

Supplementary Table 4: Differentially expressed genes between GR I and GR II/III meningiomas

Gene	baseMean	log2FoldCha	pvalue	padj
SNORA54	50.7952454	3.19328883	2.79E-14	4.92E-10
FOXC2	1389.28921	-2.0191834	3.32E-13	2.92E-09
KIF18B	81.0640303	-2.6077351	3.33E-12	1.95E-08
ADCY5	4074.23155	-1.387015	1.30E-10	5.49E-07
HJURP	59.5483004	-2.2349815	1.56E-10	5.49E-07
FAM111B	102.093607	-2.2998221	3.01E-10	8.82E-07
CDT1	58.4799344	-2.1300611	4.79E-10	1.06E-06
SAPCD2	34.0228708	-1.9902187	4.83E-10	1.06E-06
MKI67	845.240137	-2.0930668	6.10E-10	1.19E-06
CYB5R4	145.174574	0.88664356	1.54E-09	2.70E-06
RPL21	3.5798149	2.97407395	2.58E-09	4.13E-06
MYBL2	67.1024003	-2.4627485	4.51E-09	6.61E-06
H2AFX	338.080292	-1.4034867	5.12E-09	6.93E-06
FOXO1	166.438157	-2.1536478	5.82E-09	6.95E-06
TONSL	134.679437	-1.5091557	5.93E-09	6.95E-06
SLC12A1	40.2181579	2.8337392	8.12E-09	8.93E-06
CIT	380.131202	-1.8608533	1.32E-08	1.37E-05
GSG2	18.6302025	-2.040642	1.89E-08	1.81E-05
INMT	2897.36131	2.85688335	1.95E-08	1.81E-05
IQGAP3	201.292766	-2.0213912	2.32E-08	2.04E-05
CENPF	562.612635	-1.8298353	2.49E-08	2.08E-05
LRFN1	73.5216663	-1.4388648	3.10E-08	2.48E-05
CDCA8	29.5819194	-1.5510073	3.89E-08	2.98E-05
SAMD5	366.169468	2.71600725	4.24E-08	3.01E-05
TROAP	60.5998905	-2.1361303	4.28E-08	3.01E-05
GATA3	37.2947269	-2.4900474	5.40E-08	3.61E-05
MEX3A	58.6719381	-2.1564204	5.54E-08	3.61E-05
XKR5	15.3259131	-2.3931121	6.41E-08	4.03E-05
NCAPH	60.1493133	-1.6773279	8.08E-08	4.58E-05
TACC3	246.1329	-1.3366706	7.92E-08	4.58E-05
TUBB4A	26.9385879	-2.7239338	8.00E-08	4.58E-05
DHRS9	4.24834164	2.49258227	8.80E-08	4.84E-05
TOP2A	732.282545	-1.7132954	9.15E-08	4.88E-05
BIRC5	92.8476479	-2.0314323	1.08E-07	5.55E-05
TK1	128.862046	-1.9470042	1.11E-07	5.55E-05
LINC00312	16.5307872	2.35238172	1.29E-07	6.27E-05
SNORA48	389.539786	1.43209678	1.32E-07	6.27E-05
HMMR	68.5502586	-1.8065463	1.55E-07	7.17E-05
FAM57B	2.99769318	-2.6544397	1.76E-07	7.75E-05
RABGAP1L	2205.84068	1.02370006	1.73E-07	7.75E-05
DHCR7	568.394165	-1.5367659	2.15E-07	9.22E-05
EXO1	42.4647914	-1.9403281	2.31E-07	9.68E-05
HES7	9.36868329	-1.8864776	2.68E-07	0.00010975
CKAP2L	68.3373256	-1.8879325	3.16E-07	0.00011346
CKMT1B	11.953546	-2.5984347	3.00E-07	0.00011346
FASN	2898.41727	-1.2648917	2.96E-07	0.00011346
SLC27A2	15.8595456	2.453663	3.11E-07	0.00011346

SNAP23	772.171453	0.47721192	3.08E-07	0.00011346
WDR62	59.2474009	-1.6448774	2.94E-07	0.00011346
ASF1B	63.2437152	-1.5293387	3.27E-07	0.00011499
RRM2	178.652762	-1.9549914	3.75E-07	0.00012918
E2F8	17.1744304	-2.1115437	3.87E-07	0.00013081
HIST1H2BO	105.534224	-1.6126726	4.41E-07	0.00014641
LMCD1	155.889899	2.22831354	4.57E-07	0.00014901
HIST1H2AL	96.4948165	-1.5557106	4.84E-07	0.00015493
ATP2B2	114.190322	-2.5454491	5.60E-07	0.00017116
ATP6V0C	983.993406	-0.9302583	5.48E-07	0.00017116
SGOL1	34.2664882	-1.7740314	5.64E-07	0.00017116
C9orf172	19.9189371	-2.2023237	5.76E-07	0.00017187
NUSAP1	264.027404	-1.64722	6.50E-07	0.00019054
E2F7	42.8751019	-1.7744777	6.95E-07	0.00020051
ARHGEF39	50.3718679	-1.8967444	7.87E-07	0.0002122
ASPM	332.709337	-1.9462479	7.91E-07	0.0002122
DTL	145.009427	-1.706446	8.08E-07	0.0002122
NNMT	196.758136	2.26694158	8.07E-07	0.0002122
SPC25	19.8197849	-2.0919087	7.75E-07	0.0002122
SPP1	3548.40948	-2.1503879	7.70E-07	0.0002122
SV2A	205.711431	-2.2793344	8.41E-07	0.00021744
MYO7B	12.5469678	2.25994347	9.07E-07	0.00023134
ZNF777	239.322581	-0.5801578	1.12E-06	0.00028178
HNRNPUL2	568.168082	-0.6195489	1.15E-06	0.00028376
PIK3R2	1089.03598	-0.743256	1.17E-06	0.00028502
CD48	36.3051201	1.83646959	1.24E-06	0.00029494
MRPL12	298.694681	-1.3480755	1.23E-06	0.00029494
BUB1	103.226377	-1.6509057	1.39E-06	0.000321
BUB1B	114.891189	-1.7124025	1.37E-06	0.000321
CCDC106	223.61957	-0.7673853	1.49E-06	0.00034149
GVINP1	136.640853	1.21231104	1.56E-06	0.00034667
MTRNR2L9	38.3214333	1.49372369	1.55E-06	0.00034667
MYCL	73.6429696	1.95419987	1.84E-06	0.00040427
DDX60	674.970675	0.89307928	1.87E-06	0.00040629
PDE1C	104.418305	2.25029012	2.03E-06	0.00043498
SNORA68	57.1790241	1.5811485	2.05E-06	0.00043498
UPK3B	149.517152	-2.1201051	2.36E-06	0.00049384
MELK	84.1834083	-1.7930083	2.43E-06	0.00050356
CHRM1	96.566855	-2.3320687	2.86E-06	0.00058036
KIF20A	96.8379339	-1.7149335	2.87E-06	0.00058036
LINC00649	8.94301587	2.20981188	3.10E-06	0.00061887
CCNB2	60.7162711	-1.8210265	3.31E-06	0.0006539
HRCT1	84.7859688	-1.6046925	3.37E-06	0.00065854
CEP55	65.3702194	-1.6929429	3.47E-06	0.00066417
RECQL4	88.9841249	-1.4096165	3.45E-06	0.00066417
ANLN	275.450442	-1.6103234	3.61E-06	0.00068309
LRCH4	1261.32814	-0.7584794	3.77E-06	0.00070465
BCAR3	236.926807	1.8897876	4.21E-06	0.0007804
FLG	16.1383328	-2.230276	4.39E-06	0.00079535
TIMELESS	356.9589	-0.8792598	4.37E-06	0.00079535

DPP6	121.779828	-2.3300298	4.94E-06	0.00086082
ESPMP	1.71492126	-2.3367279	4.99E-06	0.00086082
KIF4A	66.8081293	-1.7436639	4.94E-06	0.00086082
OR7E2P	12.1334293	2.20803651	4.97E-06	0.00086082
PLK1	63.9920114	-1.5336953	4.89E-06	0.00086082
APLP2	19398.266	-1.0494163	5.20E-06	0.00088094
PAX2	7.79189112	2.31099709	5.24E-06	0.00088094
TMEM223	133.900336	-0.7571325	5.26E-06	0.00088094
FAM83D	29.7931544	-1.8746654	5.54E-06	0.00091926
NUF2	32.885971	-1.503286	5.74E-06	0.0009432
CDCA5	60.6547559	-1.6246869	5.88E-06	0.00095535
UBAP2L	2312.57921	-0.5555536	5.92E-06	0.00095535
OLIG1	11.3046264	-2.2795658	6.01E-06	0.00095962
PAQR4	77.5044507	-1.281895	6.06E-06	0.00095962
CDC20	33.7788291	-1.6728236	6.36E-06	0.00098891
IRF4	10.4847206	1.62332017	6.40E-06	0.00098891
NEK2	28.2347138	-1.6526384	6.41E-06	0.00098891
LOC1019269	1.68356295	2.31201506	6.86E-06	0.00104857
SNORA46	3.7947037	2.11791035	6.97E-06	0.00105762
HIST1H2AI	113.200208	-1.3957637	7.10E-06	0.00106722
CENPA	13.1785921	-2.0271622	7.72E-06	0.00113524
COG8	375.945812	-0.5479158	7.74E-06	0.00113524
NCBP2-AS2	141.447313	-0.6433662	7.66E-06	0.00113524
GLI4	97.8714642	-0.8516818	8.00E-06	0.00116266
SLC31A2	257.075902	1.16184994	8.11E-06	0.00116985
STARD5	43.2399513	1.86674065	8.26E-06	0.00118169
BST2	192.297066	1.18187489	8.39E-06	0.00118814
CDC25A	61.5241314	-1.3906176	8.53E-06	0.00118814
KIAA1161	329.040779	-1.7524767	8.58E-06	0.00118814
LIX1	28.392782	-2.122695	8.51E-06	0.00118814
CCDC85B	93.9505045	-0.7352903	9.11E-06	0.00125177
UBE2C	80.7483119	-1.7938763	9.25E-06	0.00126182
KIF14	85.8147612	-1.6000775	9.59E-06	0.00129825
HIST1H2AJ	80.8144191	-1.5149477	9.81E-06	0.00131777
RRN3P2	59.9623176	1.54163806	1.04E-05	0.00138695
SLC29A1	1198.71716	1.36193672	1.05E-05	0.00138695
ZDHHC23	67.7081576	-1.836697	1.06E-05	0.00138695
C19orf54	143.740222	-0.910079	1.10E-05	0.00141286
CRTAM	6.68232808	1.89041712	1.10E-05	0.00141286
KIF11	199.972869	-1.4469048	1.11E-05	0.00141286
MYPOP	57.3529436	-0.7552698	1.10E-05	0.00141286
C10orf32	344.754718	0.93756411	1.15E-05	0.0014257
EZH2	175.620944	-1.1671562	1.14E-05	0.0014257
HIST1H3B	254.45393	-1.4854918	1.14E-05	0.0014257
PPP1R14B	555.529416	-1.0711047	1.13E-05	0.0014257
DRD2	21.0921337	2.23908006	1.22E-05	0.00150179
RPL10	5775.59675	0.69326202	1.29E-05	0.00156322
SPRED1	1436.66948	0.45045419	1.29E-05	0.00156322
EHMT1	1085.72985	-0.5100029	1.37E-05	0.0016343
TYRP1	6.20261738	-2.2314795	1.36E-05	0.0016343

CDR2L	217.311967	-1.1704891	1.41E-05	0.001654
CEACAM21	14.2185924	1.42545736	1.40E-05	0.001654
RIPK3	25.6285416	1.27704678	1.40E-05	0.001654
GLDC	228.420038	-1.6471388	1.44E-05	0.00167206
ALAS2	7.81130824	1.95004045	1.47E-05	0.00169571
RGS6	62.5657692	2.18770353	1.48E-05	0.00169665
OGFRL1	1104.58312	0.92140738	1.49E-05	0.00170447
ARRDC1	309.173779	-0.6320918	1.53E-05	0.00173698
OTX1	7.63324393	-2.1559024	1.54E-05	0.00173774
BAALC	101.365098	-2.0829846	1.64E-05	0.00183854
DAAM2	389.514326	1.57110657	1.72E-05	0.00185482
FTH1	12588.9789	-0.9131303	1.71E-05	0.00185482
PKMYT1	29.4323405	-1.6506085	1.70E-05	0.00185482
SNORA81	311.790334	-0.9368512	1.69E-05	0.00185482
ST8SIA1	126.725692	2.16872629	1.70E-05	0.00185482
UST	684.19328	1.14460366	1.69E-05	0.00185482
GREM2	11.4756329	2.20562936	1.75E-05	0.00186797
PRRC2C	5930.24806	-0.4488682	1.75E-05	0.00186797
CABLES2	239.12275	-1.0638635	1.78E-05	0.00188511
NKD1	855.781993	2.13780194	1.79E-05	0.00188615
TEKT3	9.345895	1.63047831	1.82E-05	0.00190158
NCAM2	29.5336792	-1.953319	1.95E-05	0.00202662
FAM46A	921.050535	1.21512577	1.96E-05	0.00203106
PCSK1N	329.989338	-1.681595	2.01E-05	0.00205759
TRIP13	50.1865887	-1.568866	2.02E-05	0.00205759
VIT	369.803382	2.12292305	2.02E-05	0.00205759
KIF13B	702.11344	0.78673211	2.11E-05	0.00213413
GPR123	2.86475031	-2.1168612	2.14E-05	0.00215496
CKMT1A	10.4537221	-2.1677327	2.25E-05	0.00219097
CKS2	73.269701	-1.3273956	2.25E-05	0.00219097
IL18R1	51.8857673	1.46740379	2.24E-05	0.00219097
JPH1	61.1368504	-1.9588885	2.23E-05	0.00219097
NBPF25P	23.6781919	1.03998409	2.19E-05	0.00219097
RNF214	414.411754	-0.5110835	2.23E-05	0.00219097
PDLIM5	2922.47757	0.81620545	2.32E-05	0.0022304
PM20D2	266.454432	1.11244589	2.31E-05	0.0022304
CDH1	7416.46071	-1.1337317	2.34E-05	0.00223276
PRF1	20.4740786	1.46142177	2.35E-05	0.00223538
MAG	22.9844483	-2.1658099	2.38E-05	0.00225146
RSPO3	265.405679	2.16357322	2.43E-05	0.00228698
AKT1S1	520.582512	-0.6929408	2.46E-05	0.00229923
FAM180B	36.3400992	2.16366104	2.47E-05	0.00229923
EBP	194.377924	-0.8935254	2.52E-05	0.0023205
MME	102.358415	2.02086911	2.51E-05	0.0023205
CD300LF	11.1613717	1.64242723	2.55E-05	0.00233344
AGR2	339.096519	-2.1616941	2.60E-05	0.00237295
IGSF5	17.4725539	-1.9063363	2.63E-05	0.00237689
NEFM	58.9800755	-2.1186521	2.63E-05	0.00237689
TFG	1377.68901	-0.6463344	2.67E-05	0.00239888
CCDC146	94.7600199	1.07388294	2.69E-05	0.00240177

CNIH2	9.57425482	-1.6034805	2.70E-05	0.00240281
OAZ1	2656.88785	0.49834615	2.73E-05	0.00240968
C11orf30	598.755316	-0.4375495	2.77E-05	0.0024404
AKAP7	153.797385	1.13857575	2.83E-05	0.00246469
FAM127B	346.929004	-0.7635246	2.86E-05	0.00246469
GPR171	4.82824115	1.7508721	2.85E-05	0.00246469
PID1	245.669167	1.86673188	2.85E-05	0.00246469
CRAT	780.023758	-0.6689415	2.89E-05	0.00248053
KIF5C	121.516293	-1.856606	2.91E-05	0.00248626
DNAJC30	263.666376	-0.6416231	2.95E-05	0.00250739
ESPL1	83.4718255	-1.4882705	2.96E-05	0.00250739
MARC2	142.103579	-1.1762083	3.02E-05	0.00254377
COMMD10	212.520962	0.82849081	3.12E-05	0.0025888
DSE	2115.92783	0.91974067	3.11E-05	0.0025888
HIST1H3C	133.160862	-1.3711253	3.12E-05	0.0025888
LYST	1465.70295	0.83722814	3.20E-05	0.00264438
CXCR6	11.4929546	1.79993447	3.23E-05	0.0026586
AURKB	23.7697381	-1.5154242	3.31E-05	0.00268179
GIT1	1233.59455	-0.7963723	3.29E-05	0.00268179
SNRNP200	5330.60279	-0.5725524	3.28E-05	0.00268179
ALG3	270.503864	-0.7953828	3.33E-05	0.00268937
MIR3648	145.903221	-2.0079559	3.36E-05	0.00270218
KIAA0101	51.3030554	-1.6630666	3.47E-05	0.0027759
MEX3B	56.1812173	-1.6379148	3.52E-05	0.00279989
CCDC126	176.472019	1.24320283	3.64E-05	0.00287329
MCM10	35.7492435	-1.5727973	3.64E-05	0.00287329
PVALB	93.3821155	-2.0700755	3.66E-05	0.00287329
TGFB3	560.995495	1.36145479	3.68E-05	0.00287786
COL8A2	1112.8174	1.66944671	3.73E-05	0.00290669
UBXN7	835.164915	-0.3377697	3.96E-05	0.00306887
FCER1A	15.5023216	2.00904294	4.02E-05	0.00309823
LOC1005073	167.337807	-1.8338699	4.15E-05	0.00317529
RHOD	251.7704	-0.8276442	4.19E-05	0.00317529
SOX9	130.471956	-2.0449262	4.17E-05	0.00317529
SYT10	3.96003044	-2.0930193	4.14E-05	0.00317529
TBC1D32	267.697258	0.85650066	4.33E-05	0.0032719
ZNF865	271.36676	-0.880526	4.40E-05	0.00330995
TEX41	6.43724474	1.7183386	4.43E-05	0.00331672
SPAG5	182.366099	-1.2178437	4.46E-05	0.00332383
CDCA3	27.9288671	-1.3410722	4.57E-05	0.003391
POLQ	80.5866274	-1.4616995	4.64E-05	0.00342727
ATG9A	953.023008	-0.6125039	4.70E-05	0.00345653
KCNA6	73.2853661	1.98570697	4.78E-05	0.00350091
PDHA1	836.588917	-0.6586191	4.86E-05	0.00354864
FST	29.3481701	2.03006208	4.90E-05	0.003563
PRKAA2	559.486348	1.14580665	5.01E-05	0.00362948
UBQLN4	435.830843	-0.6680334	5.05E-05	0.00364147
BVES-AS1	2.39489742	2.0377413	5.13E-05	0.0036844
CHCHD10	119.93423	-1.5460665	5.17E-05	0.00369444
ELOVL6	288.436023	-1.0103559	5.23E-05	0.00372554

NBPF9	52.2523015	0.98087403	5.34E-05	0.00378535
SLC28A1	4.29683427	1.99865023	5.41E-05	0.0038185
SLC25A5	1613.91431	-0.7272247	5.47E-05	0.00384905
CPQ	1355.16841	0.83559376	5.75E-05	0.0040318
UHRF1	99.6174098	-1.2521605	5.84E-05	0.00407947
RAD51	33.5782143	-1.4630289	5.93E-05	0.00410971
TIMP2	13394.5311	-1.0407824	5.93E-05	0.00410971
TMEM242	167.470984	0.6722053	6.06E-05	0.0041782
FBN3	95.2977436	-1.8891479	6.09E-05	0.00418431
CLEC16A	1044.04424	-0.7290124	6.12E-05	0.00418953
PCLO	410.065128	-1.4863789	6.19E-05	0.00422027
ZDHHC12	138.678433	-0.8717801	6.28E-05	0.00426319
CENPU	87.1856044	-1.2386323	6.41E-05	0.00429078
LZIC	201.633309	0.65786555	6.42E-05	0.00429078
MACC1	45.4093662	1.39139746	6.35E-05	0.00429078
TMEM37	319.807196	-1.246242	6.40E-05	0.00429078
CASC5	198.434647	-1.3458046	6.57E-05	0.00431964
ESRRG	26.8381243	-2.0361324	6.52E-05	0.00431964
MEN1	371.550326	-0.6144141	6.50E-05	0.00431964
MYRF	52.9594018	-1.9296068	6.58E-05	0.00431964
PRAF2	265.261773	-0.7559087	6.57E-05	0.00431964
WNT6	865.164438	-1.5158792	6.74E-05	0.00440996
TMEM140	127.707968	0.90823712	7.26E-05	0.00472848
C16orf59	15.7295677	-1.5462018	7.33E-05	0.00475944
ZNF462	1318.09156	-0.5324813	7.39E-05	0.00477946
THBS1	3272.91554	1.83427492	7.46E-05	0.00480743
INCENP	270.370027	-0.6101697	7.57E-05	0.00485875
COX5A	541.80078	-1.0990473	7.67E-05	0.00489102
WDR66	26.7580177	1.36008424	7.65E-05	0.00489102
BCAN	5.73249389	-2.0137073	7.89E-05	0.00497323
KATNA1	125.783625	0.58850767	7.84E-05	0.00497323
ZNF367	182.280284	-1.1346577	7.87E-05	0.00497323
DAPP1	34.2941552	1.48317886	8.11E-05	0.00507165
FBXO41	423.202272	-0.9473254	8.12E-05	0.00507165
FGF7	229.605366	1.96699608	8.13E-05	0.00507165
CCR2	19.7584521	1.66502375	8.27E-05	0.00512761
PIWIL2	12.5818086	1.6059227	8.31E-05	0.00512761
SESN1	1445.00515	1.15608296	8.28E-05	0.00512761
SLC27A6	59.0761017	-2.0045168	8.40E-05	0.00516429
FLJ22184	16.1699142	-1.6502576	8.45E-05	0.00517647
SLC52A3	23.9363324	-1.9598946	8.48E-05	0.00517772
ZNF136	281.106161	0.73730799	8.51E-05	0.00517802
UFSP1	18.8595752	-1.2600169	8.65E-05	0.00524924
TMEM71	31.5320569	1.39575805	8.70E-05	0.00526104
DLAT	670.595031	-0.688207	8.87E-05	0.00534384
CCDC62	7.42325815	1.3298651	9.08E-05	0.00544817
TGIF1	328.288533	0.7988463	9.23E-05	0.00552108
LOC1002890	166.362292	-1.2125769	9.32E-05	0.00555972
COQ9	710.198822	-1.0236323	9.49E-05	0.0056023
FAM222A	17.933353	-1.2529535	9.52E-05	0.0056023

RTP4	28.9686581	1.35479415	9.49E-05	0.0056023
SMG7	1802.67069	-0.7283352	9.47E-05	0.0056023
LRFN4	213.521887	-1.4276789	9.57E-05	0.00560963
C9orf72	243.181113	0.8559946	9.73E-05	0.00566854
UBE2Z	1700.62018	-0.4014566	9.73E-05	0.00566854
NCAPG	117.069425	-1.4571243	9.82E-05	0.00567946
ZMYND19	146.160019	-0.6512032	9.80E-05	0.00567946
APBB2	3408.65417	0.9745954	9.93E-05	0.00568737
FABP7	5.08655889	-1.9976343	9.92E-05	0.00568737
RSAD2	117.875292	1.18931741	9.91E-05	0.00568737
TEX36	11.7558724	-1.7025179	9.97E-05	0.00569189
AGBL1	65.0639658	-1.984122	0.00010048	0.00572
LMNB1	198.243813	-1.074809	0.00010111	0.00573511
PSKH1	714.493095	-0.6341934	0.0001014	0.00573511
SYT1	25.6917807	-1.874263	0.00010257	0.00578257
FAM189B	392.032837	-1.0076961	0.00010426	0.00585924
BANF1	457.605743	-0.8724491	0.00010643	0.00590199
HCN2	58.7038159	-1.6339585	0.00010559	0.00590199
LOC1005075	72.6661634	1.20703012	0.00010612	0.00590199
MAP3K5	596.352752	1.19285589	0.00010651	0.00590199
TAF1A-AS1	15.1303148	-1.1459154	0.0001067	0.00590199
LOC1006535	102.166809	-1.0523943	0.00011022	0.00607754
PIGR	16.6089573	1.97642802	0.00011063	0.00608097
PCYT1A	502.460279	-0.3982214	0.00011369	0.00622966
PRR14	291.323827	-0.5740449	0.00011438	0.0062482
BST1	120.344152	1.57565974	0.00011586	0.00630101
PROC	2.28232483	-1.9656599	0.00011673	0.00630101
SERPINI1	55.6598327	1.30349696	0.00011608	0.00630101
ZNF672	319.863488	-0.7152926	0.00011678	0.00630101
GIN1	121.185957	0.65654779	0.00011735	0.00631232
SLC6A6	881.456994	1.35270165	0.00011822	0.00633966
ZNF620	63.0210166	-0.744258	0.00011885	0.00635428
LOC1005068	12.8711807	1.15633382	0.00011922	0.00635498
TESK1	397.669135	-0.6949335	0.00012155	0.00645576
ZNF467	170.797125	-1.1739981	0.00012185	0.00645576
FAM105A	924.117731	1.12593947	0.0001227	0.00646222
UBALD2	229.608995	-0.588905	0.00012265	0.00646222
CXorf22	23.6285936	-1.915154	0.00012598	0.00654264
HAPLN4	55.9645956	-1.7602596	0.00012609	0.00654264
IMMT	1231.05069	-0.5854557	0.00012464	0.00654264
SQRDL	489.363498	0.75143209	0.00012505	0.00654264
TBC1D17	549.955146	-0.4108706	0.00012552	0.00654264
NDUFA8	318.248749	-0.7156648	0.00012658	0.00654887
CCNYL1	509.464347	-0.6941949	0.00012966	0.00668807
STK31	20.2289013	1.4242463	0.00013011	0.00669173
POLI	395.978981	0.79503536	0.00013067	0.0067009
TPI1P2	14.7744256	-1.2494453	0.0001318	0.00673935
DENND5B	451.472325	0.81267986	0.00013291	0.00675681
HSD11B1	15.5189228	1.9623083	0.00013271	0.00675681
NAV1	4831.43604	-1.2462141	0.00013357	0.00677104

GTF2E1	192.393595	-0.4906111	0.00013618	0.00686408
KCNS2	4.20395567	-1.942567	0.00013619	0.00686408
C11orf84	224.346657	-0.6133481	0.00013677	0.00687375
AP1S2	253.222327	1.03878608	0.00013879	0.00693549
FSIP2	107.839853	1.91431437	0.00013852	0.00693549
USP45	246.585227	0.66309201	0.00014032	0.00699203
TEAD2	301.693732	-0.9371278	0.00014096	0.00700415
PRRX1	1829.93048	1.69979064	0.00014231	0.00705153
ECT2L	6.37056898	1.67400408	0.00014552	0.0071677
HPR	24.2702459	1.86315386	0.00014588	0.0071677
TMEM63C	4.77884541	-1.8168387	0.00014573	0.0071677
PMS2P5	110.465706	-0.6068234	0.00014722	0.0072133
AIM1	130.762604	1.13108009	0.0001542	0.00721505
ARHGAP23	2179.87123	-0.6636683	0.00014962	0.00721505
CGN	32.566676	-1.599882	0.0001528	0.00721505
EPHA3	212.681755	-1.7319762	0.00015293	0.00721505
FBRSL1	576.01492	-0.7556971	0.00015346	0.00721505
FOXK2	832.222547	-0.5984467	0.0001519	0.00721505
INTU	289.605265	0.95293486	0.00015423	0.00721505
KCNE1	17.2076683	1.67783481	0.00014917	0.00721505
LY75	28.050055	1.34732875	0.00015039	0.00721505
PLSCR1	281.480473	0.5780889	0.00014938	0.00721505
PPP5C	761.089928	-0.4413249	0.00015054	0.00721505
PRCC	557.396445	-0.4922176	0.00015258	0.00721505
PRR11	145.367974	-1.3187197	0.00015357	0.00721505
RMI1	99.4802141	-0.6986817	0.00014902	0.00721505
SMAD6	448.617935	-1.2271272	0.00015243	0.00721505
TNC	402.402724	1.8493607	0.0001531	0.00721505
ZNF812	88.9351678	1.66853239	0.00015282	0.00721505
ECH1	763.27479	-0.650323	0.00015695	0.00730375
RAB31	1181.12518	1.01819327	0.00015684	0.00730375
OLFM1	147.066869	-1.6067274	0.00015836	0.00734991
IL33	41.443055	1.72790304	0.00015951	0.00738361
ATP1A3	49.6906851	-1.8501377	0.0001602	0.00739597
ZC3H12D	67.2415498	1.13460863	0.0001616	0.00744135
CLPTM1	1457.57449	-0.4755516	0.00016435	0.00752828
EP400	2272.55801	-0.5860004	0.0001643	0.00752828
TTK	44.4089323	-1.3183532	0.00016547	0.00756007
CLEC4A	39.4387689	1.05547806	0.00016598	0.00756378
SIDT1	114.276164	-1.668502	0.00016823	0.00764629
C4orf19	255.926909	-1.5905084	0.00017381	0.00787947
SYNGR3	35.0597034	-1.92422	0.0001759	0.00795387
CD6	13.1443165	1.4179925	0.00017715	0.00798904
NR3C1	1953.92573	0.75448223	0.00017758	0.00798904
CDC6	84.1473931	-1.2194748	0.00017942	0.00803485
MMP15	417.196123	-1.6528548	0.00017952	0.00803485
MYLK2	3.27862054	-1.7925107	0.00018029	0.00804883
ATCAY	3.36818337	-1.9233803	0.00018099	0.00805993
APOL1	530.621411	1.03705088	0.00018567	0.00820012
PBK	38.0584567	-1.5696181	0.00018509	0.00820012

PLS1	123.938268	1.53431272	0.00018541	0.00820012
SETD1A	667.888907	-0.6144524	0.00018601	0.00820012
CCR7	7.85244231	1.51777018	0.00018808	0.00820907
KBTBD12	10.1854184	1.78735729	0.0001876	0.00820907
LRFN3	103.098441	-0.7143417	0.00018675	0.00820907
TRAP1	864.544188	-0.7541584	0.00018786	0.00820907
FANCA	126.550092	-1.1825617	0.00019036	0.00826779
PPP2R3C	157.863317	0.77367472	0.00018992	0.00826779
EIF4A2	3952.07585	0.61597081	0.00019099	0.00827445
SNORD15A	3.9619909	1.56992838	0.00019311	0.00832553
SYTL2	223.194879	1.34702697	0.0001931	0.00832553
FOXO2-AS1	518.977041	-0.7247344	0.00019811	0.00849951
IFI44L	211.654678	1.19171858	0.00019786	0.00849951
CNTD2	10.4942447	-1.646522	0.0002034	0.00864212
IDUA	342.406851	-0.972191	0.00020297	0.00864212
LOC1001315	562.580351	0.76526778	0.00020335	0.00864212
NPIP3	299.797242	-1.0260914	0.00020197	0.00864212
SNORA27	7.90069366	1.07227848	0.00020465	0.00867416
MAP4K2	387.968439	-0.4827269	0.00020712	0.00874479
SPC24	22.4131091	-1.2279812	0.00020731	0.00874479
ATP2B4	9740.97413	-0.6004066	0.00020945	0.00881383
IGSF9B	411.056669	-1.35515	0.00021122	0.0088674
EMP1	6568.40477	0.8830188	0.00021225	0.00886967
STXB5	520.934543	0.98797357	0.00021229	0.00886967
ERCC6L	17.1004845	-1.3548097	0.00021332	0.00887329
ZFP2	36.3249637	1.16591663	0.00021338	0.00887329
FFAR2	2.45971494	1.8427776	0.000216	0.00896076
AACS	523.087218	-0.7427629	0.00022063	0.00904527
CLEC7A	456.501222	1.34579062	0.00022112	0.00904527
CREBL2	1076.54047	0.62366782	0.00021915	0.00904527
DCTPP1	185.232775	-0.6493446	0.00021997	0.00904527
MCM2	281.115036	-0.8609655	0.00021861	0.00904527
VGF	2.46037864	-1.8986569	0.00022078	0.00904527
CD164	3711.79589	0.59211108	0.00022212	0.00906516
DPYSL5	6.23242565	-1.8245267	0.00022295	0.00907809
EPN1	1153.68787	-0.5298968	0.00022494	0.00911914
KIF27	146.108885	0.76753361	0.000225	0.00911914
BLM	58.3408023	-1.3599573	0.00022804	0.00921739
ZWINT	95.1698552	-1.2013669	0.00022847	0.00921739
CEND1	27.1844942	-1.7094941	0.00023127	0.00927035
PIK3R1	3698.25152	1.34675958	0.00023136	0.00927035
PTGES2	480.014016	-0.7352544	0.00023041	0.00927035
RUNX2	223.578535	1.54746456	0.00023212	0.00927934
CXCL11	12.5161466	1.60222018	0.00023762	0.00945659
ZNF775	70.3907826	-0.5888633	0.00023755	0.00945659
FDPS	884.026021	-0.6576732	0.00023952	0.00951052
DRD4	13.8652944	-1.2391792	0.00024215	0.00959322
FREM2	3969.11009	-1.7256748	0.00024513	0.0096894
R3HDM1	552.299597	-0.4591327	0.00024782	0.00977401
BNIP1	65.032466	0.55289705	0.00025402	0.00994569

GPR64	486.942181	-1.7637025	0.00025302	0.00994569
IFIT3	479.849476	0.70832287	0.00025444	0.00994569
NLRP3	239.351435	1.36141968	0.00025362	0.00994569
TEX21P	3.75423579	1.59688558	0.00025779	0.0100543
TIGD5	105.906753	-0.6666573	0.00025866	0.01006586
PDPN	717.616315	-1.0281068	0.00026007	0.01009851
C7orf13	61.4262235	-1.4090647	0.00026148	0.01013088
NCL	4820.21214	-0.5292549	0.00026692	0.01031906
FAM180A	87.8081712	1.86882252	0.00026908	0.01032376
HMBS	135.953336	-1.0483013	0.00026855	0.01032376
SCG2	204.338677	1.85597271	0.00026997	0.01032376
SNORA72	3.39391047	1.73352806	0.00027008	0.01032376
UPK3BL	70.142603	-1.2551297	0.00027057	0.01032376
XG	1.61446475	1.80302539	0.00026848	0.01032376
SAMD10	64.6597453	-1.2725594	0.00027148	0.01033627
MLC1	10.2200631	-1.7697808	0.00027256	0.01035476
ATXN2	1345.63981	-0.4851931	0.00027417	0.01036337
FAM120A	3869.92837	-0.3595869	0.00027455	0.01036337
NCAN	32.5993958	-1.8704163	0.00027422	0.01036337
CACNG4	79.7878476	-1.7877195	0.00027576	0.0103644
TOMM7	1055.82931	0.6703041	0.00027569	0.0103644
FPGT	269.68476	0.81431677	0.00027922	0.01047212
OAS2	242.499042	0.8966106	0.00028019	0.01048625
CDK16	1086.80276	-0.4844745	0.00028436	0.0105749
DLGAP5	34.4550669	-1.4623963	0.00028424	0.0105749
PCNXL3	1311.68132	-0.6576424	0.00028316	0.0105749
SEZ6L2	545.105035	-1.5567236	0.00028541	0.01059166
C10orf10	210.097451	1.30267053	0.00028627	0.01060098
PLEKHG2	1379.66757	-0.7302272	0.00028723	0.01061441
PRC1	433.139382	-1.1555381	0.00028819	0.01062748
SUSD2	94.5345744	-1.6529285	0.0002899	0.01066818
NOB1	468.982517	-0.6807417	0.00029322	0.01076788
OPA3	793.87245	-0.4882549	0.0002948	0.01080327
CD300C	37.8247051	1.21344042	0.00029723	0.01083804
ESCO2	30.8887832	-1.2417175	0.00029819	0.01083804
HIST1H2AM	138.544927	-1.0416952	0.00029823	0.01083804
SNORA20	6.87675837	1.62999398	0.00029883	0.01083804
SPATA9	3.30575699	1.8083566	0.00029795	0.01083804
CD300LB	6.64300026	1.44520454	0.00030362	0.01096637
GFRA1	1109.79819	1.85520251	0.00030309	0.01096637
ALCAM	9746.0414	0.83791174	0.00030784	0.01109602
GPX3	670.721187	1.48846131	0.00031094	0.01118481
FOXL2NB	6.68484407	-1.758502	0.00031404	0.01127322
MIR4697HG	269.543671	-1.3398562	0.00031598	0.01131999
CORIN	18.8552646	1.72762265	0.00031667	0.01132147
ISG15	156.205295	1.01319209	0.0003178	0.0113391
CDKN3	27.1741125	-1.3621936	0.00032042	0.01140916
ARHGDI1	2933.35323	-0.5722576	0.00032579	0.01141563
CCNA2	81.7149116	-1.2070347	0.00032366	0.01141563
CCNF	80.9304504	-1.0843309	0.00032553	0.01141563

COX7B	858.640947	-0.7994163	0.00032409	0.01141563
FADS2	1375.19473	-1.2722738	0.00032198	0.01141563
IFIT2	313.023953	0.80659595	0.00032416	0.01141563
PHYHIP	28.9783989	-1.6837327	0.00032315	0.01141563
TRIM9	52.1587527	1.59580221	0.00032504	0.01141563
TNNI2	4.92155035	1.71627748	0.00033352	0.01166341
C4orf48	54.8334369	-1.1827969	0.00033701	0.01176185
CDH8	97.7039636	-1.7318958	0.00034003	0.01177398
CNOT3	478.942488	-0.568887	0.00033994	0.01177398
HIST2H3D	44.4354818	-1.2053578	0.00033965	0.01177398
TMEM151A	3.45934977	-1.8421416	0.00033817	0.01177398
CHEK1	90.6303311	-1.0679252	0.00034112	0.01178831
ADPRM	62.5806161	0.83175944	0.0003433	0.01179434
CD247	9.89399053	1.48837034	0.00034281	0.01179434
NUP214	1505.39717	-0.3611044	0.00034207	0.01179434
ITGA8	242.601177	1.73125049	0.00034472	0.01182007
AMICA1	80.9566025	1.33464349	0.00034613	0.01184524
TXK	39.2854192	1.41999763	0.00034852	0.0119039
FAM114A2	359.724447	0.46602164	0.00034972	0.01192152
ARRDC3	2570.05246	1.25583187	0.000357	0.01212286
RGS9BP	5.83173819	-1.6975078	0.0003566	0.01212286
ZAK	926.562975	0.72474548	0.00036509	0.01237357
SIGMAR1	597.623214	-0.5298744	0.00036999	0.01251546
ADCY10P1	70.2877855	1.3692347	0.00037218	0.01255785
TCF7L1	574.217216	-0.813005	0.00037267	0.01255785
TLR2	720.006014	1.14347851	0.00037563	0.01261745
TRAF4	595.275102	-0.7916523	0.00037587	0.01261745
DGKD	885.32875	-0.8337344	0.00037714	0.01262068
INMT-FAM1	5.44777256	1.81647289	0.0003776	0.01262068
RBPMS2	262.679732	-1.216272	0.00037812	0.01262068
ATP6VOE2	524.280896	-0.8610488	0.00037889	0.0126225
AAED1	91.9558205	0.59526257	0.00038019	0.01264202
BRD3	1082.62033	-0.5816047	0.00038156	0.01266332
CCDC86	204.514476	-0.7366473	0.00038537	0.01276581
LCA5	94.2640025	1.00640963	0.00038896	0.01286047
TEC	111.143581	1.13333713	0.00039364	0.012991
LHCGR	114.897837	1.75473045	0.00039468	0.01300063
DTWD1	272.182944	0.51778623	0.00039586	0.01300295
HHIP-AS1	43.8063011	-1.6929007	0.00039696	0.01300295
TICRR	57.8854213	-1.5856762	0.00039695	0.01300295
PHF12	826.08144	-0.4265477	0.00039787	0.0130083
ITPKA	9.58417332	-1.5902849	0.00040071	0.01305273
TERF2	416.465787	-0.5494538	0.00040045	0.01305273
ARHGAP39	173.782108	-0.852134	0.00040701	0.0131289
ECHDC3	12.1640194	1.56160482	0.00040902	0.0131289
HACE1	258.6982	0.74000157	0.00040867	0.0131289
IL6ST	10372.169	0.61868154	0.00040697	0.0131289
LY6H	18.2078942	-1.791041	0.00040382	0.0131289
NPLOC4	1528.63467	-0.5003301	0.00040756	0.0131289
RNFT2	144.453353	-1.5315322	0.00040791	0.0131289

RWDD3	52.6028447	0.77143383	0.00040813	0.0131289
ANGPTL5	28.6184835	1.8009638	0.00041343	0.01323144
BCORL1	381.167261	-0.8628377	0.00041748	0.01323144
GABRQ	13.0521452	-1.772165	0.00041721	0.01323144
ITGB4	9527.50398	-1.2847384	0.00041473	0.01323144
PCGF5	1843.75785	0.8967184	0.00041731	0.01323144
PSMG2	371.067929	0.60937018	0.00041424	0.01323144
STK17B	464.570012	1.08043741	0.00041594	0.01323144
CHRD2	3.31518216	-1.7894875	0.00042102	0.01329657
HUNK	50.3183101	-1.344042	0.00042105	0.01329657
FAM69B	276.998471	-0.7091701	0.00042375	0.013358
CCNE2	43.4123556	-1.1979793	0.00042669	0.01342647
CMPK1	1112.98894	0.59595519	0.00042804	0.0134272
ZBP1	5.43126313	1.46383314	0.00042824	0.0134272
SCAF4	756.605242	-0.6030953	0.00043247	0.01353589
LINC00607	142.49431	1.37875928	0.00043417	0.01356492
VMO1	30.6308049	1.30995123	0.00043776	0.01365282
TM7SF2	298.763556	-1.0692821	0.00044035	0.0137094
IGSF9	70.1731762	-1.3728054	0.00044165	0.01372552
PLAC9	122.913253	1.70201292	0.00044683	0.01386182
AKAP1	1036.36415	-0.8121052	0.00044973	0.01392751
KCNH1	19.561271	-1.6404016	0.00045665	0.01411684
ABTB2	209.081426	-1.2245323	0.00045872	0.01415587
ELP2	921.045707	0.6098781	0.00045981	0.01416462
KIAA0195	1160.87258	-0.4583408	0.000462	0.01420718
MLST8	366.789292	-0.6219156	0.00046867	0.01438714
SNORA57	187.926466	1.03061276	0.0004716	0.01445193
FAM198A	1224.83032	1.34775223	0.00047369	0.01446571
TBC1D13	610.926846	-0.3002822	0.00047345	0.01446571
RNF44	734.490657	-0.4960643	0.00047465	0.01446996
LOC1019273	7.63735121	1.70532904	0.00048242	0.01468123
PRX	364.677496	1.26656489	0.00048643	0.01477781
ACACB	1092.73551	-0.6269323	0.00049608	0.0150449
LOC1005066	95.2437536	-1.6844097	0.00049755	0.01506341
IFT43	73.2569459	0.7491709	0.00050207	0.01512777
KCNJ3	10.8182997	1.78493648	0.00050225	0.01512777
ZNF423	1714.83136	-0.7268706	0.0005013	0.01512777
COMMD8	100.213998	0.67583097	0.00051027	0.01531695
SMC4	1105.37663	-0.9005417	0.00050982	0.01531695
SAMHD1	928.120179	0.84742437	0.00051459	0.01542015
GRIK2	16.4238168	1.48633808	0.000517	0.01544698
IL12RB1	27.9559498	1.10793307	0.00051724	0.01544698
ABCG4	25.4852897	-1.4665661	0.00052017	0.01545571
ANKRD52	1712.45412	-0.7238782	0.00052016	0.01545571
THAP8	44.1752848	-0.8416921	0.00051844	0.01545571
C5orf66	26.9533777	-1.7017877	0.00052156	0.01547101
LOC1005061	8.12480053	1.42405342	0.00052269	0.01547828
RHOBTB3	753.136103	1.60545822	0.00052387	0.01548727
DVL3	1417.25627	-0.4471127	0.00053163	0.01569011
BRINP2	1.7090732	-1.7663031	0.00053391	0.01573105

LINC00899	19.5447284	1.01312958	0.00053713	0.01579959
CALCOCO1	3493.32472	0.66365335	0.00053915	0.01583249
SNORA76C	7.58209681	1.59784007	0.00054166	0.01587962
DEDD	373.565474	-0.3165357	0.00054391	0.01589325
SASH1	707.905901	1.19709653	0.00054393	0.01589325
SLC7A14	490.207095	-1.7643402	0.0005461	0.01593026
RAB3A	46.6074591	-1.0299987	0.00054865	0.01595296
ZNF570	126.223985	0.61630701	0.00054869	0.01595296
GOT1	554.609153	-1.0871807	0.00055056	0.01598073
CLEC10A	27.0928777	1.70442122	0.0005544	0.01602736
LPIN2	922.627809	0.828656	0.0005547	0.01602736
SETD5	2774.98225	-0.4775621	0.0005549	0.01602736
MARK1	648.494192	-1.1805344	0.00055602	0.01603333
SQLE	484.471623	-1.1762146	0.00055761	0.01605297
GET4	289.196534	-0.4324585	0.00056245	0.01611326
RTN3	2147.87717	-0.4936435	0.00056154	0.01611326
SRCIN1	45.8184274	-1.4312402	0.00056237	0.01611326
PRNCR1	61.289505	-1.2688342	0.00056435	0.01611499
TRIM47	187.888626	-1.099577	0.00056389	0.01611499
GPR21	64.6712267	-0.7859985	0.00056898	0.01621487
POLR1B	619.043974	-0.6476012	0.00056969	0.01621487
ZNF780A	521.780475	0.51870871	0.00057129	0.0162342
ATP8B3	133.483461	-1.3541126	0.00057329	0.01626488
STAT4	12.6385604	1.26653699	0.00057593	0.01631338
GPKOW	240.546861	0.35121016	0.00057715	0.01632177
TAF4	353.93982	-0.8277686	0.00058251	0.0164467
ABCA3	1991.39951	-0.8190156	0.00058874	0.01651969
CREBRF	1415.21206	0.46400175	0.00058719	0.01651969
F5	35.4527683	-1.7391984	0.00058885	0.01651969
GRIN1	8.33564623	-1.7659356	0.00058697	0.01651969
CNTN4	511.387956	1.67881399	0.00059323	0.01661127
FBXO22-AS1	1.81562895	-1.7602836	0.000594	0.01661127
DAPK2	76.8680076	1.38536329	0.00059573	0.01663317
ZBTB24	389.874381	0.6839447	0.0005979	0.01666741
OAS1	262.874353	0.66661199	0.00059973	0.01669198
ZNF629	928.118515	-0.4169228	0.0006024	0.01673977
ARRDC4	553.879342	-1.0893213	0.00060428	0.01676533
EPM2A	102.270071	0.68002568	0.00061199	0.01689943
GSTM1	15.6464808	-1.7536691	0.00061101	0.01689943
GTF2H5	294.876947	0.63082083	0.00061144	0.01689943
MRPS5	489.172677	-0.5808466	0.00061429	0.01693638
C5orf56	39.0002888	0.87511901	0.0006188	0.01698886
CCDC23	92.6751453	0.77944759	0.00061926	0.01698886
DNAJC4	320.021597	-0.6467883	0.00062006	0.01698886
SLC24A1	475.659578	-0.6798136	0.00061863	0.01698886
SOX8	18.9243392	-1.2910443	0.00062433	0.01707922
LLGL2	346.843196	-1.2897627	0.00062878	0.01717426
LOC1030918	37.60704	-0.977154	0.00063022	0.01718706
MASP1	40.469208	1.69657645	0.00063156	0.01719683
DEPDC1	40.6776099	-1.2355744	0.00063524	0.01727025

CCDC144A	292.273202	-1.6061191	0.00063845	0.0173041
SEC14L5	8.71510166	-1.4847561	0.00063813	0.0173041
XAF1	558.454296	0.82155873	0.00064411	0.01743056
BOC	4426.76207	1.32711879	0.00064767	0.01749995
PRSS23	566.519414	1.23322343	0.00065538	0.01768131
C16orf54	19.2289416	1.15332857	0.00065651	0.01768463
CERS2	4042.99363	-0.5583752	0.00066655	0.01781601
CMTM2	3.34249336	1.62163149	0.00066243	0.01781601
FAM19A2	26.3905342	0.97119367	0.00066684	0.01781601
LAMC2	87.7307388	-1.4525177	0.00066717	0.01781601
MRPS2	283.818669	-0.564537	0.00066747	0.01781601
TATDN2	1156.10332	-0.5355433	0.00066728	0.01781601
ADORA1	11.9665477	-1.4007846	0.0006704	0.01784209
EPN3	32.7775118	-1.6699652	0.00067047	0.01784209
ANKRA2	253.376954	0.52825273	0.00068259	0.01800856
GJA3	90.4196127	-1.6870954	0.00068048	0.01800856
PGP	305.082739	-0.5748915	0.00068354	0.01800856
POLN	58.2848447	0.8346727	0.00068278	0.01800856
SYN1	33.4942971	-1.0122078	0.0006839	0.01800856
TERC	698.249161	-1.0093162	0.00068284	0.01800856
ZNF768	386.135216	-0.4474849	0.0006792	0.01800856
BCL2	618.417534	1.24103621	0.00068626	0.0180437
PCGF2	513.511009	-0.6284921	0.00069247	0.0181798
PCAT1	11.933166	-1.41005	0.00069357	0.01818154
SLC26A4	11.8801551	1.36429454	0.00069644	0.01820254
VAMP5	123.79583	1.00210968	0.00069625	0.01820254
LOC151475	8.73259242	1.6437356	0.00070035	0.01827756
MEF2D	1658.85447	-0.4544054	0.00070725	0.01843042
KLHL6	134.140627	1.09338099	0.00070936	0.0184307
MGAM	95.8588144	1.30969194	0.00070877	0.0184307
AICDA	1.3935683	1.73361337	0.00071465	0.01848743
EFCAB12	4.80134365	-1.4590905	0.00071549	0.01848743
NLRP12	10.7581509	1.43509916	0.00071574	0.01848743
SAYSD1	124.412289	0.72862066	0.00071544	0.01848743
GPM6A	32.4870844	-1.6804744	0.0007173	0.0185004
LARP1	4971.46735	-0.5289115	0.00072122	0.01857432
LOXL3	179.946148	1.30722965	0.00072321	0.01859831
PLCD3	2264.05525	-0.6563351	0.00072446	0.01860338
DPH6-AS1	16.3454428	1.1334482	0.00072946	0.01867707
ZC3H3	276.573113	-0.5067905	0.00072871	0.01867707
SRCAP	2828.66378	-0.4675429	0.00073103	0.0186902
HMGA2	60.5557373	-1.6953002	0.00073226	0.01869441
FUS	2232.18599	-0.8533825	0.0007341	0.0187142
TMX1	464.433402	0.50123569	0.00073534	0.01871876
AUNIP	5.44180801	-1.442769	0.0007396	0.01875852
CLASRP	518.714182	-0.4973292	0.00073863	0.01875852
RNF208	22.8658994	-0.9755788	0.0007401	0.01875852
SSPN	445.22142	1.46001697	0.00074546	0.01886723
CDK1	115.213209	-1.2225416	0.0007496	0.01887725
ELMOD3	185.911549	0.56892542	0.00074748	0.01887725

OASL	35.9697193	1.3953151	0.00074904	0.01887725
TMEM8A	573.487519	-0.6592683	0.00075015	0.01887725
ITGB5	1042.54733	1.01550564	0.00075536	0.01898108
PDZK1IP1	6.41398065	1.7282132	0.00075696	0.01899426
RASD1	58.9430648	1.63642629	0.0007587	0.01901075
ATG4C	152.249376	0.73982908	0.00076542	0.01915184
CC2D2B	7.66815468	1.24068274	0.00076687	0.01916083
PKDREJ	4.73309015	1.62941349	0.00077474	0.01933007
TPX2	316.109967	-1.2546908	0.00077781	0.01937917
POLR1A	1231.63425	-0.474804	0.00078226	0.01942011
SH3BP4	718.070325	1.1118275	0.00078277	0.01942011
STRADA	528.576915	-0.4622899	0.00078207	0.01942011
WHSC1	1346.05782	-0.6679012	0.00078625	0.01947912
NAA35	366.439475	-0.3517087	0.000788	0.01949496
HNRNPUL1	2919.68325	-0.3005057	0.0007969	0.01960473
LIG1	420.835765	-0.7369048	0.0007963	0.01960473
LRRK2	873.992373	0.8179721	0.00079552	0.01960473
RABGGTB	351.594057	0.56523747	0.00079622	0.01960473
EME1	33.0575484	-1.2786408	0.00080251	0.0197153
ANGPTL7	101.955482	1.38795895	0.00080498	0.01974842
RNF26	428.885173	-0.6439039	0.00081307	0.01991915
KIF18A	28.1279117	-1.2439904	0.00081933	0.02004452
NOD2	39.8504384	1.28018057	0.00082084	0.02005354
TMEM246	1276.54676	-0.7173837	0.00082443	0.02011341
ATP5I	656.012373	-0.5761399	0.0008261	0.02012608
ZNF444	168.065277	-0.5284299	0.00083489	0.02031222
RNF125	157.74378	0.93996954	0.00083675	0.02032939
MDH2	1390.38919	-0.6392659	0.00083977	0.02037445
TMEM134	140.205126	-0.5171753	0.00084397	0.02044833
SKA3	39.3125432	-1.2364612	0.00086012	0.02081098
MAZ	1133.81199	-0.5185187	0.00086683	0.02094449
SNHG17	111.045606	-0.834907	0.0008766	0.02115131
POLR2D	395.885823	-0.3531347	0.00088003	0.02120499
KPNA2	504.216966	-0.8988128	0.00088308	0.02124945
MCOLN2	20.1765127	1.38611838	0.00089231	0.02141312
OR56B1	11.030116	1.33654706	0.00089185	0.02141312
CNTN2	34.9796086	-1.643711	0.00089432	0.02143202
SCARNA2	3048.52922	0.83464158	0.00090115	0.02156634
CSNK1D	2033.1721	-0.6409651	0.00090403	0.02159742
RIMS1	30.3491435	-1.6532323	0.00090491	0.02159742
CALML3-AS1	39.5295346	-1.5875127	0.0009078	0.02160775
ELN	2210.35411	1.54911259	0.00090662	0.02160775
ABCB6	470.169809	-0.5830816	0.00091039	0.02164012
APOL6	810.490677	0.64891747	0.00092073	0.0217467
CDH7	26.4467898	-1.6987976	0.0009201	0.0217467
GOT2	1028.52592	-0.5777315	0.00092211	0.0217467
IL18RAP	10.3666287	1.60531864	0.00091987	0.0217467
MCM4	765.122384	-0.8864387	0.0009224	0.0217467
PMVK	238.6111	-0.6620978	0.00091787	0.0217467
SPAG8	37.6194156	0.94165172	0.00092352	0.0217467

MALT1	526.940268	0.64251047	0.0009269	0.02179703
COLGALT2	24.3323051	-1.5157432	0.00092987	0.02183768
OIP5	11.3246478	-1.3091058	0.00093487	0.0219257
WNT9A	118.75772	-0.8552457	0.00094944	0.0222378
CSPG5	19.9155185	-1.4021514	0.0009544	0.02229469
STAG1	1119.99183	0.31344564	0.000954	0.02229469
B9D2	25.3105556	0.95196137	0.00096284	0.02244409
COMTD1	36.9305474	-0.9662192	0.00096335	0.02244409
AMN1	78.929731	0.53319841	0.00096603	0.02247692
SLC7A1	778.922323	-1.5005092	0.00096884	0.02251246
POLR3K	90.0604691	-0.707779	0.00098281	0.02279772
SERPINB9	585.821468	0.99988304	0.00098371	0.02279772
SLC25A39	937.682927	-0.4686624	0.00098718	0.02284813
SF3B5	367.622169	0.52705448	0.00099303	0.02295318
RICTOR	1223.15271	0.46184361	0.00099772	0.02303131
MGAT4A	1055.48437	0.84904213	0.00100004	0.0230547
ARL16	259.412152	-0.5035543	0.00100707	0.02315593
MORC3	1008.96353	0.44155911	0.00100645	0.02315593
BZW2	213.738735	-0.7693154	0.00101706	0.02335518
SOX18	68.2754286	-1.2027017	0.00102098	0.02341473
CD300E	15.9858621	1.5191015	0.0010256	0.0234594
GPC3	204.304664	-1.6617582	0.00102462	0.0234594
NTN4	413.956708	1.31985067	0.00103302	0.02356786
SERINC1	4765.64937	0.59389746	0.00103213	0.02356786
PLEC	21119.1972	-0.6504132	0.00103536	0.02359056
CKS1B	94.9805578	-0.8094054	0.00104001	0.02362981
PCDH10	11.2207642	-1.6597985	0.0010409	0.02362981
ZNF383	114.141583	0.47017274	0.00104111	0.02362981
ADAM28	286.798688	1.14182644	0.00104478	0.02368259
GZMA	11.9375567	1.45579651	0.00104779	0.02368728
RELN	854.65471	-1.6845648	0.00104903	0.02368728
TMEM127	1269.82833	-0.3782614	0.00104789	0.02368728
FEN1	237.019663	-0.6508164	0.00105543	0.02380126
DNMT3A	773.242333	-0.6589495	0.0010579	0.02382653
RPS6KA5	65.5958639	0.82672101	0.001061	0.02386578
ANP32B	1141.99694	-0.8931546	0.00106415	0.02387554
KIFAP3	766.375719	0.49595471	0.00106368	0.02387554
PCDHB5	604.36811	-1.2066907	0.00106711	0.02388091
PSMC5	880.370864	-0.4811021	0.00106692	0.02388091
LOC1005056	8.57202714	-1.190293	0.00107338	0.02393009
MGRN1	1067.30745	-0.4359741	0.00107262	0.02393009
TMEM19	543.411898	0.5970375	0.00107317	0.02393009
MYO1E	629.230247	0.9714611	0.00107479	0.02393112
IL11RA	363.324887	1.16684634	0.00107985	0.02401338
GNG12	1024.73374	0.82755839	0.00108231	0.02403077
SNORA8	42.5785516	0.82955108	0.00108337	0.02403077
HDAC4	2299.03017	-0.7444871	0.00108788	0.02410058
JPH3	39.4660634	-1.6725893	0.00109539	0.02423632
MT3	68.5162386	-1.5444395	0.00109882	0.02426394
RBFADN	6.49763942	1.32857728	0.0010994	0.02426394

LINC00158	8.45878298	1.49559334	0.00110186	0.02428785
IL2ORA	36.5973998	1.53347918	0.00110496	0.02432562
ITGAL	128.382463	1.1134683	0.00111017	0.02437106
SEPT5	9.53015983	-1.2365542	0.00111019	0.02437106
TMEM219	628.20608	0.3647446	0.00111118	0.02437106
FAM95A	30.7282062	-1.6017842	0.0011227	0.02459314
DAO	2.11890062	1.58648331	0.00112974	0.02471653
CLEC9A	55.3265936	1.6121298	0.00113214	0.02473821
LOC1019296	11.1727499	1.63204752	0.00114082	0.02489701
DCC	219.514783	1.64737564	0.00114474	0.02494476
ZC2HC1C	125.300603	1.34904484	0.00114584	0.02494476
SNX9	979.100046	0.54578172	0.0011476	0.02495212
CENPN	138.655407	-1.0443479	0.00115206	0.02498528
SLC14A2	8.23485044	1.50963729	0.00115339	0.02498528
TAF15	808.588318	-0.567172	0.00115298	0.02498528
HIST1H3G	99.1812688	-1.308637	0.0011605	0.0251085
CS	2179.76067	-0.529897	0.00116881	0.02525712
THAP4	472.218264	-0.4770179	0.00117358	0.02532923
GLIPR1	645.402751	0.64347593	0.00118297	0.02550061
RABL6	1034.16655	-0.4263493	0.0011872	0.02556046
ELL2	806.48783	1.09202164	0.00119	0.02556546
NUP210	786.785757	-0.9178991	0.00119034	0.02556546
CERS5	640.738754	-0.5324956	0.00120422	0.02582324
ZMYND15	79.2494955	1.03211769	0.00120528	0.02582324
LOC80154	16.8812641	-1.0620171	0.00121347	0.0259671
AURKA	66.9420466	-1.2333079	0.00122181	0.02611295
LOC399715	51.5993357	1.11530182	0.00122565	0.02611295
NDUFA10	842.745808	-0.4138668	0.00122623	0.02611295
SLC5A12	4.74215997	1.57816814	0.00122509	0.02611295
CDH26	14.0610137	1.18447934	0.00122952	0.02611996
TNFAIP3	1147.4414	1.03952777	0.00122827	0.02611996
BBS9	646.563368	0.97924307	0.00123246	0.0261508
SF3B4	487.560974	-0.552363	0.00123553	0.02618434
GANAB	6139.28984	-0.4498447	0.00124027	0.02622154
JADE3	290.582377	-0.6314249	0.00123987	0.02622154
SSRP1	1356.39972	-0.434937	0.00124329	0.0262538
FBXO8	266.620987	0.3902239	0.0012531	0.02642925
CSNK2A2	390.969314	-0.4377229	0.00125924	0.02652705
C1orf123	252.291551	0.59320941	0.00126362	0.02656196
SLC24A5	10.6412288	1.61249705	0.00126392	0.02656196
TMPO-AS1	44.4499	-0.6820172	0.00126807	0.02661727
ATP5B	5987.12229	-0.6757806	0.00127117	0.02665053
TMEM11	152.66174	-0.4659695	0.00127272	0.02665134
NME9	3.64187204	1.64136848	0.00128059	0.02678436
CYS1	165.531856	1.57451786	0.00128213	0.02678454
HLA-DRB5	506.403834	1.61285999	0.00128624	0.02683869
NDUFS8	775.46535	-0.614962	0.00128971	0.02687904
COL20A1	3.8768435	-1.6535922	0.00129566	0.02693928
GATAD2B	1304.30886	-0.3835576	0.00129457	0.02693928
CTGF	11035.6066	1.40065875	0.00129911	0.02697909

TCF3	713.086961	-0.5311534	0.00130294	0.02702676
LINC00663	84.3316825	0.54209834	0.00130886	0.02705387
PLEKHB1	66.9747366	-1.4176162	0.00130592	0.02705387
POM121	965.083411	-0.4953533	0.00130806	0.02705387
GS1-259H13	17.3960998	1.11776046	0.0013139	0.0270627
RGL1	1270.66502	0.94118081	0.00131238	0.0270627
SNORA74A	182.308408	-1.0126991	0.00131179	0.0270627
COLCA2	62.3665539	-1.3469181	0.00131589	0.02707204
DNM1	75.5388127	-1.1611811	0.00132111	0.02713064
RSP02	58.7120293	-1.6458034	0.00132183	0.02713064
UBALD1	175.546366	-0.7903937	0.00132964	0.02725907
LOC440300	106.631912	0.94786482	0.00133702	0.02729914
PTTG2	3.70810624	1.44606592	0.0013378	0.02729914
RAB7A	2623.53422	-0.4418496	0.00133767	0.02729914
RNF148	26.4814227	-1.23633	0.00133576	0.02729914
MKRN7P	17.4713453	1.22635634	0.00134467	0.02739068
MTERFD2	478.818441	-0.4167512	0.0013454	0.02739068
ABCC8	2.87409957	-1.6221682	0.00135568	0.02744162
PAICS	1231.84201	-0.8085988	0.001353	0.02744162
RAPGEF6	1124.94941	0.4843541	0.00135564	0.02744162
SNORD89	3.10219059	1.57898042	0.00135203	0.02744162
TPCN2	344.960531	-0.5198442	0.0013557	0.02744162
MTNR1A	12.2730164	-1.6394793	0.00135737	0.02744388
TLK1	1154.75141	-0.4146357	0.00135983	0.02746203
SAMD1	108.514442	-0.5509032	0.00136594	0.02755377
SYNPO2	1853.96087	1.48657655	0.00136802	0.02756412
PRR12	958.689686	-0.5760224	0.00138149	0.0278037
PDF	19.816098	-1.0327413	0.00138316	0.02780537
MCM6	421.781001	-0.6534222	0.00138978	0.02787483
SLITRK5	6.22754416	-1.5388201	0.00138835	0.02787483
CYSLTR2	9.59179348	1.36435445	0.00139225	0.0278926
CCDC79	1.72630963	1.49650093	0.00139477	0.02789283
UBE2T	50.5326878	-1.1073308	0.00139543	0.02789283
CYTIP	91.1643092	1.07216293	0.00140048	0.02793024
EPST11	133.223497	0.77249949	0.00139975	0.02793024
MRPL24	411.604492	-0.5981415	0.00140499	0.02795682
SPOPL	810.603571	0.74133618	0.00140437	0.02795682
AHCTF1P1	11.2114699	-0.868518	0.00141134	0.028042
LOC1019270	131.818656	0.69127198	0.00141246	0.028042
ZNF831	11.1606371	1.37429114	0.00142365	0.02823232
ITK	21.9293646	1.32337114	0.00143263	0.02837841
SNAP25	32.3155352	-1.6252169	0.00143946	0.02848153
ZEB1	1625.20311	0.70690341	0.00144473	0.02855361
LINC00667	435.163276	0.58349405	0.00144652	0.02855706
E2F1	210.102873	-1.0563453	0.00145128	0.02861876
BRIP1	119.926644	-1.1053964	0.00145604	0.02868053
MILR1	39.3232951	1.13344544	0.00145988	0.02872398
RAB38	25.8871521	-1.3711423	0.00146461	0.02878492
NXPH2	284.108686	1.62944719	0.00147131	0.0288844
AKR1B10	20.012381	1.5911946	0.00148494	0.02899318

COX6A1	1396.20748	-0.6050737	0.00147899	0.02899318
IGIP	424.005829	0.59459427	0.00148353	0.02899318
OTOA	4.40539136	1.43931426	0.00148147	0.02899318
PLCB1	727.423642	1.45111089	0.0014851	0.02899318
CD300A	165.709922	1.01227363	0.00149755	0.02920389
CCDC137	204.245612	-0.5126836	0.00150869	0.02926732
FARSB	485.074803	-0.4908173	0.00151079	0.02926732
KCNA3	24.6793099	1.18161341	0.00150585	0.02926732
TCP10L	17.8010776	1.19738959	0.00150927	0.02926732
TRAPPC2	216.405084	0.54737081	0.00150804	0.02926732
TSTD3	54.867222	0.91996324	0.00150247	0.02926732
CHL1	14.4692145	-1.6161702	0.00151359	0.02928937
ARHGAP15	121.001076	1.00092051	0.00151934	0.02936841
GABRA3	33.7975409	-1.6116361	0.00152273	0.02937541
PAPPA	801.580257	1.50984894	0.00152472	0.02937541
SCARNA16	127.648356	-0.8714572	0.00152387	0.02937541
IDH3G	507.408287	-0.2950119	0.0015305	0.0294025
MPP6	1044.19467	1.17843046	0.00152846	0.0294025
PLEKHG4B	2041.61936	-1.0243914	0.00153114	0.0294025
RAB23	752.300689	0.86757535	0.0015345	0.0294228
TRIM23	472.935211	0.38100748	0.00153554	0.0294228
BVES	112.697872	1.39057521	0.00154633	0.02959379
PMPCA	483.653955	-0.4500768	0.00154783	0.02959379
TRG-AS1	8.29341296	1.25769398	0.00155395	0.02967862
RAB32	117.125978	0.64824332	0.00156584	0.02987326
LAMTOR4	387.285617	0.41712254	0.00156854	0.02987679
TNR	2.712065	-1.6208946	0.00156942	0.02987679
CTBS	307.039196	0.65243551	0.00158367	0.03010559
RSRP1	660.875733	0.72026967	0.00158658	0.03010559
SH3PXD2A	11024.5558	-0.7419111	0.00158572	0.03010559
CHDC2	13.1726755	-1.5756331	0.00159253	0.03012685
COPS6	737.681825	-0.481135	0.00159284	0.03012685
PAK4	781.702373	-0.8133537	0.00159172	0.03012685
IGF2BP2	542.015584	-1.5412335	0.00159724	0.03017768
ACACA	2078.23521	-0.4435394	0.00160366	0.03026659
STAT2	3164.70421	0.49696027	0.00161116	0.03037545
APC2	35.4121764	-1.3798412	0.00161421	0.03040029
FLJ31104	7.2132584	1.09406216	0.00161654	0.03040179
SYF2	346.226975	0.63485875	0.00161774	0.03040179
LILRA1	47.5292939	1.20939823	0.0016228	0.03045895
TBCD	1236.20968	-0.3926595	0.00162425	0.03045895
KIAA0825	231.68004	0.8163375	0.00163249	0.030581
GRIA2	5.5608161	-1.6183002	0.00164344	0.03075329
POLDIP2	1134.39862	-0.4680379	0.00164964	0.0308365
C9orf129	15.0271815	-1.4023515	0.00165337	0.03087335
GLTSCR1	226.203054	-0.8675457	0.00166085	0.03095241
LIMS2	468.944192	-0.8762968	0.00166112	0.03095241
STC2	130.502167	-1.4926157	0.00166338	0.03096184
SUPT6H	2501.31431	-0.2681252	0.00168141	0.03126419
C10orf35	22.1245893	-1.1472514	0.00168665	0.03131469

NME4	873.127687	-0.7117093	0.00168768	0.03131469
LINC01277	1.69621764	1.43017947	0.00170229	0.03155255
SCML4	6.00842836	1.30498436	0.00170525	0.03157402
RAB43	39.7794904	-0.5998854	0.00171229	0.03167112
AGPS	739.299146	0.67050074	0.00171767	0.03170384
WDR5	510.273618	-0.3900488	0.00171726	0.03170384
TLX1	10.0286466	1.54301906	0.00172198	0.03175009
HIST2H2BE	875.112893	-0.8964036	0.00173067	0.03185284
UBE2Q1	833.327736	-0.2618728	0.00173117	0.03185284
POM121C	803.611042	-0.491357	0.00174166	0.0320123
SCD	2092.2465	-1.258293	0.00175423	0.03220974
SLA	528.934328	1.03464139	0.00175651	0.03221788
ERMARD	227.395089	0.56180886	0.00176498	0.03233951
KIRREL3	4.21006064	-1.5232235	0.00177394	0.03246991
BIRC2	1104.7721	0.31639805	0.00179131	0.03275383
ATAD2	550.299426	-0.7826232	0.0017945	0.03277812
HSPA1B	26.5309834	1.18191487	0.00180336	0.03290576
SEPT8	1137.69339	0.62694688	0.00181088	0.03300864
CACNB1	133.149456	-0.8207764	0.00181454	0.03304108
HEPACAM	11.6462748	-1.6023091	0.00182669	0.03322796
BLNK	180.167666	0.96387367	0.00183362	0.03331959
SH2B2	14.0801	-1.1285235	0.00183908	0.03338433
POTEF	14.4147676	-1.2812829	0.00185527	0.03364351
ACLY	2312.12286	-0.4442432	0.00185858	0.0336689
COX10	200.880261	-0.5886137	0.00186888	0.03382056
NAIP	342.604339	0.56539673	0.0018762	0.0338834
NME2	275.363198	-0.7516044	0.00187507	0.0338834
ZNF487	45.952682	0.93747786	0.00187884	0.03389626
STXBPL5L	6.04142302	-1.5921461	0.00189921	0.0342285
HIVEP3	308.002256	1.14817907	0.00191595	0.03447709
ZFAND5	2959.34573	0.70605194	0.00191692	0.03447709
CDCA7	49.9616936	-1.5080131	0.00191947	0.03448779
LPCAT4	148.033614	-0.8527451	0.00192152	0.03448929
MSANTD4	460.869546	-0.5000446	0.00192993	0.03460488
SNORA80A	18.5348982	1.35545634	0.00194518	0.03484288
MARCH9	157.033649	-0.5012808	0.00194991	0.03489204
FN3K	144.27091	-0.8471207	0.00196042	0.03504455
SET	4061.29411	-0.4232377	0.00196251	0.03504618
DCT	7.72263524	1.1631477	0.00196959	0.03513692
ATE1-AS1	11.723148	1.42524186	0.00197748	0.03522447
CPSF7	1418.5355	-0.3430789	0.00198603	0.03522447
GTSE1	28.374082	-1.11227	0.00198651	0.03522447
OTUB1	597.013392	-0.4216225	0.00197944	0.03522447
POLR2L	971.293497	-0.6097729	0.00198179	0.03522447
ZNF562	966.410488	0.38347089	0.00198595	0.03522447
TUBG1	396.984995	-0.61993	0.00198895	0.0352322
MED14OS	2.76064576	1.27760341	0.00199292	0.03526714
COL9A2	60.1715321	1.37902475	0.00199676	0.03529954
CLUH	830.662991	-0.5569171	0.00201055	0.03533018
E2F2	24.2538067	-1.1316136	0.00200372	0.03533018

LINC00417	17.5959255	1.54183858	0.00200925	0.03533018
NKX6-1	13.459662	-1.5279959	0.00200585	0.03533018
RBP4	95.5762866	1.56781645	0.00200818	0.03533018
SRP68	993.51777	-0.5754279	0.00200782	0.03533018
EPHA1	4.18581159	1.47186554	0.0020137	0.03535032
ZDHHC5	1668.79698	-0.4807567	0.00201912	0.03541007
RASL10A	4.74617228	-1.3825379	0.0020291	0.03554961
DKK2	2029.09132	-1.5824035	0.00204347	0.03576586
VENTX	119.306822	1.25417094	0.00204652	0.03578357
GAB2	846.708939	0.72188002	0.00205329	0.03583079
LOC729683	14.8042248	1.00317565	0.00205165	0.03583079
PABPC1	7118.61875	-0.6000677	0.00206292	0.03596307
HGF	85.1895756	1.20903111	0.00206715	0.03600122
NRTN	4.70017568	-1.5330548	0.00207016	0.03601793
ARMC2	100.804226	0.89771589	0.00207773	0.03611393
BBOX1	1.32875708	1.47424627	0.0020895	0.03617553
CPB2-AS1	10.1533558	1.24357769	0.00208891	0.03617553
FBXO46	232.19465	-0.6799195	0.00208585	0.03617553
NUDCD2	157.229304	0.47976856	0.00208634	0.03617553
KIAA1467	318.515922	0.78730169	0.00209564	0.0362462
ADRA1A	23.3400376	-1.5725806	0.00211007	0.03642409
KIAA1217	3891.30038	-0.6688891	0.00210893	0.03642409
SUMO4	29.853724	0.69258664	0.00211782	0.03652207
CDADC1	128.536663	0.62484795	0.00212216	0.03656095
FAM168B	2472.40142	-0.3397249	0.0021272	0.03661202
IFT20	202.38328	0.46678695	0.00213491	0.03670884
OMA1	213.304179	0.58725373	0.00213705	0.03670974
HIATL2	58.2061199	-0.5722018	0.00214016	0.03672719
SENP7	839.16531	0.39039896	0.00214602	0.03679184
GUCA1B	21.2483771	0.92965781	0.00215135	0.03684741
C19orf48	321.40122	-0.5969687	0.00215954	0.03689266
KMT2B	1215.85003	-0.4227335	0.00216238	0.03689266
SLC25A25	424.906223	0.91456723	0.00215793	0.03689266
STOML3	6.22218203	1.56654986	0.00216104	0.03689266
ABLIM2	34.841937	-1.0983886	0.00217661	0.03702762
PAQR6	107.875763	-1.2011282	0.00217488	0.03702762
TMEM220-A	2.33246163	1.45440761	0.00217543	0.03702762
TBPL1	108.963802	0.65532732	0.00217924	0.0370365
MCOLN3	11.9449639	1.34677638	0.00218388	0.03706046
PHGDH	288.313457	-1.3693578	0.00218486	0.03706046
IRF5	195.073432	0.96191193	0.00219238	0.03715216
EMR3	4.58420212	1.50812427	0.00219807	0.03721277
TSPO	175.506638	0.89736821	0.00220179	0.03723997
HPS5	773.559247	0.75221238	0.00220843	0.03731636
ADRBK2	336.204353	0.82573534	0.00223142	0.03765758
ASCL4	1.99346926	1.57136932	0.0022371	0.03765758
PFKM	2628.61986	-0.5291315	0.00223753	0.03765758
TNFRSF11B	734.274616	-1.4402414	0.00224324	0.03765758
TP73	11.8422271	-1.327318	0.00224254	0.03765758
ZBTB45	133.211891	-0.5105278	0.00223461	0.03765758

ZNF853	251.337883	-0.5858667	0.00224361	0.03765758
ZFPM1	119.47177	-0.7265266	0.00225756	0.03785551
KCNJ10	20.157932	-1.5691187	0.00225999	0.03786018
CCRL2	13.6468113	0.99694398	0.00226351	0.03788305
RAB6C	9.68137603	-1.1668227	0.0022662	0.03789204
MAFA	7.74290844	-1.5648252	0.00227217	0.03793089
RELL2	72.8701386	-1.0015033	0.00227283	0.03793089
NDUFB9	473.667022	-0.6598206	0.00228907	0.03814845
SERPINE2	318.802024	-1.2186833	0.00229021	0.03814845
SDHC	796.671851	-0.5077297	0.0022958	0.03816937
ZNF18	203.783687	0.48114025	0.00229365	0.03816937
RAP2C-AS1	67.3901528	0.76444883	0.00229988	0.03820098
TFPI2	20.1743434	-1.5604717	0.00231085	0.03834703
A2ML1	2.26219225	1.41522222	0.00231725	0.03841702
SLFNL1	4.90327391	1.28875559	0.00232816	0.03856151
UNC80	143.819261	-1.3693423	0.00234929	0.03887496
RPP30	241.904886	0.43526029	0.00235515	0.03893518
CNTNAP2	12.8693127	-1.3521869	0.00236992	0.03914254
SLC35C1	487.809954	-0.7704194	0.00237884	0.03925316
PPFIBP2	327.098326	0.92320471	0.0023832	0.03928816
LINC00673	6.0517173	-1.5058857	0.00238858	0.03930317
NOMO2	282.524282	-0.6946329	0.00238675	0.03930317
FANCI	296.718394	-0.9267192	0.00239454	0.03936444
LOC1019271	10.7268381	1.15520612	0.00241663	0.0396836
PQLC3	320.153179	0.66581295	0.00241847	0.0396836
PTGES	190.655792	-1.2462995	0.00242278	0.03971741
APLP1	320.713709	-1.125309	0.00243001	0.03979869
CELF5	5.5510553	-1.4457848	0.00243735	0.03988192
AFAP1-AS1	94.5466343	-1.5414457	0.00245087	0.03991745
NAA60	706.968921	-0.4986945	0.00244671	0.03991745
SHC1	2717.67389	-0.4997136	0.00244788	0.03991745
TNFSF8	106.030012	1.06223647	0.00244258	0.03991745
UBQLN1	2043.47035	-0.4371849	0.00245024	0.03991745
VSIG10	296.606667	-0.6783658	0.00245653	0.0399726
CXCR2	15.2690353	1.01056637	0.0024615	0.039985
KLHL8	304.870586	0.50129252	0.00246184	0.039985
GPD1L	584.581894	0.85992492	0.00246766	0.04004255
FAM86C1	52.9203552	-0.6274075	0.002476	0.04012838
GRB14	52.2663526	-1.5290012	0.00247979	0.04012838
MANEA-AS1	32.9991073	0.79580314	0.00247841	0.04012838
SLC25A44	506.748974	-0.4910701	0.00248336	0.04014915
FOXL2	3.1115344	-1.4534435	0.0024929	0.04019257
MUC1	232.246386	-0.9537554	0.00249157	0.04019257
SCRT1	1.46335665	-1.532698	0.00249195	0.04019257
KCNG2	7.50116547	-1.5281966	0.00250127	0.04029064
ACY1	18.50459	-0.9279266	0.00250595	0.04029227
C1orf116	3.76003512	-1.3212519	0.00250517	0.04029227
PTPRR	4.58121532	1.45856998	0.00250915	0.0403068
TSEN54	149.370835	-0.8723183	0.00252675	0.04055243
ACTR6	177.315103	0.4450235	0.00252921	0.04055493

PRR18	2.93358126	-1.5519889	0.00253398	0.04059437
HECA	1236.70348	0.68125738	0.00254259	0.04065834
NUDT8	35.9370935	-0.889074	0.00254037	0.04065834
RPRM	65.4858054	-1.5391229	0.00255341	0.04079421
TBX3	25.5188493	-1.343745	0.00255579	0.04079527
HIST1H1B	333.185146	-1.0023404	0.00257739	0.04110216
LINC00632	2.31269935	-1.5418253	0.00258416	0.04110216
LOC1019270	31.4362329	1.35249027	0.00258686	0.04110216
SKINTL	8.24894046	1.20498488	0.00258945	0.04110216
TBX1	16.449054	-1.4458652	0.00258347	0.04110216
TBX21	3.86032949	1.33521002	0.00258544	0.04110216
UBE2S	193.173655	-0.8299099	0.00259138	0.04110216
NRIP3	18.8807186	1.40565546	0.00260763	0.04119969
TAF6	485.852839	-0.4266817	0.00260642	0.04119969
TMC6	756.238212	-0.8524716	0.00260271	0.04119969
TTYH3	1108.718	-0.785025	0.00260924	0.04119969
ZNF142	732.91311	-0.3777138	0.00260226	0.04119969
FANCC	243.432517	-0.7837937	0.00261774	0.04129698
FGFR1OP2	529.295339	0.38939645	0.00262594	0.04138922
ZNF598	423.319377	-0.6276844	0.00263096	0.04143108
CNNM3	401.325258	-0.4693776	0.00263917	0.04152328
DDX58	449.713084	0.59916226	0.00264763	0.0416191
AIM2	7.18798715	1.42934806	0.00265761	0.04170152
BRCA2	230.878727	-0.9256505	0.00265727	0.04170152
SF1	2374.387	-0.4394398	0.00267982	0.04197502
SPNS3	16.6124083	1.43453784	0.00267759	0.04197502
LMBR1	1097.7648	-0.5616923	0.00268823	0.04206939
ACSBG2	11.0410363	1.5357455	0.00269961	0.04217245
CREG1	1214.91133	0.39598423	0.00269743	0.04217245
ATP8B4	345.131251	0.99779798	0.00271142	0.04231931
POLK	901.368214	0.3202678	0.00271825	0.0423883
MRPL38	396.703635	-0.4635566	0.00272325	0.04242868
PPAN	26.6682761	0.76359407	0.0027335	0.04251306
SMPD4	723.131715	-0.4070775	0.00273146	0.04251306
KRT14	33.2496729	-1.5362673	0.00274135	0.04259745
CNOT1	4255.0343	-0.4009375	0.00274661	0.04264147
CNIH3	20.1935479	1.07820898	0.00275224	0.04269131
ZCCHC10	158.21385	0.49733118	0.00277864	0.04306278
ASPRV1	40.3801062	1.05175014	0.00278482	0.0430827
TLCD1	14.3662054	-1.1793021	0.00278445	0.0430827
C11orf35	45.0197732	-0.7094954	0.0027958	0.04310096
FAM229B	238.940116	0.87006295	0.00279043	0.04310096
MRPL41	326.905432	-0.6257164	0.00279513	0.04310096
SCAMP3	703.975153	-0.4934911	0.00279389	0.04310096
NAGPA	106.707259	0.34875874	0.00280667	0.04323052
SHCBP1	78.7332453	-1.0013193	0.00281374	0.04330158
SPATA41	16.6038716	-0.8870349	0.00282935	0.04350367
ESRRA	369.902958	-0.7247024	0.00283353	0.04352992
RUNX3	53.4176828	1.15928662	0.00284014	0.04359338
FAM106CP	33.7272346	-1.5032595	0.00286028	0.04379053

GPATCH8	2211.86536	-0.4128738	0.00285688	0.04379053
USP53	4313.66273	0.78816581	0.00286045	0.04379053
CPO	8.30705827	1.20774088	0.002874	0.04392154
MINOS1P1	166.634016	0.72689329	0.00287269	0.04392154
WEE2-AS1	13.6623406	0.94514495	0.00288495	0.0440506
ASIC3	43.1203869	-0.9633623	0.00290188	0.04427065
PEX5L	59.8901658	-1.4467256	0.00291518	0.04443498
ATP7A	707.595756	0.3641526	0.00292711	0.04453973
SPRY1	624.173493	1.01666815	0.00292631	0.04453973
DLL1	80.4396858	1.35367564	0.0029332	0.0445552
SOX12	233.512548	-0.854358	0.00293279	0.0445552
CETN4P	1.54058385	1.5101748	0.00294511	0.04469763
LOC728819	5.08743447	-1.4433427	0.00296737	0.04499658
DNAJB1	1740.88621	0.71985092	0.00298027	0.04515332
ACSM5	40.5575885	1.16505162	0.00298991	0.04526034
FZD2	963.904521	-0.6206861	0.00299265	0.04526281
C8orf82	177.730391	-0.6554342	0.00299704	0.04529028
TTYH1	10.6865586	-1.5046439	0.00300111	0.04531293
FRMPD4	2.15636193	-1.5252861	0.00300602	0.04534814
NRG4	51.5245271	-1.4383975	0.0030115	0.0453919
CALY	9.79209512	-1.5086657	0.00301787	0.04540999
PTPN22	46.8368537	1.11899181	0.00301778	0.04540999
CCND1	21355.0724	-0.9160399	0.00302843	0.04552993
LOC1019276	4.95133738	1.5054633	0.00303494	0.04558889
CAPN15	521.236132	-0.6302792	0.00303993	0.04562495
TRIM46	55.9294482	-1.3384695	0.00304394	0.0456461
ANKRD39	72.6868642	-0.5138767	0.00306625	0.04573696
EPG5	1597.81399	0.67103874	0.00305493	0.04573696
GPR98	23.424167	-1.4100518	0.00306311	0.04573696
HSPA12A	379.714745	1.27385326	0.00306661	0.04573696
LOC283038	5.43118841	-1.4127541	0.0030682	0.04573696
PTPRC	971.915685	0.92983124	0.00305896	0.04573696
TRPC1	603.414684	0.63147171	0.00306675	0.04573696
PLA1A	5.77362796	1.2331817	0.00307923	0.04586261
ARHGAP11B	30.9314246	-1.070385	0.00309318	0.04603126
LOC1019272	9.73653821	1.48128226	0.00310189	0.04608291
UBA7	655.700195	0.78621443	0.00310161	0.04608291
CST7	11.8065323	1.32276445	0.00312116	0.04633019
AQP1	1810.00775	1.44452043	0.00314321	0.04648228
DCAF7	2481.52292	-0.4611992	0.00313894	0.04648228
RNF11	1581.43529	0.62145455	0.00314462	0.04648228
SLC30A3	17.8307891	1.51676004	0.00314445	0.04648228
ZBED8	190.258235	0.60551393	0.0031362	0.04648228
ANKRD20A8	52.1625303	-1.3376395	0.00314779	0.04649004
KIF23	362.283681	-1.0644221	0.00316352	0.04668319
ARID5B	1255.1713	1.1487315	0.00317844	0.04675633
HERC2	3874.27986	-0.2988698	0.00317533	0.04675633
IPCEF1	85.4745127	1.08484079	0.00317911	0.04675633
SAP130	472.205882	-0.4073437	0.00317682	0.04675633
ITGB3	115.296176	1.04267228	0.00318391	0.04678518

NELFB	568.186493	-0.3349292	0.00318639	0.04678518
NEB	586.314523	1.20512144	0.00319691	0.04690041
SHROOM3	244.47223	1.31128813	0.00320346	0.04695738
IKZF3	61.0426669	1.14033402	0.00321014	0.04701606
ACO2	1351.79574	-0.6646326	0.00321501	0.04704831
BLOC1S3	157.965236	-0.5164942	0.00321926	0.0470713
HIF3A	1603.4172	-1.1423435	0.00323248	0.04722536
FAM13A-AS1	94.0139253	0.72120814	0.00323642	0.04724365
THEMIS	14.2077361	1.16494318	0.00324265	0.04729544
AEBP1	4151.15313	1.29254512	0.00325749	0.04739388
CYC1	609.978737	-0.565131	0.00325513	0.04739388
MRPL14	147.599837	0.45953914	0.00325582	0.04739388
WDR11-AS1	5.53914016	1.26910206	0.00326337	0.04744027
SOX11	328.616986	-1.5071619	0.0032672	0.04745664
AMH	92.6189154	-1.3987401	0.00327645	0.04755171
CYP2D7P	18.4793639	0.77439569	0.00328765	0.04765386
ZNF438	187.129874	0.60317536	0.0032889	0.04765386
CD244	5.91877599	1.32160104	0.00330233	0.04778337
CUX1	3267.02176	-0.5227282	0.00330786	0.04778337
ORC6	37.339782	-1.0721834	0.00330613	0.04778337
SLC37A4	228.659393	-0.4484349	0.00330871	0.04778337
FIZ1	139.399511	-0.6305609	0.00331223	0.04779502
STON1	130.432274	0.83506459	0.00332444	0.04793187
FUBP3	960.913236	-0.2722478	0.0033305	0.04794063
RGP1	422.969312	-0.5132597	0.00332826	0.04794063
HTRA1	1337.63966	0.91616869	0.00334278	0.04807809
EHD1	4132.50246	-0.7875156	0.00334992	0.04813384
HMP19	2.75663015	-1.5068792	0.00335487	0.04813384
LSMEM1	16.3966629	0.82434466	0.00335358	0.04813384
FAM135A	517.102822	0.50986503	0.00337756	0.04822348
LAMC1	7265.36256	-0.6091379	0.00337371	0.04822348
MX1	991.154475	0.59723847	0.00337286	0.04822348
PSAT1	214.051277	-1.1484501	0.00336393	0.04822348
RPUSD3	145.896273	-0.5005441	0.00337714	0.04822348
SHMT2	1069.43287	-0.7291454	0.00337009	0.04822348
DPY19L1P1	43.5684963	0.88693367	0.00338499	0.04825306
INTS6-AS1	27.2466626	0.60810292	0.00338512	0.04825306
LOC728730	45.1218994	0.75325841	0.00339456	0.04834847
TNXB	12.5352774	-1.2267921	0.00339961	0.04838113
CD226	18.3975941	0.95740901	0.0034048	0.04841583
ERBB2IP	3192.35647	0.29779565	0.00340924	0.04843981
TDRKH	120.46616	-0.7607495	0.00342438	0.04857655
TXNDC15	957.192443	0.46936303	0.00342275	0.04857655
SAT1	2458.71124	0.60806402	0.00343542	0.04869384
PPP1R1C	6.29176205	-1.4651195	0.00344117	0.04873611
RTN4R	61.5644347	-1.2904459	0.00345083	0.04883351
CSMD2	37.3880403	-1.3468282	0.00346178	0.04894907
ARHGAP11A	207.151778	-0.9486742	0.00346886	0.04897054
SLC6A17	28.3566681	1.45261771	0.00346769	0.04897054
C1QL1	129.455126	-1.192896	0.00347296	0.04898913

P2RY14	56.5488825	1.42817758	0.00347834	0.04902571
RANBP10	485.878456	-0.4580209	0.00348788	0.04908147
SURF2	76.3025261	-0.6746234	0.0034851	0.04908147
LMNB2	721.672312	-0.6396509	0.00351361	0.04919182
MATN2	713.979172	1.33846953	0.00352369	0.04919182
NDUFS1	1557.43859	-0.4893952	0.00350017	0.04919182
NUMBL	847.965807	-0.5791738	0.00350289	0.04919182
PSMD10	342.652407	0.34503791	0.0035231	0.04919182
RAP1GAP2	397.827078	-1.0095698	0.00350591	0.04919182
SNORA71C	7.95084917	-1.2633236	0.0035194	0.04919182
SRSF10	77.4348237	0.5612431	0.00351677	0.04919182
THUMPD3	637.728991	-0.4953759	0.00352034	0.04919182
TNIK	203.637933	1.20465955	0.00351484	0.04919182
RPL23AP32	115.135701	0.89084066	0.00353525	0.04931406
TRAF3IP3	47.3773251	1.08864812	0.00354706	0.04943964
LCK	10.8696077	1.11586237	0.0035597	0.04957646
ZMYM6NB	148.180609	0.62462535	0.00356321	0.04958619
EIF2AK1	1800.25327	-0.3864185	0.00356821	0.04961639
C9orf16	360.109414	-0.6435515	0.00358119	0.04967906
FBXW5	859.404595	-0.3827278	0.00358098	0.04967906
MTERF	174.552108	0.45231153	0.00357683	0.04967906
WNT10A	10.885127	-1.4135691	0.00358691	0.04971931
SIN3A	1755.37184	-0.5080286	0.00359894	0.0498467
LOC653602	11.1288635	-1.2910275	0.00362378	0.05015126
MATK	48.3858419	-1.3876817	0.00363388	0.05025154
NMRAL1	274.484908	-0.520026	0.00364094	0.05030955
GAL3ST3	8.21105171	-1.418312	0.00365876	0.05051619
TNNT2	1650.11178	-1.1280174	0.00366174	0.05051759
SLC22A18	215.050917	-0.6036876	0.00366811	0.05056584
LOC374443	291.380026	0.62190905	0.00368166	0.05071293
C19orf68	49.4224164	-0.6043642	0.00370941	0.05103679
PDCD1	6.33562299	1.40882393	0.00371098	0.05103679
ABCC11	4.45788913	-1.1799602	0.0037244	0.0511451
GPAA1	950.589618	-0.4759048	0.00372757	0.0511451
THAP2	74.9523733	0.59111347	0.00372634	0.0511451
STK32A	173.689622	1.4197198	0.00373431	0.05119762
P2RX7	213.792652	0.91472939	0.00373735	0.0511993
FAM171A2	208.431893	-0.6064887	0.00374405	0.05125117
CASP2	568.817525	-0.470954	0.00375085	0.05130444
RNGTT	394.952804	0.56603334	0.0037557	0.05133084
C19orf84	2.15855958	-1.4891186	0.00376768	0.05145269
JPH2	80.6487556	-1.1759404	0.00377632	0.05145269
SMC2	483.678492	-0.4999722	0.00377202	0.05145269
TMSB4X	5949.29007	0.49160454	0.0037761	0.05145269
ATIC	691.229388	-0.7748901	0.00378178	0.0514873
GLS	2076.50844	0.75206033	0.00378542	0.05149197
PIK3IP1	553.269914	0.93186551	0.00378798	0.05149197
PSTPIP2	137.818774	0.80322356	0.00381008	0.05175231
MORN1	51.3371211	0.84891093	0.00381838	0.0518096
PRKAG2-AS1	10.4523365	1.20140471	0.00382018	0.0518096

BRI3BP	128.277167	-0.6591681	0.00382376	0.05181807
COL24A1	32.4034502	1.10207995	0.00382904	0.05184968
ROGDI	331.252634	-0.6941741	0.0038789	0.05248456
RPS29	1123.54262	0.67267207	0.00388458	0.05252096
STK16	224.112595	-0.4298485	0.00388863	0.05253527
ATXN2L	1553.80302	-0.4820157	0.00389738	0.05261312
CHAF1A	175.098804	-0.7252597	0.00390663	0.0526169
ZNF394	312.013309	0.33759042	0.00390434	0.0526169
ZNF699	89.2600049	0.64630416	0.00390655	0.0526169
EZH1	972.572201	0.59210823	0.00391505	0.05268992
ZFYVE9	1015.76131	0.658123	0.00391816	0.05269142
CDH23	2780.14431	1.30474793	0.00392325	0.05271959
DBI	489.686461	-0.5077332	0.00392883	0.0527543
SFRP2	26626.5836	1.26512037	0.00393184	0.05275438
THUMPD1	1149.73997	0.38272192	0.00395106	0.05297185
ENDOG	100.884023	-0.857078	0.00396906	0.05317268
CRMP1	287.447831	-1.2687385	0.00397445	0.05318157
TTC37	2229.48872	0.32799035	0.00397577	0.05318157
KIAA0895L	452.122542	-0.6828871	0.00399117	0.05324371
LOC1019282	6.07772508	-1.4650541	0.00399252	0.05324371
SRRT	1005.28008	-0.3741494	0.00398759	0.05324371
ZNF683	2.13867688	1.42196789	0.00399159	0.05324371
ACSL1	942.53583	0.82954358	0.0039999	0.05330163
KIF2C	32.1922651	-0.9428833	0.00400433	0.05332037
NAV3	172.516836	1.4236052	0.00401639	0.0534405
CCDC3	499.56544	-1.3959137	0.00402359	0.05345538
ZNF285	77.9659753	0.64521124	0.00402296	0.05345538
PHB	1189.45674	-0.4170433	0.00404127	0.0536497
ZDHHC24	126.254234	-0.5541912	0.00404435	0.05365011
RCBTB2	854.64281	0.53727152	0.00405581	0.05372111
SFRP4	2848.9995	1.4552105	0.00405488	0.05372111
PNRC1	2685.09502	0.67313357	0.00406938	0.05380039
RAD51AP1	52.4767029	-0.8736393	0.00406625	0.05380039
VGLL4	2794.24916	-0.9835649	0.00407097	0.05380039
CAMLG	455.358184	0.50583234	0.00408288	0.05391727
LINC00630	98.2719017	0.41174733	0.0040914	0.05398932
ZIC2	2853.9414	-0.6692618	0.00409591	0.05400829
TMED1	240.428736	0.4338828	0.00410192	0.05404697
C11orf21	11.6607747	1.27624885	0.00411116	0.05408932
KIAA0100	5252.63161	-0.3150958	0.00411128	0.05408932
SLC19A1	90.9028422	-0.8676169	0.00412829	0.0542725
BTBD8	22.4478222	0.98328613	0.00415344	0.05456235
BOP1	182.634935	-0.5392051	0.00416746	0.05469173
STAT5A	469.596612	0.50226888	0.00416951	0.05469173
ASPHD1	3.2033583	-1.4483584	0.004198	0.05502447
FIG4	251.917675	0.62762689	0.00420308	0.05504998
CLEC17A	10.7647456	1.37964341	0.00421681	0.05518873
ALDOA	10177.4213	-0.6731153	0.0042219	0.05521379
GZMH	5.45880893	1.34560473	0.00422646	0.05521379
HIST1H2BM	57.4956526	-1.029034	0.00422814	0.05521379

CDKAL1	341.026633	0.49839512	0.00425792	0.0555202
ZNF345	131.176292	0.49427418	0.00425787	0.0555202
OSBPL8	1816.74921	0.42560287	0.00426997	0.05563615
CH25H	46.7467649	1.20413206	0.00427921	0.05571521
ANKRD13B	584.243642	-0.9982559	0.0043042	0.05596396
RPL13A	1657.98562	0.53817452	0.00430468	0.05596396
NME8	4.78623948	1.30355961	0.00432819	0.05622814
ADAT2	99.2355043	0.72830565	0.00433678	0.05628406
CSF2RB	121.027558	0.86490144	0.0043389	0.05628406
CYTH2	686.297052	-0.5342585	0.00434713	0.05634925
FAM110A	53.9211951	-0.6002888	0.00436192	0.05649944
SLC26A7	279.090127	-1.4341303	0.00438103	0.05670521
CIZ1	1028.07374	-0.3633949	0.00438915	0.05676855
APOL3	162.018703	0.85877188	0.00442718	0.05691542
CEP135	206.394112	0.53861112	0.00442705	0.05691542
H19	13475.5423	-1.4620329	0.00442983	0.05691542
LRIT3	8.68846458	1.04197954	0.00442334	0.05691542
MTSS1L	1532.41335	-0.806025	0.00440688	0.05691542
PI4KB	1410.24429	-0.2615663	0.00441218	0.05691542
PIP5K1A	1264.55959	-0.4417414	0.00442327	0.05691542
RTKN	289.876196	-0.6289715	0.00441663	0.05691542
SGK1	2778.67963	0.97949674	0.00441634	0.05691542
SMAD5	2231.53611	0.45980737	0.00443287	0.05691542
CENPE	140.260413	-1.0009327	0.00445076	0.05710347
IDH3A	850.762888	-0.7592703	0.00445792	0.05712337
LRRC38	94.9163077	-1.3166308	0.00445881	0.05712337
SNORA53	822.408514	-0.806796	0.00446305	0.05713619
PSMD1	1447.79871	-0.323311	0.00447319	0.05722428
C10orf2	169.570123	-0.8307185	0.00447881	0.05725458
GATSL2	360.967222	-0.5180188	0.00449605	0.05743186
SYCP2	95.6139762	1.28486746	0.00450228	0.05743186
SYVN1	743.308005	-0.4836508	0.00450248	0.05743186
FAM64A	12.884585	-1.1623211	0.0045633	0.05816554
EHD3	185.320994	-1.0002367	0.00457101	0.05822161
PKD1L1	25.6654873	0.75573502	0.00459866	0.05853148
ANKRD22	106.482737	1.35215537	0.00461281	0.05854213
EDC3	547.469837	-0.5021533	0.0046122	0.05854213
HIST1H2BL	71.5843595	-0.8752459	0.00460733	0.05854213
OLFM4	107.744791	-1.3098076	0.00460406	0.05854213
USP22	5114.42123	-0.2822917	0.00462872	0.0587017
CACFD1	246.951225	-0.5324579	0.00463265	0.05870916
ATP5H	864.491629	-0.5317001	0.00463893	0.05874643
MEF2BNB	102.175816	-0.404804	0.00464813	0.05882061
OGDHL	631.046674	-1.2504116	0.00466178	0.05895085
NFKBIA	2331.13834	0.64827695	0.00467163	0.05903299
REV3L	1414.28752	0.56243808	0.0046803	0.0590489
SLC6A4	129.222134	1.45222422	0.00468029	0.0590489
UNC13C	6.82379954	-1.3676112	0.00468296	0.0590489
ABC3	628.150914	-0.2592692	0.00469203	0.05912094
SERPINB10	10.660512	-1.450311	0.00470731	0.05922863

TNFRSF12A	109.989699	-1.0151776	0.00470439	0.05922863
ENOSF1	464.894621	0.60488755	0.00472068	0.05935432
CDCA2	77.939032	-1.2074363	0.0047297	0.05942527
CNN2	821.020199	0.91201053	0.0047454	0.05957933
LYZ	460.679776	1.08430769	0.00475889	0.05957933
PAFAH1B3	97.7260217	-0.6870667	0.00475758	0.05957933
SUCNR1	9.32426093	1.33288117	0.00475854	0.05957933
ZER1	975.79909	-0.2811065	0.00475494	0.05957933
TF	891.361795	-1.4407533	0.00477931	0.05979233
NELL2	46.4406824	-1.2348406	0.00479087	0.05989439
DCPS	134.600549	-0.4296463	0.00479464	0.0598989
GINS2	51.266067	-1.126402	0.00480145	0.05994149
NR2F1-AS1	328.316341	1.01990095	0.00481716	0.06009498
NOL12	148.132498	0.49976185	0.00482147	0.06010606
CCDC175	11.8188737	1.44838667	0.00483091	0.06013848
DCHS2	378.109381	-1.3264042	0.00482999	0.06013848
TRIT1	157.069383	0.67146224	0.00483648	0.06016532
CADM3	24.7724202	-1.3772983	0.00485525	0.06022844
DPM3	120.0774	-0.5833015	0.00485226	0.06022844
GBA2	1240.68969	-0.4800638	0.00485189	0.06022844
RAI1	874.337993	-0.5385548	0.00484841	0.06022844
APOBEC3B	10.328715	-1.0161492	0.00486676	0.06032865
RSF1	1468.00614	-0.3271816	0.00487094	0.06033796
KMT2D	4134.92374	-0.4465098	0.00488179	0.06039952
RPS16	4029.24921	-0.7742386	0.00488278	0.06039952
PPP1R12B	2184.45996	0.55356658	0.00489262	0.06044266
ULK1	928.997369	-0.6191068	0.00489314	0.06044266
RBM4	718.766728	-0.3605022	0.00489716	0.06044983
NPHP3	199.792151	0.46990021	0.00490064	0.06045042
REPIN1	849.548658	-0.5586223	0.00491104	0.06053627
CLK2	696.250375	-0.4781837	0.00492035	0.06060847
LOC1019272	2.28517208	1.44162799	0.00492845	0.06066575
HCG11	355.882328	0.95391719	0.00493426	0.06069484
CXCL16	556.142166	0.6985937	0.00494218	0.0607074
NSUN5P1	303.427761	0.70817596	0.00494189	0.0607074
KHNYN	1132.28657	0.50750961	0.00494837	0.06074095
ATP2A2	4089.59735	-0.4591633	0.00495559	0.06074487
RGS18	75.3373293	1.10622125	0.00495502	0.06074487
TRAF3IP2-AS	99.1558169	0.93859921	0.00496288	0.06079183
CCNH	425.10051	0.42582614	0.00498456	0.06101495
PDE1B	61.8168712	0.75225524	0.00498939	0.0610316
NSUN7	80.6799572	-0.8050773	0.00499627	0.06107325
GORASP2	1025.03431	-0.4126538	0.00500297	0.06111265
GALNT13	17.4973658	-1.3780566	0.00501755	0.0612482
GDA	13.8464772	-1.4407077	0.00502229	0.06126353
CKAP2	541.196848	-0.675572	0.00503397	0.06131414
HNRNPH3	1170.69953	-0.3901552	0.00503689	0.06131414
RHOT2	749.839717	-0.4477283	0.00503195	0.06131414
CDC45	26.4369442	-1.2483797	0.00504121	0.06132426
SNORA52	20.1762829	0.96220423	0.00505174	0.06140987

UVRAG	475.716176	0.40210903	0.00505676	0.0614285
RWDD1	424.771097	0.52279861	0.00507325	0.06158619
ROR1	335.621477	1.18433441	0.00511752	0.06208076
FUT7	3.77103372	1.21966056	0.00512505	0.06212934
SLC22A4	35.7180829	0.85651516	0.0051394	0.06226041
VANGL2	428.511389	-0.5936418	0.0051465	0.06230341
AOAH	228.152811	1.00970322	0.00515458	0.06231548
PM20D1	6.3717607	1.41860078	0.00515133	0.06231548
MFSD3	118.590727	-0.629548	0.00516234	0.0623664
AOAH-IT1	3.30808031	1.40935483	0.00516938	0.06240868
KLHDC7A	165.061482	-1.4165095	0.00519698	0.06269883
NRK	7.74432513	1.39998411	0.00520416	0.06274246
LINC00486	1.68177761	1.39139492	0.00522829	0.06275857
MISP	44.2150991	-1.3161495	0.00522136	0.06275857
MPPE1	360.549037	0.51814528	0.00521268	0.06275857
RNF146	778.089527	0.6140877	0.00521008	0.06275857
THEM6	256.081564	-0.6843767	0.00522387	0.06275857
UBXN4	2369.71476	-0.2805858	0.00523048	0.06275857
XCL1	2.02661592	1.35872006	0.00522746	0.06275857
MAP1LC3B	1357.04694	-0.4506641	0.00524148	0.06278025
PHYHIPL	11.1751061	-1.3710769	0.00524224	0.06278025
SLC12A8	17.8157457	-1.0967189	0.00524299	0.06278025
SNX22	22.5688493	1.11254228	0.00525751	0.06291131
SPTBN2	296.987874	-1.0012533	0.00526981	0.06297393
ZFP41	387.599033	-0.5247829	0.00526991	0.06297393
MTMR4	1563.20035	-0.4649125	0.00527748	0.06302167
RPF2	255.094655	0.51744196	0.00529015	0.06313013
DDX60L	624.713464	0.73952208	0.00530534	0.06314006
EMC6	125.510461	-0.618083	0.00530416	0.06314006
IBA57	476.805809	-0.4431109	0.00530261	0.06314006
LIMK1	450.997546	-0.5423185	0.00529542	0.06314006
FAIM2	32.5764038	-1.3142549	0.00533202	0.06341459
CENPP	165.767334	-0.7093026	0.00534064	0.06347235
FIGNL2	8.10312593	1.2754611	0.00535131	0.06347235
NCAPG2	295.068998	-0.6552961	0.00535047	0.06347235
SKIV2L2	1074.88126	0.26100023	0.00534582	0.06347235
C11orf80	96.2688336	-0.6794979	0.0053812	0.06374096
SPIRE2	125.040861	-1.0564163	0.00537975	0.06374096
CPSF4	229.085268	0.40422699	0.00539355	0.06379865
ECM2	1864.13354	0.74269672	0.00539248	0.06379865
XRCC1	393.791622	-0.273606	0.00539695	0.06379865
QRFPR	22.275286	1.42974672	0.00540471	0.06380462
TGM5	2.00783131	1.23589107	0.00540124	0.06380462
PTPRZ1	17.6295957	-1.4298618	0.00541089	0.06383466
C12orf29	139.927624	0.36876324	0.0054412	0.06413304
DOCK7	931.525089	0.56130915	0.00544347	0.06413304
EEF1A1	72424.0787	0.56721496	0.00545002	0.06416728
POC1A	35.5166157	-0.8009907	0.00545612	0.06419607
PPP6R3	2402.74013	-0.2865113	0.00547731	0.06440233
EI24	951.135265	-0.3041846	0.00549853	0.06456549

LOC1019271	1.98396388	1.39707562	0.00549725	0.06456549
FBXL4	509.425143	0.54057298	0.00551808	0.06475191
CD2	18.7311302	1.19028981	0.00553278	0.06479462
SMIM8	128.035042	0.59084476	0.00553127	0.06479462
ZCCHC14	1000.10242	-0.5339689	0.00552996	0.06479462
SV2B	25.4268329	-1.369538	0.00553723	0.06480369
GALR1	8.20608744	-1.3968436	0.00555028	0.06491314
SCAMP5	298.258001	-0.9640464	0.00556222	0.06500956
ZNF503	863.818222	-0.924981	0.00557032	0.06506103
PPIF	540.165842	-0.7968083	0.00558013	0.06513233
CHST7	71.4249869	1.05372209	0.00559086	0.06521428
ZC3H18	553.588682	-0.4308902	0.00560653	0.06535378
COX6B2	5.2221668	-1.3646098	0.00561461	0.06540462
CDK15	7.17600588	1.16412342	0.00563702	0.06557882
PSD	24.7597973	-1.0820648	0.00563601	0.06557882
CHST11	599.081514	0.76369272	0.0056492	0.06563372
ZEB2-AS1	1.32368021	1.36184111	0.00564915	0.06563372
DDX39A	366.462655	-0.5387024	0.00569517	0.06612407
CCNB3	9.62144859	-1.0730091	0.00569923	0.06612759
CFP	13.6705981	0.96976251	0.00571028	0.06621211
C5orf49	3.05683968	1.35757893	0.0057306	0.06634594
GUSBP4	44.0534114	0.73322231	0.00573313	0.06634594
PMEL	29.7234524	-0.9855012	0.00572862	0.06634594
GAPT	70.6416616	1.11714321	0.00573885	0.06636844
LOC1001305	10.0375103	-1.4198576	0.00574418	0.06638637
ARMC7	204.768554	-0.7404941	0.00576153	0.06643255
HIVEP2	1004.77078	0.53452214	0.00576231	0.06643255
LINC00260	73.8223309	-0.7408331	0.00576328	0.06643255
SEC31B	405.172773	0.56560755	0.00575628	0.06643255
IL2RG	27.4951858	1.07213033	0.00577179	0.06648711
LPCAT2	462.831246	0.99039592	0.00577732	0.06650728
ITIH2	1403.05965	1.29701162	0.00580339	0.06672002
SNTB2	1539.15493	0.64137246	0.0058015	0.06672002
MAPK7	342.564725	-0.4227899	0.00580793	0.06672154
RPS14	5360.01173	0.46829599	0.00581111	0.06672154
PKIB	55.5752694	1.10964947	0.00582218	0.06680507
C17orf89	158.521387	-0.6377718	0.00584776	0.06686476
DDIT4	2655.66891	1.02344923	0.00583503	0.06686476
ELAC2	872.003181	-0.3508181	0.00585779	0.06686476
LOC1019272	7.77615769	-1.4131086	0.0058492	0.06686476
NPPA-AS1	5.37771404	1.09609348	0.00585468	0.06686476
SAMD9L	1498.68799	0.45590142	0.00583225	0.06686476
ZNF559	421.651756	0.50447723	0.00585529	0.06686476
ZNF57	111.988631	-1.0557548	0.00585172	0.06686476
HSPD1	3053.22197	-0.6076484	0.00586335	0.06688475
LOC1019287	5.42803061	1.3819573	0.00587154	0.06693478
LOC1002889	30.2617573	1.0384787	0.00587575	0.06693946
RAMP1	31.9463908	-1.300571	0.005892	0.06708109
ZNF674	92.8306411	0.51104139	0.0059041	0.06717538
CHERP	599.004873	-0.4842045	0.00591301	0.06718987

ZBTB46	547.545263	-0.7844902	0.00590949	0.06718987
S1PR4	4.61156697	1.19628042	0.00591847	0.06720841
RAB11B	908.885037	-0.5295726	0.00592844	0.06727826
PLA2G3	28.4466703	-1.395845	0.00596003	0.06759313
UBN1	878.561784	-0.246809	0.00598312	0.06781129
COL6A4P2	18.3523729	1.31929381	0.00599467	0.0678202
CSTB	924.797617	-0.7772236	0.00599826	0.0678202
MARCH8	626.506098	0.46529177	0.00599206	0.0678202
STRIP2	335.950393	0.95759266	0.00599933	0.0678202
P2RX5	20.9619462	-1.3735595	0.00601053	0.06786656
UNC13A	340.059048	-1.3450177	0.00601115	0.06786656
KCTD15	473.094064	-0.705585	0.00601692	0.06788818
ZNF331	580.053114	0.71552566	0.00602091	0.06788961
NFE2L1	15083.6028	-0.4731025	0.00602477	0.06788966
PHLPP2	1241.89966	-0.6598804	0.00602971	0.06790175
SLA2	9.25717512	0.95470225	0.00603839	0.06795603
MRPS24	22.5364258	-0.7988738	0.00605747	0.06808361
SLC25A22	268.850336	-0.5022879	0.00605451	0.06808361
CIAPIN1	404.805335	-0.5505523	0.00607453	0.06823183
ETV4	51.9704662	-1.2703831	0.00610628	0.06853423
FAM200A	109.603044	0.52162858	0.00610925	0.06853423
ICK	618.203465	0.68480714	0.00611731	0.06858088
NABP1	272.560044	0.89848207	0.00614878	0.06884601
PLK4	75.1299168	-0.8624847	0.00614604	0.06884601
ARPC5L	169.102961	-0.3947112	0.00615944	0.0688587
EAF2	47.8869908	0.67910202	0.00616557	0.0688587
ELOVL2	191.454218	-1.2377104	0.00615623	0.0688587
NCK2	1153.49149	-0.5642976	0.00616232	0.0688587
SUPT3H	96.6941348	0.78641569	0.00617012	0.06886578
LOC1019271	2.3389472	1.40700437	0.00617811	0.06891122
DHRS2	82.125077	-1.3840876	0.00618497	0.06894394
EPS8L2	690.567974	-0.7854088	0.00618944	0.06895009
KIAA1671	4588.91117	-0.6454011	0.0062001	0.06899085
MYOZ3	141.600014	1.23428279	0.00620353	0.06899085
NAT8L	127.393646	-0.8838707	0.00620486	0.06899085
MRO	359.048622	-1.0866831	0.00621306	0.06899473
TMEM255A	33.1432279	-1.3686403	0.00621099	0.06899473
EEFSEC	179.324462	-0.4754959	0.00623337	0.06917666
SCP2	1068.13341	0.52020486	0.00624602	0.0692733
HIST2H2BF	326.124561	-0.6810791	0.0062575	0.06935693
CARF	420.413737	0.41693356	0.00627469	0.06945986
PDIK1L	132.591691	0.47772894	0.00627388	0.06945986
TRNT1	286.624074	-0.4480701	0.0062795	0.06946949
CD96	20.8541379	1.04770698	0.00628814	0.06947762
SYNGR2	740.582145	-0.6948021	0.00628431	0.06947762
FITM2	108.07815	-0.515004	0.0062988	0.06955168
PDK4	1236.06121	1.16445164	0.00631684	0.06970715
CTDSP1	2173.20378	-0.2455021	0.00632615	0.06976614
CAMKK2	678.591547	-0.3665919	0.00633173	0.0697839
AIG1	437.373804	0.57260121	0.00635671	0.07001533

CXorf56	266.651562	0.36137981	0.00636077	0.07001625
CDKN2A	44.3753833	-1.30695	0.00637062	0.07008075
MIR5572	1.53033586	-1.3356566	0.00637795	0.07011754
GLI2	776.124295	-0.5731502	0.00639271	0.07023599
LOC1005065	30.7798968	1.05395867	0.0063982	0.0702524
SFXN1	579.156389	-0.5499733	0.00641865	0.070433
AFMID	226.139881	-0.6583809	0.00644911	0.0705111
C1GALT1	439.416701	0.67623731	0.00644278	0.0705111
CRYBB3	15.3762176	-1.1724154	0.00643677	0.0705111
FIRRE	69.2577526	-1.3410921	0.00644714	0.0705111
QKI	4881.01974	0.37435863	0.00644982	0.0705111
WHAMMP3	129.087267	0.55234857	0.00643798	0.0705111
CHCHD6	131.189074	0.92335625	0.0064684	0.0706008
FBLN1	2178.81423	1.37307973	0.00647616	0.0706008
GLMN	75.7645119	0.74005732	0.00647167	0.0706008
GPI	4221.6021	-0.6210638	0.00646253	0.0706008
TSC22D3	5050.89579	0.91327237	0.0064781	0.0706008
LAMC3	98.8062433	-1.233243	0.00648256	0.07060567
MRRF	306.875979	-0.4492405	0.00650342	0.07078531
PRRT3	96.9781263	-0.8283575	0.0065071	0.07078531
TBC1D8	2814.24225	-0.8683395	0.00653515	0.0710465
DNAH12	46.9387259	1.13457881	0.00658559	0.07155063
LOC1019272	37.7708471	0.59421365	0.00660707	0.07173975
CASS4	94.4592572	1.08591875	0.00661186	0.07174748
FXYP1	326.7294	0.89654685	0.00664018	0.07187925
MSI2	1515.47305	-0.5149068	0.00664444	0.07187925
NCAPD3	495.490632	-0.4398607	0.00663184	0.07187925
PDE2A	84.5137286	1.10285979	0.00663639	0.07187925
TWIST2	85.3157495	-1.0521586	0.00664272	0.07187925
RNU6ATAC	10.157866	1.23520238	0.00665588	0.07195873
HORMAD1	2.36202051	1.3686604	0.0066713	0.07204093
TPRXL	8.08744902	-1.1928687	0.00667167	0.07204093
GPR19	3.33951177	-1.3383385	0.00669881	0.07228963
RLF	546.507852	0.56751135	0.00671359	0.07240472
NALCN-AS1	2.63608729	1.35996613	0.00672471	0.07248019
FAM131A	201.700396	0.8123818	0.00675256	0.07250355
FAM134A	1354.54853	-0.368192	0.0067454	0.07250355
FBLL1	19.2394899	-1.23484	0.0067552	0.07250355
MYOC	1.72997171	1.39068877	0.00674622	0.07250355
TMC4	95.3806337	1.13206521	0.00673428	0.07250355
TRABD2A	15.4216812	-1.0676104	0.00674948	0.07250355
TRIM59	89.3428754	-1.0335043	0.00675573	0.07250355
RIMS2	6.49587886	-1.38569	0.00677058	0.07261864
BAZ2A	2611.2002	-0.44271	0.00678616	0.07272746
TNFSF13B	81.1130181	0.76997422	0.006789	0.07272746
CSNK2A3	11.4656862	-1.1057021	0.0068011	0.0728128
CHST6	6.4917891	-1.1897552	0.00682713	0.07300254
MYBPC2	15.7780267	-1.3088914	0.00682359	0.07300254
ANGPTL1	10.5167893	-1.3827025	0.00685906	0.07321595
CLN6	380.044317	-0.5672359	0.00687059	0.07321595

FAM73A	525.401744	0.4784359	0.00686531	0.07321595
SLC2A13	185.27988	0.79147844	0.00685182	0.07321595
STMN2	3.10385714	-1.3896621	0.00686446	0.07321595
SYMPK	1154.12467	-0.3510298	0.00687206	0.07321595
CAP1	2228.07733	0.43871854	0.006885	0.07326509
SNORA47	144.992718	-0.8038545	0.0068835	0.07326509
CD22	38.0405981	-1.2608932	0.00689604	0.07330689
FBXL19	342.696043	-0.40624	0.00689727	0.07330689
N4BP3	192.540667	-0.9972669	0.00690974	0.07339512
DDAH1	658.306134	0.89181048	0.00692171	0.07347788
TMEFF2	3.06989736	-1.3696019	0.00692639	0.07348328
TRPV6	2.99630096	-1.2318179	0.00693234	0.07350207
RBM4B	237.964997	-0.314522	0.00694004	0.07353934
LOC1001295	15.6084899	0.85657385	0.0069575	0.07367997
MTR	2279.06408	-0.4132623	0.00697119	0.07373612
PHC2	844.763143	0.67854146	0.00697053	0.07373612
WFIKN1	3.84945437	-1.2752951	0.00697632	0.07374613
C10orf85	2.02669293	1.37390366	0.00699328	0.07374813
HNMT	721.083848	0.69991166	0.00698714	0.07374813
MYO3A	121.977745	-1.3066181	0.00698843	0.07374813
SLC24A4	21.6598742	1.0941425	0.00699238	0.07374813
YY1AP1	935.653986	-0.3110162	0.00702491	0.0740373
WFDC10B	2.16401842	1.38153143	0.00704695	0.07422509
RGS2	364.487017	1.11604499	0.00705636	0.0742797
PSME3	1028.2267	-0.3873644	0.00708571	0.074544
ANAPC16	801.529816	0.50667458	0.00712887	0.0745605
APOD	2561.11528	1.34493362	0.00709186	0.0745605
DKFZP58614	243.549029	0.63993747	0.00712376	0.0745605
FBXO43	8.2409028	-1.1077351	0.00712334	0.0745605
GSK3B	1460.48401	-0.2985407	0.00712264	0.0745605
HIST2H2AC	576.587367	-0.4729899	0.00712197	0.0745605
NEK11	116.819904	0.84870477	0.00712707	0.0745605
SEC61G	198.37667	0.61566205	0.00711761	0.0745605
SETD1B	915.850324	-0.3953702	0.00711644	0.0745605
XRCC2	62.2740623	-0.9069593	0.00712966	0.0745605
CXCR3	2.4690869	1.25358641	0.00713403	0.07456189
GTF2IRD1	586.661702	-0.5949058	0.00714839	0.07466752
SWSAP1	30.9462481	0.65841211	0.007172	0.07486972
MAL	4.07708762	-1.3733071	0.00718375	0.07490347
SEPP1	3429.86545	0.873289	0.00718301	0.07490347
GOLM1	1771.15419	-0.5963552	0.00719107	0.07491947
KIN	266.199672	0.34762612	0.0072	0.07491947
NCKAP5	133.342158	0.82041712	0.00719956	0.07491947
UGT8	7.34085992	-1.3588731	0.00720232	0.07491947
YTHDF1	938.349134	-0.5072065	0.00721737	0.07503163
FRAT1	111.345698	0.892625	0.00722329	0.07504885
SNAPC4	275.142855	-0.4143946	0.00722815	0.07505501
DPYD	658.151311	0.80614371	0.00725658	0.07530575
HLA-DQA1	362.607791	1.24692679	0.00731396	0.07585644
SPN	89.7027575	1.06549501	0.00732131	0.07588795

ERAL1	341.126496	-0.3259454	0.0073296	0.07591108
TNFRSF1B	692.467589	0.75399358	0.00733217	0.07591108
USP43	50.0868464	-1.0280823	0.00733761	0.07592265
PCNT	1259.45603	-0.5157463	0.00735042	0.07601048
PTMA	4515.25657	-0.4510202	0.00736443	0.0760213
ST6GALNAC4	356.019739	-0.7474887	0.00736211	0.0760213
TRIM38	797.731274	0.36543132	0.00736086	0.0760213
DAPL1	44.5547071	-1.375088	0.00738191	0.07602333
ITGAX	416.800742	0.95708409	0.00738057	0.07602333
LRRC66	13.5859959	0.99498072	0.00737088	0.07602333
RTCB	556.417645	0.46526524	0.00738038	0.07602333
COX8A	1046.55534	-0.4613345	0.00738814	0.07604294
ZC3HAV1L	242.16514	-0.533992	0.00741562	0.07628116
THAP3	88.9547193	0.49933557	0.00742424	0.07632517
HRH2	26.2884063	1.00653559	0.00742941	0.07633368
UBAP2	800.526155	-0.5093192	0.0074365	0.07636196
PPP5D1	8.36028369	1.06002587	0.00745969	0.07655536
PHKB	1581.52667	-0.2486273	0.00747928	0.07671165
SNORA22	91.4601122	-0.9014758	0.00749196	0.076797
AGAP1	981.878979	-0.6289205	0.00750487	0.07683119
IGF1	656.19493	1.21762476	0.0075084	0.07683119
SLC50A1	279.539905	-0.4904021	0.00750341	0.07683119
AP2B1	4906.69735	-0.420947	0.00755095	0.07700654
CLSPN	99.2796124	-0.9061021	0.00755181	0.07700654
EXOC3L1	18.2225992	-0.8517377	0.00754821	0.07700654
LRCH1	540.727939	0.94386298	0.0075351	0.07700654
SIAE	625.224355	-0.6973814	0.00753678	0.07700654
VPS4A	992.212736	-0.3558222	0.00754801	0.07700654
GSTM5	127.50856	1.30779805	0.00756275	0.07707341
CD19	2.00194291	1.3664171	0.00758995	0.07726113
SHC4	273.00258	1.29300012	0.00758736	0.07726113
LRRC24	39.3991708	-0.6898899	0.00762504	0.07743905
NPRL3	445.380552	-0.5168202	0.00762186	0.07743905
PPAPDC1A	13.0121451	1.33254159	0.00761966	0.07743905
ST8SIA4	318.592252	0.6874842	0.00761927	0.07743905
CEP120	1145.50328	0.63001476	0.00766255	0.07768542
SFRP1	1246.21992	1.34289952	0.00765898	0.07768542
ZNF552	101.359538	-0.4345508	0.00766107	0.07768542
CLEC4E	58.3287264	1.24811922	0.00768062	0.07782384
RPS23	6159.9106	0.48475512	0.00770842	0.07806056
TMEM132A	293.960091	-1.0659121	0.00771661	0.0780985
CADPS2	1125.09816	-0.9046582	0.00772116	0.07809962
NDUFB2-AS1	6.24295045	-0.9780856	0.0077492	0.07833815
LRRC8A	898.879648	-0.4335187	0.00776225	0.07838003
ZIC3	3.57793925	-1.3677678	0.00775803	0.07838003
OSBP	1345.09887	-0.3364541	0.00778612	0.07855951
SEC16A	3061.50191	-0.396876	0.00778896	0.07855951
RNF152	133.022328	1.1191809	0.00779578	0.07858328
HTRA3	85.7421346	-1.2049246	0.00780089	0.07858968
TSTA3	308.407137	-0.6239679	0.00781715	0.0787085

SLC22A20	9.06765585	-1.0814901	0.0078242	0.0787344
C1QTNF2	31.2511423	1.14869369	0.00786995	0.07897312
DPF1	3.62336971	-1.2745987	0.00787037	0.07897312
FGD1	328.426605	-0.4468967	0.00786895	0.07897312
LAMA5	6392.39045	-1.04763	0.00786443	0.07897312
MPHOSPH6	104.383524	0.61250931	0.0078613	0.07897312
BLOC1S6	966.662705	0.38008975	0.0078809	0.07902983
C1orf61	6.60112108	-1.3399154	0.00788501	0.07902983
SULT1E1	46.9064246	-1.3655629	0.00789634	0.07909831
EBF3	261.419946	1.20634404	0.00793303	0.07942065
GOLGA8N	104.48881	0.71880309	0.0079693	0.07965506
KIRREL2	6.34369895	-1.3571089	0.00796171	0.07965506
SNAI3	19.0466897	1.20328117	0.00797003	0.07965506
SLC39A4	51.2174747	-0.9393497	0.00797902	0.07969963
FOXD2	985.867828	-0.7040362	0.00800123	0.07985256
SDCCAG3	323.487109	-0.3889491	0.00800341	0.07985256
STIP1	1039.55486	-0.4937859	0.0080081	0.07985405
KIAA1107	95.0899433	0.80434909	0.00802105	0.07993779
WLS	1641.20846	0.66990805	0.00805629	0.08024352
LOC283731	3.82649162	-1.3377782	0.00806903	0.08032494
ZNF579	110.928098	-0.597411	0.00811577	0.08074458
SLAMF1	3.01500642	1.31262687	0.00812561	0.08079672
C1orf198	1007.91842	0.72718818	0.00814756	0.08096927
KRTAP5-10	2.89670533	-1.2504201	0.00815649	0.08097997
TLX1NB	1.30583485	1.25932515	0.00815785	0.08097997
HIC1	593.362307	-0.6864376	0.0081648	0.08098283
TACO1	181.921377	-0.4827885	0.00816734	0.08098283
ADAM20	89.4721456	0.71543662	0.00818912	0.08106166
GLIS2	1186.00038	-0.6665973	0.0081813	0.08106166
OXCT1-AS1	7.8274801	1.09102863	0.00818859	0.08106166
PDIA2	14.9532241	1.1735459	0.00821559	0.08127794
B4GALT6	188.864157	0.93701003	0.00823802	0.08137546
FAM157B	1.7965365	1.29925748	0.00823932	0.08137546
MTMR3	1127.46056	0.34116455	0.0082353	0.08137546
KPNA5	253.096579	0.61969571	0.00824592	0.08139492
AQP6	2.53211799	-1.3245364	0.00825707	0.08145914
CENPK	50.3279916	-1.0301507	0.00826169	0.08145914
PI16	91.0604743	1.34990953	0.0082931	0.08172301
AFAP1	3235.3442	-0.6465041	0.00831173	0.08186073
PSMD2	2140.87467	-0.2986027	0.00833909	0.08208426
BCL11A	13.1524702	-1.2515067	0.00840874	0.0826784
CTSS	922.399261	0.73459492	0.00840885	0.0826784
SPOCK1	20.4803096	-1.2054319	0.00844409	0.08297855
C5orf45	158.642865	0.48442137	0.00845365	0.08300129
RAD54L	25.2271469	-0.874106	0.00845584	0.08300129
ADAMTS8	4.23374591	-1.2876615	0.00847028	0.0830315
CD93	1669.44188	0.72377207	0.00847308	0.0830315
MNDA	187.513684	0.88440434	0.00847297	0.0830315
AQP5	33.5413778	-1.3515927	0.00852513	0.08344852
TLR5	129.703653	0.91485303	0.00852235	0.08344852

ECT2	283.98822	-0.781238	0.00854807	0.08350859
NLRC3	28.8700799	0.77852161	0.00854088	0.08350859
SEPHS2	442.84727	-0.6046046	0.00855025	0.08350859
STAG3L2	393.629562	-0.4820947	0.00854159	0.08350859
PFKFB3	1095.32992	0.68190771	0.00857021	0.08365706
COQ4	349.273436	-0.3510392	0.00858218	0.08372742
HIST1H3D	205.543917	-0.5778635	0.00859022	0.08374512
SLC6A16	23.56193	-1.0881179	0.00859352	0.08374512
MOB3B	191.764371	1.14393026	0.00860956	0.08382351
TMEM44	136.046742	-0.5835957	0.00861109	0.08382351
UNG	458.852563	-0.4703865	0.00862775	0.08393922
EIF4H	2542.60041	0.26345735	0.00864249	0.08398972
KIF21B	170.101855	0.81043399	0.00863896	0.08398972
GOPC	775.073207	0.45935445	0.00865653	0.0840797
CHRN2	13.6945406	-1.1283327	0.00868735	0.08422573
MFSD6L	1.5615883	1.29666276	0.00867949	0.08422573
RACGAP1	298.266603	-0.7297039	0.00868439	0.08422573
TOP1	1834.46056	-0.4056994	0.0086952	0.08422573
USP32P1	458.292133	-1.2897786	0.0086955	0.08422573
FAM129B	2373.61031	-0.7306909	0.00870377	0.08424261
METTL10	261.815124	0.49096096	0.00871293	0.08424261
SLC7A5P2	311.113632	-0.7085969	0.0087164	0.08424261
ZIC4	293.497437	-0.9547033	0.00871326	0.08424261
GLYR1	1388.05145	-0.2761638	0.00872684	0.08429716
PCBP1	1854.6541	-0.5438329	0.00873388	0.08431883
PTH2R	16.4102415	-1.3110094	0.00875121	0.08443982
MTF2	323.418175	0.49828425	0.00875934	0.08447192
ADAMTS17	731.755755	-1.0378369	0.00878086	0.08463309
TMED7	1697.24227	0.40263344	0.00881687	0.08493357
CCNB1	136.261762	-0.8451117	0.00882867	0.08495422
NAALADL2	138.503997	0.68015692	0.00882858	0.08495422
FRA10AC1	187.08009	0.6010873	0.00887452	0.08526907
PHACTR3	15.7575775	-1.3109532	0.00887593	0.08526907
ZC3H6	787.13698	0.52677322	0.00887457	0.08526907
MSH4	24.374397	1.24713325	0.00889041	0.08536157
RDM1	3.2391828	-1.2834219	0.00889644	0.08537285
DLGAP3	12.841439	-0.8849434	0.00891796	0.08553264
PVRL1	381.637036	-0.7861457	0.00892347	0.0855389
SLFN13	335.350902	-0.8899567	0.00895245	0.08572321
SORL1	3035.71862	1.06952883	0.00894893	0.08572321
BSDC1	833.073056	0.42548249	0.00898319	0.08597082
MCM7	750.278983	-0.5111325	0.00899585	0.08599838
SNX10	153.616538	0.64461621	0.00899103	0.08599838
MRPL54	154.269287	0.49527471	0.00900599	0.08604853
L3MBTL1	244.504355	0.54906386	0.00902569	0.08618995
CTNND2	15.3003762	-1.2736968	0.00903858	0.08621995
MAOB	26.8689368	-1.2610371	0.00904109	0.08621995
SCUBE3	733.938635	-0.84299	0.00904844	0.08621995
TAGLN3	2.63950269	-1.2435348	0.00904577	0.08621995
DOCK2	694.728173	0.78603255	0.00905638	0.08624894

TJP3	44.0041609	-1.1412179	0.00906359	0.08627088
ISY1	125.436635	0.42532774	0.00912104	0.08677075
GPR126	276.694093	0.97527771	0.00912793	0.08678937
FADS1	1182.50756	-0.9346054	0.00917333	0.0871739
CIDCEP	50.5251633	-0.5634377	0.00919046	0.08724239
PFDN2	174.667901	-0.4907102	0.00919001	0.08724239
HERC2P7	47.1901979	-0.5599004	0.00920351	0.0872675
MSTN	17.8233495	0.93613515	0.00920799	0.0872675
MYLK	1397.31815	1.18158923	0.00920298	0.0872675
MAP3K8	296.915721	0.69428878	0.00922595	0.0873907
TRUB2	283.000817	-0.4761209	0.00923707	0.08744894
HNRNPLL	545.387493	0.3874339	0.0092665	0.08763319
MNT	458.385302	-0.4362841	0.0092657	0.08763319
CALB1	55.3802302	-1.3372605	0.00928143	0.08768806
CXorf30	10.8770499	-1.3350675	0.00928985	0.08768806
MRAP2	126.592335	1.3355561	0.00928929	0.08768806
SAP30BP	909.955125	-0.6214766	0.00929224	0.08768806
GPNMB	1155.58777	1.06298916	0.00930545	0.08772684
MSS51	92.1673805	0.66182436	0.00930633	0.08772684
SLC6A9	68.5587588	-0.9949846	0.00933148	0.08791684
KLHDC1	149.047834	0.7065104	0.00935108	0.08803905
LRMP	84.0325391	0.8398506	0.00935746	0.08803905
ZBTB37	415.01171	-0.3624504	0.00935947	0.08803905
CATSPER2P1	25.023952	-0.7792548	0.00942443	0.08855545
SMIM14	642.774746	0.58541772	0.00942059	0.08855545
CLPB	433.961787	-0.4142103	0.00945875	0.08863486
FEZ2	674.230142	0.37286401	0.00946299	0.08863486
IARS	2597.69943	-0.4533487	0.00944844	0.08863486
PCDHB10	216.552312	-0.9819181	0.00946312	0.08863486
SCAND1	257.54916	-0.4786299	0.00945834	0.08863486
SEC22A	250.394982	0.27047855	0.00945783	0.08863486
KCTD2	819.709457	-0.4183544	0.00947872	0.08868653
TFEC	243.715246	0.91099253	0.00947392	0.08868653
HOXD13	11.2605109	-1.2860945	0.00949335	0.08872902
TRMT11	265.751446	0.51233345	0.009489	0.08872902
EIF2B3	176.626493	0.59341514	0.00951491	0.08888328
CRLF3	218.030425	0.50076702	0.00952796	0.08895793
GADL1	5.35914178	-1.3192235	0.00955342	0.08914836
IGF2BP1	7.3617089	-1.3316526	0.00957142	0.08922166
TRPC6	35.7064511	1.0032315	0.00956891	0.08922166
GALM	183.624667	0.85428911	0.00959267	0.08934899
GUK1	1166.13852	-0.4041806	0.00959524	0.08934899
CYP4Z1	88.5680969	0.98522166	0.00962941	0.08957234
TSGA10	86.8851414	0.72635449	0.00962545	0.08957234
LACC1	207.000162	0.61782274	0.00963983	0.08962189
ULK2	679.691497	0.42920502	0.00964632	0.08963488
NRCAM	42.2055144	-1.2105624	0.00965571	0.08967469
RASA4B	26.1088889	0.62958016	0.00969269	0.08992323
TMEM175	389.06708	-0.4553691	0.00968797	0.08992323
ZNF709	157.704013	0.70949104	0.00969943	0.08993829

LINC00276	3.75064201	1.20784277	0.00972701	0.09014653
DARS2	349.290839	-0.6333252	0.00973936	0.09019509
ZHX3	2578.78223	0.5797516	0.00974251	0.09019509
GTF3C4	517.918237	-0.3195609	0.00976933	0.09025341
RPTOR	1110.45962	-0.3836327	0.009767	0.09025341
SLC27A4	359.198924	-0.4238999	0.0097629	0.09025341
SRRD	111.163421	0.42961768	0.00976278	0.09025341
GPR174	4.62927119	1.10839929	0.00979358	0.09042996
WDR83OS	586.177275	0.41441455	0.00982524	0.09067466
DLGAP1-AS1	79.1493969	0.64305101	0.00983864	0.09069063
HOGA1	117.589582	0.94548182	0.00984243	0.09069063
RAB8B	1322.96586	0.6305523	0.00983366	0.09069063
CASKIN2	703.627239	-0.7805524	0.00985386	0.09074834
CTD-2201118	13.0738831	1.25956502	0.00986941	0.09084402
C20orf197	16.2091515	1.014425	0.00987761	0.09087192
NT5C2	1885.4198	0.58278399	0.00990685	0.09109327
INSRR	21.2773372	-1.2275415	0.0099209	0.09113647
SLC25A36	1329.03309	-0.2130097	0.00992191	0.09113647
GUSBP1	268.407154	0.44209335	0.009985	0.09166816
ITGB1BP2	12.3987205	0.96962101	0.01000256	0.09168581
NFAM1	131.597606	0.90117812	0.0099929	0.09168581
WFIKKN2	33.596926	-1.1810948	0.01000178	0.09168581
CDK2	448.89343	-0.5305259	0.01000805	0.09168834
LOC283194	8.18574721	1.14573638	0.01004748	0.09192204
SCYL1	1087.19291	-0.3243741	0.01004924	0.09192204
SLITRK6	107.481748	-1.3187076	0.01004128	0.09192204
RNF182	6.46914249	-1.28002	0.01005986	0.09197139
GABRB1	2.40867529	-1.3185873	0.01007127	0.09202785
NPHP3-ACAC	110.391161	0.59948344	0.01009371	0.09210961
RBPM5	582.528367	-0.6628947	0.01010028	0.09210961
SGK494	177.807946	-0.742496	0.01010116	0.09210961
TRAPPC9	719.353097	-0.3728201	0.01009847	0.09210961
GRIK3	6.18211677	-1.2867098	0.01013269	0.09230275
MAP1S	412.22877	-0.4313726	0.01013284	0.09230275
FAM227B	42.0173594	0.55812735	0.01016208	0.09234712
KLHDC3	930.972133	0.46675492	0.01016678	0.09234712
SCAF1	897.905899	-0.3778499	0.01014431	0.09234712
SEPT9	1864.8579	-0.6178233	0.01016643	0.09234712
SFTPD	4.55890954	1.30052897	0.0101552	0.09234712
WASH2P	228.707634	0.32184616	0.01016921	0.09234712
CACTIN-AS1	3.269549	1.26311632	0.01017918	0.09238994
MAT2A	2125.07196	-0.2968164	0.0101917	0.0924559
DOCK10	633.678268	0.81421739	0.01020821	0.09251025
EHD2	2104.9211	-0.6436983	0.01020537	0.09251025
CPLX2	41.6759835	-1.2843813	0.01023052	0.09266467
LOC1009965	11.0636019	-1.2925667	0.01024017	0.09270435
DKFZp779M0	1.80227249	1.22945518	0.01029437	0.09295587
GPR132	82.1197067	0.91900268	0.01029113	0.09295587
INTS10	466.561986	0.44790115	0.01028452	0.09295587
MIR497HG	92.2121759	1.17496674	0.01028143	0.09295587

SH2D5	2.13265296	-1.2656291	0.01029332	0.09295587
DUSP2	37.1178142	1.1913886	0.01032811	0.09318031
WWP2	971.062957	0.49516715	0.01032982	0.09318031
ATP5G1	339.783801	-0.4016904	0.01035167	0.09332952
SMU1	1213.1633	0.26118731	0.01036404	0.09339315
ATP5D	483.65129	-0.5771506	0.01037948	0.09346313
PRRG3	11.2313071	-1.3010998	0.01038243	0.09346313
ZFP14	385.960028	0.48150248	0.01039122	0.09349439
PKN3	138.442897	-0.7911983	0.01040123	0.09353666
AGBL3	22.839102	0.67526441	0.01041614	0.0935698
BCL9	565.89901	-0.56335	0.0104284	0.0935698
COL8A1	4128.87281	1.2432255	0.01043422	0.0935698
CTNNBIP1	286.493552	0.59969044	0.0104216	0.0935698
FAM209B	1.62886279	1.18017663	0.01043684	0.0935698
LCP1	865.873621	0.88846622	0.01041262	0.0935698
NUTF2	663.141085	-0.4457137	0.01048337	0.09393912
SNORA37	14.9144109	0.84058316	0.01050237	0.09406141
OMG	3.99499555	-1.3152802	0.0105092	0.09407474
STS	494.077123	0.92121554	0.01051701	0.09409678
PRPS2	292.904714	-0.336753	0.01054059	0.0942598
P2RY2	8.5396683	1.06877948	0.0105563	0.09435231
CMKLR1	753.210278	-1.1717778	0.01056978	0.09436855
FIBIN	2098.07476	1.2492112	0.01057958	0.09436855
PPAP2B	1602.65214	1.0070891	0.01056862	0.09436855
SMOC2	1104.65737	1.1645175	0.01057532	0.09436855
CCNC	398.775093	0.50870935	0.01063712	0.09472702
PBDC1	204.432539	-0.4762585	0.0106355	0.09472702
PTRH2	136.549145	-0.5927044	0.01064131	0.09472702
SRPX	118.385247	1.31232844	0.01063272	0.09472702
LOC1005060	11.6996876	1.04176154	0.01065594	0.09480929
FGD3	113.520507	0.84712199	0.01066276	0.09482201
ANKRD12	2012.35097	0.53194202	0.01070228	0.09483787
FOXO4	163.011566	0.66908949	0.01069999	0.09483787
ITGAM	625.424429	0.90210399	0.01069544	0.09483787
KLHL41	19.5811554	0.88142473	0.01068792	0.09483787
LETM1	992.057375	-0.4210587	0.01067469	0.09483787
METTL1	90.4556564	-0.5436944	0.01069129	0.09483787
RCN3	344.239766	0.91686764	0.01069005	0.09483787
ARPP21	2.48092624	-1.3115684	0.01072889	0.09502572
PPP6R1	983.591198	-0.3698864	0.01076842	0.09532785
ZNF420	191.940567	0.35822484	0.01079093	0.09547909
C19orf24	168.987367	-0.4160026	0.01081196	0.0956171
ADAMTSL4-A	90.6223746	0.76028893	0.01083475	0.09567432
CCR5	60.1099779	0.99780015	0.01083251	0.09567432
PITX1	44.8059028	-1.2897383	0.01083356	0.09567432
ANKAR	221.579737	0.48696999	0.01087701	0.09598508
C7orf76	2.73281527	1.17219638	0.01088086	0.09598508
APOB	143.79025	0.99439349	0.01089388	0.09605101
KIF15	79.7250562	-0.805695	0.01089925	0.09605101
TUBB1	8.69275039	1.16033592	0.01091324	0.09612611

BSCL2	98.8387233	-0.4663892	0.01092855	0.09621277
NLRP1	349.563795	0.85735851	0.01094438	0.09630394
HMGCS1	911.000882	-0.7204714	0.01096331	0.09642232
SLC26A6	751.588407	-0.9098107	0.01097726	0.09649676
DPF2	650.231858	-0.2585779	0.01099916	0.09664097
NUDT12	333.710983	0.65790589	0.01101175	0.09670331
ZNF319	216.828932	-0.3919418	0.0110513	0.09700217
KCNQ2	1.480978	-1.2563217	0.01106445	0.09706917
C6orf226	34.3841844	-0.7510572	0.01110301	0.09735892
METTL3	372.741443	0.48863607	0.01111155	0.09738526
MRPS11	216.124956	-0.4585369	0.01111714	0.09738567
RPL9	4924.86024	0.41211927	0.01112541	0.09740963
HSPA5	7500.83159	-0.7360764	0.01115369	0.09756013
SYT12	13.337844	-1.2829697	0.01115133	0.09756013
CGNL1	2553.76464	1.02449688	0.01116843	0.09759199
NEK10	8.66049861	0.96918089	0.01116798	0.09759199
MED8	228.707734	0.54505333	0.0111752	0.09760264
LOC642423	2.2050648	-1.113341	0.01120546	0.09781836
PCYOX1L	165.946433	-0.6661185	0.01122076	0.09785483
PRPF3	910.366099	-0.4682312	0.01121874	0.09785483
GINS1	95.9678097	-0.830902	0.01125066	0.09790827
PPP1R14A	10.7156895	-1.0851736	0.01124798	0.09790827
PTPRM	2645.52257	0.60985929	0.01126029	0.09790827
S100A10	3848.74361	-0.5949333	0.01125241	0.09790827
SLC7A5	379.476834	-1.1028454	0.01125667	0.09790827
ZRANB2	1238.77489	0.39719814	0.01124086	0.09790827
DNAH9	33.5780757	1.01605752	0.01127773	0.09801146
SLC29A2	16.2635598	-1.2130864	0.01131126	0.09820585
TMEM232	33.1005057	0.81704389	0.01130746	0.09820585
ABI2	1589.28727	-0.2600054	0.011365	0.09842849
DDX42	2325.93893	-0.2630001	0.0113579	0.09842849
FAM182A	4.24978078	1.28575251	0.01135063	0.09842849
SETDB1	846.87377	-0.3441052	0.01137048	0.09842849
TP63	855.707961	-1.2487262	0.0113567	0.09842849
USP24	2333.569	0.44688153	0.01136918	0.09842849
ALG14	67.0363986	0.61239694	0.01139107	0.09855823
PURA	1305.10431	0.4753986	0.0114063	0.09864152
LRPPRC	2367.36386	-0.4401944	0.01142262	0.09868564
SLC35F1	8.11396146	-1.2337157	0.01141818	0.09868564
ALMS1P	4.22355277	1.07876514	0.01143995	0.09869065
C16orf13	276.987338	-0.4670433	0.01143106	0.09869065
GRB7	15.2770871	-1.0920194	0.01144565	0.09869065
PRKG1	379.097124	1.01973672	0.0114456	0.09869065
PARK2	87.986768	0.69044471	0.01146914	0.09884474
SUGP1	339.47792	-0.2726939	0.01147712	0.09886512
KRTCAP2	643.855049	-0.4516948	0.01150059	0.09901879
EDN1	38.6798321	1.02343008	0.01151264	0.09902557
SNORA10	8.4224426	-1.0151493	0.01151161	0.09902557
CLYBL	87.9650955	-0.5450727	0.01152859	0.09911436
BRPF1	373.678976	-0.3768595	0.01155155	0.09926323

TP53	759.585356	-0.477851	0.01158129	0.09947017
CTXN1	53.6242678	-1.0128276	0.01159226	0.0995158
LMBRD1	803.698176	0.62951337	0.01161732	0.0996378
MANEA	410.497381	0.65990363	0.0116178	0.0996378
TSSC4	207.600728	0.41448553	0.01163209	0.09971172
ANK3	543.83447	1.02748273	0.01167264	0.10001058
HS3ST2	1.35087474	-1.2867445	0.01169271	0.10003639
LDB1	1146.34633	-0.495794	0.01168734	0.10003639
TP53INP2	980.326758	-0.7036812	0.01168272	0.10003639
C16orf86	30.0215993	1.05668027	0.01172378	0.10010743
CRHR1	2.40582086	1.28750912	0.0117128	0.10010743
DAAM1	407.477678	0.71983906	0.01172082	0.10010743
SP4	268.044704	0.48340013	0.01172206	0.10010743
TRIM7	24.2590231	1.01776631	0.01177229	0.10047283
DMXL1	2253.31708	0.4510443	0.01179167	0.1005728
MYBPC1	2.98903073	1.28358317	0.01179543	0.1005728
SLED1	21.6166102	1.05589575	0.01181547	0.1006948
CD3G	4.97961134	1.1703156	0.01182555	0.10073196
GYS1	1080.65506	-0.478583	0.01185708	0.1008714
PRNP	1967.47208	0.49008355	0.01185913	0.1008714
SLC29A4	41.2254333	-1.1315046	0.01185871	0.1008714
SCUBE2	48.0387352	1.08537123	0.01187641	0.10096956
C2orf15	15.9640901	-0.8641079	0.01190111	0.10108185
ZNF695	10.3276014	-1.1379469	0.01189966	0.10108185
HLF	3390.13925	0.71121899	0.01192658	0.10124929
NOL11	556.46959	-0.3417932	0.01194754	0.10137833
LSM12	249.763551	-0.4439958	0.01197356	0.10155011
ITIH3	12.8339221	1.25339661	0.01198096	0.1015639
PCDHB16	596.64816	-1.0148205	0.01199704	0.10165119
DNAJB4	483.055656	0.76837785	0.01202347	0.10174715
MARCH1	346.371791	0.84089245	0.01202572	0.10174715
TBC1D10C	18.7998992	0.98745078	0.01202548	0.10174715
POTEJ	27.7853301	-0.7765977	0.01204081	0.10182589
MFGE8	727.972092	0.9082871	0.01208736	0.1021704
RASSF7	328.126049	-0.7837914	0.01209778	0.10220942
C11orf44	2.81487725	1.2871382	0.01211221	0.10228214
HCFC1	2397.99007	-0.3282641	0.01215039	0.10245703
ICA1L	259.718095	0.72596262	0.01214458	0.10245703
UBLCP1	419.857303	0.22117043	0.01213912	0.10245703
ETV3	272.971867	-0.3550517	0.0121669	0.1024992
ZNF574	263.834691	-0.3284222	0.01216705	0.1024992
MIR181A1HG	57.4126577	-0.7753829	0.01219421	0.10267883
COQ3	31.8957607	0.54423003	0.01220879	0.10273971
SAMD3	6.12312816	1.12609853	0.01221312	0.10273971
ASPG	6.72131176	1.24148216	0.01225076	0.10297197
DTX1	3.29223566	-1.2478831	0.01225243	0.10297197
SNHG10	65.8140844	0.51460863	0.01233001	0.103525
ZYG11B	1282.47491	0.49900043	0.01232704	0.103525
LOC442028	35.3632189	-1.2288942	0.01233605	0.10352631
ADSS	650.687267	-0.3595628	0.01234731	0.1035714

HIST1H3I	77.6256111	-0.9198371	0.01236383	0.10366053
CCDC124	301.113209	-0.5010763	0.01239035	0.10383339
GZMM	1.97633887	1.22489555	0.01243837	0.10413654
NOP14	613.04987	-0.3684622	0.01243595	0.10413654
FAM65A	824.952635	-0.3765384	0.01245505	0.10421816
HIST1H4I	26.5851307	0.93280888	0.01246887	0.10421816
LOC1019270	3.82614715	1.16747416	0.01246103	0.10421816
NFIA	4419.28123	0.50548368	0.01247182	0.10421816
NEIL3	17.8882922	-0.903145	0.01251124	0.104498
EIF4G1	5206.83667	-0.3152885	0.01253735	0.10466631
DHCR24	1192.26893	-0.9644255	0.01257492	0.1049302
TFAP4	86.2441319	-0.750607	0.01260075	0.10509587
PLSCR4	811.872572	0.71338444	0.01260844	0.1051102
DLGAP4	1264.97398	-0.6463967	0.01262056	0.10513613
GRM7	36.0323409	-1.2777433	0.01265067	0.10513613
LRRC8C	1232.74403	0.62961715	0.01264673	0.10513613
MAP3K11	638.443469	-0.4402532	0.01263805	0.10513613
PABPC3	23.6396158	-0.9476277	0.0126454	0.10513613
SLC25A33	44.6416468	0.67550271	0.01265339	0.10513613
WDSUB1	176.775913	-0.4151742	0.01265113	0.10513613
LRRC69	9.66141907	0.84703124	0.01266579	0.10518738
TSPAN2	22.2643151	-1.2022264	0.01267152	0.10518738
SERTM1	144.6982	1.2793928	0.01268587	0.10525678
ARAP3	170.45605	0.79681192	0.01279063	0.10583365
CNPY4	286.323915	0.54291907	0.01277342	0.10583365
DNPEP	408.096581	-0.3690933	0.01278053	0.10583365
FGD2	320.285714	0.8365301	0.01277909	0.10583365
GTF2B	182.754677	0.50492289	0.01279149	0.10583365
SEZ6	3.03019801	-1.2206748	0.01276813	0.10583365
ELF4	587.184075	-0.5203067	0.01279999	0.10585415
FASTKD1	281.999901	-0.5247002	0.01281169	0.10590117
COL7A1	365.299018	-0.8526574	0.01282375	0.10595107
IFI44	262.317596	0.65124767	0.01284766	0.10609872
ZNF277	284.021546	0.35304326	0.01285398	0.10610111
PHLDB1	2459.67734	-0.4398601	0.01287025	0.10618556
CPNE5	66.3061028	1.12831964	0.01288321	0.10624267
FADD	210.472432	-0.3992807	0.01289751	0.10631074
CFL1	3643.69941	-0.3459104	0.01291184	0.10637904
IBTK	1418.76264	0.39605733	0.01293373	0.10640987
NCOA6	1411.61294	-0.4227224	0.01293071	0.10640987
SCNN1D	81.0540113	0.80531716	0.01292485	0.10640987
CDPF1	63.1080039	0.48757096	0.01295794	0.10655918
NUFIP2	4546.82794	-0.2951646	0.01296923	0.10660219
LEPR	16039.4928	1.13460274	0.01298873	0.1067126
LOC220729	418.006234	-0.4598756	0.013003	0.10678005
CLK4	431.552046	0.50422898	0.01302049	0.10687376
ATAD5	155.22906	-0.6035711	0.0130446	0.10699725
P4HA2	1000.45007	0.6982131	0.0130477	0.10699725
FAM26E	321.117952	0.81058838	0.01308124	0.10718751
KRT16	37.4048571	-1.2735752	0.0130873	0.10718751

YDJC	63.6388203	-0.6138884	0.01308919	0.10718751
KLHL31	27.6874593	0.88158593	0.01309676	0.10719961
VAV2	510.529355	-0.6368231	0.01312396	0.10737234
ACAP1	26.7086243	0.8503598	0.01314126	0.107376
FGF12	42.0837238	1.02709781	0.01314579	0.107376
SPATA17	12.9576386	-0.8726605	0.01314778	0.107376
SSR4P1	19.7276751	0.94019903	0.01314883	0.107376
PPP1R7	464.955348	-0.4237314	0.01316284	0.1074405
COMMD3	136.750367	0.46489079	0.01316996	0.10744881
FAM102B	404.871321	0.63820167	0.01319523	0.10760504
KLHL29	1076.55604	-1.102008	0.01320448	0.10763055
KIF13A	1442.11856	0.51628006	0.0132211	0.10771613
ISPD	63.8734177	0.67941747	0.01323969	0.10781765
LOC286437	161.089393	0.4419421	0.01325314	0.10786094
PIGO	582.605954	-0.363892	0.01325727	0.10786094
ALG1L9P	26.0601467	0.70938526	0.01328895	0.10806875
ARHGFE2	1787.99027	-0.4616076	0.01329562	0.10807277
SBNO1	2033.24934	-0.2988044	0.01330174	0.10807277
NSUN5P2	159.901143	0.58077033	0.01332369	0.10815455
TACR2	1.66965866	1.26210807	0.0133241	0.10815455
AARS	2290.84621	-0.5328307	0.01337678	0.10842956
CALN1	4.61157744	-1.1921107	0.01340257	0.10842956
NUDT9P1	11.4315562	1.02128096	0.01338204	0.10842956
OR6W1P	2.30199508	-1.1913464	0.01340391	0.10842956
SENCR	3.33791416	1.02508474	0.01340149	0.10842956
TBC1D19	341.360064	0.47599534	0.01336694	0.10842956
TRIB1	316.84525	0.87521678	0.01339525	0.10842956
TRIM61	26.4017129	0.58737515	0.01340729	0.10842956
CAPS2	93.2605738	0.60842412	0.01344028	0.10864638
CMTR1	781.961744	0.35645332	0.01346857	0.10868801
HNRNPD	1190.59673	-0.497393	0.01346426	0.10868801
PIEZO1	4006.42399	-0.5267762	0.01347015	0.10868801
VNN1	30.2810876	0.89516411	0.01346124	0.10868801
ABC4	33.5559559	0.84911103	0.01351035	0.10886256
ACTG1	28071.0994	-0.4047729	0.01350929	0.10886256
ATP10B	3.48652456	-1.2419752	0.01350496	0.10886256
TRAT1	3.62481835	1.16882959	0.01352039	0.1088936
HN1L	980.212124	-0.4786807	0.01352702	0.10889714
ERCC3	715.168043	-0.2640257	0.01356048	0.10907656
SGOL2	138.272914	-0.6594302	0.01356171	0.10907656
CLEC12A	14.9363494	1.20218421	0.01356905	0.10908571
SLC25A45	134.808263	0.68694282	0.0136117	0.10937865
CEP162	260.994242	0.63611098	0.01362159	0.10940809
ZNF426	374.97793	0.45002124	0.01367317	0.10977226
ZBTB48	161.551934	0.47811598	0.01380871	0.1108099
MED25	355.553707	-0.3306966	0.01388499	0.11132039
METTL13	375.697317	-0.3695798	0.01388329	0.11132039
TPM1	3502.53893	0.65335459	0.01390644	0.11144157
EDAR	6.26220872	-1.2642539	0.01391534	0.11146211
HDLBP	9996.57967	-0.3889842	0.01393159	0.11154149

CDH6	245.365006	1.08569767	0.01393877	0.11154824
GIMAP2	96.5844368	0.70358902	0.01394906	0.1115798
ERP44	989.139389	-0.2541882	0.01395699	0.11159244
FAM87A	1.36964824	1.22229525	0.01398304	0.11174994
ANKRD23	96.9699113	-0.4573199	0.01400513	0.11187569
KLK14	1.46445187	-1.261703	0.01401651	0.11190972
RORB	1.72614072	-1.2416578	0.01402212	0.11190972
CYP1B1-AS1	28.4272791	1.1006298	0.0140299	0.11192104
C10orf131	6.36538291	1.03689831	0.01406573	0.112156
RPL34	2927.86885	0.45906791	0.01408742	0.11222726
TLR8	52.1214509	0.96806396	0.01408537	0.11222726
GCSH	117.674334	-0.6205266	0.01410353	0.11227955
URB2	330.71244	-0.4310364	0.01410675	0.11227955
MAP3K9	181.077898	-0.6856005	0.01413311	0.11243843
CCDC147	6.53309278	1.05180332	0.01415059	0.11252659
MROH9	2.49677848	1.18217481	0.01415795	0.11253423
SKAP2	461.680458	0.67906221	0.01418526	0.1127004
EML1	271.134284	0.67811396	0.01420917	0.11283577
QPCT	31.5268386	1.04707726	0.01421513	0.11283577
DLEC1	99.105556	1.00218891	0.01422494	0.112838
PLEKHF2	183.095843	0.35442768	0.01423111	0.112838
TTBK1	6.62494902	-1.1098188	0.01423465	0.112838
HAPLN1	33.6846411	-1.256739	0.01427339	0.11304322
KRT10	239.435949	-0.5994697	0.01426991	0.11304322
SPTA1	3.49769645	1.10758314	0.01430062	0.1132079
CALCR	7.88014651	1.07772408	0.01431933	0.11330502
NPEPPS	1718.17291	-0.3674811	0.01433327	0.1133643
CENPM	13.810056	-0.9488749	0.01434784	0.11342854
GPS1	1089.80612	-0.2803623	0.01436639	0.11347321
LPHN3	344.615058	-1.2438929	0.01436012	0.11347321
KIF22	255.348288	-0.4725856	0.01439998	0.11363647
PAM	4232.58511	0.74480046	0.01439857	0.11363647
GMFG	80.4834946	0.71777067	0.01444567	0.11394589
EPPK1	1044.10875	-1.1441464	0.01446805	0.11399198
FH	549.138878	-0.4871053	0.01448585	0.11399198
LINC-PINT	667.322094	0.5732055	0.01447162	0.11399198
NFE2L2	2518.82983	-0.499303	0.01448204	0.11399198
NSFP1	3.43982201	-0.9148012	0.01446539	0.11399198
ST14	48.1829963	-0.850542	0.0144904	0.11399198
DLEU2L	26.6992043	0.76997037	0.01451847	0.11416177
GRIA4	3.01412661	-1.2377456	0.01454361	0.11430837
C9orf156	161.664825	0.29780757	0.01459967	0.11464655
HSPB7	60.3476868	0.88817731	0.0145934	0.11464655
B4GALNT3	20.222208	0.84579361	0.01464162	0.11487337
SCARA3	4333.17705	-0.7601584	0.01464162	0.11487337
CD82	161.514609	-0.9015279	0.01467058	0.11487355
GNAI1	239.946798	-0.7046352	0.01466788	0.11487355
LINC00689	13.4211027	-1.2530618	0.01467425	0.11487355
P2RX1	7.26811683	1.10016983	0.01465516	0.11487355
UBE2Q2P2	4.64547338	-1.0373413	0.0146743	0.11487355

ZNF688	110.35104	0.43363575	0.01470263	0.11504413
SNORA28	3.81580568	0.93418142	0.01471232	0.11506879
CDK18	215.987998	-0.7865878	0.01471922	0.11507155
GDF15	164.41552	-1.1582479	0.01473675	0.11514394
LINC00174	207.434769	-0.6082702	0.01474157	0.11514394
ADC	65.4148393	0.70893746	0.01477488	0.11519647
DPEP1	8.27426572	-1.2513772	0.01477511	0.11519647
HIP1	805.513726	0.60782814	0.01476142	0.11519647
LINC00861	7.75879575	0.93080005	0.01478104	0.11519647
LOC1002881	13.0298617	-1.1310317	0.01476097	0.11519647
SHOX2	39.6118835	-1.2270117	0.01480599	0.11533983
C5orf27	1.67760537	1.25142983	0.01483306	0.11549209
EIF3D	1099.14014	0.42050089	0.01483867	0.11549209
FCGR2A	1078.17494	0.65380444	0.01484823	0.1155154
KMO	18.1280246	0.91558832	0.01485721	0.11553418
CNDP1	4.0325359	-1.2489277	0.01486933	0.1155773
LOC1019270	15.0884918	-1.2519334	0.01487663	0.11558301
AP2M1	3356.31939	-0.2196964	0.01490216	0.1156848
PATL1	660.856971	-0.4290482	0.01490289	0.1156848
GATAD2A	1009.48143	-0.4256562	0.01491746	0.11574682
HERC1	4893.26257	0.34731317	0.01493665	0.11584463
COMMD2	617.795885	0.39798514	0.01498969	0.11594924
HADH	363.647013	-0.3545237	0.01497118	0.11594924
KIAA0247	3173.48115	0.64113004	0.01498406	0.11594924
MVD	250.582196	-0.5977959	0.01495853	0.11594924
ORC1	18.5123793	-0.8136361	0.01497827	0.11594924
SLC2A9	79.6319762	0.7763519	0.0149687	0.11594924
LST1	1.76775754	1.20736856	0.01501892	0.11612434
HEXB	1279.61824	0.4233278	0.01504467	0.11627226
ZFHx4	1145.46462	-0.7391326	0.01505264	0.11628277
CENPO	214.892978	-0.5410062	0.01511055	0.11637239
FBXO4	125.386928	0.53076369	0.01508524	0.11637239
NDUFA3	505.62272	-0.4214873	0.01509958	0.11637239
NEXN-AS1	9.78814837	1.03708387	0.01508712	0.11637239
OR51B5	16.1320698	0.88862884	0.01509674	0.11637239
SNORA61	5.16213449	0.92126932	0.01508004	0.11637239
TOB2P1	11.9596795	-1.0238819	0.01511023	0.11637239
BOLA3	83.2231494	-0.6109069	0.0151504	0.11656509
LRRTM4	2.64830568	-1.1853234	0.01515036	0.11656509
NEAT1	26129.2731	-0.6752856	0.01515545	0.11656509
STAC2	11.1911642	-1.1948699	0.01519301	0.11680288
PCDHB9	275.324177	-1.0218514	0.01521147	0.11689371
IL6R	365.900702	0.78521929	0.015224	0.11693897
EIF3L	2280.59498	0.52554215	0.0152325	0.11695319
STAT5B	1202.18454	0.39699136	0.01524179	0.1169734
CCDC78	21.5450788	-0.876187	0.01525624	0.11703231
GSE1	1012.73337	-0.5985577	0.01526568	0.11703231
RPGRIP1	9.03574265	1.06270198	0.01526942	0.11703231
LOC1001323	48.0001957	0.65234671	0.01529215	0.11715544
MBD6	885.865038	-0.4156389	0.01531403	0.11722099

SDHAP1	516.954413	-0.5441823	0.01531199	0.11722099
ABCB9	53.0105083	-0.4793778	0.0153484	0.11738187
ALYREF	335.493172	-0.3851224	0.01534423	0.11738187
ASS1	3224.6212	-0.715687	0.01536764	0.11747796
TSPAN17	343.78064	-0.5015222	0.01537627	0.11749288
BHMT	19.2833342	1.18855637	0.01543597	0.1175699
FAM45B	11.471693	0.64023592	0.01543366	0.1175699
GNAI3	780.379574	0.4646368	0.01541985	0.1175699
MYO5C	931.810147	-0.7295759	0.01540797	0.1175699
POMGNT2	337.035203	0.53365382	0.01540488	0.1175699
SENP6	1919.43057	0.46122914	0.015402	0.1175699
SLC25A23	1470.81556	-0.5247997	0.0154375	0.1175699
ZNF818P	200.625646	0.62610235	0.01543982	0.1175699
SIRT1	480.543898	0.41353023	0.01544813	0.11758228
ALB	8.74818323	1.13081647	0.01545643	0.11759453
ACKR2	27.0028024	1.0437618	0.01546506	0.11760932
FAM76A	152.107249	0.6168431	0.01549834	0.1178115
CAPN1	1541.65555	-0.384699	0.01551548	0.11785399
NTRK1	3.05237524	-1.0691841	0.01551846	0.11785399
ZNHIT6	297.32681	0.35530311	0.01552403	0.11785399
FBN2	3232.61463	-0.9343474	0.01553566	0.11789138
IFI6	632.30995	0.61240891	0.01556862	0.11809056
C21orf58	84.5822832	-0.618608	0.01559978	0.11817401
NLRC4	45.3060286	0.81107778	0.01559726	0.11817401
TNS3	2647.4907	0.90044845	0.01559559	0.11817401
MGC16142	15.1843735	0.70266208	0.01560998	0.11820044
CIRH1A	367.855348	-0.5182217	0.01563128	0.11826449
UNC5A	3.65386196	-1.1910224	0.01563189	0.11826449
HAUS1	145.935206	0.57528165	0.0156413	0.11828484
LOC1005066	34.7666024	0.81821277	0.01571489	0.11873921
LOC90784	292.880447	-0.6566639	0.01571201	0.11873921
TMIE	3.14981364	1.12748332	0.015738	0.11883176
UQCRC1	1280.10662	-0.6087974	0.01574065	0.11883176
RCAN1	488.134875	0.52190799	0.01576936	0.11899745
AKAP3	10.1838475	0.97101711	0.01579433	0.1191348
MICU3	149.599626	0.60431486	0.01580231	0.11914386
GPC1	1224.94355	-0.7739876	0.01583764	0.11935911
C19orf66	328.962652	0.37682422	0.01586862	0.11951035
MIR155HG	22.1874183	0.98507548	0.0158713	0.11951035
CCL19	2.39818569	1.21944974	0.01588628	0.11957198
STAM2	993.125854	0.23640949	0.01589878	0.11961488
DKFZp451B0	1.60015866	1.21888732	0.0159251	0.11964679
NOTCH2NL	1708.84794	0.41704837	0.01591843	0.11964679
SHPK	400.874133	-0.4312795	0.01593023	0.11964679
ZIC1	3995.73948	-1.0414894	0.01592862	0.11964679
ZBTB21	603.855811	0.60100489	0.01595503	0.11978186
CHST1	56.6912046	0.81519604	0.0159734	0.11981757
DDN	5.32317992	-1.1695367	0.01597289	0.11981757
CCDC22	153.349388	0.28785008	0.01602175	0.11987348
CCDC28B	31.8521422	-0.6362662	0.01600252	0.11987348

GNG3	2.10186931	-1.2343705	0.01601898	0.11987348
KRT4	30.2846316	-1.184534	0.01600423	0.11987348
LINC00412	9.67884405	0.76765392	0.01600286	0.11987348
NFIL3	248.73075	0.96236282	0.01601567	0.11987348
ERG	192.599458	0.89829293	0.01605228	0.12005083
HSCB	40.5497933	0.46819328	0.01606245	0.12007589
CHPT1	395.886944	0.67788495	0.01610232	0.12029546
UNK	791.942592	-0.4122597	0.0161055	0.12029546
RNF175	5.58120153	1.22046635	0.0161453	0.12043931
SLC31A1	676.795471	-0.5218087	0.0161333	0.12043931
VSIG1	8.95449544	-1.075749	0.0161402	0.12043931
ADAM10	2090.079	-0.3615527	0.01615877	0.12048364
LYRM2	554.831832	0.60493979	0.01616495	0.12048364
LOC284023	55.811801	0.5431662	0.01619259	0.12058747
RRS1-AS1	323.45794	-0.783172	0.01619001	0.12058747
PNKD	506.444471	-0.5016499	0.0162513	0.12097352
KLK10	93.2887591	-1.1222467	0.01627154	0.12107289
ANKRD13C	534.644614	0.4366514	0.01628282	0.1211056
GRTP1	91.3843747	-0.6373269	0.01630718	0.12118431
PINLYP	77.5818182	-0.4411063	0.01630485	0.12118431
TXNL4B	125.012111	0.6885896	0.01635273	0.12142679
ZRANB1	1042.66994	0.35995898	0.01635361	0.12142679
LDLRAP1	564.082293	0.72409681	0.01637046	0.12150057
FAM188A	403.906875	0.37908087	0.01640977	0.12174095
ADAMTS5	1547.87796	-1.2074387	0.01646376	0.12201464
EVC2	238.902341	0.56826488	0.01648134	0.12201464
LDLRAD2	11.17156	1.22597667	0.01647545	0.12201464
PDPK1	1217.32719	-0.3072523	0.01645617	0.12201464
YIPF5	934.538213	0.50648096	0.01647608	0.12201464
TMEM145	16.0594457	-1.1090047	0.01649746	0.1220826
LTBP2	12209.0176	1.06622671	0.01654737	0.1222976
NHLRC4	20.4533166	0.92815726	0.01654214	0.1222976
SNAI1	16.6488587	1.12507045	0.01653521	0.1222976
CYB561D2	107.15457	0.43408637	0.01663565	0.12289842
MTO1	285.419356	0.42852192	0.01666919	0.12304281
PDZD4	1540.02841	-0.5239095	0.01666762	0.12304281
CHCHD5	100.149992	-0.4675818	0.01669168	0.12315718
SLMAP	1179.40496	0.4923634	0.01673467	0.12342261
GALC	445.466678	0.50635299	0.01676693	0.12360869
ID4	1574.74504	-1.0611992	0.01679743	0.123678
OVGP1	39.5638713	0.84079444	0.01679279	0.123678
SCN4B	600.794733	1.03577643	0.01679232	0.123678
MRPS12	168.522291	-0.4280847	0.01681222	0.12373512
FRS2	1228.56547	0.20806862	0.01682771	0.12374554
SNRPG	253.00344	-0.4178507	0.01682643	0.12374554
PRICKLE3	77.6791809	-0.4960801	0.01683744	0.12375029
RPS18P9	56.3695793	0.64583328	0.01684242	0.12375029
ATP13A1	880.520999	-0.3524328	0.01686205	0.12379107
GNG10	64.874661	0.40082127	0.01685739	0.12379107
PPM1K	537.927506	0.48653922	0.01688351	0.12389691

FN3KRP	409.965049	-0.4033351	0.01690867	0.12402985
TMUB1	297.439901	-0.4759638	0.01698572	0.12454307
ANKRD31	30.8222985	-0.9484377	0.0170068	0.12459376
TNFRSF10C	14.568077	0.92103523	0.01700533	0.12459376
RHBDL3	88.9697933	-0.8885354	0.01701973	0.12463658
DHX33	422.509173	-0.4161583	0.01705544	0.1247942
HLA-DQB1	587.199442	1.20118235	0.01705205	0.1247942
CADM2	10.4136585	-1.2239324	0.01707108	0.12480476
KLHL21	295.624705	0.5953951	0.01706957	0.12480476
BTLA	3.9608166	0.94320905	0.01711027	0.12503932
WDR70	477.098621	0.32743792	0.01712498	0.12509484
ADAMTS9-AS1	69.6413555	1.05003057	0.01718881	0.12540487
GORAB	169.20808	0.42737881	0.0171829	0.12540487
RECK	1379.9725	-0.5241131	0.01717572	0.12540487
MFAP5	1577.53	1.13750017	0.01722761	0.12563581
CRABP1	6023.17308	-1.1401613	0.01725974	0.12566619
FGF13	8.86937171	-1.0468769	0.01726182	0.12566619
HBS1L	721.081992	0.43583218	0.01725765	0.12566619
PARM1	57.9631921	0.90084309	0.01725833	0.12566619
POLD1	283.416759	-0.4473143	0.01726749	0.12566619
TTC38	176.211297	0.32878802	0.01729129	0.12578737
ASTE1	123.27816	0.37436779	0.01734745	0.12589934
CWF19L1	292.278705	0.38493006	0.01732526	0.12589934
HTR7	18.9614089	1.01944344	0.01733589	0.12589934
LAMTOR3	538.169836	0.34688776	0.01734271	0.12589934
MED7	147.38885	0.36702661	0.01734963	0.12589934
TBC1D26	1.69659189	1.1347752	0.017329	0.12589934
DOCK11	455.862323	0.52660387	0.01741953	0.12606325
EPHB3	108.615407	0.93519374	0.0174154	0.12606325
FXR1	1835.64737	-0.2688147	0.01738191	0.12606325
PCDHGA1	146.406419	-0.9278872	0.01742239	0.12606325
PTK2	2149.64879	-0.3061128	0.017409	0.12606325
SAP25	90.4107356	-0.6149695	0.01740765	0.12606325
TRPC2	3.31925008	1.13480143	0.01740217	0.12606325
HMHA1	580.71561	0.76978618	0.01747597	0.12623723
LRRC37BP1	254.001929	0.3571886	0.01747963	0.12623723
POTEE	36.1149842	-0.7634425	0.01746997	0.12623723
PPTC7	359.92602	-0.4939802	0.01748231	0.12623723
ZNF664	2450.08196	-0.4938254	0.01746687	0.12623723
BTN3A1	365.524012	0.57604716	0.01749676	0.12623788
CKLF	54.7061044	0.64292406	0.01749047	0.12623788
CCL26	77.9117202	1.08365428	0.01751516	0.12626709
MYOZ1	41.2404142	1.15928768	0.01751347	0.12626709
C21orf128	3.21191093	-1.1878946	0.01754716	0.12628142
GPR88	24.2211318	1.21953206	0.01753318	0.12628142
RER1	858.520844	0.37737768	0.01754608	0.12628142
TMEM150A	153.598855	0.37882506	0.01753734	0.12628142
ZFYVE16	1514.73254	0.38858027	0.01755305	0.12628142
CUL3	1144.44518	-0.2826773	0.01757687	0.12629783
LOC441455	5.72410907	1.11819282	0.01757257	0.12629783

PIK3CD	217.708388	0.76063099	0.01757272	0.12629783
FRMD3	42.7695614	0.5524958	0.01761391	0.1264823
SKA1	14.6382782	-0.9325176	0.01761692	0.1264823
ASH1L-AS1	57.2095834	-0.5555873	0.01764282	0.12656229
C1orf213	51.0773663	0.67027802	0.01764081	0.12656229
ORC2	530.755438	-0.2257503	0.01764965	0.12656229
ISG20L2	372.478476	-0.2999802	0.01766427	0.12661552
SF3A2	494.863194	-0.4485977	0.01768529	0.12671458
HIST1H2BH	142.710648	-0.9846687	0.01773476	0.12681074
KIF5A	203.229145	-1.1951528	0.01771641	0.12681074
MGP	3113.78849	0.79996454	0.01773146	0.12681074
PLD3	5103.82038	0.70126558	0.01772836	0.12681074
ZNF799	85.5289452	0.5945771	0.01773042	0.12681074
CNTLN	838.605205	0.41279858	0.01776362	0.12690649
DOCK8	1134.03703	0.66060933	0.01776062	0.12690649
EIF1B-AS1	17.9996719	0.82827248	0.0177698	0.12690649
CTTNBP2	144.085813	1.02680209	0.01778183	0.12693533
RUNX1-IT1	24.7889353	0.82649883	0.01778827	0.12693533
AMZ1	5.37178341	-1.1416163	0.017848	0.12728474
LINC01105	6.12096281	-1.2176078	0.0178517	0.12728474
PCDHGB6	398.20236	-0.8484708	0.01786466	0.12732553
FER1L4	462.01982	-0.9327065	0.01787252	0.12732998
OTUD3	319.193637	0.56811154	0.01789239	0.12741992
ADRM1	715.452496	-0.4496354	0.01792085	0.12746775
AGO2	706.622199	-0.3838945	0.01792036	0.12746775
B3GALT5	4.63391928	-1.1667899	0.01790689	0.12746775
KCNJ5	46.639109	0.76220326	0.01797256	0.12773228
LIMD1-AS1	6.43559814	0.96278904	0.01796631	0.12773228
STRN4	982.856253	-0.2677645	0.01798458	0.12776604
ATG4B	635.563948	-0.3732264	0.01800058	0.12782811
SCARB2	2990.27891	0.35009122	0.01801461	0.12787609
DLGAP1-AS2	12.3857047	0.75002685	0.01806245	0.1281261
LINC00294	212.520957	0.44342822	0.0180644	0.1281261
TBC1D10B	607.005218	-0.2957194	0.01808094	0.12819173
FZD8	181.097157	0.70579283	0.01809783	0.12820815
PTGIR	6.36669564	1.07045238	0.01809417	0.12820815
PMP2	16.3963299	-1.1857319	0.01812709	0.12836373
COX5B	1038.30834	-0.4849756	0.01813659	0.12837935
FOPNL	375.580776	0.32291037	0.0181483	0.12841054
ZXDA	227.941113	0.41703052	0.0181821	0.12859794
BATF3	10.2438693	1.06146388	0.018209	0.1286847
RASGRF2-AS	2.46146715	1.21185304	0.01820244	0.1286847
FGGY	179.463029	0.49608873	0.0182425	0.12885987
HAPLN3	69.5087713	0.99517931	0.01824843	0.12885987
HHIPL1	81.0423643	0.79695421	0.01826818	0.12894752
CTSC	1310.77348	-0.9046148	0.01827673	0.12895617
ZNF407	830.473994	0.36349569	0.01828486	0.1289618
LINC00467	50.7160623	-0.6361161	0.01830535	0.12905453
GGN	5.34802273	-0.9971445	0.0183304	0.12917936
ATP5G3	1557.75168	-0.5998609	0.0183411	0.12920301

RYK	1109.58663	0.2783256	0.01834859	0.12920407
GM2A	1075.43973	0.32270765	0.01836734	0.12923263
TNFAIP1	965.429219	-0.3541293	0.01836611	0.12923263
NEK7	1068.71028	0.32621972	0.01837622	0.12924337
COQ7	319.227089	0.31970067	0.01840596	0.12935342
NCAPD2	682.605805	-0.3954637	0.01841014	0.12935342
PCDHGB4	412.949842	-0.8367136	0.01841393	0.12935342
SIRT7	120.821191	-0.4782833	0.01843579	0.12945532
CIRBP	4270.23654	0.47342875	0.01847439	0.1296746
CEP57L1	161.719035	0.61520745	0.01849778	0.12973526
GALNT4	13.5125667	0.72768225	0.01849573	0.12973526
GOLGA2P7	97.8499178	-0.6178131	0.01854276	0.12999889
DLD	1168.34532	-0.4106832	0.01858264	0.13022654
EVI5	909.140958	0.49112573	0.01859193	0.13023973
BLACAT1	2.18744506	-1.2084236	0.01863237	0.13047113
RRP7B	119.362232	0.50576098	0.01864075	0.13047787
ZNF322	253.985889	0.4529534	0.01866415	0.13058969
C20orf203	16.9625886	0.98861242	0.01868586	0.13065363
PPP2R2C	73.3034838	-1.0757266	0.01868815	0.13065363
CLK1	2311.83593	0.47991604	0.01870874	0.13069368
CROCCP2	202.069261	0.61718554	0.01870678	0.13069368
GGTA1P	221.561618	0.78954218	0.01873617	0.13078142
RPP25	81.4771471	-1.0472373	0.01873214	0.13078142
TNFRSF10A	20.1251698	0.89360767	0.01875457	0.13085794
UBR2	1627.01755	0.43485549	0.01877111	0.13092144
DMBX1	12.7212476	-1.2013785	0.01879392	0.13100603
TMC3	4.85553803	1.19551678	0.01879814	0.13100603
CCDC58	75.862956	-0.4519992	0.01880718	0.13101714
AGAP11	264.864654	0.87815612	0.01881869	0.13104542
ADAMTS4	110.546578	1.03740159	0.01883883	0.13113377
ZNF513	228.690349	-0.3679572	0.01886964	0.1312963
DDX41	669.645887	-0.3128845	0.01888657	0.13131017
TSIX	16.5620458	1.18213852	0.0188835	0.13131017
ZNRF1	146.536957	-0.5354503	0.01889749	0.13133418
TM6SF2	27.2971018	-0.7804078	0.01890979	0.1313678
MIER1	796.199396	0.43170769	0.01895837	0.13151124
MMD2	1.42785939	-1.1810182	0.01895617	0.13151124
SCARNA10	4141.29921	0.42575583	0.01895169	0.13151124
SEMA4G	108.306124	-0.7890921	0.01896782	0.13151124
SLC35A3	391.772041	0.46908301	0.01896568	0.13151124
PAX9	4.40823114	-1.1808548	0.01901199	0.13171364
SEMA3A	62.2756074	-1.1972194	0.01900774	0.13171364
RPS2	8170.53671	-0.4871434	0.01907989	0.13213202
KIAA0226L	90.6040974	0.82517593	0.01909007	0.13215045
WBP4	240.802899	0.40501535	0.01910187	0.13218012
RAD23B	2922.47049	-0.3010609	0.01911827	0.13224156
C14orf132	327.314922	1.01144151	0.01914552	0.132378
CHTOP	627.00304	-0.2472034	0.01915873	0.13241729
FASLG	1.58149491	1.19573955	0.01916669	0.13242032
ABCC2	25.6058877	0.78279285	0.019215	0.13264097

ATP5J2	637.677347	-0.3769351	0.01921012	0.13264097
HIST1H2AH	111.510033	-0.7432187	0.01923633	0.13264097
RRP7A	374.757528	0.32485931	0.01922256	0.13264097
SNX19	2855.25058	-0.3111833	0.01923408	0.13264097
C11orf53	3.84436301	-1.2022426	0.01930989	0.13264208
CAPN6	169.25765	-1.1536852	0.01931618	0.13264208
COMT	553.824982	0.42791138	0.01932092	0.13264208
DDX12P	104.890152	-0.6566637	0.01932049	0.13264208
HIST1H2AG	216.86582	-0.8925885	0.01927683	0.13264208
HIST1H3H	127.286246	-0.694482	0.01926712	0.13264208
HPGD	182.742463	1.08881976	0.01926657	0.13264208
ICOS	2.32270959	1.12847095	0.01931981	0.13264208
NOTUM	2.43845651	-1.0761138	0.01924577	0.13264208
RPPH1	88350.0298	0.3630559	0.01930818	0.13264208
TMEM260	407.800665	0.46738151	0.01932698	0.13264208
TMEM59	2087.19386	0.51827131	0.01925807	0.13264208
MT1M	11.821481	1.15917772	0.01934299	0.13270012
AGRN	4325.10607	-0.6370926	0.01938757	0.13283925
CIITA	571.479516	0.86644262	0.01938167	0.13283925
ETV7	18.1788379	0.89517105	0.01940889	0.13283925
FAM212A	33.9820786	0.93579343	0.01940565	0.13283925
PRPF18	248.327115	0.37098454	0.01941613	0.13283925
RABL3	263.633169	0.38689788	0.01941217	0.13283925
TCP11	1.33381015	1.16483818	0.01940654	0.13283925
OGDH	2319.1214	-0.5116648	0.01944721	0.1329485
RP2	340.133793	0.38132556	0.01944617	0.1329485
LURAP1L	155.748661	-1.0257479	0.01947774	0.13310548
EPN2	619.397765	-0.2873489	0.01950154	0.13320126
JUP	2481.25349	-0.5996657	0.0195069	0.13320126
TM2D1	250.068047	0.49393614	0.01957985	0.1336475
COL2A1	2113.5285	-1.1171761	0.01960285	0.13375258
TNNI3	4.31224158	-1.1725173	0.01961048	0.13375272
SYT13	4.4903428	-1.1547917	0.01962702	0.13381366
GBP4	235.628734	0.75534924	0.01969446	0.13422142
MORN2	82.1801757	0.65477723	0.01973776	0.13446444
SIGLEC11	55.7525836	1.01498967	0.01975372	0.13452104
MAPT	37.5094298	-0.9005335	0.0198922	0.13533995
PHPT1	871.010425	-0.3599938	0.01989705	0.13533995
UBL4B	78.2432099	1.17019545	0.01989365	0.13533995
GIMAP1	102.06355	0.79500135	0.01990591	0.13534786
OSCAR	29.1761609	0.8293059	0.01995346	0.13556639
ZNF790	145.365293	0.48365625	0.01995087	0.13556639
CMPK2	101.343701	0.54732662	0.01997446	0.13565666
NAGLU	436.409366	0.52165421	0.01998276	0.13566043
SCAMP1	1003.96194	0.4022738	0.01999044	0.13566043
SNX2	1658.94676	0.50063094	0.02002603	0.13584958
RPA2	377.589674	0.43611188	0.02003775	0.13587665
THRB	46.2296847	1.04260147	0.02009199	0.13619196
NR2F2	2724.00323	-0.9908574	0.02013377	0.13637004
RTP1	1.28070757	1.18475832	0.02012709	0.13637004

AMER2	5.82384108	-1.1938888	0.02014845	0.13641692
EPB41L1	1777.44184	-0.4802824	0.02017978	0.13656612
TGM4	5.01426476	-1.1895612	0.02018601	0.13656612
ALPK3	278.001769	0.8905612	0.02023479	0.13678724
CNTNAP3	449.574033	-0.9272911	0.02022891	0.13678724
EFNA2	11.2135371	-0.9426364	0.02024202	0.13678724
ABCA2	1133.59339	-0.6623067	0.02027629	0.13691361
ATG5	354.917825	0.39143227	0.02026988	0.13691361
NELL1	56.952565	-1.1909234	0.02031543	0.1370201
PTPLB	237.623248	0.57143284	0.0203148	0.1370201
ZNF558	270.770498	0.38066499	0.02030488	0.1370201
LSS	1730.64353	-0.5501576	0.02033324	0.1370463
LTB4R2	53.9555084	-0.6344587	0.0203349	0.1370463
NRL	6.7339895	0.68355218	0.02036267	0.13718094
DUSP23	119.251354	-0.5098406	0.02040896	0.13735956
MYO1B	319.959448	-0.8406336	0.02042042	0.13735956
QRICH2	206.207651	0.38265863	0.02039741	0.13735956
SMPX	1.45186379	1.00278783	0.02041882	0.13735956
LOC1005065	599.131677	0.46756424	0.02048946	0.13774648
WNT11	7.11154317	-1.057469	0.02049361	0.13774648
TMEM135	736.846847	0.40800202	0.0205097	0.13777375
TRAPPC8	1103.50397	0.37506737	0.02051333	0.13777375
SC5D	776.977657	-0.3830821	0.02052575	0.13780457
AATK	149.401996	-0.7910415	0.02057393	0.13798365
GPATCH3	104.319178	0.47584676	0.02057596	0.13798365
HVCN1	143.356244	0.63699841	0.0205679	0.13798365
TUBGCP3	617.596494	-0.3496894	0.02059891	0.13808493
MARK2	572.707845	-0.3660357	0.02061567	0.13814459
GSKIP	91.4371207	0.49895405	0.02066233	0.13840453
FLJ37201	25.4705171	0.77959017	0.02070175	0.13861585
CEP72	63.0589905	-0.4493509	0.02072392	0.13864931
CRYM	15.1845996	-1.1826112	0.02073235	0.13864931
MBLAC1	13.0605761	0.71410213	0.02073828	0.13864931
PCSK9	24.8302562	-1.130476	0.0207164	0.13864931
ADAMTS14	10.318732	-1.0446641	0.0207495	0.1386636
AGAP3	892.781635	-0.3789492	0.02076407	0.1386636
KLC2	369.680981	-0.4527857	0.02076362	0.1386636
DUSP27	34.2636578	0.98986861	0.02080408	0.13883712
GTF3C2	793.599615	-0.3329293	0.02081084	0.13883712
RBM15B	1087.24527	-0.3693117	0.02081373	0.13883712
CCDC117	278.903307	0.41939427	0.0208406	0.13896367
AKNA	681.550614	0.45716503	0.02085712	0.13902111
PTTG1	67.2064444	-0.8854155	0.02087996	0.13912062
ACKR1	6.99517371	1.11553294	0.02090343	0.13922427
LTBP1	2609.06248	0.95084435	0.02091169	0.13922655
NUPL2	231.969234	0.34274406	0.02091981	0.13922796
IL13RA1	1643.59435	0.44590272	0.02093352	0.13924274
UBTF	2491.24674	-0.319482	0.02093787	0.13924274
ST8SIA3	52.5894541	-1.1853199	0.02094843	0.13926036
USP7	1899.04891	-0.1478745	0.02096423	0.13931271

CABP1	2.96240915	-1.1742599	0.0209911	0.13931454
DOC2A	33.8932638	-0.9659116	0.02102218	0.13931454
GFI1	7.38628728	0.8622671	0.0210437	0.13931454
KDM2A	2317.57699	-0.2680049	0.02102788	0.13931454
KNOP1	163.419734	-0.4565234	0.0210315	0.13931454
PICALM	3262.32494	0.29412504	0.02099471	0.13931454
PLL	31.9477573	-0.921835	0.02099862	0.13931454
PRKCA	2990.08668	-0.7244323	0.02101676	0.13931454
SLC16A5	925.926778	-0.8082879	0.02098009	0.13931454
TRIM37	861.870872	-0.4865002	0.02104223	0.13931454
CHAMP1	300.645644	-0.4955399	0.02108068	0.13950683
ERMAP	219.999567	0.61984344	0.02112068	0.13951607
MSH6	946.029604	-0.4290833	0.02112967	0.13951607
MTMR9LP	161.889609	0.98185723	0.02112281	0.13951607
NOXRED1	7.08285056	0.8112119	0.02109816	0.13951607
TRPV2	106.164722	0.65515944	0.02112013	0.13951607
VAV1	181.1728	0.76569646	0.02110029	0.13951607
RBP1	870.548966	-0.9887752	0.02116584	0.1397025
MAPK14	827.389015	0.37223468	0.02121025	0.13994312
KIF26B	34.011879	1.0115947	0.02124616	0.13997
TCTEX1D1	3.29193443	1.0165559	0.02123317	0.13997
ZBTB14	243.608424	0.35857244	0.02123418	0.13997
ZNF566	253.098602	0.34429472	0.02123917	0.13997
MFNG	122.096569	0.63471498	0.02127239	0.14003792
PRAC2	2.59163497	-1.1161663	0.02126562	0.14003792
HECTD4	5221.03483	-0.3851433	0.02128902	0.140095
RNF166	261.958076	0.49126321	0.02132142	0.1402557
USP33	1110.76221	0.42360706	0.02134779	0.1403767
RNF32	8.56184404	-0.7770297	0.0213923	0.14061677
EYA4	31.8207818	-1.1743306	0.02140945	0.14067699
LOC440311	1.55378968	-1.1092299	0.02145756	0.1409396
MXD3	97.8683955	-0.4487267	0.02147322	0.1409396
SNHG5	312.678066	0.75415509	0.02147346	0.1409396
ABHD12B	1.50412745	-1.1796681	0.02149438	0.14102433
EPN2-IT1	11.3517259	-0.6565899	0.02151264	0.14109146
CABYR	15.6405737	-1.010721	0.02156097	0.14121344
CTSE	1.49687832	-1.1142887	0.02156222	0.14121344
RASGRF2	1532.29275	0.76960736	0.02156252	0.14121344
ZNF333	350.678956	0.3912263	0.02156335	0.14121344
VIPR2	31.134779	-1.1703198	0.02160478	0.14143211
MB21D2	68.8107865	0.76914874	0.02161308	0.14143379
TPBGL	3.52678464	-1.0970849	0.02169346	0.14190699
SNORA34	39.5255362	0.81278162	0.02170211	0.14191079
ATXN3	549.410449	0.44205285	0.02172925	0.14193004
LOC145474	106.919097	0.78827882	0.02172545	0.14193004
NQO1	887.098717	-0.7329654	0.02172574	0.14193004
MXD1	169.120691	-0.5361008	0.02174021	0.14194887
BBS10	410.010307	0.37059755	0.02177081	0.14204325
SNORA23	216.465159	-0.4335271	0.02177034	0.14204325
LOC1019297	11.4790365	1.13079537	0.02179708	0.14216189

USP36	908.702588	-0.4461883	0.02184222	0.1424035
RHPN1-AS1	2.28034778	-1.0214124	0.02186095	0.14247282
ODF2	732.615776	-0.3001716	0.0218776	0.14250572
TIMM8A	70.2656692	-0.4150792	0.0218822	0.14250572
LRRC42	301.259641	0.53035989	0.02192613	0.14268616
ZFP37	118.339467	0.71909175	0.02191834	0.14268616
MIA3	1922.4598	-0.2734792	0.02195594	0.14282729
RNA45S5	7239175.76	-1.109938	0.02196784	0.14285185
RPAP2	258.57948	0.41394935	0.02199274	0.14296091
CLIC3	186.136485	-0.9693712	0.02200137	0.14296419
PIWIL4	44.2864992	0.54077244	0.02202376	0.14300404
YIPF1	193.125417	0.50307635	0.02202321	0.14300404
ANKRD46	285.00024	0.45730971	0.02205712	0.14300551
PDCD1LG2	12.9429015	0.9217066	0.02205107	0.14300551
PPIE	288.725871	0.33864624	0.02206464	0.14300551
PRMT9	306.994362	0.53912283	0.0220435	0.14300551
SGK2	33.7989517	0.86168865	0.02206114	0.14300551
FAM13C	27.6955228	-0.9225141	0.02208233	0.14306747
GATAD1	977.547606	0.36175119	0.02210386	0.14315427
LOC283683	30.6325717	1.04807838	0.02212244	0.14322181
FAAH	141.529287	-0.8157932	0.02215803	0.1433995
FBXO2	47.83577	-1.0019384	0.02217223	0.14343861
DENND6A	756.556457	0.46324975	0.02227574	0.14400232
EXOC6B	609.293694	-0.3338332	0.02226839	0.14400232
AKR1A1	457.858532	0.41313073	0.02231739	0.14421857
C1QTNF3	46.2268216	0.6684	0.02234237	0.14432696
SH3BGRL2	380.395951	0.8680664	0.02235998	0.14438771
SLC35B4	1147.66447	-0.3732341	0.02239971	0.14459119
MANEAL	123.116597	-0.9646923	0.02241702	0.14464978
CD180	58.8601312	0.93057242	0.02242877	0.14467256
EMC10	1644.02197	-0.4841153	0.02243731	0.14467458
GCLM	207.941893	0.67644405	0.02247396	0.14479644
TMEM97	326.920984	-0.6096927	0.02247767	0.14479644
TRAF2	122.555914	-0.3635639	0.0224809	0.14479644
RASSF1	219.499388	0.4790098	0.02250926	0.144873
SLC16A13	31.8354518	-0.7479789	0.02250476	0.144873
PRR24	107.315749	-0.3739479	0.02256105	0.14510016
SLC25A18	5.24293249	-1.146338	0.02255286	0.14510016
CDKL3	47.1019481	0.55959794	0.02259659	0.1452756
ANO4	55.1641555	-1.1720195	0.02260938	0.14530469
ANO7	33.0873216	-0.7671802	0.02262325	0.14534073
C12orf4	386.5365	0.35202006	0.02270974	0.14563045
CHRNA5	15.7300343	-1.0684798	0.02270122	0.14563045
FTCD	5.27121695	-1.166937	0.02268978	0.14563045
HOXC10	7.15884048	-1.1039435	0.02268606	0.14563045
STXBP1	550.37071	-0.4403956	0.02270203	0.14563045
WDR12	252.856675	-0.3777361	0.02272192	0.14565547
RAB9A	190.923952	0.34813993	0.02273811	0.14570617
ASIC4	3.91253504	-1.1217688	0.02275612	0.14574644
C6orf57	36.3525694	0.51557915	0.02283081	0.14574644

DSEL	565.543822	0.70284065	0.02284383	0.14574644
GAS2L2	3.54346705	1.10146742	0.02280225	0.14574644
GTF2IRD2	83.8502202	0.49529087	0.02279137	0.14574644
LOC1001283	58.349835	-0.7533129	0.02280691	0.14574644
SNORA14B	4.66188067	0.94093988	0.02283932	0.14574644
SUV39H1	93.1343228	-0.4311541	0.02282637	0.14574644
TOM1L1	387.214129	-0.4187897	0.02281605	0.14574644
UTRN	8368.32818	0.4878453	0.02280177	0.14574644
ZNF461	118.698223	0.48275432	0.02281377	0.14574644
ZNF571	87.7497247	0.55711513	0.02283178	0.14574644
PYHIN1	5.88551776	0.9850462	0.02285287	0.14575127
KDM1A	719.00567	0.38496498	0.02289942	0.14588311
KIAA1919	363.66915	0.45647645	0.02290672	0.14588311
LCMT2	262.440246	-0.2948622	0.02288622	0.14588311
SLC16A1-AS1	48.6828666	0.63148543	0.02289984	0.14588311
PGAM5	353.092555	-0.3866073	0.02293361	0.1460015
GABRA2	2.39596876	-1.1659968	0.02295177	0.14606426
P2RY13	303.662961	0.88714096	0.02296864	0.14609903
SLC25A10	62.3258938	-0.6775806	0.02297384	0.14609903
LINC01114	7.31567651	1.16860858	0.02300357	0.14618239
MARK4	507.534155	-0.459805	0.02300338	0.14618239
CYB5RL	76.24936	0.45423479	0.02301462	0.14619974
ZNF628	95.4319927	-0.5242396	0.02305015	0.14637263
EBF1	666.668596	1.0391292	0.02309154	0.14651286
VAPA	1744.87672	0.4418301	0.02309722	0.14651286
ZNF687	694.975096	-0.3119419	0.02308602	0.14651286
LOC284454	127.558221	0.80651349	0.02311455	0.14651706
TOPBP1	818.273735	-0.3110517	0.02311423	0.14651706
CXCR4	584.255172	0.72972498	0.02315041	0.14663869
TM6SF1	167.758218	0.79312131	0.02314511	0.14663869
APP	22567.5744	-0.6767832	0.0231763	0.14665722
BCAS4	122.53573	-1.0003311	0.02317834	0.14665722
FAM133CP	249.403172	0.60558163	0.02316549	0.14665722
ARSA	403.186196	0.5279774	0.02323884	0.14686777
KRT9	1.34669731	-1.1644467	0.02322113	0.14686777
LOC644762	2.05315684	-1.1099228	0.02324502	0.14686777
VPS9D1	278.243301	-0.4634379	0.02323057	0.14686777
AMMECR1	143.041848	-0.4187597	0.02327301	0.14699181
TBKBP1	294.998848	-0.3626898	0.02331215	0.1471862
CEP41	169.412785	0.44919586	0.02341916	0.14780875
FLJ44087	13.5658354	1.11666973	0.0234994	0.14826201
FBXO44	270.848594	0.35644903	0.02352392	0.14831031
LZTFL1	353.592318	0.52593524	0.02351915	0.14831031
EIF3G	1035.5146	0.3681083	0.02355053	0.14842485
TRMT13	218.381029	0.41701541	0.02358619	0.14859637
NRGN	29.2459566	-1.0484839	0.02366882	0.14906357
FAM43A	605.45137	-0.9276701	0.02368966	0.14914144
C11orf1	162.445485	-0.4916681	0.02370504	0.14918487
MPO	1.29029806	1.15486564	0.02376895	0.14953358
IL20RB	28.5726297	-0.7587294	0.02379128	0.14962054

LOC284837	10.1599216	1.04159434	0.0238044	0.14964954
NBPF14	1.33868242	1.11770941	0.02381515	0.14966364
DKC1	492.482107	-0.3271044	0.02382379	0.14966443
BCAM	697.903637	-0.8670311	0.02385676	0.14981807
COG5	1012.17638	0.26061391	0.02388437	0.14983254
OCIAD2	81.6551468	-0.8215368	0.02389598	0.14983254
SGPP1	353.533717	0.55821062	0.02390165	0.14983254
TLE1	188.46178	0.76038042	0.02389307	0.14983254
TYMS	281.937473	-0.6943063	0.02387407	0.14983254
LRRC25	145.701689	0.70435931	0.02391216	0.14984501
TRNAU1AP	124.542714	0.49741092	0.0239737	0.15017716
VEGFB	914.20998	-0.5022457	0.02398939	0.15022189
CD74	13997.8753	0.73587778	0.02400691	0.15027815
ZZZ3	691.327552	0.42298675	0.02401686	0.15028691
CA8	108.394455	-1.0513055	0.02405843	0.15044
SNORA71A	44.4052054	-0.8527776	0.0240533	0.15044
RPGR	93.182107	0.63333227	0.02411707	0.15075313
UBE2Q2L	6.07958101	0.97023336	0.0241417	0.15085348
KRTAP5-AS1	1.65027619	-1.1567699	0.0241839	0.15106271
SPIN2B	66.2032477	-0.4401888	0.02419417	0.15106271
ZNF25	403.212787	0.51488051	0.02420095	0.15106271
RTCA	259.84242	0.47556789	0.02420979	0.15106428
LINC00887	129.536753	-1.1190161	0.0242687	0.1513458
TMEM119	241.85159	1.05755183	0.02427211	0.1513458
FCHO2	1111.04489	0.33712406	0.02428129	0.15134936
NXT2	118.164647	0.47734947	0.02429406	0.1513753
ZDHH17	1095.15507	0.29692156	0.02431378	0.15144452
PPRC1	692.818752	-0.4954754	0.02432501	0.15146084
ZFY	20.0408517	-1.1381648	0.02433612	0.15147641
DR1	552.322066	0.37583831	0.02440461	0.15184902
CITED2	1438.56653	0.60448311	0.02443291	0.15197129
PRKG2	319.209222	-1.1545576	0.02444508	0.15198178
RPS12	3929.33635	0.54889957	0.02445187	0.15198178
LINC00526	19.4238322	0.59534329	0.0245125	0.15230479
LAMA1	727.901864	-1.083267	0.02452214	0.1523109
CYP27A1	750.785532	0.39548505	0.02458733	0.15263099
LOC727896	44.2935163	0.70086965	0.02459103	0.15263099
KY	2.36648907	1.14588203	0.02463472	0.15274716
RPS15	2503.07766	0.35785588	0.02462268	0.15274716
SH3BP5L	387.513504	-0.3107892	0.0246358	0.15274716
PCSK7	847.433628	-0.3152662	0.02466811	0.15289358
AS3MT	6.65510378	0.81791613	0.02469339	0.1529425
GPR133	683.899119	0.97284803	0.02469273	0.1529425
BMX	8.10716473	1.0776649	0.02481937	0.1536687
HYMAI	107.414978	0.91529704	0.02484708	0.15378611
CASC1	28.3036307	0.83588267	0.0248677	0.15378959
RASGRP2	176.279748	-0.8094588	0.02487387	0.15378959
TNRC6C-AS1	198.030914	-0.6664214	0.02487094	0.15378959
ALKBH2	114.721509	-0.4273725	0.02489514	0.15382719
CHRNA4	288.17689	-1.1523238	0.02489744	0.15382719

ZNF546	165.652415	0.39003261	0.02490939	0.15384696
DIRAS1	77.7489031	-1.0126152	0.02493539	0.15395351
DYRK4	192.386222	0.37751744	0.02495369	0.15395839
RGS4	53.6046751	-1.1017794	0.0249454	0.15395839
DNAL4	97.5988329	0.53405591	0.02501194	0.1542096
PEX7	70.3003815	0.5956695	0.0250054	0.1542096
CEACAM6	3.84850366	-1.1457879	0.02504195	0.15423244
FKBP11	142.410464	-0.5649392	0.02504012	0.15423244
ZNF512B	1297.45608	-0.5052564	0.02503787	0.15423244
BBS2	813.156509	0.44257594	0.02507108	0.15435783
DFFA	295.021968	0.2633908	0.02510681	0.15437473
GABRA5	2.23299568	-1.1433536	0.02510823	0.15437473
SPON1	83.7748093	1.02299939	0.02510893	0.15437473
UBXN8	108.287951	0.37822544	0.02509999	0.15437473
MSR1	1058.78578	0.72843027	0.02512199	0.15440108
FAM212B	76.9754028	0.70921322	0.02514672	0.15449908
MTRNR2L3	4.75820798	0.99057467	0.0251707	0.15459242
GIMAP4	355.441038	0.66622766	0.02518833	0.15464666
CYP4X1	938.664431	0.75663067	0.02524846	0.15496178
NDUFA13	1224.3029	-0.3508613	0.02528273	0.15505052
OR52N4	19.0507113	0.96210044	0.02528534	0.15505052
SRSF2	2189.09344	-0.2694978	0.02528937	0.15505052
C17orf107	44.5371484	0.68707037	0.02536023	0.15518647
CELF3	2.36237647	-1.1357416	0.0253459	0.15518647
CEP131	173.284962	-0.4125684	0.02534825	0.15518647
DNAH8	2.97277506	1.03698528	0.02536447	0.15518647
GSTM3	570.017466	0.93505984	0.02532223	0.15518647
POLR3GL	275.808552	0.33226503	0.02535631	0.15518647
PXDC1	378.715458	0.606238	0.02537556	0.15520032
CBLN2	3.50396524	-1.1271331	0.0254001	0.15520941
LOC1002892	123.724851	0.42897855	0.02540352	0.15520941
TNKS1BP1	2269.88849	-0.3589662	0.02538798	0.15520941
KCNMB1	29.7300776	0.82805919	0.02542954	0.15531446
C21orf88	4.73498468	-1.1310868	0.02545958	0.15539629
WDR77	299.634799	0.3492198	0.02546061	0.15539629
SCUBE1	561.792019	1.11784517	0.0255059	0.15561873
TRIM22	3397.81618	0.41917242	0.0255311	0.1556645
WIPF1	879.757898	0.38065349	0.02552741	0.1556645
ZFPL1	254.34515	-0.2996507	0.02556815	0.1558364
C9orf169	5.74325543	-0.9932948	0.02559334	0.15593588
TCERG1L	24.1384094	-1.1434613	0.02563016	0.15610611
EIF4E3	415.59589	0.62246327	0.02564533	0.15614444
MCM3AP-AS	89.8398167	-0.8048922	0.02565909	0.15617418
KCNJ1	1.66869134	1.04822814	0.02567347	0.15620768
POGK	872.557842	-0.279723	0.02571025	0.15637734
ZBED3	60.4511273	-0.3853358	0.02572013	0.15638339
TNFRSF10D	213.630845	1.00292328	0.02574641	0.15648906
FCGR1C	30.8344835	0.91620667	0.02576576	0.1564985
VWA3A	9.44019557	0.87480668	0.02576374	0.1564985
CACNA1D	267.183799	1.11235995	0.02577625	0.1565082

HBP1	1237.41717	0.29896876	0.02579539	0.15656775
UBA52	2931.52663	0.23771507	0.02580386	0.15656775
ATM	4043.91455	0.34079683	0.02581785	0.15659862
ADRA1B	51.1162006	-0.8611527	0.02587593	0.1568968
POLR2M	98.4387645	-0.4558602	0.02592032	0.15705765
XRRA1	425.14664	-0.6242673	0.02591835	0.15705765
EMC7	566.697185	-0.3870794	0.02593311	0.15708104
COL9A3	6248.50479	-0.9808974	0.02595748	0.15717452
SCRIB	891.784021	-0.4183144	0.0259749	0.15722593
CLMN	714.271167	-0.8084335	0.02599032	0.15726513
GINS4	36.760441	-0.6529448	0.02600208	0.15728217
GPC6	6561.57161	0.57116247	0.02605301	0.15742782
LOC1019295	7.29771753	1.01892043	0.0260406	0.15742782
THEMIS2	424.468815	0.69801603	0.02605024	0.15742782
RNF141	615.8538	0.47416249	0.02609814	0.15759224
ZBTB5	482.191018	-0.4446893	0.02609235	0.15759224
FAM193A	895.47397	-0.3234247	0.02618395	0.15771084
LOC1005062	13.9986733	0.83122506	0.0261434	0.15771084
MRPS18C	131.12973	0.34838	0.02613491	0.15771084
POU5F2	40.7168004	0.54938247	0.02617115	0.15771084
PUS1	130.095275	-0.4051939	0.02615847	0.15771084
TPT1-AS1	113.807328	0.4690803	0.02617637	0.15771084
TRIM17	116.772804	-0.7323088	0.02617893	0.15771084
XYLT2	741.474434	-0.4147394	0.0261895	0.15771084
CNOT11	502.878054	-0.2876135	0.02624729	0.15800111
SERPINA1	298.376605	0.78651925	0.02625567	0.15800111
IMPG2	100.794061	0.88688016	0.02628053	0.15809663
BMPR1B	2727.03093	1.07111363	0.0263257	0.158098
CCDC88B	255.936706	0.78636288	0.02630318	0.158098
NOL4L	765.960765	-0.625692	0.02632077	0.158098
PSIP1	1247.92096	-0.5799651	0.02630986	0.158098
SNCB	3.87176405	-1.1418219	0.0263065	0.158098
IL23R	4.07092125	-1.1085575	0.02636111	0.15825662
PPM1G	862.85844	-0.358852	0.02640125	0.1584423
ZFP64	389.735405	-0.4007204	0.02641005	0.1584423
CYP2W1	11.0921481	-1.1280987	0.0264436	0.15854289
EIF5A1	9.13049523	-0.8427007	0.02644633	0.15854289
STXBP3	488.77292	0.43334598	0.02645386	0.15854289
CCNG1	3311.98823	0.44737807	0.02648987	0.15865061
HPCA	7.76732242	-0.9691779	0.02648832	0.15865061
MSL3	298.231517	0.37019851	0.02652114	0.15875414
TRRAP	2865.81864	-0.344306	0.02652521	0.15875414
NAA25	753.750742	-0.2631373	0.02653889	0.158782
HAUS2	350.305215	0.34815602	0.02659978	0.15897173
QRSL1	223.784069	0.47774179	0.02660254	0.15897173
TMEM68	186.468122	0.35971445	0.02660675	0.15897173
ZNF317	554.586607	0.33993845	0.02660532	0.15897173
PCDHGB8P	247.892311	-0.661721	0.02664922	0.15917141
ABCC13	9.91086527	-1.1199972	0.0266788	0.15926083
PIBF1	531.853085	0.27493446	0.0266823	0.15926083

FHOD3	25.1216789	1.05159592	0.02671264	0.15938784
S100A11	2528.49259	-0.4666436	0.02674134	0.15950498
PCDHGA11	406.266932	-0.7044908	0.02680401	0.15982457
WDR76	105.067775	-0.6703798	0.02687693	0.16020507
NINL	1060.69833	-0.645837	0.02689682	0.16026934
FLI1	399.182654	0.60217416	0.02695677	0.16057218
HHIP	220.070093	-1.1368159	0.02698575	0.16068245
TMEM205	1267.06015	-0.5715378	0.02699356	0.16068245
ANP32E	778.050563	-0.3687404	0.02703845	0.16082334
CXCL12	1151.4586	-0.9802053	0.02704465	0.16082334
NPDC1	844.466149	-0.4467566	0.02702755	0.16082334
BRSK2	19.4516827	-0.8928752	0.02707842	0.1609697
LOC1005063	42.2408272	0.92148527	0.0270994	0.1609917
PPM1F	557.030729	0.38807088	0.02710042	0.1609917
BNIP3L	2888.18182	0.42287329	0.02712887	0.16104711
ELFN1	192.105627	-1.0548402	0.02714089	0.16104711
KCNE4	910.938561	0.8184689	0.02717426	0.16104711
LOC1002893	3.65888864	0.77170552	0.02712611	0.16104711
NNT	2012.74394	-0.44773	0.02714812	0.16104711
PCNXL4	767.70695	0.4052282	0.02718299	0.16104711
SLC44A1	2188.60549	0.71670672	0.02715878	0.16104711
TMCC3	593.457182	0.55934362	0.02716564	0.16104711
STX10	249.606799	0.29296826	0.02720694	0.1611347
PTGER4	287.041525	0.80325511	0.02724066	0.16128012
NOP16	129.626899	-0.5198744	0.02728799	0.161506
CD302	34.2334405	-0.7118044	0.02731482	0.16159743
CD3D	6.44875466	1.0321086	0.02732182	0.16159743
SURF4	3192.58501	-0.3281438	0.02733959	0.16164819
WDR11	1404.88891	0.42839271	0.02736569	0.16174812
GPR65	100.592914	0.87769344	0.02740787	0.16184458
INTS5	343.470111	-0.334577	0.02740098	0.16184458
TIMM50	368.787123	-0.2898311	0.02740961	0.16184458
MID1IP1-AS1	4.0315716	-1.0406273	0.02742557	0.16188447
SLC9A7P1	66.4332862	0.72254207	0.0274723	0.16210593
GPR83	110.799199	-1.061605	0.02752751	0.16237722
ACTR3	2010.18188	0.19628702	0.0275817	0.16241852
C10orf82	8.20135732	1.13258356	0.02756388	0.16241852
DDX50	510.400789	0.40188679	0.02758221	0.16241852
KIAA1456	13.5431182	-1.0575453	0.02759399	0.16241852
PCDHGB3	414.513982	-0.7505127	0.02759059	0.16241852
POC1B	272.459075	0.34291534	0.02754732	0.16241852
ZNF234	340.928081	0.32071836	0.02759915	0.16241852
SMAP2	899.172315	0.70973784	0.02762711	0.16252875
SEPT2	6654.54726	-0.2399425	0.02767938	0.1627818
ZNF410	422.99054	0.3810601	0.02774258	0.16309894
HIST1H2BD	530.098323	-0.5058976	0.02778012	0.16323475
LOC1001333	74.493895	-0.6190639	0.02778424	0.16323475
CD3E	13.4113154	0.87031798	0.02779487	0.16324266
PIANP	18.4967091	-1.062605	0.02780528	0.16324926
CHN2	249.134431	0.96059354	0.02784764	0.16327737

ESCO1	489.537497	0.41468945	0.02784541	0.16327737
LAT2	220.134347	0.70358483	0.02782845	0.16327737
PRDX5	1532.10664	-0.3608196	0.0278558	0.16327737
SFT2D1	174.495408	0.41335699	0.02785647	0.16327737
RAB40C	274.767777	-0.3915956	0.02788504	0.16339038
BPTF	4669.05615	-0.2799034	0.02792201	0.16355251
DUSP1	7492.72554	0.78348026	0.02797901	0.16365568
ESM1	155.765628	1.06828597	0.02797515	0.16365568
SNX29	1240.76013	0.47348331	0.02797685	0.16365568
TMEM123	1814.10183	0.40987926	0.02798614	0.16365568
ZNF787	220.876341	-0.3492417	0.02797185	0.16365568
HUWE1	9506.2104	-0.2447647	0.02801601	0.16377588
LOC1005075	22.1026642	-0.5686124	0.02807752	0.16403754
RPH3A	3.9366871	-1.1283025	0.02807942	0.16403754
FLJ46906	10.8813784	1.00488173	0.02812255	0.16423497
TGFB1	576.476332	-0.5281176	0.02814227	0.16424108
TRMU	118.037643	0.40491109	0.02814208	0.16424108
IGHMBP2	270.8365	-0.2688781	0.0281891	0.16441036
PILRA	131.586353	0.72072985	0.02818997	0.16441036
EOGT	393.790787	0.61358677	0.0282498	0.16465011
OSMR-AS1	7.91703707	1.01249963	0.02824186	0.16465011
DOT1L	576.888173	-0.3354427	0.02828854	0.16482127
SNAP91	71.0201676	0.97791056	0.02830237	0.16484726
DNAJB6	1192.94204	-0.2964111	0.02833047	0.16486459
NAGA	591.716232	0.37433655	0.02833347	0.16486459
NFATC1	129.732068	0.58047043	0.02831591	0.16486459
LBX1-AS1	3.679529	-1.0968739	0.02835968	0.16490799
SEMA3E	3.91887352	1.09498066	0.02835654	0.16490799
DPP3	380.302438	-0.4115593	0.02841588	0.16512564
MANBA	533.875633	0.34471959	0.02841451	0.16512564
METTL4	164.602419	0.50706147	0.02845029	0.16525399
OVCA2	19.4184318	-0.6708207	0.02846615	0.16525399
PTPRN	4.60730744	-1.1257652	0.02846615	0.16525399
SSTR5-AS1	1.83224796	-1.1186978	0.02848901	0.1653321
POLE2	23.4462566	-0.7359222	0.02852734	0.16549995
PODN	622.082773	0.76903738	0.02854791	0.16556473
SLC27A1	742.295981	-0.4116786	0.02856847	0.16562935
EID2B	63.4597201	0.53289453	0.02868274	0.16612756
RFXAP	148.167664	-0.3789686	0.02868054	0.16612756
TIAF1	10.9690782	0.77165614	0.02867188	0.16612756
ITM2C	13078.7078	-0.7935026	0.02869633	0.16615154
CDC5L	972.694789	0.33199143	0.02874702	0.16628087
CXADRP2	3.28719766	-1.1089757	0.02873715	0.16628087
SNORA65	8.40709296	-0.9584085	0.02873806	0.16628087
ANAPC4	398.316195	0.26321212	0.02877808	0.16635974
DSCAML1	13.352528	-1.0753777	0.02877957	0.16635974
ATP5L	1058.48455	-0.3328036	0.02892428	0.16683959
CNOT6L	1008.02742	0.33633741	0.02891346	0.16683959
COX4I1	2023.5	-0.4385468	0.02892139	0.16683959
HMGB3	131.329332	-0.6484016	0.02889481	0.16683959

LOC1019272	7.15939356	0.87269207	0.02892898	0.16683959
RASL12	36.4137269	0.92471017	0.02891057	0.16683959
RNF13	1301.47742	0.22774876	0.02888438	0.16683959
LRP2BP	60.521462	0.81551396	0.02893869	0.16684088
NBPF1	989.623941	0.59966667	0.02894826	0.1668414
WHAMMP1	136.833587	0.37760056	0.02898219	0.16698221
PNMAL2	94.9021033	0.81580626	0.0290024	0.16704392
B4GALT3	295.295686	-0.3721747	0.02901529	0.16706348
PIGK	505.13983	0.37318197	0.02904211	0.16716322
OTOG	473.274579	-1.119898	0.02905393	0.16717653
LINC01234	14.1245046	-1.061757	0.02906533	0.16718745
GHR	691.091394	0.60880065	0.02907958	0.16721474
DEF6	174.986212	0.57853519	0.02916061	0.16762584
PODXL	4296.30291	-0.7238078	0.0292076	0.16784114
FAHD2A	127.508966	0.42131716	0.02922801	0.16790356
BET1	216.646252	0.25771761	0.02927019	0.16792648
COX17	236.768026	-0.4153693	0.02926576	0.16792648
MFSD1	1012.67974	0.34185674	0.0292559	0.16792648
PUS10	93.508515	0.43403127	0.0292596	0.16792648
NSDHL	188.753146	-0.4487803	0.02931038	0.16810227
MET	3786.49178	-0.9145013	0.02935257	0.16828933
LINC00909	185.188974	0.50814188	0.02939889	0.16844509
VAT1	1774.53022	0.52731957	0.02939558	0.16844509
IL10	8.13968759	1.0691232	0.02940979	0.16845271
CCDC40	143.391138	0.70099364	0.0295303	0.1690879
MTRNR2L2	4035.9529	-0.645655	0.0295725	0.16921934
TMC8	132.888408	0.64000729	0.02957159	0.16921934
TSPAN7	998.37661	0.99725953	0.0295925	0.1692787
TMEM189	426.044526	-0.5644965	0.02960248	0.16928077
PRICKLE2	444.677456	0.70686218	0.02961451	0.16929452
KCNG3	11.0582523	-1.0844917	0.02964464	0.1693567
TVP23C	292.369093	0.47218982	0.0296365	0.1693567
HAUS7	306.015746	0.53091429	0.02979227	0.17003443
NTNG1	14.7366704	-1.1142105	0.0297737	0.17003443
TAS2R10	23.4643085	0.64988157	0.02978477	0.17003443
C20orf196	20.7150415	0.66849375	0.02981209	0.17009235
HIST1H2BF	92.6572201	-0.7292934	0.02983294	0.17010094
UBQLN2	913.922869	-0.302505	0.02982782	0.17010094
RILPL1	318.924933	-0.393818	0.02990284	0.17044423
SUCLG1	629.383775	-0.3641999	0.02994308	0.17061832
XRCC4	109.345222	0.46406546	0.02996509	0.17068848
INPP5E	277.99569	-0.3374869	0.03000134	0.1707843
RASGRP1	26.7995425	0.86912732	0.02999801	0.1707843
CCRN4L	45.1436851	-0.7614147	0.0300401	0.17083923
GNPDA1	344.247953	0.30955905	0.03004563	0.17083923
RNF180	246.898602	0.9234869	0.03002583	0.17083923
ZNF587	1545.35482	-0.3317432	0.03004983	0.17083923
RELA	831.711381	-0.3298157	0.03006912	0.17089364
PEF1	536.619055	0.40112052	0.03008207	0.17091201
HIP1R	338.627001	-0.6438153	0.03011	0.17096026

TFIP11	283.15955	0.39011716	0.03010662	0.17096026
TMSB15A	3.64763739	-0.987224	0.03012839	0.17100948
DUOX1	173.23759	1.11073896	0.03014321	0.17101161
NAA30	386.96055	0.37661969	0.03014821	0.17101161
ZNF711	230.818554	-0.813662	0.03016112	0.17102969
CDK8	157.394771	-0.435108	0.03018691	0.17106563
CYP20A1	932.373623	0.27884846	0.0301859	0.17106563
HDAC5	769.72435	0.34016595	0.03023691	0.17129379
ALDH1B1	219.257299	-0.6200088	0.03025211	0.17132475
CD2BP2	823.19129	0.23560402	0.03030749	0.17158313
CRNKL1	801.232045	0.32967752	0.03034933	0.17172187
METTL25	122.073482	0.42272799	0.03035152	0.17172187
PSENNEN	209.786636	0.34509128	0.03037458	0.17179704
ACCS	220.670213	0.58786464	0.03038734	0.17181398
AMZ2	601.949723	-0.2818465	0.03048662	0.17196491
C19orf25	223.065895	0.42805391	0.03047761	0.17196491
H6PD	1658.42389	0.50826782	0.03049792	0.17196491
LINC00612	6.99805088	-0.8614238	0.03050202	0.17196491
LOC644936	2.66246472	1.06217604	0.0304656	0.17196491
NDUFS2	859.577747	-0.4464326	0.03049117	0.17196491
PUF60	901.996494	-0.2671176	0.03047638	0.17196491
SALL1	208.365536	-1.0785112	0.03048636	0.17196491
WDR78	90.1347772	0.87971756	0.03046039	0.17196491
GFM1	844.680282	-0.315205	0.03052135	0.17201877
ARHGEF3	836.827019	0.80430297	0.03064004	0.1726324
ASGR2	3.87258022	0.98763016	0.03065732	0.17266609
RAB13	604.137322	-0.3989106	0.03066565	0.17266609
ESYT3	141.968844	0.91256672	0.03069444	0.17277284
ARHGDI3	23.3948858	0.9970966	0.03076915	0.17299132
DMGDH	173.029029	0.87560219	0.03074563	0.17299132
SPDYE5	1.29350774	1.08653105	0.03077255	0.17299132
WBP1L	4773.91336	0.68206694	0.03077259	0.17299132
VTN	240.947162	-0.8342588	0.03078351	0.17299742
C19orf38	17.836551	0.84027668	0.03084129	0.1732668
LYRM7	430.199442	0.47380661	0.03091072	0.17354598
NCOR2	4192.57968	-0.4276492	0.03090904	0.17354598
ZDHHC22	2.45186915	-1.0717136	0.03092205	0.17355421
CACNA1B	12.110647	-0.9081087	0.030969	0.17376228
ENO4	13.7807625	0.82952585	0.03099041	0.17382694
TBXAS1	334.417678	0.7152917	0.03105799	0.17415046
CILP2	52.3717697	1.06538786	0.03107177	0.17417221
CLCN4	329.723817	-0.5679338	0.0310876	0.17419725
FAM71F1	3.1376057	1.03415403	0.03109604	0.17419725
NTMT1	146.77866	-0.2915894	0.03111467	0.17424609
CD276	1170.14917	-0.5967627	0.03114543	0.17436285
LOC652276	85.0059607	-0.4764863	0.03116345	0.17440821
ANKS6	806.123298	-0.436248	0.03123009	0.17441361
ECM1	62.8492554	-0.8872053	0.03130132	0.17441361
GEN1	272.513514	-0.5440266	0.03119013	0.17441361
GRAMD4	283.546265	0.43792073	0.03125754	0.17441361

GTPBP10	423.784126	0.23817469	0.03126505	0.17441361
HIST1H2BN	140.681304	-0.5825545	0.03130344	0.17441361
IRF6	6.15154371	0.88946556	0.03121746	0.17441361
ISCU	876.125392	0.32981693	0.03129872	0.17441361
LOC1002870	26.4423378	0.56295445	0.03120877	0.17441361
MICAL2	1292.24519	-0.5628925	0.03125521	0.17441361
PIP4K2A	457.155895	0.39182826	0.03132231	0.17441361
RARRES3	188.781149	0.68022878	0.03124801	0.17441361
RFX3	388.369445	0.50940111	0.03127838	0.17441361
RFX7	824.340803	-0.3817781	0.03130986	0.17441361
SPCS2	518.43151	-0.3386513	0.03132306	0.17441361
STX12	748.963295	0.46785429	0.03131391	0.17441361
LSM10	118.828753	-0.5171565	0.03133444	0.17442178
C9orf89	89.2909417	-0.4393479	0.03134944	0.17445004
KIF24	84.7203209	-0.55177	0.03142888	0.1748368
ME3	137.353629	0.56695763	0.03147715	0.17495662
NRP2	3637.59713	0.86200226	0.03147981	0.17495662
RBMX2	182.230601	0.31805964	0.03148026	0.17495662
ABCC4	931.105552	-0.96013	0.03156169	0.17529843
SLC24A2	5.71164845	-1.1042249	0.03155433	0.17529843
BMP1	1151.79766	-0.5437435	0.03159482	0.17542706
CCR4	3.84773713	1.02757788	0.03161382	0.17547713
LRRCS8	1464.17826	-0.2472066	0.03164093	0.17557222
BAI3	48.6417289	0.94992779	0.03167559	0.17561387
MAP2K3	343.765625	-0.5134735	0.03166139	0.17561387
PELO	533.484203	0.46008963	0.03167839	0.17561387
CD53	452.935995	0.67061235	0.03170097	0.17568368
FBXO10	259.360952	-0.4955109	0.03174361	0.17581187
NUGGC	3.90558258	1.00413896	0.03174409	0.17581187
SERPINE1	306.074725	1.00183726	0.03175489	0.17581635
TUBGCP4	352.381663	-0.3368594	0.03178082	0.17590456
DCP2	1396.74078	0.40081357	0.03187979	0.17639684
ADM5	17.1412735	-0.8457618	0.03190285	0.17641344
LOC1005056	1.72240681	1.08174437	0.03189575	0.17641344
RAB24	751.33496	-0.5462763	0.03194533	0.17659281
FRY	707.948603	0.86877996	0.03197175	0.17668332
SNORA31	4.52467172	0.72050402	0.03198619	0.17670761
PCDH7	23.1111336	-1.071513	0.03204555	0.17697996
SCN2B	182.000489	1.07959073	0.03207093	0.177009
SNRNP40	297.750659	0.39320531	0.03206283	0.177009
SSPO	404.676972	-0.6946385	0.03209044	0.17706113
FCN1	10.0013606	0.99187656	0.03214176	0.17719196
HIST1H2BB	54.0646522	-0.7670903	0.03214323	0.17719196
TMEM156	31.4381538	1.01869706	0.03214437	0.17719196
RAB14	1875.80057	-0.2381738	0.03215875	0.17721566
LRRRC14	482.228933	-0.3283456	0.03220615	0.17742128
SYT15	378.871655	0.91814328	0.03224128	0.17755922
OSTF1	245.924006	0.3484874	0.0322648	0.17763315
DEPDC5	269.424119	-0.3478477	0.03228715	0.17763534
FBXO48	12.9345857	0.69341235	0.03228832	0.17763534

ZNF517	61.9434893	-0.3837463	0.0322955	0.17763534
LOC1001323	69.6990163	0.29728877	0.03239247	0.178113
LYN	402.699487	0.50799352	0.03242975	0.17825061
MKRN3	4.24995195	-1.0424549	0.03243776	0.17825061
CRLF1	248.964644	1.03012065	0.03245443	0.17828651
LIN9	76.309942	-0.5225343	0.03247641	0.1783422
LOC1004994	30.0456093	0.50349443	0.0325041	0.1783422
NDFIP1	2192.6226	0.40233904	0.03251526	0.1783422
PLXDC2	3154.35294	0.69834144	0.03250809	0.1783422
ZFP91	1287.08299	-0.2351078	0.03249996	0.1783422
AGPAT9	64.6733205	0.77949422	0.03256409	0.17855437
CTNND1	172.065796	0.27888455	0.03261324	0.17876812
PCSK2	11.1163616	-1.0961643	0.0326917	0.17911298
RIN1	53.1149554	-0.7976736	0.03269652	0.17911298
LINC01184	240.921035	0.35769307	0.03272727	0.17920309
MAPK1	1929.93216	0.25506157	0.03273334	0.17920309
TOB1	2165.06113	-0.6034116	0.03274796	0.1792273
CTDSPL	809.024127	0.63562442	0.03279206	0.17941283
FAM228B	117.273444	0.55137253	0.03280394	0.17942202
HLA-DQA2	1.93300648	1.0196172	0.03283356	0.17952825
RNF187	1260.21689	-0.3202939	0.03285141	0.17957002
CCSER1	66.246113	-0.9081541	0.03287274	0.17963077
COMMD6	447.819947	0.41128095	0.03292146	0.17982287
NPW	46.2574119	-1.0619165	0.03292834	0.17982287
CCDC11	9.89179026	0.79446971	0.03294903	0.17988001
ABO	37.1507997	1.02831065	0.03299886	0.1799194
BAIAP2	447.725488	-0.617979	0.0330483	0.1799194
CCDC81	19.2079182	0.86590284	0.0330434	0.1799194
CDHR2	3.20363096	-0.9681638	0.03303407	0.1799194
CLDN10	1.40248455	-1.0721677	0.03304108	0.1799194
DOPEY1	1033.41719	0.5325941	0.03303341	0.1799194
LOC1027248	51.8760487	0.51298695	0.03299557	0.1799194
SNRPA1	166.501535	-0.496145	0.03302232	0.1799194
TEAD4	128.262172	-0.5721367	0.03301015	0.1799194
ABI1	698.71873	0.25639172	0.03307471	0.18000745
G3BP2	2209.21759	-0.3533426	0.03308693	0.18001828
C18orf25	558.110326	0.47547702	0.03314448	0.18026072
IFNLR1	85.3819315	0.77819537	0.03319298	0.18026072
KCNH8	2.04743478	-1.0932273	0.03318963	0.18026072
LOC1001293	415.367903	-0.4100526	0.03318293	0.18026072
PRDM11	487.865278	-0.5375927	0.03317228	0.18026072
YPEL3	427.022497	0.42326085	0.03316416	0.18026072
CSDC2	135.867506	-0.9461617	0.03322839	0.18036225
GOLGA8M	31.7201046	0.9422689	0.03323218	0.18036225
KNTC1	580.388023	-0.4726416	0.03327709	0.18055029
COL23A1	44.760332	1.07264056	0.03335938	0.18074813
NEO1	5202.04336	-0.5467622	0.03336493	0.18074813
TMEM151B	9.77858524	-0.9935044	0.03333651	0.18074813
XAB2	533.88947	0.31885456	0.03332679	0.18074813
ZMIZ1	3422.92943	-0.5567616	0.03336251	0.18074813

LOC1009964	10.7234824	0.95626017	0.03338039	0.18077622
ANKRD6	202.290736	0.65527321	0.03341383	0.18090159
TECR	954.703161	-0.5489734	0.03344337	0.18100583
ATG10	104.453903	0.47734184	0.03354416	0.1813325
LOC1019287	20.2783723	0.8804373	0.03354497	0.1813325
RABGAP1	1955.6251	-0.255677	0.03353026	0.1813325
SGMS1	741.496264	0.40037615	0.03353033	0.1813325
CAMSAP1	868.927633	-0.2932902	0.03362455	0.181353
CEP85L	421.316696	0.50329699	0.03357481	0.181353
HEATR2	281.816632	-0.3426524	0.03363124	0.181353
HIST1H2BI	126.67062	-0.6202905	0.03360918	0.181353
IL7R	48.2315128	0.84489683	0.03361239	0.181353
JMJD1C	3772.04454	0.39092644	0.03358362	0.181353
RPL5	4729.8575	0.41238728	0.03363116	0.181353
TGIF2	371.323904	-0.4883932	0.03358205	0.181353
ALDH3A1	4.54017626	-1.0376907	0.03364583	0.18137606
CDK10	325.990868	-0.3472637	0.03368981	0.1815575
PLEKHA1	1108.19914	0.52746141	0.03371106	0.18161637
EMBP1	13.8229289	0.77142541	0.03373858	0.1816534
SEC1P	3.8205024	0.98780588	0.03373639	0.1816534
PLXNB3	29.1759803	-0.8990754	0.03376365	0.18173274
KANK4	21.3621067	-1.0016096	0.03379338	0.18183713
HS6ST1	768.545759	-0.6083433	0.03380969	0.1818407
SMAGP	131.47637	-0.9389578	0.03381472	0.1818407
SRPRB	848.727959	-0.4258988	0.03383713	0.18190561
KRTCAP3	8.42610799	-0.8187264	0.03386578	0.18200401
FAM155B	12.7648467	-0.7950002	0.03405004	0.18293835
LRRC4B	129.584642	-1.0569176	0.03408689	0.18308042
VWDE	2.37069831	-1.0831157	0.03412615	0.18323534
MAGI2-AS3	1724.82006	0.37579095	0.03421856	0.18367543
LMCD1-AS1	13.0897049	0.98280066	0.03424492	0.18376085
HSPA7	340.107917	0.88503348	0.03433164	0.18382717
NPIPB5	76.8335512	-0.6000502	0.03434088	0.18382717
PCDHGA6	633.870053	-0.7647559	0.03429779	0.18382717
PDIA3	5616.31562	-0.360936	0.03432924	0.18382717
PPP1R16A	271.313049	-0.3974664	0.03430658	0.18382717
PSMB10	234.078427	0.43911056	0.03433302	0.18382717
SYK	593.574212	0.58962207	0.03430571	0.18382717
ZNF7	305.422935	-0.3026624	0.03432597	0.18382717
ALKBH6	63.0773505	-0.3576773	0.03437414	0.18394924
PATL2	9.53630374	0.82083102	0.03440746	0.18407154
LOC400927	12.2044679	0.60639757	0.03453293	0.18437055
NCKIPSD	573.664194	-0.4279261	0.03448509	0.18437055
NRBP1	1147.93452	-0.3571549	0.03453047	0.18437055
PIK3C2B	2567.56678	-0.5275716	0.03448167	0.18437055
PRKD1	96.6698443	0.85757647	0.03454318	0.18437055
RASSF2	5738.17722	0.80703378	0.03454118	0.18437055
TMOD2	854.467629	0.50133768	0.03451156	0.18437055
ZNF181	362.187515	0.28114218	0.0345472	0.18437055
LINC00884	2.61937694	0.97881289	0.03455814	0.18437296

PARP1	2115.88668	-0.3213802	0.03458727	0.18443928
TMEM186	88.5775628	-0.3714566	0.03459154	0.18443928
MOK	138.18863	0.63237057	0.03462027	0.18453651
FOXD3	8.80665725	-1.0088846	0.03464739	0.1846245
WNK2	226.685623	-1.0288439	0.03465777	0.1846245
CTLA4	4.90382073	1.04291001	0.03467598	0.18466561
SETD8	586.246464	-0.3872122	0.03471362	0.1848101
CHRD1	49.5530635	-0.9703618	0.03474019	0.18489561
CCDC89	35.7866377	-0.7258092	0.03480719	0.18511619
LSR	611.919003	-0.7084122	0.03481321	0.18511619
MAN1C1	2141.05434	0.62092849	0.03480688	0.18511619
LOC1019283	4.94811841	0.98582517	0.03485229	0.18526802
CENPT	472.353609	-0.2604288	0.0349085	0.18534275
FAM134C	1263.46729	0.29151826	0.03489426	0.18534275
SMG5	1447.87688	-0.2844759	0.03490681	0.18534275
VPS26B	1057.72619	-0.2320113	0.03488452	0.18534275
AKIP1	180.704204	0.38167609	0.03498198	0.18544966
BRWD1-IT2	17.733317	-0.6846713	0.03498219	0.18544966
GPA33	2.08475576	0.95116835	0.03500244	0.18544966
IGFL2	5.41940341	-1.0758932	0.0349762	0.18544966
SCNN1A	291.786032	-0.996062	0.03500034	0.18544966
SYNE3	144.437534	0.67822363	0.03498329	0.18544966
UNC5CL	18.185967	0.63772298	0.03498209	0.18544966
EIF4EBP1	158.941122	-0.5889765	0.03501802	0.18547636
ADM	467.234036	0.985295	0.03505145	0.18548587
CCR1	188.497248	0.75916809	0.03503652	0.18548587
MST1P2	23.991054	-0.87528	0.03504555	0.18548587
CLEC2D	328.666787	0.50246729	0.03508439	0.18559672
LOC1005070	18.096686	0.78275172	0.0350935	0.18559672
LOC1019272	1.44561409	1.03115828	0.03511501	0.18564827
ULK4P3	4.3400452	-1.0397339	0.035133	0.18564827
WDFY4	441.952034	0.65805359	0.03513491	0.18564827
LOC1001343	3.61084512	1.00439794	0.03515887	0.18571906
METTL20	58.985435	0.51185428	0.0352085	0.1859254
ADAR	5694.80417	-0.2339432	0.03531612	0.18604119
AGPAT3	1577.5178	-0.3754813	0.03541023	0.18604119
AHCYL2	6250.16472	0.59189845	0.03534661	0.18604119
FHOD1	603.5887	-0.58773	0.03526197	0.18604119
GFRA2	3.2630694	-0.9678218	0.03526784	0.18604119
KCNJ13	29.1411939	-1.0802917	0.03529835	0.18604119
LIPC	8.59055215	1.01880773	0.03540885	0.18604119
LRRRC37A4P	346.796044	-0.547402	0.03538962	0.18604119
OSGEP	224.700335	0.39677302	0.03536374	0.18604119
PAPSS1	959.74067	-0.4196963	0.03526764	0.18604119
PLEKHO1	354.145246	0.47580691	0.03538307	0.18604119
SLC26A11	304.971097	-0.3997851	0.03528016	0.18604119
SNORA18	21.3464624	-0.5773429	0.03537528	0.18604119
TBC1D2B	1682.05852	0.32960792	0.0353717	0.18604119
UBE3C	1589.09352	-0.2071443	0.03535104	0.18604119
VEGFC	20.2826916	0.94943455	0.03535129	0.18604119

WIPI1	1501.30983	-0.5031937	0.03530562	0.18604119
HTR2C	3.8762911	1.07390724	0.03543391	0.18611003
LOC1005061	20.5565693	-0.6485823	0.03545925	0.18618755
CD163L1	90.5191424	-0.873995	0.0355166	0.18637737
CDC42SE1	1209.99462	0.26529007	0.035512	0.18637737
PIEZO2	3223.89496	-0.9625185	0.0356561	0.18705364
ZC3H8	93.1745975	-0.3685947	0.03567549	0.18709956
SNX5	737.132049	0.37630545	0.03571727	0.18726284
CEP95	510.124907	-0.3600305	0.03576129	0.18728757
ETNK1	1516.12565	0.38752123	0.03576458	0.18728757
GPC5	15.340395	-1.0298745	0.03573994	0.18728757
PEX3	204.821614	0.40142228	0.03576096	0.18728757
ATP5G2	1498.02183	-0.3019617	0.03580742	0.18734461
BEND6	64.2795737	0.854102	0.03580346	0.18734461
TCTN3	796.761873	0.34393875	0.03579486	0.18734461
ZNF124	334.043142	0.52823232	0.03582109	0.18736038
CRIM1	5558.84356	0.59887114	0.03585256	0.18746923
LACE1	58.9520415	0.45626276	0.03590375	0.18760501
MRPS25	1069.80726	-0.4958018	0.03589287	0.18760501
SRPR	2238.34882	-0.2621241	0.03591052	0.18760501
PJA2	3938.55036	0.41515933	0.03592133	0.18760573
BEX1	40.8284228	-1.0253153	0.03594589	0.18767829
METRNL	924.340845	-0.6694701	0.03597199	0.18775886
SEL1L3	461.305493	-0.6703042	0.03606345	0.18818036
CDK19	442.211633	0.40365334	0.03619635	0.18865
DTX4	717.563842	-0.6960138	0.03617718	0.18865
FLVCR1	210.389679	-0.4289433	0.03617897	0.18865
SHPRH	954.639107	0.32429424	0.03618962	0.18865
TEX15	520.71065	-1.0289284	0.0362207	0.18872099
MRPL18	284.925036	0.3395863	0.03625829	0.18886094
TNFRSF14	292.678056	0.52811084	0.03628548	0.1889466
SLC2A14	11.9098947	-0.9004853	0.03634252	0.18918758
SPINK8	1.38016885	-1.0238467	0.03646055	0.1897459
PALD1	993.438053	0.61418123	0.03650101	0.18990026
CD40	97.9579427	0.85570972	0.03652691	0.18994578
ISLR2	26.1541354	-0.9309332	0.03653136	0.18994578
FMOD	4295.79147	0.46203758	0.03657498	0.1900041
ITGB1BP1	387.026199	-0.3695507	0.03655948	0.1900041
RPS9	3736.68306	0.34586845	0.03657089	0.1900041
CASP1	162.300759	0.44816274	0.0367028	0.19021871
FYB	547.539411	0.66881356	0.03663676	0.19021871
HAVCR2	342.653711	0.67575407	0.03668783	0.19021871
LINC00858	2.62201988	-0.9995042	0.03665299	0.19021871
LPHN1	1147.6857	-0.4912562	0.03670032	0.19021871
PRDM1	170.978757	0.63388555	0.03669893	0.19021871
SSBP2	934.240871	0.65419381	0.0366817	0.19021871
TP53I11	5662.95749	-0.8868852	0.0366775	0.19021871
KDM7A	518.572888	0.35628467	0.03674498	0.19029081
LOC1019291	3.57611737	-1.0309781	0.03672835	0.19029081
RPL36A	400.756731	0.42655701	0.03674917	0.19029081

TMEM181	714.491917	0.41252985	0.03680335	0.19051526
ROCK1	1861.64557	0.37234502	0.03682973	0.19059577
LINC01061	88.4439088	-0.594709	0.03686814	0.19068234
PAK6	61.2862124	-0.7173172	0.03686003	0.19068234
ERCC2	332.822459	-0.3924757	0.03689657	0.19071722
ZFP69	50.8172771	0.42558282	0.03689515	0.19071722
CLEC11A	185.206213	0.93737812	0.03691552	0.19075909
GMPS	809.526626	-0.3017212	0.03697839	0.19102786
PSMB1	846.625229	0.35208183	0.03701873	0.1911801
BTK	131.450085	0.71371677	0.037132	0.19123878
BTNL9	907.867462	-0.8134216	0.03713366	0.19123878
CXCR2P1	2.51818085	-1.0480211	0.03710621	0.19123878
HERC6	186.173094	0.53319163	0.03714968	0.19123878
KRCC1	321.932735	0.39121851	0.03707059	0.19123878
LINC01237	6.36216893	0.92653321	0.03714719	0.19123878
LOC339874	14.2684885	0.84332256	0.03710977	0.19123878
RNF212	43.306654	-1.0696572	0.03713409	0.19123878
SIVA1	209.895123	0.362111	0.03712267	0.19123878
SNX14	890.427165	0.40532332	0.03704379	0.19123878
ZNF22	243.491106	0.47514452	0.03713442	0.19123878
GFAP	596.65589	-1.0109724	0.03717437	0.19130989
C19orf57	13.9797064	-0.8037207	0.03720539	0.19141352
INPP5J	182.827158	-0.7480139	0.03724318	0.19155193
ZNF573	179.756017	0.38081161	0.03735213	0.1920561
HIST1H3F	110.239916	-0.8302768	0.03737853	0.19207954
SRM	497.103201	-0.4507003	0.03737114	0.19207954
PIK3R5	322.3986	0.71146085	0.0373921	0.19209319
ATG16L2	159.175521	0.54948493	0.03743812	0.19215082
IER5	376.722586	0.52953455	0.03743261	0.19215082
ITFG3	1106.0578	-0.3834216	0.03744702	0.19215082
SIRPG	3.80664972	1.04729959	0.03744177	0.19215082
PLA2G5	1.95817395	1.06880519	0.03746105	0.19216676
ACKR4	23.7134881	-0.9897853	0.03747901	0.19220286
C1QTNF7	30.349341	1.05469514	0.03751831	0.19234832
ANXA9	88.6771802	-0.7580708	0.0375694	0.19240781
ARHGEF15	51.9787338	0.76188331	0.03756091	0.19240781
FAM150B	6.08745422	-1.0467131	0.03757248	0.19240781
PTPRO	89.1636402	0.70936765	0.03757367	0.19240781
HCFC1R1	583.945741	-0.5355552	0.03759634	0.19246788
FEM1C	748.831244	0.42619522	0.03761736	0.19251943
CHRNE	18.3514471	0.90316351	0.03763541	0.19255579
ZNF846	410.953147	0.47334424	0.03769629	0.19281123
PLP2	621.771973	-0.582347	0.03773032	0.1928731
TMSB10	7790.92344	-0.3952657	0.03772693	0.1928731
AIM1L	2.02697742	-1.0600831	0.03778653	0.19310434
CLSTN3	729.185031	-0.4840554	0.03783897	0.19326
SERTAD2	355.601423	0.55142799	0.03783866	0.19326
SS18L2	50.9534287	0.39340747	0.03787512	0.19338849
PPP1R9B	1020.09716	-0.25523	0.03791877	0.19352499
YJEFN3	29.2529156	-0.7356673	0.03792386	0.19352499

TTC9C	204.818086	-0.2733101	0.03795935	0.19364993
FDFT1	803.864426	-0.4272115	0.03799103	0.19375535
NMUR1	4.93244048	0.94330295	0.03805226	0.1940114
RAD1	349.894418	0.30649101	0.03806939	0.19404249
ITPR2	3466.37347	0.5452155	0.03808153	0.1940481
TNK1	79.4288315	-0.6580009	0.03810819	0.19412771
LINC00599	1.55282855	-1.0577873	0.03814221	0.19416884
MRPS34	336.529499	-0.3992467	0.03816041	0.19416884
MSL2	874.089892	-0.2133978	0.03815718	0.19416884
RNF2	374.478447	-0.2774843	0.03813977	0.19416884
ARL14EP	290.188357	0.37644949	0.03821643	0.19439765
COPS4	423.786684	0.2706866	0.03824397	0.19448146
MIR612	2.45674369	-0.9080476	0.03827489	0.19452623
YBX3P1	5.35506924	-0.8142088	0.03826718	0.19452623
FBXO31	697.857603	-0.3360166	0.03830031	0.1945744
THOC1	320.554841	0.39239815	0.03830649	0.1945744
IMPACT	590.06858	0.49194096	0.03834241	0.19470061
SP140	28.8293111	0.70622314	0.03836329	0.19475043
DCUN1D3	298.803865	0.57278271	0.03839786	0.19475731
PIGW	132.346769	-0.5054355	0.03839381	0.19475731
TRAPPC2P1	49.5933534	0.44282468	0.0383965	0.19475731
RNF133	19.1947795	-0.8359396	0.03843268	0.19487774
IER3IP1	321.978911	0.43551356	0.03848658	0.19503861
SYNJ1	1035.02015	-0.4114843	0.03848358	0.19503861
CARNS1	13.8435122	-1.0035415	0.03852773	0.1951347
SPATS2	367.119111	-0.3832695	0.03851907	0.1951347
ANKRD32	221.90063	0.70377801	0.03855308	0.19515828
ARID3B	83.4701112	0.4956576	0.03855458	0.19515828
LBH	817.286238	0.67426455	0.0385707	0.19518374
IPO5P1	357.097072	0.48987869	0.03865176	0.19553766
MYH15	14.9963976	0.78931809	0.03866694	0.19555824
ESD	771.429757	0.27718481	0.03872909	0.19581625
FILIP1L	312.102809	0.69037911	0.03880387	0.19608159
WDR81	913.633928	0.44946622	0.0387938	0.19608159
ITPKC	464.644348	0.39796189	0.03886754	0.19634692
IKZF1	268.075962	0.68619227	0.03894701	0.19657901
PTOV1	1064.04471	-0.2548773	0.03894595	0.19657901
TPST1	194.569479	0.44862241	0.03894432	0.19657901
FSCN1	1450.77759	-0.3541503	0.03902696	0.19686958
KIAA1045	10.3077974	0.90566796	0.03901671	0.19686958
PLD4	180.17944	0.89529838	0.0391135	0.19724954
PRDM6	934.255136	0.70291276	0.03914116	0.19729782
ZNF75A	289.554624	-0.314458	0.0391455	0.19729782
HCK	241.198002	0.67995718	0.03917665	0.19734172
SECTM1	47.9671826	0.71605141	0.03917512	0.19734172
CENPI	40.7872867	-0.7448694	0.03925037	0.19754336
MAP7	163.304385	0.7283244	0.03924305	0.19754336
PDLIM2	424.878626	0.61133338	0.0392445	0.19754336
LOC1005071	13.0656524	0.82543001	0.03926428	0.19755684
NIPSNAP1	511.285001	-0.5467711	0.03929101	0.1976348

C16orf52	357.487707	0.28672478	0.0393548	0.19784251
ZNF582	58.3818456	0.50919731	0.03934481	0.19784251
B4GALNT1	50.5937149	-0.9139429	0.03939568	0.19793777
CPVL	356.54044	0.50924156	0.03943001	0.19793777
GUSBP3	29.9899236	0.61464598	0.03939732	0.19793777
PLAG1	37.2834674	0.82914771	0.03940803	0.19793777
SMIM2-AS1	4.72221536	0.81403739	0.039429	0.19793777
ENTPD1	788.365754	0.63712021	0.03949189	0.19819181
CHD7	859.377125	-0.5207748	0.03956934	0.19835415
LOC1019278	10.8324413	0.82280997	0.03955701	0.19835415
LRRC8E	62.9977379	-0.7297815	0.03954781	0.19835415
SUMF2	1021.69228	0.34354617	0.03955814	0.19835415
PGS1	477.707496	-0.3031228	0.03960566	0.19847966
ZNF33BP1	29.6457532	0.57112056	0.03962364	0.19851321
CTSV	141.051292	-1.0205301	0.03969436	0.19881087
MACROD2	174.46293	0.81374412	0.03973679	0.19896675
SLC7A9	4.340495	0.76699562	0.03976851	0.19906891
PCDHGB7	828.664311	-0.6677716	0.03978847	0.19911213
MAP2K5	331.813871	-0.3649646	0.03982417	0.19923411
CNGA1	3.59416362	1.04017236	0.0398564	0.199282
LRIG1	1098.66431	-0.5192601	0.03985531	0.199282
ZNF791	482.939797	0.35026138	0.03988667	0.1993767
NBEAL1	1290.33003	0.20768103	0.03994994	0.19963622
NTRK2	4854.92701	0.92153875	0.04002171	0.19993805
LRRC40	192.248117	0.36763715	0.04007432	0.20010685
VWA5B2	3.02787087	-1.0244629	0.04007825	0.20010685
SPATC1L	61.8216254	-0.9630099	0.0401054	0.20018558
GPATCH2L	1431.17892	0.32911161	0.04011779	0.20019061
CDC25C	10.7524333	-0.9018626	0.04013855	0.20023741
COL25A1	31.389379	0.86566817	0.04018926	0.20031852
GAS2L1	189.505871	-0.4316743	0.0401669	0.20031852
IGSF1	37.4910466	-1.0130506	0.04020036	0.20031852
MCTP2	203.838357	-0.8551086	0.04019408	0.20031852
TMEM80	164.370572	0.5301325	0.04022003	0.20035974
PHF1	43.7094103	0.45140741	0.04026673	0.20053559
ENOX2	141.870457	0.35848448	0.04029953	0.20058539
LINC00189	67.1711399	-0.8634809	0.04028992	0.20058539
HYOU1	2663.96954	-0.5076867	0.04036031	0.20077427
OSBPL7	294.598689	-0.3213228	0.0403545	0.20077427
CLGN	9.74773827	-0.97356	0.04043858	0.20110678
LINC01176	22.2705244	0.72249315	0.04047888	0.20121876
METTL15	238.558946	0.33192088	0.04049542	0.20121876
RIOK2	351.833665	0.33856949	0.04049067	0.20121876
ZDHHC16	337.858745	-0.3707761	0.04050701	0.20121952
MAFF	198.67175	0.94222981	0.04053002	0.20127696
STAG3L4	215.032187	-0.3435816	0.04054331	0.20128617
ST6GALNAC6	908.089249	0.41437248	0.04058517	0.20143713
YWHAG	2649.87682	-0.3276345	0.04063199	0.20161259
SCARF2	469.177505	-0.6313644	0.04068933	0.20184021
ATP1B2	213.686419	-0.7671026	0.04075684	0.20194727

C14orf39	66.2607985	0.92332212	0.04073672	0.20194727
UBE2M	568.692666	-0.4767132	0.04074742	0.20194727
VAC14	490.723425	-0.3166752	0.04074943	0.20194727
OLFML1	1548.569	0.72077527	0.04078123	0.20201121
RRP8	181.778485	0.30816205	0.04080935	0.20209361
ANXA2P2	84.9055383	-0.6285371	0.04090243	0.20210465
ARHGAP25	131.16387	0.62811384	0.0409035	0.20210465
GZMK	14.6854968	0.92189802	0.04085517	0.20210465
KCNIP2-AS1	1.34402505	1.01314214	0.04084699	0.20210465
MED30	84.2780918	0.46202261	0.04086984	0.20210465
MEPCE	719.146861	-0.3136554	0.04084888	0.20210465
NPIPA5	64.8092228	-0.6445554	0.04086586	0.20210465
SNHG1	384.596973	-0.4159636	0.04090291	0.20210465
CBX5	6673.13845	-0.2688486	0.04097912	0.20238334
CEP44	409.724237	0.311872	0.04102894	0.20238334
IGSF11	103.806915	-0.9194818	0.04102406	0.20238334
MCCC2	830.790789	-0.2670939	0.04101354	0.20238334
NFIB	2664.01937	-0.5463586	0.04099494	0.20238334
PGLS	419.364404	-0.2572831	0.04102049	0.20238334
GNB4	1340.92935	0.62480642	0.04104207	0.20239136
SHARPIN	445.56554	-0.3142374	0.04105789	0.20241262
DIXDC1	1849.4715	-0.5914427	0.04113976	0.20271727
SLC19A3	2.71893955	-1.0000729	0.04114273	0.20271727
C6orf147	13.8344512	-1.0039196	0.04118012	0.20283998
CPA2	1.76519866	-1.0415679	0.0411907	0.20283998
RRAGB	371.223174	0.22865023	0.04121968	0.20292589
SLC35D2	289.893847	0.26303198	0.04125626	0.20301517
TNFSF4	49.9102876	0.77561469	0.0412609	0.20301517
LOC1005055	66.3744876	0.58237889	0.04127977	0.2030512
C10orf128	27.1587372	0.69857167	0.04131336	0.20314094
IRAK1BP1	145.702279	0.65000922	0.04132111	0.20314094
SPIN1	2629.13408	-0.2163335	0.04133799	0.20316715
C2CD2L	286.882481	-0.3918371	0.04136041	0.20322056
ZDHHHC13	151.142284	-0.5124243	0.04138483	0.20328379
NEURL1	9.49779151	-0.884286	0.04142052	0.20329465
PIGM	311.679059	-0.3825376	0.04140083	0.20329465
RNU12	61.1105406	0.4717217	0.04142172	0.20329465
LOC1019295	3.43618835	0.94106362	0.04147629	0.20350571
GAP43	387.233541	-1.0023808	0.04154209	0.20373755
PCDHB17	42.7006587	-0.8695782	0.04154671	0.20373755
ENPP2	437.1916	0.80549955	0.04155954	0.20374367
SPAG9	6670.43394	0.32424099	0.04158114	0.20374593
TAS2R5	67.8346287	0.56184709	0.04158317	0.20374593
PXK	257.618784	0.47434785	0.04163931	0.20396419
HLA-DRB1	1622.18773	0.9562411	0.04165444	0.20398149
COQ10A	101.097408	-0.4877027	0.04172046	0.20419114
RPS8	6291.98911	0.43631857	0.04171402	0.20419114
SNIP1	217.509164	0.4650503	0.04178565	0.20445331
FAM58A	119.48502	-0.3122001	0.04189396	0.20492624
CAMKV	1.91865453	-1.0422069	0.04195192	0.2051445

CST6	1.56131206	1.04288881	0.04197018	0.2051445
RPL8	7907.55269	-0.4688765	0.04197357	0.2051445
FOXO3	2463.10359	0.65852541	0.04199737	0.20514681
SNHG3	244.410045	0.40709368	0.04199188	0.20514681
RHBDL1	23.4233454	-0.6518578	0.04202516	0.20516862
SS18L1	307.355	-0.4197417	0.04201959	0.20516862
C3orf70	237.197103	0.72376125	0.04207925	0.20531875
PDCD6IPP2	33.600459	0.86187816	0.04207802	0.20531875
LAIR1	544.05771	0.64573464	0.04210025	0.2053642
FAM214A	1044.65201	-0.2808872	0.04215568	0.20557758
WDR93	3.8038987	-0.9305324	0.04225398	0.20594278
ZNF8	343.191305	-0.2679799	0.04224626	0.20594278
DOK1	245.815661	0.41301397	0.04228109	0.20601782
KDM5A	2756.31688	0.36722296	0.04231398	0.206121
BCKDHA	432.187531	-0.3512416	0.04234712	0.20622533
ALK	7.84815225	-0.8491448	0.04237585	0.2063081
TTC29	14.2544956	-1.0429386	0.04239934	0.20632656
ZNF292	1858.71895	0.35315931	0.0424031	0.20632656
NAE1	460.049594	0.28573232	0.04244405	0.20641163
RPS6KA2	1447.6195	-0.664211	0.04243671	0.20641163
NME6	92.6751731	0.35708107	0.04246225	0.20644305
CRYGS	13.7783077	0.64810003	0.0424931	0.20647888
DNAJC27-AS	54.5688105	0.68770842	0.04248382	0.20647888
OLFM2	158.255725	0.82617685	0.04252311	0.20649918
RPL23AP82	48.6288699	0.64435581	0.04254423	0.20649918
ZNF414	94.8556422	-0.5248648	0.04254266	0.20649918
ZNF587B	470.60024	-0.3094507	0.04253275	0.20649918
IRF2BP1	320.537326	-0.2931055	0.04257198	0.20657685
C11orf68	379.283272	-0.2902473	0.04264097	0.20685459
PDGFB	324.25684	0.54894491	0.04272317	0.20719617
LINC00482	18.1721238	-0.967833	0.04274219	0.2072313
FBRS	618.303686	-0.2764516	0.04279126	0.207296
PELI2	134.152302	0.67930866	0.04279734	0.207296
RGPD4	19.0637381	0.62770938	0.04281526	0.207296
TM4SF1	693.847339	0.6757152	0.04281588	0.207296
TRDMT1	277.450399	0.4013929	0.04277946	0.207296
ZNF222	54.7680363	0.37285129	0.04282625	0.207296
VTI1A	537.307934	0.33909544	0.04283827	0.20729714
BCL10	191.515632	0.41580355	0.04291929	0.20761552
CYP2B7P	5.21775599	0.95281129	0.04295102	0.20761552
LOC1005061	1.77060596	-1.0319549	0.04295426	0.20761552
PCDH19	545.381495	-0.9712846	0.04293063	0.20761552
XRCC6	1794.1729	0.34222994	0.04296308	0.20761552
ANXA7	1215.37512	0.30667641	0.04301878	0.20781073
YRDC	67.4619215	0.46988362	0.0430271	0.20781073
POF1B	9.32205757	-1.0177637	0.04304566	0.20784329
COX6B1	1145.27526	-0.3692732	0.04307881	0.20794627
NCF4	121.669426	0.61670529	0.04309441	0.20796452
KLHDC2	618.646094	0.49046854	0.04315784	0.20821351
DDX28	103.015097	-0.3375738	0.04320852	0.20823971

MBD2	665.847739	0.51780114	0.04319661	0.20823971
PCIF1	621.498508	-0.3522432	0.04317835	0.20823971
RAVER1	563.945441	-0.3451771	0.04321063	0.20823971
MAP3K7	1012.58601	0.34235278	0.04325808	0.20829719
MATR3	5508.29544	0.2033866	0.04323612	0.20829719
VPS4B	769.83924	0.39569924	0.04325379	0.20829719
HLA-DOA	31.9452772	0.88927866	0.0432997	0.20844052
HSF1	617.51626	-0.3031775	0.04333377	0.20854747
ZNF205-AS1	5.39184198	0.7851226	0.0433661	0.20864598
C7orf55	47.0653205	0.4655182	0.04338434	0.20867668
HHATL	1.9639756	-0.9931431	0.04339839	0.20868717
LILRB5	50.2269842	-1.0183371	0.04341539	0.20871185
ZNF271	574.6136	0.34172032	0.04343396	0.2087441
MTHFD1	694.888271	-0.3621843	0.04349132	0.20879157
PRIMPOL	204.343615	0.32835354	0.04347132	0.20879157
PRRT2	180.069009	0.77517286	0.04347975	0.20879157
SON	12477.3485	-0.2604097	0.0434891	0.20879157
POLE	1266.15931	-0.4085184	0.04356689	0.20909729
RBM27	1025.68673	0.20854862	0.04359178	0.20915969
EXD2	398.594819	0.44345658	0.04363915	0.20921601
LIMCH1	1267.57674	0.59295778	0.0436392	0.20921601
MAP7D3	286.47035	0.74819064	0.04362398	0.20921601
CHMP4C	63.8139986	-1.0066276	0.04371303	0.20951288
ITGA1	2205.04749	0.64475276	0.04375743	0.20966851
ZSCAN26	300.803467	0.41084098	0.04381255	0.20987547
CLDN23	4.42171329	0.82323064	0.04393858	0.21042041
GDNF-AS1	1.40266401	1.01111075	0.04396118	0.21042041
ISOC2	519.119862	-0.3468724	0.04397416	0.21042041
ZNF622	292.616657	0.38128575	0.04397192	0.21042041
ADAMTSL3	5447.03969	0.78846594	0.04416914	0.21051511
C16orf80	215.212012	-0.3064481	0.04409171	0.21051511
CAPN11	6.64521919	0.8665089	0.04410608	0.21051511
EVPL	4.83653382	-0.9467417	0.04419402	0.21051511
GALK2	364.236227	0.25661731	0.04409841	0.21051511
GPR137	309.852347	-0.362165	0.04412314	0.21051511
HSBP1L1	93.5748549	-0.5426809	0.04413983	0.21051511
ISLR	11026.8832	-0.8432679	0.04410099	0.21051511
LINC01140	4.54774345	0.74996337	0.04410463	0.21051511
MMP28	191.346119	0.9214464	0.0441915	0.21051511
NECAP2	504.457123	0.35087401	0.04403756	0.21051511
NXN	726.420093	-0.6853449	0.04419857	0.21051511
SHB	702.610497	-0.5887186	0.04409909	0.21051511
SLC5A9	4.33198825	0.89745897	0.0441774	0.21051511
SLC8A3	8.46459038	0.95549211	0.04420937	0.21051511
UCKL1	398.43627	-0.4079554	0.04414745	0.21051511
ZCCHC4	140.785402	0.34790691	0.04409777	0.21051511
ZFP36L2	3511.65583	-0.4263456	0.04406199	0.21051511
LACTB	235.425954	0.45801418	0.04425843	0.21063469
PCGF6	92.7532585	0.40135475	0.04425564	0.21063469
GMPPA	269.818778	-0.3619197	0.04427888	0.21067502

DDX3X	5586.63776	0.27846904	0.0443307	0.21080751
LOC1022884	28.0537633	-0.4464259	0.04431982	0.21080751
MAPKAPK5-A	139.468152	0.29306992	0.04440658	0.21111129
SCRN3	402.651671	-0.2367615	0.04448727	0.21143775
ZNF878	3.80421563	-0.8641188	0.04452292	0.21155004
BCS1L	229.18372	-0.3163686	0.04460536	0.21159878
DMC1	7.81423093	0.82957003	0.04457524	0.21159878
KLK11	3.4260298	-0.9420673	0.04459718	0.21159878
LHX2	2.95436843	-1.0326227	0.04454612	0.21159878
MORC4	463.900728	0.43857299	0.04459525	0.21159878
RBMS3	777.861994	0.87146955	0.04457922	0.21159878
RFX1	203.999605	-0.3420383	0.0448212	0.21256536
VPS37B	307.46994	-0.243501	0.04489548	0.21286022
DFNB31	178.989428	-0.6071747	0.04495322	0.21295446
MS4A6A	797.819861	0.59865427	0.04495658	0.21295446
PIGF	153.03589	0.39190408	0.04496228	0.21295446
RAB6A	2210.79411	-0.2169076	0.04496378	0.21295446
NEK1	661.113544	0.31541937	0.0450349	0.21317648
STXBP5-AS1	8.59625568	0.82712789	0.04503149	0.21317648
UBE2O	733.135037	-0.2750967	0.04505869	0.21323171
EMILIN1	932.739322	0.74700912	0.04519789	0.2134823
KPNB1	3605.04605	-0.2419704	0.0451669	0.2134823
LINC00941	4.60473977	-1.0052366	0.04519428	0.2134823
LINC01279	393.612357	0.76172199	0.04514068	0.2134823
PDHX	610.689454	-0.2862234	0.04517285	0.2134823
PML	1018.16551	-0.3380339	0.04520873	0.2134823
TRPM6	15.439791	-0.95054	0.04512499	0.2134823
ZNRF2P1	36.1002016	-0.6011609	0.04515547	0.2134823
DPY19L2P3	5.23384281	0.73528092	0.04523875	0.2135667
IFT88	280.896526	0.44174581	0.04528123	0.2136576
PRLR	44.8075172	0.81384962	0.0452881	0.2136576
TUBB3	125.840134	-0.9400211	0.04529444	0.2136576
ATP6AP1	1700.68728	-0.2621404	0.04535325	0.21370579
GOLGA6L9	18.8393414	-0.707982	0.04532069	0.21370579
PYGL	691.800866	0.4745546	0.04534195	0.21370579
ZNF784	70.7511118	-0.5350495	0.04535229	0.21370579
FSCN2	26.111017	-0.7951798	0.04537721	0.21376144
ARNT2	6606.36038	-0.6353784	0.0454451	0.21399453
PER3	1039.8286	0.56876497	0.04546319	0.21399453
SNTG1	3.40655971	-1.0257086	0.0454526	0.21399453
HLTF	1444.1811	-0.318955	0.04549794	0.21402003
ITGA3	754.942283	-0.6784944	0.04550181	0.21402003
OSGIN1	21.2311302	0.83587263	0.04551728	0.21402003
PRKCE	535.322573	-0.4105464	0.04550639	0.21402003
LOC1005075	5.57855028	0.73475395	0.04554435	0.21403289
SNORA55	1.80055144	0.92080974	0.0455373	0.21403289
DLG1	1418.6169	-0.2107388	0.04557869	0.2140799
LUZP2	31.5954281	1.02778328	0.0455685	0.2140799
PRKD2	501.085234	-0.3608381	0.04566177	0.21439387
TRIP4	285.541522	-0.2947488	0.04566992	0.21439387

KCTD20	1626.78781	0.34176898	0.04570901	0.21452015
FAF1	545.827185	0.25128399	0.04573233	0.21457224
SPNS1	372.204708	-0.321728	0.04574451	0.21457224
ARFGAP2	870.988287	0.28147645	0.04579295	0.21469311
GPR183	158.068776	0.78908363	0.04579469	0.21469311
HELLS	200.736013	-0.6255577	0.04585236	0.21490623
DDX5	9955.5466	-0.2852117	0.04587844	0.21491392
ZNF397	366.826978	0.36977787	0.04587321	0.21491392
LINC00173	31.9871132	-0.857067	0.04595208	0.2151443
RPL28	4346.07911	-0.4790981	0.04594424	0.2151443
CENPW	25.0119182	0.71874682	0.04597999	0.21521767
EXOSC4	113.878132	-0.3717818	0.04600839	0.21523605
LOC1019269	2.94679815	0.89971608	0.04599634	0.21523605
BRSK1	165.144273	-0.8074301	0.04603028	0.21528123
MEA1	358.406587	-0.3472748	0.04607662	0.21544065
TNFRSF4	6.2607815	0.85181293	0.046102	0.21550202
IGBP1	583.714652	0.32788079	0.04613159	0.21558305
GOLGA1	591.458322	-0.2394096	0.04617456	0.21566929
TTC23L	8.23212658	0.74729652	0.04616613	0.21566929
ADNP	2921.36577	-0.3167354	0.04619332	0.21567211
ASCC3	1697.04326	0.38938361	0.04623139	0.21567211
FUCA1	425.359176	0.45605254	0.04622268	0.21567211
GRIN2C	8.19786901	-0.7793268	0.04623585	0.21567211
NPAT	739.568078	-0.1844768	0.04623647	0.21567211
IP6K3	15.8518673	-1.0217187	0.04626553	0.21571445
LOC1019290	1.90028426	-0.9928936	0.04627007	0.21571445
FTO-IT1	30.5931919	0.59775614	0.04631816	0.21583341
GPR37	12.638798	-1.0219202	0.04632013	0.21583341
NCR3LG1	845.481615	-0.7935202	0.04633975	0.21586763
CSF3R	328.933752	0.71072675	0.04639227	0.21590422
IKZF2	483.87179	0.43058946	0.04638909	0.21590422
SELL	68.0373487	0.66555565	0.04638915	0.21590422
TMBIM4	906.587839	0.26490852	0.0463967	0.21590422
PDSS2	272.022296	0.41004434	0.04641555	0.21593483
HDAC1	425.837296	0.43461069	0.04649275	0.21617942
LOC145783	141.879239	-0.3930438	0.04652958	0.21617942
LOC150776	417.295308	-0.4847739	0.04651262	0.21617942
NDUFS4	432.393813	0.327406	0.04651892	0.21617942
SLC6A8	886.459679	0.608376	0.04650606	0.21617942
ARHGAP5-AS	31.7635397	-0.6668815	0.04657828	0.21629145
JUN	3377.2183	0.57397501	0.04657491	0.21629145
EIF3I	864.261886	0.34717708	0.04661809	0.21639476
FGD5P1	51.2515192	-0.9000457	0.04662514	0.21639476
LOC613037	27.6474392	0.63144798	0.04664044	0.21640871
ATXN7L2	63.0591328	0.49419028	0.04671011	0.2166748
C7orf63	69.4042251	0.49853293	0.04677224	0.21667712
CIRBP-AS1	3.24086463	-0.9963427	0.04678452	0.21667712
ITGB2-AS1	55.447562	0.88170657	0.04676783	0.21667712
SMYD3	103.401361	-0.325786	0.04676453	0.21667712
WDR4	192.995292	-0.4179098	0.04678109	0.21667712

ZNF536	277.223014	-0.7974539	0.04677311	0.21667712
ASAP3	997.592836	0.54079254	0.04684256	0.21682189
GPSM3	3.14511034	-0.9617427	0.04684403	0.21682189
PRDM8	7.12214672	-0.9286355	0.04685276	0.21682189
NFE2L3	73.1762727	0.69361853	0.04689738	0.21697129
MTM1	229.697679	0.3481853	0.04697681	0.21728163
SEPT7	2805.7521	0.3600778	0.04701283	0.21739106
HHIPL2	5.97905307	-0.959706	0.04706797	0.21758886
ATL1	414.577594	0.6002632	0.04709602	0.21766134
FRMD6-AS1	15.2515923	0.67525628	0.04713544	0.2177863
GPRC5A	331.170851	-0.93567	0.04722019	0.21806361
RAB11FIP1	1417.41966	-0.565045	0.04722026	0.21806361
NME1	298.069925	-0.451558	0.04724767	0.21813292
NBAS	1796.7949	0.21042788	0.04733221	0.21844522
ZSCAN12	373.206612	-0.3373372	0.04734015	0.21844522
LOC283440	2.00503247	0.98494154	0.04735591	0.21846065
CXorf21	35.8754237	0.83243777	0.04739015	0.218504
MBD1	743.948741	0.33000856	0.0473789	0.218504
CHTF18	166.409093	-0.4504592	0.04743414	0.21853497
CNBP	3084.20191	0.16511098	0.04741414	0.21853497
GRM5	1.73741911	-1.0124736	0.04742654	0.21853497
CIR1	422.491165	-0.1610436	0.04746232	0.21860753
GALK1	149.7359	-0.472466	0.0475043	0.21874364
LYSMD3	538.825892	0.32809521	0.04752637	0.21878797
LOC1005062	3.95578964	0.82833583	0.04755198	0.2188486
CPD	5665.75007	-0.4528361	0.04764911	0.21891593
JMJD1C-AS1	4.31097766	-0.9458422	0.04761461	0.21891593
MRPS28	125.348704	0.40325053	0.04764471	0.21891593
PCBP2	6036.42724	-0.4458549	0.04765373	0.21891593
RAB40A	7.71247537	0.69074169	0.04759325	0.21891593
SH2D1A	6.94914472	0.95079718	0.04761893	0.21891593
TMEM17	39.9272047	0.47607458	0.04758095	0.21891593
ALDH1L1-AS1	1.83065457	0.99731283	0.04767256	0.21894524
UFL1	917.56176	0.38274036	0.04773609	0.21917978
LIPA	1201.48735	0.41393458	0.04777788	0.21931444
ZNF490	428.69535	0.37253456	0.04781191	0.2194134
SETBP1	3703.37648	0.51479741	0.04784088	0.21948905
FOS	5726.33899	0.77888962	0.04786561	0.21953335
MAPKAP1	1082.90253	-0.1836547	0.04787549	0.21953335
RAD18	284.097956	-0.3730212	0.04789004	0.21954282
ARF1	4190.72588	-0.2910688	0.04798816	0.2197895
GPSM2	168.259662	-0.7626666	0.04800633	0.2197895
KLF7	1096.84387	0.36031196	0.04797823	0.2197895
LOC729080	1.72827439	-0.9592287	0.04799568	0.2197895
SUN2	1007.96732	0.32687062	0.04797659	0.2197895
CCKBR	9.67967203	-0.9182671	0.04802678	0.21980849
IFNGR2	762.589131	0.30455368	0.0480588	0.21980849
LY86	94.289478	0.704098	0.04805307	0.21980849
RAB3IL1	1735.79462	-0.3911935	0.04806046	0.21980849
EPHA6	6.73039943	-0.9937098	0.04809386	0.2199041

CCDC102B	83.9158255	0.51025947	0.0481114	0.21992709
EPCAM	3.33462608	-0.9643816	0.04813969	0.21994211
STX7	1748.95473	0.35569387	0.04813612	0.21994211
NCF2	270.283234	0.64128756	0.04815735	0.21996565
MIR143HG	36.2687276	0.83335697	0.04817615	0.21999442
IFNAR2	395.422094	-0.4324244	0.04825293	0.22028783
TMEM240	12.1843445	0.73494358	0.04827766	0.22034356
ULBP1	3.99654147	0.98987992	0.04831527	0.22045802
BHMT2	518.324573	0.88581764	0.04840261	0.22063545
CD37	128.021885	0.68381859	0.04839246	0.22063545
DCX	11.6763571	-0.9408048	0.04840433	0.22063545
GTF3C3	571.329414	-0.2155252	0.04838523	0.22063545
PEX6	379.816227	0.48720553	0.04845375	0.2207463
TMEM214	1005.40394	-0.3532856	0.04845132	0.2207463
GOLGA2	1478.14733	-0.2128786	0.04866241	0.2216395
NDUFB3	343.656523	-0.3216803	0.04870149	0.22176011
C1orf95	12.6619062	0.77157532	0.04872637	0.22181597
ACTR3C	24.317666	-0.5574402	0.04879771	0.22196837
DOK5	144.191196	0.92467302	0.04879734	0.22196837
PPP1R15A	948.27234	0.59429631	0.0487896	0.22196837
NOC3L	399.707372	0.36904138	0.04883893	0.22209843
DCDC5	16.1480911	-0.90228	0.0488961	0.22223846
FOXP3	3.15058091	-0.9182525	0.04892205	0.22223846
PKP2	3114.22944	0.75176682	0.04891793	0.22223846
PTPN9	1207.77378	-0.429032	0.04893289	0.22223846
SNTB1	113.104982	0.71476926	0.04893276	0.22223846
ABI3BP	3918.98917	0.86310392	0.04900288	0.22246234
CABIN1	1050.49439	0.27577317	0.04900748	0.22246234
PABPC1L	293.960745	-0.613497	0.04903231	0.22251761
RARS2	424.984279	0.34767012	0.04910318	0.22266744
STT3A	2062.76328	-0.258614	0.04910012	0.22266744
VAX2	11.1148561	-1.002219	0.0491033	0.22266744
IGDCC4	183.363909	-0.8332516	0.04916216	0.22281949
PIP5KL1	8.41753081	-0.8147513	0.04915439	0.22281949
MYO19	575.665715	-0.46368	0.04921588	0.22300551
SLC22A3	799.255822	-0.7480609	0.04928026	0.2232397
INTS4	356.797903	-0.26577	0.04930172	0.22327939
CBX7	410.597246	0.45014873	0.04937666	0.22348935
LOC1001290	1335.36594	-0.439945	0.0494224	0.22348935
PRRC2B	6647.81993	-0.2518607	0.04937239	0.22348935
PWWP2A	469.696296	0.33478518	0.049423	0.22348935
RDH16	3.79180445	0.88665047	0.04943701	0.22348935
RFX2	153.027609	0.78879003	0.04943309	0.22348935
SURF1	298.154738	-0.2599644	0.04942142	0.22348935
ARHGAP30	355.532427	0.62526562	0.04951148	0.22376846
HRASLS5	42.8539959	1.00834537	0.04953818	0.22380008
MIAT	617.528335	-0.7840879	0.04954392	0.22380008
TIMM8B	294.136273	-0.3806866	0.04962156	0.22409327
DHX58	246.870147	0.39770879	0.04967382	0.22427167
DTYMK	121.657804	-0.4389273	0.04970322	0.22434685

ASF1A	259.011308	0.41992363	0.04974818	0.22437706
LBX1	1.59052284	-0.9154071	0.04972273	0.22437706
TNFRSF8	6.04640602	0.83516951	0.04974449	0.22437706
RNPEPL1	537.124924	-0.3615973	0.04976736	0.22440602
ATP6V1B1	16.2489035	-0.971931	0.04980181	0.22442742
FLII	2123.67544	-0.2826066	0.0497983	0.22442742
KCNMB3	137.737048	-0.5266599	0.04982314	0.22442742
MOB3A	486.099836	0.2729282	0.0498131	0.22442742
CLDN11	5740.14042	-0.9116287	0.04986335	0.22455102
KCNK10	15.9116983	0.98701631	0.04995534	0.22490773