

The 1353 DEGs between HCC tissues and adjacent normal tissues

SYMBOL	logFC	AveExpr	t	P.Value	adj.P.Val	B
SPINK1	8.991923326	4.30181284	9.192984753	7.68E-06	0.001275745	4.296621464
AKR1B10	8.947228933	6.4588864	8.570955993	1.35E-05	0.001671021	3.728398901
TGM3	8.404663672	0.623586104	14.64749344	1.54E-07	0.000200327	8.007369239
PEBP4	8.261030993	0.467363568	7.022782748	0.000219977	0.00657109	1.192161444
SFN	8.070408589	0.875801943	11.8780325	9.17E-07	0.00037675	6.367926073
FER1L6	7.662070883	0.613699202	11.91859596	2.48E-06	0.000693129	5.445606521
MUC13	7.183578886	2.079460774	7.864430577	2.69E-05	0.00237146	3.034474251
PRAMEF10	7.150161152	1.593151	10.2695451	3.09E-06	0.000779115	5.195698553
S100P	7.019342706	2.788227217	9.959239941	3.99E-06	0.000915309	4.946816987
RAB3B	6.678421009	2.937705114	9.825847149	4.46E-06	0.00093987	4.837349005
MDK	6.152184355	1.284642392	11.04043769	1.69E-06	0.000575032	5.780968989
FGF21	6.143103195	3.686806803	7.779182172	2.93E-05	0.002456192	2.947017764
NBPF22P	6.121379138	0.556970635	17.98102309	4.65E-07	0.000279088	6.521380147
CYP17A1	6.006661012	4.197117497	6.689166406	9.39E-05	0.004547534	1.751574371
CRP	5.938763511	8.308296272	10.49803699	2.58E-06	0.000693932	5.373961792
PTH2R	5.819023209	0.954752741	3.671784283	0.005228371	0.032954165	-2.413154589
TUBB4A	5.789764391	1.566361879	3.552155772	0.006293719	0.036248104	-2.603527544
NQO1	5.72529253	0.257027763	3.65474091	0.005367766	0.033431802	-2.440192287
STC2	5.694295881	2.193062697	5.145402115	0.0009106	0.013089296	-0.450670095
UGT2B11	5.61507857	3.46544556	7.840184531	2.75E-05	0.00237146	3.009684716
GNAZ	5.603543711	3.079998203	7.930364882	2.51E-05	0.00237146	3.101549097
LCN2	5.548533897	2.381891339	5.406800484	0.000444043	0.009169547	0.142177619
SLC7A11	5.358978456	2.578808871	6.355254439	0.000137906	0.005408123	1.354770237
DUSP9	4.858734286	0.828857307	4.024945398	0.00305713	0.024520679	-1.86004841
GPR158	4.794732643	1.594432607	6.387503724	0.000132802	0.005287707	1.393755635
XK	4.676738562	2.247895985	6.546866603	0.000110433	0.004814634	1.584316736
C12orf75	4.644841587	3.555633708	7.731708678	3.07E-05	0.002506852	2.897952726
BUB1B	4.621033442	1.872965734	4.728595797	0.001105767	0.014454611	-0.80595383
CDC20	4.614133843	1.630220112	5.558744666	0.000365205	0.008514873	0.34522365
SPP1	4.56420959	2.783552282	7.580253534	3.59E-05	0.002747553	2.739666633
MIR4435-1HG	4.534413434	0.096264768	9.03512631	8.84E-06	0.001399163	4.155998022
CDC6	4.518321354	2.202515696	4.729422858	0.001104492	0.014454611	-0.804756097
E2F1	4.498802016	2.561677408	5.785913428	0.000274278	0.007380909	0.642457698
KIF4A	4.426206724	2.348498514	7.579069407	3.59E-05	0.002747553	2.738418484
MYBL2	4.420474389	2.118434594	5.386628687	0.000455827	0.009229734	0.114964547
CKAP2L	4.415391132	1.713176589	5.881527157	0.000243646	0.006964874	0.765312697
ANLN	4.403193632	3.075999317	7.601296233	3.51E-05	0.002747553	2.761819426
HKDC1	4.398668435	4.687311935	4.899063532	0.0008737	0.012888367	-0.561213437
EGFEM1P	4.286980924	-0.871495013	3.76991935	0.005579021	0.03394534	-2.338829598
SNAP25-AS1	4.274496839	-0.52268209	9.269240292	3.81E-05	0.002800581	2.915623251
CRNDE	4.254460928	0.55449901	11.74717298	2.55E-05	0.00237146	3.027198451
LOC344887	4.14220964	-0.030009615	3.549299389	0.009552281	0.04670802	-2.705654437
KIFC1	4.125184998	2.047890456	6.193579157	0.00016693	0.005858088	1.157152677
COL15A1	4.073659667	2.668558659	8.408873492	1.58E-05	0.001857945	3.573938623

TOP2A	4.026998678	5.113129632	5.192018118	0.000588596	0.010415877	-0.150685283
IQGAP3	4.020394194	2.413736747	7.892250486	2.61E-05	0.00237146	3.062835417
EGLN3	3.98991842	3.063732741	3.821543384	0.004155812	0.029191677	-2.176880077
LRRC37A6P	3.929132729	0.174065335	3.723602875	0.004827497	0.031872918	-2.331130884
CCNB1	3.922137446	3.016019459	8.196839237	1.93E-05	0.00215699	3.367689463
TEX41	3.918621943	-1.026587997	3.335709508	0.00884118	0.044171941	-2.951107606
CENPF	3.886598294	4.536487329	6.743855084	8.83E-05	0.004360963	1.815137043
ILDR2	3.884537688	2.943325884	4.754260577	0.00106695	0.014189257	-0.768833374
SUSD4	3.869424739	1.929272442	4.630501762	0.001268716	0.015446268	-0.948719867
CDC45	3.787615424	2.084974847	5.753079932	0.000285743	0.007508197	0.599963706
LOXL4	3.764997542	4.139533553	6.528562561	0.00011278	0.004878151	1.562604836
LOC254896	3.753780363	-1.150696615	4.999982599	0.000761485	0.011993741	-0.418349988
BUB1	3.734771729	2.343961275	5.555776186	0.000366591	0.008514873	0.34128948
TRIM16L	3.653140879	2.642205902	7.339869746	4.61E-05	0.0030491	2.482847491
CELSR3	3.618982451	2.393486662	7.437194815	4.16E-05	0.002852665	2.587664754
TRIM16	3.607036601	2.707278405	7.389307218	4.38E-05	0.002944112	2.536234429
TOB2P1	3.547217665	0.720762713	7.065747798	6.19E-05	0.003800869	2.181352309
LOC100499489	3.534793074	0.483655844	4.276129633	0.002109128	0.020600296	-1.475949249
NDUFA4L2	3.530515925	2.76853881	4.823795499	0.00096896	0.013431203	-0.668747392
LINC00189	3.473535032	0.016149239	4.302309916	0.002030136	0.020189834	-1.436398299
DTL	3.467177048	2.679048886	4.640375048	0.001251203	0.015328711	-0.934286893
GINS1	3.440633483	2.44145071	5.655671957	0.00032293	0.007902615	0.472970513
COL5A3	3.439255585	4.911492326	3.70317964	0.004981482	0.03214434	-2.363425781
COLEC12	3.41007399	2.174317536	3.772860882	0.004476405	0.030430197	-2.253421733
SLC22A15	3.373643977	2.574488195	6.452977832	0.000123064	0.005082649	1.472466521
CAP2	3.324408426	4.834915726	10.61868325	2.35E-06	0.000693129	5.466427527
STC1	3.304764684	3.643021714	5.193608776	0.000587355	0.010415877	-0.148491125
GPX2	3.302255336	4.29605703	5.018510864	0.000742626	0.011949383	-0.39228537
NAPA	3.290503556	-0.500847007	7.836458054	2.76E-05	0.00237146	3.005868766
GLDN	3.271486634	1.383738142	3.472193321	0.007131227	0.038853844	-2.73150302
ARHGAP11A	3.262179579	2.707762566	6.279845	0.000150694	0.005646635	1.263048792
PLVAP	3.259681871	4.698982116	9.030974638	8.88E-06	0.001399163	4.152267482
FAM83D	3.250695926	3.330049269	7.094629858	5.99E-05	0.003712777	2.213561336
BCYRN1	3.250219057	-0.974690886	3.618288017	0.005679208	0.034277293	-2.49811764
EIF5A2	3.237811072	3.719343693	4.698336108	0.001153493	0.01469425	-0.849844075
HIST1H2AH	3.23399862	2.651596406	4.406355757	0.001746086	0.018608752	-1.280147159
CSTA	3.225501446	3.565840676	7.480894236	3.98E-05	0.002852665	2.634355645
CCNA2	3.215819197	2.5955233	6.252254964	0.000155691	0.005646635	1.229293466
MOGAT3	3.178152082	3.319456297	4.350049747	0.001894112	0.019500862	-1.364518821
SQLE	3.174856825	6.113187195	4.666711256	0.001205747	0.015152409	-0.895857333
ENAH	3.166278909	2.633190141	9.849595163	4.37E-06	0.00093987	4.856948912
FGL1	3.159637859	2.292744513	4.029619122	0.003035841	0.024515097	-1.85282724
SLC3A2	3.154846147	-0.353096141	6.553281637	0.000186884	0.006076833	1.191871987
TTC9	3.140839968	3.494694724	8.768019015	1.13E-05	0.001536955	3.912559767
CD24	3.135786584	6.247934364	8.002221035	2.34E-05	0.002313079	3.174090609
SERPINA1	3.081318841	2.328163164	6.978051373	6.81E-05	0.003856614	2.082904673

MMP9	3.075199037	3.144698679	3.220522447	0.010616123	0.049818534	-3.137401342
EPPK1	3.04954248	3.762239433	3.870768791	0.00385622	0.028283689	-2.099755821
FUT1	3.048407057	2.421582234	5.283953894	0.000521293	0.009826499	-0.024487489
ASPM	3.028148826	4.069705439	4.691784779	0.001164114	0.014737987	-0.85936409
GOLGA2P10	3.025401244	0.650402443	5.962486941	0.000220608	0.00657109	0.868307319
MSL3P1	3.021227587	2.042880851	6.551539165	0.000109843	0.004814634	1.589851987
POLQ	3.020111256	2.434606093	4.509189345	0.00150674	0.017115863	-1.12720515
HIST1H3B	3.019046691	4.640994771	3.302187196	0.009323364	0.045818344	-3.005243432
CCDC64	3.015470648	3.244499337	6.590182137	0.000105089	0.004740554	1.63551675
SCD	3.005848616	11.78881443	5.149649638	0.000622724	0.010751641	-0.209267295
HIST1H1B	3.005528321	4.585495183	3.467438901	0.007184567	0.038990516	-2.739129139
FBXO27	2.994680949	3.973150122	4.882008805	0.000894365	0.012973276	-0.585505755
TPX2	2.980165572	4.037446578	5.807279053	0.000267086	0.007287909	0.67002551
OLFM2	2.960302935	5.634251702	5.345967447	0.000480622	0.009400439	0.059926228
LINC00152	2.930834148	0.684725878	5.405584426	0.000444744	0.009169547	0.140538788
HYOU1	2.928534261	2.545390485	6.158628165	0.000174043	0.005879781	1.1139518
ZNF724P	2.926074866	-0.591008659	4.278624283	0.002762799	0.023245579	-1.608077797
HIST1H2AB	2.907075554	2.376078552	4.487230863	0.001554728	0.017431065	-1.15973776
TUBB2A	2.906357939	5.048253689	8.077578393	2.17E-05	0.002292122	3.24954815
HIST1H2AI	2.880118393	2.598997572	3.650049105	0.005406823	0.033441984	-2.447640474
KIF14	2.869003315	2.792821105	6.26368227	0.0001536	0.005646635	1.243287185
GOLGA2P7	2.868661251	0.835243012	4.735353775	0.001095401	0.014415692	-0.796170008
FOXO2-AS1	2.843982207	1.276212605	6.820283237	8.11E-05	0.004169117	1.903306282
FADS1	2.84271567	7.083860785	4.313492239	0.001997365	0.020009542	-1.419533537
PRKAA2	2.838126188	5.650375336	4.57434421	0.001373461	0.016144568	-1.031080456
ZSCAN12P1	2.822544316	1.773647674	12.57865445	5.65E-07	0.000293954	6.823549537
HIST1H2BO	2.816446702	2.53411448	4.882085111	0.000894271	0.012973276	-0.58539697
B3GNT5	2.787835778	4.020233731	3.481914536	0.007023452	0.038545022	-2.715915868
PPFIA3	2.780905082	2.589263186	5.309613719	0.00050403	0.009740807	0.010510409
FN1	2.7428829	5.48222328	5.755293639	0.000284953	0.007508197	0.602833678
FAM222A	2.731494189	3.520021066	6.953932001	6.99E-05	0.003856614	2.055656043
UBE2S	2.719340837	4.305599739	7.558827773	3.67E-05	0.00277145	2.717056756
HIST1H1A	2.7143457	2.743218294	5.855067205	0.000251732	0.007066612	0.731446442
KPNA2	2.703591943	5.548189211	9.481139873	5.97E-06	0.001138133	4.547302704
HIST1H4A	2.696195536	2.732312228	4.98341349	0.000778788	0.012131063	-0.441701814
C5orf30	2.691185644	2.46948625	4.882809665	0.000893383	0.012973276	-0.584364066
ME1	2.686934085	6.15702975	5.273190496	0.000528724	0.009894872	-0.039197058
TMEM45B	2.683555402	4.981334883	3.848510762	0.003988752	0.028716068	-2.134594468
INHBE	2.670911107	6.567132496	4.429645689	0.00168852	0.018227568	-1.245377869
SLC25A39	2.670799505	3.167170223	8.063874425	2.20E-05	0.002292122	3.23587278
FLVCR1-AS1	2.654643652	-0.628009136	4.202583174	0.002349105	0.021416374	-1.587553286
HIST1H3C	2.645576726	3.867196736	3.408811517	0.007877723	0.041122243	-2.833314404
DBF4B	2.643989856	0.776677253	9.303014065	6.97E-06	0.001209365	4.393247083
CPLX1	2.61021421	2.802846099	3.38340289	0.008199527	0.042153562	-2.87421412
KCTD17	2.588315282	2.91842304	5.380106222	0.000459709	0.009229734	0.106152392
TK1	2.576740811	3.164272223	5.07309538	0.000689936	0.011383207	-0.315795654

SLC50A1	2.55483064	2.586646735	4.683064656	0.001178415	0.014856791	-0.872045393
SLC1A4	2.553515202	3.366217566	5.56546101	0.00036209	0.008511297	0.354120127
HIST1H2AL	2.551892498	2.841634202	3.844730189	0.004011737	0.028775365	-2.140517532
LAPTM4B	2.54103827	6.67826607	3.568707434	0.006133637	0.035641774	-2.577107493
LINC00888	2.539744806	0.149338354	4.614924535	0.001296883	0.015597514	-0.971519716
SOX4	2.528989419	4.892259473	5.152566295	0.000620308	0.010733663	-0.205225919
THTPA	2.525781635	-0.326711488	3.249487615	0.010137498	0.048386241	-3.090485288
NOTCH3	2.507780345	5.107231957	4.932109266	0.000835109	0.012701065	-0.514266622
ENPP2	2.507543858	1.914772153	3.776389949	0.004452309	0.030430197	-2.247864334
DNM1P41	2.490861932	2.149228641	4.618504519	0.001290351	0.015597514	-0.966276706
ARHGEF37	2.489071888	3.606873268	4.180726181	0.002425913	0.021886507	-1.620859974
NPAS2	2.474613872	4.033160267	7.835529026	2.77E-05	0.00237146	3.004917186
SLC35C1	2.467669702	3.268970725	6.054195359	0.000197337	0.006237827	0.983841955
C19orf80	2.465970579	5.581205149	3.253833759	0.01006764	0.04829002	-3.083449462
GAS2L3	2.430258754	3.046134459	5.655423864	0.000323031	0.007902615	0.472645296
IRAK1	2.417618744	2.650140665	6.159017394	0.000173962	0.005879781	1.114433849
ANXA2	2.386077792	3.569264527	6.266134164	0.000153155	0.005646635	1.246287369
HIST1H3I	2.382756708	2.880826923	3.657474987	0.005345144	0.033344126	-2.435852978
PRR11	2.361651441	3.172722583	5.180887878	0.000597361	0.010523265	-0.166048924
FAM169A	2.352561971	0.215721396	7.190644885	5.40E-05	0.003401482	2.319881782
PLEKHA8P1	2.349778568	1.156483357	6.785146336	8.43E-05	0.004244159	1.862866808
TRIB3	2.347910364	6.184802641	3.706423743	0.00495668	0.032142724	-2.358293039
LOC100506844	2.314879273	0.239199181	5.664752763	0.00031925	0.007898706	0.484868035
UGDH	2.310317952	4.616468365	5.505088678	0.00039116	0.008745917	0.273911975
GARS	2.306475853	6.933215508	11.92369432	8.88E-07	0.00037675	6.398563825
SLC52A2	2.294667006	1.658909526	5.06007133	0.00070213	0.011535632	-0.33400606
PLOD3	2.287757018	6.760138135	6.439195124	0.000125047	0.005082649	1.455946144
MCM2	2.28284711	4.171364343	3.49433889	0.006888187	0.038225861	-2.696005818
EEF1E1	2.275937848	2.67177159	6.328589567	0.000142287	0.005552039	1.322427384
RBPM52	2.264580778	4.078879649	4.124620555	0.00263559	0.022602354	-1.706644475
HIST1H3H	2.248502693	3.377849332	3.267478069	0.009851562	0.047663726	-3.061367862
FABP5	2.248267858	3.196990743	4.726587079	0.001108868	0.014470915	-0.808863227
CENPE	2.240123061	3.882556233	5.479816296	0.000404072	0.008783787	0.240176318
NOP56	2.238133035	-0.220694186	3.308207139	0.009234796	0.045526434	-2.995516529
PVT1	2.230417411	0.506245255	4.149483884	0.002540384	0.022275454	-1.668578005
HIST1H2BD	2.209483885	3.175801033	4.272589484	0.002120059	0.020628443	-1.48130457
VSIG10	2.203592591	5.414447385	6.569807385	0.000107567	0.004814634	1.611464776
SQSTM1	2.194101293	7.334097042	4.83856287	0.000949424	0.013329003	-0.647583511
KLHL5	2.193990495	3.169995248	7.414772441	4.26E-05	0.002891319	2.563618116
JHDM1D-AS1	2.184720177	2.597725308	6.973479922	6.84E-05	0.003856614	2.077745852
TIGD5	2.181048745	3.078554258	4.923572798	0.000844898	0.012753553	-0.526378543
SNX22	2.176024547	3.587822321	5.502933121	0.000392244	0.008745917	0.271038243
UGT1A6	2.17578183	6.395998322	4.129269652	0.002617503	0.022536364	-1.699520454
SLC25A21-AS1	2.174108684	0.366899719	3.815606082	0.004193577	0.029324977	-2.186200967
ALPK2	2.168313484	4.750568172	4.010245633	0.003125128	0.024810275	-1.882778153
DAGLA	2.168052968	2.580137975	3.788905465	0.004367951	0.030086047	-2.228166506



SCARA3	2.163035396	3.078836362	3.518718441	0.00663064	0.037337883	-2.65697533
HELLS	2.158498314	3.374073506	4.238230115	0.002229346	0.021001547	-1.533369484
FAM45B	2.153459388	1.554547732	6.220434215	0.00016168	0.005769801	1.190230216
RNF187	2.153257022	7.037613133	4.300126225	0.002036602	0.020195229	-1.439693657
XPOT	2.146991762	7.550983015	6.551205467	0.000109885	0.004814634	1.589456776
LONRF2	2.145894709	3.91818581	5.484478805	0.000401656	0.008783787	0.246407323
SLC41A1	2.14371624	4.512033217	4.338219353	0.001926887	0.019631108	-1.382302
CTSD	2.142189772	11.09564197	6.132894649	0.000179491	0.00601178	1.082034252
HOMER1	2.14032354	3.4956899	4.786277661	0.001020568	0.01383985	-0.72266078
KIF11	2.139735659	3.520962543	5.004956565	0.000756372	0.011993741	-0.411347852
PNKD	2.131794505	3.344235036	5.20864204	0.000575762	0.010341966	-0.127772811
SAC3D1	2.117349849	2.823296033	6.25044261	0.000156026	0.005646635	1.22707241
LRRC31	2.117094997	3.566196596	3.490098483	0.006934043	0.038284761	-2.702799635
ABCC4	2.115674005	3.9191638	3.501195553	0.00681471	0.038123294	-2.685023531
NHLRC1	2.10725742	2.737550252	5.347148098	0.000479882	0.009400439	0.061527798
YIPF1	2.095477486	0.83912146	5.796925444	0.000270545	0.007318646	0.656674648
UGGT1	2.090561232	-0.452921296	4.160928258	0.002497798	0.022093084	-1.6510835
HIST2H2BC	2.083387718	0.355366153	4.806819293	0.000991956	0.013556805	-0.693116622
GPR37	2.078079809	5.084627928	4.297962875	0.00204303	0.020227933	-1.442958964
FASN	2.070368913	10.92156391	3.467938939	0.007178938	0.038990516	-2.73832699
TMEM38B	2.058862456	5.004505718	5.327973798	0.000492057	0.009576098	0.035491928
ARL4D	2.058738222	4.017210334	4.188193791	0.002399375	0.021697241	-1.609473361
TACC3	2.042844729	3.768033999	3.515260373	0.006666548	0.037482522	-2.662508442
FEN1	2.039169764	4.277468456	5.531383179	0.000378199	0.008554976	0.30891186
LOC100506100	2.027766608	0.209696747	8.036724732	2.26E-05	0.002293614	3.208718384
HEXA-AS1	2.020928388	-0.268480904	4.102370307	0.002724013	0.023072322	-1.740778305
THY1	2.016132321	3.901099913	3.811654618	0.004218912	0.029475729	-2.192406507
SLC7A1	2.014516983	4.043039645	3.499164244	0.006836392	0.038147528	-2.688276657
HIST1H2BN	2.014226167	3.056203599	4.012201796	0.003115987	0.024788141	-1.879751854
TUBG1	2.009441386	4.655018585	7.857629994	2.70E-05	0.00237146	3.027527984
TPGS2	2.005498334	5.045657918	8.744534315	1.15E-05	0.001536955	3.890818701
CHML	2.005078374	5.814461038	7.052440458	6.28E-05	0.003823021	2.166476532
ACKR3	2.000399478	2.890318977	3.837597697	0.004055485	0.028929619	-2.151696522
KLHL29	1.983372611	3.863024512	6.177407549	0.000170181	0.005879781	1.137185231
TFRC	1.9776469	3.011218709	4.616732591	0.001293579	0.015597514	-0.968871523
LOC100132111	1.968164469	0.356030916	4.038319739	0.002996628	0.024284202	-1.839391575
FICD	1.967377374	2.843774586	6.038637402	0.000201089	0.006288962	0.964326441
YARS	1.964694893	6.464745143	6.375612557	0.00013466	0.005334442	1.379397348
CKS2	1.958783007	3.039308106	6.014194889	0.000207141	0.006288962	0.933596765
CSTB	1.956945018	6.394875342	4.342347821	0.001915382	0.019590613	-1.376093983
FLVCR1	1.954335722	3.819225626	4.241206632	0.002219645	0.021001547	-1.528852849
PIK3C2B	1.950739586	5.514825276	5.15690511	0.000616731	0.010719315	-0.19921632
GGH	1.950560596	7.567634983	5.923793522	0.000231308	0.006760787	0.819200264
BOP1	1.948842806	4.97017341	3.752126007	0.004620793	0.031042578	-2.286101272
TONSL	1.945356416	2.963586727	3.447269188	0.007415538	0.039664744	-2.77150168
LBP	1.945270269	9.20439607	6.801353157	8.28E-05	0.004194988	1.881539523

ARMC7	1.939556084	2.937320836	4.565918762	0.001389961	0.016223731	-1.043476457
CPD	1.938760035	5.738421694	6.671883045	9.58E-05	0.004556877	1.731404074
LOC389641	1.937787277	0.885493805	4.212871655	0.002313851	0.021399851	-1.571897218
SDF2L1	1.929160817	5.163957496	4.576957118	0.001368387	0.016139946	-1.027238273
NME2	1.921948873	3.198507941	5.422329399	0.000435197	0.009080951	0.163086012
MEAF6	1.915540279	0.372060425	3.586967315	0.005961985	0.035009276	-2.547989812
SHMT2	1.910629115	0.581462627	4.054223094	0.002926337	0.023963413	-1.814857905
DLL4	1.909134951	3.147636971	4.390611801	0.001786188	0.018837044	-1.303694182
MANF	1.903995257	5.811714932	6.176607164	0.000170343	0.005879781	1.136196024
ABCC6P2	1.903452187	0.260538535	3.58882264	0.005944828	0.034979593	-2.54503299
COLCA1	1.900058724	1.537681343	4.658911184	0.001219022	0.015190201	-0.907228617
HSPB1	1.895992571	8.003393817	4.967089567	0.000796251	0.012329244	-0.464747994
CKAP4	1.888960391	6.688678704	5.660273339	0.00032106	0.007902615	0.479000677
DKFZp779M0652	1.88428516	0.814087077	5.036876711	0.000724428	0.0117752	-0.366499646
USP3	1.883171061	0.050860248	5.606995338	0.000343455	0.008272605	0.408989007
UFD1L	1.878348118	3.127185135	6.902477561	7.40E-05	0.003958821	1.997275686
PSPH	1.877825099	4.128695285	6.044280838	0.000199719	0.006284709	0.971409406
ZBED6CL	1.87128538	3.908301055	3.953624085	0.003402433	0.026263685	-1.970579224
ADAMTS17	1.870683849	5.201622831	3.58151013	0.00601275	0.035201424	-2.556688753
REREP3	1.869490771	0.861055399	4.057634348	0.002911489	0.023922529	-1.809599615
GFPT1	1.860602797	3.147724754	4.637493735	0.001256287	0.015366869	-0.938497394
MMP11	1.858399009	3.172304995	4.016387626	0.003096523	0.024658437	-1.873277727
CSPG4	1.84735694	2.834583851	3.782564002	0.004410481	0.030298763	-2.238145015
SLC35F6	1.840083788	7.056056614	5.637950611	0.000330244	0.008053825	0.449717483
ALG3	1.834657453	3.283545911	4.849861719	0.000934762	0.013239352	-0.631412292
HTATIP2	1.834031533	3.579574822	6.937659727	7.12E-05	0.003856614	2.037230371
TRIM37	1.825894315	3.158479695	4.164798584	0.002483569	0.02207491	-1.645170996
ANKRD52	1.806850699	6.074735123	7.435947513	4.17E-05	0.002852665	2.586328693
IRAK2	1.803556028	4.792826851	5.056264793	0.000705738	0.011570549	-0.339333183
LPGAT1	1.803186313	8.616054803	8.558089137	1.37E-05	0.001671021	3.716236724
HIST1H2BG	1.792347901	3.381002836	3.38641399	0.008160684	0.042064714	-2.869364779
AZIN1	1.792204918	3.301405725	5.248345846	0.000546318	0.010114407	-0.073216331
ATP5J2	1.782056846	3.128656194	4.992934964	0.000768794	0.012023378	-0.428277648
HSPA5	1.781376939	10.07526123	7.850849378	2.72E-05	0.00237146	3.020596871
PYGB	1.770238816	6.118184063	6.034910482	0.000201999	0.006288962	0.959646372
CYP4F22	1.75879201	4.112515556	3.271528933	0.009788343	0.047480331	-3.054814044
OR7E14P	1.758060767	0.336430309	3.744854486	0.004672586	0.031199948	-2.297572637
ZSWIM5	1.755728831	2.948192201	5.375566006	0.000462433	0.009229734	0.100014621
HTRA1	1.755714771	7.088925979	3.917335219	0.003593796	0.027106763	-2.027055671
NEU1	1.754182432	6.258974067	5.239749808	0.000552552	0.010170075	-0.085008116
RTN4RL2	1.750555752	3.78551775	3.364176804	0.008452136	0.04306402	-2.905192583
CEBPA	1.745245383	7.916753797	3.570655207	0.006115082	0.035613508	-2.574000061
CELSR2	1.743240954	4.180552015	3.558367419	0.006233134	0.03603213	-2.593609498
ANKRD27	1.742006301	4.953209993	8.638001157	1.27E-05	0.001626986	3.7914973
PCDH17	1.738461043	3.671525407	4.043258363	0.00297461	0.024231581	-1.831769484
SPSB1	1.73214885	5.608188299	5.908731481	0.000235625	0.006835756	0.80002639

P4HB	1.729285856	10.95865602	5.518276089	0.000384601	0.008649637	0.291478136
FAM83H	1.727660807	6.647541262	4.067639007	0.002868402	0.023687844	-1.794186402
ZBTB9	1.725674005	3.040845565	5.71528866	0.000299587	0.007657435	0.55085885
GPAA1	1.715026876	7.212875189	3.718238046	0.004867454	0.032028339	-2.339609975
SLC39A7	1.701677476	3.715667564	4.357399437	0.001874051	0.019345366	-1.353480681
PON2	1.699918283	5.566444769	4.441717204	0.001659485	0.01801199	-1.22738643
RRS1	1.699539262	4.508852101	4.240110734	0.002223211	0.021001547	-1.530515651
PTGFRN	1.692756982	5.966409324	6.159356495	0.000173891	0.005879781	1.114853798
TUBA1C	1.682707646	5.881599723	5.743160096	0.000289308	0.007530659	0.587094321
LOXL2	1.681251844	3.313362184	3.297106325	0.009398804	0.046101989	-3.013454721
UCK2	1.678819078	4.555170626	5.664468507	0.000319365	0.007898706	0.484495791
RASSF3	1.676962265	3.294517966	4.703667319	0.001144926	0.01469425	-0.84210169
GLIS2	1.675518124	3.470245658	3.395543042	0.00804409	0.041737827	-2.854666527
ONECUT2	1.674367907	8.330323329	7.106753456	5.92E-05	0.003693648	2.227050068
SLC12A9	1.673462897	3.774032783	5.298824954	0.000511211	0.009740807	-0.004192644
ATP6V1C1	1.670588197	7.244702735	3.67036146	0.005239861	0.032968084	-2.415410648
BLOC1S3	1.670114396	3.649236804	7.268574612	4.97E-05	0.003261063	2.405330243
DBF4	1.669326795	3.358728388	4.01141972	0.003119639	0.024791914	-1.880961714
TYW5	1.668771408	-0.032407216	5.795497402	0.000271026	0.007318646	0.654831982
RAB11FIP4	1.667550465	5.229523104	4.54136905	0.00143926	0.016664669	-1.079653554
FTH1	1.666968641	11.69465228	6.394096301	0.000131785	0.005274096	1.40170763
FBXL19-AS1	1.662454679	1.451039871	4.82687103	0.000964856	0.013421993	-0.664337036
DHCR7	1.652216328	3.50149725	3.609676297	0.005755524	0.034471305	-2.511820869
CCDC86	1.646468355	3.995430067	5.210656838	0.000574227	0.010341966	-0.124998646
PDIA3	1.640469813	9.219222708	4.649000863	0.001236115	0.015232668	-0.921689078
LAGE3	1.637289098	3.608673166	5.138693024	0.000631894	0.010790595	-0.224460315
CADM4	1.634970189	3.291300089	3.427939549	0.007644189	0.040291519	-2.802555929
SOGA1	1.631615694	4.320078714	3.709872524	0.004930457	0.032125998	-2.352837655
TMEM104	1.629861361	5.146799685	6.470119218	0.000120645	0.005082649	1.492976547
PDIA4	1.62863014	9.408097812	4.211838009	0.002317367	0.021400361	-1.573469488
STAMBPL1	1.619766628	3.339177135	3.428476005	0.007637745	0.040291519	-2.801693692
ABHD17C	1.616130351	3.112561111	4.463253577	0.001609003	0.017646131	-1.195339565
HEXA	1.610509809	7.427570056	6.188502822	0.000167943	0.005858088	1.150888765
ITGA5	1.608676378	7.09176858	8.01414894	2.31E-05	0.002313079	3.186076392
FTL	1.607609565	12.85570065	4.144059794	0.002560837	0.022276723	-1.676875564
ARPIN	1.607493398	3.494267996	3.619619229	0.005667506	0.034259659	-2.496000009
SREBF2	1.604653395	7.659533214	3.345931632	0.008699375	0.043743701	-2.934614062
SEMA3F	1.604298525	3.597353716	4.446750372	0.001647537	0.017957234	-1.21989104
MTOR	1.603734725	7.965730564	5.440782987	0.000424932	0.00896261	0.187885745
STAG3L4	1.600307231	0.582283495	3.973954353	0.003299974	0.025690277	-1.939008617
LINC00857	1.597342803	1.526349496	3.831849555	0.004091109	0.029014919	-2.16070998
RASSF4	1.597096276	5.937142247	3.321599693	0.009040888	0.044996871	-2.973885165
PSMD2	1.59544169	7.757727806	6.611297433	0.000102587	0.004691771	1.66038407
ABCF2	1.588310288	3.020904783	5.739778704	0.000290534	0.007530659	0.582704235
TBC1D16	1.587962878	5.615262009	5.53354031	0.000377157	0.008554976	0.311778627
SCARB1	1.587374149	5.901389601	3.409834779	0.007865044	0.041122243	-2.831668272

PLOD1	1.585343786	8.131421585	5.585219851	0.000353092	0.00842669	0.380254183
HLTF	1.584415933	4.230432933	5.804181303	0.000268116	0.007290518	0.666032628
GPI	1.580897559	6.44930087	6.304112087	0.000146443	0.005646635	1.29265113
CIDCEP	1.576552384	1.40853636	4.105120274	0.002712916	0.023037642	-1.736556151
SLC22A5	1.56864398	3.90622737	5.105999195	0.000660134	0.011126745	-0.269901648
TMEM241	1.565610381	3.130549927	6.12321206	0.000181588	0.006017157	1.070000657
COMMD8	1.562727761	3.507945372	5.767000607	0.000280819	0.007428862	0.617999368
STIP1	1.560717377	6.726953896	5.947903918	0.000224576	0.00661356	0.849824767
ATP8B1	1.556780317	6.46186705	4.399264651	0.001764028	0.018680441	-1.290748492
HSP90AB1	1.555224753	9.948522678	5.966529095	0.000219522	0.00657109	0.873424959
SPAG5	1.550108872	4.854242046	3.444472343	0.007448175	0.039784774	-2.775993185
MAP3K9	1.54763546	3.264014288	3.893641491	0.003724873	0.027684676	-2.064014859
MPV17L2	1.543763449	3.135360463	5.829645223	0.000259777	0.007113335	0.698813367
RRP9	1.540380223	3.212217707	6.614269998	0.00010224	0.004691771	1.663880034
LOC100287042	1.538240448	-0.079708006	3.73380306	0.004752479	0.031591435	-2.315017883
SRM	1.536056852	5.171054701	4.678197298	0.00118648	0.014934337	-0.879128606
PLBD2	1.533687691	3.664938279	5.864545726	0.000248802	0.007010575	0.743589682
MTCL1	1.532808585	3.552874604	4.942655246	0.000823183	0.012571657	-0.499318448
TMCO3	1.53197968	5.186481001	4.069626766	0.002859923	0.023684253	-1.791125567
KDELR3	1.53037531	3.332808015	3.990245746	0.003220233	0.025384548	-1.913746336
TAGLN2	1.530123938	7.735234268	6.209551836	0.000163785	0.005783626	1.176838496
C12orf49	1.528334712	4.689726622	5.550494757	0.000369071	0.00852741	0.334286712
PRAF2	1.527205583	3.067356421	3.693168788	0.005058844	0.03246646	-2.379271562
LAMC1	1.525288777	7.624223889	6.682998002	9.46E-05	0.004547534	1.74438018
LINC00896	1.517728495	0.257725794	3.59138493	0.007202855	0.039008383	-2.603386515
ZNF503-AS2	1.516959318	0.528238348	5.347128571	0.000479894	0.009400439	0.061501311
MAP2	1.511649951	3.211861157	5.548781206	0.00036988	0.00852741	0.332013793
PLXNA3	1.510740671	4.102867721	3.607272069	0.005777022	0.034497129	-2.515647813
COL4A1	1.509974747	8.015253653	3.276116417	0.00971726	0.047277739	-3.047393163
GNS	1.509779872	8.936657616	4.490074157	0.001548423	0.017431065	-1.155521408
TRMT6	1.508237411	3.870563595	7.342045302	4.60E-05	0.0030491	2.485203117
CATSPER2P1	1.508026275	0.780390062	3.773182921	0.004474201	0.030430197	-2.252914546
ZNF678	1.507852749	0.11017739	3.2287062	0.01047856	0.049351046	-3.124141425
WSB2	1.502912298	6.505895139	5.59362693	0.000349337	0.008362654	0.391356388
EIF4EBP1	1.49805724	5.253238102	7.20227767	5.34E-05	0.00338661	2.33268479
TMEM19	1.496168733	6.461040937	3.928144212	0.003535631	0.026945377	-2.010217121
CEBPZOS	1.49592566	1.27616259	3.84689447	0.003998561	0.028739125	-2.137126531
RELB	1.49304685	4.182009141	3.49378049	0.006894208	0.038225861	-2.69690038
RHPN2	1.4920191	5.765329016	5.045578994	0.000715974	0.011689248	-0.354299137
FDPS	1.49200321	3.40129844	3.67459406	0.005205759	0.032868723	-2.408699943
H2AFZ	1.49082902	6.06882844	3.708074366	0.004944111	0.032142724	-2.355681881
ERMP1	1.486698055	6.219163913	5.070337679	0.000692498	0.011401388	-0.3196494
ENO1	1.484120418	7.265270233	5.457476576	0.000415871	0.008891665	0.210276749
MARS	1.482863403	6.367386723	5.540183001	0.000373966	0.008554976	0.320602266
C20orf24	1.475127661	1.672115324	3.914827967	0.003607433	0.027168401	-2.030963523
BARD1	1.469583943	3.101203355	3.997395954	0.003185884	0.025182228	-1.90266915

RP9P	1.468780653	0.606363462	4.233625348	0.002244443	0.021073087	-1.54035921
RAP2A	1.467867784	6.267930139	5.179012914	0.000598852	0.010525761	-0.168638851
HSPA4	1.46317267	7.588915533	6.941944712	7.08E-05	0.003856614	2.042085716
USP14	1.45635243	3.352801974	5.331391297	0.000489863	0.009557227	0.04013639
DCAF13	1.454751248	5.232377233	4.997718377	0.000763825	0.011993741	-0.421538681
COASY	1.44998354	3.317268482	6.824393497	8.07E-05	0.004169117	1.908026272
TPP1	1.44933598	8.946657189	4.023430589	0.003064064	0.024520679	-1.862389462
GGPS1	1.448829789	0.256925472	3.874387285	0.003835118	0.02820854	-2.094097495
AAGAB	1.448442771	5.212920433	6.068420962	0.000193973	0.006203961	1.001656085
NBPF3	1.446686567	0.395498911	3.440846165	0.007490712	0.039843771	-2.781817441
LYSMD4	1.444777688	3.101613369	3.304366185	0.009291204	0.04568907	-3.00172241
CALR	1.44350297	10.43738316	5.959211211	0.000221493	0.006572356	0.864158308
PPP4R1	1.442818498	-0.161755173	3.691207131	0.005074151	0.032535474	-2.3823778
BACE1-AS	1.442446509	0.492476667	4.146218598	0.002552675	0.022276723	-1.67357265
PSMD14	1.441309217	6.073475726	6.213006751	0.000163114	0.005783626	1.181091867
VARS	1.439617424	6.633395562	4.090608832	0.002772024	0.023245579	-1.75884723
TBX15	1.438062859	5.471717761	3.327122877	0.00896216	0.04469054	-2.964967531
DNAJB11	1.437951591	6.492578932	5.629130451	0.000333951	0.008093649	0.438126956
ABCB8	1.43498605	5.360488385	5.389578844	0.000454083	0.009229734	0.118948271
TNFRSF21	1.432975708	5.61001876	3.669492927	0.005246888	0.032968367	-2.416787913
DSTNP2	1.43245102	1.137329226	3.925770369	0.003548319	0.026973664	-2.013913966
NPLOC4	1.431734208	7.370845484	5.567875575	0.000360977	0.008510774	0.357316837
CYSTM1	1.425244753	5.771741973	4.608531849	0.001308636	0.015687552	-0.980886635
WDYHV1	1.423796556	2.953114182	3.478619661	0.007059789	0.038589627	-2.721198056
MAPKAPK2	1.423675291	3.055976239	3.723625027	0.004827333	0.031872918	-2.331095878
CDKN2AIPNL	1.420187871	4.211345023	4.917167693	0.000852325	0.012791433	-0.535473489
C8orf33	1.420184664	5.4159307	3.60664286	0.005782662	0.034497129	-2.51664945
H1FO	1.420055376	8.093751958	5.885685521	0.000242401	0.00695476	0.770625825
ST20-AS1	1.416655091	3.11067816	4.660623822	0.001216094	0.015184632	-0.904731099
B3GAT3	1.408037372	4.809721357	6.706957372	9.20E-05	0.004517433	1.772295629
ALG2	1.407748931	1.070082515	3.836562591	0.004061876	0.028948746	-2.153319359
HEXB	1.406754881	7.970403827	6.119582476	0.000182382	0.006017157	1.065486372
SF3B4	1.405939015	5.268402431	5.142566159	0.000628636	0.0107799	-0.219087577
SOX12	1.402780338	4.81951783	4.092190961	0.002765514	0.023245579	-1.756415602
DYNLL1-AS1	1.401273161	2.09454443	4.952140123	0.000812613	0.012483532	-0.485888413
SMG5	1.398670401	6.768559764	3.3952051	0.008048375	0.041737827	-2.855210524
PPIA	1.398664165	9.589601321	5.398544695	0.000448826	0.009194812	0.13104732
ATIC	1.396064844	6.16625027	5.005016659	0.00075631	0.011993741	-0.411263276
PTPRF	1.394115944	3.65986501	6.089460512	0.000189112	0.006098467	1.027950392
PSMC4	1.392152353	4.584898888	5.386714057	0.000455776	0.009229734	0.115079843
WRNIP1	1.391902757	3.099737032	4.270551571	0.002126379	0.020628443	-1.484388172
HMGB3	1.391514845	6.237660115	4.077295725	0.002827457	0.023624286	-1.779321296
TBRG1	1.388327255	0.136437101	3.923673989	0.003559564	0.026973664	-2.017179272
NT5C3B	1.387769235	2.588181738	4.866388817	0.000913753	0.013108331	-0.607792247
MLEC	1.385237878	8.869552305	6.407620017	0.000129724	0.005218372	1.418001315
GPX3	1.381370755	9.584937817	3.518659149	0.006631254	0.037337883	-2.657070193

ADCK2	1.380422488	4.490677224	3.490294217	0.00693192	0.038284761	-2.702486004
C8orf76	1.379841573	3.102760383	4.212714091	0.002314387	0.021399851	-1.572136878
NABP2	1.379278526	4.172558054	5.465705146	0.000411482	0.008821998	0.221298492
WDR46	1.378067907	3.014145458	3.718403538	0.004866216	0.032028339	-2.33934837
ATP6V1F	1.375317697	3.739072064	5.298016167	0.000511754	0.009740807	-0.005295567
HSPA9	1.372292619	9.66361119	6.467107268	0.000121066	0.005082649	1.489375585
FBXL18	1.371676232	4.452842289	3.622656598	0.005640902	0.034151744	-2.49116894
TPST2	1.371586531	3.120732157	6.011133891	0.000207913	0.006288962	0.929742409
ARPC1B	1.370557162	6.878375011	3.571390295	0.006108095	0.035607528	-2.572827409
UBTD1	1.363197413	3.353840451	3.569080403	0.006130079	0.035641774	-2.57651244
SLC5A6	1.360767719	4.05170807	4.702663698	0.001146534	0.01469425	-0.843558906
WDR45B	1.359434264	6.530234904	5.622176692	0.000336906	0.008139976	0.428981006
SLC22A23	1.355703672	3.098129069	3.252142202	0.01009477	0.048301399	-3.086187747
DUSP23	1.354905578	5.534015994	3.650762767	0.005400863	0.033441984	-2.446507404
FAM220A	1.354789932	3.653043865	4.972443834	0.000790477	0.012264176	-0.457184454
POLA2	1.35304449	3.486891206	3.471511574	0.00713885	0.038853844	-2.732596433
LAMP2	1.352715758	7.263629822	4.3816734	0.001809393	0.019004713	-1.317078063
PARP12	1.350393466	5.706102151	4.893711559	0.000880129	0.012888367	-0.568832011
SBF2-AS1	1.350185477	2.877207029	5.357519012	0.000473433	0.009353593	0.075587195
LRFN3	1.34785365	3.948047167	4.63262102	0.001264935	0.015424298	-0.945620701
UBL4A	1.346553024	5.144926226	5.045642153	0.000715913	0.011689248	-0.35421063
PPIL1	1.346066202	4.570823411	3.951088742	0.003415445	0.026338075	-1.974519841
DCTN2	1.345293672	3.122071806	5.094343348	0.000670529	0.011229195	-0.286140691
PAK1IP1	1.345204965	4.328776295	4.149935705	0.002538688	0.022275454	-1.667887002
DCAF8	1.344489662	-0.171326074	3.687214223	0.005105459	0.032631451	-2.388701692
SNRPC	1.343373799	3.189660129	5.476899865	0.000405592	0.008792328	0.236277148
RPLP1	1.342432858	9.377899943	4.296819541	0.002046436	0.020227933	-1.444684941
MYO5C	1.341775271	5.197447322	4.435462148	0.001674463	0.018124143	-1.236706432
NSMCE2	1.341270604	4.106896739	3.790826153	0.004355156	0.030058845	-2.225145112
FAM50A	1.33837826	5.096729439	4.482629153	0.00156499	0.017497396	-1.166564117
MIF	1.337256363	8.124247556	4.020813778	0.003076082	0.024520679	-1.866434272
OLA1	1.336401985	3.102434328	4.910841742	0.000859729	0.012839961	-0.544462011
AJUBA	1.335494091	4.356650316	3.790623736	0.004356502	0.030058845	-2.225463511
SEC61A1	1.335334293	8.592798899	5.116699777	0.000650744	0.011040008	-0.255011315
DHCR24	1.33490134	10.76173188	3.684782084	0.005124629	0.032673697	-2.392554466
DSG2	1.332488088	6.736961789	4.893853118	0.000879958	0.012888367	-0.568630446
CCDC137	1.327991091	3.75260165	4.807899808	0.000990475	0.013556805	-0.691564284
BCAP31	1.321593525	3.47088701	5.113639872	0.000653414	0.011046143	-0.259267566
KLB	1.316371029	6.842297707	3.854386555	0.003953303	0.028660367	-2.125392043
RAB15	1.316090334	4.437604171	3.801453911	0.004285065	0.029698623	-2.208434167
EPRS	1.316047956	7.589661731	4.811459847	0.000985612	0.013517953	-0.686450918
BCR	1.313249974	3.070302376	4.008646396	0.003132622	0.024844495	-1.885252618
VDAC1	1.312411307	1.548710556	3.830874168	0.004097186	0.029014919	-2.162239821
LRP10	1.311967254	7.120718101	3.248241421	0.010157621	0.048423994	-3.092502898
LRRC59	1.311599272	7.144965463	5.845796142	0.000254634	0.0070841	0.719556419
SWAP70	1.307774565	6.08062468	4.699446081	0.001151703	0.01469425	-0.848231746

FLOT1	1.304340704	6.916609083	5.267533423	0.000532675	0.009921239	-0.04693509
TOMM40L	1.304151413	4.877709118	3.843314112	0.004020383	0.028776805	-2.142736535
ZNF271P	1.298388773	2.173347891	5.877196707	0.00024495	0.006976592	0.759777045
BYSL	1.298104324	3.592281694	4.02842428	0.003041269	0.024518659	-1.854673078
LOC90784	1.296611478	3.283282965	4.818253304	0.000976404	0.013486471	-0.676698504
NGRN	1.296198736	5.005345107	4.095905328	0.002750293	0.023228664	-1.750708126
FURIN	1.295612079	9.740984181	5.83466568	0.000258166	0.007113335	0.705265318
NUDT19	1.294857177	4.601443765	5.129016237	0.000640114	0.010907096	-0.237893538
DTD1	1.291323365	3.678603411	3.683026723	0.005138512	0.032735466	-2.395335523
EXOSC4	1.29072507	4.246087249	3.717384402	0.004873844	0.032032303	-2.340959434
UQCC2	1.289985769	4.467236165	3.922671482	0.003564955	0.026984394	-2.018740953
ANKRD39	1.28934975	3.024548713	4.714379883	0.001127918	0.014597471	-0.826556658
RRAGC	1.287777436	4.455029139	3.955830447	0.003391152	0.026202524	-1.967150567
IL22RA1	1.28618626	3.397445244	3.383686785	0.008195856	0.042153562	-2.873756884
CFL1	1.284121393	8.261965751	5.384798698	0.000456913	0.009229734	0.112492784
LOC100630918	1.283873544	0.422663412	3.924918523	0.003552884	0.026973664	-2.015240731
MAP4K2	1.282320242	3.757130026	5.2174104	0.000569115	0.010341966	-0.115704115
RFFL	1.281360786	1.479630749	3.729989951	0.004780378	0.031668988	-2.32104008
MICALL1	1.280272379	5.106893774	4.339159317	0.001924261	0.01962998	-1.38088836
ABCD1	1.277353497	5.174926757	3.345521481	0.008705019	0.043743701	-2.935275714
KIAA0100	1.276167307	7.901808135	5.304669226	0.000507307	0.009740807	0.003774147
PUS7	1.275388323	4.433725416	3.254721121	0.010053439	0.048251559	-3.082013068
PSMD11	1.273941377	3.851211188	5.739803976	0.000290525	0.007530659	0.582737052
CTTN	1.266864076	3.939002402	3.785386671	0.004391497	0.030221552	-2.233702904
XPO5	1.266556932	5.687797473	4.203182043	0.002347037	0.021416374	-1.586641596
POP7	1.26487635	4.443595289	3.556785076	0.006248509	0.036067575	-2.596135673
EHD4	1.260703694	5.810696928	3.912221934	0.003621664	0.027168401	-2.035026128
HIST1H4B	1.258259026	4.754451673	4.81922682	0.000975092	0.013486471	-0.675301521
SSR1	1.257683374	8.747207904	4.133464425	0.002601297	0.022456328	-1.693095025
SNRPB	1.255566896	4.083313616	4.838403914	0.000949632	0.013329003	-0.647811147
CLTC	1.254937294	9.928433916	4.14150986	0.002570512	0.022276723	-1.680777682
C5orf28	1.251881808	3.428423522	5.377466224	0.000461291	0.009229734	0.102583837
SESTD1	1.248023463	6.27937383	3.913795021	0.003613066	0.027168401	-2.03257371
C1orf109	1.246156255	3.193347901	3.729328368	0.004785236	0.031674284	-2.322085101
MTERF3	1.24604665	3.932872149	3.255421824	0.010042239	0.048251559	-3.080878852
OPTN	1.243139329	3.58262947	3.262770882	0.009925557	0.047902936	-3.068984688
HM13	1.238990217	3.636363447	4.245622392	0.002205336	0.021001547	-1.522154472
RHBDD2	1.238210165	3.777813361	4.087782247	0.002783696	0.023308972	-1.763192304
SLC25A43	1.238188174	4.777774671	4.292079055	0.002060622	0.020294359	-1.451843087
ACTB	1.235183048	11.35713471	3.938466537	0.003481016	0.026659321	-1.994149742
ARFGEF2	1.233921318	8.152414397	4.507602685	0.001510154	0.017129707	-1.129553567
CDK4	1.23188717	5.708544326	4.321934756	0.001972997	0.019867443	-1.406812211
COA7	1.231657235	4.573428894	4.746453532	0.001078601	0.014308029	-0.780114933
SLC9A3R1	1.230057542	7.880856534	5.000801325	0.000760641	0.011993741	-0.417197168
PIGU	1.229434124	4.117741001	5.382236634	0.000458437	0.009229734	0.109031373
SCAMP3	1.22912691	3.274507932	4.429576015	0.001688689	0.018227568	-1.245481771

SSR3	1.227277185	8.242375179	4.537897588	0.001446381	0.01667291	-1.084776167
TMBIM1	1.224172177	7.448054298	5.364527206	0.000469128	0.009339089	0.085078851
APEX2	1.224096414	4.116332906	5.396166544	0.000450214	0.009197559	0.127839266
AACS	1.224034491	3.588427726	4.408643088	0.001740341	0.018604958	-1.276729059
TMEM9	1.222525334	5.683216788	5.49324461	0.000397155	0.008783787	0.258113295
ORMDL2	1.221155981	4.361956655	4.302697484	0.002028991	0.020189834	-1.435813496
ATP6AP1	1.217052997	6.57076177	4.241458339	0.002218826	0.021001547	-1.528470958
PI4KA	1.214267189	6.962255812	3.822543195	0.004149488	0.029191677	-2.175310876
ADSL	1.208888751	3.529867398	4.144429279	0.002559438	0.022276723	-1.676310218
ZSCAN12	1.206055698	1.895082199	4.271417917	0.00212369	0.020628443	-1.48307722
SARS	1.205908209	7.189093845	5.696358389	0.000306794	0.007723293	0.52618306
ZEB1-AS1	1.203888849	1.32174762	4.220396198	0.002288425	0.02123528	-1.560456005
FKBP9	1.20100718	5.947513899	3.925427336	0.003550157	0.026973664	-2.014448236
CCT6A	1.200975102	4.88783172	4.814059247	0.000982078	0.013493193	-0.682718521
CHCHD3	1.197101591	5.462553934	3.608632711	0.005764845	0.034497129	-2.513481935
OTUD6B	1.195487795	4.481500284	3.629081118	0.005585061	0.03394534	-2.480953396
LETM1	1.192219711	6.250894597	4.584666257	0.001353533	0.016077587	-1.015908002
TRAPPC13	1.19219487	1.33107502	3.861663198	0.003909865	0.028513644	-2.114001157
ZMPSTE24	1.19130013	6.865920132	4.692277965	0.001163311	0.014737987	-0.858647204
CANX	1.190862253	5.551387405	4.048796982	0.002950121	0.024132854	-1.823225036
TBL2	1.188563769	4.737257581	3.602495709	0.005819982	0.034617835	-2.523252242
ZDHHHC24	1.185239203	3.42579025	4.649244191	0.001235693	0.015232668	-0.921333859
MYH9	1.183273155	10.40404293	3.690723073	0.005077935	0.032535474	-2.383144355
APIP	1.181558996	4.641972355	5.480899968	0.000403509	0.008783787	0.241624831
PGK1	1.18131376	8.484459181	3.712598276	0.004909835	0.032125998	-2.348526857
BAG2	1.18028589	4.622663494	4.257686502	0.002166742	0.020747551	-1.503867529
VPS18	1.179489071	5.349650169	4.313552366	0.00199719	0.020009542	-1.419442902
SLC48A1	1.178177028	4.860516248	4.35932122	0.001868843	0.019338204	-1.350595684
YWHAG	1.178132434	8.061344067	3.67736224	0.005183582	0.032808333	-2.404312026
CNOT11	1.173553166	5.81047962	6.05380645	0.00019743	0.006237827	0.983354536
KIAA0196	1.173144951	6.587032075	3.633818401	0.005544258	0.033829078	-2.473423271
RPUSD2	1.172677977	3.116162474	4.75403482	0.001067285	0.014189257	-0.769159479
NARS	1.167516026	7.574762078	6.168937268	0.000171911	0.005879781	1.126712129
PNO1	1.162375185	4.486804524	5.236703983	0.000554779	0.010187044	-0.089188928
GMPS	1.159710056	5.778170831	4.618175694	0.001290949	0.015597514	-0.966758204
TMED9	1.157986157	7.268510251	4.454800491	0.001628619	0.017775859	-1.207910237
TMEM209	1.156136432	5.394532528	4.179064002	0.002431863	0.02191485	-1.623395469
MAP10	1.153839122	3.322256133	4.39703548	0.001769709	0.018713828	-1.294082596
ERCC2	1.153787986	3.510212439	4.771921197	0.001041092	0.013959934	-0.743345944
ATP6V0B	1.152568381	4.87170998	4.263506074	0.002148383	0.020735571	-1.495053177
IKBIP	1.150485712	3.661897531	3.617535703	0.005685832	0.034284578	-2.499314461
PAQR9	1.149690026	5.446359721	3.704803449	0.004969051	0.03214434	-2.360856493
DLG5	1.149539746	5.415795817	4.321967165	0.001972904	0.019867443	-1.406763395
DERL1	1.146506678	4.374603775	4.344956702	0.001908149	0.019567926	-1.372172199
TARBP1	1.144120382	5.476059195	4.770221075	0.001043552	0.013968915	-0.74579753
GGTA1P	1.144061013	0.417837444	3.84288606	0.004023	0.028776805	-2.143407342



FARSB	1.142709901	5.179285837	4.327143384	0.001958122	0.019819952	-1.398968648
TMEM199	1.142679046	4.343376898	5.482237145	0.000402816	0.008783787	0.243411957
MTDH	1.140721311	8.853353646	3.309238873	0.009219705	0.045526434	-2.993849697
SHKBP1	1.14059717	5.000667367	3.858106414	0.003931034	0.028591207	-2.119568201
SLC39A1	1.138901608	6.774799613	4.623009642	0.00128218	0.015585882	-0.959681437
RRAS2	1.138594721	3.801574615	3.646868274	0.005433472	0.033441984	-2.452691246
GSKIP	1.135737293	4.561712525	4.479833051	0.001571261	0.017521937	-1.170713435
MED8	1.135156007	3.19939835	4.404709656	0.001750234	0.018608752	-1.282607483
RHBDD3	1.13375981	3.822118492	3.656691939	0.005351613	0.033357815	-2.437095693
SNTA1	1.13092481	4.384619122	5.119816981	0.000648036	0.011018016	-0.250676796
TMEM123	1.130815978	10.10013699	4.500678133	0.001525149	0.017274693	-1.139806798
FAM127A	1.126017193	5.01765696	3.230579855	0.010447327	0.04929319	-3.121106066
COMMD4	1.125638782	5.00852145	4.777485163	0.001033086	0.013916561	-0.735325641
MAN2A2	1.123511089	7.047295394	3.449130248	0.007393905	0.039658953	-2.768513311
YWHAH	1.122273225	6.411612037	3.709959195	0.0049298	0.032125998	-2.352700573
TTL	1.120080619	5.669434312	5.141077084	0.000629887	0.0107799	-0.221152928
TOMM34	1.11962004	4.348417584	5.008953502	0.00075229	0.011993741	-0.405723801
NAIF1	1.119340673	3.21940895	3.292800967	0.009463227	0.046332132	-3.020413905
NDUFB9	1.11670137	7.37397482	3.275532816	0.009726273	0.047292107	-3.048337151
UBA1	1.114724628	3.408550555	3.588482994	0.005947965	0.034979593	-2.545574259
RNF213	1.112230075	9.754705341	4.121296583	0.002648603	0.022689019	-1.711739668
SSSCA1	1.108839244	3.487297274	3.752462377	0.004618412	0.031042578	-2.285570761
SPATS2	1.107082712	4.138989548	4.581478659	0.001359654	0.016125746	-1.020591837
ZNHIT2	1.106774585	3.183517809	4.061958496	0.002892783	0.023838728	-1.802936261
SLC26A2	1.106586723	4.67381463	3.491711891	0.006916558	0.038254303	-2.700214517
MEA1	1.105018612	5.265661991	4.325796857	0.001961956	0.019833035	-1.400995997
NEDD4	1.102168552	4.501574559	5.481290073	0.000403307	0.008783787	0.242146231
STIM1	1.101651536	7.450533838	3.933026466	0.003509687	0.0267738	-2.002615981
RABIF	1.099802321	3.961660406	4.022102954	0.003070155	0.024520679	-1.864441484
DARS2	1.098240787	5.685048668	4.02185547	0.003071292	0.024520679	-1.864824025
MEMO1	1.097981245	3.289705423	3.870151426	0.003859832	0.028283689	-2.10072136
GTPBP2	1.096591236	4.932058791	3.529828461	0.006516642	0.03685208	-2.639205658
MPV17	1.09499951	3.748755629	3.586245456	0.005968674	0.035022202	-2.549140321
THAP9-AS1	1.093627622	0.244832647	4.273621981	0.002116865	0.020624236	-1.479742496
PSMA4	1.093422674	3.862488508	4.648200059	0.001237508	0.015232668	-0.92285818
GLA	1.092183879	3.721093683	3.489846118	0.006936783	0.038284761	-2.703204011
CYHR1	1.088605073	3.999479421	3.602012277	0.005824349	0.034617835	-2.524022031
NCKAP1	1.088393954	3.182257676	3.653033218	0.005381947	0.033441984	-2.442902977
RBM42	1.087434332	5.656012959	3.679294427	0.005168162	0.032808333	-2.401249724
C9orf16	1.08566133	4.349976511	4.001985577	0.003164041	0.02505556	-1.895562177
XYLT2	1.08516839	5.044675268	3.949618662	0.003423014	0.026370386	-1.976805105
DRAP1	1.084842629	5.437203916	4.241090312	0.002220023	0.021001547	-1.529029333
MAP4	1.082680303	3.837106517	4.697709321	0.001154504	0.01469425	-0.850754614
PDIA6	1.082349945	8.294369184	4.345044178	0.001907907	0.019567926	-1.372040717
CBX3	1.081742428	3.392890724	3.964978453	0.0033448	0.025921373	-1.95294098
TXN	1.08004411	7.170012025	3.697861608	0.005022422	0.032312432	-2.371842198

HSP90B1	1.074755439	10.71650257	3.833052579	0.004083626	0.028997829	-2.158823251
MRGBP	1.073664236	3.589302992	4.225161756	0.002272476	0.021203522	-1.5532138
NPC1	1.073579294	6.083305063	3.722771477	0.004833667	0.031886674	-2.332444707
CCT5	1.071020845	7.133975196	3.493708863	0.00689498	0.038225861	-2.697015128
C14orf169	1.069643211	3.458581938	4.420697913	0.001710393	0.018402389	-1.258726903
GSR	1.065757921	3.862443323	3.532580733	0.00648872	0.036747438	-2.634805261
NCAPG2	1.064376769	4.107946897	4.948254021	0.000816926	0.012525127	-0.491389293
BUD31	1.063680834	5.073726257	3.664556786	0.005287012	0.033132304	-2.424616777
PML	1.062302288	4.125410938	3.344205775	0.008723149	0.043778429	-2.937398272
ACP1	1.059938661	3.555726729	3.597692994	0.005863518	0.034639585	-2.530900805
NUP37	1.059834821	3.392526037	4.316925206	0.001987417	0.019986863	-1.414359504
LEO1	1.059179613	5.547861188	5.158380433	0.00061552	0.010719315	-0.197173522
UBIAD1	1.058147689	5.058964939	5.601284709	0.000345954	0.008307164	0.401460035
TMED10P1	1.057057738	2.341780925	3.34257291	0.008745705	0.043815498	-2.940032648
PSMD4	1.056569397	6.889404877	5.262136322	0.000536475	0.009968218	-0.054321963
DPAGT1	1.05650575	5.281820212	4.266460805	0.002139126	0.020711831	-1.490579682
IMPAD1	1.055863744	8.197557625	3.341962551	0.008754152	0.043821297	-2.941017413
CLPTM1	1.055735423	3.945402419	4.024130311	0.003060859	0.024520679	-1.861308047
PPP2R5B	1.052758196	4.055816633	3.809704868	0.004231473	0.029510645	-2.195469117
UBXN2B	1.052349162	6.794928786	3.828831054	0.004109948	0.029078906	-2.165444684
EEPD1	1.050823546	5.108843291	3.314954921	0.00913656	0.045270932	-2.984616255
PBX3	1.049694518	0.22650107	3.774320666	0.004466421	0.030430197	-2.251122773
ENOPH1	1.04913653	5.012343665	3.364046195	0.00845388	0.04306402	-2.905403116
AARS	1.04865518	7.566406562	4.360415341	0.001865885	0.019338204	-1.348953409
LEMD2	1.04763686	3.250061444	3.267622426	0.009849302	0.047663726	-3.061134293
SLC35B2	1.047294273	5.630081189	3.485558876	0.00698349	0.038506389	-2.710074478
LARP1	1.045790417	8.474716013	4.663817501	0.001210653	0.015165231	-0.900074942
TMED5	1.045413946	1.27297003	3.59639237	0.005875366	0.034657112	-2.532972487
ZFAND3	1.045343471	7.17618232	5.019040034	0.000742094	0.011949383	-0.391541711
PGP	1.044796027	4.013714833	3.83309136	0.004083385	0.028997829	-2.158762433
RPS6KA3	1.0442198	8.375949382	4.069627499	0.00285992	0.023684253	-1.79112444
PSMC2	1.044050171	6.821437429	4.472305686	0.001588278	0.017631465	-1.181889292
SRRD	1.043904644	3.919271048	4.140512392	0.002574308	0.022276723	-1.68230432
C17orf62	1.04125962	0.726909227	3.419712324	0.007743736	0.040740689	-2.815782184
UTP18	1.039865737	5.273249891	4.443250414	0.001655836	0.017997411	-1.225102797
C6orf47	1.039015661	4.642430052	3.40121805	0.007972489	0.041478205	-2.845532512
SMYD5	1.038531974	3.906245064	4.270071693	0.00212787	0.020628443	-1.485114365
SPRYD3	1.037185322	5.185068739	3.249348182	0.010139747	0.048386241	-3.090711028
CYB5R3	1.036983288	4.216227102	4.296403659	0.002047677	0.020227933	-1.445312801
ZNF252P	1.035834934	6.349884297	4.222226472	0.002282286	0.021203522	-1.557674184
GMFB	1.033755589	6.59029885	3.781044339	0.004420738	0.030316416	-2.240536911
PDCL3	1.031672735	3.597116715	3.975010849	0.00329474	0.025690277	-1.937369374
ATL3	1.031118105	6.28839858	5.471734566	0.000408298	0.008803492	0.229368226
POLR1A	1.030684236	5.957125201	5.663302461	0.000319835	0.007898706	0.482968684
AP1S1	1.030669226	5.252621776	4.897342089	0.000875762	0.012888367	-0.563663461
BTBD1	1.026383971	3.155758742	3.94415096	0.003451322	0.026483893	-1.985307022

NOL6	1.026339736	3.494821675	3.343475849	0.008733225	0.043800826	-2.938575874
RCN2	1.025920124	5.149677643	3.846331749	0.004001983	0.028739125	-2.138008152
LMAN2	1.02573634	8.044151934	3.944588987	0.003449045	0.026483893	-1.984625785
ABHD12	1.024871673	4.420492408	4.569871948	0.001382193	0.016171865	-1.037659031
BSG	1.023709936	4.912027465	3.492455756	0.006908512	0.038236901	-2.699022718
NRAS	1.022354444	6.885713747	4.358569134	0.00187088	0.019338204	-1.351724661
GRPEL2	1.017596272	4.902979387	4.870785889	0.00090825	0.013089296	-0.601514884
LRP1	1.0173096	11.17658021	3.416053211	0.007788444	0.040872115	-2.821666295
C6orf106	1.016613217	5.498247889	5.086727875	0.000677416	0.011248449	-0.296761577
BRPF3	1.016253229	6.623415255	3.685349014	0.005120154	0.032671856	-2.391656333
BCORL1	1.013439009	4.401043473	3.342451901	0.008747379	0.043815498	-2.940227884
CACUL1	1.01204096	6.943306123	4.376600894	0.001822705	0.019093137	-1.324678313
C5orf22	1.01143263	5.432486813	3.440485364	0.007494958	0.039843771	-2.782397004
FRAT2	1.010794229	4.325903634	3.453919564	0.007338535	0.039469283	-2.760824196
EIF2S2	1.007985452	7.072511734	4.721584074	0.001116634	0.01452368	-0.816112077
FLOT2	1.007841662	6.466172351	3.498380779	0.006844774	0.038147528	-2.689531463
SRPRB	1.006771304	6.304924182	3.733844388	0.004752177	0.031591435	-2.314952621
PSAP	1.002354486	7.842458244	4.05541596	0.002921136	0.023945948	-1.81301899
DDX41	1.002285955	5.594683211	3.844035437	0.004015977	0.028776805	-2.141606186
ZBTB46	-1.001263531	3.509632247	-3.403209232	0.007947525	0.041401876	-2.842328231
C4orf29	-1.001698272	3.724885507	-4.203273066	0.002346723	0.021416374	-1.58650303
TOB1	-1.00241141	4.729442736	-4.026963402	0.003047919	0.024520679	-1.856930144
OSBPL11	-1.002420087	6.69340214	-3.704012807	0.0049751	0.03214434	-2.36210746
AIG1	-1.003775281	7.128948711	-3.80980353	0.004230836	0.029510645	-2.195314131
THNSL1	-1.005494323	5.155599099	-3.545489091	0.00635943	0.036438322	-2.614175987
GLIPR1	-1.006799479	4.386007317	-3.428759778	0.007634338	0.040291519	-2.801237596
ZNF330	-1.010415833	5.292804354	-3.851776271	0.00396901	0.028668385	-2.129479675
SOD1	-1.010501913	8.73491255	-3.416802949	0.007779262	0.040854211	-2.820460582
HELQ	-1.011285881	4.039833382	-3.735246785	0.00474196	0.031575307	-2.312738151
NKTR	-1.013000368	6.623106749	-3.364735349	0.008444684	0.04306402	-2.90429225
CYBB	-1.014912814	7.408478783	-3.467606836	0.007182676	0.038990516	-2.73885974
SHPK	-1.014968657	5.164968705	-4.188265848	0.00239912	0.021697241	-1.609363525
TANGO6	-1.018836142	5.272700781	-4.071373247	0.002852495	0.023684253	-1.788436678
ZNF700	-1.019291905	4.190328449	-3.717061203	0.004876265	0.032032303	-2.341470374
PCAT19	-1.020302123	1.369094936	-3.694180432	0.005050969	0.0324426	-2.377669803
KIF27	-1.022013926	3.310994492	-4.039426189	0.00299168	0.024280022	-1.837683654
TESK2	-1.022552861	3.659569981	-4.232956748	0.002246644	0.021073087	-1.541374336
RILPL2	-1.024102059	3.544280445	-3.535432605	0.00645992	0.036717565	-2.630246324
GPR146	-1.036432956	3.831975387	-3.663147636	0.005298526	0.033151312	-2.42685218
PROX1	-1.039697207	5.233138587	-3.381335423	0.008226309	0.042207832	-2.877544126
AGL	-1.040409054	3.426198743	-4.384491476	0.001802042	0.018978595	-1.312857225
ABCG8	-1.042771895	6.672140736	-3.908449786	0.00364237	0.027262816	-2.040908041
ALDH2	-1.047720611	7.725922404	-3.664195682	0.00528996	0.033132304	-2.425189596
SEMA5A	-1.04913802	6.39882619	-4.539084456	0.001443942	0.016669419	-1.083024588
CHD9	-1.049154973	7.299179774	-3.652924564	0.005382851	0.033441984	-2.443075457
REL	-1.049187034	4.655370248	-3.934385799	0.003502499	0.026745113	-2.000500155

FAM214A	-1.05465918	6.818618388	-4.128823855	0.002619231	0.022536364	-1.700203447
CCS	-1.055422312	5.052575191	-4.565501386	0.001390784	0.016223731	-1.044090789
MMAA	-1.058720078	5.636624677	-3.819275948	0.004170191	0.029240049	-2.180439226
ADAP2	-1.060815962	4.933091527	-4.039130603	0.002993001	0.024280022	-1.838139907
FAM210B	-1.061562609	7.151397254	-3.257697402	0.010005958	0.048171805	-3.077195602
SRSF2	-1.062511521	3.900406439	-3.753432595	0.004611551	0.031042578	-2.284040634
C1QC	-1.062893192	5.875577201	-3.49488443	0.006882311	0.038225861	-2.695131885
ITPRIP	-1.063464063	5.135917	-4.171973877	0.002457417	0.022004319	-1.634214875
CAT	-1.0634811	9.614198196	-3.806457793	0.004252478	0.029551506	-2.200570468
FLVCR2	-1.066751153	4.051595349	-3.753374626	0.004611961	0.031042578	-2.284132054
MAOB	-1.067962367	8.039213419	-3.414450615	0.00780811	0.040897053	-2.824243698
ZADH2	-1.068898478	6.01217663	-5.078317709	0.00068511	0.011327542	-0.308500819
C8B	-1.072171167	8.93779344	-3.671339573	0.005231959	0.032954165	-2.413859709
SFXN2	-1.077550131	4.593469708	-4.998174208	0.000763353	0.011993741	-0.420896676
GRK5	-1.095931601	4.41293704	-3.64933899	0.00541276	0.033441984	-2.448767964
RTN4	-1.097606437	5.568885829	-3.680453418	0.005158935	0.032808333	-2.399413035
C3orf58	-1.098073108	4.02358084	-3.538804664	0.00642604	0.036658493	-2.624856752
FLJ46906	-1.098221576	1.06916818	-3.686346588	0.005112289	0.032648366	-2.390076051
ANKRD44	-1.09885397	4.798305981	-3.617153433	0.005689201	0.034284578	-2.499922617
ANKRD36	-1.100606094	3.687759338	-4.373670907	0.001830441	0.01909728	-1.329070008
SORL1	-1.105146809	9.098025584	-4.037015713	0.003002471	0.02430631	-1.841404674
COL27A1	-1.106043653	6.013191656	-4.244794431	0.002208011	0.021001547	-1.523410226
FARP2	-1.106680876	4.81824256	-3.380641148	0.008235323	0.042226319	-2.878662441
ZBTB48	-1.10792071	3.94029451	-4.898618885	0.000874232	0.012888367	-0.561846233
RBL2	-1.108621322	7.508682815	-3.427983679	0.007643659	0.040291519	-2.802484999
LINC00174	-1.108638836	3.128838966	-3.647365141	0.0054293	0.033441984	-2.451902216
MGMT	-1.109228673	6.130496487	-4.897851901	0.000875151	0.012888367	-0.562937832
PSD4	-1.109457014	6.972255696	-4.43615881	0.001672787	0.018124143	-1.235668137
LOC728730	-1.111181105	2.808941669	-3.703586817	0.004978362	0.03214434	-2.362781495
HAGH	-1.111698942	4.347076014	-5.267961829	0.000532375	0.009921239	-0.046348928
NID2	-1.118713048	4.1552742	-4.143891249	0.002561475	0.022276723	-1.67713346
FAM188A	-1.119359629	4.603592141	-5.293380258	0.000514878	0.009743387	-0.011619315
PTMS	-1.120429913	8.32581999	-4.468017958	0.001598059	0.017646131	-1.18825886
DOCK2	-1.123486623	5.615431707	-3.457923478	0.007292579	0.039333205	-2.75439742
KLHDC2	-1.123516335	6.504152844	-4.258920947	0.002162834	0.020735571	-1.50199745
ZNF124	-1.12497574	3.880756277	-4.576577005	0.001369124	0.016139946	-1.027797154
GLCCI1	-1.128610277	4.246412025	-3.973583581	0.003301813	0.025690277	-1.939583933
WWC2	-1.131415201	6.556347158	-3.255268826	0.010044683	0.048251559	-3.081126505
RGL1	-1.13163843	6.159397777	-4.444929977	0.001651848	0.017979107	-1.222601558
DDTL	-1.132952564	4.091982417	-4.301182681	0.002033471	0.020189834	-1.438099301
SORD	-1.133996753	6.572502706	-4.140454557	0.002574528	0.022276723	-1.682392841
ALKBH7	-1.135383369	5.46781702	-3.571434298	0.006107677	0.035607528	-2.572757214
GPSM3	-1.136428667	3.799947661	-4.155907981	0.002516385	0.022189678	-1.658755659
SDHAP2	-1.138218943	3.71771856	-3.651548423	0.00539431	0.033441984	-2.445260087
SLC16A2	-1.138566561	7.13245159	-3.967714173	0.00333107	0.025866338	-1.948693564
SPRY2	-1.139096189	4.54044487	-4.239064815	0.002226621	0.021001547	-1.532102771

CLMN	-1.14839023	7.574971324	-3.677397837	0.005183298	0.032808333	-2.404255606
LOC100288069	-1.149107087	2.263257687	-3.391130827	0.008100223	0.041891412	-2.861769675
C1QA	-1.150017566	7.796015287	-3.54375853	0.006376605	0.036483159	-2.616940798
FLJ42627	-1.154592382	3.712415625	-3.941377358	0.003465777	0.026568687	-1.989621168
CFAP20	-1.158893	4.895249494	-4.529011423	0.001464783	0.016787497	-1.097896773
ANKS1A	-1.160209203	5.900662083	-4.870423054	0.000908703	0.013089296	-0.602032767
GIMAP4	-1.160856351	5.337518681	-4.20872941	0.002327976	0.021416374	-1.57819881
CTPS1	-1.16799608	6.594570667	-3.597802666	0.00586252	0.034639585	-2.530726123
CCNL1	-1.17059885	6.361409499	-4.652164011	0.001230632	0.015232668	-0.917072078
FCHSD2	-1.170716157	5.881341084	-4.735502636	0.001095173	0.014415692	-0.795954572
MORC3	-1.175065522	6.27077393	-3.709796681	0.004931032	0.032125998	-2.352957614
USP54	-1.175839449	4.892500835	-3.776255449	0.004453225	0.030430197	-2.248076113
RCBTB2	-1.176790508	3.949380156	-4.920310496	0.000848672	0.012761153	-0.531010098
PRKCH	-1.178493756	4.742734543	-3.80055903	0.004290921	0.029712818	-2.209840784
PUS10	-1.180902218	4.904420446	-4.22755219	0.002264511	0.02118974	-1.54957761
TET2	-1.182231253	4.59407845	-4.824670712	0.000967791	0.013431203	-0.667492183
DHX58	-1.18372335	3.943265944	-3.986013531	0.00324075	0.025494771	-1.920305898
CYB5D1	-1.185105931	4.153303823	-3.852831558	0.003962652	0.028660367	-2.127827032
TNFAIP2	-1.189182061	6.039219962	-3.358017076	0.008534776	0.043328601	-2.915123004
ABRACL	-1.190548833	4.51667092	-3.238489903	0.01031653	0.048955695	-3.108293615
RAB11B-AS1	-1.193886462	3.874679083	-3.439469779	0.007506925	0.039880217	-2.784028419
UAP1	-1.194214994	7.061650418	-4.757743292	0.001061797	0.01416455	-0.763803569
SLC19A3	-1.195172568	5.2912762	-3.605260184	0.005795077	0.034506137	-2.518850665
ZNF814	-1.196729702	3.746313562	-3.920462163	0.003576866	0.027048317	-2.022183001
FAM115C	-1.198328526	3.534905488	-4.856711482	0.000925992	0.013211052	-0.621617911
BAZ2B	-1.199409241	6.50338217	-3.870526497	0.003857637	0.028283689	-2.100134756
ERMARD	-1.207366544	4.265953903	-3.357362887	0.008543602	0.043328601	-2.916177809
MAF	-1.213154029	6.616390012	-4.33072674	0.001941334	0.019708211	-1.390044401
CFH	-1.214551263	6.126342304	-4.546613067	0.001428574	0.016565517	-1.071918569
ITIH1	-1.214826667	7.968937889	-4.185374835	0.002409356	0.021762287	-1.613770837
N4BP2L2	-1.215585701	6.230344715	-3.535732414	0.0064569	0.036717565	-2.629767098
ICAM3	-1.217685897	4.442423028	-3.506919235	0.006754003	0.037865115	-2.675858976
KHK	-1.219186119	5.833378454	-3.471456321	0.007139469	0.038853844	-2.732685052
WDR90	-1.223738264	3.361150809	-3.460133872	0.007267338	0.039275833	-2.750850013
TMEM256	-1.224035185	4.642622759	-4.464230269	0.001606753	0.017646131	-1.193887769
POLE	-1.224106545	5.790616837	-3.292961881	0.009460811	0.046332132	-3.020153783
THEMIS2	-1.228448608	3.806869348	-3.230047556	0.01045619	0.049305201	-3.121968384
SUMO1P3	-1.231190983	0.731213812	-4.711402364	0.001132618	0.014634027	-0.830875662
C1QB	-1.234681042	8.187690388	-3.807699828	0.00424443	0.029521867	-2.198619016
CBR4	-1.235832108	6.411253932	-3.503371171	0.006791568	0.038021086	-2.681539682
PCK2	-1.238241512	7.935361662	-3.896178403	0.0037106	0.02763122	-2.060054438
FGD2	-1.240191234	4.532806715	-3.732949232	0.004758711	0.03160594	-2.316366234
CROCCP2	-1.242848822	3.180879567	-4.171100744	0.002460583	0.022004319	-1.63554772
HCG11	-1.243285198	2.153802426	-3.300212093	0.009352615	0.045933168	-3.008435246
CLUHP3	-1.246397254	2.225779713	-4.16390013	0.002486864	0.022079054	-1.646543344
MLLT4	-1.255313381	3.579410845	-3.273011858	0.009765306	0.047422806	-3.052415079

GMFG	-1.256976292	3.774142074	-5.767892471	0.000280507	0.007428862	0.619153908
GNB4	-1.260332541	5.752625341	-4.5292795	0.001464224	0.016787497	-1.097500786
GSTP1	-1.263666911	4.580436404	-3.746858168	0.004658254	0.031199948	-2.294411115
KDM6B	-1.264460234	5.972229387	-3.354705808	0.008579548	0.043371215	-2.920462343
C1R	-1.266042962	10.63800801	-3.36266993	0.008472275	0.043129573	-2.907621653
ATG16L2	-1.273306876	3.439642369	-4.364568795	0.001854701	0.019298783	-1.342720588
AHSG	-1.273340187	11.18511032	-3.744713624	0.004673595	0.031199948	-2.297794913
CHIC2	-1.274823166	3.869493606	-6.255727595	0.000155052	0.005646635	1.233547925
RCSD1	-1.275312285	4.856813838	-3.996929272	0.003188114	0.025182228	-1.903391946
JMJD1C-AS1	-1.277236124	0.438666753	-4.090336462	0.002773146	0.023245579	-1.759265878
RASA3	-1.278384094	3.948427308	-3.742923019	0.004686446	0.031258996	-2.30062062
ALDH1L1-AS2	-1.279135279	2.534876093	-3.587740578	0.005954828	0.034993581	-2.546757427
ORC2	-1.280099239	1.369298251	-3.386824275	0.008155406	0.042064714	-2.86870407
ITPR3	-1.284587545	3.44168395	-3.414428537	0.007808382	0.040897053	-2.824279207
EVI2B	-1.284908164	5.086002642	-4.341337517	0.00191819	0.019593662	-1.377612969
42795	-1.285467175	6.129405731	-4.904084784	0.000867714	0.012888367	-0.554069503
LZTFL1	-1.288572186	4.192487093	-4.698358444	0.001153457	0.01469425	-0.849811628
SAT1	-1.289828509	5.928617747	-5.418589243	0.00043731	0.009100711	0.158053473
LONRF1	-1.290083529	4.729091468	-6.004639504	0.000209561	0.006314332	0.921560362
RANBP10	-1.293426132	5.821664239	-4.290688768	0.002064803	0.020294359	-1.453943005
HAO1	-1.298593133	8.306312734	-4.279963302	0.002097359	0.020554516	-1.470151832
MAT1A	-1.299635992	10.63110447	-4.665271412	0.001208185	0.015158647	-0.897955732
MLYCD	-1.300029171	5.341128858	-3.43510189	0.007558617	0.039991492	-2.791045816
A2M	-1.302470016	12.55208268	-4.579512089	0.001363445	0.016139946	-1.023482234
SLC45A3	-1.302715026	3.850468203	-4.787397213	0.001018986	0.01383985	-0.721048975
NT5DC1	-1.302802965	6.153349257	-4.092516187	0.002764177	0.023245579	-1.75591579
DNAH1	-1.303579616	5.568323175	-4.174007062	0.00245006	0.022004319	-1.631111592
NSUN6	-1.30403073	5.954970924	-3.437130752	0.00753456	0.039960435	-2.787786088
TNFRSF10D	-1.30410242	4.561535602	-4.229686338	0.002257444	0.021148967	-1.546340624
GIMAP8	-1.306487341	5.201353524	-4.294563196	0.002053175	0.020256613	-1.448091646
FOXN3-AS2	-1.306647138	0.760603957	-3.985284071	0.0032443	0.025496998	-1.921436719
USP53	-1.308974478	5.434283305	-4.474858647	0.001582484	0.017605889	-1.178098017
CD180	-1.309202937	3.273756361	-3.731454361	0.004769643	0.031624718	-2.318727096
PAH	-1.311391807	10.09440618	-3.499016197	0.006837975	0.038147528	-2.688513767
AGMO	-1.312971196	6.575395493	-4.816458767	0.000978827	0.013488461	-0.679274008
EMB	-1.313760548	4.518911324	-3.781032136	0.00442082	0.030316416	-2.24055612
LBH	-1.314641453	4.65106287	-3.862138927	0.003907043	0.028513644	-2.113256661
KLF6	-1.315013959	4.422797021	-3.287785911	0.009538849	0.046671586	-3.028521638
USPL1	-1.317379199	4.738030237	-4.736803827	0.00109319	0.014415692	-0.794071578
ACMSD	-1.318232316	6.388353825	-3.605078211	0.005796713	0.034506137	-2.519140379
PIK3CD	-1.318929712	4.044941438	-3.317042318	0.009106393	0.045207563	-2.981244878
PGM1	-1.328624332	5.723755211	-5.303576374	0.000508035	0.009740807	0.00228478
DCHS1	-1.328662411	5.242475997	-3.534857059	0.006465721	0.036719987	-2.631166321
LOC100289511	-1.329086453	1.021192866	-4.101911564	0.002725869	0.023072322	-1.74148273
BDH2	-1.329748514	5.751164743	-4.291499643	0.002062363	0.020294359	-1.452718211
HCLS1	-1.334537092	5.829925175	-4.463066566	0.001609434	0.017646131	-1.195617562

ADPRM	-1.342043674	3.225194709	-3.392442226	0.008083497	0.041846684	-2.859658329
PROSER2-AS1	-1.342202771	1.600523546	-4.486288303	0.001556824	0.017431065	-1.161135745
UNC13D	-1.344051852	3.48179301	-3.646727144	0.005434657	0.033441984	-2.452915367
FCER1G	-1.344557691	5.207673606	-3.678259766	0.005176413	0.032808333	-2.4028895
BIN2	-1.345821634	3.571395723	-3.361299746	0.008490631	0.043194839	-2.909830516
DISP1	-1.348873278	4.291855974	-4.696716759	0.001156108	0.01469425	-0.852196636
ASL	-1.351080374	3.875466152	-6.1092283	0.000184665	0.006055154	1.052598165
ESPNP	-1.352045717	-0.173561761	-3.485255483	0.006986808	0.038506389	-2.710560734
ABCC6	-1.356897922	7.214101058	-4.510774942	0.001503337	0.017102098	-1.124858667
LARP1B	-1.35734738	4.489481519	-4.265593637	0.002141838	0.020712397	-1.491892461
LYRM5	-1.364134636	5.525875685	-3.887761117	0.003758182	0.027819955	-2.073197723
DNAJB4	-1.364285867	5.182449056	-4.144973973	0.002557377	0.022276723	-1.67547682
UGT1A4	-1.365745145	7.146786204	-5.398415535	0.000448901	0.009194812	0.130873108
ABCG5	-1.366169006	5.886557966	-5.198969983	0.000583192	0.01039093	-0.141098635
GNG12-AS1	-1.366775982	0.064224912	-3.660090065	0.0053236	0.033262908	-2.431703232
TSPYL4	-1.372019076	4.220541685	-4.852958459	0.000930786	0.013219297	-0.626983448
PSMD6-AS2	-1.374737617	2.342083781	-3.65845837	0.005337031	0.033320155	-2.434292414
RND1	-1.377225975	4.384788443	-4.071571056	0.002851655	0.023684253	-1.788132155
SPRYD4	-1.377384898	5.911544298	-4.657823511	0.001220885	0.015190201	-0.908814977
SYNPO2	-1.37911652	4.541872174	-3.355808999	0.008564605	0.043363007	-2.918683392
DDX60L	-1.382303321	5.487087791	-3.385727147	0.008169527	0.042073582	-2.870470875
LOC729683	-1.383197421	0.404578073	-3.549609883	0.006318728	0.036301406	-2.60759353
MIR99AHG	-1.38499886	0.81196711	-3.317957656	0.009093197	0.045170788	-2.979766591
GOT2	-1.387207528	8.671422874	-3.243856689	0.010228757	0.048673914	-3.09960251
CD4	-1.392218607	4.441675084	-6.453282118	0.00012302	0.005082649	1.472830955
TMEM86B	-1.393587897	3.594492857	-4.648619259	0.001236779	0.015232668	-0.922246174
HNRNPU-AS1	-1.393713069	5.108593949	-3.643886071	0.005458582	0.033475958	-2.457427528
LINC00852	-1.395716704	0.632343176	-5.201914196	0.000580919	0.01039093	-0.137040725
DDB2	-1.399675467	4.37914176	-3.228049879	0.010489524	0.049372604	-3.125204721
SNED1	-1.400133913	4.828881399	-5.404591474	0.000445318	0.009169547	0.139200464
LCP2	-1.400549063	5.373208565	-4.373832682	0.001830013	0.01909728	-1.328827497
AGXT2	-1.400944443	5.824846194	-3.402810849	0.007952513	0.041401876	-2.8429693
ZC3H13	-1.402845316	7.095277265	-3.626715329	0.005605556	0.034035673	-2.484714742
MINOS1P1	-1.404170213	1.569495289	-3.244506101	0.010218189	0.048653291	-3.098550939
SRSF5	-1.406126591	4.699524804	-4.47964873	0.001571676	0.017521937	-1.170987
PER3	-1.40797496	6.210337475	-3.64358937	0.005461087	0.033475958	-2.457898792
HPN	-1.409880668	4.876249905	-5.099968705	0.00066549	0.01116878	-0.27830086
MTMR9LP	-1.415306886	1.339691083	-4.828801836	0.000962289	0.013410187	-0.661568946
ADK	-1.41594793	3.459896819	-4.209643511	0.002324851	0.021416374	-1.576807992
none	-1.416048143	4.682161423	-4.618796534	0.001289819	0.015597514	-0.965849123
F2R	-1.419609646	5.341796128	-3.457880223	0.007293074	0.039333205	-2.754466843
SNORD17	-1.419741587	5.174038175	-3.435166269	0.007557853	0.039991492	-2.790942374
CLK1	-1.434703349	5.036461631	-4.056776951	0.002915213	0.023922529	-1.810921114
ZNF470	-1.44067972	3.309182112	-4.322778812	0.001970578	0.019867443	-1.405540911
HDAC6	-1.441303174	6.880842195	-6.443128748	0.000124478	0.005082649	1.460663754
FGL2	-1.446691029	7.153971542	-4.987979687	0.000773978	0.012080244	-0.435262327

RAD54L2	-1.448764954	5.908570932	-5.547629525	0.000370424	0.00852741	0.330485915
KLHL15	-1.448810487	5.479820204	-5.889332805	0.000241314	0.006949465	0.775283895
RASGEF1B	-1.44999479	6.231566412	-4.915231373	0.000854584	0.012800719	-0.538224169
SLC9A9	-1.454782804	4.562229687	-4.589555715	0.001344202	0.016015503	-1.00872631
TMEM56	-1.454969001	5.016127577	-3.898051356	0.003700099	0.027605708	-2.057131021
DAPK1	-1.456644067	7.10778921	-4.539471411	0.001443148	0.016669419	-1.082453564
HERC5	-1.460771832	4.633566034	-3.552861337	0.006286806	0.036235033	-2.602400804
AKR1C8P	-1.461584748	3.395542596	-3.710279185	0.004927374	0.032125998	-2.35219447
C11orf54	-1.463775239	7.692088565	-4.14255496	0.002566542	0.022276723	-1.679178281
AQP3	-1.465300639	5.421758028	-5.209657998	0.000574987	0.010341966	-0.126373868
PDK4	-1.467640946	10.4073635	-4.492618497	0.001542804	0.017424082	-1.151749354
PER2	-1.468160265	5.963934873	-3.526675557	0.006548783	0.037007023	-2.644247408
DHRS1	-1.469769769	3.644541372	-4.199534412	0.002359661	0.021447015	-1.592195321
MNDA	-1.473903955	3.314957642	-5.436186235	0.000427464	0.008991719	0.181712901
MYO1F	-1.476038823	4.975509998	-4.514598836	0.001495163	0.017033948	-1.119201261
LOC100507577	-1.480642329	4.24942506	-3.918729807	0.003586235	0.027092913	-2.024882361
MUT	-1.487900209	8.04001333	-6.556157107	0.000109262	0.004814634	1.595319637
RGMB	-1.489343619	4.791303196	-4.223129784	0.002279262	0.021203522	-1.556301411
CCR1	-1.491360174	4.579410263	-4.964049173	0.000799549	0.012339066	-0.469044809
NNMT	-1.494053214	8.361084465	-3.620826751	0.005656914	0.034222136	-2.494079286
DENND3	-1.494309959	4.127777578	-4.843795219	0.000942604	0.013313805	-0.640092487
AR	-1.496676356	6.330821322	-6.36449807	0.000136421	0.005376935	1.365959289
MS4A6A	-1.497788445	3.469635019	-6.229397576	0.000159968	0.00575295	1.201247974
SLC19A2	-1.498177146	6.596606688	-6.022767388	0.000204996	0.006288962	0.944383998
NTN4	-1.502138764	5.625165928	-4.944181829	0.000821471	0.012570125	-0.497155992
42796	-1.504022828	6.67653942	-4.301380582	0.002032885	0.020189834	-1.437800655
ANO1	-1.504348415	5.420821183	-3.565941726	0.006160085	0.035727983	-2.581520434
GOLGA8S	-1.506883802	3.444857986	-3.217927626	0.01066013	0.049964959	-3.141606357
PPP1R1A	-1.509610432	5.760145938	-3.546687887	0.006347561	0.036397038	-2.612260903
SS18L1	-1.510895514	5.673931802	-6.250863763	0.000155948	0.005646635	1.227588577
KLF12	-1.512865967	6.842056549	-4.34585842	0.001905655	0.019567926	-1.370816915
BCKDHB	-1.517241535	4.985871411	-4.462035632	0.001611814	0.017646131	-1.197150162
ZFAND5	-1.51768225	5.349745085	-3.443030015	0.007465064	0.0398437	-2.778309685
NOTCH2NL	-1.522536096	5.982965748	-4.309197588	0.002009883	0.020083392	-1.426008543
GPD1	-1.529597627	4.155253523	-3.862284052	0.003906182	0.028513644	-2.113029552
PXMP2	-1.534155895	6.931371136	-4.805580688	0.000993656	0.013556805	-0.694896295
SLC31A2	-1.53424369	5.133103451	-6.249022531	0.000156288	0.005646635	1.22533177
STX11	-1.5458266	4.113611281	-3.976452275	0.003287613	0.025690277	-1.935133098
FGF14-AS2	-1.546387221	1.39553199	-4.023478516	0.003063845	0.024520679	-1.86231539
DUSP10	-1.547598456	4.621233522	-6.290230147	0.000148858	0.005646635	1.27572718
MST1	-1.549547702	7.763157547	-3.268277859	0.009839047	0.047662272	-3.060073822
HGD	-1.550309424	8.878025482	-4.548317454	0.001425119	0.016564513	-1.069405428
PRKCB	-1.551598845	3.802110696	-5.684468072	0.000311417	0.007796851	0.510657133
SELENBP1	-1.555156218	3.444179101	-4.929431606	0.000838166	0.012701065	-0.518064642
LRRK1	-1.557765775	4.057234027	-4.343151713	0.00191315	0.019590613	-1.374885437
DBT	-1.562668835	6.779675847	-5.633412977	0.000332146	0.008074966	0.443756028



EP400NL	-1.566128293	1.615830989	-3.398157465	0.008011021	0.041623176	-2.85045828
CYBA	-1.570867957	5.741801985	-4.162066669	0.002493604	0.022093084	-1.649344202
ACAD11	-1.571691847	5.468229697	-6.025229845	0.000204385	0.006288962	0.947480701
MRS2P2	-1.572376146	1.068698498	-4.261500002	0.002154693	0.020735571	-1.498091065
MEIS3P1	-1.57304592	1.795311828	-3.780205296	0.004426412	0.030328108	-2.241857645
KLF2	-1.579853177	5.147057942	-3.648824971	0.005417062	0.033441984	-2.449584132
MTURN	-1.580961571	3.911906037	-4.852282857	0.000931652	0.013219297	-0.627949548
TLR2	-1.593699987	5.012946181	-4.895872008	0.000877528	0.012888367	-0.565756085
MGC12916	-1.595294369	2.00678781	-3.38859502	0.008132669	0.042003539	-2.865852661
TMEM220	-1.596344584	6.631058177	-4.784267544	0.001023415	0.013841827	-0.725555183
LINC01558	-1.611012291	2.436263341	-3.64852594	0.005419567	0.033441984	-2.450058949
GSTA1	-1.614214477	9.439863303	-3.935528203	0.003496471	0.026729725	-1.998722153
N4BP2L2-IT2	-1.617554671	4.013783288	-4.17651453	0.002441019	0.021971986	-1.627285154
H1FX-AS1	-1.618001896	0.190242371	-4.199374402	0.002360217	0.021447015	-1.592438986
LOC100505658	-1.618606465	2.122489698	-4.309501001	0.002008996	0.020083392	-1.425551007
PPARGC1A	-1.620100742	7.721054956	-3.565768031	0.006161751	0.035727983	-2.581797603
RTTN	-1.628938327	4.889446445	-4.705554248	0.00114191	0.01469425	-0.839362345
CENPC	-1.629098364	5.086863324	-6.124116593	0.000181391	0.006017157	1.071125379
CD163	-1.63229788	3.658986497	-4.374741972	0.001827609	0.01909728	-1.327464474
RPL21P44	-1.634137914	0.503058011	-3.352283359	0.008612458	0.04347317	-2.924368953
LOC145474	-1.637130864	0.430955448	-4.691109518	0.001165215	0.014737987	-0.860345698
SDC3	-1.64756823	7.248430977	-4.466236139	0.001602143	0.017646131	-1.190906578
STARD13-AS	-1.651787945	0.663965674	-4.779195629	0.001030638	0.013915391	-0.732860967
ECHDC2	-1.651889837	4.337541831	-5.681518571	0.000312576	0.007796851	0.506802584
TNRC6C-AS1	-1.652241977	2.017333042	-4.656156415	0.001223748	0.015190201	-0.911246753
SAMD9L	-1.653459159	5.506568556	-3.311042649	0.009193383	0.045465879	-2.99093574
GCKR	-1.657288234	6.173082309	-4.351012615	0.001891471	0.019499395	-1.36307231
AQP7P1	-1.664720463	3.590920401	-3.850819831	0.003974781	0.028668385	-2.130977627
NIPAL1	-1.66508691	3.676119771	-3.482915203	0.007012456	0.038545022	-2.714311823
DOCK10	-1.666476674	5.443947837	-4.559047122	0.001403575	0.016348506	-1.053593964
AMER1	-1.667531671	4.707707586	-6.753496555	8.73E-05	0.004360963	1.826301989
SCARNA6	-1.669674628	4.955317453	-3.478591162	0.007060104	0.038589627	-2.721243747
LINC01239	-1.671984022	2.081885043	-3.636575471	0.005520656	0.03373782	-2.469041789
APOC4-APOC2	-1.679369678	1.98446968	-4.064141512	0.002883387	0.023786422	-1.799573211
HRSP12	-1.683690084	8.297396014	-3.319956838	0.009064445	0.045085358	-2.976538063
CYP4F12	-1.687287131	5.351004812	-3.869274884	0.003864967	0.028294751	-2.102092321
RRN3P2	-1.68819107	1.338308358	-3.532962314	0.006484859	0.036747438	-2.634195234
OTC	-1.688703988	7.315499208	-4.614790704	0.001297128	0.015597514	-0.971715752
SRGN	-1.693342288	5.716056048	-5.199606031	0.0005827	0.01039093	-0.140221882
NFAM1	-1.69561837	4.248522095	-4.279370764	0.002099173	0.020554516	-1.471047758
ZNF518B	-1.69625949	3.490189531	-5.146021659	0.000625745	0.010757019	-0.21429606
SCARNA5	-1.697351744	7.043065405	-3.820246013	0.004164033	0.029223123	-2.178916463
AVPI1	-1.697600283	4.287680976	-3.975340945	0.003293106	0.025690277	-1.936857229
CYP4F2	-1.703001844	7.497462728	-4.794756995	0.001008651	0.013737369	-0.710457784
TMEM47	-1.703363192	5.813622167	-5.113043066	0.000653936	0.011046143	-0.260097871
GPT2	-1.706629831	4.69647494	-4.203128585	0.002347222	0.021416374	-1.586722976

ACSM5	-1.708110877	7.055506067	-3.989304972	0.003224782	0.025394753	-1.915204263
GAMT	-1.711567705	6.246590394	-3.960271919	0.003368563	0.02607963	-1.960250365
BOK	-1.711960953	6.321298823	-4.41854276	0.001715706	0.01841729	-1.261943818
ID2	-1.71466852	7.859311161	-8.442136537	1.53E-05	0.001835552	3.605860911
PFN1P2	-1.720152089	5.621735189	-3.417918771	0.007765616	0.040810014	-2.818666218
C1orf162	-1.72034243	3.783056942	-5.188169169	0.000591611	0.01044555	-0.155996097
CHAD	-1.724057593	3.601202037	-6.62912455	0.000100525	0.004669639	1.681332398
ALB	-1.725449318	16.12314701	-5.956081184	0.000222342	0.006572555	0.860192406
SLC17A1	-1.725698341	4.464572067	-3.877315768	0.00381813	0.028163219	-2.089519268
C1RL	-1.732889558	7.521763191	-5.864430804	0.000248838	0.007010575	0.743442529
ACADS	-1.740011654	6.581961878	-7.003628637	6.62E-05	0.003856614	2.111718907
ZFP1	-1.742313016	4.839968506	-4.868785529	0.000910749	0.013089296	-0.60437029
ETNK2	-1.743411479	7.472312583	-5.700796358	0.000305088	0.007723293	0.531972694
ACADSB	-1.7440473	9.311760331	-4.404710707	0.001750231	0.018608752	-1.282605911
CNKSR3	-1.747168463	6.012195181	-4.700486883	0.001150028	0.01469425	-0.846720058
IL18R1	-1.752394971	3.536657662	-5.278582379	0.000524987	0.009848559	-0.0318262
ADM	-1.753094741	4.941390498	-3.884192259	0.003778552	0.027924069	-2.078772867
GRHPR	-1.759822737	8.245313921	-4.68930215	0.001168167	0.014751413	-0.862973342
FRMD4B	-1.760789529	6.199086033	-8.174314009	1.98E-05	0.002173701	3.345494701
SPSB3	-1.765219749	4.800767317	-6.657172682	9.74E-05	0.00460542	1.714205245
LINC00987	-1.780226823	2.354803455	-4.304573896	0.002023455	0.020189834	-1.432982465
ACAA1	-1.781067389	6.60909819	-4.61637675	0.001294229	0.015597514	-0.969392673
IFI44	-1.782056094	4.280360232	-4.260269043	0.002158574	0.020735571	-1.499955435
YAF2	-1.788281999	3.342801767	-3.887284032	0.003760899	0.027819955	-2.073942923
STARD5	-1.791628666	3.624455519	-4.7656498	0.001050196	0.014033789	-0.752391443
MYO9A	-1.792350927	5.581399886	-5.487215483	0.000400245	0.008783787	0.25006314
PPP1R3B	-1.794537515	4.406543888	-3.753410542	0.004611707	0.031042578	-2.284075411
GNN	-1.795098867	0.055369845	-3.770852852	0.004490178	0.030470735	-2.256584485
SLC38A4	-1.796771688	6.003930917	-3.995066776	0.00319703	0.025227124	-1.906276848
SH3BP5-AS1	-1.797886776	3.967878264	-5.002564094	0.000758827	0.011993741	-0.414715411
ZEB2	-1.798090867	3.100722762	-5.52043764	0.000383537	0.008649637	0.294354959
GPR65	-1.800356051	3.354214941	-4.416125609	0.001721686	0.018456099	-1.265552585
BRE-AS1	-1.80470159	0.73337138	-5.543468493	0.000372399	0.008547653	0.324964053
MX2	-1.809396988	3.329036597	-4.852798729	0.000930991	0.013219297	-0.627211853
C8A	-1.810201394	8.717795456	-5.156946458	0.000616697	0.010719315	-0.199159063
MMP19	-1.811598625	3.48511147	-3.716414696	0.004881113	0.032037181	-2.342492458
ACOX2	-1.811770201	7.194998815	-3.976224863	0.003288736	0.025690277	-1.935485895
PPP1R15A	-1.813580849	5.773566567	-5.697329351	0.00030642	0.007723293	0.527449992
FLJ42393	-1.815253589	2.031376554	-6.117969208	0.000182735	0.006017157	1.063479277
MIR100HG	-1.824320869	2.4057646	-3.631169687	0.005567033	0.033915009	-2.477633253
PLCB2	-1.825361501	4.481540155	-5.775207927	0.00027796	0.007428767	0.628619579
NAAA	-1.82672743	3.449136627	-7.887991483	2.62E-05	0.00237146	3.058499244
PER1	-1.827428615	7.422305992	-4.739565847	0.001088992	0.014404232	-0.790075393
JUN	-1.831837244	7.963623981	-6.443307736	0.000124452	0.005082649	1.460878364
SGCB	-1.832256586	3.909828982	-3.394495638	0.008057379	0.041752844	-2.856352597
SLC25A15	-1.833616168	7.856169597	-3.540403482	0.006410042	0.036595985	-2.622301708

ARHGAP15	-1.83479737	3.793279341	-7.038887295	6.37E-05	0.003823348	2.151302856
PEAR1	-1.837366656	3.284210019	-4.399213655	0.001764158	0.018680441	-1.290824757
ARHGAP10	-1.842340273	3.545754059	-6.959098787	6.95E-05	0.003856614	2.061499455
SIGLEC1	-1.842365292	6.202397912	-5.574028792	0.000358158	0.008469895	0.365459373
TGDS	-1.851438442	4.484671766	-5.557846003	0.000365624	0.008514873	0.344032776
METRN	-1.857204431	3.221006788	-3.5359069	0.006455143	0.036717565	-2.629488196
KCNJ8	-1.865890975	6.519257841	-4.33141795	0.001946004	0.019722875	-1.39253446
SCP2	-1.8679029	4.973707177	-6.864820434	7.71E-05	0.004048164	1.954332863
ZG16	-1.868101578	3.722692519	-3.32418362	0.009003967	0.044841711	-2.96971296
DMGDH	-1.871759937	7.735989674	-7.536060084	3.75E-05	0.002790456	2.692971102
PLIN5	-1.874641019	5.491762634	-4.150235717	0.002537562	0.022275454	-1.667428185
SERPINF2	-1.8881128	6.181021662	-5.482944749	0.000402449	0.008783787	0.244357557
TIAM1	-1.895623761	4.576774615	-6.03189942	0.000202738	0.006288962	0.955863796
LOC100288123	-1.89578598	-0.001935549	-4.274055198	0.002115526	0.020624236	-1.479087122
LINC00641	-1.900437807	2.894461499	-4.236918574	0.002233635	0.021001547	-1.535360025
TMC8	-1.901355872	3.755454588	-5.409421386	0.000442537	0.009169547	0.145708954
GCDH	-1.904215989	4.227652027	-6.609433233	0.000102805	0.004691771	1.658191023
SCART1	-1.905858894	0.745722704	-3.442223694	0.007474523	0.0398437	-2.779604774
MYCT1	-1.908557685	3.887200255	-5.192408022	0.000588291	0.010415877	-0.150147414
ADHFE1	-1.91342202	5.170390429	-4.380564464	0.001812294	0.019009602	-1.318739301
DCAF11	-1.915148442	1.607468828	-3.451849147	0.007362418	0.039570462	-2.764147971
AIM1	-1.922170863	5.895829226	-3.616133842	0.005698198	0.034294035	-2.501544761
PPAP2B	-1.926275529	7.93449856	-8.574549125	1.35E-05	0.001671021	3.731792204
LOC643770	-1.932277339	0.310776795	-4.141736967	0.002569649	0.022276723	-1.680430109
GVINP1	-1.936879802	4.745137713	-5.153981217	0.000619139	0.010733663	-0.203265834
AZGP1P1	-1.94009031	4.606193257	-4.246187089	0.002203513	0.021001547	-1.521298057
DSEL	-1.946550982	4.571053584	-3.82398581	0.004140381	0.029185018	-2.173046895
ZFP36	-1.949270869	7.983778159	-4.110597856	0.002690954	0.022923865	-1.728149067
GIPC2	-1.950889801	4.956108799	-3.981482441	0.003262869	0.025617135	-1.927331129
ZNF808	-1.956624315	4.044687356	-3.61190905	0.005735635	0.034431456	-2.508267362
CMAHP	-1.962377865	1.668984659	-4.829189452	0.000961775	0.013410187	-0.661013308
F8	-1.966615291	5.852859169	-6.987149235	6.74E-05	0.003856614	2.093163521
SDPR	-1.967680059	5.912168589	-7.236021129	5.15E-05	0.003320479	2.369727541
ITIH4	-1.969458789	6.142154097	-6.52578951	0.00011314	0.004878151	1.559311545
MEGF6	-1.980403427	3.556948691	-3.252409777	0.010090473	0.048301399	-3.085754587
TLE4	-1.99295759	3.998547549	-6.488018463	0.000118174	0.00506721	1.51435065
CIDEB	-2.000743725	7.207933152	-4.474314308	0.001583718	0.017605889	-1.17890631
CFD	-2.001688434	4.061642634	-6.955116645	6.98E-05	0.003856614	2.056996127
MTHFD1	-2.006583534	8.513779291	-5.217622962	0.000568955	0.010341966	-0.115411689
MASP2	-2.007105085	5.965145304	-4.518535029	0.0014868	0.016963427	-1.113379889
FKBP5	-2.011592663	6.846055518	-6.219210599	0.000161915	0.005769801	1.188725276
DAK	-2.018082966	7.31454006	-4.73354727	0.001098161	0.014427694	-0.79878471
P2RY13	-2.018839419	4.22828754	-6.090712718	0.000188827	0.006098467	1.029513366
PDXDC2P	-2.021674162	5.072281178	-4.600024735	0.001324454	0.015828545	-0.993360895
SLC16A10	-2.021986606	3.234001939	-5.004268037	0.000757078	0.011993741	-0.412316912
PSD3	-2.026469121	6.039456286	-3.879340885	0.003806429	0.028103472	-2.086353895

PLGLA	-2.034323577	3.542827247	-4.88589042	0.001847614	0.019250709	-0.992677293
NINL	-2.038321254	4.20171775	-4.226587578	0.002267728	0.021194426	-1.551047573
MRC2	-2.039777327	4.347655196	-3.532840037	0.006486096	0.036747438	-2.634390715
LOC148696	-2.04498474	3.340579904	-5.769147782	0.000280068	0.007428862	0.620778744
EMR4P	-2.053626488	0.986164273	-3.318231882	0.009089247	0.045170788	-2.979323721
FBP1	-2.054226198	6.385637271	-4.487056231	0.001555116	0.017431065	-1.159996761
GABARAPL1	-2.055476206	6.831500125	-6.170097938	0.000171673	0.005879781	1.128147839
FAXDC2	-2.056026965	6.626213135	-5.739665153	0.000290576	0.007530659	0.582556782
ACSM2A	-2.060749884	7.709057142	-3.252863651	0.01008319	0.048301399	-3.085019849
MT1L	-2.063416616	1.733729827	-3.78449649	0.005464937	0.033475958	-2.317402518
ADAMTS1	-2.063888002	6.213819286	-4.879022004	0.000898038	0.013002386	-0.589764509
BTG2	-2.070061847	5.497341067	-4.090693316	0.002771676	0.023245579	-1.758717376
LOC100130476	-2.083198615	0.891176616	-3.508675949	0.006735485	0.037788442	-2.673046747
CCL5	-2.084899195	4.104198861	-5.222567626	0.000565244	0.010341966	-0.108611104
ACADL	-2.089180492	4.868392594	-4.169968685	0.002464695	0.022007418	-1.637275967
CPED1	-2.089946142	5.152738152	-5.713517988	0.000300253	0.007657435	0.548552982
DUSP1	-2.094370579	9.224870107	-4.242482997	0.002215498	0.021001547	-1.526916429
IRF8	-2.101690514	5.324224311	-6.633189688	0.000100061	0.004669639	1.686103314
HLF	-2.102872152	7.372087565	-5.841516302	0.000255986	0.0070841	0.714063384
SERPINA4	-2.108718784	7.78569506	-4.167311548	0.002474376	0.022068607	-1.641333121
C1orf168	-2.109279102	4.792723552	-6.650907617	9.81E-05	0.004610339	1.706871599
LOC729603	-2.116064662	3.114452479	-5.430924614	0.000430382	0.009004993	0.174643381
DCXR	-2.120655313	6.282959994	-4.315166346	0.001992507	0.020009542	-1.417010187
FOXO1	-2.121531447	7.163650716	-5.215651863	0.000570441	0.010341966	-0.118123632
COL14A1	-2.123014335	5.471557422	-3.249115518	0.010143502	0.048386241	-3.091087711
NR2F1-AS1	-2.134926141	1.082691635	-3.415669722	0.007793145	0.040872115	-2.82228303
LINC01128	-2.142642662	2.058295621	-5.038284235	0.000723053	0.0117752	-0.364525548
F11	-2.144163839	7.315146374	-3.711492052	0.004918193	0.032125998	-2.350276266
EGFR-AS1	-2.148111056	1.94905762	-3.411799571	0.007840756	0.041039076	-2.828507708
THBD	-2.148257852	4.510489878	-5.468072731	0.000410229	0.008819353	0.224467893
SLED1	-2.157158278	2.158703326	-5.710066762	0.000301556	0.007665622	0.544057285
CYP4V2	-2.158239113	7.637277894	-7.465328193	4.04E-05	0.002852665	2.617750344
PON3	-2.161667073	7.740792227	-6.316149464	0.000144383	0.005605787	1.307304674
RBP5	-2.166038882	5.414883594	-5.910021717	0.000235252	0.006835756	0.801670129
RSAD2	-2.168205308	3.306918723	-4.461863859	0.001612211	0.017646131	-1.197405535
FAT4	-2.169924298	5.869681991	-4.118338992	0.002660239	0.02273878	-1.716274453
GCH1	-2.177339748	5.04257942	-4.576626209	0.001369029	0.016139946	-1.027724807
SSTR1	-2.177830178	3.06550984	-4.126328318	0.00262893	0.022594904	-1.704027266
ITK	-2.189932858	3.228205604	-3.482101128	0.0070214	0.038545022	-2.715616759
CRISPLD2	-2.192348876	4.591992863	-4.069163264	0.002861898	0.023684253	-1.791839242
C1RL-AS1	-2.194095435	3.742860044	-6.56534826	0.000108117	0.004814634	1.606193419
FETUB	-2.196790874	6.559403028	-3.597156592	0.005868401	0.034642211	-2.531755187
EPB41L4B	-2.202458557	5.756681567	-4.237734172	0.002230966	0.021001547	-1.534122155
CHRD	-2.208677888	4.842958358	-5.211371548	0.000573684	0.010341966	-0.124014711
RGS2	-2.21761846	4.817851524	-4.021020452	0.003075131	0.024520679	-1.866114784
MST1P2	-2.222373623	4.804056417	-3.44085512	0.007490607	0.039843771	-2.781803056

VPS37B	-2.233283274	4.280519951	-5.7373402	0.000291422	0.007530659	0.579537273
RGS1	-2.241877852	5.593463641	-4.830031214	0.000960659	0.013410187	-0.659806741
PAIP2B	-2.245233401	5.571545891	-4.730411944	0.001102971	0.014454611	-0.803323856
FMO2	-2.245614525	3.829195061	-5.348624623	0.000478958	0.009400439	0.063530435
CCDC88C	-2.248855795	4.266552493	-4.745597748	0.001079886	0.014308029	-0.781352125
TSPAN7	-2.256227491	4.460203906	-8.397510247	1.60E-05	0.001857945	3.563006736
SULT1A1	-2.270134058	4.429240686	-3.369586032	0.008380254	0.042854198	-2.896474233
EPB41L4A	-2.270406317	4.248485543	-6.591459312	0.000104936	0.004740554	1.63702257
TRABD2B	-2.272801057	3.395378938	-4.5197665	0.001484193	0.016958484	-1.111559079
LINC01197	-2.280888921	-0.112663566	-3.868321701	0.00387056	0.028309135	-2.103583254
IER2	-2.282744793	5.727155047	-5.555743311	0.000366607	0.008514873	0.341245902
AKR7A3	-2.285119988	6.963400324	-7.205882579	5.32E-05	0.00338661	2.336648922
PPL	-2.298496974	4.881032913	-5.014465149	0.0007467	0.011970847	-0.397972316
BASP1	-2.29984637	4.072076178	-4.980848317	0.000781505	0.012149128	-0.445320712
PPM1K	-2.305131415	4.56521533	-4.910191139	0.000860495	0.012839961	-0.545386789
FAM95B1	-2.307021115	-0.325367265	-7.987610379	2.38E-05	0.002317461	3.159387432
LRRC3	-2.309444565	4.477193858	-3.887287142	0.003760881	0.027819955	-2.073938064
ALDH6A1	-2.314526725	8.280040577	-3.26342003	0.009915319	0.047902936	-3.067934212
RGPD1	-2.316502369	4.89444174	-4.527278315	0.001468401	0.016802637	-1.100457059
TNXB	-2.328295808	5.468994534	-3.771667493	0.004484585	0.030459269	-2.25530133
MAN1C1	-2.329649039	5.362341916	-3.40836044	0.00788332	0.041123949	-2.834040081
C11orf96	-2.333791786	3.922340032	-4.718826186	0.001120939	0.014555423	-0.820109545
MPPED1	-2.33645015	3.205171182	-3.497378357	0.006855514	0.038160078	-2.69113703
HK3	-2.353667864	3.519190264	-6.099600026	0.000186817	0.006076833	1.040599911
JUNB	-2.357617487	6.831106179	-5.247490014	0.000546935	0.010114407	-0.074389842
TTR	-2.364435247	10.92139882	-3.61577441	0.005701373	0.034294035	-2.502116633
OXER1	-2.375470675	3.598644655	-3.891760176	0.003735496	0.02773721	-2.066952304
RDH16	-2.380854888	7.612115618	-5.497149643	0.000395167	0.008783787	0.263324469
SERPINA11	-2.386787592	7.702342861	-3.351894048	0.008617759	0.04347317	-2.924996819
ANGPTL1	-2.387003009	4.250701458	-3.482869615	0.007012956	0.038545022	-2.714384898
PRKAG2	-2.389736701	3.50843025	-4.469712796	0.001594185	0.017646131	-1.185740808
PPIEL	-2.396694366	0.803306556	-8.991025438	9.20E-06	0.001408144	4.116285597
GPT	-2.434206558	5.851438675	-5.446226213	0.000421954	0.008948175	0.195191245
CD1D	-2.444065344	3.192681165	-8.739271283	1.16E-05	0.001536955	3.885938839
LECT2	-2.445715304	5.888733421	-4.158283527	0.002507571	0.022136976	-1.655124856
NR0B2	-2.451787187	6.681307799	-5.207717199	0.000576468	0.010341966	-0.129046421
EMILIN1	-2.456055525	4.93682829	-3.666184377	0.005273746	0.033110473	-2.4220351
SLC25A25	-2.456846593	4.474551703	-4.382309063	0.001807732	0.019004713	-1.316125888
LRRK2	-2.459594227	5.435735953	-6.901466322	7.41E-05	0.003958821	1.996124907
GRASP	-2.470496851	2.956573898	-6.025845068	0.000204232	0.006288962	0.948254249
CFHR3	-2.47523759	6.569223686	-5.449624184	0.000420107	0.008938769	0.199749528
AFM	-2.48154538	8.37644578	-6.445619512	0.000124118	0.005082649	1.463649842
GADD45B	-2.483970485	7.029983726	-7.579402925	3.59E-05	0.002747553	2.738770051
CXCL2	-2.490857814	6.799151499	-6.28455527	0.000149858	0.005646635	1.268801038
TUBE1	-2.49113792	5.262226534	-6.474654284	0.000120014	0.005082649	1.498396148
RAMP3	-2.493254545	3.467889904	-5.301517064	0.000509409	0.009740807	-0.000522184

ABCA10	-2.494945204	3.708090162	-6.290798086	0.000148759	0.005646635	1.276420098
HAAO	-2.512414374	6.752528473	-9.375977125	6.54E-06	0.001160467	4.456702003
ADAMTS2	-2.524385474	4.386248261	-5.449148035	0.000420365	0.008938769	0.199110891
LIME1	-2.533577699	5.679042864	-8.712475818	1.19E-05	0.001543617	3.86105101
ADH1A	-2.553591662	9.159758016	-3.399678665	0.007991846	0.041551208	-2.848009944
LINC00538	-2.561361096	0.252383684	-4.893608124	0.000880254	0.012888367	-0.568979294
CYTIP	-2.56461583	4.18258723	-5.307755383	0.000505259	0.009740807	0.007979082
C6	-2.57162334	5.606565178	-7.727750469	3.08E-05	0.002506852	2.893850052
LYVE1	-2.575264232	5.264375971	-3.607364587	0.005776193	0.034497129	-2.515500537
RNF125	-2.578772598	5.650511947	-5.471611538	0.000408363	0.008803492	0.22920362
EHMT1-IT1	-2.593506013	-0.23279779	-3.732293398	0.004763504	0.03161087	-2.31740197
DUSP5	-2.601896586	4.251955843	-5.734031119	0.000292632	0.00753696	0.575238277
SLFN1-AS1	-2.603606024	3.865112072	-5.581238323	0.000354885	0.008432648	0.374992633
CLEC3B	-2.623484728	3.409097221	-4.131620635	0.002608407	0.022492826	-1.695919005
RCL1	-2.64109967	6.422340451	-8.7522545	1.14E-05	0.001536955	3.897971795
ANG	-2.642368311	6.096844563	-4.929795871	0.000837749	0.012701065	-0.517547902
LINC-PINT	-2.644393777	3.574746675	-5.430888322	0.000430403	0.009004993	0.174594605
FAM99B	-2.644616981	1.000393699	-3.678302235	0.005176074	0.032808333	-2.402822192
S100A9	-2.645337488	4.041888389	-5.88929499	0.000241326	0.006949465	0.77523561
GPR128	-2.647381555	4.561110122	-4.606853862	0.00131174	0.015700643	-0.983346294
MYO10	-2.661149601	5.505786208	-6.963700777	6.92E-05	0.003856614	2.06670122
CSRNP1	-2.666070072	5.998664773	-6.187489719	0.000168146	0.005858088	1.14963822
LOC728040	-2.670245673	3.071655499	-4.840690852	0.000946644	0.013329003	-0.644536443
IFI44L	-2.672590538	4.716352049	-5.29253916	0.000515447	0.009743387	-0.012766983
EPHA3	-2.677835737	3.430900641	-4.150766778	0.002535572	0.022275454	-1.666616048
SDS	-2.679508745	8.941753774	-3.3155397	0.009128099	0.045257739	-2.983671745
ACSM3	-2.688867714	4.360294777	-4.043494872	0.00297356	0.024231581	-1.831404542
GBA3	-2.690172673	5.926588206	-3.466640485	0.007193565	0.038990887	-2.740409984
LDLRAD4-AS1	-2.709336291	1.356323174	-4.497852251	0.001531314	0.017319388	-1.143993063
NR4A2	-2.713087776	4.351029586	-3.858094062	0.003931108	0.028591207	-2.119587536
CCL21	-2.72972703	3.736906963	-4.99844755	0.00076307	0.011993741	-0.420511708
SULT1E1	-2.73828088	3.880283984	-3.354277746	0.008585354	0.043371215	-2.921152637
PELI2	-2.747946319	3.227571656	-7.466538607	4.04E-05	0.002852665	2.619042614
KLKB1	-2.768457123	7.19000992	-4.883499272	0.000892538	0.012973276	-0.583381054
SARDH	-2.770466453	3.955381781	-4.394104295	0.001777208	0.018767702	-1.298467739
SLCO2B1	-2.774558311	2.797600257	-3.767195866	0.004515374	0.030615102	-2.262345554
RGN	-2.788259169	3.466956846	-5.717891878	0.00029861	0.007657435	0.554248076
ALDOB	-2.796622679	12.06125505	-4.161341312	0.002496275	0.022093084	-1.650452404
GADD45G	-2.801572991	5.71731288	-5.102558102	0.000663184	0.011154073	-0.274693707
SLC27A5	-2.811320785	8.257914001	-6.011913838	0.000207716	0.006288962	0.930724633
ITGA9	-2.813801965	5.28446561	-7.672913309	3.26E-05	0.002623679	2.836824178
EXPH5	-2.814198921	4.519025751	-6.862970018	7.73E-05	0.004048164	1.952217973
A2M-AS1	-2.815442604	2.42452573	-5.021056988	0.000740074	0.011949383	-0.388707604
TMEM82	-2.82439271	3.469355858	-6.957875051	6.96E-05	0.003856614	2.060115773
CCRN4L	-2.847110871	5.234634969	-4.884910284	0.000890812	0.012973276	-0.58136992
SLC22A10	-2.858199328	6.62383436	-4.52894246	0.001464926	0.016787497	-1.097998642

TEK	-2.867390049	4.161607858	-5.014141257	0.000747027	0.011970847	-0.398427708
SPATA6L	-2.873804199	3.066812595	-4.862215529	0.00091901	0.013158919	-0.613752776
ADH6	-2.884224035	7.376845758	-6.019626466	0.000205779	0.006288962	0.940432824
PKHD1	-2.895515018	3.840308421	-11.12094747	1.16E-05	0.001536955	3.996634242
PBLD	-2.898869513	6.728505264	-5.830018407	0.000259657	0.007113335	0.699293084
LY6E	-2.906496382	2.984884832	-4.024865313	0.003057496	0.024520679	-1.86017217
ATOH8	-2.911871882	4.96375725	-3.277838993	0.009690707	0.047225479	-3.044606974
ADRA1A	-2.928683295	3.768410838	-3.451187369	0.007370069	0.039584321	-2.765210438
LOC284454	-2.971604168	1.104969439	-3.766328504	0.004521373	0.030629159	-2.263712174
BGN	-2.980244069	7.01270178	-3.790075705	0.00436015	0.030058845	-2.226325577
DNM3OS	-2.999075449	1.881948959	-4.776644661	0.001034291	0.013916561	-0.736536909
SRD5A2	-3.027011938	5.590312572	-3.584694457	0.005983073	0.035053979	-2.55161249
ASPDH	-3.035643491	3.863908941	-5.359122881	0.000472444	0.009353593	0.077760064
GPR153	-3.044505328	3.129788015	-9.459462477	6.09E-06	0.001138133	4.528709275
RCAN1	-3.052360796	2.803904091	-6.445056951	0.000124199	0.005082649	1.462975482
ABI3BP	-3.056939633	3.034820322	-4.902863949	0.000869166	0.012888367	-0.55580609
CYP4A22	-3.065701075	5.43063173	-10.65015828	2.29E-06	0.000693129	5.490365294
CYP2C8	-3.078402941	6.235611411	-8.143390487	2.04E-05	0.00217885	3.31493486
UTS2B	-3.092978084	4.47408274	-5.50576664	0.00039082	0.008745917	0.274815674
MT2A	-3.119772415	8.630990949	-4.843158354	0.000943431	0.013313805	-0.641004055
APOF	-3.131966938	7.089933555	-3.255087145	0.010047587	0.048251559	-3.081420587
NAALADL2	-3.137121556	3.08922202	-4.189057745	0.002396324	0.021697241	-1.60815648
NAPSB	-3.156810566	2.433866059	-4.223400965	0.002278355	0.021203522	-1.555889315
ADAMTS9-AS2	-3.171377391	0.470675798	-4.686648984	0.001616271	0.017665796	-1.049054174
ANXA10	-3.172008901	3.980096346	-3.498313062	0.006845499	0.038147528	-2.689639923
PDE7B	-3.176317916	3.869538252	-8.786571343	1.11E-05	0.001536955	3.929695653
OAT	-3.189997116	3.808961656	-6.816697338	8.14E-05	0.004169117	1.899186633
KMO	-3.195979286	5.653004113	-6.987770023	6.73E-05	0.003856614	2.093863142
CCDC3	-3.198498351	4.150476933	-6.055712286	0.000196975	0.006237827	0.985742908
LIFR	-3.204589978	3.038951076	-10.95149907	1.81E-06	0.000589599	5.715741869
FAM46C	-3.235868331	4.864036474	-6.263987632	0.000153544	0.005646635	1.243660877
ABCA9	-3.243127735	4.915707263	-5.085113722	0.000678885	0.011248449	-0.299013858
CYP39A1	-3.255226889	5.291534926	-4.925211136	0.00084301	0.012749709	-0.524053158
SNX29P2	-3.258718468	1.818221293	-4.46693849	0.002150618	0.020735571	-1.34696984
MBL1P	-3.263073156	-0.060467332	-4.832595033	0.001342178	0.016015503	-0.855209735
ASS1	-3.271125049	5.800782598	-11.97078536	8.59E-07	0.00037675	6.430019142
HOGA1	-3.287020838	3.225147013	-3.562074176	0.006197272	0.035865579	-2.587692634
ASPG	-3.294011689	4.769421652	-7.030681202	6.43E-05	0.003828274	2.142104235
AASS	-3.318293139	7.314281762	-3.82209772	0.004152304	0.029191677	-2.176010034
CYP2A6	-3.321049387	8.450562887	-3.471945693	0.007133995	0.038853844	-2.731900172
GNAO1	-3.343344941	3.374934299	-3.245946791	0.010194784	0.048571486	-3.096218159
EHD3	-3.390876795	4.075407988	-8.05064532	2.23E-05	0.002292122	3.222651584
MAMDC4	-3.391438827	3.938475579	-6.679097329	9.50E-05	0.004547534	1.739828228
KCNJ10	-3.394461686	2.759663818	-3.491669819	0.008323359	0.042621716	-2.752764845
CYR61	-3.399729983	5.691276413	-5.242323252	0.000550677	0.010159539	-0.081476789
CXCR2P1	-3.402773149	3.58964565	-4.335395636	0.001934799	0.019686016	-1.386549403

EXOC3L4	-3.404124443	4.422436284	-7.55189934	3.69E-05	0.00277145	2.709733771
LEPR	-3.430835526	3.043678738	-6.13721687	0.000178563	0.006006481	1.08740167
KCNK5	-3.448484292	4.36991077	-4.074726853	0.002838288	0.023639275	-1.783274539
CD69	-3.470940177	2.497984598	-4.16039415	0.002499768	0.022093084	-1.651899584
BHMT	-3.481809723	8.870273283	-3.70477687	0.004969254	0.03214434	-2.360898545
ADH1C	-3.491588673	8.49785794	-4.094989194	0.002754039	0.023235155	-1.752115687
FTCD	-3.528625852	3.438407071	-6.746324724	8.80E-05	0.004360963	1.817998085
SPP2	-3.540064863	6.51727712	-4.586447776	0.001350126	0.016061554	-1.013290887
GYS2	-3.540688134	6.68408672	-9.393960502	6.44E-06	0.001160467	4.472266681
RNF165	-3.557958545	0.653642603	-4.331276117	0.00509585	0.03259673	-1.774096954
MXRA5	-3.611177174	4.325937449	-5.035510354	0.000725765	0.0117752	-0.368416288
SLC2A12	-3.625828509	3.583822291	-4.834054874	0.000955342	0.013385083	-0.654040738
NGFR	-3.632428625	3.875226433	-5.362603621	0.000470305	0.009339089	0.08247434
ANGPTL6	-3.634956916	2.942588239	-9.264880938	7.21E-06	0.001223356	4.359887253
MT1M	-3.65366347	3.813737045	-4.18958303	0.002394472	0.021697241	-1.607355864
KIAA0125	-3.703561663	-0.868813344	-3.86114743	0.00490479	0.032125998	-2.205183056
CXCL12	-3.71490753	4.975196899	-9.654146909	5.15E-06	0.001057744	4.694185561
FOLH1B	-3.777080483	2.319161699	-4.236933275	0.002233586	0.021001547	-1.535337712
OLFML3	-3.78058024	3.138887913	-9.920585178	4.12E-06	0.000918112	4.915251128
UGT2B10	-3.785948556	5.780000992	-4.075597122	0.002834614	0.023633896	-1.781935186
CPS1	-3.787298927	6.723013212	-3.637955863	0.005508878	0.03369223	-2.466848376
C8orf4	-3.804072589	6.33716851	-7.046051196	6.32E-05	0.003823021	2.159326232
DBH	-3.825804991	4.008270892	-13.51043667	3.08E-07	0.000240077	7.384621265
CETP	-3.85961174	3.764486429	-11.28591502	1.41E-06	0.000550112	5.958033451
CYP2B6	-3.872705775	7.207030431	-4.785622094	0.001021496	0.01383985	-0.723604678
MT1X	-3.899931844	7.523486847	-5.681168937	0.000312713	0.007796851	0.506345581
HBA1	-3.928608995	2.640831286	-5.145964105	0.000625793	0.010757019	-0.214375852
GLYAT	-3.92943177	5.747582625	-11.15122551	1.56E-06	0.000563384	5.861415539
RBP1	-4.056964355	2.849221459	-4.661854643	0.001213994	0.015182706	-0.902936473
CYP8B1	-4.090785663	7.9073904	-3.601159582	0.005832059	0.034637285	-2.525379871
ADH1B	-4.092486328	11.15465983	-3.803121077	0.004274179	0.029649504	-2.205813874
HBA2	-4.10894574	3.523825053	-5.535754164	0.00037609	0.008554976	0.314720063
MEG3	-4.126888783	1.168521691	-5.824636983	0.000678094	0.011248449	0.045737309
OIT3	-4.144609164	5.315209738	-18.122351	2.44E-08	6.36E-05	9.568808932
PGLYRP2	-4.153261853	6.491724881	-4.707648489	0.001138573	0.014686657	-0.836322644
CYP2C9	-4.183476731	8.535975609	-7.249267833	5.08E-05	0.003301129	2.384230851
MT1E	-4.204347349	6.618017232	-5.164009998	0.000610923	0.010689786	-0.189381553
HBB	-4.25216725	5.775670702	-6.259895684	0.000154289	0.005646635	1.238652201
SVEP1	-4.254193872	4.385860328	-5.84733149	0.000254151	0.0070841	0.721526343
KBTBD11	-4.261832656	3.50231576	-13.66598208	2.79E-07	0.000240077	7.473653464
MT1H	-4.305031288	2.229492627	-3.305837081	0.00926956	0.045640155	-2.999345756
MFSD2A	-4.336949917	2.917759398	-3.409036198	0.007874937	0.041122243	-2.83295295
PTGIS	-4.360586298	3.440442023	-4.959052541	0.000805003	0.012391009	-0.476109248
PLCXD3	-4.441507444	2.899964378	-4.120197644	0.00265292	0.022701084	-1.713424506
HAO2	-4.475612138	4.37522918	-5.170702041	0.000605506	0.010618815	-0.180125137
DNASE1L3	-4.512153715	3.635324213	-8.158218558	2.01E-05	0.002177384	3.329601562



PCK1	-4.516362123	9.455111899	-3.28279143	0.009614787	0.046925452	-3.03659758
NPY1R	-4.527736547	3.023460753	-7.439158535	4.15E-05	0.002852665	2.589767834
LCAT	-4.536944686	4.98004565	-13.25142311	3.63E-07	0.00025742	7.233507513
TMEM27	-4.560456265	2.753237402	-8.793742231	1.10E-05	0.001536955	3.936309849
ACSL5	-4.577474655	2.108256351	-4.570245911	0.001381461	0.016171865	-1.037108832
CYP2A7	-4.589629183	3.114393692	-6.943584896	7.07E-05	0.003856614	2.043943594
EGR1	-4.597475541	7.651586909	-6.684963369	9.44E-05	0.004547534	1.746672931
DPT	-4.626113194	3.085723679	-4.490132562	0.002086037	0.020477271	-1.315175914
ABCA8	-4.693304657	5.335308679	-5.537325958	0.000375335	0.008554976	0.316807989
MOGAT2	-4.699796645	3.437023594	-14.50242971	5.58E-07	0.000293954	6.766188332
LRAT	-4.707984	2.506805158	-8.794198635	1.10E-05	0.001536955	3.936730647
PZP	-4.709372567	2.503816246	-4.254863232	0.002175709	0.020807881	-1.508145318
FLRT2	-4.730995472	2.316619101	-3.871016904	0.003854769	0.028283689	-2.099367792
MT1G	-4.731361451	6.194942077	-6.891314629	7.49E-05	0.003976303	1.984565053
BMPER	-4.738478158	2.894480633	-4.464610417	0.002157219	0.020735571	-1.350165571
ACE2	-4.755499376	2.122819777	-5.536134423	0.000571787	0.010341966	0.033886741
MT1F	-4.810086528	4.294788122	-4.463655885	0.001608076	0.017646131	-1.194741542
PTGS2	-4.833305987	2.154201899	-10.45479285	2.67E-06	0.000694188	5.340541806
HPD	-4.843506859	5.843252206	-3.815861379	0.004191946	0.029324977	-2.185800098
FAM65C	-4.849754993	2.55875678	-15.10265045	1.18E-07	0.000184783	8.239413846
IGLL5	-4.866348595	1.161586042	-4.655820386	0.001224326	0.015190201	-0.911736965
HAMP	-4.880685999	3.362646911	-3.807815262	0.004243683	0.029521867	-2.198437658
LINC01093	-4.886655926	1.716600507	-6.284825678	0.000800047	0.012339066	0.071691825
C7	-4.917723615	7.097649915	-4.934909632	0.000831924	0.012680337	-0.510295693
SMIM24	-4.938024227	2.591537002	-4.203008845	0.002347635	0.021416374	-1.586905259
CCBE1	-4.966152447	3.515929561	-16.91563774	7.03E-07	0.000342977	6.238537858
PDGFRA	-4.986038348	5.052703447	-6.079972604	0.000191287	0.006143241	1.016100591
FOS	-5.249892067	7.104891347	-11.12647193	1.59E-06	0.000563384	5.843518021
CPS1-IT1	-5.255527499	4.800022524	-5.29226062	0.000515635	0.009743387	-0.01314707
IDO2	-5.256490889	1.899882198	-8.200542344	1.93E-05	0.00215699	3.371332966
ELK2AP	-5.292578325	5.004964967	-4.056926211	0.002914565	0.023922529	-1.810691055
UROC1	-5.336099728	2.104458461	-7.453717237	4.09E-05	0.002852665	2.605345235
IGJ	-5.350198675	4.295621767	-6.424131881	0.000127255	0.00514558	1.437861184
LPA	-5.3984326	5.375351272	-5.579873129	0.000355502	0.008432648	0.373188007
HAND2	-5.441617054	1.763164926	-6.812725765	8.17E-05	0.004169117	1.894621943
HGFAC	-5.455028503	5.160861334	-5.315193914	0.000500358	0.009713414	0.018108368
DCN	-5.499513419	3.298289247	-7.61851761	3.45E-05	0.002745836	2.779910437
MUC6	-5.649927437	2.756836688	-7.908337995	2.57E-05	0.00237146	3.079195893
CFTR	-5.67690169	1.502680649	-4.154266655	0.002522493	0.022218439	-1.661264707
CLRN3	-5.725287855	1.897650405	-5.780942598	0.000275981	0.00740122	0.636034387
GLS2	-5.789132745	5.635903312	-5.085765878	0.000678291	0.011248449	-0.298103836
SLC22A1	-5.794648877	4.575596478	-4.815588473	0.000980005	0.013488461	-0.680523217
HEPACAM	-5.821606183	2.163981767	-3.634264629	0.005540431	0.033829078	-2.472714083
FCN2	-5.874027304	3.450982371	-10.93313833	3.84E-05	0.002800581	2.72388818
FREM2	-5.919875892	3.946687149	-5.443925189	0.00042321	0.008950488	0.192103514
GNMT	-6.082875309	4.965095148	-13.6552307	2.81E-07	0.000240077	7.467540265

CNDP1	-6.096117386	3.185010552	-5.204324888	0.000847745	0.012761153	-0.376130697
LOC100130899	-6.158841237	0.770684054	-11.56697005	8.96E-06	0.001399163	4.225113726
LOC200772	-6.207895028	0.113295298	-9.608881368	3.02E-05	0.002506852	3.125118187
ADH4	-6.328985632	8.422607224	-7.812225425	2.83E-05	0.002401392	2.981015605
COLEC10	-6.424731983	4.144322897	-9.48949262	5.93E-06	0.001138133	4.554455794
CYP1A2	-6.558078681	5.750598809	-5.940824177	0.000226531	0.006646036	0.840840889
NAT2	-6.650262042	2.858163689	-6.287927881	0.000149263	0.005646635	1.272917822
CD5L	-6.835967488	4.754529584	-4.361517958	0.001862909	0.019338204	-1.34729855
CYP3A4	-6.874490367	4.011861433	-5.867374284	0.000247935	0.007010575	0.747210924
CYP2E1	-7.052416747	9.342552388	-4.635841092	0.001259213	0.015378554	-0.940912968
FOSB	-7.075929961	2.20452933	-10.01724925	3.80E-06	0.000898944	4.993951314
SLCO1B7	-7.119283451	0.573989793	-10.02872555	3.77E-06	0.000898944	5.003242672
TTC36	-7.252549258	3.193726207	-5.843619525	0.000255321	0.0070841	0.716763133
FCN3	-7.425535874	2.414643805	-14.18214342	2.03E-07	0.000226498	7.760210575
CRHBP	-7.512419145	3.431061644	-12.88817002	4.60E-07	0.000279088	7.015367056
HHIP	-7.663608807	1.966644547	-8.285314478	1.78E-05	0.002038331	3.454335514
MARCO	-8.174540347	4.287875779	-15.75701397	8.21E-08	0.000160255	8.557194994
GDF2	-8.435892262	3.551490268	-17.59594199	2.49E-06	0.000693129	4.458062489
CXCL14	-9.039624692	1.510329435	-28.2447278	4.99E-10	3.90E-06	12.29303651
STAB2	-9.05590095	3.077457351	-20.77587863	7.42E-09	2.90E-05	10.49393005
SLCO1B3	-9.135959164	3.757966286	-9.451967787	6.13E-06	0.001138133	4.522270925