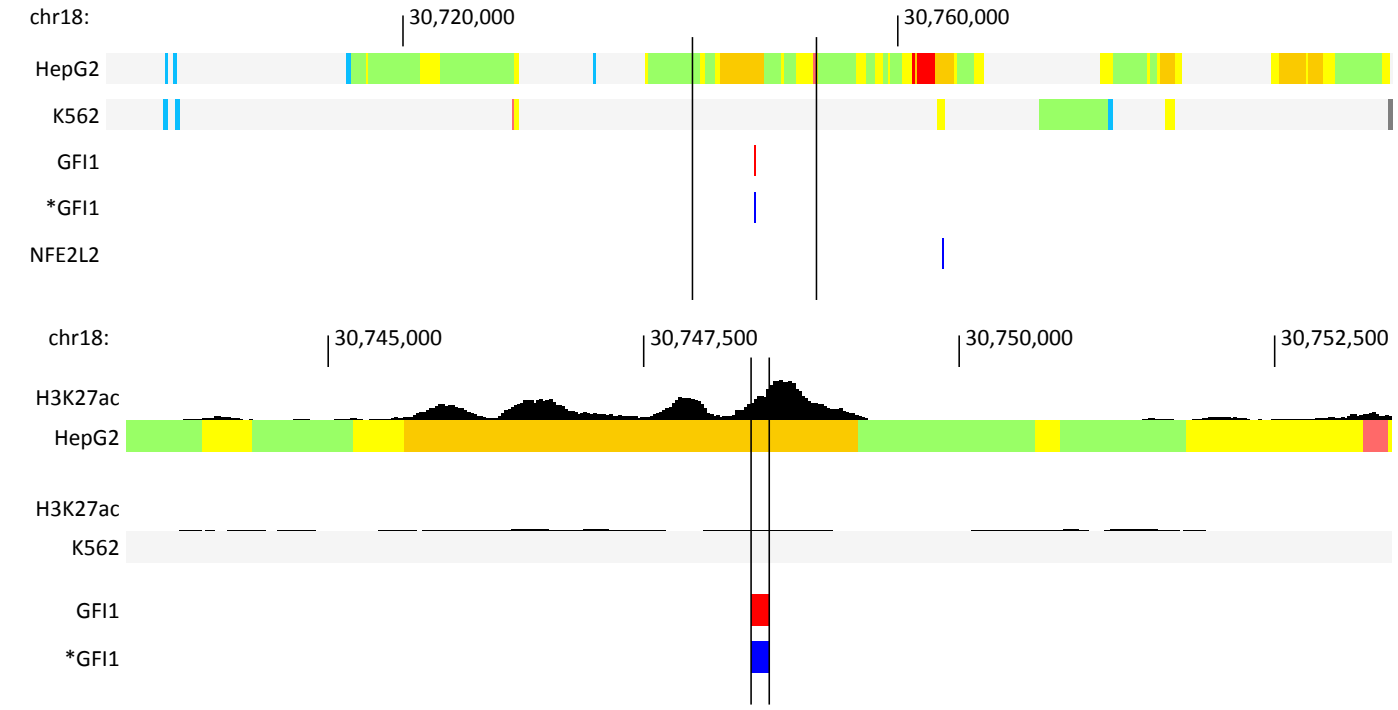
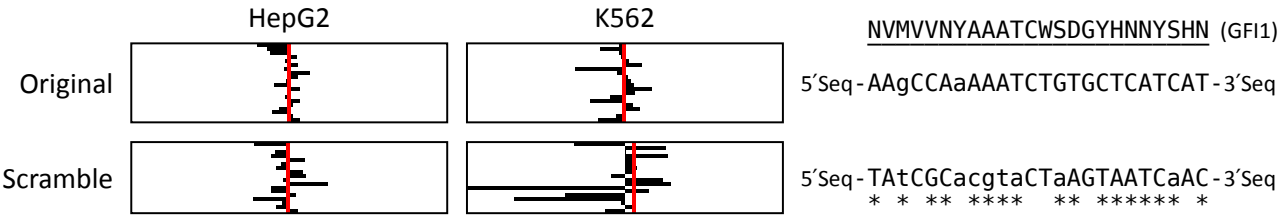
1783 GFI1 in HepG2 enhancer

chr18 30748412 30748435 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AAgCCAaAAATCTGTGCTCATCAT-3′Seq

5′Seq-TAtCGCacgtaCTaAGTAATCaAC-3′Seq

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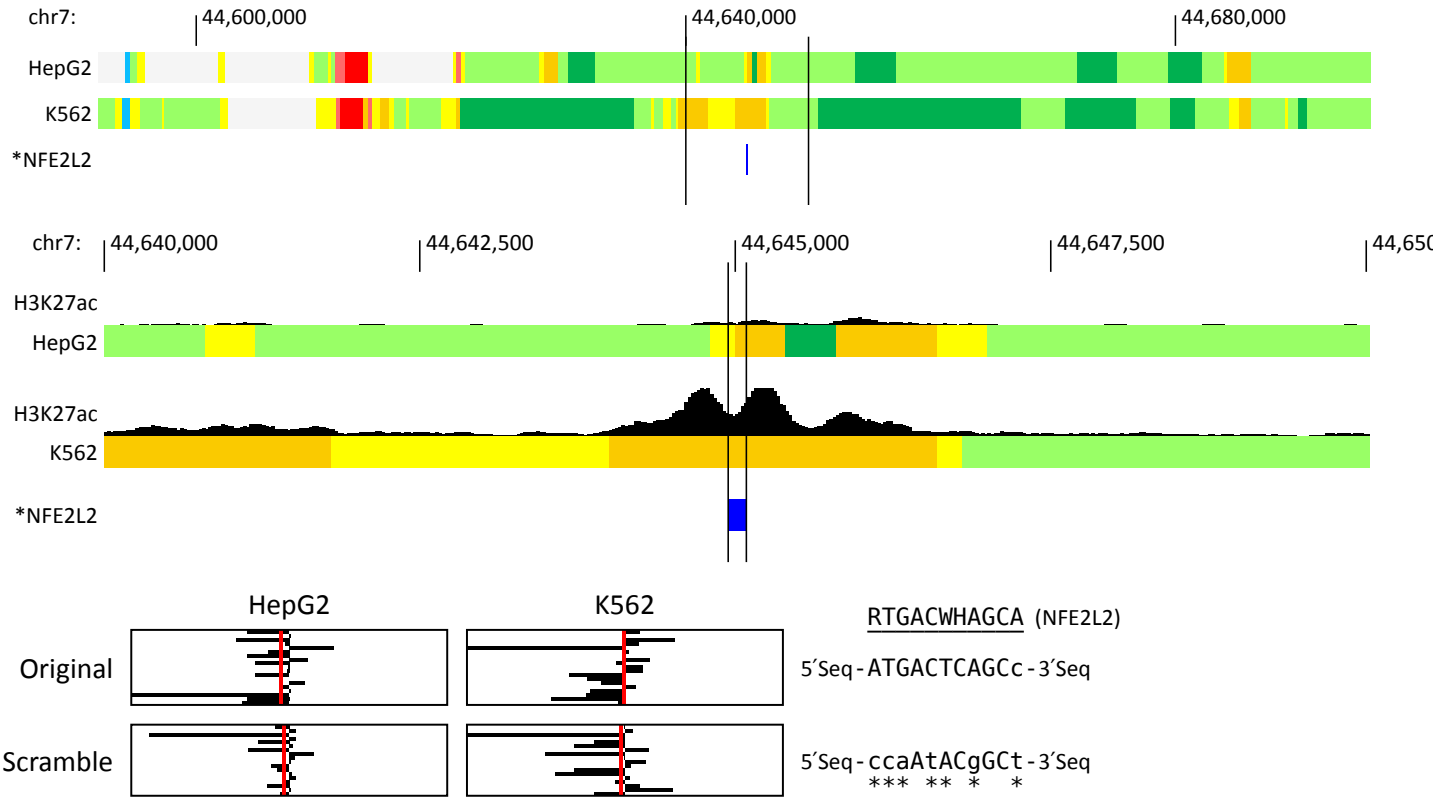
3′Seq = tttgtgtttatttggcattcaaatatggcagtcattctcagctcttgctgctgtttatat

1784 NFE2L2 in K562 enhancer

chr7 44645011 44645021 + (hg18)



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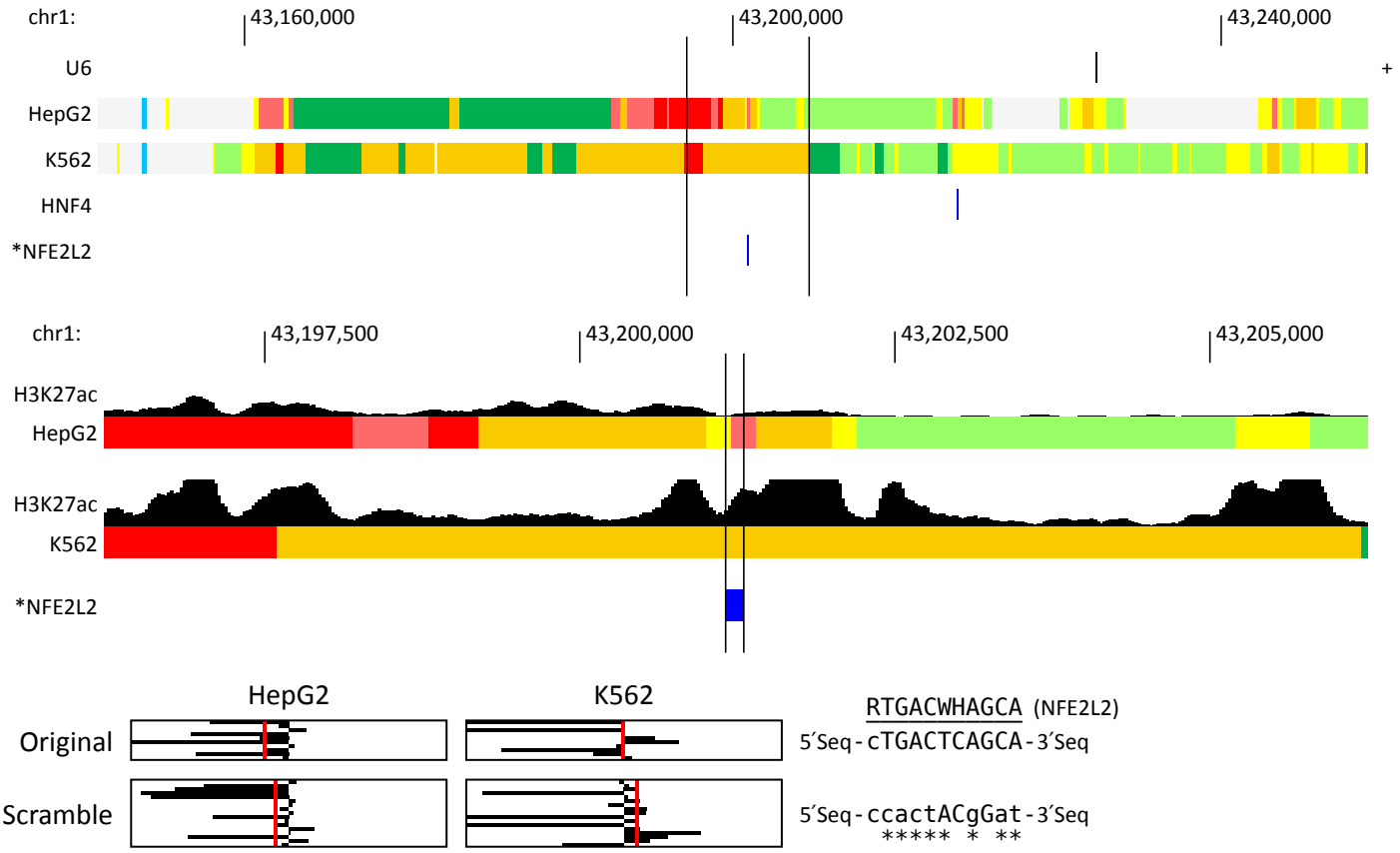
1785 NFE2L2 in K562 enhancer

chr1 43201224 43201234 - (hg18)



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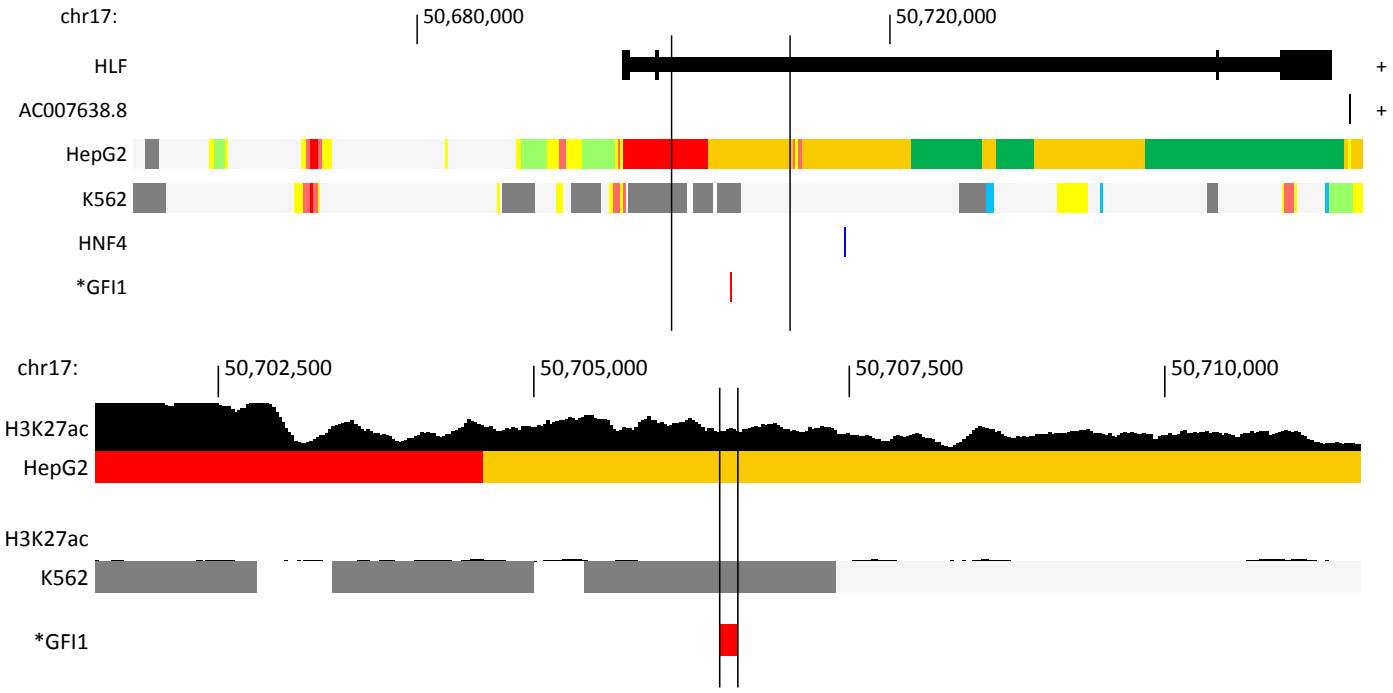
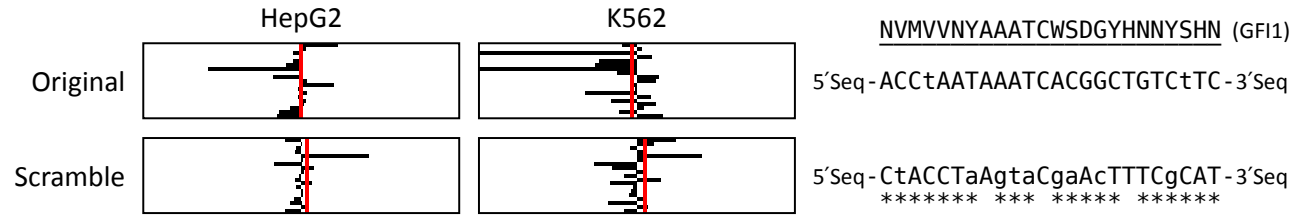
1786 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr17 50706534 50706557 - (hg18)





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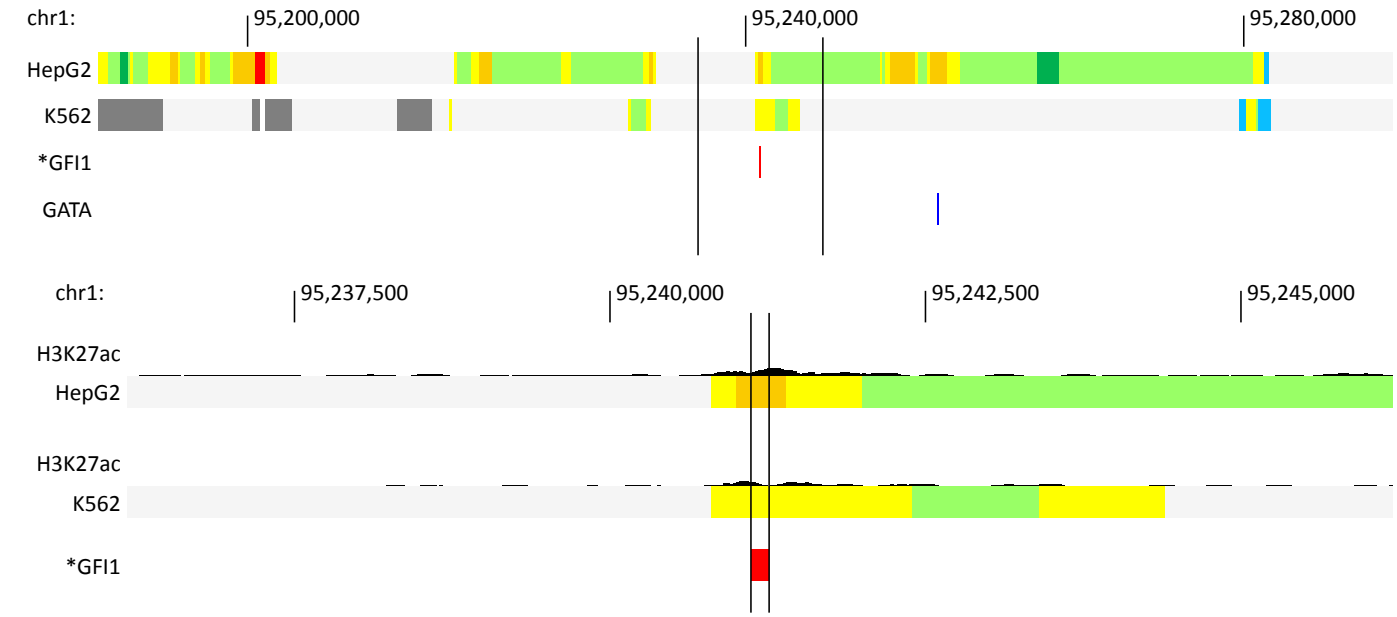
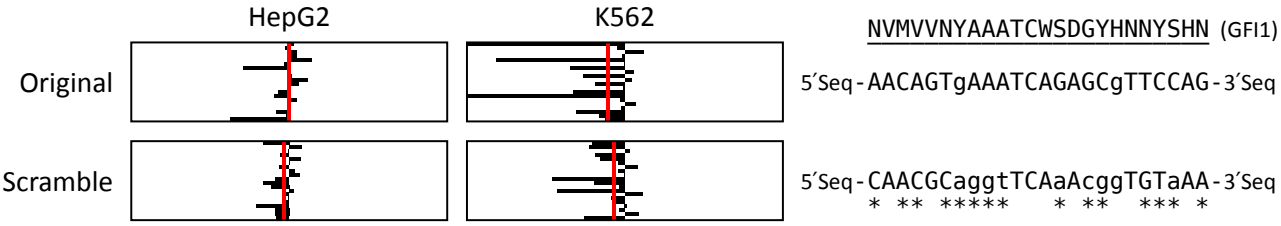
1787 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 95241178 95241201 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AACAGTgAAATCAGAGCgTTCCAG-3′Seq

5′Seq-CAACGCaggtTCAaAcggTGTaAA-3′Seq

* ** ***** * ** *** *

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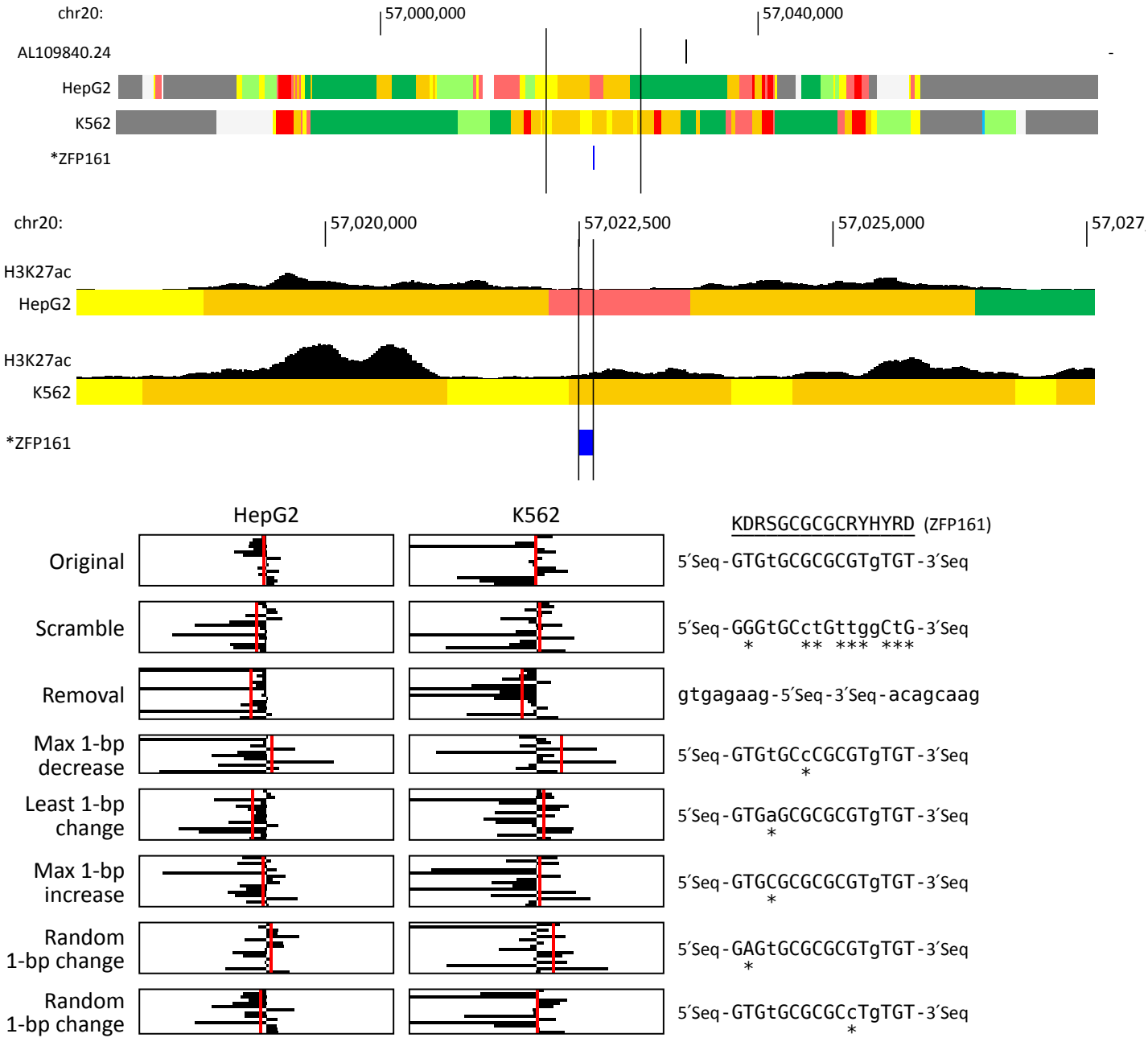
3′Seq = ttcacggagattaaatgtcaggctttaaacatttagcagagtattaactatggaagtttt

1788 ZFP161 in K562 enhancer

chr20 57022560 57022575 + (hg18)



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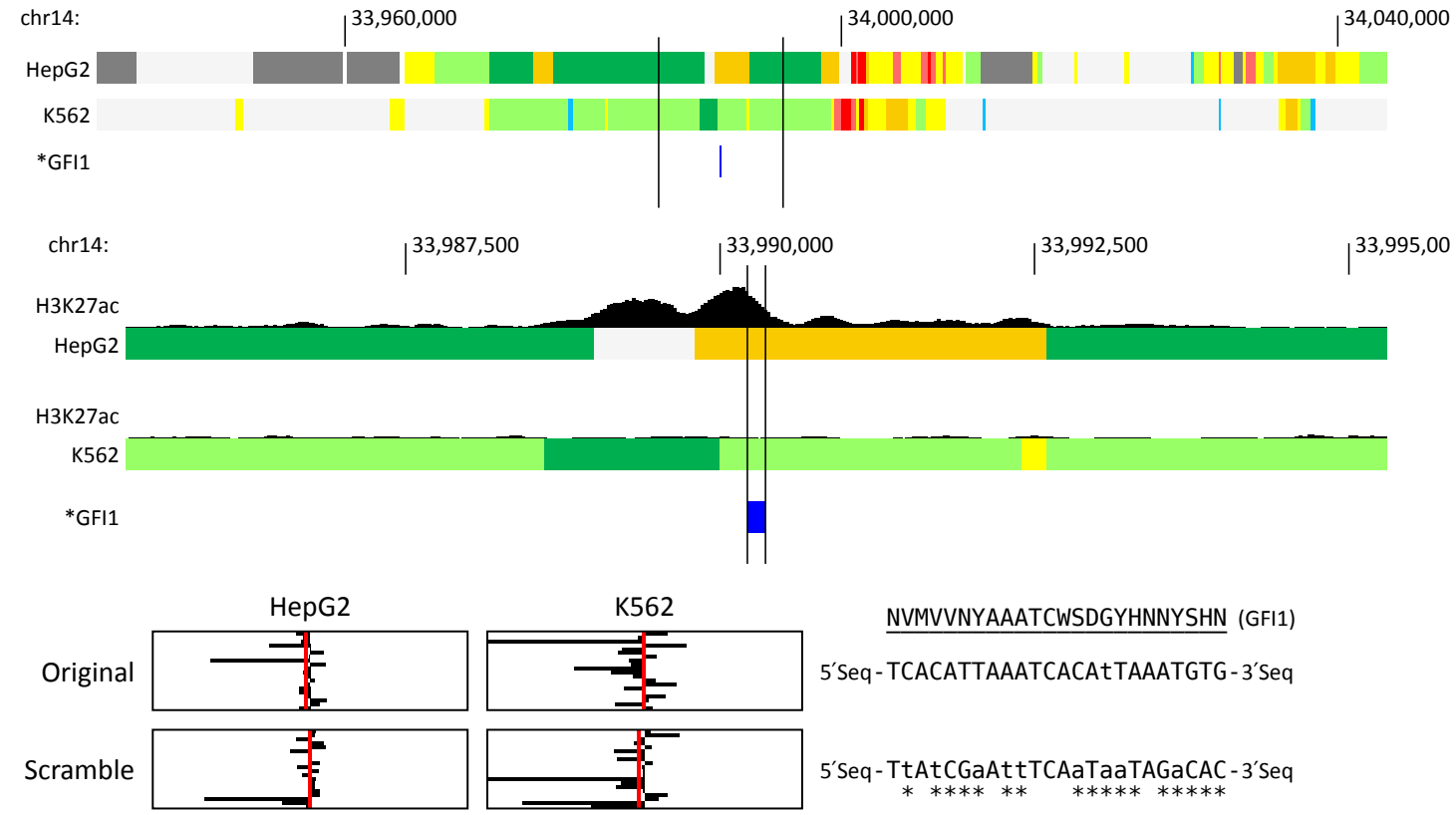
1789 GFI1 in HepG2 enhancer

chr14 33990278 33990301 + (hg18)



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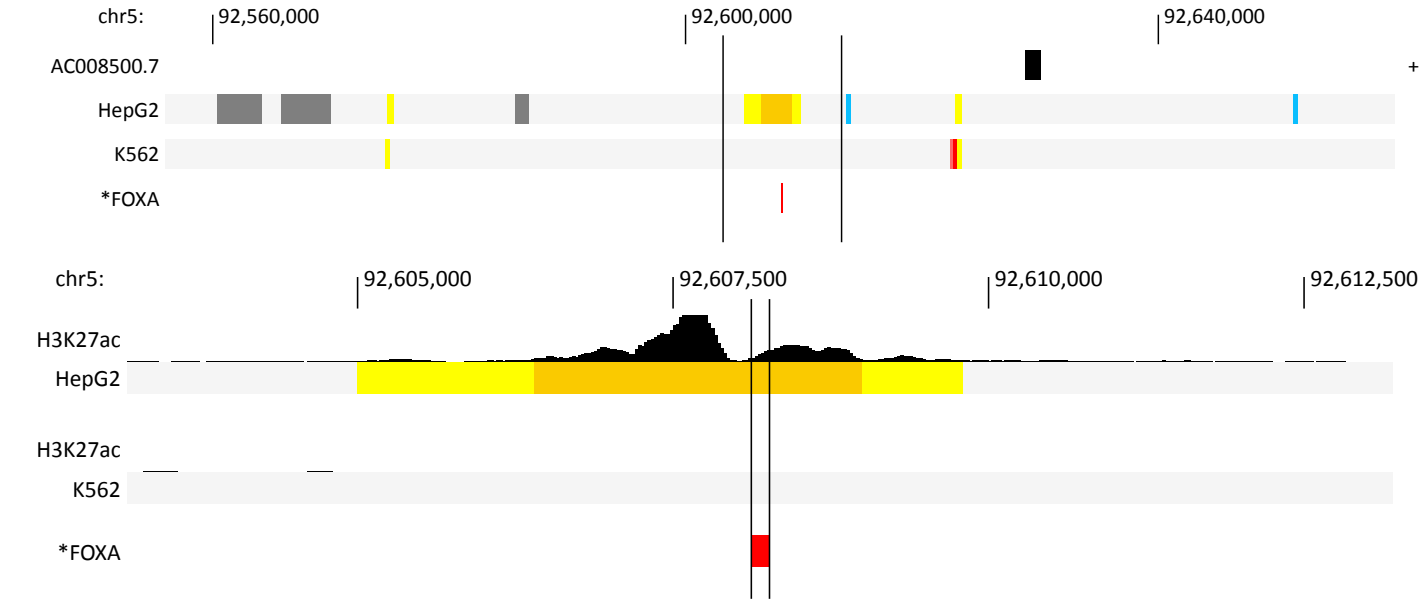
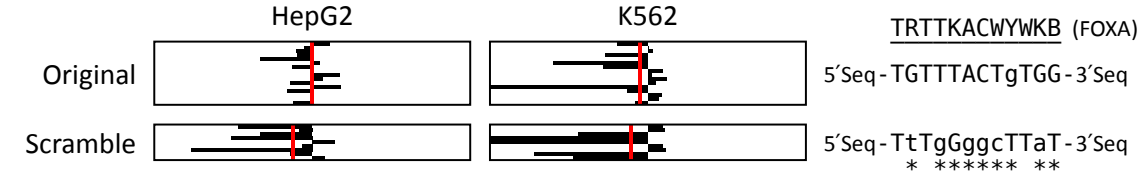
1790 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr5 92608187 92608198 + (hg18)





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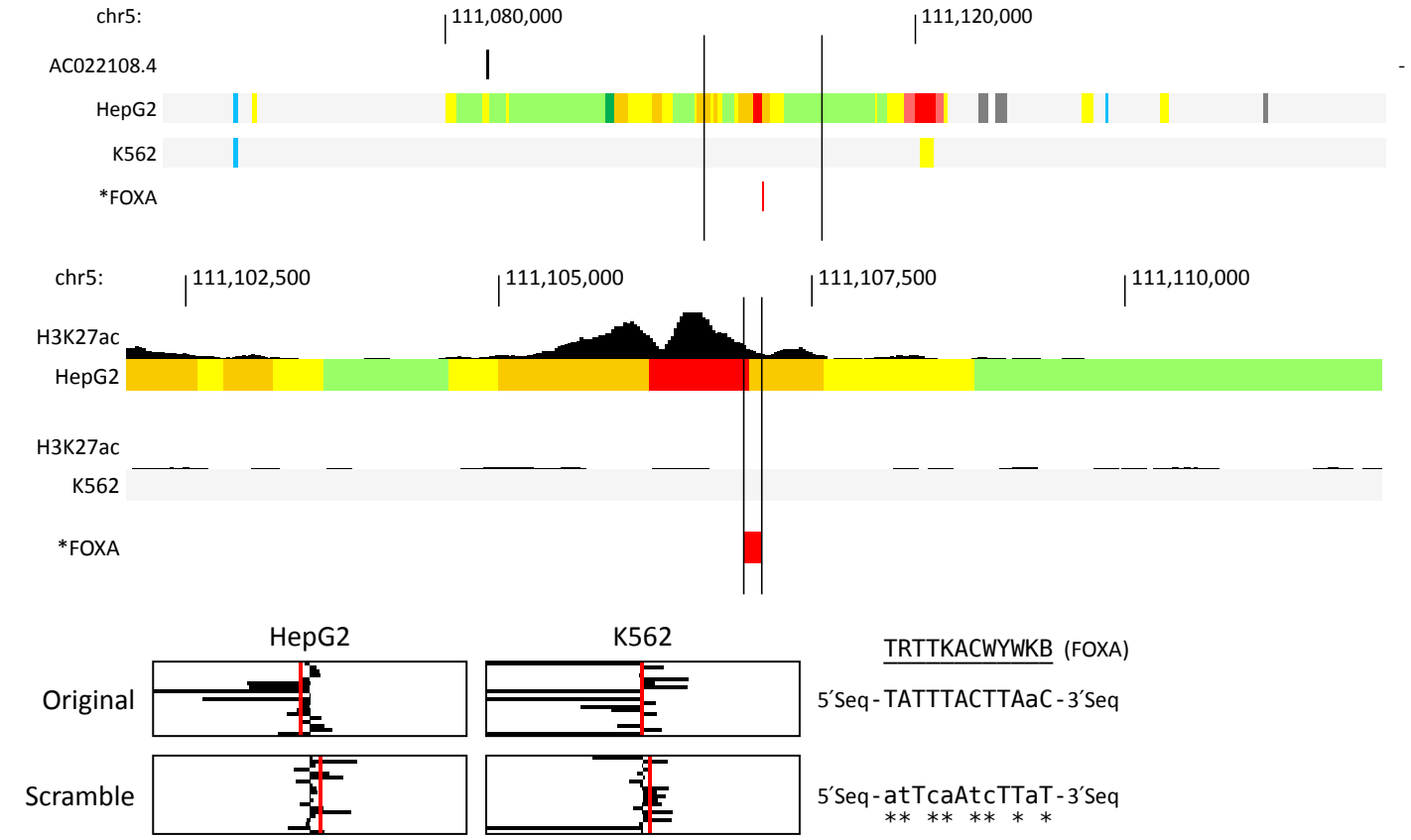
1791 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr5 111107023 111107034 + (hg18)



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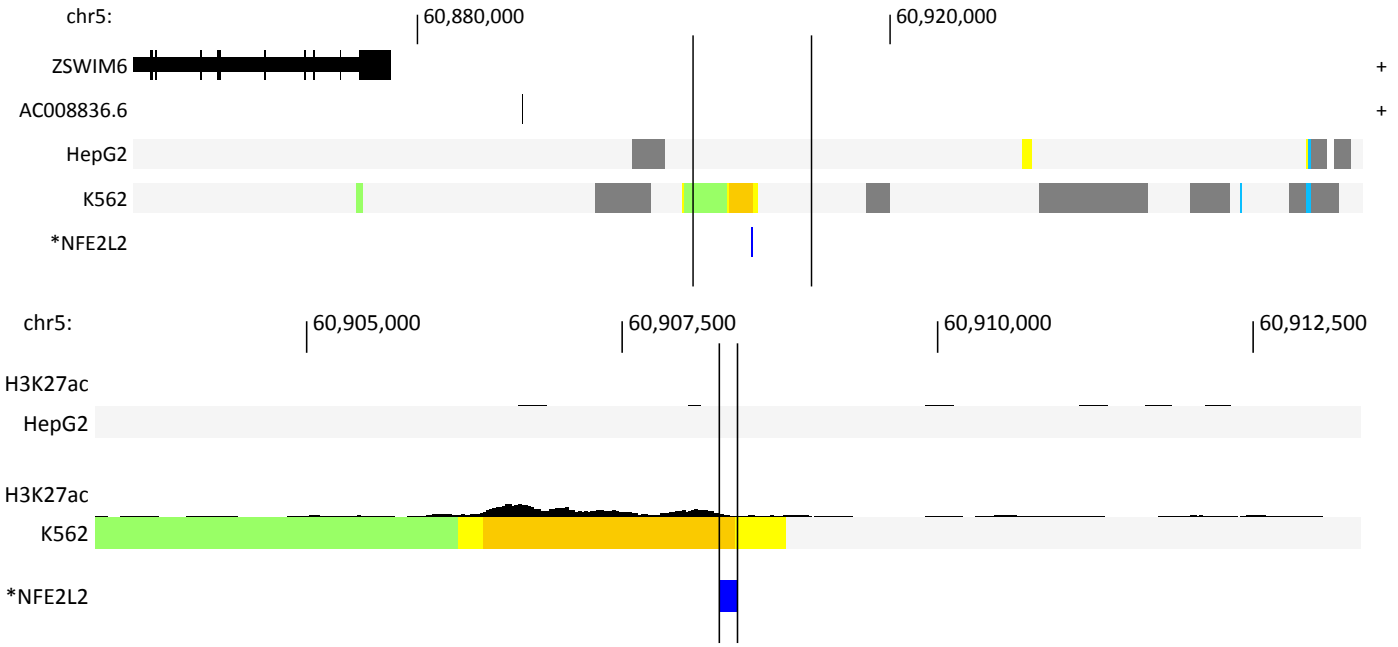
1792 NFE2L2 in K562 enhancer

chr5 60908337 60908347 - (hg18)



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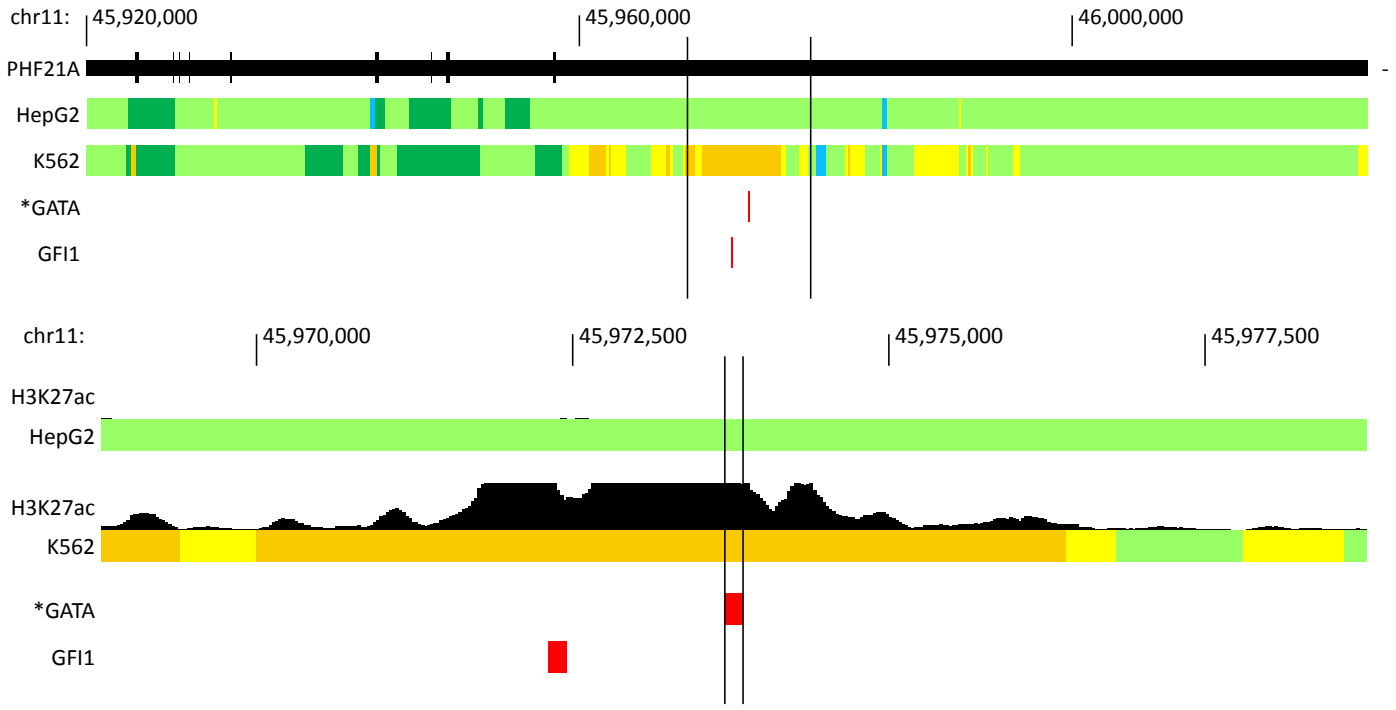
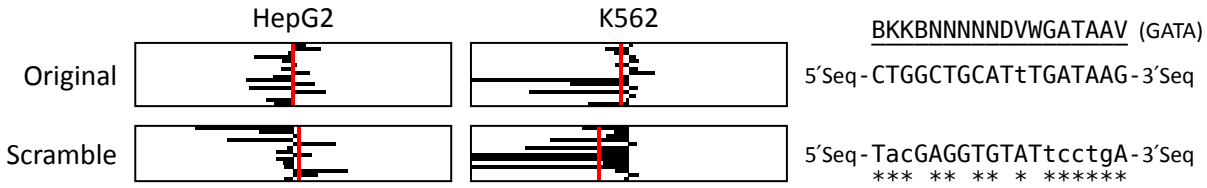
1793 GATA in K562 enhancer (conserved at 60% confidence)

chr11 45973767 45973784 + (hg18)





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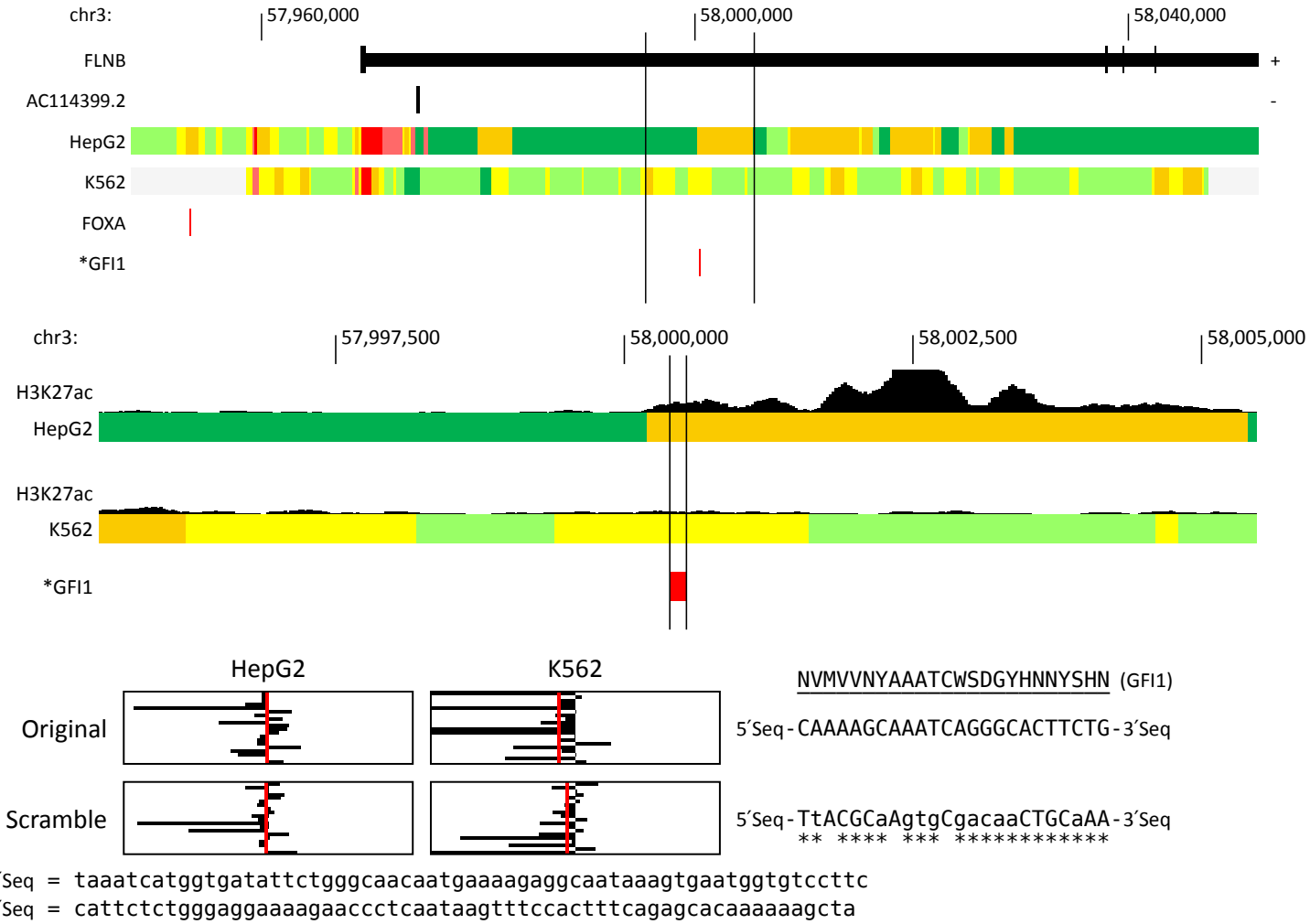
1794 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr3 58000455 58000478 - (hg18)



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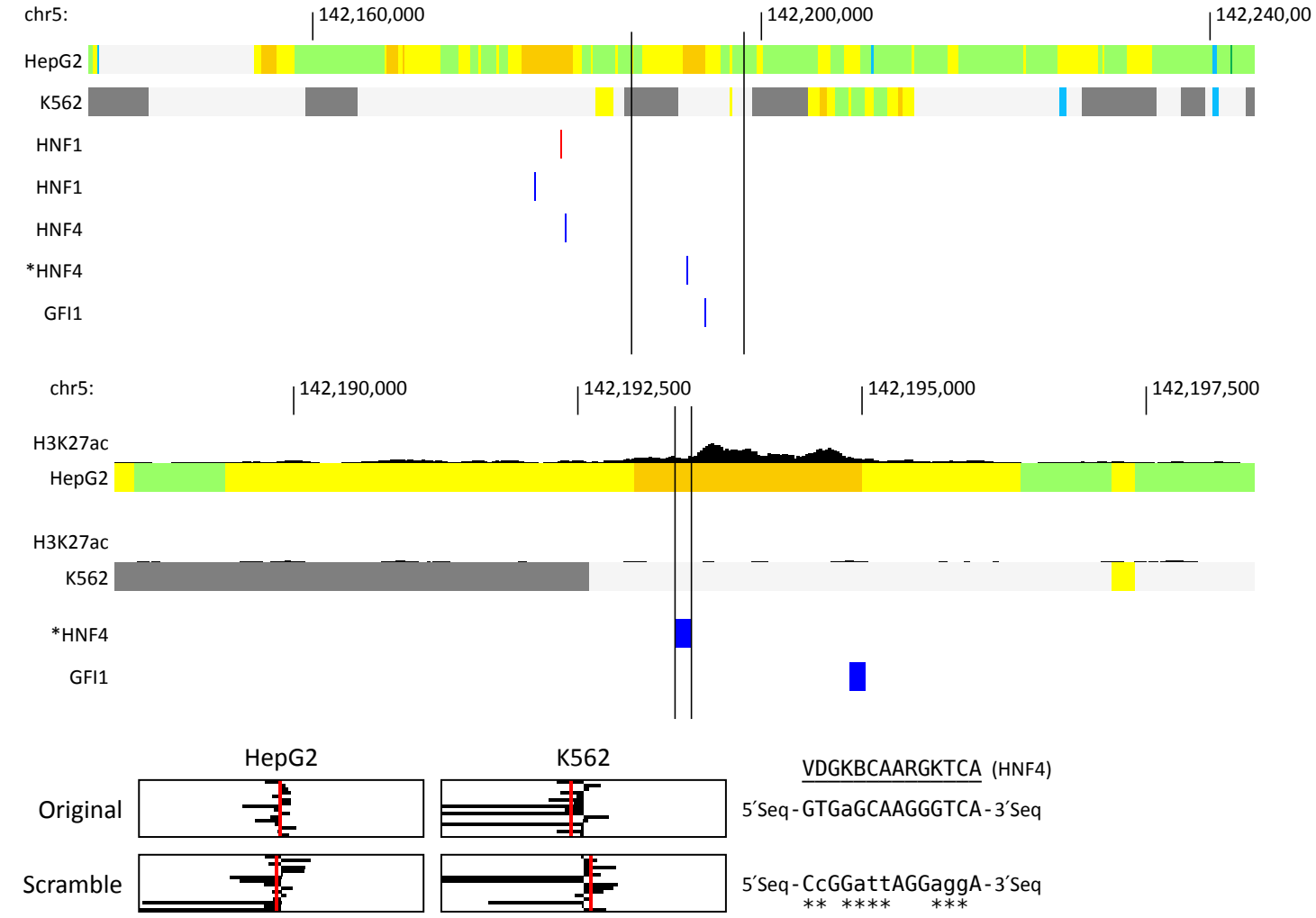
1795 HNF4 in HepG2 enhancer

chr5 142193421 142193434 + (hg18)



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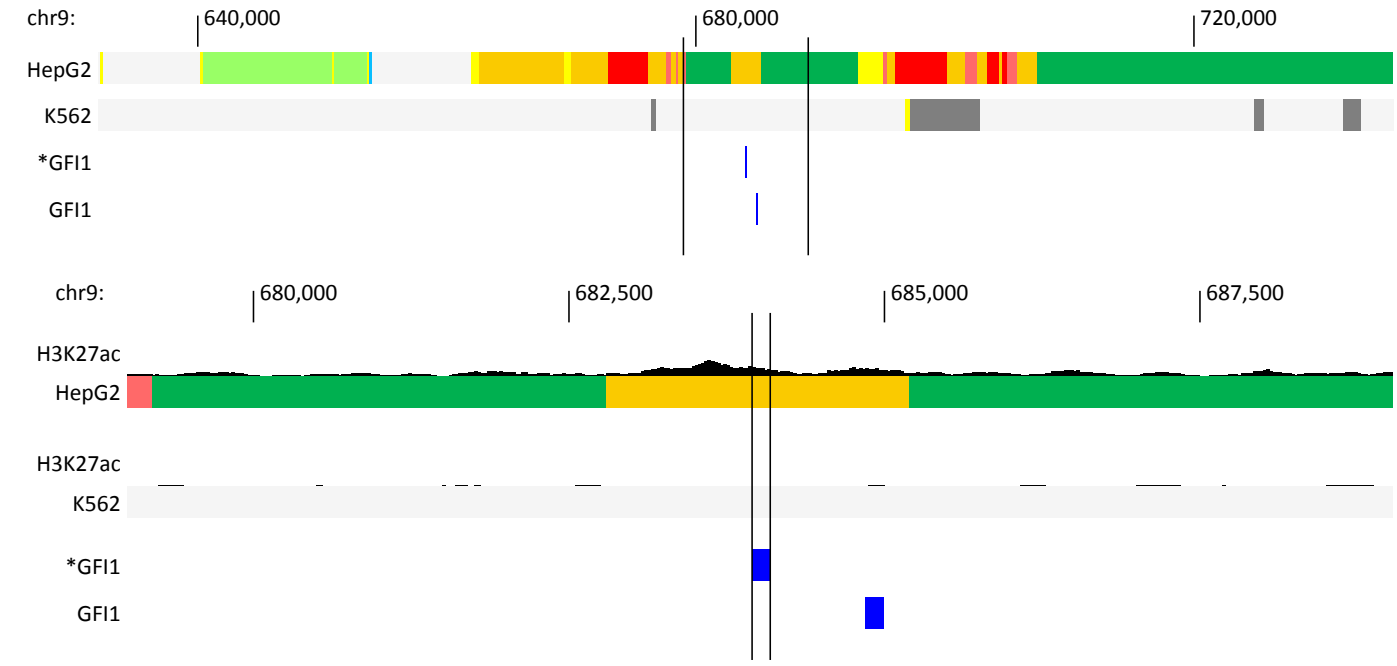
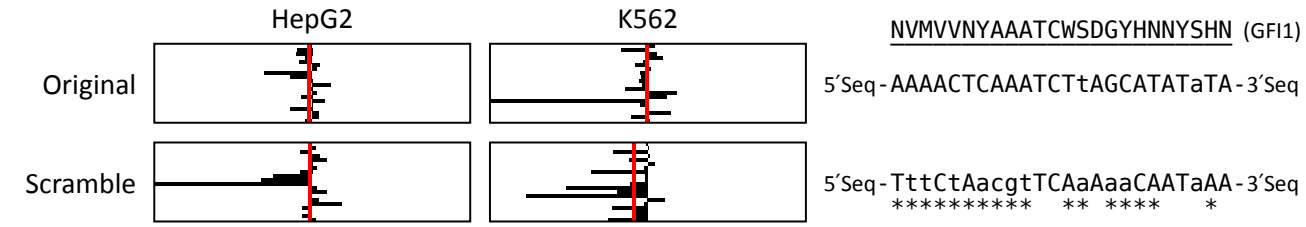
1796 GFI1 in HepG2 enhancer

chr9 684012 684035 - (hg18)





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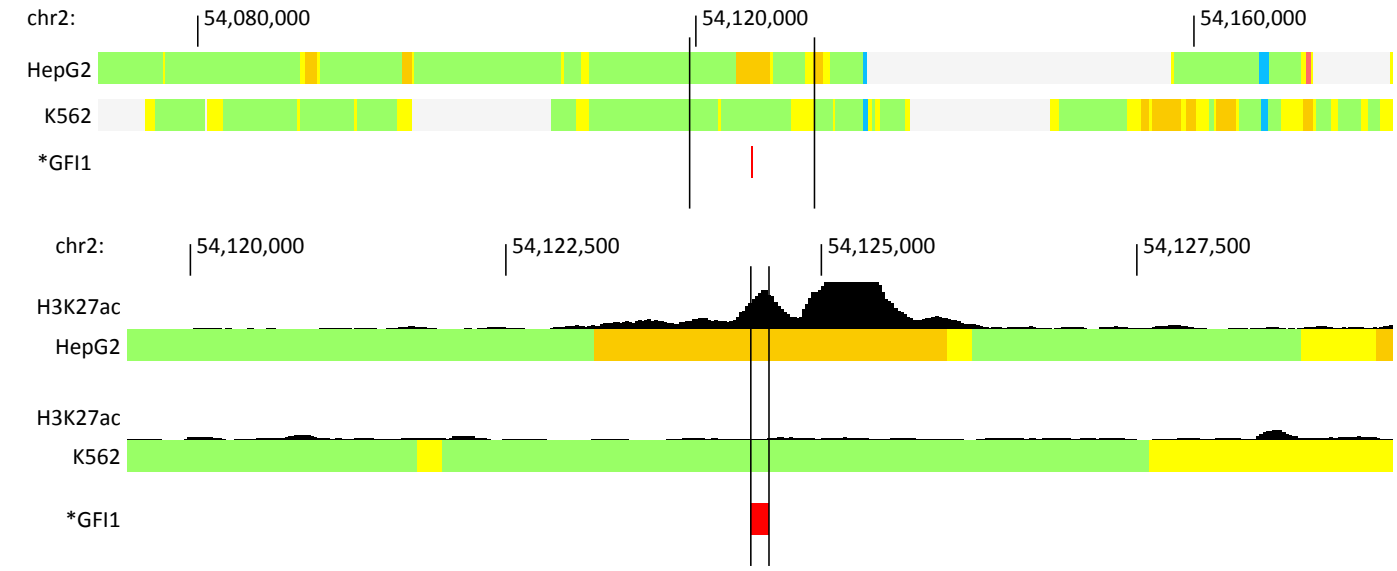
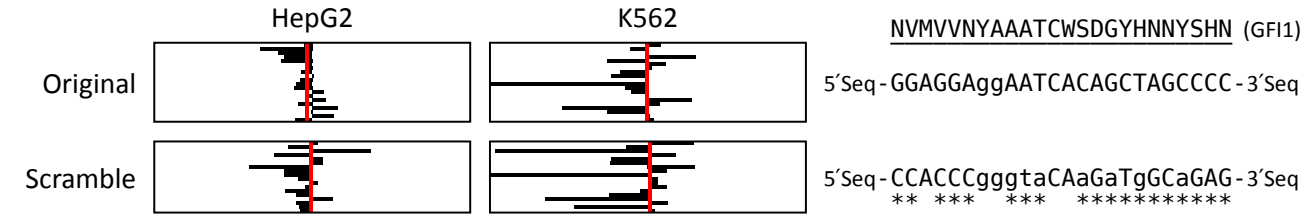
1797 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 54124502 54124525 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

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5′Seq-CCACCCgggtaCAaGaTgGCaGAG-3′Seq

** *** *** ***********

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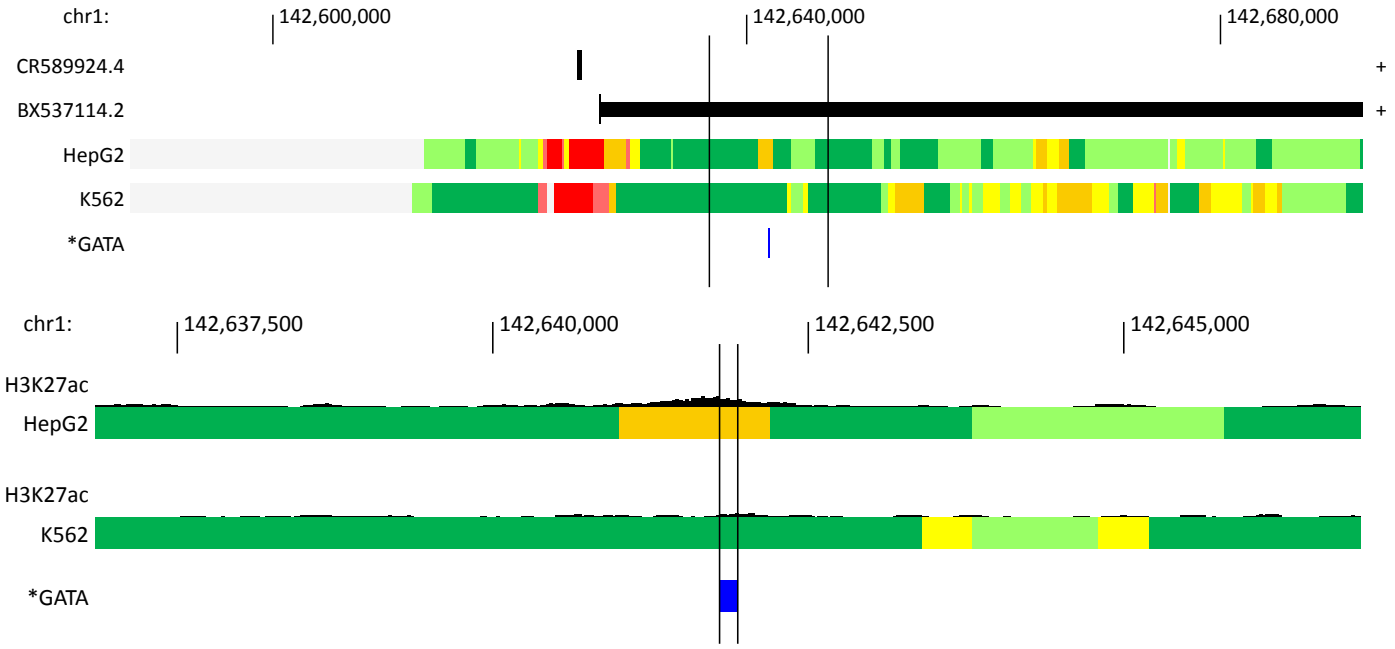
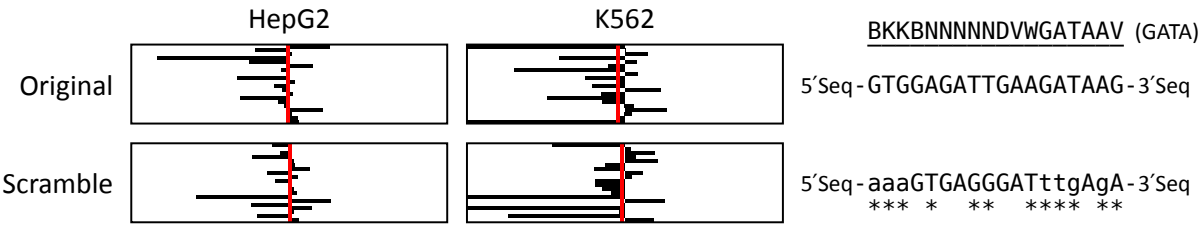
1798 GATA in HepG2 enhancer

chr1 142641861 142641878 + (hg18)





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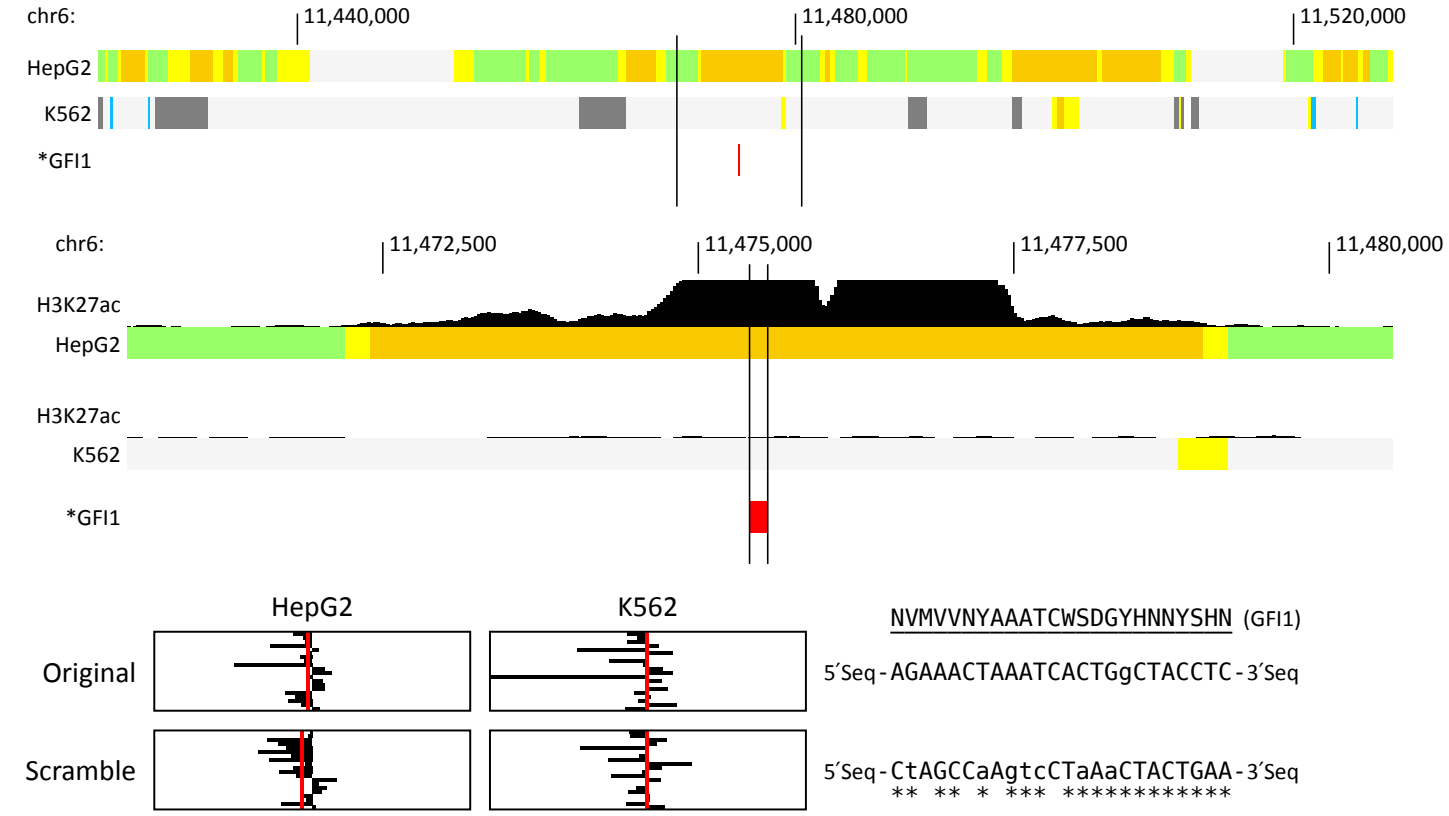
1799 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 11475467 11475490 - (hg18)



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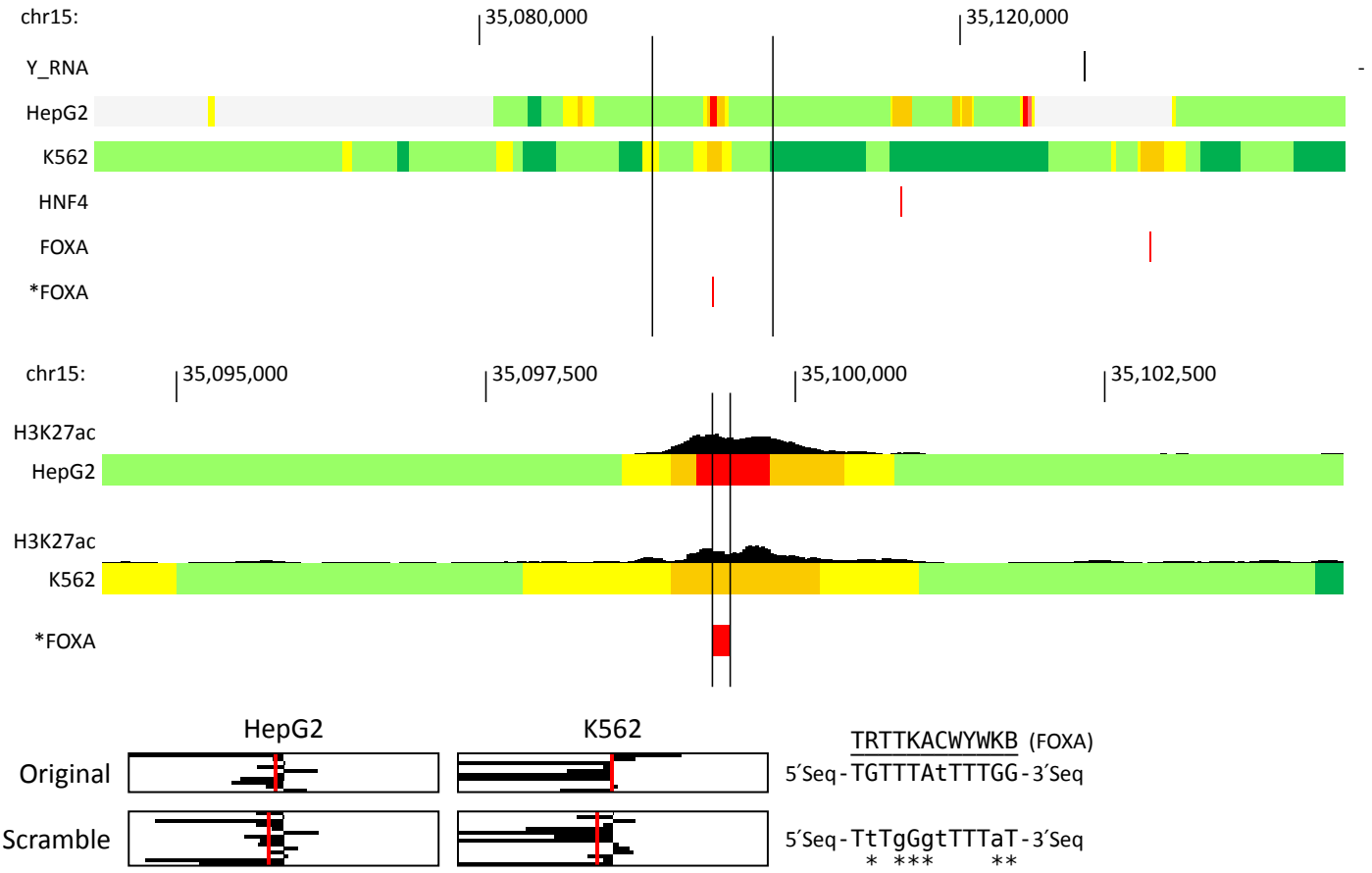
1800 FOXA in K562 enhancer (conserved at 50% confidence)

chr15 35099397 35099408 - (hg18)



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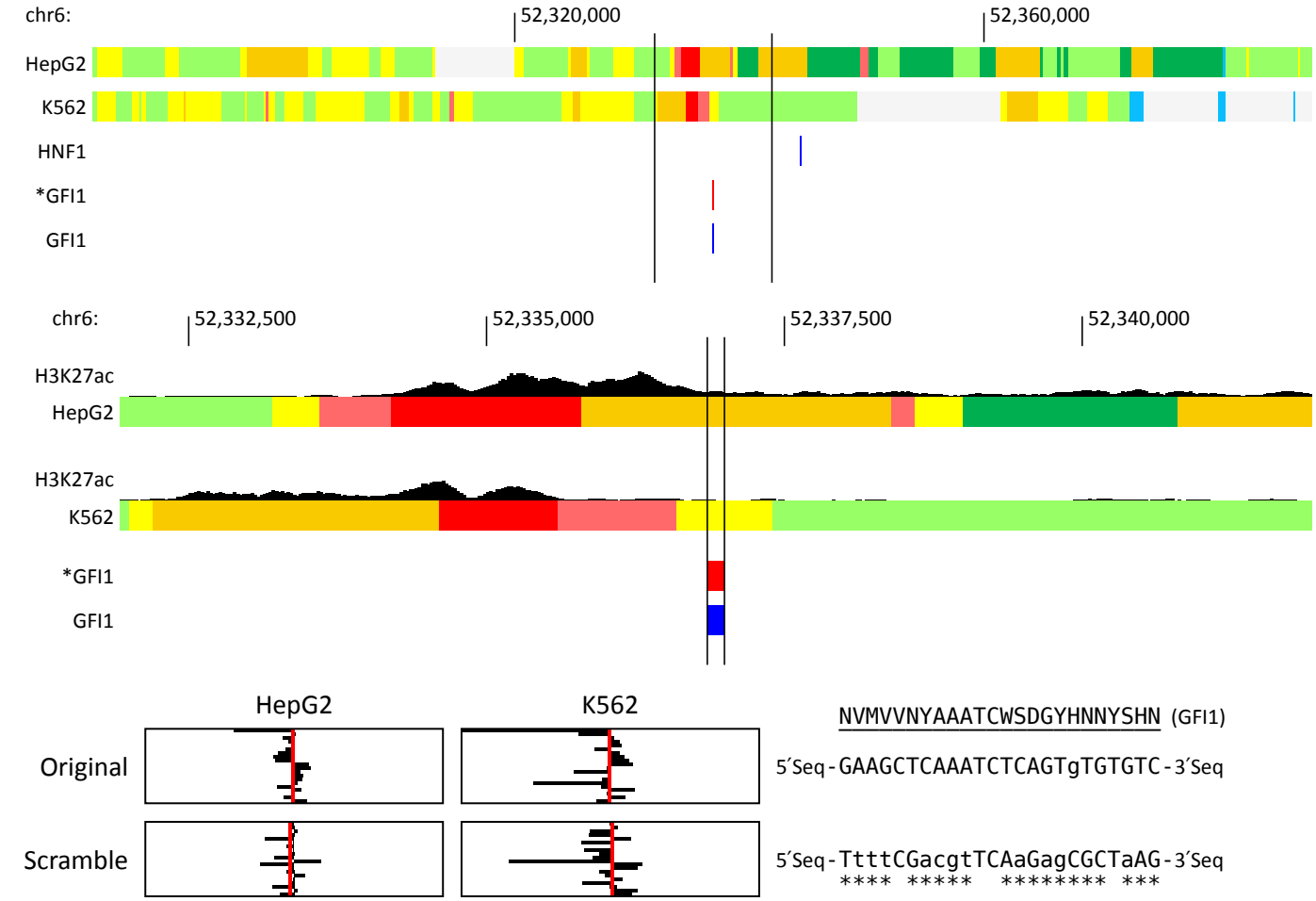
1801 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 52336914 52336937 - (hg18)



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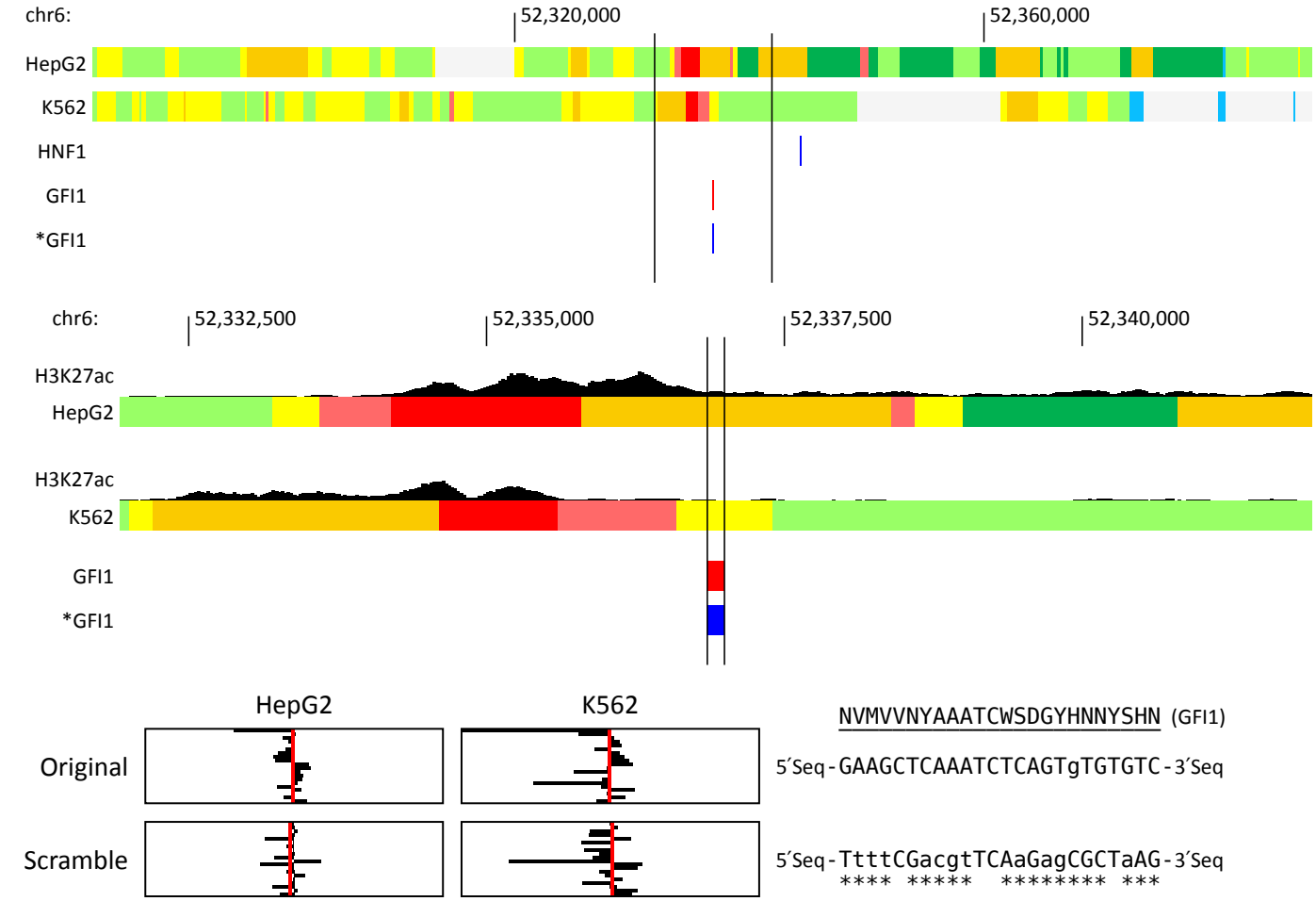
1802 GFI1 in HepG2 enhancer

chr6 52336914 52336937 - (hg18)



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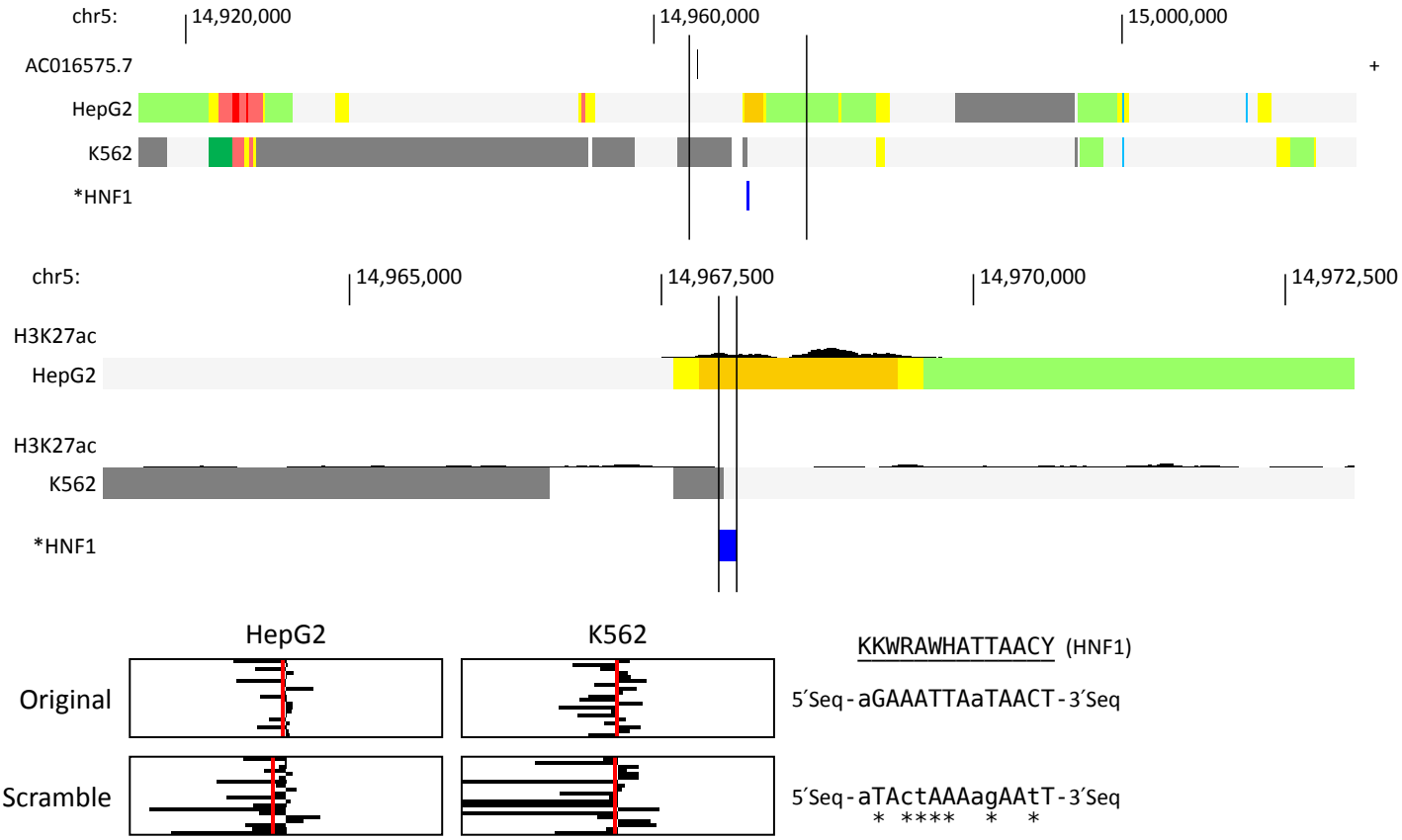
1803 HNF1 in HepG2 enhancer

chr5 14968025 14968038 + (hg18)



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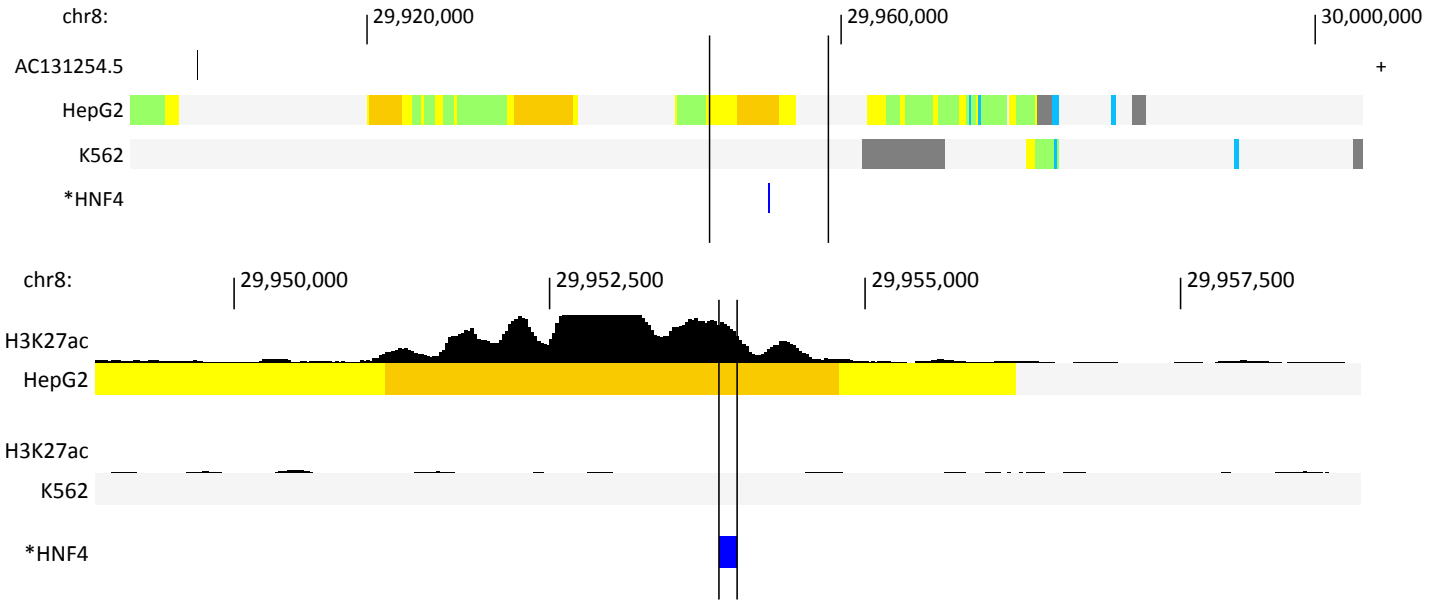
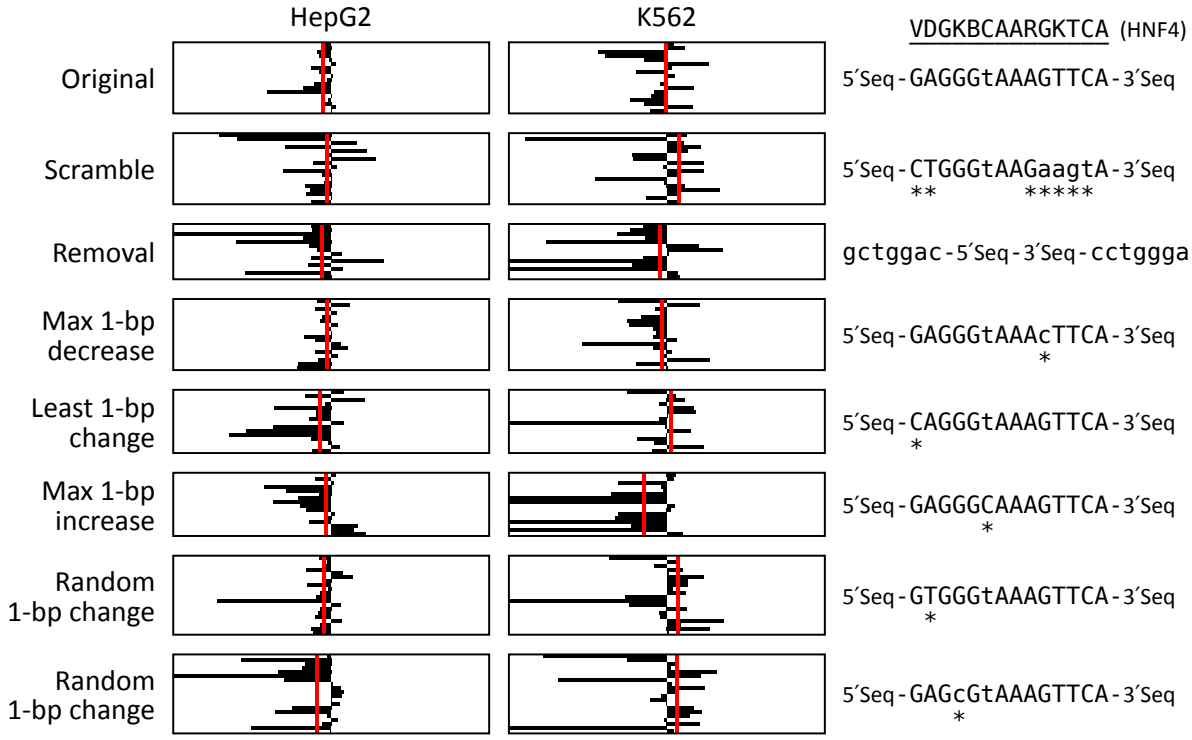
1804 HNF4 in HepG2 enhancer

chr8 29953908 29953921 - (hg18)





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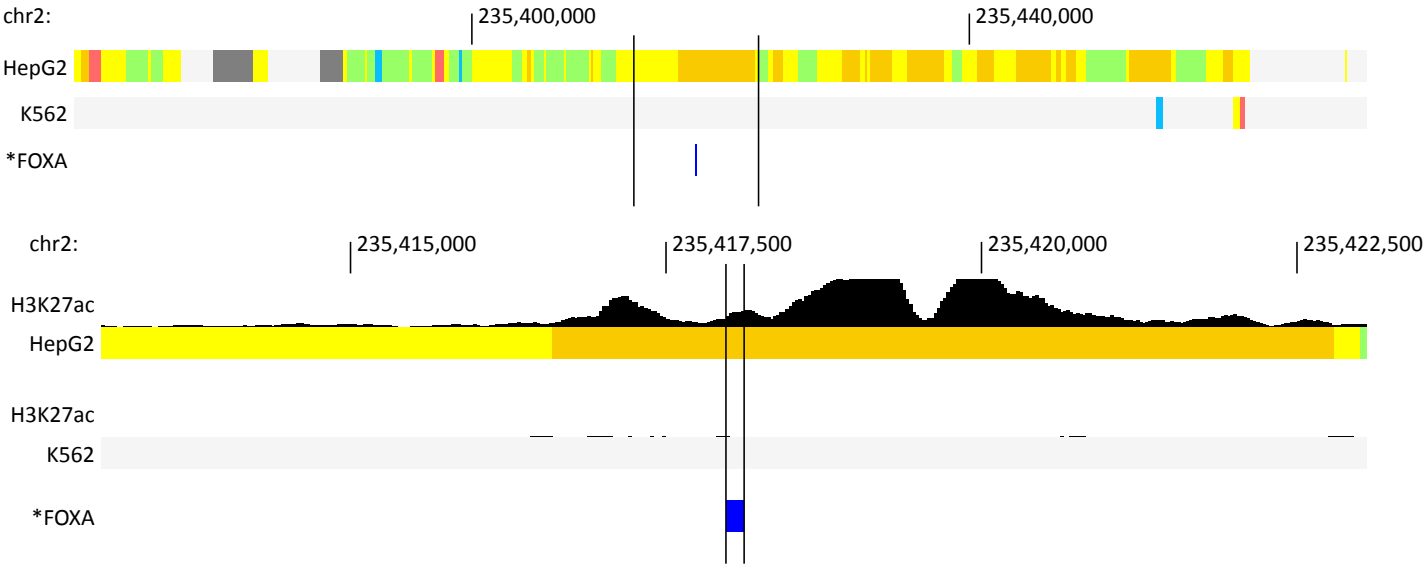
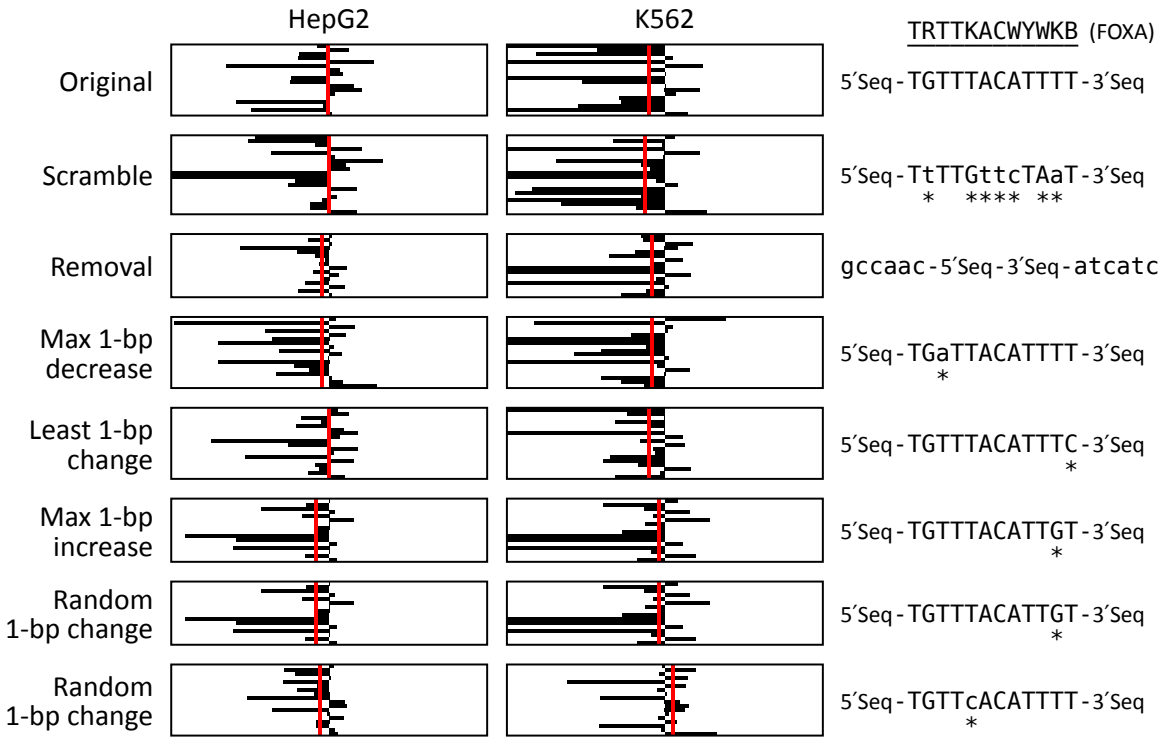
1805 FOXA in HepG2 enhancer

chr2 235418042 235418053 + (hg18)





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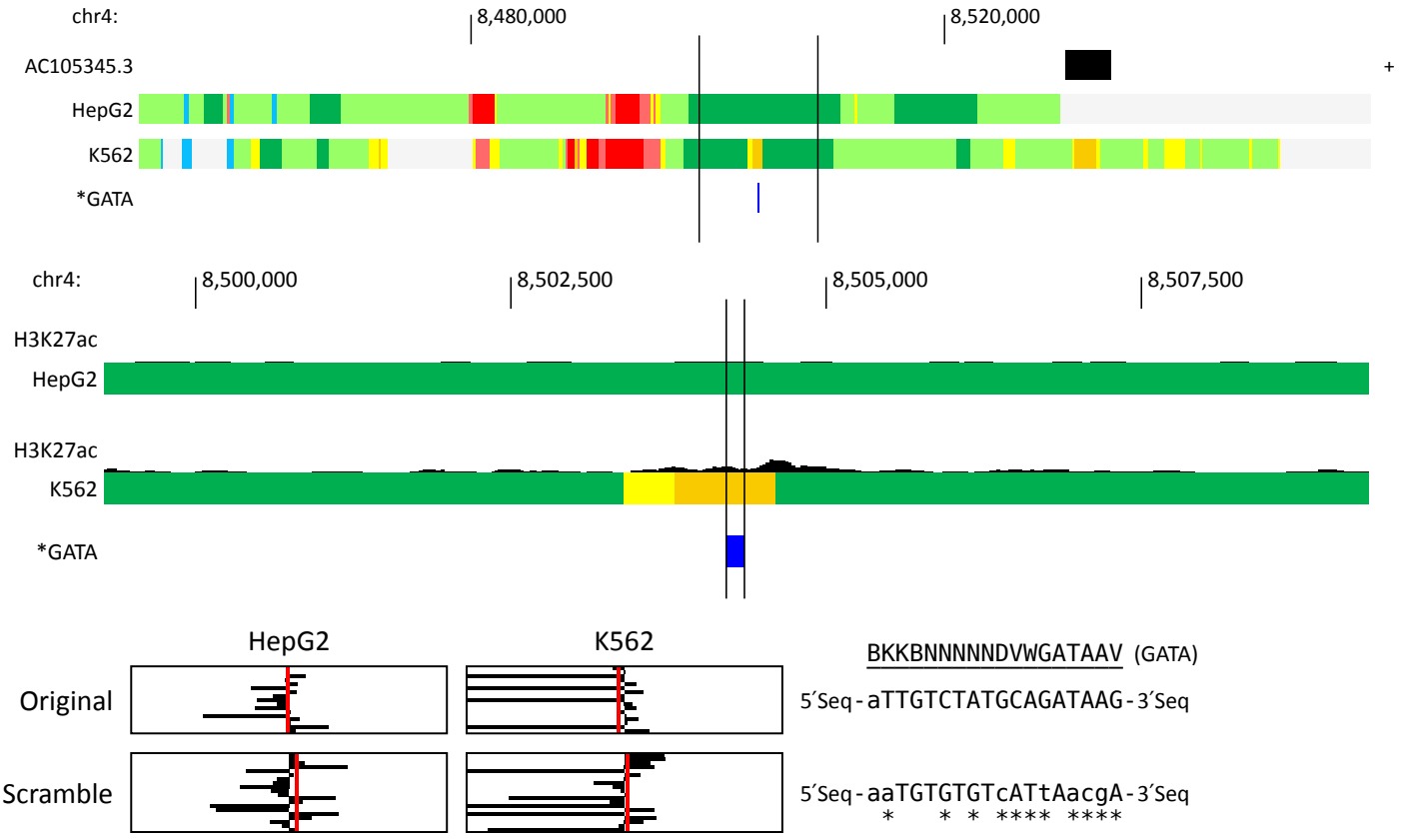
1806 GATA in K562 enhancer

chr4 8504272 8504289 - (hg18)



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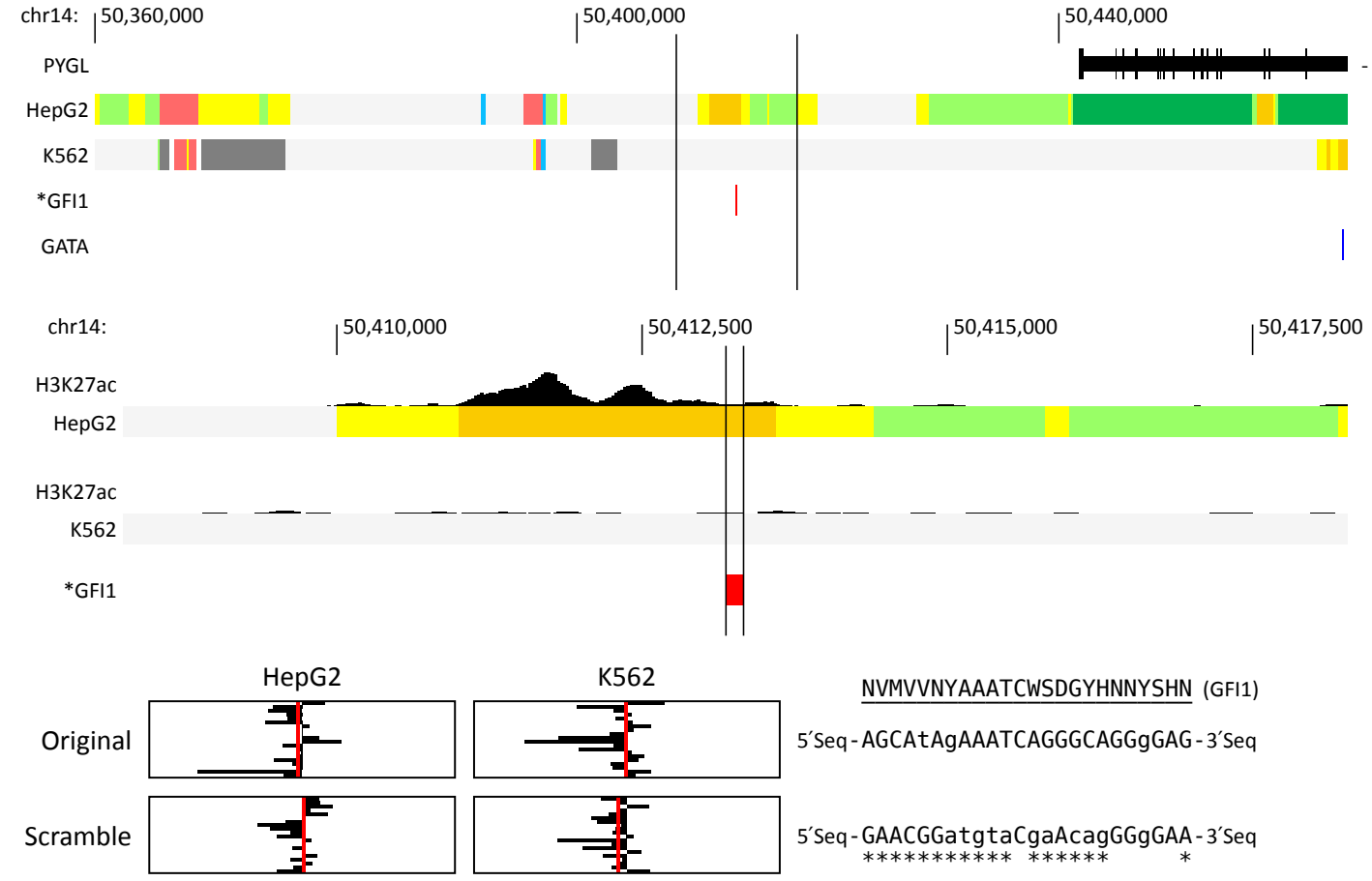
1807 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 50413248 50413271 + (hg18)



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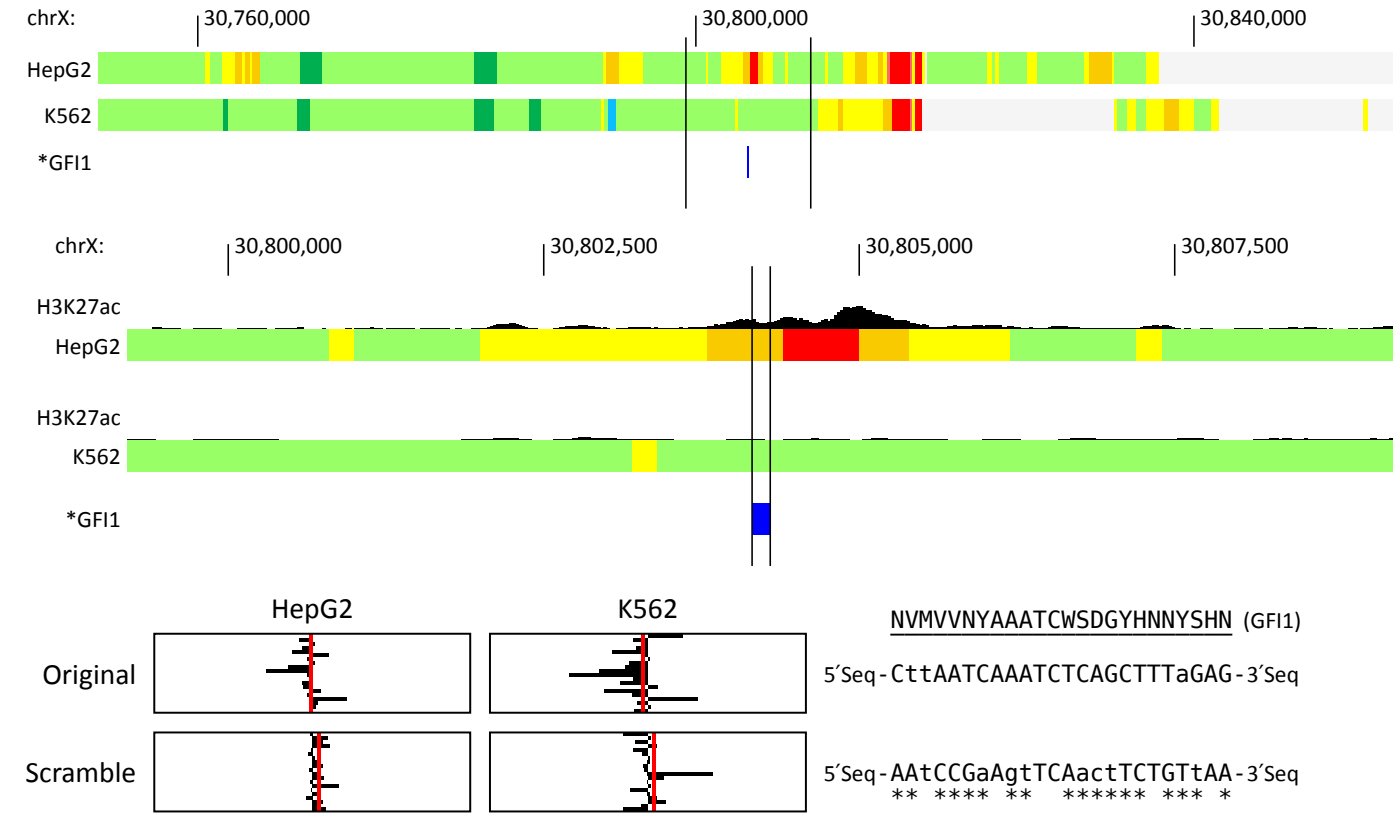
1808 GFI1 in HepG2 enhancer

chrX 30804212 30804235 - (hg18)



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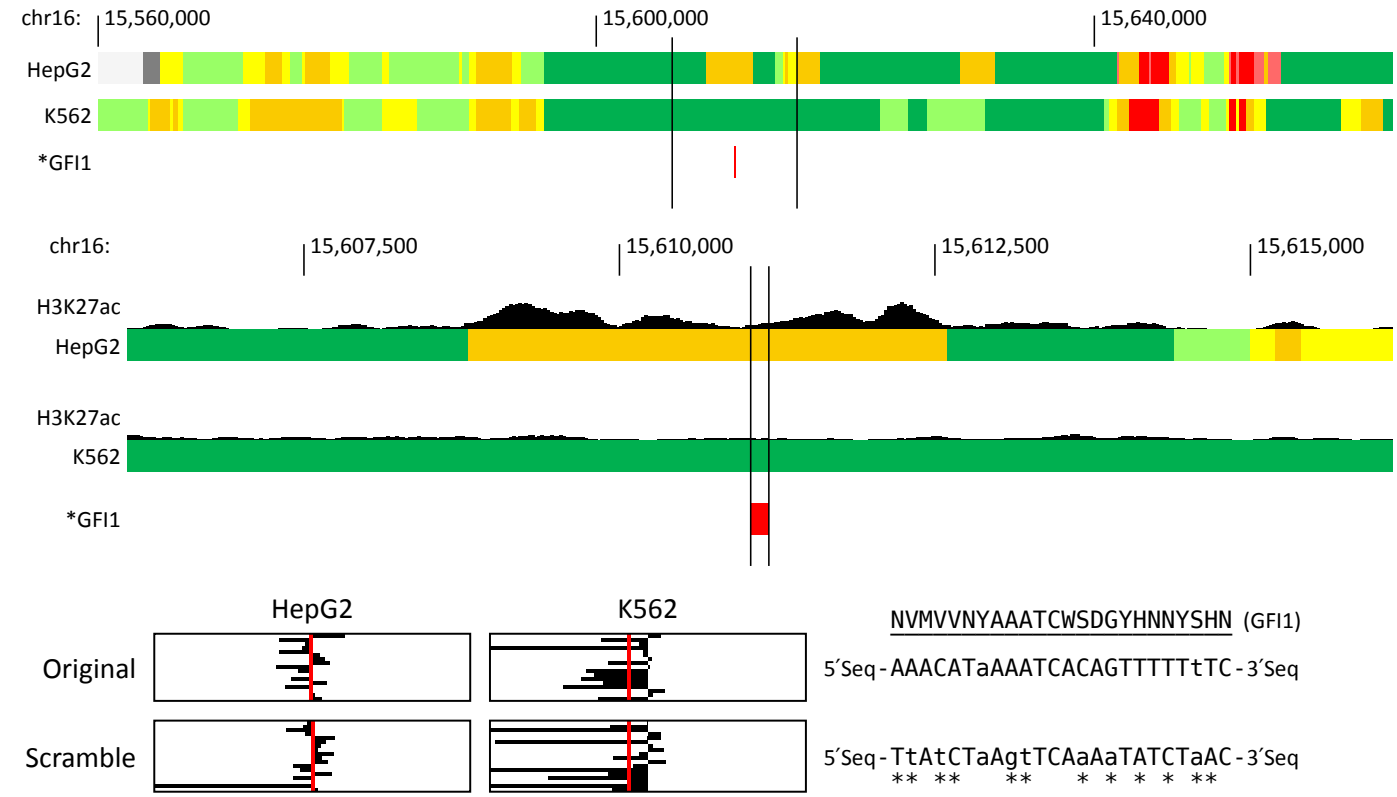
1809 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr16 15611101 15611124 + (hg18)



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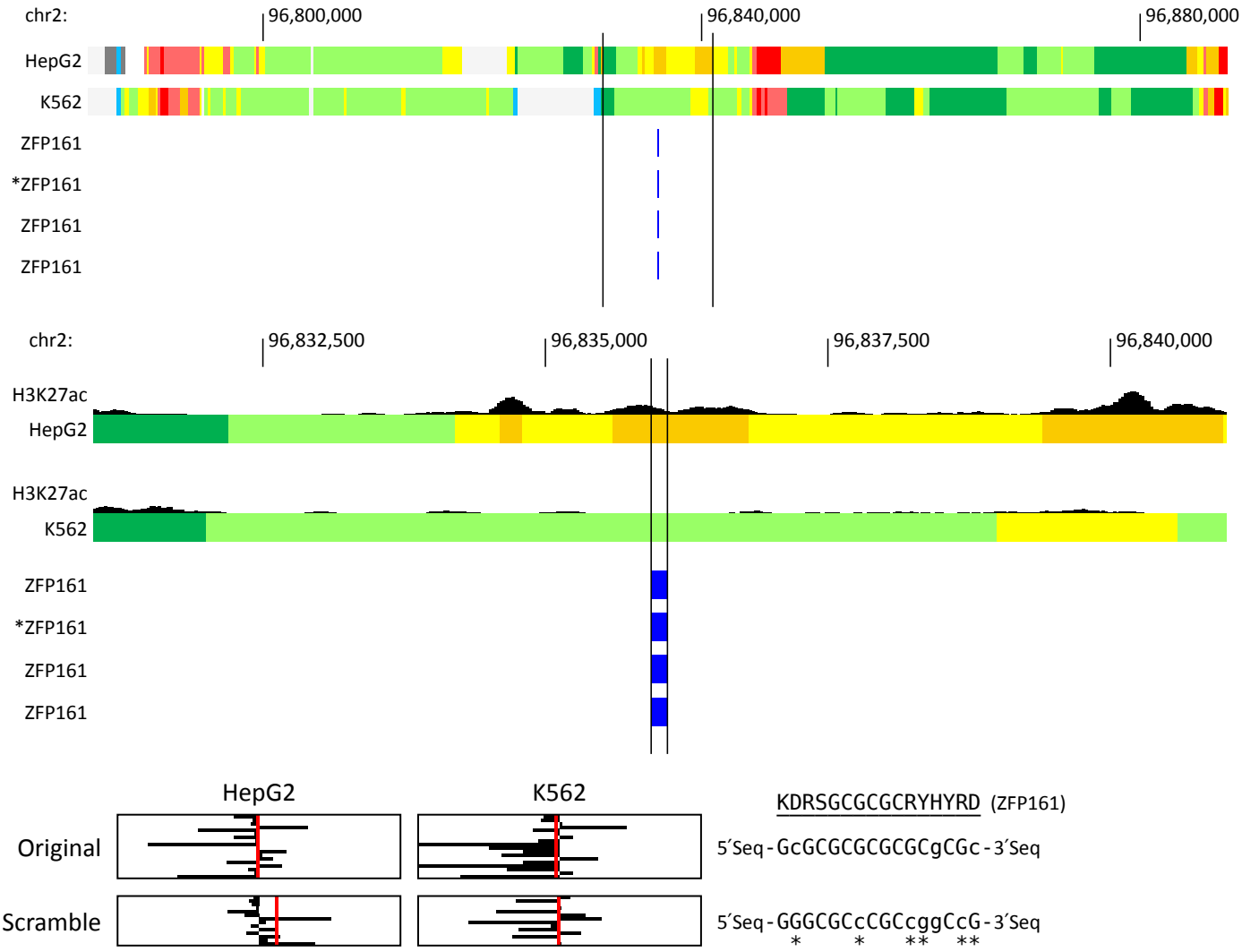
1810 ZFP161 in HepG2 enhancer

chr2 96836001 96836016 - (hg18)



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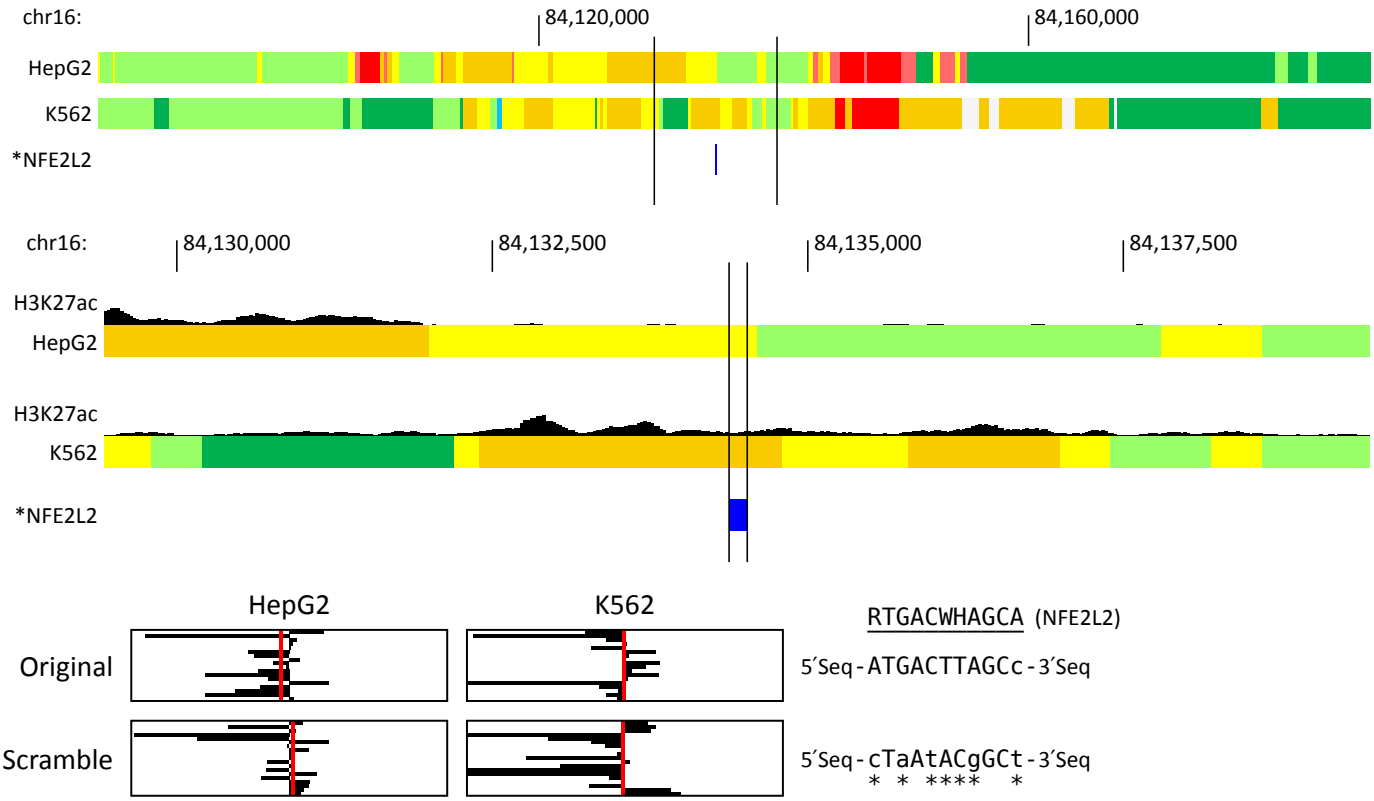
1811 NFE2L2 in K562 enhancer

chr16 84134443 84134453 - (hg18)



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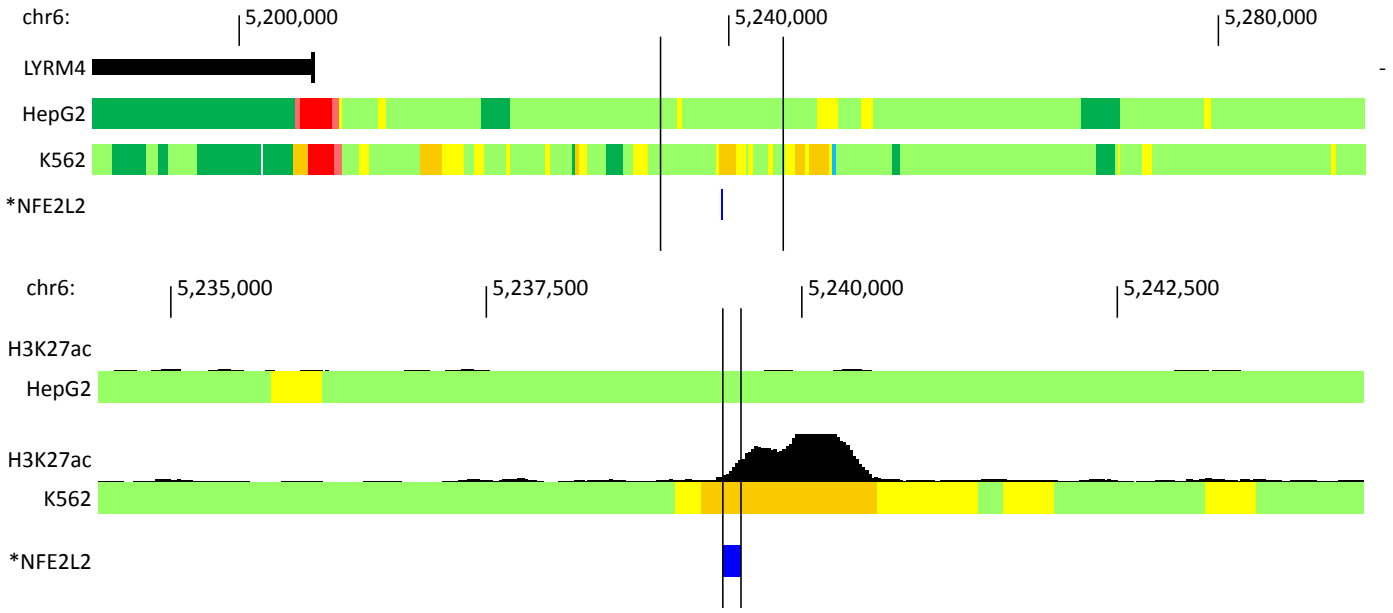
1812 NFE2L2 in K562 enhancer

chr6 5239441 5239451 + (hg18)



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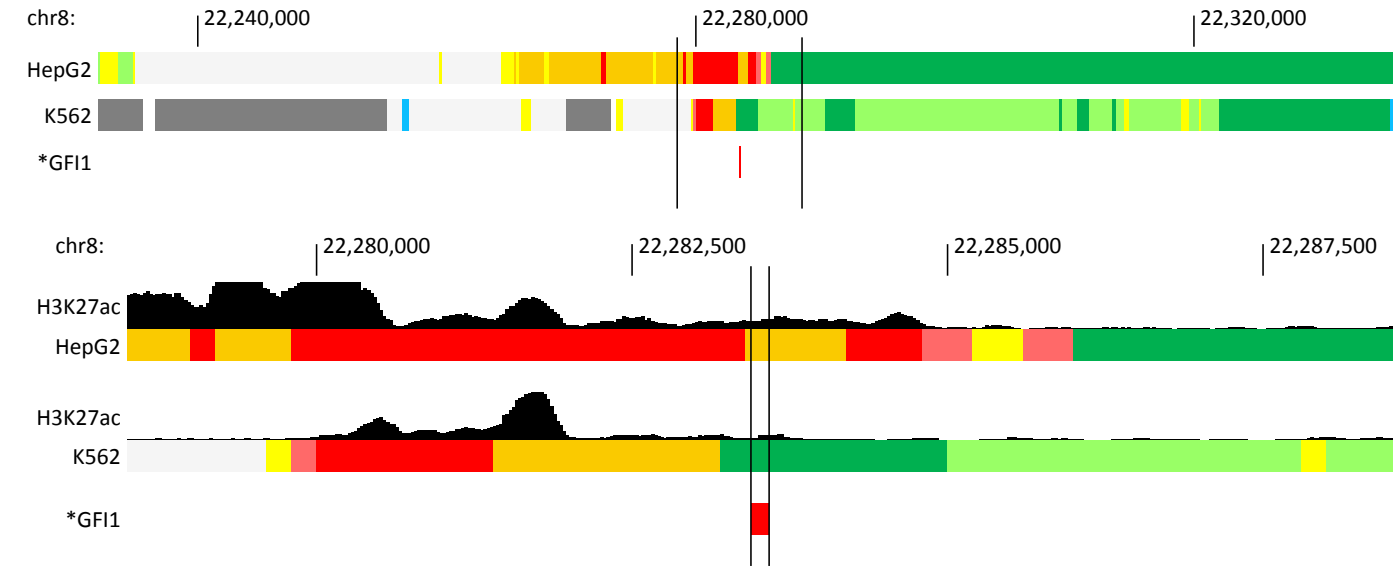
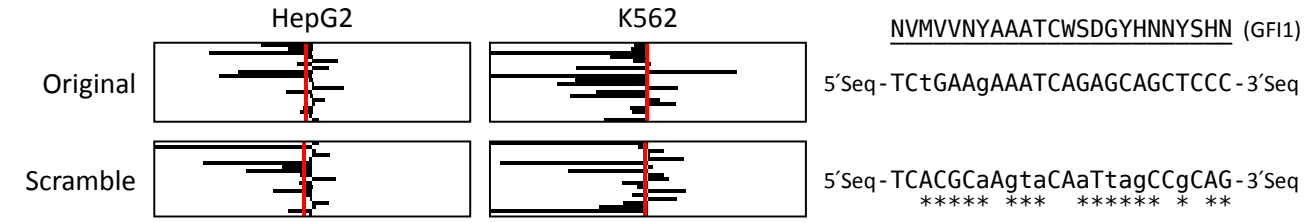
1813 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr8 22283503 22283526 - (hg18)





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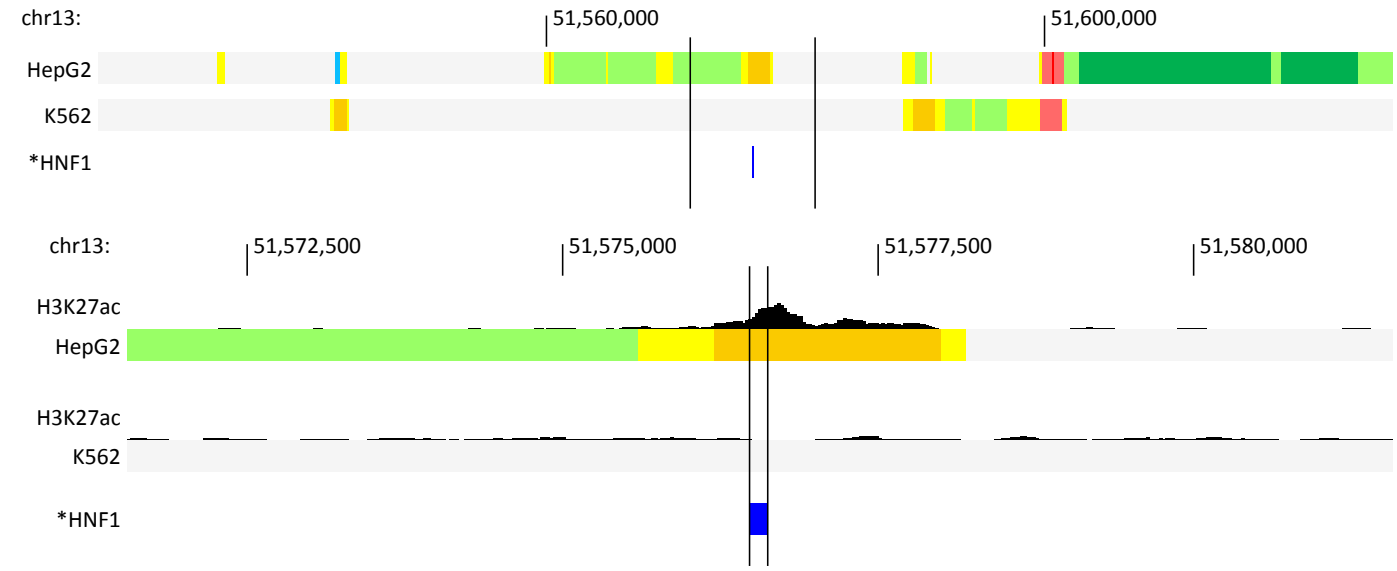
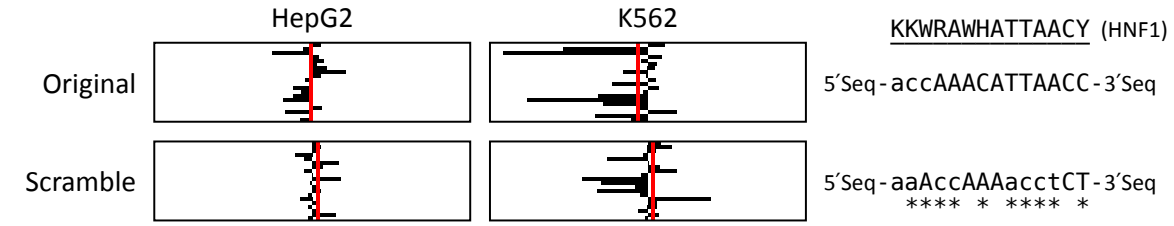
1814 HNF1 in HepG2 enhancer

chr13 51576547 51576560 + (hg18)





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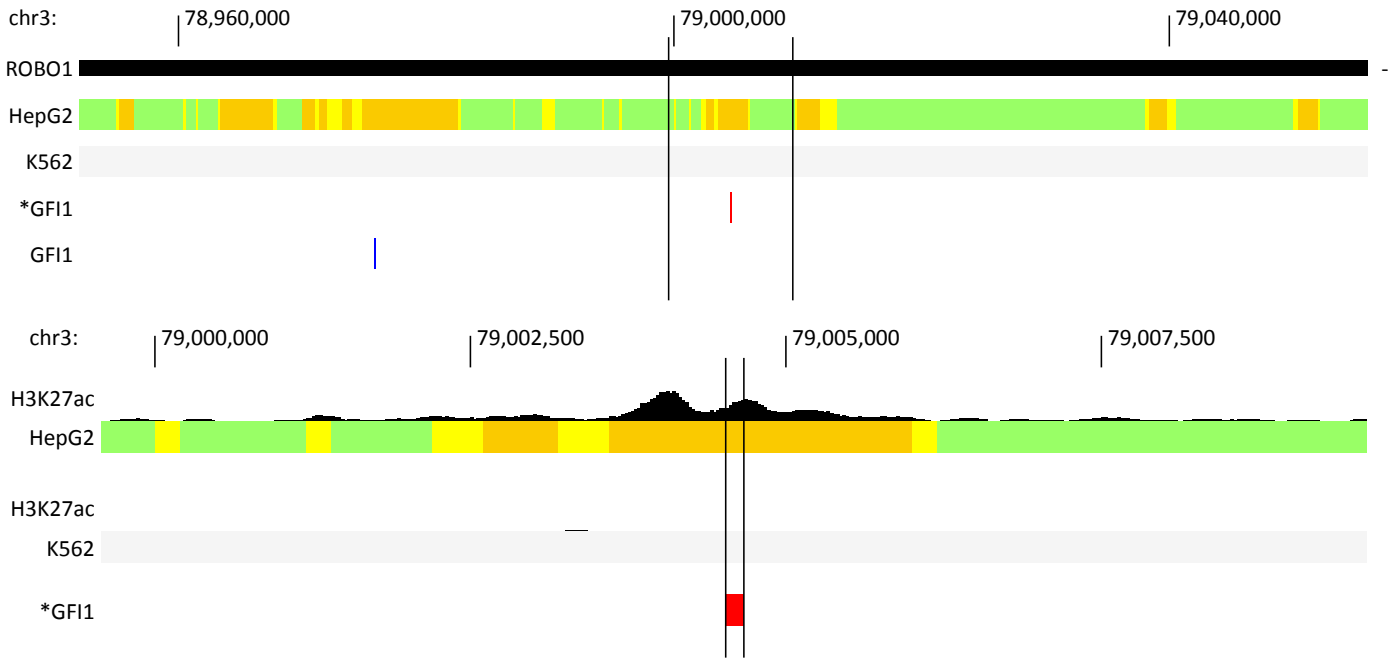
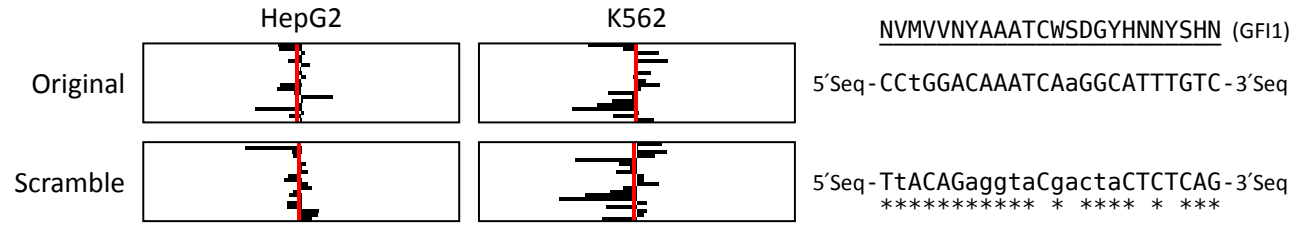
1815 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr3 79004584 79004607 + (hg18)





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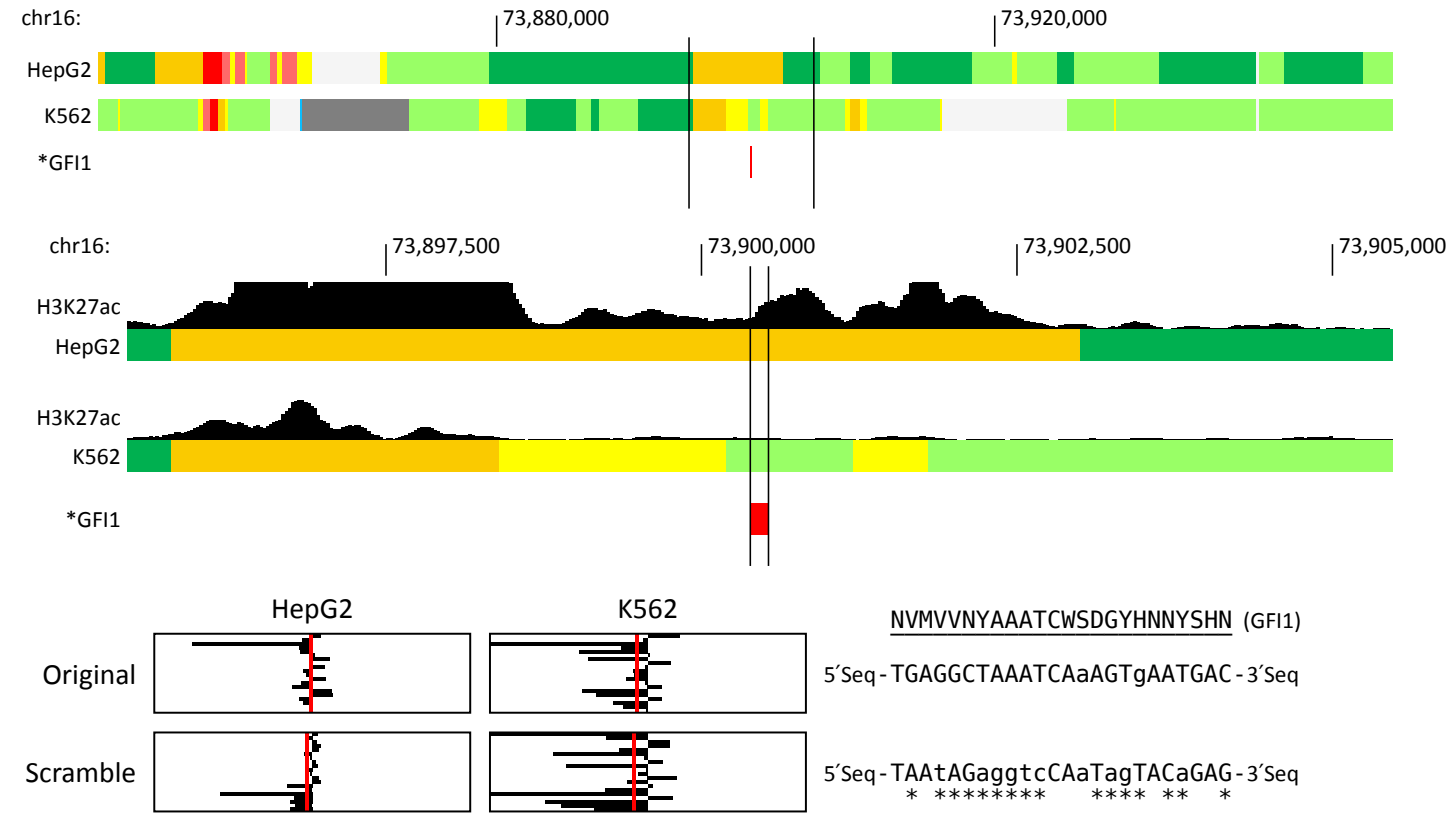
1816 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr16 73900448 73900471 + (hg18)



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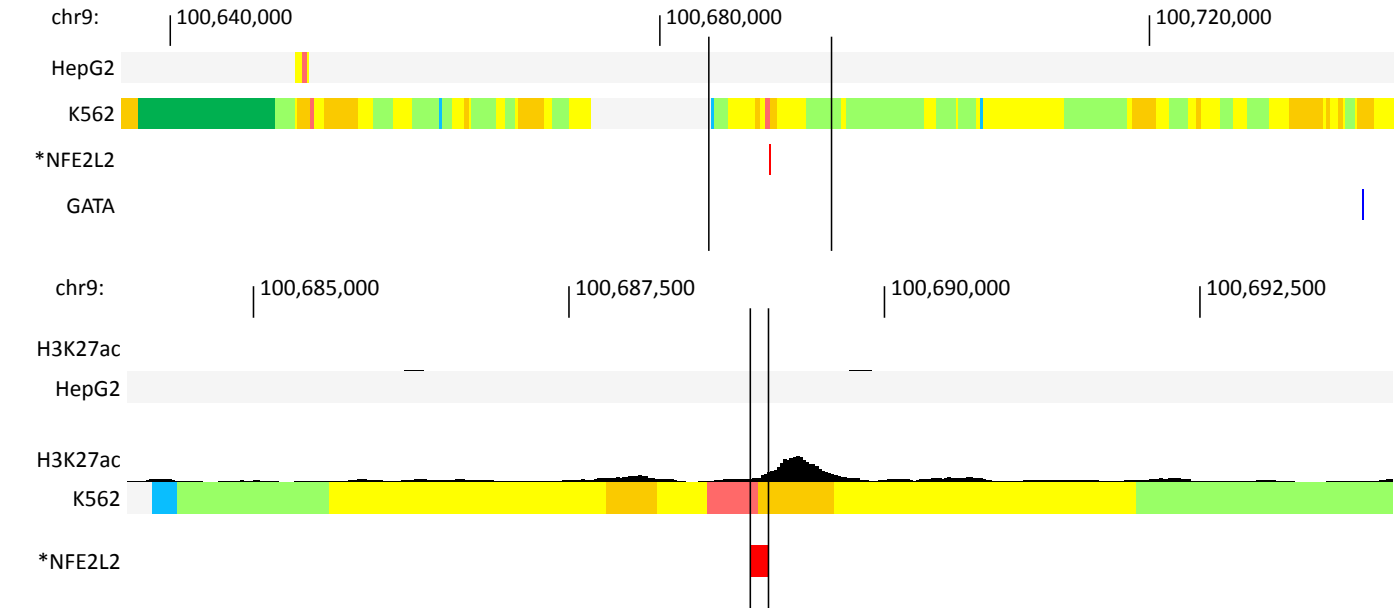
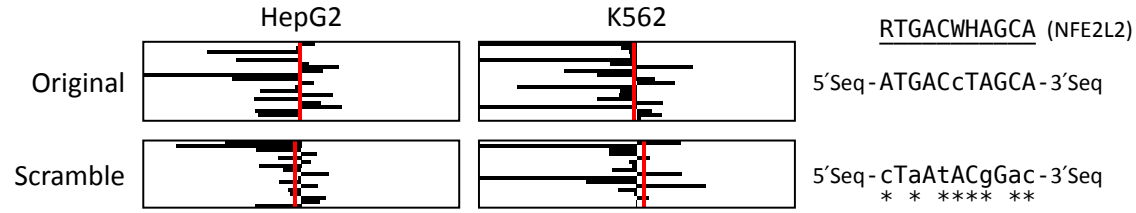
1817 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr9 100689004 100689014 + (hg18)





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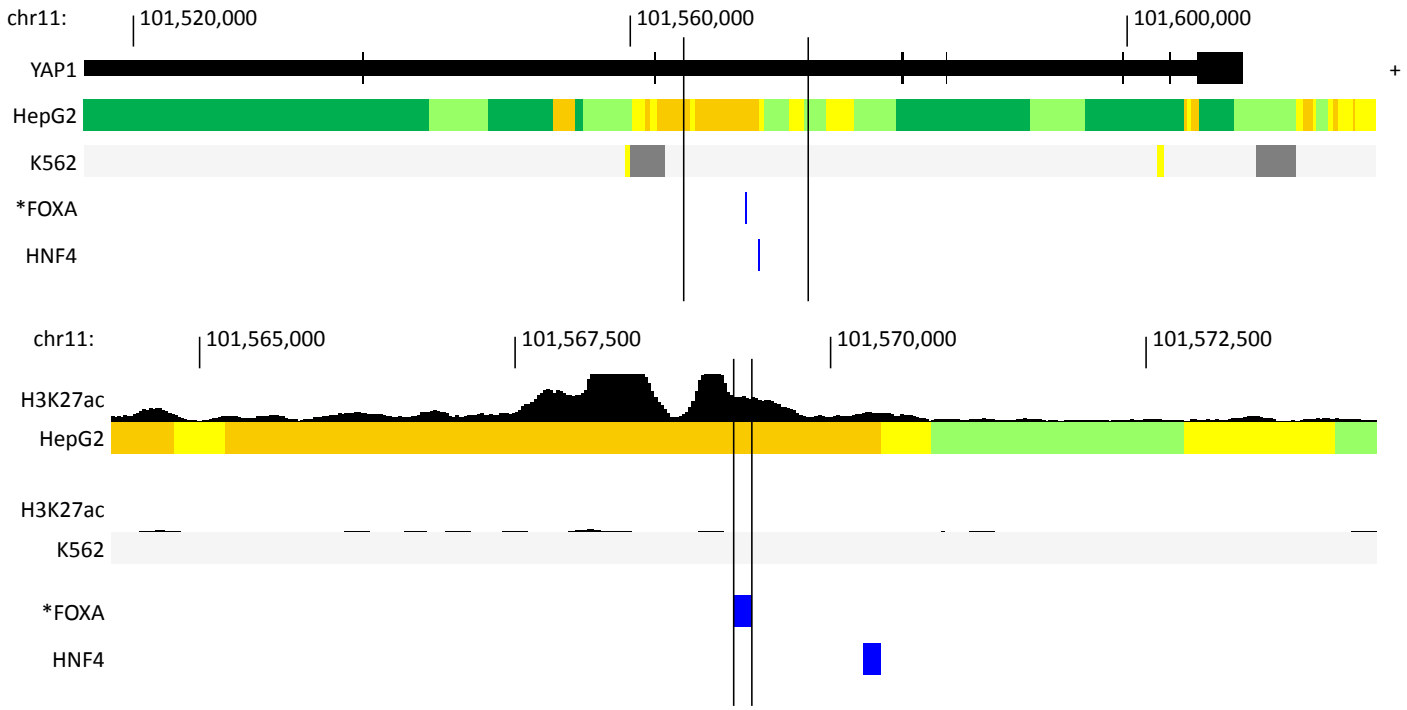
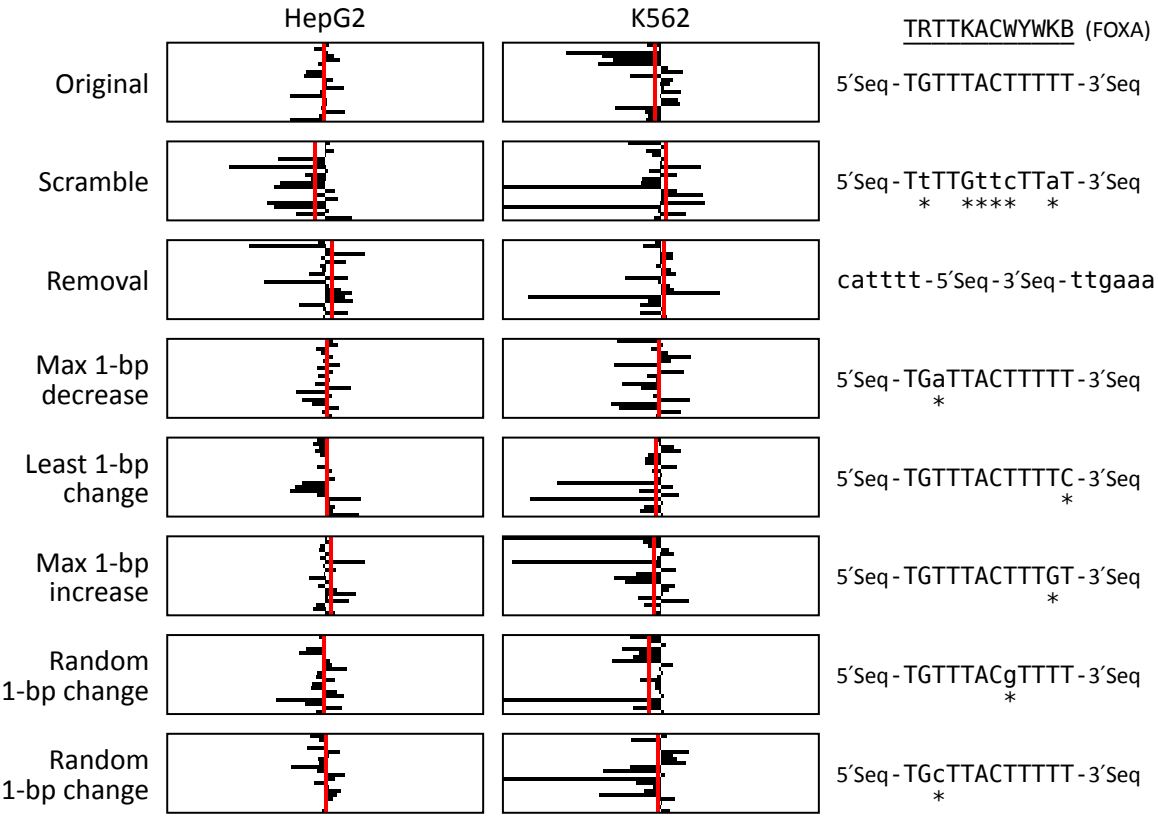
1818 FOXA in HepG2 enhancer

chr11 101569299 101569310 - (hg18)





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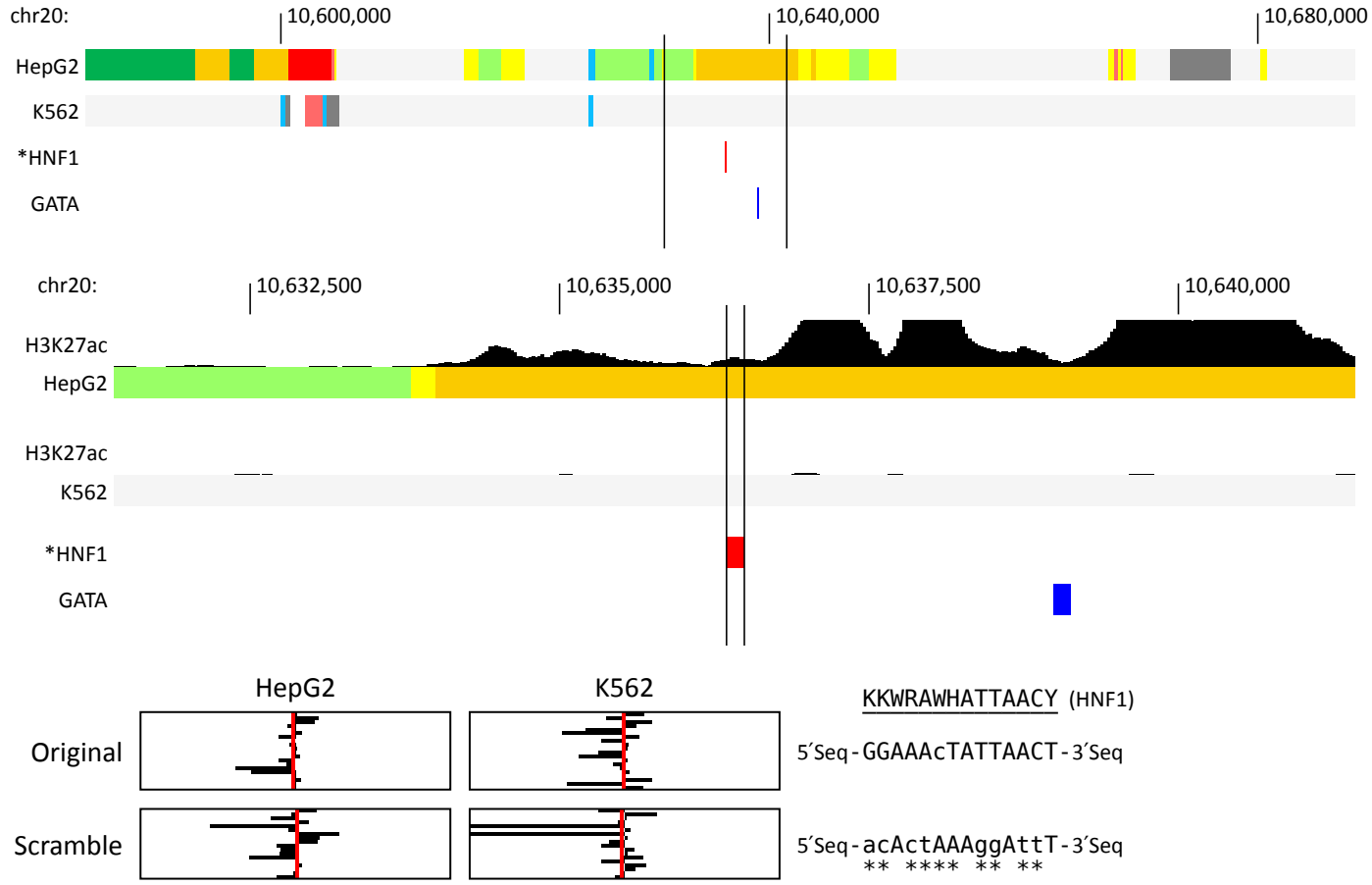
1819 HNF1 in HepG2 enhancer (conserved at 50% confidence)

chr20 10636415 10636428 + (hg18)



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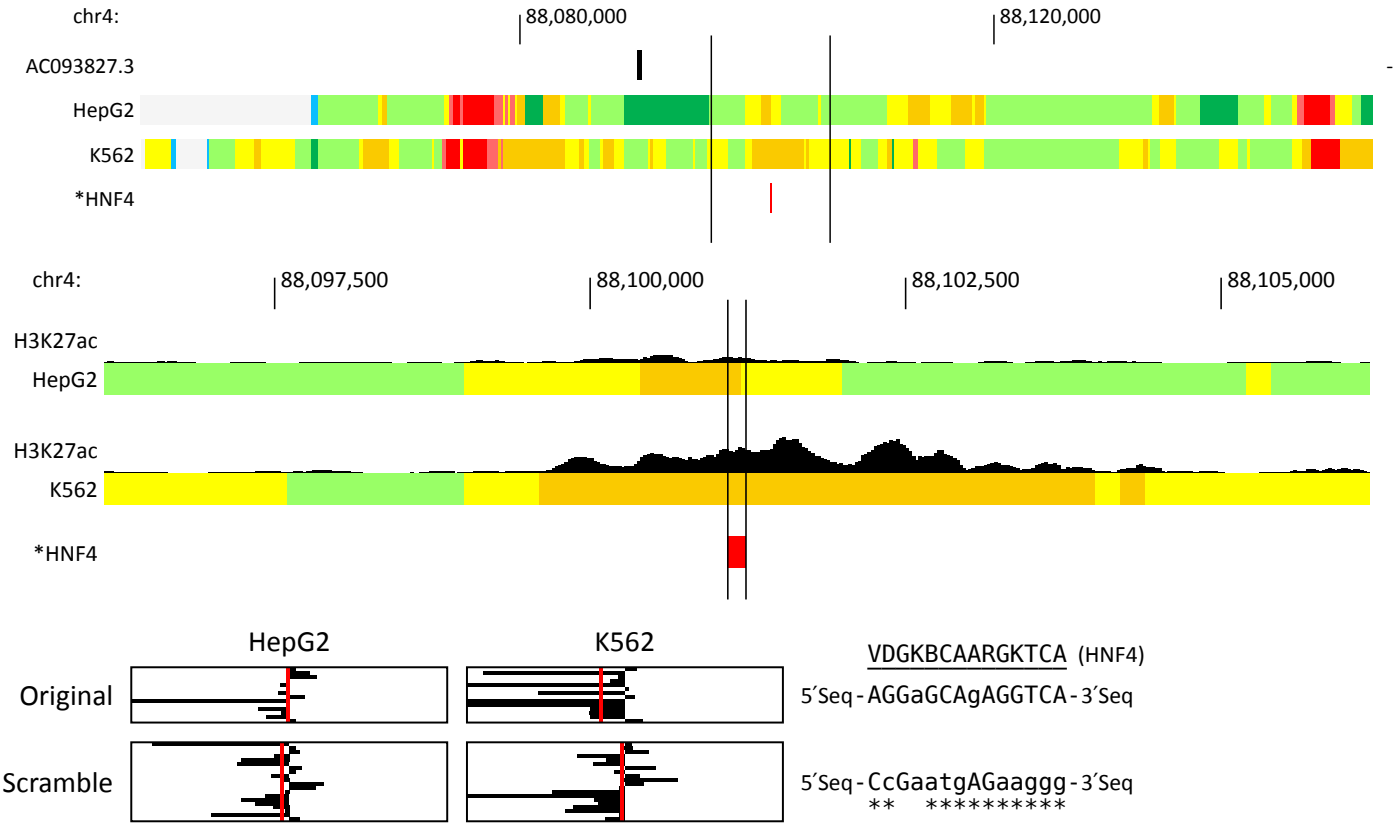
1820 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr4 88101157 88101170 + (hg18)



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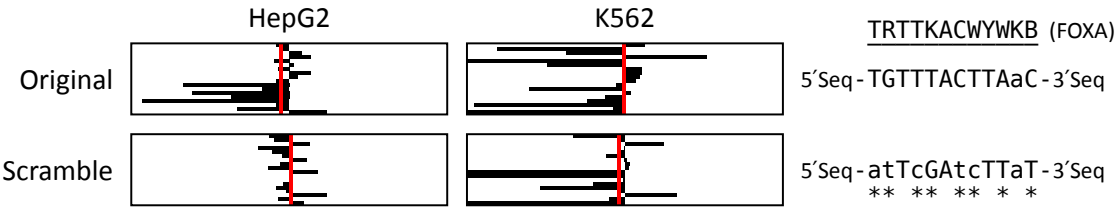
1821 FOXA in K562 enhancer (conserved at 50% confidence)

chr6 139949440 139949451 + (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTTAaC-3′Seq

5′Seq-atTcGAtcTTaT-3′Seq

** ** ** * *

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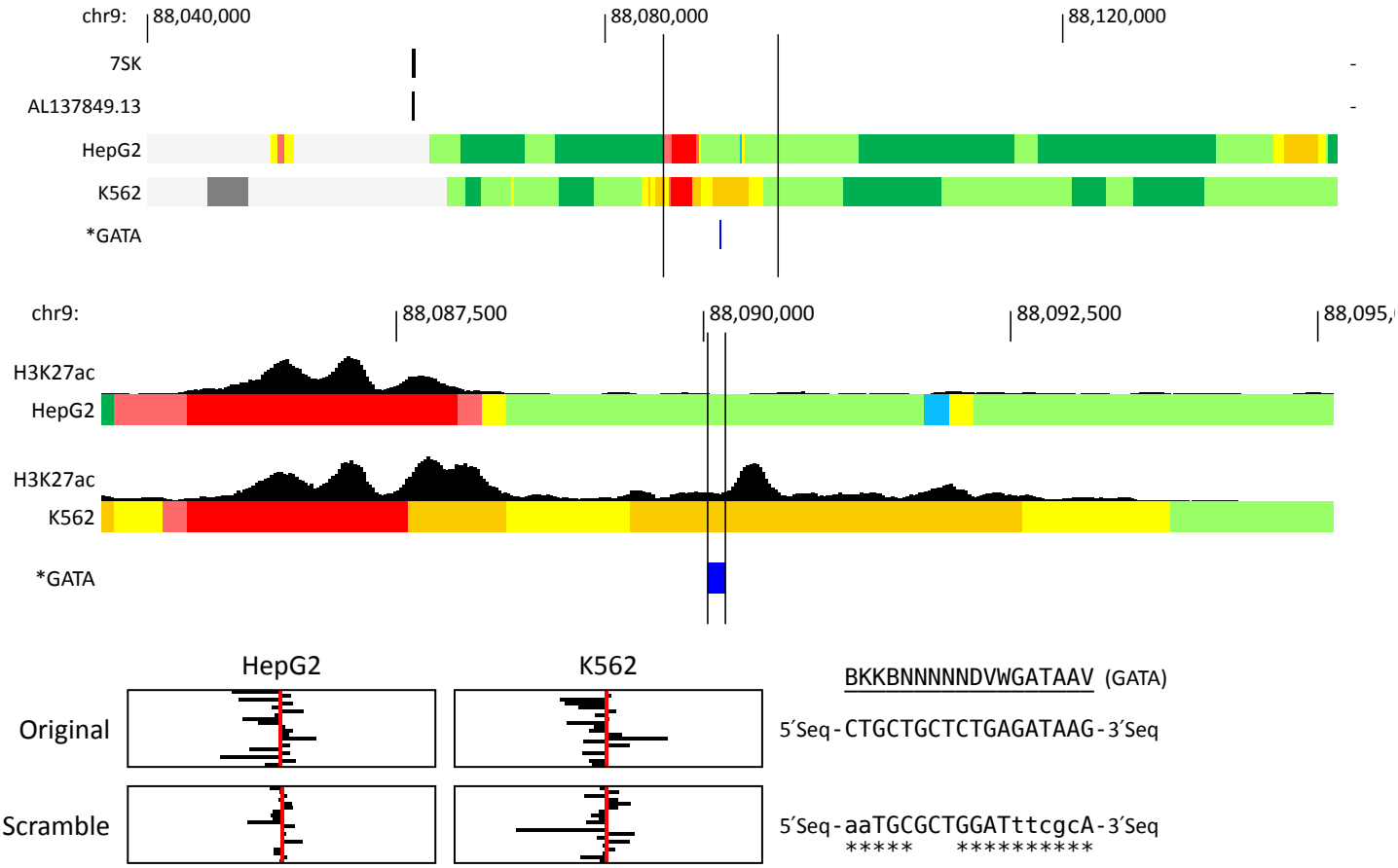
3′Seq = aaaagacactccaccctcgctgcaagttttgacactctctctgatacactgtatggctactgtacc

1822 GATA in K562 enhancer

chr9 88090098 88090115 - (hg18)



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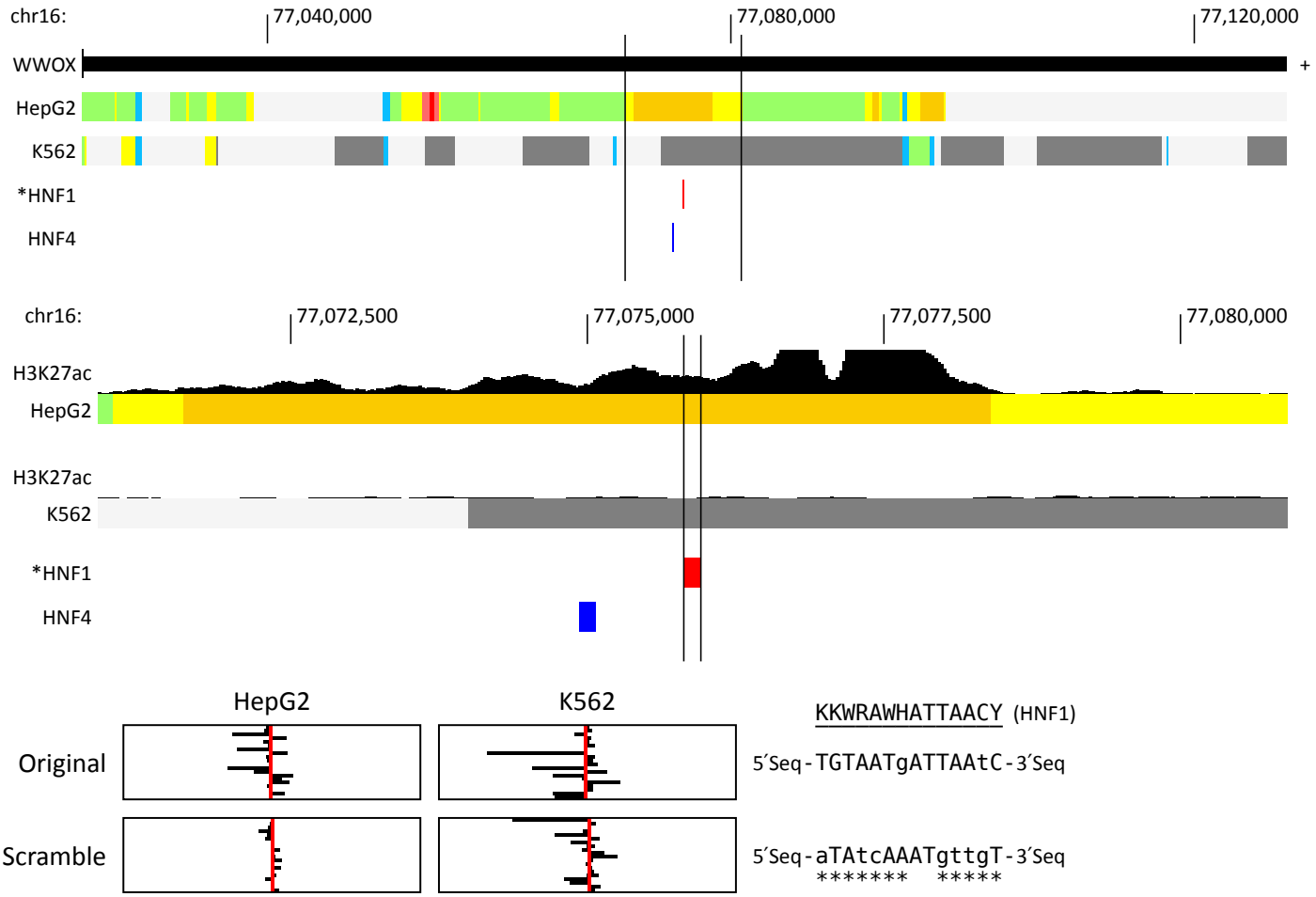
1823 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr16 77075879 77075892 - (hg18)



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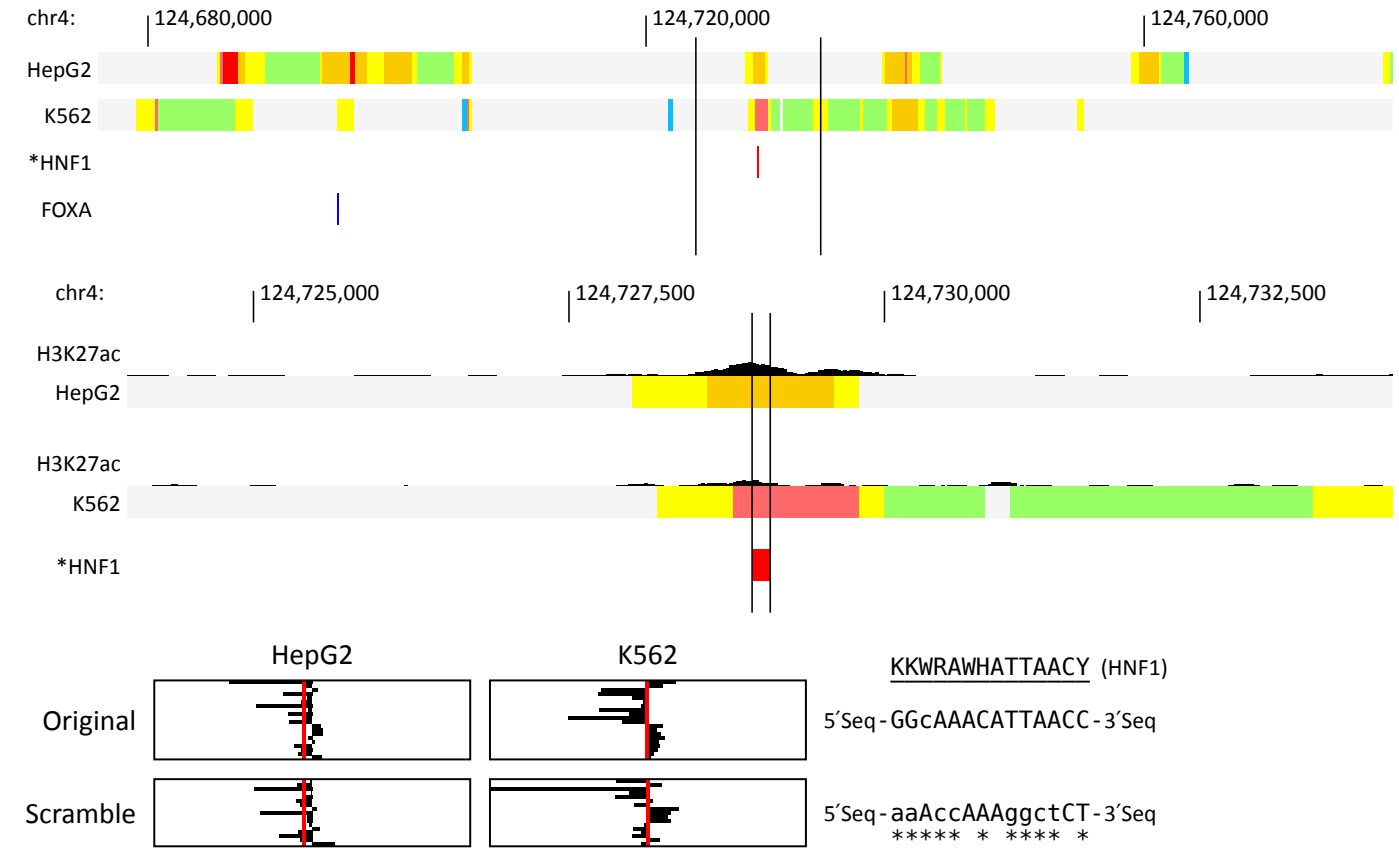
3′Seq = aatttatgaatacattatttaaactaatagctcaggtagggtatcttaaacaagttacagagtat

1824 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr4 124729017 124729030 + (hg18)



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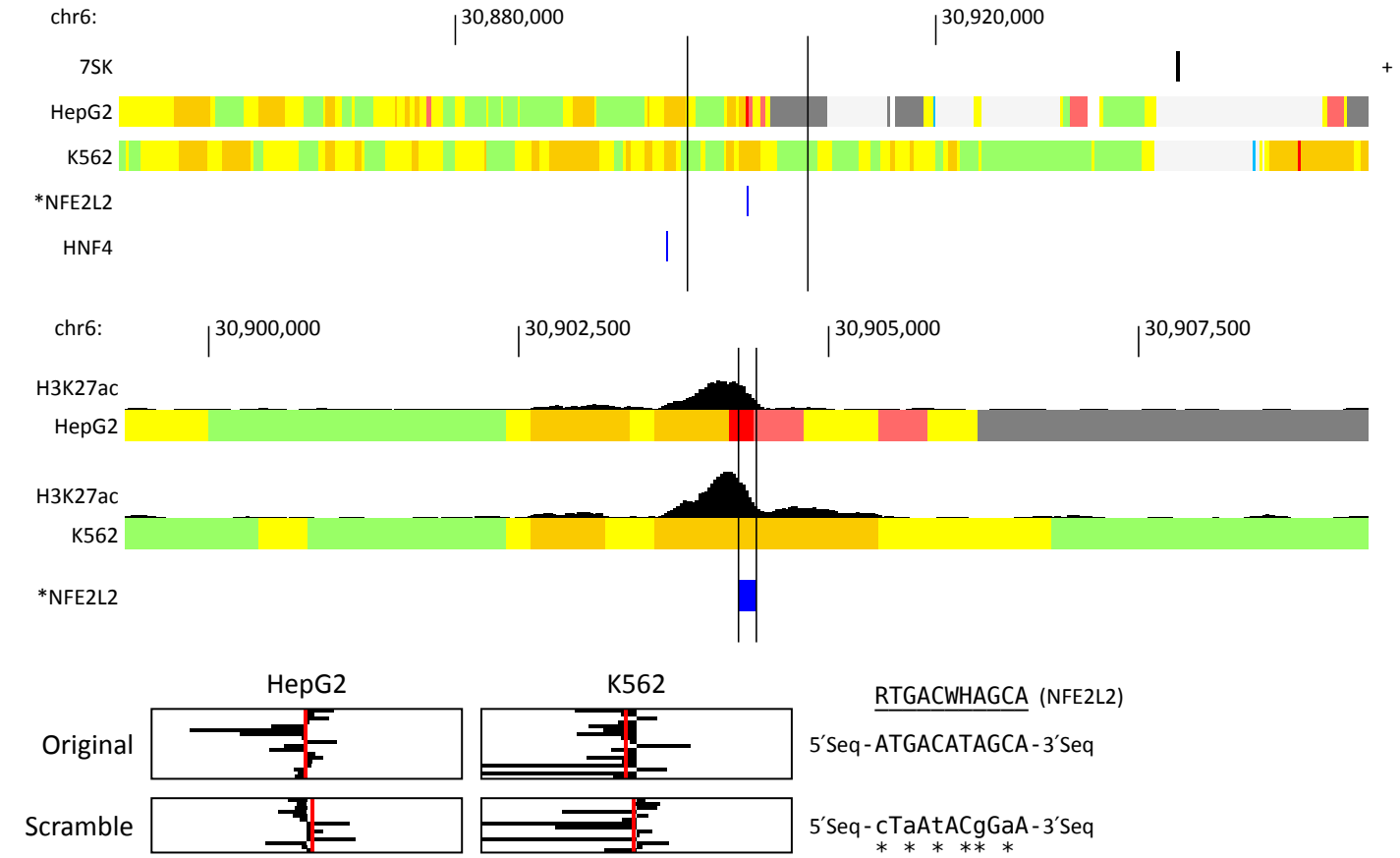
1825 NFE2L2 in K562 enhancer

chr6 30904340 30904350 + (hg18)



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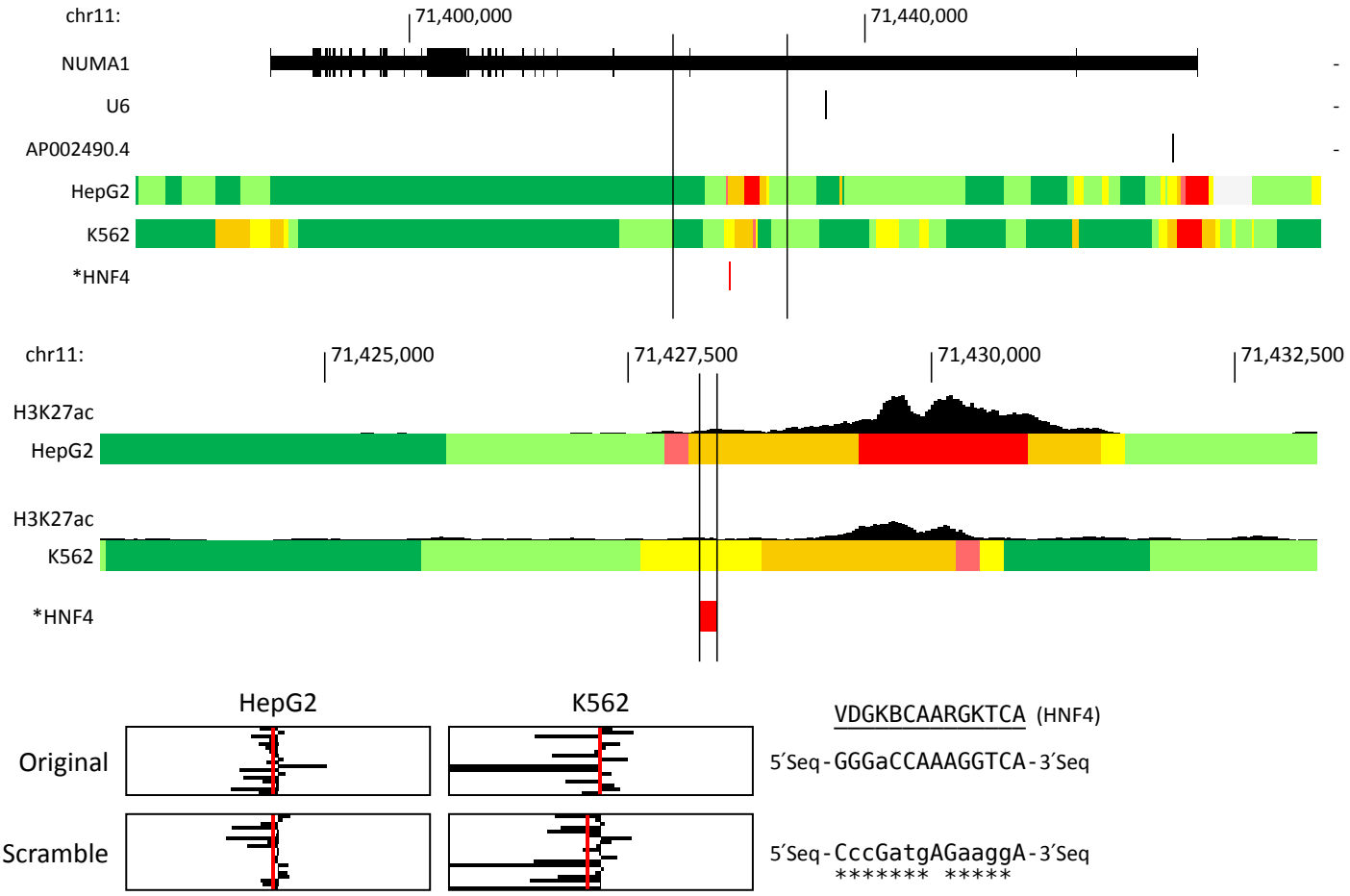
1826 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr11 71428155 71428168 - (hg18)



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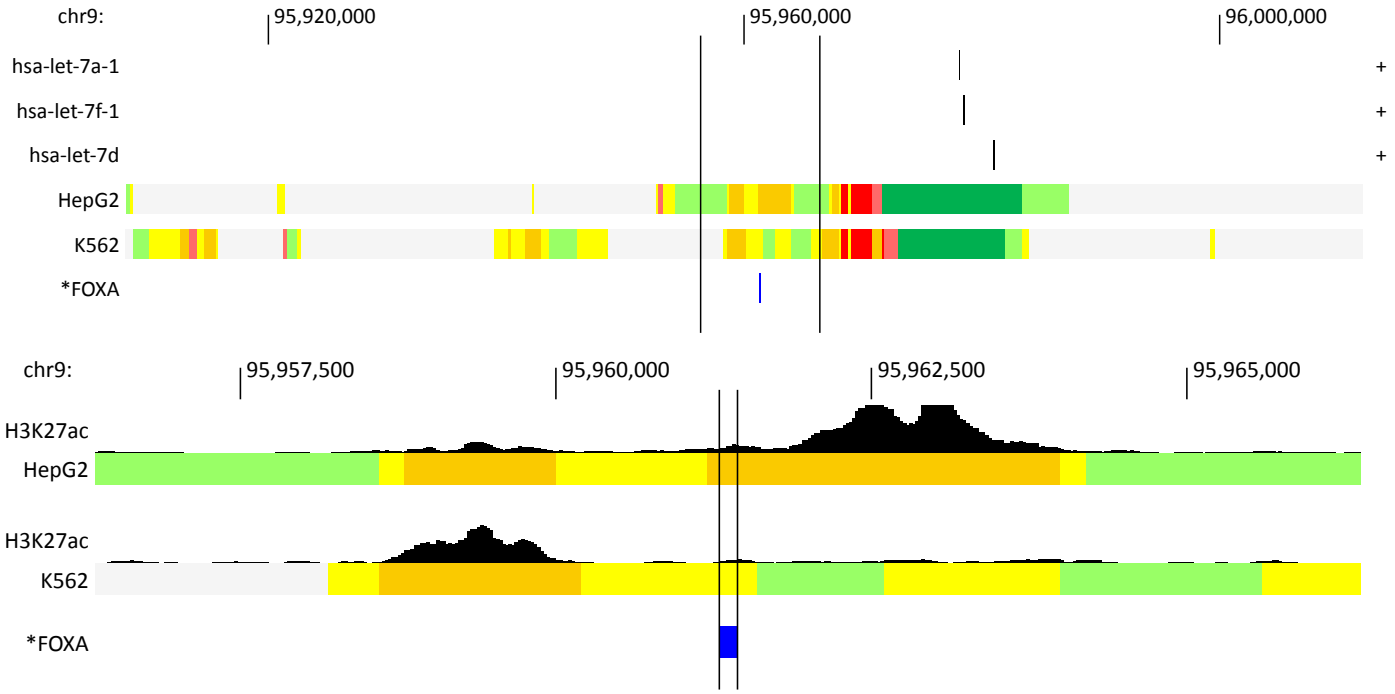
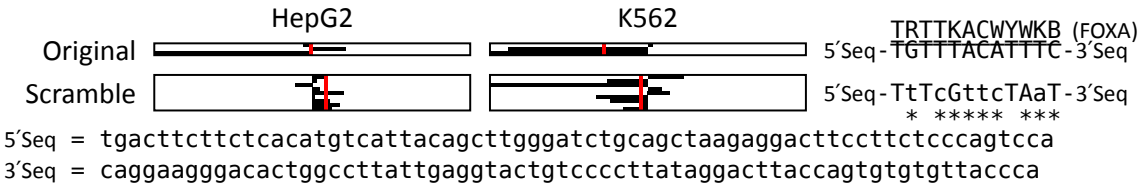
1827 FOXA in HepG2 enhancer

chr9 95961362 95961373 + (hg18)





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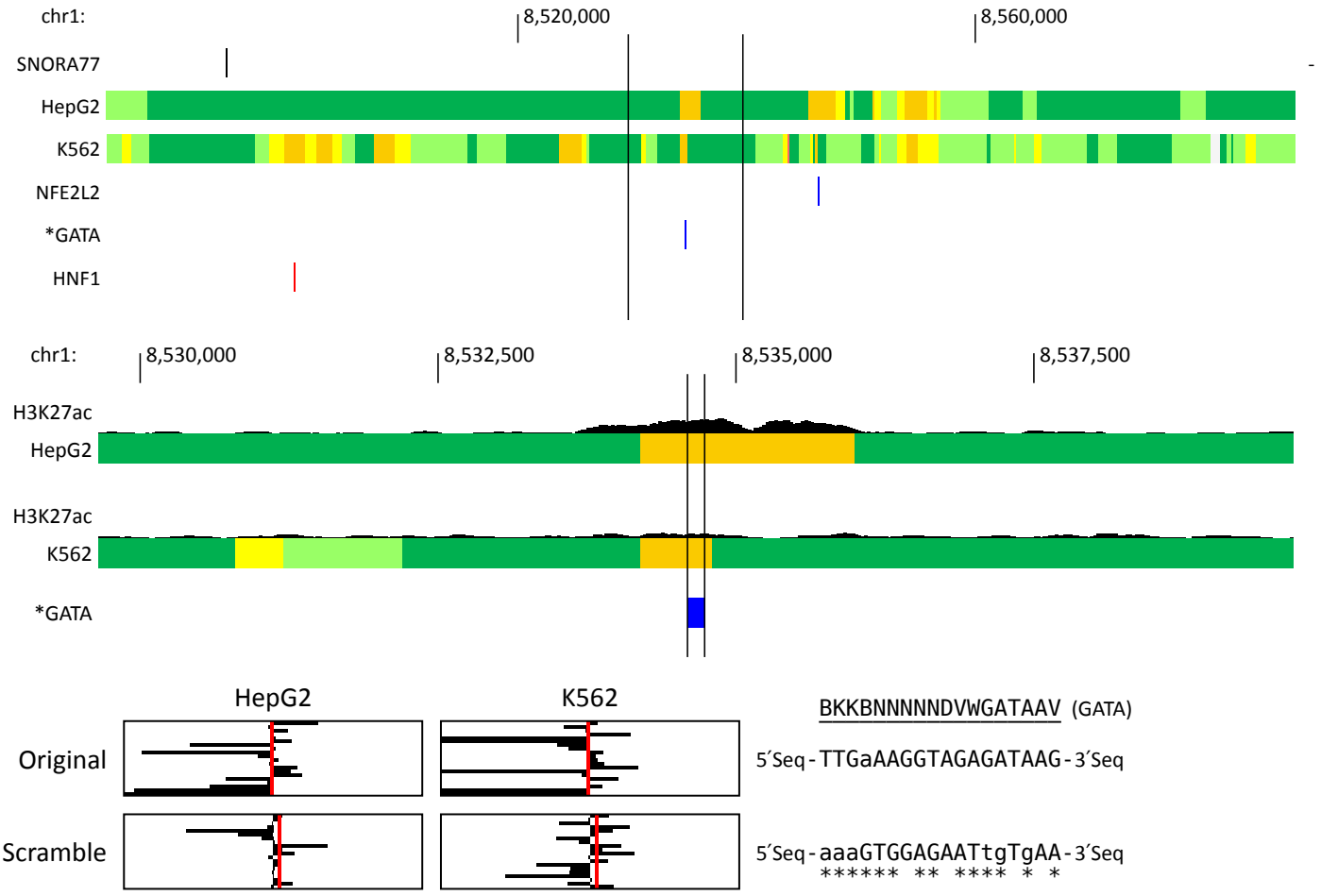
1828 GATA in HepG2 enhancer

chr1 8534657 8534674 + (hg18)



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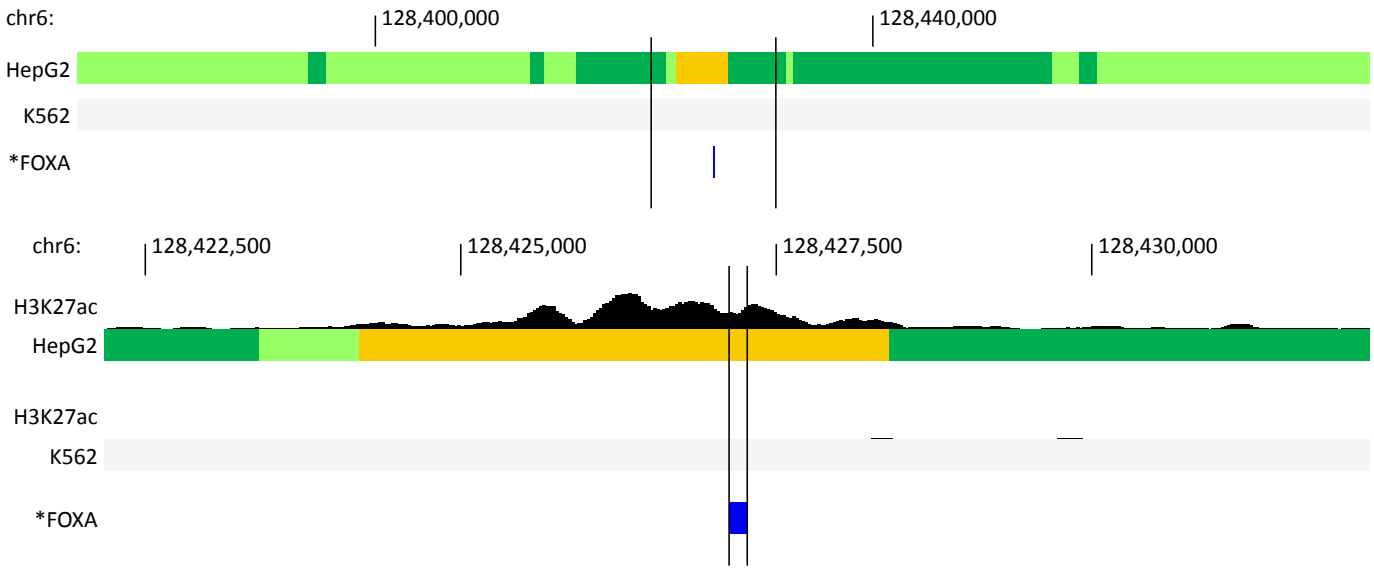
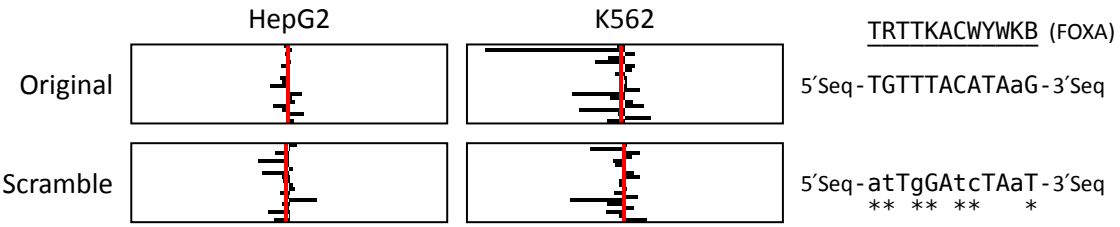
1829 FOXA in HepG2 enhancer

chr6 128427193 128427204 - (hg18)





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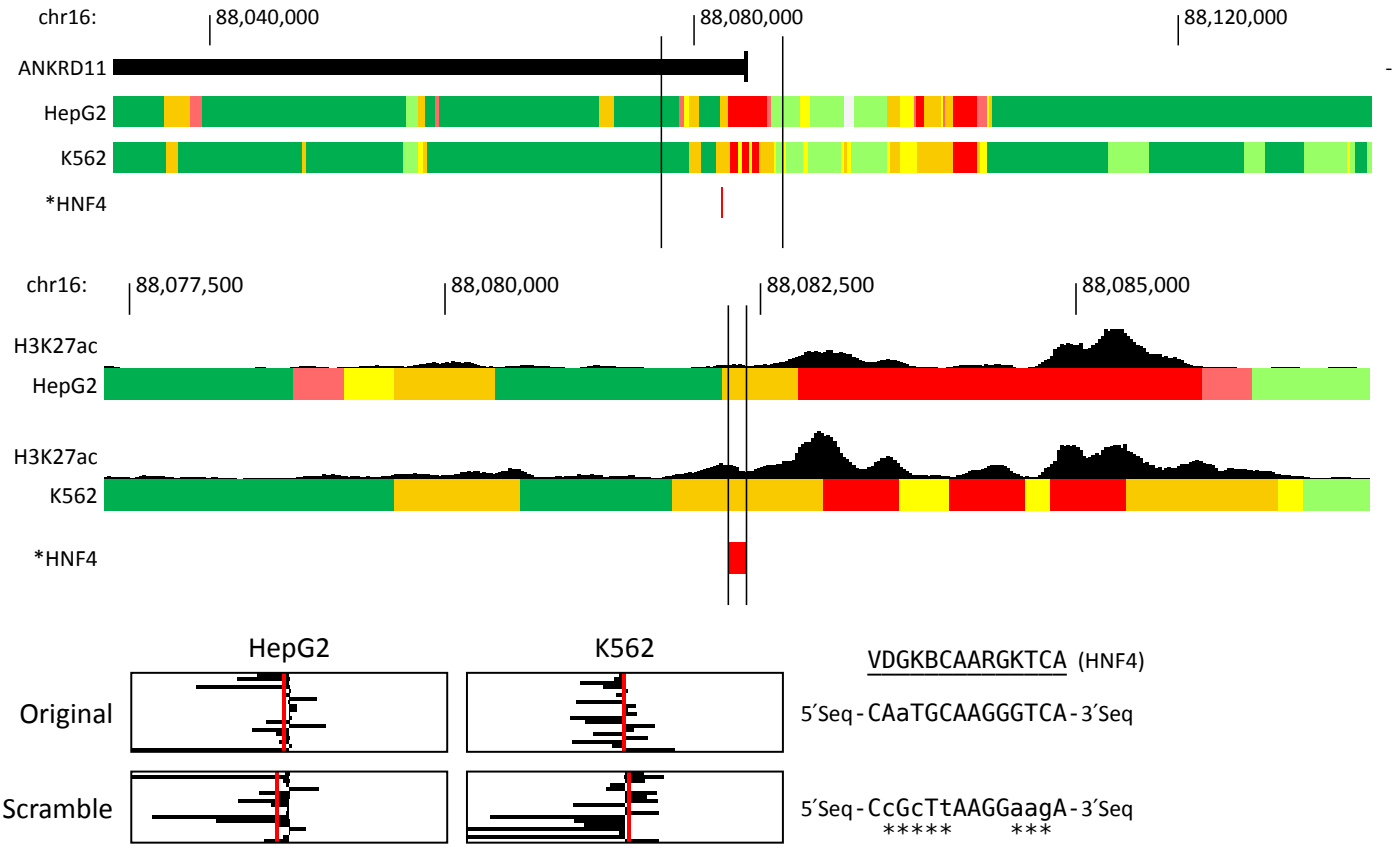
1830 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr16 88082311 88082324 + (hg18)



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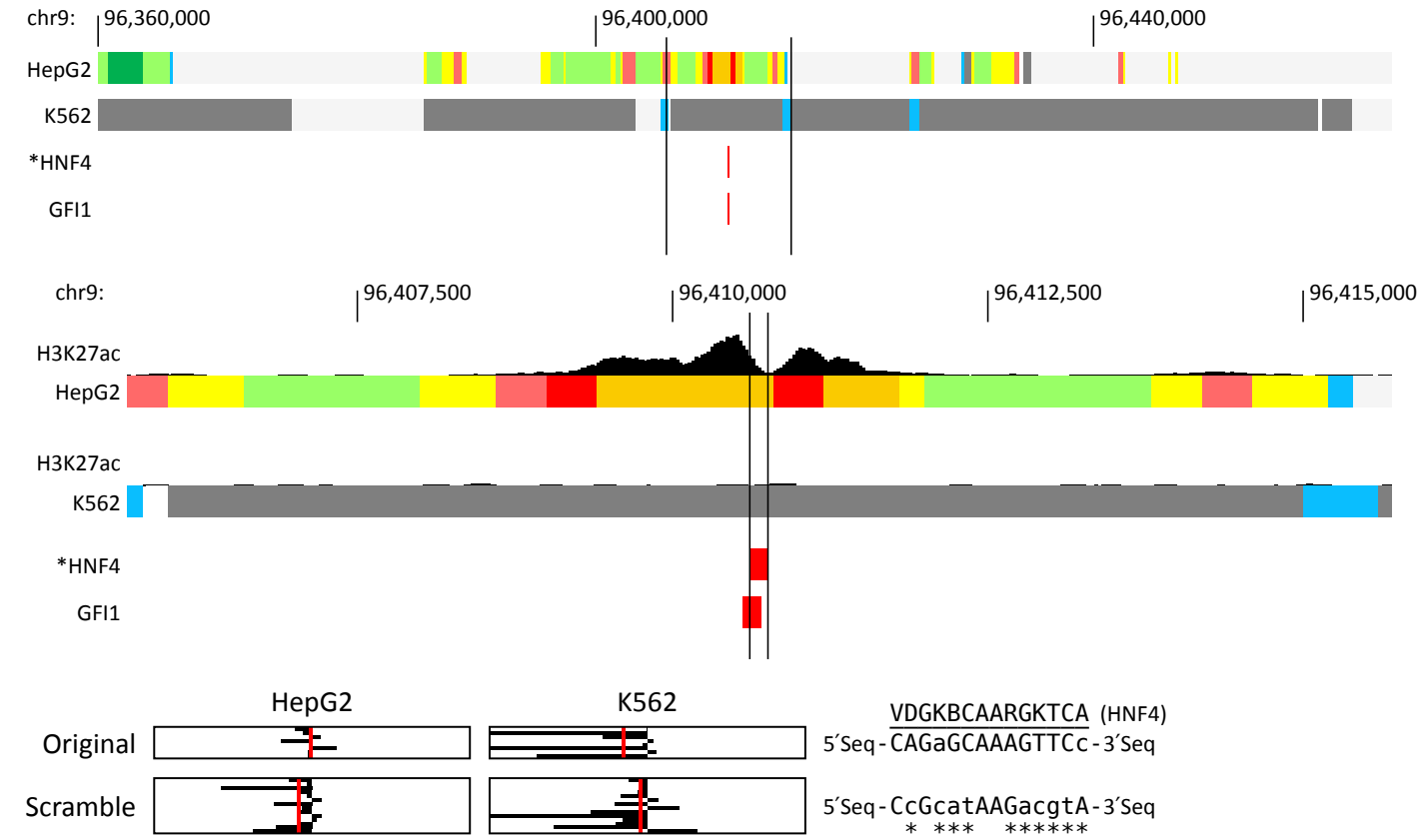
1831 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr9 96410678 96410691 - (hg18)



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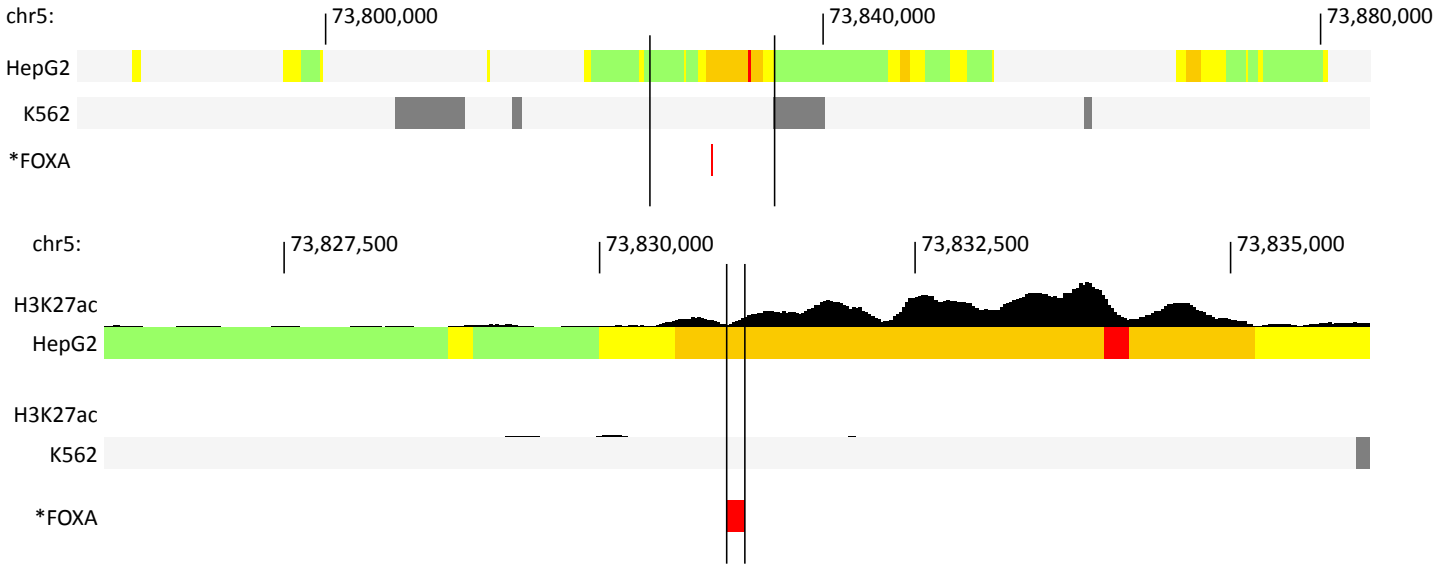
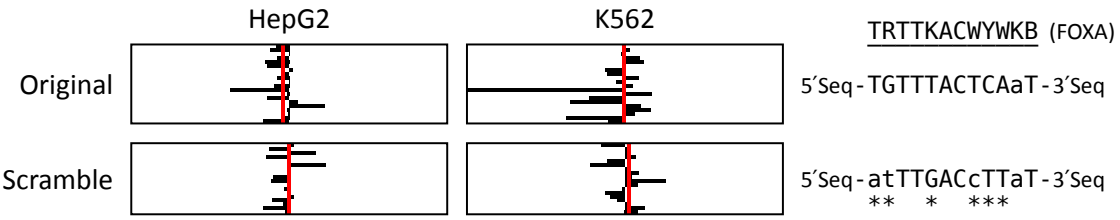
1832 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr5 73831074 73831085 - (hg18)





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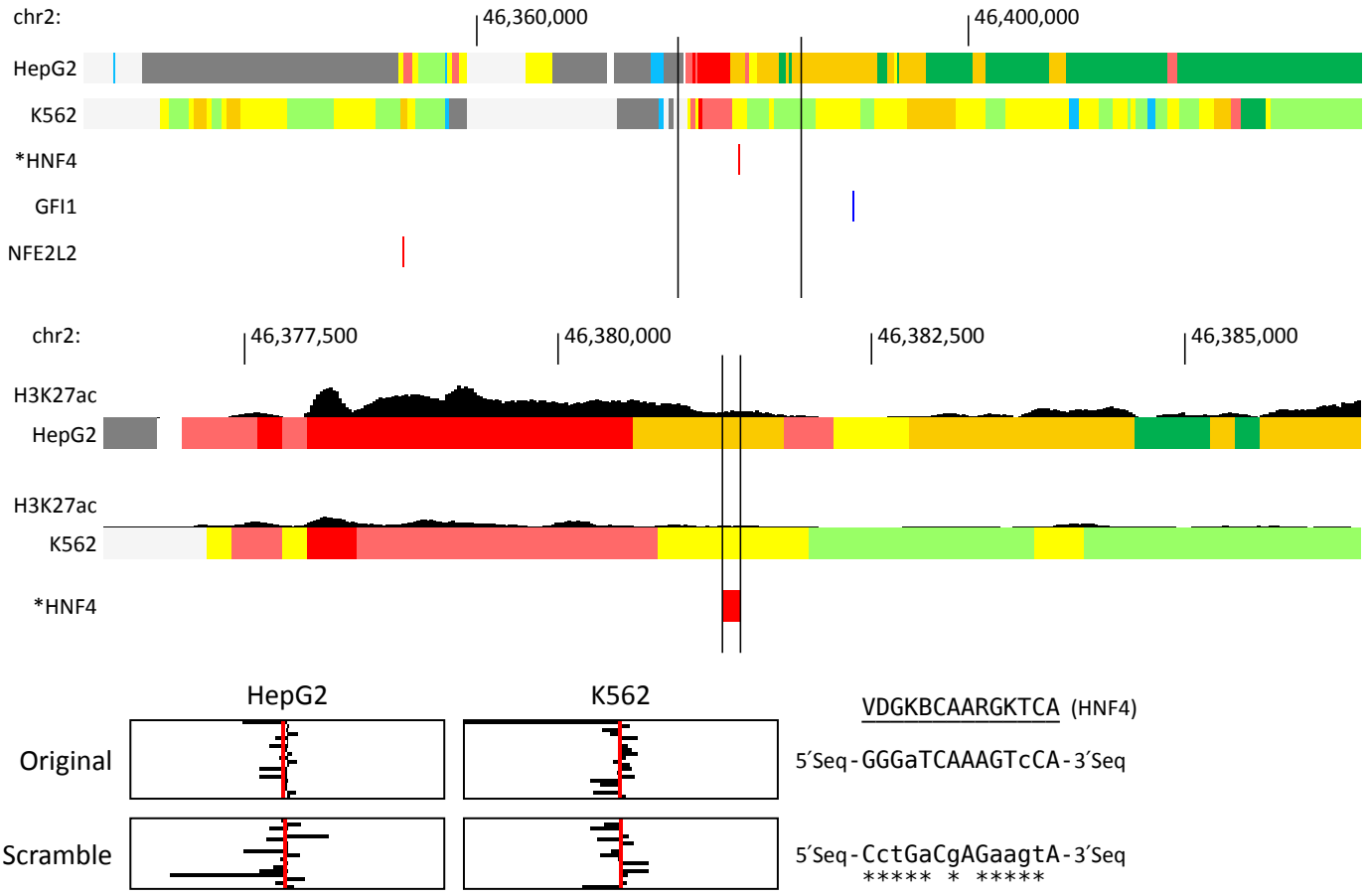
1833 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 46381377 46381390 + (hg18)



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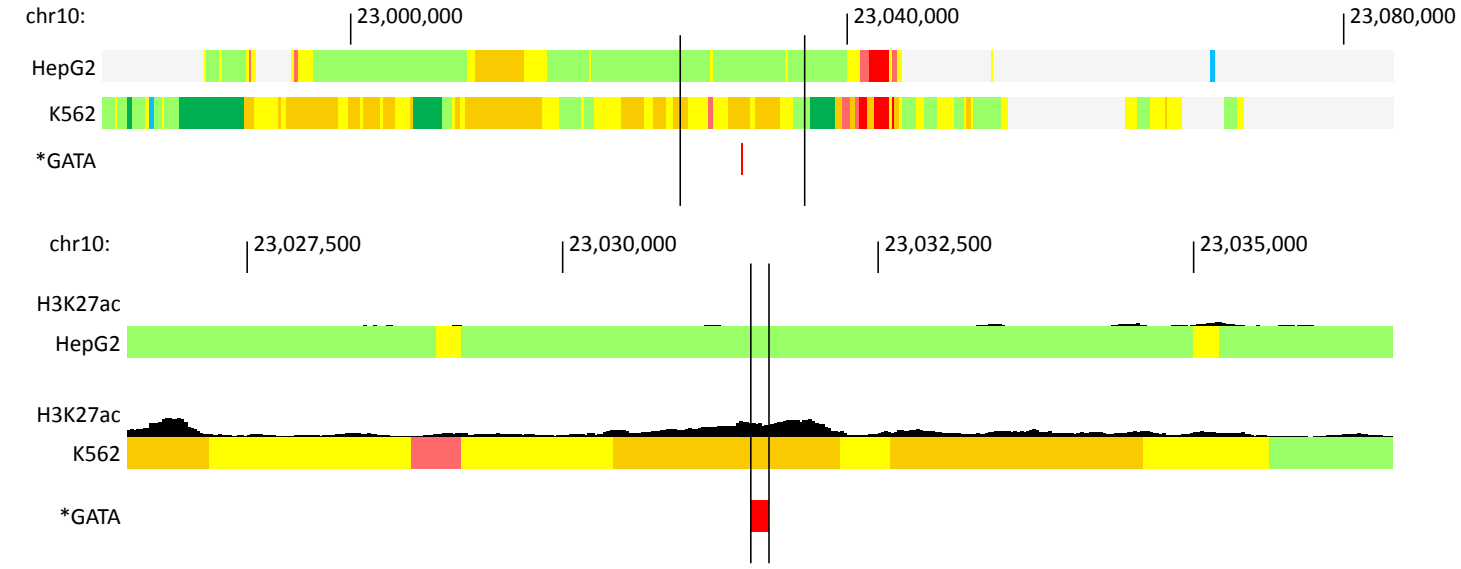
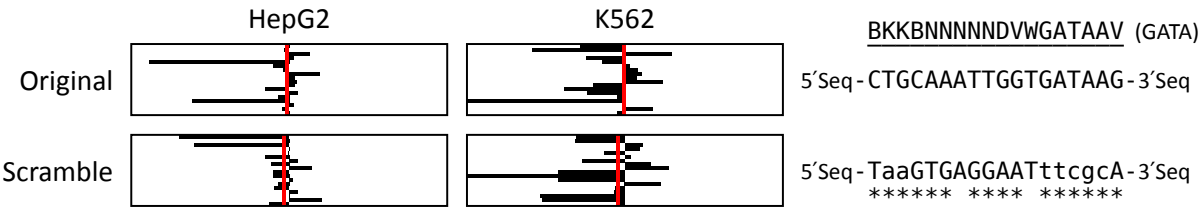
1834 GATA in K562 enhancer (conserved at 60% confidence)

chr10 23031555 23031572 - (hg18)





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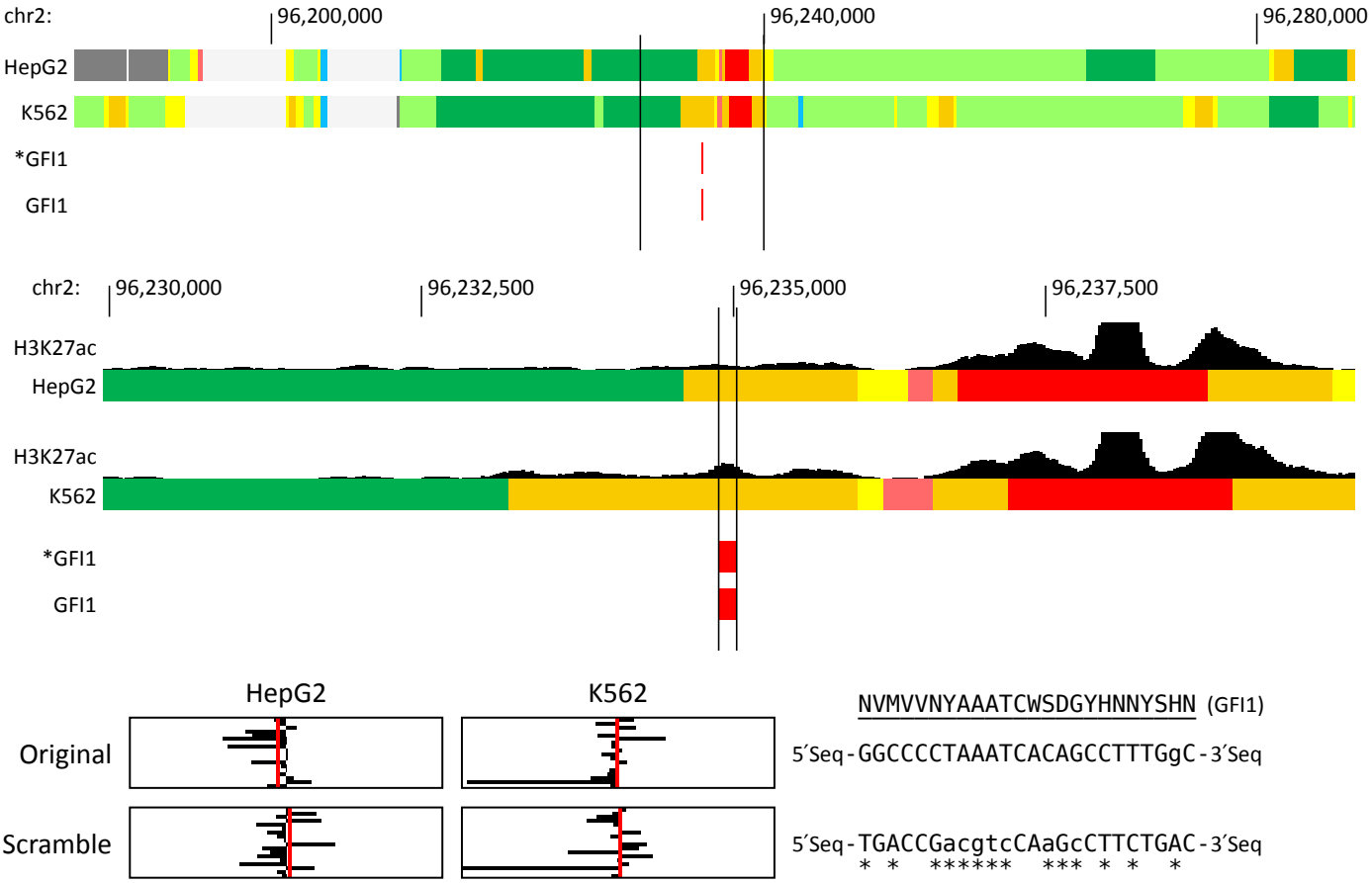
1835 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 96234942 96234965 - (hg18)



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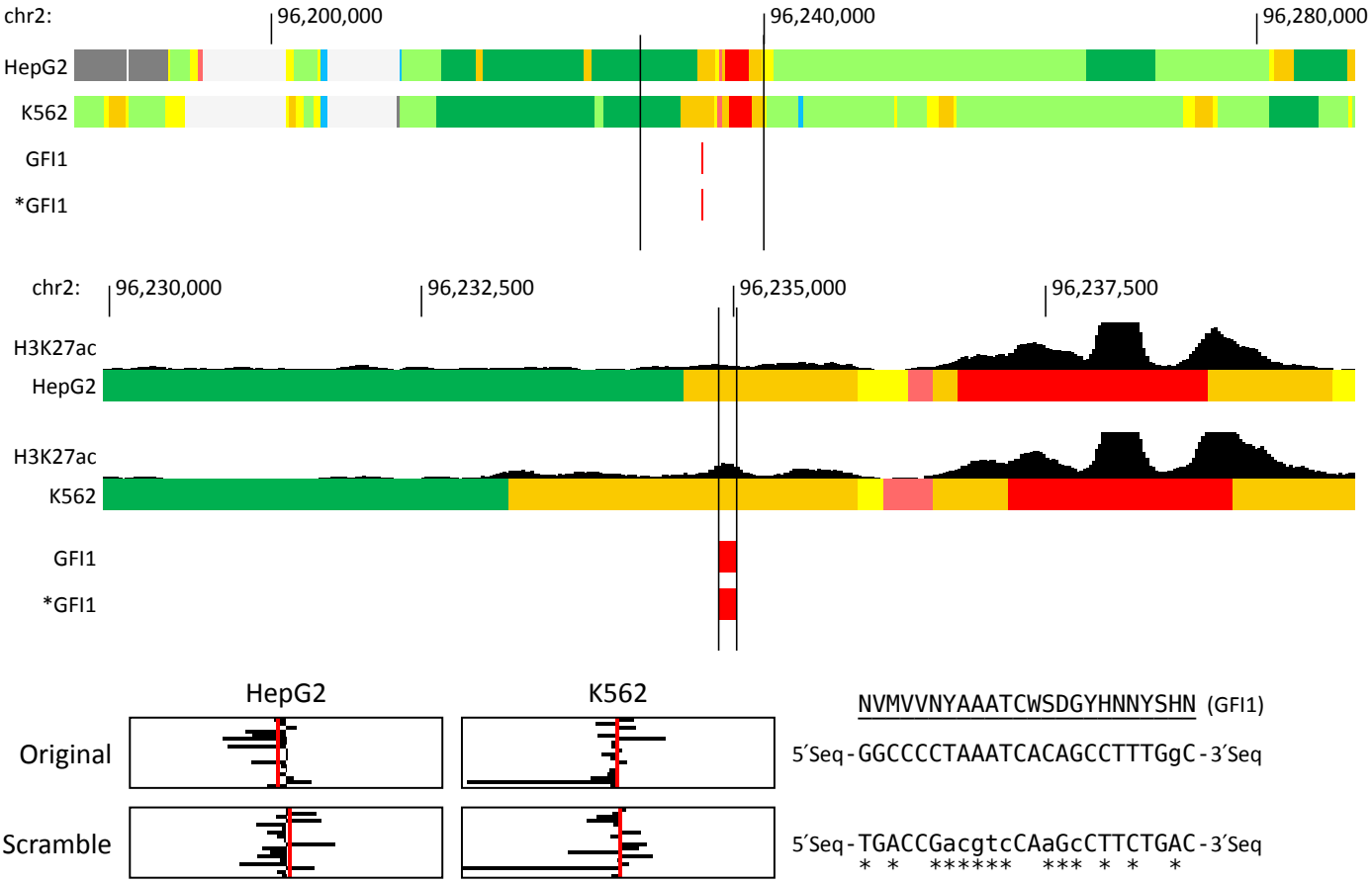
1836 GFI1 in K562 enhancer (conserved at 40% confidence)

chr2 96234942 96234965 - (hg18)



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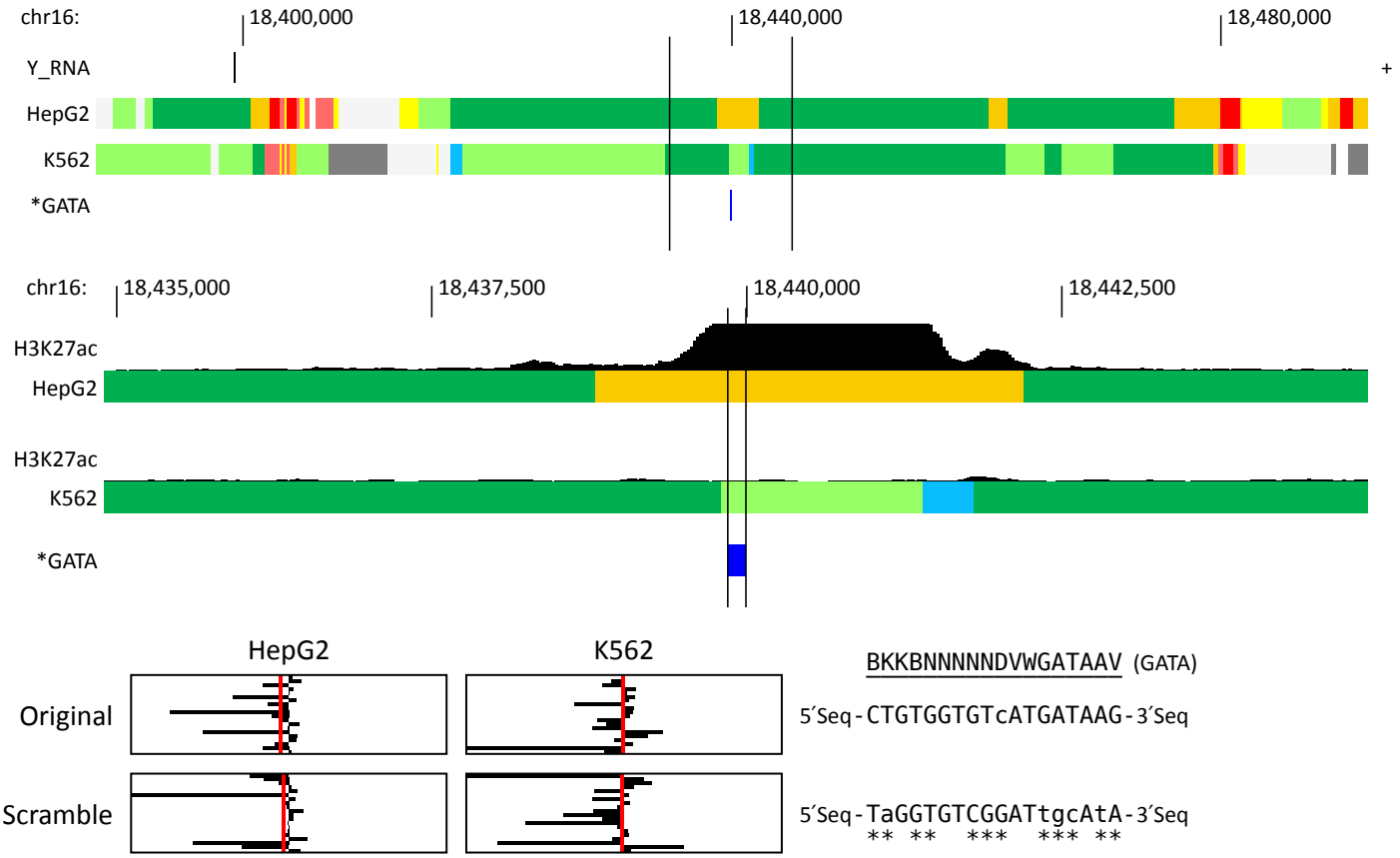
1837 GATA in HepG2 enhancer

chr16 18439913 18439930 - (hg18)



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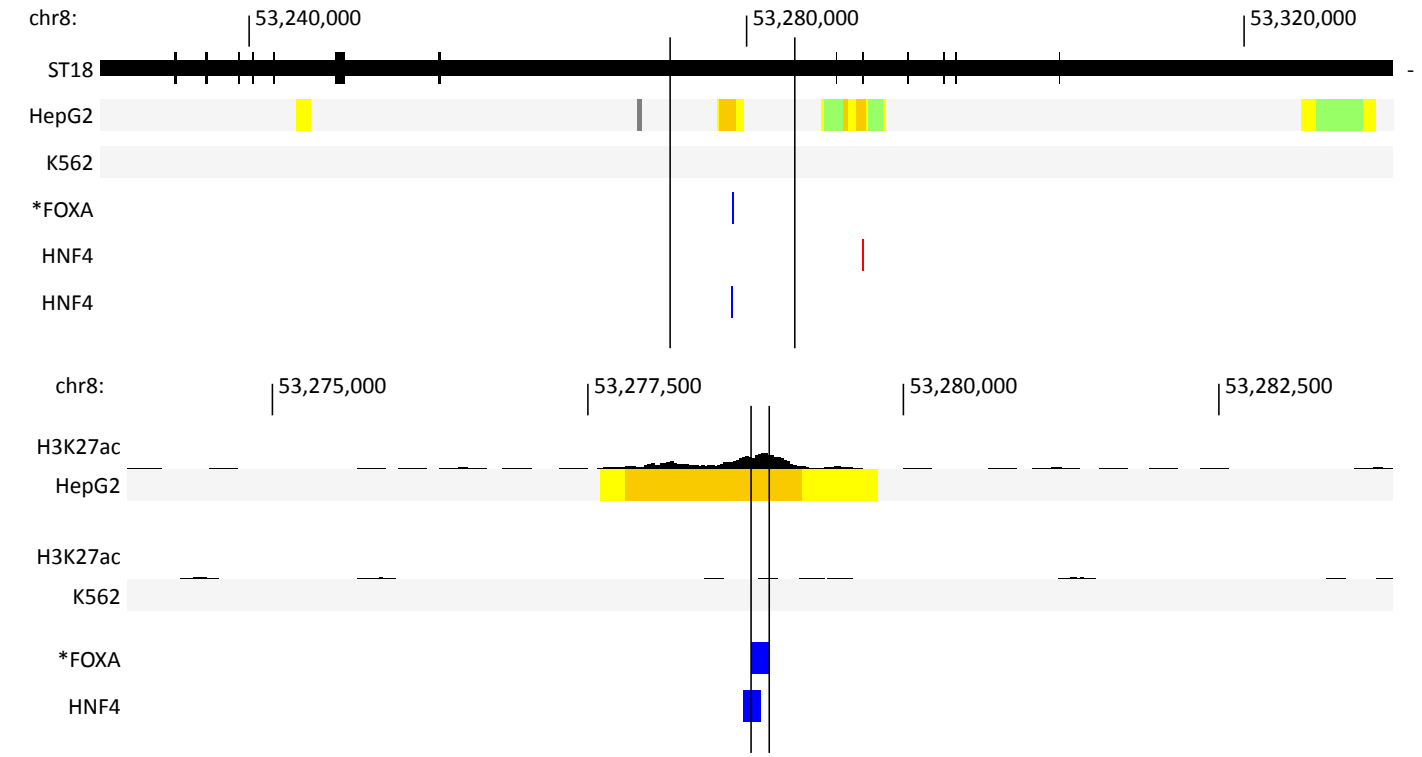
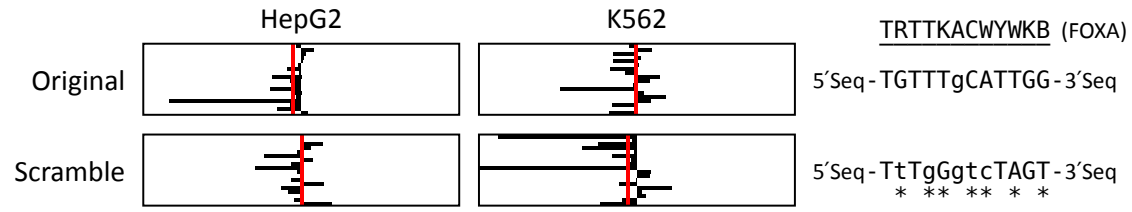
1838 FOXA in HepG2 enhancer

chr8 53278860 53278871 + (hg18)





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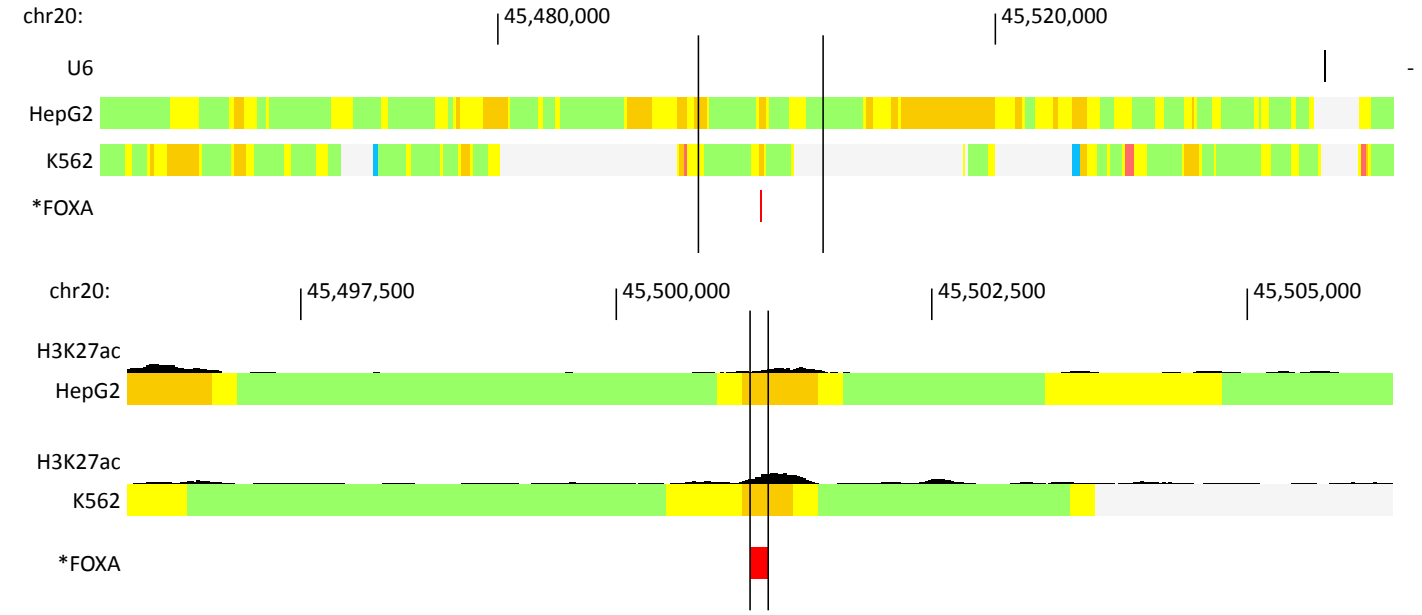
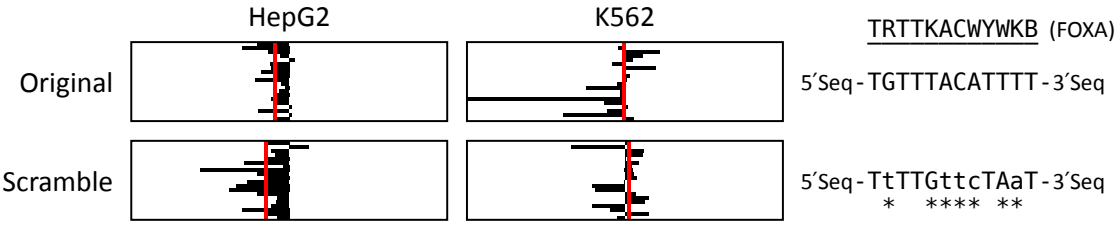
1839 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr20 45501127 45501138 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACATTTT-3′Seq

5′Seq-TtTTGttcTAaT-3′Seq

* **** **

5′Seq = tttcccgcccttctgaacctcttcccttcgcatactcttctcctctgatgacttctcctttagtccg

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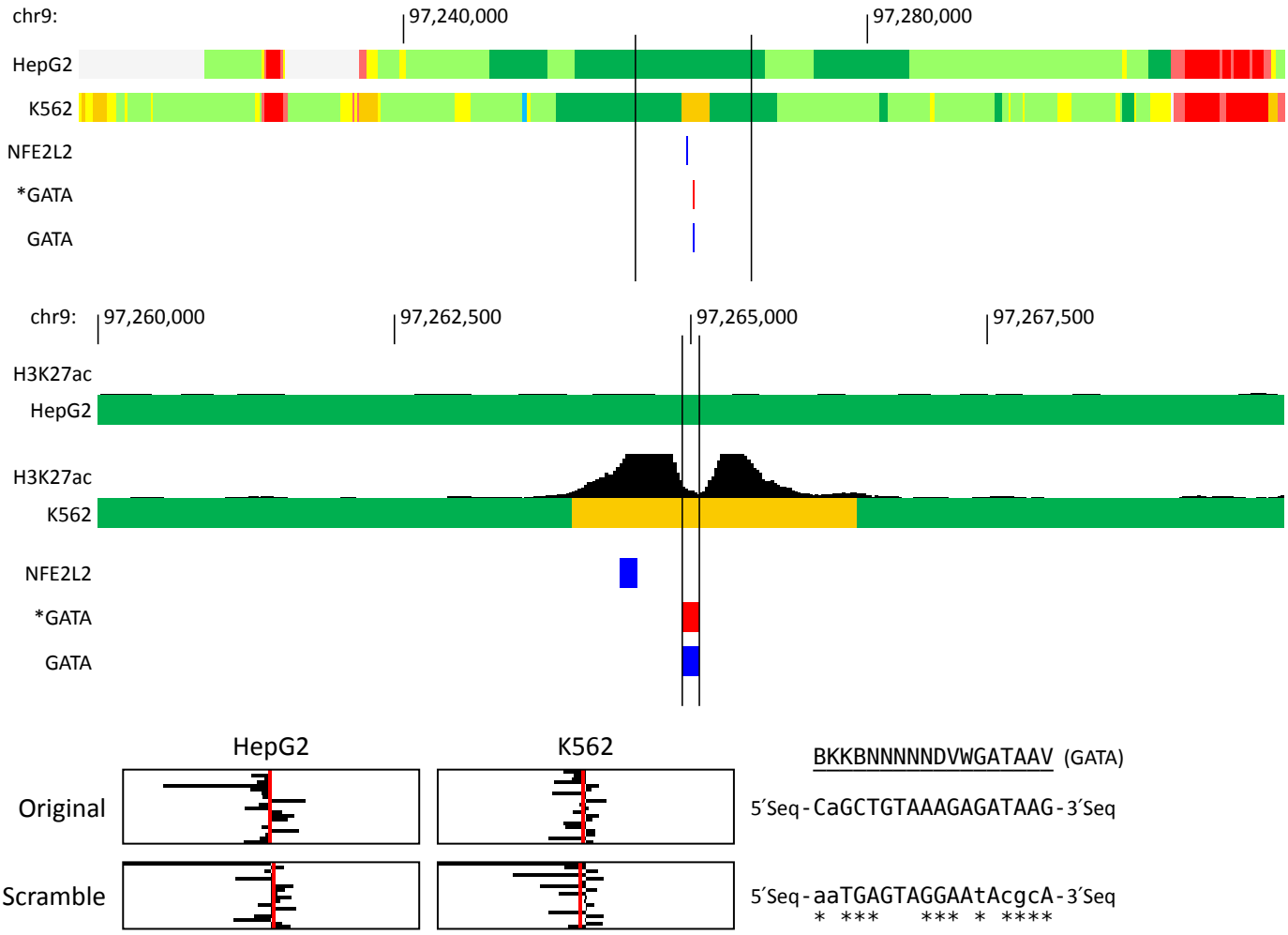
1840 GATA in K562 enhancer (conserved at 60% confidence)

chr9 97264992 97265009 + (hg18)



BKKBNNNNNDVWGATAAV (GATA)

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* *** *** * ****

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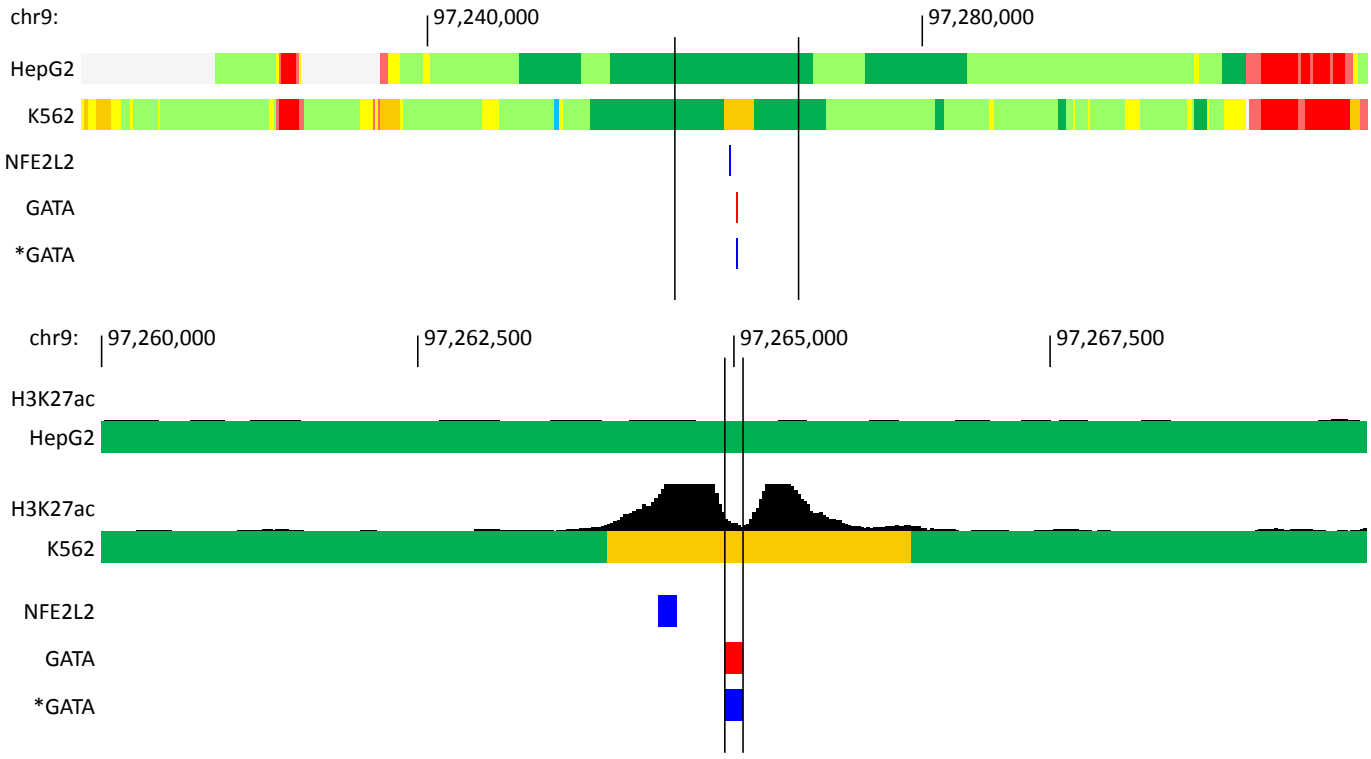
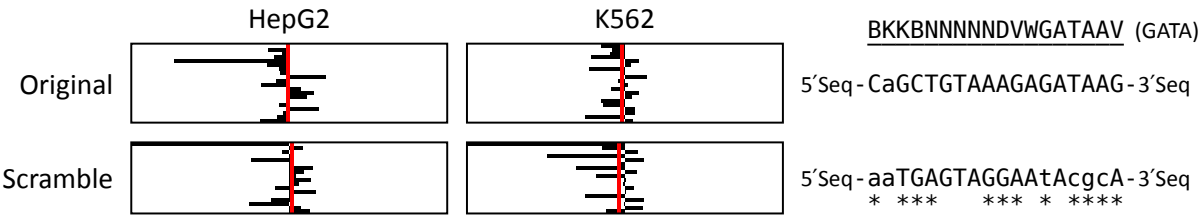
1841 GATA in K562 enhancer

chr9 97264992 97265009 + (hg18)





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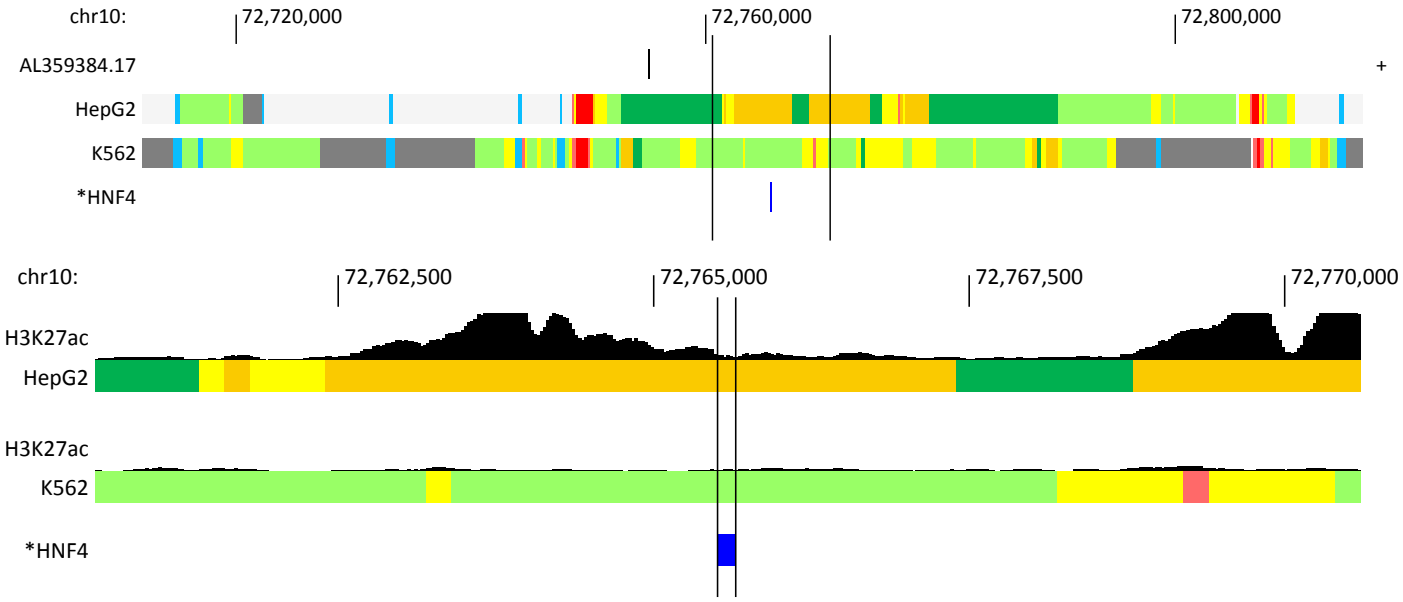
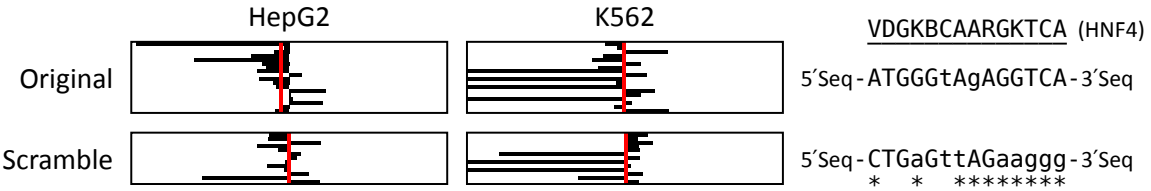
1842 HNF4 in HepG2 enhancer

chr10 72765572 72765585 + (hg18)





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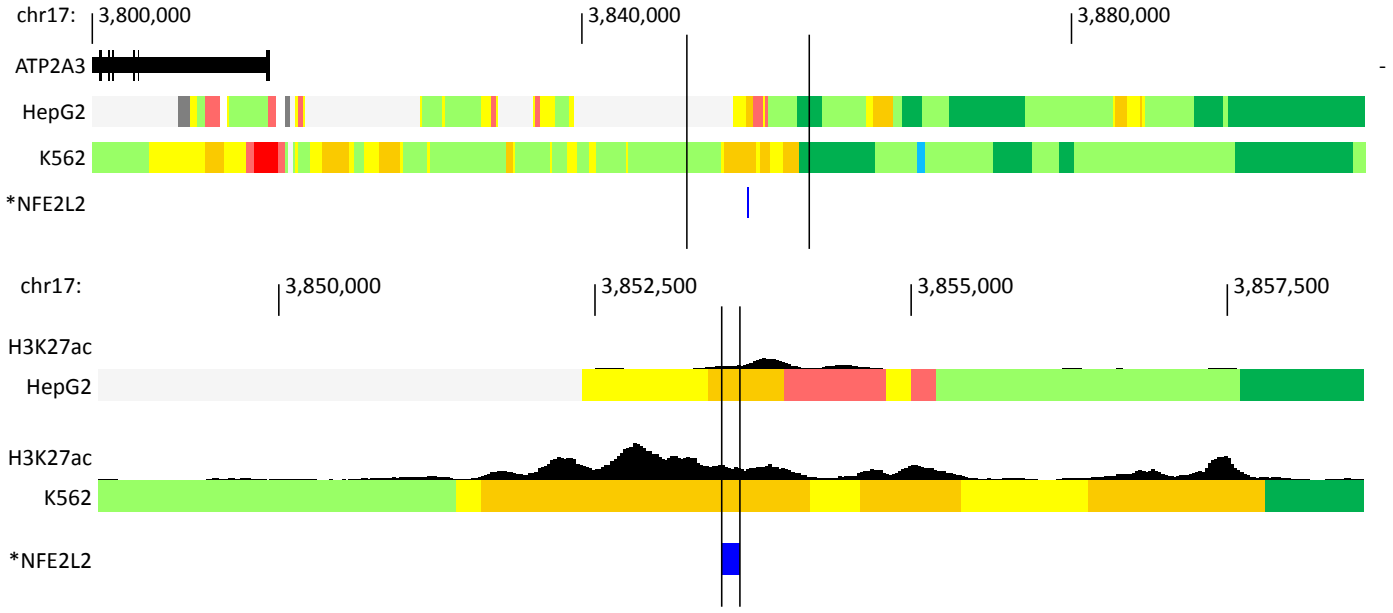
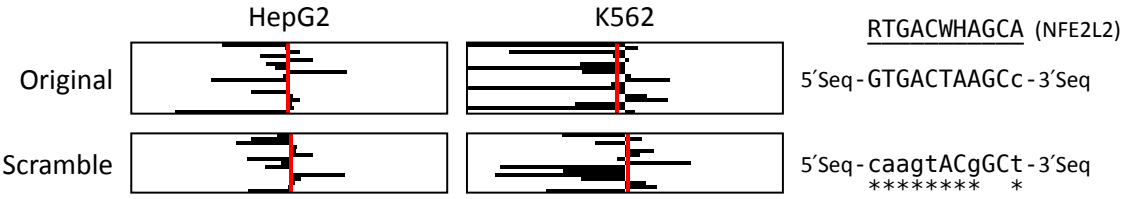
1843 NFE2L2 in K562 enhancer

chr17 3853569 3853579 - (hg18)





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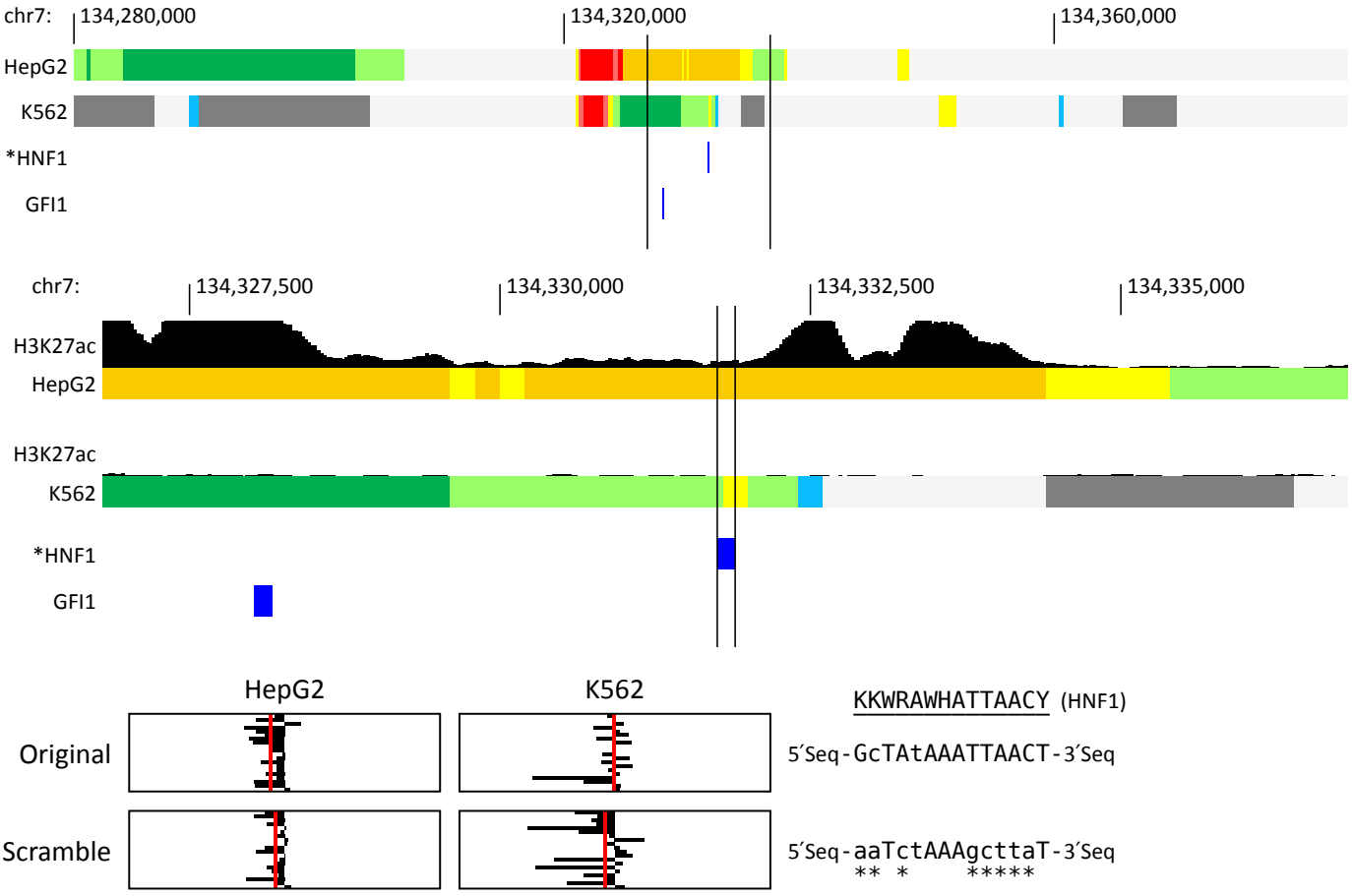
1844 HNF1 in HepG2 enhancer

chr7 134331816 134331829 + (hg18)



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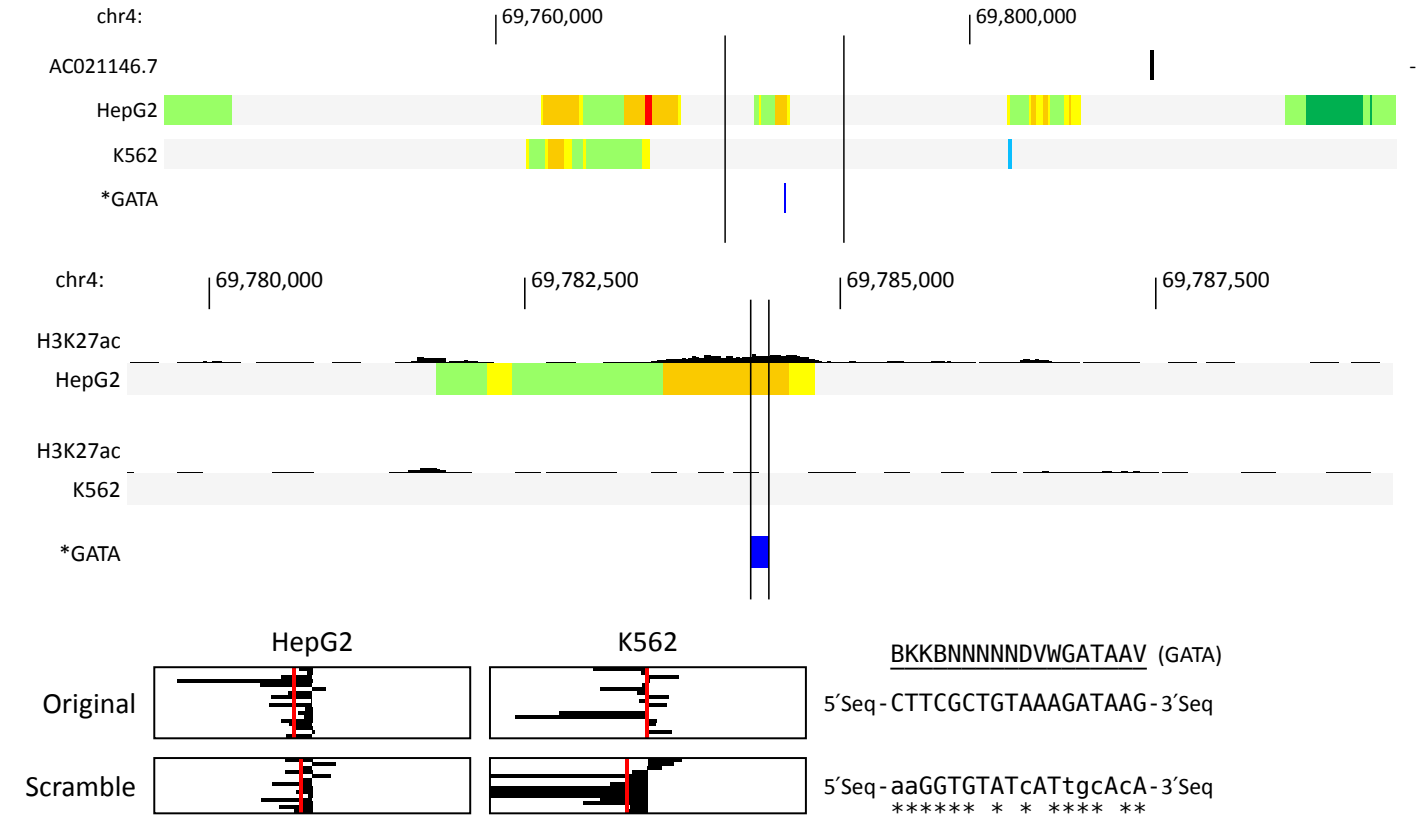
1845 GATA in HepG2 enhancer

chr4 69784354 69784371 - (hg18)



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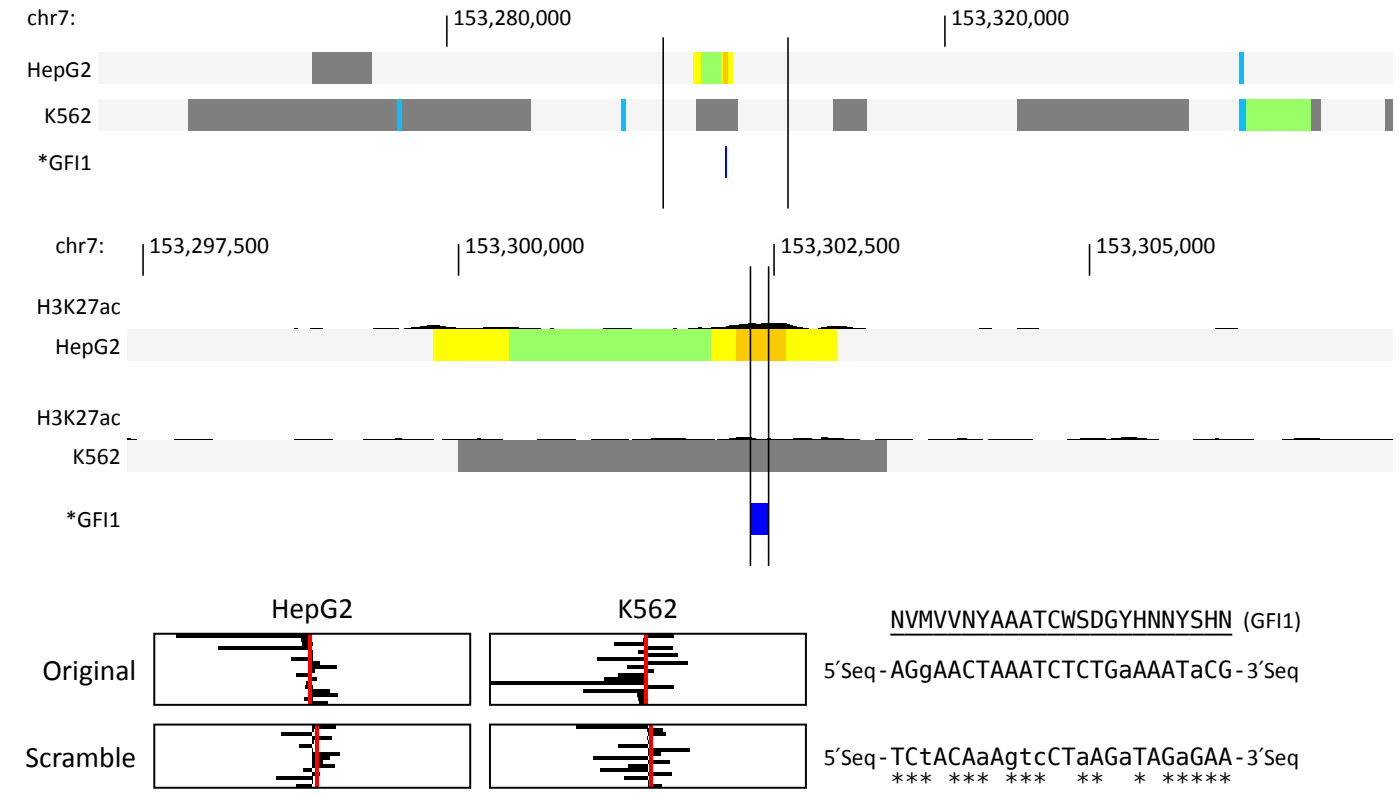
1846 GFI1 in HepG2 enhancer

chr7 153302374 153302397 - (hg18)



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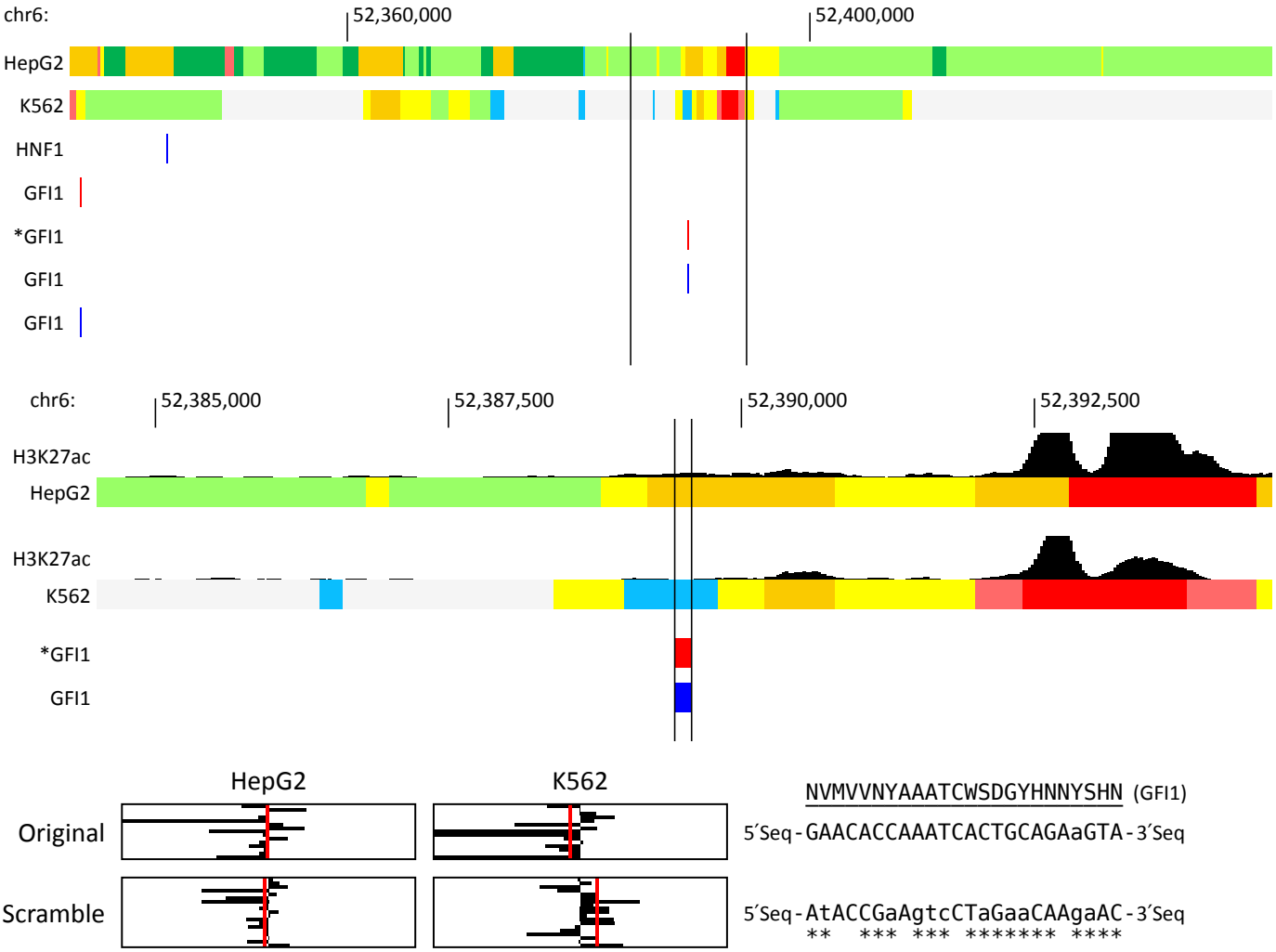
1847 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 52389492 52389515 + (hg18)



5′Seq = aattggttgttttctttccagaaattttgctgtaccatttttacccagcagagggaagca
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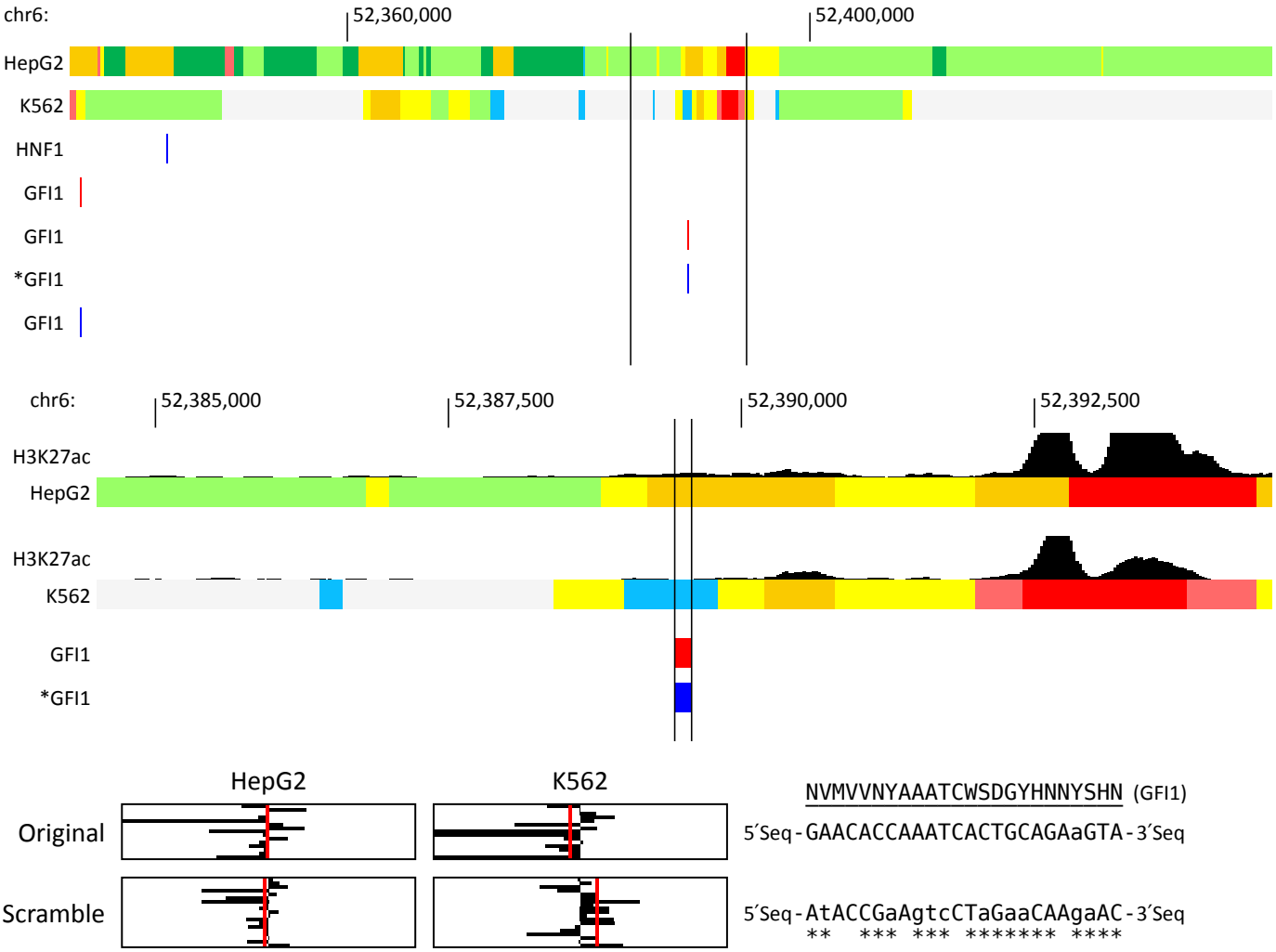
1848 GFI1 in HepG2 enhancer

chr6 52389492 52389515 + (hg18)



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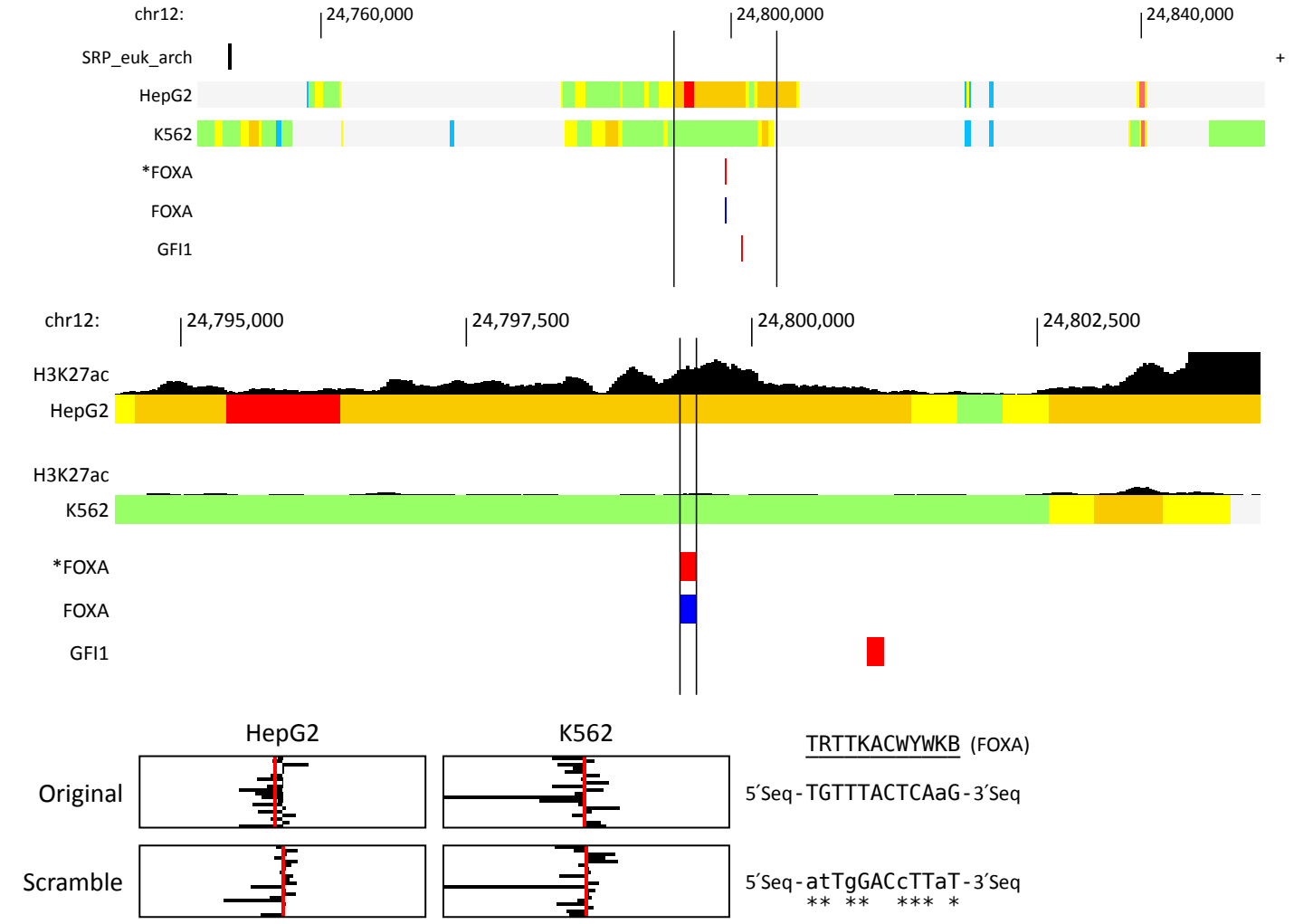
3′Seq = atccaggacacatgcacacacagccctttggtatttttgtcctgtgaatttaggtatta

1849 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr12 24799438 24799449 + (hg18)



5′Seq = gactcttgaatcacaaaggcaagtccttccctcgtcttgccacaatctttgatggtgatgaagaatg
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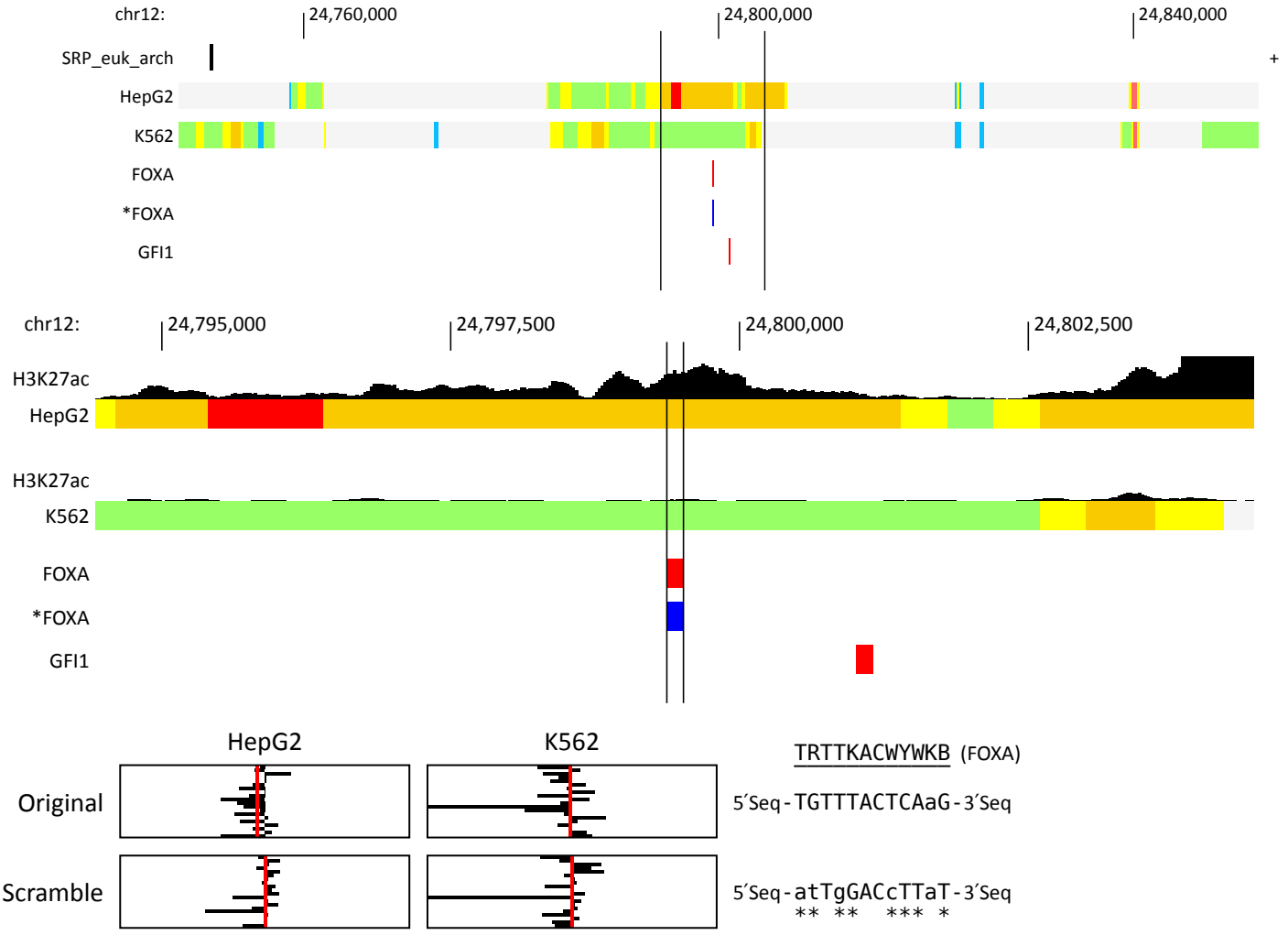
1850 FOXA in HepG2 enhancer

chr12 24799438 24799449 + (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTCAaG-3′Seq

5′Seq-atTgGACcTTaT-3′Seq

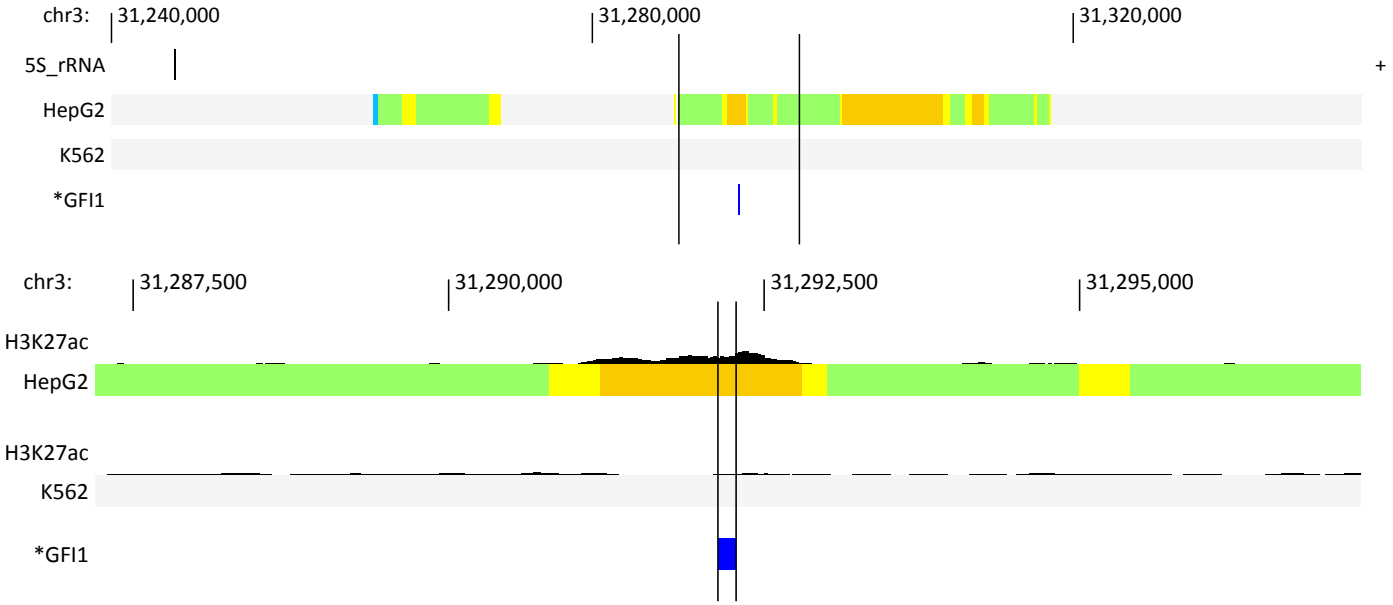
** ** *** *

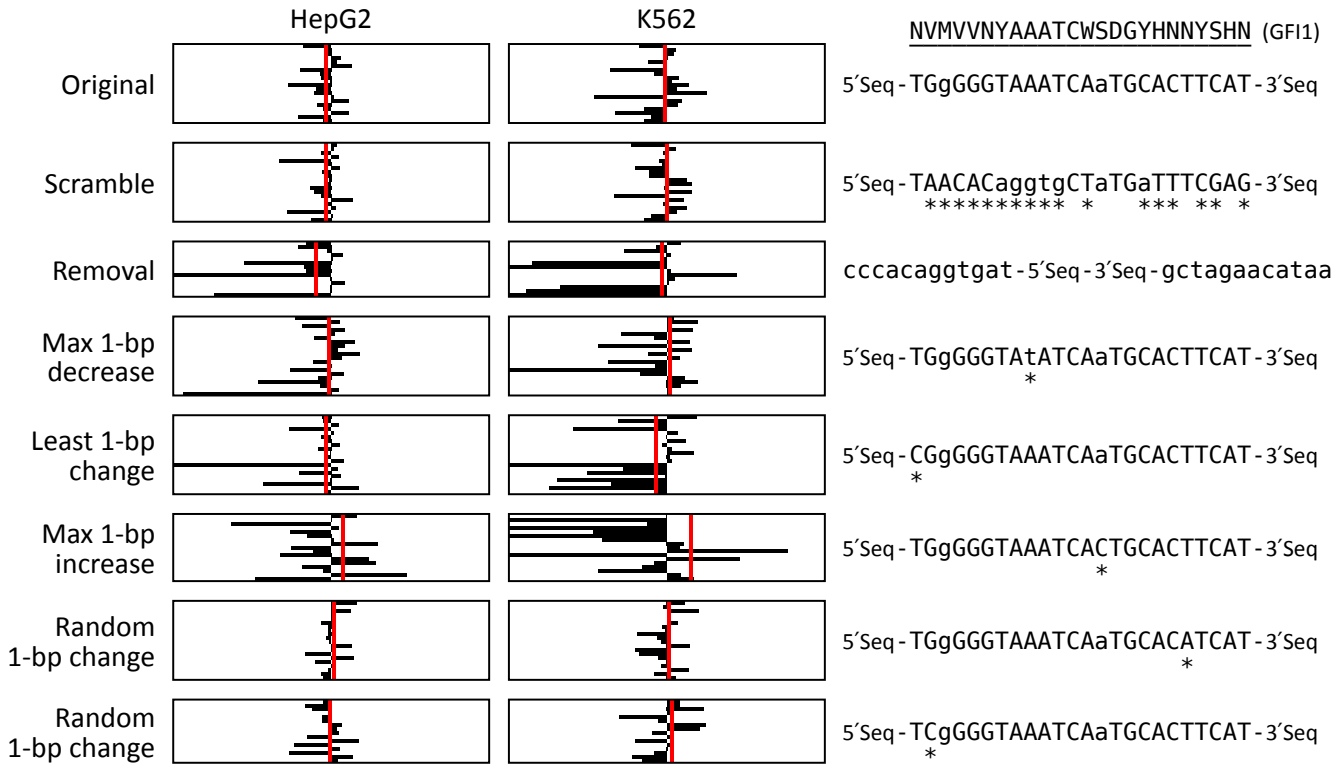
5′Seq = gactcttgaatcacaaaggcaagtccttccctcgtcttgccacaatctttgatggtgatgaagaatg

3′Seq = ttcacaaaagagaacttggtttgctctgttttagcaacagattaggattttcaaaagaaaaactgg

1851 GFI1 in HepG2 enhancer

chr3 31292195 31292218 - (hg18)





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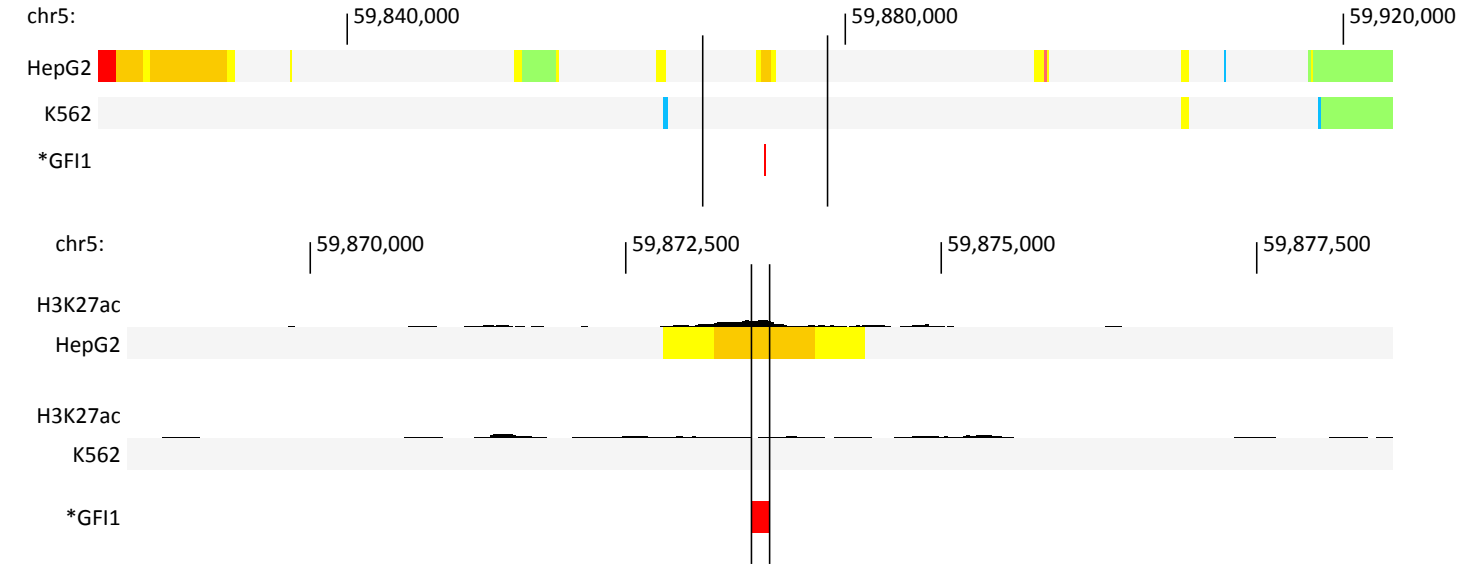
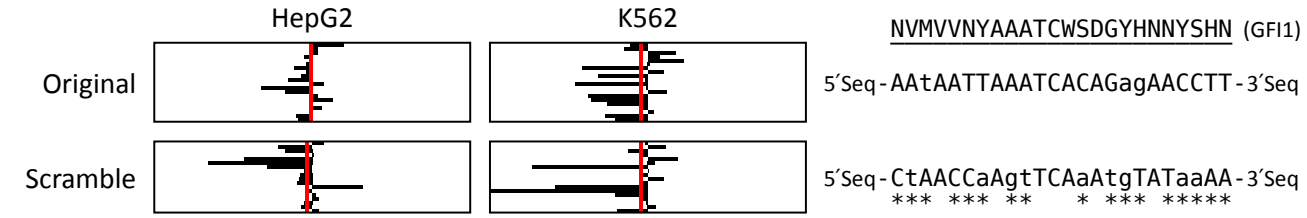
3′Seq = ggaggaaagatattttatgtcttagatccaagtccagttctccaatccagtttttccagt

1852 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr5 59873557 59873580 + (hg18)

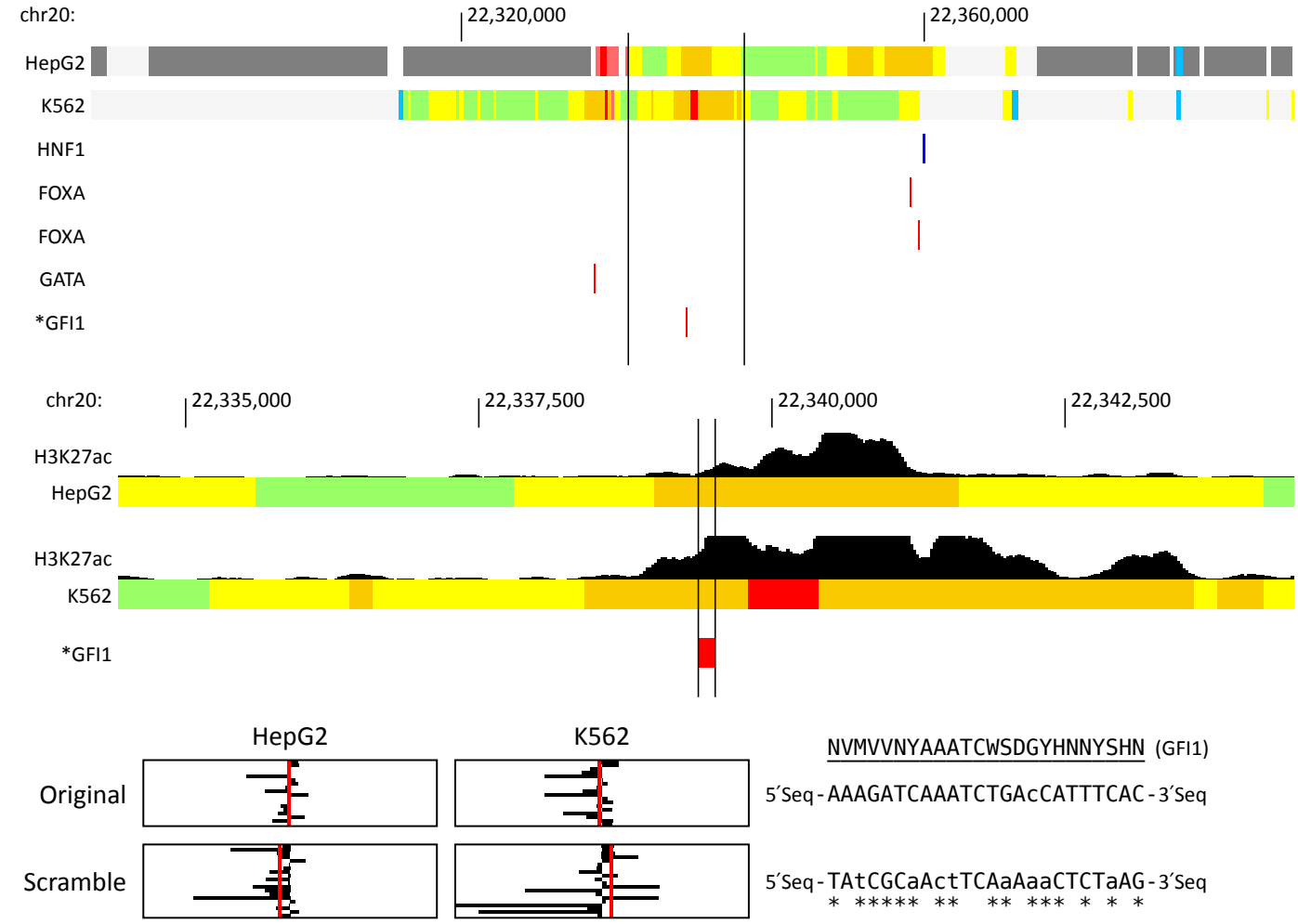




5′Seq = aaatgagagaaactgactttctttgaagaaagtgtaaactttctaggaagcctctttcctg
3′Seq = gactctctgtggactcaaaagcaattacacccagttcttaaacagagctgttccctcatc

1853 GFI1 in K562 enhancer (conserved at 40% confidence)

chr20 22339433 22339456 - (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AAAGATCAAATCTGAcCATTTCAC-3′Seq

5′Seq-TAtCGCaActTCAaAaaCTCTaAG-3′Seq

* ***** ** ** *** * * *

5′Seq = ccacctctagtctgtcagcttccatcccttccacaactctggttattagagtactatccttt

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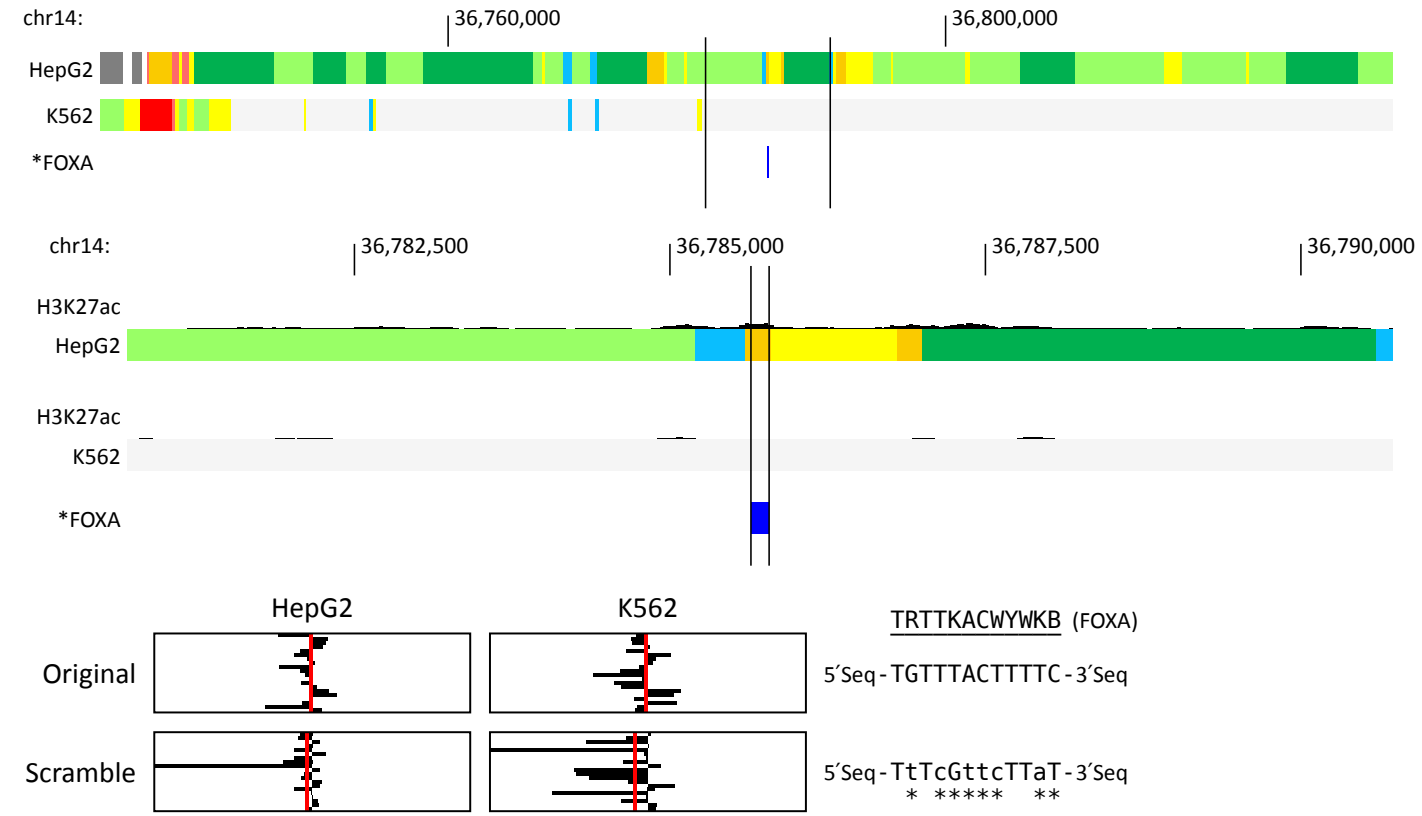
1854 FOXA in HepG2 enhancer

chr14 36785709 36785720 + (hg18)



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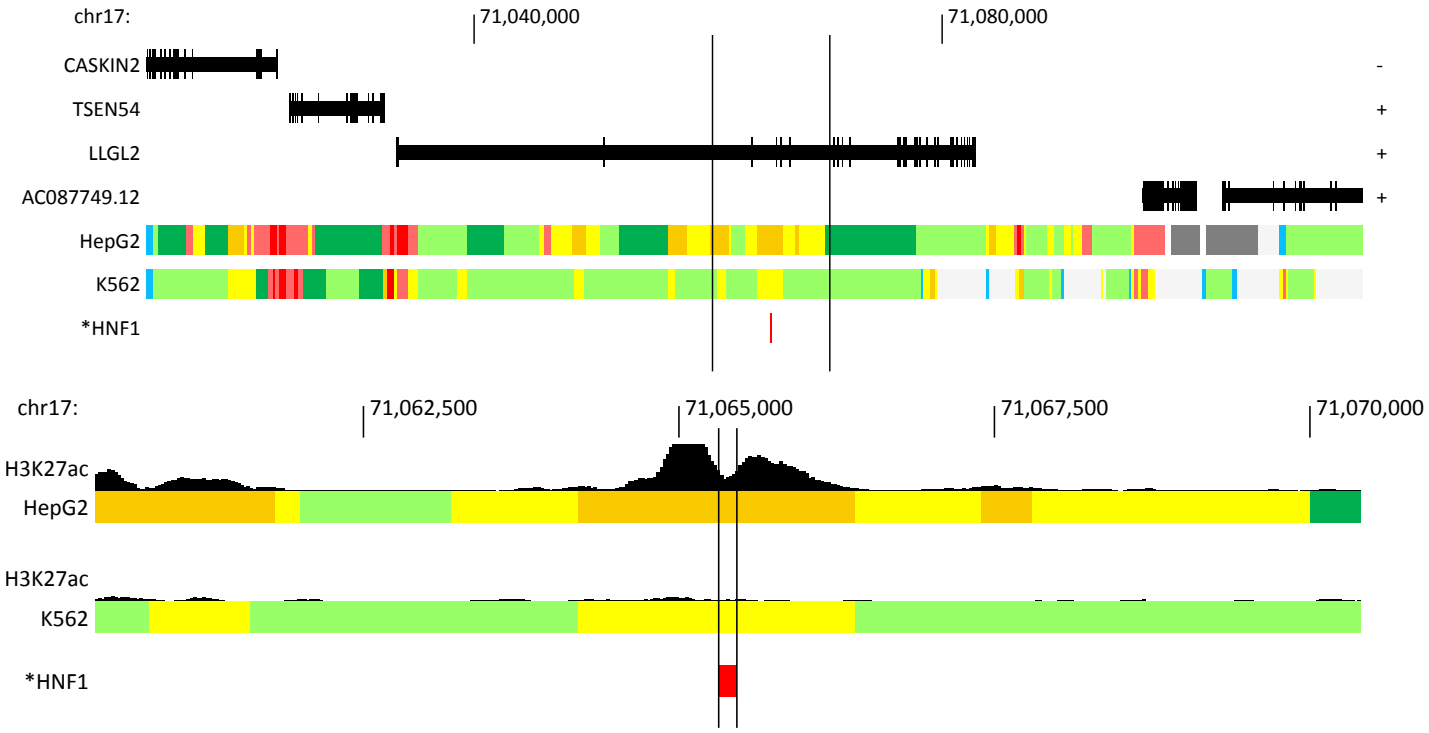
3′Seq = tgagtgctaaaagcattaaaatgattgtgcaatgggattacattttactaattgctggcattcatt

1855 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr17 71065381 71065394 - (hg18)



KKWRAWHATTAACY (HNF1)

5′Seq-GGcAATgATTAACC-3′Seq

5′Seq-aTAccAAAggctgT-3′Seq

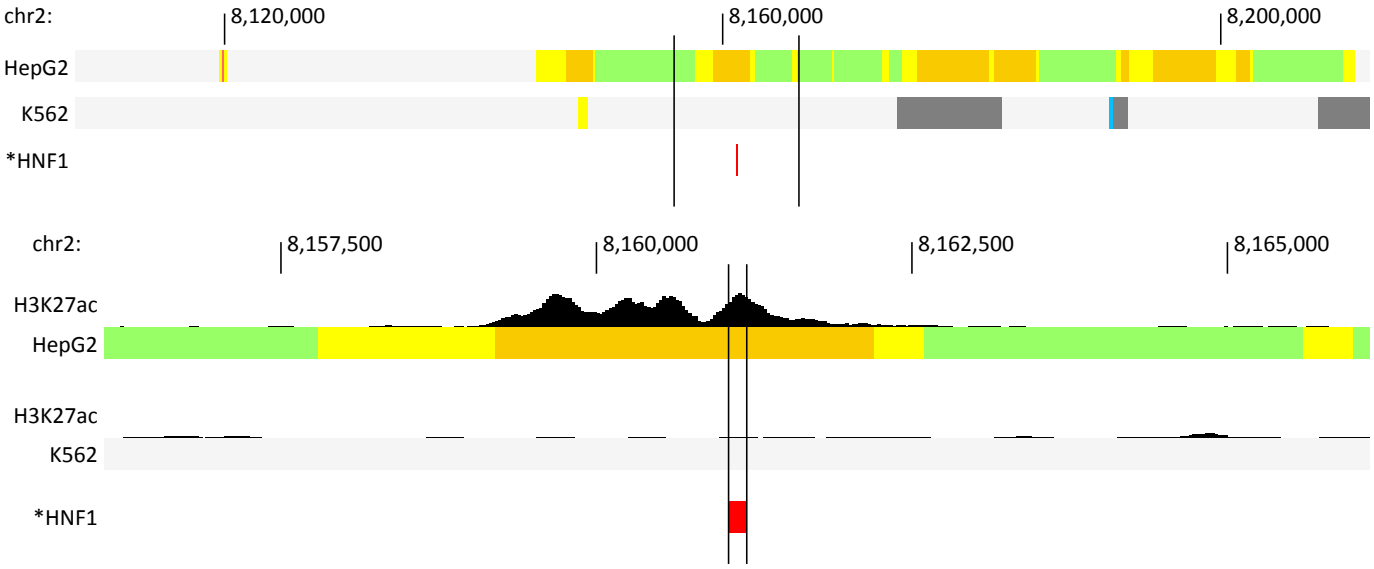
******* ******

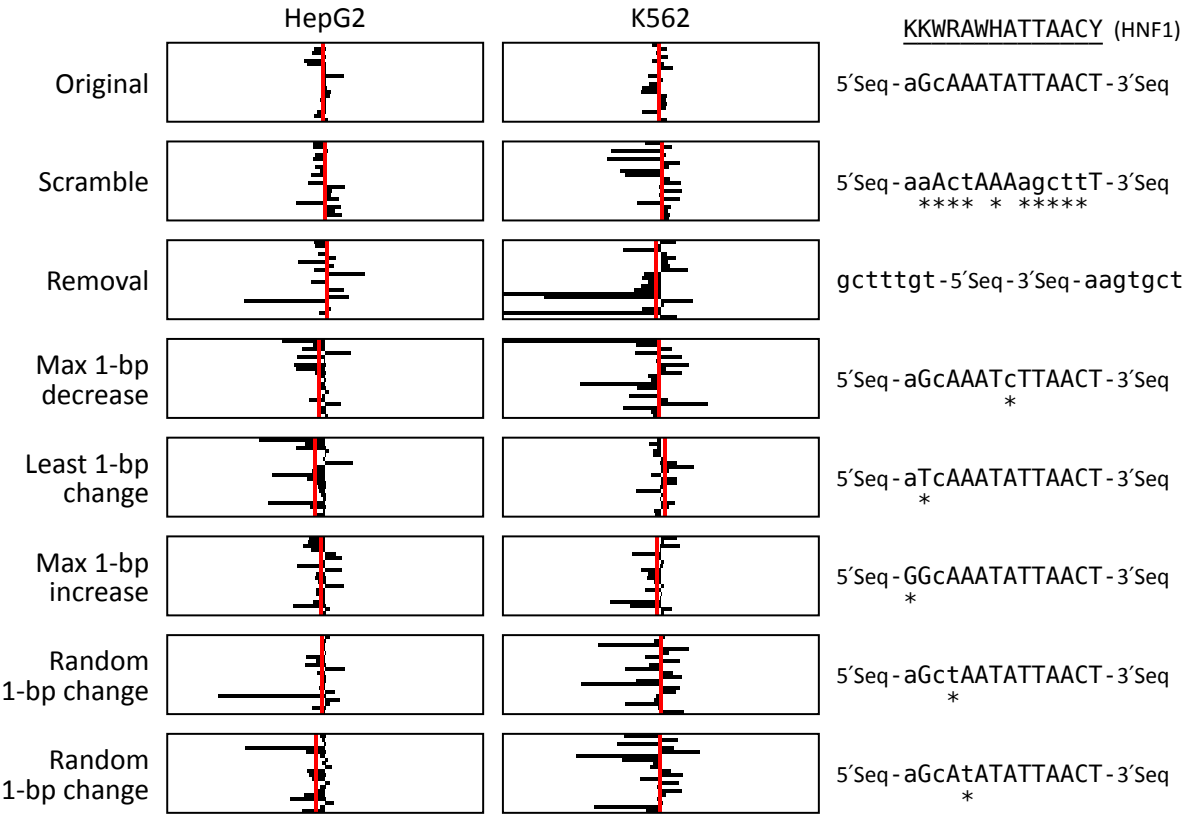
5′Seq = tcaccaacagccttggcccattagtcttggcaccagggattggtaactagagtctggctgtggcct

3′Seq = agccgagggaaggctgagcccgcagcaaggccctggccccctgtgtacaccagcccagcctggaa

1856 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr2 8161113 8161126 + (hg18)





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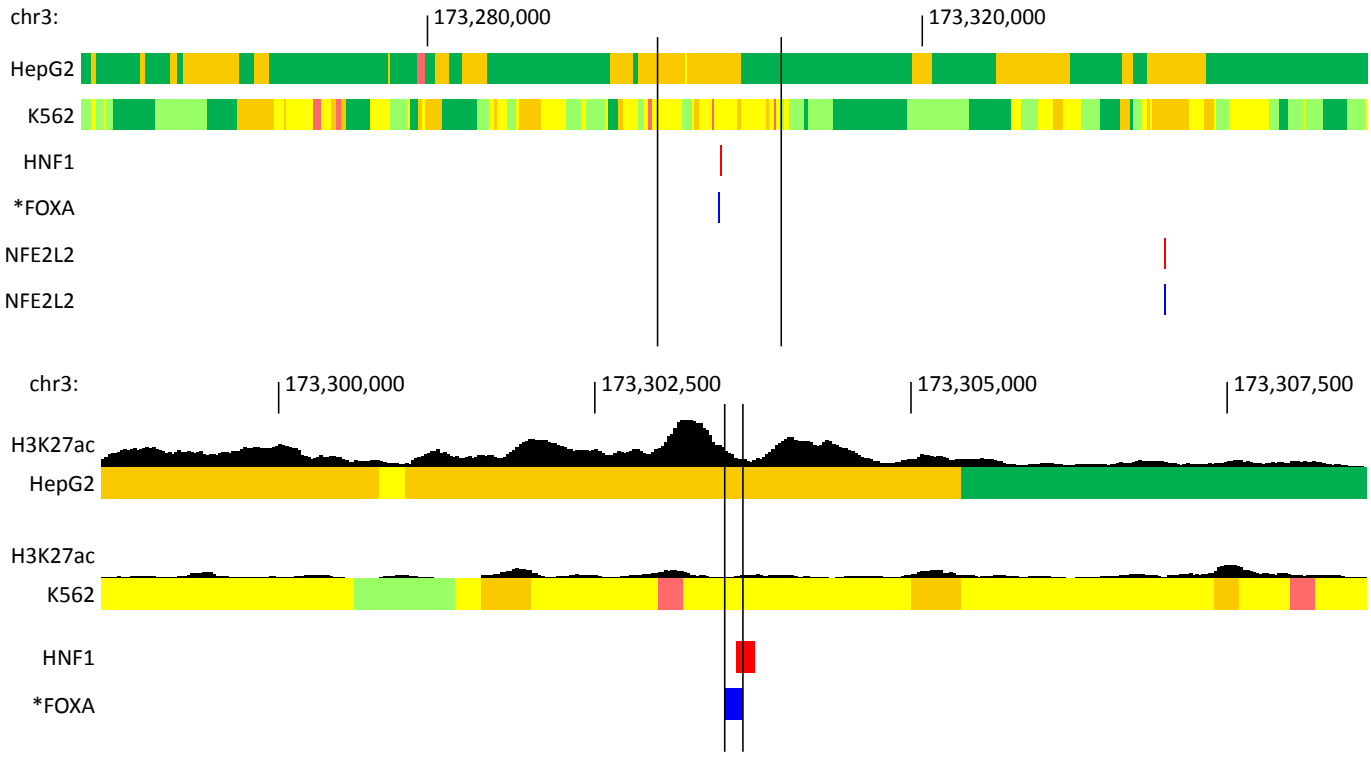
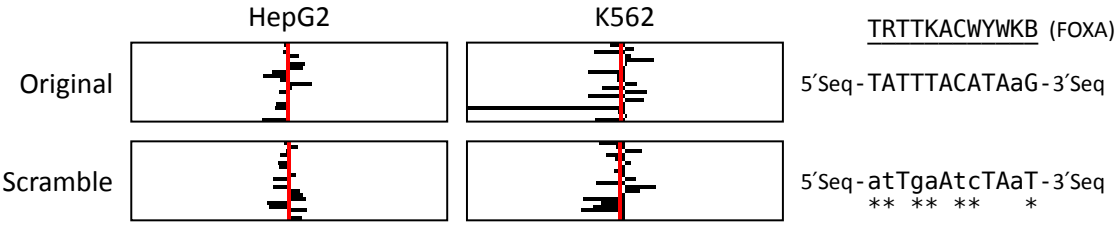
3′Seq = tgagatagtgtttattagcatttataaaataatcactgtaatagtggtatgtaattggtagagat

1857 FOXA in HepG2 enhancer

chr3 173303594 173303605 - (hg18)

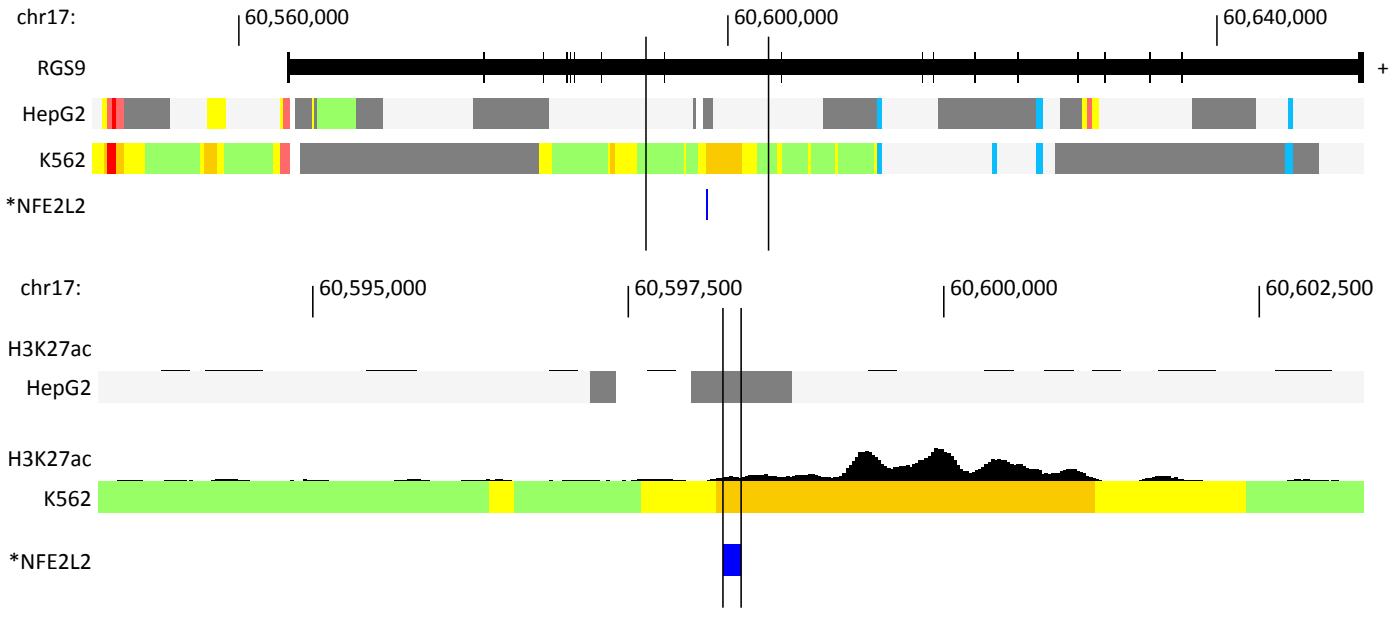


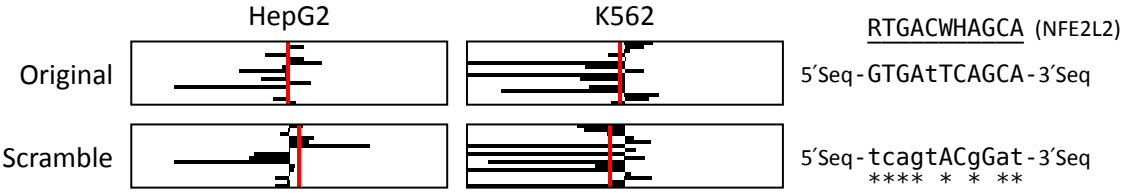


5′Seq = ggggcttatctacaaaaaaagtttaccaaccaaaggttcgtttgctttgttcgttgtttttaagtgg
3′Seq = cttgcagacgtaattaaccatttttattagaacacttagattccaggtacactcatatcacaatac

1858 NFE2L2 in K562 enhancer

chr17 60598317 60598327 + (hg18)





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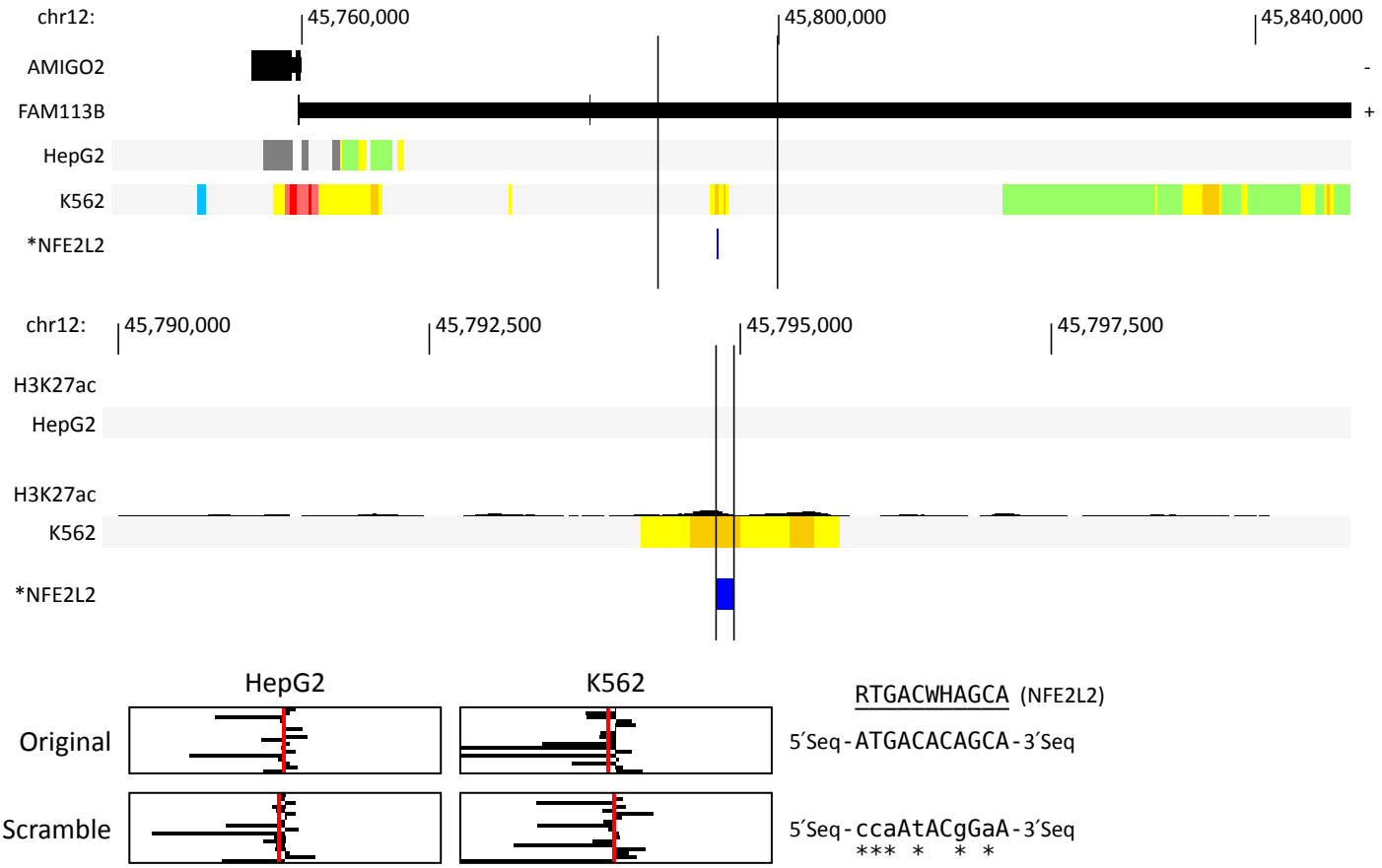
3′Seq = tcctgtaatgaaggaaaacgatgtttctcacctgtttttactcaaatggaaccaagtacagatctg

1859 NFE2L2 in K562 enhancer

chr12 45794872 45794882 + (hg18)



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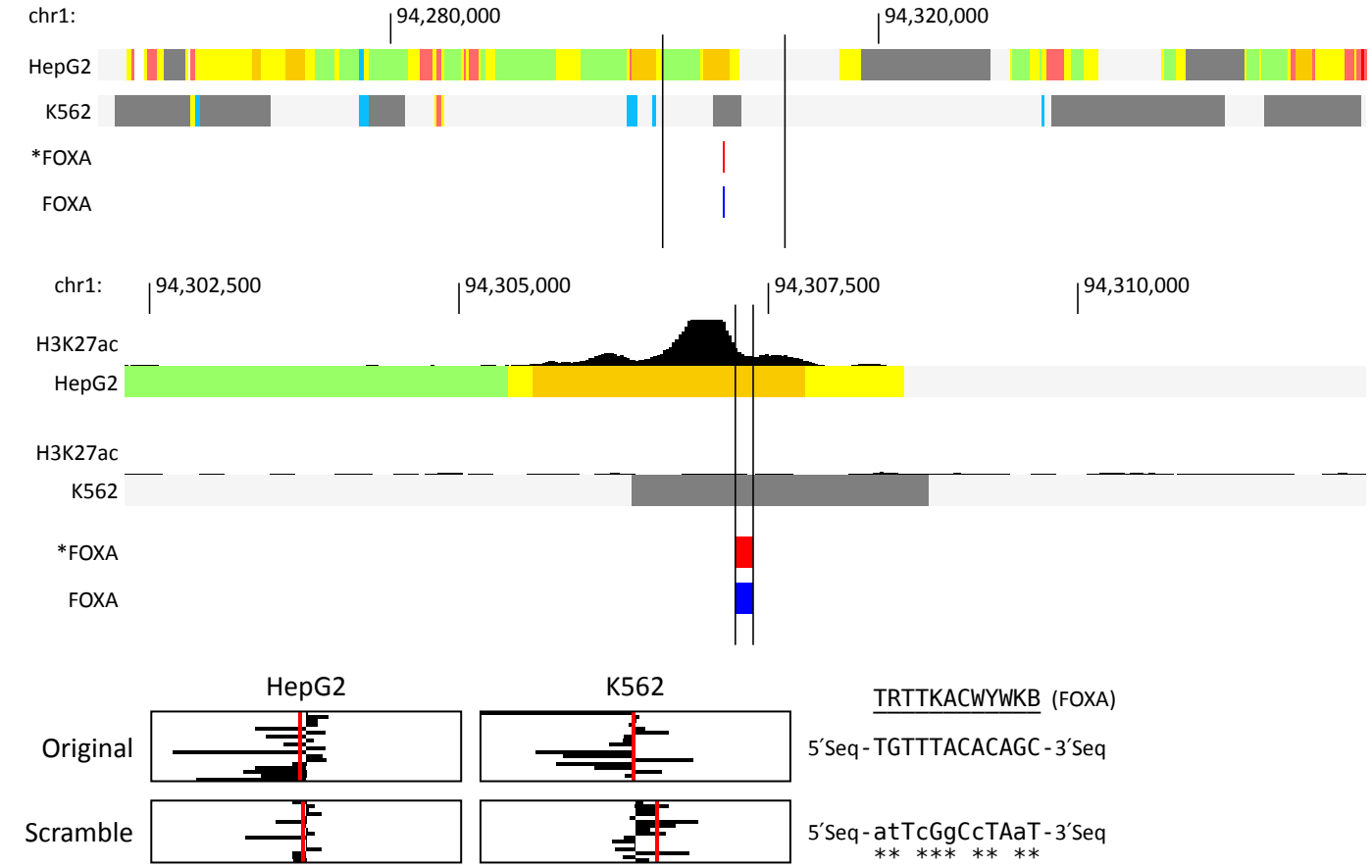
3′Seq = cgtttttaggaaattacactttcatttttcctgctgtccattaaagaaggtttaataacatagtctg

1860 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr1 94307300 94307311 + (hg18)



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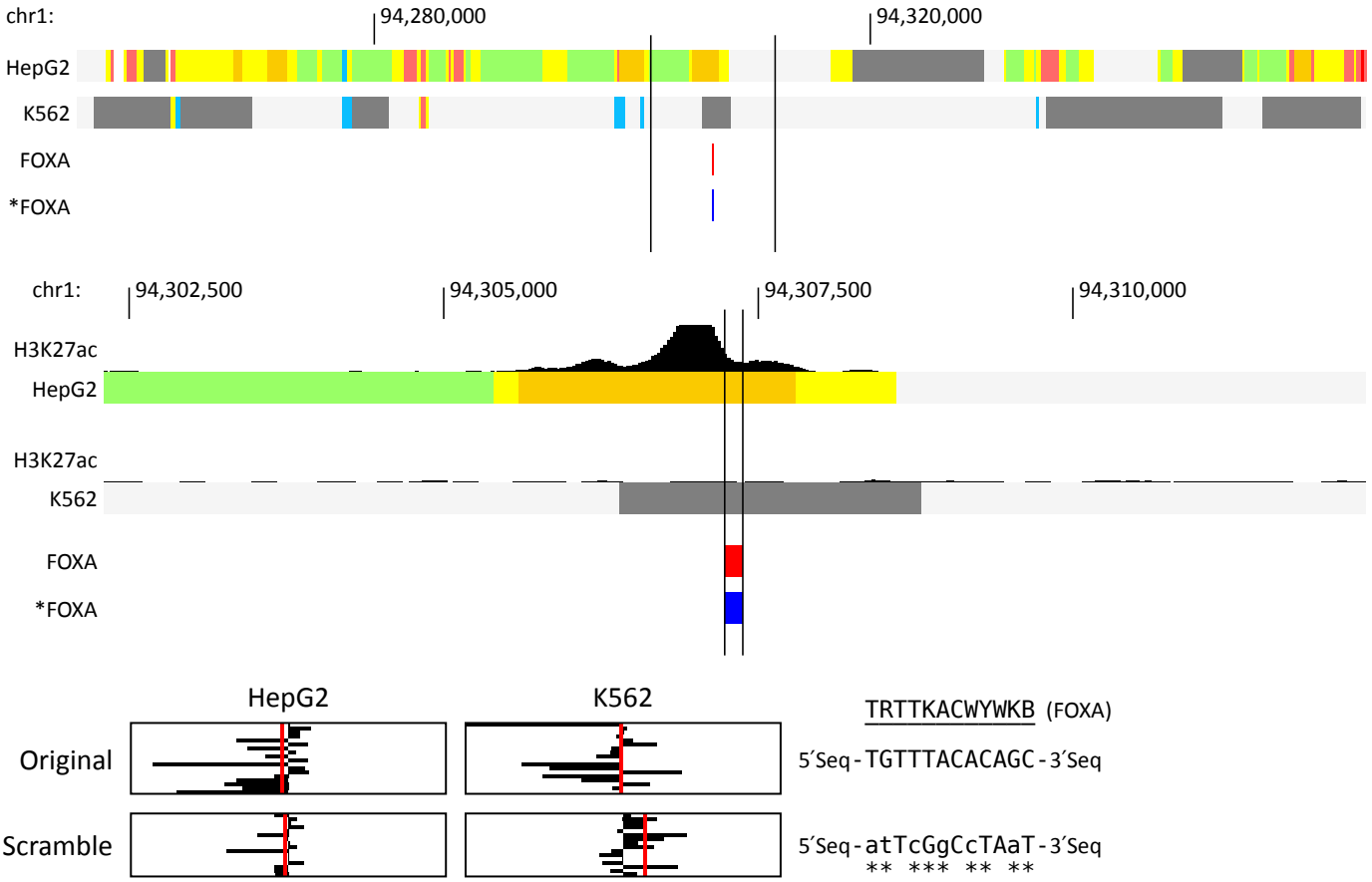
3′Seq = taaatcaaacacctccttgggaggacaagctgcagtagcagcaggcttccttctttaactgtgacc

1861 FOXA in HepG2 enhancer

chr1 94307300 94307311 + (hg18)



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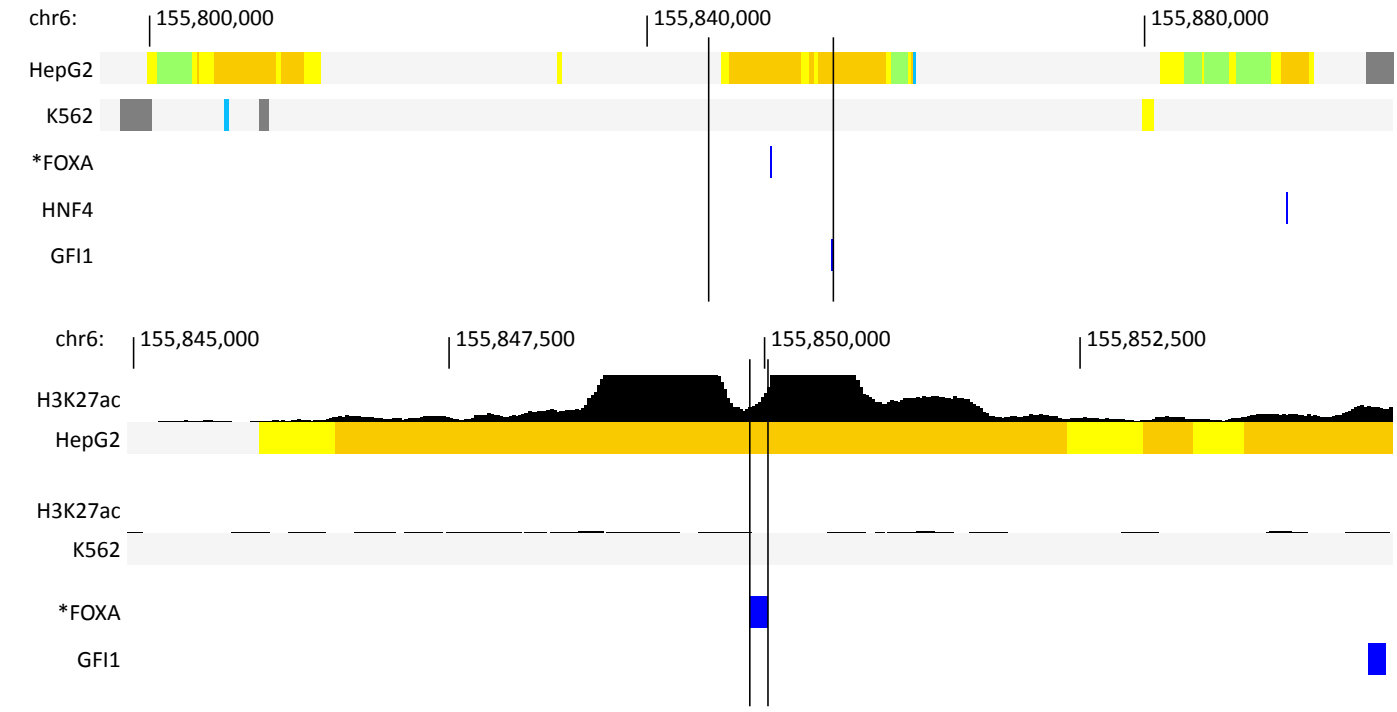
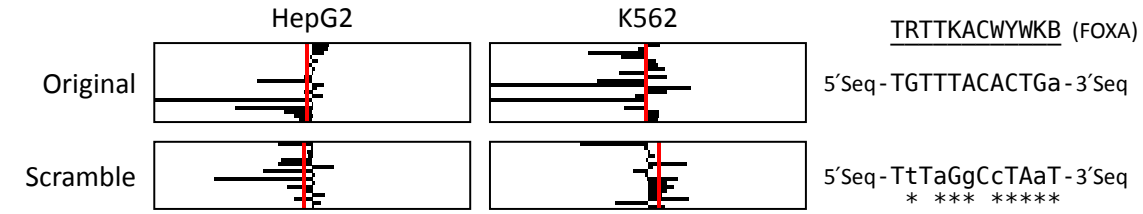
1862 FOXA in HepG2 enhancer

chr6 155849950 155849961 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACACTGa-3′Seq

5′Seq-TtTaGgCcTAaT-3′Seq

* *** *****

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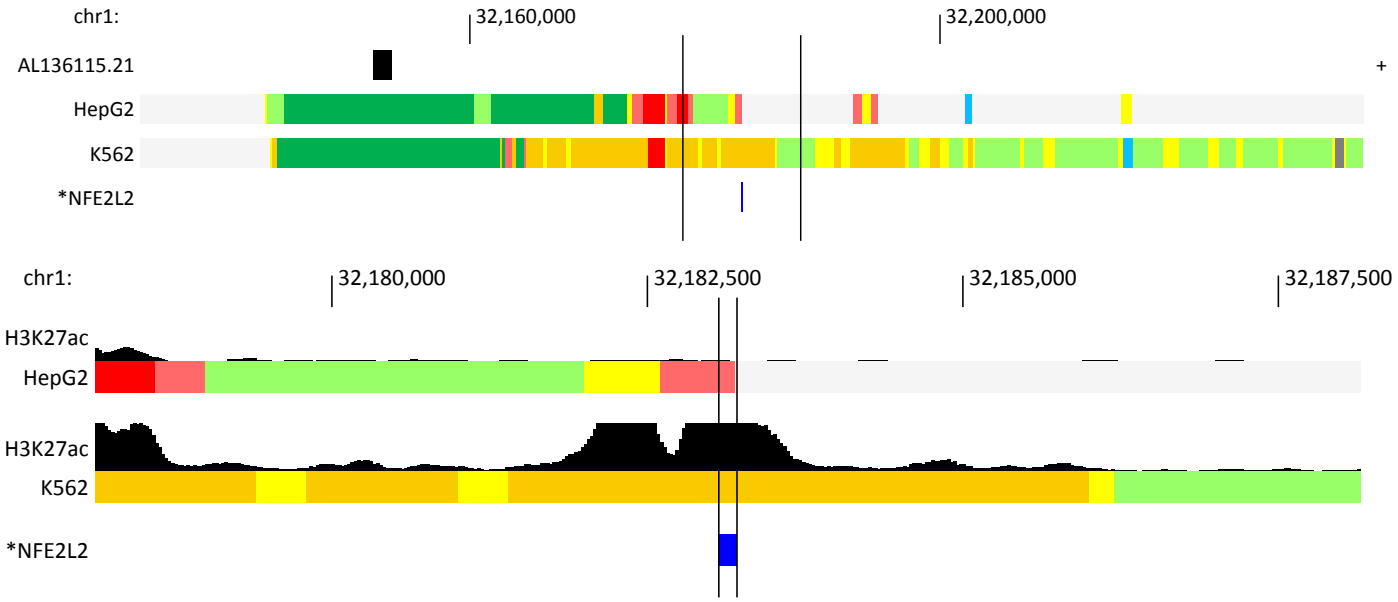
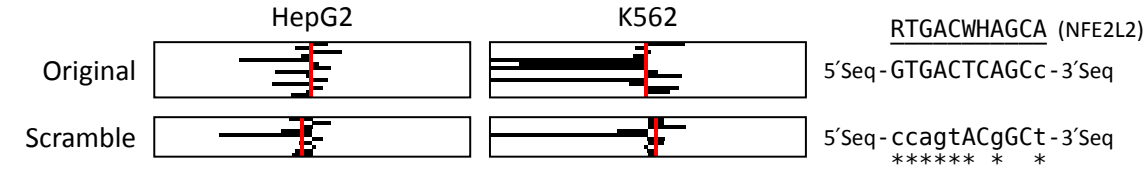
3′Seq = cttgttcttgttctcacatttgcagcatggcttatggcagaggagttggggaaaaccgtcacacta

1863 NFE2L2 in K562 enhancer

chr1 32183133 32183143 + (hg18)





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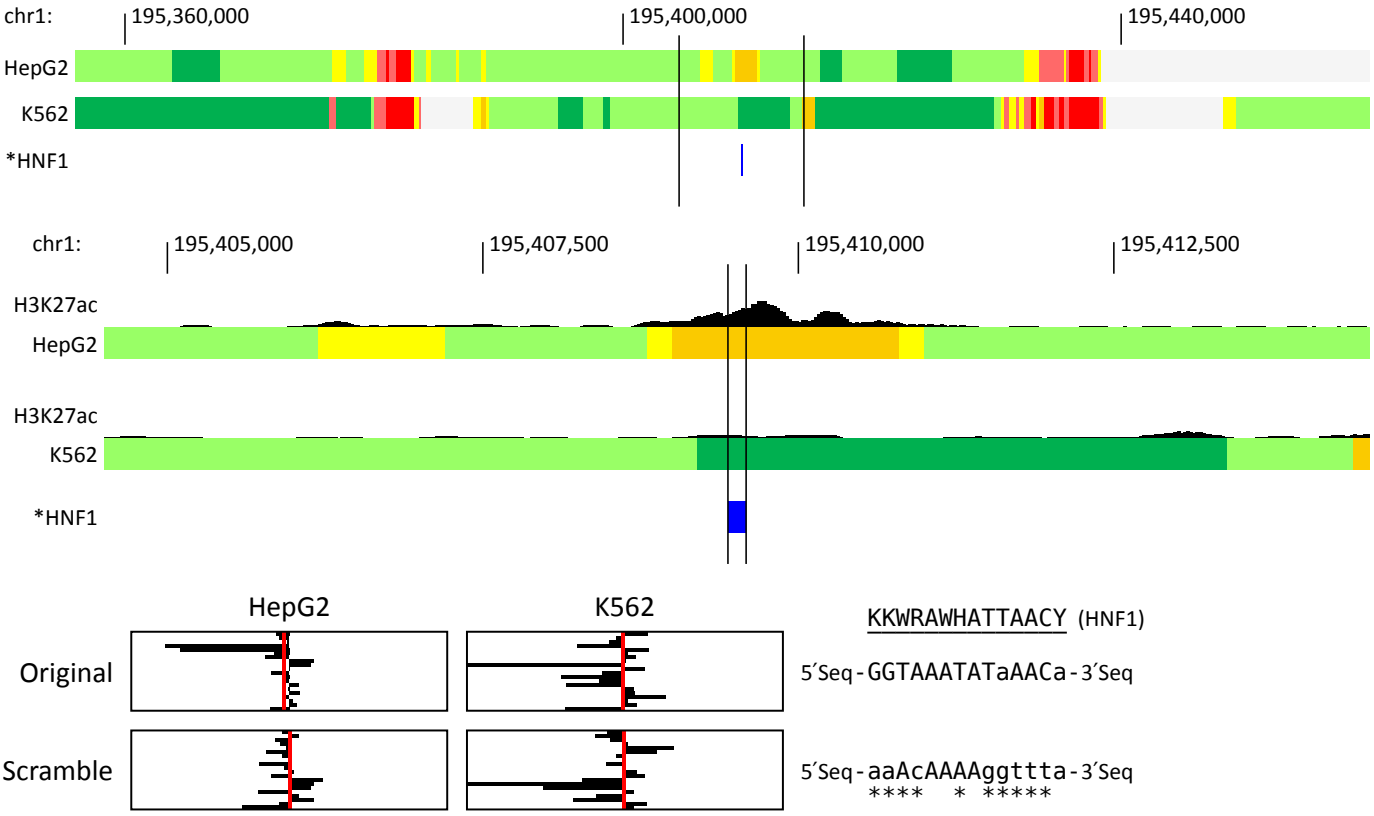
1864 HNF1 in HepG2 enhancer

chr1 195409508 195409521 + (hg18)



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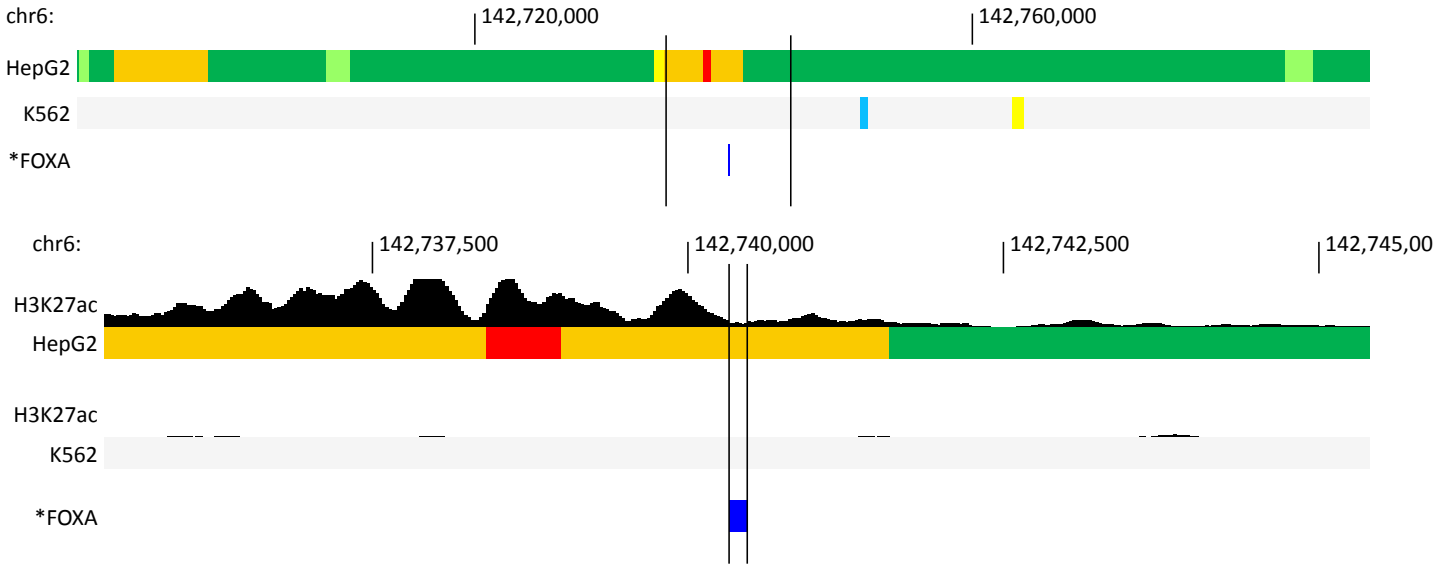
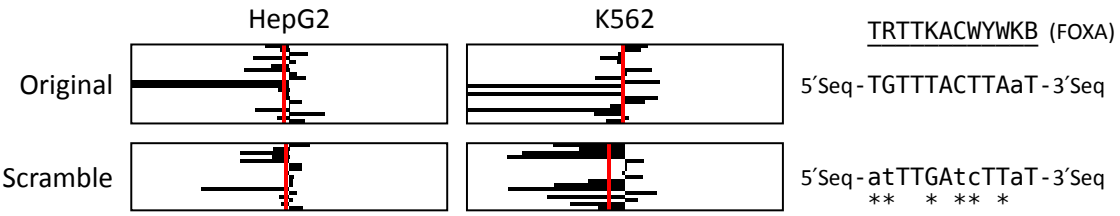
1865 FOXA in HepG2 enhancer

chr6 142740393 142740404 - (hg18)





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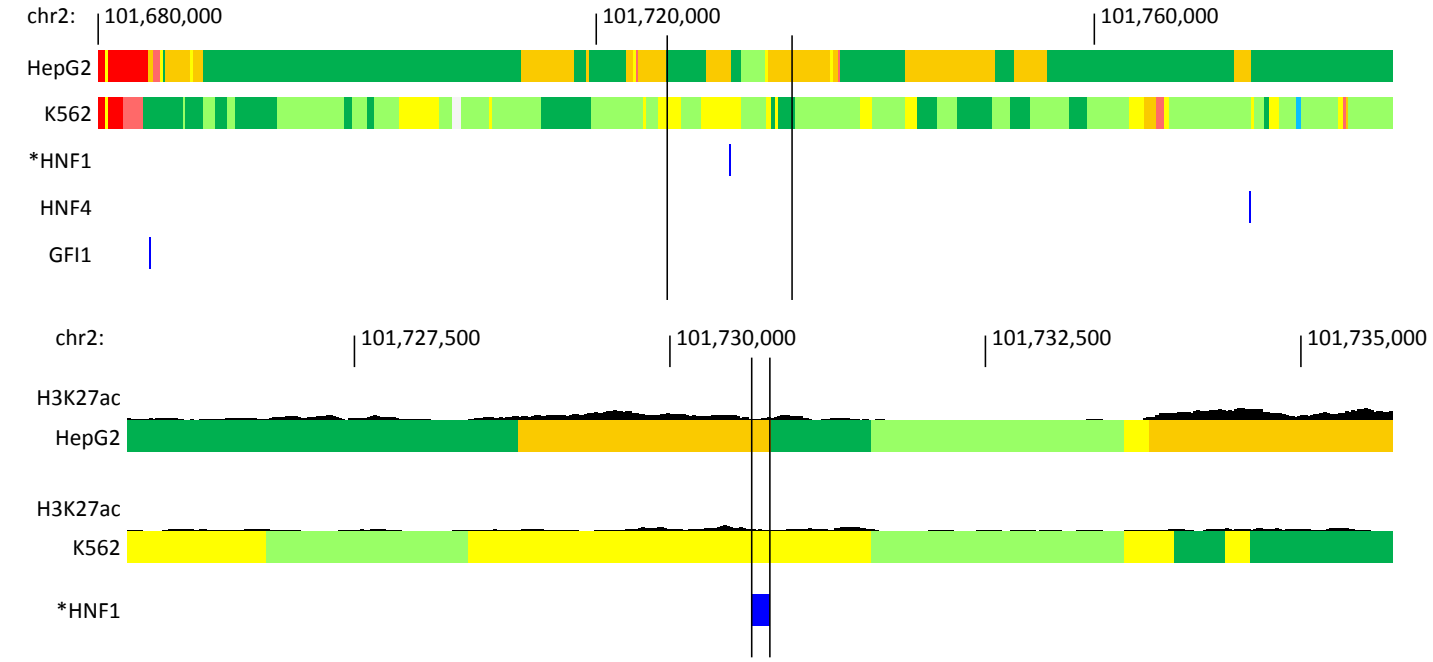
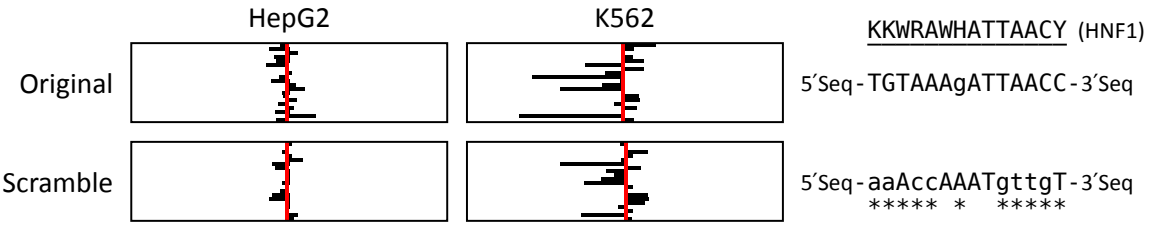
1866 HNF1 in HepG2 enhancer

chr2 101730714 101730727 - (hg18)





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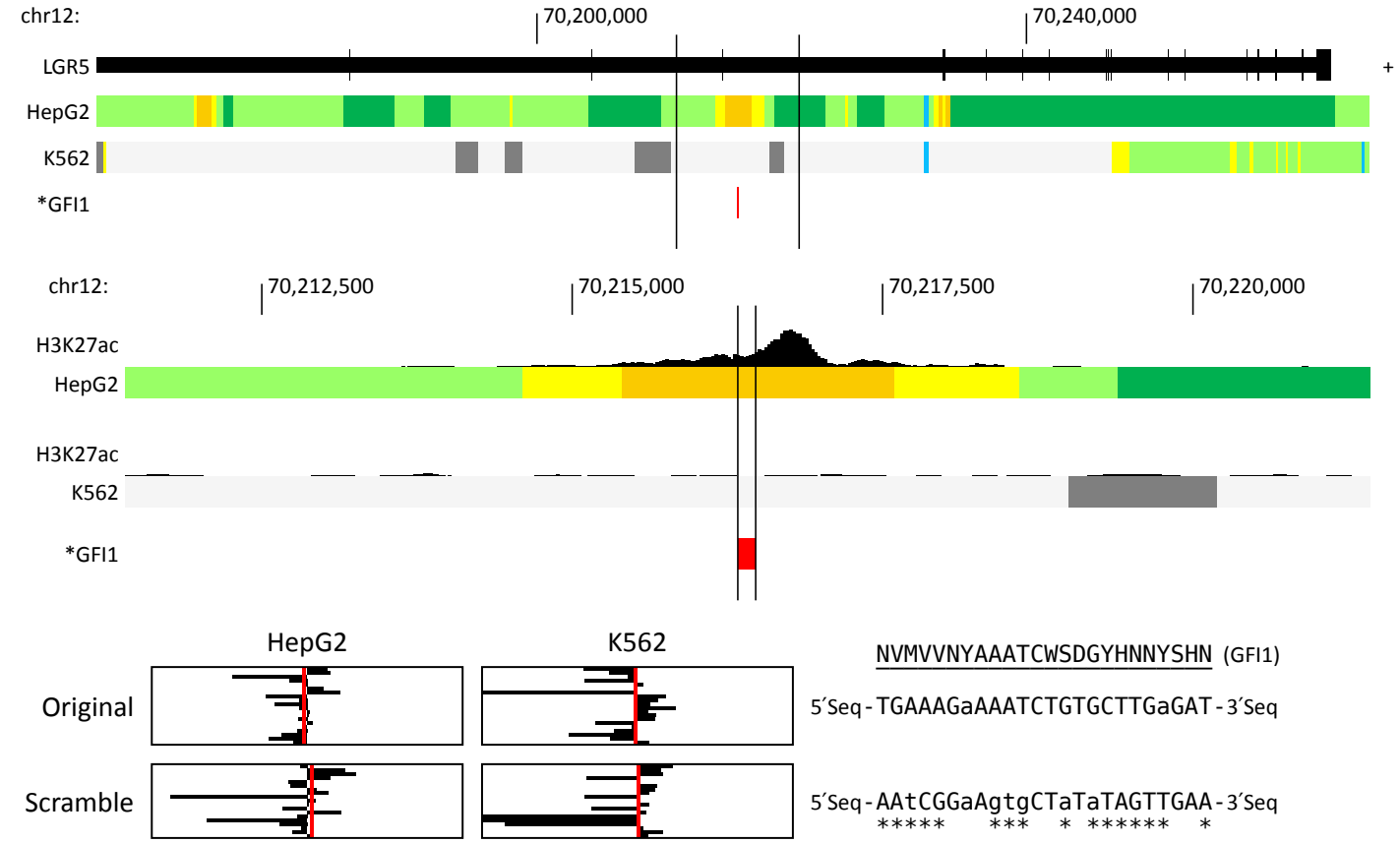
3′Seq = aagcctatttcttggaccaaactagacatagtattaaaatgatatttgggatctgttttgtttgt

1867 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr12 70216395 70216418 + (hg18)



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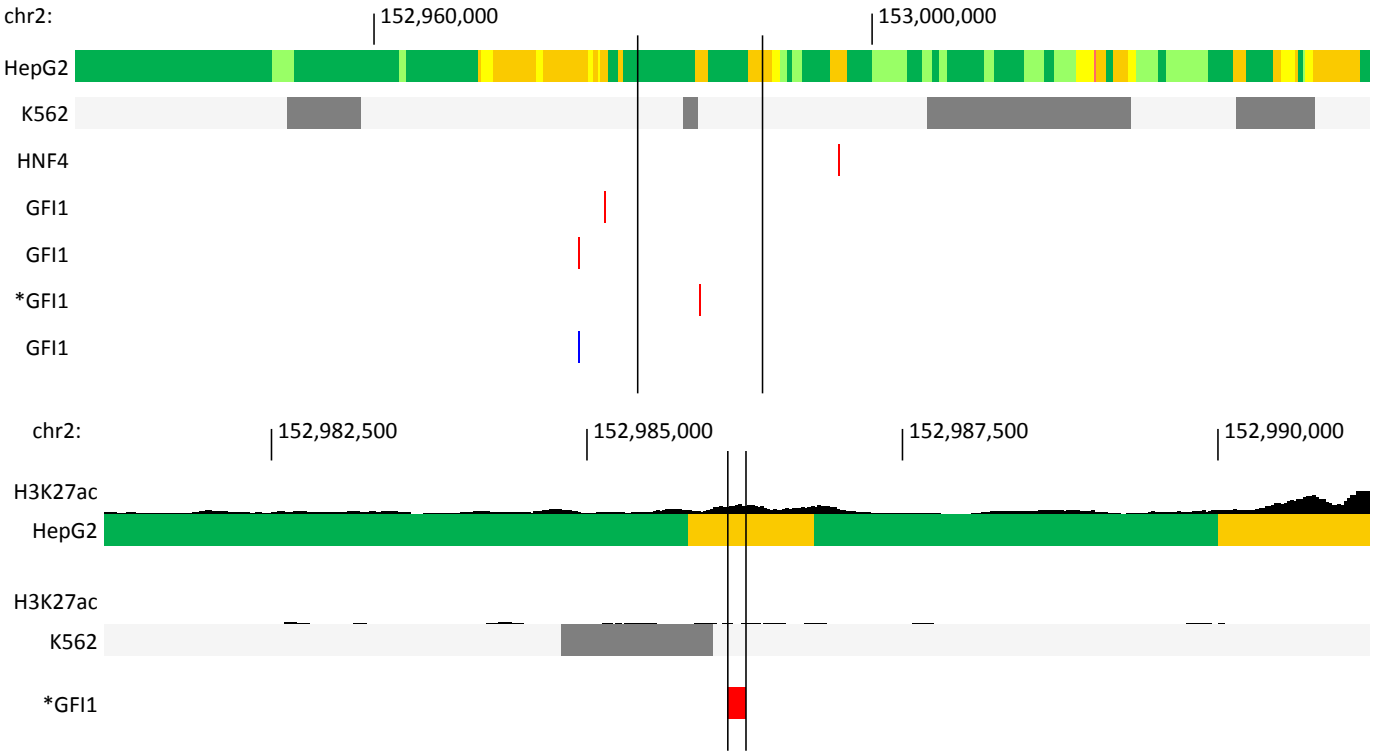
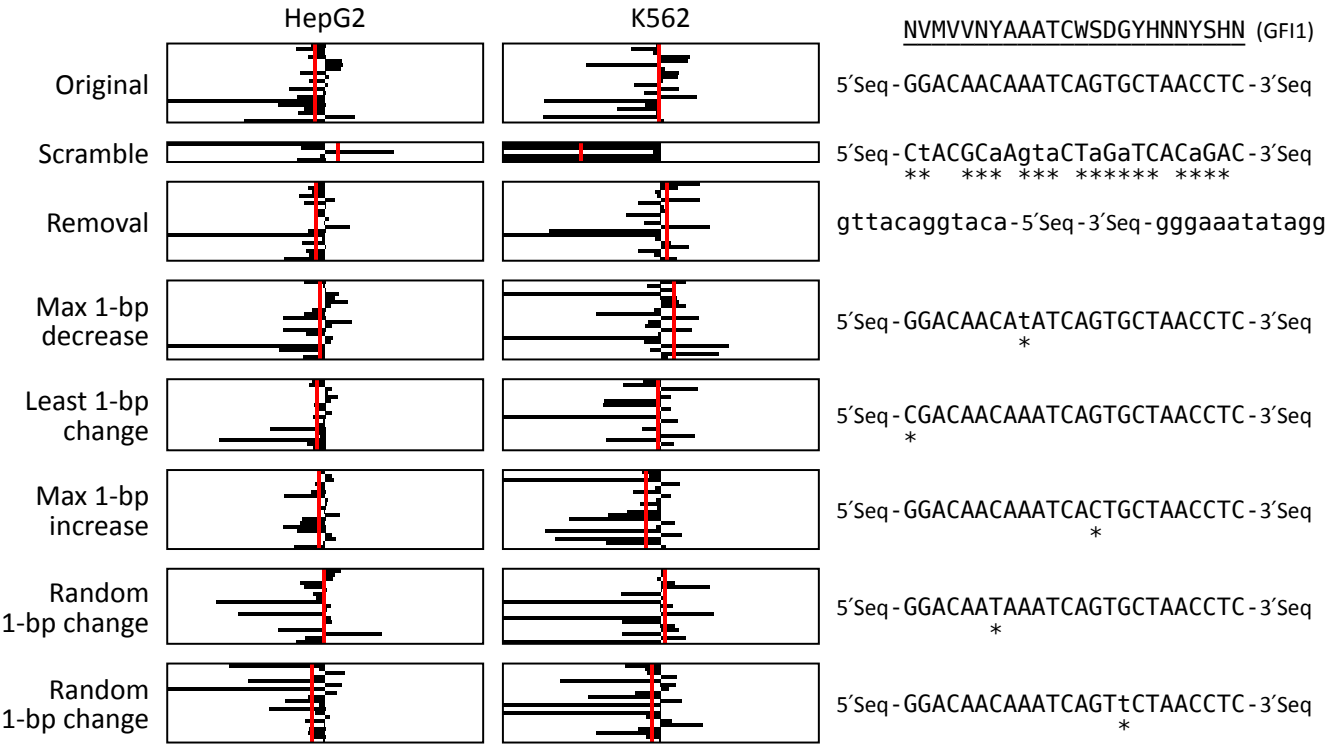
1868 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 152986177 152986200 + (hg18)





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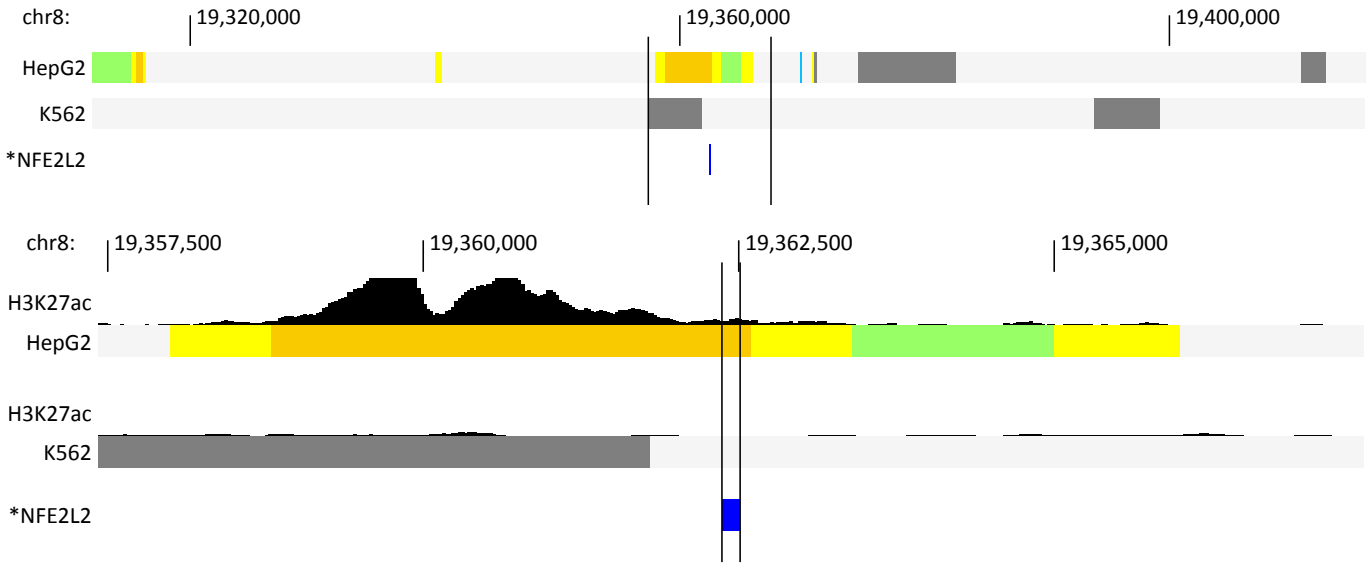
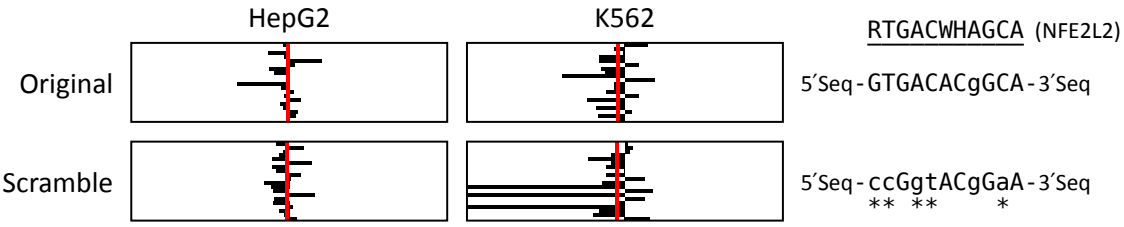
1869 NFE2L2 in HepG2 enhancer

chr8 19362434 19362444 + (hg18)





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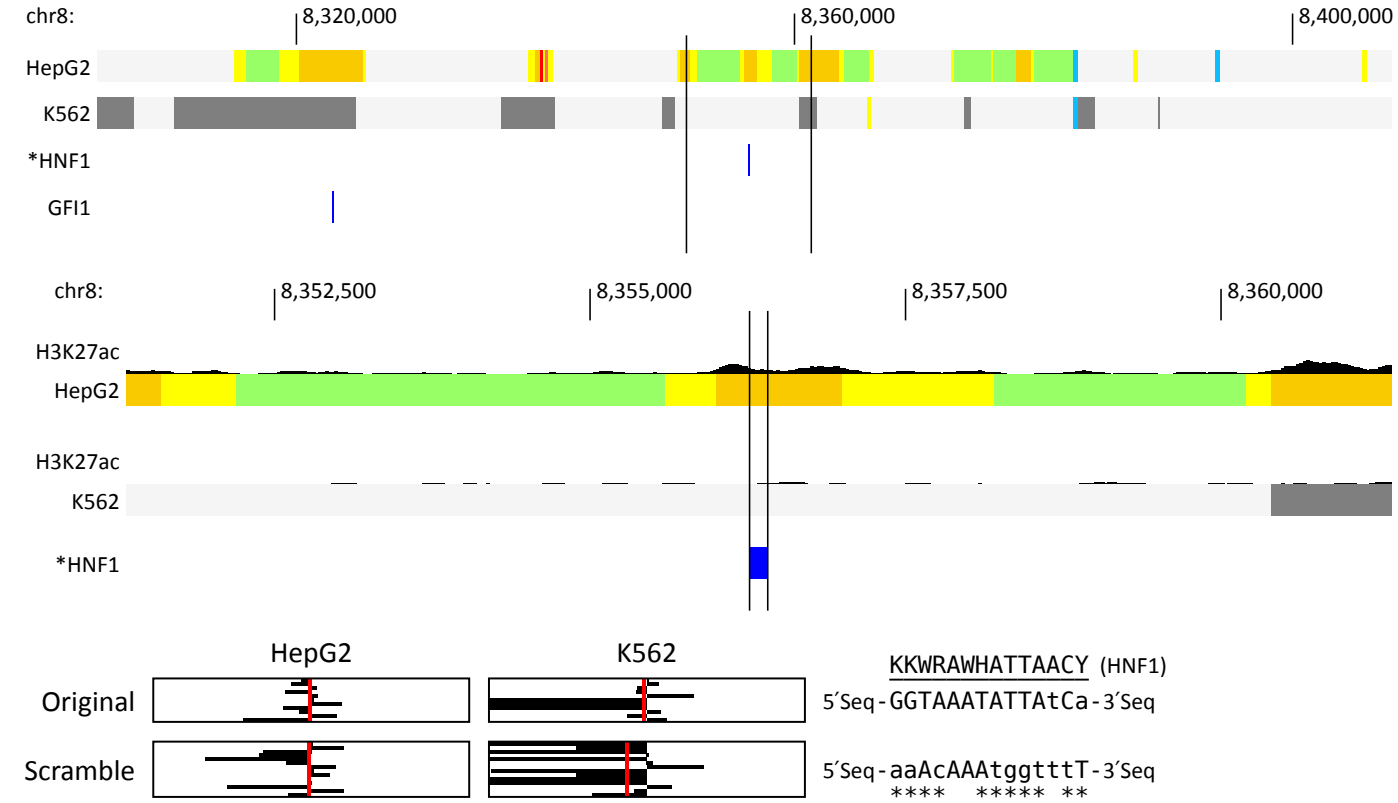
1870 HNF1 in HepG2 enhancer

chr8 8356330 8356343 + (hg18)



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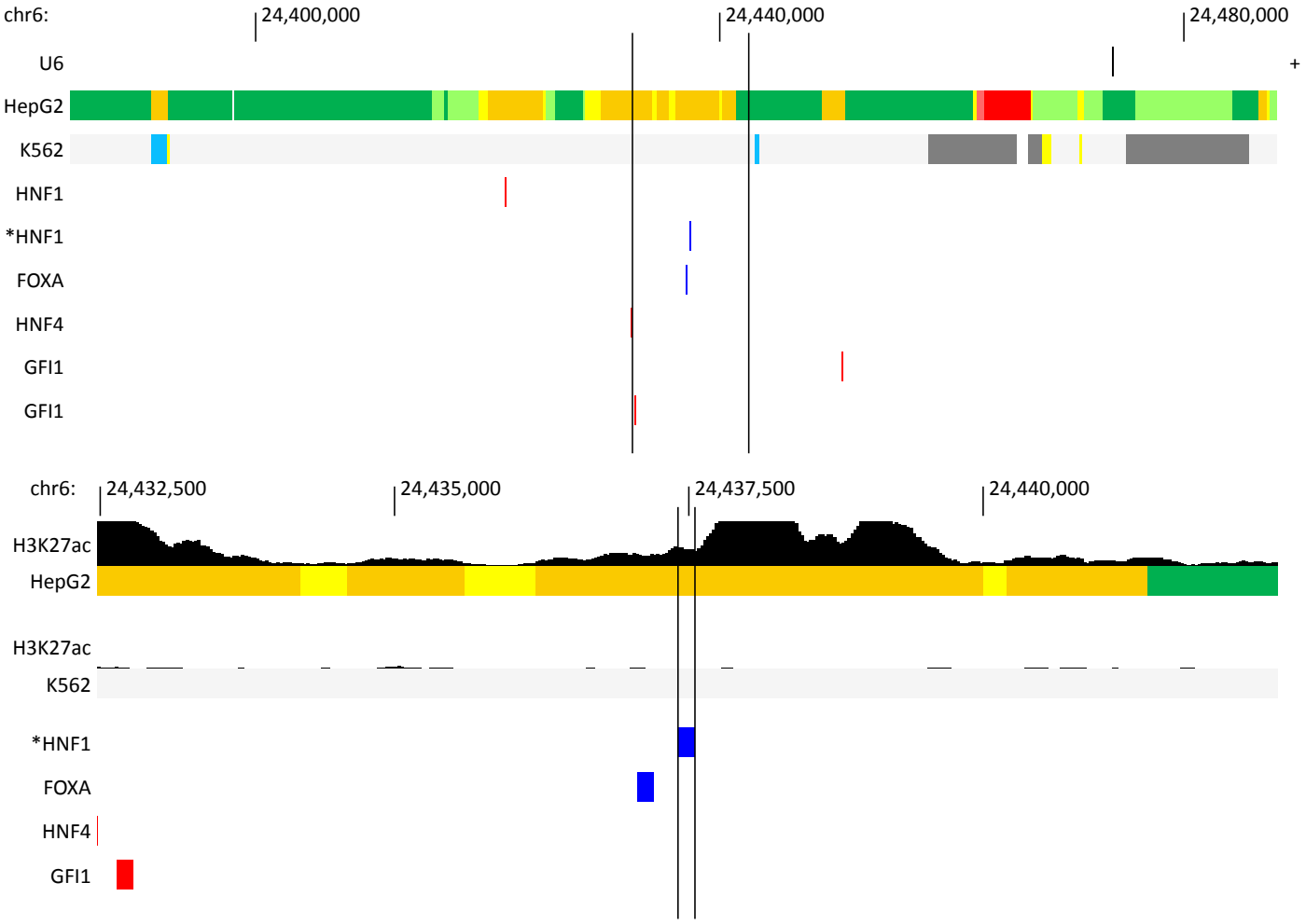
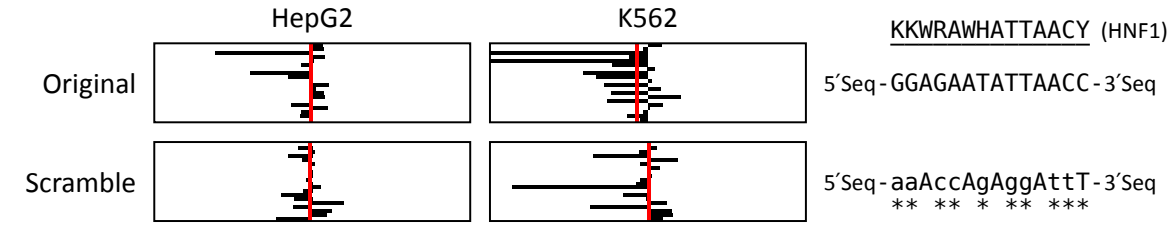
1871 HNF1 in HepG2 enhancer

chr6 24437474 24437487 + (hg18)





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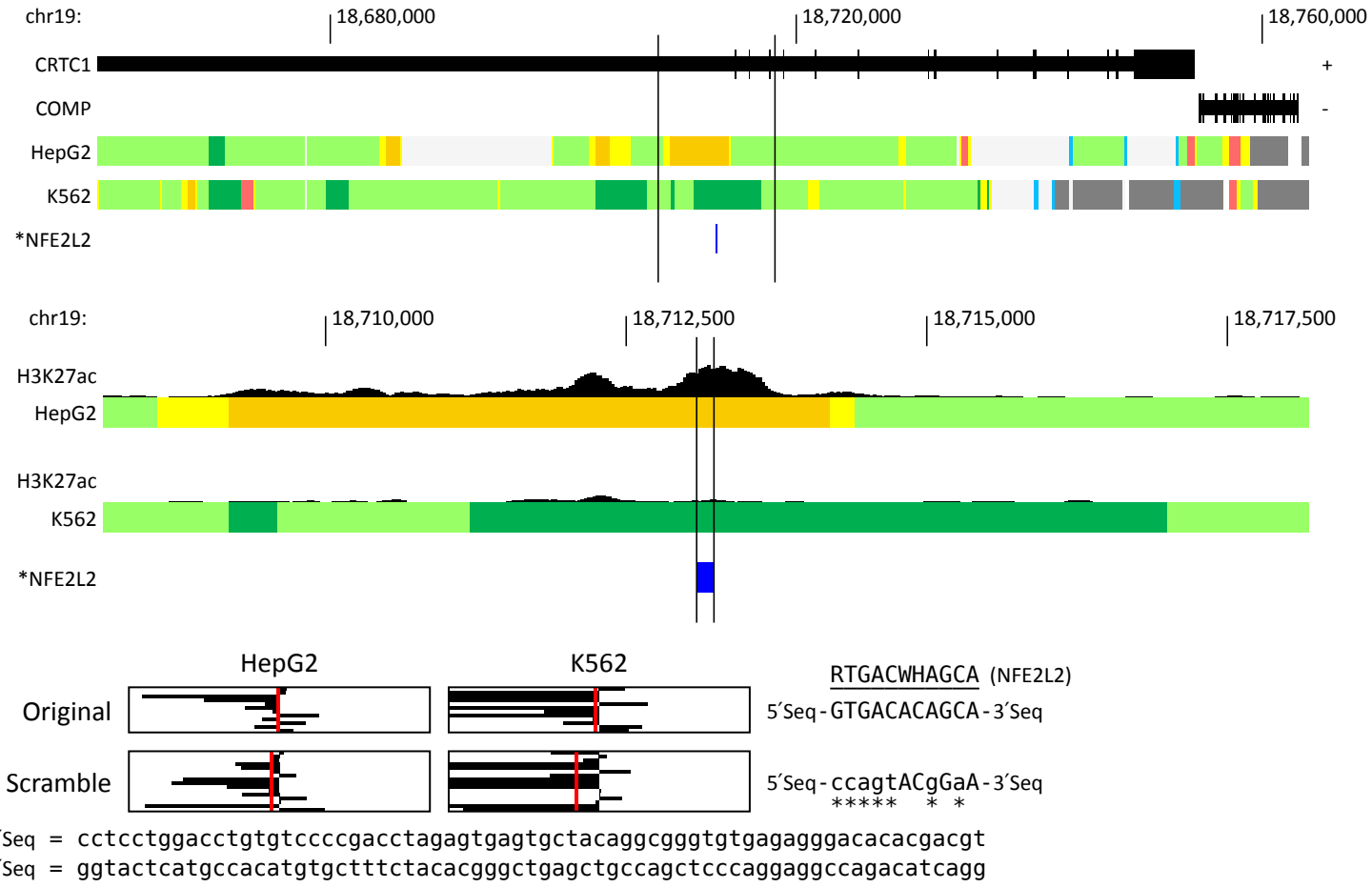
1872 NFE2L2 in HepG2 enhancer

chr19 18713153 18713163 - (hg18)



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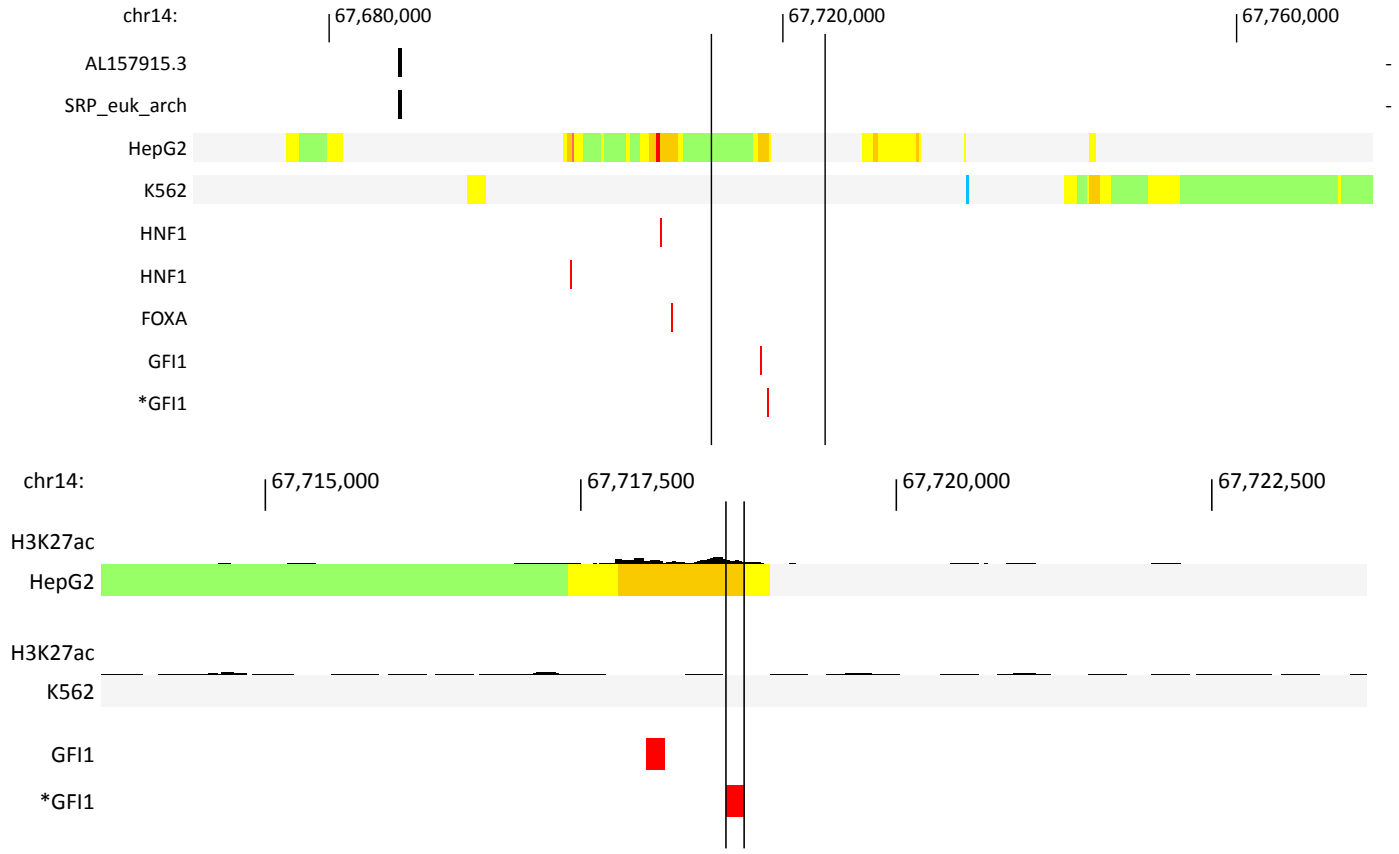
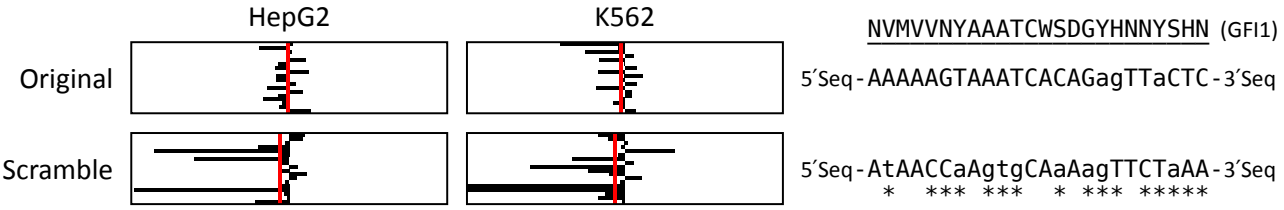
3′Seq = ggtactcatgccacatgtgctttctacacgggctgagctgccagctcccaggaggccagacatcagg

1873 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 67718711 67718734 - (hg18)

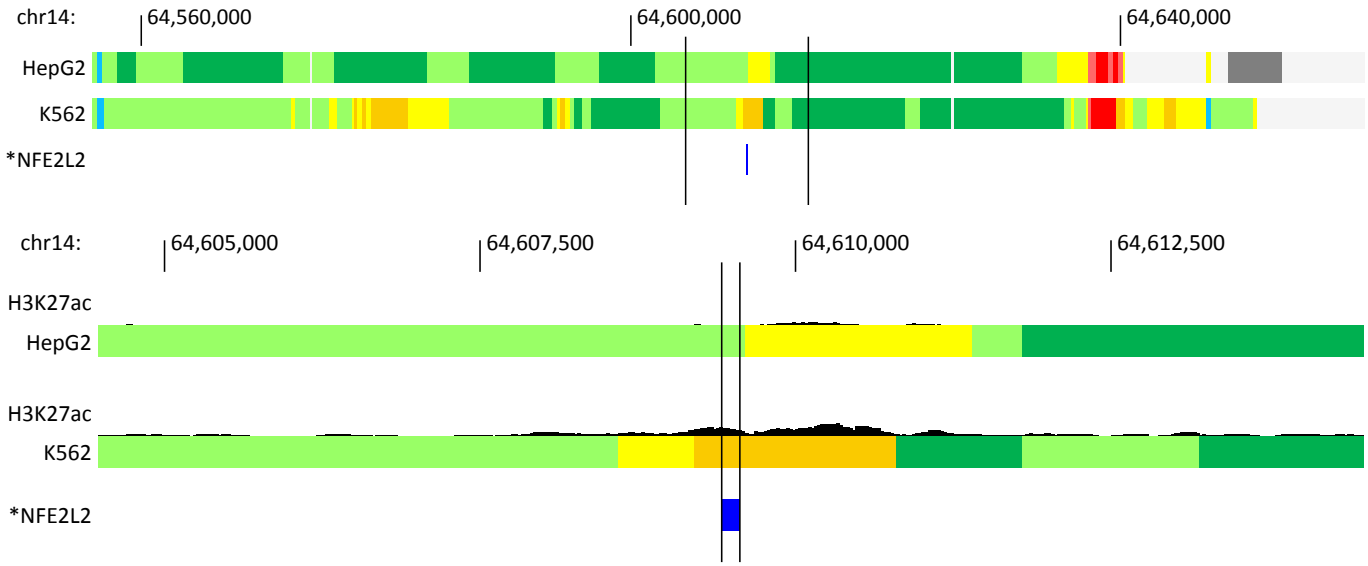


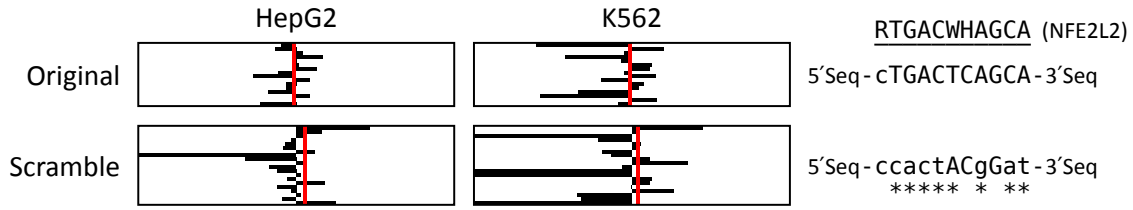


5′Seq = ccaacatgttgatccaaactagtgggaaacaaactgaaatgcttacagcagtcaaaattgg
3′Seq = agtacactgcatagctgttaatttagctttggaaaactctctcttaaaggagaacttcta

1874 NFE2L2 in K562 enhancer

chr14 64609482 64609492 - (hg18)

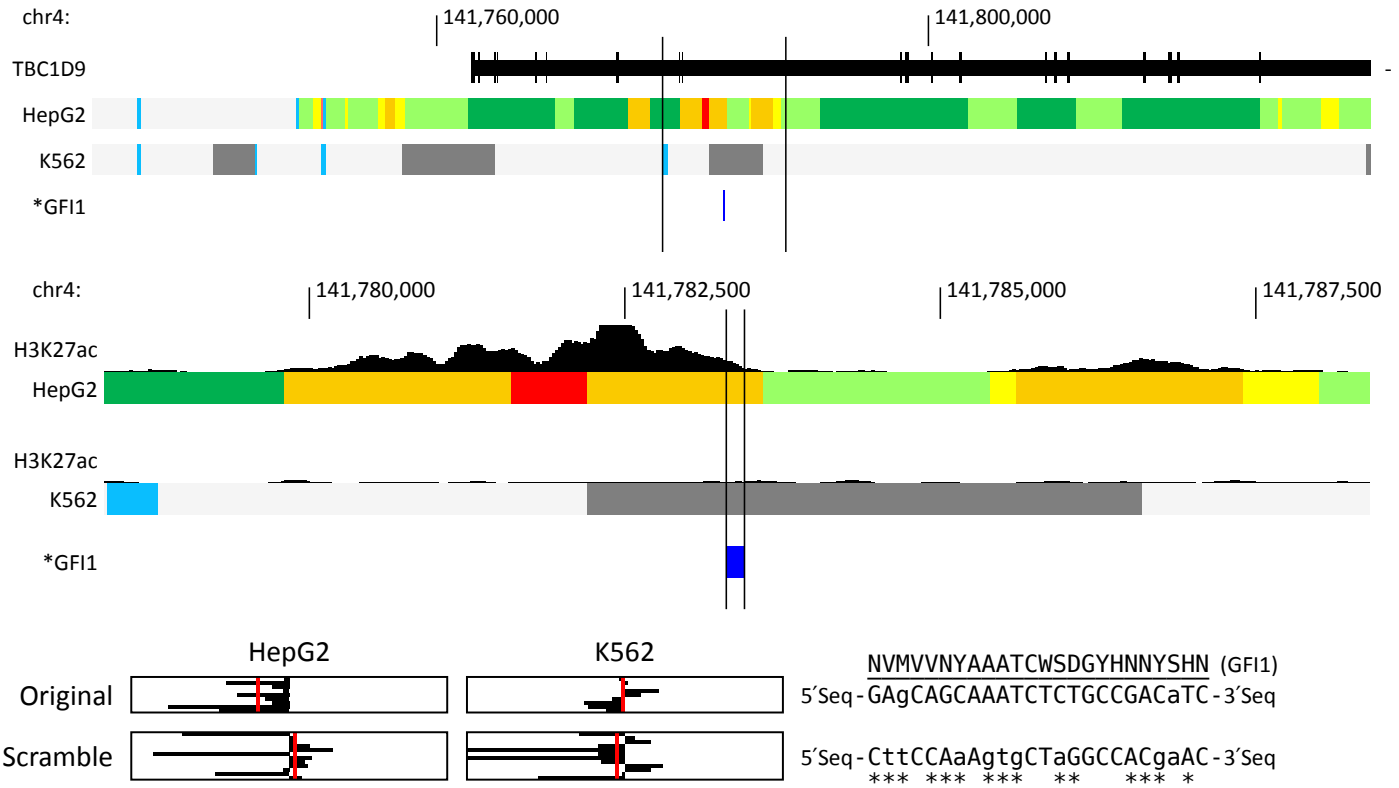




5′Seq = acctcaggaccaagcaagcactgaggtgcctctgctgtcattatctacacaaagcatgtaaccaggg
3′Seq = aggtggaaaaagccagctcccagacacctttcctaaagtgagtaagggttgacttcttggtatatca

1875 GFI1 in HepG2 enhancer

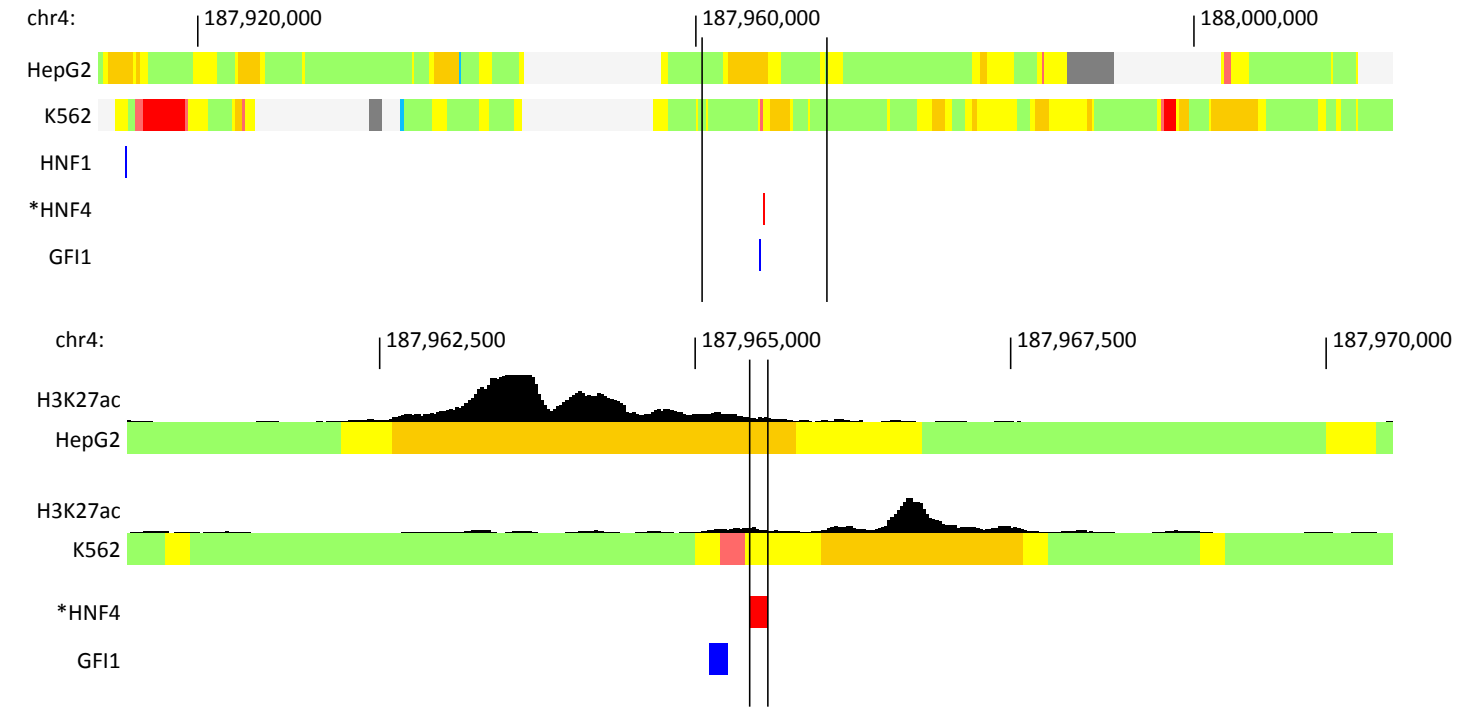
chr4 141783365 141783388 - (hg18)

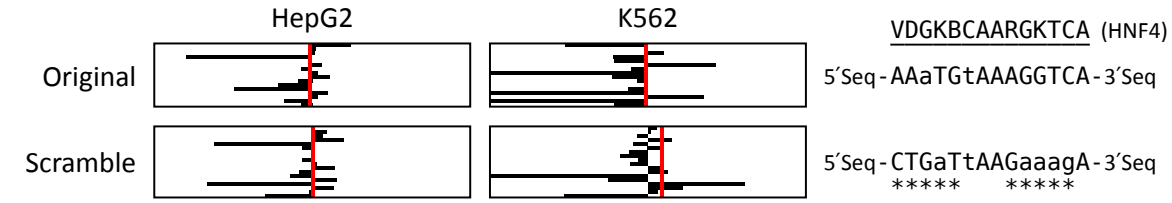


5′Seq = ccccgagagccctgtcgcccgcccgcaagaggggaagaactgcaacagtagcggaaagct
3′Seq = agatgactatgagctgggagcaggaataaggaagagacacaaagggcccaaggaggaaca

1876 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr4 187965498 187965511 - (hg18)

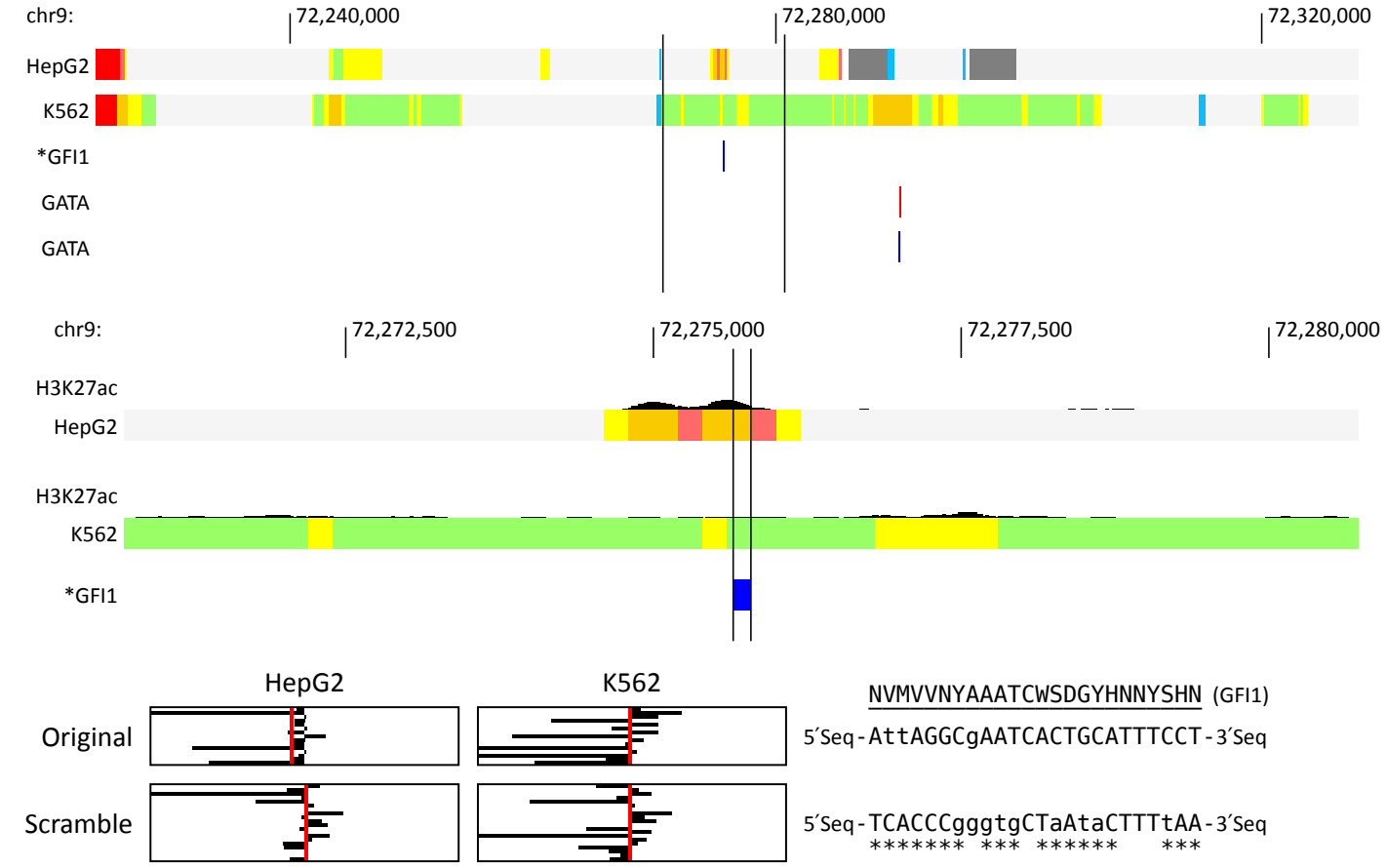




5′Seq = tgtgattaaaactactggcccatctctttttgttccaaagctgaggaagataatttactaggtcat
3′Seq = tcagatctaagaccgtacaaatgagcaaaggcagccagaaattccctcaaaacaagcatggctgt

1877 GFI1 in HepG2 enhancer

chr9 72275709 72275732 + (hg18)

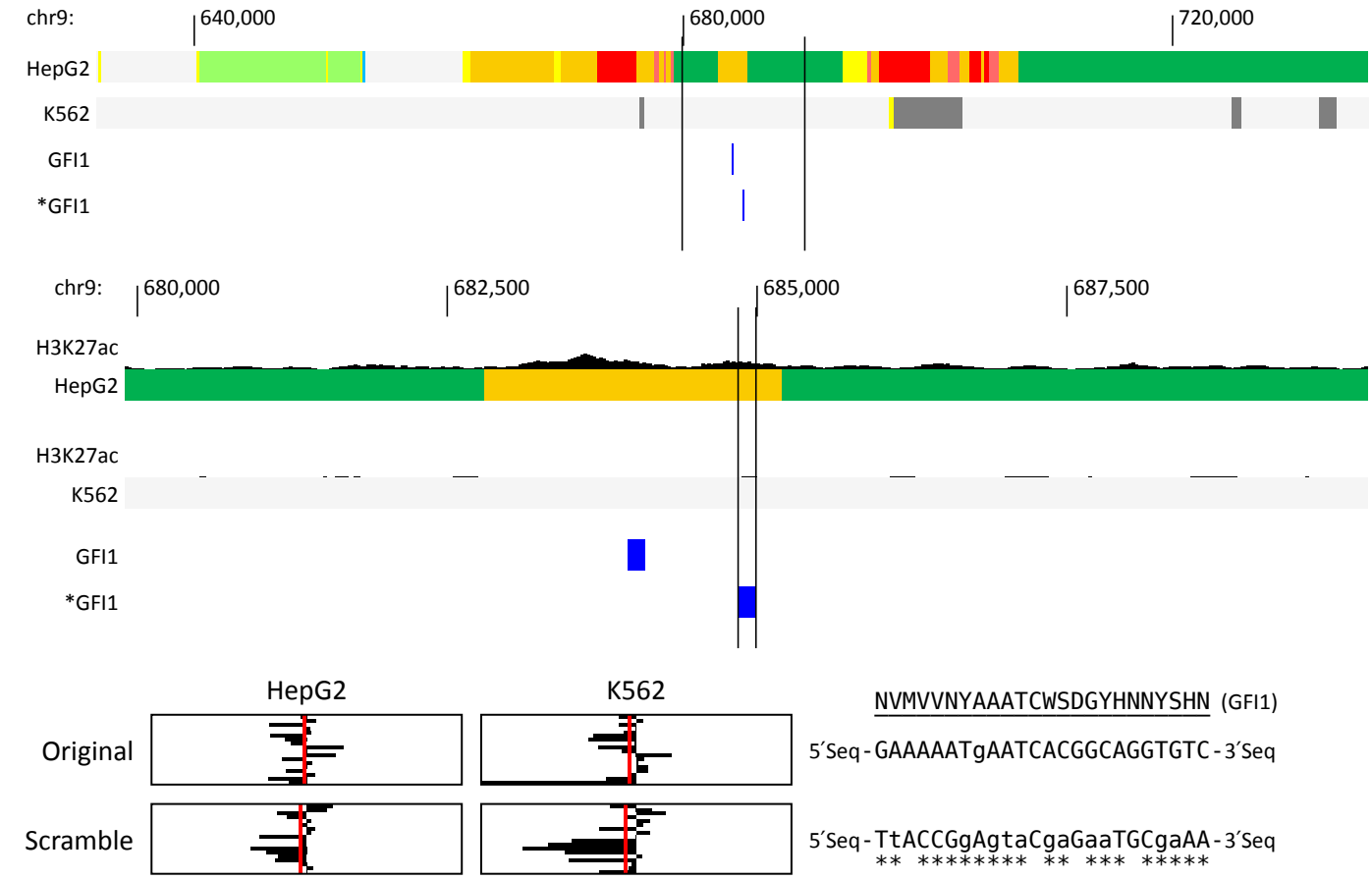


5′Seq = gcatccaatctaatgtaggtggaggcacaaactggagagcctccttgcaggaaggtttggg

3′Seq = gcttggaaaaaggagatggaagaagtgaagttaggcaagataagcaaagtgcttcctgga

1878 GFI1 in HepG2 enhancer

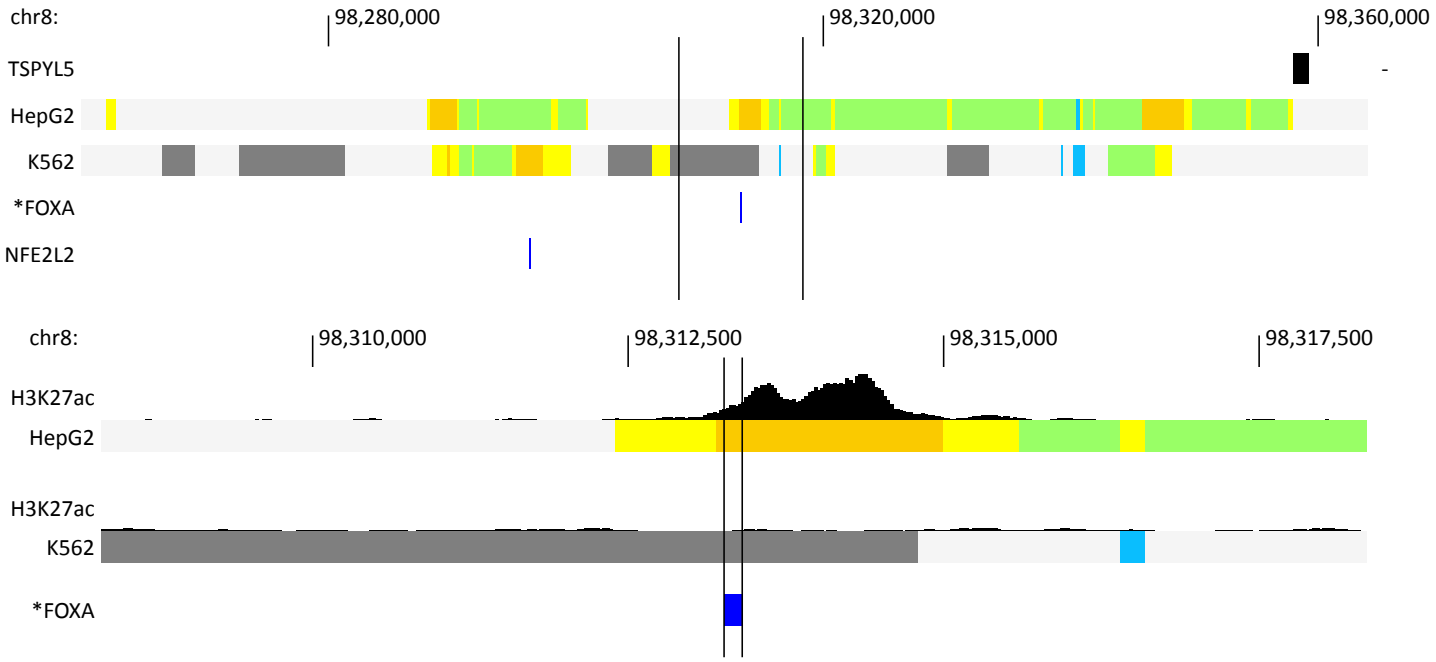
chr9 684908 684931 - (hg18)

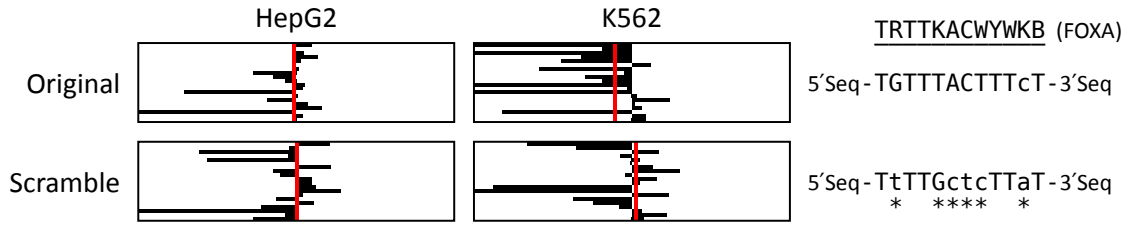


5′Seq = cttccaggctatgagtaactgtcgactagacttgatacaaaatttcttaacatggcatgaa
3′Seq = agaccagatgagctcaggcagacagagcctgcagtcttcccctctgcacgtcccactcag

1879 FOXA in HepG2 enhancer

chr8 98313327 98313338 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTTTcT-3′Seq

5′Seq-TtTTGctcTTaT-3′Seq

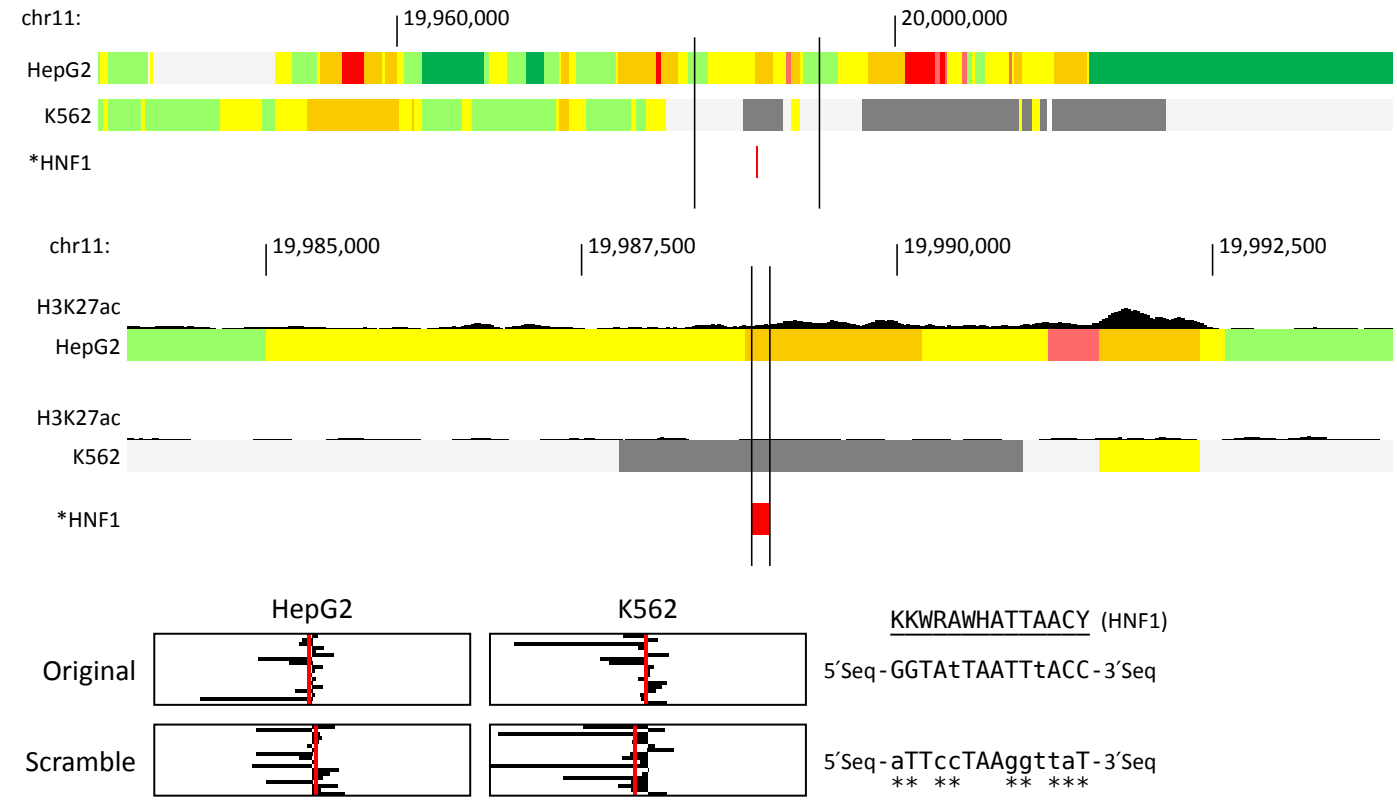
* **** *

5′Seq = ttatgtgcagctagggttgagatccactgctctgggacttgaacttctttaggctgaactctttgtc

3′Seq = gattctcagctagagacccagggcctgatgatctgtaaacctaaaaaggctgctgtagcacaaaac

1880 HNF1 in HepG2 enhancer (conserved at 60% confidence)

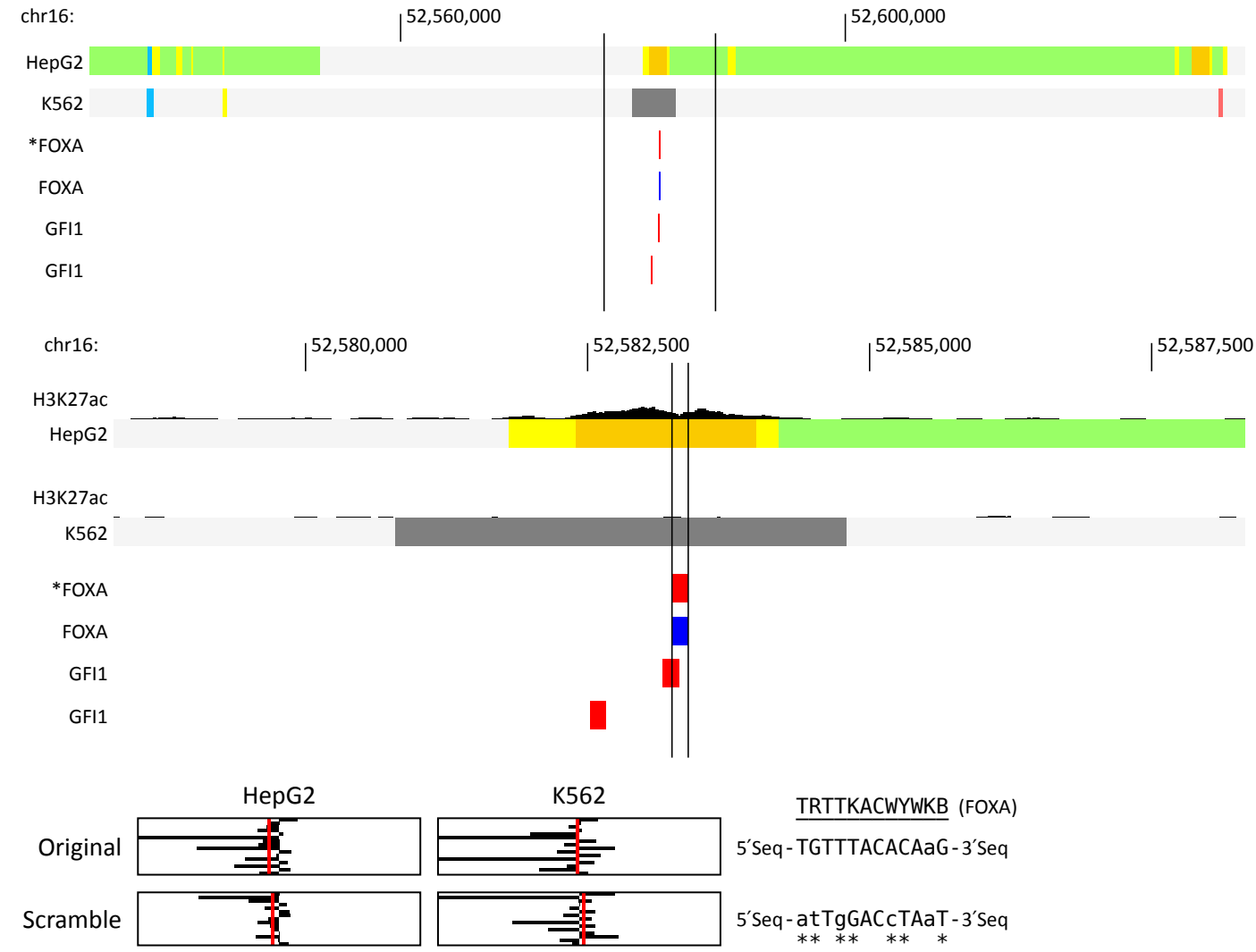
chr11 19988914 19988927 - (hg18)



5′Seq = tgcacaggcttaaatgaaagcctgttacagtacttaaagtttcctagagaaggaaaaagatcccca
3′Seq = taaagagcagctgcctggaagacactgtaatgtatcttaagtagccaatgctataaaacagataa

1881 FOXA in HepG2 enhancer (conserved at 40% confidence)

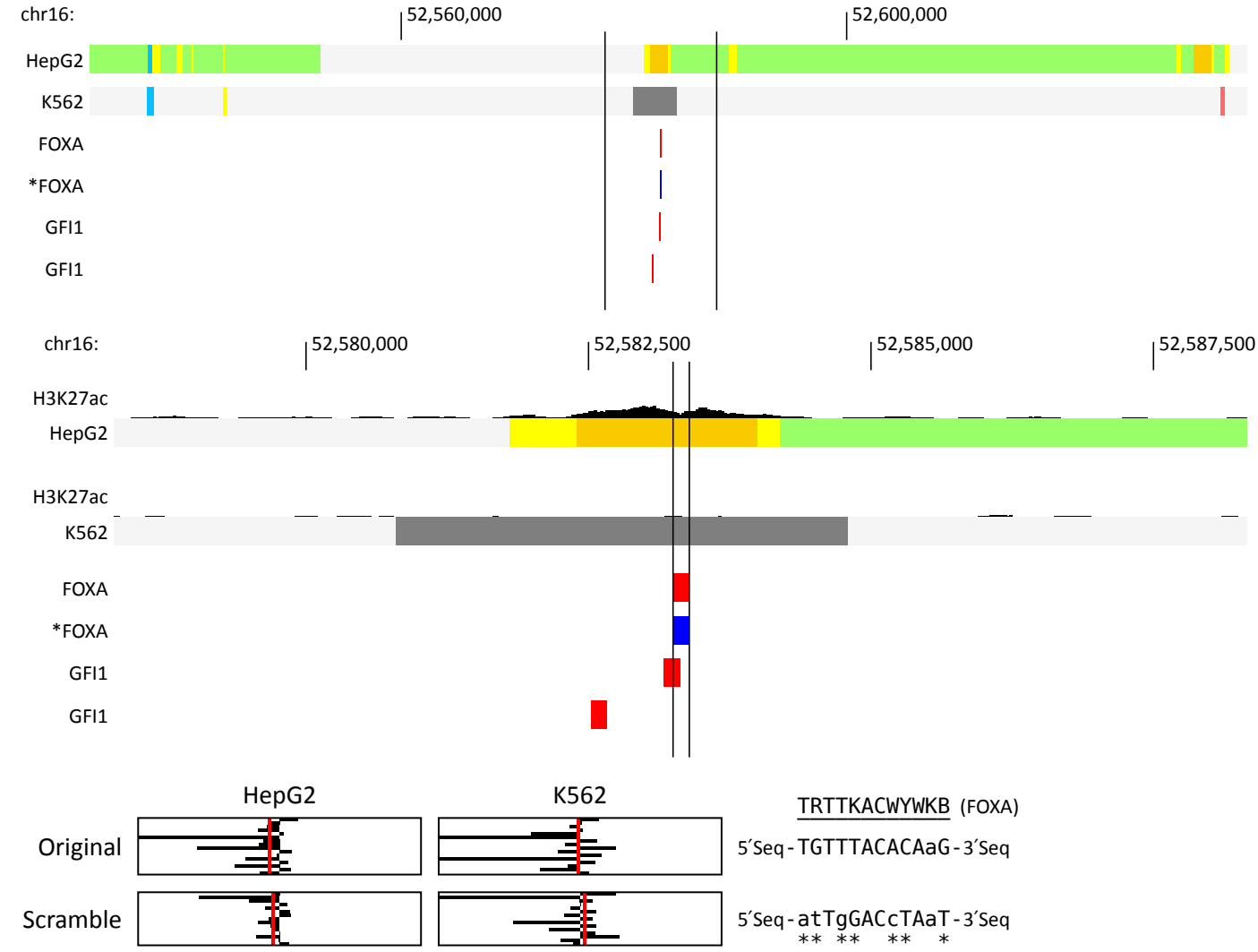
chr16 52583315 52583326 + (hg18)



5′Seq = aagtcattcaaacactttaaaactgaaattgttttgttctgaagtagggttcagttgggctactgaa
3′Seq = ccagttgctgccaggaactgtaggatggggaagaaaaccacacttctccccgcctccacccagccc

1882 FOXA in HepG2 enhancer

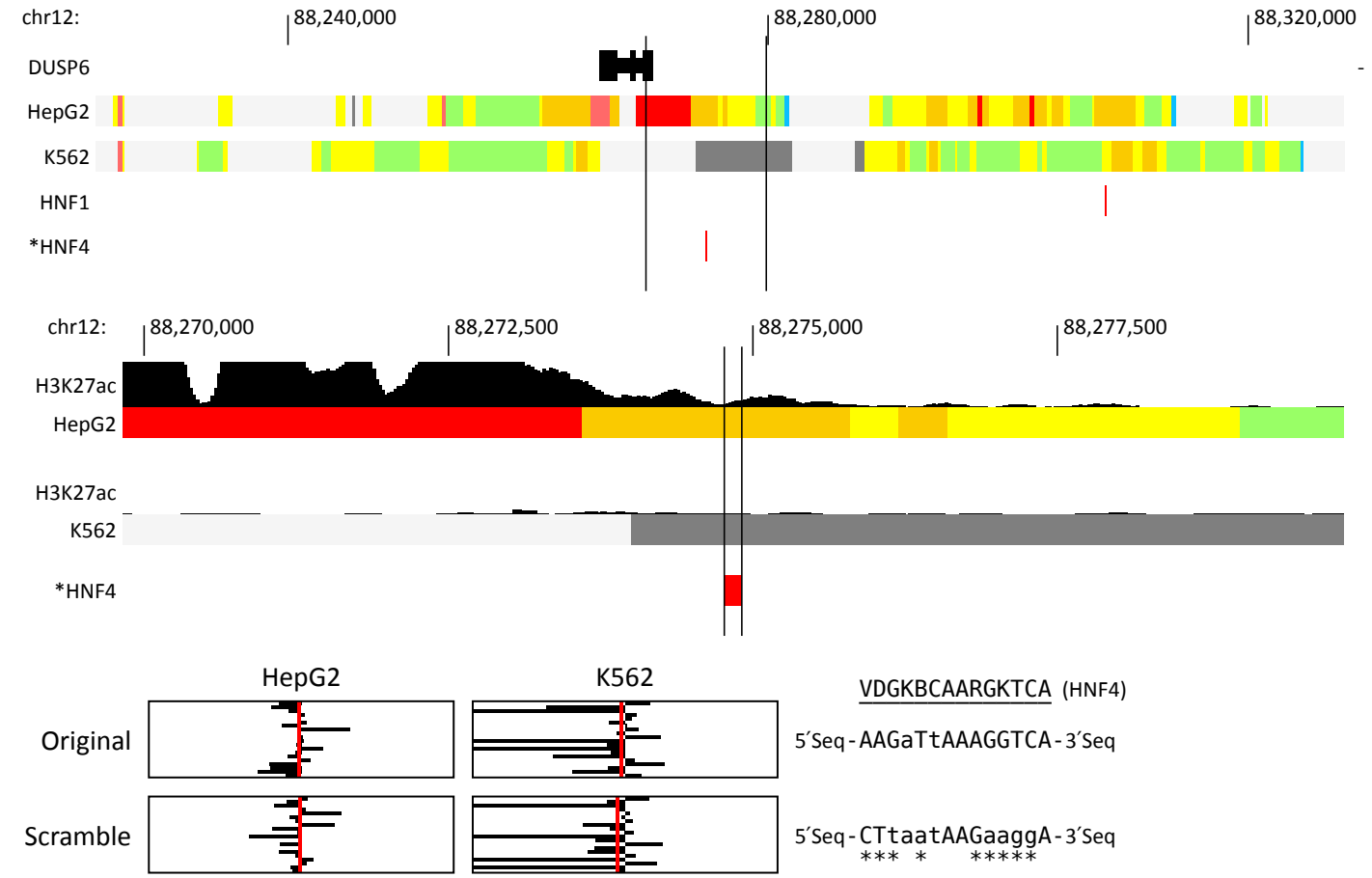
chr16 52583315 52583326 + (hg18)



5′Seq = aagtcattcaaacactttaaaactgaaattgttttgttctgaagtagggttcagttgggctactgaa
3′Seq = ccagttgctgccaggaactgtaggatggggaagaaaaccacacttctccccgcctccacccagccc

1883 HNF4 in HepG2 enhancer (conserved at 50% confidence)

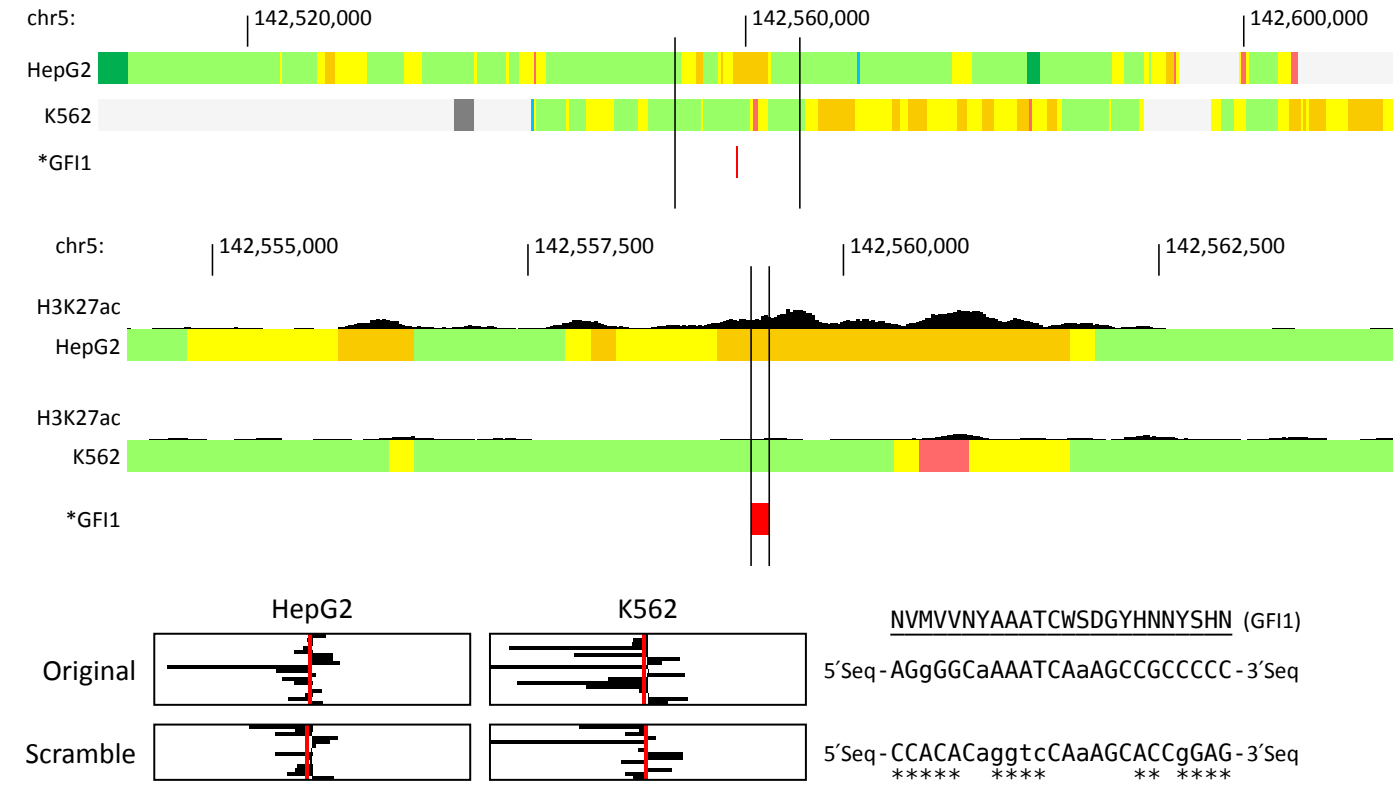
chr12 88274831 88274844 - (hg18)



5′Seq = atctgtttaactgttttcacatgatgtgttaataaatgtcattgtattcacagagattattccaag
3′Seq = tgctagcccatttgcatcttataaatctcaagtgccctcaaactcaggaaaattcctgcaaaagt

1884 GFI1 in HepG2 enhancer (conserved at 40% confidence)

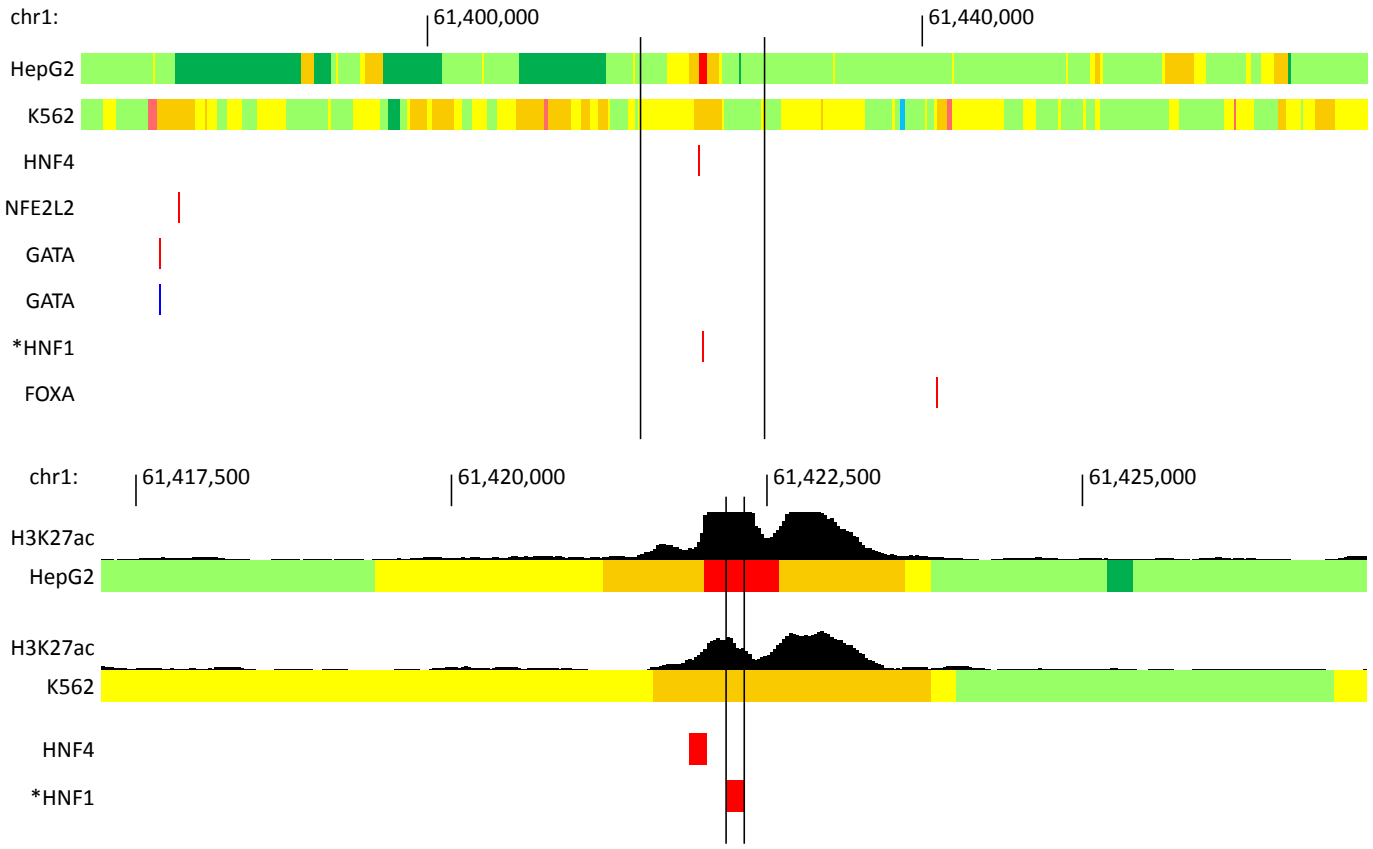
chr5 142559329 142559352 + (hg18)

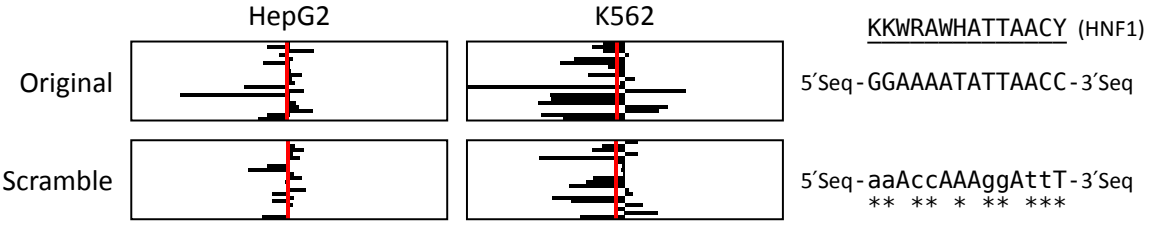


5′Seq = tgggattagattagataggacattttagattttcatggaattttcttctctttttcatcat
3′Seq = tgttagtttaatagcaccatcaccacctaacagtctaacctggaaggggaactgacagca

1885 HNF1 in K562 enhancer (conserved at 60% confidence)

chr1 61422242 61422255 - (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GGAAAATATTAACC-3′Seq

5′Seq-aaAccAAAggAttT-3′Seq

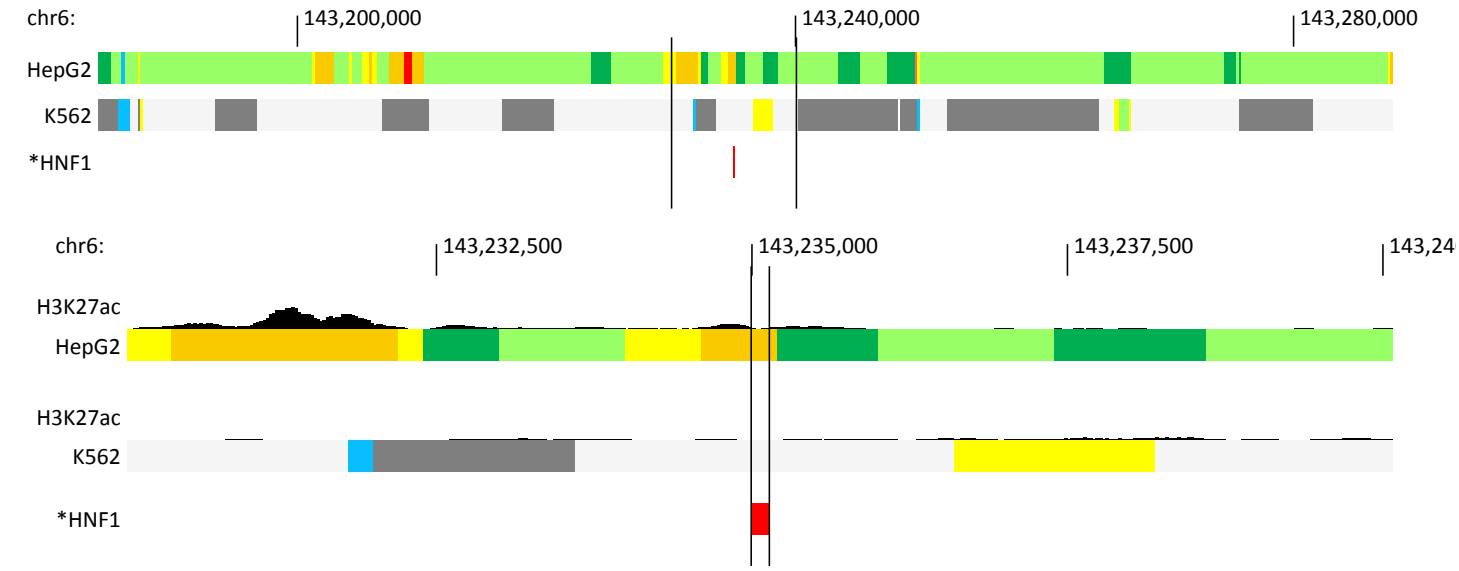
** ** * ** ***

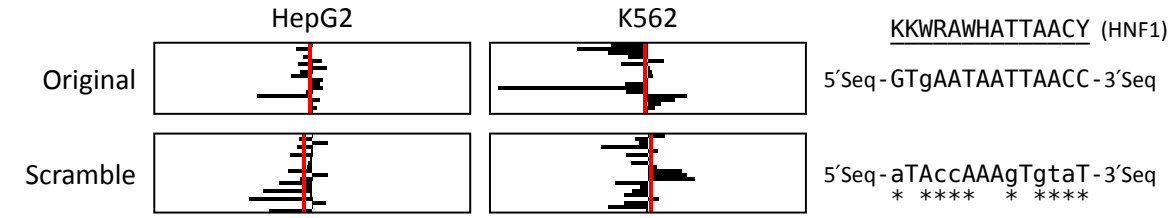
5′Seq = ttctccggctcaatttcacagttcggcatacactcaggcactgtcaaaagcttgacaatgttccag

3′Seq = gtaaactttccaagaggaattaaaggagcaggcagaaatgtcaggacgtcctctctttgaaagc

1886 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 143235060 143235073 - (hg18)

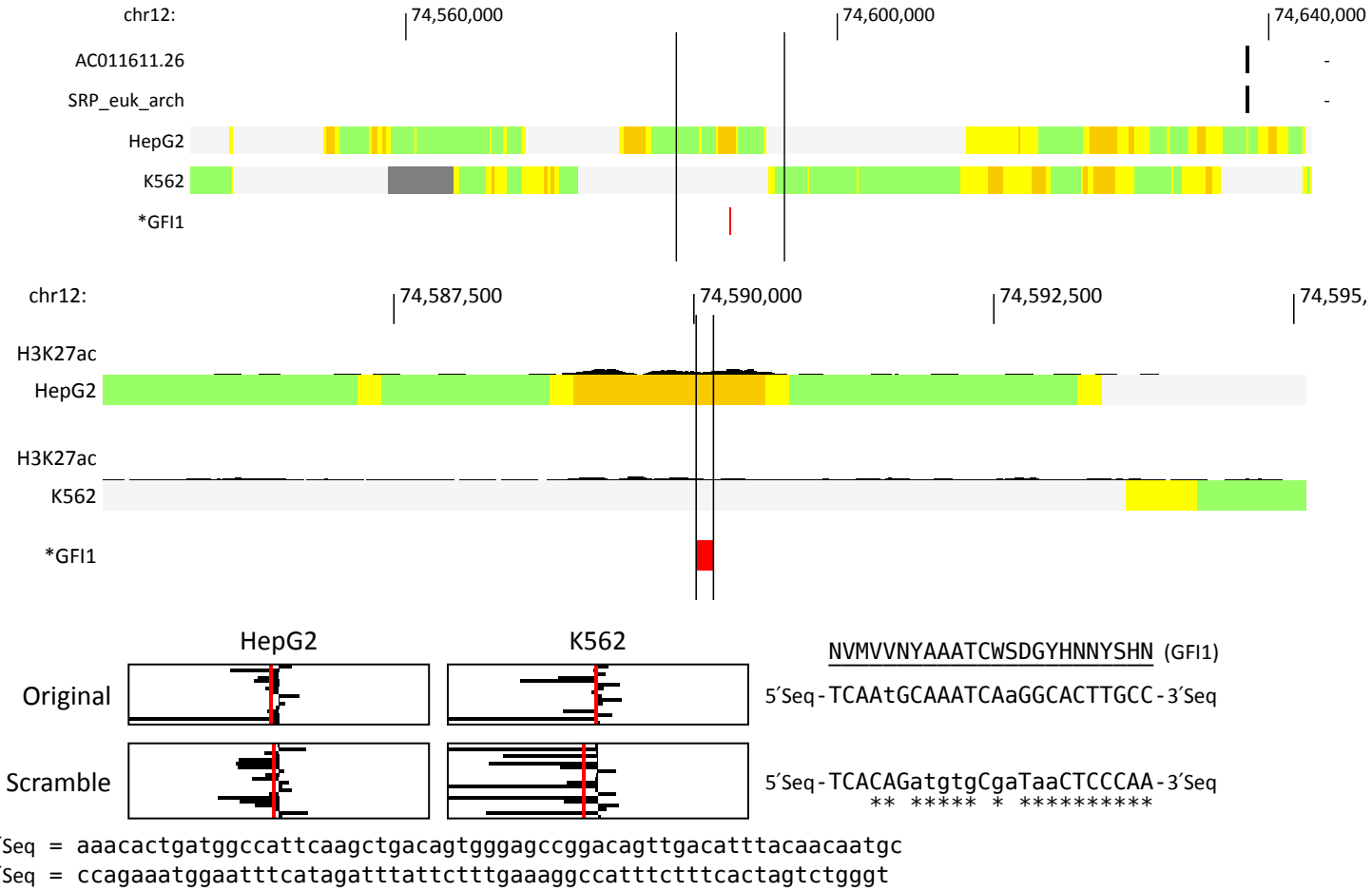




5′Seq = ggacatccttatgttattcaggtctgatgatatttgatctaacgcagattaattactaagctctca
3′Seq = atttgacctgttcccaagttatatactcactgagttagaaatgatttccccaactactaaagata

1887 GFI1 in HepG2 enhancer (conserved at 40% confidence)

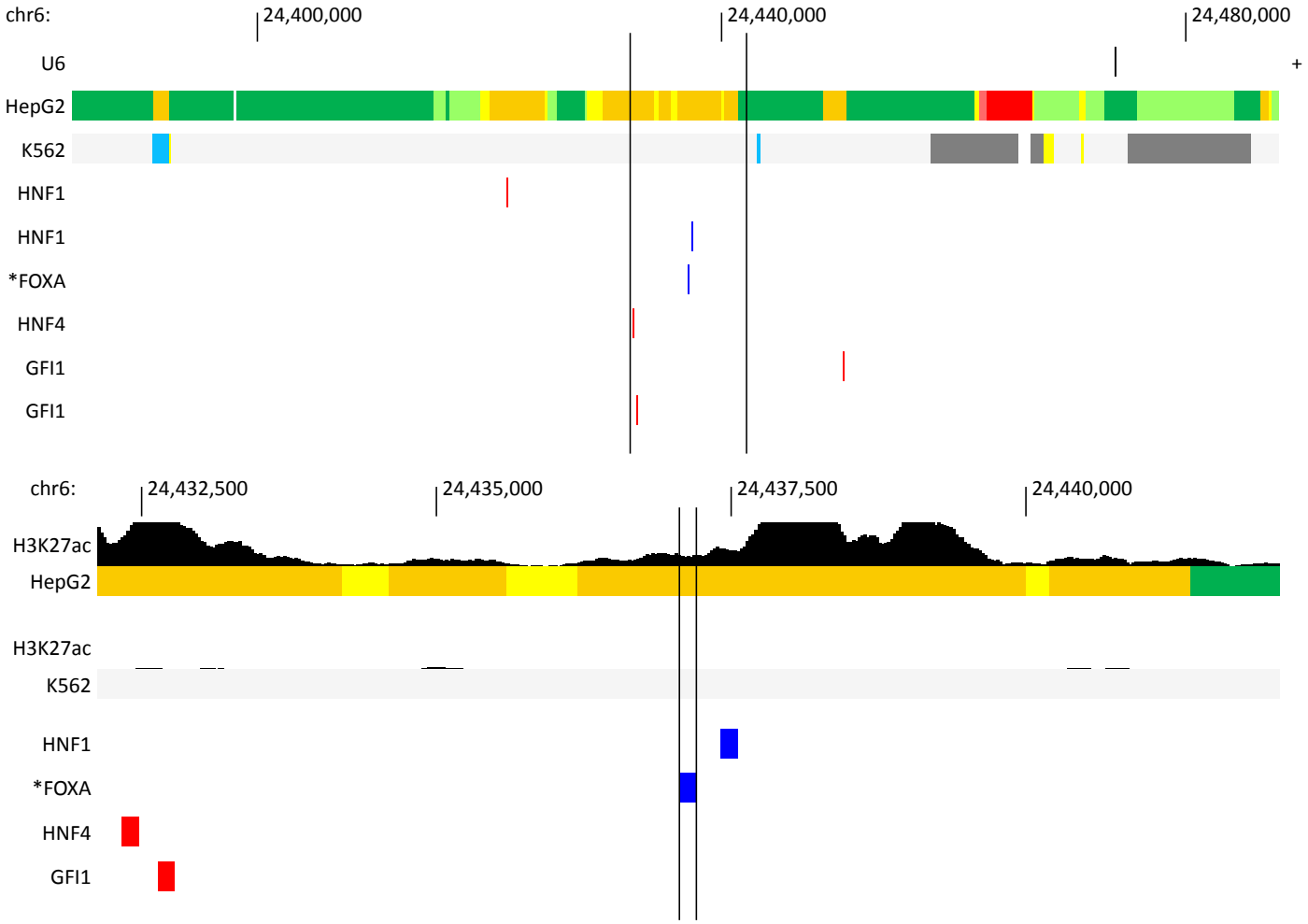
chr12 74590080 74590103 + (hg18)

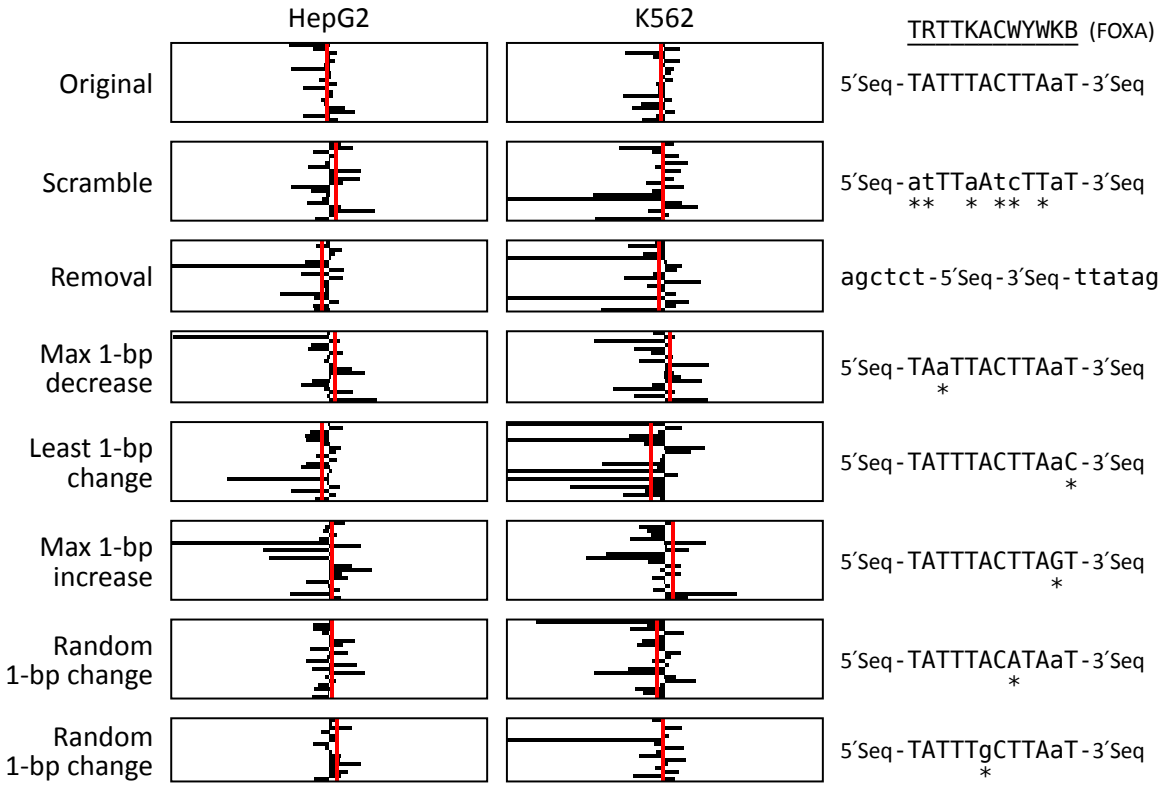


5′Seq = aaacactgatggccattcaagctgacagtgggagccggacagttgacatttacaacaatgc
3′Seq = ccagaaatggaatttcatagatttattctttgaaaggccatttctttcactagtctgggt

1888 FOXA in HepG2 enhancer

chr6 24437128 24437139 + (hg18)



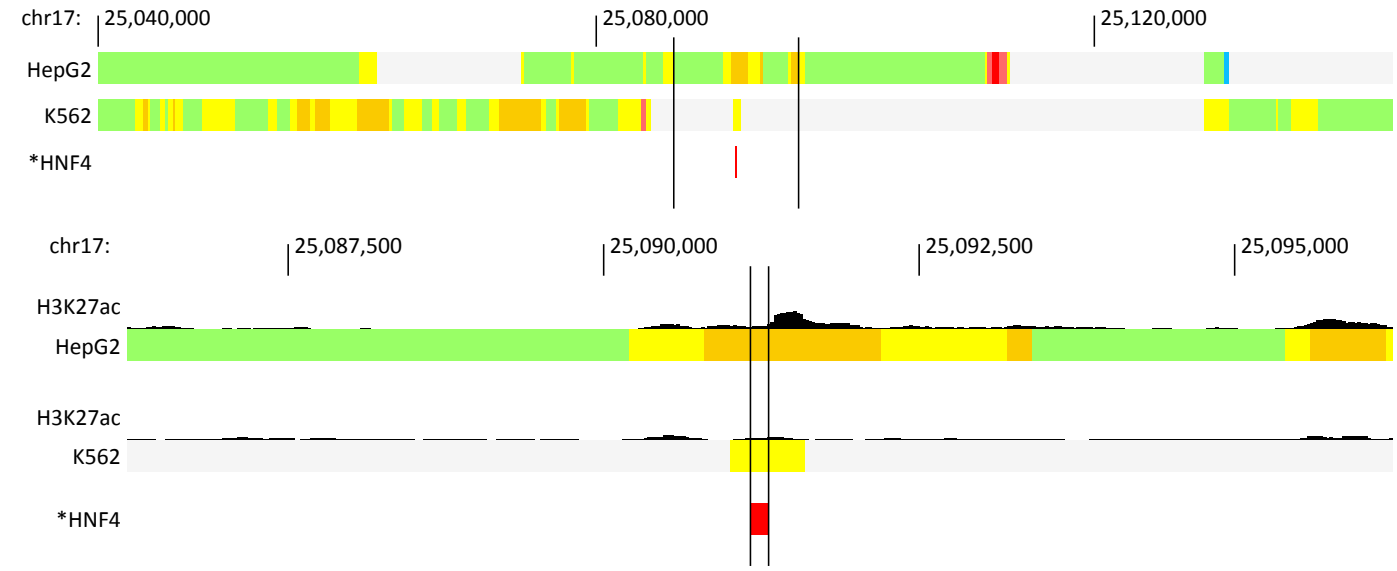


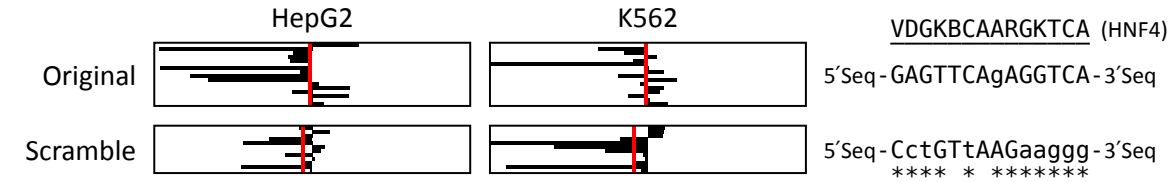
5′Seq = tccttggaaagcaggagccacatagttctcatttttcatcaacatcatgtatccgatacatgataga

3′Seq = atttcttgataaccacagctctaagataaacattagttttttccagtctccacagaggaaattata

1889 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr17 25091229 25091242 - (hg18)

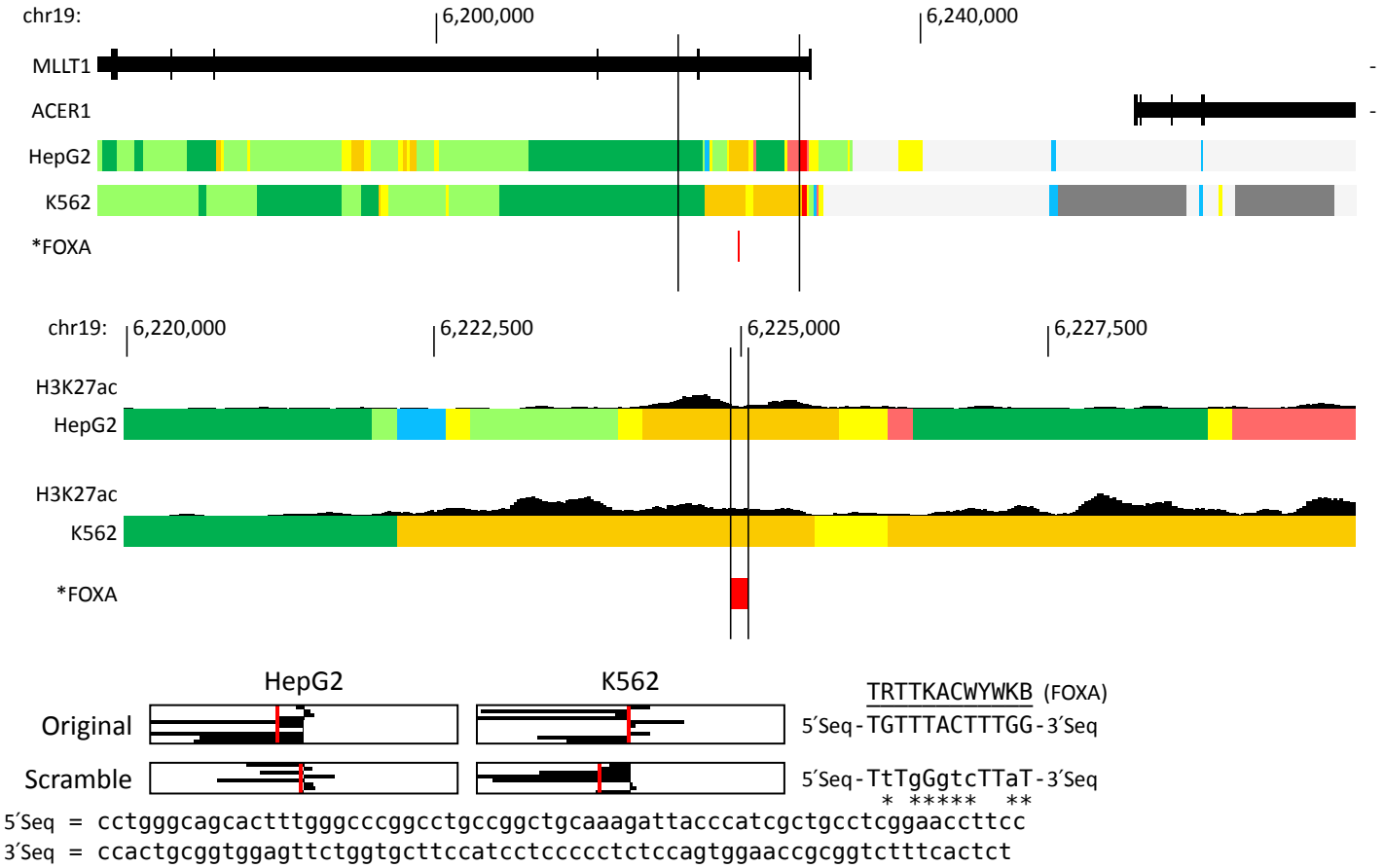




5′Seq = actggagagtggacctctgtggttggcctgtccacctactgtcagagaccaaaggtgactgataag
3′Seq = aaacagatactgcgaggtcaatccagctttaaggagaaagcagttgttttgacatggaggcatca

1890 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr19 6224982 6224993 - (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTTTGG-3′Seq

5′Seq-TtTgGgtcTTaT-3′Seq

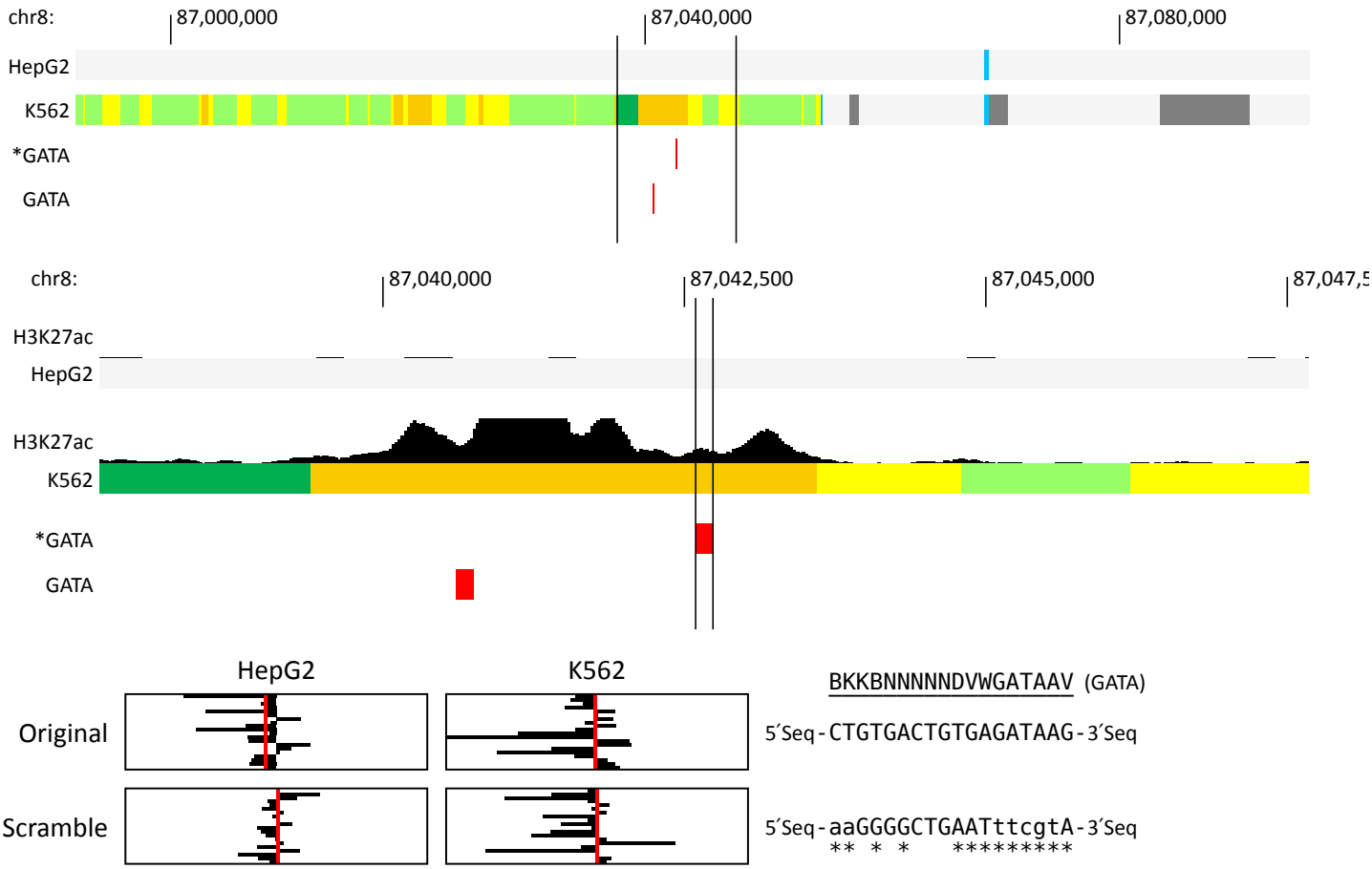
* ***** **

5′Seq = cctgggcagcactttgggcccggcctgccggctgcaaagattacccatcgctgcctcggaaccttcc

3′Seq = ccactgcggtggagttctggtgcttccatcctccccctctccagtggaaccgcggtctttcactct

1891 GATA in K562 enhancer (conserved at 60% confidence)

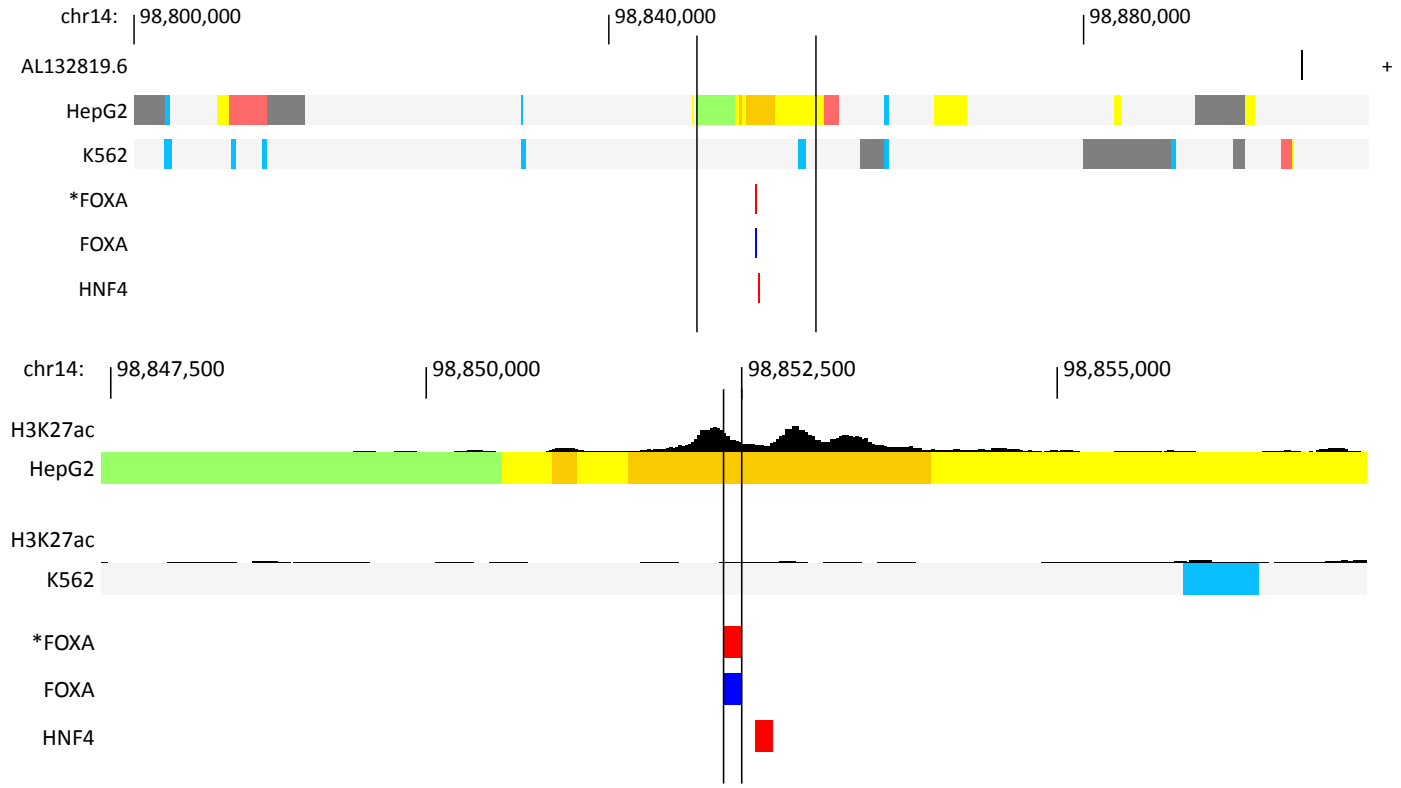
chr8 87042657 87042674 + (hg18)

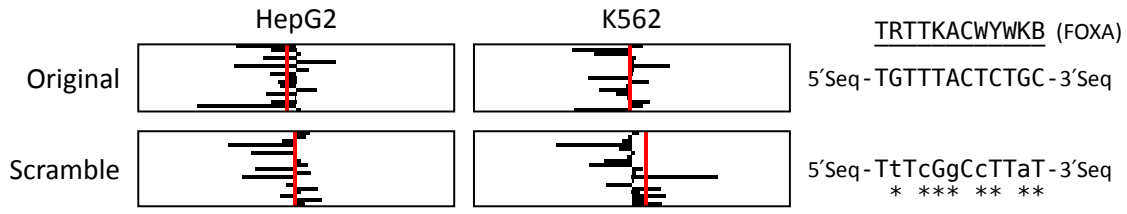


5′Seq = aagccctggtttcagcactaagtggtatcacataacgtttgcacaggtctttatcacatttctc
3′Seq = atgtttgagtttttgctacttctttcaggcagcaggaaaaaacttatcggtatcaacatttttt

1892 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 98852423 98852434 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTCTGC-3′Seq

5′Seq-TtTcGgCcTTaT-3′Seq

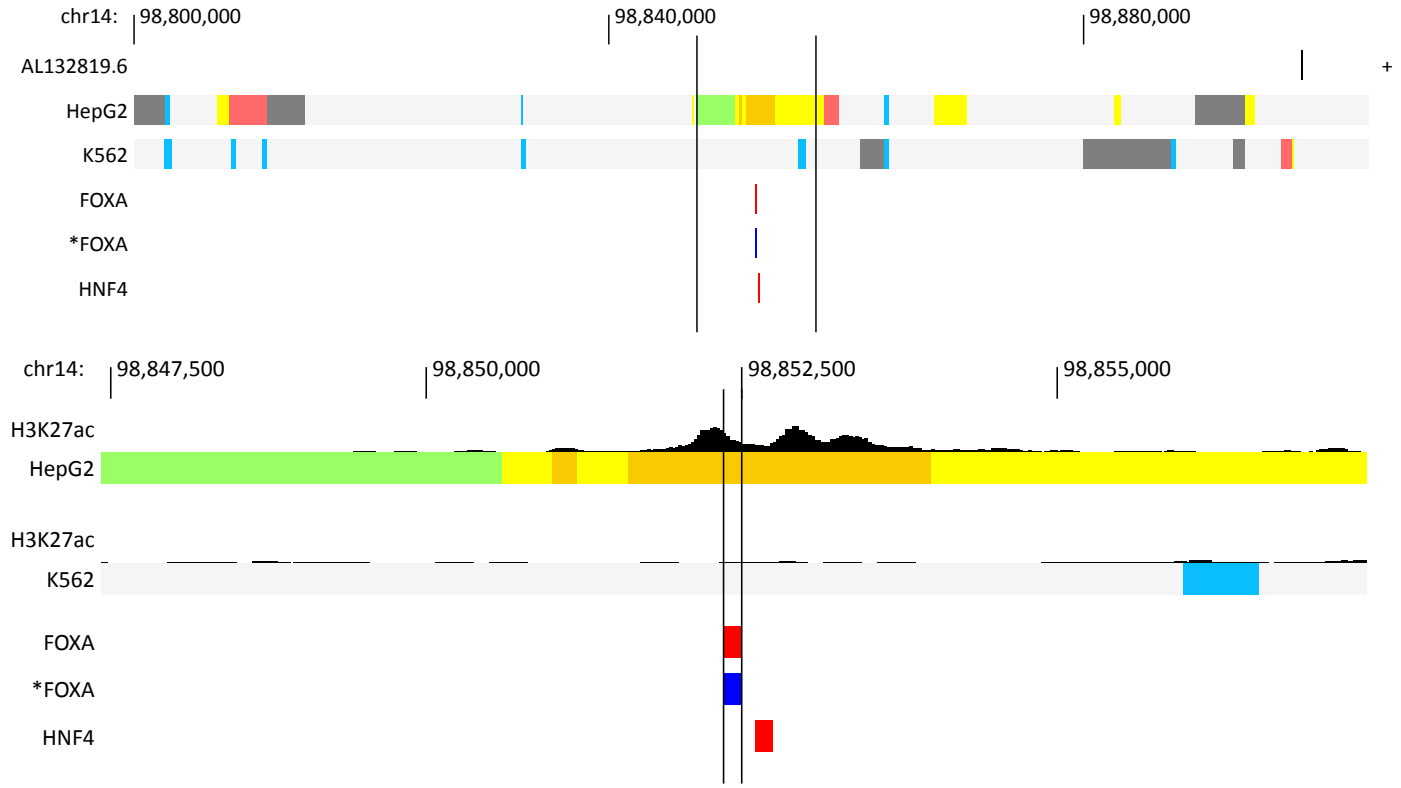
* *** ** **

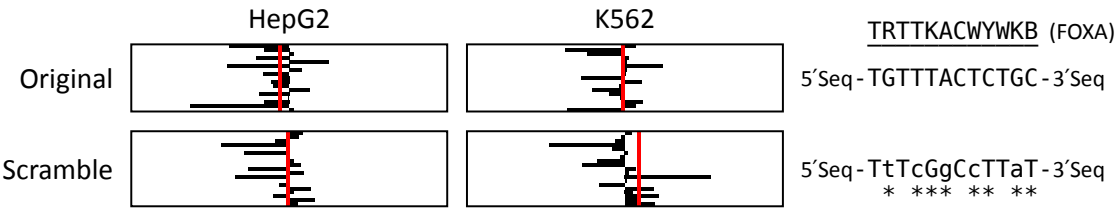
5′Seq = agaaatatatgtcttccagaagaaagagaaagctcctccccattgctgccagccacctctgggtggc

3′Seq = caggtggggtccctcccagggtccactctgaggccgcatgatggcctttgagacggagaacaatgc

1893 FOXA in HepG2 enhancer

chr14 98852423 98852434 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTCTGC-3′Seq

5′Seq-TtTcGgCcTTaT-3′Seq

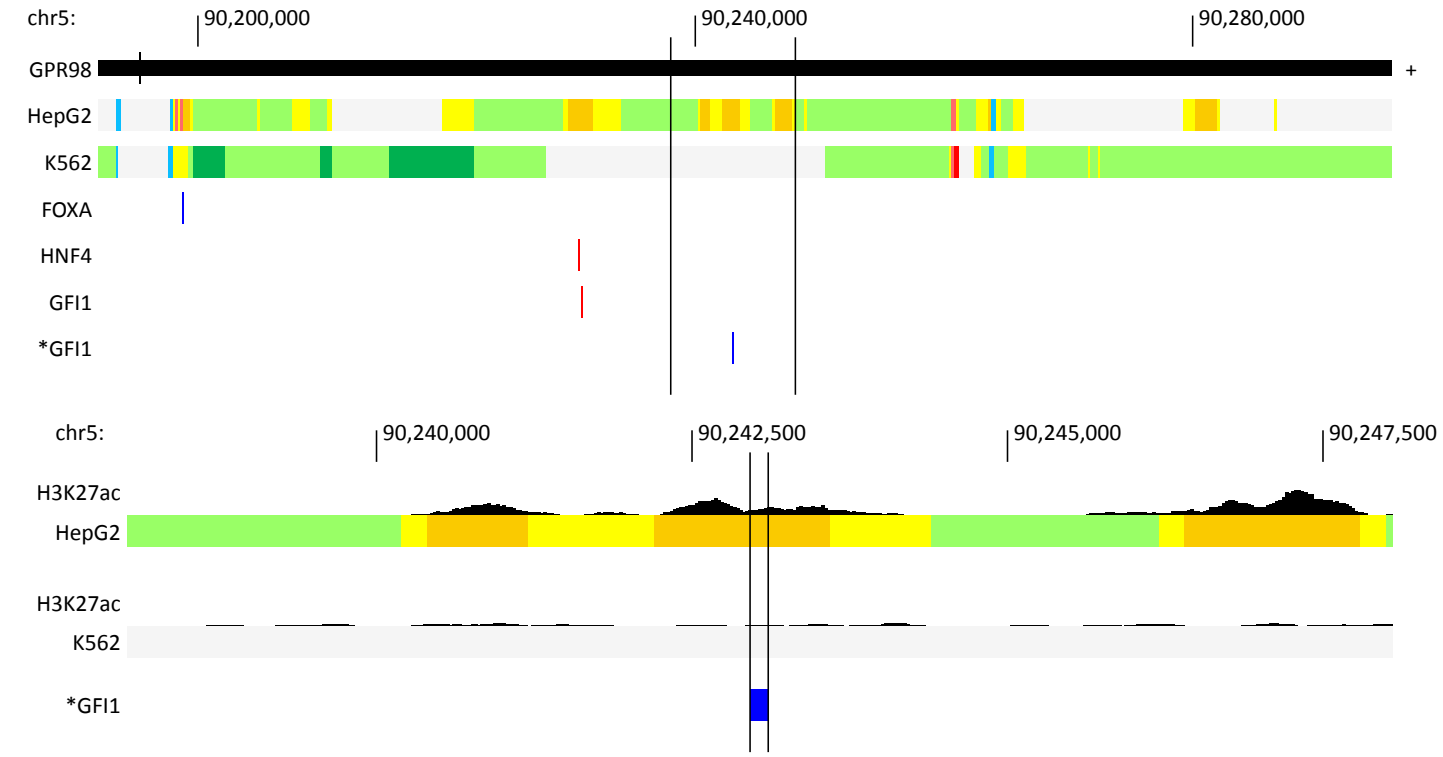
* *** ** **

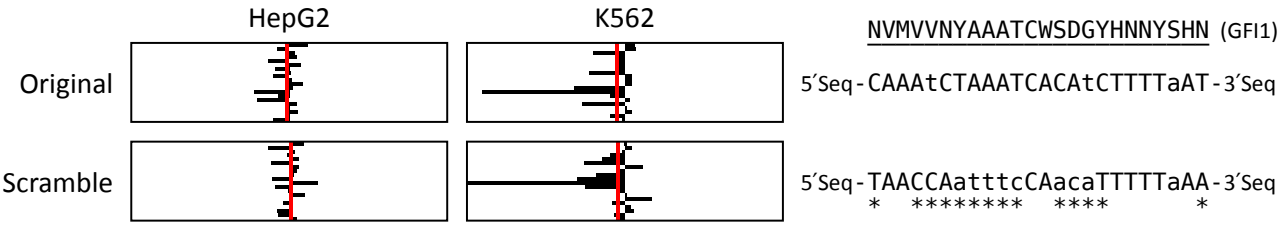
5′Seq = agaaatatatgtcttccagaagaaagagaaagctcctccccattgctgccagccacctctgggtggc

3′Seq = caggtggggtccctcccagggtccactctgaggccgcatgatggcctttgagacggagaacaatgc

1894 GFI1 in HepG2 enhancer

chr5 90243021 90243044 - (hg18)

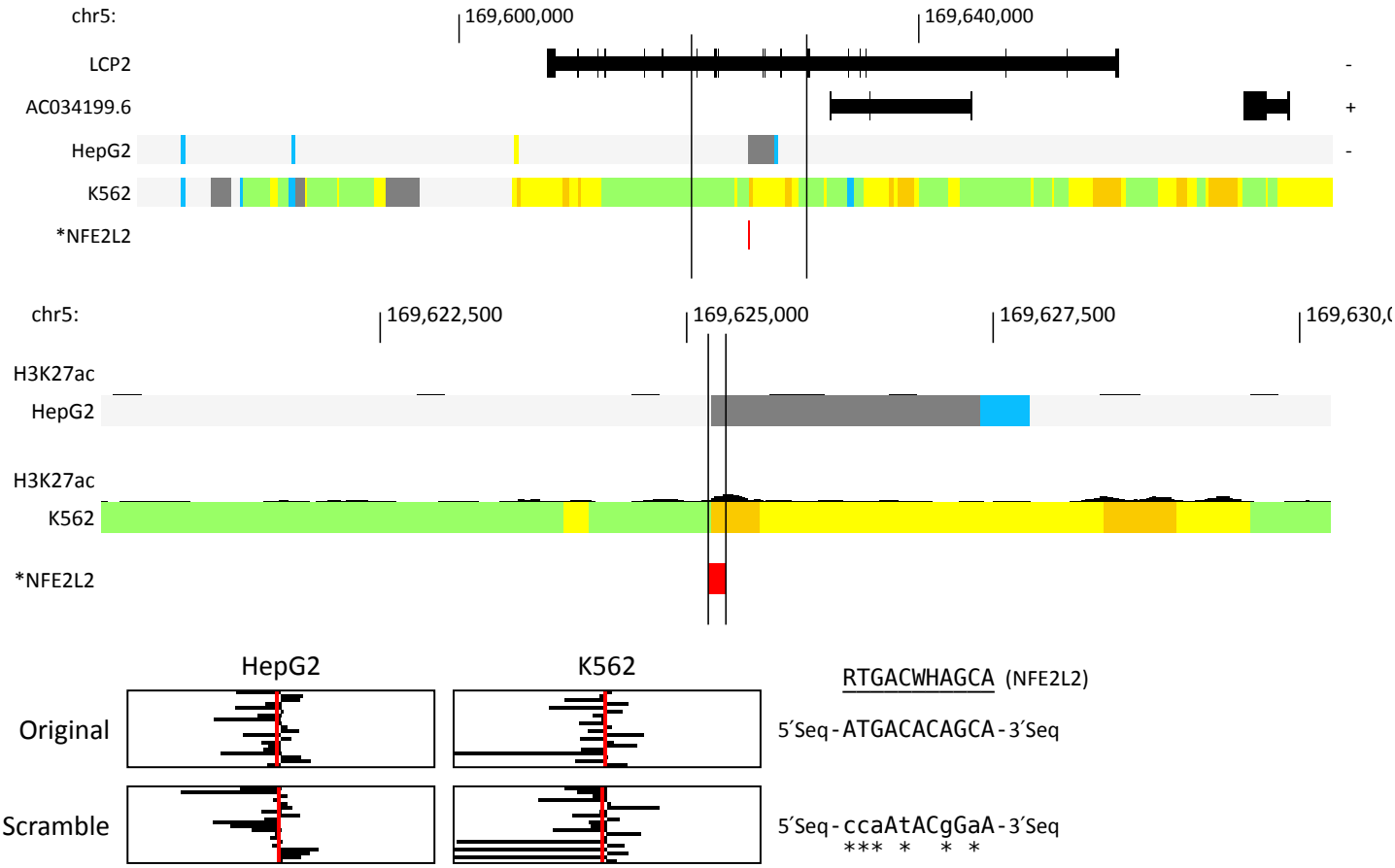




5′Seq = acctgtatgtaaaacaacattgtagattagctttttagtttccacagaaatattaagaaaa
3′Seq = gacctttgaataaacaaagtaaatgatcatgaatatacctcatgaggtctggatcagtgt

1895 NFE2L2 in K562 enhancer (conserved at 60% confidence)

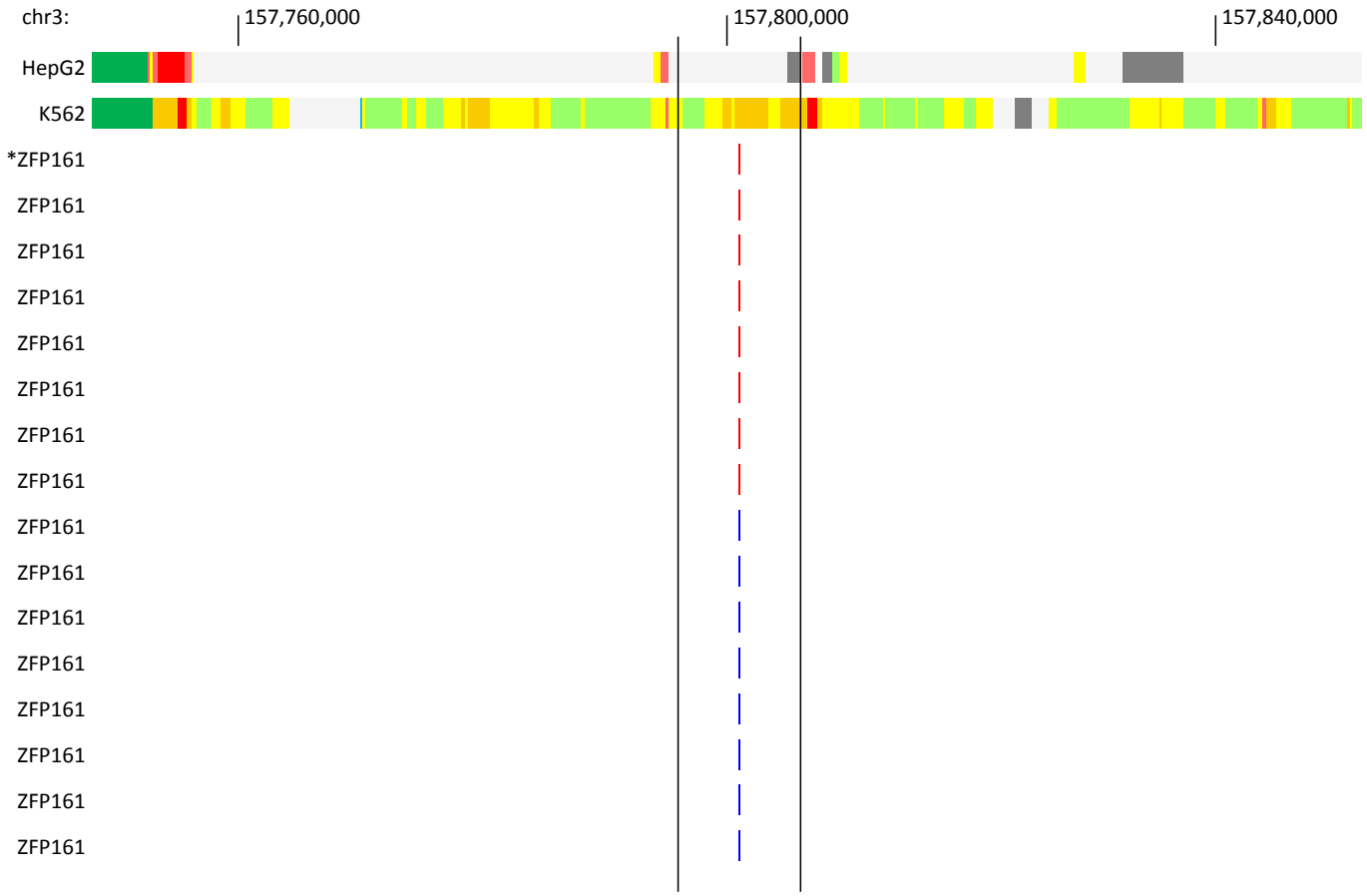
chr5 169625243 169625253 + (hg18)

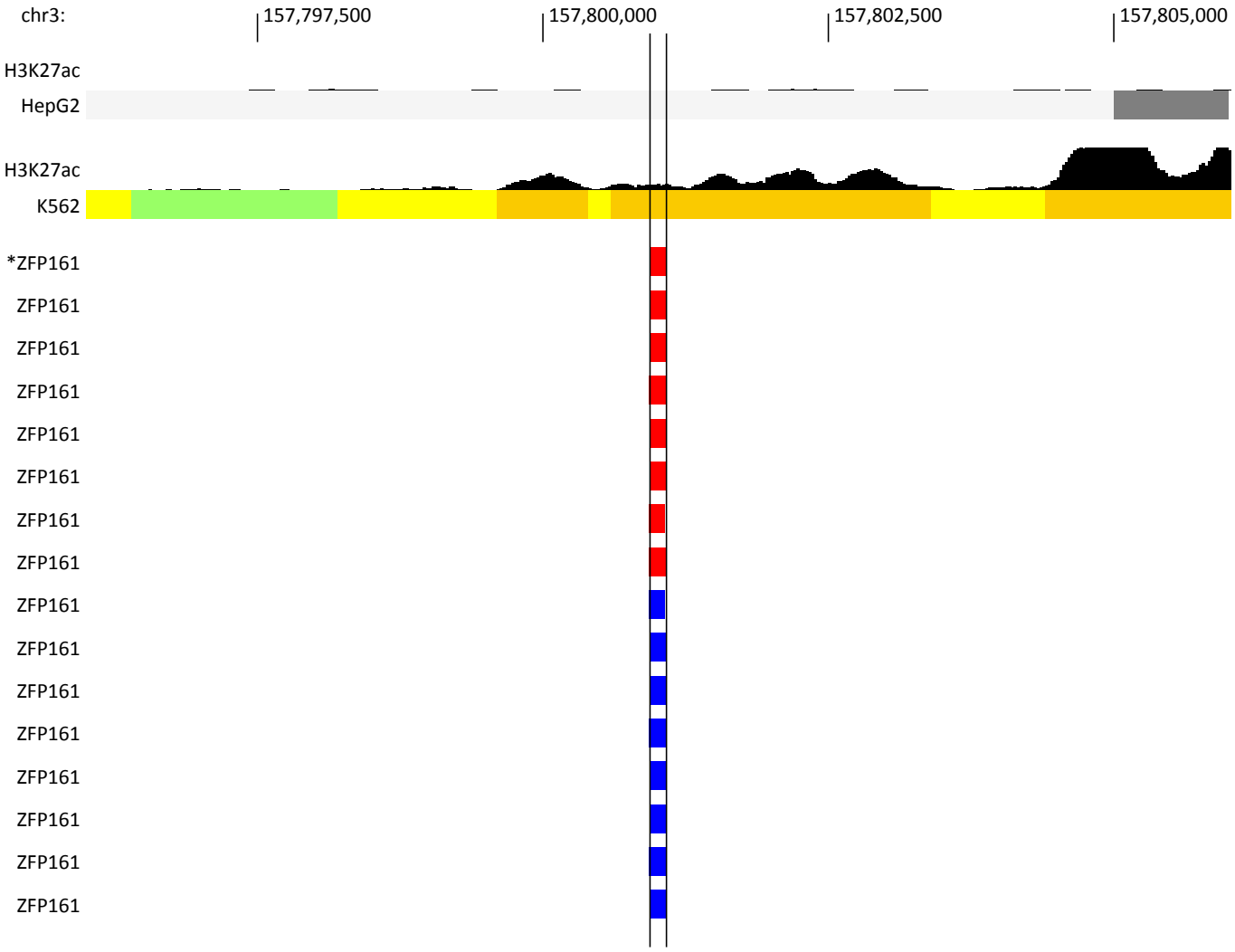


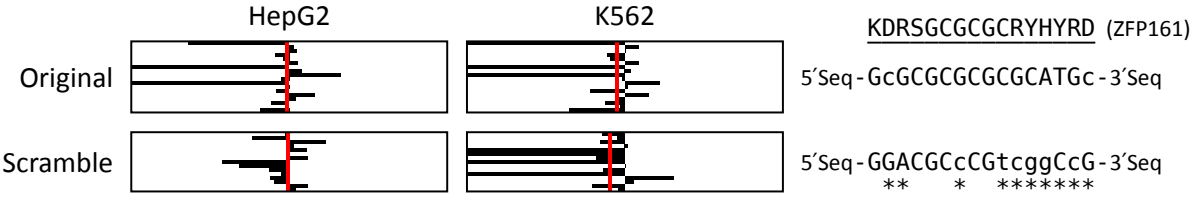
5′Seq = tttccatgtaattatacagctctctacagcagacaattccaagccaaaccagccagcacagctttgc
3′Seq = gagctgtgatgtagttcggggaaagagcagcgagcagcagcctcatatccaagaactgaaagtcatt

1896 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr3 157801003 157801018 + (hg18)



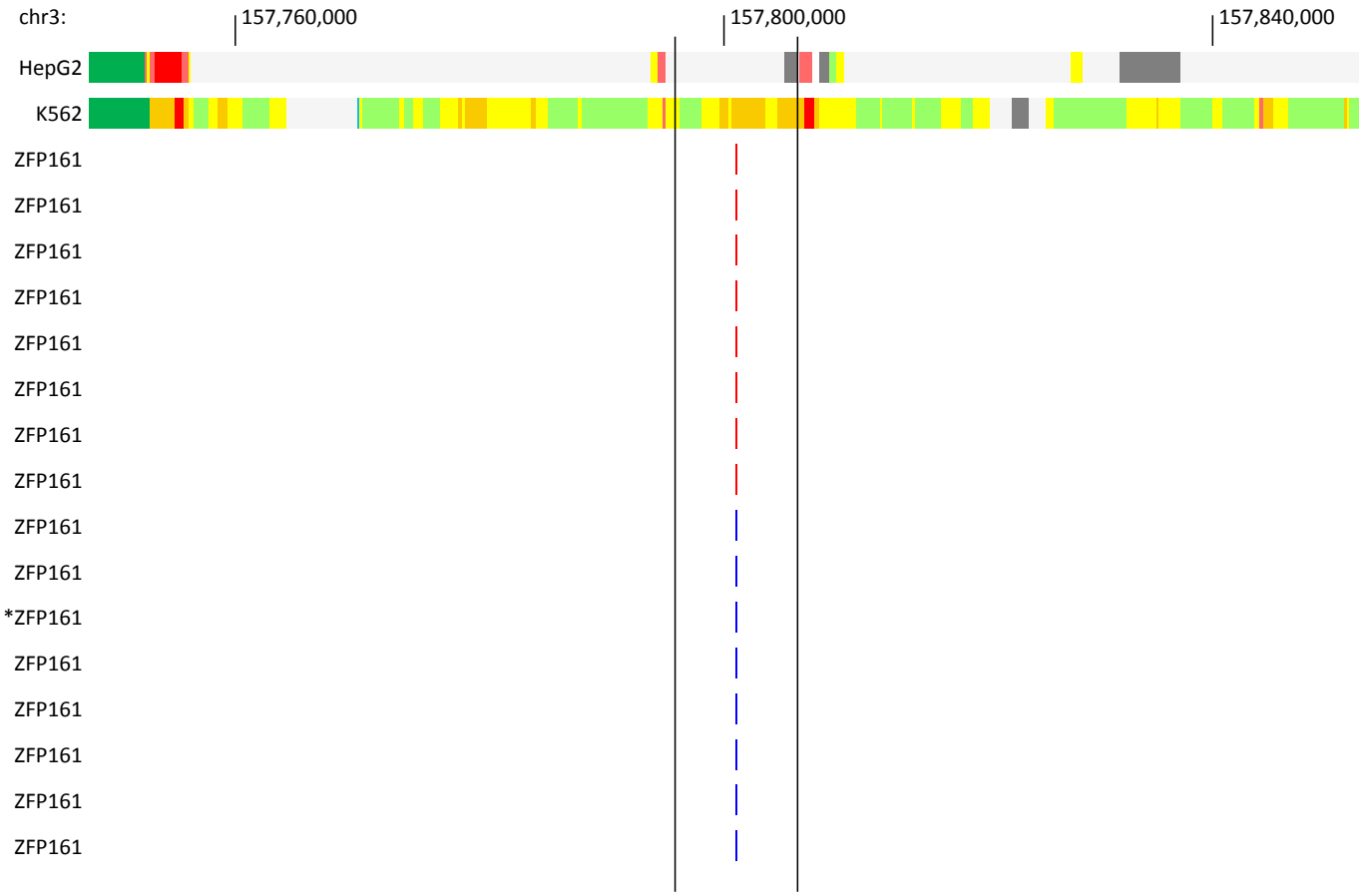


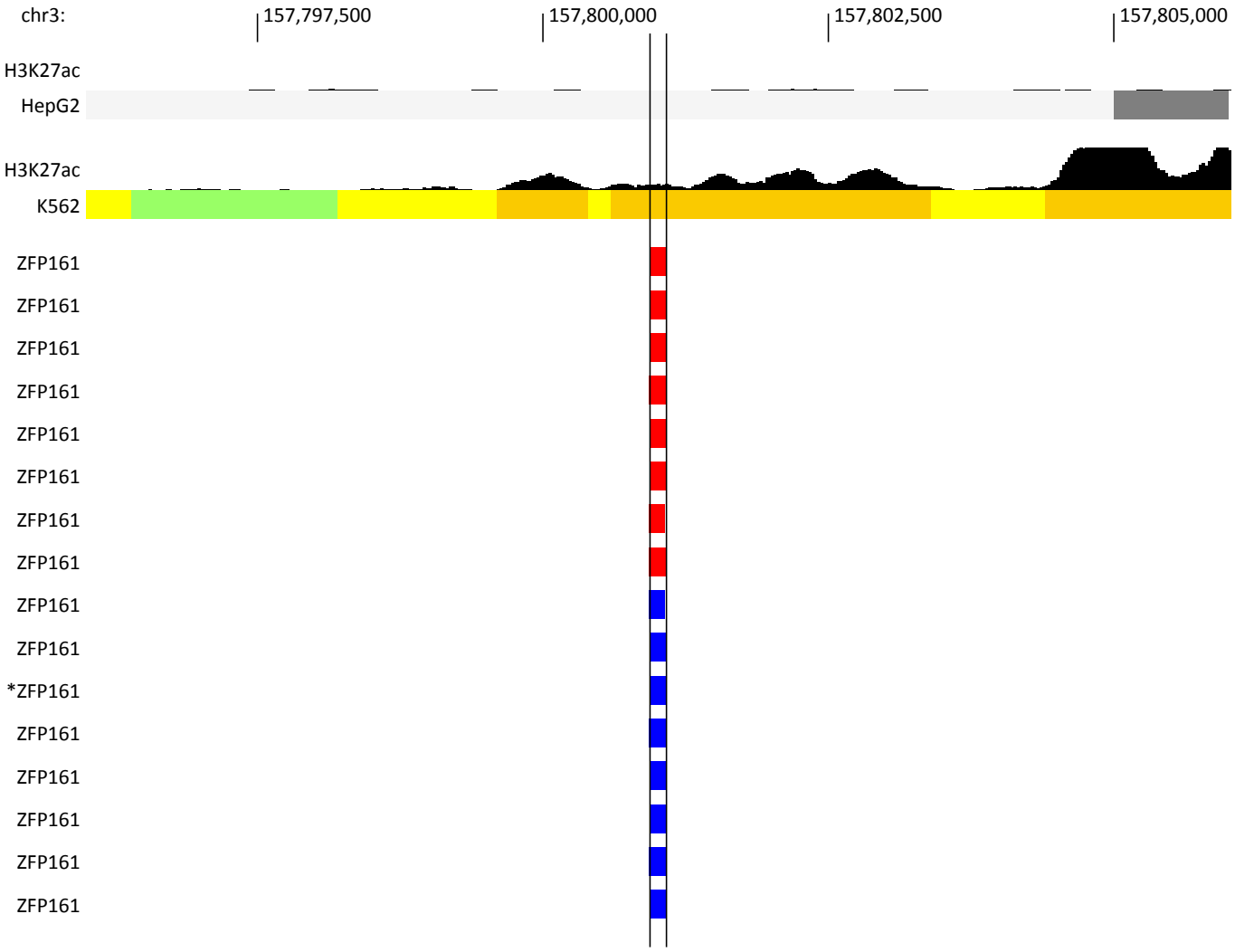


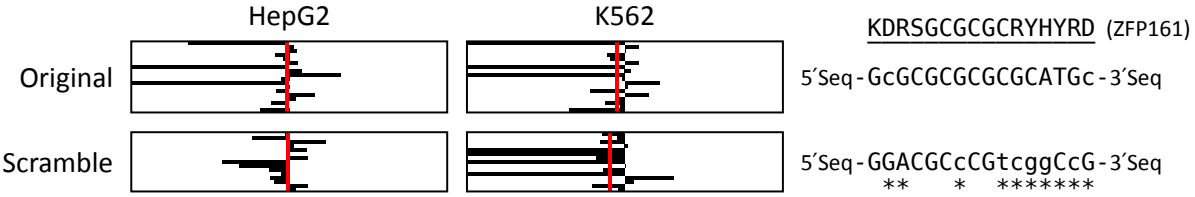
5′Seq = agcttgggtgacagagtgagaccctgtttcaaaaaaaaaaaaaaaaagtgtgtgtgtgtgtgtgc
3′Seq = actgggaaagacaggataatgagagaacaatgttgaacttgatcacatccctaagaaggaagaa

1897 ZFP161 in K562 enhancer

chr3 157801003 157801018 + (hg18)







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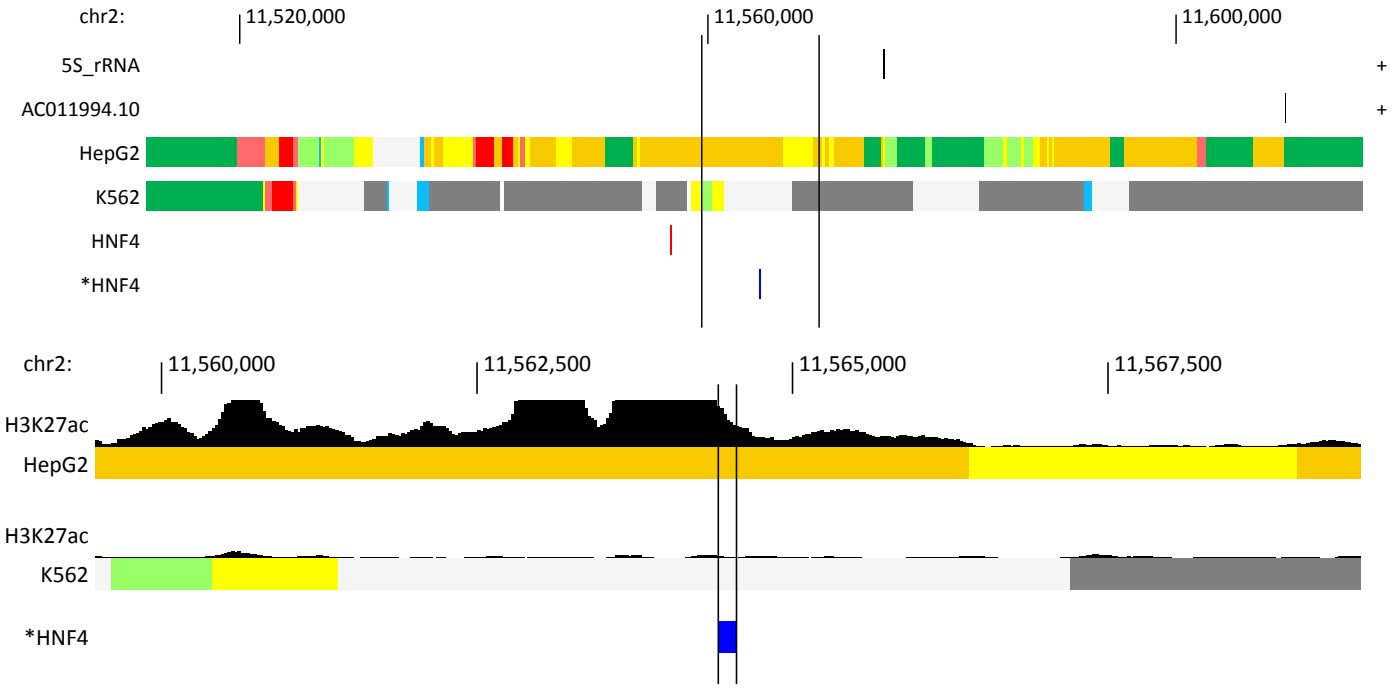
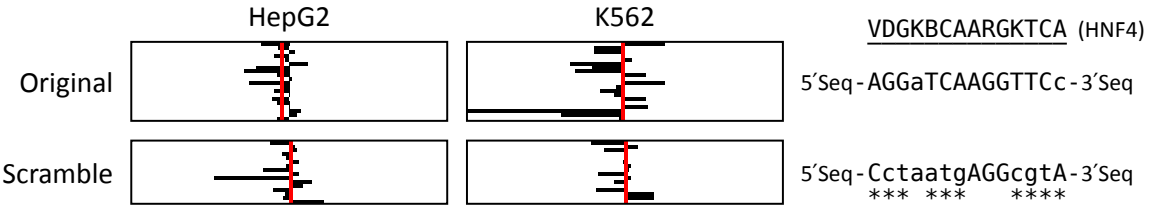
1898 HNF4 in HepG2 enhancer

chr2 11564478 11564491 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-AGGaTCAAGGTTCc-3′Seq

5′Seq-CctaatgAGGcgtA-3′Seq

*** *** ****

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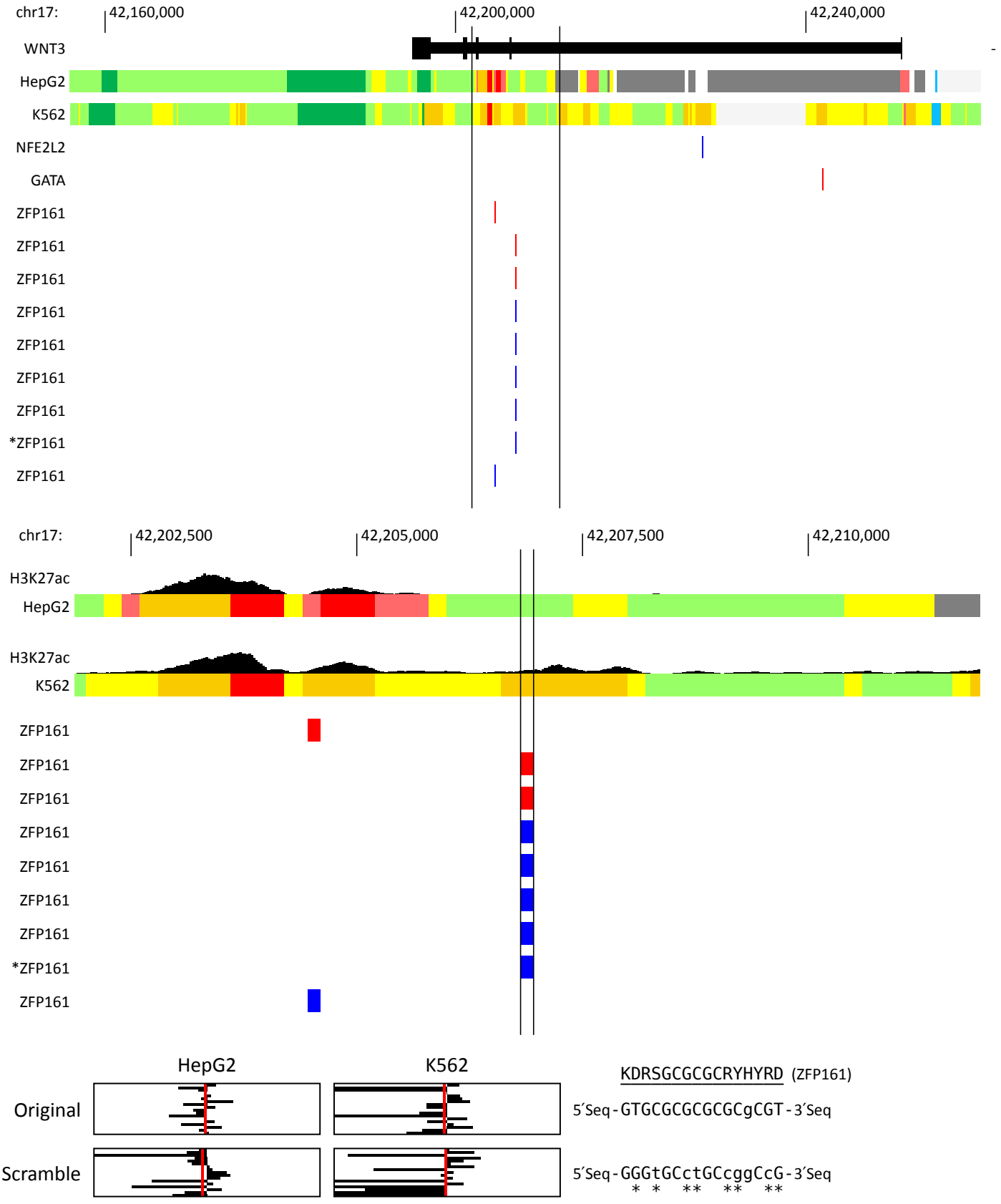
3′Seq = acccacgttaaatacaacatgtgttacatccctttatattttgtgtgaagcaatcaaagaatatt

1899 ZFP161 in K562 enhancer

chr17 42206879 42206894 - (hg18)



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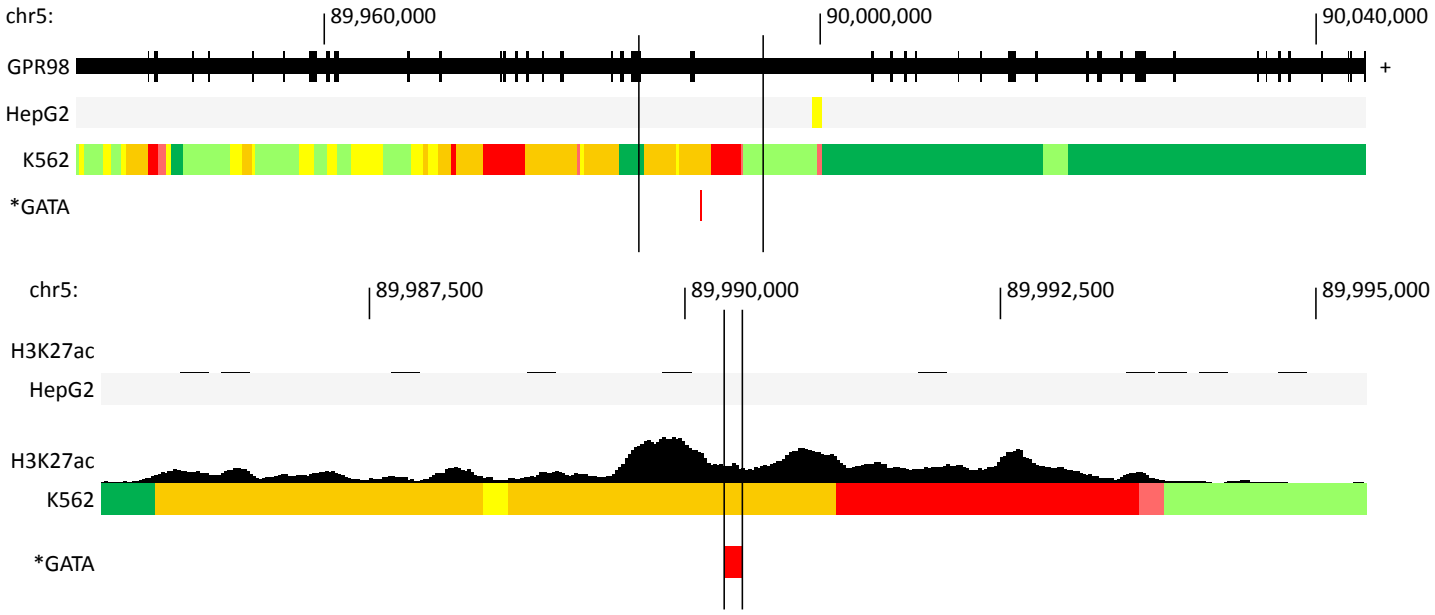
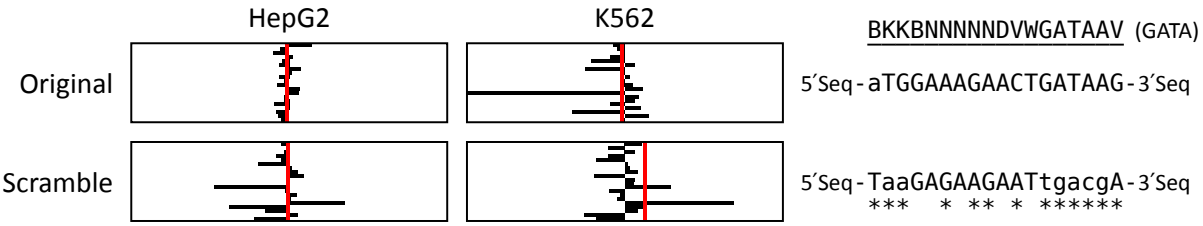
1900 GATA in K562 enhancer (conserved at 60% confidence)

chr5 89990375 89990392 - (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-aTGGAAAGAACTGATAAG-3′Seq

5′Seq-TaaGAGAAGAATtgacgA-3′Seq

*** * ** * ******

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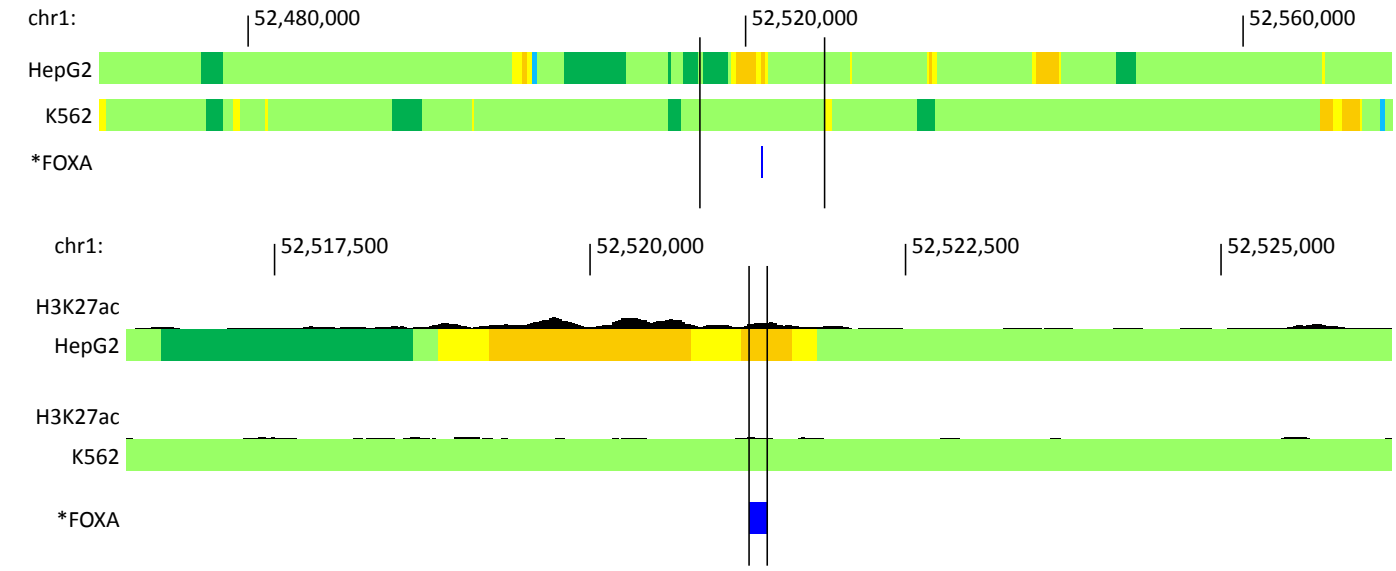
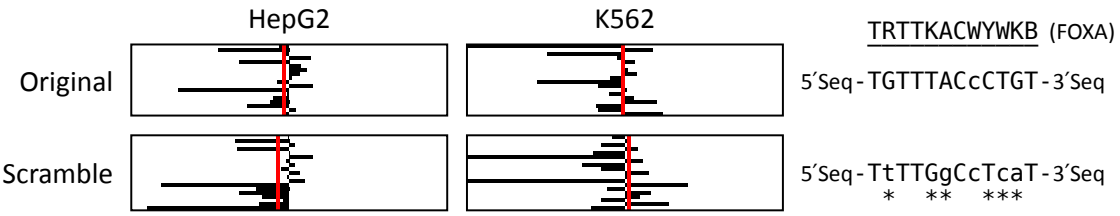
3′Seq = gacagtaagacagcctaatgaattaagctggccaagaaggttgataagaaaggtatttacacc

1901 FOXA in HepG2 enhancer

chr1 52521327 52521338 + (hg18)





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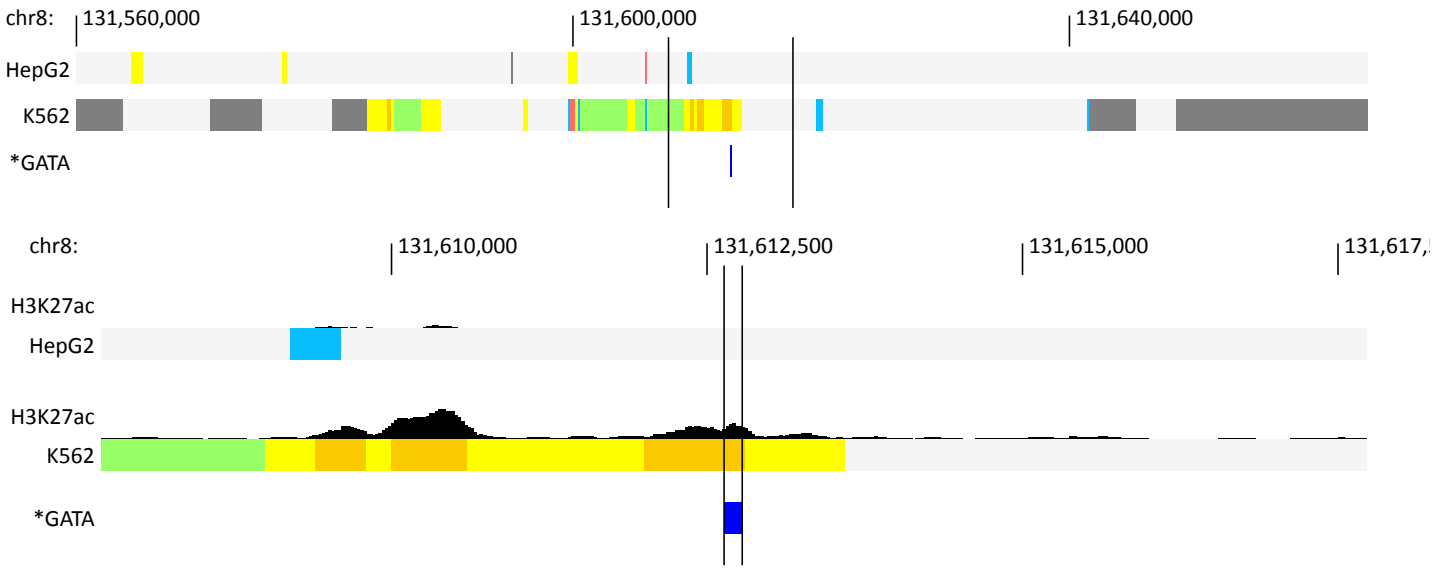
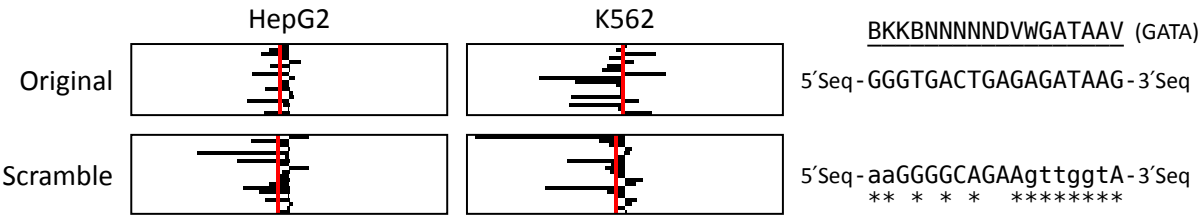
1902 GATA in K562 enhancer

chr8 131612699 131612716 - (hg18)





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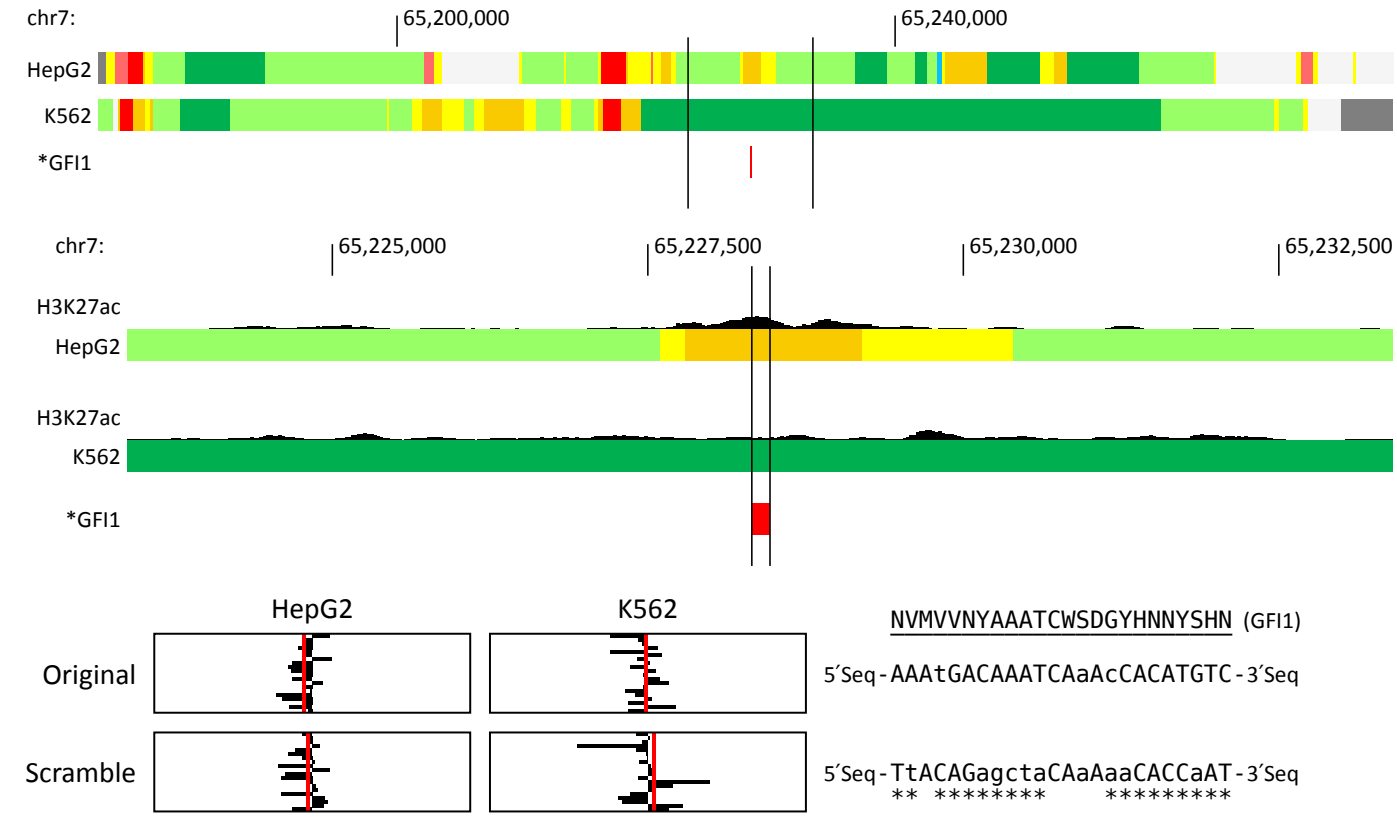
3′Seq = acagaaagccaggagcttgcctacaaaggaggaagagatgtgtgctcatagttaagggaggat

1903 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr7 65228385 65228408 - (hg18)



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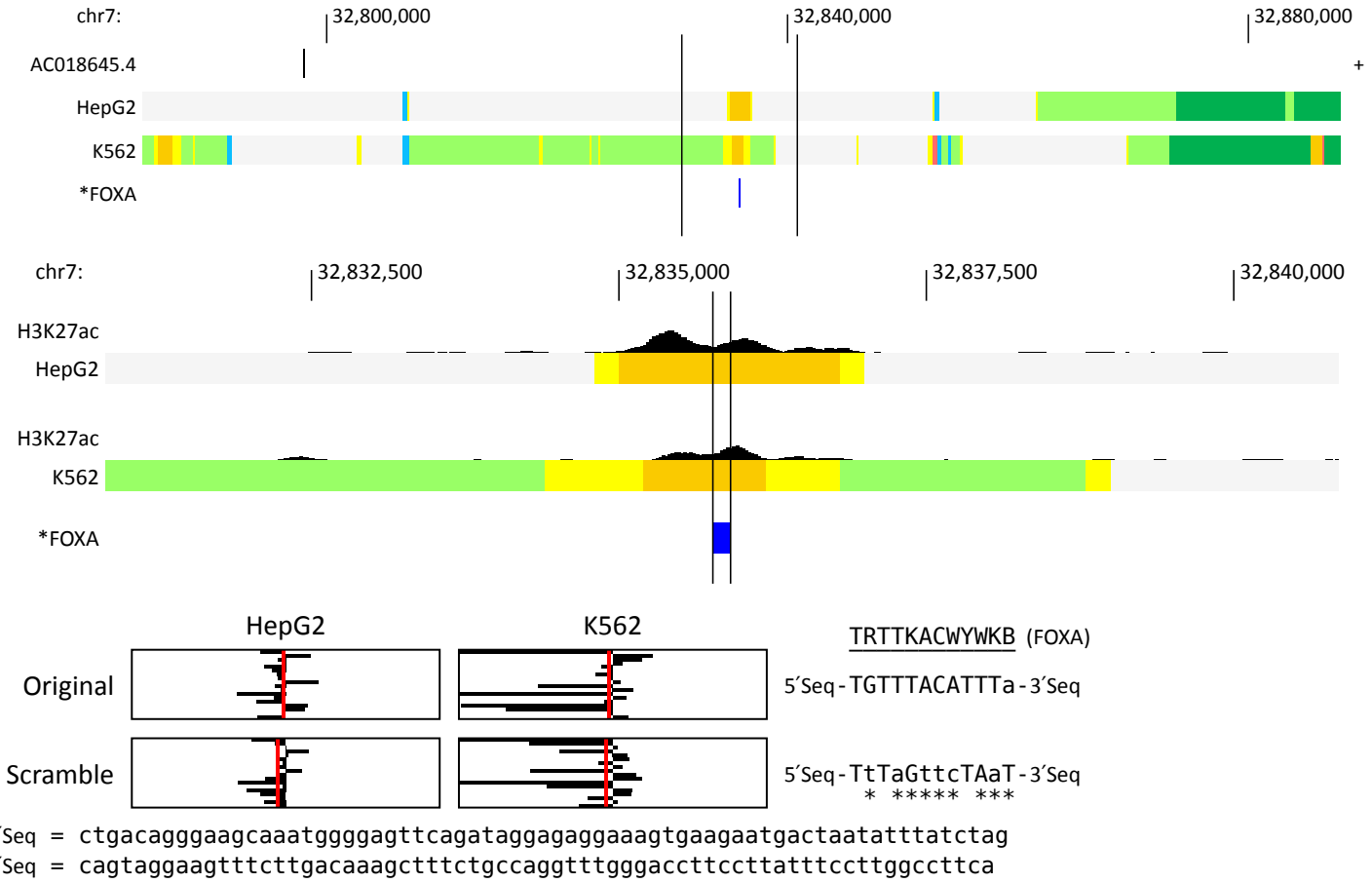
1904 FOXA in HepG2 enhancer

chr7 32835831 32835842 + (hg18)



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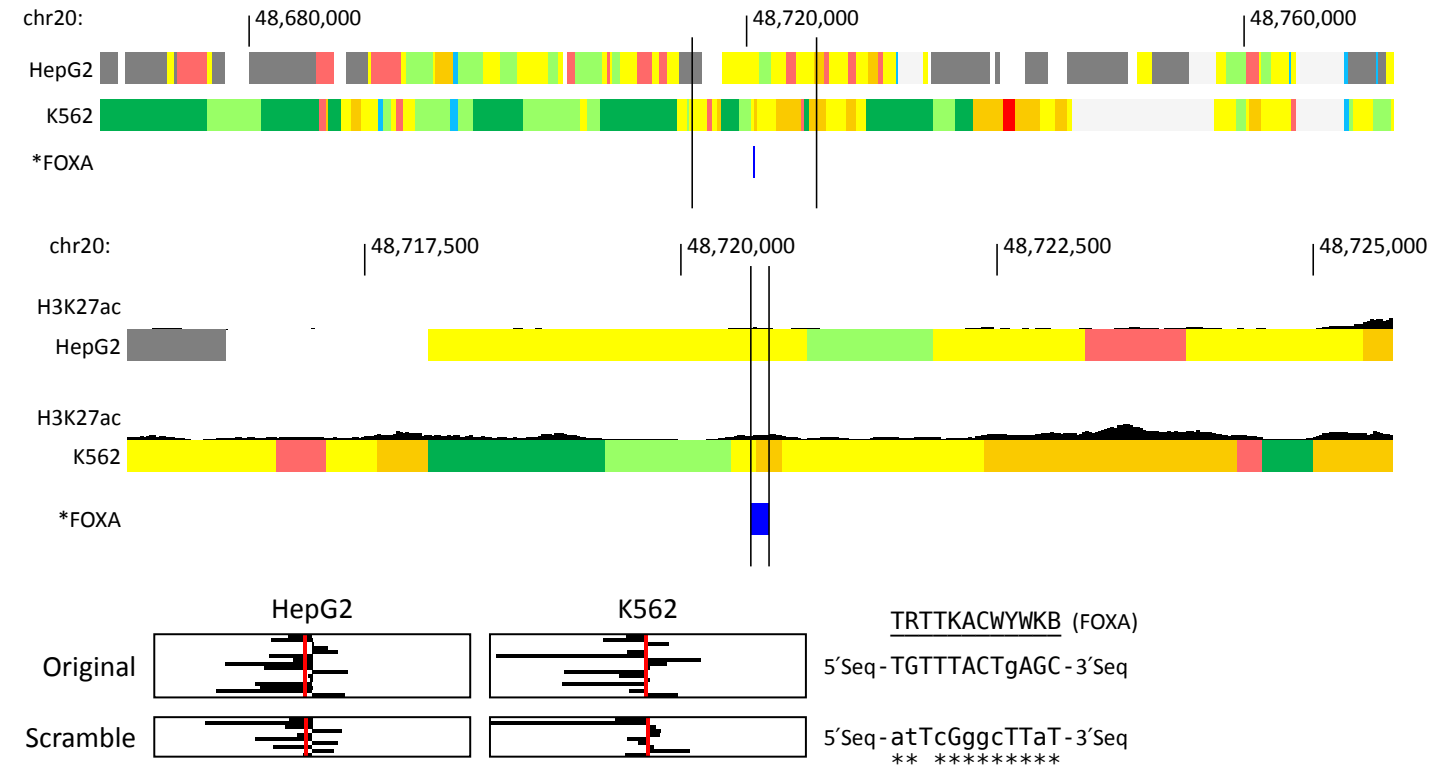
1905 FOXA in K562 enhancer

chr20 48720620 48720631 - (hg18)



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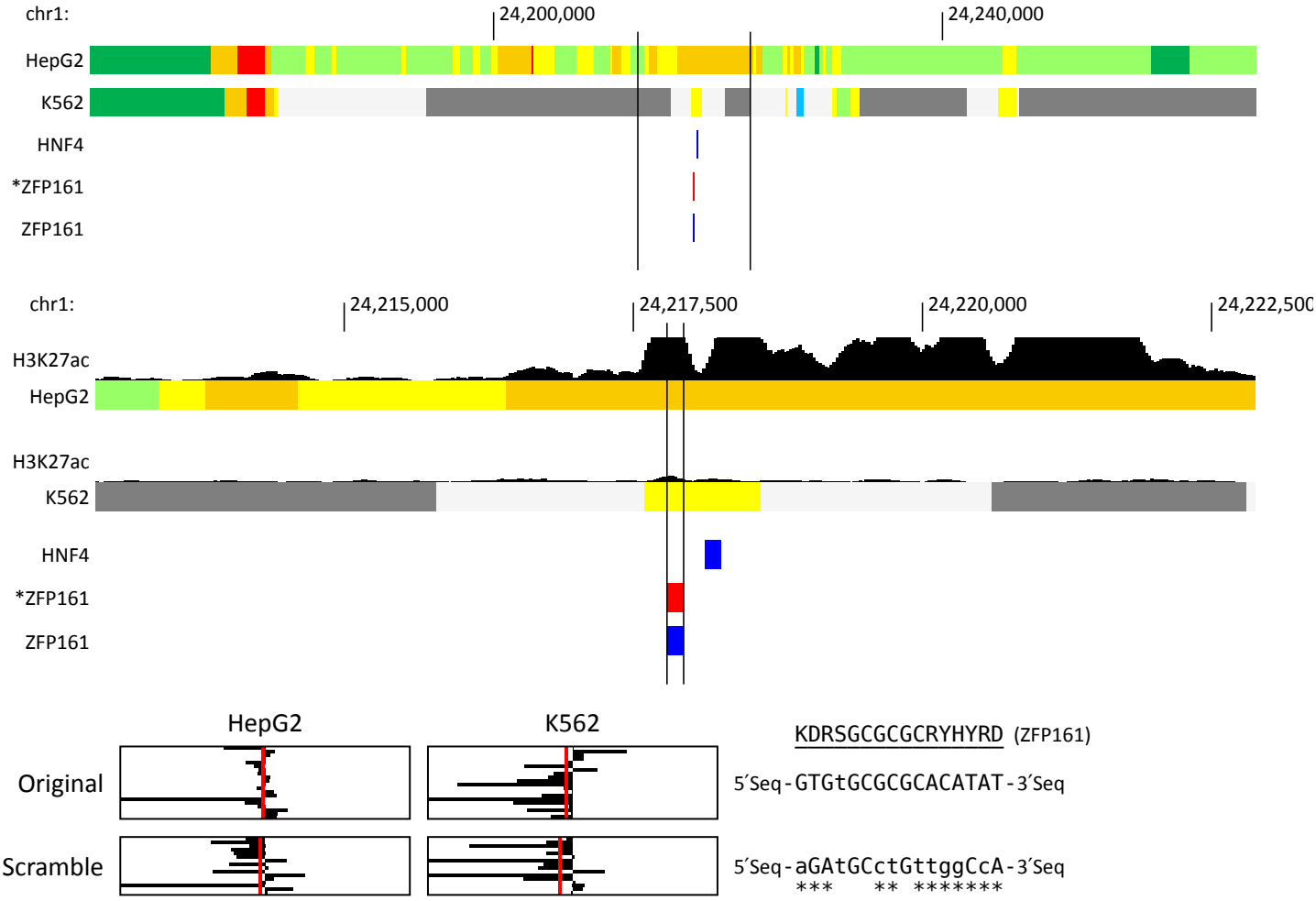
1906 ZFP161 in HepG2 enhancer (conserved at 40% confidence)

chr1 24217856 24217871 + (hg18)



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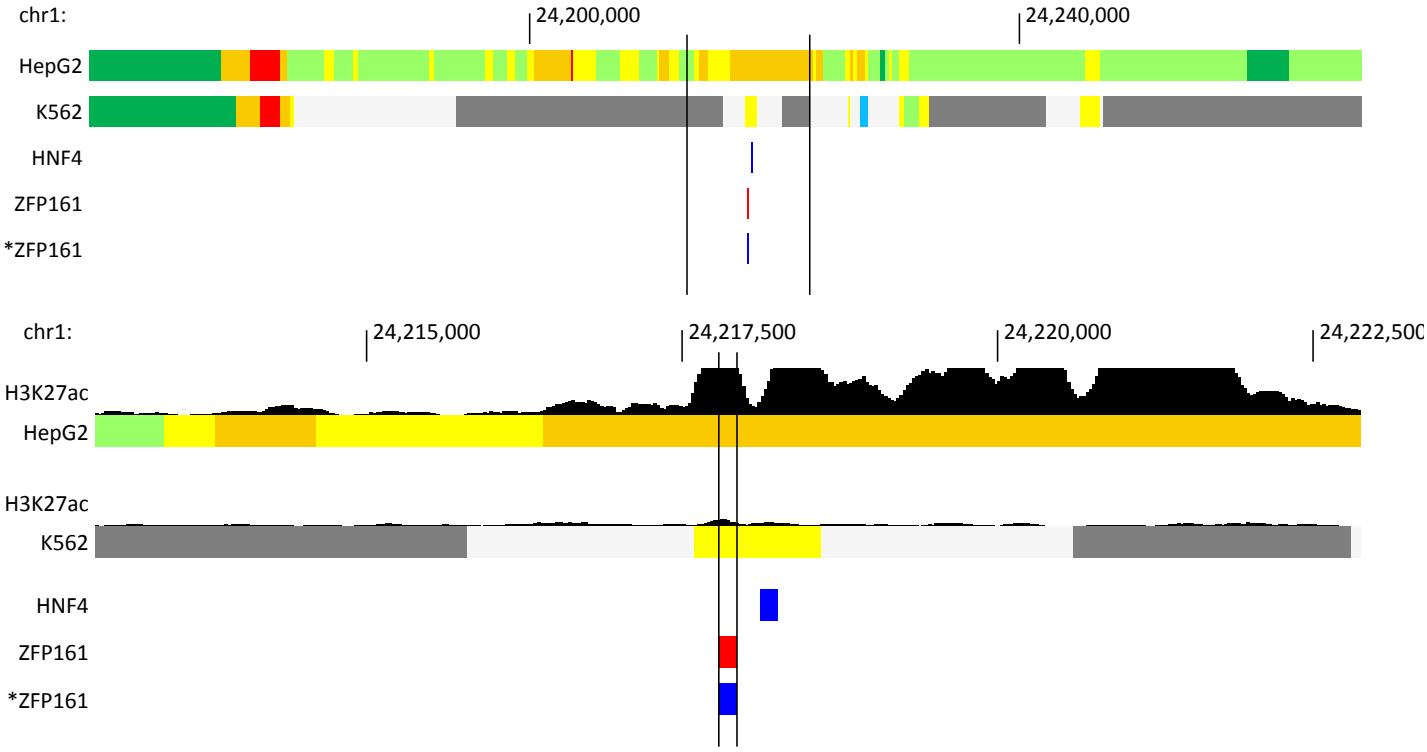
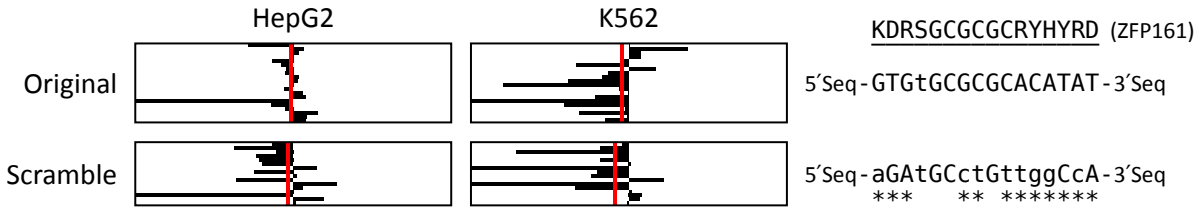
1907 ZFP161 in HepG2 enhancer

chr1 24217856 24217871 + (hg18)





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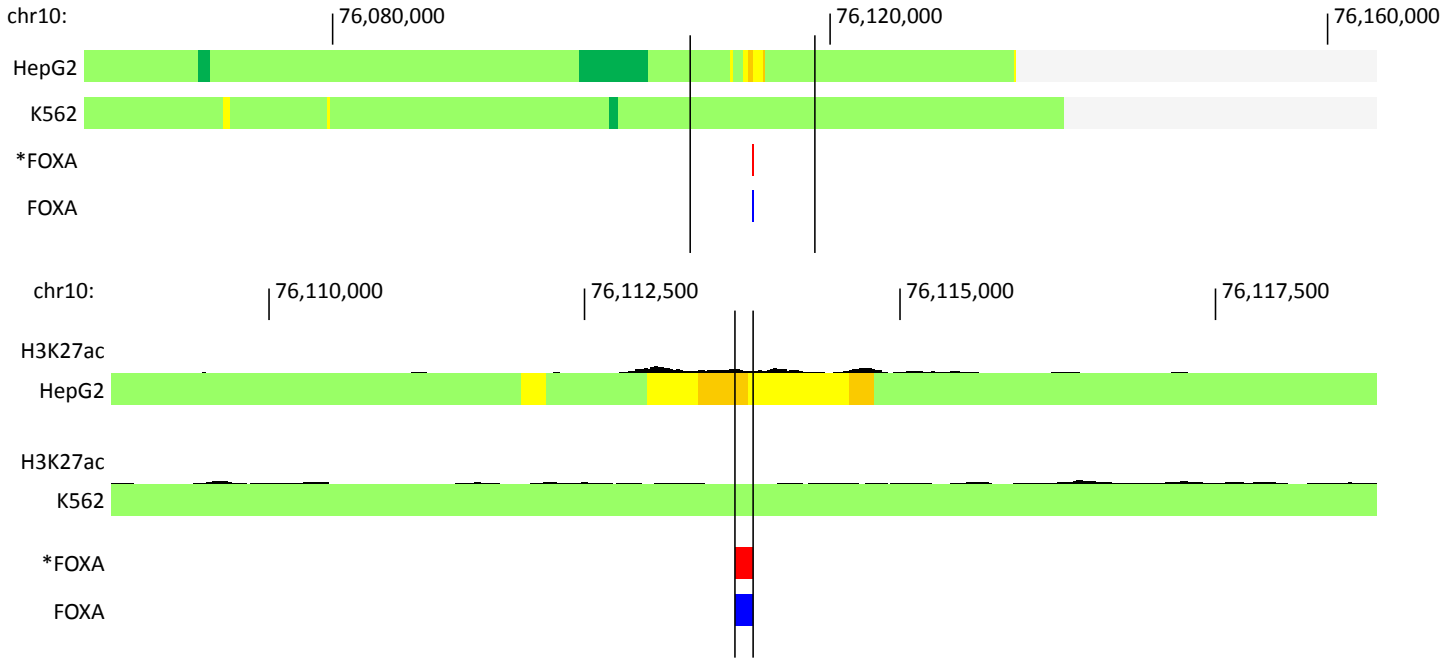
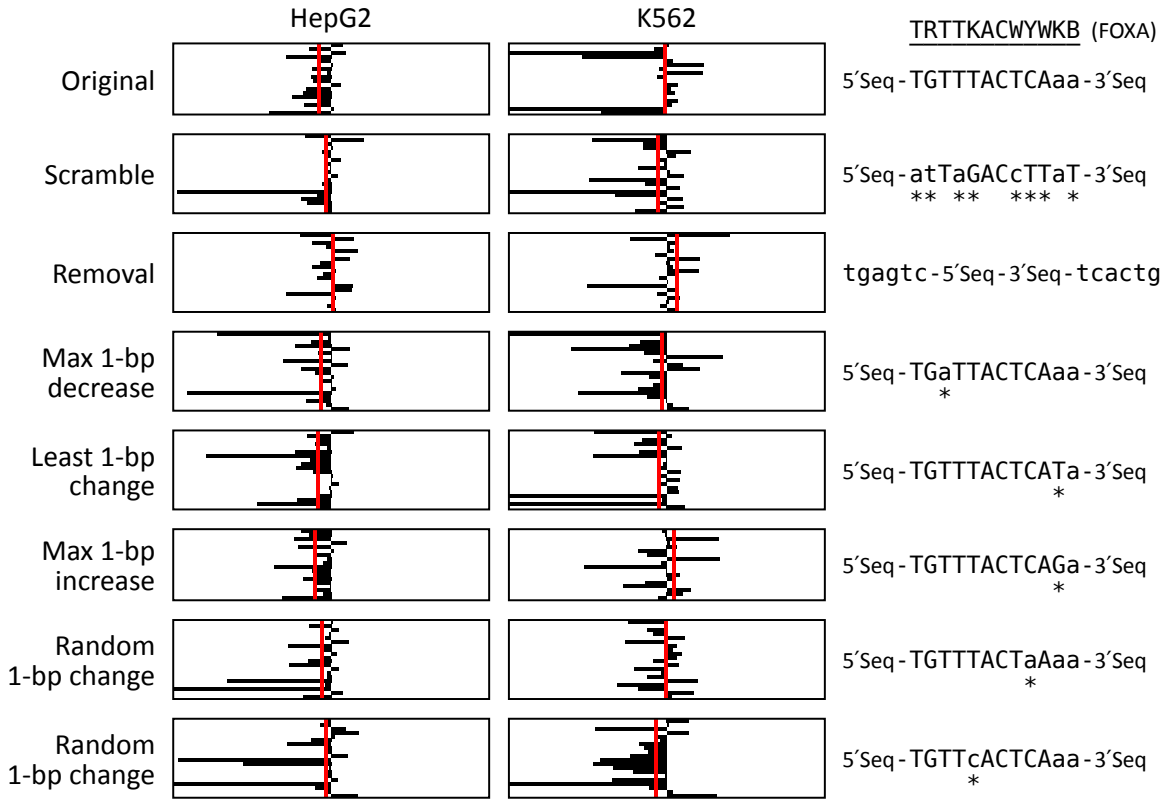
1908 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr10 76113759 76113770 + (hg18)





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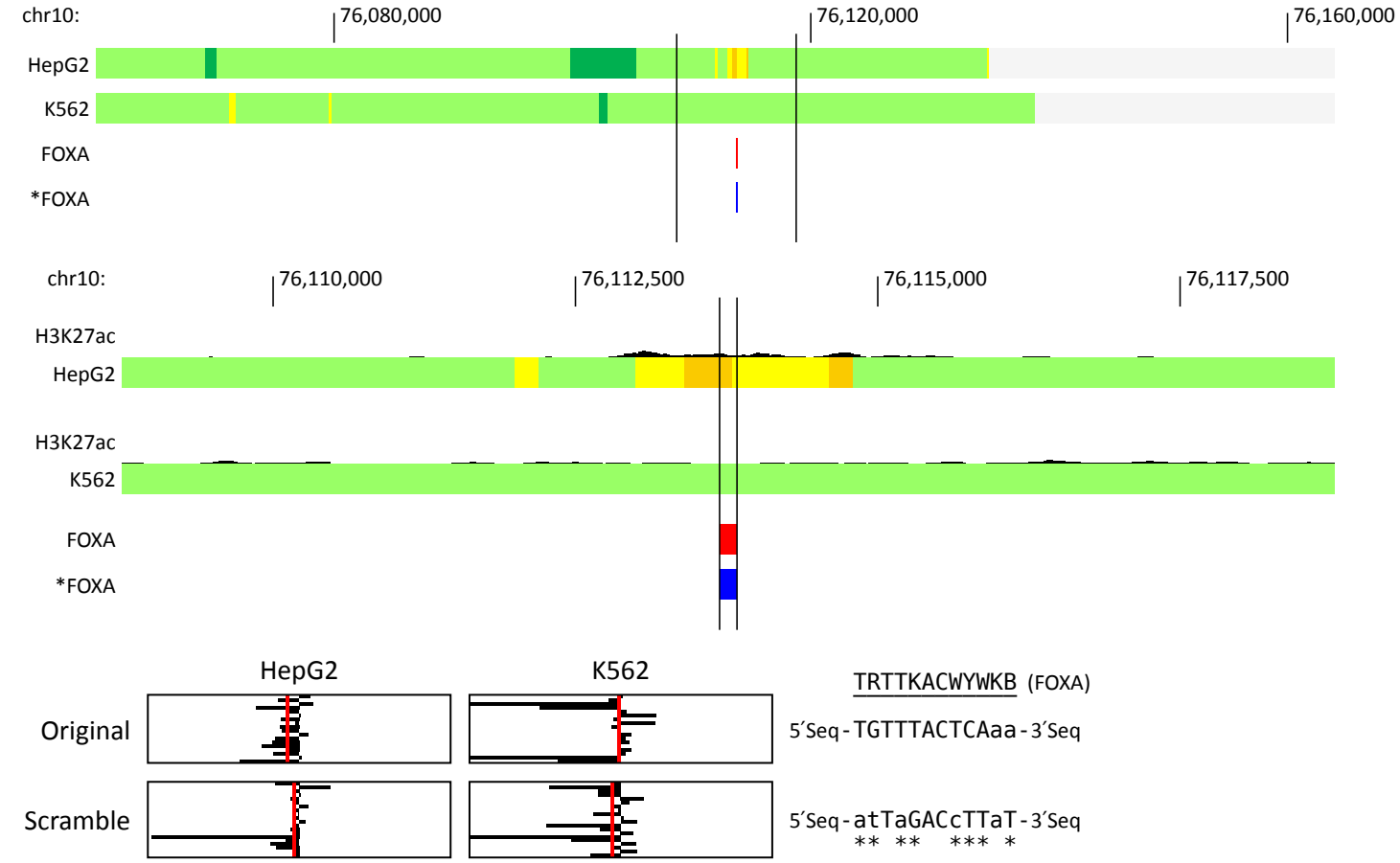
1909 FOXA in HepG2 enhancer

chr10 76113759 76113770 + (hg18)



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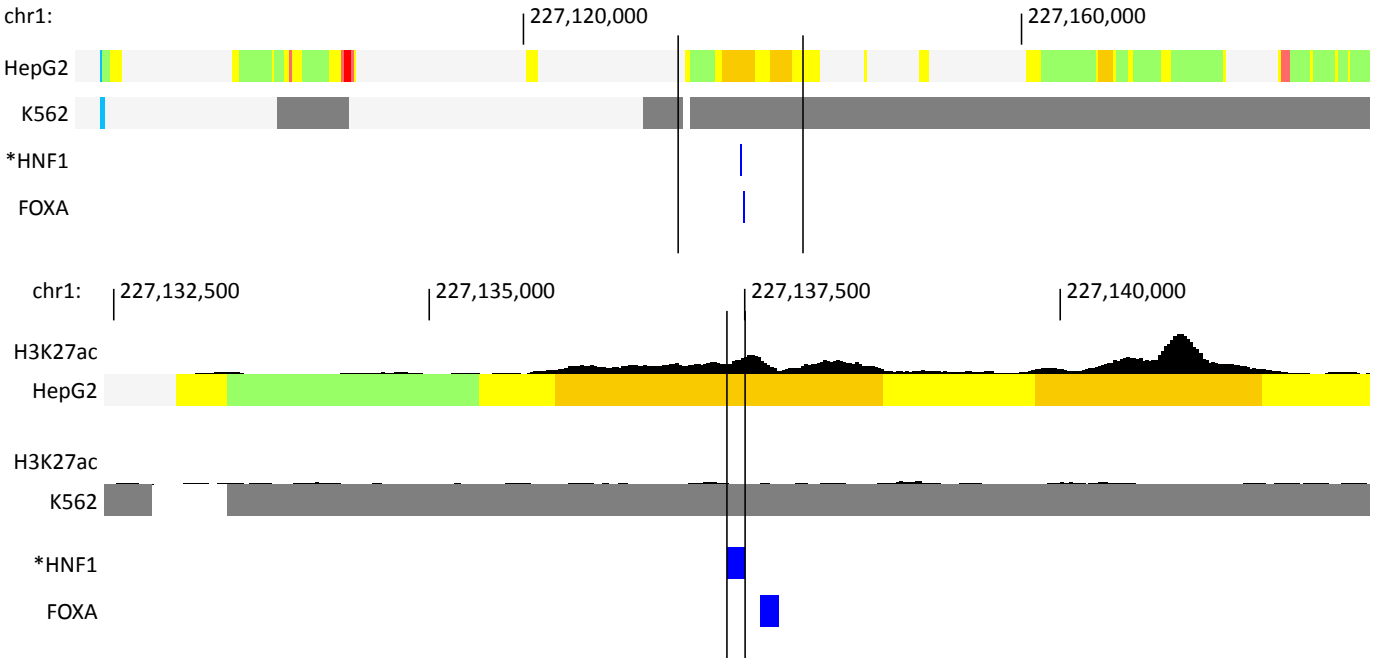
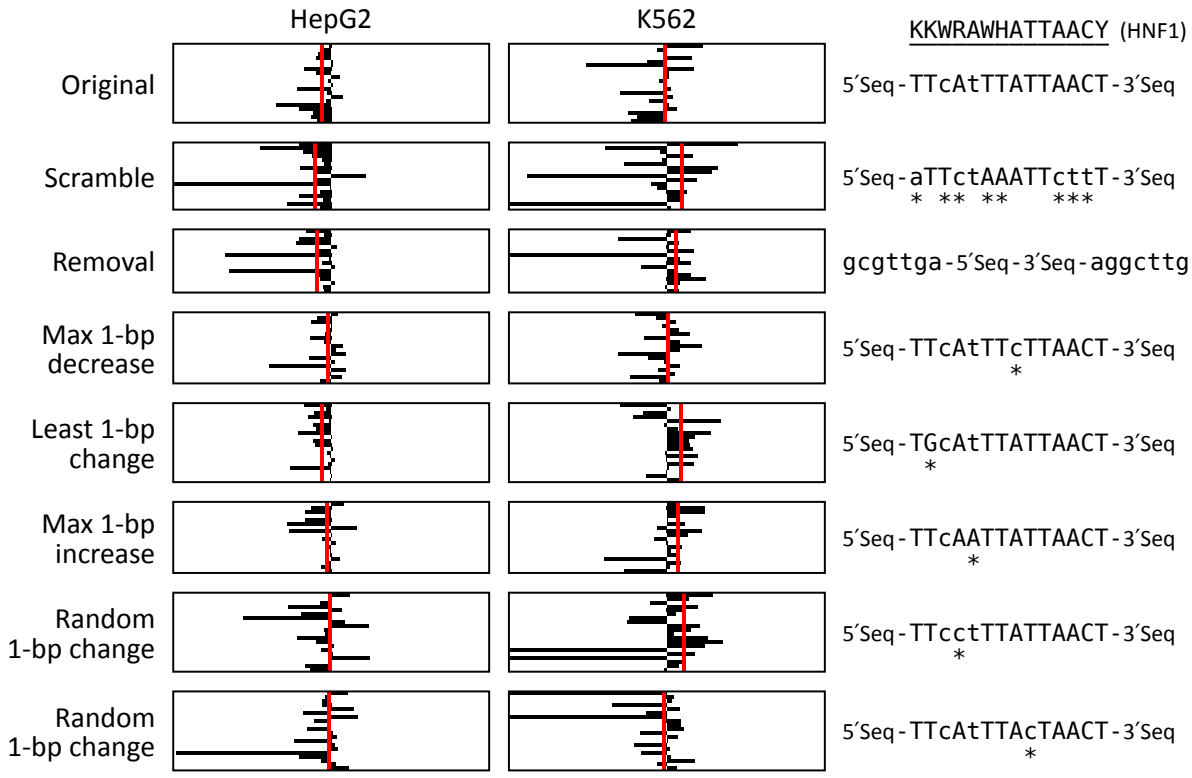
1910 HNF1 in HepG2 enhancer

chr1 227137425 227137438 - (hg18)





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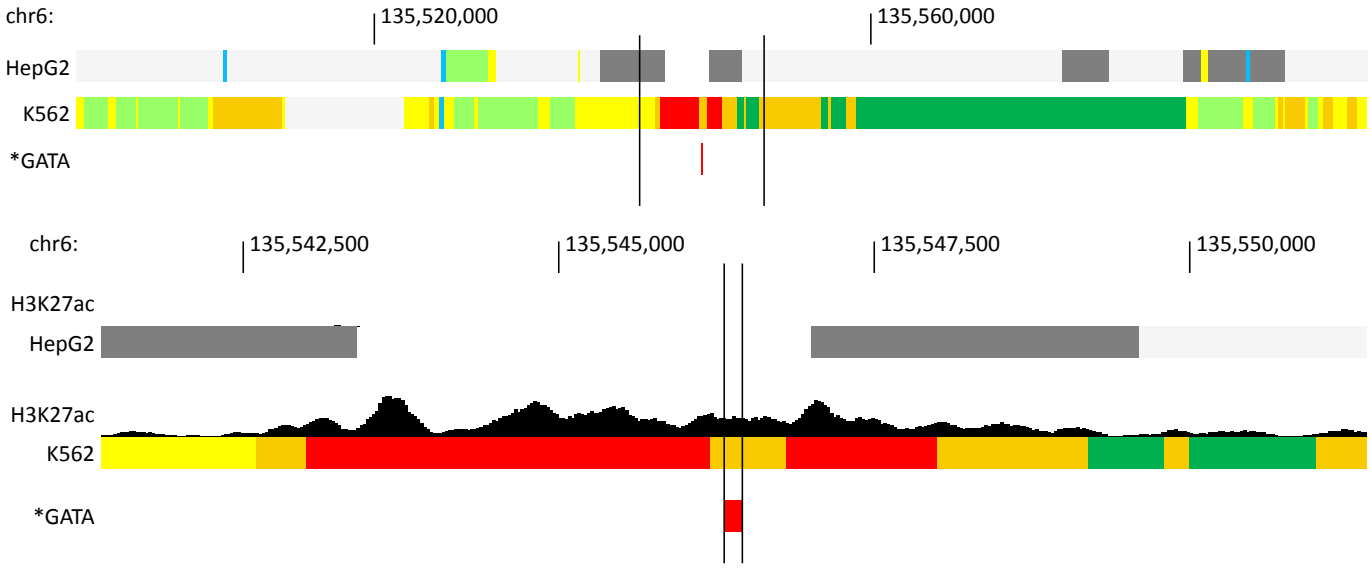
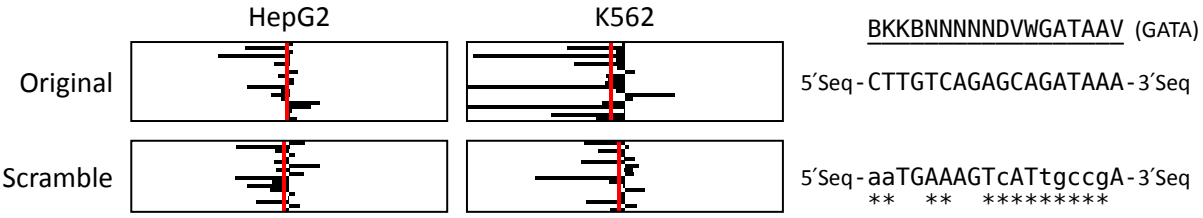
1911 GATA in K562 enhancer (conserved at 60% confidence)

chr6 135546375 135546392 + (hg18)





BKKBNNNNNDVWGATAAV (GATA)

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5′Seq-aaTGAAAGTcATtgccgA-3′Seq

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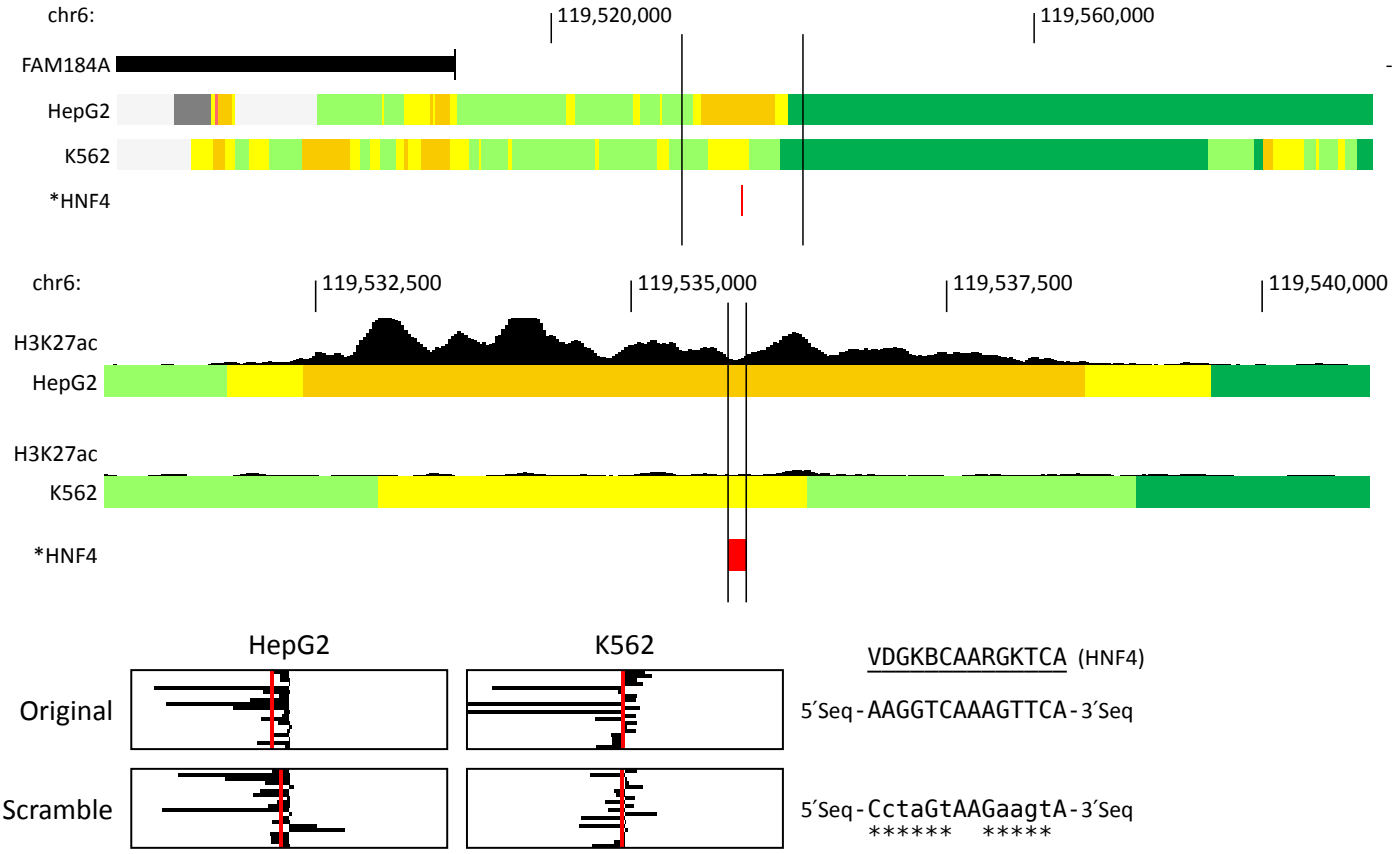
3′Seq = ggaaaagttatttcaggttccttagtagaaattaatcatgcttctaggacgacttagagcaag

1912 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr6 119535834 119535847 - (hg18)



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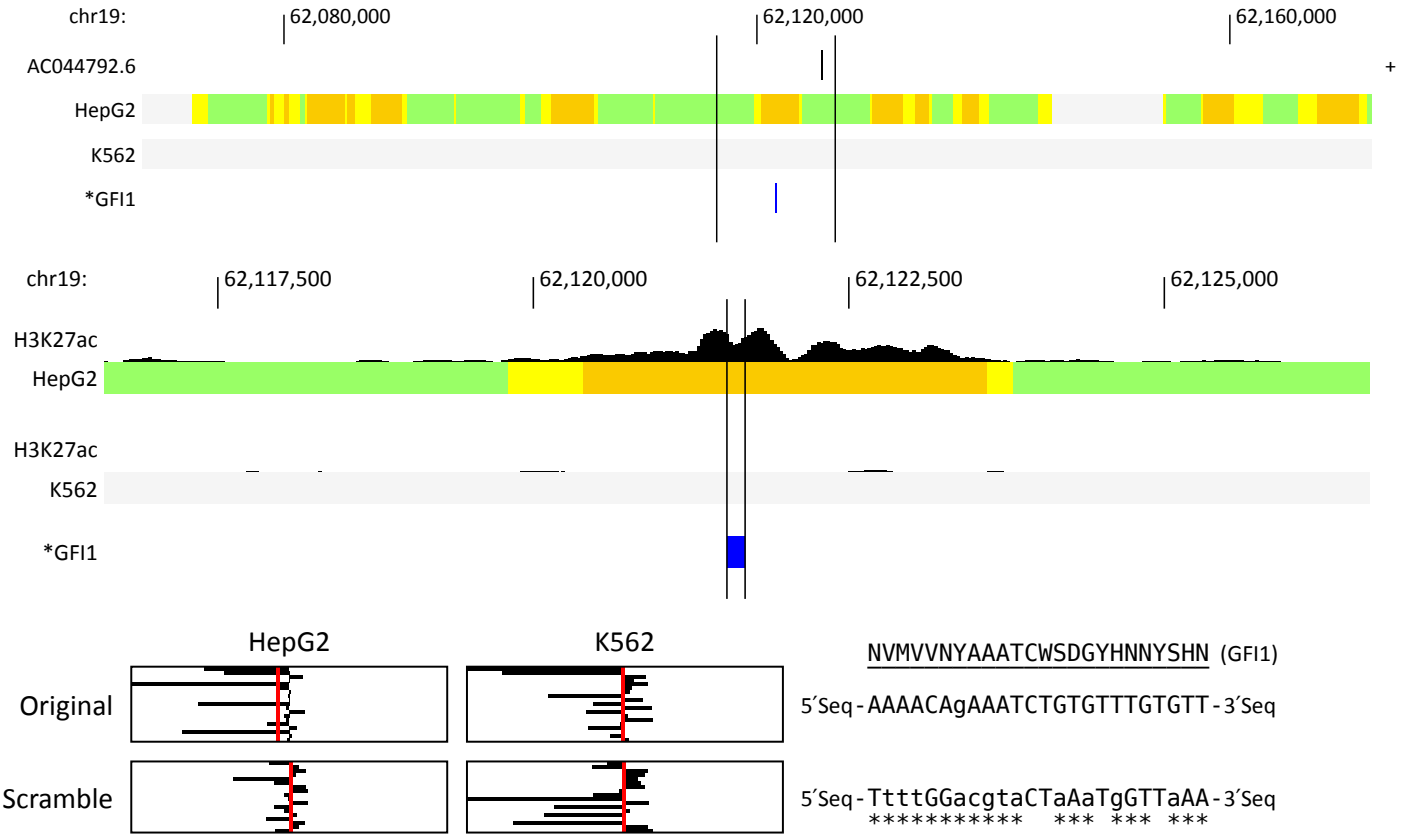
1913 GFI1 in HepG2 enhancer

chr19 62121595 62121618 + (hg18)



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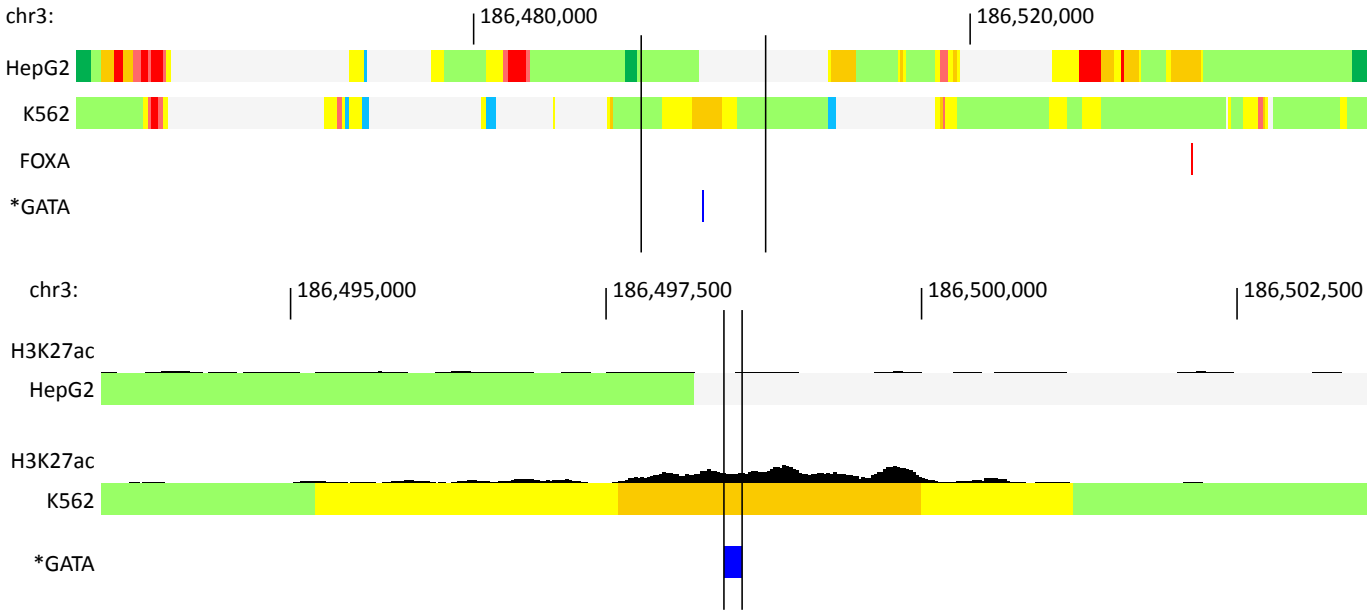
1914 GATA in K562 enhancer

chr3 186498498 186498515 + (hg18)



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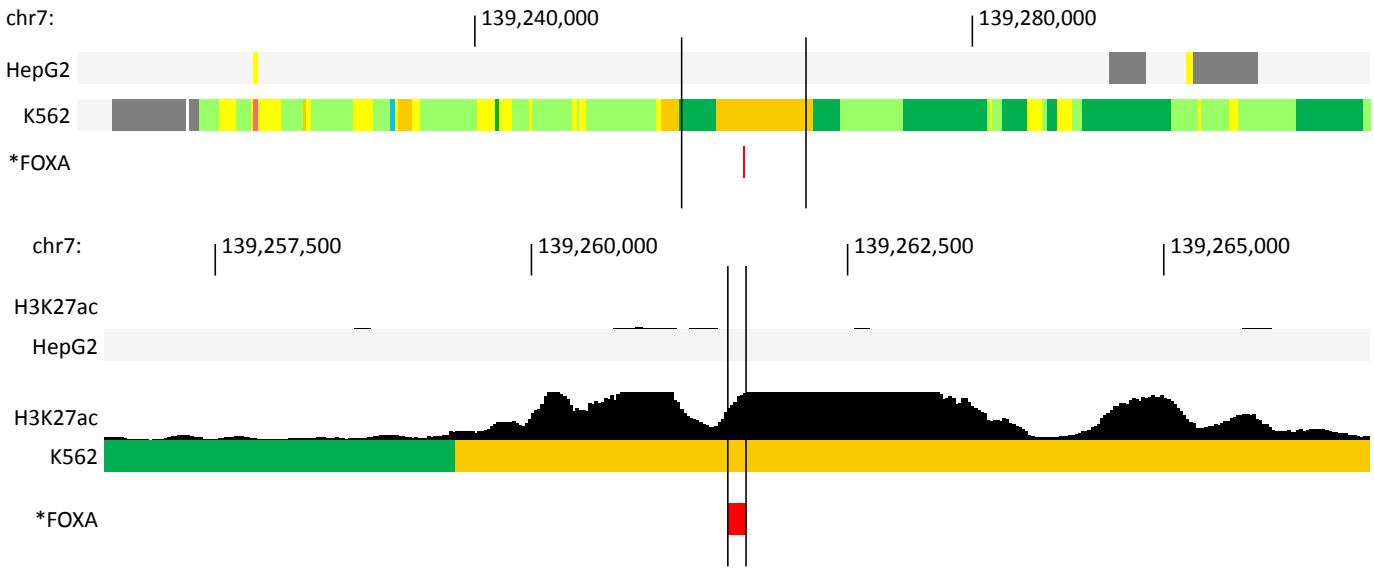
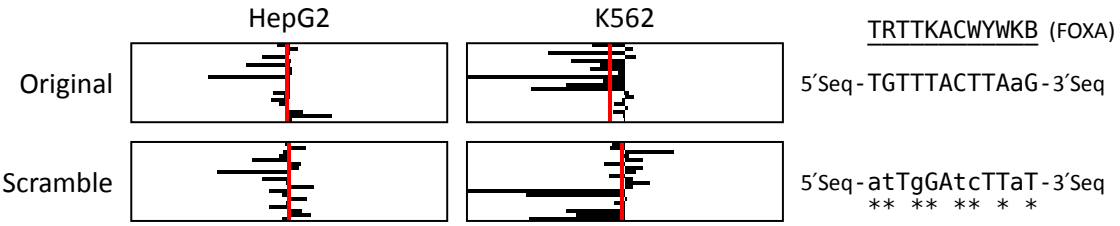
1915 FOXA in K562 enhancer (conserved at 40% confidence)

chr7 139261620 139261631 + (hg18)





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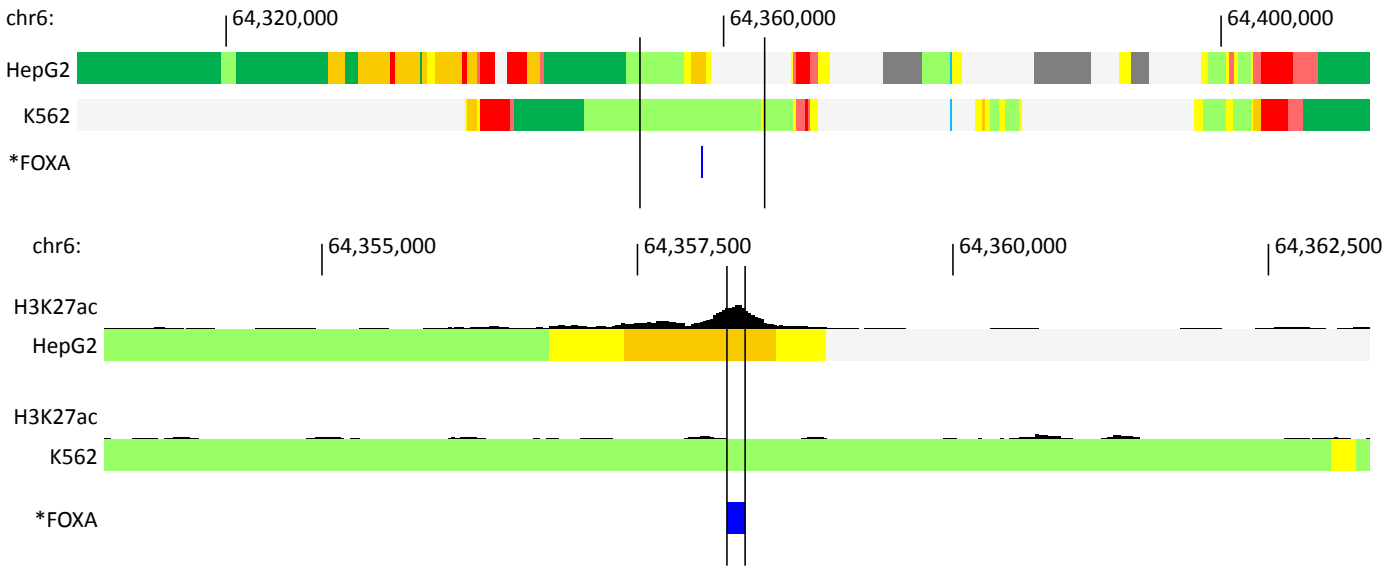
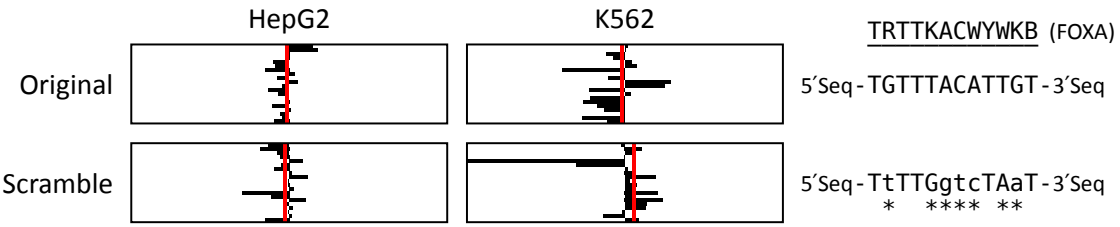
1916 FOXA in HepG2 enhancer

chr6 64358276 64358287 + (hg18)





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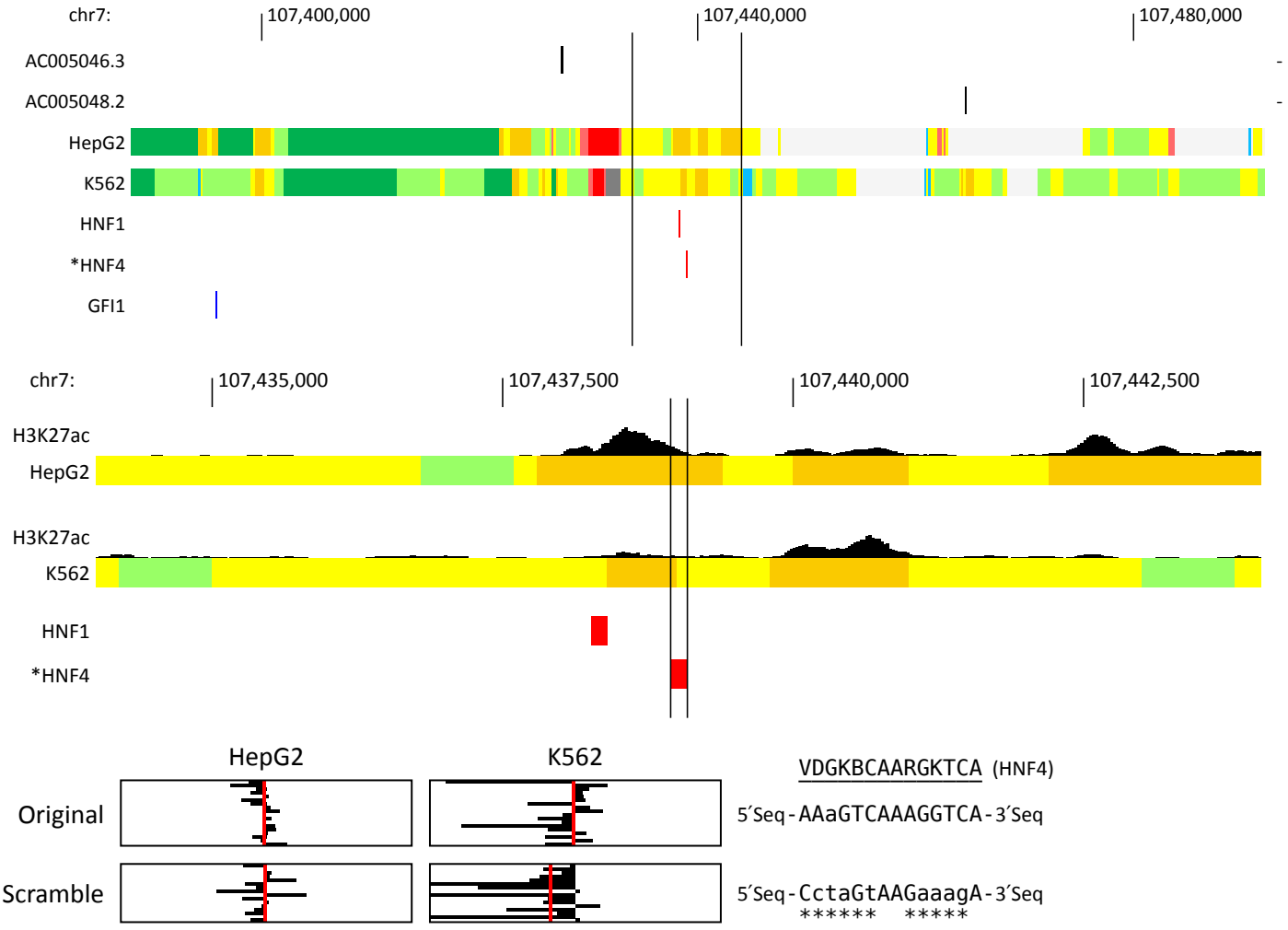
1917 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr7 107439012 107439025 - (hg18)



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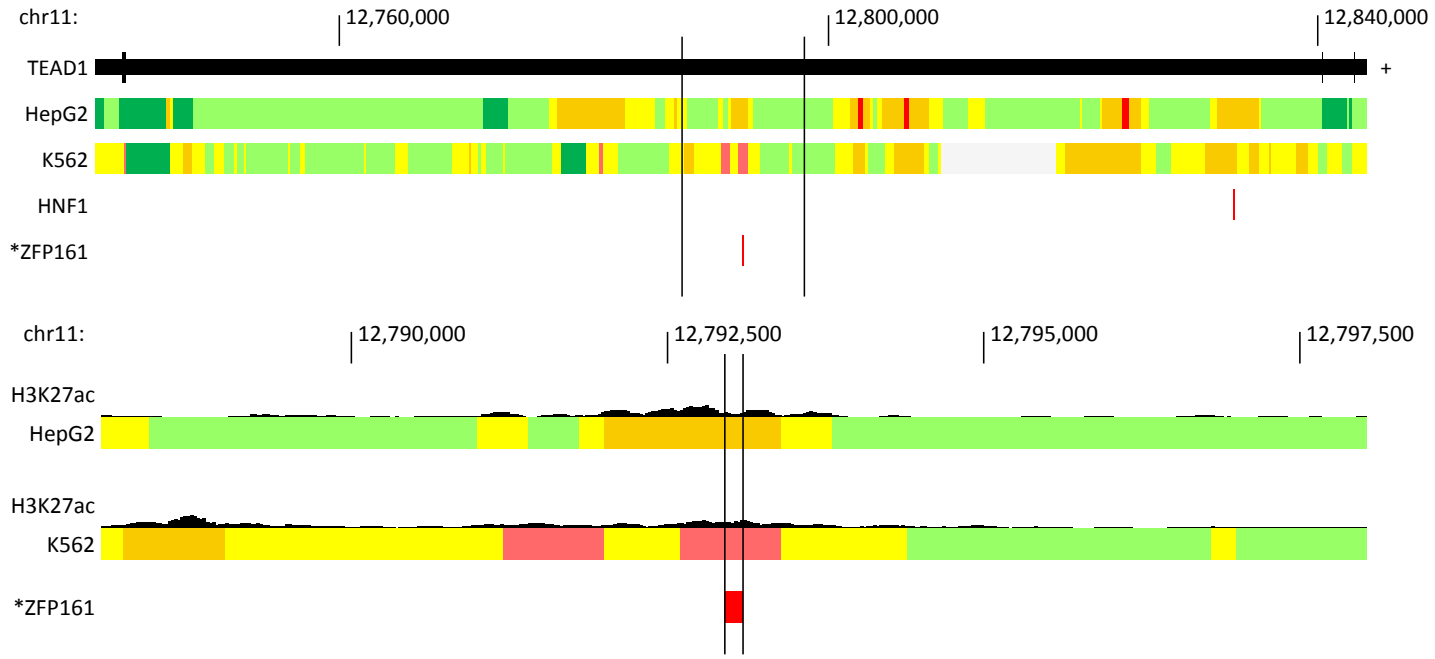
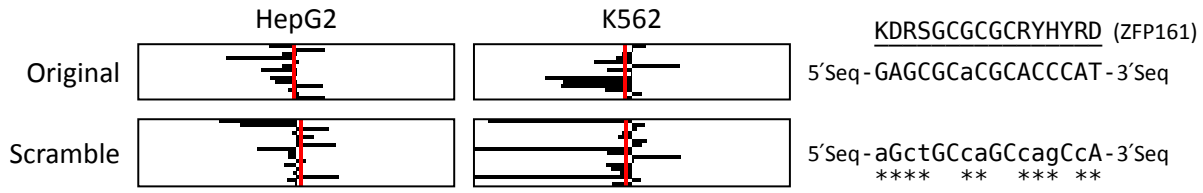
1918 ZFP161 in HepG2 enhancer (conserved at 40% confidence)

chr11 12793018 12793033 + (hg18)





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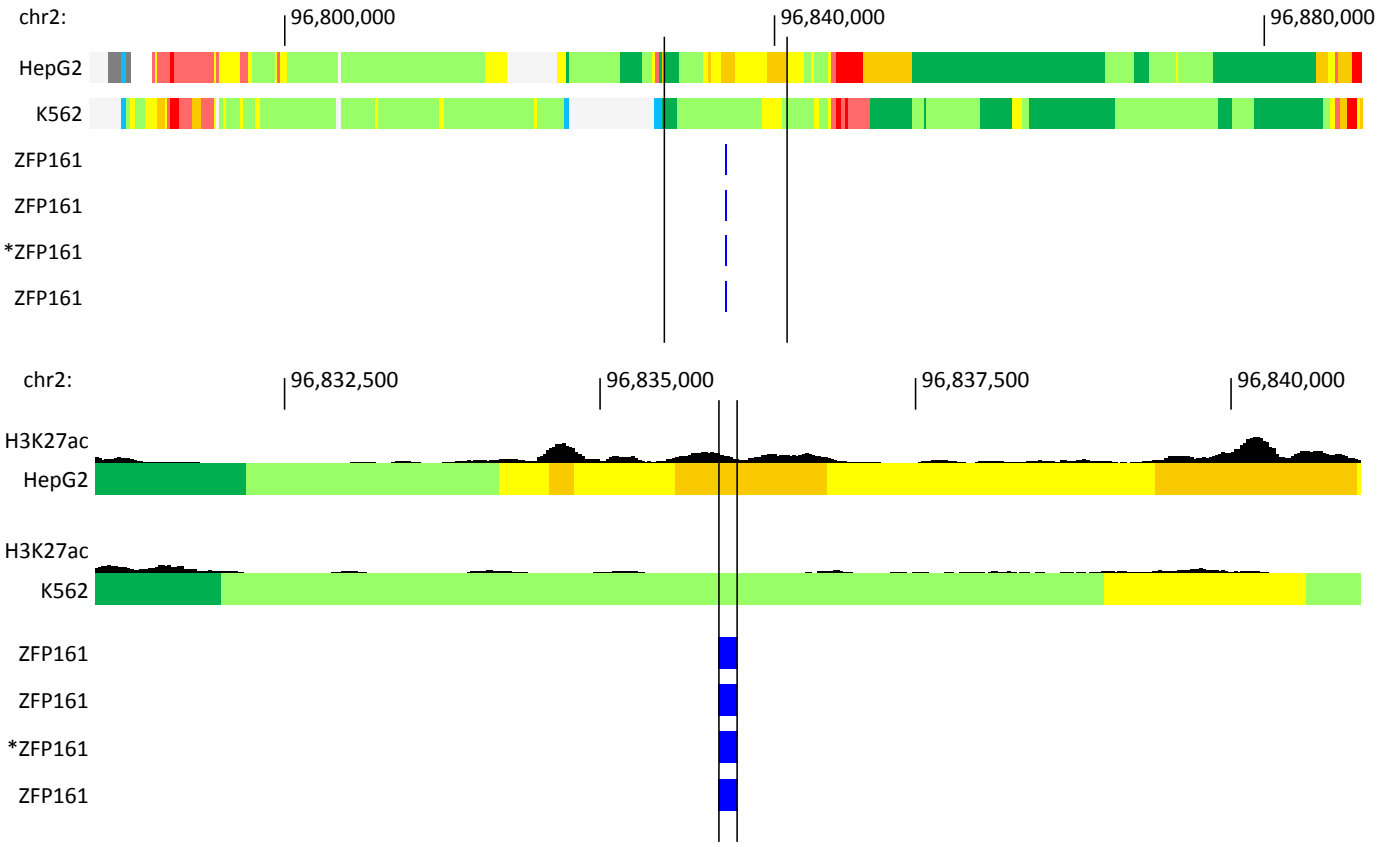
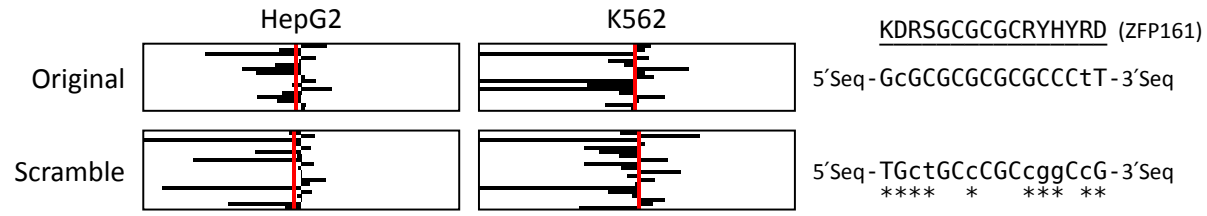
1919 ZFP161 in HepG2 enhancer

chr2 96836007 96836022 + (hg18)





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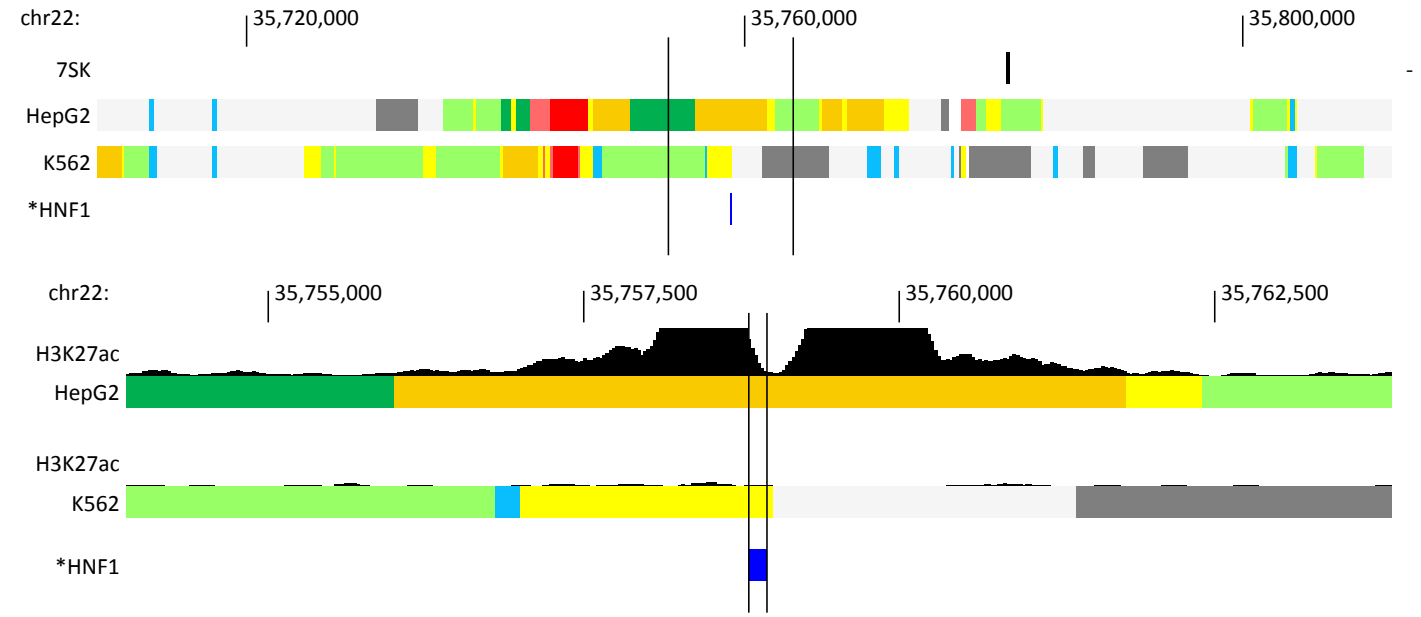
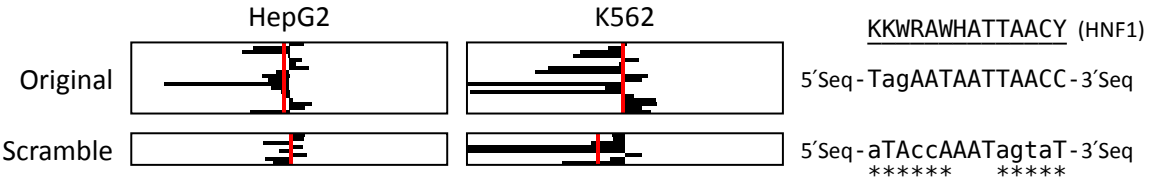
3′Seq = agttaaaaattgtattggtcattgagtcactagattcagtatgtttgttctcttcacttggcaa

1920 HNF1 in HepG2 enhancer

chr22 35758874 35758887 + (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-TagAATAATTAACC-3′Seq

5′Seq-aTAccAAATagtaT-3′Seq

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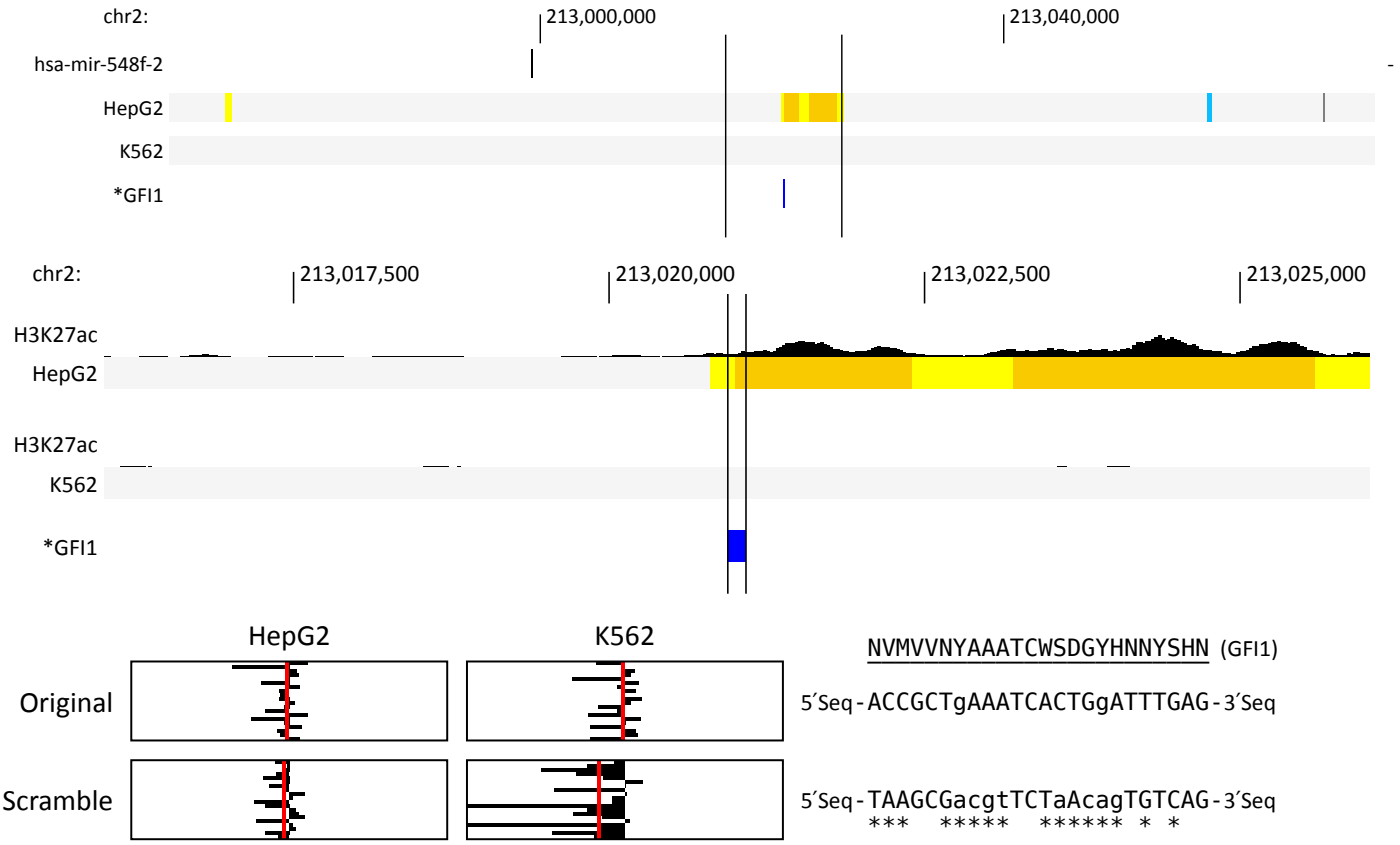
1921 GFI1 in HepG2 enhancer

chr2 213021002 213021025 - (hg18)



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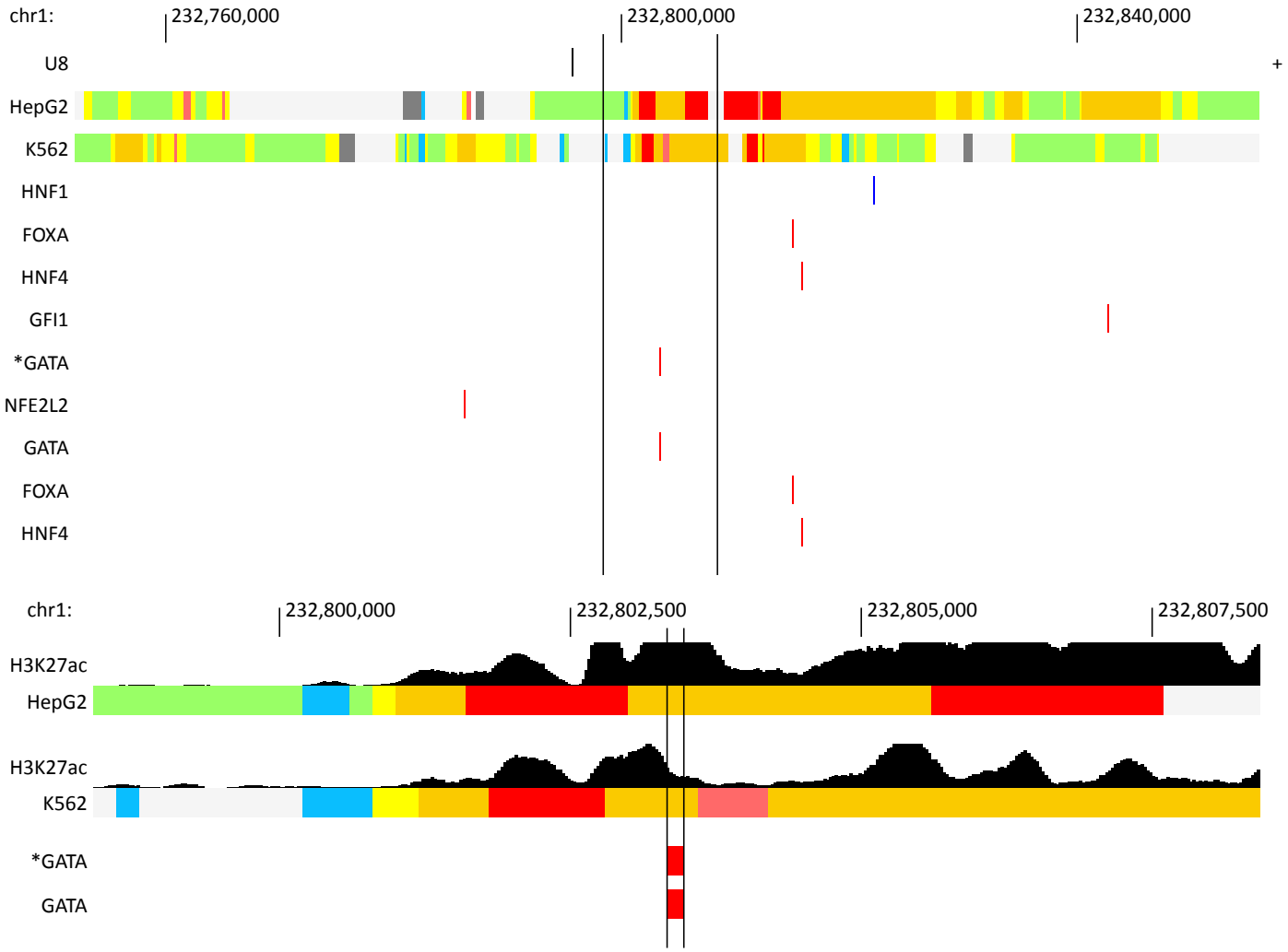
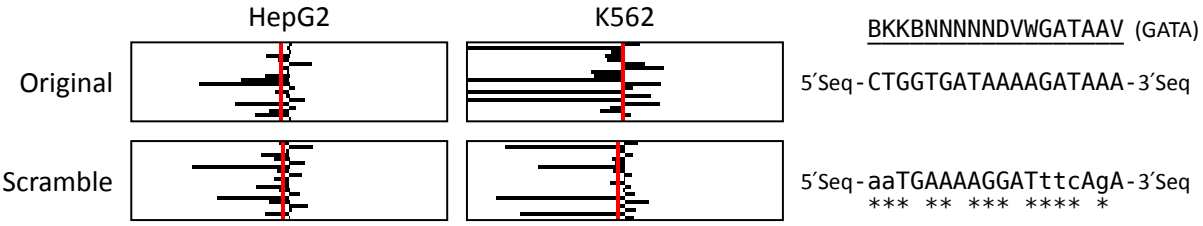
1922 GATA in HepG2 enhancer (conserved at 60% confidence)

chr1 232803395 232803412 - (hg18)





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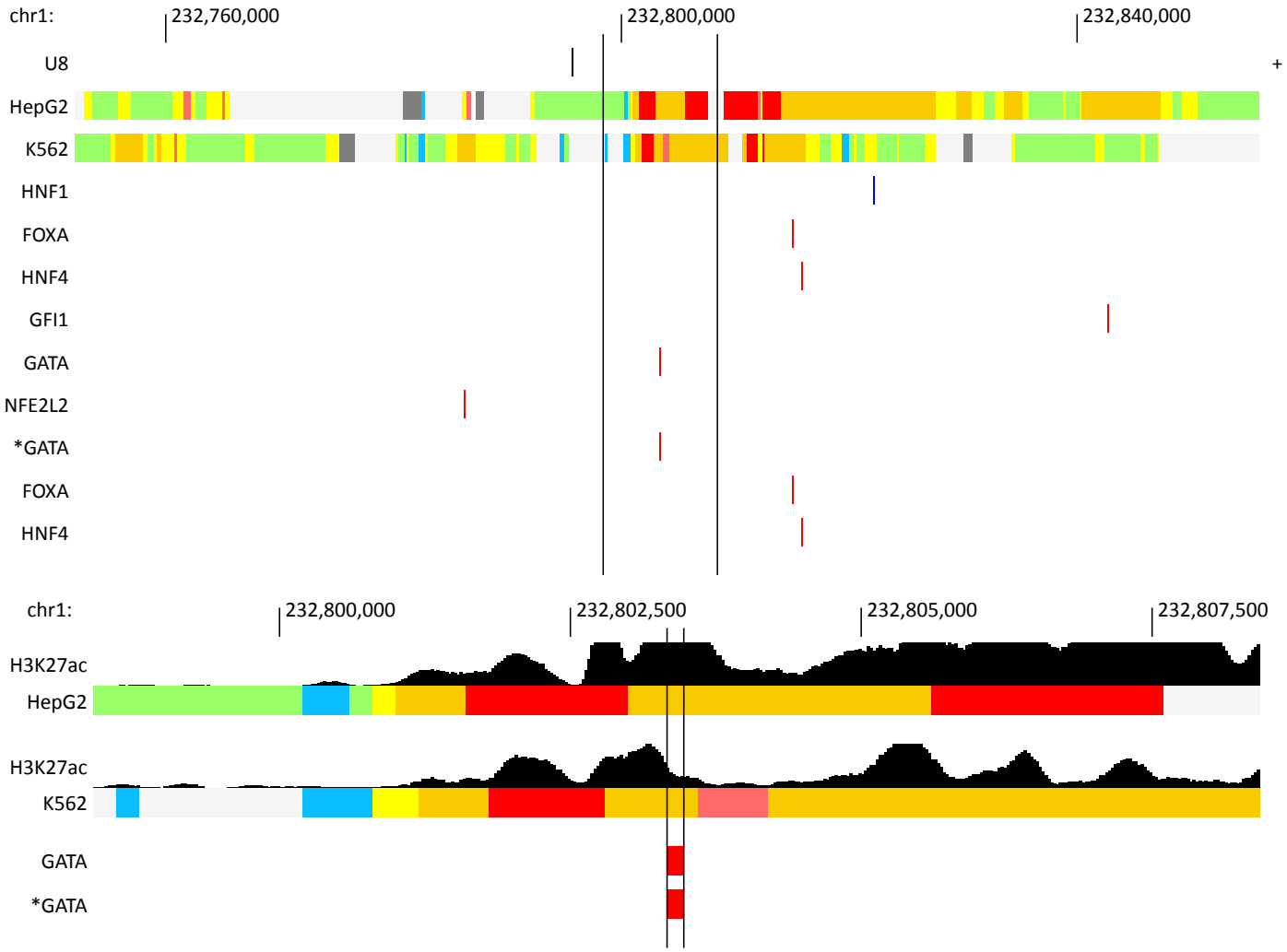
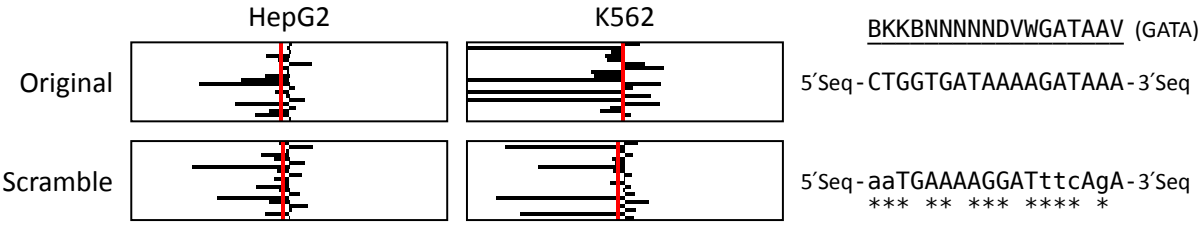
1923 GATA in K562 enhancer (conserved at 60% confidence)

chr1 232803395 232803412 - (hg18)





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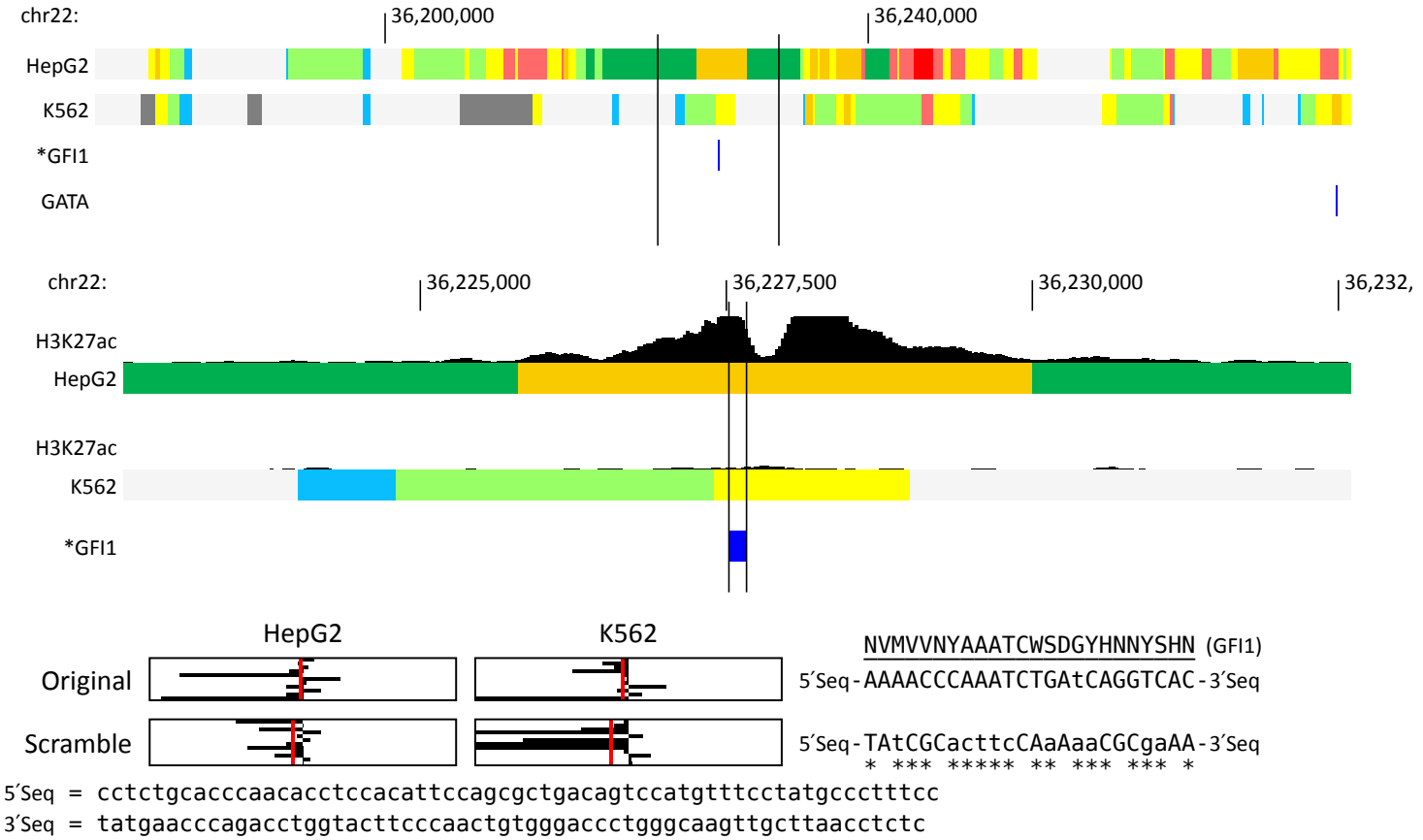
1924 GFI1 in HepG2 enhancer

chr22 36227582 36227605 + (hg18)



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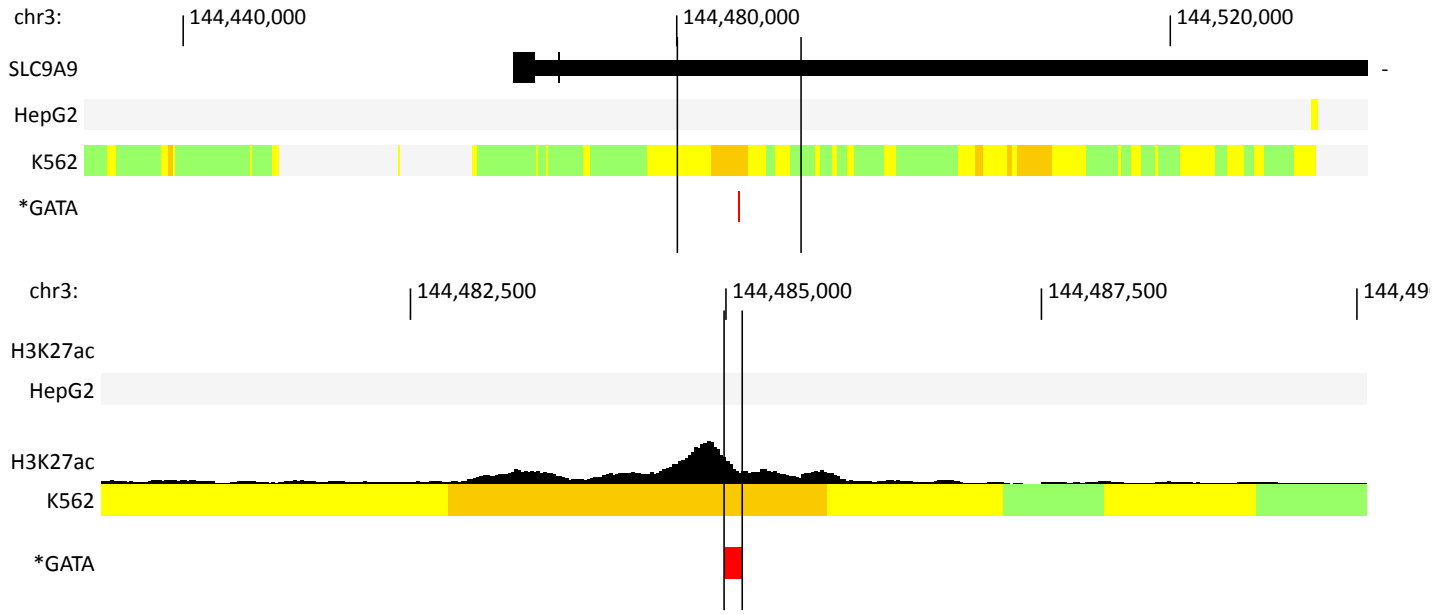
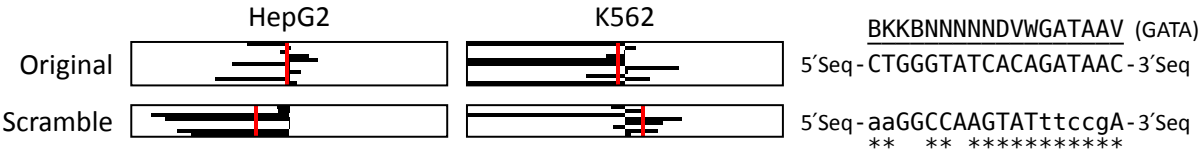
3′Seq = tatgaacccagacctggtacttcccaactgtgggaccctgggcaagttgcttaacctctc

1925 GATA in K562 enhancer (conserved at 60% confidence)

chr3 144485049 144485066 + (hg18)





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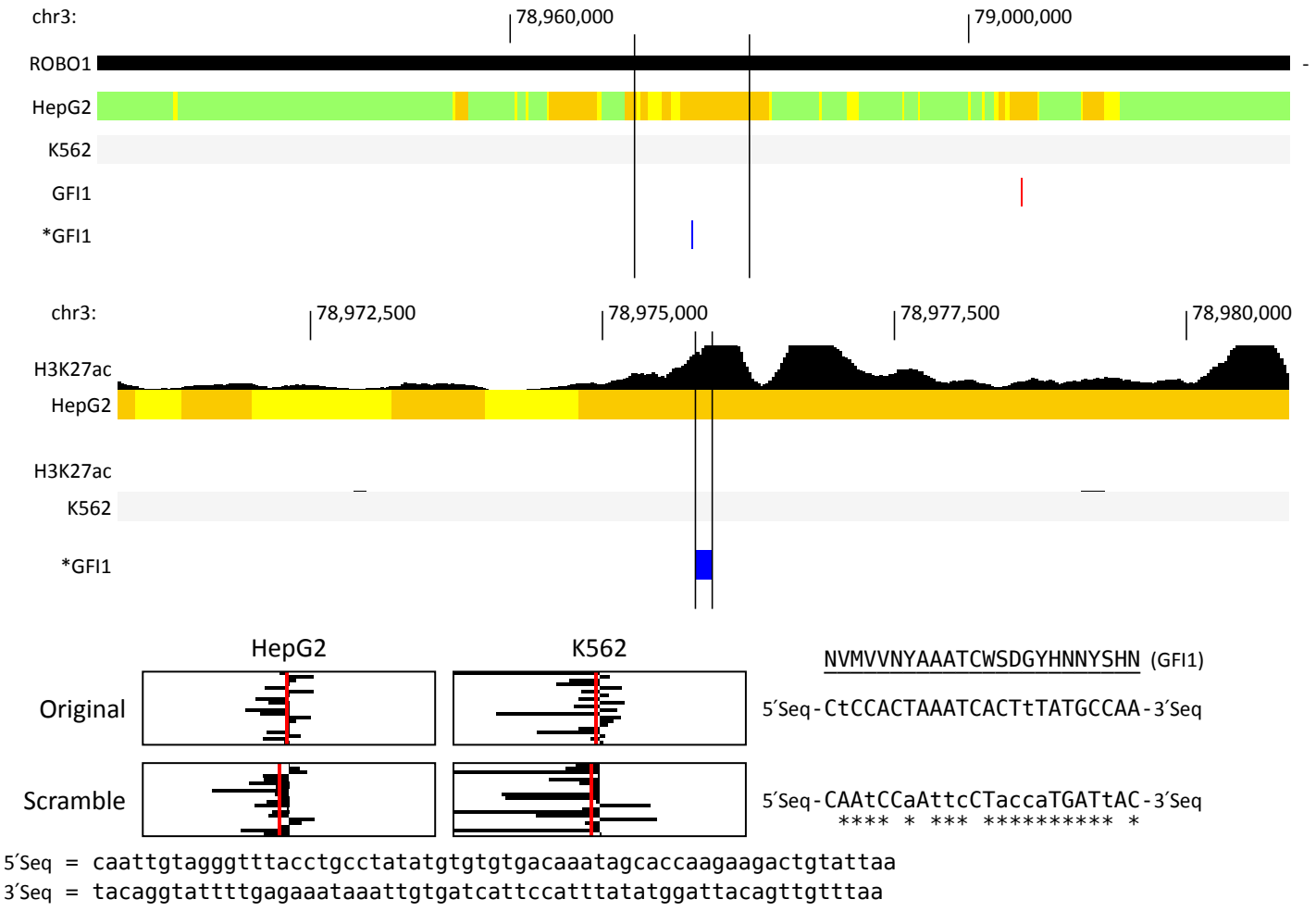
1926 GFI1 in HepG2 enhancer

chr3 78975857 78975880 + (hg18)



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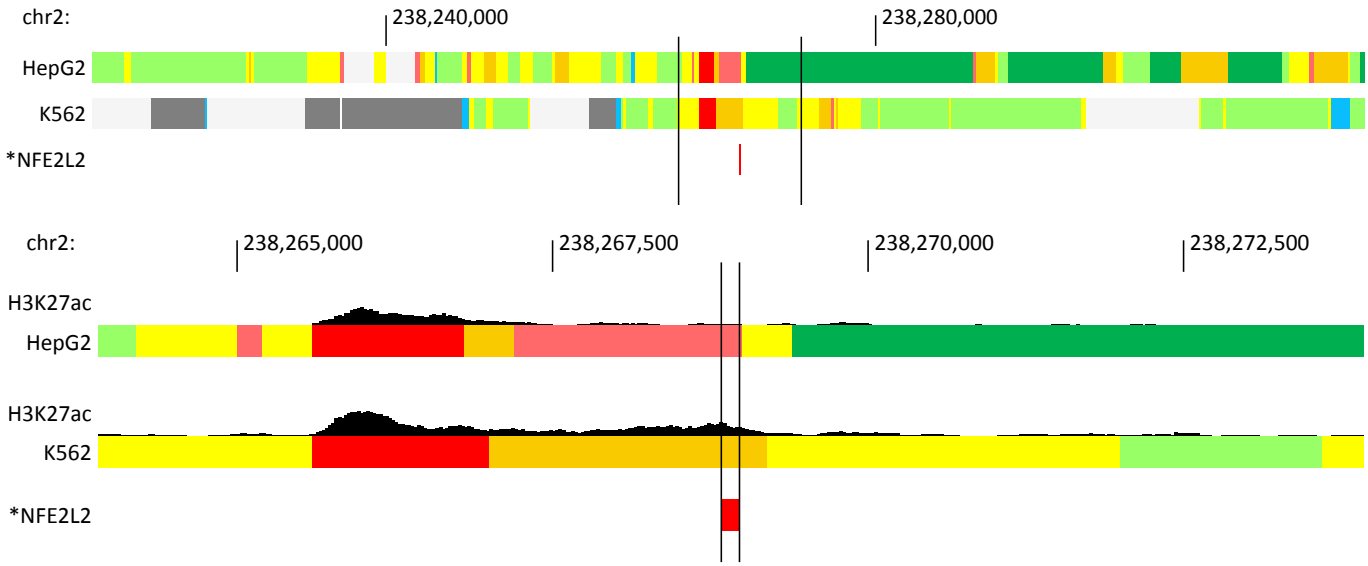
3′Seq = tacaggtattttgagaaataaattgtgatcattccatttatatggattacagttgtttaa

1927 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr2 238268904 238268914 + (hg18)



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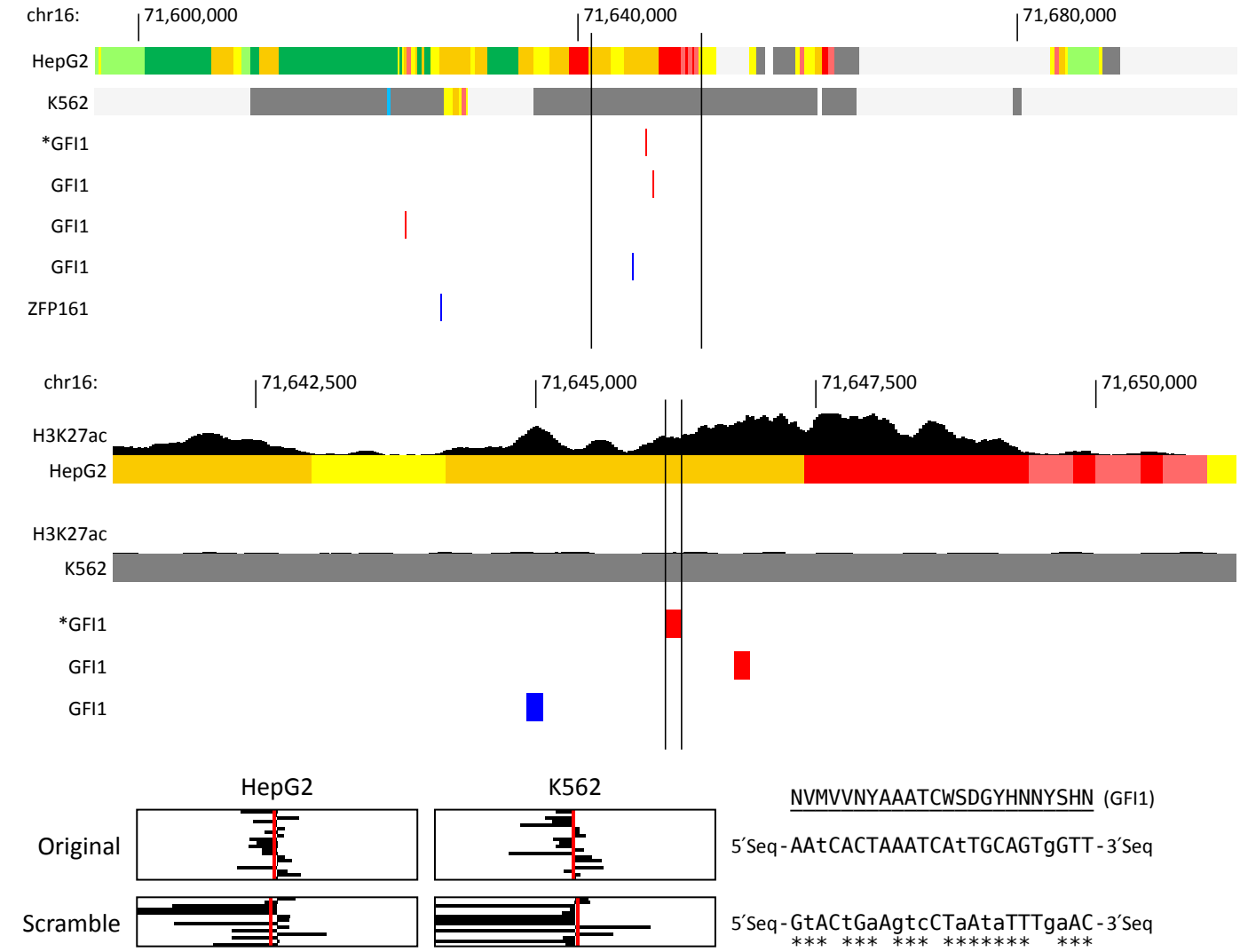
3′Seq = aaggaattgtttatgactggttactcatatgccagtgcttccagaatatctgctcgtatttaaagga

1928 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr16 71646218 71646241 - (hg18)



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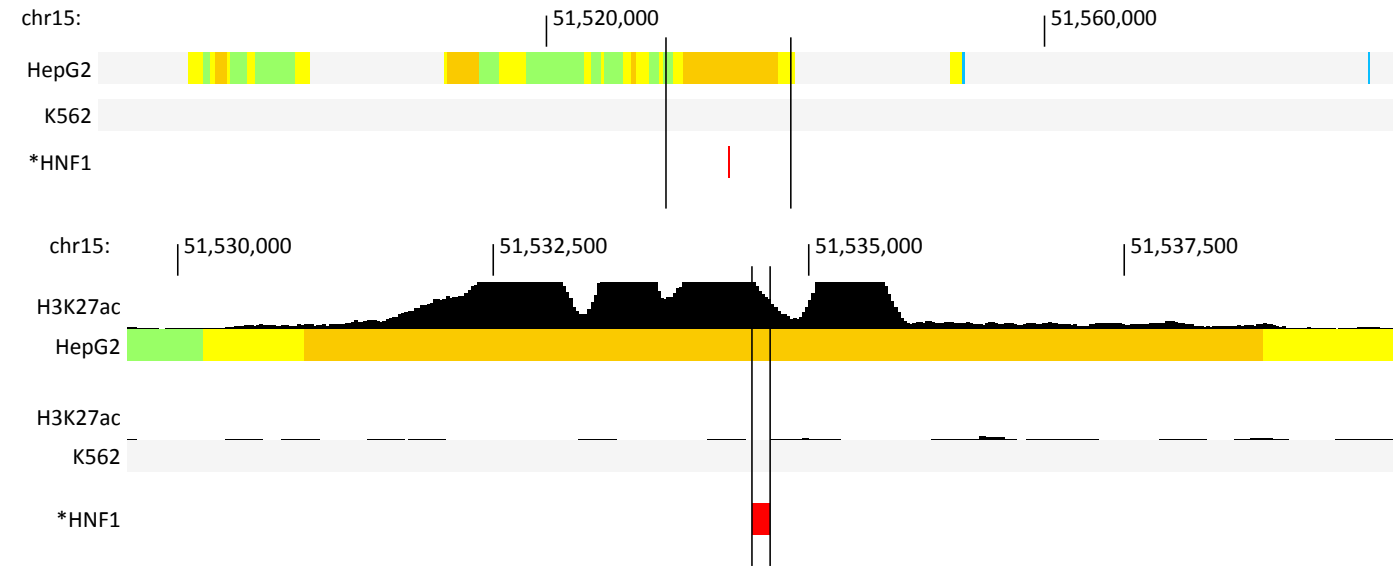
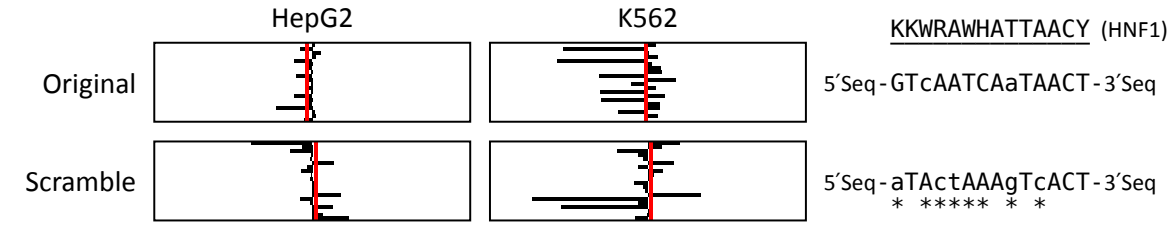
3′Seq = atagatttacagtcttggggtattacagagaggagcaacggcggctatatatatgccttt

1929 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr15 51534616 51534629 + (hg18)





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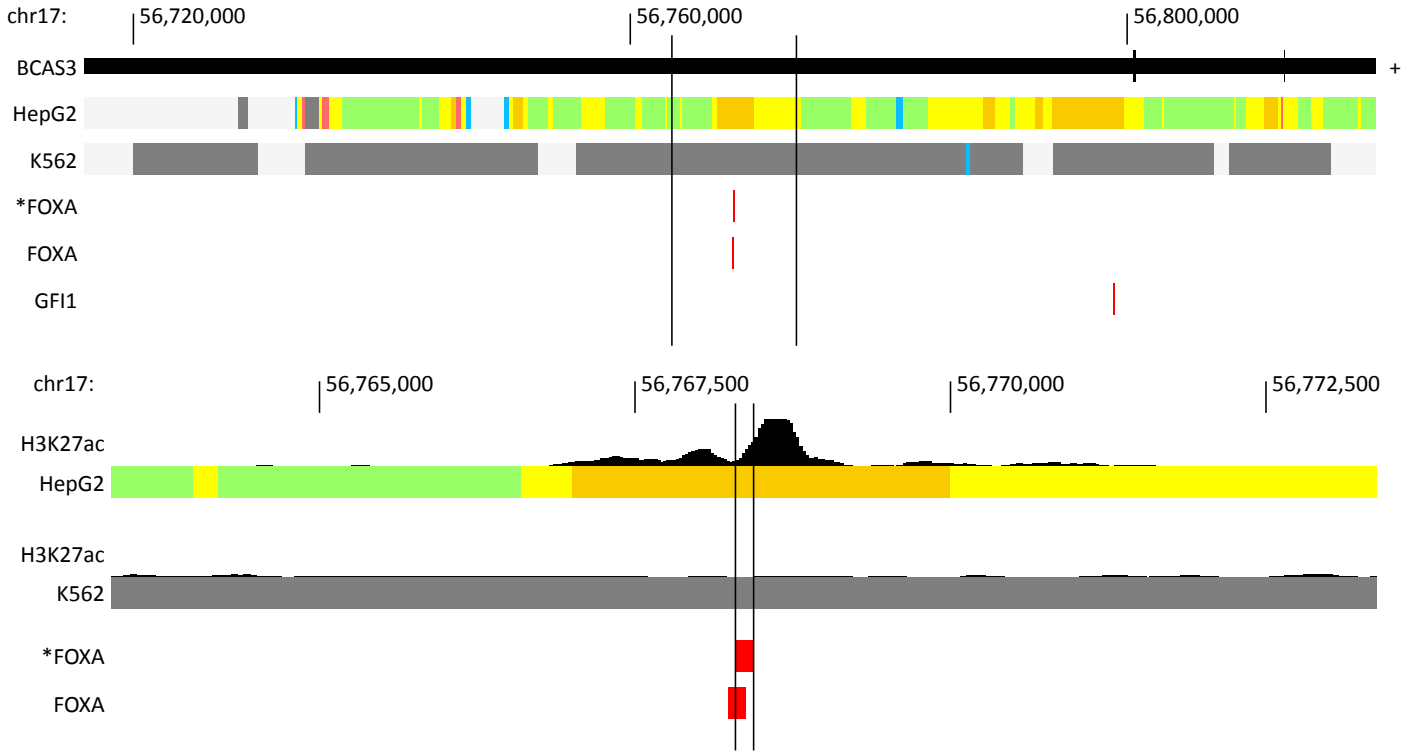
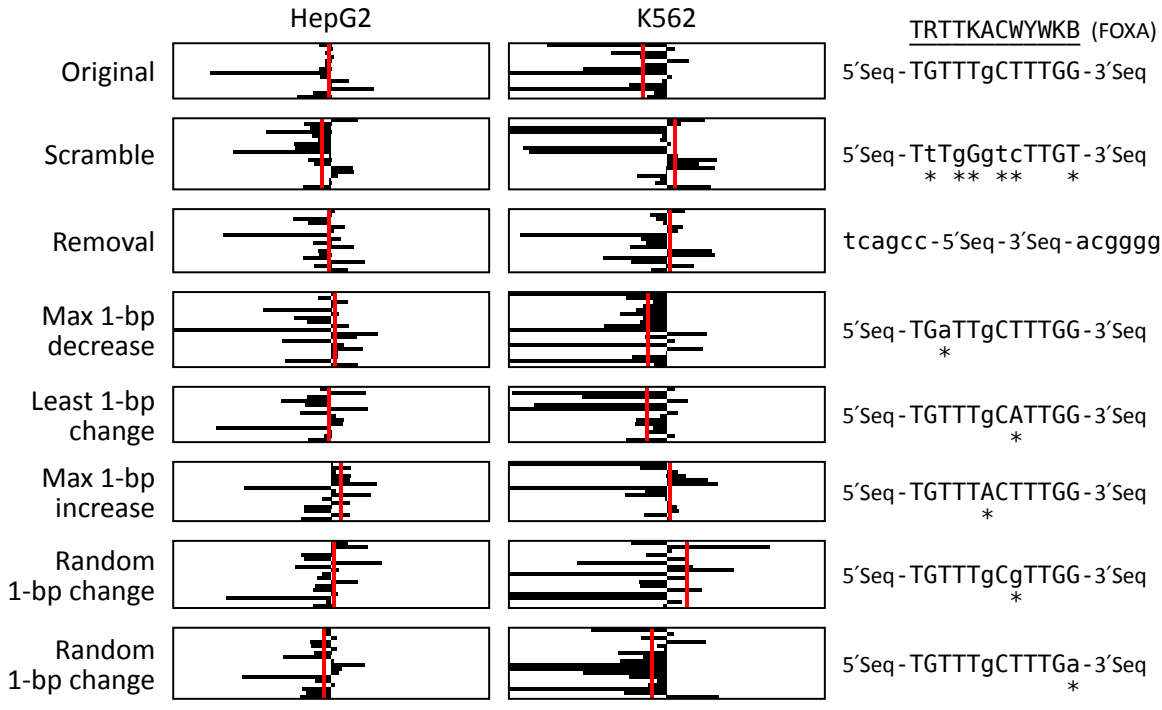
1930 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr17 56768363 56768374 + (hg18)





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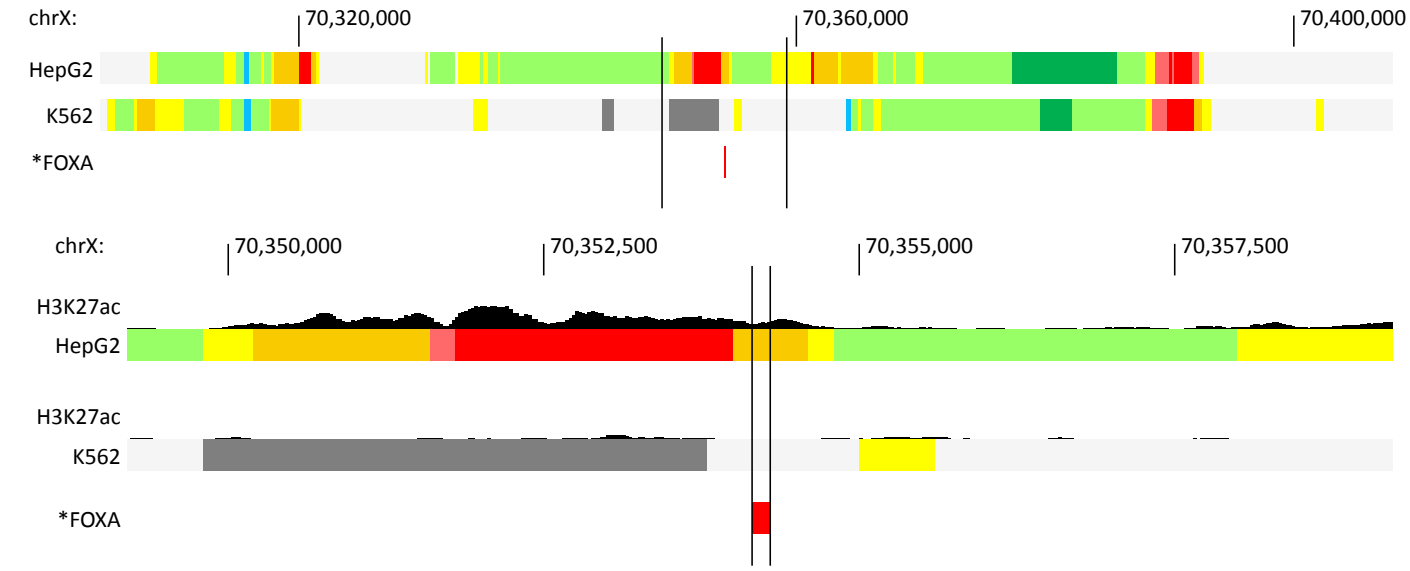
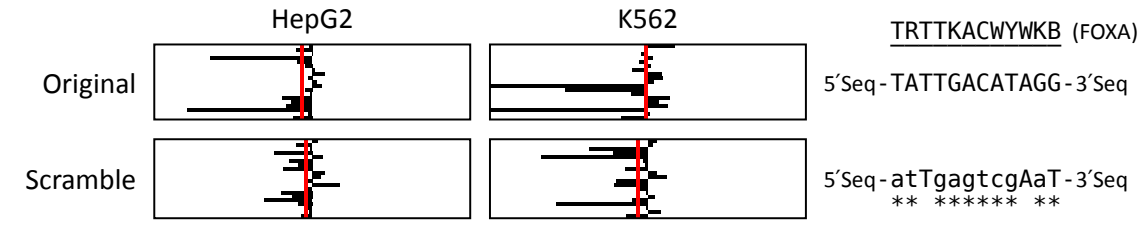
3′Seq = cagctcttgaaagcactttgctgattacagtcccagatgtcattgcatacattaccctgctctata

1931 FOXA in HepG2 enhancer (conserved at 40% confidence)

chrX 70354218 70354229 + (hg18)





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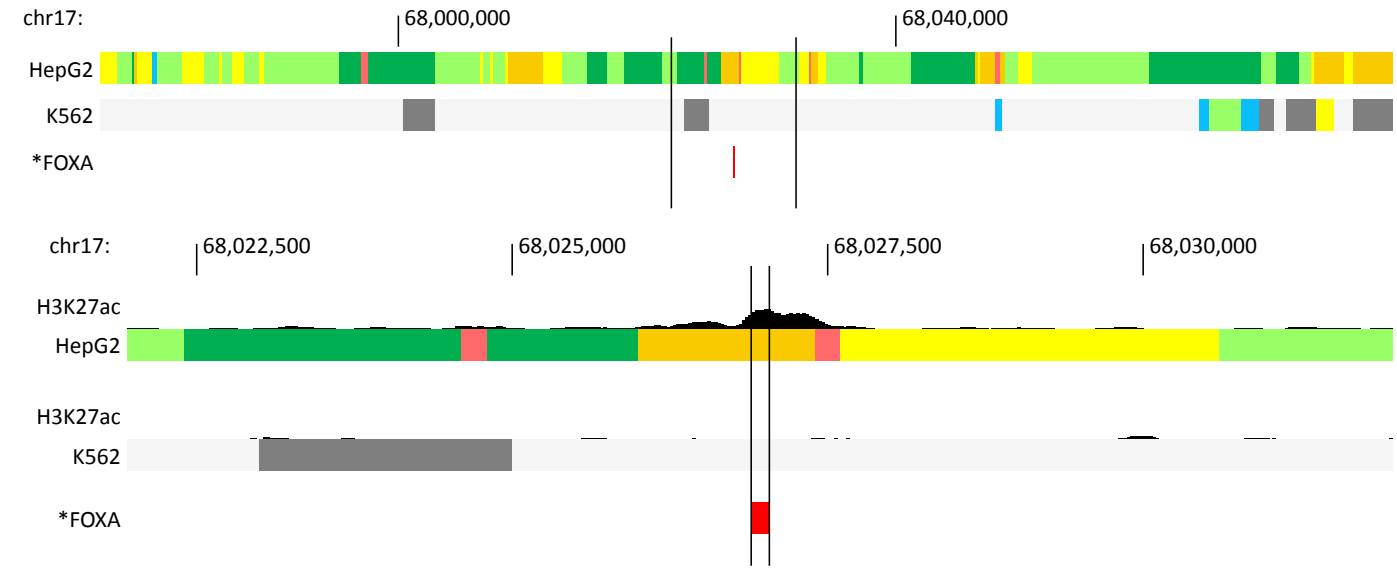
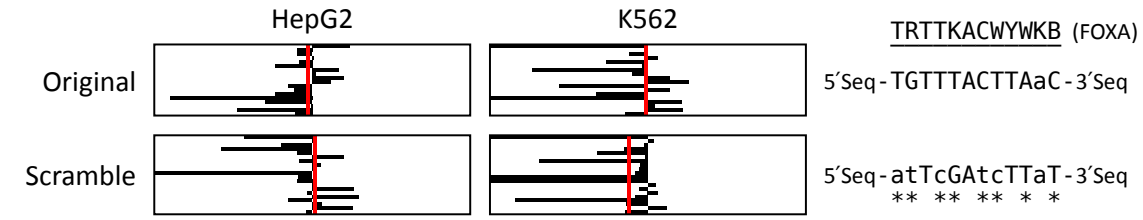
1932 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 68026961 68026972 + (hg18)





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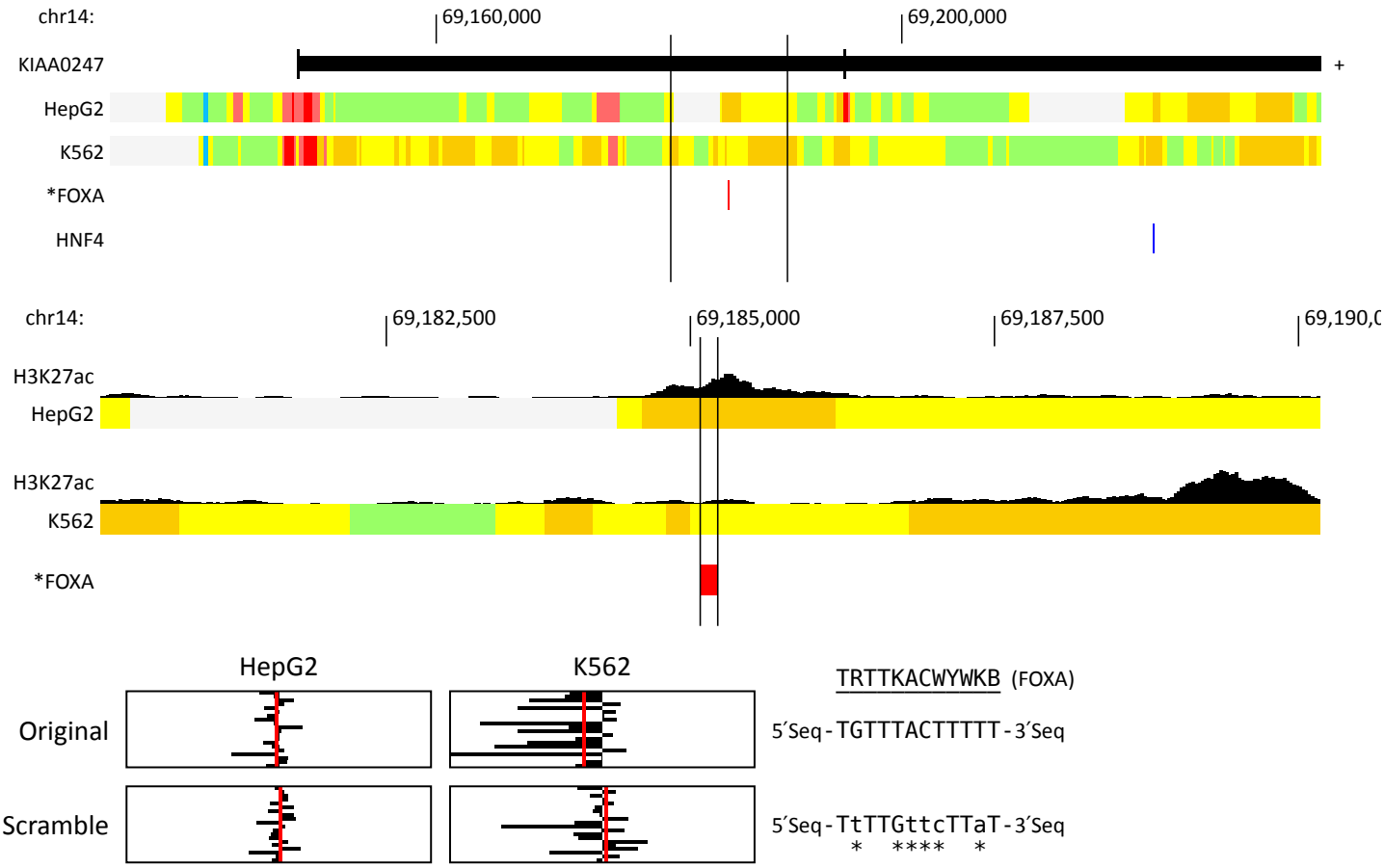
1933 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 69185148 69185159 - (hg18)



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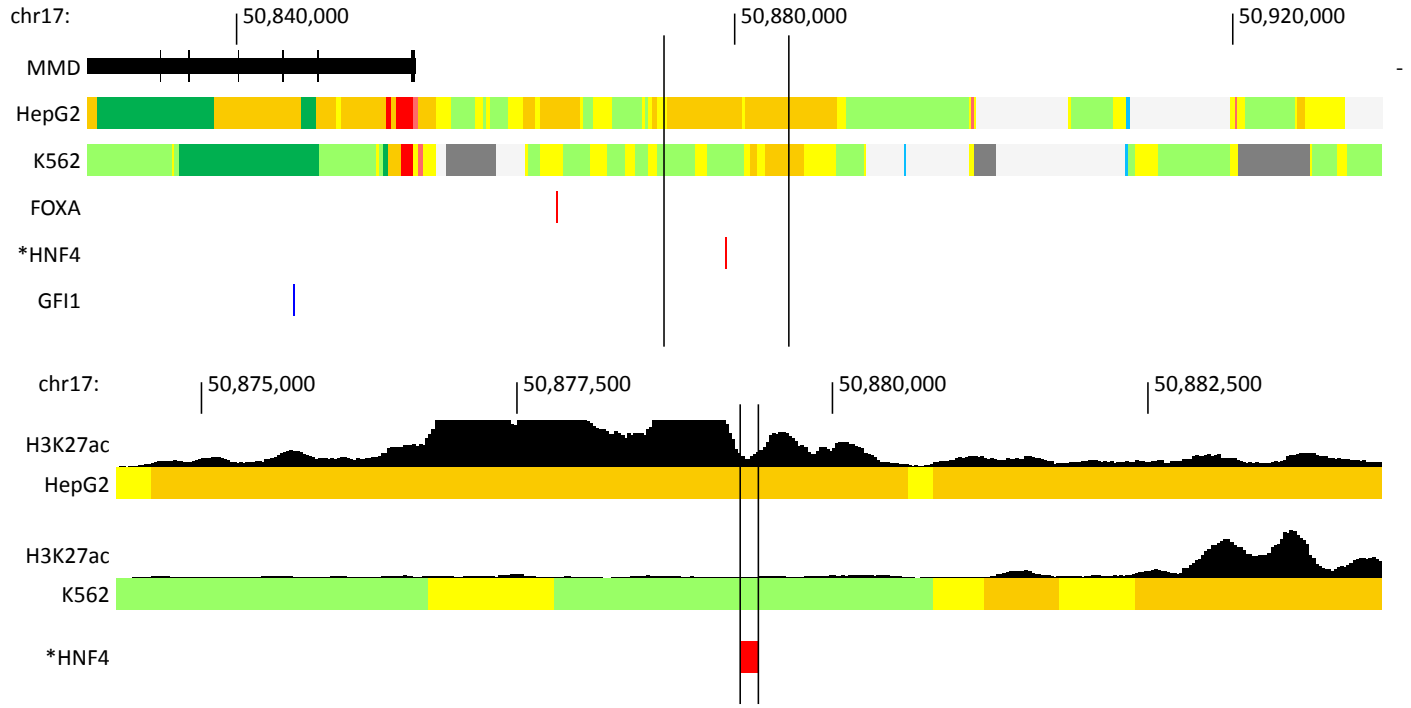
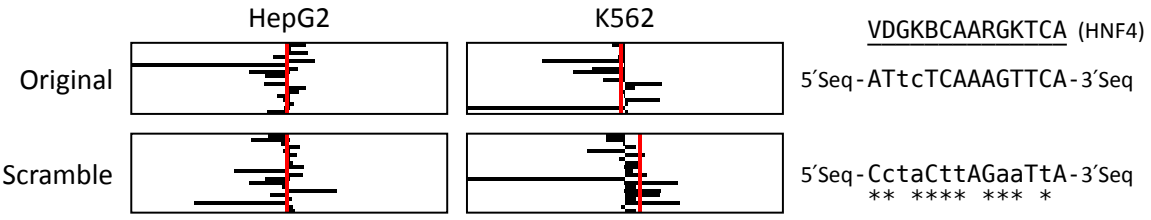
3′Seq = accatctctgtggatcgttttccaaaggcctgggagtgggatggtataaacaggtctgtgtcactt

1934 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr17 50879335 50879348 + (hg18)





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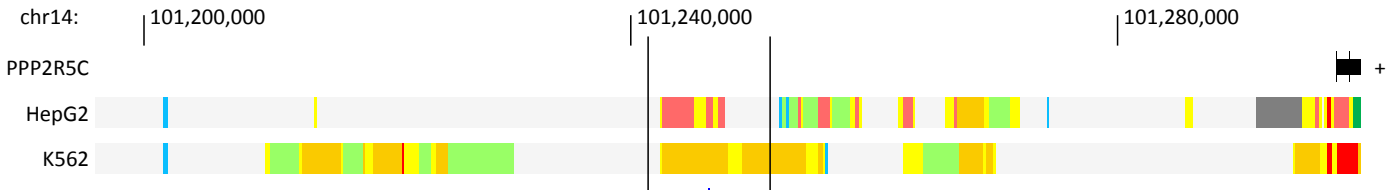
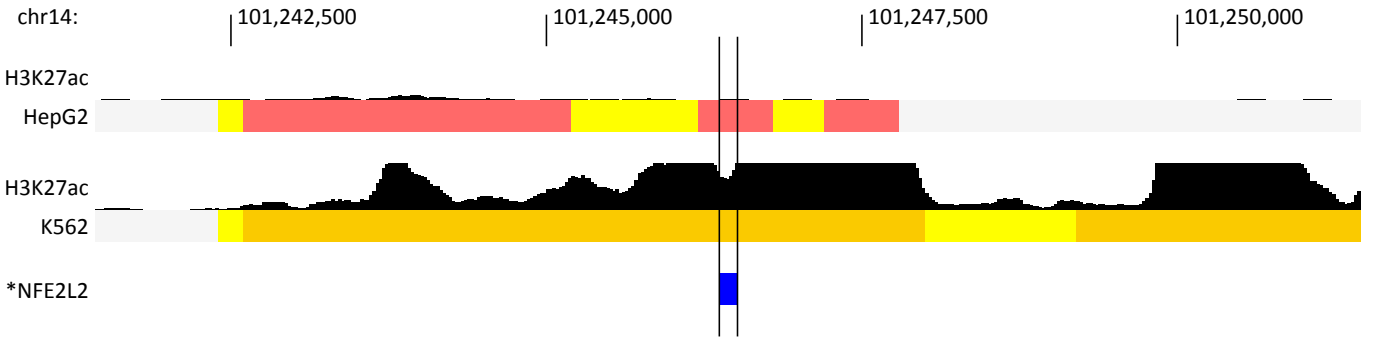
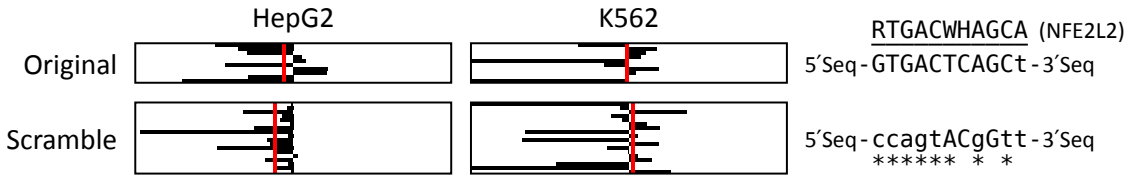
1935 NFE2L2 in K562 enhancer

chr14 101246437 101246447 + (hg18)







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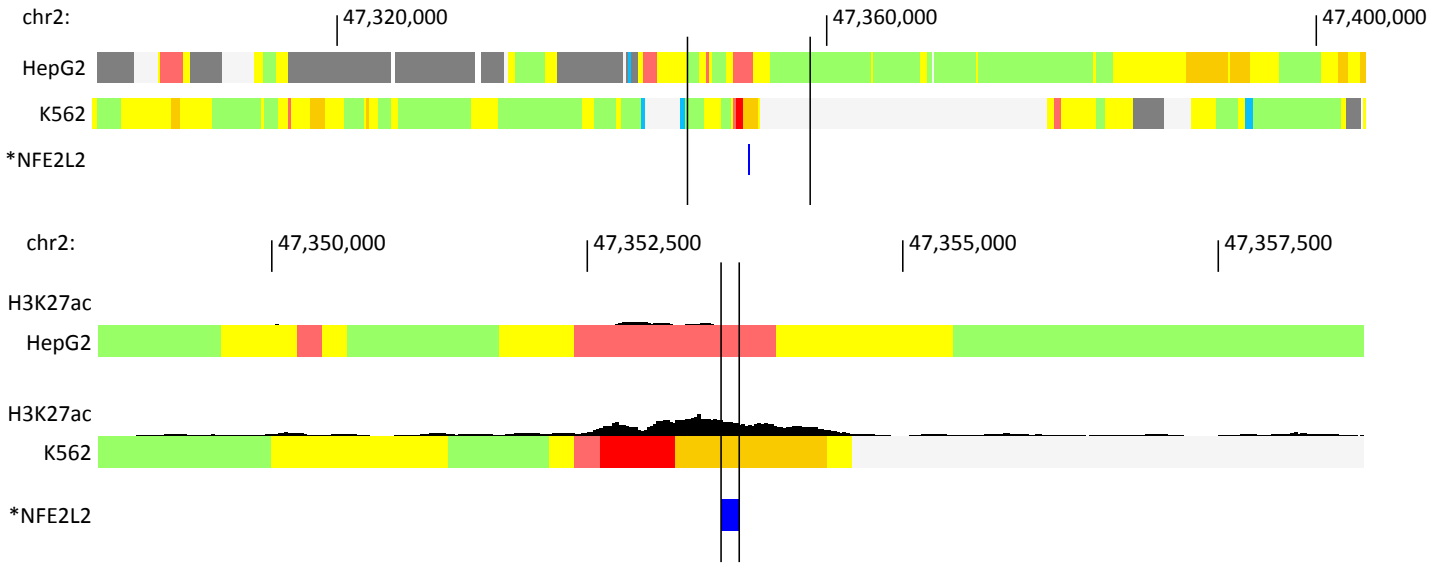
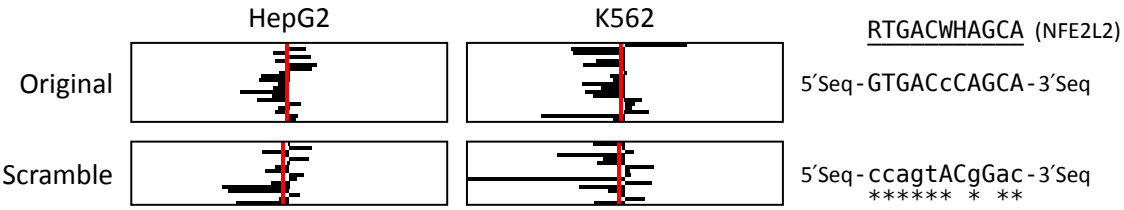
1936 NFE2L2 in K562 enhancer

chr2 47353627 47353637 + (hg18)





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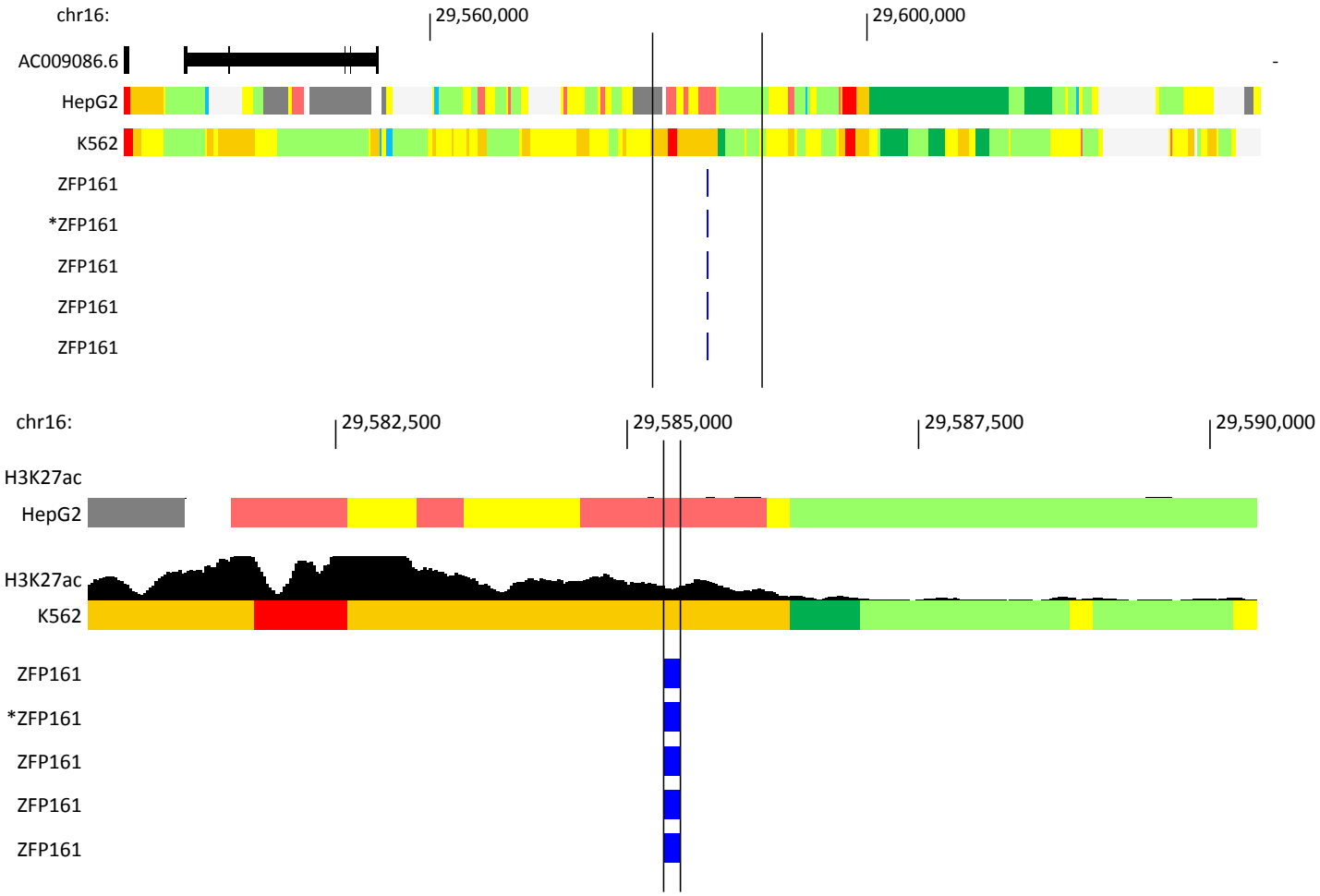
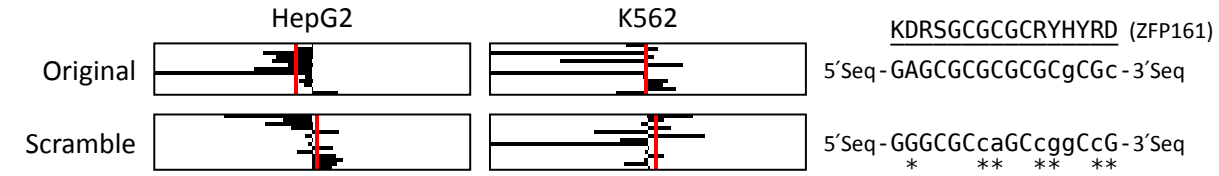
1937 ZFP161 in K562 enhancer

chr16 29585378 29585393 - (hg18)





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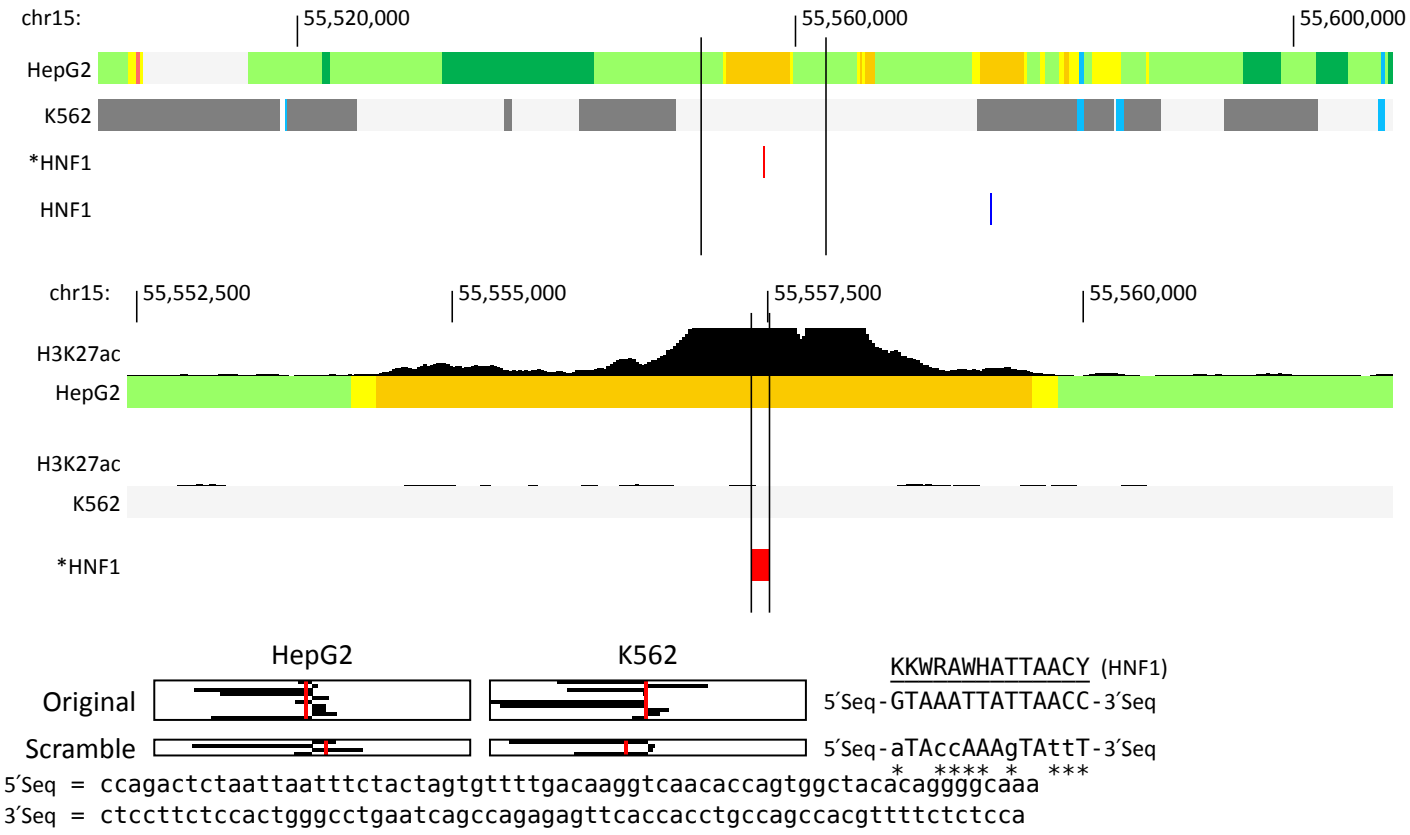
1938 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr15 55557436 55557449 - (hg18)



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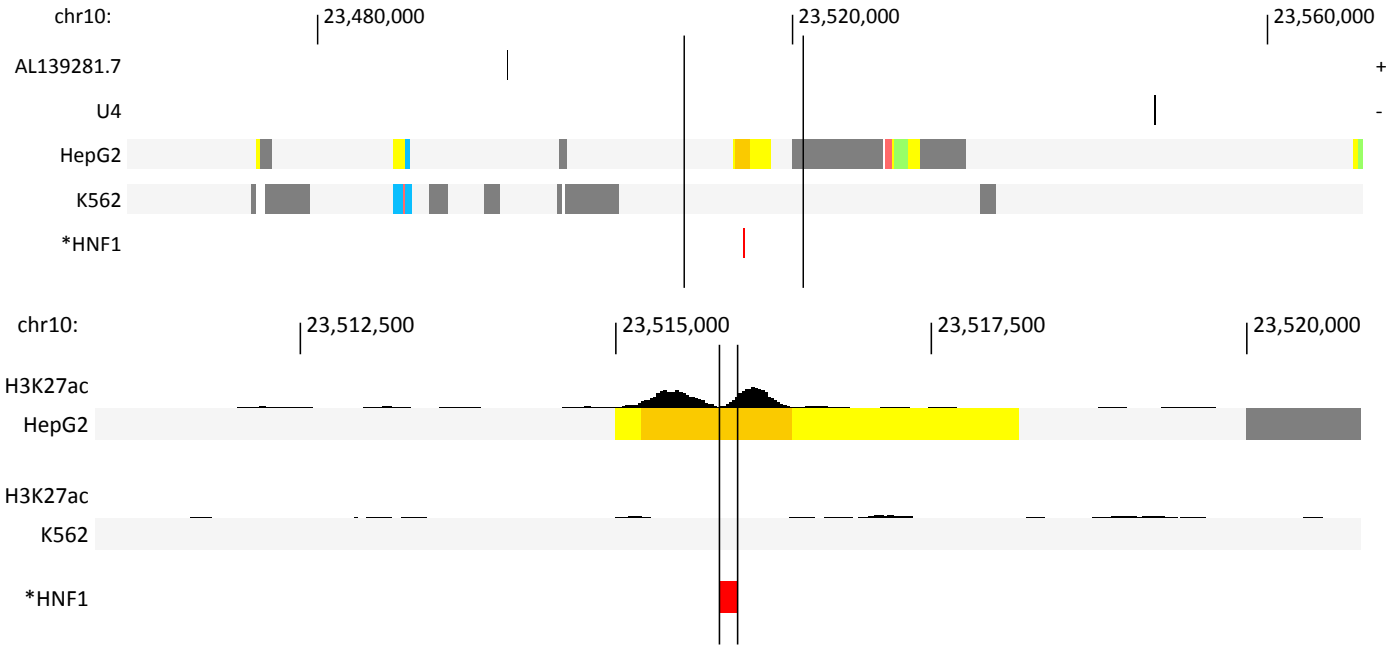
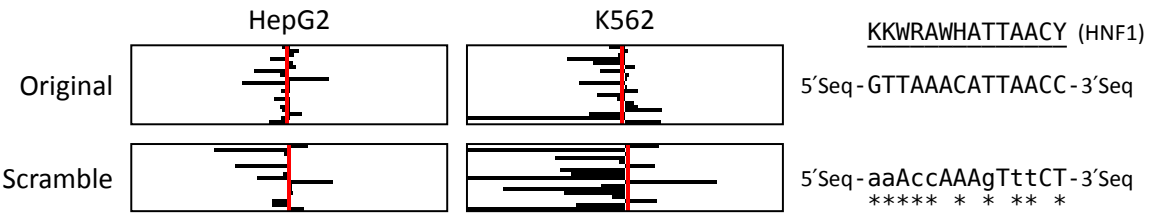
1939 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 23515887 23515900 - (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GTTAAACATTAACC-3′Seq

5′Seq-aaAccAAAgTttCT-3′Seq

***** * * ** *

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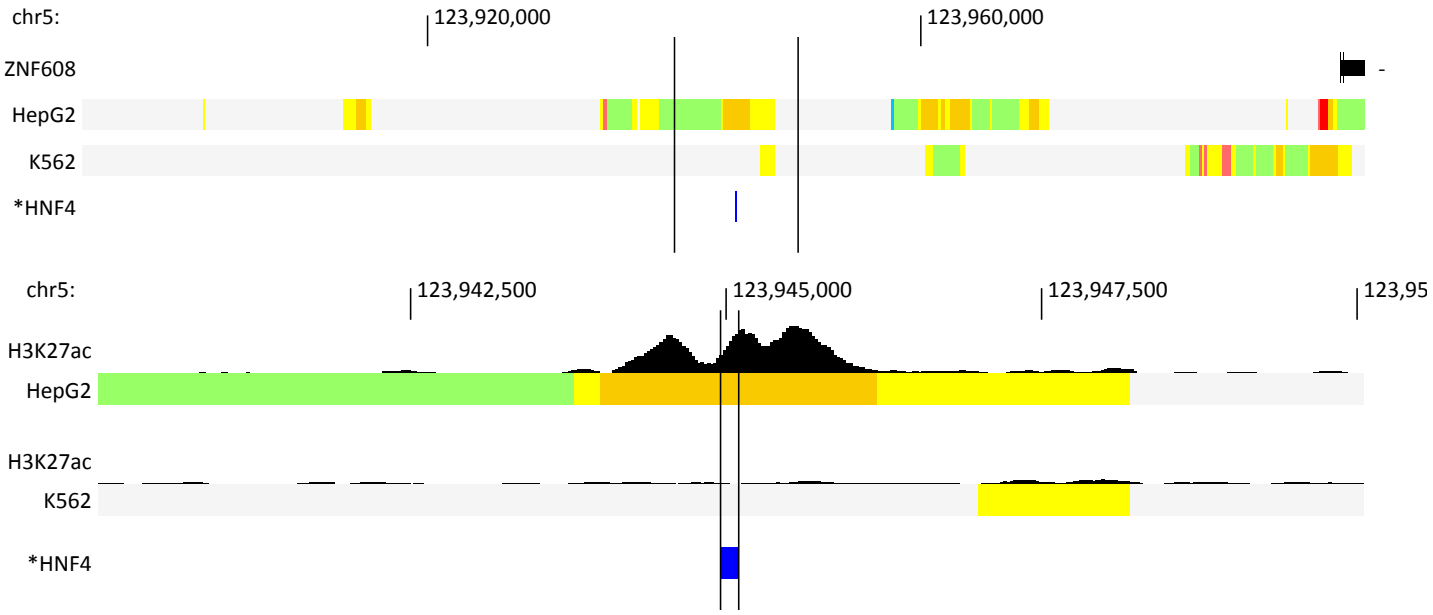
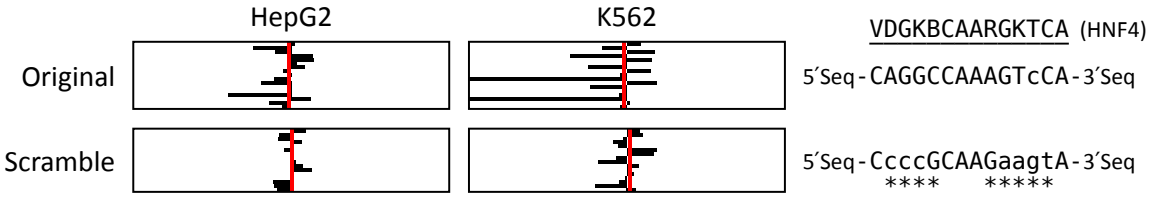
1940 HNF4 in HepG2 enhancer

chr5 123945022 123945035 - (hg18)





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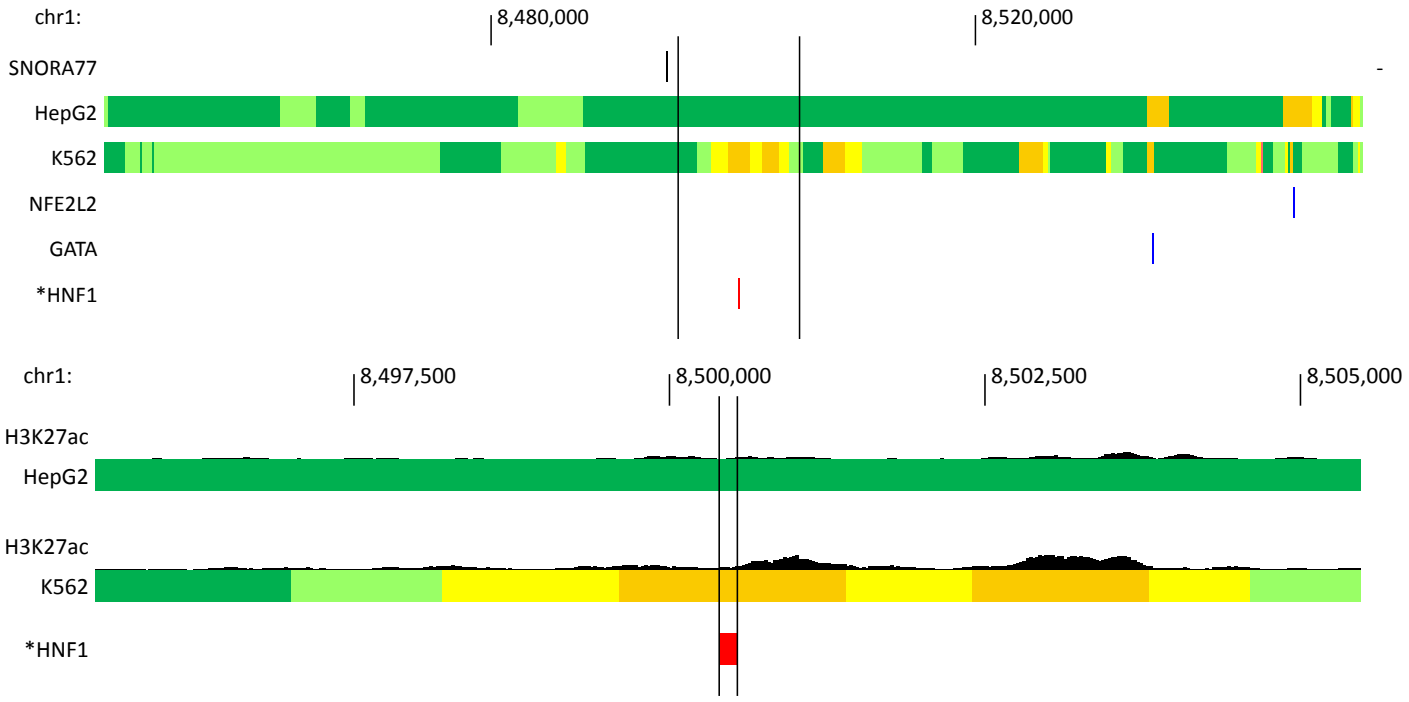
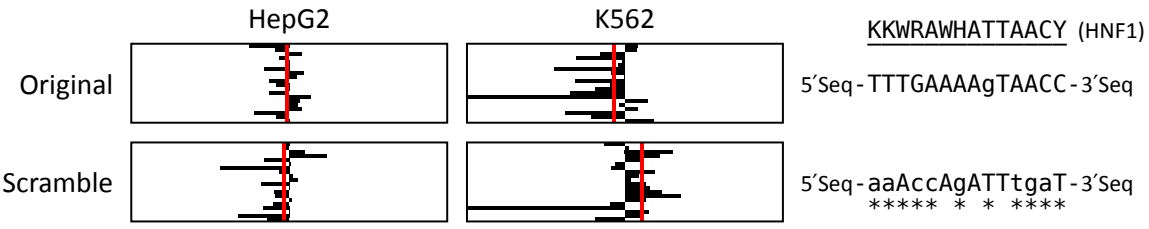
3′Seq = atctctttatcattatccctgggatgagaaaatccaagtctgccttgtttaggcaggggtagttt

1941 HNF1 in K562 enhancer (conserved at 60% confidence)

chr1 8500460 8500473 + (hg18)





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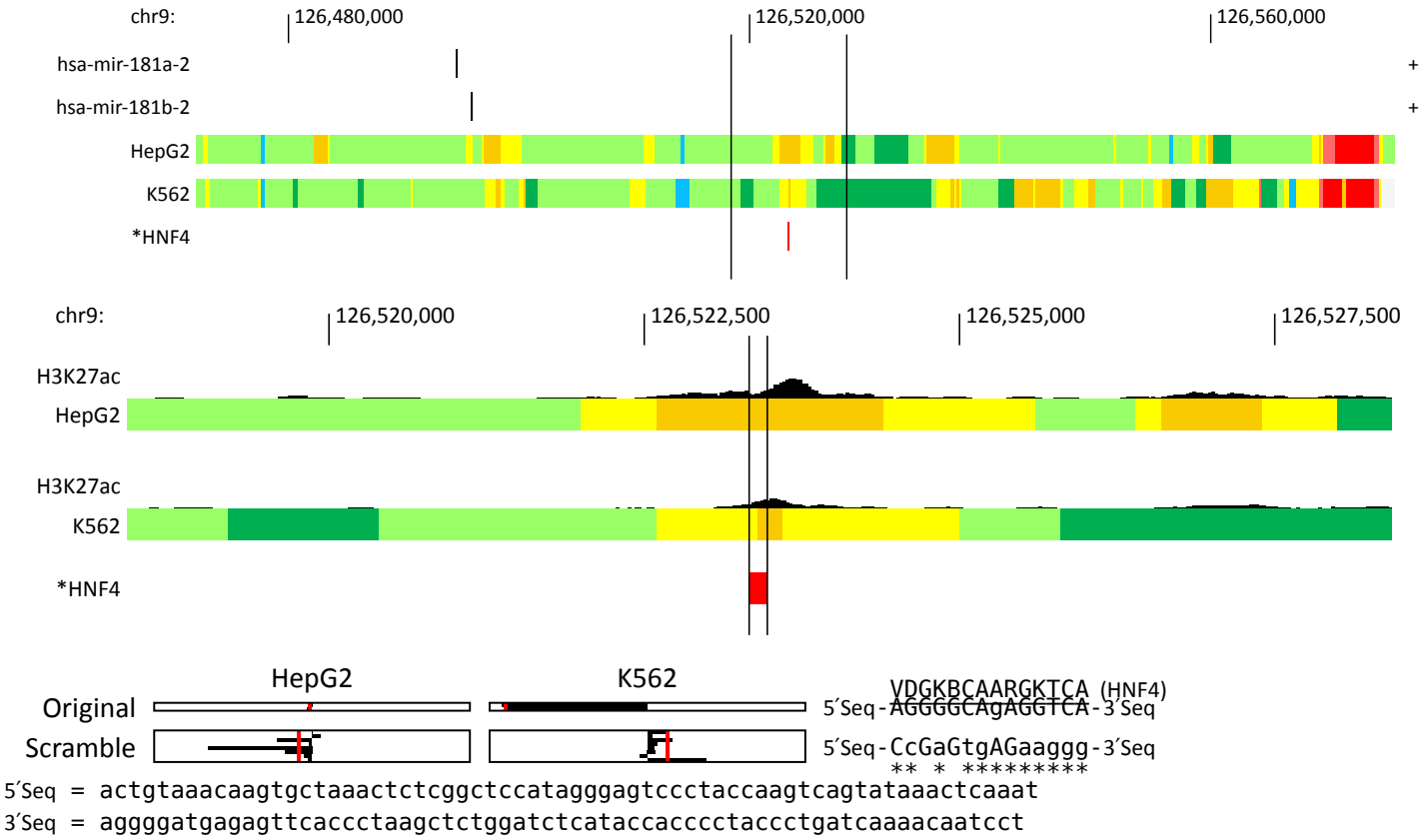
1942 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr9 126523398 126523411 + (hg18)



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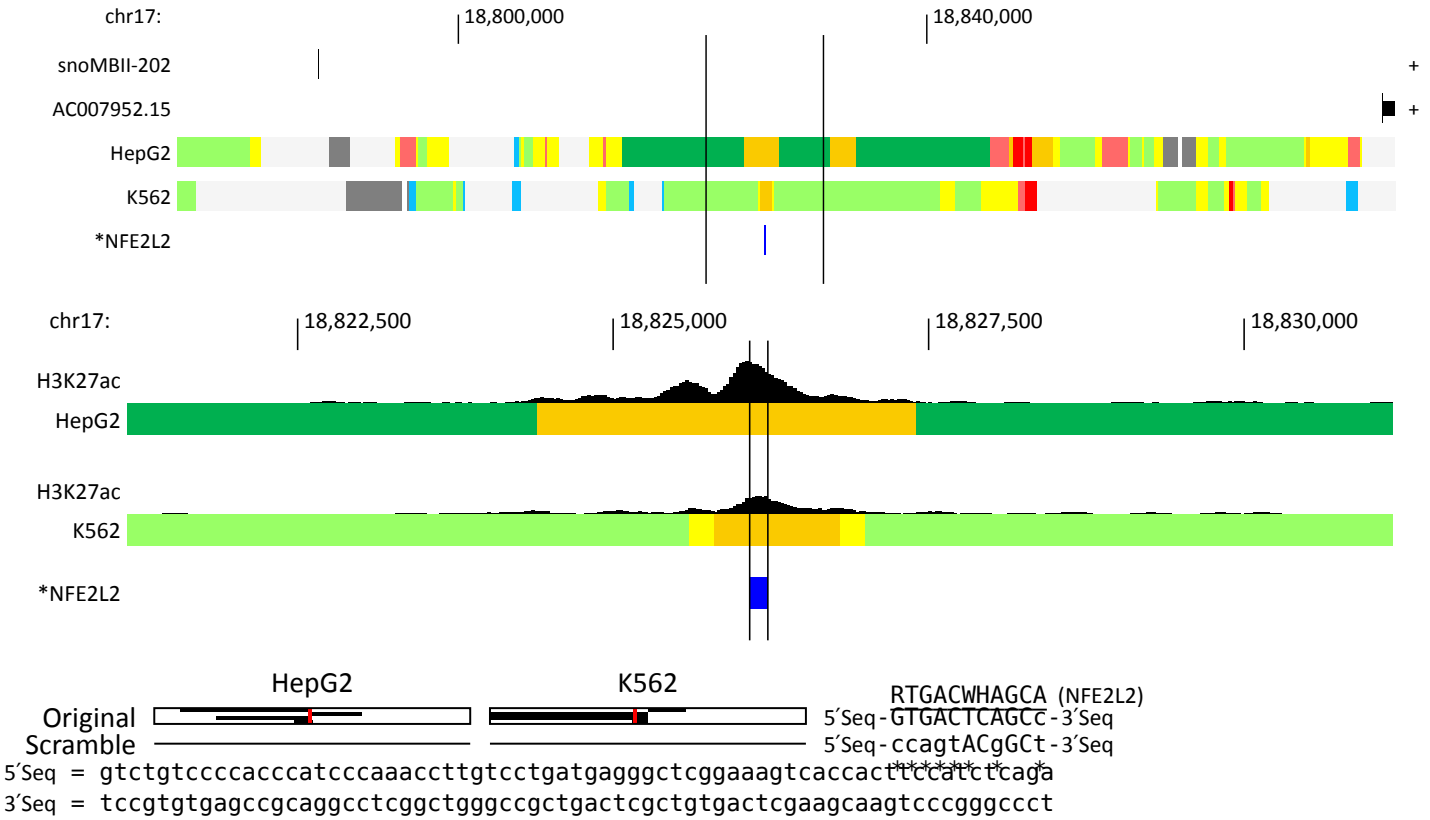
3′Seq = aggggatgagagttcaccctaagctctggatctcataccacccctaccctgatcaaaacaatcct

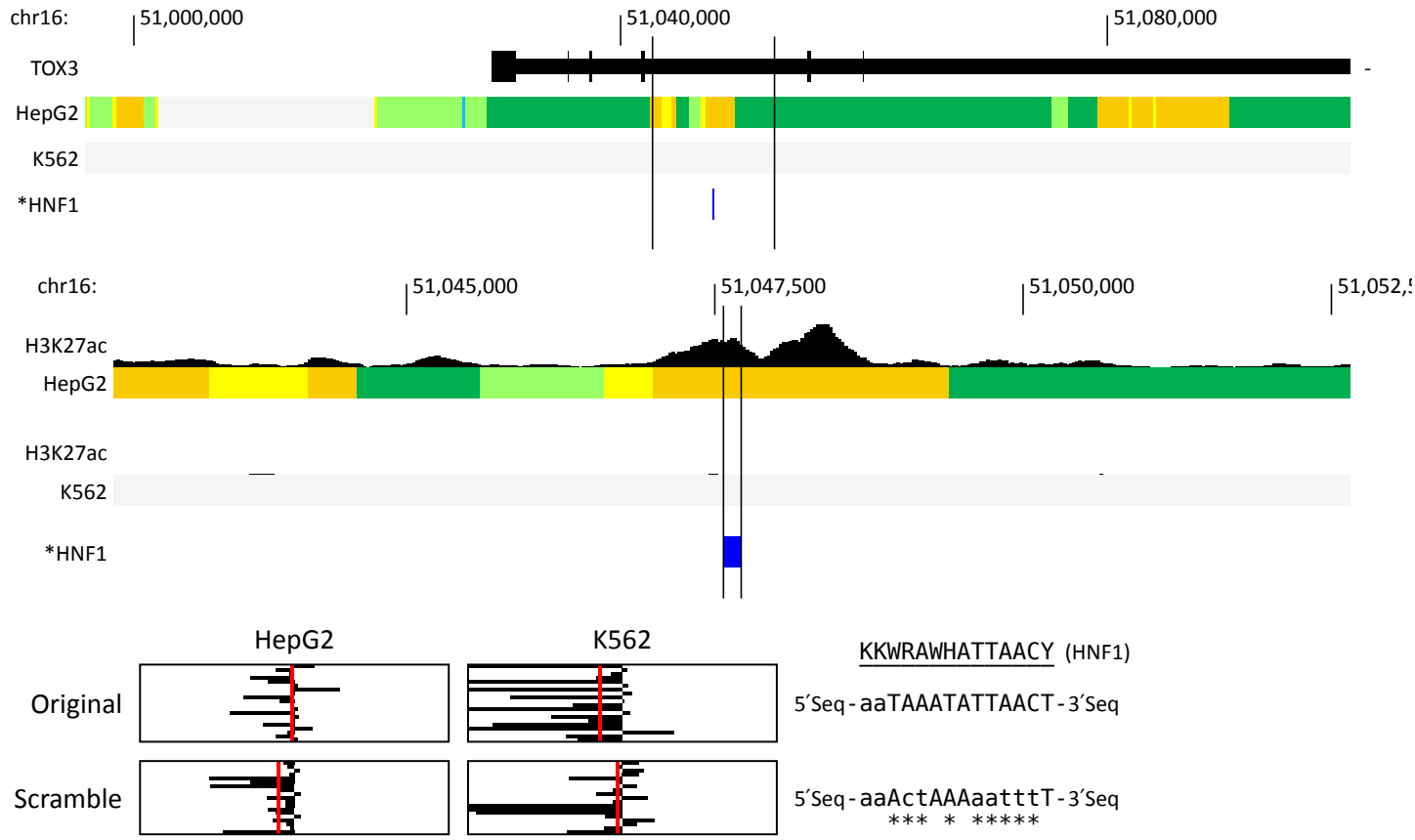
1943 NFE2L2 in K562 enhancer

chr17 18826149 18826159 + (hg18)



1944 HNF1 in HepG2 enhancer

chr16 51047636 51047649 + (hg18)



KKWRAWHATTAACY (HNF1)

5′Seq-aaTAAATATTAACT-3′Seq

5′Seq-aaActAAAaatttT-3′Seq

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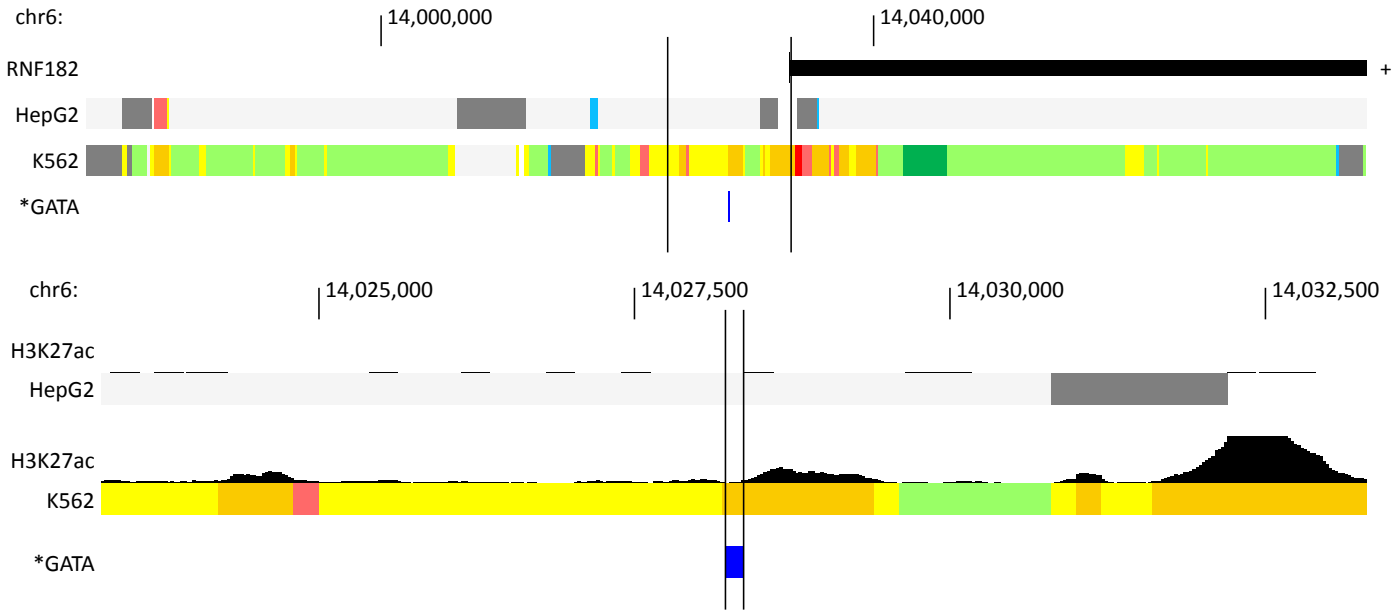
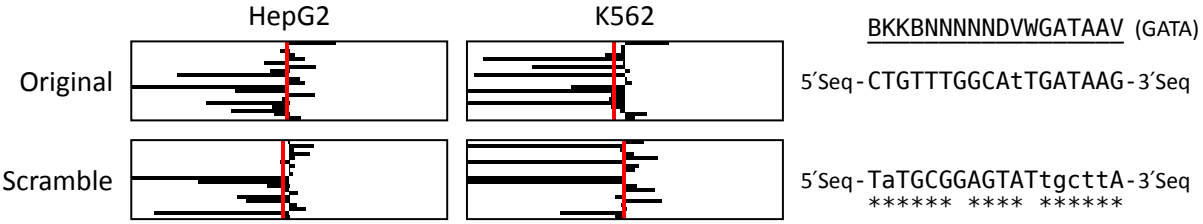
1945 GATA in K562 enhancer

chr6 14028285 14028302 + (hg18)

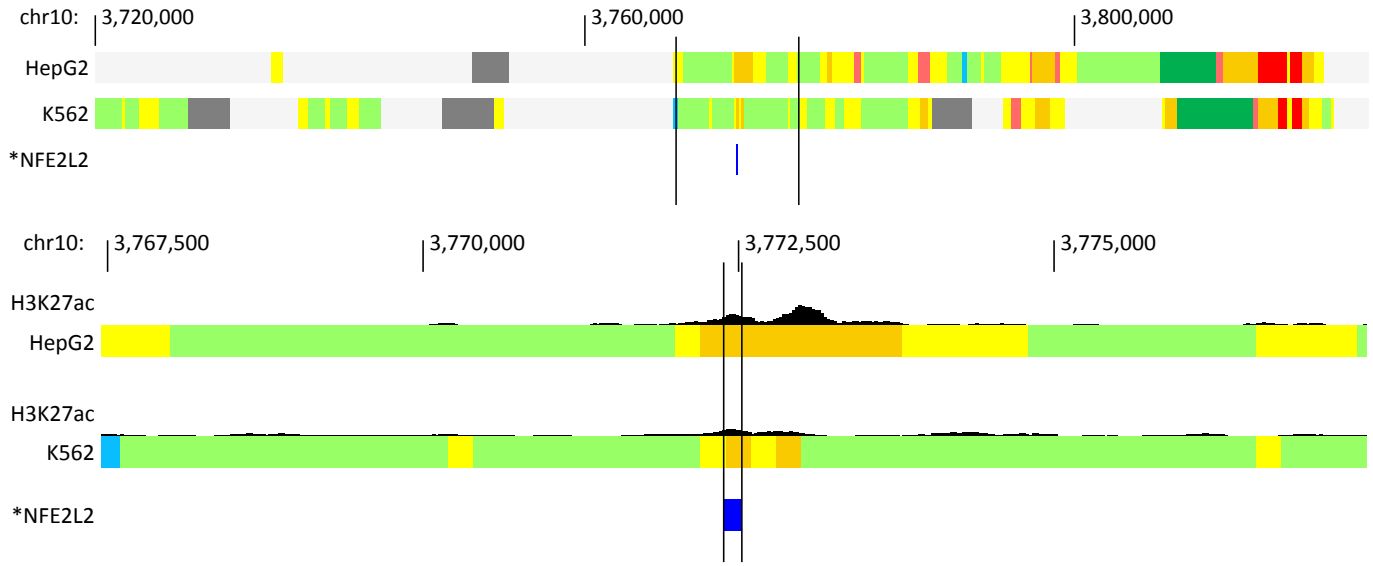


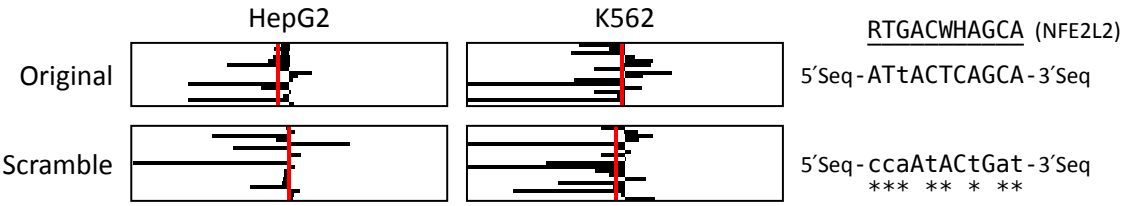


5′Seq = tatctttgtggaatggattgaagagagaagatagcctccttcacttctataagcaattatggga
3′Seq = aaagctgggtgtcctttaatttctttattgctaaagccagtagggtagaccatagtctttgta

1946 NFE2L2 in K562 enhancer

chr10 3772449 3772459 + (hg18)

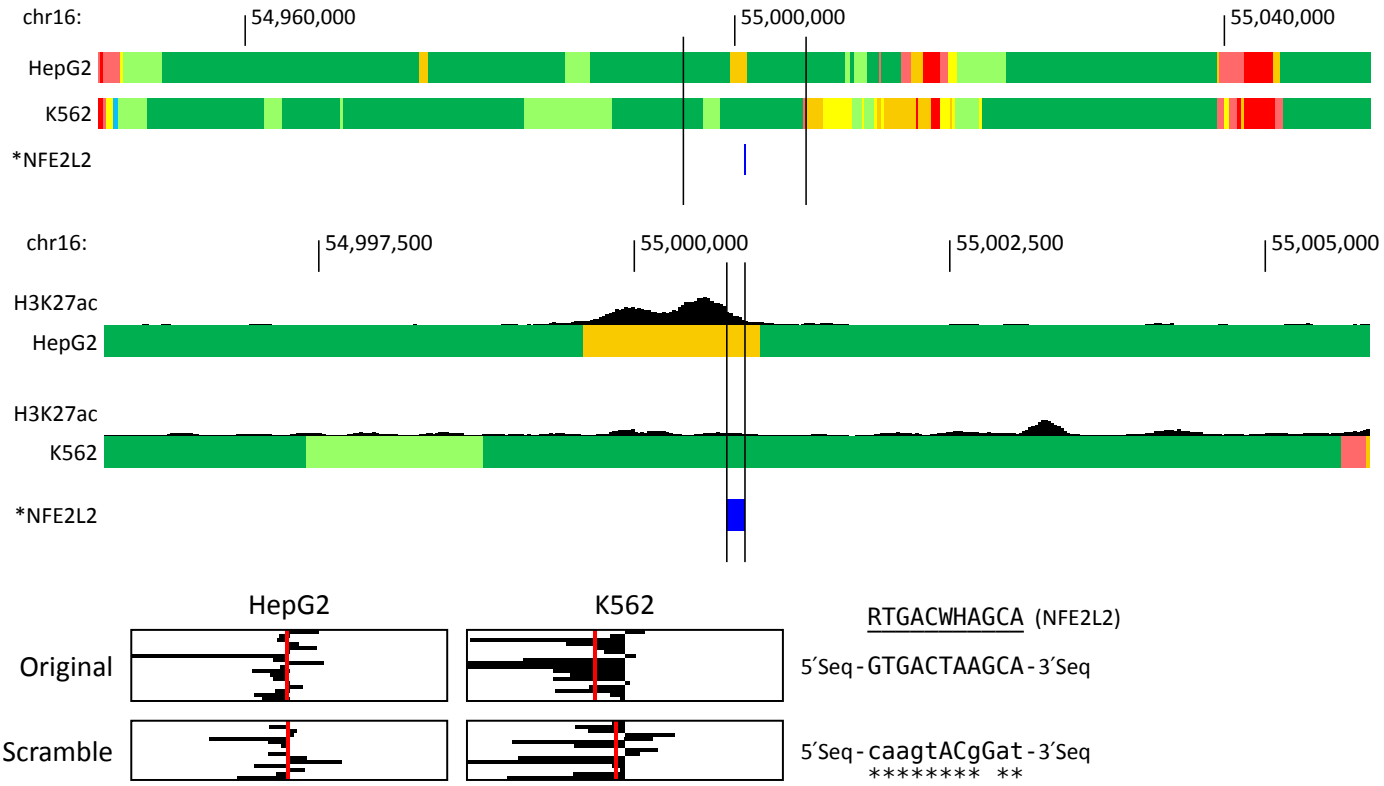




5′Seq = tcgtttcacccttacccactcatatggtatgagaggaaccccagcagagcaggaagttcaggtaac
3′Seq = ttactcagtctcttctgagctgtttctttctcacttgctgtcttacatccttcagatattacttttt

1947 NFE2L2 in HepG2 enhancer

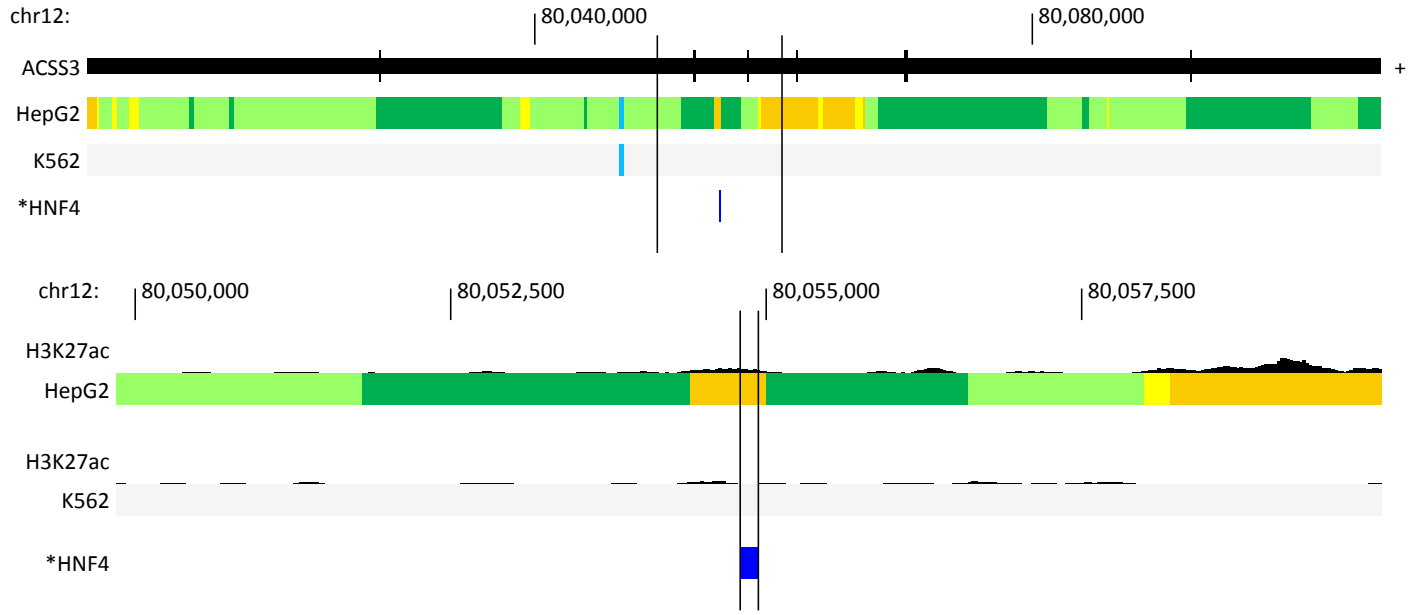
chr16 55000800 55000810 + (hg18)

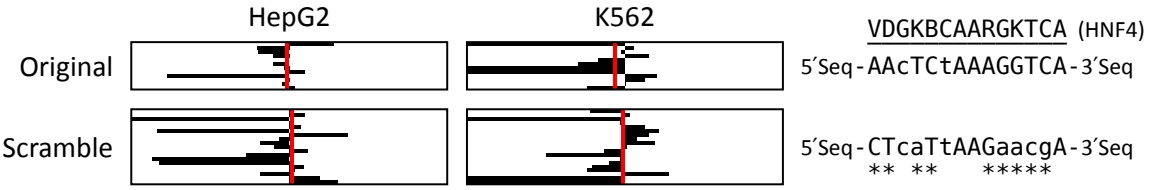


5′Seq = gaagagctaccctgaccatgcctgctgtggctcattcacattacacaattcaaagttggcaaacgtg
3′Seq = agcaaaaagcttggctaaaaactcacatattcaaatcgatccttgcagagctgaaccatcaggtgca

1948 HNF4 in HepG2 enhancer

chr12 80054860 80054873 - (hg18)

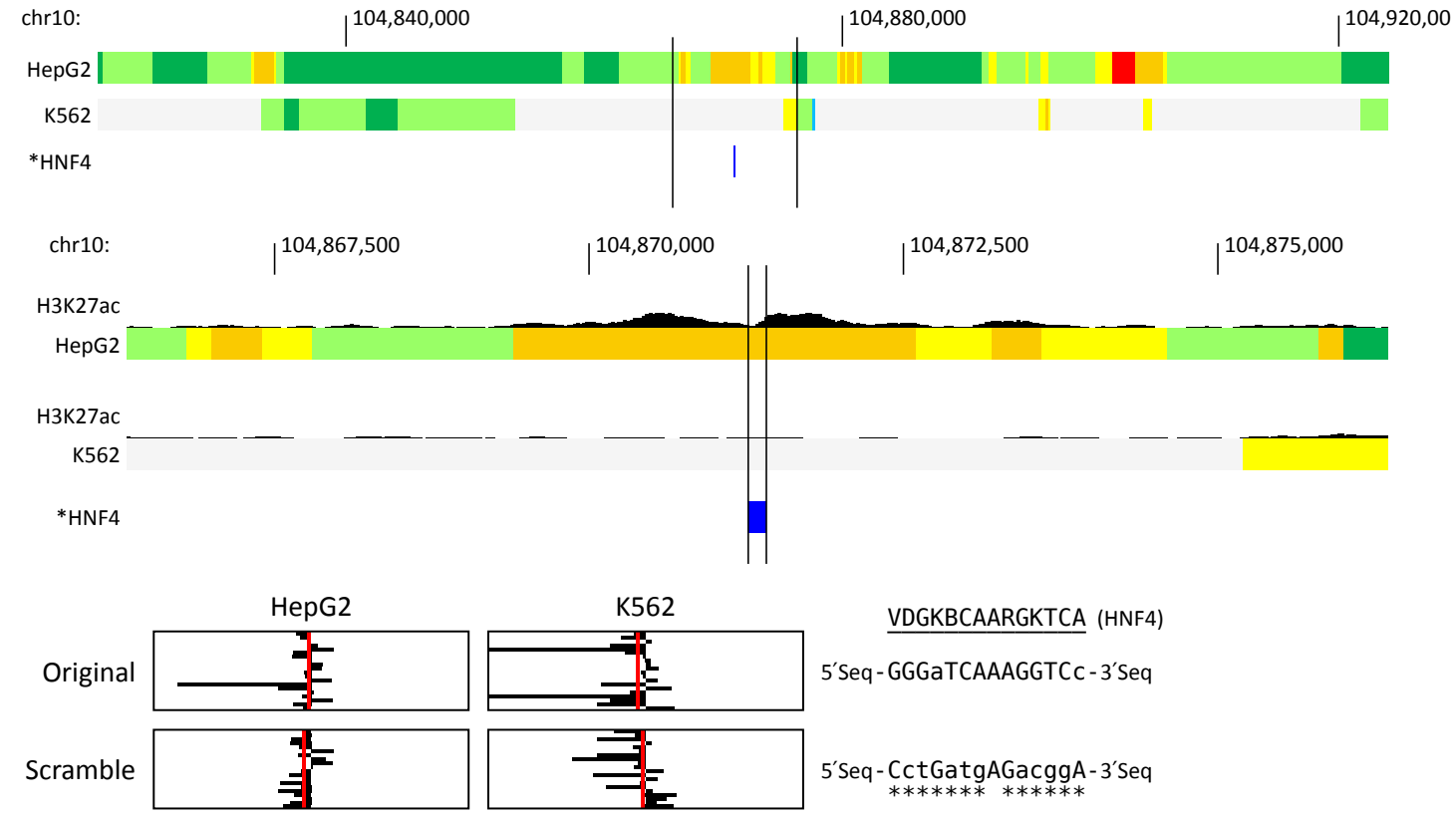




5′Seq = actcaggggccttcagtatatattagctttcttcccattaagaatgtctcatcttgggcttgtaa
3′Seq = accatctcttgctctgataagcaccttccttccttaatcttcccagagtccttttttccccttcat

1949 HNF4 in HepG2 enhancer

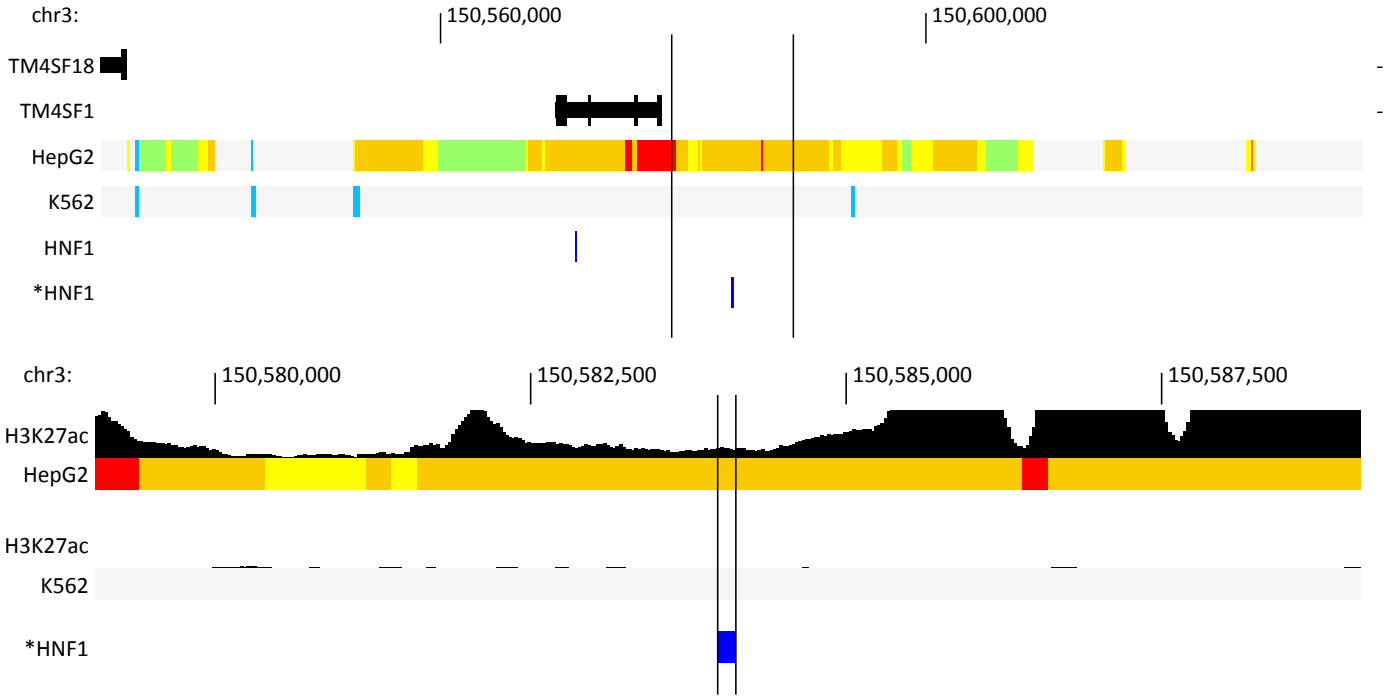
chr10 104871332 104871345 + (hg18)

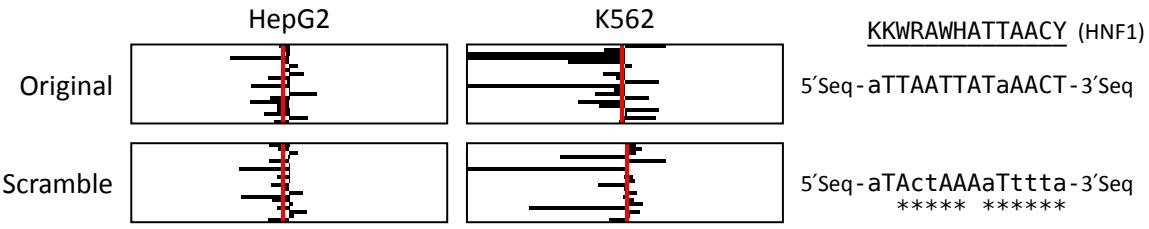


5′Seq = tgagttgagtccattccaataacaataaaacaagatcagagtgcatctactatgttcgagaggaca
3′Seq = tgagatgcctctgctagtagcaagataatgctctgatttactgacatcacaggctagtttctctt

1950 HNF1 in HepG2 enhancer

chr3 150584048 150584061 + (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-aTTAATTATaAACT-3′Seq

5′Seq-aTActAAAaTttta-3′Seq

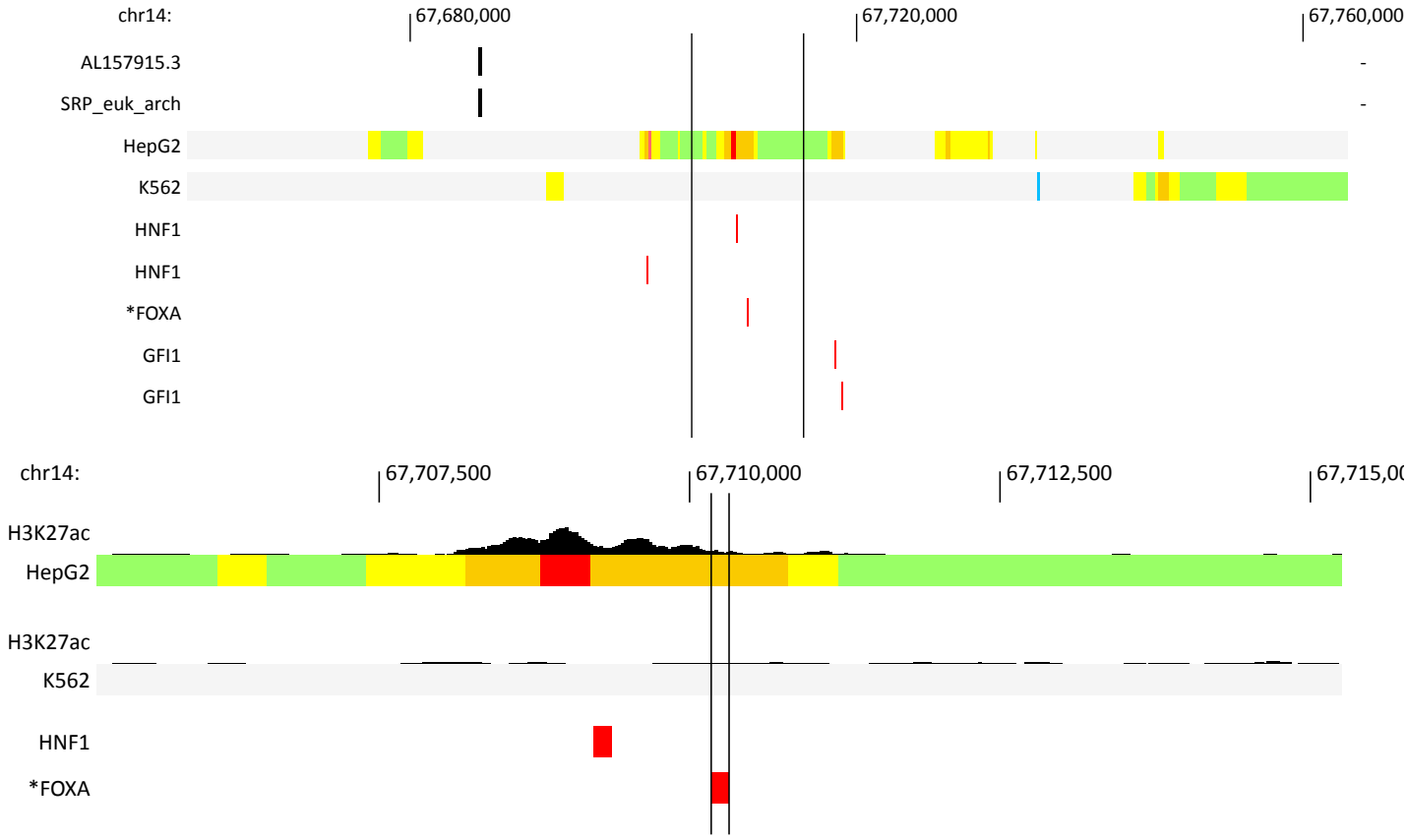
***** ******

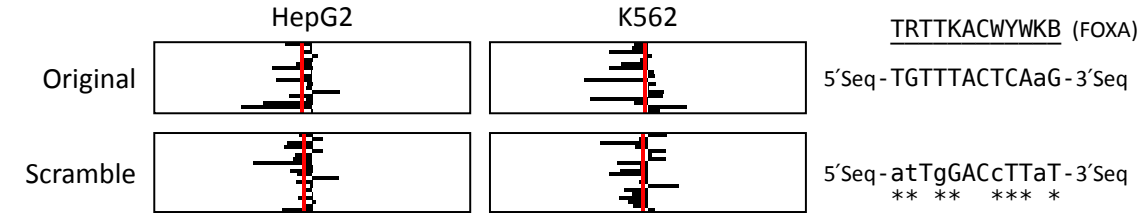
5′Seq = caatgctcattagagcattctgattatagtaacagaagccagttgagttacctaaaacaaaggggc

3′Seq = tcaaaggtggagatgcagataggatgatggaactcacggacaggggaacaaaggtctggaaattc

1951 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 67710241 67710252 + (hg18)

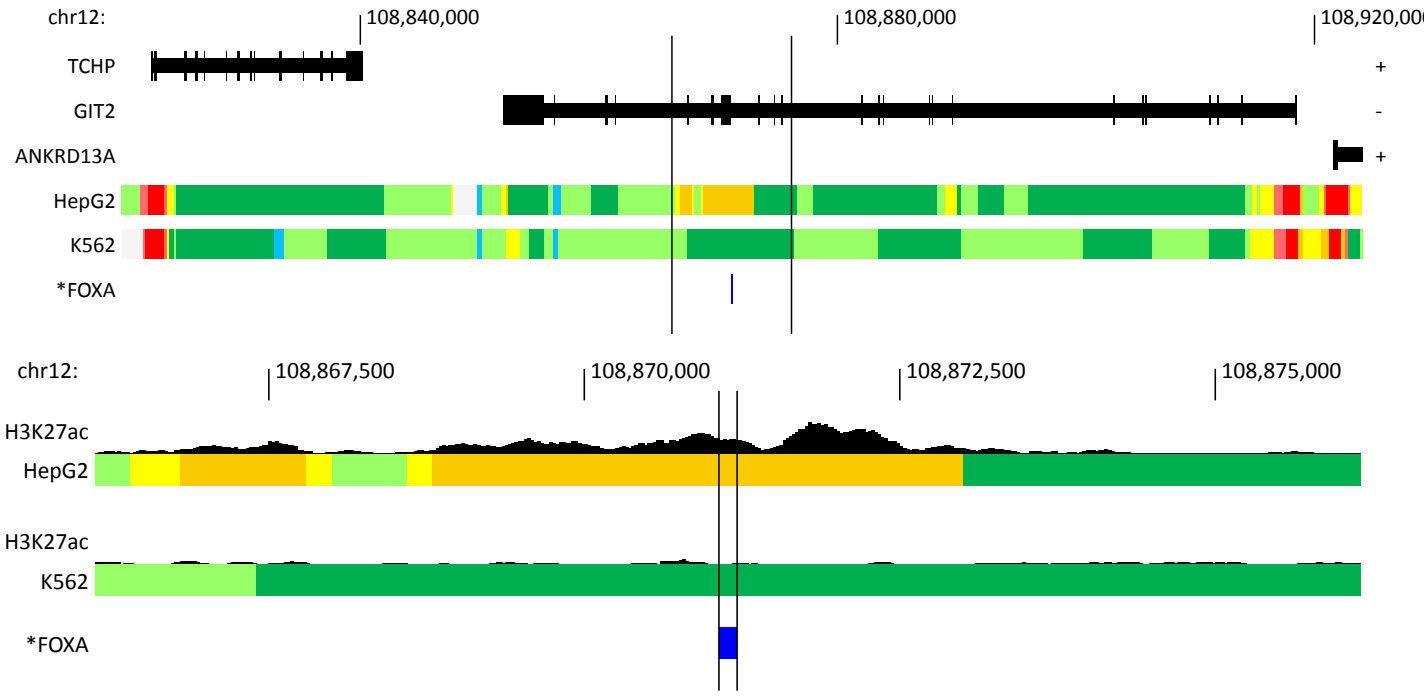


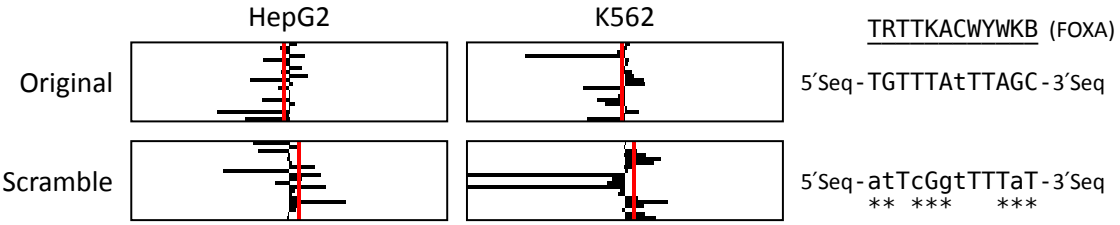


5′Seq = ctattagggagtacccatgttcctggcttctttccttgggctggaaccattcaactgcacagataaa
3′Seq = gaagaatgcatagctttgaaacagtcttaagatgagtaaaagtcttaagatcagtaaaatatacaa

1952 FOXA in HepG2 enhancer

chr12 108871134 108871145 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTAtTTAGC-3′Seq

5′Seq-atTcGgtTTTaT-3′Seq

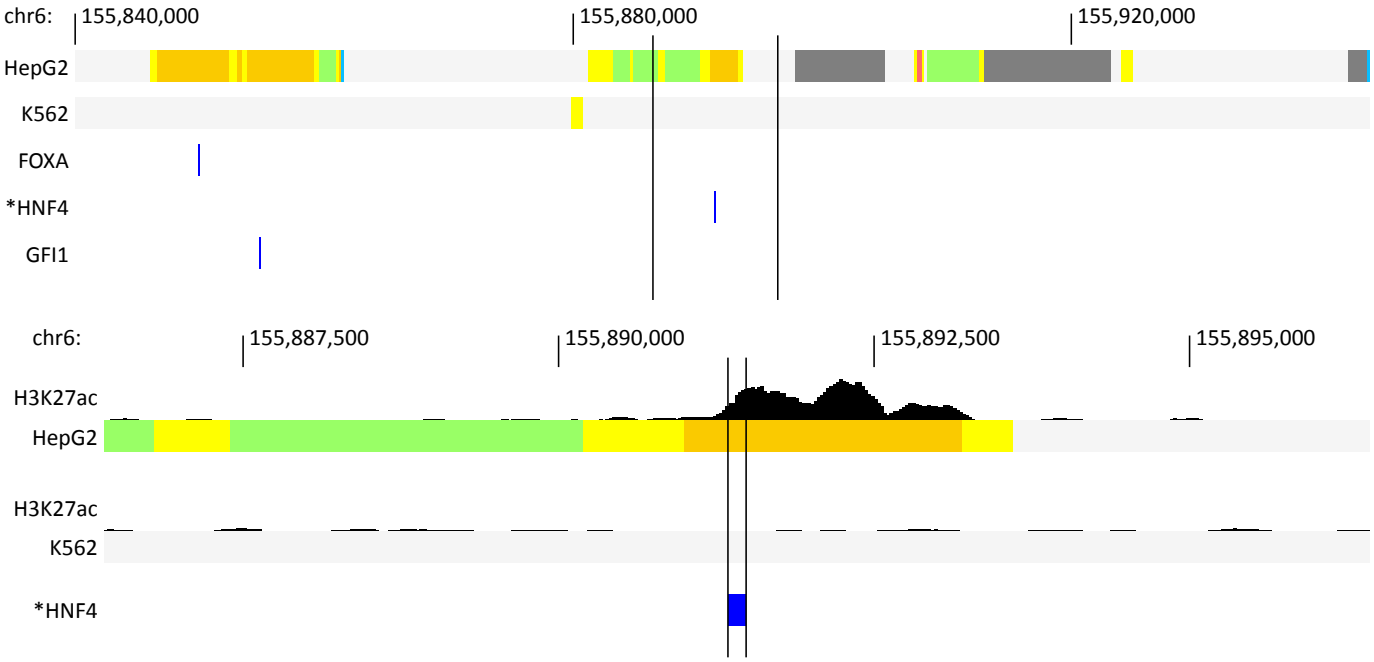
** *** ***

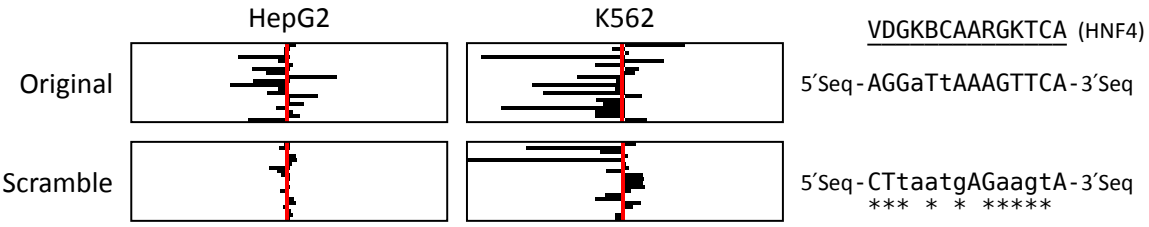
5′Seq = tgtggaagaggcagtaagtcacactttcacagcagtttggcatgattaatataaagtatatggaatt

3′Seq = aaagatgtattgattatatttcaaagttgggtaaagttttaatatacataaagttgacaaagtag

1953 HNF4 in HepG2 enhancer

chr6 155891408 155891421 - (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-AGGaTtAAAGTTCA-3′Seq

5′Seq-CTtaatgAGaagtA-3′Seq

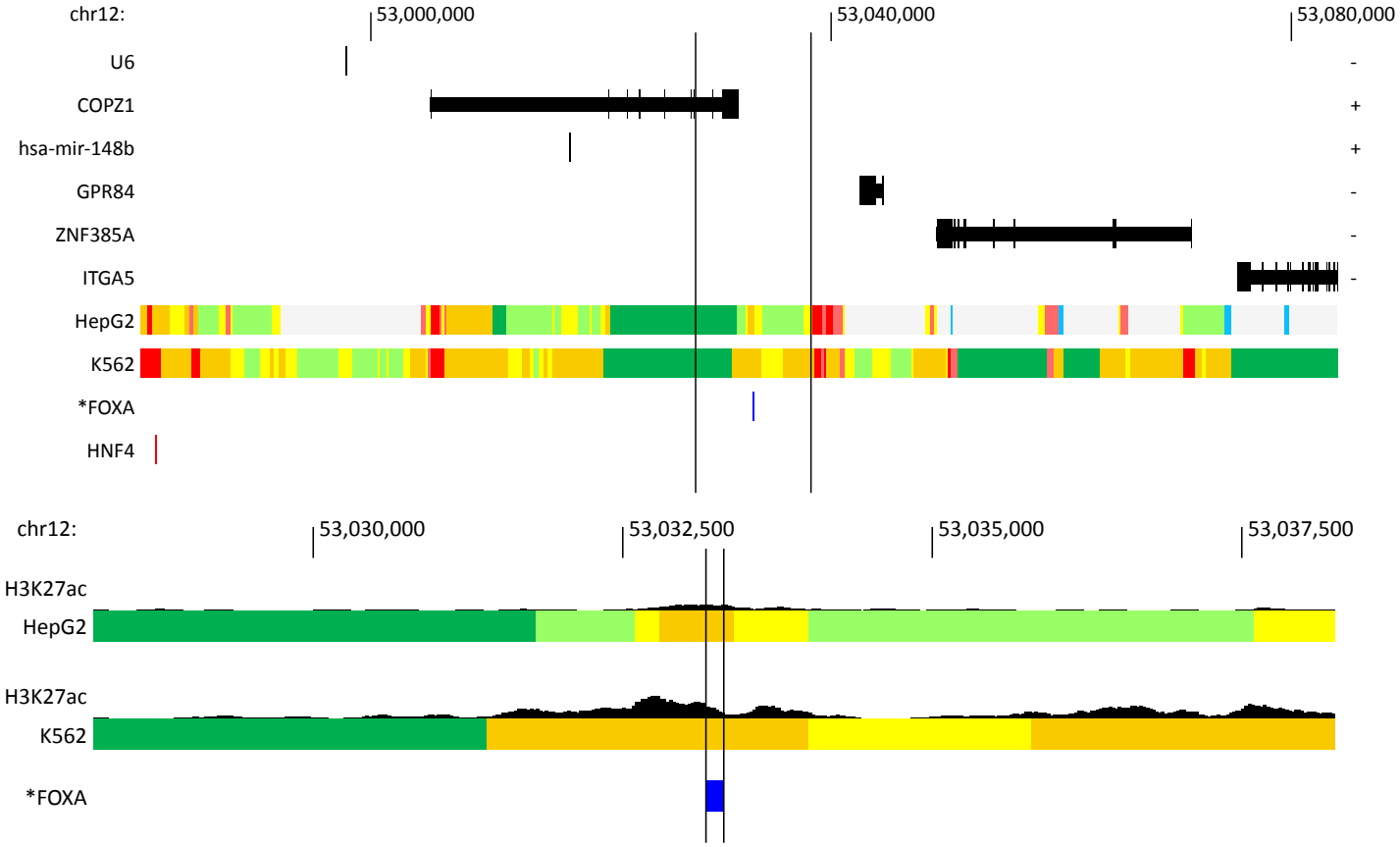
*** * * *****

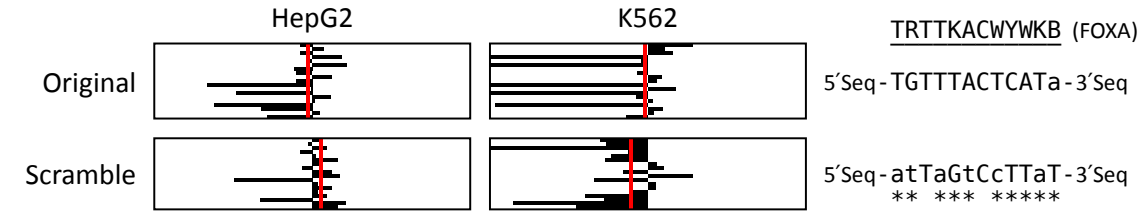
5′Seq = aattgggagacttccctgctgtttgataaggaatacaagctcagaaattacagttaaatccgtaac

3′Seq = ttcacaaagaaatacaaagcaatgatgtaatgcttaatagtgatgatgttggtaatgatgccaga

1954 FOXA in HepG2 enhancer

chr12 53033239 53033250 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTCATa-3′Seq

5′Seq-atTaGtCcTTaT-3′Seq

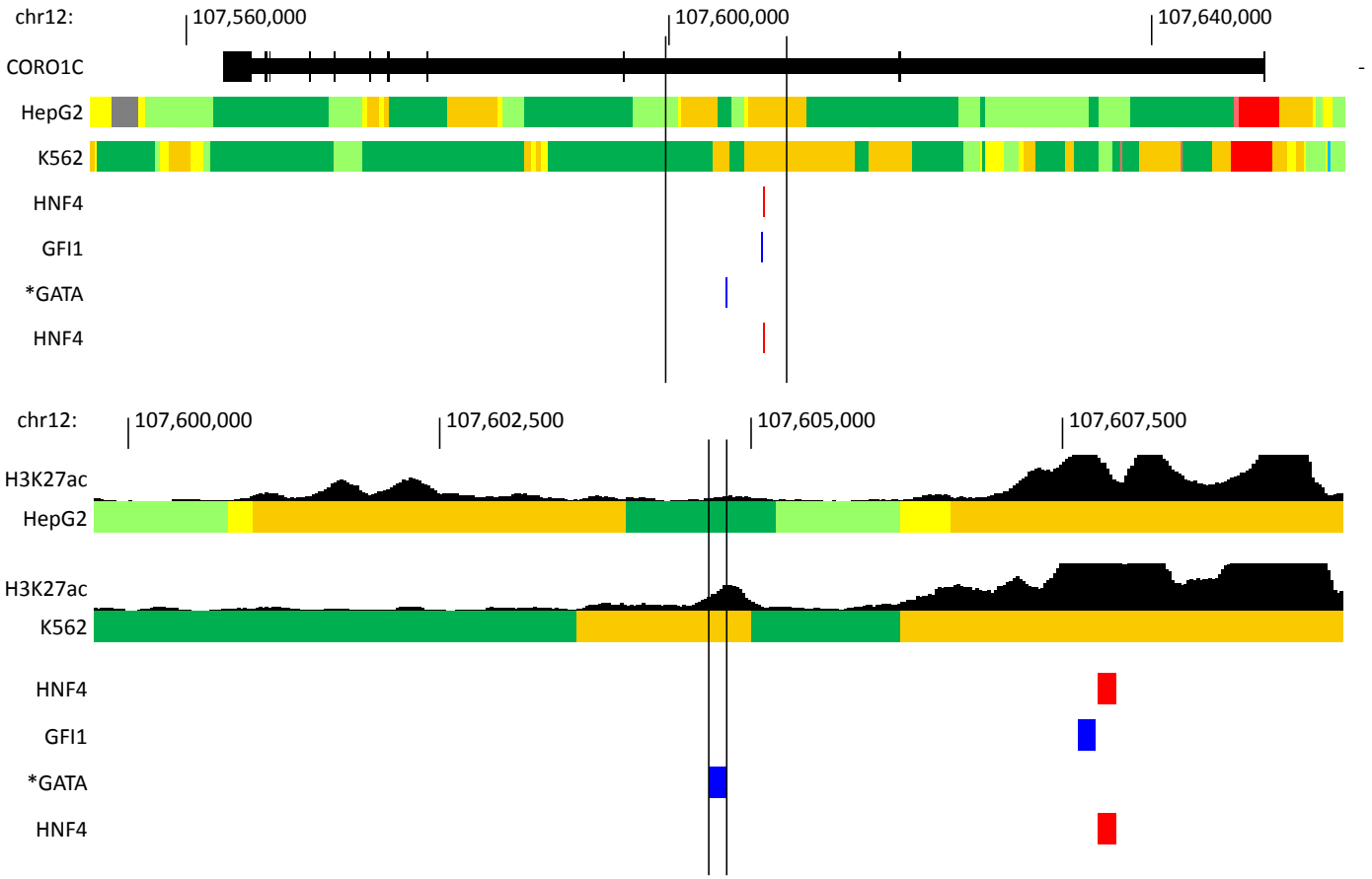
** *** *****

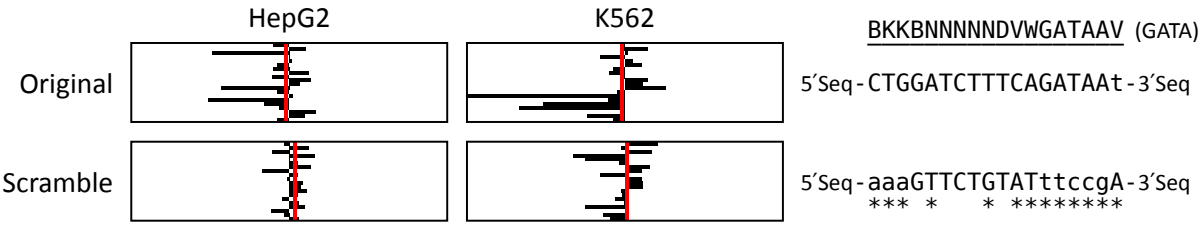
5′Seq = agaaaccaaggaaaagaaataatcagaccctgctcccaggctctgcttcagtcagtgcttggggatg

3′Seq = gccctgaaaaaaaattgctggccaaaagactgggtaggccagggcaccaaagttccattcatgctg

1955 GATA in K562 enhancer

chr12 107604724 107604741 - (hg18)





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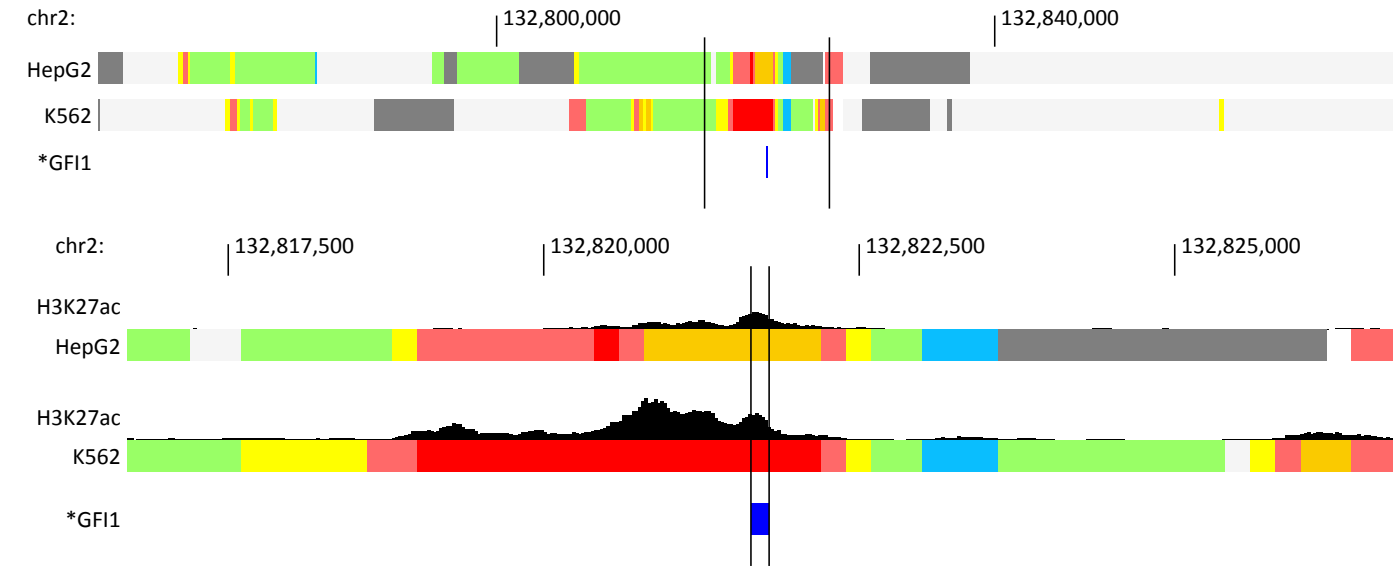
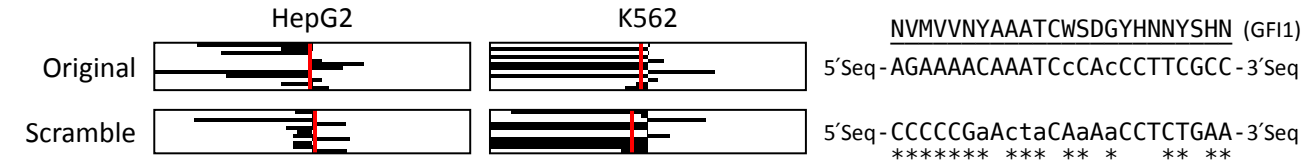
3′Seq = aatgtctgtaggccagtgtcctgacctatttcaccaatgtcccacgagtttatgaactggctc

1956 GFI1 in HepG2 enhancer

chr2 132821703 132821726 - (hg18)

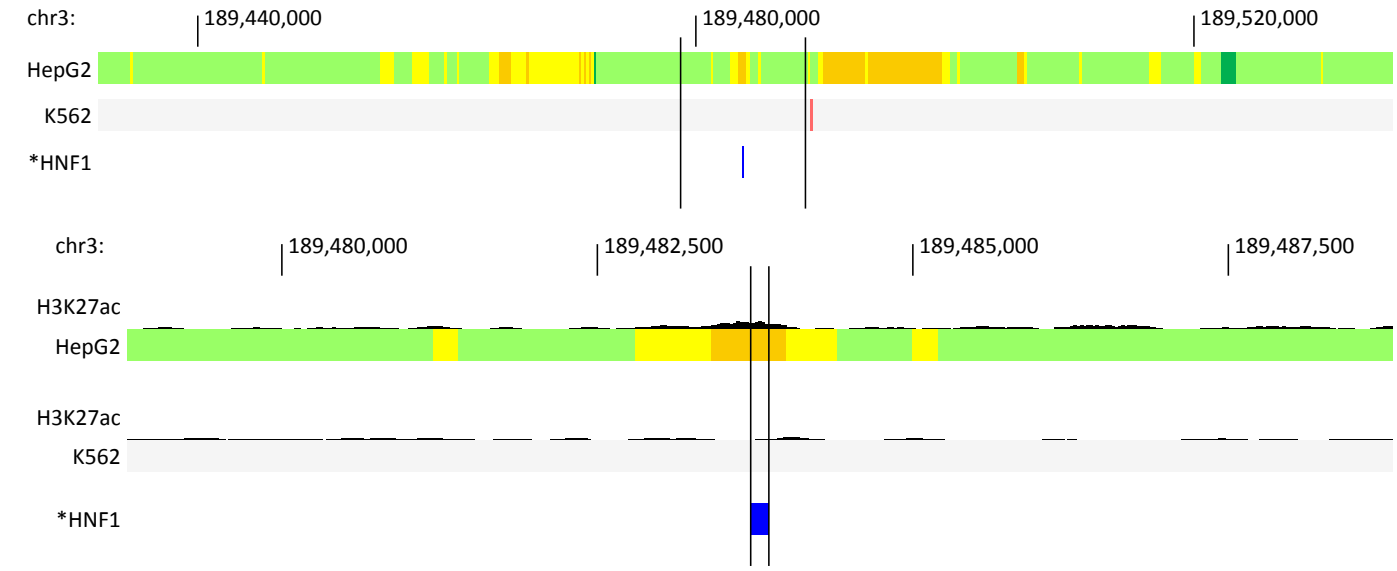


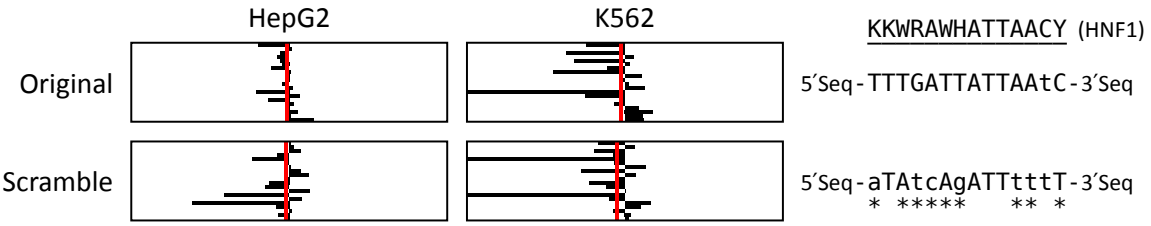


5′Seq = atcccggacccccggcgctaagtggagatgcgccagctgccccacactggagaaggctcaa
3′Seq = gcaggtggattctcctcccctagagctactgtccagttgctactggcctccagcaaaaca

1957 HNF1 in HepG2 enhancer

chr3 189483781 189483794 + (hg18)





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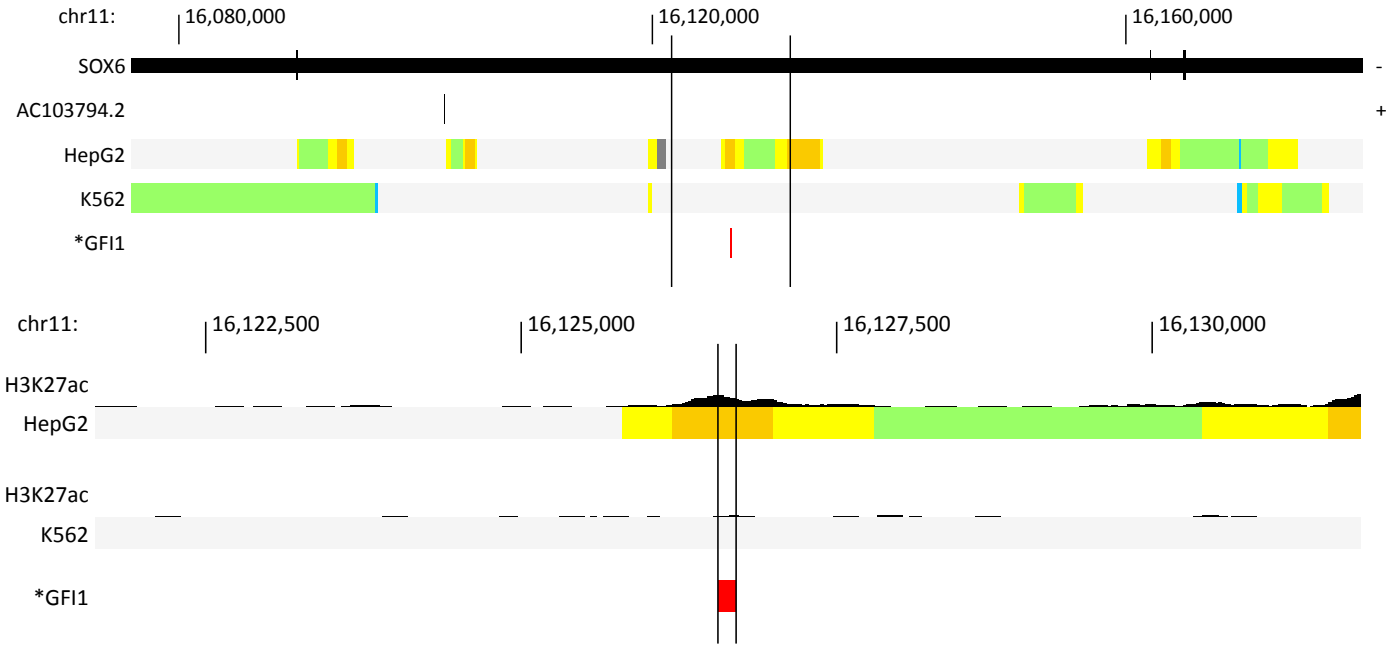
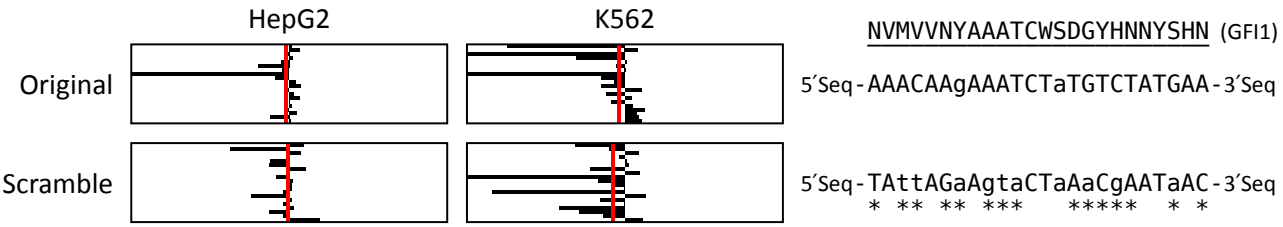
1958 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr11 16126620 16126643 + (hg18)





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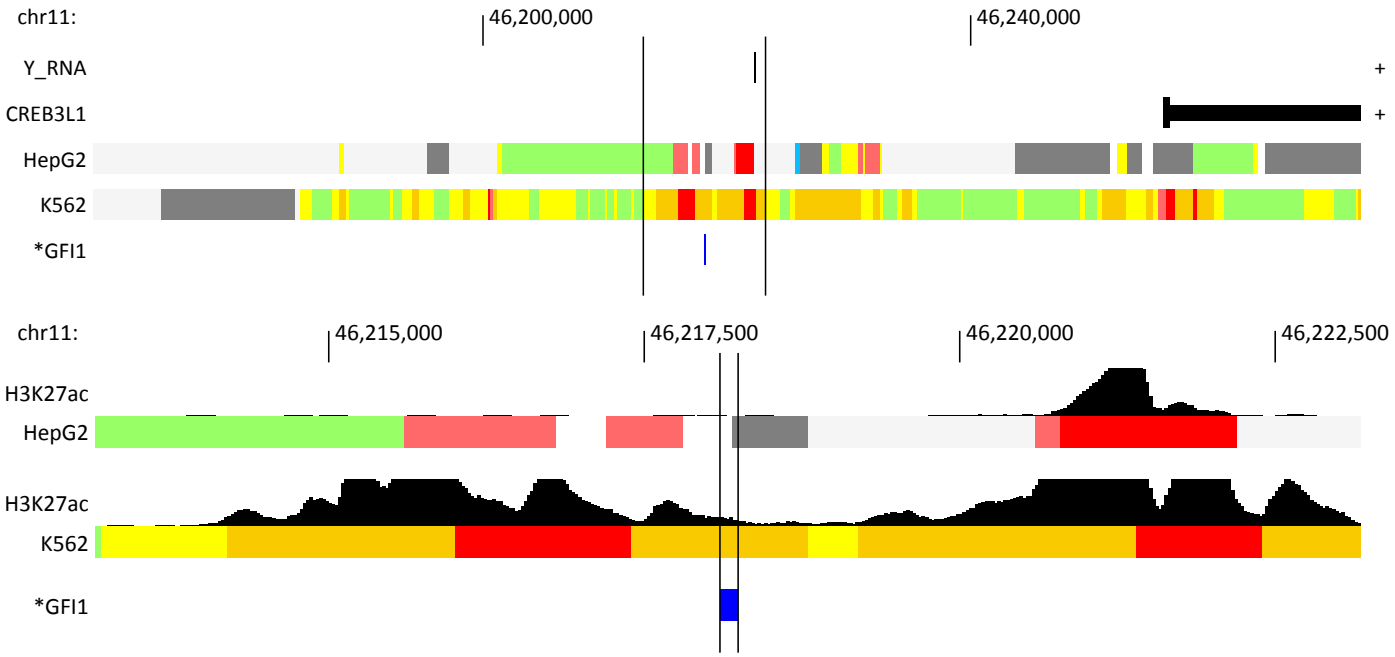
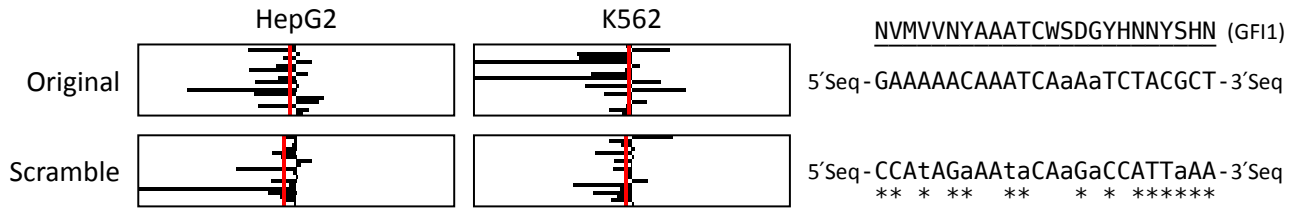
1959 GFI1 in K562 enhancer

chr11 46218161 46218184 + (hg18)





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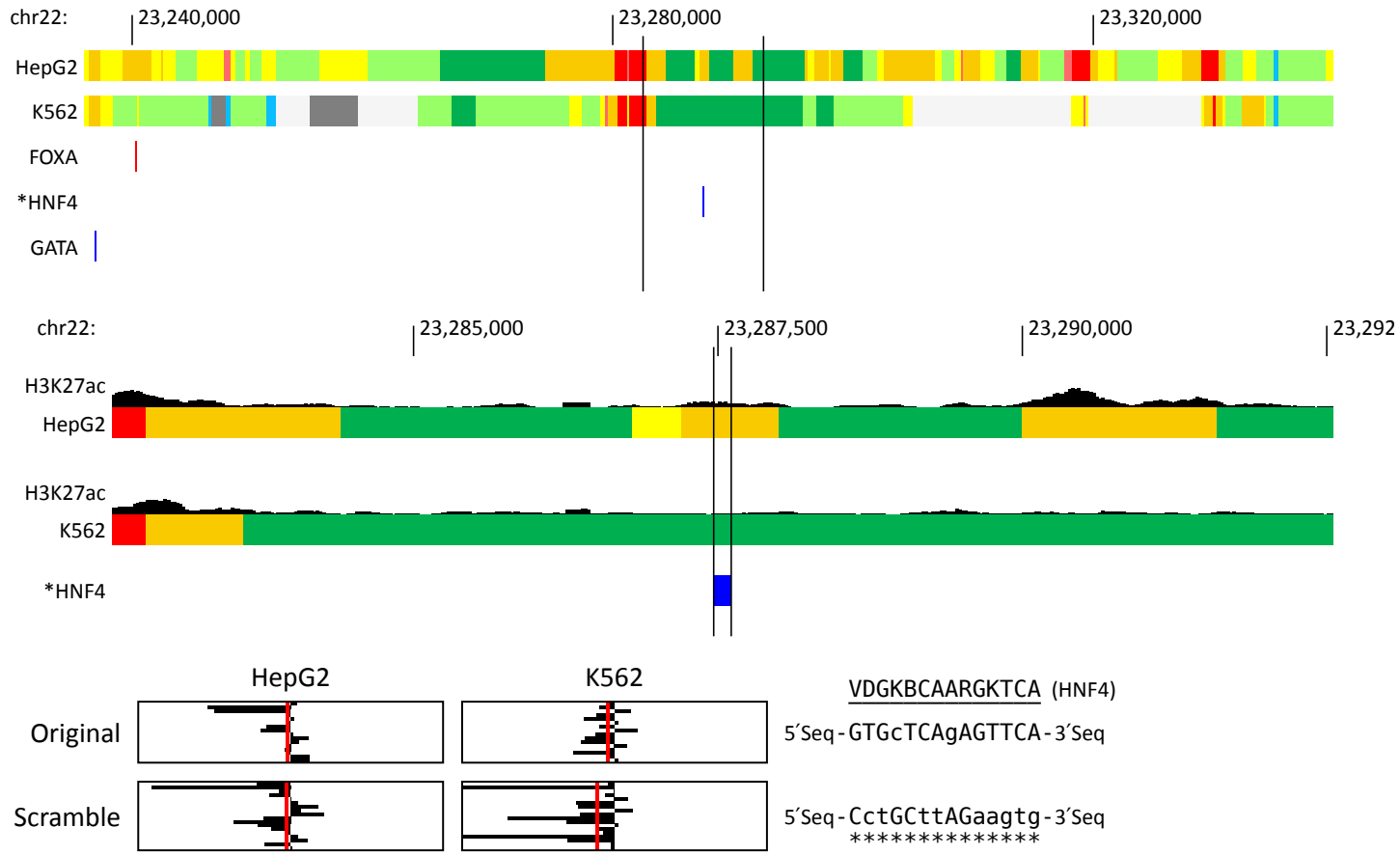
1960 HNF4 in HepG2 enhancer

chr22 23287531 23287544 - (hg18)



5′Seq = agaatgactggatctgggaaggacaggcaagcctcacagcctgagatgtgctgaacaaactaaact
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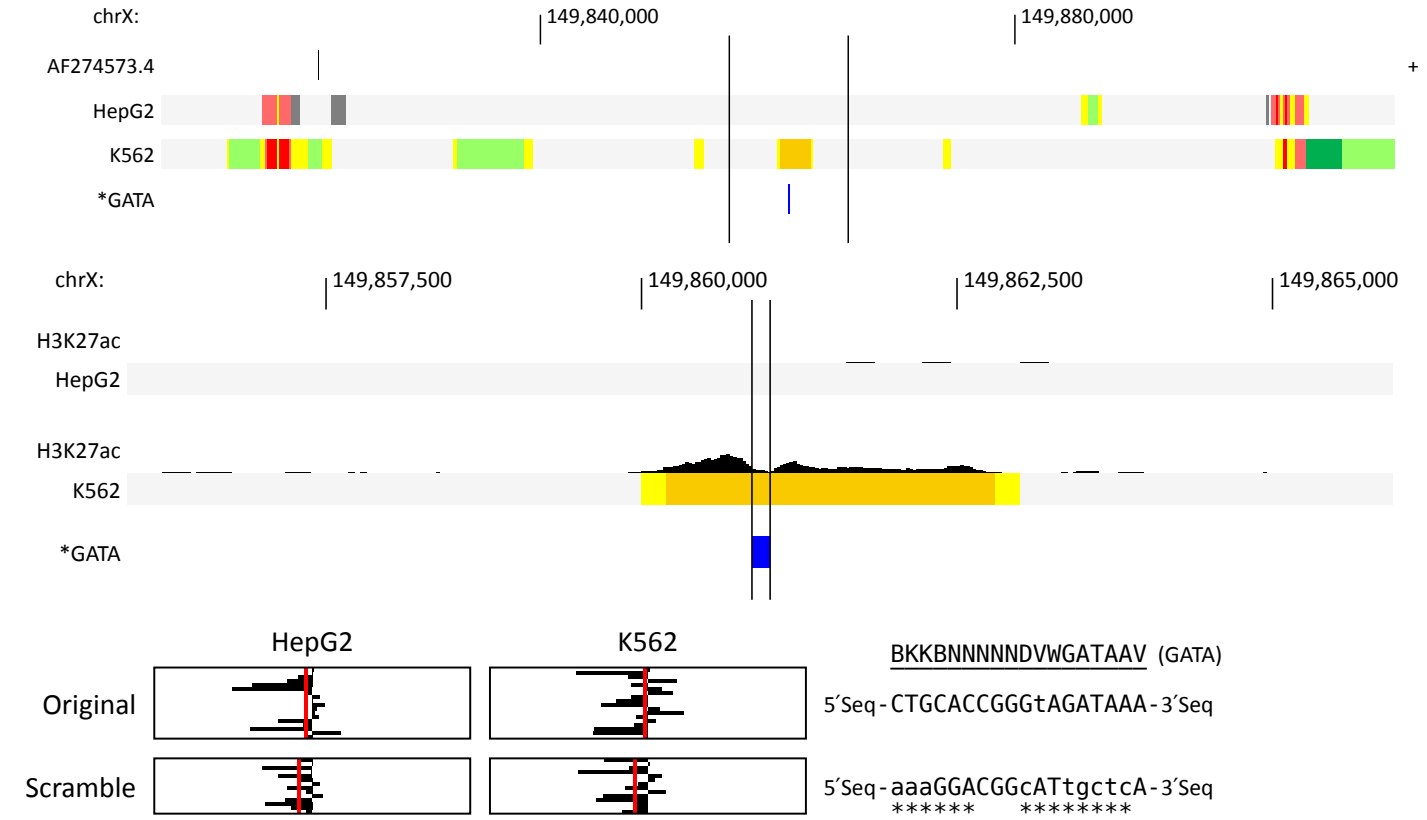
1961 GATA in K562 enhancer

chrX 149860939 149860956 + (hg18)



5′Seq = agagggagctgaagggaggggtttttgatgtggaggtgacagtgggatctcaaagagaagcct
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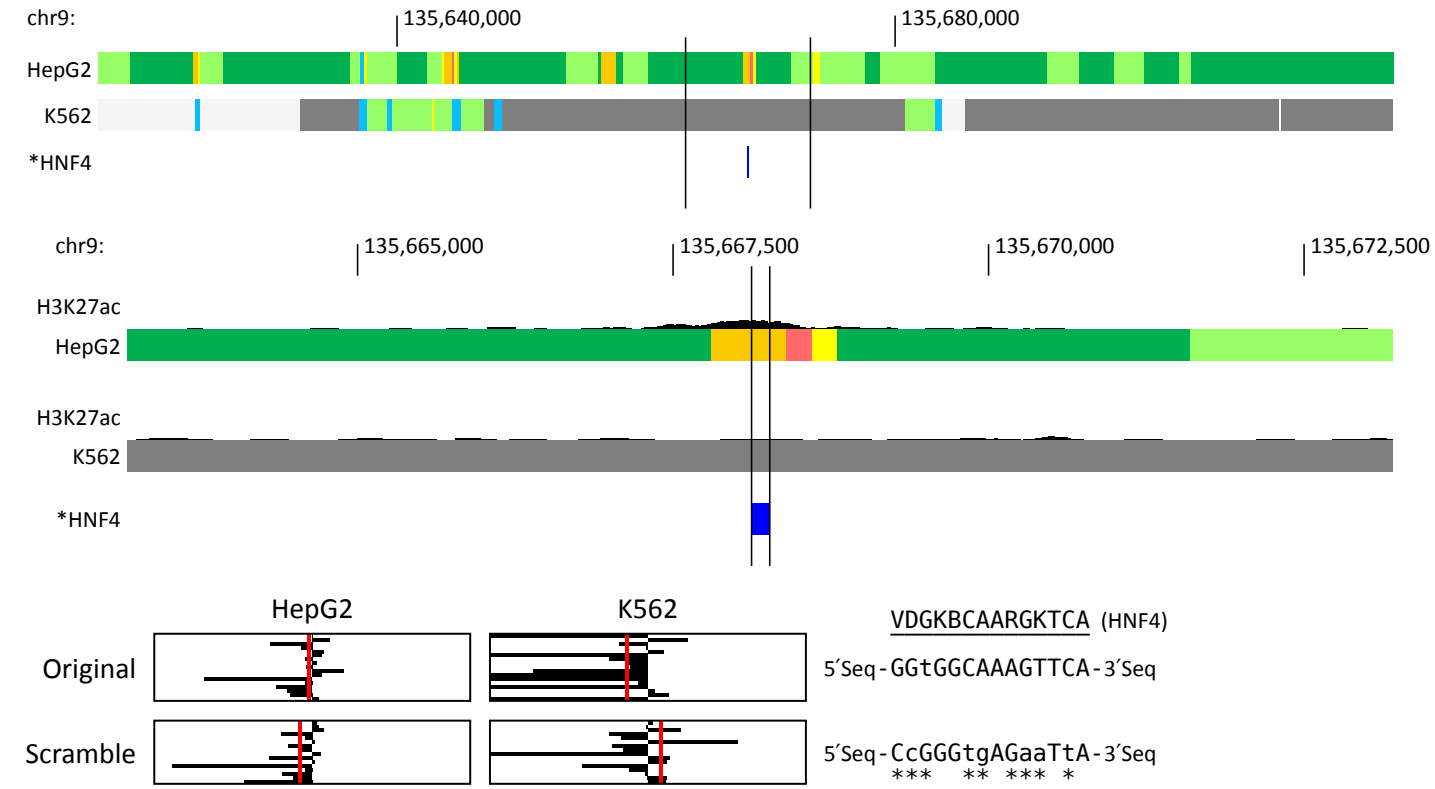
1962 HNF4 in HepG2 enhancer

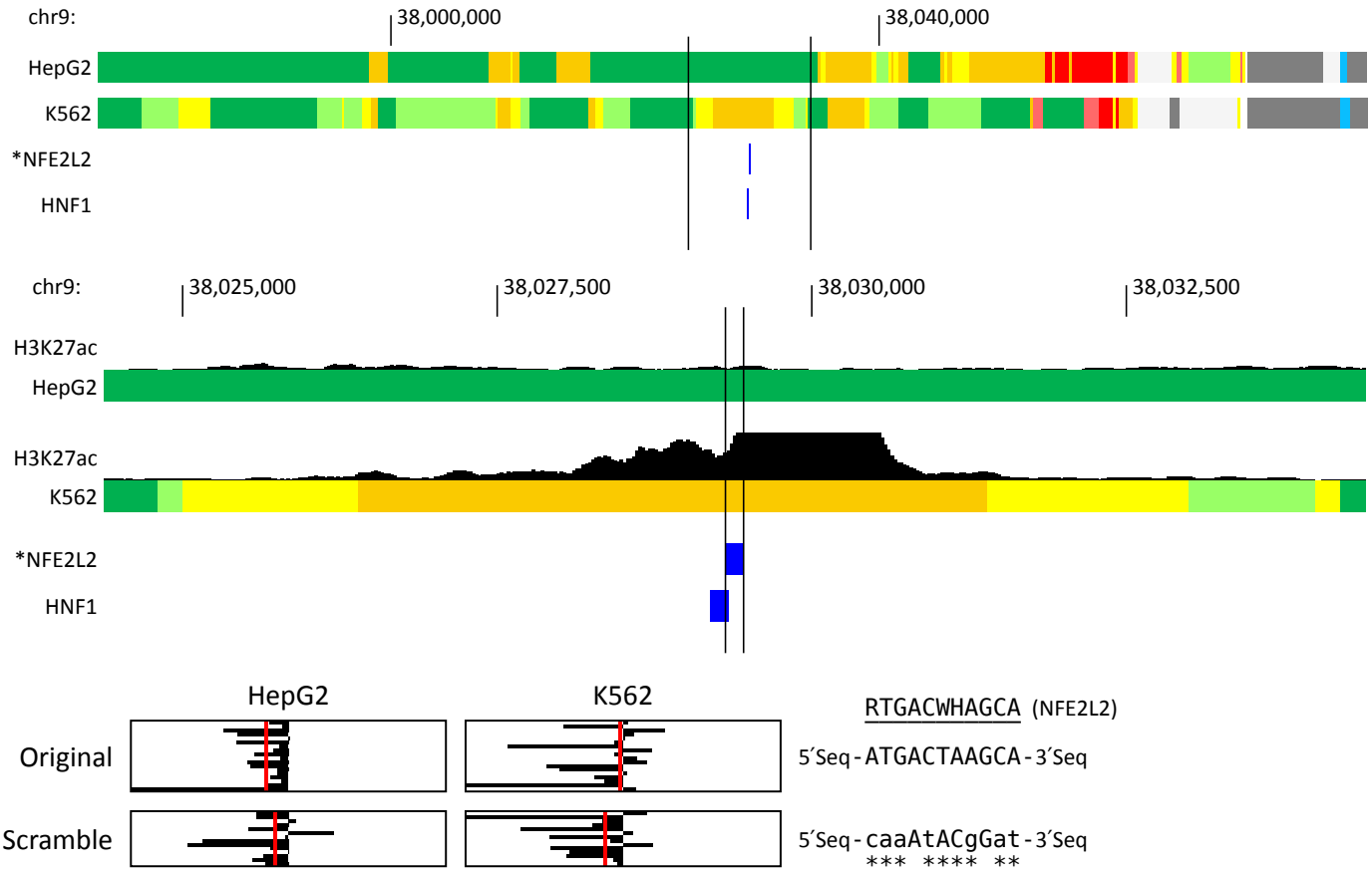
chr9 135668188 135668201 + (hg18)



5′Seq = gtgtattcagtcctgcaagccctcacccctgcacaaggacacatctcacatcccgggctcaaagtg
3′Seq = ctgctagaaggacggaaataaatgcagagcacccccttccatggccagcacgcagggaggcgagg

1963 NFE2L2 in K562 enhancer

chr9 38029381 38029391 - (hg18)



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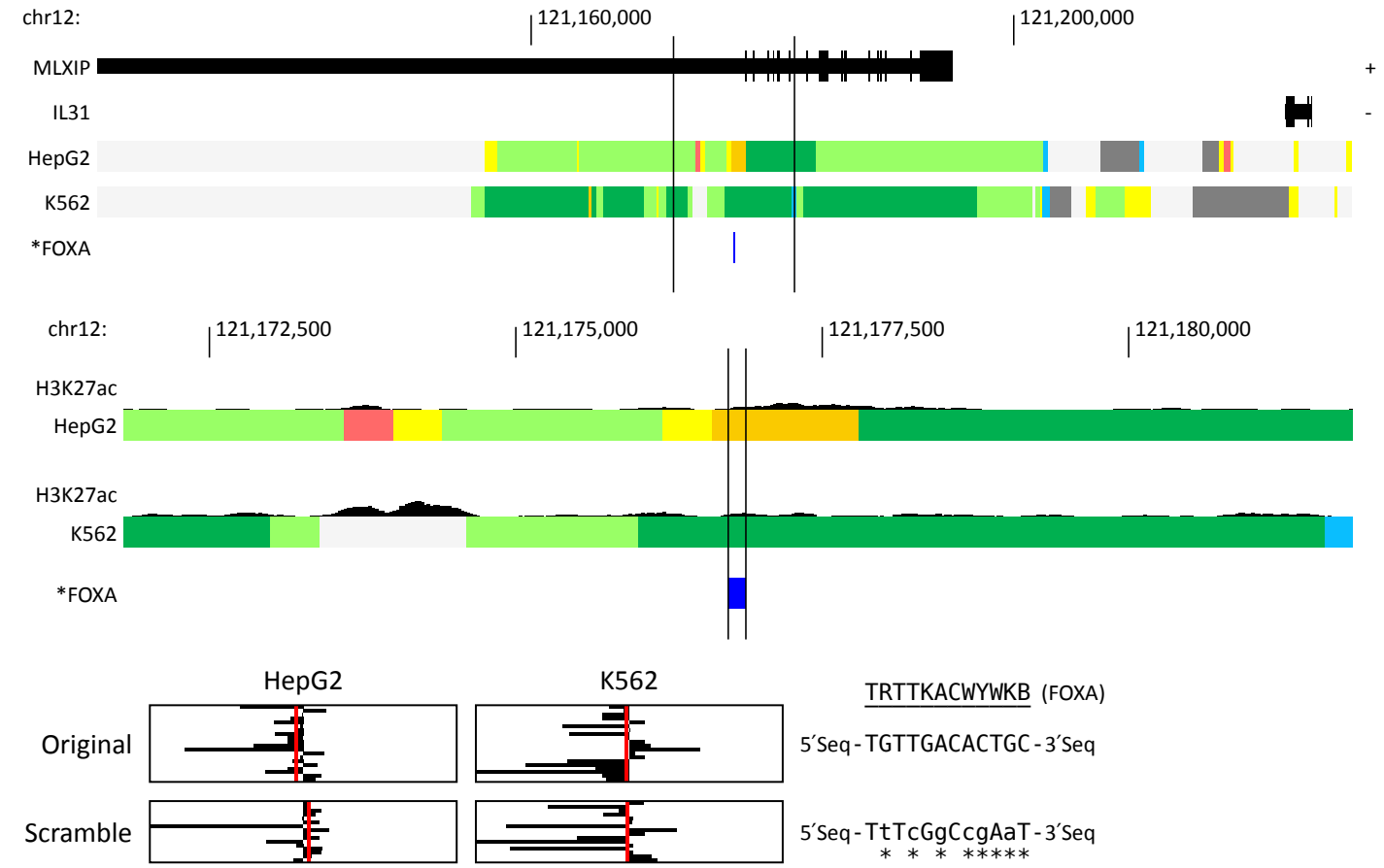
1964 FOXA in HepG2 enhancer

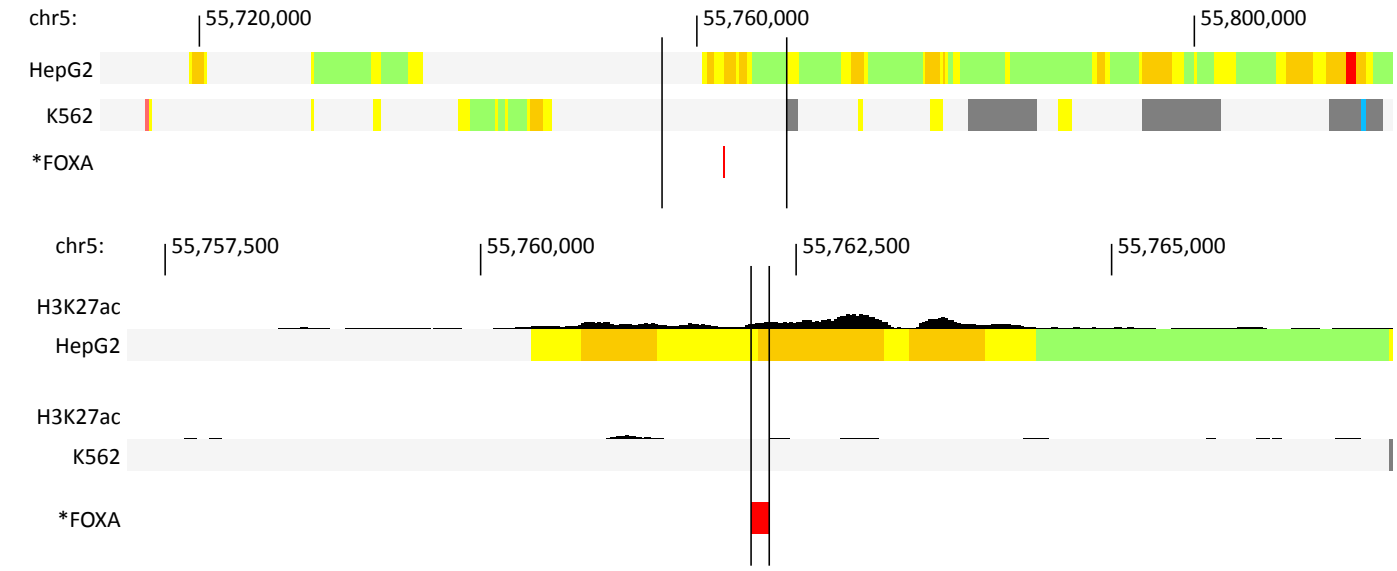
chr12 121176800 121176811 - (hg18)

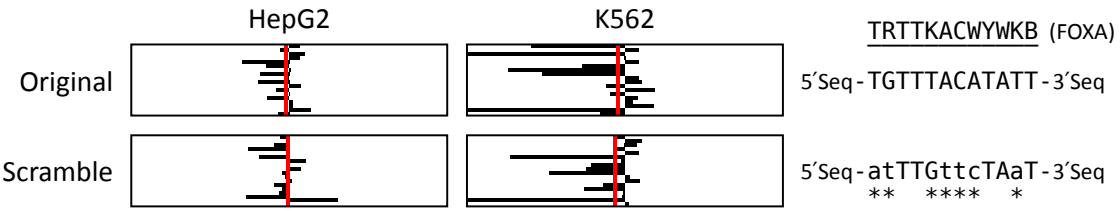


5′Seq = tcctccactcggggatggtctcacgggagctcttatgtagtagtgtctgcacacaagcacctttccc
3′Seq = agctcctctagggaggacgtttggtggcttggcacatagtaggggctcaattaacaattcttcatt

1965 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr5 55762210 55762221 - (hg18)





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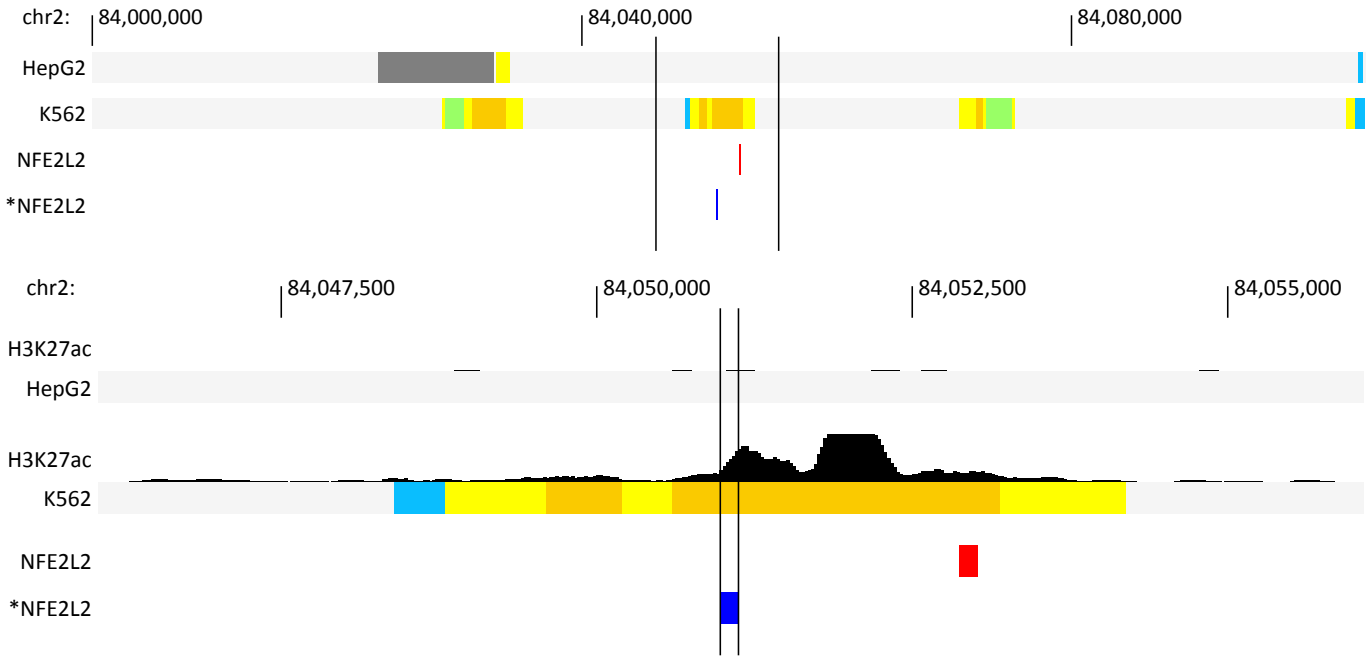
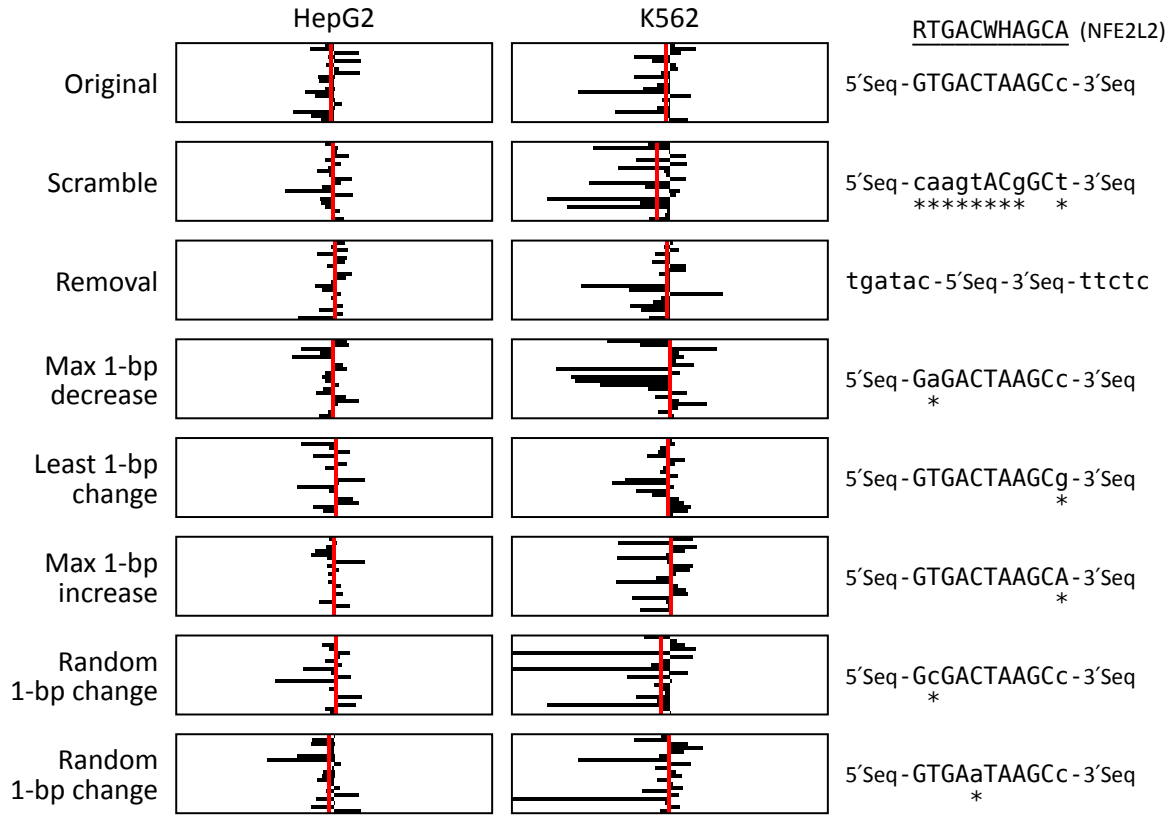
3′Seq = ttgcataattatgcttttccaatgtagtgactggaattcaaagggcttctctccttccattgtttc

1966 NFE2L2 in K562 enhancer

chr2 84051046 84051056 - (hg18)





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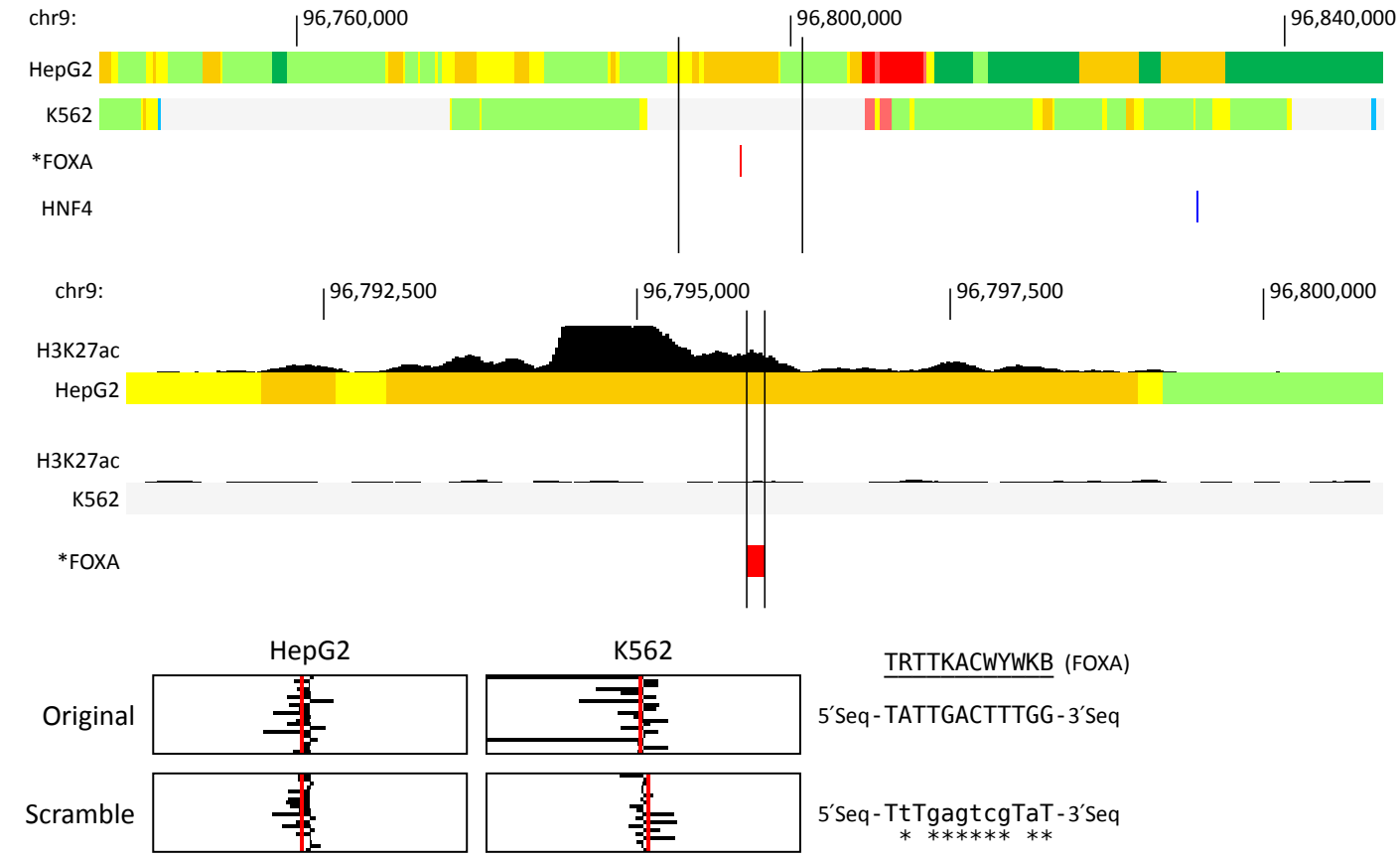
3′Seq = agaggagtgcctccttctgagcacatattcagaataaatgtttcctccaggctgacatttgcaagac

1967 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr9 96795943 96795954 - (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TATTGACTTTGG-3′Seq

5′Seq-TtTgagtcgTaT-3′Seq

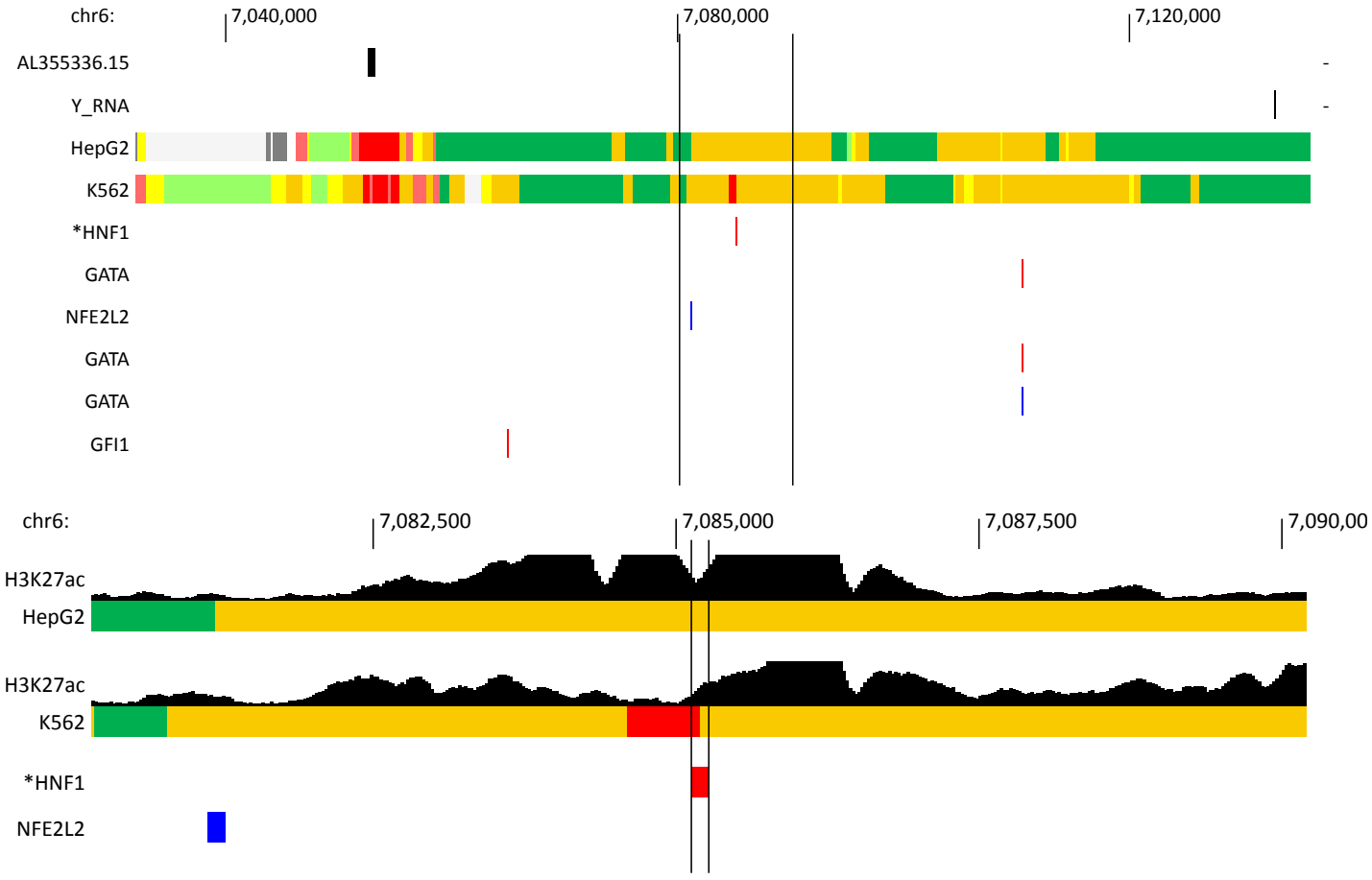
* ***** **

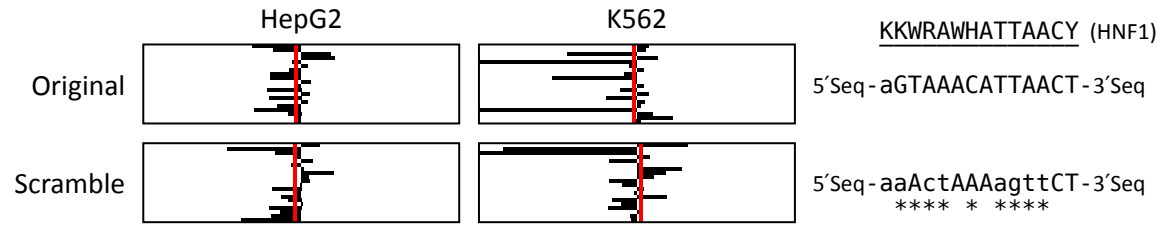
5′Seq = aggggttatctccagccgaatcccattattgcttgttgccctggagtctgagtcccaaattctgatg

3′Seq = cctcccttccatgcatgttcatgccaataaagttggtgaaattaaagaagaactgaattgtgaagt

1968 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr6 7085192 7085205 + (hg18)





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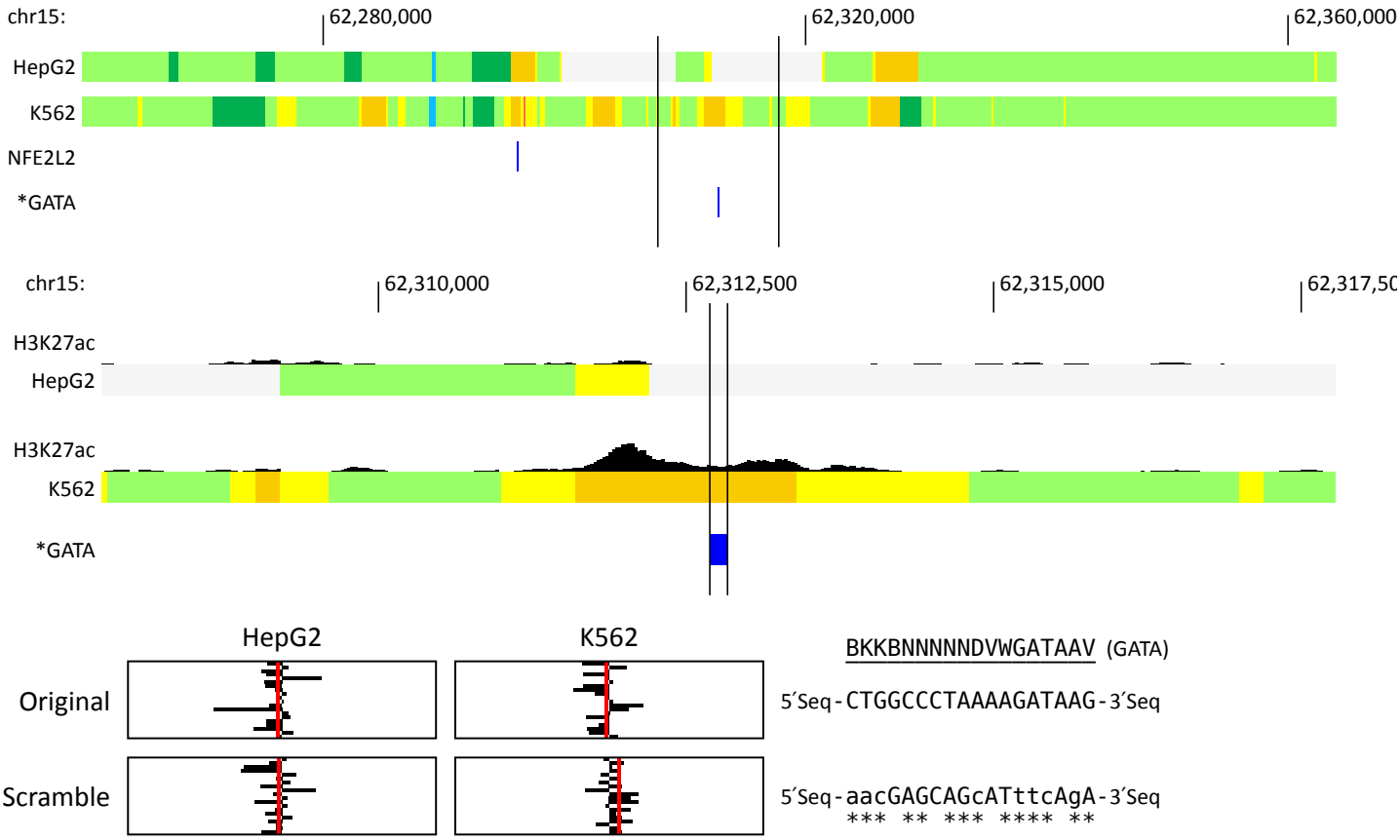
1969 GATA in K562 enhancer

chr15 62312757 62312774 + (hg18)



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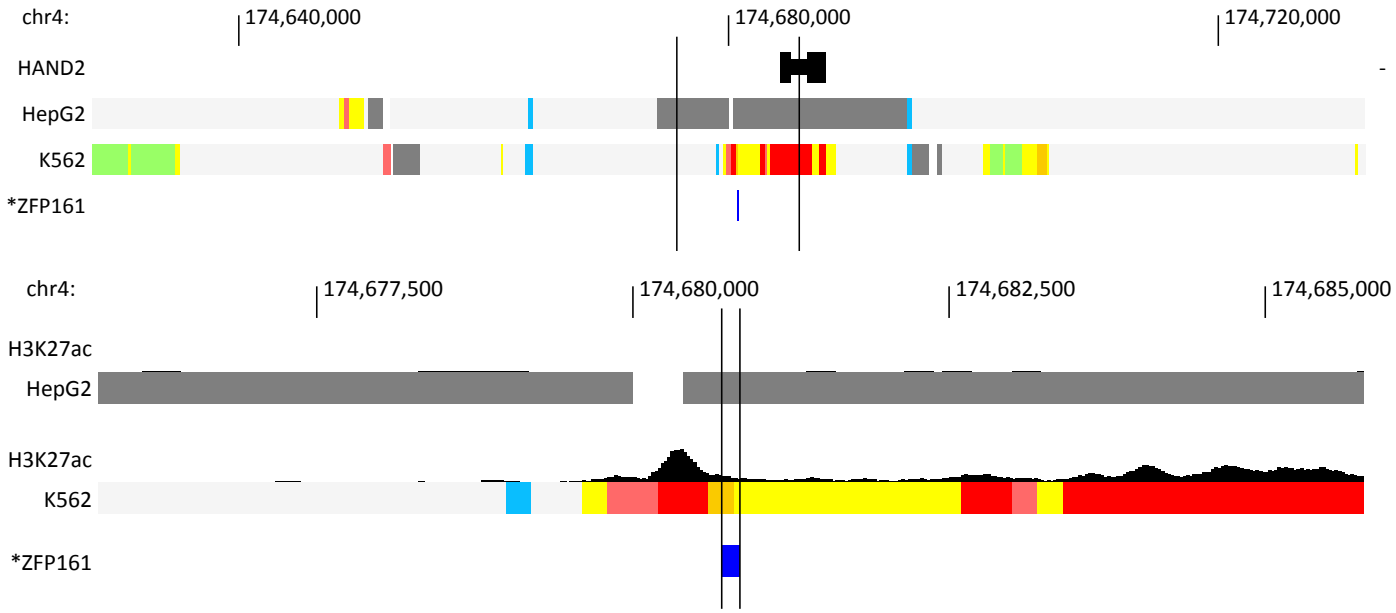
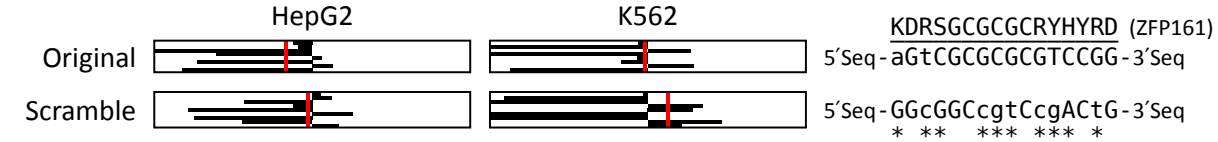
1970 ZFP161 in K562 enhancer

chr4 174680767 174680782 + (hg18)





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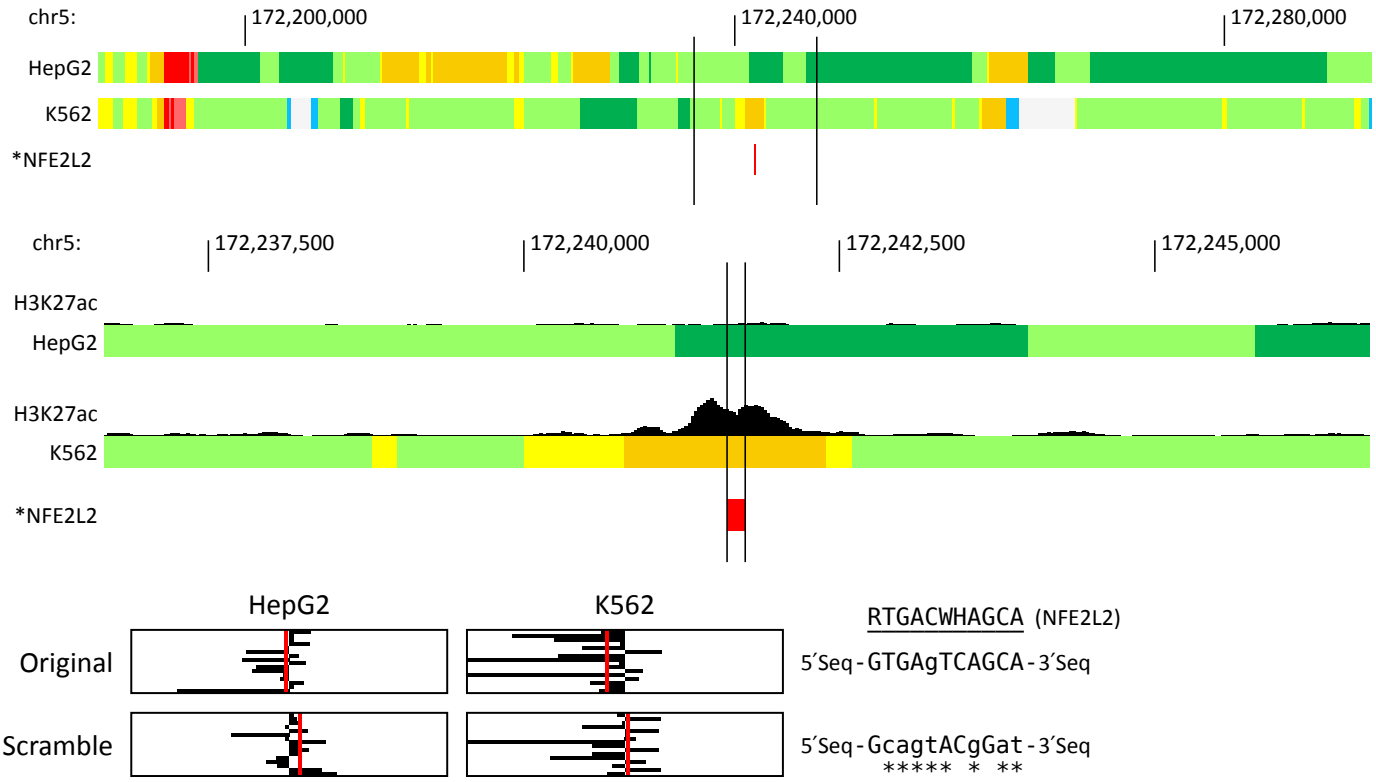
1971 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr5 172241677 172241687 - (hg18)



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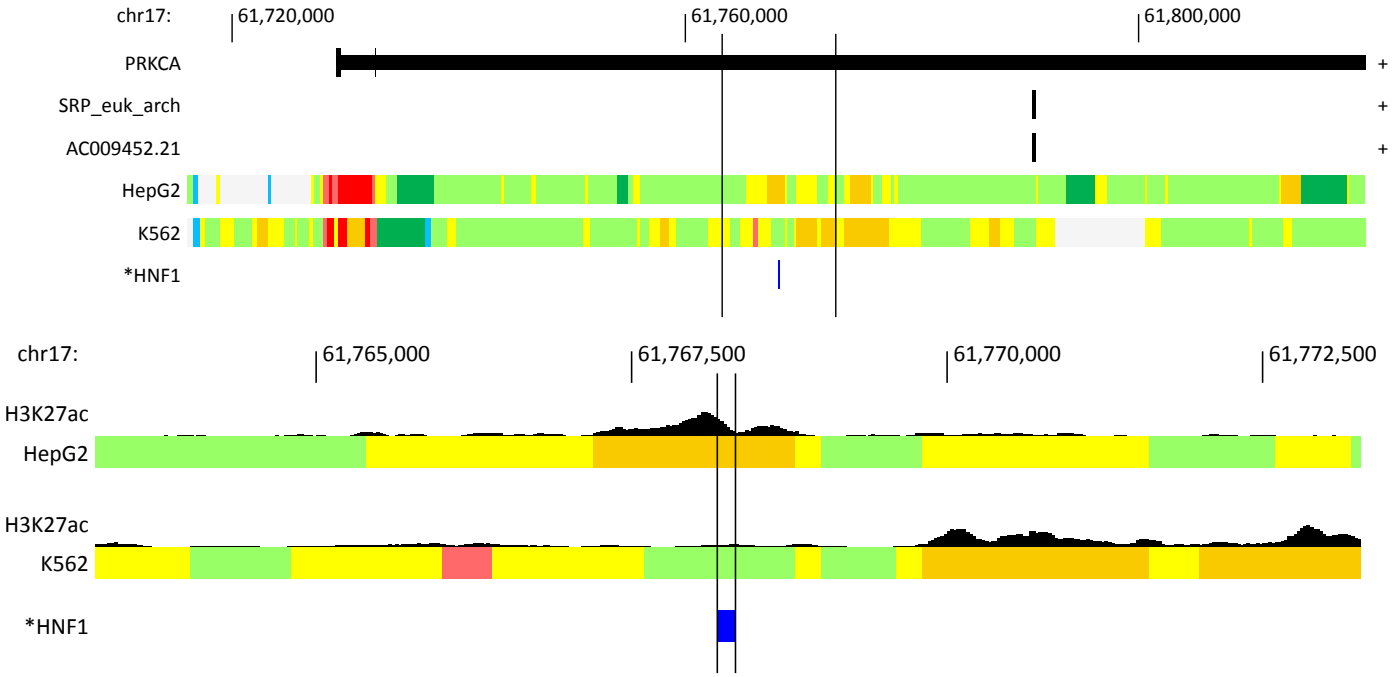
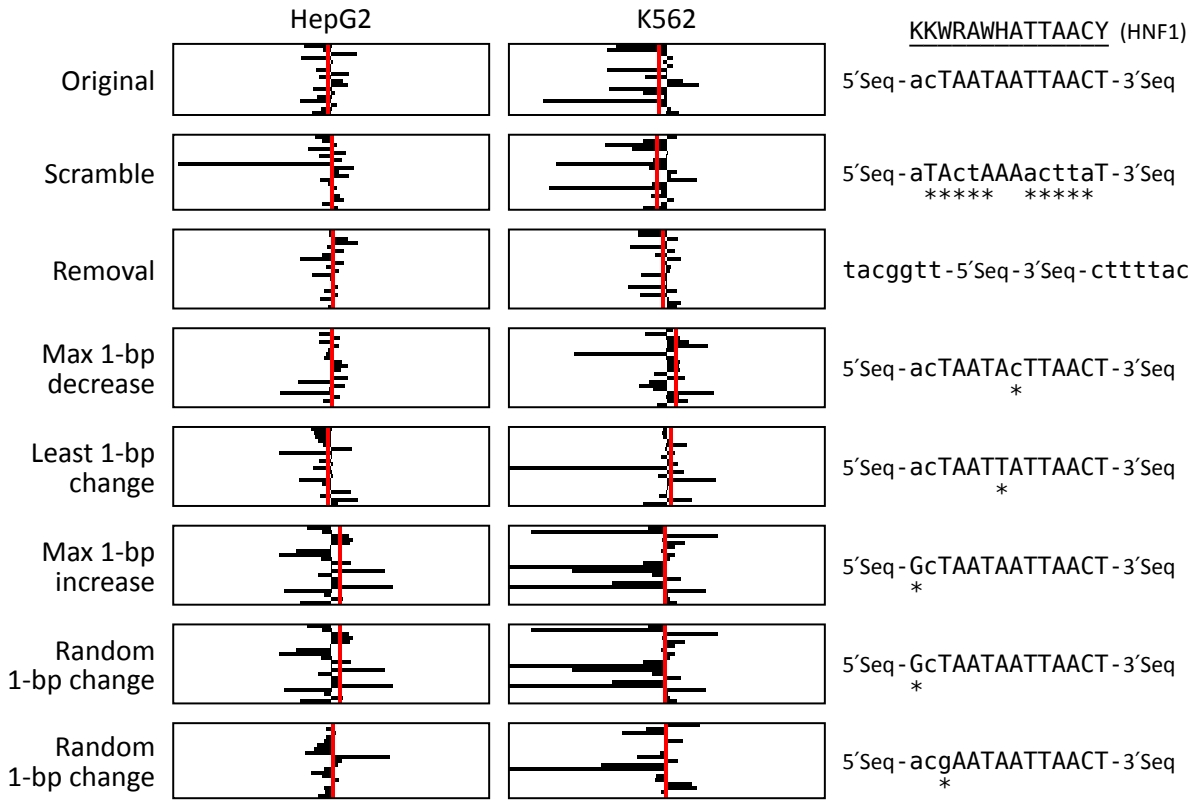
1972 HNF1 in HepG2 enhancer

chr17 61768245 61768258 + (hg18)





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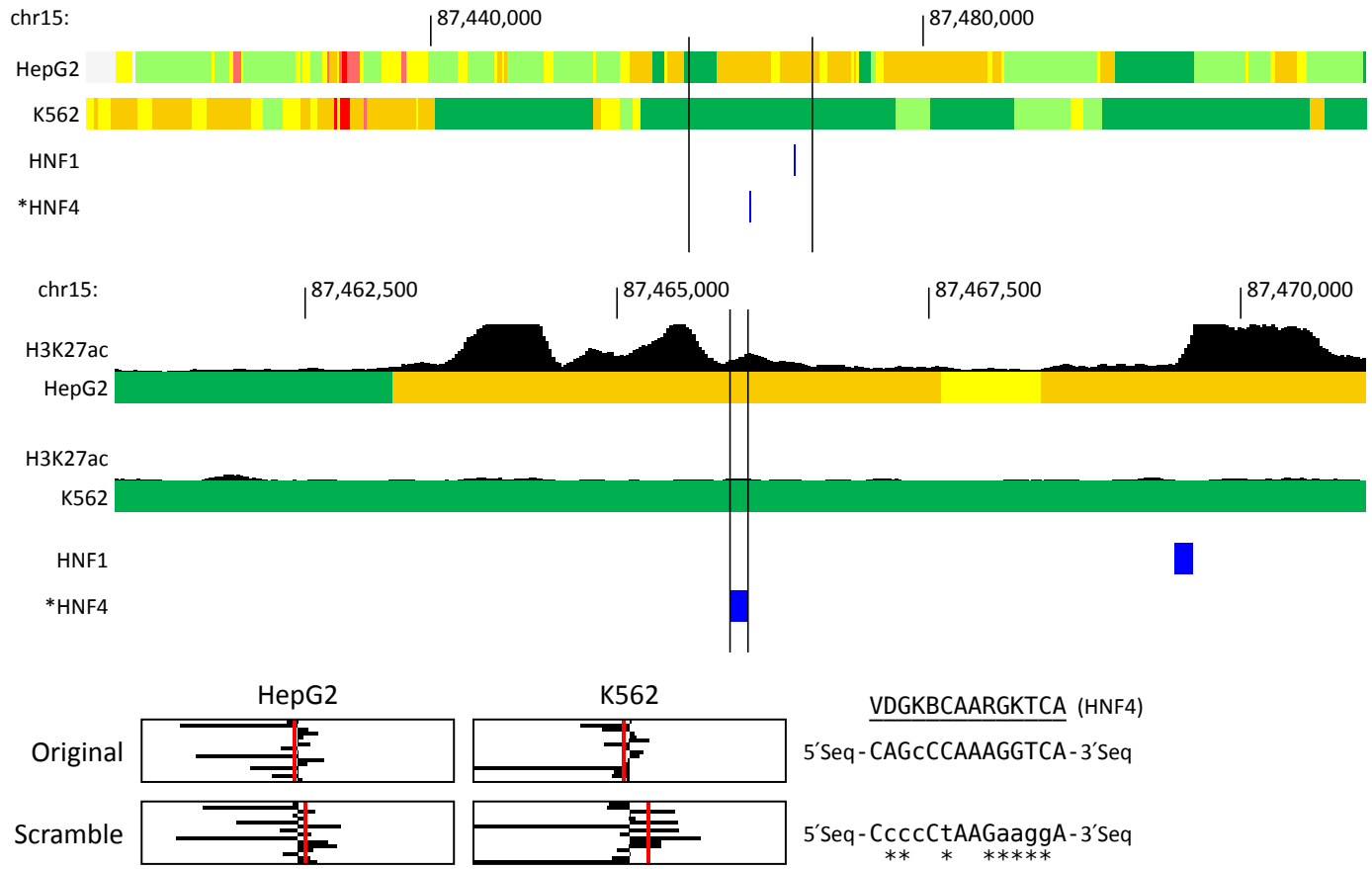
1973 HNF4 in HepG2 enhancer

chr15 87465972 87465985 - (hg18)



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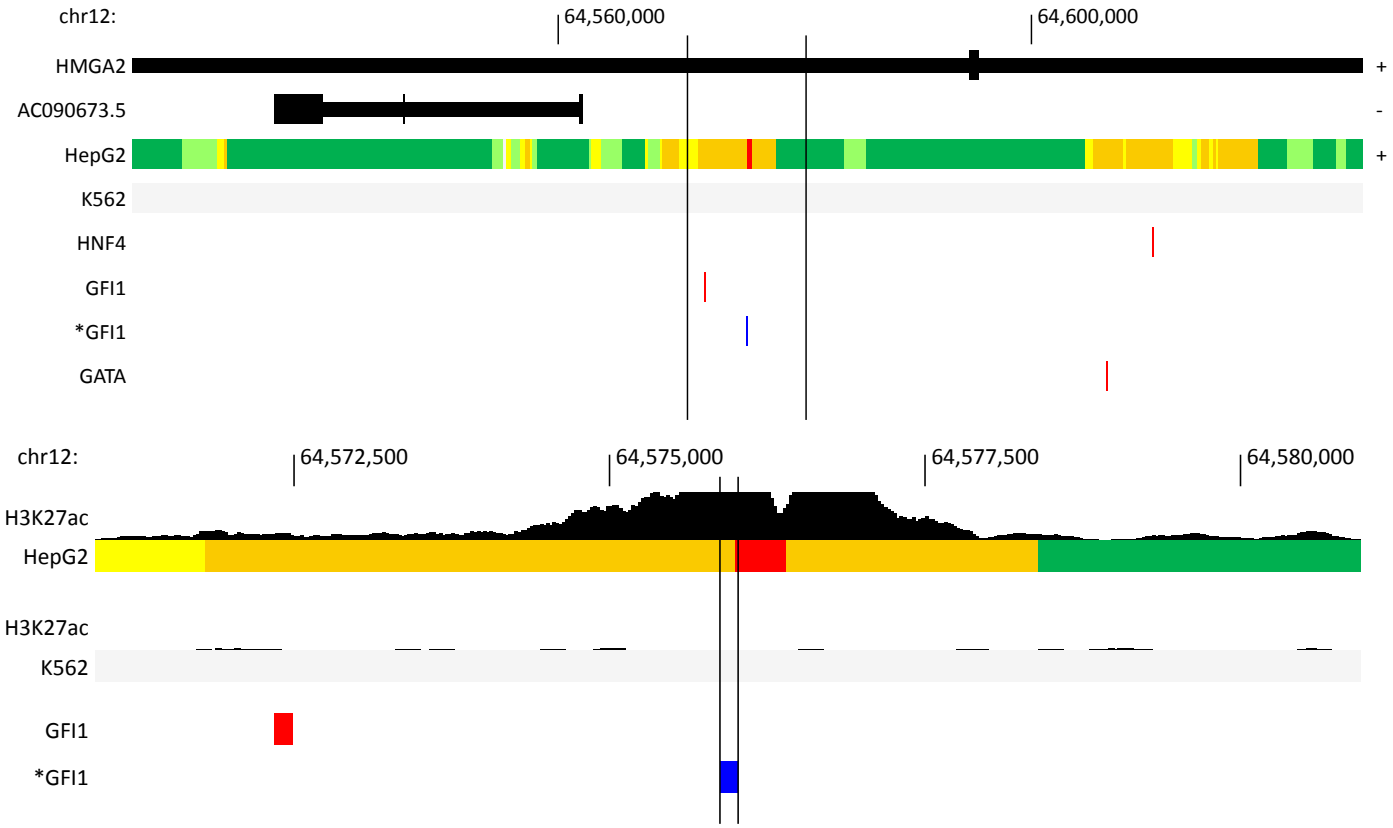
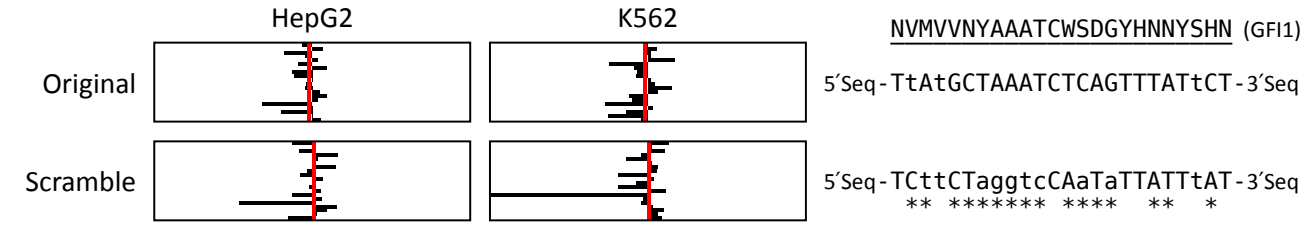
1974 GFI1 in HepG2 enhancer

chr12 64575936 64575959 + (hg18)





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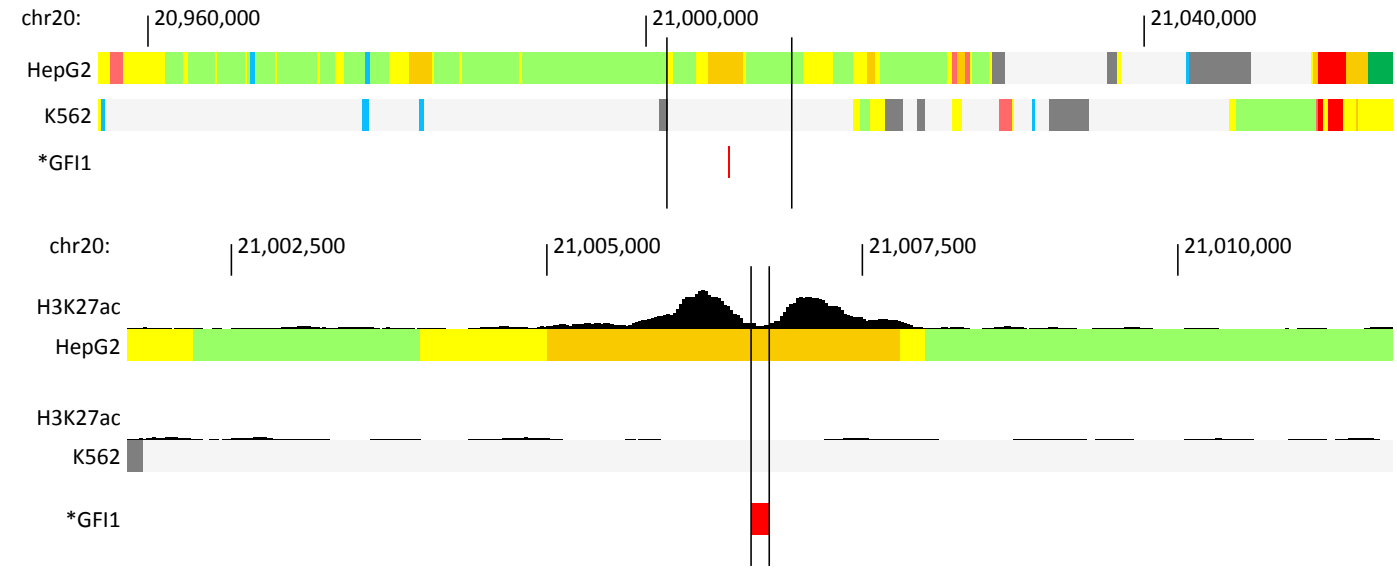
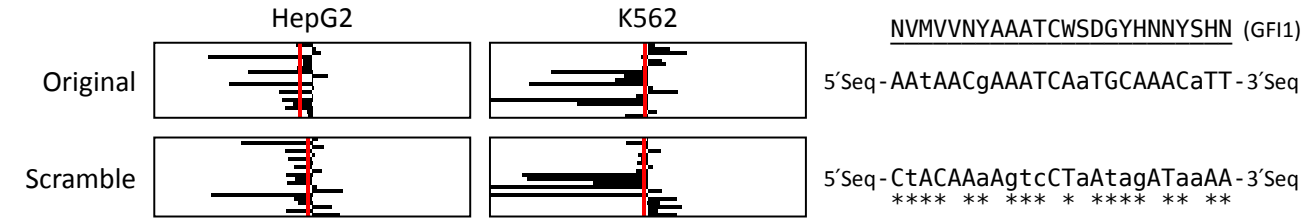
1975 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr20 21006679 21006702 + (hg18)





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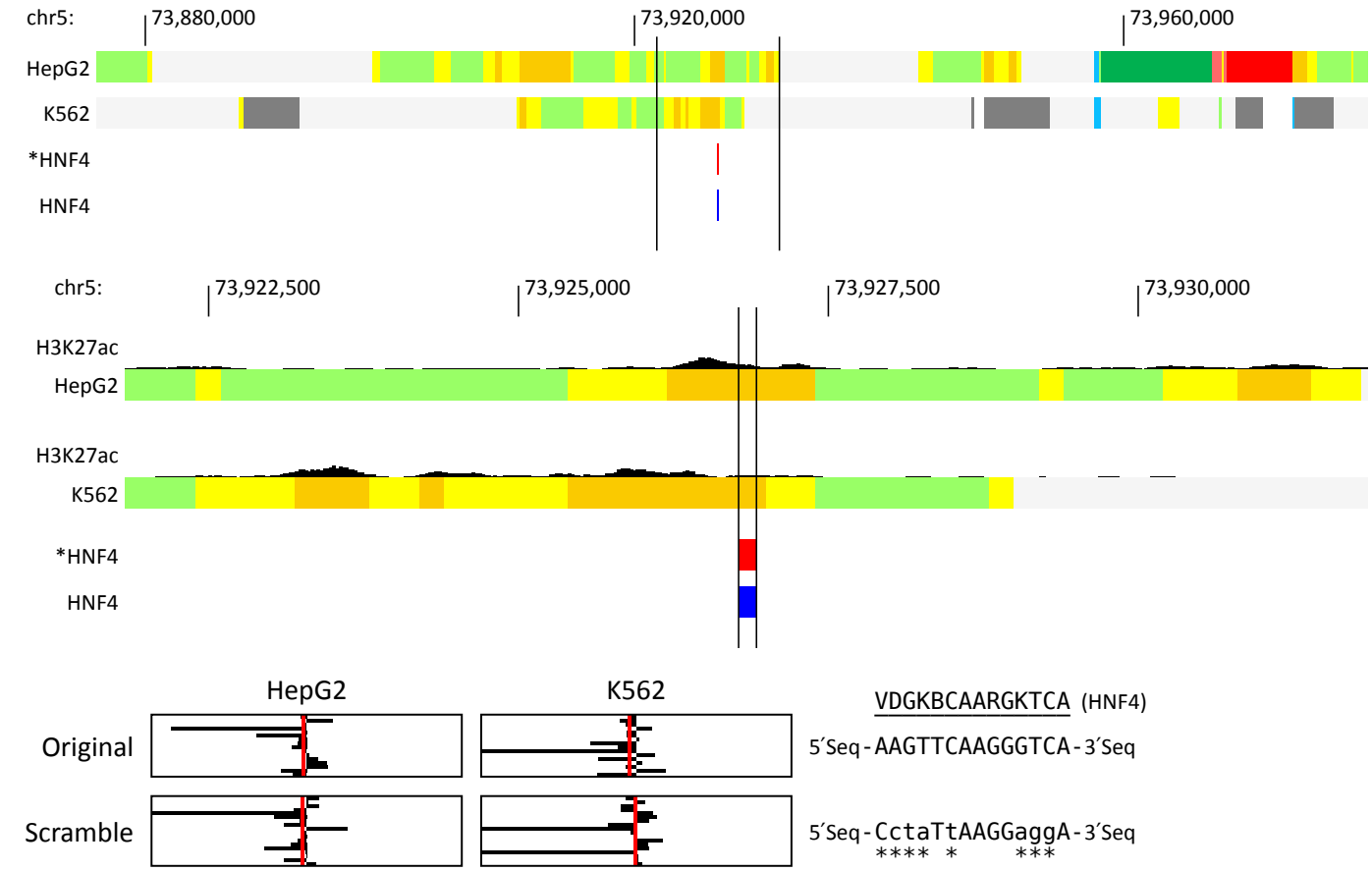
1976 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr5 73926842 73926855 - (hg18)



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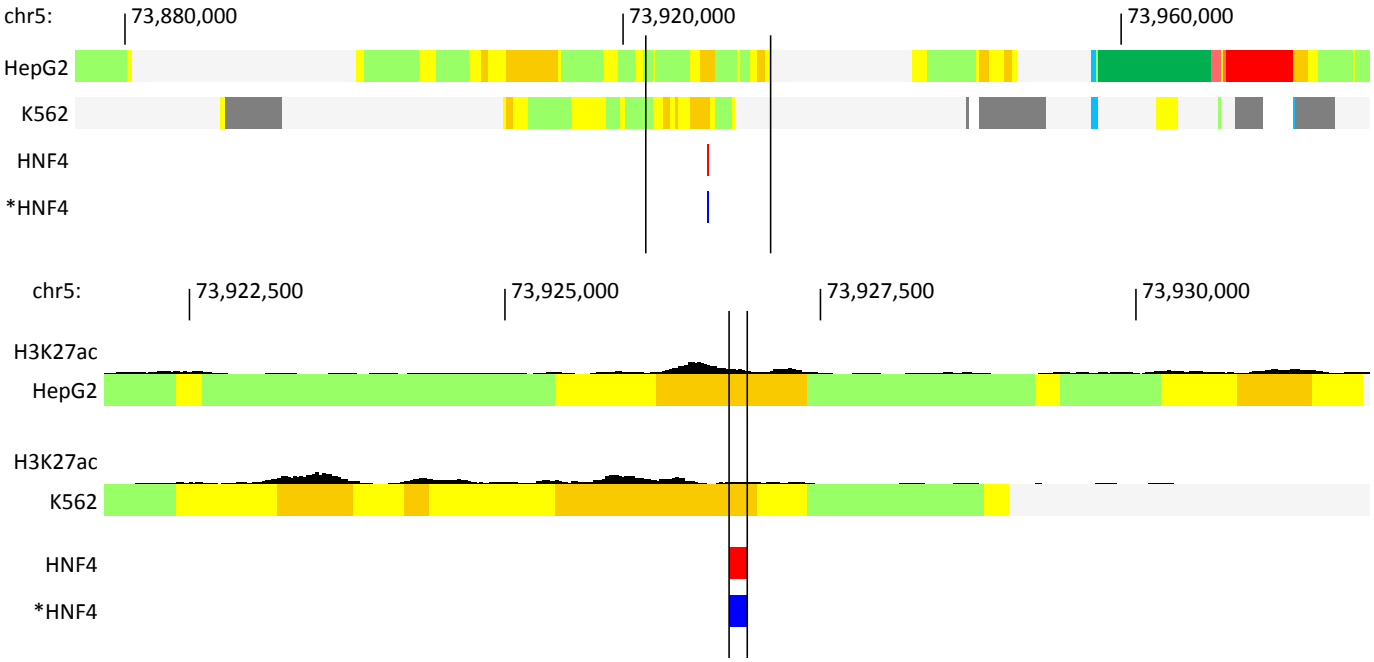
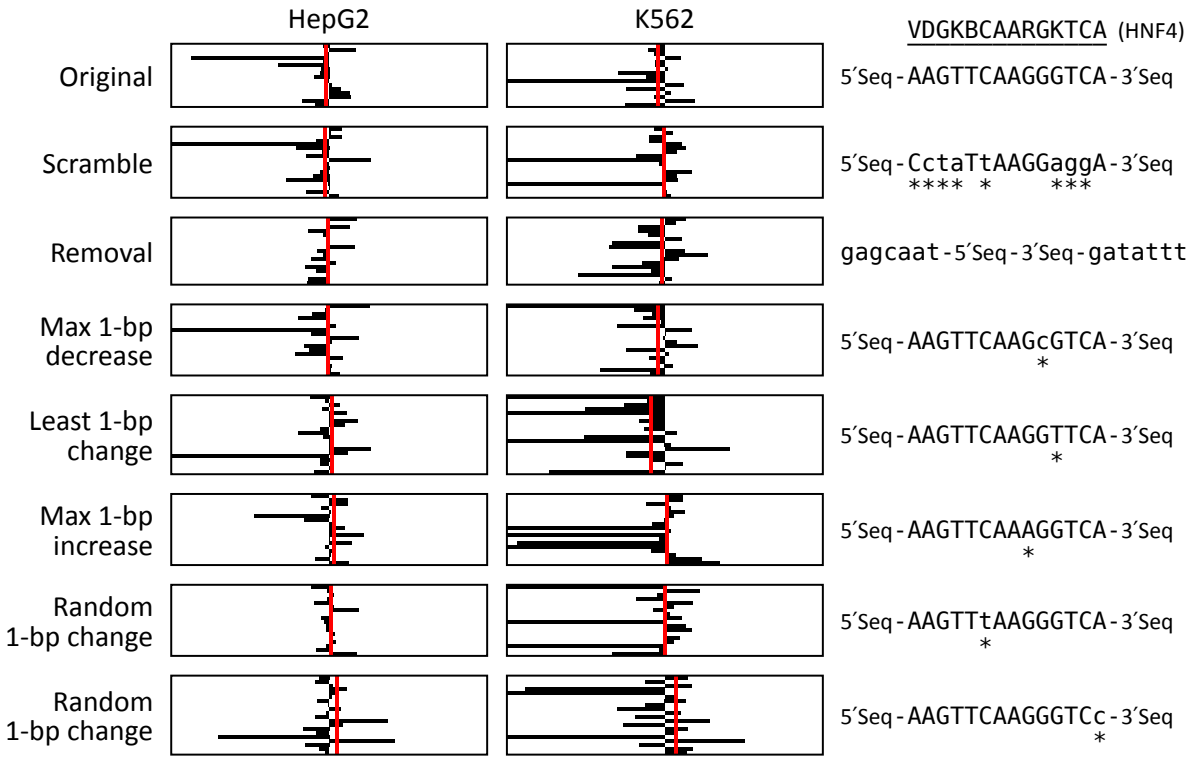
1977 HNF4 in HepG2 enhancer

chr5 73926842 73926855 - (hg18)





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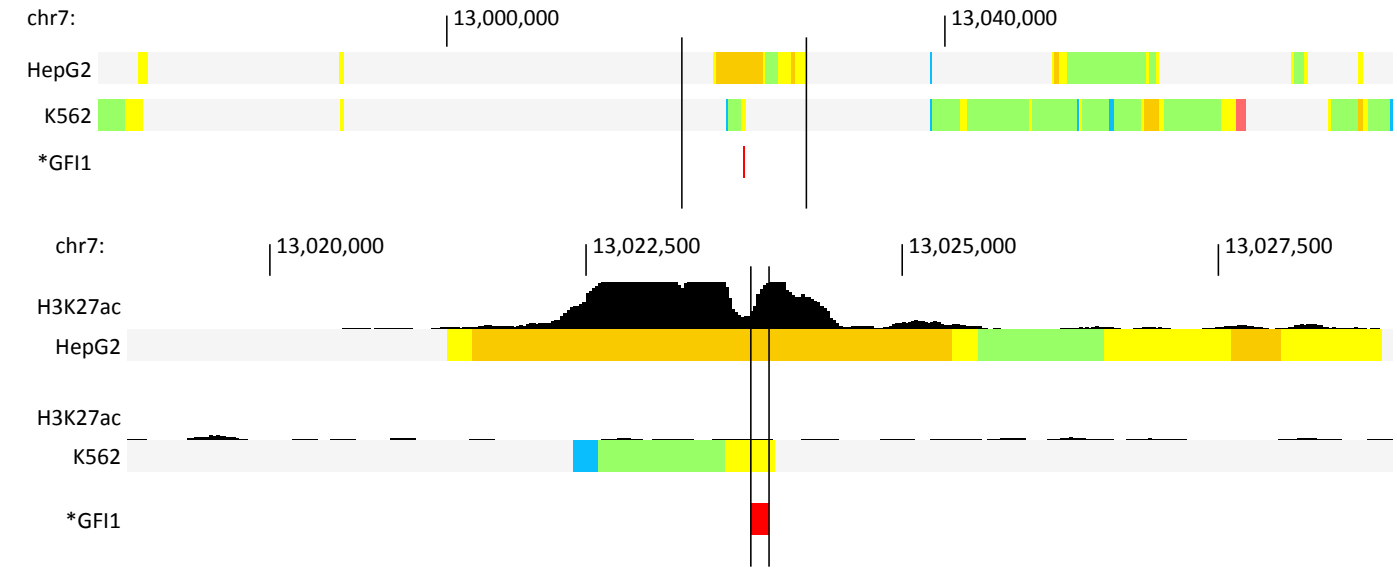
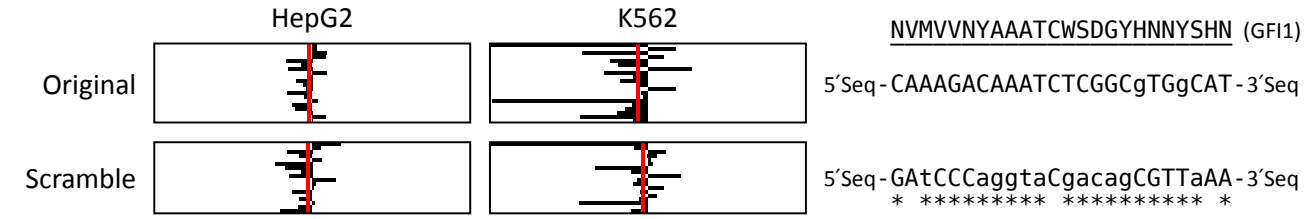
1978 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr7 13023864 13023887 + (hg18)





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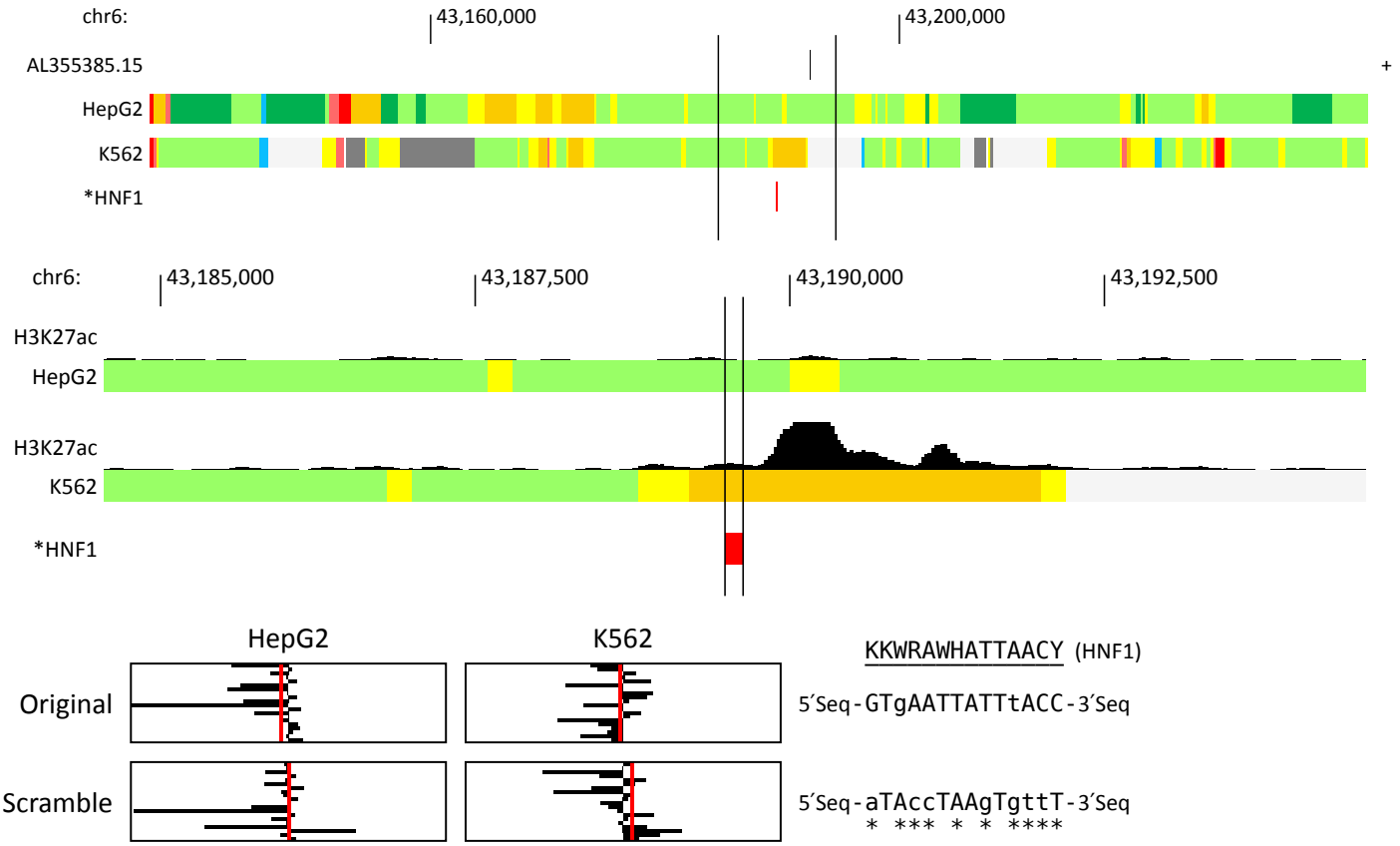
1979 HNF1 in K562 enhancer (conserved at 60% confidence)

chr6 43189551 43189564 + (hg18)



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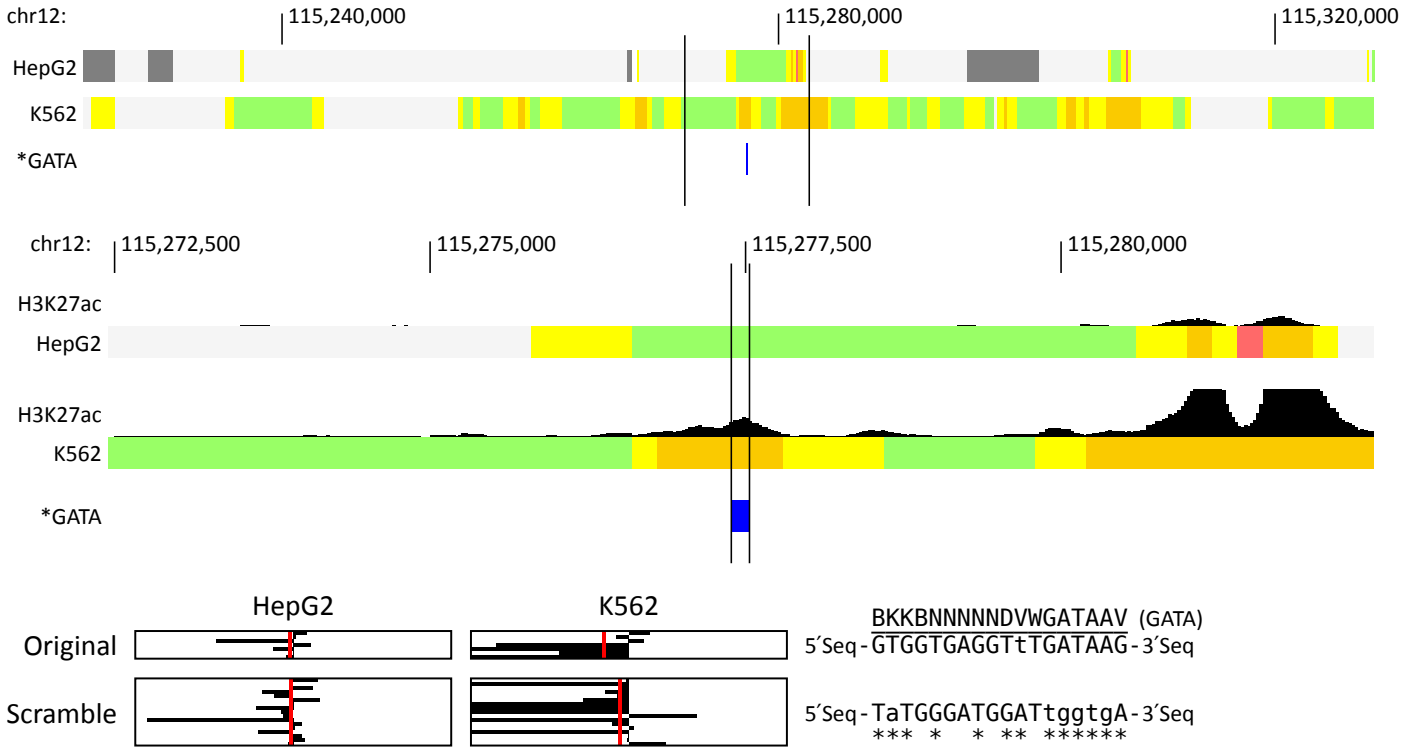
1980 GATA in K562 enhancer

chr12 115277451 115277468 - (hg18)



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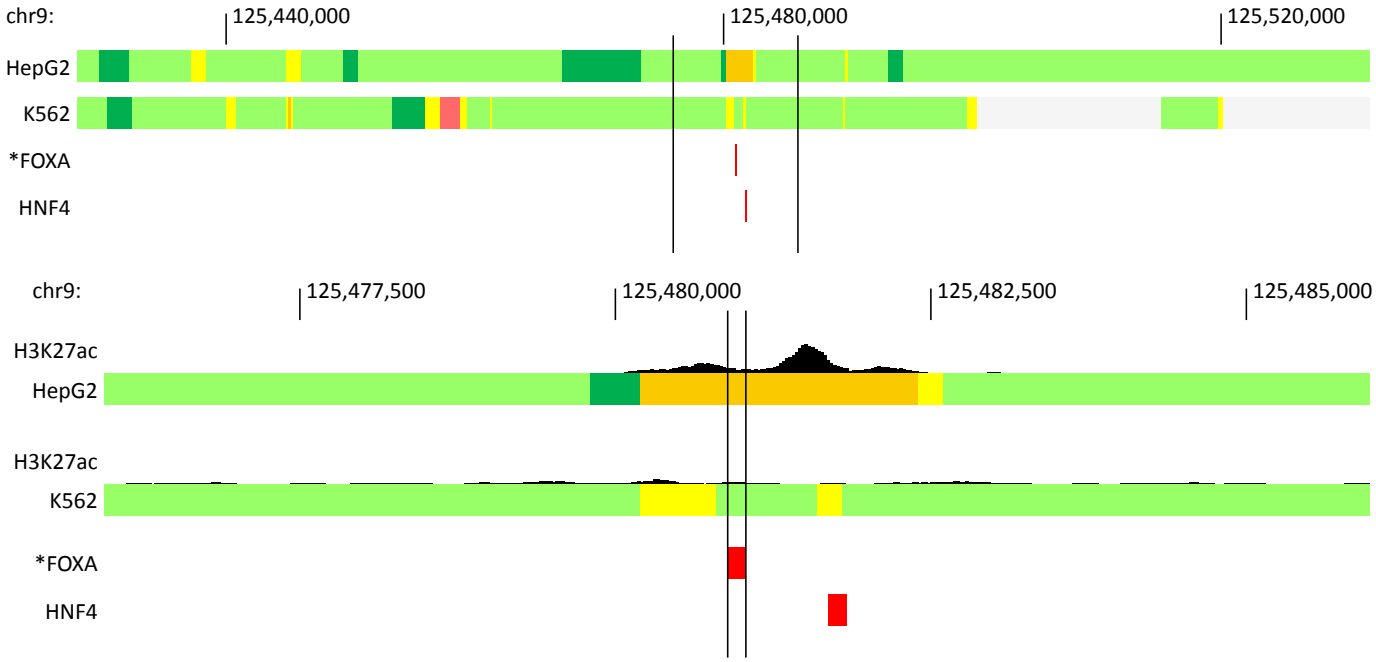
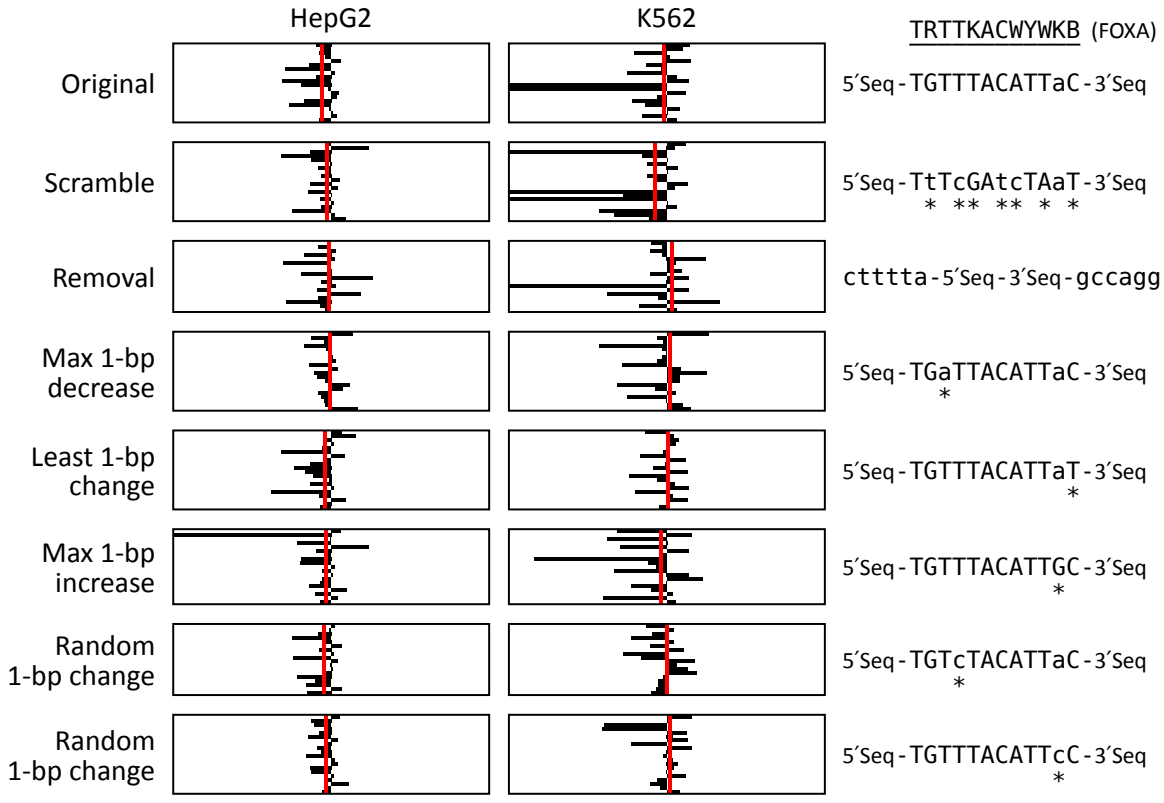
1981 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr9 125480957 125480968 - (hg18)





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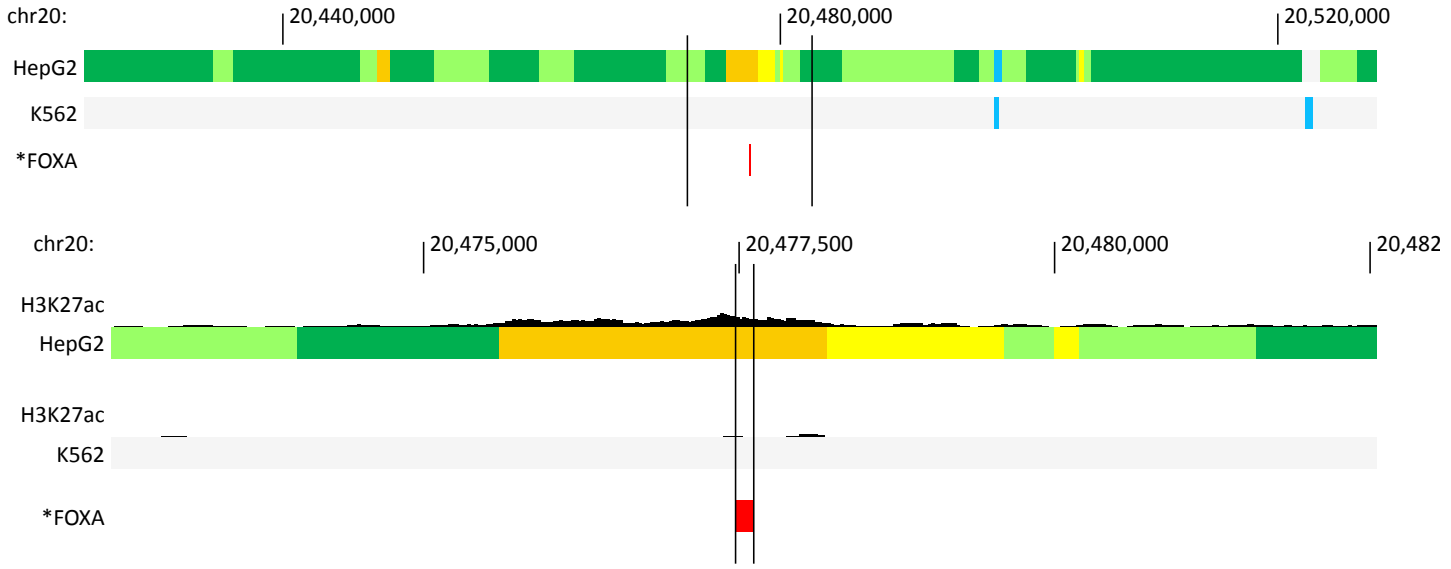
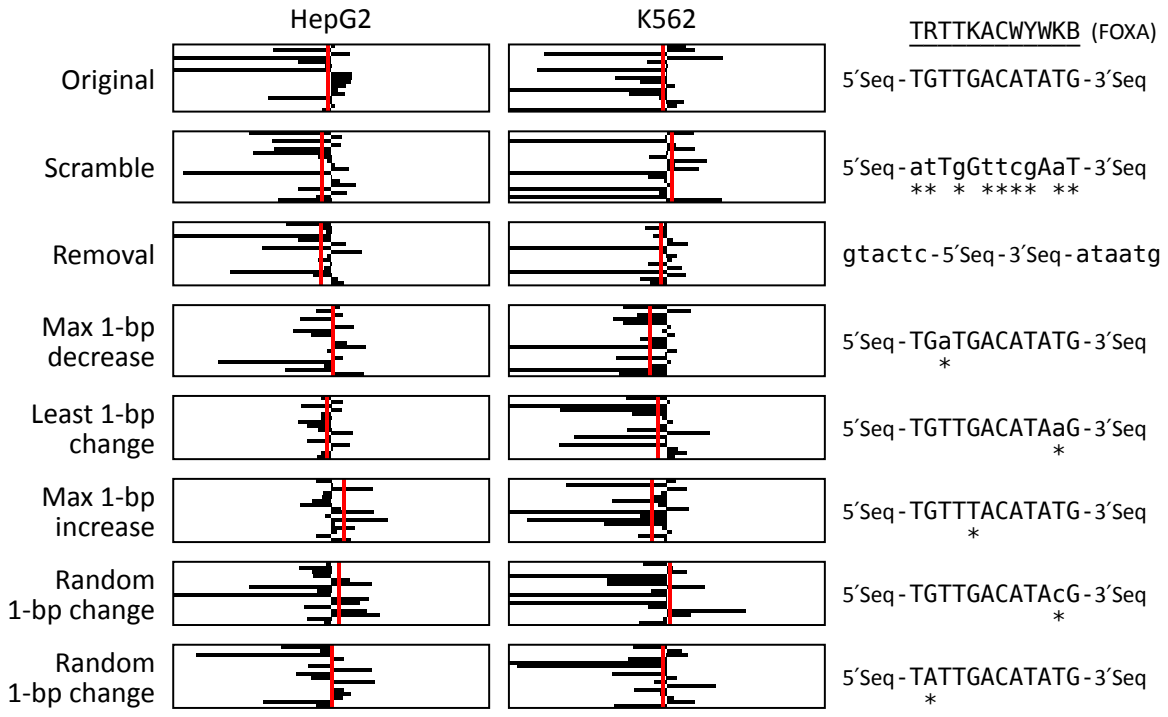
1982 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr20 20477539 20477550 + (hg18)





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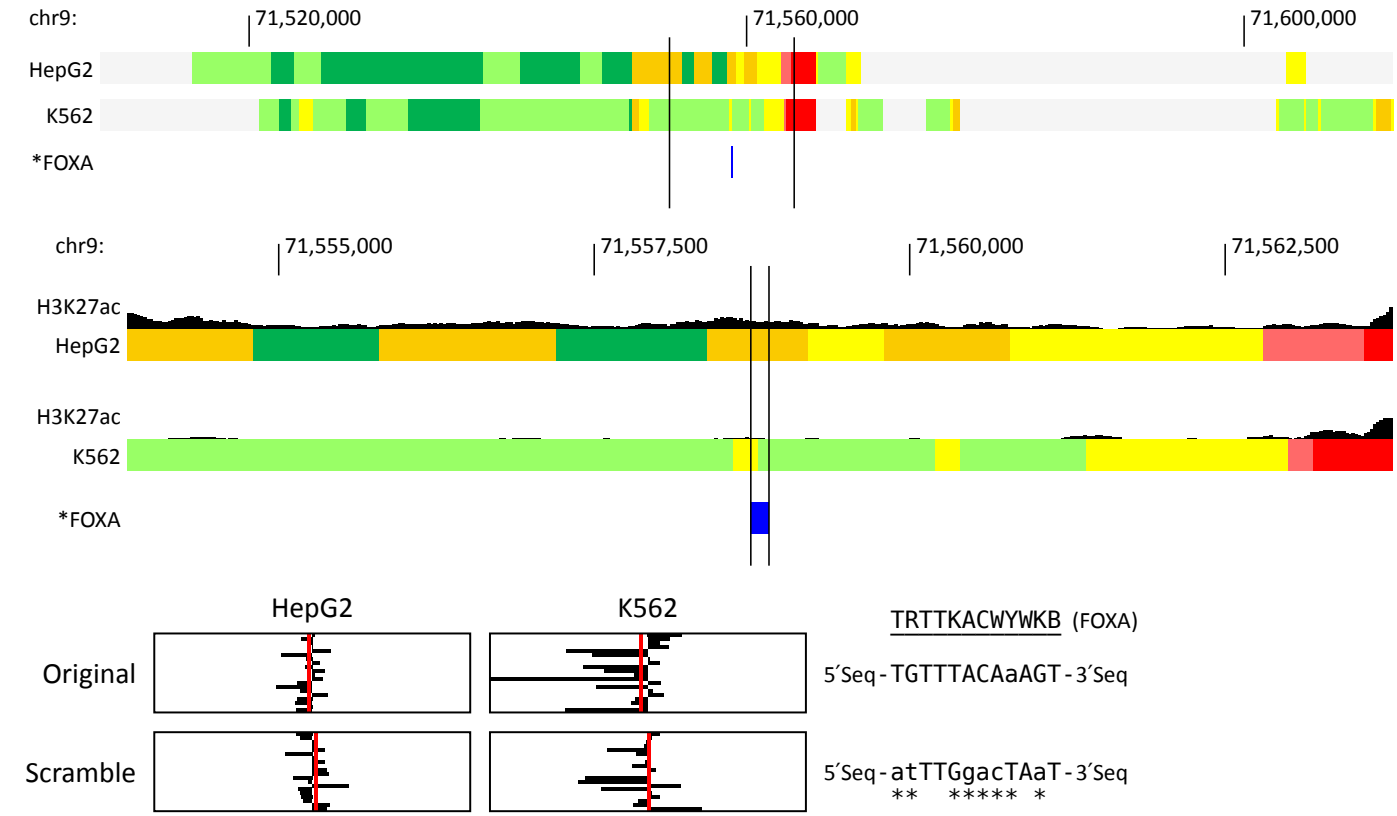
1983 FOXA in HepG2 enhancer

chr9 71558808 71558819 - (hg18)



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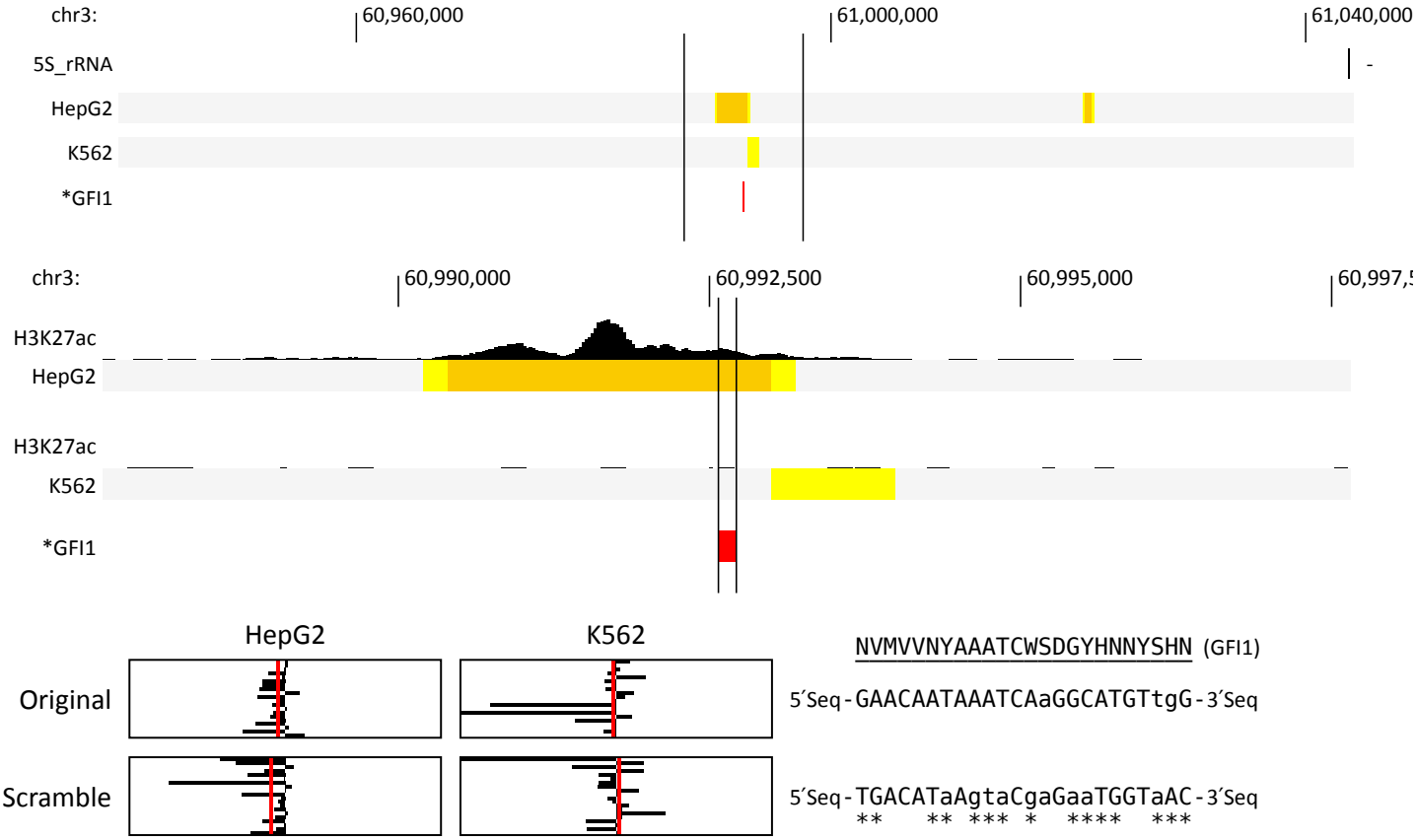
1984 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr3 60992633 60992656 + (hg18)



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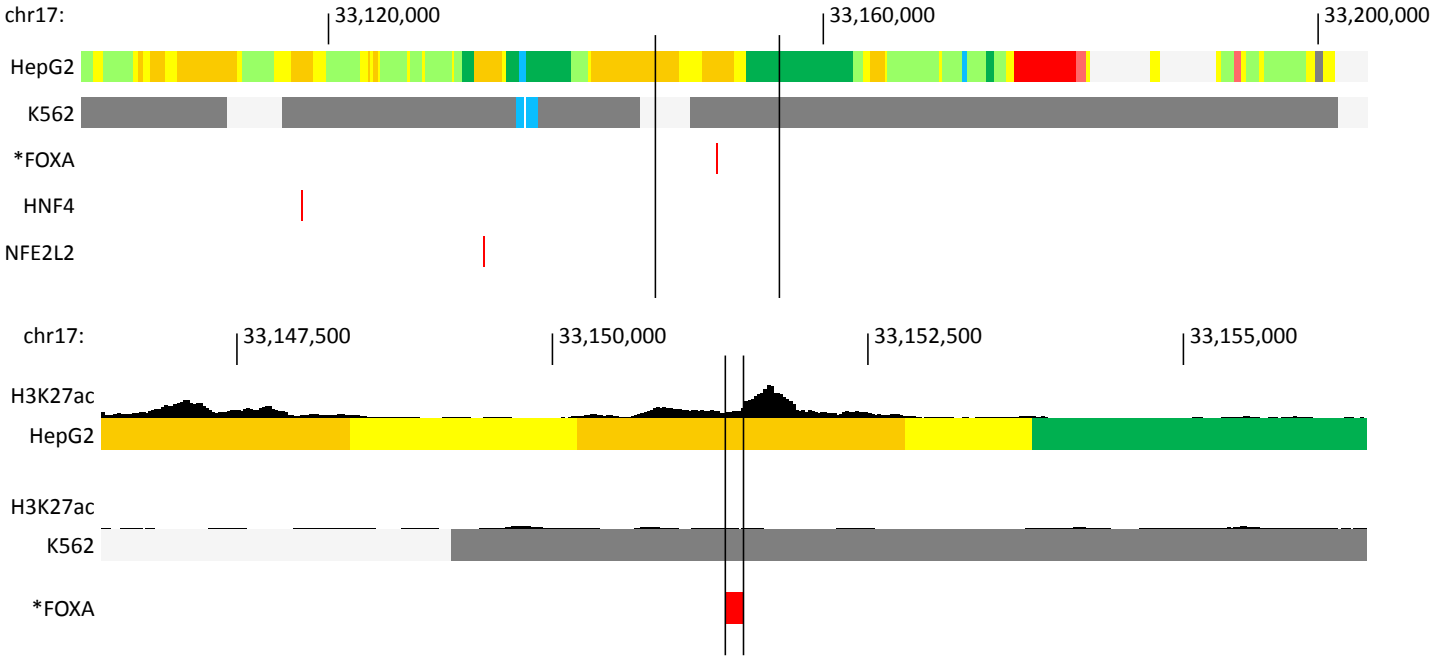
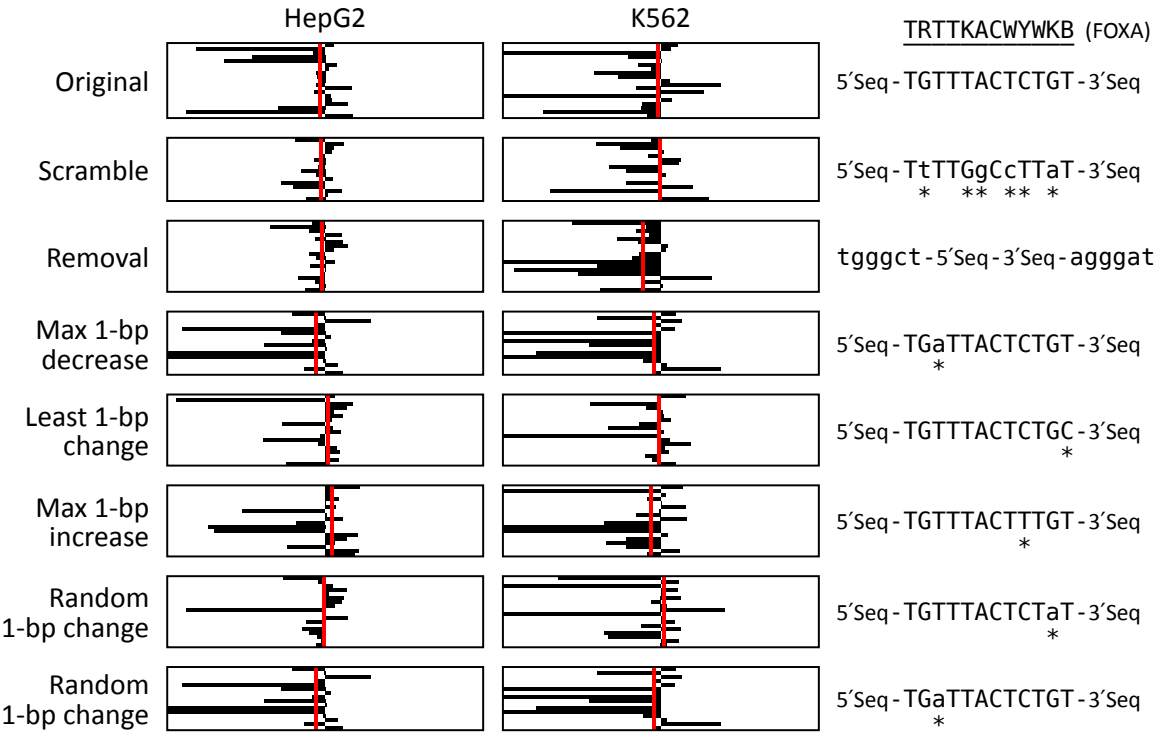
1985 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr17 33151437 33151448 - (hg18)





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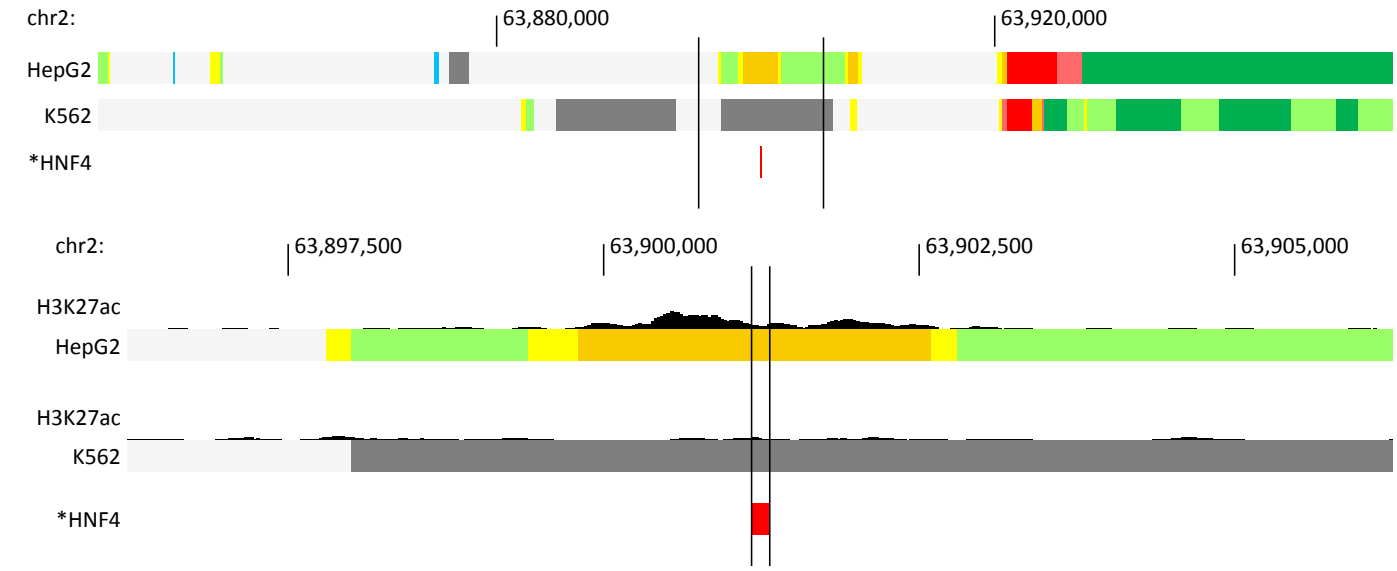
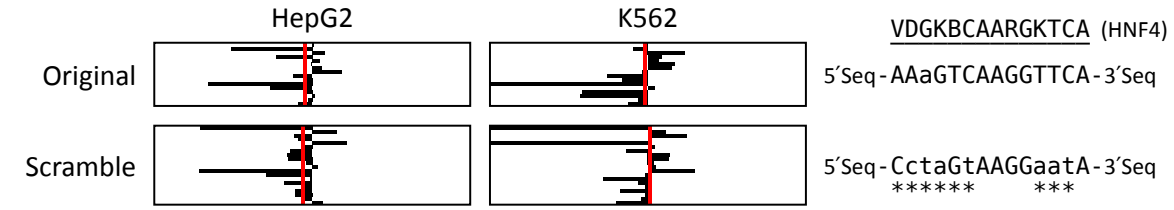
1986 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr2 63901238 63901251 - (hg18)





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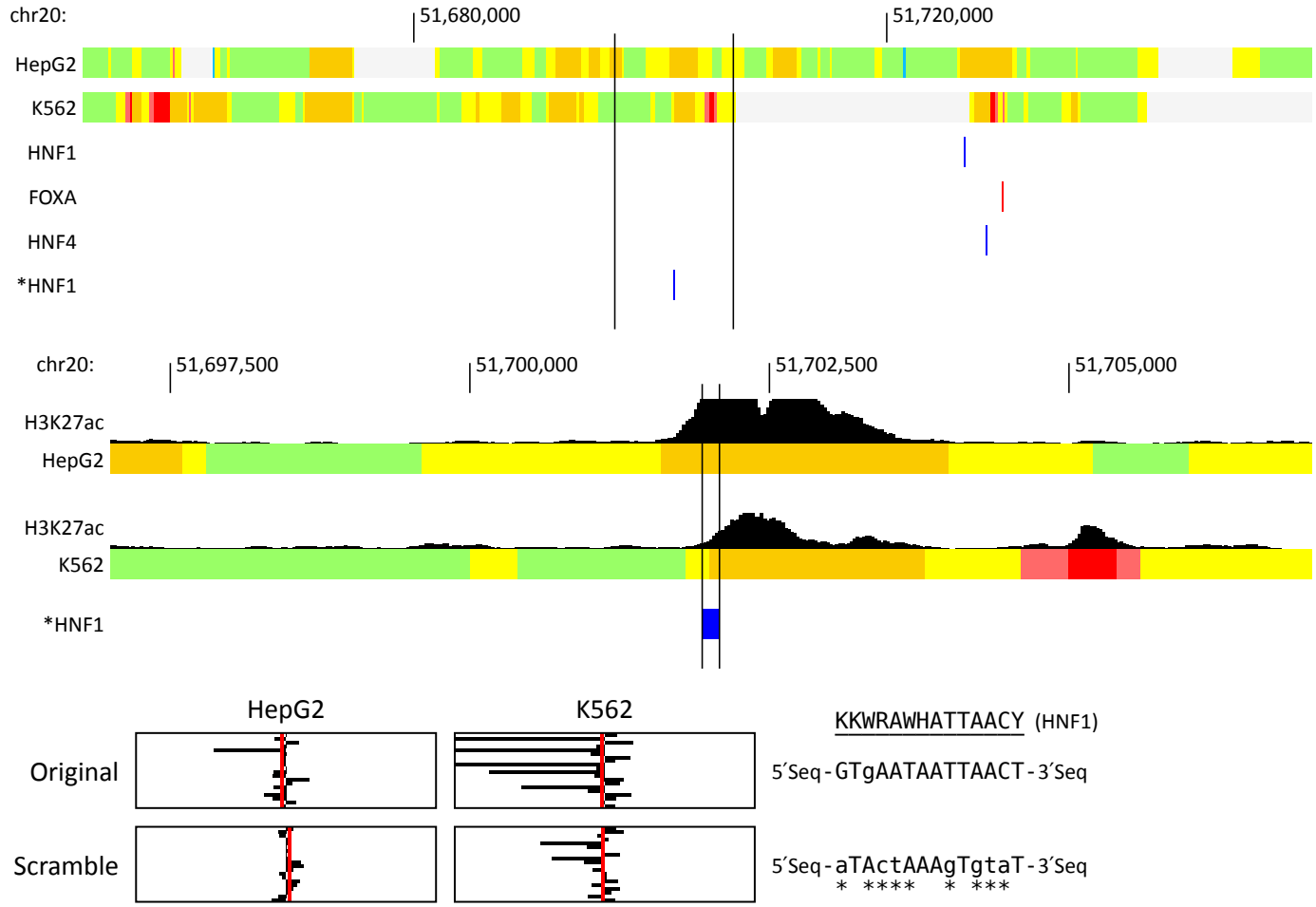
1987 HNF1 in K562 enhancer

chr20 51702005 51702018 - (hg18)



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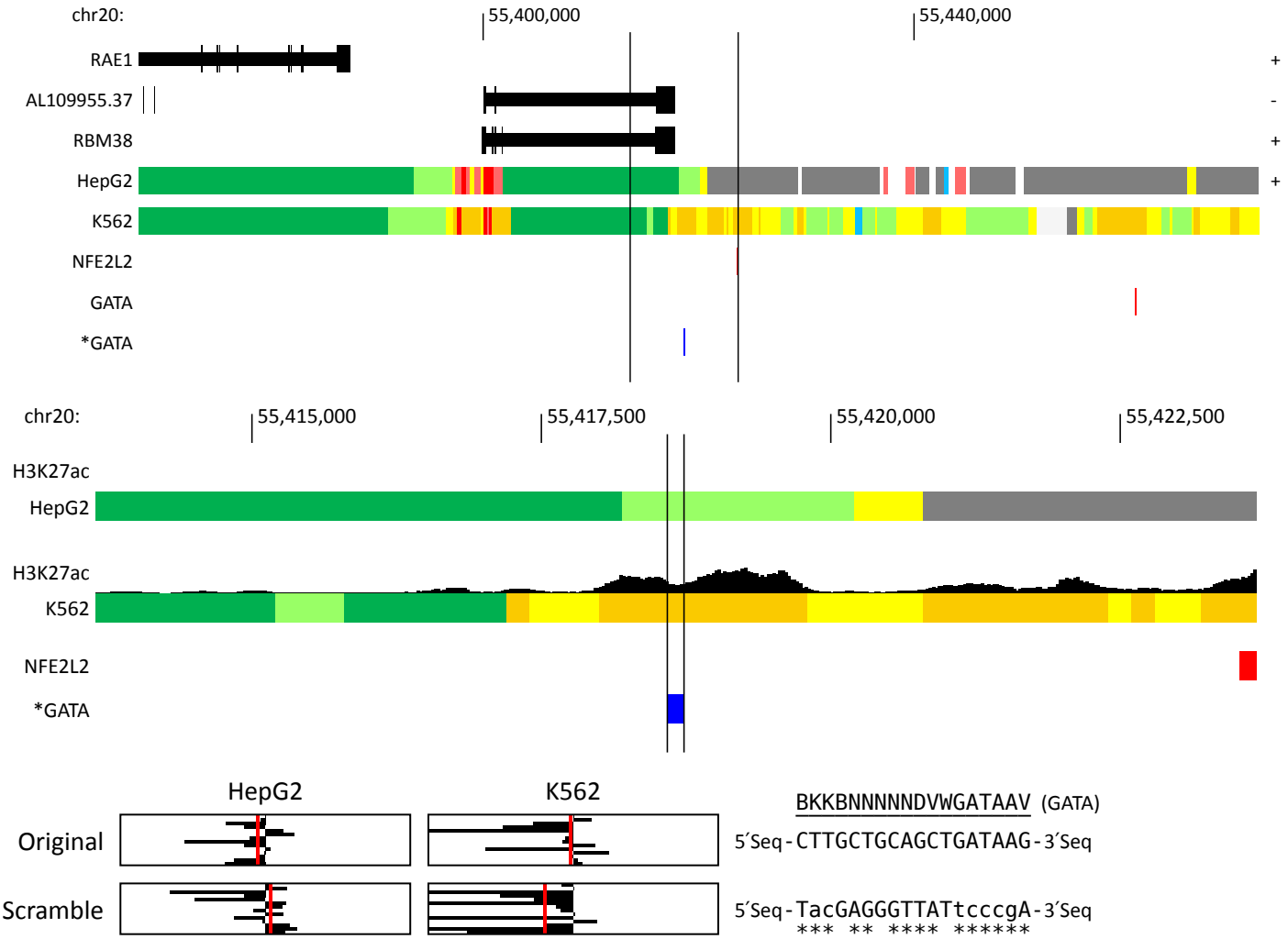
1988 GATA in K562 enhancer

chr20 55418652 55418669 + (hg18)



BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTTGCTGCAGCTGATAAG-3′Seq

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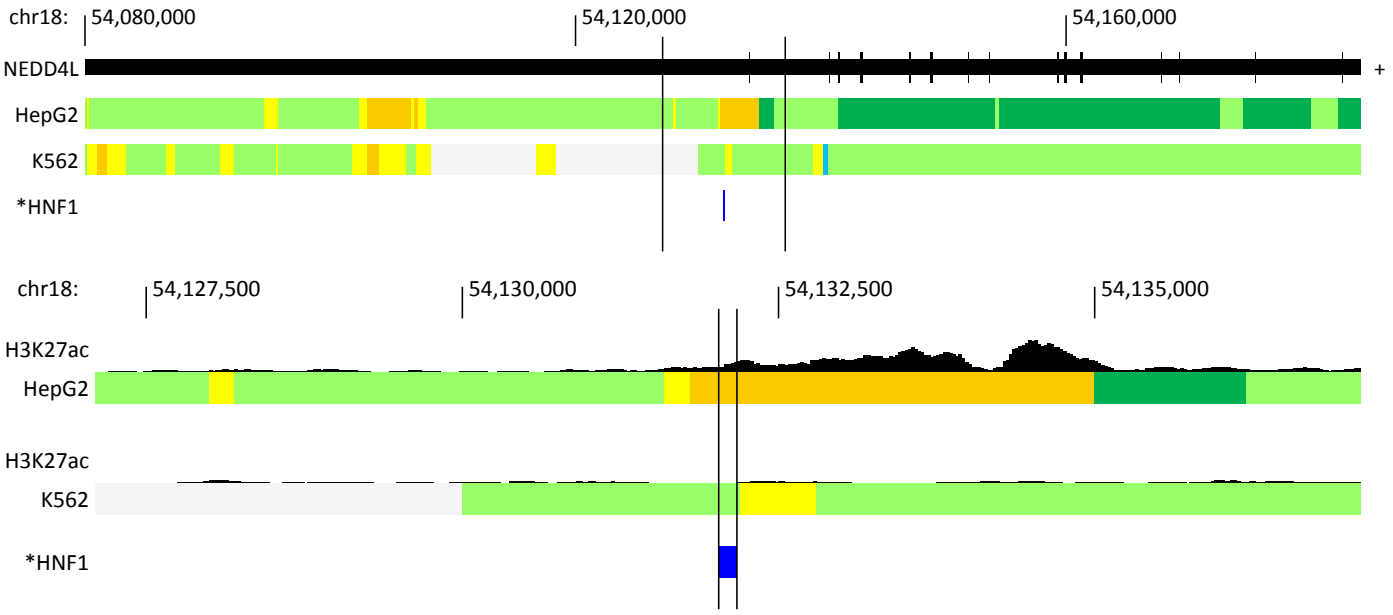
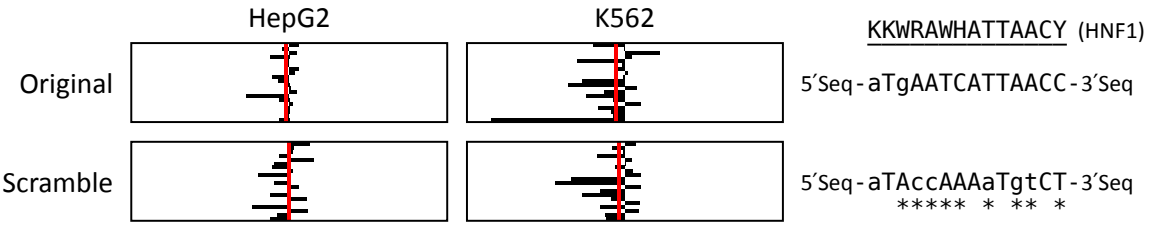
1989 HNF1 in HepG2 enhancer

chr18 54132093 54132106 - (hg18)





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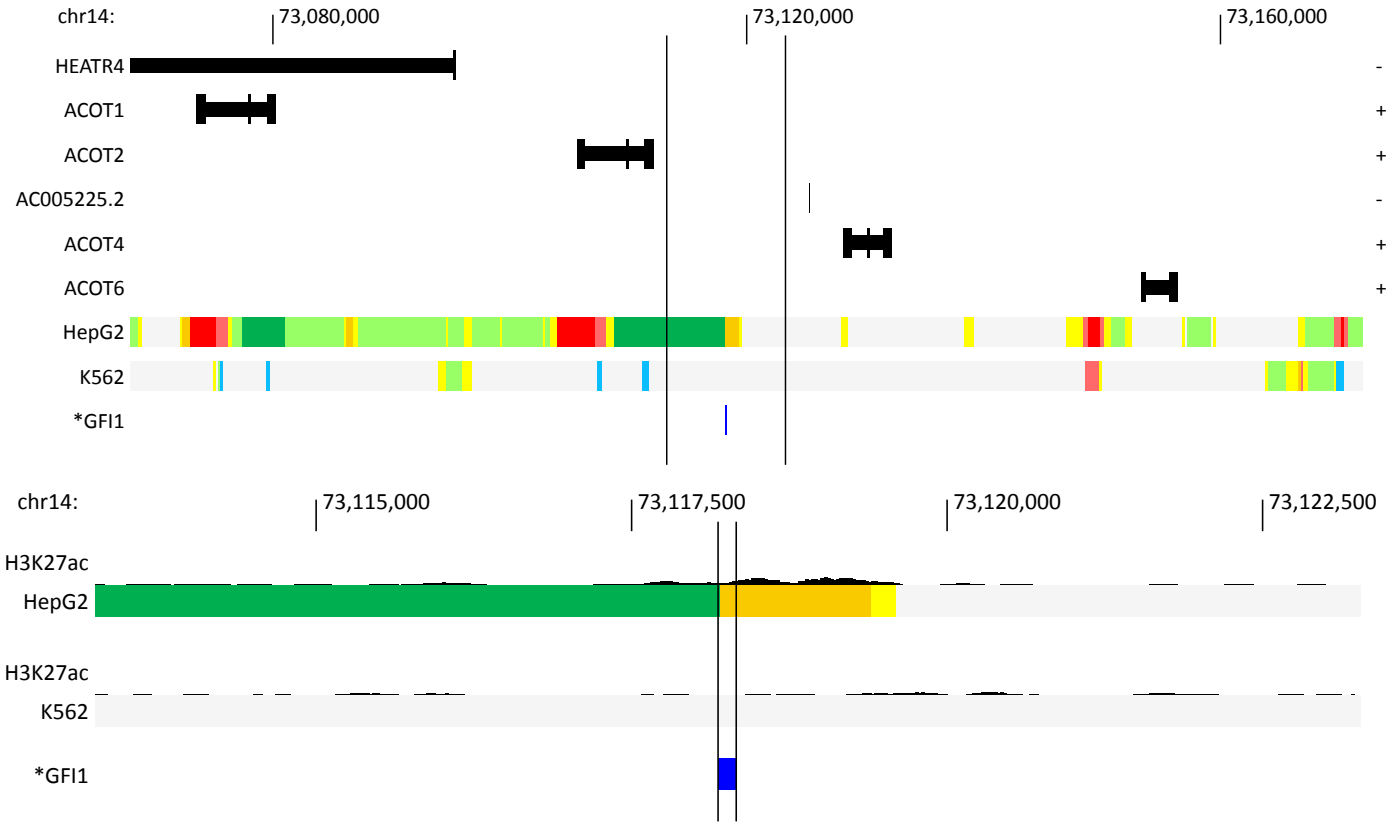
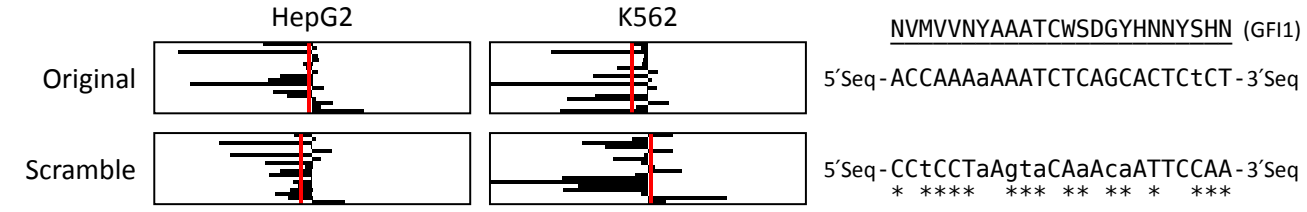
1990 GFI1 in HepG2 enhancer

chr14 73118246 73118269 - (hg18)





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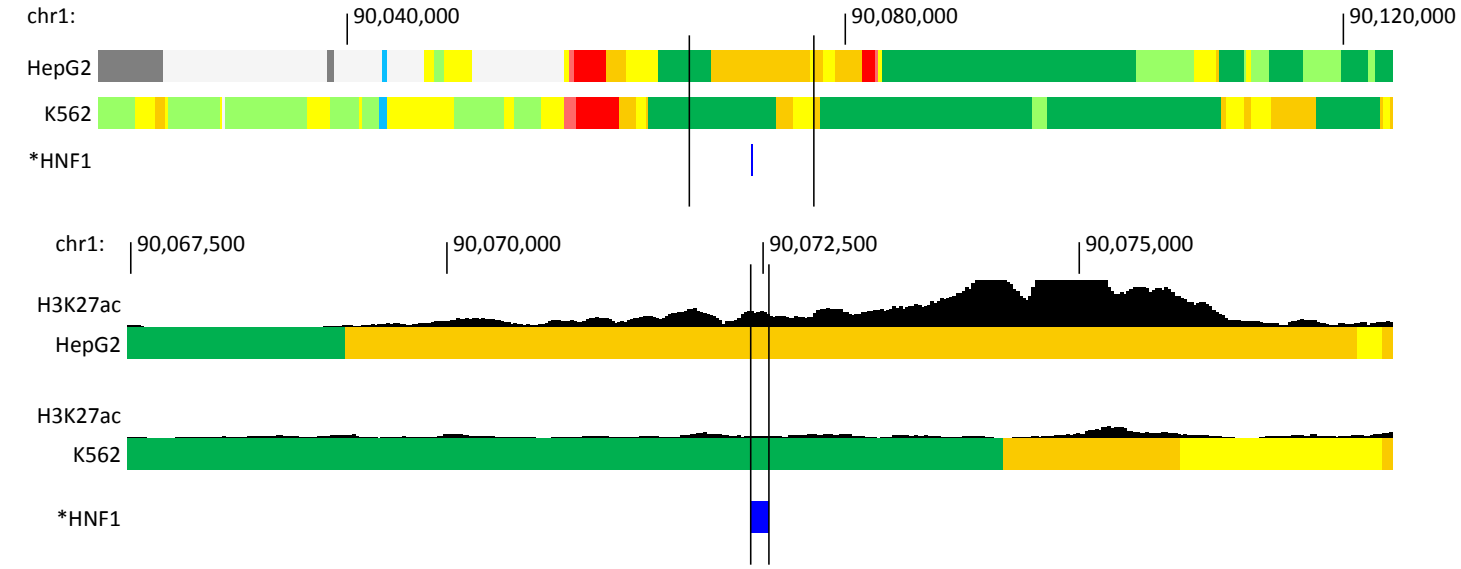
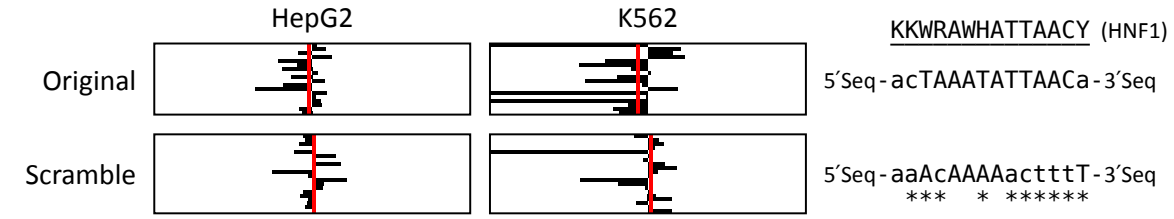
1991 HNF1 in HepG2 enhancer

chr1 90072468 90072481 + (hg18)





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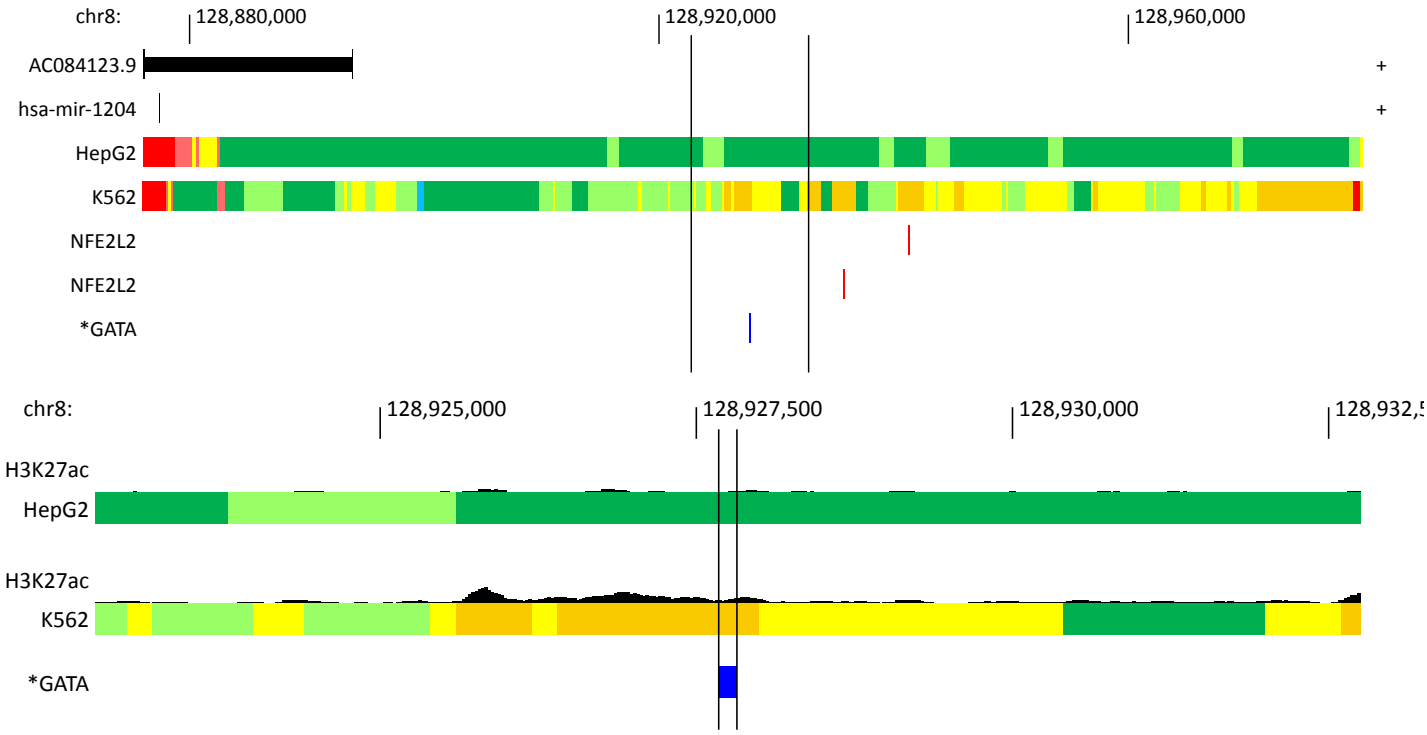
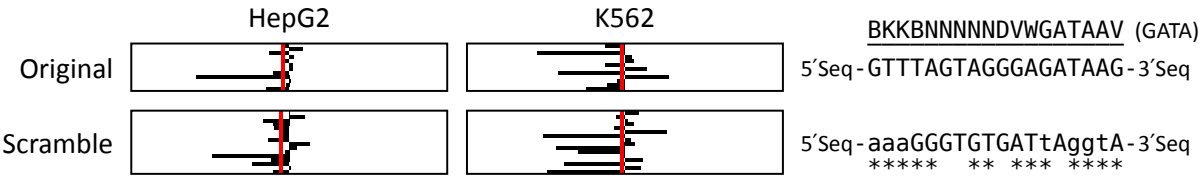
1992 GATA in K562 enhancer

chr8 128927741 128927758 - (hg18)





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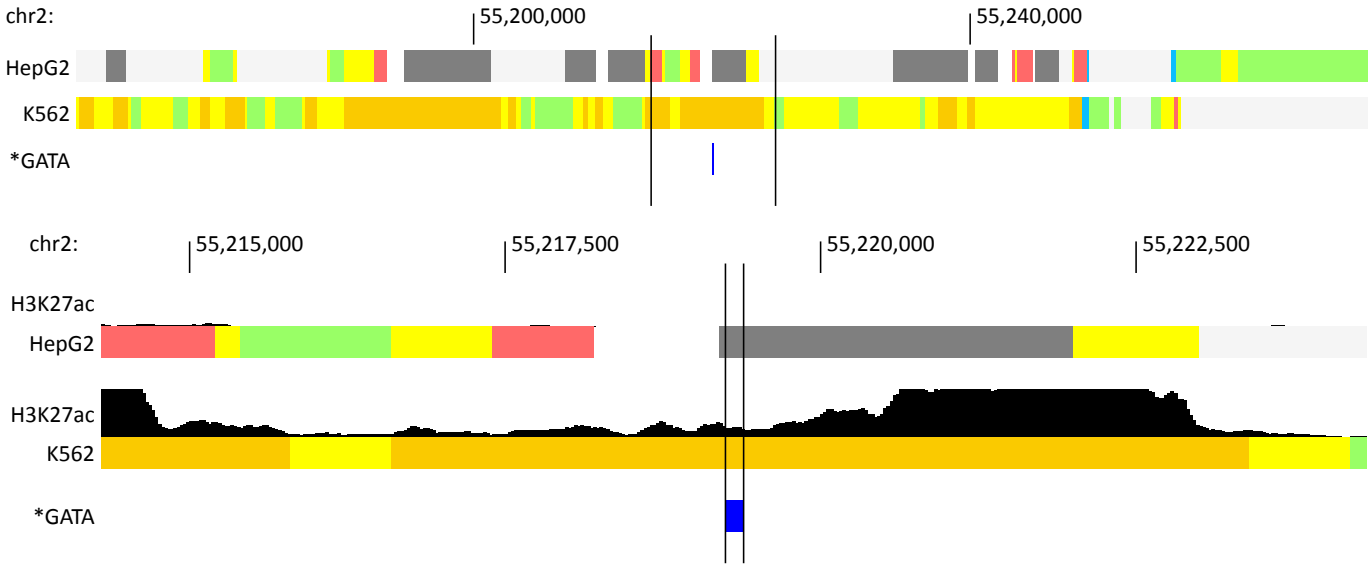
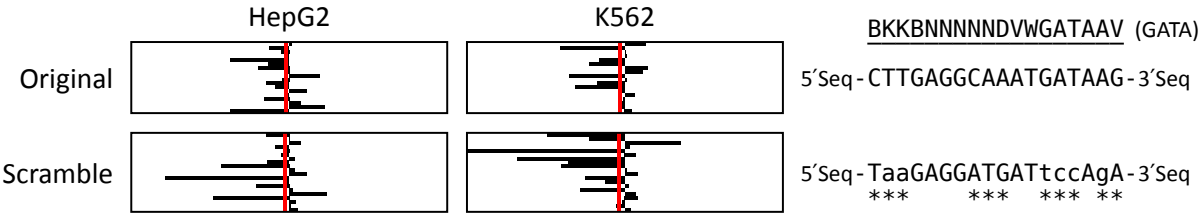
1993 GATA in K562 enhancer

chr2 55219310 55219327 + (hg18)





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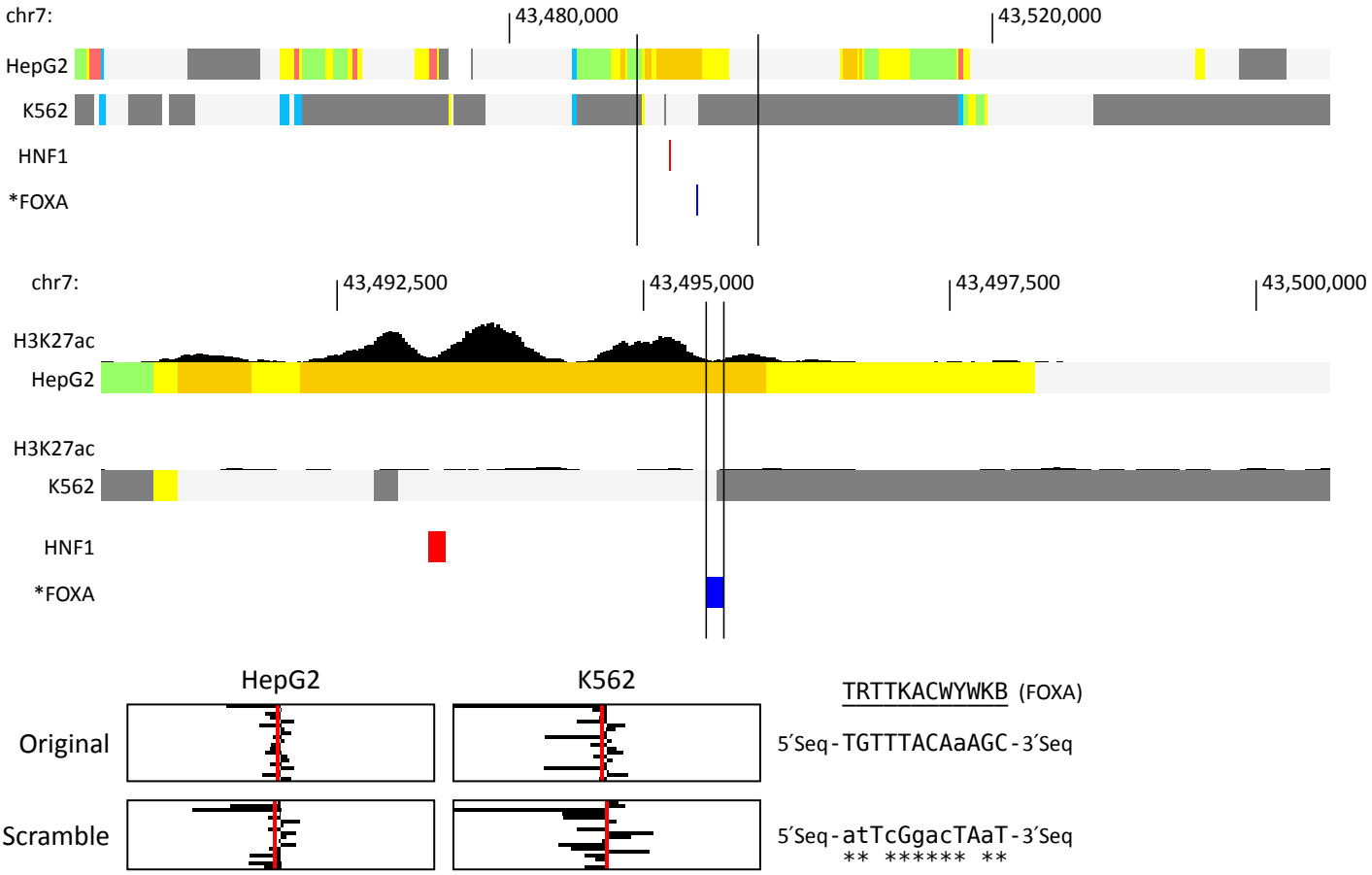
1994 FOXA in HepG2 enhancer

chr7 43495579 43495590 - (hg18)



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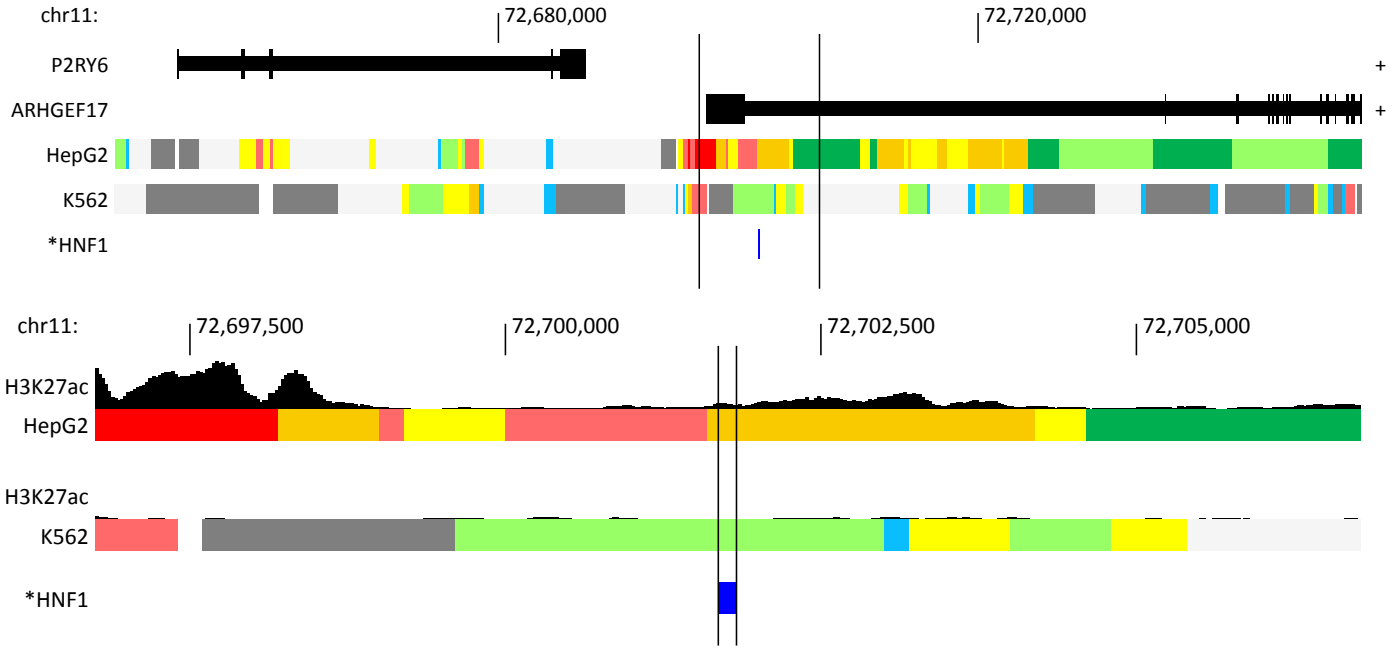
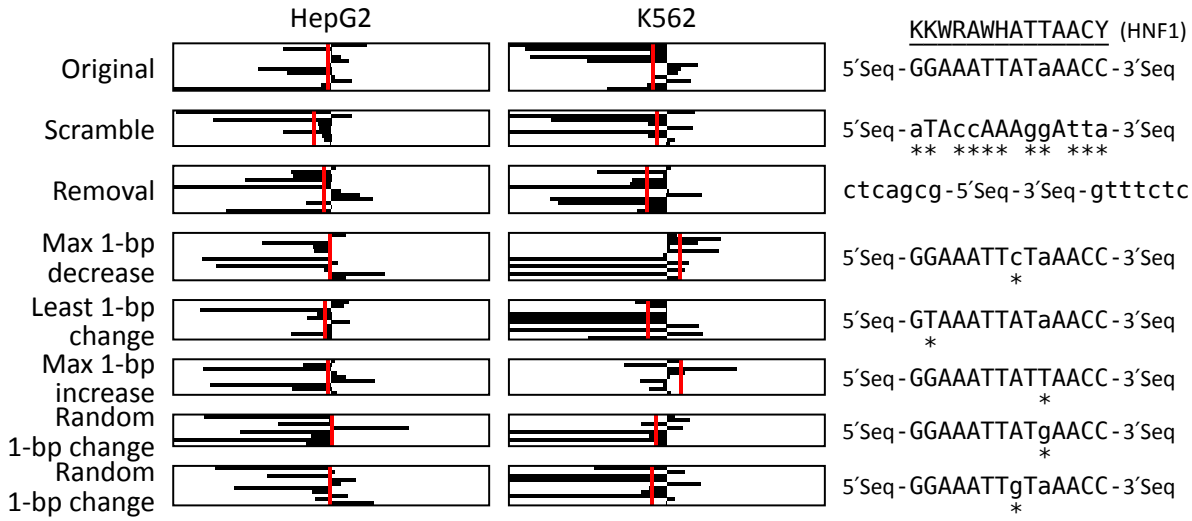
1995 HNF1 in HepG2 enhancer

chr11 72701753 72701766 + (hg18)





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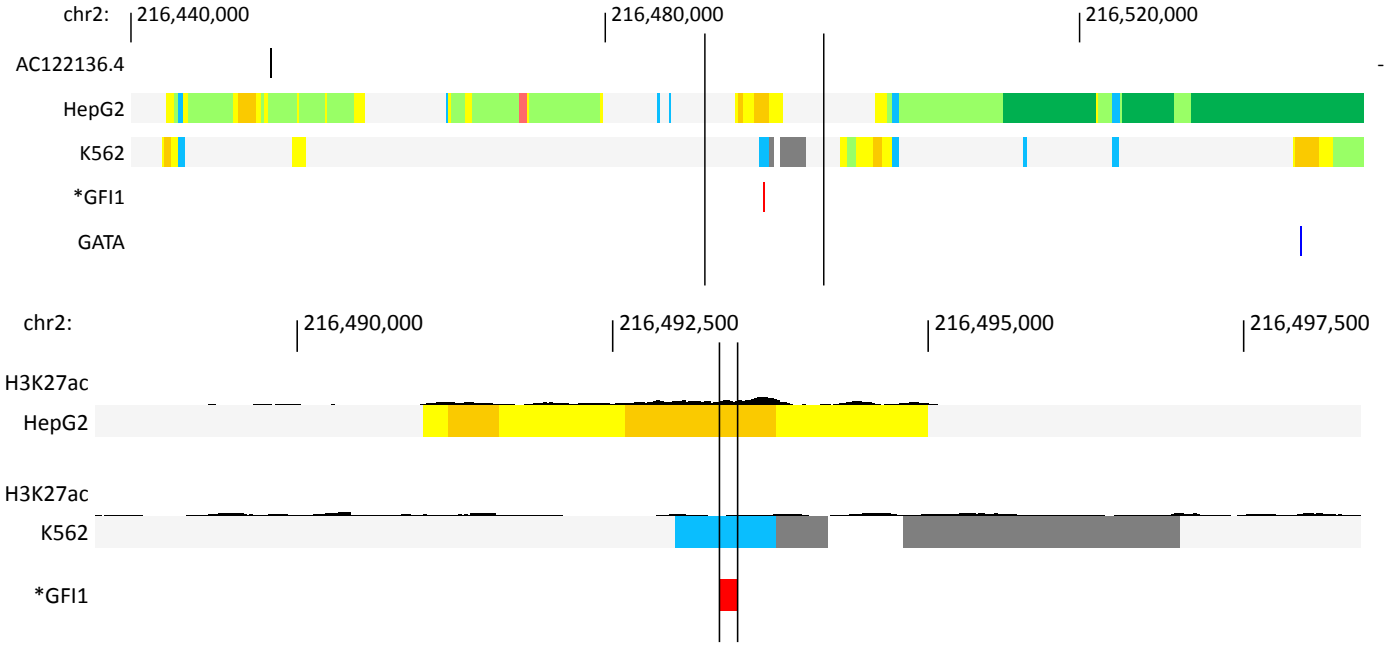
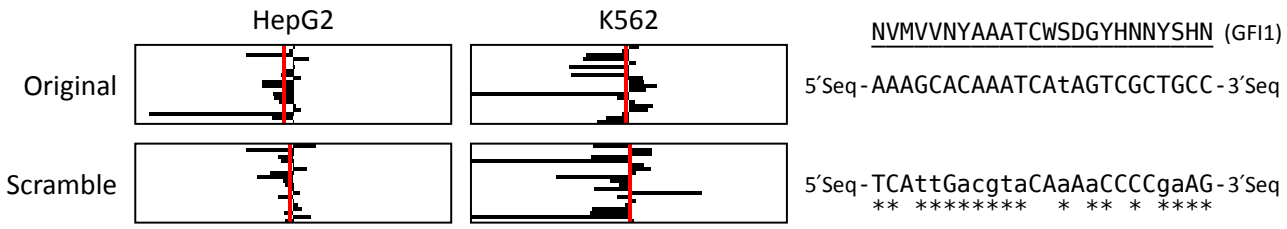
1996 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 216493407 216493430 + (hg18)





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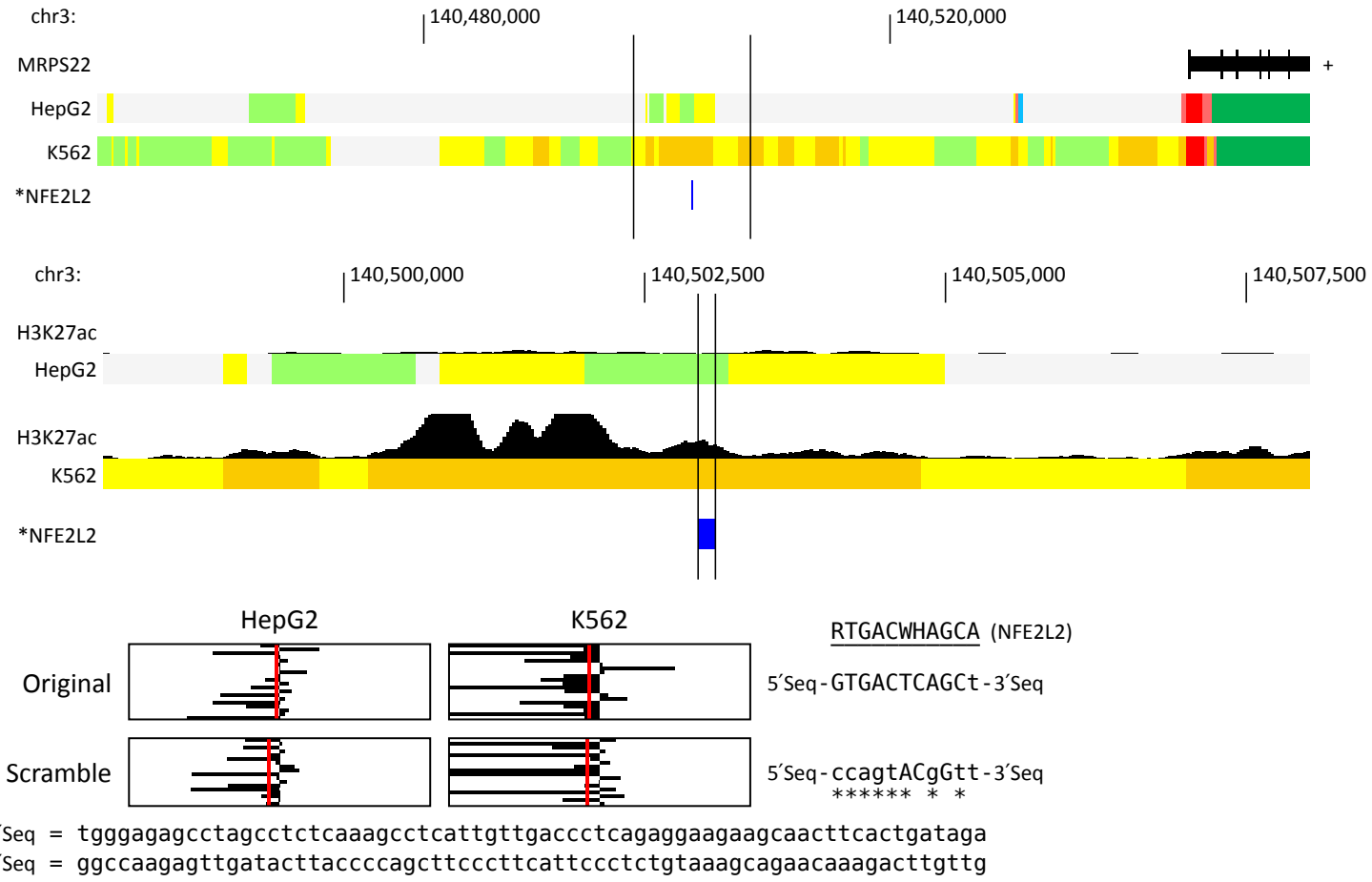
1997 NFE2L2 in K562 enhancer

chr3 140503011 140503021 + (hg18)



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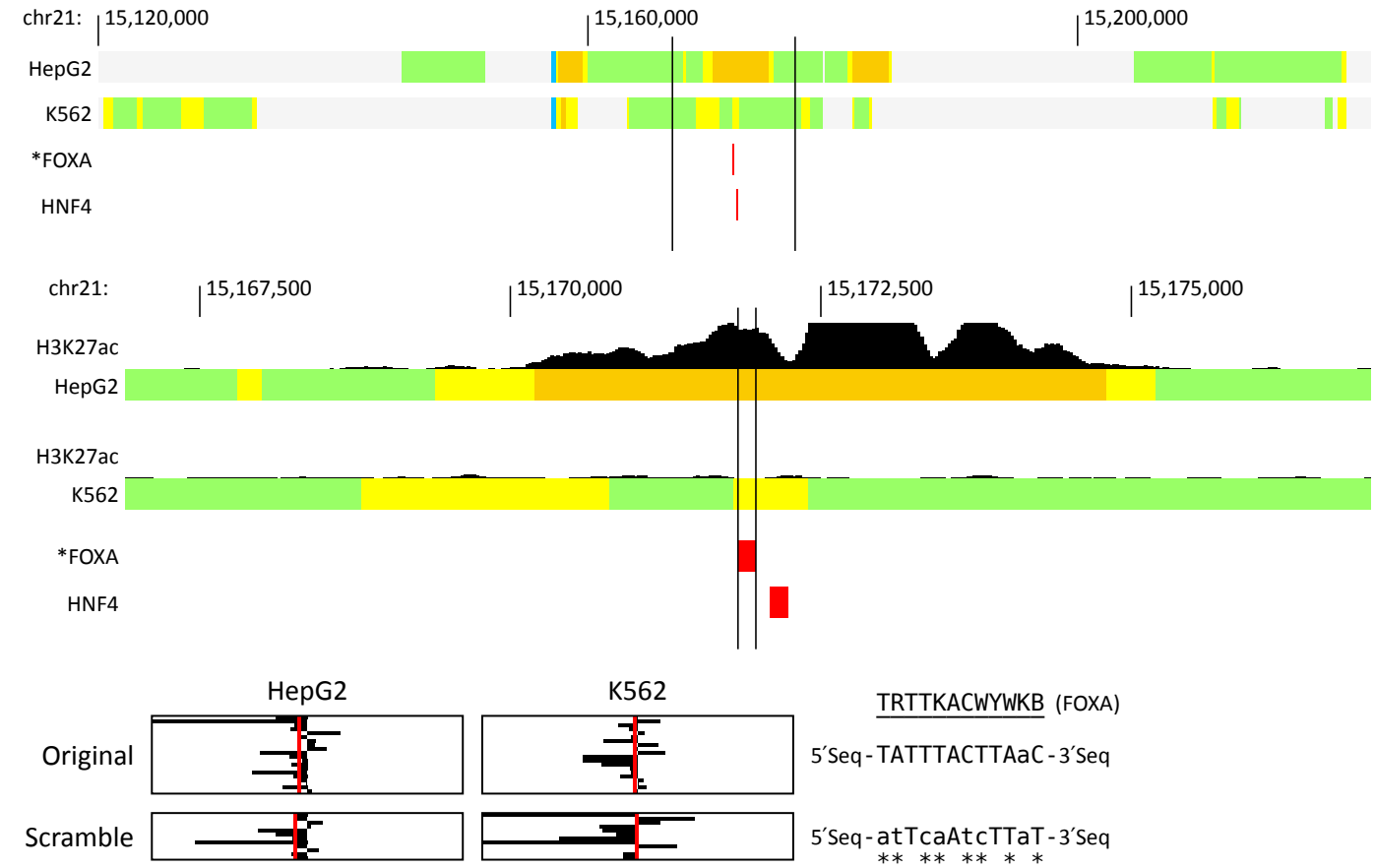
1998 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr21 15171900 15171911 - (hg18)



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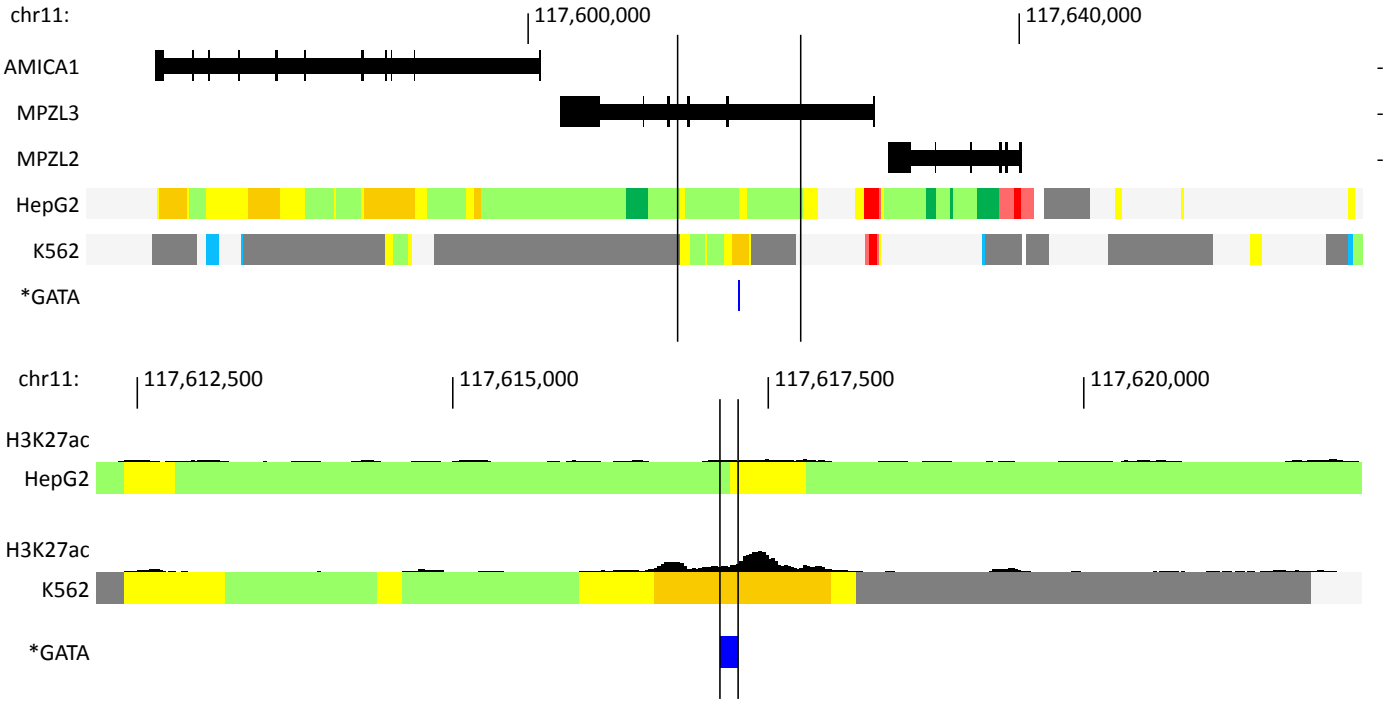
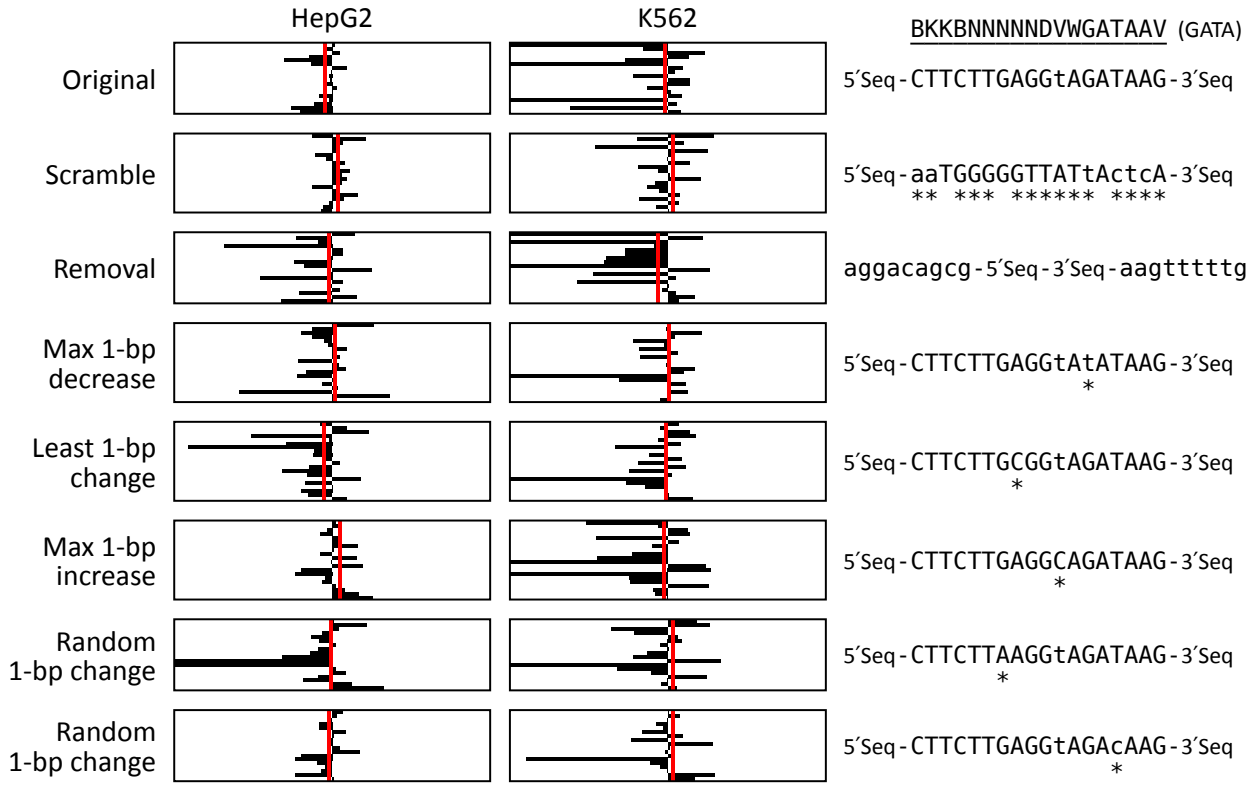
1999 GATA in K562 enhancer

chr11 117617181 117617198 - (hg18)





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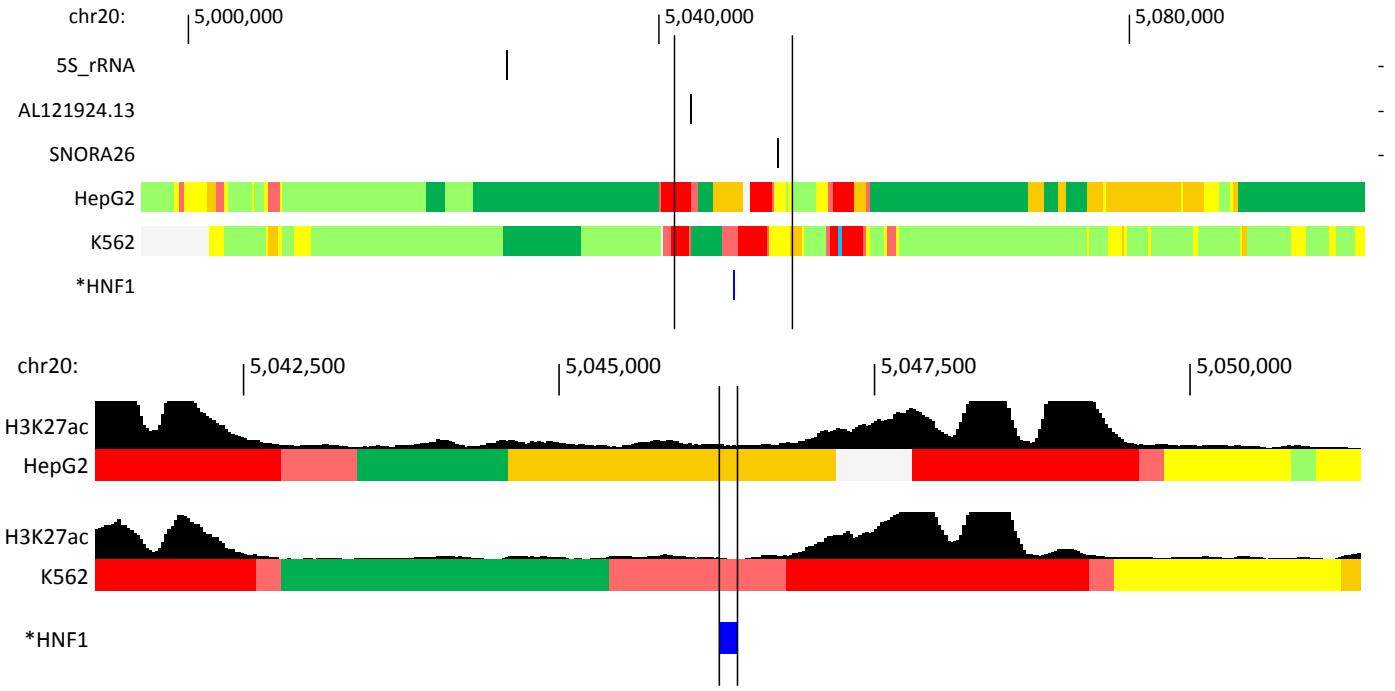
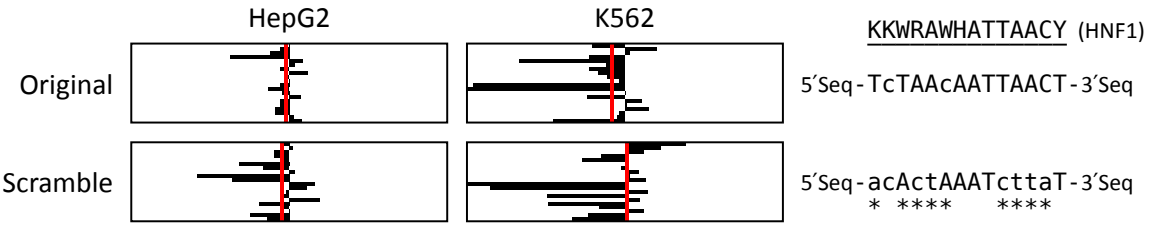
2000 HNF1 in HepG2 enhancer

chr20 5046336 5046349 - (hg18)





KKWRAWHATTAACY (HNF1)

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5′Seq-acActAAATcttaT-3′Seq

* **** ****

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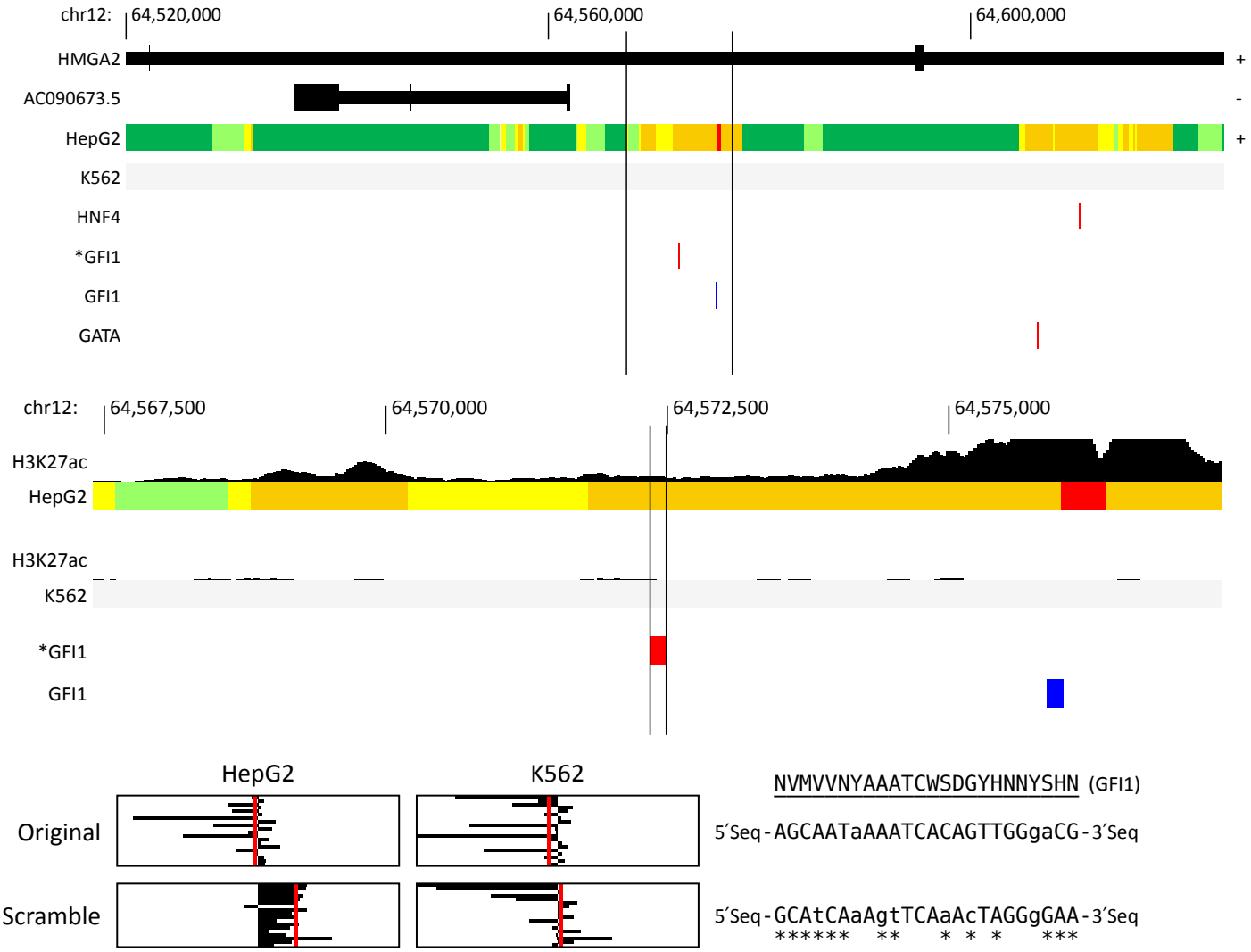
2001 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr12 64572408 64572431 - (hg18)



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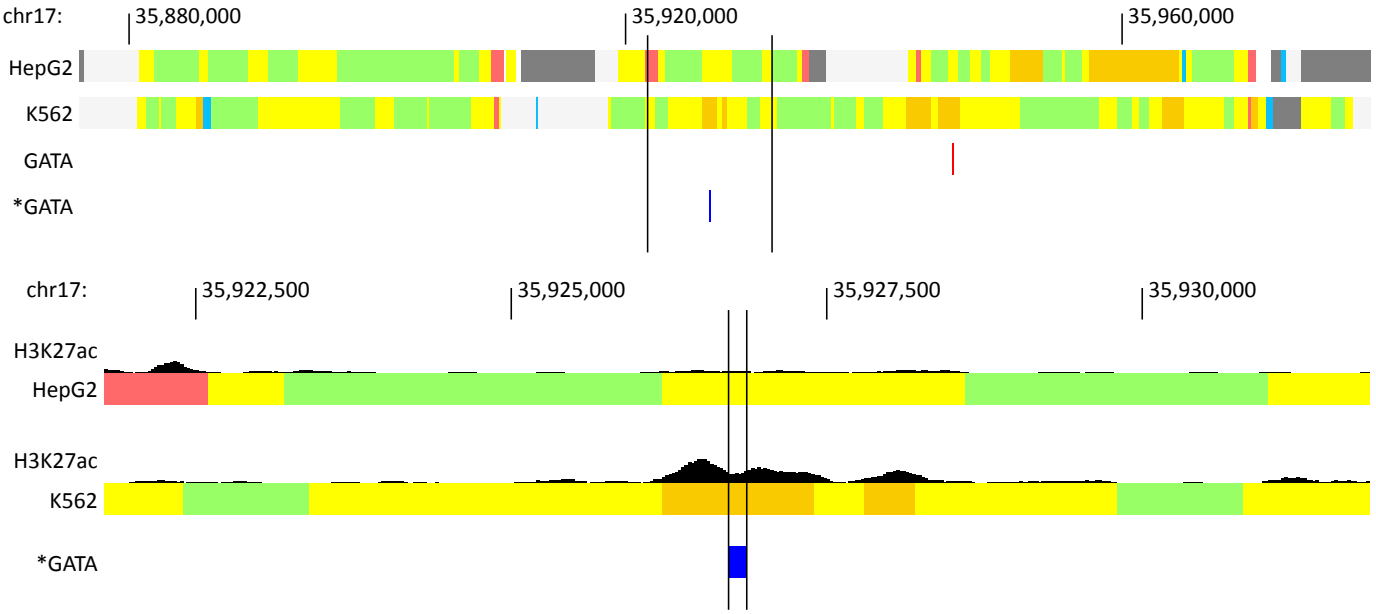
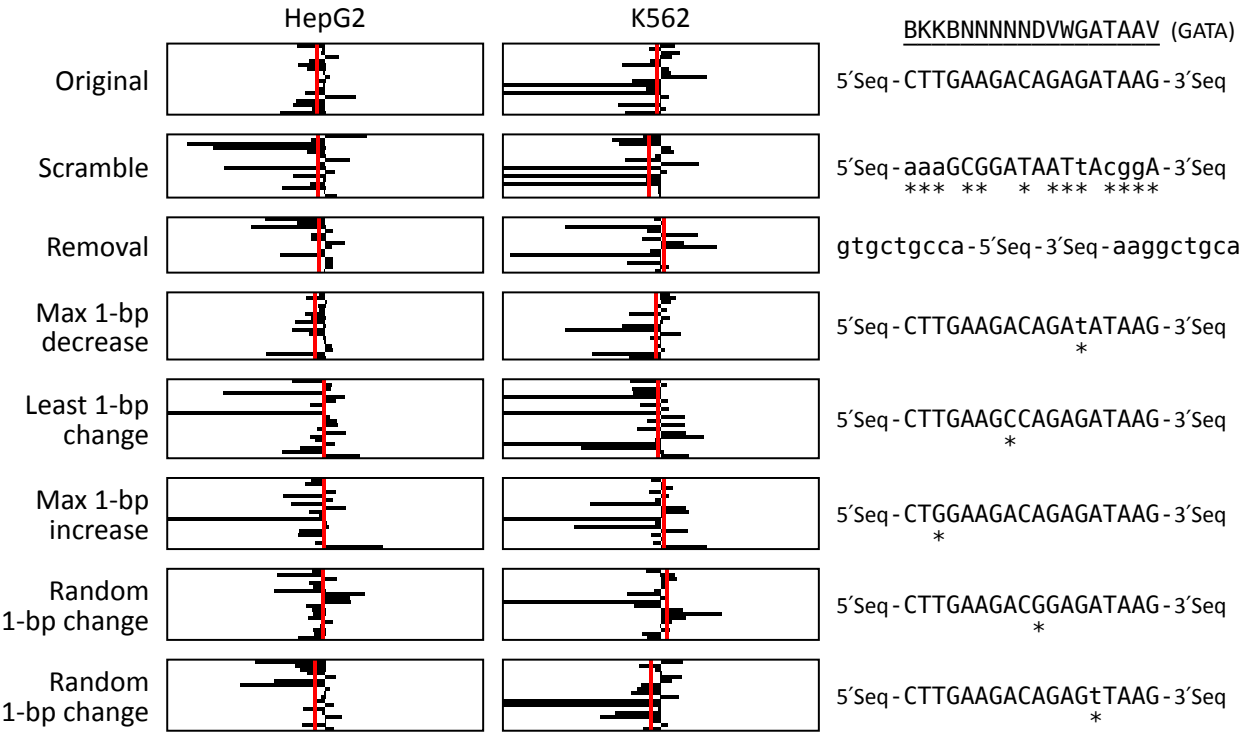
2002 GATA in K562 enhancer

chr17 35926786 35926803 - (hg18)





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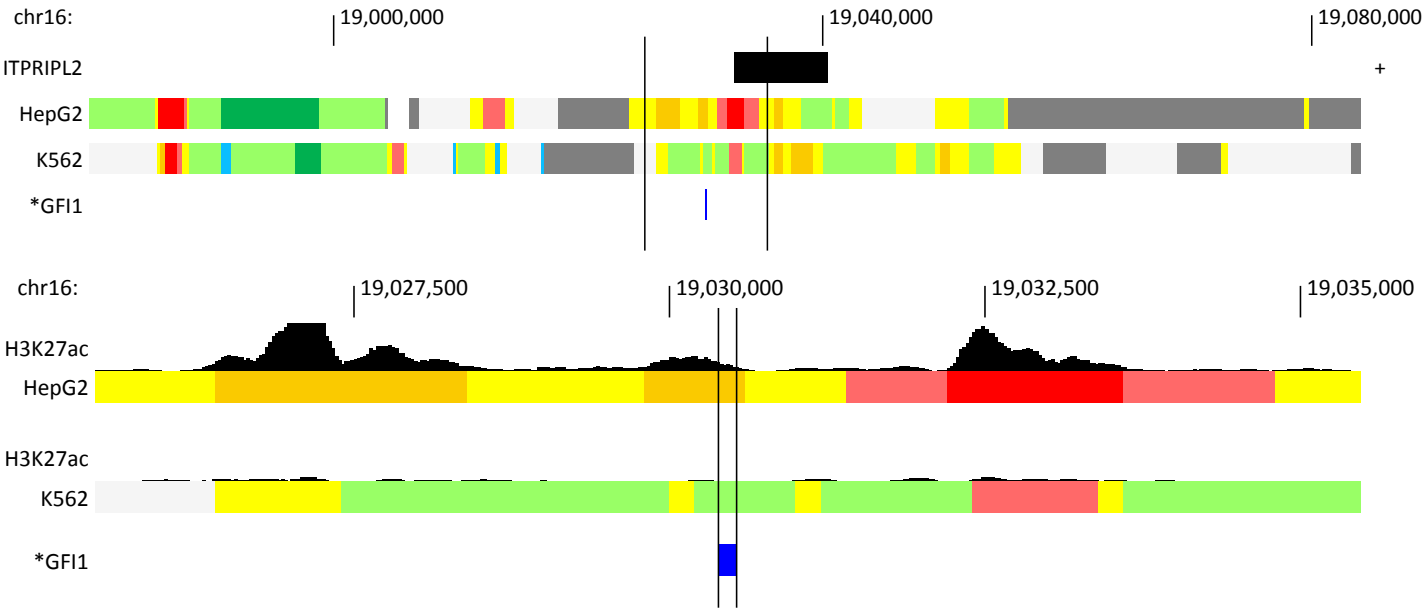
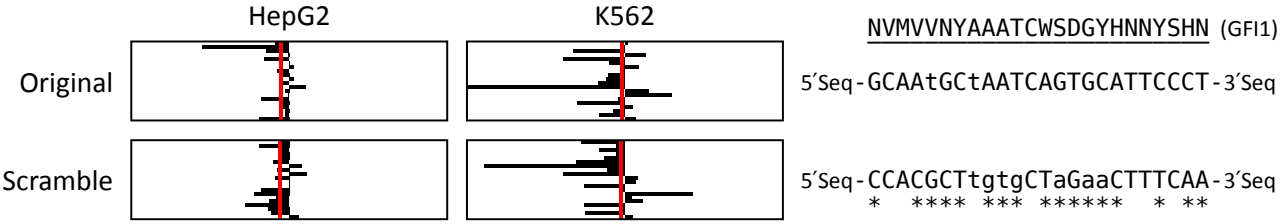
2003 GFI1 in HepG2 enhancer

chr16 19030449 19030472 + (hg18)





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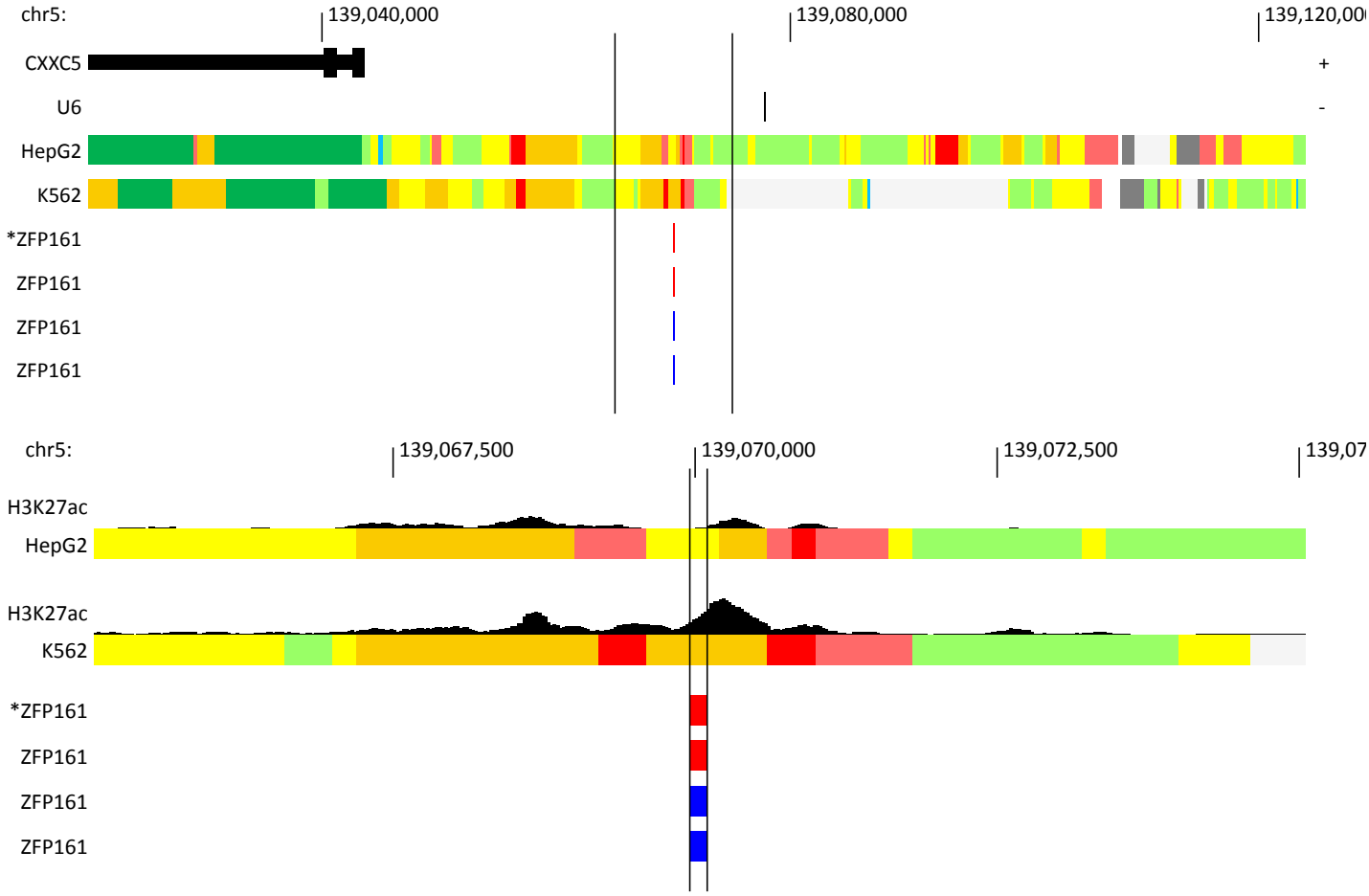
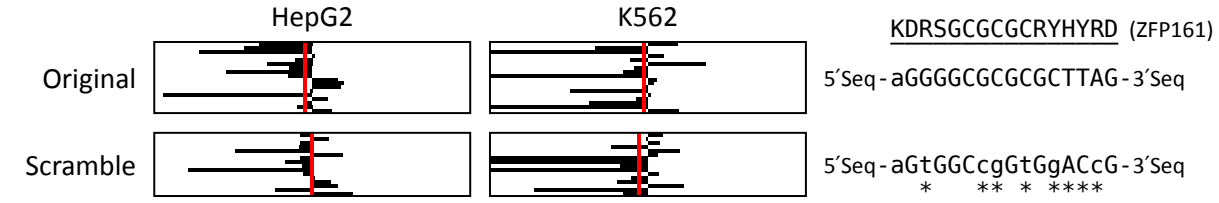
2004 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr5 139070021 139070036 - (hg18)





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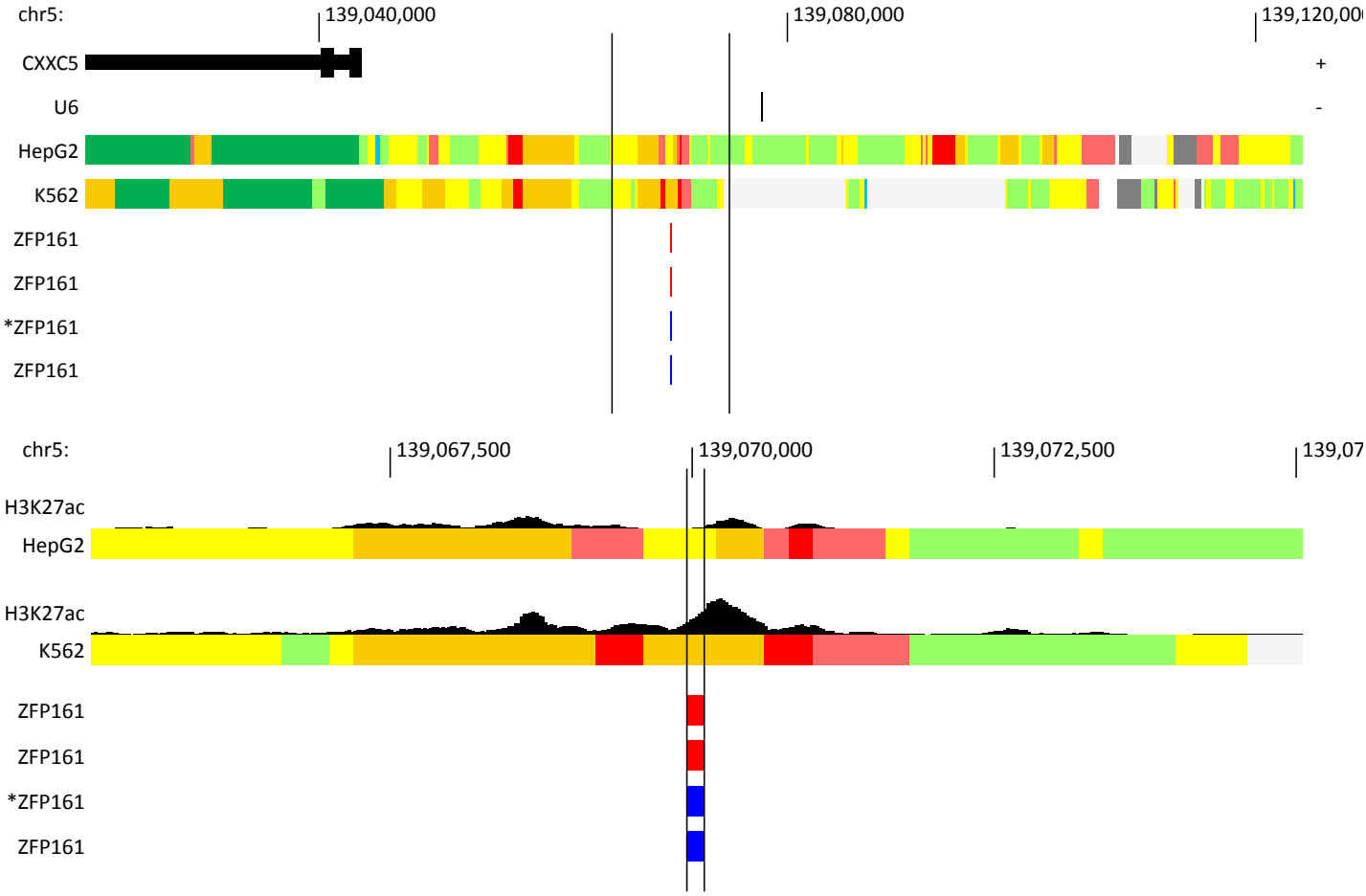
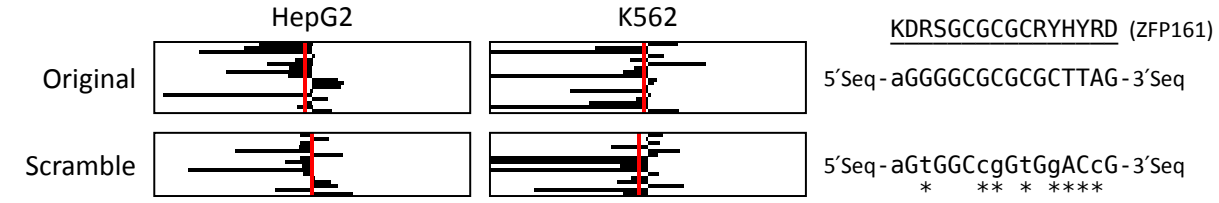
2005 ZFP161 in K562 enhancer

chr5 139070021 139070036 - (hg18)





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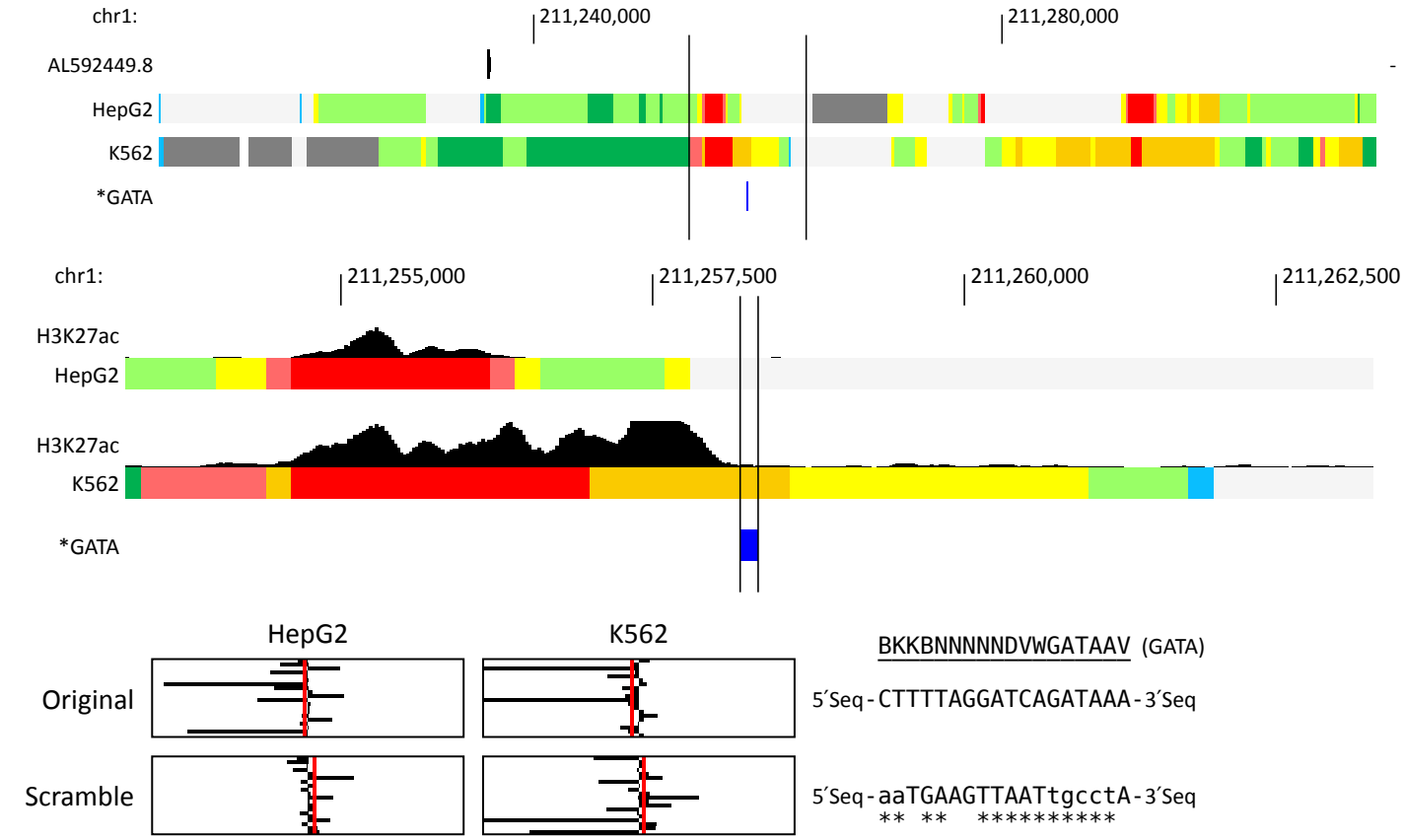
2006 GATA in K562 enhancer

chr1 211258266 211258283 - (hg18)



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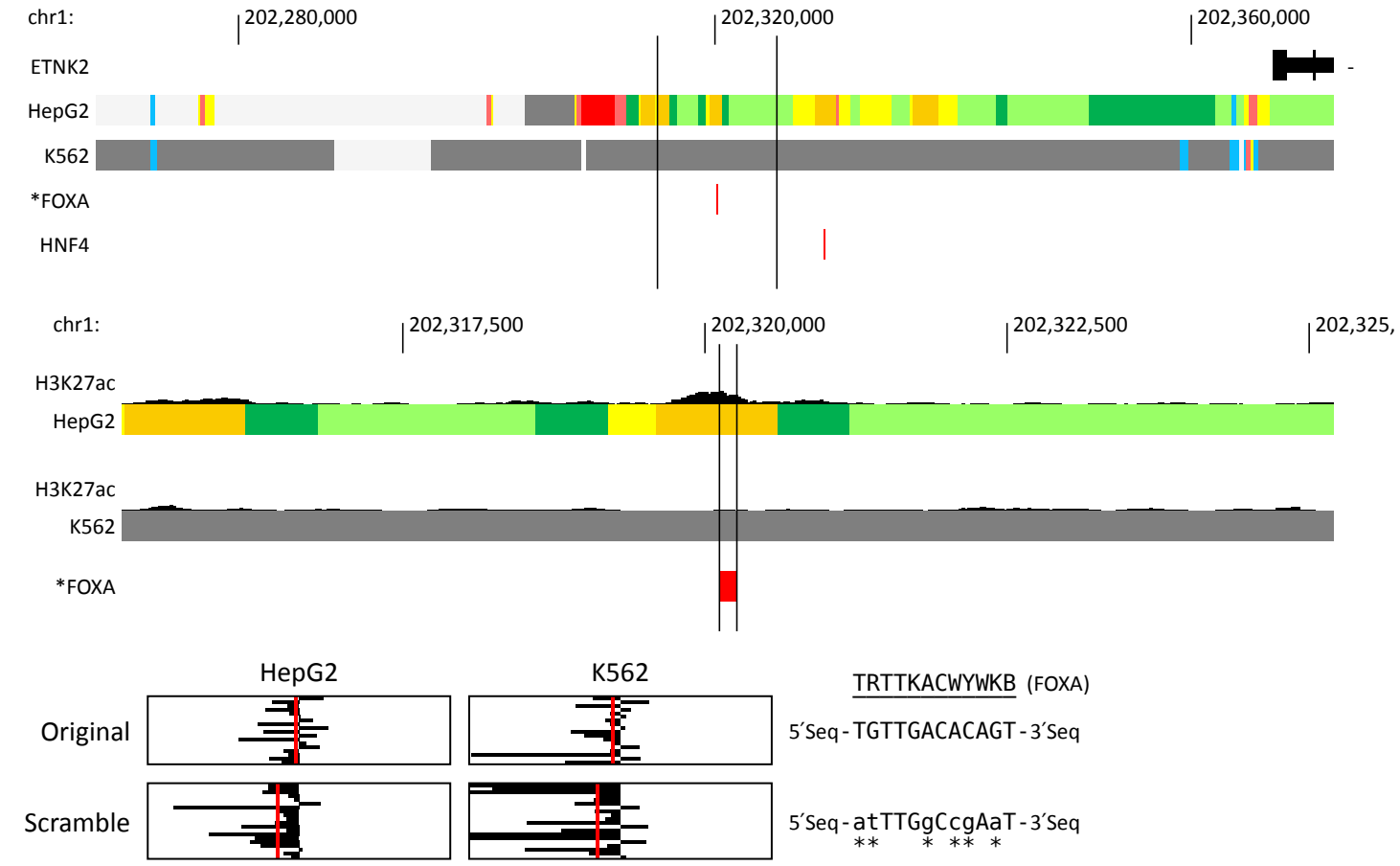
2007 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr1 202320187 202320198 - (hg18)



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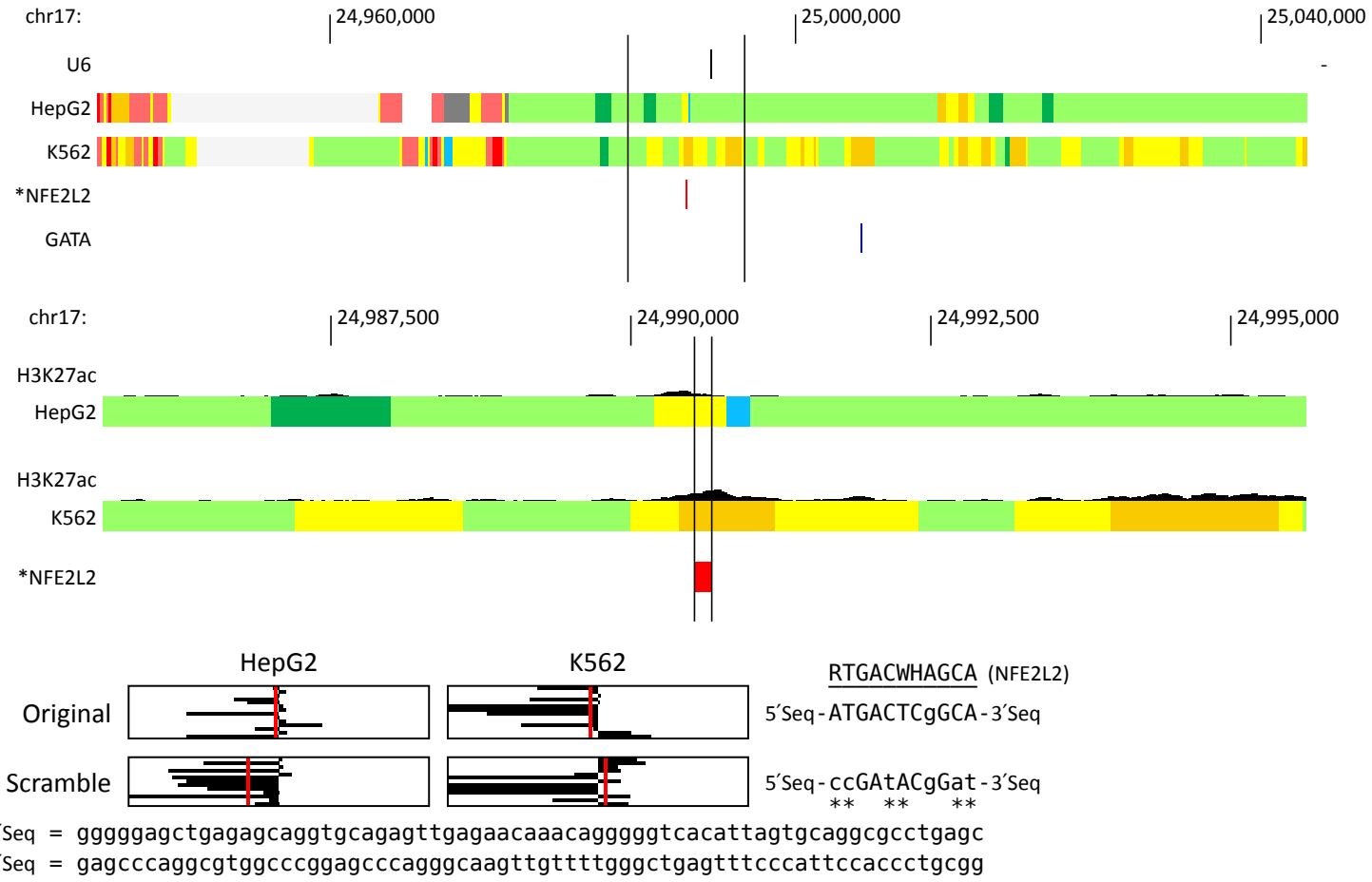
2008 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr17 24990597 24990607 - (hg18)



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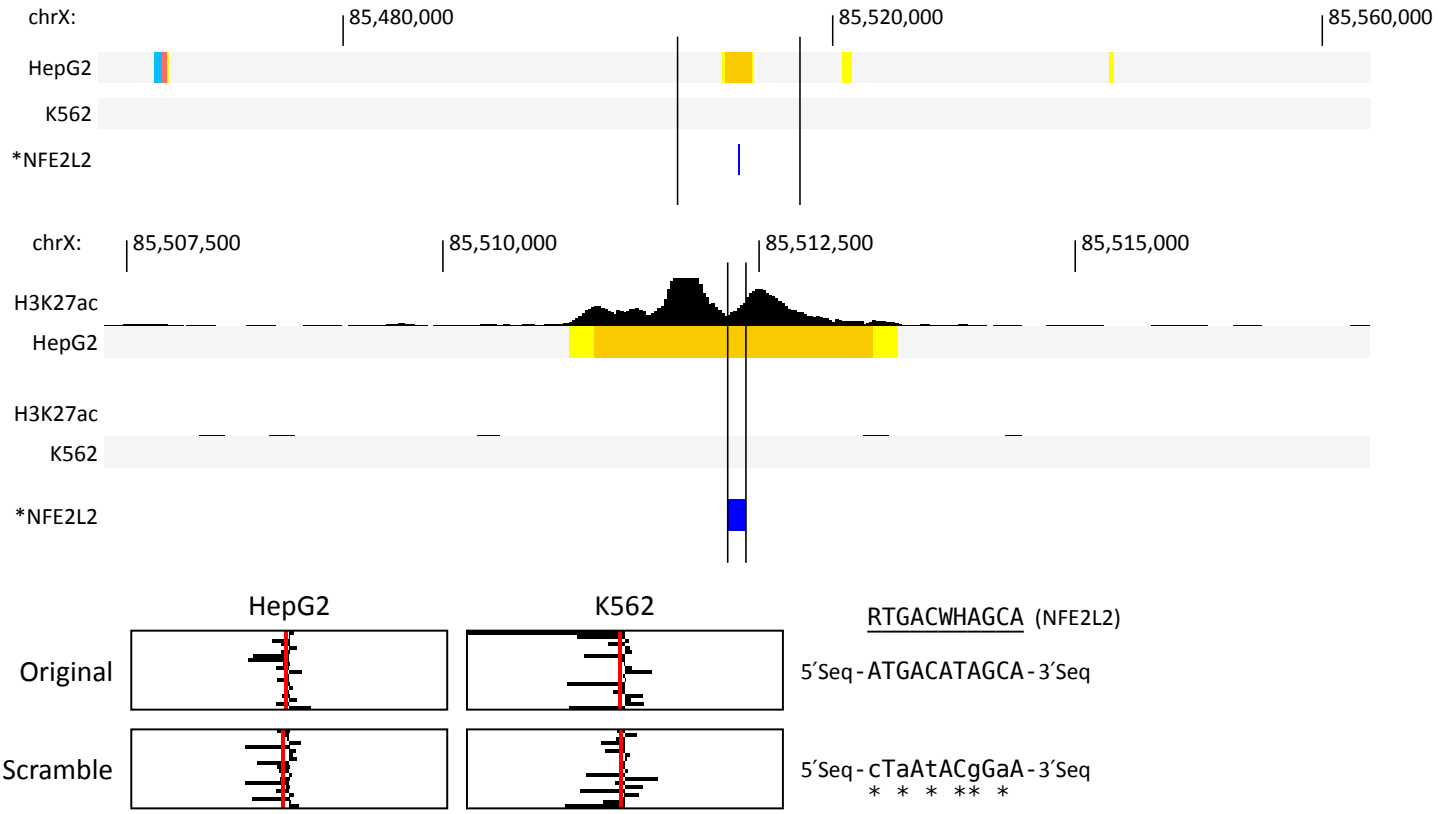
2009 NFE2L2 in HepG2 enhancer

chrX 85512319 85512329 + (hg18)



RTGACWHAGCA (NFE2L2)

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5′Seq-cTaAtACgGaA-3′Seq

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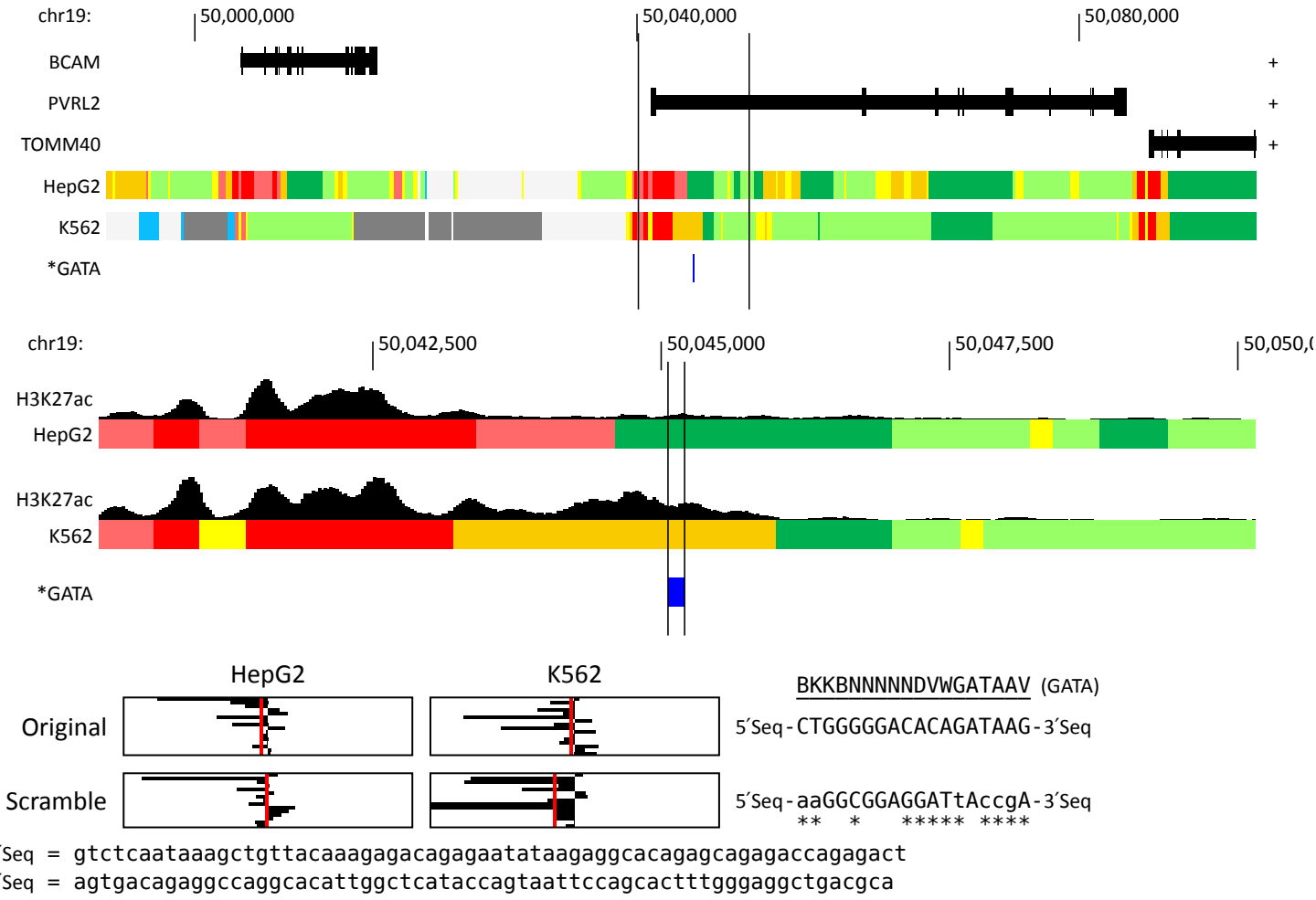
2010 GATA in K562 enhancer

chr19 50045123 50045140 + (hg18)



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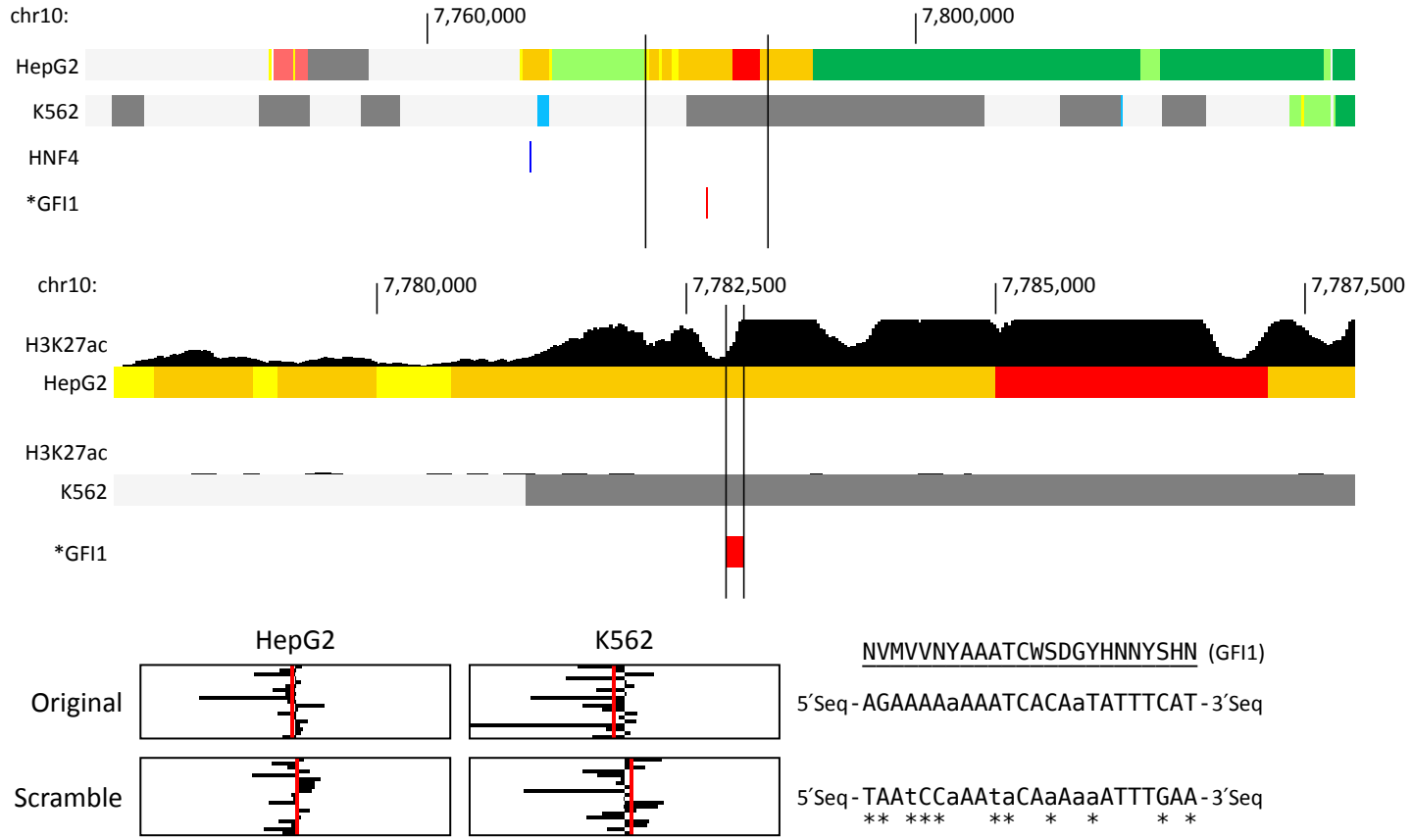
2011 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr10 7782882 7782905 - (hg18)



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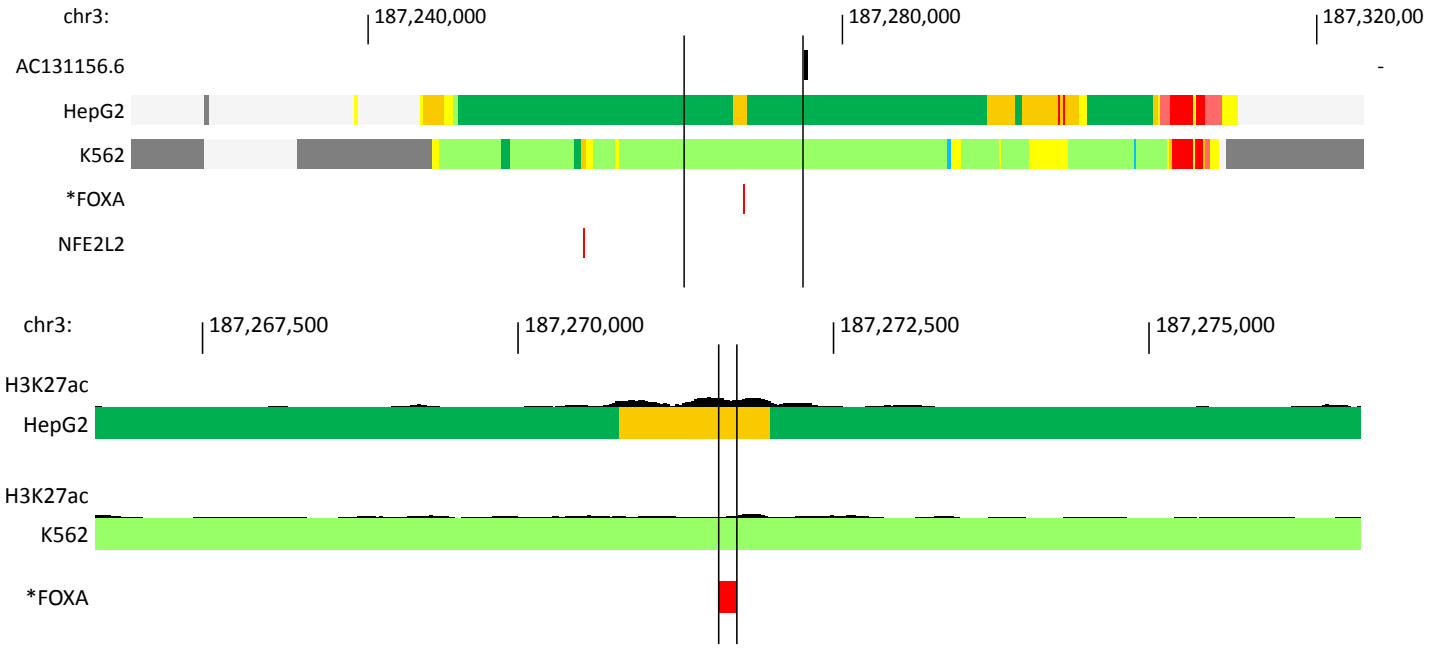
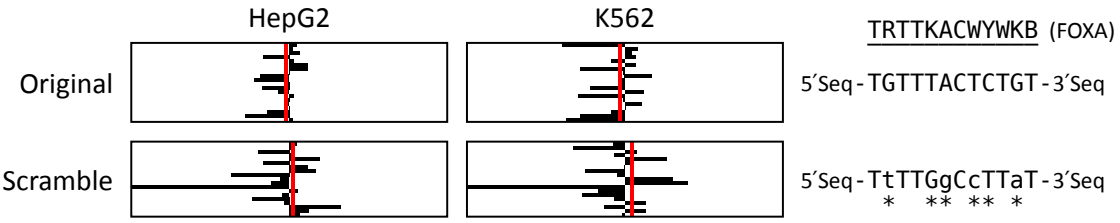
2012 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr3 187271657 187271668 - (hg18)





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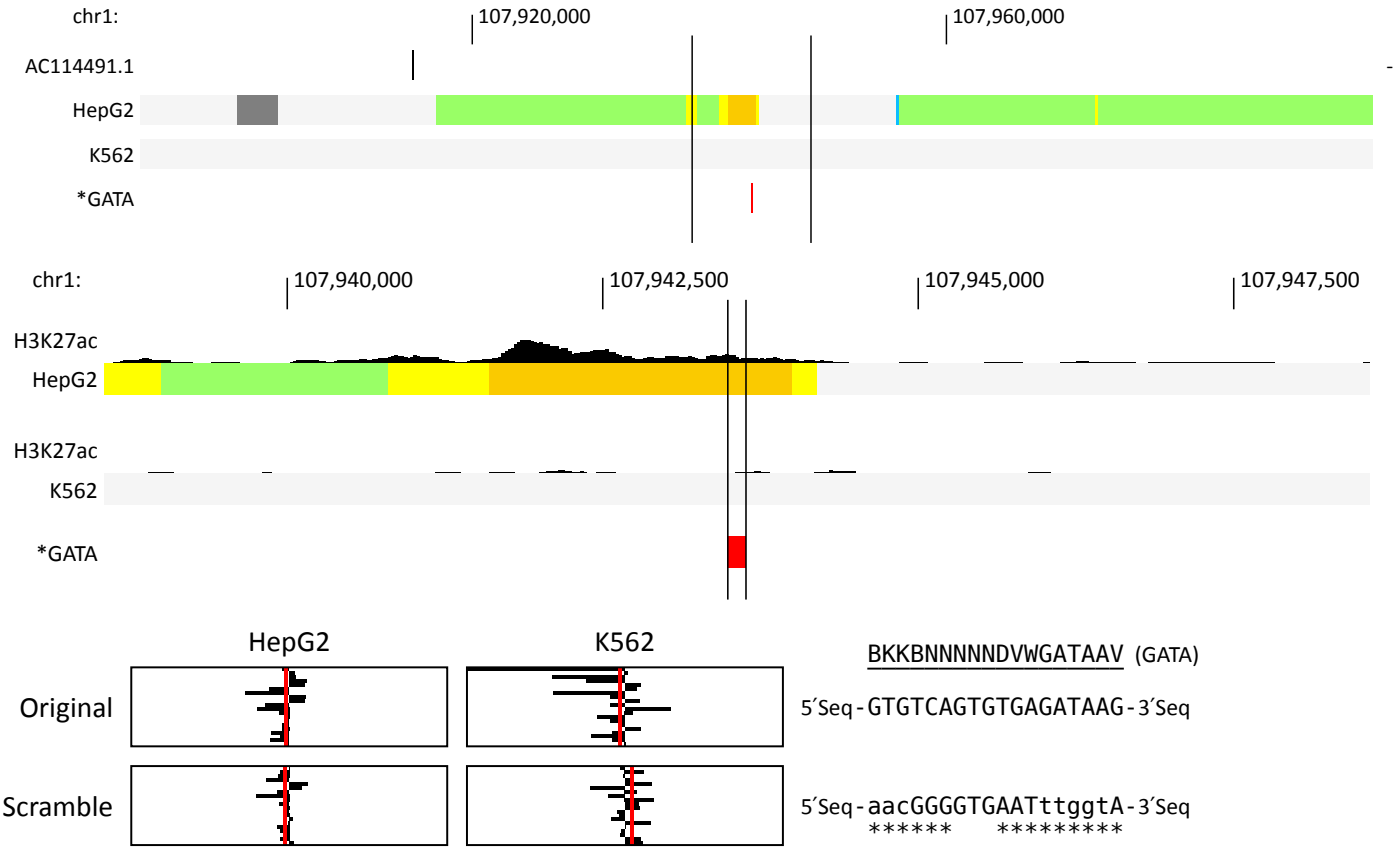
2013 GATA in HepG2 enhancer (conserved at 70% confidence)

chr1 107943555 107943572 - (hg18)



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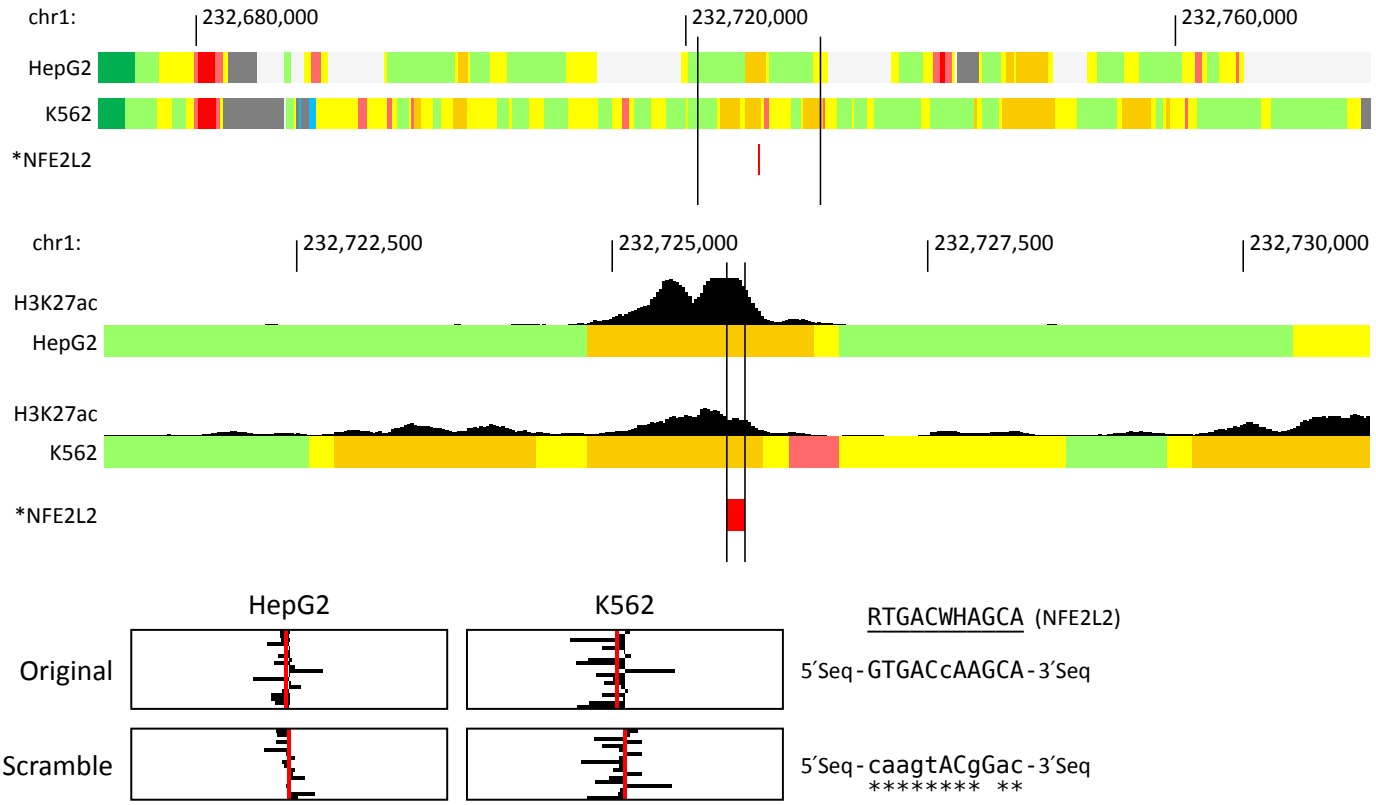
3′Seq = gaaagcttagcgatttcttttgtttagagtcttcttatttacttgttgtacctgaaggtcaat

2014 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr1 232725975 232725985 - (hg18)



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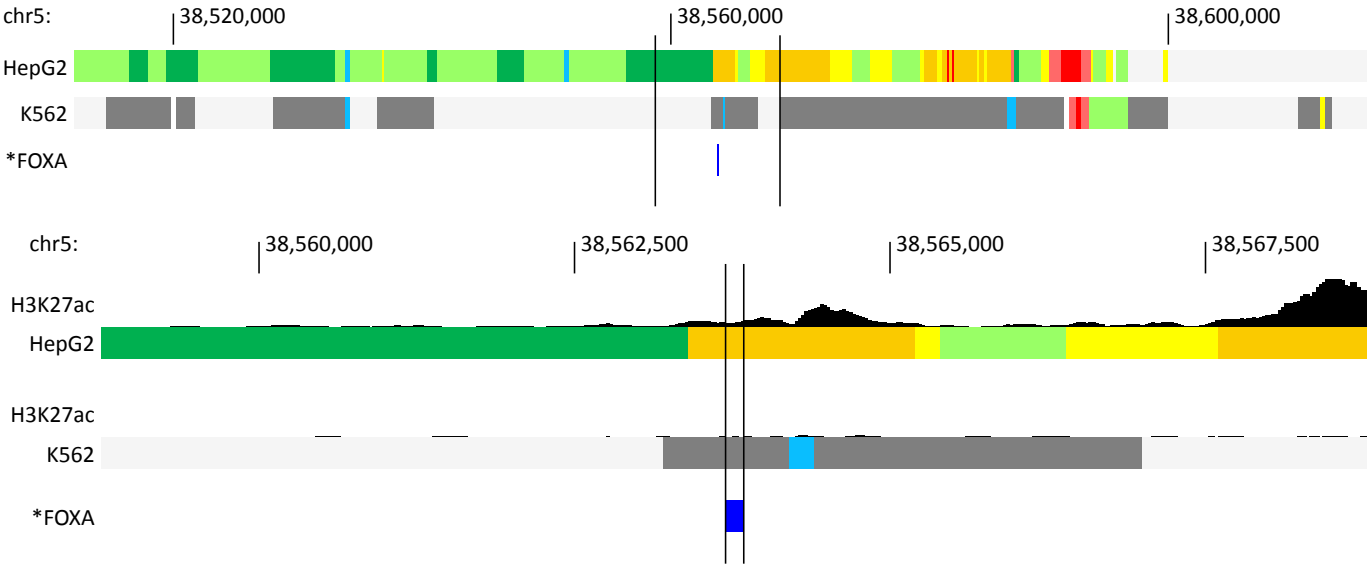
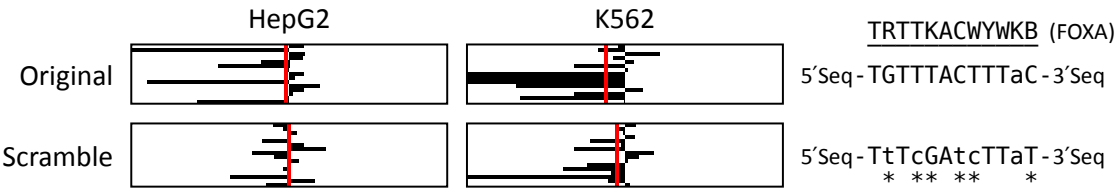
2015 FOXA in HepG2 enhancer

chr5 38563764 38563775 + (hg18)





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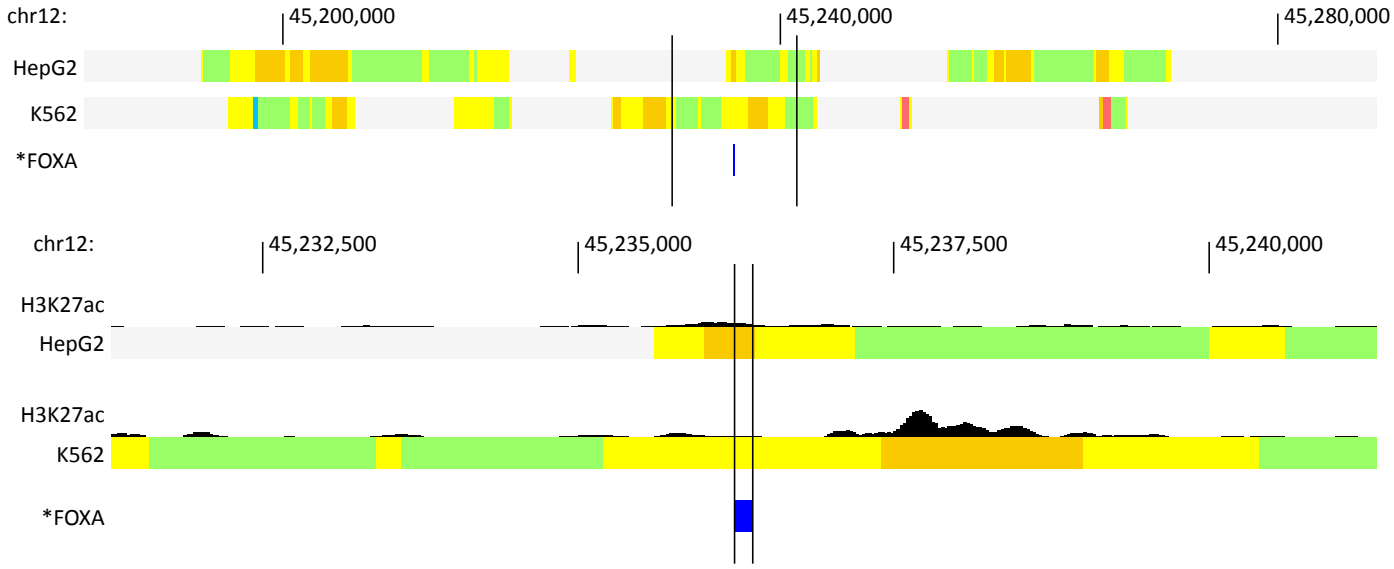
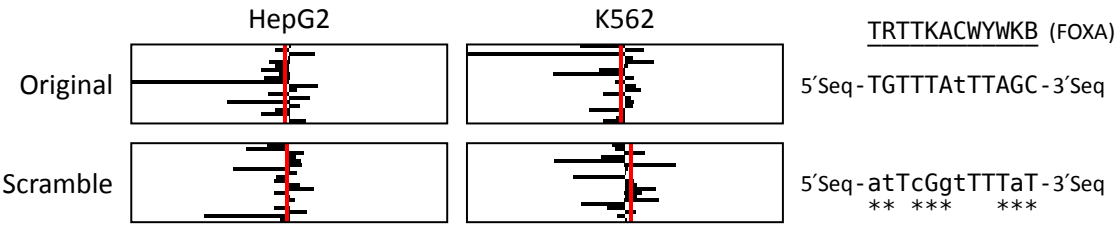
2016 FOXA in HepG2 enhancer

chr12 45236306 45236317 + (hg18)





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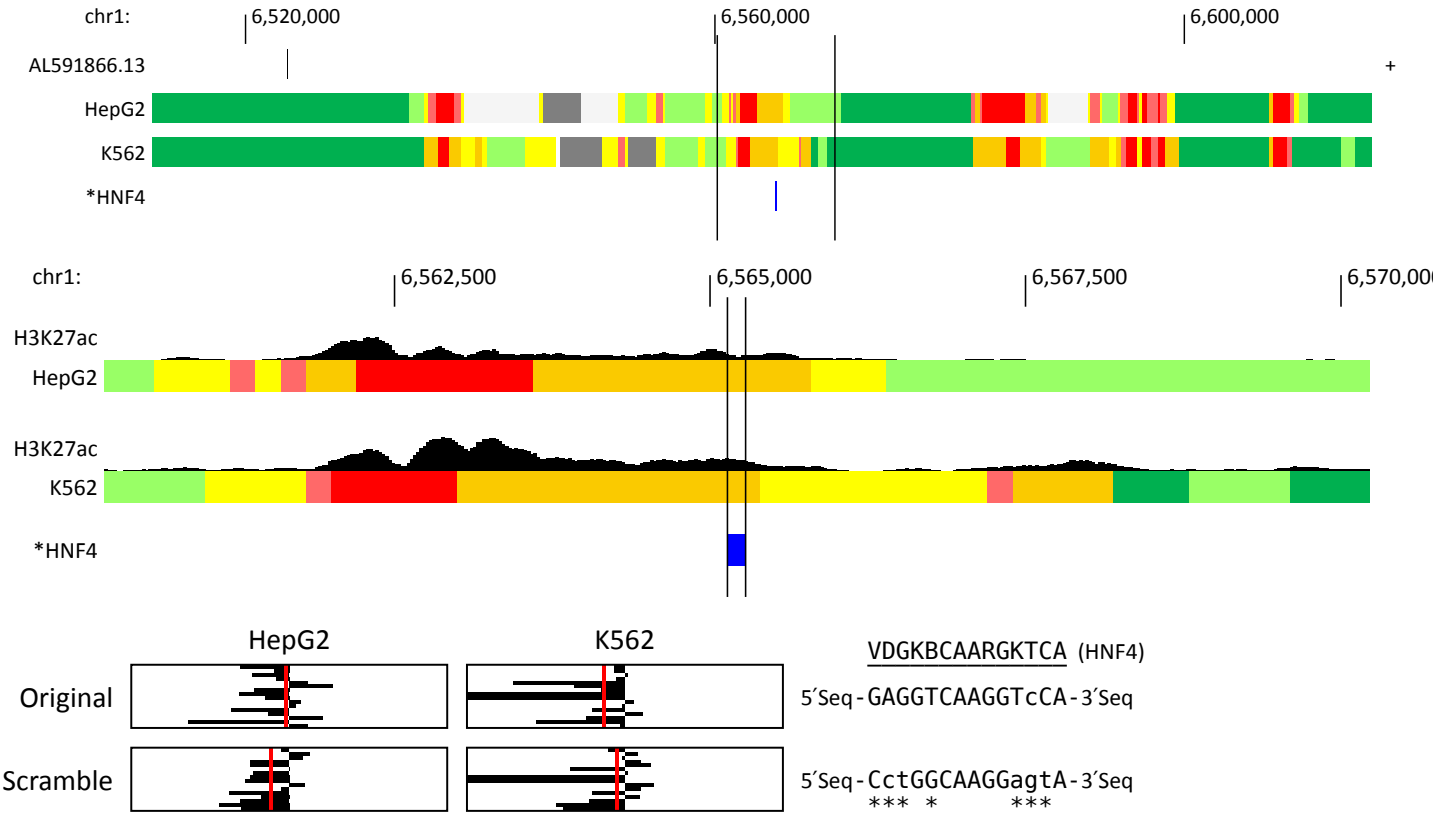
2017 HNF4 in HepG2 enhancer

chr1 6565204 6565217 - (hg18)



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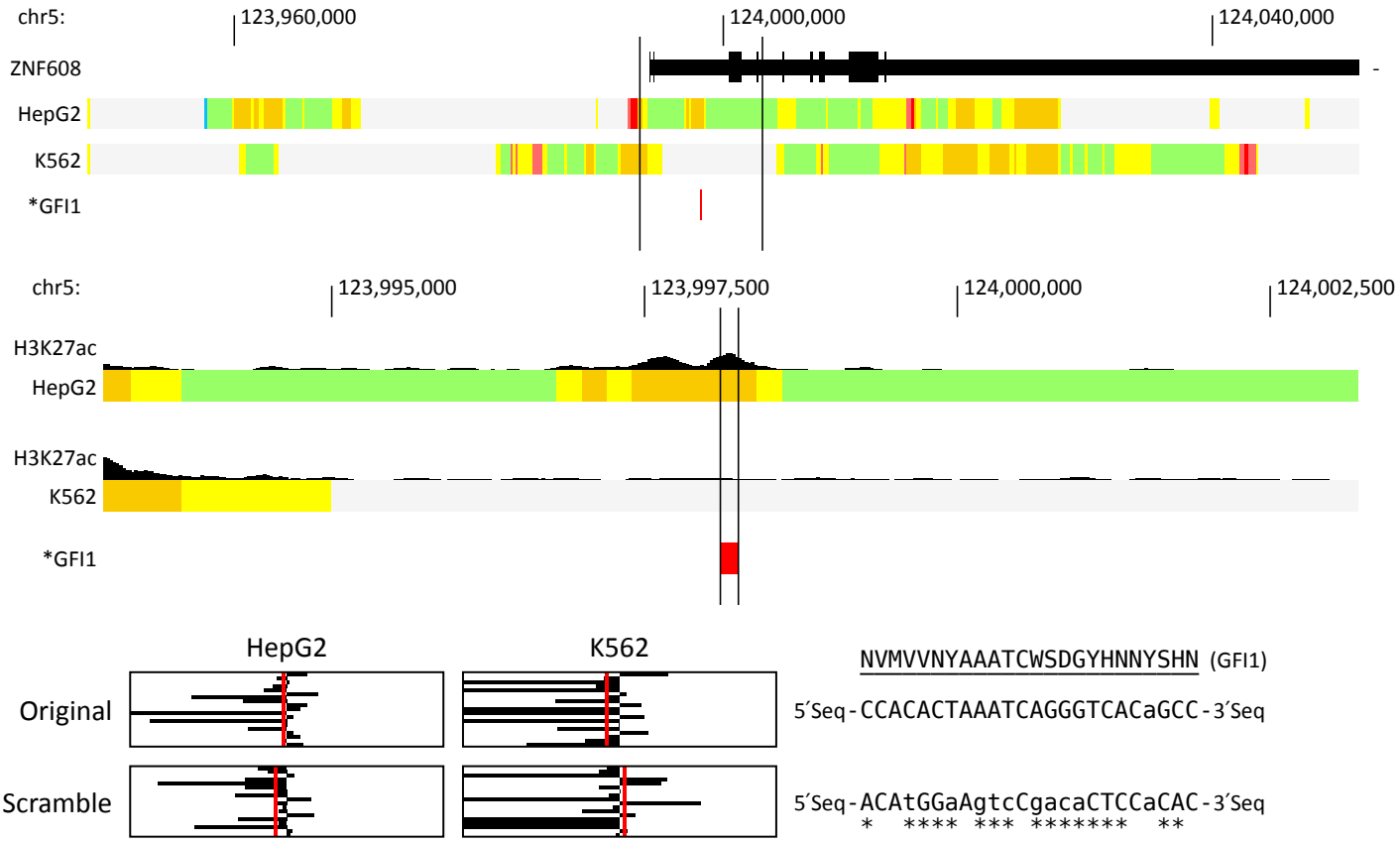
2018 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr5 123998167 123998190 + (hg18)



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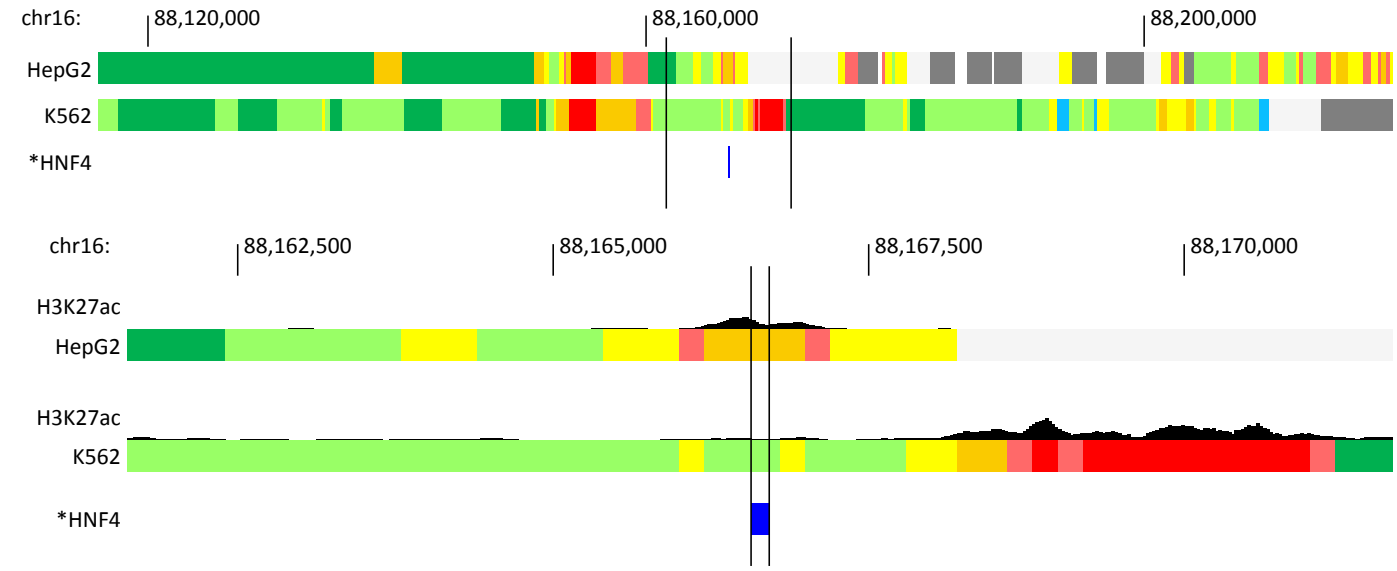
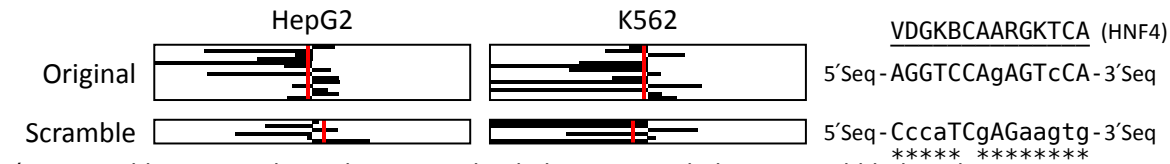
2019 HNF4 in HepG2 enhancer

chr16 88166634 88166647 - (hg18)





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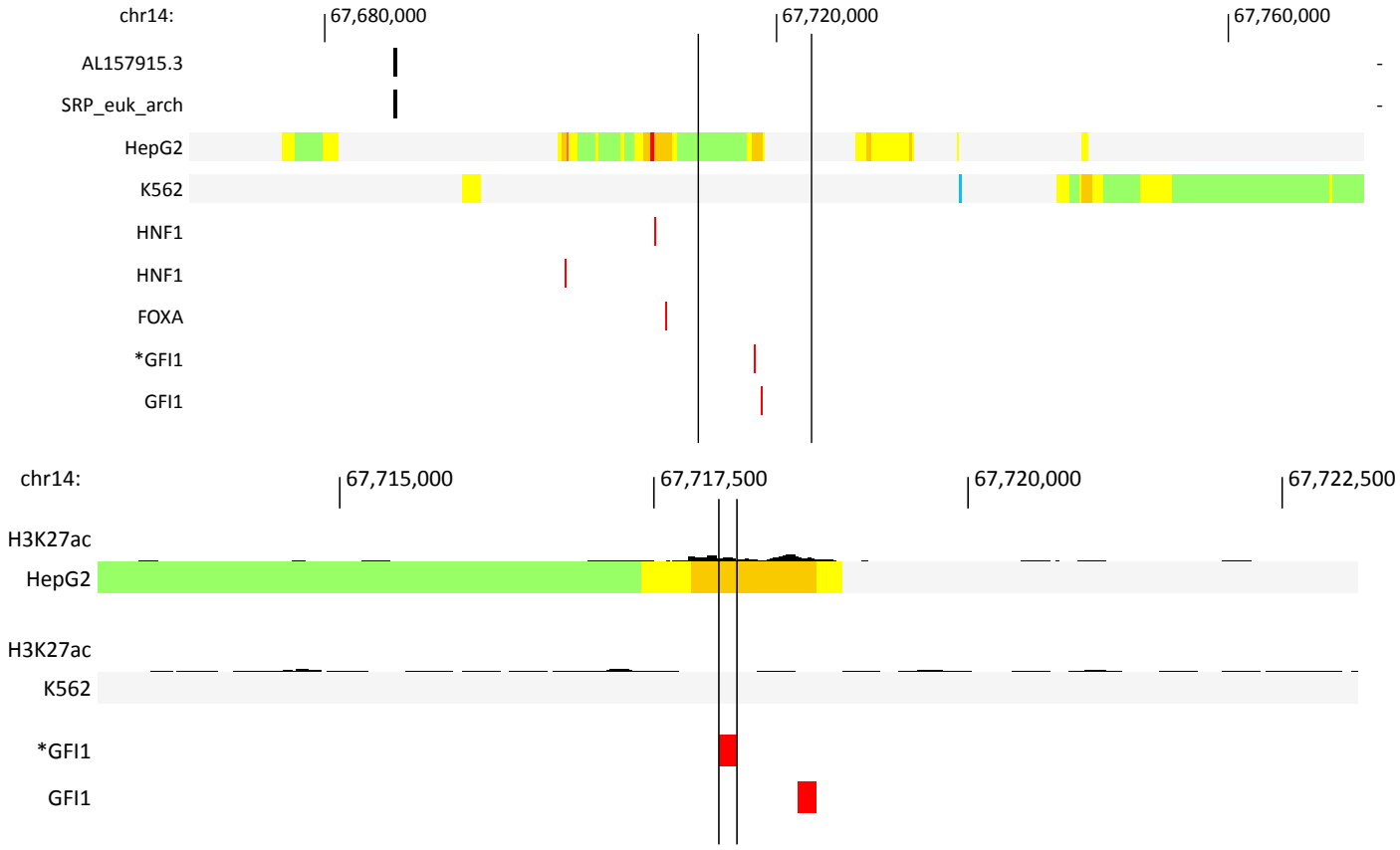
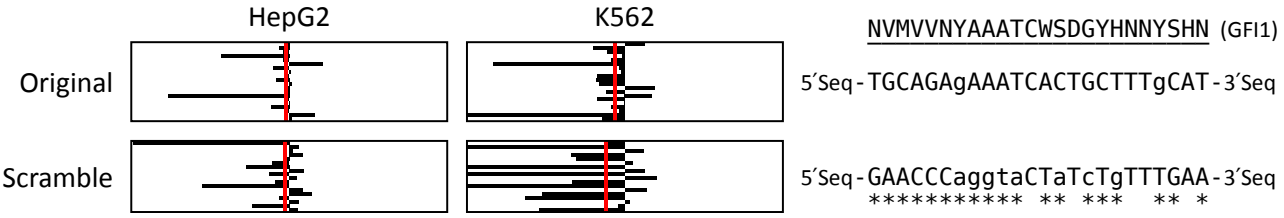
2020 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 67718078 67718101 - (hg18)





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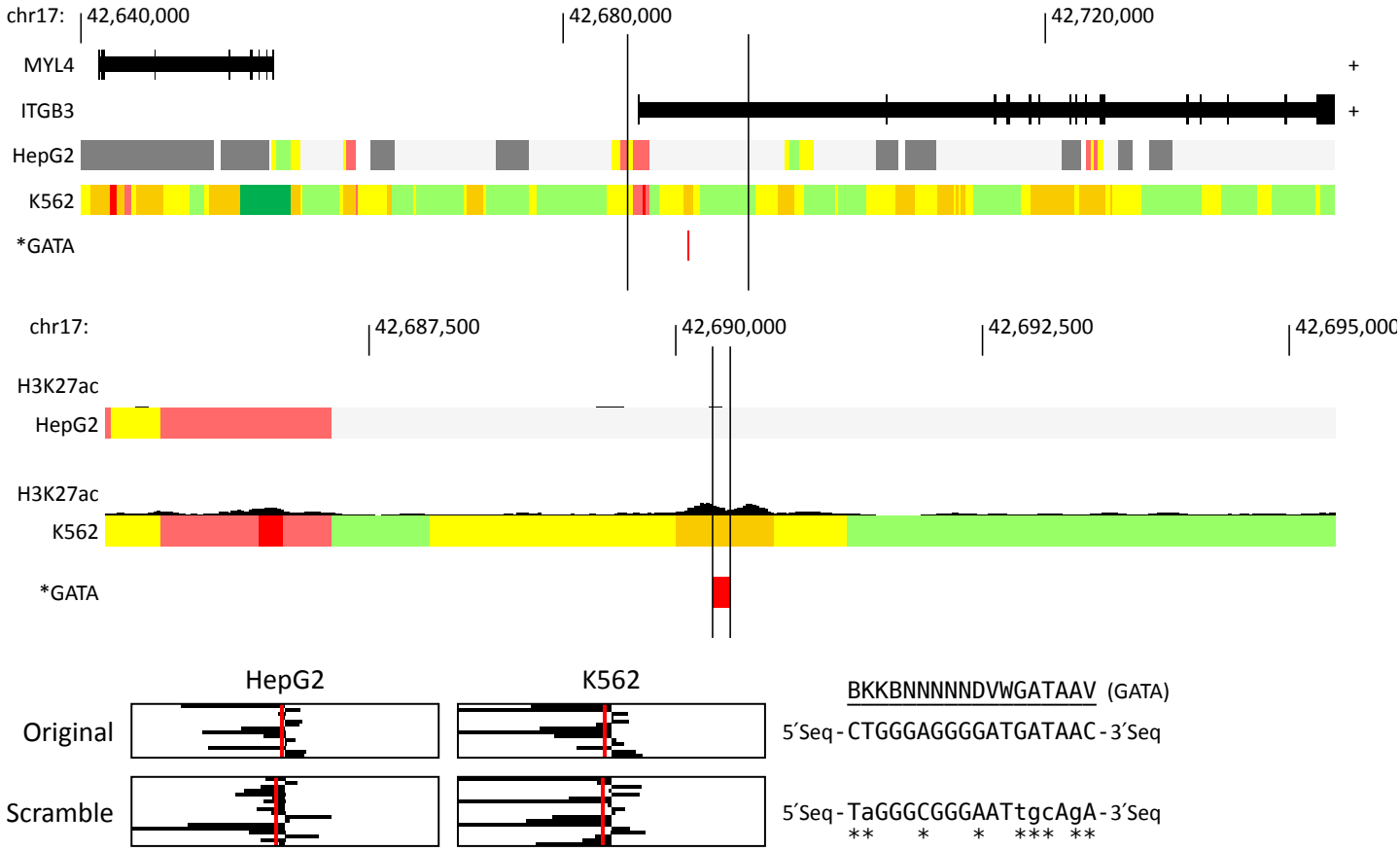
2021 GATA in K562 enhancer (conserved at 60% confidence)

chr17 42690364 42690381 - (hg18)



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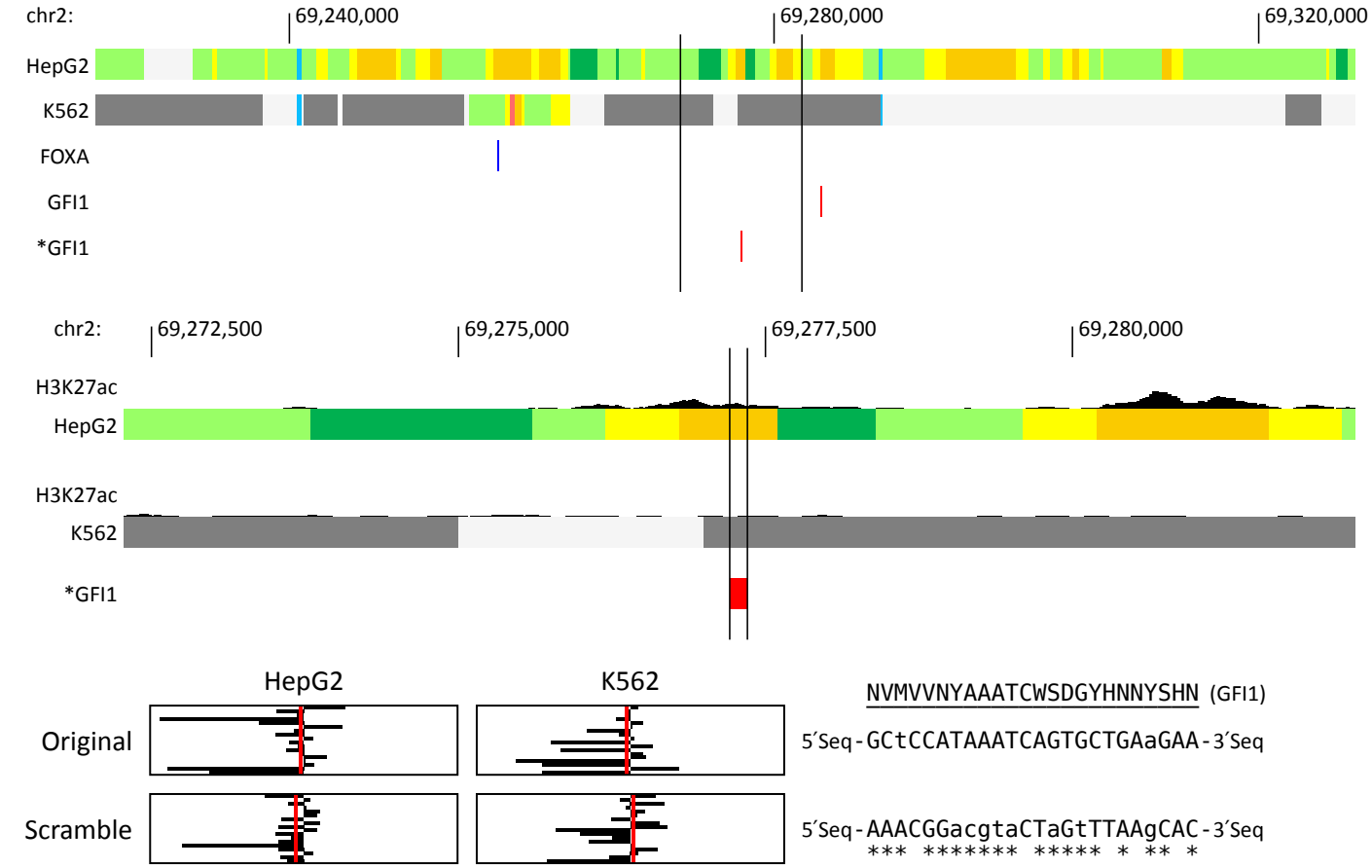
2022 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 69277270 69277293 - (hg18)



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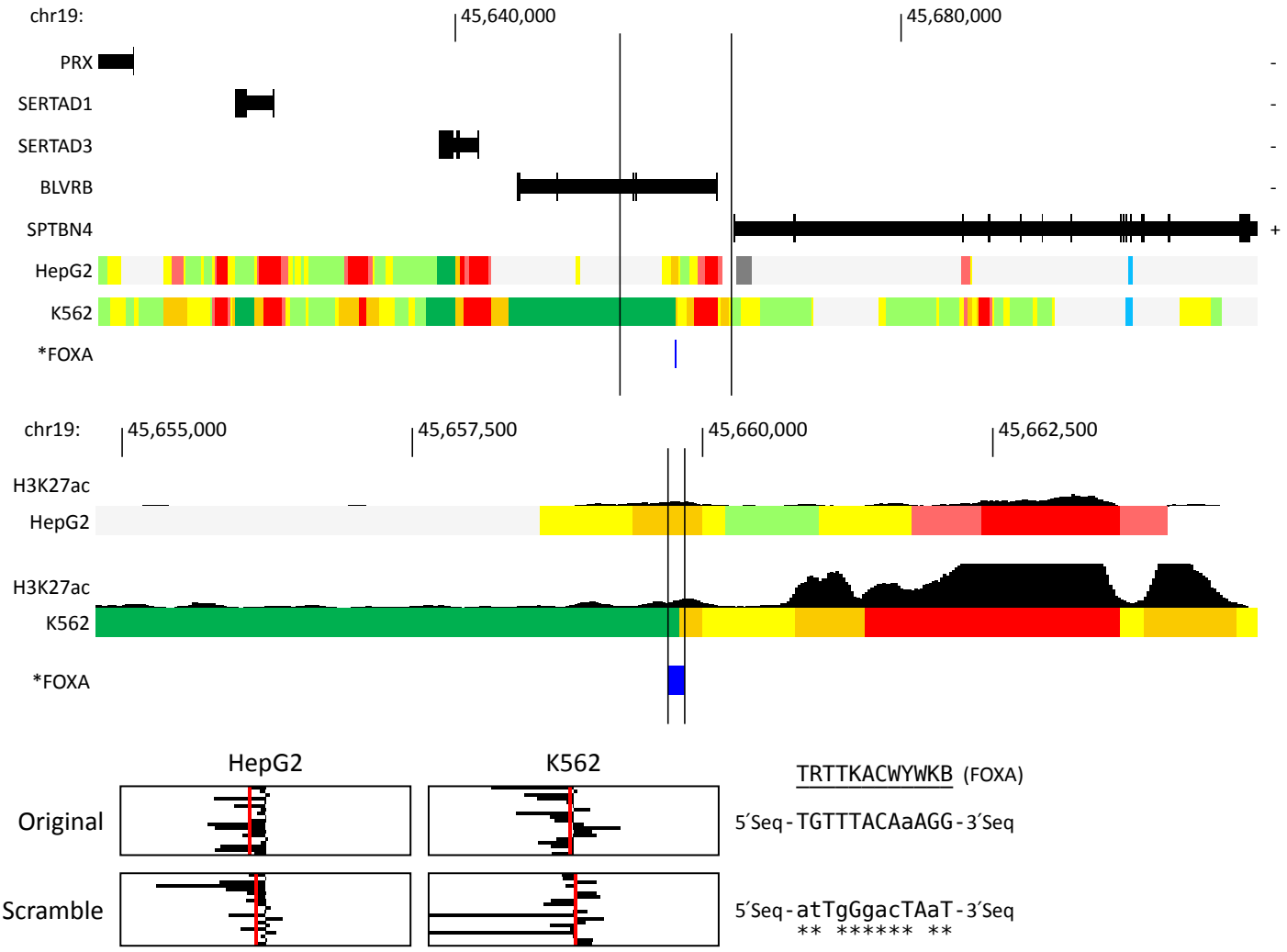
2023 FOXA in HepG2 enhancer

chr19 45659769 45659780 - (hg18)



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5′Seq-atTgGgacTAaT-3′Seq

** ****** **

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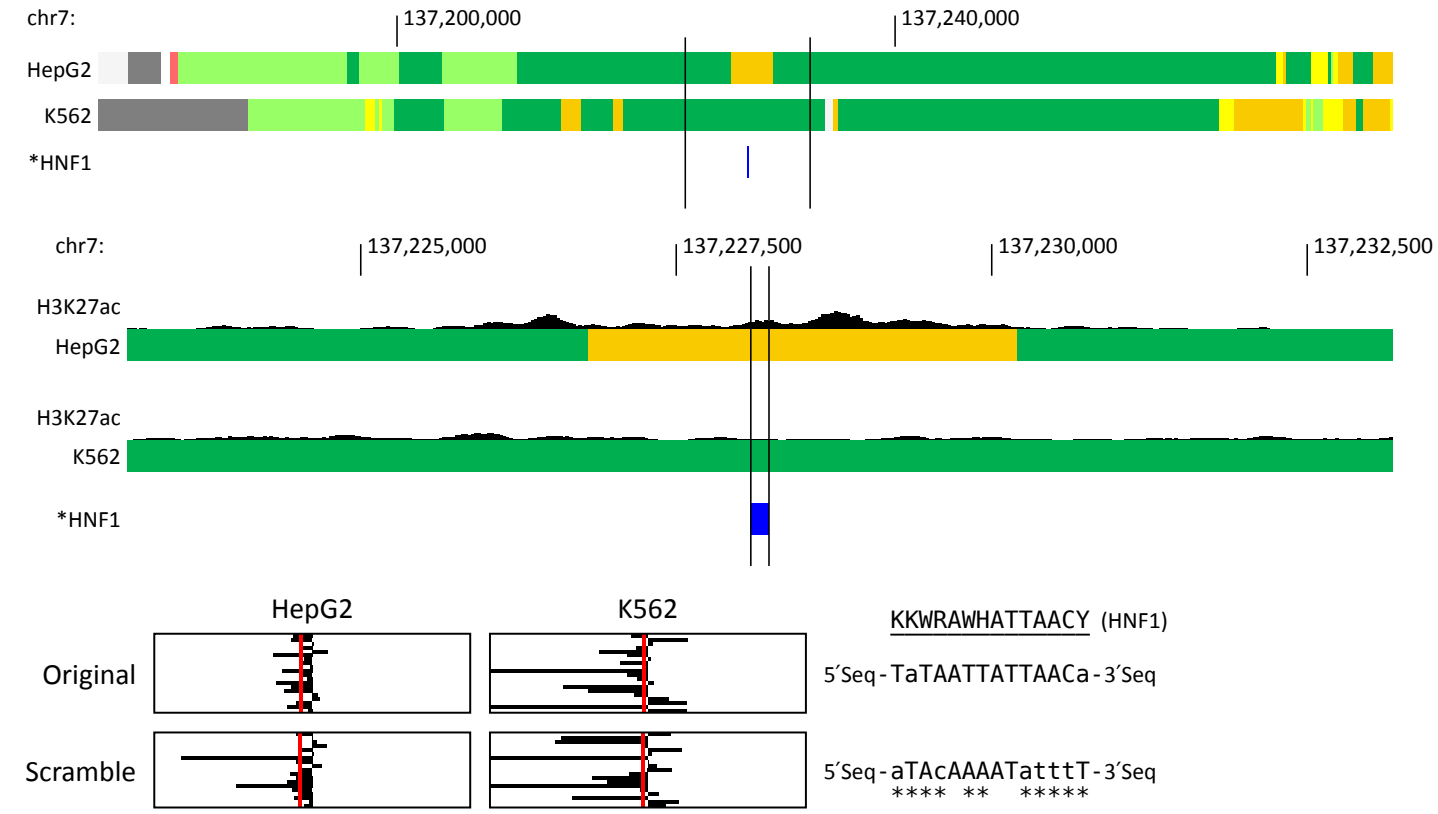
2024 HNF1 in HepG2 enhancer

chr7 137228157 137228170 - (hg18)



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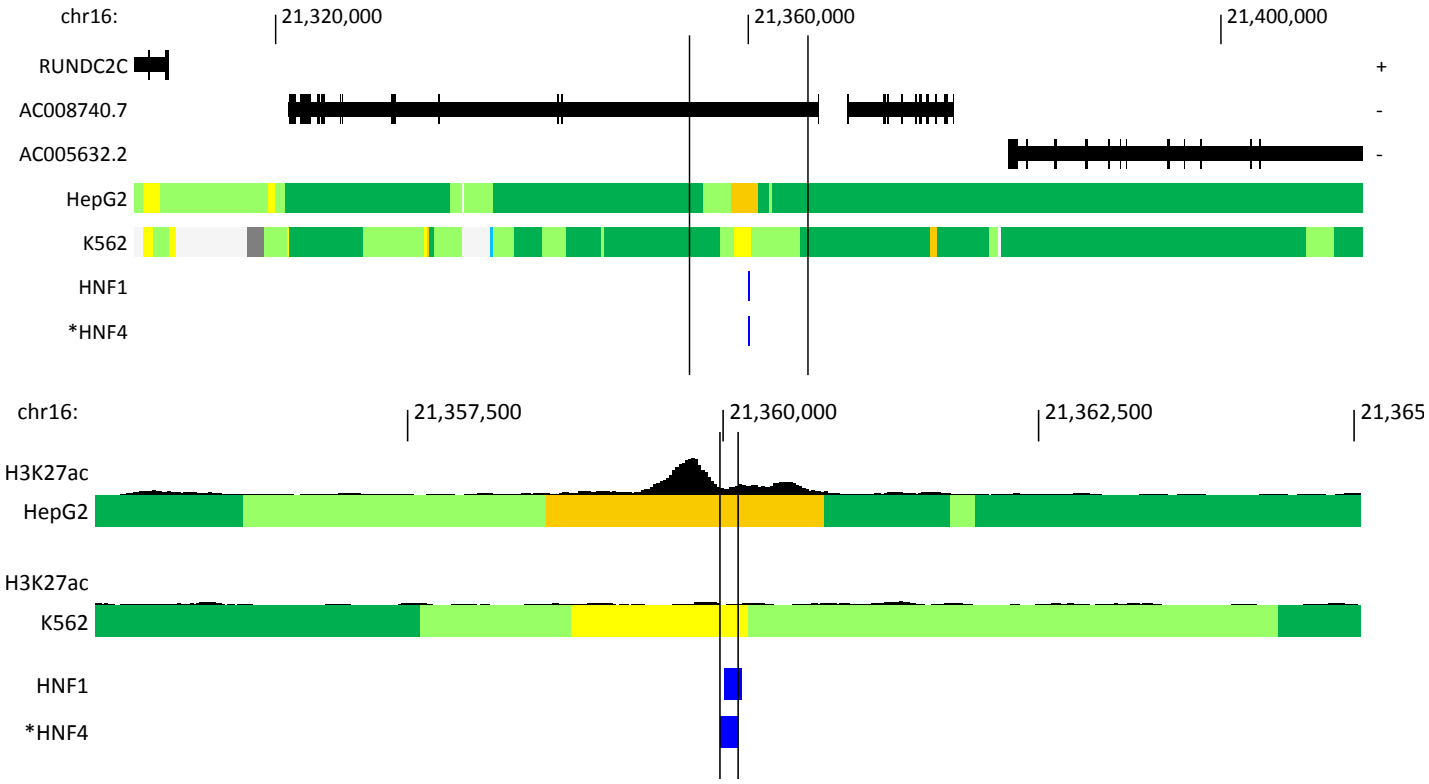
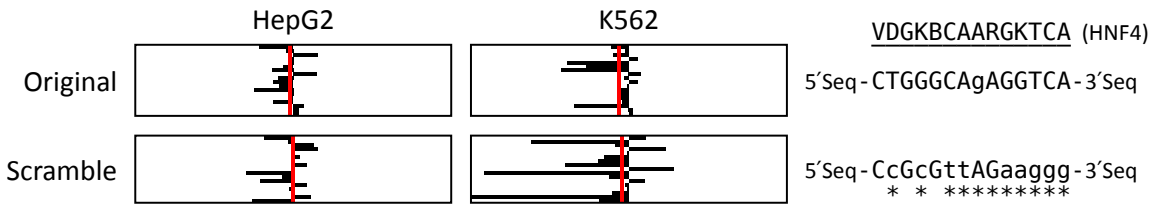
2025 HNF4 in HepG2 enhancer

chr16 21360041 21360054 + (hg18)





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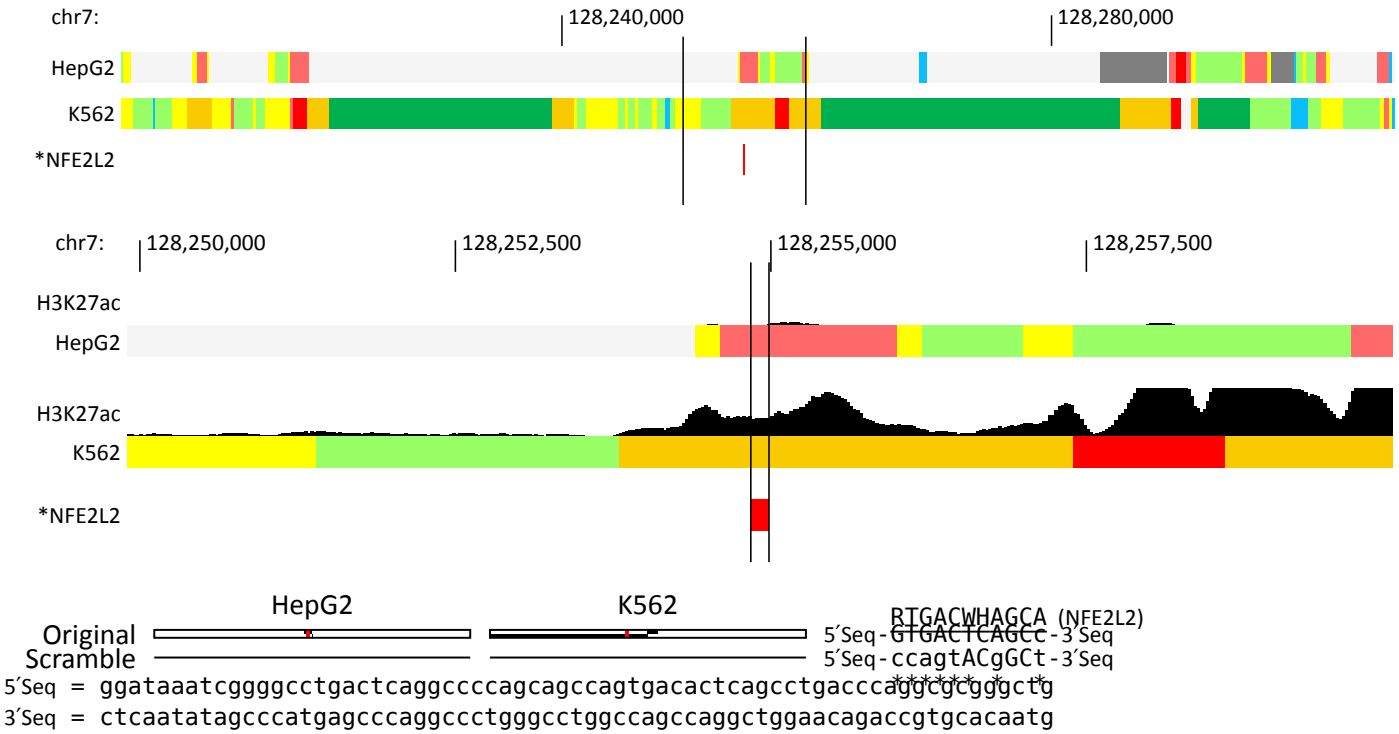
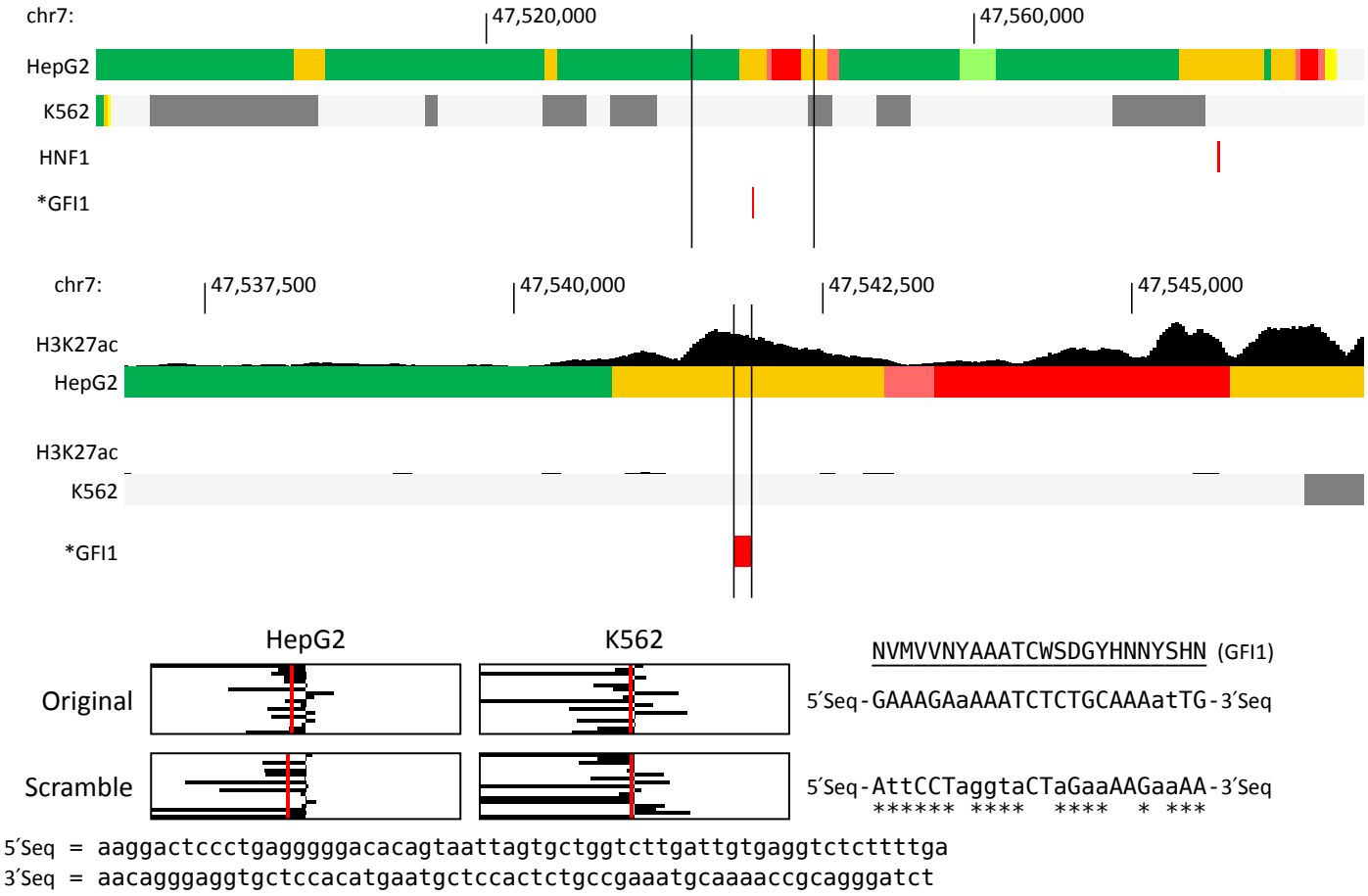
2026 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 128254908 128254918 - (hg18)



2027 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr7 47541841 47541864 + (hg18)



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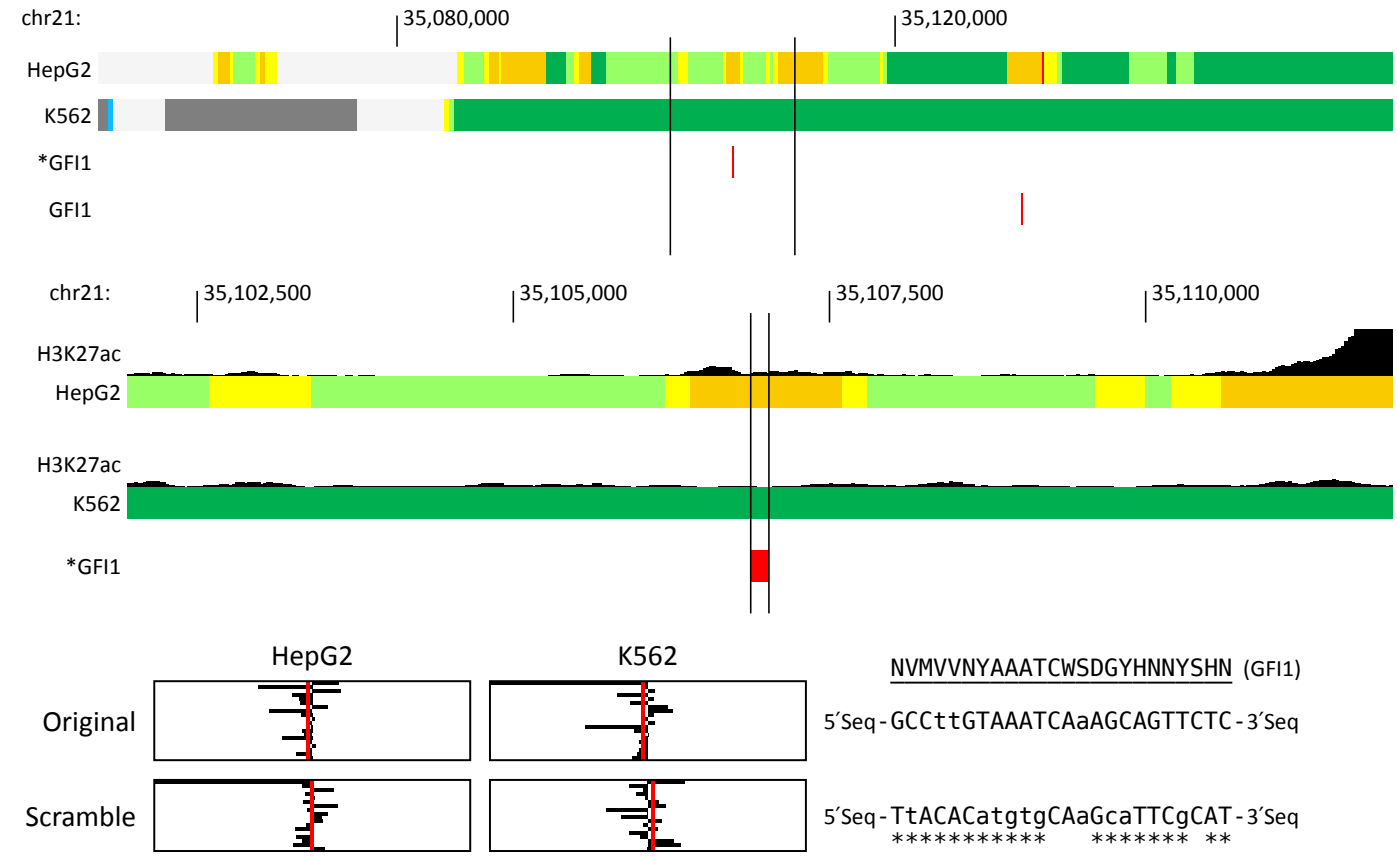
2028 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr21 35106938 35106961 - (hg18)



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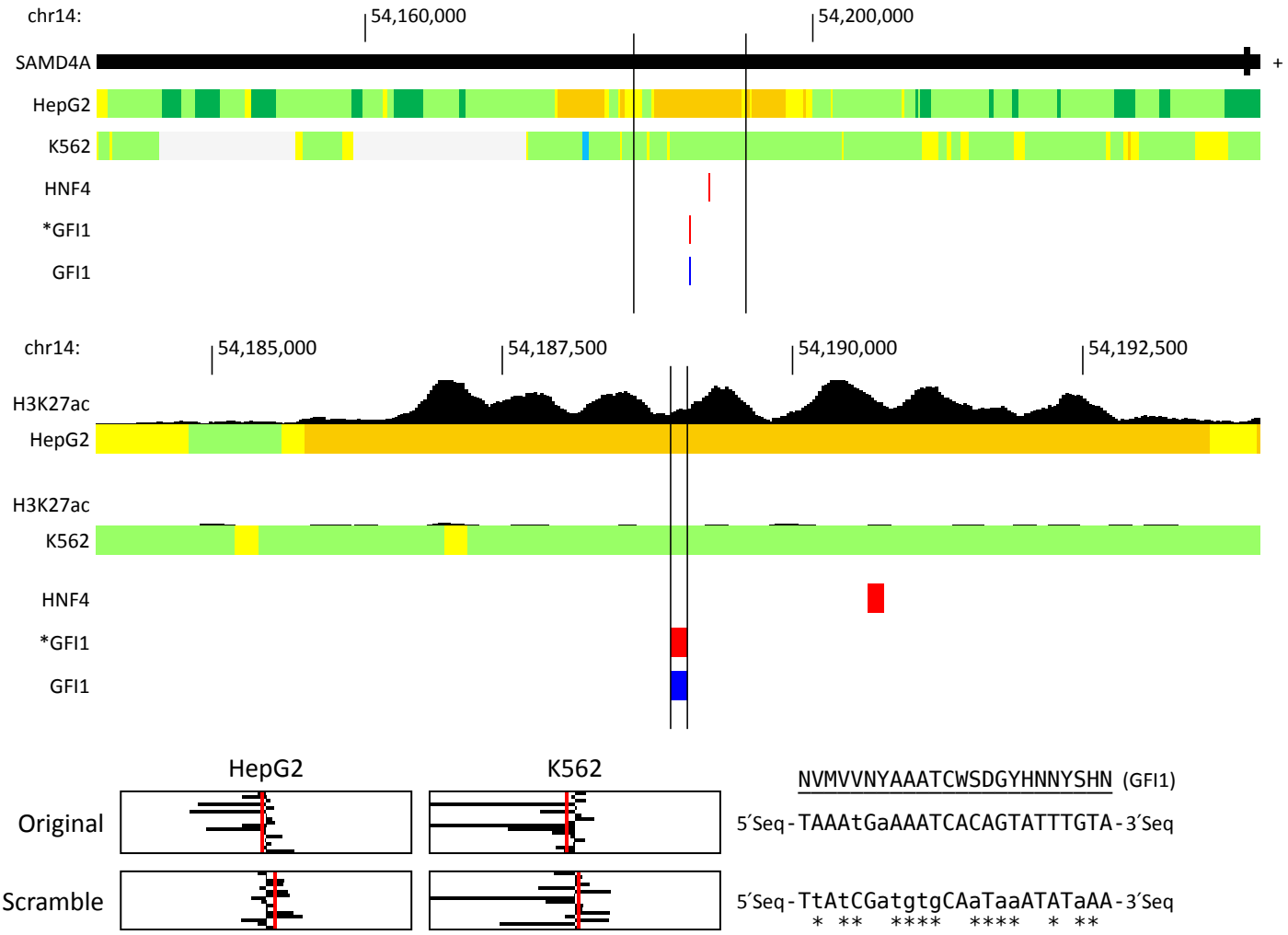
2029 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 54189011 54189034 - (hg18)



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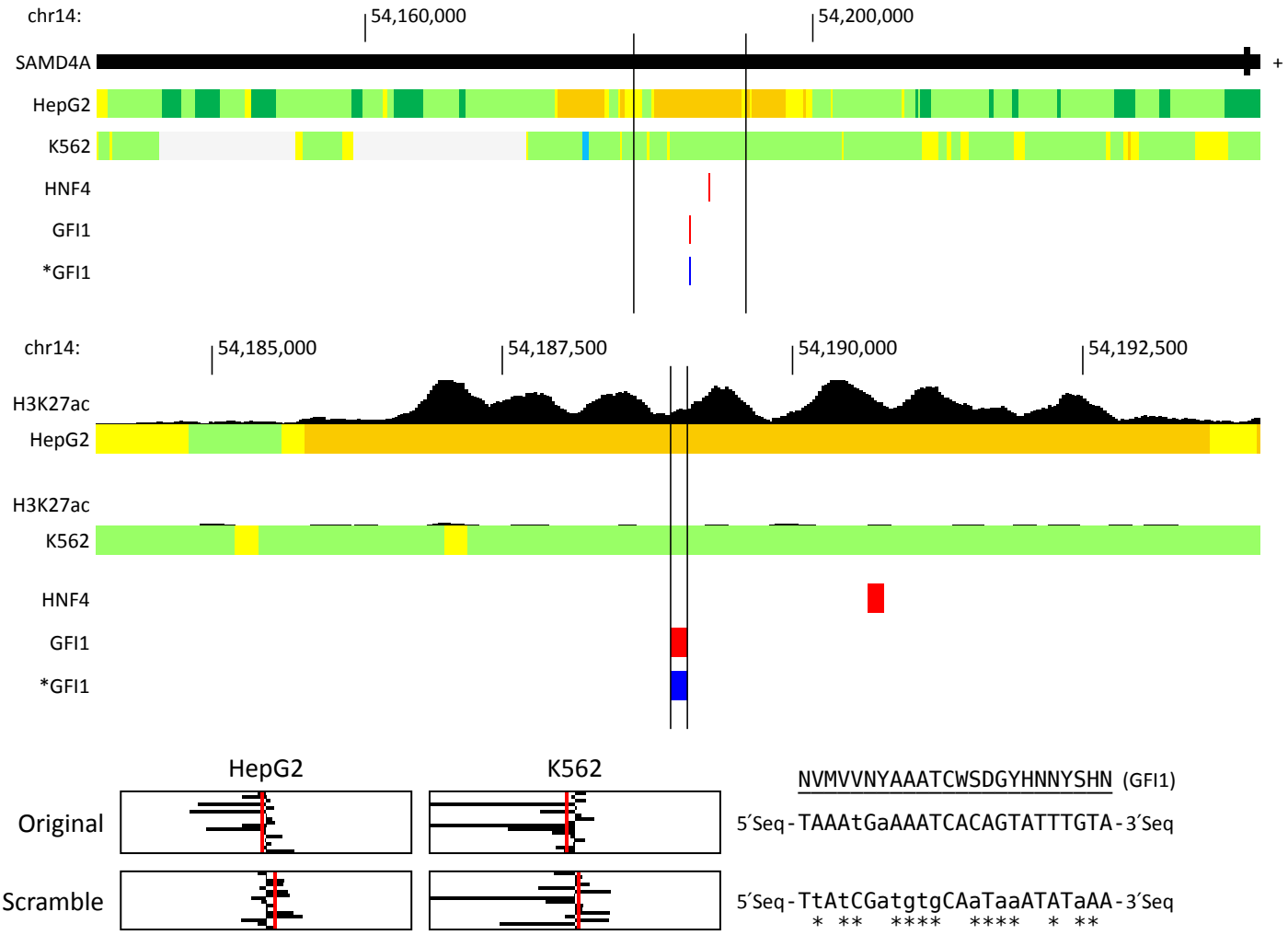
2030 GFI1 in HepG2 enhancer

chr14 54189011 54189034 - (hg18)



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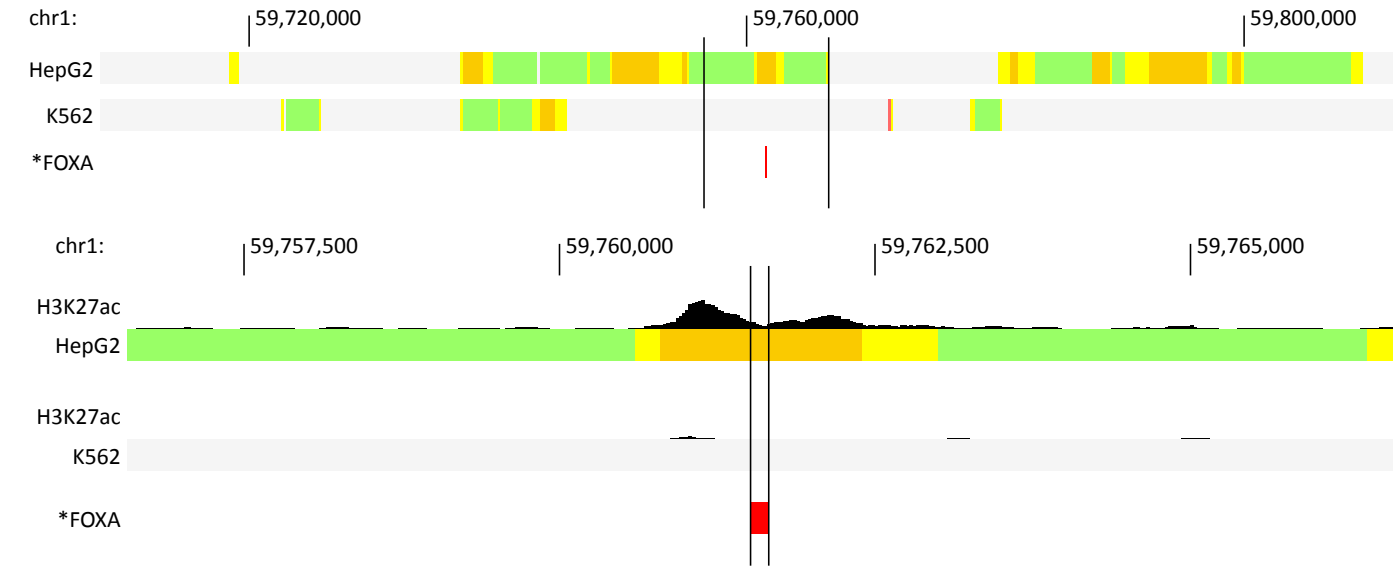
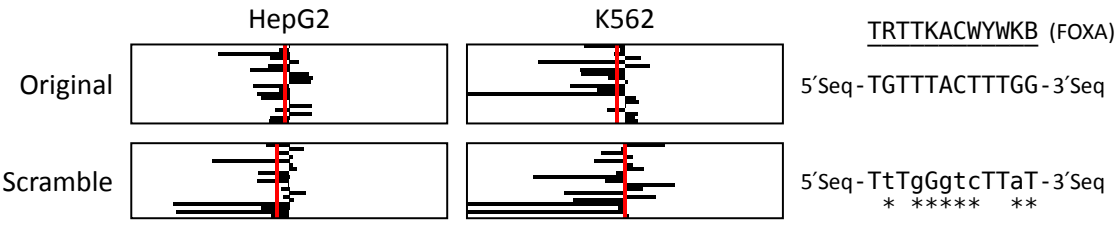
2031 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr1 59761581 59761592 + (hg18)





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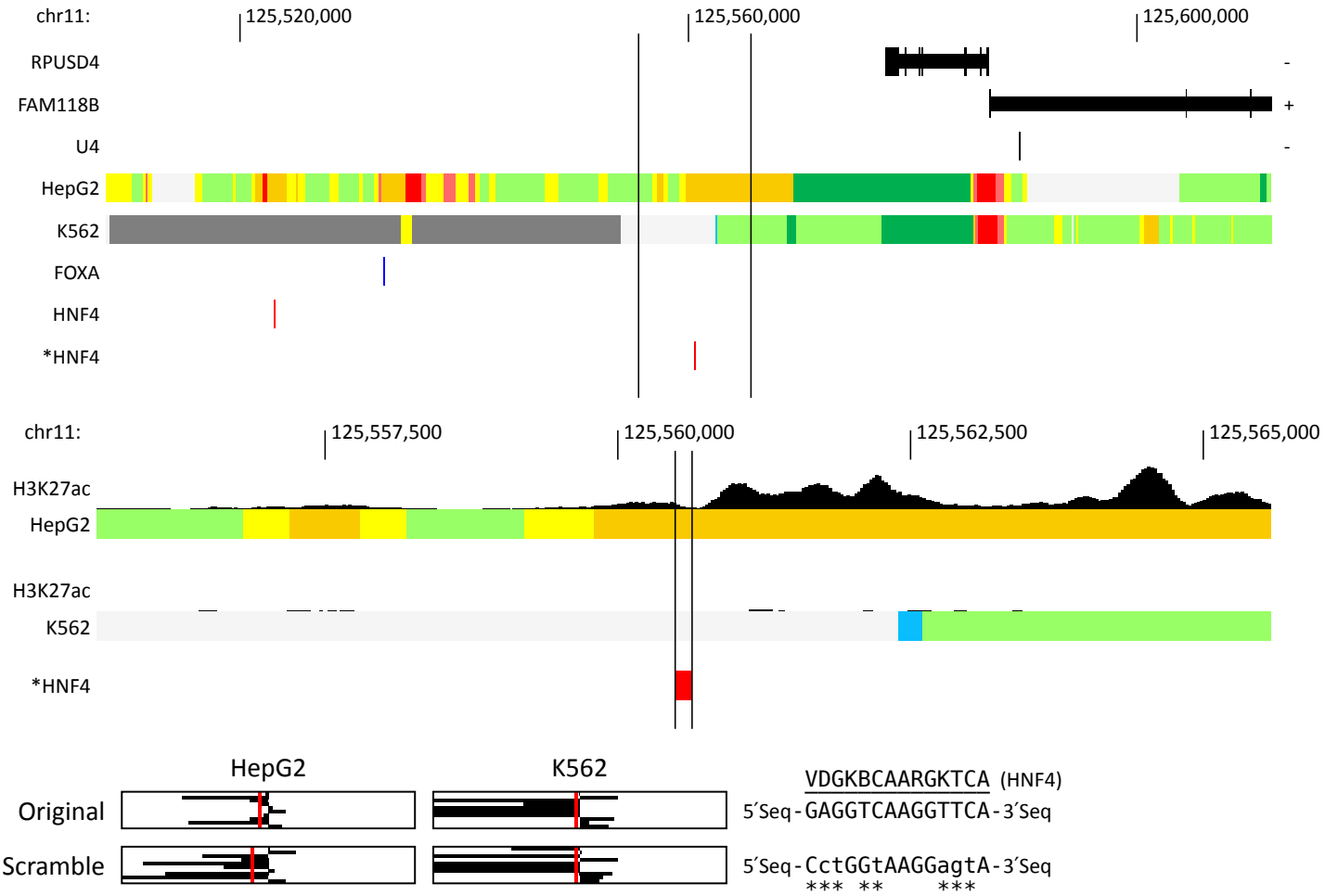
2032 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr11 125560556 125560569 + (hg18)



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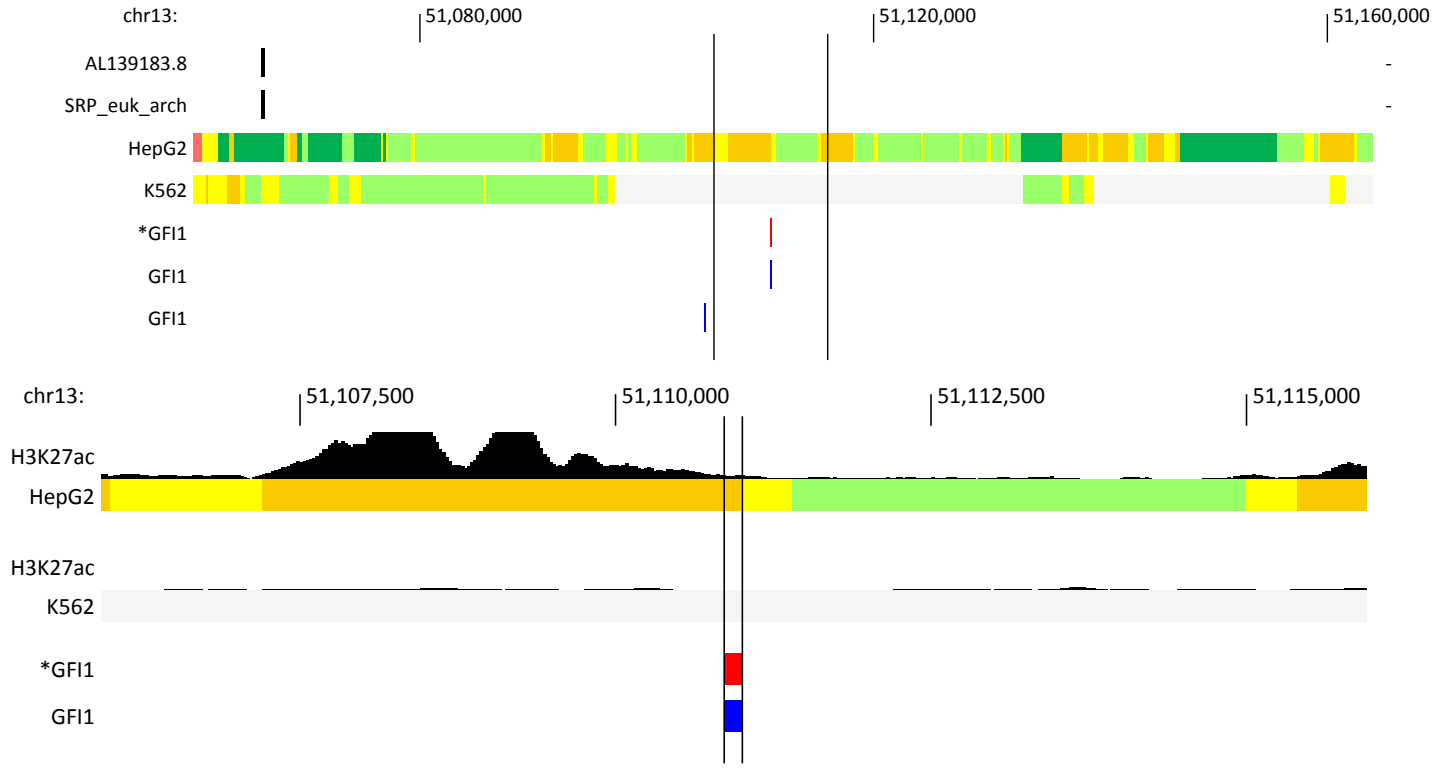
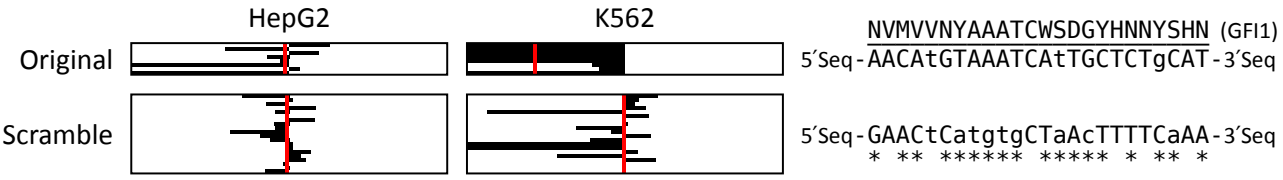
2033 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr13 51110922 51110945 - (hg18)





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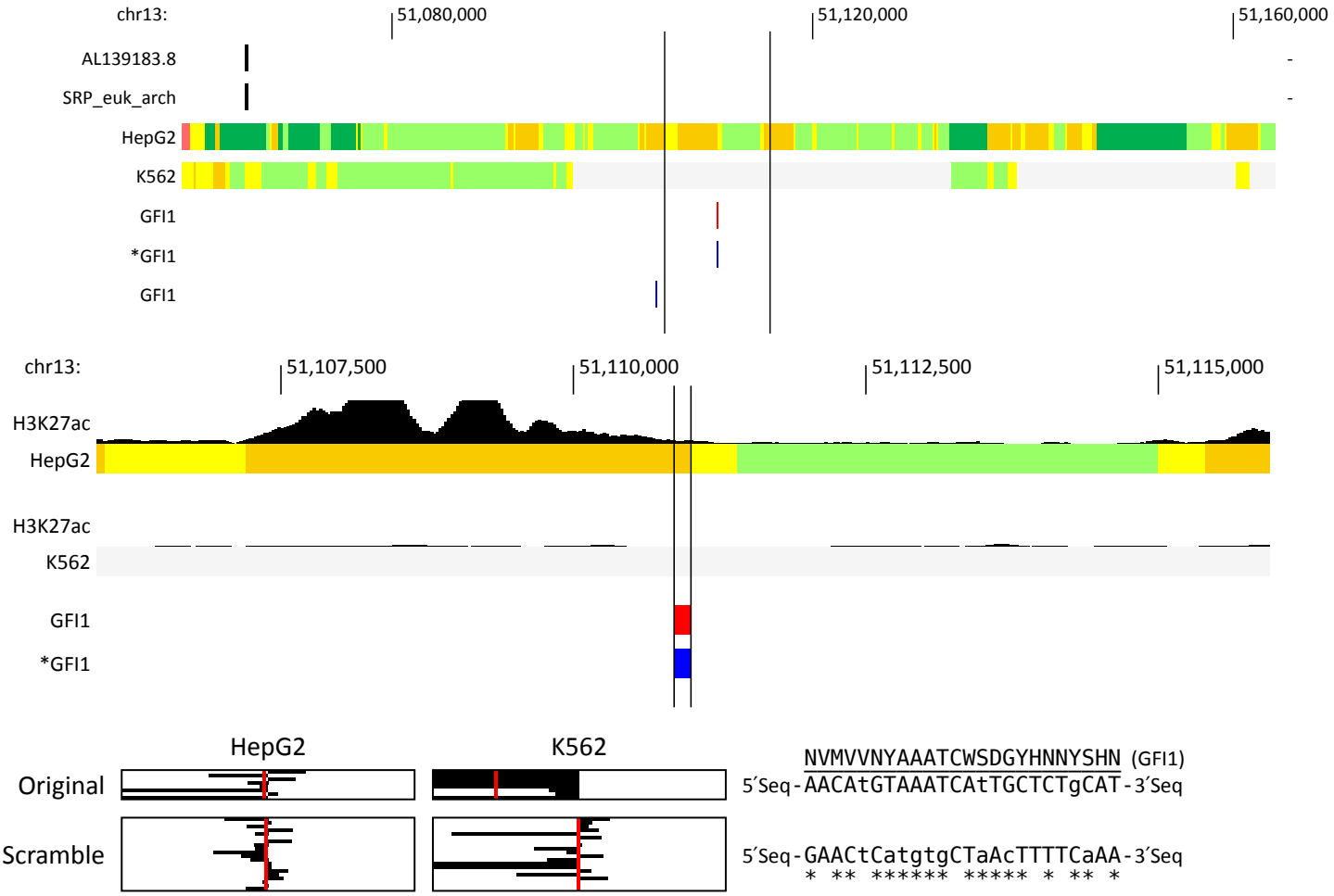
2034 GFI1 in HepG2 enhancer

chr13 51110922 51110945 - (hg18)



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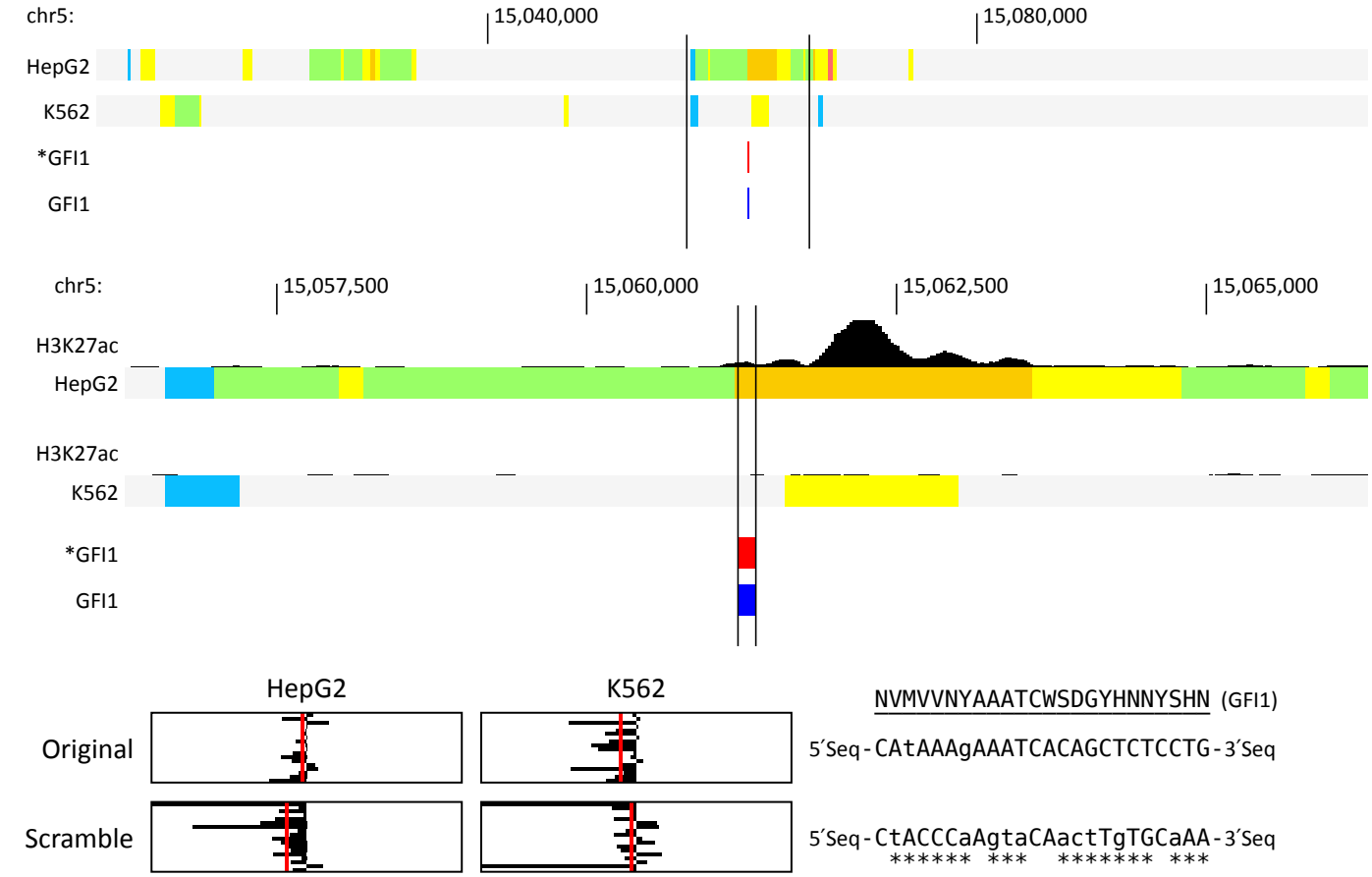
2035 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr5 15061282 15061305 + (hg18)



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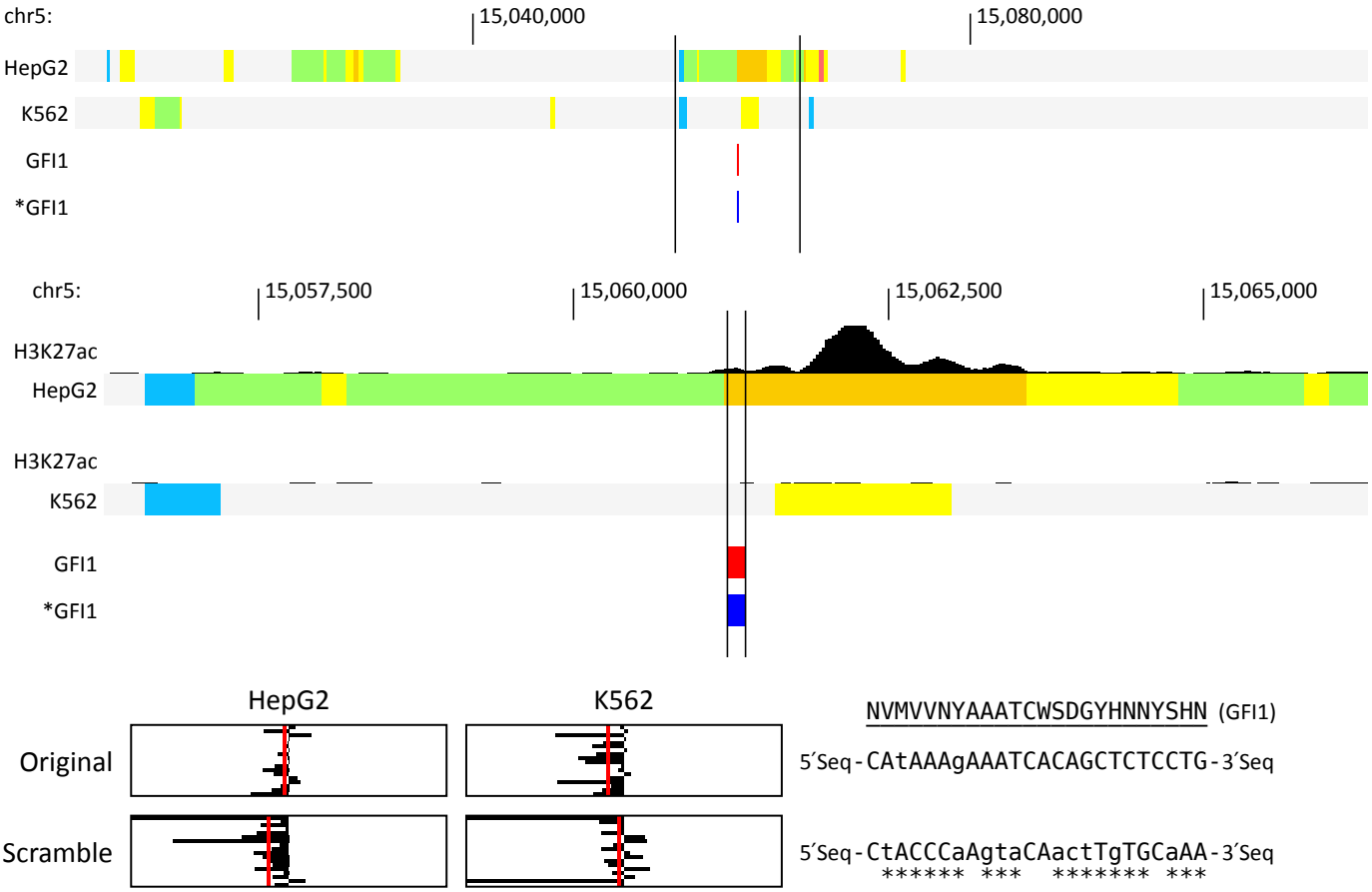
2036 GFI1 in HepG2 enhancer

chr5 15061282 15061305 + (hg18)



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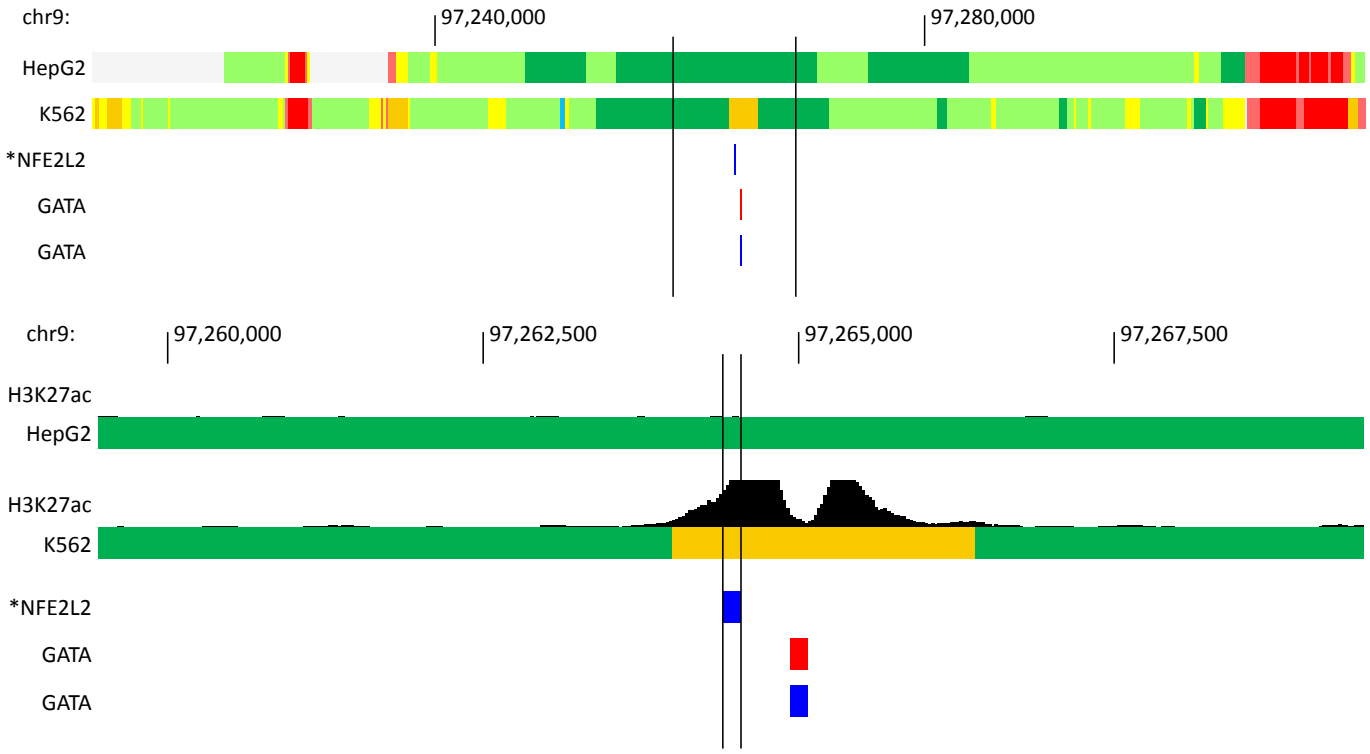
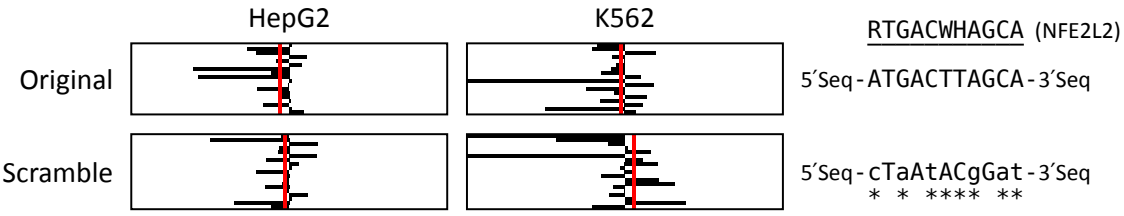
2037 NFE2L2 in K562 enhancer

chr9 97264466 97264476 - (hg18)





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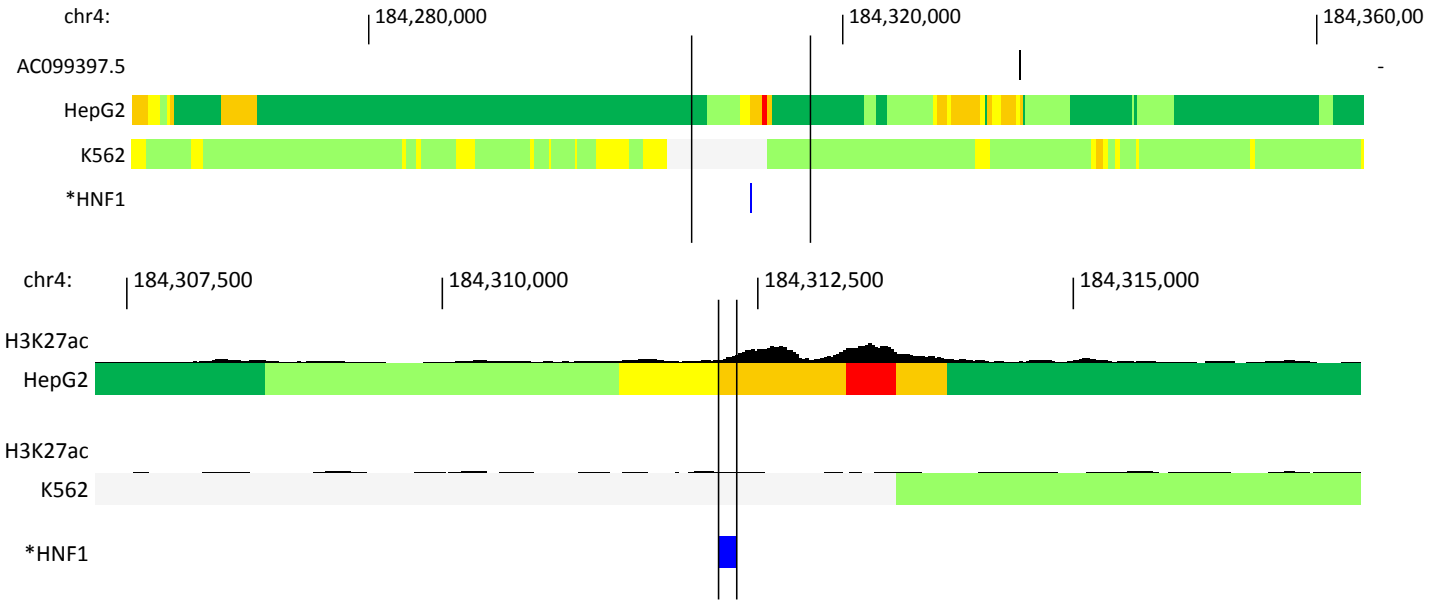
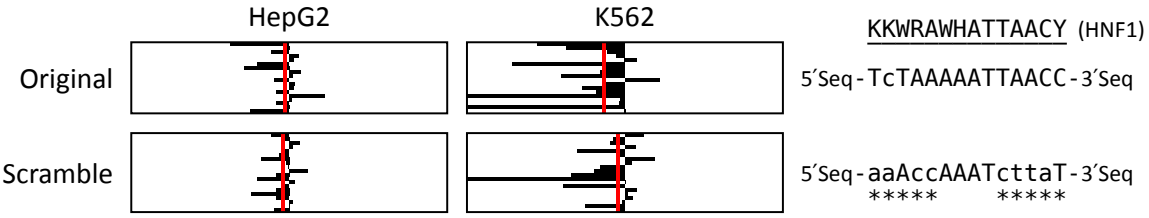
2038 HNF1 in HepG2 enhancer

chr4 184312255 184312268 - (hg18)





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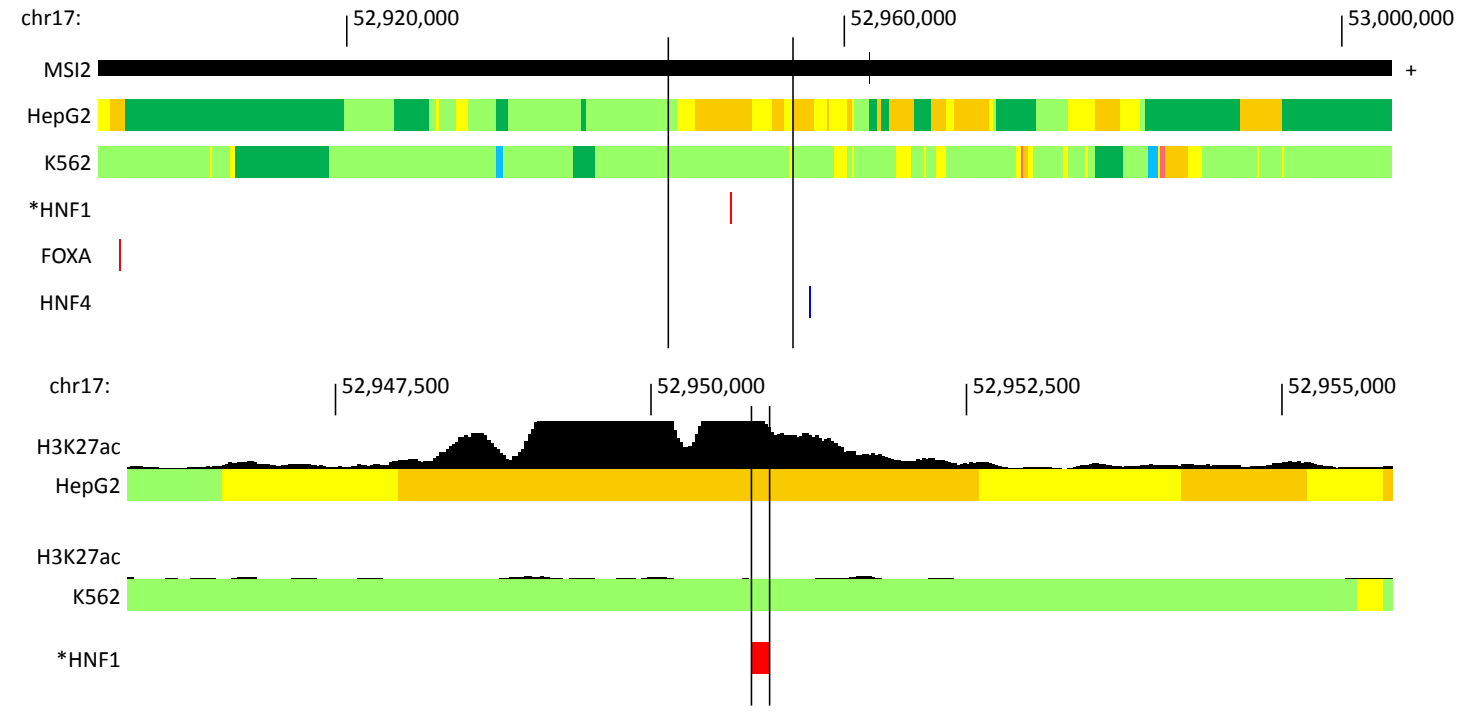
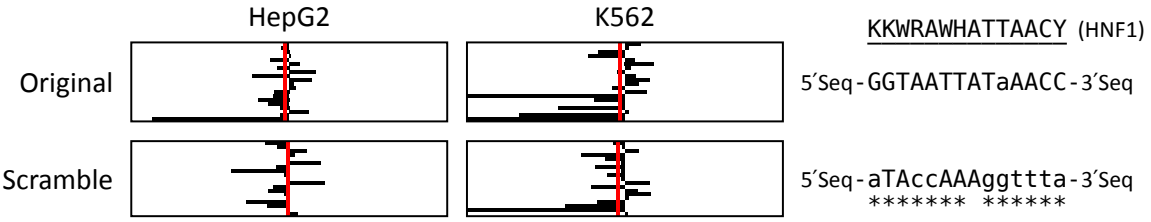
2039 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr17 52950862 52950875 + (hg18)





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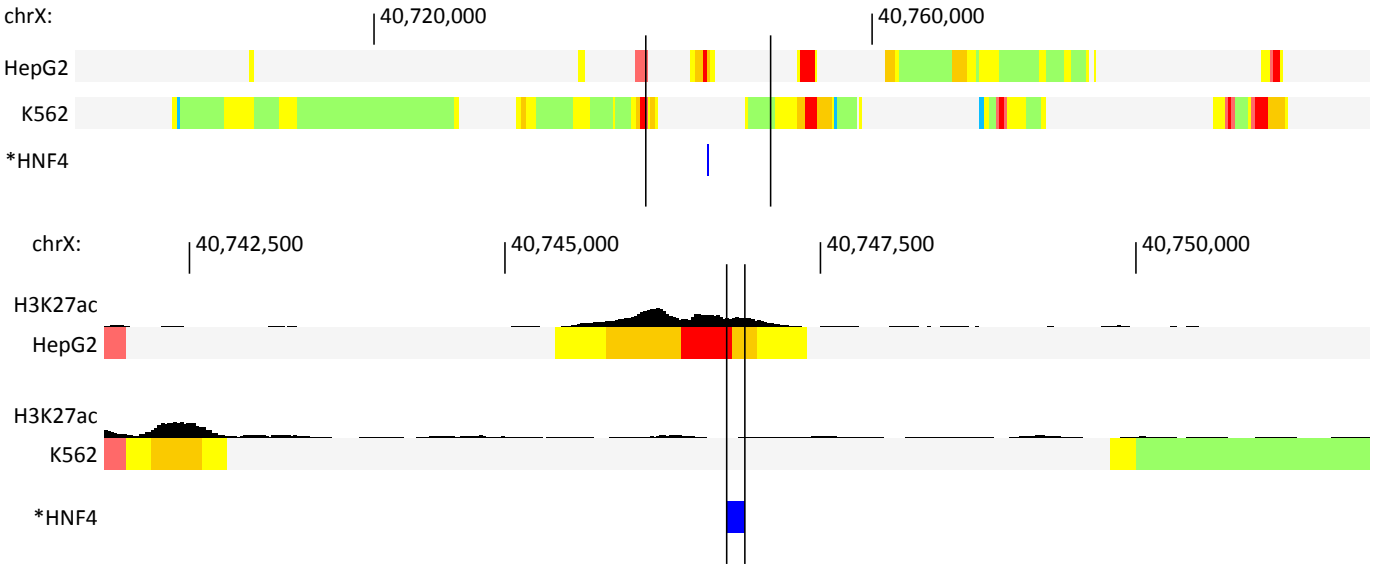
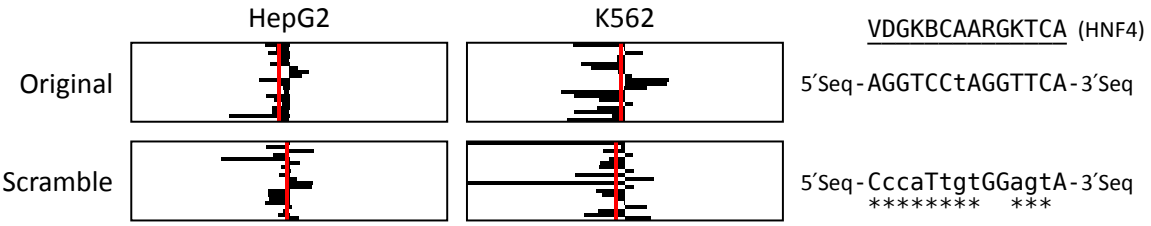
2040 HNF4 in HepG2 enhancer

chrX 40746823 40746836 - (hg18)





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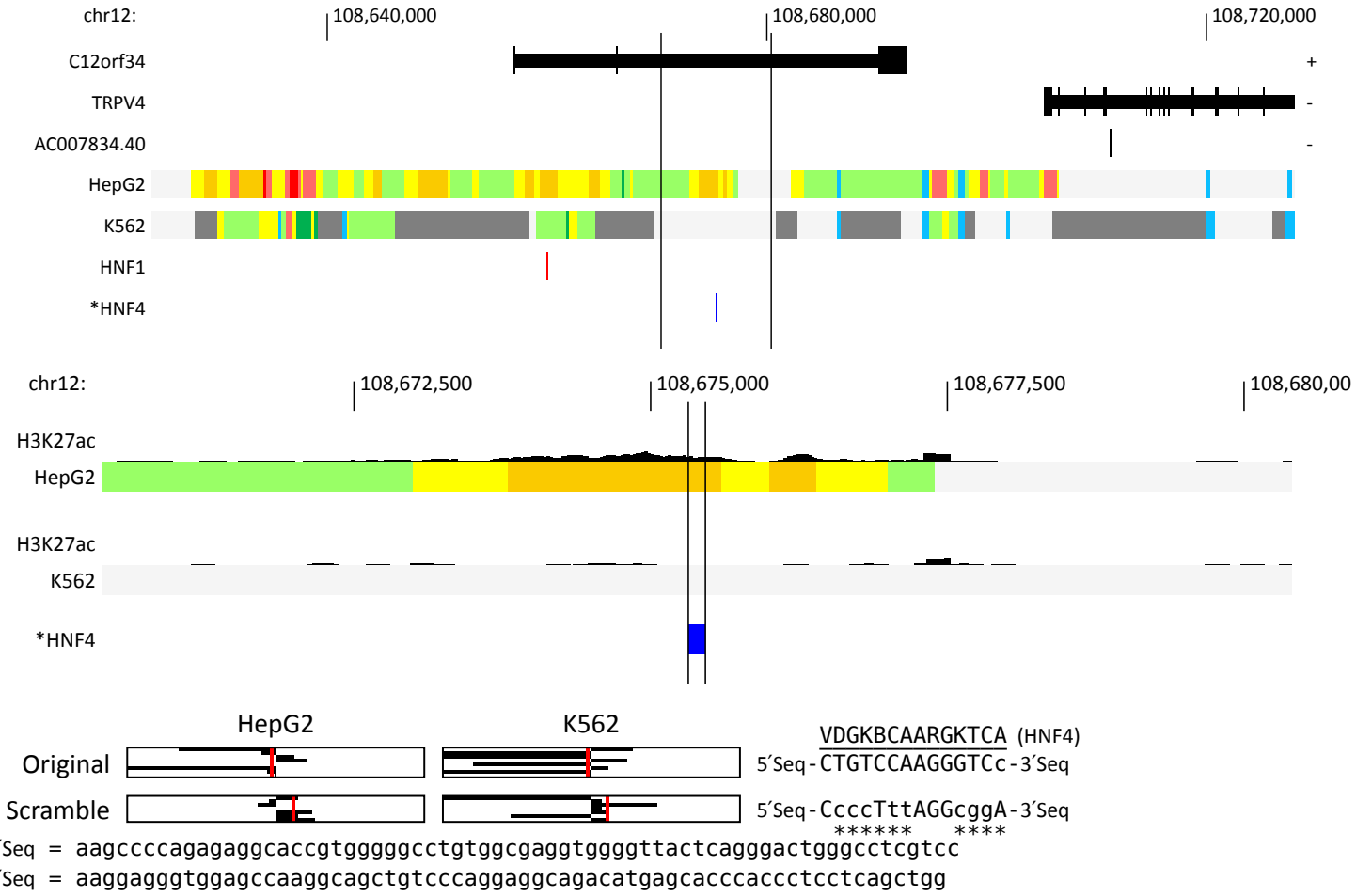
2041 HNF4 in HepG2 enhancer

chr12 108675383 108675396 + (hg18)



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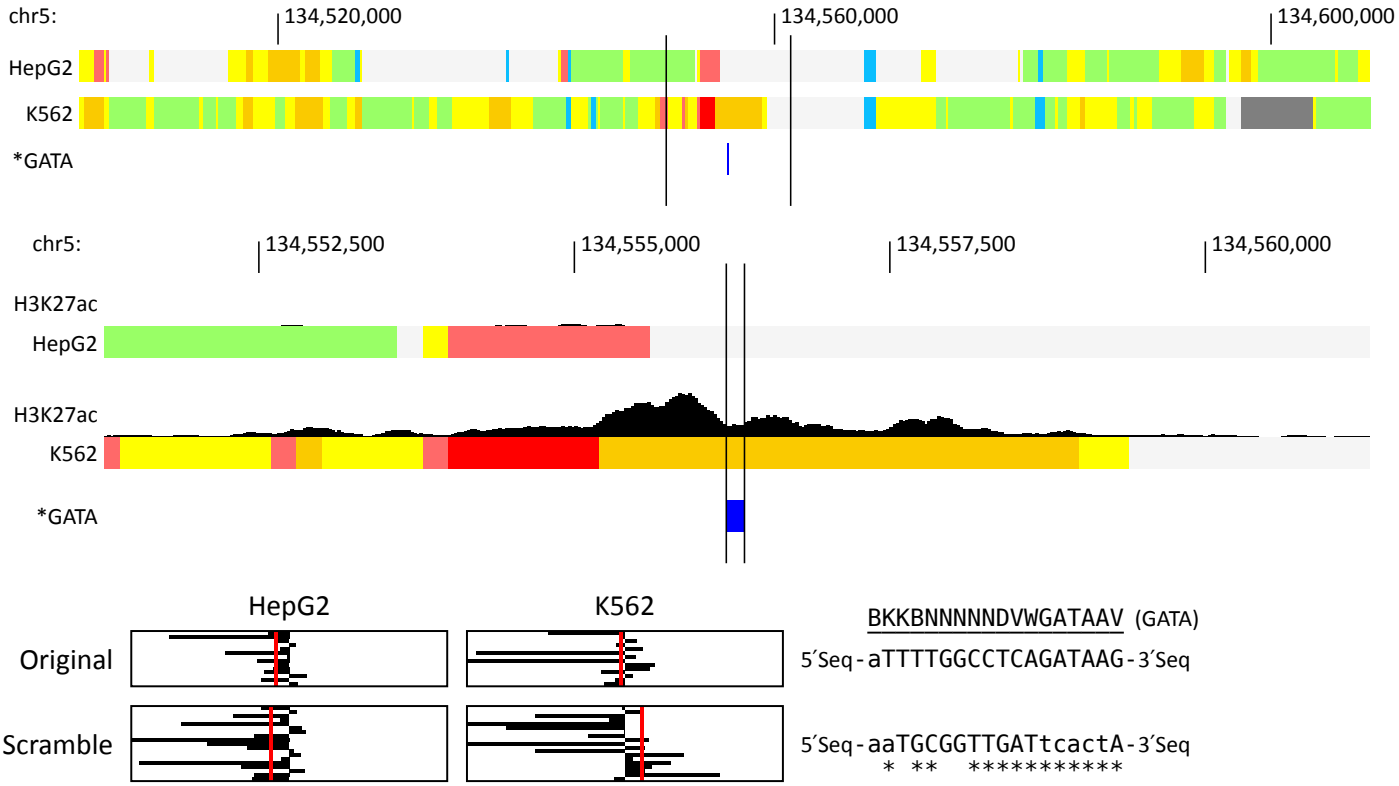
2042 GATA in K562 enhancer

chr5 134556268 134556285 - (hg18)



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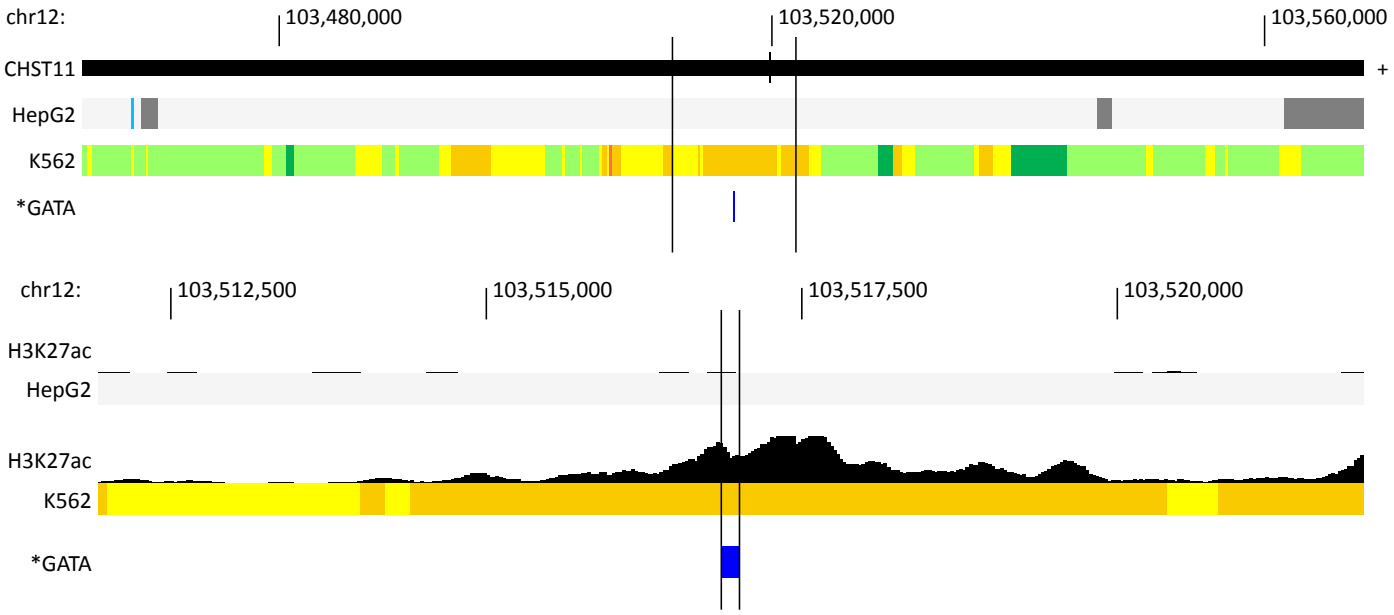
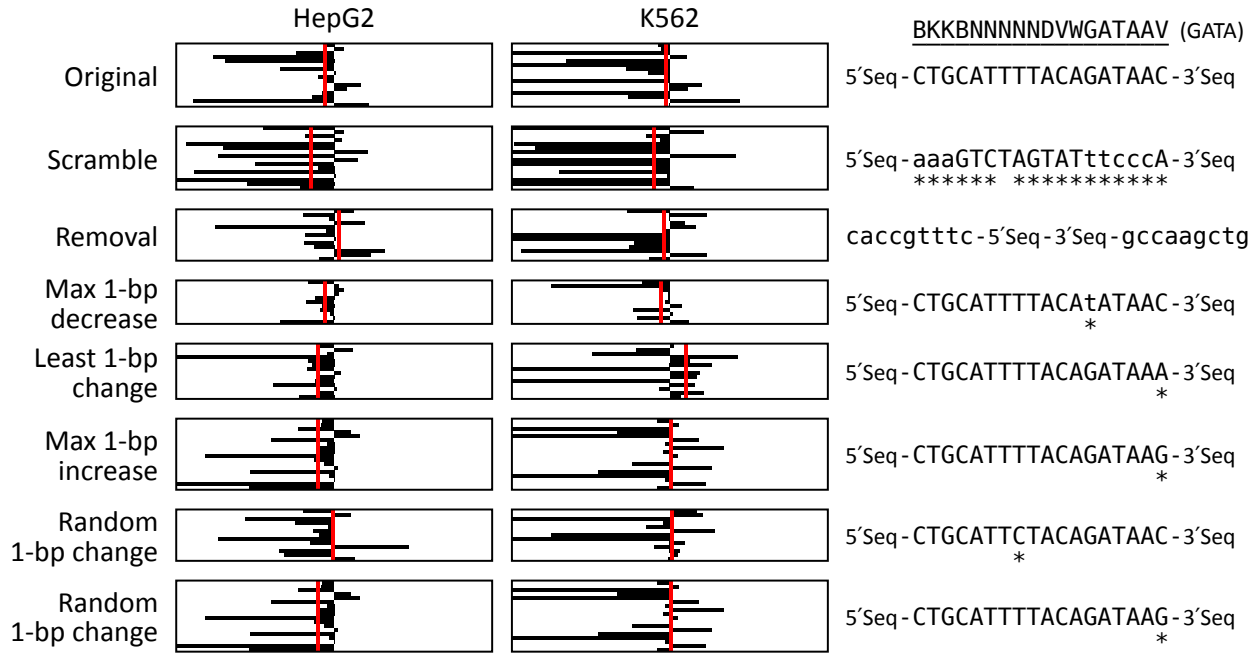
2043 GATA in K562 enhancer

chr12 103516926 103516943 - (hg18)





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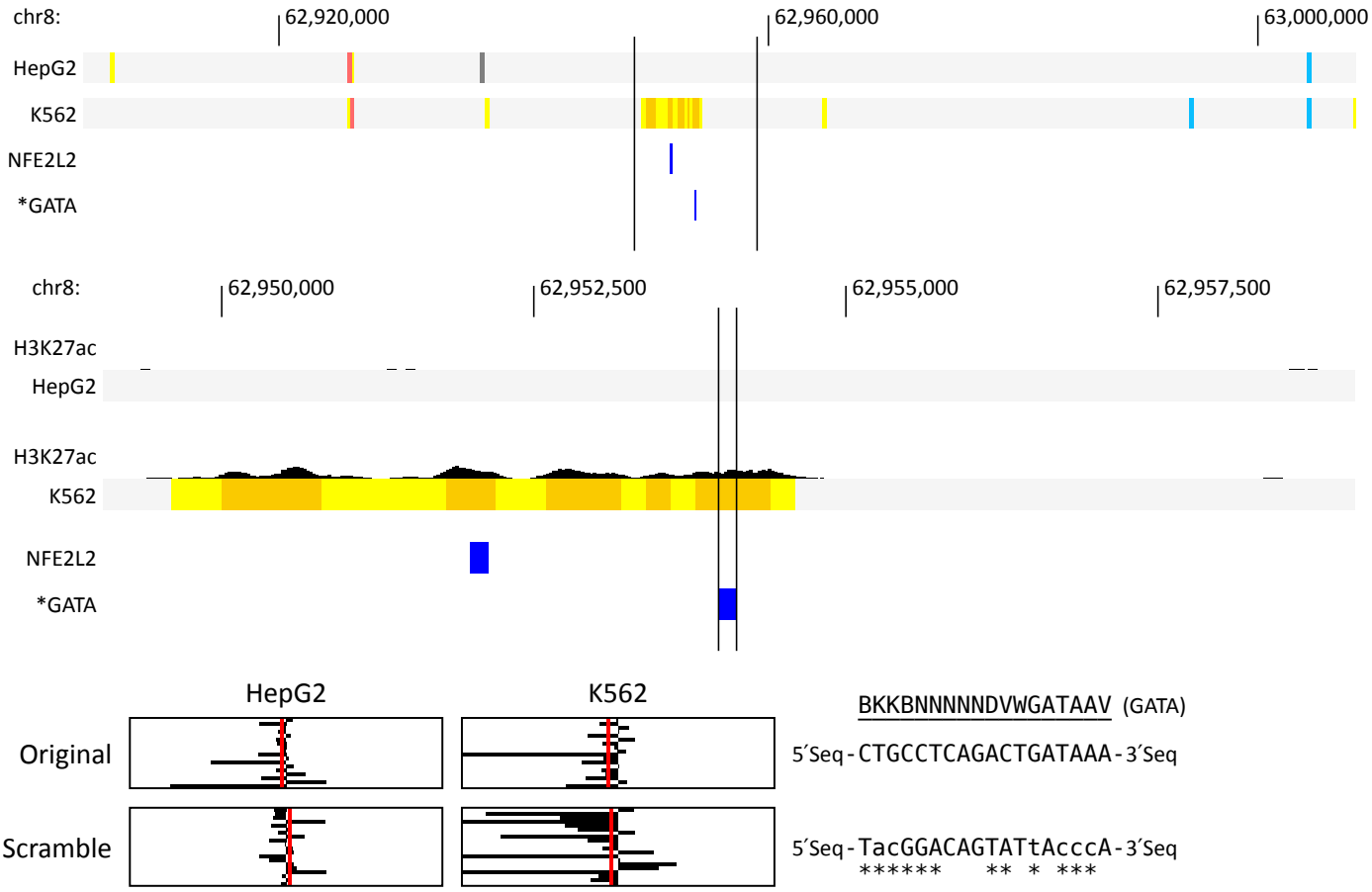
2044 GATA in K562 enhancer

chr8 62954044 62954061 + (hg18)



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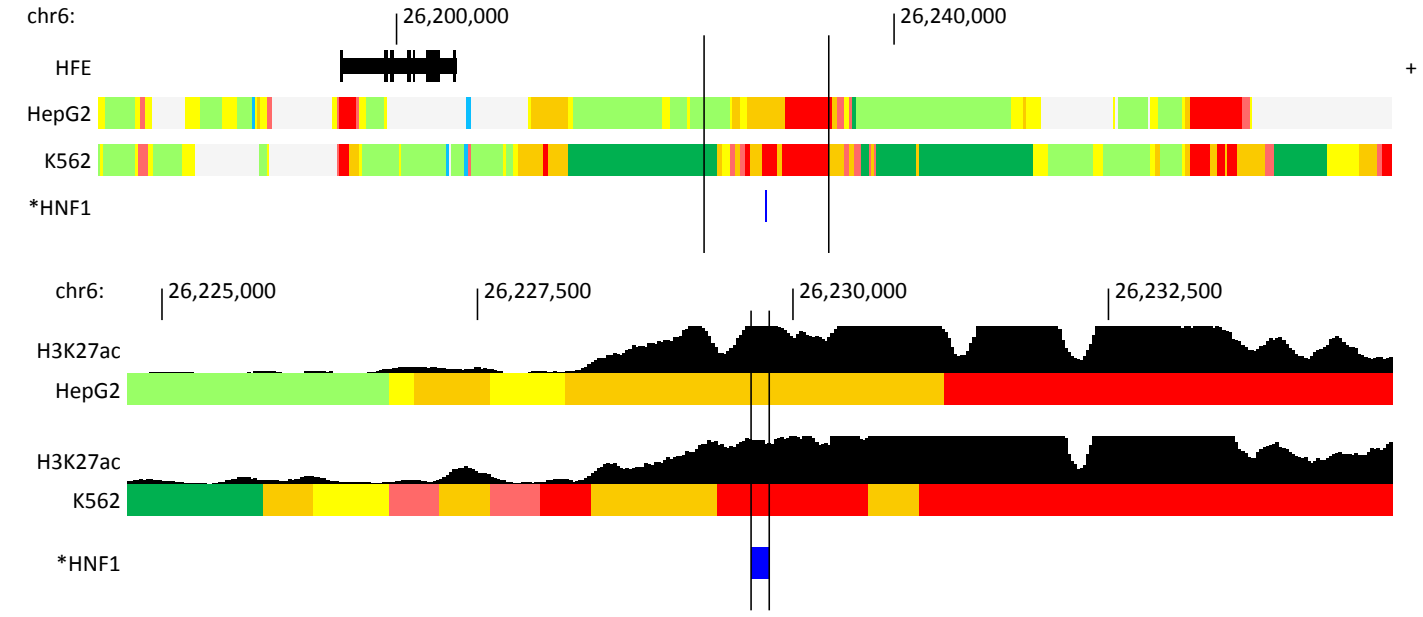
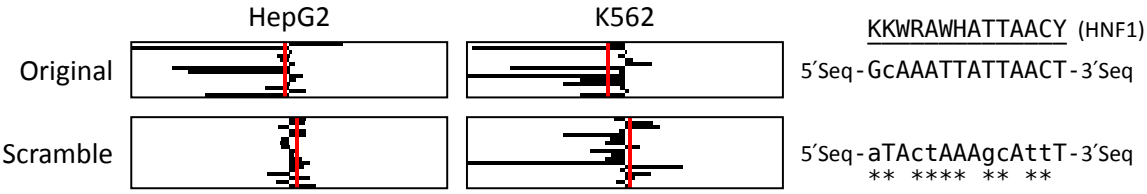
2045 HNF1 in HepG2 enhancer

chr6 26229734 26229747 - (hg18)





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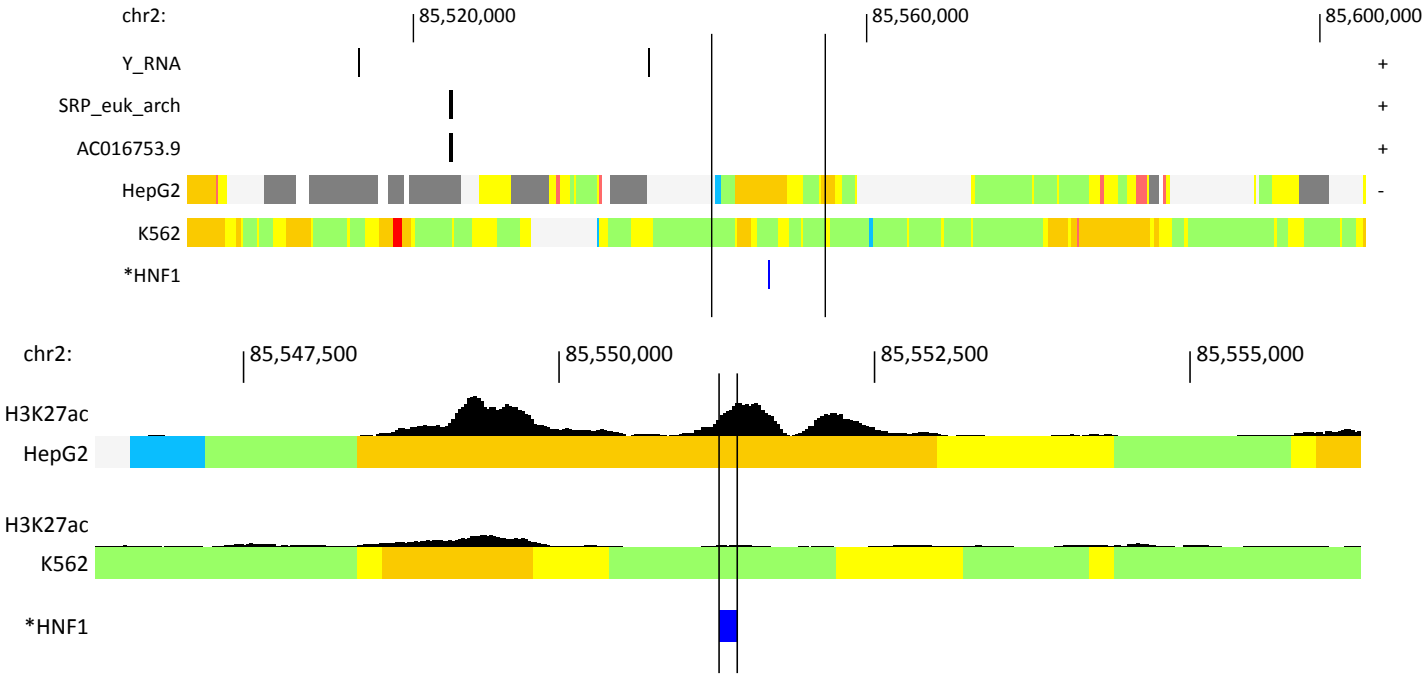
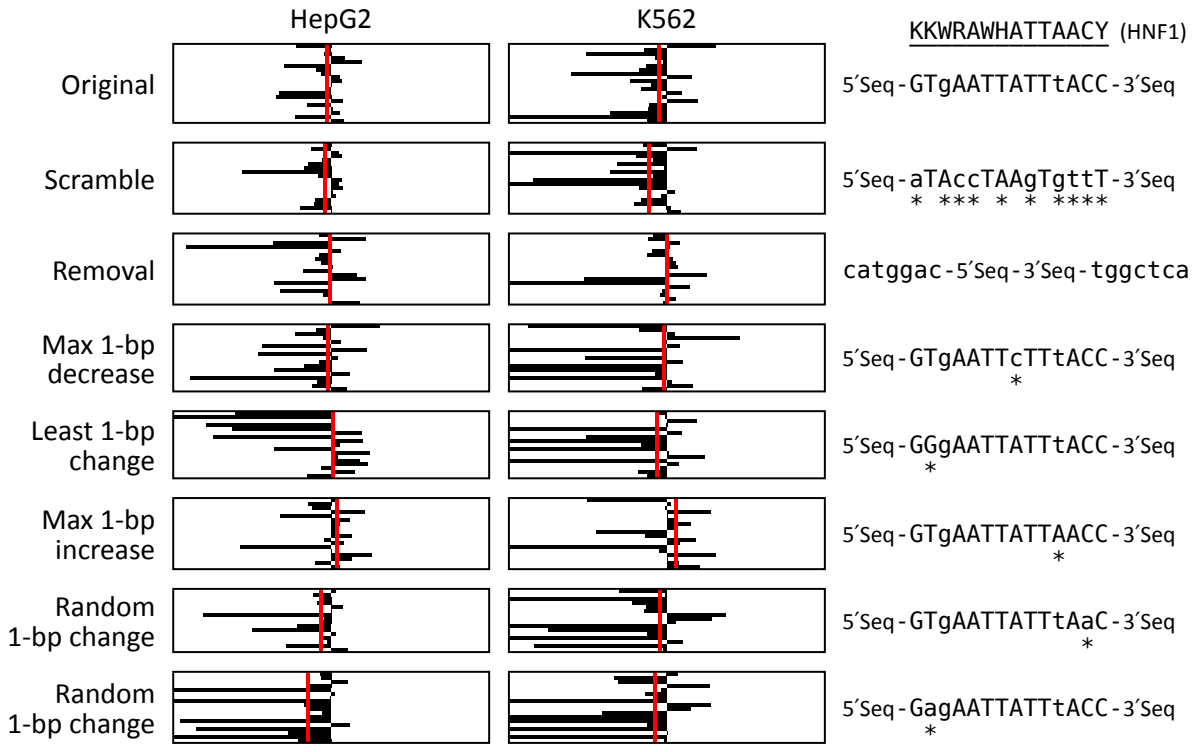
2046 HNF1 in HepG2 enhancer

chr2 85551334 85551347 - (hg18)



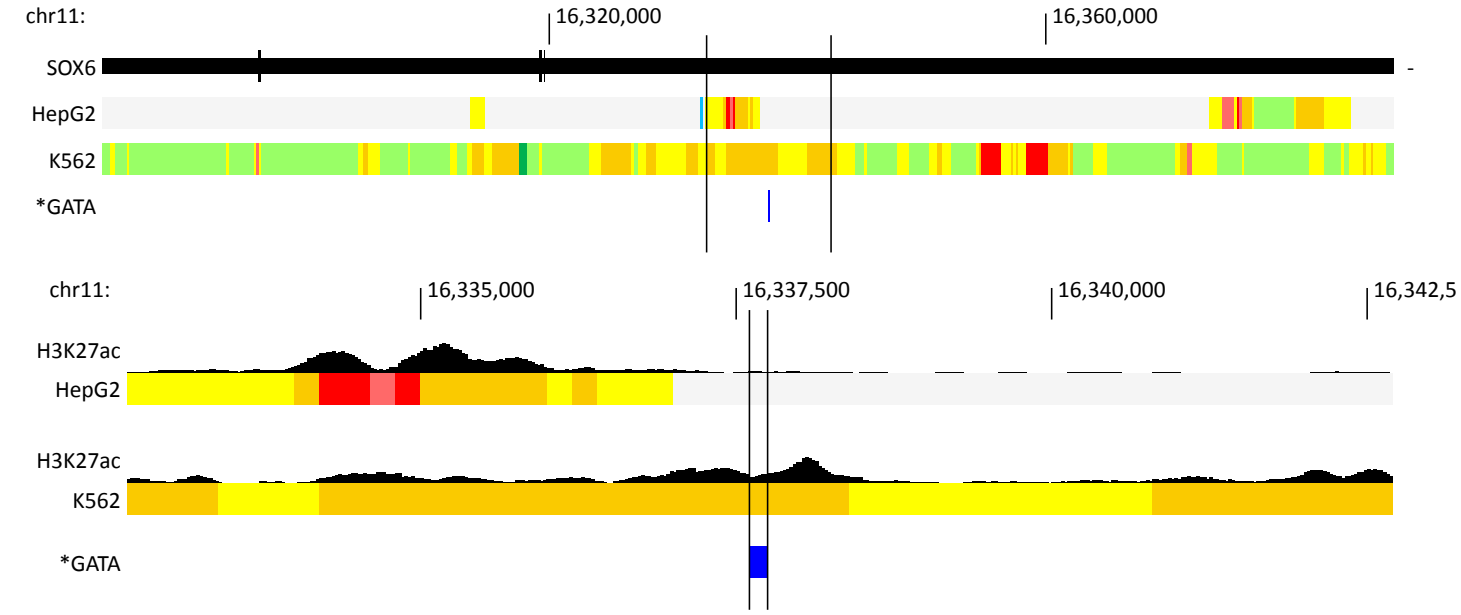


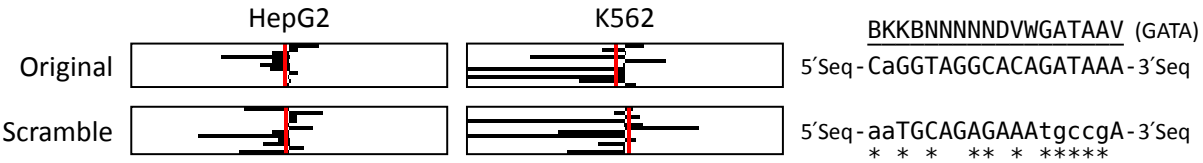
5′Seq = tcgctttcttcagtgttatttggaaacccaaggtccataatgccagtgccttcacaggctgtgtat

3′Seq = ccctggagaaagtcatagacagctgcagcgagggagtgataaaagtatttttggccgggcacgg

2047 GATA in K562 enhancer

chr11 16337669 16337686 - (hg18)

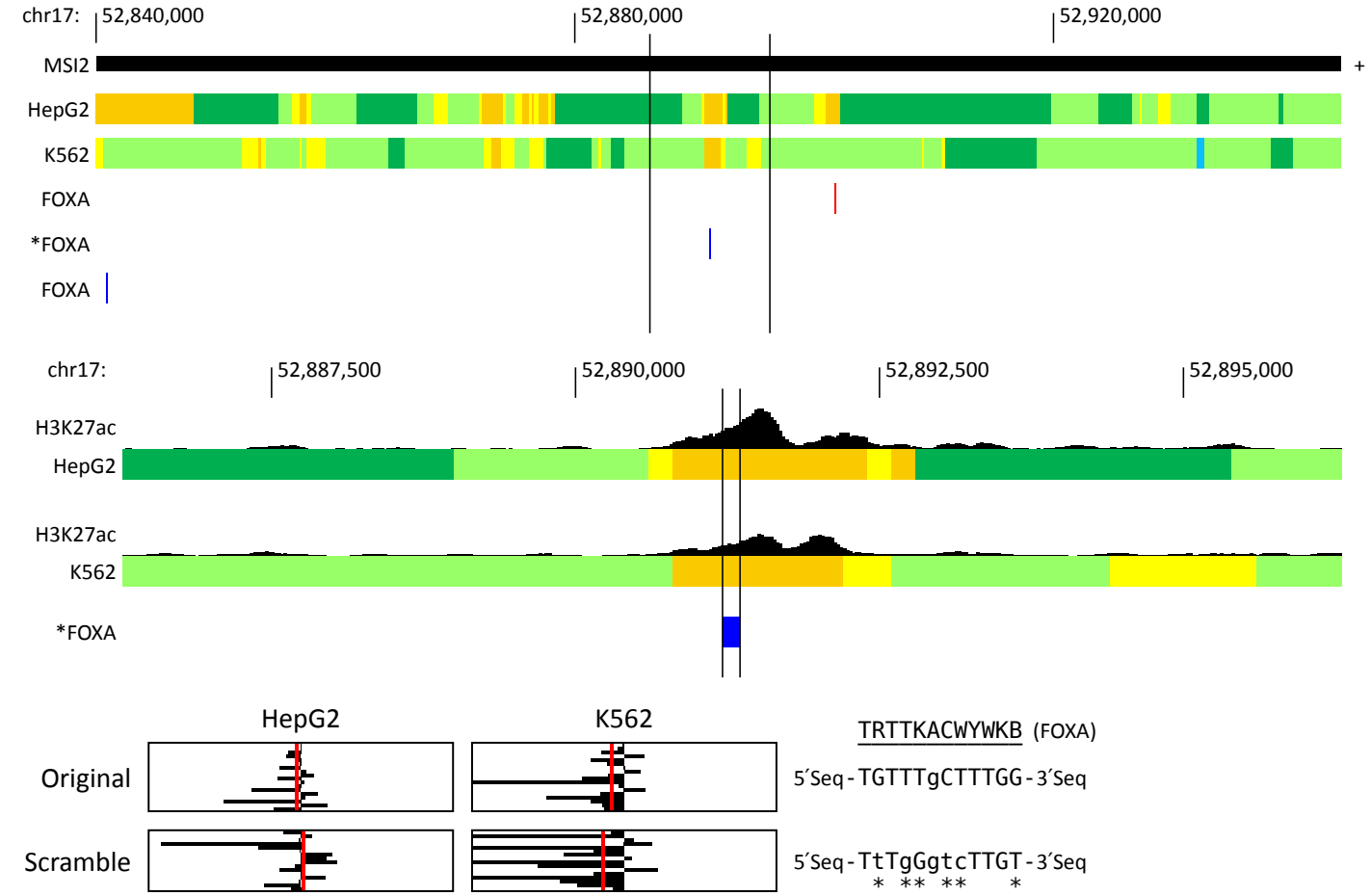




5′Seq = ggtagagaggaactggtcagtatcacatgtcgagcagaacaccaaggacaagataagaaaagga
3′Seq = tacaaatgacaggagcataaacatatatacaacctttggatgagtcatccttcctaaggcca

2048 FOXA in HepG2 enhancer

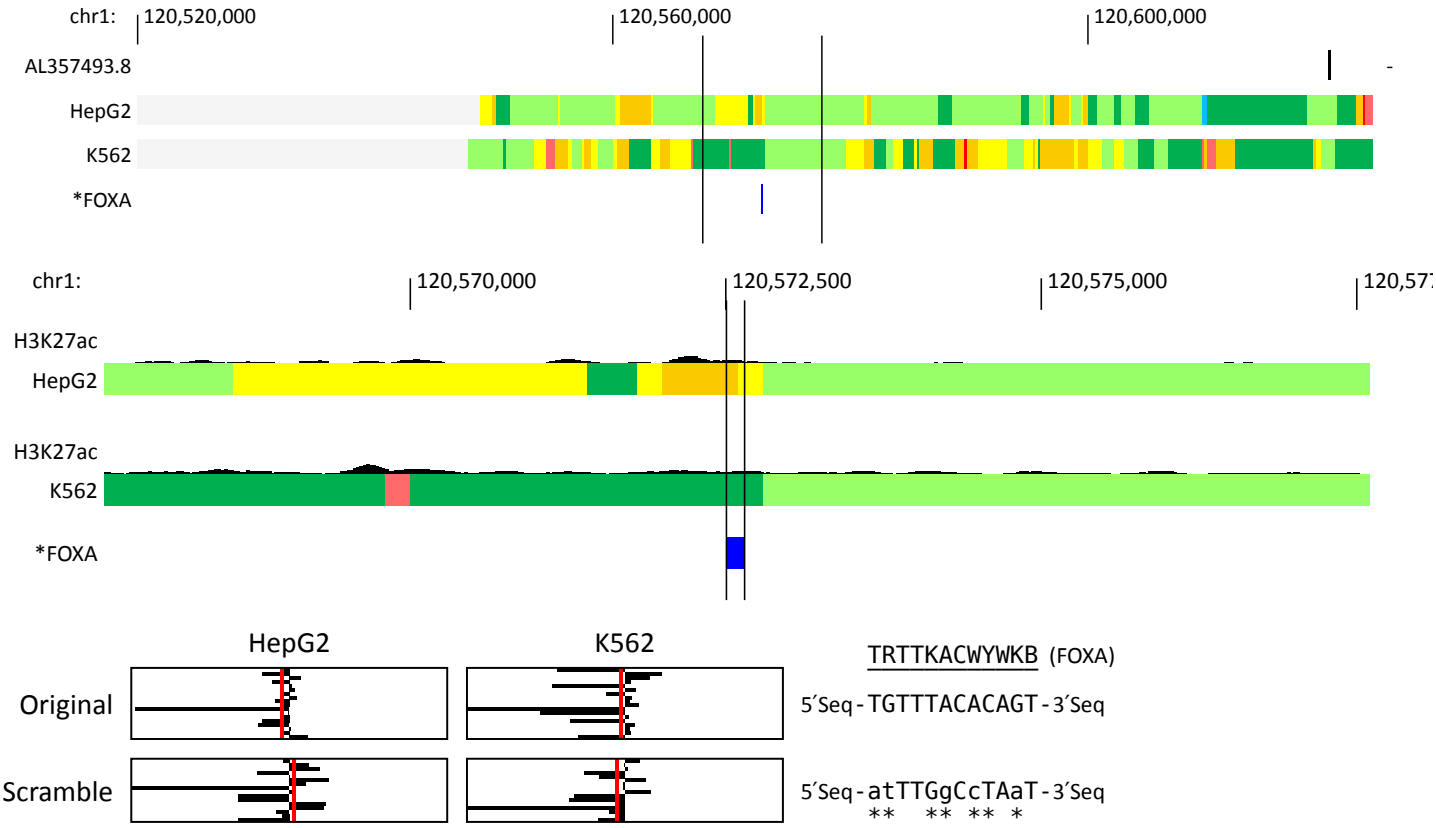
chr17 52891276 52891287 + (hg18)



5′Seq = ataatttgagaattcccttgcctgtccctgctccgcggttgctgggcacctggcgagagcgttgggt
3′Seq = gtaactatggcagatccttttaattgccaccaaataacttcagctcaacctcgtcagtggttgttt

2049 FOXA in HepG2 enhancer

chr1 120572572 120572583 - (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACACAGT-3′Seq

5′Seq-atTTGgCcTAaT-3′Seq

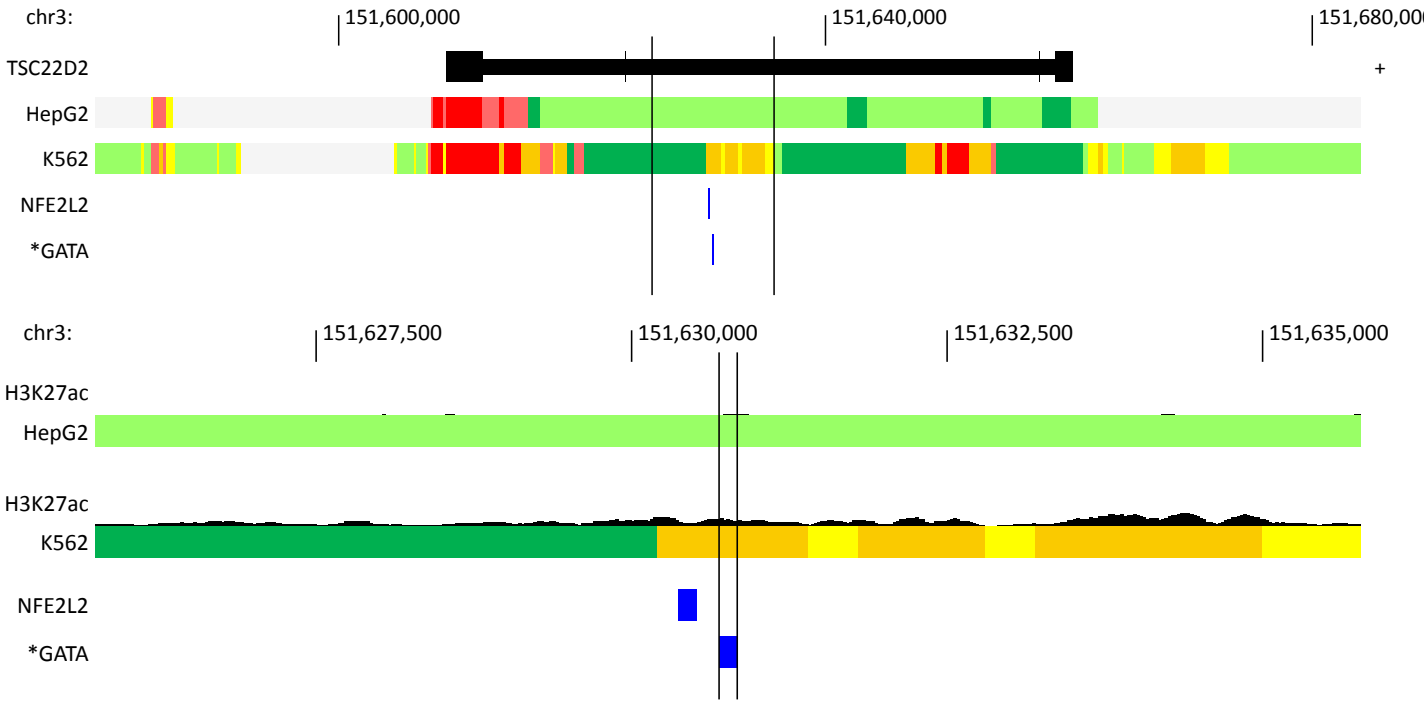
** ** ** *

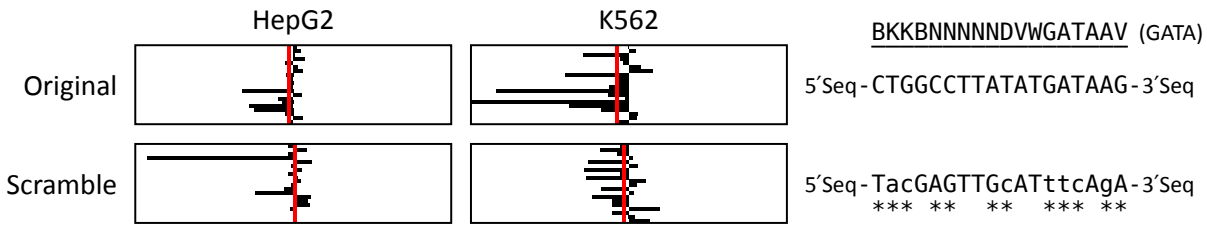
5′Seq = gttaaatgaaaaaaatgtggcacacgtgccacgttttaaaaagggaaggggcatatacacagatgct

3′Seq = tagtatttcttgaaggatatataagaaaatggtttcctcagaggtatagacctttggggaagggta

2050 GATA in K562 enhancer

chr3 151630757 151630774 + (hg18)

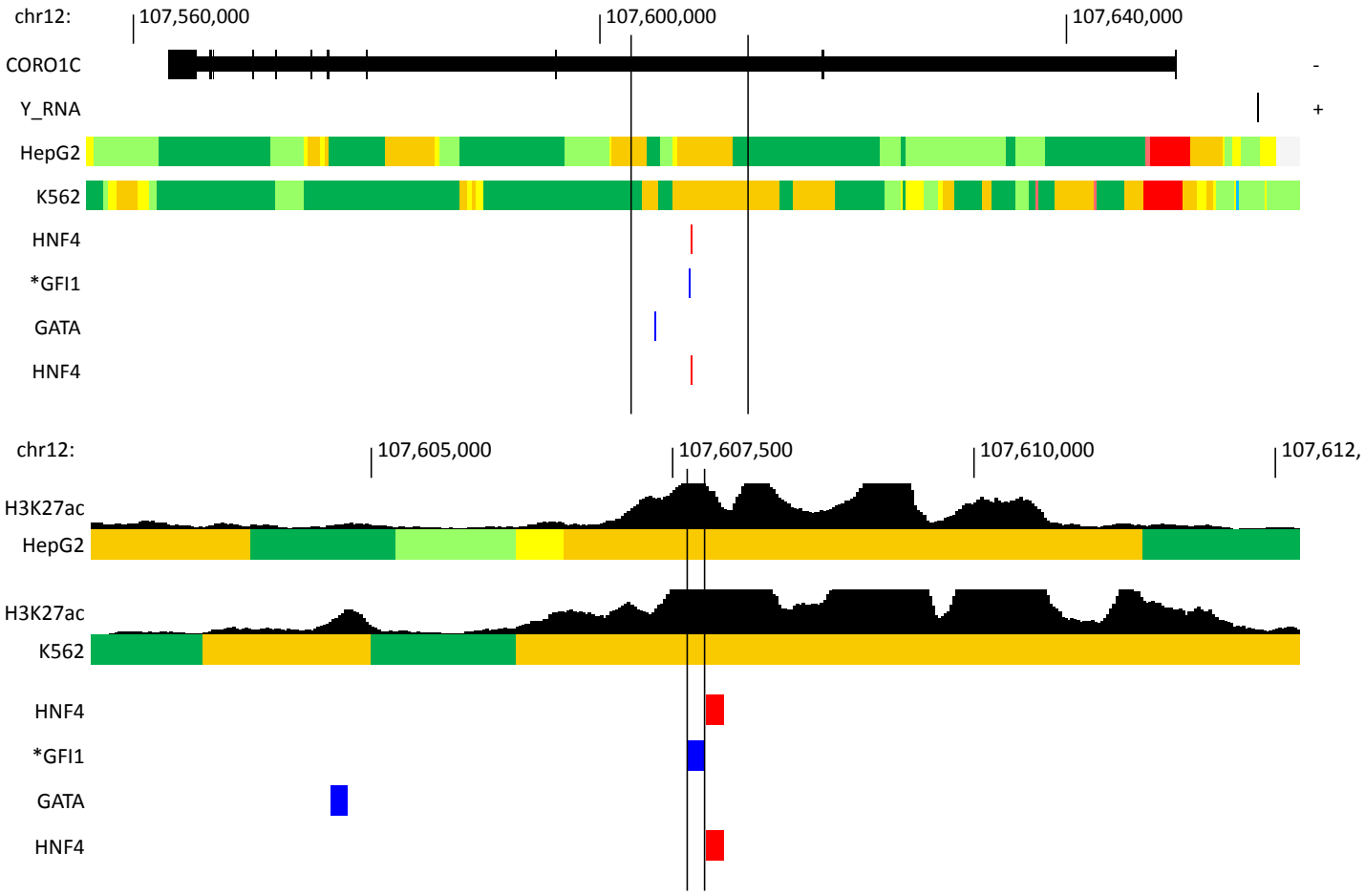


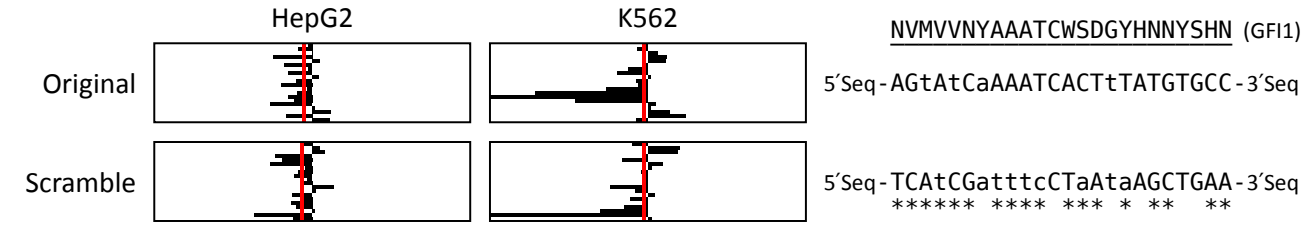


5′Seq = ttaaagaactgaggggaagggaacattccagttagaggaaatattgtgcaccactatggaagta
3′Seq = gataaagttaaatttggtaggtgtataacatttgaagacaggagaggagagcagttagattag

2051 GFI1 in HepG2 enhancer

chr12 107607682 107607705 + (hg18)

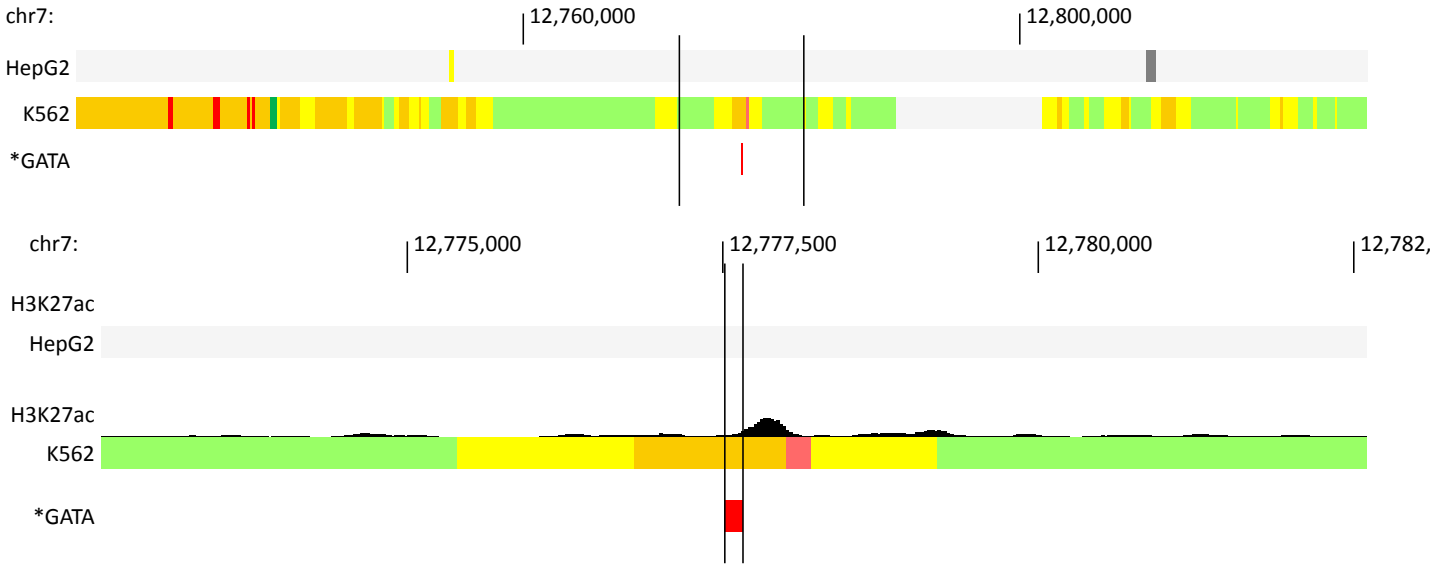




5′Seq = tttccacattgttcaaacccctacctaatattcatctaagttttcattttaggaaaaaatg
3′Seq = caaatttcaatcataacttatttttggctttgggtgatacatactgagaattcttcaact

2052 GATA in K562 enhancer (conserved at 60% confidence)

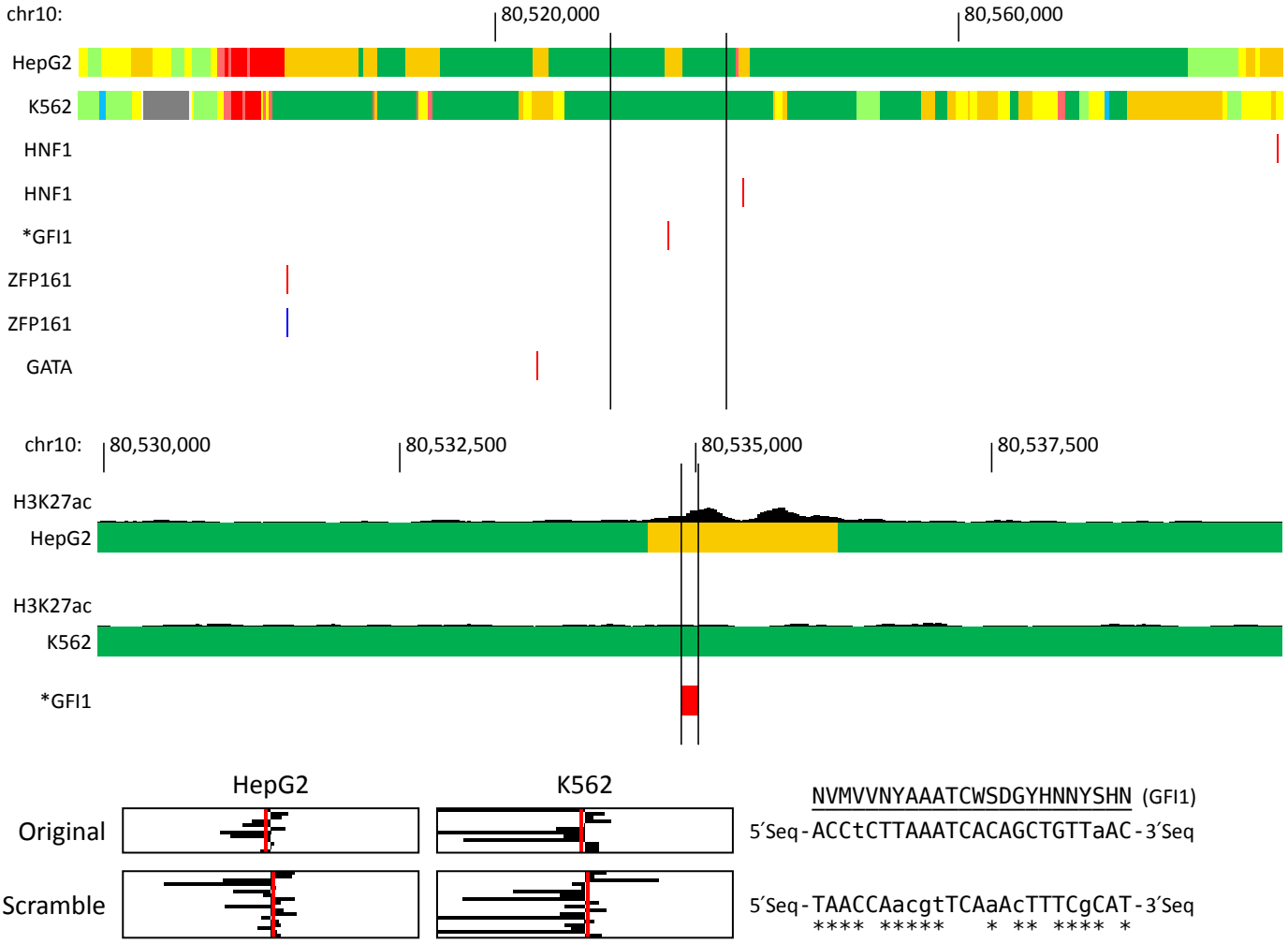
chr7 12777580 12777597 - (hg18)



5′Seq = cacactgaggaaaaataacattttatcctgcacttggtaactcacagatagatttatgactata
3′Seq = gtaaaaatcaatcatattattcatatgagtaacataagcaagtactagcaaaacaaaaaatat

2053 GFI1 in HepG2 enhancer (conserved at 40% confidence)

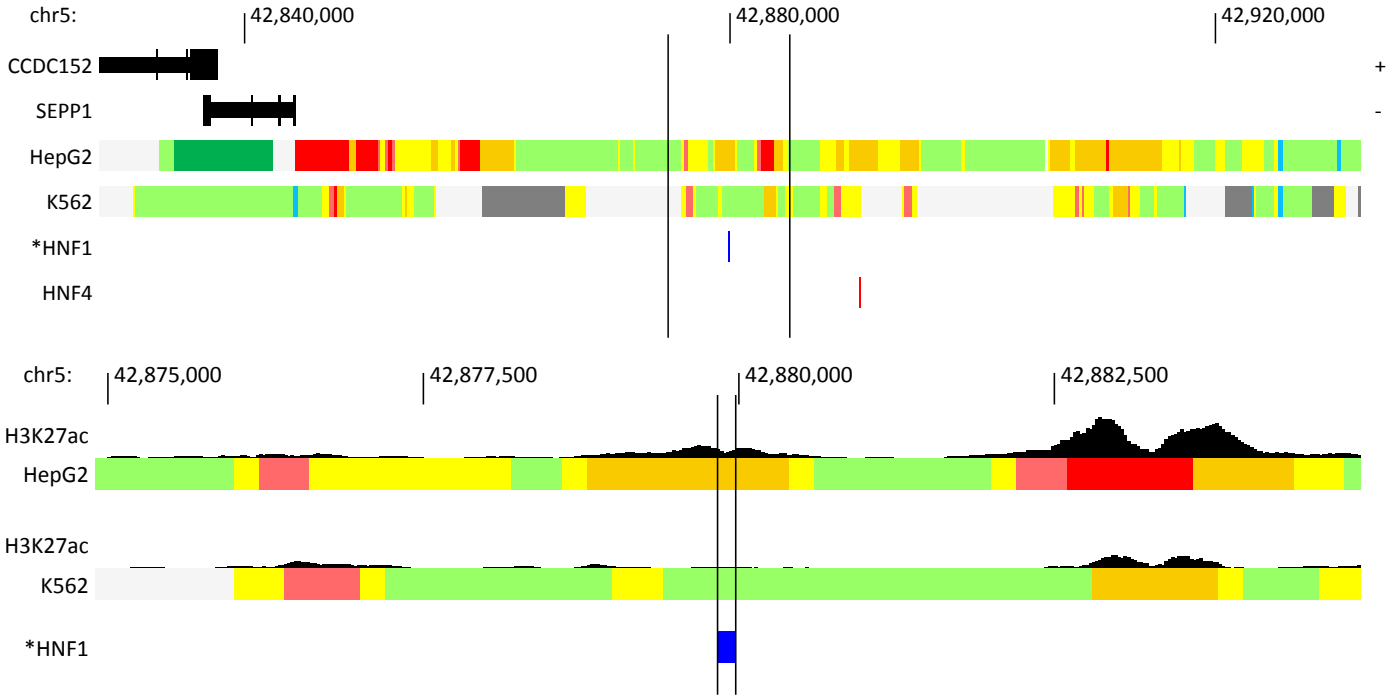
chr10 80534939 80534962 + (hg18)

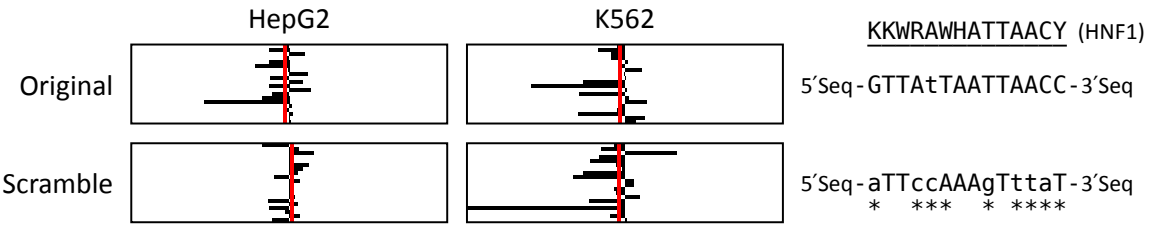


5′Seq = gagcccaatgtgttagttgtctcctccctgagaaactgattcccgaaaatttagacaaata
3′Seq = ctcgggtgtaaaaactgctaccacaccagccgcaggtcacagcgactctgctctgcctaa

2054 HNF1 in HepG2 enhancer

chr5 42879897 42879910 - (hg18)

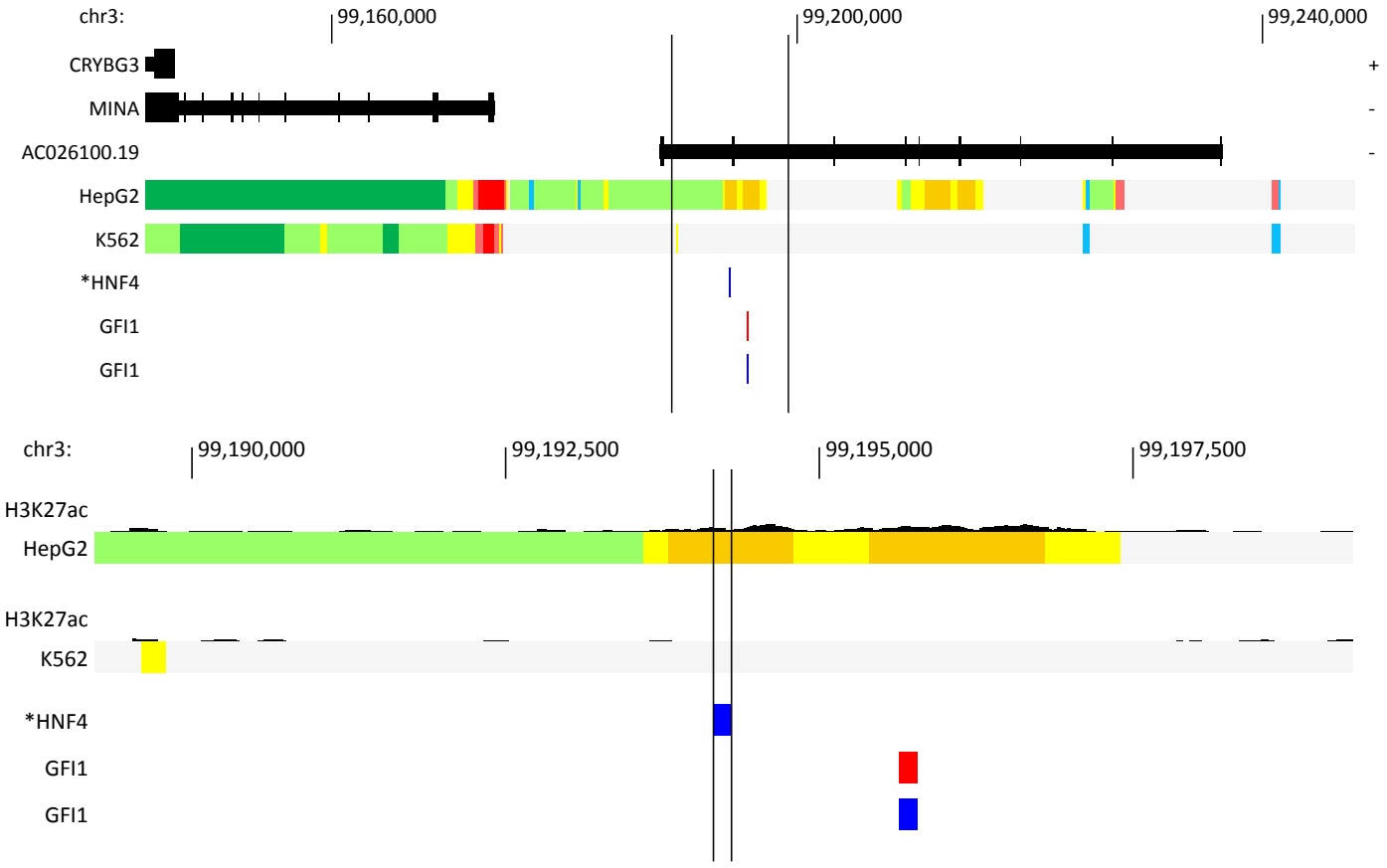


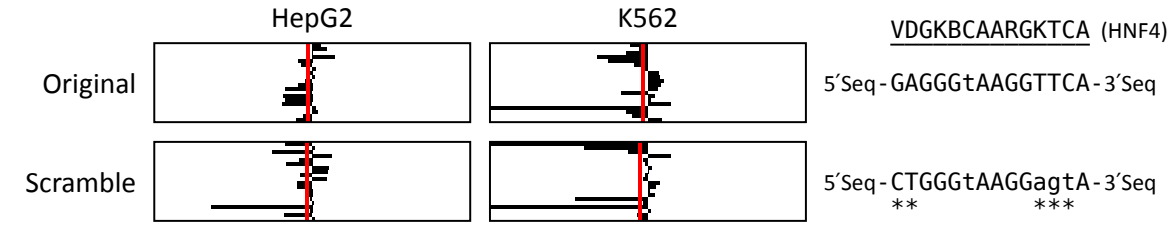


5′Seq = tctggatccacagggactaaatctctatgatctccatgaccaaaacttgtcaataatttctgcaaa
3′Seq = aattcagctaaaagtccaattagtgtggaagacagcatgttgctaaaaatgatggttgtggcttt

2055 HNF4 in HepG2 enhancer

chr3 99194222 99194235 + (hg18)

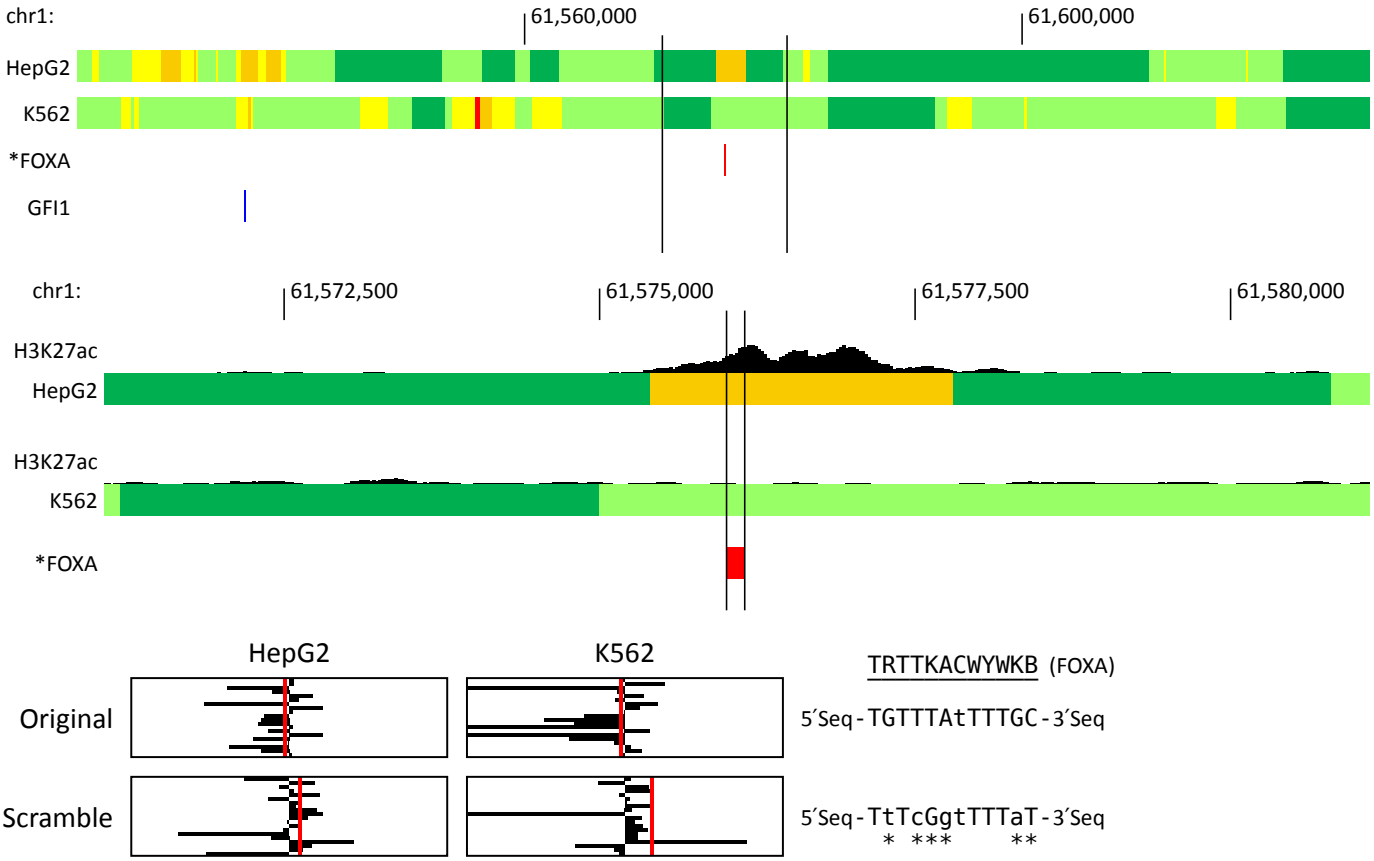




5′Seq = aattttgcacacacaaaaactcctgatgaaggtgagtgaggataagaaaacagccagcacagagca
3′Seq = atgttaaattgtcaccatactgtcaacttgcctcttgacaagcatatggacttaatacaaaggct

2056 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr1 61576073 61576084 + (hg18)



TRTTKACWYWKB (FOXA)

5′Seq-TGTTTAtTTTGC-3′Seq

5′Seq-TtTcGgtTTTaT-3′Seq

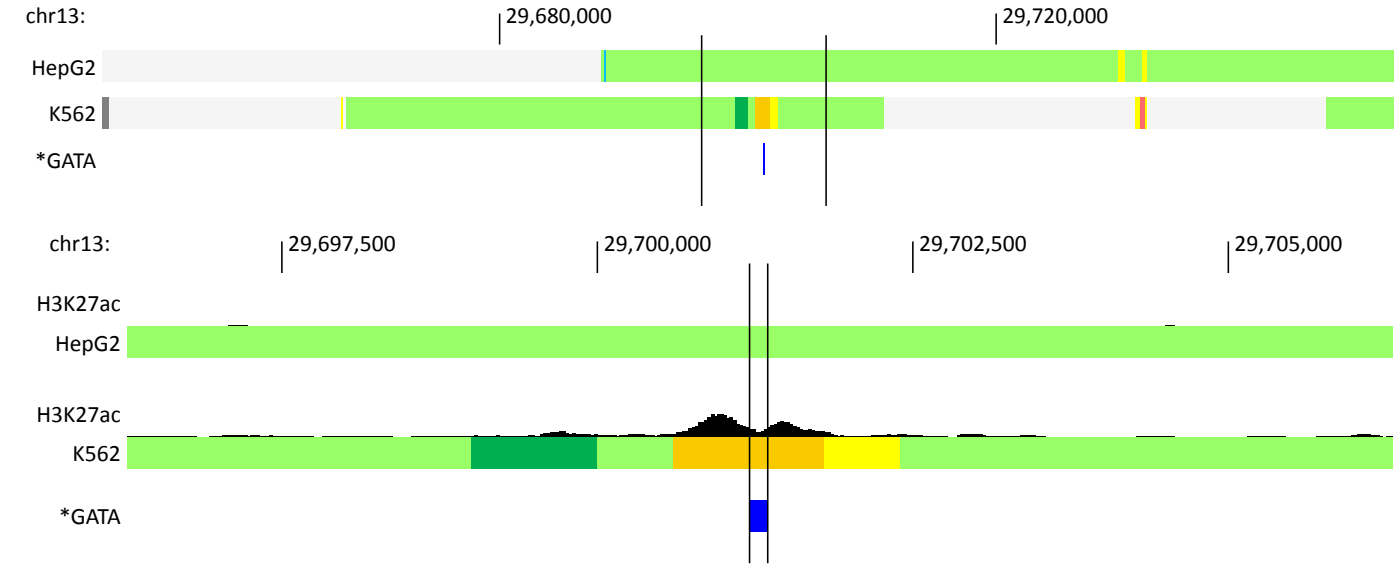
* *** **

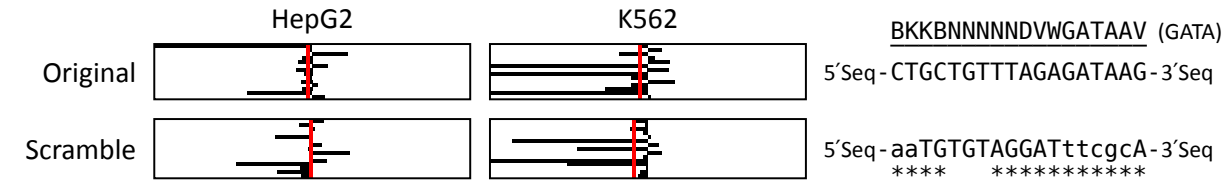
5′Seq = agagcccactctactagctgctaagtgatgctgcttagatagctctctctgtcagcacccactcttt

3′Seq = gctagtgttttcctcaaagtatgagtgctaaggctgtcaaatatcactcctggtaggaacccagaa

2057 GATA in K562 enhancer

chr13 29701270 29701287 - (hg18)

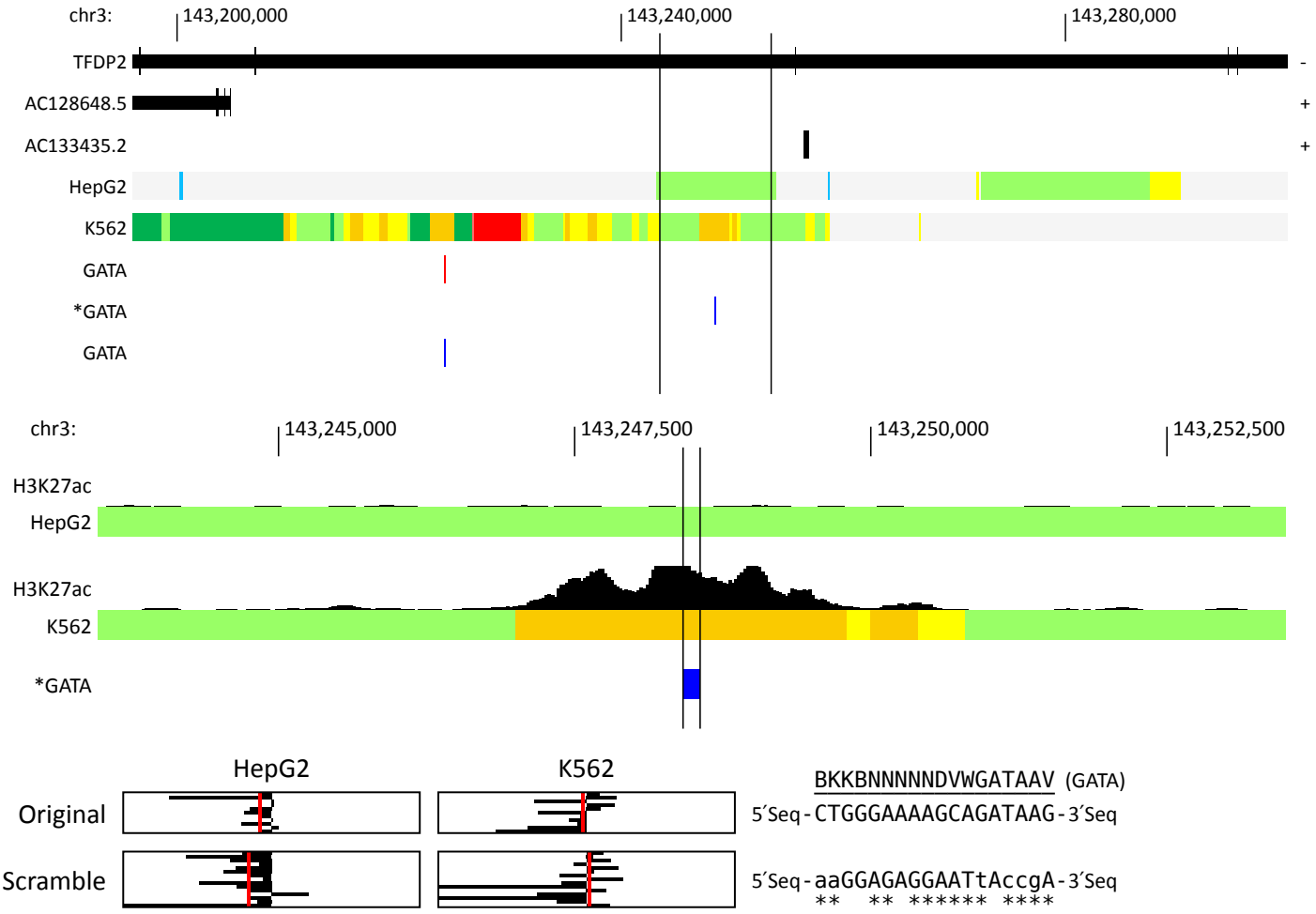




5′Seq = gttatcaggacagagaaaaagggccctgaggagccatagaaggaaaagggttatgggctcagag
3′Seq = ttagctgtgtggtagacaagaggccgttcaagcaaaacattagaacagataaaatacattaaa

2058 GATA in K562 enhancer

chr3 143248479 143248496 + (hg18)

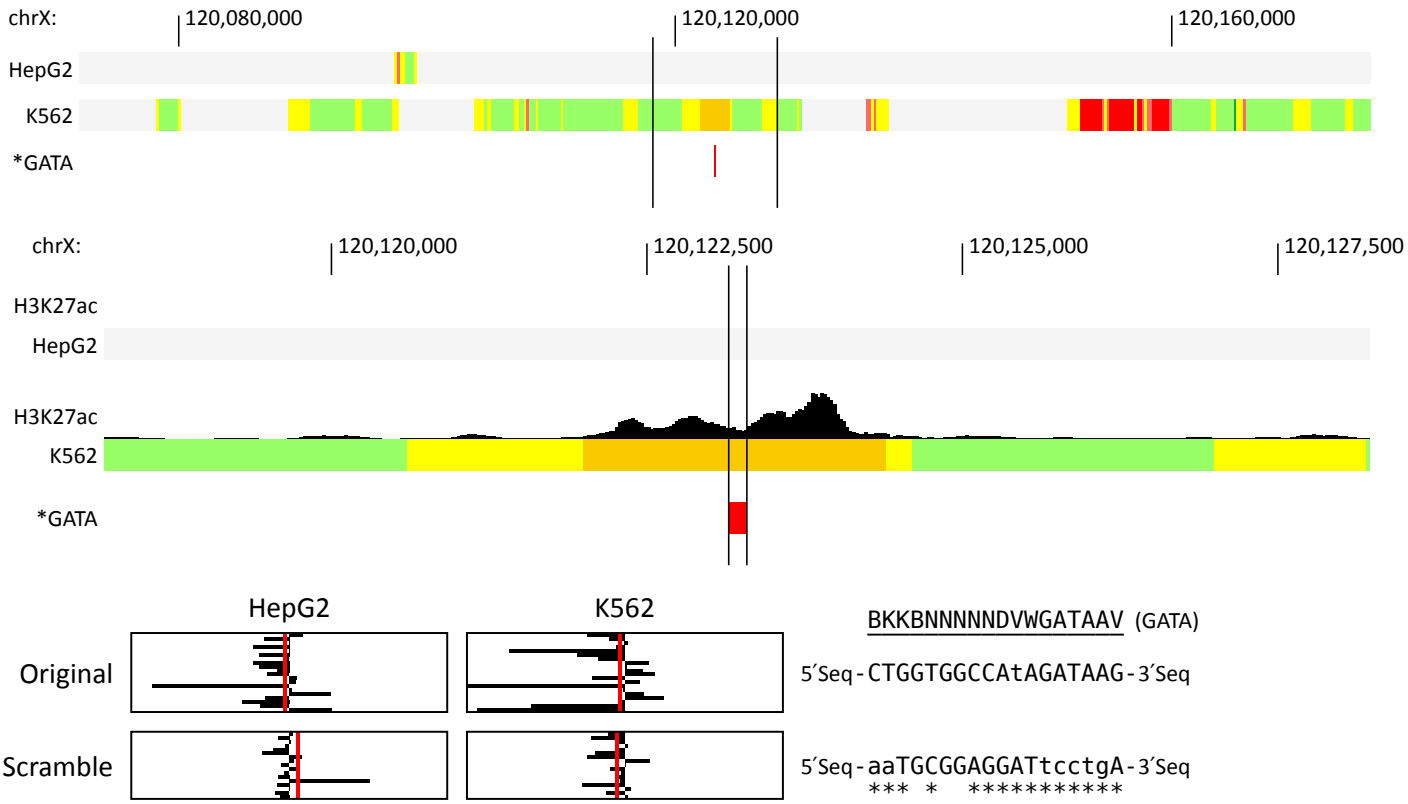


5′Seq = ttcaggcttccccattgatttttgagcccaaaaggtcctaaaataatctagcacacattcaac

3′Seq = tggaagcaatagcttctcatgtgctcttgccccccttcagccttcagccacactacaatctta

2059 GATA in K562 enhancer (conserved at 60% confidence)

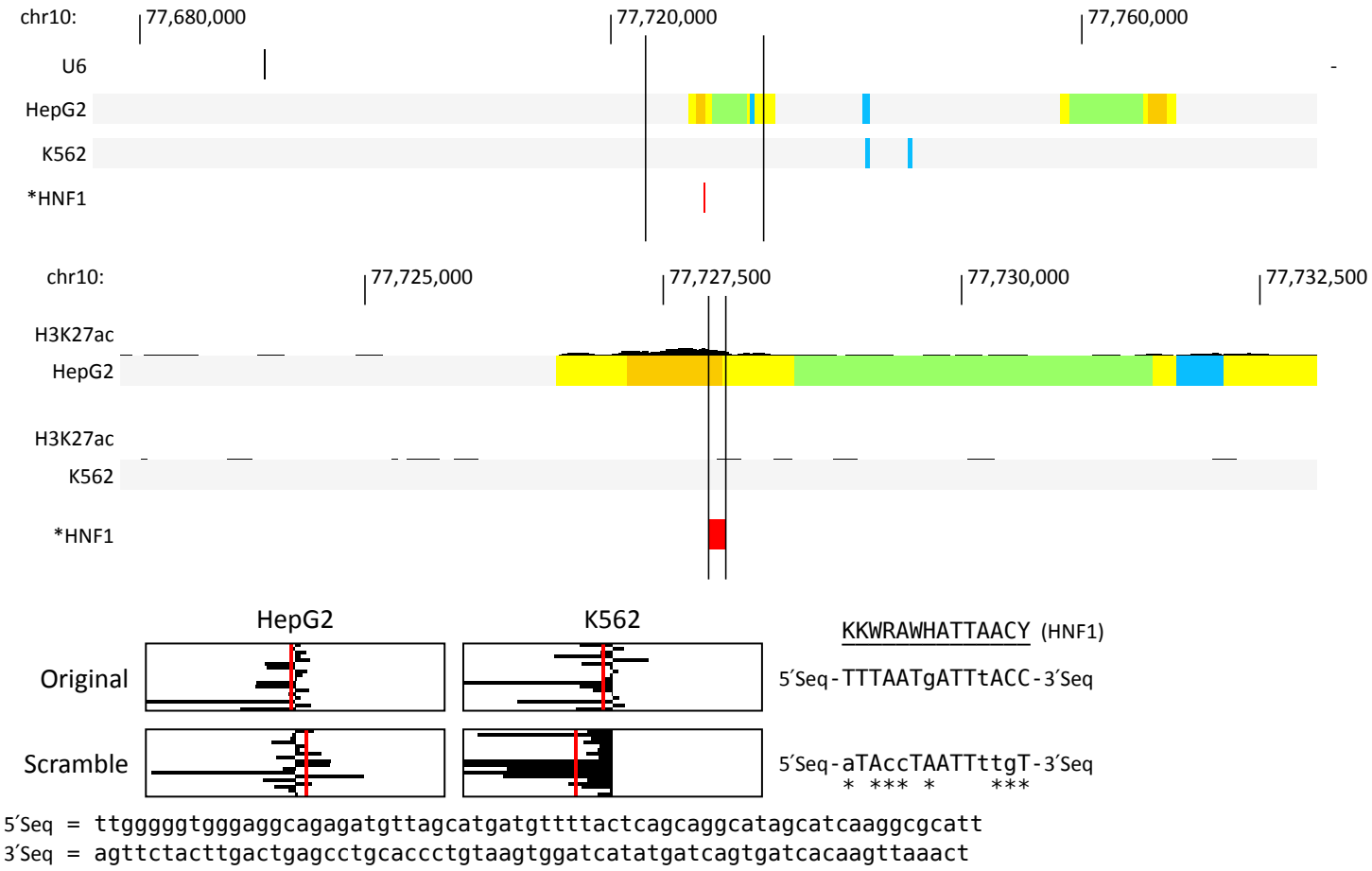
chrX 120123212 120123229 - (hg18)



5′Seq = tcagtgggtggagaatgtcagaaacaaagaaaactctttaaaatgttaaatgcaaactcattta
3′Seq = atggcagagtttactattgacagggactgtgacagtgatgaatgaaaccattctggaactgtg

2060 HNF1 in HepG2 enhancer (conserved at 60% confidence)

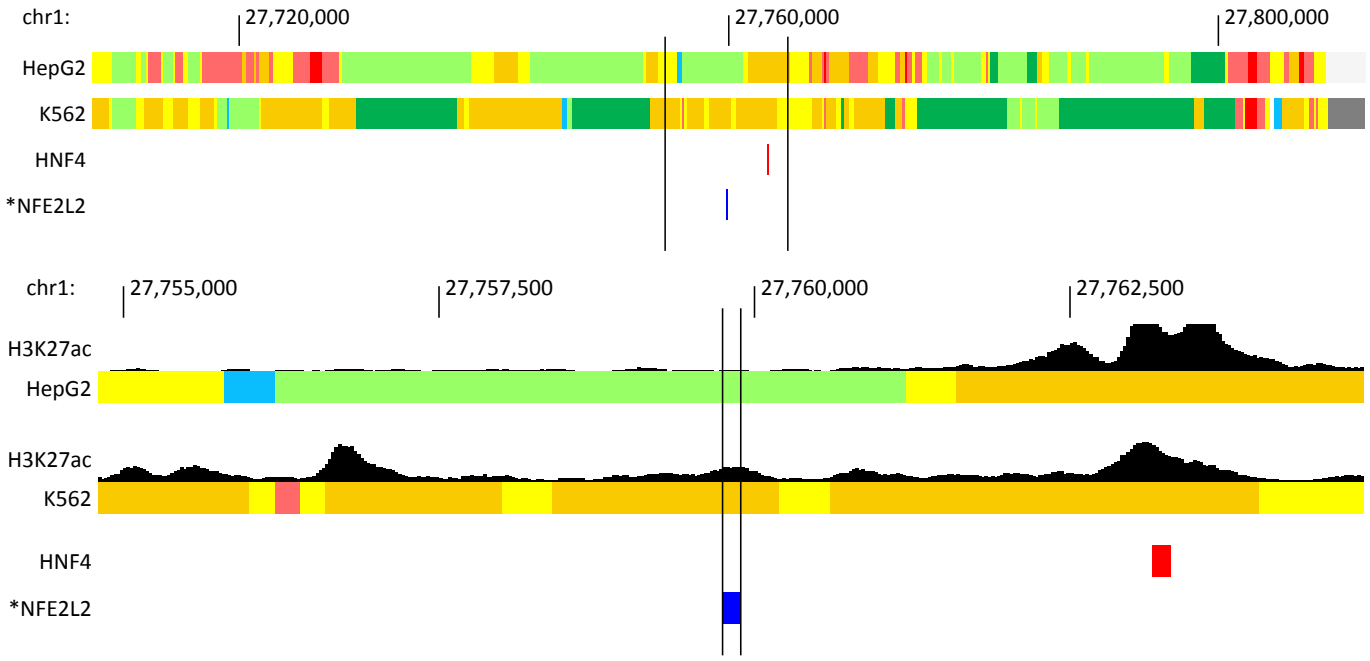
chr10 77727946 77727959 - (hg18)

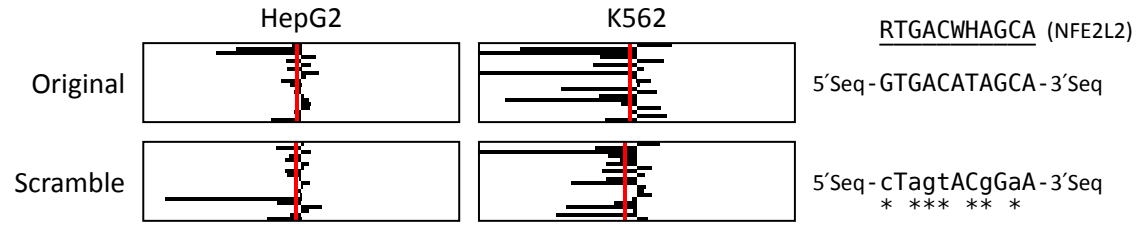


5′Seq = ttgggggtgggaggcagagatgttagcatgatgttttactcagcaggcatagcatcaaggcgcatt
3′Seq = agttctacttgactgagcctgcaccctgtaagtggatcatatgatcagtgatcacaagttaaact

2061 NFE2L2 in K562 enhancer

chr1 27759814 27759824 - (hg18)

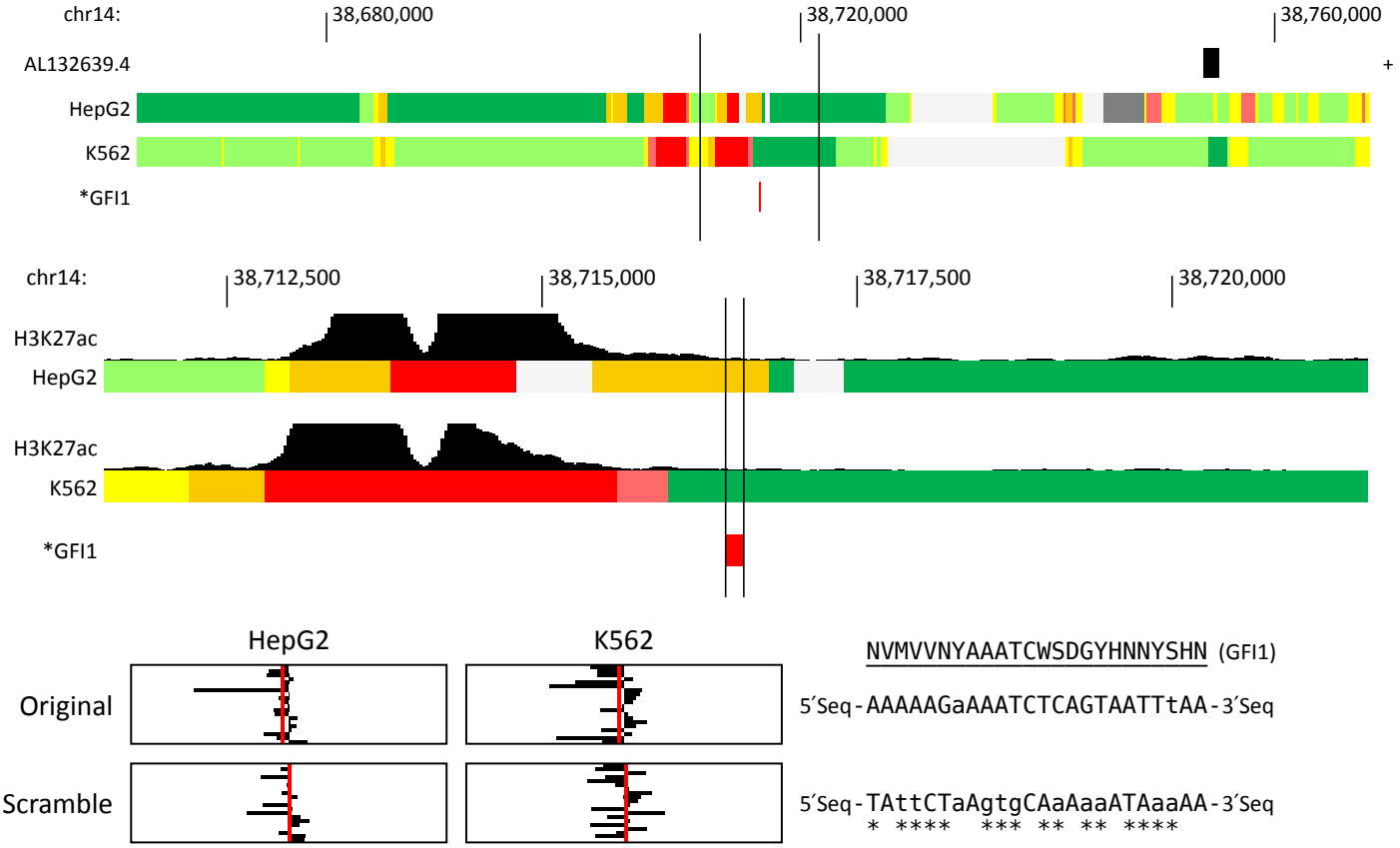




5′Seq = accatggcacacagacctgctcacacatgttgacgctgacacacggccatactggcacaatcataca
3′Seq = caaggacccactgacatacacagagacacgctgtggtacacagacacacaataaggtcacacaaatc

2062 GFI1 in HepG2 enhancer (conserved at 40% confidence)

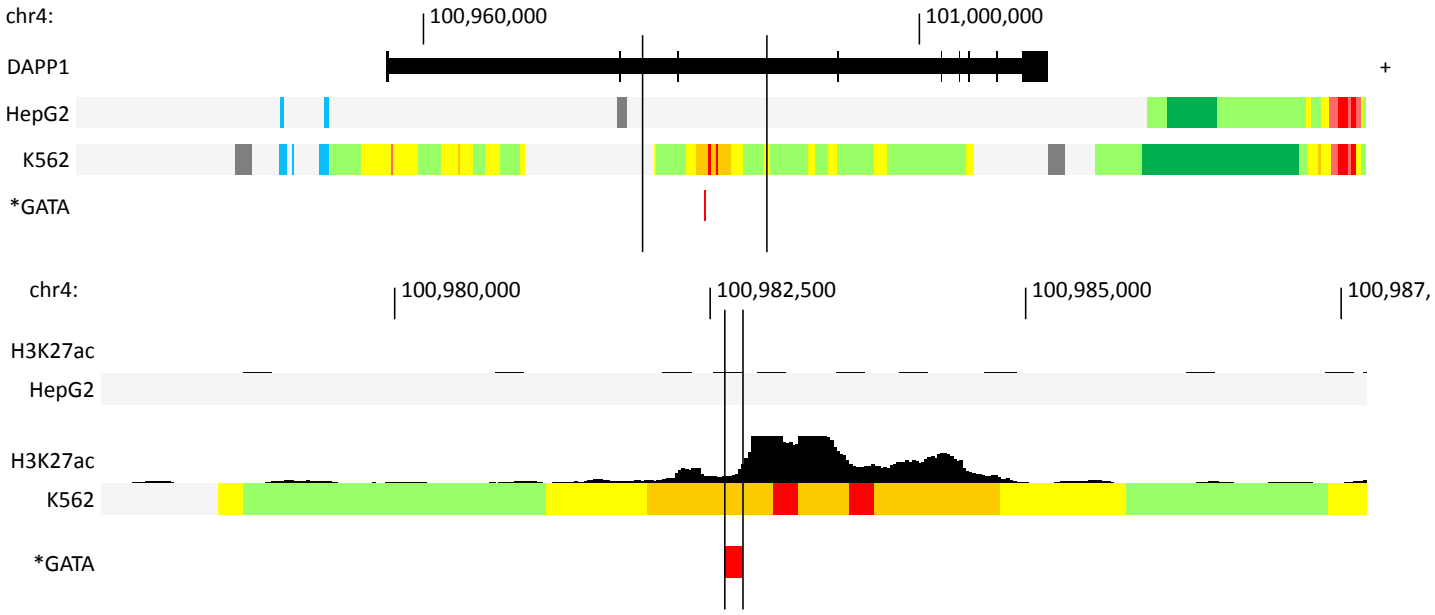
chr14 38716518 38716541 - (hg18)

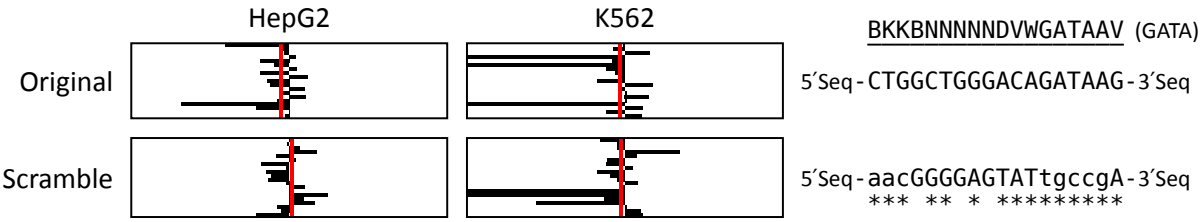


5′Seq = ggtctctacgtgtgcgctctttggaggtagctacaactgaagactgcaatgctggctgcag
3′Seq = ctagcatatgagtggtgtgcttttaaatgtagtaaagtgaaggtactacattcatttaag

2063 GATA in K562 enhancer (conserved at 60% confidence)

chr4 100982680 100982697 - (hg18)

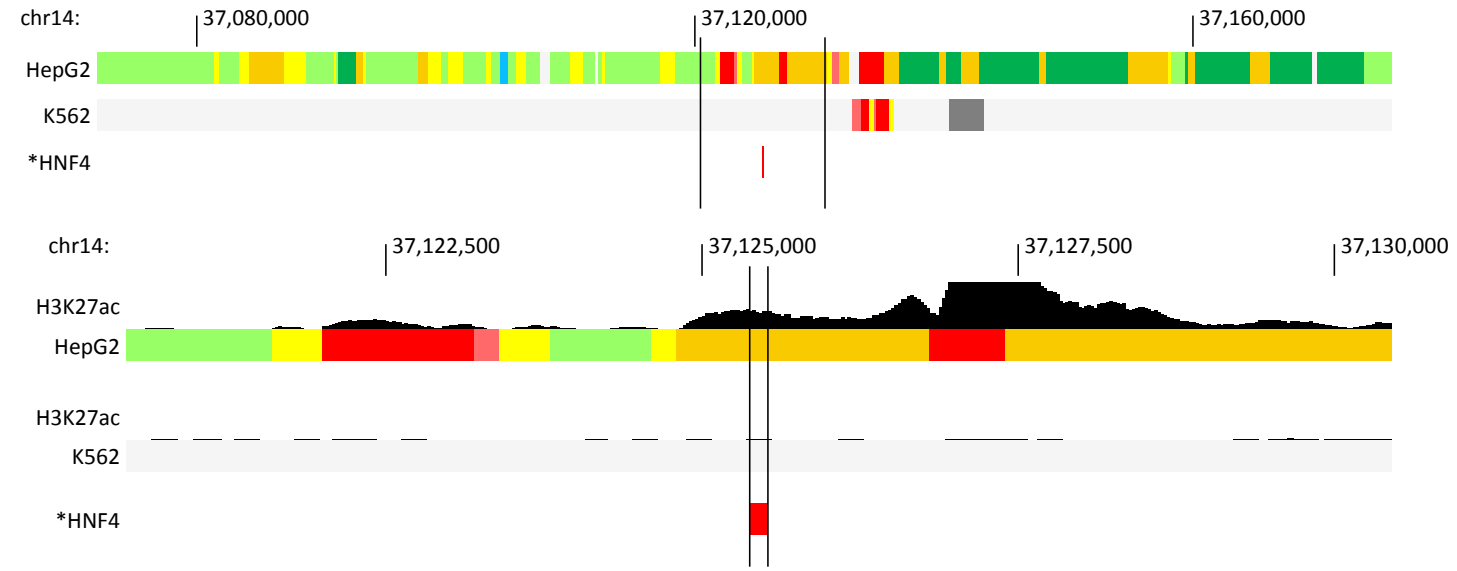


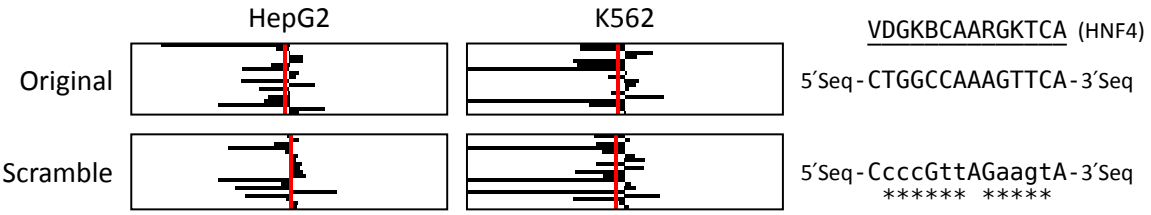


5′Seq = atttgaacactcatctgtcatgggttttgcctgttgttcctagccctgatggctttcccttcat
3′Seq = aggaataaagctggtggactctaactcaagggctggaagccagcaagtcaagtgcatatccat

2064 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 37125443 37125456 + (hg18)

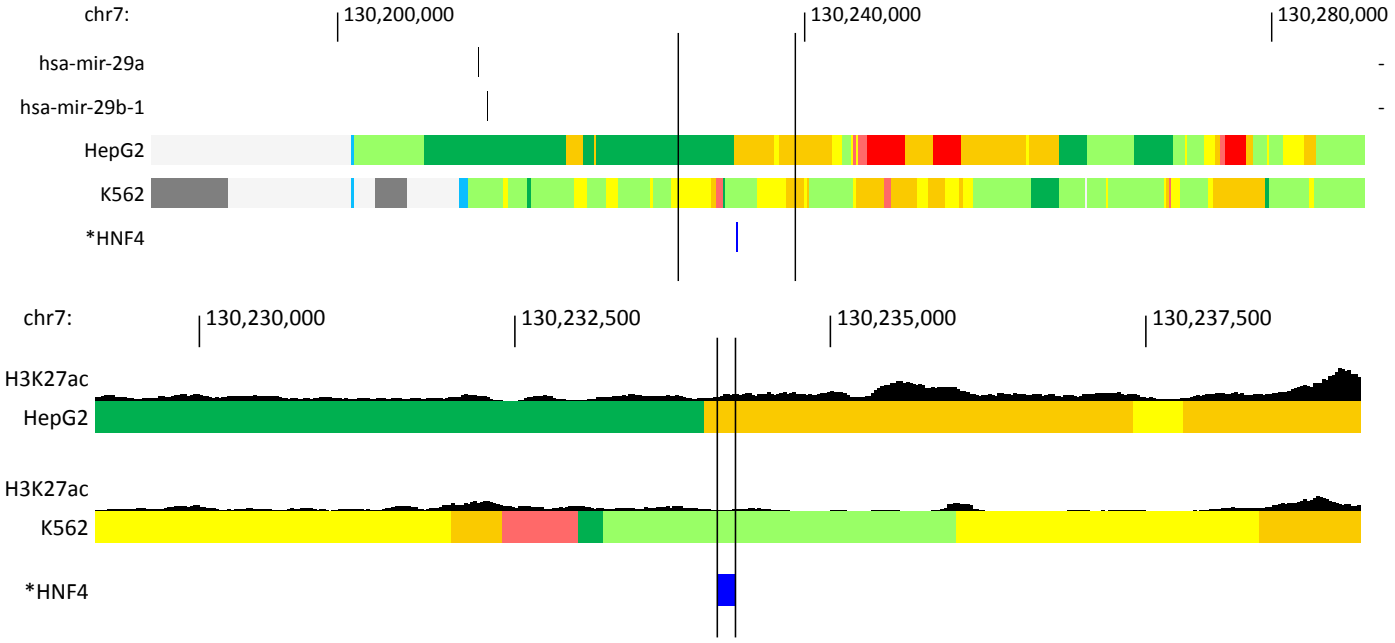


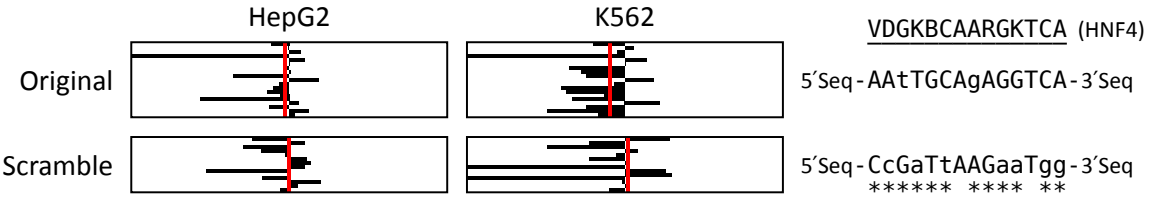


5′Seq = tttccagccccagattgcttggtaaaatgatggtggagaacaaaaaggtgagggctgcagtcctag
3′Seq = aagaaccatgctgggctggggctaaaagaaaaaccaatggaattattatgcccccaaacttagct

2065 HNF4 in HepG2 enhancer

chr7 130234170 130234183 + (hg18)

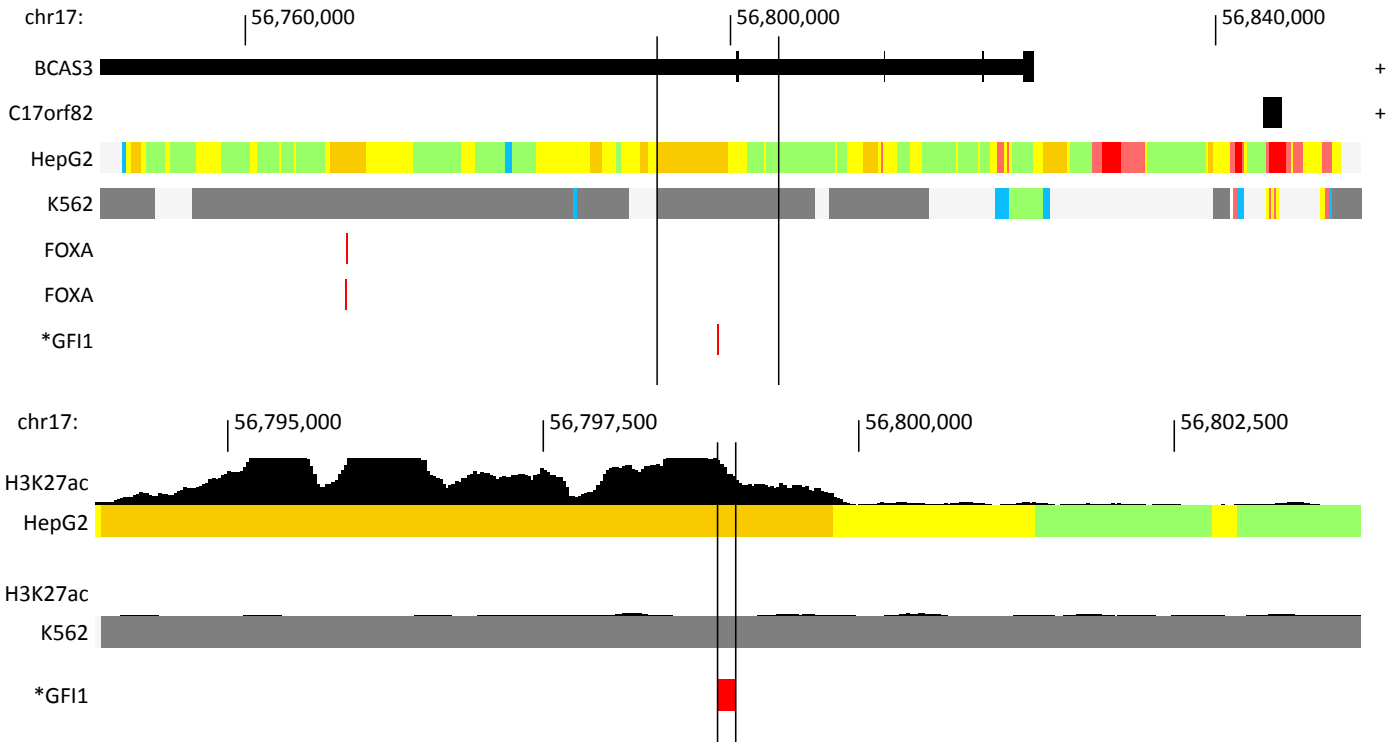


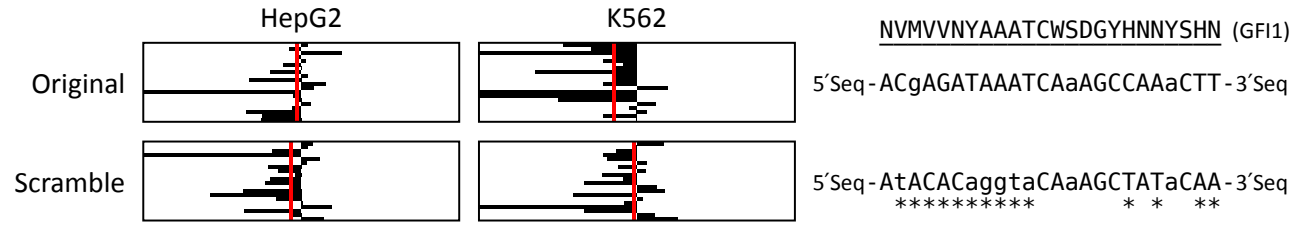


5′Seq = cctccctgatgtttttaactaacattgctagtggtttaagttgggcaccgacaagtattagaacgt
3′Seq = cgttgtttgaacaccggaacttcaaggcgtgcttgaaccacctgatcaaaggagaagggactgag

2066 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr17 56798942 56798965 + (hg18)





5′Seq = gagatgcccttatagatgctgcccattctcccagtgccaggaatcttccctacaattaggt
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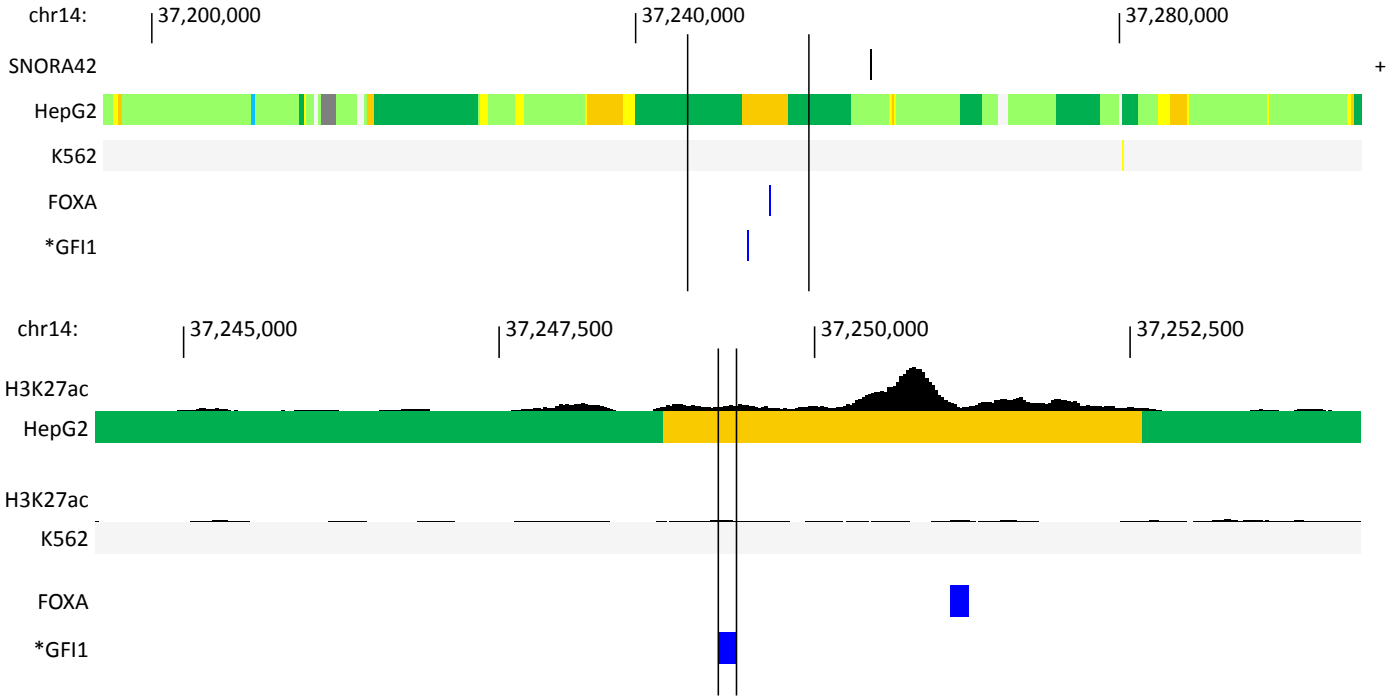
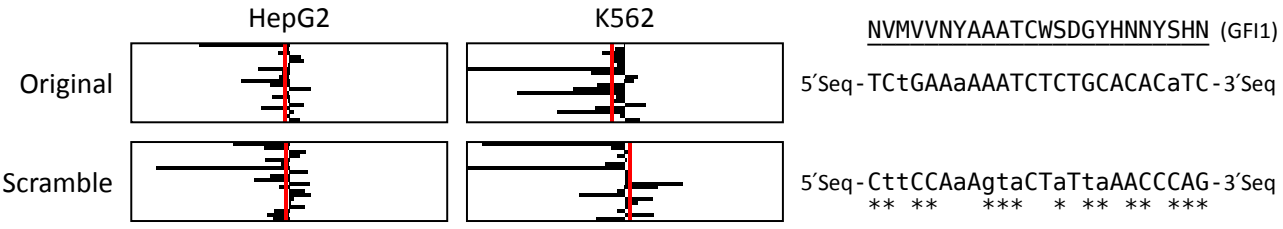
2067 GFI1 in HepG2 enhancer

chr14 37249298 37249321 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-TCtGAAaAAATCTCTGCACACaTC-3′Seq

5′Seq-CttCCAaAgtaCTaTtaAACCCAG-3′Seq

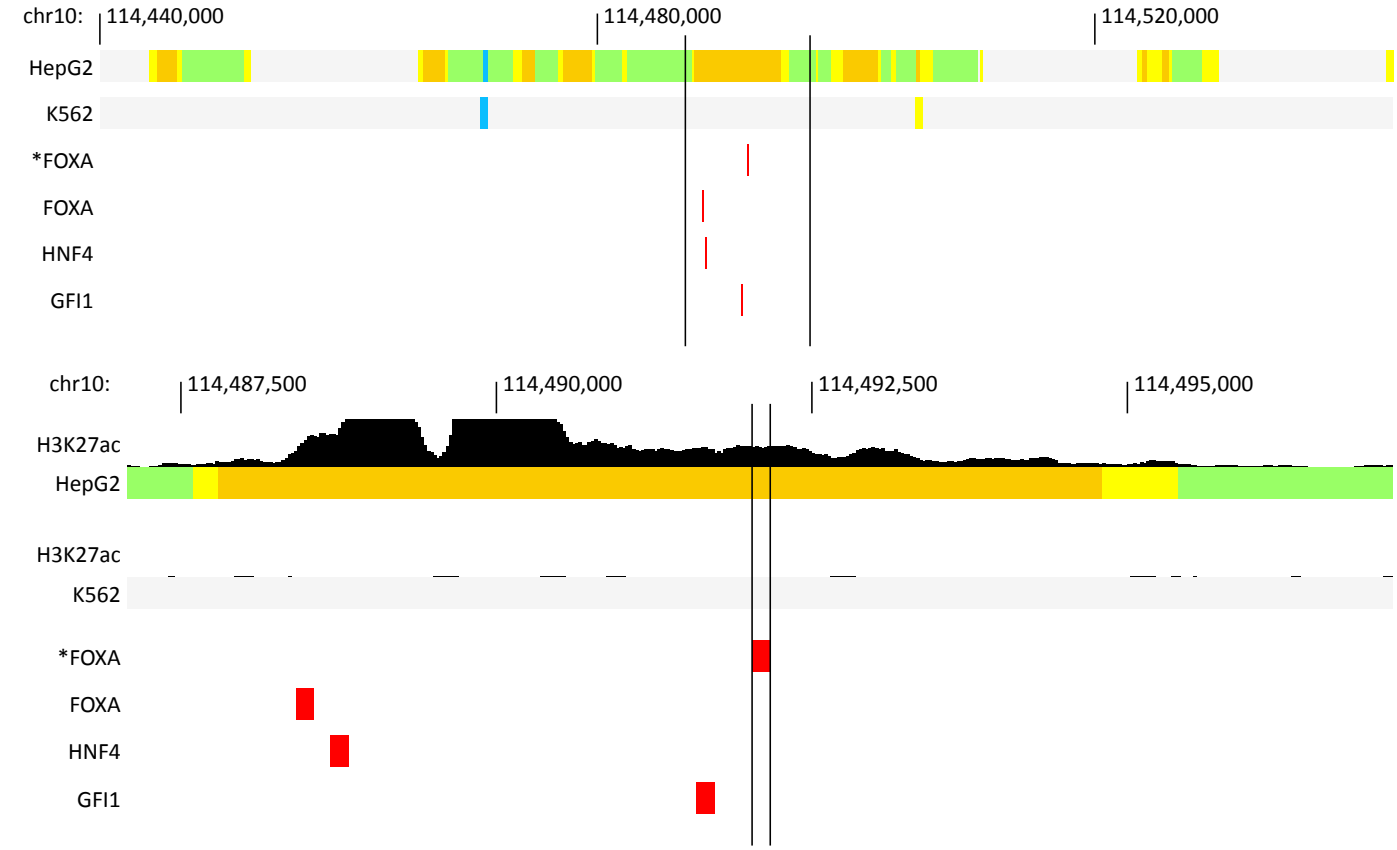
** ** *** * ** ** ***

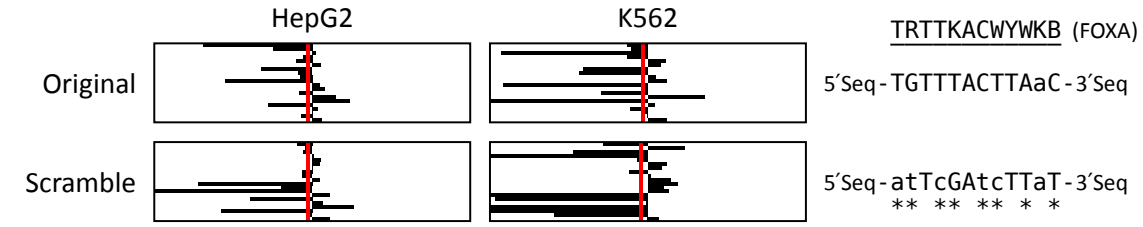
5′Seq = tttgtgattgtatgatgctgttaaagaagtttggaaaacatttgttctaagctgtgagtac

3′Seq = ttctatgagttacataaaggtgactgtgagctacatcttgtgaagcatggagaagggatc

2068 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr10 114492093 114492104 - (hg18)





5′Seq = atttcctagcaactctgataatctgacctggctaggaaggctaggatgctggggttctgtatcaagc
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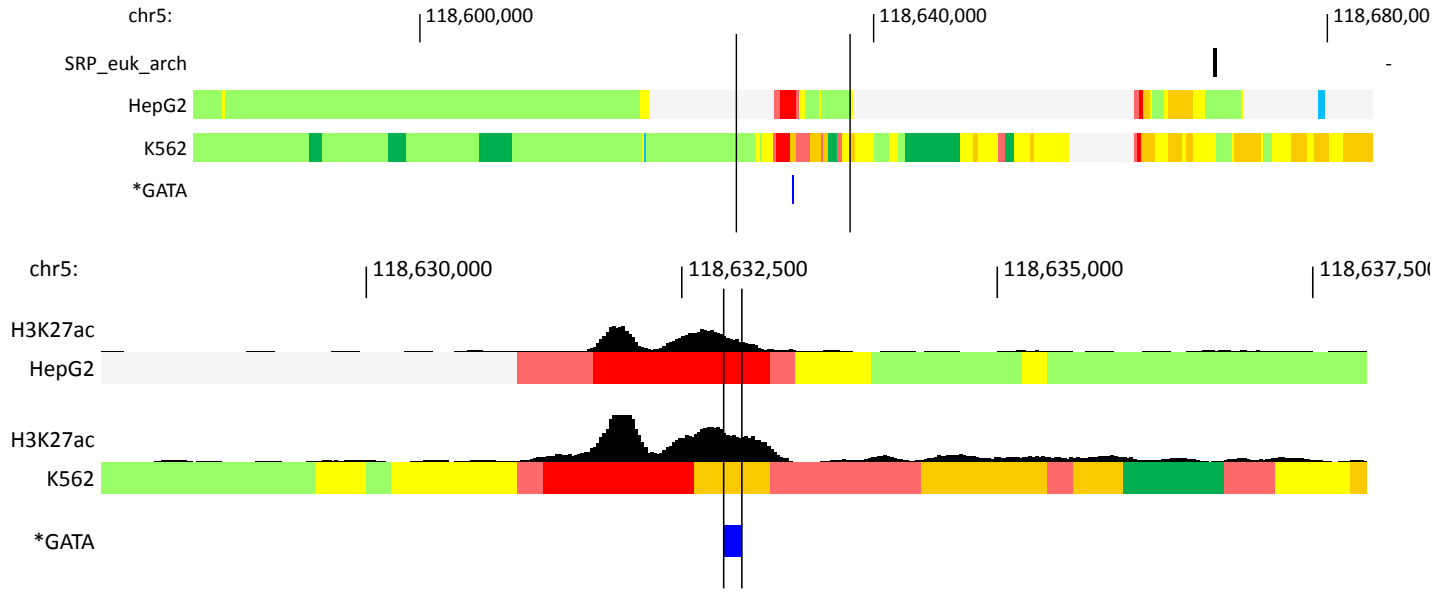
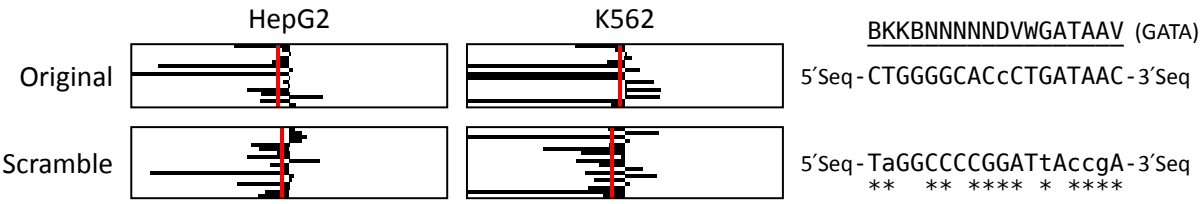
2069 GATA in K562 enhancer

chr5 118632896 118632913 - (hg18)





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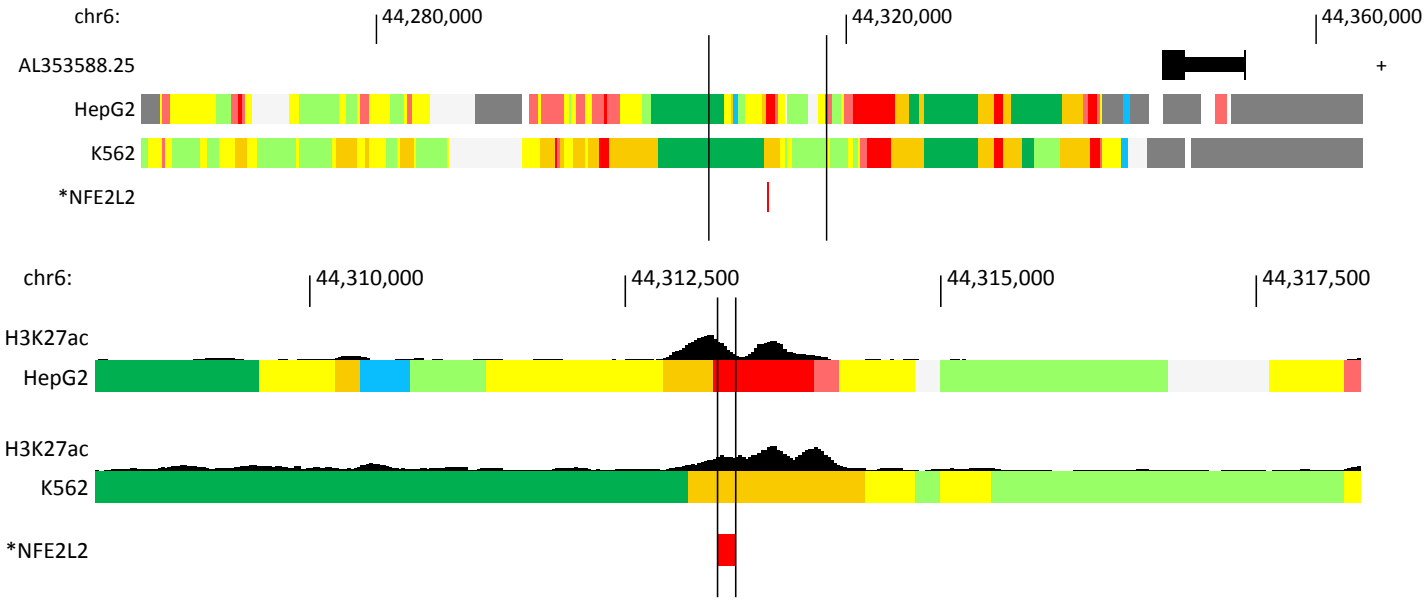
3′Seq = ccgggcagtgctttcgccagtatgtgcggttacaggaggacgtgacaaatagcgggaacccag

2070 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 44313298 44313308 + (hg18)



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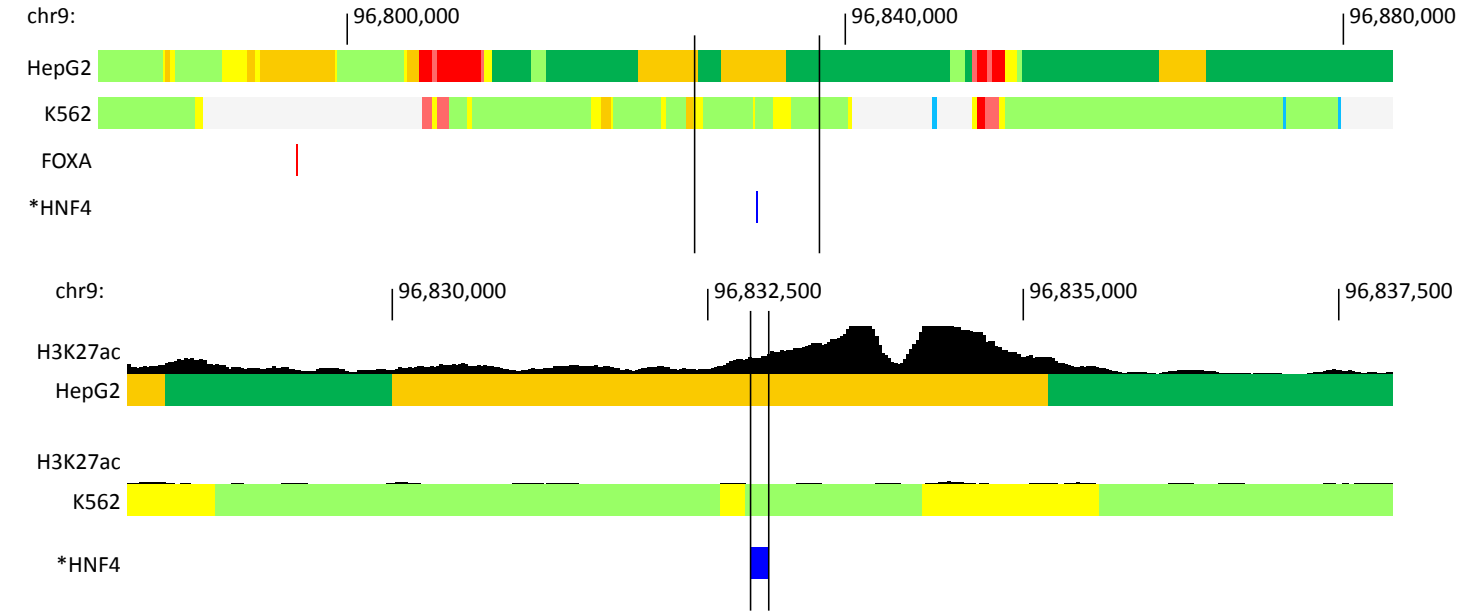
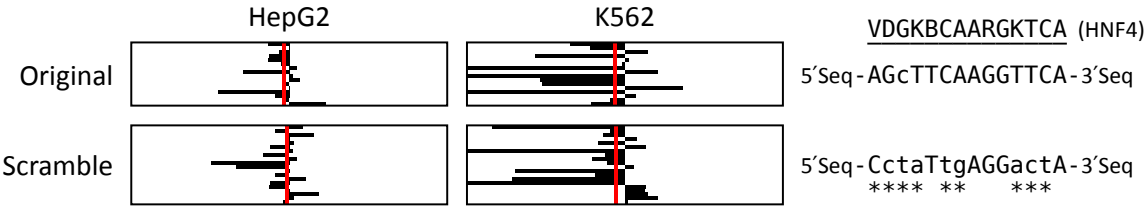
2071 HNF4 in HepG2 enhancer

chr9 96832905 96832918 + (hg18)





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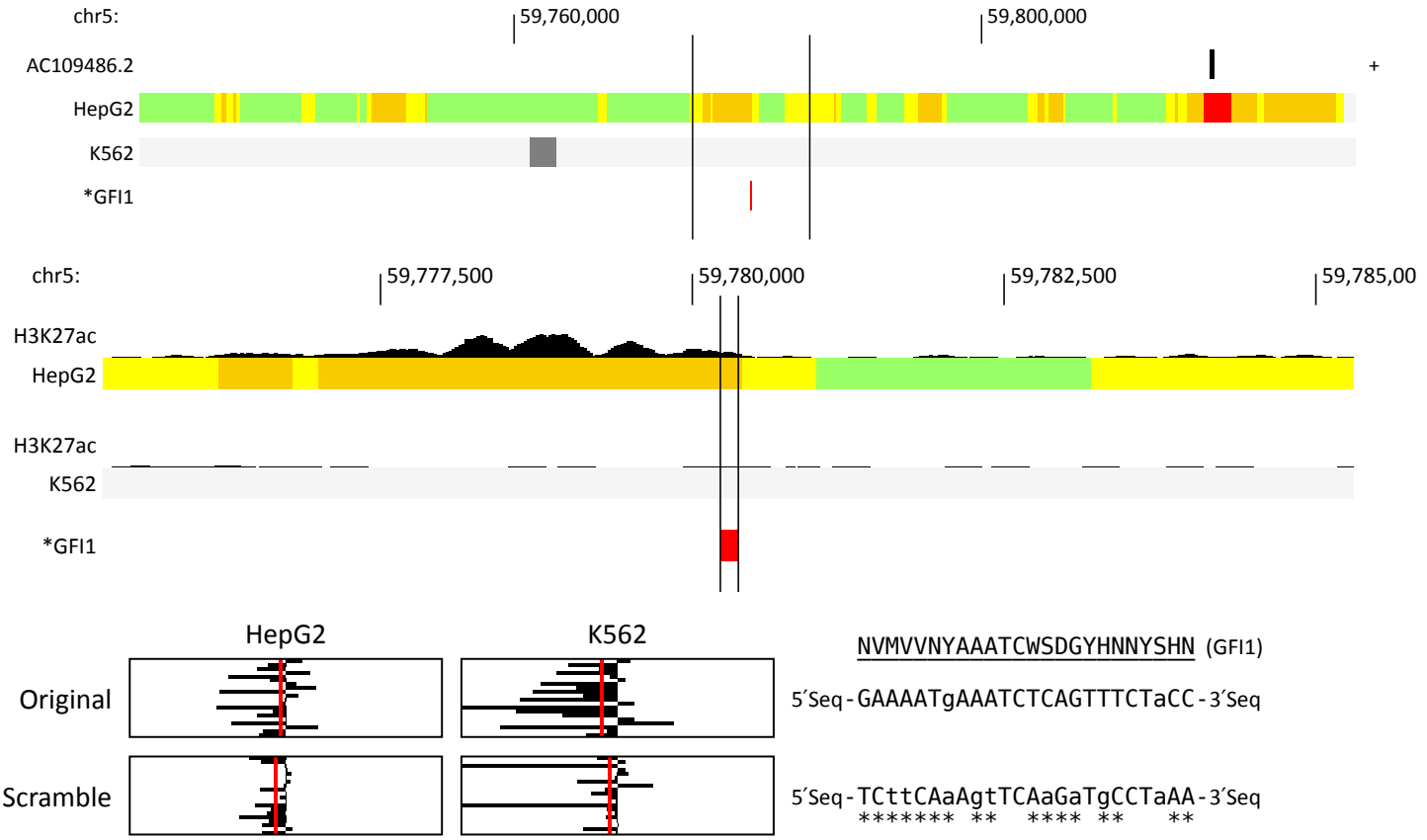
2072 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr5 59780286 59780309 + (hg18)



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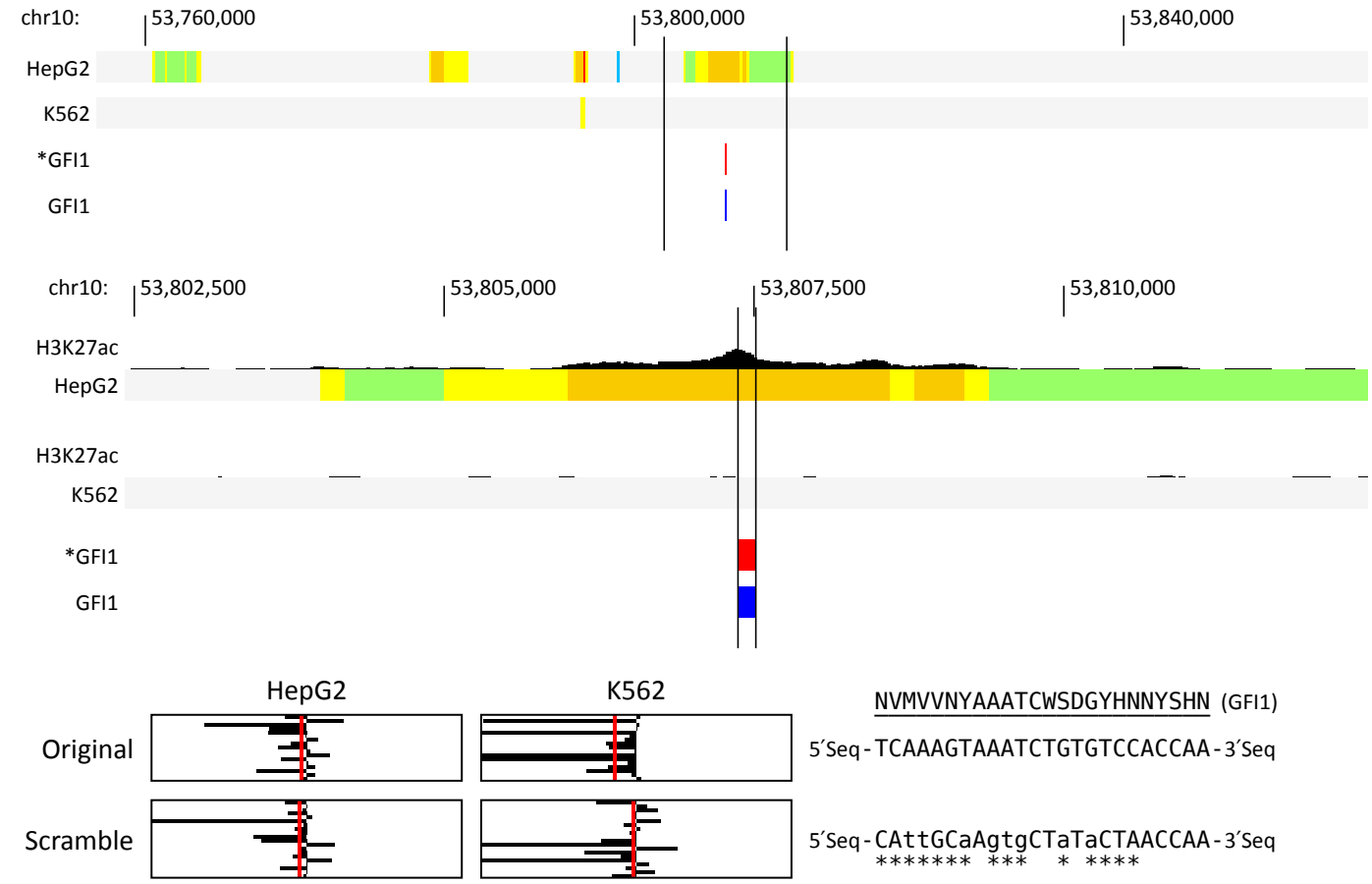
3′Seq = aagaatacaaatctctgacatttgatagcatcccatctaatctcagtgctttcatagcag

2073 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr10 53807432 53807455 + (hg18)



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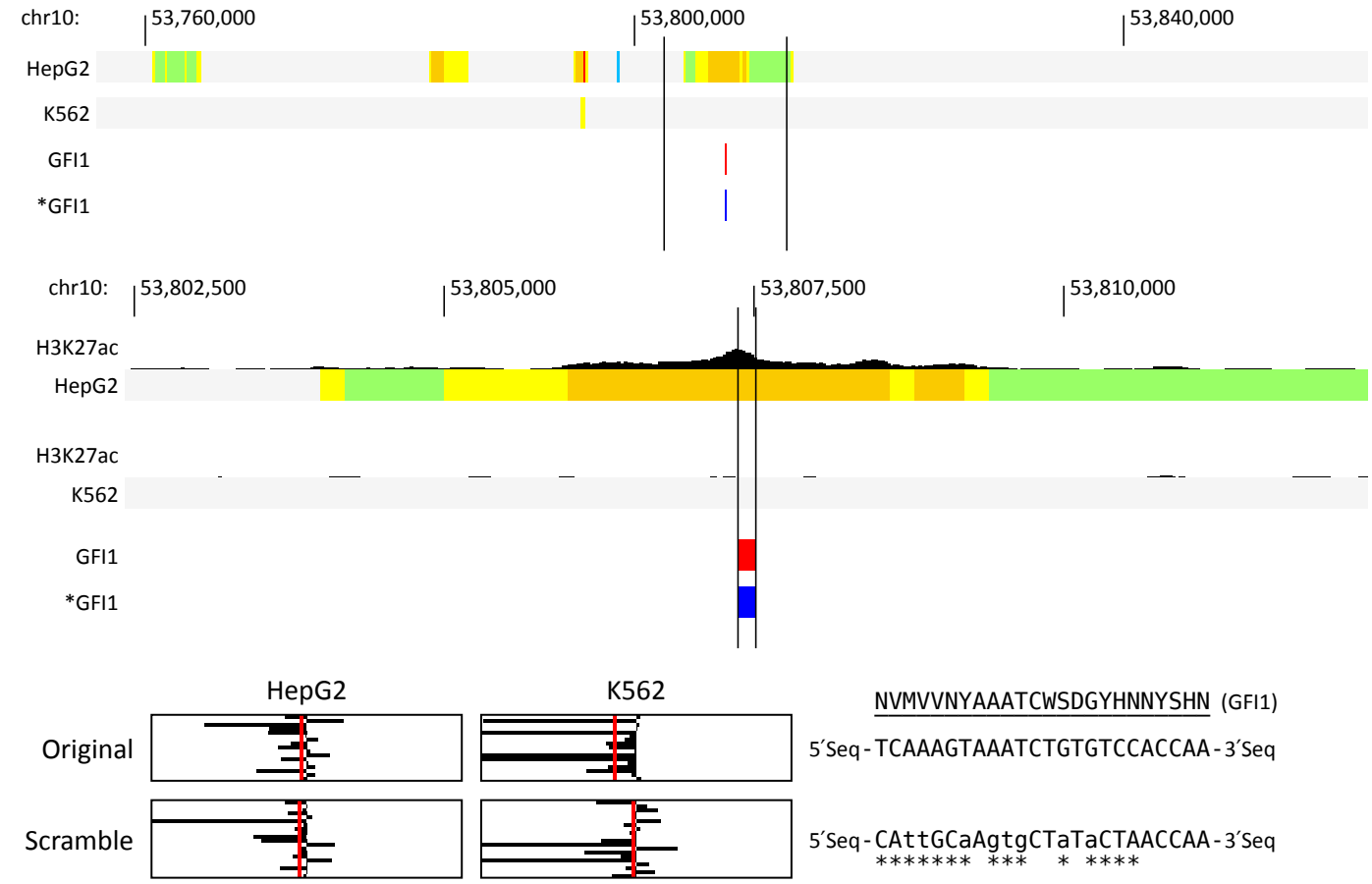
2074 GFI1 in HepG2 enhancer

chr10 53807432 53807455 + (hg18)



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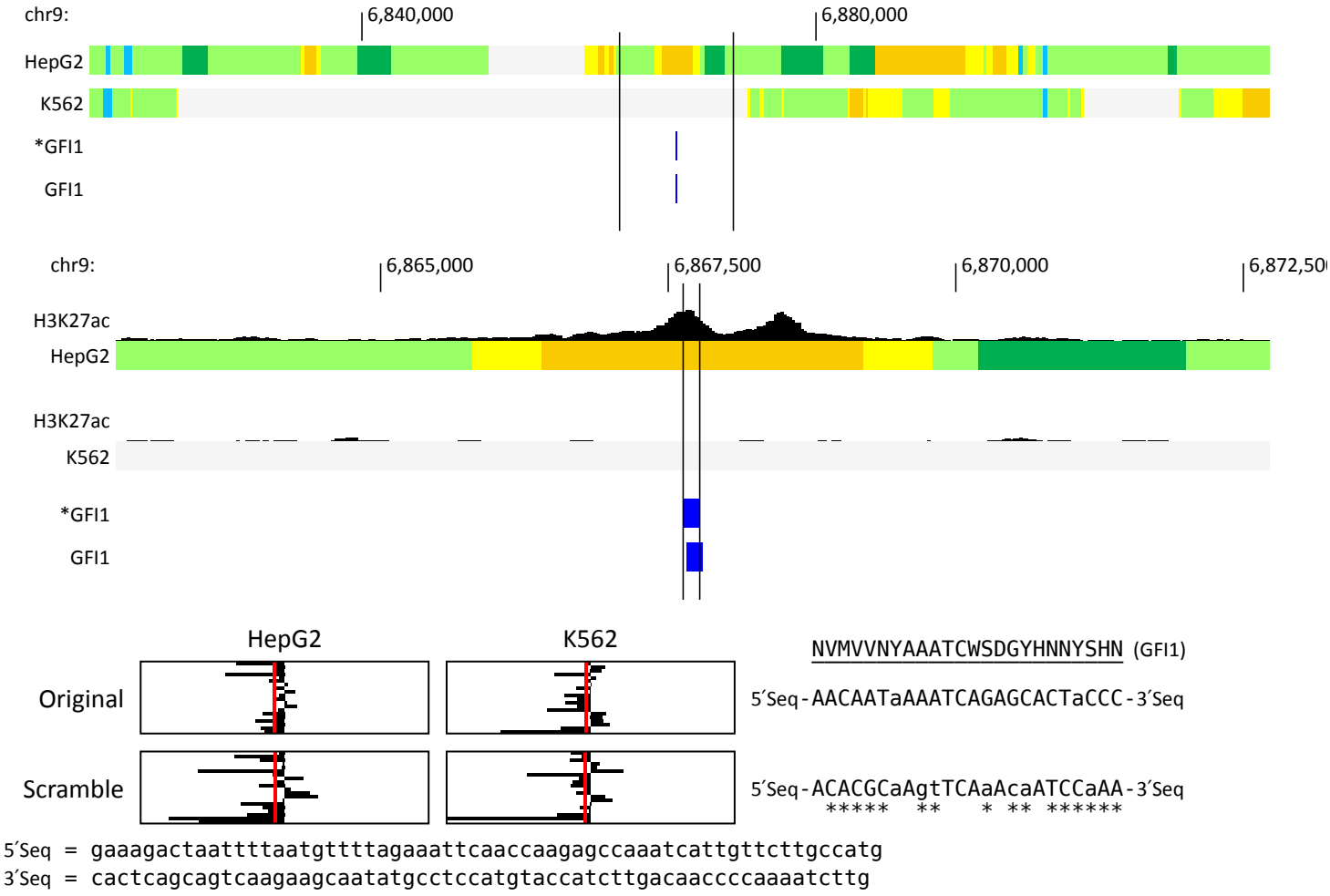
2075 GFI1 in HepG2 enhancer

chr9 6867691 6867714 - (hg18)



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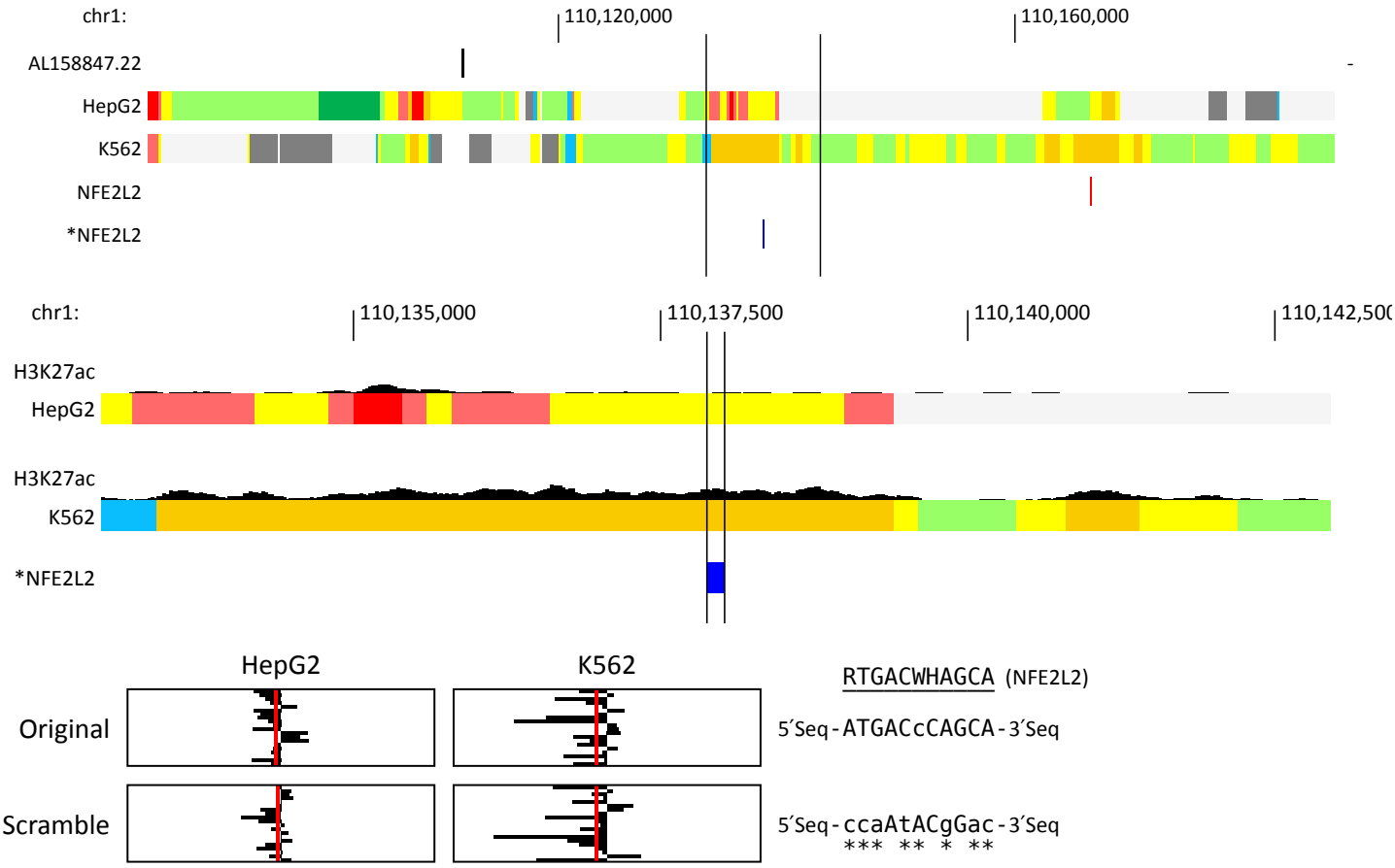
2076 NFE2L2 in K562 enhancer

chr1 110137944 110137954 + (hg18)



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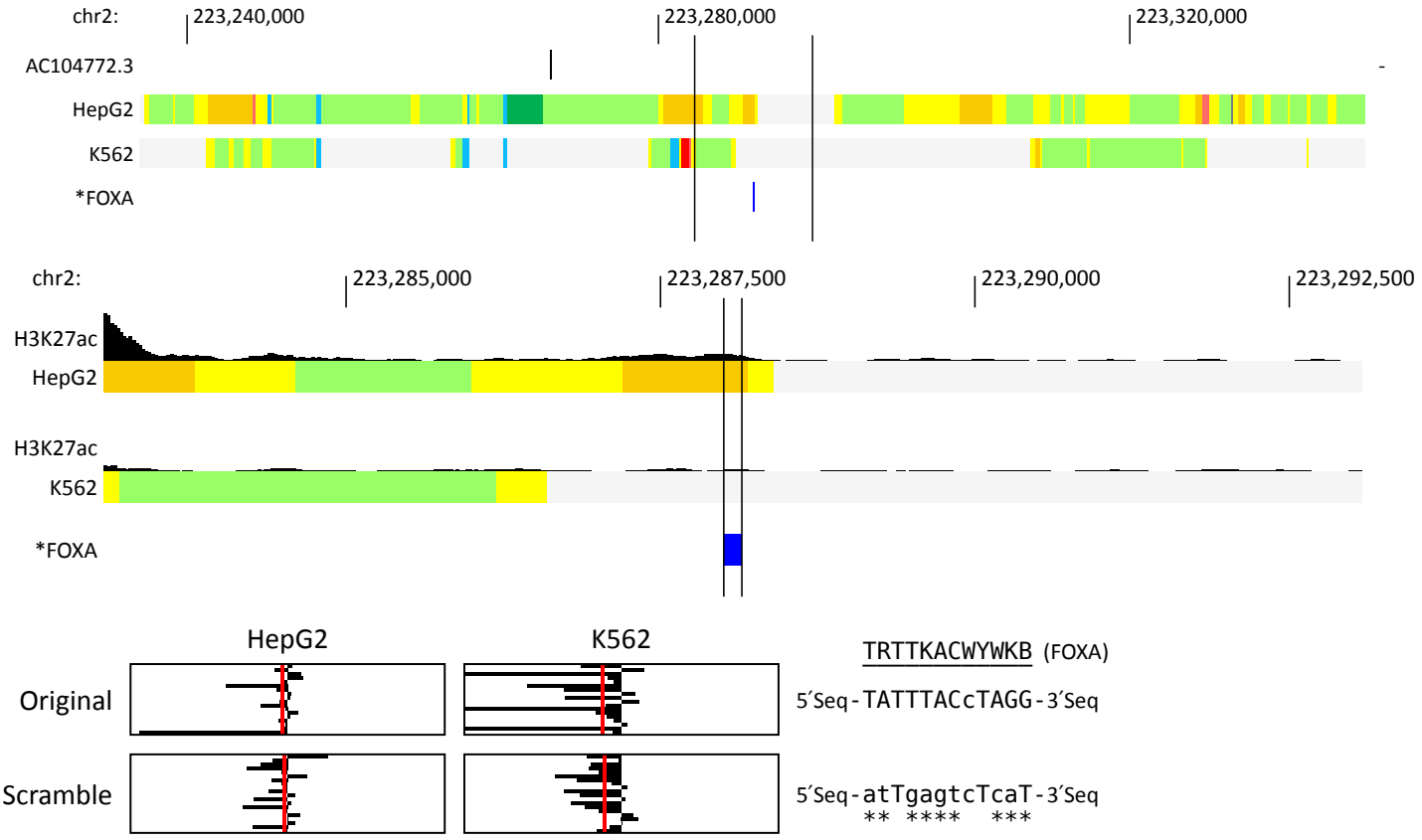
2077 FOXA in HepG2 enhancer

chr2 223288070 223288081 - (hg18)



5′Seq = taaaaggccaggcagagaccataagatacaggcagaaatgacctggaggatcattcactcccaactc
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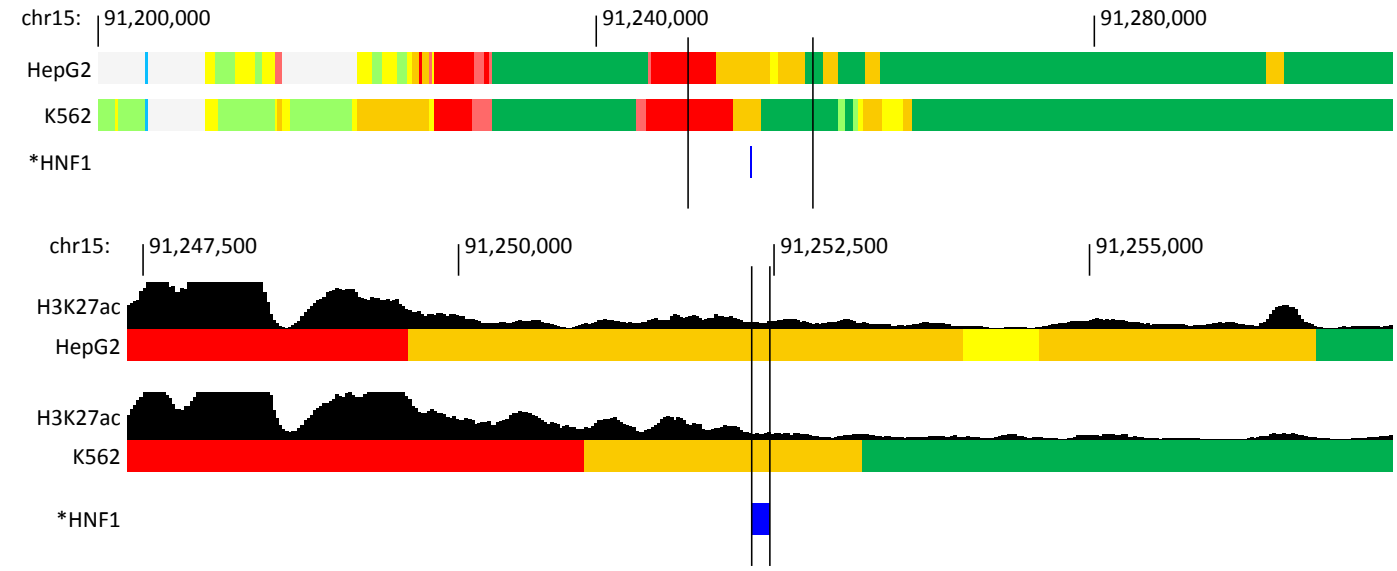
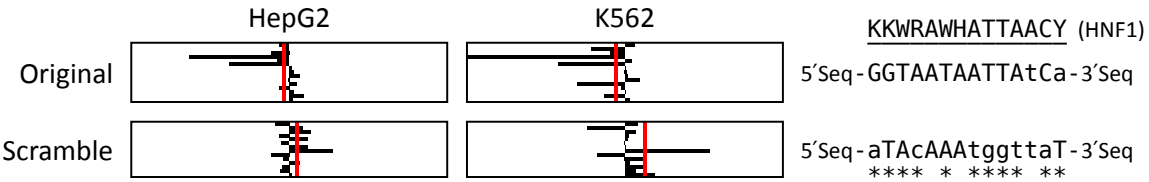
2078 HNF1 in HepG2 enhancer

chr15 91252389 91252402 - (hg18)

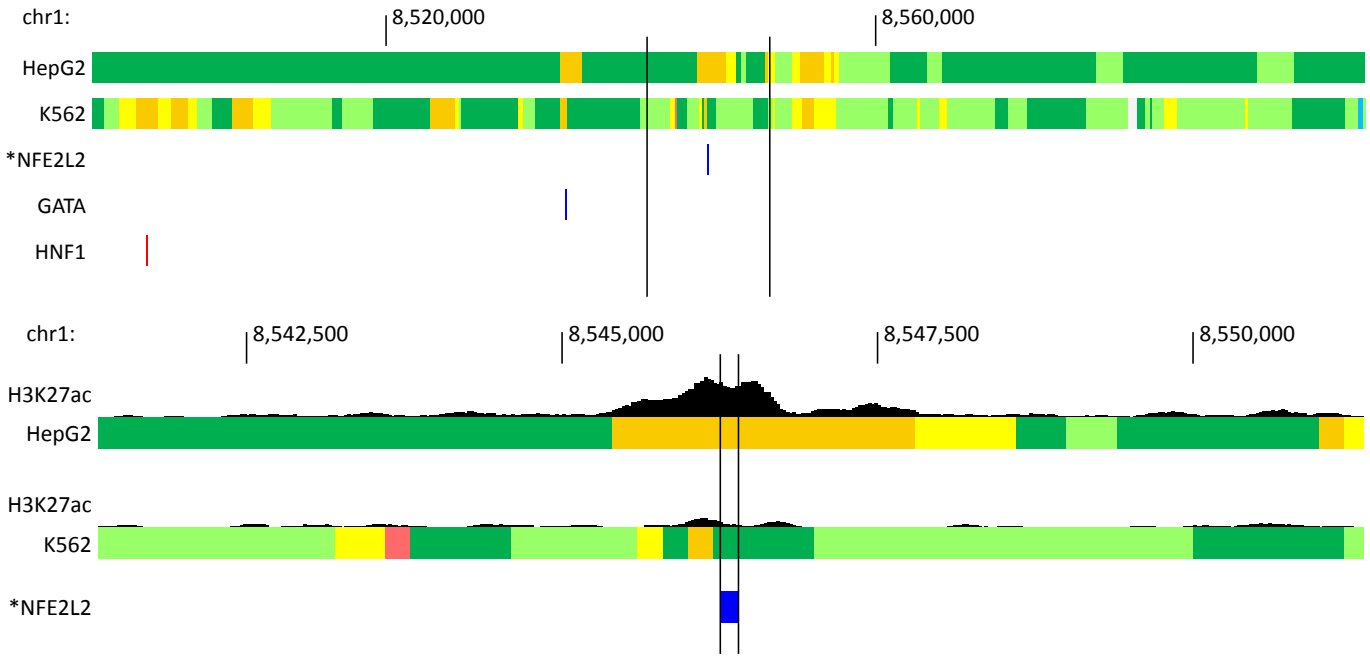


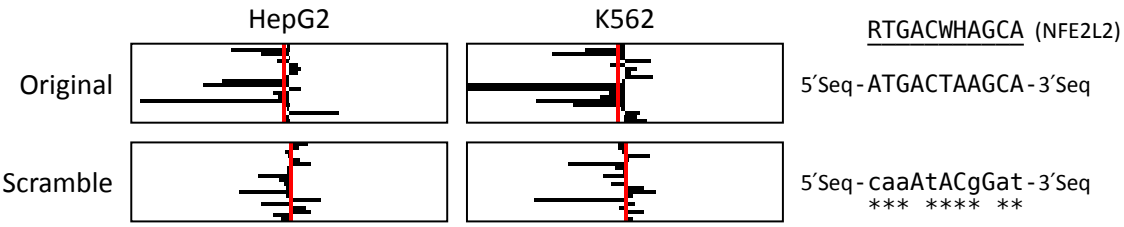


5′Seq = caccacagtattcagtattcattctctaacagcttgagaggggaaatgagacagaggataaaccag
3′Seq = gcttgggggagtgggggtgggtagttatctactcagactaactggcaaaagccgggctgtgattc

2079 NFE2L2 in HepG2 enhancer

chr1 8546321 8546331 - (hg18)





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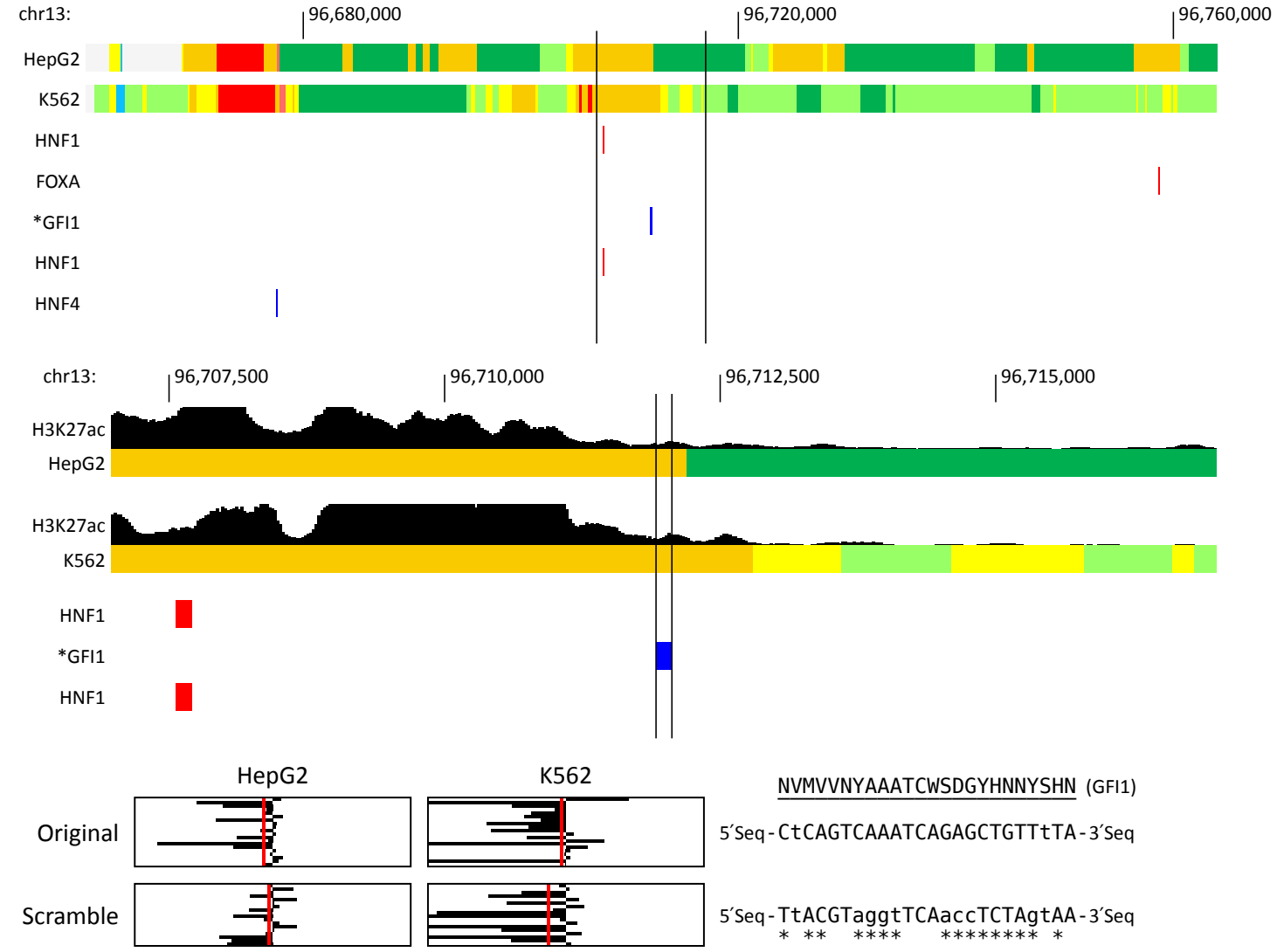
2080 GFI1 in HepG2 enhancer

chr13 96711979 96712002 - (hg18)



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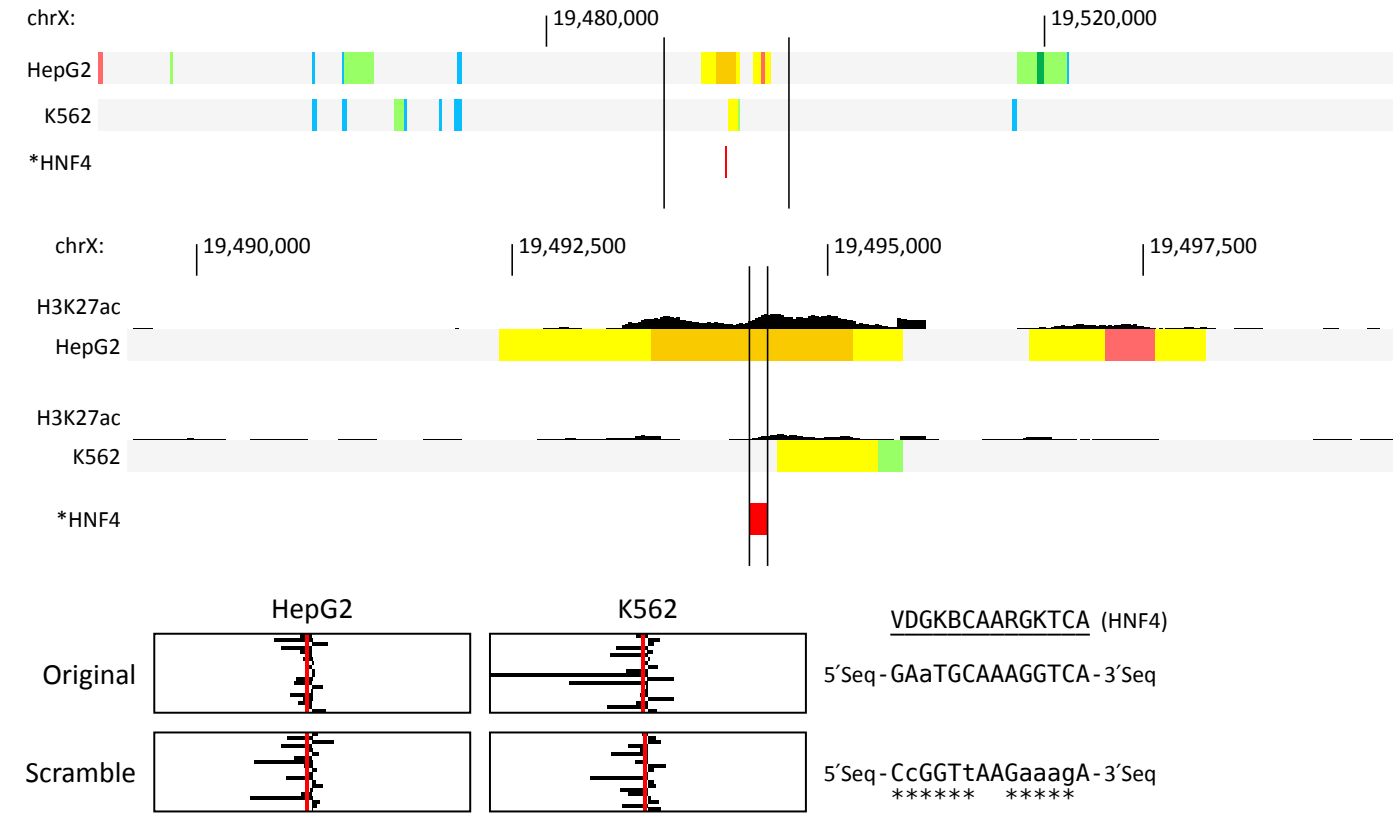
3′Seq = cctgctgcaaaagtggtgctggggccttccagccagtgcctgaagtgtgggaaatctttg

2081 HNF4 in HepG2 enhancer (conserved at 50% confidence)

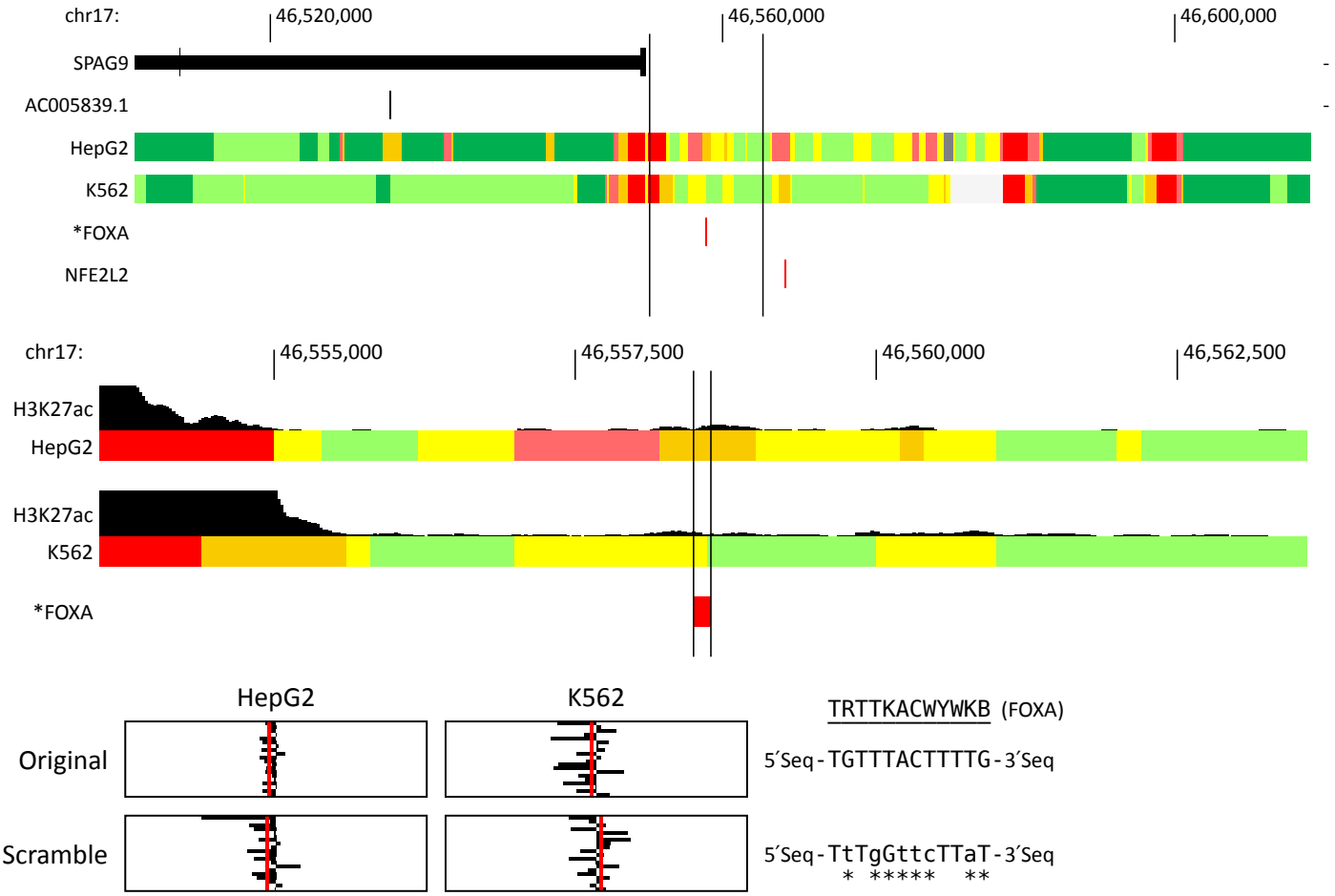
chrX 19494446 19494459 + (hg18)



5′Seq = catcagactgaaaaacatgtgattcatattttcatgatagcgatcatagacatctccagacccaaa
3′Seq = aaggtgaatgctcttagcaagcaagacagattatcctgtatattctggaggagggagaatacctc

2082 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 46558550 46558561 + (hg18)



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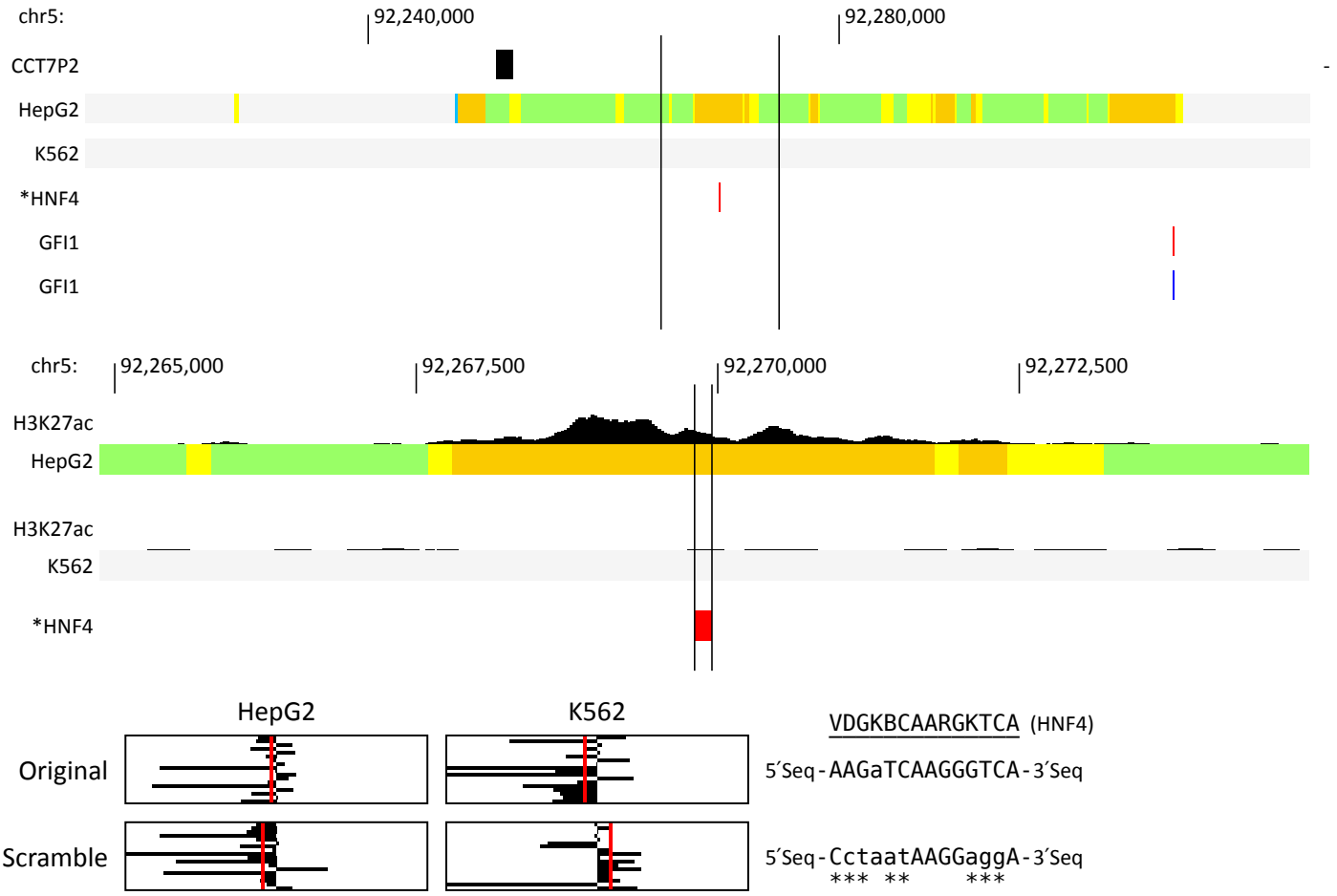
3′Seq = attcctacagggaaggaaattccatttcaagagattccttggccttgcaaaaatagtgaggacagt

2083 HNF4 in HepG2 enhancer (conserved at 60% confidence)

chr5 92269874 92269887 - (hg18)



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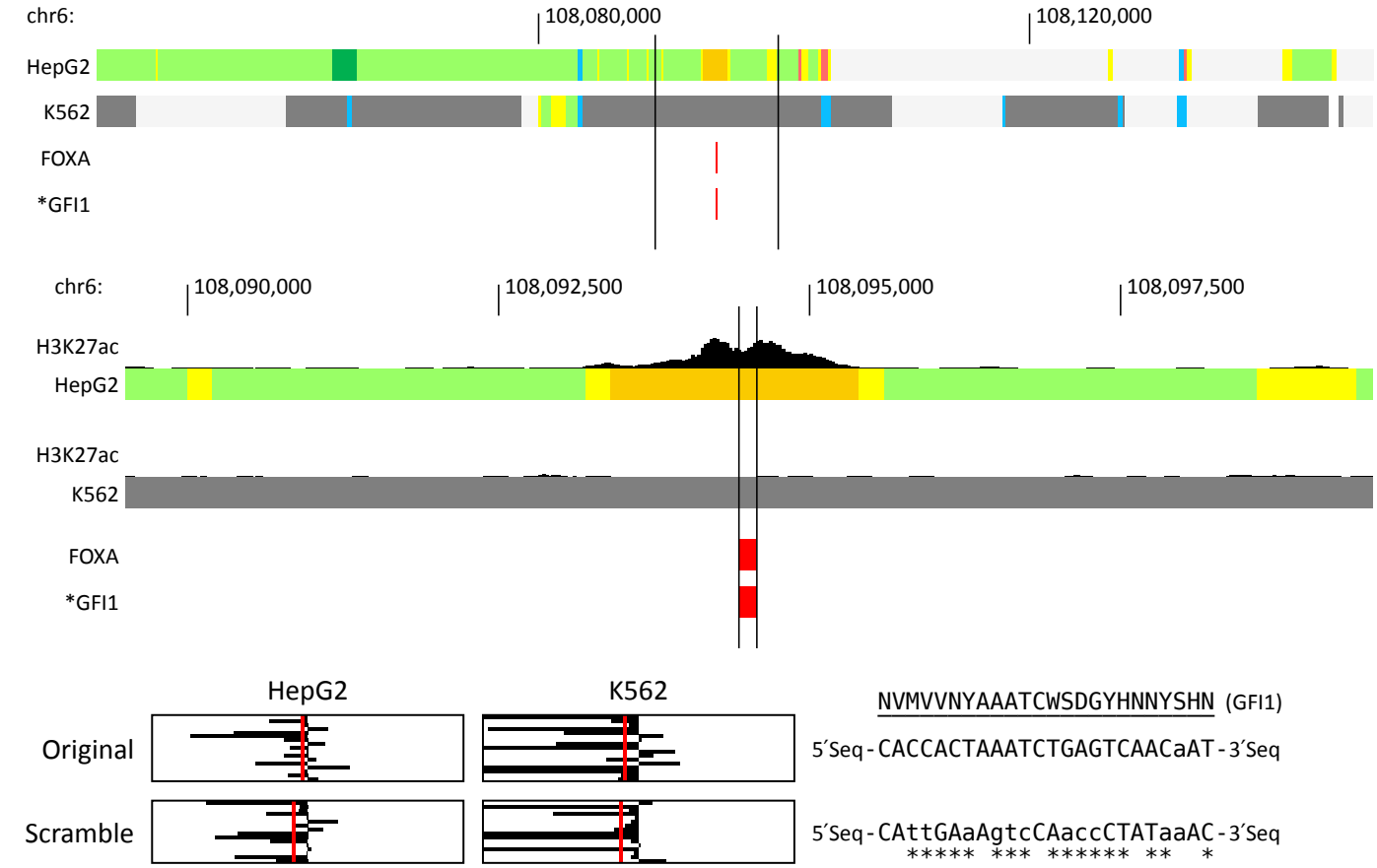
3′Seq = cagttataaacaacacagataaaaaaagaagaaaaaagaggaagaaagtaagaaagctggaagga

2084 GFI1 in HepG2 enhancer (conserved at 40% confidence)

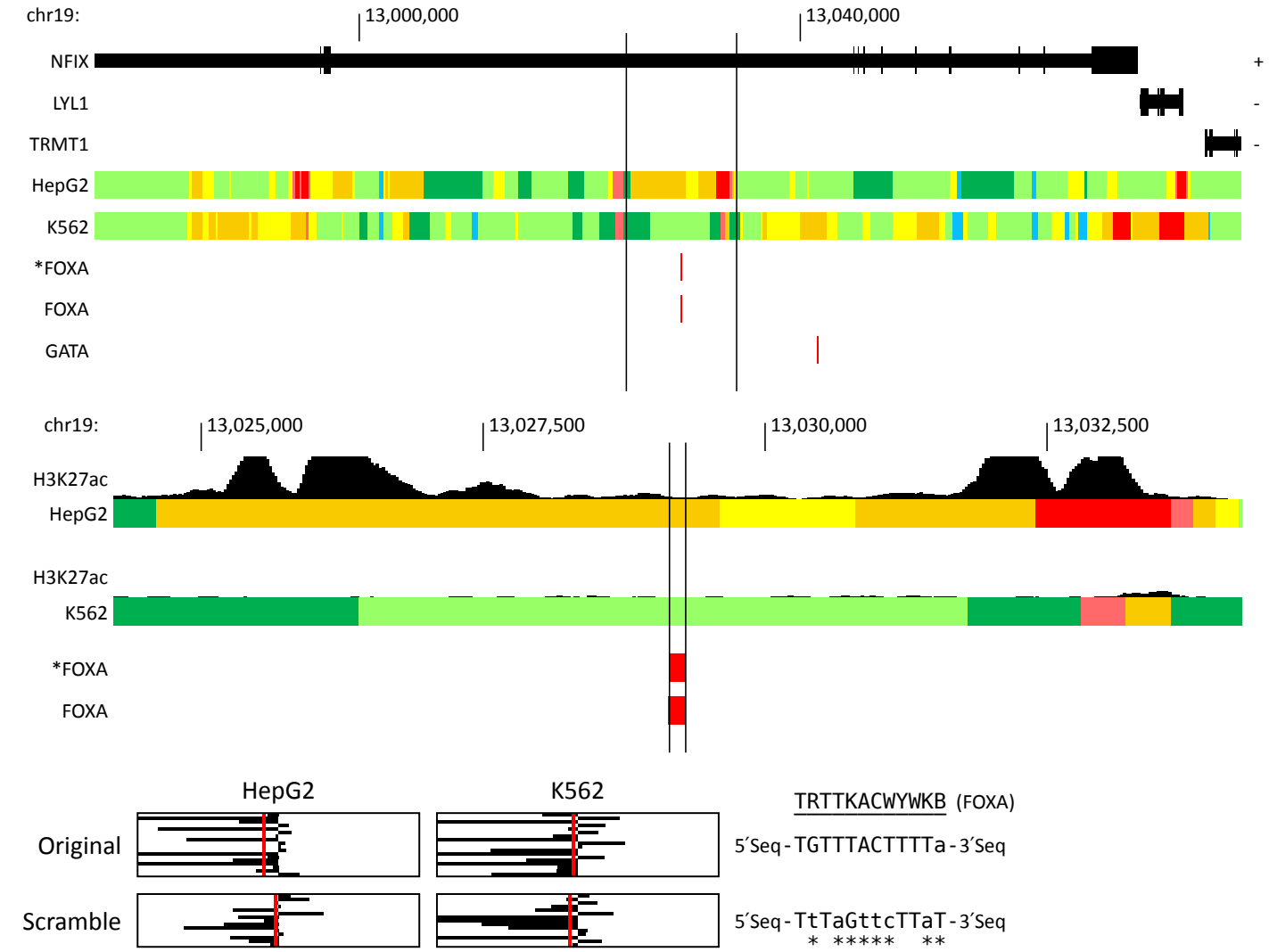
chr6 108094493 108094516 - (hg18)



5′Seq = tcttggcttaagtaaacttgcttcttcaaggcttgccatcaacagagtccggctcacgttt
3′Seq = ctctaatctggacactgggttcggaatccaggctcaggttgcacttggaagctgacagca

2085 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr19 13029219 13029230 - (hg18)



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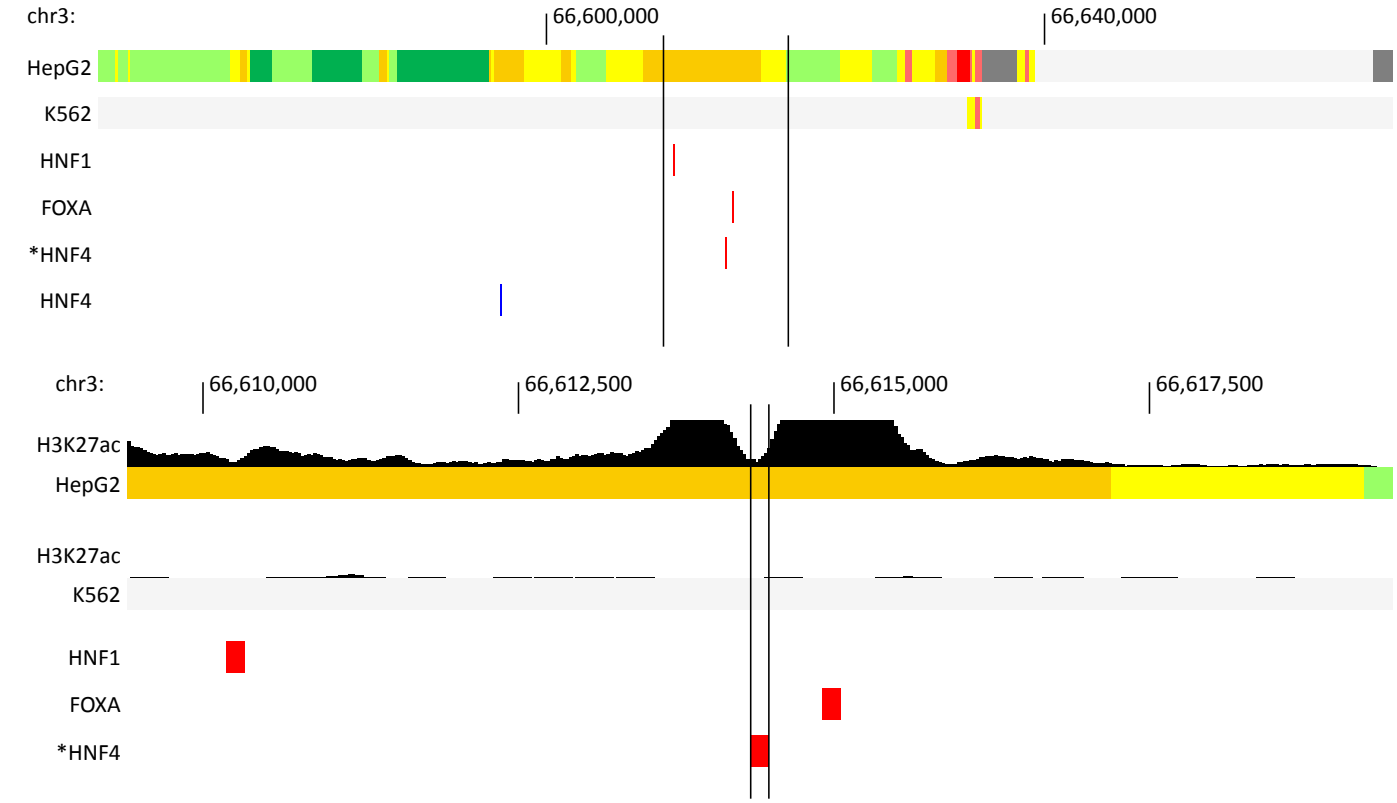
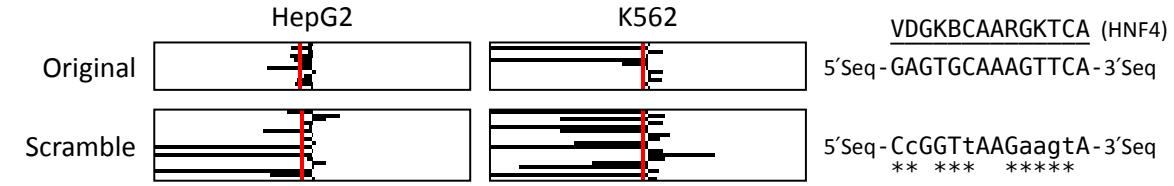
3′Seq = attaagtaaacaatgtcggctttccgcctcctcccctgccatcccagccagtaatttgggggatga

2086 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr3 66614406 66614419 + (hg18)





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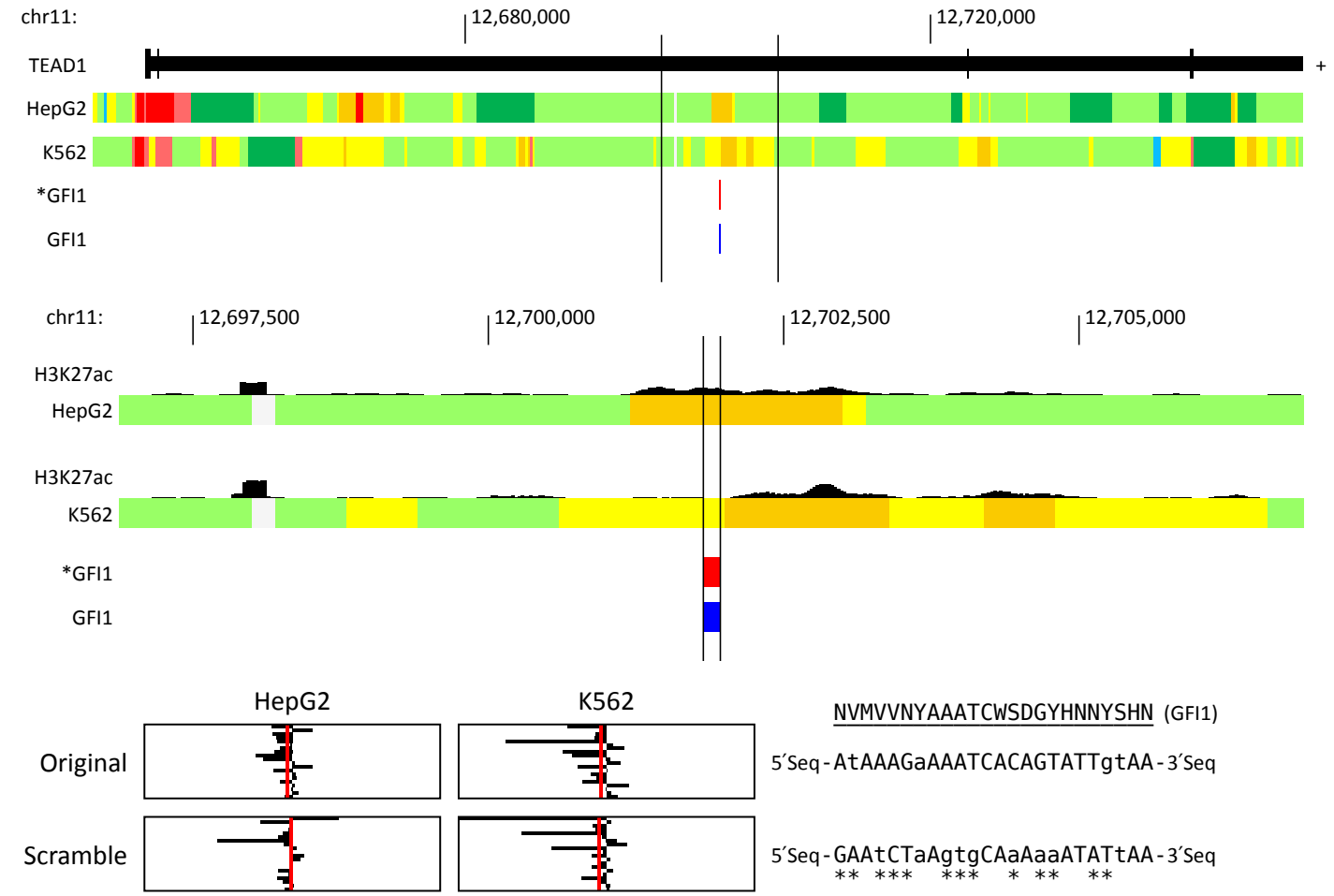
3′Seq = ctctgatattggtggctttctcactttgtagctttttttggcaagtgccccttggcctggttgttc

2087 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr11 12701881 12701904 + (hg18)



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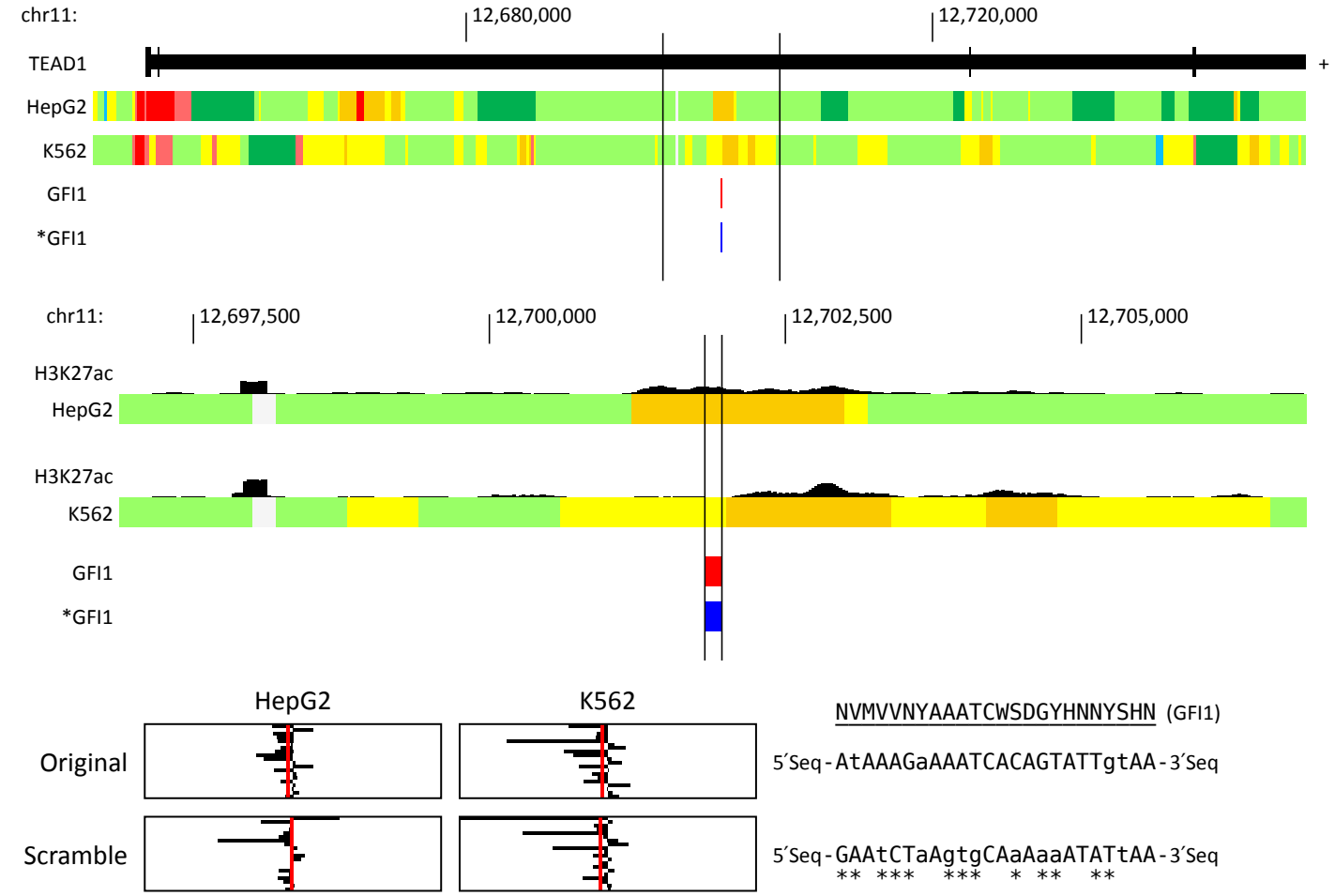
2088 GFI1 in HepG2 enhancer

chr11 12701881 12701904 + (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AtAAAGaAAATCACAGTATTgtAA-3′Seq

5′Seq-GAAtCTaAgtgCAaAaaATATtAA-3′Seq

** *** *** * ** **

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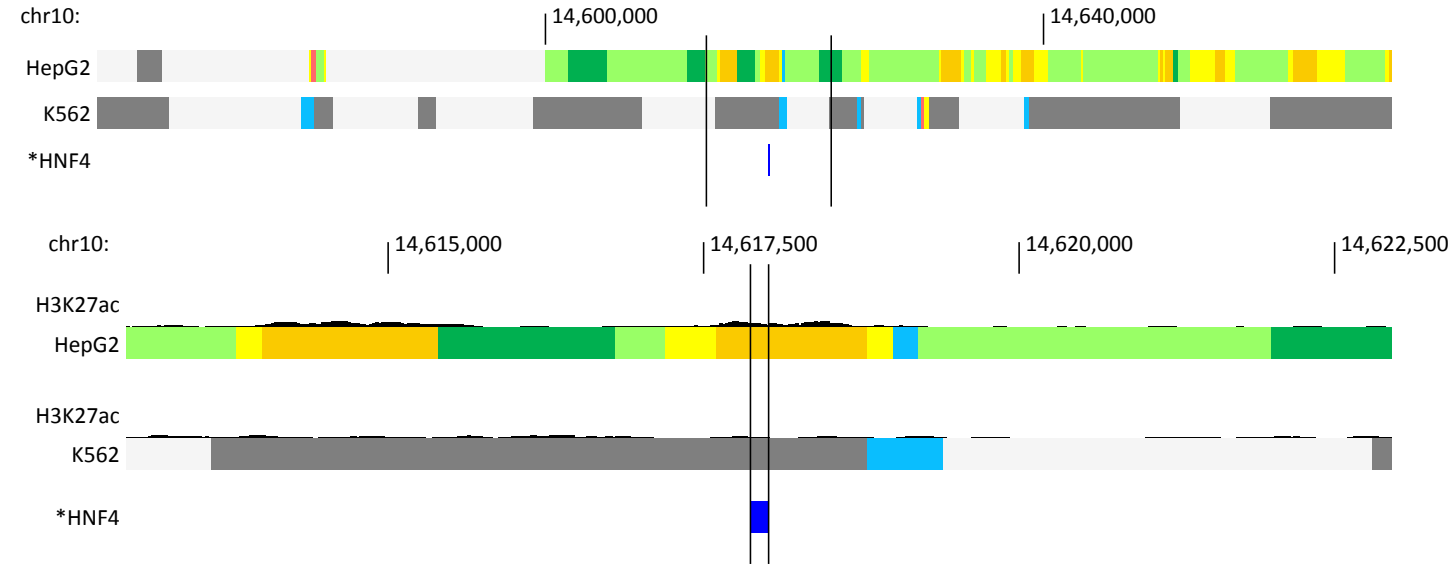
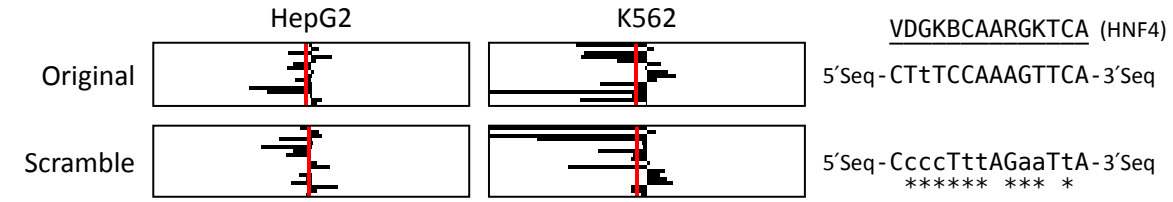
3′Seq = cacattgcctgtaactgctttgcaaaagcaaacgtctcccacgaaatcttagaaaggtgt

2089 HNF4 in HepG2 enhancer

chr10 14617937 14617950 + (hg18)





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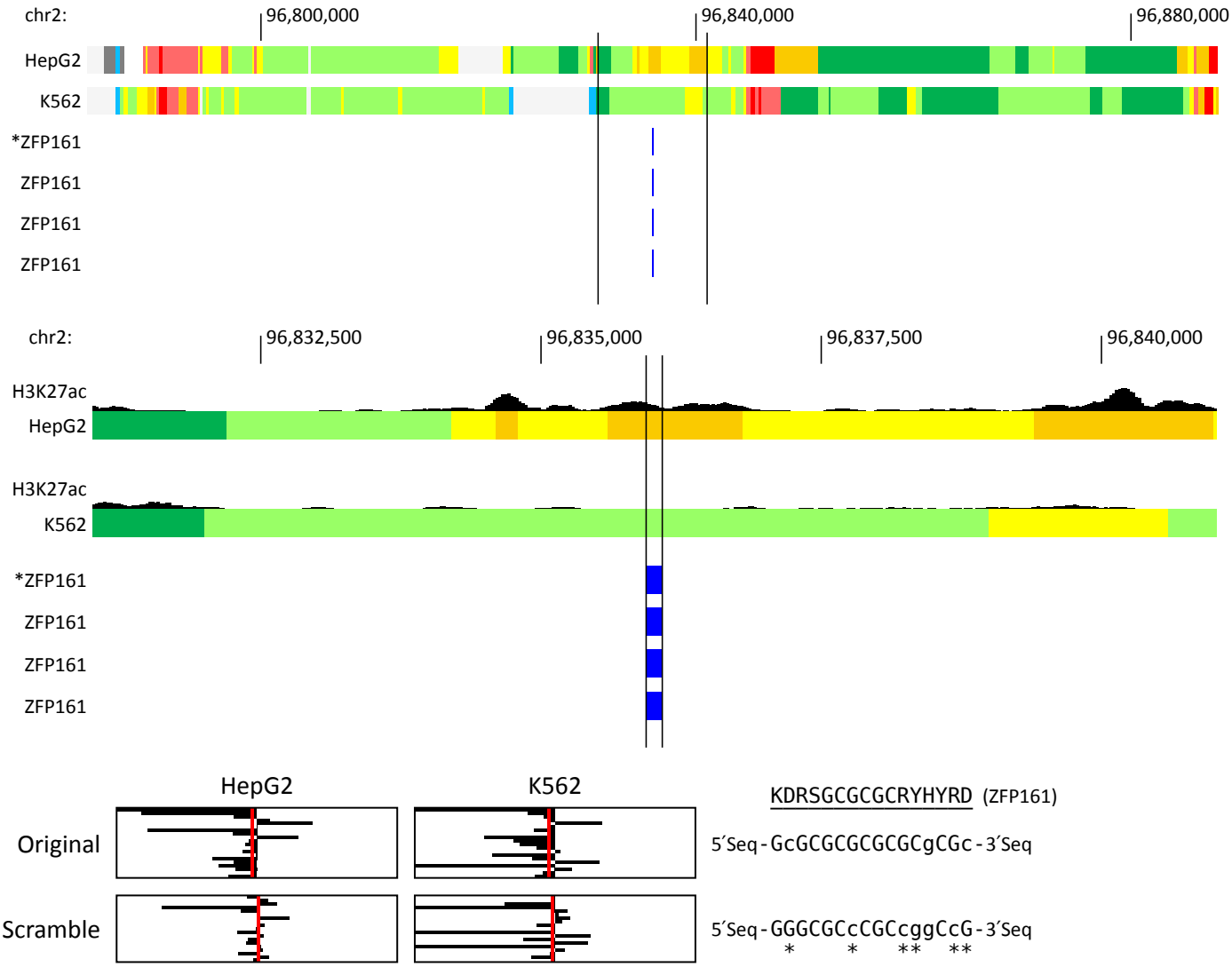
2090 ZFP161 in HepG2 enhancer

chr2 96836003 96836018 - (hg18)



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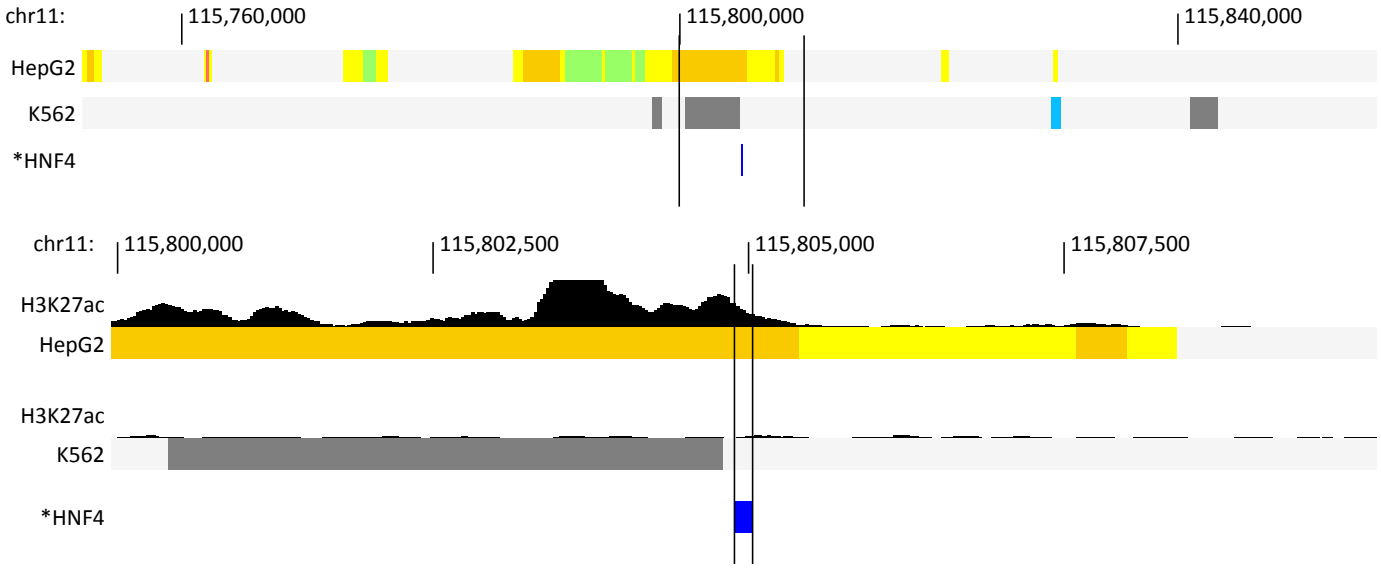
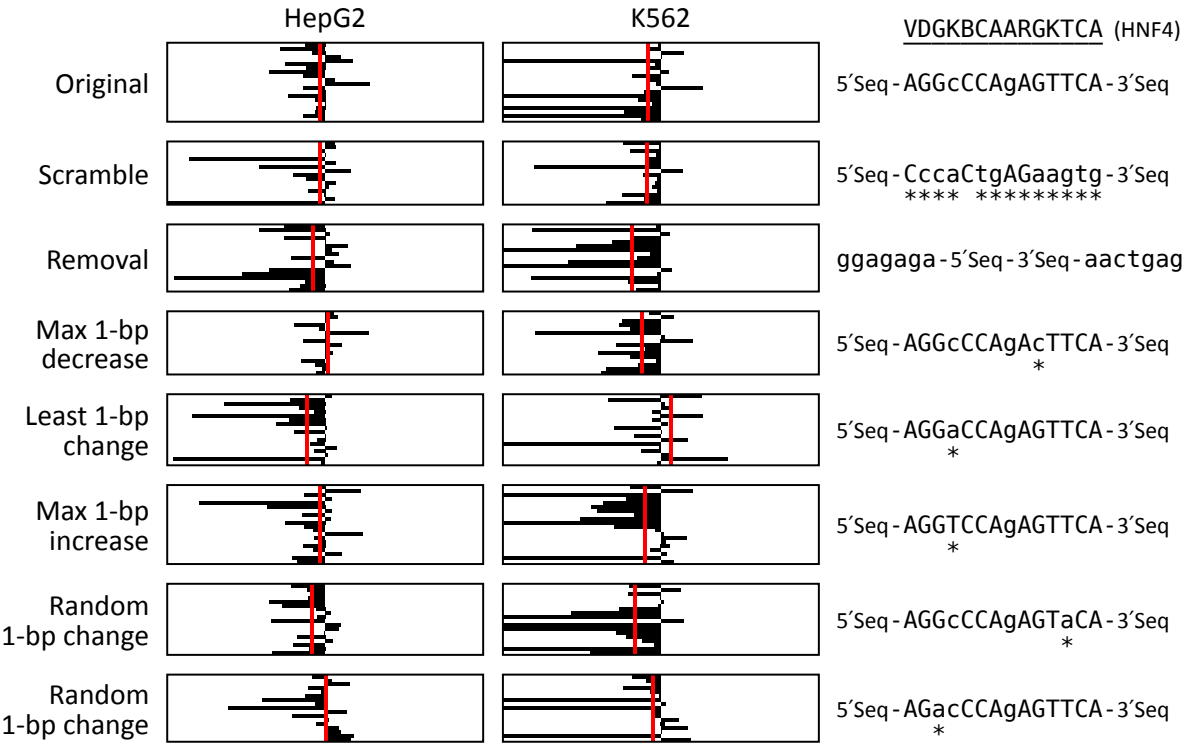
2091 HNF4 in HepG2 enhancer

chr11 115804954 115804967 + (hg18)





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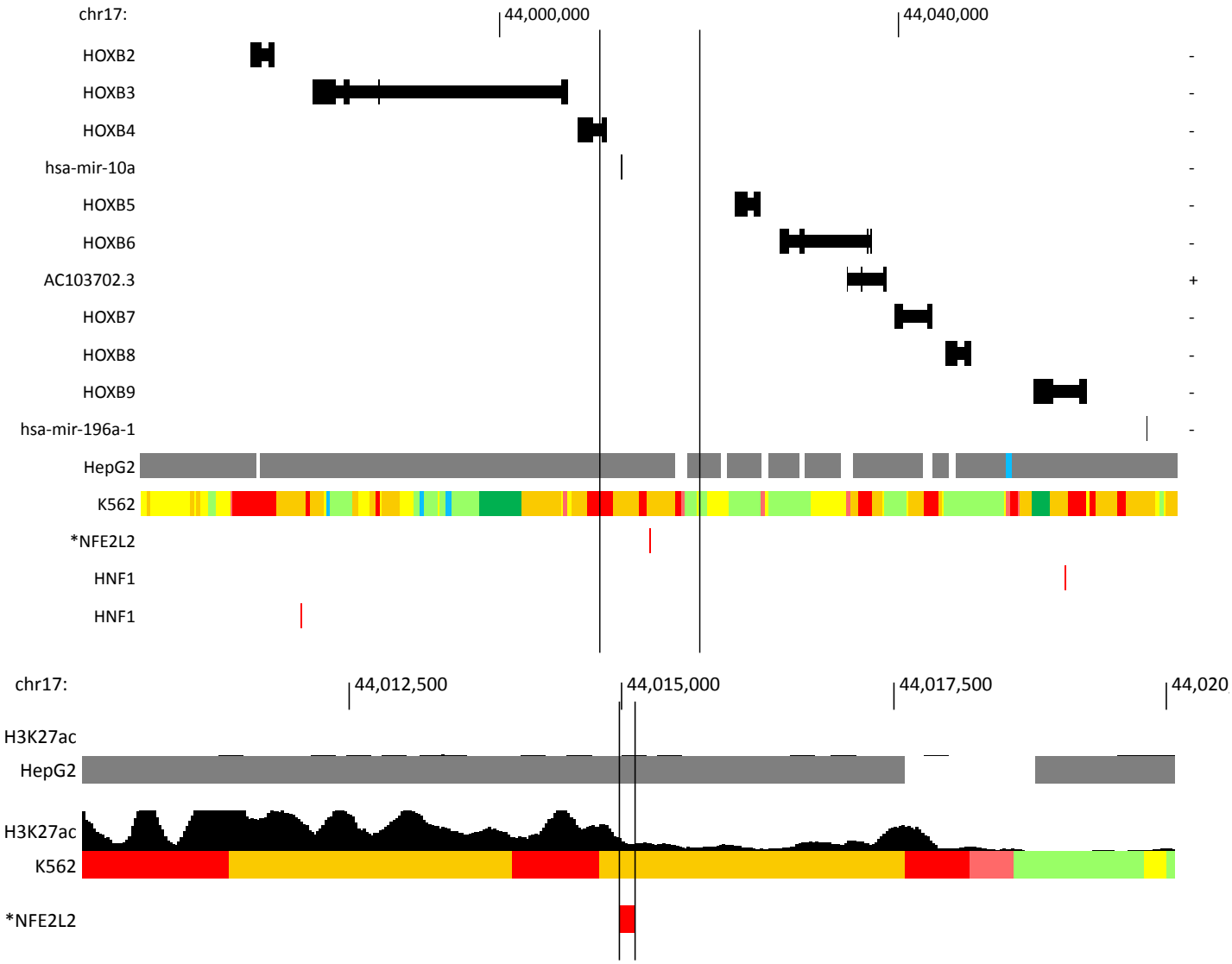
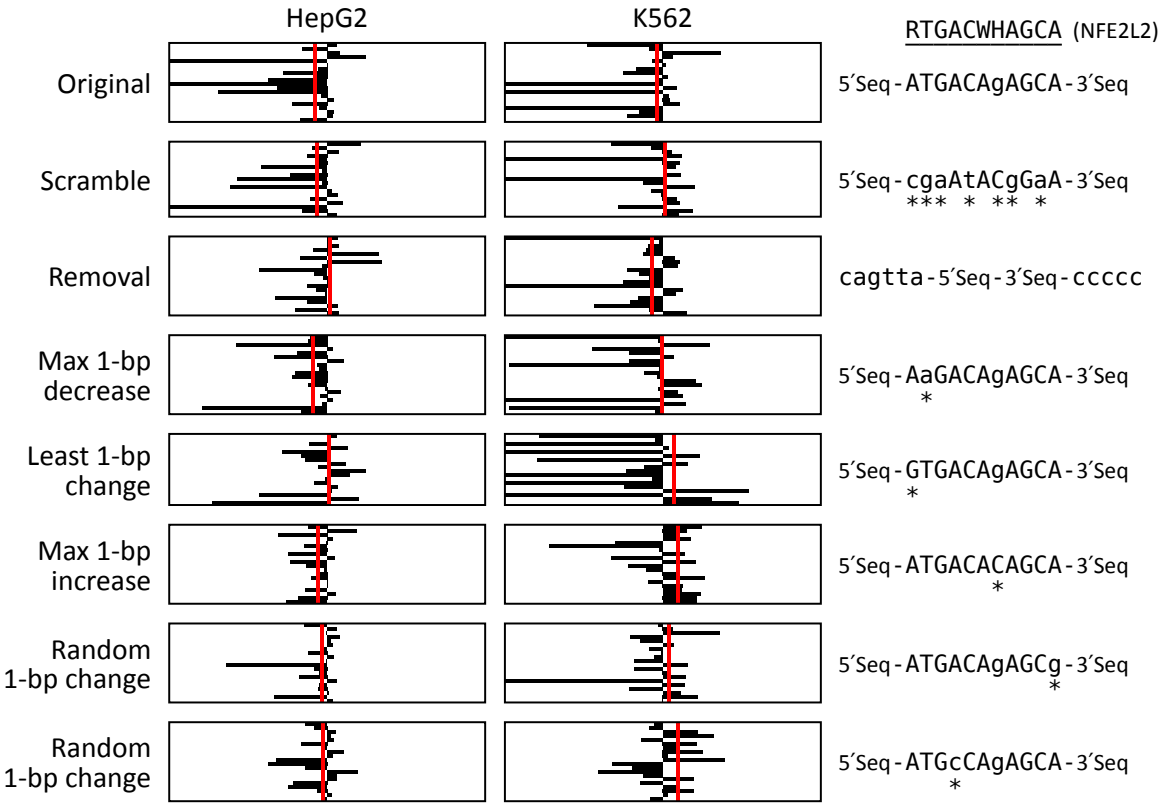
3′Seq = ggatgctcccccactttaccctgctgtcccaagtgtgggaccattttctttcttcctcacagtgt

2092 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr17 44015047 44015057 + (hg18)





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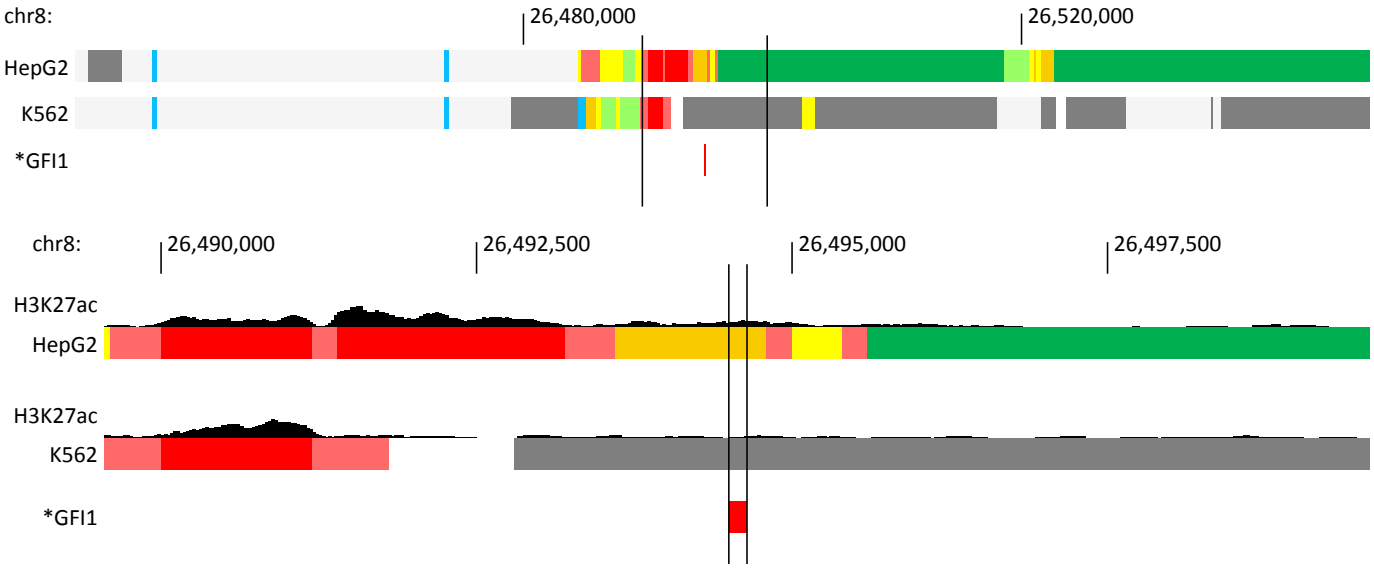
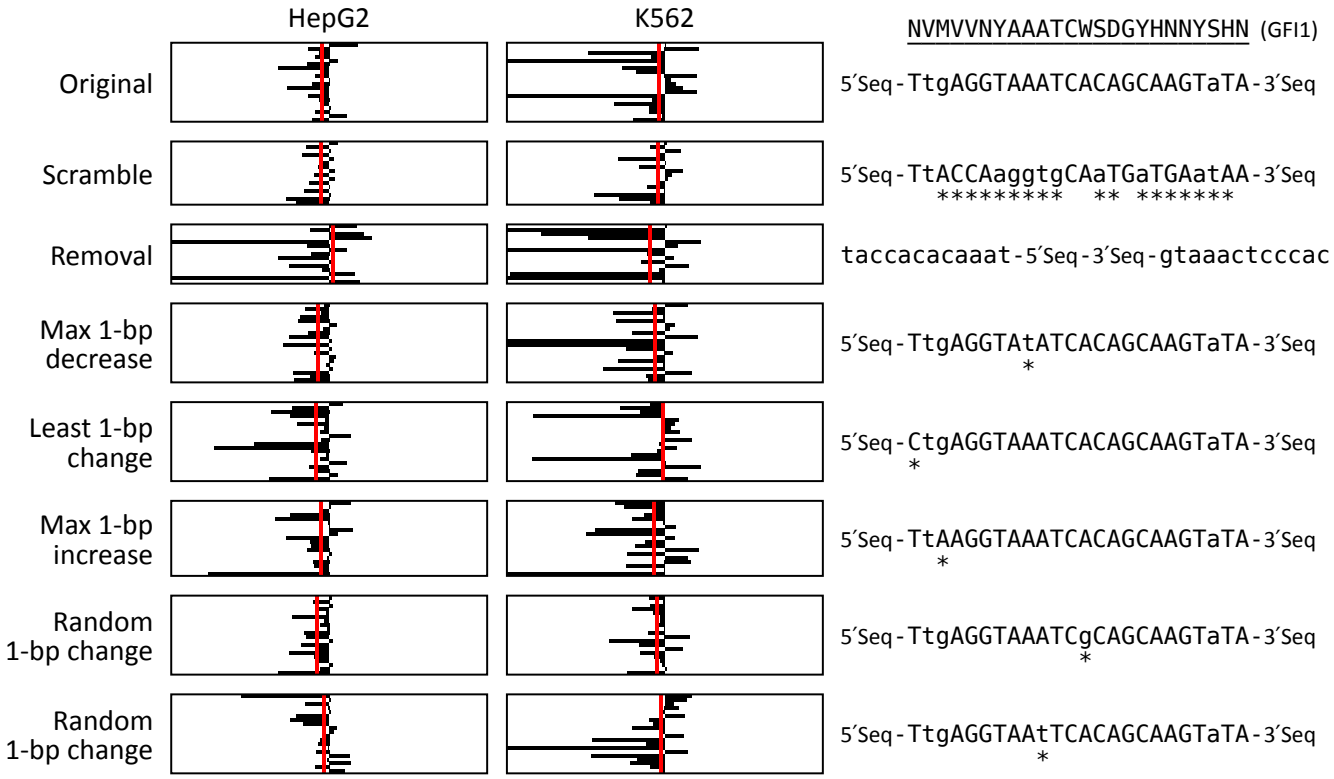
3′Seq = gaaatttgattcagctcatcctctccagctcgacttttcgccagagccttctcttctcttcatccaa

2093 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr8 26494560 26494583 - (hg18)





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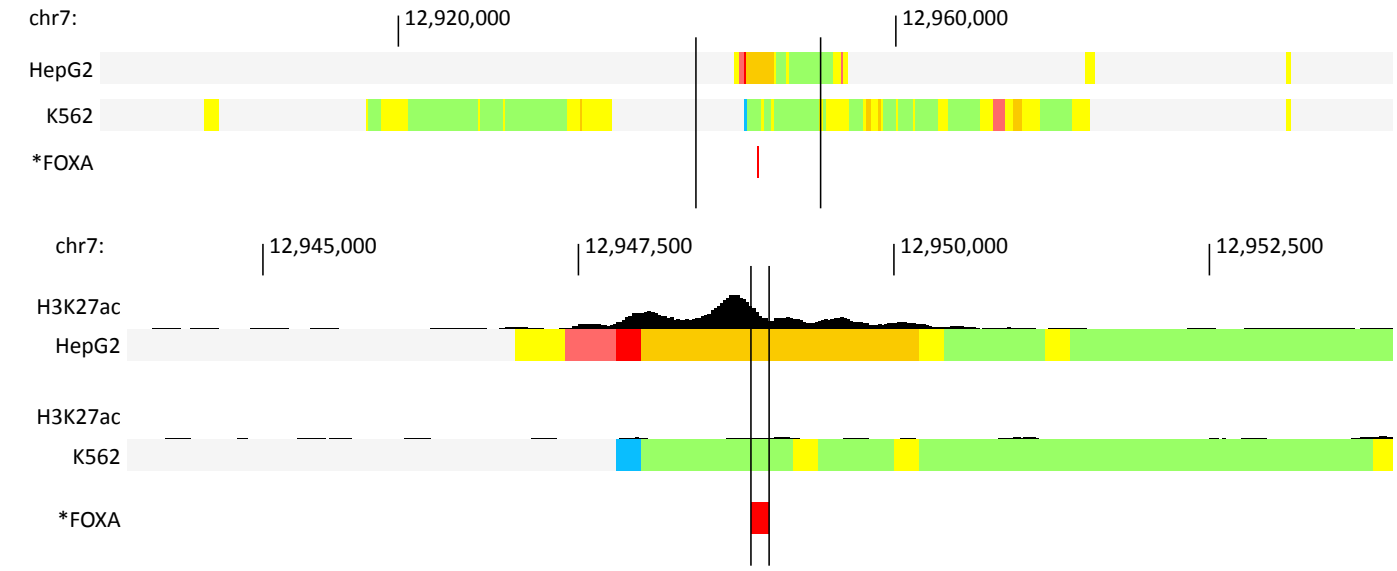
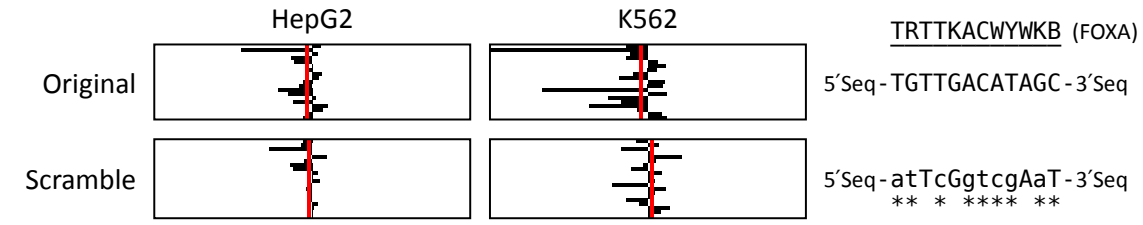
3′Seq = gcaaaaagactacaaaaaatacgccattgatgccattttaactaggctgttaagaaaaag

2094 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr7 12948934 12948945 - (hg18)





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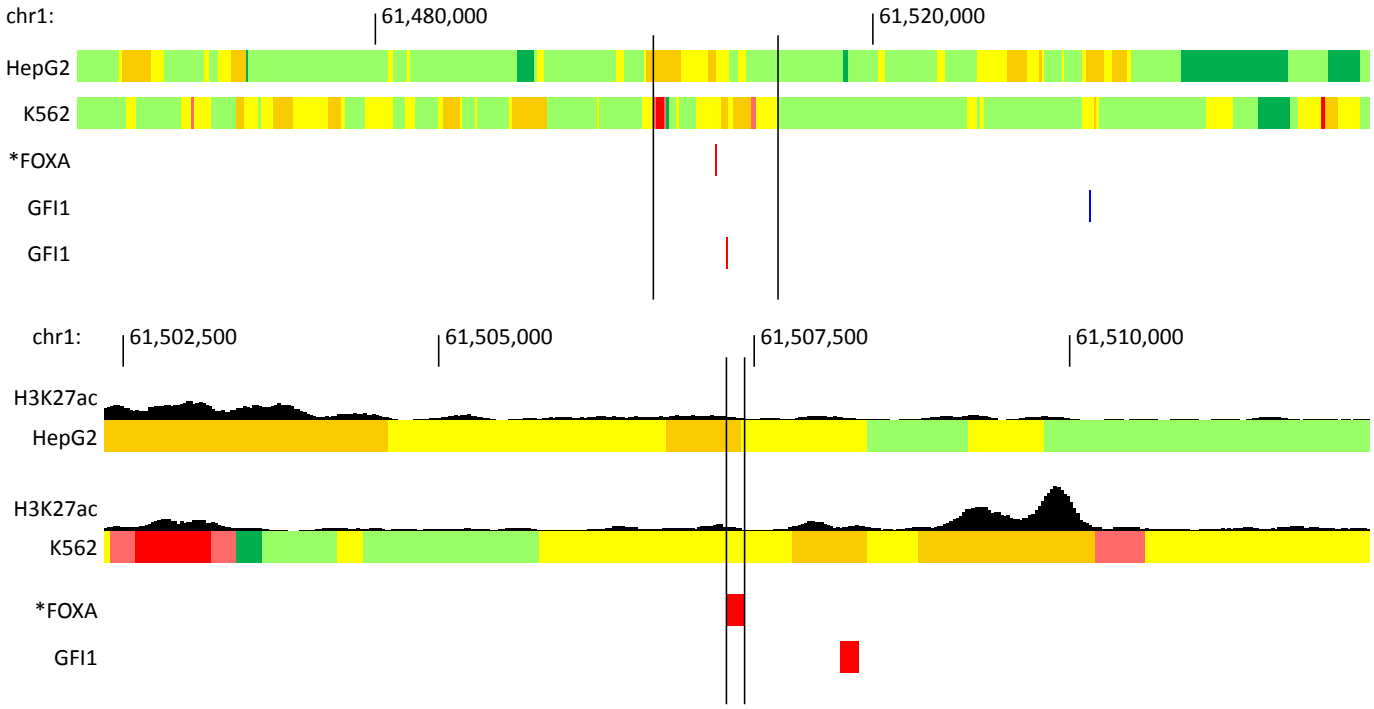
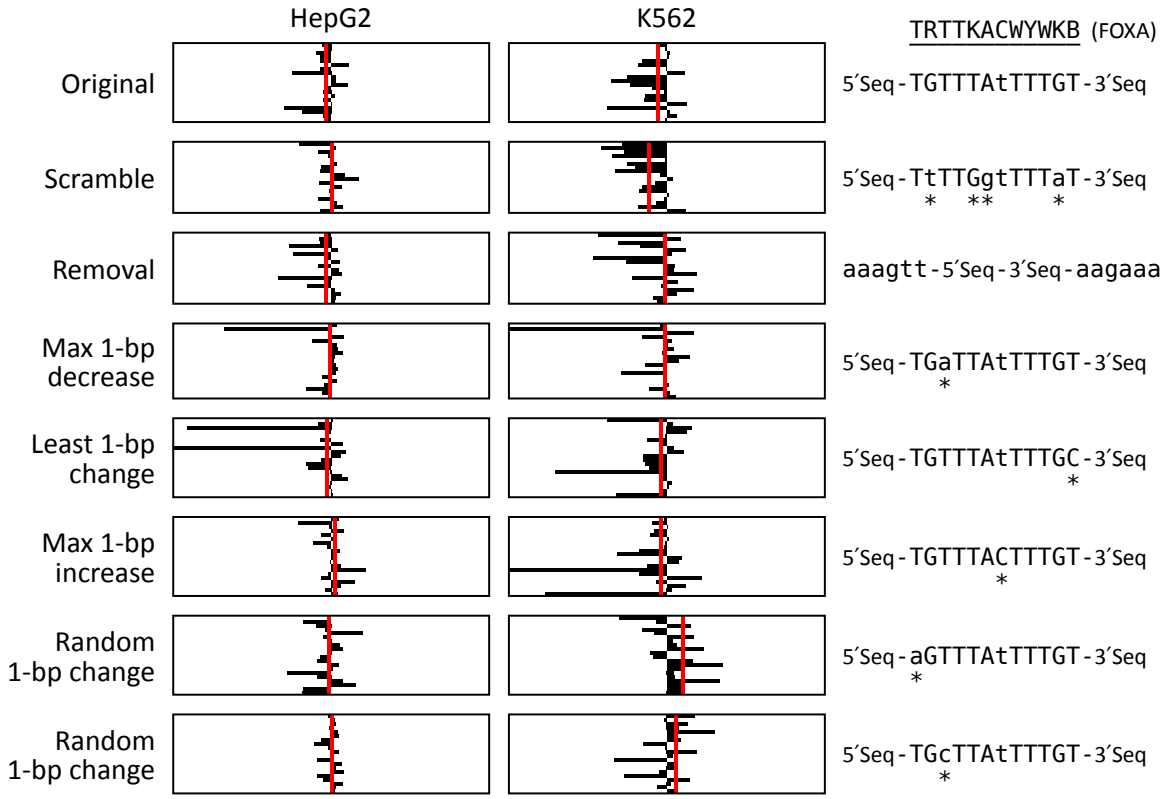
2095 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr1 61507347 61507358 + (hg18)





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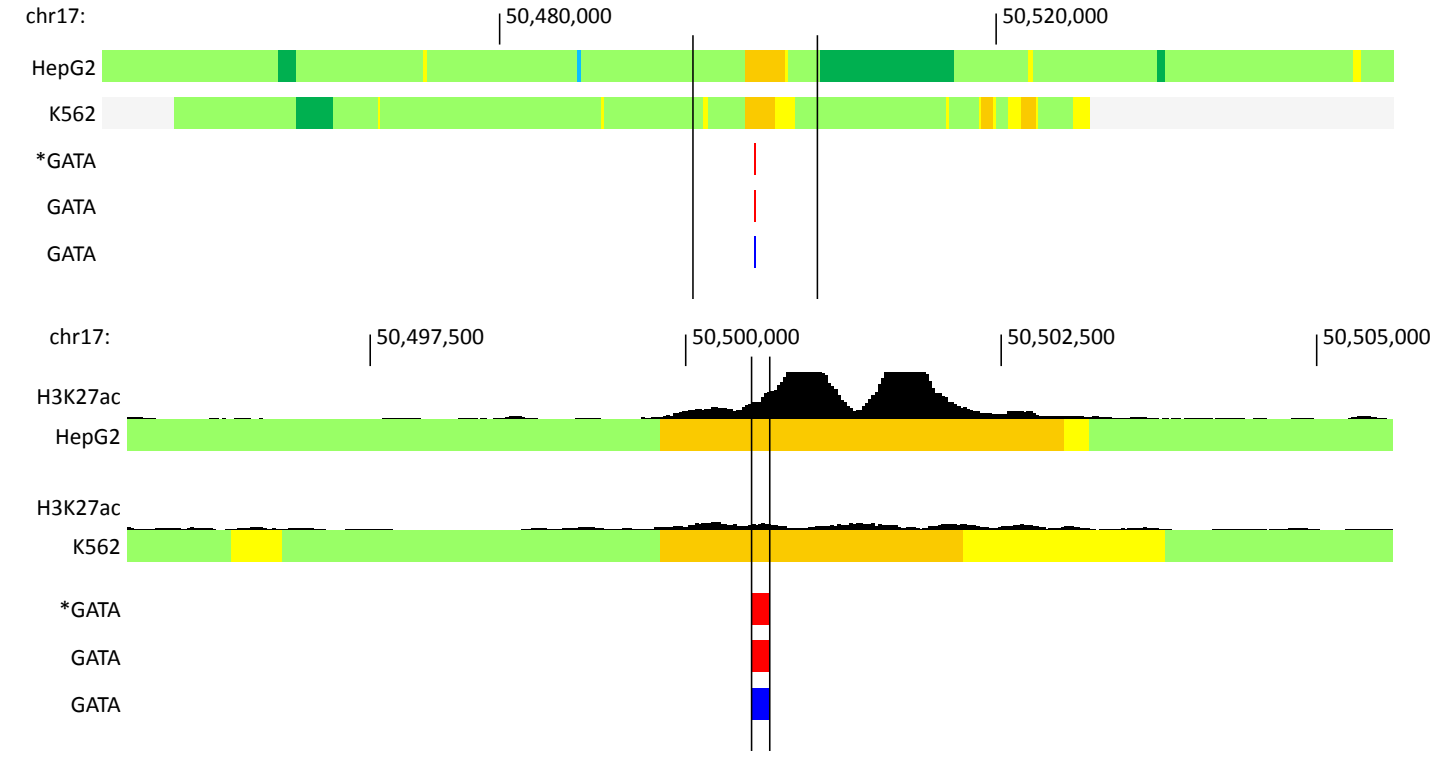
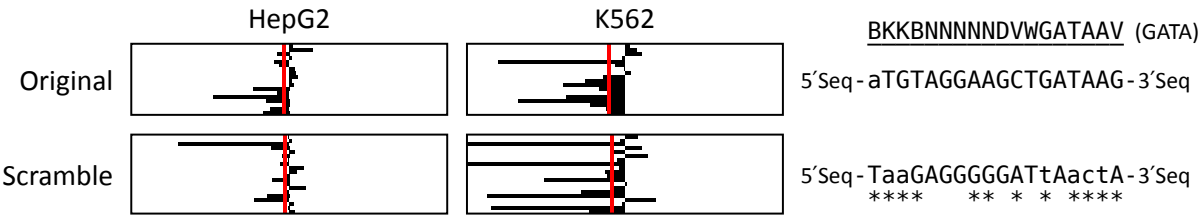
2096 GATA in HepG2 enhancer (conserved at 70% confidence)

chr17 50500586 50500603 + (hg18)





5′Seq = aacccttaatttttttcacaagctgtaatagtaccaagaccaagaagggctttccaaagagtgg
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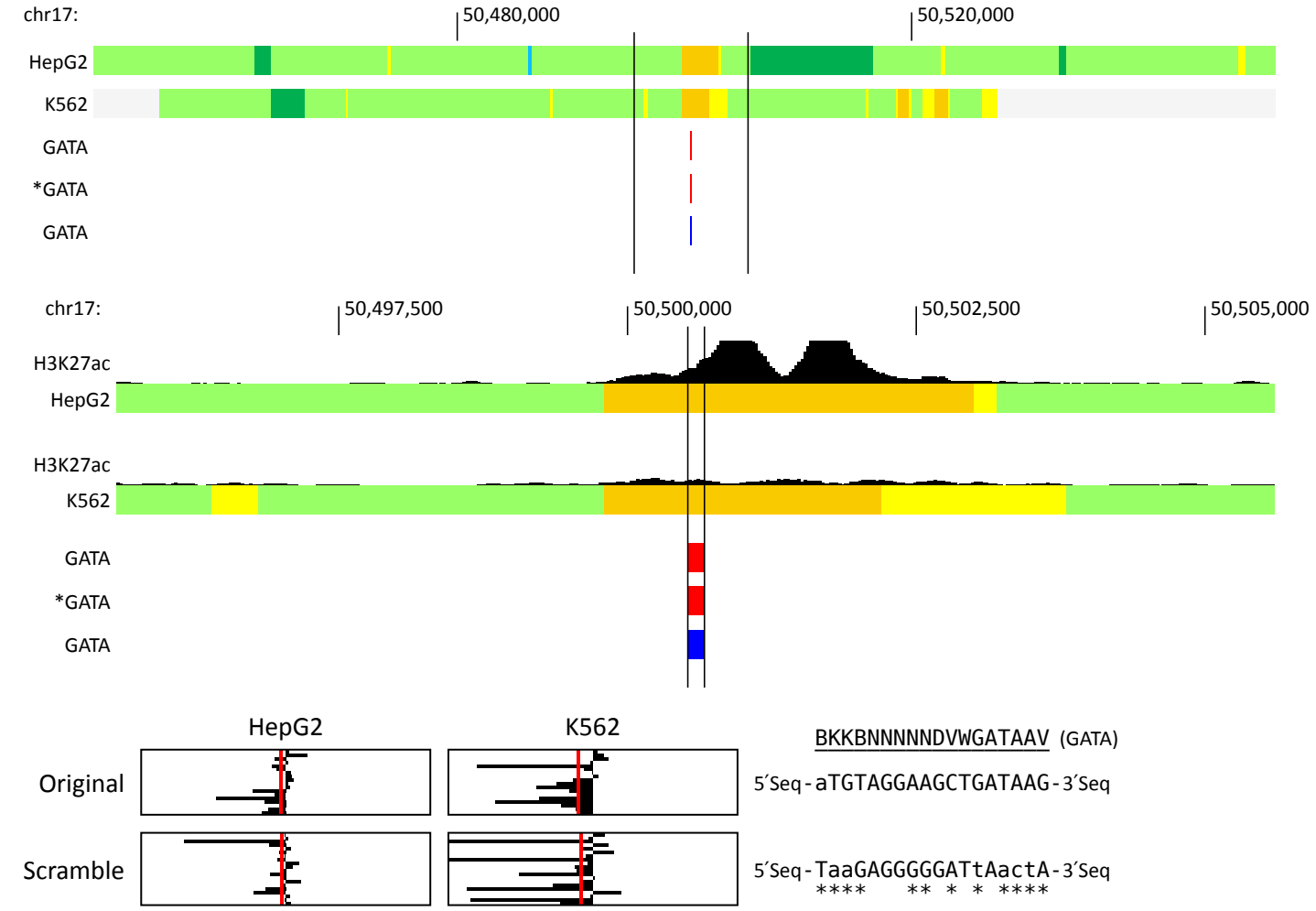
2097 GATA in K562 enhancer (conserved at 70% confidence)

chr17 50500586 50500603 + (hg18)



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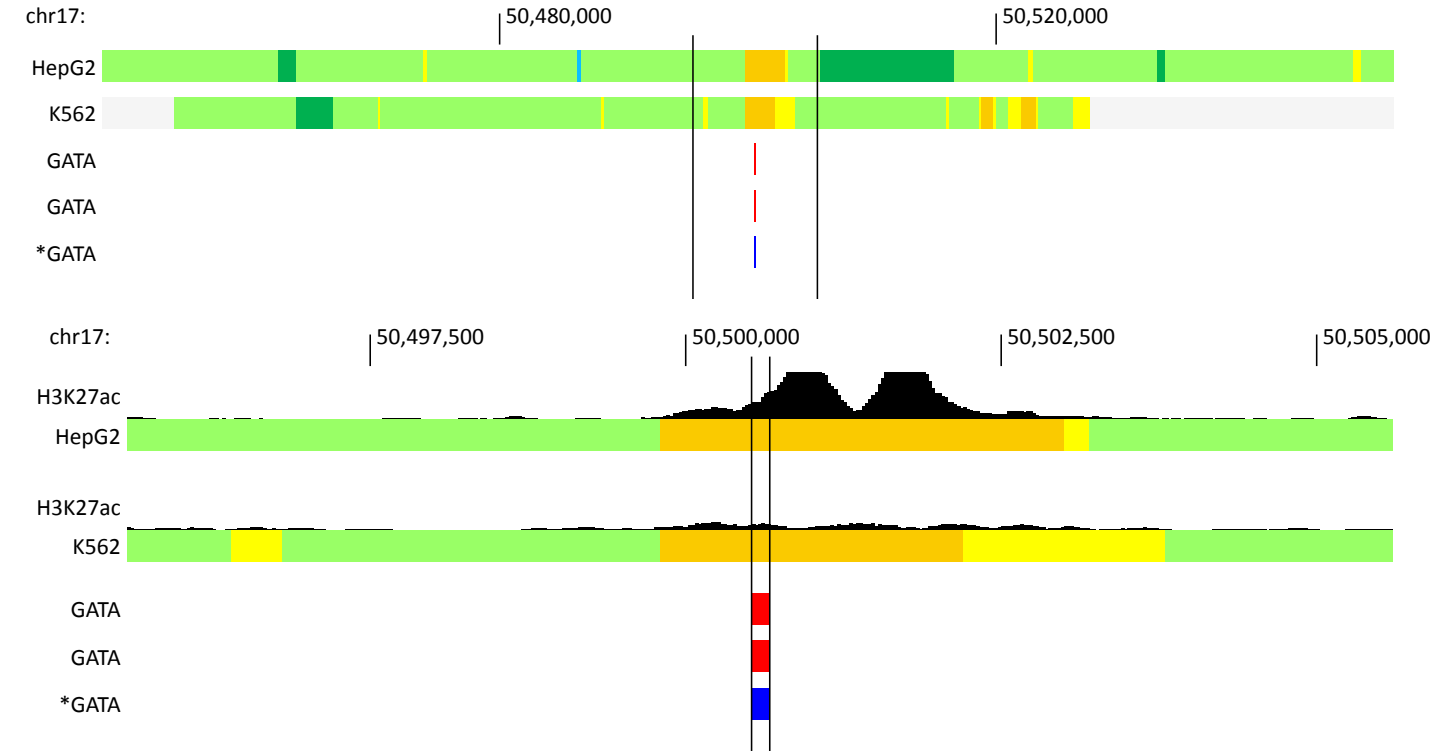
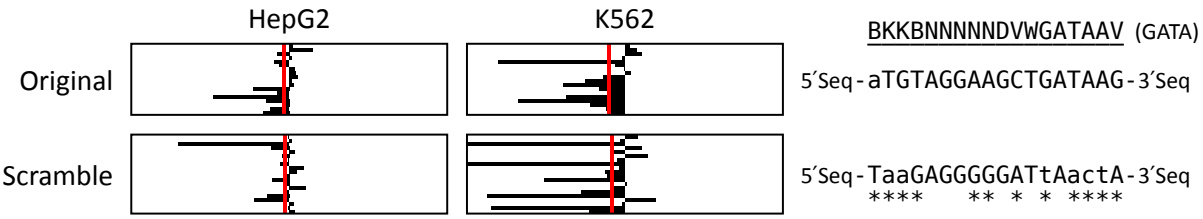
2098 GATA in K562 enhancer

chr17 50500586 50500603 + (hg18)





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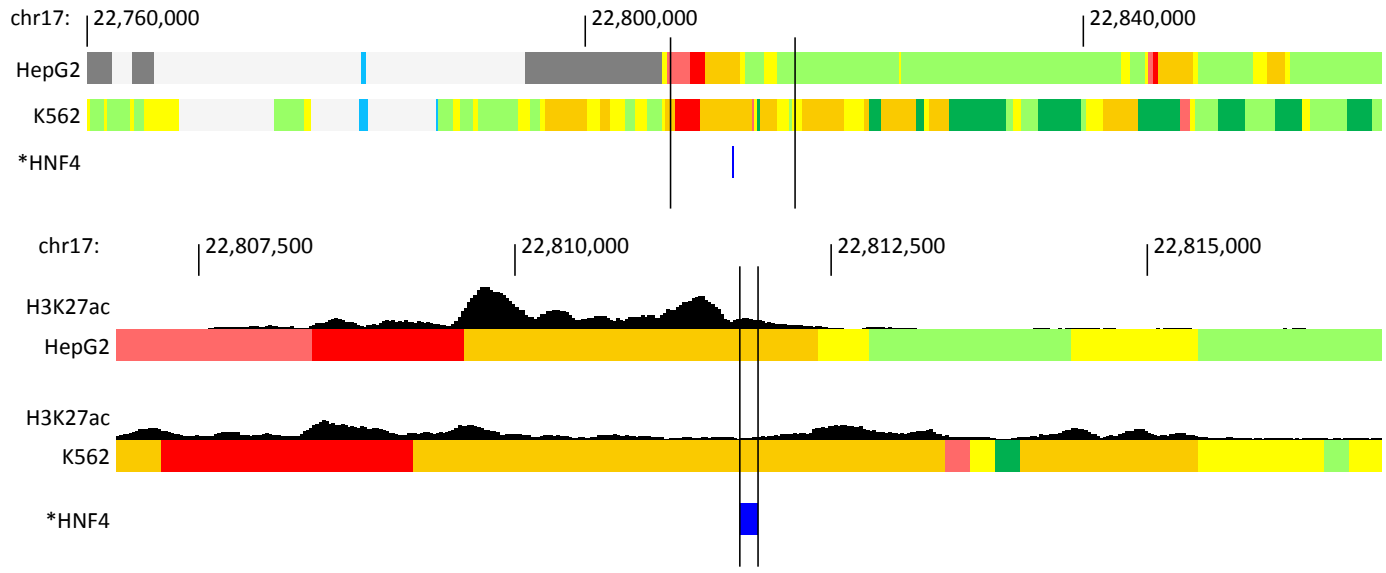
2099 HNF4 in HepG2 enhancer

chr17 22811844 22811857 + (hg18)



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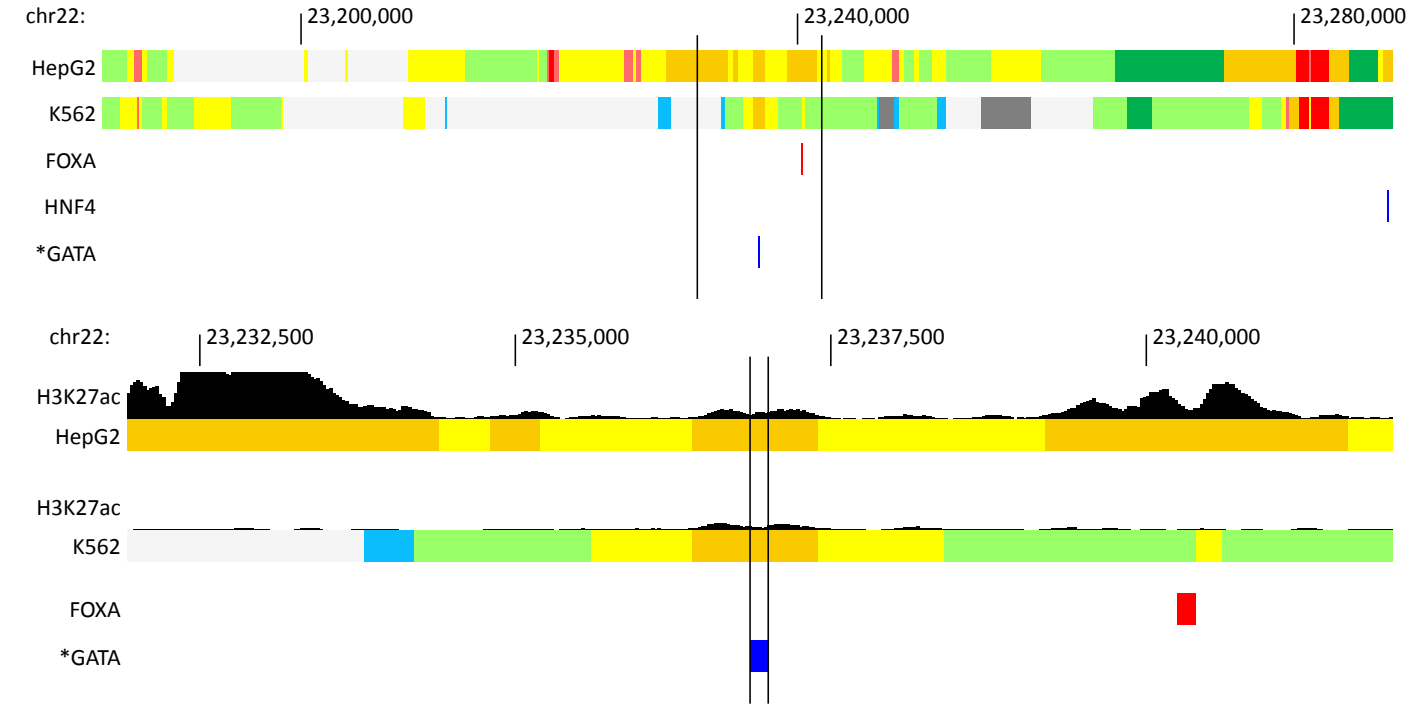
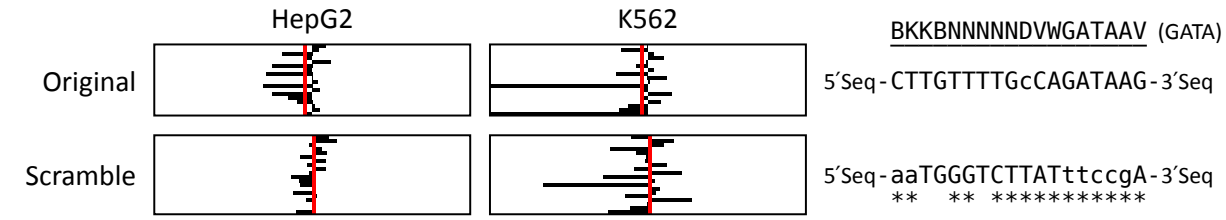
2100 GATA in K562 enhancer

chr22 23236924 23236941 + (hg18)





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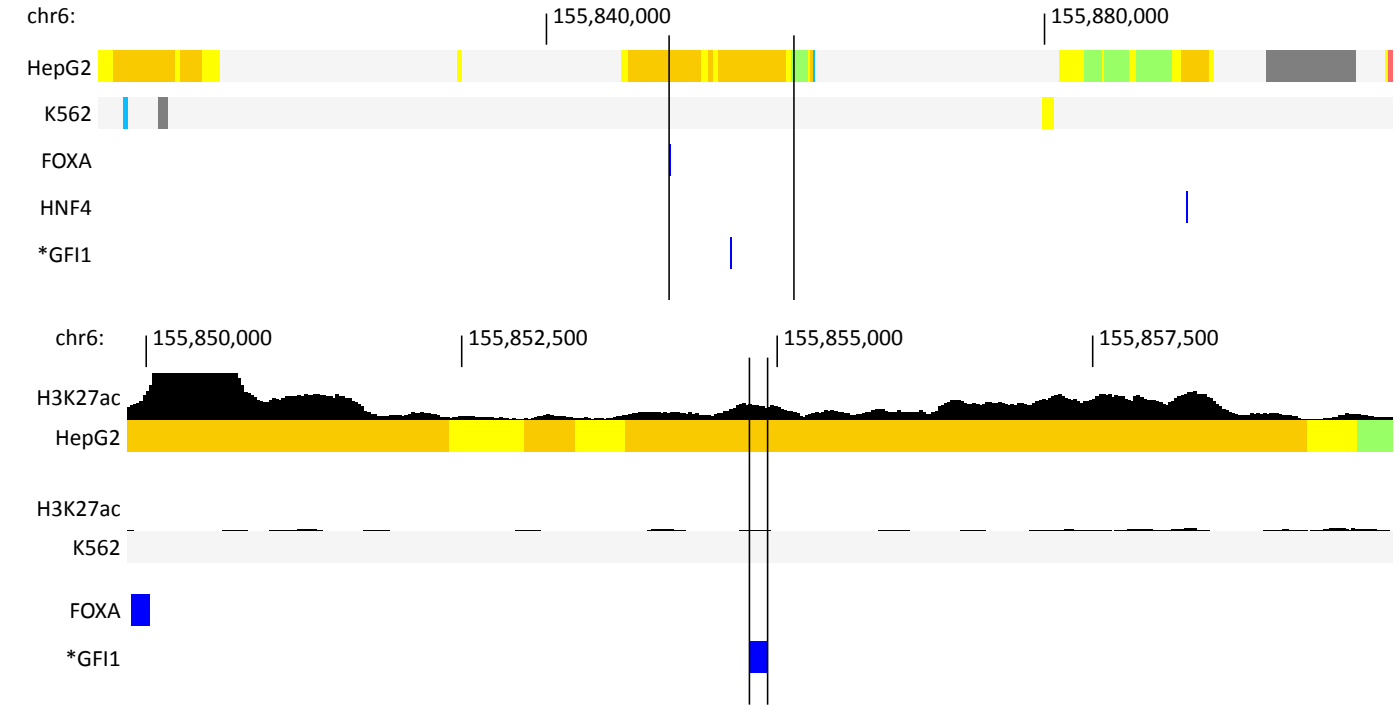
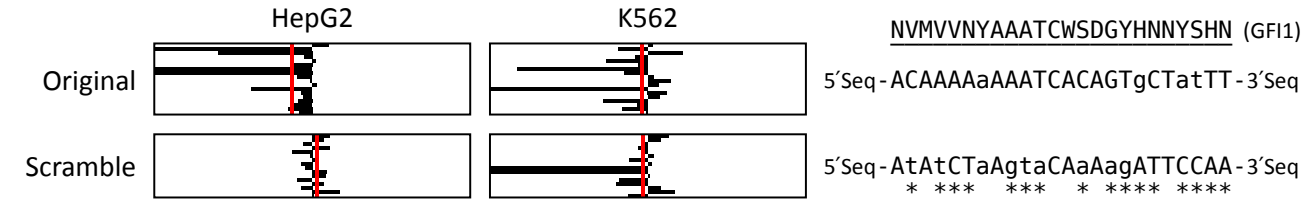
2101 GFI1 in HepG2 enhancer

chr6 155854841 155854864 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-ACAAAAaAAATCACAGTgCTatTT-3′Seq

5′Seq-AtAtCTaAgtaCAaAagATTCCAA-3′Seq

* *** *** * **** ****

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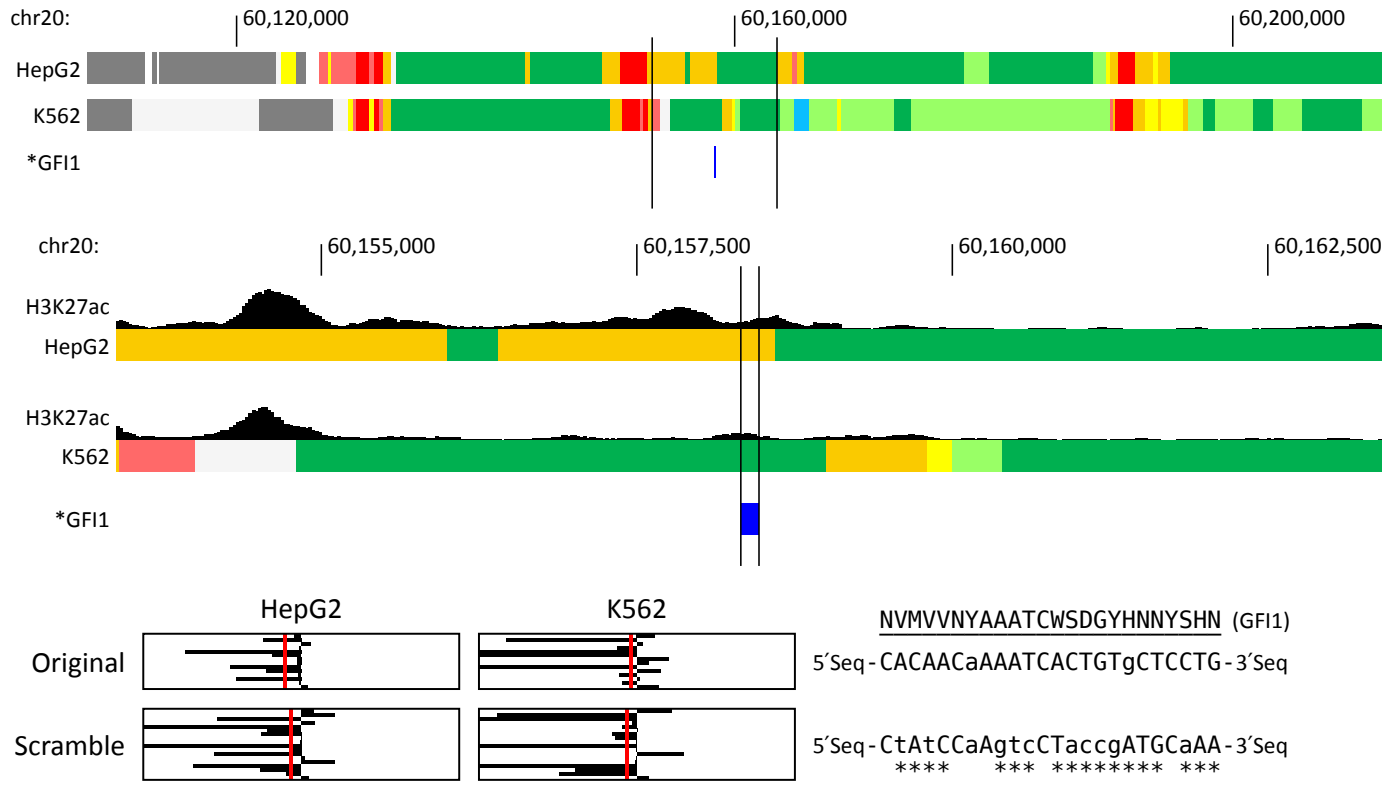
3′Seq = cctgaaataattccattctctctgatgcctcctccaaagtggcagcagaagcagaagaaa

2102 GFI1 in HepG2 enhancer

chr20 60158385 60158408 - (hg18)



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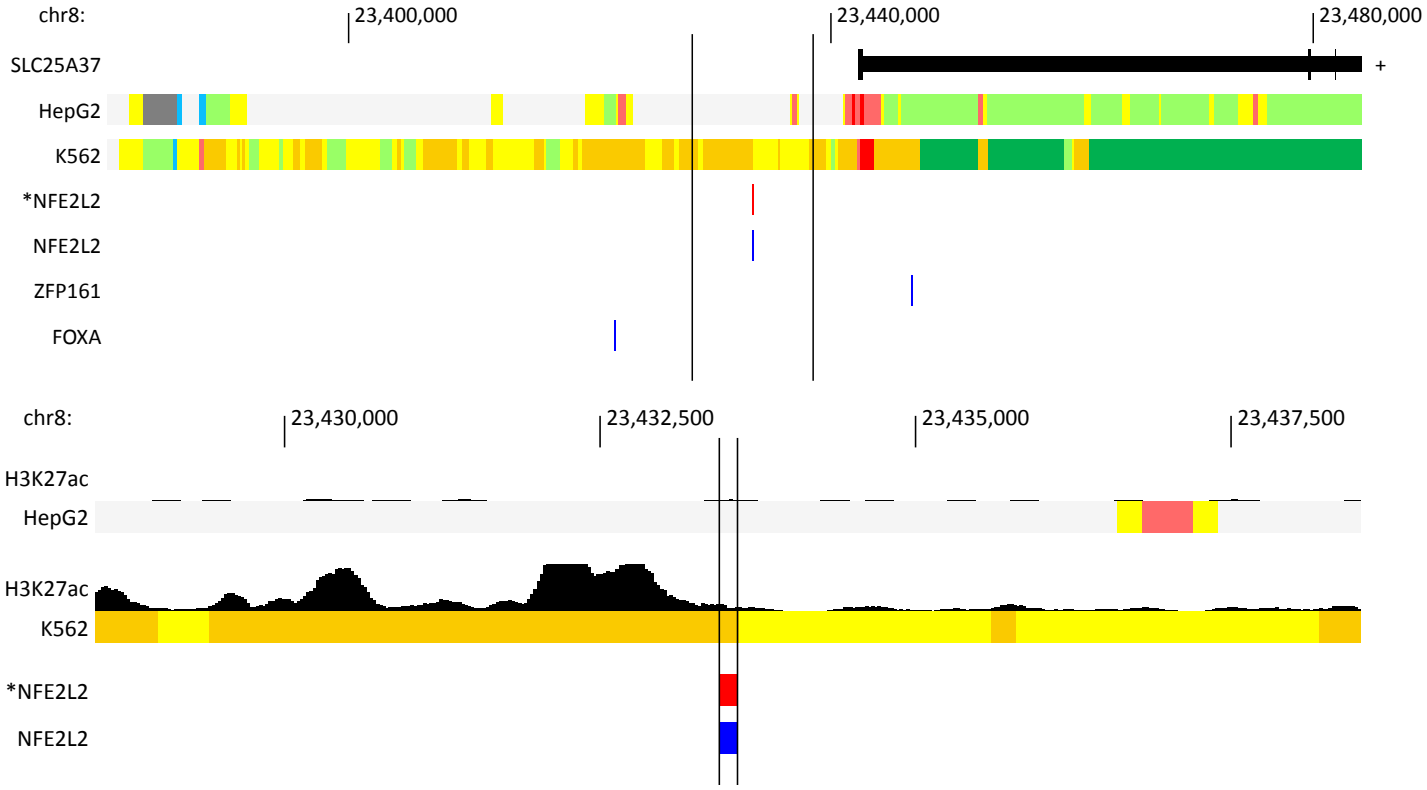
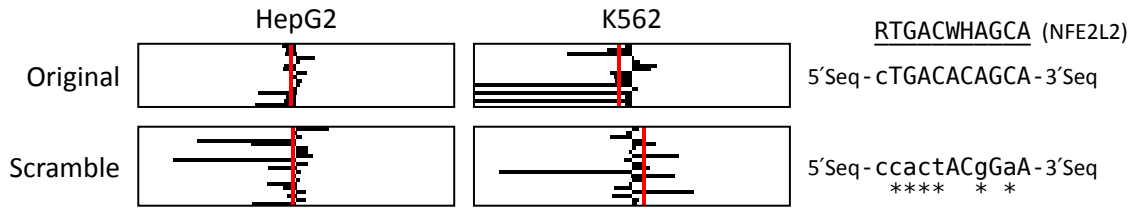
3′Seq = acagtttccaagctggagacgtgcttattgtactagcaacacgcgacgtctgtatgcatc

2103 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr8 23433512 23433522 - (hg18)





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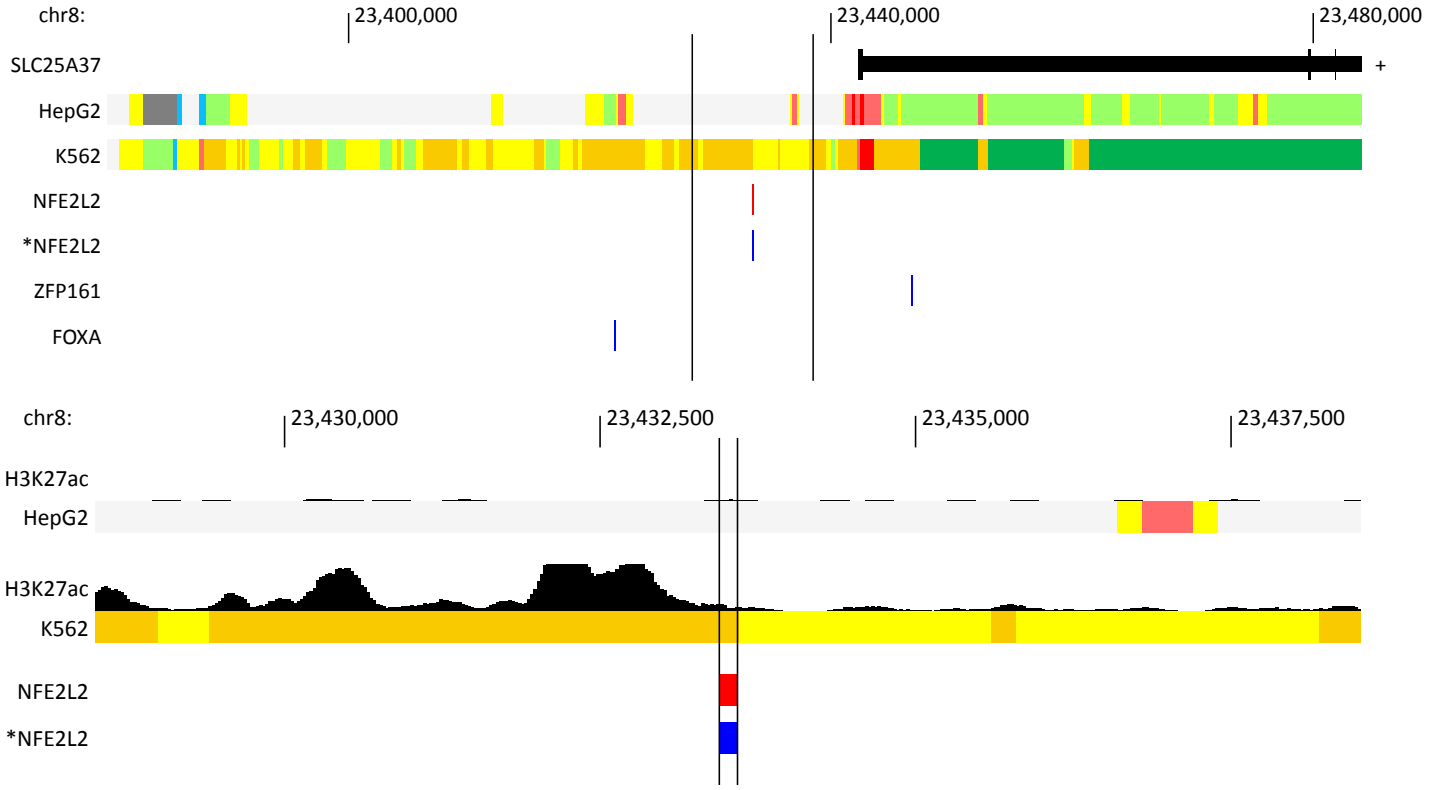
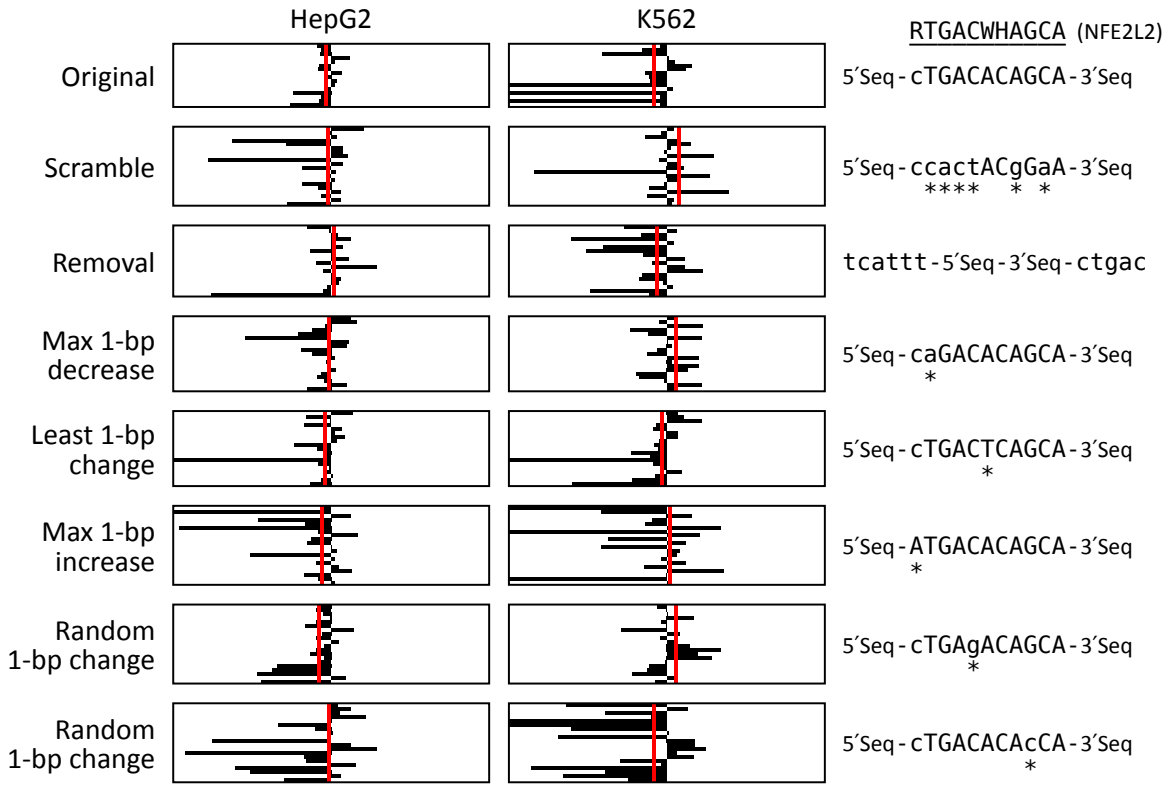
2104 NFE2L2 in K562 enhancer

chr8 23433512 23433522 - (hg18)



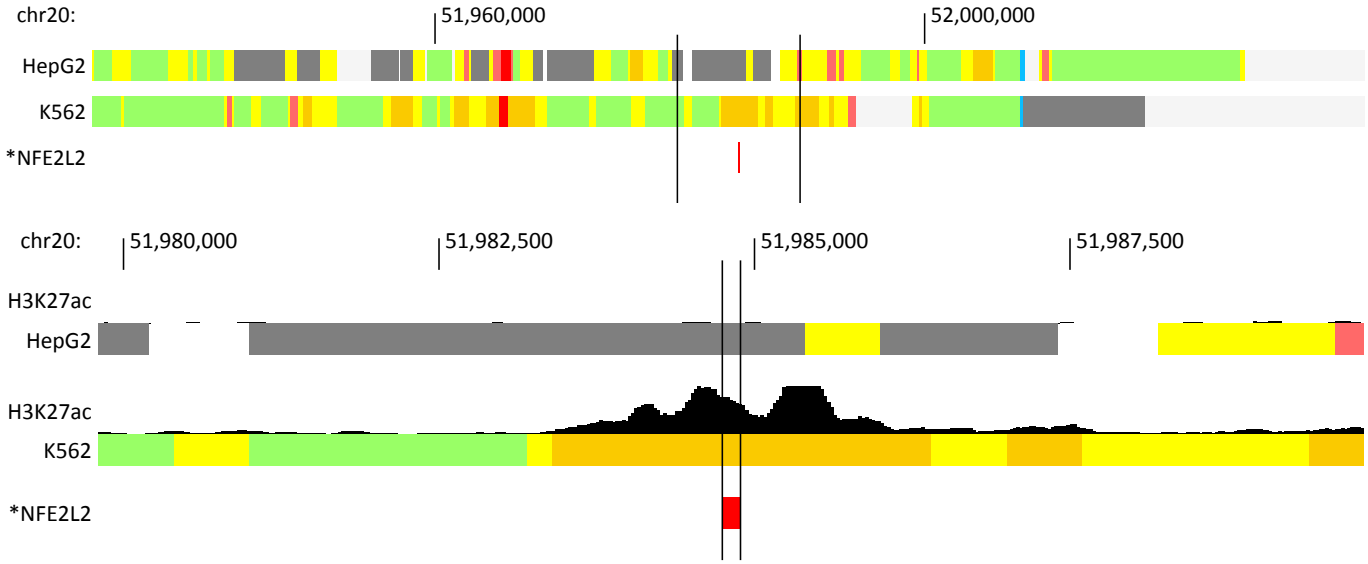


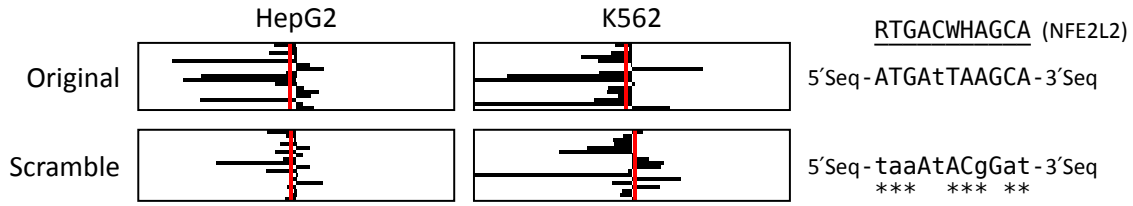
5′Seq = gtcatatctcagatgcctgctctgtaaaaatcaatagtcatcaattctccactctggtcaggttcac

3′Seq = cattagcacatggccacatttgcacagttttgtactgagctctatgcacagtgaataagagagttca

2105 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 51984812 51984822 + (hg18)

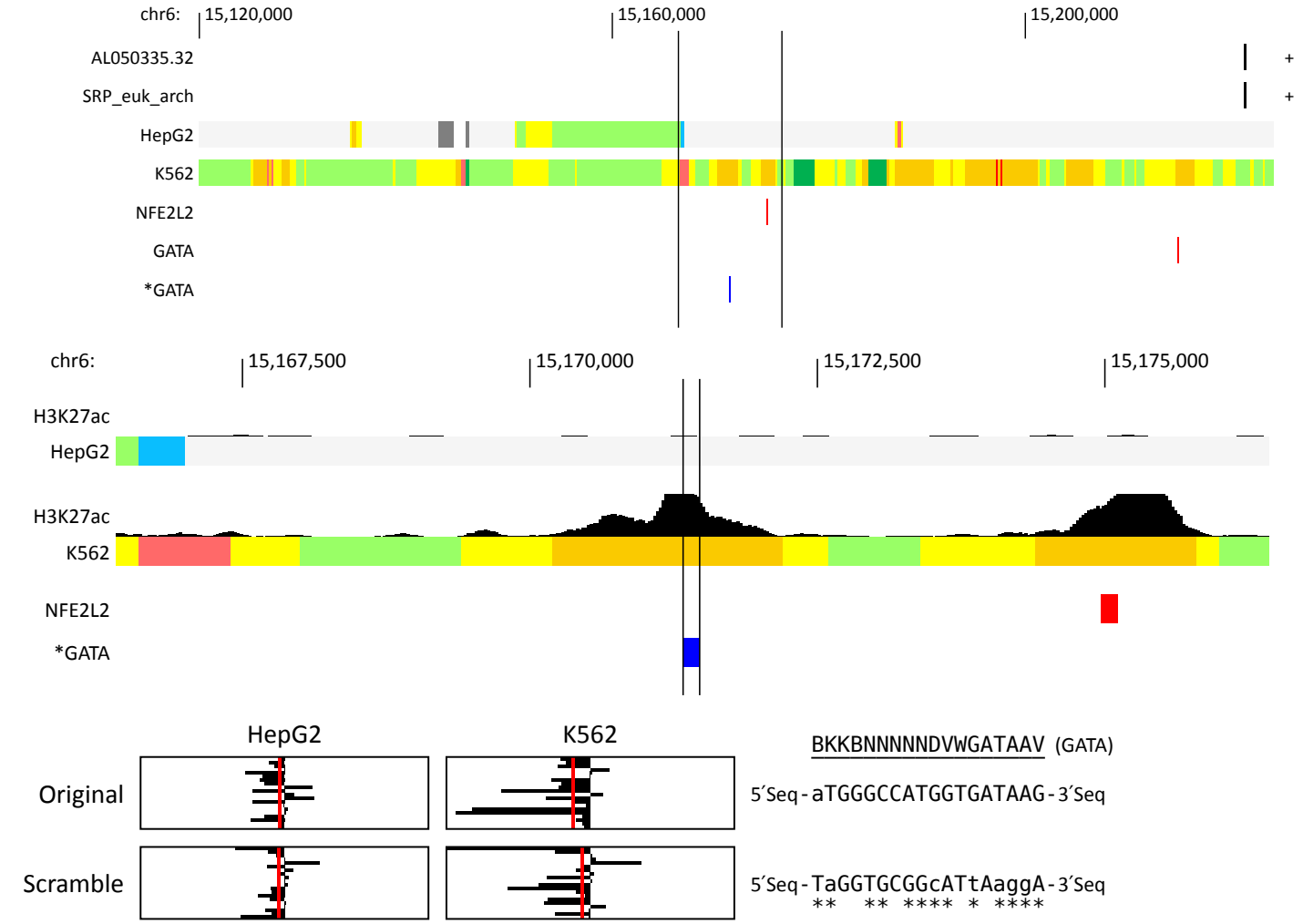




5′Seq = aactcccgcctccccctttctcaccatctctcttcatggttaaagaggttataaatttgcaaaggaa
3′Seq = aatccagaaaatttggccatgggacctgatttttcaaggccttagttttgaaagctgaagaaatct

2106 GATA in K562 enhancer

chr6 15171396 15171413 - (hg18)



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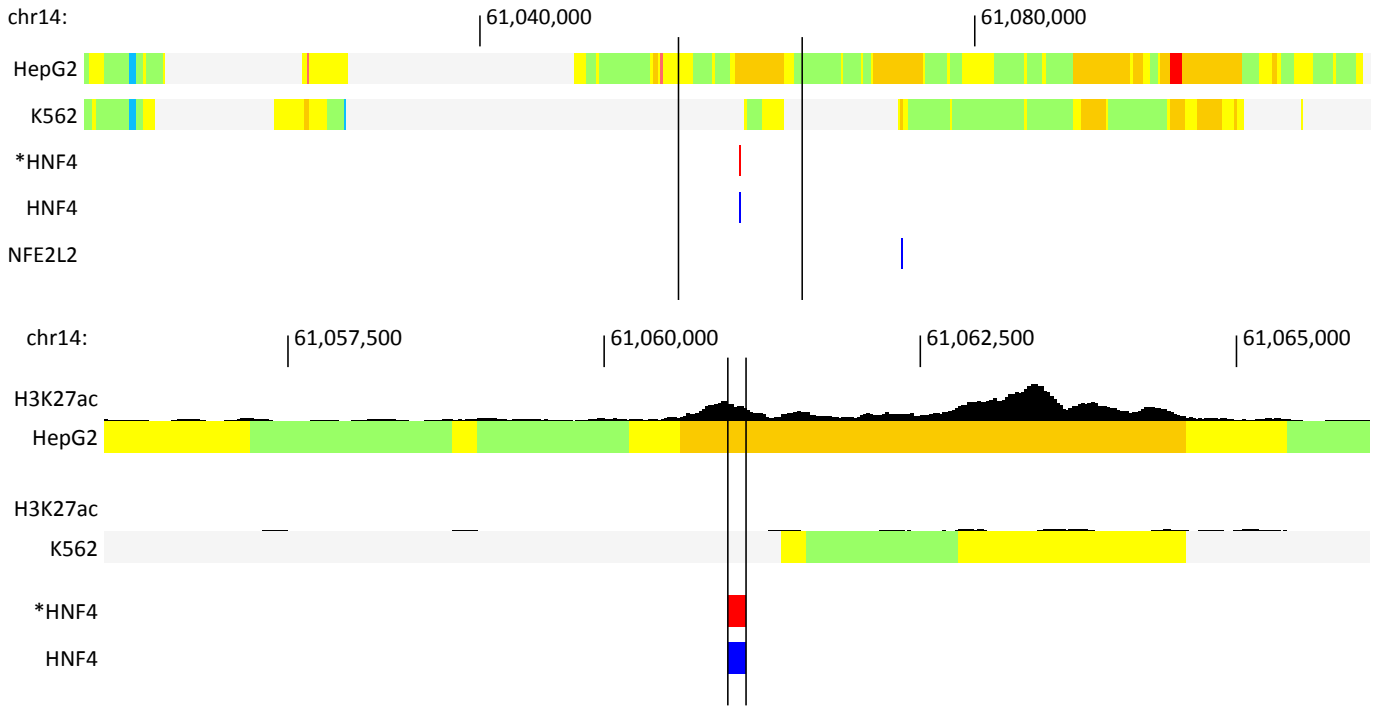
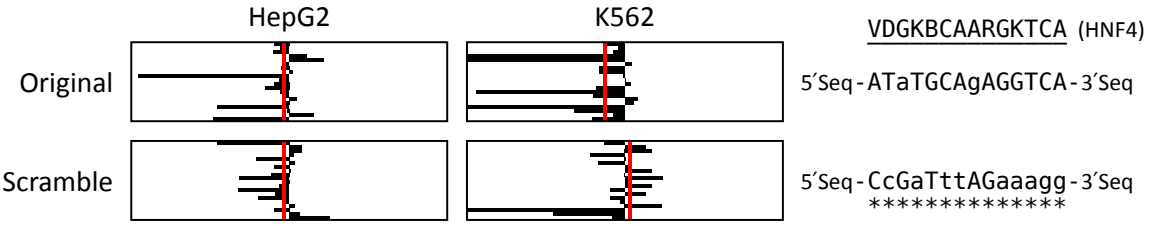
3′Seq = attgagaccaggggaggaattaggccacatgctagcctctggtctctggttgacttttcttgt

2107 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 61061044 61061057 - (hg18)





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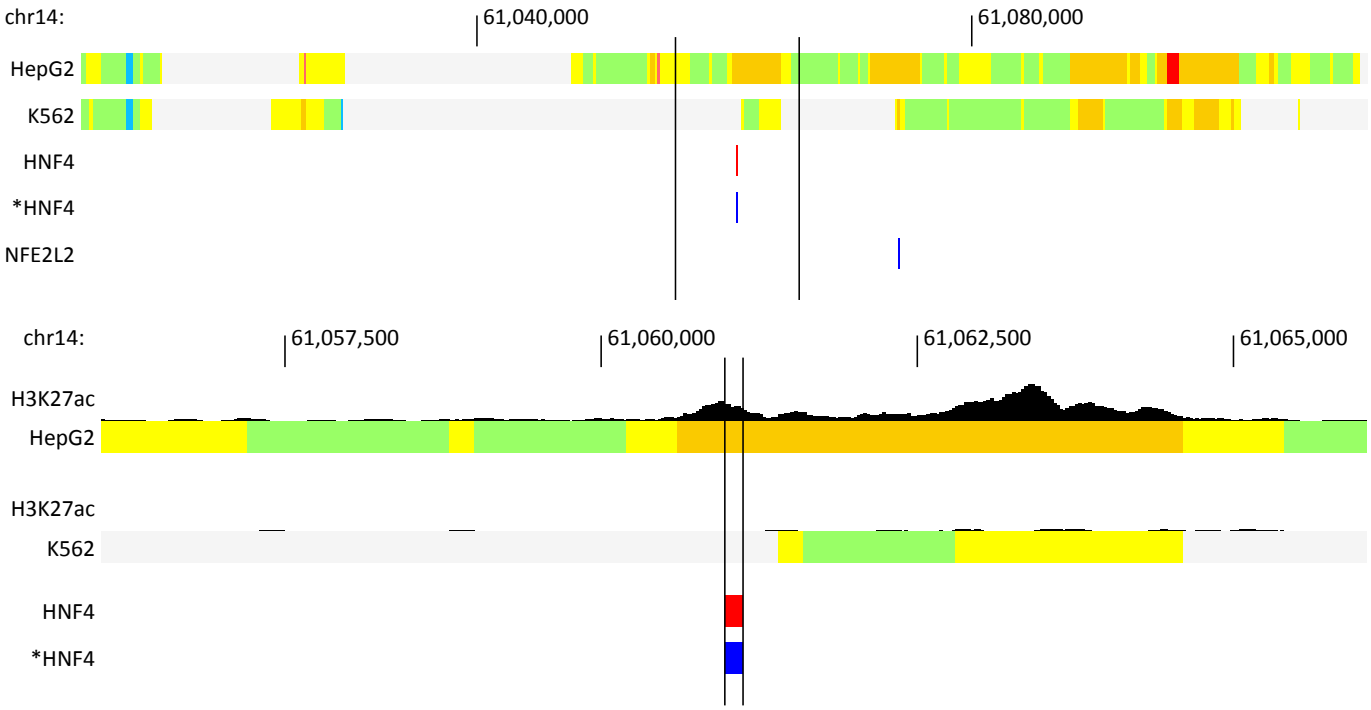
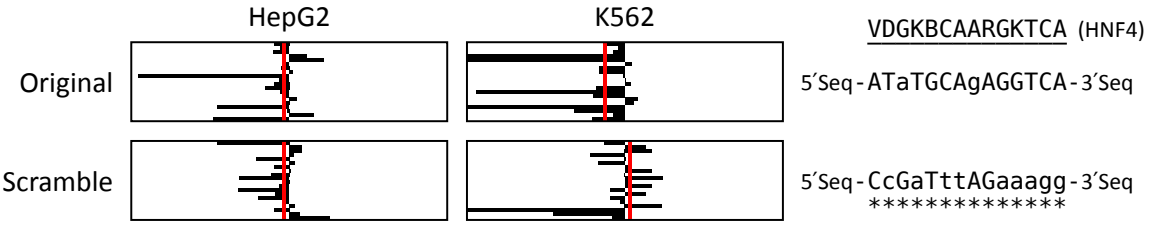
2108 HNF4 in HepG2 enhancer

chr14 61061044 61061057 - (hg18)





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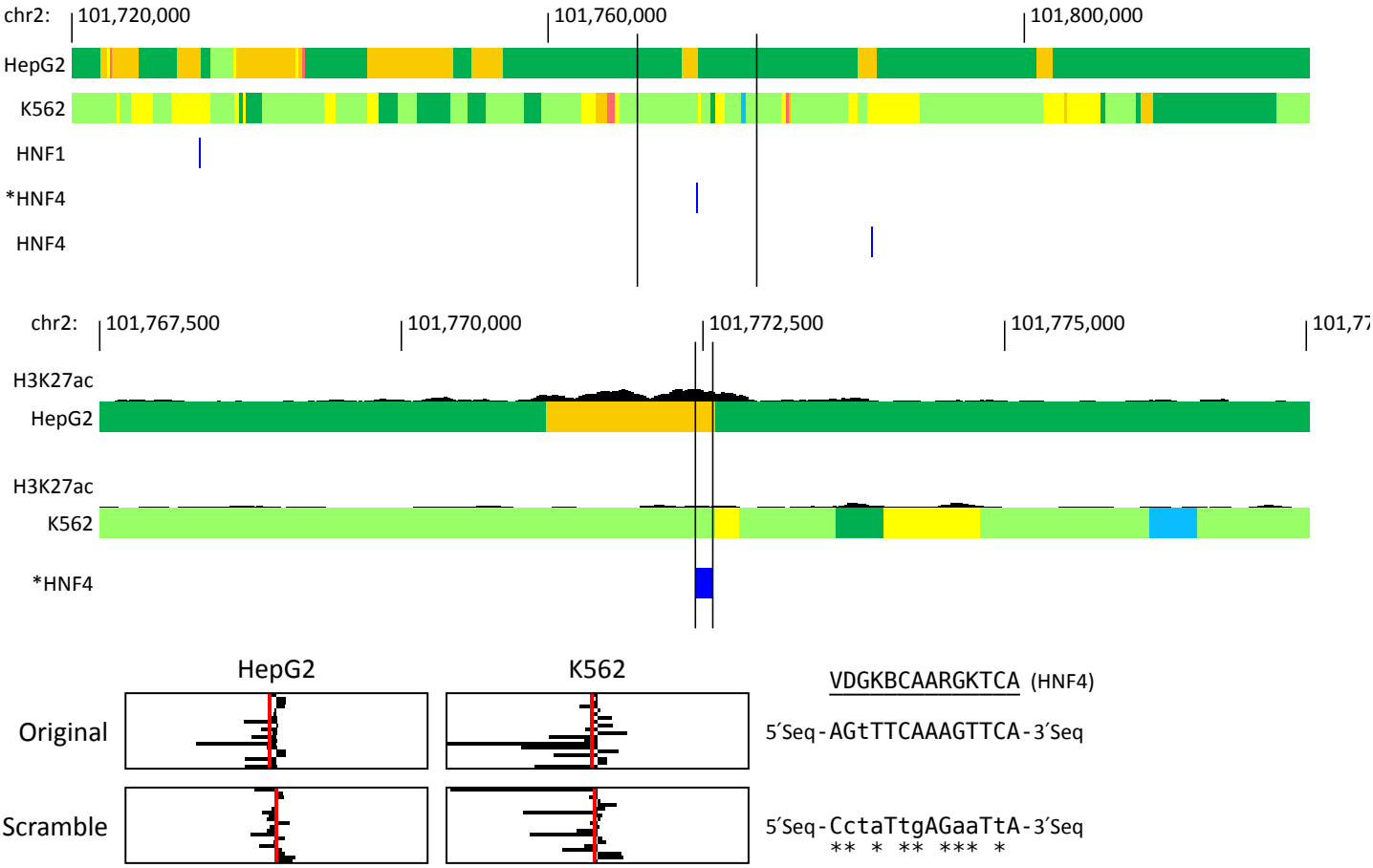
3′Seq = gtttttggcttaggagtacctcagcttcctatgccaacatgtaactcagcagctgaacttaacaa

2109 HNF4 in HepG2 enhancer

chr2 101772503 101772516 + (hg18)



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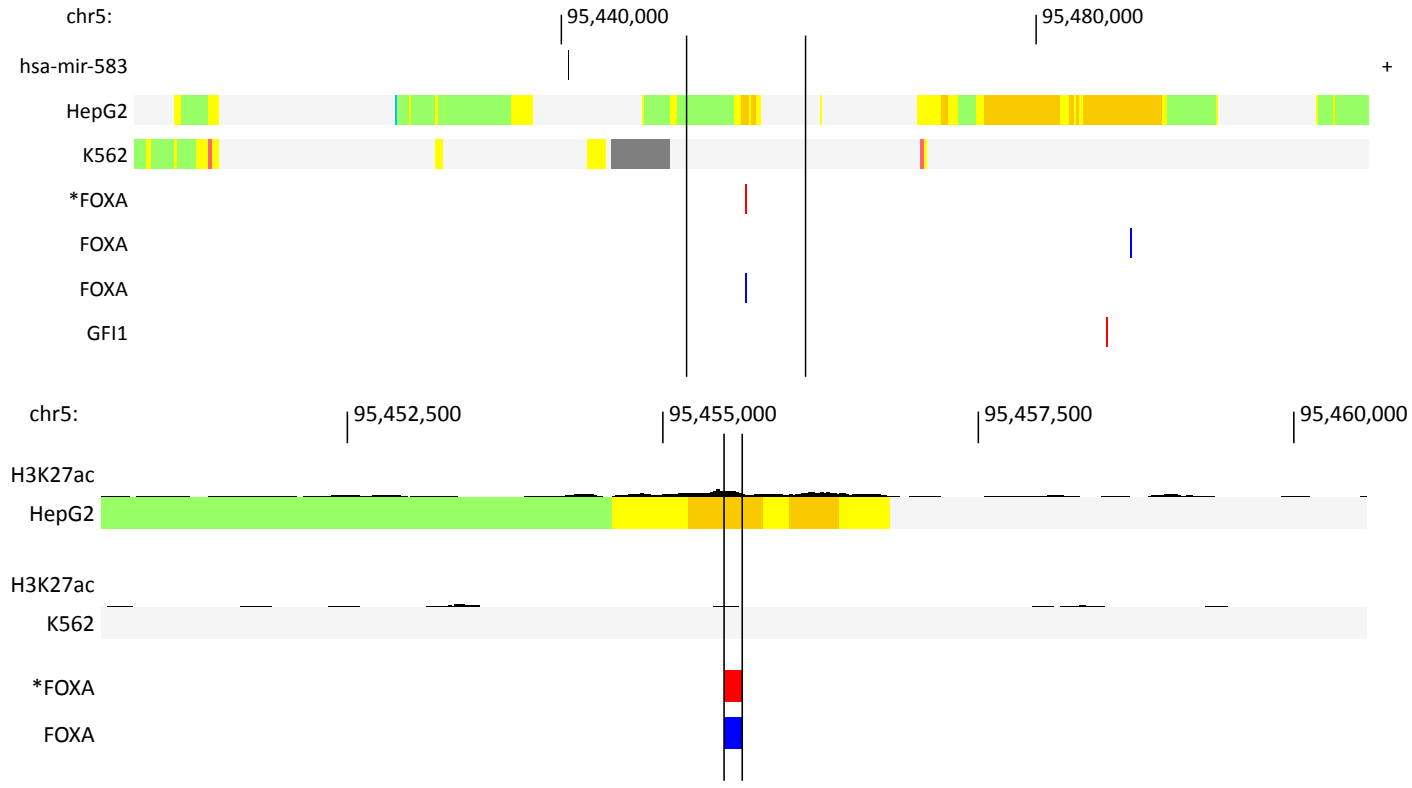
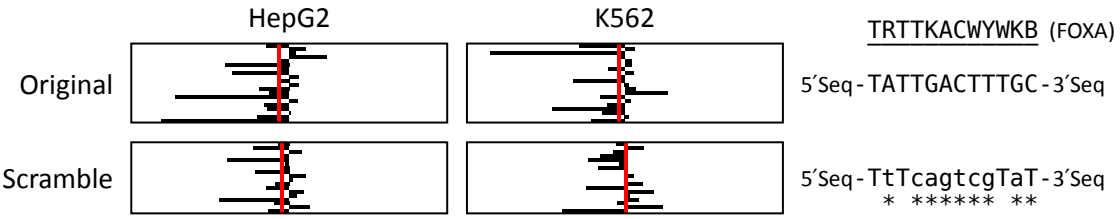
3′Seq = caactctttaagtcatgagacacaagagggacaggctttggaaaatatggggatgttctttctg

2110 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr5 95455552 95455563 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTGACTTTGC-3′Seq

5′Seq-TtTcagtcgTaT-3′Seq

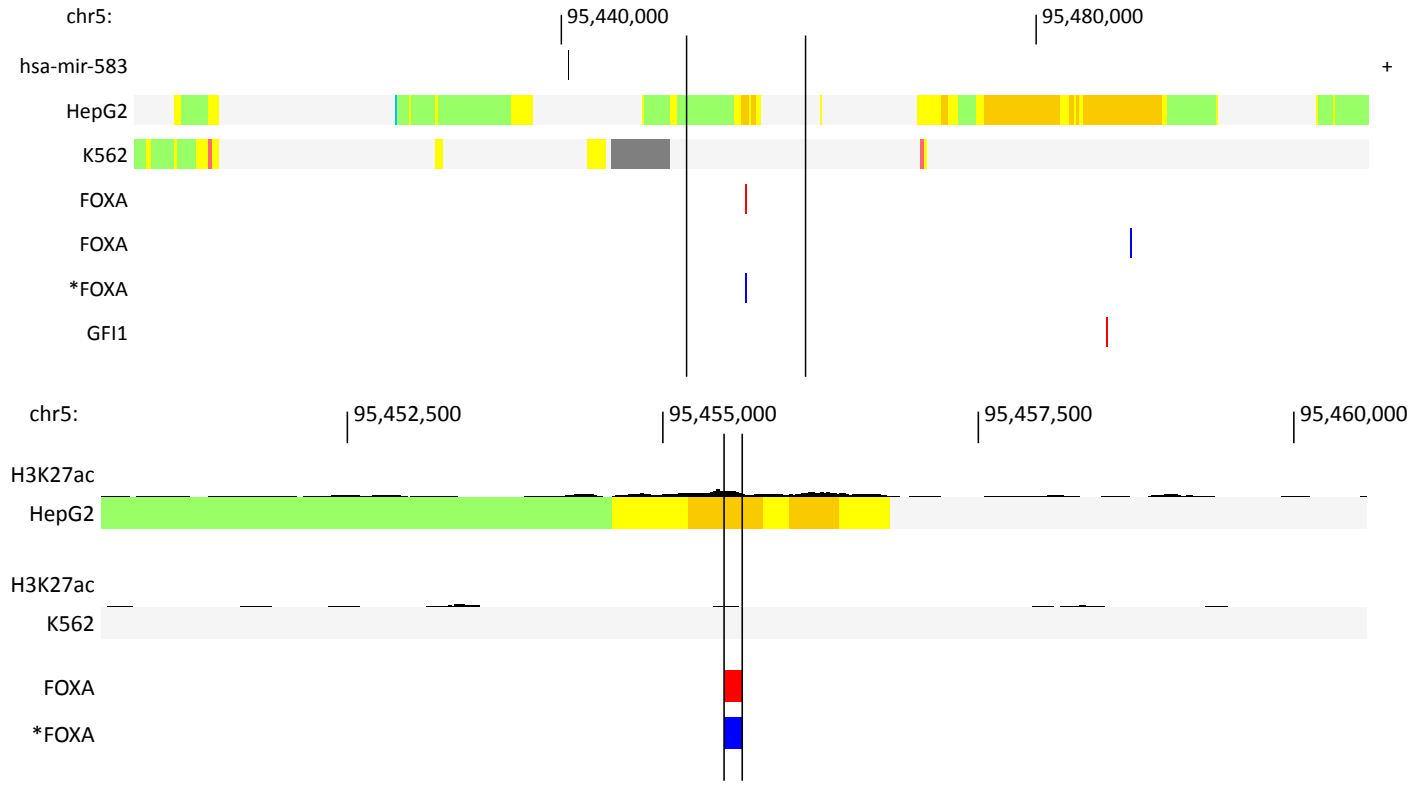
* ****** **

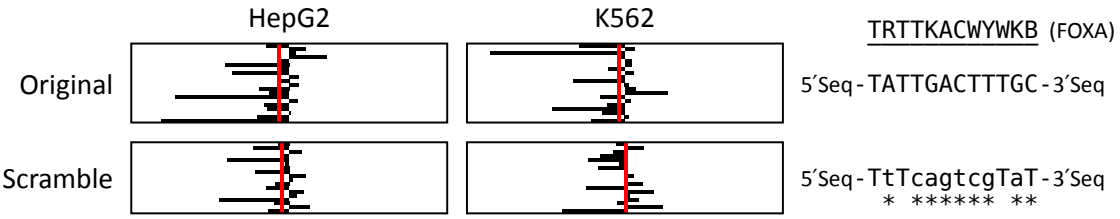
5′Seq = ccttatttccctcaaggaaaaactatttgtaaggaagttagttggttacttgcacctactgtctgat

3′Seq = cacttagttatcttgttgttaaatacacagaaaaagatccctggagcccattagtctccacaggtg

2111 FOXA in HepG2 enhancer

chr5 95455552 95455563 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTGACTTTGC-3′Seq

5′Seq-TtTcagtcgTaT-3′Seq

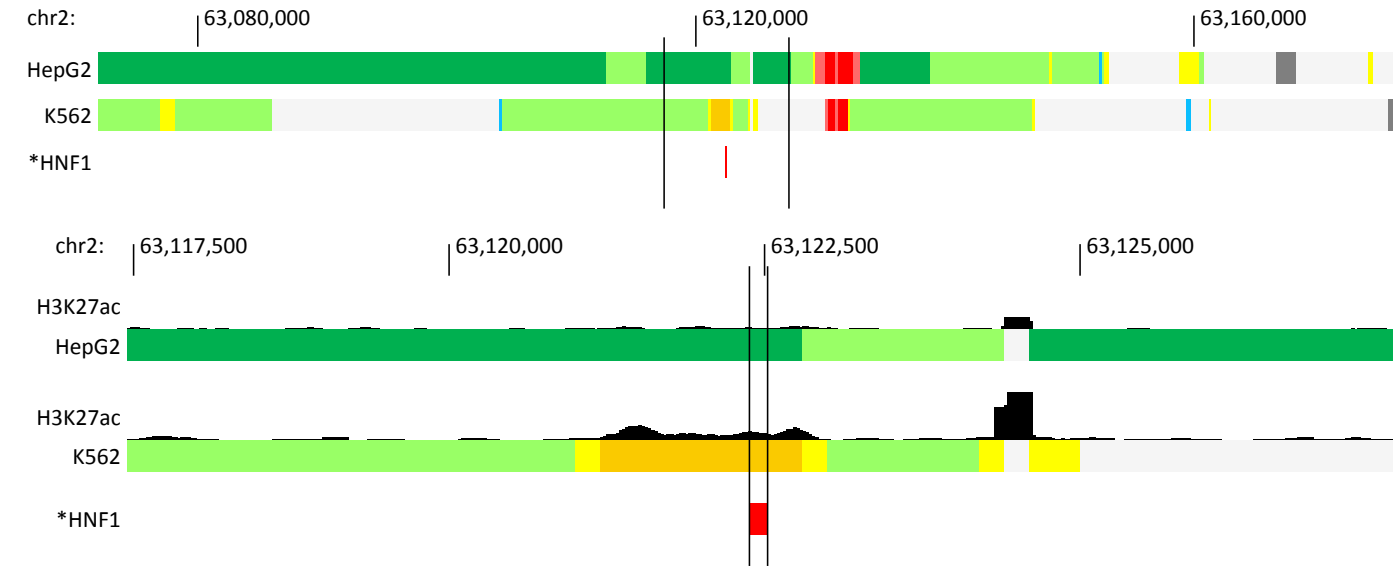
* ***** **

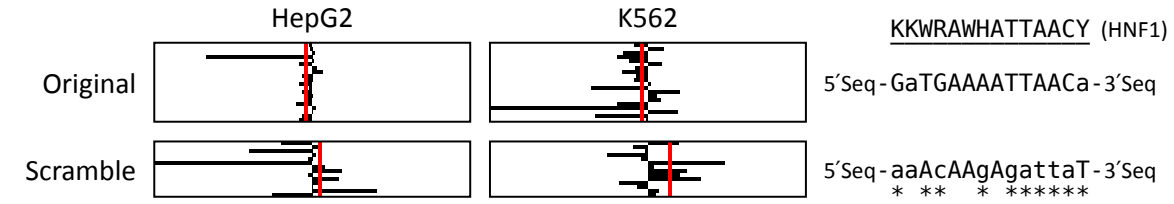
5′Seq = ccttatttccctcaaggaaaaactatttgtaaggaagttagttggttacttgcacctactgtctgat

3′Seq = cacttagttatcttgttgttaaatacacagaaaaagatccctggagcccattagtctccacaggtg

2112 HNF1 in K562 enhancer (conserved at 60% confidence)

chr2 63122446 63122459 - (hg18)





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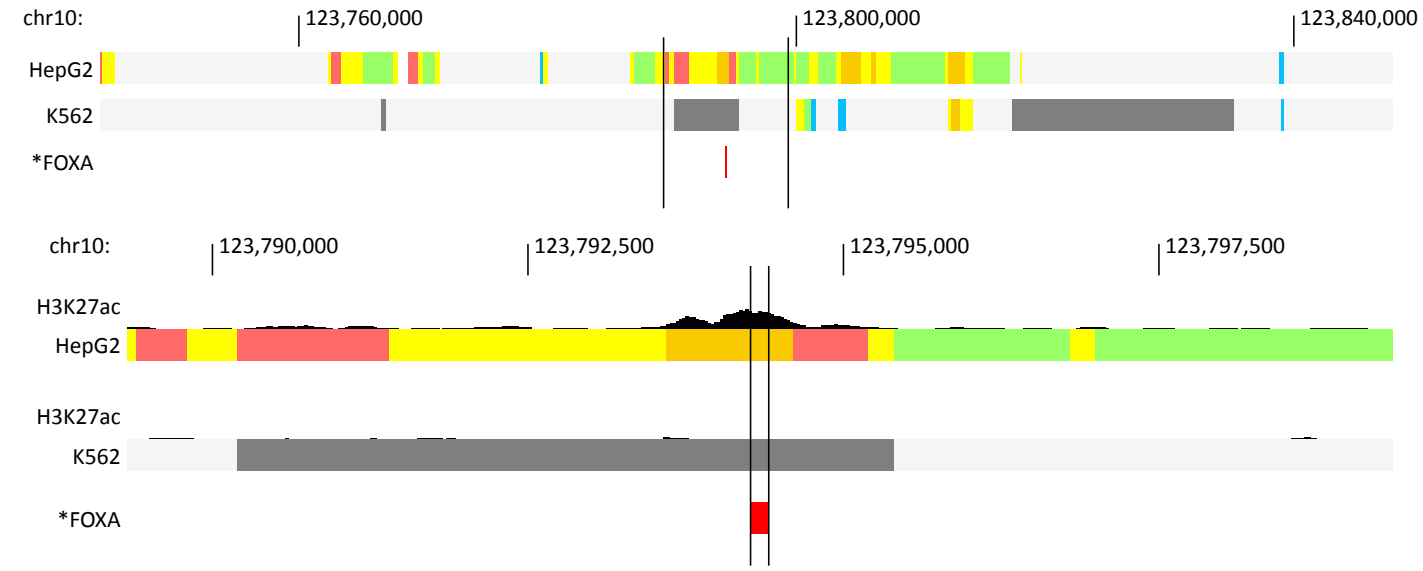
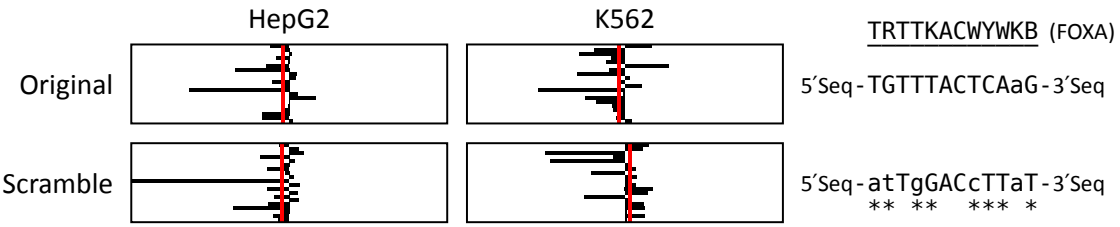
2113 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr10 123794331 123794342 + (hg18)

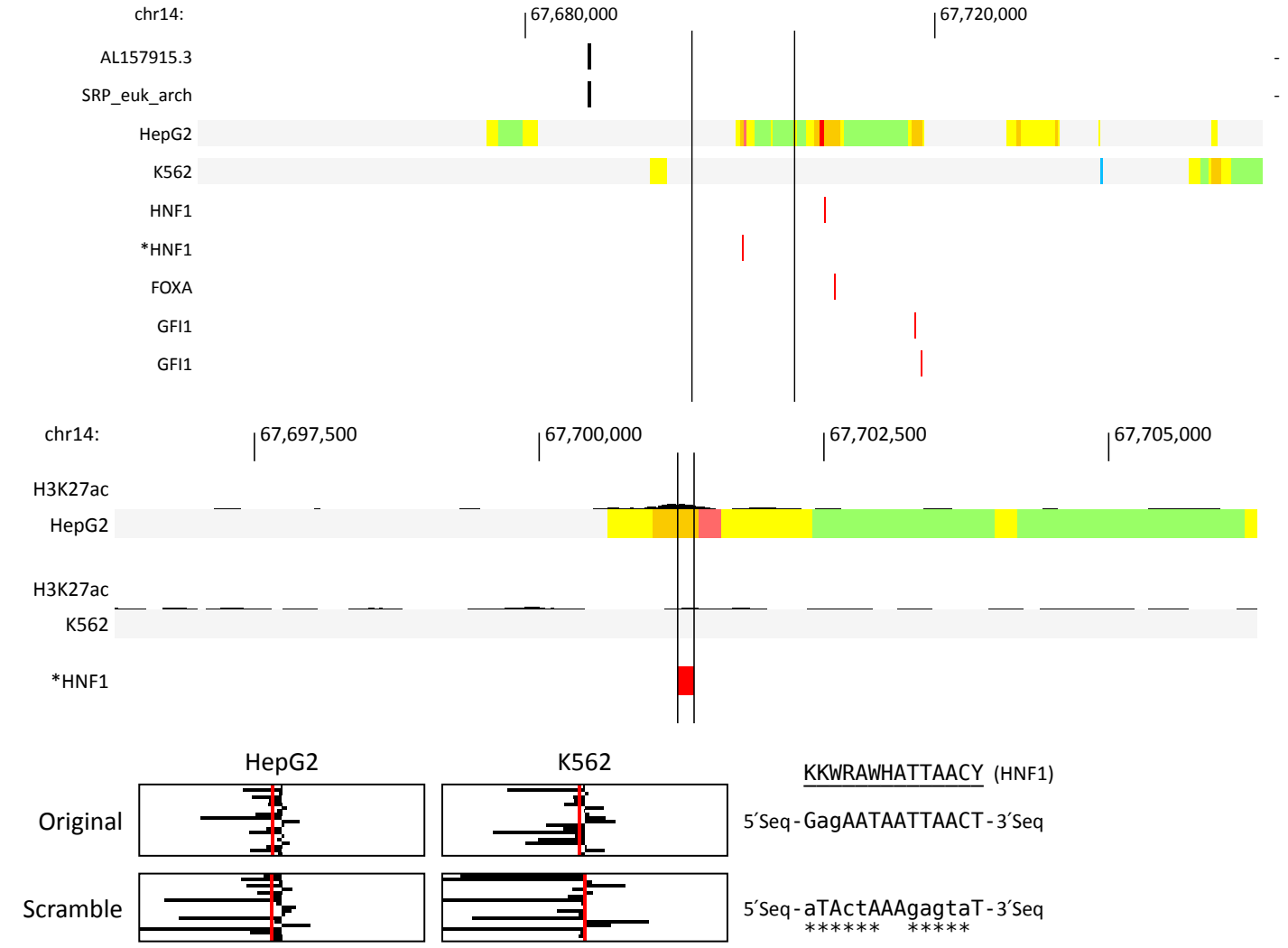




5′Seq = ctgtttaaagattgctttaaaatagactccaggctctggagtgttccagagccaacgaaagactgtt
3′Seq = caatggcagcgagggaaagatttgaagaagcaactgggcgagtccacgtgtcctgtaaggcttgcc

2114 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr14 67701282 67701295 - (hg18)



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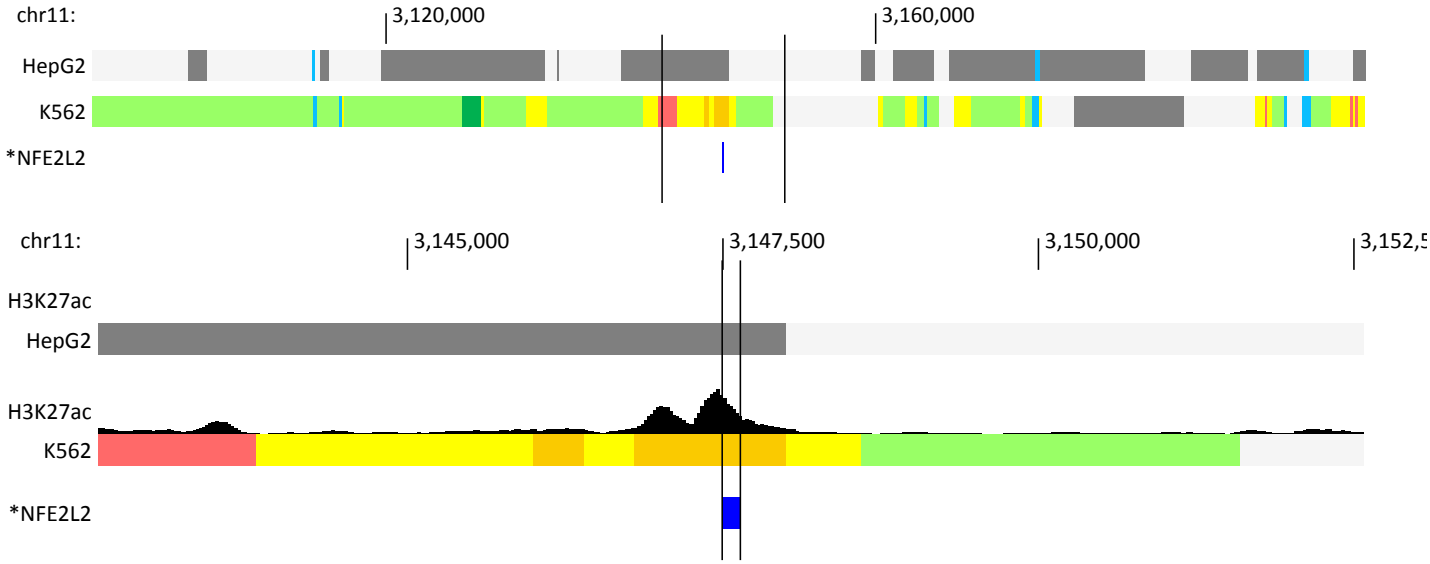
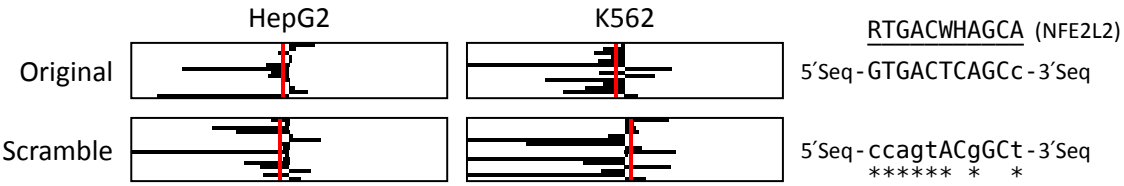
3′Seq = acccacatctggtacatgttactgaaaatgctagtgggaaccattacctttggtaagggttattt

2115 NFE2L2 in K562 enhancer

chr11 3147561 3147571 - (hg18)





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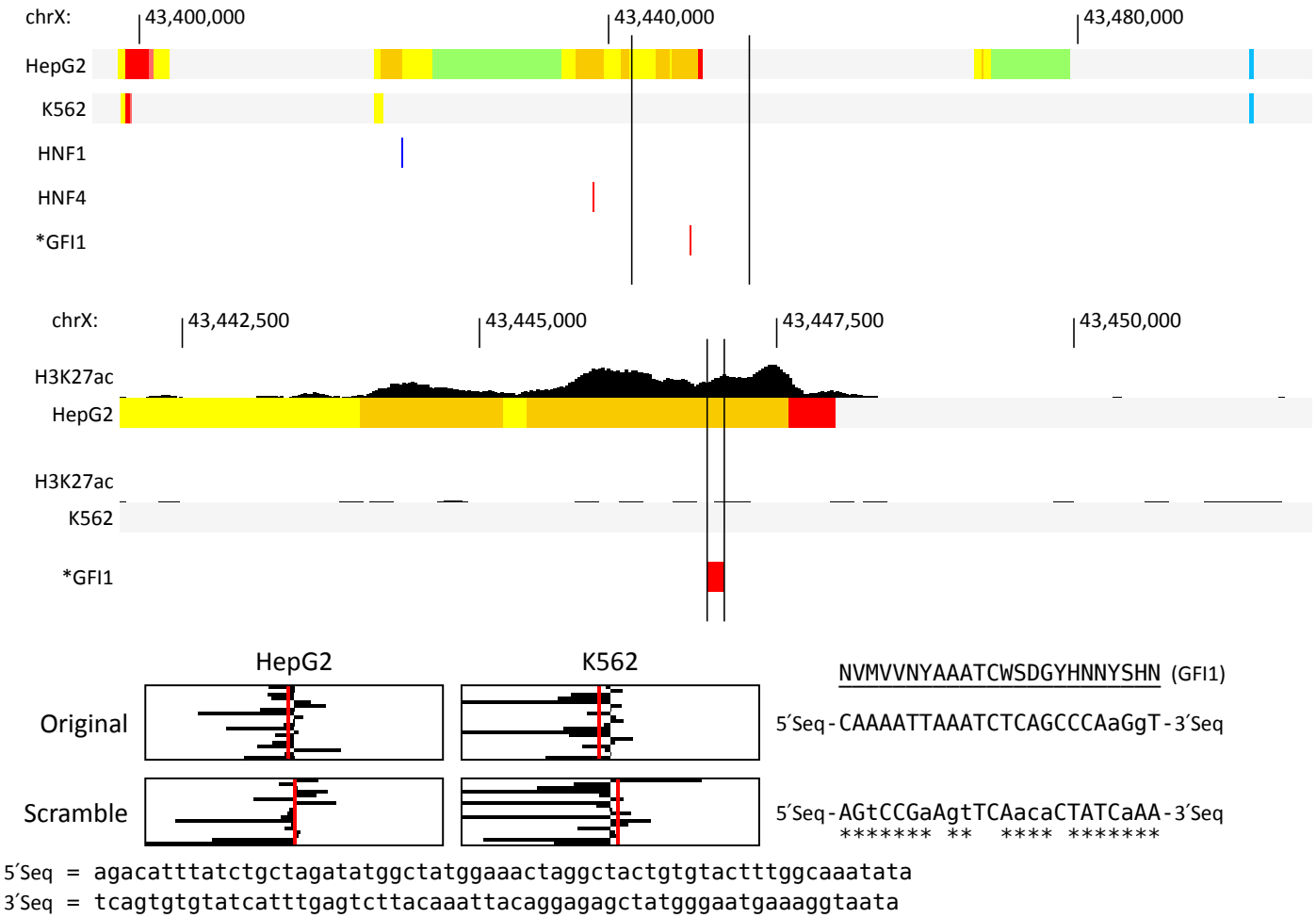
2116 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chrX 43446976 43446999 - (hg18)



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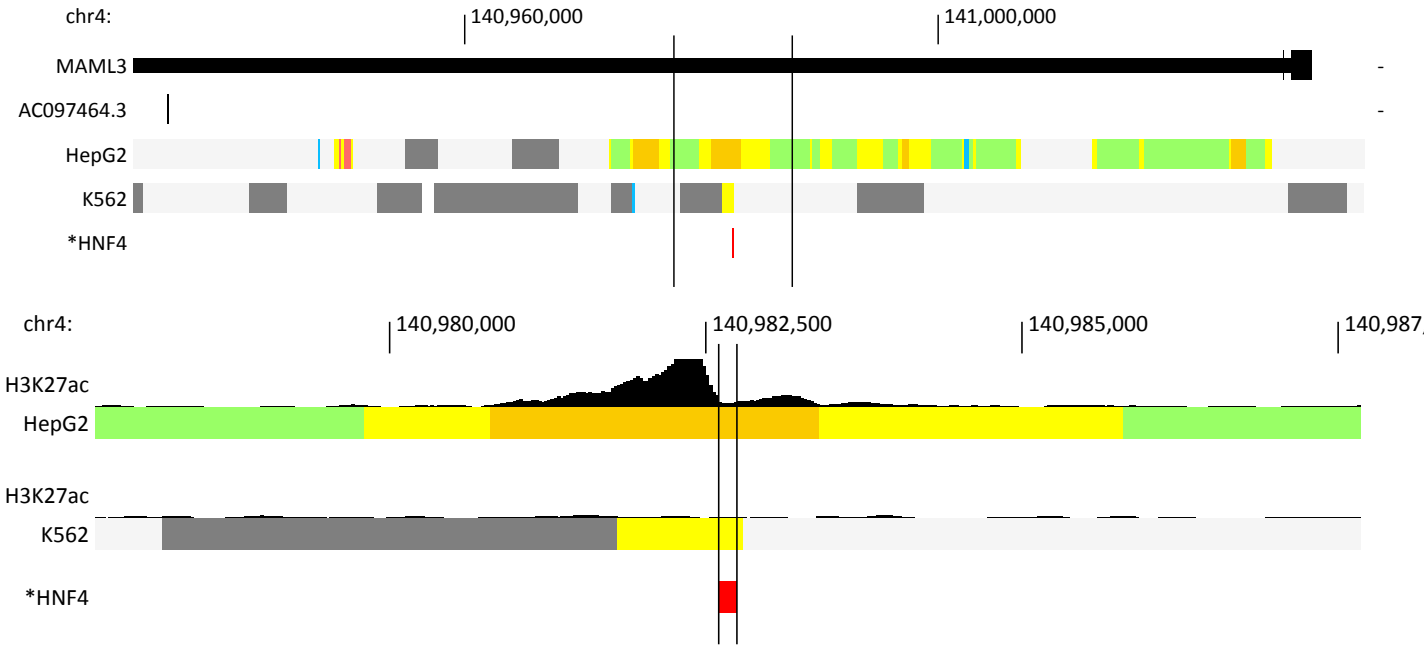
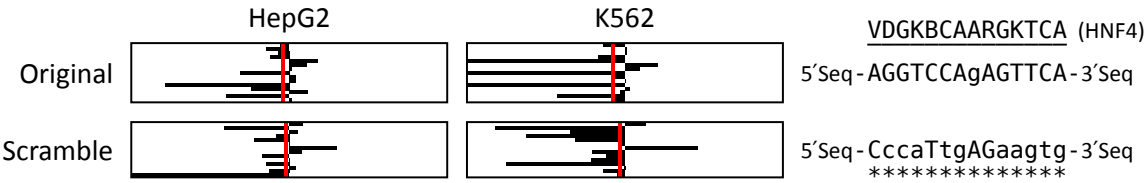
2117 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr4 140982668 140982681 + (hg18)





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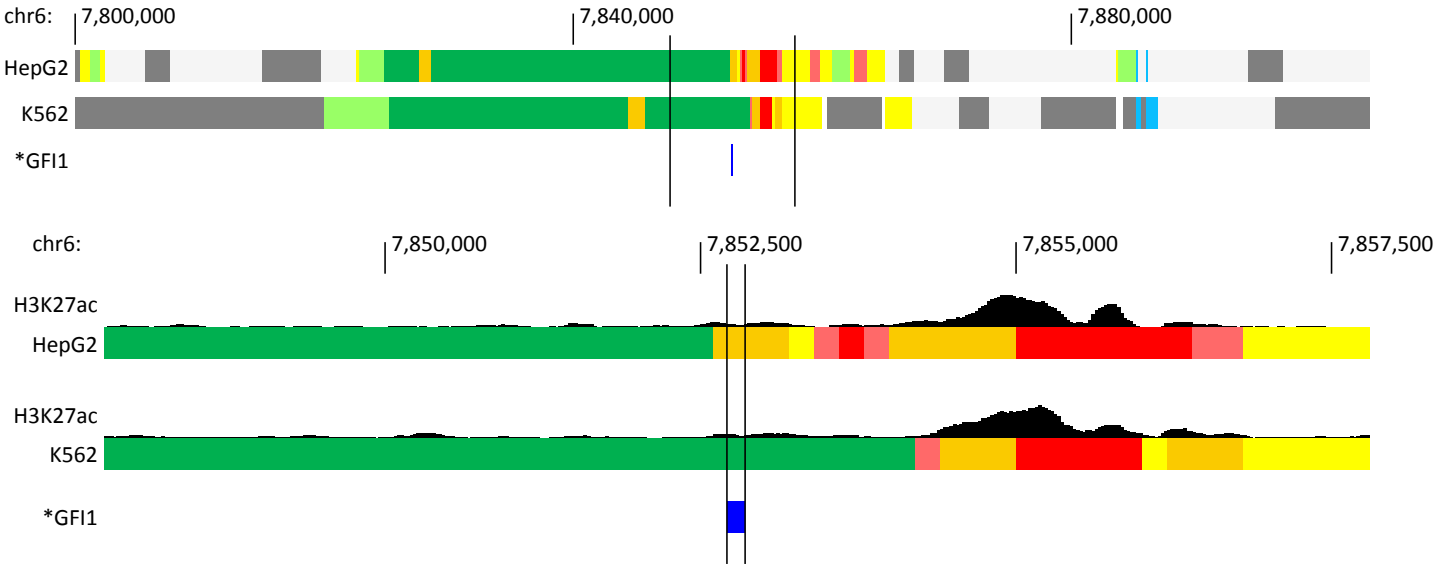
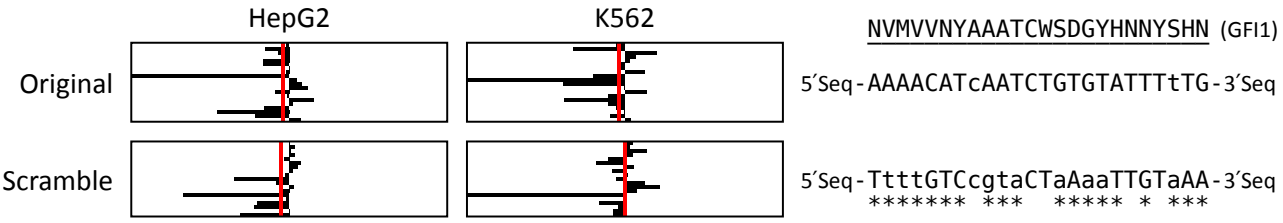
2118 GFI1 in HepG2 enhancer

chr6 7852770 7852793 - (hg18)





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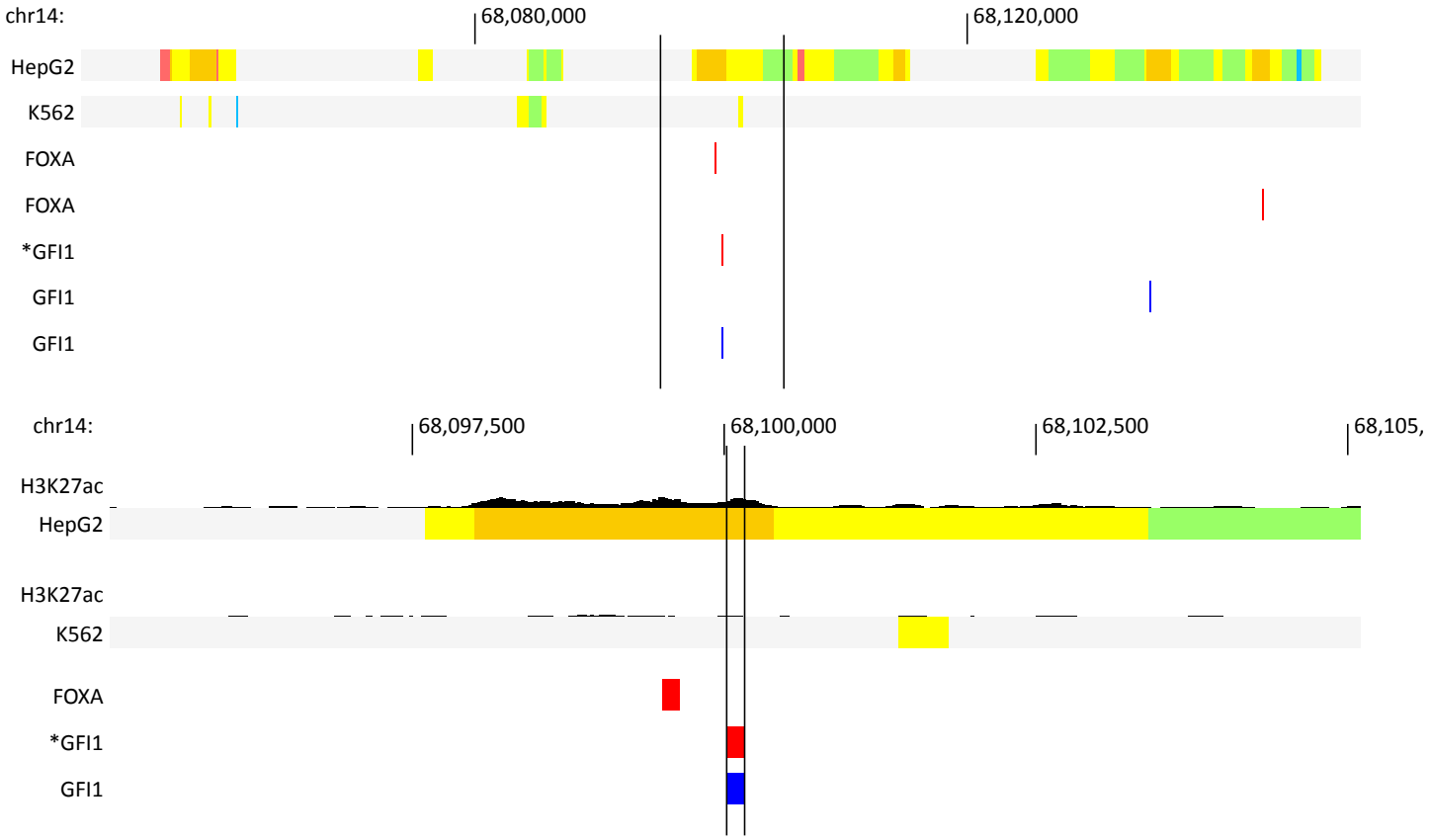
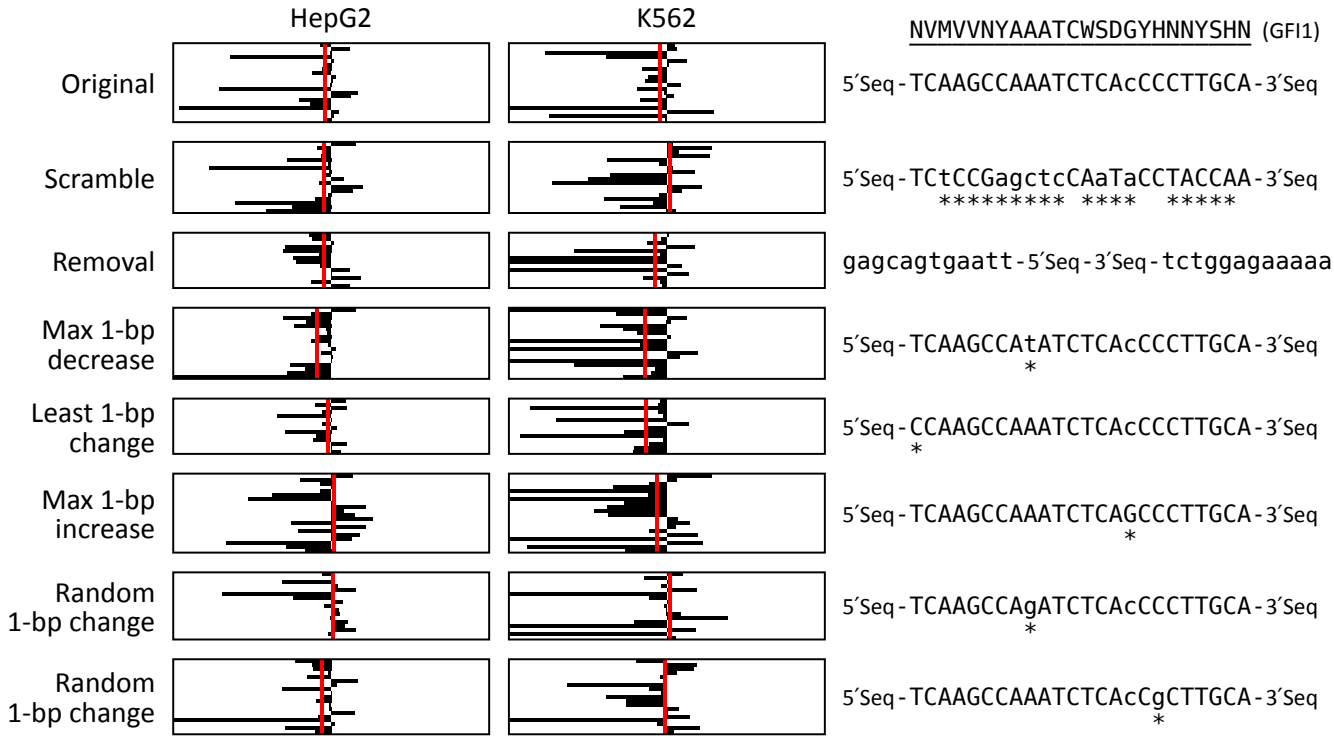
2119 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr14 68100081 68100104 - (hg18)





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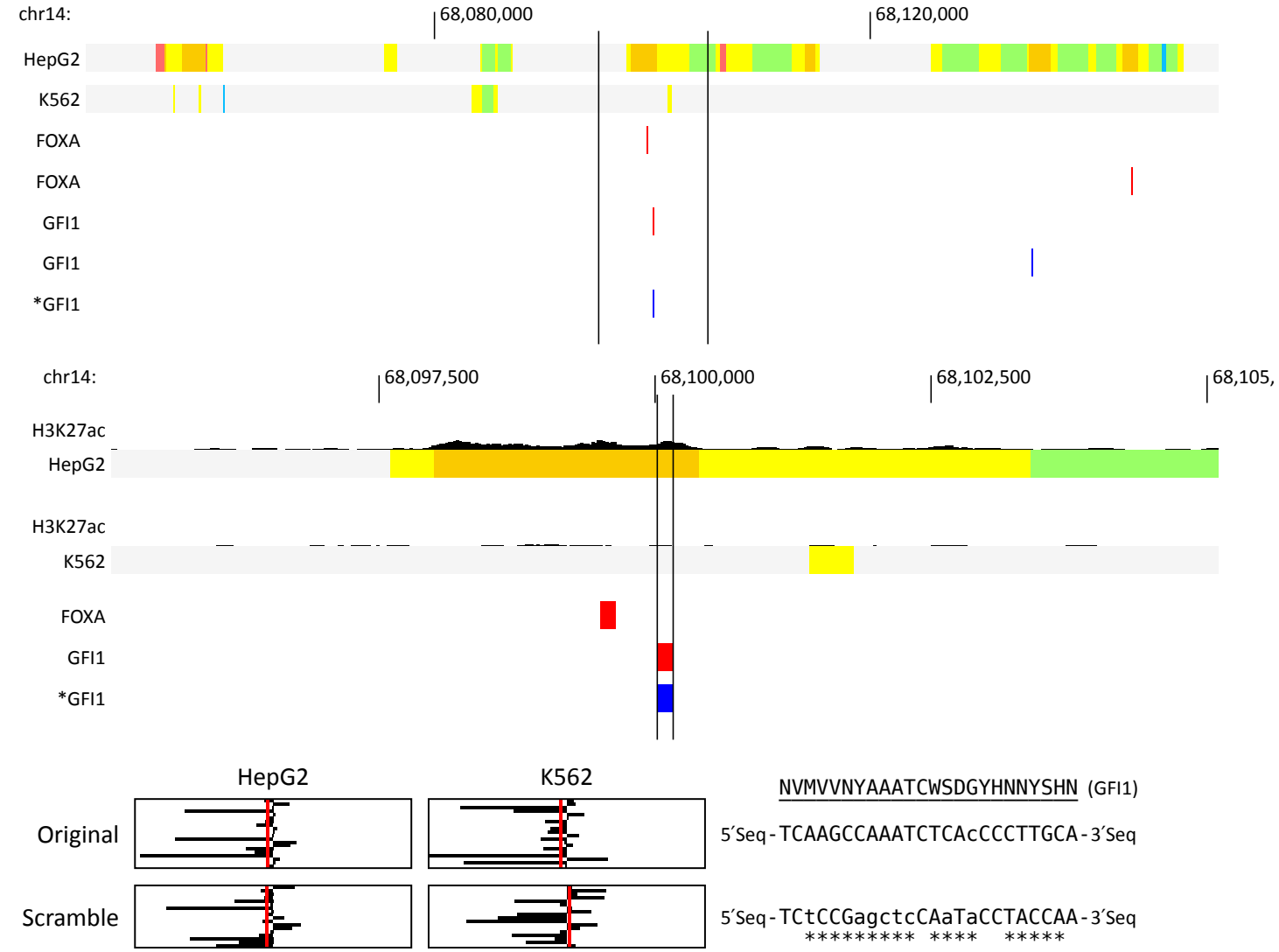
2120 GFI1 in HepG2 enhancer

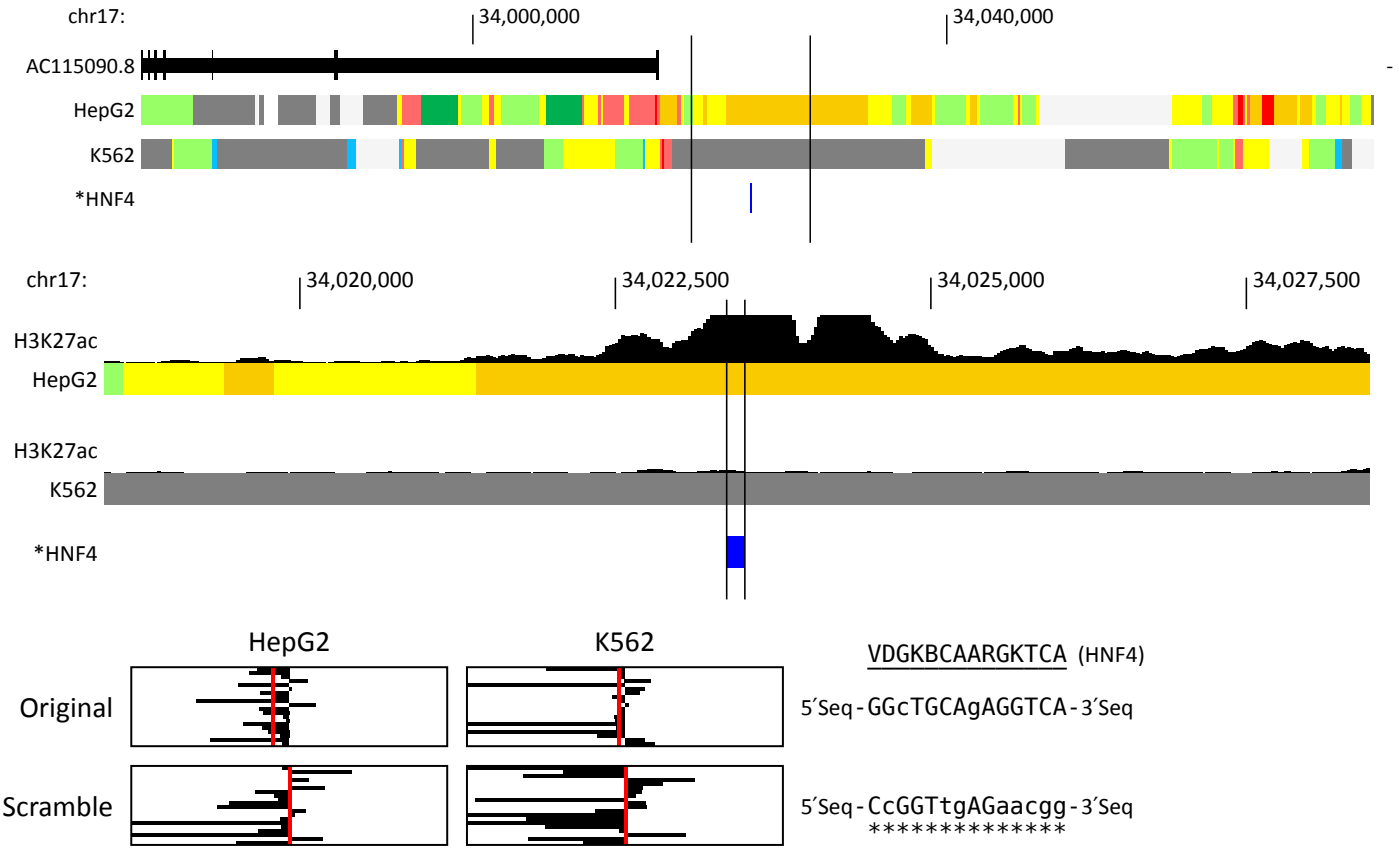
chr14 68100081 68100104 - (hg18)



5′Seq = tgagcaatctgggaattttggtttctgcccttcccccgaagcatgaccgatggcccatttt
3′Seq = ggcagctgtcaggaaaccacagaaggtgcttgaaggcacacaagaaatggctggttctaa

2121 HNF4 in HepG2 enhancer

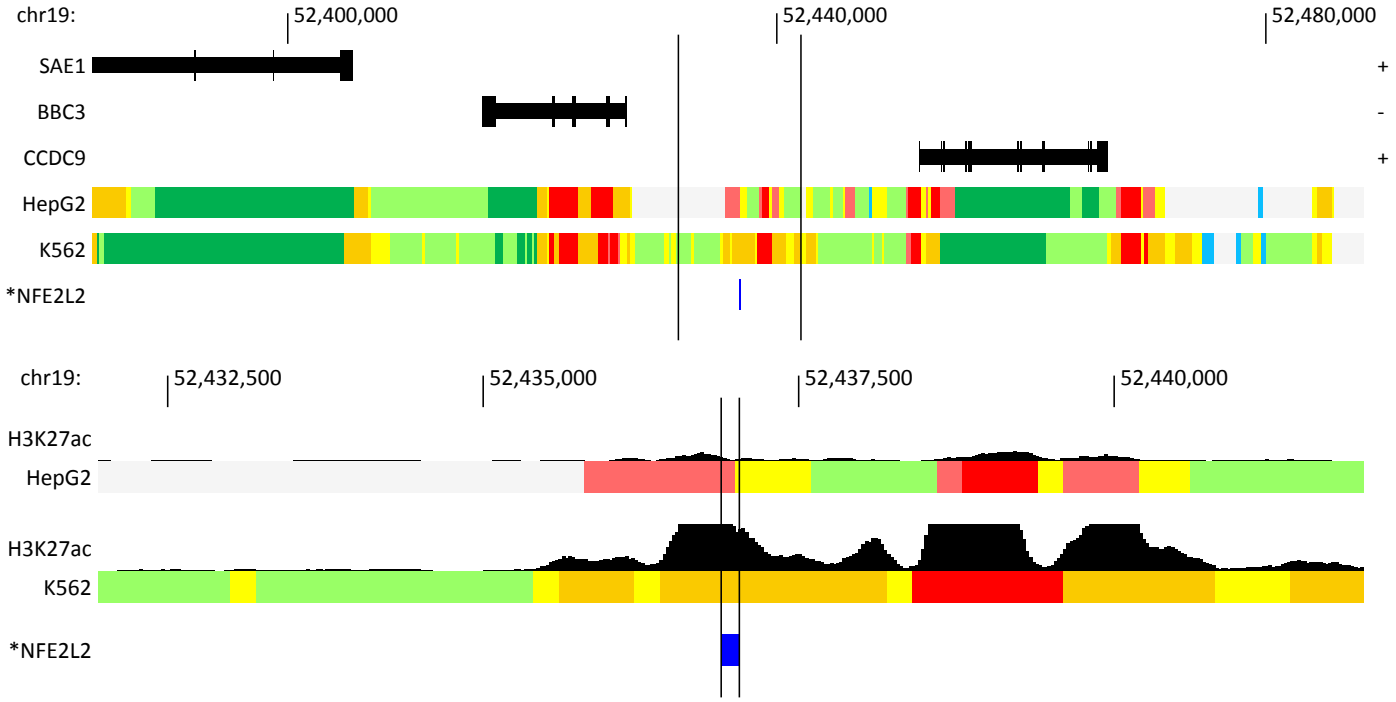
chr17 34023448 34023461 - (hg18)

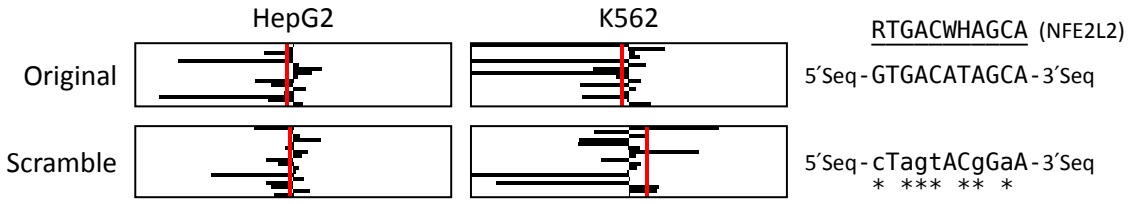


5′Seq = aaccagtggctggcactggtctatggaccacactttgagtagctctgccttagaggtccttggatg
3′Seq = aagaggcccactcatttcttgtacatgggcacatttatttatttacagagaatgcaaaattcttg

2122 NFE2L2 in K562 enhancer

chr19 52436953 52436963 - (hg18)

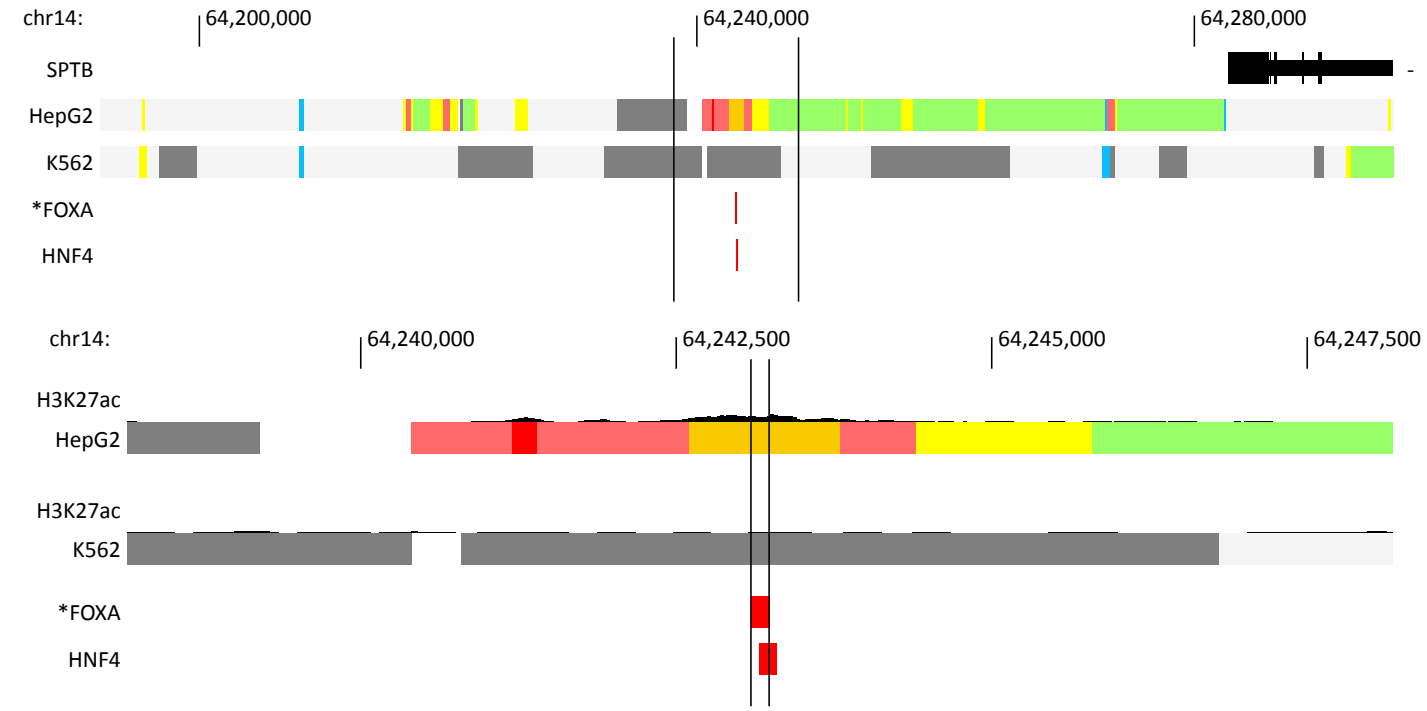


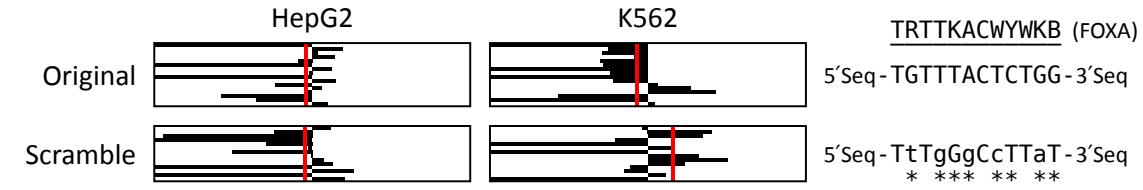


5′Seq = acacacacaaccccagtgacacccagcattacacaaacacatccaaccatgacaacagaacagtaca
3′Seq = ccttcacagatcttcccccaacacaacatcactctgacacatatacgatcccagcgtcaggacacaa

2123 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr14 64243159 64243170 - (hg18)

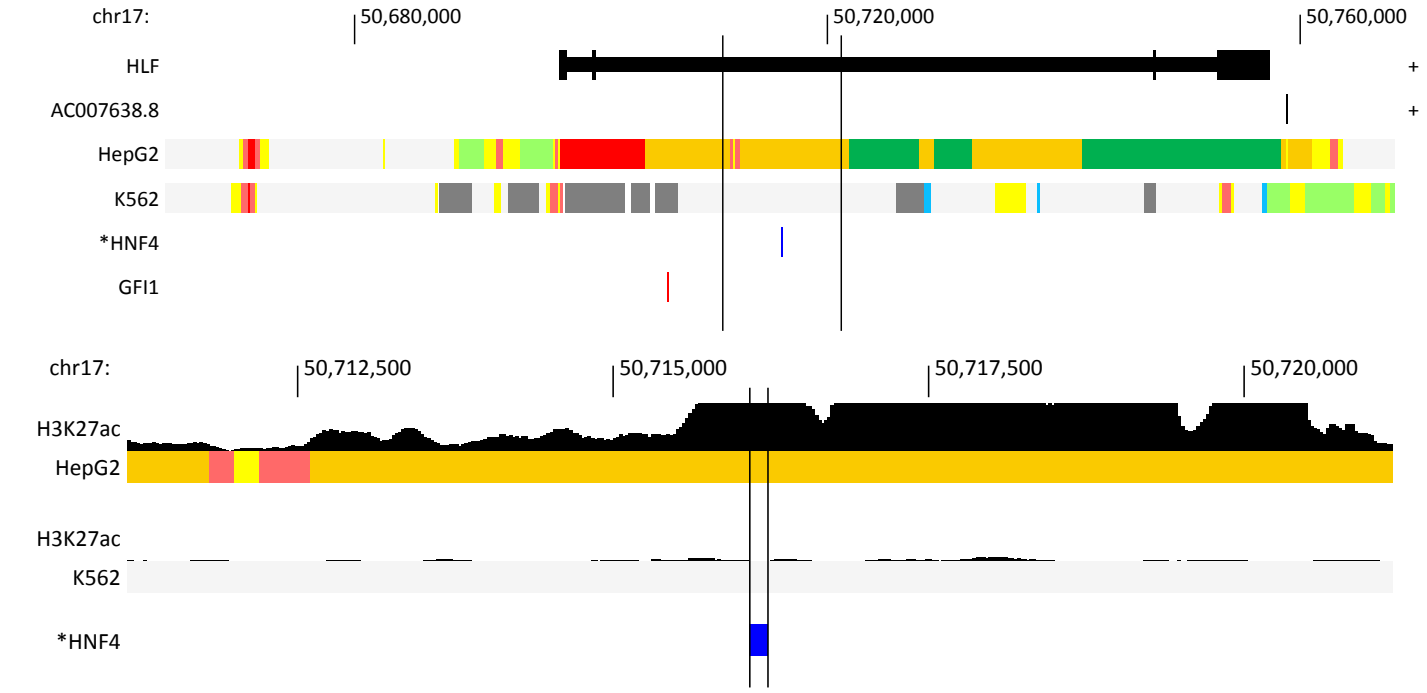


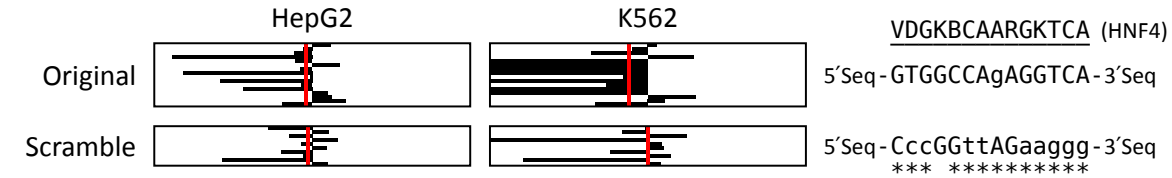


5′Seq = ccgtggcctttggcctcttccagcgtaaacagtgaccgtgggatagctgcggatttggtaaggcaaa
3′Seq = ggctgagatattaagaccagggtgttttaaacatccaacaatggctcctggtatctaacgtctcct

2124 HNF4 in HepG2 enhancer

chr17 50716149 50716162 + (hg18)





VDGKBCAARGKTCA (HNF4)

5′Seq-GTGGCCAgAGGTCA-3′Seq

5′Seq-CccGGttAGaaggg-3′Seq

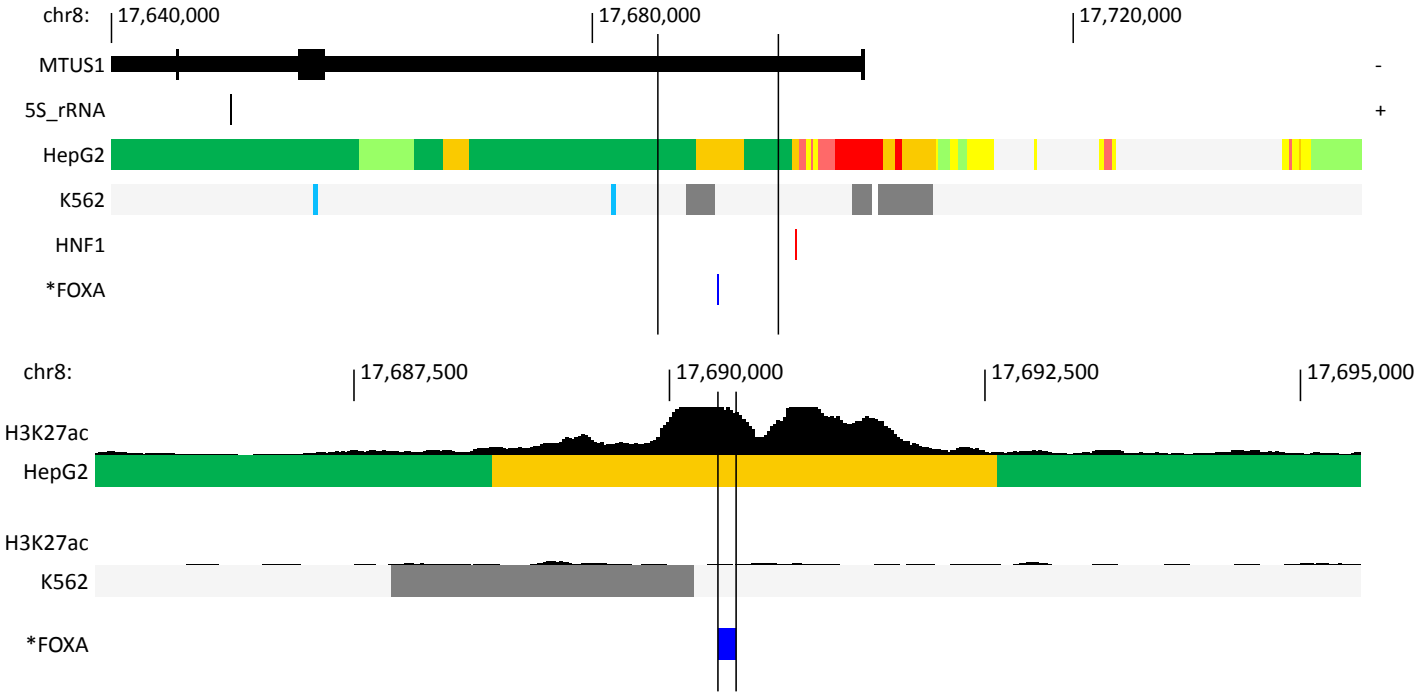
*** **********

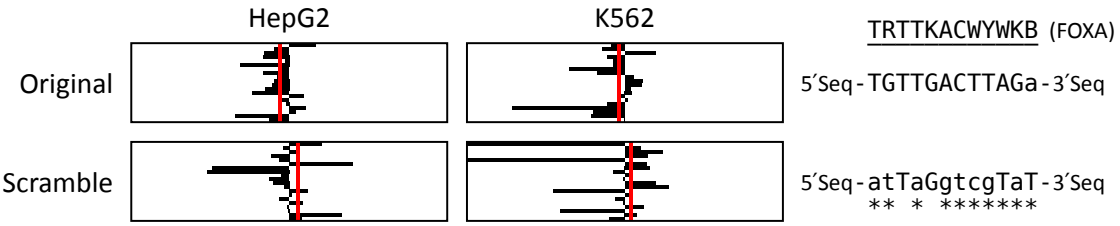
5′Seq = gcacaggcataggtgccactgatccagcagaggcagccacaaaccacaggccctggtaagctgcct

3′Seq = tggctgcagattccagggaaactgcgtcctcggtaggcagtcagccgtacactccatacttgcga

2125 FOXA in HepG2 enhancer

chr8 17690451 17690462 - (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTGACTTAGa-3′Seq

5′Seq-atTaGgtcgTaT-3′Seq

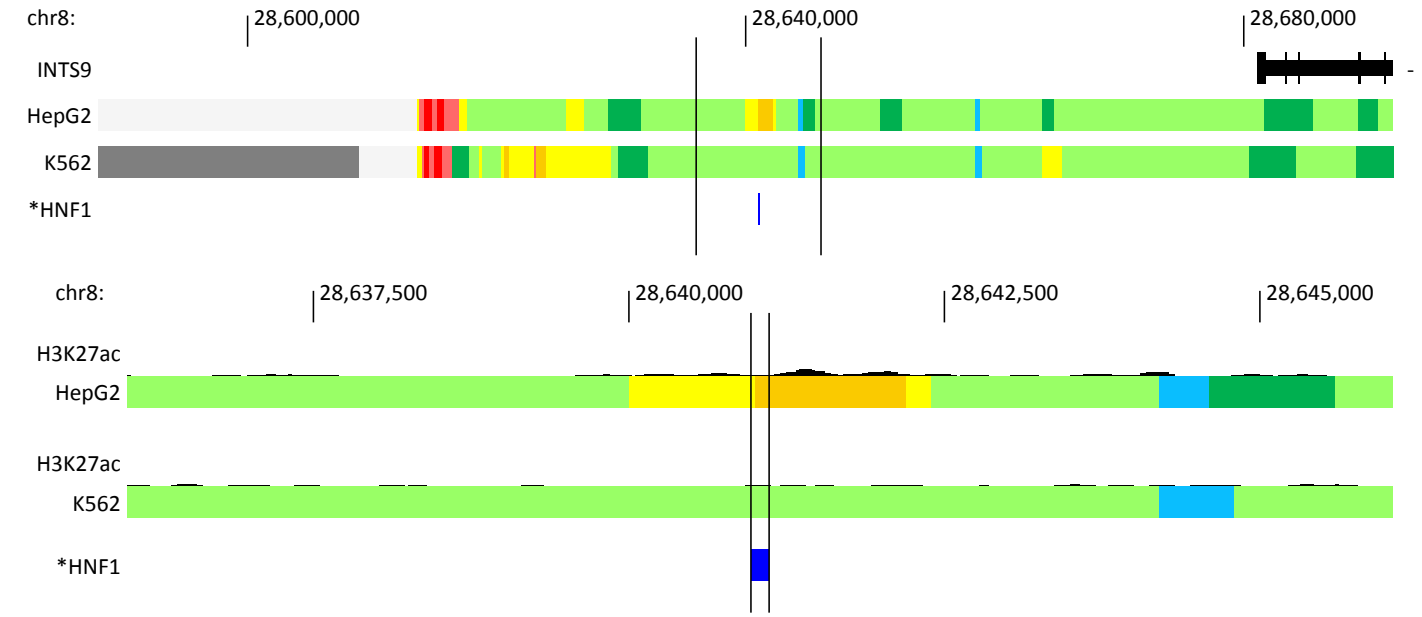
** * *******

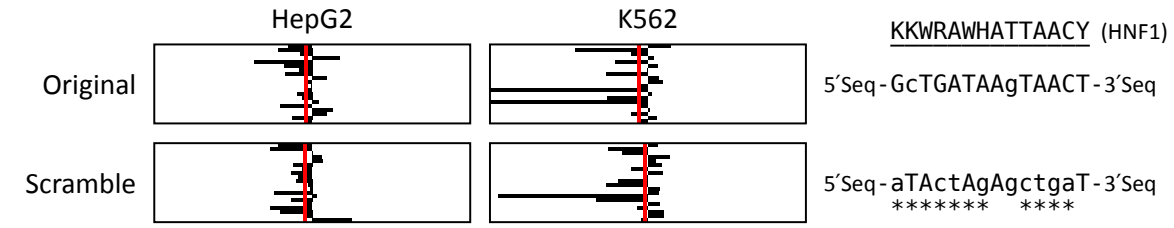
5′Seq = ttccttcctctgggaggagtatttagaattgtgctttttatttttgttcaataaactgttgaaggaa

3′Seq = ttgagaaatatagttgagattctcagaagtcggctgagttaggactgcaggcagctggcacatgat

2126 HNF1 in HepG2 enhancer

chr8 28641033 28641046 + (hg18)

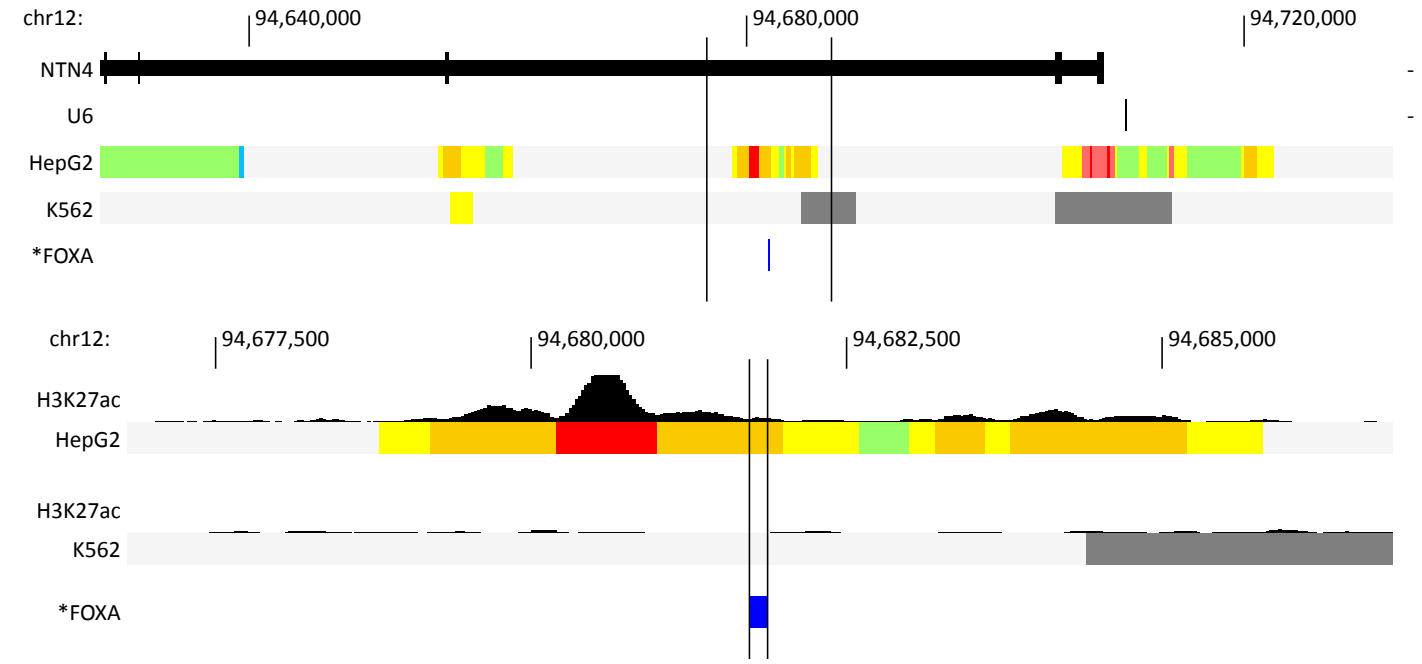


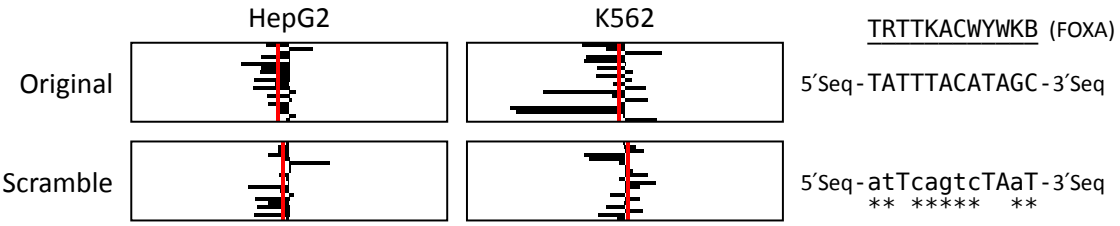


5′Seq = ttgtagtttttcttgtttttcgttttcaggtgcagagttaggttgtttataggattgtcaagtttg
3′Seq = tcagattttgcaaacagtgtggtgctatgttgatttagcagagagggtgctggcattcacacgtc

2127 FOXA in HepG2 enhancer

chr12 94681797 94681808 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TATTTACATAGC-3′Seq

5′Seq-atTcagtcTAaT-3′Seq

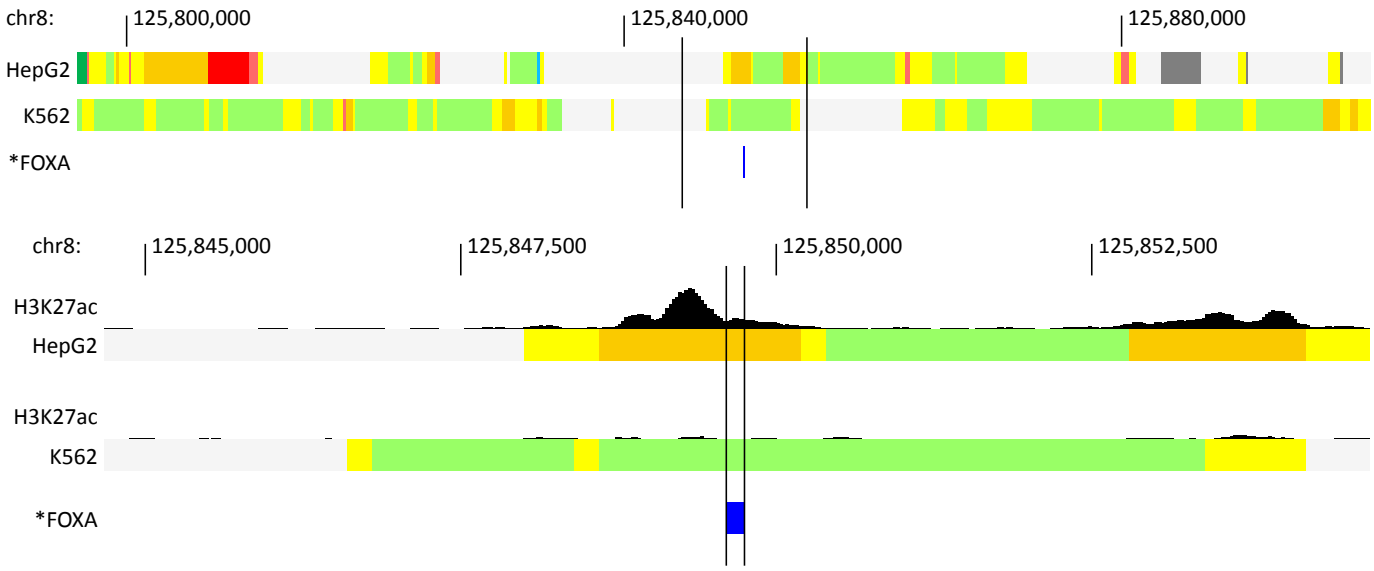
** ***** **

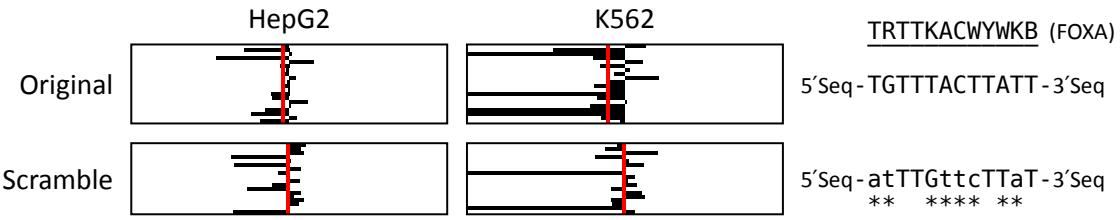
5′Seq = aagaaatgaagctgactgagtggagacagtagcatgagacagaaaaatatgtttttatgagacctat

3′Seq = ctcttgagcacccacttctaatcatggtaaaactggaatgcaagactgaagttccaatgtcattat

2128 FOXA in HepG2 enhancer

chr8 125849671 125849682 + (hg18)





TRTTKACWYWKB (FOXA)

5′Seq-TGTTTACTTATT-3′Seq

5′Seq-atTTGttcTTaT-3′Seq

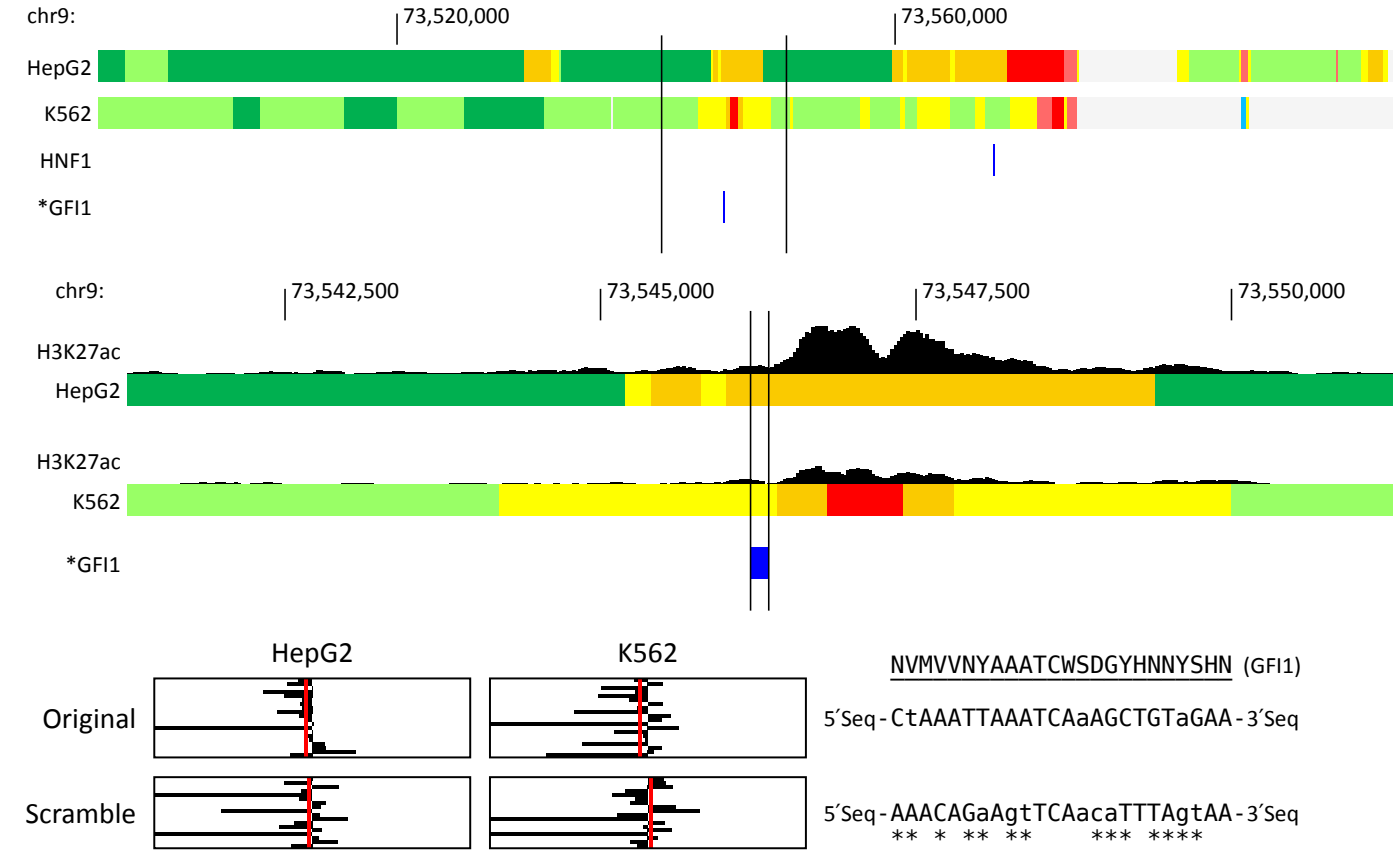
** **** **

5′Seq = attacttaaaggcctcagttctttttagaattctatggagcctctatctctgagtttccatactcct

3′Seq = aatgtcagattttggactaccttcatacttgctatgtactttgattcttccccaacaaaactagaa

2129 GFI1 in HepG2 enhancer

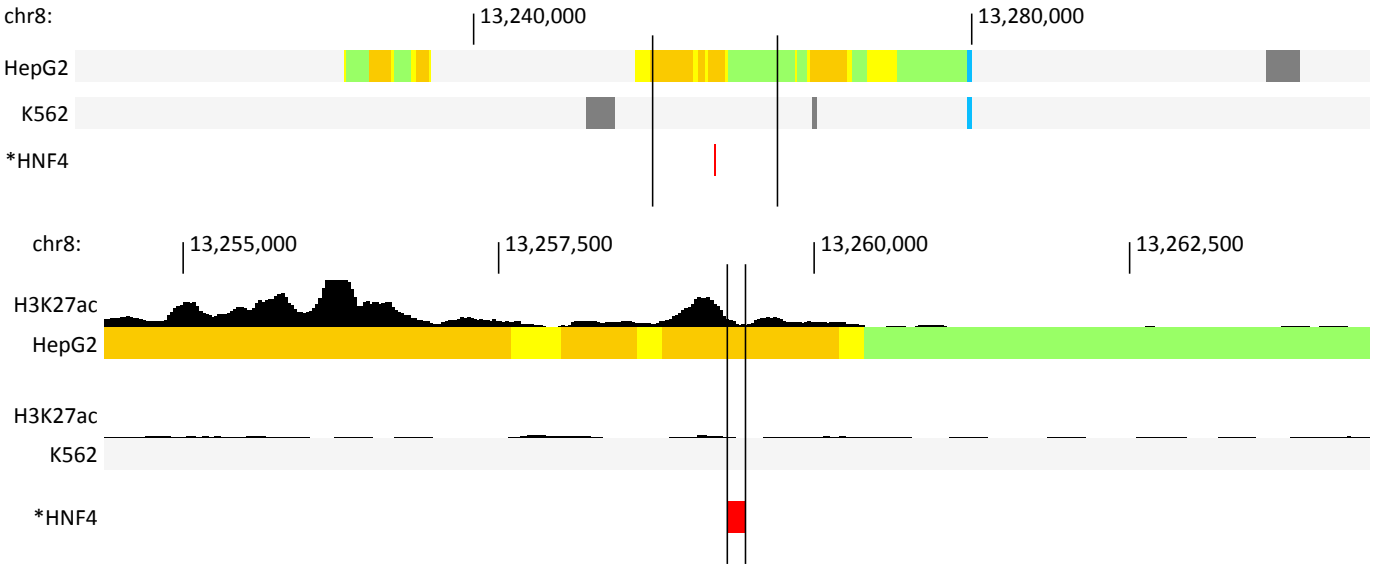
chr9 73546250 73546273 + (hg18)

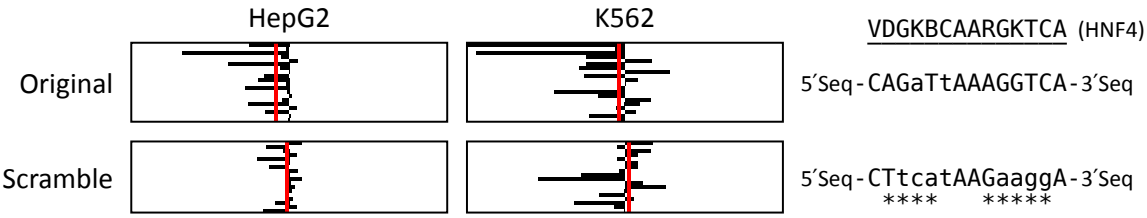


5′Seq = tcccaaagtgctgggattacaggtgtgagccaccgcagccagcagagatttcttaacgttc
3′Seq = tcactatccaacagattttaaattttatatactatatgtctatttgttgacagcaatgtg

2130 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr8 13259378 13259391 + (hg18)

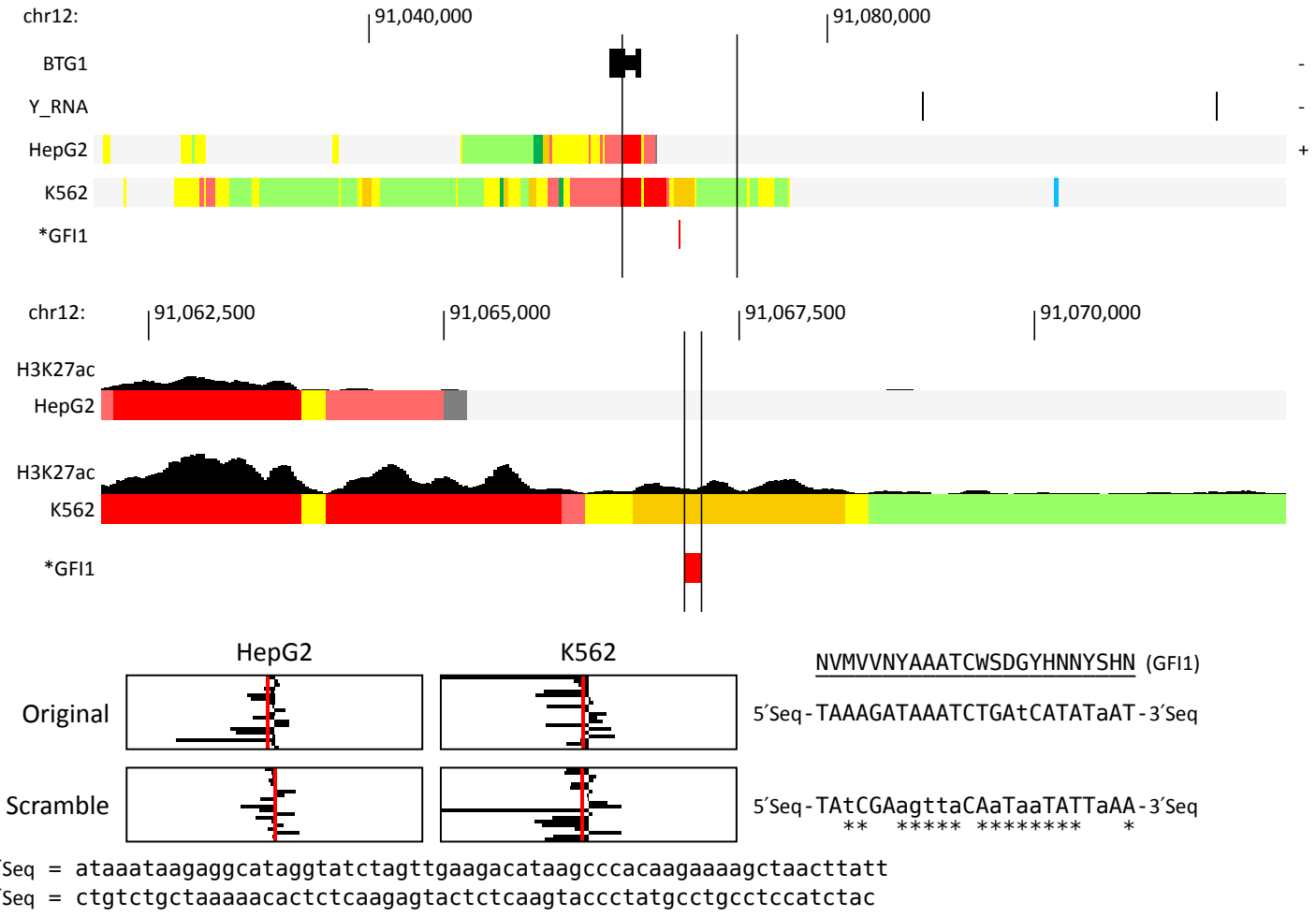




5′Seq = ctctgccaggcctgagccccagcacgttgtgagatgctttatatagaagagcactgatgacccaaa
3′Seq = gtgaagttaagcctggggtaattgttctctgaactctggcacattcttactgggtttctgctgtt

2131 GFI1 in K562 enhancer (conserved at 40% confidence)

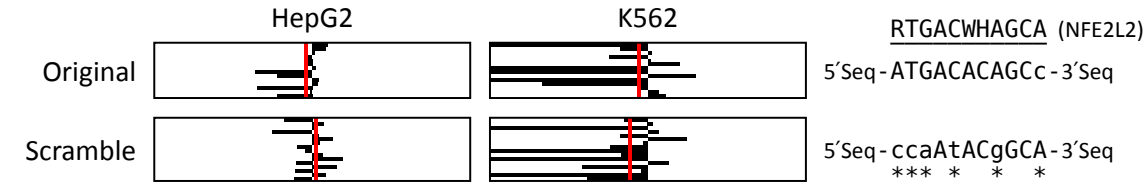
chr12 91067098 91067121 - (hg18)



5′Seq = ataaataagaggcataggtatctagttgaagacataagcccacaagaaaagctaacttatt
3′Seq = ctgtctgctaaaaacactctcaagagtactctcaagtaccctatgcctgcctccatctac

2132 NFE2L2 in K562 enhancer

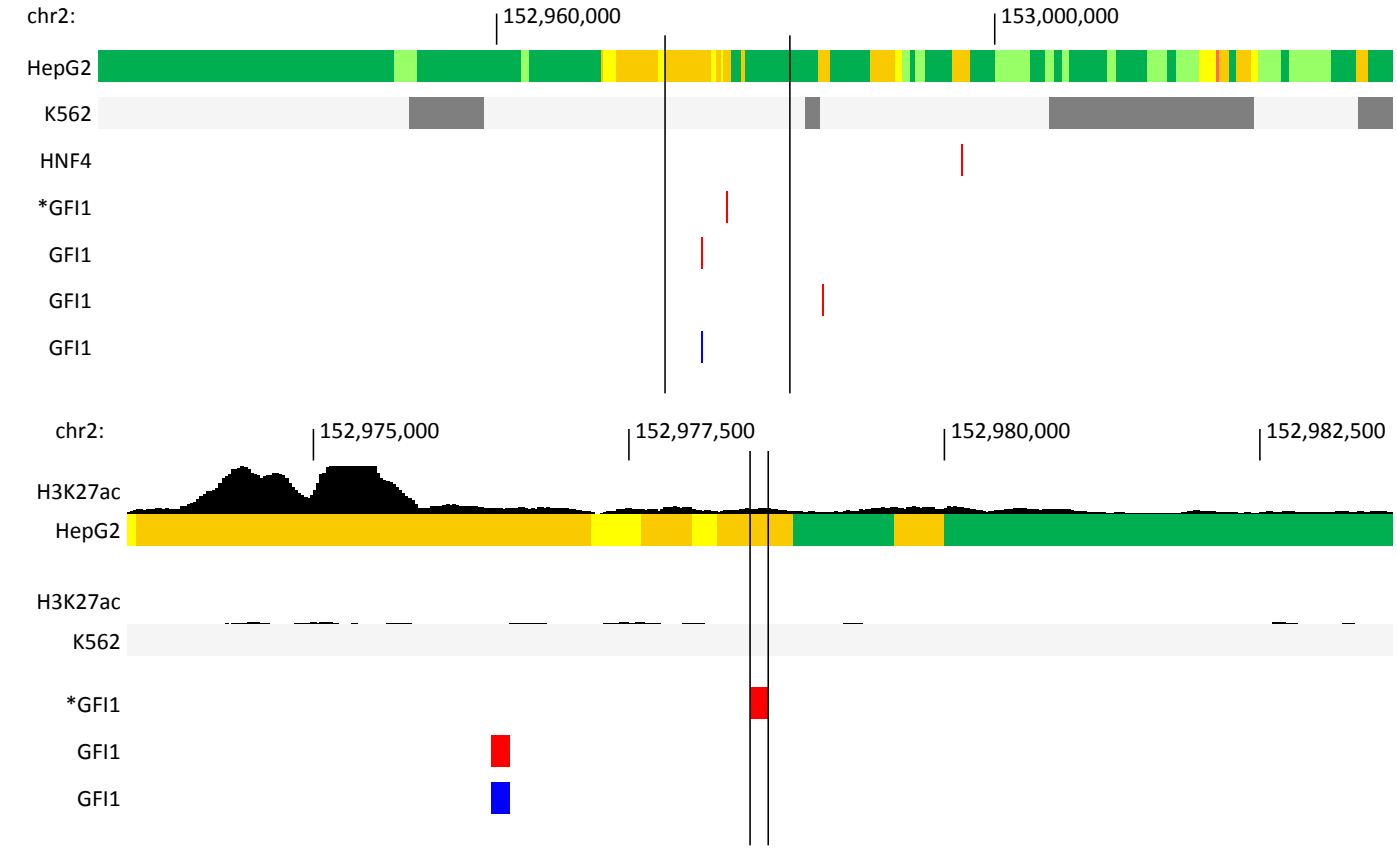
chr8 126256904 126256914 - (hg18)

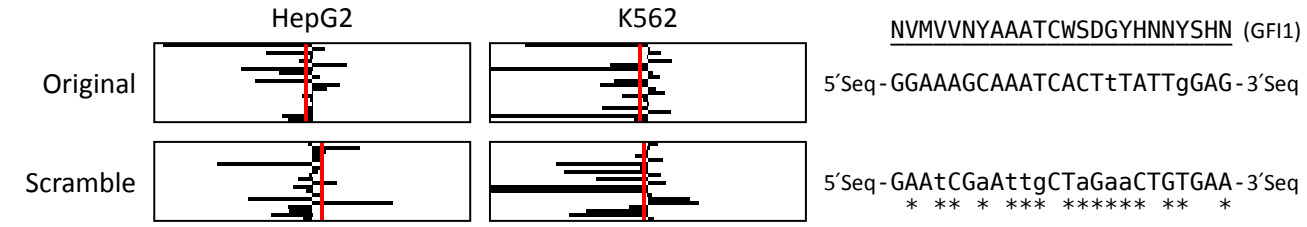


5′Seq = ccaaaacagccattgttagatgtctgcctcccaaaataacacatacccagtgatttacatttaggaa
3′Seq = ttcagaagtttatcacagacacatactagtgataagcagtttgctttgtgttctgcttagtactagt

2133 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 152978521 152978544 - (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-GGAAAGCAAATCACTtTATTgGAG-3′Seq

5′Seq-GAAtCGaAttgCTaGaaCTGTGAA-3′Seq

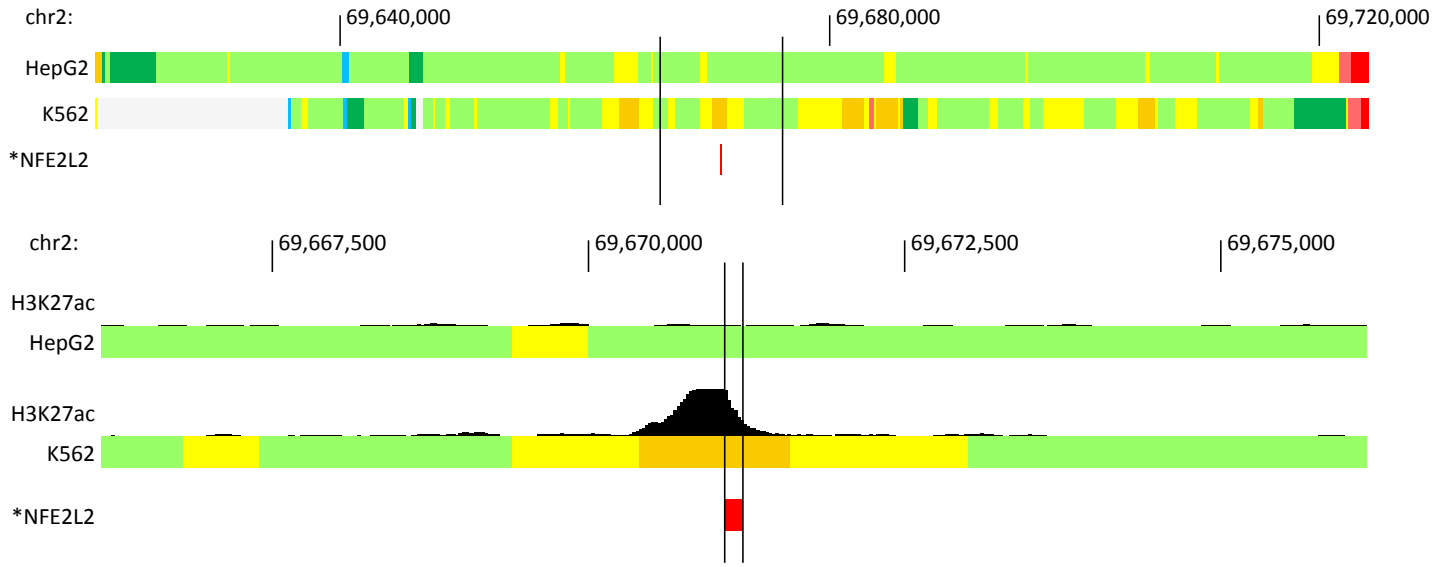
* ** * *** ****** ** *

5′Seq = tgctgtgtccatcggtatccgtatctttcacaactcatttgtttgcctccatgcagtgtta

3′Seq = aaggccatagaaaactctgctgtcttgctgattctttatttagaaagcccttgttcctcc

2134 NFE2L2 in K562 enhancer (conserved at 60% confidence)

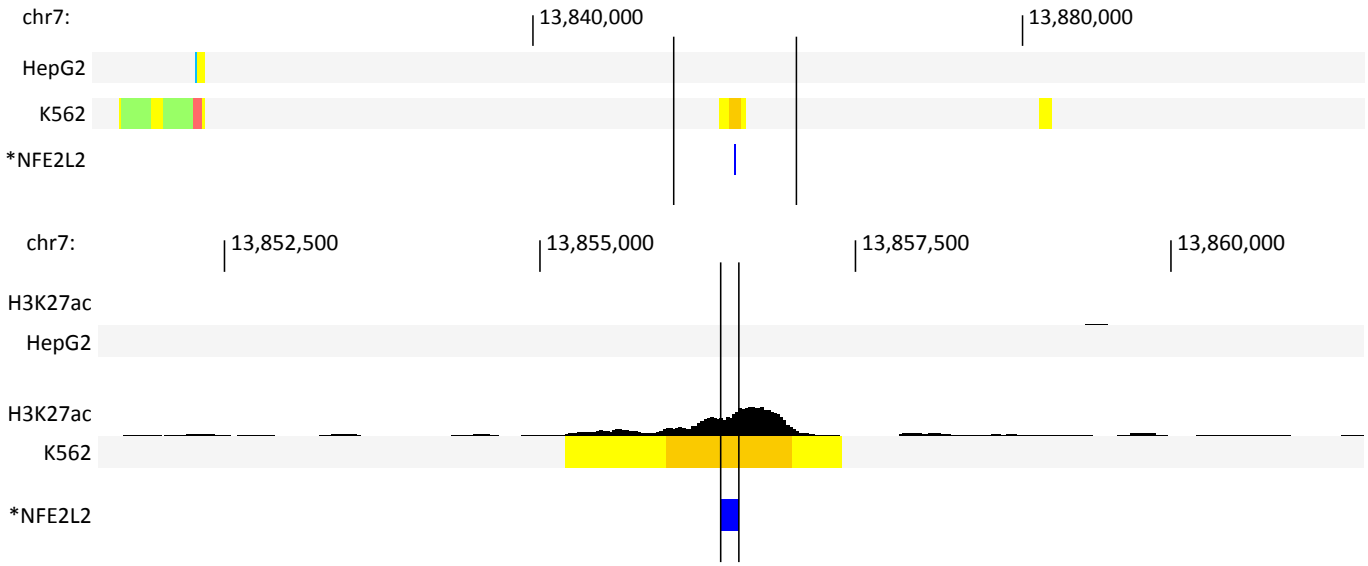
chr2 69671144 69671154 + (hg18)

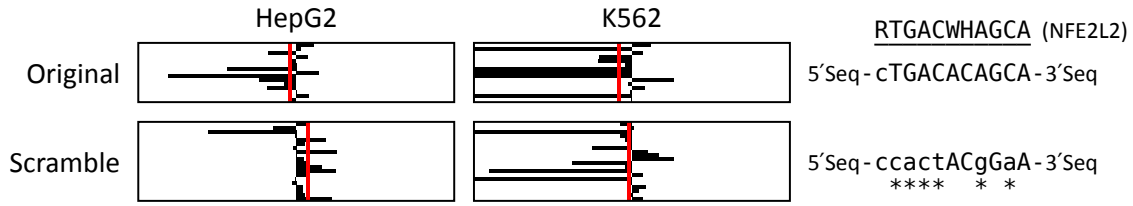


5′Seq = gtacacccacccccagactgccattccgcagtgcctgtccttcctggaggacagagccagggcagga
3′Seq = taagccatccccactaaccttgtacacagcctacttaatatagcaggcttagatgtctcaattttta

2135 NFE2L2 in K562 enhancer

chr7 13856499 13856509 - (hg18)

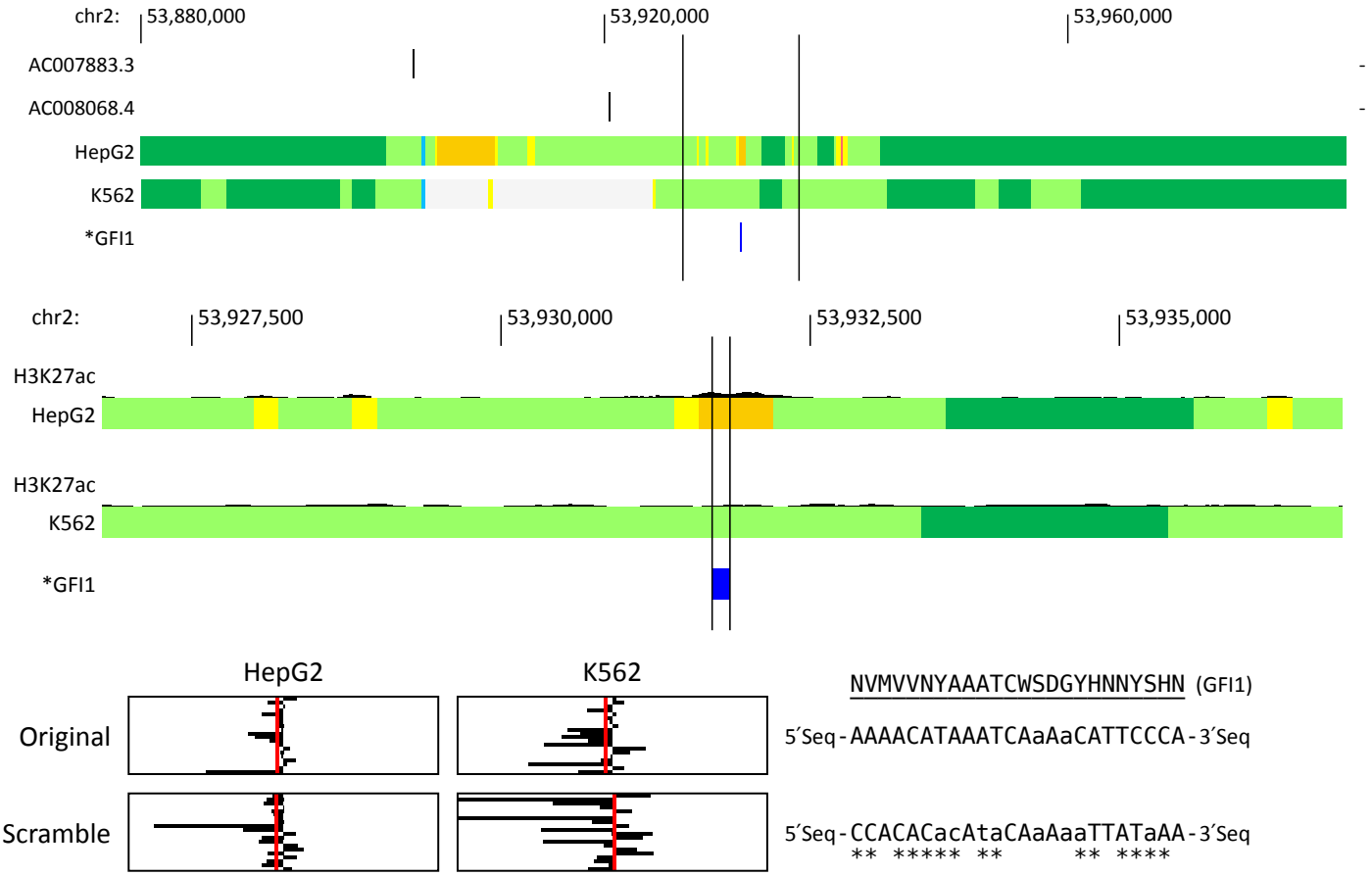




5′Seq = agcaaatgaaacctatttgcatttctcatgtgtgtaagcctagtaaatgttgattgcttccagctca
3′Seq = gcagtgtgctttccattttgttaccaaataatcaaacctcaaacaggcactgtctctgggcttaaca

2136 GFI1 in HepG2 enhancer

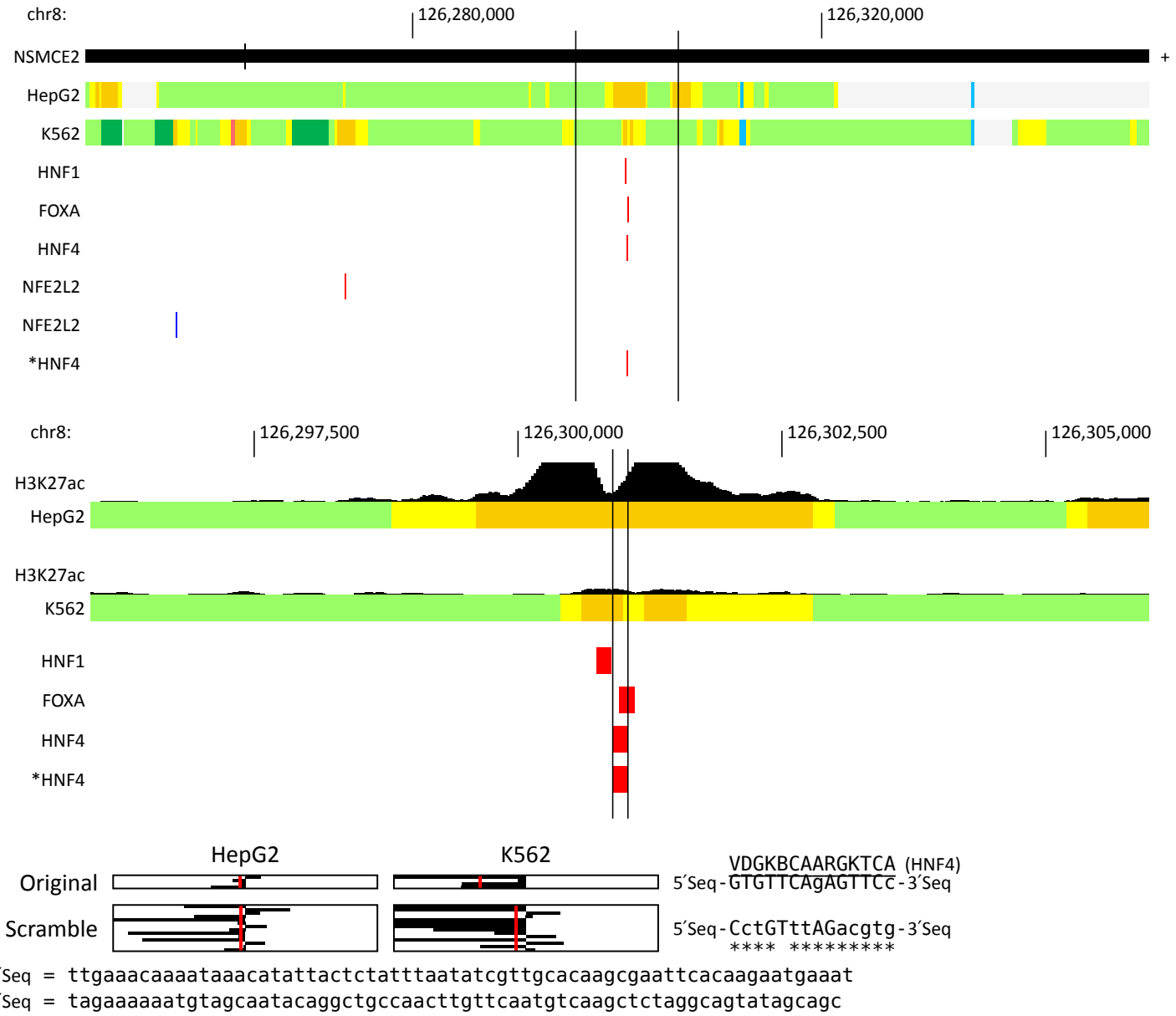
chr2 53931768 53931791 + (hg18)



5′Seq = catttctaaatagttacttgaatactgtcaggtggttagtaaactcttctcacacagaagg
3′Seq = gtcttatctgtaaaccttgttaagcaataataaatattgcccaatgcatgacaggagtcc

2137 HNF4 in K562 enhancer (conserved at 60% confidence)

chr8 126300963 126300976 - (hg18)

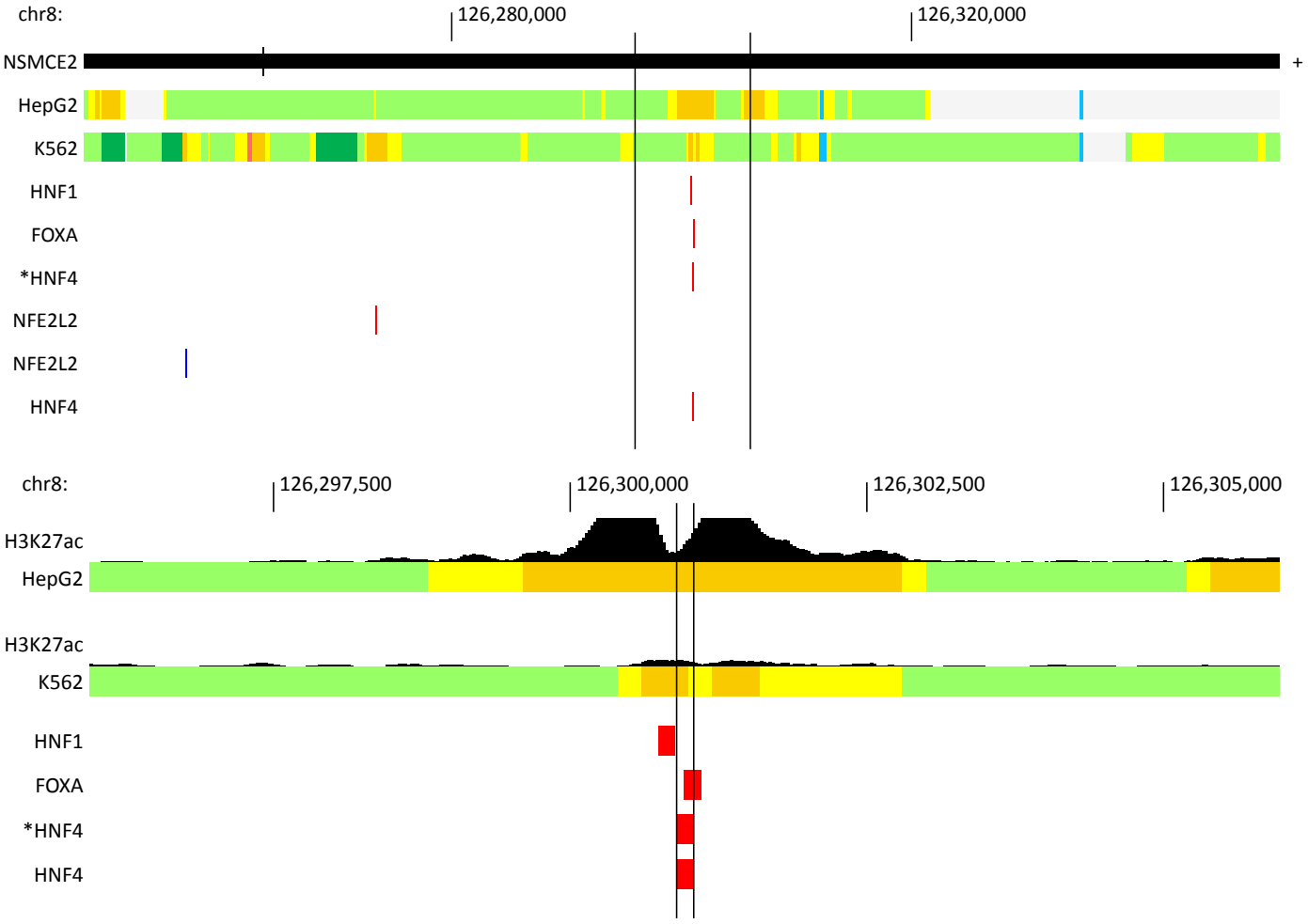


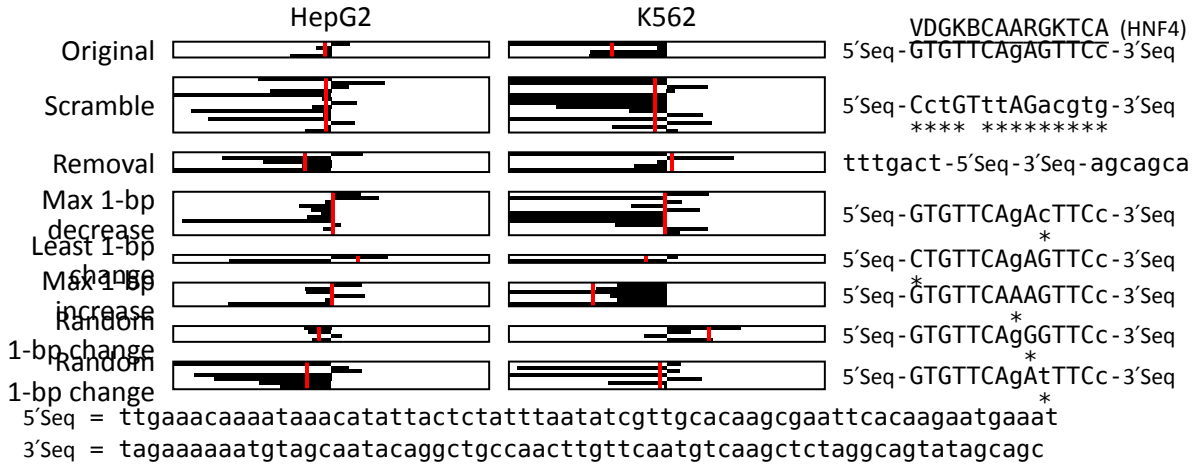
5′Seq = ttgaaacaaaataaacatattactctatttaatatcgttgcacaagcgaattcacaagaatgaaat

3′Seq = tagaaaaaatgtagcaatacaggctgccaacttgttcaatgtcaagctctaggcagtatagcagc

2138 HNF4 in HepG2 enhancer (conserved at 60% confidence)

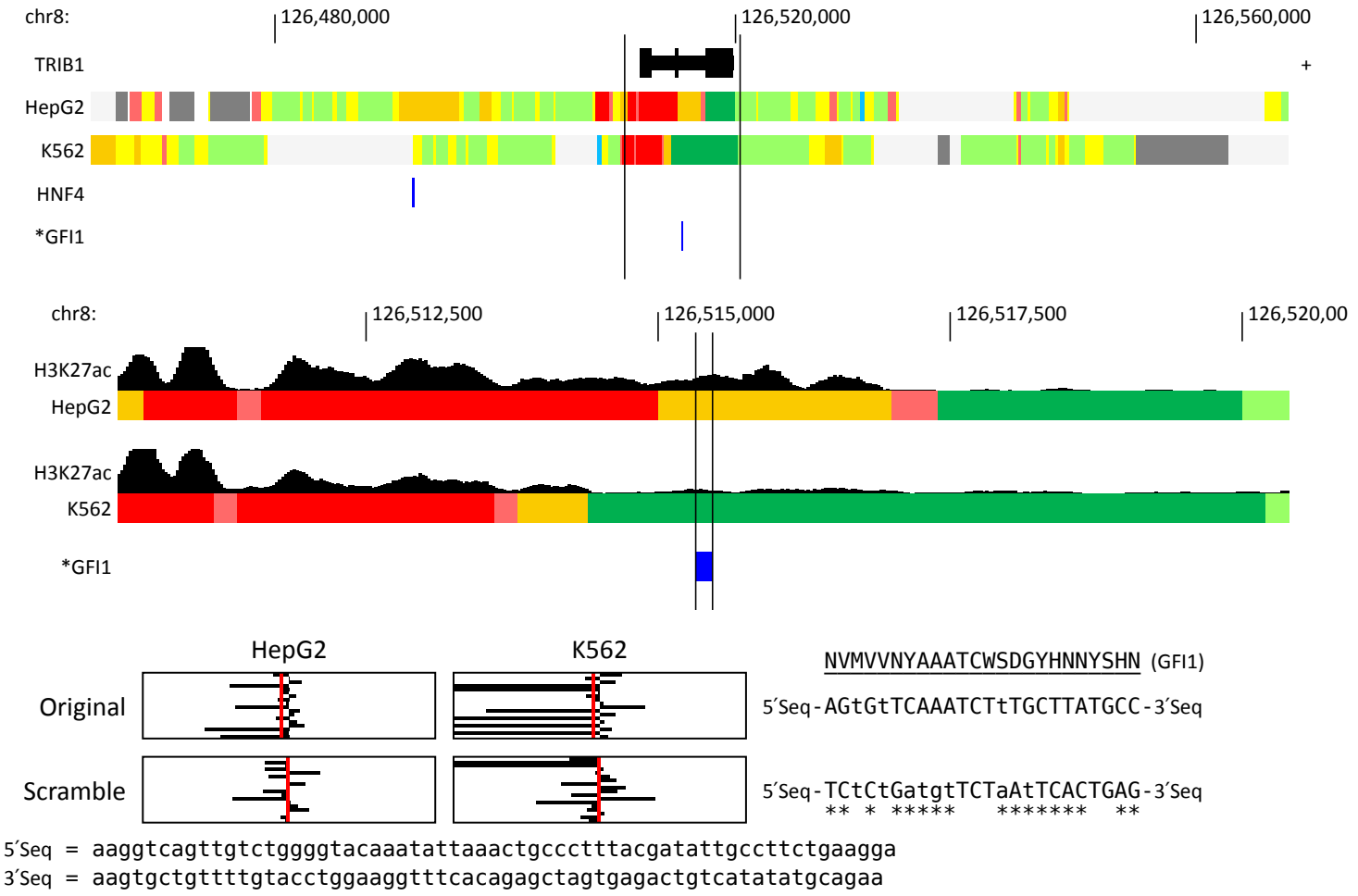
chr8 126300963 126300976 - (hg18)





2139 GFI1 in HepG2 enhancer

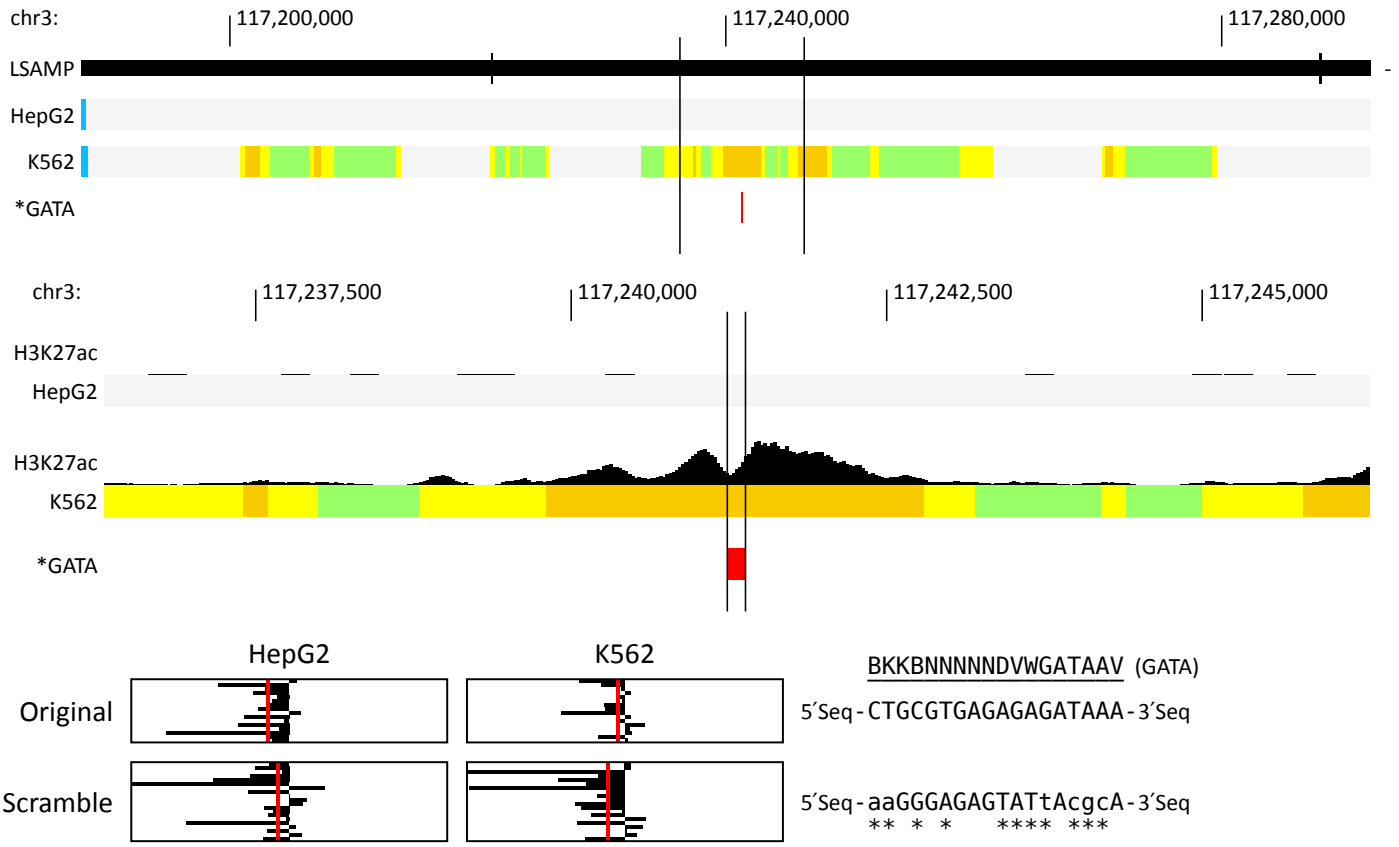
chr8 126515383 126515406 + (hg18)



5′Seq = aaggtcagttgtctggggtacaaatattaaactgccctttacgatattgccttctgaagga
3′Seq = aagtgctgttttgtacctggaaggtttcacagagctagtgagactgtcatatatgcagaa

2140 GATA in K562 enhancer (conserved at 70% confidence)

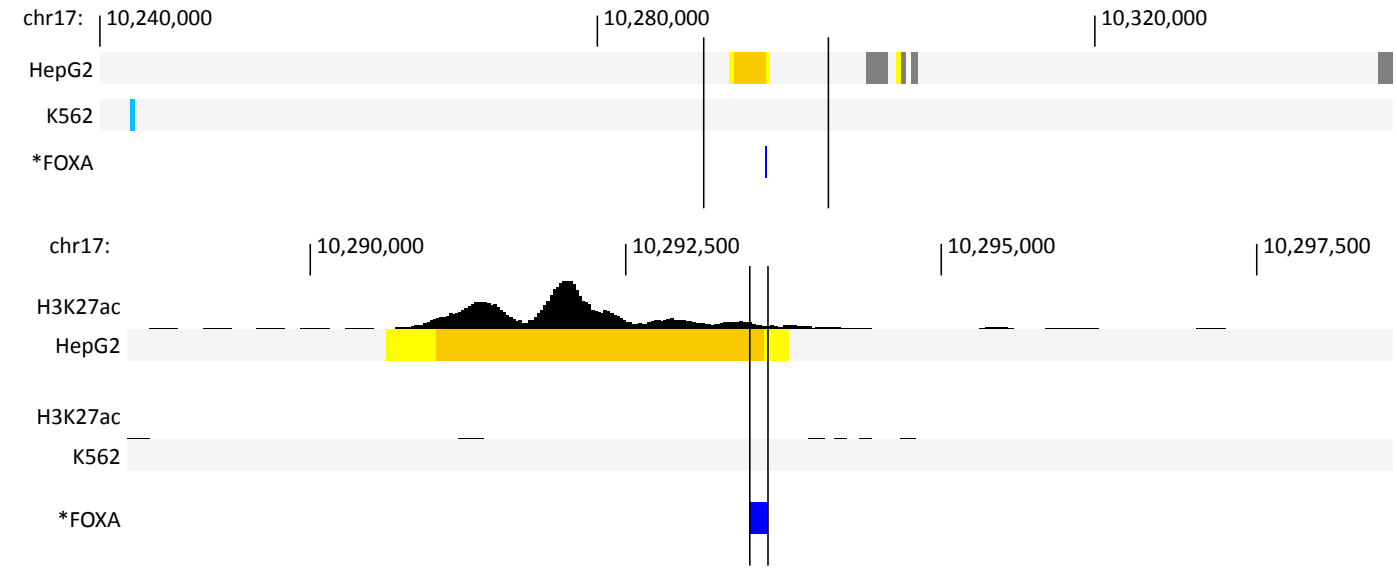
chr3 117241301 117241318 + (hg18)

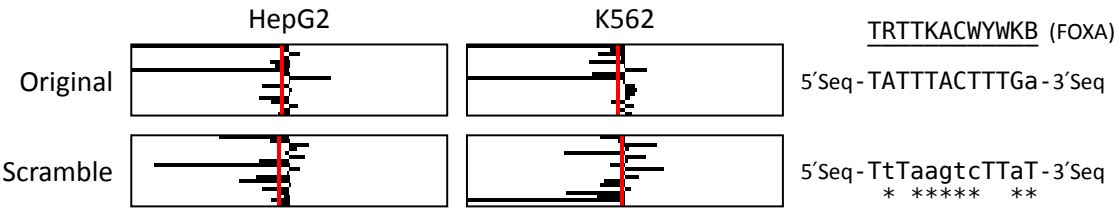


5′Seq = agtcctgctgggtggggcattacaaagagaggccacaggaaaaccttgagagtttggagcctg
3′Seq = agtagaaacagcaaattggctgcaatacgaatggcaggtgcatttgttcactggaggcaagtt

2141 FOXA in HepG2 enhancer

chr17 10293550 10293561 + (hg18)

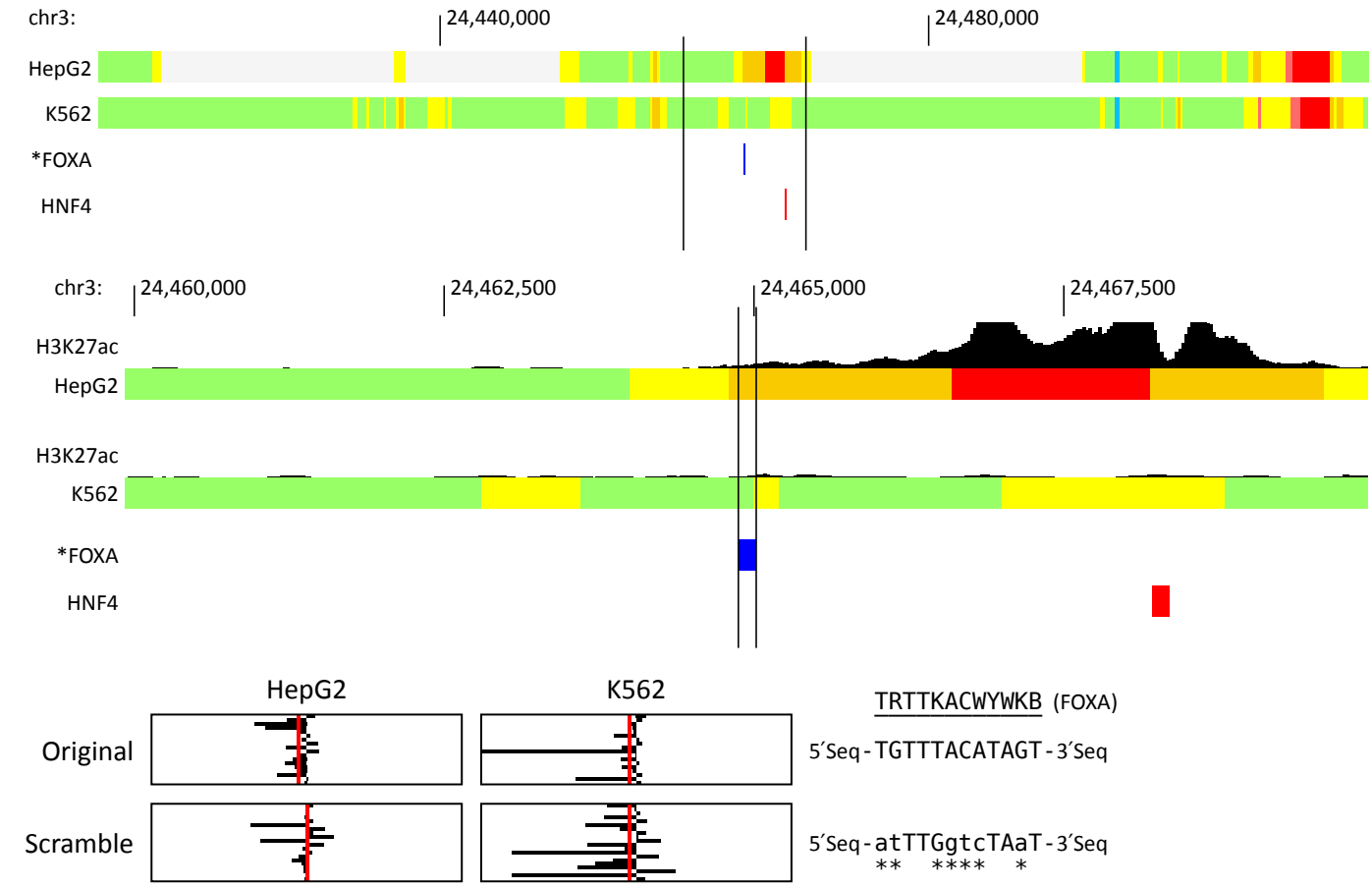




5′Seq = agtacatttctcttttgaaacctgggatttagagatctgtaactacttgtggaaaagggctgagttt
3′Seq = ggaagaaatggcaaccatgaacaggaagcatatcaccaaggaatggtagcattgagtagtatcttt

2142 FOXA in HepG2 enhancer

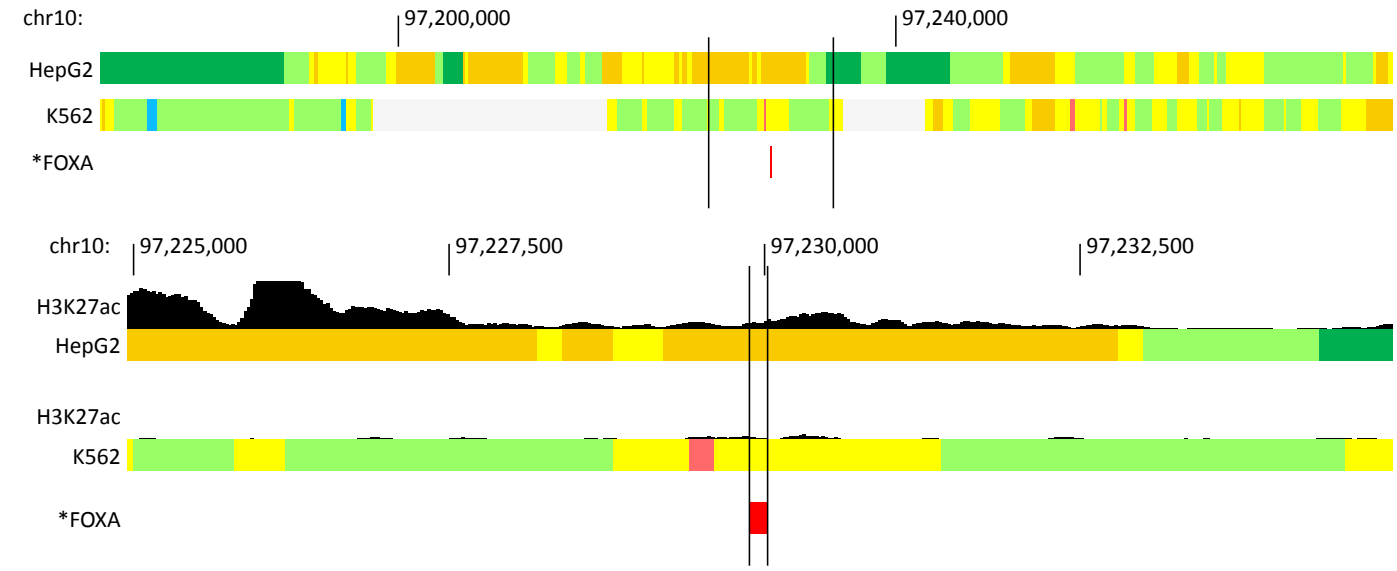
chr3 24464941 24464952 - (hg18)

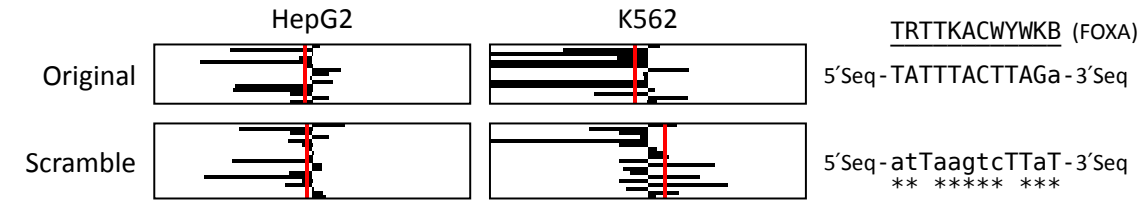


5′Seq = ccaggacaaggcctgcttatctgtgtattgtagctttcctaattgatagcaagtgcctctgaaaaaa
3′Seq = tatctaaagtaatcattaattaccaacattgtacatttcattctggttaacctcttttggtatcat

2143 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr10 97229947 97229958 + (hg18)

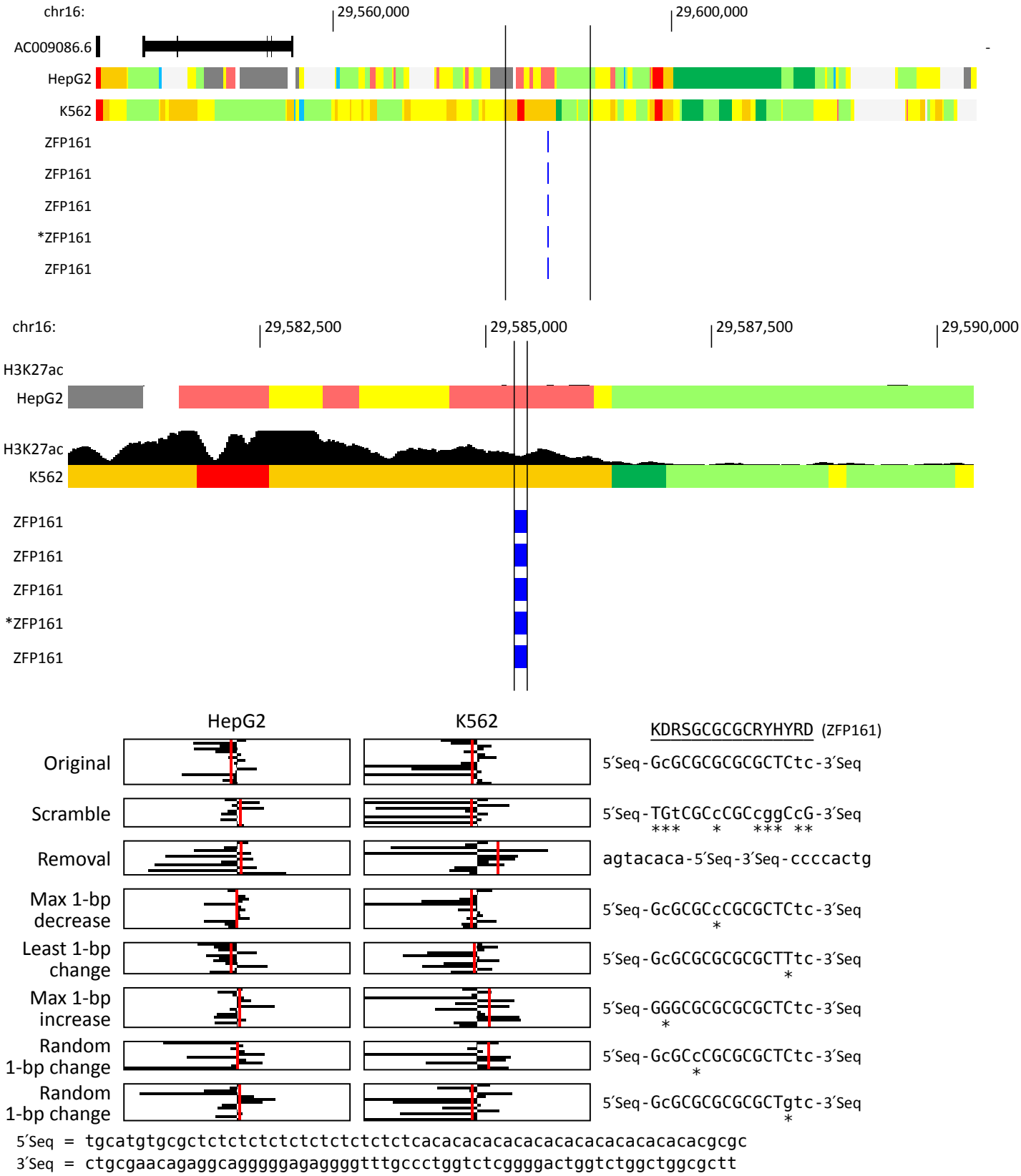




5′Seq = gaggggacgggctgaagcaaaagacactgaatacttgaaaccacaaatcctgaatctgcaattcctc
3′Seq = aacagttgctgatgcttaccctgcccaaagataaactaggacaaaccggaaagggaaggggaagca

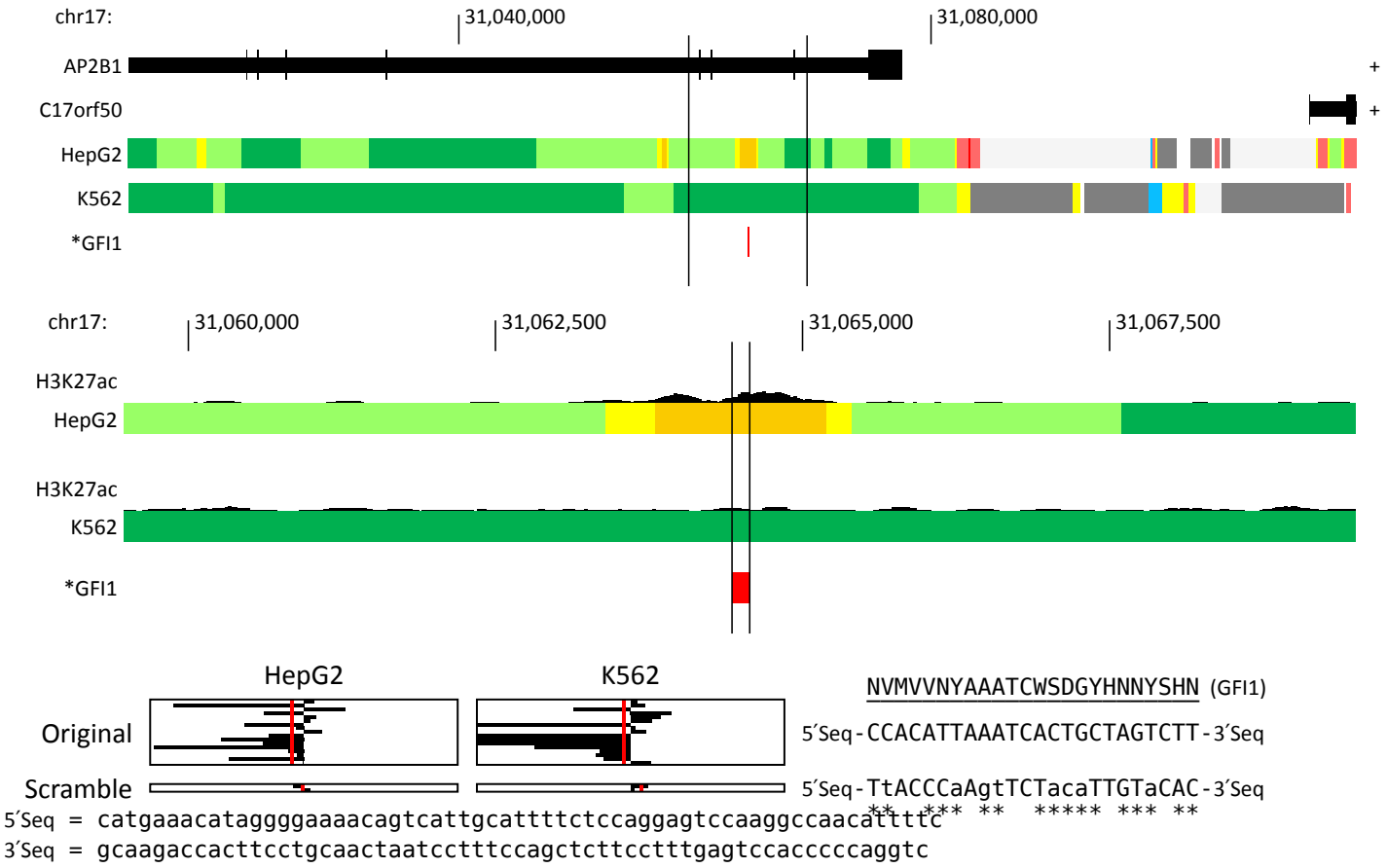
2144 ZFP161 in K562 enhancer

chr16 29585380 29585395 + (hg18)



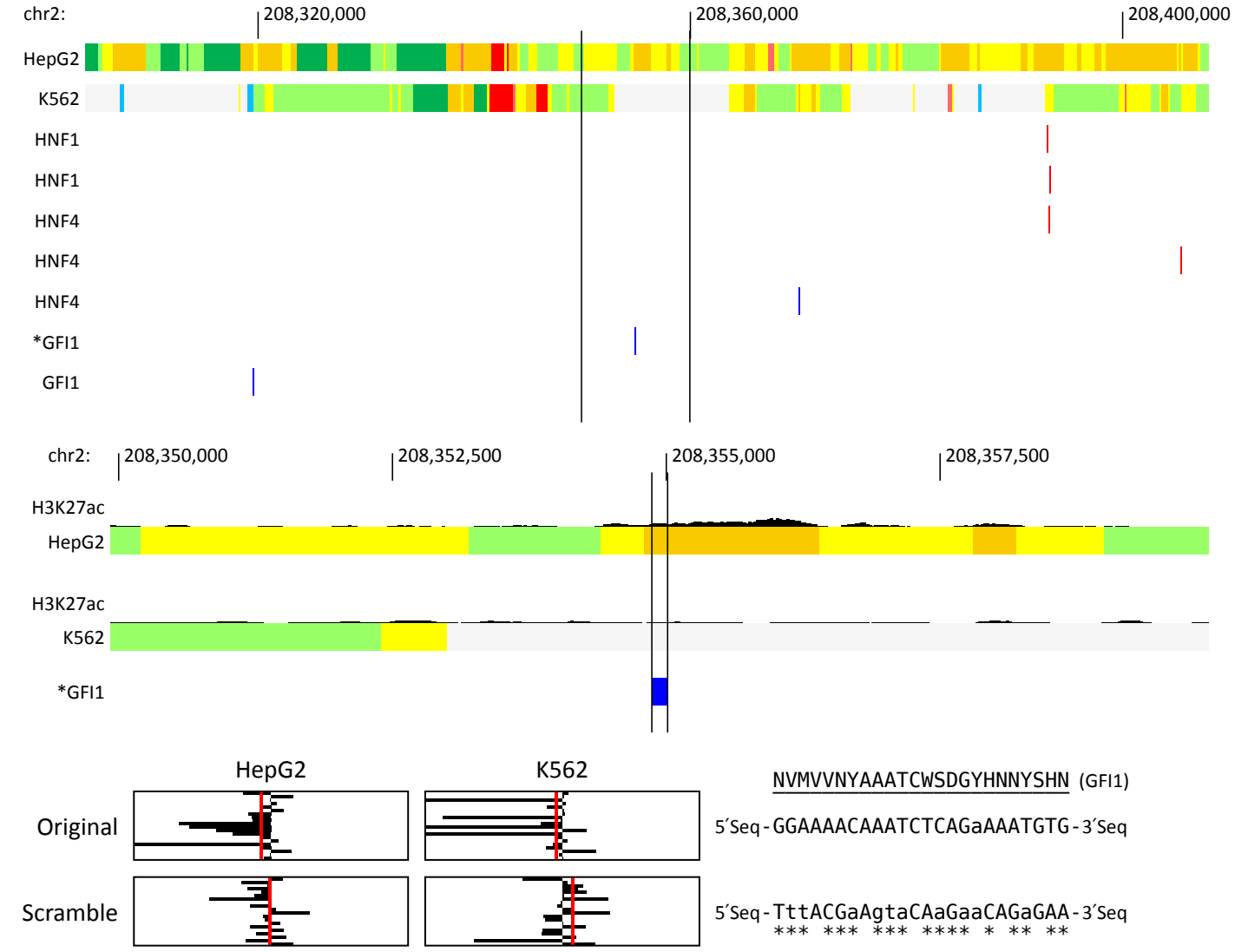
2145 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr17 31064487 31064510 + (hg18)



2146 GFI1 in HepG2 enhancer

chr2 208354929 208354952 + (hg18)



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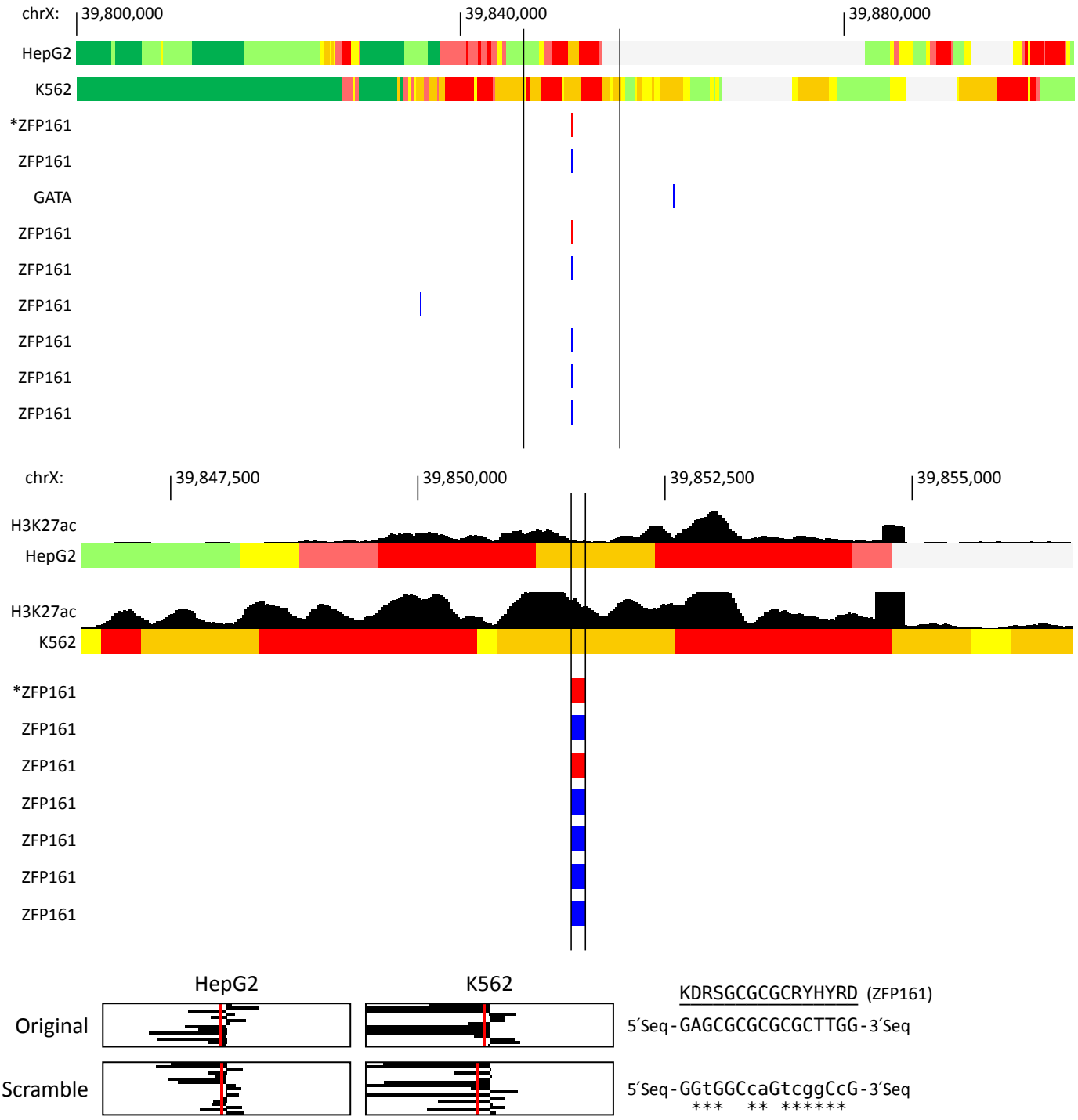
2147 ZFP161 in HepG2 enhancer (conserved at 30% confidence)

chrX 39851616 39851631 - (hg18)



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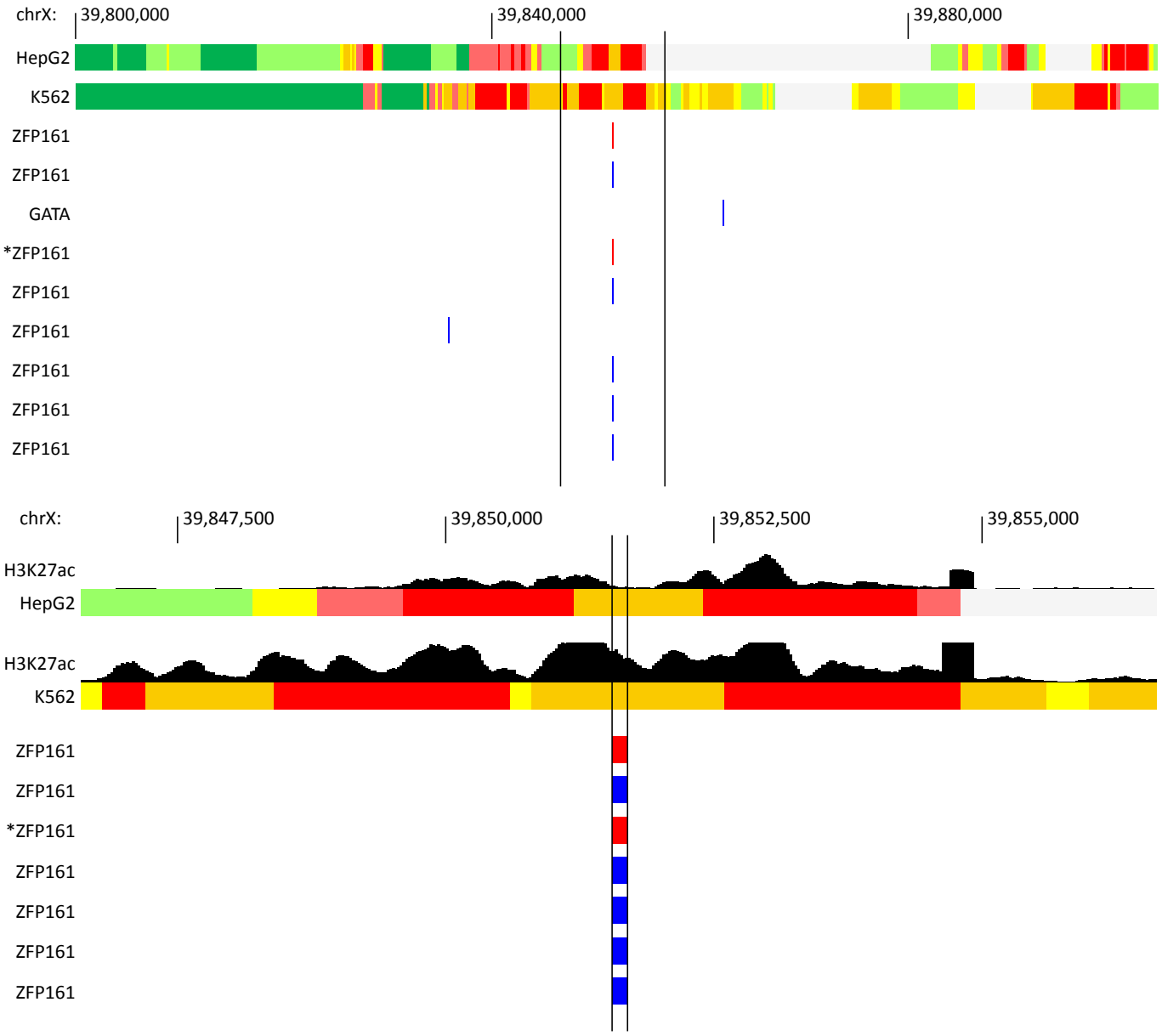
2148 ZFP161 in K562 enhancer (conserved at 30% confidence)

chrX 39851616 39851631 - (hg18)



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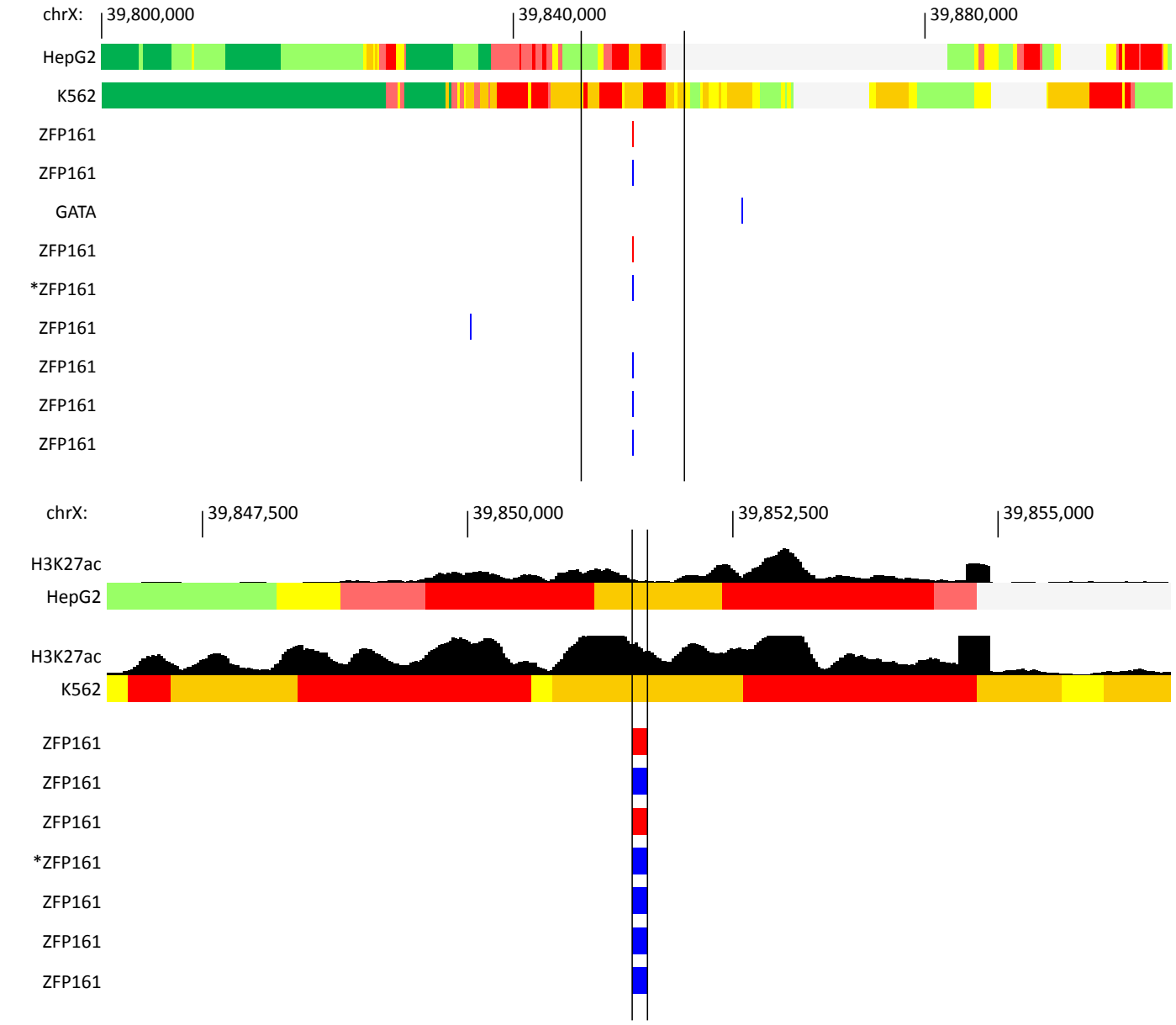
2149 ZFP161 in K562 enhancer

chrX 39851616 39851631 - (hg18)



5′Seq = ggcttaaaaaattgccgcctgagcagctctggcgcggagagccacggcttgcgcgtcgagctagg
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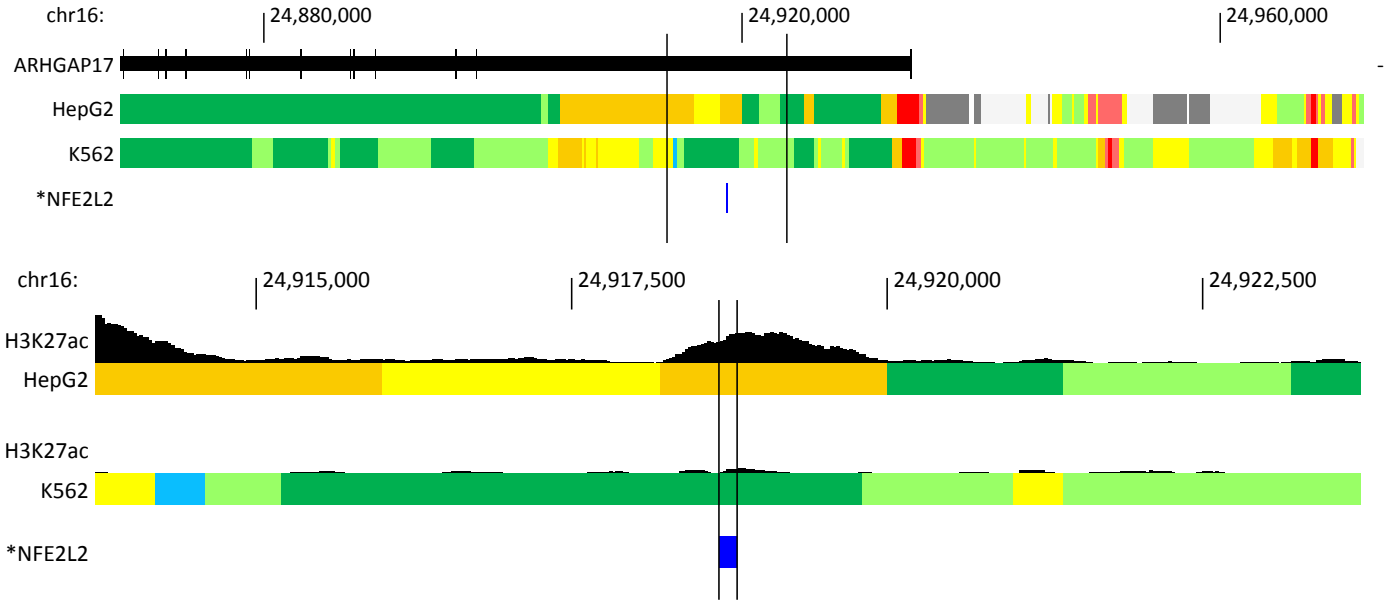
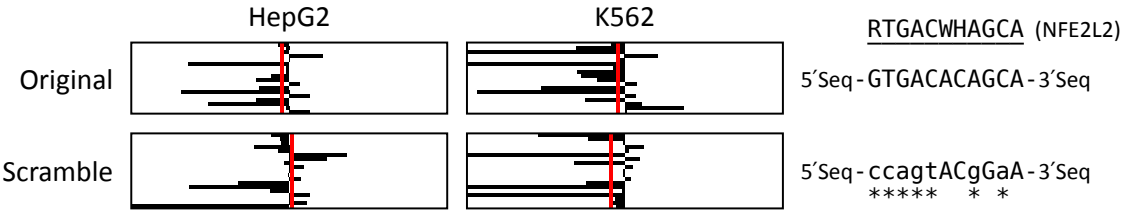
2150 NFE2L2 in HepG2 enhancer

chr16 24918734 24918744 - (hg18)





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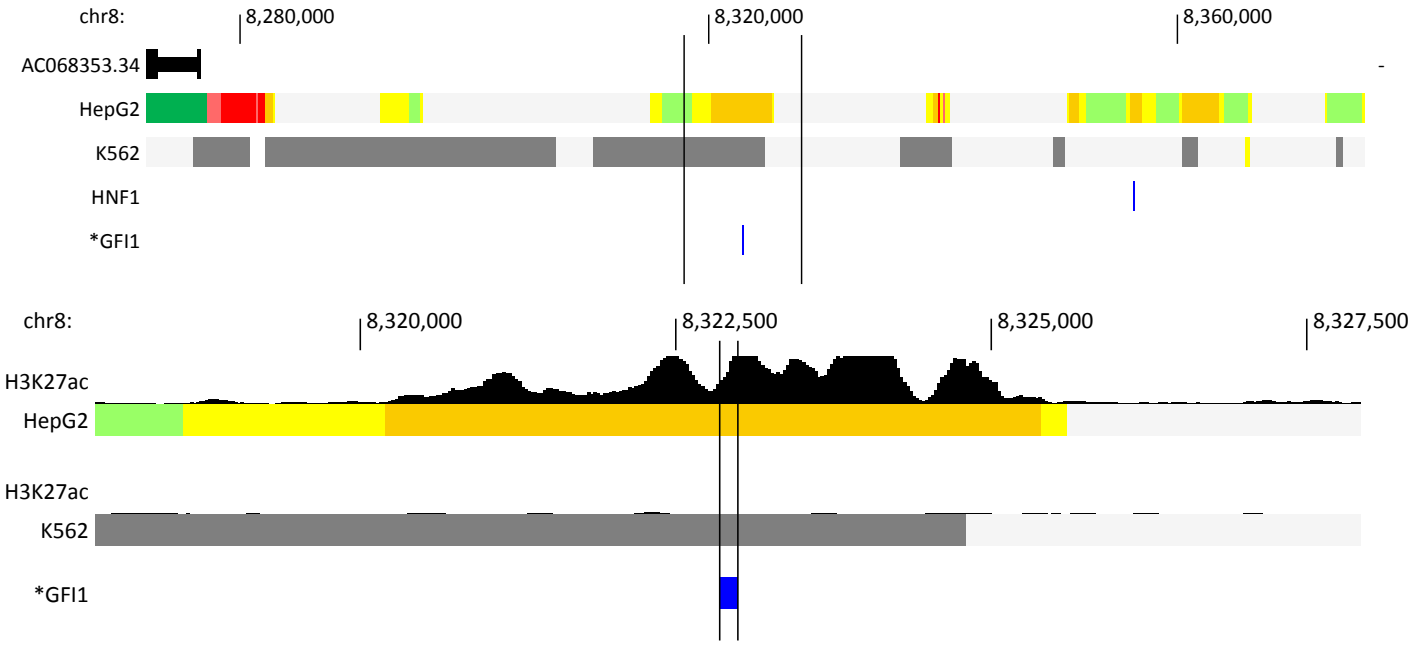
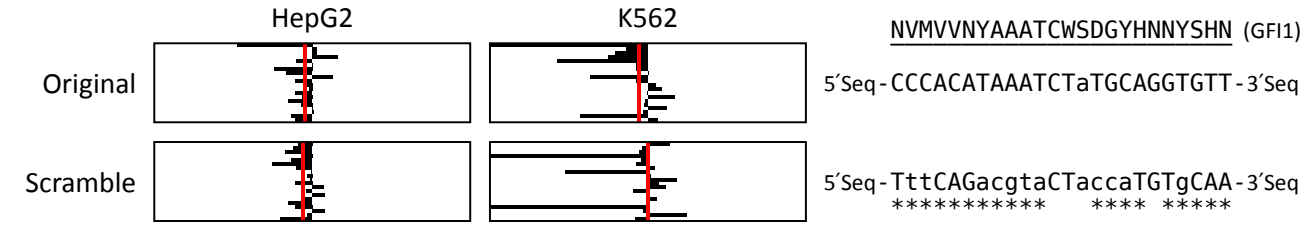
3′Seq = ggtcagcactggggaaaatagccaggttagccttcacttcactgctctatgccaaaatacattccaa

2151 GFI1 in HepG2 enhancer

chr8 8322909 8322932 + (hg18)





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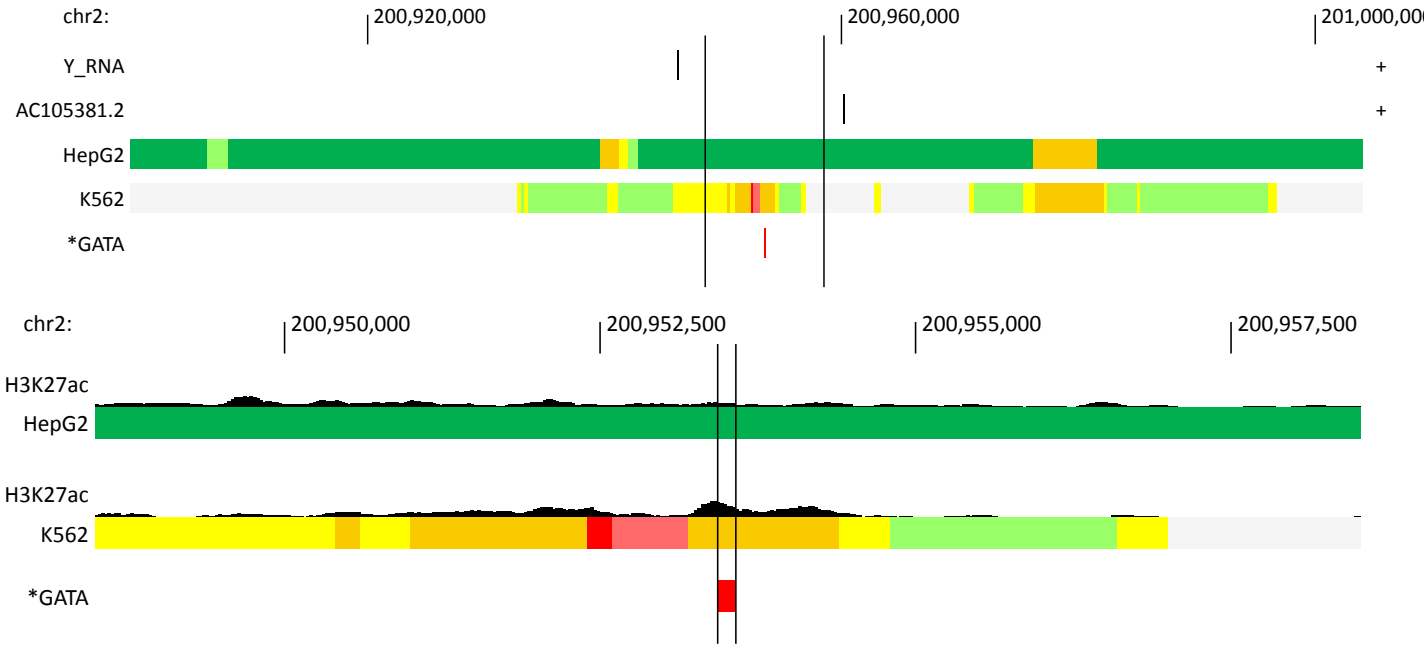
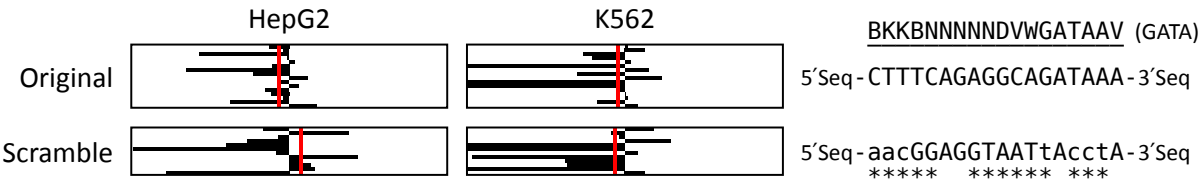
3′Seq = tggaagactataacctgtctgcgactttttttttgcatctctaggagtgttcagctcacag

2152 GATA in K562 enhancer (conserved at 60% confidence)

chr2 200953496 200953513 - (hg18)





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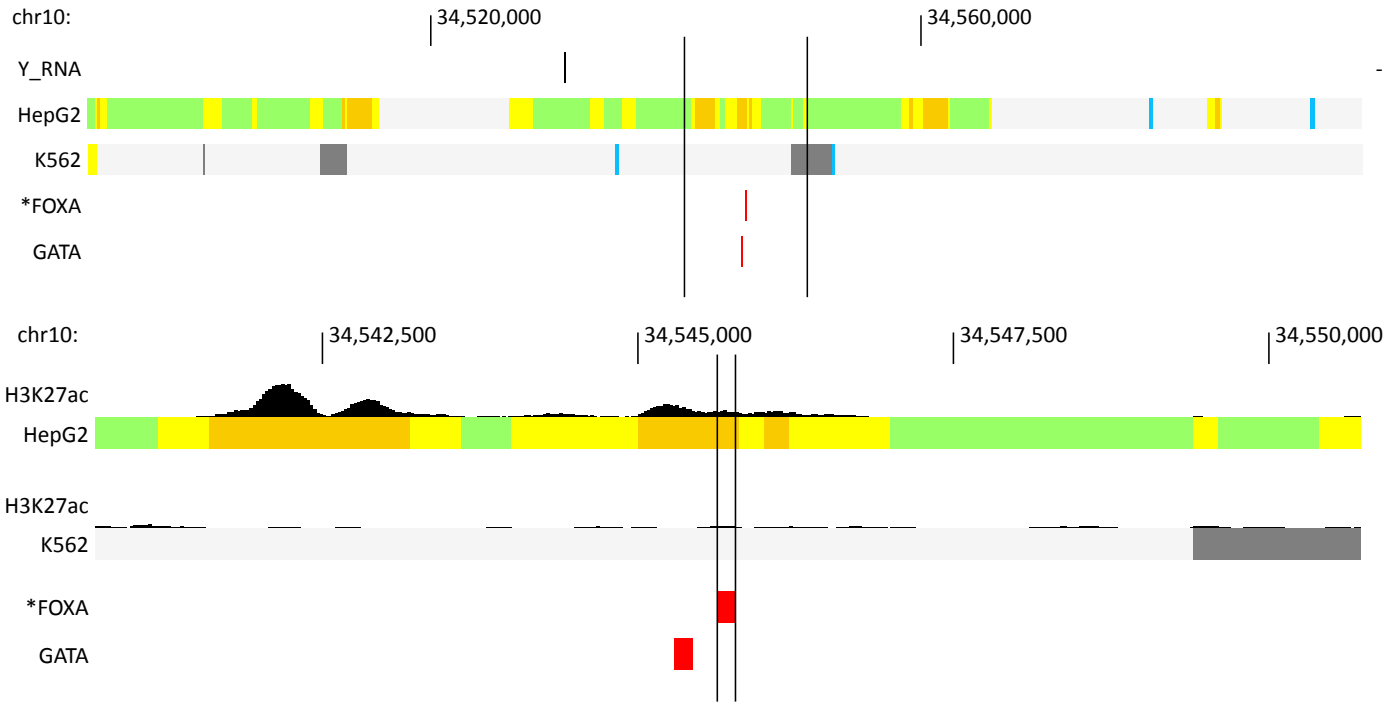
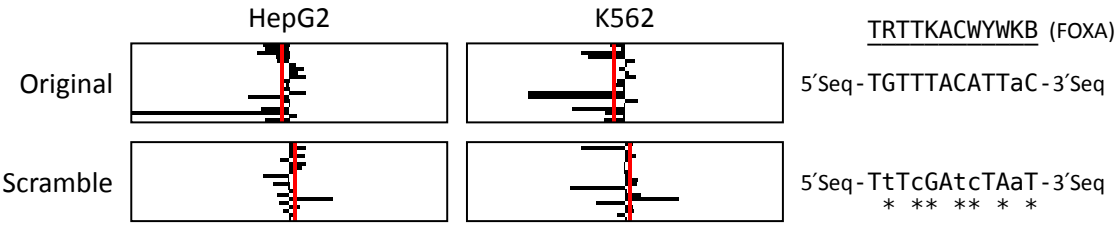
3′Seq = agcttccaatcacttagaatatcacttgagcagatctagggcaagatgtgctcatgcaagttt

2153 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr10 34545696 34545707 - (hg18)





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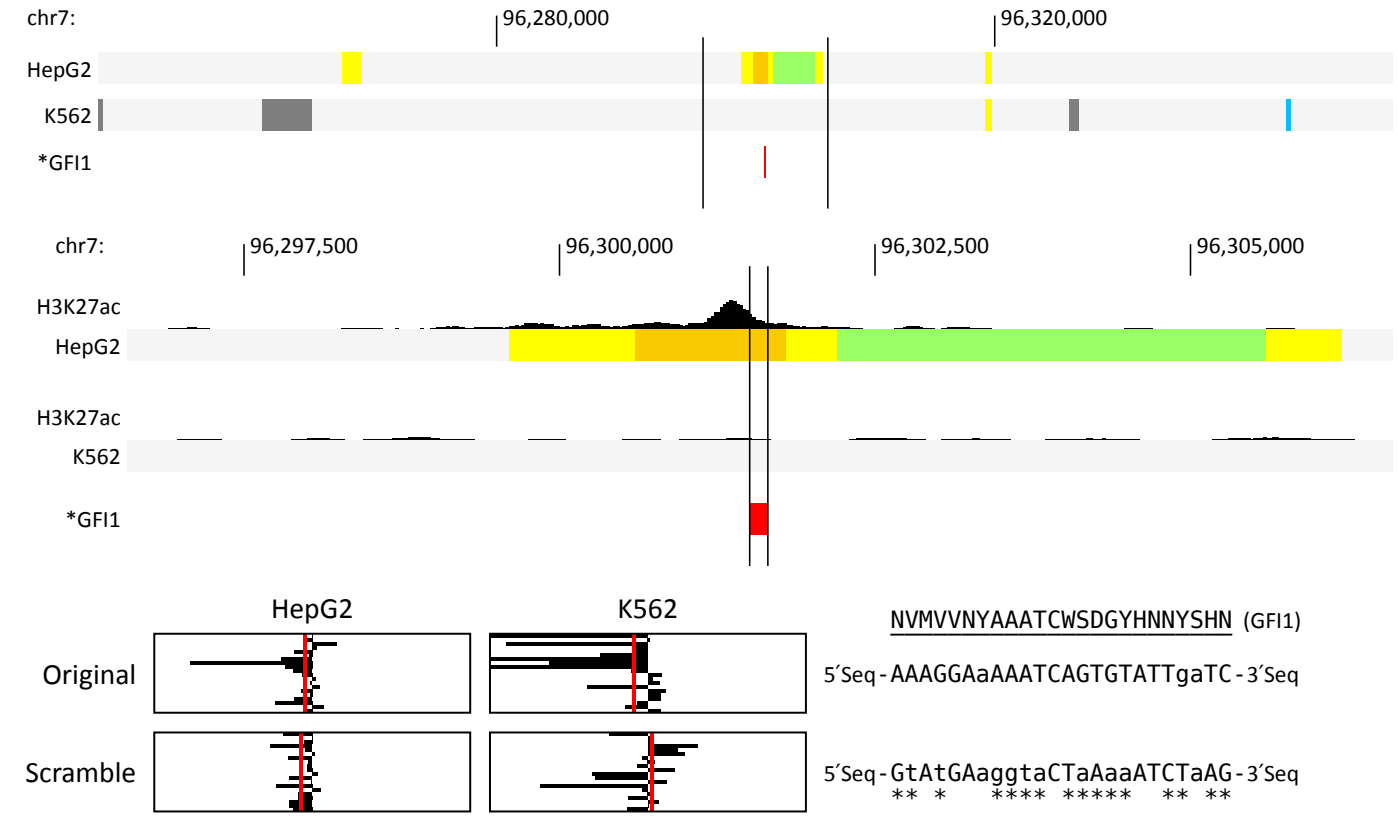
2154 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr7 96301568 96301591 - (hg18)



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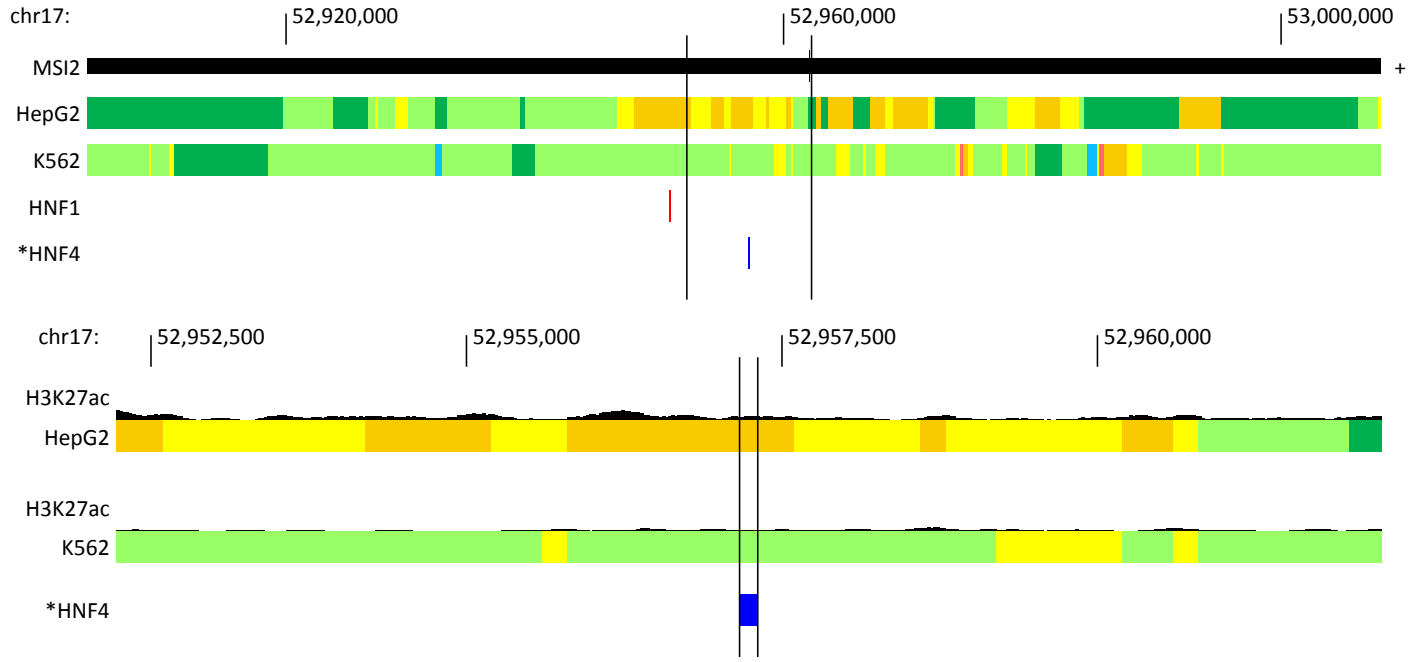
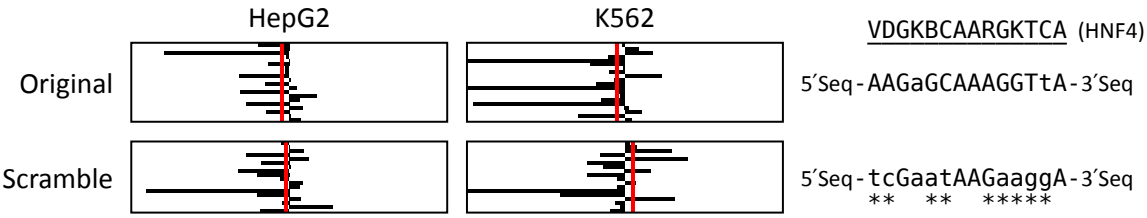
2155 HNF4 in HepG2 enhancer

chr17 52957230 52957243 - (hg18)





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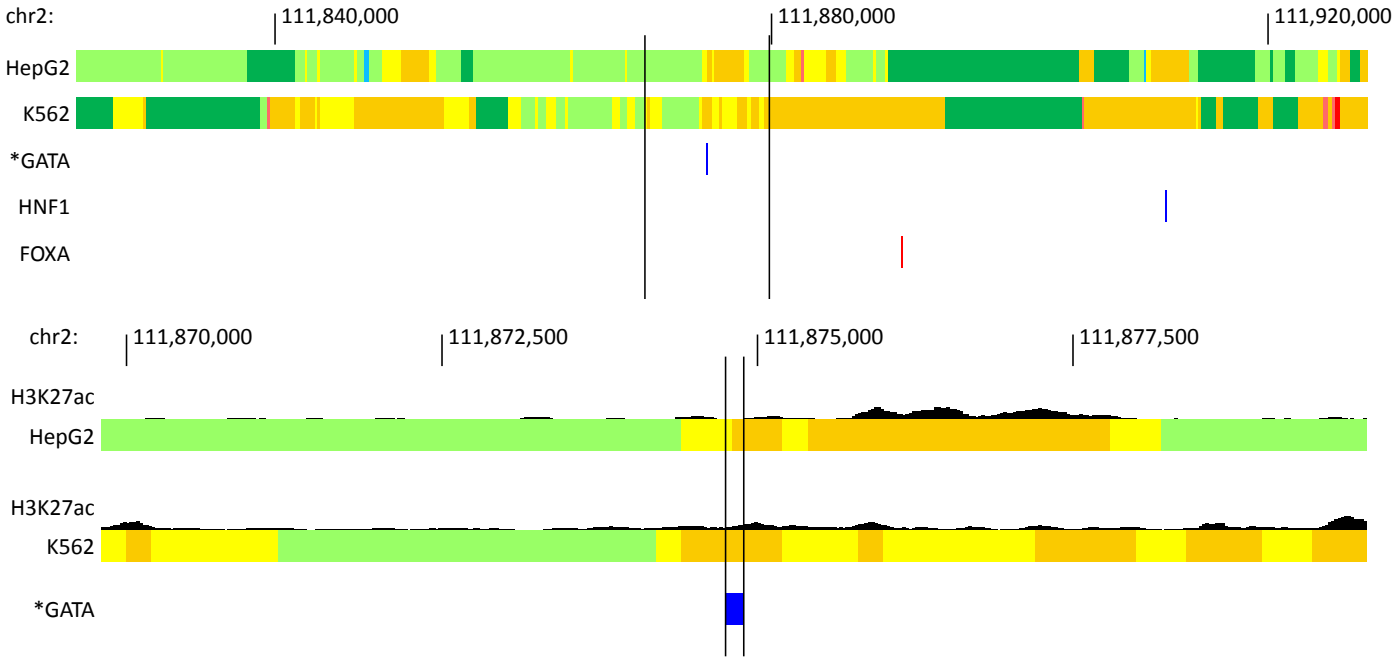
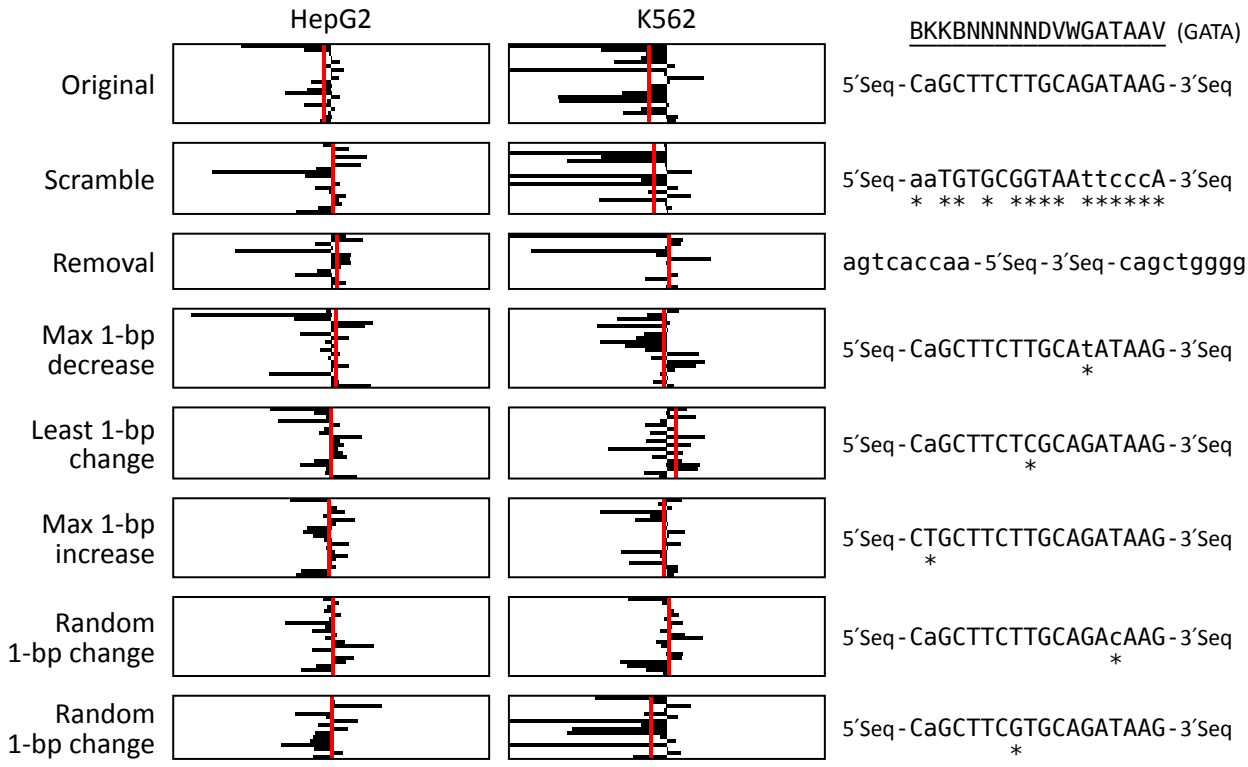
3′Seq = aagacactgggcagaggttgcttcttcctctttaacatacactcagtggtcaatacatgaaacaa

2156 GATA in K562 enhancer

chr2 111874811 111874828 - (hg18)





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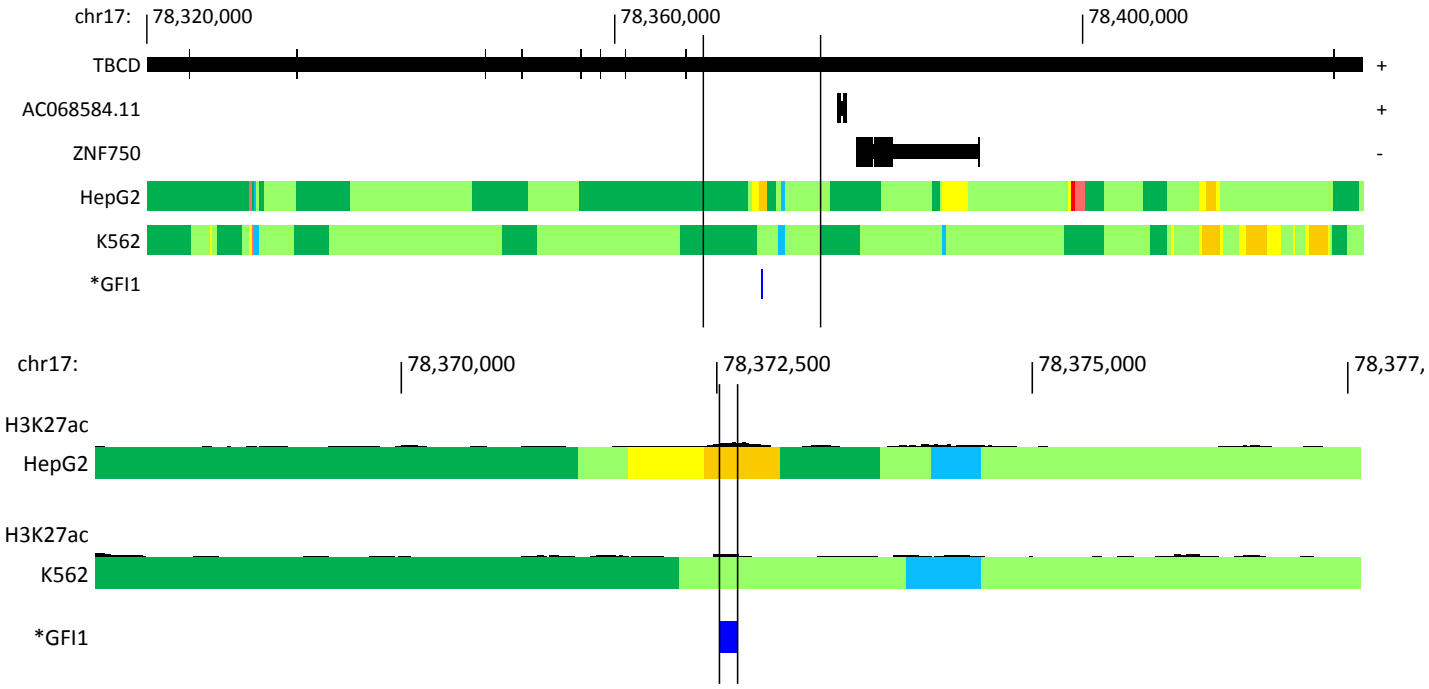
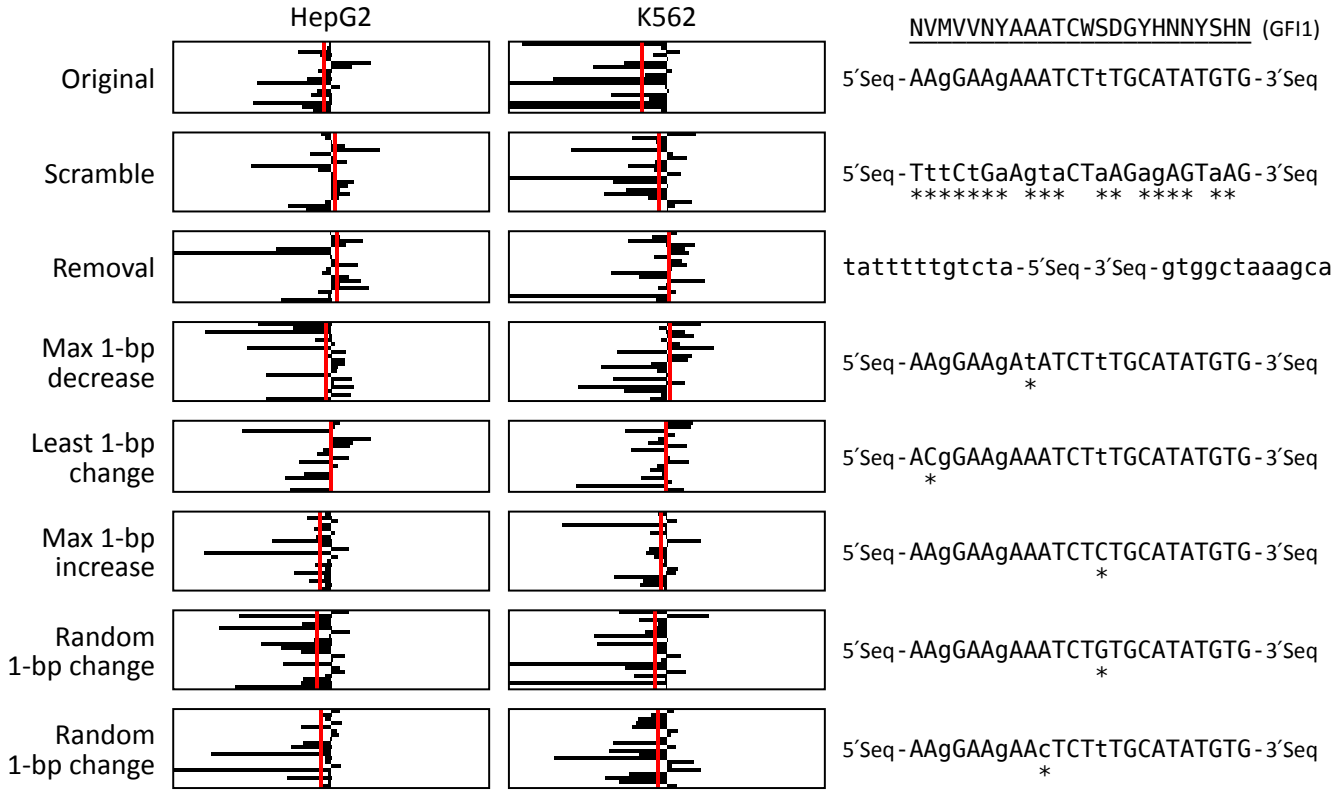
3′Seq = atgtgaaaagagtctgttactcattccaggtcctgtggcacttttagcagagatggatgtttc

2157 GFI1 in HepG2 enhancer

chr17 78372582 78372605 + (hg18)





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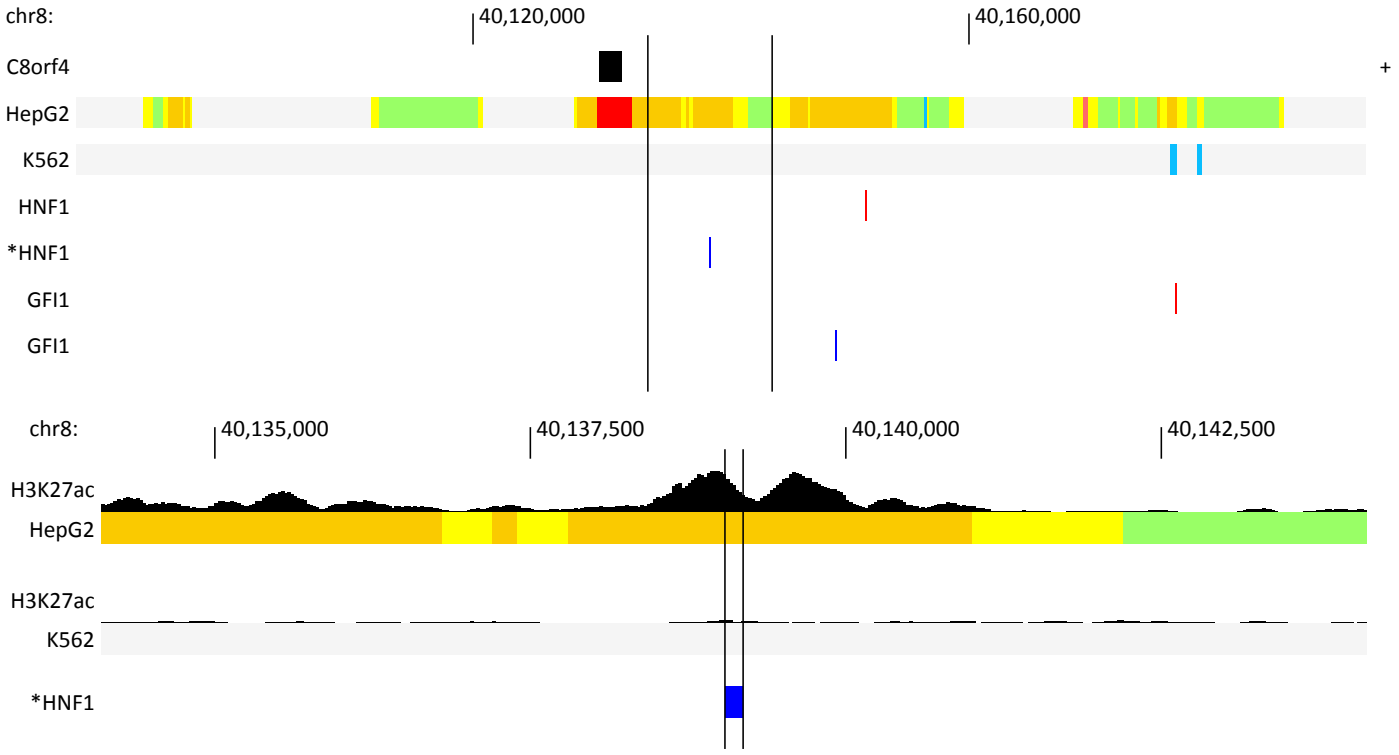
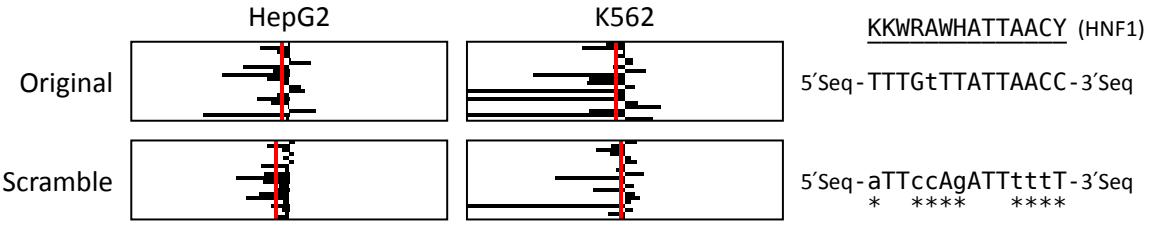
2158 HNF1 in HepG2 enhancer

chr8 40139108 40139121 + (hg18)





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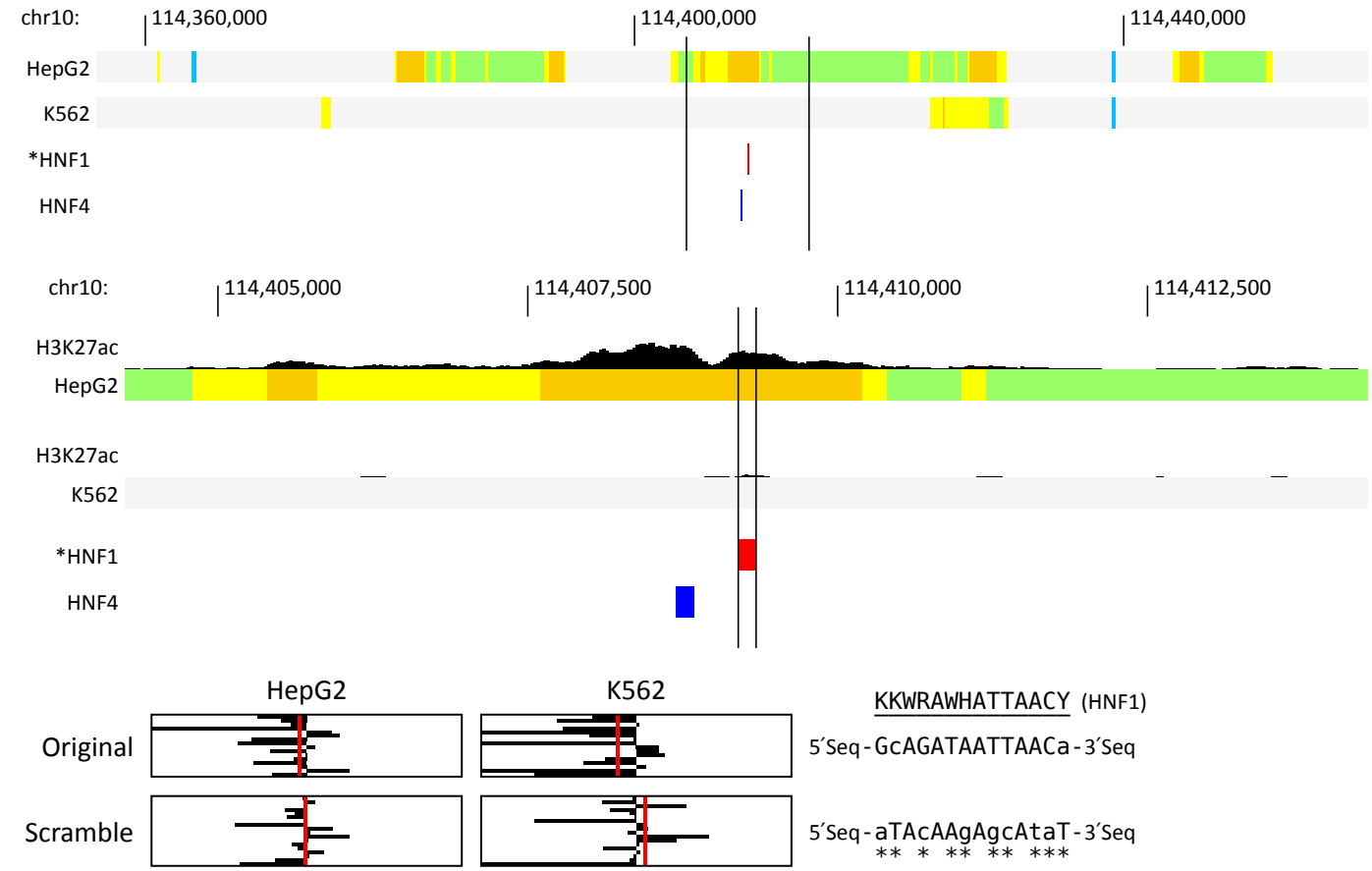
3′Seq = tctgaagtcaacatctgtacccttttgtctcttaagcatctccaaggagggctaagtcaacagt

2159 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 114409264 114409277 - (hg18)



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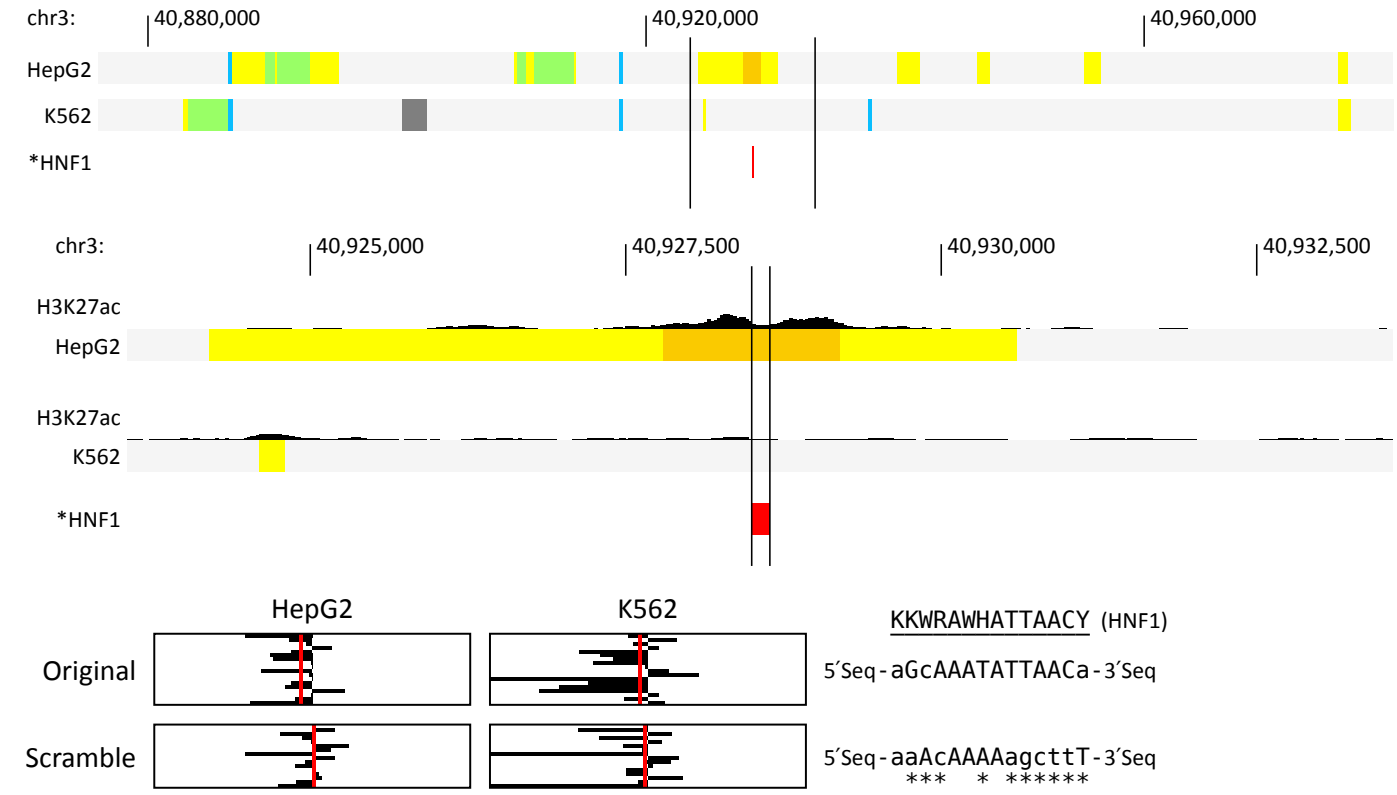
3′Seq = aacactattcccagagccctcagacatcagtcaatgaagctgtgctaccagtaacgatgctctgg

2160 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr3 40928564 40928577 - (hg18)



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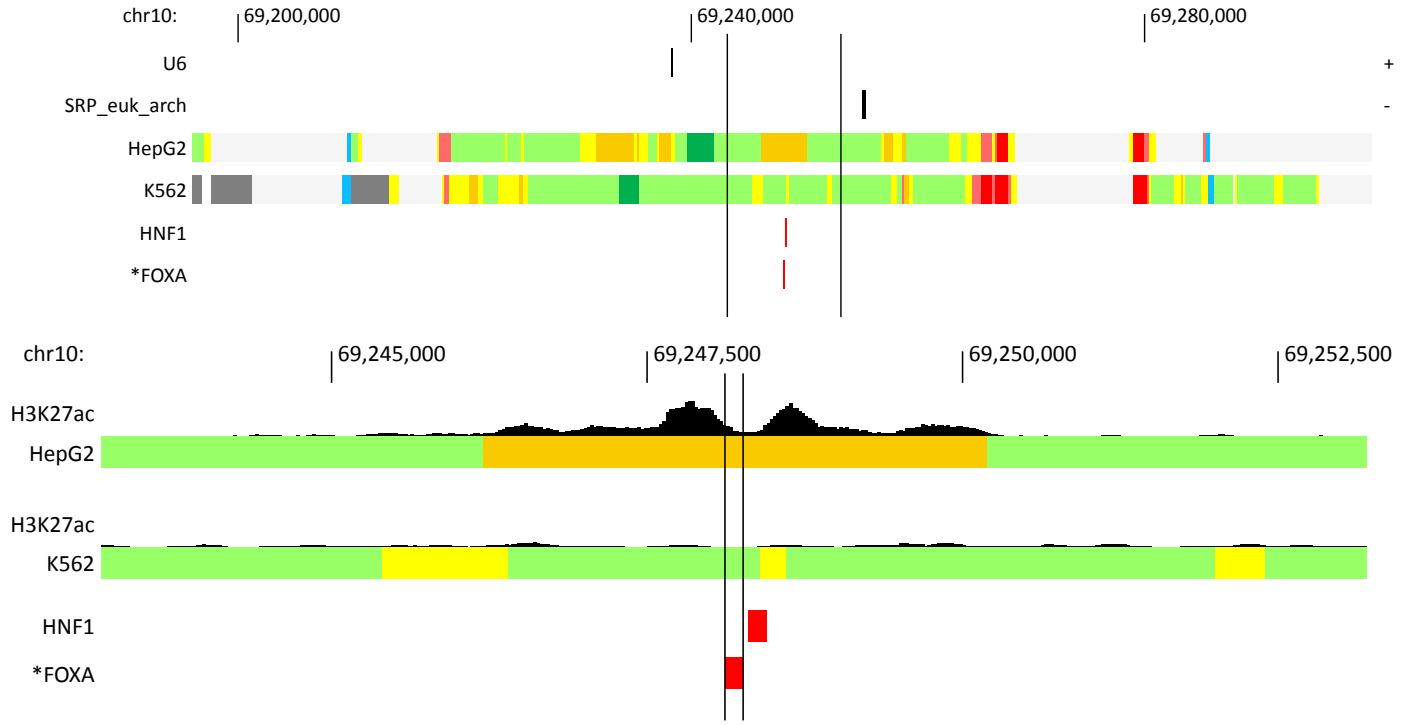
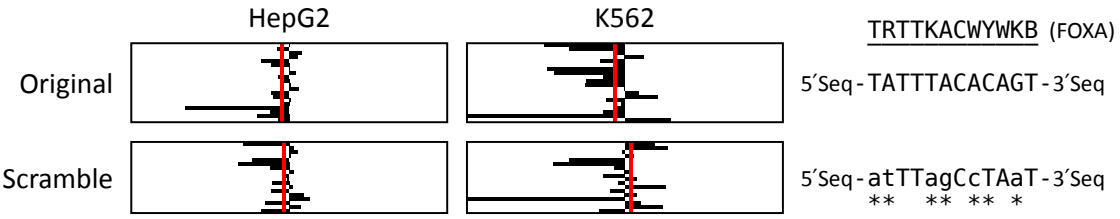
3′Seq = tatatgggcaagggcactttcctataactatacaatatgcttacaaaacatcagcaatgaaggca

2161 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr10 69248184 69248195 + (hg18)





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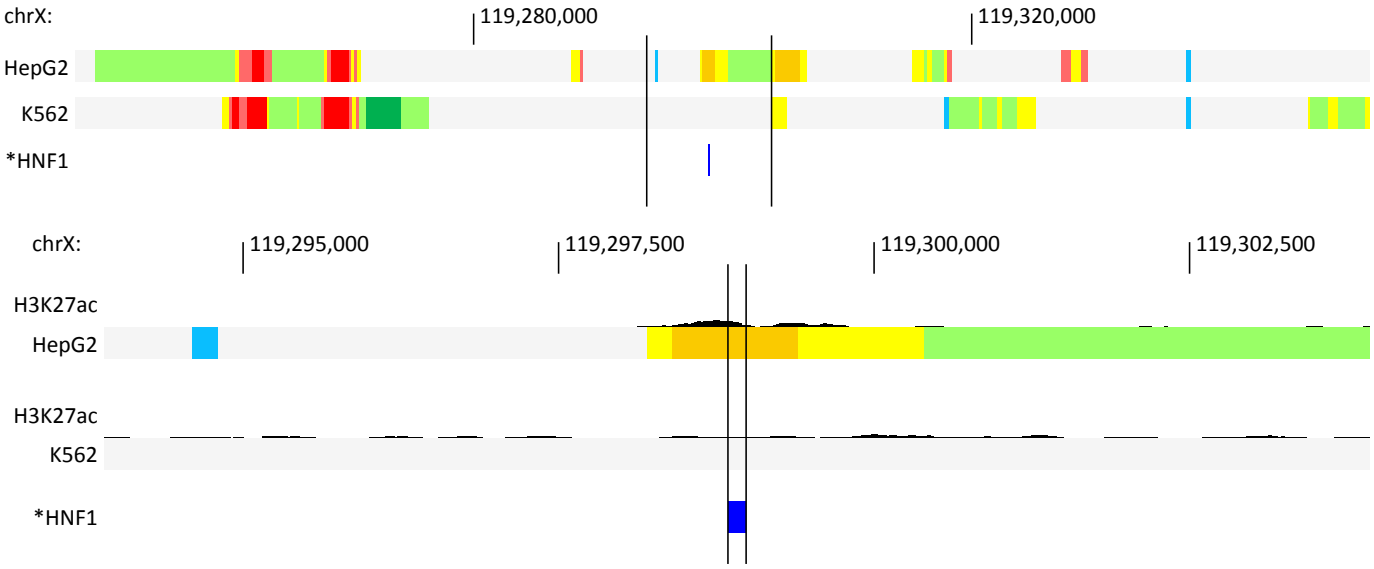
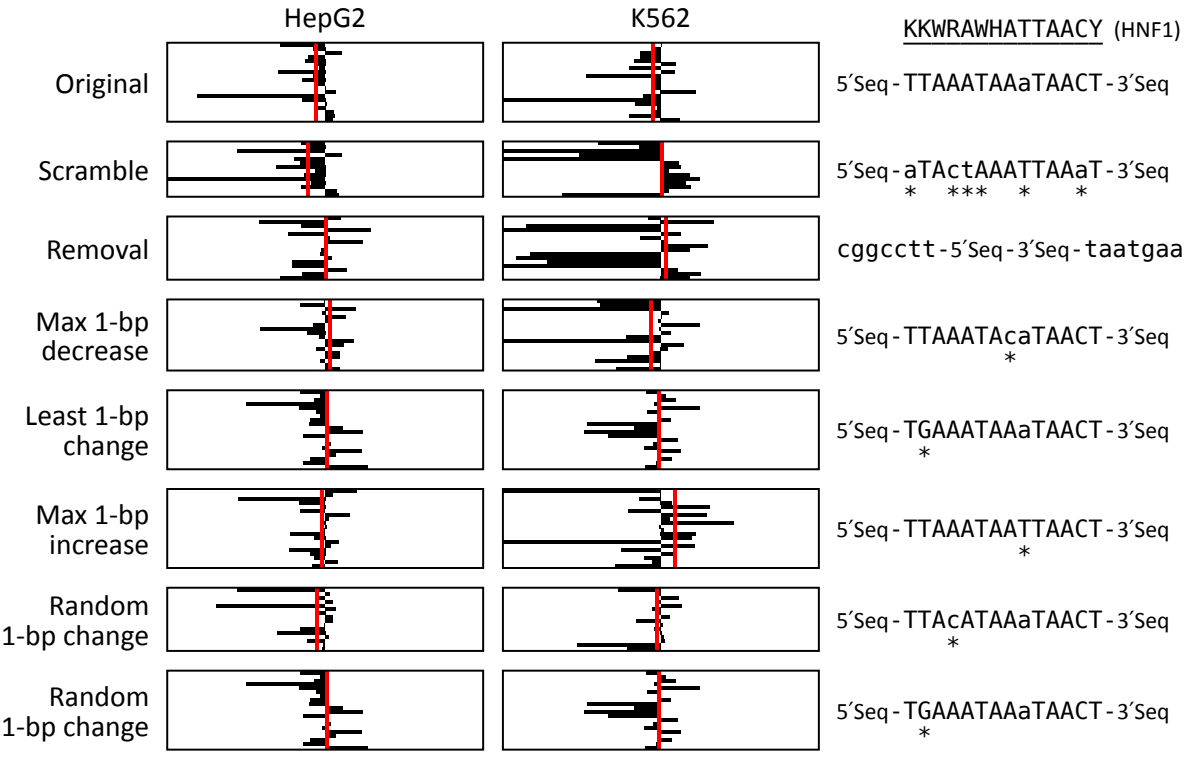
2162 HNF1 in HepG2 enhancer

chrX 119298908 119298921 - (hg18)





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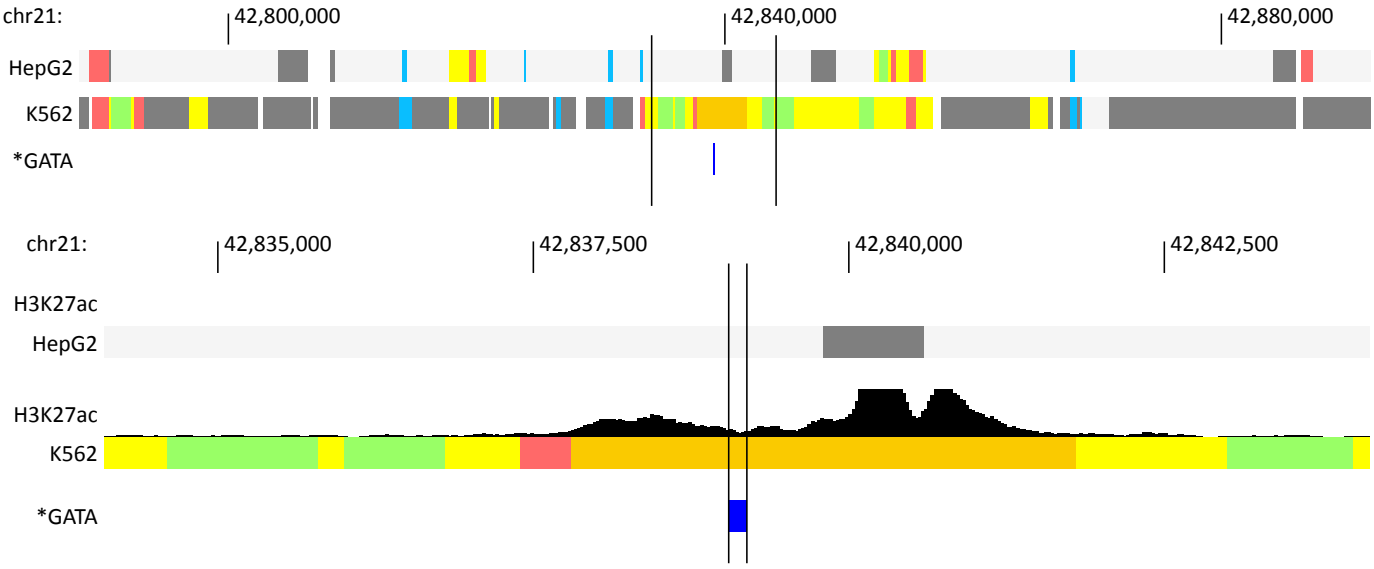
2163 GATA in K562 enhancer

chr21 42839112 42839129 - (hg18)



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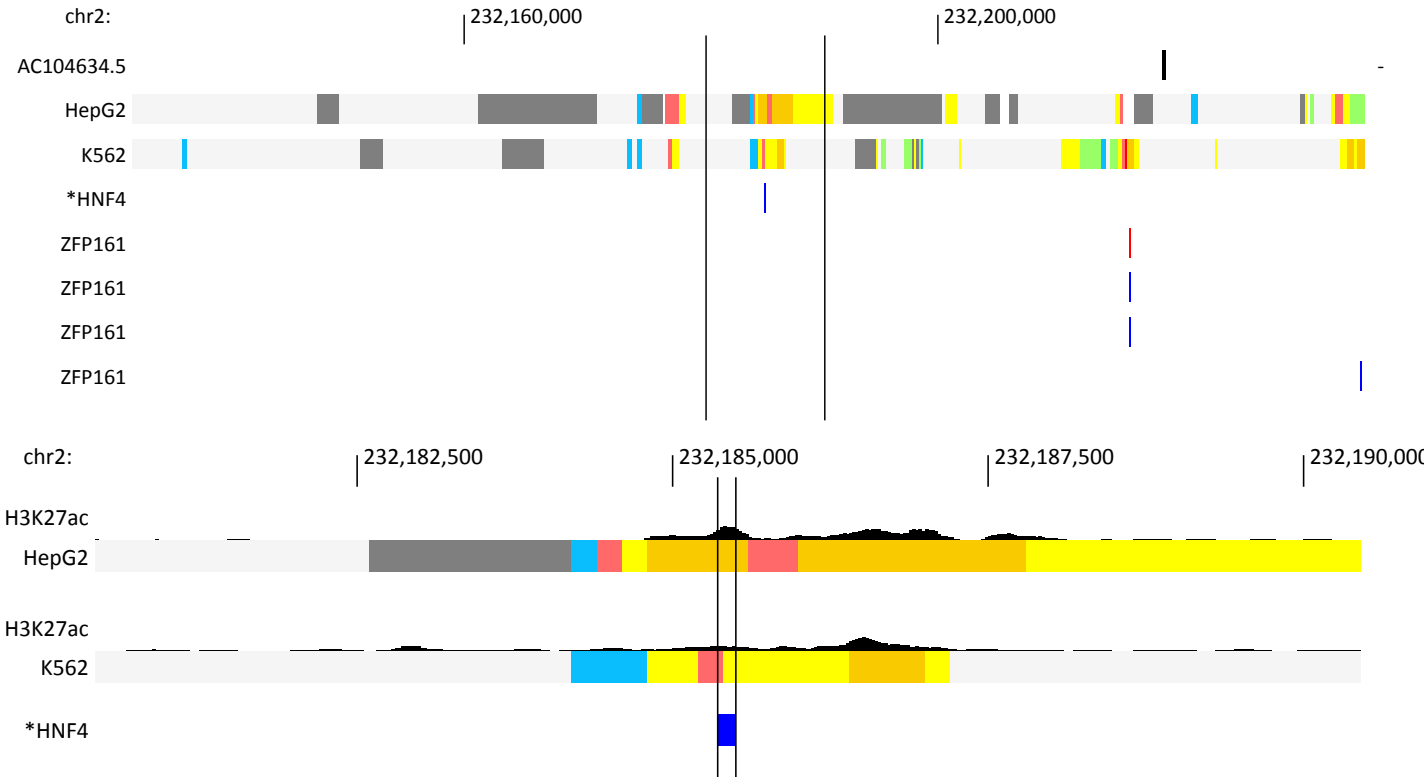
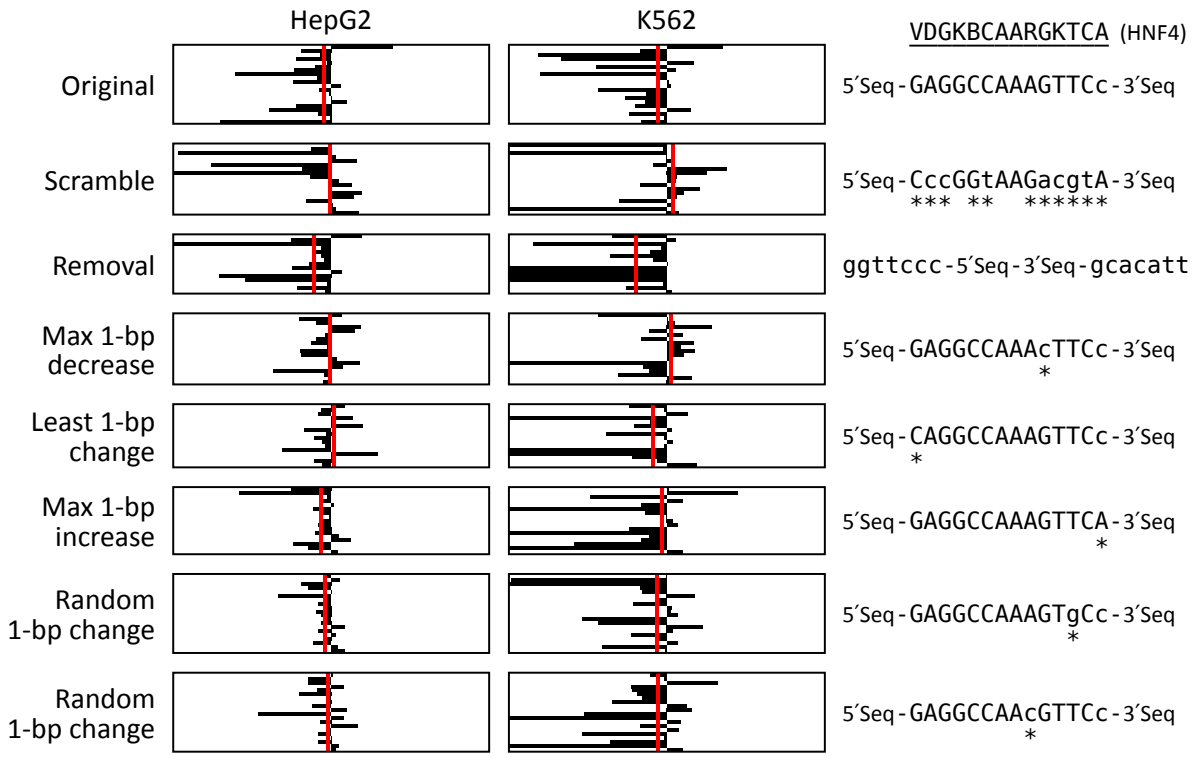
2164 HNF4 in HepG2 enhancer

chr2 232185423 232185436 - (hg18)





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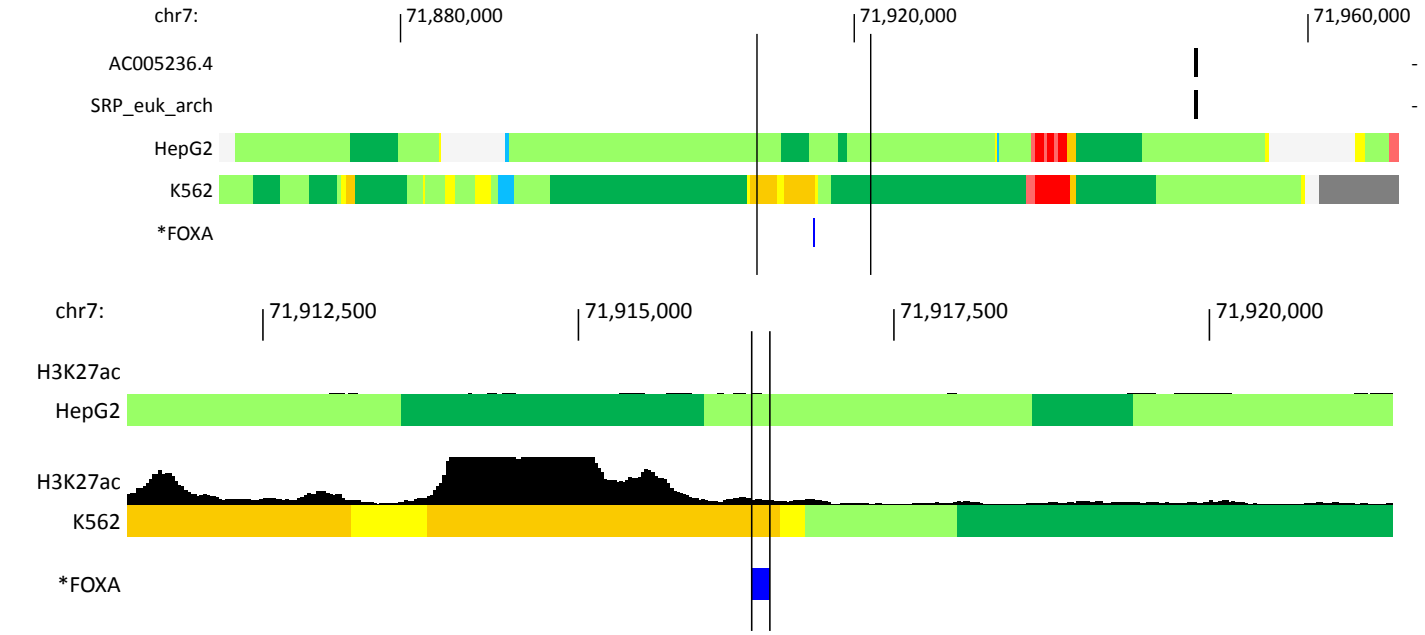
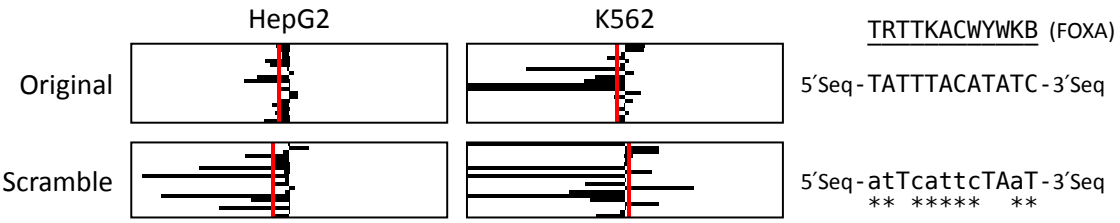
2165 FOXA in K562 enhancer

chr7 71916440 71916451 + (hg18)





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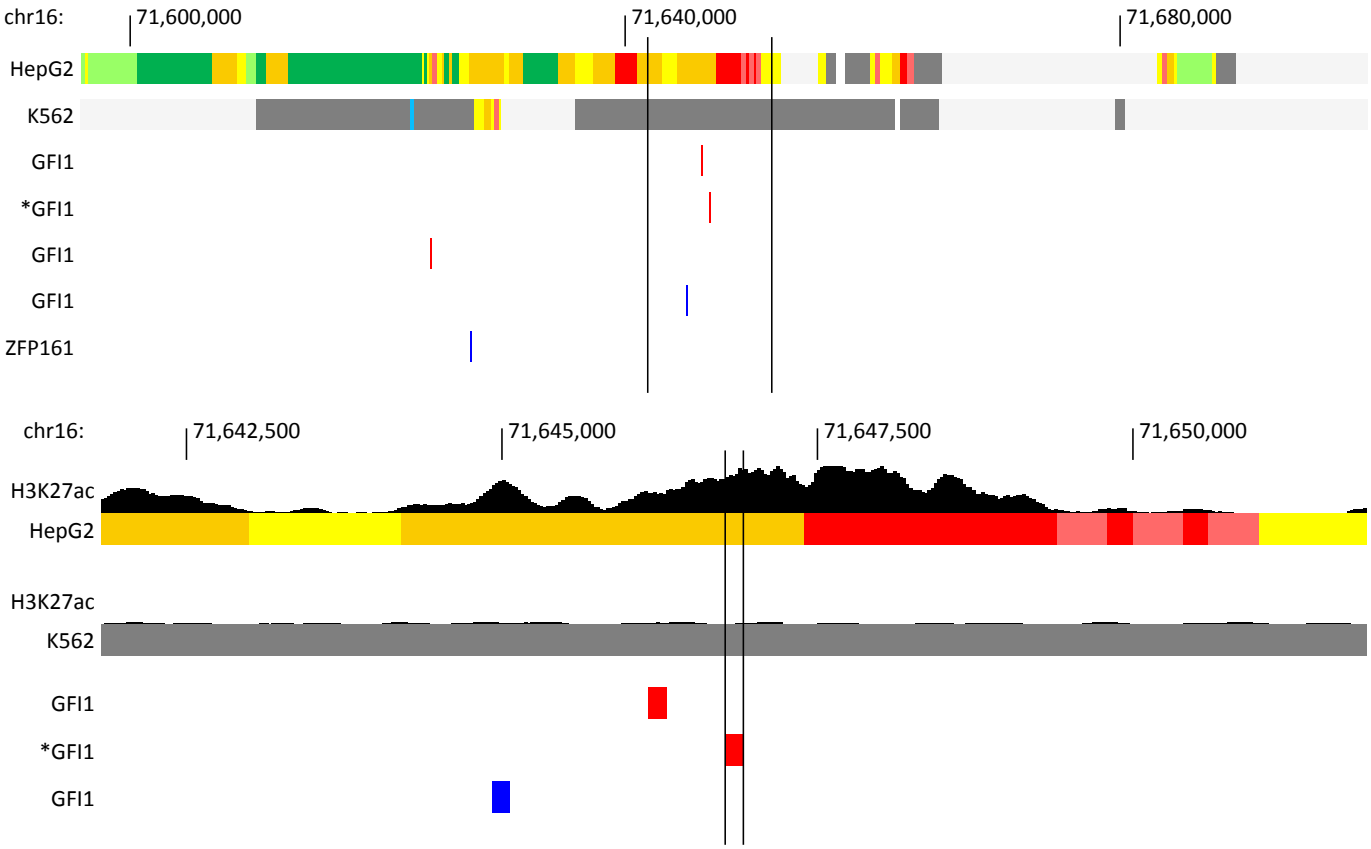
3′Seq = tacgccaggcgaagtgtctcacgtctgtaatcccagcactttgggaggctgaggcaggcagattgt

2166 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr16 71646830 71646853 + (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AAAAATaAAATCAaAGCAGCTGTA-3′Seq

5′Seq-TtACAGaAgtTCAaAaaACAgaAA-3′Seq

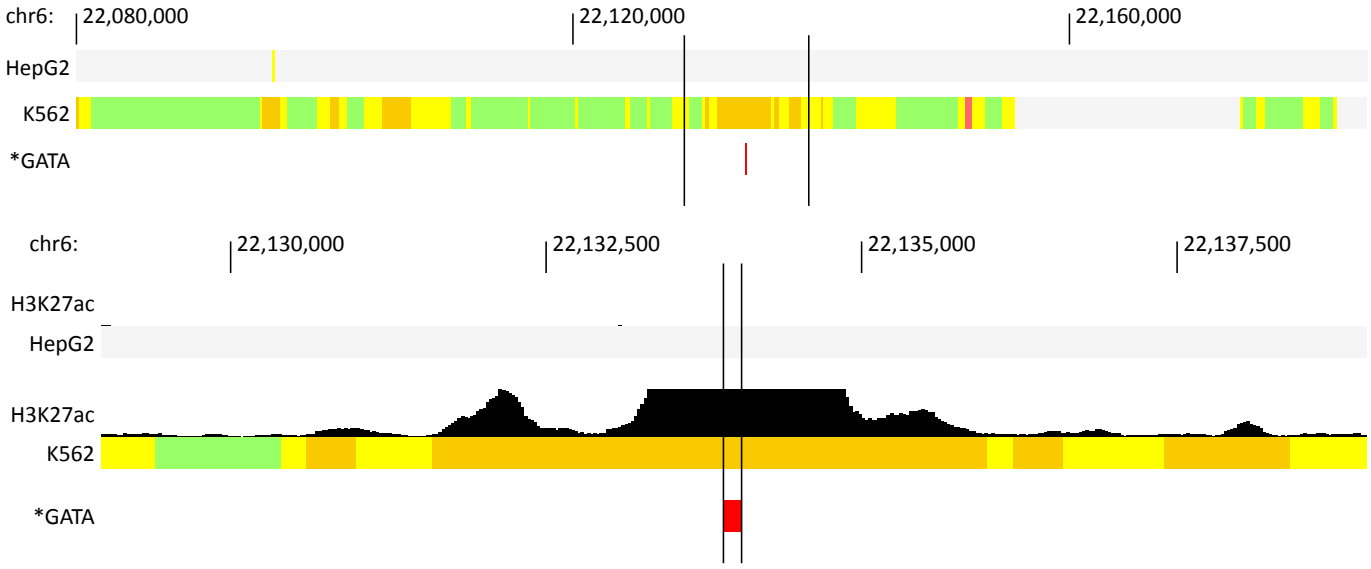
** * * ** ** *****

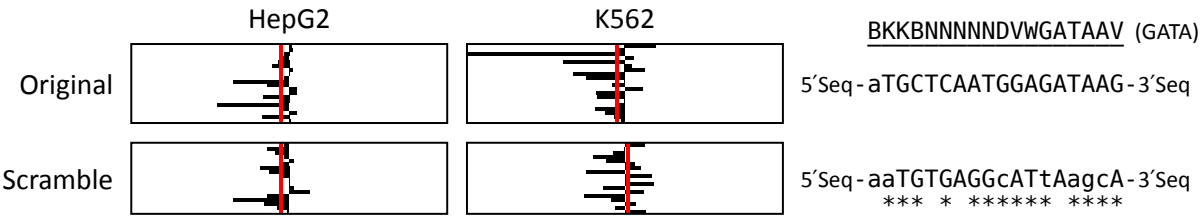
5′Seq = aacacctgaaaggggaggcacaatttgtacaatggcaggaggagcctaaaatatacacca

3′Seq = ggggttttggcctctgagcagctgacctgaccccgttctgtatattcttttatttcccca

2167 GATA in K562 enhancer (conserved at 60% confidence)

chr6 22133969 22133986 - (hg18)





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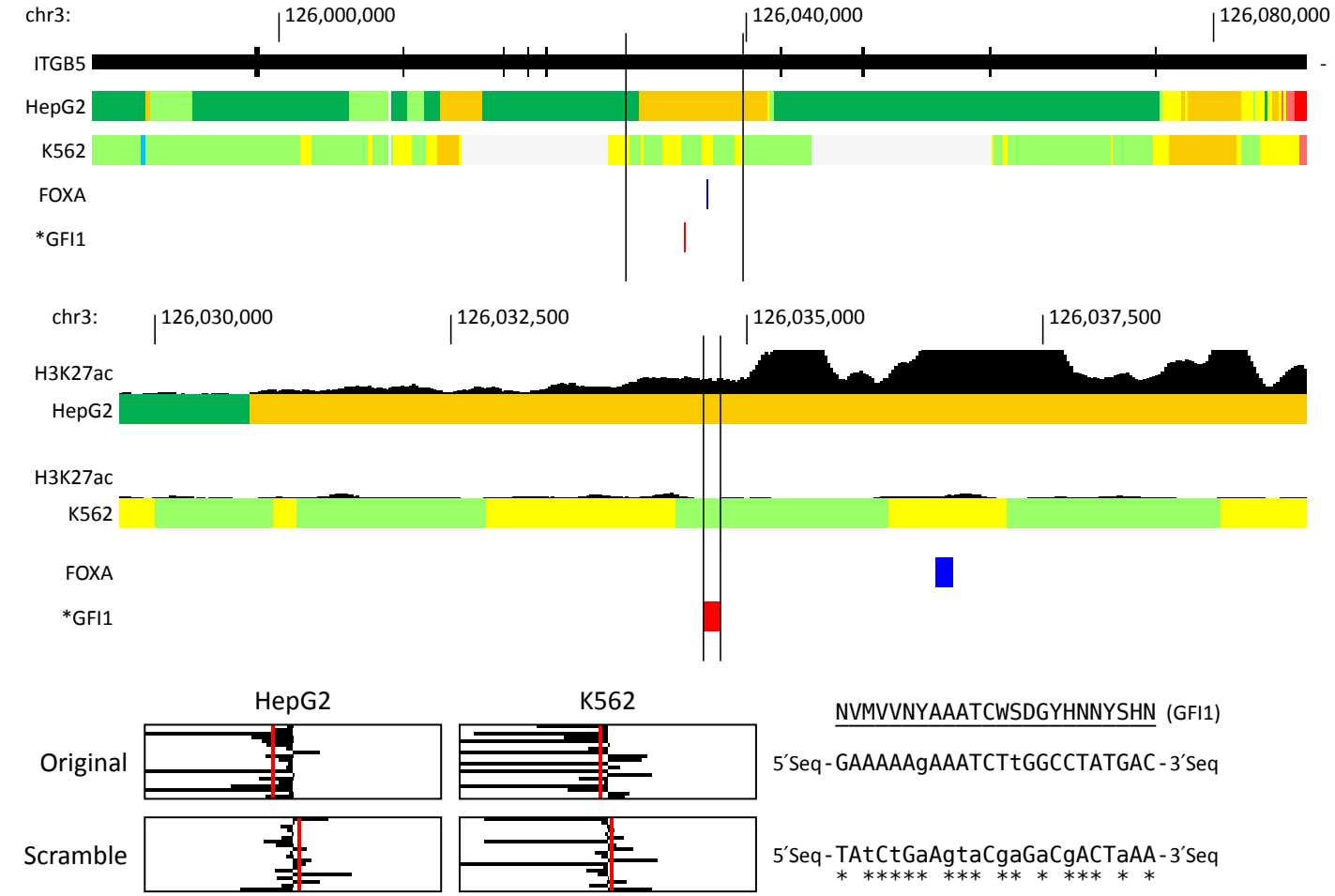
3′Seq = taagaacattctctgctctggccaataggagatctgcagctacagctgctcacagaagctctg

2168 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr3 126034694 126034717 + (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-GAAAAAgAAATCTtGGCCTATGAC-3′Seq

5′Seq-TAtCtGaAgtaCgaGaCgACTaAA-3′Seq

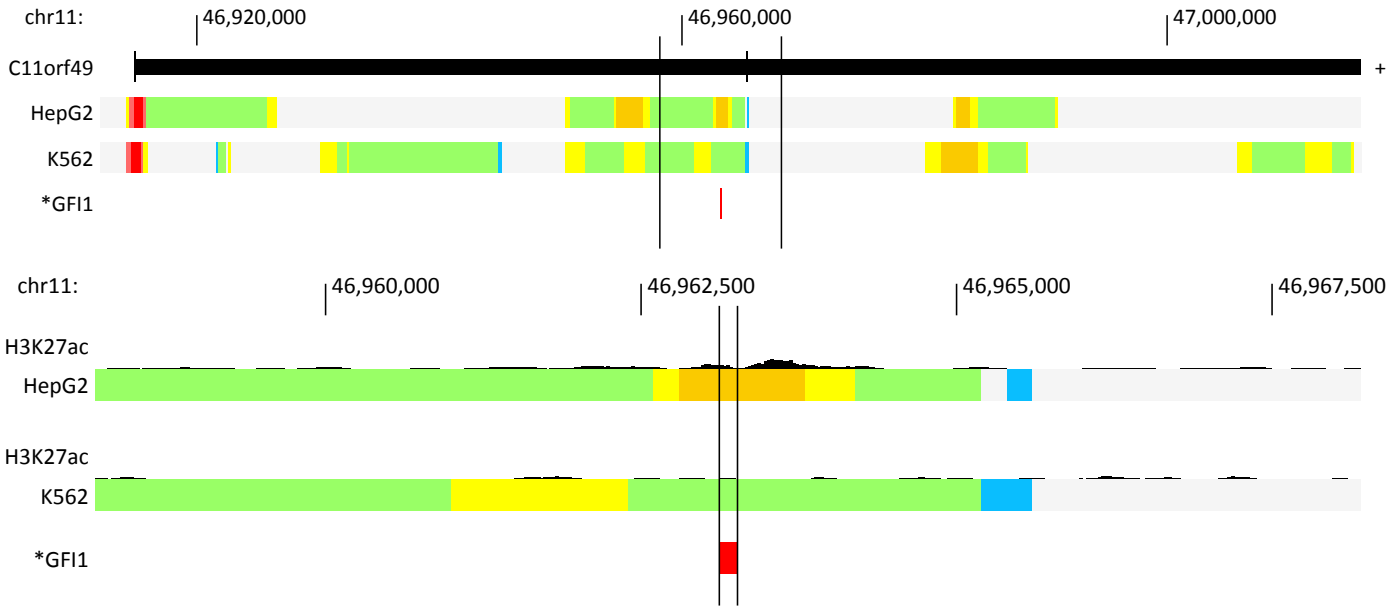
* ***** *** ** * *** * *

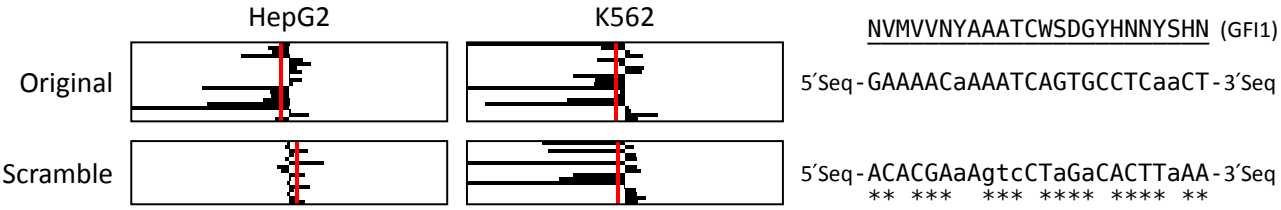
5′Seq = aaaaaaatctgttctgtggctaaacttaatgaggccaaaagtgtagcatttctttccttgg

3′Seq = tcaggatacagacattcctcttgagctcaaatcccagcaatgtgcaggatgacatttcta

2169 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr11 46963181 46963204 - (hg18)



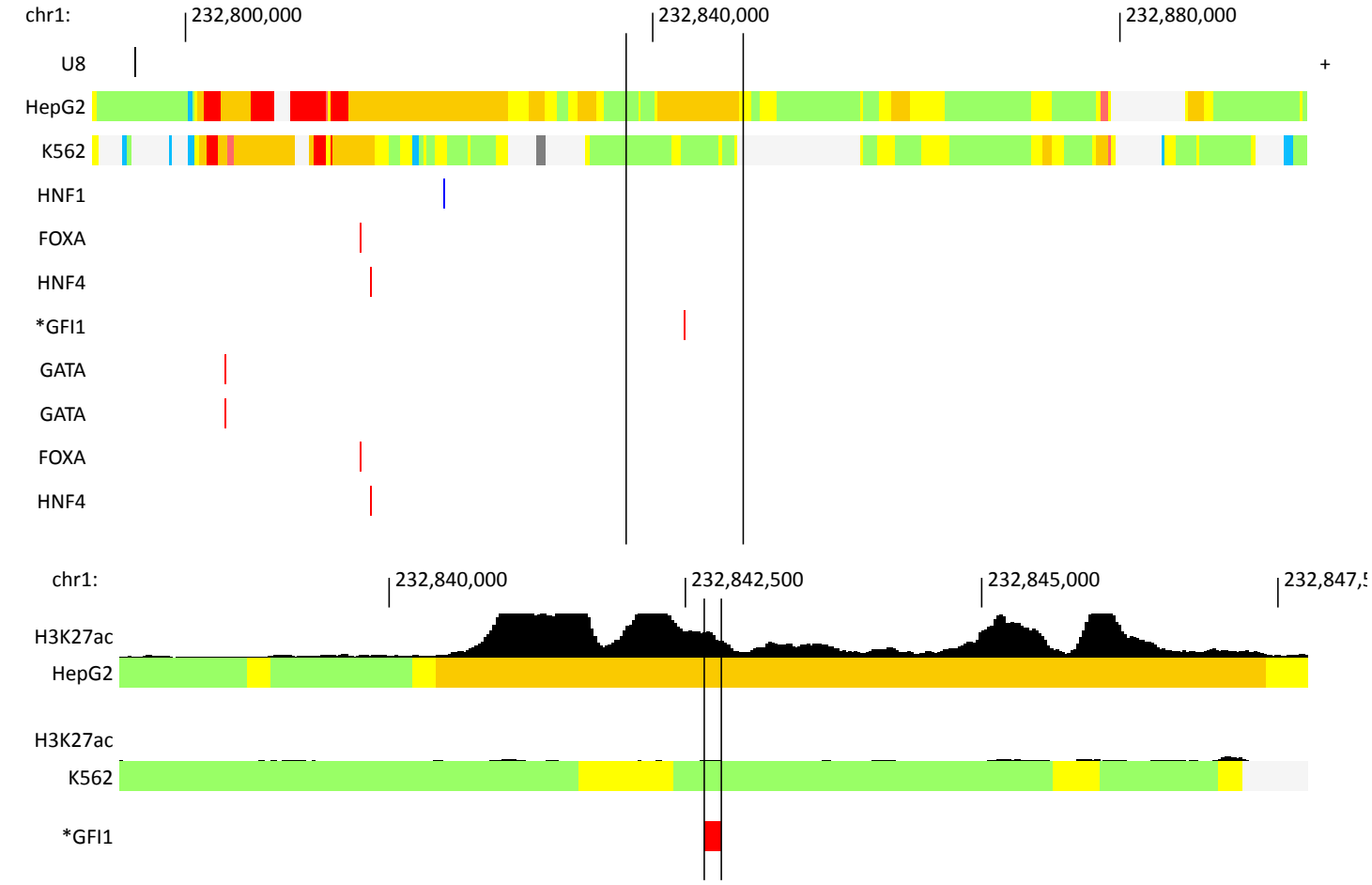


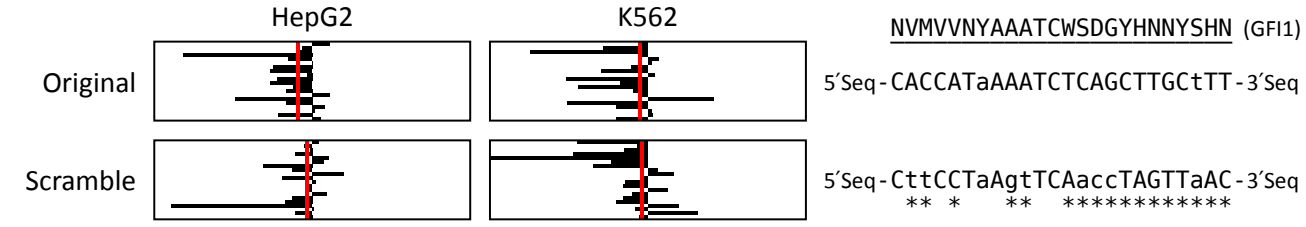
5′Seq = taacaactataaaccactgcaaaccctgactgcccacccccaaccccacccaaaaagaggt

3′Seq = caacagttcatccaactagaaaactgtttctttaagaaacggccaaaactaagagtgaag

2170 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 232842720 232842743 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-CACCATaAAATCTCAGCTTGCtTT-3′Seq

5′Seq-CttCCTaAgtTCAaccTAGTTaAC-3′Seq

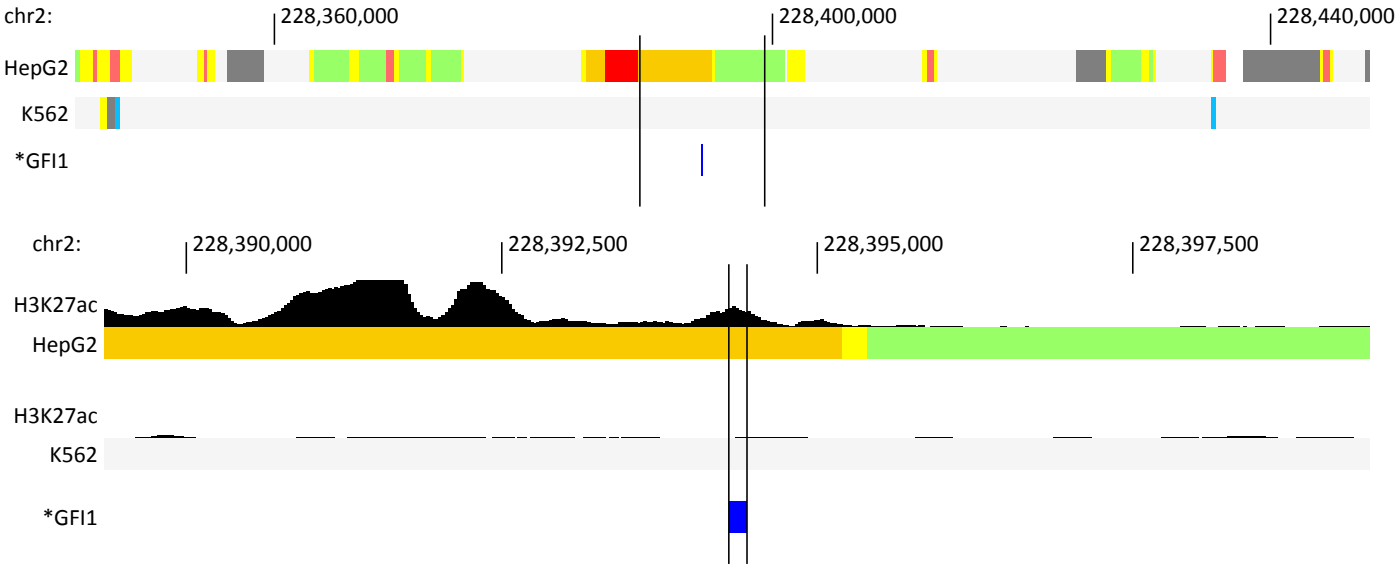
** * ** **********

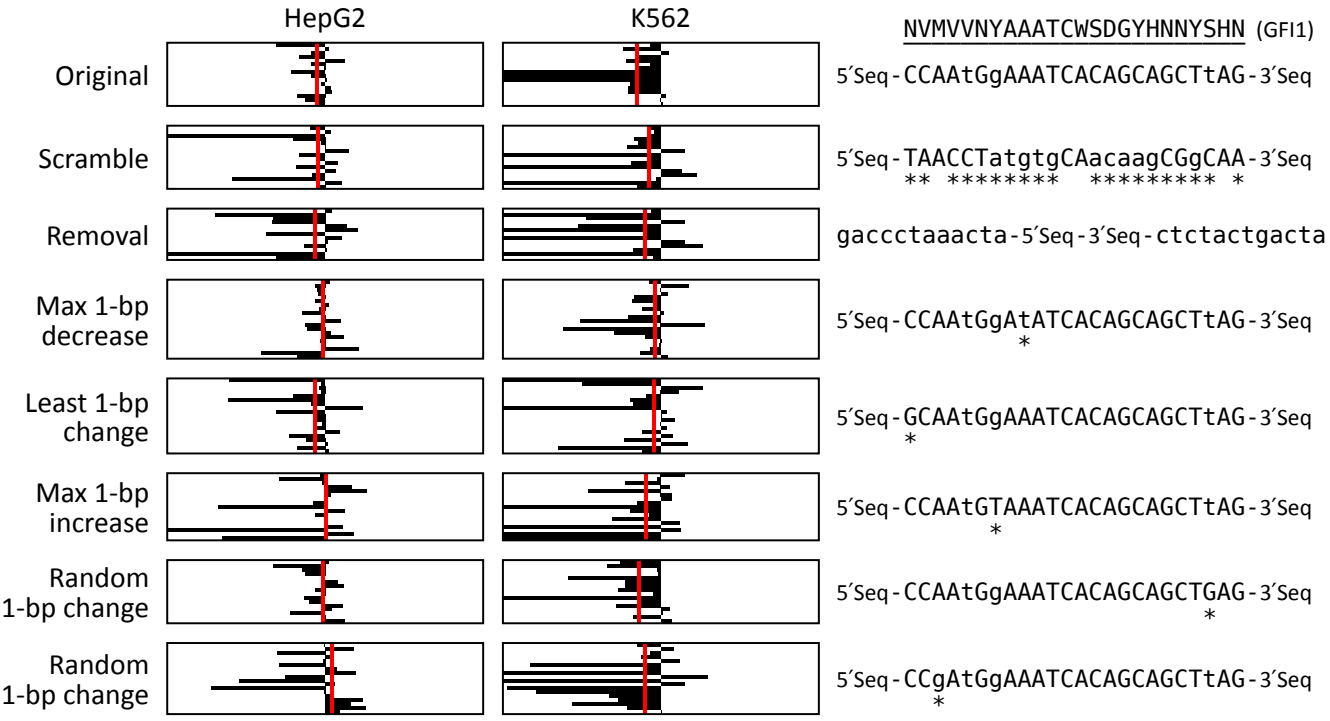
5′Seq = actaacattgatcacacagtgtgtaatcccacatctatatactggcaaatgatggcacaaa

3′Seq = gtagccattctggattgctgagttctaggcaagtaagagctggtccttcaaagcaccaaa

2171 GFI1 in HepG2 enhancer

chr2 228394360 228394383 - (hg18)





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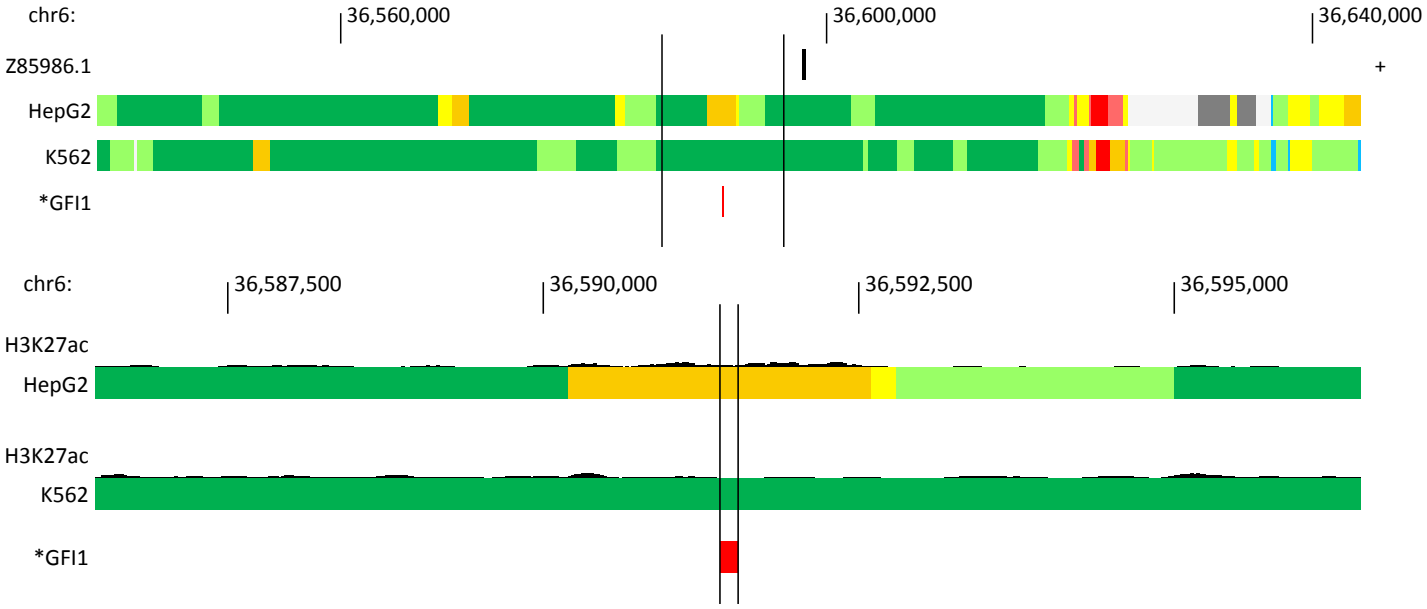
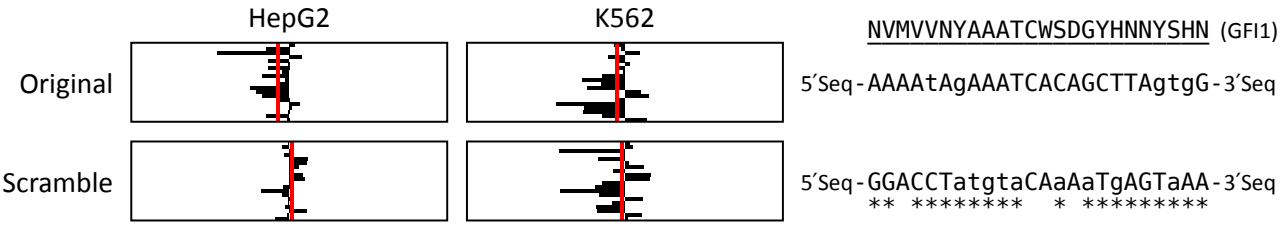
3′Seq = ttatctccgacttcagtgaaccccaacactgtggaacaaccttgagtgtacccctgtgtc

2172 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 36591461 36591484 - (hg18)





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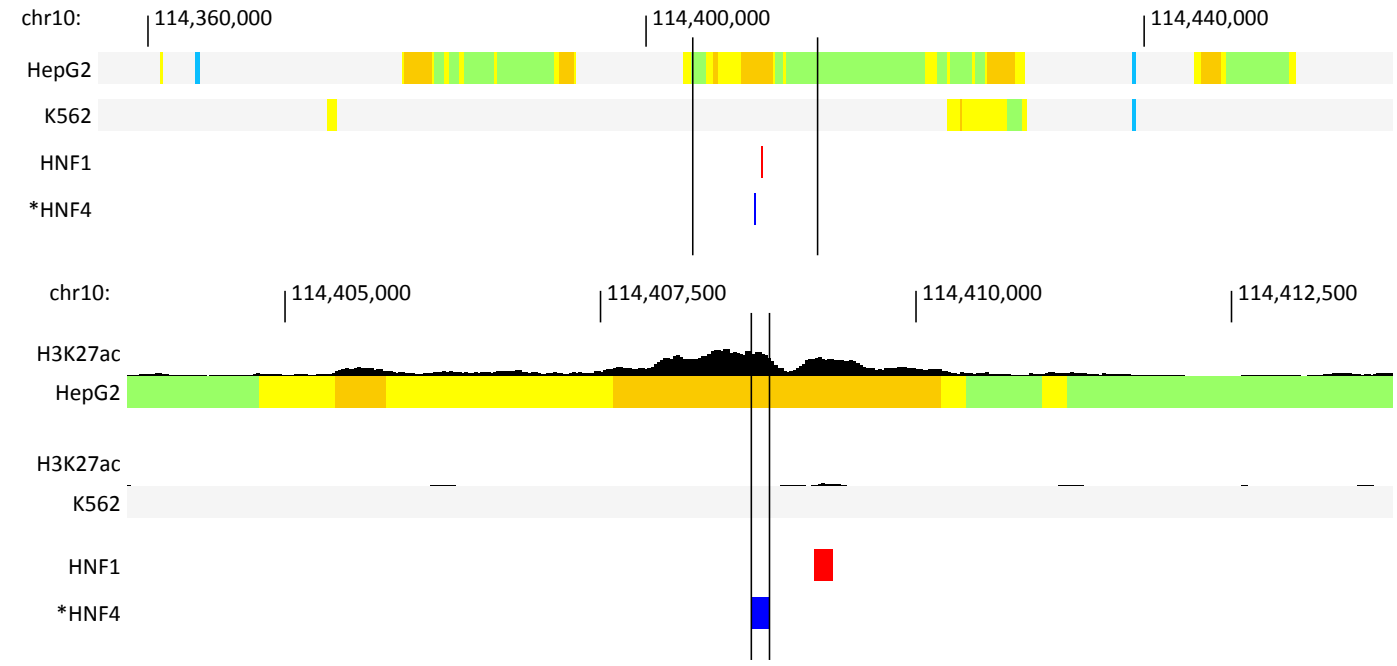
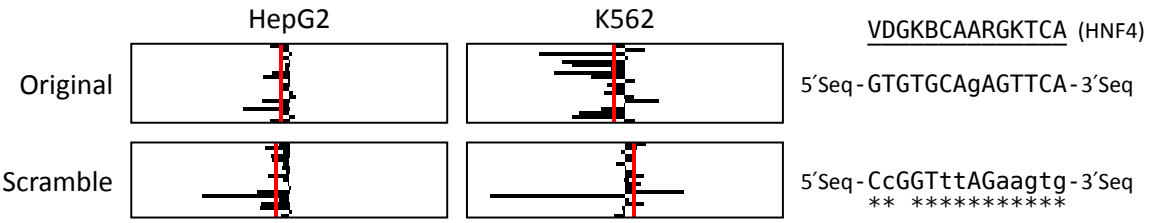
2173 HNF4 in HepG2 enhancer

chr10 114408761 114408774 + (hg18)





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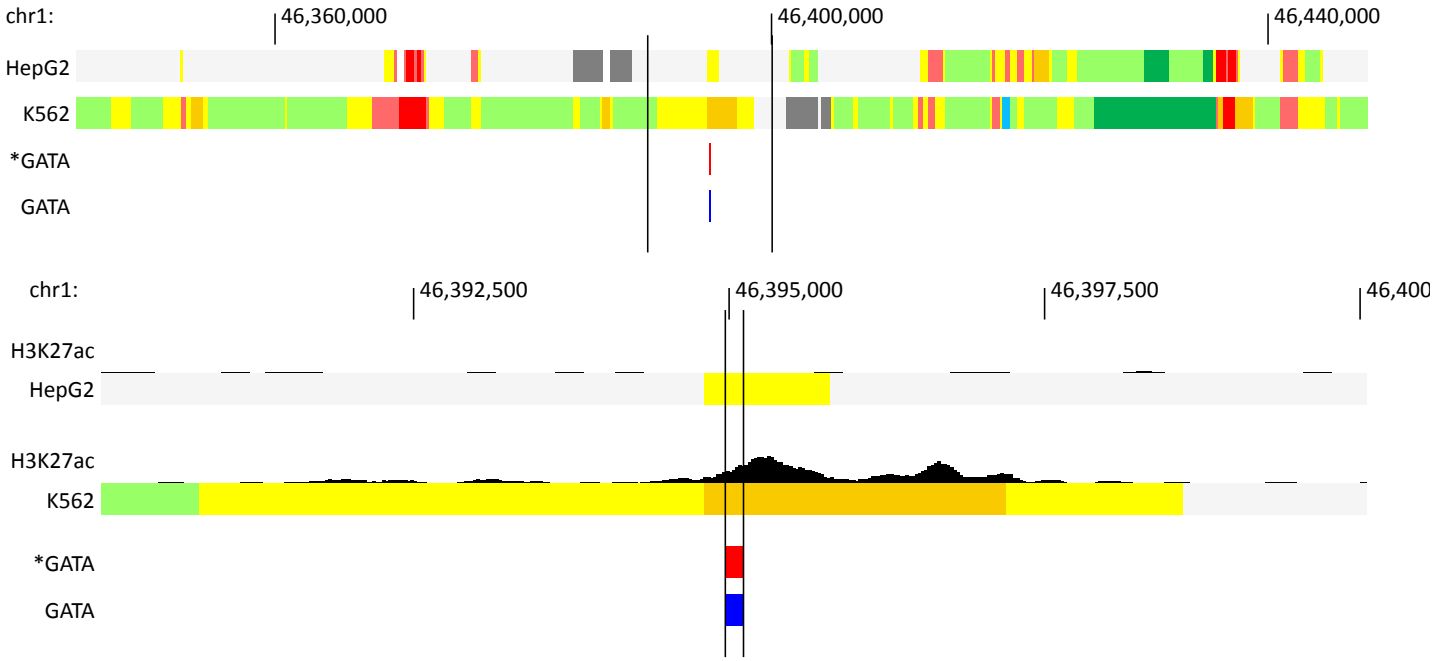
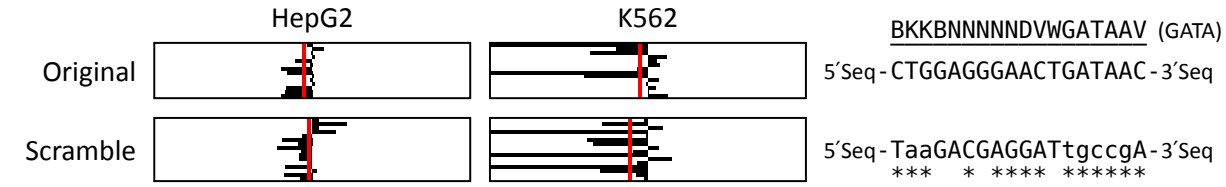
2174 GATA in K562 enhancer (conserved at 60% confidence)

chr1 46395034 46395051 - (hg18)





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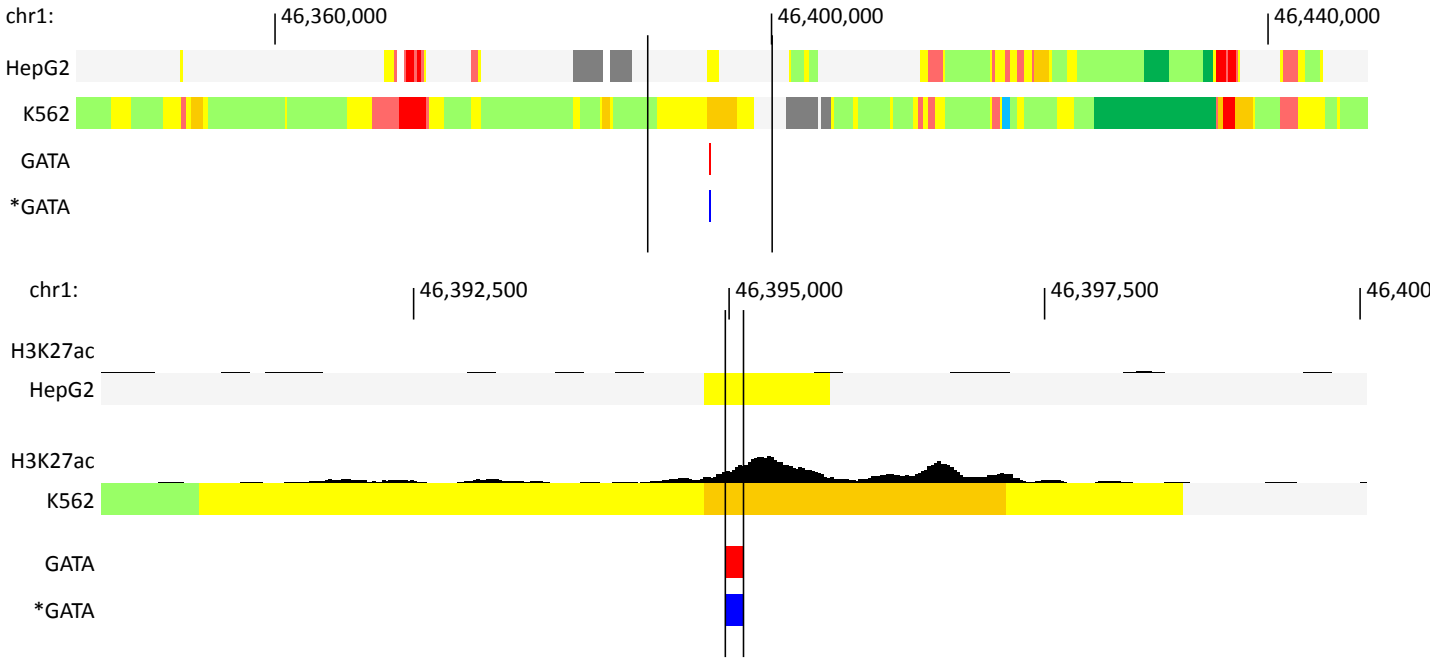
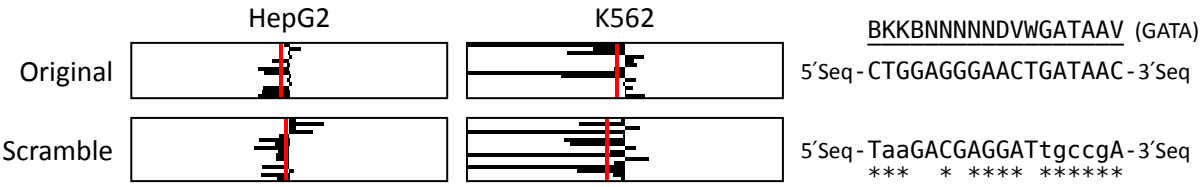
2175 GATA in K562 enhancer

chr1 46395034 46395051 - (hg18)





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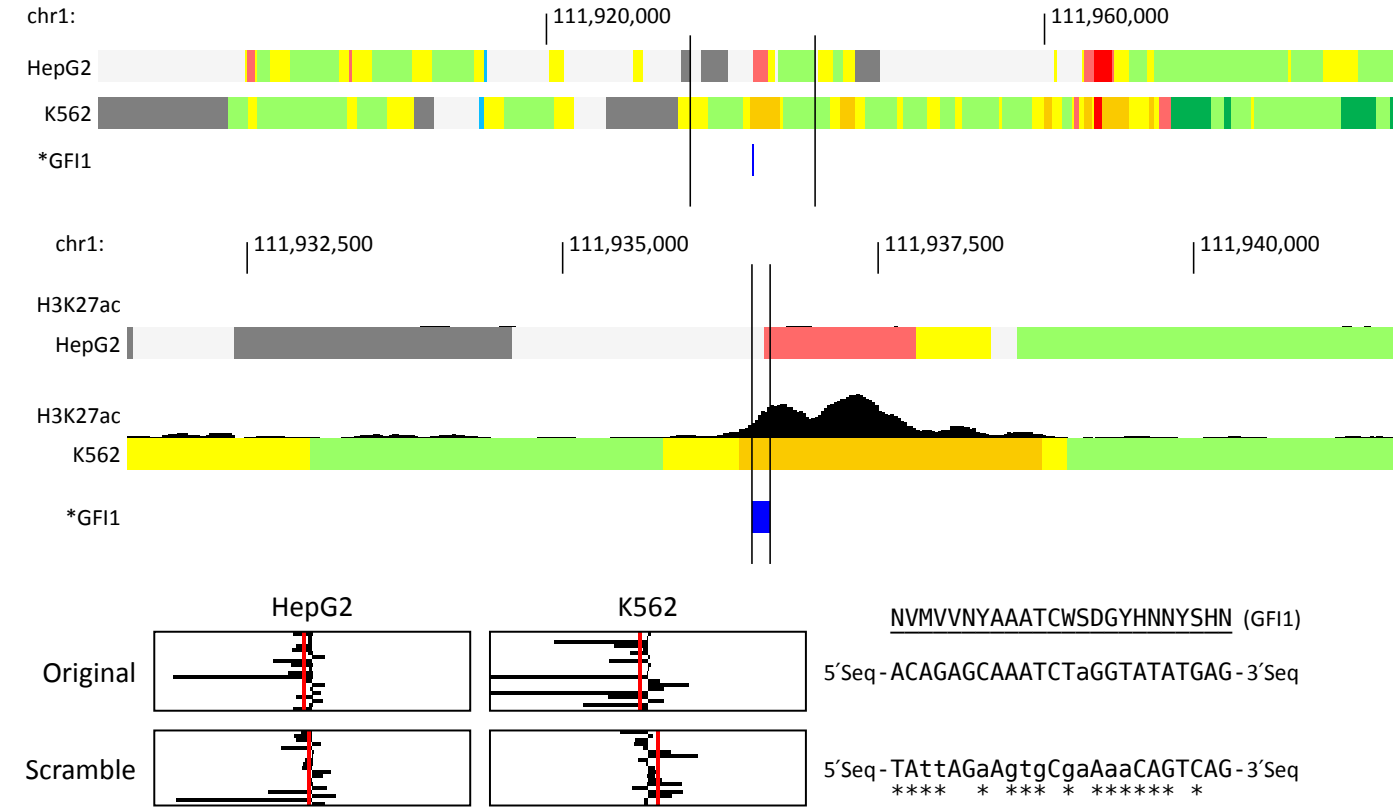
2176 GFI1 in K562 enhancer

chr1 111936561 111936584 + (hg18)



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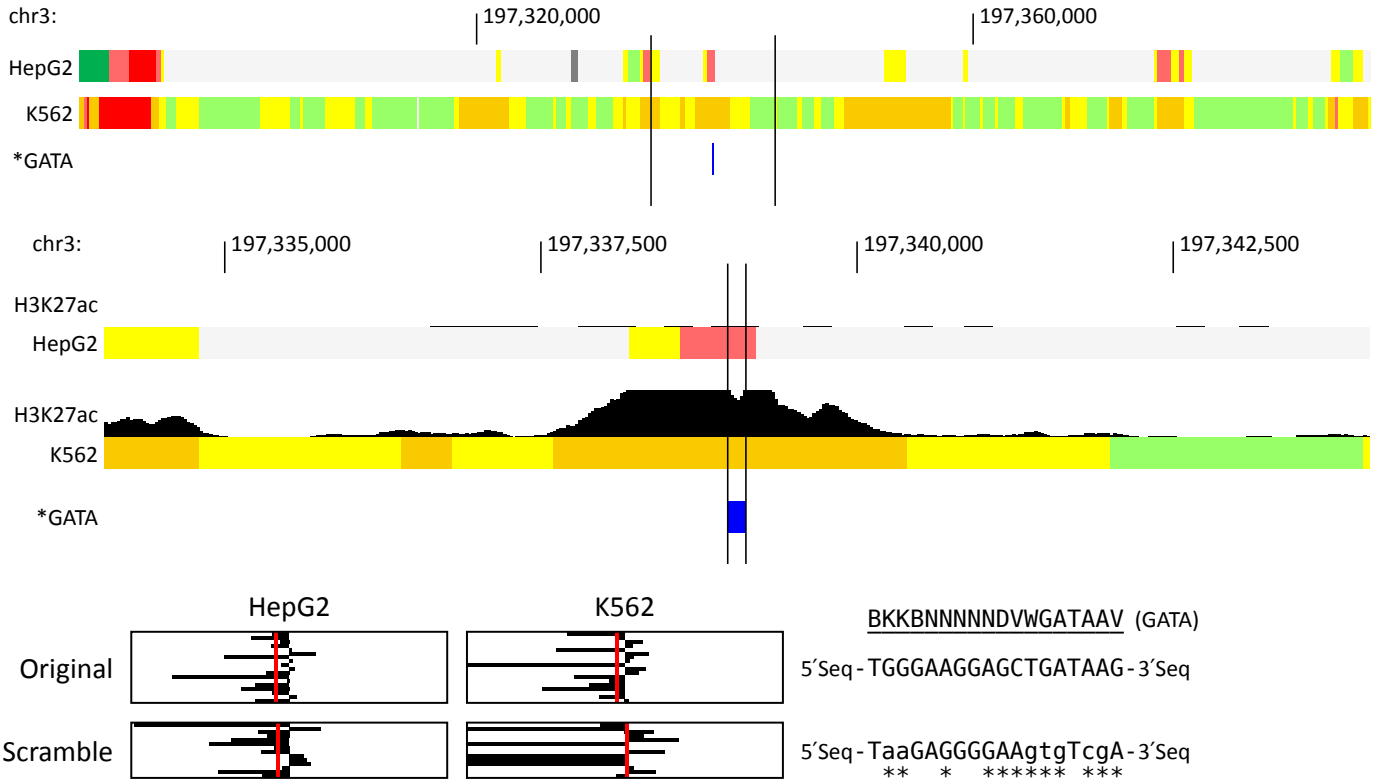
2177 GATA in K562 enhancer

chr3 197339041 197339058 + (hg18)



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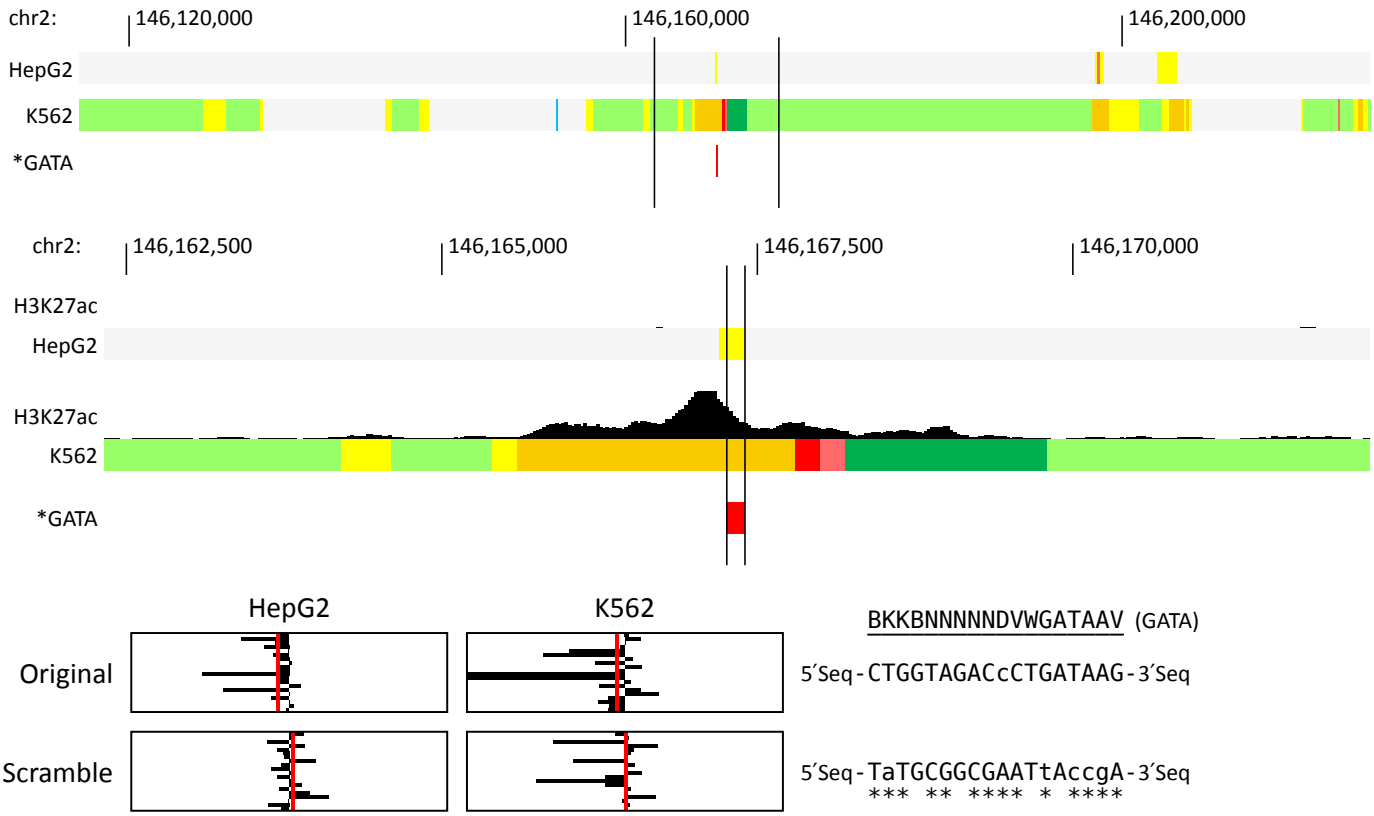
2178 GATA in K562 enhancer (conserved at 60% confidence)

chr2 146167322 146167339 - (hg18)



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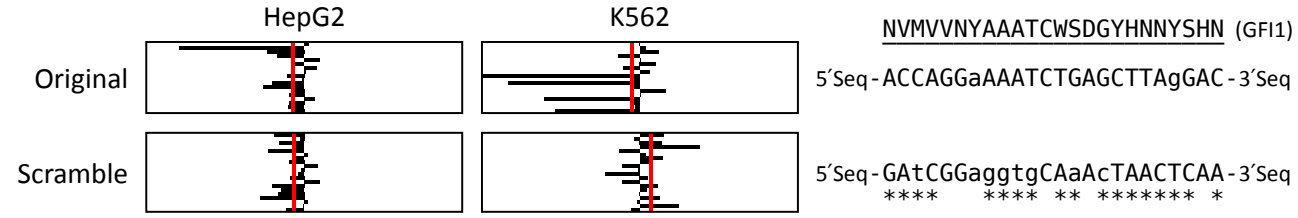
2179 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr8 141608054 141608077 + (hg18)



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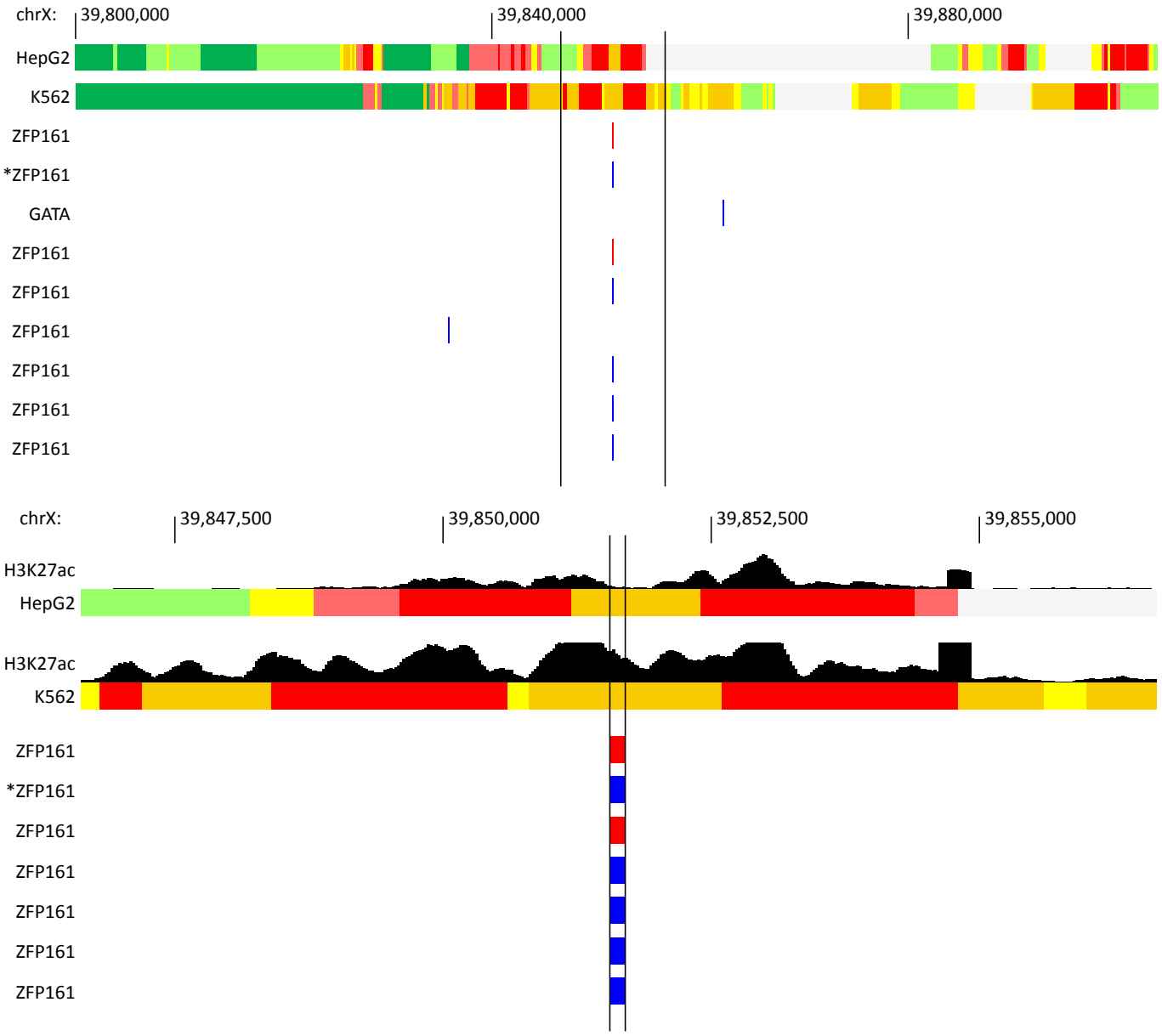
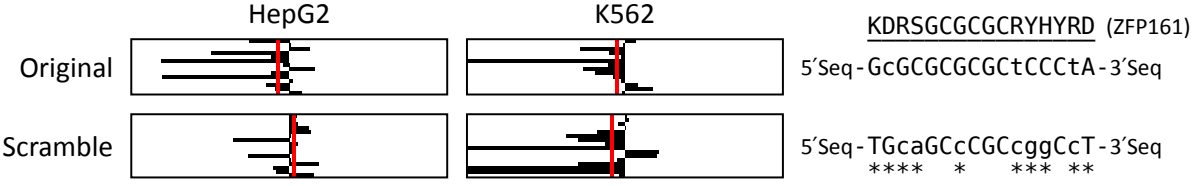
3′Seq = acacaaaacaacaggacggtggctttgcgtcaccgaagggctcacacacgagggcagctt

2180 ZFP161 in HepG2 enhancer

chrX 39851620 39851635 + (hg18)





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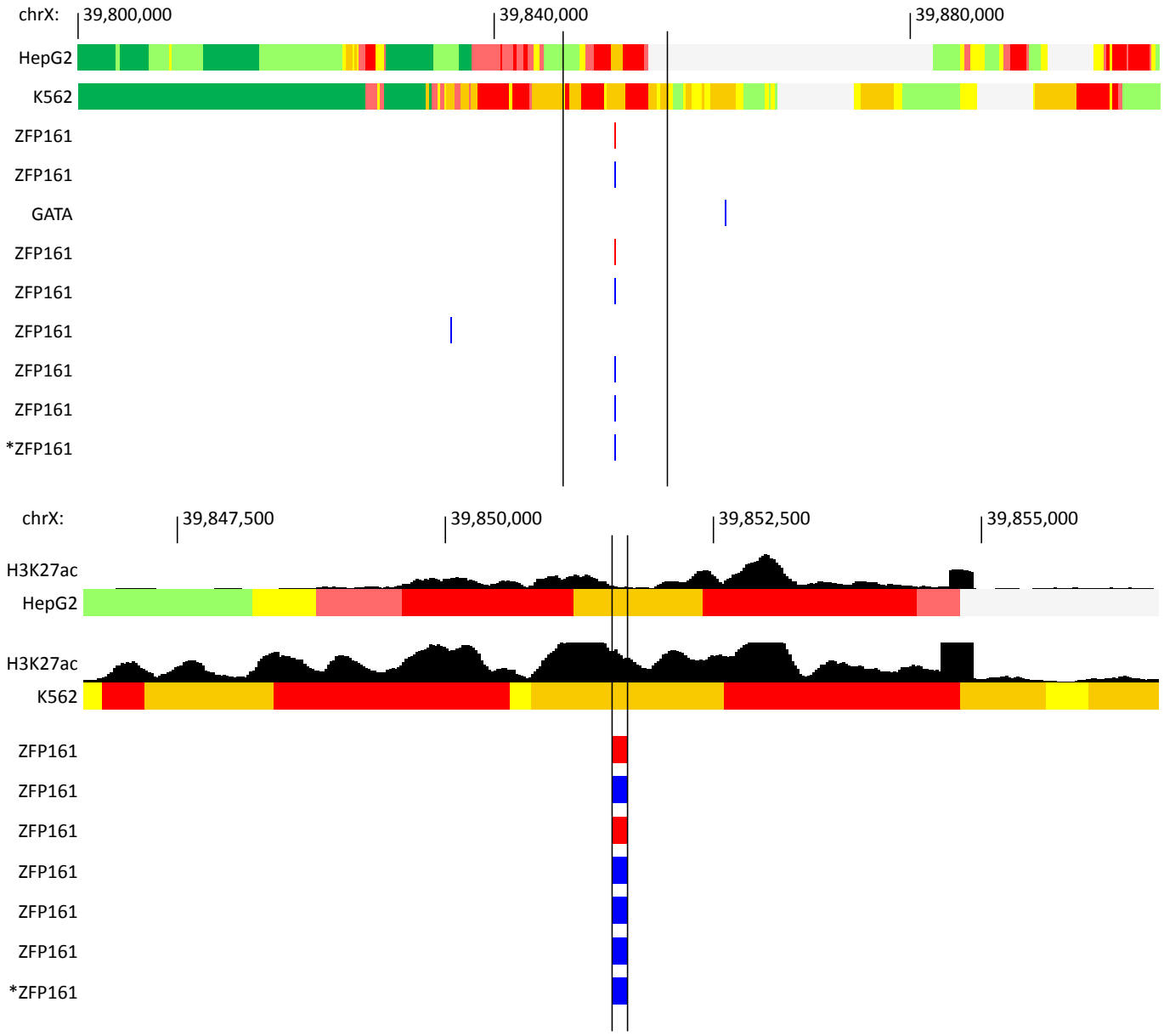
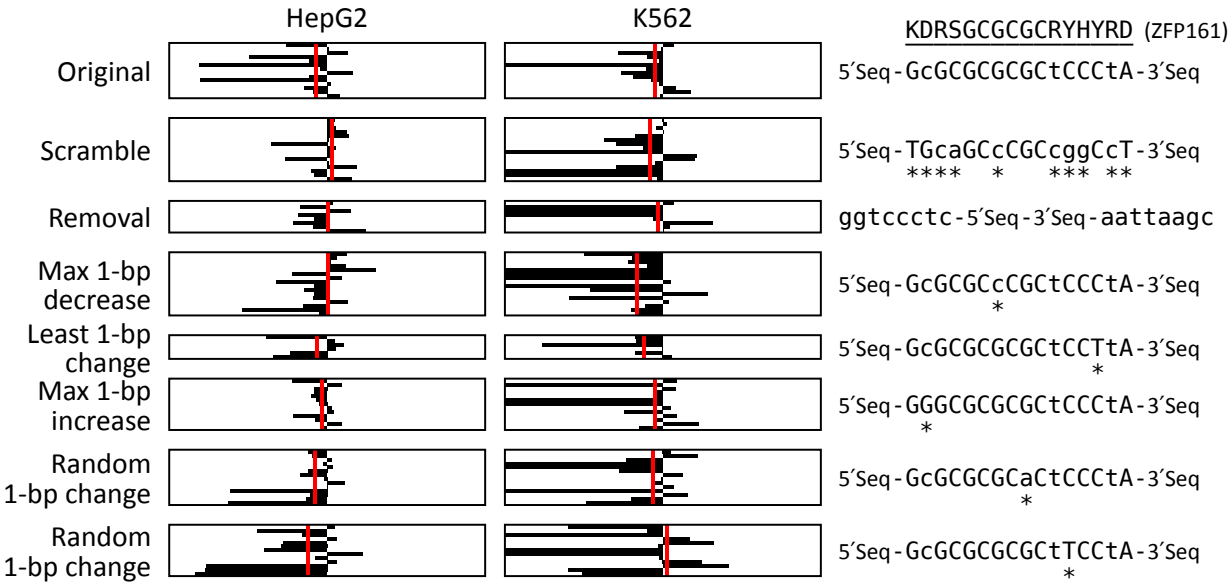
2181 ZFP161 in K562 enhancer

chrX 39851620 39851635 + (hg18)





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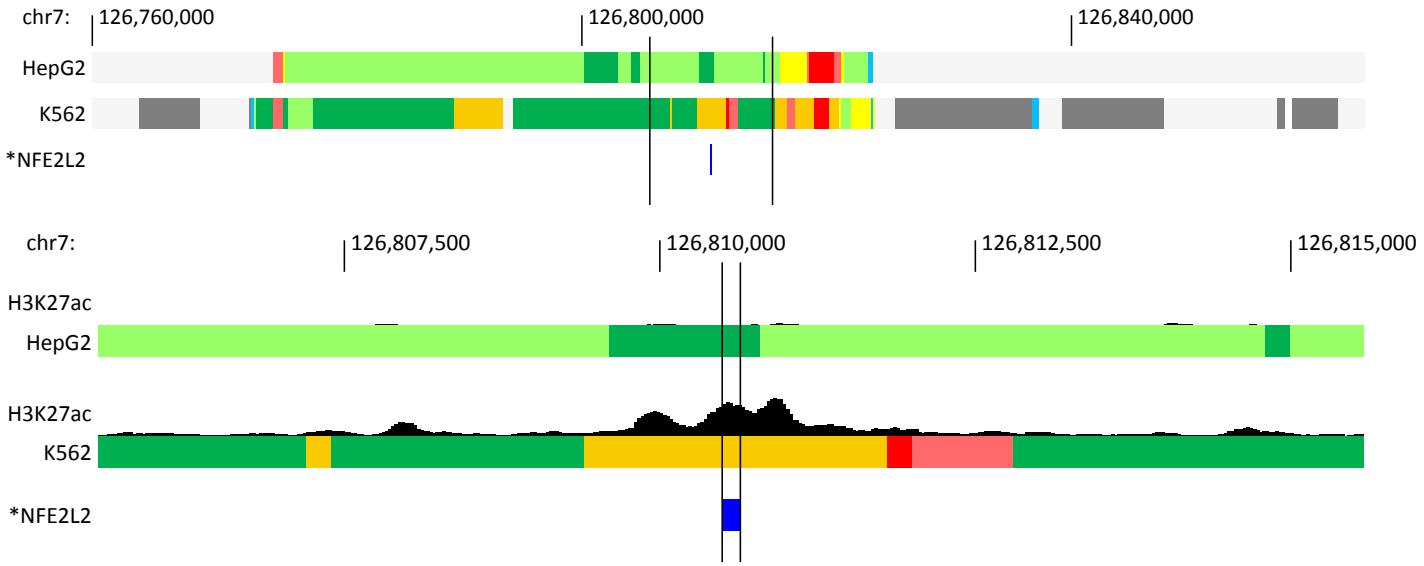
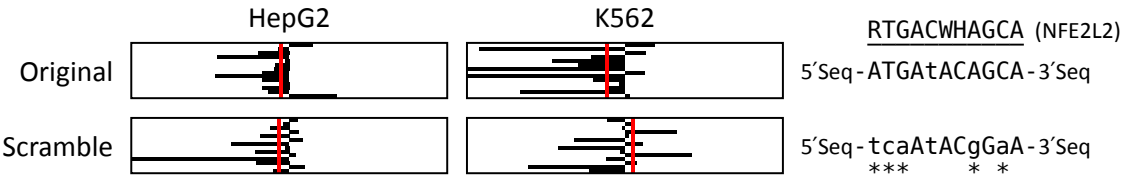
3′Seq = gctcgacgcgcaagccgtggctctccgcgccagagctgctcaggcggcaatttttttaagcctgc

2182 NFE2L2 in K562 enhancer

chr7 126810561 126810571 + (hg18)





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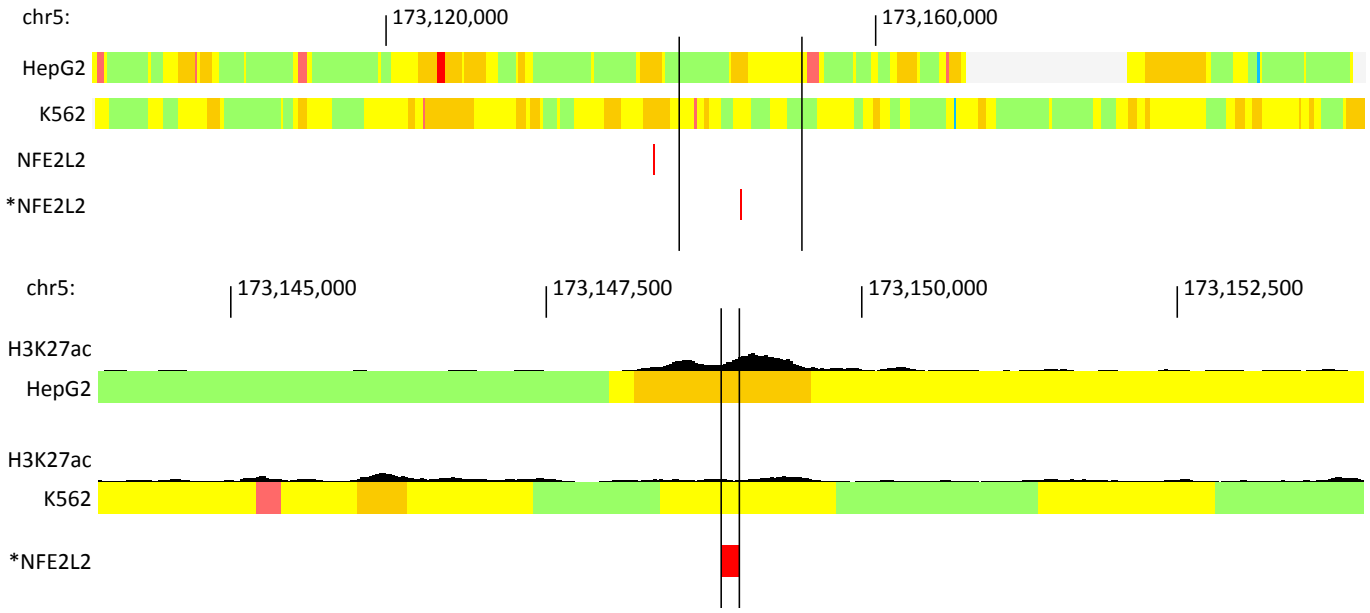
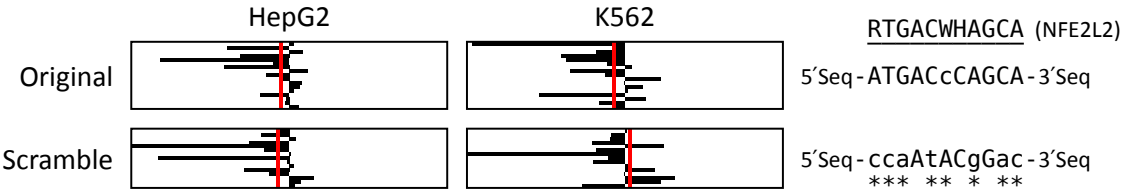
2183 NFE2L2 in HepG2 enhancer (conserved at 60% confidence)

chr5 173148953 173148963 - (hg18)





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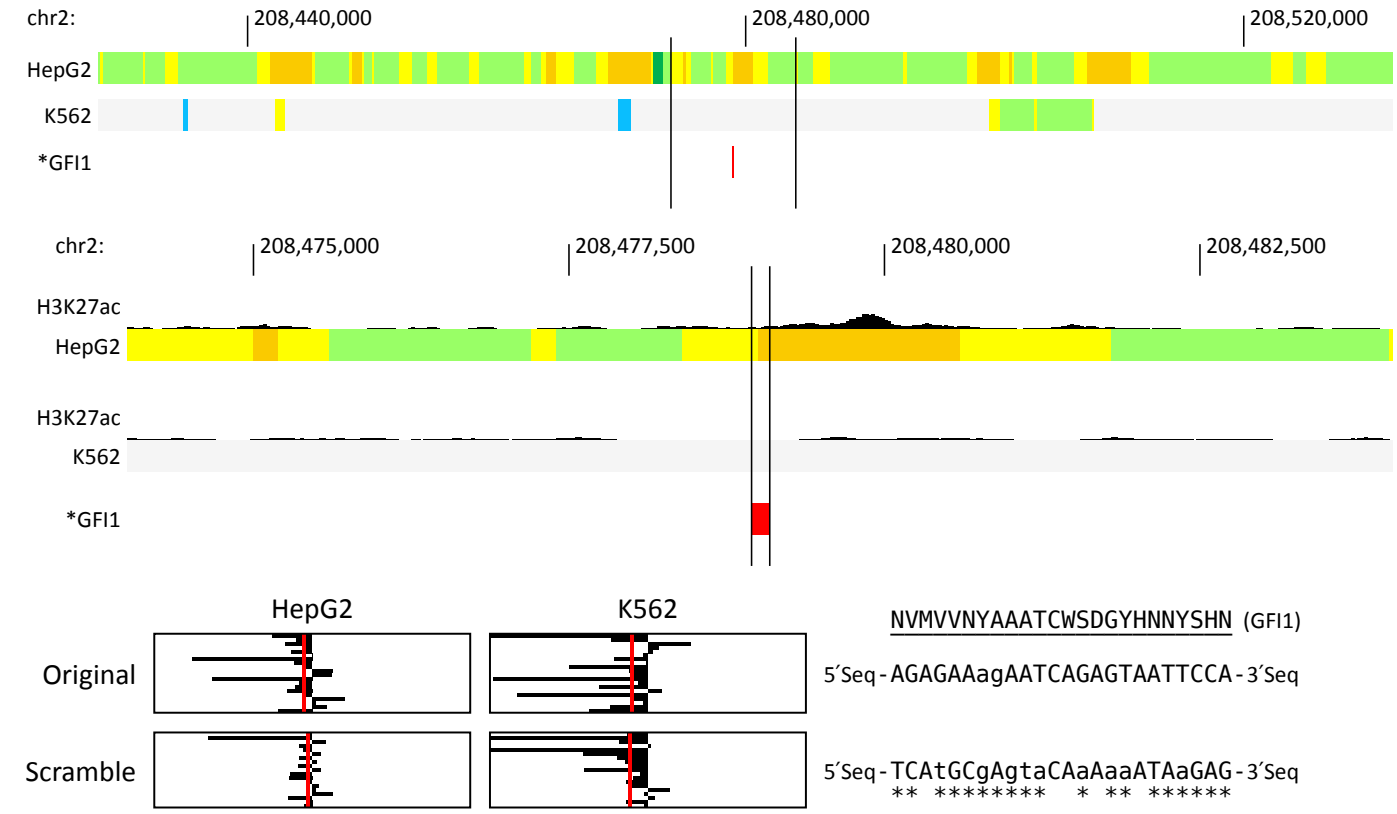
3′Seq = aattgcaaggtggcatttggccttttcctcagcaattgccagactttgtcccagggtgaggaggaag

2184 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 208479008 208479031 - (hg18)



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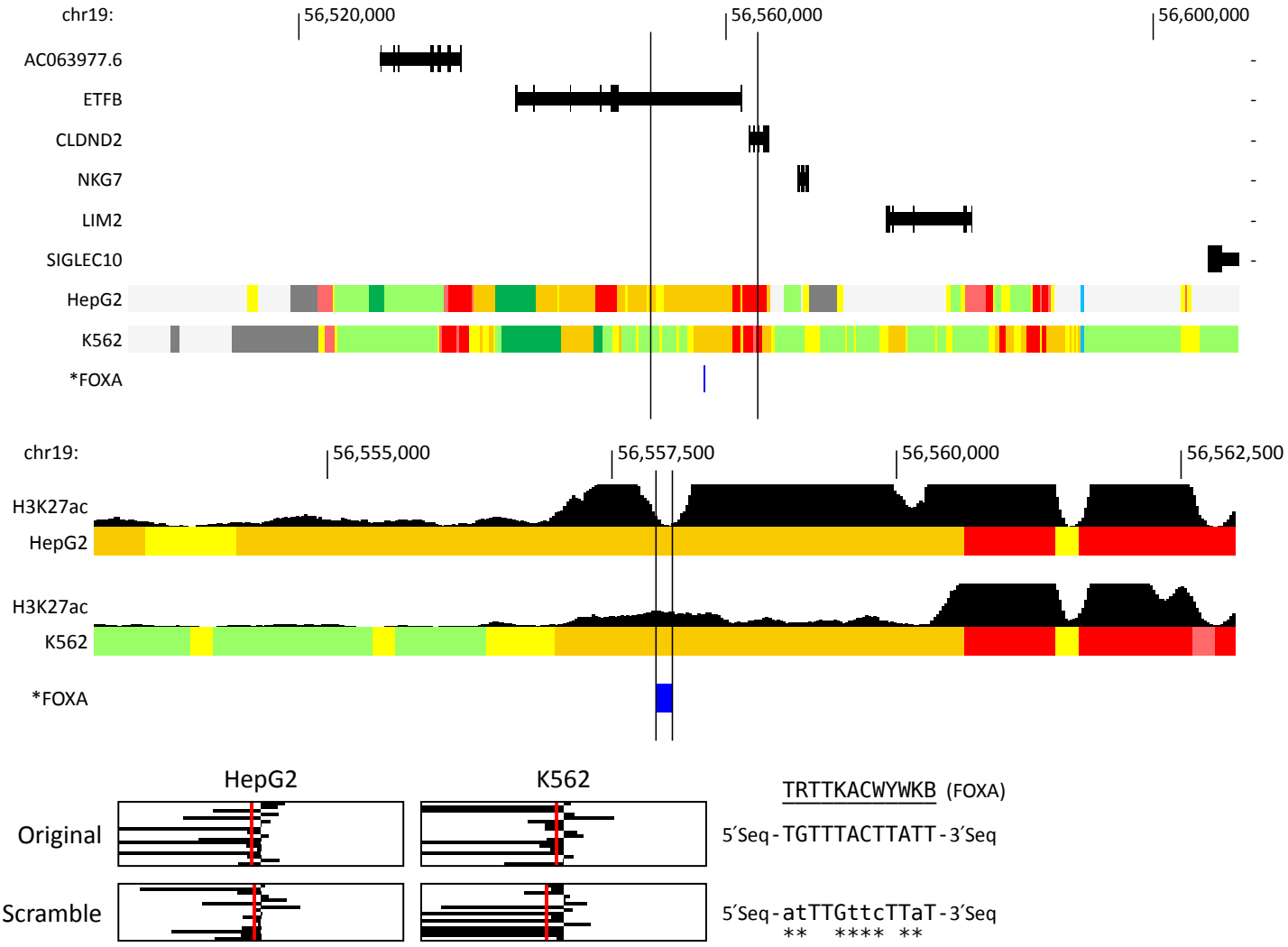
2185 FOXA in HepG2 enhancer

chr19 56557954 56557965 - (hg18)



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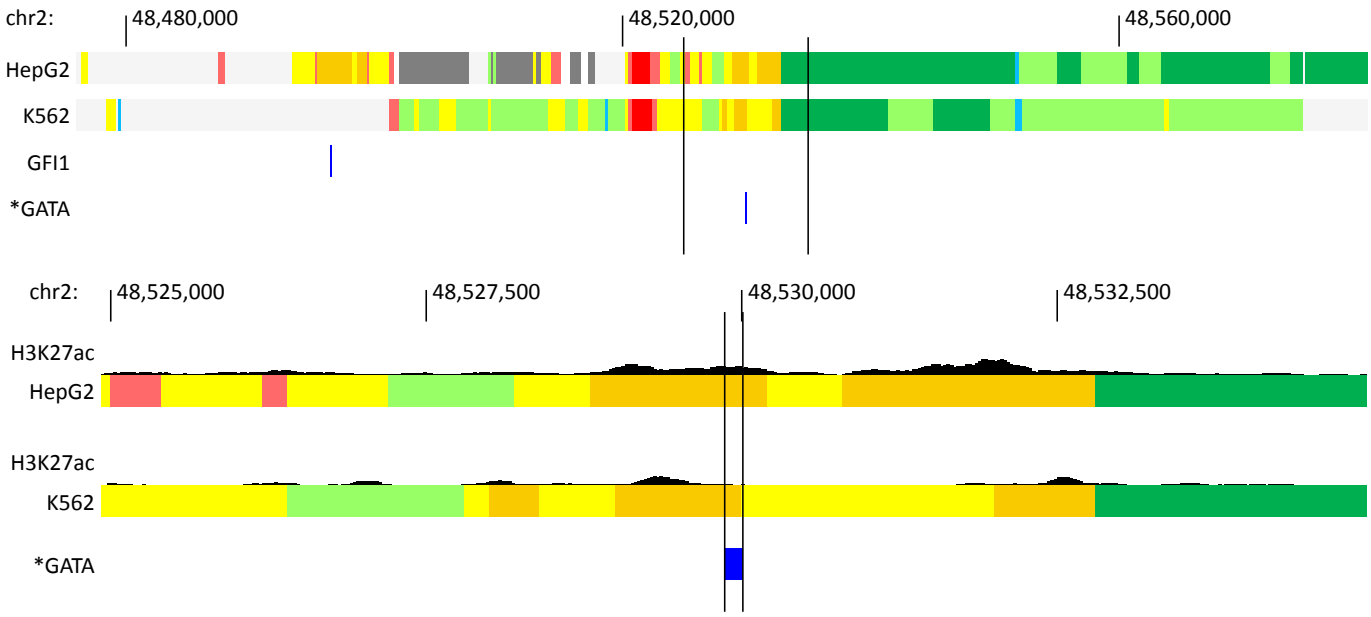
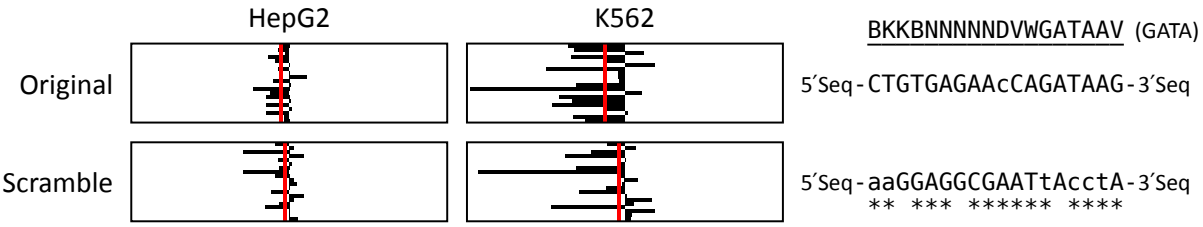
2186 GATA in HepG2 enhancer

chr2 48529929 48529946 - (hg18)





BKKBNNNNNDVWGATAAV (GATA)

5′Seq-CTGTGAGAAcCAGATAAG-3′Seq

5′Seq-aaGGAGGCGAATTtAcctA-3′Seq

** *** ****** ****

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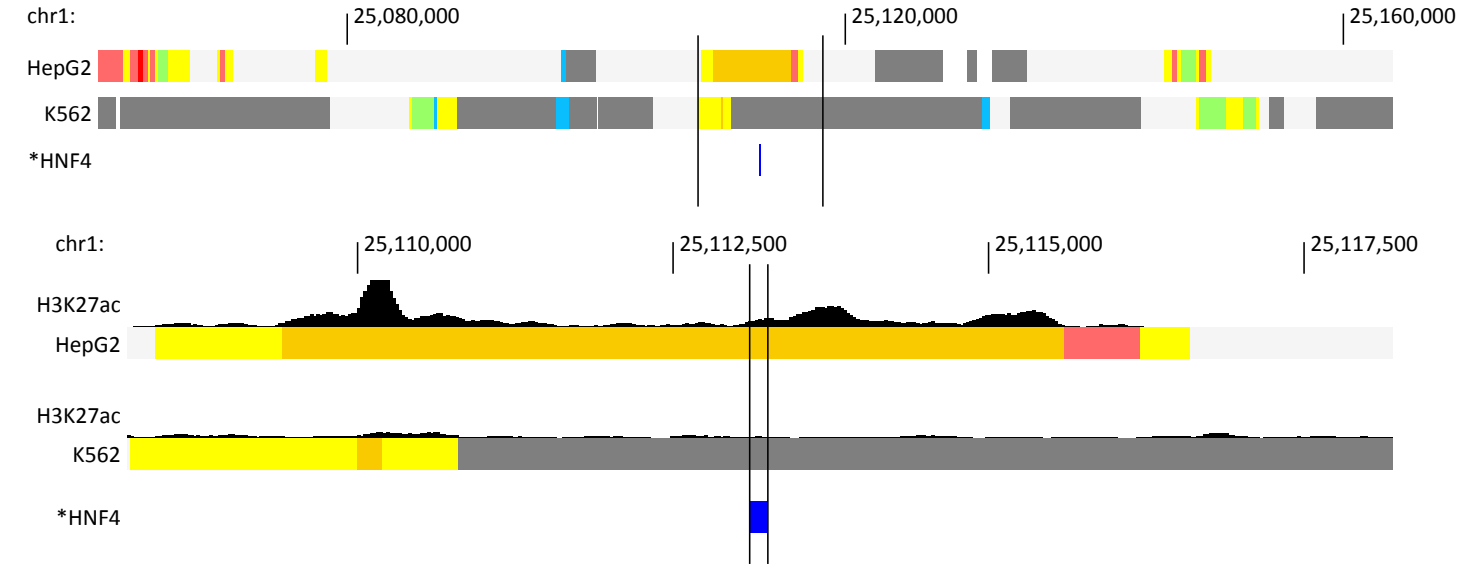
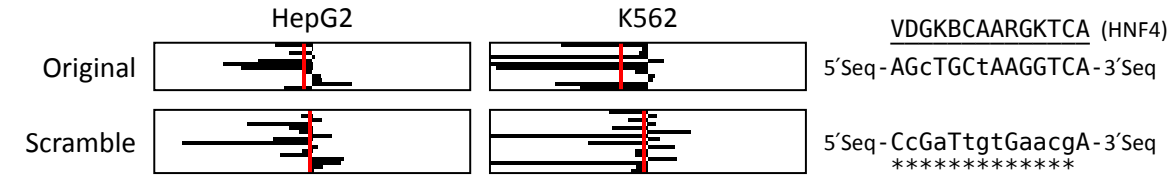
2187 HNF4 in HepG2 enhancer

chr1 25113173 25113186 + (hg18)





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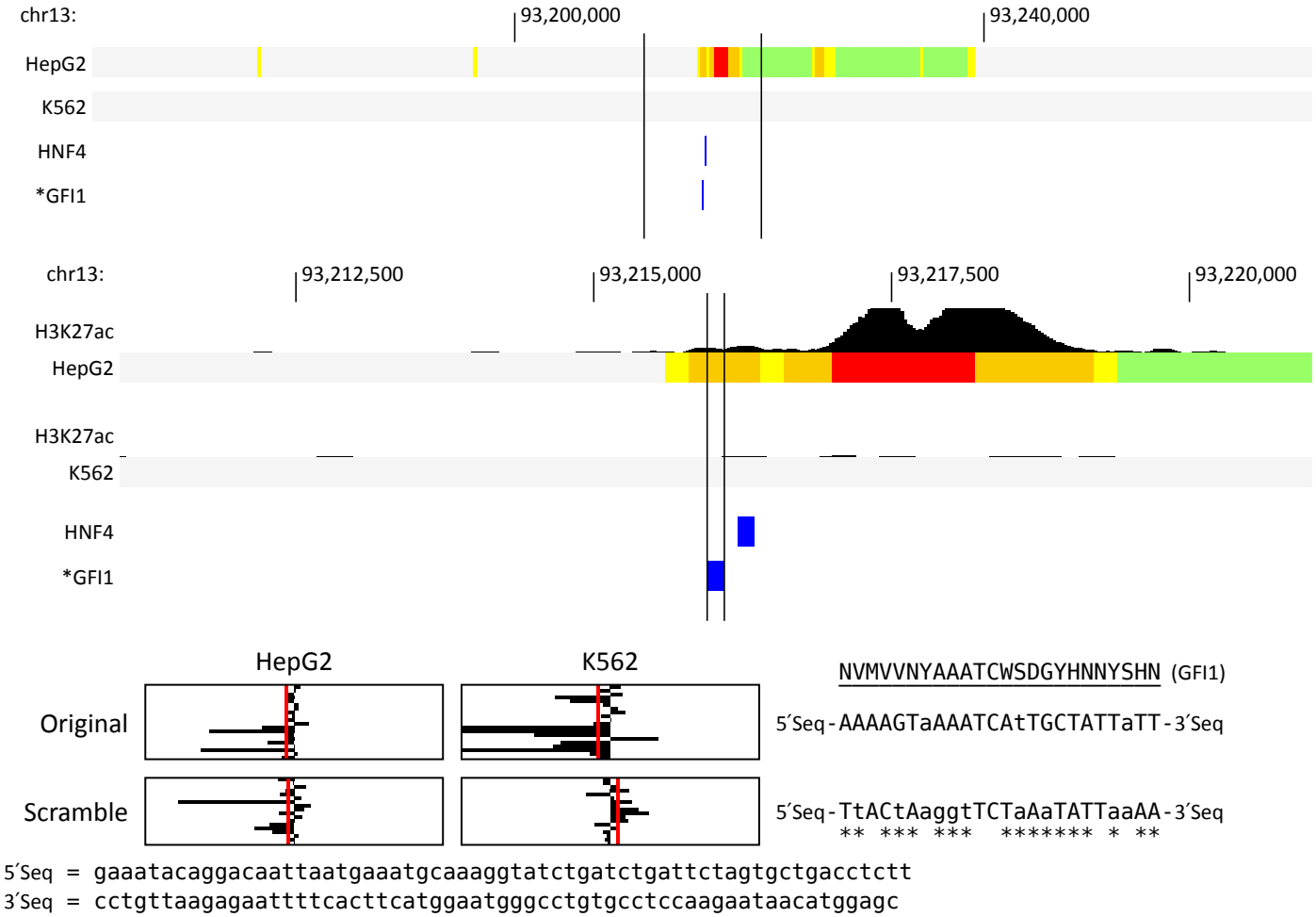
2188 GFI1 in HepG2 enhancer

chr13 93216013 93216036 + (hg18)



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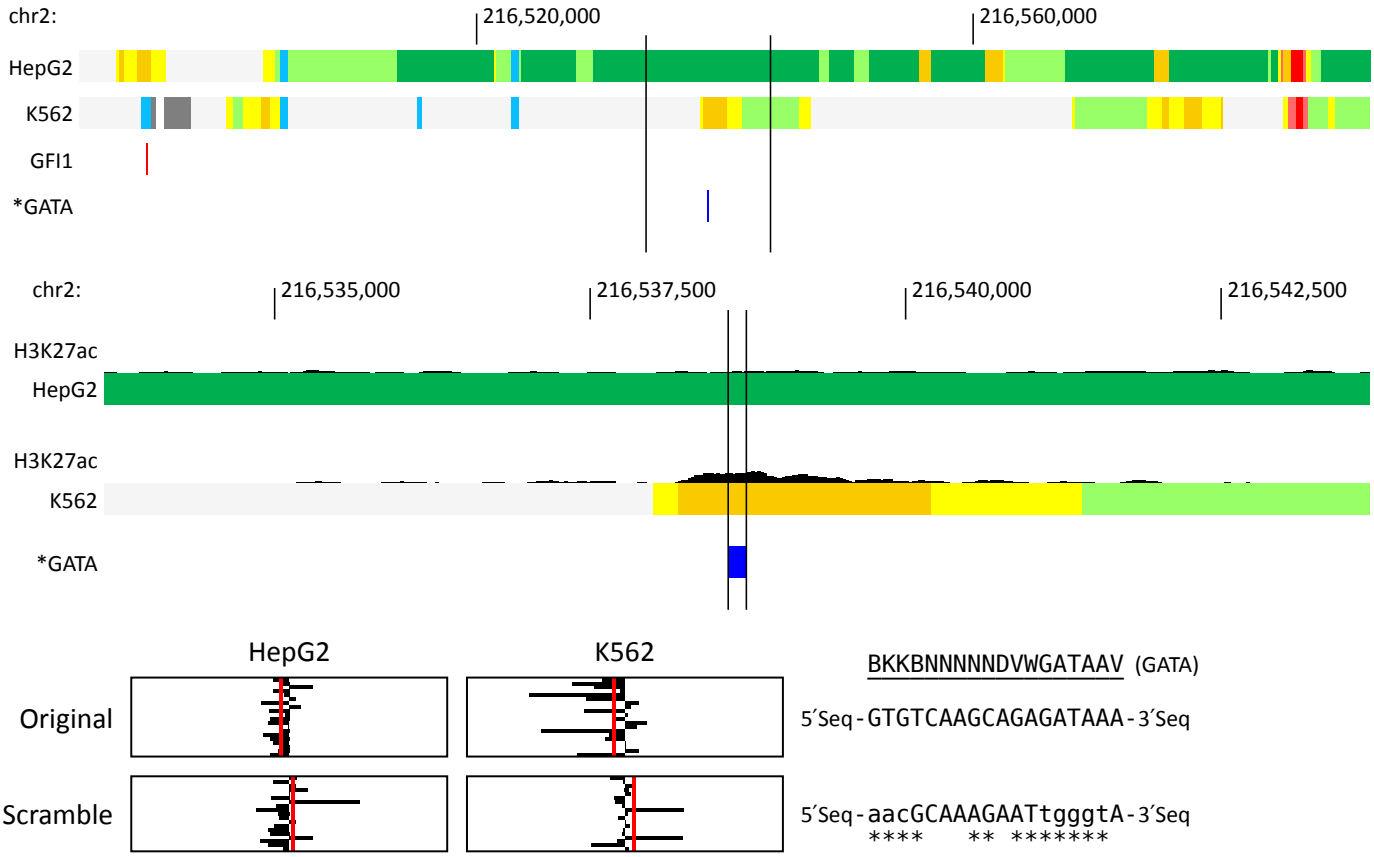
2189 GATA in K562 enhancer

chr2 216538658 216538675 - (hg18)



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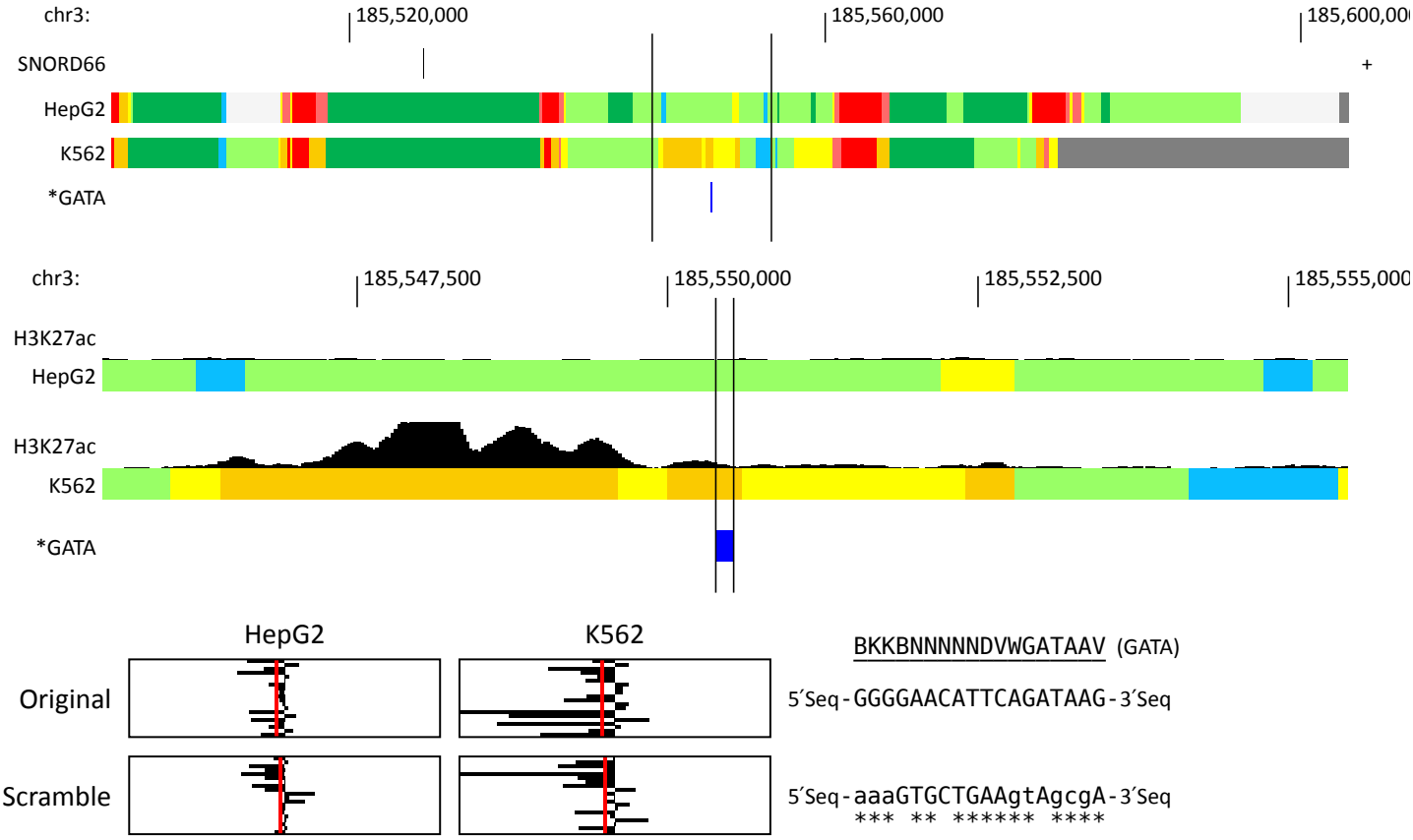
2190 GATA in K562 enhancer

chr3 185550452 185550469 - (hg18)



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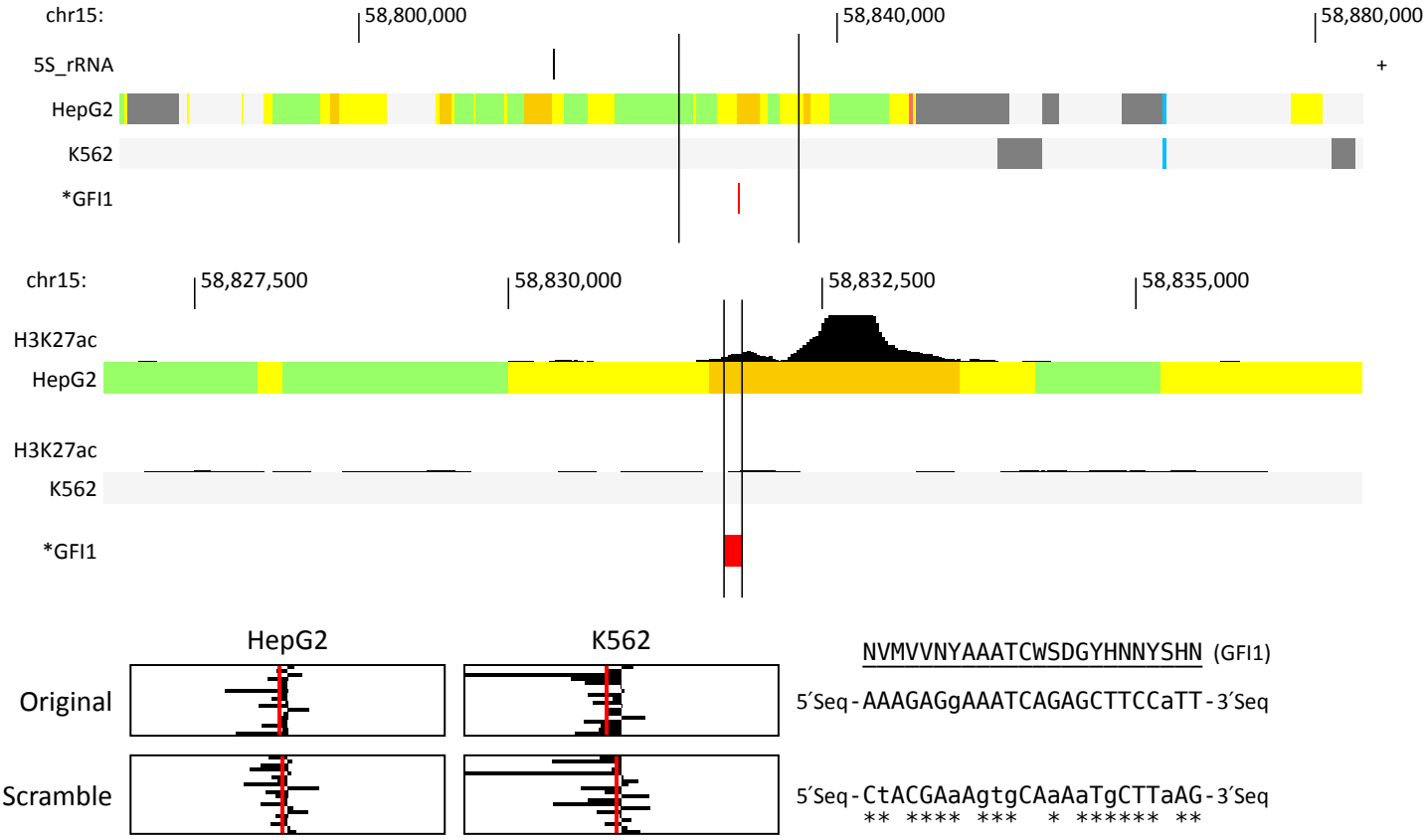
2191 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr15 58831779 58831802 - (hg18)



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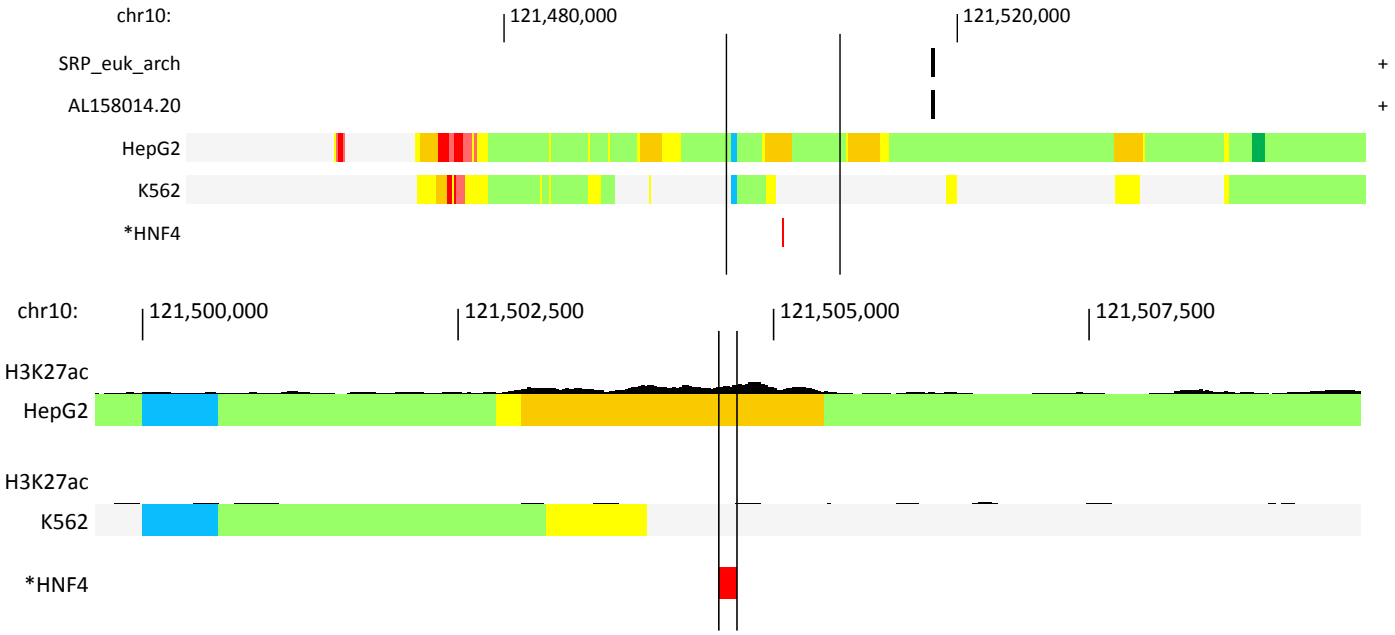
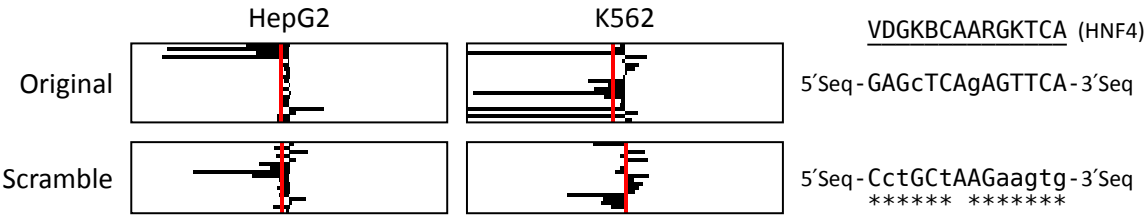
2192 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr10 121504632 121504645 - (hg18)





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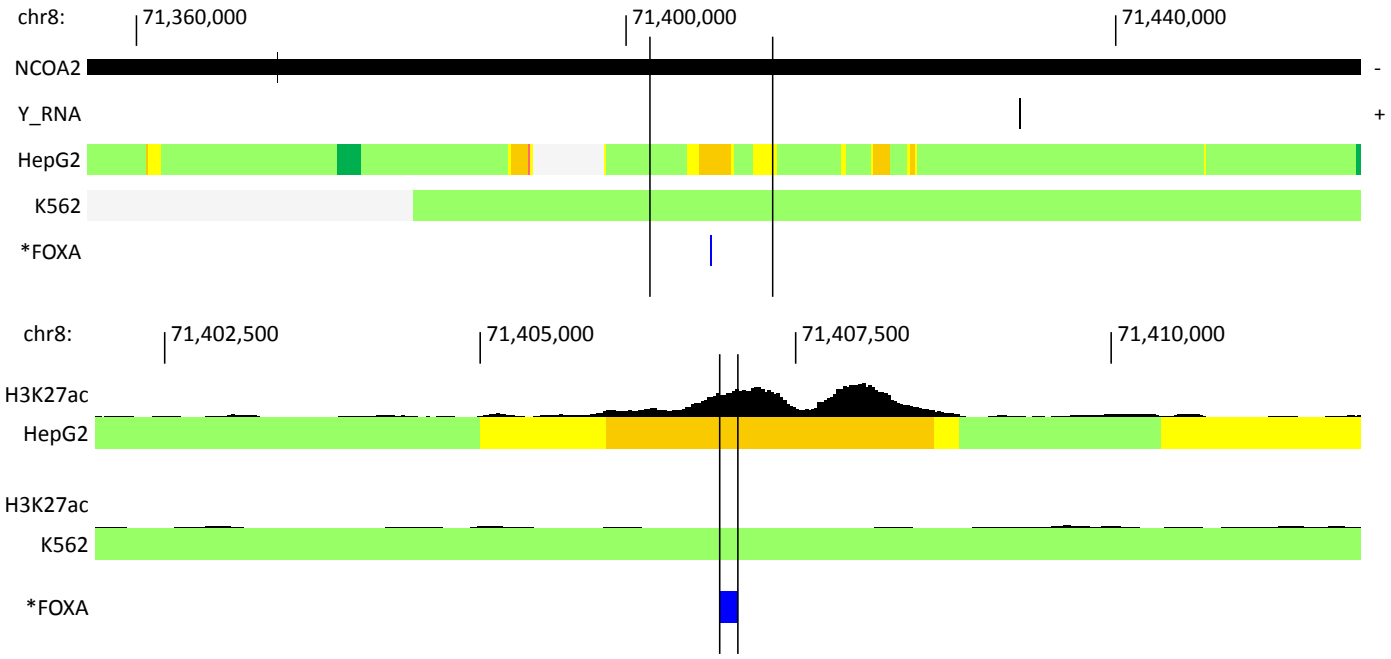
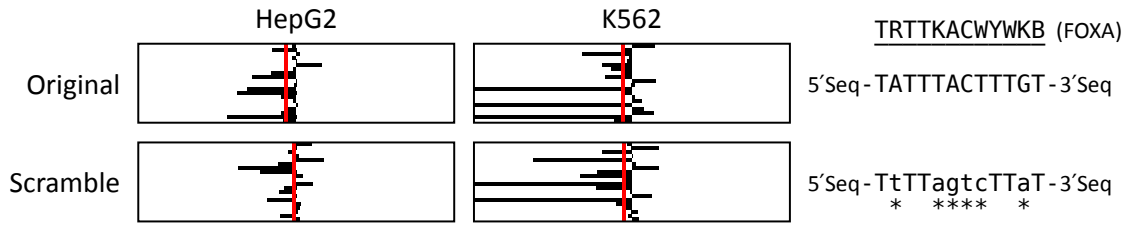
2193 FOXA in HepG2 enhancer

chr8 71406965 71406976 - (hg18)





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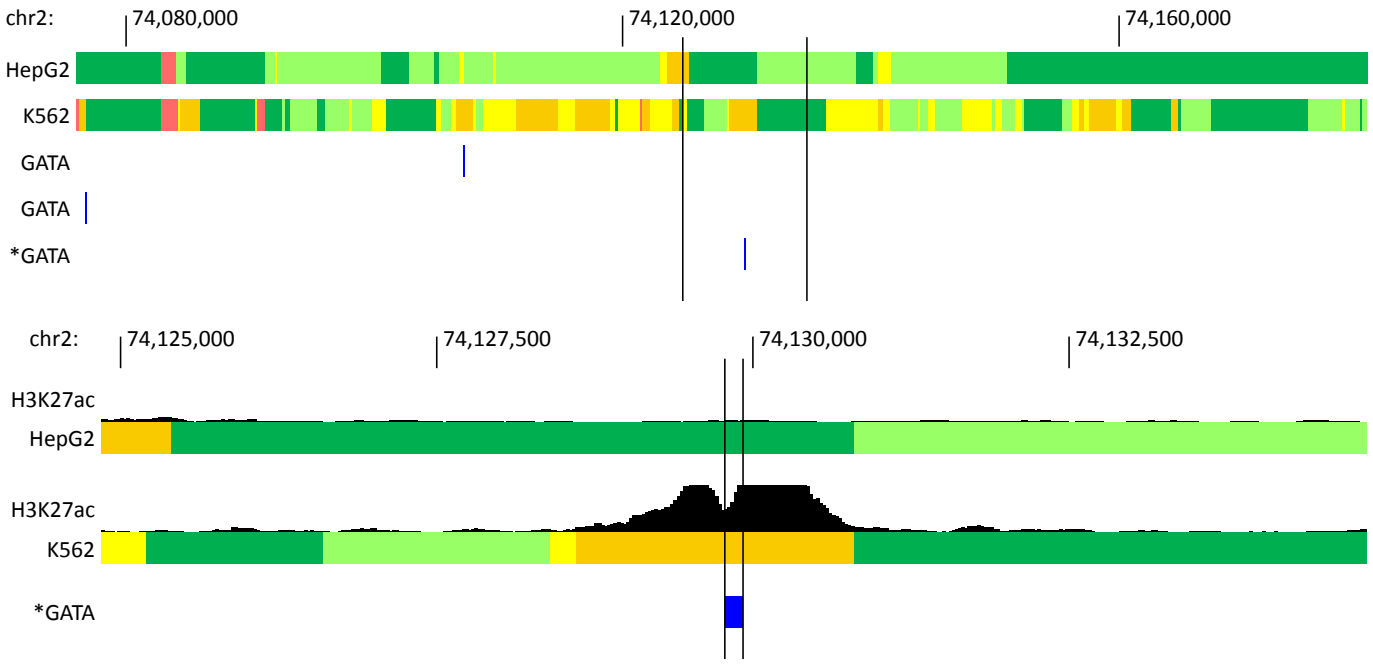
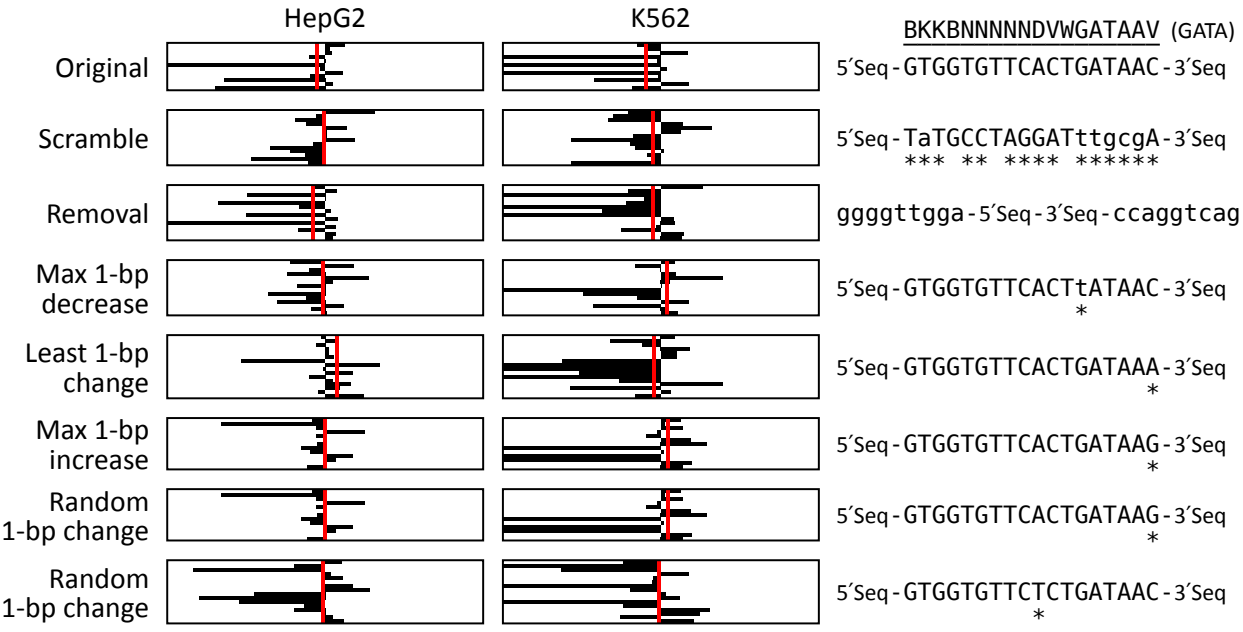
2194 GATA in K562 enhancer

chr2 74129842 74129859 + (hg18)





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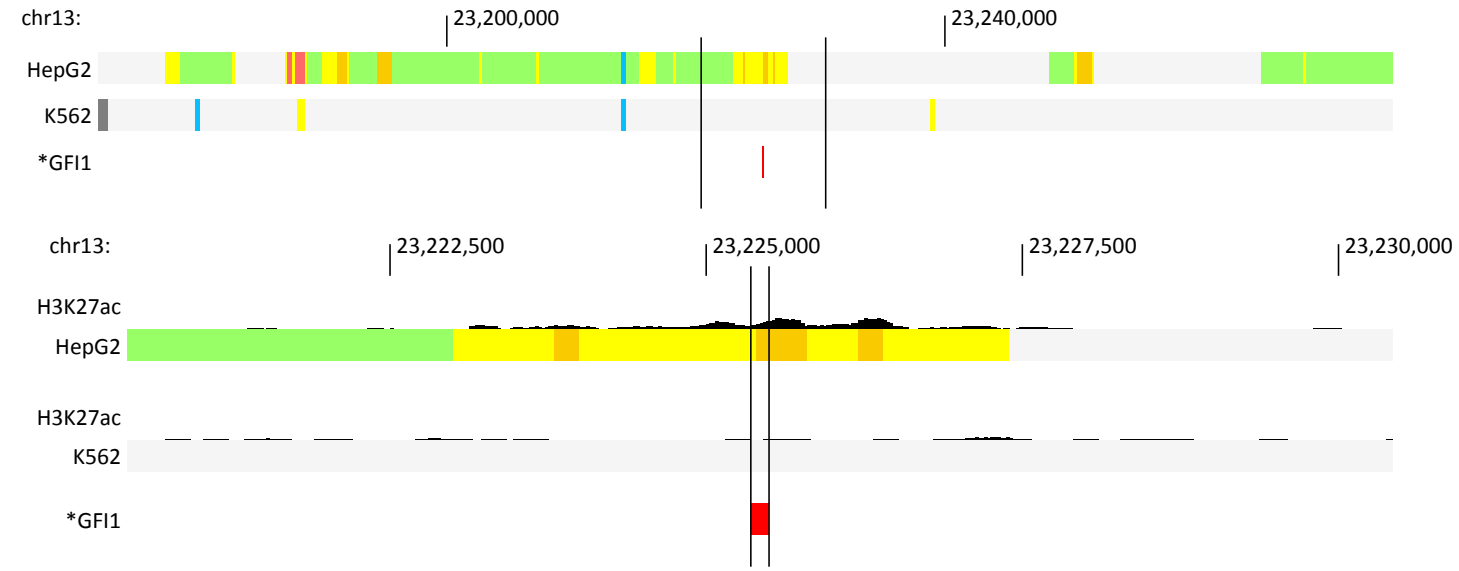
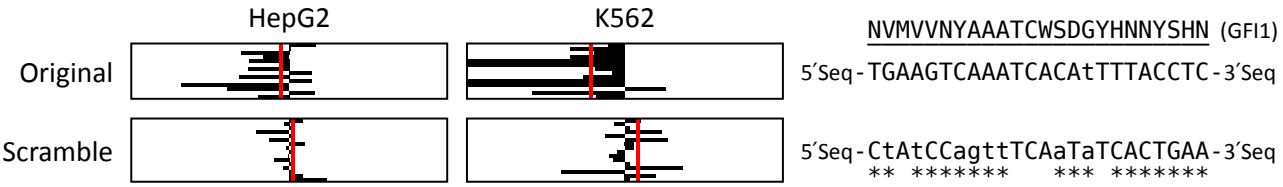
3′Seq = tcggattgggaggacaggaagtgagttcccactggacgagccacatctgaagtggccagaaga

2195 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr13 23225414 23225437 + (hg18)





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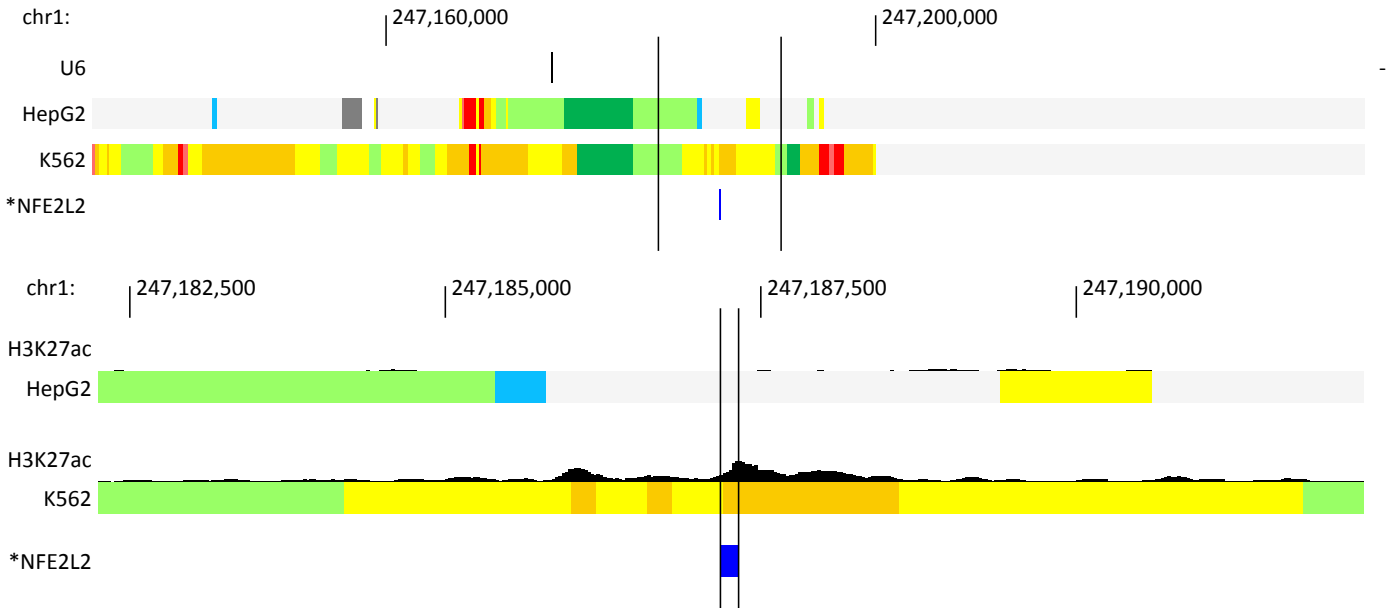
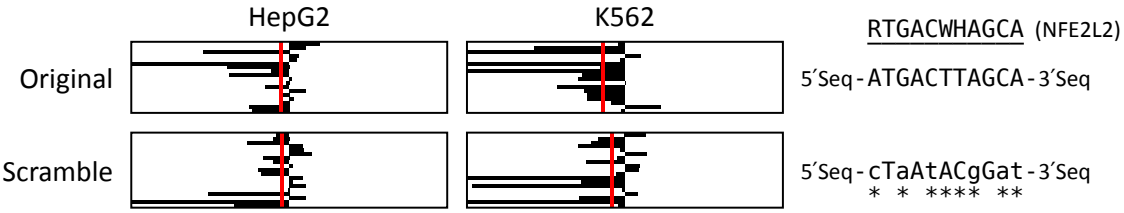
2196 NFE2L2 in K562 enhancer

chr1 247187247 247187257 - (hg18)

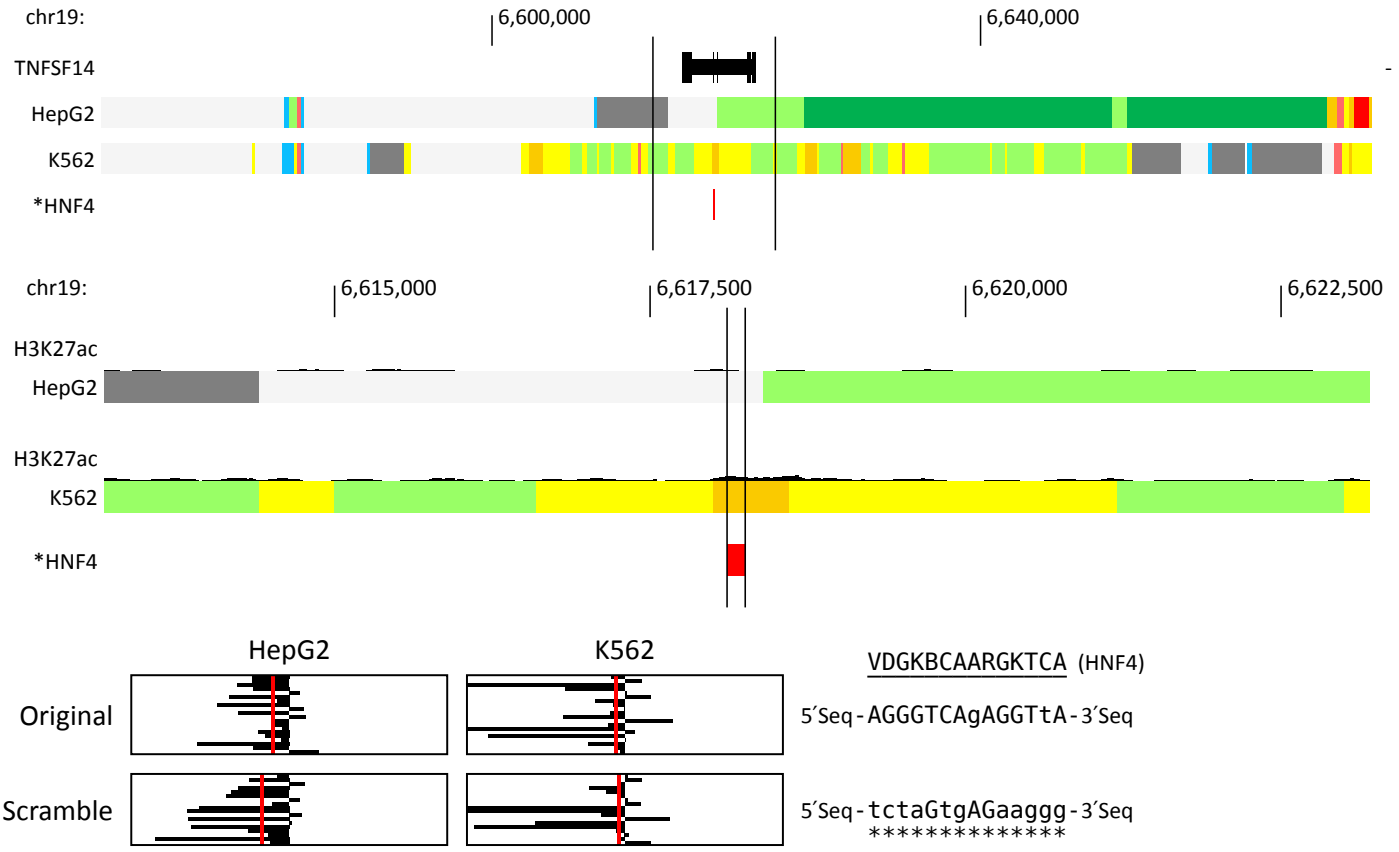




5′Seq = atgcagtgaaggacgtagacgagaagctgctactacagcttgcagctcctggaggcccattttgtcc
3′Seq = ggaatgcactacctttccataaggagacactgcccacagaaaccaaggccattctttgaagacaaat

2197 HNF4 in K562 enhancer (conserved at 50% confidence)

chr19 6618176 6618189 + (hg18)



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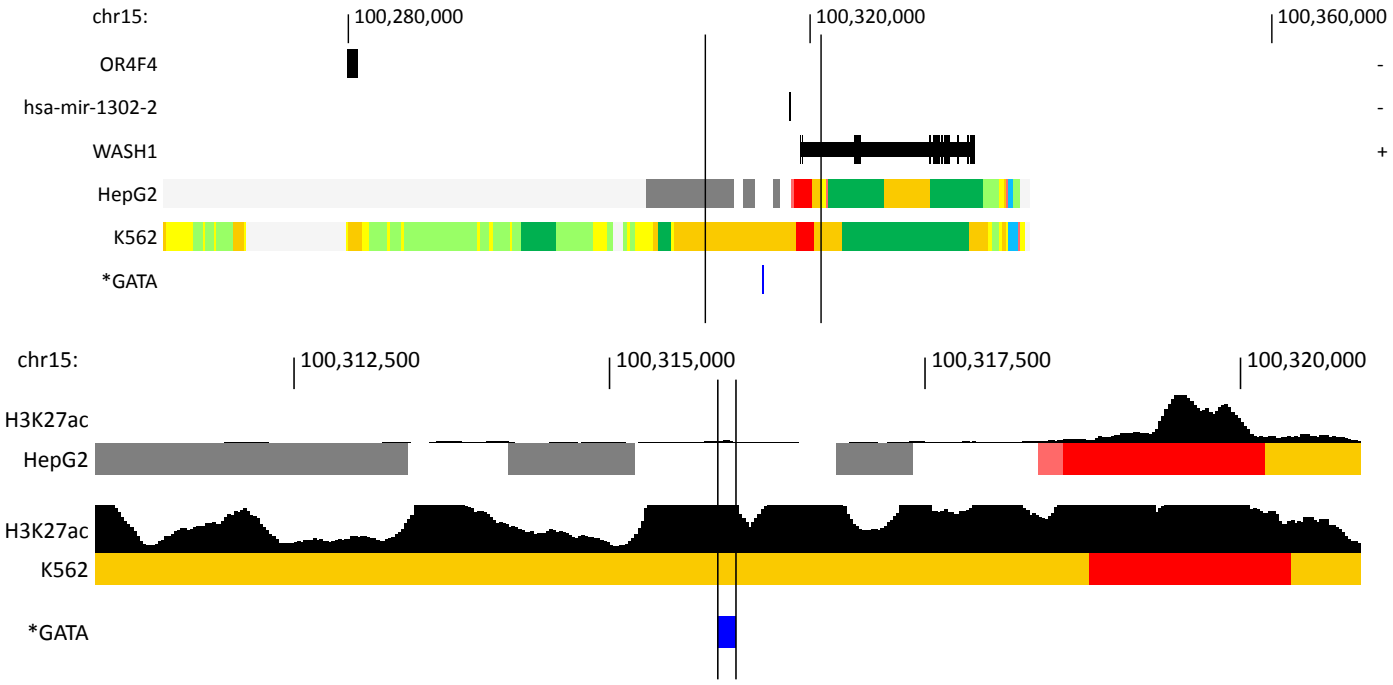
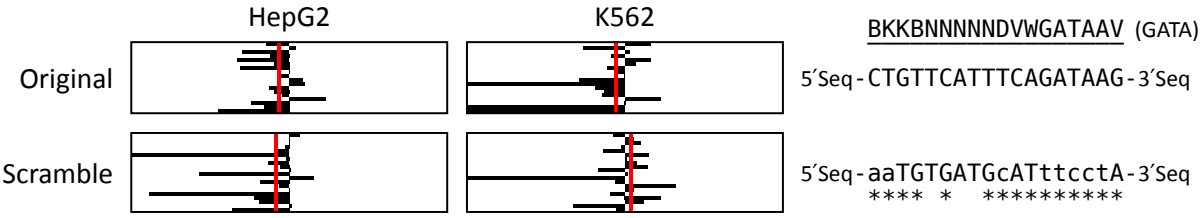
2198 GATA in K562 enhancer

chr15 100315922 100315939 + (hg18)





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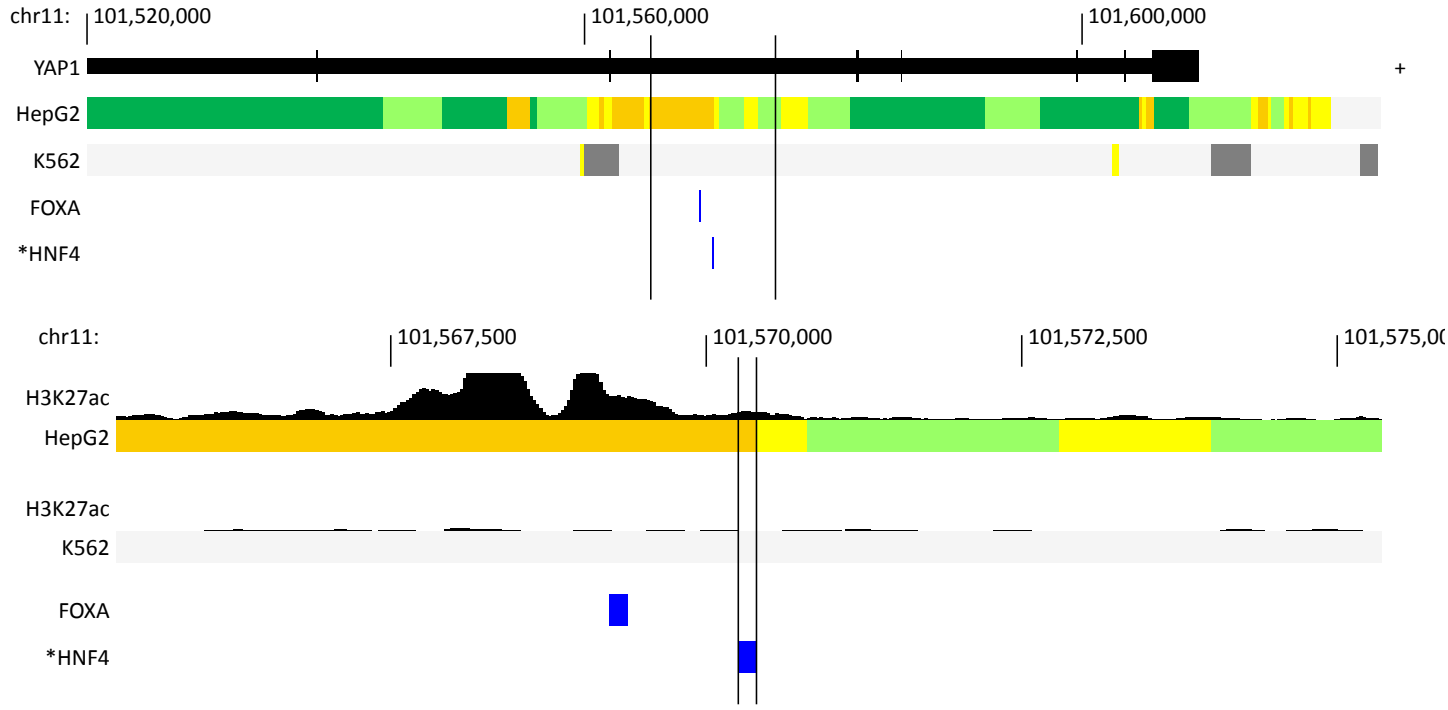
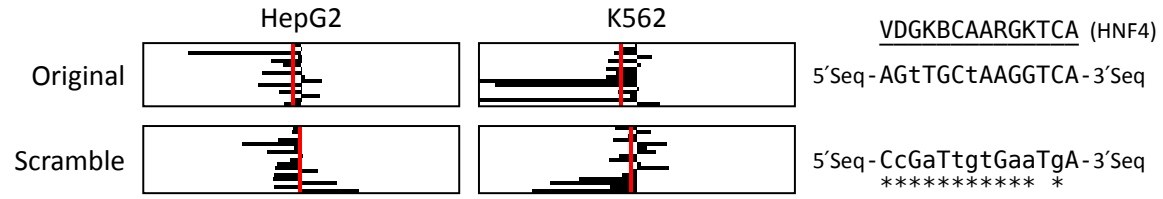
3′Seq = gggaggttcctgggctgcagaggcttcctagaggaggaagaccatgtaaggtctaactcaggg

2199 HNF4 in HepG2 enhancer

chr11 101570320 101570333 + (hg18)





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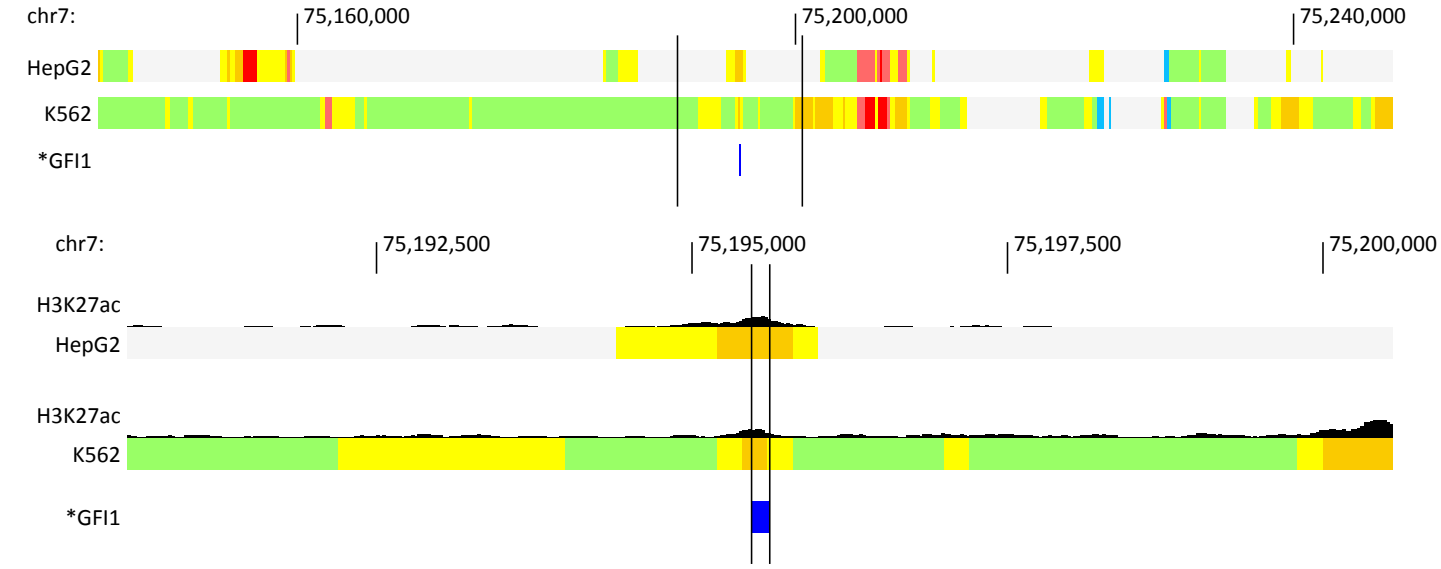
2200 GFI1 in HepG2 enhancer

chr7 75195533 75195556 + (hg18)



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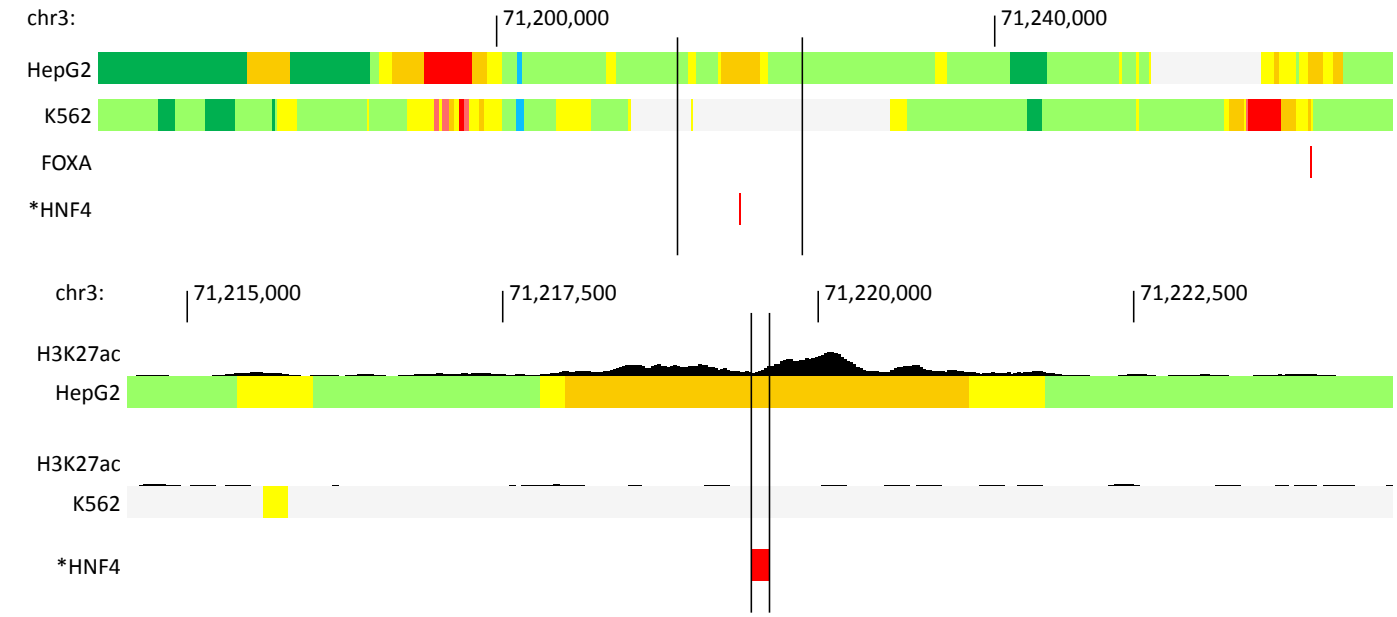
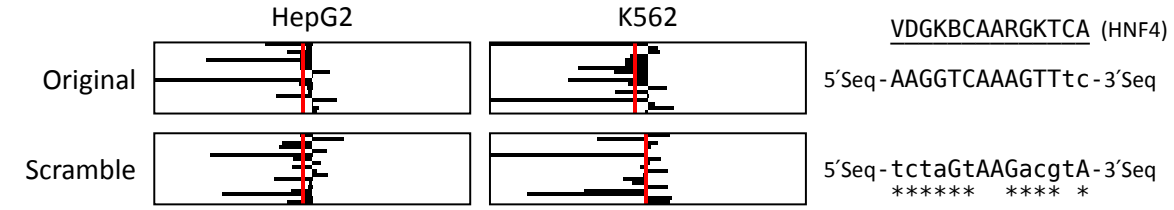
2201 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr3 71219536 71219549 - (hg18)





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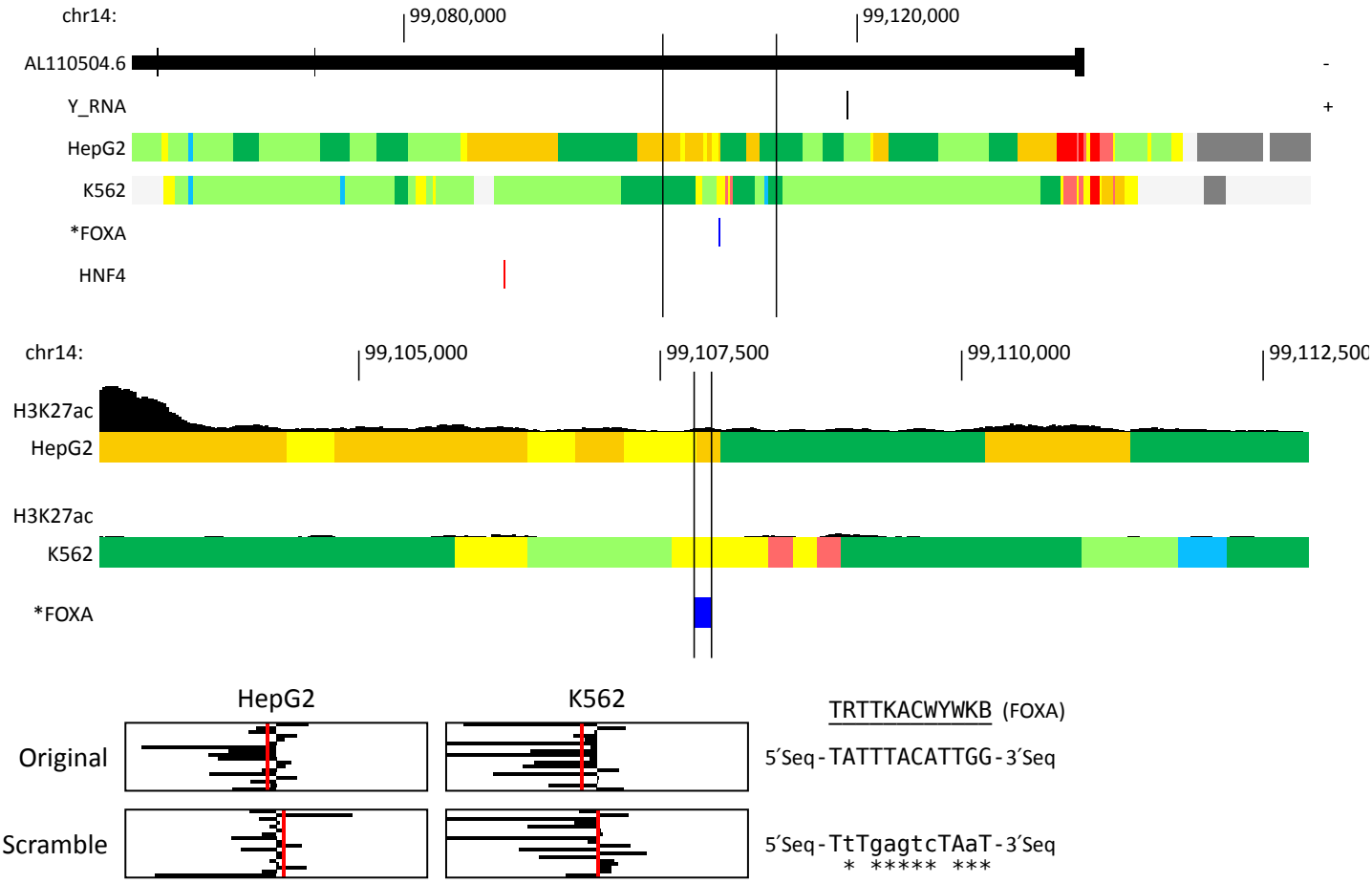
2202 FOXA in HepG2 enhancer

chr14 99107848 99107859 - (hg18)



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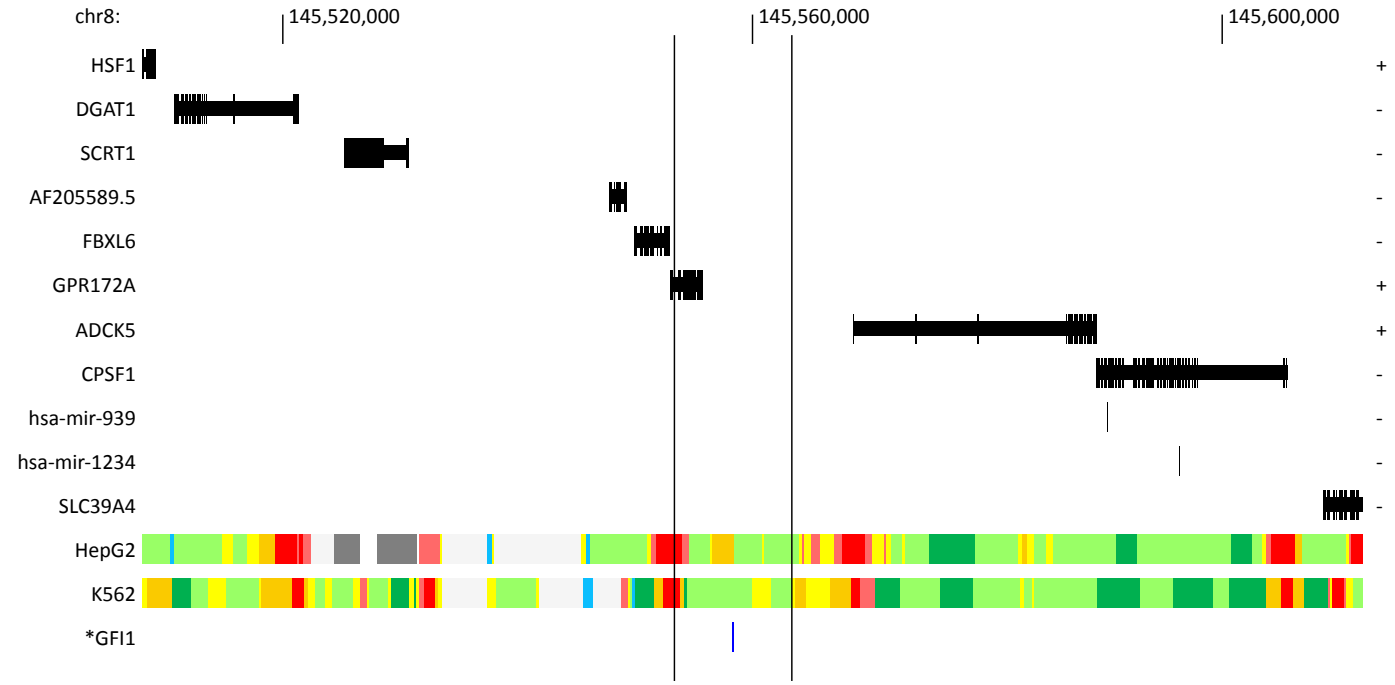
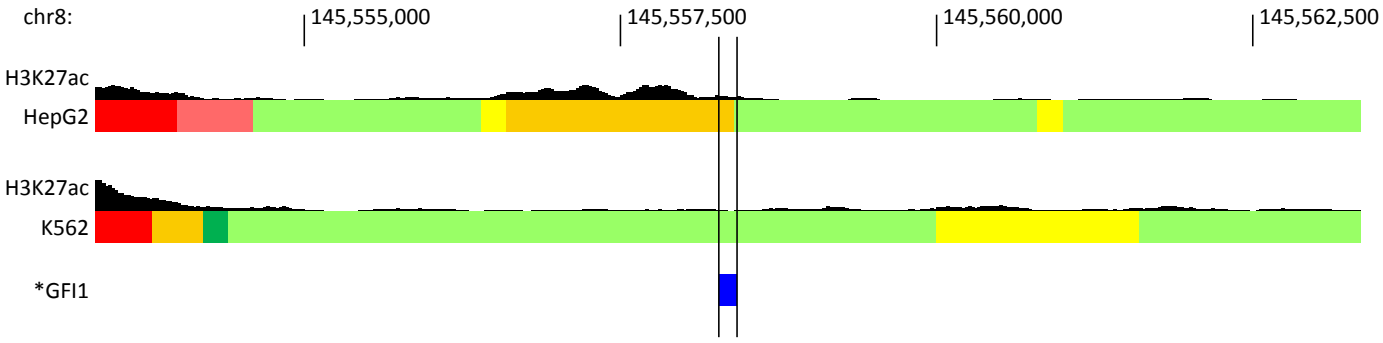
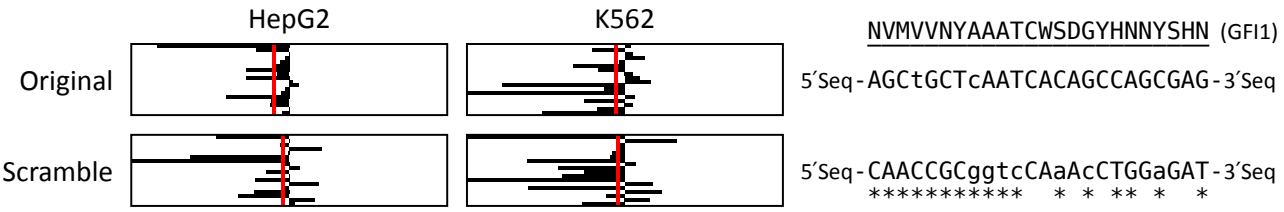
2203 GFI1 in HepG2 enhancer

chr8 145558339 145558362 - (hg18)







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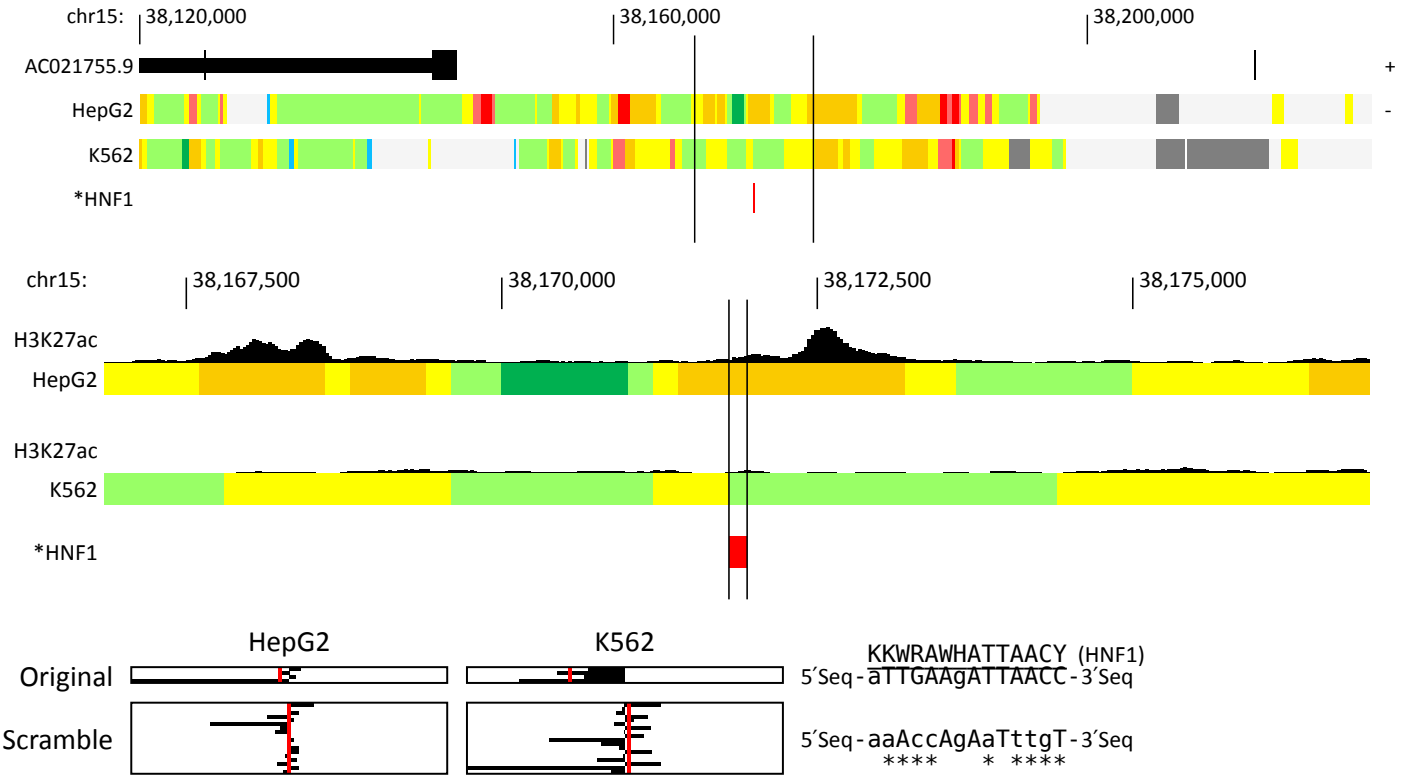
2204 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr15 38171866 38171879 - (hg18)



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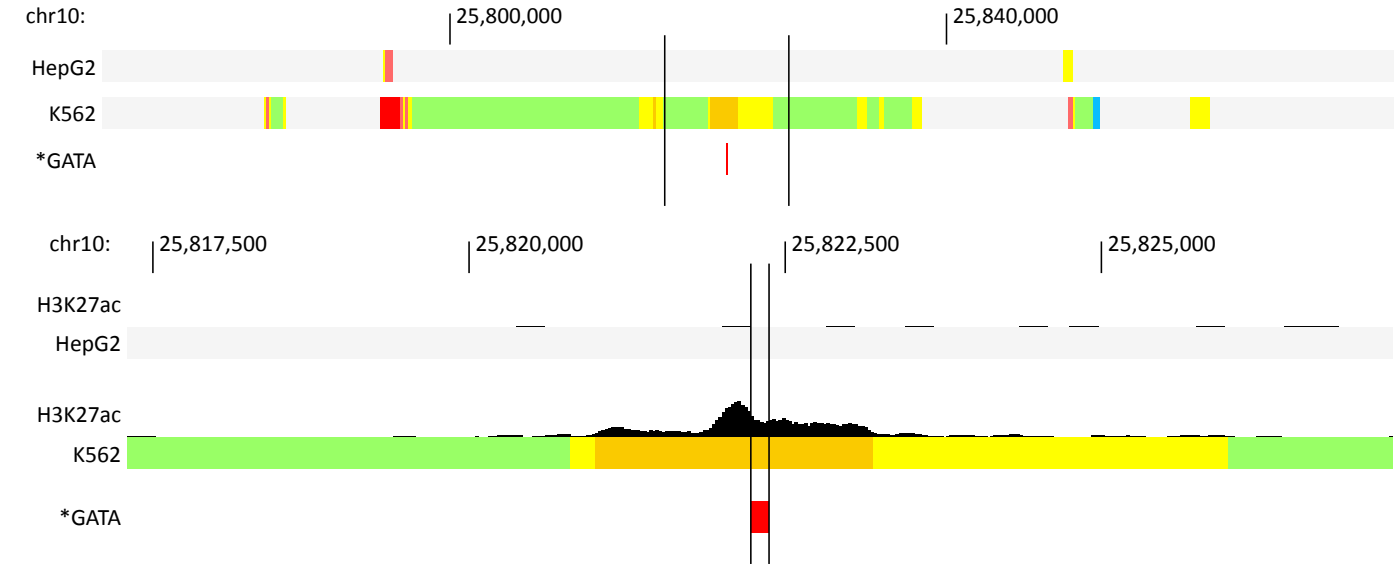
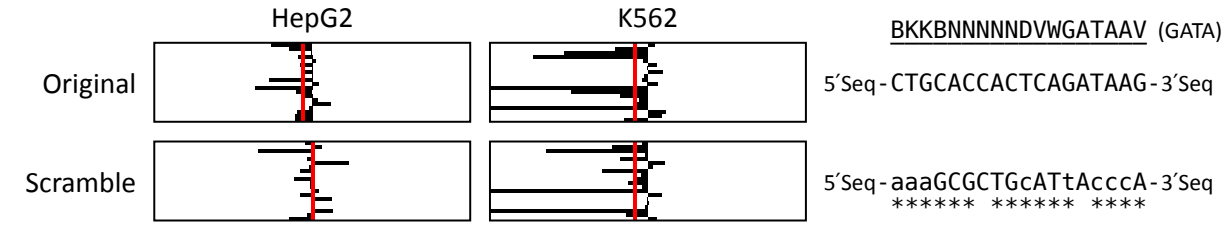
3′Seq = ctttgaccttcacagtgtcaaatcacttgcagatggaggccccccctttccccttgttctctgtg

2205 GATA in K562 enhancer (conserved at 60% confidence)

chr10 25822292 25822309 + (hg18)





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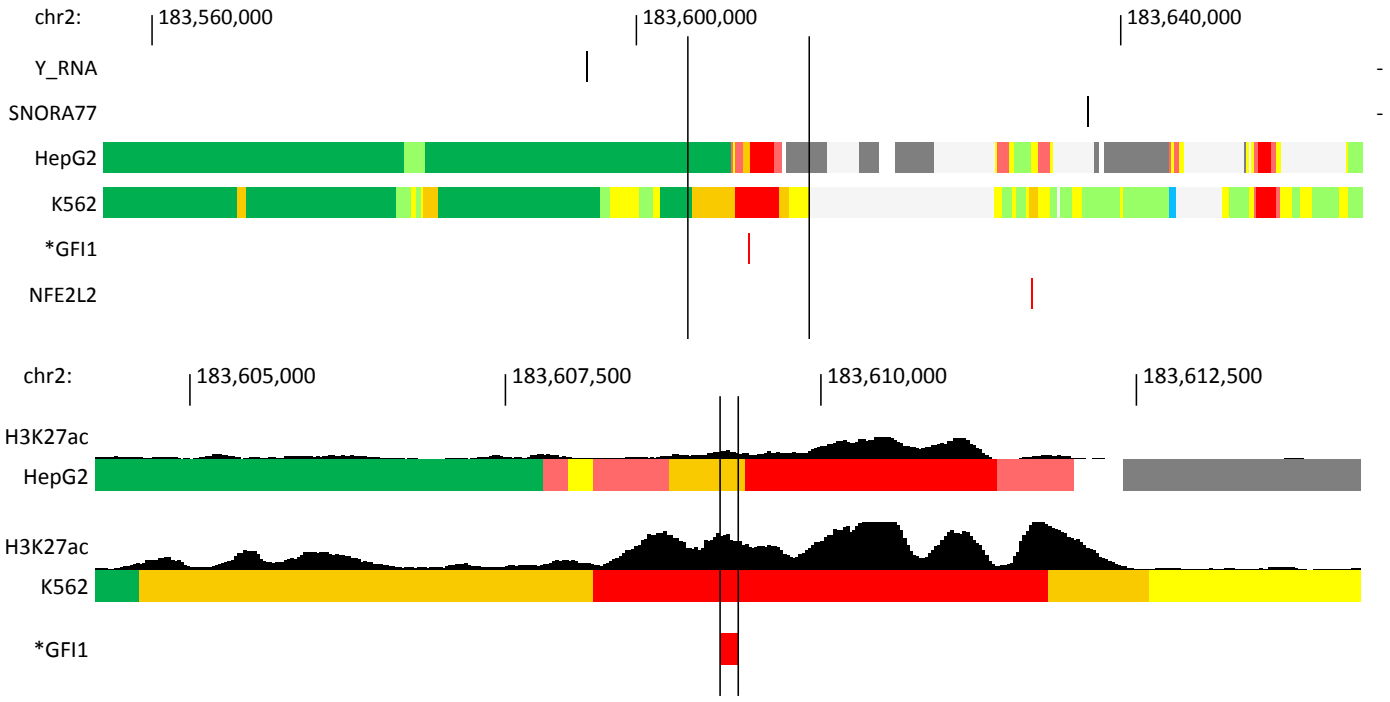
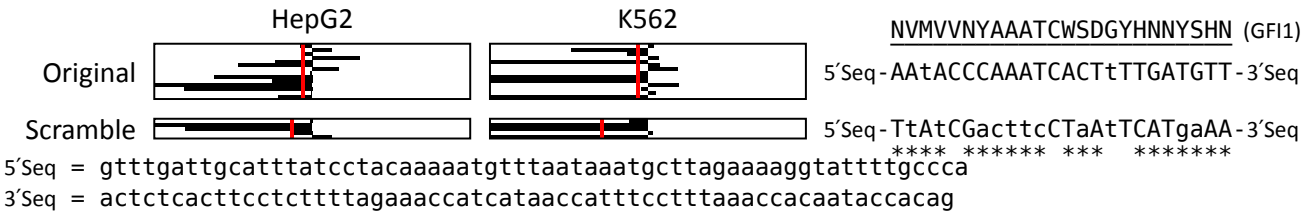
2206 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 183609262 183609285 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-AAtACCCAAATCACTtTTGATGTT-3′Seq

5′Seq-TtAtCGacttcCTaAtTCATgaAA-3′Seq

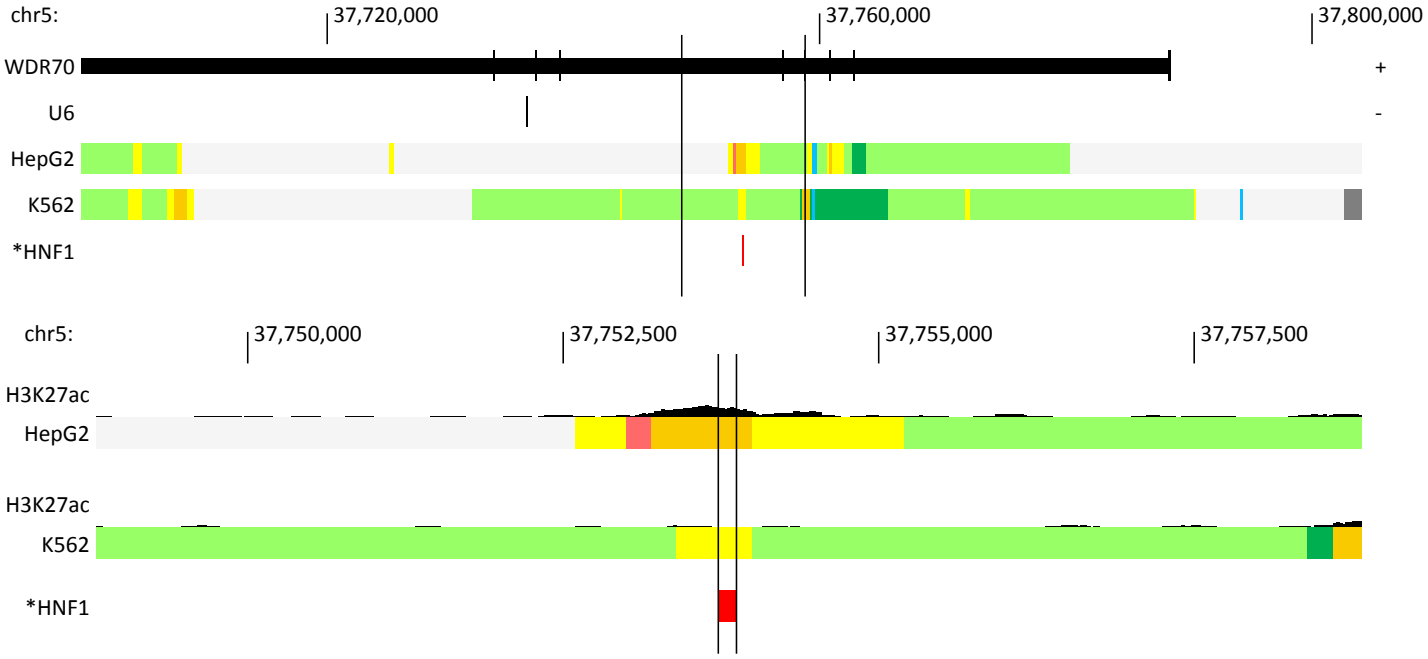
**** ****** *** *******

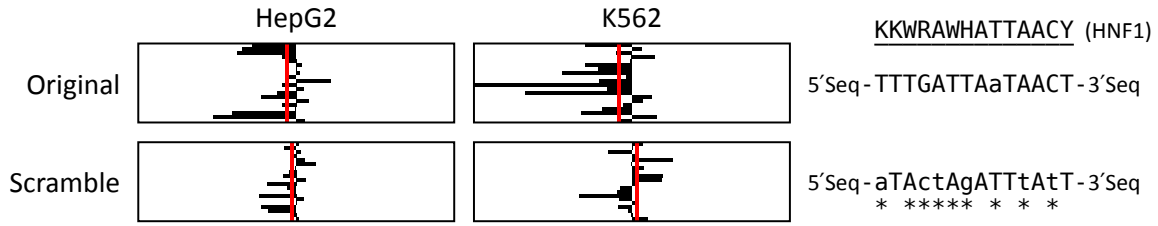
5′Seq = gtttgattgcatttatcctacaaaaatgtttaataaatgcttagaaaaggtattttgccca

3′Seq = actctcacttcctcttttagaaaccatcataaccatttcctttaaaccacaataccacag

2207 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr5 37753795 37753808 + (hg18)





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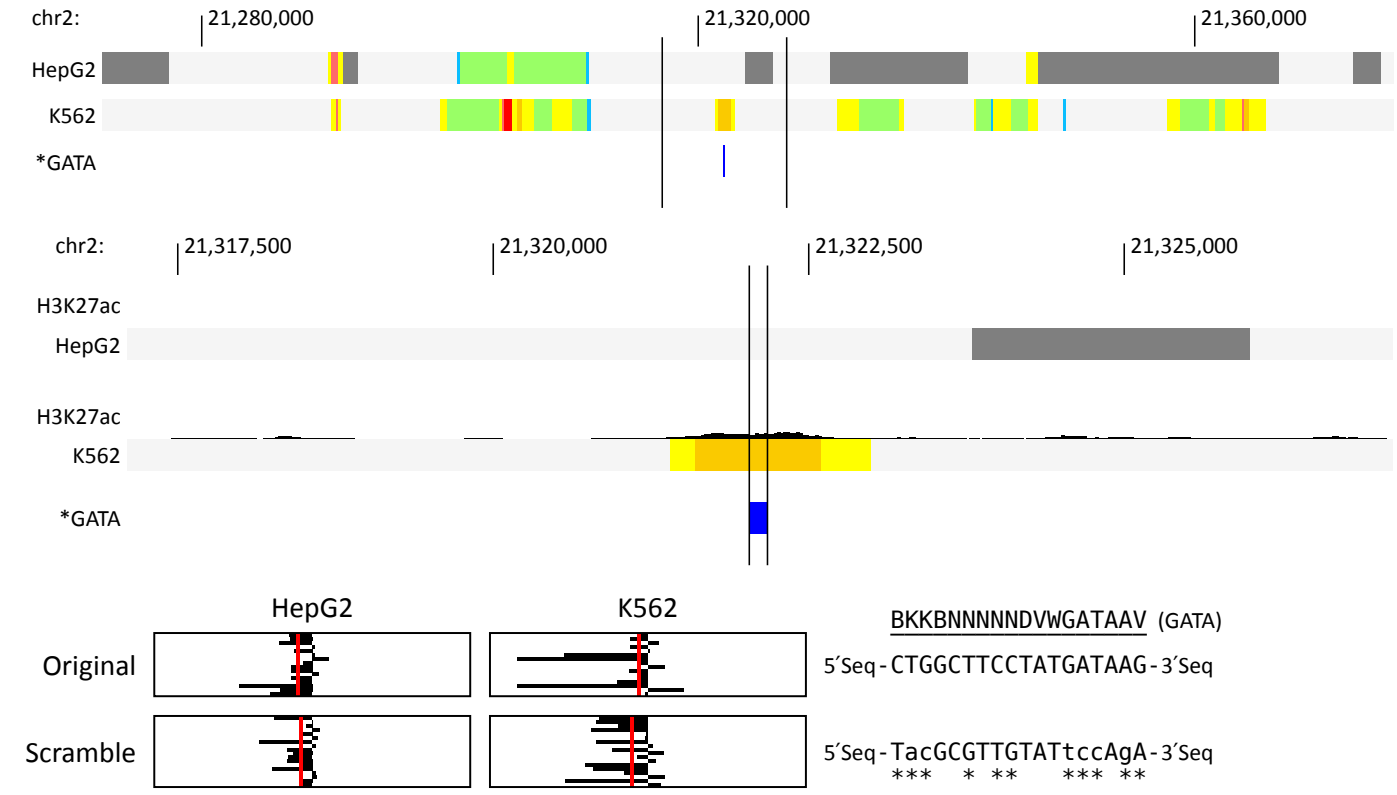
2208 GATA in K562 enhancer

chr2 21322093 21322110 + (hg18)



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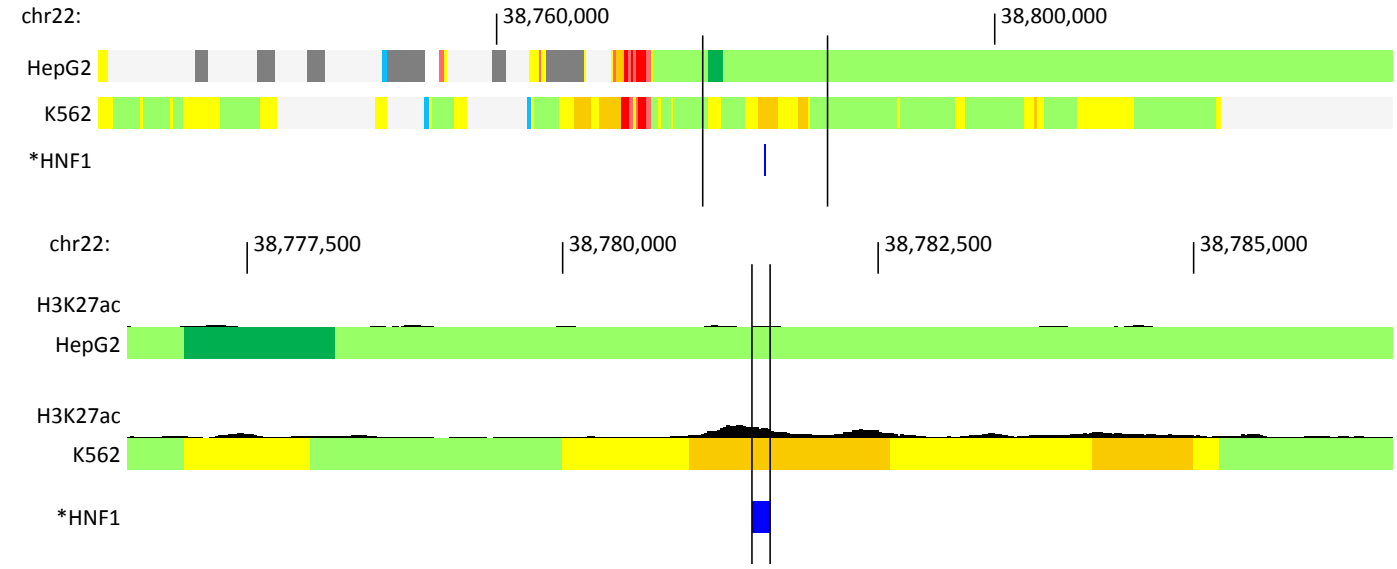
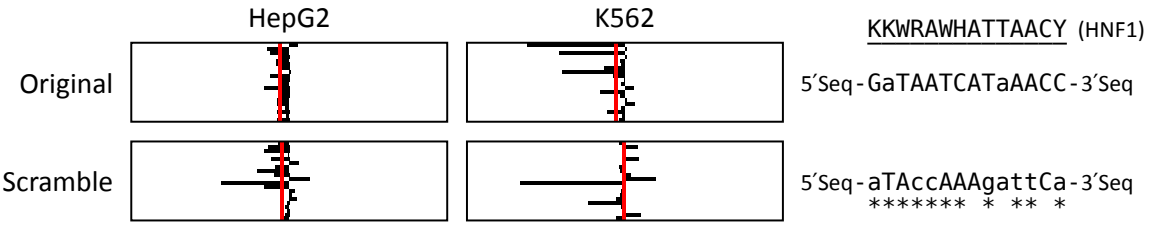
2209 HNF1 in K562 enhancer

chr22 38781566 38781579 + (hg18)





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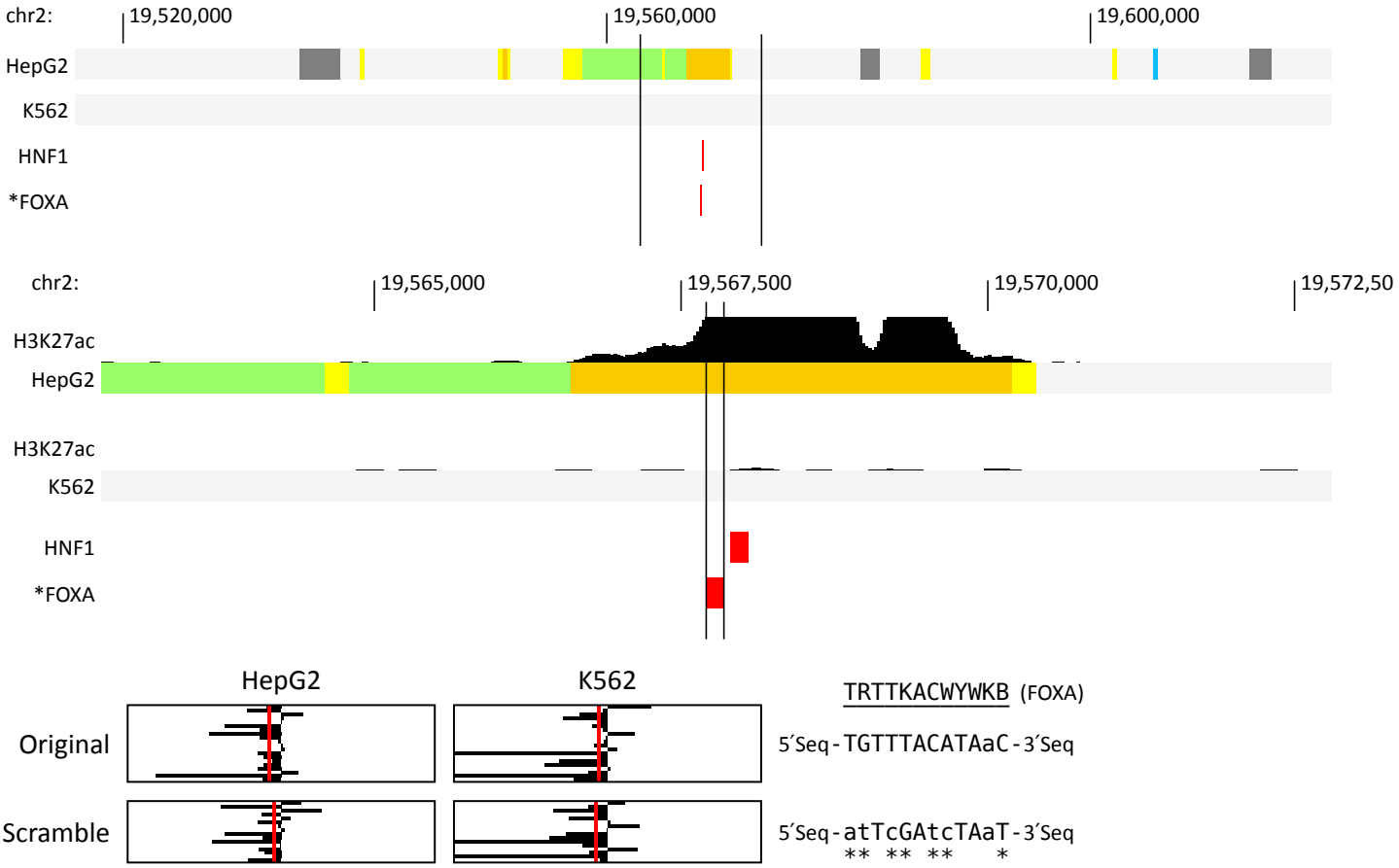
3′Seq = acaacggcacttgtcacttctagttaatatacttgcttcagtggtgtacctataaccatgcaaat

2210 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr2 19567772 19567783 - (hg18)



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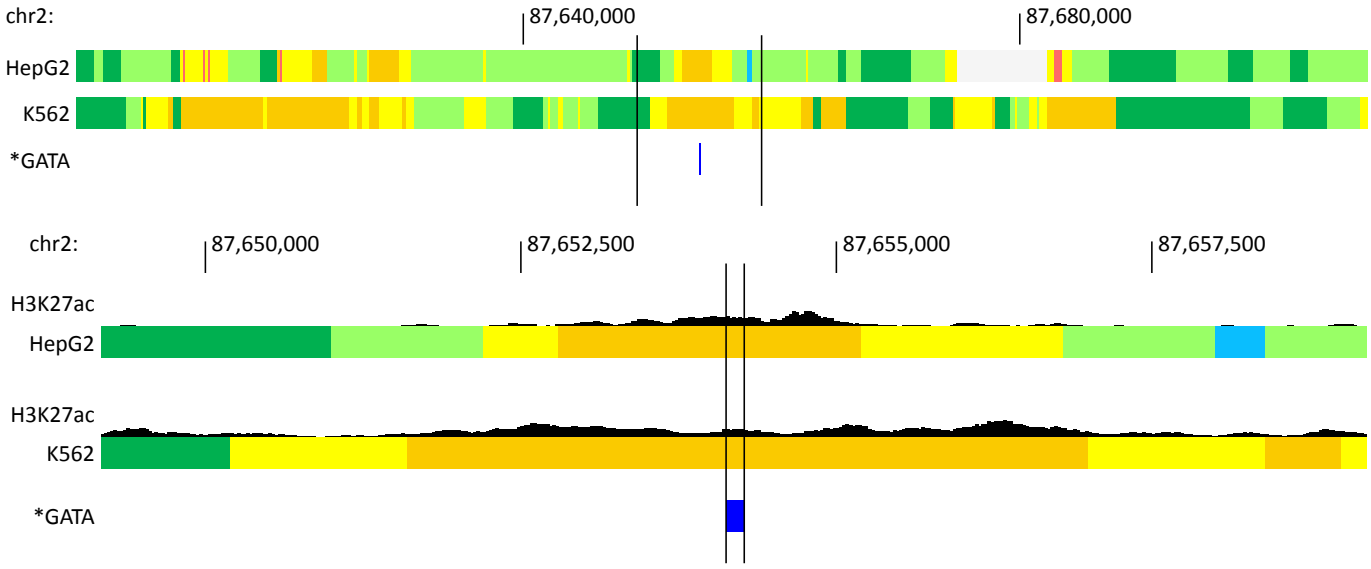
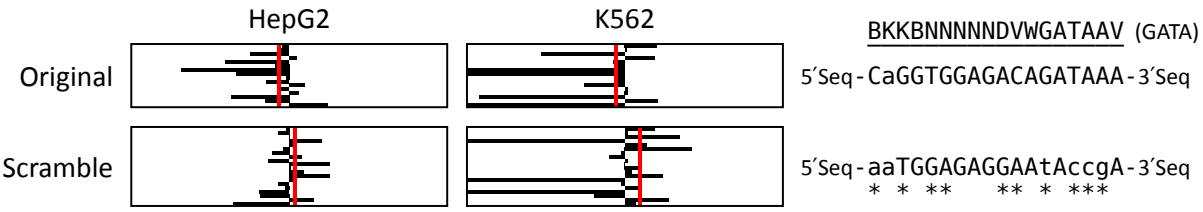
2211 GATA in K562 enhancer

chr2 87654190 87654207 - (hg18)





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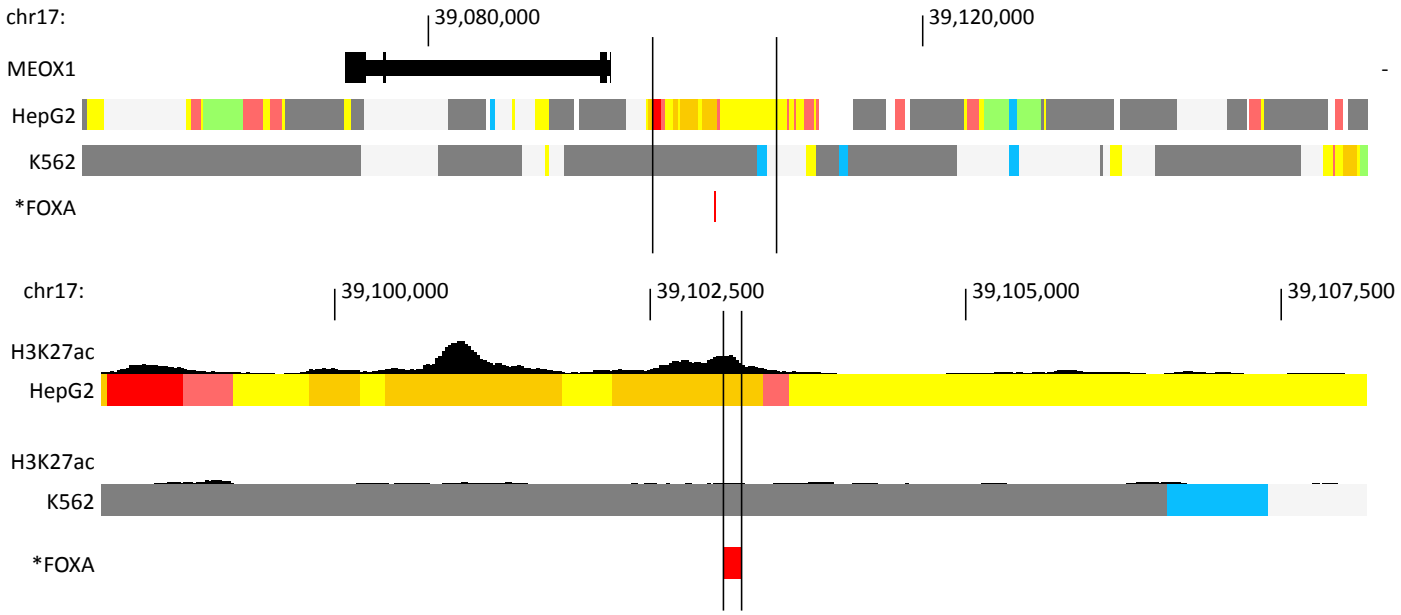
3′Seq = acaaactgaaatggtgtaatgggctacaggaaacctttctttcagaacttgattcatctccag

2212 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr17 39103147 39103158 + (hg18)



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5′Seq-atTcGgCcTcaT-3′Seq

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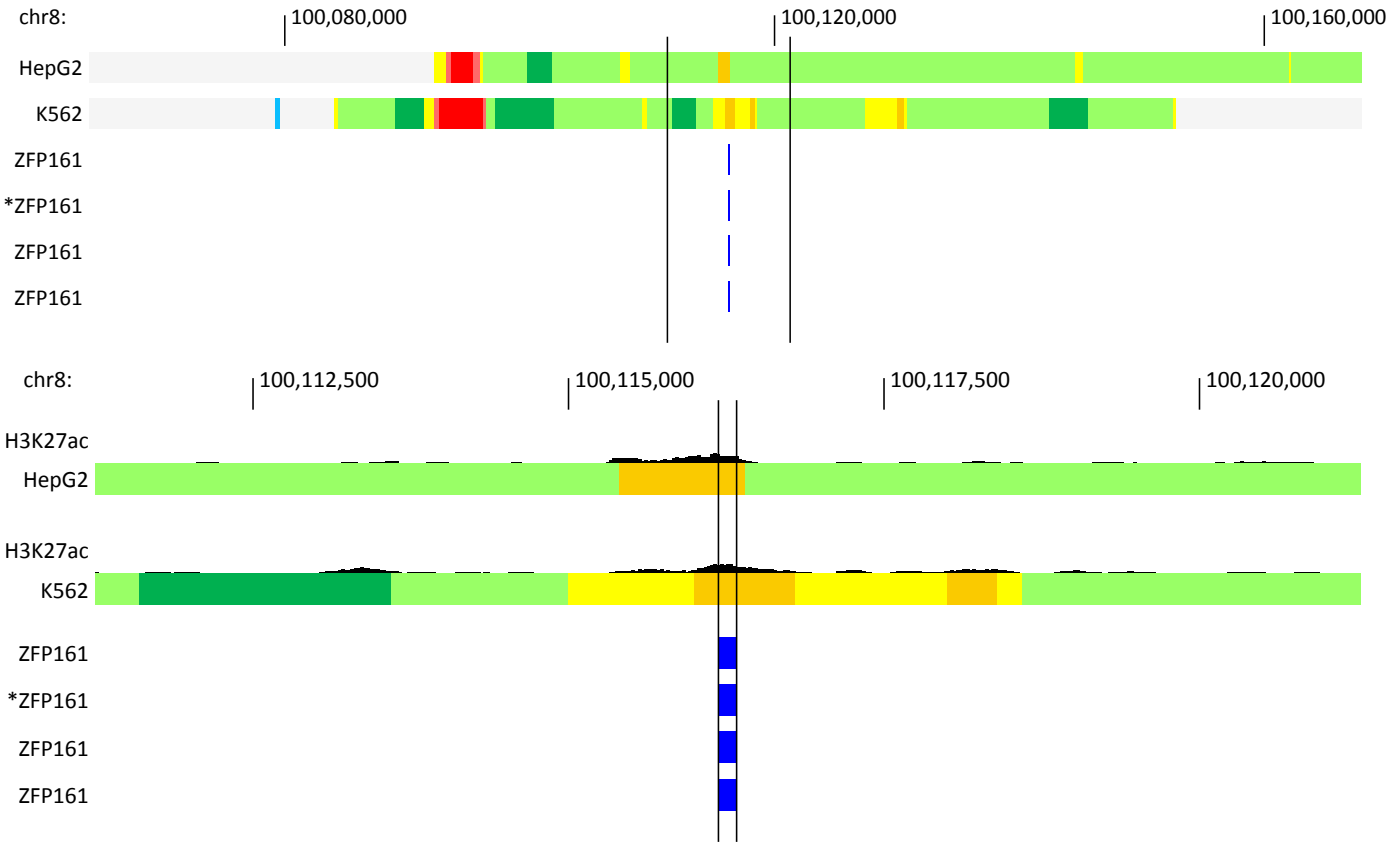
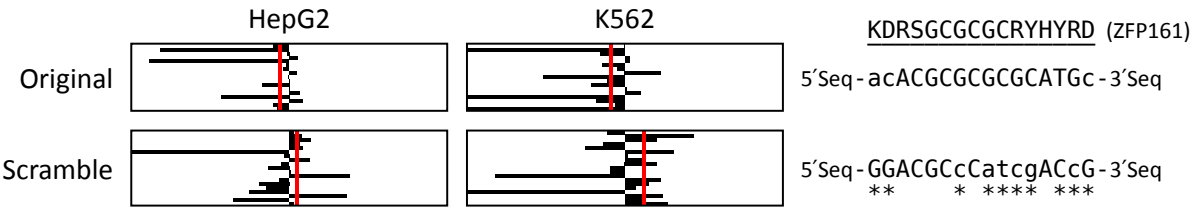
2213 ZFP161 in HepG2 enhancer

chr8 100116253 100116268 - (hg18)





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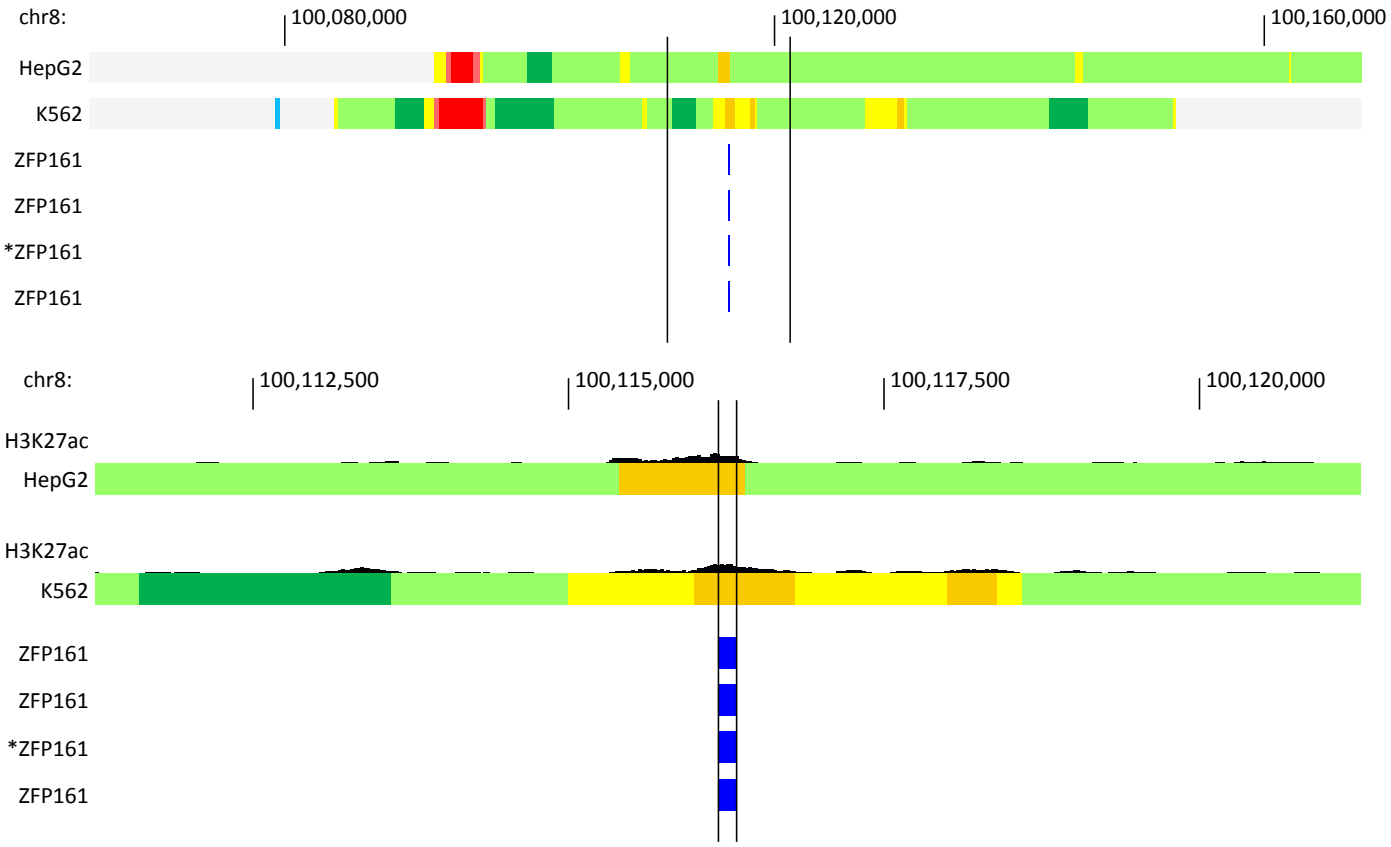
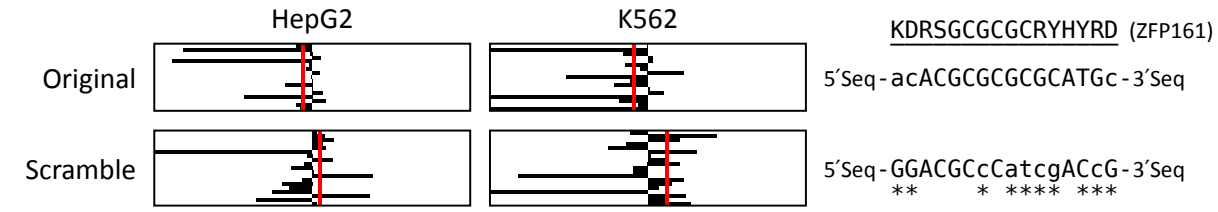
2214 ZFP161 in K562 enhancer

chr8 100116253 100116268 - (hg18)





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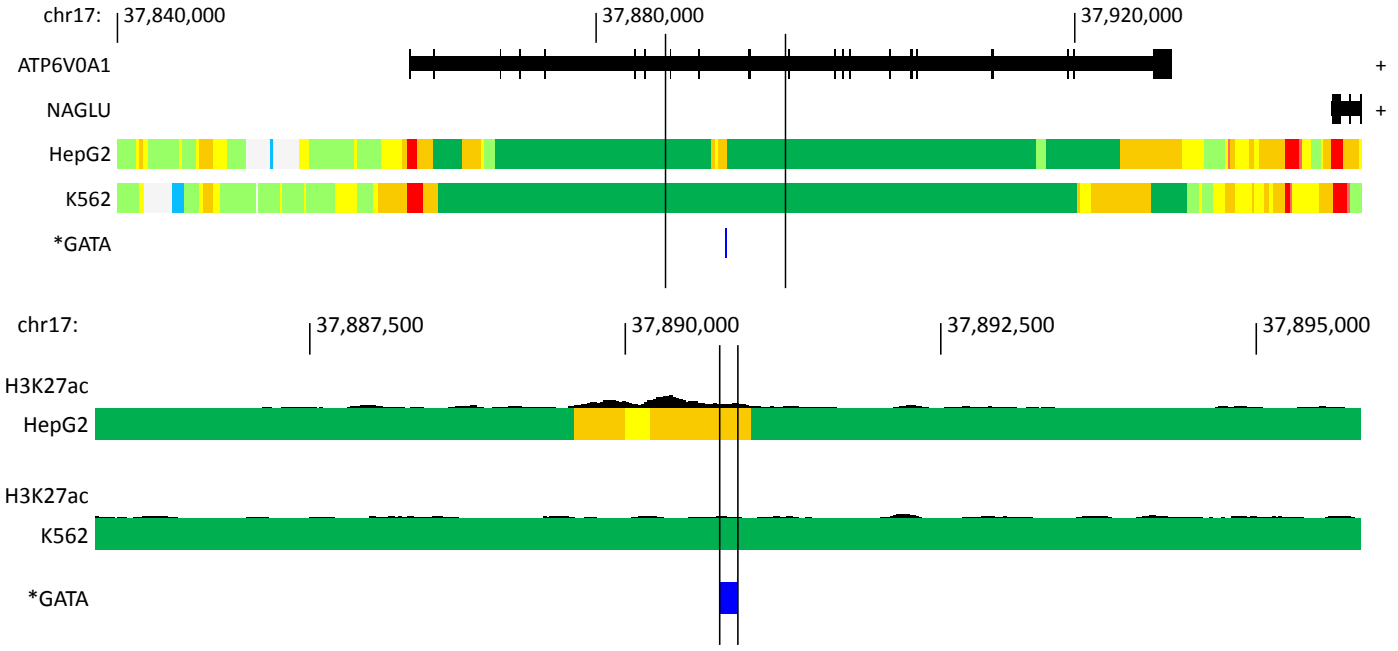
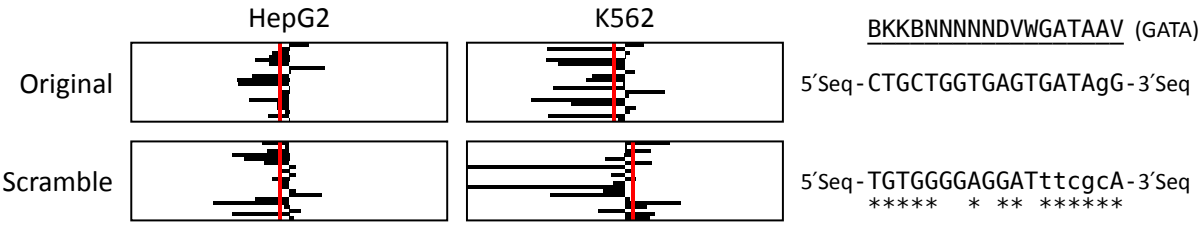
2215 GATA in HepG2 enhancer

chr17 37890812 37890829 + (hg18)





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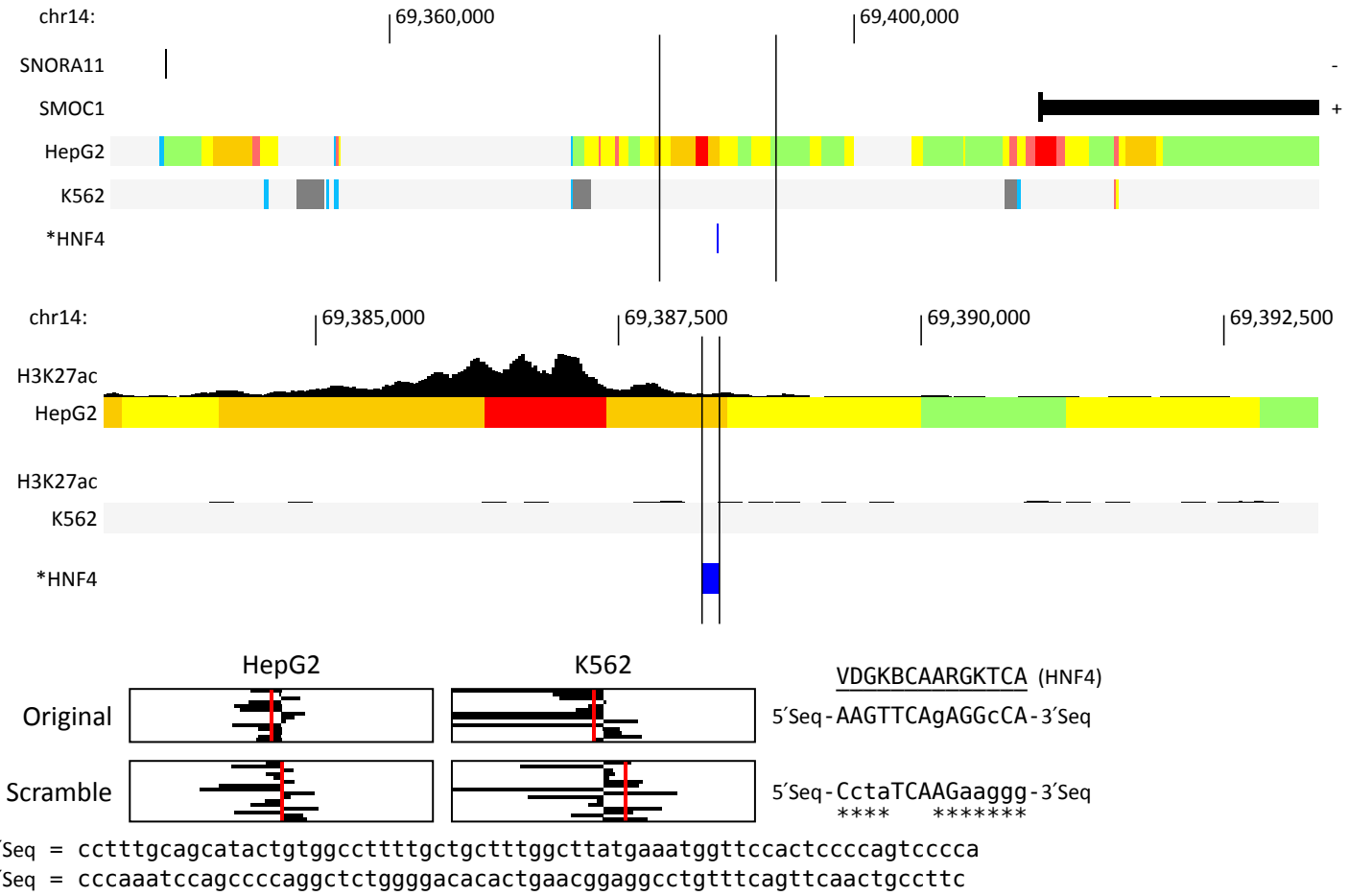
2216 HNF4 in HepG2 enhancer

chr14 69388256 69388269 + (hg18)



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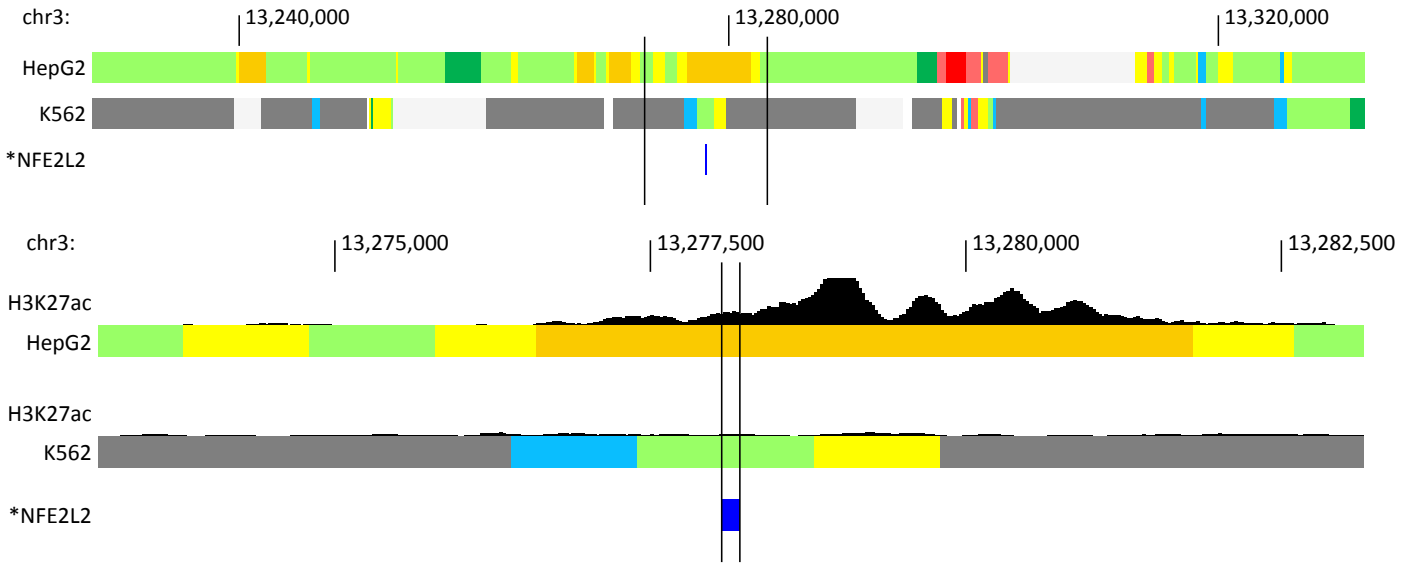
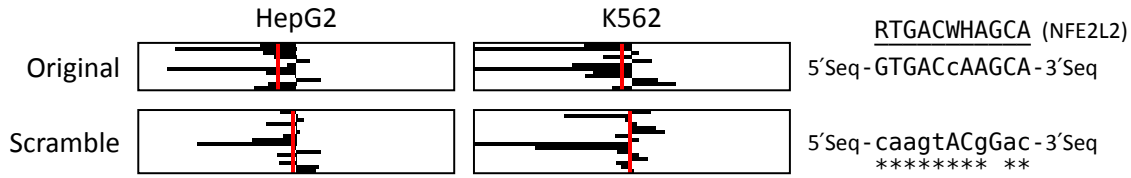
2217 NFE2L2 in HepG2 enhancer

chr3 13278132 13278142 + (hg18)





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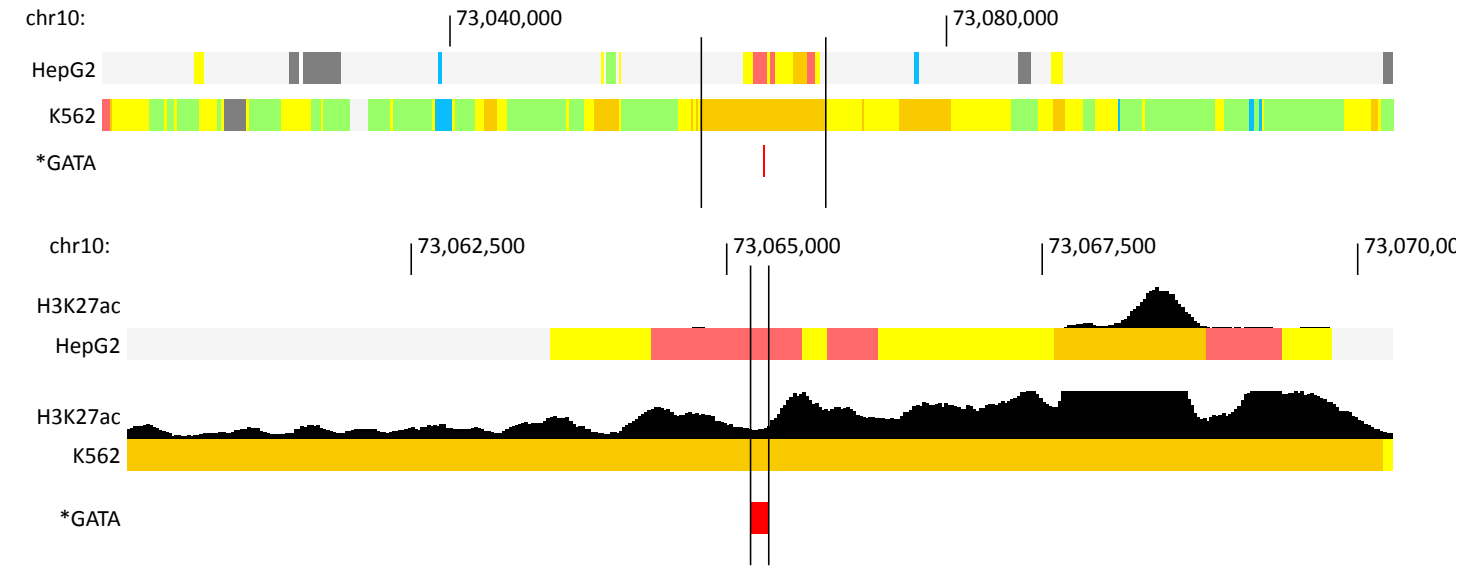
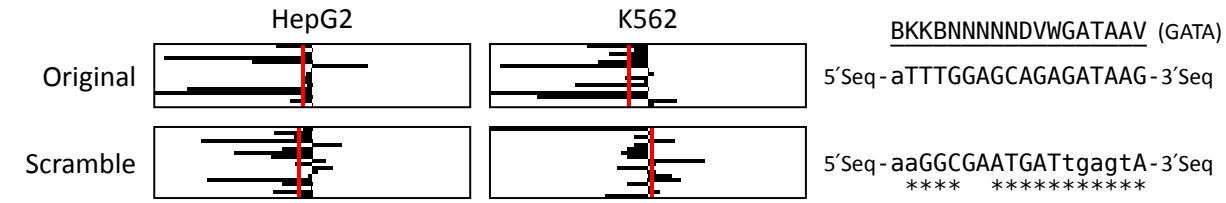
3′Seq = tctgtcccctgagctcccagggcagagccagggatgcatggtccctgagagcttacagagttgaagc

2218 GATA in K562 enhancer (conserved at 60% confidence)

chr10 73065253 73065270 + (hg18)





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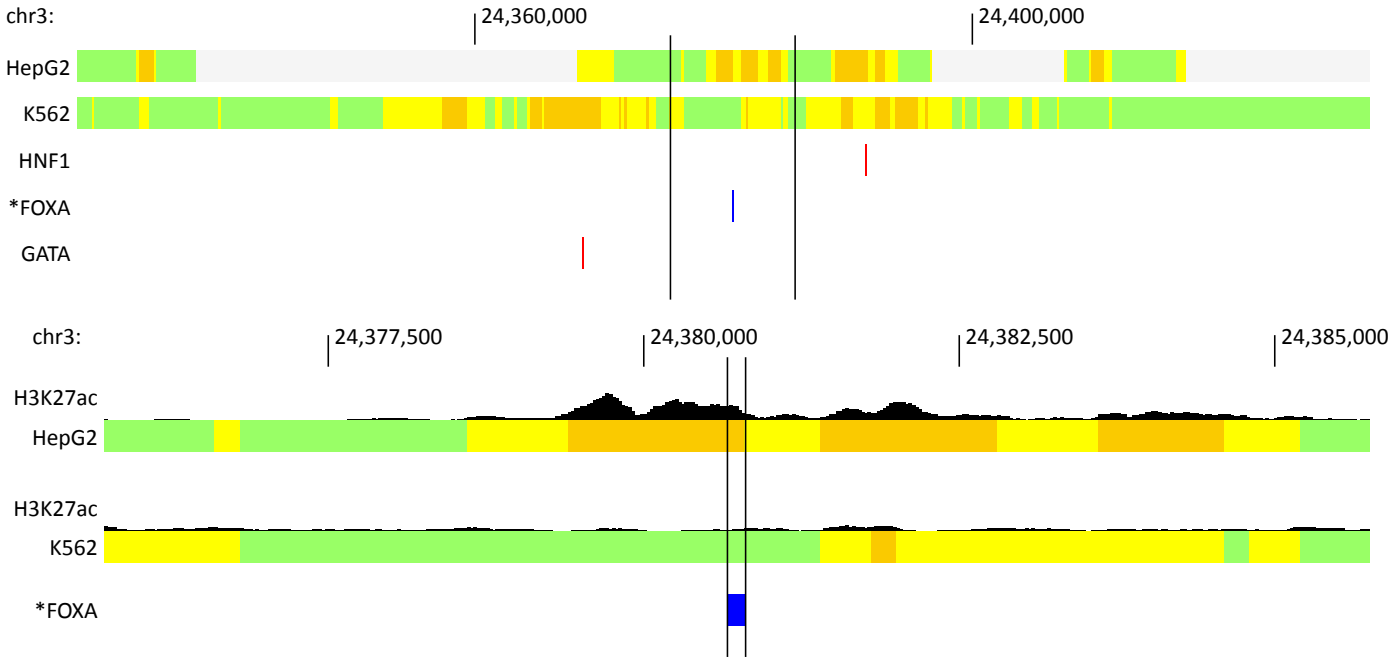
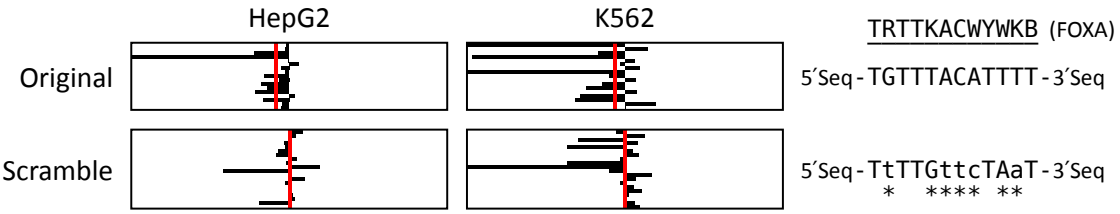
3′Seq = ctgaaggcgaggcagcctcggattgatcccgtctgtgcaggcgtgtgtggaattcagcagata

2219 FOXA in HepG2 enhancer

chr3 24380730 24380741 - (hg18)





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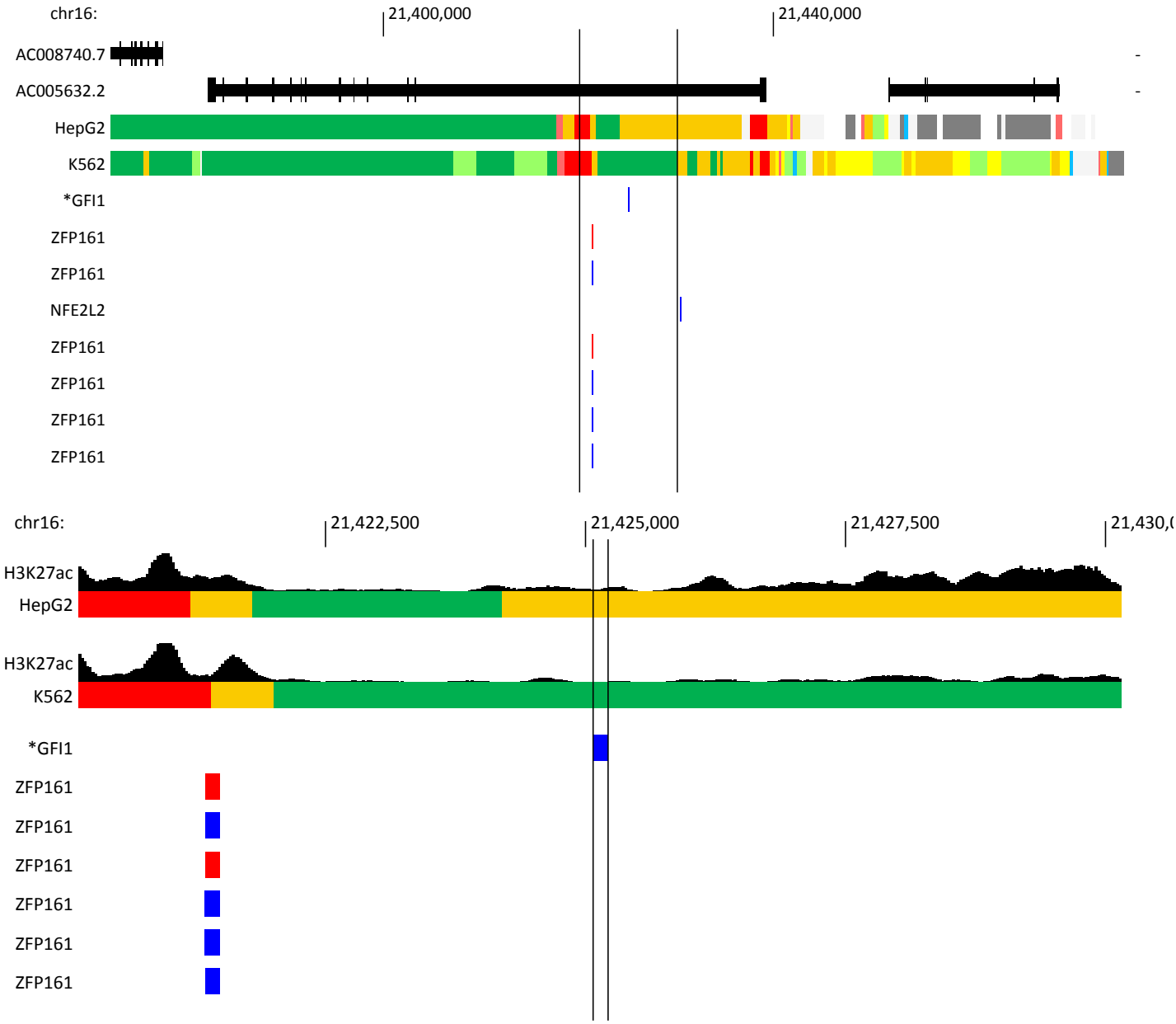
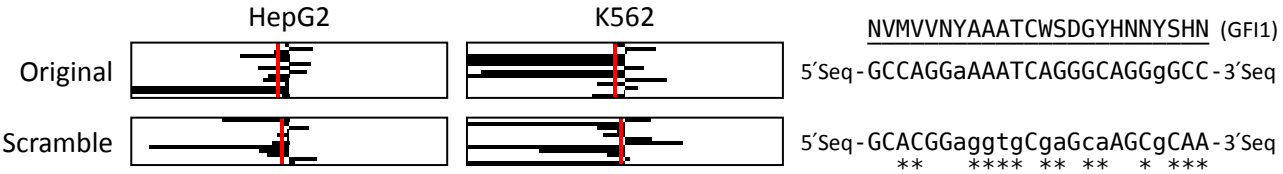
2220 GFI1 in HepG2 enhancer

chr16 21425134 21425157 - (hg18)





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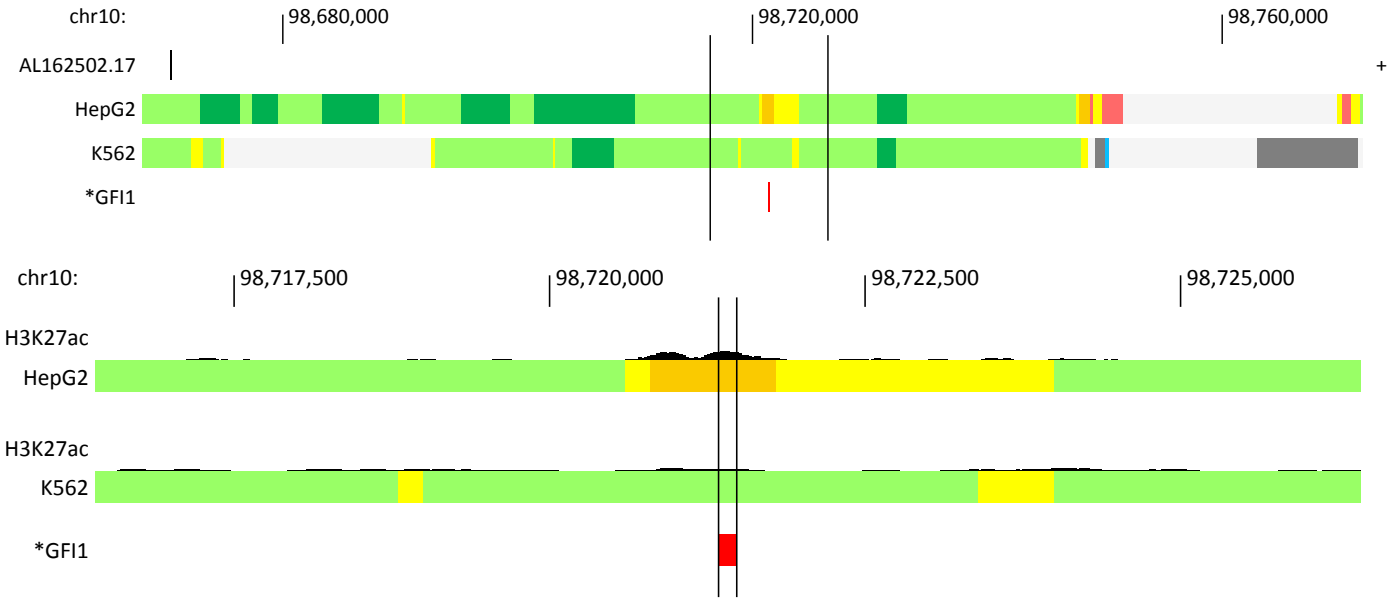
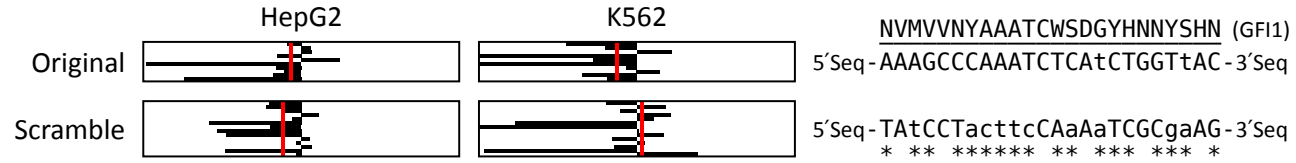
3′Seq = agagtagggcaaatgtggtgcctagagcctcatttttttttttagacggattctcgccct

2221 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr10 98721400 98721423 - (hg18)





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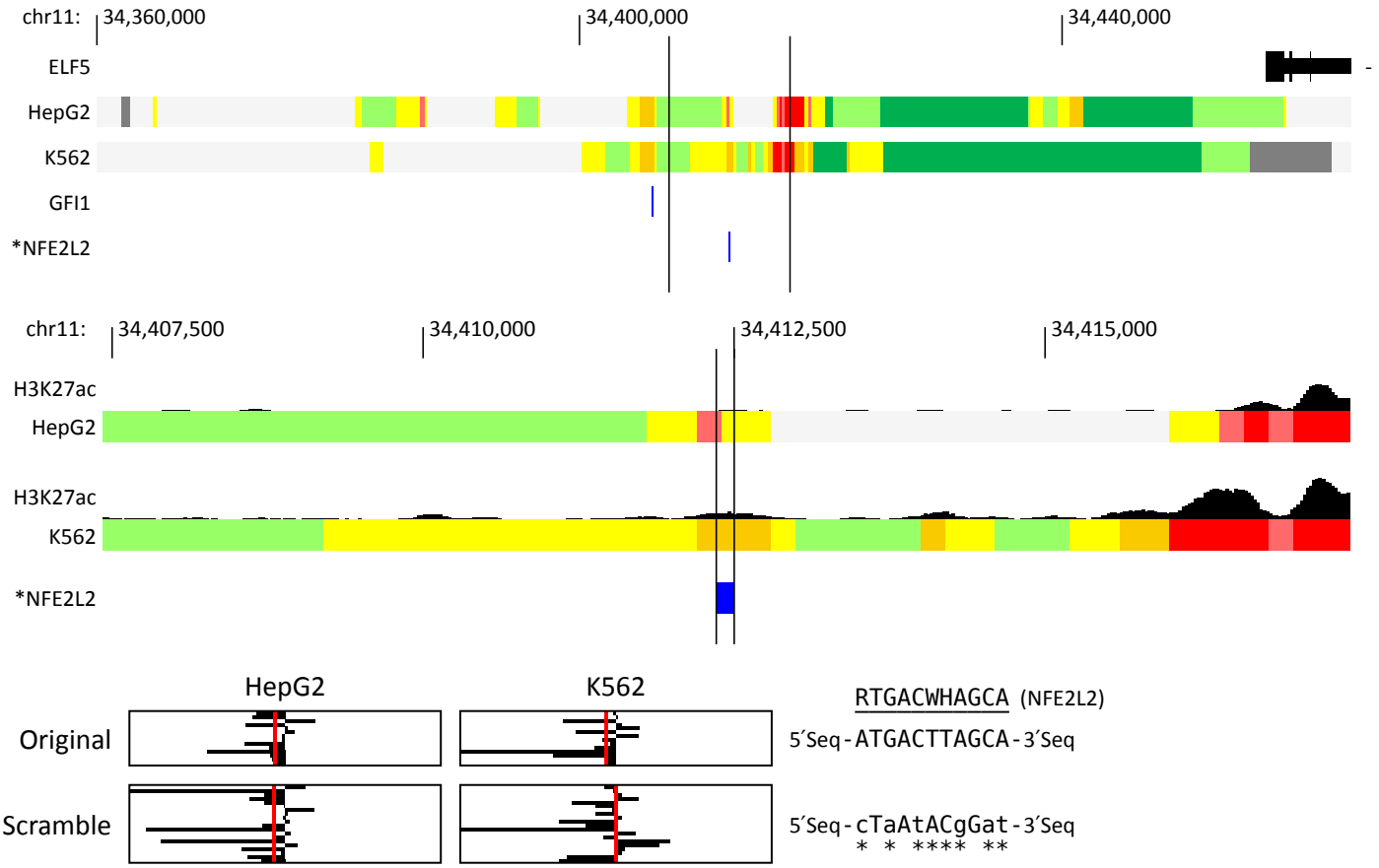
3′Seq = tttcctgcatgaaacccctataagctccccactgcttacacaaccctcctcagcaccctg

2222 NFE2L2 in K562 enhancer

chr11 34412424 34412434 + (hg18)



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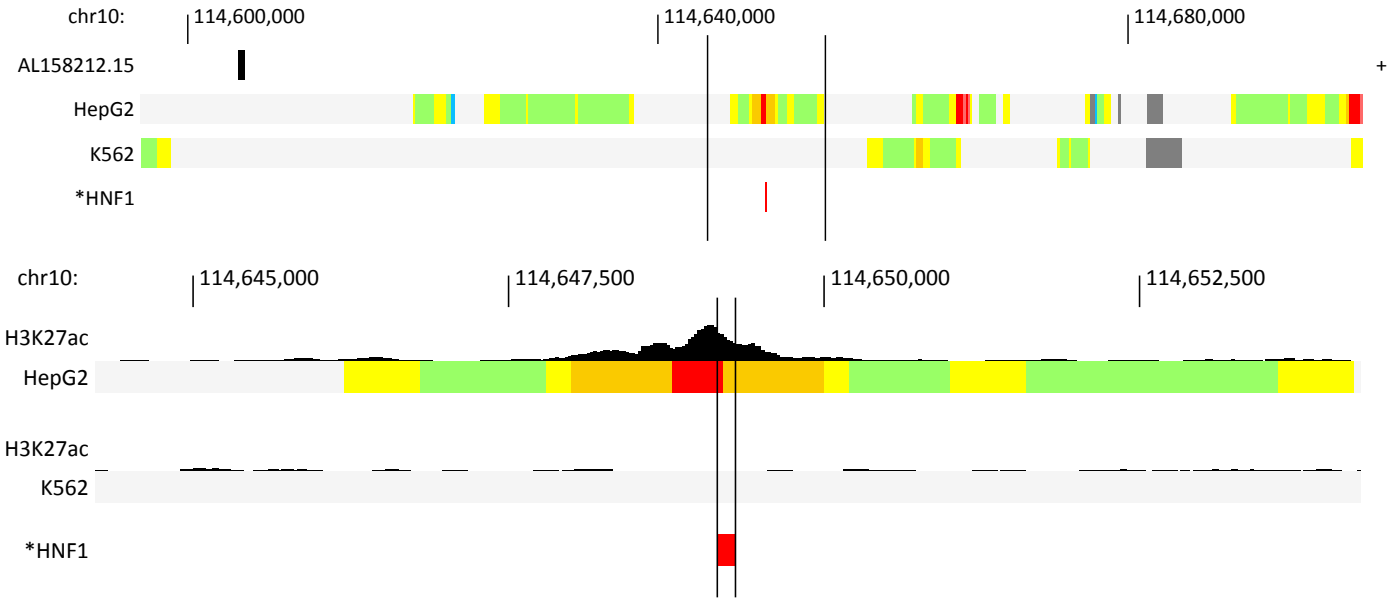
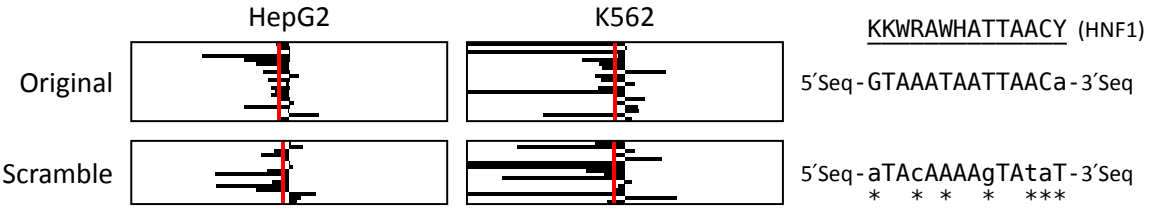
3′Seq = ggttcaggttaggcgaccttcttaggtaatcctaataacagctggccttcccttctctcagcacttt

2223 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr10 114649220 114649233 + (hg18)





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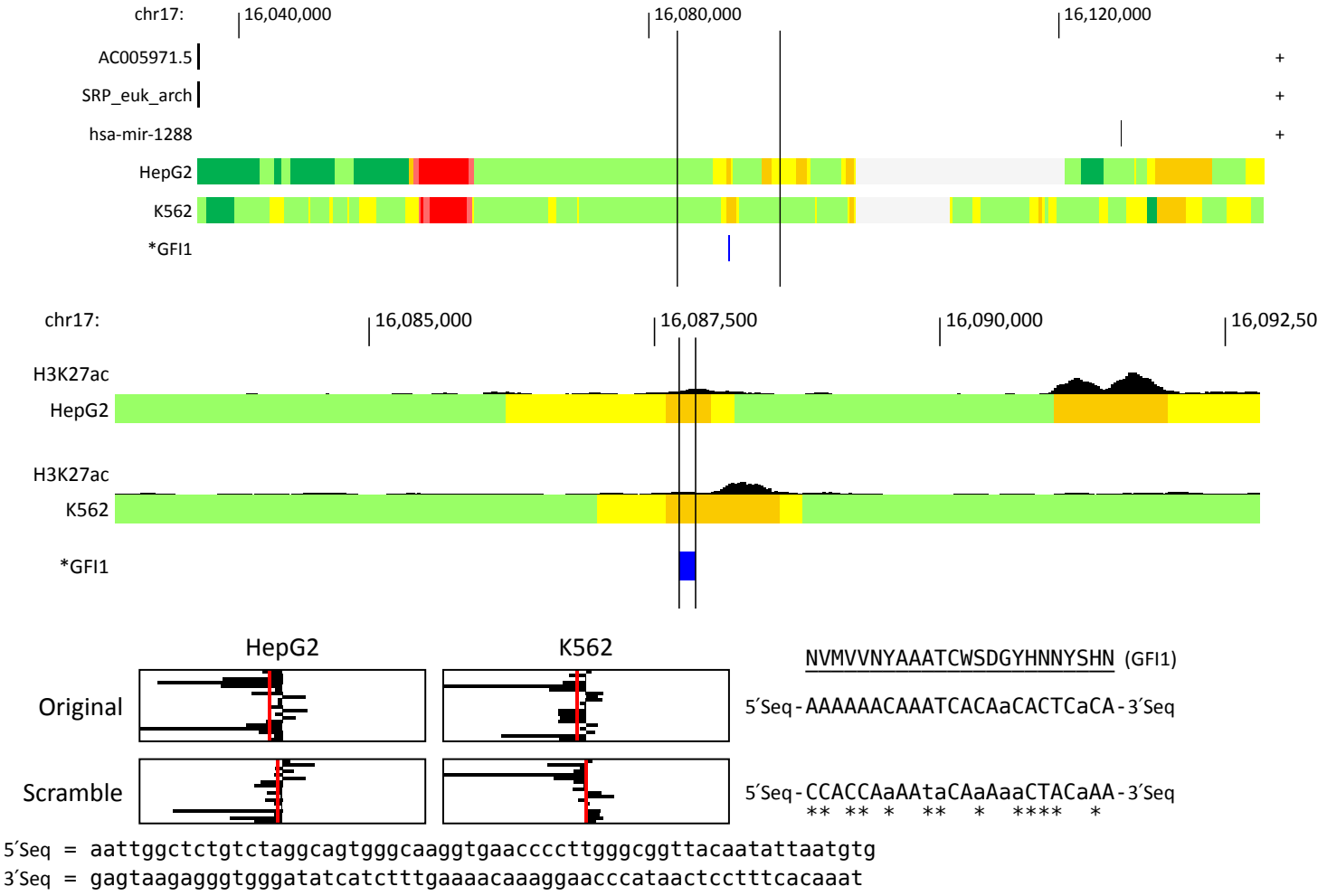
3′Seq = ccaaaaaatgtttccctaaaaaaaaaatgcccagcagaactttcaacttctccaatttgggaagt

2224 GFI1 in K562 enhancer

chr17 16087777 16087800 - (hg18)



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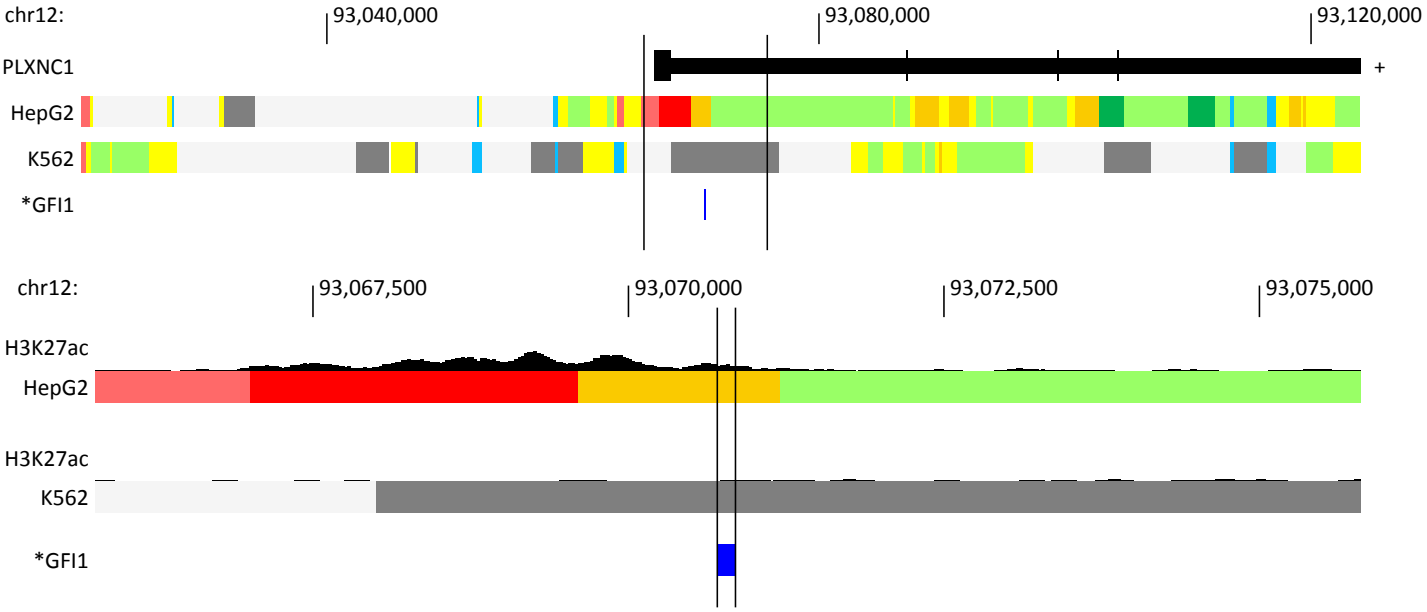
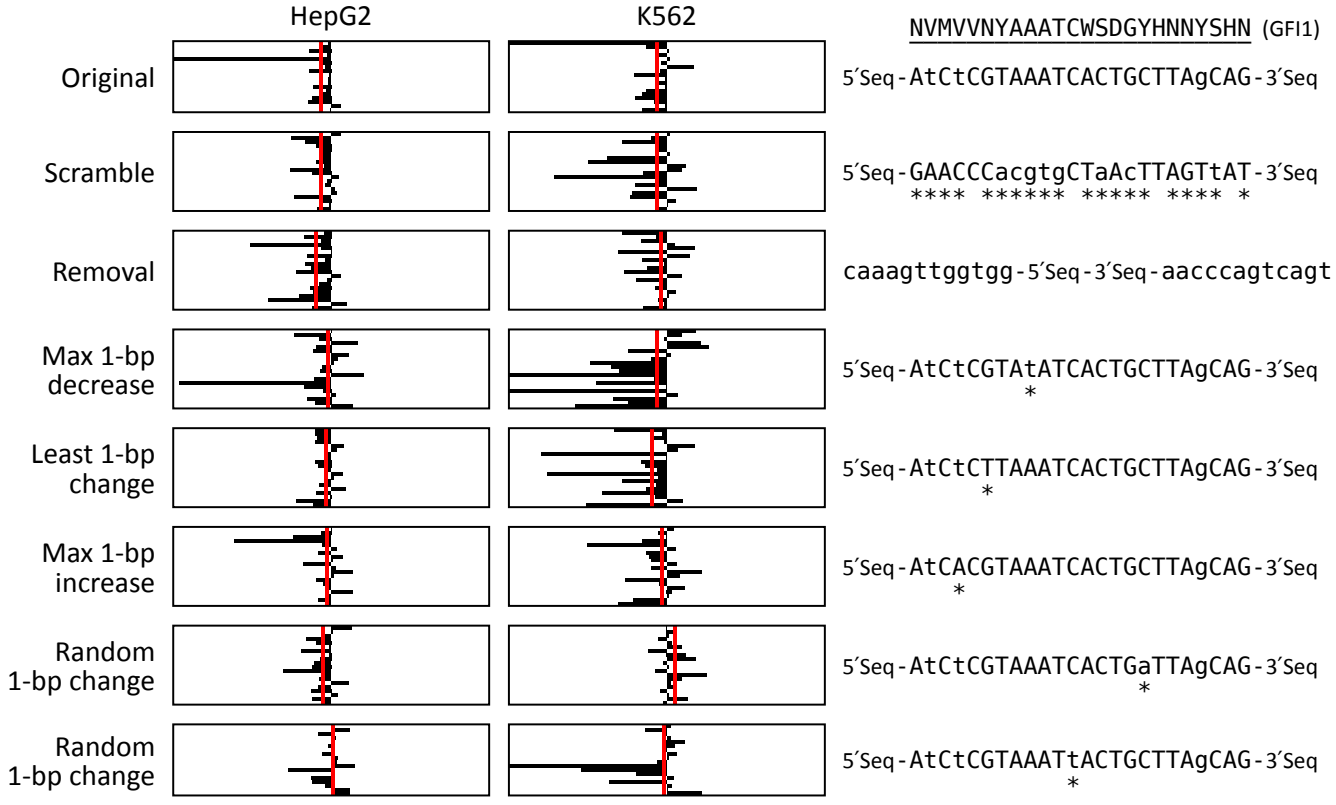
2225 GFI1 in HepG2 enhancer

chr12 93070765 93070788 - (hg18)



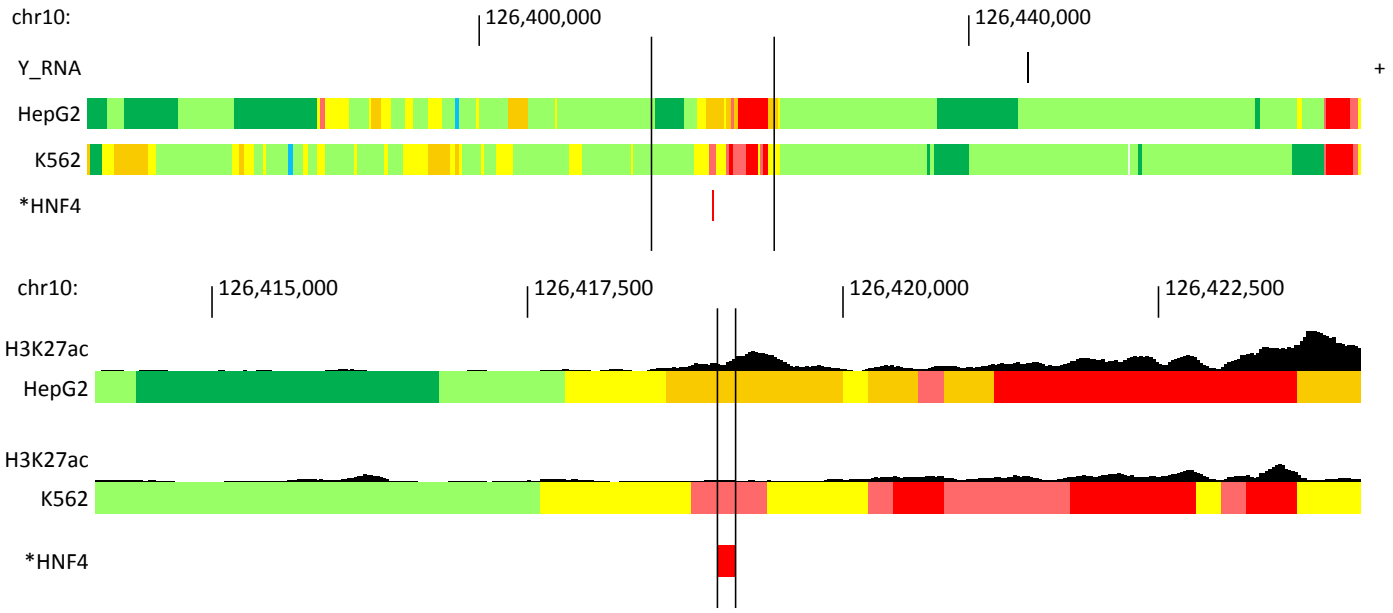


5′Seq = caaggcagaaaaagtaatggtccagtgtgtaaacagctgagtacacactcattacacaagc

3′Seq = aagctgaaggagaggaggatcagtgacaagagataagagaaccagaaagtgggaaaatac

2226 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr10 126419071 126419084 + (hg18)



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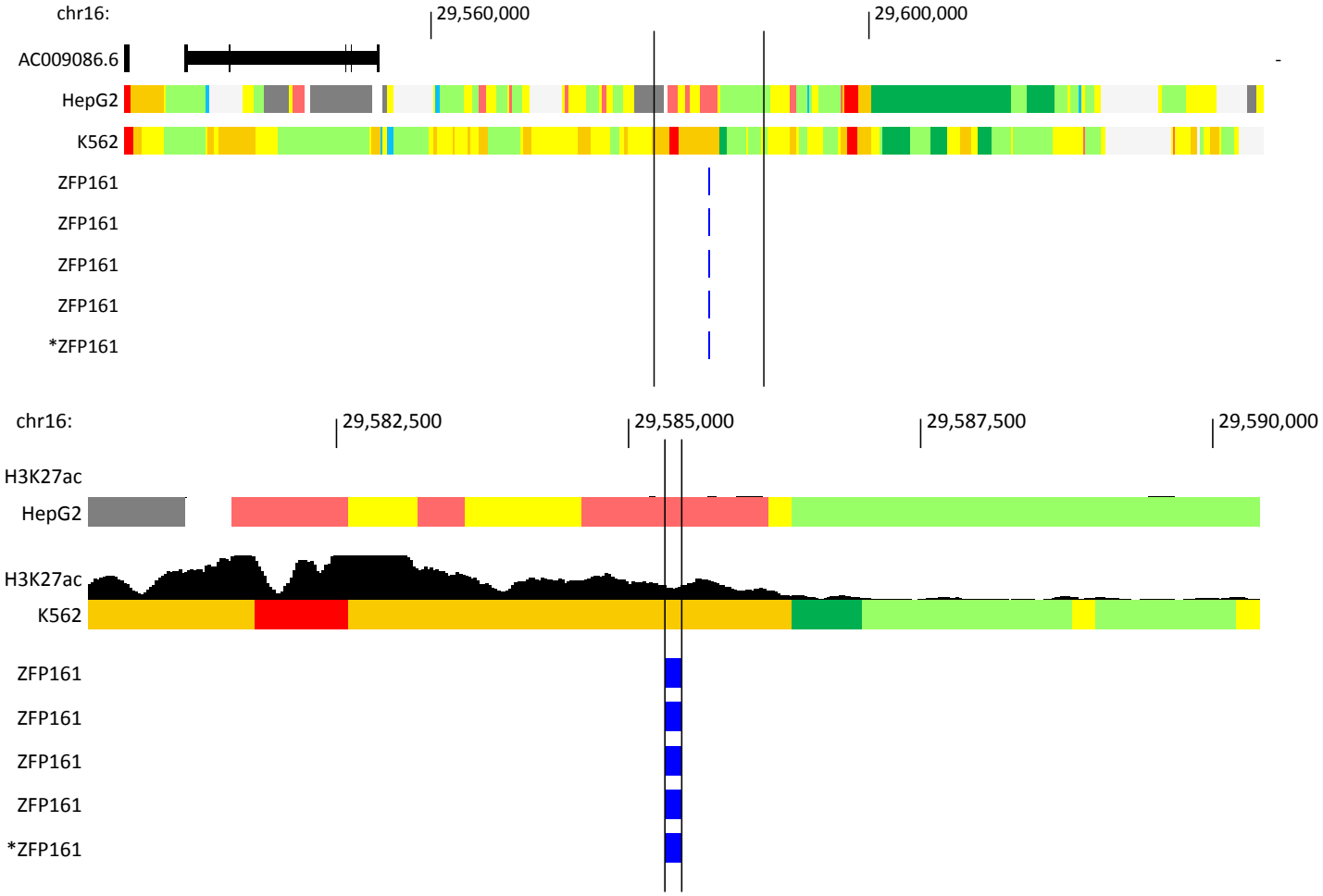
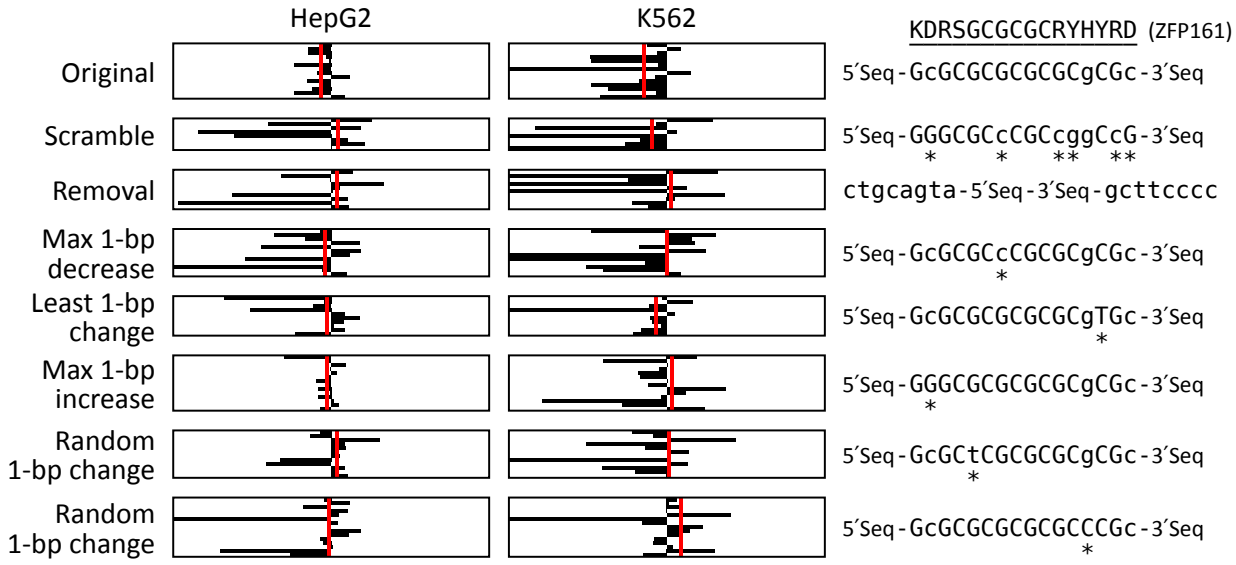
2227 ZFP161 in K562 enhancer

chr16 29585376 29585391 + (hg18)





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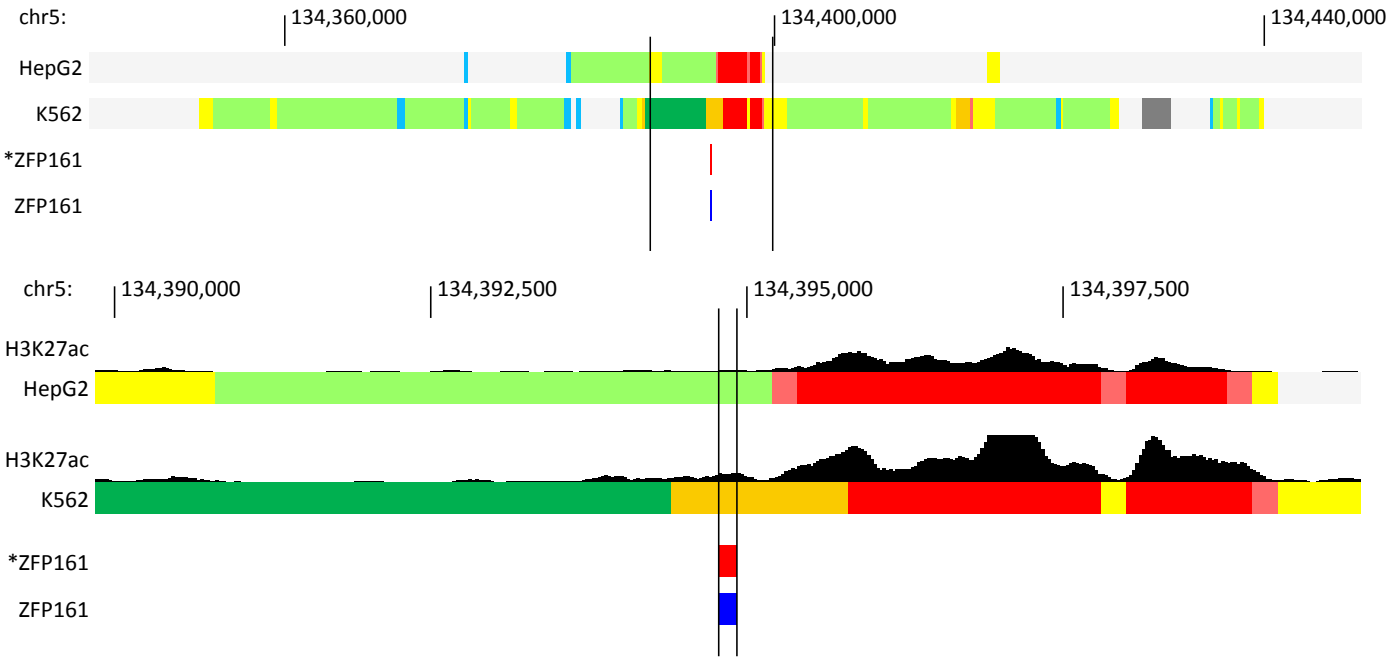
3′Seq = tctcctgcgaacagaggcaggggagaggggtttgccctggtctcggggactggtctggctggc

2228 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr5 134394842 134394857 + (hg18)



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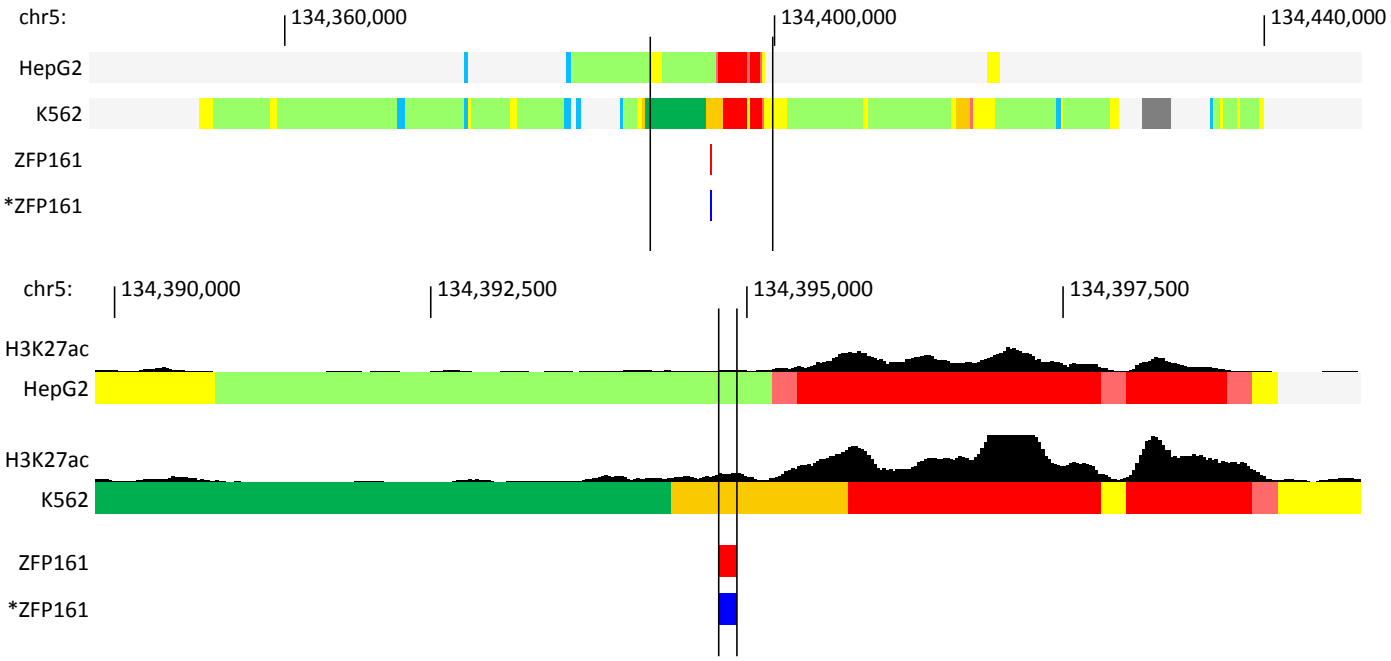
2229 ZFP161 in K562 enhancer

chr5 134394842 134394857 + (hg18)



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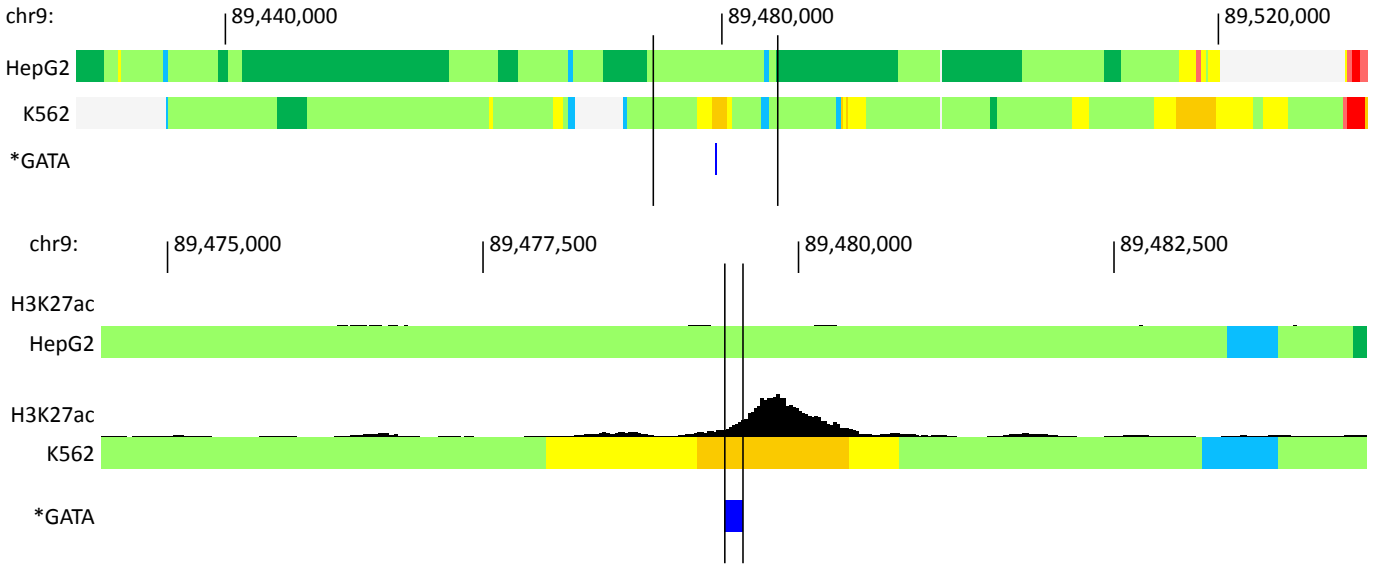
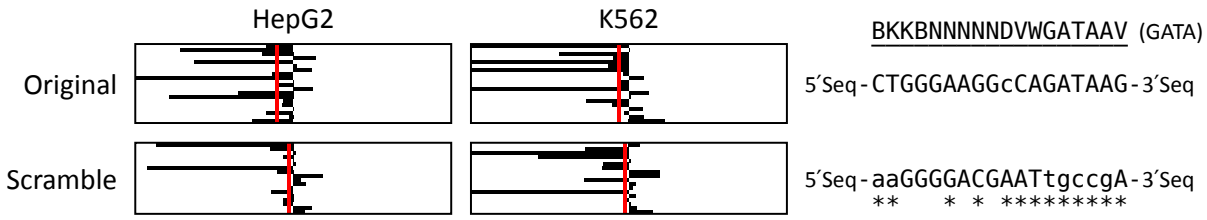
2230 GATA in K562 enhancer

chr9 89479480 89479497 - (hg18)





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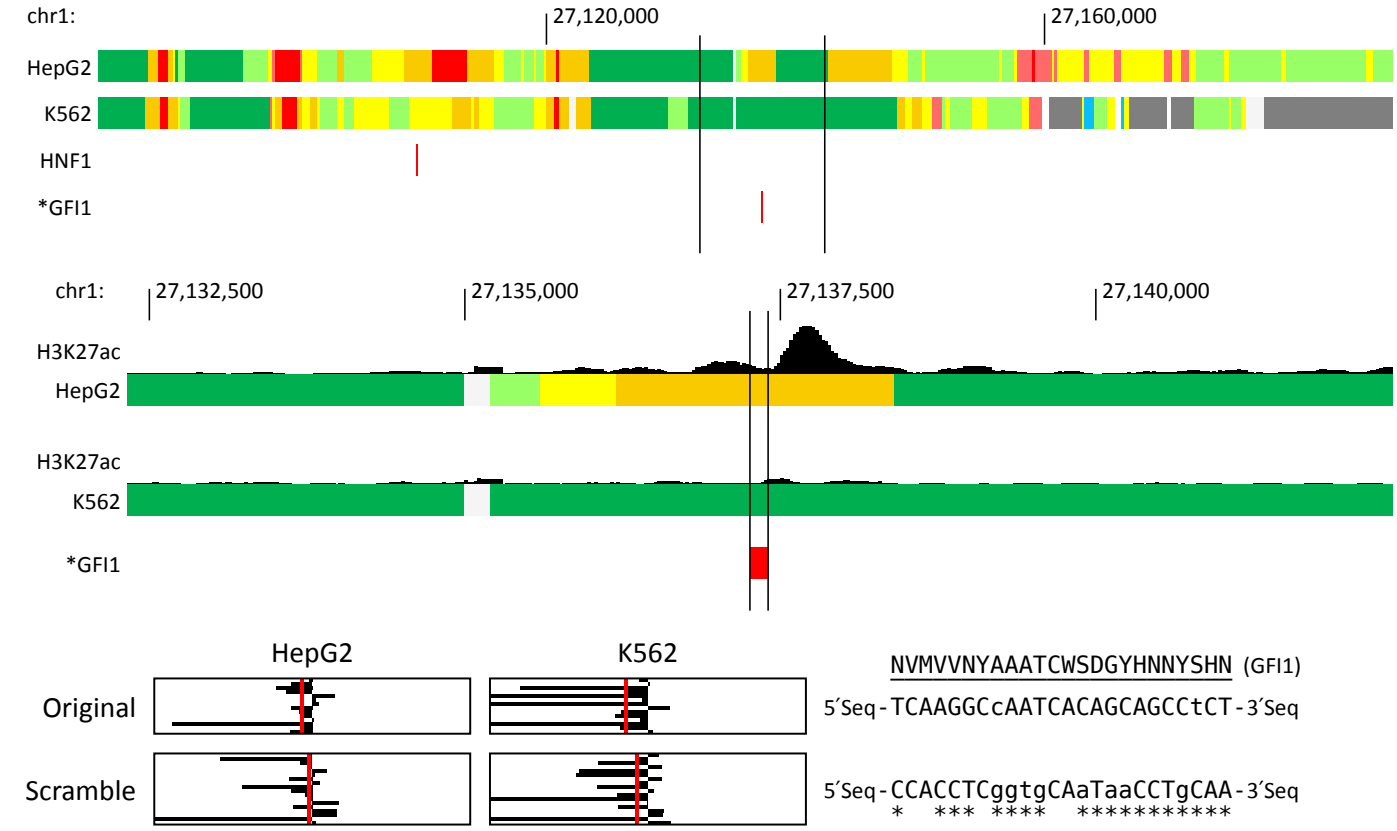
2231 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr1 27137320 27137343 - (hg18)



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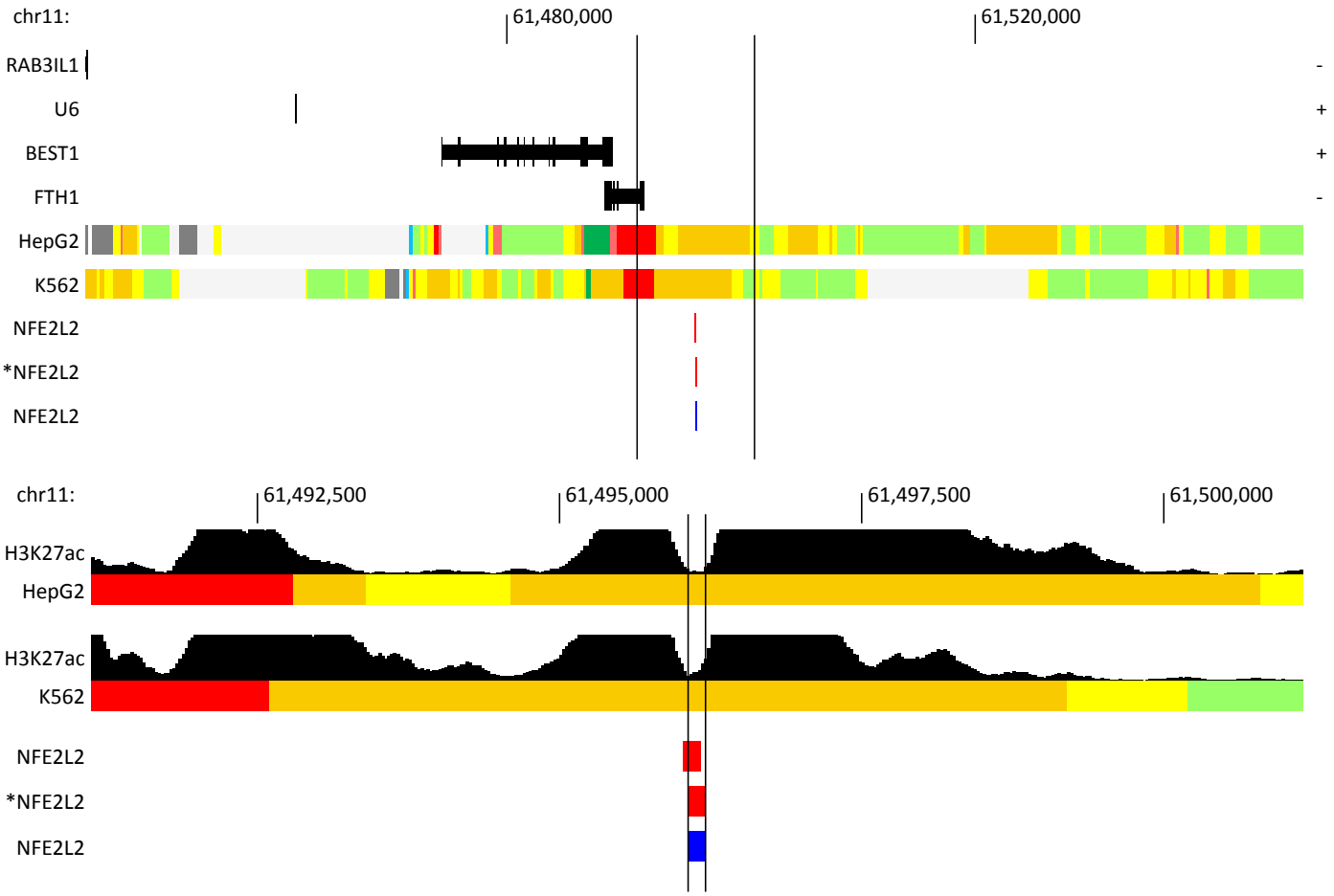
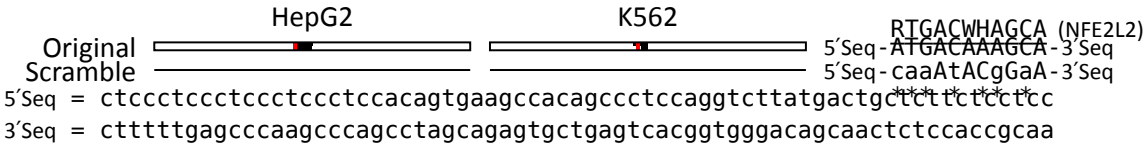
2232 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr11 61496131 61496141 - (hg18)





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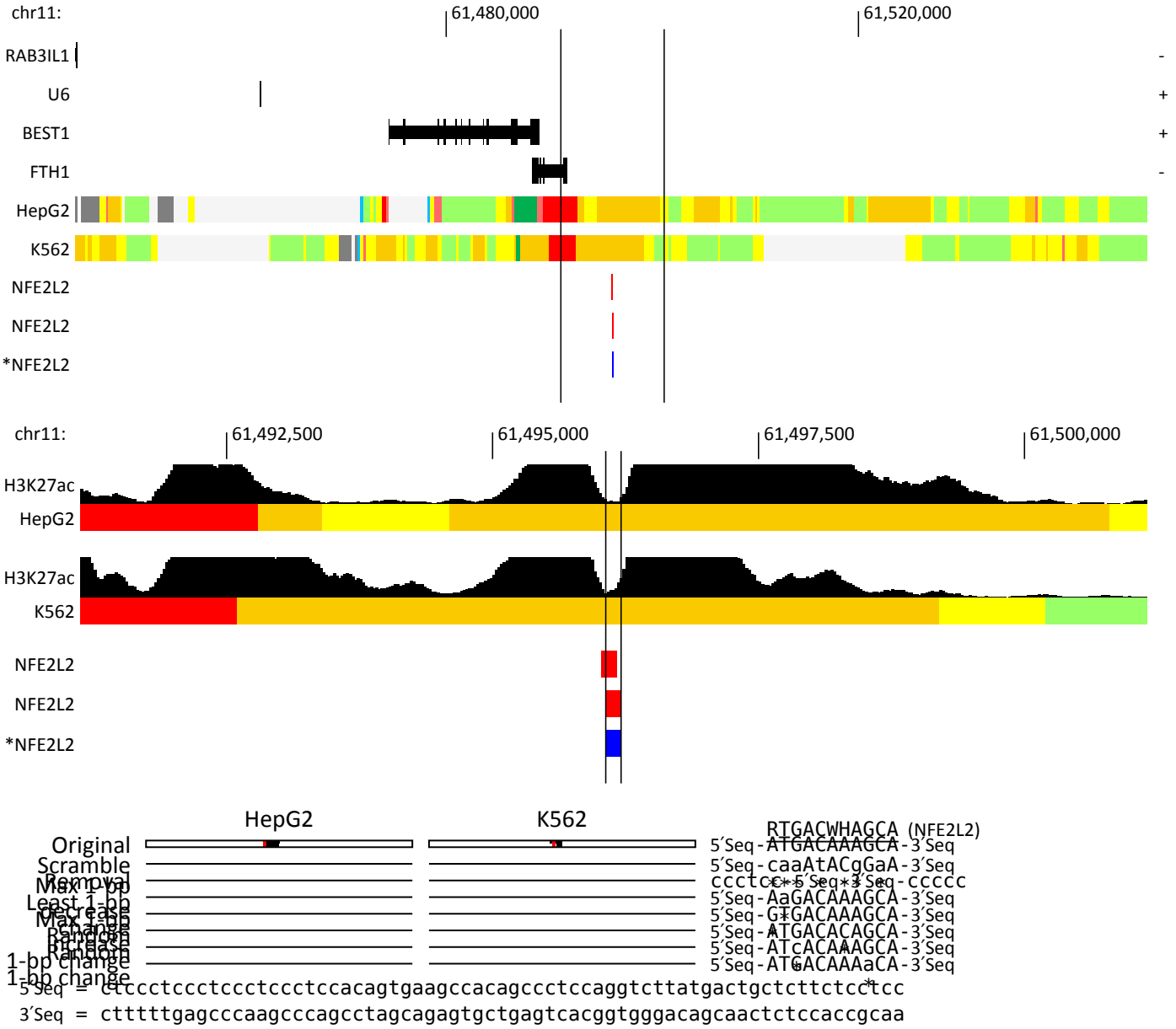
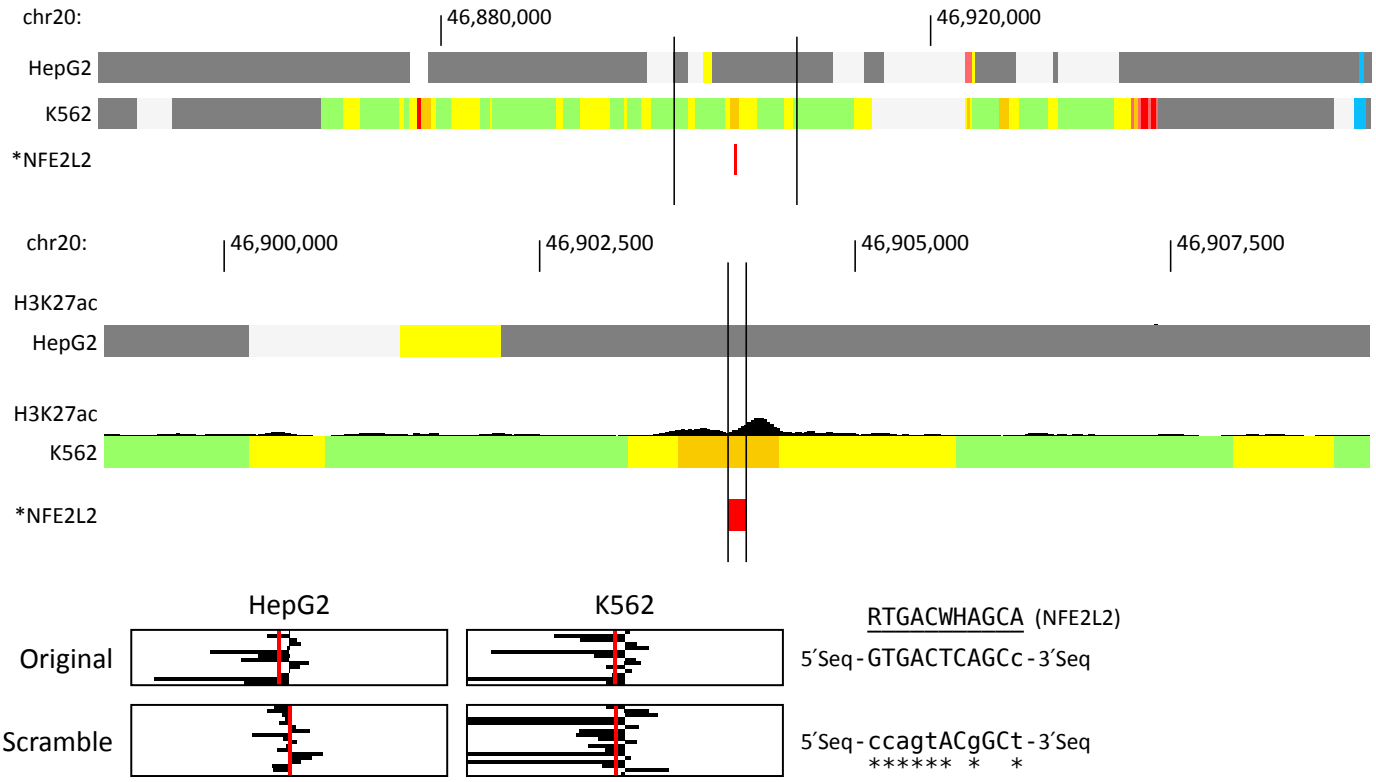
2233 NFE2L2 in K562 enhancer

chr11 61496131 61496141 - (hg18)



2234 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 46904060 46904070 - (hg18)



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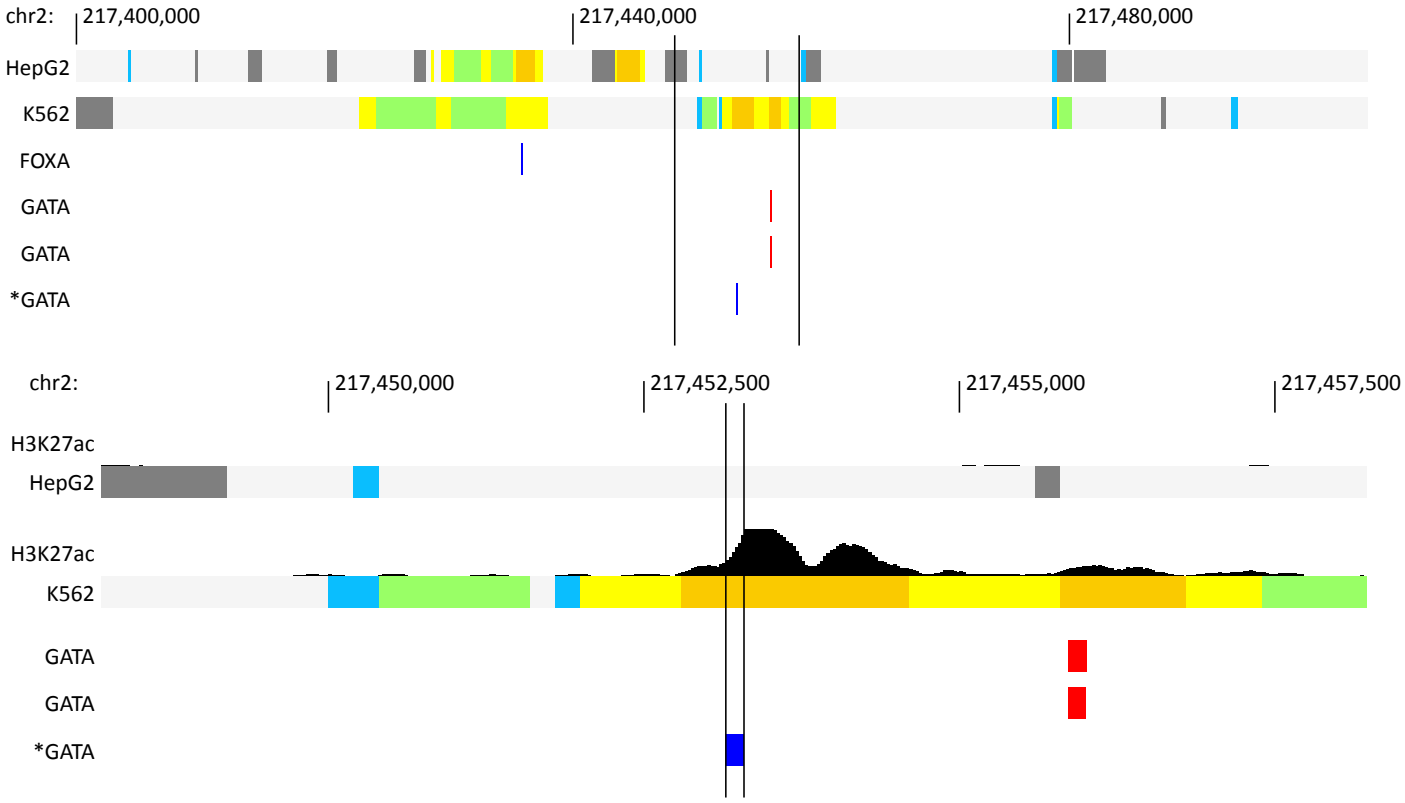
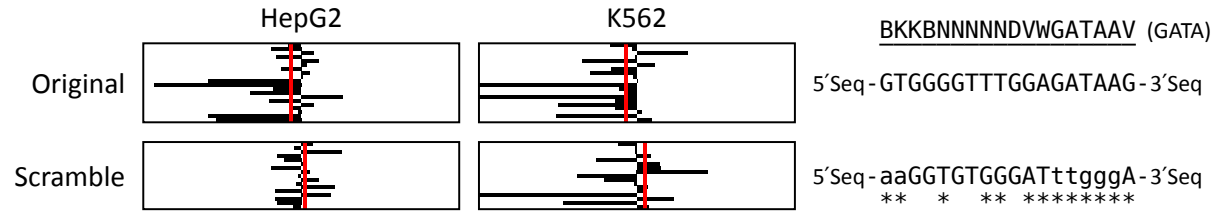
2235 GATA in K562 enhancer

chr2 217453213 217453230 - (hg18)





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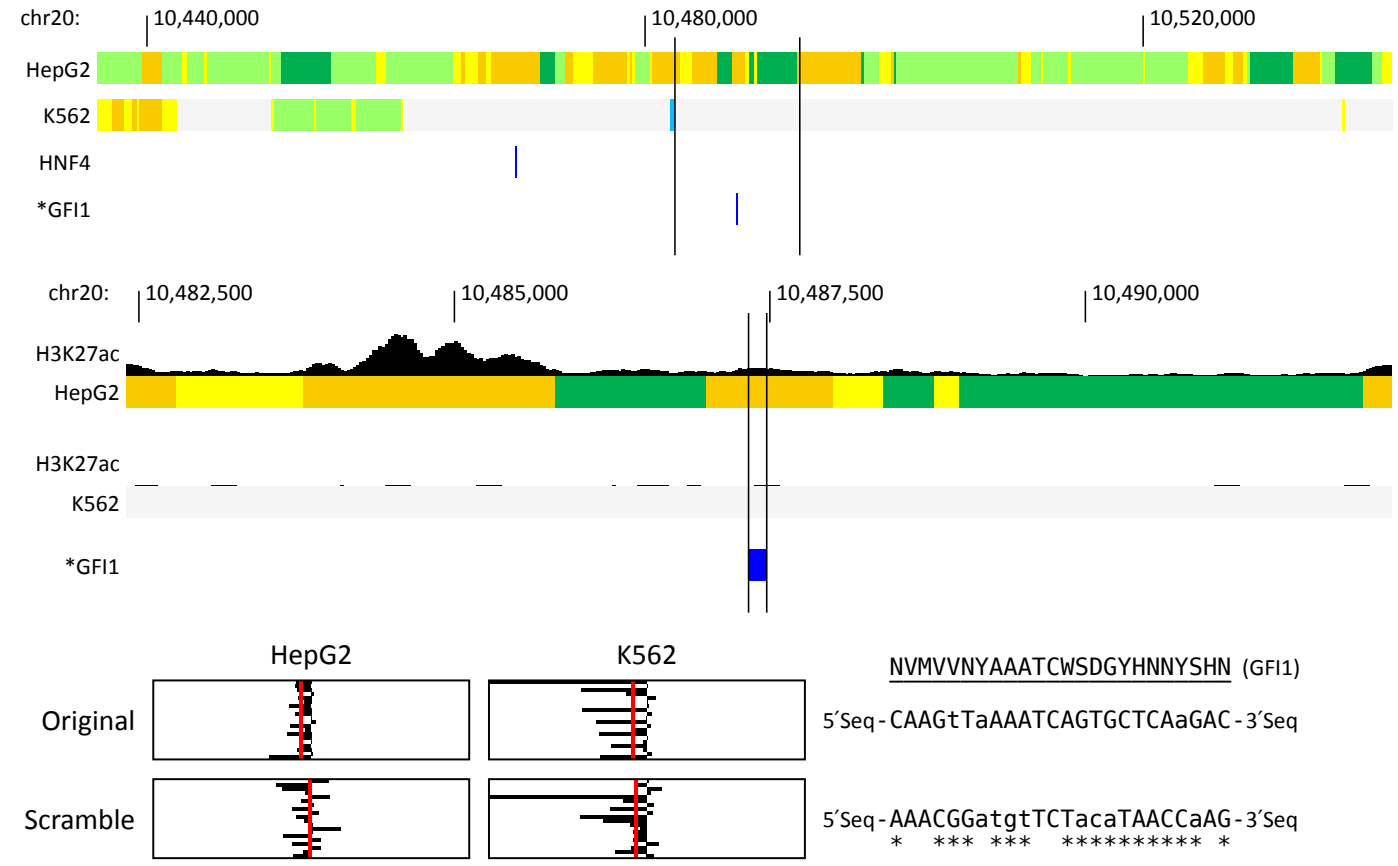
2236 GFI1 in HepG2 enhancer

chr20 10487392 10487415 - (hg18)



NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

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5′Seq-AAACGGatgtTCTacaTAACCaAG-3′Seq

* *** *** ********** *

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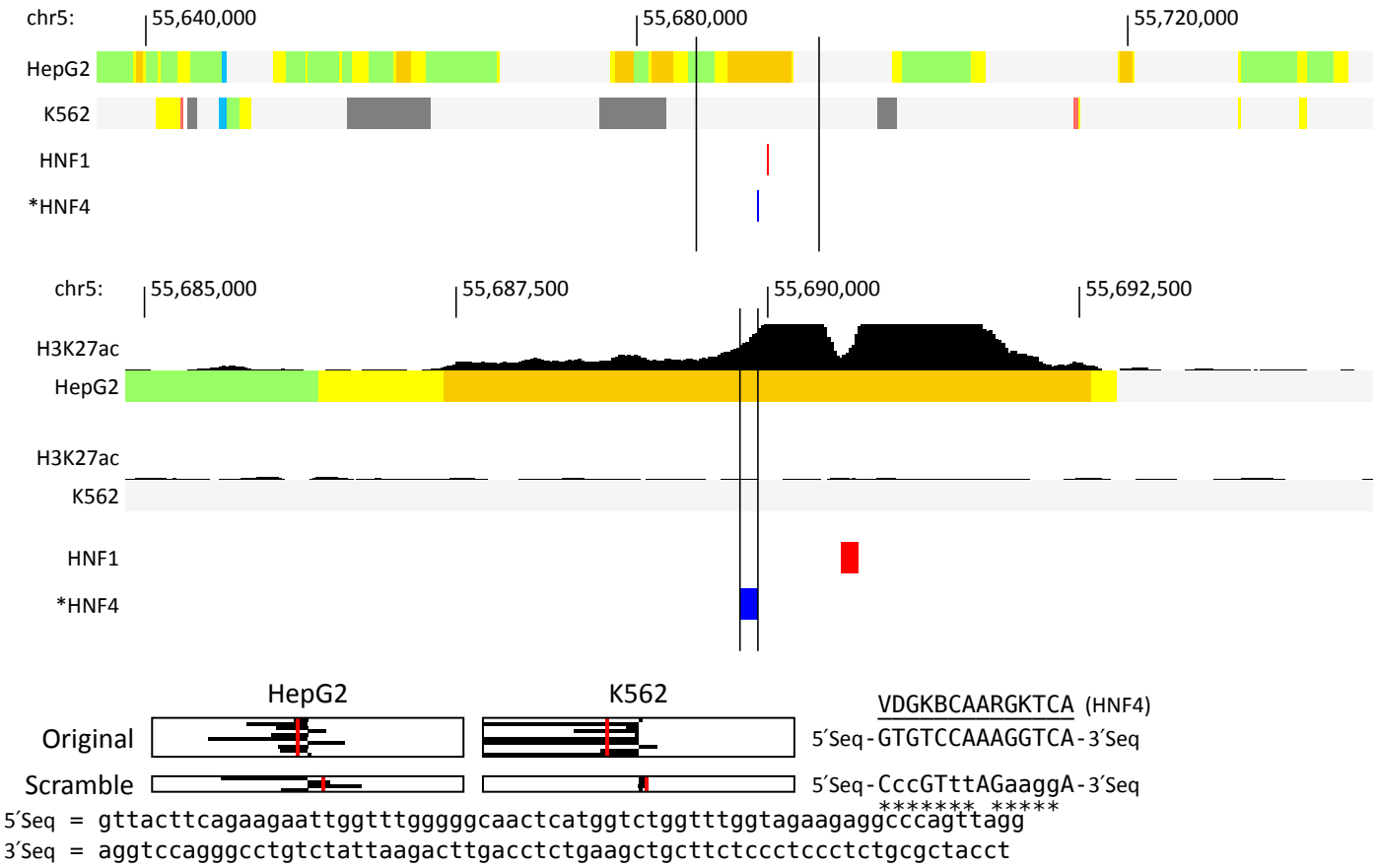
3′Seq = agagatgcagagggcatctctaggctaacgggctgtgctcgcttcctcgagttgacacat

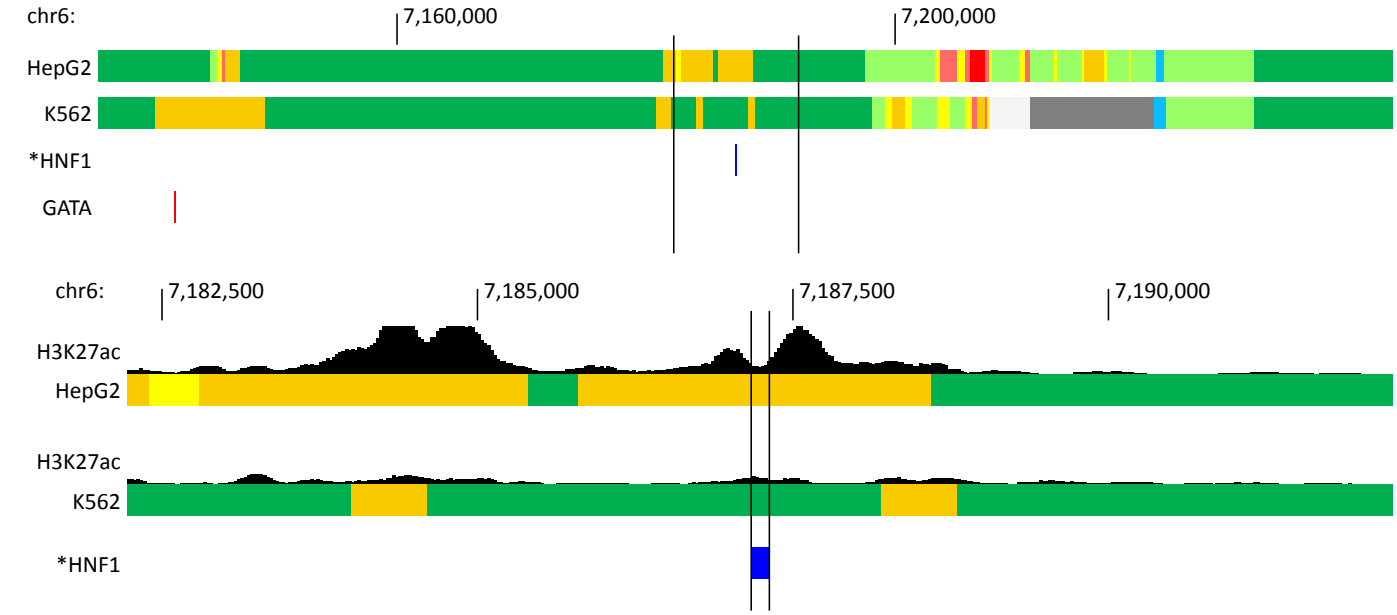
2237 HNF4 in HepG2 enhancer

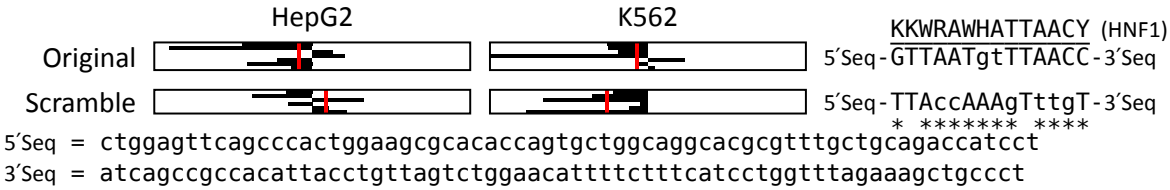
chr5 55689843 55689856 - (hg18)



2238 HNF1 in HepG2 enhancer

chr6 7187235 7187248 + (hg18)





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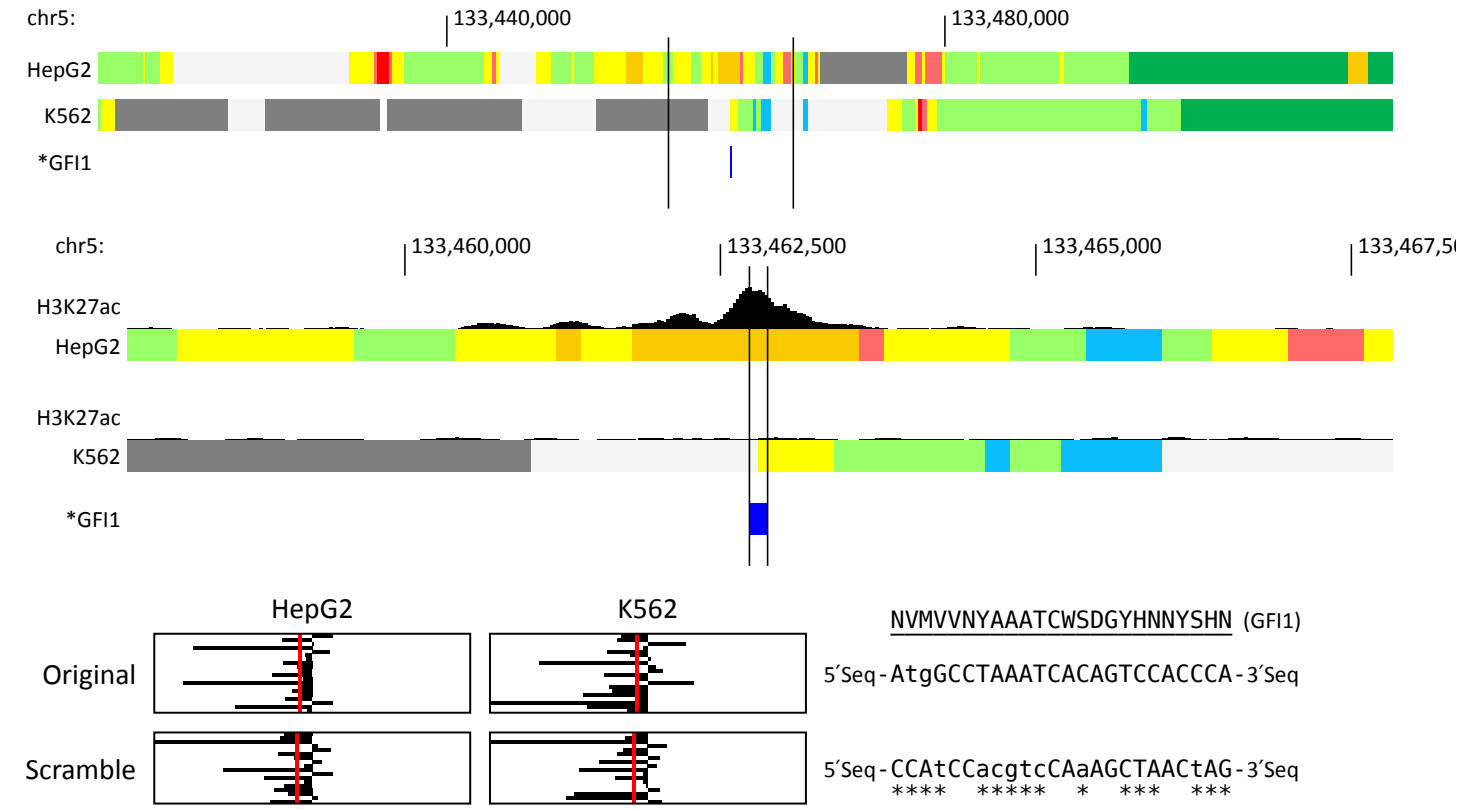
2239 GFI1 in HepG2 enhancer

chr5 133462791 133462814 - (hg18)



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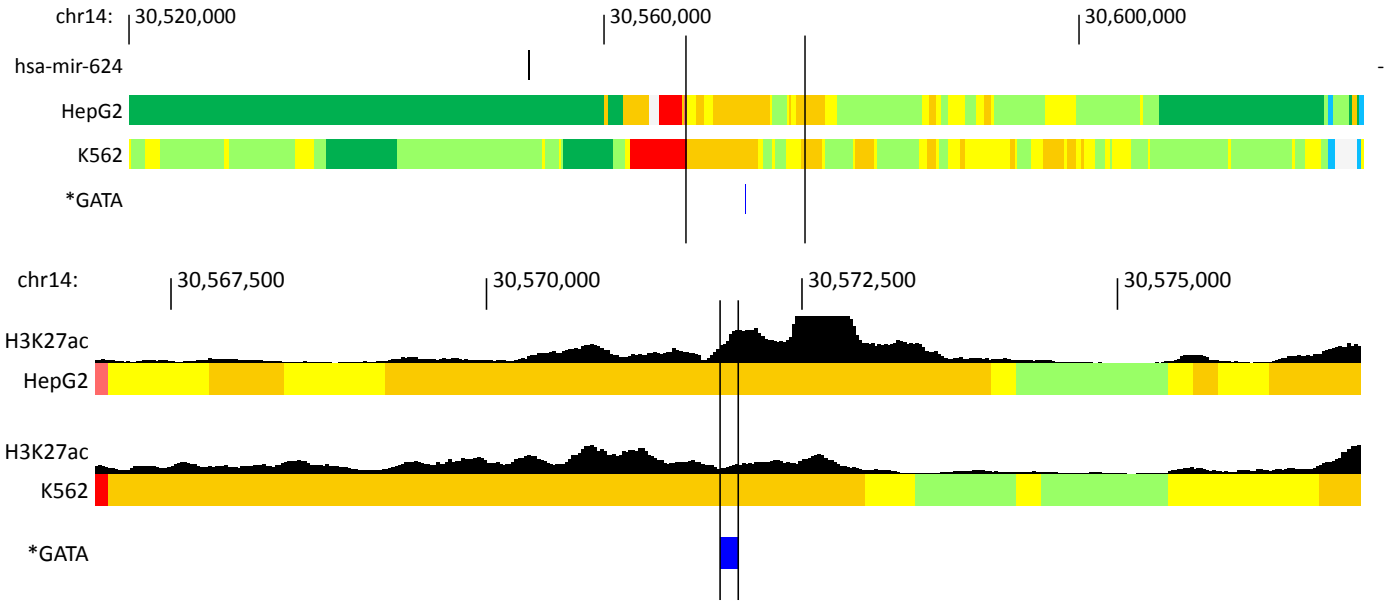
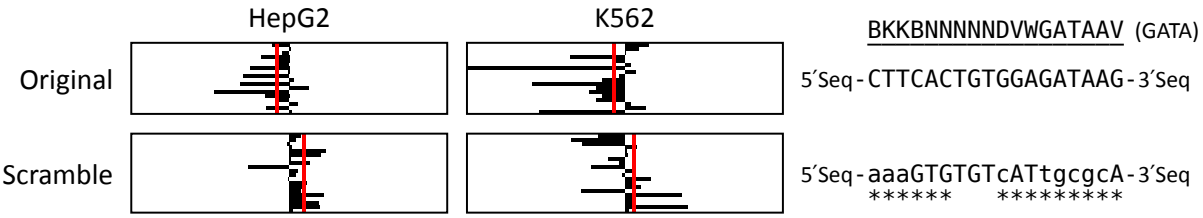
2240 GATA in HepG2 enhancer

chr14 30571915 30571932 - (hg18)





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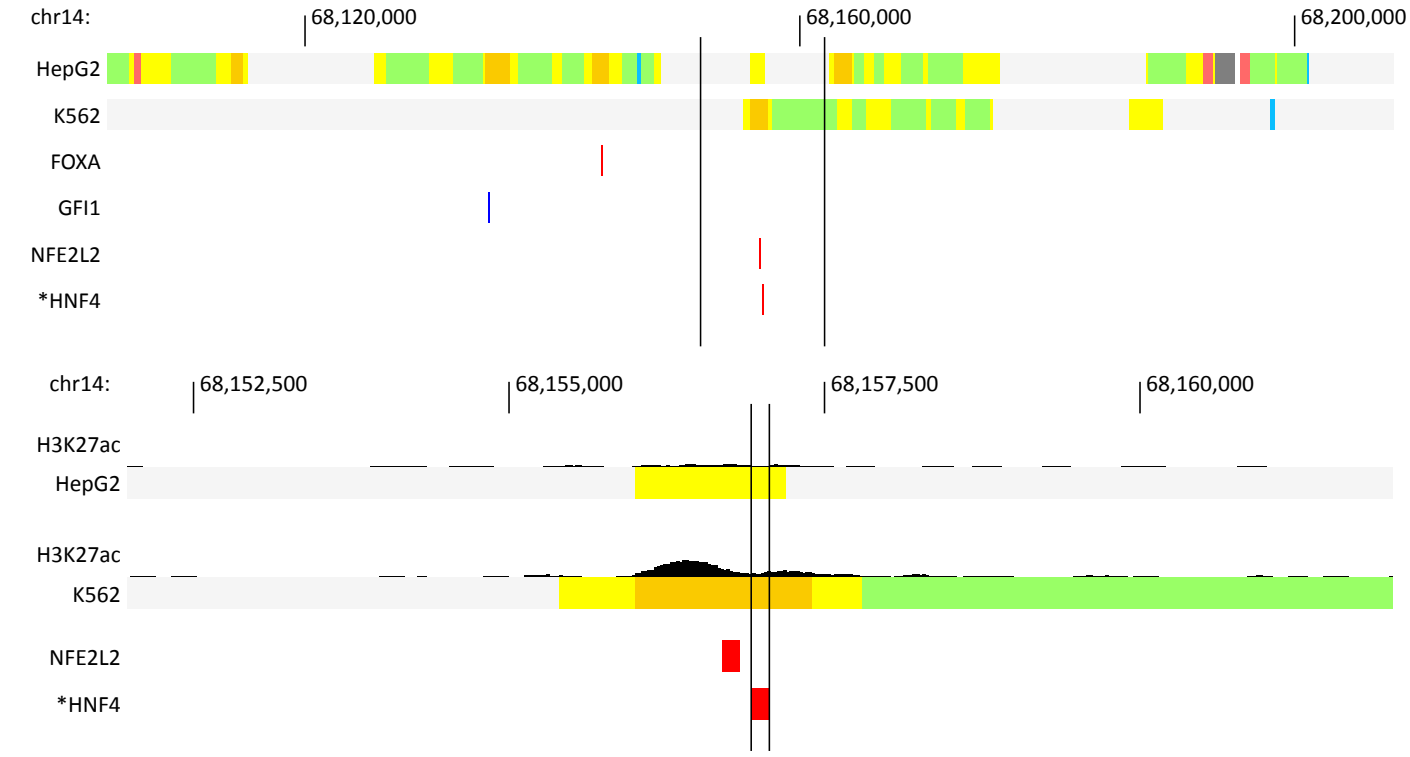
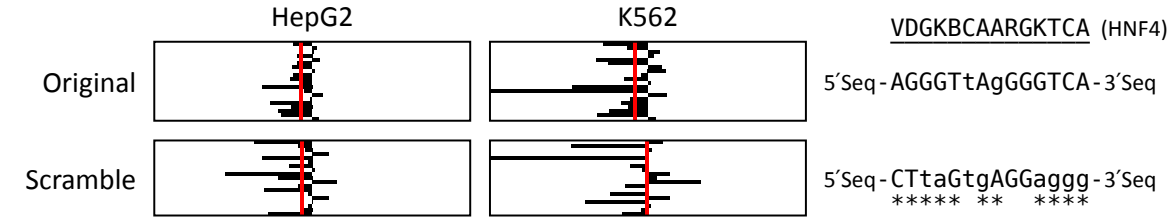
3′Seq = aatatttgttatagcctttgcagatgatgcaaaaaagatgactagattagtgtttgtgaattg

2241 HNF4 in K562 enhancer (conserved at 50% confidence)

chr14 68156985 68156998 - (hg18)





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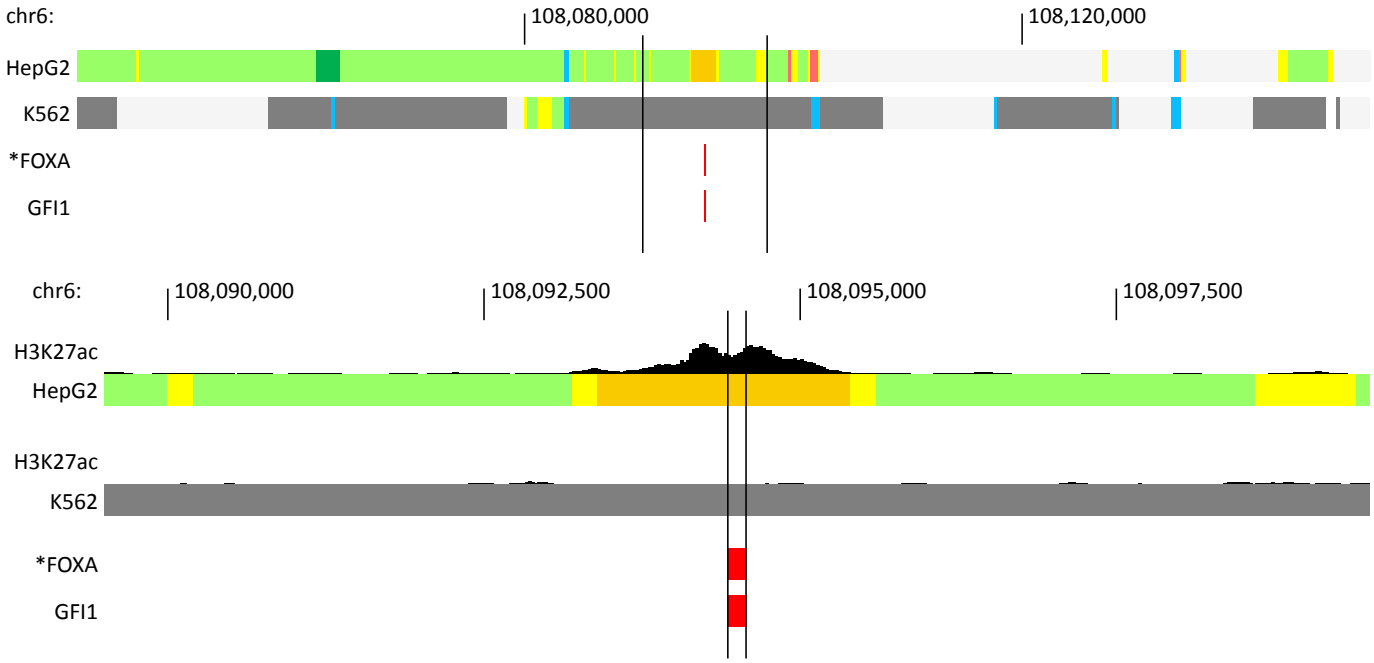
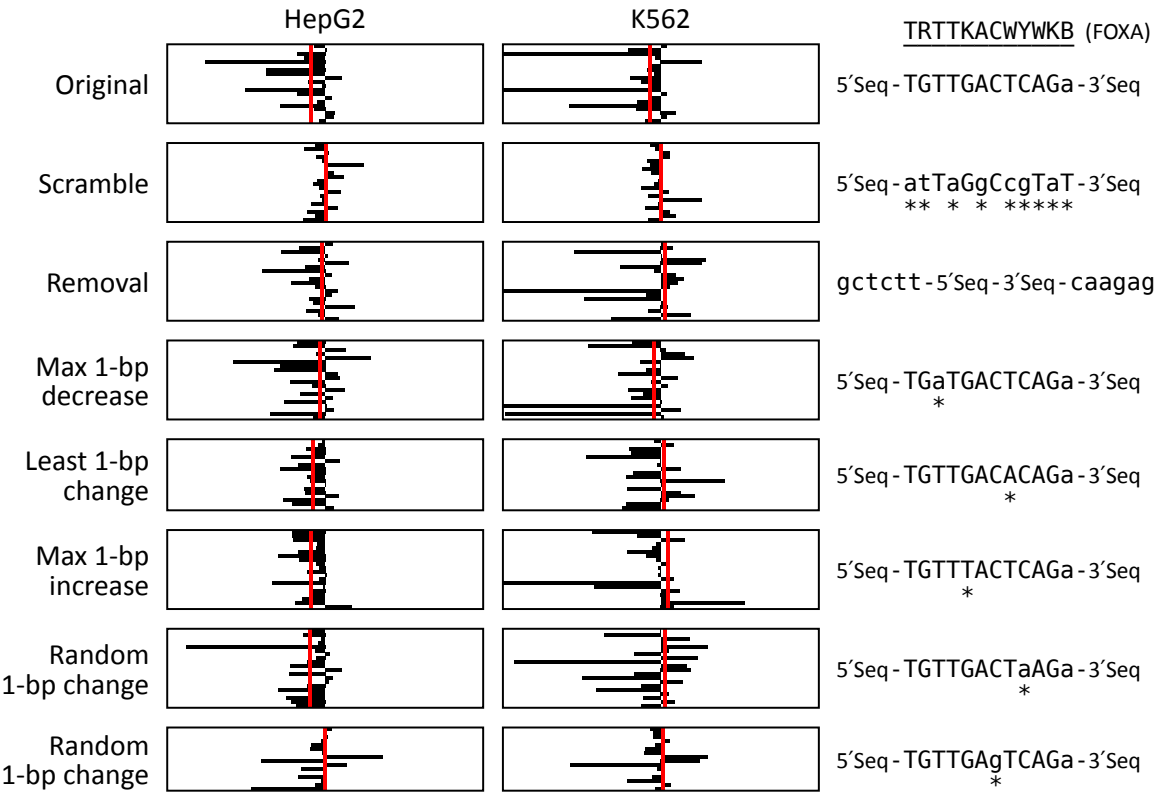
3′Seq = aaggactatactctctaagccttgaaccaataatgtgagcagctagtgcagaagtgagcaaggct

2242 FOXA in HepG2 enhancer (conserved at 50% confidence)

chr6 108094495 108094506 + (hg18)

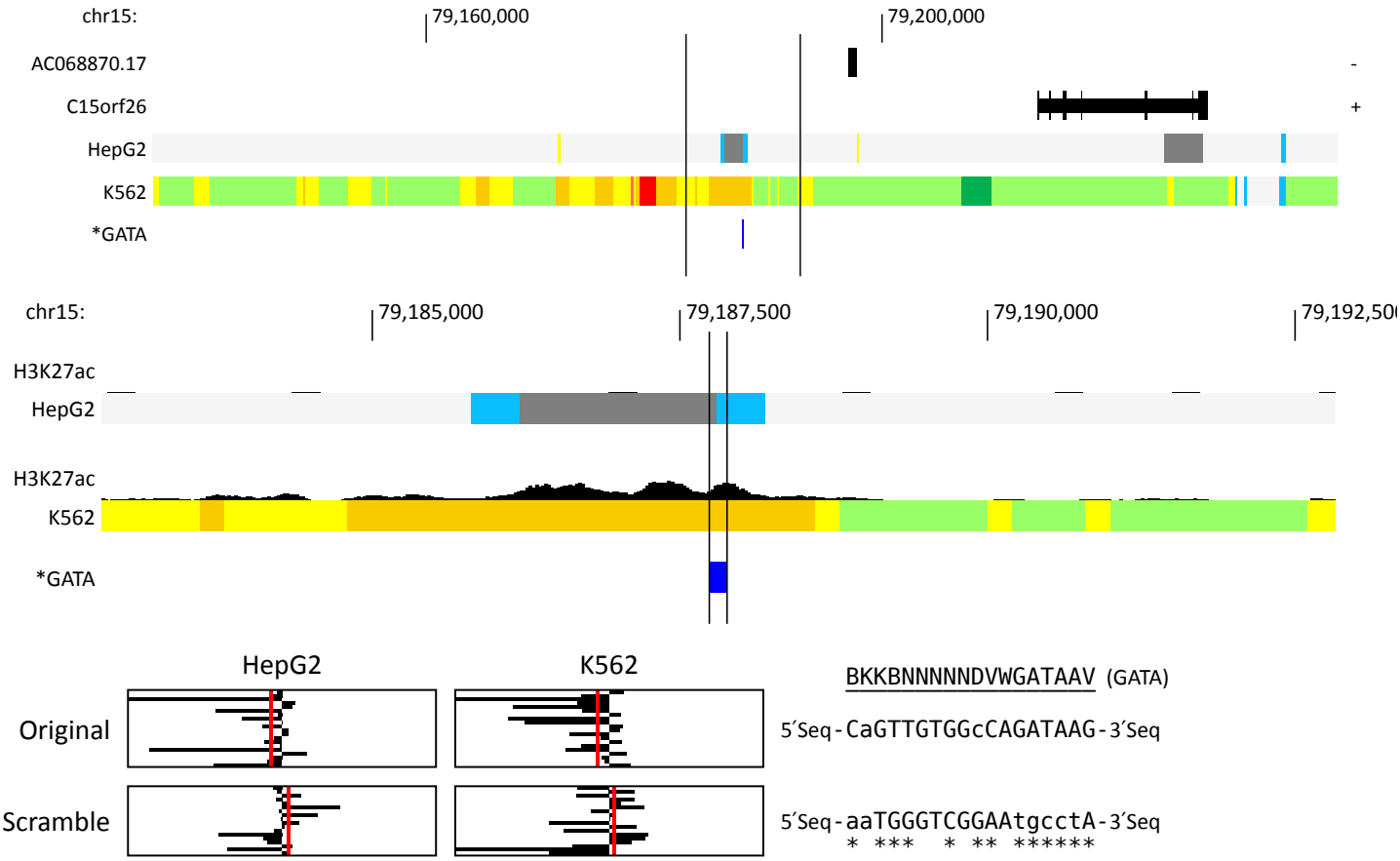




5′Seq = gtccctgctgtcagcttccaagtgcaacctgagcctggattccgaacccagtgtccagattagagat
3′Seq = tttagtggtgaaacgtgagccggactctgttgatggcaagccttgaagaagcaagtttacttaagc

2243 GATA in K562 enhancer

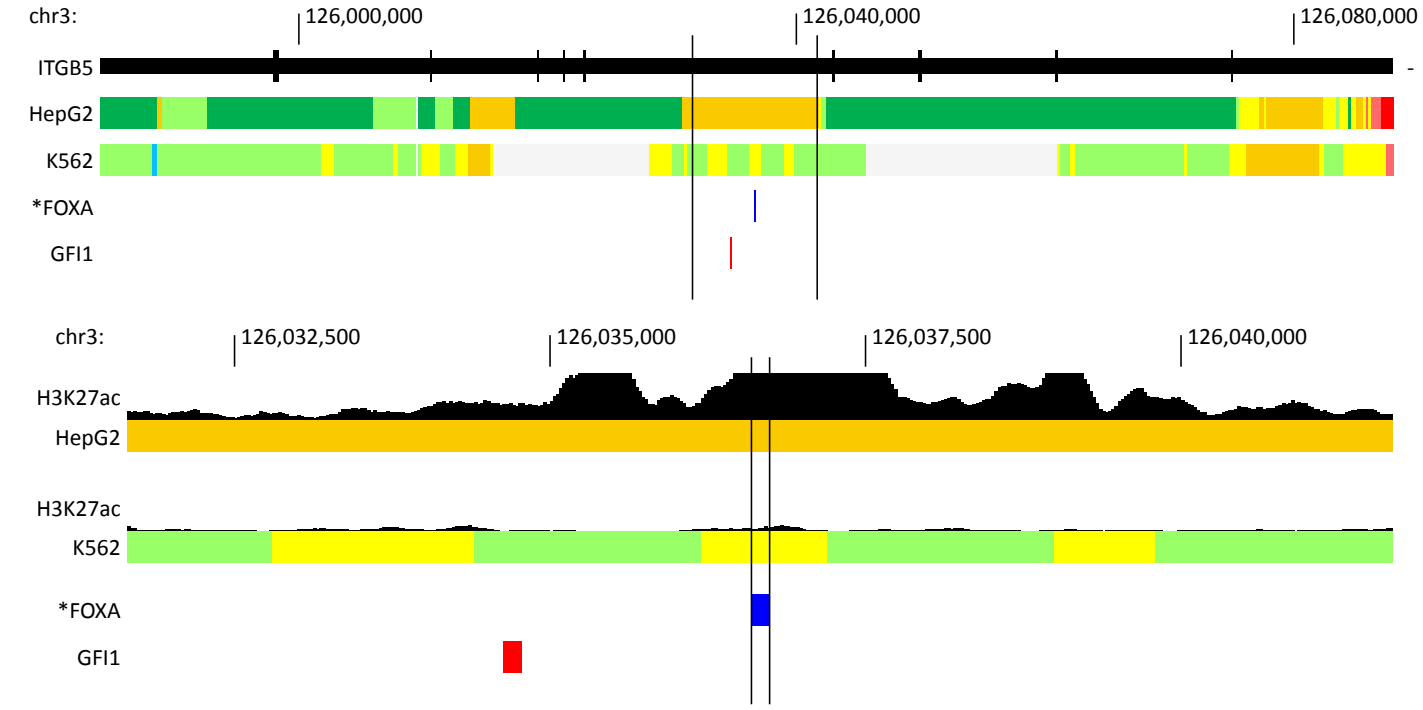
chr15 79187803 79187820 + (hg18)

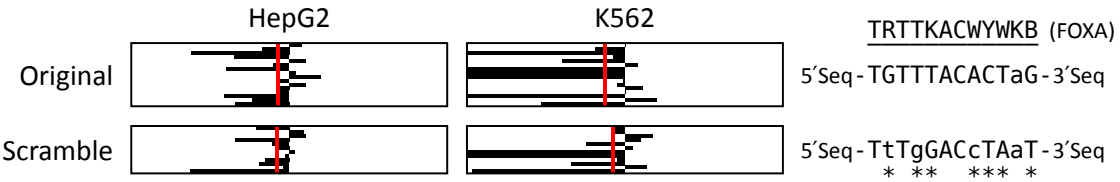


5′Seq = ttttttttttcccaaccagcaacaggagatgaatgggtcaatgagaatcagatgagtgttccca
3′Seq = gggtaggaagtagaaaaggccctggacaaaaagtcaagtgacattaattctagcccctgctct

2244 FOXA in HepG2 enhancer

chr3 126036663 126036674 + (hg18)

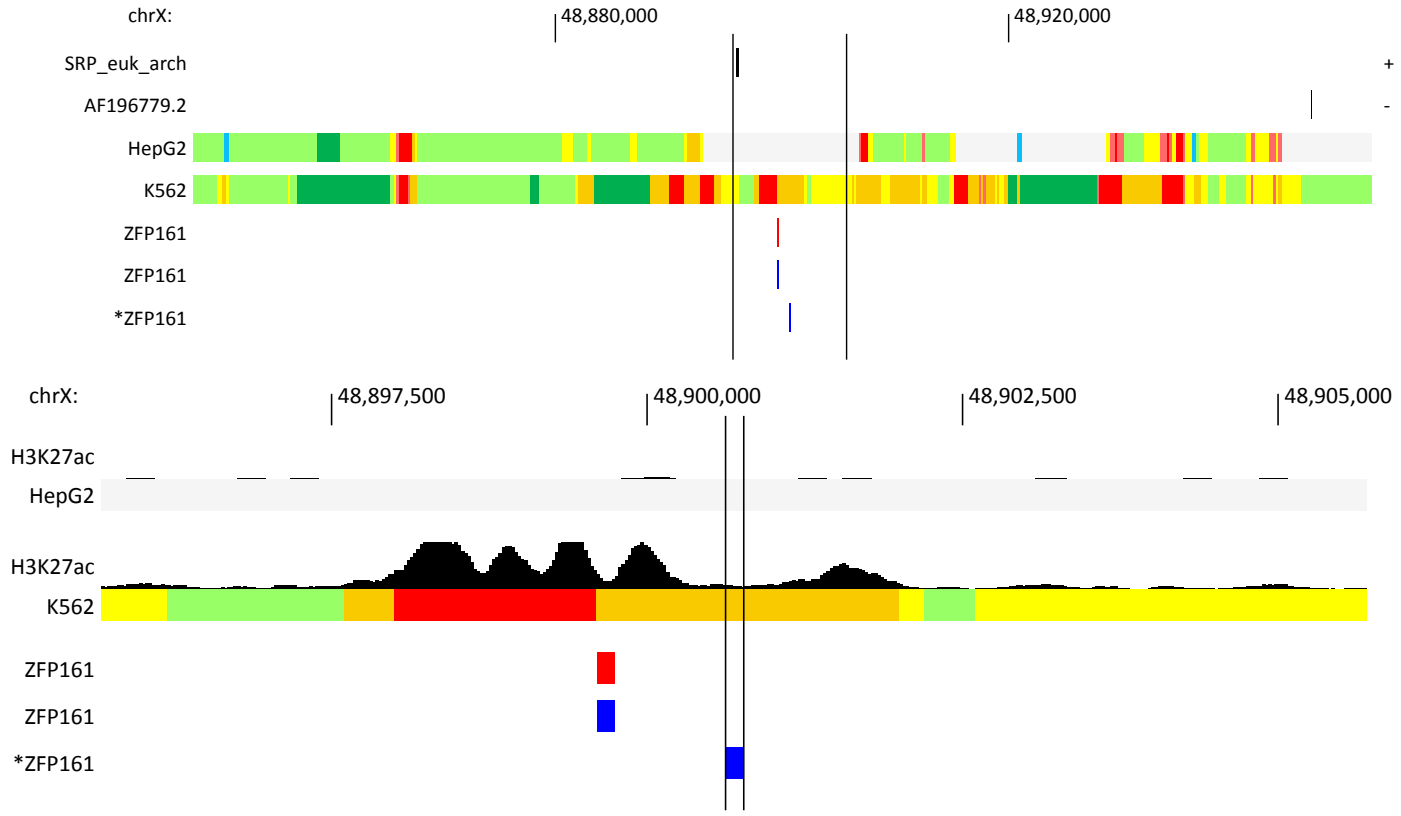


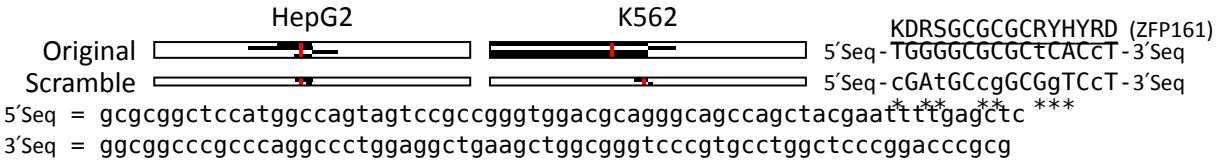


5′Seq = tcagtgaagggagccaccagcacgtgtagacacctcctaagcacaggtgcaaggcaggcacgtgact
3′Seq = agggcaaaaagaaacgcaaactctcccacgtgccctgttcacgatactgagttatgactcagccag

2245 ZFP161 in K562 enhancer

chrX 48900687 48900702 + (hg18)



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5′Seq = gcgcggctccatggccagtagtccgccgggtggacgcagggcagccagctacgaattttgagctc
3′Seq = ggcggcccgcccaggccctggaggctgaagctggcgggtcccgtgcctggctcccggacccgcg
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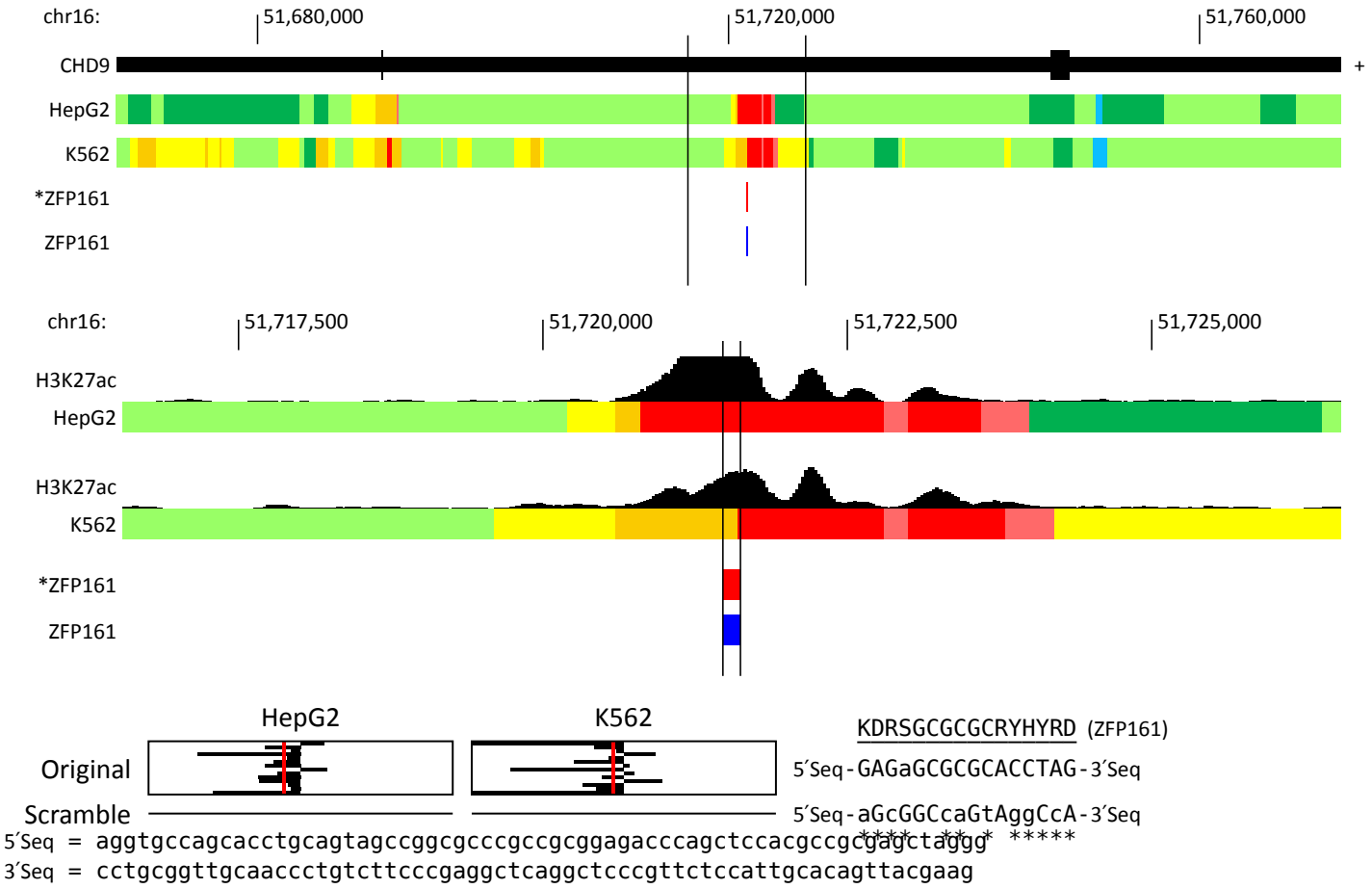
2246 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr16 51721543 51721558 - (hg18)

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5′Seq = aggtgccagcacctgcagtagccggcgcccgccgcggagacccagctccacgccgcgaggctaggg* *****
3′Seq = cctgcggttgcaaccctgtcttcccgaggctcaggctcccgttctccattgcacagttacgaag
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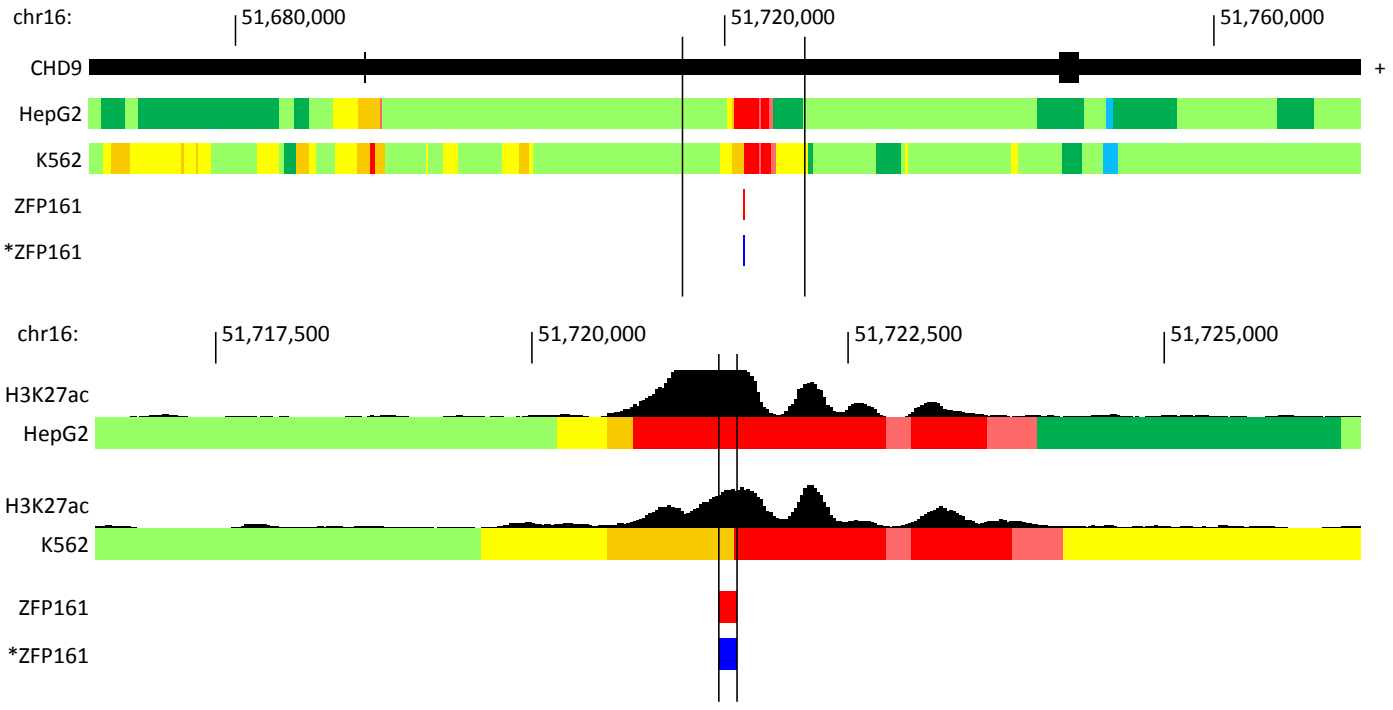
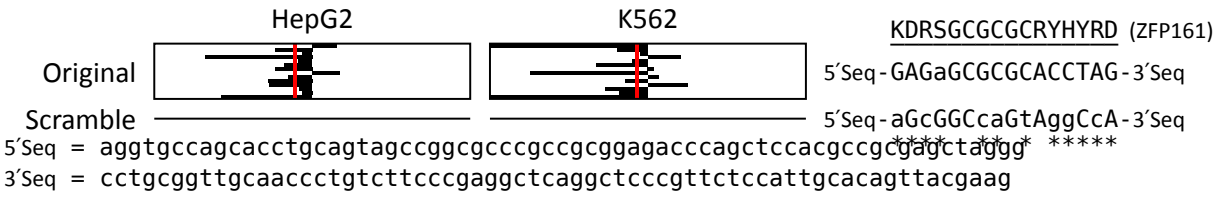
2247 ZFP161 in K562 enhancer

chr16 51721543 51721558 - (hg18)



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5′Seq = aggtgccagcacctgcagtagccggcgcccgccgcggagacccagctccacgccgcgaggctaggg* *****
3′Seq = cctgcggttgcaaccctgtcttcccgaggctcaggctcccgttctccattgcacagttacgaag
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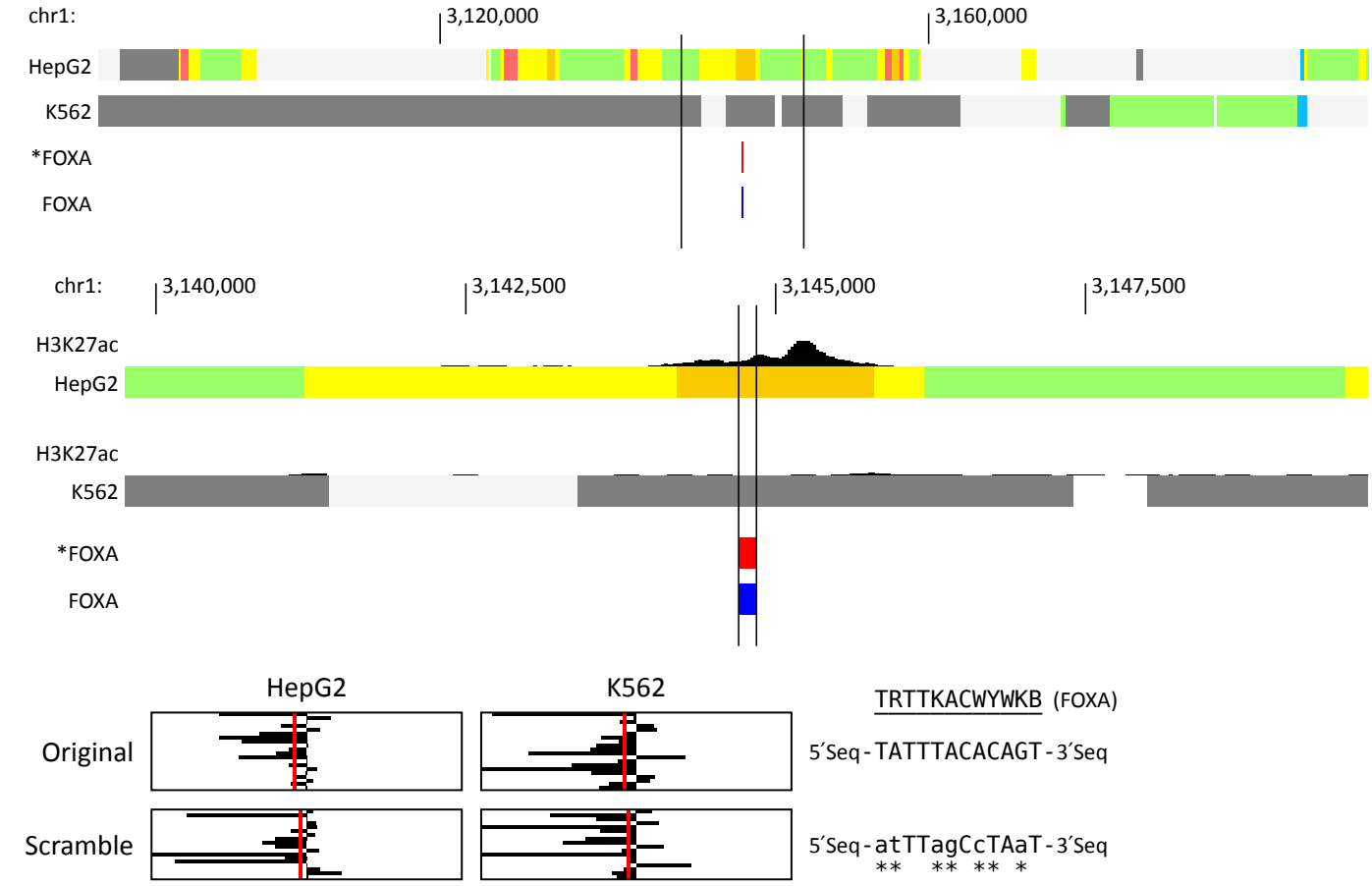
2248 FOXA in HepG2 enhancer (conserved at 40% confidence)

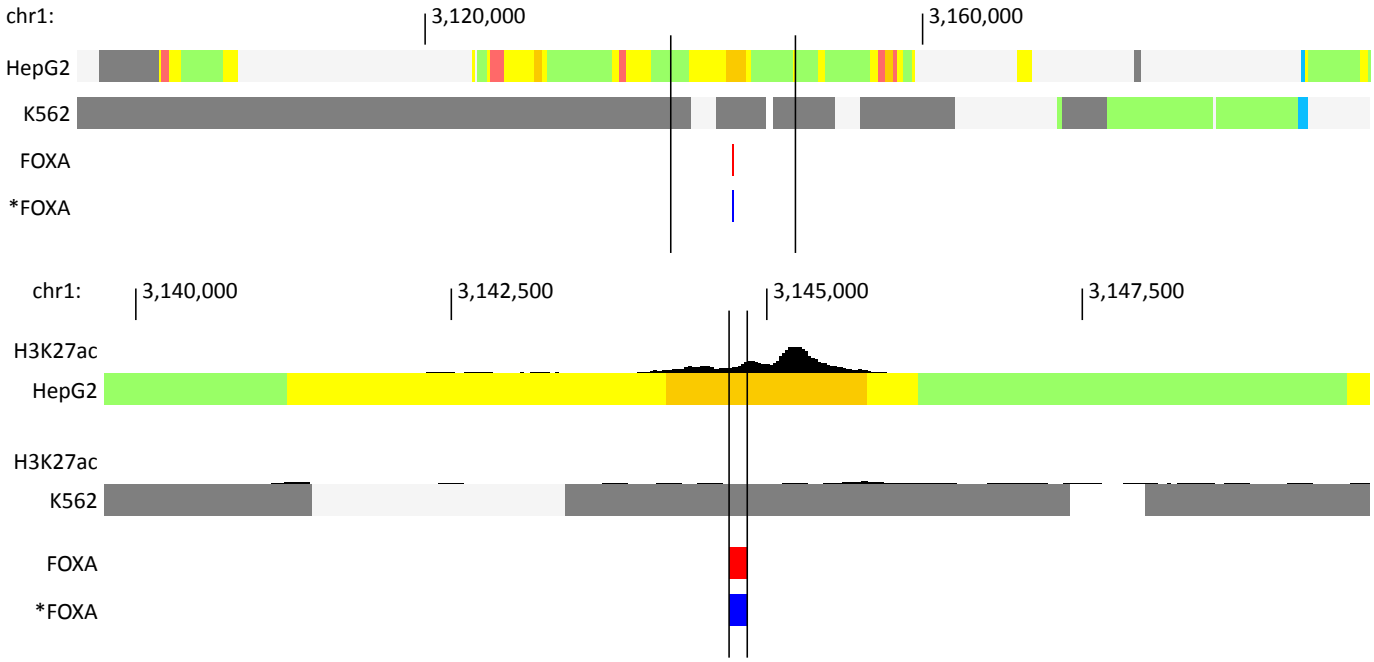
chr1 3144768 3144779 - (hg18)

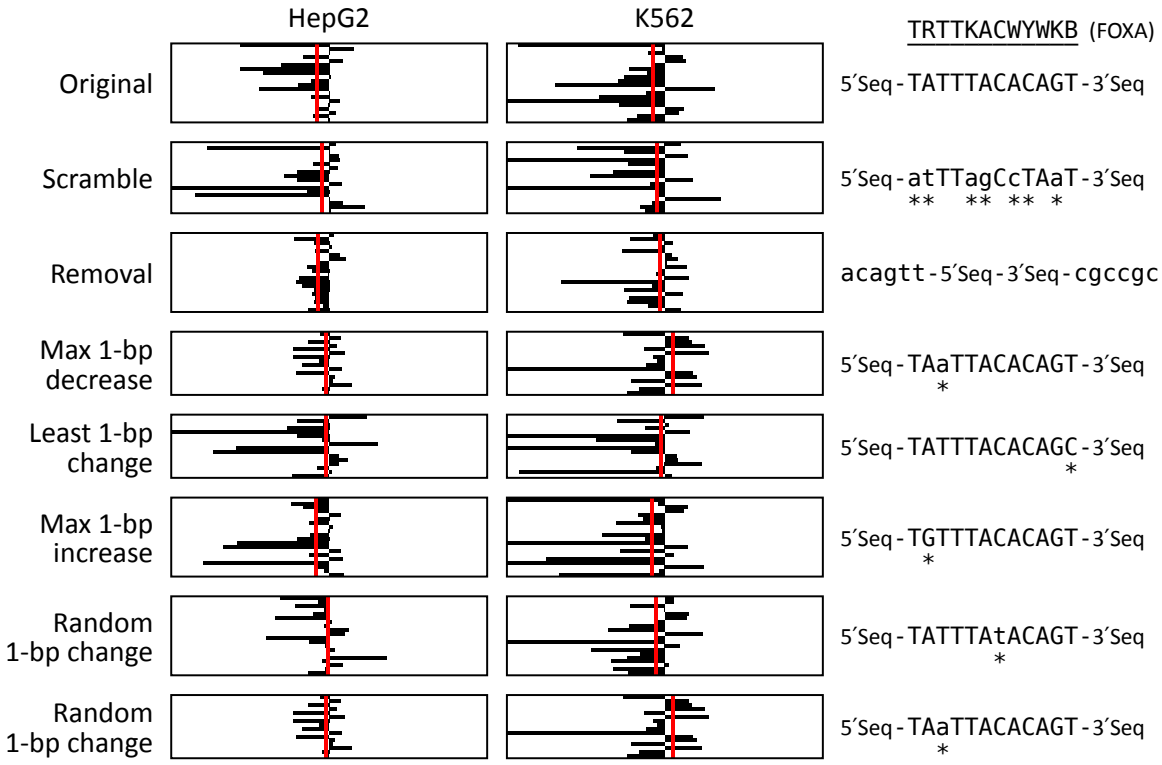


5′Seq = acttctcagttccttcaagtgagatccatccaatgaatggaggctctctctttactcctaagaaaaa
3′Seq = caagtacggcacagaaaaggaccctgggctctggagagcccgtcctgaaatgcacagaggtctcta

2249 FOXA in HepG2 enhancer

chr1 3144768 3144779 - (hg18)



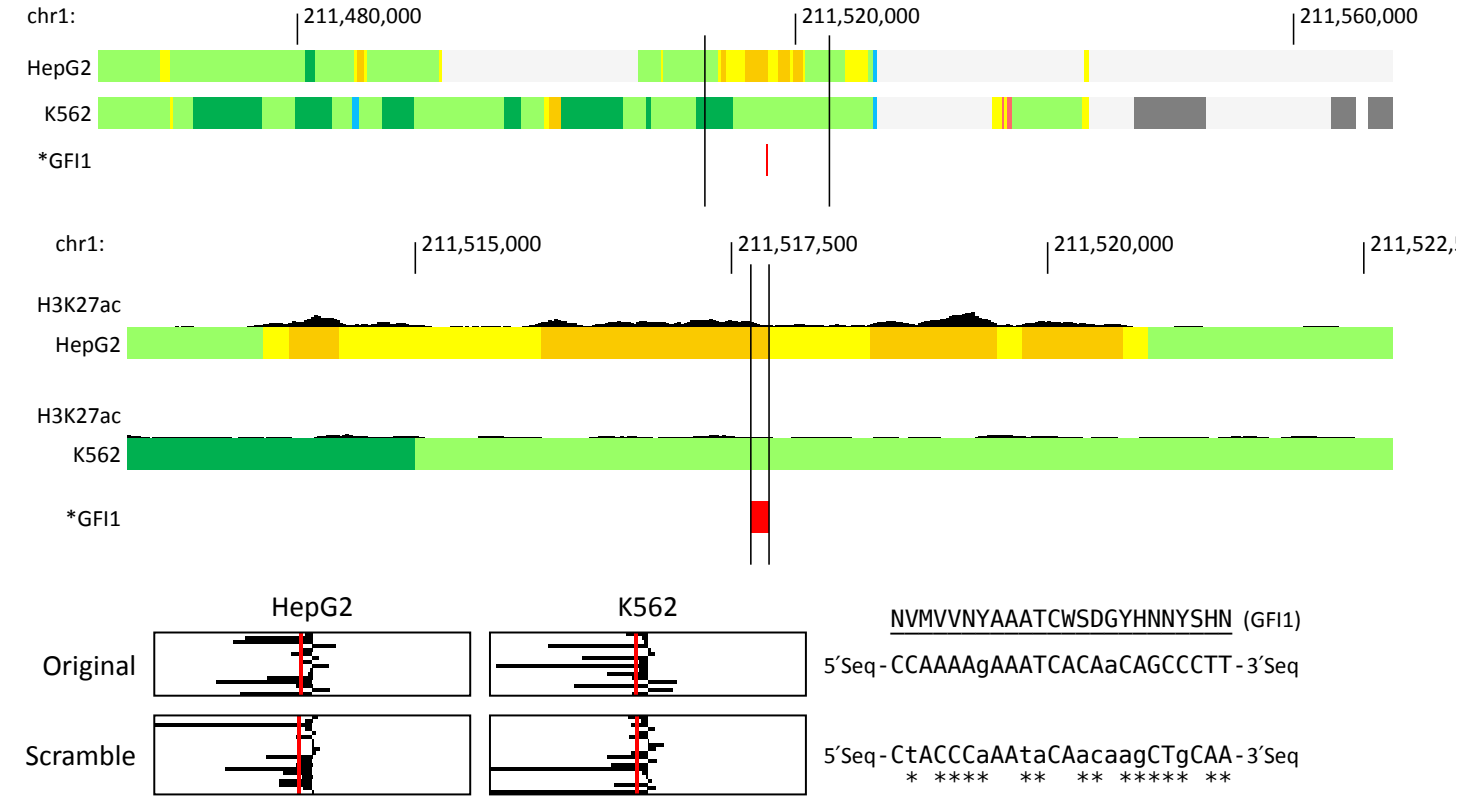


5′Seq = acttctcagttccttcaagtgagatccatccaatgaatggaggctctctctttactcctaagaaaaa

3′Seq = caagtacggcacagaaaaggaccctgggctctggagagcccgtcctgaaatgcacagaggtctcta

2250 GFI1 in HepG2 enhancer (conserved at 40% confidence)

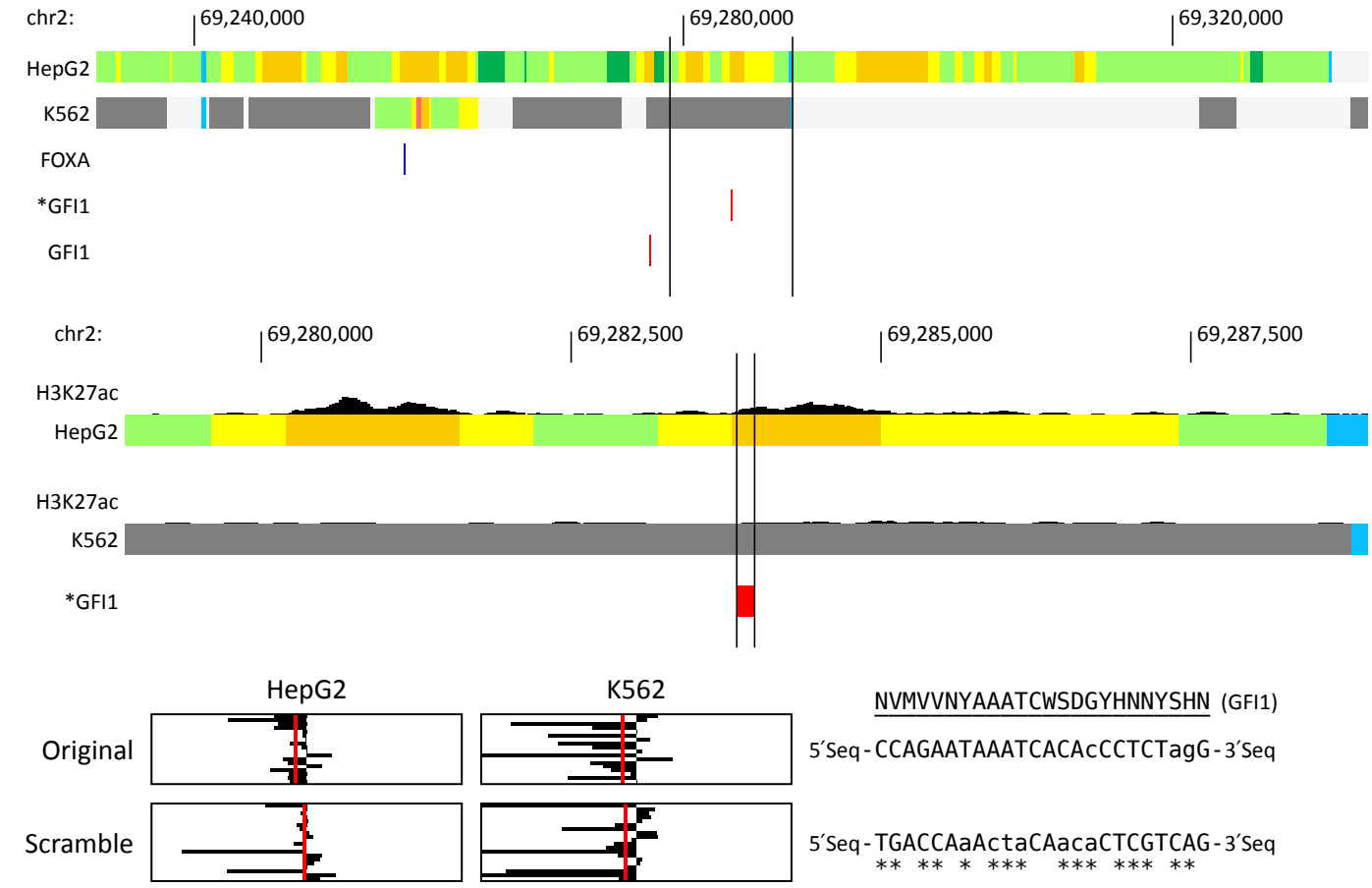
chr1 211517714 211517737 - (hg18)



5′Seq = atgtaccccaaagctggctcatttgtcattctttcctaccacattaaagaggcattcctgc
3′Seq = cgcaaacactcatggcctctgccttaactaccagttgtaccagctgtctttagcaaggag

2251 GFI1 in HepG2 enhancer (conserved at 40% confidence)

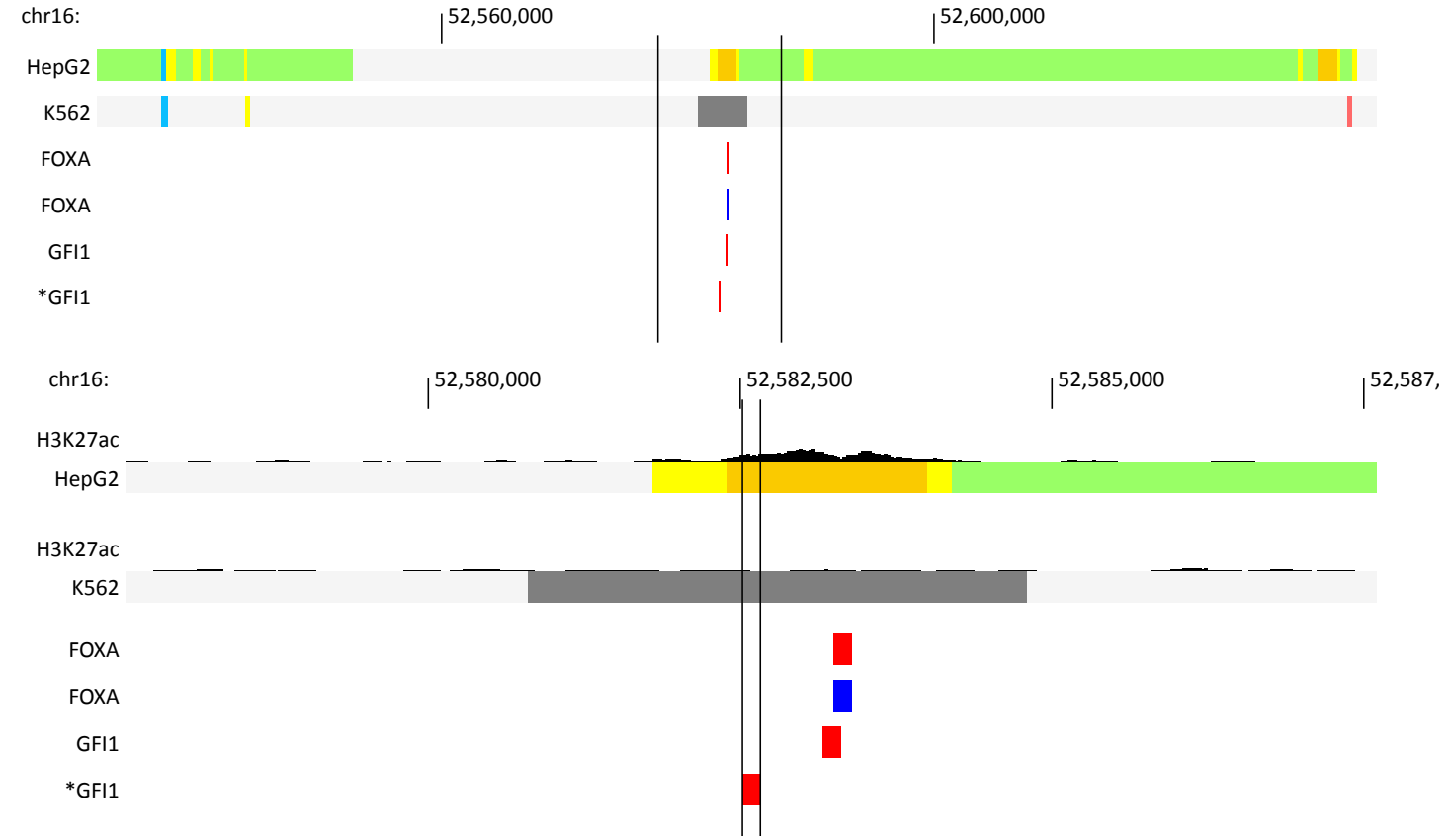
chr2 69283897 69283920 - (hg18)

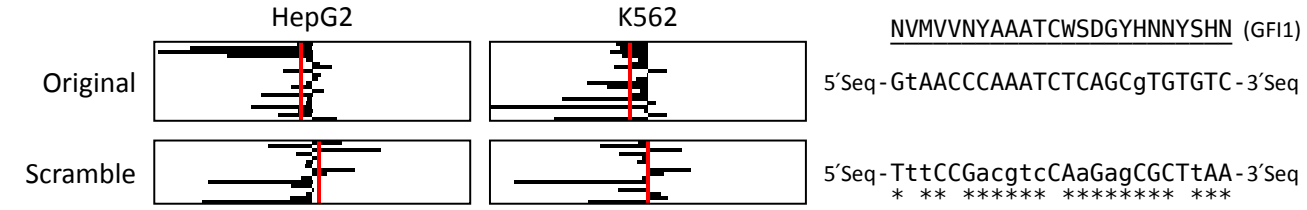


5′Seq = ccaagggtgagaactgaatgaatactacagagaattcaaacatccagggaagatggctgtg
3′Seq = aacatttcctataatttgctctttttttcttccttttttcttaaaatgatccgtttcttaca

2252 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr16 52582579 52582602 + (hg18)





NVMVVNYAAATCWSDGYHNNYSHN (GFI1)

5′Seq-GtAACCCAAATCTCAGCgTGTGTC-3′Seq

5′Seq-TttCCGacgtcCAaGagCGCTtAA-3′Seq

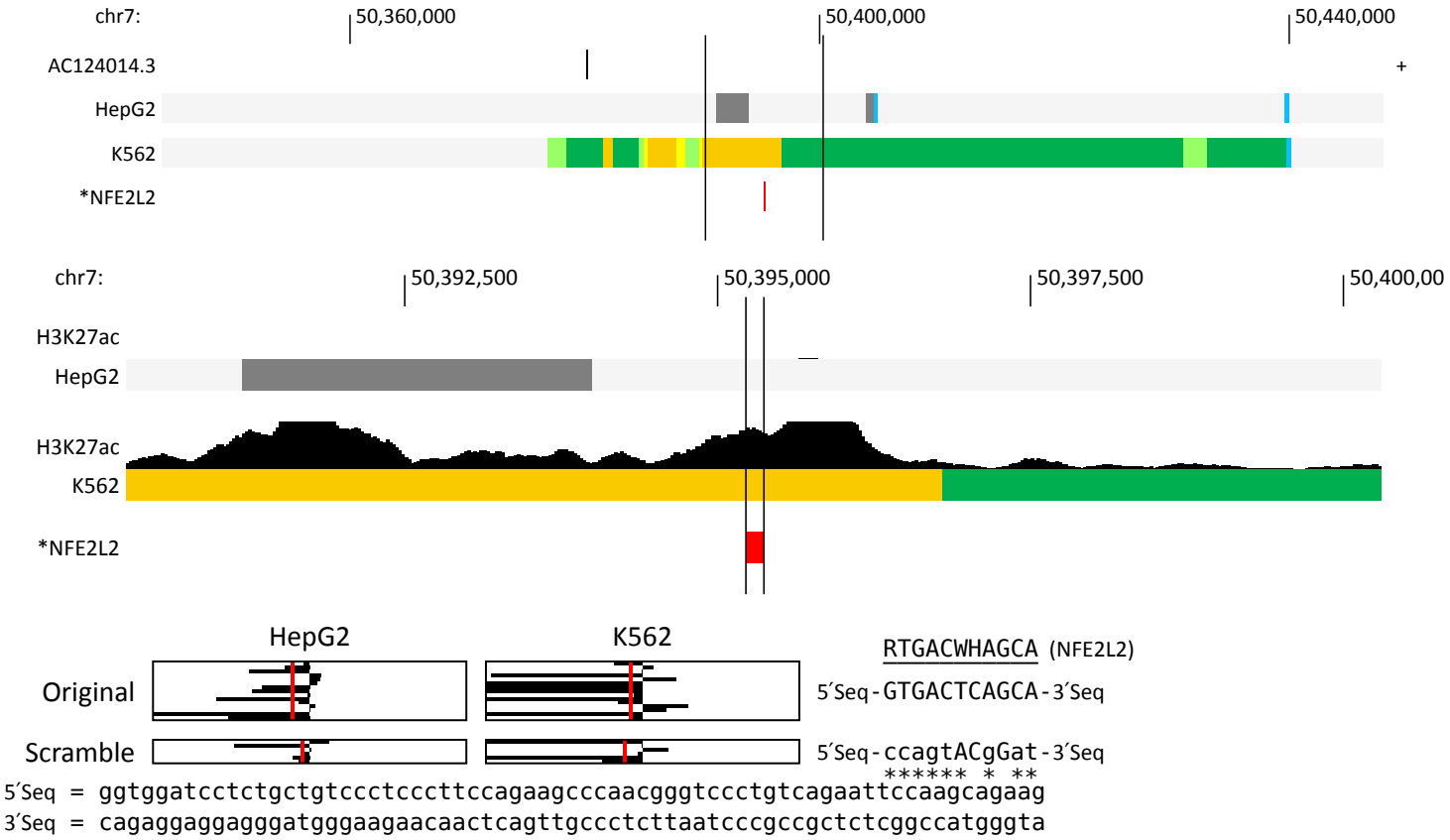
* ** ****** ******** ***

5′Seq = taagttgtatttcttcatgactcactgccataggaagaccacccaaaacataccctcttct

3′Seq = cttattttccttgttttcagcatgtccaagtgaagccattaagtaggtaatatactgtta

2253 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr7 50395293 50395303 - (hg18)



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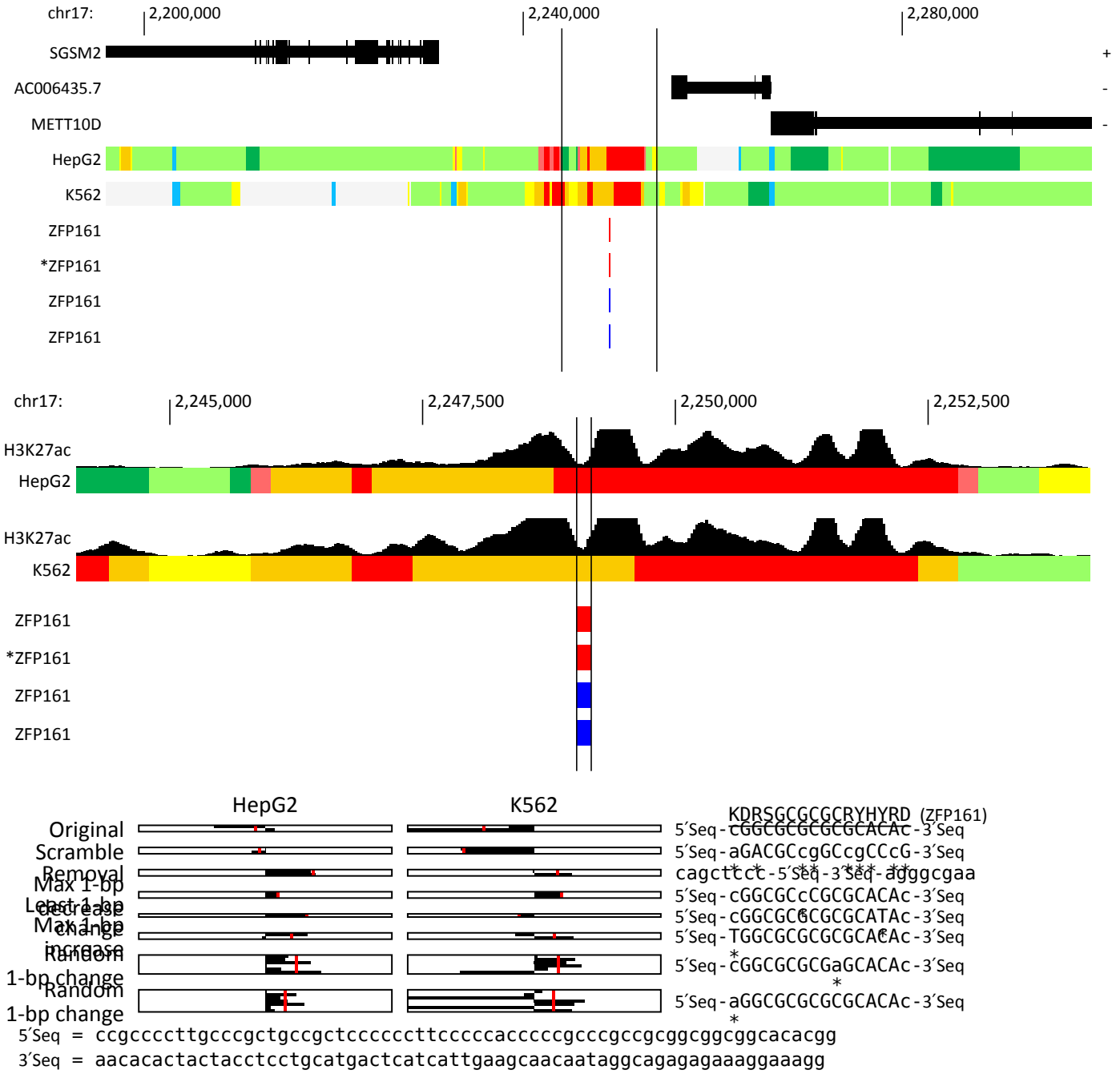
3′Seq = cagaggaggagggatgggaagaacaactcagttgccctcttaatcccgccgctctcggccatgggta

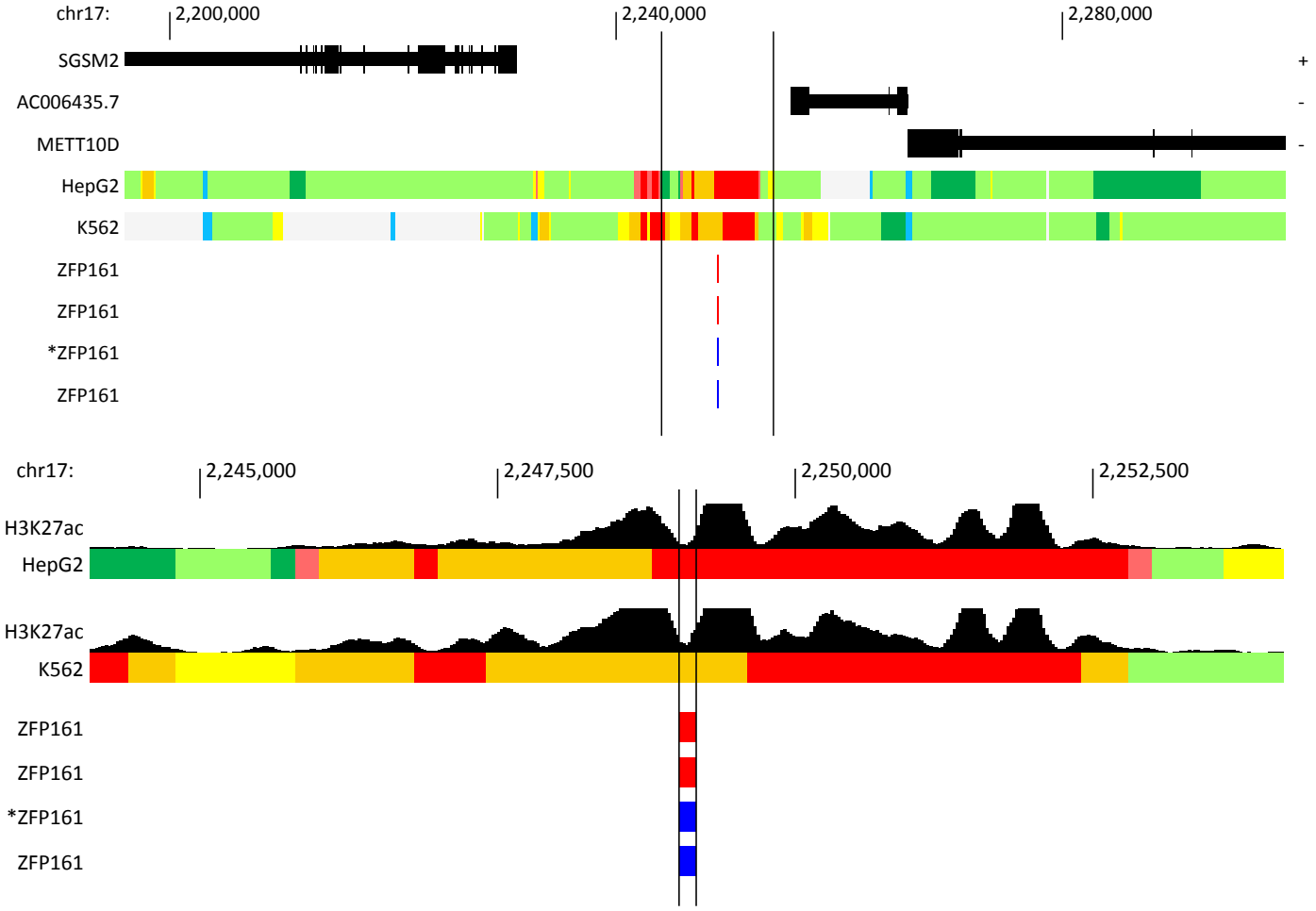
2254 ZFP161 in K562 enhancer (conserved at 50% confidence)

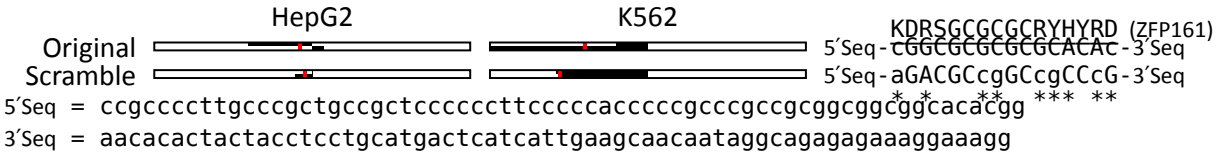
chr17 2249089 2249104 + (hg18)



2255 ZFP161 in K562 enhancer

chr17 2249089 2249104 + (hg18)



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5′Seq = ccgccccttgcccgctgccgctcccccttcccccaccccgcccgccgcggcggcggcacacgg *  *  ** *** **
3′Seq = aacacactactacctcctgcatgactcatcattgaagcaacaataggcagagagaaaggaaagg
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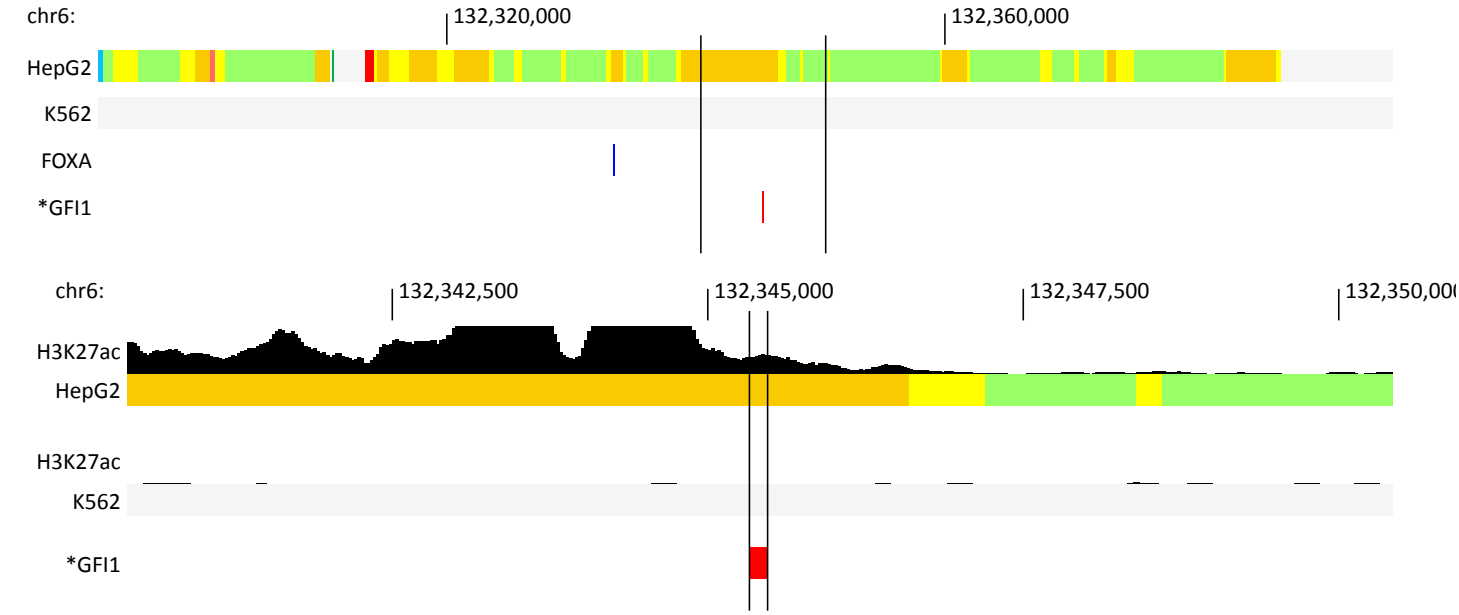
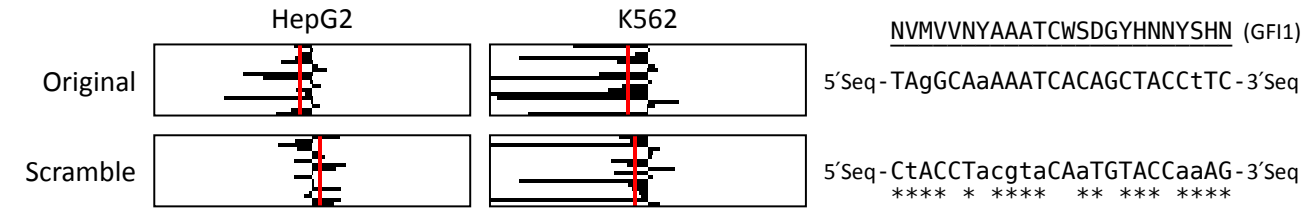
2256 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr6 132345391 132345414 - (hg18)





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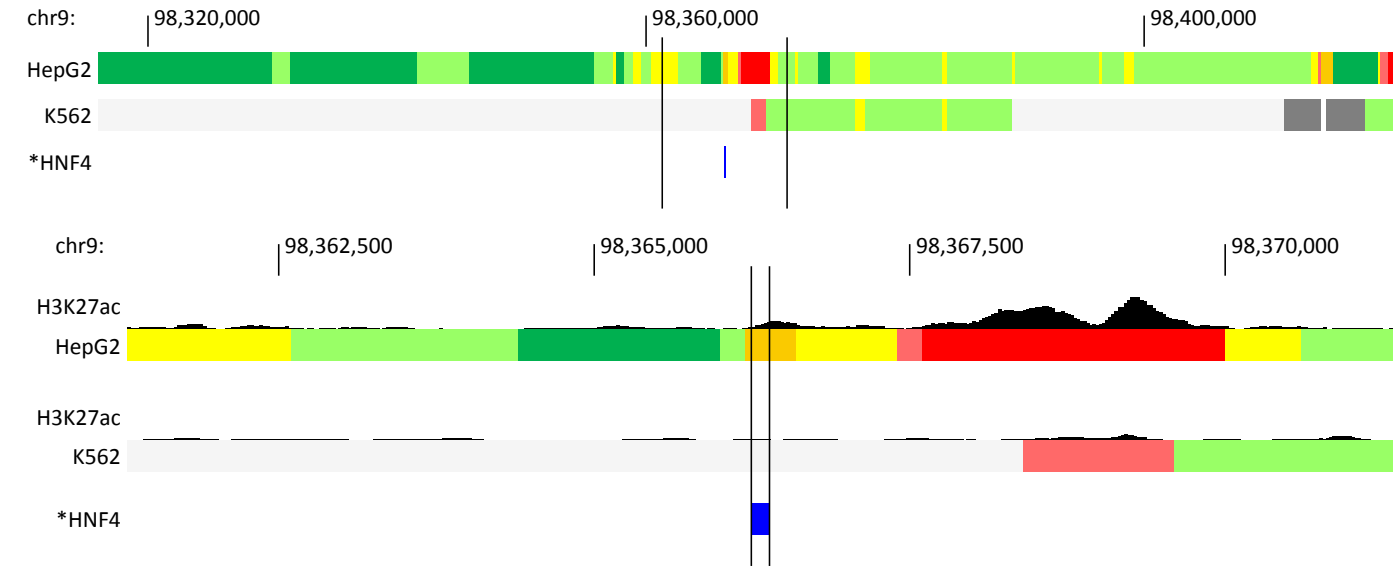
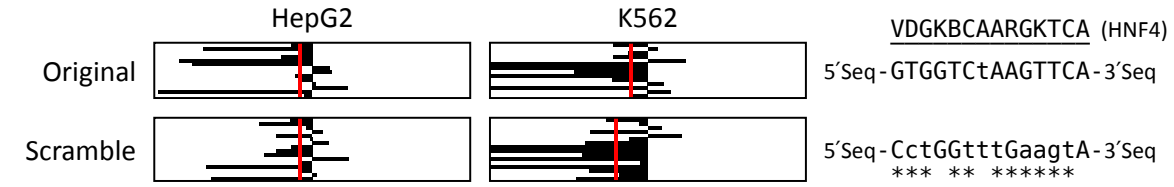
3′Seq = aacagcgttgataataataacgcttcatgggaagagtgtggaattgctaaaaacacaaca

2257 HNF4 in HepG2 enhancer

chr9 98366311 98366324 + (hg18)

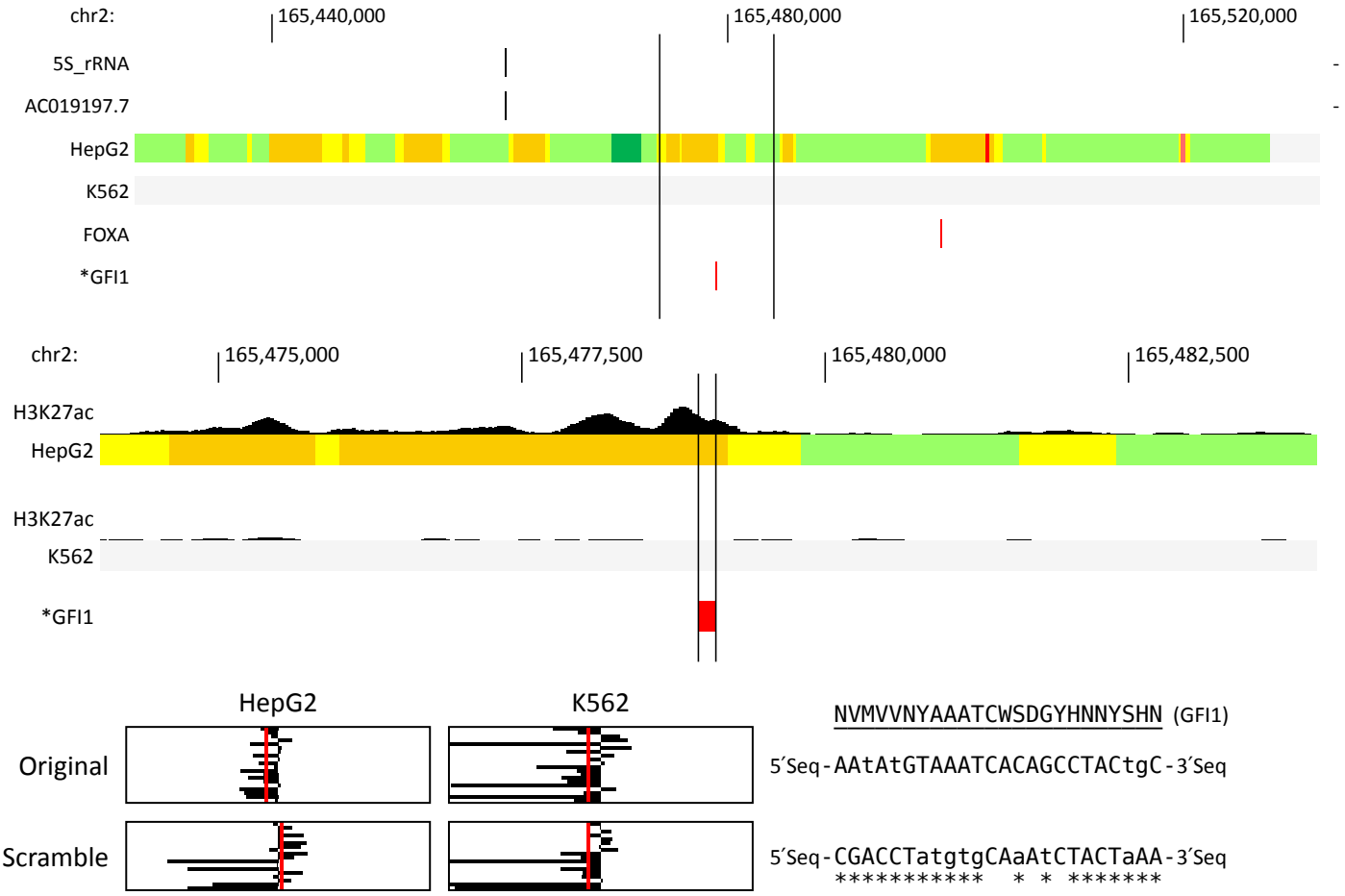




5′Seq = gtaagcagtacatacataacttcctaccgtgcatggccaacaattcagtgttttacatacatgaat
3′Seq = aaccaatacaaatatacttgtgtaactctcagtaatacagccttaatgacatgcttatttgccct

2258 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 165479016 165479039 + (hg18)



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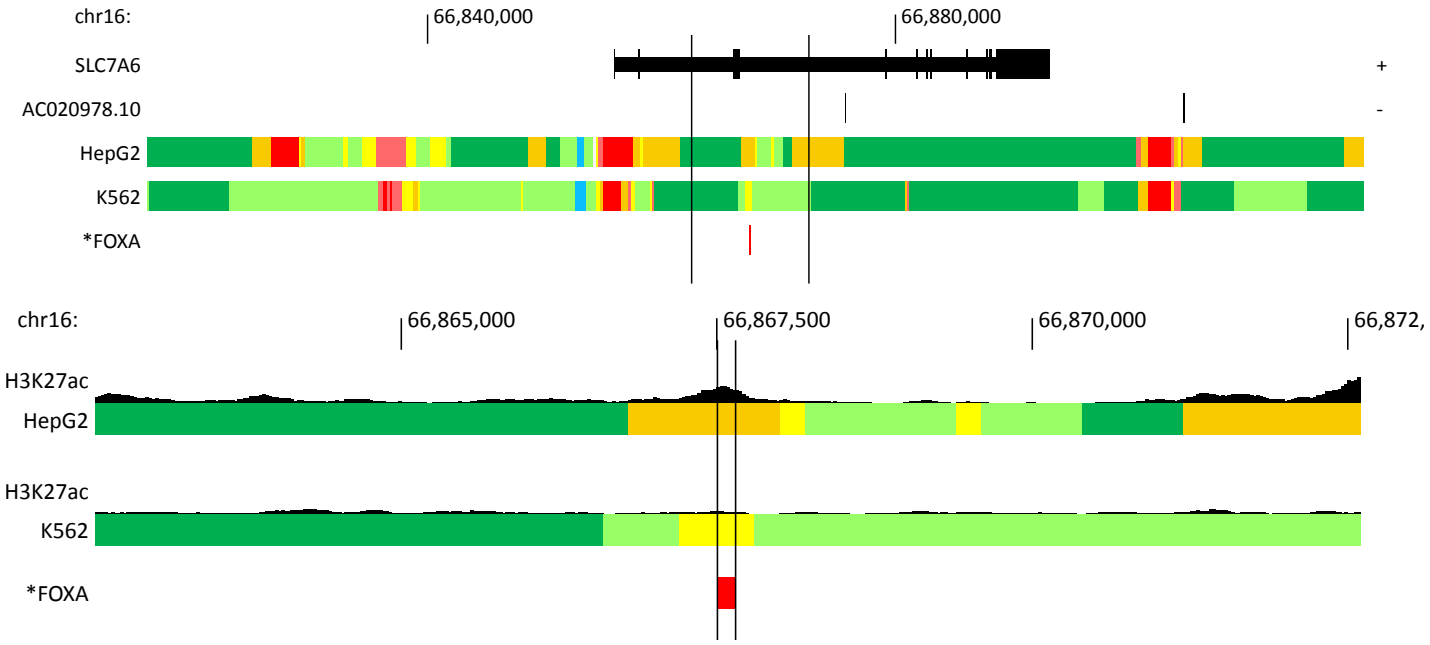
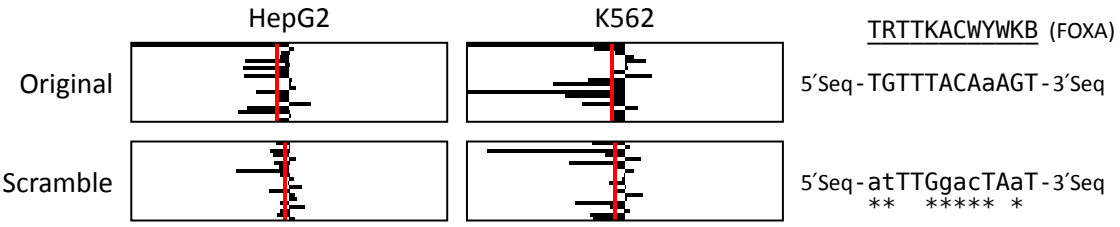
3′Seq = tggactgccctgactactacactacactgatgattgaatgtaagggtcaagggaagtaga

2259 FOXA in HepG2 enhancer (conserved at 40% confidence)

chr16 66867572 66867583 - (hg18)





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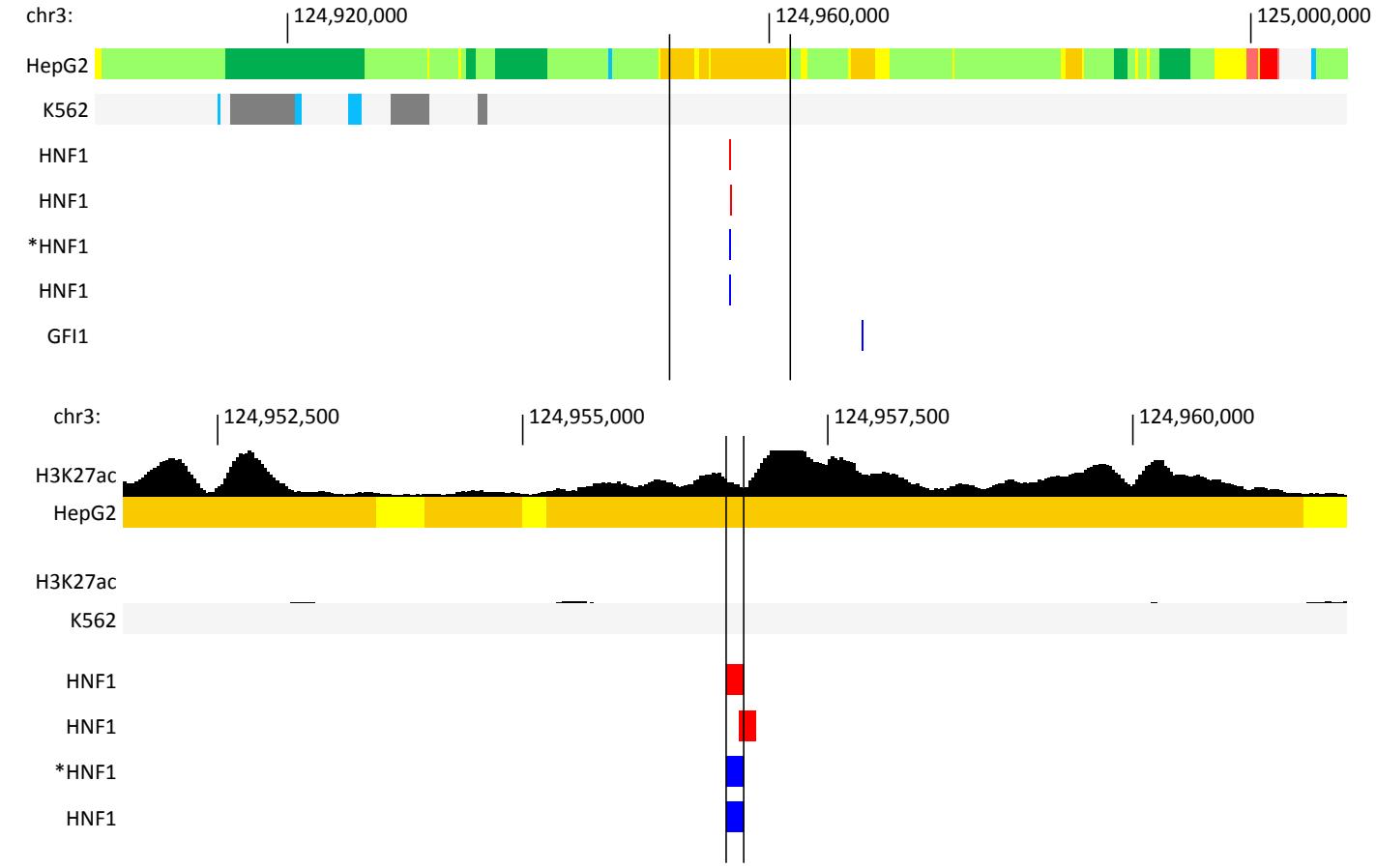
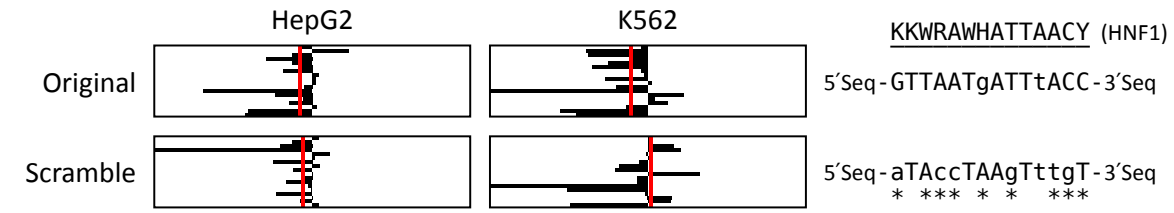
3′Seq = cagtgtaaagaagtctgatacactaggaagaaaaggtgttttgttgtacctgctgctcagagcaag

2260 HNF1 in HepG2 enhancer

chr3 124956733 124956746 - (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GTTAATgATTtACC-3′Seq

5′Seq-aTAccTAAgTttgT-3′Seq

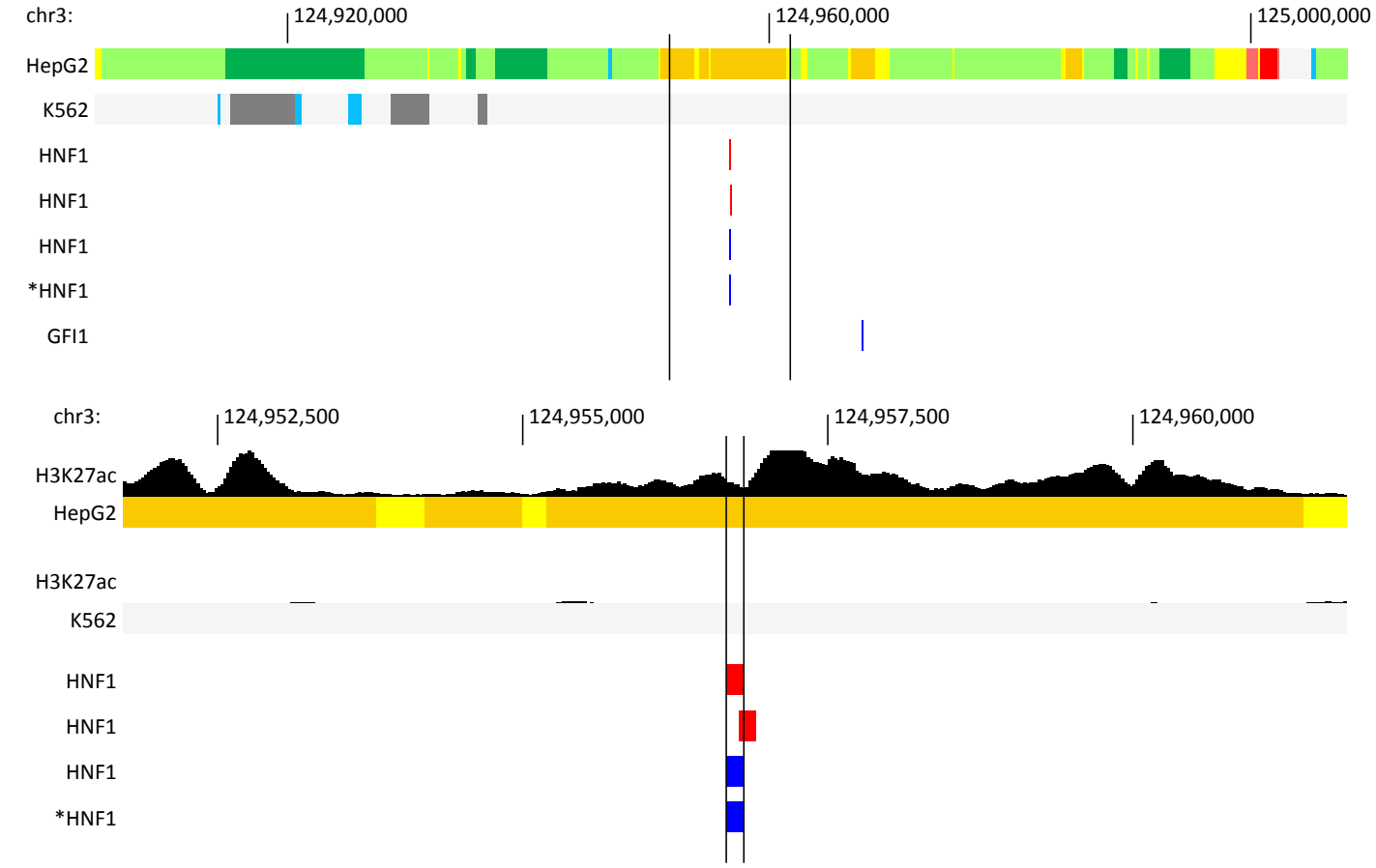
* *** * * ***

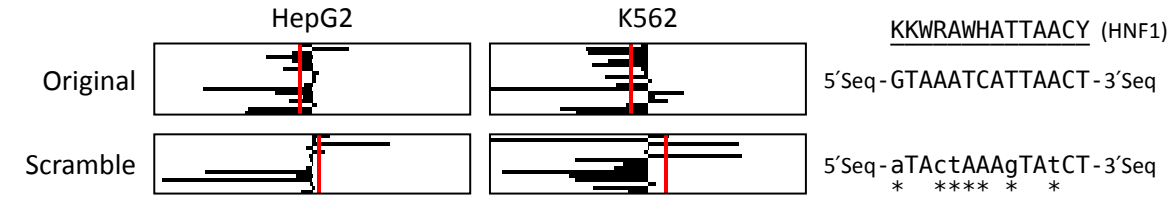
5′Seq = cagagctggccctgctgcaggggccagtatgcttgctaatggaatgccaggacgcctttggcgca

3′Seq = tcctcctagttgcagtgcttggcactcccattctctgaagctgatagaagcctgggtagaccagc

2261 HNF1 in HepG2 enhancer

chr3 124956734 124956747 + (hg18)





KKWRAWHATTAACY (HNF1)

5′Seq-GTAAATCATTAACT-3′Seq

5′Seq-aTActAAAgTAtCT-3′Seq

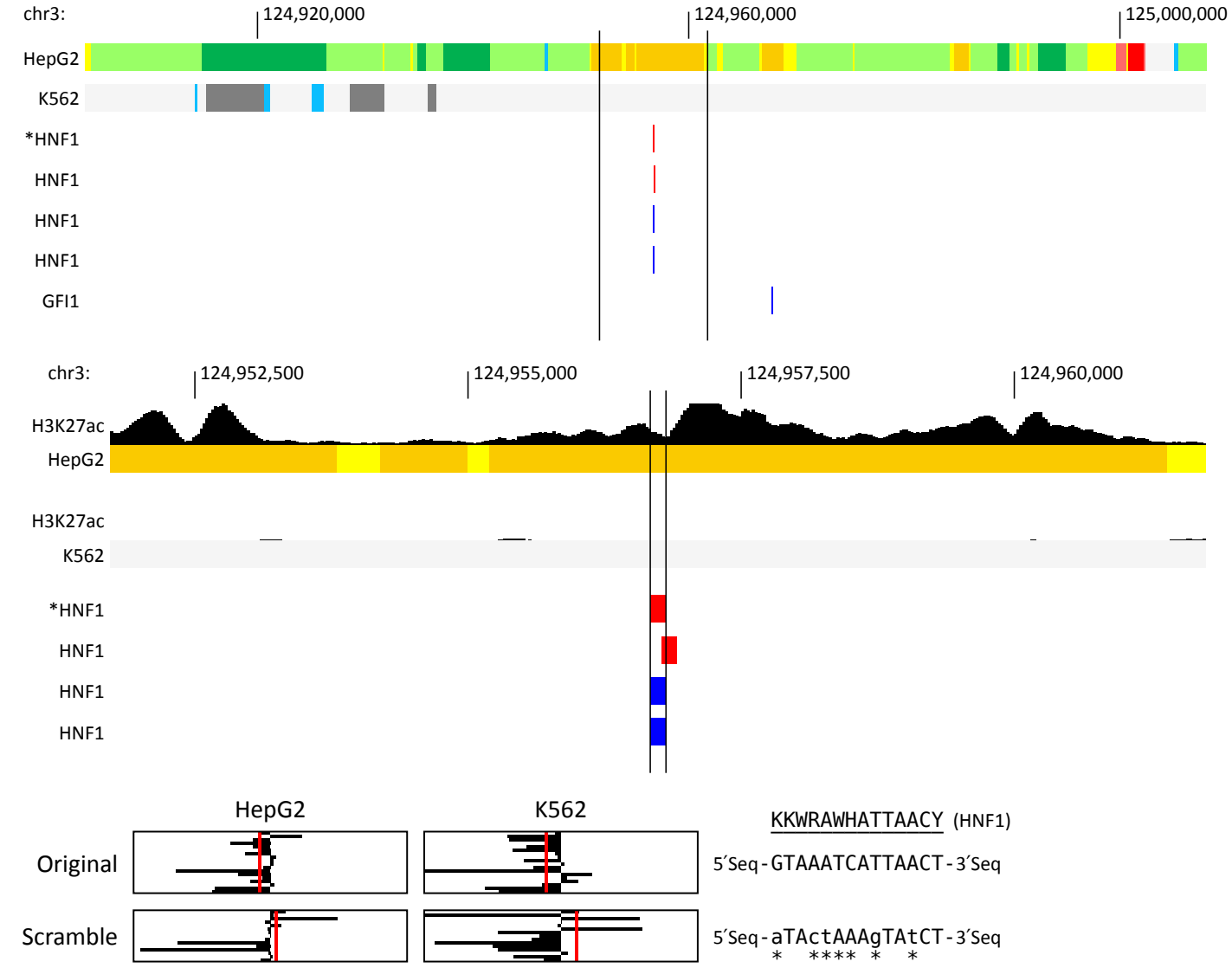
* **** * *

5′Seq = gctggtctacccaggcttctatcagcttcagagaatgggagtgccaagcactgcaactaggaggag

3′Seq = gcgccaaaggcgtcctggcattccattagcaagcatactggccccctgcagcagggccagctctg

2262 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr3 124956734 124956747 + (hg18)



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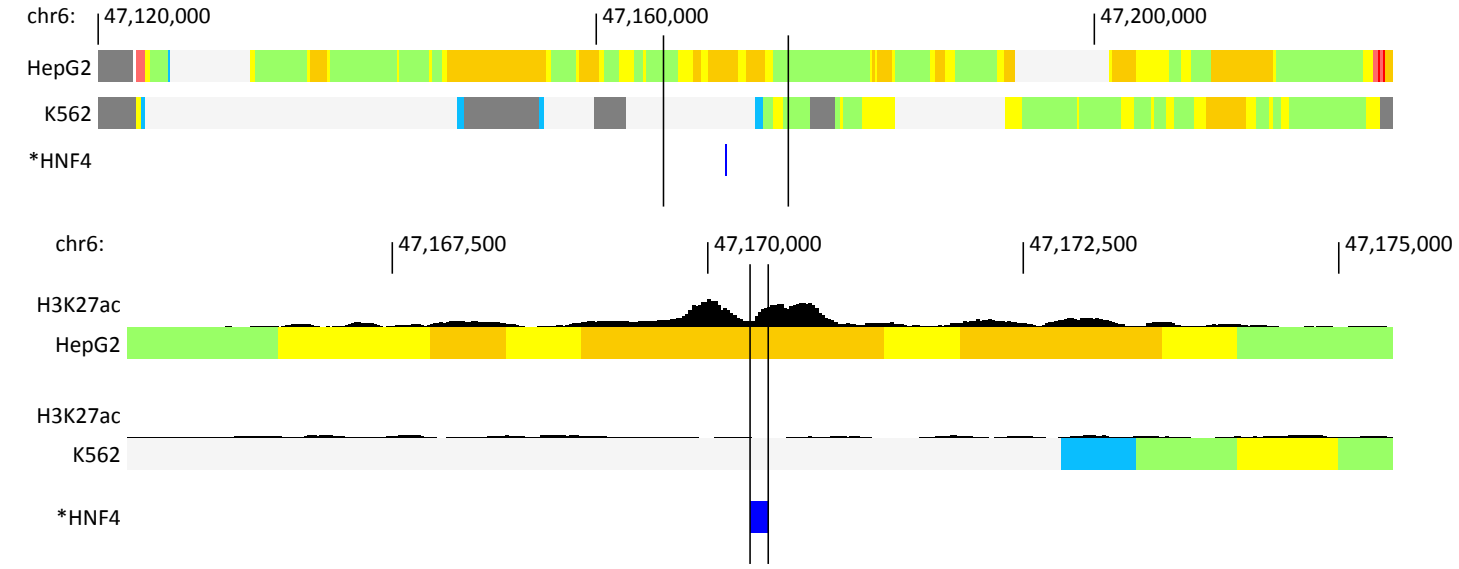
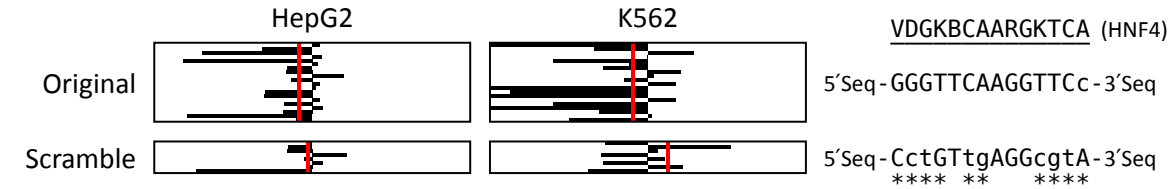
3′Seq = gcgccaaaggcgtcctggcattccattagcaagcatactggccccctgcagcagggccagctctg

2263 HNF4 in HepG2 enhancer

chr6 47170401 47170414 + (hg18)





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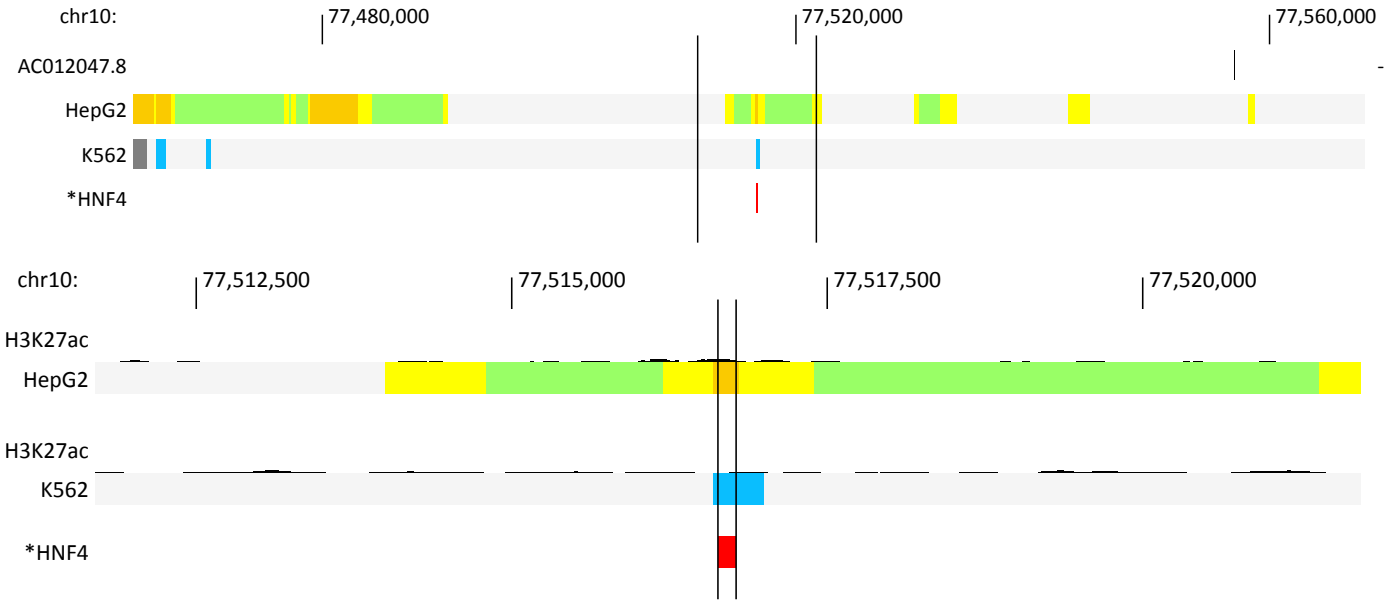
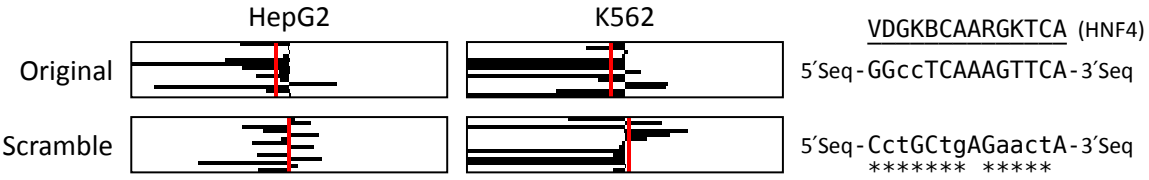
2264 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr10 77516700 77516713 - (hg18)





5′Seq = gtgatttatttctgtcggacaagccaaagaacgtctctccccacctctgcaaagcctccggtccct
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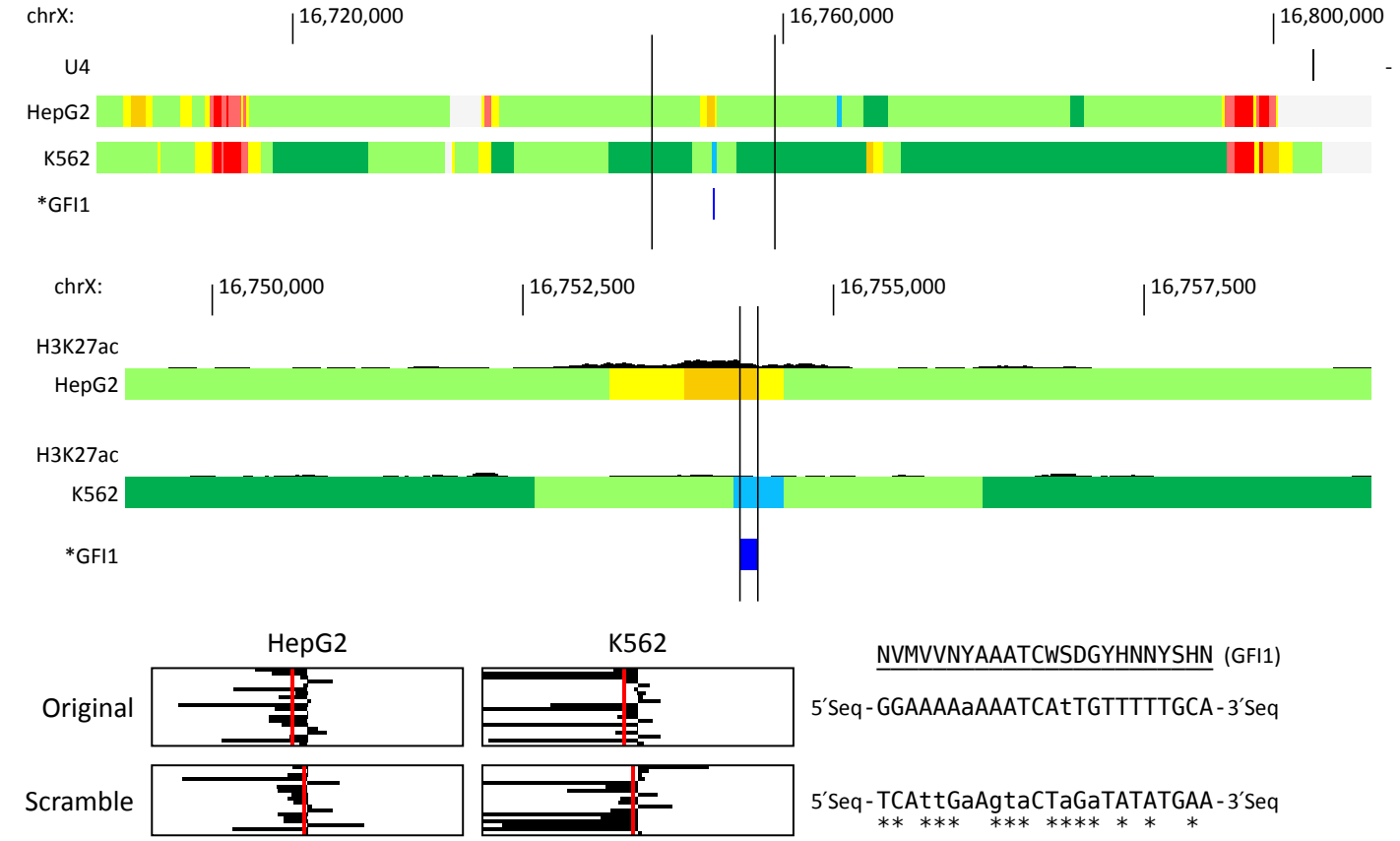
2265 GFI1 in HepG2 enhancer

chrX 16754308 16754331 - (hg18)



5′Seq = atcacgcatccttacagccacatttacagatattaaaaacacctttactgaaattcttgca
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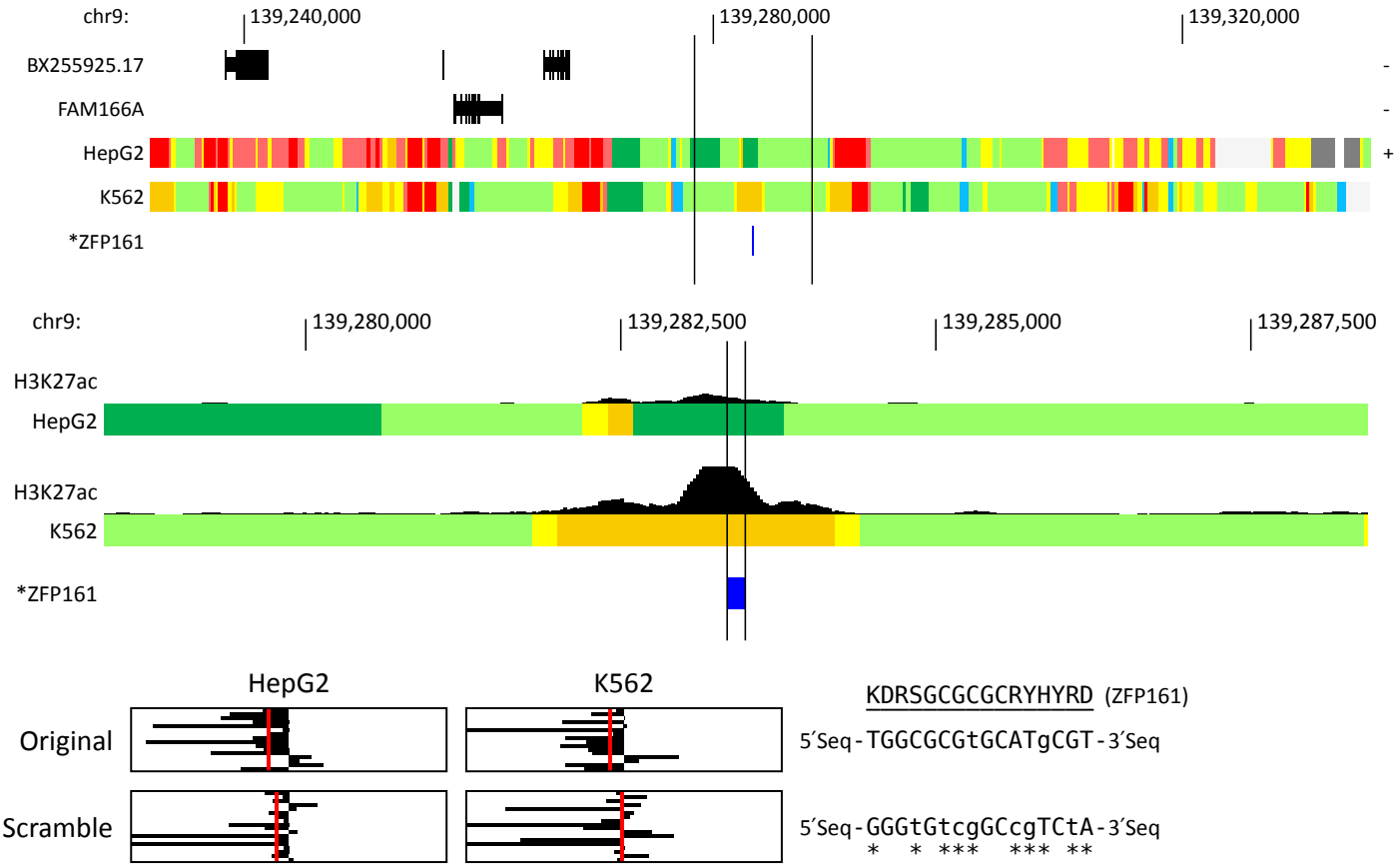
2266 ZFP161 in K562 enhancer

chr9 139283409 139283424 + (hg18)



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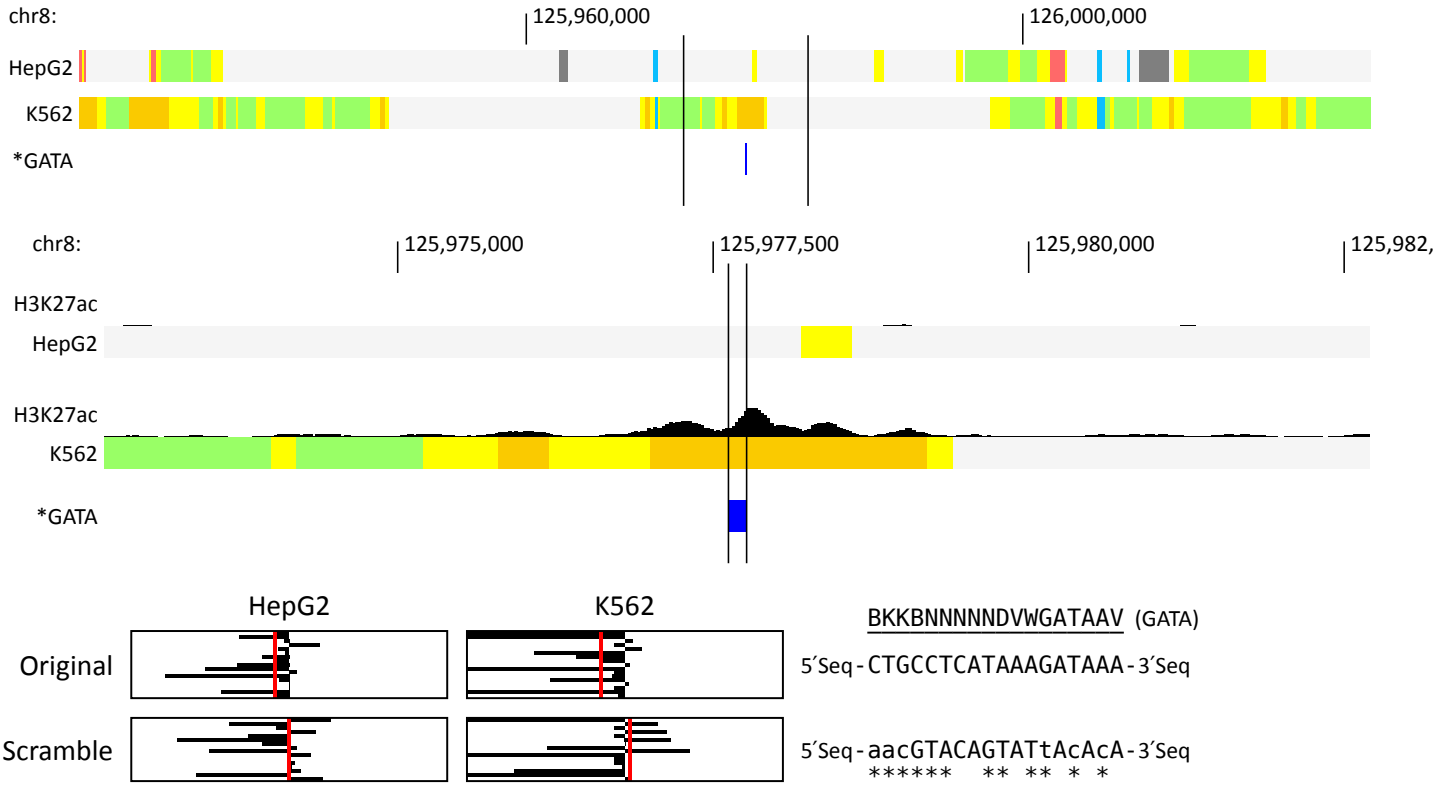
3′Seq = tttccagctttctttgtggaggaagttacctgtgggtattaacctgtccccagccatcctctca

2267 GATA in K562 enhancer

chr8 125977685 125977702 - (hg18)



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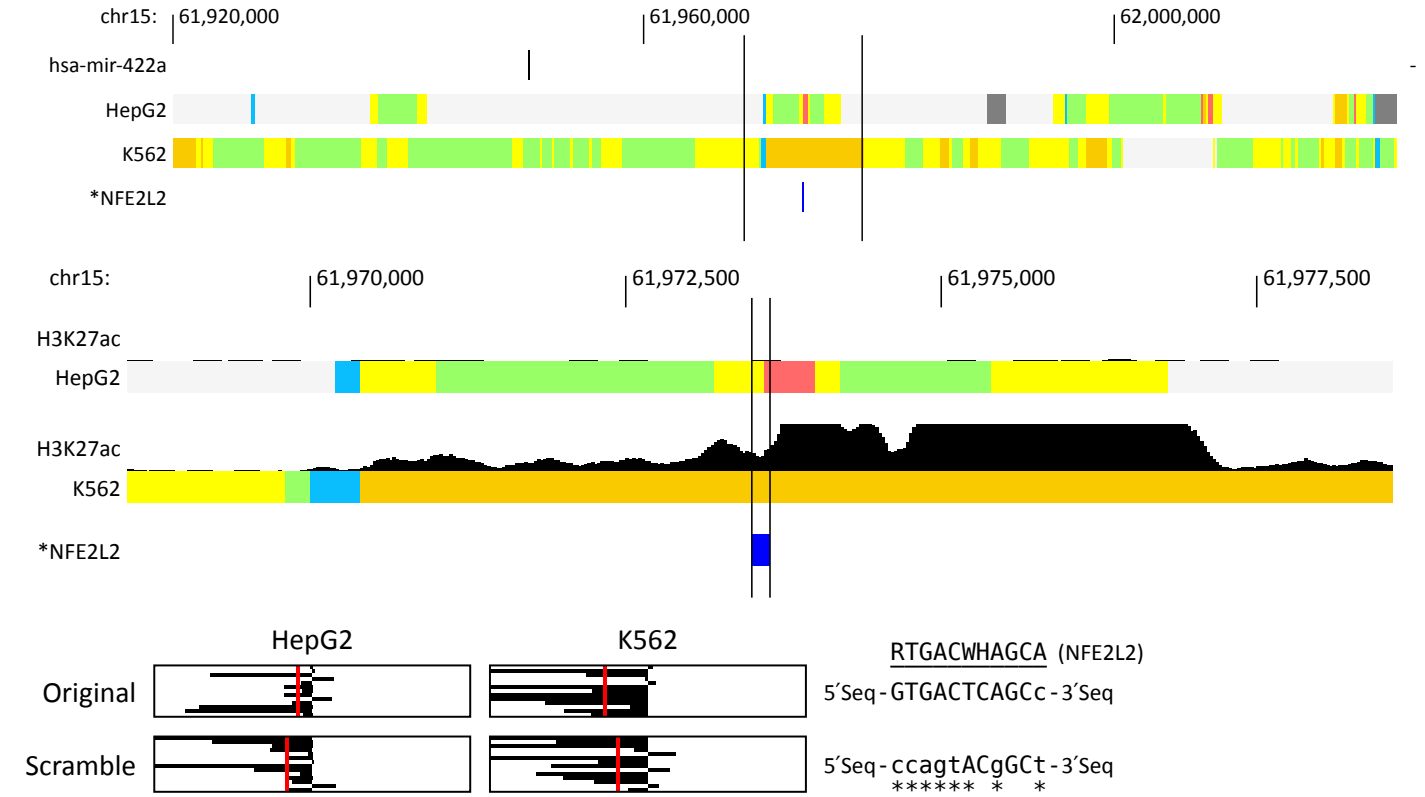
2268 NFE2L2 in K562 enhancer

chr15 61973566 61973576 - (hg18)



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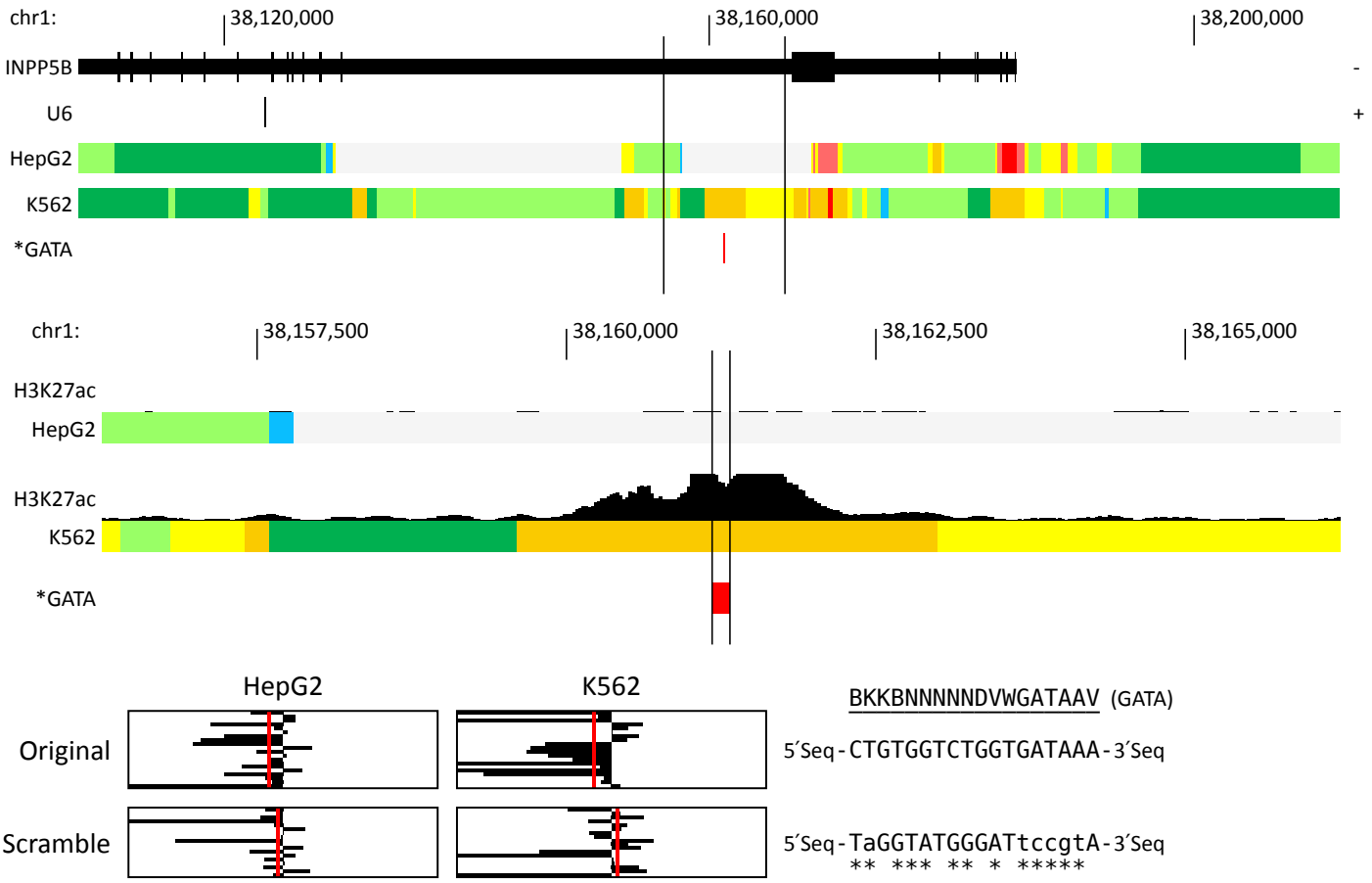
2269 GATA in K562 enhancer (conserved at 60% confidence)

chr1 38161241 38161258 + (hg18)



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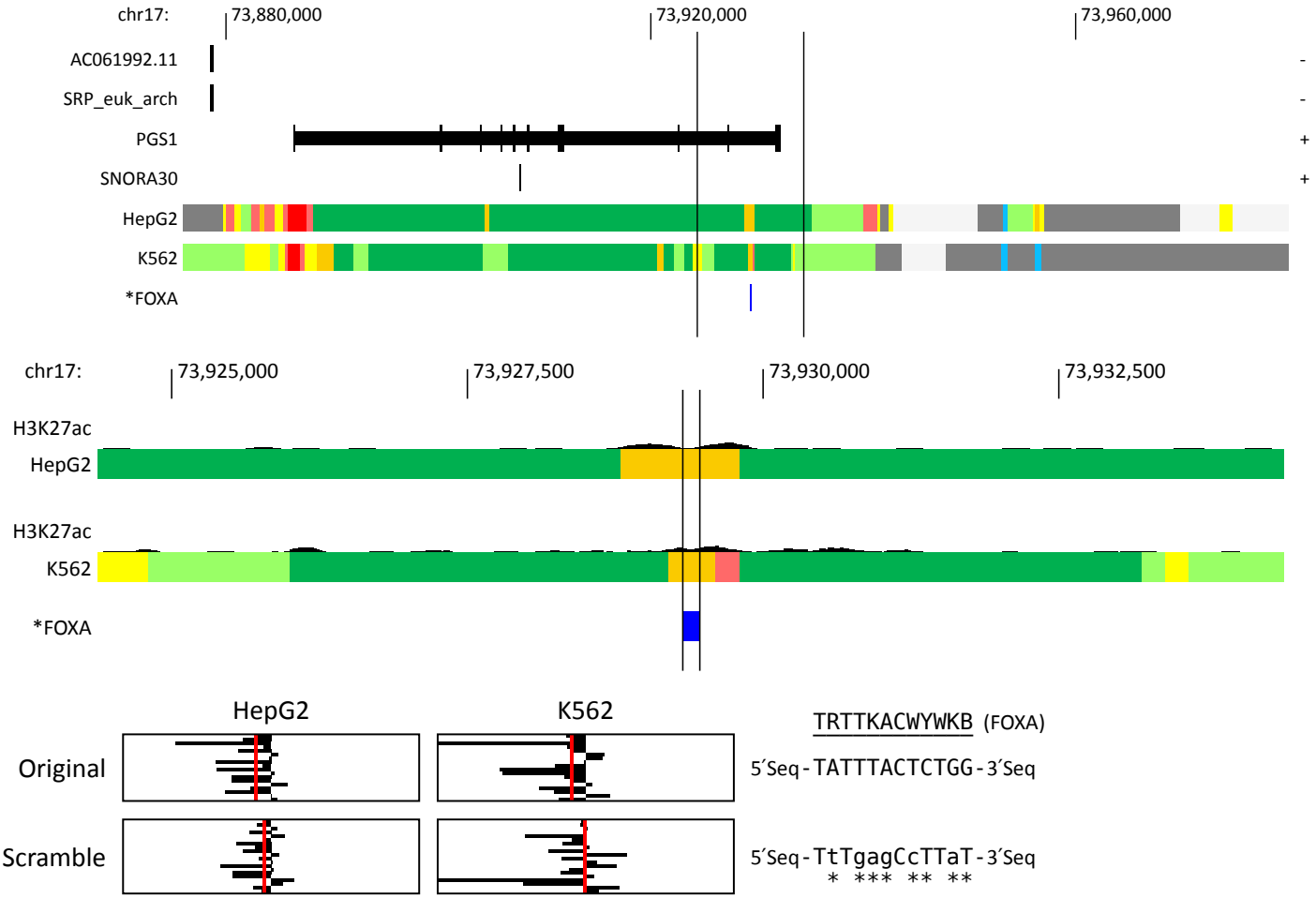
2270 FOXA in HepG2 enhancer

chr17 73929388 73929399 - (hg18)



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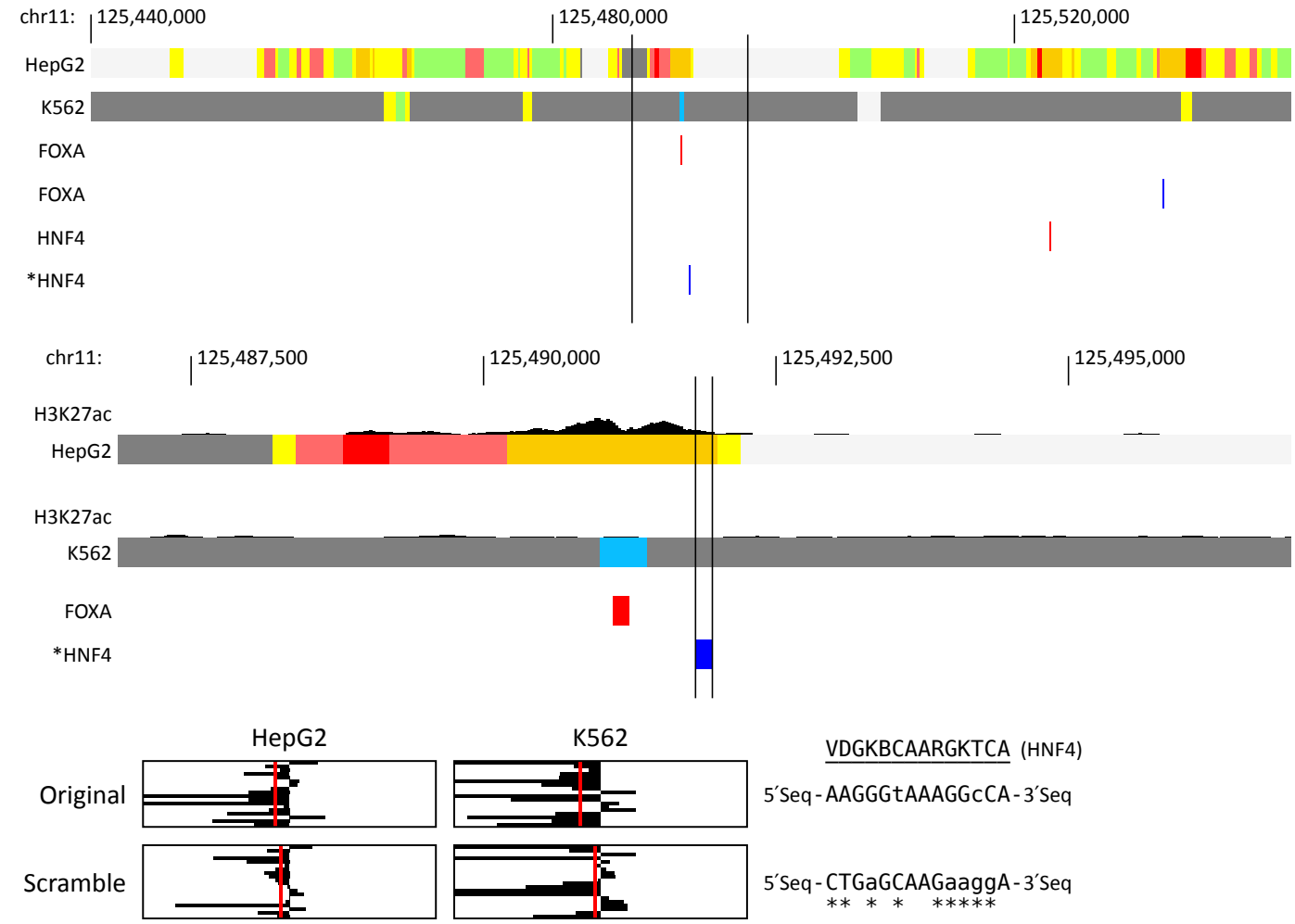
2271 HNF4 in HepG2 enhancer

chr11 125491878 125491891 - (hg18)



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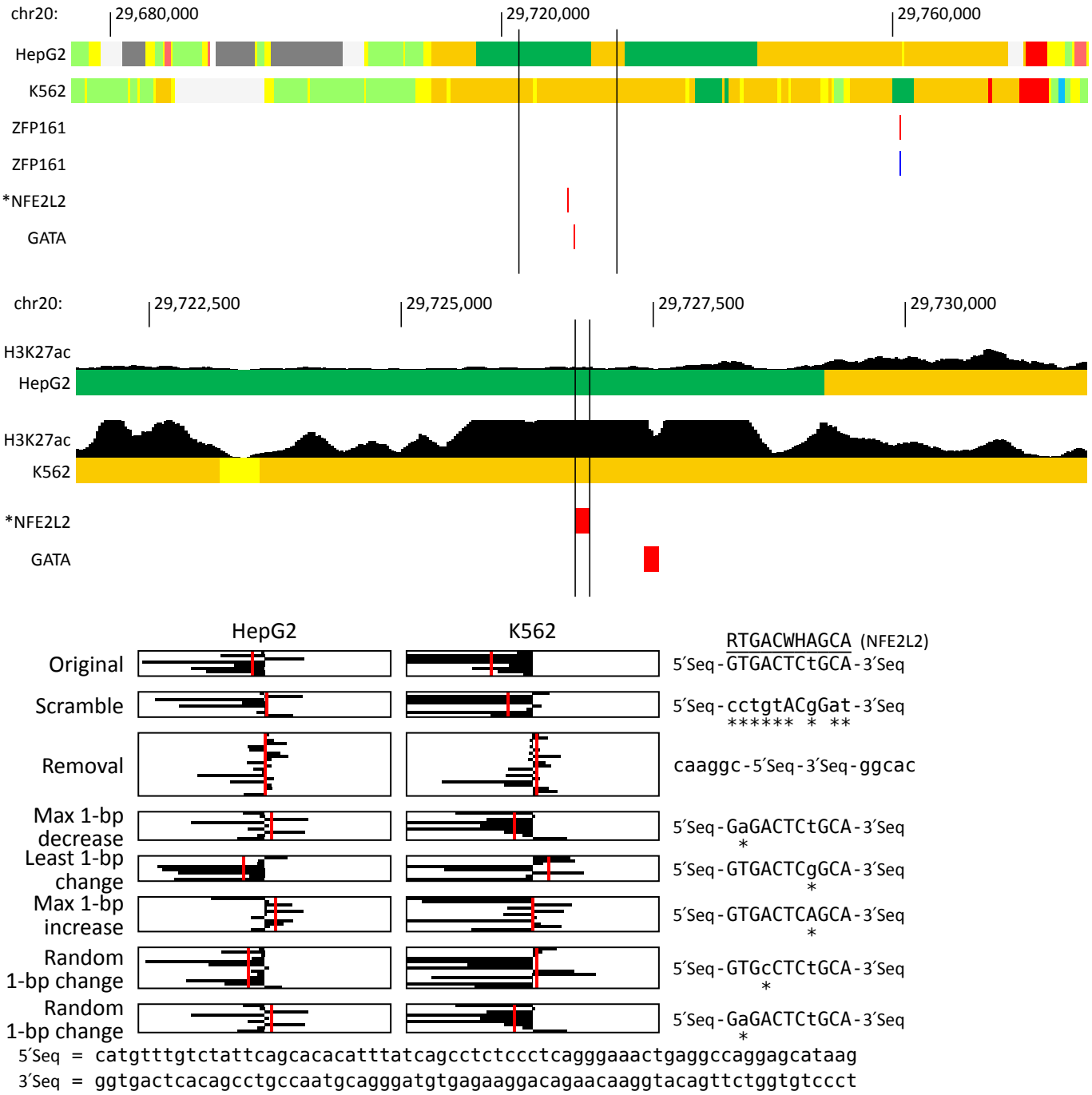
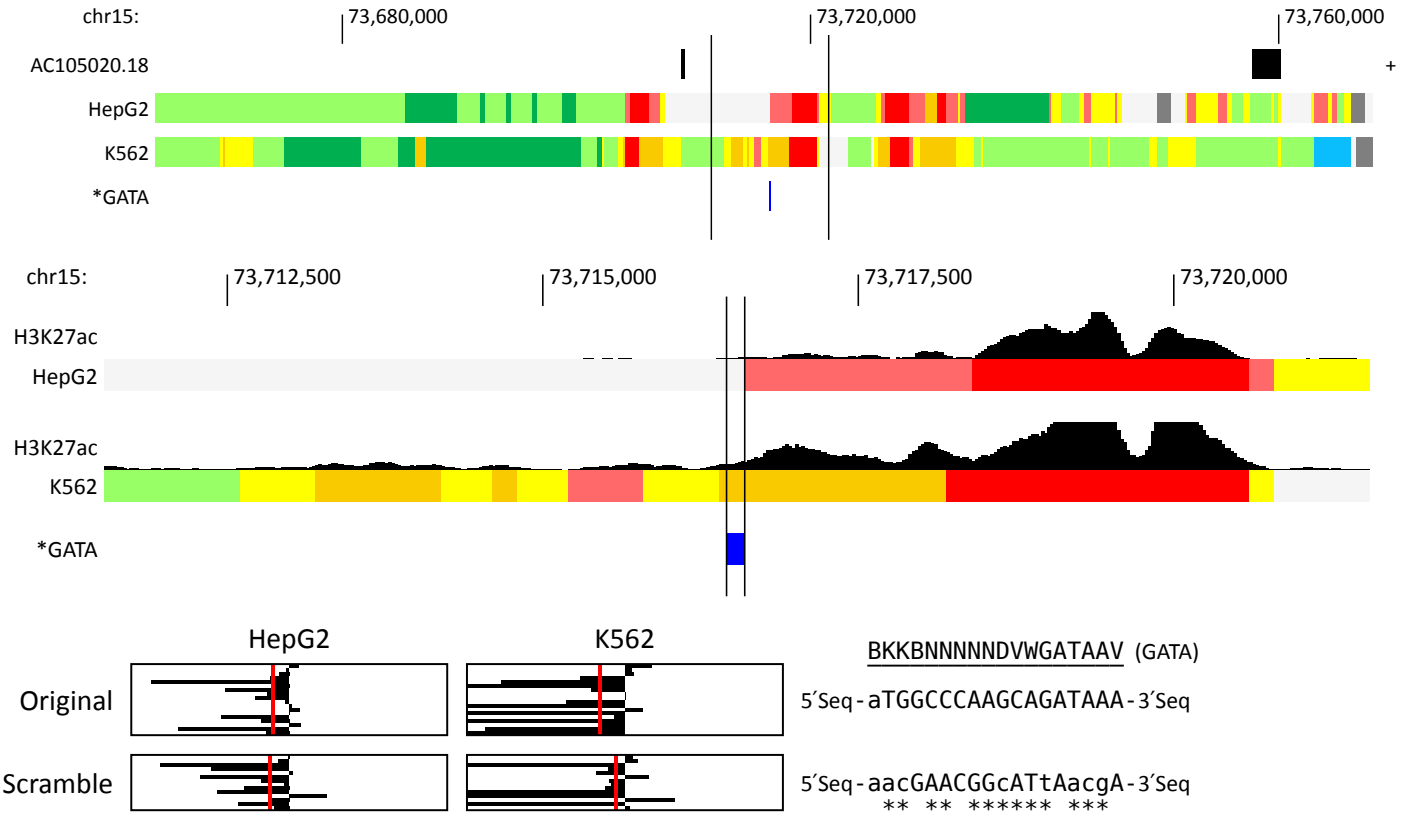
2272 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 29726793 29726803 - (hg18)



2273 GATA in K562 enhancer

chr15 73716520 73716537 - (hg18)

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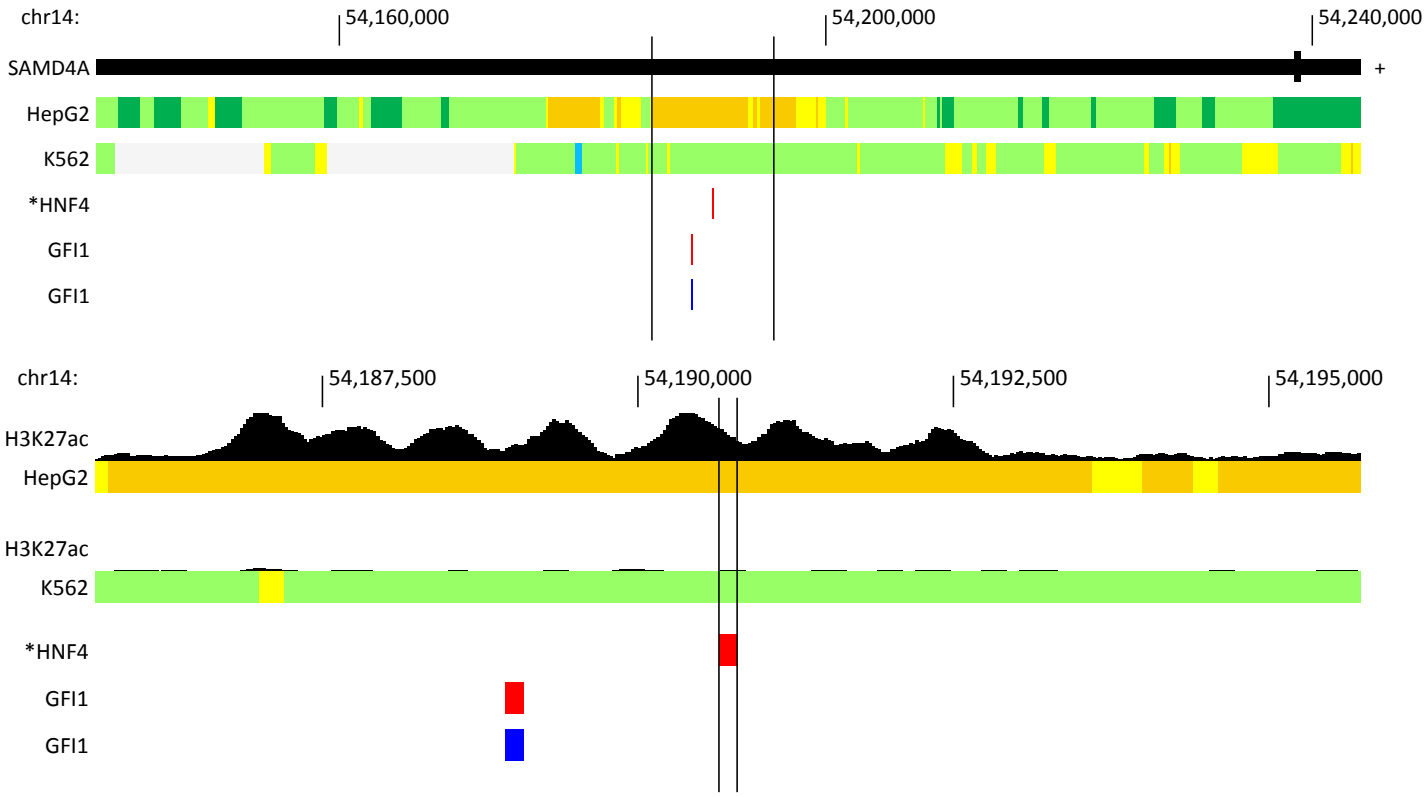
2274 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr14 54190708 54190721 - (hg18)



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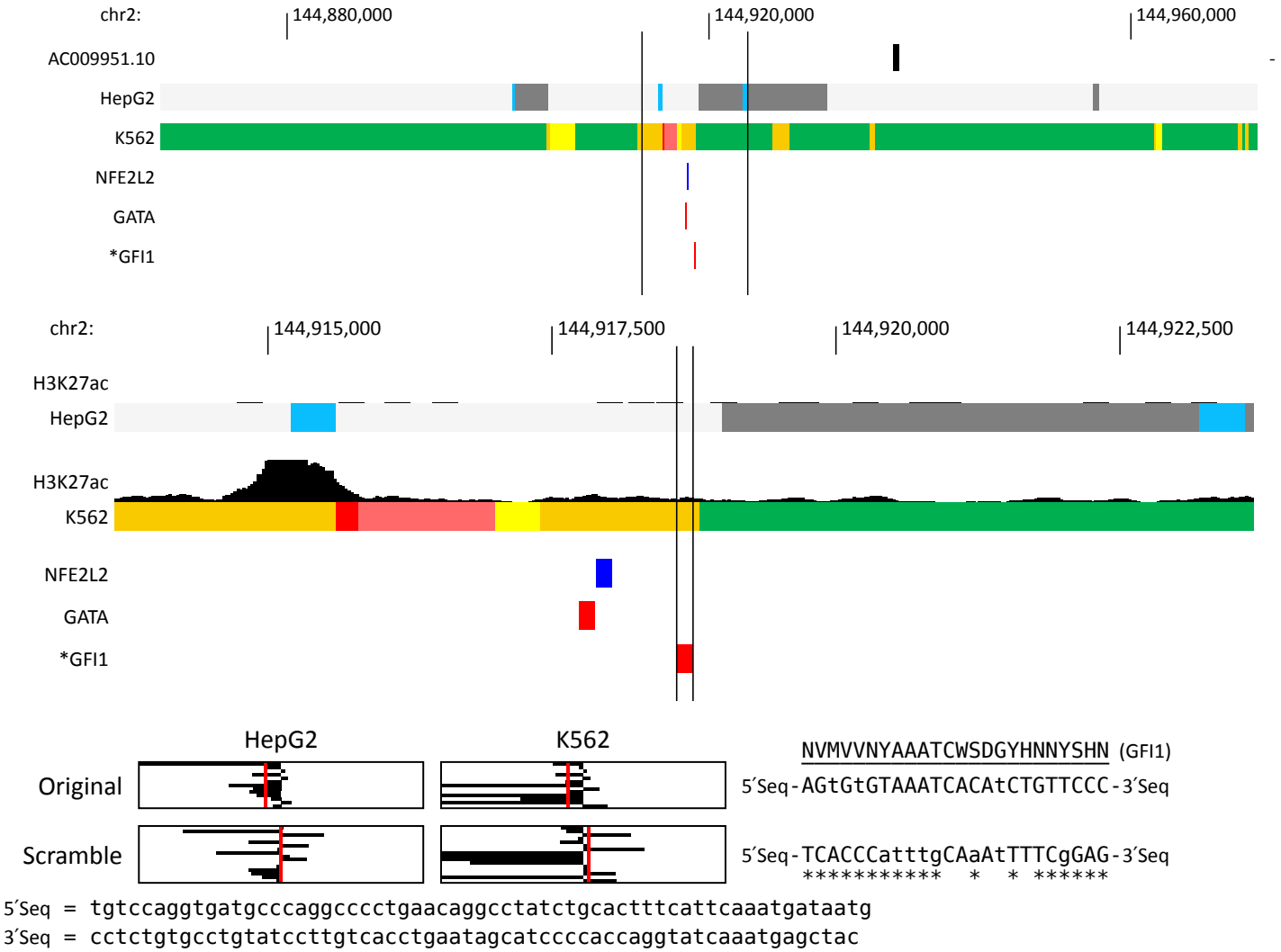
2275 GFI1 in K562 enhancer (conserved at 40% confidence)

chr2 144918659 144918682 + (hg18)



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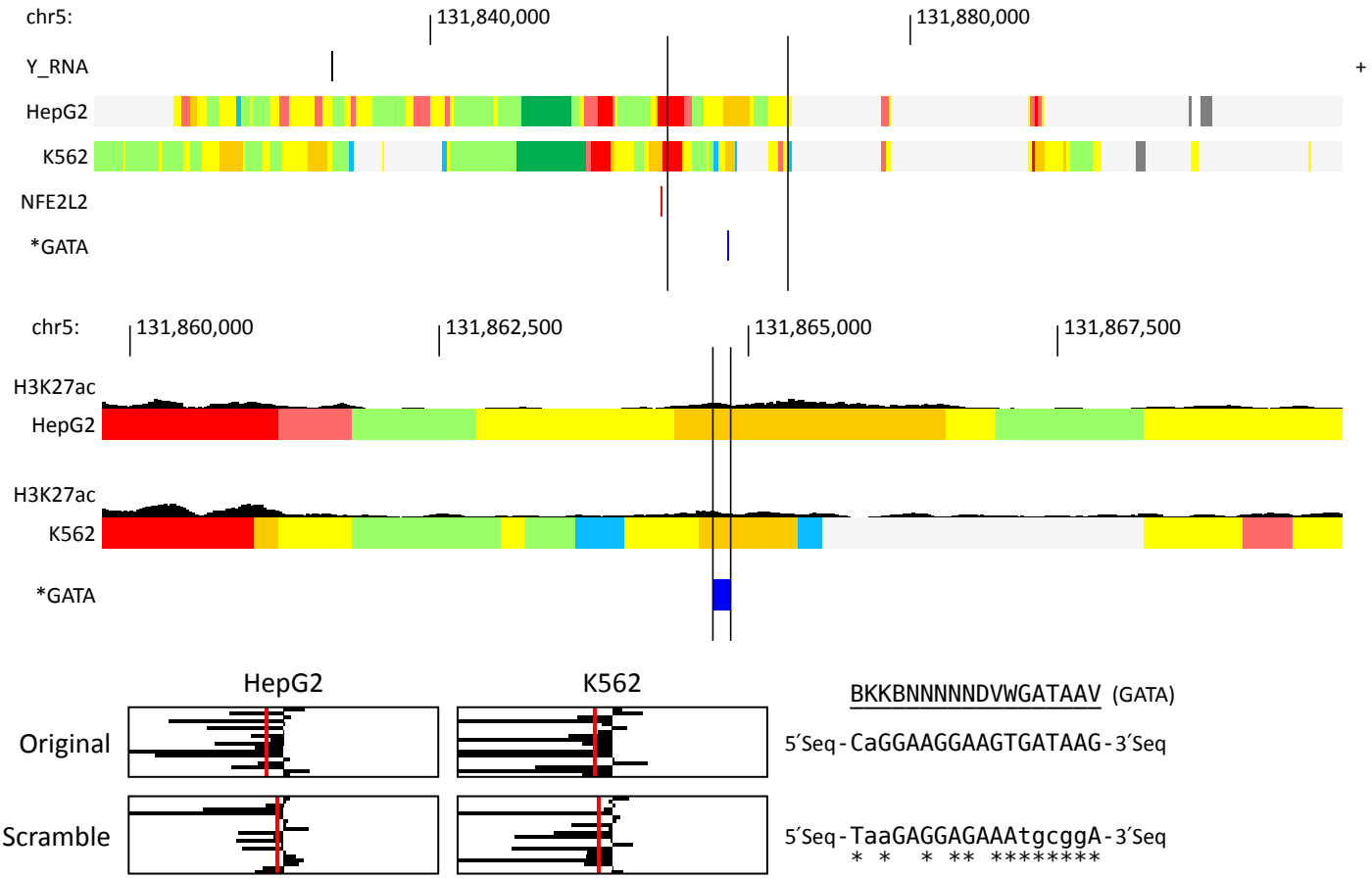
2276 GATA in K562 enhancer

chr5 131864777 131864794 + (hg18)



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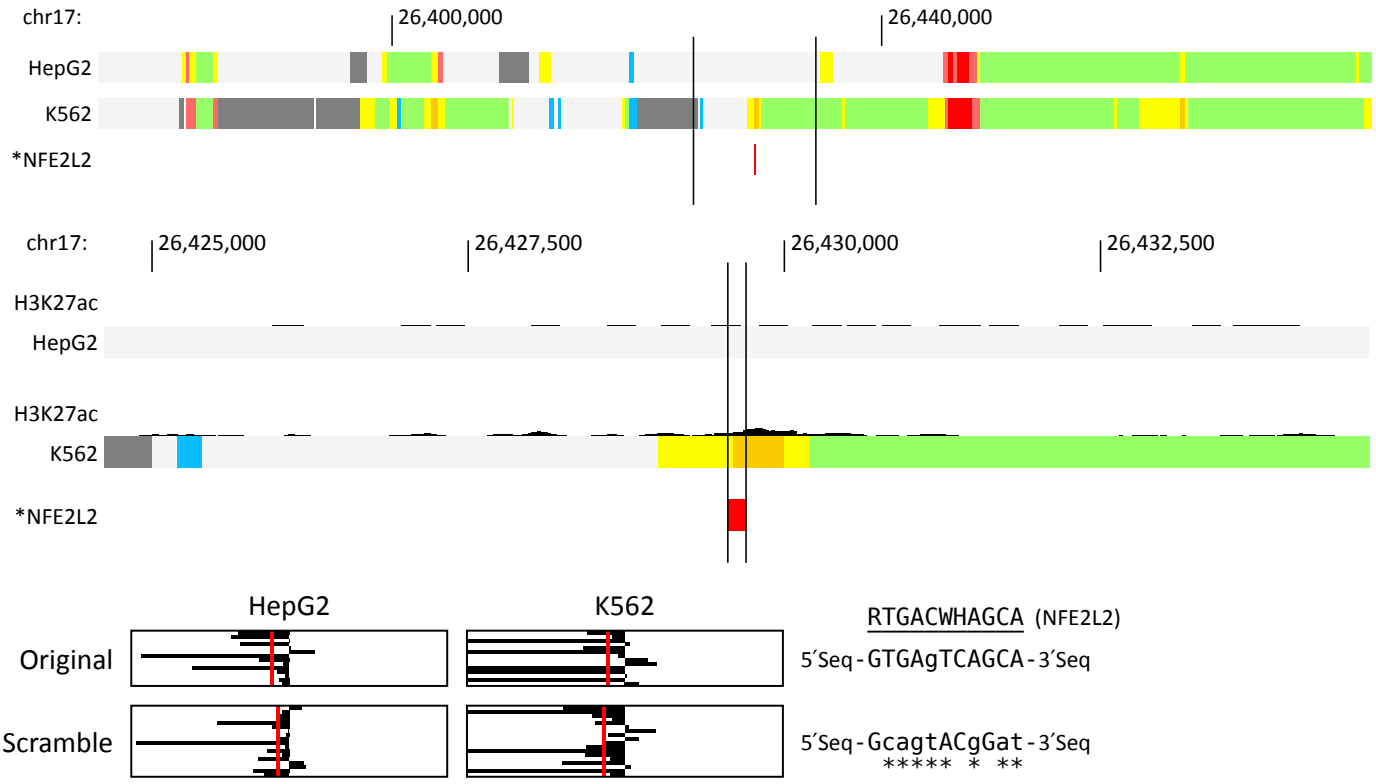
2277 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr17 26429620 26429630 - (hg18)



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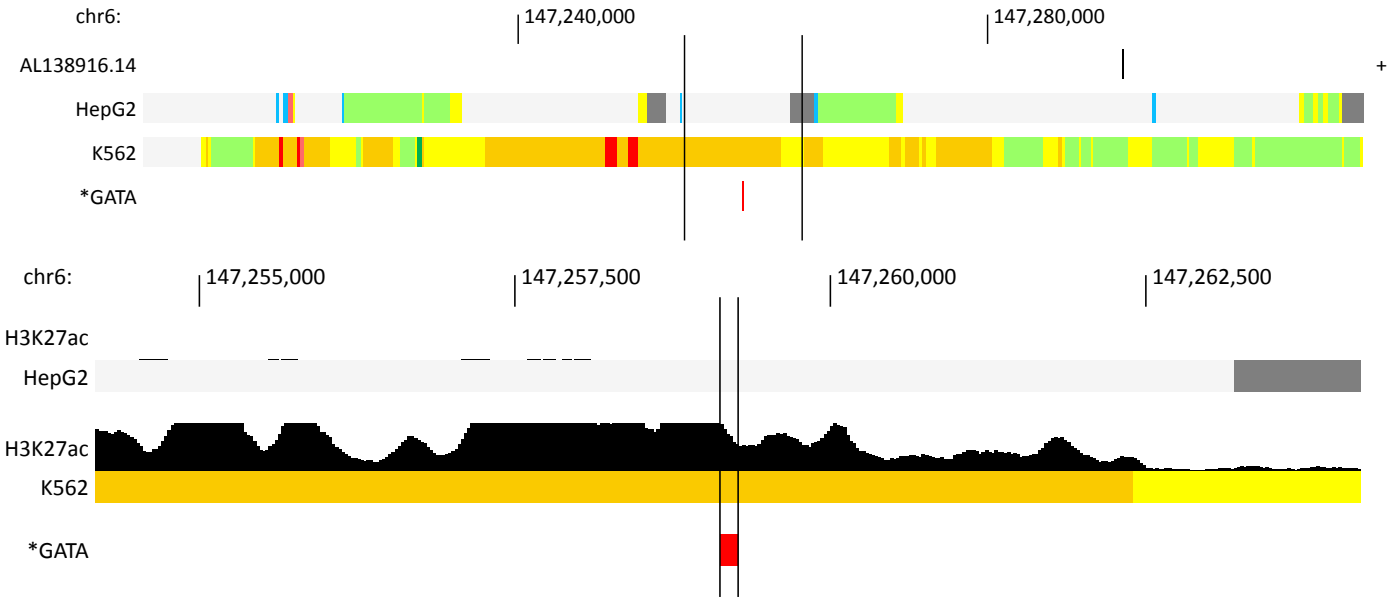
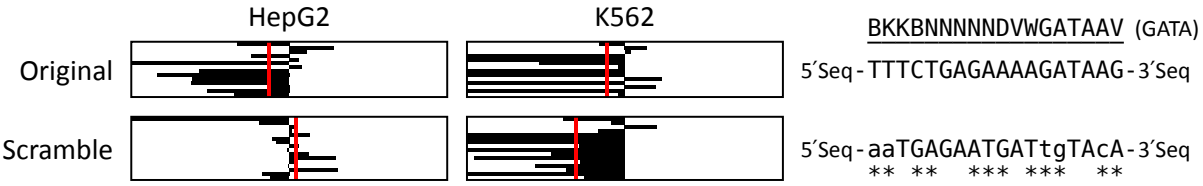
2278 GATA in K562 enhancer (conserved at 60% confidence)

chr6 147259189 147259206 + (hg18)





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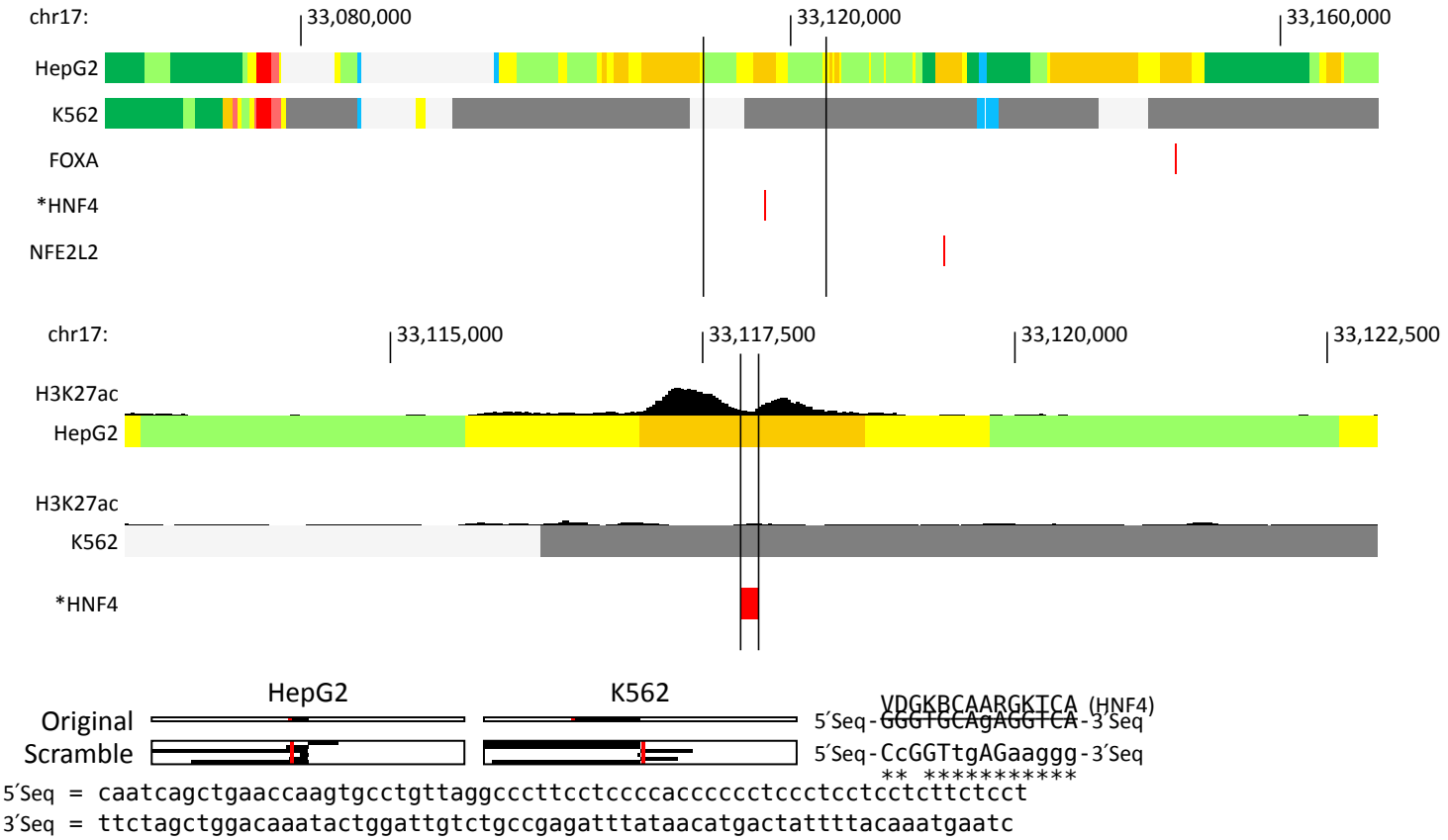
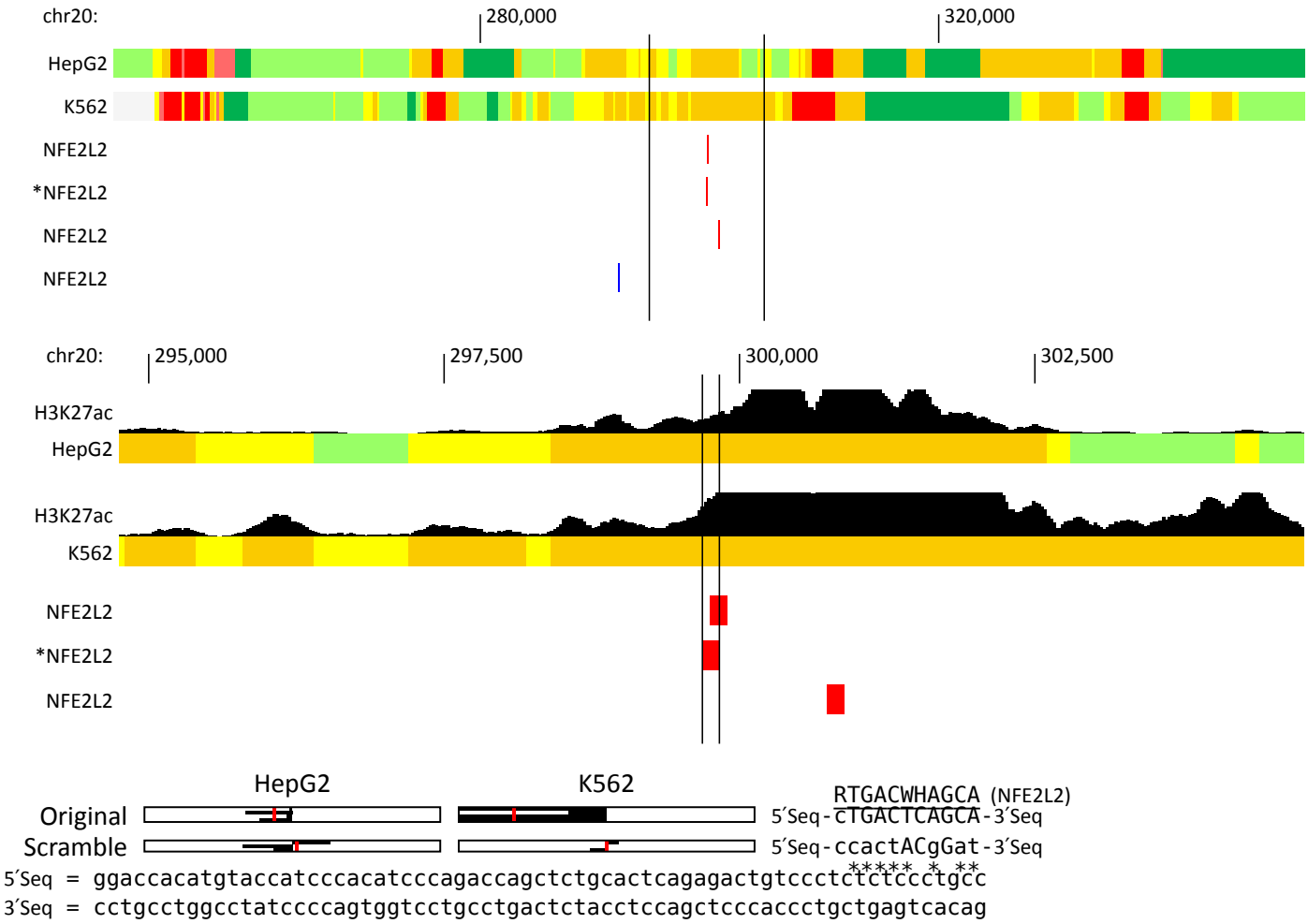
2279 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr17 33117870 33117883 - (hg18)



2280 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr20 299753 299763 + (hg18)



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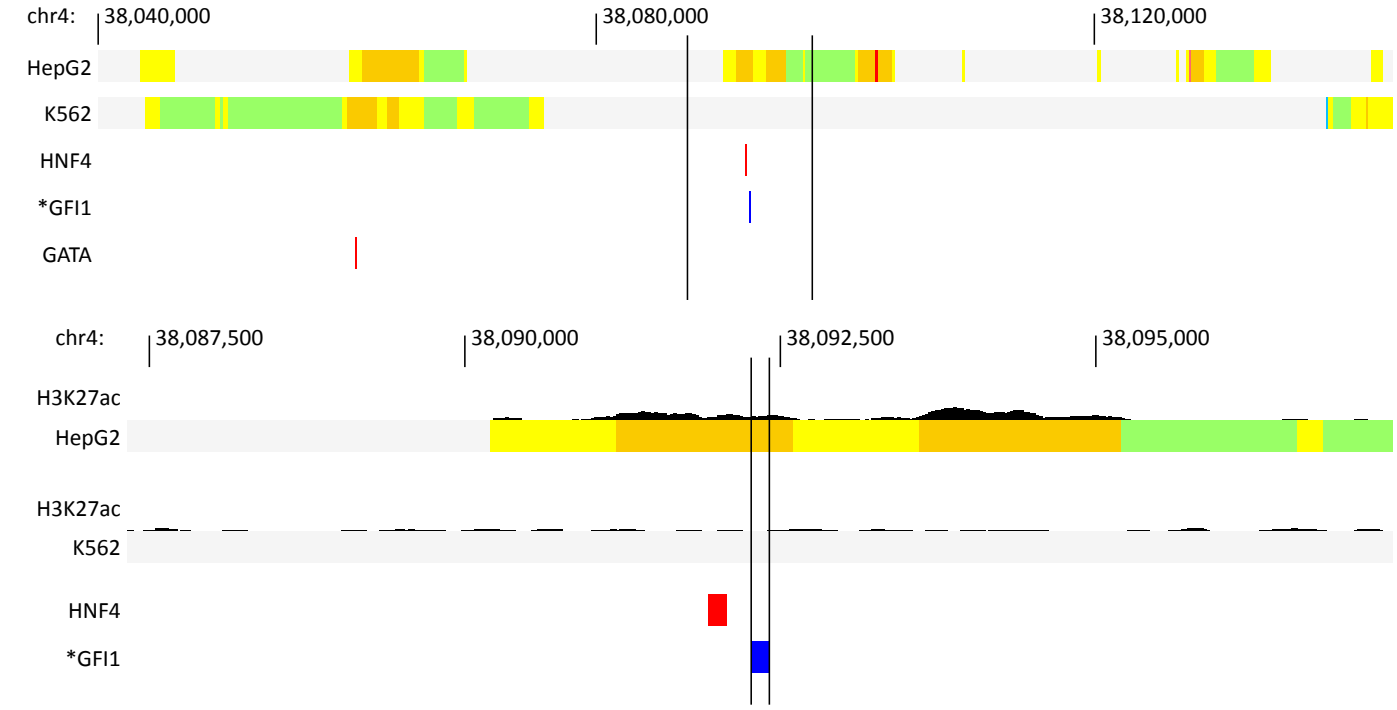
2281 GFI1 in HepG2 enhancer

chr4 38092330 38092353 + (hg18)



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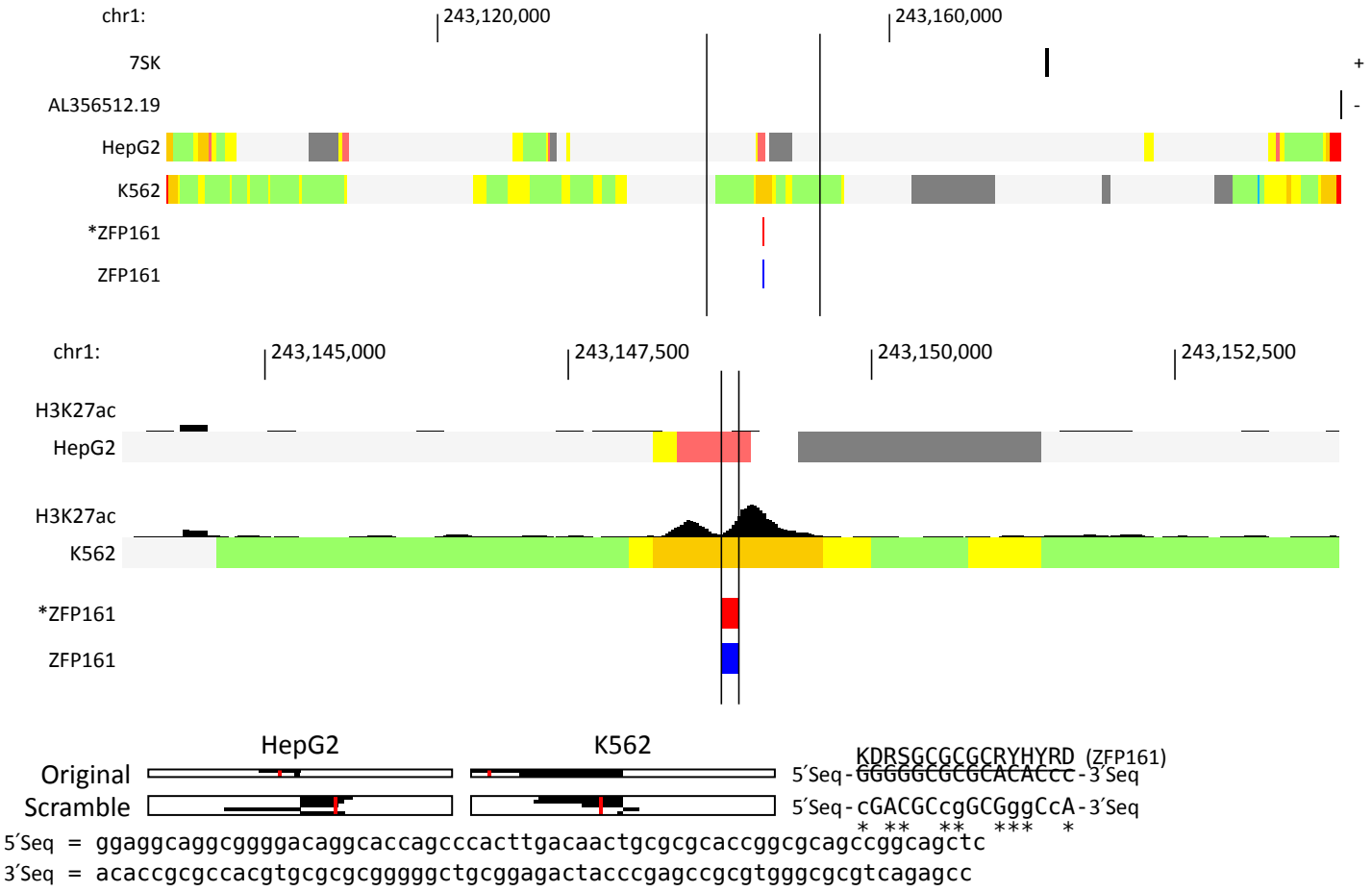
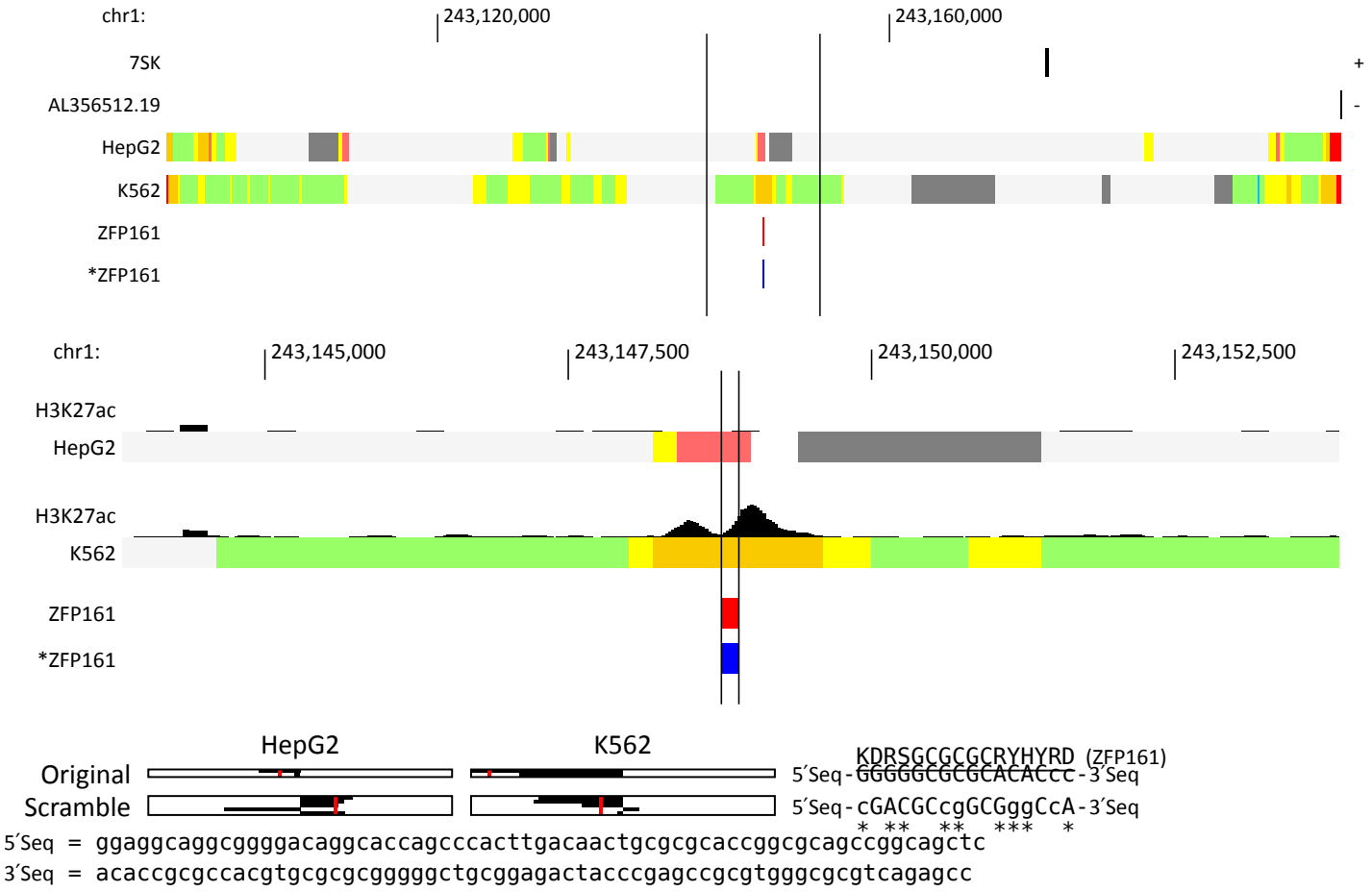
2282 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr1 243148827 243148842 + (hg18)



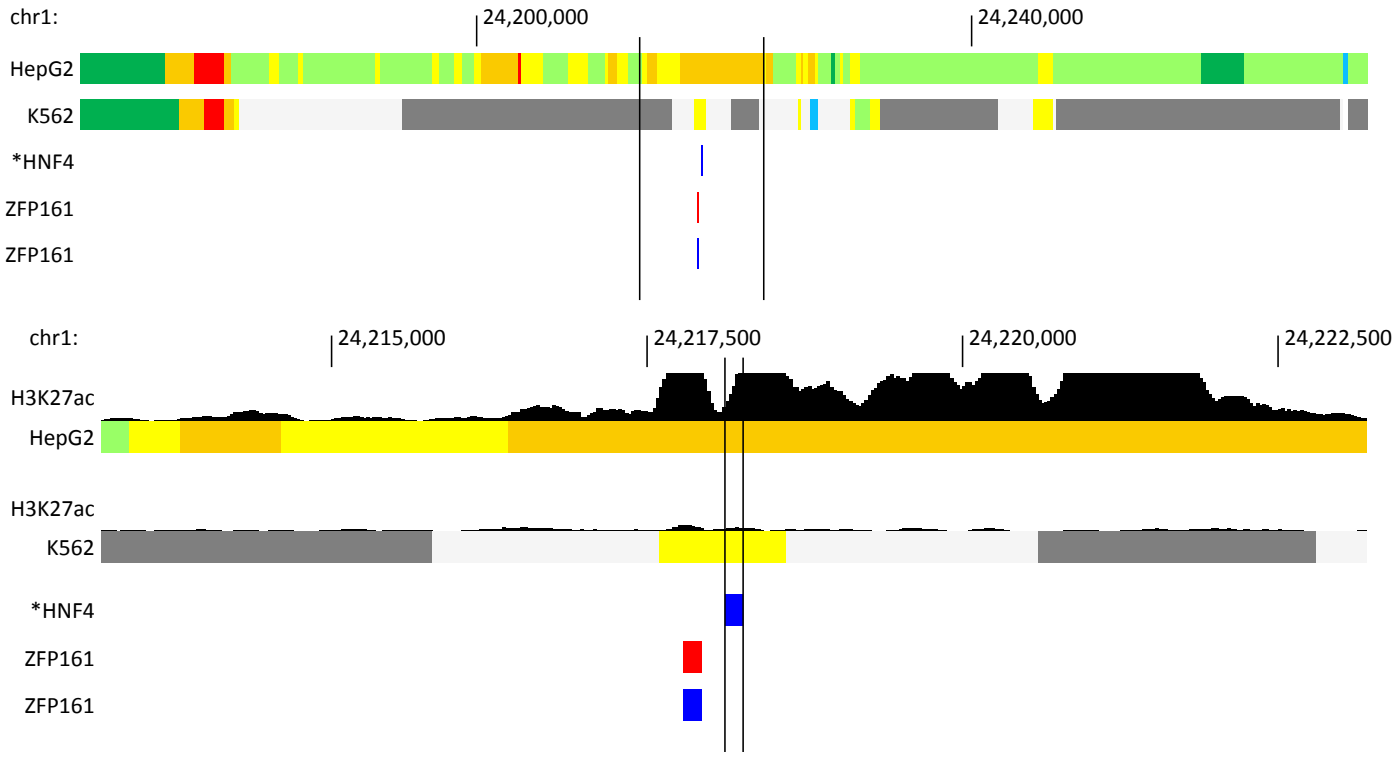
2283 ZFP161 in K562 enhancer

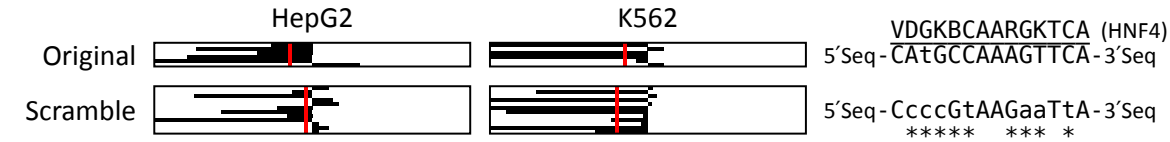
chr1 243148827 243148842 + (hg18)



2284 HNF4 in HepG2 enhancer

chr1 24218183 24218196 - (hg18)





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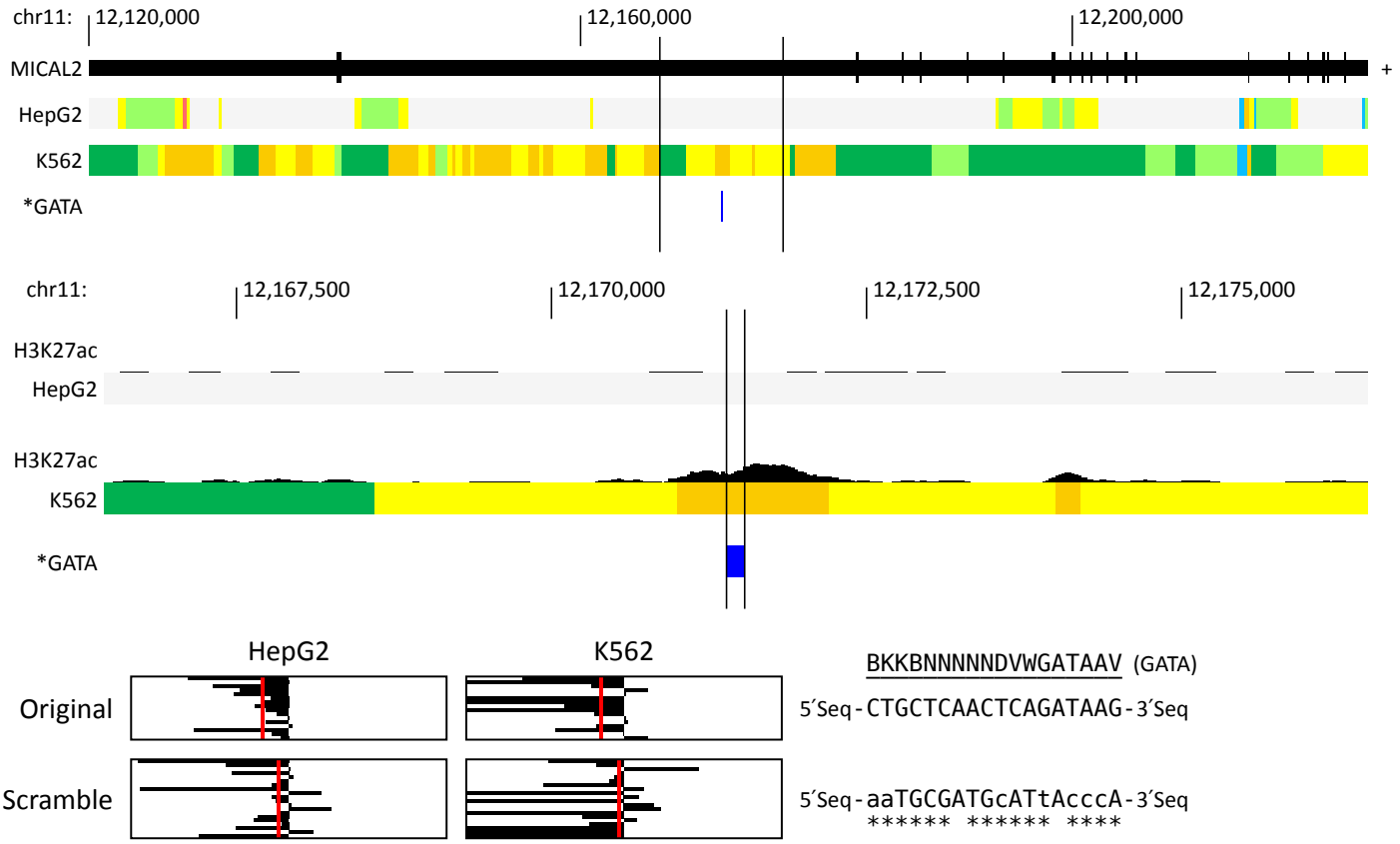
2285 GATA in K562 enhancer

chr11 12171453 12171470 + (hg18)



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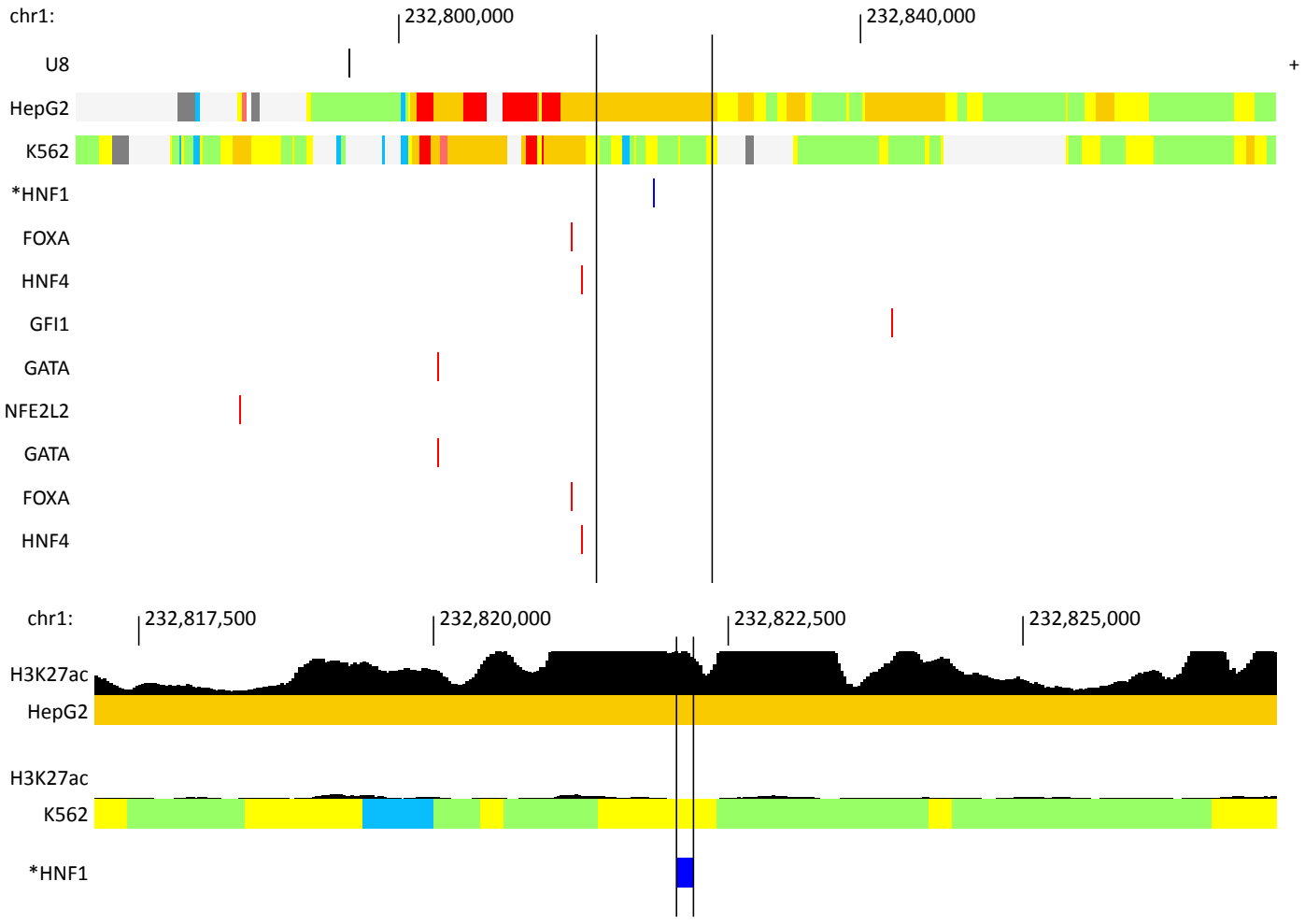
2286 HNF1 in HepG2 enhancer

chr1 232822127 232822140 - (hg18)



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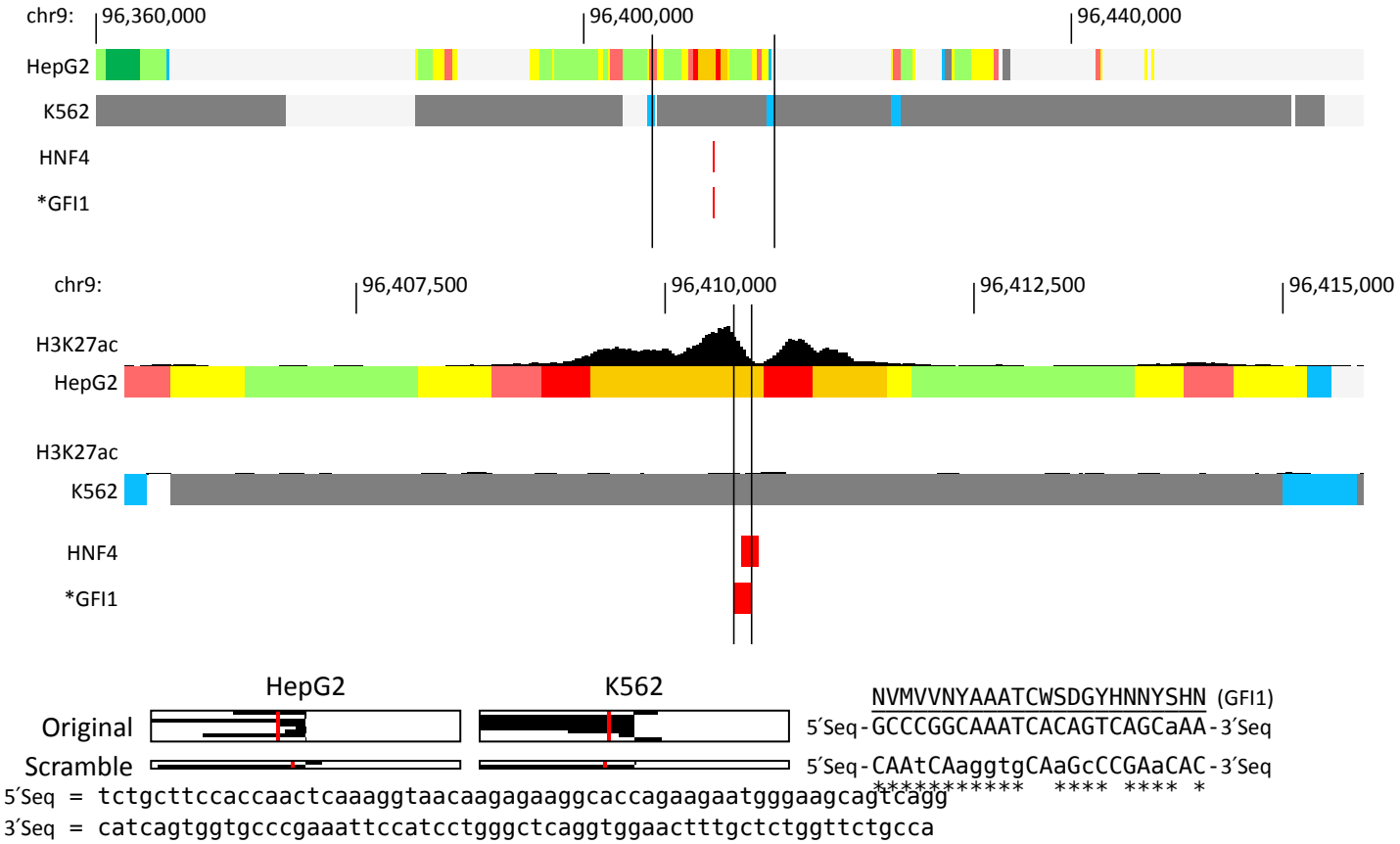
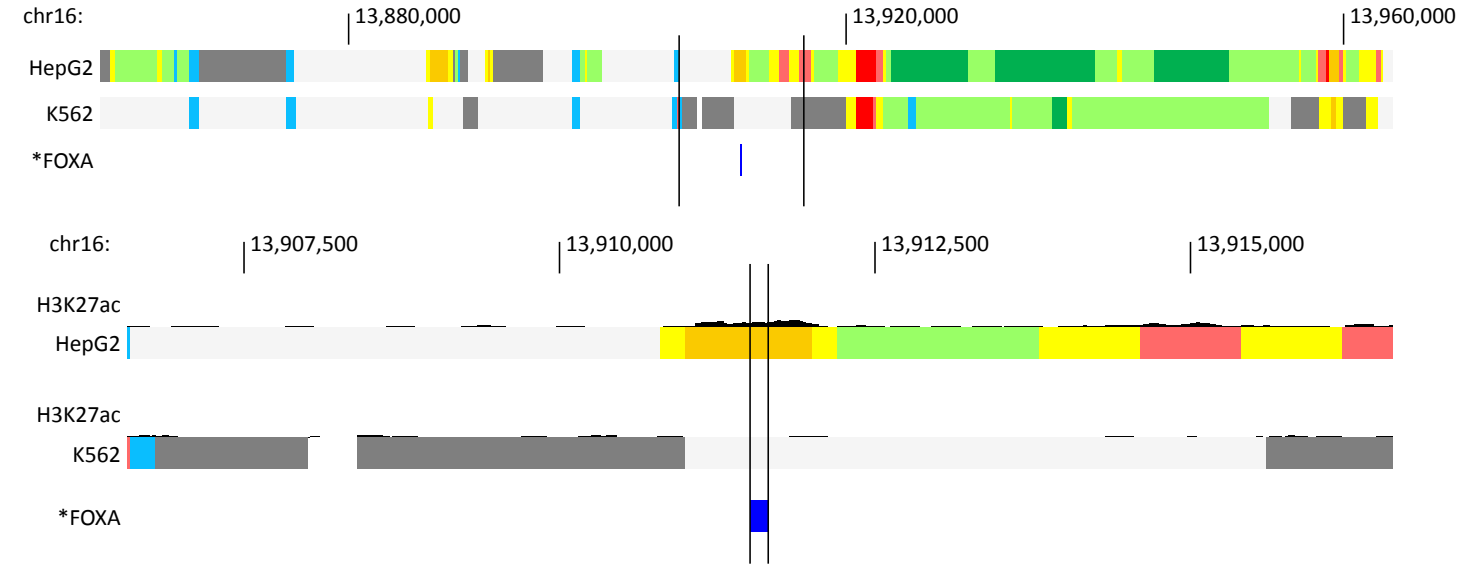
2287 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr9 96410617 96410640 + (hg18)



2288 FOXA in HepG2 enhancer

chr16 13911577 13911588 + (hg18)



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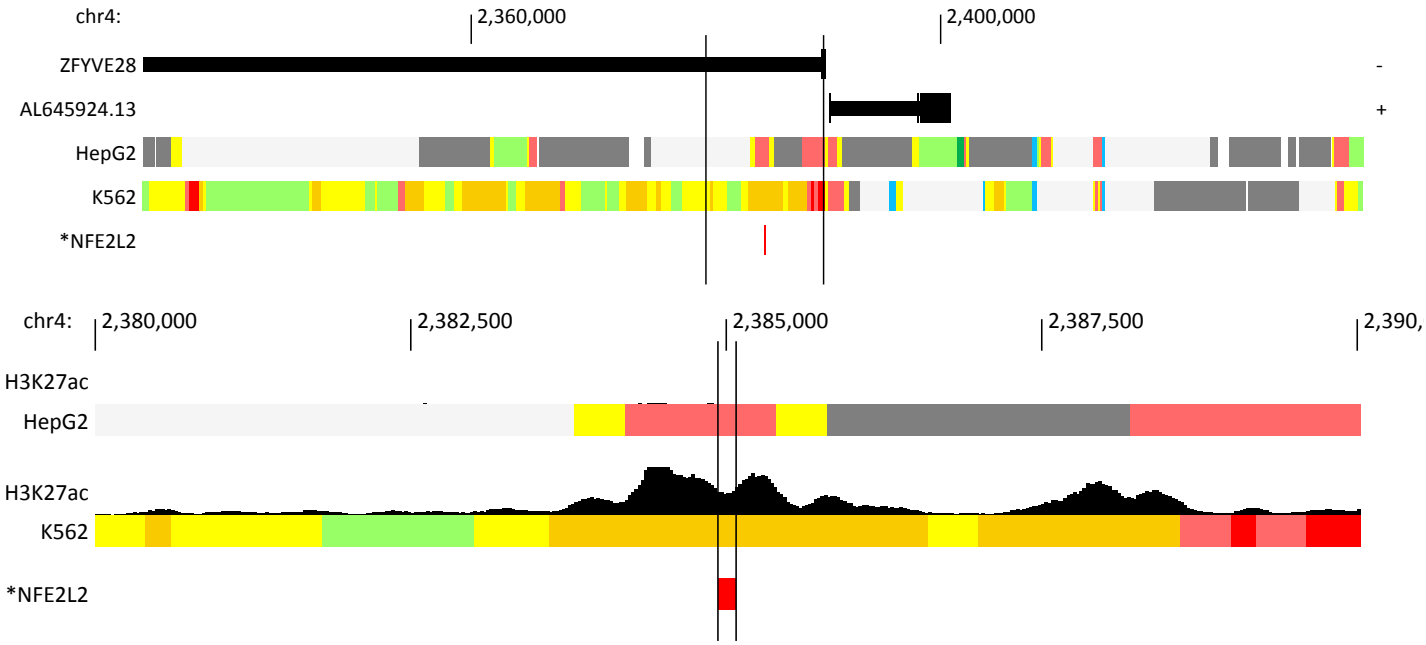
2289 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr4 2385001 2385011 + (hg18)



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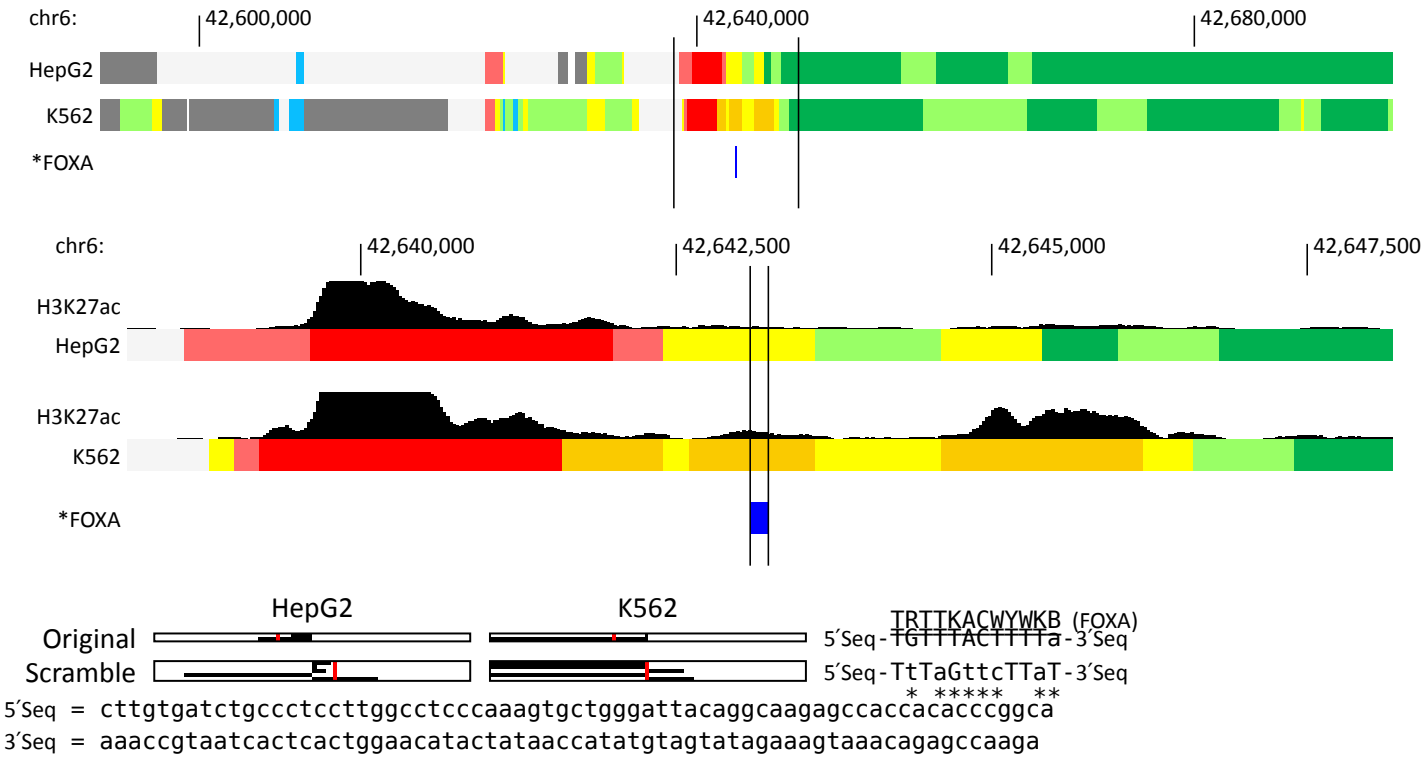
chr6 42643153 42643164 - (hg18)



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2291 ZFP161 in K562 enhancer (conserved at 10% confidence)

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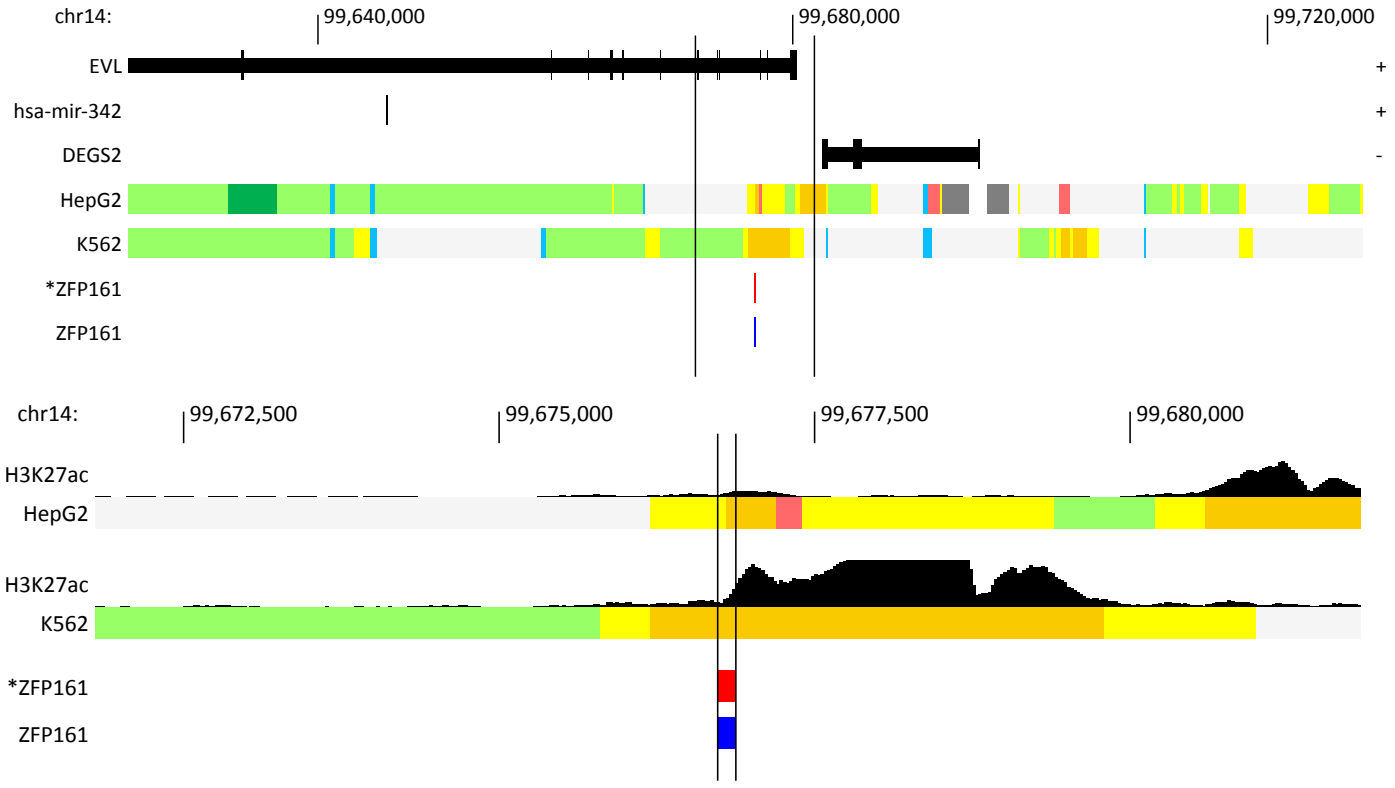

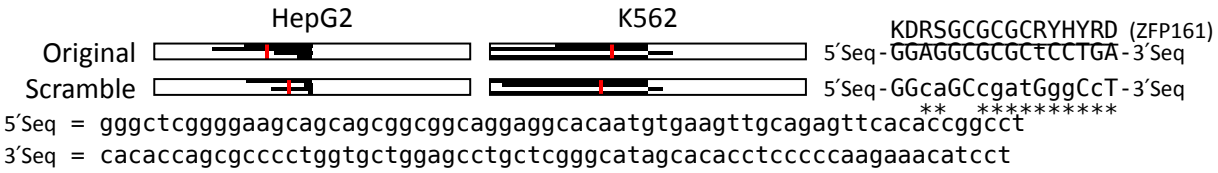

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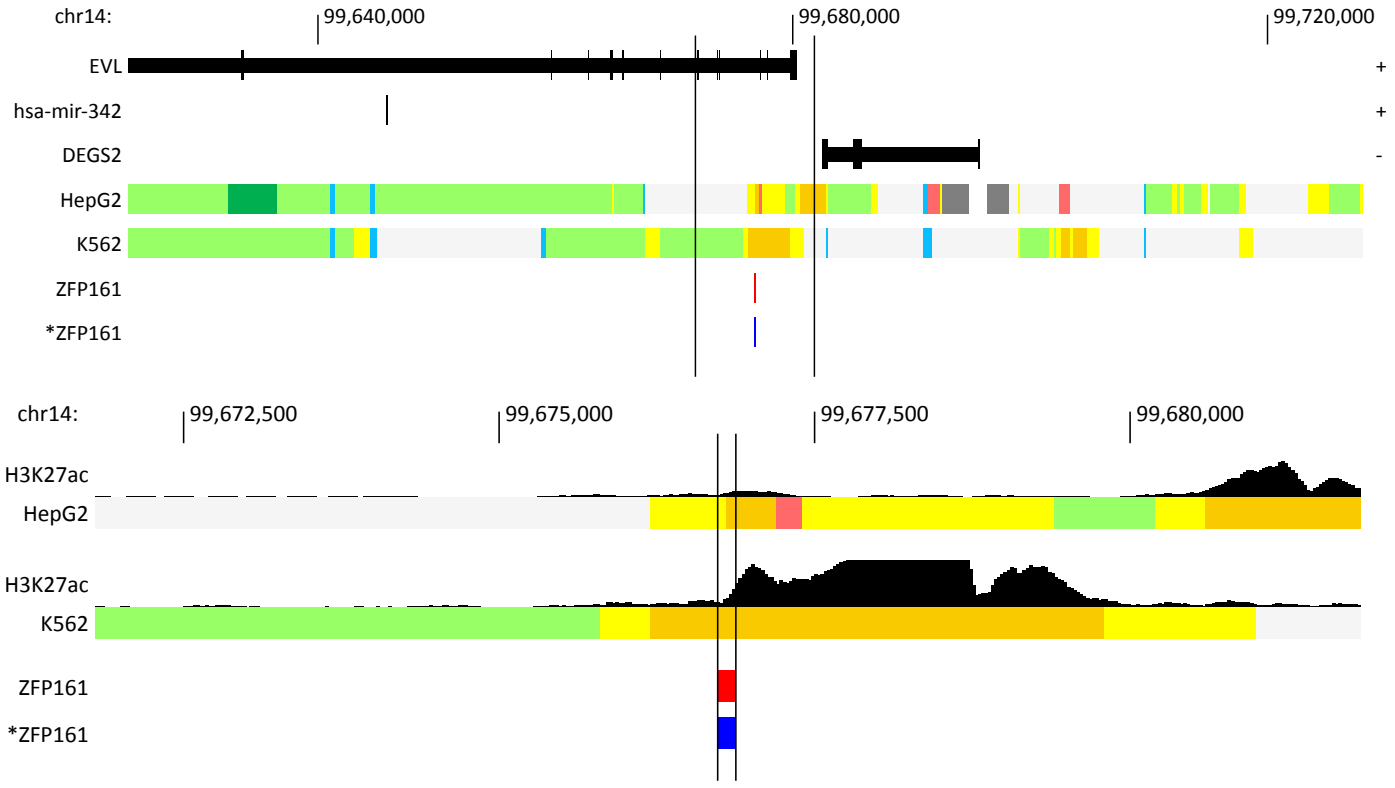
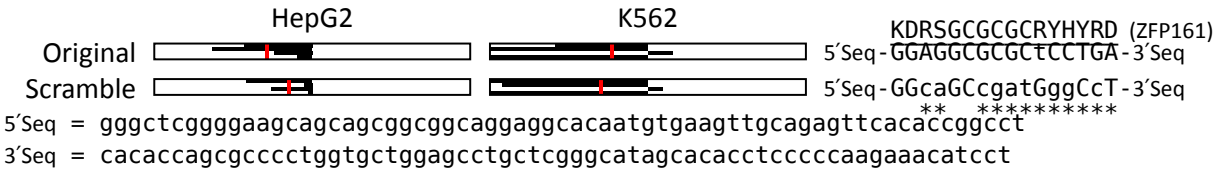
2292 ZFP161 in K562 enhancer

chr14 99676797 99676812 - (hg18)





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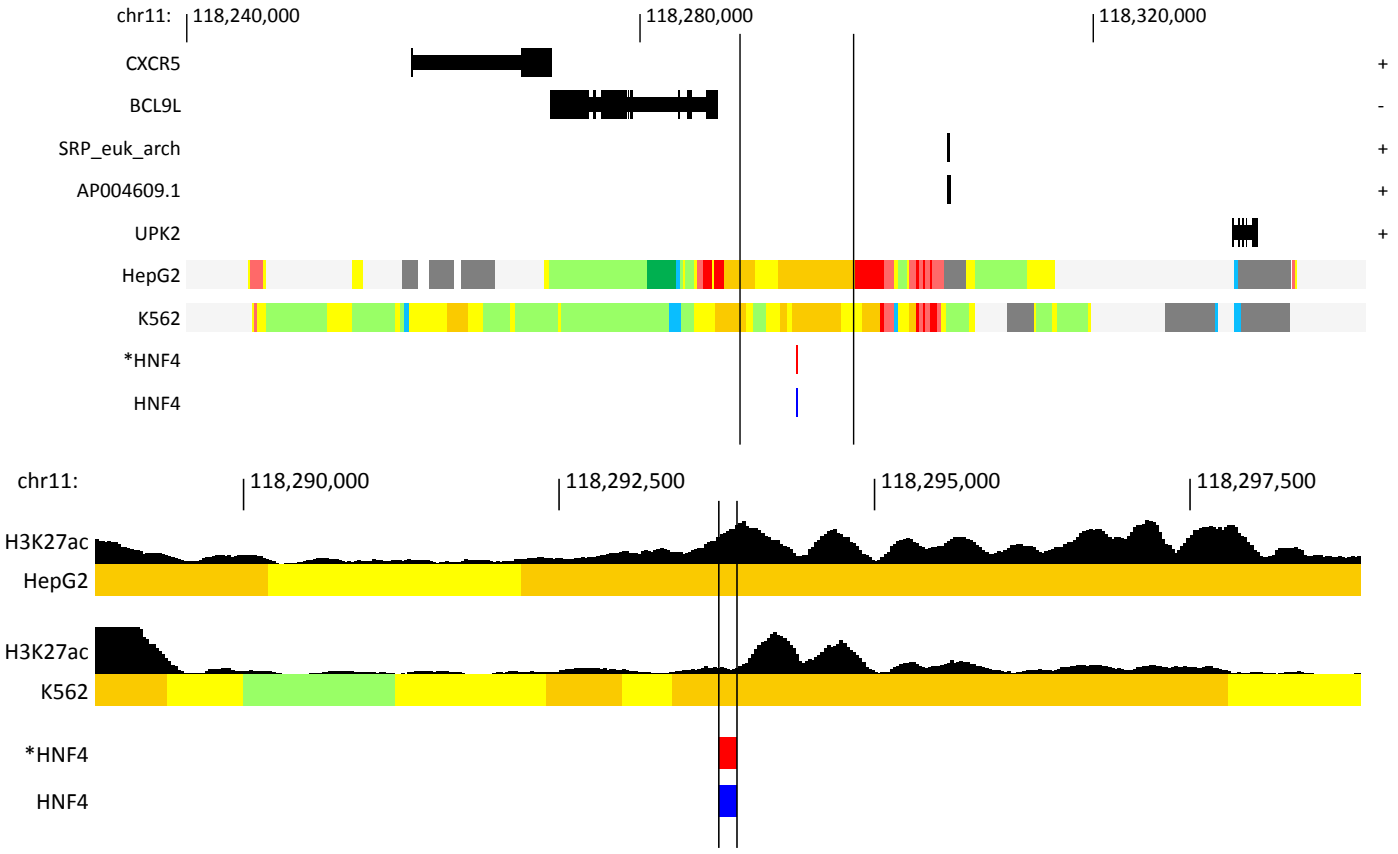
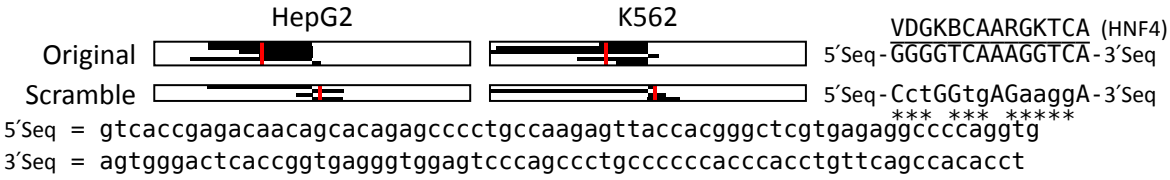
2293 HNF4 in HepG2 enhancer (conserved at 50% confidence)

chr11 118293832 118293845 + (hg18)





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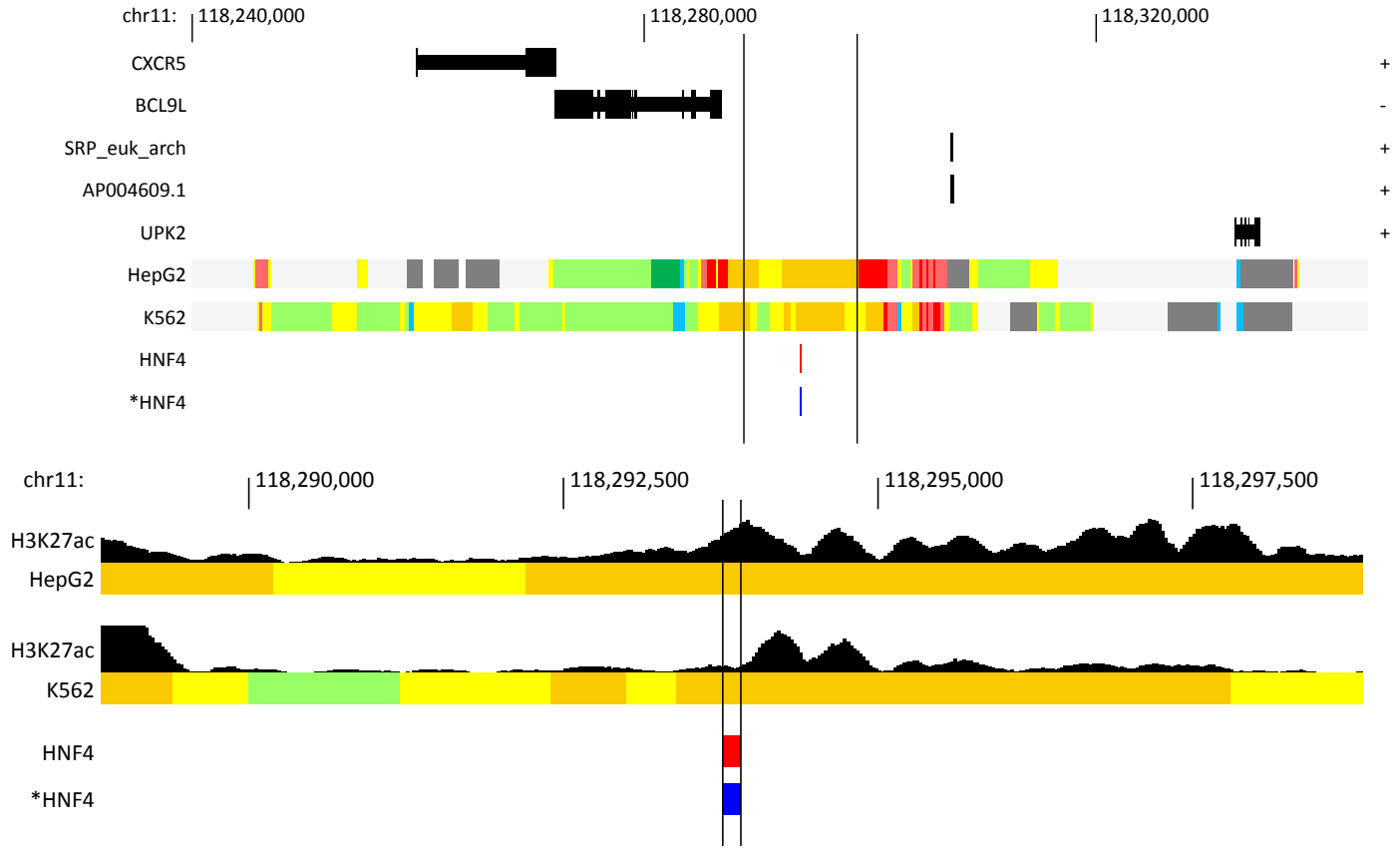
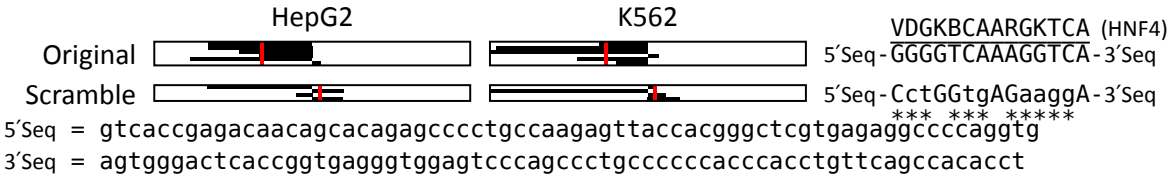
2294 HNF4 in HepG2 enhancer

chr11 118293832 118293845 + (hg18)





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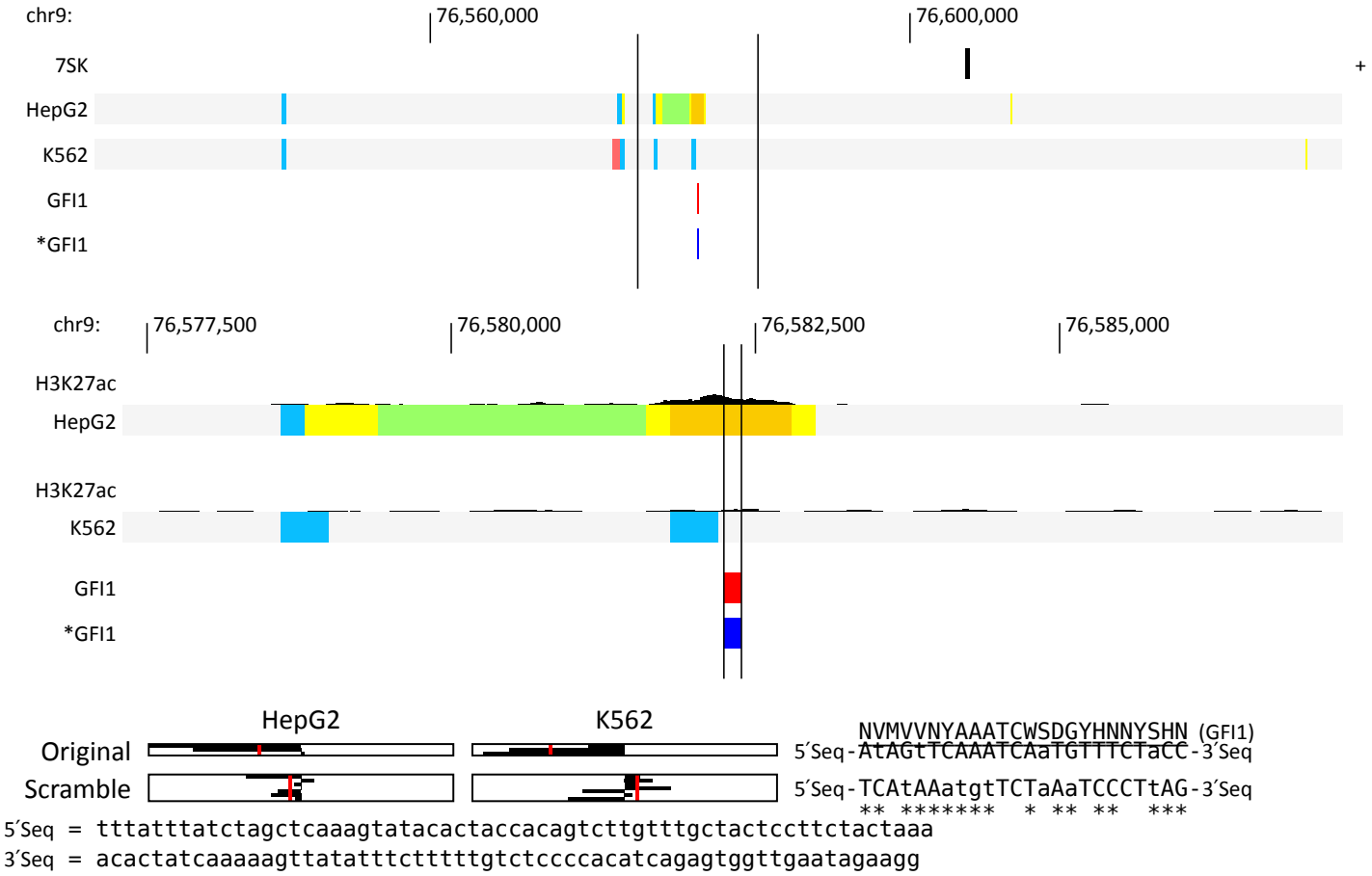
2295 GFI1 in HepG2 enhancer

chr9 76582302 76582325 + (hg18)



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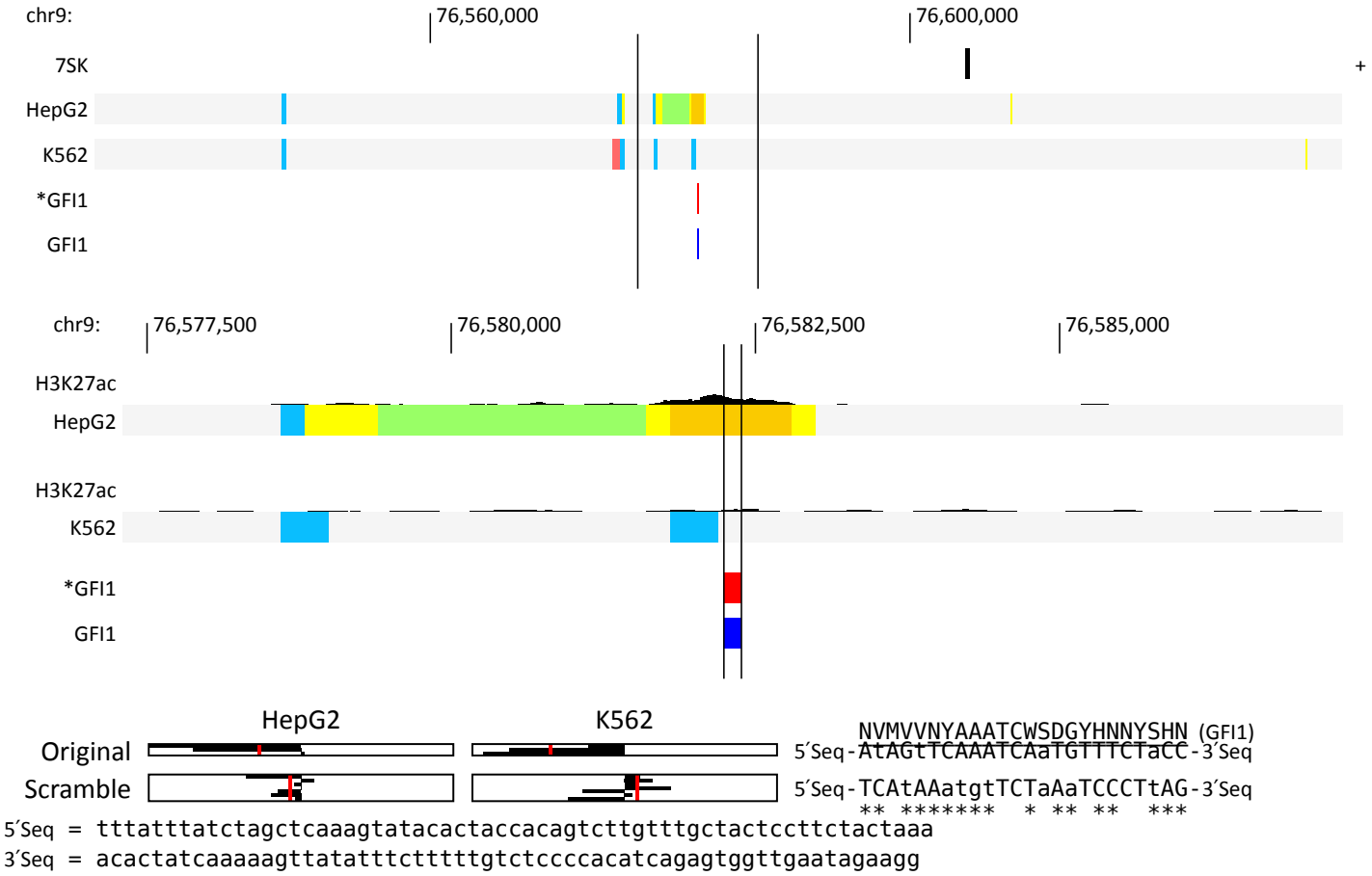
2296 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr9 76582302 76582325 + (hg18)



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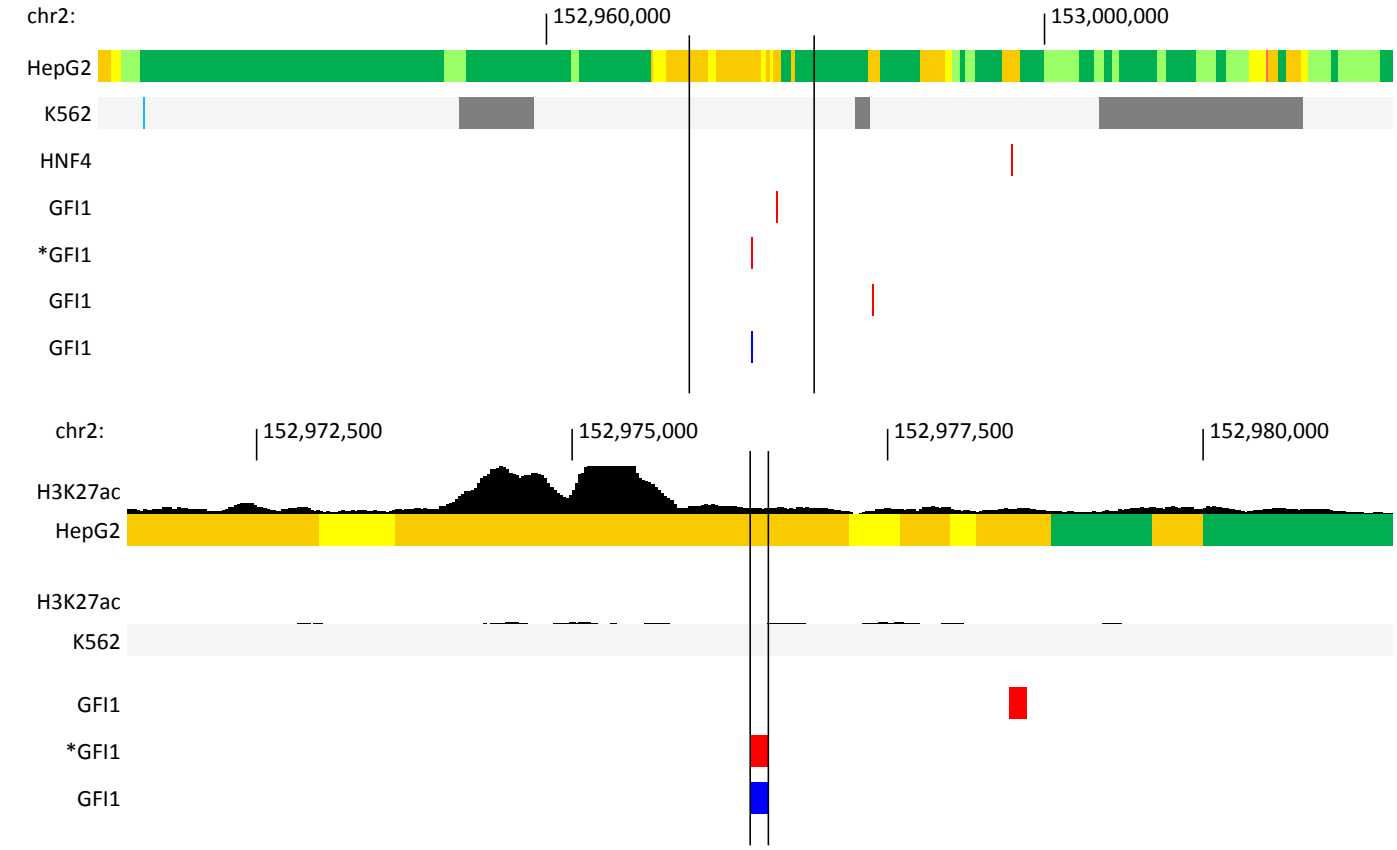
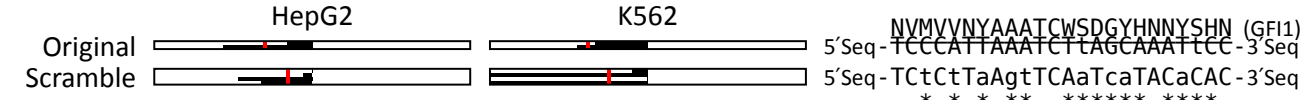
2297 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr2 152976472 152976495 + (hg18)





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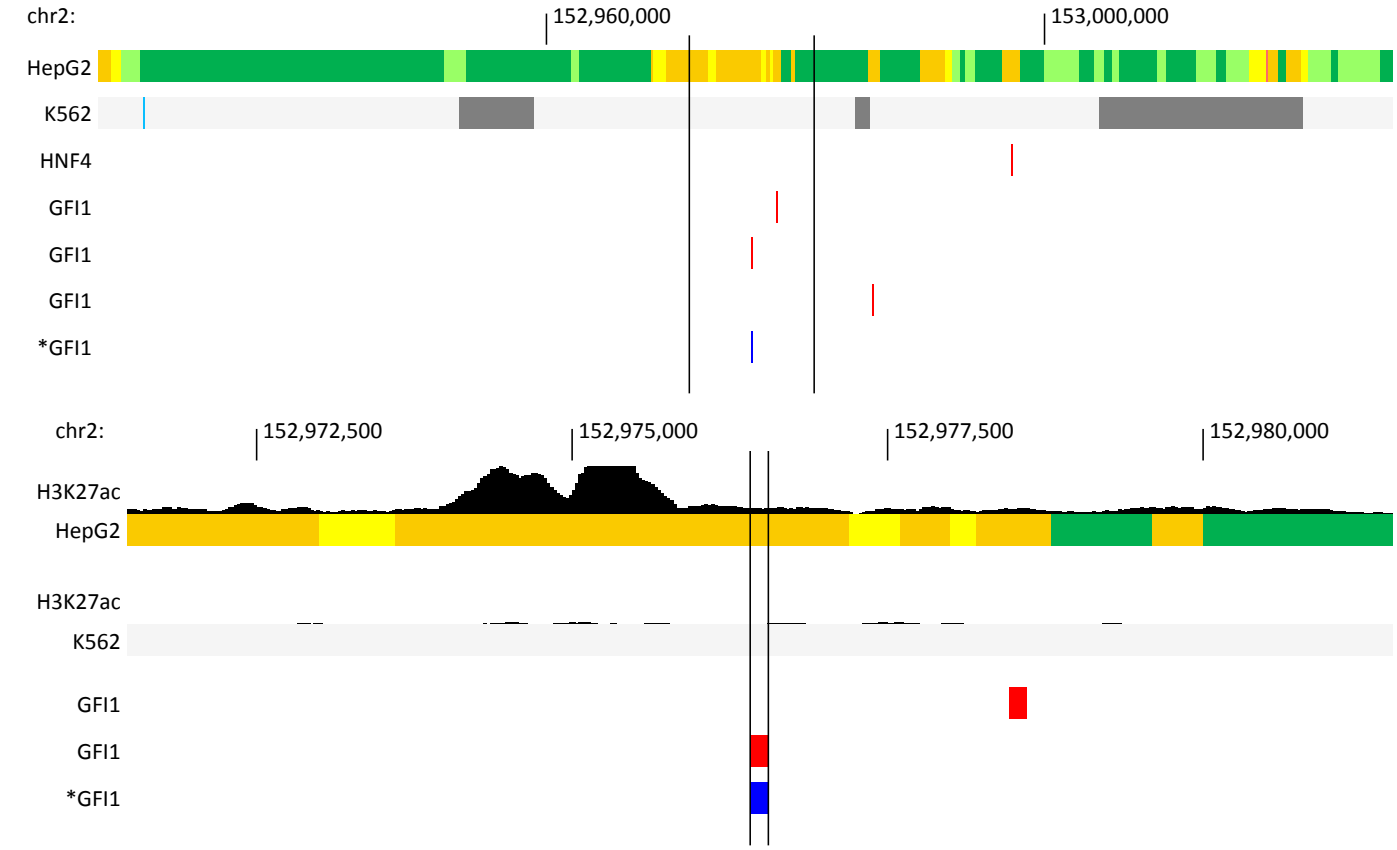
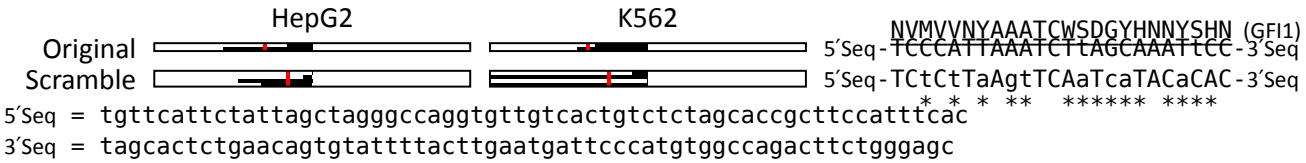
2298 GFI1 in HepG2 enhancer

chr2 152976472 152976495 + (hg18)





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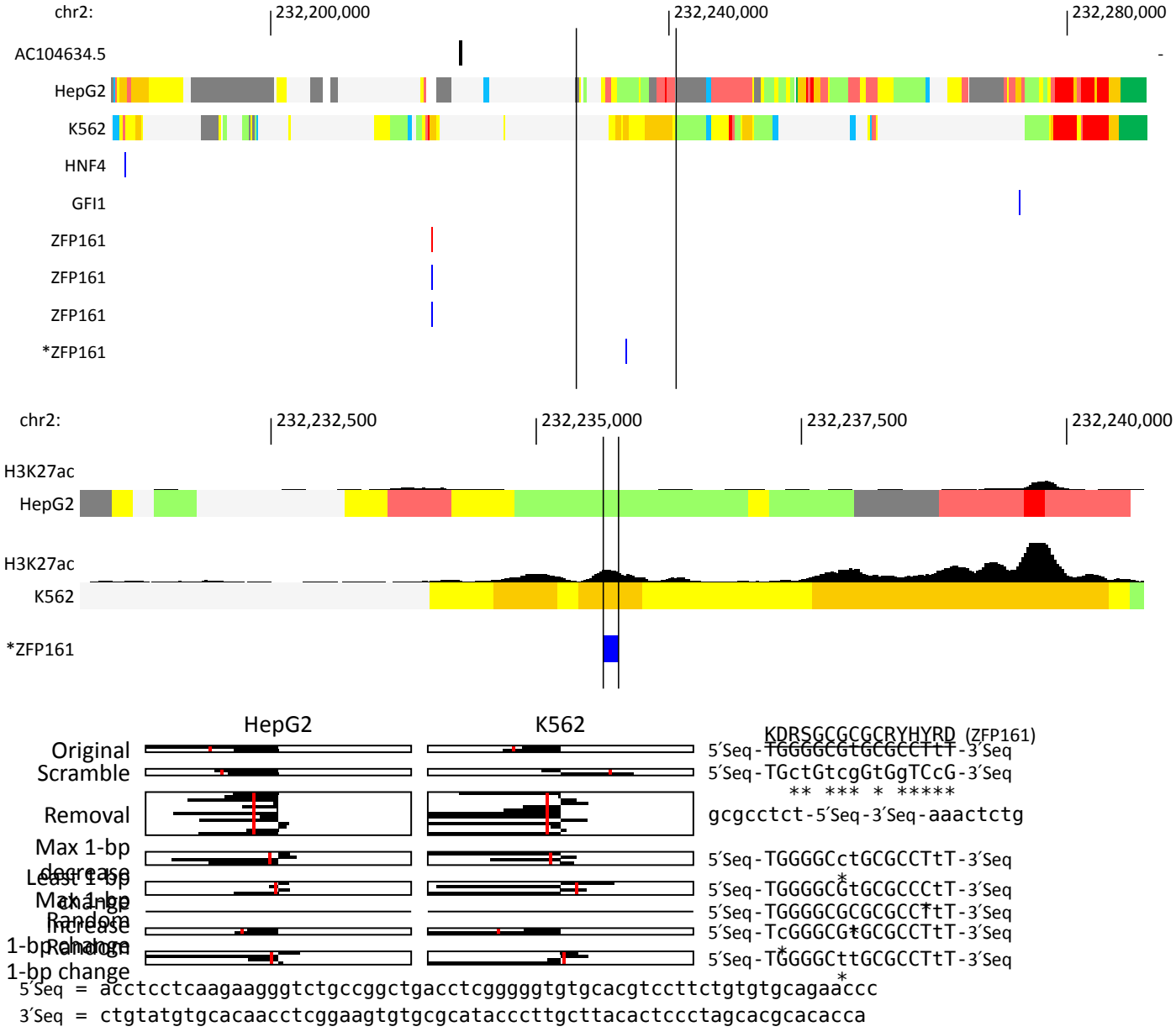
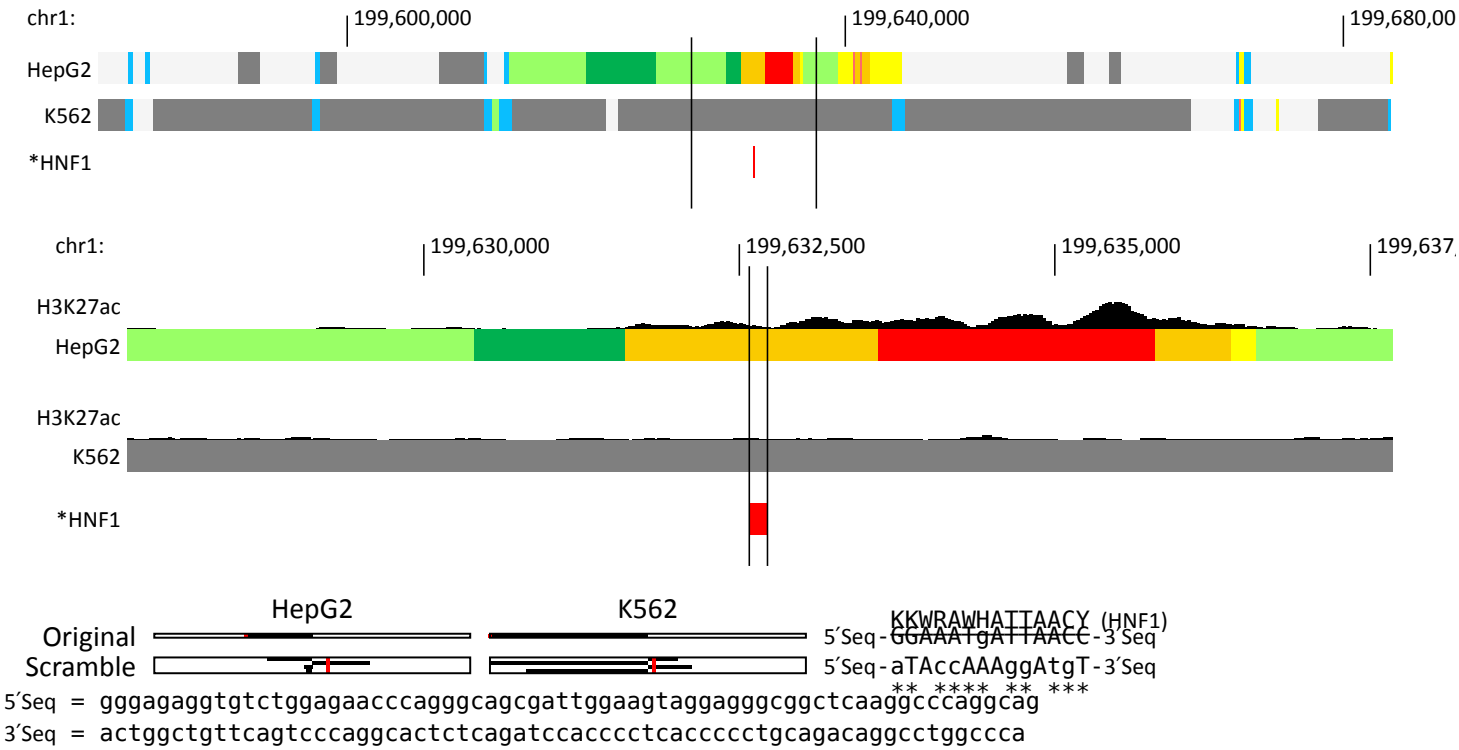
2299 ZFP161 in K562 enhancer

chr2 232235697 232235712 + (hg18)



2300 HNF1 in HepG2 enhancer (conserved at 60% confidence)

chr1 199632645 199632658 + (hg18)



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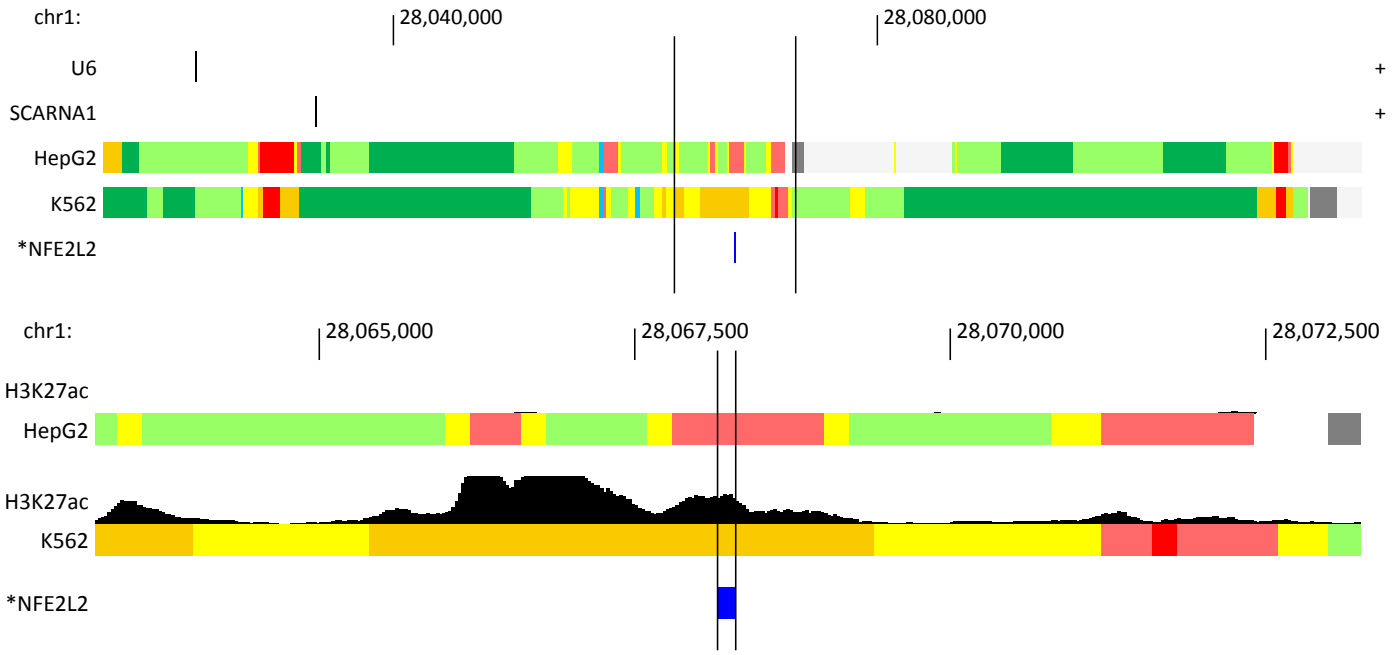
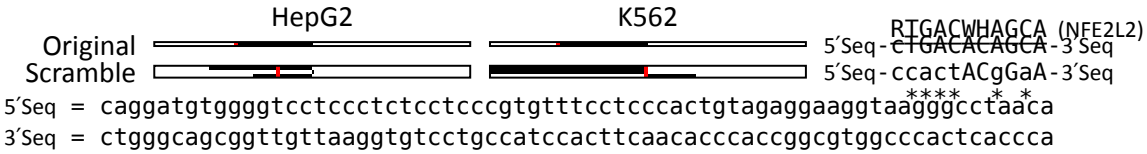
2301 NFE2L2 in K562 enhancer

chr1 28068223 28068233 - (hg18)





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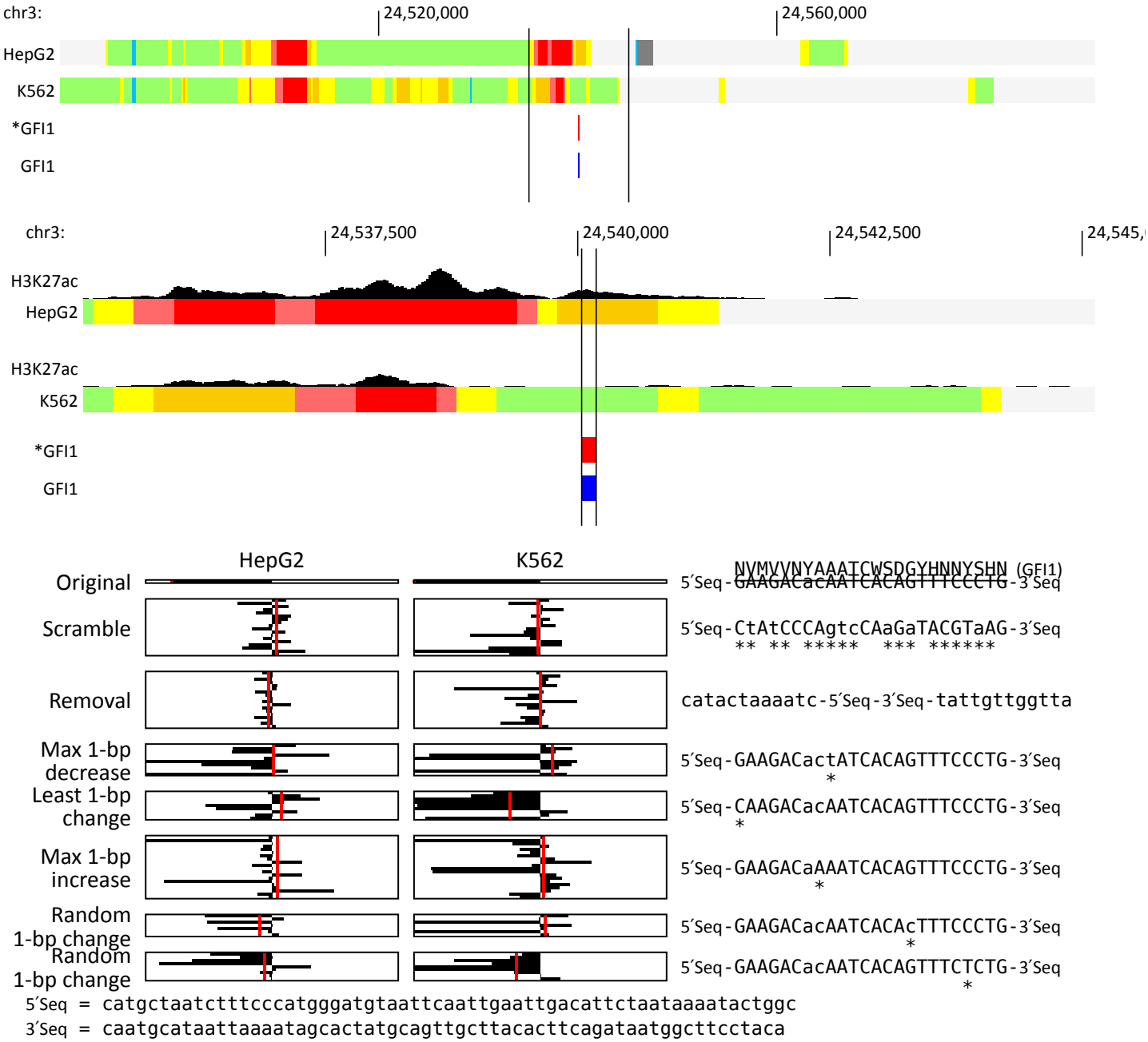
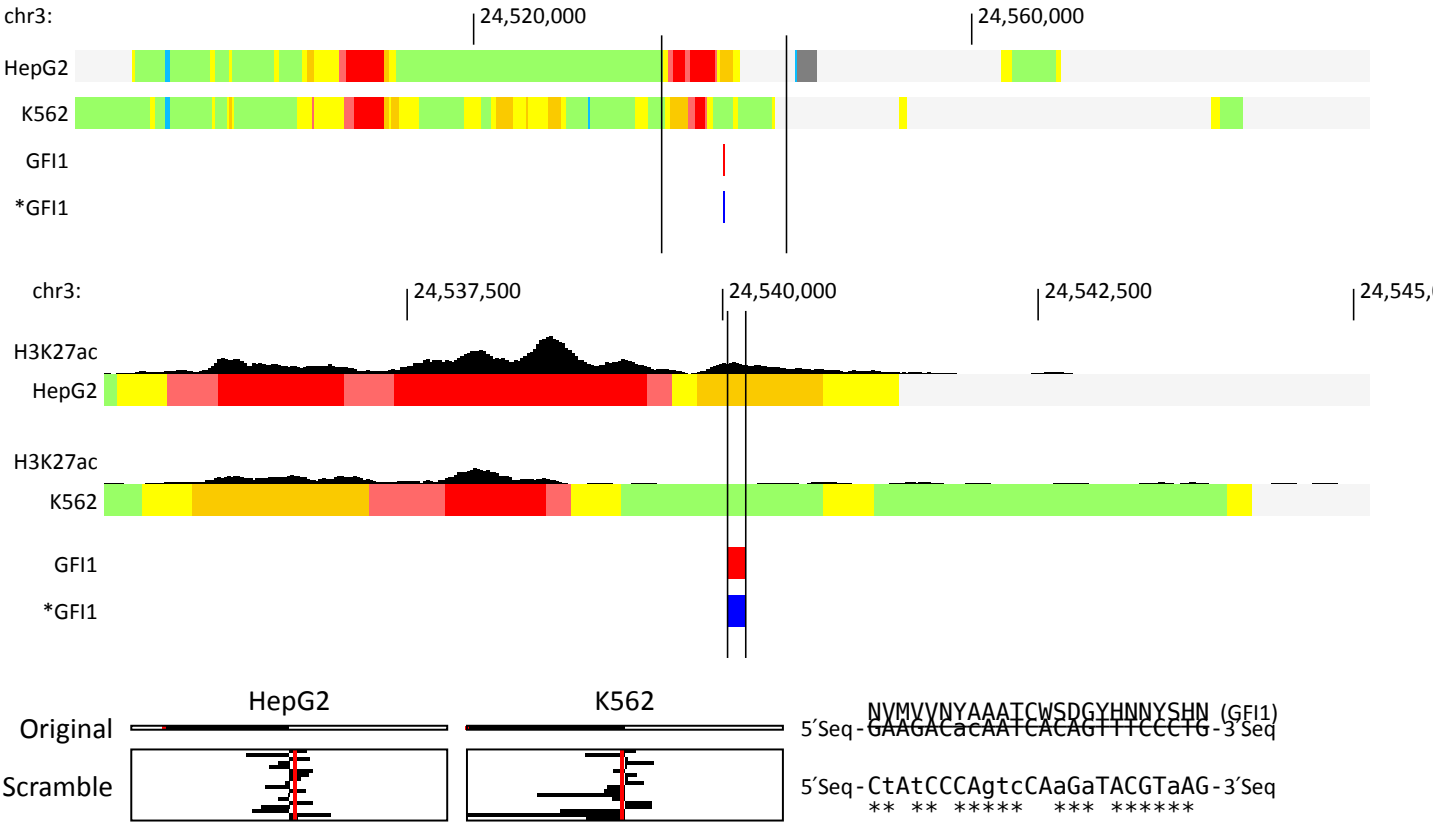
2302 GFI1 in HepG2 enhancer (conserved at 40% confidence)

chr3 24540100 24540123 + (hg18)



2303 GFI1 in HepG2 enhancer

chr3 24540100 24540123 + (hg18)



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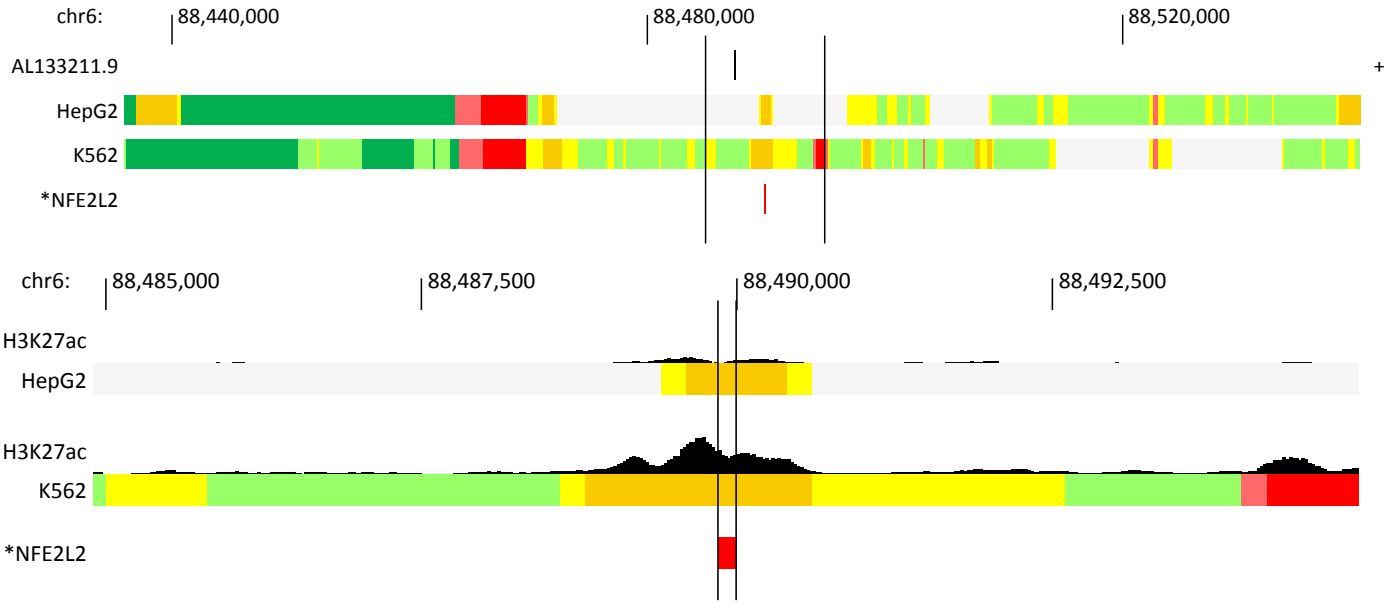
2304 NFE2L2 in K562 enhancer (conserved at 60% confidence)

chr6 88489917 88489927 + (hg18)



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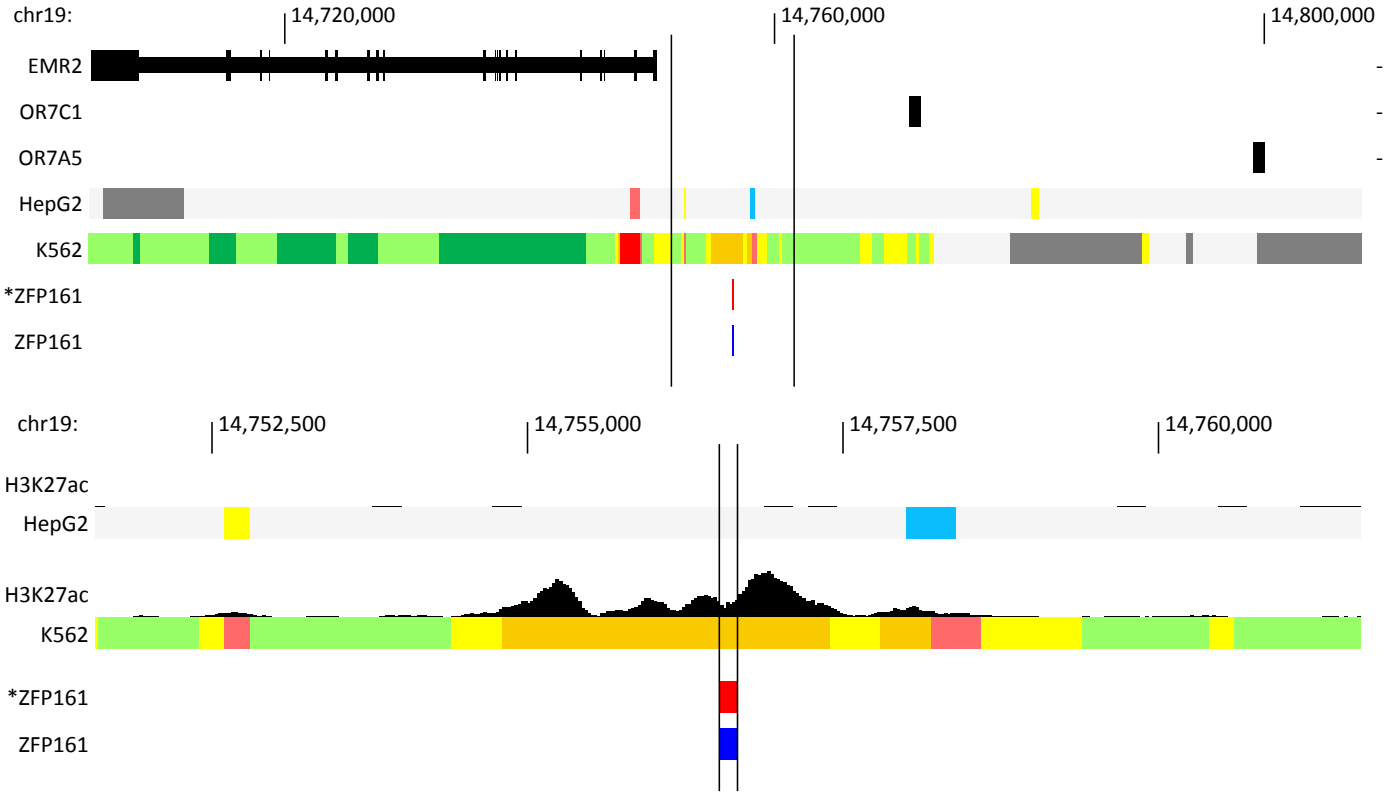
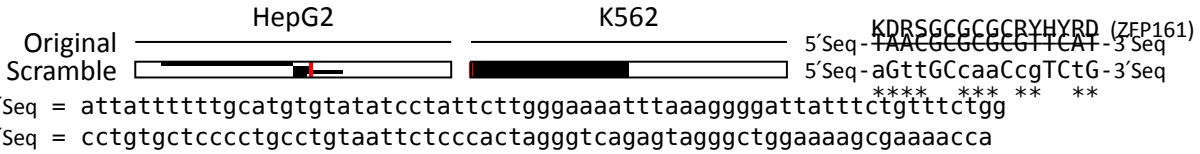
2305 ZFP161 in K562 enhancer (conserved at 40% confidence)

chr17 42204519 42204534 - (hg18)

2306 ZFP161 in K562 enhancer (conserved at 30% confidence)

chr19 14756585 14756600 + (hg18)





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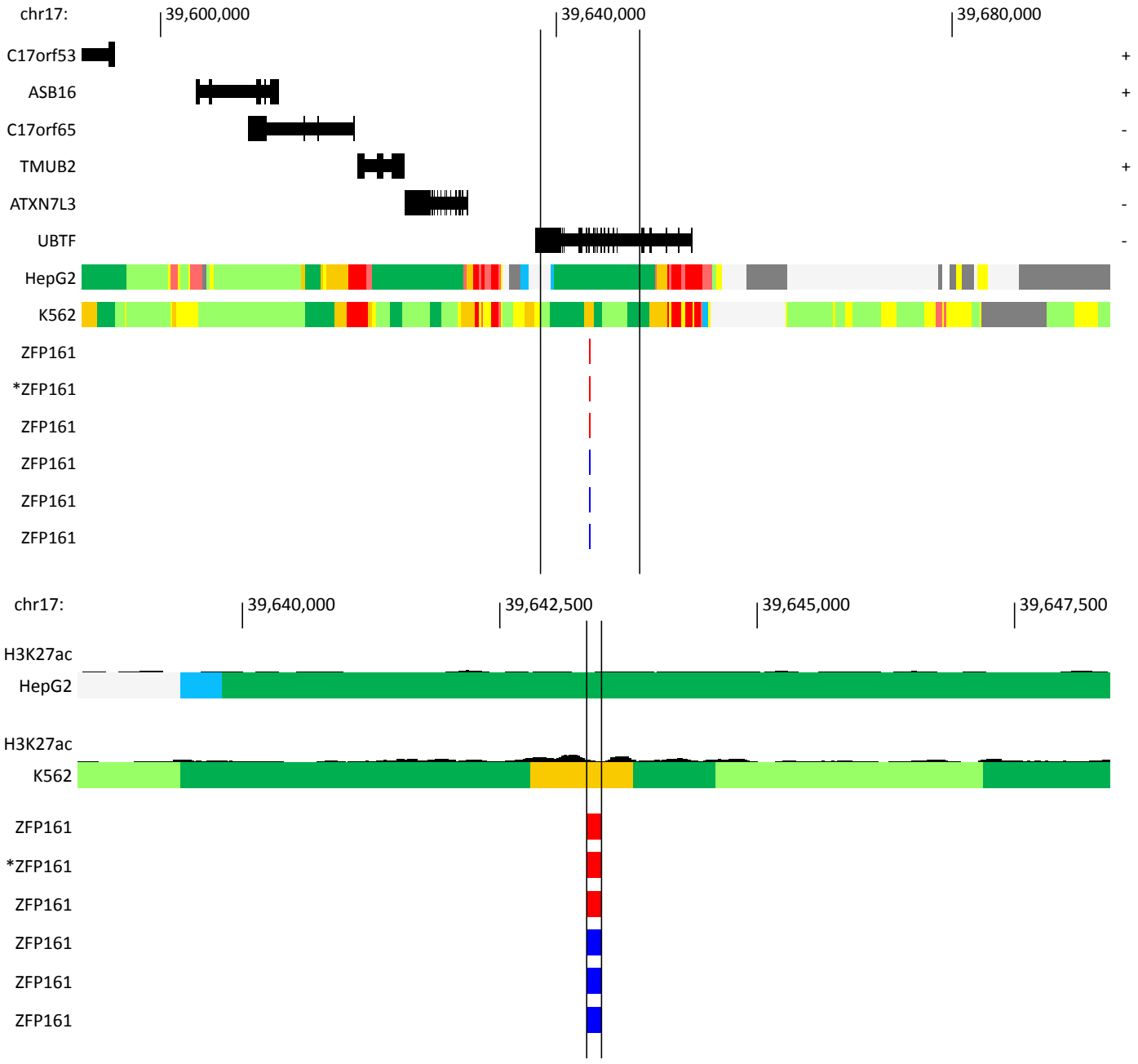
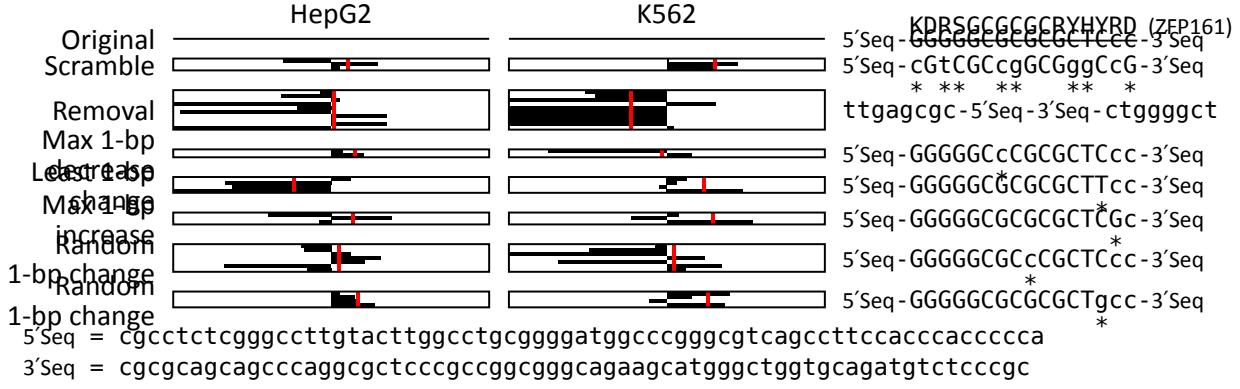
2307 ZFP161 in K562 enhancer (conserved at 50% confidence)

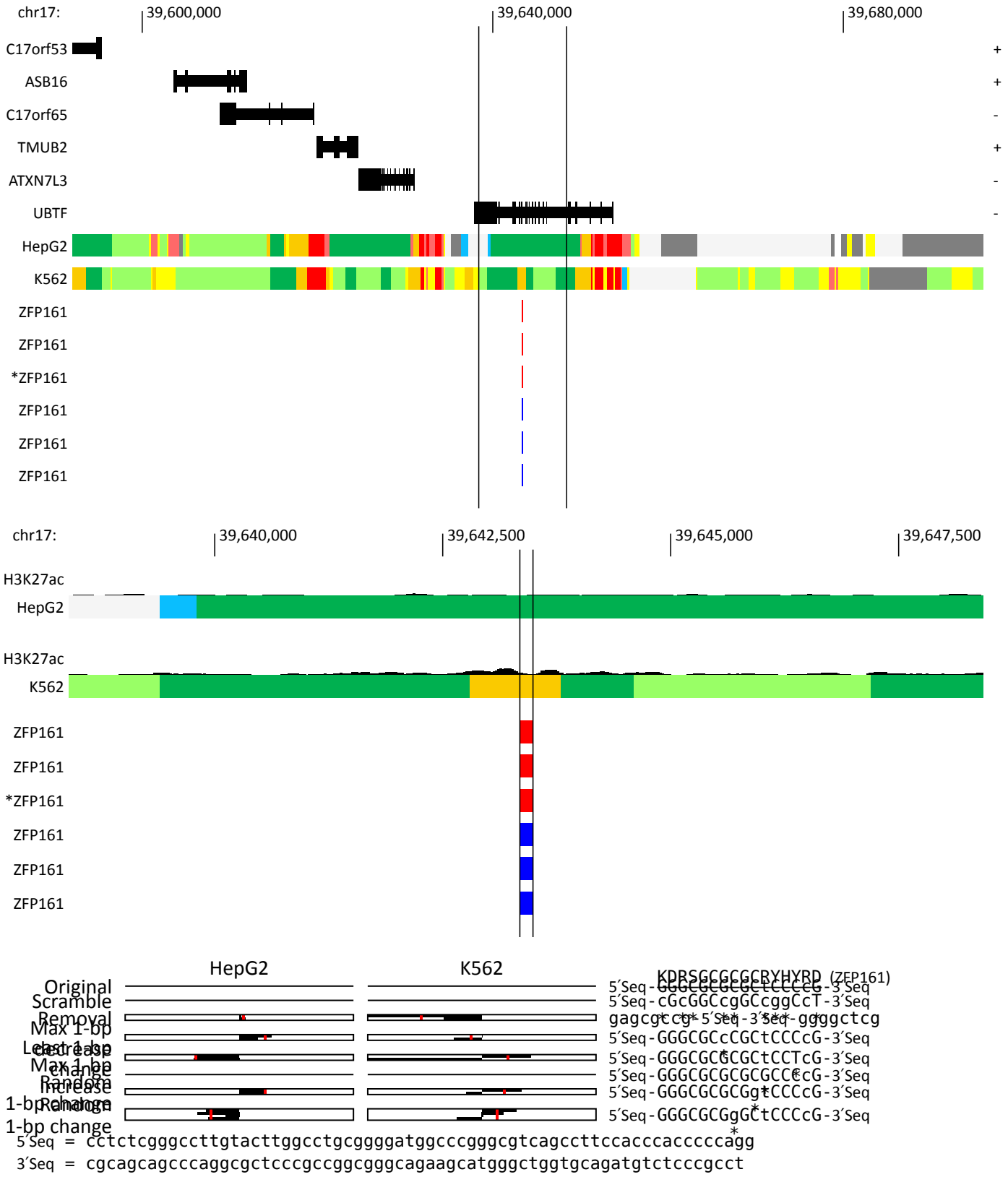
chr17 39643409 39643424 + (hg18)





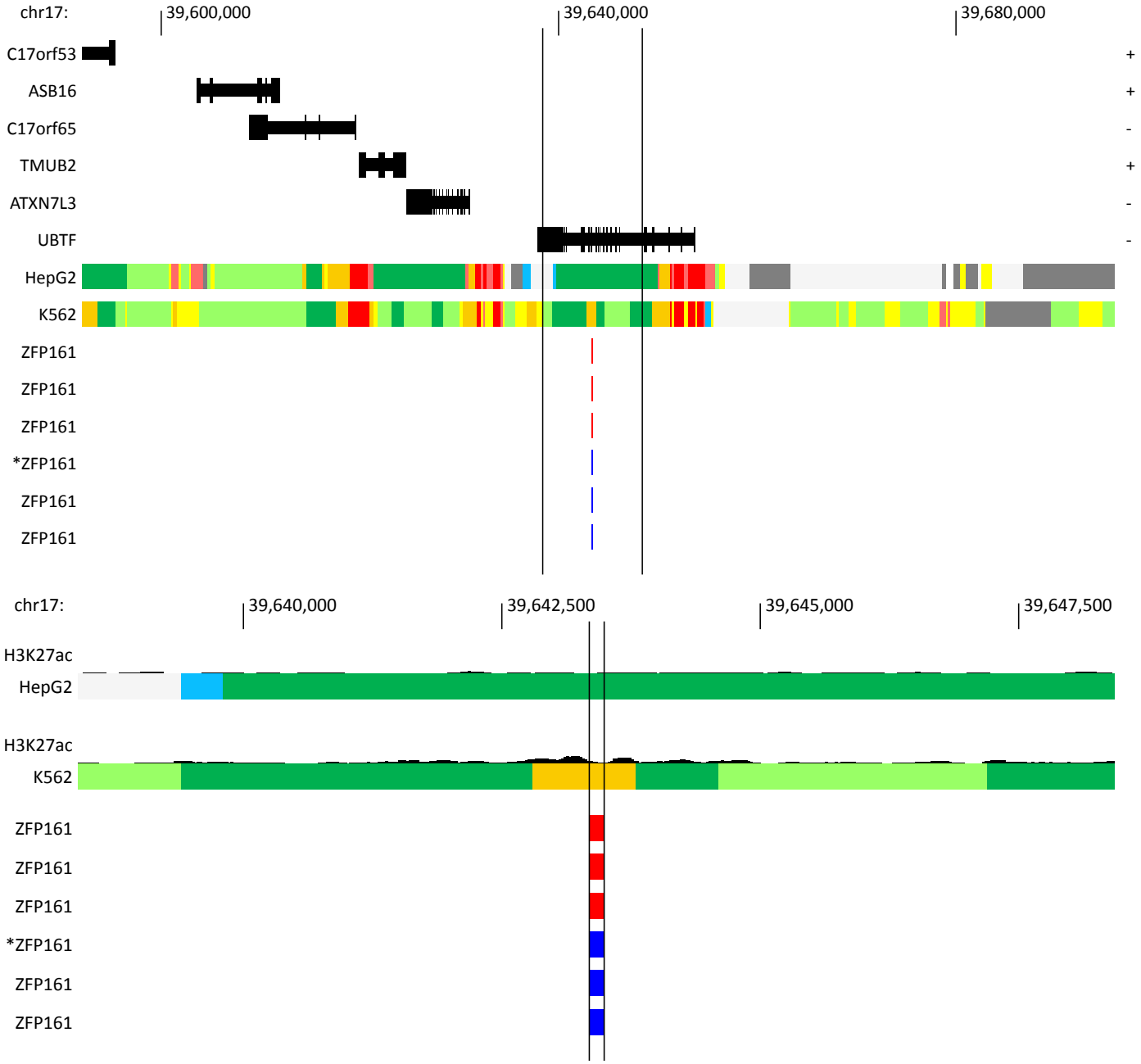
2308 ZFP161 in K562 enhancer (conserved at 40% confidence)

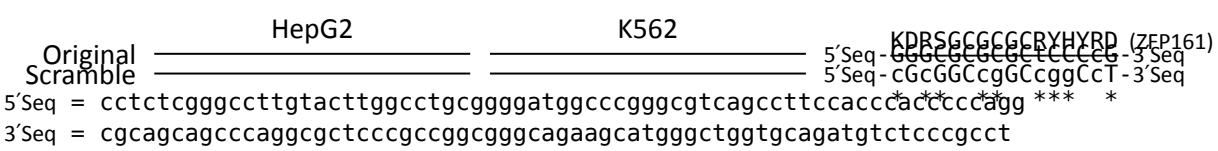
chr17 39643411 39643426 + (hg18)



2309 ZFP161 in K562 enhancer

chr17 39643411 39643426 + (hg18)





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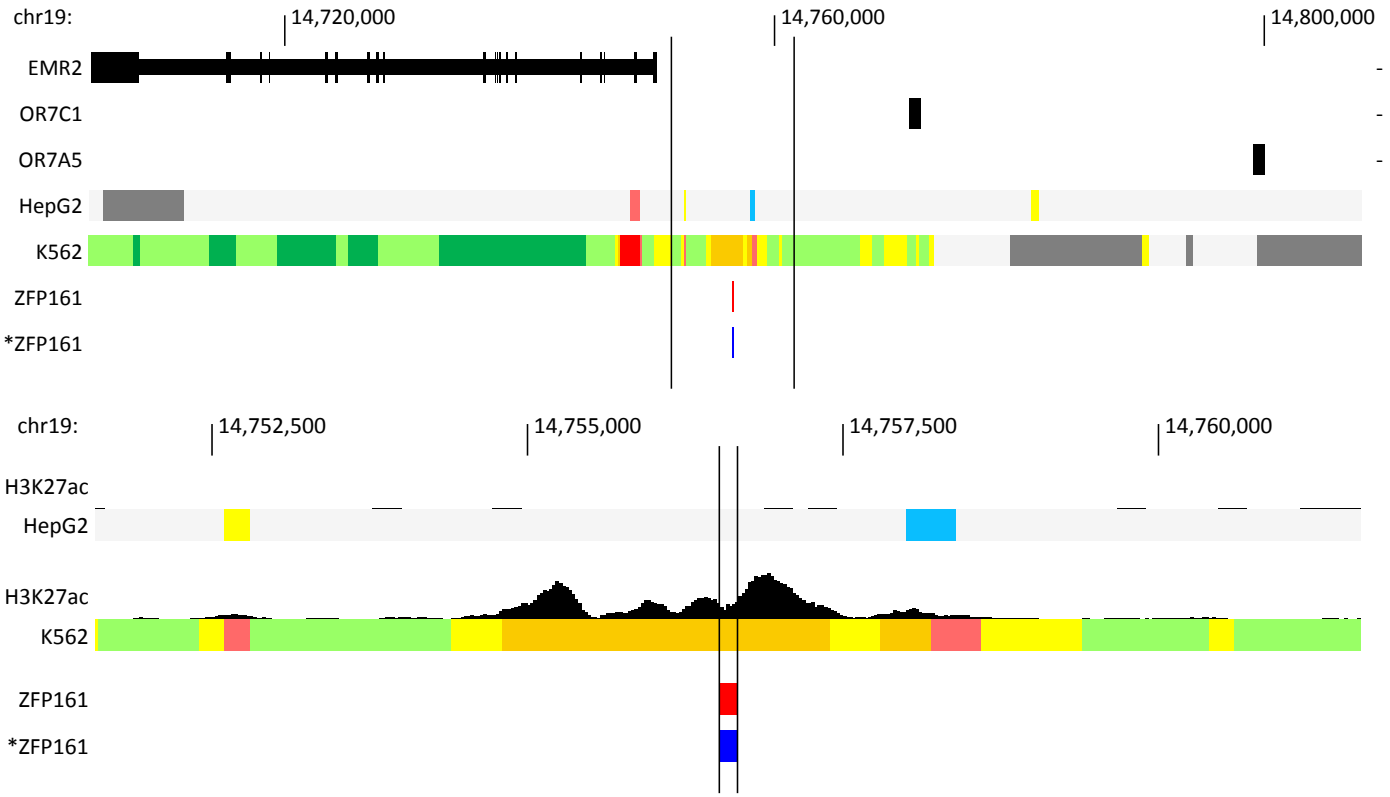
2310 ZFP161 in K562 enhancer

chr19 14756585 14756600 + (hg18)



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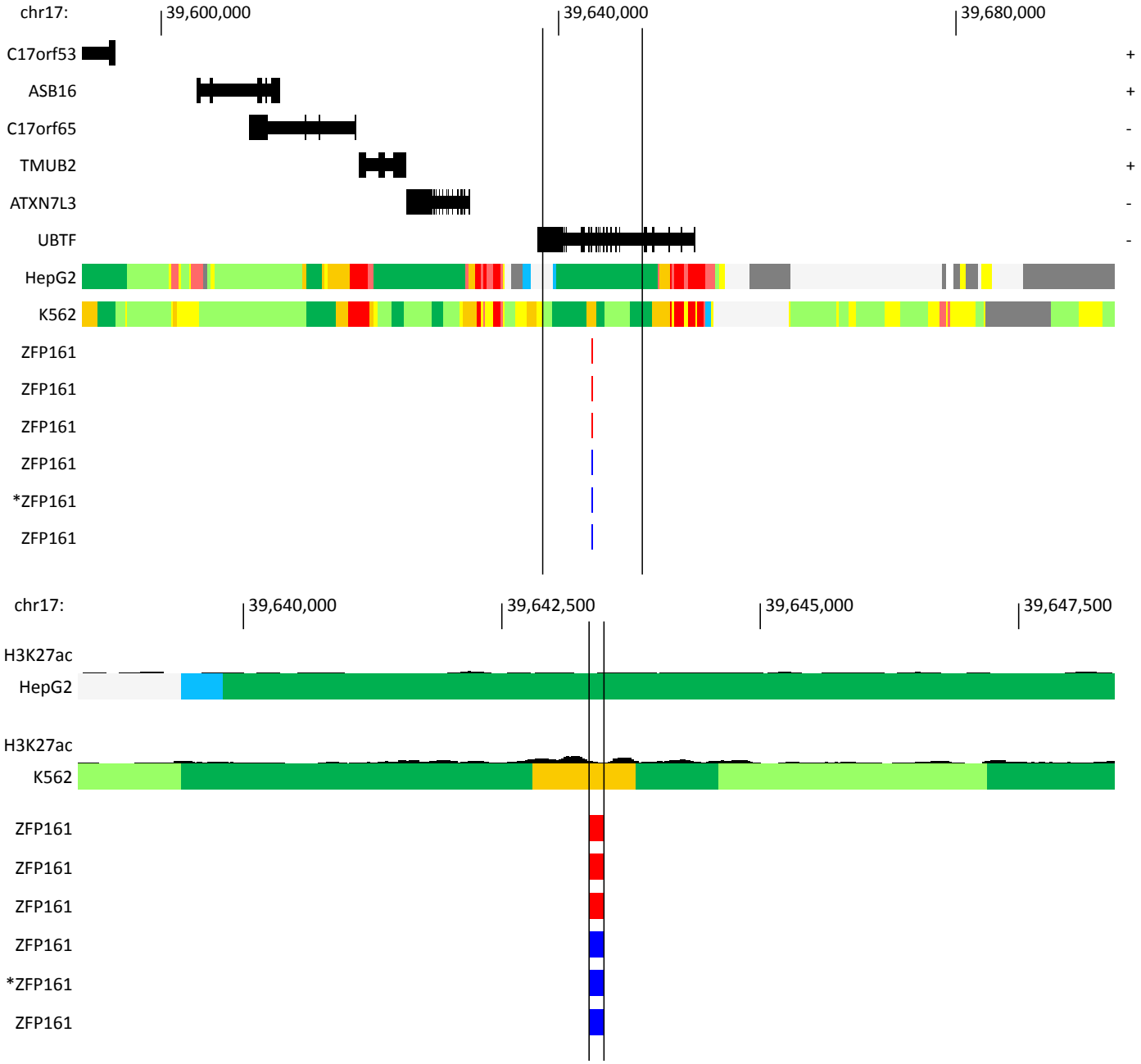
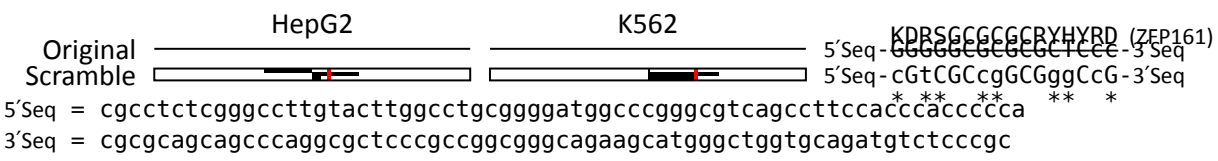
2311 ZFP161 in K562 enhancer

chr17 39643409 39643424 + (hg18)





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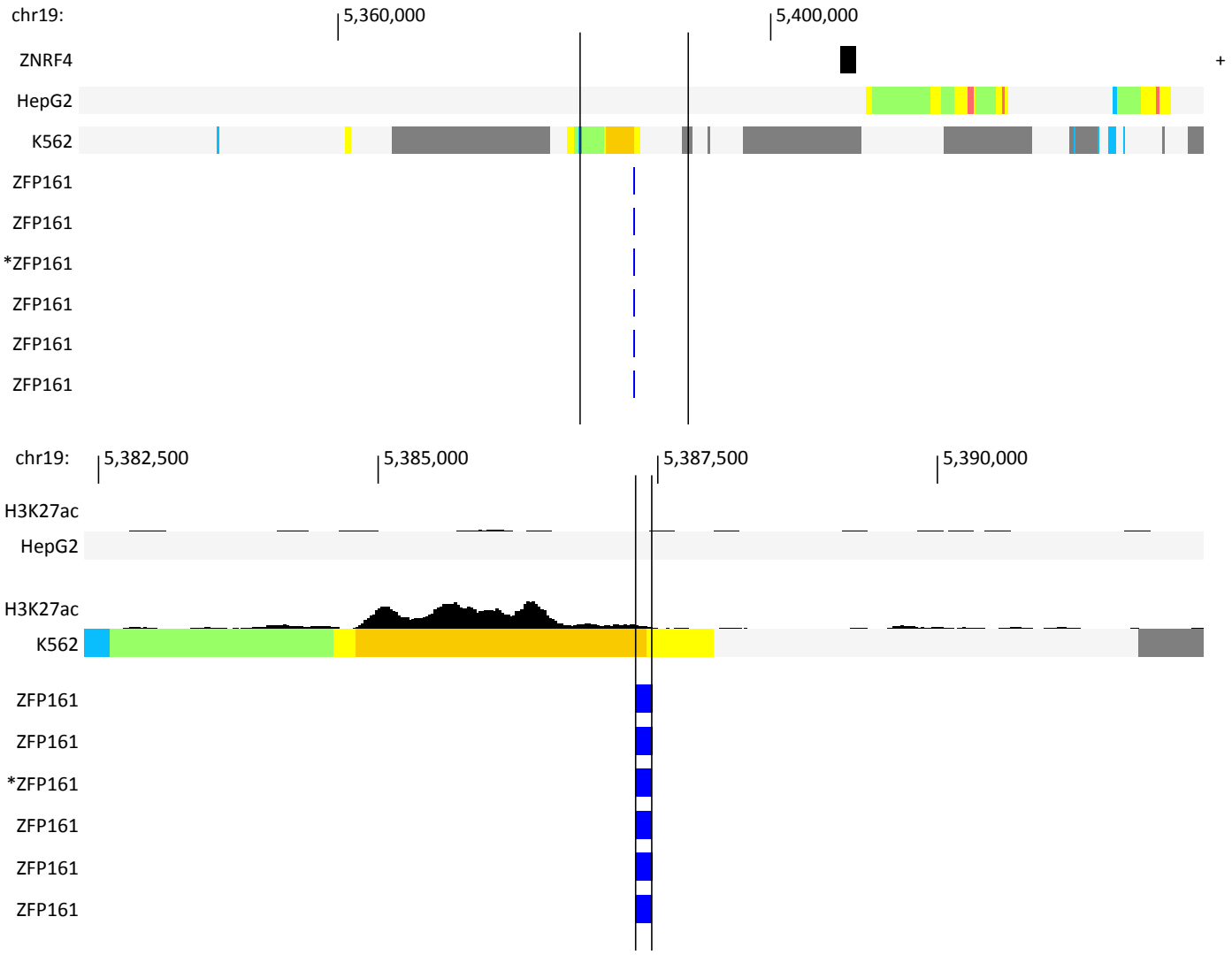
2312 ZFP161 in K562 enhancer

chr19 5387367 5387382 - (hg18)



HepG2 K562

KDRSGCGCGCRYHYRD (ZFP161)

Original 5′Seq-GcGCGCGCGCACACAc-3′Seq

Scramble 5′Seq-aGACGCcCGCcggCcA-3′Seq

5′Seq = tcccctcccaagggctcttttatcacccttccccccttccctcccctcccctcccc*** *cgc *** **

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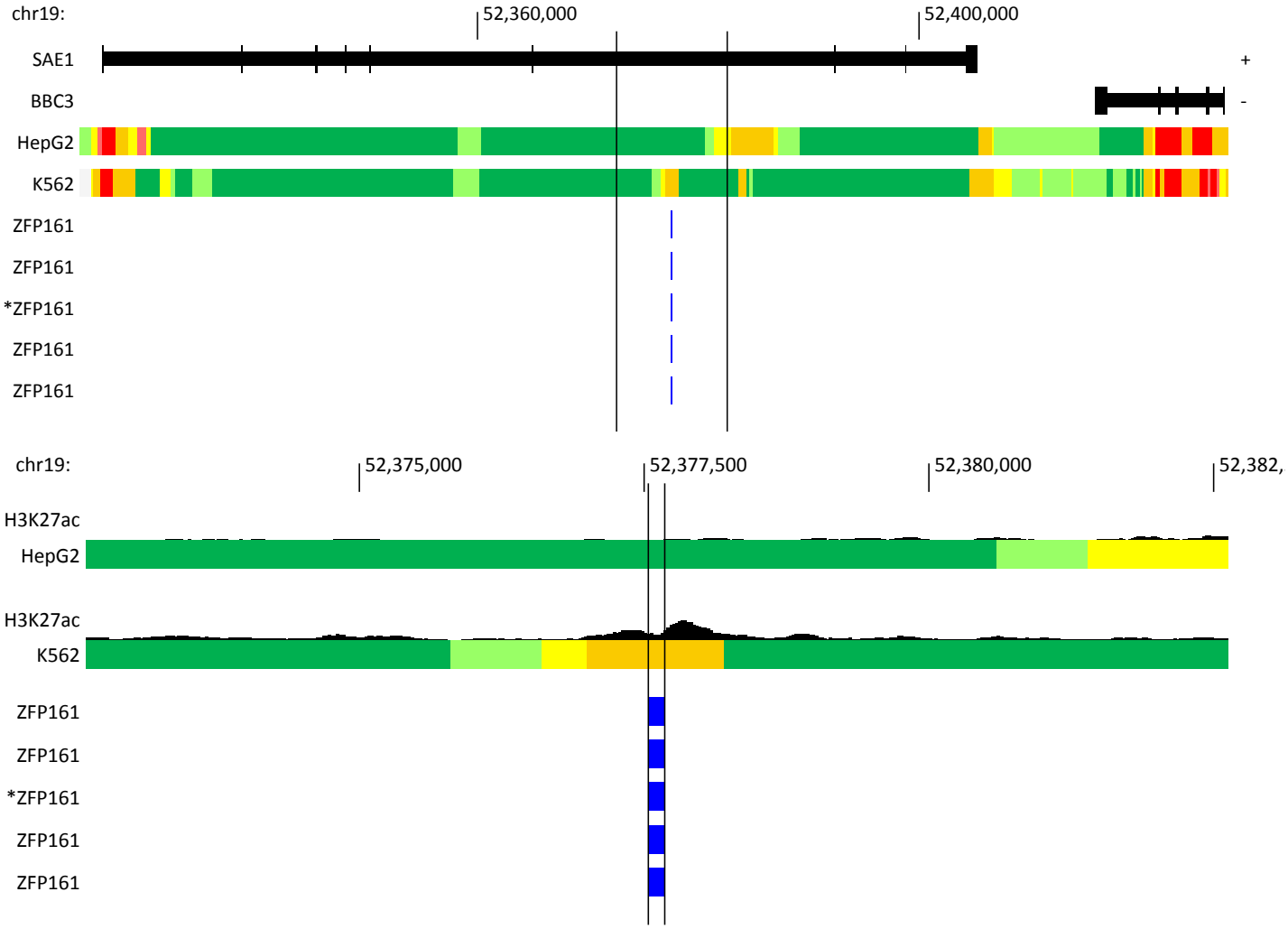
2313 ZFP161 in K562 enhancer

chr19 52377602 52377617 - (hg18)



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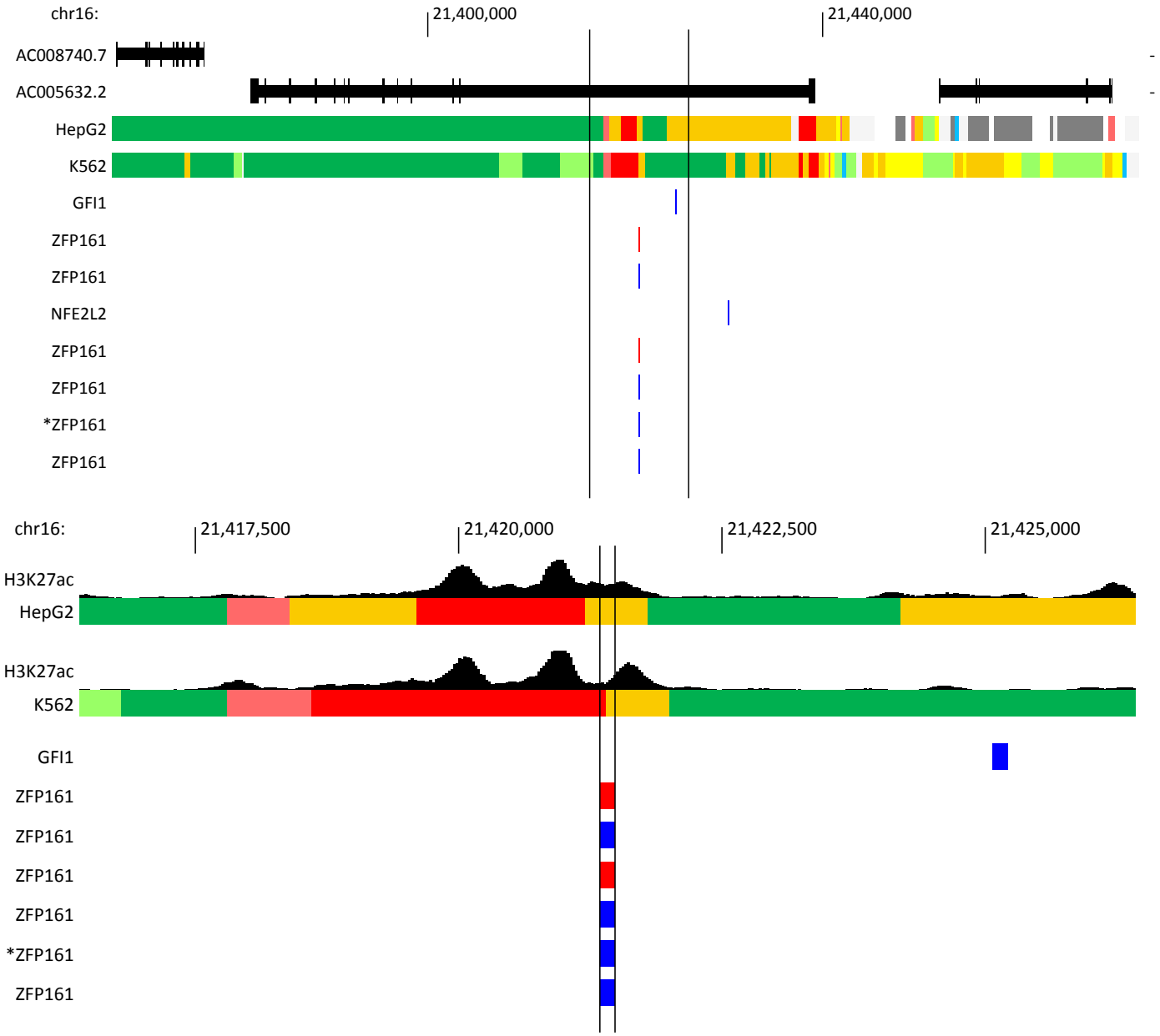
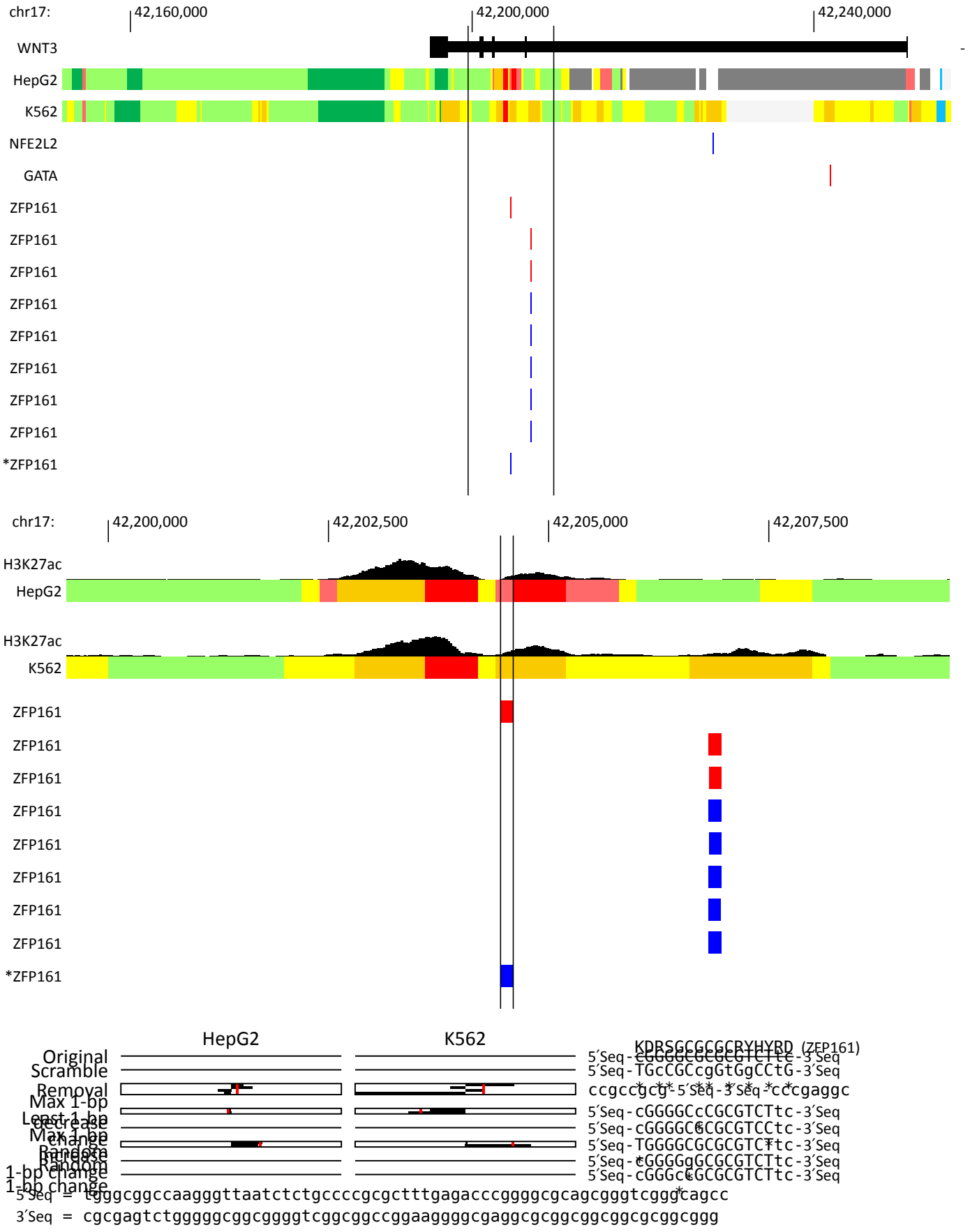
2314 ZFP161 in K562 enhancer

chr16 21421406 21421421 + (hg18)



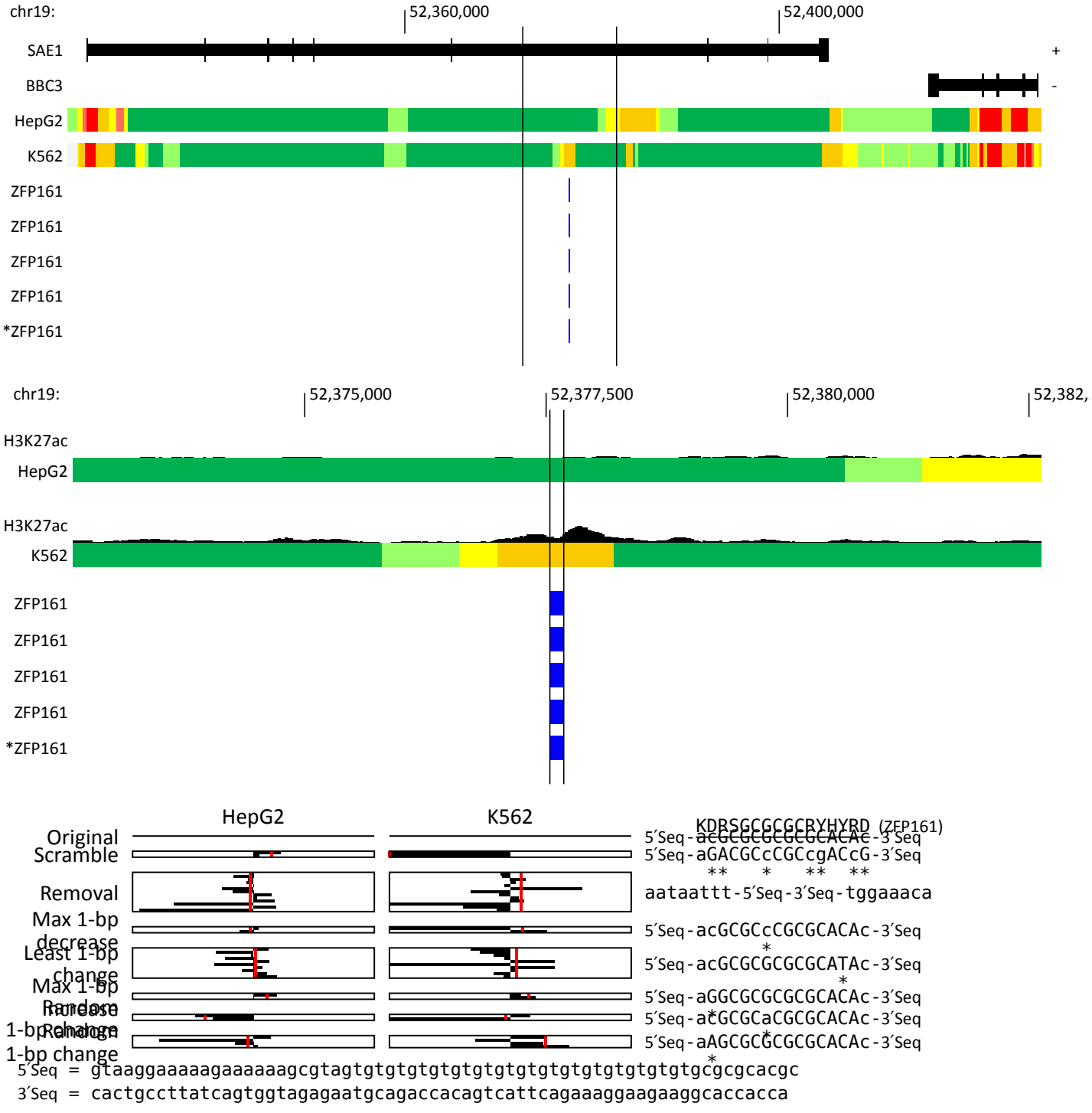
2315 ZFP161 in K562 enhancer

chr17 42204519 42204534 - (hg18)



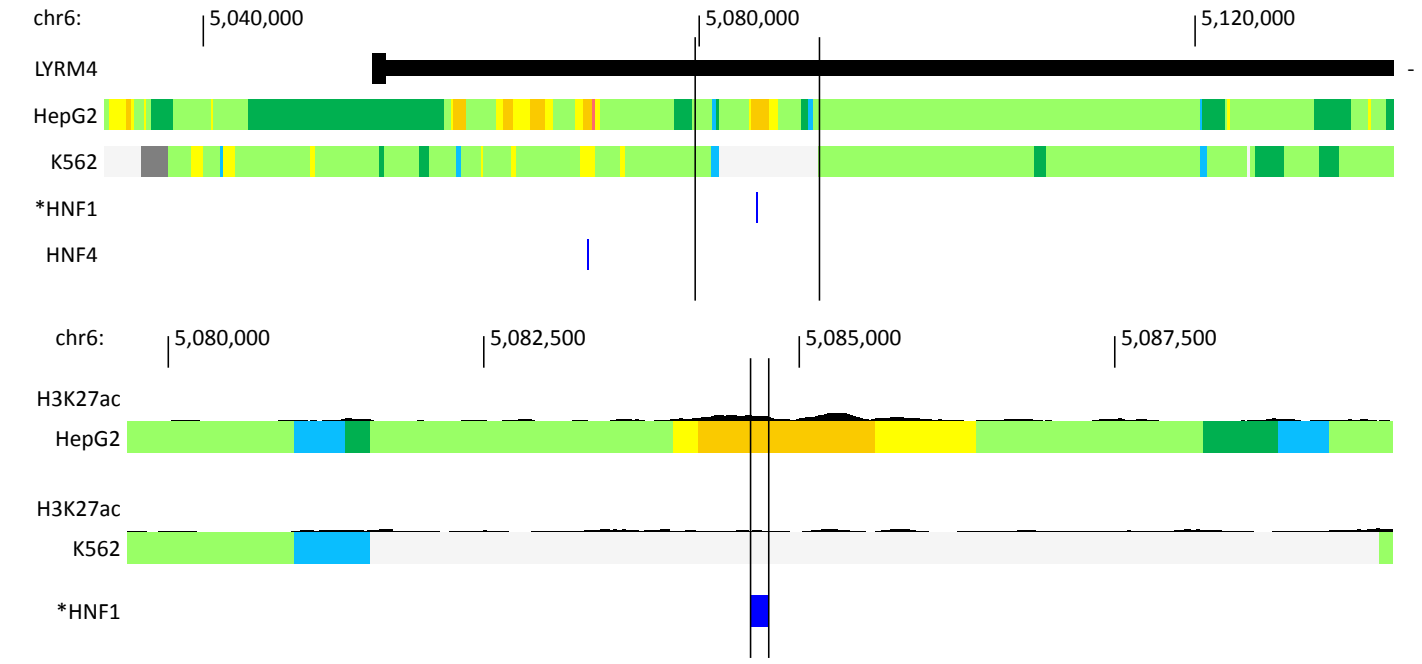
2316 ZFP161 in K562 enhancer

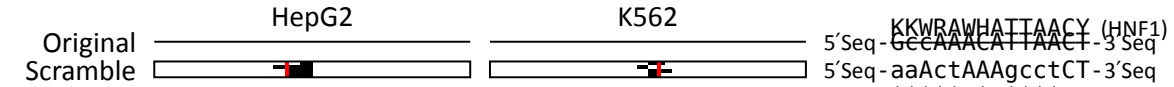
chr19 52377604 52377619 + (hg18)



2317 HNF1 in HepG2 enhancer

chr6 5084680 5084693 - (hg18)





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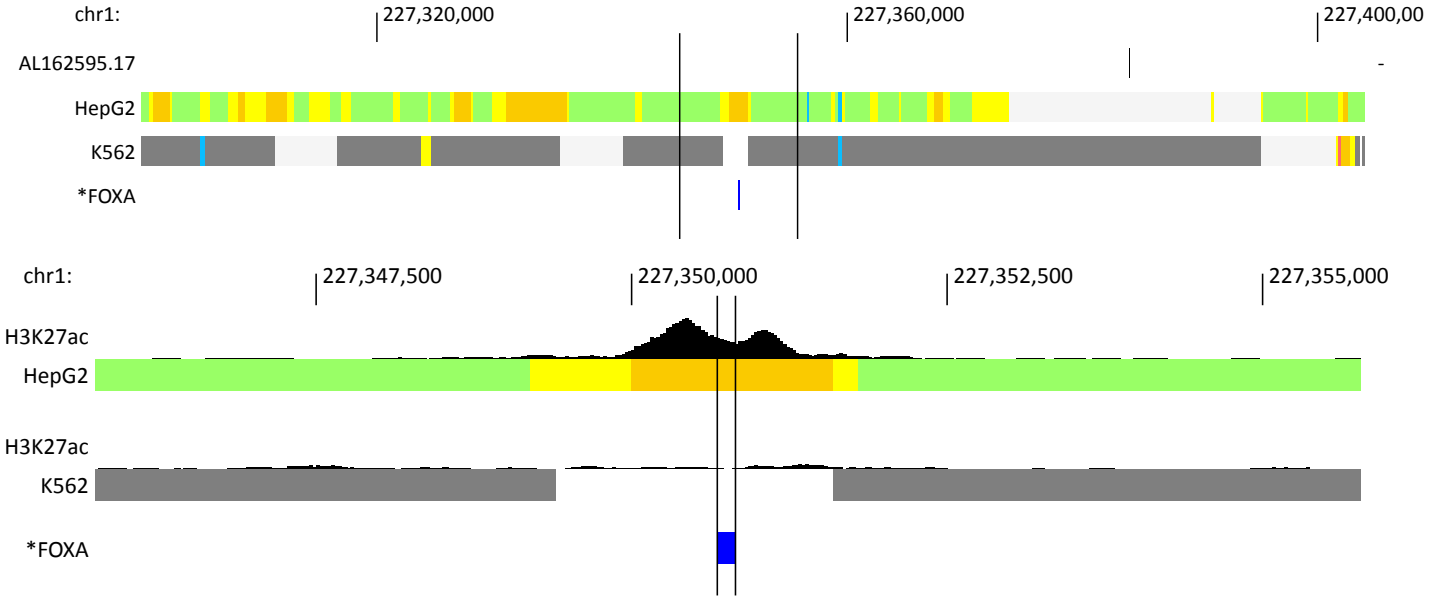
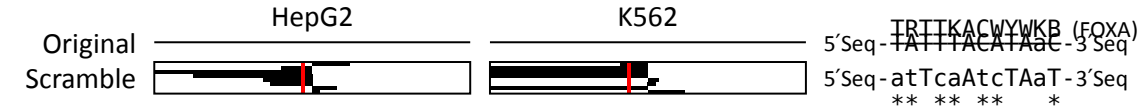
2318 FOXA in HepG2 enhancer

chr1 227350746 227350757 + (hg18)





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2319 FOXA in HepG2 enhancer

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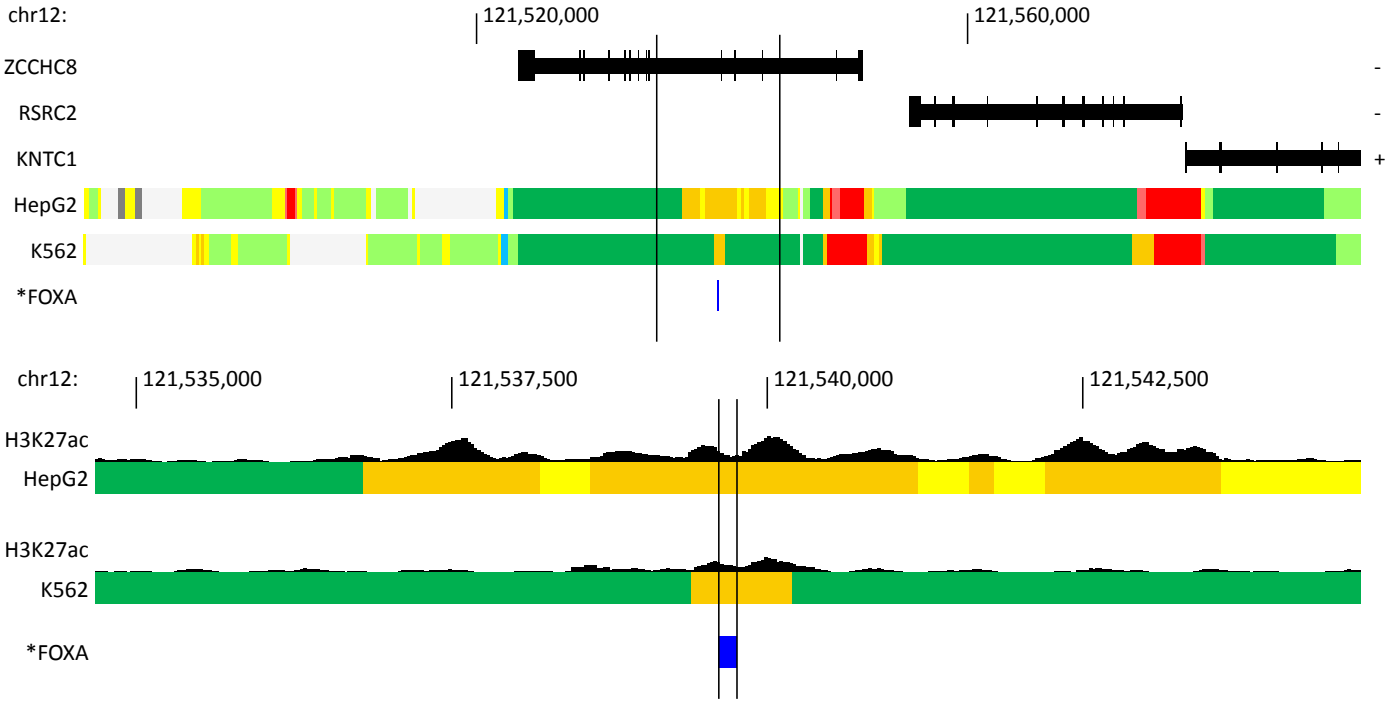

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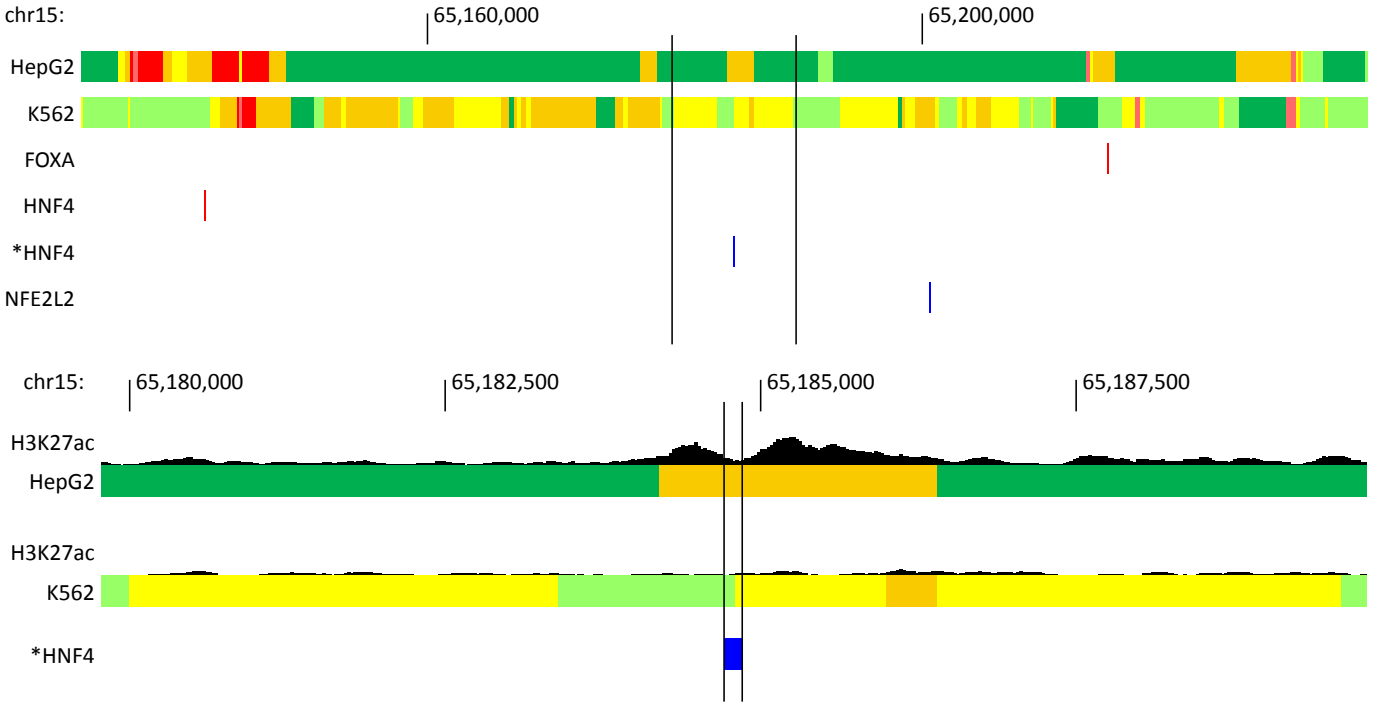
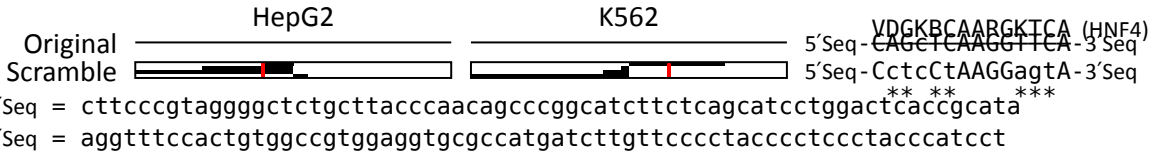
2320 HNF4 in HepG2 enhancer

chr15 65184776 65184789 - (hg18)





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