

Table.S1A.Placenta.10pct.FDR.cis.eQTL

Gene	Lead eSNP Chr: Position_hg19	pvalue	beta	r_square	t-statistics
AGL	1:100282493	5.02E-06	-0.49287593	0.124619585	-4.727641808
FRRS1	1:100363703	2.42E-05	-0.461112815	0.107642316	-4.351829363
EXTL2	1:100984439	1.58E-06	-0.92574071	0.136924239	-4.990746779
VCAM1	1:101088119	2.16E-07	0.649830403	0.157826606	5.424243498
COL11A1	1:103570127	3.08E-07	0.598390582	0.1541434	5.348893145
PGD	1:10448260	2.87E-06	0.515630077	0.130600325	4.856375033
PEX14	1:10495508	1.18E-21	-0.924458388	0.442279513	-11.15809202
DFFA	1:10564909	1.41E-05	0.466727151	0.113510473	4.483642625
PRMT6	1:107607810	7.67E-30	1.142110095	0.560685556	14.15538773
SLC25A24	1:108737551	8.79E-11	-0.815939862	0.235714868	-6.958499644
FAM102B	1:109065271	3.64E-07	-0.776461348	0.152392277	-5.312927054
AKNAD1	1:109356216	1.33E-15	0.839618764	0.335052603	8.894318537
SRG7	1:109356394	7.25E-10	-0.708637031	0.215324095	-6.563734151
PSRC1	1:109364165	2.11E-05	0.48417004	0.109160659	4.386147241
GPSM2	1:109387676	2.27E-05	0.657757785	0.108372834	4.368359737
CLCC1	1:109560968	7.58E-11	0.87594418	0.23713519	6.985926921
AMIGO1	1:110052139	6.93E-32	1.136607509	0.586135867	14.91145697
GSTM4	1:110198727	3.03E-19	-1.007999171	0.40177294	-10.26850314
GSTM3	1:110281941	3.56E-24	0.934883335	0.481740734	12.08044615
KCNC4	1:110805807	3.00E-08	0.744871511	0.178160027	5.833931572
SLC16A4	1:110939612	1.74E-16	-0.970839623	0.351895627	-9.23281822
DRAM2	1:111731158	1.30E-08	0.677814868	0.186622797	6.001864342
C1orf88	1:111897232	5.25E-10	-0.625131882	0.218475621	-6.624911062
OVGP1	1:111999584	6.79E-09	-0.640376893	0.193167983	-6.130922645
CTTNBP2NL	1:112936760	3.06E-13	0.776131827	0.288011192	7.969258698
ST7L	1:113049862	1.05E-13	-0.779070193	0.297522272	-8.154423966
WNT2B	1:113049941	1.44E-07	-0.576813823	0.162064223	-5.510462294
MAGI3	1:113848867	3.45E-07	0.867148485	0.152937383	5.324132988
SDF4	1:1166887	2.24E-06	-0.741831094	0.133209637	-4.912025487
FBXO44	1:11714368	4.34E-13	-1.098041677	0.28490201	-7.908876678
FBXO2	1:11714793	3.57E-09	-0.935542163	0.199583598	-6.256828637
MRPL20	1:1173611	6.10E-06	0.654495788	0.122530463	4.682263388

TTF2	1:117596069	4.18E-07	1.093043215	0.1509447	5.283123611
TRIM45	1:117630875	1.36E-13	-1.24349744	0.295257797	-8.110271151
AGTRAP	1:11802434	3.92E-05	0.642223116	0.102416069	4.232493924
MTHFR	1:11847759	1.02E-06	-0.510068462	0.141521671	-5.087408749
WARS2	1:119484644	1.21E-06	-0.544287958	0.139729094	-5.049816884
CLCN6	1:11955984	4.65E-06	-1.132160573	0.125433278	-4.745257001
ZNF697	1:120261388	9.33E-06	0.472040339	0.117952307	4.582020332
PLOD1	1:12157881	1.24E-05	0.864393879	0.114865352	4.513772645
ATAD3C	1:1375810	4.90E-11	-0.665942096	0.241282914	-7.065992602
LOC653513	1:144570551	4.03E-09	0.849450792	0.198378724	6.233224305
NOTCH2NL	1:145395604	8.66E-08	0.954138175	0.16729037	5.61614747
ACP6	1:147124310	2.86E-11	0.750595147	0.246381651	7.16437442
GJA5	1:147216860	3.58E-10	0.615767492	0.22221281	6.697365172
OTUD7B	1:149928679	1.39E-05	0.548421961	0.11362882	4.486278818
MRPS21	1:150510122	4.49E-07	0.788140625	0.150205262	5.267874036
CTSS	1:150789961	4.01E-06	0.518957435	0.127006779	4.779229003
TUFT1	1:151542626	1.97E-07	-0.576090335	0.158794775	-5.443985369
TDRKH	1:151761624	4.91E-09	0.619210513	0.196412222	6.194659203
THEM4	1:151846517	4.48E-11	0.722306228	0.242122051	7.082186566
FLG	1:152177539	1.11E-12	-0.753266414	0.276380053	-7.743689125
S100A9	1:153337943	2.29E-06	-0.596402761	0.133014866	-4.907881764
S100A4	1:153521932	8.06E-06	0.869400695	0.119535076	4.61680443
S100A16	1:153585584	3.28E-05	-0.448473451	0.104348567	-4.276845473
S100A13	1:153587256	7.41E-15	0.802987517	0.320534466	8.606042319
CREB3L4	1:153940739	1.84E-09	0.661705432	0.206161459	6.385390694
ADAM15	1:155034632	8.06E-06	-0.614215647	0.119531141	-4.61671811
MUC1	1:155178782	3.17E-09	0.630518073	0.200769284	6.280039536
THBS3	1:155184975	1.14E-09	0.651804183	0.2108566	6.476874197
SCAMP3	1:155230131	4.22E-06	-0.522016986	0.12648072	-4.767884693
YY1AP1	1:155680449	4.87E-10	0.709198582	0.219207668	6.639110968
ARHGEF2	1:155829511	5.21E-07	0.574641181	0.148636106	5.23545428
CCT3	1:156247907	3.97E-08	-0.696464452	0.175300395	-5.776880446
APOA1BP	1:156567496	1.07E-05	0.515838395	0.1164952	4.549874149
EFHD2	1:15730693	1.05E-05	-0.769585365	0.11667223	-4.553786175

CASP9	1:15812665	3.93E-10	-0.867469133	0.221286154	-6.679408388
DNAJC16	1:15881237	2.85E-05	0.542170739	0.105866305	4.311490887
SLC35E2	1:1596500	3.91E-14	0.98247034	0.306173448	8.323541157
SLC35E2B	1:1597020	3.15E-15	-0.994978448	0.327817168	-8.750280303
ATP1A2	1:160077953	1.63E-05	-0.472367083	0.111907857	-4.447859927
PEA15	1:160140572	5.82E-12	0.912788593	0.261239052	7.451040271
CASQ1	1:160147065	3.91E-18	-0.881678634	0.38215856	-9.854466214
ATP1A4	1:160147065	2.85E-19	-0.904547048	0.402240022	-10.27848364
SLC25A34	1:16061966	1.01E-08	-0.767955429	0.189225752	-6.053268999
TSTD1	1:160951537	3.46E-05	0.429556716	0.103765989	4.263503567
KLHDC9	1:161047220	2.01E-05	0.936087491	0.109656531	4.397322196
FCGR3A	1:161617516	4.03E-06	-0.751518869	0.126969155	-4.778418111
HSPA7	1:161783760	2.08E-05	0.905138577	0.109316586	4.38966294
C1orf226	1:162351586	8.65E-07	0.957237625	0.143306833	5.124725682
NOS1AP	1:162360135	2.89E-05	0.632023678	0.10574539	4.30873667
RGS5	1:163206721	2.06E-10	1.314768418	0.227537983	6.800458766
CLCNKA	1:16344494	5.50E-20	-0.918008299	0.414520171	-10.54306033
HSPB7	1:16344858	2.44E-10	-0.666411913	0.225915859	-6.769071486
PBX1	1:164502470	5.65E-06	-0.970105959	0.123354368	-4.70018613
EPHA2	1:16506260	2.00E-07	0.5610426	0.158621873	5.440461663
ARHGEF19	1:16530049	2.46E-17	-0.816692393	0.367644615	-9.553957837
ALDH9A1	1:165526793	1.01E-07	-0.650790366	0.165752903	-5.585126916
MGST3	1:165612890	8.76E-14	1.12940213	0.299111565	8.18543911
TMCO1	1:165686873	1.97E-10	-1.149183107	0.227996316	-6.809324863
UCK2	1:165862323	5.37E-24	-1.051304774	0.479034063	-12.01512686
FBXO42	1:16593404	1.02E-05	0.603245967	0.116951283	4.55994904
RSG1	1:16596558	5.97E-08	-0.608386725	0.171120904	-5.693191156
CDK11B	1:1665702	1.23E-05	-0.476395265	0.114941555	-4.515464013
TADA1	1:166852434	6.89E-17	0.827562276	0.359397027	9.385179665
DUSP27	1:167087788	3.60E-08	0.665383315	0.176286071	5.796563806
CREG1	1:167525350	1.14E-28	1.036215295	0.545413147	13.72474207
TIPRL	1:168113416	1.52E-14	0.881456091	0.314377215	8.484626642
DPT	1:168709564	3.30E-20	0.984318758	0.418277396	10.62488051
NBPF1	1:16871193	5.35E-06	0.702505294	0.123939275	4.712888848

F5	1:169540080	8.74E-16	-0.823565121	0.338564318	-8.964511085
METTL18	1:169732743	6.26E-11	-1.138953555	0.238957823	-7.021115053
CROCCP2	1:17048715	2.86E-06	1.041423139	0.13061203	4.856625364
NADK	1:1705773	3.94E-05	0.711189772	0.102358431	4.231166907
VAMP4	1:171710405	1.59E-11	0.889540393	0.251893933	7.270714495
PIGC	1:172411768	1.24E-07	-0.639535269	0.163595763	-5.54150514
C1orf9	1:172603940	9.21E-10	-0.749500628	0.212979836	-6.518176858
MFAP2	1:17298496	1.27E-05	0.523882424	0.114649559	4.508981107
CROCC	1:17306923	3.62E-06	0.581242328	0.128101854	4.802801712
ATP13A2	1:17311882	3.77E-07	0.559615123	0.152017531	5.305217911
DARS2	1:173831757	1.52E-05	-0.620910945	0.112679531	-4.465109271
PADI2	1:17417313	2.75E-12	0.71530111	0.268147678	7.584467928
PAPPA2	1:176427218	1.36E-07	-0.780571129	0.162662298	-5.522591947
RASAL2	1:178181933	2.23E-06	0.534605889	0.133300012	4.91394765
ARHGEF10L	1:17846723	1.03E-09	0.720244332	0.211855572	6.496311874
TOR3A	1:179053051	9.11E-08	-0.552635188	0.166776518	-5.605786166
SOAT1	1:179245942	3.54E-07	0.705836715	0.152671108	5.318660222
CDK11A	1:1800364	2.92E-05	-0.854362665	0.105626699	-4.306032128
FLJ23867	1:180105578	1.78E-08	-0.941255222	0.183483337	-5.939715118
QSOX1	1:180105578	2.81E-15	-1.259966042	0.328775551	-8.769315596
LOC100527964	1:180225893	3.94E-05	1.027912034	0.102352257	4.231024752
XPR1	1:180522217	1.07E-06	-0.578325824	0.141040157	-5.077322929
RGS16	1:182601771	5.20E-06	-0.698449542	0.124234295	-4.719289376
LAMC2	1:183222013	1.14E-05	-0.559066905	0.115769936	-4.533828454
NMNAT2	1:183402201	1.65E-08	-0.61925642	0.184202148	-5.953959733
SMG7	1:183415318	1.98E-05	0.468212575	0.109832349	4.401280614
RGL1	1:183581402	1.20E-10	0.661454986	0.232747861	6.901184231
ARPC5	1:183581960	6.58E-30	1.015381727	0.561539831	14.17996098
NCF2	1:183582249	6.16E-23	0.922409199	0.462702471	11.62768649
C1orf21	1:184427186	3.41E-07	-0.601324321	0.153065274	-5.326760775
IVNS1ABP	1:185409061	1.75E-12	0.817646604	0.272289649	7.664540372
ALDH4A1	1:19202896	8.13E-06	0.467629639	0.119442552	4.614774841
IFFO2	1:19369527	4.01E-06	0.484166136	0.127030789	4.779746471
KIAA0090	1:19565344	3.25E-05	-0.437343842	0.10444573	-4.27906828

MRT04	1:19586294	4.99E-07	-0.595428597	0.149081529	-5.244665192
CAMSAP1L1	1:200768521	4.26E-08	0.952755682	0.174585507	5.762592043
C1orf106	1:201048016	1.10E-05	-0.899244071	0.116191434	-4.543157348
TMEM9	1:201113397	1.56E-14	0.809020475	0.314141077	8.47997933
PKP1	1:201261868	3.02E-06	-1.005272999	0.130036929	-4.844319403
TNNI1	1:201374677	1.23E-09	-0.630868668	0.210128923	-6.462709536
CSRP1	1:201478276	3.05E-10	-0.737960969	0.223745919	-6.727062133
NAV1	1:201490599	1.33E-12	-0.855771049	0.274751215	-7.712161796
RNPEP	1:201947787	1.24E-09	-0.741224264	0.210078757	-6.461732847
ELF3	1:202003987	3.19E-06	0.497245516	0.129447133	4.831683408
OTUD3	1:20203025	2.26E-05	-0.640756864	0.10839981	-4.368969469
PPP1R12B	1:202559753	1.26E-05	-0.917548702	0.114682925	-4.509722156
PLA2G2A	1:20306146	7.88E-08	0.686395238	0.168264062	5.63576373
FMOD	1:203333064	6.90E-06	0.609136244	0.12120391	4.653332481
ATP2B4	1:203527812	1.48E-07	0.568184278	0.161769448	5.504480474
ZC3H11A	1:203760414	2.08E-08	-0.735574485	0.181861444	-5.907540585
KISS1	1:204148903	3.08E-08	0.74038529	0.177892932	5.828609801
PIK3C2B	1:204403311	5.11E-17	1.123782106	0.361794062	9.434092346
NFASC	1:204839154	3.49E-06	0.476600408	0.128489007	4.811122085
TMCC2	1:205272926	1.02E-05	-0.54404997	0.117030927	-4.561707168
MFSD4	1:205557621	2.27E-05	-0.684929242	0.108369658	-4.368287945
RAB7L1	1:205735612	8.54E-10	-0.684846439	0.213722323	-6.53261097
CD55	1:207409432	3.69E-08	0.599451358	0.176035513	5.791562193
CD46	1:208018219	5.86E-07	0.598365041	0.14739959	5.209849703
PINK1	1:20897226	1.63E-07	0.568890493	0.160784169	5.484469615
LAMB3	1:209831590	3.05E-22	-0.956018283	0.451721305	-11.37324587
UBXN10	1:20993162	1.23E-05	-0.48280833	0.11501843	-4.517169962
KIF17	1:21172774	9.67E-06	-0.48071505	0.117572665	-4.573656362
SLC30A1	1:211775742	1.10E-05	-0.603531648	0.116162144	-4.542509417
SH2D5	1:21229538	1.49E-05	0.474206339	0.112904044	4.470120953
TMEM206	1:212588206	8.77E-11	-0.723241385	0.235738489	-6.958955832
FLVCR1	1:213066914	1.60E-07	0.619542262	0.160966416	5.488172984
HP1BP3	1:21517361	2.08E-05	0.479622722	0.109274604	4.38871651
NBPF3	1:21705436	3.59E-05	0.438967122	0.103368753	4.254392263

GPATCH2	1:217656307	3.14E-05	-0.861706967	0.104820817	-4.287642923
RRP15	1:218516310	5.31E-15	0.82452113	0.323369815	8.662113715
RAP1GAP	1:21953026	5.74E-06	0.724289068	0.123184322	4.696489893
USP48	1:22105918	2.98E-07	-1.024365183	0.154463778	-5.355463258
DISP1	1:223129451	9.57E-06	0.514224068	0.117682859	4.576084906
TLR5	1:223228143	1.56E-05	-1.084753935	0.112407486	-4.459032395
NCRNA00339	1:22352108	1.66E-19	1.062373398	0.406305778	10.36561119
DEGS1	1:224399727	5.32E-06	-0.552936748	0.124001978	-4.714249571
CNIH4	1:224544529	1.64E-13	0.774451607	0.293557212	8.077141774
ENAH	1:225942686	5.12E-06	0.51550146	0.124399977	4.72288198
TMEM63A	1:226063446	1.54E-11	-0.687684528	0.252192191	-7.276468366
PYCR2	1:226111945	7.96E-18	1.786906849	0.376581324	9.738438159
PSEN2	1:227069737	2.08E-17	0.814965039	0.368998538	9.581797007
CDC42BPA	1:227412734	4.69E-08	0.927146008	0.173589793	5.742672932
WNT3A	1:228203268	3.36E-12	-0.768548191	0.266304272	-7.548851764
HIST3H2A	1:228617200	1.74E-10	-1.165427574	0.229156298	-6.831759371
RNF187	1:228672258	2.27E-06	-1.020823569	0.133091623	-4.909514961
ABCB10	1:229737227	5.03E-06	-0.534728411	0.124599691	-4.727210716
URB2	1:229744594	5.43E-09	-0.666171624	0.195414315	-6.175069692
TAF5L	1:229780381	3.95E-15	-0.862842683	0.325893195	-8.712105319
TTC13	1:231114595	2.48E-07	-0.637596441	0.156415241	-5.395416779
C1orf124	1:231489353	7.79E-06	-0.489601339	0.119893783	-4.624668572
KDM1A	1:23287199	3.63E-05	-0.54478589	0.103241049	-4.251460714
NTPCR	1:233070803	1.36E-23	-1.193574537	0.472863271	-11.86741086
TARBP1	1:234586504	1.29E-10	-0.743221807	0.232021649	-6.887150791
LOC100506810	1:234872636	4.95E-06	1.16843723	0.124756678	4.730611949
RBM34	1:235324545	2.30E-06	-0.655128351	0.132961632	-4.906748942
TBCE	1:235565315	2.57E-09	0.680167379	0.20285394	6.320807998
B3GALNT2	1:235661544	9.20E-08	0.624135941	0.166672191	5.60368173
GNG4	1:236083092	1.54E-05	-0.557145639	0.112525312	-4.461664925
GPR137B	1:236303331	6.45E-07	-0.582896123	0.146395687	-5.189023841
ERO1LB	1:236424239	2.81E-09	0.602793297	0.201979674	6.303716643
LGALS8-AS1	1:236655806	3.49E-05	-1.10570534	0.103683058	-4.261602351
LGALS8	1:236673582	2.83E-08	-0.976704441	0.178731698	-5.845317249

ZNF436	1:23880208	3.23E-05	0.434003648	0.104507161	4.280473306
CHRM3	1:239843880	4.95E-06	-0.566720739	0.124767188	-4.73083961
KMO	1:241755567	1.70E-08	0.836831525	0.183916718	5.948304467
FUCA1	1:24180962	1.75E-14	-0.903183436	0.313137799	-8.460241581
ID3	1:24203848	3.37E-05	-1.105249093	0.104069589	-4.270459491
MAP1LC3C	1:242160789	4.66E-09	0.830832592	0.196929788	6.204814109
PNRC2	1:24288404	3.82E-24	-1.063525481	0.481274375	-12.06916833
ZNF238	1:244188049	9.47E-09	0.671541514	0.189827412	6.065135633
IL28RA	1:24518643	2.14E-08	-0.985899752	0.181603622	-5.902421629
SMYD3	1:246671888	2.55E-07	-0.672807267	0.156112006	-5.389215795
CNST	1:246861470	1.30E-06	-0.666063822	0.139019084	-5.034893338
SCCPDH	1:246874377	1.91E-10	-0.67602407	0.228295589	-6.815113528
LOC149134	1:246947793	4.38E-08	0.65945632	0.174285979	5.756602233
C1orf201	1:24699178	1.50E-05	0.687592468	0.112831281	4.468497054
GRHL3	1:24701330	2.53E-06	-0.571928882	0.131944336	-4.885077012
NIPAL3	1:24723768	2.28E-07	-0.662076357	0.157287102	-5.413231002
ZNF124	1:247288469	7.84E-15	-0.918781595	0.320058866	-8.596647116
TRIM58	1:247884022	5.68E-11	-1.38017323	0.239870464	-7.038731668
OR2W3	1:247911757	2.78E-07	-1.008147255	0.155220235	-5.370964027
C1orf130	1:24881453	6.90E-18	0.80478697	0.37770881	9.761837135
RHD	1:25624252	7.18E-21	-1.086203608	0.429388982	-10.86939066
TMEM50A	1:25647011	3.34E-06	1.818759429	0.128969797	4.821445119
PAFAH2	1:26291065	7.43E-09	0.594160675	0.192264609	6.113148478
EXTL1	1:26365549	4.94E-23	-1.034318165	0.464199078	-11.66273034
CNKSR1	1:26526554	2.01E-07	-0.705526505	0.158555993	-5.439118822
CEP85	1:26622633	6.93E-06	0.628156274	0.121162278	4.652423027
AIM1L	1:26668396	2.19E-10	0.797385964	0.226949698	6.7890773
HMG2	1:26839910	1.32E-07	-0.577063229	0.162905203	-5.527515665
PIGV	1:27019744	5.25E-10	-1.279482901	0.218478295	-6.624962948
MAP3K6	1:27684396	5.99E-06	-0.64095595	0.122712867	-4.686234292
SMPDL3B	1:28261600	2.03E-08	0.673339301	0.18213253	5.912921584
ATPIF1	1:28560580	2.85E-05	0.46497003	0.105898007	4.312212835
MECR	1:29571222	3.39E-05	-0.8416611	0.103981943	-4.268452073
SERINC2	1:31934343	1.38E-07	0.624344742	0.162507283	5.519448962

TRIM62	1:33628341	1.95E-17	-1.006163249	0.369488128	-9.591873355
ADC	1:33636657	2.43E-06	-0.544101417	0.132379011	-4.89434261
ZNF362	1:33680744	2.06E-08	-0.719376241	0.181968673	-5.909669209
ARHGEF16	1:3391022	1.55E-05	0.789170114	0.112446926	4.459913681
GJB4	1:35219736	1.28E-06	0.513762869	0.139190644	5.038501109
GJB5	1:35224844	1.35E-15	0.77381476	0.334956099	8.892392286
GJA4	1:35263443	2.49E-09	0.682707147	0.203165753	6.326901624
WRAP73	1:3538835	1.12E-11	0.666808679	0.255137787	7.333296538
C1orf216	1:36178590	7.09E-07	-0.66466055	0.145404732	-5.168432579
TP73-AS1	1:3679146	3.38E-07	0.604236992	0.153161723	5.328742175
OSCP1	1:36864652	2.80E-05	0.469126974	0.106054696	4.315780066
CSF3R	1:36964375	3.81E-14	1.21695487	0.306412713	8.328228923
CEP104	1:3773733	9.76E-11	-0.741538662	0.234715803	-6.93920343
LOC728431	1:37939094	1.96E-05	-0.4806197	0.109927991	-4.403433081
SNIP1	1:38000185	2.64E-06	-0.649758493	0.131469386	-4.874943399
MEAF6	1:38010243	5.88E-10	-1.328732255	0.217368616	-6.603430585
DNALI1	1:38071728	7.86E-06	-0.473311573	0.119804442	-4.622710537
INPP5B	1:38373554	8.18E-17	-1.193987784	0.358009743	-9.356922464
FHL3	1:38461319	2.00E-07	-0.552867478	0.15864091	-5.440849673
MACF1	1:39309107	2.90E-05	-0.469590256	0.105694895	-4.307586206
AKIRIN1	1:39465139	5.38E-06	-0.543390257	0.123882193	-4.71164993
NDUFS5	1:39492462	1.96E-21	-1.006186484	0.438656822	-11.07638507
PPIEL	1:40000354	9.55E-06	0.579757059	0.117708132	4.576641795
PABPC4	1:40035928	1.24E-07	-0.792372695	0.163585698	-5.541301316
TRIT1	1:40283051	1.83E-05	0.809301224	0.110675928	4.420245479
MYCL1	1:40288051	9.79E-06	-0.499390746	0.117435222	-4.570626335
PPT1	1:40580896	3.71E-08	0.79884322	0.175981116	5.790476149
DEM1	1:41053260	2.11E-05	0.783959834	0.109137118	4.385616315
CTPS	1:41442786	1.67E-15	-0.817497254	0.333159502	-8.856557459
FOXJ3	1:42649049	5.09E-09	0.688378326	0.196051267	6.18757498
EBNA1BP2	1:43559587	6.61E-07	-0.646361845	0.146132282	-5.183553823
ST3GAL3	1:44297673	5.60E-07	1.068029006	0.147875922	5.219719205
BEST4	1:45271912	2.34E-07	0.671085962	0.156997174	5.407309503
ZSWIM5	1:45736852	3.81E-05	0.56893408	0.102725967	4.23962452

TOE1	1:45819489	2.98E-08	0.642667892	0.178226304	5.835251908
PRDX1	1:45907843	2.97E-11	-0.775035676	0.246018899	-7.157375973
CCDC163P	1:46001550	4.28E-24	-1.042711517	0.480519515	-12.05093442
TESK2	1:46005708	3.19E-08	-0.597841505	0.177518635	-5.821149705
MMACHC	1:46451739	8.64E-06	0.662891146	0.118791046	4.600470276
PIK3R3	1:46512998	6.89E-06	-0.602111749	0.121212821	-4.65352713
C1orf190	1:46664249	1.27E-11	-1.075556846	0.253967201	-7.310712108
UQCRH	1:46795720	3.26E-05	-0.853536802	0.104404899	-4.278134264
NSUN4	1:46801471	1.51E-19	-1.00955024	0.407017834	-10.38091727
MKNK1	1:46959845	1.49E-05	-1.102963249	0.112887031	-4.469741305
ATPAF1	1:47187255	6.51E-10	-0.731236033	0.216382768	-6.584293382
CMPK1	1:47809936	2.66E-05	0.479335577	0.106626049	4.328773302
GPX7	1:53068430	4.19E-36	-1.056109385	0.634123418	-16.49564932
SCP2	1:53432786	1.89E-05	-0.503526719	0.11034037	-4.412707104
LRP8	1:53811942	3.21E-05	-0.45573694	0.104582341	-4.282192417
OMA1	1:58984949	5.91E-17	-0.91082829	0.360628957	-9.410303758
TACSTD2	1:59038549	1.83E-12	-0.748685494	0.271894756	-7.656903305
MYSM1	1:59155683	1.34E-07	-0.539204273	0.162799713	-5.525377551
TM2D1	1:62193831	4.45E-06	0.640962226	0.125908096	4.755521017
INADL	1:62208244	3.76E-06	0.99787035	0.127713303	4.794444218
L1TD1	1:62666745	2.76E-06	0.699410672	0.131014973	4.865238613
KANK4	1:62680934	3.49E-05	0.983124489	0.103687602	4.261706534
PGM1	1:64078425	2.94E-25	-1.543540231	0.4978279	-12.47564913
ACOT7	1:6501044	1.04E-07	0.725897955	0.165388496	5.577766013
AK4	1:65625635	3.09E-06	-1.098217436	0.129814284	-4.839551237
LEPROT	1:65801829	1.40E-05	-0.735458124	0.113598759	-4.485609277
LEPR	1:65941016	1.68E-10	1.329022185	0.2295087	6.838573714
THAP3	1:6655053	1.00E-05	-0.530870317	0.117173769	-4.56485947
GNG12	1:68318718	5.69E-12	0.818594003	0.261451184	7.455135306
NEGR1	1:72823713	2.64E-06	0.496762613	0.131479307	4.875155177
FPGT	1:74669000	7.96E-17	-0.826761729	0.358221982	-9.361243093
CRYZ	1:75195243	1.01E-19	-1.089414385	0.410022932	-10.44567078
TYW3	1:75219146	5.29E-06	-0.723430731	0.12405489	-4.715397659
SLC44A5	1:75765593	1.13E-05	0.457771502	0.115920536	4.537162834

ACADM	1:76189445	3.09E-10	0.710395735	0.223641293	6.725035941
CAMTA1	1:7725855	2.17E-09	0.648377431	0.204524681	6.353445862
PIGK	1:77994888	9.40E-06	0.765777473	0.117878823	4.580402023
FUBP1	1:78450517	5.10E-08	-1.095030661	0.172733246	-5.72552094
PTGFR	1:78759594	9.08E-11	0.691147199	0.23541167	6.952643917
ELTD1	1:79469865	9.04E-06	-0.486098373	0.118298478	-4.589639862
PARK7	1:8004440	2.15E-08	0.881243413	0.181526457	5.90088932
ENO1	1:8503379	3.06E-05	-0.454312316	0.105097405	-4.293959456
LPAR3	1:85350320	7.04E-07	0.544746594	0.145478983	5.16997664
MCOLN2	1:85463208	7.39E-06	-0.488407322	0.120471848	-4.637327195
MCOLN3	1:85552682	1.30E-06	-0.711229989	0.138993082	-5.03434644
CCBL2	1:89419575	1.21E-23	-0.985475567	0.473623812	-11.88552782
GBP3	1:89481583	1.01E-32	-1.135487082	0.596101241	-15.22206527
LRRC8B	1:90022799	1.22E-15	0.820770441	0.335775408	8.908750441
KLHL17	1:910394	5.38E-07	-0.631318433	0.148297359	-5.22844492
HFM1	1:91870410	1.86E-05	-0.535859321	0.110498482	-4.416260012
CDC7	1:91983174	2.10E-15	-0.838201704	0.33121194	-8.817765858
H6PD	1:9295794	2.86E-21	-0.874981781	0.435983204	-11.01637438
FAM69A	1:93415081	8.30E-14	0.860978665	0.299590072	8.194781691
LOC100131564	1:93622789	3.90E-12	0.929283169	0.264943653	7.522570558
DR1	1:93832565	4.97E-08	-0.526802485	0.172997257	-5.730809333
DNTTIP2	1:94343023	4.53E-16	0.827932077	0.34401128	9.073774506
ARHGAP29	1:94574053	1.15E-17	-0.866590915	0.373654952	-9.677838569
ABCA4	1:94574053	6.46E-19	-0.892150906	0.396021825	-10.14609125
ABCD3	1:94860629	4.43E-08	0.582153172	0.174170374	5.754289922
TMEM56	1:95484133	3.20E-09	-1.264410736	0.200696326	-6.278611816
SNX7	1:99130265	2.36E-05	-0.530599116	0.107949482	-4.358784345
PYROXD2	10:100155296	3.75E-19	0.876320597	0.400168128	10.23425668
HPS1	10:100299611	3.68E-05	0.851293626	0.10309906	4.248199845
ABCC2	10:101547612	3.82E-16	-0.767839417	0.345414504	-9.102001897
CWF19L1	10:102038641	6.75E-07	0.554594075	0.145915737	5.179055124
SEC31B	10:102229016	1.11E-06	-0.666291646	0.140712445	-5.070453689
LZTS2	10:102758337	4.01E-17	-0.914418088	0.363754858	-9.474187763
TMEM180	10:104222963	1.98E-07	-0.556884631	0.158737929	-5.442826951

TRIM8	10:104408272	8.52E-06	0.487750514	0.118930815	4.603541017
SFXN2	10:104487382	2.23E-10	-0.801286036	0.226801764	-6.786214964
C10orf32	10:104611764	4.51E-19	-1.030091463	0.39875181	-10.20408972
NT5C2	10:104652495	6.97E-06	0.593551178	0.121098566	4.651031052
NEURL	10:105310388	1.08E-05	-0.452548491	0.116334415	-4.546319582
SLK	10:105870132	8.19E-06	0.709416581	0.119357293	4.612904196
COL17A1	10:105870132	2.29E-21	1.358331416	0.43758032	11.05219305
SFR1	10:105870132	7.43E-26	1.461405818	0.506509919	12.69417816
CELF2	10:109533351	1.16E-12	-1.060633858	0.276033468	-7.736979607
MXI1	10:112011084	6.71E-06	0.72569696	0.121505463	4.659917157
ADRA2A	10:113072435	1.54E-07	-1.104615429	0.161335358	-5.495667362
ZDHHC6	10:114111660	1.64E-05	-0.811458951	0.111867789	-4.44696327
VWA2	10:115980929	8.44E-06	0.615810626	0.11904208	4.605984775
USP6NL	10:11751376	1.85E-09	-0.901924308	0.206097876	-6.384150294
NCRNA00200	10:1182768	2.80E-11	0.684045001	0.24658053	7.168211285
ECHDC3	10:11839030	9.60E-08	-0.610096706	0.166234649	-5.594852998
C10orf46	10:120533116	8.82E-10	0.641565432	0.213406535	6.526472553
SFXN4	10:120919179	1.08E-06	0.507491684	0.140939414	5.075211681
GRK5	10:121168934	1.74E-05	-0.924840941	0.111260862	-4.433369038
CDC123	10:12316859	1.87E-06	0.493089384	0.135119745	4.952577078
DHTKD1	10:12320114	8.92E-06	0.476989912	0.118438236	4.592714183
BTBD16	10:124110798	8.40E-08	0.599566774	0.16760336	5.622455517
PLEKHA1	10:124180766	5.74E-12	-0.672431744	0.261364624	-7.453464324
HTRA1	10:124215211	1.47E-09	-0.691330888	0.208357368	-6.428204298
ARMS2	10:124215565	1.23E-08	-0.656465775	0.18718694	-6.013014658
IKZF5	10:125021860	3.63E-05	0.526238169	0.103248768	4.251637944
CCDC3	10:12566323	4.09E-05	-0.442752052	0.101939912	-4.221523923
METTTL10	10:126348035	1.97E-06	0.813266511	0.1345766	4.941061798
MGMT	10:131303513	9.57E-07	0.567636836	0.142233977	5.10231285
CTAGE7P	10:132134542	9.79E-06	0.727672745	0.117441569	4.570766269
PHYH	10:13255634	3.44E-14	-0.828878051	0.307292974	-8.345480465
BNIP3	10:133790636	1.81E-05	0.796929993	0.110799166	4.423012234
LRRC27	10:134158316	9.52E-08	0.546229583	0.166319839	5.596572337
STK32C	10:134158448	1.28E-05	-0.641422473	0.114516181	-4.50601818

PWWP2B	10:134214937	2.62E-05	-0.56024222	0.106791989	-4.332542783
TUBGCP2	10:135082346	8.90E-07	0.669667348	0.142998871	5.118296417
MTG1	10:135218844	9.01E-07	-0.547704267	0.142880115	-5.115816232
LOC619207	10:135232654	1.70E-07	-0.652891565	0.160317748	-5.474987613
FRMD4A	10:13764711	1.86E-07	0.638300727	0.159378119	5.455867688
FAM107B	10:14717099	2.01E-10	-0.711727157	0.227784048	-6.805218825
OLAH	10:15071848	9.96E-08	0.570343345	0.165849088	5.587069261
ACBD7	10:15076906	4.07E-06	0.490035756	0.126860336	4.776072335
NMT2	10:15249832	2.23E-07	-0.711802986	0.157513966	-5.417862813
FAM171A1	10:15417216	3.53E-06	0.622810095	0.128384776	4.808882735
C1QL3	10:16555862	2.77E-22	0.912171434	0.452380372	11.38838655
CUBN	10:17040116	1.56E-06	0.722263333	0.137101304	4.994484997
STAM	10:17598391	1.32E-05	-0.472542144	0.114244118	-4.499971134
NSUN6	10:18798319	2.19E-05	0.455004911	0.108719726	4.376196902
ARL5B	10:18939467	1.14E-06	0.611229685	0.140379176	5.063463769
MASTL	10:27467486	1.63E-14	0.833030345	0.313781025	8.472894595
MPP7	10:28666860	3.14E-08	-0.957617601	0.177693926	-5.824643757
PITRM1	10:3169139	7.28E-11	0.673026828	0.23751661	6.993291412
ARHGAP12	10:32223728	3.91E-06	-0.472537129	0.127294004	-4.785417354
CCDC7	10:32904682	6.27E-06	0.64459081	0.122225416	4.675618715
C10orf68	10:33179058	1.38E-05	-0.720727541	0.113726867	-4.488462188
CCNY	10:35793889	2.71E-05	-0.496683977	0.10641899	-4.324067121
ZNF37A	10:38472243	3.46E-05	1.043964835	0.10378212	4.263873322
ZNF33B	10:43130471	3.57E-05	-0.541432594	0.10342069	-4.255584185
LOC441666	10:43210751	1.56E-08	-0.75099115	0.18480716	-5.965942243
C10orf25	10:45481121	4.07E-05	1.001849841	0.102009577	4.223129965
ALOX5	10:45856319	1.24E-17	-1.089635942	0.373061775	-9.665577949
FAM21C	10:46169848	1.70E-08	0.831447978	0.183898212	5.947937747
SYT15	10:46973933	2.65E-07	1.042069779	0.15569208	5.380624127
ANXA8L2	10:47703613	7.54E-07	0.525171333	0.144755275	5.154918734
AKR1E2	10:4866747	1.80E-06	-1.066753735	0.135533128	-4.961333027
ERCC6	10:50748561	1.30E-08	1.198188924	0.18662131	6.001834948
NCOA4	10:51563700	3.51E-12	-0.78830573	0.265898459	-7.541012646
SGMS1	10:52487641	3.27E-05	0.736497743	0.104394395	4.277893966

CSTF2T	10:53620545	6.12E-06	-0.981996001	0.122491595	-4.681417003
TUBAL3	10:5539425	8.66E-06	0.562222482	0.118755268	4.599684044
GDI2	10:5799613	6.01E-14	-0.99565024	0.302418451	-8.250048014
ZWINT	10:58059647	4.07E-05	-1.012115231	0.102017729	-4.223317882
FBXO18	10:5902711	1.73E-05	0.506641326	0.111289523	4.434011508
IPMK	10:60038248	6.38E-09	1.176394713	0.193797464	6.143300954
IL15RA	10:6009462	2.72E-06	-0.530491913	0.131172358	-4.868600891
C10orf108	10:603327	4.17E-06	-0.54274994	0.126611625	-4.770708862
CCDC6	10:61709195	2.97E-06	-0.500806861	0.130223972	-4.848323366
ANK3	10:61894916	4.48E-09	-0.859672443	0.19733222	-6.212707565
DIP2C	10:627211	2.74E-09	0.716720117	0.202240932	6.308824991
NRBF2	10:65104500	3.68E-05	0.486903922	0.103111361	4.248482415
REEP3	10:65293924	3.67E-08	0.574470523	0.176101212	5.792873787
DNA2	10:70231412	1.48E-08	-0.88096364	0.185305243	-5.975802269
TET1	10:70432350	1.60E-05	-0.512822478	0.112138665	-4.453023068
STOX1	10:70599221	5.61E-08	0.93687071	0.171762109	5.706055092
TSPAN15	10:71211150	5.41E-16	0.963365793	0.342542141	9.044256483
SAR1A	10:71905695	4.60E-06	0.507610989	0.125558135	4.747957061
PPA1	10:71941873	2.40E-09	0.635318808	0.203535619	6.334128341
EIF4EBP2	10:72172992	1.06E-06	0.755729873	0.141139616	5.079406921
ADAMTS14	10:72502554	2.91E-07	-0.661310977	0.154732718	-5.360976139
CHST3	10:73770073	5.41E-09	0.618114376	0.195447894	6.175729072
ASCC1	10:73970451	5.76E-07	-0.523835396	0.147588669	-5.213768301
ANXA7	10:75369185	2.92E-06	1.024332158	0.130416918	4.852452033
MYOZ1	10:75415677	4.01E-05	0.627825455	0.10216647	4.226745607
SYNPO2L	10:75425333	2.66E-07	-0.793964377	0.155665587	-5.380081908
ADK	10:75867614	7.17E-06	-0.47601854	0.120786441	-4.644208717
ITIH5	10:7645142	3.79E-09	-1.432374649	0.199008441	-6.245563165
VDAC2	10:76970613	1.20E-06	-0.552450964	0.139891306	-5.053223645
C10orf11	10:77143467	1.29E-05	0.509242057	0.114437356	4.504266612
KCNMA1	10:79336052	4.31E-06	0.473097528	0.126241102	4.762712973
RPS24	10:79743330	4.25E-11	0.684972352	0.24262025	7.09180041
PLAC9	10:81886241	1.88E-05	-0.652360775	0.110419461	-4.414484547
ANXA11	10:81933306	1.99E-07	0.547956579	0.158692082	5.441892616

C10orf58	10:82183505	1.36E-08	0.646997275	0.186175097	5.993011796
SNCG	10:88718833	2.00E-18	0.94403532	0.387351941	9.963161345
C10orf116	10:88732476	1.34E-06	0.544699154	0.138701773	5.028217503
MINPP1	10:89262987	2.23E-07	0.527487174	0.157515616	5.417896492
PAPSS2	10:89484962	4.84E-06	-0.517449337	0.125015935	-4.736226247
PTEN	10:89599749	1.18E-05	0.900662148	0.115394307	4.525506091
ATAD1	10:89605427	1.36E-05	1.15445835	0.113915999	4.492672289
FAS	10:90752128	1.91E-12	0.755370961	0.271490784	7.649091338
IFIT5	10:91160092	5.18E-11	-0.781247929	0.240751588	-7.055738231
MARCH5	10:94572035	3.65E-05	0.482063996	0.103195437	4.250413373
RBP4	10:95062654	3.86E-05	0.91702478	0.102582973	4.236335184
MYOF	10:95203670	3.74E-05	0.533281988	0.102920197	4.244090063
FRA10AC1	10:95470501	1.68E-05	-0.480258429	0.111587747	-4.440693616
PLCE1	10:96039597	1.63E-06	-0.505424864	0.136587524	-4.983634491
TBC1D12	10:96105979	8.38E-10	-0.738422467	0.213913148	-6.536319899
PDLIM1	10:96828160	3.94E-05	-0.63740062	0.102354733	-4.231081763
TCTN3	10:97335852	1.00E-08	-1.407268182	0.189276353	-6.054267214
TM9SF3	10:98384918	3.62E-06	-0.805438479	0.12812707	-4.80334385
FRAT1	10:98971025	1.49E-06	0.64401904	0.137583784	5.00466479
PI4K2A	10:99283361	3.99E-05	-0.523454201	0.102212911	-4.227815492
MORN4	10:99420093	3.71E-06	-0.5093313	0.127855329	-4.797499927
MARVELD1	10:99478081	1.06E-11	0.716730596	0.255689232	7.343936188
ARHGAP42	11:100512126	1.52E-08	-0.992488127	0.185089046	-5.97152297
TMEM133	11:100512126	6.51E-09	-1.015044187	0.193597602	-6.139371418
CNTN5	11:100530419	2.13E-06	0.910245238	0.133771063	4.923960622
TMEM123	11:102268527	3.77E-05	0.618296944	0.102826738	4.241941682
SBF2	11:10266998	9.64E-07	0.514405898	0.142165722	5.100885509
MMP1	11:102675489	1.14E-08	0.555640049	0.187962847	6.028342003
CARD16	11:104918132	2.13E-12	-1.094157411	0.270489711	-7.629735633
ADM	11:10764618	1.23E-06	0.546534924	0.139602107	5.047149212
SLC35F2	11:107720325	8.83E-13	-0.764479157	0.278492759	-7.784602345
ACAT1	11:107885628	4.64E-06	0.788318921	0.125462712	4.745893575
NPAT	11:108048541	3.24E-21	-0.979303953	0.435099802	-10.99659943
ATM	11:108287131	3.15E-06	-0.604880402	0.129608605	-4.835144404

KDELC2	11:108369173	1.98E-11	-1.04903702	0.249821384	-7.230732433
EXPH5	11:108495541	2.54E-08	-0.815405987	0.179865778	-5.86788547
DLAT	11:111856412	2.54E-12	0.657556553	0.268865694	7.598343817
C11orf1	11:112109646	3.07E-05	0.51830414	0.105059892	4.293103058
TTC12	11:113161082	1.38E-06	0.993639672	0.138390358	5.021661885
GALNTL4	11:11329561	1.66E-05	-0.43080702	0.111730254	-4.443884714
CCDC84	11:118837272	2.14E-05	-0.490272665	0.108986964	-4.38222905
TRAPPC4	11:118895202	1.99E-13	0.949080933	0.29185361	8.043977342
SLC37A4	11:119130689	3.89E-05	-0.512695323	0.102489058	-4.234174007
CBL	11:119130689	5.20E-07	-0.617458725	0.148653334	-5.235810673
THY1	11:119304090	3.84E-07	-0.921991656	0.151822915	-5.301212593
USP47	11:11972846	6.81E-10	-0.827284842	0.215941879	-6.575732458
TRIM29	11:120002727	3.93E-05	0.530408895	0.10237816	4.231621177
ARHGEF12	11:120149184	2.96E-08	1.177663317	0.178279365	5.836308879
BLID	11:122249182	1.38E-06	-0.56399881	0.138381404	-5.021473331
MIR100HG	11:122249182	1.78E-10	-0.725481719	0.228967743	-6.828113068
CLMP	11:122971458	2.32E-05	-0.689490492	0.108129468	-4.362856744
PARVA	11:12345459	3.33E-05	-0.812920811	0.104202342	-4.273498979
VWA5A	11:123986173	2.68E-07	-0.966224386	0.155577619	-5.378281368
NRGN	11:124636373	5.40E-07	0.676079857	0.148265597	5.22778751
ESAM	11:124636373	1.76E-09	0.798055476	0.206590602	6.39376156
VSIG2	11:124643693	2.82E-13	0.949162477	0.288755824	7.98372999
CCDC15	11:124834836	9.74E-07	0.673731363	0.14205597	5.098590043
SLC37A2	11:124955162	1.05E-05	-0.448982208	0.116694459	-4.554277259
PUS3	11:125777056	2.20E-05	-0.47460076	0.10867775	-4.375248978
CDON	11:125857370	3.85E-17	-0.898521525	0.364076205	-9.480766188
HYLS1	11:125956762	2.32E-05	-0.609621182	0.108123442	-4.362720418
FOXRED1	11:126093217	1.54E-24	-1.198072631	0.487208438	-12.21340594
DCPS	11:126109548	3.99E-05	-0.48013799	0.10221083	-4.22776756
C11orf45	11:128773802	8.66E-06	-0.559091755	0.11875752	-4.599733536
ARHGAP32	11:129086105	4.15E-10	0.86916546	0.220766149	6.669329313
NFRKB	11:129786506	2.00E-05	-0.442615669	0.109721312	-4.398780931
ST14	11:130050822	5.59E-06	0.502822306	0.123463518	4.702557914
ADAMTS8	11:130090562	1.25E-05	-0.618409305	0.114806136	-4.51245806

SNX19	11:130771662	1.75E-09	-0.652140688	0.206676945	-6.395445543
ARNTL	11:13305263	4.77E-06	-0.480594849	0.125165419	-4.739461876
JAM3	11:134011913	9.39E-11	0.745578661	0.23508852	6.946402549
PDE3B	11:14603548	1.12E-06	0.526465381	0.140548339	5.067012287
C11orf58	11:16534415	1.89E-06	0.475490717	0.13503518	4.950785024
NUCB2	11:17237949	1.19E-09	-0.751311635	0.21042858	-6.468543128
CTSD	11:1749981	2.61E-13	0.900942375	0.289431927	7.996873003
SERGEF	11:18039056	9.47E-11	-0.633411517	0.23500745	-6.944836698
GTF2H1	11:18342081	2.51E-08	0.572060838	0.17996834	5.869925262
SYT8	11:1840686	1.37E-06	-0.672822995	0.138464305	-5.023218892
TNNI2	11:1857112	7.84E-06	-0.528585939	0.119826923	-4.623203286
SPTY2D1	11:18643559	2.02E-12	-0.706777994	0.270975067	-7.63911946
ZDHHC13	11:19139190	2.41E-10	-0.70571771	0.226036938	-6.771414782
IGF2AS	11:2164990	3.99E-06	-0.843341255	0.12706722	-4.780531547
BET1L	11:236811	1.36E-08	0.687213061	0.186180344	5.993115577
MUC15	11:26615917	2.51E-07	0.673160859	0.15626785	5.392403047
ANO3	11:26645073	9.09E-31	1.457430662	0.572401297	14.49712691
BBOX1	11:27062975	1.35E-09	0.959354273	0.209221078	6.445030859
FIBIN	11:27090719	4.39E-07	0.547549309	0.150436827	5.272651535
BDNF	11:27655318	2.50E-06	-0.530769425	0.132048286	-4.887293579
LGR4	11:27780018	6.52E-06	1.222953361	0.12181628	4.666699121
ATHL1	11:295808	1.02E-06	0.569514535	0.141549429	5.087989902
IFITM3	11:303631	1.10E-05	0.486983701	0.116195715	4.543252058
OSBPL5	11:3181085	9.59E-06	0.608920877	0.117659983	4.57558079
RCN1	11:32101281	1.88E-07	-0.62656309	0.159297596	-5.454228055
NCRNA00294	11:33061663	3.74E-06	0.547314276	0.127756281	4.795369002
TCP11L1	11:33087972	1.12E-09	0.673234279	0.211068244	6.480993047
C11orf41	11:33407954	4.34E-06	-0.550432689	0.126173123	-4.761245256
C11orf91	11:33751052	6.92E-06	-0.499394355	0.121176858	-4.65274153
LMO2	11:33891357	2.53E-05	-0.492429903	0.107156107	-4.340807466
ABTB2	11:34298731	3.55E-05	-0.503196878	0.103481022	-4.2569685
CAT	11:34490537	2.76E-19	-0.960646112	0.402476752	-10.28354427
APIP	11:34897474	2.19E-11	-0.727043706	0.248877057	-7.212515229
CD44	11:35069058	1.77E-08	-0.621221164	0.183496202	-5.939970145

SLC1A2	11:35397619	9.91E-07	-0.717139716	0.141865395	-5.09460309
TRIM44	11:35730541	1.39E-07	-1.09090386	0.162416138	-5.517600662
ANO9	11:422987	2.87E-13	-0.899779426	0.288579246	-7.98029798
SIGIRR	11:437811	4.68E-07	-0.557438018	0.149771973	-5.258930043
HSD17B12	11:43877934	8.39E-06	-0.523962054	0.119104207	-4.607348991
ACCS	11:44087989	1.23E-14	1.150601781	0.316181069	8.52014916
CD82	11:44552537	1.45E-07	0.553947157	0.161977925	5.508711305
SLC35C1	11:45837152	2.27E-05	0.707391558	0.108329304	4.367375716
OR51E1	11:4664460	8.52E-06	-0.486041504	0.11894056	-4.603755072
OR51E2	11:4667430	1.17E-06	-0.646514512	0.140159579	-5.058855671
ACP2	11:47275064	2.14E-10	-0.713710209	0.22717866	-6.79350721
LOC441601	11:50257732	6.56E-13	-0.962540455	0.281181364	-7.836703734
HBG1	11:5258038	1.13E-06	-0.538858364	0.140514762	-5.066308023
OR51B5	11:5368448	4.58E-06	-0.529671146	0.125591009	-4.748667858
TRIM22	11:5711177	1.32E-05	-0.513960847	0.114226819	-4.499586488
TIMM10	11:57326927	5.33E-10	-0.856922419	0.218328176	-6.622050526
MED19	11:57510294	8.00E-08	0.613786835	0.168104939	5.632559523
TRIM5	11:5956626	3.66E-12	-0.772708824	0.265527437	-7.533846022
MS4A4A	11:60054948	6.97E-16	0.785897395	0.340442136	9.002124769
MS4A7	11:60152482	2.58E-05	-0.538064913	0.106945928	-4.336037967
TMEM109	11:60624517	1.08E-05	-0.563725043	0.116366742	-4.547034369
FADS2	11:61595564	1.43E-07	0.914157197	0.16212934	5.511783405
FADS3	11:61639488	2.64E-06	0.527326181	0.131461607	4.874777345
EML3	11:62334908	2.06E-11	0.829785218	0.24945337	7.223633013
EEF1G	11:62365619	3.73E-09	-0.741925207	0.199157889	-6.248490763
MTA2	11:62374821	4.13E-09	0.741747593	0.198148764	6.228717126
RARRES3	11:63282048	1.41E-05	0.643838721	0.113482209	4.48301291
PRKCDBP	11:6341365	2.13E-13	1.219438203	0.291247539	8.032184368
MACROD1	11:63917601	1.09E-05	0.465473675	0.116254259	4.544546962
PPP1R14B	11:63956839	2.57E-06	0.564977887	0.131763254	4.881214593
TRMT112	11:64078943	2.39E-07	-0.961613498	0.156794277	-5.403164083
SMPD1	11:6409316	4.65E-08	-0.864403801	0.173682809	-5.744534588
PRDX5	11:64147083	3.32E-06	-0.505529933	0.129049593	-4.823157383
CAPN1	11:64588185	3.24E-05	0.465611262	0.104491841	4.280122929

SIPA1	11:65395860	1.68E-05	0.839237458	0.11158705	4.440678023
DPP3	11:66324360	1.28E-07	-0.54045708	0.163231931	-5.534136112
CTSF	11:66338300	1.03E-26	-1.150267932	0.51871781	-13.00814923
RPS6KB2	11:67205978	1.73E-06	-0.542664484	0.135978657	-4.970761934
PTPRCAP	11:67215988	5.00E-06	-0.511576694	0.124663392	-4.728590978
DEAF1	11:672919	2.34E-07	-0.540869233	0.156988354	-5.407129322
ALDH3B2	11:67423892	6.87E-07	0.726952329	0.145731452	5.175225338
ALDH3B1	11:67719646	1.92E-05	-0.570460845	0.110162612	-4.40871083
TCIRG1	11:67775101	1.15E-05	0.685520442	0.115737564	4.533111556
CPT1A	11:68615600	3.93E-09	-0.657782651	0.198637531	-6.238296043
IGHMBP2	11:68668437	4.33E-10	0.68441931	0.220357618	6.661409637
TMEM80	11:688091	1.82E-14	-0.786333692	0.312807948	-8.453754906
ZNF215	11:6948139	9.43E-10	0.686606763	0.212750545	6.51371844
ANO1	11:69915175	5.53E-08	-0.761784178	0.17189994	-5.708819099
PPFIA1	11:70151686	2.03E-06	-0.545246674	0.134294882	-4.93508418
CTTN	11:70249399	2.03E-05	0.692778037	0.10956978	4.395368338
NADSYN1	11:71205006	3.14E-05	0.826796331	0.104828747	4.287824101
DHCR7	11:71221585	3.82E-05	0.84326632	0.102682103	4.238615668
INPPL1	11:71871594	3.77E-06	-0.517756587	0.127689081	-4.793922987
ARAP1	11:72341538	2.36E-06	-0.577837779	0.132690348	-4.900974044
ATG16L2	11:72506130	3.58E-05	0.43463023	0.103396102	4.255019922
ARHGEF17	11:73011075	7.90E-06	-1.040257535	0.119742617	-4.621355327
RELT	11:73039229	2.70E-05	0.6241875	0.106462342	4.325052698
MRPL48	11:73365157	2.72E-05	0.651407251	0.106390714	4.323424225
PAAF1	11:73611349	4.55E-08	-1.049615152	0.173911471	-5.74911034
UCP2	11:73692417	7.02E-06	-0.806964422	0.121023285	-4.649386075
C2CD3	11:73810871	1.03E-08	-0.814950017	0.188952897	-6.047885559
PPME1	11:73825503	3.73E-09	-0.962859325	0.19917131	-6.248753665
UCP3	11:74088541	1.07E-06	-0.781745378	0.141050898	-5.077548007
PGM2L1	11:74105105	9.17E-08	-0.644622932	0.166708809	-5.604420392
XRR1	11:74659789	2.78E-43	1.33909751	0.703395145	19.29569303
RNF169	11:74671100	1.88E-08	0.683455714	0.182899573	5.928140018
SLCO2B1	11:74839404	1.54E-05	0.455840062	0.112543869	4.462079448
SERPINH1	11:75250017	1.02E-05	-0.498832659	0.116957883	-4.560094746

WNT11	11:75959236	3.16E-05	0.44160038	0.10477383	4.286569327
TSKU	11:76512431	4.17E-06	-0.655896531	0.126590352	-4.770249974
ACER3	11:76573016	2.32E-05	0.450255527	0.108105174	4.362307171
TALDO1	11:766133	7.53E-06	0.6653051	0.120268161	4.632868853
PAK1	11:77261051	1.01E-31	1.111067944	0.584154	14.85071076
AQP11	11:77261051	3.17E-38	1.177520547	0.656119745	17.30763627
GAB2	11:78010830	8.15E-11	-0.800040087	0.236444602	-6.972591984
NARS2	11:78286462	3.03E-15	0.889336229	0.328143694	8.756764277
OVCH2	11:7928252	3.81E-07	0.593749824	0.151919332	5.303197065
LOC283299	11:7928947	8.80E-08	-1.221594067	0.167128337	-5.612880929
NLRP10	11:7948612	8.70E-07	-0.714081972	0.143245609	-5.123447791
PIDD	11:802115	3.87E-05	0.499008802	0.10254205	4.235393534
DRD4	11:802125	3.20E-05	1.220419645	0.104623027	4.283122596
ST5	11:8284860	2.53E-05	-0.577652628	0.107182681	-4.341410288
CD151	11:833589	2.38E-29	1.13908513	0.554340876	13.97451928
TSPAN4	11:835877	7.67E-08	-0.622184071	0.168543497	-5.641389153
ME3	11:86359524	5.13E-06	0.590689731	0.124392261	4.722714702
TMEM135	11:86770127	4.51E-06	1.088917276	0.125761967	4.752363363
TRIM66	11:8701836	1.76E-19	0.909506294	0.405870842	10.35626893
CHID1	11:870446	1.17E-11	0.683415523	0.254763223	7.326069839
RAB38	11:87908736	1.35E-09	-1.021728218	0.209229368	-6.445192334
CTSC	11:88044888	4.84E-07	0.814896784	0.14941283	5.251511955
NAALAD2	11:89913729	2.16E-15	0.827654556	0.330995196	8.8134522
TMEM9B	11:9024896	7.60E-07	-0.964179659	0.144668888	-5.153120078
AP2A2	11:919107	9.07E-25	-0.988048001	0.490626677	-12.29723033
FAT3	11:91921654	1.40E-07	0.575597627	0.162339613	5.516048681
SLC36A4	11:92936341	2.70E-07	-0.608350486	0.155518847	-5.377078285
C11orf54	11:93500659	2.01E-20	0.923545276	0.421913264	10.70446369
VSTM5	11:93583790	6.15E-11	-0.720056796	0.239118255	-7.024211988
HEPHL1	11:93651071	4.14E-07	-1.165449147	0.151046208	-5.285215653
PANX1	11:93862020	3.93E-14	0.756653002	0.306137978	8.322846251
PIWIL4	11:94041469	3.70E-05	0.541443957	0.103047316	4.247011145
FUT4	11:94099391	4.15E-05	0.70618813	0.101795818	4.218200876
MRE11A	11:94225807	3.02E-08	0.598210382	0.178076391	5.832265302

CWC15	11:94724428	2.41E-11	-0.685652313	0.247979558	-7.195201223
SESN3	11:95311422	2.81E-05	-0.793511772	0.106037652	-4.315392119
CEP57	11:95491685	3.72E-05	-0.498884865	0.102969988	-4.245234355
ZNF143	11:9557607	8.36E-06	1.180232583	0.119134773	4.608020102
FAM76B	11:95798568	3.52E-05	0.662150625	0.103580787	4.259257048
CCDC82	11:96122428	2.96E-09	0.703720999	0.201468356	6.293716574
GAS2L3	12:100967902	2.37E-08	0.608936362	0.180566148	5.881810697
CLEC12A	12:10135536	2.04E-09	0.667136282	0.205162673	6.365900904
UTP20	12:101824963	1.92E-06	-0.896019346	0.134843719	-4.946726561
CHPT1	12:102083778	1.70E-12	0.726797307	0.272552914	7.669632179
GNPTAB	12:102222014	2.56E-07	-0.671061518	0.156079471	-5.388550314
CLEC1A	12:10247896	1.68E-06	0.708145454	0.136311744	4.977805868
CLEC7A	12:10292859	3.65E-06	0.705398455	0.128038776	4.801445422
OLR1	12:10320444	3.17E-16	0.820920115	0.34695246	9.132978033
C12orf59	12:10334088	1.41E-07	1.023465715	0.162273933	5.514716511
KLRD1	12:10393535	6.52E-08	-0.580635843	0.170215592	-5.675012994
NT5DC3	12:104185496	2.29E-10	0.64417861	0.226512877	6.780625054
HSP90B1	12:104309712	4.02E-07	-0.589064446	0.151361817	-5.291718199
C12orf73	12:104333866	7.19E-07	0.509290127	0.145256728	5.165354215
SLC41A2	12:105349252	6.18E-12	0.73873561	0.260683441	7.440315163
ALDH1L2	12:105387537	4.51E-07	-0.605310714	0.150147407	-5.266680134
C12orf45	12:105391019	3.57E-07	-0.965293978	0.1525933	-5.317060623
RAD52	12:1056030	2.22E-11	-0.968458895	0.248756302	-7.210185717
C12orf75	12:105752267	5.62E-08	-0.681182452	0.171729296	-5.705397023
MTERFD3	12:107359844	3.28E-06	0.912860292	0.129169458	4.825728877
ACACB	12:109562460	1.64E-05	-0.525289012	0.111874532	-4.447114178
KCTD10	12:109914802	4.54E-24	1.319126192	0.480135871	12.04167709
TAS2R30	12:10996316	4.69E-06	-0.694244363	0.125346932	-4.743389293
MMAB	12:109975211	2.51E-10	-0.660981513	0.225631623	-6.763570244
UBE3B	12:110000394	2.05E-24	1.321396382	0.48534465	12.16793003
ANAPC7	12:110529238	2.13E-06	0.620921604	0.133773707	4.924016799
ERC1	12:1110336	1.86E-11	-0.825434772	0.250439	-7.242646948
FAM109A	12:111807499	2.61E-07	0.53447254	0.155849533	5.383846227
ATXN2	12:112040904	1.26E-05	0.684981164	0.114759751	4.511428187

PTPN11	12:112591821	4.03E-05	0.681689818	0.102119551	4.225664551
ADAM1	12:112591821	3.25E-07	-0.835967321	0.153572652	-5.337180926
TAS2R19	12:11323939	6.26E-07	-0.54038843	0.146701652	-5.195374717
LOC100129361	12:11323939	5.82E-08	-0.58408367	0.171385095	-5.698492489
TAS2R13	12:11323994	1.35E-06	-0.525280852	0.138612319	-5.0263348
PRH2	12:11324176	7.53E-09	-0.611967785	0.192139479	-6.110685581
TAS2R20	12:11324176	9.08E-10	-0.644522021	0.2131253	-6.521005091
TAS2R14	12:11325804	3.12E-10	-0.660102175	0.22354316	-6.723135427
OAS1	12:113357193	8.71E-13	-0.724449627	0.278612918	-7.786929998
PRH1-PRR4	12:11351211	6.55E-11	-0.685513393	0.238517217	-7.012609388
C12orf52	12:113607823	1.85E-06	-0.890719824	0.135276697	-4.955902338
TPCN1	12:113697253	4.34E-07	1.024431068	0.150558735	5.275165961
SDSL	12:113841922	3.01E-07	1.205312419	0.15438199	5.353786285
RBM19	12:114255756	6.78E-06	0.522350826	0.121390896	4.657416039
VSIG10	12:118514069	2.32E-05	-0.434870121	0.108109187	-4.362397957
TAOK3	12:118710721	3.45E-05	-0.576601676	0.103815779	-4.264644776
HSPB8	12:119610739	4.54E-08	0.597502801	0.173933442	5.749549942
SRRM4	12:119623470	2.21E-06	0.527980151	0.133366171	4.915354537
PRKAB1	12:120146925	1.58E-07	1.177316873	0.161082649	5.49053444
COQ5	12:120916555	2.38E-13	0.74646945	0.290253166	8.012841958
GATC	12:120981410	8.58E-14	-0.868999632	0.299298332	-8.189085383
DYNLL1	12:121031557	2.96E-08	-0.793380389	0.178286343	-5.83644789
UNC119B	12:121122676	2.99E-07	0.733350429	0.154431912	5.354809915
CAMKK2	12:121615641	1.66E-07	-0.708843296	0.160561924	-5.479952266
P2RX4	12:121670064	1.43E-10	0.756334852	0.23103355	6.868053293
LOC338799	12:122221592	5.68E-07	-0.755697733	0.147736336	-5.21682781
PITPNM2	12:123593218	3.39E-07	-1.132486126	0.153134262	-5.328178064
ARL6IP4	12:123643729	9.29E-06	0.52208368	0.117999739	4.583064746
RILPL2	12:123921264	6.08E-15	0.893484561	0.322225083	8.639463051
SNRNP35	12:123969457	4.10E-05	-0.646371852	0.101924399	-4.221166257
DDX55	12:124062743	6.45E-06	0.510089046	0.121928149	4.669138847
TCTN2	12:124188807	2.06E-05	-0.97745243	0.109407576	-4.39171376
ATP6VOA2	12:124220543	3.21E-06	-0.529676647	0.129406065	-4.830802961
LOH12CR1	12:12618204	1.11E-10	-0.900347918	0.233451394	-6.914777545

STX2	12:131319099	5.61E-07	0.615431198	0.147861716	5.219424972
GPR133	12:131438037	1.90E-05	0.53798209	0.110265617	4.411026793
KIAA1467	12:13168834	3.52E-11	0.786939882	0.244412188	7.126376842
HTR7P1	12:13179433	3.33E-23	0.947247901	0.466869743	11.72549066
EP400NL	12:132595647	1.36E-13	-0.766540097	0.295243541	-8.109993311
FBRSL1	12:133145017	2.40E-05	0.558691329	0.107749729	4.354262176
ZNF268	12:133770096	1.45E-10	-0.905046412	0.230919905	-6.865856546
ERP27	12:15075202	1.06E-10	-0.676685851	0.233914859	-6.923731407
ARHGDIB	12:15123071	3.08E-09	-0.703442118	0.201057723	-6.285683429
PYROXD1	12:21592406	1.23E-07	-0.562654922	0.163674301	-5.543095401
C12orf39	12:21691958	3.17E-06	0.618447004	0.129538038	4.833632026
LDHB	12:21816831	7.46E-20	-1.017663569	0.412264534	-10.49414026
KCNJ8	12:22223271	3.56E-05	0.539209875	0.103476551	4.256865934
RASSF8	12:26268953	2.29E-05	0.620814892	0.108264701	4.365915104
ITPR2	12:26958660	1.65E-12	0.78817619	0.272796158	7.674337047
MRPS35	12:27864341	1.55E-13	0.768423423	0.294066819	8.087066987
FAR2	12:29409634	2.40E-08	0.632844995	0.18040615	5.878630325
TMTC1	12:29824448	1.13E-07	-0.59563802	0.164560885	-5.561036319
C12orf32	12:2996174	2.43E-05	-0.482662852	0.107599281	-4.350854448
IPO8	12:30751112	4.84E-11	-0.708783756	0.241399296	-7.068238654
DDX11	12:31241345	5.07E-36	-1.124260385	0.633237246	-16.46419266
SLC6A12	12:319111	6.52E-09	0.614449779	0.193579397	6.139013458
TSPAN9	12:3217586	9.89E-07	-0.677080933	0.141894444	-5.095210894
BICD1	12:32458281	1.97E-05	0.477362086	0.109902539	4.402860328
FGD4	12:33170492	3.46E-05	1.134869857	0.103785523	4.263951317
GXYLT1	12:42456782	2.23E-05	-0.521669411	0.108563235	-4.372662354
C12orf5	12:4471635	3.56E-06	-0.526004005	0.128305753	-4.807184626
DYRK4	12:4676899	1.98E-05	-0.984256824	0.109819331	-4.400987584
AKAP3	12:4765271	1.31E-19	0.936225368	0.40804787	10.40308363
RAPGEF3	12:48146041	6.29E-10	0.683726293	0.216709337	6.590633526
TMEM106C	12:48366550	1.65E-06	0.55292026	0.136449564	4.980719081
CACNB3	12:49211913	3.01E-10	1.03057287	0.223867077	6.729408427
ARF3	12:49318546	3.62E-06	0.511104635	0.128108786	4.802950746
FKBP11	12:49318800	7.13E-06	-0.762300879	0.120854096	-4.645687946

TUBA1B	12:49548190	3.20E-09	-0.641442796	0.200680525	-6.278302588
FMNL3	12:50001705	2.67E-05	0.582116613	0.106574847	4.327609809
LARP4	12:50898728	2.74E-10	0.807217416	0.224796504	6.747404415
DIP2B	12:51002088	3.40E-06	-0.55154338	0.128775317	-4.817270738
SLC11A2	12:51246427	2.71E-05	0.961465395	0.106438754	4.324516467
CCDC77	12:517059	1.16E-12	0.87782404	0.276042156	7.737147785
SCN8A	12:51758536	2.56E-05	0.709374862	0.107053719	4.338484396
FIGNL2	12:52244611	3.70E-08	-1.047448684	0.176002407	-5.790901241
ANKRD33	12:52281920	1.94E-05	-0.492037518	0.110062186	-4.406452205
ACVRL1	12:52300110	2.97E-05	0.95165961	0.105441514	4.301810468
KRT86	12:52649887	5.16E-06	-0.501452579	0.124313951	-4.721016806
KRT1	12:53070502	2.96E-06	-0.493447477	0.130264781	-4.849196748
PRR13	12:53839956	2.03E-05	-0.657912194	0.109565989	-4.395282937
ATP5G2	12:54067135	7.47E-06	0.619236103	0.120348751	4.634633089
SMUG1	12:54584028	1.93E-33	1.04000367	0.604521131	15.49151627
GTSF1	12:54867626	2.97E-13	1.692852502	0.288290791	7.974692001
METTL7B	12:56070668	3.33E-15	-0.825129284	0.327333449	-8.74067764
TAC3	12:57416382	8.29E-08	-0.645210173	0.167745504	-5.625319518
STAT6	12:57510309	5.03E-09	0.668671203	0.196185371	6.190207163
OS9	12:58063475	2.41E-06	0.580163774	0.13244638	4.895777911
TSFM	12:58167992	7.19E-09	-0.738346629	0.192602897	-6.119805785
XRCC6BP1	12:58322764	5.16E-10	-0.722741047	0.218646918	-6.628234133
LRIG3	12:59308666	5.72E-06	-0.959961377	0.123221584	-4.697299963
ANO2	12:6066357	2.89E-15	0.812638612	0.328546478	8.764764584
FAM19A2	12:62522039	5.03E-06	0.529490421	0.124592732	4.727059911
DPY19L2	12:64008778	1.32E-06	0.521630305	0.138874816	5.031858618
TMEM5	12:64094778	3.66E-05	0.603386476	0.103146296	4.249284827
TBK1	12:64881288	3.25E-05	0.691037243	0.104453857	4.279254173
LTBR	12:6504098	1.05E-11	-0.824691923	0.255788258	-7.345846849
TBC1D30	12:65118323	6.63E-12	0.703682302	0.260037528	7.427847743
GNS	12:65163066	1.84E-14	0.760431946	0.312698755	8.451607842
TAPBPL	12:6564448	4.72E-16	0.91575222	0.343682987	9.067175299
MRPL51	12:6625285	1.48E-09	0.871343433	0.208332803	6.427725627
TMBIM4	12:66569030	6.78E-22	-0.926073063	0.446159381	-11.2461129

NCAPD2	12:6662333	6.76E-06	0.498177265	0.121427807	4.658221921
HELB	12:66696706	2.70E-09	0.621532366	0.202377773	6.311500319
GRIP1	12:67290844	2.04E-07	0.543114533	0.158434427	5.436640614
CPM	12:69378789	2.07E-14	-0.811528958	0.311683066	-8.431642861
NUP107	12:69508874	6.00E-06	0.966998562	0.122702766	4.686014437
CPSF6	12:69653146	1.30E-05	0.462155735	0.114372913	4.502834354
LYZ	12:69748397	5.53E-06	-0.478471586	0.123573515	-4.704947472
YEATS4	12:69778914	5.07E-07	-0.540468755	0.148922596	-5.241379372
SPSB2	12:7001838	2.62E-25	1.003123007	0.498569134	12.49415785
LRRC23	12:7014076	3.32E-14	0.764079225	0.307602324	8.351545114
C12orf57	12:7044056	9.38E-06	-0.514503174	0.117896392	-4.580788971
LPCAT3	12:7067555	9.87E-07	-0.600688053	0.141912032	-5.095578893
CLSTN3	12:7291670	6.13E-09	0.683757005	0.194189966	6.151016381
CD163L1	12:7585971	8.13E-08	0.574455657	0.167948893	5.629416711
NAV3	12:78842069	4.54E-06	0.69723177	0.125694659	4.750908563
SYT1	12:79454331	1.40E-07	-0.740646521	0.162306957	-5.515386355
LIN7A	12:81251667	2.66E-05	0.476211777	0.10664014	4.329093453
SLC6A15	12:85325952	3.05E-19	-0.862375421	0.401723462	-10.26744627
POC1B	12:89873975	3.60E-05	0.409190789	0.103327105	4.253436325
M6PR	12:9082581	2.96E-12	-1.067749542	0.267462146	-7.571221514
PHC1	12:9112005	6.55E-08	-0.596352298	0.170172868	-5.674154675
LOC643339	12:93771224	4.25E-10	-1.111071768	0.220533117	-6.664811957
MRPL42	12:93859555	6.96E-19	0.868587394	0.395463158	10.1342463
CCDC41	12:94842302	1.42E-05	-0.878543109	0.113400408	-4.481190138
FGD6	12:95573040	6.33E-12	-0.739465299	0.26045796	-7.435962832
VEZT	12:95711876	1.80E-05	0.451183504	0.110876118	4.424739375
LTA4H	12:96412338	3.26E-05	0.48563377	0.10440398	4.27811323
CLEC2D	12:9800589	7.42E-09	-1.02850959	0.192283431	-6.113518936
LOC374443	12:9804226	1.39E-11	-1.245445145	0.253169379	-7.295320169
SLC9A7P1	12:98756279	4.08E-05	0.57134674	0.101967142	4.222151729
IKBIP	12:99112323	5.58E-06	0.544760347	0.123480164	4.702919553
CD69	12:9919521	3.44E-05	-0.437817625	0.103838303	-4.265160979
GPR18	13:100040979	1.29E-07	0.576949566	0.163207222	5.533635535
TMTC4	13:101375663	7.99E-06	0.48133233	0.119625686	4.618791583

ITGBL1	13:101840366	1.36E-08	-0.678127762	0.186215565	-5.993812123
NALCN	13:102108397	6.51E-12	-0.989879295	0.26020488	-7.431077903
METTL21C	13:103350901	2.16E-10	1.169923105	0.227076105	6.791523026
BIVM	13:103478119	9.94E-08	0.721187549	0.165876179	5.5876163
CARS2	13:111301341	1.44E-10	-0.723171058	0.230967642	-6.866779306
ANKRD10	13:111529619	7.51E-06	-0.501398059	0.120296644	-4.633492419
ARHGEF7	13:111847641	5.28E-09	0.63909434	0.195699915	6.180677564
ATP11A	13:113370267	7.96E-08	0.888182259	0.168155949	5.633586749
GRTP1	13:114019050	2.56E-19	0.881959456	0.403051606	10.29583942
TMCO3	13:114129113	6.07E-07	-0.567893572	0.147039559	-5.20238486
DCUN1D2	13:114283063	3.98E-06	-0.684787565	0.127095153	-4.781133477
UPF3A	13:115002305	6.38E-06	0.502133834	0.122049196	4.671777998
CDC16	13:115002305	1.99E-17	0.873509152	0.369343848	9.588903389
ZMYM2	13:20969210	1.67E-05	0.49318995	0.111674056	4.442626461
CRYL1	13:21098249	1.43E-05	0.908301739	0.113317235	4.479336377
IFT88	13:21162940	5.05E-14	-0.760731691	0.303951346	-8.280032898
XPO4	13:21483892	2.07E-08	0.655734343	0.18194635	5.90922609
LATS2	13:21885030	2.09E-05	-0.705944807	0.109269728	-4.388606585
EFHA1	13:22040100	5.06E-08	-0.599903943	0.172809036	-5.727039238
ZDHHC20	13:22092762	5.40E-12	-0.737290194	0.261934341	-7.464462613
TNFRSF19	13:24214813	1.98E-13	0.744671921	0.291912338	8.045120224
MIPEP	13:24443988	3.85E-07	0.772011851	0.151794687	5.30063156
SPATA13	13:24720546	1.56E-05	-0.494099518	0.112417979	-4.459266872
ATP12A	13:25243777	4.26E-13	1.25039825	0.285049507	7.911739655
RNF17	13:25460829	1.70E-06	-0.528614117	0.136159322	-4.974583101
MTMR6	13:25810823	3.08E-10	-0.748355817	0.223651244	-6.725228657
ATP8A2	13:25955112	1.08E-12	-0.738305672	0.276700042	-7.749884303
NUPL1	13:25965984	2.44E-05	0.474200146	0.107582698	4.350478742
RNF6	13:27037230	3.11E-06	0.603660509	0.129728537	4.837714282
GTF3A	13:28000507	1.53E-05	0.545651036	0.112637227	4.464164591
ALOX5AP	13:31312178	3.37E-05	0.529877906	0.104046476	4.269930179
BRCA2	13:32889792	3.80E-07	-0.710548249	0.151928965	-5.303395319
RFC3	13:34318149	1.82E-09	0.675327196	0.206266782	6.387445316
CCDC169	13:36930263	1.46E-07	-0.749197645	0.161889662	-5.506920238

SPG20	13:37177272	6.05E-06	-1.386593701	0.122607692	-4.683944861
UFM1	13:38829616	7.72E-10	0.691511713	0.214709898	6.551802489
NAA16	13:41988701	1.84E-05	-0.456311386	0.110643331	-4.419513484
KIAA0564	13:42406884	9.16E-06	-0.918478607	0.118150819	-4.58639057
EPSTI1	13:43541944	2.57E-05	-0.502563321	0.107004737	-4.33737278
DNAJC15	13:43597706	6.52E-26	-1.282528954	0.507319532	-12.7147535
CCDC122	13:44483593	7.23E-06	-0.658314811	0.120698347	-4.642282262
NCRNA00284	13:44593911	1.04E-09	-0.754512603	0.211825136	-6.495719805
COG3	13:46010676	1.13E-07	-0.612036223	0.164578665	-5.561395908
SPERT	13:46238076	1.23E-14	-0.836052479	0.316208156	-8.520682882
LCP1	13:46745935	6.35E-09	0.793016218	0.19384792	6.144292881
LRCH1	13:47208767	1.86E-07	-0.760573477	0.1593967	-5.456246011
ESD	13:47379851	6.89E-07	-0.571200576	0.145703645	-5.174647353
SUCLA2	13:48607608	1.11E-07	0.577584513	0.164715631	5.564165719
ITM2B	13:48796627	1.28E-05	0.943549969	0.11450653	4.50580374
RCBTB1	13:50168601	9.42E-10	-1.02392454	0.21276251	-6.513951119
EBPL	13:50266109	8.91E-11	-0.659071931	0.235591049	-6.956108341
KPNA3	13:50431129	1.56E-06	0.571033254	0.137088625	4.994217361
SPRYD7	13:50432187	1.73E-05	0.467120503	0.111299861	4.434243249
RNASEH2B	13:51531815	2.25E-05	0.57127627	0.108467017	4.370488351
GUCY1B2	13:51642708	2.19E-18	-0.906363688	0.386667289	-9.948794938
INTS6	13:51675549	3.95E-05	-0.572885772	0.102323796	-4.230369384
NEK3	13:52704431	2.42E-23	0.920979366	0.469008682	11.77596638
VPS36	13:53003907	2.43E-06	-0.551416315	0.132347718	-4.893675851
CKAP2	13:53043333	1.88E-09	-0.62142786	0.205963467	-6.38152803
DIAPH3	13:60721640	1.11E-15	-0.845545991	0.336563767	-8.924500394
TBC1D4	13:75901637	1.80E-05	0.454731005	0.110852697	4.424213739
LMO7	13:76357830	5.14E-13	-1.061616285	0.283369044	-7.879129652
SCEL	13:78068838	2.49E-07	0.604730908	0.156356359	5.394212876
RBM26-AS1	13:79961144	1.80E-09	1.384746537	0.206373709	6.389531089
GPR180	13:95248905	2.27E-24	1.012275978	0.48467359	12.15159547
DZIP1	13:96472037	4.99E-07	0.769274855	0.149091445	5.244870183
UGGT2	13:96580855	8.41E-12	0.683509656	0.257825417	7.385155627
STK24	13:99298499	1.80E-14	-1.016029808	0.312899409	-8.455553394

UBAC2	13:99996015	4.55E-16	0.824554324	0.343978079	9.073107029
EML1	14:100275413	1.92E-07	0.552608107	0.159030876	5.448795731
WDR20	14:102657851	2.65E-06	0.900563262	0.131421391	4.873918809
RCOR1	14:103046894	3.54E-06	-0.543192152	0.128362107	-4.80839562
EXOC3L4	14:103566904	5.81E-12	1.207885687	0.261260444	7.451453214
TNFAIP2	14:103603569	1.24E-11	-0.703948087	0.254227515	-7.315734311
EIF5	14:103607353	1.30E-05	-0.601986416	0.114342897	-4.502167181
C14orf153	14:104061352	1.29E-07	0.601529548	0.16316674	5.532815362
KLC1	14:104120612	1.78E-10	0.697333747	0.228960139	6.827966015
XRCC3	14:104155317	2.03E-06	0.528147348	0.134296811	4.935125121
SIVA1	14:105205481	1.21E-05	-0.670532775	0.115157966	-4.520265521
AKT1	14:105231196	1.31E-06	0.552585976	0.13890473	5.032487932
ADSSL1	14:105231196	7.67E-09	0.649577068	0.191945832	6.106873611
C14orf79	14:105447267	2.98E-06	0.606324683	0.130179085	4.847362641
NUDT14	14:105639041	3.28E-14	0.742457151	0.307703324	8.35352538
PARP2	14:20669845	4.09E-05	0.453650051	0.10195675	4.221912142
OSGEP	14:20922994	1.05E-06	-0.671823799	0.141299936	-5.082765351
PNP	14:20945906	1.38E-06	-0.642794552	0.138371347	-5.021261553
RNASE1	14:21280895	7.81E-07	0.58229388	0.144382463	5.147154576
METTTL17	14:21460902	5.85E-07	0.574243742	0.147423563	5.210346614
METTTL3	14:21941148	3.95E-05	0.644030434	0.102332603	4.230572194
ABHD4	14:23067931	1.07E-05	0.59965352	0.116459612	4.549087521
HAUS4	14:23426422	2.44E-07	-0.544335392	0.156547536	-5.398121297
EFS	14:23459101	1.42E-05	-0.863156052	0.113411551	-4.48143845
PSMB5	14:23504021	5.47E-06	-0.988033775	0.123702001	-4.70773792
AP1G2	14:24143409	1.27E-05	-0.794811051	0.114600394	-4.507889057
DHRS2	14:24152248	3.77E-06	-0.721435803	0.127679366	-4.793713923
LTBR4	14:24782958	1.61E-05	0.599934521	0.112101669	4.4521957
DHRS1	14:24791798	5.37E-10	1.234727928	0.218251902	6.620570698
CBLN3	14:24898751	3.03E-16	0.961630133	0.347318717	9.140360847
STRN3	14:31365884	9.94E-07	0.914430962	0.141840037	5.094072475
HECTD1	14:31853318	2.97E-05	0.453670207	0.105434587	4.301652516
HEATR5A	14:31861934	7.73E-39	1.159092251	0.662228945	17.54456848
C14orf126	14:31944189	7.91E-09	-0.653720931	0.191643186	-6.100914883

NUBPL	14:32357329	3.87E-05	-0.682697089	0.102555988	-4.235714255
AKAP6	14:32568007	1.68E-05	-0.658243154	0.111627314	-4.441579762
NPAS3	14:33380150	2.62E-16	1.048731611	0.348509766	9.164385464
SPTSSA	14:34849476	1.20E-08	-0.631696719	0.187437066	-6.017956741
SNX6	14:35104759	3.25E-06	0.60289982	0.129259015	4.827649742
CFL2	14:35185345	4.69E-06	0.58962378	0.125344421	4.743334978
MIPOL1	14:38192302	1.68E-05	0.572310815	0.11161465	4.441296137
SSTR1	14:38974730	1.04E-08	0.554135463	0.188912108	6.047080697
LRFN5	14:42066464	3.40E-13	0.742662095	0.287083387	7.951233174
C14orf182	14:50473015	1.02E-05	-0.488835154	0.116980351	-4.560590764
TMX1	14:51371121	2.53E-05	-0.562809757	0.107189354	-4.341561653
PYGL	14:51387554	7.21E-08	0.816432835	0.169176792	5.654131551
FRMD6	14:52015823	7.86E-07	0.671481675	0.144314753	5.145743907
DDHD1	14:53872104	3.37E-05	0.429541645	0.104069077	4.270447777
LGALS3	14:55882463	2.29E-06	-0.518995023	0.132993841	-4.90743437
KTN1	14:55962554	4.80E-06	0.695409371	0.125091022	4.737851662
C14orf37	14:58588313	2.61E-06	0.62205672	0.131611344	4.877973278
ACTR10	14:58684872	9.09E-09	0.649927658	0.190247794	6.073423577
JKAMP	14:59852500	3.23E-05	0.883950748	0.104503121	4.280380917
PPM1A	14:60749118	2.47E-07	-0.551933915	0.156457462	-5.39627995
TMEM30B	14:61766982	3.14E-05	-0.450358765	0.104828771	-4.287824631
SYT16	14:62430856	9.90E-09	-0.655177767	0.189378824	-6.056288582
KCNH5	14:63515892	1.32E-12	0.749081209	0.274874041	7.714538734
C14orf50	14:65119607	3.58E-06	0.986720588	0.128245111	4.805881286
CHURC1	14:65402161	3.79E-36	1.312784794	0.634593591	16.51237667
SRSF5	14:70206808	7.58E-06	0.785342674	0.120192105	4.631203541
SIPA1L1	14:71785276	1.65E-10	0.843037845	0.229680912	6.841903554
RGS6	14:72316402	1.04E-10	0.661422061	0.234067922	6.926688327
DCAF4	14:73361447	4.34E-07	0.726948738	0.150539822	5.274775888
PAPLN	14:73647174	4.51E-09	-0.698221275	0.197265706	-6.211403079
ACOT1	14:73972289	1.93E-08	-0.565843461	0.182631748	-5.922827464
HEATR4	14:73972289	3.18E-14	-0.73480848	0.307986721	-8.359082443
ACOT2	14:74033594	5.56E-09	-0.639783837	0.195170648	-6.170284299
PTGR2	14:74318714	6.75E-14	-1.286878175	0.301404357	-8.230223956

ALDH6A1	14:74597227	2.30E-08	-0.786999218	0.18087628	-5.887974002
IRF2BPL	14:77475547	3.38E-06	-0.75214396	0.128833473	-4.818519201
POMT2	14:77754547	8.91E-06	0.538026966	0.118455385	4.593091332
GSTZ1	14:77788838	1.67E-07	-0.561621456	0.160504718	-5.478789293
AHSA1	14:77993033	2.66E-06	-0.657004721	0.13139855	-4.873431184
ADCK1	14:78278910	3.00E-06	-0.51103071	0.130124699	-4.846198471
CEP128	14:81408591	1.43E-28	1.05084487	0.544076864	13.6878154
STON2	14:81859521	5.92E-30	1.092976096	0.562126914	14.1968793
GALC	14:88443116	4.06E-12	-0.865727276	0.264574464	-7.515440408
EFCAB11	14:89941783	3.31E-05	-0.677242688	0.104268612	-4.275015814
TDP1	14:90422664	2.85E-07	0.576424371	0.154938498	5.36519286
C14orf159	14:91581272	2.13E-07	1.137169312	0.157984825	5.427471528
CATSPERB	14:92328486	2.70E-06	0.549139827	0.131253159	4.870326634
CPSF2	14:92589107	1.69E-08	-0.60120376	0.183992421	-5.949804522
RIN3	14:93018567	1.51E-09	-0.63232133	0.208120272	-6.42358397
LG MN	14:93190081	3.03E-22	-0.90757544	0.451774023	-11.37445636
ITPK1	14:93406232	2.83E-05	-0.787184847	0.105960349	-4.313632331
OTUB2	14:94236812	4.16E-05	0.550063605	0.10176644	4.217523176
PPP4R4	14:94905739	5.76E-06	0.812309881	0.123137803	4.695478461
CLMN	14:95789261	1.57E-22	-1.088890726	0.456316961	-11.47916344
TCL1B	14:96150354	3.95E-13	1.383768453	0.285726614	7.924884461
SNHG10	14:96150909	1.07E-05	1.010393452	0.116517136	4.550359001
C14orf129	14:96808750	1.67E-08	0.631450595	0.18409843	5.951904913
LOC100129345	14:98144671	4.97E-09	0.733610917	0.19630279	6.192511641
LYSMD4	15:100272337	4.97E-12	0.9720662	0.262698482	7.479215445
ALDH1A3	15:101278312	1.01E-05	0.489190433	0.117077619	4.562737709
WHAMMP3	15:22773982	1.29E-05	0.806684233	0.114477974	4.505169231
CYFIP1	15:22926727	2.80E-10	0.646113904	0.224589246	6.743391824
NIPA1	15:23105196	1.73E-12	0.818928379	0.272376054	7.6662115
HERC2P2	15:23283671	1.34E-08	-0.922438955	0.186347242	-5.996416092
ATP10A	15:25808586	2.97E-05	0.93459017	0.10542021	4.301324653
GABRB3	15:26879458	2.12E-08	0.619430388	0.181700985	5.904354877
WHAMMP2	15:29043336	8.87E-06	-0.566115898	0.118503986	-4.594160135
NDNL2	15:29700366	1.99E-05	-0.482767692	0.109759579	-4.399642494

FAN1	15:31269691	1.24E-05	-0.612729628	0.114848789	-4.51340497
TRPM1	15:31333960	4.03E-17	-1.098182136	0.36369932	-9.473051034
MTMR10	15:31382136	2.23E-05	2.058725206	0.108548245	4.372323699
C15orf24	15:33899671	2.49E-05	0.574806882	0.107358285	4.345392585
GOLGA8B	15:34859970	1.51E-07	-0.599855113	0.161523705	-5.499491879
ZNF770	15:35352061	4.04E-06	-0.525413969	0.126949488	-4.777994191
EIF2AK4	15:40302441	4.41E-07	-0.563383921	0.150377474	-5.271427154
PLCB2	15:40584804	3.08E-05	0.555028472	0.105041661	4.292686835
C15orf23	15:40675329	1.30E-15	1.294501547	0.335265881	8.898576125
IVD	15:40691052	1.21E-09	0.683509715	0.210282056	6.465690768
DISP2	15:40705417	5.04E-16	1.285904881	0.343130016	9.056063798
C15orf57	15:40795198	8.44E-15	0.821006144	0.319420865	8.58404829
MRPL42P5	15:40867122	4.78E-14	-0.748188118	0.304429098	-8.289382962
ZFYVE19	15:41101145	2.39E-38	1.137784649	0.657352828	17.35503596
C15orf62	15:41257227	3.20E-05	0.723267054	0.104628134	4.283239362
CHP	15:41486990	3.24E-05	0.586797606	0.104501392	4.280341372
NDUFAF1	15:41775221	1.06E-05	0.586742802	0.116570371	4.551535508
RPAP1	15:41816190	1.07E-07	-0.567852972	0.165078772	-5.571507106
MAPKBP1	15:42112795	6.26E-06	0.613192067	0.122249645	4.676146647
JMJD7	15:42133502	2.35E-20	0.922222289	0.420782493	10.67966961
SPTBN5	15:42202647	2.36E-15	-0.880576336	0.330230337	-8.79823533
EHD4	15:42238141	2.61E-09	-0.897534539	0.202723008	-6.318248916
SNAP23	15:42817780	7.74E-06	-1.134136971	0.119969204	-4.626321173
UBR1	15:43396926	1.45E-05	0.480383772	0.113236258	4.477531162
LCMT2	15:43610672	2.72E-07	-0.820360149	0.155440159	-5.375467352
SPATA5L1	15:45667178	1.18E-10	0.713928047	0.232865132	6.903450219
SQRDL	15:45947944	5.96E-06	0.586504614	0.122771782	4.687516489
GALK2	15:49337381	3.87E-05	0.456405566	0.102554375	4.235677156
SECISBP2L	15:49355137	2.62E-12	-0.925448278	0.268573987	-7.592706259
TNFAIP8L3	15:51356111	9.43E-06	-0.529373191	0.117837421	-4.579490114
GLDN	15:51616480	1.18E-14	-1.008273544	0.316555781	-8.527533105
MAPK6	15:52207029	3.46E-08	-0.614916747	0.176685672	-5.804537971
LEO1	15:52264275	1.40E-11	0.749449338	0.253078563	7.293568122
MYO5C	15:52581344	1.27E-05	1.067312555	0.114606858	4.508032641

MYO5A	15:52725587	2.20E-06	0.739623236	0.133413449	4.916359799
KIAA1370	15:52863592	3.15E-05	-0.872382345	0.104798102	-4.287123921
NEDD4	15:56270362	2.37E-06	-0.528935725	0.132641807	-4.899940401
TCF12	15:57254842	4.95E-06	0.580545263	0.124769225	4.730883734
CGNL1	15:57698850	8.41E-07	-0.626082601	0.143603474	-5.130915374
MYO1E	15:59599981	1.27E-13	-0.748615262	0.295838992	-8.121599068
LDHAL6B	15:59692974	1.03E-05	0.529543892	0.116915321	4.559155084
GTF2A2	15:59974777	1.31E-06	0.577614352	0.138895103	5.032285395
NARG2	15:60762779	8.18E-12	-0.732920009	0.258084909	-7.390163202
TLN2	15:63257881	3.35E-05	0.495950229	0.104115844	4.271518693
USP3	15:63795628	1.87E-05	0.503654172	0.110464699	4.415501014
HERC1	15:64155534	4.17E-05	0.552768258	0.101730927	4.216703884
SNX22	15:64448365	9.49E-14	-1.455320932	0.298412309	-8.171790279
PLEKHO2	15:65149682	1.39E-05	0.429656641	0.113645097	4.486641325
ANKDD1A	15:65263401	3.22E-05	-0.45175568	0.104557709	-4.281629221
SPG21	15:65263401	1.11E-06	-0.524070396	0.140711007	-5.070423538
CILP	15:65495820	3.23E-07	-0.512408687	0.153643249	-5.33863017
MAP2K1	15:66630569	1.61E-06	-0.563327454	0.136744237	-4.98694523
DIS3L	15:66763177	3.66E-05	-0.570417545	0.103148879	-4.24934415
CLN6	15:68336811	1.92E-05	-0.453890429	0.110165155	-4.408768008
CALML4	15:68944552	2.19E-05	0.521583297	0.108760048	4.37710735
ANP32A	15:69047100	2.23E-10	0.665420425	0.226796732	6.786117611
GLCE	15:69476544	3.60E-05	-0.507439964	0.103344164	-4.253827889
MYO9A	15:72218206	1.23E-13	-0.872995539	0.296108178	-8.1268467
GRAMD2	15:72218594	1.21E-06	0.615990286	0.139745556	5.050162663
ADPGK	15:72976521	9.11E-07	1.051831731	0.142756875	5.113241884
NEO1	15:73333692	2.04E-07	0.86197868	0.158444418	5.436844298
PML	15:74245007	3.98E-05	-0.473222724	0.10225984	-4.228896489
STOML1	15:74318532	5.94E-06	-0.494729071	0.122806357	-4.688268902
ULK3	15:75207083	5.49E-12	0.946639959	0.261785561	7.461590358
MAN2C1	15:75766672	5.39E-13	0.766798488	0.282939306	7.870793347
CSPG4	15:76075437	6.25E-07	0.721099227	0.146730333	5.195969868
C15orf27	15:76436920	4.34E-09	-0.684073525	0.197656894	-6.219074321
CIB2	15:78476843	7.04E-06	0.621987842	0.120981775	4.648478882

WDR61	15:78601654	9.63E-08	0.726289839	0.166193741	5.594027314
DNAJA4	15:78604485	2.84E-09	0.627458947	0.201871583	6.301602915
CTSH	15:79257278	2.26E-05	-0.706832497	0.108407558	-4.369144605
MTHFS	15:80198784	6.77E-06	-0.511437775	0.121409367	-4.657819326
FAH	15:80443757	5.06E-07	-0.553038649	0.148942831	-5.241797761
STARD5	15:81561124	9.25E-14	-0.878701282	0.29863353	-8.176107825
TMC3	15:81567973	2.54E-05	-0.516843274	0.107142562	-4.340500198
BTBD1	15:83370171	4.77E-06	-0.540030498	0.125161156	-4.739369627
WHAMM	15:83498795	2.72E-19	0.841145687	0.402579379	10.28573864
SCAND2	15:85106505	2.54E-05	0.51815843	0.107135478	4.340339484
ALPK3	15:85162553	1.46E-07	-0.56725195	0.161903017	-5.507191238
SLC28A1	15:85437352	2.69E-10	-0.669858574	0.224976211	-6.750883432
PDE8A	15:86056134	1.40E-05	0.791218664	0.113582705	4.485251688
ACAN	15:89353798	5.57E-10	-0.661826503	0.217903076	-6.613802432
HAPLN3	15:89431902	3.49E-07	-0.745482124	0.152834772	-5.322024294
MFGE8	15:89482646	1.29E-06	1.291262978	0.139052309	5.03559213
FANCI	15:89864763	1.25E-05	-0.865507813	0.114842298	-4.513260876
PEX11A	15:90220873	1.08E-06	0.623992552	0.140922582	5.074858893
IDH2	15:90645265	3.67E-06	-0.487922575	0.127963072	-4.799817419
C15orf58	15:90818331	1.15E-07	0.588398022	0.164348639	5.556743104
IQGAP1	15:91009484	1.62E-06	0.552800719	0.136682742	4.985646206
CIB1	15:91070965	5.91E-07	-1.00011427	0.147314576	-5.208087443
FES	15:91409514	3.40E-05	-0.489544999	0.10396173	-4.267989031
VPS33B	15:91554148	2.30E-06	-0.818923908	0.132941304	-4.906316314
SV2B	15:91628638	2.98E-05	-0.476902988	0.105379039	-4.300385682
SYNM	15:99690980	2.07E-08	-0.953200539	0.181908144	-5.908467661
TTC23	15:99855966	2.19E-07	-0.978813755	0.15769912	-5.421641969
LMF1	16:1037035	2.53E-09	0.631759015	0.203015942	6.32397406
EMP2	16:10694255	1.70E-14	-0.897260966	0.313406489	-8.465526457
FAM18A	16:10870959	1.07E-07	1.458273017	0.165149346	5.572933478
DEXI	16:11036296	2.95E-05	-0.451973908	0.105497631	-4.303090019
RMI2	16:11426541	1.94E-10	0.652561276	0.228127419	6.811860767
LITAF	16:11733116	7.88E-09	0.629605913	0.191672724	6.10149651
TXNDC11	16:11800848	8.17E-13	-0.741643203	0.279200596	-7.798315238

GSPT1	16:11921263	3.61E-12	-0.712355801	0.265649528	-7.53620427
RSL1D1	16:11934176	4.85E-14	-0.703143573	0.304298369	-8.286824244
BCAR4	16:11963361	7.71E-10	0.575291888	0.214723627	6.552069236
RUNDC2A	16:12081100	8.66E-19	-0.987823805	0.393786223	-10.09873984
SNX29	16:12081100	5.85E-20	-1.012941822	0.414066931	-10.53321854
CACNA1H	16:1237181	4.13E-05	-0.610490554	0.101841496	-4.219254468
UNKL	16:1479986	1.20E-05	-1.030626855	0.115273407	-4.522825688
CCDC154	16:1503310	4.41E-06	0.856432868	0.126003515	4.757582336
NTAN1	16:15127986	1.08E-05	-0.562894635	0.116416474	-4.548133907
RRN3	16:15187912	1.13E-11	0.700200928	0.255050346	7.331609462
TELO2	16:1540012	1.97E-06	0.642305074	0.134620774	4.9419988
ABCC1	16:16100673	2.98E-08	-0.586273194	0.178230354	-5.835332589
NOMO3	16:16353166	2.76E-11	-0.978408653	0.246692825	-7.170377711
FAHD1	16:1853013	7.51E-14	-1.085453459	0.30047	-8.211967316
HAGH	16:1872160	4.76E-08	-0.63135621	0.173435384	-5.73958213
COQ7	16:19061822	2.71E-06	0.869000958	0.131190231	4.868982648
NPRL3	16:190968	2.29E-07	-0.582022496	0.157226801	-5.41199962
TMC5	16:19402852	1.85E-16	0.819872143	0.351387459	9.222534414
GPRC5B	16:19730554	1.91E-06	-0.669438069	0.134929432	-4.948543626
SYNGR3	16:2035784	1.10E-09	-1.053090522	0.211210975	-6.483770537
ECI1	16:2301272	3.33E-13	-1.197054382	0.287272861	-7.954913797
RNPS1	16:2305539	1.99E-05	-0.487916381	0.109766257	-4.399792831
EARS2	16:23504041	3.22E-09	0.906300637	0.200628444	6.277283352
DCTN5	16:23694732	2.92E-24	1.269774059	0.483039595	12.11190767
TNRC6A	16:24728227	2.48E-05	0.479660431	0.107393881	4.346199582
LOC554206	16:25040936	1.44E-13	-0.742042757	0.294720204	-8.099795597
LOC100506655	16:25160317	1.84E-06	1.154755601	0.135305056	4.956503072
ZKSCAN2	16:25239805	7.51E-06	0.480596874	0.120291434	4.633378361
IL4R	16:27332334	3.47E-07	0.586758565	0.152876715	5.322886274
SULT1A1	16:28489342	2.21E-05	0.548171058	0.108650931	4.374643273
NFATC2IP	16:28963012	1.56E-05	-0.54198547	0.112431606	-4.459571372
PRSS30P	16:2908703	9.00E-09	0.650994615	0.190339655	6.075234282
PRSS22	16:2911320	1.12E-11	0.685661791	0.255163293	7.333788647
FLYWCH1	16:2953703	7.09E-13	-0.8527972	0.280473615	-7.822984507

QPRT	16:29740557	2.22E-05	-0.686523864	0.108590703	-4.373282869
C16orf54	16:29827681	1.60E-05	-0.908857867	0.112117337	-4.452546094
KIF22	16:29827681	9.20E-07	-1.025183464	0.14265402	-5.11109291
MAPK3	16:30134679	3.02E-10	0.711033514	0.223843942	6.7289604
LOC595101	16:30323810	5.16E-17	0.936017587	0.361730501	9.432793904
CD2BP2	16:30359408	9.81E-07	0.617503764	0.141973743	5.096869966
ZNF764	16:30569659	2.81E-06	1.145658127	0.13079899	4.860622686
IL32	16:3106003	4.68E-06	-0.823309718	0.125358719	-4.743644272
ZNF213	16:3121156	2.25E-06	1.187643486	0.133198052	4.911779065
CCDC64B	16:3126699	2.84E-13	-0.790554548	0.288682448	-7.982303816
MMP25	16:3129237	1.23E-08	-0.636095063	0.187231082	-6.013886894
ZNF205	16:3136946	6.95E-08	-0.577596265	0.16956373	-5.661912477
ZNF200	16:3214442	5.12E-06	0.702491871	0.124410952	4.723119912
TIGD7	16:3326038	6.32E-06	0.544758064	0.122139474	4.673745799
ZNF75A	16:3338343	8.01E-07	-0.598891859	0.144119419	-5.141673447
NAA60	16:3472114	3.79E-05	-0.52698673	0.102778605	-4.240834987
MRPL28	16:415078	3.97E-06	0.517021796	0.127126718	4.781813604
TMEM8A	16:427516	8.14E-18	-0.878615977	0.376409177	-9.734868062
ANKS3	16:4401557	7.70E-06	-0.776217666	0.120017797	-4.627385778
NMRAL1	16:4527109	1.96E-14	-0.872809288	0.312154941	-8.440916844
WDR24	16:468450	2.07E-05	0.479321635	0.109324458	4.389840388
DECR2	16:468450	2.92E-15	0.830813851	0.328451104	8.762870014
MGRN1	16:4754194	1.43E-11	0.697913373	0.252908923	7.290295423
ROGDI	16:4817296	5.10E-07	-0.951045817	0.148857067	-5.240024364
N4BP1	16:48667717	1.87E-16	0.843153284	0.351305045	9.220867021
SEC14L5	16:5020514	4.48E-14	0.779229397	0.304994687	8.300455031
NAGPA	16:5071670	1.96E-05	-0.53503976	0.109931895	-4.403520931
CYLD	16:50769563	1.91E-11	-0.747867558	0.25014882	-7.237049045
SALL1	16:51672389	3.64E-05	-0.521067266	0.103220499	-4.250988869
CHD9	16:53375645	8.89E-12	0.872773631	0.257313559	7.375278323
MMP2	16:55504521	1.28E-07	0.618525642	0.16328472	5.535205507
LPCAT2	16:55558730	1.70E-23	0.947961695	0.471385668	11.83228295
BBS2	16:56555788	6.28E-22	-1.045949336	0.446689427	-11.25817974
HERPUD1	16:56963647	2.20E-06	0.472124424	0.133411886	4.916326567

CETP	16:56985514	1.04E-07	-0.63539058	0.165377338	-5.577540583
POLR2C	16:57014319	1.65E-05	-0.613026953	0.111807689	-4.445618154
ARL2BP	16:57325866	8.42E-13	0.886189209	0.278919328	7.792865926
MMP15	16:58109896	1.61E-05	-0.489927987	0.112093353	-4.452009699
CNGB1	16:58247373	4.12E-07	-0.712754398	0.151096503	-5.286252111
NDRG4	16:58383228	2.01E-07	-0.563901061	0.158561591	-5.439232935
NARFL	16:622211	4.12E-05	-0.520791192	0.101883229	-4.220216908
CDH5	16:66379992	1.32E-06	0.540459515	0.138840444	5.031135459
BEAN1	16:66443916	1.37E-06	0.649816214	0.138420985	5.022306782
TK2	16:66585710	9.19E-10	0.82009205	0.213008026	6.51872498
PDP2	16:66954449	1.05E-09	-1.021629527	0.211652582	-6.492362893
NAE1	16:66969176	1.30E-05	-0.665271318	0.114405223	-4.503552488
NFATC3	16:67691477	9.03E-06	-0.805750092	0.118305298	-4.589789916
WFIKK1	16:677020	1.87E-07	0.625133173	0.159310674	5.454494368
LCAT	16:67801309	1.13E-05	0.725791991	0.11586758	4.535990498
SLC12A4	16:67951827	8.31E-08	-1.137173002	0.167714072	-5.624686246
DPEP2	16:68361498	2.15E-05	-0.831154598	0.108960973	-4.381642602
PRMT7	16:68395952	3.01E-10	1.111179725	0.223880513	6.729668611
C16orf13	16:686337	9.27E-11	1.09728023	0.235208032	6.948710859
CDH3	16:68661683	4.33E-12	0.935691077	0.263974344	7.503851125
CDH1	16:68803614	2.46E-05	-0.471288558	0.107489442	-4.34836558
WDR90	16:694174	2.08E-05	0.503734112	0.109304775	4.389396691
PDXDC2P	16:70042416	3.44E-15	-0.818202384	0.327070944	-8.735467825
EXOSC6	16:70285901	5.04E-28	-1.010478676	0.536748229	-13.48734889
COG4	16:70559548	1.48E-08	-0.577024937	0.185299332	-5.975685285
RHBDL1	16:713204	1.86E-06	0.488297044	0.135190727	4.954081063
ZNF23	16:71446490	2.52E-05	0.656974119	0.107216826	4.342184777
MARVELD3	16:71667131	9.18E-07	-0.693215557	0.142674992	-5.111531111
DHX38	16:72115238	1.65E-08	0.626069088	0.184244757	5.954803812
LOC283922	16:74394425	6.42E-09	0.95620999	0.193739352	6.142158459
RFWD3	16:74657485	3.54E-16	-0.779000563	0.346054307	-9.11488332
MLKL	16:74709940	9.64E-06	0.458161459	0.117605418	4.574378275
LDHD	16:75154893	3.46E-05	-0.536771211	0.103777509	-4.263767634
ZFP1	16:75204443	6.17E-17	0.866686684	0.360285256	9.403291317

TMEM170A	16:75464007	1.63E-05	-0.812215449	0.111923686	-4.448214133
ADAT1	16:75576037	1.90E-10	0.701465477	0.228314279	6.815475035
ADAMTS18	16:77626860	2.19E-07	0.589406629	0.157694984	5.421557554
NUDT7	16:77718582	3.89E-06	0.495548351	0.127352772	4.786683045
WWOX	16:78293943	7.42E-11	0.647063386	0.237335891	6.989802127
PKD1L2	16:81140526	1.96E-07	-0.577981247	0.158840769	-5.444922575
ATMIN	16:81140526	5.42E-18	-0.893505204	0.379602144	-9.801194561
C16orf46	16:81140526	3.94E-19	-0.916950922	0.399785159	-10.22609435
PLCG2	16:81867410	1.25E-06	0.552787178	0.13940277	5.042960386
SDR42E1	16:82180338	3.64E-05	-0.531091802	0.103224597	-4.251082959
TAF1C	16:84209498	4.87E-08	0.589165188	0.17321469	5.735163608
DNAAF1	16:84209498	7.92E-26	1.007088279	0.506110852	12.68404894
HSDL1	16:84211969	1.23E-08	0.602109188	0.187227559	6.013817278
ATP2C2	16:84403561	1.47E-25	1.075792076	0.502236571	12.58613831
MBTPS1	16:84509964	3.22E-05	0.454251259	0.104557662	4.28162814
KIAA1609	16:84533101	8.58E-32	-1.027035291	0.585011717	-14.87695987
COTL1	16:84546655	2.30E-09	0.648192886	0.203946426	6.342153182
ZDHHC7	16:85034225	7.97E-10	0.779933072	0.214397618	6.545734843
METRNL	16:853169	3.06E-05	0.525493844	0.105093287	4.293865448
C16orf74	16:85773356	1.02E-05	0.497773104	0.116944939	4.559808977
MTHFSD	16:86565187	2.80E-05	-1.038917381	0.106067408	-4.316069402
ABAT	16:8771186	7.12E-06	0.538187684	0.120873087	4.646103119
SLC7A5	16:87858245	1.99E-12	0.796026035	0.271087345	7.64129036
CTU2	16:88342431	2.78E-05	-0.78094269	0.106131697	-4.317532463
CYBA	16:88630804	3.61E-06	0.893167854	0.128136651	4.803549823
MVD	16:88730354	6.00E-07	0.600798242	0.147149402	5.204662809
RNF166	16:88763896	3.09E-07	-0.651222742	0.154106888	-5.348144192
APRT	16:88902277	1.36E-05	-0.721108606	0.11389596	-4.492226311
GALNS	16:88912899	1.84E-15	-0.856621182	0.33234689	-8.840365026
ACSF3	16:89160708	1.20E-09	0.751005623	0.210375594	6.467511685
CARHSP1	16:8929260	1.67E-12	-1.219263164	0.272699842	-7.672474046
PMM2	16:8948433	9.13E-07	0.80840044	0.142732278	5.112727995
SPG7	16:89616039	2.93E-05	-0.465722827	0.105594558	-4.305299589
FANCA	16:89826723	3.83E-12	-0.689894469	0.265102461	-7.525637746

SPIRE2	16:89863750	8.39E-06	-0.527862543	0.119098154	-4.60721607
TUBB3	16:89986608	7.42E-16	-1.074897047	0.339932662	-8.991914154
DEF8	16:89995088	1.10E-06	-0.634664839	0.140800084	-5.072291103
CDK10	16:90015960	2.49E-09	-1.404205404	0.203179981	-6.327179639
GAS8	16:90091830	1.90E-05	-0.957960369	0.110266566	-4.411048129
C16orf72	16:9158755	1.15E-05	-0.49093279	0.115699505	-4.532268635
SNRNP25	16:95254	6.37E-06	0.632237666	0.122064398	4.672109392
GAS7	17:10113827	9.01E-10	-0.895381829	0.213203414	-6.522523761
MYH3	17:10583173	3.32E-07	0.527816721	0.153350239	5.332614132
TMEM220	17:10636105	1.94E-10	0.661847515	0.228150227	6.812301938
MYOCD	17:12531685	3.40E-09	-0.748107874	0.200078097	-6.266511004
ELAC2	17:12895984	6.18E-14	0.792058808	0.302175045	8.245288881
FAM18B2	17:15464679	6.20E-11	-0.805596712	0.239053312	-7.02295835
MEIS3P1	17:15685752	9.30E-12	-0.725556891	0.256886399	-7.367035743
TTC19	17:15875935	7.19E-06	0.498131038	0.120753284	4.643483681
TLCD2	17:1625215	1.46E-08	-0.806244469	0.185483707	-5.979334118
NCRNA00188	17:16346484	4.71E-07	0.56125715	0.149687406	5.257183693
ZNF624	17:16508098	1.92E-08	0.676245549	0.182702632	5.924233634
SERPINF1	17:1674429	3.46E-09	-0.668253192	0.199909048	-6.263201337
SMYD4	17:1735095	3.17E-07	0.702549532	0.153835573	5.342577498
MYO15A	17:18142740	9.44E-08	-0.605511647	0.166405463	-5.59830025
SHMT1	17:18192954	7.85E-10	0.741648799	0.214551696	6.548728701
SMCR8	17:18218804	3.58E-05	0.44107674	0.103400597	4.255123086
FAM18B1	17:18702220	2.36E-15	-0.839874594	0.330235068	-8.798329423
RNF112	17:19194812	1.36E-05	-0.477458784	0.11389943	-4.492303544
USP22	17:20862566	1.51E-07	0.667003489	0.161576629	5.500566381
C17orf103	17:21155951	1.50E-08	-0.623290701	0.185200516	-5.973729448
SRR	17:2138658	4.87E-08	-0.616074242	0.173199001	-5.734849439
SMG6	17:2279695	4.81E-06	1.014221429	0.125064559	4.737278855
TMEM97	17:26628747	1.87E-09	-0.689086167	0.206011591	-6.382466922
RAP1GAP2	17:2777647	2.06E-10	-0.874291947	0.227529222	-6.800289267
TP53I13	17:27922275	8.93E-07	0.539971157	0.142967701	5.117645493
BLMH	17:28629819	6.15E-07	-0.583584328	0.146897191	-5.199431797
C17orf75	17:30659006	4.94E-06	-0.566245161	0.12479168	-4.731370114

CCT6B	17:33120214	4.02E-06	0.741696947	0.126999854	4.779079766
LIG3	17:33301215	1.21E-05	-0.477085371	0.115134739	-4.519750319
SLFN5	17:33570441	1.44E-16	0.867816695	0.353388563	9.26305794
SLFN11	17:33646631	4.79E-06	0.51497841	0.125126652	4.738622856
SLFN12	17:33755394	8.03E-09	0.969605072	0.191488126	6.097861404
CCL5	17:34236746	2.63E-07	0.784485682	0.155775583	5.382333018
TRPV1	17:3534560	3.78E-16	0.805140938	0.345511369	9.103951676
SHPK	17:3561711	1.27E-15	0.832784556	0.335473227	8.902715971
CTNS	17:3561842	9.85E-10	-0.70167175	0.212322545	-6.505395038
TADA2A	17:35860964	9.67E-08	-0.623170185	0.166158858	-5.593323218
DUSP14	17:35861133	9.34E-11	0.767051176	0.235141328	6.947422518
CWC25	17:36988179	5.94E-07	1.046088369	0.147256119	5.206875529
MED1	17:37561613	4.07E-05	0.49352044	0.102005276	4.22303083
PGAP3	17:37832704	1.15E-21	-0.959148747	0.442445788	-11.16185324
ORMDL3	17:38066240	1.19E-13	-0.71343046	0.296377951	-8.132106383
GSDMB	17:38066267	2.24E-12	-0.684394356	0.270041768	-7.621075991
MED24	17:38216522	1.74E-05	0.493893795	0.111238148	4.432859823
SMARCE1	17:38782343	8.58E-13	-0.751336095	0.278755557	-7.78969319
KRT23	17:39045605	1.21E-07	-1.174449949	0.163806765	-5.545777196
KRT34	17:39611864	2.96E-07	1.132936149	0.154555682	5.357347389
KRT14	17:39745353	1.00E-13	-0.803944069	0.297910917	-8.162006301
ACLY	17:39964032	1.22E-07	-1.055562442	0.163792843	-5.545495371
NT5C3L	17:39986754	1.54E-11	-0.798201827	0.252205439	-7.276723942
TUBG2	17:40811781	1.30E-06	0.525427309	0.138994684	5.034380134
NBR2	17:41384118	1.64E-09	-0.72396534	0.207281912	-6.407242265
GRN	17:42423556	1.04E-05	-0.530631883	0.116839891	-4.55748948
FAM101B	17:425099	3.22E-10	-0.643588008	0.223214623	-6.716772303
DBF4B	17:42695328	1.62E-08	-0.945046687	0.184429058	-5.95845451
NMT1	17:43173131	1.50E-07	-0.531090818	0.161602556	-5.50109274
PLCD3	17:43207426	1.37E-11	1.251319096	0.253287326	7.297595621
DCAKD	17:43218677	9.87E-06	-0.542800515	0.117348517	-4.568714314
PLEKHM1	17:43671436	1.79E-07	1.38507312	0.159774964	5.463945781
MGC57346	17:43804317	9.95E-21	-1.077898024	0.42703239	-10.81720845
ARHGAP27	17:43893751	1.82E-13	0.907263355	0.292658693	8.05964717

MAPT	17:44365098	2.12E-07	-1.202024218	0.15801589	-5.428105247
LRRC37A2	17:44614265	7.64E-06	-0.676008199	0.1201143	-4.629499623
KIAA1267	17:44787313	4.93E-11	0.848294713	0.241216148	7.064704076
NSF	17:44852612	1.27E-06	-0.76821476	0.139216204	-5.039038524
ITGB3	17:45331427	3.48E-13	-0.813483591	0.286870001	-7.947088335
C17orf57	17:45388283	8.90E-11	-1.070007289	0.235596546	-6.956214504
MRPL10	17:45910447	9.88E-07	-0.543673498	0.141896882	-5.095261911
SCRN2	17:45927411	1.11E-10	-0.620733531	0.233523429	-6.91616927
SNX11	17:46311075	3.60E-07	-0.592065389	0.152506464	-5.3152752
HOXB3	17:46609918	6.15E-10	0.817281152	0.216935915	6.595031926
HOXB2	17:46609918	1.34E-17	1.070915051	0.372476206	9.653482089
PLD2	17:4706109	4.39E-12	1.176828721	0.26384626	7.501377749
NGFR	17:47532098	2.05E-07	0.820965026	0.158377013	5.435470039
C17orf107	17:4789961	4.66E-10	1.186552691	0.219633851	6.647376138
FLJ45513	17:47975136	2.71E-05	-0.446936389	0.106415926	-4.323997461
MRPL27	17:47975539	1.68E-06	-0.522269239	0.136310333	-4.977776047
CHRNE	17:4806428	1.35E-08	1.047705893	0.186283221	5.995150085
SGCA	17:48243736	1.17E-11	-0.750638831	0.254764458	-7.326093652
EPN3	17:48609558	1.61E-08	-0.696231639	0.184450055	-5.958870401
SPATA20	17:48624523	1.25E-25	-0.976186649	0.503239771	-12.61141727
SPAG7	17:4870893	3.48E-12	1.401310123	0.26599126	7.542805237
ABCC3	17:48716720	1.36E-08	-0.633129925	0.186195617	-5.993417617
ANKRD40	17:48787960	1.12E-05	-0.544034699	0.116000688	-4.538936897
CA10	17:49825433	3.00E-14	0.969826984	0.308476531	8.368688997
PELP1	17:5000130	2.25E-05	-0.853950387	0.108427842	-4.36960304
STXBP4	17:53044084	2.71E-05	0.574394939	0.106427726	4.324265745
HLF	17:53403955	1.57E-07	-0.74741708	0.161171908	-5.492347629
DHX33	17:5380167	1.84E-05	0.580433768	0.110618658	4.41895941
PCTP	17:53832056	2.21E-05	-0.729483967	0.108622554	-4.374002329
ANKFN1	17:54518069	2.97E-17	1.041627329	0.366144506	9.523157295
MSI2	17:55375255	4.11E-11	-0.702828121	0.242943047	-7.098029283
RAD51C	17:56538639	9.46E-10	0.798660014	0.2127227	6.513176982
SKA2	17:56785571	7.79E-06	-0.49808296	0.119896857	-4.624735927
TEX14	17:56907737	2.65E-05	-0.488329313	0.106658781	-4.329516991

TRIM37	17:57137129	7.96E-12	-0.714991972	0.258332816	-7.394947302
GDPD1	17:57264660	5.45E-07	0.620017839	0.148160571	5.225613416
HEATR6	17:58156330	8.81E-09	0.813385354	0.190556341	6.079504949
MED13	17:60249859	1.68E-05	0.681041025	0.111634356	4.441737449
FTSJ3	17:61903445	3.99E-20	0.926196211	0.416884203	10.59449212
STRADA	17:61962878	1.05E-05	0.471077389	0.116664333	4.553611692
TCAM1P	17:61980297	3.33E-07	-0.557190726	0.153327774	-5.332152784
SMARCD2	17:61980297	9.81E-12	-0.720516161	0.256389671	-7.357451059
ERN1	17:62019103	3.66E-06	-0.654861303	0.128007196	-4.80076634
SCN4A	17:62033322	1.20E-06	-0.616582995	0.139824702	-5.051824951
AMZ2P1	17:62991863	3.96E-09	0.995545497	0.198563452	6.236844439
FAM57A	17:635080	3.11E-06	0.500816754	0.129741344	4.837988668
CACNG4	17:64948285	1.65E-08	-0.78122633	0.18420492	-5.95401465
KIAA0753	17:6538963	3.91E-06	0.500674721	0.127277028	4.785051703
GLOD4	17:658577	1.76E-05	0.463958324	0.111104042	4.429852739
LOC440461	17:66192359	8.47E-09	1.029006266	0.190952101	6.087303134
WIP1	17:66449844	1.52E-06	-0.711301631	0.137342812	-4.999581704
KCNJ2	17:68259446	3.22E-05	0.522348524	0.104542553	4.281282658
SLC39A11	17:70641315	2.08E-05	-0.519463107	0.109321788	-4.389780189
CDC42EP4	17:70851761	1.64E-08	-0.880688779	0.184265147	-5.955207744
CLDN7	17:7172609	2.39E-09	0.624961894	0.203593876	6.335266469
EIF5A	17:7207964	3.07E-08	-0.565824829	0.177913165	-5.82901298
TMEM104	17:72782216	1.39E-11	0.675370094	0.253139025	7.294734567
GRIN2C	17:72792071	2.53E-05	-0.56137588	0.107169886	-4.341120041
FDXR	17:72869078	9.11E-09	-0.715999806	0.190222046	-6.072916023
KCTD2	17:73033378	2.31E-09	-0.747257424	0.203925004	-6.341734756
NUP85	17:73243307	1.04E-10	-0.92783084	0.234138635	-6.92805435
MRPS7	17:73247660	3.41E-07	-1.01032566	0.153076214	-5.326985522
TSEN54	17:73512363	1.67E-06	0.680134853	0.13637644	4.979173513
LLGL2	17:73565510	3.47E-06	0.466855349	0.128551026	4.812454299
RPH3AL	17:73624	1.96E-09	-0.742171632	0.205544966	-6.37336203
ITGB4	17:73693810	2.52E-08	-0.59264667	0.179911944	-5.868803663
FBF1	17:73909948	1.32E-05	0.586393924	0.114180821	4.498563628
CHRNA1	17:7392285	2.27E-06	0.800993332	0.133098231	4.909655548

ACOX1	17:74011721	3.38E-05	0.443061536	0.10402906	4.269531293
RNF157	17:74216739	3.50E-05	0.466403522	0.103659411	4.261060132
ST6GALNAC2	17:74598144	1.01E-06	0.923877704	0.141694581	5.091028409
ST6GALNAC1	17:74618871	1.09E-05	-0.54967398	0.116311959	-4.545823013
MXRA7	17:74694446	5.31E-27	0.980920219	0.522722409	13.11293364
NCRNA00338	17:75063579	1.93E-06	0.548233993	0.134805448	4.945915126
SEC14L1	17:75172484	1.24E-05	0.973644054	0.11487529	4.513993238
TMC6	17:76147615	4.67E-10	0.938631923	0.219618723	6.647082778
SYNGR2	17:76169116	8.47E-15	-0.759635286	0.31939176	-8.583473662
USP36	17:76746325	3.81E-06	0.497536596	0.127576257	4.791494734
ENGASE	17:77070676	1.85E-10	0.690810707	0.22858882	6.820784922
CCDC40	17:78011360	3.96E-17	0.941323843	0.363851626	9.476168515
GAA	17:78076592	3.90E-09	-0.603233299	0.198716592	-6.239845219
CARD14	17:78125161	2.82E-06	0.486704684	0.130762025	4.859832485
SGSH	17:78191030	6.05E-07	0.939503115	0.147066238	5.202938163
LOC100294362	17:78332823	2.61E-06	0.976444779	0.131618374	4.878123302
NPTX1	17:78562434	3.63E-09	-0.619181324	0.199419583	-6.253616535
RPTOR	17:78615899	3.51E-05	-0.50310834	0.103608706	-4.25989738
BAIAP2	17:79022625	1.92E-10	-0.781208757	0.228213763	-6.813530853
CCDC137	17:79335680	9.02E-06	-1.609419007	0.118324541	-4.590213259
ARL16	17:79649515	5.15E-18	-1.212886563	0.380000733	-9.809490597
SLC25A10	17:79687736	5.27E-07	0.839868833	0.14852169	5.233087212
DCXR	17:79992855	1.42E-08	0.788981839	0.185748591	5.984575235
SLC16A3	17:80067298	2.14E-06	-0.518890006	0.133735482	-4.923204615
C17orf101	17:80377406	4.39E-07	-0.551668212	0.150430122	-5.272513217
NARF	17:80411830	3.11E-17	-0.812479976	0.365790564	-9.515896844
C17orf62	17:80412292	2.09E-09	-0.991734071	0.204909631	-6.360961476
FN3KRP	17:80679455	2.61E-25	-0.953695719	0.49858233	-12.49448759
FN3K	17:80729581	7.47E-06	-0.500971532	0.120343548	-4.63451919
METRNL	17:81049726	4.53E-14	0.779834389	0.30489635	8.298529741
CTC1	17:8163399	1.01E-11	-0.711668515	0.256158596	-7.352992437
RANGRF	17:8185902	4.30E-11	-0.637042515	0.242516018	-7.089789066
PFAS	17:8194318	3.40E-07	-0.507074124	0.153093984	-5.327350606
SLC25A35	17:8199481	1.63E-13	0.708108322	0.293630486	8.078568739

RNF222	17:8275001	2.05E-10	0.740326112	0.227579442	6.801260798
KRBA2	17:8276636	3.83E-05	0.443896723	0.102671106	4.238362713
MFSD6L	17:8704061	2.62E-17	0.950893111	0.367143517	9.543664004
GNAL	18:11775299	6.49E-10	0.705786862	0.216403031	6.584686791
IMPA2	18:11994598	2.17E-09	0.656178138	0.204544303	6.353828994
C18orf2	18:1267662	1.46E-06	-0.710817142	0.137789829	-5.009009274
CEP192	18:13129938	2.88E-08	-0.623222151	0.178566527	-5.84202827
ANKRD20A5P	18:13777078	4.89E-06	0.848271229	0.12488805	4.733457272
RNMT	18:13819819	1.01E-06	0.770060442	0.141658847	5.090280442
ZNF519	18:14094507	2.98E-05	-0.44965428	0.105403213	-4.300937034
ESCO1	18:19248118	2.30E-07	0.725047841	0.157158015	5.410594822
MIB1	18:19315680	9.86E-11	-0.879547773	0.23462484	-6.937446382
LAMA3	18:21288366	1.01E-08	0.589629096	0.189143822	6.051652636
TTC39C	18:21580492	5.94E-06	0.646631681	0.122814175	4.688439018
DSG2	18:29078627	1.51E-12	-0.678329809	0.273609189	-7.690064712
LPIN2	18:2962177	9.56E-06	0.755711144	0.117695323	4.576359544
MYOM1	18:3115143	9.89E-07	-0.752511576	0.141894187	-5.09520552
C18orf34	18:31173528	3.11E-06	0.563195965	0.12974353	4.83803551
ASXL3	18:31173528	2.61E-20	1.0133308	0.420019186	10.66295501
INO80C	18:33083546	2.46E-05	0.492504686	0.107472103	4.347972622
MOCOS	18:33712229	9.56E-06	0.520384648	0.117692494	4.576297215
DLGAP1	18:3818842	9.38E-07	-0.596236346	0.142451826	-5.106867309
SLC14A1	18:43252883	2.88E-05	0.633501259	0.105756613	4.308992353
EPG5	18:43550901	3.12E-05	-0.984494851	0.104904905	-4.289563823
PSTPIP2	18:43599265	8.00E-07	0.814708494	0.14413199	5.141935458
HAUS1	18:43684561	3.03E-07	1.180678432	0.15431521	5.352416908
HDHD2	18:44621382	2.04E-08	0.998391701	0.182099832	5.912272607
ACAA2	18:47290831	3.34E-05	-0.463248735	0.104143566	-4.27215342
MYO5B	18:47693961	1.52E-11	0.731258163	0.252309815	7.278737521
MBD1	18:47839240	3.12E-05	-0.553191418	0.104885395	-4.289118179
CXXC1	18:47840706	2.98E-07	-0.564224696	0.154468733	-5.355564858
POLI	18:51817587	5.20E-14	-0.739679738	0.303684142	-8.274804465
C18orf54	18:51948204	7.11E-14	-0.91039785	0.300947127	-8.221288982
RAB27B	18:52033152	1.57E-05	-0.51190827	0.112331585	-4.457336144

CCDC68	18:52570345	1.82E-09	-0.623315694	0.206277563	-6.387655613
FECH	18:55238820	2.10E-10	-1.199433148	0.227363824	-6.797089511
ALPK2	18:56211453	9.41E-06	0.707630412	0.117861137	4.580012477
MALT1	18:56211591	3.49E-05	-0.473163333	0.103670961	-4.261324971
ZNF532	18:56554401	1.57E-06	-0.54105741	0.136971989	-4.991755005
PIGN	18:59869481	2.65E-15	-1.291747337	0.3292805	-8.77935007
ZCCHC2	18:60200978	1.85E-10	0.819361609	0.228577289	6.820561902
BCL2	18:60924613	2.67E-05	0.471840917	0.106584866	4.327837487
SERPINB10	18:61576106	2.23E-17	0.959587631	0.368418594	9.569867588
DSEL	18:65249115	5.51E-14	-0.757230774	0.303180227	-8.264946185
TMX3	18:66365976	1.54E-05	0.802129596	0.112539513	4.461982164
ENOSF1	18:703442	6.62E-16	0.834897406	0.340877488	9.0108532
LOC400655	18:70931673	2.13E-08	0.732071695	0.18162975	5.902940451
CNDP2	18:72170397	6.88E-23	0.9866513	0.461945974	11.61000686
ZNF236	18:74626094	4.26E-10	-0.711961519	0.220511258	-6.664388197
PQLC1	18:77678515	6.87E-06	0.669185145	0.121247213	4.654278321
HSBP1L1	18:77725655	1.35E-05	0.747150727	0.114010783	4.494781367
RBFA	18:77792946	3.86E-12	-0.722074769	0.265021155	-7.524067405
TXNL4A	18:77848002	1.09E-05	-0.624521355	0.116262044	-4.544719139
ADNP2	18:77904014	2.08E-06	0.595295175	0.133992127	4.928656441
PARD6G	18:78003573	7.84E-07	0.828480341	0.144345366	5.146381715
PTPRM	18:8485082	2.91E-05	-0.48276839	0.105662518	-4.306848424
CCDC165	18:8800723	1.72E-16	-0.9731936	0.351989553	-9.234719519
PPP4R1	18:9675478	1.98E-06	0.59604943	0.134546529	4.940423889
RAB31	18:9723111	2.39E-06	-0.553058721	0.132549822	-4.897981379
S1PR2	19:10347032	7.11E-07	0.87341788	0.14536963	5.167702551
TMED1	19:10491005	1.39E-05	-0.821053333	0.113693285	-4.487714439
TYK2	19:10525743	6.94E-11	-0.744984717	0.237974789	-7.002137455
SLC44A2	19:10638076	1.50E-05	0.476551284	0.112835371	4.468588326
KRI1	19:10676343	1.96E-26	1.034116839	0.514773288	12.90581625
POLR2E	19:1095336	1.04E-06	0.498097264	0.141372276	5.084280441
GPX4	19:1103785	5.18E-06	-1.103337623	0.124282148	-4.720327153
RGL3	19:11473854	1.31E-05	0.808889251	0.114263178	4.500394926
ZNF439	19:11966683	1.23E-05	0.630045393	0.11500972	4.516976685

ZNF69	19:11999985	3.81E-06	-0.514022649	0.127566537	-4.791285514
MAN2B1	19:12772090	6.15E-06	0.492786209	0.122434609	4.680175958
FARSA	19:13028001	7.80E-21	0.924985637	0.428793543	10.85618887
GCDH	19:13029188	1.64E-09	0.634008471	0.20729856	6.407566851
DNASE2	19:13029188	2.49E-11	0.69301155	0.247677817	7.189380142
MRI1	19:13871411	1.21E-20	-0.914064333	0.425592818	-10.78541949
ZSWIM4	19:13899223	7.47E-08	0.859246849	0.168810961	5.64677188
PALM3	19:14172728	1.67E-10	-0.714143067	0.229582331	-6.839997437
LOC113230	19:14177828	5.55E-06	0.592591894	0.123529645	4.703994518
CD97	19:14497052	2.66E-09	0.838706075	0.202517439	6.314230658
ZNF333	19:14801166	1.55E-13	-0.811219302	0.294088909	-8.087497268
REEP6	19:1502014	5.79E-10	0.669786181	0.217527123	6.606506829
ILVBL	19:15252881	3.01E-09	0.764361998	0.201297384	6.29037213
UCA1	19:15939104	3.52E-13	0.92363564	0.286761896	7.94498861
RAB8A	19:16185757	3.57E-06	0.534281075	0.128246677	4.805914955
C19orf44	19:16616420	7.46E-11	-0.755928811	0.237281066	-6.988743554
HAUS8	19:17168193	4.44E-11	-0.656191777	0.24221128	-7.083908455
OCEL1	19:17337025	6.32E-16	0.870740334	0.341263864	9.018602263
NR2F6	19:17360878	2.40E-08	-0.561313069	0.180426201	-5.879028904
ANKLE1	19:17407415	1.14E-05	0.546991412	0.115780902	4.534071288
MRPL34	19:17418311	8.98E-08	0.543551875	0.1669205	5.608690062
PGLS	19:17567428	2.30E-05	0.471385665	0.108202212	4.364502032
MAP1S	19:17822825	4.37E-07	-0.60876175	0.150485736	-5.273660374
B3GNT3	19:17905907	3.11E-28	-1.122909643	0.539575708	-13.564285
JAK3	19:17907444	6.24E-10	0.692983342	0.216786193	6.592125526
GDF15	19:18060047	1.94E-05	-1.02354867	0.110045543	-4.406077826
IL12RB1	19:18197744	3.05E-08	-0.722798772	0.177995167	-5.830646953
IFI30	19:18288322	1.61E-09	-0.77038885	0.207517549	-6.411836132
LOC100288123	19:1837338	2.26E-05	-0.576165593	0.10837702	-4.368454348
KIAA1683	19:18398139	3.33E-10	-0.639323818	0.222896072	-6.710601997
SSBP4	19:18543054	2.79E-05	-0.467087719	0.106098762	-4.31678297
MEF2BNB	19:19264840	7.92E-07	0.533483065	0.144228373	5.14394405
MAU2	19:19432811	3.62E-06	0.508412018	0.128116815	4.803123382
ZNF506	19:20081029	1.30E-06	0.564317895	0.138994592	5.034378205

BTBD2	19:2012382	2.35E-05	-0.789067653	0.10795991	-4.359020359
ZNF682	19:20133846	7.42E-10	-0.788524532	0.215094883	-6.559281749
PLEKHJ1	19:2032148	3.69E-06	-0.487199255	0.127903587	-4.798537998
ZNF738	19:21549668	4.28E-09	0.601819109	0.197791709	6.221717594
ZNF208	19:21752910	2.45E-06	-0.644988501	0.132262626	-4.891862543
ZNF100	19:21908053	1.18E-34	1.092874515	0.618310467	15.9476979
LOC641367	19:21932574	4.87E-14	-0.77146775	0.304257655	-8.286027384
AMH	19:2248683	3.64E-13	0.923337922	0.286457523	7.939077229
SPPL2B	19:2353368	4.31E-06	-0.517499692	0.126236845	-4.762621074
TMPRSS9	19:2395960	4.40E-15	-0.859038408	0.324973374	-8.693872452
THOP1	19:2793289	6.37E-09	-0.594261699	0.193811881	-6.14358439
ZNF555	19:2857149	3.46E-05	-0.432345651	0.103768498	-4.263561068
PPAP2C	19:289657	6.22E-12	-0.904416335	0.260627398	-7.439233391
TLE6	19:2985384	3.76E-05	-0.819200987	0.102860623	-4.242720693
C19orf12	19:30196938	3.09E-05	0.67283184	0.104998242	4.291695449
GNA15	19:3137137	4.44E-08	0.580404828	0.17414369	5.753756139
NCLN	19:3198286	9.40E-06	-0.436441244	0.117879233	-4.58041105
DPY19L3	19:32992855	1.42E-07	0.817826375	0.16217615	5.512733021
ANKRD27	19:33144248	3.99E-11	0.766722032	0.243234478	7.103652784
PDCD5	19:33265379	1.93E-05	-0.63234525	0.110113367	-4.407603356
RHPN2	19:33559874	2.35E-10	-0.892520142	0.226272549	-6.775974422
SLC7A10	19:33722682	1.66E-12	0.724517277	0.272744775	7.67334317
PEPD	19:34000018	9.27E-23	1.379559502	0.459917692	11.56271734
ZNF302	19:35213287	4.27E-10	-1.047954284	0.220488984	-6.663956387
ZNF181	19:35246250	2.53E-08	-0.650192298	0.179873797	-5.868044962
SCN1B	19:35525322	4.55E-06	-0.62380416	0.125671	-4.750397149
FXYD3	19:35608868	1.03E-10	0.944818001	0.234177251	6.928800326
C19orf71	19:3565092	5.07E-06	-0.571087089	0.124509399	-4.725253911
C19orf28	19:3565092	4.25E-08	-0.676254575	0.174589405	-5.762669983
FXYD5	19:35659379	3.76E-10	0.866129128	0.221734293	6.688093122
LIN37	19:36226469	1.87E-05	-1.008810176	0.110462536	-4.415452429
IGFLR1	19:36230174	5.78E-06	0.642013175	0.123095562	4.694559957
U2AF1L4	19:36232923	1.11E-14	0.982521949	0.317058934	8.537450719
SDHAF1	19:36486509	1.11E-05	-1.352353032	0.116100166	-4.541138219

TBCB	19:36591416	3.56E-05	-0.707854483	0.10346352	-4.256566935
COX7A1	19:36659354	3.85E-06	0.537505752	0.127467406	4.789151444
TJP3	19:3677496	6.07E-08	0.739838862	0.170941752	5.689595333
PIP5K1C	19:3687060	4.70E-28	1.310370891	0.537162136	13.49857991
ZNF260	19:36999787	9.52E-11	0.699145085	0.234957548	6.943872842
ZNF529	19:37152146	5.40E-06	0.462737179	0.123832337	4.710567707
ZNF567	19:37205178	1.78E-09	0.625357255	0.20651339	6.392255618
ZNF420	19:37409561	2.17E-05	-0.451319292	0.108827851	-4.378638094
HKR1	19:37839871	3.91E-05	-0.468893153	0.102440092	-4.233046922
ZNF781	19:38215896	1.57E-13	-0.754990422	0.293986836	-8.08550907
ZNF540	19:38457809	3.98E-06	0.571044301	0.127109495	4.78144251
SIPA1L3	19:38594379	1.23E-05	-0.445842471	0.114984584	-4.516418909
YIF1B	19:38796383	2.17E-05	-0.610792923	0.108857054	-4.379297277
SARS2	19:39433299	1.94E-09	-0.680728787	0.205639115	-6.37519926
FBXO27	19:39547368	1.12E-14	1.343567828	0.317014537	8.536575496
PAK4	19:39636597	1.68E-11	-0.765954941	0.25136204	-7.260453524
NCCRP1	19:39677078	2.07E-14	-0.822003865	0.311715626	-8.432282689
EID2	19:40013920	1.75E-06	-0.537483561	0.135842571	-4.967882766
LGALS13	19:40116048	3.95E-08	-0.745507926	0.175354707	-5.777965551
LOC100129935	19:40133958	1.59E-09	0.781925787	0.207635462	6.414134689
LGALS14	19:40173502	4.61E-19	-0.879741357	0.398595057	-10.20075422
SHKBP1	19:41091145	1.13E-29	0.978902035	0.558536122	14.09379247
CYP2S1	19:41685023	2.15E-07	0.971319145	0.157891727	5.425572185
BCKDHA	19:41937095	1.29E-09	-0.693033154	0.209643496	-6.453257676
LOC100505495	19:41990325	1.16E-07	0.694670739	0.16429005	5.555557812
ANKRD24	19:4205324	2.72E-16	-1.077243927	0.348225224	-9.158643718
C2CD4C	19:421825	7.29E-07	0.62468464	0.145105978	5.162217976
PSG3	19:43264429	4.31E-07	-0.713421396	0.150630998	-5.276656208
PSG8	19:43268216	1.11E-10	-1.234937362	0.233514798	-6.916002514
PSG10P	19:43335513	3.95E-11	0.791366402	0.243324405	7.105387995
STAP2	19:4336379	6.37E-06	0.50533779	0.122058382	4.67197824
PSG1	19:43373078	3.25E-11	-1.335325614	0.245175546	-7.141105044
PSG7	19:43439694	8.54E-21	1.313078075	0.428139365	10.841698
LOC284344	19:43439848	1.79E-20	1.329085068	0.422780539	10.72350695

PSG11	19:43526731	6.98E-18	-0.782575637	0.377616524	-9.759920818
PSG2	19:43603074	1.01E-13	0.990119255	0.297822685	8.160284802
PSG5	19:43686346	5.05E-08	-0.601076639	0.17283527	-5.727564755
PSG4	19:43711592	3.83E-11	0.733137151	0.243604203	7.110786861
PSG9	19:43770319	4.62E-10	0.726196324	0.219731119	6.649262316
LYPD3	19:43989567	1.01E-05	0.512861327	0.117104007	4.563320069
PHLDB3	19:44025235	3.39E-19	-1.016816713	0.400931877	-10.25054635
XRCC1	19:44079687	3.69E-12	-0.774996883	0.265441767	-7.532191289
ETHE1	19:44085827	9.50E-06	0.697055571	0.117761295	4.577813117
LYPD5	19:44299298	2.30E-22	-0.935959184	0.453683341	-11.41836761
ZNF404	19:44392100	2.02E-06	-0.491326005	0.134332902	-4.935891105
LOC100505715	19:44417575	2.49E-07	-0.53989625	0.156355386	-5.394192996
ZNF221	19:44461640	4.01E-05	-0.720850209	0.102177915	-4.227009288
ZNF155	19:44488352	8.67E-11	-1.405612589	0.235854305	-6.961192526
PVR	19:45134626	4.62E-06	0.586310952	0.125510879	4.74693524
PVRL2	19:45382717	8.84E-07	0.524999687	0.143072181	5.119827219
DMPK	19:46342885	8.61E-08	-0.591472133	0.167352036	-5.617390476
CD3EAP	19:46363290	1.74E-05	0.785292493	0.111208568	4.432196641
PNMAL1	19:46975520	6.71E-26	1.167074441	0.507138722	12.71015546
CALM3	19:47066644	1.98E-05	0.625039972	0.109819215	4.400984976
AP2S1	19:47131409	1.76E-05	-0.633170514	0.111091936	-4.429581243
FKRP	19:47218101	9.05E-09	-0.63122082	0.19028474	-6.074151852
DPP9	19:4724734	2.81E-15	-0.898600481	0.328771334	-8.769231811
PRKD2	19:47257481	1.92E-06	-0.640935741	0.134877733	-4.947447668
CDC34	19:480009	9.53E-06	1.373998005	0.117731527	4.577157265
SEPW1	19:48288437	2.01E-18	0.875587156	0.387328815	9.962675893
PLA2G4C	19:48690906	7.17E-06	-0.806121853	0.120795161	-4.644399394
ZNF114	19:48775272	1.49E-18	-0.866528624	0.389627846	-10.01100006
GRWD1	19:48943921	1.93E-09	0.801542078	0.20567355	6.37587121
SPHK2	19:49120774	1.39E-05	0.466137844	0.113684104	4.487509997
NUCB1	19:49394900	2.37E-09	-0.733258355	0.203661302	-6.336583664
FTL	19:49519230	2.21E-05	0.43703377	0.108632579	4.374228778
CGB	19:49527339	6.84E-15	-0.721330612	0.321214757	-8.619486128
CGB7	19:49544430	8.39E-09	0.739202201	0.191045285	6.089138933

TRPM4	19:49661582	1.87E-07	0.639845672	0.159334391	5.454977305
ALDH16A1	19:49971596	1.42E-13	-0.835330463	0.294867564	-8.102666823
RPL13A	19:49982043	3.40E-05	0.970823085	0.103977248	4.268344518
RCN3	19:50030701	1.54E-06	0.784952762	0.137240556	4.997424027
PRRG2	19:50093572	1.96E-06	0.49244712	0.134636282	4.942327717
TSKS	19:50265549	3.52E-14	0.992059558	0.307093148	8.341563531
PNKP	19:50380858	9.64E-07	0.49264102	0.142157448	5.100712479
KCNC3	19:50850534	4.88E-06	0.49655905	0.124909912	4.733930691
C19orf63	19:50953781	1.46E-06	0.544149413	0.137765578	5.008498021
VSIG10L	19:51853400	9.82E-06	0.500663919	0.117411322	4.570099322
SIGLEC6	19:52040769	3.32E-08	-0.671264904	0.177121367	-5.813228735
ZNF175	19:52042766	1.02E-05	-0.753634891	0.116978994	-4.560560794
FPR1	19:52255196	3.12E-05	0.45491843	0.104881933	4.289039106
ZNF615	19:52436172	5.65E-08	0.662316626	0.171690719	5.704623313
ZNF613	19:52436172	3.89E-12	0.822758608	0.264947835	7.522651334
ZNF841	19:52437487	2.54E-05	0.656216804	0.107151325	4.340698986
ZNF480	19:52711014	3.81E-05	0.497925953	0.102736627	4.239869672
ZNF880	19:52894445	5.58E-12	-0.985032789	0.261634384	-7.458671899
ZNF528	19:52917590	2.06E-09	0.688452659	0.20505348	6.36376952
PTPRS	19:5306407	2.73E-06	-0.555819778	0.131137806	-4.867862829
ZNF701	19:53073564	3.31E-05	-0.599315682	0.104238757	-4.27433252
ZNF83	19:53190061	5.22E-16	0.820045764	0.342846962	9.050378007
ZNF611	19:53233572	2.26E-12	0.785945633	0.269939906	7.619106907
ZNF28	19:53324256	1.96E-22	1.647825393	0.454789874	11.44387914
ZNF468	19:53361838	2.59E-09	0.639923158	0.202803134	6.31981501
ZNF320	19:53400760	1.31E-14	-0.811486284	0.315626094	-8.509216137
ERVV-2	19:53548950	4.14E-07	-0.612087032	0.151043116	-5.285151941
ZNF525	19:53874142	1.91E-05	0.568028048	0.110199642	4.409543497
ZNF765	19:53934604	4.80E-07	-0.566387488	0.149502968	-5.25337415
NDUFA3	19:54612628	9.82E-06	-0.554843374	0.117411387	-4.570100771
MBOAT7	19:54677189	1.19E-13	-0.80469926	0.296404818	-8.13263025
TMC4	19:54677189	3.55E-41	-1.222908064	0.684550786	-18.4581401
RPS9	19:54700668	1.60E-09	-0.704020343	0.207561701	-6.412696818
TTYH1	19:54781010	1.31E-06	-0.542723151	0.138895963	-5.032303488

LILRB2	19:54930108	3.40E-05	-0.54262177	0.103972957	-4.268246228
LILRB4	19:55121108	1.59E-05	-0.447636581	0.112197746	-4.454344169
LILRB1	19:55125147	1.07E-09	-0.625735145	0.211470314	-6.488816726
PLAC2	19:5554321	1.15E-05	0.502887567	0.115742714	4.533225611
GP6	19:55548269	2.87E-07	0.620894731	0.154859012	5.363564235
EPS8L1	19:55588651	1.68E-08	0.650114329	0.184042037	5.950787591
SUV420H2	19:55856083	1.84E-07	0.593438488	0.159525374	5.458865679
RPL28	19:56073901	1.76E-05	-0.525476129	0.111076248	-4.429229367
ZNF471	19:57029837	6.05E-09	0.681427741	0.194320907	6.153589815
ZNF71	19:57046007	6.59E-06	0.524156758	0.121694068	4.664033077
ZFP28	19:57048240	1.92E-13	0.81419896	0.292173839	8.050209531
ZNF470	19:57063916	6.42E-14	-0.855768881	0.301842544	-8.238788656
ZNF667	19:57086815	4.49E-07	0.582457384	0.150202828	5.267823792
ZNF583	19:57099817	1.55E-05	0.526409251	0.112492957	4.460942124
ZNF749	19:57939619	3.04E-07	-0.577285262	0.154275433	-5.351601171
VN1R1	19:57970368	3.76E-08	0.606752671	0.175839016	5.787638842
DUS3L	19:5799037	6.47E-11	-0.742871676	0.238640436	-7.014988116
ZNF419	19:58020696	8.29E-09	-0.601108594	0.191165703	-6.09151104
ZNF550	19:58078537	3.84E-07	0.678150202	0.151818743	5.301126733
ZNF211	19:58155089	3.12E-07	0.746230014	0.154006154	5.34607764
ZNF586	19:58263585	2.07E-06	0.509452593	0.13409004	4.93073565
LOC100128398	19:58502454	1.85E-08	-0.604178179	0.183084103	-5.931799605
ZNF606	19:58526736	7.87E-06	0.946457916	0.119788887	4.622369587
ZNF497	19:58873584	1.68E-05	0.609755704	0.11158483	4.440628296
ZNF132	19:58918405	4.65E-16	-0.851065162	0.343793482	-9.069396212
ZNF584	19:58926345	4.07E-08	-0.64835545	0.175031031	-5.771497942
BSG	19:589315	3.71E-06	0.76074175	0.127853537	4.797461379
SH2D3A	19:6762742	3.47E-20	-1.066639558	0.417925095	-10.61719057
KIAA1543	19:7648057	1.11E-05	-0.519544967	0.116091599	-4.540948659
CD209	19:7802307	3.06E-07	0.540678536	0.154189438	5.349837454
CLEC4M	19:7827830	1.41E-11	0.943322286	0.252990682	7.291872725
LRRC8E	19:7960005	1.99E-30	-1.112365726	0.568137336	-14.37155171
RPS28	19:8387207	6.32E-24	-0.987020119	0.477959884	-11.98929403
MARCH2	19:8555886	6.58E-06	-0.532113472	0.121720325	-4.664605952

MED16	19:869198	1.42E-10	-0.791773431	0.231159223	-6.870482461
PRAM1	19:8849819	3.02E-05	0.486119399	0.105262086	4.297717765
MUC16	19:9168586	9.93E-13	-0.852106104	0.277427974	-7.763979484
ZNF266	19:9517537	1.56E-27	0.990351338	0.530061907	13.30738735
ZNF559	19:9543029	1.36E-14	-1.277527412	0.31532774	-8.503340099
WDR18	19:998798	2.25E-16	-0.74241163	0.349775668	-9.189947171
TBC1D8	2:101691831	1.18E-05	-0.527681131	0.11543415	-4.526389232
RNF149	2:101939128	1.80E-05	0.627863538	0.110835807	4.423834658
IL1R2	2:102523595	2.06E-06	0.54308945	0.134132073	4.931628096
IL1R1	2:102758116	1.06E-14	-0.8102385	0.31747972	-8.545747189
IL18R1	2:103094323	1.85E-06	-0.600180606	0.135253588	-4.955412804
HPCAL1	2:10436443	1.91E-09	0.69825499	0.205777022	6.37789024
MRPS9	2:105745533	1.43E-06	-0.624924972	0.138028746	-5.014044753
NCK2	2:106486548	3.82E-10	-0.696173303	0.221569858	-6.684906603
RANBP2	2:109189776	1.77E-11	-0.707107149	0.250891718	-7.251380429
GCC2	2:109192277	1.02E-11	0.717344866	0.255994133	7.349819141
ATP6V1C2	2:10937095	7.76E-07	0.644259846	0.14445053	5.148572511
ANKRD57	2:110396324	5.44E-07	0.603985503	0.148190163	5.226226028
ANAPC1	2:112512202	3.72E-06	-0.540049582	0.127821466	-4.796771443
TMEM87B	2:112797423	5.58E-10	-0.636586793	0.217879201	-6.613339164
FBLN7	2:112888106	1.28E-08	0.58383981	0.186795159	6.005271646
POLR1B	2:113316539	3.51E-05	1.024494701	0.103604173	4.259793411
IL36RN	2:113825386	4.11E-24	1.065733966	0.480791295	12.05749643
LOC654433	2:113993344	3.26E-19	-0.909791205	0.40120894	-10.25645959
PAX8	2:113995934	1.78E-07	-0.606947831	0.159814492	-5.464750163
DDX18	2:118513255	1.42E-06	-0.518837218	0.138035221	-5.014181192
STEAP3	2:120014805	3.03E-09	1.108247718	0.201215036	6.288761161
EPB41L5	2:120851683	3.83E-24	-1.071125956	0.481258595	-12.06878688
RALB	2:121049613	2.60E-08	-0.865614667	0.179600601	-5.862610649
CLASP1	2:122429132	5.20E-06	-0.597020498	0.124241122	-4.719437445
MAP3K2	2:128178415	2.28E-07	-0.590014243	0.157267223	-5.412825076
IWS1	2:128228901	4.42E-07	0.886985448	0.150370715	5.271287729
UGGT1	2:128971267	1.08E-05	0.490127434	0.116425754	4.548339062
HS6ST1	2:129073674	2.77E-07	-0.561557713	0.155246511	-5.371502148

LOC440905	2:130791472	5.97E-08	-0.564400876	0.171119413	-5.693161218
POTEF	2:130794777	1.79E-13	-0.738283898	0.292794357	-8.062288197
PLEKHB2	2:131893958	3.24E-16	0.908851455	0.346776126	9.129424411
LOC150776	2:132274077	3.29E-14	-0.828953751	0.307684764	-8.353161489
TMEM163	2:135537898	2.57E-18	-0.774527065	0.38541604	-9.922568545
ARHGAP15	2:143652818	1.01E-05	-0.703004521	0.117061466	-4.562381219
KYNU	2:143675232	1.42E-05	-1.012728359	0.113428184	-4.481809104
FAM84A	2:14695412	5.20E-06	0.842336872	0.124232738	4.719255618
NMI	2:152085643	2.18E-07	-0.546373858	0.157725203	-5.422174263
FMNL2	2:153219404	1.36E-10	0.712522549	0.231530179	6.877652394
DDX1	2:15723605	6.12E-08	-0.594166438	0.17086133	-5.687980935
DPP4	2:162982138	1.38E-18	-0.834897863	0.390202457	-10.02309832
FIGN	2:164874536	1.31E-05	-0.56945297	0.114258671	-4.500294718
FASTKD1	2:170449547	1.45E-06	-0.57967803	0.137843109	-5.010132408
MYO3B	2:171293397	2.80E-07	0.722494956	0.155126982	5.369054073
LOC440925	2:171570488	6.14E-06	0.532035033	0.122462784	4.680789588
SP5	2:171588502	7.21E-07	0.556191752	0.145220674	5.164604224
GAD1	2:171665325	1.62E-09	-0.717909613	0.207421372	-6.409961171
CYBRD1	2:172380390	1.20E-06	0.513539597	0.13985541	5.052469854
KIAA1715	2:176842487	9.24E-12	-0.672711422	0.256947872	-7.368221925
GEN1	2:17940653	1.08E-12	1.094115192	0.276663382	7.749174517
CCDC141	2:180325960	3.53E-05	-0.52251093	0.103546823	-4.258478014
UBE2E3	2:181899804	1.38E-06	0.581127491	0.138374261	5.021322908
FRZB	2:183803514	3.50E-06	1.159020459	0.128480673	4.810943047
FSIP2	2:186828591	3.56E-07	-0.548742006	0.152620606	-5.317622003
FAM171B	2:187574070	1.84E-27	1.065420867	0.529103753	13.2818213
TFPI	2:188359673	3.33E-11	0.720153861	0.244924525	7.136261908
GULP1	2:189181586	2.08E-09	-0.854612571	0.204978028	-6.362296674
ORMDL1	2:190536283	2.27E-10	-0.691497775	0.226623446	-6.782764594
ASNSD1	2:190542687	2.17E-12	0.802775707	0.270332043	7.626687508
C2orf88	2:190997856	2.04E-17	-0.876169999	0.369153796	-9.584991854
HIBCH	2:191184475	3.68E-14	0.782405667	0.306702139	8.33390026
INPP1	2:191217257	5.66E-08	0.663690799	0.171661278	5.704032819
MFSD6	2:191250454	2.17E-13	-0.864297341	0.291092721	-8.02917236

NAB1	2:191509460	1.76E-05	-0.509575805	0.111123669	-4.430292928
GLS	2:191837841	1.94E-15	0.781765163	0.331914532	8.831753673
STAT4	2:192224274	8.77E-06	0.478396985	0.11862877	4.596903696
RFTN2	2:198568076	6.80E-08	-0.597921387	0.16978069	-5.666273823
SPATS2L	2:201160699	4.21E-06	-0.454532456	0.126495935	-4.768212971
AOX1	2:201455774	2.11E-14	0.98594969	0.311538323	8.428798662
PPIL3	2:201813830	4.23E-18	-1.088600561	0.381531134	-9.841377634
TRAK2	2:202253716	9.96E-15	0.841652484	0.318007405	8.556154399
FZD7	2:202853304	4.16E-08	-0.659967597	0.174827408	-5.767428088
FAM117B	2:203748786	4.36E-06	-0.780574666	0.126133195	-4.760383086
ALS2CR8	2:203808532	1.61E-07	-0.86573155	0.160883904	-5.486496398
NBEAL1	2:203839628	5.51E-12	-1.117881015	0.26175152	-7.460933208
ABI2	2:204633075	1.77E-05	0.570206572	0.111062138	4.428912886
RHOB	2:20699101	3.10E-05	-0.504879849	0.104973129	-4.291121992
GPR1	2:207086784	1.65E-07	0.583963302	0.160635351	5.481444886
ZDBF2	2:207128546	1.21E-08	0.700930367	0.187372914	6.016689298
METTTL21A	2:208384687	6.30E-10	-0.965378368	0.216703253	-6.590515405
CCNYL1	2:208566027	2.19E-05	-0.680233501	0.108720533	-4.376215108
C2orf43	2:20883216	6.10E-14	-0.956213306	0.302294373	-8.247621944
PIKFYVE	2:209150978	8.89E-07	-0.612474463	0.143019832	-5.118734114
CPS1	2:211427576	4.43E-07	-0.554253901	0.150342891	-5.270713714
APOB	2:21267461	3.74E-05	-0.485019196	0.102932477	-4.244372289
ERBB4	2:213409337	7.90E-06	0.488355068	0.119746799	4.621446989
BARD1	2:215673440	6.37E-08	0.670385463	0.17044421	5.679605263
ABCA12	2:215980683	1.48E-08	-0.711438207	0.185304104	-5.975779733
PKI55	2:216935058	1.38E-05	0.862414295	0.113706532	4.488009416
C2orf62	2:219209796	1.57E-08	-0.603172663	0.184744031	-5.964692233
CTDSP1	2:219264107	3.82E-06	0.49957202	0.127540547	4.790726049
TTLL4	2:219584975	8.92E-12	0.73341534	0.257281699	7.374663543
CYP27A1	2:219660374	3.22E-06	0.489848838	0.129369631	4.830021783
NHEJ1	2:220048150	1.20E-05	-0.442558029	0.115209524	-4.521409036
GLB1L	2:220113728	9.87E-07	-0.718974702	0.141912998	-5.09559909
CHPF	2:220408638	2.17E-05	-0.433849106	0.10881928	-4.378444597
OBSL1	2:220435034	1.87E-05	0.866344739	0.11044256	4.415003576

WDFY1	2:224774742	1.41E-06	-0.888646567	0.138152776	-5.016657956
CUL3	2:225257825	1.93E-06	-0.635488411	0.134789725	-4.945581758
FAM124B	2:225310089	3.28E-09	-0.785196624	0.20043232	-6.273444895
AGFG1	2:228623896	4.17E-05	0.698611256	0.101750604	4.21715784
PID1	2:229866801	2.56E-05	0.587037326	0.10703146	4.337979269
CAB39	2:231679224	5.14E-07	-0.562698887	0.148779492	-5.238420083
ITM2C	2:231734414	1.89E-09	-0.613526097	0.205887725	-6.380050243
ARMC9	2:232126698	2.17E-05	0.476680554	0.108847628	4.379084512
ECEL1P2	2:233243586	8.11E-10	1.217361782	0.214225785	6.542395738
ALPPL2	2:233297573	1.40E-12	1.40712846	0.274315622	7.703732776
USP40	2:234464498	1.92E-10	0.997619228	0.228226273	6.813772835
MSL3P1	2:234784331	1.20E-06	0.496374094	0.139819933	5.051724795
KLHL29	2:23601301	2.62E-05	0.435556204	0.10677844	4.332235072
MLPH	2:238386515	3.51E-10	-1.092021588	0.222382897	-6.700660535
RAB17	2:238387632	3.35E-05	-0.746296152	0.104119795	-4.271609156
NDUFA10	2:240877818	1.61E-08	-0.680590589	0.184445412	-5.958778433
PP14571	2:241395538	4.92E-08	-1.037717191	0.173109372	-5.733054656
GPC1	2:241397143	3.04E-08	-0.621762729	0.178030648	-5.831353919
MTERFD2	2:242033696	8.36E-06	-0.786844112	0.119135975	-4.608046473
SEPT2	2:242347614	2.52E-20	1.659551057	0.420256076	10.66814043
BOK	2:242491366	2.05E-16	0.994720314	0.350528614	9.205164486
D2HGDH	2:242703618	6.77E-06	-0.467935392	0.121412911	-4.657896702
ADCY3	2:25100902	1.20E-09	0.660925766	0.210394084	6.467871626
DNAJC27	2:25195577	1.20E-06	-0.670837707	0.139882378	-5.053036163
SH3YL1	2:258210	7.16E-29	-1.168882249	0.548068393	-13.79846725
MAPRE3	2:27192201	7.97E-21	-1.13784262	0.428634751	-10.85267016
C2orf28	2:27387429	3.51E-07	0.605433135	0.152780562	5.320910116
NRBP1	2:27586155	3.85E-10	-0.688513865	0.221508619	-6.683719838
C2orf16	2:27744089	8.79E-06	0.686794237	0.118596138	4.596186306
FNDC4	2:27768808	3.76E-10	-0.662398493	0.221736613	-6.68813809
GPN1	2:27855052	1.01E-06	0.531214683	0.141647435	5.090041562
PLB1	2:28861657	6.03E-07	0.613345282	0.14709874	5.203612216
TRMT61B	2:28969413	1.77E-05	-0.481803286	0.111044051	-4.428507187
C2orf71	2:29697067	1.15E-05	-0.509425681	0.115745481	-4.533286887

LBH	2:30498653	2.32E-07	0.766693991	0.157080891	5.409019592
LCLAT1	2:30777908	1.98E-10	0.798184078	0.22793317	6.808103417
SLC30A6	2:32342888	8.26E-07	-0.64181059	0.143793474	-5.134878207
RNASEH1	2:3272117	4.12E-05	-0.462092144	0.101877646	-4.220088174
LTBP1	2:33160459	5.02E-08	-0.583725358	0.172893234	-5.72872584
FAM98A	2:33857236	2.43E-10	-0.589690597	0.225934509	-6.769432429
LOC100506054	2:3608756	1.71E-05	-0.597942966	0.111431128	-4.437185054
STRN	2:37134285	2.57E-06	1.211762759	0.131786488	4.881710242
CEBPZ	2:37425629	1.76E-10	-0.693657101	0.229082225	-6.830326945
CDC42EP3	2:38023198	3.97E-05	0.921916863	0.102282004	4.229406953
FAM82A1	2:38254258	4.10E-05	0.601686724	0.101929195	4.221276831
DHX57	2:39100760	1.63E-19	-1.019228075	0.40644844	-10.36867666
TMEM178	2:39889229	2.53E-07	0.53739299	0.156177087	5.390546902
FAM150B	2:41366	7.79E-07	1.254281215	0.144408993	5.147707244
LRPPRC	2:44248383	2.35E-13	-0.748536918	0.290364101	-8.014999478
PPM1B	2:44306480	1.93E-05	0.603837081	0.110095869	4.407209807
ATP6V1E2	2:46658067	1.36E-05	-0.520827129	0.113891432	-4.492125549
SOCS5	2:47030363	2.10E-13	-0.786841525	0.291393549	-8.035025165
LOC100134259	2:47034728	6.85E-06	0.514117782	0.121273723	4.65485732
MSH6	2:48192190	5.07E-06	0.499487589	0.124499289	4.725034794
KLRAQ1	2:48668290	1.18E-08	-1.259522531	0.187630385	-6.021775714
RTN4	2:55245220	1.32E-09	0.716116679	0.209412116	6.448751644
C2orf63	2:55459373	2.50E-18	1.029230154	0.385616095	9.9267592
EFEMP1	2:55680440	1.03E-05	-0.764805143	0.116932148	-4.559526591
PNPT1	2:55739804	1.02E-07	-0.550116975	0.165645904	-5.582965903
C2orf74	2:61381528	1.03E-23	0.920134892	0.474745041	11.91228194
AHSA2	2:61476458	8.01E-08	0.641803929	0.168090588	5.632270522
VPS54	2:64071815	1.30E-07	-0.631444934	0.163125225	-5.531974239
CEP68	2:64956269	2.85E-05	-0.511656995	0.105865278	-4.311467505
TMEM18	2:671939	5.52E-12	-0.764477344	0.261733284	-7.460581148
C1D	2:68274097	1.96E-06	0.677451841	0.134632319	4.942243658
GFPT1	2:69814609	2.97E-05	-0.50488701	0.105436622	-4.301698912
PCBP1	2:69942863	2.10E-05	0.575961447	0.109168262	4.386318703
ANXA4	2:69973737	1.62E-15	-0.785161169	0.333432151	-8.861992585

CMPK2	2:7025350	1.85E-06	0.546414156	0.135249694	4.955330323
TEX261	2:71212129	8.45E-07	0.688212828	0.143555006	5.12990425
OR7E91P	2:71255691	2.82E-07	-0.618889073	0.155038307	-5.367237643
NAGK	2:71277177	2.29E-12	-0.781811016	0.269832594	-7.617032501
MCEE	2:71340351	1.59E-12	0.832429997	0.27315337	7.681246756
PAIP2B	2:71436854	1.94E-09	-0.692951513	0.205635342	-6.375125642
CCT7	2:73447736	2.61E-08	-0.656392721	0.179578469	-5.862170331
ALMS1	2:73613341	5.16E-08	0.656870029	0.172605979	5.722971121
STAMBP	2:74067880	3.92E-05	-0.456021507	0.102413813	-4.232441984
POLE4	2:75185856	9.75E-08	0.54608318	0.166067273	5.591474447
MRPL19	2:75853353	2.53E-10	0.699857208	0.225578558	6.762543152
C2orf3	2:75883878	3.04E-11	0.653467949	0.245790672	7.152972814
C2orf89	2:84686757	1.73E-05	-0.477029819	0.111292328	-4.434074394
DNAH6	2:84686757	9.73E-19	-0.89629984	0.392898897	-10.07998116
TMSB10	2:85124209	9.26E-06	0.609671747	0.118034043	4.583820015
CAPG	2:85650318	1.80E-06	0.547669026	0.135564372	4.961994515
VAMP5	2:85762209	2.20E-12	0.726557598	0.270175716	7.623665393
GGCX	2:85812784	2.30E-06	0.521534341	0.132931405	4.906105642
POLR1A	2:86315526	9.28E-13	0.920772804	0.278040548	7.775843137
IMMT	2:86422416	4.76E-06	-0.486147578	0.125176245	-4.739696172
THNSL2	2:88463155	2.18E-27	1.265220864	0.528067484	13.25423262
IAH1	2:9567444	1.61E-07	0.990463892	0.160916191	5.48715247
ZNF514	2:95822447	1.46E-13	0.724282074	0.294613708	8.097720696
ADAM17	2:9649966	3.42E-12	0.723492124	0.266146396	7.545802009
TMEM127	2:96780122	8.50E-06	0.537751706	0.118955383	4.604080677
ANKRD36B	2:98225437	5.00E-12	-0.688479702	0.262634055	-7.477971539
UNC50	2:99153756	4.19E-08	-0.831691221	0.174736362	-5.765608054
ASAP2	2:9948107	1.31E-05	0.669013829	0.114334274	4.501975485
TSGA10	2:99704273	2.11E-14	0.744522034	0.311542016	8.428871232
MRPL30	2:99812070	2.45E-06	-0.499452201	0.132257864	-4.89176106
TAF1B	2:9983686	6.51E-22	0.880363865	0.44643714	11.252435
ANKRD5	20:10024388	7.83E-08	-0.800397642	0.168329565	-5.637082553
C20orf202	20:1174075	1.94E-07	0.870513264	0.158950756	5.44716352
C20orf46	20:1174075	6.76E-17	1.309238759	0.359541909	9.388132871

SPTLC3	20:12978517	1.28E-14	-1.086412067	0.315820875	-8.513052922
KIF16B	20:16552964	8.34E-15	-1.181466821	0.319521323	-8.58603172
C20orf72	20:17968548	1.63E-09	-0.658907673	0.20737481	-6.409053428
SIRPB1	20:1889858	2.78E-16	0.878610523	0.348029903	9.154703182
SLC24A3	20:19240085	4.70E-09	0.598458176	0.196859469	6.203434623
PLK1S1	20:21095964	1.48E-06	-0.538338588	0.137592906	-5.004857171
TGM3	20:2203224	9.70E-09	0.697617783	0.18958566	6.060368182
THBD	20:22946115	1.36E-05	-1.25049327	0.113863763	-4.491509713
GZF1	20:23349749	2.66E-06	-0.91367528	0.131402352	-4.873512352
CST3	20:23620075	1.45E-08	-0.755053888	0.185550486	-5.980655546
C20orf3	20:24917052	1.35E-10	-1.249253884	0.23160618	-6.879121275
ABHD12	20:25378318	3.21E-11	-0.662169529	0.245285124	-7.143219178
C20orf96	20:256727	5.16E-06	0.497793294	0.124311326	4.720959883
PYGB	20:25758201	2.64E-07	0.800450553	0.155734746	5.381497307
NOP56	20:2633296	4.29E-11	0.907752914	0.24255156	7.090474903
VPS16	20:2846397	2.54E-05	0.477595278	0.107131475	4.340248668
COX4I2	20:30224355	1.25E-07	0.673782831	0.163475389	5.539067464
TM9SF4	20:30696392	7.61E-06	0.488325909	0.120155074	4.630392621
MAPRE1	20:31404147	6.38E-13	0.751784241	0.281432819	7.841578738
ITPA	20:3193893	2.04E-13	-1.073076572	0.291650984	-8.040034314
NECAB3	20:32265513	1.77E-10	0.655159535	0.229016466	6.829055301
ATRN	20:3235525	3.43E-05	0.505286122	0.1038534	4.265506954
RALY	20:32555276	4.14E-07	-1.008810068	0.151042258	-5.285134261
ACSS2	20:33384805	5.85E-08	-0.586547975	0.171329339	-5.697373808
GGT7	20:33458851	2.74E-07	0.689303943	0.155362118	5.3738695
PROCR	20:33780970	2.30E-05	0.580703455	0.108184984	4.364112399
EIF6	20:33869735	7.11E-08	-0.745874448	0.169325997	-5.65713232
MMP24	20:33869735	1.15E-17	-1.108018803	0.373668461	-9.678117866
UQCC	20:33995780	1.33E-13	0.731835151	0.295454964	8.114113762
CEP250	20:34163474	5.96E-07	-0.843462213	0.14722484	-5.206227007
CPNE1	20:34232415	2.24E-23	-1.759891392	0.469541158	-11.78856149
C20orf194	20:3435475	9.76E-06	0.491437392	0.117474607	4.571494711
SPAG4	20:34412049	8.39E-08	-0.704432103	0.167624592	-5.622883332
PHF20	20:34487921	3.64E-06	-0.730818675	0.128047371	-4.801630238

C20orf4	20:34767240	3.57E-05	-0.955437559	0.103437291	-4.255965115
CDC25B	20:3788985	8.02E-08	-0.544890568	0.168080623	-5.632069827
HSPA12B	20:3878974	2.93E-05	0.474467178	0.105574449	4.304841227
LPIN3	20:39969513	3.82E-15	0.818328644	0.326177894	8.717751011
PTPRT	20:40396384	1.52E-06	-0.619193027	0.137320314	-4.999107014
JPH2	20:42743153	1.23E-06	-0.490567121	0.13955322	-5.046122041
TBC1D20	20:428553	9.20E-07	1.204949005	0.142649494	5.110998338
SERINC3	20:43118606	2.25E-07	-1.190273613	0.157419046	-5.415925052
SDC4	20:43975693	6.11E-08	0.554937288	0.170877581	5.688307169
DNTTIP1	20:44418471	1.22E-13	0.794824088	0.296172857	8.128107662
PLTP	20:44532484	1.84E-06	-0.661473993	0.135312893	-4.956669059
CD40	20:44746982	1.01E-08	0.728154698	0.189156912	6.051910878
CTSA	20:44764078	1.57E-05	0.479540069	0.112369692	4.458187817
ELMO2	20:45085740	2.58E-09	-0.834951679	0.202839954	-6.320534644
ZNF334	20:45151273	9.16E-24	1.09595695	0.475499462	11.93031394
TP53RK	20:45193459	6.34E-08	0.727293821	0.170506792	5.680862144
EYA2	20:45639345	3.60E-07	-0.579797535	0.152513637	-5.315422688
ZMYND8	20:45678917	1.72E-05	-0.638072181	0.111352126	-4.435414688
PREX1	20:47291776	1.08E-09	-0.657880183	0.211431764	-6.488066664
ARFGEF2	20:47825374	3.71E-10	-0.763052355	0.221861613	-6.690560288
ZNFX1-AS1	20:47844341	1.94E-05	0.599829581	0.110030966	4.405749908
SLC9A8	20:48444557	6.51E-10	-0.729223324	0.216380575	-6.584250803
RNF114	20:48590773	2.32E-06	-0.559700358	0.132835837	-4.904071495
TMEM189	20:48748548	5.99E-07	0.641940744	0.147176662	5.205228065
LOC284751	20:48909966	1.79E-10	-0.75460443	0.228910009	-6.826996574
ATP9A	20:50224599	9.60E-07	0.570105882	0.142209197	5.101794674
C20orf30	20:5058061	2.98E-05	0.462742552	0.105413194	4.301164665
ZFP64	20:50805763	2.74E-05	-0.533614887	0.106300478	-4.321372179
TSHZ2	20:52115003	3.52E-05	-0.53247753	0.103596463	-4.259616597
GPCPD1	20:5515387	2.13E-12	0.824545393	0.270484461	7.629634138
VAPB	20:56990263	1.27E-11	0.766386442	0.253997754	7.311301562
TH1L	20:57554367	1.28E-11	0.993579624	0.253905508	7.30952187
CTSZ	20:57777439	1.43E-05	0.523196054	0.113331097	4.479645354
C20orf177	20:58604703	2.05E-05	-0.487412984	0.10947398	-4.393210087

MCM8	20:5951588	2.58E-07	-0.955145397	0.15597798	-5.386474189
TRMT6	20:5980698	2.05E-05	0.534610676	0.109432234	4.392269425
GTPBP5	20:60769085	1.43E-08	0.785952797	0.185687161	5.983359865
LAMA5	20:60949043	1.81E-07	-0.625614005	0.159679899	-5.462011046
COL9A3	20:61448466	8.06E-06	-0.721929017	0.119526843	-4.616623839
TCFL5	20:61492227	2.50E-06	0.548704701	0.132042768	4.887175921
NKAIN4	20:61895909	1.56E-08	0.586158889	0.184811326	5.966024737
PPDPF	20:62139177	1.91E-11	-0.925439914	0.25017507	-7.237555444
STMN3	20:62308245	1.49E-06	-0.765072735	0.137550165	-5.00395577
TPD52L2	20:62522466	1.11E-06	0.604398072	0.140655614	5.069262025
PRPF6	20:62611478	7.12E-09	-0.987128597	0.192690712	-6.121533669
PCMTD2	20:62887012	4.59E-07	-0.761497761	0.149957449	-5.262759402
SOX12	20:668361	1.47E-05	0.945445234	0.113023228	4.472780201
C20orf54	20:746098	1.20E-07	-0.626092742	0.163928367	-5.548238715
PLCB1	20:8069573	8.50E-07	-1.067263921	0.143489319	-5.128533802
BTG3	21:19022830	8.55E-13	-0.738766417	0.278784259	-7.790249224
C21orf91	21:19658718	3.31E-05	-0.58514461	0.104238471	-4.274325964
NCAM2	21:22519580	1.64E-13	0.843731507	0.293600419	8.077983189
ATP5J	21:26886470	2.59E-06	1.050946454	0.131682399	4.879489508
MRPL39	21:26964408	5.89E-10	0.804421726	0.217365394	6.603368049
N6AMT1	21:30207494	1.80E-08	-0.74803983	0.183334234	-5.936759215
RWDD2B	21:30388553	4.00E-10	-0.686821763	0.221134059	-6.676460575
CCT8	21:30445948	2.40E-06	0.770520271	0.13249173	4.896744002
GRIK1	21:30830393	2.06E-05	0.493516895	0.109393553	4.39139772
CLDN8	21:31614389	1.29E-09	-0.728838112	0.209644528	-6.453277787
KRTAP26-1	21:31618841	3.81E-05	-0.738792944	0.102718931	-4.239462702
URB1	21:33735005	1.54E-05	0.736284486	0.112525076	4.461659648
IL10RB	21:34644082	1.66E-05	0.522413512	0.111734992	4.443990801
IFNAR1	21:34682069	2.10E-10	0.77895428	0.227344339	6.796712561
KCNE1	21:35884633	2.86E-13	0.874578678	0.288610957	7.980914311
RCAN1	21:35957254	8.10E-06	1.002651362	0.119482689	4.615655325
CBR3	21:37545588	5.57E-07	-0.556970806	0.147930443	-5.220848372
MORC3	21:37640964	3.71E-10	-0.86982847	0.22184752	-6.690287207
HLCS	21:38339455	3.09E-12	-0.721656074	0.267076428	-7.563769077

TTC3	21:38444890	1.55E-27	0.925399717	0.530108509	13.30863222
PIGP	21:38517021	1.24E-08	0.598676611	0.187136588	6.012019652
NCRNA00257	21:40604429	1.60E-06	-0.582484632	0.136830417	-4.988765465
PSMG1	21:40669083	3.99E-19	-0.852971233	0.39968822	-10.22402888
WRB	21:40766181	3.71E-05	-0.436589188	0.103000538	-4.245936376
IGSF5	21:41160938	6.80E-08	-0.587407856	0.16978562	-5.666372923
DSCAM	21:42257165	3.62E-07	0.997084108	0.152453208	5.314180094
FAM3B	21:42678481	7.57E-09	1.198160032	0.192084214	6.109597738
MX1	21:43129407	3.40E-05	0.578317945	0.103962028	4.267995879
C2CD2	21:43377711	2.77E-18	0.869186387	0.384831782	9.910335271
ABCG1	21:43556335	8.93E-08	-0.735404163	0.166973246	-5.609753725
TMPRSS3	21:43825086	3.29E-05	0.882363552	0.104323209	4.276265228
CBS	21:44434836	3.62E-14	-0.838702532	0.306846079	-8.336721109
NDUFV3	21:44463724	2.13E-07	-0.658815498	0.157988409	-5.427544638
U2AF1	21:44466694	2.40E-05	-0.543236695	0.107752302	-4.354320449
NCRNA00319	21:44616883	2.59E-06	0.823951439	0.131675798	4.87934867
CSTB	21:45214581	1.18E-08	-0.641195443	0.187589186	-6.020961876
PWP2	21:45567351	3.46E-17	-0.873561614	0.364927572	-9.498204944
ICOSLG	21:45627976	7.01E-16	0.834707947	0.340405368	9.001387738
C21orf2	21:45759746	3.11E-06	0.564865074	0.129724606	4.837630064
UBE2G2	21:46182162	8.65E-06	-0.563719279	0.118773772	-4.600090696
SUMO3	21:46298241	1.24E-06	-0.536860428	0.139517164	-5.045364413
PTTG1IP	21:46298241	2.18E-15	-0.826810099	0.330914957	-8.811855441
C21orf122	21:46469877	2.96E-05	0.475653765	0.105461631	4.302269189
ADARB1	21:46472929	2.47E-07	0.682519412	0.156416718	5.395446978
POFUT2	21:46705621	1.43E-08	-0.712788245	0.185692418	-5.983463859
LOC642852	21:46711357	2.39E-06	-0.518561737	0.132522253	-4.897394163
SLC19A1	21:46940524	2.37E-19	0.946406289	0.403627399	10.30816365
C21orf56	21:47617489	1.53E-10	0.753841394	0.230385219	6.855520481
LSS	21:47623848	1.65E-11	-0.898061096	0.251530061	-7.263694884
FTCD	21:47629268	1.03E-08	-0.63866127	0.188956197	-6.047950685
YBEY	21:47695417	4.00E-09	-0.625154802	0.198454984	-6.23471883
MCM3AP	21:47707284	1.65E-11	0.708187643	0.251542479	7.263934452
IL17RA	22:17601466	7.25E-08	0.685060506	0.169122445	5.653038424

CECR5	22:17632744	1.82E-10	0.70357071	0.228726751	6.823452494
BID	22:18308936	2.65E-05	-0.48290695	0.106669332	-4.329756687
DGCR6	22:18895875	3.69E-06	-0.847831877	0.127914947	-4.798782343
DGCR11	22:19069568	1.50E-06	0.750194551	0.137466976	5.002201131
DGCR14	22:19132385	3.40E-11	-1.448174388	0.244753366	-7.132959591
CLTCL1	22:19185736	3.62E-12	-0.753504316	0.265616304	-7.535562518
SLC25A1	22:19187375	1.98E-09	-0.653934775	0.205454238	-6.371591443
C22orf29	22:19812973	2.84E-07	-0.544019499	0.154973331	-5.365906512
TXNRD2	22:19856561	2.49E-07	-0.698990969	0.156344311	-5.393966545
RTN4R	22:20249918	3.22E-06	0.689548419	0.129376543	4.830169987
PI4KAP1	22:20376408	8.60E-11	-0.921966721	0.235924283	-6.962543954
ZNF74	22:20742450	8.60E-06	-0.47748979	0.118838465	-4.601512199
SNAP29	22:21080404	4.12E-11	-1.233169438	0.242916797	-7.097522752
LZTR1	22:21336549	4.24E-07	-0.562339483	0.150805624	-5.280256752
YDJC	22:21919868	2.02E-07	-0.7144035	0.158532381	-5.438637495
PPIL2	22:22010918	2.21E-11	-0.679123607	0.248786981	-7.210777563
YPEL1	22:22039199	3.44E-05	0.619242393	0.103821881	4.264784629
SDF2L1	22:22053880	1.28E-09	0.621324134	0.209763577	6.455596007
MAPK1	22:22305008	2.07E-05	-0.498593487	0.109354645	-4.390520806
LOC96610	22:22650239	1.45E-16	0.830698988	0.353348288	9.262241618
ZDHHC8P1	22:23853983	3.77E-09	0.717932848	0.199044208	6.246263856
GUSBP11	22:24096726	4.14E-05	-0.684449429	0.101830787	-4.219007464
LOC284889	22:24267047	3.76E-24	0.927876833	0.481367695	12.07142428
GSTT1	22:24329681	8.85E-24	0.970708773	0.475727606	11.93577183
SUSD2	22:24617101	1.58E-06	0.643778575	0.136951507	4.991322539
SPECC1L	22:24742426	3.81E-06	0.603139143	0.127575429	4.791476913
GGT1	22:25004608	9.36E-10	0.652646512	0.212823866	6.515144182
SGSM1	22:25172117	4.98E-25	-1.038341122	0.494470084	-12.39214272
TFIP11	22:26904541	6.87E-15	-1.155346686	0.321183346	-8.618865245
TPST2	22:26960349	4.98E-18	-1.130976833	0.38025551	-9.814795316
MIAT	22:27231668	2.07E-05	-0.598297997	0.109337416	-4.390132465
TTC28-AS1	22:28416547	1.50E-05	0.454637144	0.112821987	4.468289613
TTC28	22:28798679	6.21E-07	-0.516844571	0.146787826	-5.197162831
KREMEN1	22:29494624	2.14E-05	-0.831810364	0.109011578	-4.382784415

NIPSNAP1	22:29915406	2.60E-05	0.456312928	0.106868831	4.334287662
ASCC2	22:30122279	3.38E-05	-0.445175414	0.104040879	-4.269801993
TBC1D10A	22:30700924	4.13E-07	-0.631151957	0.151063033	-5.285562387
GATSL3	22:30700924	2.05E-10	-0.774690992	0.227586945	-6.801405943
DUSP18	22:31091633	4.71E-06	-0.535066248	0.125293003	-4.742222587
TCN2	22:31482701	1.98E-09	-0.746679112	0.205462261	-6.37174802
YWHAH	22:32341669	6.74E-07	-0.601926732	0.145934861	-5.179452488
TIMP3	22:33409904	1.12E-06	0.688227733	0.140550246	5.067052292
HMOX1	22:35765175	1.89E-05	-0.996190597	0.110320809	-4.412267449
APOL4	22:36605725	4.80E-10	0.67861449	0.21935774	6.642021517
FOXRED2	22:36851152	1.27E-12	1.196443783	0.275200889	7.720864242
NCF4	22:37267767	4.05E-06	-0.507458031	0.126918536	-4.777326997
CSF2RB	22:37319425	3.37E-21	-1.003303282	0.434809276	-10.99010175
SH3BP1	22:38100040	1.51E-05	0.546735447	0.112740153	4.46646281
H1FO	22:38184685	1.77E-06	0.575730502	0.135719218	4.965272324
ANKRD54	22:38187346	9.64E-14	1.868457638	0.298272217	8.169056341
PLA2G6	22:38569557	2.38E-08	0.847944782	0.18050801	5.880655098
SLC16A8	22:38811608	2.77E-05	-0.896284589	0.106207831	-4.319264729
KDELR3	22:38838730	3.26E-05	-0.430329464	0.104418749	-4.278451099
CBX6	22:39266451	3.60E-05	-0.611646513	0.103334015	-4.25359495
APOBEC3G	22:39480697	6.32E-07	-0.540428407	0.146612126	-5.193516775
LOC100506472	22:39794071	5.06E-08	0.646946554	0.17281671	5.727192979
RANGAP1	22:41833116	2.57E-06	0.542623321	0.131775544	4.881476785
PMM1	22:41957610	2.55E-08	-0.706718887	0.179809282	-5.866761794
CCDC134	22:42264269	7.30E-06	-0.64202313	0.120596622	-4.640057182
CENPM	22:42361336	4.25E-06	-0.568575771	0.126386189	-4.765844734
SEPT3	22:42379813	2.40E-09	0.804710673	0.203537722	6.334169411
NAGA	22:42379813	4.33E-11	0.878271138	0.242450234	7.088519626
RRP7B	22:42912029	3.15E-08	0.743341357	0.177652016	5.823808419
RRP7A	22:42918859	2.73E-07	0.736084744	0.155391914	5.374479567
CYB5R3	22:43070805	2.58E-08	-0.568358446	0.179685913	-5.8643078
A4GALT	22:43082755	1.07E-32	-1.06546665	0.595804096	-15.21267595
ARFGAP3	22:43226599	2.42E-32	1.029716711	0.591616775	15.08120761
TSPO	22:43551836	2.78E-05	0.459698545	0.106139545	4.317711044

TTLL12	22:43576256	1.01E-11	-0.801223956	0.256113339	-7.352119193
PRR5	22:45106233	1.54E-05	-0.68483917	0.112576431	-4.462806787
NUP50	22:45554197	1.92E-11	-0.722797948	0.250097313	-7.236055419
LOC100506714	22:45554573	1.32E-08	-1.166311934	0.186444994	-5.998348979
FAM118A	22:45731539	7.53E-16	-1.147903086	0.339800028	-8.989256664
FBLN1	22:45879432	1.14E-06	0.530083924	0.140428114	5.064490442
WNT7B	22:46364191	4.55E-09	-0.660185167	0.197187044	-6.20986028
TTC38	22:46692203	8.39E-16	1.327090137	0.338907827	8.971387558
GRAMD4	22:47100478	2.16E-06	0.542955518	0.13362469	4.920850245
CERK	22:47144658	1.39E-05	1.073864509	0.113647352	4.48669155
CRELD2	22:50274751	4.87E-08	-0.683044049	0.173196219	-5.734793745
FAM116B	22:50768939	1.66E-06	0.880930144	0.136441407	4.980546682
CPT1B	22:51017082	6.74E-08	0.636548946	0.169879062	5.668250946
MAPK8IP2	22:51021599	1.61E-05	0.483628024	0.112084971	4.451822233
ARSA	22:51063477	1.51E-05	-0.957720775	0.112776918	-4.46728358
FAM55C	3:101365228	8.05E-06	-1.049584695	0.119540077	-4.616914122
GHRLOS	3:10323781	1.61E-08	0.613405988	0.184501733	5.959893929
TATDN2	3:10323781	5.63E-09	0.630681723	0.195040553	6.167729033
CBLB	3:105677262	4.85E-26	-1.080480124	0.509165517	-12.76179563
CCDC54	3:107120880	1.53E-07	-0.581885902	0.161443807	-5.497869613
CD47	3:107743074	1.83E-19	0.845014467	0.405554459	10.34947642
SLC6A11	3:10860297	3.55E-08	-0.784240988	0.176437002	-5.799576061
PHLDB2	3:111512756	2.08E-05	-0.947285253	0.109312619	-4.389573521
SLC9A10	3:112013896	1.21E-05	-0.732501237	0.115188478	-4.520942268
BTLA	3:112119551	6.46E-10	0.676736452	0.216448452	6.585568658
HRH1	3:11284950	4.62E-19	0.866095543	0.398576869	10.20036725
ATG7	3:11285474	2.88E-24	0.969024831	0.483120605	12.11387246
UPK1B	3:118813425	1.78E-06	-0.508704443	0.135684916	-4.964546292
B4GALT4	3:118908226	8.29E-06	-0.648620005	0.119223857	-4.609975722
POGLUT1	3:119146159	6.99E-09	-0.614735989	0.192876955	-6.125197868
ADPRH	3:119309260	1.13E-12	-0.87469213	0.276262986	-7.741422764
LRRC58	3:120076749	1.90E-12	-0.770346435	0.271527908	-7.649809214
IQCB1	3:121532639	2.41E-12	0.75767679	0.269371265	7.608115282
FAM162A	3:122014683	2.35E-05	0.827873931	0.107979753	4.359469403

LOC100129550	3:122473430	2.74E-07	-0.53286073	0.155341212	-5.373441418
DIRC2	3:122473430	5.45E-18	-0.832927041	0.379553659	-9.800185663
HSPBAP1	3:122517786	7.20E-13	-0.759518869	0.280338129	-7.820358546
PTPLB	3:123309735	5.69E-06	0.770282507	0.123266345	4.698272977
KALRN	3:124285892	5.47E-07	-0.652851961	0.148123263	-5.224841036
SLC12A8	3:124821860	9.38E-07	-0.729762938	0.142450029	-5.106829746
HEG1	3:124860561	8.80E-09	-0.621049513	0.190564375	-6.079663273
SLC41A3	3:125769757	9.83E-11	-0.738979432	0.234655895	-6.93804625
MKRN2	3:12606771	9.26E-11	1.368986807	0.235220892	6.94895925
PLXNA1	3:126653053	1.82E-12	-0.726279154	0.271910499	-7.657207758
LOC90246	3:128223300	1.30E-05	-0.451637094	0.114364171	-4.502640048
CAND2	3:12829863	8.49E-12	1.52296252	0.257741072	7.383528002
RPN1	3:128370204	2.96E-05	-0.473709685	0.105474774	-4.302568885
FAM86HP	3:129813745	2.61E-09	-0.704669231	0.20271543	-6.318100803
PIK3R4	3:130458363	6.16E-07	0.647472527	0.146871403	5.19889682
ASTE1	3:130773642	2.86E-08	0.660468228	0.178639567	5.843482751
NEK11	3:130900317	3.85E-09	-0.728612496	0.19884268	-6.242315687
NUDT16P1	3:131082775	3.19E-06	0.839011096	0.129455544	4.831863723
NPHP3	3:132446336	4.49E-06	-0.475249274	0.125807721	-4.753352147
SRPRB	3:133530647	2.94E-05	0.454713489	0.105531522	4.303862697
RAB6B	3:133607140	6.35E-18	-1.153411744	0.378355832	-9.775277862
SLCO2A1	3:133788649	3.72E-06	0.732992361	0.127820324	4.796746878
RYK	3:133993433	1.72E-07	0.615334845	0.160172644	5.472036561
ANAPC13	3:134205227	1.89E-24	1.021385803	0.485883779	12.18106816
CEP63	3:134364129	2.55E-07	-0.605138836	0.156098906	-5.388947855
PPP2R3A	3:135656780	2.16E-15	0.930702677	0.330994969	8.81344768
TPRXL	3:14037014	1.19E-15	0.803885363	0.336013416	8.913504387
ZBTB38	3:141038088	5.88E-06	0.490836897	0.122914473	4.690621233
XPC	3:14175149	4.12E-06	-0.804096245	0.126725941	-4.773174466
XRN1	3:142204728	5.25E-09	0.831530408	0.195744734	6.181557502
PCOLCE2	3:142626005	3.40E-11	-0.798554473	0.244741398	-7.132728678
AGTR1	3:148589462	3.39E-06	-0.498557206	0.128809426	-4.818002982
GYG1	3:148701399	4.39E-06	0.521394413	0.126048221	4.758547956
TM4SF18	3:148995585	1.37E-09	-0.714388841	0.209087594	-6.442430839

TM4SF1	3:148998148	2.34E-05	-0.508687415	0.108003238	-4.360000858
PFN2	3:149689011	5.66E-07	0.560941477	0.147769986	5.217524887
CLRN1-AS1	3:150609925	2.62E-09	-0.813628869	0.202665557	-6.317125973
IGSF10	3:151419458	2.83E-09	-0.745789322	0.201920327	-6.302556132
SH3BP5	3:15315824	5.99E-07	-0.678277557	0.147163606	-5.204957343
ARHGEF26	3:153883426	1.78E-06	0.575421588	0.135645233	4.963706314
EAF1	3:15415249	2.84E-05	-0.457663052	0.105936933	-4.313099193
KCNAB1	3:156009614	1.34E-12	0.69137024	0.274714417	7.711449699
LEKR1	3:156546675	1.45E-06	0.612661711	0.137848693	5.010250117
NMD3	3:160812752	1.18E-08	0.650936172	0.187597311	6.021122388
B3GALNT1	3:160923084	6.99E-06	-0.620713685	0.121060433	-4.65019784
GALNTL2	3:16096643	9.85E-12	-0.917387925	0.256353879	-7.356760449
DPH3	3:16295635	1.04E-06	0.534729365	0.141370821	5.084249971
RFTN1	3:16459847	8.51E-06	-0.5802191	0.118949101	-4.603942692
EGFEM1P	3:167925722	4.55E-07	-0.581280859	0.150056273	-5.26479926
PLCL2	3:16819132	7.85E-10	-0.601261165	0.214554452	-6.548782254
NAALADL2	3:174493956	1.02E-05	-0.482155903	0.117022385	-4.561518619
TBL1XR1	3:177176385	1.62E-05	0.516579374	0.111999951	4.449920444
MFN1	3:179066454	2.59E-13	1.21207614	0.289516371	7.998514779
KCNMB3	3:179380539	4.13E-05	-0.455740474	0.101836807	-4.219146306
ATP11B	3:182523868	1.86E-11	0.681817045	0.250433051	7.242532195
MCCC1	3:182704808	4.86E-09	0.588693046	0.196526139	6.196894614
SATB1	3:18303505	1.51E-06	0.630373483	0.137405757	5.000909696
KLHL24	3:183312550	2.66E-09	0.764216851	0.202533342	6.314541523
ABCC5	3:183742328	2.54E-06	-0.50180501	0.131911978	-4.884386939
PSMD2	3:183875822	1.14E-05	0.511619006	0.1158228	4.534999049
C3orf70	3:184778815	4.84E-06	0.529722547	0.125012294	4.736147421
EHHADH	3:184956207	2.72E-05	0.440858069	0.10637283	4.323017581
ETV5	3:185894919	3.33E-06	-0.522905345	0.128992768	-4.821938056
DNAJB11	3:186311667	2.55E-05	-0.753027482	0.107082866	-4.339145771
CLDN1	3:190009842	9.54E-06	-0.4920875	0.117719821	-4.576899348
CCDC50	3:191031692	8.61E-06	0.659359195	0.118826018	4.601238707
FGF12	3:192014121	4.54E-10	-0.697827192	0.219888957	-6.652322922
LRRC15	3:194088911	2.02E-06	-0.677064541	0.134301708	-4.93522905

TMEM44	3:194348600	1.85E-12	0.714124844	0.271778993	7.654664615
LSG1	3:194406507	8.41E-11	0.936209529	0.236142989	6.966767535
LOC100507391	3:194427470	3.94E-14	0.816383801	0.306104139	8.322183331
FAM43A	3:194583085	9.69E-06	0.553895441	0.117554388	4.573253482
C3orf21	3:195007852	7.67E-08	0.56653091	0.168540117	5.641321126
MIR570	3:195424995	5.41E-06	-0.701745796	0.123804282	-4.709958657
SDHAP1	3:195463099	4.07E-08	0.700392051	0.175040552	5.771688212
MUC4	3:195550412	1.57E-12	1.193091389	0.273264765	7.683401644
SDHAP2	3:195674257	1.42E-10	0.698271398	0.231130592	6.869929041
MUC20	3:195809080	9.73E-06	-0.491879454	0.117507052	-4.572210002
PIGX	3:196433031	2.44E-09	-0.618587316	0.203379593	-6.331079964
PAK2	3:196475119	3.72E-07	-0.556486237	0.152159484	-5.308138618
BDH1	3:197327876	1.05E-10	-0.757640863	0.234015446	-6.925674592
IQCG	3:197639827	4.81E-06	0.666075361	0.125063552	4.737257068
UBE2E2	3:23474611	2.35E-05	0.541670022	0.107955897	4.358929531
NKIRAS1	3:23948189	1.83E-06	0.51964396	0.13535879	4.957641204
TOP2B	3:25675637	3.80E-06	-0.536887727	0.127598297	-4.791969149
STT3B	3:31529887	2.62E-11	-1.121978656	0.247180171	-7.179779644
GPD1L	3:32186403	1.95E-13	0.728985819	0.292025779	8.047327939
TRNT1	3:3239004	4.99E-06	-0.621994974	0.12467396	-4.728819951
DYNC1LI1	3:32629365	2.77E-05	0.824031746	0.106196242	4.319001075
LRRN1	3:3775266	3.61E-09	1.032495843	0.199478504	6.25477049
CTDSPL	3:37947087	1.66E-06	1.168846636	0.136415825	4.980005986
PLCD1	3:38085447	3.22E-05	0.610280885	0.104568647	4.281879318
ACVR2B	3:38807100	3.08E-05	0.842873645	0.105032565	4.292479165
SCN11A	3:39009527	1.63E-05	-0.672017927	0.111939123	-4.448559543
RPSA	3:39449137	7.74E-32	-1.045076128	0.585557521	-14.89369569
TRAK1	3:42042714	7.93E-07	-0.71722796	0.144221813	-5.143807355
CCK	3:42304293	1.65E-21	0.92086759	0.439895061	11.10426117
CCDC13	3:42832585	2.65E-05	0.542788934	0.106673263	4.329846003
FAM198A	3:42914012	3.55E-07	-0.575746119	0.152651902	-5.318265406
CCBP2	3:42923776	1.61E-05	0.486006165	0.112054929	4.451150283
KRBOX1	3:43027004	2.63E-06	0.578101107	0.131524763	4.876125455
C3orf23	3:44412162	1.12E-05	0.608871937	0.115975787	4.538385786

ZNF197	3:44671230	3.40E-08	-0.580350487	0.176889395	-5.808602077
ZNF501	3:44762830	2.21E-05	0.609245625	0.108645951	4.374530803
ZNF502	3:44762830	9.33E-17	1.104290916	0.356940401	9.335166479
EXOSC7	3:45048472	2.95E-06	0.501521458	0.13030282	4.850010775
ZDHH3	3:45114682	9.81E-08	0.572981454	0.166005394	5.590225221
CDCP1	3:45195203	8.62E-15	0.777155467	0.319240712	8.580491676
LIMD1	3:45511026	9.21E-07	0.576610699	0.142638484	5.110768276
LARS2	3:45560113	7.38E-18	-0.921499419	0.377179355	-9.750845683
FYCO1	3:46126332	3.07E-05	-0.550416359	0.105060841	-4.293124745
CCR1	3:46154253	3.10E-07	-0.560757773	0.154083506	-5.347664534
LTF	3:46484261	6.45E-07	-0.562514735	0.146390303	-5.188912069
ALS2CL	3:46688498	5.13E-07	0.489042585	0.148798103	5.238804975
SCAP	3:47453216	1.55E-05	0.697229531	0.112454062	4.460073119
MAP4	3:47884953	1.15E-06	0.53824112	0.140276066	5.061300296
SMARCC1	3:48194667	3.54E-05	0.494062311	0.103526859	4.258020063
TREX1	3:48443816	1.21E-06	-0.529576878	0.139728036	-5.049794665
NCKIPSD	3:48730116	3.57E-08	0.585331234	0.176386657	5.798571339
WDR6	3:48872998	3.16E-13	-0.770617891	0.28773272	-7.963847863
ARIH2	3:49180103	1.74E-05	0.50072146	0.11122779	4.432627613
UBA7	3:49858142	1.20E-08	-0.634462922	0.187415464	-6.017529954
HYAL3	3:50371432	6.56E-06	-0.501061194	0.121753568	-4.66533116
CYB561D2	3:50409826	1.73E-06	-0.58173547	0.135989432	-4.970989874
GLYCTK	3:52310442	3.33E-06	0.814788437	0.129010269	4.822313593
NEK4	3:52789943	1.67E-05	-1.17623605	0.111658526	-4.442278692
ITIH4	3:52868445	4.10E-09	0.719399251	0.198223402	6.230180101
SFMBT1	3:53003179	5.40E-15	-1.165405554	0.323233682	-8.659419172
RFT1	3:53101640	8.18E-07	0.737470251	0.143892992	5.136953341
IL17RB	3:53906891	7.01E-07	-0.557155674	0.145524455	-5.170922139
ACTR8	3:53906891	1.00E-22	-0.989904088	0.459376848	-11.55013493
SELK	3:53941164	1.04E-13	0.737384205	0.297606743	8.15607185
CACNA2D3	3:54118798	1.31E-05	0.490147523	0.114309125	4.501416422
ARF4	3:57630018	4.81E-07	0.689726	0.149484102	5.252984406
FAM116A	3:57693019	2.17E-05	0.75574393	0.108812991	4.378302638
DNASE1L3	3:58193419	6.70E-07	0.636710656	0.146001668	5.180840514

PDHB	3:58381120	2.96E-05	0.515978393	0.105474783	4.302569092
SYNPR	3:63328000	2.70E-13	-0.903044651	0.289152887	-7.991448235
MAGI1	3:65457041	1.35E-08	0.687083622	0.186223687	5.993972746
ARL6IP5	3:69135799	1.06E-13	-1.156085313	0.29740273	-8.152091999
FRMD4B	3:69257437	1.31E-09	0.925639635	0.209528017	6.451008838
RYBP	3:72389824	3.23E-05	-0.510216353	0.104526868	-4.280923982
C3orf38	3:88273071	1.46E-05	0.788597976	0.113120513	4.474950184
EPHA3	3:89493283	2.06E-06	-0.547948305	0.134133679	-4.9316622
SETD5	3:9351395	3.48E-05	-1.088909726	0.103710726	-4.262236687
SRGAP3	3:9441180	4.90E-06	0.718174106	0.124878942	4.733260034
THUMPD3	3:9445173	8.13E-08	-0.842911662	0.167940592	-5.629249508
DCBLD2	3:98663533	6.52E-06	0.820443279	0.121817453	4.666724709
ST3GAL6	3:98703507	6.61E-06	1.022147296	0.121665296	4.663405315
IL17RE	3:9942234	4.06E-07	-0.550931477	0.151260481	-5.289630703
IL17RC	3:9951777	4.12E-13	0.738057239	0.285358999	7.917747501
LNP1	3:99666907	3.33E-05	-0.667337706	0.104193646	-4.273299912
CRELD1	3:9983196	1.07E-08	1.001391169	0.188557525	6.040082792
TBC1D23	3:99962929	1.40E-07	-0.691334089	0.162346116	-5.516180569
SLC2A9	4:10001656	1.27E-15	-0.791981471	0.335426213	-8.901777232
DAPP1	4:100751693	9.89E-10	-0.636011579	0.212289459	-6.504751543
FGFRL1	4:1019672	1.77E-05	0.489027387	0.111069738	4.429083366
PPP3CA	4:102352913	2.15E-11	0.759710634	0.24905597	7.215966685
SLC39A8	4:103114369	1.43E-05	0.575697395	0.113359592	4.480280474
MANBA	4:103679117	9.13E-26	0.982119609	0.505218401	12.66142644
CISD2	4:103851776	1.77E-05	-0.467936624	0.111019792	-4.42796301
ZNF518B	4:10469082	4.54E-06	0.566646493	0.1256812	4.750617645
TET2	4:106099809	8.30E-09	0.640165074	0.191161366	6.091425613
TBCK	4:106519944	2.48E-05	-0.95371619	0.107371122	-4.345683622
NPNT	4:106723497	2.43E-05	1.00926788	0.107594151	4.350738229
PAPSS1	4:108677958	1.39E-08	0.934651223	0.185950998	5.98857936
CCDC109B	4:110517824	1.62E-08	-0.773841078	0.184417468	-5.958224956
CASP6	4:110554434	4.09E-05	-0.671796838	0.101942254	-4.221577935
ALPK1	4:113204114	6.58E-11	-0.726038437	0.238480704	-7.011904509
TIFA	4:113205592	4.16E-09	-0.671342136	0.198072749	-6.227227109

ANK2	4:113719791	2.96E-05	-0.4560907	0.105456617	-4.302154867
MAEA	4:1185522	4.53E-07	0.542855931	0.150102353	5.265750315
SYNPO2	4:119807401	1.89E-05	-0.478727943	0.110323814	-4.412334985
USP53	4:120026019	1.93E-05	-0.532891566	0.110125886	-4.407884916
LOC645513	4:120442428	3.00E-10	-0.673368966	0.223903417	-6.730112149
NDNF	4:121998104	8.15E-06	0.468176023	0.119414558	4.614160669
ANXA5	4:122620565	9.85E-09	-0.608727858	0.189435097	-6.057398566
PP12613	4:122669747	9.21E-06	-0.638338881	0.118097669	-4.585220693
ZNF718	4:127978	2.93E-33	1.044778792	0.602422244	15.42372547
HSPA4L	4:128704525	3.35E-07	-0.690532455	0.153262765	-5.330817624
C4orf29	4:128858103	9.74E-06	1.018492031	0.117497029	4.571989036
LARP1B	4:129037139	9.56E-10	0.795345658	0.212618272	6.511146272
CRIPAK	4:1338246	2.26E-07	0.790552862	0.15738306	5.41519034
RAB33B	4:140359958	3.08E-06	0.4657769	0.129836663	4.840030613
MAML3	4:141172413	4.87E-10	0.771149469	0.219215433	6.639261565
RNF150	4:142128130	1.03E-12	-0.811568268	0.277096158	-7.757554076
INPP4B	4:143326714	1.88E-05	0.506801886	0.1103812	4.41362475
GAB1	4:144261813	1.46E-09	0.628632817	0.208436974	6.429755461
LSM6	4:147120075	6.85E-06	0.461504228	0.121274915	4.654883374
NR3C2	4:149506452	1.73E-06	-1.256152124	0.135965018	-4.970473422
FAM160A1	4:152420756	1.54E-26	-0.983306121	0.516236217	-12.94366861
TMEM154	4:153634359	2.84E-05	0.584486969	0.105926306	4.312857235
ARFIP1	4:153744009	2.79E-13	-0.722364806	0.288843186	-7.985428057
C1QTNF7	4:15392125	9.51E-08	0.677610474	0.166331442	5.596806487
TRIM2	4:154130854	5.11E-06	-0.523879366	0.124424902	-4.723422338
GUCY1A3	4:156385235	2.61E-05	-0.517942215	0.106824924	-4.333290692
CTSO	4:156874833	1.85E-08	-0.604843225	0.183093935	-5.931994578
FAM198B	4:158965691	7.82E-08	-1.034618793	0.168349166	-5.63747718
NPY1R	4:164338027	8.61E-06	-0.713650382	0.118826831	-4.601256577
DDX60L	4:169345005	3.30E-11	-0.897191383	0.245010064	-7.137912284
PALLD	4:169647068	2.36E-05	-1.087627948	0.107916434	-4.35803637
CBR4	4:169887165	9.78E-07	0.751520241	0.142006604	5.097557396
C4orf27	4:170657998	2.87E-09	0.722239408	0.201753602	6.299295628
QDPR	4:17511810	2.40E-18	-1.025847152	0.385929316	-9.933322334

HPGD	4:175459298	9.05E-15	0.991028547	0.318820819	8.57220365
LAP3	4:17585625	1.53E-07	0.601396624	0.161396743	5.496913929
SPCS3	4:177260184	1.46E-05	-0.533342972	0.113143255	-4.475457364
AGA	4:178362122	1.08E-13	-0.853704762	0.297284699	-8.149789653
STOX2	4:184638290	2.21E-06	1.257715441	0.133348763	4.914984362
CCDC111	4:185571776	4.76E-06	0.677822991	0.125183851	4.739860755
MLF1IP	4:185654683	3.90E-13	0.733786818	0.285855919	7.927395043
LRP2BP	4:186157178	1.14E-06	-0.502172445	0.140410032	-5.064111116
SNX25	4:186157304	6.81E-16	-0.782601056	0.340640034	-9.006092064
KIAA1430	4:186170358	6.72E-07	-0.527093655	0.145964488	-5.180068063
TLR3	4:186982959	3.91E-06	0.567282215	0.127302564	4.785601724
FAM149A	4:186986933	4.07E-06	-0.70730886	0.126852642	-4.775906463
CYP4V2	4:187099609	5.67E-08	0.659927337	0.171655818	5.703923309
LOC339975	4:188426585	1.19E-07	-0.93446414	0.16398629	-5.549411084
TRIML2	4:189020348	9.97E-07	-1.006091247	0.141803485	-5.093307592
DHX15	4:24636865	3.52E-06	-0.54804813	0.128406961	-4.809359417
PI4K2B	4:25310628	4.52E-06	0.555993879	0.125742156	4.751935197
ANAPC4	4:25374371	5.09E-21	-0.91619124	0.431862305	-10.92435169
C4orf52	4:25913582	6.55E-20	-0.986507895	0.413225661	-10.51496693
TBC1D19	4:26726780	2.24E-07	-0.561296005	0.157445841	-5.416472081
DOK7	4:3485786	3.62E-05	0.429693524	0.103271803	4.252166815
LRPAP1	4:3514086	3.37E-06	0.614808255	0.12886329	4.81915922
ADRA2C	4:3752734	1.94E-08	-0.641420994	0.182601493	-5.922227256
RELL1	4:37666991	1.26E-07	-0.621562373	0.163410111	-5.537745374
FLJ13197	4:38646954	3.74E-06	-0.647417511	0.127750421	-4.79524291
KLHL5	4:39078906	2.75E-09	-0.739715723	0.202175923	-6.307553958
FAM86EP	4:3937186	7.12E-06	0.780879083	0.12087028	4.64604176
KLB	4:39439719	3.47E-23	1.414527302	0.466592295	11.71895712
RPL9	4:39449824	1.80E-32	-1.111150124	0.593148331	-15.12911177
UGDH	4:39537738	3.66E-06	-0.519412093	0.127994273	-4.800488419
N4BP2	4:40060475	8.48E-06	0.692394733	0.1189883	4.604803675
SLC30A9	4:41972192	8.52E-06	-0.825160748	0.118940956	-4.603763787
TMEM128	4:4257901	4.11E-06	0.523616706	0.126747857	4.773647083
ATP8A1	4:42631449	4.28E-12	-0.787957678	0.264074334	-7.50578203

ABCA11P	4:426475	6.79E-10	-1.296169604	0.215969368	-6.576266276
D4S234E	4:4394824	1.49E-13	0.724371636	0.294434907	8.094237282
GABRA4	4:46891137	5.32E-09	0.668591931	0.1956173	6.179055501
GABRB1	4:46923108	8.86E-27	1.066684441	0.519617884	13.03162145
ATP10D	4:47426700	3.41E-05	-0.592091822	0.10391734	-4.266972081
NIPAL1	4:48037926	4.09E-11	0.785167045	0.242995112	7.099033947
TEC	4:48271762	3.25E-07	0.707139285	0.153565656	5.337037302
FRYL	4:48547041	1.16E-05	0.478859652	0.115625749	4.530634858
STK32B	4:5170214	3.43E-10	0.776904388	0.222604788	6.704959293
KIAA0114	4:53454738	4.31E-06	0.49207447	0.126235551	4.76259313
USP46	4:53454738	7.41E-07	0.527265309	0.144936714	5.158695588
RASL11B	4:53636740	2.06E-05	-0.928952858	0.10939266	-4.391377597
KIT	4:55521017	1.87E-05	0.455148398	0.110468292	4.415581749
SRD5A3	4:56217015	1.37E-12	1.049776962	0.274519859	7.707684779
CEP135	4:56884830	1.36E-05	-0.458388979	0.113916194	-4.492676624
KIAA1211	4:56946072	2.83E-06	0.652962982	0.130741075	4.859384594
PPAT	4:57184397	2.42E-06	-0.535595279	0.132421974	-4.895257961
AASDH	4:57207188	2.94E-11	-0.714554591	0.246125592	-7.159434375
EVC	4:5763446	2.57E-06	0.512480916	0.131751691	4.880967901
POLR2B	4:57869527	1.61E-05	-0.494255108	0.112037976	-4.450771069
CRMP1	4:5889340	9.59E-10	-0.658066086	0.212589433	-6.510585455
LPHN3	4:62979295	3.62E-05	3.387688998	0.103269456	4.252112931
WFS1	4:6315563	8.27E-12	0.815411505	0.257980059	7.388139843
PPP2R2C	4:6465791	7.70E-17	-0.829469491	0.358497931	-9.366862017
LOC93622	4:6678234	5.69E-06	-0.531318322	0.123280731	-4.698585685
CENPC1	4:68219296	5.07E-08	-0.590719127	0.172788553	-5.726628929
TBC1D14	4:6923793	2.31E-14	-0.840367268	0.310735512	-8.413027709
DGKQ	4:697196	3.83E-05	-0.621865442	0.102670899	-4.23835796
GRPEL1	4:7052777	2.99E-05	-0.515146477	0.105369145	-4.300160033
NPFFR2	4:72905564	2.63E-13	0.770577255	0.289360868	7.995491513
ADAMTS3	4:73443865	5.22E-08	0.59279219	0.172503473	5.72091714
PCGF3	4:743519	2.55E-08	0.633849481	0.179810201	5.866780067
RASSF6	4:74509577	2.40E-05	-0.465607947	0.107766456	-4.354640956
PARM1	4:76212164	7.48E-10	0.602873094	0.215023053	6.557886356

RCHY1	4:76410420	1.57E-13	0.843618871	0.293945522	8.084704386
C4orf26	4:76482793	9.60E-17	0.917181395	0.356706173	9.330403962
NAAA	4:76855106	2.68E-16	-0.976807222	0.34834711	-9.161103068
NUP54	4:77038473	7.79E-07	0.569189048	0.144412766	5.147785838
FAM47E	4:77182004	2.23E-08	-0.628638795	0.181152849	-5.893468804
SCARB2	4:77194473	5.77E-18	-0.957731837	0.379107084	-9.790895697
STBD1	4:77203043	4.15E-27	-1.024042789	0.524211059	-13.15211943
CPLX1	4:774574	5.11E-20	-0.954249032	0.41506183	-10.55483002
SHROOM3	4:77513071	7.09E-06	0.521155037	0.120914778	4.647014501
AFAP1	4:7873174	4.84E-16	0.831638147	0.343461689	9.06272789
AFAP1-AS1	4:7931249	9.42E-09	0.611415975	0.18987883	6.066149505
ANXA3	4:79468715	5.86E-23	-1.001701246	0.463038283	-11.63554189
LOC100505702	4:79531553	7.40E-06	-0.593239801	0.120444269	-4.636723667
NAA11	4:80255322	2.29E-06	-0.519452135	0.13300246	-4.90761777
SEC31A	4:83800428	2.53E-08	-0.587198347	0.17989802	-5.868526743
ACOX3	4:8392835	2.08E-08	-1.311453413	0.181886185	-5.908031739
PLAC8	4:84110981	8.74E-09	-1.152108858	0.190640958	-6.081172468
METTTL19	4:8471398	1.36E-11	-0.73359784	0.253357149	-7.298942668
CDS1	4:85469306	1.84E-10	-0.726617472	0.228615146	-6.821294064
ABLIM2	4:8579758	1.23E-05	-0.585762361	0.115014331	-4.517079002
CPZ	4:8594815	2.81E-15	-0.974140901	0.328769577	-8.769196888
ARHGAP24	4:86937874	2.19E-05	0.582091314	0.108734831	4.37653798
SLC10A6	4:87833928	7.36E-07	-0.681533231	0.14501095	-5.160240577
LOC100506746	4:87836005	3.05E-06	-0.483604332	0.129949394	-4.842445024
C4orf36	4:87860844	6.52E-06	-0.646615761	0.121817872	-4.666733852
HSD17B11	4:88261416	1.43E-05	0.671253704	0.113330157	4.479624404
MMRN1	4:90410542	6.04E-09	-0.763672234	0.194350149	-6.154164489
FAM190A	4:91094329	7.44E-12	-0.842556395	0.258967315	-7.407192324
SMARCAD1	4:95202492	3.83E-05	-0.469960459	0.102653075	-4.23794795
ADH1B	4:99853948	2.61E-05	-0.431786134	0.106833345	-4.333481912
PAM	5:102120269	2.44E-05	0.441657014	0.107561927	4.350008127
CCT5	5:10252119	3.38E-05	0.60423614	0.104026064	4.269462675
NUDT12	5:102865348	1.06E-07	-0.920871121	0.165219252	-5.574346231
ANKRD33B	5:10518705	9.21E-07	-0.572500558	0.142639627	-5.110792165

PJA2	5:108983966	2.63E-05	0.57155972	0.106756697	4.331741237
MAN2A1	5:109007557	6.58E-07	-0.544129409	0.14617691	-5.184480768
TMEM232	5:110048907	2.53E-05	-0.492595996	0.107180409	-4.341358753
SLC12A7	5:1104938	6.89E-06	-0.460148365	0.121221098	-4.653707914
EPB41L4A	5:111795910	2.22E-08	0.709360697	0.181195491	5.894315877
YTHDC2	5:112798498	3.27E-11	-0.676759648	0.245112746	-7.139893404
COMMD10	5:115608225	2.68E-06	0.5585169	0.131300309	4.871333549
CEP120	5:122750972	6.50E-12	-0.686696544	0.260212885	-7.431232404
GRAMD3	5:125703712	3.38E-07	-0.655228821	0.153173632	-5.328986812
C5orf63	5:126279525	2.79E-05	-0.498612764	0.106095789	-4.316715308
MARCH3	5:126433164	3.31E-18	-0.795787549	0.383457701	-9.881596571
MEGF10	5:126813822	3.60E-05	-0.418890539	0.103331839	-4.253544997
SLC27A6	5:128288575	9.29E-24	-1.088806731	0.475404659	-11.92804664
ADAMTS19	5:128333999	1.17E-05	0.603710555	0.115536252	4.528651962
ISOC1	5:128460713	4.37E-06	0.523252265	0.126090879	4.759469263
P4HA2	5:131556174	3.75E-12	-0.732014568	0.265298062	-7.529415653
PDLIM4	5:131598705	1.39E-28	-0.982754067	0.544245556	-13.69247057
LOC553103	5:131703691	2.41E-08	-0.713846045	0.180376305	-5.878037016
SLC22A5	5:131721174	1.50E-13	0.793315036	0.29438697	8.093303409
IRF1	5:131786418	1.70E-16	-0.837771472	0.352040609	-9.235753081
C5orf56	5:131800599	8.13E-15	-0.813375836	0.319744421	-8.590437019
HSPA4	5:132444128	1.87E-06	-0.955853195	0.135146914	-4.953152762
VDAC1	5:133333988	9.33E-10	-0.780248399	0.212853938	-6.51572892
CXCL14	5:135114485	3.04E-05	-0.853324868	0.105185206	-4.295963472
KLHL3	5:137044581	4.87E-10	-0.861894698	0.219205283	-6.639064701
SIL1	5:138540898	9.20E-07	0.51284548	0.142655354	5.111120788
DNAJC18	5:138775173	1.83E-13	-0.918479205	0.292599656	-8.058497931
SRA1	5:139962167	2.17E-14	-0.833270154	0.311295188	-8.424021588
CD14	5:140008419	2.34E-07	0.599401093	0.157012428	5.407621123
DND1	5:140051983	3.85E-07	-0.552702447	0.151809901	-5.300944716
PCDHAC2	5:140307284	9.49E-10	0.621509944	0.212686302	6.512469211
FCHSD1	5:141025929	2.92E-18	-0.985297708	0.384434039	-9.902011936
FGF1	5:141777439	7.18E-07	0.524025596	0.145259335	5.165408449
TRIO	5:14210897	2.62E-09	-0.711209123	0.202679201	-6.317392658

PPP2R2B	5:146288806	3.17E-09	0.635582128	0.200775998	6.280170917
SPINK5	5:147330366	1.90E-14	0.830368554	0.312445914	8.446636739
SH3TC2	5:148451798	3.77E-10	0.633665766	0.221705215	6.687529656
PCYOX1L	5:148726146	1.07E-08	0.606227182	0.188637669	6.041664668
SLC26A2	5:149230730	6.94E-06	0.535051874	0.121135269	4.651832972
CSF1R	5:149489242	2.17E-08	0.668602594	0.181440396	5.899180226
CAMK2A	5:149702801	3.91E-18	0.987200493	0.382142858	9.854138556
ARSI	5:149702801	1.28E-21	1.061336154	0.441693428	11.14484224
NDST1	5:149886437	2.85E-05	0.525555972	0.105890793	4.312048565
RBM22	5:150084562	3.28E-07	-0.701762898	0.153494819	-5.335582953
ZNF300P1	5:150334662	7.85E-07	0.714850873	0.144328608	5.146032586
GM2A	5:150618993	2.92E-15	1.01082124	0.328438349	8.762616639
SLC36A1	5:150798334	1.19E-08	0.672143072	0.187510729	6.019412002
LPCAT1	5:1517881	1.86E-05	0.536091772	0.110536504	4.417114174
FAM114A2	5:153374898	2.19E-07	0.525736239	0.157704755	5.421756955
MFAP3	5:153429187	2.02E-15	0.777947227	0.331556843	8.824631588
GALNT10	5:153554512	7.31E-10	0.946306852	0.215247658	6.562249419
SAP30L	5:153840472	2.51E-07	0.890223655	0.156274101	5.392530881
LARP1	5:153993031	2.51E-05	0.558169591	0.107253896	4.343025529
ADAM19	5:157099261	2.70E-05	-0.858110493	0.106454176	-4.324867067
NIPAL4	5:157102854	9.40E-06	-1.086454806	0.117881556	-4.580462207
THG1L	5:157159678	1.02E-07	0.549320665	0.165581321	5.581661412
CLINT1	5:157355371	1.71E-06	-0.627405139	0.136118549	-4.973720853
PTTG1	5:160197584	3.66E-06	-0.520566578	0.127997828	-4.800564869
FAM134B	5:16513112	7.02E-08	0.60384129	0.169457657	5.659779811
CCDC99	5:169008399	1.08E-05	-1.023555126	0.116418051	-4.548168765
RANBP17	5:170372454	4.48E-10	0.649025849	0.220018209	6.654829101
STK10	5:171599933	3.33E-06	0.584016499	0.129003628	4.82217109
SFXN1	5:174928132	1.55E-09	0.914538463	0.207893951	6.419173114
THOC3	5:175361176	1.14E-09	0.729937135	0.210892316	6.477569312
HIGD2A	5:175809210	1.26E-08	-0.994635884	0.186941862	-6.008171321
TSPAN17	5:176074171	5.39E-06	-0.623652912	0.123852828	-4.711012513
RAB24	5:176548993	3.76E-07	0.692010576	0.152064064	5.306175396
PRELID1	5:176740704	8.46E-06	0.517761983	0.11901095	4.605301123

RGS14	5:176799992	1.71E-11	-0.685909335	0.251230521	-7.257916354
TMED9	5:177025838	4.05E-05	-1.219900843	0.102061695	-4.224331235
B4GALT7	5:177044707	2.17E-05	-0.429517411	0.108815821	-4.378366523
FAM193B	5:177047379	1.60E-05	0.473253274	0.112161672	4.453537543
LOC728554	5:177260129	1.75E-12	0.715701946	0.272290003	7.664547211
N4BP3	5:177507306	1.05E-10	0.73890403	0.234062621	6.926585926
RMND5B	5:177509545	2.10E-05	0.503830323	0.109198771	4.387006705
ZNF354A	5:178186629	1.46E-05	-0.507375984	0.113094401	-4.474367802
ZNF879	5:178451107	9.44E-08	0.662768032	0.166406685	5.598324894
ZNF354C	5:178470307	7.50E-06	-0.493115882	0.12031326	-4.633856187
RUFY1	5:179034260	1.38E-12	0.728047757	0.274472867	7.706775463
TBC1D9B	5:179335060	1.06E-13	1.78790423	0.297420714	8.152442823
C5orf45	5:179604487	1.09E-05	0.536317558	0.116314062	4.545869524
GFPT2	5:179843753	3.90E-09	0.898903512	0.198707251	6.239662178
CNOT6	5:179910179	1.87E-08	-0.873280184	0.182958394	-5.929306626
ZFP62	5:180283506	2.30E-11	-0.865718518	0.248415955	-7.203619958
MGAT1	5:180295966	4.61E-09	-0.689328425	0.197050686	-6.207185671
SDHA	5:188437	5.40E-06	-1.006897931	0.123828374	-4.710481677
CCDC127	5:200967	1.40E-06	0.573134364	0.138180644	5.017245022
CDH6	5:31123473	2.16E-10	1.380194654	0.227088147	6.791756014
C1QTNF3	5:34357578	1.94E-06	-0.640294094	0.134772381	-4.945213991
RAI14	5:34626411	9.43E-15	0.884209851	0.318469223	8.565265399
RICTOR	5:39121508	5.88E-08	0.60301717	0.171281785	5.696419623
DAB2	5:39435433	1.33E-05	-0.788978908	0.114145951	-4.497788141
OXCT1	5:42001804	3.26E-06	0.640699502	0.129235565	4.827146811
ZNF131	5:42624138	2.09E-05	0.738877512	0.109239804	4.387931915
LOC153684	5:43054758	1.14E-05	0.499393793	0.115818522	4.534904334
NIM1	5:43211047	5.31E-08	-0.591809773	0.172310976	-5.717059336
NNT	5:43513126	3.14E-10	-0.641285796	0.223469336	-6.721705658
EXOC3	5:459771	2.25E-05	-0.591855484	0.108430535	-4.369663893
EMB	5:49841558	1.40E-05	0.461094085	0.113568402	4.484933091
PELO	5:52104699	3.89E-06	-0.56931355	0.127336304	-4.786328377
ITGA2	5:52280670	4.75E-06	0.570940269	0.125205159	4.740321878
FST	5:52848382	4.46E-20	-1.081726534	0.416062752	-10.57660184

NDUFS4	5:52851931	1.27E-16	-0.998617018	0.354465772	-9.284902362
SNX18	5:53778134	2.27E-05	-0.485767555	0.108326148	-4.367304364
SLC38A9	5:55328578	3.42E-05	0.429695943	0.103892375	4.266400064
C5orf35	5:56259808	1.12E-21	-1.21961037	0.442600368	-11.16535081
PART1	5:59942309	2.98E-11	-0.686889413	0.245974805	-7.15652529
DEPDC1B	5:60001644	2.97E-18	-0.872522108	0.384294125	-9.899084925
ELOVL7	5:60135121	1.04E-09	1.478849894	0.211804453	6.495317446
KIF2A	5:61606610	1.81E-05	-0.484357678	0.11080055	-4.423043312
SLC9A3	5:616760	1.51E-13	-0.939139038	0.294303653	-8.091680338
TPPP	5:640882	6.54E-27	1.316549952	0.521466927	13.07998458
CEP72	5:641694	3.59E-23	1.144077114	0.466360483	11.71350067
ADAMTS6	5:64712122	1.50E-08	-0.615943184	0.185195391	-5.973628012
CENPK	5:64783767	5.51E-06	0.580781102	0.123620799	4.705974491
PPWD1	5:64859592	9.28E-08	0.67072974	0.166582574	5.601873806
SGTB	5:65047549	2.79E-05	0.437243953	0.1061204	4.317275385
ERBB2IP	5:65171124	1.83E-20	-0.885475221	0.42262145	-10.720012
MAST4	5:65885240	1.36E-06	0.547045175	0.138515492	5.024296538
NSUN2	5:6677687	1.27E-05	0.718054554	0.114617792	4.508275526
PAPD7	5:6691557	2.66E-05	-0.583198414	0.106619522	-4.328625001
PIK3R1	5:67263575	5.71E-07	-0.541866155	0.1476705	-5.215463851
GUSBP9	5:69733811	4.12E-05	0.555291149	0.10186373	4.219767248
MCCC2	5:70767269	2.95E-05	-0.641331267	0.105490343	-4.302923864
ANKRA2	5:72910233	3.80E-05	-0.583095953	0.102739114	-4.239926875
RGNEF	5:72950155	2.17E-23	1.018917965	0.469745554	11.79339938
ENC1	5:73803818	1.40E-05	0.579044471	0.113586787	4.485342623
HEXB	5:73972991	4.30E-09	-0.787364298	0.197743581	-6.220773991
GFM2	5:73997524	2.53E-05	-0.700219854	0.107169634	-4.341114322
NSA2	5:74167947	7.16E-12	1.094985964	0.259315433	7.413910861
GCNT4	5:74245512	4.84E-09	-0.9157153	0.19655877	-6.197534909
F2R	5:75982221	9.81E-06	-0.503769704	0.117421297	-4.570319277
IQGAP2	5:76004014	1.57E-05	0.460897277	0.112356201	4.4578863
F2RL1	5:76115172	2.38E-05	0.673618847	0.107857941	4.356712311
CRHBP	5:76194302	1.61E-20	-0.968082795	0.423535291	-10.74009854
WDR41	5:76860422	7.45E-06	0.661538344	0.120379792	4.635312524

AP3B1	5:77535910	5.97E-07	-0.582904507	0.147198102	-5.205672613
LHFPL2	5:77974427	3.34E-12	0.927916679	0.266365134	7.550027495
ARSB	5:78275186	4.67E-09	0.765374736	0.196907272	6.204372403
MTRR	5:7893121	2.54E-07	-0.665365355	0.156138778	-5.389763381
MTX3	5:79245022	1.85E-05	-0.60189794	0.110582841	-4.418154985
MSH3	5:79933093	1.43E-13	0.873873186	0.294794732	8.101247701
DHFR	5:79942207	1.64E-08	-0.658520285	0.184277043	-5.955443403
ZCCHC9	5:80557456	3.51E-08	0.593498117	0.176544209	5.80171539
ATG10	5:81279021	3.77E-14	0.89539988	0.306504054	8.33001867
ATP6AP1L	5:81569311	2.21E-09	0.678223831	0.204337573	6.349792247
RPS23	5:81570394	1.57E-13	0.814482	0.293952176	8.084833993
POLR3G	5:89828258	1.67E-05	0.48671468	0.111663945	4.442400037
FAM172A	5:93333723	1.22E-07	0.870793116	0.163773505	5.545103873
MCTP1	5:94538011	2.79E-05	0.617867393	0.1061121	4.317086514
TTC37	5:94925849	1.87E-06	0.814403959	0.135129376	4.952781148
C5orf27	5:95171391	2.27E-06	-0.471248913	0.133076322	-4.909189411
ELL2	5:95196856	1.24E-05	0.499685012	0.114854205	4.513525189
ERAP1	5:96121715	3.27E-11	-0.685891081	0.245103623	-7.139717378
ERAP2	5:96252589	2.65E-31	1.097345748	0.579044461	14.69561168
RIOK2	5:96500242	2.50E-13	1.343366741	0.289824945	8.004514591
USP45	6:100139753	1.77E-06	1.083973941	0.135741034	4.965734055
GRIK2	6:102000912	5.40E-06	-0.69947747	0.123837644	-4.710682909
QRSL1	6:107077502	9.71E-09	-0.580267192	0.189574893	-6.060155846
PDSS2	6:107706258	1.26E-07	0.88887356	0.163427199	5.53809147
SOBP	6:107726328	5.07E-08	1.00689747	0.172788814	5.726634157
SESN1	6:109496192	2.97E-06	0.891412991	0.130226041	4.848367646
CCDC162P	6:109498294	1.35E-06	0.908688119	0.138582765	5.025712701
CD164	6:109734916	1.30E-05	0.462524102	0.114378966	4.502968901
SMPD2	6:109791110	2.20E-11	0.681692169	0.248842233	7.21184343
DDO	6:110737247	7.15E-11	0.683046648	0.237683365	6.996511005
CDK19	6:111000185	4.08E-09	0.759656531	0.198259595	6.230889486
KIAA1919	6:111915564	2.07E-05	-0.591502047	0.109368713	-4.390837901
TMEM170B	6:11517016	1.52E-11	0.736962703	0.252281966	7.278200283
FRK	6:116391259	5.35E-07	-0.546768377	0.148357599	-5.229691696

NT5DC1	6:116399118	3.59E-05	-0.717223544	0.103356884	-4.254119843
NUS1	6:118011723	2.31E-06	0.814849004	0.132923682	4.905941273
MCM9	6:119181125	2.54E-08	0.724772417	0.179859325	5.867757129
FAM184A	6:119423612	2.24E-08	0.606773514	0.181143194	5.893277014
SMPDL3A	6:123125411	3.70E-06	-0.570411074	0.127890709	-4.798261005
TPD52L1	6:125474791	3.87E-24	-0.915538495	0.481185976	-12.06703168
HDDC2	6:125573194	2.24E-14	-0.713849134	0.311021212	-8.418639355
RSPO3	6:127456122	2.94E-08	0.548904878	0.178374412	5.838202114
ARHGAP18	6:129966715	2.82E-11	0.758419649	0.246490624	7.166476782
PHACTR1	6:13068959	3.25E-06	-0.55550031	0.129266681	-4.827814148
MOXD1	6:132655724	2.20E-06	0.781131602	0.133403111	4.916140011
STX7	6:132833954	1.15E-05	0.594598828	0.115692631	4.532116376
VNN1	6:133032759	2.90E-06	0.519840438	0.130465952	4.853501016
VNN3	6:133072650	1.24E-17	-0.94446281	0.373103021	-9.666430234
VNN2	6:133076489	1.48E-12	-0.817176492	0.27383532	-7.694439642
C6orf192	6:133122767	2.28E-06	0.884737407	0.133036873	4.90835004
RPS12	6:133151313	7.28E-06	-0.48958675	0.120633378	-4.640861219
TBC1D7	6:13318865	2.51E-06	0.555299765	0.132018444	4.886657291
SLC2A12	6:134399173	9.38E-06	-0.830575014	0.11790084	-4.580886926
AHI1	6:135844359	3.45E-05	0.458564153	0.103818025	4.264696265
MAP3K5	6:137116123	2.64E-16	-0.87182521	0.348471884	-9.163620966
IL20RA	6:137291296	4.53E-07	-0.522717213	0.150093444	-5.265566455
IL22RA2	6:137495707	8.65E-08	-0.544448783	0.167310901	-5.616561341
ECT2L	6:139332842	6.48E-06	0.512344258	0.121875609	4.6679931
C6orf115	6:139347288	1.22E-05	-0.886154168	0.115030387	-4.517435259
HECA	6:139826787	1.73E-05	0.452272968	0.11128998	4.434021756
AIG1	6:143559096	5.60E-06	-0.549099665	0.123440641	-4.702060856
LOC100507557	6:146018881	3.09E-05	-0.472438689	0.104984192	-4.291374626
NUP43	6:150050570	6.48E-26	-0.93929827	0.507357546	-12.71572044
LRP11	6:150245203	1.09E-09	-0.666267123	0.211338365	-6.486249344
PLEKHG1	6:151007844	9.10E-20	-1.001877844	0.410783656	-10.4621035
AKAP12	6:151654269	5.91E-06	-0.984626367	0.122862204	-4.689484066
C6orf211	6:151763283	2.81E-05	0.708269823	0.106025324	4.315111502
RMND1	6:151781022	2.49E-05	-0.442084869	0.107355522	-4.345329959

IPCEF1	6:154479396	2.41E-11	0.66338792	0.247978719	7.195185042
TFB1M	6:155234468	1.60E-05	0.541069627	0.112161426	4.453532046
SYNJ2	6:158410946	4.80E-07	-0.670416227	0.149485873	-5.253020995
GTF2H5	6:158496489	1.91E-06	0.507881804	0.134926107	4.948473151
TULP4	6:158775332	5.44E-14	0.835026887	0.303292869	8.267149632
DYNLT1	6:158988869	3.86E-05	0.505037603	0.102592023	4.236543411
ACAT2	6:160154099	2.16E-10	-0.776069295	0.227110914	-6.792196506
MRPL18	6:160186872	2.83E-12	0.85723049	0.267869413	7.579090865
LOC729603	6:160506462	1.62E-05	-0.655189492	0.111970448	-4.449260417
IGF2R	6:160527180	7.52E-06	0.63998711	0.120273148	4.632978045
QKI	6:163926730	1.94E-06	-1.228174449	0.134733733	-4.94439446
PDE10A	6:166014255	8.50E-07	0.525133352	0.14348485	5.128440554
ATXN1	6:16731200	9.64E-07	0.835674441	0.142157783	5.100719477
MLLT4	6:168198324	6.60E-06	0.473274259	0.121679768	4.663721077
FAM120B	6:170679355	8.67E-07	0.721976612	0.14327768	5.124117209
PSMB1	6:170793145	2.18E-05	0.450982704	0.108787428	4.377725526
TPMT	6:18117226	1.69E-05	-0.555333884	0.111562997	-4.440139283
MBOAT1	6:20142048	1.45E-05	-0.646926311	0.11318743	-4.476442448
ALDH5A1	6:24505030	3.59E-17	-0.801517971	0.364644631	-9.492407767
ACOT13	6:24679178	5.06E-13	-0.967572398	0.283518997	-7.882038798
C6orf62	6:24721165	4.11E-05	0.513245058	0.10191075	4.220851538
KIAA0319	6:24752400	1.63E-06	-0.830626821	0.136588463	-4.983654335
FAM65B	6:24923935	7.26E-12	-0.710645412	0.259187206	-7.411436107
CMAHP	6:25083615	1.44E-10	-0.749728626	0.230997611	-6.867358599
LRRC16A	6:25276266	4.29E-06	-0.554214366	0.126285132	-4.763663482
HIST1H4B	6:26021456	2.78E-06	-0.511573462	0.130939796	-4.863632189
HIST1H1C	6:26100198	5.89E-10	-1.173868408	0.217351104	-6.603090709
HIST1H1D	6:26221826	4.47E-07	0.706371913	0.150241351	5.268618696
HIST1H3E	6:26224089	4.79E-08	0.790636936	0.173371543	5.738304071
BTN3A2	6:26373121	1.91E-17	-1.681698303	0.369655399	-9.595317165
BTN3A1	6:26417851	6.59E-06	0.684173448	0.121700545	4.664174407
BTN2A1	6:26510993	1.65E-06	0.786893247	0.136455938	4.980853797
HIST1H2BK	6:26874397	4.09E-05	0.939558358	0.101946435	4.221674335
ZNF184	6:27347808	1.06E-07	-0.567802408	0.165215117	-5.574262664

MYLK4	6:2763885	9.89E-06	-0.734685831	0.117334199	-4.568398528
ZNF323	6:27960435	1.94E-06	0.480604065	0.134737402	4.944472259
ZNF165	6:28109960	1.05E-07	1.161632524	0.165274384	5.575460312
ZKSCAN4	6:28187101	7.28E-13	0.681222646	0.280233126	7.818323463
ZNF193	6:28187101	3.23E-28	0.945077491	0.539356798	13.55831037
ZNF192	6:28193786	5.49E-14	0.712154912	0.303207837	8.265486258
TOB2P1	6:28197752	3.61E-25	0.98890015	0.496537293	12.44348731
ZSCAN12P1	6:28375209	9.45E-11	0.746025497	0.235030289	6.945277845
PGBD1	6:28375210	1.86E-05	0.511584247	0.110524662	4.416848144
ZSCAN23	6:28408258	1.91E-13	0.742343187	0.292226452	8.051233554
SERPINB1	6:2843612	7.52E-12	-0.700429118	0.258865162	-7.405220855
MGC39372	6:2876581	1.71E-09	-0.916733542	0.20691416	-6.400071634
TRIM27	6:28905612	6.21E-07	-0.498993701	0.14679637	-5.19734011
SERPINB9	6:2906954	9.33E-07	0.578335259	0.142505743	5.107994252
HLA-G	6:29634012	9.32E-07	0.982130579	0.142514433	5.108175874
ZFP57	6:29648398	5.04E-19	0.954447292	0.397909302	10.18616984
RNF39	6:29677249	2.32E-05	0.426066671	0.108118971	4.362619284
ZNRD1-AS1	6:29807006	4.98E-06	-0.489422507	0.124710074	-4.729602362
HLA-H	6:29834773	6.20E-13	1.025756853	0.281685498	7.846477857
HCG18	6:29908309	4.24E-06	-0.96975549	0.126431623	-4.766825244
HLA-L	6:29908649	1.04E-09	0.609707939	0.211776921	6.494781837
HLA-A	6:29909840	1.00E-14	0.719106364	0.317932309	8.554673118
HLA-J	6:29916885	1.81E-07	0.521804543	0.159685435	5.462123728
ZNRD1	6:29945620	8.33E-06	0.619982454	0.11917423	4.608886342
NQO2	6:3003970	2.95E-22	-1.171529747	0.45195778	-11.37867652
TRIM40	6:30103571	2.96E-08	-0.64868807	0.178281615	-5.836353706
FLOT1	6:30471520	1.32E-06	-0.601763863	0.138827461	-5.030862301
IER3	6:30776393	5.85E-06	-0.592100999	0.122972326	-4.691879723
VAR52	6:30894759	1.49E-21	0.913331207	0.440609407	11.12036722
TCF19	6:31101583	9.98E-06	-0.699875028	0.117231165	-4.566125779
CCHCR1	6:31121513	2.83E-08	-0.582228571	0.178760831	-5.845897303
CSNK2B	6:31137798	6.05E-06	-0.542532825	0.122618334	-4.68417654
HLA-C	6:31237802	1.08E-32	-1.298110263	0.595785328	-15.2120832
MICA	6:31391591	4.98E-07	-0.576540533	0.149105783	-5.245166566

HLA-B	6:31428967	3.56E-05	-0.522173345	0.103470287	-4.256722204
MICB	6:31462842	1.32E-07	0.832536861	0.162955982	5.528544786
ABHD16A	6:31687008	7.17E-06	-0.552257012	0.12079183	-4.644326563
C6orf25	6:31687008	1.05E-07	-0.646066412	0.165313914	-5.576259089
LY6G6C	6:31740454	2.34E-07	-0.551687997	0.157012544	-5.407623472
DDAH2	6:31794592	1.17E-05	-0.466985179	0.115548638	-4.528926417
SKIV2L	6:31930462	2.01E-06	0.726911515	0.134399398	4.937302225
HSPA1B	6:32190217	1.10E-05	0.50294657	0.1162017	4.543384436
NOTCH4	6:32191041	6.65E-08	-0.60442903	0.170005274	-5.670787279
HLA-DRB6	6:32498558	2.68E-09	0.909441478	0.202456284	6.313035167
HLA-DRB1	6:32560327	6.02E-08	-0.625680669	0.171036591	-5.691498976
HLA-DRB5	6:32577385	1.77E-13	-1.046284783	0.292891606	-8.064181482
HLA-DQB1	6:32627561	1.04E-13	-0.886513979	0.297583878	-8.155625787
LOC100294145	6:32861920	6.13E-07	-0.811561038	0.146930527	-5.200123331
HSD17B8	6:33181997	1.77E-05	-0.547224576	0.11103345	-4.428269385
RPS18	6:33239869	1.45E-10	-1.402447641	0.230934129	-6.866131511
CUTA	6:33457133	4.84E-06	-0.736262905	0.125009955	-4.736096791
BAK1	6:33540209	2.09E-16	-0.808824291	0.350358313	-9.201721763
C6orf125	6:33659046	9.38E-06	-0.493272785	0.117903858	-4.580953382
IP6K3	6:33717770	6.10E-19	-0.928895038	0.396463719	-10.15546609
C6orf106	6:34620153	3.55E-05	0.655356716	0.103484135	4.257039922
UHRF1BP1	6:34697379	7.60E-13	0.728739747	0.279847616	7.810852383
SLC22A23	6:3470242	4.27E-06	-0.496770597	0.126358267	-4.765242108
ZNF76	6:35191519	4.72E-20	0.9744078	0.415647652	10.56756907
SRPK1	6:35905946	2.15E-06	0.505002798	0.133655171	4.921498019
ETV7	6:36357172	6.34E-25	0.925594526	0.492932539	12.35408823
KCTD20	6:36432643	1.38E-10	-0.794658836	0.231378045	-6.874711975
MDGA1	6:37669641	3.91E-10	-0.652629272	0.221340463	-6.680460947
KCNK5	6:39239122	4.02E-10	-0.86199125	0.221073875	-6.67529407
KCNK17	6:39291609	8.68E-18	0.84466229	0.375908749	9.724493618
KIF6	6:39384933	3.44E-14	0.932612373	0.307296076	8.345541285
MOCS1	6:39903734	2.05E-05	-0.487945007	0.109477914	-4.393298743
UNC5CL	6:41029109	8.61E-06	-0.633330242	0.118823265	-4.601178233
APOBEC2	6:41029109	3.83E-11	-0.906820356	0.243603516	-7.110773597

ECI2	6:4120565	1.56E-07	-0.599011704	0.161230127	-5.493530148
PRICKLE4	6:41299381	1.26E-05	-0.843906471	0.11470124	-4.510128905
MED20	6:41888827	4.42E-06	-0.480946733	0.125989726	-4.757284489
CCND3	6:41937047	5.05E-11	1.137718105	0.240998325	7.060500229
USP49	6:41937058	1.73E-05	0.525108938	0.111268946	4.433550246
GUCA1B	6:42171560	7.28E-09	0.63067024	0.192472353	6.117236956
RPL7L1	6:42856502	5.30E-06	-0.540143051	0.124031937	-4.714899638
PEX6	6:42923902	1.27E-30	0.974582909	0.570592532	14.4436871
CUL7	6:43013662	2.75E-05	-0.85479422	0.106251914	-4.320267575
AARS2	6:44296145	1.40E-11	1.115184567	0.253073411	7.293468744
CLIC5	6:45968001	1.66E-09	0.674312017	0.20720749	6.405791259
ENPP4	6:46097758	5.16E-07	-0.588347332	0.148743488	-5.23767545
SLC25A27	6:46619476	2.61E-05	-0.458511344	0.106839477	-4.333621168
TNFRSF21	6:47138057	3.96E-06	-0.492512141	0.127163717	-4.78261077
GPR115	6:47689992	3.88E-07	0.543984379	0.151718304	5.299059151
C6orf138	6:48164159	3.96E-05	0.463742963	0.102293593	4.229673851
CENPQ	6:49347535	1.28E-05	-0.472266873	0.114571481	-4.507246768
MUT	6:49419864	8.09E-25	1.015812856	0.491362818	12.31535453
FARS2	6:5073699	3.92E-05	0.522148102	0.102422343	4.232638343
TFAP2B	6:50796634	2.33E-05	-0.472009127	0.108066694	-4.361436649
LYRM4	6:5193123	6.03E-09	-0.690364181	0.194355126	-6.154262298
TRAM2	6:52392413	5.13E-06	-0.577882057	0.124375827	-4.722358419
LOC730101	6:52528118	1.58E-09	0.649269911	0.20765608	6.414536601
TMEM14A	6:52548373	2.23E-07	0.588332204	0.157511547	5.417813433
GSTA3	6:52765284	3.83E-10	-1.370366036	0.221555676	-6.684631756
ICK	6:52837001	1.19E-05	0.542203427	0.115322178	4.523907054
GCLC	6:53378369	5.22E-06	0.486803811	0.124196513	4.718469942
LRRC1	6:53603537	1.36E-07	-0.536356532	0.162644418	-5.522229448
FAM83B	6:54823431	8.24E-07	-0.545362193	0.143814691	-5.13532066
RPP40	6:5493151	3.96E-05	0.824894667	0.102309305	4.230035679
COL21A1	6:56188241	8.36E-07	-0.689009765	0.143658258	-5.132058127
DST	6:56703801	1.08E-05	0.674302388	0.116410223	4.54799571
BEND6	6:56859839	2.32E-08	-0.703960152	0.180784647	-5.886153154
ZNF451	6:57015050	1.25E-05	0.944580128	0.114830631	4.513001872

PRIM2	6:57229283	1.80E-05	-0.503189328	0.110844235	-4.424023833
LGSN	6:64150426	2.82E-28	0.974515207	0.54014556	13.57985209
PHF3	6:64153219	2.04E-05	-0.444065668	0.109489598	-4.393561979
PTP4A1	6:64156268	1.60E-12	-0.693080986	0.273114705	-7.680498818
EXOC2	6:696058	1.41E-07	0.763220441	0.162264026	5.514515559
FAM135A	6:71088004	1.56E-13	0.750977136	0.294036438	8.086475224
C6orf155	6:71727564	1.73E-05	0.483625014	0.111319241	4.434677631
SSR1	6:7312886	8.23E-07	0.578940064	0.14383317	5.135705994
MTO1	6:74168308	3.48E-08	-0.849337389	0.176647325	-5.803772883
SLC17A5	6:74369300	2.50E-12	-0.853319879	0.269019888	-7.601323923
RIOK1	6:7442807	2.38E-06	0.617185273	0.132600958	4.899070491
CD109	6:74442924	3.73E-06	0.808191423	0.127795284	4.796208167
COL12A1	6:76121417	4.58E-07	1.142884615	0.149996013	5.263555452
TXNDC5	6:7911702	4.09E-07	0.553967532	0.151174508	5.287859427
DOPEY1	6:83869103	3.77E-22	-1.405010698	0.450251921	-11.33954824
SNHG5	6:86206773	5.59E-30	1.051034809	0.562445026	14.20605702
GJB7	6:87909703	9.92E-11	-0.702311803	0.234566641	-6.93632219
ZNF292	6:87981595	8.17E-07	0.515096683	0.143906485	5.137234683
C6orf163	6:88020521	8.69E-06	-0.49473411	0.11872131	-4.598937749
C6orf162	6:88100720	3.64E-05	0.681931885	0.103223059	4.251047653
SLC35A1	6:88415508	3.17E-05	0.721210181	0.104723751	4.285424907
RNGTT	6:89723527	1.03E-06	1.041934887	0.141445113	5.085805736
SRSF12	6:89770216	3.55E-05	-0.449936999	0.103490617	-4.257188641
GABRR1	6:89948232	1.75E-08	0.62745714	0.183649014	5.942999113
ANKRD6	6:90188518	8.28E-06	-0.625931983	0.119236389	-4.610250797
LYRM2	6:90472410	7.02E-08	-0.751603452	0.169446588	-5.659557244
MANEA	6:96018179	1.27E-06	-0.503536757	0.139281865	-5.040418951
SERPINE1	7:100722420	1.14E-05	0.876983548	0.115800146	4.534497429
AP1S1	7:100804542	1.81E-08	-0.604049082	0.183312686	-5.936331998
CLDN15	7:100862768	1.13E-05	0.913204336	0.115905759	4.536835708
CUX1	7:101513672	4.36E-06	0.786964746	0.126129814	4.760310078
SH2B2	7:101932722	3.75E-05	-0.462672183	0.102892449	-4.243452273
LRWD1	7:102119322	1.26E-06	-0.542205253	0.139328115	-5.041391206
NAPEPLD	7:102782932	1.83E-05	-0.985916307	0.110682734	-4.420398306

THAP5	7:108209623	1.41E-06	0.601806347	0.138125508	5.016083494
IMMP2L	7:111183610	3.26E-06	0.745144544	0.129214732	4.826699988
THSD7A	7:11779082	4.98E-14	1.079705328	0.304065662	8.282269971
ZFAND2A	7:1206638	6.78E-22	-0.896074807	0.446155452	-11.24602348
PTPRZ1	7:121578357	3.66E-05	-0.428995659	0.103159816	-4.249595336
VWDE	7:12344101	1.53E-09	-0.746152962	0.208000231	-6.42124451
GPR37	7:124330316	3.07E-05	-0.534525355	0.105065852	-4.293239144
POT1	7:124706406	1.03E-05	-0.477843203	0.116941829	-4.559740332
C7orf68	7:128024863	1.42E-05	-0.46592291	0.11339049	-4.480969101
METTL2B	7:128142023	8.20E-09	-0.585327988	0.191284148	-6.093844097
FLNC	7:128501241	9.28E-06	0.871210807	0.11801706	4.583446104
ATP6V1F	7:128501241	6.94E-07	0.96774721	0.145620373	5.172916323
LOC100130705	7:128515846	9.97E-09	0.745947462	0.189315117	6.055031904
IRF5	7:128576086	4.54E-09	0.663744587	0.197193046	6.209977987
TSPAN33	7:128777461	4.45E-10	-0.663298399	0.220097256	-6.656361745
KLHDC10	7:129752312	6.61E-07	0.559720614	0.146143263	5.183781903
TMEM209	7:129845202	3.77E-11	-1.260761115	0.24375233	-7.113645018
COPG2	7:130298550	4.17E-11	0.995957258	0.242815878	7.095575389
LOC646329	7:130817756	2.15E-07	-0.588419004	0.157883422	-5.425402747
EXOC4	7:133502828	4.02E-07	-0.792462714	0.151354397	-5.291565349
SLC35B4	7:134019379	5.82E-07	0.535665551	0.14747886	5.211492709
AKR1B15	7:134278238	4.93E-14	0.824374709	0.304156007	8.284038037
C7orf49	7:134797058	8.41E-37	1.086955099	0.641510542	16.76152505
WDR91	7:134857024	5.61E-34	1.071457536	0.610667205	15.69248172
NUP205	7:135242910	2.21E-10	-0.648833171	0.226856331	-6.787270786
C7orf73	7:135357476	6.37E-09	-0.739113421	0.193810021	-6.143547819
SLC13A4	7:135382677	6.75E-07	0.551347769	0.145914297	5.179025202
CHRM2	7:136564519	1.97E-07	0.68323035	0.158804671	5.444187027
ATP6V0A4	7:138467043	5.16E-08	-0.579720183	0.172604665	-5.722944799
KIAA1147	7:141444414	4.91E-06	0.51146139	0.12485116	4.732658369
EPHB6	7:142552547	4.46E-07	-0.527491213	0.150276755	-5.269349206
TRPV5	7:142575239	2.06E-16	1.067446195	0.350493488	9.204454343
EPHA1	7:143117735	2.95E-06	0.564044288	0.130284421	4.849617039
FAM115C	7:143430576	1.35E-16	1.117399024	0.353968012	9.274805764

FAM115A	7:143604201	9.63E-06	-0.512170725	0.117612924	-4.574543697
ARHGEF35	7:143869221	1.65E-14	-0.969724569	0.313668409	-8.47067896
CNTNAP2	7:148164406	7.89E-09	0.588598903	0.191667398	6.101391635
EZH2	7:148313360	2.68E-05	-0.439812628	0.106543682	-4.326901564
ZNF425	7:148844884	2.18E-07	-0.807834316	0.15773967	-5.422469488
ZNF786	7:148895304	1.67E-05	0.4444464607	0.111674356	4.442633161
ZNF777	7:149194171	2.74E-06	-0.609708979	0.131064793	-4.866303052
ATP6V0E2	7:149578880	5.66E-07	0.571918705	0.147773639	5.217600555
ACTR3C	7:149991396	2.39E-06	-0.849848064	0.132523615	-4.897423189
LRRC61	7:150034184	2.55E-20	1.058413661	0.420192012	10.66673793
REPIN1	7:150050427	9.03E-07	0.632405633	0.142850736	5.115202596
C7orf29	7:150054146	1.68E-07	-0.637983424	0.160452915	-5.477736063
GIMAP8	7:150174079	3.45E-09	0.690300664	0.19993821	6.263772296
TMEM176B	7:150503079	7.89E-08	-0.726326919	0.168249012	-5.635460687
ABP1	7:150542646	1.74E-11	-0.715505733	0.251031643	-7.254079746
ABCB8	7:150726920	1.88E-08	-0.654295927	0.182910632	-5.928359355
ATG9B	7:150727984	4.21E-08	0.588141788	0.174699877	5.764878669
CDK5	7:150766129	5.72E-06	-0.636184144	0.123207014	-4.696983217
NUB1	7:151047510	6.42E-07	-0.754601262	0.146446702	-5.19008298
GALNT11	7:151808661	1.79E-05	-0.781461344	0.110936324	-4.426090393
ACTR3B	7:152254661	4.14E-05	0.546550611	0.101820556	4.2187715
XRCC2	7:152342974	1.07E-20	1.173357821	0.426489935	10.80522207
INTS1	7:1536566	2.36E-11	-0.693861824	0.248168186	-7.198840136
MICALL2	7:1541838	3.50E-06	0.99139348	0.128474805	4.810817003
LMBR1	7:156725243	3.24E-06	-0.940176642	0.129289971	-4.828313628
NOM1	7:156751377	2.20E-12	-0.682592336	0.270204217	-7.624216364
ESYT2	7:158532898	1.15E-05	-0.525410306	0.115684238	-4.531930482
ISPD	7:16368668	1.50E-06	-0.777705716	0.137495142	-5.002795239
ANKMY2	7:16684247	2.93E-07	0.618021966	0.154666108	5.359610922
TWIST1	7:19371245	1.86E-06	-0.589632212	0.135184248	-4.953943797
ITGB8	7:20454814	2.77E-09	-0.660836633	0.202123298	-6.306525002
DNAH11	7:21597487	3.79E-10	-0.905414369	0.221650119	-6.686461964
TOMM7	7:22854840	8.96E-07	-0.536818714	0.142938168	-5.117028715
KLHL7	7:23145952	3.79E-13	1.262604641	0.286098144	7.93209836

GPNMB	7:23294668	1.52E-24	-0.932849748	0.487269503	-12.21489861
STK31	7:23798072	1.76E-11	-0.827879974	0.250927739	-7.252075316
CHST12	7:2449733	1.11E-08	0.843466683	0.18824125	6.033839258
MPP6	7:24769241	4.03E-09	0.644728369	0.198386696	6.23338053
OSBPL3	7:25054098	2.25E-07	0.602607808	0.157385147	5.415232939
HOTTIP	7:27243221	1.18E-07	-0.977959797	0.164068695	-5.551078809
SNX8	7:2743283	7.65E-06	0.591534012	0.120096801	4.629116367
HIBADH	7:27704186	1.66E-08	-0.765396602	0.184143667	-5.952801144
JAZF1	7:27953035	5.58E-07	0.552011896	0.1479068	5.220358713
CREB5	7:28791237	7.68E-06	-0.555060961	0.120053518	-4.62816828
CPVL	7:29188475	9.01E-26	0.949964782	0.505296832	12.66341291
PRR15	7:29654819	4.70E-06	0.704812764	0.125319547	4.742796855
LOC646762	7:29720725	8.75E-17	0.884348565	0.357463723	9.345810846
NOD1	7:30514903	1.46E-08	-0.61170559	0.185433873	-5.978347946
GGCT	7:30544747	3.66E-13	-0.811601234	0.286429109	-7.938525413
LOC401320	7:30610211	1.67E-18	-1.282200983	0.388748036	-9.992491697
GARS	7:30626393	5.90E-06	-0.781150376	0.122884433	-4.689967695
INMT	7:30784826	4.69E-06	-0.492511826	0.125332136	-4.743069207
AQP1	7:30844923	1.97E-05	-1.056677231	0.109908494	-4.402994339
LSM5	7:32517088	6.37E-09	0.700897213	0.193807373	6.143495754
FKBP9	7:32997523	1.78E-08	-0.748043566	0.183457732	-5.939207529
RP9P	7:33029281	8.09E-06	-0.666562762	0.119496386	-4.615955784
SDK1	7:3342722	6.76E-07	1.038126847	0.14589846	5.178696127
DPY19L1	7:35273116	2.40E-07	-0.525720347	0.156728766	-5.401825363
TBX20	7:35281155	3.87E-29	0.987621739	0.551584147	13.89681368
HERPUD2	7:35668920	1.19E-12	0.725378622	0.275790908	7.732284267
EEPD1	7:36261744	1.37E-06	-0.506556454	0.138433814	-5.022576897
ANLN	7:36355628	2.41E-05	-0.509095898	0.107688033	-4.352864914
STARD3NL	7:38306366	8.36E-06	0.903002171	0.119145631	4.608258469
VPS41	7:38759534	8.39E-09	0.746129905	0.191048481	6.089201884
C7orf36	7:39428542	2.17E-05	0.442815968	0.108821569	4.378496283
NCRNA00265	7:39733688	5.69E-06	-0.491909012	0.123277713	-4.698520081
INHBA	7:41814356	9.99E-06	-0.492275402	0.117222833	-4.565941959
GLI3	7:42567152	2.99E-05	0.479037947	0.105342046	4.299541907

URGCP	7:43932337	2.46E-26	-1.028084844	0.513363498	-12.86944974
POLM	7:44089052	3.69E-08	1.127631119	0.176033785	5.791527696
NUDCD3	7:44450294	3.62E-14	1.084879519	0.306841283	8.336627125
SNORA5C	7:45131499	1.44E-05	0.45268292	0.113300189	4.478956409
RNF216L	7:5013688	2.80E-16	0.800512103	0.347964169	9.153377167
RBAK	7:5079896	8.27E-09	-0.951897909	0.191197116	-6.092129815
WIP12	7:5147942	2.83E-06	0.534282081	0.130745528	4.859479808
SUMF2	7:56091622	2.40E-09	0.795611783	0.203552702	6.334462083
CHCHD2	7:56156156	1.25E-13	0.872517959	0.295961499	8.123987203
GBAS	7:56187347	2.01E-08	0.752259686	0.182201245	5.91428534
PSPH	7:56413325	1.86E-05	-0.820968922	0.110483108	-4.415914623
CCT6A	7:56419365	1.24E-05	0.585302933	0.114929922	4.515205841
CCZ1	7:5930582	7.05E-06	0.510015269	0.120973373	4.648295242
PMS2	7:6042522	6.23E-12	0.742583187	0.260612523	7.43894626
DAGLB	7:6412387	1.81E-05	0.516379965	0.110810743	4.423272098
ZNF107	7:64126536	3.46E-18	-0.814582621	0.383092745	-9.873971078
CCT6P3	7:64430992	8.66E-17	0.845550259	0.357541502	9.347393321
ZNF117	7:64464998	7.26E-07	0.49931468	0.145150338	5.163140926
CCT6P1	7:65657111	3.76E-06	-0.740789735	0.12770451	-4.79425501
ZDHHC4	7:6617247	2.82E-09	0.66223954	0.20194067	6.302953925
STAG3L4	7:66786384	1.45E-11	-0.707459778	0.252765493	-7.287528374
C7orf28B	7:6862678	6.35E-13	-0.778410038	0.281476172	-7.842419273
TYW1B	7:72234732	3.82E-16	0.925322265	0.345420741	9.102127439
TBL2	7:73128427	2.38E-06	0.889088214	0.132603036	4.899114735
CLDN3	7:73150694	1.47E-10	-0.70121812	0.230779946	-6.863151103
ABHD11	7:73178435	4.07E-10	-0.627444661	0.220951655	-6.672925119
WBSCR27	7:73265417	5.94E-21	-0.981992959	0.43074952	-10.89959911
CLIP2	7:73692733	6.83E-06	-1.059969845	0.121316603	-4.655793789
C1GALT1	7:7400594	4.16E-06	0.528703998	0.126627116	4.771043011
STAG3L2	7:74283220	1.56E-17	-0.855614223	0.371294779	-9.629100386
SRRM3	7:75505491	3.98E-06	-0.719509956	0.127085817	-4.780932303
COL28A1	7:7560298	2.50E-15	-0.837315612	0.32977566	-8.789193534
STYXL1	7:75667901	8.84E-11	1.147508978	0.235665198	6.95754037
MDH2	7:75719350	1.01E-07	-0.602990696	0.165722409	-5.58451106

POMZP3	7:76029695	1.65E-06	-0.711415959	0.136477406	-4.981307512
SRCRB4D	7:76033906	5.83E-19	0.851863334	0.396810379	10.16282408
RSBN1L	7:77822001	5.11E-06	-0.935754955	0.124418642	-4.723286636
MAGI2	7:79072356	2.58E-08	0.973328747	0.179694183	5.864472311
GLCC11	7:7967424	5.13E-11	-0.686043472	0.240849123	-7.05762066
HEATR2	7:797132	3.76E-08	0.558758543	0.175841486	5.787688168
GNAI1	7:79774364	5.36E-08	-0.637530476	0.172216798	-5.715171621
SEMA3C	7:80383605	3.14E-05	-0.600798842	0.104828488	-4.287818175
SEMA3E	7:82953598	8.85E-06	0.793200629	0.118522168	4.594559957
ICA1	7:8301583	1.32E-12	-0.753135396	0.274858409	-7.714236211
SEMA3A	7:83583757	4.11E-05	-0.457329603	0.10190312	-4.22067559
C7orf23	7:86868025	1.66E-10	-0.947223334	0.229620538	-6.840736211
SUN1	7:874639	9.87E-06	-0.665327089	0.117350103	-4.56874929
SRI	7:87856515	1.26E-26	0.956768971	0.517481366	12.97597916
STEAP4	7:87868233	1.12E-05	0.553664758	0.115967742	4.538207719
AKAP9	7:91397160	3.13E-05	0.692937716	0.104872537	4.288824477
CALCR	7:93253049	5.80E-07	-1.122328992	0.147511229	-5.212163534
CCDC132	7:93400992	3.93E-05	-0.478739892	0.102379155	-4.231644077
CASD1	7:94191088	7.44E-06	-0.887026402	0.12038944	-4.635523709
PPP1R9A	7:94506882	1.04E-05	0.470875524	0.116831877	4.557312506
DYNC1I1	7:95488017	3.96E-17	1.445388368	0.363848764	9.476109942
DLX5	7:96654349	2.52E-05	-0.539299332	0.107224348	-4.342355391
ASNS	7:97593885	4.52E-08	0.723676892	0.173959315	5.750067623
BAIAP2L1	7:97997164	6.18E-11	-0.836554669	0.239072017	-7.023319426
ATP5J2	7:99159174	3.12E-06	-1.021436325	0.129682767	-4.836733623
ZNF655	7:99161347	2.23E-05	0.884517345	0.108551362	4.372394113
TRIM4	7:99473229	4.00E-05	0.458134054	0.102206095	4.227658483
AP4M1	7:99704827	5.37E-07	-0.529506794	0.148323745	-5.228991034
PILRA	7:99905684	3.91E-17	0.991772929	0.363957953	9.478345157
PILRB	7:99905684	1.86E-21	1.089299984	0.439057812	11.08540662
PABPC1	8:101758725	5.85E-07	-0.521135125	0.147418105	-5.210233491
ANKRD46	8:101840244	2.67E-07	0.585423375	0.155620542	5.379159958
UBR5	8:103277847	3.29E-05	-0.828364917	0.104327582	-4.276365304
FZD6	8:104340086	7.48E-18	-0.823308168	0.377078305	-9.7487486

DCAF13	8:104407671	5.29E-11	-0.635440745	0.240551131	-7.051869364
XKR6	8:10626566	3.11E-14	-0.965235571	0.30816168	-8.362513587
ENY2	8:109881453	1.65E-05	0.448005372	0.111806634	4.445594538
NUDCD1	8:109890521	4.13E-17	-0.869171736	0.363515127	-9.469281494
FAM167A	8:11342986	1.63E-07	0.791876319	0.160753449	5.483845288
FDFT1	8:11660764	2.85E-15	1.082914237	0.328649947	8.766820121
CTSB	8:11720227	3.22E-11	-0.783447539	0.245255598	-7.142649523
LOC100506990	8:11795373	1.77E-06	-0.51900768	0.135710539	-4.965088631
EXT1	8:119018957	1.48E-06	0.491896639	0.137600892	5.005025578
COL14A1	8:121138921	8.14E-11	0.870060331	0.23645763	6.972843549
SNTB1	8:121926702	5.18E-19	0.891810999	0.397710425	10.18194251
FER1L6	8:125455495	1.75E-05	0.652524088	0.111183268	4.431629376
TMEM65	8:125455495	6.48E-17	1.173974482	0.359884922	9.395126317
RNF139	8:125463001	1.26E-11	0.935772308	0.254089214	7.313066075
TRMT12	8:125463001	2.84E-21	1.225839728	0.436026853	11.01735215
MTSS1	8:125882156	1.37E-13	-0.757428381	0.295165449	-8.108471479
FAM84B	8:127520375	4.38E-07	-0.894434283	0.150462308	-5.273177132
KIAA1456	8:12797362	3.68E-10	1.335163263	0.221945978	6.692195044
MYC	8:129035098	8.86E-06	-0.939023906	0.118510778	-4.59430948
ASAP1	8:131503915	5.16E-10	0.621254783	0.218638606	6.6280729
DLC1	8:13216649	2.24E-05	0.710961842	0.108495949	4.371142122
EFR3A	8:133075398	3.75E-05	0.844301389	0.102894322	4.243495318
TG	8:134624548	2.90E-05	-0.527215385	0.105705196	-4.307820909
TSNARE1	8:143483444	3.94E-10	-0.909089499	0.22128064	-6.679301538
PSCA	8:143774193	7.36E-28	0.971772493	0.534525795	13.42722761
LY6K	8:143798641	1.78E-10	0.702496353	0.228970303	6.828162572
LYNX1	8:143861450	7.33E-25	1.006773444	0.491992154	12.3308696
LY6D	8:143879927	1.98E-07	0.540908094	0.15876075	5.443292015
LY6E	8:144109260	2.04E-08	0.571860958	0.182099836	5.912272684
MAFA	8:144506133	4.48E-07	0.655185948	0.150217624	5.268129114
GSDMD	8:144642596	2.86E-10	0.6641339	0.224371875	6.73918317
NAPRT1	8:144683934	3.17E-18	0.901817039	0.383773878	9.88820541
ZNF707	8:144752348	2.08E-06	0.503313042	0.134018602	4.929218678
MAPK15	8:144816759	8.39E-06	-0.676425233	0.119099228	-4.607239669

PLEC	8:145068062	2.12E-05	-0.478060697	0.10907706	-4.384261686
KIAA1875	8:145182727	1.83E-09	-0.965038306	0.206231585	-6.38675871
CPSF1	8:145587615	7.90E-19	-0.897376874	0.394486907	-10.11356695
GPR172A	8:145609354	2.20E-05	0.457505769	0.108698705	4.375722197
VPS28	8:145630226	1.35E-07	1.246012084	0.162713004	5.523619887
RECQL4	8:145724275	2.73E-05	-0.460491154	0.106346128	-4.322410364
C8orf33	8:146184028	9.30E-07	0.560112988	0.14254039	5.108718366
ZNF252	8:146289882	3.39E-06	-0.555158427	0.128807421	-4.817959937
ZDHHC2	8:17014585	2.45E-07	-0.555633324	0.156518514	-5.397528037
CLN8	8:1707951	2.34E-12	0.780611735	0.269637148	7.613254551
VPS37A	8:17093265	9.77E-06	0.71072377	0.117465203	4.571287365
MTMR7	8:17259191	3.57E-05	0.448348717	0.103440972	4.256049577
PCM1	8:17781810	3.92E-05	-0.476908675	0.102400988	-4.232146733
PSD3	8:18805123	2.24E-05	0.692975633	0.108482383	4.370835576
SH2D4A	8:19120321	8.35E-08	-0.682888585	0.167664856	-5.62369463
LPL	8:19326443	2.11E-05	-0.53581778	0.10915218	-4.38595602
CSGALNACT1	8:19491705	1.90E-06	0.552230484	0.134956123	4.949109406
GFRA2	8:21699950	3.00E-06	0.680785447	0.130116982	4.846033261
FAM160B2	8:21955552	2.11E-09	-0.614876348	0.204832568	-6.359457064
NUDT18	8:21964224	1.08E-07	0.537739272	0.165028965	5.570500385
HR	8:21988515	1.08E-07	-0.573696926	0.16497626	-5.56943502
PHYHIP	8:22023655	4.86E-06	0.661148427	0.124972693	4.73529006
DOK2	8:22027151	1.45E-05	-0.784624196	0.113209796	-4.476941164
RHOBTB2	8:22851074	5.08E-07	-0.737056053	0.148902988	-5.240973937
TNFRSF10D	8:23021346	8.65E-09	0.771561142	0.190741248	6.083148704
TNFRSF10A	8:23082971	1.51E-10	-0.62237852	0.230537037	-6.858455414
R3HCC1	8:23277878	1.70E-09	-0.703568413	0.206935958	-6.400496698
ENTPD4	8:23318320	1.84E-15	-0.857136819	0.33231764	-8.83978235
CHMP7	8:23324877	2.98E-05	-0.485780259	0.105407317	-4.301030621
KCTD9	8:25014297	3.72E-05	-0.775370958	0.102978531	-4.245430671
DPYSL2	8:26466059	2.90E-08	-0.77020243	0.17851325	-5.840967284
EPHX2	8:27337045	6.20E-07	-1.147017494	0.146810261	-5.197628307
CLU	8:27456253	1.21E-06	0.528512748	0.139748754	5.050229843
SCARA3	8:27569737	2.07E-05	-0.568489203	0.109337267	-4.390129104

CCDC25	8:27621127	5.94E-07	-0.538747202	0.147259662	-5.206948976
ELP3	8:27947787	1.00E-14	0.862788002	0.317937215	8.554769886
FZD3	8:28401290	6.30E-06	-0.47245974	0.122177422	-4.674572835
EXTL3	8:28485405	2.38E-06	0.504572931	0.132583655	4.898701971
LEPROTL1	8:30468428	2.15E-05	0.976294021	0.10893715	4.381104997
CSMD1	8:3051445	1.28E-07	0.672656472	0.163235688	5.534212224
FUT10	8:33330688	3.72E-14	-0.812187631	0.30661571	-8.332206577
LSM1	8:38032158	7.97E-08	0.679438047	0.168152198	5.633511227
PPAPDC1B	8:38129128	1.08E-05	0.604083432	0.116422459	4.548266209
WHSC1L1	8:38259481	1.56E-06	0.630236348	0.137055959	4.993527782
FGFR1	8:38259481	2.46E-09	0.767569149	0.203294697	6.329421204
LETM2	8:38259481	5.90E-15	0.966740454	0.322485961	8.644623509
BAG4	8:38262233	4.78E-06	0.618606405	0.125135806	4.738820992
ADAM9	8:38840300	3.31E-14	-0.762028162	0.307639786	-8.352279613
IDO2	8:39793318	2.47E-09	-0.819223704	0.20324814	-6.328511492
SFRP1	8:40983185	3.10E-05	-0.985379011	0.104963459	-4.290901146
GOLGA7	8:41395401	2.38E-05	-0.550368169	0.107835816	-4.356211422
AP3M2	8:42032026	7.22E-06	-0.541958747	0.120709045	-4.642516232
POLB	8:42172311	3.83E-09	-0.746672537	0.198896083	-6.24336195
SLC20A2	8:42423190	5.40E-09	-0.635726102	0.195472145	-6.176205294
C8orf40	8:42423190	5.21E-11	-0.705440601	0.240694238	-7.054631377
MCM4	8:48885436	2.36E-05	0.720111823	0.107940614	4.358583649
ST18	8:53044347	1.53E-08	-0.790893976	0.184988653	-5.969535567
RB1CC1	8:53335091	9.53E-06	-1.189774289	0.117734226	-4.577216729
OPRK1	8:54129883	1.12E-21	-1.029322869	0.442646034	-11.16638422
RP1	8:55549936	2.91E-19	0.821483625	0.402086799	10.27520897
TGS1	8:56667916	8.09E-07	0.805850486	0.144010835	5.139410141
TMEM68	8:56755804	2.18E-06	-0.606949173	0.133510997	-4.918433654
ERICH1	8:574653	3.68E-16	-1.010025434	0.345722987	-9.108211858
UBXN2B	8:59329438	9.75E-10	-0.681987133	0.212426376	-6.507414407
SDCBP	8:59479767	3.56E-16	-0.834178126	0.346000755	-9.113804874
CA8	8:61124668	3.63E-09	0.596259258	0.199438386	6.253984787
RAB2A	8:61537523	9.83E-06	0.513612384	0.117398941	4.569826321
MTFR1	8:66511275	3.72E-13	0.737203657	0.286271075	7.935456445

PDE7A	8:66820397	2.52E-13	0.904911074	0.289749117	8.003040155
C8orf46	8:67378385	2.39E-18	-0.848291295	0.385980113	-9.934386945
ADHFE1	8:67385088	1.83E-10	0.690691788	0.228689163	6.822725546
SULF1	8:70215500	9.41E-10	-0.743958223	0.212770543	-6.514107308
LACTB2	8:71575600	2.55E-06	0.520683766	0.131841586	4.882885572
C8orf84	8:74049175	8.40E-19	0.920452068	0.394020717	10.10370055
TMEM70	8:74896654	2.01E-06	0.578097815	0.134370457	4.936688078
PI15	8:75461054	3.44E-08	1.148664864	0.17674528	5.805727184
CRISPLD1	8:75965048	5.39E-07	0.523513065	0.14827282	5.227937015
FAM164A	8:79665139	6.96E-07	-1.144601549	0.145598304	-5.172457532
FABP4	8:82393201	1.87E-06	-0.717387208	0.135148844	-4.953193656
CHMP4C	8:82659306	9.47E-14	-1.762633074	0.298429317	-8.172122203
SNX16	8:82707507	1.17E-18	-0.980862126	0.391482197	-10.0500724
ZFAND1	8:82731157	2.10E-06	-0.544206926	0.133933959	-4.927421057
LRRCC1	8:86030101	2.16E-06	0.496843575	0.133625396	4.920865241
WWP1	8:87164153	5.38E-07	0.578256894	0.148301916	5.22853924
FAM82B	8:87526192	6.85E-06	0.534107508	0.121275531	4.654896822
ERI1	8:8860894	2.82E-09	-0.616401289	0.201955634	-6.303246559
MMP16	8:89415843	7.09E-09	0.817979301	0.192733713	6.122379723
RIPK2	8:90815188	1.73E-06	0.739682935	0.135970225	4.970583575
DECR1	8:91463425	4.14E-08	-0.653554224	0.174859553	-5.768070646
NBN	8:91485578	2.90E-06	-0.498915761	0.130496316	-4.854150515
TMEM64	8:91572731	1.97E-13	-0.696134907	0.291938777	-8.045634745
C8orf83	8:94091222	4.31E-09	-1.499564776	0.19770974	-6.22011049
ESRP1	8:95651573	1.18E-14	0.765214398	0.316582479	8.528059252
TP53INP1	8:95875513	2.07E-05	0.717331131	0.10932517	4.389856441
GDF6	8:96683996	3.89E-05	0.482386281	0.102508229	4.23461522
TSPYL5	8:98289986	4.77E-07	-0.530345124	0.149570847	-5.254776304
C8orf47	8:99082842	1.32E-26	1.128789061	0.517197864	12.96861496
NIPAL2	8:99305363	4.57E-06	-0.799643078	0.125631104	-4.749534685
STK3	8:99899070	1.19E-08	-0.628322228	0.187506726	-6.019332914
TRIM14	9:100910928	1.13E-06	0.913524203	0.140462974	5.065221726
CORO2A	9:100910928	6.65E-07	0.93161287	0.146080653	5.182481382
TBC1D2	9:100967797	1.36E-14	1.326807065	0.315348228	8.503743569

GABBR2	9:101449433	1.71E-08	-1.064503417	0.183858808	-5.947156918
ANKS6	9:101491063	1.09E-05	-0.856053084	0.116236572	-4.544155778
STX17	9:102669877	1.45E-05	-0.494503384	0.113229311	-4.477376276
ERP44	9:102776091	5.46E-15	0.751579156	0.323135884	8.657483552
INVS	9:102885162	1.56E-08	0.651810041	0.184818707	5.966170883
TEX10	9:103061366	1.49E-09	0.609420503	0.208227243	6.425668607
MURC	9:103180135	8.59E-06	-0.621137145	0.11885057	-4.601778159
NIPSNAP3A	9:107545903	8.70E-09	-0.611445751	0.19068354	-6.082011571
SLC44A1	9:108059302	2.11E-07	-0.798642614	0.158095823	-5.429735713
TMEM38B	9:108447753	5.41E-16	0.842296153	0.342548239	9.044378919
CTNNAL1	9:111661150	2.31E-10	0.658943247	0.226435632	6.779130312
C9orf5	9:111664178	2.70E-10	0.779876624	0.224935767	6.750100476
C9orf6	9:112092795	4.10E-05	0.494319798	0.101915701	4.22096569
PTPN3	9:112302220	7.89E-06	0.505017798	0.119763451	4.621812018
PALM2	9:112305163	1.37E-06	-0.54456996	0.138431455	-5.022527237
AKAP2	9:112813053	8.30E-06	0.522689059	0.119218901	4.609866945
TXN	9:112983064	3.07E-06	0.555280455	0.12986598	4.840658564
PTGR1	9:114361659	3.66E-07	-0.780255289	0.152346373	-5.311982959
SUSD1	9:114936478	1.93E-08	0.610519298	0.182642285	5.9230365
ROD1	9:115035865	4.62E-06	0.48341778	0.12550528	4.746814146
HSDL2	9:115283935	2.29E-09	1.011257639	0.203988422	6.342973453
C9orf27	9:118712252	1.26E-06	-0.611476294	0.139359661	-5.042054285
CDK5RAP2	9:123301346	2.00E-06	-0.889851695	0.13441424	-4.937617182
PSMD5	9:123583192	9.73E-25	-0.96037376	0.49017329	-12.28608046
PHF19	9:123692940	1.28E-05	-0.509674579	0.114507347	-4.505821889
TRAF1	9:123695858	2.25E-06	0.82331225	0.133162222	4.911016899
STOM	9:124132880	5.20E-08	-0.584725611	0.172533626	-5.721521371
TTLL11	9:124864385	3.63E-08	0.655937464	0.176198718	5.794820217
LOC100129034	9:126919448	1.54E-06	0.682262843	0.13723321	4.997268989
SCAI	9:127943338	9.26E-06	-0.761884727	0.118034482	-4.583829688
FAM125B	9:129177893	3.76E-06	0.547078164	0.127703067	4.79422395
RPL12	9:130111697	2.33E-06	0.524856483	0.13278755	4.903043577
SLC2A8	9:130210111	1.13E-06	-0.569795651	0.140511354	-5.066236543
ZNF79	9:130233993	2.74E-06	0.691944652	0.131082967	4.866691325

LRSAM1	9:130270686	1.43E-05	-0.650745603	0.113339824	-4.479839873
PTRH1	9:130478653	2.32E-05	-0.440742724	0.108091099	-4.36198877
DNM1	9:130959778	4.16E-08	-1.327892627	0.174825179	-5.767383525
CERCAM	9:131179203	1.20E-09	0.899171109	0.210360285	6.467213662
ENDOG	9:131607921	1.26E-05	0.462064458	0.114756405	4.511353899
PHYHD1	9:131758519	2.76E-15	-0.817148908	0.32893464	-8.772476654
CRAT	9:131894340	5.48E-11	0.778984855	0.240222007	7.045517002
PTGES	9:132524152	3.81E-07	-0.638424375	0.151914566	-5.303098966
TOR1B	9:132566666	2.19E-05	-0.958813271	0.108761301	-4.377135644
LAMC3	9:133922072	3.73E-09	0.611146133	0.199156822	6.248469865
AIF1L	9:133968750	9.78E-07	-0.531237648	0.14201128	-5.097655204
GTF3C4	9:135558386	2.01E-09	0.996004918	0.205296184	6.368506774
GBGT1	9:136044393	1.37E-16	0.840867765	0.353839584	9.27220147
C9orf96	9:136276699	2.52E-05	0.708412139	0.107225621	4.342384254
SURF1	9:136311679	2.23E-07	0.53009448	0.157520159	5.417989245
NCRNA00094	9:136924500	3.67E-05	0.452468886	0.103145079	4.249256868
UBAC1	9:138818500	1.09E-05	-0.530099717	0.116270629	-4.54490901
QSOX2	9:139137204	4.48E-10	-0.637770065	0.220020414	-6.654871848
DNLZ	9:139326959	2.35E-05	1.185797989	0.107966423	4.359167749
SDCCAG3	9:139331221	1.28E-06	-0.570514093	0.139179592	-5.038268737
MAMDC4	9:139397707	3.31E-05	0.46908116	0.104237654	4.274307275
SNHG7	9:139613686	1.00E-09	-0.627124318	0.212168574	-6.502400344
PHPT1	9:139844151	1.47E-06	-0.606001539	0.137732504	-5.007800735
NOXA1	9:140318426	1.35E-10	-1.10653545	0.231646748	-6.879905337
PNPLA7	9:140444078	2.71E-16	0.819824911	0.348234325	9.158827349
C9orf37	9:140494249	4.61E-06	-0.601333746	0.125532917	-4.747411789
FREM1	9:14266763	3.24E-05	-0.838101306	0.104491484	-4.280114774
ZDHHC21	9:14671647	8.27E-08	0.796606208	0.167765298	5.625718303
TTC39B	9:15304782	6.93E-19	-1.223815595	0.395490104	-10.13481742
DENND4C	9:19249468	3.11E-08	-0.639569041	0.177779118	-5.826341666
ACER2	9:19942222	1.74E-05	-0.502377822	0.111218639	-4.432422434
KIAA1797	9:20662649	7.48E-06	-0.575157654	0.120334939	-4.63433075
CBWD1	9:208549	7.99E-10	0.791988934	0.214375898	6.545312782
KLHL9	9:21168483	4.97E-06	0.707266241	0.124717974	4.729773506

MTAP	9:21804693	7.39E-06	-0.492145184	0.120458844	-4.637042639
VLDLR	9:2624433	3.39E-07	-0.717632462	0.153130917	-5.328109352
MOBKL2B	9:27447283	7.64E-06	-0.480478417	0.120108878	-4.629380867
B4GALT1	9:32983371	3.65E-05	-0.444811622	0.103196302	-4.250433228
AQP3	9:33431512	2.30E-18	1.145513887	0.386287745	9.940835652
NUDT2	9:34316043	1.03E-19	0.848209159	0.409889942	10.44279971
KIAA1161	9:34348743	3.95E-08	0.702256364	0.175354722	5.777965847
C9orf25	9:34390330	1.36E-06	-0.574011773	0.138521807	-5.024429491
KIAA1539	9:35114394	1.57E-06	0.52979071	0.137003834	4.992427354
UNC13B	9:35153435	4.28E-08	-0.572928587	0.174539243	-5.761667011
TMEM8B	9:35845929	1.70E-08	0.889668529	0.183950603	5.948975908
RNF38	9:36414837	2.38E-06	-0.776565897	0.132586148	-4.898755068
GRHPR	9:37420311	1.60E-16	0.899326451	0.352544587	9.245958048
POLR1E	9:37514867	1.12E-07	-0.695549728	0.164649266	-5.562823706
FRMPD1	9:37584687	3.16E-19	-1.136221155	0.401464446	-10.26191456
FBXO10	9:37593744	1.29E-05	-0.63078713	0.114477788	-4.505165101
SHB	9:38096639	6.09E-06	0.545919342	0.122535219	4.682366935
GLIS3	9:4261758	8.82E-06	-0.683964473	0.118566679	-4.595538639
WASH1	9:46587	6.16E-08	-0.790053817	0.170797228	-5.68669403
C9orf68	9:4676745	5.00E-07	0.548750384	0.149067087	5.24436666
AK3	9:4740456	1.74E-05	-0.961167412	0.111259144	-4.433330521
C9orf46	9:5381870	3.85E-08	-0.663603287	0.175616817	-5.78320138
CD274	9:5450529	3.50E-10	-1.179156679	0.222412264	-6.701229489
PDCD1LG2	9:5498964	5.80E-06	-0.57457264	0.123074343	-4.694098529
ERMP1	9:5944012	7.85E-07	-0.609019456	0.144323822	-5.145932866
KANK1	9:681645	1.93E-05	0.450286999	0.110135509	4.408101332
TJP2	9:71697916	2.16E-06	0.535203058	0.133635591	4.921081922
APBA1	9:72255620	2.18E-06	0.637011443	0.133498832	4.918175054
TMC1	9:75077730	2.69E-14	0.720618764	0.309421388	8.387227616
ZFAND5	9:75092767	3.17E-07	0.529903516	0.153830822	5.342480012
C9orf95	9:77707300	8.20E-21	-0.920339408	0.428425641	-10.84803766
PCSK5	9:78919387	4.05E-12	-0.976555197	0.264587418	-7.515690593
VPS13A	9:79748931	4.34E-07	-0.515729505	0.150539005	-5.274759053
GNA14	9:80360302	4.31E-06	0.544233446	0.126243347	4.762761441

GNAQ	9:80649991	8.28E-06	0.845497136	0.119244997	4.610439752
PSAT1	9:81162127	3.81E-05	0.821228854	0.102709173	4.239238288
TLE4	9:82394334	8.46E-06	0.437639067	0.119016536	4.605423791
TLE1	9:84432894	4.37E-06	0.823183618	0.126098072	4.7596246
C9orf64	9:86563495	2.08E-14	0.786799743	0.311658825	8.431166501
ZCCHC6	9:88978867	8.51E-22	0.990518011	0.444561142	11.20978921
CTSL1	9:90345608	3.31E-07	-0.547739873	0.15339455	-5.333524092
C9orf47	9:91521615	1.57E-07	0.565276232	0.161154297	5.491989881
S1PR3	9:91521618	1.57E-14	0.781360946	0.314069324	8.478567319
SEMA4D	9:91984571	2.57E-05	-0.545272105	0.10698516	-4.336928467
DIRAS2	9:92889306	2.19E-05	-0.867580568	0.108719136	-4.376183578
SYK	9:93567472	1.86E-09	-0.625656646	0.206086821	-6.383934617
OGN	9:95107221	1.60E-05	-0.94925936	0.112133109	-4.452898822
IPPK	9:95380726	9.69E-12	-0.795598813	0.256505365	-7.359683421
WNK2	9:95960737	3.06E-06	0.709273299	0.129891442	4.841203917
C9orf129	9:96293123	1.39E-05	0.630656915	0.113684222	4.487512629
PHF2	9:96381795	1.47E-06	-0.885635405	0.137704286	-5.007205794
HIATL1	9:97265325	2.93E-05	0.898866275	0.105591764	4.305235901
FBP1	9:97407997	1.39E-07	0.669844332	0.162371182	5.516688946
C9orf3	9:97678911	4.10E-08	-0.579853716	0.174959949	-5.770077306
C9orf130	9:98553263	1.15E-19	-0.880269785	0.409042985	-10.4245269
HABP4	9:99095223	5.39E-06	0.655634167	0.123853939	4.711036632
C9orf21	9:99201368	2.61E-05	-0.707066448	0.106834643	-4.333511406
CTSL2	9:99811261	1.15E-08	0.986520114	0.187849356	6.026100706