

chr	CNV start	CNV stop	Gene	Gene feature
1	37261312	37269719	Tmem131	closest upstream gene
1	37261312	37269719	Cnga3	closest downstream gene
1	41160869	41180390	Tmem182	closest upstream gene
1	41160869	41180390	2610017I09Rik	closest downstream gene
1	66835123	66839616	1110028C15Rik	in region
2	88714200	88719211	Olf1206	closest upstream gene
2	88714200	88719211	Olf1208	closest downstream gene
2	154840037	154846228	a	in region
3	30065831	30417157	Mecom	closest upstream gene
3	30065831	30417157	Arpm1	closest downstream gene
3	35476875	35495913	Sox2ot	closest upstream gene
3	35476875	35495913	Atp11b	closest downstream gene
3	39563408	39598697	Fat4	closest upstream gene
3	39563408	39598697	Intu	closest downstream gene
3	94246481	94410611	Celf3	in region
3	94246481	94410611	Mrpl9	in region
3	94246481	94410611	Riad1	in region
3	94246481	94410611	Snx27	in region
3	104311901	104319916	Lrig2	in region
3	144613709	144619149	Clca6	in region
3	144613709	144619149	Clca6	in region
4	108673	137301	Vmn1r2	closest downstream gene
4	3353037	5882883	6330407A03Rik	in region
4	3353037	5882883	Chchd7	in region
4	3353037	5882883	Fam110b	in region
4	3353037	5882883	Impad1	in region
4	3353037	5882883	Lyn	in region
4	3353037	5882883	Mos	in region
4	3353037	5882883	Penk	in region
4	3353037	5882883	Plag1	in region
4	3353037	5882883	Rps20	in region
4	3353037	5882883	Sdr16c5	in region
4	3353037	5882883	Sdr16c6	in region
4	3353037	5882883	Tgs1	in region
4	3353037	5882883	Tmem68	in region
4	5919294	6304249	Cyp7a1	in region
4	5919294	6304249	Sdcbp	in region
4	5919294	6304249	Ubxn2b	in region
4	6323722	9768420	4930412C18Rik	in region
4	6323722	9768420	Asph	in region
4	6323722	9768420	Car8	in region
4	6323722	9768420	Chd7	in region
4	6323722	9768420	Clvs1	in region
4	6323722	9768420	Nsmaf	in region
4	6323722	9768420	Rab2a	in region
4	6323722	9768420	Tox	in region
4	8149783	8156635	Car8	in region
4	10669395	10684312	4930448K20Rik	closest upstream gene
4	10669395	10684312	2610301B20Rik	closest downstream gene

4	16046223	16050237 Osgin2	closest upstream gene
4	16046223	16050237 Ripk2	closest downstream gene
4	17804251	17819463 Mmp16	in region
4	25232469	25266783 1810074P20Rik	closest upstream gene
4	25232469	25266783 Fut9	closest downstream gene
4	26735929	31706301 Epha7	in region
4	48245140	54717839 2810432L12Rik	in region
4	48245140	54717839 4930547C10Rik	in region
4	48245140	54717839 5730528L13Rik	in region
4	48245140	54717839 AI427809	in region
4	48245140	54717839 Abca1	in region
4	48245140	54717839 Acnat1	in region
4	48245140	54717839 Acnat2	in region
4	48245140	54717839 Aldob	in region
4	48245140	54717839 Baat	in region
4	48245140	54717839 Cylc2	in region
4	48245140	54717839 E130309F12Rik	in region
4	48245140	54717839 Erp44	in region
4	48245140	54717839 Fktn	in region
4	48245140	54717839 Fsd1l	in region
4	48245140	54717839 Grin3a	in region
4	48245140	54717839 Invs	in region
4	48245140	54717839 Mrpl50	in region
4	48245140	54717839 Murc	in region
4	48245140	54717839 Nipsnap3a	in region
4	48245140	54717839 Nipsnap3b	in region
4	48245140	54717839 Olfr270	in region
4	48245140	54717839 Olfr272	in region
4	48245140	54717839 Olfr273	in region
4	48245140	54717839 Olfr275	in region
4	48245140	54717839 Ppp3r2	in region
4	48245140	54717839 Rnf20	in region
4	48245140	54717839 Slc44a1	in region
4	48245140	54717839 Smc2	in region
4	48245140	54717839 Tal2	in region
4	48245140	54717839 Tex10	in region
4	48245140	54717839 Tmeff1	in region
4	48245140	54717839 Tmem38b	in region
4	48245140	54717839 Zfp189	in region
4	89376248	89450792 Dmrta1	closest upstream gene
4	89376248	89450792 Zfp352	closest downstream gene
4	98825082	98831985 Dock7	closest upstream gene
4	98825082	98831985 Atg4c	closest downstream gene
4	100470985	100479762 Cachd1	in region
4	111109230	111113731 Agbl4	in region
4	111109230	111113731 Bend5	in region
4	111745389	111754246 Skint4	in region
4	112362843	112375515 Skint2	closest upstream gene
4	112362843	112375515 Skint10	closest downstream gene
4	112922412	112936900 Skint6	in region
4	113284761	113309482 Skint5	in region
4	113911554	114161959 Gm12824	in region

4	113911554	114161959 Skint11	in region
4	114600149	125030202 1110065P20Rik	in region
4	114600149	125030202 1520402A15Rik	in region
4	114600149	125030202 1700042G07Rik	in region
4	114600149	125030202 2610528J11Rik	in region
4	114600149	125030202 4732418C07Rik	in region
4	114600149	125030202 4930538K18Rik	in region
4	114600149	125030202 4930544O15Rik	in region
4	114600149	125030202 9530002B09Rik	in region
4	114600149	125030202 9930104L06Rik	in region
4	114600149	125030202 AA415398	in region
4	114600149	125030202 AU022252	in region
4	114600149	125030202 Akirin1	in region
4	114600149	125030202 Akr1a4	in region
4	114600149	125030202 Artn	in region
4	114600149	125030202 Atp6v0b	in region
4	114600149	125030202 Atpaf1	in region
4	114600149	125030202 B4galt2	in region
4	114600149	125030202 BC002163	in region
4	114600149	125030202 Bmp8a	in region
4	114600149	125030202 Bmp8b	in region
4	114600149	125030202 Btbd19	in region
4	114600149	125030202 C530005A16Rik	in region
4	114600149	125030202 Cap1	in region
4	114600149	125030202 Ccdc163	in region
4	114600149	125030202 Ccdc17	in region
4	114600149	125030202 Ccdc23	in region
4	114600149	125030202 Ccdc24	in region
4	114600149	125030202 Ccdc30	in region
4	114600149	125030202 Cdc20	in region
4	114600149	125030202 Cdca8	in region
4	114600149	125030202 Cited4	in region
4	114600149	125030202 Cldn19	in region
4	114600149	125030202 Cmpk1	in region
4	114600149	125030202 Col9a2	in region
4	114600149	125030202 Ctps	in region
4	114600149	125030202 Cyp4a10	in region
4	114600149	125030202 Cyp4a12a	in region
4	114600149	125030202 Cyp4a12b	in region
4	114600149	125030202 Cyp4a14	in region
4	114600149	125030202 Cyp4a29-ps	in region
4	114600149	125030202 Cyp4a30b-ps	in region
4	114600149	125030202 Cyp4a31	in region
4	114600149	125030202 Cyp4a32	in region
4	114600149	125030202 Cyp4b1	in region
4	114600149	125030202 Cyp4x1	in region
4	114600149	125030202 D4Ertd617e	in region
4	114600149	125030202 D830031N03Rik	in region
4	114600149	125030202 Dem1	in region
4	114600149	125030202 Dmap1	in region
4	114600149	125030202 Dmbx1	in region
4	114600149	125030202 Dnali1	in region

4	114600149	125030202 Dph2	in region
4	114600149	125030202 Ebna1bp2	in region
4	114600149	125030202 Edn2	in region
4	114600149	125030202 Eif2b3	in region
4	114600149	125030202 Elovl1	in region
4	114600149	125030202 Epha10	in region
4	114600149	125030202 Eri3	in region
4	114600149	125030202 Ermap	in region
4	114600149	125030202 Faah	in region
4	114600149	125030202 Fhl3	in region
4	114600149	125030202 Foxj3	in region
4	114600149	125030202 Foxo6	in region
4	114600149	125030202 Gm12839	in region
4	114600149	125030202 Gm12886	in region
4	114600149	125030202 Gm12887	in region
4	114600149	125030202 Gm12888	in region
4	114600149	125030202 Gm1661	in region
4	114600149	125030202 Gm8439	in region
4	114600149	125030202 Gnl2	in region
4	114600149	125030202 Gpbp111	in region
4	114600149	125030202 Guca2a	in region
4	114600149	125030202 Guca2b	in region
4	114600149	125030202 Hectd3	in region
4	114600149	125030202 Heyl	in region
4	114600149	125030202 Hivep3	in region
4	114600149	125030202 Hpcal4	in region
4	114600149	125030202 Hpdl	in region
4	114600149	125030202 Hyi	in region
4	114600149	125030202 Inpp5b	in region
4	114600149	125030202 Ipo13	in region
4	114600149	125030202 Ipp	in region
4	114600149	125030202 Kcnq4	in region
4	114600149	125030202 Kdm4a	in region
4	114600149	125030202 Kif2c	in region
4	114600149	125030202 Klf17	in region
4	114600149	125030202 Kncn	in region
4	114600149	125030202 Lao1	in region
4	114600149	125030202 Lepre1	in region
4	114600149	125030202 Lrrc41	in region
4	114600149	125030202 Macf1	in region
4	114600149	125030202 Maneal	in region
4	114600149	125030202 Mast2	in region
4	114600149	125030202 Meaf6	in region
4	114600149	125030202 Med8	in region
4	114600149	125030202 Mfsd2a	in region
4	114600149	125030202 Mir30c-1	in region
4	114600149	125030202 Mir30e	in region
4	114600149	125030202 Mir697	in region
4	114600149	125030202 Mir698	in region
4	114600149	125030202 Mknk1	in region
4	114600149	125030202 Mmachc	in region
4	114600149	125030202 Mobkl2c	in region

4	114600149	125030202 Mpl	in region
4	114600149	125030202 Mtf1	in region
4	114600149	125030202 Mutyh	in region
4	114600149	125030202 Mycbp	in region
4	114600149	125030202 Mycl1	in region
4	114600149	125030202 Nasp	in region
4	114600149	125030202 Ndufs5	in region
4	114600149	125030202 Nfyc	in region
4	114600149	125030202 Nsun4	in region
4	114600149	125030202 Nt5c1a	in region
4	114600149	125030202 Olfr1328	in region
4	114600149	125030202 Olfr1329	in region
4	114600149	125030202 Olfr1330	in region
4	114600149	125030202 Olfr1331	in region
4	114600149	125030202 Olfr1333	in region
4	114600149	125030202 Olfr1335	in region
4	114600149	125030202 Olfr1337	in region
4	114600149	125030202 Olfr1338	in region
4	114600149	125030202 Olfr1339	in region
4	114600149	125030202 Olfr1340	in region
4	114600149	125030202 Olfr1341	in region
4	114600149	125030202 Olfr1342	in region
4	114600149	125030202 Olfr62	in region
4	114600149	125030202 Oxct2a	in region
4	114600149	125030202 Oxct2b	in region
4	114600149	125030202 Pabpc4	in region
4	114600149	125030202 Pdzk1ip1	in region
4	114600149	125030202 Pik3r3	in region
4	114600149	125030202 Plk3	in region
4	114600149	125030202 Pomgnt1	in region
4	114600149	125030202 Pou3f1	in region
4	114600149	125030202 Ppcs	in region
4	114600149	125030202 Ppie	in region
4	114600149	125030202 Ppih	in region
4	114600149	125030202 Ppt1	in region
4	114600149	125030202 Prdx1	in region
4	114600149	125030202 Ptch2	in region
4	114600149	125030202 Ptpf	in region
4	114600149	125030202 Rad54l	in region
4	114600149	125030202 Rhbdl2	in region
4	114600149	125030202 Rimkla	in region
4	114600149	125030202 Rims3	in region
4	114600149	125030202 Rlf	in region
4	114600149	125030202 Rnf220	in region
4	114600149	125030202 Rps8	in region
4	114600149	125030202 Rragc	in region
4	114600149	125030202 Rspo1	in region
4	114600149	125030202 Scmh1	in region
4	114600149	125030202 Sf3a3	in region
4	114600149	125030202 Slc2a1	in region
4	114600149	125030202 Slc6a9	in region
4	114600149	125030202 Slfnl1	in region

4	114600149	125030202 Smap2	in region
4	114600149	125030202 Snip1	in region
4	114600149	125030202 Snord38a	in region
4	114600149	125030202 Snord55	in region
4	114600149	125030202 St3gal3	in region
4	114600149	125030202 Stil	in region
4	114600149	125030202 Szt2	in region
4	114600149	125030202 Tal1	in region
4	114600149	125030202 Tctex1d4	in region
4	114600149	125030202 Tesk2	in region
4	114600149	125030202 Tie1	in region
4	114600149	125030202 Tmco2	in region
4	114600149	125030202 Tmem125	in region
4	114600149	125030202 Tmem53	in region
4	114600149	125030202 Tmem69	in region
4	114600149	125030202 Toe1	in region
4	114600149	125030202 Trit1	in region
4	114600149	125030202 Tspan1	in region
4	114600149	125030202 Uqcrh	in region
4	114600149	125030202 Urod	in region
4	114600149	125030202 Utp11l	in region
4	114600149	125030202 Wdr65	in region
4	114600149	125030202 Ybx1	in region
4	114600149	125030202 Yrdc	in region
4	114600149	125030202 Zc3h12a	in region
4	114600149	125030202 Zfp69	in region
4	114600149	125030202 Zfp691	in region
4	114600149	125030202 Zmpste24	in region
4	114600149	125030202 Zmynd12	in region
4	114600149	125030202 Zswim5	in region
4	119046121	119049920 Ccdc30	in region
4	124478262	124483156 Inpp5b	in region
4	124478262	124483156 Mtf1	in region
4	128868505	128877071 Yars	in region
4	128868505	128877071 Yars	in region
4	135263959	135270848 Il28ra	in region
4	135263959	135270848 Il28ra	in region
4	135580544	135587308 Tceb3	closest upstream gene
4	135580544	135587308 Rpl11	closest downstream gene
4	135593576	136274451 4930549C01Rik	in region
4	135593576	136274451 Asap3	in region
4	135593576	136274451 E2f2	in region
4	135593576	136274451 Ephb2	in region
4	135593576	136274451 Hnrnpr	in region
4	135593576	136274451 Htr1d	in region
4	135593576	136274451 Id3	in region
4	135593576	136274451 Kdm1a	in region
4	135593576	136274451 Luzp1	in region
4	135593576	136274451 Rpl11	in region
4	135593576	136274451 Tcea3	in region
4	135593576	136274451 Zfp46	in region
4	137028177	137033877 Hspg2	in region

4	138332045	138342152 Pla2g2d	in region
4	140346748	140369614 Padi1	in region
4	140346748	140369614 Padi3	in region
4	140346748	140369614 Padi1	in region
4	140346748	140369614 Padi3	in region
4	140615336	140622510 Necap2	in region
4	140615336	140622510 Necap2	in region
4	140833124	140868192 Epha2	in region
4	144041747	144041935 1700012P22Rik	closest upstream gene
4	144041747	144041935 Aadacl3	closest downstream gene
4	144472718	145004485 Dhrc3	in region
4	144472718	145004485 Tnfrsf1b	in region
4	144472718	145004485 Tnfrsf8	in region
4	144472718	145004485 Vps13d	in region
4	147256753	147527356 2510039O18Rik	in region
4	147256753	147527356 2610109H07Rik	in region
4	147256753	147527356 Agtrap	in region
4	147256753	147527356 Clcn6	in region
4	147256753	147527356 Fbxo44	in region
4	147256753	147527356 Fbxo6	in region
4	147256753	147527356 Mad2l2	in region
4	147256753	147527356 Mfn2	in region
4	147256753	147527356 Mthfr	in region
4	147256753	147527356 Nppa	in region
4	147256753	147527356 Nppb	in region
4	147256753	147527356 Plod1	in region
4	147873450	147881261 Angptl7	in region
4	147873450	147881261 Mtor	in region
4	153667346	153673400 Arhgef16	in region
4	154247833	154251287 Mmel1	in region
5	65412893	65562892 Fam114a1	in region
5	65412893	65562892 Klhl5	in region
5	65412893	65562892 Fam114a1	in region
5	65412893	65562892 Klhl5	in region
5	105311425	105348300 Zfp951	closest upstream gene
5	105311425	105348300 Abcg3	closest downstream gene
5	105331983	105348300 Zfp951	closest upstream gene
5	105331983	105348300 Abcg3	closest downstream gene
6	48461795	48476891 Zfp862	in region
6	148630679	148675047 Tmtc1	closest upstream gene
6	148630679	148675047 lpo8	closest downstream gene
6	148861925	149511955 2810474O19Rik	in region
6	148861925	149511955 4833442J19Rik	in region
6	148861925	149511955 Amn1	in region
6	148861925	149511955 Bicd1	in region
6	148861925	149511955 Dennd5b	in region
6	148861925	149511955 Fam60a	in region
7	96230274	99103010 Ccdc81	in region
7	96230274	99103010 Ccdc83	in region
7	96230274	99103010 Ccdc89	in region
7	96230274	99103010 Crebzf	in region
7	96230274	99103010 Dlg2	in region

7	96230274	99103010 E230029C05Rik	in region
7	96230274	99103010 Eed	in region
7	96230274	99103010 Fzd4	in region
7	96230274	99103010 Me3	in region
7	96230274	99103010 Picalm	in region
7	96230274	99103010 Prss23	in region
7	96230274	99103010 Sytl2	in region
7	96230274	99103010 Tmem126a	in region
7	96230274	99103010 Tmem126b	in region
7	96230274	99103010 Tmem135	in region
7	96230274	99103010 I7Rn6	in region
8	77156369	77355872 Large	closest upstream gene
8	77156369	77355872 Isx	closest downstream gene
8	83268773	83274765 Smarca5	closest upstream gene
8	83268773	83274765 Gab1	closest downstream gene
8	123077454	123085062 Gse1	in region
9	16919103	16977580 Fat3	closest upstream gene
9	16919103	16977580 Chordc1	closest downstream gene
9	34565872	34577261 Kirrel3	in region
9	38832189	38835808 Olfr146	closest upstream gene
9	38832189	38835808 Olfr936	closest downstream gene
9	60328309	60337709 Thsd4	closest upstream gene
9	60328309	60337709 Lrrc49	closest downstream gene
9	64087297	64090552 Map2k1	in region
9	64683128	64690547 Dennd4a	in region
9	72280048	72287075 Mns1	in region
9	81124857	81142892 Impg1	closest upstream gene
9	81124857	81142892 Htr1b	closest downstream gene
9	88627783	88628965 Bcl2a1d	closest upstream gene
9	88627783	88628965 Trim43c	closest downstream gene
9	93446953	93476896 Plod2	closest upstream gene
9	93446953	93476896 1190002N15Rik	closest downstream gene
9	94680524	94695397 Slc9a9	in region
9	102186146	102203687 Ephb1	in region
9	103440253	103453201 Tmem108	in region
9	109422051	109429269 Fbxw19	closest upstream gene
9	109422051	109429269 Fbxw15	closest downstream gene
9	116875427	116885369 Rbms3	in region
9	119074980	119078554 Acaa1b	closest upstream gene
9	119074980	119078554 Slc22a14	closest downstream gene
9	122955960	122960501 Tgm4	in region
10	21399999	21413701 1700020N01Rik	closest upstream gene
10	21399999	21413701 Sgk1	closest downstream gene
10	21643883	21672123 1700020N01Rik	closest upstream gene
10	21643883	21672123 Sgk1	closest downstream gene
10	24890292	116235331 1110038D17Rik	in region
10	24890292	116235331 1190007I07Rik	in region
10	24890292	116235331 1500009L16Rik	in region
10	24890292	116235331 1600002K03Rik	in region
10	24890292	116235331 1700009J07Rik	in region
10	24890292	116235331 1700017N19Rik	in region
10	24890292	116235331 1700021F05Rik	in region

10	24890292	116235331	1700023F02Rik	in region
10	24890292	116235331	1700025K23Rik	in region
10	24890292	116235331	1700027D21Rik	in region
10	24890292	116235331	1700028I16Rik	in region
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10	126789283	126793511 Inhbc	in region
10	127160842	127163782 Tac2	in region
11	31072193	31106391 Asb3	closest upstream gene
11	31072193	31106391 Stc2	closest downstream gene
11	115308540	115453291 4933422H20Rik	in region
11	115308540	115453291 Armc7	in region
11	115308540	115453291 Gga3	in region
11	115308540	115453291 Hn1	in region
11	115308540	115453291 Nt5c	in region
11	115308540	115453291 Nup85	in region
11	115308540	115453291 Slc16a5	in region
11	115308540	115453291 Sumo2	in region
12	26854616	26887931 Id2	closest upstream gene
12	26854616	26887931 Rnf144a	closest downstream gene
12	29447058	29449190 Tssc1	in region

13	23145965	23151286 Vmn1r214	closest upstream gene
13	23145965	23151286 Vmn1r215	closest downstream gene
13	37481703	37490254 Ly86	in region
13	59499863	59521760 Ntrk2	closest upstream gene
13	59499863	59521760 Agtpbp1	closest downstream gene
13	118340741	118360308 Emb	closest upstream gene
13	118340741	118360308 Hcn1	closest downstream gene
14	3042998	7743192 1700110I01Rik	in region
14	3042998	7743192 4930555G01Rik	in region
14	3042998	7743192 D830030K20Rik	in region
14	3042998	7743192 ENSMUSG000000C	in region
14	3042998	7743192 Gm1973	in region
14	3042998	7743192 Gm2897	in region
14	3042998	7743192 Gm3002	in region
14	3042998	7743192 Gm3020	in region
14	3042998	7743192 Gm8348	in region
14	30304061	30318535 Cacna2d3	in region
14	30776359	30782644 Selk	in region
14	32995250	33023641 Parg	in region
14	32995250	33023641 Timm23	in region
14	33067709	33079216 Parg	in region
14	33115313	33130567 Parg	closest upstream gene
14	33115313	33130567 Ogdhl	closest downstream gene
14	41974937	44405431 1700001F09Rik	in region
14	41974937	44405431 Ear1	in region
14	41974937	44405431 Gm10375	in region
14	41974937	44405431 Sftpd	in region
14	44541223	44541223 Ang5	closest upstream gene
14	44541223	44541223 Ang6	closest downstream gene
14	44616791	44616791 Ang6	closest upstream gene
14	44616791	44616791 Ear2	closest downstream gene
14	45960904	45969147 Psmc6	in region
14	48710887	91743057 1190002H23Rik	in region
14	48710887	91743057 1200011I18Rik	in region
14	48710887	91743057 1300010F03Rik	in region
14	48710887	91743057 1700011H14Rik	in region
14	48710887	91743057 1700108F19Rik	in region
14	48710887	91743057 1700109G14Rik	in region
14	48710887	91743057 1700123O20Rik	in region
14	48710887	91743057 1700129C05Rik	in region
14	48710887	91743057 2610027L16Rik	in region
14	48710887	91743057 2610301G19Rik	in region
14	48710887	91743057 3632451O06Rik	in region
14	48710887	91743057 4930578I06Rik	in region
14	48710887	91743057 4930579G18Rik	in region
14	48710887	91743057 4931414P19Rik	in region
14	48710887	91743057 4933429O19Rik	in region
14	48710887	91743057 5031414D18Rik	in region
14	48710887	91743057 6330409N04Rik	in region
14	48710887	91743057 6720456H20Rik	in region
14	48710887	91743057 9030625A04Rik	in region
14	48710887	91743057 9630013A20Rik	in region

14	48710887	91743057 9930012K11Rik	in region
14	48710887	91743057 AU021034	in region
14	48710887	91743057 AY358078	in region
14	48710887	91743057 Abhd4	in region
14	48710887	91743057 Acin1	in region
14	48710887	91743057 Adam2	in region
14	48710887	91743057 Adam28	in region
14	48710887	91743057 Adam7	in region
14	48710887	91743057 Adamdec1	in region
14	48710887	91743057 Adcy4	in region
14	48710887	91743057 Adra1a	in region
14	48710887	91743057 Akap11	in region
14	48710887	91743057 Ang	in region
14	48710887	91743057 Ang2	in region
14	48710887	91743057 Ang4	in region
14	48710887	91743057 Ap1g2	in region
14	48710887	91743057 Apex1	in region
14	48710887	91743057 Arhgef40	in region
14	48710887	91743057 Arl11	in region
14	48710887	91743057 Atp12a	in region
14	48710887	91743057 Atp8a2	in region
14	48710887	91743057 Bcl2l2	in region
14	48710887	91743057 Bin3	in region
14	48710887	91743057 Blk	in region
14	48710887	91743057 Bmp1	in region
14	48710887	91743057 Bnip3l	in region
14	48710887	91743057 C1qtnf9	in region
14	48710887	91743057 Cab39l	in region
14	48710887	91743057 Cbln3	in region
14	48710887	91743057 Ccdc122	in region
14	48710887	91743057 Ccdc25	in region
14	48710887	91743057 Ccnb1ip1	in region
14	48710887	91743057 Cdadc1	in region
14	48710887	91743057 Cdca2	in region
14	48710887	91743057 Cdh24	in region
14	48710887	91743057 Cebpe	in region
14	48710887	91743057 Cenpj	in region
14	48710887	91743057 Chd8	in region
14	48710887	91743057 Chmp7	in region
14	48710887	91743057 Chrna2	in region
14	48710887	91743057 Cideb	in region
14	48710887	91743057 Clu	in region
14	48710887	91743057 Cma1	in region
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14	48710887	91743057 Cpb2	in region
14	48710887	91743057 Cpne6	in region
14	48710887	91743057 Cryl1	in region
14	48710887	91743057 Ctsb	in region
14	48710887	91743057 Ctsg	in region
14	48710887	91743057 Cysltr2	in region

14	48710887	91743057 D14Ert668e	in region
14	48710887	91743057 D830015G02Rik	in region
14	48710887	91743057 D930020E02Rik	in region
14	48710887	91743057 Dad1	in region
14	48710887	91743057 Dcaf11	in region
14	48710887	91743057 Defb30	in region
14	48710887	91743057 Defb42	in region
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14	48710887	91743057 Defb47	in region
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14	48710887	91743057 Dgkh	in region
14	48710887	91743057 Dh1	in region
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14	48710887	91743057 Dh4	in region
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14	48710887	91743057 Dock5	in region
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14	48710887	91743057 Dpysl2	in region
14	48710887	91743057 Ear11	in region
14	48710887	91743057 Ear14	in region
14	48710887	91743057 Ear4	in region
14	48710887	91743057 Ear5	in region
14	48710887	91743057 Ear6	in region
14	48710887	91743057 Ear7	in region
14	48710887	91743057 Ebf2	in region
14	48710887	91743057 Ebpl	in region
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14	48710887	91743057 Efha1	in region
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14	48710887	91743057 Entpd4	in region
14	48710887	91743057 Epb4.9	in region
14	48710887	91743057 Ephx2	in region
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14	48710887	91743057 Extl3	in region
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14	48710887	91743057 Fam123a	in region
14	48710887	91743057 Fam158a	in region
14	48710887	91743057 Fam160b2	in region
14	48710887	91743057 Fam167a	in region
14	48710887	91743057 Fbxo16	in region
14	48710887	91743057 Fdft1	in region
14	48710887	91743057 Fgf17	in region

14	48710887	91743057 Fgf9	in region
14	48710887	91743057 Fitm1	in region
14	48710887	91743057 Fndc3a	in region
14	48710887	91743057 Fzd3	in region
14	48710887	91743057 G630016D24Rik	in region
14	48710887	91743057 Gata4	in region
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14	48710887	91743057 Gm10094	in region
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14	48710887	91743057 Gm5142	in region
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14	48710887	91743057 Homez	in region
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14	48710887	91743057 Kbtbd7	in region
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14	48710887	91743057 Ltb4r1	in region
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14	48710887	91743057 Mir124a-1	in region
14	48710887	91743057 Mir15a	in region
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14	48710887	91743057 Mir208a	in region
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14	48710887	91743057 Mir2145-2	in region
14	48710887	91743057 Mir3077	in region
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14	48710887	91743057 Mir320	in region
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14	48710887	91743057 Pinx1	in region
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14	48710887	91743057 Pnma2	in region
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14	48710887	91743057 Ppp1r3e	in region
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14	48710887	91743057 Rnaseh2b	in region
14	48710887	91743057 Rnf17	in region
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14	48710887	91743057 Rp111	in region
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14	48710887	91743057 Rpph1	in region
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14	48710887	91743057 Sap18	in region
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14	48710887	91743057 Scara5	in region
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14	48710887	91743057 Serp2	in region
14	48710887	91743057 Serpine3	in region
14	48710887	91743057 Setdb2	in region
14	48710887	91743057 Sftpc	in region
14	48710887	91743057 Sgcg	in region
14	48710887	91743057 Shisa2	in region
14	48710887	91743057 Siah3	in region
14	48710887	91743057 Slc22a17	in region
14	48710887	91743057 Slc25a30	in region
14	48710887	91743057 Slc25a37	in region
14	48710887	91743057 Slc35f4	in region
14	48710887	91743057 Slc39a14	in region
14	48710887	91743057 Slc39a2	in region
14	48710887	91743057 Slc7a7	in region
14	48710887	91743057 Slc7a8	in region
14	48710887	91743057 Snora31	in region
14	48710887	91743057 Snord8	in region
14	48710887	91743057 Sorbs3	in region
14	48710887	91743057 Sox7	in region
14	48710887	91743057 Spata13	in region
14	48710887	91743057 Spert	in region
14	48710887	91743057 Stc1	in region

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14	48710887	91743057 Sugt1	in region
14	48710887	91743057 Supt16h	in region
14	48710887	91743057 Tdh	in region
14	48710887	91743057 Tdrd3	in region
14	48710887	91743057 Tep1	in region
14	48710887	91743057 Tgm1	in region
14	48710887	91743057 Thtpa	in region
14	48710887	91743057 Tinf2	in region
14	48710887	91743057 Tlr11	in region
14	48710887	91743057 Tm9sf1	in region
14	48710887	91743057 Tmem55b	in region
14	48710887	91743057 Tnfrsf10b	in region
14	48710887	91743057 Tnfrsf19	in region
14	48710887	91743057 Tnfsf11	in region
14	48710887	91743057 Tox4	in region
14	48710887	91743057 Tppp2	in region
14	48710887	91743057 Tpt1	in region
14	48710887	91743057 Tpt1p	in region
14	48710887	91743057 Trim13	in region
14	48710887	91743057 Trim35	in region
14	48710887	91743057 Tsc22d1	in region
14	48710887	91743057 Tssk4	in region
14	48710887	91743057 Ttc5	in region
14	48710887	91743057 Vmn2r88	in region
14	48710887	91743057 Vmn2r89	in region
14	48710887	91743057 Wbp4	in region
14	48710887	91743057 Wdfy2	in region
14	48710887	91743057 Xkr6	in region
14	48710887	91743057 Xpo4	in region
14	48710887	91743057 Xpo7	in region
14	48710887	91743057 Zc3h13	in region
14	48710887	91743057 Zdhhc20	in region
14	48710887	91743057 Zfhx2	in region
14	48710887	91743057 Zfhx2as	in region
14	48710887	91743057 Zfp219	in region
14	48710887	91743057 Zfp395	in region
14	48710887	91743057 Zfp957	in region
14	48710887	91743057 Zmym2	in region
14	48710887	91743057 Zmym5	in region
14	49876951	49884609 1700011H14Rik	closest upstream gene
14	49876951	49884609 Slc35f4	closest downstream gene
14	50504942	50541768 Olfr722	in region
14	51095711	51103619 Olfr741	in region
14	51796151	51805973 Ear5	closest upstream gene
14	51796151	51805973 Ang2	closest downstream gene
14	67473516	67477324 Dpysl2	in region
14	83703655	83720238 Olfm4	closest upstream gene
14	83703655	83720238 Pcdh17	closest downstream gene
14	91747487	91750146 Gm5088	closest upstream gene
14	91747487	91750146 Pcdh9	closest downstream gene

14	91752257	125164197_1700108J01Rik	in region
14	91752257	125164197_1700110M21Rik	in region
14	91752257	125164197_4921530L21Rik	in region
14	91752257	125164197_6720463M24Rik	in region
14	91752257	125164197_A2ld1	in region
14	91752257	125164197_A330035P11Rik	in region
14	91752257	125164197_Abcc4	in region
14	91752257	125164197_Cldn10	in region
14	91752257	125164197_Cln5	in region
14	91752257	125164197_Clybl	in region
14	91752257	125164197_Commd6	in region
14	91752257	125164197_D130009I18Rik	in region
14	91752257	125164197_Dach1	in region
14	91752257	125164197_Dct	in region
14	91752257	125164197_Dis3	in region
14	91752257	125164197_Dnajc3	in region
14	91752257	125164197_Dock9	in region
14	91752257	125164197_Dzip1	in region
14	91752257	125164197_Ednrb	in region
14	91752257	125164197_Farp1	in region
14	91752257	125164197_Fbxl3	in region
14	91752257	125164197_Fgf14	in region
14	91752257	125164197_Gm5089	in region
14	91752257	125164197_Gm9376	in region
14	91752257	125164197_Gpc5	in region
14	91752257	125164197_Gpc6	in region
14	91752257	125164197_Gpr18	in region
14	91752257	125164197_Gpr180	in region
14	91752257	125164197_Gpr183	in region
14	91752257	125164197_Hs6st3	in region
14	91752257	125164197_Ipo5	in region
14	91752257	125164197_Irg1	in region
14	91752257	125164197_Itgb1	in region
14	91752257	125164197_Kctd12	in region
14	91752257	125164197_Klf12	in region
14	91752257	125164197_Klf5	in region
14	91752257	125164197_Klhl1	in region
14	91752257	125164197_Lmo7	in region
14	91752257	125164197_Mbnl2	in region
14	91752257	125164197_Mir17	in region
14	91752257	125164197_Mir17hg	in region
14	91752257	125164197_Mir18	in region
14	91752257	125164197_Mir19a	in region
14	91752257	125164197_Mir19b-1	in region
14	91752257	125164197_Mir20a	in region
14	91752257	125164197_Mir92-1	in region
14	91752257	125164197_Mycbp2	in region
14	91752257	125164197_Mzt1	in region
14	91752257	125164197_Nalcn	in region
14	91752257	125164197_Ndfip2	in region
14	91752257	125164197_Oxgr1	in region
14	91752257	125164197_Pcca	in region

14	91752257	125164197 Pcdh9	in region
14	91752257	125164197 Pibf1	in region
14	91752257	125164197 Pou4f1	in region
14	91752257	125164197 Rap2a	in region
14	91752257	125164197 Rbm26	in region
14	91752257	125164197 Rnf219	in region
14	91752257	125164197 Scel	in region
14	91752257	125164197 Slain1	in region
14	91752257	125164197 Slc15a1	in region
14	91752257	125164197 Slitrk1	in region
14	91752257	125164197 Slitrk5	in region
14	91752257	125164197 Slitrk6	in region
14	91752257	125164197 Sox21	in region
14	91752257	125164197 Spry2	in region
14	91752257	125164197 Stk24	in region
14	91752257	125164197 Tbc1d4	in region
14	91752257	125164197 Tgds	in region
14	91752257	125164197 Timm8a2	in region
14	91752257	125164197 Tm9sf2	in region
14	91752257	125164197 Tmtc4	in region
14	91752257	125164197 Trim52	in region
14	91752257	125164197 Ubac2	in region
14	91752257	125164197 Uchl3	in region
14	91752257	125164197 Ugg2	in region
14	91752257	125164197 Zic2	in region
14	91752257	125164197 Zic5	in region
14	91806479	91825034 Gm5088	closest upstream gene
14	91806479	91825034 Pcdh9	closest downstream gene
14	97348612	97360390 Khlh1	closest upstream gene
14	97348612	97360390 Dach1	closest downstream gene
14	100989808	101077282 Klf12	closest upstream gene
14	100989808	101077282 1700110M21Rik	closest downstream gene
14	112380613	112393301 Slitrk5	closest upstream gene
14	112380613	112393301 Mir17	closest downstream gene
14	115705068	115718226 Gpc5	in region
15	5862853	5899664 Ptger4	closest upstream gene
15	5862853	5899664 Dab2	closest downstream gene
15	5862853	5899664 Ptger4	closest upstream gene
15	5862853	5899664 Dab2	closest downstream gene
15	8179090	8196127 2410089E03Rik	in region
15	8179090	8196127 2410089E03Rik	in region
15	17085294	17183454 Cdh9	closest upstream gene
15	17085294	17183454 Cdh10	closest downstream gene
15	17085294	17183454 Cdh9	closest upstream gene
15	17085294	17183454 Cdh10	closest downstream gene
15	23313757	23320897 Cdh18	in region
15	77361635	77377491 Apol7c	in region
15	82078165	82084585 Cenpm	closest upstream gene
15	82078165	82084585 1500009C09Rik	closest downstream gene
15	82078165	82084585 Cenpm	closest upstream gene
15	82078165	82084585 1500009C09Rik	closest downstream gene
15	91435990	91814167 Lrrk2	in region

15	91435990	91814167 Muc19	in region
15	91435990	91814167 Smgc	in region
15	97054411	97059801 Slc38a4	closest upstream gene
15	97054411	97059801 Amigo2	closest downstream gene
15	102164397	102168247 Myg1	in region
15	102164397	102168247 Myg1	in region
15	103350843	103361294 Pde1b	in region
15	103350843	103361294 Ppp1r1a	in region
16	3900257	3903680 Nat15	in region
16	3900257	3903680 Nat15	in region
16	23106664	23107650 Eif4a2	in region
16	23106664	23107650 Eif4a2	in region
16	36302510	36315222 Stfa1	closest upstream gene
16	36302510	36315222 BC117090	closest downstream gene
16	39938420	39958737 Igsf11	closest upstream gene
16	39938420	39958737 Lsamp	closest downstream gene
16	60038245	60044212 Epha6	in region
16	60038245	60044212 Epha6	in region
16	69328034	69360721 Cadm2	closest upstream gene
16	69328034	69360721 Speer2	closest downstream gene
16	69328034	69360721 Cadm2	closest upstream gene
16	69328034	69360721 Speer2	closest downstream gene
16	71160098	71177690 Gbe1	closest upstream gene
16	71160098	71177690 Robo1	closest downstream gene
16	71160098	71177690 Gbe1	closest upstream gene
16	71160098	71177690 Robo1	closest downstream gene
16	80025549	80041276 Tmprss15	closest upstream gene
16	80025549	80041276 Ncam2	closest downstream gene
16	93624926	93643686 Cbr1	closest upstream gene
16	93624926	93643686 Cbr3	closest downstream gene
17	7718573	7754779 Gm9992	closest upstream gene
17	7718573	7754779 Fn timer	closest downstream gene
17	16690392	16706105 Rgmb	closest upstream gene
17	16690392	16706105 Zfp960	closest downstream gene
17	64982415	64989415 Man2a1	in region
17	85317079	85336104 Lrpprc	closest upstream gene
17	85317079	85336104 1110020A21Rik	closest downstream gene
17	92814088	92827843 Nr xn1	closest upstream gene
17	92814088	92827843 Adcyap1	closest downstream gene
18	15720851	15725610 Chst9	in region
18	31429451	31437437 Rit2	in region
18	31944845	31950834 Polr2d	in region
18	42541779	42547122 Rbm27	closest upstream gene
18	42541779	42547122 Pou4f3	closest downstream gene
18	66305569	66345963 Ccbe1	in region
18	67405794	67410138 Mppe1	closest upstream gene
18	67405794	67410138 Impa2	closest downstream gene
18	75161929	75167219 BC031181	in region
18	75161929	75167219 Rpl17	in region
18	79218018	79224490 Setbp1	in region
19	3272976	11244072 1110014N23Rik	in region
19	3272976	11244072 1700017D01Rik	in region

19	3272976	11244072 1700019N12Rik	in region
19	3272976	11244072 1700020D05Rik	in region
19	3272976	11244072 1700025F22Rik	in region
19	3272976	11244072 1700092M07Rik	in region
19	3272976	11244072 1700123I01Rik	in region
19	3272976	11244072 1810006K21Rik	in region
19	3272976	11244072 1810009A15Rik	in region
19	3272976	11244072 1810055G02Rik	in region
19	3272976	11244072 2010003K11Rik	in region
19	3272976	11244072 2700081O15Rik	in region
19	3272976	11244072 4930481A15Rik	in region
19	3272976	11244072 4930579J09Rik	in region
19	3272976	11244072 5730408K05Rik	in region
19	3272976	11244072 A430093F15Rik	in region
19	3272976	11244072 AB056442	in region
19	3272976	11244072 AI462493	in region
19	3272976	11244072 AI837181	in region
19	3272976	11244072 AI846148	in region
19	3272976	11244072 AW112010	in region
19	3272976	11244072 Actn3	in region
19	3272976	11244072 Acy3	in region
19	3272976	11244072 Adrbk1	in region
19	3272976	11244072 Ahnak	in region
19	3272976	11244072 Aip	in region
19	3272976	11244072 Aldh3b1	in region
19	3272976	11244072 Aldh3b2	in region
19	3272976	11244072 Ankrd13d	in region
19	3272976	11244072 Arl2	in region
19	3272976	11244072 Asrgl1	in region
19	3272976	11244072 Atg2a	in region
19	3272976	11244072 Atl3	in region
19	3272976	11244072 B3gat3	in region
19	3272976	11244072 B3gnt1	in region
19	3272976	11244072 BC014805	in region
19	3272976	11244072 BC021614	in region
19	3272976	11244072 BC048609	in region
19	3272976	11244072 Bad	in region
19	3272976	11244072 Banf1	in region
19	3272976	11244072 Batf2	in region
19	3272976	11244072 Bbs1	in region
19	3272976	11244072 Best1	in region
19	3272976	11244072 Brms1	in region
19	3272976	11244072 Bscl2	in region
19	3272976	11244072 C730048C13Rik	in region
19	3272976	11244072 Cabp2	in region
19	3272976	11244072 Cabp4	in region
19	3272976	11244072 Capn1	in region
19	3272976	11244072 Carns1	in region
19	3272976	11244072 Catsper1	in region
19	3272976	11244072 Ccdc85b	in region
19	3272976	11244072 Ccdc86	in region
19	3272976	11244072 Ccdc87	in region

19	3272976	11244072 Ccdc88b	in region
19	3272976	11244072 Ccs	in region
19	3272976	11244072 Cd248	in region
19	3272976	11244072 Cd5	in region
19	3272976	11244072 Cd6	in region
19	3272976	11244072 Cdc42bpg	in region
19	3272976	11244072 Cdc42ep2	in region
19	3272976	11244072 Cdca5	in region
19	3272976	11244072 Cdk2ap2	in region
19	3272976	11244072 Cfl1	in region
19	3272976	11244072 Chka	in region
19	3272976	11244072 Chrm1	in region
19	3272976	11244072 Clcf1	in region
19	3272976	11244072 Cnih2	in region
19	3272976	11244072 Coro1b	in region
19	3272976	11244072 Cox8a	in region
19	3272976	11244072 Cpsf7	in region
19	3272976	11244072 Cpt1a	in region
19	3272976	11244072 Cst6	in region
19	3272976	11244072 Ctsf	in region
19	3272976	11244072 Ctsw	in region
19	3272976	11244072 Cybasc3	in region
19	3272976	11244072 D330050I16Rik	in region
19	3272976	11244072 D630002G06Rik	in region
19	3272976	11244072 Dagla	in region
19	3272976	11244072 Dak	in region
19	3272976	11244072 Ddb1	in region
19	3272976	11244072 Dnajc4	in region
19	3272976	11244072 Doc2g	in region
19	3272976	11244072 Dpf2	in region
19	3272976	11244072 Dpp3	in region
19	3272976	11244072 Drap1	in region
19	3272976	11244072 Eef1g	in region
19	3272976	11244072 Efemp2	in region
19	3272976	11244072 Ehbp111	in region
19	3272976	11244072 Ehd1	in region
19	3272976	11244072 Eif1ad	in region
19	3272976	11244072 Eml3	in region
19	3272976	11244072 Esrra	in region
19	3272976	11244072 Fads1	in region
19	3272976	11244072 Fads2	in region
19	3272976	11244072 Fads3	in region
19	3272976	11244072 Fam89b	in region
19	3272976	11244072 Fau	in region
19	3272976	11244072 Fen1	in region
19	3272976	11244072 Fermt3	in region
19	3272976	11244072 Fibp	in region
19	3272976	11244072 Fkbp2	in region
19	3272976	11244072 Firt1	in region
19	3272976	11244072 Fosl1	in region
19	3272976	11244072 Frmd8	in region
19	3272976	11244072 Fth1	in region

19	3272976	11244072 Gal	in region
19	3272976	11244072 Gal3st3	in region
19	3272976	11244072 Ganab	in region
19	3272976	11244072 Gm2518	in region
19	3272976	11244072 Gm5631	in region
19	3272976	11244072 Gm962	in region
19	3272976	11244072 Gm98	in region
19	3272976	11244072 Gng3	in region
19	3272976	11244072 Gpha2	in region
19	3272976	11244072 Gpr137	in region
19	3272976	11244072 Gpr152	in region
19	3272976	11244072 Gpr44	in region
19	3272976	11244072 Gstp1	in region
19	3272976	11244072 Gstp2	in region
19	3272976	11244072 Hnrnpul2	in region
19	3272976	11244072 Hrasls5	in region
19	3272976	11244072 Ighmbp2	in region
19	3272976	11244072 Incenp	in region
19	3272976	11244072 Ints5	in region
19	3272976	11244072 Kat5	in region
19	3272976	11244072 Kcnk4	in region
19	3272976	11244072 Kcnk7	in region
19	3272976	11244072 Kdm2a	in region
19	3272976	11244072 Klc2	in region
19	3272976	11244072 Lgals12	in region
19	3272976	11244072 Lrfn4	in region
19	3272976	11244072 Lrp5	in region
19	3272976	11244072 Lrrc10b	in region
19	3272976	11244072 Lrrn4cl	in region
19	3272976	11244072 Ltbp3	in region
19	3272976	11244072 Macrod1	in region
19	3272976	11244072 Malat1	in region
19	3272976	11244072 Map3k11	in region
19	3272976	11244072 Map4k2	in region
19	3272976	11244072 Mark2	in region
19	3272976	11244072 Men1	in region
19	3272976	11244072 Mir192	in region
19	3272976	11244072 Mir194-2	in region
19	3272976	11244072 Mrpl11	in region
19	3272976	11244072 Mrpl21	in region
19	3272976	11244072 Mrpl49	in region
19	3272976	11244072 Ms4a10	in region
19	3272976	11244072 Ms4a13	in region
19	3272976	11244072 Ms4a15	in region
19	3272976	11244072 Ms4a8a	in region
19	3272976	11244072 Mta2	in region
19	3272976	11244072 Mtl5	in region
19	3272976	11244072 Mus81	in region
19	3272976	11244072 Naa40	in region
19	3272976	11244072 Naaladl1	in region
19	3272976	11244072 Ndufs8	in region
19	3272976	11244072 Ndufv1	in region

19	3272976	11244072 Neat1	in region
19	3272976	11244072 Npas4	in region
19	3272976	11244072 Nrxa2	in region
19	3272976	11244072 Nudt22	in region
19	3272976	11244072 Nudt8	in region
19	3272976	11244072 Nxf1	in region
19	3272976	11244072 Otub1	in region
19	3272976	11244072 Ovol1	in region
19	3272976	11244072 Pacs1	in region
19	3272976	11244072 Pcnx13	in region
19	3272976	11244072 Pcx	in region
19	3272976	11244072 Peli3	in region
19	3272976	11244072 Pga5	in region
19	3272976	11244072 Pitpnm1	in region
19	3272976	11244072 Pla2g16	in region
19	3272976	11244072 Plcb3	in region
19	3272976	11244072 Pola2	in region
19	3272976	11244072 Pold4	in region
19	3272976	11244072 Polr2g	in region
19	3272976	11244072 Ppp1ca	in region
19	3272976	11244072 Ppp1r14b	in region
19	3272976	11244072 Ppp2r5b	in region
19	3272976	11244072 Ppp6r3	in region
19	3272976	11244072 Prdx5	in region
19	3272976	11244072 Prpf19	in region
19	3272976	11244072 Ptprcap	in region
19	3272976	11244072 Pygm	in region
19	3272976	11244072 Rab1b	in region
19	3272976	11244072 Rab3il1	in region
19	3272976	11244072 Rad9	in region
19	3272976	11244072 Rasgrp2	in region
19	3272976	11244072 Rbm14	in region
19	3272976	11244072 Rbm4	in region
19	3272976	11244072 Rbm4b	in region
19	3272976	11244072 Rce1	in region
19	3272976	11244072 Rcor2	in region
19	3272976	11244072 Rela	in region
19	3272976	11244072 Rhod	in region
19	3272976	11244072 Rin1	in region
19	3272976	11244072 Rnaseh2c	in region
19	3272976	11244072 Rom1	in region
19	3272976	11244072 Rps6ka4	in region
19	3272976	11244072 Rps6kb2	in region
19	3272976	11244072 Rtn3	in region
19	3272976	11244072 Sac3d1	in region
19	3272976	11244072 Sart1	in region
19	3272976	11244072 Scgb1a1	in region
19	3272976	11244072 Scyl1	in region
19	3272976	11244072 Sdhaf2	in region
19	3272976	11244072 Sf1	in region
19	3272976	11244072 Sf3b2	in region
19	3272976	11244072 Sipa1	in region

19	3272976	11244072 Slc15a3	in region
19	3272976	11244072 Slc22a12	in region
19	3272976	11244072 Slc22a19	in region
19	3272976	11244072 Slc22a20	in region
19	3272976	11244072 Slc22a6	in region
19	3272976	11244072 Slc22a8	in region
19	3272976	11244072 Slc25a45	in region
19	3272976	11244072 Slc29a2	in region
19	3272976	11244072 Slc3a2	in region
19	3272976	11244072 Snhg1	in region
19	3272976	11244072 Snord22	in region
19	3272976	11244072 Snx15	in region
19	3272976	11244072 Snx32	in region
19	3272976	11244072 Spnb3	in region
19	3272976	11244072 Ssh3	in region
19	3272976	11244072 Sssca1	in region
19	3272976	11244072 Stip1	in region
19	3272976	11244072 Stx5a	in region
19	3272976	11244072 Suv420h1	in region
19	3272976	11244072 Syt12	in region
19	3272976	11244072 Syt7	in region
19	3272976	11244072 Syvn1	in region
19	3272976	11244072 Taf6l	in region
19	3272976	11244072 Tbc1d10c	in region
19	3272976	11244072 Tbx10	in region
19	3272976	11244072 Tcirg1	in region
19	3272976	11244072 Tigd3	in region
19	3272976	11244072 Tm7sf2	in region
19	3272976	11244072 Tmem109	in region
19	3272976	11244072 Tmem132a	in region
19	3272976	11244072 Tmem134	in region
19	3272976	11244072 Tmem138	in region
19	3272976	11244072 Tmem151a	in region
19	3272976	11244072 Tmem179b	in region
19	3272976	11244072 Tmem216	in region
19	3272976	11244072 Tmem223	in region
19	3272976	11244072 Trmt112	in region
19	3272976	11244072 Trpt1	in region
19	3272976	11244072 Ttc9c	in region
19	3272976	11244072 Tut1	in region
19	3272976	11244072 Ubxn1	in region
19	3272976	11244072 Unc93b1	in region
19	3272976	11244072 Vegfb	in region
19	3272976	11244072 Vps37c	in region
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19	3272976	11244072 Wdr74	in region
19	3272976	11244072 Yif1a	in region
19	3272976	11244072 Zbtb3	in region
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19	11280786	16049394 Cntf	in region
19	11280786	16049394 Dtx4	in region
19	11280786	16049394 Fam111a	in region
19	11280786	16049394 Gif	in region
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19	11280786	16049394 Mrpl16	in region
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19	11280786	16049394 Olfr1417	in region
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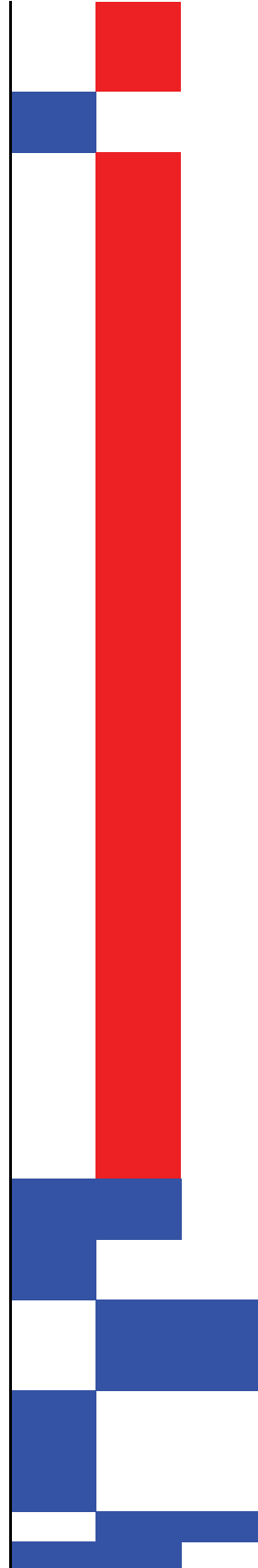
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19	11280786	16049394 Olfr76	in region
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19	11280786	16049394 Zfp91	in region
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19	18689360	25974568 2410127L17Rik	in region
19	18689360	25974568 Aldh1a1	in region
19	18689360	25974568 Aldh1a7	in region
19	18689360	25974568 Anxa1	in region
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19	18689360	25974568 Fam122a	in region
19	18689360	25974568 Fam189a2	in region
19	18689360	25974568 Foxd4	in region
19	18689360	25974568 Fxn	in region
19	18689360	25974568 Gda	in region
19	18689360	25974568 Kank1	in region
19	18689360	25974568 Klf9	in region
19	18689360	25974568 Mamdc2	in region
19	18689360	25974568 Mir1192	in region
19	18689360	25974568 Mir204	in region
19	18689360	25974568 Ostf1	in region
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19	18689360	25974568 Rorb	in region
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19	18689360	25974568 Tmc1	in region
19	18689360	25974568 Tmem2	in region
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19	18689360	25974568 Zfand5	in region
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19	26040768	27757257 D19Bwg1357e	in region
19	26040768	27757257 Gm815	in region
19	26040768	27757257 Kcnv2	in region
19	26040768	27757257 Smarca2	in region
19	26040768	27757257 Vldlr	in region
19	38148017	38153709 Cep55	in region
19	38589204	38598536 Tmem20	closest upstream gene
19	38589204	38598536 Plce1	closest downstream gene
19	44435088	44443084 Scd4	closest upstream gene
19	44435088	44443084 Scd1	closest downstream gene
19	46477513	46532944 Sufu	in region
19	54645268	57419690 9930023K05Rik	in region
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19	54645268	57419690 Ablim1	in region
19	54645268	57419690 Acsl5	in region
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19	54645268	57419690 Nrap	in region
19	54645268	57419690 Tcf7l2	in region
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19	54645268	57419690 Vti1a	in region
19	54645268	57419690 Vwa2	in region
19	54645268	57419690 Zdhhc6	in region
19	55617636	55625830 Vti1a	in region
X	120137949	120158626 Nap1l3	closest upstream gene
X	120137949	120158626 3110007F17Rik	closest downstream gene
X	120377370	121084372 3110007F17Rik	closest upstream gene
X	120377370	121084372 Vmn2r121	closest downstream gene
Y	27	37653 Zfy1	closest downstream gene
Y	27	37029 Zfy1	closest downstream gene
Y	49697	627575 Ddx3y	in region
Y	49697	627575 Eif2s3y	in region
Y	49697	627575 Kdm5d	in region
Y	49697	627575 Tspy-ps	in region
Y	49697	627575 Ube1y1	in region
Y	49697	627575 Uty	in region
Y	49697	627575 Zfy1	in region
Y	628670	629367 Ddx3y	closest upstream gene
Y	628670	629367 Usp9y	closest downstream gene
Y	628670	629367 Ddx3y	closest upstream gene
Y	628670	629367 Usp9y	closest downstream gene
Y	629548	641515 Usp9y	in region
Y	642954	697432 Usp9y	in region
Y	700853	796066 Usp9y	in region
Y	799215	801874 Usp9y	closest upstream gene
Y	799215	801874 Zfy2	closest downstream gene
Y	1680828	1755358 Zfy2	closest upstream gene
Y	1680828	1755358 Gm6026	closest downstream gene
Y	1759926	1827232 Zfy2	closest upstream gene
Y	1759926	1827232 Gm6026	closest downstream gene
Y	1781425	1809242 Zfy2	closest upstream gene
Y	1781425	1809242 Gm6026	closest downstream gene
Y	1822884	1827232 Zfy2	closest upstream gene
Y	1822884	1827232 Gm6026	closest downstream gene
Y	1851347	1918061 Gm6026	in region
Y	1851347	2148556 Gm16501	in region
Y	1851347	2148556 Gm6026	in region
Y	1851347	2148556 Sry	in region
Y	1919670	2000358 Gm16501	in region
Y	2003497	2148556 Gm16501	closest upstream gene
Y	2003497	2148556 Rbmy1a1	closest downstream gene

Gene start	Gene stop	Gain/Loss	RED (1) = copy gain BLUE (-1) = copy loss			
			Myc	NeuT	Ras	Src
36849033	36996372	gain		1		
37276105	37320229	gain		1		
40862445	40912112	gain		1		
42705044	42751670	gain		1		
66765816	66864169	gain		1		
88704763	88705687	loss	-1			
88736825	88737752	loss	-1			
154839305	154876748	loss	-1			
29850217	29912126	loss		-1		
30495994	30498792	loss		-1		
34459302	34576915	loss				-1
35653059	35755198	loss				-1
38785861	38910905	loss				-1
40439688	40508662	loss				-1
94282752	94296115	gain		1		
94247257	94252630	gain		1		
94268906	94277513	gain		1		
94304601	94386624	gain		1		
104257905	104315779	loss	-1			
144615449	144638009	gain	1			
144615449	144638009	loss				-1
3099229	3100150	loss	-1			
3642110	3643953	loss	-1			
3866034	3870672	loss	-1			
5571325	5727091	loss	-1			
4691500	4720453	loss	-1			
3605267	3718759	loss	-1			
3797804	3799252	loss	-1			
4060682	4065592	loss	-1			
3828304	3865552	loss	-1			
3761619	3762747	loss	-1			
3923088	3946810	loss	-1			
3983812	4004661	loss	-1			
3502025	3543770	loss	-1			
3476187	3501915	loss	-1			
6192758	6202778	loss	-1			
6292826	6323269	loss	-1			
6118251	6146935	loss	-1			
9697731	9750558	loss	-1			
9548056	9596309	loss	-1			
8068639	8166188	loss	-1			
8618067	8793956	loss	-1			
9196463	9378838	loss	-1			
6323353	6381418	loss	-1			
8462790	8534849	loss	-1			
6614532	6917870	loss	-1			
8068639	8166188	gain		1		
9843111	9844544	gain		1		
10801644	10826570	gain		1		

15924267	15941024 gain
16050521	16090645 gain
17780628	18045881 gain
25175732	25208968 loss
25536479	25727150 loss
28740294	28894649 gain
49597377	49610742 gain
52609145	52625035 gain
48552817	48574792 gain
53274227	53283104 gain
53043660	53172767 gain
49456403	49463981 gain
49392716	49421023 gain
49548866	49562355 gain
49502289	49519430 gain
51229549	51242800 gain
49072333	49353133 gain
48206202	48292461 gain
53727053	53776143 gain
53644342	53719881 gain
49678097	49857953 gain
48292673	48444825 gain
49525468	49533955 gain
48676385	48686364 gain
53002155	53013726 gain
53024795	53034931 gain
52983500	52984439 gain
52923704	52924664 gain
52868429	52869383 gain
52838270	52839230 gain
49691618	49694855 gain
49644931	49669758 gain
53453284	53635350 gain
52452120	52501131 gain
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48443827	48486294 gain
48598064	48676003 gain
53838916	53874890 gain
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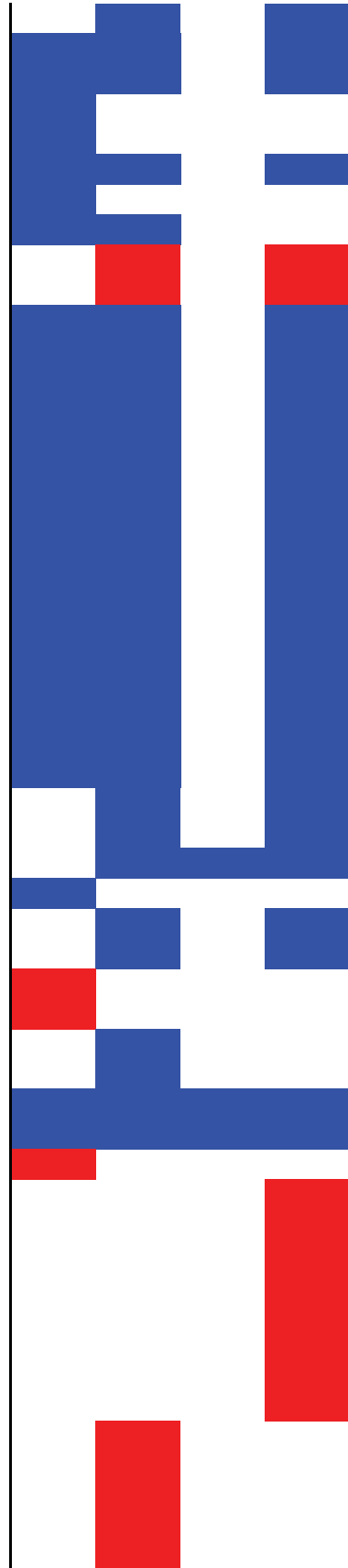
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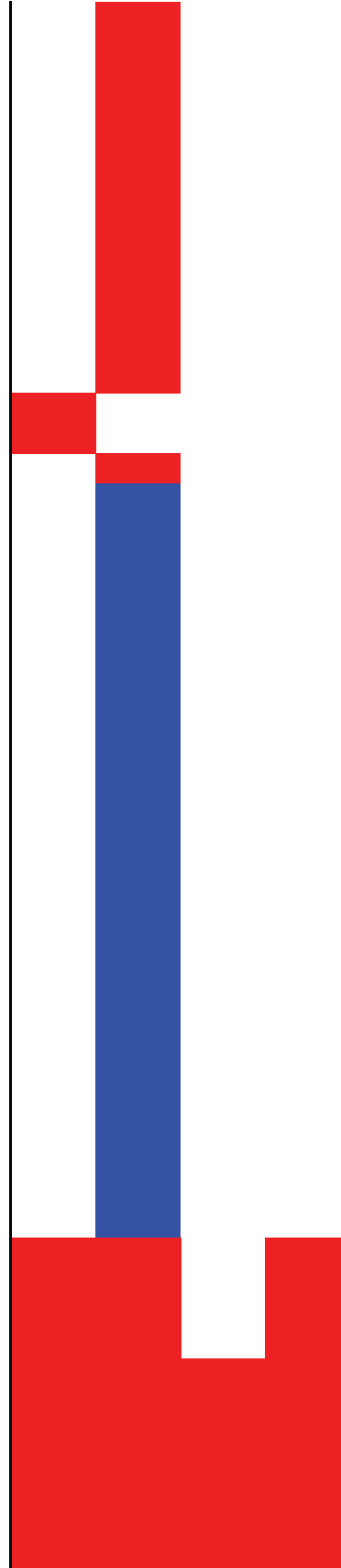
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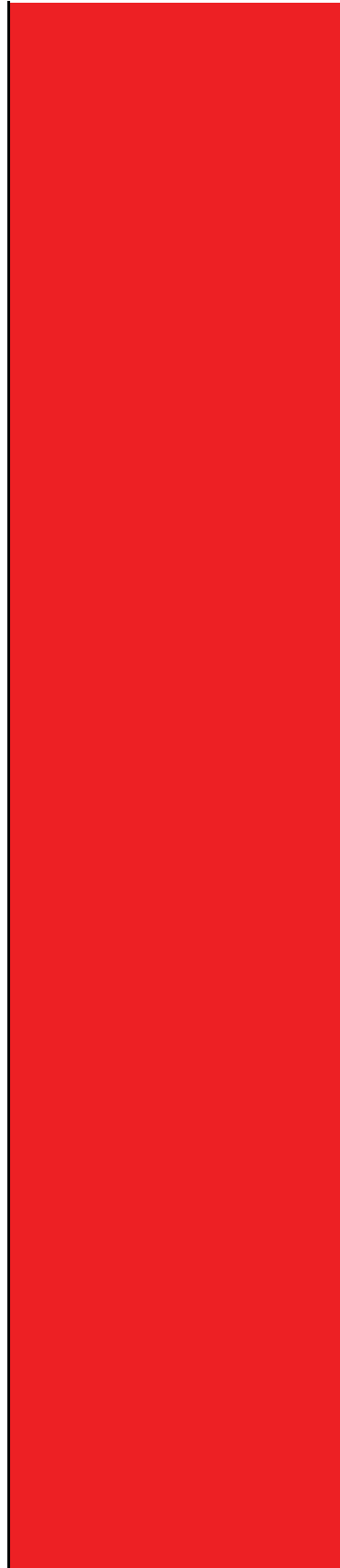
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144008093	144028675	gain
144043673	144053659	gain
144483039	144517548	loss
144802270	144836773	loss
144858878	144905050	loss
144565039	144780495	loss
147315003	147321423	loss
147472545	147504807	loss
147451169	147462173	loss
147380592	147412876	loss
147526908	147533704	loss
147519824	147526034	loss
147514598	147519805	loss
147247703	147278928	loss
147415297	147433671	loss
147374854	147376176	loss
147359897	147361314	loss
147283861	147310885	loss
147869388	147874571	loss
147822690	147931794	loss
153652578	153674004	loss
154243693	154269639	loss
65361313	65433140	loss
65522469	65559381	loss
65361313	65433140	gain
65522469	65559381	gain
105242186	105289087	loss
105364075	105411736	loss
105242186	105289087	loss
105364075	105411736	loss
48454337	48484831	gain
148180951	148392874	gain
148719205	148779989	gain
149257935	149284185	gain
149090118	149099692	gain
149106098	149137234	gain
149357407	149507379	gain
148936590	149050202	gain
148869580	148894954	gain
97014657	97052139	gain
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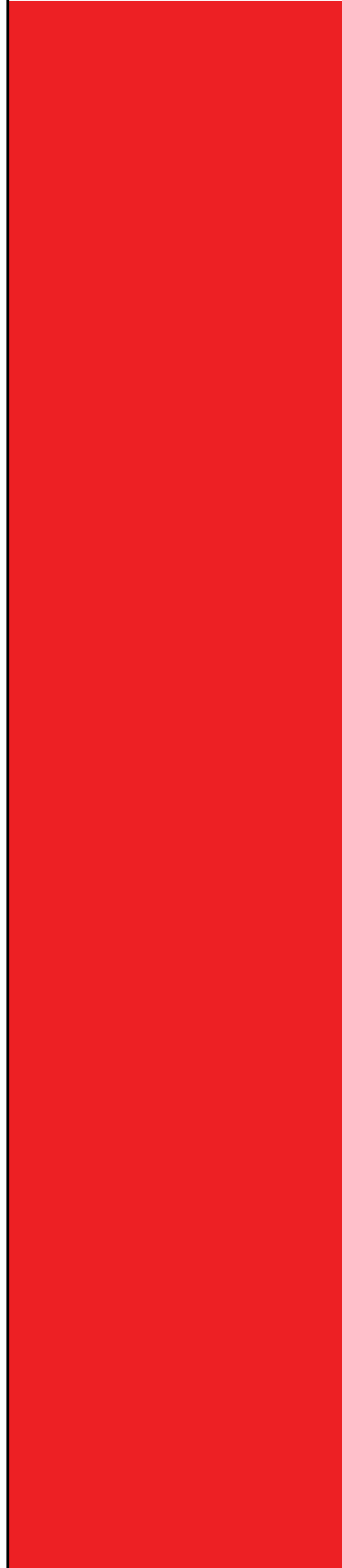
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97103163	97129486 gain
96552875	96558620 gain
96781327	97002869 gain
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97497208	97558949 gain
97599221	97605718 gain
97617338	97624505 gain
96288230	96487297 gain
97067198	97089695 gain
75338497	75876455 gain
77397072	77417405 gain
83223842	83263358 gain
83288332	83404378 gain
123012765	123105283 gain
15714636	16182675 loss
18096710	18118444 loss
34296315	34843892 loss
38826203	38827124 loss
38854198	38855134 loss
59814737	59989027 loss
60435043	60535341 loss
64033599	64101412 loss
64658817	64767474 loss
72286335	72306383 loss
80161136	80359045 loss
81524998	81526159 loss
88618125	88626688 loss
88734001	88743028 loss
92437060	92503265 loss
94418282	94438500 loss
94570310	95130871 loss
101824457	102257023 loss
103385265	103664167 loss
109381088	109398368 loss
109455115	109470776 loss
116481863	117161601 loss
119057160	119066211 loss
119078573	119099511 loss
122943858	122976676 loss
21312950	21342181 gain
21698477	21719708 gain
21312950	21342181 gain
21698477	21719708 gain
74969558	74980067 gain
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79635688	79637864 gain
77356164	77358856 gain
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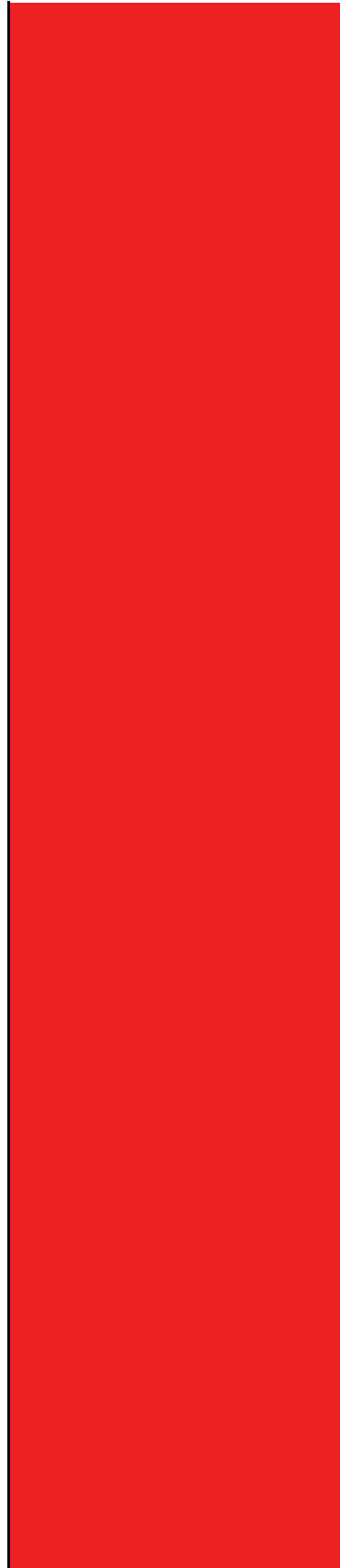
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38838613	38853701 gain
76025016	76032945 gain
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67893703	68004623 gain
71442632	71443438 gain
115855176	115858291 gain
86520790	86693344 gain
76949399	76978558 gain
86148271	86152699 gain
77441394	77448183 gain
39640187	39646729 gain
25247748	25256078 gain
61570403	61573761 gain
80855808	80857824 gain
61803354	61812614 gain
79780999	79783293 gain
69667414	69682459 gain
80657435	80671115 gain
28692093	28706112 gain
62021217	62041205 gain
80783847	80788996 gain
78527118	78560345 gain
75911825	75923963 gain
80318019	80331453 gain
59809598	59835432 gain
97155692	97157560 gain
80826768	80828565 gain
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85558598	85576330 gain
61911907	61914101 gain
28641768	28643313 gain
87554142	87609686 gain
94136237	94151358 gain
57692726	57694761 gain
115548719	115550973 gain
28863801	28919434 gain
40403087	40530889 gain
42894509	42896368 gain
79283765	79293197 gain
110037705	110053017 gain
28931448	28950585 gain
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33707232	33709101 gain
39612565	39619044 gain
39721378	39745074 gain
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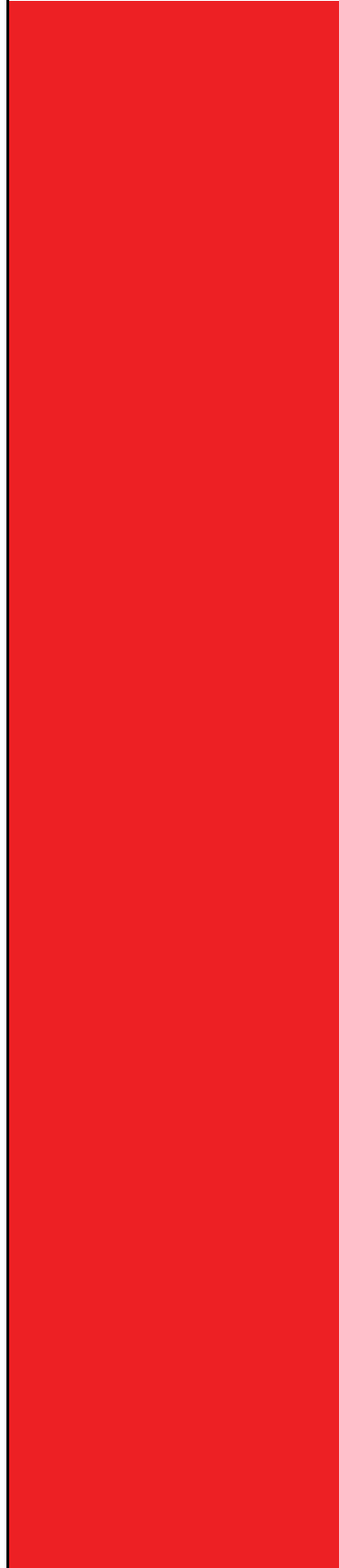
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79803460	79811191 gain
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74779687	74797533 gain
81022304	81029109 gain
77734307	77814445 gain
61178010	61201400 gain
43670112	43724652 gain
77492775	77506325 gain
24888895	25018969 gain
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40007263	40021994 gain
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92986082	93002778 gain
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58684669	58689181 gain
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88411738	88720535 gain
80169722	80204956 gain
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80730916	80735992 gain
79764564	79781001 gain
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26492317	26638454 gain
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67558340	67741474 gain
88194158	88205947 gain
41634796	41738188 gain
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50312474	50571008 gain
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85391235	85392392 gain
53316766	53329021 gain
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43988163	44084097 gain
62562903	62563353 gain
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79982329	80001869 gain
112362483	112366082 gain
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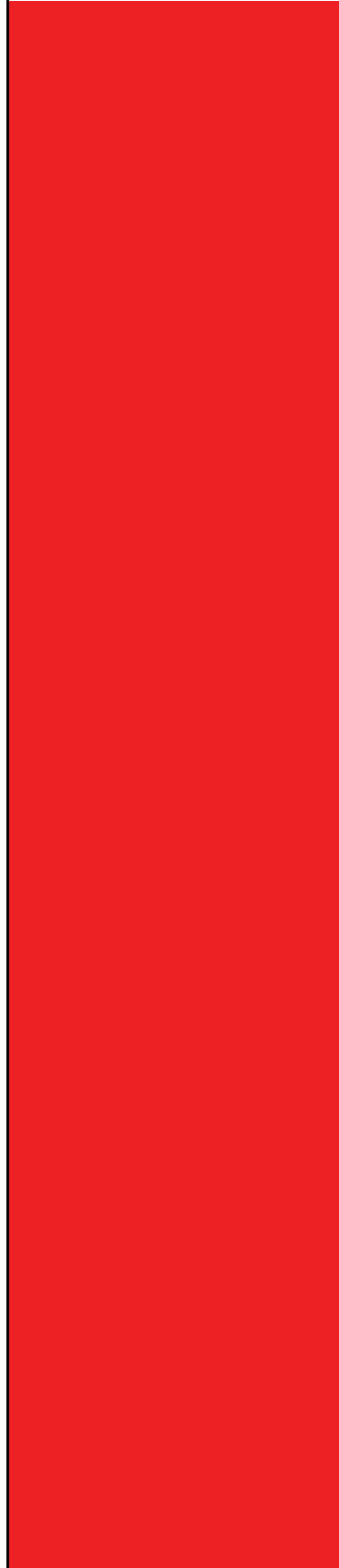
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74523640	74647668 gain
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33757402	33829621 gain
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85422435	85474605 gain
79167102	79174724 gain
85061155	85123037 gain
80105361	80119816 gain
96079634	96085445 gain
45055567	45089514 gain
79372797	79379675 gain
79069598	79076763 gain
70631484	70644788 gain
75108854	75227102 gain
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59165382	59326870 gain
62206675	62255116 gain
78209668	78215812 gain
58911180	59079440 gain
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41258654	41307559 gain
93003376	93047071 gain
94151534	94253081 gain
87663841	87708903 gain
105278534	105284566 gain
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41239305	41250848 gain
43298974	43304071 gain
79144939	79151143 gain
40552698	40602949 gain
59766021	60159238 gain
68799382	68815660 gain
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40069113	40203624 gain
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29915814	29920346 gain
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41438651	41529436 gain
79353597	79355401 gain
75398317	75400479 gain
87935557	87966715 gain
82448241	82658636 gain
59644275	59682008 gain
79630585	79634398 gain
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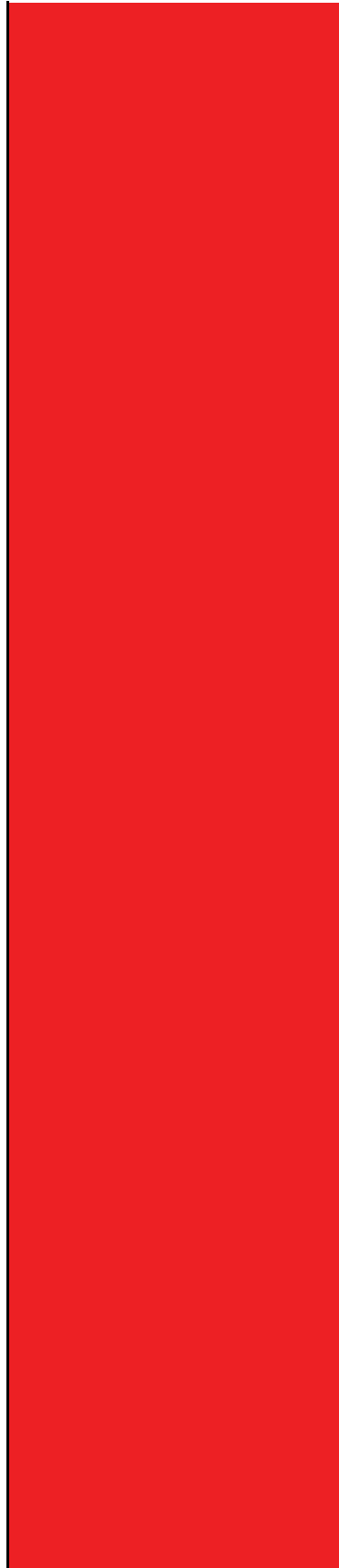
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80092400	80103516 gain
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77888414	77890367 gain
62892845	64466415 gain
77624811	77632513 gain
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85401381	85420538 gain
55734099	55948495 gain
80645751	80655942 gain
79727735	79751158 gain
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96942133	96980796 gain
59412422	59414518 gain
40349816	40369737 gain
75233977	75236119 gain
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75356142	75358686 gain
75725793	75808007 gain
80482334	80488122 gain
62409776	62436936 gain
59342338	59360764 gain
62845190	62871588 gain
77512586	77526360 gain
80847172	80851097 gain
79593178	79602112 gain
80217950	80257092 gain
87785548	87819820 gain
33871198	33927357 gain
98725864	98730123 gain
57693398	57695423 gain
39341216	39451813 gain
79314121	79317716 gain
110182520	110224440 gain
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95403296	95508152 gain
80639375	80645254 gain
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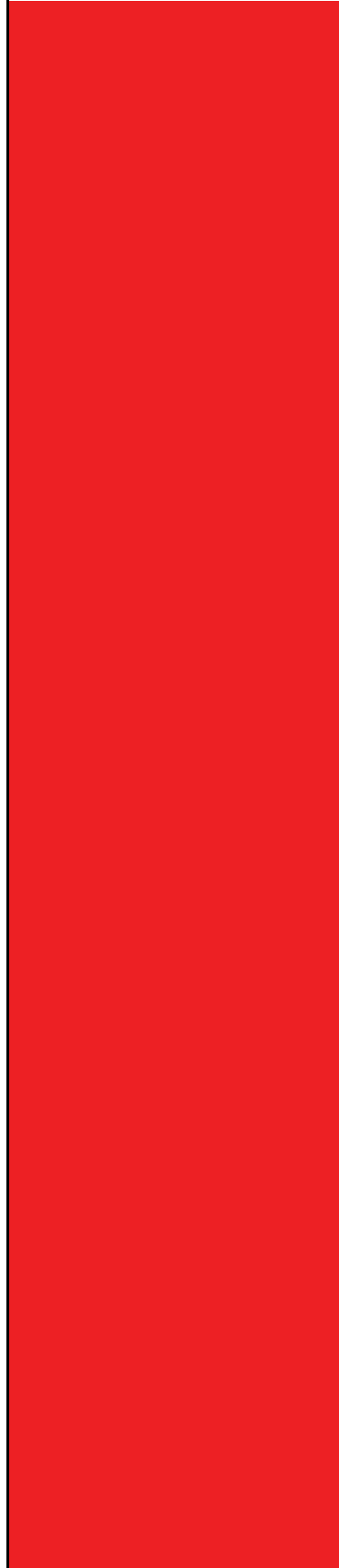
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43313232	43350719 gain
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80046393	80053086 gain
69903415	70021480 gain
51305255	51310266 gain
53352951	53470715 gain
33758589	33764119 gain
33811157	33816325 gain
33845872	33847778 gain
85484673	85511073 gain
93498745	93608084 gain
79217863	79219706 gain
84559763	84565240 gain
40907977	41023047 gain
41905591	41996548 gain
34203205	34331036 gain
79240018	79245375 gain
76038392	76053083 gain
39089604	39285180 gain
80829623	80841115 gain
39666719	39679959 gain
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98570768	98575881 gain
79720895	79723713 gain
88871567	88906712 gain
57718273	57768340 gain
75036337	75048927 gain
75052125	75079713 gain
80800506	80806011 gain
56097105	56110225 gain
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97144047	97429724 gain
81274930	81289235 gain
76720517	76721968 gain
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77277426	77278149 gain
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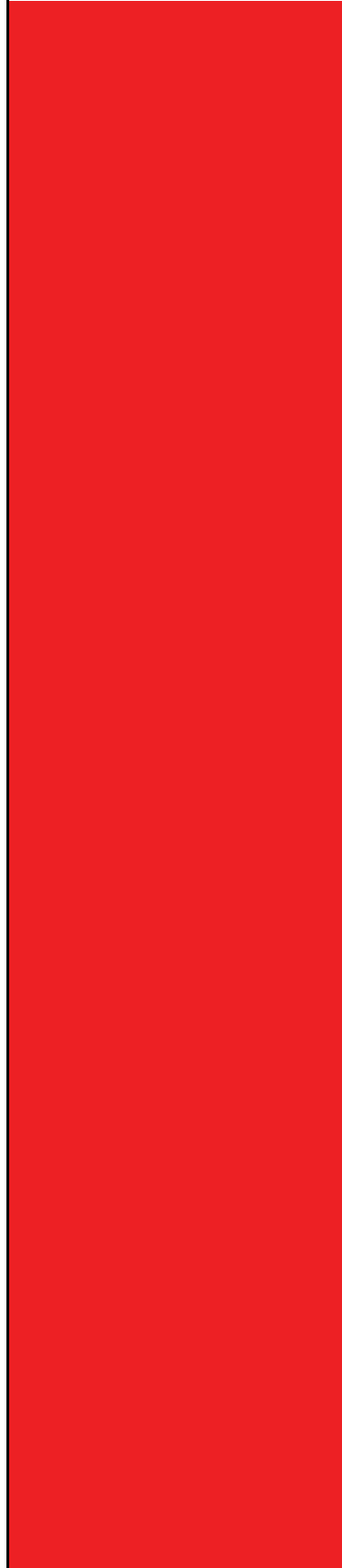
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88192285	88193846 gain
57697595	57699408 gain
75417258	75472334 gain
108136099	108137216 gain
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61533769	61535319 gain
74814799	74815706 gain
84776313	84777039 gain
93127988	93128599 gain
26393251	26394457 gain
52997886	53099657 gain
25798060	25799253 gain
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74429975	74478622 gain
80411368	80464110 gain
87842156	87910074 gain
52056829	52101930 gain
51200484	51206025 gain
40790298	40791390 gain
51334628	51351264 gain
79516781	79519184 gain
48819268	49508560 gain
79433468	79439935 gain
75246557	75261329 gain
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75236866	75244159 gain
75277688	75285288 gain
39969008	39977471 gain
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61201394	61246612 gain
45297634	45432151 gain
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79179378	79198853 gain
36694349	36721694 gain
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62706544	62780629 gain
30552164	30562589 gain
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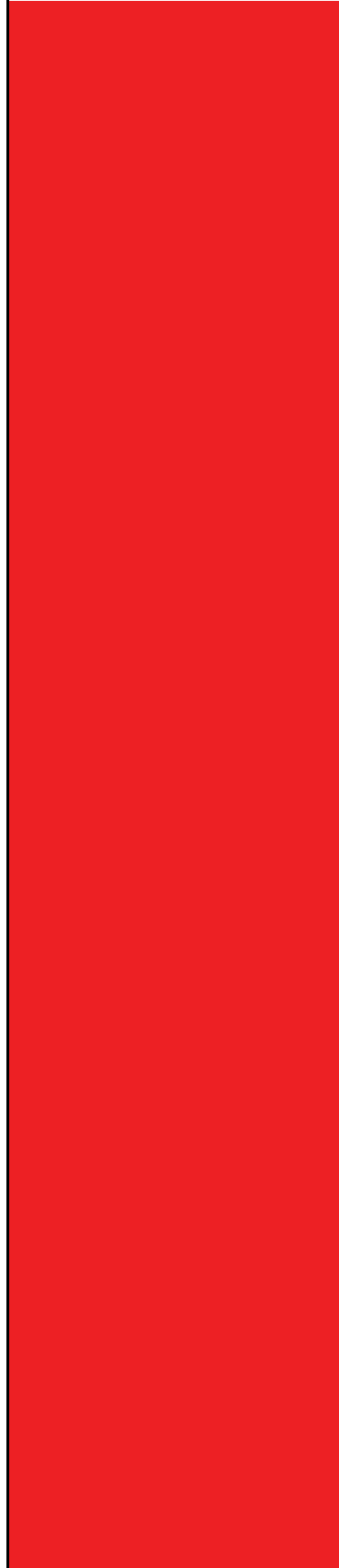
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78037244	78047247 gain
70810540	70848633 gain
80660914	80664782 gain
76993092	77028419 gain
80165437	80168127 gain
66590005	66719074 gain
80271240	80276243 gain
111708178	111903360 gain
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77261131	77261878 gain
93136962	93146067 gain
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26701091	27336748 gain
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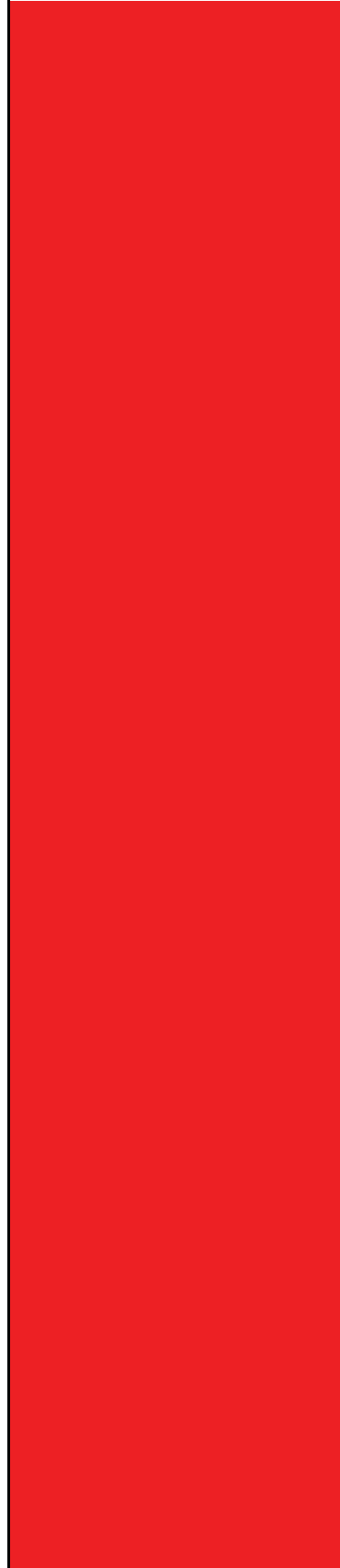
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91534830	91534930 gain
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80291541	80291615 gain
80734341	80734432 gain
95021864	95021955 gain
101235325	101235406 gain
93426512	93426608 gain
75670070	75670154 gain
80128073	80134721 gain
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80147997	80164565 gain
94943439	94964561 gain
80727466	80729671 gain
55826722	55836686 gain
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79689342	79707889 gain
87981027	88067897 gain
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62578542	62666700 gain
110917672	110935206 gain
109120494	109437275 gain
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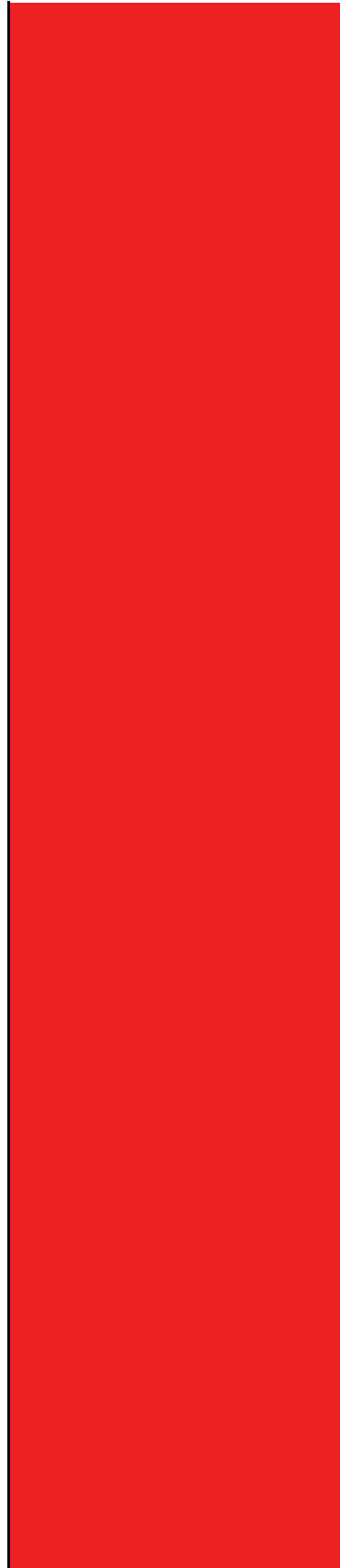
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61058231	61089133 gain
88916978	88996367 gain
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42281776	42303394 gain
66729436	66748029 gain
34023417	34138334 gain
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78497467	78498547 gain
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42398721	42422268 gain
107199365	107349190 gain
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86984539	87046882 gain
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107769244	107851447 gain
62524364	62540284 gain
62487259	62521560 gain
60552090	60557077 gain
76224598	76424692 gain
73284614	73970345 gain
75813998	75905657 gain
79784027	79792218 gain
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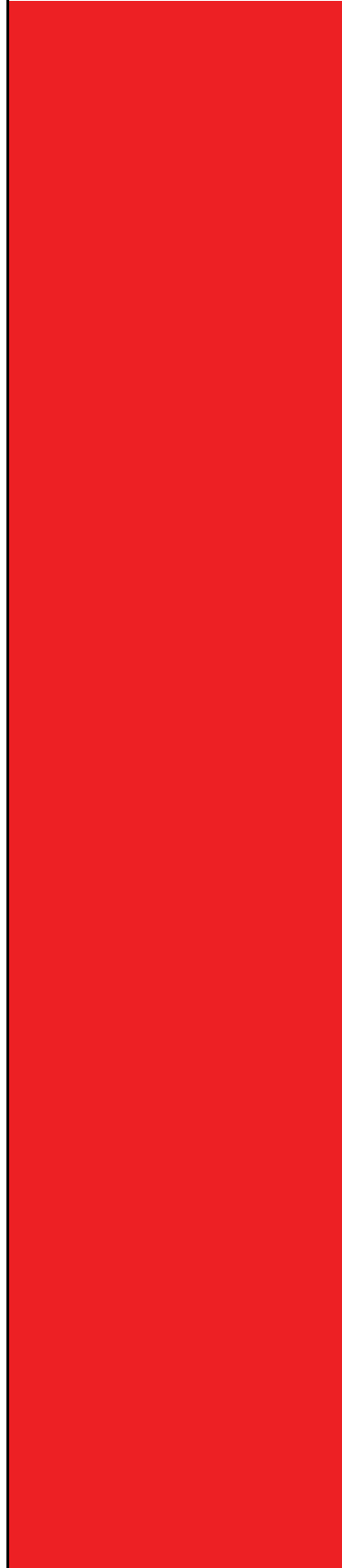
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79819203	79828234 gain
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76722044	76732331 gain
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84085181	84189923 gain
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105907394	106369573 gain
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85354712	85379690 gain
44787019	44878801 gain
60760583	60767011 gain
75669966	75700610 gain
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59740375	59765348 gain
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27794625	28317203 gain
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77633654	77647894 gain
43593995	43621542 gain
114726917	114752647 gain
74499833	74516845 gain
57909599	57956902 gain
101974855	102009194 gain
66471936	66559736 gain
79792889	79799186 gain
39451965	39595011 gain
80003670	80024305 gain
38540346	38541585 gain
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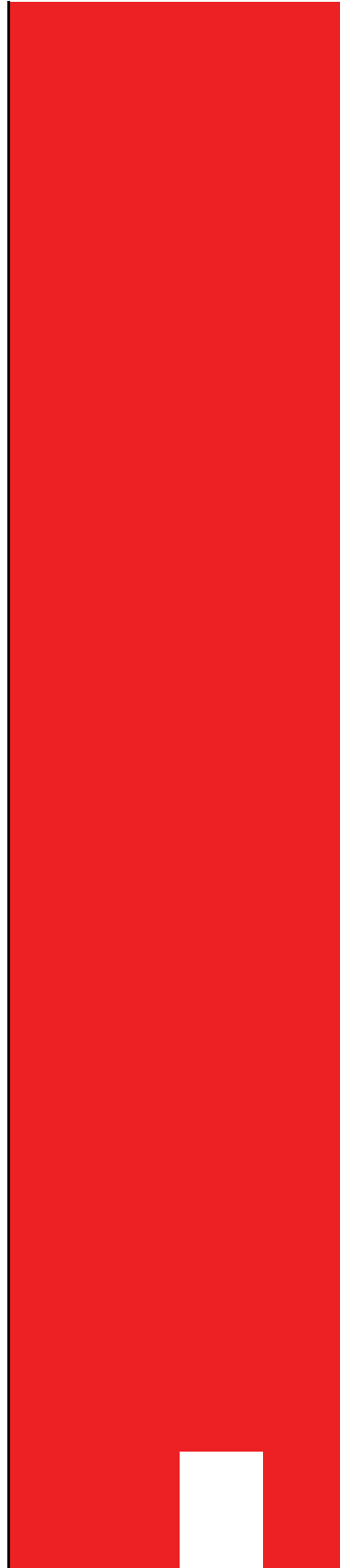
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77863106	77875788 gain
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74420221	74495331 gain
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75716580	75724064 gain
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25949512	25980610 gain
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80065626	80078528 gain
42580317	42680588 gain
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42481301	42552320 gain
58626859	58684595 gain
57235581	57252335 gain
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42221859	42255175 gain
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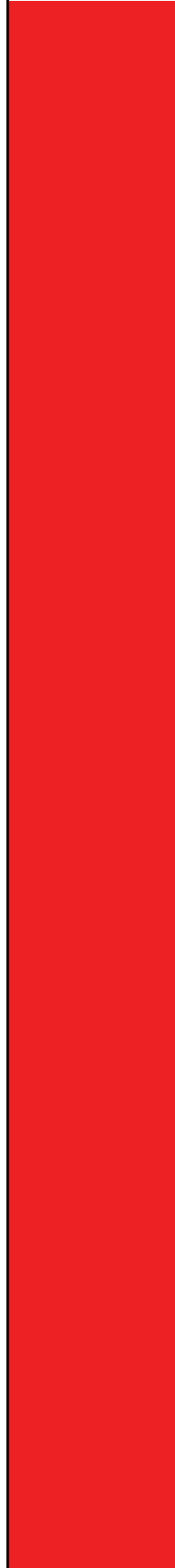
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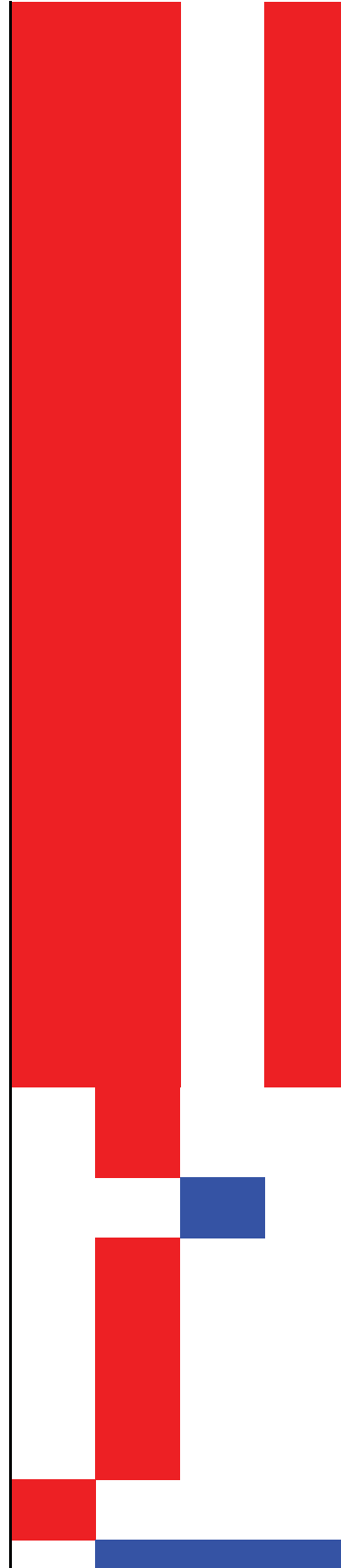
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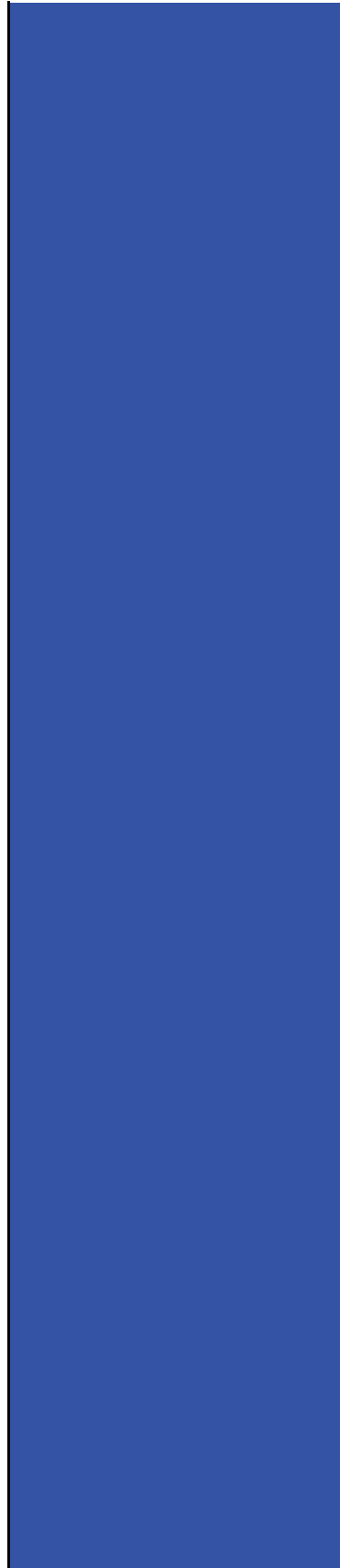
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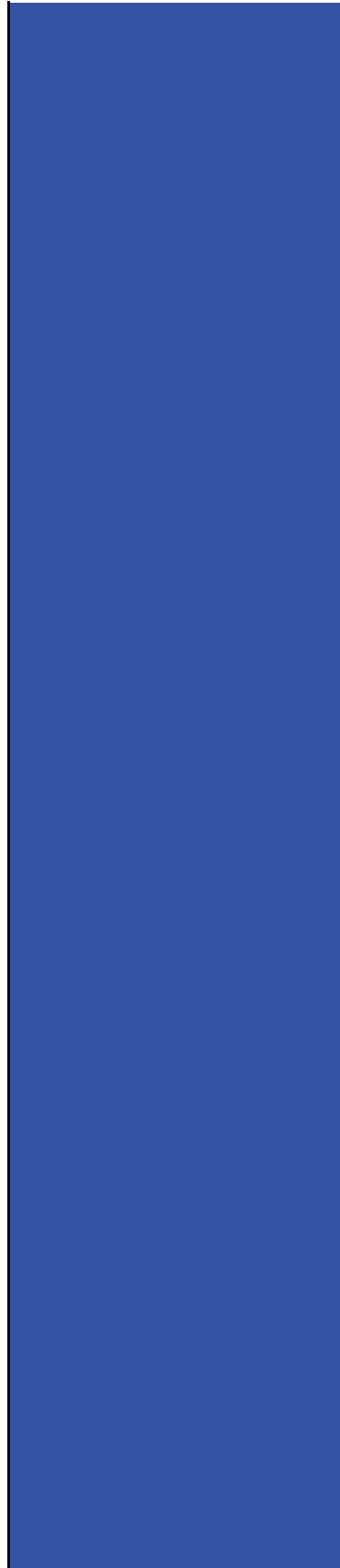
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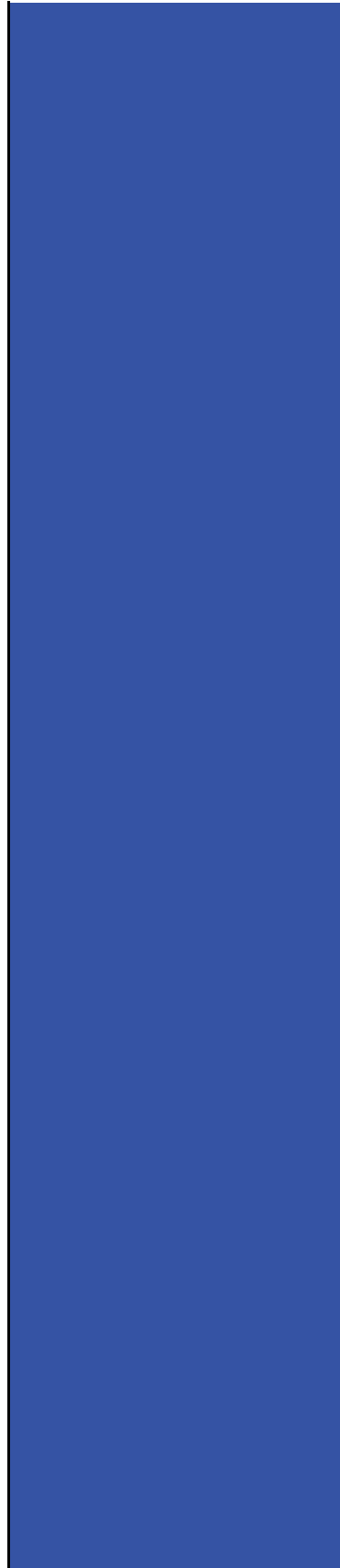
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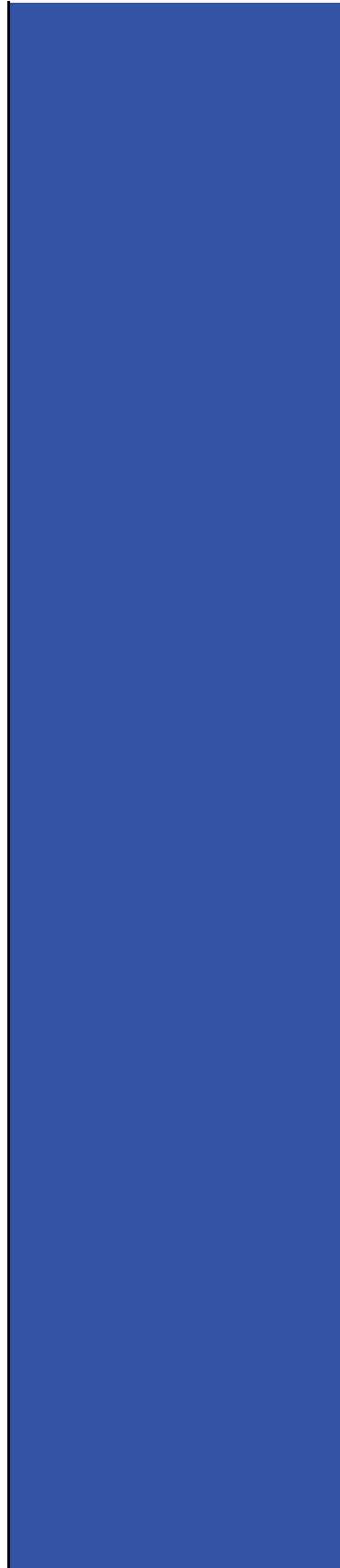
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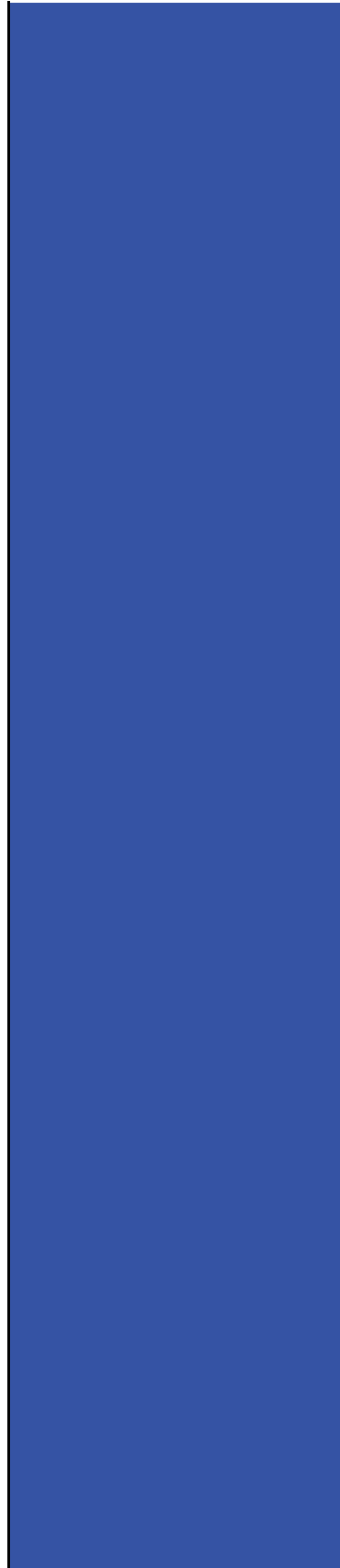
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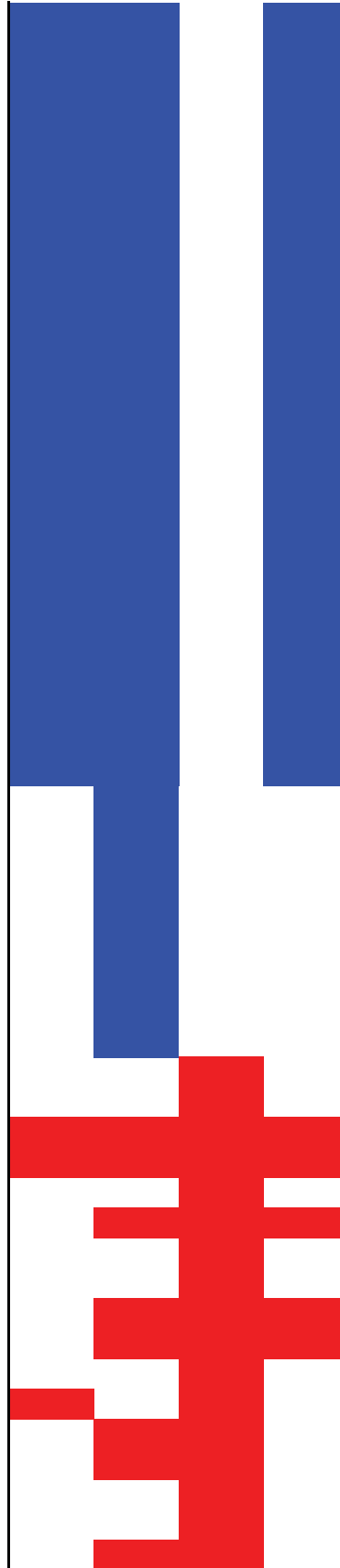
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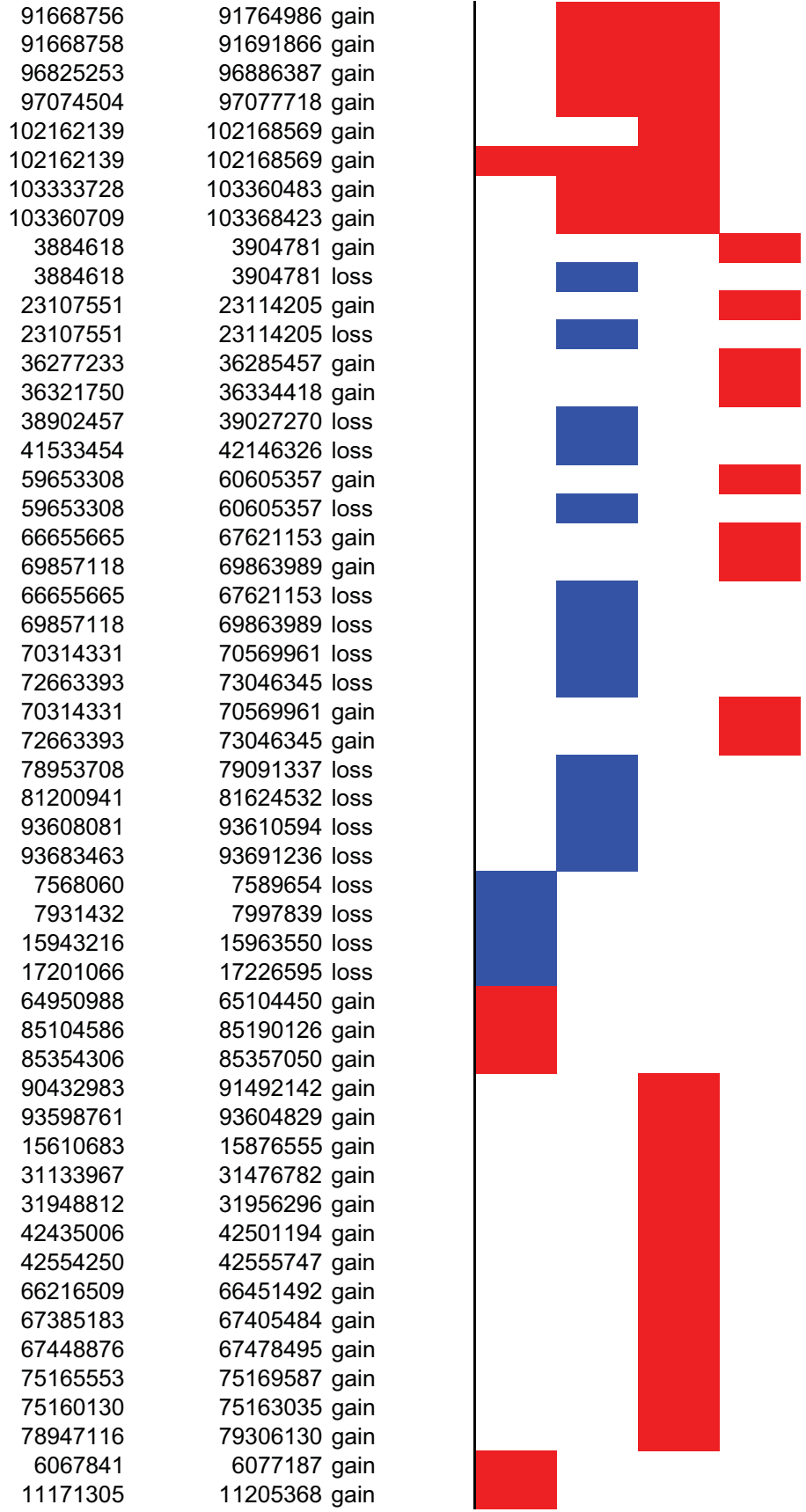


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Human aCGH data from Taylor 2010 (MSKCC CancerGenomics portal)

Human Ortholog	% human PCa with gain	% human PCa with loss
TMEM131	1.03%	3.61%
CNGA3	1.03%	3.61%
TMEM182	1.03%	4.12%
C2orf67	2.06%	5.67%
OR4C11	0.00%	0.00%
ASIP	2.58%	4.12%
MECOM		
ARPM1	7.22%	0.52%
SOX2OT		
ATP11B	4.12%	3.61%
FAT4	2.06%	8.76%
INTU	2.06%	9.28%
CELF3		
MRPL9	5.15%	1.55%
RIIAD1		
SNX27	5.67%	1.55%
LRIG2	1.03%	6.19%
CLCA4	0.52%	10.31%
CLCA4	0.52%	10.31%
CHCHD7	13.40%	3.61%
FAM110B	13.40%	3.61%
IMPAD1	13.40%	3.09%
LYN	14.43%	3.61%
MOS	13.40%	3.61%
PENK	13.40%	3.61%
PLAG1	14.43%	3.61%
RPS20	13.40%	3.61%
SDR16C5	13.40%	3.61%
SDR16C6P		
TGS1	13.40%	3.61%
TMEM68	13.40%	3.61%
CYP7A1	13.40%	3.09%
SDCBP	13.40%	3.09%
UBXN2B	13.40%	3.09%
ASPH	13.92%	4.12%
CA8	13.92%	3.09%
CHD7	13.92%	3.09%
CLVS1		
NSMAF	12.37%	3.09%
RAB2A	13.92%	3.09%
TOX	12.89%	3.09%
CA8	13.92%	3.09%
C8orf37	15.46%	2.58%

OSGIN2	13.92%	2.58%
RIPK2	13.92%	2.58%
MMP16	14.43%	2.58%
KIAA0776	1.03%	28.35%
FUT9	1.03%	28.35%
EPHA7	0.52%	30.93%
C9orf125	6.19%	2.06%
C9orf30	6.19%	1.55%
ABCA1	5.67%	1.55%
ALDOB	6.19%	2.06%
BAAT	6.19%	2.06%
CYLC2	6.19%	1.03%
LPPR1		
ERP44	6.70%	1.55%
FKTN	5.67%	1.55%
FSD1L	5.67%	1.55%
GRIN3A	6.70%	2.06%
INVS	6.70%	1.55%
MRPL50	6.19%	2.06%
MURC	6.19%	2.06%
NIPSNAP3B	5.67%	1.55%
NIPSNAP3A	5.67%	1.55%
OR13D1	5.67%	1.55%
OR13C8	5.67%	1.55%
OR13C3	5.67%	1.55%
OR13F1	5.67%	1.55%
PPP3R2	6.19%	2.06%
RNF20	6.19%	2.06%
SLC44A1	5.67%	1.55%
SMC2	6.19%	1.03%
TAL2	5.67%	1.55%
TEX10	6.19%	1.55%
TMEFF1	6.19%	2.06%
TMEM38B	5.67%	1.55%
ZNF189	6.19%	2.06%
DMRTA1	2.58%	6.19%
DOCK7	0.52%	7.22%
ATG4C	0.52%	7.22%
CACHD1	1.03%	7.22%
AGBL4	1.03%	6.19%
BEND5	1.03%	6.19%

LOC388630

C1orf122	1.03%	4.64%
C1orf190	0.52%	6.70%
C1orf210	1.03%	5.15%
KIAA0494	0.52%	7.22%
LOC100129924		
C1orf223		
C1orf109	0.52%	4.64%
C1orf50	1.55%	5.67%
AKIRIN1	1.03%	4.64%
AKR1A1	1.55%	6.19%
ARTN	1.03%	5.67%
ATP6V0B	1.03%	5.67%
ATPAF1	0.52%	7.22%
B4GALT2	1.03%	5.67%
BMP8A	1.03%	4.64%
BMP8B	1.03%	4.64%
BTBD19		
CAP1	1.03%	4.64%
CCDC163P		
CCDC17	1.55%	6.19%
CCDC23	1.55%	5.67%
CCDC24	1.03%	5.67%
CCDC30		
CDC20	1.03%	5.15%
CDCA8	0.52%	4.64%
CITED4	1.03%	4.64%
CLDN19	1.55%	5.67%
CMPK1	2.58%	7.73%
COL9A2	1.03%	4.64%
CTPS	1.03%	4.64%
CYP4A11	0.52%	7.22%
CYP4A22	0.52%	7.22%
CYP4B1	0.52%	7.22%
CYP4X1	0.52%	7.22%
KIAA0754	1.03%	4.64%
DEM1	1.03%	4.64%
DMAP1	1.03%	5.67%
DMBX1	0.52%	6.70%
DNALI1	0.52%	5.15%

DPH2	1.03%	5.67%
EBNA1BP2	1.03%	5.15%
EDN2	1.03%	4.64%
EIF2B3	1.03%	5.67%
ELOVL1	1.03%	5.15%
EPHA10	1.03%	4.64%
ERI3	1.03%	6.19%
ERMAP	1.55%	5.67%
FAAH	0.52%	6.70%
FHL3	1.03%	4.64%
FOXJ3	2.06%	5.15%
FOXO6		
C1orf228		
GNL2	0.52%	4.64%
GPBP1L1	1.55%	6.70%
GUCA2A	2.06%	5.15%
GUCA2B	2.06%	5.15%
HECTD3	1.03%	5.67%
HEYL	1.03%	4.64%
HIVEP3	1.55%	5.15%
HPCAL4	1.03%	4.64%
HPDL	1.03%	5.67%
HYI	1.03%	5.15%
INPP5B	1.03%	4.64%
IPO13	1.03%	5.67%
IPP	1.55%	6.70%
KCNQ4	1.03%	4.64%
KDM4A	1.03%	5.15%
KIF2C	1.03%	5.67%
KLF17	1.03%	5.67%
KNCN	0.52%	7.22%
LEPRE1	1.55%	5.67%
LRRC41	0.52%	6.70%
MACF1	1.03%	4.64%
MANEAL	1.03%	4.64%
MAST2	1.55%	6.70%
MEAF6		
MED8	1.03%	5.15%
MFSD2A		
MKNK1	0.52%	7.22%
MMACHC	1.55%	6.19%
MOBK2C	0.52%	7.22%

MPL	1.03%	5.15%
MTF1	1.03%	4.64%
MUTYH	1.03%	5.67%
MYCBP	1.03%	4.64%
MYCL1	1.03%	4.64%
NASP	1.55%	6.19%
NDUFS5	1.03%	4.64%
NFYC	1.03%	4.64%
NSUN4	0.52%	6.70%
NT5C1A	1.03%	4.64%

OXCT2	1.03%	4.64%
PABPC4	1.03%	4.64%
PDZK1IP1	0.52%	7.22%
PIK3R3	1.55%	6.70%
PLK3	1.03%	5.67%
POMGNT1	1.03%	6.70%
POU3F1	1.03%	4.64%
PPCS	1.55%	5.15%
PPIE	1.03%	4.64%
PPIH	1.55%	5.67%
PPT1	1.03%	4.64%
PRDX1	1.55%	6.19%
PTCH2	1.03%	5.67%
PTPRF	1.03%	5.15%
RAD54L	0.52%	6.70%
RHBDL2	1.03%	4.64%
RIMKLA	1.55%	5.15%
RIMS3	1.03%	4.64%
RLF	1.03%	4.64%
RNF220	1.03%	6.19%
RPS8	1.03%	5.67%
RRAGC	1.03%	4.64%
RSPO1	0.52%	4.64%
SCMH1	1.03%	4.64%
SF3A3	1.03%	4.64%
SLC2A1	1.55%	5.67%
SLC6A9	1.03%	5.67%
SLFN1	1.03%	4.64%

SMAP2	1.03%	4.64%
SNIP1	0.52%	5.15%
SNORD38A		
SNORD55		
ST3GAL3	1.03%	5.67%
STIL	2.06%	7.73%
KIAA0467	1.03%	5.15%
TAL1	0.52%	7.22%
TCTEX1D4	1.03%	5.67%
TESK2	1.55%	5.67%
TIE1	1.03%	5.15%
TMCO2	1.03%	4.64%
TMEM125	1.03%	5.15%
TMEM53	1.03%	5.67%
TMEM69	1.55%	6.70%
TOE1	1.03%	5.67%
TRIT1	1.03%	4.64%
TSPAN1	1.03%	6.70%
UQCRHL		
UROD	1.03%	5.67%
UTP11L	1.03%	4.64%
WDR65	1.03%	5.15%
YBX1	1.55%	5.67%
YRDC	1.03%	4.64%
ZC3H12A	0.52%	5.15%
ZNF642	1.03%	4.64%
ZNF691	1.55%	5.67%
ZMPSTE24	1.03%	4.64%
ZMYND12	1.55%	5.15%
ZSWIM5	1.03%	5.67%
CCDC30		
INPP5B	1.03%	4.64%
MTF1	1.03%	4.64%
YARS	1.03%	5.15%
YARS	1.03%	5.15%
IL28RA	0.52%	5.67%
IL28RA	0.52%	5.67%
TCEB3	0.52%	5.67%
RPL11	0.52%	5.67%
LOC729059		
ASAP3	0.52%	6.19%
E2F2	0.52%	5.67%
EPHB2	0.52%	5.67%
HNRNPR	0.52%	6.19%
HTR1D	0.52%	6.19%
ID3	0.52%	5.67%
KDM1A		
LUZP1	0.52%	6.19%
RPL11	0.52%	5.67%
TCEA3	0.52%	6.19%
ZNF436	0.52%	6.19%
HSPG2	0.52%	5.67%

PLA2G2D	0.52%	6.19%
PADI1	0.52%	8.25%
PADI3	0.52%	8.25%
PADI1	0.52%	8.25%
PADI3	0.52%	8.25%
NECAP2	0.52%	6.70%
NECAP2	0.52%	6.70%
EPHA2	1.03%	5.67%
C1orf158	0.52%	6.19%
AADA3L3	0.52%	6.19%
DHRS3	0.52%	6.19%
TNFRSF1B	0.52%	6.19%
TNFRSF8	0.52%	6.19%
VPS13D	0.52%	6.19%
KIAA2013	0.52%	6.19%
C1orf187	0.52%	6.70%
AGTRAP	0.52%	6.70%
CLCN6	0.52%	6.19%
FBXO44	0.52%	6.70%
FBXO6	0.52%	6.70%
MAD2L2	0.52%	6.70%
MFN2	0.52%	6.19%
MTHFR	0.52%	6.19%
NPPA	0.52%	6.19%
NPPB	0.52%	6.19%
PLOD1	0.52%	6.19%
ANGPTL7	0.52%	6.70%
MTOR		
ARHGEF16	0.52%	4.12%
MMEL1	1.03%	4.12%
FAM114A1	0.00%	8.25%
KLHL5	0.52%	9.28%
FAM114A1	0.00%	8.25%
KLHL5	0.52%	9.28%
ZNF862	9.28%	2.58%
TMTC1	2.58%	6.70%
IPO8	3.61%	5.67%
C12orf35	4.12%	5.15%
METTTL20		
AMN1	4.12%	5.15%
BICD1	2.58%	7.22%
DENND5B	4.12%	5.15%
FAM60A	4.12%	5.15%
CCDC81	2.58%	1.03%
CCDC83	2.58%	1.03%
CCDC89	2.58%	1.03%
CREBZF	2.58%	1.03%
DLG2	2.58%	1.55%

EED	2.58%	1.03%
FZD4	2.58%	1.03%
ME3	2.58%	1.03%
PICALM	2.58%	1.03%
PRSS23	2.58%	1.03%
SYTL2	2.58%	1.03%
TMEM126A	2.58%	1.03%
TMEM126B	2.58%	1.03%
TMEM135	2.58%	1.03%
C11orf73	2.58%	1.03%
LARGE	0.00%	9.28%
ISX	0.00%	8.76%
SMARCA5	1.55%	3.61%
GAB1	2.06%	3.61%
KIAA0182	0.52%	30.41%
FAT3	2.58%	1.55%
CHORDC1	3.09%	1.03%
KIRREL3	1.03%	3.09%
THSD4	1.55%	6.70%
LRRC49	1.55%	5.67%
MAP2K1	1.55%	6.70%
DENND4A	1.55%	6.70%
MNS1	1.03%	8.25%
IMPG1	0.52%	15.98%
HTR1B	0.52%	17.53%
PLOD2	5.15%	0.00%
C3orf58	5.15%	0.00%
SLC9A9	5.67%	0.52%
EPHB1	5.15%	0.00%
TMEM108	5.15%	0.00%
RBMS3	3.09%	3.61%
SLC22A14	4.12%	2.06%
TGM4	3.09%	2.58%
SGK1	1.55%	5.67%
SGK1	1.55%	5.67%
C22orf13	0.52%	9.79%
C12orf73		
C12orf75		
C19orf24	0.52%	6.70%
C12orf50	2.06%	1.55%
C6orf203	0.52%	27.84%

C6orf225	1.03%	24.23%
C21orf56	2.58%	5.15%
C10orf107	2.58%	5.15%
C12orf42	2.58%	1.55%
C21orf70	2.58%	5.67%
C21orf2	2.58%	5.67%
KIAA1919	1.03%	24.23%
LOC285733		
C10orf35	3.61%	4.12%
C19orf77		
C19orf25	1.03%	6.70%
M1		
C6orf58	1.55%	10.82%
KIAA1279	4.64%	4.64%
C19orf29	0.00%	4.64%
C21orf58	2.58%	5.15%
SPPL2B	0.52%	6.19%
C10orf54	3.09%	3.61%
C12orf12	2.06%	1.55%
C19orf71		
C12orf29	2.06%	1.55%
C12orf48	2.58%	1.55%
LOC144486		
KIAA0408	1.55%	10.82%
C6orf186		
C19orf21	0.52%	5.67%
KIAA1033	2.06%	1.03%
C12orf23	2.58%	2.06%
C22orf36	0.52%	9.79%
ZNF878		
ABCA7	0.52%	5.67%
ACSS3	2.06%	2.06%

ACTR6	3.09%	1.55%
ADAMTS14	3.09%	4.12%
ADAMTSL5	0.52%	6.70%
ADARB1	2.58%	5.15%
ADAT3	0.52%	6.70%
ADO	3.09%	5.15%
ADORA2A	0.52%	9.79%
AES	0.52%	5.15%
AGPAT3	2.58%	5.67%
AIFM2	3.09%	4.12%
AIM1	0.52%	27.84%
AIRE	2.58%	5.67%
AKAP7	1.03%	6.70%
ALDH1L2	2.06%	1.03%
ALX1	2.06%	1.55%
AMD1	1.03%	25.26%
AMDHD1	2.58%	1.03%
AMH	0.52%	6.19%
ANAPC16		
ANK3	1.55%	6.70%
ANKRD24	0.00%	4.64%
ANKRD57	2.06%	7.22%
ANKS1B	3.61%	1.55%
ANO4	3.09%	1.55%
AP3D1	0.52%	6.70%
APAF1	4.12%	1.55%
APBA3	0.00%	4.64%
APC2	1.03%	6.70%
APPL2	2.06%	1.03%
ARHGAP18	1.03%	6.70%
ARID3A	0.52%	5.67%
ARID5B	2.58%	4.64%
ARL1	2.58%	1.03%
ARMC2	0.52%	27.84%
ASCC1	3.09%	3.61%
ASCC3	0.52%	28.35%
ASCL1	2.58%	1.55%
ASCL4	2.58%	1.55%
ASF1A	0.52%	20.62%
ATCAY	0.00%	4.64%
ATG5	0.52%	27.84%
ATOH7	5.67%	5.15%
ATP2B1	2.06%	1.55%
ATP5D	0.52%	6.19%
ATP8B3	0.52%	6.70%
ATXN7L3B		
LPPR3		
GNN		

C12orf26	2.06%	2.06%
BBS10	3.09%	2.58%
BCR	0.52%	8.76%
BEND3	0.52%	27.84%
BET3L		
BICC1	1.55%	5.67%
BPIL2	0.00%	8.76%
BSG	0.52%	5.67%
BTBD11	2.58%	2.06%
BTBD2	0.52%	6.70%
BTG1	2.06%	1.03%
BVES	0.00%	0.00%
C19orf22	0.52%	5.67%
C2CD4C		
CABIN1	1.03%	10.31%
CAPS2	3.09%	2.06%
CASP14	1.03%	2.58%
CBARA1	3.09%	3.61%
CCAR1	4.64%	5.15%
CCDC105	1.03%	2.58%
CCDC109A	3.09%	4.12%
CCDC138	2.06%	6.19%
LOC100506339		
CCDC38	2.58%	1.03%
CCDC41	2.58%	1.03%
CCDC53	2.58%	1.55%
CCDC59	2.06%	2.06%
CCDC6	1.55%	6.19%
CD164	0.52%	25.77%
CD24		
CDC34	0.52%	5.67%
CDC40	0.52%	24.74%
CDH23	3.09%	4.64%
CDK1		
CDK17		
CDK19		
CELF5		
CENPW		
CEP290	2.06%	1.55%
CEP57L1		
CFD	0.52%	5.67%
CHCHD10	0.52%	9.79%
CHPT1	2.58%	1.03%
CHST11	2.06%	1.03%
CHST3	3.09%	3.61%
CIRBP	0.52%	6.70%
CISD1	1.55%	5.67%
CKAP4	2.58%	1.03%
CLVS2		
CNN2	0.52%	5.67%
CNOT2	3.61%	1.03%

COL10A1	0.52%	22.68%
COL13A1	3.09%	4.64%
COL18A1	2.58%	5.15%
COL6A1	2.58%	5.15%
COL6A2	2.58%	5.15%
CRADD	2.58%	1.03%
CREB3L3	0.00%	4.64%
CRY1	2.58%	2.06%
CSNK1G2	0.52%	6.70%
CSRP2	3.09%	2.58%
CSTB	2.58%	5.67%
CTNNA3	3.61%	5.67%
C21orf33	2.58%	5.67%
C12orf45	2.06%	1.03%
C22orf28	0.00%	8.76%
C6orf170	0.52%	18.56%
DAPK3	0.00%	4.64%
DAZAP1	0.52%	6.70%
DCBLD1	0.52%	21.65%
DCN	2.06%	1.55%
DDIT4	3.09%	3.61%
DDO	0.52%	24.74%
DDT	0.00%	0.00%
DDX21	4.64%	4.64%
DDX50	4.64%	4.64%
DERL3	0.52%	9.79%
DIP2A	2.58%	5.15%
DIRAS1	0.52%	5.15%
DNA2	4.64%	5.15%
DNAJB12	3.09%	3.61%
DNAJC12	4.64%	5.15%
DNMT3L	2.58%	5.67%
DOHH	0.00%	4.64%
DOT1L	0.52%	6.19%
DRAM1		
DSE	0.52%	22.16%
DUSP6	2.06%	2.06%
E2F7	3.09%	2.58%
ECHDC1	1.03%	11.34%
EDAR	2.06%	6.70%
EEA1	2.06%	1.03%
EEF2	0.00%	4.64%
EFNA2	0.52%	6.70%
EGR2	3.09%	5.15%
EID3	2.06%	1.03%
EIF4EBP2	3.09%	4.12%
ELANE	0.52%	5.67%

ELK3	2.58%	1.55%
EPB41L2	1.03%	6.70%
EPYC	2.06%	1.55%
C19orf28	0.00%	4.64%
FABP7	0.52%	15.46%
FAM108A1	0.52%	6.70%
FAM13C	1.55%	5.67%
FAM162B	0.52%	21.13%
FAM184A	0.52%	20.62%
FAM26D	0.52%	22.16%
FAM26E	0.52%	22.16%
FAM26F	0.52%	22.16%
FBXO7	0.00%	8.76%
FGD6	2.58%	1.55%
FGF22	0.52%	5.67%
FIG4	0.52%	24.74%
FOXO3	0.52%	27.84%
FRK	0.52%	22.16%
FSTL3	0.52%	5.67%
FTCD	2.58%	5.15%
FYN	1.03%	24.23%
FZR1	0.00%	4.64%
GADD45B	0.52%	6.19%
GALNT4	2.06%	1.55%
GAMT	0.52%	6.70%
GAS2L3	3.09%	1.55%
GCC2	2.06%	6.19%
GGT1	0.52%	9.79%
GGT5	0.52%	10.31%
GIPC3	0.00%	4.64%
GJA1	0.52%	18.04%
GLIPR1	3.09%	2.58%
GLIPR1L1	3.09%	2.06%
GLIPR1L2	3.09%	2.06%
GLT8D2	2.06%	1.03%
C19orf20	0.52%	5.67%
C12orf28		

C6orf204	0.52%	21.13%
GNA11	0.52%	5.15%
GNA15	0.52%	5.15%
GNAZ	0.00%	8.76%
GNG7	0.52%	5.67%
GNPTAB	2.58%	1.55%
GOPC	0.52%	21.65%
GPR6	0.52%	24.74%
GPRC6A	0.52%	21.13%
GPX4	0.52%	6.19%
GRIK2	0.52%	28.87%
GRIN3B	0.52%	5.67%
GSTT1	9.79%	4.12%
GSTT2	0.00%	0.00%
GTF3C6	1.03%	24.74%
GZMM	0.52%	5.67%
H2AFY2	3.09%	4.12%
HACE1	0.52%	25.77%
HAL	2.58%	1.03%
HCFC2	2.06%	1.03%
HCN2	0.52%	5.67%
HDAC2	0.52%	23.20%
HDDC2	0.52%	13.40%
HERC4	4.64%	5.15%
HEY2	1.03%	11.86%
HINT3	1.03%	12.37%
HK1	4.64%	4.64%
HKDC1	4.64%	4.64%
HMG20B	0.00%	4.64%
HMHA1	0.52%	5.67%

LRRIQ1	2.06%	1.55%
LRRTM3	3.61%	5.67%
LSM7	0.52%	6.19%
LSS	2.58%	5.15%
LTA4H	2.58%	1.03%
LUM	2.06%	1.55%
MADCAM1	0.52%	6.19%
MAN1A1	0.52%	20.10%
MAP2K2	0.00%	4.64%
MARCKS	0.52%	23.20%
MATK	0.00%	4.64%
MBD3	0.52%	6.70%
MCM3AP	2.58%	5.15%
MCM9	0.52%	20.62%
MED16	0.52%	5.67%
METAP2	2.58%	1.55%
MEX3D	0.52%	6.70%
MGAT4C	2.06%	1.55%
MICAL1	0.52%	25.77%
MIDN	0.52%	6.70%
MIER2	0.52%	6.19%
MIF	0.52%	9.79%
MKNK2	0.52%	6.70%
MMP11	0.52%	9.79%
MOBKL2A	0.52%	6.70%
MRPL42	2.58%	1.03%
MRPL54	0.00%	4.64%
MTERFD3	2.58%	2.06%
MUM1	0.52%	6.70%
MYBPC1	2.58%	1.03%
MYF5	2.06%	2.06%
MYF6	2.06%	2.06%
MYPN	5.15%	5.67%
NAP1L1	3.09%	2.58%
NAV3	2.58%	2.06%
NCLN	0.52%	5.15%
NCOA7	1.03%	12.89%
NDUFA12	2.58%	1.55%
NDUFS7	0.52%	6.70%
NEDD1	2.58%	1.55%

NEPNP		
NEUROG3	3.61%	4.12%
NFIC	0.00%	5.15%
NFYB	2.06%	1.03%
NKAIN2	0.52%	15.46%
NODAL	3.09%	4.12%
NPFFR1	3.09%	4.12%
NR1H4	3.09%	1.55%
NR2C1	2.58%	1.55%
NR2E1	0.52%	26.29%
NRBF2	3.09%	5.15%
NT5DC1	0.52%	22.68%
NT5DC3	2.06%	1.03%
NTN4	2.58%	1.03%
NTS	2.06%	1.55%
NUAK1	2.58%	1.55%
NUDT4	2.58%	1.03%
NUP37	2.58%	1.55%
NUS1	0.52%	21.65%
OAZ1	0.52%	6.19%
ODF3L2	0.52%	6.19%
OIT3	3.09%	4.64%
OR7A5	1.03%	2.58%
OR7C2	1.03%	2.58%
OR111	1.03%	2.58%
OR7A17	1.03%	2.58%
ONECUT3	0.52%	6.70%
OSBPL8	3.09%	2.58%
OSTM1	0.52%	26.80%
OTOGL		
P4HA1	3.09%	5.15%
PAH	2.58%	1.55%
PALM	0.52%	5.67%
PAWR	2.58%	2.06%
PBLD	4.64%	5.15%
PCBD1	3.09%	4.12%
PCBP3	2.58%	5.15%
PCDH15	2.58%	7.73%
PCNT	2.58%	5.15%
PCSK4	1.03%	6.70%
PDSS2	0.52%	27.84%
PDXK	2.58%	5.67%
PFKL	2.58%	5.67%
PHLDA1	3.09%	2.58%
PHYHIPL	1.55%	5.67%

PIAS4	0.00%	4.64%
PIP5K1C	0.00%	4.64%
PKIB	0.52%	15.98%
PLA2G12B	3.09%	4.64%
PLEKHJ1	0.52%	6.19%
PLK5P		
PLN	0.52%	21.13%
PLXNC1	2.58%	1.03%
PMCH	2.58%	1.55%
POC1B		
POFUT2	2.58%	5.15%
POLR2E	0.52%	6.19%
POLR3B	2.58%	2.06%
POLRMT	0.52%	5.67%
POPDC3	0.52%	26.80%
PPA1	3.09%	4.12%
PPAP2C	0.52%	6.19%
PPFIA2	2.06%	2.06%
PPIL6	0.52%	25.77%
PPP1R12A	2.06%	2.06%
PRDM1	0.52%	26.80%
PRDM4	2.58%	1.55%
PREP	0.52%	26.80%
PRF1	3.09%	4.12%
PRMT2	2.58%	6.19%
PRTN3	0.52%	5.67%
PSAP	3.09%	3.61%
PTBP1	0.52%	5.67%
PTPRB	3.61%	1.03%
PTPRK	1.03%	10.31%
PTPRQ		
PTPRR	3.61%	1.03%
PTTG1IP	2.58%	5.67%
PWP1	2.58%	1.55%
PWP2	2.58%	5.67%
QRSL1	0.52%	27.84%
RAB21	3.61%	1.03%
RAB36	0.00%	8.76%
RANBP2	2.06%	6.19%
RASSF9	2.06%	1.55%
REEP3	3.61%	5.67%
REEP6	0.52%	6.70%
REV3L	1.03%	24.23%
REXO1	0.52%	6.70%
RFX4	2.58%	2.06%
RFX6	0.52%	21.65%
RHOBTB1	1.55%	6.19%
RIC8B	2.58%	2.06%

RNF126	0.52%	5.67%
RNF146	1.03%	11.34%
RNF217	0.52%	13.40%
ROS1	0.52%	22.16%
RPF2		
RPS15	1.03%	6.19%
RRP1	2.58%	5.67%
RSPH4A	0.52%	22.16%
RSPO3	1.03%	11.86%
RTDR1	0.00%	8.76%
RTKN2	3.09%	5.15%
RTN4IP1	0.52%	27.84%
RUFY2	4.64%	5.15%
RWDD1	0.52%	22.16%
S100B	2.58%	5.67%
S1PR4	0.52%	5.15%
SAMD3	1.03%	6.70%
SAR1A	3.09%	4.12%
SBNO2	0.52%	6.19%
SCAMP4	0.52%	6.70%
SCML4	0.52%	27.84%
SCYL2	3.09%	1.55%
SEC63	0.52%	26.80%
SEPT10		
SERINC1	0.52%	16.49%
SESN1	0.52%	26.80%
SF3A2	0.52%	6.19%
SGPL1	3.09%	4.12%
SGTA	0.52%	5.15%
SH3RF3	2.06%	7.22%
SHC2	0.52%	6.19%
SIM1	0.52%	27.84%
SIRT1	4.64%	5.15%
SIRT6	0.00%	4.64%
SLC16A10	1.03%	24.23%
SLC16A9	1.55%	6.19%
SLC17A8	3.09%	1.55%
SLC19A1	2.58%	5.15%
SLC1A6	1.03%	2.58%
SLC22A16	0.52%	24.74%
SLC25A16	4.64%	5.15%
SLC25A3	4.12%	1.55%
SLC29A3	3.09%	4.12%
SLC35F1	0.52%	21.13%
SLC39A3	0.52%	5.15%
SLC41A2	2.06%	1.03%
SLC5A4	0.00%	8.76%
SLC5A8	3.09%	1.55%
SLC6A15	2.06%	1.55%
SMARCB1	0.52%	9.79%
SMPD2	0.52%	25.77%

SMPDL3A	0.52%	15.46%
SNORD37		
SNRPD3	0.52%	9.79%
SNRPF	2.58%	1.03%
SNX3	0.52%	26.80%
SOBP	0.52%	27.84%
SOCS2	2.58%	1.03%
SPECC1L		
SPIC	2.58%	1.03%
SPOCK2	3.09%	3.61%
SRGN	4.64%	4.64%
STAB2	2.06%	1.55%
STK11	0.52%	6.19%
STOX1	0.00%	0.00%
SUMO3	2.58%	5.67%
SUPV3L1	4.64%	4.64%
SUSD2	0.52%	10.31%
SYCP3	2.58%	1.03%
SYDE1	1.03%	3.09%
SYN3	0.00%	9.28%
SYT1	2.58%	2.06%
TACR2	3.61%	4.12%
C10orf27	3.09%	4.12%
TBC1D15	3.61%	1.55%
TBXA2R	0.00%	4.64%
TCF3	0.52%	6.70%
TCP11L2	2.58%	1.03%
TDG	2.06%	1.03%
TET1	4.64%	5.15%
TFAM	1.55%	5.67%
THAP2	3.61%	1.03%
THEG	0.52%	6.19%
THEMIS		
THOP1	0.52%	5.15%
TIMM13	0.52%	6.19%
TIMP3	0.00%	9.28%
TJP3	0.00%	4.64%
TLE2	0.52%	5.15%
TLE6	0.52%	5.15%
TMCC3	2.58%	1.03%
TMEM19	3.61%	1.03%
TMEM200A	1.03%	6.70%
TMEM26	2.58%	5.67%
TMPO	4.64%	2.58%
TMPRSS9	0.52%	6.19%
TMTC2	0.00%	0.00%
TMTC3	2.06%	1.55%
TPD52L1	0.52%	13.40%
TPH2	2.58%	1.55%
TRAF3IP2	1.03%	24.23%

TRAPPC10	2.58%	5.67%
TRDN	0.52%	15.98%
TRHDE	2.58%	1.55%
TRMT11	1.03%	12.37%
TRPM2	2.58%	5.67%
TSPAN15	3.61%	4.12%
TSPAN8	3.61%	1.03%
TSPYL1	0.52%	22.16%
TSPYL4	0.52%	22.68%
TUBE1	1.03%	24.23%
TXNRD1	2.06%	1.03%
TYSND1	3.09%	4.12%
UBE2D1	1.55%	5.67%
UBE2G2	2.58%	5.67%
UBE2N	2.58%	1.03%
UHRF1BP1L	3.61%	1.55%
UNC5B	3.09%	4.12%
UPB1	0.52%	9.79%
UQCR11		
USP44	2.58%	1.55%
UTP20	2.58%	1.03%
VEZT	2.58%	1.55%
VGLL2	0.52%	22.16%
VPREB3	0.52%	9.79%
VPS26A	4.64%	4.64%
WASF1	0.52%	24.74%
WDR18	0.52%	5.67%
WISP3	1.03%	24.23%
KIAA1274	3.09%	4.12%
YBEY		
ZBTB24	0.52%	25.77%
ZBTB7A	0.00%	4.64%
ZDHHC17	3.09%	2.58%
ZFC3H1	3.61%	1.03%
ZNF280B	0.00%	0.00%
ZNF365	3.09%	5.67%
ZFR2	0.00%	4.64%
ZUFSP	0.52%	21.13%
ZWINT	1.55%	6.19%
KIAA0748	2.06%	1.55%

AGAP2	2.58%	1.03%
ANKRD52	2.58%	1.55%
APOF	2.58%	1.55%
ARHGAP9	2.58%	1.03%
ARHGEF25		
ATP5B	2.58%	1.55%
AVIL	2.58%	1.03%
AVPR1A	2.58%	1.03%
B4GALNT1	2.58%	1.03%
C12orf66	2.58%	1.03%
BAZ2A	2.58%	1.55%
BLOC1S1	2.06%	2.06%
CAND1	4.12%	1.55%
CD63	2.06%	2.06%
CDK2	2.06%	2.06%
CDK4	2.58%	1.03%
CNPY2	2.58%	1.55%
COQ10A	2.58%	1.55%
CS	2.58%	1.55%
CTDSP2	2.58%	1.03%
CYP27B1	2.58%	1.03%
C12orf56	2.58%	1.03%
DCTN2	2.58%	1.03%
DDIT3	2.58%	1.03%
DGKA	2.06%	2.06%
DNAJC14	2.06%	2.06%
DTX3	2.58%	1.03%
DYRK2	3.61%	1.03%
ERBB3	2.06%	2.06%
ESYT1		
FAM19A2	2.58%	1.03%
GDF11	2.06%	2.06%
GLI1	2.58%	1.03%
GLS2	2.58%	1.55%
GNS	3.09%	1.03%
GPR182	2.58%	2.58%
GRIP1	4.64%	2.06%
HELB	4.12%	1.55%
HMGA2	4.12%	1.03%
HSD17B6	2.58%	2.06%
IKZF4	2.06%	2.06%
IL23A	2.58%	1.55%
INHBC	3.61%	1.03%
INHBE	2.58%	1.03%
IRAK3	4.12%	1.55%
ITGA7	2.06%	2.06%
KIF5A	2.58%	1.03%

LEMD3	3.09%	1.03%
LLPH	4.12%	1.03%
LRIG3	2.58%	1.03%
LRP1	2.58%	2.06%
MARCH		
MARS	2.58%	1.03%
MBD6	2.58%	1.03%
METTL1	2.58%	1.03%
METTL7B	2.06%	2.06%
MIP	2.58%	1.55%
MMP19	2.06%	2.06%
MON2	2.58%	1.03%
MSRB3	3.09%	1.03%
MYL6	2.06%	2.06%
MYL6B	2.06%	2.06%
MYO1A	2.58%	2.06%
NAB2	2.58%	2.06%
NACA	2.58%	1.55%
NDUFA4L2	2.58%	1.55%
NEUROD4	2.06%	1.55%
NXPH4	2.58%	2.06%
OBFC2B	2.58%	1.55%
OR6C68	2.06%	1.55%
OR6C1	2.06%	1.55%
OR6C3	2.06%	1.55%
OR6C75	2.06%	1.55%
OR6C2	2.06%	1.55%

OR10P1	2.06%	2.06%
OR6C6	2.06%	1.55%
OR6C65	2.06%	1.55%
OR6C76	2.06%	1.55%
OR6C74	2.06%	1.55%
OR9K2	2.06%	1.55%
OR9K1P		
ORMDL2	2.06%	2.06%
OS9	2.58%	1.03%
PA2G4	2.06%	2.06%
PAN2	2.58%	1.55%
PIP4K2C	2.58%	1.03%
PMEL		
PPM1H	2.58%	1.03%
PRIM1	2.58%	2.06%
PTGES3	2.58%	1.55%
R3HDM2	2.58%	1.55%
RAB5B	2.06%	2.06%
RASSF3	3.09%	1.03%
RBMS2	2.58%	1.55%
RDH16	2.58%	2.06%
RDH5	2.06%	2.06%

RNF41	2.58%	1.55%
RPL41	2.06%	2.06%
RPS26	2.06%	2.06%
SARNP	2.06%	2.06%
SDR9C7	2.58%	2.06%
SHMT2	2.58%	1.55%
SLC16A7	2.58%	1.03%
SLC26A10	2.58%	1.03%
SLC39A5	2.58%	1.55%
SMARCC2	2.06%	2.06%
SPRYD4	2.58%	1.55%
SRGAP1	2.58%	1.03%
STAC3	2.58%	1.55%
STAT2	2.58%	1.55%
STAT6	2.58%	2.06%
SUOX	2.06%	2.06%
TAC3	2.58%	2.58%
TBC1D30		
TBK1	3.09%	1.03%
TIMELESS	2.58%	1.55%
TMBIM4	4.12%	1.03%
TMEM194A	2.58%	2.06%
TMEM5	2.58%	1.03%
TSFM	2.58%	1.03%
TSPAN31	2.58%	1.03%
USP15	2.58%	1.03%
WIBG	2.06%	2.06%
WIF1	3.09%	1.03%
XPOT	3.09%	1.03%
XRCC6BP1	2.58%	1.03%
ZBTB39	2.58%	2.58%
ZC3H10	2.06%	2.06%
MON2	2.58%	1.03%
INHBC	3.61%	1.03%
TAC3	2.58%	2.58%
ASB3	0.52%	7.22%
STC2	2.58%	2.58%
ARMC7	3.09%	1.55%
GGA3	3.09%	1.55%
HN1	3.09%	1.55%
NT5C	3.09%	1.55%
NUP85	3.09%	1.55%
SLC16A5	3.09%	1.55%
SUMO2	3.09%	1.55%
ID2	1.03%	5.15%
RNF144A	1.03%	5.15%
TSSC1	1.03%	5.15%

LY86	1.03%	5.67%
NTRK2	5.15%	2.58%
AGTPBP1	5.67%	3.61%
EMB	3.61%	6.19%
HCN1	5.15%	1.55%
CACNA2D3	3.61%	3.61%
SELK	3.61%	4.12%
PARG	2.06%	9.28%
LOC10431		
PARG	2.06%	9.28%
PARG	2.06%	9.28%
OGDHL	2.58%	8.25%
SFTPD	4.12%	7.73%
PSMC6	2.58%	4.12%
C13orf15	0.00%	30.93%
KIAA1704	0.52%	34.02%
KIAA0564	0.52%	31.96%
C14orf105	1.55%	5.15%
C14orf119	2.06%	4.64%
C14orf21	2.58%	4.12%
KIAA1967	1.03%	43.81%
C14orf37	1.55%	5.15%
C8orf74	1.55%	36.60%
C14orf93	2.58%	4.64%
C13orf18	0.00%	35.05%
C13orf1	0.52%	34.02%
C14orf101	2.06%	4.64%
C13orf31	0.52%	32.99%

C8orf58	1.03%	43.81%
C13orf30	0.52%	32.47%
ABHD4	4.12%	4.64%
ACIN1	3.09%	4.64%
ADAM2	4.64%	25.26%
ADAM28	1.55%	40.21%
ADAM7	2.06%	38.66%
ADAMDEC1	1.55%	40.21%
ADCY4	2.58%	4.12%
ADRA1A	1.55%	35.05%
AKAP11	0.52%	31.96%
ANG	2.06%	4.64%
AP1G2	2.06%	4.64%
APEX1	2.06%	4.12%
ARHGEF40		
ARL11	0.00%	35.05%
ATP12A	1.03%	10.82%
ATP8A2	1.03%	11.34%
BCL2L2	2.06%	4.64%
BIN3	1.03%	43.81%
BLK	1.55%	36.08%
BMP1	1.03%	42.27%
BNIP3L	1.03%	37.11%
C1QTNF9	1.03%	10.31%
CAB39L	0.00%	34.54%
CBLN3	2.58%	4.12%
CCDC122	0.52%	32.99%
CCDC25	1.55%	35.05%
CCNB1IP1	2.06%	4.12%
CDADC1	0.00%	34.54%
CDCA2	2.06%	37.63%
CDH24	3.61%	4.64%
CEBPE	2.06%	4.64%
CENPJ	1.03%	10.82%
CHD8	2.58%	4.64%
CHMP7	1.03%	41.75%
CHRNA2	1.55%	36.08%
CIDEB	2.58%	4.12%
CLU	1.55%	35.57%
CMA1	2.58%	4.12%
CMTM5	2.06%	4.64%
COG3	0.52%	34.54%
CPB2	0.00%	35.05%
CPNE6	2.06%	4.12%
CRYL1	1.55%	11.34%
CTSB	1.55%	35.57%
CTSG	2.58%	4.12%
CYSLTR2	0.00%	35.57%

ERVFRDE1		
DAD1	5.15%	4.64%
DCAF11		
DEFB135		
DEFB136	1.55%	35.57%
DEFB131	0.00%	0.00%
DEFB130	1.55%	36.08%
DGKH	0.52%	31.96%
DHRS1	2.58%	4.12%
DHRS2	2.06%	4.12%
DHRS4	2.06%	4.12%
DIAPH3	0.00%	30.41%
DLEU2		
DLEU7	0.00%	34.54%
DNAJC15	0.52%	32.47%
DOCK5	1.55%	37.63%
DOK2	1.55%	40.72%
DPYSL2	1.03%	36.08%
RNASE2	2.06%	4.64%
RNASE3	0.00%	0.00%
EBF2	1.55%	37.11%
EBPL	0.52%	35.05%
EDDM3B		
EFHA1	1.03%	10.82%
EFS	2.06%	4.64%
EGR3	1.03%	43.81%
ELF1	0.00%	30.41%
ELP3	1.55%	34.02%
ENOX1	0.52%	32.47%
ENTPD4	1.55%	40.72%
EPB49	1.55%	41.24%
EPHX2	1.55%	36.08%
EPST11	0.52%	32.47%
ESCO2	1.55%	35.05%
ESD	0.00%	34.02%
EXOC5	2.06%	4.64%
EXTL3	2.06%	32.99%
SKA3		
FAM123A	1.03%	11.34%
FAM158A	2.06%	4.12%
FAM160B2	1.03%	42.27%
FAM167A	1.55%	36.08%
FBXO16	1.55%	33.51%
FDFT1	1.55%	35.57%
FGF17	1.55%	40.72%

MRP63	1.03%	11.34%
MRPL52	2.06%	4.64%
MSRA	1.55%	37.11%
MTMR6	1.03%	11.34%
MTMR9	1.55%	36.08%
MTRF1	0.00%	31.96%
MUDENG	2.06%	4.64%
MYH6	2.06%	4.64%
MYH7	2.06%	4.64%
N6AMT2	1.55%	10.82%
NAA16		
NAA30		
NDRG2	2.06%	4.64%
NEDD8	2.58%	4.64%
NEFL	2.58%	37.11%
NEFM	2.58%	37.11%
NEIL2	1.55%	35.57%
NFATC4	2.58%	4.12%
NGDN	2.06%	4.64%
NKX2-6		
NKX3-1	1.55%	40.21%
NPM2	1.55%	40.72%
NRL	2.06%	4.12%
NUDT15	0.00%	32.99%
NUDT18	1.03%	42.27%
NUFIP1	0.52%	34.02%
NUPL1	1.03%	11.34%
NYNRIN		
OLFM4	0.00%	31.44%
OR4E2	2.06%	4.64%
OR10G2	2.58%	4.64%
OR10G3	2.58%	4.64%
OR5AU1	2.06%	4.64%
OR6T1	0.52%	4.12%
OR4N5	2.06%	4.12%
OR4L1	0.00%	0.00%
OR4K15	0.00%	0.00%
OR4K1	0.00%	0.00%
OR4K5	0.00%	0.00%
OR4K2	0.00%	0.00%
OR4N4	0.00%	0.00%
OR4N2	0.00%	0.00%
OR4M1	0.00%	0.00%
OR4Q3	0.00%	0.00%

OR11G2	2.06%	4.12%
OR11H6	2.06%	4.12%
OR11H4	2.06%	4.12%
OR6S1	2.06%	4.64%
OSGEP	2.06%	4.12%
OTX2	2.06%	4.64%
OXA1L	2.06%	4.64%
PABPN1	2.06%	4.64%
PARP2	2.06%	4.12%
PARP4	1.03%	10.31%
PBK	1.55%	35.05%
PCDH17	0.00%	29.90%
PCDH20	0.00%	29.38%
PCDH8	0.52%	32.47%
PCK2	2.06%	4.12%
PDLIM2	1.03%	43.81%
PEBP4	1.03%	43.81%
PELI2	2.06%	4.64%
PHYHIP	1.03%	42.27%
PINX1	1.55%	36.60%
PIWIL2	1.03%	42.78%
PNMA2	1.03%	36.60%
PNOC	1.55%	34.02%
PNP		
POLR3D	1.03%	42.27%
PPP1R3E		
PPP2R2A	1.03%	36.60%
PPP3CC	1.03%	43.81%
PRMT5	2.58%	4.64%
PRSS55		
PSMB11	2.58%	4.64%
PSMB5	2.58%	4.64%
PSME1	2.06%	4.12%
PSME2	2.06%	4.12%
PSPC1	2.58%	11.34%
PTK2B	1.55%	36.08%
R3HCC1		

RAB2B	2.58%	4.64%
RABGGTA	2.58%	4.12%
RB1	0.00%	35.05%
RCBTB1	0.00%	35.05%
RCBTB2	0.00%	35.57%
REC8	2.06%	4.12%
REEP4	1.03%	42.27%
REM2	2.06%	5.15%
RHOBTB2	1.03%	43.30%
RIPK3	2.58%	4.12%
RNASE1	2.06%	4.64%
RNASE10	2.06%	4.12%
RNASE11	2.06%	4.12%
RNASE12	2.06%	4.12%
RNASE13	2.06%	4.64%
RNASE4	2.06%	4.64%
RNASE6	2.06%	4.64%
RNASE9	2.06%	4.12%
RNASEH2B	0.00%	33.51%
RNF17	1.03%	10.82%
RNF31	2.06%	4.12%
RP1L1	1.55%	36.60%
RPGRIP1	3.09%	4.64%
RPPH1		
SACS	1.03%	10.31%
SALL2	2.58%	4.64%
SAP18	1.55%	11.86%
SCARA3	1.55%	35.05%
SCARA5	1.55%	34.02%
SDR39U1	2.58%	4.64%
SERP2	0.00%	33.51%
SERPINE3	0.00%	32.99%
SETDB2	0.00%	34.54%
SFTPC	1.03%	42.27%
SGCG	1.03%	10.31%
SHISA2	1.03%	10.82%
SIAH3	0.00%	34.54%
SLC22A17	2.06%	4.64%
SLC25A30	0.52%	34.02%
SLC25A37	1.55%	40.21%
SLC35F4	1.55%	5.15%
SLC39A14	1.03%	42.78%
SLC39A2	2.06%	4.64%
SLC7A7	2.06%	4.64%
SLC7A8	2.06%	4.64%
SNORA31		
SNORD8		
SORBS3	1.03%	43.81%
SOX7	1.55%	36.60%
SPATA13	1.03%	10.31%
SPERT	0.00%	34.02%
STC1	1.55%	40.21%

STMN4	1.55%	36.60%
SUCLA2	0.00%	33.51%
SUGT1	0.00%	32.99%
SUPT16H	3.09%	4.64%
TDH		
TDRD3	0.00%	29.90%
TEP1	2.06%	4.12%
TGM1	2.58%	4.12%
THTPA	2.06%	4.64%
TINF2	2.58%	4.64%
TM9SF1	2.06%	4.12%
TMEM55B	2.06%	4.12%
TNFRSF10B	1.03%	43.30%
TNFRSF19	1.55%	9.79%
TNFSF11	0.52%	32.47%
TOX4	2.58%	4.64%
TPPP2	2.06%	4.64%
TPT1	0.52%	34.54%
TRIM13	0.52%	35.05%
TRIM35	1.55%	36.60%
TSC22D1	0.00%	33.51%
TSSK4	2.58%	4.64%
TTC5	2.06%	4.12%
WBP4	0.00%	31.96%
WDFY2	0.00%	33.51%
XKR6	1.55%	36.60%
XPO4	2.06%	11.86%
XPO7	1.55%	40.72%
ZC3H13	0.00%	35.05%
ZDHHC20	1.55%	10.31%
ZFHX2		
ZNF219	2.58%	5.15%
ZNF395	1.55%	34.02%
ZMYM2	2.06%	10.31%
ZMYM5	2.58%	11.86%
C14orf105	1.55%	5.15%
SLC35F4	1.55%	5.15%
OR4N5	2.06%	4.12%
RNASE3	0.00%	0.00%
DPYSL2	1.03%	36.08%
OLFM4	0.00%	31.44%
PCDH17	0.00%	29.90%
PCDH9	0.00%	28.87%

C2orf53	0.52%	4.12%
C13orf34	0.00%	29.90%
A2LD1		
ABCC4	1.55%	18.04%
CLDN10	1.03%	15.98%
CLN5	0.52%	25.77%
CLYBL	1.03%	15.98%
COMMD6	0.52%	26.80%
DACH1	0.00%	28.35%
DCT	0.52%	18.04%
DIS3	0.00%	30.41%
DNAJC3	1.03%	15.98%
DOCK9	0.00%	15.98%
DZIP1	1.03%	15.98%
EDNRB	0.52%	24.74%
FARP1	0.00%	16.49%
FBXL3	0.52%	25.77%
FGF14	1.03%	15.98%
GPC5	0.00%	19.07%
GPC6	0.52%	19.59%
GPR18	0.00%	15.98%
GPR180	0.52%	18.04%
GPR183	0.00%	15.98%
HS6ST3	0.00%	15.98%
IPO5	0.00%	15.98%
IRG1		
ITGBL1	1.03%	15.98%
KCTD12	0.52%	25.77%
KLF12	0.52%	28.35%
KLF5	0.00%	28.87%
KLHL1	0.00%	26.80%
LMO7	0.52%	27.32%
MBNL2	0.00%	15.98%
MYCBP2	0.52%	26.80%
MZT1		
NALCN	0.52%	15.98%
NDFIP2	0.00%	22.68%
OXGR1	0.00%	15.98%
PCCA	0.52%	16.49%

PCDH9	0.00%	28.87%
PIBF1	0.00%	29.38%
POU4F1	0.00%	23.71%
RAP2A	0.00%	15.46%
RBM26	0.00%	22.68%
RNF219	0.00%	23.20%
SCEL	0.52%	26.29%
SLAIN1	0.52%	24.23%
SLC15A1	0.00%	15.98%
SLITRK1	0.00%	20.62%
SLITRK5	0.00%	19.59%
SLITRK6	1.03%	19.59%
SOX21	0.52%	17.53%
SPRY2	0.00%	23.20%
STK24	0.00%	16.49%
TBC1D4	0.00%	27.32%
TGDS	0.52%	18.04%
TM9SF2	1.03%	15.98%
TMTC4	0.52%	15.98%
UBAC2	0.00%	15.98%
UCHL3	0.52%	26.80%
UGGT2		
ZIC2	0.52%	15.98%
ZIC5	0.52%	15.98%
PCDH9	0.00%	28.87%
KLHL1	0.00%	26.80%
DACH1	0.00%	28.35%
KLF12	0.52%	28.35%
C2orf53	0.52%	4.12%
SLITRK5	0.00%	19.59%
GPC5	0.00%	19.07%
PTGER4	6.19%	1.03%
DAB2	6.70%	1.03%
PTGER4	6.19%	1.03%
DAB2	6.70%	1.03%
C5orf42	7.73%	2.58%
C5orf42	7.73%	2.58%
CDH9	6.19%	3.61%
CDH10	5.67%	2.06%
CDH9	6.19%	3.61%
CDH10	5.67%	2.06%
CDH18	5.15%	3.09%
CENPM	0.52%	8.25%
CENPM	0.52%	8.25%
LRRK2	2.58%	3.09%

LOC100506072

SLC38A4	2.58%	3.61%
AMIGO2	2.58%	3.61%
C12orf10	3.09%	2.58%
C12orf10	3.09%	2.58%
PDE1B	2.06%	1.55%
PPP1R1A	2.06%	1.55%
NAT15	5.15%	2.06%
NAT15	5.15%	2.06%
EIF4A2	4.64%	4.64%
EIF4A2	4.64%	4.64%
IGSF11	4.12%	0.52%
LSAMP	4.64%	2.06%
EPHA6	4.12%	2.58%
EPHA6	4.12%	2.58%
CADM2	3.61%	3.09%
CADM2	3.61%	3.09%
GBE1	4.12%	5.67%
ROBO1	3.09%	6.19%
GBE1	4.12%	5.67%
ROBO1	3.09%	6.19%
TMPRSS15		
NCAM2	2.06%	4.64%
CBR1	2.58%	5.15%
CBR3	2.58%	5.15%
FNDC1	1.03%	9.28%
RGMB	1.03%	15.98%
MAN2A1	1.03%	15.98%
LRPPRC	0.52%	7.22%
NRXN1	1.03%	7.22%
ADCYAP1	2.06%	5.15%
CHST9	2.06%	10.82%
RIT2	1.55%	13.92%
POLR2D	0.52%	13.40%
RBM27		
POU4F3	0.52%	5.15%
CCBE1	2.06%	14.43%
MPPE1	2.06%	5.67%
IMPA2	2.06%	4.12%
C18orf32	1.03%	13.92%
RPL17	1.03%	13.92%
SETBP1	1.03%	13.40%
C11orf2	2.58%	0.52%
C11orf64		

C11orf20	3.09%	0.52%
C11orf85	2.58%	0.52%
C11orf10	1.55%	0.52%
C11orf48	2.06%	1.55%
C11orf24	3.09%	0.52%
C11orf86		
C11orf95		
C11orf66	1.55%	0.52%
C11orf83	2.06%	1.55%
C11orf68	3.09%	0.52%
C11orf84	2.58%	1.03%
ACTN3	3.61%	0.52%
ACY3	3.61%	0.52%
ADRBK1	4.12%	0.52%
AHNAK	2.06%	0.52%
AIP	3.61%	0.52%
ALDH3B1	3.09%	1.03%
ALDH3B2	3.61%	0.52%
ANKRD13D	4.12%	0.52%
ARL2	2.58%	0.52%
ASRGL1	2.06%	0.52%
ATG2A	2.58%	0.52%
ATL3	2.58%	1.55%
B3GAT3	2.06%	1.55%
B3GNT1	3.09%	0.52%
BAD	3.09%	0.52%
BANF1	3.09%	0.52%
BATF2	2.58%	0.52%
BBS1	3.61%	0.52%
BEST1	2.06%	0.52%
BRMS1	3.09%	0.52%
BSCL2	2.06%	1.55%
SLC22A9	2.06%	2.06%
CABP2	3.61%	0.52%
CABP4	3.61%	0.52%
CAPN1	2.58%	1.03%
CARNS1		
CATSPER1	3.09%	0.52%
CCDC85B	3.09%	0.52%
CCDC86	1.55%	0.52%
CCDC87	3.61%	0.52%

CCDC88B	3.09%	0.52%
CCS	3.61%	0.52%
CD248	3.09%	0.52%
CD5	1.55%	0.52%
CD6	1.55%	0.52%
CDC42BPG	2.58%	0.52%
CDC42EP2	2.58%	1.03%
CDCA5	2.58%	0.52%
CDK2AP2	3.61%	0.52%
CFL1	3.09%	0.52%
CHKA	3.09%	1.03%
CHRM1	2.06%	2.06%
CLCF1	3.61%	0.52%
CNIH2	3.09%	0.52%
CORO1B	3.61%	0.52%
COX8A	3.09%	1.03%
CPSF7	1.55%	0.52%
CPT1A	3.09%	1.03%
CST6	3.09%	0.52%
CTSF	3.61%	0.52%
CTSW	3.09%	0.52%
CYBASC3	1.55%	0.52%
DAGLA	1.55%	0.52%
DAK	1.55%	0.52%
DDB1	1.55%	0.52%
DNAJC4	3.09%	0.52%
DOC2GP		
DPF2	2.58%	1.03%
DPP3	3.61%	0.52%
DRAP1	3.09%	0.52%
EEF1G	2.06%	0.52%
EFEMP2	3.09%	0.52%
EHBP1L1	2.58%	1.03%
EHD1	2.58%	0.52%
EIF1AD	3.09%	0.52%
EML3	2.06%	0.52%
ESRRA	3.09%	0.52%
FADS1	1.55%	0.52%
FADS2	1.55%	0.52%
FADS3	1.55%	0.52%
FAM89B	2.58%	1.03%
FAU	2.58%	0.52%
FEN1	1.55%	0.52%
FERMT3	3.09%	0.52%
FIBP	3.09%	0.52%
FKBP2	3.09%	0.52%
FLRT1	3.09%	0.52%
FOSL1	3.09%	0.52%
FRMD8	2.58%	1.03%
FTH1	2.06%	0.52%

GAL	3.09%	1.03%
GAL3ST3	3.09%	0.52%
GANAB	2.06%	1.55%
DKFZp761E198	3.09%	0.52%
C11orf9	1.55%	0.52%
GNG3	2.06%	1.55%
GPHA2	2.58%	0.52%
GPR137	3.09%	0.52%
GPR152	3.61%	0.52%
GPR44	1.55%	0.52%
GSTP1	3.61%	0.52%
HNRNPUL2	2.06%	2.06%
HRASLS5	2.06%	2.06%
IGHMBP2	3.09%	1.03%
INCENP	2.06%	0.52%
INTS5	2.06%	1.55%
KAT5	3.09%	0.52%
KCNK4	3.09%	0.52%
KCNK7	2.58%	1.03%
KDM2A	4.12%	0.52%
KLC2	3.09%	0.52%
LGALS12	2.06%	2.06%
LRFN4	3.61%	0.52%
LRP5	3.09%	1.03%
LRRC10B		
LRRN4CL	2.06%	1.55%
LTBP3	2.58%	1.03%
MACROD1	3.09%	1.03%
MALAT1		
MAP3K11	2.58%	1.03%
MAP4K2	2.58%	1.03%
MARK2	2.58%	1.03%
MEN1	2.58%	1.03%
MRPL11	3.09%	0.52%
MRPL21	3.09%	1.03%
MRPL49	2.58%	0.52%
MS4A10	1.55%	0.52%
MS4A13	1.55%	0.52%
MS4A15	1.55%	0.52%
MS4A8B	1.55%	0.52%
MTA2	2.06%	0.52%
MTL5	3.09%	1.03%
MUS81	3.09%	0.52%
NAA40		
NAALADL1	2.58%	0.52%
NDUFS8	3.09%	1.03%
NDUFV1	3.61%	0.52%

NEAT1		
NPAS4	3.09%	0.52%
NRXN2	3.09%	0.52%
NUDT22	3.09%	0.52%
NUDT8	3.61%	0.52%
NXF1	2.06%	1.55%
OTUB1	3.09%	1.03%
OVOL1	3.09%	0.52%
PACS1	3.09%	0.52%
PCNXL3	2.58%	1.03%
PC	4.64%	0.52%
PELI3	3.61%	0.52%
PITPNM1	3.61%	0.52%
PLA2G16	2.58%	2.06%
PLCB3	3.09%	0.52%
POLA2	2.58%	1.03%
POLD4	3.61%	0.52%
POLR2G	2.06%	2.58%
PPP1CA	3.61%	0.52%
PPP1R14B	3.09%	0.52%
PPP2R5B	2.58%	0.52%
PPP6R3		
PRDX5	3.09%	0.52%
PRPF19	1.55%	0.52%
PTPRCAP	3.61%	0.52%
PYGM	3.09%	0.52%
RAB1B	3.09%	0.52%
RAB3IL1	2.06%	0.52%
RAD9A	3.61%	0.52%
RASGRP2	3.09%	0.52%
RBM14	3.61%	0.52%
RBM4	3.61%	0.52%
RBM4B	3.61%	0.52%
RCE1	3.61%	0.52%
RCOR2	2.58%	1.03%
RELA	3.09%	0.52%
RHOD	4.12%	0.52%
RIN1	3.09%	0.52%
RNASEH2C	3.09%	0.52%
ROM1	2.06%	0.52%
RPS6KA4	3.09%	0.52%
RPS6KB2	3.61%	0.52%
RTN3	2.58%	1.03%
SAC3D1	2.58%	0.52%
SART1	3.09%	0.52%
SCGB1A1	2.06%	0.52%
SCYL1	2.58%	1.03%
SDHAF2		
SF1	3.09%	0.52%
SF3B2	3.09%	0.52%
SIPA1	2.58%	1.03%

SLC15A3	1.55%	0.52%
SLC22A12	3.09%	0.52%
SLC22A25	2.06%	2.06%
SLC22A6	2.06%	2.06%
SLC22A8	2.06%	2.06%
SLC25A45	2.58%	1.03%
SLC29A2	3.09%	0.52%
SLC3A2	2.06%	2.06%
SNORD22		
SNX15	2.58%	0.52%
SNX32	3.09%	0.52%
SPTBN2	3.61%	0.52%
SSH3	3.61%	0.52%
SSSCA1	2.58%	1.03%
STIP1	3.09%	0.52%
STX5	2.06%	1.55%
SUV420H1	3.09%	1.03%
SYT12	4.12%	0.52%
SYT7	1.55%	0.52%
SYVN1	2.58%	0.52%
TAF6L	2.06%	2.58%
TBC1D10C	3.61%	0.52%
TBX10	3.61%	0.52%
TCIRG1	3.09%	1.03%
TIGD3	2.58%	1.03%
TM7SF2	2.58%	0.52%
TMEM109	1.55%	0.52%
TMEM132A	1.55%	0.52%
TMEM134	3.61%	0.52%
TMEM138	1.55%	0.52%
TMEM151A	3.09%	0.52%
TMEM179B	2.06%	1.55%
TMEM216	1.55%	0.52%
TMEM223	2.06%	1.55%
TRMT112		
TRPT1	3.09%	0.52%
TTC9C	2.06%	2.06%
TUT1	2.06%	0.52%
UBXN1	2.06%	1.55%
UNC93B1	3.09%	1.03%
VEGFB	3.09%	0.52%
VPS37C	1.55%	0.52%
VWCE	1.55%	0.52%
WDR74	2.06%	1.55%
YIF1A	3.09%	0.52%
ZBTB3	2.06%	2.06%
ZDHHC24	3.61%	0.52%
ZFPL1	2.58%	0.52%
ZNHIT2	2.58%	0.52%
ZP1	1.55%	0.52%

CEP78	4.12%	3.09%
CNTF	1.55%	0.52%
DTX4	1.55%	0.52%
FAM111A	1.55%	0.52%
GIF	1.55%	0.52%
GLYAT	1.55%	0.52%
LPXN	1.55%	0.52%
MPEG1	1.55%	0.52%
MRPL16	1.55%	0.52%
MS4A1	1.55%	0.52%
MS4A2	1.55%	0.52%
MS4A3	1.55%	0.52%
MS4A5	1.55%	0.52%
MS4A6A	1.55%	0.52%
MS4A7	1.55%	0.52%
OR10V1	1.55%	0.52%
OR4D11	1.55%	0.52%
OR4D10	1.55%	0.52%
OR4D9	1.55%	0.52%
OR4D6	1.55%	0.52%
OR5AN1	1.55%	0.52%
OR5B21	1.55%	1.03%
OR5B12	2.06%	1.03%
OR5B2	2.06%	1.03%

OR5B17	1.55%	1.03%
OR5B3	2.06%	1.03%
OR10W1	1.55%	1.03%
OR10Q1	1.55%	1.03%
OR1S1	1.55%	1.03%
OR9Q2	1.55%	1.03%
OR9Q1	1.55%	1.03%
OR9I1	1.55%	1.03%
OR5A1	1.55%	0.52%
OOSP1		
OSBP	1.55%	0.52%
PATL1	1.55%	0.52%
PLAC1L	1.55%	0.52%
PSAT1	4.12%	3.09%
STX3	1.55%	0.52%
TLE4	4.12%	3.61%
ZFP91-CNTF		
ZFP91	1.55%	0.52%
C9orf85	4.64%	2.58%
C9orf135	4.12%	2.58%
C9orf41	3.61%	2.58%
ALDH1A1	4.12%	2.58%
ANXA1	4.12%	2.58%
APBA1	4.12%	2.58%

C9orf95	3.61%	2.58%
CBWD1	0.00%	0.00%
C9orf40	3.61%	2.58%
DMRT1	3.61%	3.61%
DMRT2	3.61%	3.61%
DMRT3	3.61%	3.61%
DOCK8	0.00%	0.00%
C9orf71	4.12%	2.58%
FAM108B1	4.64%	2.58%
FAM122A	4.12%	2.58%
FAM189A2		
FOXD4	0.00%	0.00%
FXN	4.12%	2.58%
GDA	4.64%	2.58%
KANK1	0.00%	0.00%
KLF9	4.12%	2.58%
MAMDC2	4.12%	2.58%
OSTF1	3.61%	2.58%
PGM5	4.12%	4.12%
PIP5K1B	4.12%	2.58%
PTAR1	4.12%	2.58%
RORB	3.61%	2.58%
SMC5	4.12%	2.58%
TJP2	4.12%	2.58%
TMC1	4.12%	3.09%
TMEM2	4.64%	3.09%
TRPM3	4.12%	2.58%
TRPM6	3.61%	2.58%
ZFAND5	4.64%	2.58%
KIAA0020	3.61%	4.64%
KCNV2	3.61%	4.64%
SMARCA2	3.61%	5.15%
VLDLR	3.61%	4.64%
CEP55	1.55%	11.86%
TMEM20	2.06%	11.86%
PLCE1	2.06%	11.34%
SUFU	1.55%	9.79%
C10orf81	1.55%	9.28%
C10orf118	1.55%	9.28%
ABLIM1	1.55%	9.28%
ACSL5	1.55%	9.28%
ADRB1	1.55%	9.28%
AFAP1L2	1.55%	9.28%
CASP7	1.55%	9.28%
DCLRE1A	1.55%	9.28%

GPAM	1.03%	10.31%
GUCY2GP		
HABP2	1.55%	9.28%
NHLRC2	1.55%	9.28%
NRAP	1.55%	9.28%
TCF7L2	1.55%	9.28%
TDRD1	1.55%	9.28%
TECTB	1.55%	9.28%
VTI1A	1.55%	9.28%
VWA2	1.55%	9.28%
ZDHHC6	1.55%	9.28%
VTI1A	1.55%	9.28%
NAP1L3		

DDX3Y

KDM5D
TSPY1

UTY

DDX3Y
USP9Y
DDX3Y
USP9Y
USP9Y
USP9Y
USP9Y
USP9Y

SRY

RBM1A1