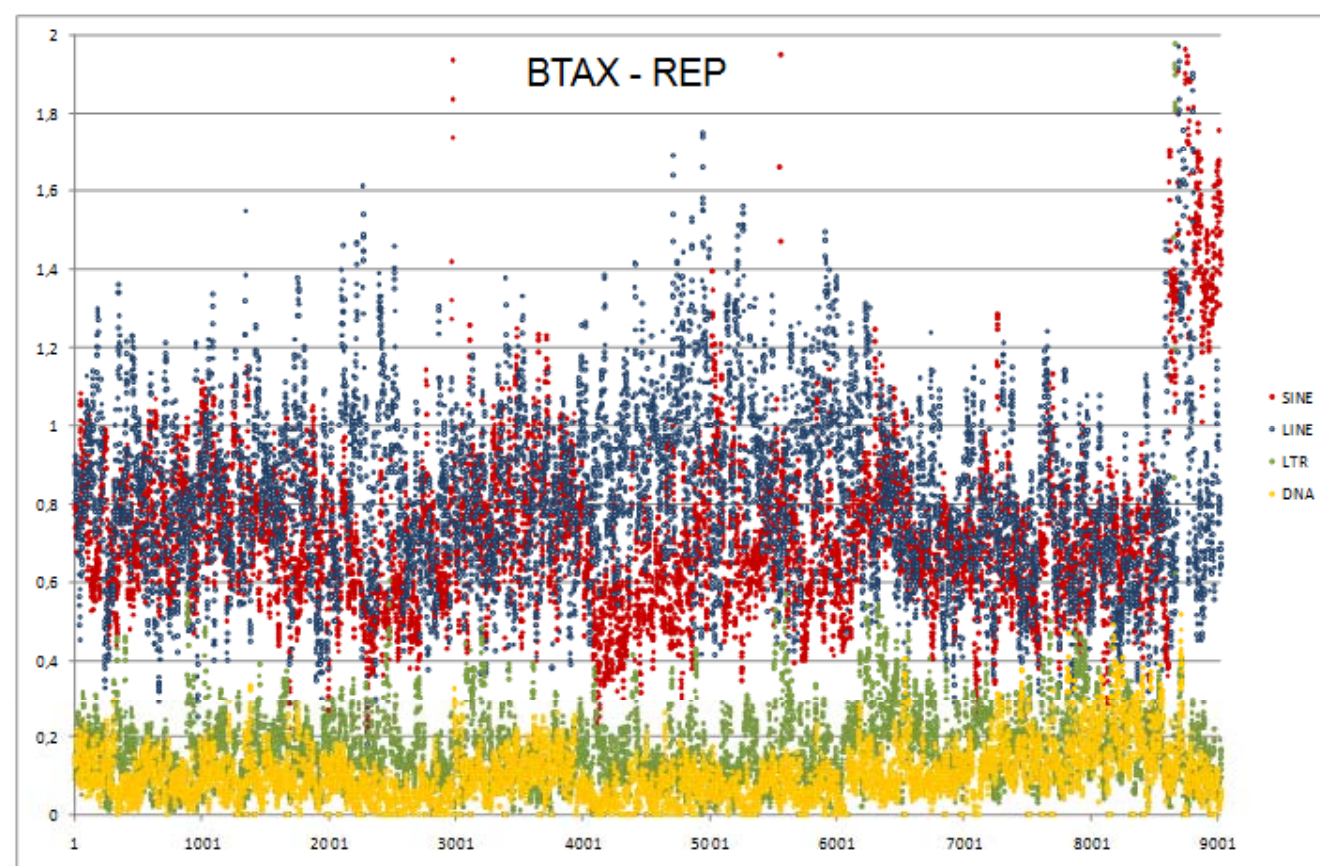
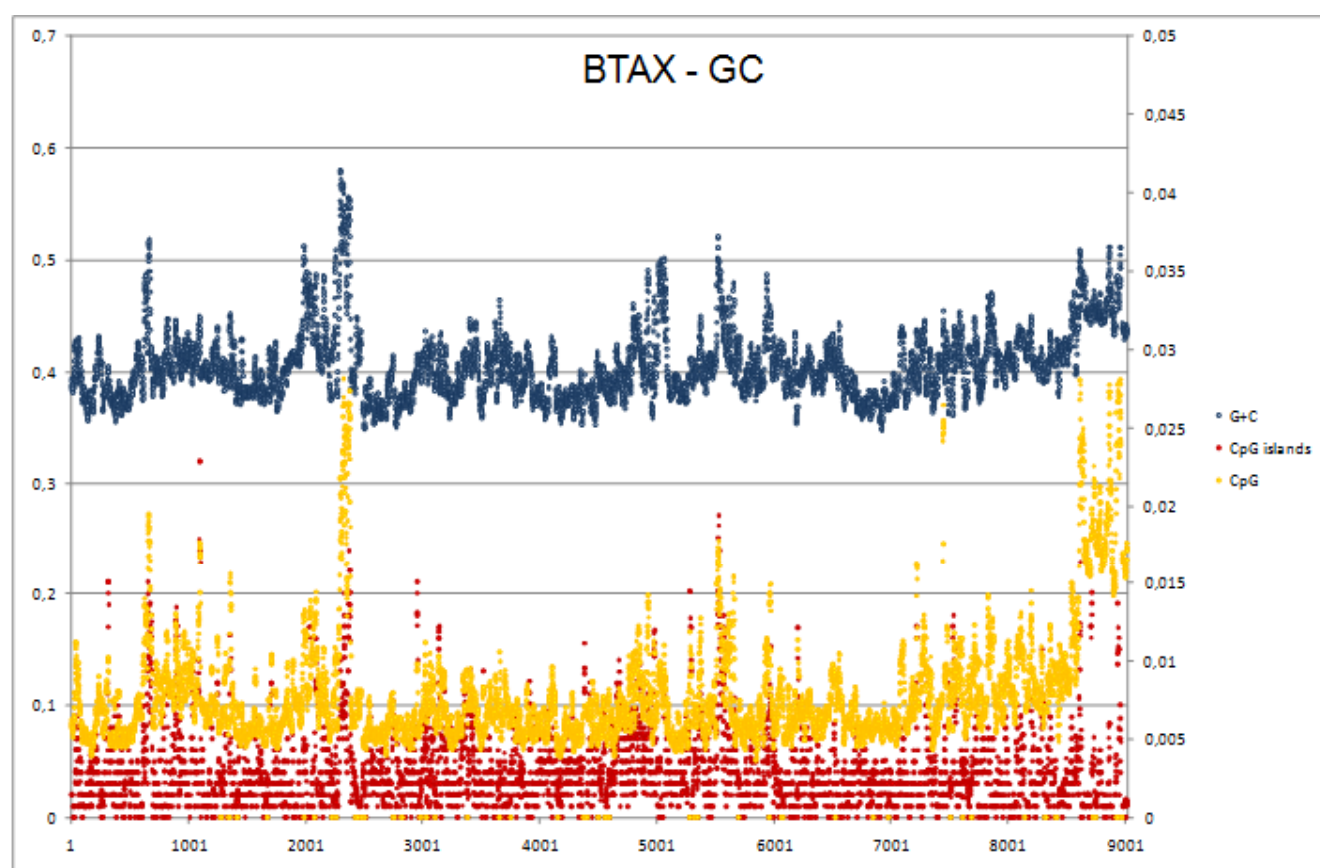
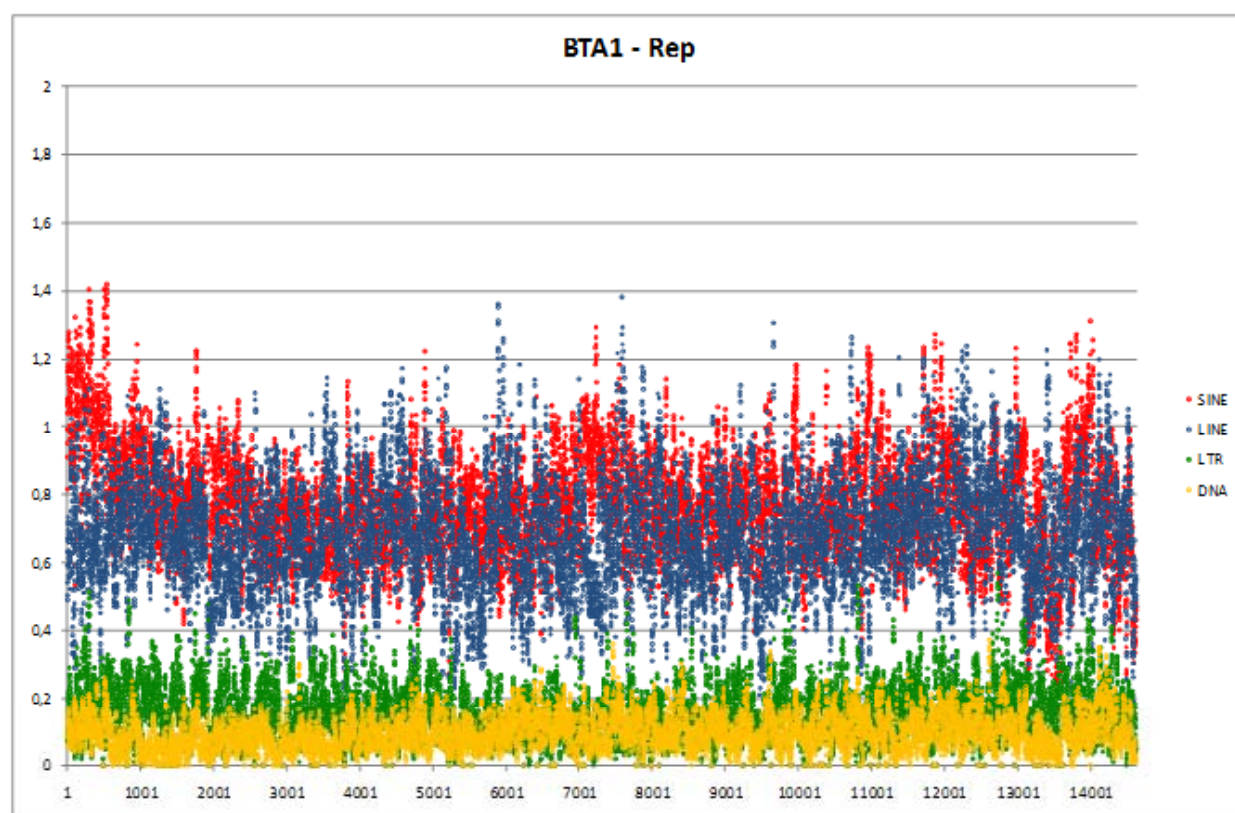
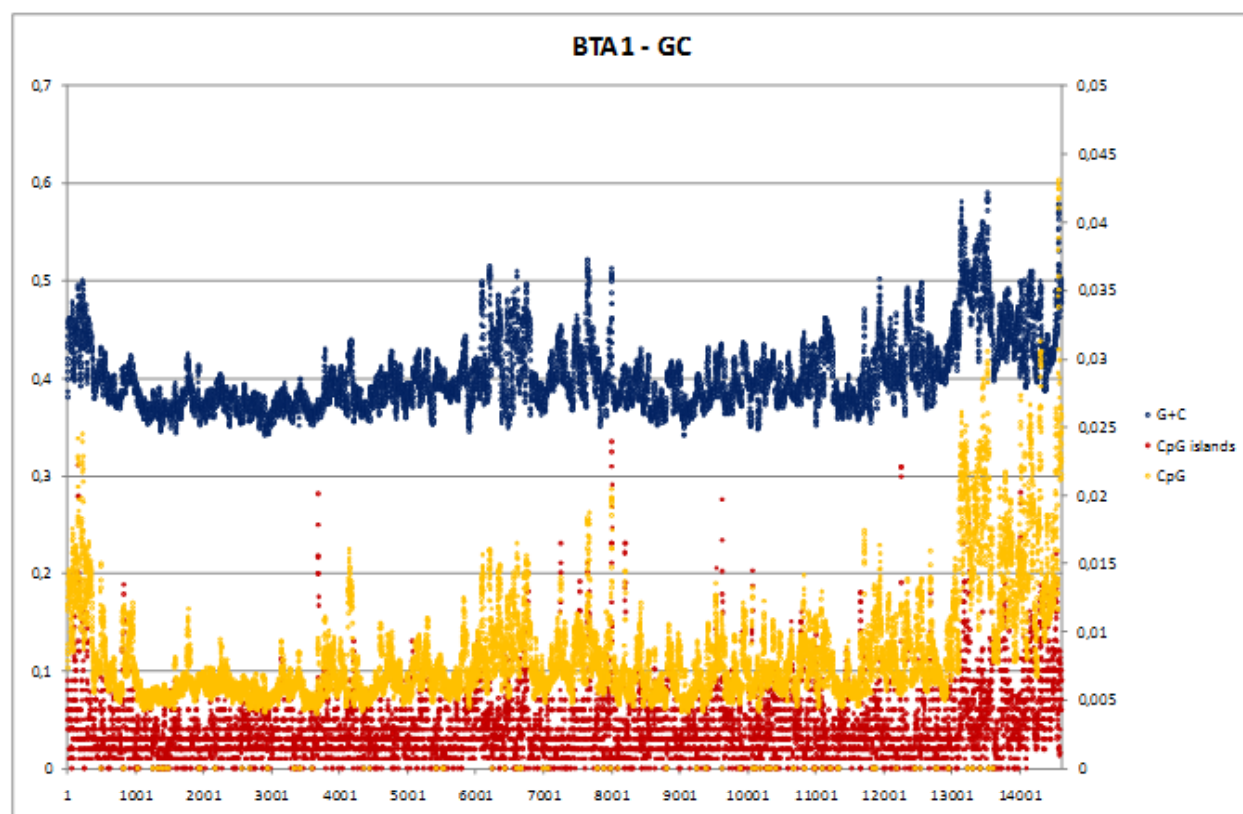
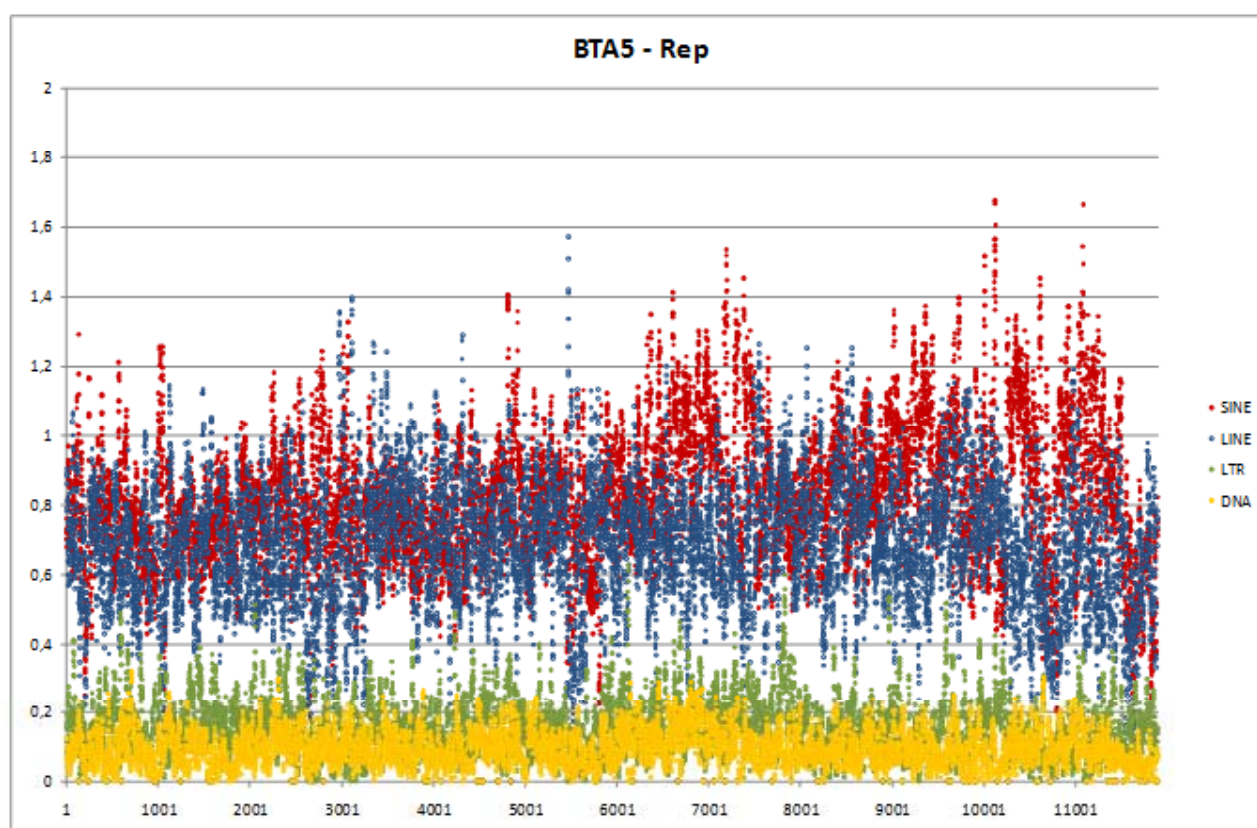
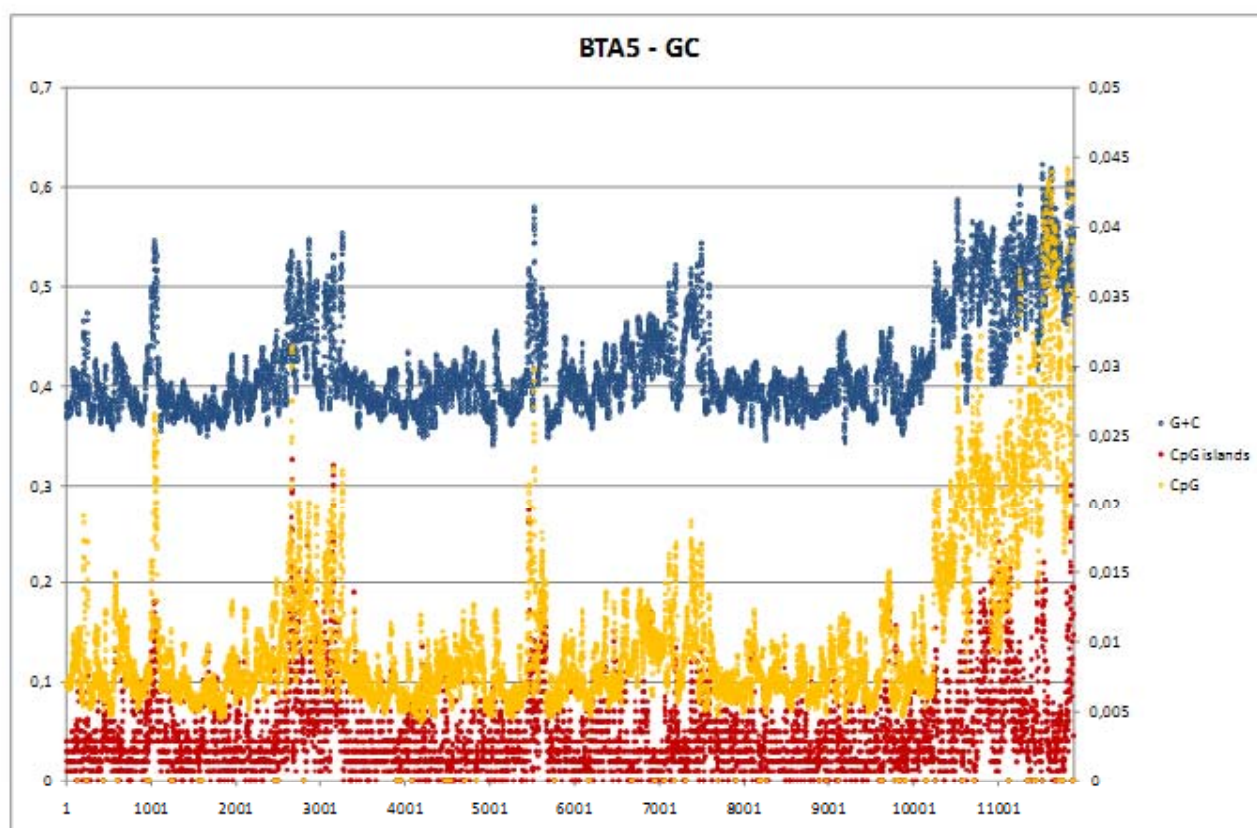








Bovine-X GAGCTAAAATACCCACTCTGTATCCACCCCAATAGCATCTAGGGGTTCTCAAGTGGCACTTGAAGTAAACAACTGCTTGCCAAATGCATGAGACATAA 100
 Bovine-Y GGTGAAAGACCATATAAATGCCCTAGAGTITTTGGATGTGCCCTGTCCCACTCGGGGCTTCCCTTTGTGGCTCAGCTAGTAAAGTATCTGCACTGGGG 100
 Clustal Consensus * * * * * 21

Bovine-X GAGACG GTT GATCCCTTTGGGAAGATCCCTGGAGGA GGCATGC AACCCACTCCAGTATT TTGCTGGAGATCC GGACAGGA C 200
 Bovine-Y GAGACCTGTGTTTCGATCCCTGATTTGGGAAGATCCCTGGAGGAAGGCATGGGAACCCACTCCAGTATTTTGGCTGGAGATCCCTGGACAGAGGAAC 200
 Clustal Consensus * * * * * 107

Bovine-X CTG TGG TACAGCCCATAGGAT CA AAP AG C GACA G TGAAGCACTTA CACACA AGCATCTAAC AATCACCTAATGCC CTTCT 300
 Bovine-Y CTG-TGGAGTACAGCCCATAGGATGGCAAAACAGACAGACATGGCTGAAGCACTTACACACATAGCATCTAACTAATCACCTAATGCCATCTTCT 299
 Clustal Consensus * * * * * 191

Bovine-X AGTAGGAATTTTCTGTCTT AG CTATAAAATGGGCTGCTAGCC ATCAAAGGGG GGGCTCTCCCTTGACCAGCCCTGTTCTAA GC T TCC 400
 Bovine-Y AGTAGGAATTTTCTGTCTTGAAGCTATAAAATGGGCTGCTAGCCATCAAAGGGGCTGGCTCTCCCTTGACCAGCCCTGTTCTAAAGCATATCCCA 399
 Clustal Consensus * * * * * 280

Bovine-X CTG GATA ACTCTC TCTCTCTCATTCTGCTCATCTCTG AAACCTTTTCC CQ GTGCAC GACCAACCACTCCCCCAAAACACACTT 493
 Bovine-Y TACTGCATCCGATACACTCTCTTCTCTCTCATTCTGCTCATCTCTGGAACCTTTTCAACCGGTGCACGGACACCACTCTCCCCAAACACACTT 499
 Clustal Consensus * * * * * 366

Bovine-X CCTTCA AGTGC GTGACATTGAGTGCATCATCTGAGACCACTGCGACCTGCTCCAGCTCTCAAAAGTGGACTCTTCTTGTCTCGAGATGCT 593
 Bovine-Y CCTTCAAAAGTGGGTGACATTGAGTGCATCATCTGAGACCACTGCGACCTGCTCCAGCTCTCAAAAGTGGACTCTTCTTGTCTCGAGATGCT 599
 Clustal Consensus * * * * * 464

Bovine-X GAGTCACAAAGAGTACTTCGGTCTGTCTGACCCCTTTGGGACACTCACATTGACGGGGCGGTGAACCTCGTATTCCCTGCTGGAGCTTAGGGAGTGAC 693
 Bovine-Y GAGTCACAAAGAGTACTTCGGTCTGTCTGACCCCTTTGGGACACTCACATTGACGGGGCGGTGAACCTCGTATTCCCTGCTGGAGCTTAGGGAGTGAC 699
 Clustal Consensus * * * * * 564

Bovine-X TGGCTGGATTGAAGTCTCAGCTCTACGACCTCTGTGAGCTTGGACAGCTCACATGCTTTCTGCTGCTTGGACAGAACTAGAGATAGAAAGGTGAGCCA 793
 Bovine-Y TGGCTGGATTGAAGTCTCAGCTCTACGACCTCTGTGAGCTTGGACAGCTCACATGCTTTCTGCTGCTTGGACAGAACTAGAGATAGAAAGGTGAGCCA 799
 Clustal Consensus * * * * * 664

Bovine-X CCAGGATAGGGGGTGCCAGTAAAGCCAGACTTGAAGTTATCCAGTGCAGCCACACTGCACTGGAAGGCACTGCGGATAAGGATACCTCGGTTAGCTTGG 893
 Bovine-Y CCAGGATAGGGGGTGCCAGTAAAGCCAGACTTGAAGTTATCCAGTGCAGCCACACTGCACTGGAAGGCACTGCGGATAAGGATACCTCGGTTAGCTTGG 899
 Clustal Consensus * * * * * 764

Bovine-X TTCCCTCTTTGTCTCTGGACACAAACCCCACTCTGCTTTCCAGCCTGGGCTCGTCTCTTTGGAGGCTGAGAAATGGAGCTCAAGACTTAGTCAGATGG 993
 Bovine-Y TTCCCTCTTTGTCTCTGGACACAAACCCCACTCTGCTTTCCAGCCTGGGCTCGTCTCTTTGGAGGCTGAGAAATGGAGCTCAAGACTTAGTCAGATGG 999
 Clustal Consensus * * * * * 864

Bovine-X TCCAGCATTGAATGTTCTGCTGACTGCTCTCTTAGGCACTATTCTCAAGCCATCCATTCTGCTATCTCTTCAAGACAAAGACTGGGTTTCTTTCAG 1093
 Bovine-Y TCCAGCATTGAATGTTCTGCTGACTGCTCTCTTAGGCACTATTCTCAAGCCATCCATTCTGCTATCTCTTCAAGACAAAGACTGGGTTTCTTTCAG 1099
 Clustal Consensus * * * * * 963

Bovine-X AAGCCAAAGTCAGGTGAGGTTAATTCGCCACAAAAACCAAGTCAGACTCTTTGGCTTCAACTCTCAGTAGCTCACTCATAGTCTGACTCTTTGTGAC 1193
 Bovine-Y AAGCCAAAGTCAGGTGAGGTTAATTCGCCACAAAAACCAAGTCAGACTCTTTGGCTTCAACTCTCAGTAGCTCACTCATAGTCTGACTCTTTGTGAC 1199
 Clustal Consensus * * * * * 1063

Bovine-X CCATGGCCTGTAGCCTGCCAGCTCCTCTGTCCAGCCTATCTCCAGGCAAGAACTCTGGAGTGGCTAGCTGCTGTCCCTCTCCAGGGGATGTCCTGA 1293
 Bovine-Y CCATGGCCTGTAGCCTGCCAGCTCCTCTGTCCAGCCTATCTCCAGGCAAGAACTCTGGAGTGGCTAGCTGCTGTCCCTCTCCAGGGGATGTCCTGA 1299
 Clustal Consensus * * * * * 1163

Bovine-X CCTCTGATGGAAACCTTGGTGGCCGCAATTGCAGGCAGATTCTTACCTCTGAGCCACTAAGCCAGGTTCAAAACCCACCCACTGTGTGCAATATTTAC 1393
 Bovine-Y CCTCTGATGGAAACCTTGGTGGCCGCAATTGCAGGCAGATTCTTACCTCTGAGCCACTAAGCCAGGTTCAAAACCCACCCACTGTGTGCAATATTTAC 1399
 Clustal Consensus * * * * * 1263

Bovine-X AGAGCTACTGAATTCCTCCGGGGTGGGGTTGGGGGACAGAAAGAGTTGCATGCCAAGCTGTAACCCACGACACACTTTTTATCCGCTTAAAGCTG 1493
 Bovine-Y AGAGCTACTGAATTCCTCCGGGGTGGGGTTGGGGGACAGAAAGAGTTGCATGCCAAGCTGTAACCCACGACACACTTTTTATCCGCTTAAAGCTG 1499
 Clustal Consensus * * * * * 1363

Bovine-X TGTAGGCAACCTTGAGCAGTTTGTCCGTTCTGGAGACACTGGGACAGAAACAGAGGCCGAAATGCAGTGACGCTGTTGCACAGATCCACCCCAAAATCT 1593
 Bovine-Y TGTAGGCAACCTTGAGCAGTTTGTCCGTTCTGGAGACACTGGGACAGAAACAGAGGCCGAAATGCAGTGACGCTGTTGCACAGATCCACCCCAAAATCT 1599
 Clustal Consensus * * * * * 1463

Bovine-X TTGGCATCAGGGCAAAATGGACAAACGACAGCAATTCATCTTTAAGGCAAGTTCCACACACGATCTTCAAAAGAAATGTTCTGCTTTCCAGGAGCCAAAG 1693
 Bovine-Y TTGGCATCAGGGCAAAATGGACAAACGACAGCAATTCATCTTTAAGGCAAGTTCCACACACGATCTTCAAAAGAAATGTTCTGCTTTCCAGGAGCCAAAG 1699
 Clustal Consensus * * * * * 1563

Bovine-X AAATAGAAGATCAACTGTTTCAAAACAGGTACTGAGATCTCACTCT 1739
 Bovine-Y AAATAGAAGATCAACTGTTTCAAAACAGGTACTGAGATCTCACTCT 1745
 Clustal Consensus * * * * * 1609

Gayal-X GAGCTAAAATACCCACTCTGTATCCACCCATAGCATCTAGGGGGTCTCAAGTGGCACTTGGGTAACAACTGCTTGCCAAATGCATGAGACATAA 100
Gayal-Y GGTGAAAGACCATATAAATGCCCTAGAGTTTGGGATGTGCCCTGTCCCACTCGGGGCTTCCCTGTGGCTCAGCTAGTAAAGATTTCTGCACTGGGG 100
Clustal Consensus * * * * * 21

Gayal-X GAGAC G GTT GATCCCT ITGGGAAGATCCCTGGAGG GGCATGG AACCCACTCCAGTATT ITGCCTGGAGATCC G GACH AGGA C 200
Gayal-Y GAGACCTGTGTTGATCCCTGATTGGGAAGATCCCTGGAGGAGGCATGGGAACCCACTCCAGTATTTTGCCTGGAGATCCCTGGACAGAGGAAC 200
Clustal Consensus ***** 107

Gayal-X CTG TGG TACAGCCCATAGGAT CA AAP AG C GACA C TGAAGCAACTTA CACACA AGCATCTAA AATCACCTAATGCC CTTCT 300
Gayal-Y CTG TGGAGTACAGCCCATAGGATGGCAAAACAGACAGACATGGCTGAAGCAACTTACCACACATAGCATCTAACTAATCACCTAATGCCATCTTCT 299
Clustal Consensus *** * * * * 191

Gayal-X AGTAGGAATTTTCTGTCTT AG CTATAAAATGGGCTGCTAGCC ATCAAAGGGG GGCTCTCCCTTGACCGGCCCTGTTCTAA GC T TCCC 400
Gayal-Y AGTAGGAATTTTCTGTCTTGAAGTATAAAATGGGCTGCTAGCCATCAAAGGGGCGGCTCTCCCTTGACCGGCCCTGTTCTAAAGCATATCCCA 399
Clustal Consensus ***** 281

Gayal-X CTG GATA ACTCTC TCTCCTCTCATTCTGCCTCATCTCTG AAACCTTTTCCA C GTGCAC GACCAACCACTCCCCAAACACACTT 493
Gayal-Y TACTGCATCCGATACACTCTCTTCTCCTCTCATTCTGCCTCATCTCTGGAACCTTTTCCAAGCGTGCACGGAACCAACCACTCCCCAAACACACTT 499
Clustal Consensus ***** 366

Gayal-X CCTTCA AGTGC GTGACATTGAGTGCATCACTCTGAGACCACTGCGAGCTGCTCCAGCTCTCAAAAGTGGACTCTTCTGTCTCGAGATGCT 593
Gayal-Y CCTTCAAAAGTGGGTTGACATTGAGTGCATCACTCTGAGACCACTGCGAGCTGCTCCAGCTCTCAAAAGTGGACTCTTCTGTCTCGAGATGCT 599
Clustal Consensus ***** 464

Gayal-X GAGTC CAGAGAG CTTGGTC GTCTGACCCCTTTC GACACTCACA TGACGGGGGGGTGAACCTCGTATTCCC GCTGGAGCTTAGGGAGTGACC 693
Gayal-Y GAGTCGACAGAGAGCGCTTCGGTCCGTCTGACCCCTTTCGACACTCACA TGACGGGGGGGTGAACCTCGTATTCCC GCTGGAGCTTAGGGAGTGACC 699
Clustal Consensus ***** 557

Gayal-X TGCTTGGATTGAAGTCTCAGCTCTACGACCTCTGTGAGCTTGGACAGCTCA TGTCTTCTGCTGCTTGGACAGAACTAGAGATAGAAAGGTGAGCCA 793
Gayal-Y TGCTTGGATTGAAGTCTCAGCTCTACGACCTCTGTGAGCTTGGACAGCTCA TGTCTTCTGCTGCTTGGACAGAACTAGAGATAGAAAGGTGAGCCA 799
Clustal Consensus ***** 656

Gayal-X CCAGGATGGGGGG TGCCAGTTAAGCCAGACTTGAAGTTATCCAGTGCAGCCACACTGCACTGGAAGGCAGTCGGATAA GATACTCGCGTTAGCTTGG 893
Gayal-Y CCAGGATAGGGGG TGCCAGTTAAGCCAGACTTGAAGTTATCCAGTGCAGCCACACTGCACTGGAAGGCAGTCGGATAA GATACTCGCGTTAGCTTGG 898
Clustal Consensus ***** 753

Gayal-X GTTCCCTTCTTTGTCTCTG ACACAAACCCAC CTGTCCTTTCCAGCCTGGGCTCGTCTCTTTGGAGGCTGAGAAATGGAGCTCAAGACTTAGTCAGATG 993
Gayal-Y GTTCCCTTCTTTGTCTCTG ACACAAACCCAC CTGTCCTTTCCAGCCTGGGCTCGTCTCTTTGGAGGCTGAGAAATGGAGCTCAAGACTTAGTCAGATG 997
Clustal Consensus ***** 851

Gayal-X GCTCCAGCATTGAATGTTCTGCTGACTGCTCTCTTAGGCACTATTCTCAAGCCATCCATTCTGCTATCTCTTCAGAACAAAGACTGGGTTTCCTTCAG 1093
Gayal-Y GCTCCAGCATTGAATGTTCTGCTGACTGCTCTCTTAGGCACTATTCTCAAGCCATCCATTCTGCTATCTCTTCAGAACAAAGACTGGGTTTCCTTCAG 1097
Clustal Consensus ***** 951

Gayal-X GAAGCCAAGTCAGGTGAGGTTAATCCCAACAAACCAAGTCAGACTCTTTGGCTTCTAACTCTCAGTAGCTCACTCATAGTCTGACTCTTTGTGAC 1193
Gayal-Y GAAGCCAAGTCAGGTGAGGTTAATCCCAACAAACCAAGTCAGACTCTTTGGCTTCTAACTCTCAGTAGCTCACTCATAGTCTGACTCTTTGTGAC 1197
Clustal Consensus ***** 1051

Gayal-X CCGATGGCCTGTAGCCTGCCAGCTCCTCTGTCCACGCAATTCTCCAGGCAAGATCTGGAGTGGCTAGCTGCTGTTCCCTTCTCCAGGGGATCGTCTG 1293
Gayal-Y CCGATGGCCTGTAGCCTGCCAGCTCCTCTGTCCACGCAATTCTCCAGGCAAGATCTGGAGTGGCTAGCTGCTGTTCCCTTCTCCAGGGGATCGTCTG 1297
Clustal Consensus ***** 1151

Gayal-X ACCTCTGATGGAACCCCTGGTCGCCGCAITGACGGCAGATTCTTACCTTCTGAGCCACTAAGCCAGGTTCAAAACCCACCACTGTGTGCAATATTTA 1393
Gayal-Y ACCTCTGATGGAACCCCTGGTCGCCGCAITGACGGCAGATTCTTACCTTCTGAGCCACTAAGCCAGGTTCAAAACCCACCACTGTGTGCAATATTTA 1397
Clustal Consensus ***** 1251

Gayal-X CAGAGCTACTGAATTTCCC GGGTGGGG TGGG GGGCAGAAAAGAGTTGCATGCCAGCTGTAAOCCAGCAACACATTTTTATC GCTTAAAGCT 1493
Gayal-Y CAGAGCTACTGAATTTCCC GGGTGGGG TGGG GGGCAGAAAAGAGTTGCATGCCAGCTGTAAOCCAGCAACACATTTTTATC GCTTAAAGCT 1497
Clustal Consensus ***** 1348

Gayal-X CTGTAGGCAACCTTGAGCAGTTTGTCCGTTCTGGAGACACTGGGCAAGAACAGAGGCCGAATG AGTGACGCTGTGTGACAGATCCACCCCAATC 1593
Gayal-Y CTGTAGGCAACCTTGAGCAGTTTGTCCGTTCTGGAGACACTGGGCAAGAACAGAGGCCGAATG AGTGACGCTGTGTGACAGATCCACCCCAATC 1597
Clustal Consensus ***** 1447

Gayal-X TTTGG ATCAGGGCAAATGGACAAACGC GCAITTCATCTTTAAGGCAGTTCCACACAGATCTTCCAAAGAAATGTTCTGCTTCCAGGAGCCAAG 1693
Gayal-Y TTTGGCATCAGGGCAAATGGACAAACGC GCAITTCATCTTTAAGGCAGTTCCACACAGATCTTCCAAAGAAATGTTCTGCTTCCAGGAGCCAAG 1697
Clustal Consensus ***** 1545

Gayal-X GAAATAGAAGATCAACTGTTCACAAACAGGTACTGA ATCTCCACTCT 1740
Gayal-Y GAAATAGAAGATCAACTGTTCACAAACAGGTACTGA ATCTCCACTCT 1744
Clustal Consensus ***** 1591

Yak-X GAGCTAAATACCCACTCTGTATCCACCCATAGCATCCTAGGGGTTCTCAAGTGGCATTGAGGTAAACAACTGCTTGCCATGCATGAGACATAA 100
Yak-Y GGTGAAAGACCATATAAATGCCCTAGAGTTTITGGATGTGCCCTGTCCCACTCGGGGCTCCCTTGTGGCTCAGCTAGTAAAGAAATTCGAGTGGGG 100
Clustal Consensus * ** * ** 21

Yak-X GAGAC G GTT GATCCCT ITGGGAAGATCCCTGGAGGA GGCATGG AACCACTCCASTATT ITGCCTGGAGATCC GGAAC AGGA C 200
Yak-Y GAGACCTGTGTTTCGATCCCTGATITGGGAAGATCCCTGGAGGAAGGCATGGGAACCACTCCAGTATTTTGGCTGGAGATCCGTGGACAGAGGAAC 200
Clustal Consensus ***** 107

Yak-X CTG TGG TACAGCCCATAGGAT C AAA AGTC GACA G TGAAGCAACTTATCACACA AGCATCCTAAC AATCACCTAATGCCA CTTCT 300
Yak-Y CTG TGGAGTACAGCCCATAGGATGGCAAAACAGTCAGACATGGCTGAAGCAACTTATCACACATAGCATCCTAACCTAACCTAATGCCATCCTTCT 299
Clustal Consensus ***** 193

Yak-X AGTAGGAATTTTCTGTCTT AG CTATAAAAAATGGCTGCTAGCC ATCAAAGGGG TGGCTCTCC ITGACCGGCCCTCTGTTCTAA GC T TCC 399
Yak-Y AGTAGGAATTTTCTGTCTT GAGACTATAAAAAATGGCTGCTAGCCCATCAAAGGGGTTGGCTCTCCCTTGACCGGCCCTCTGTTCTAAACAGCATATCCA 399
Clustal Consensus ***** 283

Yak-X CTC GATA ACTCTC TCTCCTCTCATTCGCTCATCTCG AAACCTTTCCA CC GTGCAC GACCACCACTCTCCCAAAACACACTT 492
Yak-Y TACTGCACCTCCGATACACTCTCTCTCTCATTCGCTCATCTCGAAACTTTTCCACCGGTGCACGGACCAACCACTCTCCCAAAACACACTT 499
Clustal Consensus ***** 369

Yak-X CTTTCA AGTGC GTGACATTGATGCCATCACATCTGAGACCACTGCGACCTGCTCCAGCTCTCAAAAGTGGACTTCTTCTGCTTCGAGATGCT 592
Yak-Y CTTTCAAAGTGCAGTGCATTCAGATGCCATCACATCTGAGACCACTGCGACCTGCTCCAGCTCTCAAAAGTGGACTTCTTCTGCTTCGAGATGCT 599
Clustal Consensus ***** 467

Yak-X GAGTC CAGAGAG CTTGCTG GTCTGACCCCTTTC GACACTCACA TGACGGGGCGGTGAACCTCGTATTCCC GCTGGAGCTTAGGGAGTGACC 692
Yak-Y GAGTCGACAGAGCGCTTCGCTGCTGACCCCTTTCGACACTCACA TGACGGGGCGGTGAACCTCGTATTCCC GCTGGAGCTTAGGGAGTGACC 699
Clustal Consensus ***** 560

Yak-X TGCCTGGATTGAAGTCTCAGCTCTACGACCTCTGTGAGCTTGGACAGCTCACATGCTTCTGCTGCTTGGACAGAACTAGAGATAGAAAGGTGAGCCA 792
Yak-Y TGCCTGGATTGAAGTCTCAGCTCTACGACCTCTGTGAGCTTGGACAGCTCACATGCTTCTGCTGCTTGGACAGAACTAGAGATAGAAAGGTGAGCCA 799
Clustal Consensus ***** 660

Yak-X CCAGGATAGGGGGTGGCAGTTAAGCCAGACTTGAAGTTATCCAGTGCAGCCCACTGCACTGGAGGGCAGTCGGATAGGATACCTCGGTTAGCTTGGG 892
Yak-Y CCAGGATAGGGGGTGGCAGTTAAGCCAGACTTGAAGTTATCCAGTGCAGCCCACTGCACTGGAGGGCAGTCGGATAGGATACCTCGGTTAGCTTGGG 899
Clustal Consensus ***** 760

Yak-X TTCCTTCTTGTCTCTGGACACAAACCCACCTGTCTTCCAGCCTGGGCTCGTCTCTTTGGAGGCTGAGAAATGGAGCTCAAGACTTAGTCAGATGG 992
Yak-Y TTCCTTCTTGTCTCTGGACACAAACCCACCTGTCTTCCAGCCTGGGCTCGTCTCTTTGGAGGCTGAGAAATGGAGCTCAAGACTTAGTCAGATGG 999
Clustal Consensus ***** 860

Yak-X CTCGAGCATGAATGTTCTGCTGACTGCTCTCTTAGGCCTAATTTCTCAGGCATCCATTTCTGCTATCTCTTCAAGACAAAGACTGGGTTCCTTCAGG 1092
Yak-Y CTCGAGCATGAATGTTCTGCTGACTGCTCTCTTAGGCCTAATTTCTCAGGCATCCATTTCTGCTATCTCTTCAAGACAAAGACTGGGTTCCTTCAGG 1099
Clustal Consensus ***** 960

Yak-X AAGCCAAAGTCAGGTGAGGTAAATTCGCCACAAAACCAAGTCAGACTCTTTGGCTTCAACTCTCAGTAGCTCACTCATAGTCTGACTCTTTGTGACC 1192
Yak-Y AAGCCAAAGTCAGGTGAGGTAAATTCGCCACAAAACCAAGTCAGACTCTTTGGCTTCAACTCTCAGTAGCTCACTCATAGTCTGACTCTTTGTGACC 1199
Clustal Consensus ***** 1060

Yak-X CCATGGCCTGTAGCCTGCCAGCTCCTCTGTCCACGCAATTCCTCAGGCAGAAATCCTGGAGTGGCTAGCTGCTGTTCCTTCTCCAGGGGATGTCCTGA 1292
Yak-Y CCATGGCCTGTAGCCTGCCAGCTCCTCTGTCCACGCAATTCCTCAGGCAGAAATCCTGGAGTGGCTAGCTGCTGTTCCTTCTCCAGGGGATGTCCTGA 1299
Clustal Consensus ***** 1160

Yak-X CCTCTGATGGAACCTGCTGCTGCTGCTCTCTTAGGCCTAATTTCTCAGGCATCCATTTCTGCTATCTCTTCAAGACAAAGACTGGGTTCCTTCAGG 1392
Yak-Y CCTCTGATGGAACCTGCTGCTGCTGCTCTCTTAGGCCTAATTTCTCAGGCATCCATTTCTGCTATCTCTTCAAGACAAAGACTGGGTTCCTTCAGG 1399
Clustal Consensus ***** 1260

Yak-X AGAGCTACTGAATTCCTCCCGGGGTGGGGTTGGGGGCGAGAAAGAGTTGCATGCCAAGCTGTAACCCACGACAACTTTTTATCGCTTAAAGCTC 1492
Yak-Y AGAGCTACTGAATTCCTCCCGGGGTGGGGTTGGGGGCGAGAAAGAGTTGCATGCCAAGCTGTAACCCACGACAACTTTTTATCGCTTAAAGCTC 1499
Clustal Consensus ***** 1360

Yak-X TGTAGGCAACCTTGAGCAGTTTTGCTGCTCTGGAGACACTGGGAGAAACAGAGGCCGAAATGCAGTGACTCTGTTGCACAGATCCACCCCAAAATCT 1592
Yak-Y TGTAGGCAACCTTGAGCAGTTTTGCTGCTCTGGAGACACTGGGAGAAACAGAGGCCGAAATGCAGTGACTCTGTTGCACAGATCCACCCCAAAATCT 1599
Clustal Consensus ***** 1460

Yak-X TTGGCATCAGGGCAAATGGACAAACGCGCAATTCATCTTTAAGGCAAGTCCACACGATCTTCCAAAAGAAATGTTCTGCTTTCAGGAGCCAAAG 1692
Yak-Y TTGGCATCAGGGCAAATGGACAAACGCGCAATTCATCTTTAAGGCAAGTCCACACGATCTTCCAAAAGAAATGTTCTGCTTTCAGGAGCCAAAG 1699
Clustal Consensus ***** 1560

Yak-X AAATAGAAGATCAACTGTTCCAAACAGGTACTGAGATCTCCACTC 1738
Yak-Y AAATAGAAGATCAACTGTTCCAAACAGGTACTGAGATCTCCACTC 1745
Clustal Consensus ***** 1606

Bison-X GAGCTAAAATACCCACTCTGTATCCACCCAGTAGCATCCTAGGGGCTTCTCAAGTGGCCTTGAGGTAAACAACTGCTTGCATGAGACATAA 100
 Bison-Y GGTGAAAGACCATATAAATGCCCCCTAGAGTCTTTTGGATGTGCGCTGTCCCACTCGGGGCTTCCCTTGTGGCTCAGCTAGTAAAGATCTGCGAGTGGGG 100
 Clustal Consensus * ** * 21

Bison-X CAGAC G GTT GATCCCT TTGGGAAGATCCCTGGAGGA GGCATGG AACCCACTCCAGTATT TTGCTTGGAGATCCC GGACAGAGG C 200
 Bison-Y CAGAC G GTT GATCCCT TTGGGAAGATCCCTGGAGGA GGCATGG AACCCACTCCAGTATT TTGCTTGGAGATCCC GGACAGAGG C 200
 Clustal Consensus * * * 106

Bison-X CTG TGG TACAGCCCATAGGAT CA AAN AGTCAGACACG TGAAGCAACTTA CACACA AGCATCCTAAC AATCACCTAATGCC CTTCT 300
 Bison-Y CTG TGG TACAGCCCATAGGAT CA AAN AGTCAGACATG TGAAGCAACTTA CACACA AGCATCCTAAC AATCACCTAATGCC CTTCT 299
 Clustal Consensus * * * 192

Bison-X AGTAGGAATTTTCTGTCTT AG CTATAAAAATGGGCTGCTAGCC ATCAAAGGGG GGCTCTCCCTTGACCGGCCCCCTGTCTAA GC T TCCC 400
 Bison-Y AGTAGGAATTTTCTGTCTT AG CTATAAAAATGGGCTGCTAGCC ATCAAAGGGG GGCTCTCCCTTGACCGGCCCCCTGTCTAA GC T TCCC 399
 Clustal Consensus * * * 282

Bison-X CTC GATA ACTCTC TCTCCTCTCATCTGCTCATCTCTG AAACCTTTTCCA CC GTGCAC GACCCACCACTCCCCCAAAACACACTT 493
 Bison-Y CTC GATA ACTCTC TCTCCTCTCATCTGCTCATCTCTG AAACCTTTTCCA CC GTGCAC GACCCACCACTCCCCCAAAACACACTT 493
 Clustal Consensus * * * 368

Bison-X CCTTCA AGTGC GTGACATTGAGTGCATCAGATCTGAGACCACTTGC ACCTGCTCCAGCTCTCAAN GTGGACTTCTTCTGCTTCGAGATGCT 592
 Bison-Y CCTTCA AGTGC GTGACATTGAGTGCATCAGATCTGAGACCACTTGC ACCTGCTCCAGCTCTCAAN GTGGACTTCTTCTGCTTCGAGATGCT 599
 Clustal Consensus * * * 464

Bison-X GAGTC CAGAGAG CTTCGGTC GTCTGACCCCTTTGC GACACTCACA TGACGGGGCGTGAACTCGTATTCCC GCTGGAGCTTAGGGAGTGACC 692
 Bison-Y GAGTC CAGAGAG CTTCGGTC GTCTGACCCCTTTGC GACACTCACA TGACGGGGCGTGAACTCGTATTCCC GCTGGAGCTTAGGGAGTGACC 699
 Clustal Consensus * * * 557

Bison-X TGCTTGGATTGAAGTCTCAGCTCTACGACCTCTGTGAGCTTGGACAC TCACATGCTCTCTGCTGCTTGGACAGAACTAGAGATAGAAAGGTGAGCCA 792
 Bison-Y TGCTTGGATTGAAGTCTCAGCTCTACGACCTCTGTGAGCTTGGACAC TCACATGCTCTCTGCTGCTTGGACAGAACTAGAGATAGAAAGGTGAGCCA 799
 Clustal Consensus * * * 656

Bison-X CCAGGATAGGGGG TGCCAGTTAAGCCAGACTTGAAGTT TCCAGTGCAGCCCACTGCACTGGAAGGCAGTC GATAAGGATACTCG GTTAGCTTGG 891
 Bison-Y CCAGGATAGGGGG TGCCAGTTAAGCCAGACTTGAAGTT TCCAGTGCAGCCCACTGCACTGGAAGGCAGTC GATAAGGATACTCG GTTAGCTTGG 899
 Clustal Consensus * * * 751

Bison-X GTTCCCTTCTTGTCTCTGGACACAAACCCACCTCTGCTTTCCAGCCTGGGCTCGTCTCTTTGGAGGCTGAGAAATGGAGCTCAAGACTTAGTCAGATG 991
 Bison-Y GTTCCCTTCTTGTCTCTGGACACAAACCCACCTCTGCTTTCCAGCCTGGGCTCGTCTCTTTGGAGGCTGAGAAATGGAGCTCAAGACTTAGTCAGATG 999
 Clustal Consensus * * * 851

Bison-X GCTCCAGCATTGAATGTTCTGCTGACTGCTCTCTTAGGCATATTTCTCAAGCCATCCATT CTGCTATCTCTTCAGAACAAAGACTGGGTTTCCCTCAG 1091
 Bison-Y GCTCCAGCATTGAATGTTCTGCTGACTGCTCTCTTAGGCATATTTCTCAAGCCATCCATT CTGCTATCTCTTCAGAACAAAGACTGGGTTTCCCTCAG 1099
 Clustal Consensus * * * 950

Bison-X GAAGCCAAAGTCAGGTGAGGTTAATTCCTCACAAAACCCAGTCAAGTCTTGTGGCTTCTAACTCTCAGTAGCTCACTCATAGTCTGACTCTTTGTGAC 1191
 Bison-Y GAAGCCAAAGTCAGGTGAGGTTAATTCCTCACAAAACCCAGTCAAGTCTTGTGGCTTCTAACTCTCAGTAGCTCACTCATAGTCTGACTCTTTGTGAC 1199
 Clustal Consensus * * * 1050

Bison-X CCGATGGCCTGTAGCCTGCCAGCTCTCTGTCCACGCAATTCTCCAGGCAAGATCTGGAGTGGCTAGCTGCTGTTCCCTCTCCAGGGGATCGTCTG 1291
 Bison-Y CCGATGGCCTGTAGCCTGCCAGCTCTCTGTCCACGCAATTCTCCAGGCAAGATCTGGAGTGGCTAGCTGCTGTTCCCTCTCCAGGGGATCGTCTG 1299
 Clustal Consensus * * * 1150

Bison-X ACCTCTGATGGAACCTTGGTCCCGCCAT CAGGCAGATTCTTTACCTCTGAGGCCACTAAGCCAGGTTCAAAACCCACCCACTGTGTGCAATATTTA 1391
 Bison-Y ACCTCTGATGGAACCTTGGTCCCGCCAT CAGGCAGATTCTTTACCTCTGAGGCCACTAAGCCAGGTTCAAAACCCACCCACTGTGTGCAATATTTA 1399
 Clustal Consensus * * * 1249

Bison-X CAGAGCTACTGAATCCCCCGGGGTGGGGTTGGGGGCGAGAAAAGAGTTGCATGCCAGCTGTAAOCCAGACACACTTTTATCCGCTTAAGCT 1491
 Bison-Y CAGAGCTACTGAATCCCCCGGGGTGGGGTTGGGGGCGAGAAAAGAGTTGCATGCCAGCTGTAAOCCAGACACACTTTTATCCGCTTAAGCT 1499
 Clustal Consensus * * * 1349

Bison-X CTGTAGGCAACCTTGAAGCAGTTTGTCTGCTTCTGGAGACACTGGGCGAGAAAGGAGGCCAAATGCACTGATGCTGTGCAAGATCCACCCCAAAATC 1591
 Bison-Y CTGTAGGCAACCTTGAAGCAGTTTGTCTGCTTCTGGAGACACTGGGCGAGAAAGGAGGCCAAATGCACTGATGCTGTGCAAGATCCACCCCAAAATC 1599
 Clustal Consensus * * * 1449

Bison-X TTTGGCATCAGGGCAAAATGGACAAACGCGGCATTTCTATCTTTAAGGCAGCTTCCACACAGATCTTCCAAAGAGATGTTCTGCTTCCAGGAGCCAG 1691
 Bison-Y TTTGGCATCAGGGCAAAATGGACAAACGCGGCATTTCTATCTTTAAGGCAGCTTCCACACAGATCTTCCAAAGAGATGTTCTGCTTCCAGGAGCCAG 1699
 Clustal Consensus * * * 1549

Bison-X GAAATAGAAGATCAACTGTTCCAAACAGGTACTGAGATCTCCACTCT 1738
 Bison-Y GAAATAGAAGATCAACTGTTCCAAACAGGTACTGAGATCTCCACTCT 1746
 Clustal Consensus * * * 1596

Ovine-X CATATGAGCTAAATACCCACTCTTATCCACTGATAGCATCTAGGGGTTTATCAGCTGGCACTTGTAACAAACTGCTTGCCATGCAAGACATAA 100
Ovine-Y GATGAAAGACCATATAAATGCACCTACAGTTTGTGGATGTGCGCTGTCCCACTCAGGGCTTCCCTTTTGCTCAGCTGGTAAAGAAATGTGTCAGTGTGG 100
Clustal Consensus ** ** 31

Ovine-X GAGACGTTTCATCCCTGTTTGGGAAGATCCCTGGAGGAGGGCAAGCAAACCACTCCCTTTCTTGCTGGGAGATCCAGGGACAGAGGAGC 200
Ovine-Y GAGACCTGTGTTCCATCCCTGATTTGGGAAGATCCCTGGAGGAGGGCATGGCAATCCACTCCATTATTCTTGCTGGGAGATCCAGGGACAGAGGAGC 200
Clustal Consensus ***** 121

Ovine-X CTGGGCTACAGCCCAAGGATCACAGAAAGAGTCAGACATGTGAAGACTAACACACATAGCATCTAACCACACCTAATGCCCTCTCTCT 300
Ovine-Y CTGGGGAGCTACAGCCCATAGGATCACAGAAAGAGTCAGACATGGCTGAA--ACTGAACACACATAGCATCTAACCACACCTAATGCCATCTCTCT 297
Clustal Consensus ***** 210

Ovine-X AGTAGGAATTTTCTGTCTTGAGGCTATAAAATGGGCTGTAGGCCATCAAGGGGGCTGTTCTAAAGGCTCTCTCC 400
Ovine-Y AGTAGGAATTTTCTGTCTTGAGGCTATAAAATGGGCTGTAGGCCATCAAGGGGGCTGTTCTAAAGGCTCTCTCC 374
Clustal Consensus ***** 285

Ovine-X CTCTGATAAACTCCTCTCCTCTCATTCTGCTCCTACCTCTGGAAGCTTTTCCAACGGTGACGGACCAACACTCCCCCAAAACACATTTCTTCAA 500
Ovine-Y CTCTGATAAACTCCTCTCCTCTCATTCTGCTCCTACCTCTGGAAGCTTTTCCAACGGTGACGGACCAACACTCCCCCAAAACACATTTCTTCAA 474
Clustal Consensus ***** 384

Ovine-X GTGCGGTGACATTGAGATGCCATCACATCTGAGACCACTGCGACCTGCTCCAGCTCTCAAAAGCGGACTCTTGCTGCTTCGAGATGCTGAGTCT 600
Ovine-Y GTGCGGTGACATTGAGATGCCATCACATCTGAGACCACTGCGACCTGCTCCAGCTCTCAAAAGCGGACTCTTGCTGCTTCGAGATGCTGAGTCT 574
Clustal Consensus ***** 483

Ovine-X CAGAGTGCTTTGGTCACTCTGACCCCTTTGGGACACTCACAAGGAGGCTGAACCTCTTATTCCTCTGAGCTTAGGGATGACCTGCTGGA 700
Ovine-Y CAGAGTGCTTTGGTCACTCTGACCCCTTTGGGACACTCACAAGGAGGCTGAACCTCTTATTCCTCTGAGCTTAGGGATGACCTGCTGGA 674
Clustal Consensus ***** 576

Ovine-X TTGAAGTCTCAGCTCTACGACCTTTGTGAGCTTGACACGTCACCTGCTCTGCTGCTTGACAGAACTAGAGATAGAAAGGTGAGCCACAGGATG 800
Ovine-Y TTGAAGTCTCAGCTCTACGACCTTTGTGAGCTTGACACGTCACCTGCTCTGCTGCTTGACAGAACTAGAGATAGAAAGGTGAGCCACAGGATG 774
Clustal Consensus ***** 675

Ovine-X GGGGGTGCCAGTTAAGCCAGACTTGAAGTTGTCCAGTGCAGCCAACTGCACTGGGAGGCACTCGGATAAGGATACTCGCGTTAGCTTGGGTTCTTCT 900
Ovine-Y GGGGGTGCCAGTTAAGCCAGACTTGAAGTTGTCCAGTGCAGCCAACTGCACTGGGAGGCACTCGGATAAGGATACTCGCGTTAGCTTGGGTTCTTCT 874
Clustal Consensus ***** 775

Ovine-X TTGCCTCTGGACACAAACCCACCTGTCTTTCCAGCCTGGGCTCTCTCTTGCAAGGTGAGAGTGGAGCTCAAGACTTAGTCTGATGGCTGCAGCA 1000
Ovine-Y TTGCCTCTGGACACAAACCCACCTGTCTTTCCAGCCTGGGCTCTCTCTTGCAAGGTGAGAGTGGAGCTCAAGACTTAGTCTGATGGCTGCAGCA 974
Clustal Consensus ***** 874

Ovine-X CTGAATGTTCTGCTGACTGCTCTCTTAGGCACTATTCTCAAGCCATCCATTGTGCTGTTTTTCAGAGCAAGAGCTGGGTTCTCTCAGGAAGCCAA 1100
Ovine-Y CTGAATGTTCTGCTGACTGCTCTCTTAGGCACTATTCTCAAGCCATCCATTGTGCTGTTTTTCAGAGCAAGAGCTGGGTTCTCTCAGGAAGCCAA 1074
Clustal Consensus ***** 974

Ovine-X TCAGGTGAGGTTAATTCACCAAAAACCAAGTCAGACTCTTTGGCTCTCAACTCTCAGTAGCTCACTCATAGTCTGATCTTTGTGACCCATGTCT 1200
Ovine-Y TCAGGTGAGGTTAATTCACCAAAAACCAAGTCAGACTCTTTGGCTCTCAACTCTCAGTAGCTCACTCATAGTCTGATCTTTGTGACCCATGTCT 1174
Clustal Consensus ***** 1074

Ovine-X TGTAGCCCCGCAAGCTCCCTGTCCAGCAATCTCTCAGGCAAGAACTCTGGAGTGGCTAGCTGCTGTTCCTCTCTCAGGGGATGCTCTGACTCTGAT 1300
Ovine-Y TGTAGCCCCGCAAGCTCCCTGTCCAGCAATCTCTCAGGCAAGAACTCTGGAGTGGCTAGCTGCTGTTCCTCTCTCAGGGGATGCTCTGACTCTGAT 1274
Clustal Consensus ***** 1174

Ovine-X GGAACCTTGGTCTCTGCAATGCAGGCAAGCTCTTACCTCTGAGCCACTAAGCCAGGTTCAAAACCATCCACTGTGTGCAATATTACAGAGCTAC 1400
Ovine-Y GGAACCTTGGTCTCTGCAATGCAGGCAAGCTCTTACCTCTGAGCCACTAAGCCAGGTTCAAAACCATCCACTGTGTGCAATATTACAGAGCTAC 1374
Clustal Consensus ***** 1274

Ovine-X TGAATTCTCCCGGGTAGGGGGTGGGGGCAGAAAGAGGTTGCATGCCAAGCTGTAACCCACAGCAAACTTTTTTTATCCTCTGTAAGGCTCTGTA 1500
Ovine-Y TGAATTCTCCCGGGTAGGGGGTGGGGGCAGAAAGAGGTTGCATGCCAAGCTGTAACCCACAGCAAACTTTTTTTATCCTCTGTAAGGCTCTGTA 1474
Clustal Consensus ***** 1374

Ovine-X GGCACCTTGAGCAGTTTGTCTGTTCTGGAGACACTGGGAGAAACAGGCTGAATGCAGTGACGCTGTTGCACGGAATCCACCCCGGATCTTTGGCA 1600
Ovine-Y GGCACCTTGAGCAGTTTGTCTGTTCTGGAGACACTGGGAGAAACAGGCTGAATGCAGTGACGCTGTTGCACGGAATCCACCCCGGATCTTTGGCA 1574
Clustal Consensus ***** 1474

Ovine-X TCAGGGCAAAATGGACAGACGCGGCAATTTATCTTTTAAGGCACATTCCACACAGATCTTCAAAAGAAATGTTCTGGTTTCCAGGAACCAAGAAATAG 1700
Ovine-Y TCAGGGCAAAATGGACAGACGCGGCAATTTATCTTTTAAGGCACATTCCACACAGATCTTCAAAAGAAATGTTCTGGTTTCCAGGAACCAAGAAATAG 1674
Clustal Consensus ***** 1574

Ovine-X AAGTCAATGTTTCCCAACAGGCTCTGAGATCTCCGCTCT 1740
Ovine-Y AAGAGCAACTGTTCCCAACAGGCTCTGAGATCTCCGCTCT 1714
Clustal Consensus ***** 1614