

Supplemental Table 1. Location of genes that were compared between the Ambystoma, Human, Chicken, and Xenopus genomes.

Marker	LG	cM	Axolotl Reference Sequence	Gene ID
SPEN	1	0	contig02189	23013
SPAG7	1	9.5	Tig_Nohits_50_Contig_1	9552
PCOLCE2	1	10.6	Tig_NM_013363_Contig_1	26577
ENO3	1	10.6	contig92272	2027
PSMB6	1	11.7	contig42244	5694
EIF4A1	1	12.8	contig81230	1973
E16A9	1	13.9	contig34304	NA
CLDN7	1	22	contig81290	1366
CIRBP	1	39.7	Tig_NM_001280_Contig_18	1153
GPX4	1	39.7	contig82233	2879
CNN2	1	39.7	contig50138	1265
SLC39A3	1	39.7	contig05173	29985
E12E2	1	39.7	Tig_Nohits_25_Contig_1	NA
CDC34	1	45.3	contig51941	997
BSG	1	45.3	contig61586	682
PRTN3	1	46.4	contig85186	5657
SFRS14	1	55.8	contig67787	10147
NDUFA13	1	57	contig20400	51079
USE1	1	58.1	contig39841	55850
UHRF1	1	64.9	contig63025	29128
E17C2	1	67.1	contig02364	NA
EEF2	1	67.1	contig70842	1938
NDUFA11	1	72.7	contig00788	126328
MYO1F	1	72.7	Tig_NM_012335_Contig_1	4542
OAZ1	1	73.8	contig75058	4946
BTBD2	1	73.8	contig86524	55643
SAFB	1	79.4	contig123155	6294
MAPRE1	1	79.4	contig41675	22919
LSM7	1	79.4	Mex_NM_016199_Contig_1	51690
ATP5E	1	80.5	contig62128	514
MCL1	1	89.5	contig79242	4170
ERO1L	1	98.5	contig05724	30001
IFIH1	1	101.8	Tig_NM_022168_Contig_2	64135
KRTCAP2	1	101.8	contig89993	200185
C1ORF230	1	111.4	contig118859	284485
S100A11	1	112.6	contig80388	6282
PRG4	1	112.6	contig71969	10216
S100A13	1	112.6	contig24005	6284
S100A4	1	112.6	Tig_NM_019554_Contig_1	6275
E12E11	1	122.8	Tig_Nohits_675_Contig_1	NA
TPM3	1	129	Mex_NM_153649_Contig_10	7170
RPS27	1	131.2	contig82193	6232
ANP32E	1	136.1	contig77943	81611
TXNIP	1	142.3	Mex_NM_000999_Contig_2	10628
SSR2	1	149.1	contig64891	6746

DYNC1LI2	1	156	Mex_NM_006141_Contig_2	1783
ATP6V0D1	1	166.5	contig39362	9114
TPPP3	1	167.7	contig02060	51673
NUTF2	1	170.1	contig61365	10204
HDGF	1	170.1	contig83340	3068
UFC1	1	170.1	contig21433	51506
TMEM188	1	171.3	Mex_Nohits_498_Contig_1	255919
PSMD11	1	179.5	contig07260	5717
U2AF1_b	1	179.5	contig41767	NA
LUC7L3	1	179.5	contig82209	51747
FXYD3	1	181.9	Tig_NM_005971_Contig_1	5349
E12C7	1	186.6	contig82950	NA
COX6B1	1	187.7	Mex_NM_001863_Contig_1	1340
POLR2L	1	189.9	contig23009	5441
NUCB1	1	194.3	contig64537	4924
FTH1_b	1	195.4	contig16634	NA
FTL	1	195.4	contig61925	2512
LOC733905	1	195.4	contig02612	733905
KRTAP10-1	1	195.4	Tig_NM_002457_Contig_4	386677
CD163L1	1	204.8	Tig_NM_174941_Contig_1	283316
SACS	1	212.2	contig67532	26278
GPI	1	232.2	Tig_NM_000175_Contig_2	2821
ITLN1	1	236.7	contig81255	55600
GABARAPL2	1	237.8	Mex_NM_007285_Contig_1	11345
HNRNPK_b	1	237.8	contig40009	3190
NQO1	1	241.1	contig25226	1728
VPS4A	1	242.2	Tig_NM_013245_Contig_1	27183
APRT	1	246.7	contig88259	353
MAP1LC3B	1	250.1	contig64750	81631
CA5B	1	250.1	Mex_NM_007220_Contig_1	11238
TEAD4	1	261.4	contig22962	7004
GMDS	1	261.4	contig40189	2762
E24A11	1	267.1	contig20025	NA
E12A2	1	276.3	Tig_Nohits_477_Contig_1	NA
E13E7	1	276.3	Tig_Nohits_737_Contig_1	NA
LIG1	1	277.4	contig05956	3978
MOCS3	1	285.6	contig00931	27304
SFRS7	1	303.5	contig73873	6432
LOC769550	1	304.7	Mex_Nohits_19_Contig_8	769550
MMP2	1	313.2	contig86041	4313
NUDT21	1	319.5	Tig_NM_007006_Contig_1	11051
ETHE1	1	339.5	contig15512	23474
SODEFRIN	1	339.5	contig70679	NA
RABAC1	1	345.1	contig29421	10567
MC1R	1	350.9	Tig_NM_002386_Contig_1	6929
MGST3	1	350.9	contig79254	4259
APOE	1	355.6	Tig_NM_000041_Contig_1	348
PRDX6	1	365.8	Mex_NM_004905_Contig_1	9588
FMO3	1	373.5	contig90908	2328

NCF2	1	380.4	contig109102	4688
ARPC5	1	380.4	contig89187	10092
RGS2	1	380.4	contig28299	5997
GLUL	1	383.7	contig39666	2752
CLCA2	1	386	contig02085	9635
RGS5	1	387.1	contig114632	8490
COL11A1	1	390.4	contig81611	1301
IFI44L	1	392.7	contig77945	10964
GNG5	1	395	contig21923	2787
SEPT10_b	1	396.1	contig81464	NA
E12G5	1	398.4	contig11943	NA
E17G11	1	398.4	Tig_Nohits_534_Contig_1	NA
FPGT	1	404.2	contig09405	8790
GPR177	1	407.6	contig90087	79971
LEPROT	1	409.8	Tig_NM_017526_Contig_1	54741
USP1	1	412	contig86073	7398
PSMA4	1	427.3	contig68254	5685
C8A	1	436	Tig_NM_000562_Contig_1	731
TMEM59	1	444.5	contig61133	9528
SLC1A7	1	448	FUMMW201DHA9M	6512
SCP2	1	450.3	contig59689	6342
EPS15	1	453.7	contig01348	2060
TXNDC12	1	453.7	contig61321	51060
KIAA0494	1	461.8	contig10682	9813
FAAH	1	464.1	contig45884	2166
E17G7	1	467.4	contig76320	NA
PRDX1	1	473.1	Mex_NM_181696_Contig_1	5052
DAZL	2	0	AF308872.1	1618
TMLHE	2	2.5	Tig_NM_018196_Contig_1	55217
THRB	2	17.2	AY174872.1	7068
STT3B	2	29.3	contig01439	201595
SH3BP5	2	37.4	contig25248	9467
NGLY1	2	40.7	contig20957	55768
C7ORF41	2	40.7	contig76124	222166
E12C2	2	40.7	Mex_Nohits_71_Contig_3	NA
VWDE	2	51.4	contig28954	221806
COL1A2	2	60.1	contig81602	1278
UHRF2	2	62.5	Mex_NM_152896_Contig_1	115426
NMT2	2	77	Tig_NM_004808_Contig_1	9397
VIM	2	81.7	Mex_NM_003380_Contig_2	7431
EIF1B	2	83.9	contig22699	10289
IGF2BP3	2	83.9	contig83712	10643
TOMM7	2	83.9	Mex_NM_019059_Contig_1	54543
KIF15	2	85	contig10844	56992
E54A6	2	91.7	contig12961	NA
HOXA9	2	94.3	U20941.1	396096
HOXA4	2	94.3	contig23964	3201
CBX3	2	102.3	contig77780	11335
CYCS	2	103.4	Mex_NM_018947_Contig_2	54205

ABI2	2	105.6	contig23149	10152
KIF5B	2	110	contig44898	3799
CREM	2	113.3	contig32021	1390
WDR60	2	115.6	Tig_NM_018051_Contig_1	55112
U2AF2	2	119.1	Tig_NM_007279_Contig_1	11338
HBZ	2	127.1	Tig_NM_005332_Contig_1	3050
HBG1	2	131.8	contig04701	3047
HBA2	2	131.8	contig124199	3040
EIF3I	2	150.5	contig44224	8668
KBTBD5	2	161.2	contig95062	131377
CRHR2	2	168.2	Tig_NM_001883_Contig_1	1395
UQCRC2	2	169.3	contig94734	7385
GNA12	2	181.8	contig00814	2768
TIMM17B	2	195.6	Mex_NM_005834_Contig_2	10245
TIMP4	2	199.3	Tig_NM_000362_Contig_1	7079
TNRC6A	2	203.8	contig103677	27327
RBBP6	2	203.8	contig58795	5930
DCTN5	2	203.8	contig04165	84516
NARFL	2	207.1	contig05670/contig09172	64428
E17G8	2	210.4	Mex_Nohits_98_Contig_3	NA
MSLNL	2	211.5	contig77203	401827
SSTR5	2	211.5	contig16851	6752
PDGFRA_b	2	217.2	contig05547	NA
H3F3B_b	2	224	contig64711	NA
UBE2I	2	226.2	contig39904	7329
COQ7	2	227.3	Tig_NM_016138_Contig_1	10229
PDXDC1	2	228.4	contig83823	23042
MYL3	2	230.6	Tig_NM_000258_Contig_1	4634
ARF1_b	2	234	contig64763	375
ABAT	2	238.5	contig01498	18
ATP6V0C	2	240.7	contig18638	527
HN1L	2	240.7	Mex_NM_144570_Contig_1	90861
MRPS34	2	240.7	contig03533	65993
NME3	2	240.7	contig22305	4832
C16ORF13	2	252	contig13233	84326
STUB1	2	256.4	contig05742	10273
HBA2	2	256.4	contig82383	3040
HBD	2	256.4	contig82324	3045
LOC440335	2	257.5	contig122644	440335
AURKB	2	263.2	contig88180	9212
CCM2	2	265.4	FUMMW201B3Z0I	83605
C11ORF51	2	265.4	contig60913	25906
M_NOHITS_397_CTG1	2	265.4	contig74804	NA
NGFR	2	266.5	contig91745	4804
SETD2	2	266.5	contig01567	29072
KIF9	2	266.5	contig09301	64147
RAI1	2	268.8	contig14908	10743
RASD1	2	268.8	FUMMW202GRMMG	51655
MED9	2	268.8	contig09855	55090

MAP2K3	2	268.8	Mex_Nohits_1630_Contig_1	5606
DRG2	2	268.8	contig20030	1819
M_NOHITS_5137_CTG1	2	268.8	contig08716	NA
SHMT1	2	268.8	contig01780	6470
PVALB	2	276.8	contig79786	5816
RAC1	2	276.8	contig20873	5879
ARPC1A	2	280.1	contig67792	10552
UTS2R	2	280.1	Tig_NM_018949_Contig_1	2837
ACTG1	2	280.1	Mex_NM_001614_Contig_21	71
M_NOHITS_899_CTG1	2	280.1	contig60951	NA
ACTB	2	281.2	Mex_NM_001101_Contig_17	60
FOXK1	2	284.5	contig00407	221937
TKTL2	2	286.7	contig90905	84076
RENBP	2	286.7	Tig_NM_002910_Contig_2	5973
BGN	2	286.7	contig76755	633
E13G5	2	286.7	contig41393	NA
SMC1A	2	293.5	Tig_NM_006306_Contig_1	8243
TTC9C	2	293.5	Mex_NM_173810_Contig_1	283237
EEF1G	2	293.5	Mex_NM_001404_Contig_9	1937
OTUB1	2	299.1	contig61474	55611
ADSS	2	299.1	contig42104	159
RBM4	2	299.1	Mex_NM_002896_Contig_13	5936
PRDX5	2	299.1	Mex_NM_012094_Contig_1	25824
CALM1	2	299.1	contig100887	801
ACTC1_a	2	299.1	Mex_NM_005159_Contig_14	NA
PYGM	2	303.5	contig23115	5837
CAPN1	2	303.5	contig02836	823
DPP3	2	303.5	contig21829	10072
TMED10	2	303.5	contig02749	10972
FOXA3	2	305.7	contig96250	3171
E14C12	2	307.9	contig41290	NA
E16G10	2	307.9	contig41290	NA
CFL1	2	309	contig79245	1072
PLCB3	2	309	Tig_NM_000932_Contig_1	5331
BANF1	2	309	contig20749	8815
KCNK1	2	309	Tig_NM_002245_Contig_1	3775
E23C10	2	309	Mex_Nohits_4898_Contig_1	NA
SULT6B1	2	310.1	contig121864	391365
RBM4B	2	310.1	Mex_NM_031492_Contig_9	83759
UCRC	2	312.3	Mex_Nohits_139_Contig_1	29796
E16E8	2	312.3	contig20807	NA
CKM	2	315.6	contig82224	1158
SNRPD2	2	320	contig123646	6633
CLPTM1	2	320	contig42672	1209
E17G3	2	323.4	contig20403	NA
C22ORF32	2	334.1	contig26758	91689
CYP2C19	2	334.1	Tig_NM_000769_Contig_2	1557
E12E6	2	334.1	contig31370	NA
CYP2F1	2	335.3	Tig_NM_000774_Contig_3	1572

H3F3B_a	2	343.3	Mex_NM_005324_Contig_1	NA
CAPNS1	2	345.6	contig40599	826
SNAP23	2	345.6	contig20107	8773
GMFG	2	350.1	contig22710	9535
NCCRP1	2	350.1	contig77858	342897
RHOA	2	356.2	contig74622	387
GNAT1	2	365.5	contig04301	2770
TWF2	2	372.8	contig76181	11344
WFDC2	2	372.8	contig20402	10406
CNBP	2	377.4	contig83667	7555
BTG1_a	2	379.8	contig05031	NA
FLNB	2	386.7	contig20278	2317
TKT	2	388.9	contig02840	7086
E12A3	2	398.3	contig06189	NA
RHO	2	404	contig02489	6010
LSM3	2	414.8	Mex_NM_014463_Contig_1	27258
SEC61A1	2	426	contig00553	29927
RAB7A	2	433.2	contig20543	7879
IP6K2	2	438.8	Mex_NM_016291_Contig_1	51447
PRKAR2A	2	442.1	contig82788	5576
ARPC4	2	453.4	contig40989	10093
NISCH	2	459	Tig_NM_007184_Contig_1	11188
RPL29	2	459	contig12425	6159
PBRM1	2	460.1	contig10565	55193
SPCS1	2	470.6	contig61932	28972
ZYX	3	0	contig31248	7791
MYL6	3	23.7	Mex_NM_021019_Contig_4	4637
NANOG	3	38.2	GQ215660.1	79923
C3AR1	3	39.3	Tig_NM_004054_Contig_1	719
GAPDH	3	42.6	Mex_NM_002046_Contig_10	2597
ING4	3	45.9	contig39071	51147
FKBP1A	3	66.9	contig79963	2280
ASXL1	3	75.6	contig20785	171023
E16A12	3	75.6	contig02188	NA
GNAS	3	79	contig39738	2778
ADNP	3	96.7	contig17363	23394
TNNC2	3	101.2	Mex_NM_003279_Contig_6	7125
UBE2V1	3	101.2	contig61404	7335
SNAI2	3	101.2	Mex_NM_003068_Contig_1	6591
SULF2	3	109.1	contig39416	55959
NCOA5	3	114.7	contig74758	57727
MMP2_a	3	118.1	contig67644	NA
PDLIM7	3	143.3	contig90437	9260
TMED9	3	157.3	contig03761	54732
CTBP1	3	158.4	contig61167	1487
RPUSD4	3	158.4	Tig_Nohits_253_Contig_2	84881
TIG_NOHITS_253	3	158.4	contig24983	1487
PROD1	3	168.5	contig42321	NA
VKORC1L1	3	169.6	contig04792	154807

FUS	3	169.6	Mex_NM_004960_Contig_7	2521
TRIM69	3	169.6	Tig_NM_182985_Contig_2	140691
MVP	3	176.4	contig81549	9961
NME1	3	176.4	contig81963	4830
ALDOA	3	184.4	contig81463	226
E11G12	3	193.7	contig24750	NA
YPEL3	3	193.7	contig40826	83719
SULT1C4	3	194.8	contig44217	27233
BOLA2	3	194.8	Mex_NM_016074_Contig_1	552900
ATP2A1	3	195.9	Mex_NM_173201_Contig_1	487
E16E3	3	195.9	Tig_Nohits_525_Contig_1	NA
CONTIG13340	3	195.9	contig13340	NA
NFS1	3	199.2	contig01925	9054
E50G8	3	199.2	contig17074	NA
MAP1LC3A	3	201.4	contig25812	84557
C20ORF4	3	206	contig04181	25980
MANBAL	3	209.4	contig43653	63905
BNIP1	3	217.7	Tig_Nohits_1015_Contig_1	662
UQCRQ	3	227.8	Tig_NM_014402_Contig_2	27089
CAMLG	3	236.4	contig01926	819
SKP1	3	236.4	contig01694	6500
SMAD5	3	238.8	contig04821	4090
SEPT10_a	3	241	contig01687	151011
HNRNPA0	3	242.1	contig38930	10949
HNRNPAB	3	243.2	Mex_NM_004499_Contig_37	3182
E13E11	3	243.2	contig00131	NA
MATR3	3	244.3	contig83365	9782
UBE2D2	3	244.3	Mex_NM_003339_Contig_4	7322
PHF5A	3	251	contig11407	84844
POLR3H	3	251	contig78814	171568
E12A5	3	251	contig29936	NA
E14G1	3	251	contig04073	NA
CSNK1E	3	256.6	contig74049	1454
KDELR3	3	256.6	contig78932	11015
TOM1	3	261.1	contig10478	10043
HOXC10	3	270.8	contig85757	3226
RARG	3	272	contig78310	5916
NACA	3	272	Cluster_286366_Contig2	4666
E54A1	3	272	contig78310	NA
ATP5G2	3	272	Mex_NM_005176_Contig_1	517
OS9	3	280.9	contig06273	10956
KRT5	3	280.9	contig68051	3852
KRT4	3	280.9	Tig_NM_004693_Contig_1	3851
CD63	3	285.4	Mex_NM_001780_Contig_2	967
OBFC2B	3	286.5	Tig_NM_024068_Contig_1	612104
RPS26	3	286.5	contig78872	6231
WNT1	3	289.9	X55270.1	7471
RHEBL1	3	289.9	Mex_NM_144593_Contig_1	121268
DDX23	3	291	Mex_NM_004818_Contig_1	9416

C5ORF4	3	294.4	contig78392	10826
SPARC	3	294.4	contig81343	6678
ATOX1	3	295.5	Tig_NM_004045_Contig_2	475
CD74	3	297.7	contig67402	972
SQSTM1	3	300	Tig_NM_003900_Contig_1	8878
CCNG1	3	312.8	contig40055	900
PKM2	3	318.5	Mex_NM_182471_Contig_1	5315
MYH9	3	325.3	contig38538	4627
MGP	3	331	contig75246	4256
LURP-1	3	331	contig65744	398233
ETF1	3	331	contig00016	2107
SFRS2	3	346.1	Mex_NM_003016_Contig_3	6427
PRPSAP1	3	346.1	contig05650	5635
C17ORF28	3	348.3	contig26792	283987
RAB37	3	349.4	Tig_NM_175738_Contig_1	326624
XYLT2	3	349.4	Tig_NM_022167_Contig_1	64132
APOH	3	364.4	contig78840	350
DDX5	3	364.4	Mex_NM_004396_Contig_14	1655
ETG990	3	364.4	contig85568	NA
PRKAR1A	3	368.9	contig23543	5573
GNA13	3	368.9	contig88038	10672
KCNJ16	3	370	Tig_NM_170741_Contig_1	3773
SOX9	3	371.1	Mex_NM_000346_Contig_1	6662
SSTR2	3	371.1	contig16851	6752
RPL38	3	372.2	contig78531	6169
ARHGDIA	3	375.6	contig62399	396
THOC4	3	375.6	contig84519	10189
CYP4F22	3	375.6	Tig_NM_173483_Contig_1	126410
ZNF248	3	375.6	Tig_NM_021045_Contig_1	57209
ZNF717	3	375.6	contig78212	1E+08
PBX1	3	375.6	contig90237	5087
E13G1	3	375.6	Tig_Nohits_2110_Contig_1	NA
P4HB	3	379	Tig_NM_000918_Contig_5	5034
PKN2	3	388	contig103758	5586
ASF1B	3	394.8	Tig_NM_018154_Contig_1	55723
ASF1A	3	394.8	contig03723	380002
PGLS	3	400.4	Mex_NM_012088_Contig_3	25796
E12C8	3	400.4	Tig_Nohits_3277_Contig_1	NA
C19ORF43	3	414	contig23458	79002
TYK2	3	414	contig06054	7297
JUNB	3	414	contig77454	3726
C19ORF52	3	418.4	contig11119	90580
ELOF1	3	418.4	contig04476	84337
FARSA	3	418.4	Tig_NM_004461_Contig_1	2193
DNM2	3	418.4	contig90793	1785
GADD45GIP1	3	418.4	contig60747	100195802
E14C7	3	424.2	Tig_Nohits_642_Contig_1	NA
KHSRP	3	430.2	Mex_NM_003685_Contig_9	8570
C19orf53	3	430.2	Tig_Nohits_817_Contig_2	28974

E12A1	4	0	contig92444	NA
E15G10	4	10.9	Tig_Nohits_2301_Contig_1	NA
E14G3	4	15.8	contig82190	NA
ANAPC7	4	16.9	Tig_NM_016238_Contig_1	51434
RAB35	4	21.3	contig01681	11021
SFRS9	4	22.4	contig78585	8683
DYNLL1	4	22.4	contig68486	8655
DDT	4	25.7	Mex_NM_001355_Contig_1	1652
MIF	4	26.8	contig96370	4282
E14A8	4	35.2	contig22342	NA
FBXW8	4	63.9	Tig_NM_012174_Contig_1	26259
XBP1	4	70.7	contig121888	7494
SLC20A1	4	74	contig82608	6574
PPIF	4	74	contig79864	10105
PGAM2	4	75.1	Tig_NM_000290_Contig_1	5224
TIA1	4	76.2	contig39856	7072
OGDH	4	76.2	Tig_NM_018245_Contig_1	4967
MYL7	4	76.2	contig23219	58498
E15E3	4	76.2	contig125129	NA
E16A5	4	89	contig02610	NA
AP2M1	4	93.5	contig99694	1173
EIF4G1	4	93.5	contig12269	1981
E12E10	4	93.5	contig12253	NA
E16C3	4	93.5	contig46032	NA
EIF5A	4	97.9	contig77786	1984
E13E8	4	101.2	contig103649	NA
LAMP3	4	110.7	contig98467	27074
LOC563358	4	111.9	contig03184	563358
PRPF6	4	115.3	contig07151	24148
PDCD10	4	115.3	contig83650	11235
KPNA4	4	122.5	contig03854	3840
RARRES1	4	128.1	contig122324	5918
VWA5A	4	137.5	contig72108	4013
SCLY	4	151.5	contig38687	51540
HDLBP	4	155	contig84761	3069
E14C4	4	155	contig81323	NA
E14G7	4	155	contig04788	NA
HSD17B8	4	177	contig03947	7923
CIRBP_b	4	179.3	contig87303	1153
E54E6	4	185.5	AF203327	NA
PDLIM2	4	198.1	Tig_NM_176871_Contig_1	64236
BOLA3	4	198.1	contig07310	388962
SFRP1	4	201.4	contig89439	6422
ENTPD4	4	201.4	contig43859	9583
E14E1	4	207	contig66496	NA
PHB2	4	211.8	Tig_Nohits_988_Contig_1	11331
AKAP7	4	276.1	contig21059	9465
EGLN1	4	278.3	contig01258	54583
MAL	4	284.2	Tig_NM_022439_Contig_1	4118

MALL	4	285.4	contig68724	7851
TCP1	4	285.4	Tig_NM_030752_Contig_1	6950
BTG1	4	303.1	contig60810	694
CTGF	4	304.2	Tig_NM_001901_Contig_2	1490
ZUFSP	4	310.2	contig28926	221302
FABP7	4	319.2	Tig_NM_001446_Contig_1	2173
KIAA0776	4	329.6	contig41577	23376
ZNF292	4	330.8	contig39370	23036
CIRBP_c	4	333.9	Mex_NM_001280_Contig_7	NA
COX7A2	4	344.9	contig45227	1347
COL12A1	4	346.1	Mex_NM_080645_Contig_3	1303
TMEM14A	4	356.9	contig82218	28978
PXDN	4	361.3	contig67036	7837
PDIA6	4	366.1	Mex_NM_005742_Contig_7	10130
YWHAQ	4	367.3	contig79117	10971
PQLC3	4	367.3	contig21347	130814
ID2	4	367.3	Mex_NM_002166_Contig_2	3398
SDC1	4	378.5	contig82741	6382
RHOB	4	378.5	Tig_NM_004040_Contig_1	388
CTSB	4	390.5	contig79050	1508
PGAM2_b	4	402	Tig_NM_000290_Contig_1	5224
IRGC	4	402	contig03981	56269
GPN1	4	414.1	contig22931	11321
ZNF649	5	0	Tig_NM_023074_Contig_1	65251
LECT2	5	3.8	contig95342	3950
CYC1	5	8.1	contig01564	1537
EPPK1	5	9.5	contig87120	83481
VPS28	5	9.5	contig42300	51160
PUF60	5	9.5	contig01472	22827
PSCA	5	9.5	Mex_NM_005672_Contig_9	8000
E48C10	5	9.5	contig14121	NA
PRKRIP1	5	20.8	contig42063	79706
MYC	5	28.8	contig14709	4613
NDUFB9	5	43.7	contig42979	4715
RNF19A	5	61.9	contig22406	25897
PABPC1	5	69.9	contig20637	26986
UQCRB	5	75.9	contig38784	7381
RBM12B	5	78.3	contig61158	389677
CA2	5	81.7	Tig_NM_000067_Contig_1	760
NBN	5	81.7	Tig_NM_002485_Contig_1	4683
MRPS28	5	87.3	contig06561	28957
E15A2	5	89.6	contig00261	NA
NUP37	5	109.1	contig24077	79023
YES1	5	131.8	contig01186	7525
RIOK3	5	131.8	Mex_NM_003831_Contig_1	8780
MYL12B	5	135.3	contig64743	103910
CNDP1	5	160.5	contig64720	84735
CYB5A	5	168.1	contig41437	1528
MYO10	5	179.2	contig39149	4651

CHMP5	5	179.2	contig03609	51510
BASP1	5	180.3	contig40288	10409
DAP	5	182.5	contig81772	1611
KDSR	5	194.2	contig00589	2531
VPS4B	5	194.2	contig00113	9525
ACOT13	5	202.5	contig23241	55856
JARID2	5	225.2	contig38600	3720
SERPINB6	5	227.5	contig41185	5269
TXNDC5	5	233.2	contig01143	81567
LYRM4	5	235.5	contig47087	57128
E15A11	5	237.9	contig06801	NA
KBTBD2	5	272.2	Tig_NM_032505_Contig_1	25948
LOC420992	5	272.2	contig00499	420992
TMSB15A	5	280.5	contig18468	11013
LOC792995	5	282.8	Mex_Nohits_367_Contig_1	792995
TAF9	5	287.3	contig04517	6880
FAM162A	5	287.3	contig70237	26355
E17E10	5	287.3	Mex_Nohits_59_Contig_3	NA
FHL1	5	291.8	contig25177	2273
SOX3	5	296.3	contig64886	6658
VMA21	5	297.4	contig01707	203547
HMGB3	5	297.4	Mex_NM_005342_Contig_7	3149
IDH2	6	0	contig78869	3418
MFAP1	6	0	Tig_NM_005926_Contig_2	4236
IQGAP1	6	4.9	contig73895	8826
CLPX	6	14	contig00078	10845
GATM	6	38.4	contig39679	2628
MCEE	6	49.3	contig123575	84693
MAPK6	6	55.4	contig83658	5597
LARP6	6	59.9	contig20832	55323
SFTPC	6	62.2	Tig_NM_003018_Contig_1	6440
NPTN	6	63.3	contig39728	27020
CONTIG22977	6	64.4	contig22977	NA
ISL2	6	71.6	gi 34733868 gb AY307982.1	3670
LIPC	6	75.3	Tig_NM_000236_Contig_2	3990
HAPLN3	6	87.1	contig80277	145864
ABHD2	6	91.8	Tig_NM_152924_Contig_1	11057
RHCG	6	91.8	contig93737	51458
RAB11A	6	98.5	contig97335	8766
MEX_NOHITS_2369_CON	6	98.5	Mex_Nohits_2369_Contig_1	NA
TLE3	6	100.7	contig91375	7090
PHLDA2	6	102.9	contig84067	7262
ATHL1	6	106.6	contig91060	80162
LOC644003	6	112.9	Tig_NM_002457_Contig_1	NA
MUC5AC	6	114	Tig_NM_002457_Contig_2	4586
TNNI2	6	116.2	contig17079	7136
CD81	6	117.4	contig22462	975
FTH1	6	127	contig97218	2495
C11ORF58	6	133.6	contig81610	10944

SBF2	6	134.8	Tig_NM_030962_Contig_1	81846
RRAS2	6	134.8	contig38159	22800
SPON1	6	139.7	contig00277	10418
PAX6	6	142.2	contig05857	5080
CCND1	6	154.5	contig01713	595
CD59	6	155.6	contig60874	966
ANXA2	6	163.4	contig81208	302
LOC100091509	6	163.4	contig00377	100091509
SERINC2	6	166.7	Tig_NM_178865_Contig_1	347735
E15E9	6	166.7	contig41080	NA
TRNAU1AP	6	172.4	contig03667	54952
CTSL2	6	173.5	contig81505	1515
RCC1	6	173.5	contig32974	1104
T_	6	173.5	contig97239	9496
SH3BGRL3	6	175.7	Mex_NM_031286_Contig_1	83442
GRHL3	6	182.1	contig63449	57822
STMN1	6	188.5	contig38521	3925
ZNF593	6	188.5	contig02214	51042
E12G12	6	188.5	contig121816	NA
M_NOHITS_886_CTG2	6	188.5	contig60737	NA
E15A6	6	191.8	contig89335	NA
RRAGC	6	199.9	contig59920	64121
SF3A3	6	210.7	contig01938	10946
GNL2	6	220.3	contig86563	29889
TRAPPC3	6	227.2	contig20735	27095
ZNF706	6	230.5	contig72665	51123
E14C3	6	231.6	Tig_Nohits_2689_Contig_1	NA
E16C8	6	231.6	contig82971	NA
GJB5	6	234.9	contig15497	2709
KPNA6	6	247.4	contig39676	23633
KHDRBS1	6	247.4	Mex_NM_006559_Contig_23	10657
E13G11	6	247.4	contig45182	NA
SFRS1	6	251.8	contig89499	6426
YARS	6	251.8	contig46803	8565
RAB6A	7	0	contig83040	5870
DNAJB13	7	3.6	contig42586	374407
STARD10	7	3.6	contig39086	10809
SPCS2	7	3.6	contig61755	9789
LIPT2	7	3.6	contig11156	387787
THRSP	7	10.3	Tig_NM_003251_Contig_1	7069
SYTL2	7	15.2	contig63136	54843
UBL3	7	32.5	contig82963	5412
POSTN	7	33.7	Mex_NM_006475_Contig_4	10631
E12G3	7	38.6	Tig_Nohits_1720_Contig_1	NA
ITM2B	7	48.1	contig89490	9445
RB1	7	48.1	contig02051	5925
C13ORF31	7	48.1	contig11348	144811
GTF2F2	7	48.1	contig39351	2963
LCP1	7	48.1	contig114939	3936

RAB33B	7	49.2	contig61135	83452
LMO7	7	54.3	contig78002	4008
PICK1	7	54.3	Tig_NM_012407_Contig_1	9463
GPR143	7	77.4	Tig_NM_000273_Contig_1	4935
RPL24	7	91	contig79654	6152
THOC4_a	7	91	contig58928	NA
COL8A1	7	100.2	contig84350	1295
EIF1AX	7	117.2	contig38659	1964
TM9SF2	7	128.2	contig83943	9375
COL4A2	7	146.6	contig20835	1284
ABHD13	7	159.5	Mex_Nohits_2045_Contig_1	84945
MID1IP1	7	160.6	contig108862	58526
BLZF1	7	163.9	contig89544	8548
DPT	7	166.2	contig46226	1805
TIAM1	7	196	contig28568	7074
SOD1	7	196	contig61559	6647
ALCAM	7	198.2	Mex_NM_001627_Contig_1	214
ATP5O	7	198.2	contig38674	539
RCAN1	7	198.2	contig73545	1827
CD247	7	208.4	contig98396	919
UPK1B	7	211.1	contig78657	7348
FSTL1	7	222.1	contig81746	11167
CCDC58	7	225.5	contig47206	131076
MAN1A2	7	232.2	contig38608	10905
LOC643604	8	0	Tig_NM_153263_Contig_1	NA
TPM2	8	10.2	Mex_NM_152263_Contig_1	7169
DNAJB5	8	29.5	contig02345	25822
IER3IP1	8	47.3	contig61190	51124
SMAD2	8	48.4	contig14896	4087
ID3	8	56.4	Tig_NM_002167_Contig_1	3399
ZFR	8	66.9	contig68980	51663
ATP8B1	8	66.9	Tig_NM_005603_Contig_1	5205
MEX_NOHITS_2377_CON	8	71.3	Mex_Nohits_2377_Contig_1	NA
MEX_NOHITS_2354_CON	8	74.6	Mex_Nohits_2354_Contig_1	NA
SEPP1	8	74.6	Mex_Nohits_3532_Contig_1	6414
PRKAA1	8	75.7	contig04217	5562
CONTIG95328	8	75.7	contig95328	NA
GPX8	8	81.4	contig20713	493869
SCAMP1	8	94.3	contig40306	9522
HMGCR	8	101.1	contig39849	3156
OCLN	8	104.4	contig83219	4950
MEX_NOHITS_906_CONT	8	104.4	Mex_Nohits_906_Contig_1	NA
VCAN	8	107.9	contig85548	1462
E11G8	8	145.9	contig00852	NA
TNFAIP8	8	149.8	contig03149	25816
E14E6	8	153.3	contig40558	NA
E14C5	8	157.3	Tig_Nohits_2936_Contig_1	NA
ANXA1	8	172.2	contig78390	301
HNRNPK	8	195.4	Mex_NM_031263_Contig_57	3190

FAM108B1	8	226.8	contig20131	51104
HSPA8	9	0	contig73202	3312
APLP2	9	11.4	contig40751	334
E14E10	9	11.4	contig40751	NA
NNMT	9	13.6	contig10442	4837
LOC566020	9	24.4	contig78035	566020
ARCN1	9	35.2	contig46498	372
PAFAH1B2	9	36.4	contig61168	5049
FXD2	9	36.4	Tig_NM_001680_Contig_1	486
MNT	9	47.7	contig93589	4335
E11G11	9	51.4	contig00630	NA
E12A11	9	54.8	Tig_Nohits_1140_Contig_1	NA
AATF	9	57	contig03931	26574
ATP2A3	9	63.9	contig20003	489
BAZ1B	9	74.7	contig76099	9031
E16C7	9	74.7	Tig_Nohits_1353_Contig_1	NA
C7ORF42	9	79.2	Mex_NM_017994_Contig_1	55069
GBAS	9	79.2	contig38625	2631
MKS1	9	82.5	contig107130	54903
POR	9	82.5	Tig_Nohits_63_Contig_1	5447
MED31	9	85.8	contig28566	51003
CLTC	9	86.9	contig86698	1213
DOC2B	9	86.9	contig60471	8447
PRR11	9	86.9	contig83519	55771
MED13	9	86.9	contig102797	9969
E11G4	9	107.5	contig87736	NA
E17C12	9	111.3	contig77974	NA
CFLAR	9	112.5	Tig_NM_003879_Contig_1	8837
STAT1	9	124.2	Tig_NM_007315_Contig_1	6772
TOMM20	9	126.5	Mex_NM_014765_Contig_1	9804
TRA2B	9	129	Mex_NM_004593_Contig_24	6434
DNAJB11	9	130.2	contig01241	51726
ZC3H15	9	131.3	Tig_NM_018471_Contig_1	55854
SUMO3	9	145.1	contig82230	6612
STT3B_a	9	150.8	contig26280	NA
E54C11	9	150.8	FUMMW201CWII4	NA
FN1	9	153	contig100302	2335
E12G7	9	154.1	Mex_Nohits_118_Contig_1	NA
E12G1	9	154.1	contig82169	NA
NDUFA10	9	157.5	contig79331	4705
UGT1A1	9	158.6	Tig_NM_000463_Contig_1	54658
COL6A1	9	159.7	contig64648	1291
E13E6	9	159.7	contig02372	NA
ATP5G3	9	165.4	Mex_NM_001689_Contig_1	518
HOXD8	9	165.4	FSIRIH301B5ZQF	3234
HOXD11	9	166.5	contig94163	3237
SCRN3	9	168.7	Tig_NM_024583_Contig_1	79634
E13A7	9	168.7	contig81594	NA
GCA	9	171	contig122643	25801

RND3	9	180.3	contig02990	390
HNMT	9	185.9	contig01296	3176
R3HDM1	9	188.1	contig01007	23518
SNX4	9	196.2	contig01503	8723
E14A3	9	205.7	contig03409	NA
NNMT_a	9	209.1	contig91740	
ZNF142	9	210.2	contig08821	7701
ACCN4	9	212.4	contig37092	55515
E19A7	9	215.9	contig83932	1674
CYP27B1	9	218.2	Tig_NM_000785_Contig_1	1594
SLC37A3	10	0	contig104519	84255
FBXO7	10	3.4	contig04534	100228283
CARDIAC-RNA	10	11.4	U87267.1	NA
E54G12	10	11.4	gi 1842072 gb U87267.1 SCU87267	NA
MTPN	10	13.7	contig83929	136319
IL17RA	10	30.5	Tig_NM_014339_Contig_1	23765
WNT5B	10	32.9	Z14048.1	81029
FBXL14	10	32.9	Mex_NM_152441_Contig_1	144699
E17C9	10	44.5	contig01311	NA
NTF3	10	54.7	contig23894	4908
TMEM19	10	59.6	contig86198	55266
UPK3B	10	65.1	contig92325	80761
TWF1	10	71.3	Tig_NM_002822_Contig_1	5756
HIST1H2AG	10	124.3	contig24162	8969
HIST1H1E	10	125.9	Tig_NM_005321_Contig_1	3008
E12A4	10	128.1	Tig_Nohits_2437_Contig_1	NA
CDK2AP2	10	130.3	contig21138	10263
UBE2L3	10	132.5	contig81259	7332
TMX2	10	133.6	contig05487	51075
CTNND1	10	133.6	contig02217	1500
FTSJ3	10	133.6	contig13734	117246
C11ORF31	10	133.6	contig26444	280636
CTSK	10	135.9	Tig_NM_000396_Contig_2	1513
E17C5	10	135.9	Mex_Nohits_872_Contig_1	NA
FLJ36031	10	135.9	contig00165	100009954
E17C6	10	135.9	Mex_Nohits_872_Contig_1	NA
PIM3	10	144	contig02755	415116
LUM	10	144	contig20539	4060
PAWR	10	146.2	contig03278	5074
KITLG	10	154.2	AY578915	4254
TIGRINUM-UV	10	162.6	AF038948	NA
LEP	10	166.2	contig99350	3952
CALU	10	166.2	contig04357	813
E15C7	10	166.2	contig08410	NA
SND1	10	169.5	Tig_NM_014390_Contig_2	27044
IMPDH1	10	169.5	contig84824	3614
COPG2	10	176.3	contig23282	26958
TUBA1A	10	185.2	contig79721	7846
RAP1B	10	196.2	contig00579	5908

TMEM5	10	202.5	contig04042	10329
XRCC6BP1	10	217.2	contig00347	91419
ACADSB	11	0	contig03972	36
EIF3A	11	6.7	contig76639	8661
ABLIM1	11	24.1	contig43220	3983
TRIM8	11	38.5	contig11084	81603
COX15	11	53.4	contig48900	1355
ATP5B	11	62.4	contig82158	506
ANKRD1	11	71.4	contig80875	27063
HIGD1A	11	78.3	Mex_NM_014056_Contig_1	25994
DNTT	11	78.3	contig05639	1791
CISD1	11	82.6	contig40405	55847
SGMS1	11	88.4	contig20188	259230
E16E2	11	94.5	contig15160	NA
MFAP2	11	96.9	contig80333	4237
SS18L2	11	96.9	contig95640	51188
UBR4	11	101.4	contig35966	23352
SFTPD	11	104.9	Tig_NM_003019_Contig_2	6441
VDAC2	11	113.2	contig03538	7417
E15C8	11	113.2	contig25367	NA
AP3M1	11	113.2	contig81359	26985
ERRFI1	11	115.4	contig88456	54206
HSPG2	11	115.4	contig61763	3339
CDC42	11	122.4	contig20370	998
C1QB	11	124.8	contig121962	713
PCBD1	11	137.9	Mex_NM_000281_Contig_1	5092
PSAP	11	139	contig122396	5660
C10ORF54	11	139	contig08887	64115
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RPL37A	11	160.2	contig81561	6168
CAMTA1	11	160.2	Mex_Nohits_180_Contig_1	23261
CALM2	11	191.6	contig02809	801
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KLHL8	12	17.2	contig07470	57563
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RAD23B	12	49	contig00813	5887
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SCOC	12	58	contig20581	60592
LARP7	12	61.8	contig43208	51574
TBCKL	12	62.9	Tig_NM_033115_Contig_1	93627
NDUFC1	12	77.3	Tig_NM_002494_Contig_3	4717
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PDGFC	12	91.3	Tig_NM_016205_Contig_1	56034
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PDGFRA	12	119.4	contig77123	5156
CNGA1	12	124.2	Tig_NM_000087_Contig_1	1259
WDR1	12	145.2	contig89245	9948
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CDC25A	12	161.3	contig00710	933
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KAZALD1	12	174	contig64782	81621
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GTPBP2	13	33.3	contig89338	54676
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HSP90AB1	13	37.8	contig80987	3326
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CCDC56	15	10.6	contig01371	28958
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E17E11	15	28.6	contig73404	NA
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WDR5	16	34.1	contig02083	11091
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KRT17	17	3.3	contig77120	3872
EIF1	17	3.3	contig73942	10209
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FKBP10	17	0	Chromosome 17:39968962-39979465
KRT24	17	0	Chromosome 17:38854243-38860002
KRT17	17	3.3	Chromosome 17:39775689-39781094
EIF1	17	3.3	Chromosome 17:39845137-39848920
KRT12	17	3.3	Chromosome 17:39017195-39023462
RARA	17	5.5	Chromosome 17:38465436-38513895
LOC10001	17	5.5	Unknown
SNF8	17	9.9	Chromosome 17:47007461-47022154
HOXB13	17	9.9	Chromosome 17:46802125-46806120
NFE2L1	17	12.1	Chromosome 17:46125686-46138906
RPL19	17	20.3	Chromosome 17:37356536..37360980
MED1	17	28.5	Chromosome 17:37560538-37607521
KEAP1	17	36.4	Chromosome 19:10596796-10614054
G2G13	17	38.6	Unknown
MED24	17	39.7	Chromosome 17:38175350..38210889
THRA	17	49.2	Chromosome 17:38219063-38250120
SFRS3	17	67.3	Chromosome 6:36562090-36571209
MEX_NH_1	17	69.6	Unknown
TCF19	17	76.3	Chromosome 6:31126303..31131992
MR1	17	79.9	Chromosome 1:181003139..181024633

Marker	LG	cM	Chicken Chromosome Location
SPEN	1	0	Chromosome 21: 4,247,242-4,305,510
SPAG7	1	9.5	Unknown
PCOLCE2	1	10.6	Chromosome 9: 11,641,457-11,660,508
ENO3	1	10.6	Unknown
PSMB6	1	11.7	Unknown
EIF4A1	1	12.8	Unknown
E16A9	1	13.9	Unknown
CLDN7	1	22	Unknown
CIRBP	1	39.7	Unknown
GPX4	1	39.7	Chromosome 28: 2,404,703-2,405,130
CNN2	1	39.7	Unknown
SLC39A3	1	39.7	Unknown
E12E2	1	39.7	Unknown
CDC34	1	45.3	Chromosome 28: 2,158,769-2,164,532
BSG	1	45.3	Chromosome 28: 2,167,743-2,174,689
PRTN3	1	46.4	Chromosome 28: 2,241,079-2,242,181
SFRS14	1	55.8	Chromosome 28: 2,764,881-2,776,652
NDUFA13	1	57	Unknown
USE1	1	58.1	Chromosome 28: 3,709,960-3,714,211
UHRF1	1	64.9	Chromosome 28: 4,388,722-4,397,932
E17C2	1	67.1	Unknown
EEF2	1	67.1	Chromosome 28: 1,051,660-1,059,655
NDUFA11	1	72.7	Chromosome 28: 779,423-782,360
MYO1F	1	72.7	Chromosome 28: 1,340,726-1,353,824
OAZ1	1	73.8	Chromosome 28: 1,446,253-1,568,107
BTBD2	1	73.8	Chromosome 28: 1,717,788-1,728,300
SAFB	1	79.4	Chromosome 10: 7,847,513-7,870,783
MAPRE1	1	79.4	Chromosome 20: 10,214,054-10,222,096
LSM7	1	79.4	Chromosome 28: 540,993-546,348
ATP5E	1	80.5	Unknown
MCL1	1	89.5	Chromosome 25: 1,658,379-1,661,125
ERO1L	1	98.5	Chromosome 5: 60,781,418-60,798,936
IFIH1	1	101.8	Chromosome 7: 22,607,402-22,636,018
KRTCAP2	1	101.8	Unknown
C1ORF230	1	111.4	Unknown
S100A11	1	112.6	Chromosome 25: 1,300,534-1,302,363
PRG4	1	112.6	Chromosome 8
S100A13	1	112.6	Chromosome 25_random: 11,271-11,889
S100A4	1	112.6	Unknown
E12E11	1	122.8	Unknown
TPM3	1	129	Chromosome Z: 8,546,930-8,553,188
RPS27	1	131.2	Unknown
ANP32E	1	136.1	Chromosome 25: 25,979-41,146
TXNIP	1	142.3	Unknown
SSR2	1	149.1	Chromosome 25: 1,783,616-1,786,523

DYNC1LI2	1	156	Chromosome 11: 12,220,582-12,245,162
ATP6V0D1	1	166.5	Chromosome 11: 1,349,607-1,373,475
TPPP3	1	167.7	Unknown
NUTF2	1	170.1	Chromosome 11: 881,677-901,274
HDGF	1	170.1	Unknown
UFC1	1	170.1	Unknown
TMEM188	1	171.3	Unknown
PSMD11	1	179.5	Chromosome 1: 45,869,008-45,880,845
U2AF1_b	1	179.5	Unknown
LUC7L3	1	179.5	Chromosome 18:10074576..10087770
FXYD3	1	181.9	Unknown
E12C7	1	186.6	Unknown
COX6B1	1	187.7	Unknown
POLR2L	1	189.9	Chromosome 5: 16708636..16710033
NUCB1	1	194.3	Unknown
FTH1_b	1	195.4	Unknown
FTL	1	195.4	Unknown
LOC733905	1	195.4	Unknown
KRTAP10-1	1	195.4	Unknown
CD163L1	1	204.8	Unknown
SACS	1	212.2	Chromosome 1: 181,913,899-181,945,256
GPI	1	232.2	Chromosome 11: 11,776,540-11,798,473
ITLN1	1	236.7	Unknown
GABARAPL2	1	237.8	Chromosome 11: 21,878,170-21,885,879
HNRNPK_b	1	237.8	Unknown
NQO1	1	241.1	Chromosome 11: 20,996,216-20,997,288
VPS4A	1	242.2	Unknown
APRT	1	246.7	Unknown
MAP1LC3B	1	250.1	Chromosome 11: 19,752,538-19,764,115
CA5B	1	250.1	Chromosome 11: 19,967,982-19,980,176
TEAD4	1	261.4	Chromosome 1: 78,659,066-78,705,705
GMDS	1	261.4	Chromosome 2: 68,207,412-68,605,804
E24A11	1	267.1	Unknown
E12A2	1	276.3	Unknown
E13E7	1	276.3	Unknown
LIG1	1	277.4	Unknown
MOCS3	1	285.6	Chromosome 20: 13,437,613-13,439,019
SFRS7	1	303.5	Chromosome 3: 17,533,878-17,542,306
LOC769550	1	304.7	Chromosome 1: 104,452,569-104,460,312
MMP2	1	313.2	Chromosome 11: 3,680,958-3,716,263
NUDT21	1	319.5	Chromosome 11
ETHE1	1	339.5	Unknown
SODEFRIN	1	339.5	Unknown
RABAC1	1	345.1	Unknown
MC1R	1	350.9	Chromosome 11: 20,802,676-20,805,060
MGST3	1	350.9	Chromosome 8: 5,739,240-5,751,038
APOE	1	355.6	Unknown
PRDX6	1	365.8	Chromosome 8: 4,336,639-4,344,324
FMO3	1	373.5	Chromosome 8: 4,952,120-4,960,182

NCF2	1	380.4	Chromosome 8: 7,931,461-7,939,170
ARPC5	1	380.4	Chromosome 8: 7,941,595-7,944,822
RGS2	1	380.4	Chromosome 8: 3,589,865-3,592,669
GLUL	1	383.7	Chromosome 8: 5,929,460-5,936,023
CLCA2	1	386	Chromosome 8: 16,684,448-16,696,209
RGS5	1	387.1	Chromosome 8: 3,710,871-3,715,990
COL11A1	1	390.4	Chromosome 8: 11,889,925-12,029,498
IFI44L	1	392.7	Unknown
GNG5	1	395	Chromosome 8: 17,290,640-17,291,672
SEPT10_b	1	396.1	Unknown
E12G5	1	398.4	Unknown
E17G11	1	398.4	Unknown
FPGT	1	404.2	Unknown
GPR177	1	407.6	Chromosome 8: 29,518,977-29,543,121
LEPROT	1	409.8	Chromosome 8: 29,108,000-29,113,841
USP1	1	412	Chromosome 8: 28,268,822-28,277,014
PSMA4	1	427.3	Chromosome 15: 9,536,748-9,539,551
C8A	1	436	Chromosome 8: 26,580,713-26,596,584
TMEM59	1	444.5	Chromosome 8: 25,881,134-25,889,363
SLC1A7	1	448	Chromosome 8: 25,336,957-25,379,533
SCP2	1	450.3	Chromosome 8: 25,282,804-25,294,931
EPS15	1	453.7	Chromosome 8: 24,801,113-24,843,410
TXNDC12	1	453.7	Chromosome 8: 24,997,265-25,006,253
KIAA0494	1	461.8	Unknown
FAAH	1	464.1	Chromosome 8: 22,349,639-22,358,698
E17G7	1	467.4	Unknown
PRDX1	1	473.1	Chromosome 8: 21,859,937-21,867,197
DAZL	2	0	Chromosome 2: 34,385,114-34,398,341
TMLHE	2	2.5	Chromosome 4: 11,092,947-11,110,811
THRB	2	17.2	Chromosome 2: 37,252,709-37,628,117
STT3B	2	29.3	Chromosome 2: 40,163,237-40,195,506
SH3BP5	2	37.4	Chromosome 2: 41,451,064-41,492,630
NGLY1	2	40.7	Chromosome 2: 37,908,744-37,928,089
C7ORF41	2	40.7	Unknown
E12C2	2	40.7	Unknown
VWDE	2	51.4	Chromosome 2: 26,647,872-26,659,961
COL1A2	2	60.1	Chromosome 2: 23,530,826-23,569,602
UHRF2	2	62.5	Unknown
NMT2	2	77	Chromosome 2: 20,523,480-20,551,427
VIM	2	81.7	Chromosome 2: 19,728,494-19,735,564
EIF1B	2	83.9	Chromosome 2: 43,995,698-43,999,501
IGF2BP3	2	83.9	Chromosome 2: 31,082,192-31,189,901
TOMM7	2	83.9	Chromosome 2: 30,904,847-30,908,264
KIF15	2	85	Chromosome 2: 43,201,299-43,236,718
E54A6	2	91.7	Unknown
HOXA9	2	94.3	Chromosome 2: 32,579,663-32,581,500
HOXA4	2	94.3	Chromosome 2: 32,543,955-32,546,257
CBX3	2	102.3	Unknown
CYCS	2	103.4	Chromosome 2: 31,693,215-31,695,232

ABI2	2	105.6	Chromosome 7: 14,689,028-14,741,298
KIF5B	2	110	Chromosome 2: 14,119,612-14,151,497
CREM	2	113.3	Unknown
WDR60	2	115.6	Chromosome 2: 9,499,114-9,523,735
U2AF2	2	119.1	Chromosome 2: 43,201,299-43,236,718
HBZ	2	127.1	Chromosome 14: 12,722,493-12,724,596
HBG1	2	131.8	Chromosome 1: 199,433,573-199,442,026
HBA2	2	131.8	Chromosome 14: 12,726,667-12,727,592
EIF3I	2	150.5	Chromosome 23: 5,408,796-5,412,909
KBTBD5	2	161.2	Chromosome 2: 1,907,496-1,916,552
CRHR2	2	168.2	Chromosome 2: 4,118,255-4,213,738
UQCRC2	2	169.3	Chromosome 14: 15,803,848-15,815,424
GNA12	2	181.8	Chromosome 14: 3,390,192-3,424,515
TIMM17B	2	195.6	Unknown
TIMP4	2	199.3	Chromosome 12: 4,932,676-4,977,348
TNRC6A	2	203.8	Chromosome 14: 6,869,886-6,909,004
RBBP6	2	203.8	Chromosome 14: 6,809,959-6,840,725
DCTN5	2	203.8	Chromosome 14: 6,928,973-6,935,953
NARFL	2	207.1	Chromosome 14: 6051649-6063923
E17G8	2	210.4	Unknown
MSLNL	2	211.5	Unknown
SSTR5	2	211.5	Unknown
PDGFRA_b	2	217.2	Unknown
H3F3B_b	2	224	Unknown
UBE2I	2	226.2	Chromosome 14: 7,454,158-7,467,790
COQ7	2	227.3	Chromosome 14: 8,692,511-8,695,421
PDXDC1	2	228.4	Chromosome 14: 35,163-60,852
MYL3	2	230.6	Chromosome 2: 3,342,134-3,378,274
ARF1_b	2	234	Chromosome 2: 2,259,733-2,271,703
ABAT	2	238.5	Chromosome 14: 10,305,243-10,329,149
ATP6V0C	2	240.7	Chromosome 14: 14,653,432-14,664,893
HN1L	2	240.7	Chromosome 14: 14,430,345-14,437,756
MRPS34	2	240.7	Chromosome 14: 15,140,622-15,142,398
NME3	2	240.7	Chromosome 14: 13,989,877-13,991,647
C16ORF13	2	252	Unknown
STUB1	2	256.4	Chromosome 14: 13,902,163-13,905,316
HBA2	2	256.4	Chromosome 14: 12,726,667-12,727,592
HBD	2	256.4	Unknown
LOC440335	2	257.5	Unknown
AURKB	2	263.2	Unknown
CCM2	2	265.4	Chromosome 2: 3,927,211-3,951,487
C11ORF51	2	265.4	Unknown
M_NOHITS	2	265.4	Unknown
NGFR	2	266.5	Chromosome 27: 3,124,982-3,141,255
SETD2	2	266.5	Chromosome 19: 8,668,110-8,669,558
KIF9	2	266.5	Chromosome 2: 3,849,620-3,870,438
RAI1	2	268.8	Chromosome 14: 4,921,110-4,929,591
RASD1	2	268.8	Chromosome 14: 4,804,542-4,806,388
MED9	2	268.8	Chromosome 14: 4,798,818-4,944,221

MAP2K3	2	268.8	Chromosome 14: 4,508,674-4,522,146
DRG2	2	268.8	Chromosome 14: 5,020,758-5,029,252
M_NOHITS	2	268.8	Unknown
SHMT1	2	268.8	Chromosome 14: 5,121,561-5,125,949
PVALB	2	276.8	Chromosome 14: 1,038,898-1,043,794
RAC1	2	276.8	Chromosome 1: 198,029,609-198,055,963
ARPC1A	2	280.1	Chromosome 14: 4,360,142-4,375,244
UTS2R	2	280.1	Chromosome 18: 3,636,161-3,637,309
ACTG1	2	280.1	Chromosome 10: 1,891,946-1,893,482
M_NOHITS	2	280.1	Unknown
ACTB	2	281.2	Chromosome 10: 1,891,946-1,893,482
FOXK1	2	284.5	Chromosome 14: 3,991,855-4,011,906
TKTL2	2	286.7	Unknown
RENBP	2	286.7	Unknown
BGN	2	286.7	Unknown
E13G5	2	286.7	Unknown
SMC1A	2	293.5	Unknown
TTC9C	2	293.5	Unknown
EEF1G	2	293.5	Unknown
OTUB1	2	299.1	Unknown
ADSS	2	299.1	Chromosome 3: 36,022,710-36,055,187
RBM4	2	299.1	Unknown
PRDX5	2	299.1	Unknown
CALM1	2	299.1	Chromosome 5: 46,321,178-46,326,645
ACTC1_a	2	299.1	Chromosome 5:34611929..34616216
PYGM	2	303.5	Unknown
CAPN1	2	303.5	Chromosome 3: 31,550,244-31,560,627
DPP3	2	303.5	Unknown
TMED10	2	303.5	Chromosome 5: 40,600,075-40,614,965
FOXA3	2	305.7	Unknown
E14C12	2	307.9	Unknown
E16G10	2	307.9	Unknown
CFL1	2	309	Unknown
PLCB3	2	309	Unknown
BANF1	2	309	Unknown
KCNK1	2	309	Chromosome 3: 40,397,013-40,424,763
E23C10	2	309	Unknown
SULT6B1	2	310.1	Chromosome 3: 34,755,809-34,763,544
RBM4B	2	310.1	Unknown
UCRC	2	312.3	Chromosome 15: 11,366,839-11,368,244
E16E8	2	312.3	Unknown
CKM	2	315.6	Unknown
SNRPD2	2	320	Unknown
CLPTM1	2	320	Chromosome 2: 88,089,596-88,119,806
E17G3	2	323.4	Unknown
C22ORF32	2	334.1	Chromosome 1: 51,305,019-51,307,12
CYP2C19	2	334.1	Unknown
E12E6	2	334.1	Unknown
CYP2F1	2	335.3	Unknown

H3F3B_a	2	343.3	Unknown
CAPNS1	2	345.6	Unknown
SNAP23	2	345.6	Chromosome 5: 27,881,718-27,896,892
GMFG	2	350.1	Unknown
NCCRP1	2	350.1	Unknown
RHOA	2	356.2	Chromosome 12: 2,673,962-2,679,775
GNAT1	2	365.5	Unknown
TWF2	2	372.8	Chromosome 12: 2,770,690-2,815,491
WFDC2	2	372.8	Chromosome 20: 10,440,356-10,441,363
CNBP	2	377.4	Chromosome 12: 5,253,624-5,262,898
BTG1_a	2	379.8	Unknown
FLNB	2	386.7	Chromosome 12: 9,125,356-9,170,226
TKT	2	388.9	Chromosome 12: 7,171,141-7,195,699
E12A3	2	398.3	Unknown
RHO	2	404	Chromosome 12: 20,163,795-20,166,667
LSM3	2	414.8	Chromosome 12: 11,090,744-11,092,329
SEC61A1	2	426	Chromosome 12: 9,795,956-9,803,696
RAB7A	2	433.2	Chromosome 12: 9,382,421-9,400,550
IP6K2	2	438.8	Chromosome 12: 9,219,609-9,226,919
PRKAR2A	2	442.1	Chromosome 12: 11,972,737-11,983,886
ARPC4	2	453.4	Chromosome 12: 11,779,567-11,780,621
NISCH	2	459	Chromosome 12: 547,252-580,775
RPL29	2	459	Chromosome 12: 531,782-533,742
PBRM1	2	460.1	Chromosome 12: 674,443-731,306
SPCS1	2	470.6	Chromosome 12: 749,082-751,377
ZYX	3	0	Chromosome 1: 80,670,676-80,682,092
MYL6	3	23.7	Unknown
NANOG	3	38.2	Unknown
C3AR1	3	39.3	Chromosome 1: 68,964,175-68,967,469
GAPDH	3	42.6	Chromosome 1: 80,087,936-80,094,155
ING4	3	45.9	Chromosome 1: 80,221,391-80,236,134
FKBP1A	3	66.9	Unknown
ASXL1	3	75.6	Chromosome 20: 10,116,072-10,129,332
E16A12	3	75.6	Unknown
GNAS	3	79	Chromosome 20: 10,870,284-10,950,671
ADNP	3	96.7	Chromosome 20: 13,468,153-13,481,382
TNNC2	3	101.2	Unknown
UBE2V1	3	101.2	Chromosome 20: 13,775,889-13,807,095
SNAI2	3	101.2	Chromosome 2: 111,740,576-111,743,031
SULF2	3	109.1	Chromosome 20: 5871606-5931911
NCOA5	3	114.7	Chromosome 20: 10,550,834-10,563,694
MMP2_a	3	118.1	Unknown
PDLIM7	3	143.3	Chromosome 13: 10,253,537-10,254,296
TMED9	3	157.3	Unknown
CTBP1	3	158.4	Chromosome 4: 87,707,985-87,871,087
RPUSD4	3	158.4	Chromosome 24: 314,052-317,941
TIG_NOHIT	3	158.4	Unknown
PROD1	3	168.5	Unknown
VKORC1L1	3	169.6	Chromosome 19: 4,871,799-4,881,547

FUS	3	169.6	Chromosome 23: 5,891,199-5,899,591
TRIM69	3	169.6	Chromosome 13: 13,421,704-13,426,442
MVP	3	176.4	Chromosome 28: 29,826-39,820
NME1	3	176.4	Chromosome 18: 9,930,932-9,933,309
ALDOA	3	184.4	Unknown
E11G12	3	193.7	Unknown
YPEL3	3	193.7	Unknown
SULT1C4	3	194.8	Unknown
BOLA2	3	194.8	Unknown
ATP2A1	3	195.9	Unknown
E16E3	3	195.9	Unknown
CONTIG133	3	195.9	Unknown
NFS1	3	199.2	Chromosome 20: 1,028,253-1,040,388
E50G8	3	199.2	Unknown
MAP1LC3A	3	201.4	Chromosome 20: 1,393,078-1,405,843
C20ORF4	3	206	Chromosome 20: 214,383-219,799
MANBAL	3	209.4	Chromosome 20: 5,015,988-5,018,490
BNIP1	3	217.7	Chromosome 13: 9,116,401-9,121,099
UQCRQ	3	227.8	Chromosome 13: 17654064-17655380
CAMLG	3	236.4	Chromosome 13: 16,118,375-16,121,459
SKP1	3	236.4	Chromosome 13: 16,355,077-16,363,287
SMAD5	3	238.8	Chromosome 13: 15,432,087-15,449,003
SEPT10_a	3	241	Unknown
HNRNPA0	3	242.1	Chromosome 13: 14,728,746-14,729,732
HNRNPAB	3	243.2	Chromosome 13: 14,482,749-14,505,745
E13E11	3	243.2	Unknown
MATR3	3	244.3	Chromosome 13: 2,203,879-2,229,258
UBE2D2	3	244.3	Chromosome 13: 898,227-918,259
PHF5A	3	251	Chromosome 1: 51,512,448-51,518,444
POLR3H	3	251	Chromosome 1: 51,484,204-51,490,022
E12A5	3	251	Unknown
E14G1	3	251	Unknown
CSNK1E	3	256.6	Chromosome 1: 52,878,372-52,892,173
KDEL3	3	256.6	Chromosome 1: 52,839,529-52,844,641
TOM1	3	261.1	Chromosome 1: 54,149,022-54,169,699
HOXC10	3	270.8	Unknown
RARG	3	272	Unknown
NACA	3	272	Chromosome E22C19W28_E50C23: 882,736-885,109
E54A1	3	272	Unknown
ATP5G2	3	272	Unknown
OS9	3	280.9	Unknown
KRT5	3	280.9	Chromosome E22C19W28_E50C23: 642,021-648,330
KRT4	3	280.9	Unknown
CD63	3	285.4	Unknown
OBFC2B	3	286.5	Unknown
RPS26	3	286.5	Unknown
WNT1	3	289.9	Chromosome 2: 147,605,364-147,640,671
RHEBL1	3	289.9	Unknown
DDX23	3	291	Unknown

C5ORF4	3	294.4	Chromosome 13: 12,118,623-12,123,585
SPARC	3	294.4	Chromosome 13: 12,997,371-13,001,008
ATOX1	3	295.5	Chromosome 13: 12,980,538-12,983,783
CD74	3	297.7	Chromosome 13: 13,225,790-13,229,610
SQSTM1	3	300	Chromosome 13: 13,545,463-13,549,503
CCNG1	3	312.8	Chromosome 13: 6,483,608-6,488,080
PKM2	3	318.5	Chromosome 10: 955,304-973,190
MYH9	3	325.3	Chromosome 1: 53,802,224-53,824,065
MGP	3	331	Chromosome 1: 49,904,636-49,909,869
LURP-1	3	331	Unknown
ETF1	3	331	Chromosome 13: 2,538,972-2,564,882
SFRS2	3	346.1	Chromosome 18: 4230354..4230666
PRPSAP1	3	346.1	Chromosome 18: 4,427,765-4,450,683
C17ORF28	3	348.3	Chromosome 18: 10,532,677-10,555,274
RAB37	3	349.4	Unknown
XYLT2	3	349.4	Chromosome 18: 10358357-10370856
APOH	3	364.4	Chromosome 18: 7,454,561-7,459,847
DDX5	3	364.4	Chromosome 18: 6,896,656-6,904,155
ETG990	3	364.4	Unknown
PRKAR1A	3	368.9	Chromosome 18: 7,869,231-7,886,083
GNA13	3	368.9	Chromosome 18: 7,764,558-7,787,752
KCNJ16	3	370	Chromosome 18: 8,189,086-8,190,366
SOX9	3	371.1	Chromosome 18: 8,812,397-8,815,458
SSTR2	3	371.1	Chromosome 18: 8,997,369-8,999,650
RPL38	3	372.2	Chromosome 18: 9,056,204-9,131,815
ARHGDIA	3	375.6	Chromosome 18: 9,881,918-9,889,500
THOC4	3	375.6	Chromosome 18: 9,890,634-9,894,218
CYP4F22	3	375.6	Unknown
ZNF248	3	375.6	Unknown
ZNF717	3	375.6	Unknown
PBX1	3	375.6	Chromosome 8: 5,417,383-5,539,115
E13G1	3	375.6	Unknown
P4HB	3	379	Chromosome 18: 9,868,469-9,875,308
PKN2	3	388	Chromosome 8: 15,884,609-15,896,314
ASF1B	3	394.8	Unknown
ASF1A	3	394.8	Chromosome 3: 65,437,352-65,447,254
PGLS	3	400.4	Unknown
E12C8	3	400.4	Unknown
C19ORF43	3	414	Unknown
TYK2	3	414	Unknown
JUNB	3	414	Unknown
C19ORF52	3	418.4	Unknown
ELOF1	3	418.4	Unknown
FARSA	3	418.4	Unknown
DNM2	3	418.4	Unknown
GADD45GIF	3	418.4	Unknown
E14C7	3	424.2	Unknown
KHSRP	3	430.2	Unknown
C19orf53	3	430.2	Unknown

E12A1	4	0	Unknown
E15G10	4	10.9	Unknown
E14G3	4	15.8	Unknown
ANAPC7	4	16.9	Chromosome 15: 5,330,466-5,336,968
RAB35	4	21.3	Chromosome 15: 9,747,823-9,763,715
SFRS9	4	22.4	Unknown
DYNLL1	4	22.4	Chromosome 15: 9,536,748-9,539,551
DDT	4	25.7	Chromosome 15: 8,372,897-8,375,331
MIF	4	26.8	Chromosome 15: 8,338,895-8,340,728
E14A8	4	35.2	Unknown
FBXW8	4	63.9	Chromosome 15: 11,657,567-11,704,354
XBP1	4	70.7	Chromosome 15: 7,957,484-7,960,579
SLC20A1	4	74	Unknown
PPIF	4	74	Chromosome 6: 13,304,091-13,312,011
PGAM2	4	75.1	Unknown
TIA1	4	76.2	Chromosome 22: 2,874,938-2,887,899
OGDH	4	76.2	Chromosome 22: 3,905,594-3,920,581
MYL7	4	76.2	Unknown
E15E3	4	76.2	Unknown
E16A5	4	89	Unknown
AP2M1	4	93.5	Chromosome 9: 16,927,767-16,950,469
EIF4G1	4	93.5	Unknown
E12E10	4	93.5	Unknown
E16C3	4	93.5	Unknown
EIF5A	4	97.9	Unknown
E13E8	4	101.2	Unknown
LAMP3	4	110.7	Chromosome 9: 17,469,914-17,479,071
LOC563358	4	111.9	Unknown
PRPF6	4	115.3	Chromosome 20: 9,390,391-9,413,312
PDCD10	4	115.3	Chromosome 9: 22,157,244-22,168,833
KPNA4	4	122.5	Chromosome 9: 23,677,941-23,701,602
RARRES1	4	128.1	Chromosome 9: 23,996,273-24,003,889
VWA5A	4	137.5	Chromosome 27: 61,775-69,431
SCLY	4	151.5	Chromosome 9: 1,872,490-1,878,041
HDLBP	4	155	Chromosome 9: 5,995,070-6,030,302
E14C4	4	155	Unknown
E14G7	4	155	Unknown
HSD17B8	4	177	Unknown
CIRBP_b	4	179.3	Unknown
E54E6	4	185.5	Unknown
PDLIM2	4	198.1	Unknown
BOLA3	4	198.1	Unknown
SFRP1	4	201.4	Chromosome 22: 2,610,998-2,623,198
ENTPD4	4	201.4	Chromosome 22: 1,201,638-1,209,366
E14E1	4	207	Unknown
PHB2	4	211.8	Chromosome 1: 80,507,662-80,512,942
AKAP7	4	276.1	Chromosome 3: 59,490,538-59,523,723
EGLN1	4	278.3	Chromosome 3: 41,161,200-41,604,809
MAL	4	284.2	Chromosome 3: 17,014,694-17,018,636

MALL	4	285.4	Chromosome 3: 2,992,617-2,995,408
TCP1	4	285.4	Chromosome Z: 22,531,890-22,564,021
BTG1	4	303.1	Chromosome 1: 46282645..46285175
CTGF	4	304.2	Chromosome 3: 59,163,394-59,165,073
ZUFSP	4	310.2	Chromosome 3: 66,400,325-66,406,801
FABP7	4	319.2	Chromosome 3: 63,843,220-63,846,667
KIAA0776	4	329.6	Chromosome 3: 75,492,430-75,514,034
ZNF292	4	330.8	Chromosome 3: 79,239,942-79,293,926
CIRBP_c	4	333.9	Unknown
COX7A2	4	344.9	Chromosome 3: 83,534,198-83,535,716
COL12A1	4	346.1	Chromosome 3: 83,548,290-83,649,099
TMEM14A	4	356.9	Chromosome 3: 91,240,976-91,246,238
PXDN	4	361.3	Chromosome 3: 95,769,116-95,818,016
PDIA6	4	366.1	Chromosome 3: 99,808,777-99,825,583
YWHAQ	4	367.3	Chromosome 3: 99,139,518-99,165,554
PQLC3	4	367.3	Chromosome 3: 100,043,307-100,048,168
ID2	4	367.3	Chromosome 3: 98724872..98726620
SDC1	4	378.5	Chromosome 3: 104,462,944-104,467,380
RHOB	4	378.5	Chromosome 3: 104,599,196-104,601,530
CTSB	4	390.5	Chromosome 3: 110,173,920-110,183,312
PGAM2_b	4	402	Unknown
IRGC	4	402	Unknown
GPN1	4	414.1	Unknown
ZNF649	5	0	Unknown
LECT2	5	3.8	Chromosome 13: 15,543,059-15,548,888
CYC1	5	8.1	Unknown
EPPK1	5	9.5	Unknown
VPS28	5	9.5	Unknown
PUF60	5	9.5	Chromosome 2: 154,841,347-154,866,405
PSCA	5	9.5	Chromosome 2: 153,940,704-153,944,896
E48C10	5	9.5	Unknown
PRKRIP1	5	20.8	Chromosome 19: 4,093,874-4,101,811
MYC	5	28.8	Chromosome 2: 145392353-145394591
NDUFB9	5	43.7	Chromosome 2: 144,122,161-144,125,430
RNF19A	5	61.9	Chromosome 2: 134,085,810-134,108,695
PABPC1	5	69.9	Chromosome 2: 133,698,587-133,706,396
UQCRB	5	75.9	Chromosome 2: 131,585,912-131,590,229
RBM12B	5	78.3	Chromosome 2: 130,603,885-130,605,132
CA2	5	81.7	Chromosome 2: 127,587,565-127,604,060
NBN	5	81.7	Chromosome 2: 129112204..129137151
MRPS28	5	87.3	Chromosome 2: 125,525,240-125,587,016
E15A2	5	89.6	Unknown
NUP37	5	109.1	Chromosome 1: 57,467,628-57,489,877
YES1	5	131.8	Chromosome 2: 105,030,221-105,079,364
RIOK3	5	131.8	Chromosome 2: 106,174,402-106,182,271
MYL12B	5	135.3	Unknown
CNDP1	5	160.5	Chromosome 2: 94,168,502-94,182,667
CYB5A	5	168.1	Chromosome 2: 94,287,667-94,298,980
MYO10	5	179.2	Chromosome 2: 77,249,405-77,349,707

CHMP5	5	179.2	Chromosome 2: 87,941,041-87,949,086
BASP1	5	180.3	Chromosome 2: 76,998,742-76,999,476
DAP	5	182.5	Chromosome 2: 51,638,015-51,664,939
KDSR	5	194.2	Chromosome 2: 69,033,784-69,051,546
VPS4B	5	194.2	Chromosome 2: 69,002,727-69,022,329
ACOT13	5	202.5	Unknown
JARID2	5	225.2	Chromosome 2: 62,187,724-62,395,648
SERPINB6	5	227.5	Chromosome 2: 68,854,258-68,863,717
TXNDC5	5	233.2	Chromosome 2: 65,520,413-65,541,130
LYRM4	5	235.5	Chromosome 2: 66,654,675-66,659,043
E15A11	5	237.9	Unknown
KBTBD2	5	272.2	Chromosome 2: 48115628..48129229
LOC420992	5	272.2	Chromosome 2: 91,412,755-91,433,270
TMSB15A	5	280.5	Unknown
LOC792995	5	282.8	Unknown
TAF9	5	287.3	Unknown
FAM162A	5	287.3	Chromosome 1: 79,899,864-79,909,725
E17E10	5	287.3	Unknown
FHL1	5	291.8	Chromosome 4: 4,237,102-4,240,384
SOX3	5	296.3	Chromosome 4: 10594559..10596382
VMA21	5	297.4	Chromosome 4: 17,648,229-17,653,101
HMGB3	5	297.4	Chromosome 4: 17,789,155-17,789,967
IDH2	6	0	Unknown
MFAP1	6	0	Chromosome Un_random: 33,580,708-33,581,914
IQGAP1	6	4.9	Chromosome 10: 22,457,066-22,506,595
CLPX	6	14	Chromosome 10: 19,877,018-19,896,768
GATM	6	38.4	Chromosome 10: 12,588,264-12,601,291
MCEE	6	49.3	Chromosome 10: 6,758,772-6,766,682
MAPK6	6	55.4	Chromosome 10: 9,918,122-10,212,658
LARP6	6	59.9	Chromosome 10: 7,217,201-7,343,958
SFTPC	6	62.2	Unknown
NPTN	6	63.3	Chromosome 10: 1,562,925-1,608,931
CONTIG229	6	64.4	Unknown
ISL2	6	71.6	Unknown
LIPC	6	75.3	Chromosome 10: 7,954,718-7,968,058
HAPLN3	6	87.1	Unknown
ABHD2	6	91.8	Chromosome 10: 14,673,848-14,707,353
RHCG	6	91.8	Chromosome 10: 14,558,128-14,566,053
RAB11A	6	98.5	Chromosome 10: 20,307,423-20,323,545
MEX_NOHI	6	98.5	Unknown
TLE3	6	100.7	Chromosome 10: 21650531-21669954
PHLDA2	6	102.9	Chromosome 5: 14,242,914-14,243,300
ATHL1	6	106.6	Chromosome 5: 1,622,848-1,631,935
LOC644003	6	112.9	Unknown
MUC5AC	6	114	Unknown
TNNI2	6	116.2	Chromosome 5: 15,196,413-15,200,769
CD81	6	117.4	Chromosome 5: 14,722,996-14,745,258
FTH1	6	127	Chromosome 5: 18,042642..18047153
C11ORF58	6	133.6	Chromosome 5: 12,600,643-12,607,686

SBF2	6	134.8	Chromosome 5: 9,948,204-10,182,210
RRAS2	6	134.8	Chromosome 5: 11,300,112-11,334,838
SPON1	6	139.7	Chromosome 5: 6,302,971-6,472,110
PAX6	6	142.2	Chromosome 5: 5,255,551-5,264,599
CCND1	6	154.5	Chromosome 5: 18,709,525-18,721,878
CD59	6	155.6	Chromosome 5: 19766281-19769762
ANXA2	6	163.4	Chromosome 10: 6,040,844-6,063,439
LOC100091	6	163.4	Unknown
SERINC2	6	166.7	Chromosome 23: 585,499-589,773
E15E9	6	166.7	Unknown
TRNAU1AP	6	172.4	Unknown
CTSL2	6	173.5	Chromosome Z: 40,910,626-40,916,030
RCC1	6	173.5	Chromosome 10: 4,896,591-4,975,082
T_	6	173.5	Chromosome 3: 44800690-44808591
SH3BGRL3	6	175.7	Chromosome 23: 193,096-194,583
GRHL3	6	182.1	Chromosome 23: 5,984,422-6,000,705
STMN1	6	188.5	Chromosome 23: 3,539,770-3,543,522
ZNF593	6	188.5	Chromosome 23: 213,355-214,554
E12G12	6	188.5	Unknown
M_NOHITS	6	188.5	Unknown
E15A6	6	191.8	Unknown
RRAGC	6	199.9	Chromosome 23: 3558522-3567933
SF3A3	6	210.7	Chromosome 23: 3,816,112-3,823,004
GNL2	6	220.3	Chromosome 23: 4,039,028-4,050,050
TRAPPC3	6	227.2	Chromosome 23: 4,412,444-4,416,571
ZNF706	6	230.5	Unknown
E14C3	6	231.6	Unknown
E16C8	6	231.6	Unknown
GJB5	6	234.9	Chromosome 23: 4,780,138-4,781,536
KPNA6	6	247.4	Chromosome 23: 5,433,442-5,449,501
KHDRBS1	6	247.4	Chromosome 23: 5,336,132-5,352,241
E13G11	6	247.4	Unknown
SFRS1	6	251.8	Chromosome 19: 8,668,110-8,669,558
YARS	6	251.8	Chromosome 23: 5,526,571-5,531,378
RAB6A	7	0	Chromosome 1: 200443596..200502651
DNAJB13	7	3.6	Chromosome 1: 200,539,358-200,544,050
STARD10	7	3.6	Chromosome 13: 1,721,347-1,725,945
SPCS2	7	3.6	Chromosome 1: 200,657,050-200,664,875
LIPT2	7	3.6	Unknown
THRSP	7	10.3	Chromosome 1: 197,836,616-197,838,040
SYTL2	7	15.2	Chromosome 1: 194,842,125-194,854,196
UBL3	7	32.5	Chromosome 1: 179,612,550-179,669,472
POSTN	7	33.7	Chromosome 1: 176,288,241-176,321,488
E12G3	7	38.6	Unknown
ITM2B	7	48.1	Chromosome 1: 173,005,983-173,031,954
RB1	7	48.1	Unknown
C13ORF31	7	48.1	Chromosome 1: 171,465,805-171,471,838
GTF2F2	7	48.1	Chromosome 1: 171,947,610-172,038,360
LCP1	7	48.1	Chromosome 1: 172,312,441-172,341,057

RAB33B	7	49.2	Chromosome 4: 30,437,373-30,444,388
LMO7	7	54.3	Chromosome 1: 158,951,070-159,024,023
PICK1	7	54.3	Chromosome 1: 52,962,834-52,973,360
GPR143	7	77.4	Chromosome 1: 128,971,289-128,989,048
RPL24	7	91	Chromosome 1: 88,691,842-88,696,059
THOC4_a	7	91	Unknown
COL8A1	7	100.2	Chromosome 1: 87,595,429-87,598,997
EIF1AX	7	117.2	Chromosome 1: 123,267,782-123,284,892
TM9SF2	7	128.2	Chromosome 1: 148,690,179-148,717,254
COL4A2	7	146.6	Chromosome 1: 143,257,171-143,306,903
ABHD13	7	159.5	Chromosome 1: 144,385,546-144,393,523
MID1IP1	7	160.6	Chromosome 1: 116300244..116301246
BLZF1	7	163.9	Chromosome 1: 87,009,627-87,015,566
DPT	7	166.2	Chromosome 1: 87,240,702-87,267,338
TIAM1	7	196	Chromosome 1: 107,918,557-107,999,937
SOD1	7	196	Chromosome 1: 108,112,782-108,117,598
ALCAM	7	198.2	Chromosome 1: 89,846,127-89,964,050
ATP5O	7	198.2	Chromosome 1: 109,038,453-109,041,975
RCAN1	7	198.2	Chromosome 1: 109,368,997-109,375,722
CD247	7	208.4	Unknown
UPK1B	7	211.1	Chromosome 1: 84,109,564-84,115,625
FSTL1	7	222.1	Chromosome 1: 83,186,277-83,229,807
CCDC58	7	225.5	Chromosome 1: 79,893,084-79,898,633
MAN1A2	7	232.2	Chromosome 1: 79,557,580-79,699,380
LOC643604	8	0	Unknown
TPM2	8	10.2	Unknown
DNAJB5	8	29.5	Chromosome Z: 7,917,874-7,926,626
IER3IP1	8	47.3	Unknown
SMAD2	8	48.4	Chromosome Z: 1283554..1331005
ID3	8	56.4	Unknown
ZFR	8	66.9	Chromosome Z: 9,104,596-9,144,590
ATP8B1	8	66.9	Unknown
MEX_NOHI	8	71.3	Unknown
MEX_NOHI	8	74.6	Unknown
SEPP1	8	74.6	Chromosome Z: 13006352..13015296
PRKAA1	8	75.7	Chromosome Z: 12,307,253-12,326,563
CONTIG953	8	75.7	Unknown
GPX8	8	81.4	Chromosome Z: 16,032,924-16,036,166
SCAMP1	8	94.3	Chromosome Z: 22,156,766-22,192,152
HMGCR	8	101.1	Chromosome Z: 23,472,984-23,491,297
OCLN	8	104.4	Unknown
MEX_NOHI	8	104.4	Unknown
VCAN	8	107.9	Chromosome Z: 61,310,094-61,406,137
E11G8	8	145.9	Unknown
TNFAIP8	8	149.8	Chromosome Z: 69,693,040-69,693,606
E14E6	8	153.3	Unknown
E14C5	8	157.3	Unknown
ANXA1	8	172.2	Chromosome Z: 35,727,594-35,745,308
HNRNPK	8	195.4	Chromosome Z: 39,553,832-39,572,728

FAM108B1	8	226.8	Chromosome Z: 35,299,235-35,316,913
HSPA8	9	0	Chromosome 24: 3,111,051-3,116,667
APLP2	9	11.4	Unknown
E14E10	9	11.4	Unknown
NNMT	9	13.6	Unknown
LOC566020	9	24.4	Unknown
ARCN1	9	35.2	Chromosome 24: 5,620,631-5,628,657
PAFAH1B2	9	36.4	Chromosome 24: 5,330,214-5,338,309
FXD2	9	36.4	Unknown
MNT	9	47.7	Chromosome 19: 9,345,745-9,364,573
E11G11	9	51.4	Unknown
E12A11	9	54.8	Unknown
AATF	9	57	Chromosome 19: 8,358,942-8,400,911
ATP2A3	9	63.9	Chromosome 19: 3,239,944-3,264,151
BAZ1B	9	74.7	Chromosome 19: 200,908-251,454
E16C7	9	74.7	Unknown
C7ORF42	9	79.2	Chromosome 19: 5,021,658-5,034,509
GBAS	9	79.2	Chromosome 19: 4,818,142-4,832,172
MKS1	9	82.5	Chromosome 19: 137,179-150,051
POR	9	82.5	Chromosome 19: 4,276,817-4,300,566
MED31	9	85.8	Chromosome 19: 9,778,016-9,781,657
CLTC	9	86.9	Chromosome 19: 7,239,507-7,261,769
DOC2B	9	86.9	Unknown
PRR11	9	86.9	Chromosome 19: 7,148,716-7,151,955
MED13	9	86.9	Chromosome 19: 7372175..7421136
E11G4	9	107.5	Unknown
E17C12	9	111.3	Unknown
CFLAR	9	112.5	Chromosome 7: 12,464,284-12,476,664
STAT1	9	124.2	Chromosome 7: 8,878,817-8,938,465
TOMM20	9	126.5	Chromosome 3: 39,813,663-39,820,715
TRA2B	9	129	Chromosome 9: 5,425,413-5,443,739
DNAJB11	9	130.2	Chromosome 9: 5,390,468-5,402,145
ZC3H15	9	131.3	Chromosome 7: 1,361,285-1,373,910
SUMO3	9	145.1	Chromosome 9: 6,218,677-6,220,915
STT3B_a	9	150.8	Unknown
E54C11	9	150.8	Unknown
FN1	9	153	Chromosome 7: 4,362,118-4,410,959
E12G7	9	154.1	Unknown
E12G1	9	154.1	Unknown
NDUFA10	9	157.5	Chromosome 7: 6,517,417-6,557,988
UGT1A1	9	158.6	Unknown
COL6A1	9	159.7	Chromosome 7: 6,711,897-6,734,653
E13E6	9	159.7	Unknown
ATP5G3	9	165.4	Chromosome 7: 17,779,737-17,782,680
HOXD8	9	165.4	Chromosome 7: 17,402,319-17,416,769
HOXD11	9	166.5	Chromosome 7: 17,425,085-17,426,017
SCRN3	9	168.7	Chromosome 7: 18,105,578-18,112,413
E13A7	9	168.7	Unknown
GCA	9	171	Unknown

RND3	9	180.3	Chromosome 7: 36,637,833-36,649,920
HNMT	9	185.9	Chromosome 7: 32,862,469-32,875,207
R3HDM1	9	188.1	Unknown
SNX4	9	196.2	Chromosome 7: 29,680,279-29,709,318
E14A3	9	205.7	Unknown
NNMT_a	9	209.1	Unknown
ZNF142	9	210.2	Chromosome 7: 24,026,374-24,036,206
ACCN4	9	212.4	Chromosome 7: 23,673,749-23,675,560
E19A7	9	215.9	Unknown
CYP27B1	9	218.2	Unknown
SLC37A3	10	0	Chromosome 1: 58,816,380-58,837,119
FBXO7	10	3.4	Chromosome 1: 55265700..55279065
CARDIAC-R	10	11.4	Unknown
E54G12	10	11.4	Unknown
MTPN	10	13.7	Chromosome 1: 60,292,823-60,332,330
IL17RA	10	30.5	Chromosome 1: 63,757,820-63,770,607
WNT5B	10	32.9	Chromosome 1: 63,037,409-63,053,152
FBXL14	10	32.9	Chromosome 1: 63,018,335-63,020,061
E17C9	10	44.5	Unknown
NTF3	10	54.7	Chromosome 1: 76,307,841-76,308,614
TMEM19	10	59.6	Chromosome 1: 38,279,408-38,291,995
UPK3B	10	65.1	Chromosome 19: 4,143,387-4,145,053
TWF1	10	71.3	Chromosome 1: 31,869,037-31,885,537
HIST1H2AC	10	124.3	Unknown
HIST1H1E	10	125.9	Unknown
E12A4	10	128.1	Unknown
CDK2AP2	10	130.3	Unknown
UBE2L3	10	132.5	Chromosome 15: 172,260-356,655
TMX2	10	133.6	Unknown
CTNND1	10	133.6	Chromosome 5: 18,128,274-18,152,675
FTSJ3	10	133.6	Unknown
C11ORF31	10	133.6	Unknown
CTSK	10	135.9	Unknown
E17C5	10	135.9	Unknown
FLJ36031	10	135.9	Unknown
E17C6	10	135.9	Unknown
PIM3	10	144	Unknown
LUM	10	144	Chromosome 1: 45,869,008-45,880,845
PAWR	10	146.2	Chromosome 1: 41,363,806-41,431,999
KITLG	10	154.2	Unknown
TIGRINUM-	10	162.6	Unknown
LEP	10	166.2	Unknown
CALU	10	166.2	Unknown
E15C7	10	166.2	Unknown
SND1	10	169.5	Unknown
IMPDH1	10	169.5	Unknown
COPG2	10	176.3	Chromosome 1: 854,194-873,265
TUBA1A	10	185.2	Chromosome 1: 1,072,680-1,079,188
RAP1B	10	196.2	Chromosome 1: 37,085,902-37,119,291

TMEM5	10	202.5	Chromosome 1: 35,230,653-35,241,467
XRCC6BP1	10	217.2	Chromosome 1: 33,237,937-33,380,274
ACADSB	11	0	Chromosome 6: 33,024,247-33,043,371
EIF3A	11	6.7	Chromosome 6: 31,459,807-31,487,777
ABLIM1	11	24.1	Chromosome 6: 29,286,709-29,463,066
TRIM8	11	38.5	Chromosome 6: 24,706,985-24,725,663
COX15	11	53.4	Chromosome 6: 23,522,690-23,526,597
ATP5B	11	62.4	Chromosome Un_random: 9,509,863-9,510,578
ANKRD1	11	71.4	Chromosome 6: 20,728,960-20,737,641
HIGD1A	11	78.3	Chromosome 2: 1,969,111-1,974,509
DNTT	11	78.3	Chromosome 6: 22,471,871-22,572,917
CISD1	11	82.6	Chromosome 6: 6,316,506-6,321,738
SGMS1	11	88.4	Chromosome 6: 10,872,620-10,887,577
E16E2	11	94.5	Unknown
MFAP2	11	96.9	Unknown
SS18L2	11	96.9	Chromosome 11: 11,691,310-11,709,512
UBR4	11	101.4	Chromosome 21: 4,582,623-4,668,550
SFTPD	11	104.9	Unknown
VDAC2	11	113.2	Chromosome 6: 15,927,713-15,938,094
E15C8	11	113.2	Unknown
AP3M1	11	113.2	Chromosome 6: 16,462,813-16,479,518
ERRFI1	11	115.4	Chromosome 21: 227,108-229,261
HSPG2	11	115.4	Chromosome 21: 6,705,505-6,714,388
CDC42	11	122.4	Chromosome 21: 6,541,984-6,563,877
C1QB	11	124.8	Chromosome 21: 6,268,874-6,270,887
PCBD1	11	137.9	Unknown
PSAP	11	139	Chromosome 6: 13,023,616-13,044,776
C10ORF54	11	139	Chromosome 6: 12,990,618-12,993,771
H2AFY2	11	140.1	Chromosome 6: 13,070,352-13,082,654
MYOZ1	11	144.5	Chromosome 6: 17,106,260-17,118,749
KIAA0913	11	144.5	Chromosome 6: 16,916,289-16,935,040
DDX21	11	144.5	Chromosome 6: 11,877,942-11,891,369
SAR1A	11	150.1	Chromosome 6: 12,579,087-12,583,039
CCDC109A	11	150.1	Chromosome 6: 12,345,366-12,407,179
EIF4EBP2	11	150.1	Chromosome 6: 12,600,770-12,601,091
RPL37A	11	160.2	Chromosome 7: 24,873,612-24,876,160
CAMTA1	11	160.2	Chromosome 21: 290,276-332,570
CALM2	11	191.6	Unknown
SLC4A5	12	0	Chromosome 22_random: 17,335-47,303
DCTN6	12	2.3	Chromosome 4: 35,891,842-35,894,685
PTPN9	12	10.5	Chromosome 10: 3,545,978-3,551,259
SFRS2_a	12	10.5	Unknown
C9ORF156	12	11.6	Unknown
CLTA	12	17.2	Chromosome Z: 50,949,593-50,965,043
KLHL8	12	17.2	Chromosome 4: 47,182,180-47,191,629
ENO3_a	12	25.1	Unknown
MMRN1	12	29.6	Chromosome 4: 36,630,909-36,658,464
HSDL2	12	39.9	Unknown
C4ORF16	12	39.9	Chromosome 4: 58,749,460-58,766,415

H2AFZ	12	41	Unknown
RAD23B	12	49	Chromosome Z: 54,538,467-54,561,633
KLF4	12	49	Unknown
SCOC	12	58	Chromosome 4: 30,502,079-30,764,129
LARP7	12	61.8	Chromosome 4: 58,637,724-58,665,365
TBCKL	12	62.9	Chromosome 4: 39,818,858-39,911,554
NDUFC1	12	77.3	Unknown
ARFIP1	12	86.6	Chromosome 4: 35,021,774-35,061,028
PDGFC	12	91.3	Chromosome 4: 22,269,566-22,387,719
CHDH	12	111.1	Chromosome 12: 7,446,051-7,453,163
TMEM165	12	117	Chromosome 4: 66,988,651-67,006,097
KIT	12	119.4	Chromosome 4: 67,140,610-67,193,203
PDGFRA	12	119.4	Chromosome 4: 67,270,550-67,302,055
CNGA1	12	124.2	Chromosome 4: 68,471,348-68,475,431
WDR1	12	145.2	Chromosome 4: 81,264,297-81,283,769
SLC2A9	12	145.2	Chromosome 4: 81,324,935-81,414,808
CDC25A	12	161.3	Chromosome 2: 471,971-484,476
C20ORF27	12	161.3	Unknown
E15C10	12	161.3	Unknown
KAZALD1	12	174	Chromosome 6: 24,485,460-24,488,112
MEX_NOHI	12	182.1	Unknown
MGC97528		186.9	Unknown
KCTD3	13	0	Chromosome 3: 21,869,769-21,895,435
PYGO2	13	11.2	Unknown
EPHX1	13	12.4	Chromosome 3: 18,343,163-18,354,754
GTPBP2	13	33.3	Chromosome 3: 32,101,166-32,109,395
TMEM63B	13	34.4	Chromosome 3: 31,566,038-31,602,613
HSP90AB1	13	37.8	Unknown
C6ORF226	13	42.3	Unknown
RPS6	13	81.5	Chromosome Z: 33,519,913-33,523,982
CCDC127	13	85.3	Chromosome 2: 87,982,791-87,987,029
ARRB1	13	90.2	Unknown
SFTPD_b	13	92.6	Unknown
COX7B	13	110.7	Unknown
SSR2_b	13	143.2	Unknown
E15G1	13	162.6	Unknown
EAPP	14	0	Chromosome 5: 38,286,796-38,292,022
THBS1	14	0	Chromosome 5: 31,925,409-31,943,198
AP4S1	14	0	Chromosome 5: 36,684,419-36,700,135
ACTC1	14	8.1	Chromosome 5: 34,611,954-34,616,210
ERH	14	17.4	Chromosome 5: 30,312,502-30,319,566
CHURC1	14	20.8	Unknown
SFRS4	14	26.6	Chromosome 23: 3,042,610-3,049,604
TRMT5	14	39.4	Chromosome 5: 56,815,878-56,819,536
ARF6	14	46.1	Unknown
MAP4K5	14	47.2	Chromosome 5: 60,373,662-60,432,089
RPS29	14	57.7	Unknown
NID2	14	60	Chromosome 5: 60,681,370-60,692,642
C14ORF129	14	72.7	Chromosome 5: 48,927,532-48,931,112

CNIH	14	72.7	Chromosome 5: 59,054,124-59,060,339
FERMT2	14	72.7	Chromosome 5: 60,846,643-60,882,508
NPC2	14	72.7	Chromosome 5: 40,335,903-40,373,276
FCF1	14	73.9	Chromosome 5: 40,440,052-40,444,403
LGMN	14	81.3	Chromosome 5: 47,263,137-47,287,817
WARS	14	82.5	Chromosome 5: 51,061,600-51,077,434
AHSA1	14	112.8	Chromosome 5: 41,649,854-41,655,456
UBR7	14	112.8	Unknown
CDC42BPB	14	119.7	Chromosome 5: 52,418,593-52,503,420
PPP1R13B	14	128	Chromosome 5: 53010323..53068265
E16C9	14	134.3	Unknown
COL1A1	15	0	Unknown
PHB	15	5.1	Chromosome 27: 3,312,620-3,321,764
DLX3	15	5.1	Unknown
LSM6	15	5.1	Chromosome 4: 32,490,045-32,494,958
ARF1_a	15	9.5	Chromosome 2: 2259657..2271703
PSME3	15	10.6	Chromosome 27: 4,698,615-4,725,288
CCDC56	15	10.6	Chromosome 27: 4,688,725-4,689,343
CONTIG810	15	10.6	Unknown
NSF	15	12.8	Chromosome 27: 1,122,516-1,171,176
MAPT	15	18.6	Chromosome 27: 2,857,156-2,879,337
E15G4	15	18.6	Unknown
CRHR1	15	20.8	Chromosome 27: 2,132,663-2,157,858
GH1	15	27.5	Chromosome 27: 1,522,166-1,526,523
E17E11	15	28.6	Unknown
PCK2	15	31.9	Unknown
TGM1	15	33	Unknown
MDP1	15	33	Unknown
TMEM85	15	42	Unknown
SDR39U1	15	42	Unknown
HIST2H3A	15	42	Unknown
TCELL	15	47.3	Unknown
RABIF	15	55.4	Chromosome 26: 513,120-513,616
NDRG2	15	55.4	Unknown
TMEM183A	15	57.7	Chromosome 26: 905,314-917,102
NAV1	15	65.8	Unknown
CSRP1	15	65.8	Chromosome 26: 754,413-760,477
E15A9	15	65.8	Unknown
RPLP2	15	69.1	Chromosome 5: 16,870,510-16,874,645
SRPK1	15	72.4	Chromosome 26: 99,788-117,586
TMEM167B	15	72.4	Unknown
TAF11	15	73.5	Chromosome 26: 4,104,924-4,108,350
E17C3	15	73.5	Unknown
RPL10A	15	83.1	Chromosome 26: 3,961,893-3,965,581
MEX_NOHI	15	83.1	Unknown
CAPZA1	15	108.3	Chromosome 2: 106,174,402-106,182,271
CYP2A13	15	111.9	Unknown
RHOA_b	15	111.9	Unknown
RAB7L1	15	124.2	Chromosome 26: 2,086,175-2,091,794

SNRPE	15	129.9	Chromosome 26: 1,471,765-1,474,000
TAF8	15	129.9	Chromosome 26: 4,876,560-4,884,908
CTGF_a	15	133.3	Unknown
TPRG1L	16	0	Chromosome 21: 959,535-962,839
GNB1	16	6.9	Chromosome 21: 1,907,993-1,941,798
MAD2L2	16	13.7	Chromosome 21: 5,848,755-5,851,609
TARDBP	16	13.7	Chromosome 21: 4,066,167-4,071,802
LOC100224	16	13.7	Unknown
E11E11	16	17	Unknown
NPDC1	16	19.5	Chromosome 17: 843,967-850,541
COBRA1	16	20.7	Chromosome 17: 2,302,407-2,313,615
TNC	16	26.8	Chromosome 17: 3,036,348-3,102,126
WDR5	16	34.1	Chromosome 17: 7,878,391-7,890,170
NOTCH1	16	42.2	Chromosome 17: 8,496,469-8,530,780
APEX1	16	57.7	Unknown
LHX2	16	58.9	Chromosome 17: 9,938,704-9,959,363
C9ORF78	16	75.6	Chromosome 17: 6,260,878-6,265,531
C9ORF16	16	76.9	Chromosome 17: 5,726,292-5,728,754
TOR1A	16	84.8	Chromosome 17: 6,256,661-6,260,294
FKBP10	17	0	Chromosome 27: 4,325,005-4,326,783
KRT24	17	0	Unknown
KRT17	17	3.3	Unknown
EIF1	17	3.3	Chromosome 27: 4,298,491-4,313,349
KRT12	17	3.3	Chromosome 27: 4,165,870-4,167,453
RARA	17	5.5	Unknown
LOC100016	17	5.5	Unknown
SNF8	17	9.9	Chromosome 27: 3,452,164-3,456,543
HOXB13	17	9.9	Chromosome 27: 3,518,760-3,520,331
NFE2L1	17	12.1	Unknown
RPL19	17	20.3	Chromosome 27: 4,011,826-4,015,019
MED1	17	28.5	Chromosome 27: 4,035,993-4,046,827
KEAP1	17	36.4	Chromosome 1: 87,240,702-87,267,338
G2G13	17	38.6	Unknown
MED24	17	39.7	Unknown
THRA	17	49.2	Unknown
SFRS3	17	67.3	Chromosome 26: 1,382,526-1,388,418
MEX_NH_1	17	69.6	Unknown
TCF19	17	76.3	Unknown
MR1	17	79.9	Chromosome 16:279760..282461

Marker	LG	cM	Xenopus Reference Scaffold
SPEN	1	0	scaffold_108:2644420-2689750
SPAG7	1	9.5	Unknown
PCOLCE2	1	10.6	scaffold_262:1481670-1510689
ENO3	1	10.6	Unknown
PSMB6	1	11.7	Unknown
EIF4A1	1	12.8	scaffold_1384:7585-15445
E16A9	1	13.9	Unknown
CLDN7	1	22	scaffold_3145:1-4793
CIRBP	1	39.7	scaffold_289:385626-387867
GPX4	1	39.7	scaffold_289:655304-658688
CNN2	1	39.7	scaffold_448:309076-323531
SLC39A3	1	39.7	scaffold_717:310417-313204
E12E2	1	39.7	Unknown
CDC34	1	45.3	scaffold_529:662,876..670,864
BSG	1	45.3	scaffold_529:684414-697059
PRTN3	1	46.4	scaffold_289:1218870-1223964
SFRS14	1	55.8	scaffold_202:710637-721456
NDUFA13	1	57	Unknown
USE1	1	58.1	scaffold_94:390012-415090
UHRF1	1	64.9	scaffold_569:152124-265236
E17C2	1	67.1	Unknown
EEF2	1	67.1	Unknown
NDUFA11	1	72.7	scaffold_386:575337-579513
MYO1F	1	72.7	scaffold_386:881882-945652
OAZ1	1	73.8	scaffold_327:228385-235125
BTBD2	1	73.8	scaffold_327:634293-646817
SAFB	1	79.4	scaffold_112:199548-206218
MAPRE1	1	79.4	scaffold_515:37168-44659
LSM7	1	79.4	scaffold_555:555585-562148
ATP5E	1	80.5	Unknown
MCL1	1	89.5	scaffold_151:1588797-1591551
ERO1L	1	98.5	scaffold_173:1027866-1048228
IFIH1	1	101.8	scaffold_51:724770-750081
KRTCAP2	1	101.8	Unknown
C1ORF230	1	111.4	Unknown
S100A11	1	112.6	scaffold_1114:161884-168315
PRG4	1	112.6	scaffold_69:1807123-1830590
S100A13	1	112.6	Unknown
S100A4	1	112.6	Unknown
E12E11	1	122.8	Unknown
TPM3	1	129	scaffold_783:179591-194488
RPS27	1	131.2	scaffold_103:1154554-1158892
ANP32E	1	136.1	scaffold_376:388869-402035
TXNIP	1	142.3	scaffold_376:1001966-1009581
SSR2	1	149.1	scaffold_1210:19398-22662

DYNC1LI2	1	156	scaffold_66:1826960-1854676
ATP6V0D1	1	166.5	scaffold_283:640275-708797
TPPP3	1	167.7	scaffold_283:858272-873283
NUTF2	1	170.1	scaffold_146:1614075-1630553
HDGF	1	170.1	scaffold_435:451885-471100
UFC1	1	170.1	scaffold_989:24712-27544
TMEM188	1	171.3	Unknown
PSMD11	1	179.5	scaffold_155:1533896-1549359
U2AF1_b	1	179.5	Unknown
LUC7L3	1	179.5	Unknown
FXYD3	1	181.9	Unknown
E12C7	1	186.6	Unknown
COX6B1	1	187.7	scaffold_1073:19785-21148
POLR2L	1	189.9	scaffold_183:134396..138451
NUCB1	1	194.3	scaffold_381:3985-23065
FTH1_b	1	195.4	Unknown
FTL	1	195.4	Unknown
LOC733905	1	195.4	Unknown
KRTAP10-1	1	195.4	Unknown
CD163L1	1	204.8	scaffold_854:258253-273810
SACS	1	212.2	scaffold_388:559556-590016
GPI	1	232.2	scaffold_170:377289-398764
ITLN1	1	236.7	scaffold_550:494919-516207
GABARAPL2	1	237.8	scaffold_120:427326-434946
HNRNPK_b	1	237.8	Unknown
NQO1	1	241.1	scaffold_303:146308-157552
VPS4A	1	242.2	scaffold_1884:3094-13550
APRT	1	246.7	scaffold_66:2135203-2141226
MAP1LC3B	1	250.1	scaffold_188:1274707-1292370
CA5B	1	250.1	scaffold_188:937114-955182
TEAD4	1	261.4	scaffold_381:741673-771255
GMDS	1	261.4	scaffold_95:2116516-2469748
E24A11	1	267.1	Unknown
E12A2	1	276.3	Unknown
E13E7	1	276.3	Unknown
LIG1	1	277.4	scaffold_874:173693-198308
MOCS3	1	285.6	scaffold_173:2053183-2073988
SFRS7	1	303.5	scaffold_74:2668716-2671304
LOC769550	1	304.7	Unknown
MMP2	1	313.2	scaffold_458:237128-267624
NUDT21	1	319.5	scaffold_270:116537-126768
ETHE1	1	339.5	scaffold_449:703225-714287
SODEFRIN	1	339.5	Unknown
RABAC1	1	345.1	scaffold_880:217492-221510
MC1R	1	350.9	scaffold_303:1339944-1340852
MGST3	1	350.9	scaffold_69:2343085-2351509
APOE	1	355.6	scaffold_701:316753-334596
PRDX6	1	365.8	scaffold_85:2299054-2307983
FMO3	1	373.5	scaffold_85:1564767-1579921

NCF2	1	380.4	scaffold_287:667313-684171
ARPC5	1	380.4	scaffold_287:692118-696501
RGS2	1	380.4	scaffold_442:327542-331345
GLUL	1	383.7	scaffold_129:2449954-2457025
CLCA2	1	386	Unknown
RGS5	1	387.1	scaffold_85:1255831-1288085
COL11A1	1	390.4	scaffold_92:446892-462510
IFI44L	1	392.7	Unknown
GNG5	1	395	scaffold_6:1752511-1757081
SEPT10_b	1	396.1	Unknown
E12G5	1	398.4	Unknown
E17G11	1	398.4	Unknown
FPGT	1	404.2	scaffold_1124:75744-78487
GPR177	1	407.6	scaffold_431:509073-537154
LEPROT	1	409.8	scaffold_4:6115013-6123392
USP1	1	412	scaffold_6:2985947-2997776
PSMA4	1	427.3	scaffold_4:4114695-4124953
C8A	1	436	scaffold_4:3012420-3026792
TMEM59	1	444.5	scaffold_1:6254211-6270421
SLC1A7	1	448	scaffold_1:5903540-5937314
SCP2	1	450.3	scaffold_1:5847521-5867701
EPS15	1	453.7	scaffold_1:5135512-5173215
TXNDC12	1	453.7	scaffold_1:5396311-5407266
KIAA0494	1	461.8	scaffold_1:2606751-2622611
FAAH	1	464.1	scaffold_1:2095385-2124289
E17G7	1	467.4	Unknown
PRDX1	1	473.1	scaffold_4:219989-236760
DAZL	2	0	scaffold_349:380767-417462
TMLHE	2	2.5	scaffold_258:105559-122083
THRB	2	17.2	scaffold_26:2104886-2114586
STT3B	2	29.3	scaffold_852:4544-23523
SH3BP5	2	37.4	scaffold_974:11626-52005
NGLY1	2	40.7	scaffold_26:1192295-1209766
C7ORF41	2	40.7	scaffold_320:1310741-1318692
E12C2	2	40.7	Unknown
VWDE	2	51.4	scaffold_438:326598-376177
COL1A2	2	60.1	scaffold_651:479229-485718
UHRF2	2	62.5	scaffold_86:1784881-1826945
NMT2	2	77	scaffold_155:1899231-1910094
VIM	2	81.7	scaffold_437:358861-372089
EIF1B	2	83.9	scaffold_1166:134905-139325
IGF2BP3	2	83.9	scaffold_56:3239112-3300911
TOMM7	2	83.9	scaffold_56:3583650-3588154
KIF15	2	85	scaffold_314:1167303-1210453
E54A6	2	91.7	Unknown
HOXA9	2	94.3	scaffold_56:1415287-1417630
HOXA4	2	94.3	scaffold_56:1443777-1445746
CBX3	2	102.3	Unknown
CYCS	2	103.4	scaffold_56:2477341-2481174

ABI2	2	105.6	scaffold_218:454870-491008
KIF5B	2	110	scaffold_503:538096-578946
CREM	2	113.3	scaffold_133:1673453-1678427
WDR60	2	115.6	scaffold_134:1215283-1235425
U2AF2	2	119.1	scaffold_356:1015107-1025990
HBZ	2	127.1	scaffold_357:1133439-1134691
HBG1	2	131.8	scaffold_357:931134-932695
HBA2	2	131.8	scaffold_357:988150-989876
EIF3I	2	150.5	scaffold_469:675050-688393
KBTBD5	2	161.2	scaffold_471:745114-750634
CRHR2	2	168.2	scaffold_333:460488-480485
UQCRC2	2	169.3	scaffold_14:3146151-3159651
GNA12	2	181.8	Unknown
TIMM17B	2	195.6	Unknown
TIMP4	2	199.3	Unknown
TNRC6A	2	203.8	scaffold_27:2173601-2193257
RBBP6	2	203.8	scaffold_27:2258359-2273960
DCTN5	2	203.8	scaffold_27:984769-990671
NARFL	2	207.1	Unknown
E17G8	2	210.4	Unknown
MSLNL	2	211.5	Unknown
SSTR5	2	211.5	Unknown
PDGFRA_b	2	217.2	Unknown
H3F3B_b	2	224	Unknown
UBE2I	2	226.2	scaffold_371:760341-773838
COQ7	2	227.3	scaffold_21:1197680-1204979
PDXDC1	2	228.4	scaffold_310:200569-242348
MYL3	2	230.6	scaffold_479:368451-377038
ARF1_b	2	234	scaffold_43:715318-723440
ABAT	2	238.5	scaffold_487:291122-350520
ATP6V0C	2	240.7	scaffold_27:567529-576813
HN1L	2	240.7	scaffold_27:782585-797661
MRPS34	2	240.7	scaffold_27:800437-804838
NME3	2	240.7	Unknown
C16ORF13	2	252	Unknown
STUB1	2	256.4	scaffold_174:17578-26277
HBA2	2	256.4	scaffold_357:988150-989876
HBD	2	256.4	Unknown
LOC440335	2	257.5	Unknown
AURKB	2	263.2	Unknown
CCM2	2	265.4	scaffold_757:41198-58425
C11ORF51	2	265.4	scaffold_757:69517-74351
M_NOHITS	2	265.4	Unknown
NGFR	2	266.5	scaffold_757:133804-151242
SETD2	2	266.5	scaffold_757:183548-204694
KIF9	2	266.5	scaffold_757:342396-353190
RAI1	2	268.8	scaffold_174:552927-558338
RASD1	2	268.8	scaffold_174:840251-841935
MED9	2	268.8	scaffold_174:846237-851538

MAP2K3	2	268.8	scaffold_176:4234-40485
DRG2	2	268.8	scaffold_371:361273-373332
M_NOHITS	2	268.8	Unknown
SHMT1	2	268.8	Unknown
PVALB	2	276.8	scaffold_14:2212483-2249961
RAC1	2	276.8	scaffold_14:2525749-2540783
ARPC1A	2	280.1	scaffold_1452:13790-20317
UTS2R	2	280.1	scaffold_178:827201-828280
ACTG1	2	280.1	scaffold_560:491579-495613
M_NOHITS	2	280.1	Unknown
ACTB	2	281.2	scaffold_2:956529-960953
FOXK1	2	284.5	Unknown
TKTL2	2	286.7	scaffold_136:563146-581921
RENBP	2	286.7	scaffold_136:806040-816230
BGN	2	286.7	scaffold_154:773654-833768
E13G5	2	286.7	Unknown
SMC1A	2	293.5	scaffold_154:1419052-1432457
TTC9C	2	293.5	scaffold_398:112371-120163
EEF1G	2	293.5	scaffold_782:362826-372110
OTUB1	2	299.1	scaffold_1178:131919-133537
ADSS	2	299.1	scaffold_173:708298-741593
RBM4	2	299.1	scaffold_296:1171809-1172232
PRDX5	2	299.1	scaffold_398:2585-9503
CALM1	2	299.1	scaffold_49:2319704-2328756
ACTC1_a	2	299.1	Unknown
PYGM	2	303.5	scaffold_292:1359064-1383267
CAPN1	2	303.5	scaffold_413:787435-810743
DPP3	2	303.5	scaffold_474:461131-485239
TMED10	2	303.5	scaffold_474:747977-759452
FOXA3	2	305.7	Unknown
E14C12	2	307.9	Unknown
E16G10	2	307.9	Unknown
CFL1	2	309	scaffold_474:590890-594187
PLCB3	2	309	scaffold_585:443939-519119
BANF1	2	309	scaffold_628:397207-405736
KCNK1	2	309	scaffold_900:198418-204114
E23C10	2	309	Unknown
SULT6B1	2	310.1	scaffold_2:7414618-7429103
RBM4B	2	310.1	scaffold_628:108139-116965
UCRC	2	312.3	scaffold_91:678162-680198
E16E8	2	312.3	Unknown
CKM	2	315.6	scaffold_31:3479284-3486849
SNRPD2	2	320	scaffold_31:3057104-3060333
CLPTM1	2	320	scaffold_31:3751664-3768893
E17G3	2	323.4	Unknown
C22ORF32	2	334.1	scaffold_109:1129441-1132010
CYP2C19	2	334.1	scaffold_63:693704-703509
E12E6	2	334.1	Unknown
CYP2F1	2	335.3	scaffold_63:451256-457824

H3F3B_a	2	343.3	Unknown
CAPNS1	2	345.6	scaffold_1100:107053-107688
SNAP23	2	345.6	scaffold_68:111555-129054
GMFG	2	350.1	scaffold_607:662271-667267
NCCRP1	2	350.1	Unknown
RHOA	2	356.2	scaffold_215:1004872-1020027
GNAT1	2	365.5	scaffold_159:1672706-1680468
TWF2	2	372.8	scaffold_159:296387-309603
WFDC2	2	372.8	Unknown
CNBP	2	377.4	scaffold_1095:167958-174040
BTG1_a	2	379.8	Unknown
FLNB	2	386.7	scaffold_126:2068583-2219752
TKT	2	388.9	scaffold_1483:12613-32685
E12A3	2	398.3	Unknown
RHO	2	404	scaffold_196:1637638-1641570
LSM3	2	414.8	scaffold_353:863371-866432
SEC61A1	2	426	scaffold_44:3050615-3059668
RAB7A	2	433.2	scaffold_44:2432925-2461716
IP6K2	2	438.8	scaffold_44:1778449-1798579
PRKAR2A	2	442.1	scaffold_44:1631486-1658502
ARPC4	2	453.4	scaffold_822:343067-355806
NISCH	2	459	scaffold_1024:40372-90135
RPL29	2	459	scaffold_881:105556-109417
PBRM1	2	460.1	scaffold_1084:59427-86322
SPCS1	2	470.6	scaffold_1084:4630-6595
ZYX	3	0	Unknown
MYL6	3	23.7	scaffold_101:2213945-2221379
NANOG	3	38.2	Unknown
C3AR1	3	39.3	scaffold_735:140348-141385
GAPDH	3	42.6	scaffold_827:326245-331947
ING4	3	45.9	scaffold_827:285824-294621
FKBP1A	3	66.9	scaffold_14939:3817-4170
ASXL1	3	75.6	scaffold_515:104227-111585
E16A12	3	75.6	Unknown
GNAS	3	79	scaffold_830:287838-335018
ADNP	3	96.7	scaffold_48:542524-566251
TNNC2	3	101.2	scaffold_29:4208876-4212314
UBE2V1	3	101.2	scaffold_48:1311025-1322892
SNAI2	3	101.2	scaffold_83:622961-627054
SULF2	3	109.1	Unknown
NCOA5	3	114.7	scaffold_29:3811434-3834519
MMP2_a	3	118.1	Unknown
PDLIM7	3	143.3	scaffold_251:1394022-1464521
TMED9	3	157.3	scaffold_243:1604666-1609884
CTBP1	3	158.4	scaffold_280:1362670-1404340
RPUSD4	3	158.4	Unknown
TIG_NOHIT	3	158.4	Unknown
PROD1	3	168.5	Unknown
VKORC1L1	3	169.6	scaffold_171:428002-446081

FUS	3	169.6	scaffold_661:322650-328041
TRIM69	3	169.6	Unknown
MVP	3	176.4	scaffold_1489:4077-11242
NME1	3	176.4	Unknown
ALDOA	3	184.4	scaffold_1655:5239-10286
E11G12	3	193.7	Unknown
YPEL3	3	193.7	Unknown
SULT1C4	3	194.8	scaffold_11581:6552-8580
BOLA2	3	194.8	scaffold_1436:11209-13212
ATP2A1	3	195.9	scaffold_311:454022-478037
E16E3	3	195.9	Unknown
CONTIG133	3	195.9	Unknown
NFS1	3	199.2	scaffold_38:3617678-3626942
E50G8	3	199.2	Unknown
MAP1LC3A	3	201.4	scaffold_38:2076673-2090448
C20ORF4	3	206	scaffold_38:734534-736598
MANBAL	3	209.4	scaffold_38:458184-463215
BNIP1	3	217.7	scaffold_230:577684-583916
UQCRQ	3	227.8	Unknown
CAMLG	3	236.4	scaffold_177:1209263-1215000
SKP1	3	236.4	scaffold_177:1547962-1555644
SMAD5	3	238.8	scaffold_1803:28177-30455
SEPT10_a	3	241	Unknown
HNRNPA0	3	242.1	scaffold_65:304828-306522
HNRNPAB	3	243.2	scaffold_65:332491-334021
E13E11	3	243.2	Unknown
MATR3	3	244.3	scaffold_65:378743-402997
UBE2D2	3	244.3	Unknown
PHF5A	3	251	scaffold_69:1252797-1258260
POLR3H	3	251	scaffold_69:1279868-1286719
E12A5	3	251	Unknown
E14G1	3	251	Unknown
CSNK1E	3	256.6	scaffold_88:692261-732951
KDEL3	3	256.6	scaffold_88:811924-817996
TOM1	3	261.1	scaffold_88:349153-400242
HOXC10	3	270.8	scaffold_226:374651-378204
RARG	3	272	scaffold_226:1275799-1350835
NACA	3	272	scaffold_757:27074-35789
E54A1	3	272	Unknown
ATP5G2	3	272	Unknown
OS9	3	280.9	scaffold_67:705342-731226
KRT5	3	280.9	Unknown
KRT4	3	280.9	Unknown
CD63	3	285.4	scaffold_101:2631269-2651240
OBFC2B	3	286.5	Unknown
RPS26	3	286.5	Unknown
WNT1	3	289.9	scaffold_130:1689330-1694878
RHEBL1	3	289.9	scaffold_130:1959378-1965540
DDX23	3	291	scaffold_130:1503860-1520519

C5ORF4	3	294.4	scaffold_24:4174391-4190936
SPARC	3	294.4	scaffold_826:132247-138715
ATOX1	3	295.5	scaffold_826:217728-243991
CD74	3	297.7	scaffold_559:62850-85753
SQSTM1	3	300	scaffold_278:797836-805826
CCNG1	3	312.8	scaffold_177:37413-46505
PKM2	3	318.5	scaffold_103:602521-622107
MYH9	3	325.3	scaffold_109:911386-942408
MGP	3	331	scaffold_159:159324-164152
LURP-1	3	331	scaffold_159:69612..73181
ETF1	3	331	scaffold_559:28010-51095
SFRS2	3	346.1	scaffold_178:1616794..1617153
PRPSAP1	3	346.1	scaffold_178:1928098-1943984
C17ORF28	3	348.3	scaffold_545:24606-41393
RAB37	3	349.4	scaffold_504:254177-268469
XYLT2	3	349.4	Unknown
APOH	3	364.4	scaffold_1218:7380-28072
DDX5	3	364.4	scaffold_980:135490-143439
ETG990	3	364.4	Unknown
PRKAR1A	3	368.9	scaffold_149:2222948-2232112
GNA13	3	368.9	scaffold_650:326193-339011
KCNJ16	3	370	scaffold_176:256635-257873
SOX9	3	371.1	scaffold_176:1305667-1308613
SSTR2	3	371.1	scaffold_23:448966-449955
RPL38	3	372.2	scaffold_304:1369525-1373820
ARHGDIA	3	375.6	scaffold_282:1354087-1361558
THOC4	3	375.6	scaffold_282:1368138-1374818
CYP4F22	3	375.6	scaffold_403:641459-661033
ZNF248	3	375.6	scaffold_677:100197-103422
ZNF717	3	375.6	scaffold_6968:129-1557
PBX1	3	375.6	scaffold_85:1050803-1137843
E13G1	3	375.6	Unknown
P4HB	3	379	scaffold_282:1293258-1303224
PKN2	3	388	scaffold_718:145656-171763
ASF1B	3	394.8	scaffold_149:1355624-1363367
ASF1A	3	394.8	scaffold_18:601612-606252
PGLS	3	400.4	scaffold_149:2222948-2232112
E12C8	3	400.4	Unknown
C19ORF43	3	414	scaffold_377:203966-210731
TYK2	3	414	scaffold_520:151015-172258
JUNB	3	414	Unknown
C19ORF52	3	418.4	scaffold_1120:127348-129391
ELOF1	3	418.4	scaffold_448:327583-327999
FARSA	3	418.4	scaffold_448:653013-662817
DNM2	3	418.4	scaffold_845:273897-321873
GADD45GIP	3	418.4	Unknown
E14C7	3	424.2	Unknown
KHSRP	3	430.2	scaffold_697:436601-446302
C19orf53	3	430.2	Unknown

E12A1	4	0	Unknown
E15G10	4	10.9	Unknown
E14G3	4	15.8	Unknown
ANAPC7	4	16.9	scaffold_311:403417-422425
RAB35	4	21.3	scaffold_17:4908211-4922184
SFRS9	4	22.4	scaffold_17:5159201-5164237
DYNLL1	4	22.4	scaffold_17:5186600-5188237
DDT	4	25.7	scaffold_12:4523166-4527883
MIF	4	26.8	scaffold_12:4451383-4452950
E14A8	4	35.2	Unknown
FBXW8	4	63.9	scaffold_340:863-34036
XBP1	4	70.7	scaffold_7:273051-284676
SLC20A1	4	74	scaffold_30:2080173-2093682
PPIF	4	74	scaffold_618:214073-228824
PGAM2	4	75.1	scaffold_30:2250508-2257113
TIA1	4	76.2	scaffold_143:617907-630856
OGDH	4	76.2	scaffold_30:2366696-2386154
MYL7	4	76.2	Unknown
E15E3	4	76.2	Unknown
E16A5	4	89	Unknown
AP2M1	4	93.5	scaffold_132:352566-370479
EIF4G1	4	93.5	scaffold_132:667206-677124
E12E10	4	93.5	Unknown
E16C3	4	93.5	Unknown
EIF5A	4	97.9	scaffold_3:4457535-4473780
E13E8	4	101.2	Unknown
LAMP3	4	110.7	scaffold_245:488815-506178
LOC563358	4	111.9	Unknown
PRPF6	4	115.3	scaffold_1513:16887-29802
PDCD10	4	115.3	scaffold_3:3302251-3308687
KPNA4	4	122.5	scaffold_50:1162099-1183068
RARRES1	4	128.1	scaffold_50:1654861-1673874
VWA5A	4	137.5	scaffold_709:481919-504369
SCLY	4	151.5	scaffold_55:3130313-3145161
HDLBP	4	155	scaffold_55:3573759-3599756
E14C4	4	155	Unknown
E14G7	4	155	Unknown
HSD17B8	4	177	scaffold_396:715627-726232
CIRBP_b	4	179.3	Unknown
E54E6	4	185.5	Unknown
PDLIM2	4	198.1	scaffold_34:1268337-1275680
BOLA3	4	198.1	scaffold_40:3709967-3714262
SFRP1	4	201.4	scaffold_30:3003160-3015009
ENTPD4	4	201.4	scaffold_30:3149442-3161981
E14E1	4	207	Unknown
PHB2	4	211.8	scaffold_735:345124-357118
AKAP7	4	276.1	Unknown
EGLN1	4	278.3	scaffold_807:204303-239864
MAL	4	284.2	scaffold_604:426966-441895

MALL	4	285.4	scaffold_604:518748-532077
TCP1	4	285.4	scaffold_74:229323-240003
BTG1	4	303.1	scaffold_144:1279771..1284833
CTGF	4	304.2	scaffold_200:1536998-1540990
ZUFSP	4	310.2	scaffold_358:467207-477026
FABP7	4	319.2	scaffold_274:1369536-1374949
KIAA0776	4	329.6	scaffold_115:1113793-1154099
ZNF292	4	330.8	scaffold_76:969174-1001890
CIRBP_c	4	333.9	Unknown
COX7A2	4	344.9	scaffold_193:353365-359402
COL12A1	4	346.1	scaffold_193:174162-307295
TMEM14A	4	356.9	scaffold_114:1609796-1616509
PXDN	4	361.3	scaffold_199:1162438-1229740
PDIA6	4	366.1	scaffold_565:154561-163988
YWHAQ	4	367.3	scaffold_418:4864-17438
PQLC3	4	367.3	scaffold_927:60898-68065
ID2	4	367.3	Unknown
SDC1	4	378.5	scaffold_100:1596627-1599760
RHOB	4	378.5	scaffold_100:1735308-1737362
CTSB	4	390.5	scaffold_63:2525700-2534386
PGAM2_b	4	402	scaffold_30:2250508..2257113
IRGC	4	402	Unknown
GPN1	4	414.1	Unknown
ZNF649	5	0	Unknown
LECT2	5	3.8	Unknown
CYC1	5	8.1	Unknown
EPPK1	5	9.5	scaffold_1382:54165-69736
VPS28	5	9.5	scaffold_1674:65-7313
PUF60	5	9.5	scaffold_1888:6272-21725
PSCA	5	9.5	scaffold_789:234956-240305
E48C10	5	9.5	Unknown
PRKRIP1	5	20.8	scaffold_142:882053-887471
MYC	5	28.8	Unknown
NDUFB9	5	43.7	scaffold_395:249866-250902
RNF19A	5	61.9	scaffold_96:844838-887520
PABPC1	5	69.9	scaffold_3:487614-501651
UQCRB	5	75.9	Unknown
RBM12B	5	78.3	scaffold_96:1328601-1338327
CA2	5	81.7	scaffold_452:749617-774006
NBN	5	81.7	Unknown
MRPS28	5	87.3	scaffold_225:929651-976264
E15A2	5	89.6	Unknown
NUP37	5	109.1	scaffold_243:152305-167018
YES1	5	131.8	scaffold_420:40792-87047
RIOK3	5	131.8	scaffold_84:2685894-2697574
MYL12B	5	135.3	scaffold_337:1218378-1222155
CNDP1	5	160.5	scaffold_873:212878-226392
CYB5A	5	168.1	scaffold_873:86311-103998
MYO10	5	179.2	scaffold_46:1312589-1395632

CHMP5	5	179.2	scaffold_716:436273-501699
BASP1	5	180.3	scaffold_46:1543427-1597709
DAP	5	182.5	scaffold_361:655620-706875
KDSR	5	194.2	scaffold_95:1711797-1737481
VPS4B	5	194.2	scaffold_95:1741272-1764813
ACOT13	5	202.5	scaffold_213:1728578-1732566
JARID2	5	225.2	scaffold_33:2967252-3020711
SERPINB6	5	227.5	scaffold_95:1860465-1868578
TXNDC5	5	233.2	scaffold_33:1940977-1960468
LYRM4	5	235.5	scaffold_211:1223991-1298162
E15A11	5	237.9	Unknown
KBTBD2	5	272.2	Unknown
LOC420992	5	272.2	Unknown
TMSB15A	5	280.5	Unknown
LOC792995	5	282.8	Unknown
TAF9	5	287.3	scaffold_113:156659-166850
FAM162A	5	287.3	scaffold_1250:5864-7822
E17E10	5	287.3	Unknown
FHL1	5	291.8	scaffold_31:1477539-1493551
SOX3	5	296.3	Unknown
VMA21	5	297.4	scaffold_102:1150385-1154949
HMGB3	5	297.4	scaffold_102:1422675-1427208
IDH2	6	0	scaffold_22:2799800-2810316
MFAP1	6	0	scaffold_22:3522595-3530852
IQGAP1	6	4.9	scaffold_22:4275542-4354566
CLPX	6	14	scaffold_363:111068-130791
GATM	6	38.4	scaffold_511:362144-378329
MCEE	6	49.3	scaffold_118:1298990-1307514
MAPK6	6	55.4	scaffold_203:554643-563352
LARP6	6	59.9	scaffold_118:207878-231486
SFTPC	6	62.2	scaffold_34:990927-996221
NPTN	6	63.3	scaffold_103:209033-245736
CONTIG229	6	64.4	Unknown
ISL2	6	71.6	scaffold_103:2335848-2351623
LIPC	6	75.3	scaffold_308:940758-1004904
HAPLN3	6	87.1	scaffold_22:1504939-1522902
ABHD2	6	91.8	scaffold_22:1640395-1654272
RHCG	6	91.8	scaffold_22:1811598-1843960
RAB11A	6	98.5	scaffold_363:656953-668300
MEX_NOHI	6	98.5	Unknown
TLE3	6	100.7	scaffold_202:465462-498810
PHLDA2	6	102.9	scaffold_587:462104-462514
ATHL1	6	106.6	scaffold_474:815449-826247
LOC644003	6	112.9	Unknown
MUC5AC	6	114	Unknown
TNNI2	6	116.2	scaffold_419:473297-481064
CD81	6	117.4	scaffold_419:987335-1045827
FTH1	6	127	Unknown
C11ORF58	6	133.6	scaffold_805:228807-236161

SBF2	6	134.8	scaffold_235:266478-299275
RRAS2	6	134.8	scaffold_824:116072-116387
SPON1	6	139.7	scaffold_335:607472-630850
PAX6	6	142.2	scaffold_399:629209-644691
CCND1	6	154.5	scaffold_82:1220924-1234190
CD59	6	155.6	Unknown
ANXA2	6	163.4	scaffold_295:692356-709434
LOC100091	6	163.4	Unknown
SERINC2	6	166.7	scaffold_478:373336-401321
E15E9	6	166.7	Unknown
TRNAU1AP	6	172.4	scaffold_1099:288842-289443
CTSL2	6	173.5	scaffold_122:1748919-1754900
RCC1	6	173.5	scaffold_478:786464-792547
T_	6	173.5	Unknown
SH3BGRL3	6	175.7	scaffold_106:1612006-1615335
GRHL3	6	182.1	scaffold_403:800395-815954
STMN1	6	188.5	scaffold_564:312192-313718
ZNF593	6	188.5	scaffold_564:41230-48770
E12G12	6	188.5	Unknown
M_NOHITS	6	188.5	Unknown
E15A6	6	191.8	Unknown
RRAGC	6	199.9	Unknown
SF3A3	6	210.7	scaffold_802:363736-388604
GNL2	6	220.3	scaffold_538:265814-302969
TRAPPC3	6	227.2	scaffold_194:378112-390113
ZNF706	6	230.5	scaffold_3:792521-794464
E14C3	6	231.6	Unknown
E16C8	6	231.6	Unknown
GJB5	6	234.9	scaffold_223:770126-770773
KPNA6	6	247.4	scaffold_469:604374-619662
KHDRBS1	6	247.4	scaffold_469:654516-664335
E13G11	6	247.4	Unknown
SFRS1	6	251.8	scaffold_516:130470-133332
YARS	6	251.8	scaffold_552:497687-519998
RAB6A	7	0	Unknown
DNAJB13	7	3.6	scaffold_1014:23447-27027
STARD10	7	3.6	scaffold_1128:138205-157478
SPCS2	7	3.6	scaffold_3024:9488-10208
LIPT2	7	3.6	Unknown
THRSP	7	10.3	scaffold_62:1600715-1601146
SYTL2	7	15.2	scaffold_277:711950-792010
UBL3	7	32.5	scaffold_80:2219940-2278384
POSTN	7	33.7	scaffold_505:100066-141543
E12G3	7	38.6	Unknown
ITM2B	7	48.1	scaffold_130:455261-460758
RB1	7	48.1	scaffold_130:473838-563202
C13ORF31	7	48.1	scaffold_266:254514-265065
GTF2F2	7	48.1	scaffold_689:514317..540673
LCP1	7	48.1	scaffold_689:69999-103860

RAB33B	7	49.2	scaffold_16:1584042-1589638
LMO7	7	54.3	scaffold_13:2232833-2365812
PICK1	7	54.3	scaffold_881:246550-259832
GPR143	7	77.4	scaffold_35:3249378-3262221
RPL24	7	91	scaffold_23:2812951-2816409
THOC4_a	7	91	Unknown
COL8A1	7	100.2	scaffold_694:233455-234203
EIF1AX	7	117.2	scaffold_135:76540-84686
TM9SF2	7	128.2	scaffold_160:2152136-2172433
COL4A2	7	146.6	scaffold_42:1268504-1316778
ABHD13	7	159.5	scaffold_42:1930067-1936205
MID1IP1	7	160.6	Unknown
BLZF1	7	163.9	scaffold_169:1703449-1710563
DPT	7	166.2	scaffold_169:1512144-1536269
TIAM1	7	196	scaffold_374:247244-297139
SOD1	7	196	scaffold_374:461083-465178
ALCAM	7	198.2	scaffold_23:1824328-1864248
ATP5O	7	198.2	scaffold_476:907102-911696
RCAN1	7	198.2	scaffold_872:83463-117565
CD247	7	208.4	scaffold_195:1855462-1921622
UPK1B	7	211.1	scaffold_195:1435811-1443337
FSTL1	7	222.1	scaffold_692:158107-168705
CCDC58	7	225.5	scaffold_515:873867-874477
MAN1A2	7	232.2	scaffold_1447:38002-61116
LOC643604	8	0	Unknown
TPM2	8	10.2	scaffold_1217:116147-123787
DNAJB5	8	29.5	scaffold_709:445214-450154
IER3IP1	8	47.3	scaffold_217:631972-680402
SMAD2	8	48.4	scaffold_217:993826-1029675
ID3	8	56.4	scaffold_106:2576868-2578946
ZFR	8	66.9	scaffold_228:1681558-1720110
ATP8B1	8	66.9	scaffold_228:364-65371
MEX_NOHIT	8	71.3	Unknown
MEX_NOHIT	8	74.6	Unknown
SEPP1	8	74.6	Unknown
PRKAA1	8	75.7	scaffold_418:300286-320457
CONTIG953	8	75.7	Unknown
GPX8	8	81.4	scaffold_715:155818-160838
SCAMP1	8	94.3	scaffold_579:607218-626574
HMGCR	8	101.1	scaffold_113:1979754-1988978
OCLN	8	104.4	scaffold_113:216160-283767
MEX_NOHIT	8	104.4	Unknown
VCAN	8	107.9	scaffold_165:8354-60149
E11G8	8	145.9	Unknown
TNFAIP8	8	149.8	scaffold_7:4364577-4415445
E14E6	8	153.3	Unknown
E14C5	8	157.3	Unknown
ANXA1	8	172.2	scaffold_158:176663-187210
HNRNPK	8	195.4	scaffold_122:642581-649182

FAM108B1	8	226.8	scaffold_158:521390-529915
HSPA8	9	0	scaffold_298:580566-590535
APLP2	9	11.4	scaffold_548:69421-99778
E14E10	9	11.4	Unknown
NNMT	9	13.6	scaffold_1139:82681-87608
LOC566020	9	24.4	Unknown
ARCN1	9	35.2	scaffold_124:247126-256803
PAFAH1B2	9	36.4	scaffold_39:1242655-1249866
FXVD2	9	36.4	scaffold_39:837603-839628
MNT	9	47.7	scaffold_142:1333238-1372072
E11G11	9	51.4	Unknown
E12A11	9	54.8	Unknown
AATF	9	57	scaffold_516:422757-507361
ATP2A3	9	63.9	scaffold_23:3145244-3226286
BAZ1B	9	74.7	scaffold_64:239373-271230
E16C7	9	74.7	Unknown
C7ORF42	9	79.2	scaffold_142:2318419-2327807
GBAS	9	79.2	scaffold_171:591843-608312
MKS1	9	82.5	scaffold_64:380722-394490
POR	9	82.5	scaffold_72:767540-807405
MED31	9	85.8	scaffold_61:3162090-3167217
CLTC	9	86.9	scaffold_72:3199750-3230813
DOC2B	9	86.9	scaffold_92:1742366-1746615
PRR11	9	86.9	scaffold_92:2375321-2392727
MED13	9	86.9	Unknown
E11G4	9	107.5	Unknown
E17C12	9	111.3	Unknown
CFLAR	9	112.5	scaffold_218:249842-267944
STAT1	9	124.2	scaffold_291:152822-339846
TOMM20	9	126.5	scaffold_173:1846049-1850357
TRA2B	9	129	scaffold_2:870553-876677
DNAJB11	9	130.2	scaffold_291:409807-496854
ZC3H15	9	131.3	scaffold_2:359119-424972
SUMO3	9	145.1	scaffold_218:1315872-1323322
STT3B_a	9	150.8	scaffold_852:4544..23523
E54C11	9	150.8	Unknown
FN1	9	153	scaffold_15:889856-934185
E12G7	9	154.1	Unknown
E12G1	9	154.1	Unknown
NDUFA10	9	157.5	scaffold_15:2964909-2978233
UGT1A1	9	158.6	scaffold_15:3000789-3014727
COL6A1	9	159.7	scaffold_15:3427039-3463570
E13E6	9	159.7	Unknown
ATP5G3	9	165.4	scaffold_163:1140225-1144512
HOXD8	9	165.4	scaffold_163:608259-609763
HOXD11	9	166.5	scaffold_163:633878-635453
SCRN3	9	168.7	scaffold_105:698875-704683
E13A7	9	168.7	Unknown
GCA	9	171	scaffold_51:680136-688469

RND3	9	180.3	scaffold_227:1381001-1403634
HNMT	9	185.9	scaffold_77:685092-694750
R3HDM1	9	188.1	Unknown
SNX4	9	196.2	scaffold_1036:29291-43688
E14A3	9	205.7	Unknown
NNMT_a	9	209.1	Unknown
ZNF142	9	210.2	scaffold_77:1558257-1569180
ACCN4	9	212.4	scaffold_77:2223913-2229379
E19A7	9	215.9	Unknown
CYP27B1	9	218.2	scaffold_67:1248961-1259586
SLC37A3	10	0	scaffold_809:274949-282143
FBXO7	10	3.4	Unknown
CARDIAC-R	10	11.4	Unknown
E54G12	10	11.4	Unknown
MTPN	10	13.7	scaffold_851:195505-224591
IL17RA	10	30.5	scaffold_341:246040-253246
WNT5B	10	32.9	scaffold_341:743755-761564
FBXL14	10	32.9	scaffold_341:773139-775502
E17C9	10	44.5	Unknown
NTF3	10	54.7	scaffold_24:3338309-3376562
TMEM19	10	59.6	scaffold_575:542294-554740
UPK3B	10	65.1	scaffold_72:138446-150219
TWF1	10	71.3	scaffold_36:1003926-1019251
HIST1H2AG	10	124.3	Unknown
HIST1H1E	10	125.9	Unknown
E12A4	10	128.1	Unknown
CDK2AP2	10	130.3	scaffold_591:378572-413075
UBE2L3	10	132.5	scaffold_12:3659910-3671198
TMX2	10	133.6	scaffold_598:89835-136837
CTNND1	10	133.6	scaffold_714:376408-446362
FTSJ3	10	133.6	scaffold_889:117313-149792
C11ORF31	10	133.6	Unknown
CTSK	10	135.9	scaffold_151:1956206-1964412
E17C5	10	135.9	Unknown
FLJ36031	10	135.9	Unknown
E17C6	10	135.9	Unknown
PIM3	10	144	scaffold_20:1760751-1765226
LUM	10	144	scaffold_259:1484443-1493329
PAWR	10	146.2	scaffold_160:1007608-1039219
KITLG	10	154.2	scaffold_259:634252..664755
TIGRINUM-	10	162.6	Unknown
LEP	10	166.2	scaffold_11:167922-170338
CALU	10	166.2	scaffold_480:614959-625240
E15C7	10	166.2	Unknown
SND1	10	169.5	scaffold_480:381946-420321
IMPDH1	10	169.5	scaffold_480:542571-587006
COPG2	10	176.3	scaffold_11:1372265-1407313
TUBA1A	10	185.2	scaffold_77:2566360-2569814
RAP1B	10	196.2	scaffold_380:919502-925549

TMEM5	10	202.5	scaffold_742:121295-128555
XRCC6BP1	10	217.2	scaffold_36:30380-37486
ACADSB	11	0	scaffold_316:719851-736970
EIF3A	11	6.7	scaffold_605:487764-504629
ABLIM1	11	24.1	Unknown
TRIM8	11	38.5	scaffold_401:540469-596719
COX15	11	53.4	scaffold_271:1092912-1098052
ATP5B	11	62.4	scaffold_101:1035387-1041610
ANKRD1	11	71.4	scaffold_550:448444-457361
HIGD1A	11	78.3	scaffold_471:676349-683787
DNTT	11	78.3	Unknown
CISD1	11	82.6	Unknown
SGMS1	11	88.4	scaffold_150:1420569-1435208
E16E2	11	94.5	Unknown
MFAP2	11	96.9	scaffold_1035:178448-178718
SS18L2	11	96.9	Unknown
UBR4	11	101.4	scaffold_1287:39418-78527
SFTPD	11	104.9	scaffold_75:992652-1000167
VDAC2	11	113.2	scaffold_265:68522-90375
E15C8	11	113.2	Unknown
AP3M1	11	113.2	Unknown
ERRFI1	11	115.4	scaffold_293:513834-528625
HSPG2	11	115.4	Unknown
CDC42	11	122.4	scaffold_257:1052070-1060440
C1QB	11	124.8	scaffold_3874:2701-7358
PCBD1	11	137.9	scaffold_1487:36519-46095
PSAP	11	139	scaffold_497:171469-193283
C10ORF54	11	139	scaffold_497:256955-317893
H2AFY2	11	140.1	scaffold_168:1997902-2058247
MYOZ1	11	144.5	scaffold_168:366160-442044
KIAA0913	11	144.5	scaffold_168:706463-760109
DDX21	11	144.5	scaffold_244:1173906-1184351
SAR1A	11	150.1	scaffold_179:211055-224994
CCDC109A	11	150.1	scaffold_179:893438-944452
EIF4EBP2	11	150.1	scaffold_204:524694-534236
RPL37A	11	160.2	scaffold_22:3515872-3522536
CAMTA1	11	160.2	scaffold_73:2517803-2544821
CALM2	11	191.6	scaffold_25:159011..173717
SLC4A5	12	0	scaffold_40:3754578-3815096
DCTN6	12	2.3	scaffold_1136:43702-53375
PTPN9	12	10.5	scaffold_151:841039-881210
SFRS2_a	12	10.5	Unknown
C9ORF156	12	11.6	scaffold_229:433439-451157
CLTA	12	17.2	scaffold_175:1063919-1083532
KLHL8	12	17.2	scaffold_788:135217-172151
ENO3_a	12	25.1	Unknown
MMRN1	12	29.6	scaffold_1282:5557-20817
HSDL2	12	39.9	scaffold_229:1139197-1167301
C4ORF16	12	39.9	Unknown

H2AFZ	12	41	scaffold_111:2082132-2085136
RAD23B	12	49	scaffold_78:2392699-2411321
KLF4	12	49	Unknown
SCOC	12	58	scaffold_16:1181309-1185578
LARP7	12	61.8	scaffold_89:1056302-1076486
TBCKL	12	62.9	scaffold_594:584514-638165
NDUFC1	12	77.3	scaffold_16:1638806-1645287
ARFIP1	12	86.6	scaffold_60:1507383-1575385
PDGFC	12	91.3	scaffold_110:44627-64182
CHDH	12	111.1	scaffold_1408:73163-73581
TMEM165	12	117	scaffold_107:1190327-1199889
KIT	12	119.4	scaffold_107:1078937-1082132
PDGFRA	12	119.4	scaffold_14:305871-339462
CNGA1	12	124.2	scaffold_59:383975-394771
WDR1	12	145.2	scaffold_75:449103-474598
SLC2A9	12	145.2	Unknown
CDC25A	12	161.3	scaffold_1020:68008-77029
C20ORF27	12	161.3	scaffold_198:324174-339404
E15C10	12	161.3	Unknown
KAZALD1	12	174	scaffold_238:1589568-1619708
MEX_NOHI	12	182.1	Unknown
MGC97528		186.9	Unknown
KCTD3	13	0	scaffold_465:9037-37535
PYGO2	13	11.2	Unknown
EPHX1	13	12.4	scaffold_719:441340-449276
GTPBP2	13	33.3	scaffold_924:120841-123036
TMEM63B	13	34.4	scaffold_1161:78658-105510
HSP90AB1	13	37.8	scaffold_924:272882-279483
C6ORF226	13	42.3	Unknown
RPS6	13	81.5	scaffold_162:260978-268062
CCDC127	13	85.3	scaffold_425:871079-891076
ARRB1	13	90.2	Unknown
SFTPD_b	13	92.6	scaffold_75:992652..1000167
COX7B	13	110.7	scaffold_10:5260512-5264853
SSR2_b	13	143.2	scaffold_1210:19398..22662
E15G1	13	162.6	Unknown
EAPP	14	0	scaffold_145:2095538-2100630
THBS1	14	0	scaffold_273:531483-544880
AP4S1	14	0	scaffold_37:1111952-1116671
ACTC1	14	8.1	scaffold_37:2544539-2550893
ERH	14	17.4	scaffold_145:438494-444619
CHURC1	14	20.8	scaffold_246:1479137-1484359
SFRS4	14	26.6	scaffold_492:432930-441582
TRMT5	14	39.4	scaffold_491:857498-862411
ARF6	14	46.1	scaffold_461:897173-902091
MAP4K5	14	47.2	scaffold_461:691818-731097
RPS29	14	57.7	scaffold_345:551156-554659
NID2	14	60	Unknown
C14ORF129	14	72.7	scaffold_185:1111327-1113067

CNIH	14	72.7	scaffold_247:1054306-1062025
FERMT2	14	72.7	scaffold_247:455247-510603
NPC2	14	72.7	scaffold_389:679863-683368
FCF1	14	73.9	scaffold_389:714689-725781
LGMN	14	81.3	scaffold_49:3043615-3064461
WARS	14	82.5	scaffold_222:954438-969336
AHSA1	14	112.8	scaffold_416:330060-342907
UBR7	14	112.8	scaffold_49:3281439-3292420
CDC42BPB	14	119.7	scaffold_332:971938-1038907
PPP1R13B	14	128	Unknown
E16C9	14	134.3	Unknown
COL1A1	15	0	scaffold_155:1009277-1034102
PHB	15	5.1	scaffold_165:1546783-1554673
DLX3	15	5.1	scaffold_165:2180158-2185078
LSM6	15	5.1	scaffold_424:727724-733423
ARF1_a	15	9.5	scaffold_43:715318-723440
PSME3	15	10.6	scaffold_29:2270852-2290681
CCDC56	15	10.6	Unknown
CONTIG810	15	10.6	Unknown
NSF	15	12.8	scaffold_43:732380-761230
MAPT	15	18.6	scaffold_155:1994911-2019256
E15G4	15	18.6	Unknown
CRHR1	15	20.8	Unknown
GH1	15	27.5	scaffold_43:682797-713522
E17E11	15	28.6	Unknown
PCK2	15	31.9	scaffold_439:359869-374122
TGM1	15	33	scaffold_439:629270-638636
MDP1	15	33	Unknown
TMEM85	15	42	scaffold_91:2266057-2271773
SDR39U1	15	42	scaffold_91:2532925-2540437
HIST2H3A	15	42	Unknown
TCELL	15	47.3	Unknown
RABIF	15	55.4	scaffold_512:290821-294483
NDRG2	15	55.4	scaffold_91:1644278-1678547
TMEM183A	15	57.7	scaffold_169:1424406-1437569
NAV1	15	65.8	scaffold_18:5107431-5177840
CSRP1	15	65.8	scaffold_18:5194656-5204647
E15A9	15	65.8	Unknown
RPLP2	15	69.1	scaffold_183:7261-15235
SRPK1	15	72.4	scaffold_41:279879-355481
TMEM167B	15	72.4	scaffold_512:688815-696521
TAF11	15	73.5	scaffold_429:349340-389427
E17C3	15	73.5	Unknown
RPL10A	15	83.1	scaffold_429:1023830-1030082
MEX_NOHIT	15	83.1	Unknown
CAPZA1	15	108.3	scaffold_18:2439284-2468099
CYP2A13	15	111.9	scaffold_481:40496-49328
RHOA_b	15	111.9	Unknown
RAB7L1	15	124.2	Unknown

SNRPE	15	129.9	scaffold_188:1879132-1883840
TAF8	15	129.9	scaffold_41:1192906-1200683
CTGF_a	15	133.3	Unknown
TPRG1L	16	0	scaffold_73:2845073-2848796
GNB1	16	6.9	scaffold_414:775478-791652
MAD2L2	16	13.7	scaffold_298:53462-65306
TARDBP	16	13.7	scaffold_483:724056-734498
LOC100224	16	13.7	Unknown
E11E11	16	17	Unknown
NPDC1	16	19.5	scaffold_488:469118-474590
COBRA1	16	20.7	scaffold_129:2403135-2410295
TNC	16	26.8	scaffold_136:158508-211201
WDR5	16	34.1	scaffold_137:469470-482462
NOTCH1	16	42.2	scaffold_137:1870972-1922758
APEX1	16	57.7	scaffold_91:2226270-2232678
LHX2	16	58.9	scaffold_405:693380-725299
C9ORF78	16	75.6	scaffold_154:45456-54526
C9ORF16	16	76.9	scaffold_154:416360-418019
TOR1A	16	84.8	scaffold_154:24469-31747
FKBP10	17	0	scaffold_440:614955-629192
KRT24	17	0	scaffold_654:403765-408319
KRT17	17	3.3	scaffold_440:325282-329645
EIF1	17	3.3	scaffold_440:388174-399712
KRT12	17	3.3	scaffold_654:203696-207323
RARA	17	5.5	scaffold_582:118111-158904
LOC100016	17	5.5	Unknown
SNF8	17	9.9	scaffold_334:718860-722992
HOXB13	17	9.9	Unknown
NFE2L1	17	12.1	scaffold_334:195342-199980
RPL19	17	20.3	scaffold_686:265772-272317
MED1	17	28.5	scaffold_674:294275-318220
KEAP1	17	36.4	scaffold_520:533035-543907
G2G13	17	38.6	Unknown
MED24	17	39.7	scaffold_321:748014-774025
THRA	17	49.2	scaffold_556:84508-84858
SFRS3	17	67.3	scaffold_169:1129811-1135500
MEX_NH_16	17	69.6	Unknown
TCF19	17	76.3	Unknown
MR1	17	79.9	Unknown