

Table S1. Screening of methylated-driven genes in TCGA cohort.

gene	normalMe	TumorMe	logFC	pValue	adjustP	cor	corPavlu
ADHFE1	0.221998	0.332621	0.583333	1.17E-22	5.19E-20	-0.3859	3.38E-12
CNNM1	0.447799	0.598646	0.418854	1.53E-22	6.75E-20	-0.38478	3.94E-12
CCDC8	0.375896	0.56048	0.576327	1.98E-22	8.77E-20	-0.39693	7.09E-13
FAM43B	0.25814	0.486077	0.913031	2.49E-22	1.10E-19	-0.37877	8.99E-12
CHST2	0.309904	0.56755	0.872928	2.67E-22	1.18E-19	-0.35607	1.74E-10
MSC	0.226659	0.532512	1.232289	3.91E-22	1.73E-19	-0.47373	2.35E-18
GDF6	0.276097	0.504362	0.869282	4.81E-22	2.13E-19	-0.34934	4.00E-10
MAFB	0.125371	0.29954	1.256544	5.06E-22	2.24E-19	-0.35757	1.44E-10
ADAMTS5	0.35989	0.55022	0.612453	7.15E-22	3.16E-19	-0.39236	1.36E-12
ZNF625	0.206753	0.518038	1.325149	7.40E-22	3.27E-19	-0.34291	8.72E-10
CNRIP1	0.32783	0.56321	0.780723	8.35E-22	3.69E-19	-0.53012	2.34E-23
DOK5	0.130188	0.353966	1.44302	9.41E-22	4.16E-19	-0.37814	9.79E-12
RP11-710K	0.119487	0.445787	1.899505	9.41E-22	4.16E-19	-0.42155	1.75E-14
HAND2	0.215372	0.457822	1.087955	1.06E-21	4.69E-19	-0.33373	2.57E-09
CDO1	0.327866	0.500208	0.60942	1.30E-21	5.76E-19	-0.36186	8.35E-11
DPY19L2	0.125685	0.501628	1.996804	1.63E-21	7.19E-19	-0.36426	6.13E-11
RARRES2	0.482481	0.646931	0.423139	1.68E-21	7.44E-19	-0.4467	2.88E-16
PCDH8	0.270007	0.525034	0.959414	1.93E-21	8.53E-19	-0.35418	2.20E-10
ZNF568	0.103107	0.371294	1.848415	2.25E-21	9.94E-19	-0.59515	2.01E-30
SLIT2	0.294065	0.433092	0.558538	2.37E-21	1.05E-18	-0.41534	4.58E-14
HLX	0.277627	0.460994	0.7316	2.67E-21	1.18E-18	-0.31932	1.31E-08
BNIP3	0.492076	0.601364	0.289355	3.13E-21	1.38E-18	-0.33391	2.52E-09
RP11-573K	0.152148	0.423487	1.476846	3.32E-21	1.47E-18	-0.37299	1.95E-11
ZNF135	0.541627	0.670547	0.308039	4.00E-21	1.77E-18	-0.54554	6.79E-25
KCNA3	0.42706	0.657803	0.623216	4.43E-21	1.96E-18	-0.44429	4.33E-16
AVPR1A	0.236392	0.413712	0.807445	4.90E-21	2.17E-18	-0.34311	8.51E-10
NCAM2	0.313076	0.469776	0.585459	4.98E-21	2.20E-18	-0.31718	1.66E-08
THBD	0.18031	0.457697	1.343912	5.15E-21	2.28E-18	-0.33145	3.35E-09
EFS	0.288031	0.524657	0.865151	5.90E-21	2.61E-18	-0.34813	4.64E-10
GLRB	0.285371	0.558305	0.968213	6.20E-21	2.74E-18	-0.38326	4.87E-12
FBLIM1	0.260092	0.451209	0.794777	6.20E-21	2.74E-18	-0.39729	6.73E-13
SOX17	0.336839	0.603063	0.840252	6.42E-21	2.84E-18	-0.49312	5.68E-20
TWIST1	0.265016	0.510539	0.945944	6.92E-21	3.06E-18	-0.32418	7.63E-09
CLIP4	0.346107	0.46742	0.4335	7.10E-21	3.14E-18	-0.38838	2.39E-12
CHL1	0.434704	0.584933	0.428239	7.72E-21	3.41E-18	-0.34294	8.69E-10
ST6GALNA4	0.295178	0.430696	0.545086	7.72E-21	3.41E-18	-0.37892	8.81E-12
RP11-23P1	0.404172	0.278842	-0.53552	8.82E-21	3.90E-18	-0.5009	1.19E-20
ZNF331	0.347894	0.487708	0.487373	9.92E-21	4.38E-18	-0.62027	1.32E-33
AQP1	0.339924	0.491621	0.532333	1.06E-20	4.69E-18	-0.4309	3.95E-15
ZNF134	0.231608	0.42815	0.886429	1.64E-20	7.23E-18	-0.78409	2.59E-64
LAYN	0.24904	0.394937	0.665245	1.75E-20	7.73E-18	-0.37402	1.70E-11
PCDH10	0.251005	0.517711	1.044429	1.98E-20	8.76E-18	-0.33226	3.05E-09
EVC	0.209535	0.430138	1.03761	2.06E-20	9.13E-18	-0.34646	5.69E-10
AC021218	0.620158	0.431856	-0.52209	2.08E-20	9.20E-18	-0.46656	8.77E-18
SPG20	0.287224	0.432144	0.589334	2.56E-20	1.13E-17	-0.46366	1.48E-17
ELAVL2	0.209754	0.402754	0.9412	2.74E-20	1.21E-17	-0.42322	1.35E-14
GALNT13	0.24714	0.431811	0.805072	3.23E-20	1.43E-17	-0.37266	2.04E-11
LRFN5	0.177746	0.36292	1.029834	3.42E-20	1.51E-17	-0.37618	1.28E-11
TLL1	0.187426	0.408665	1.124599	3.45E-20	1.52E-17	-0.33307	2.77E-09
LINC00944	0.30227	0.183587	-0.71938	4.00E-20	1.77E-17	-0.31816	1.49E-08
TGFBI	0.393573	0.290274	-0.43922	4.60E-20	2.03E-17	-0.47892	8.88E-19
SUSD5	0.453366	0.610986	0.430463	5.47E-20	2.42E-17	-0.39322	1.21E-12
ZNF813	0.138578	0.278827	1.008673	5.47E-20	2.42E-17	-0.66277	1.06E-39
TM6SF1	0.242712	0.490184	1.014075	5.88E-20	2.60E-17	-0.34751	5.01E-10
PTF1A	0.192925	0.456738	1.243331	6.88E-20	3.04E-17	-0.3491	4.12E-10
PROM2	0.612312	0.714912	0.223497	8.64E-20	3.82E-17	-0.47804	1.05E-18

PPP1R16B	0.377603	0.519763	0.460985	9.38E-20	4.14E-17	-0.35013	3.63E-10
SLPI	0.335345	0.181753	-0.88367	1.26E-19	5.56E-17	-0.32041	1.16E-08
METTL24	0.490835	0.62573	0.350303	1.28E-19	5.65E-17	-0.31844	1.44E-08
B3GNT7	0.338701	0.444941	0.393601	1.53E-19	6.75E-17	-0.41062	9.39E-14
FAM46C	0.682824	0.76842	0.170381	2.09E-19	9.25E-17	-0.4361	1.69E-15
PTGFR	0.361081	0.498733	0.465943	2.25E-19	9.95E-17	-0.32637	5.97E-09
TRBC2	0.217043	0.323747	0.576885	2.56E-19	1.13E-16	-0.34102	1.09E-09
ZNF334	0.233987	0.472523	1.013956	2.69E-19	1.19E-16	-0.51978	2.28E-22
ZNF582	0.18882	0.458665	1.280433	3.06E-19	1.35E-16	-0.68009	1.76E-42
CAHM	0.062635	0.276509	2.142277	3.08E-19	1.36E-16	-0.36549	5.23E-11
ZSCAN23	0.159829	0.375319	1.231592	3.31E-19	1.46E-16	-0.38959	2.01E-12
GBGT1	0.363865	0.470137	0.369676	3.48E-19	1.54E-16	-0.57228	9.32E-28
ITGA4	0.443834	0.583626	0.395024	3.53E-19	1.56E-16	-0.34542	6.45E-10
NEFH	0.378355	0.55982	0.56522	3.74E-19	1.65E-16	-0.36672	4.46E-11
TDRP	0.361618	0.493078	0.447351	3.77E-19	1.67E-16	-0.47739	1.18E-18
DMRTA1	0.111347	0.382799	1.781522	3.89E-19	1.72E-16	-0.38281	5.18E-12
ZNF471	0.176152	0.471076	1.419141	5.11E-19	2.26E-16	-0.68289	6.02E-43
USP54	0.528994	0.642894	0.281329	5.80E-19	2.57E-16	-0.41144	8.29E-14
ZNF569	0.12683	0.317277	1.322846	6.04E-19	2.67E-16	-0.61256	1.35E-32
AC009014	0.182346	0.285704	0.647844	9.81E-19	4.34E-16	-0.37929	8.38E-12
ADCYAP1	0.284082	0.480519	0.758286	1.03E-18	4.55E-16	-0.35154	3.05E-10
ZNF726	0.212901	0.521141	1.291491	1.63E-18	7.19E-16	-0.41286	6.69E-14
ZNF793	0.198272	0.49411	1.317352	2.19E-18	9.69E-16	-0.65476	1.78E-38
CTD-2368	0.135295	0.282135	1.060276	2.25E-18	9.92E-16	-0.39208	1.42E-12
FOXG1	0.230496	0.499704	1.116329	2.75E-18	1.22E-15	-0.39724	6.78E-13
C17orf107	0.240445	0.44121	0.875759	2.77E-18	1.23E-15	-0.32511	6.87E-09
ZNF454	0.337864	0.510218	0.59467	2.88E-18	1.27E-15	-0.46143	2.21E-17
FUT3	0.704784	0.80687	0.195154	3.40E-18	1.50E-15	-0.34438	7.31E-10
CSAG1	0.688574	0.586149	-0.23234	3.88E-18	1.72E-15	-0.32234	9.37E-09
FAM218A	0.263709	0.507657	0.944909	3.97E-18	1.76E-15	-0.41529	4.61E-14
ZNF347	0.208075	0.376852	0.856895	4.23E-18	1.87E-15	-0.63199	3.43E-35
SLFN13	0.31165	0.417943	0.423381	8.04E-18	3.56E-15	-0.50669	3.64E-21
SMO	0.175819	0.304615	0.792897	8.17E-18	3.61E-15	-0.4715	3.55E-18
ZNF43	0.047755	0.282362	2.563815	9.83E-18	4.34E-15	-0.7109	6.27E-48
AKR1B1	0.25278	0.514692	1.025826	1.09E-17	4.80E-15	-0.65193	4.73E-38
HOXB13	0.14447	0.30785	1.091455	1.21E-17	5.35E-15	-0.45851	3.71E-17
RP11-430f	0.29197	0.472677	0.695034	1.24E-17	5.47E-15	-0.4256	9.24E-15
AZGP1	0.635387	0.497055	-0.35423	1.57E-17	6.94E-15	-0.43962	9.48E-16
ZNF677	0.336311	0.470221	0.483542	1.72E-17	7.60E-15	-0.54019	2.37E-24
RNF165	0.247243	0.398532	0.688765	1.86E-17	8.21E-15	-0.34559	6.32E-10
PHOX2B	0.30974	0.443724	0.518606	2.25E-17	9.93E-15	-0.32939	4.24E-09
AP000251.	0.060199	0.255873	2.087625	2.68E-17	1.18E-14	-0.46292	1.69E-17
LDOC1	0.324993	0.564777	0.797274	2.93E-17	1.30E-14	-0.46236	1.87E-17
PABPC5	0.571826	0.742452	0.37672	3.39E-17	1.50E-14	-0.50663	3.68E-21
CTB-4116.1	0.370207	0.543724	0.554541	3.44E-17	1.52E-14	-0.36547	5.25E-11
WDR17	0.154016	0.337228	1.13064	4.22E-17	1.86E-14	-0.44744	2.54E-16
ZNF492	0.153483	0.31522	1.038283	5.37E-17	2.37E-14	-0.51559	5.60E-22
CMTM3	0.135994	0.36782	1.435458	5.96E-17	2.63E-14	-0.42727	7.08E-15
ZNF85	0.211555	0.44884	1.085167	6.52E-17	2.88E-14	-0.65141	5.64E-38
SOX1	0.225871	0.416334	0.882246	6.62E-17	2.93E-14	-0.37049	2.72E-11
CLIC6	0.335453	0.436102	0.378557	7.41E-17	3.28E-14	-0.55564	6.04E-26
CTC-444N	0.134885	0.410448	1.60547	1.01E-16	4.48E-14	-0.49882	1.82E-20
TBX18	0.213263	0.477267	1.16216	1.42E-16	6.27E-14	-0.7152	9.51E-49
ZNF528	0.172157	0.40179	1.222718	1.66E-16	7.32E-14	-0.69495	5.06E-45
ZNF730	0.111523	0.315257	1.499188	1.67E-16	7.38E-14	-0.36397	6.37E-11
FOXD2	0.147219	0.268386	0.866345	1.69E-16	7.49E-14	-0.63413	1.73E-35
CD34	0.49993	0.614841	0.298486	1.77E-16	7.83E-14	-0.40261	3.10E-13
AF186192.	0.206747	0.471299	1.188775	2.05E-16	9.07E-14	-0.37028	2.80E-11

TIGD7	0.411146	0.566685	0.462896	2.34E-16	1.04E-13	-0.45778	4.22E-17
FAS	0.564537	0.725335	0.361578	3.06E-16	1.35E-13	-0.32191	9.83E-09
CTD-2666	0.297358	0.52957	0.832621	3.81E-16	1.68E-13	-0.58659	2.12E-29
GREB1L	0.151654	0.43815	1.530637	3.89E-16	1.72E-13	-0.37049	2.72E-11
FADS1	0.152306	0.275349	0.854293	4.28E-16	1.89E-13	-0.33926	1.35E-09
NFE2L3	0.227787	0.184755	-0.30207	4.37E-16	1.93E-13	-0.4396	9.50E-16
ZNF880	0.188965	0.405601	1.101944	4.81E-16	2.13E-13	-0.63015	6.14E-35
TFAP2C	0.160247	0.252366	0.655216	5.57E-16	2.46E-13	-0.38635	3.17E-12
CLDN10	0.423488	0.529105	0.321235	5.99E-16	2.65E-13	-0.37986	7.75E-12
HOXA-AS1	0.241935	0.460069	0.92723	5.99E-16	2.65E-13	-0.40876	1.24E-13
SOX14	0.154354	0.304422	0.979828	6.07E-16	2.68E-13	-0.34709	5.27E-10
EPHX3	0.217172	0.396495	0.868463	7.89E-16	3.49E-13	-0.32985	4.02E-09
TBX20	0.289891	0.471716	0.70241	8.12E-16	3.59E-13	-0.37315	1.91E-11
CIDEB	0.417576	0.543117	0.379225	1.12E-15	4.93E-13	-0.5262	5.60E-23
ANO5	0.230685	0.473902	1.038665	1.15E-15	5.08E-13	-0.40162	3.58E-13
AF186192	0.334537	0.445153	0.412135	1.72E-15	7.59E-13	-0.41905	2.58E-14
ZNF418	0.427587	0.57718	0.432803	3.31E-15	1.46E-12	-0.44041	8.31E-16
ZFP82	0.239554	0.400056	0.739848	3.40E-15	1.50E-12	-0.75261	1.46E-56
RP11-394K	0.803026	0.874225	0.122558	3.86E-15	1.71E-12	-0.39528	8.98E-13
ZNF788	0.223232	0.466768	1.064163	3.86E-15	1.71E-12	-0.55081	1.94E-25
TMEM88	0.674045	0.765956	0.184416	3.89E-15	1.72E-12	-0.49146	7.89E-20
ZFPM1	0.615434	0.65413	0.087974	5.12E-15	2.26E-12	-0.34854	4.41E-10
PPP1R3C	0.322554	0.510394	0.662071	5.54E-15	2.45E-12	-0.31838	1.45E-08
RHOBTB3	0.634922	0.786775	0.30937	1.06E-14	4.69E-12	-0.53065	2.08E-23
LINC0046C	0.754734	0.619996	-0.28371	1.23E-14	5.43E-12	-0.36373	6.56E-11
RP11-535I	0.445152	0.552361	0.311316	1.36E-14	6.02E-12	-0.32219	9.52E-09
FAM200A	0.043568	0.148156	1.765772	1.38E-14	6.11E-12	-0.33917	1.36E-09
STK33	0.149785	0.274602	0.874449	1.52E-14	6.73E-12	-0.4166	3.77E-14
ST8SIA4	0.231045	0.381574	0.723788	2.01E-14	8.87E-12	-0.32971	4.08E-09
ADAM28	0.35338	0.222823	-0.66532	2.06E-14	9.12E-12	-0.32012	1.20E-08
MAEL	0.811977	0.734717	-0.14425	2.29E-14	1.01E-11	-0.42928	5.13E-15
SULT4A1	0.339732	0.455274	0.42234	2.37E-14	1.05E-11	-0.47969	7.67E-19
LINC0034C	0.37942	0.261539	-0.53677	2.52E-14	1.11E-11	-0.43758	1.33E-15
ZNF790	0.138634	0.336855	1.280841	2.73E-14	1.21E-11	-0.4038	2.60E-13
KDR	0.374177	0.506803	0.437704	2.97E-14	1.31E-11	-0.3248	7.12E-09
CD40	0.296731	0.492169	0.729997	3.47E-14	1.53E-11	-0.54705	4.75E-25
ZNF256	0.222779	0.35003	0.651866	3.59E-14	1.59E-11	-0.71805	2.68E-49
TCTEX1D1	0.344251	0.495879	0.526528	4.26E-14	1.88E-11	-0.31746	1.60E-08
SNCA	0.19034	0.395374	1.05464	4.56E-14	2.02E-11	-0.37776	1.03E-11
ZNF257	0.29808	0.435594	0.547287	4.95E-14	2.19E-11	-0.51624	4.87E-22
GPX7	0.29952	0.419237	0.485113	6.06E-14	2.68E-11	-0.52106	1.73E-22
ZNF530	0.298953	0.440952	0.560704	6.66E-14	2.95E-11	-0.62835	1.08E-34
CTD-2554	0.330083	0.539804	0.709607	7.13E-14	3.15E-11	-0.60137	3.48E-31
RERG	0.241491	0.416791	0.787358	9.46E-14	4.18E-11	-0.32771	5.12E-09
HSD17B14	0.459694	0.584619	0.346824	9.72E-14	4.29E-11	-0.3801	7.50E-12
AQP5	0.370918	0.564632	0.606211	1.14E-13	5.04E-11	-0.5259	5.98E-23
ZHX1-C8c	0.619097	0.384883	-0.68574	1.14E-13	5.04E-11	-0.34837	4.51E-10
FAM150A	0.247387	0.403798	0.706867	1.39E-13	6.16E-11	-0.44334	5.09E-16
IL2RG	0.350939	0.247997	-0.5009	1.66E-13	7.33E-11	-0.44335	5.07E-16
VSIG2	0.473235	0.602511	0.348431	1.66E-13	7.33E-11	-0.58805	1.42E-29
RP11-667I	0.670465	0.764617	0.189575	1.70E-13	7.52E-11	-0.39782	6.23E-13
ZNF354C	0.263764	0.423376	0.682694	1.87E-13	8.26E-11	-0.57236	9.13E-28
DMRT2	0.319717	0.432153	0.434744	1.97E-13	8.71E-11	-0.31745	1.61E-08
TMEM35	0.482983	0.593109	0.296325	2.81E-13	1.24E-10	-0.34025	1.20E-09
LINC0066E	0.238962	0.403527	0.755882	3.23E-13	1.43E-10	-0.54813	3.68E-25
ZSCAN18	0.382351	0.494587	0.371326	5.93E-13	2.62E-10	-0.67135	4.72E-41
ZNF549	0.245209	0.376401	0.618258	7.40E-13	3.27E-10	-0.79299	9.58E-67
CERS4	0.172408	0.23604	0.453201	8.70E-13	3.84E-10	-0.35309	2.52E-10

CLEC14A	0.447497	0.549519	0.29629	9.22E-13	4.07E-10	-0.44249	5.86E-16
RP11-2C2	0.802989	0.518004	-0.63242	9.58E-13	4.23E-10	-0.43318	2.73E-15
KLF2	0.346801	0.452676	0.384371	9.64E-13	4.26E-10	-0.41488	4.91E-14
AC016747	0.413898	0.535014	0.370302	9.77E-13	4.32E-10	-0.65979	3.06E-39
ZNF682	0.11835	0.235576	0.99314	1.05E-12	4.66E-10	-0.63789	5.14E-36
ANKRD18f	0.113158	0.342092	1.596052	1.11E-12	4.91E-10	-0.37485	1.52E-11
CTSK	0.79508	0.841552	0.081952	1.38E-12	6.10E-10	-0.329	4.43E-09
RP11-478k	0.099123	0.212279	1.098665	2.14E-12	9.47E-10	-0.33543	2.11E-09
FGF10	0.311724	0.420769	0.432758	2.39E-12	1.06E-09	-0.33796	1.57E-09
ZNF461	0.05775	0.155148	1.425751	2.42E-12	1.07E-09	-0.43075	4.05E-15
ZNF287	0.139869	0.249926	0.837421	3.23E-12	1.43E-09	-0.60595	9.35E-32
MAATS1	0.122752	0.261097	1.088843	3.31E-12	1.47E-09	-0.32785	5.05E-09
LINC0153f	0.386125	0.481204	0.31758	6.47E-12	2.86E-09	-0.41213	7.48E-14
ARHGDIb	0.534534	0.403402	-0.40607	6.67E-12	2.95E-09	-0.51585	5.30E-22
SLC43A3	0.189329	0.336567	0.829999	6.88E-12	3.04E-09	-0.63655	7.93E-36
TMEM87A	0.246425	0.356679	0.533477	7.37E-12	3.26E-09	-0.3315	3.33E-09
IRX2	0.470607	0.595762	0.340215	8.29E-12	3.66E-09	-0.43316	2.74E-15
NME5	0.099504	0.242275	1.283816	8.71E-12	3.85E-09	-0.4705	4.27E-18
PRMT6	0.160374	0.213171	0.410576	9.32E-12	4.12E-09	-0.49088	8.84E-20
RPL39L	0.309177	0.435283	0.49352	1.40E-11	6.18E-09	-0.63921	3.34E-36
NUDT16P1	0.176265	0.141818	-0.31371	1.54E-11	6.81E-09	-0.3632	7.03E-11
AC005498	0.096191	0.349144	1.859851	1.85E-11	8.18E-09	-0.54709	4.70E-25
ZNF350	0.175082	0.2853	0.704451	3.02E-11	1.33E-08	-0.61013	2.76E-32
MAGEH1	0.310126	0.565607	0.866945	3.53E-11	1.56E-08	-0.51287	9.98E-22
PIGR	0.4728	0.629769	0.413591	3.86E-11	1.71E-08	-0.69934	8.40E-46
AREG	0.443639	0.331445	-0.42061	4.76E-11	2.10E-08	-0.46542	1.08E-17
RP11-474i	0.550863	0.686679	0.317943	5.23E-11	2.31E-08	-0.46528	1.10E-17
KIAA0226l	0.203317	0.22916	0.172621	5.39E-11	2.38E-08	-0.3387	1.44E-09
CTD-2535	0.502783	0.425098	-0.24214	5.49E-11	2.43E-08	-0.37703	1.14E-11
ZSCAN12	0.322617	0.418915	0.376837	7.78E-11	3.44E-08	-0.36465	5.83E-11
PKIA	0.265609	0.365334	0.459911	9.67E-11	4.27E-08	-0.47203	3.22E-18
FIRRE	0.554392	0.364968	-0.60314	9.67E-11	4.27E-08	-0.4339	2.43E-15
ARMCX1	0.46465	0.571009	0.297369	1.41E-10	6.25E-08	-0.39478	9.65E-13
FAM72B	0.064152	0.298554	2.218427	1.45E-10	6.39E-08	-0.62237	6.95E-34
FZD7	0.275668	0.323372	0.230263	1.45E-10	6.43E-08	-0.35395	2.27E-10
KLHL34	0.426087	0.586477	0.460925	1.60E-10	7.06E-08	-0.45482	7.09E-17
ARSJ	0.204973	0.179922	-0.18806	1.61E-10	7.10E-08	-0.44508	3.79E-16
FZD10	0.271201	0.416881	0.620274	2.22E-10	9.81E-08	-0.45896	3.43E-17
AMT	0.45051	0.554648	0.300011	2.39E-10	1.06E-07	-0.68264	6.63E-43
SLFN11	0.168409	0.309982	0.880212	2.48E-10	1.09E-07	-0.40106	3.89E-13
PVRL1	0.567631	0.595627	0.069454	2.67E-10	1.18E-07	-0.33699	1.76E-09
SLFN12	0.316695	0.408	0.365476	3.73E-10	1.65E-07	-0.5596	2.28E-26
NRSN2	0.150817	0.217423	0.527704	3.80E-10	1.68E-07	-0.52803	3.73E-23
FBXO17	0.106539	0.188692	0.824645	5.71E-10	2.52E-07	-0.3523	2.78E-10
RP11-114k	0.653316	0.737494	0.174851	8.31E-10	3.67E-07	-0.3761	1.29E-11
LTB	0.259994	0.317277	0.287265	8.73E-10	3.86E-07	-0.37705	1.13E-11
LEFTY1	0.309897	0.381898	0.301395	9.60E-10	4.24E-07	-0.56171	1.35E-26
ZNF529	0.140128	0.257946	0.880323	1.17E-09	5.18E-07	-0.63238	3.03E-35
SERP2	0.484276	0.602843	0.315954	1.20E-09	5.30E-07	-0.6647	5.34E-40
ZNF329	0.304473	0.378925	0.315598	1.38E-09	6.11E-07	-0.55957	2.30E-26
AOX1	0.370022	0.50577	0.45087	2.05E-09	9.07E-07	-0.4018	3.49E-13
SLC1A1	0.153524	0.181619	0.242455	2.92E-09	1.29E-06	-0.31972	1.25E-08
HYDIN	0.418229	0.494783	0.242504	2.97E-09	1.31E-06	-0.40133	3.74E-13
LINC0086f	0.251356	0.320064	0.348631	4.14E-09	1.83E-06	-0.51137	1.37E-21
RP11-267j	0.307562	0.240876	-0.35259	4.78E-09	2.11E-06	-0.41007	1.02E-13
GOLGA8A	0.377245	0.457068	0.276906	4.91E-09	2.17E-06	-0.32727	5.39E-09
DAPP1	0.548386	0.435448	-0.33269	5.23E-09	2.31E-06	-0.71714	4.02E-49
NXPE4	0.474002	0.590931	0.318097	5.23E-09	2.31E-06	-0.49329	5.49E-20

LINC0155E	0.360366	0.302704	-0.25156	5.95E-09	2.63E-06	-0.5154	5.84E-22
B3GALNT1	0.255276	0.392106	0.619189	7.70E-09	3.40E-06	-0.40874	1.25E-13
ZNF264	0.271551	0.346976	0.353612	8.03E-09	3.55E-06	-0.60743	6.08E-32
DTX3	0.248797	0.411108	0.724548	9.06E-09	4.01E-06	-0.44949	1.79E-16
CIART	0.283296	0.429774	0.601266	1.04E-08	4.61E-06	-0.33133	3.39E-09
TMEM220	0.365562	0.466955	0.353166	1.21E-08	5.34E-06	-0.52505	7.21E-23
CTD-3035	0.717326	0.750969	0.066125	1.27E-08	5.62E-06	-0.37357	1.81E-11
PRSS41	0.693249	0.730639	0.075785	1.28E-08	5.65E-06	-0.43952	9.64E-16
ZNF550	0.250215	0.33338	0.414001	1.40E-08	6.17E-06	-0.61764	2.94E-33
ZNF300	0.433435	0.546822	0.335254	1.42E-08	6.27E-06	-0.70686	3.57E-47
CTD-2245	0.049179	0.21313	2.115619	1.43E-08	6.33E-06	-0.49838	1.98E-20
REP15	0.323084	0.461574	0.514655	1.74E-08	7.70E-06	-0.3726	2.06E-11
RP11-543I	0.784165	0.66364	-0.24075	1.97E-08	8.71E-06	-0.42296	1.40E-14
ZNF844	0.107525	0.178776	0.733478	2.34E-08	1.04E-05	-0.6801	1.76E-42
ZNF718	0.258114	0.363455	0.493765	2.84E-08	1.26E-05	-0.59162	5.37E-30
CTC-260E	0.149526	0.257737	0.785506	2.90E-08	1.28E-05	-0.38414	4.31E-12
CYP2B7P	0.568652	0.664136	0.223934	3.33E-08	1.47E-05	-0.47741	1.18E-18
ZNF254	0.21347	0.354567	0.732026	3.64E-08	1.61E-05	-0.3419	9.83E-10
KRT20	0.624865	0.492488	-0.34346	4.19E-08	1.85E-05	-0.3365	1.86E-09
ZNF83	0.186263	0.252532	0.439128	4.32E-08	1.91E-05	-0.50184	9.86E-21
BX842568	0.430227	0.496517	0.206746	5.71E-08	2.52E-05	-0.31988	1.23E-08
GSTP1	0.143655	0.137173	-0.06661	6.18E-08	2.73E-05	-0.33496	2.23E-09
ITPRIPL1	0.233956	0.310367	0.407736	6.43E-08	2.84E-05	-0.357	1.55E-10
FUZ	0.118831	0.187386	0.657095	6.76E-08	2.99E-05	-0.58647	2.19E-29
ZNF345	0.124634	0.214207	0.781312	9.12E-08	4.03E-05	-0.5466	5.29E-25
SLC14A1	0.826671	0.851918	0.043402	9.96E-08	4.40E-05	-0.36526	5.39E-11
VWDE	0.210311	0.291184	0.46941	1.53E-07	6.77E-05	-0.44093	7.61E-16
RP11-47P	0.387173	0.33122	-0.22519	2.26E-07	9.97E-05	-0.5262	5.59E-23
RP11-680f	0.402565	0.458309	0.187099	2.31E-07	0.000102	-0.59552	1.82E-30
BEX4	0.24189	0.384933	0.670259	2.45E-07	0.000108	-0.43552	1.86E-15
RP1-122P	0.193185	0.267989	0.472192	2.54E-07	0.000112	-0.32474	7.16E-09
SHC3	0.324159	0.417055	0.363539	3.56E-07	0.000157	-0.43134	3.68E-15
TRIM29	0.584094	0.529919	-0.14043	3.70E-07	0.000163	-0.67544	1.03E-41
LINC0060E	0.237051	0.333227	0.491307	4.60E-07	0.000203	-0.38012	7.49E-12
LRRC34	0.043022	0.103102	1.260931	5.21E-07	0.00023	-0.33784	1.59E-09
RP11-255f	0.228458	0.320927	0.490312	5.56E-07	0.000246	-0.41322	6.33E-14
SATB2	0.210924	0.278632	0.401642	6.01E-07	0.000266	-0.48833	1.46E-19
C5orf52	0.227572	0.276727	0.282135	6.29E-07	0.000278	-0.37336	1.86E-11
LINC01214	0.649108	0.738205	0.185563	7.09E-07	0.000313	-0.37467	1.56E-11
SMOC1	0.30672	0.368664	0.265386	7.25E-07	0.00032	-0.33092	3.56E-09
GSTM1	0.280782	0.385913	0.458825	7.32E-07	0.000323	-0.59477	2.24E-30
SYCP2	0.688854	0.708461	0.040491	8.16E-07	0.000361	-0.35479	2.04E-10
FAM179B	0.071307	0.140997	0.983553	1.04E-06	0.00046	-0.46556	1.05E-17
HOXB-AS	0.509513	0.568255	0.157418	1.05E-06	0.000462	-0.47833	9.91E-19
HSPA1A	0.096938	0.278949	1.524871	1.19E-06	0.000526	-0.47704	1.26E-18
CLDN18	0.734102	0.696917	-0.075	1.20E-06	0.000529	-0.33091	3.56E-09
RP11-370I	0.286371	0.437971	0.61295	1.20E-06	0.000529	-0.49964	1.54E-20
AC022182	0.385273	0.298869	-0.36637	1.47E-06	0.000649	-0.40424	2.44E-13
HOXB2	0.596	0.651856	0.12924	1.47E-06	0.000652	-0.70417	1.12E-46
PON3	0.237064	0.218981	-0.11447	1.55E-06	0.000684	-0.32281	8.89E-09
TMEM106	0.182511	0.376702	1.045436	1.59E-06	0.000703	-0.5901	8.16E-30
FAM127A	0.234675	0.391034	0.736629	1.76E-06	0.000778	-0.53635	5.73E-24
PSMA8	0.65324	0.681866	0.061875	2.25E-06	0.000994	-0.38118	6.48E-12
ZNF583	0.06738	0.116611	0.791305	2.36E-06	0.001043	-0.46223	1.91E-17
AHR	0.737309	0.777873	0.077265	2.53E-06	0.001119	-0.42989	4.65E-15
LYZ	0.653832	0.546817	-0.25786	2.54E-06	0.001123	-0.5274	4.30E-23
BHLHB9	0.377451	0.469526	0.314918	3.96E-06	0.00175	-0.33149	3.33E-09
ZNF879	0.199052	0.301566	0.599326	4.38E-06	0.001938	-0.68408	3.80E-43

GIPC2	0.12986	0.120185	-0.11169	4.44E-06	0.001963	-0.38688	2.95E-12
RP1-97D1	0.339351	0.417567	0.299229	4.59E-06	0.002031	-0.45	1.64E-16
GNG4	0.296919	0.286776	-0.05015	4.92E-06	0.002173	-0.51318	9.35E-22
RP11-616f	0.189369	0.262415	0.470653	4.92E-06	0.002173	-0.33954	1.30E-09
BST2	0.540382	0.431224	-0.32554	5.46E-06	0.002414	-0.68763	9.46E-44
NINL	0.274784	0.35925	0.38669	5.82E-06	0.002571	-0.37392	1.73E-11
PHLDA3	0.31218	0.360883	0.209154	6.46E-06	0.002855	-0.48941	1.18E-19
LY6G6E	0.659046	0.516763	-0.35088	6.62E-06	0.002928	-0.56181	1.32E-26
CROT	0.104345	0.120418	0.206685	7.35E-06	0.003248	-0.3459	6.09E-10
RAB32	0.162034	0.161769	-0.00236	7.69E-06	0.0034	-0.34344	8.19E-10
LINC01415	0.546839	0.569443	0.058434	7.76E-06	0.003429	-0.51549	5.72E-22
ZNF518B	0.382427	0.462855	0.275378	9.61E-06	0.004249	-0.77939	4.49E-63
ZNF614	0.039555	0.116555	1.559087	1.42E-05	0.006278	-0.37315	1.91E-11
RP4-584D	0.37469	0.445988	0.251307	1.43E-05	0.006329	-0.39425	1.04E-12
MPC2	0.839097	0.862606	0.039864	1.44E-05	0.006355	-0.3286	4.63E-09
MAP10	0.332509	0.407087	0.291943	1.90E-05	0.008377	-0.67218	3.47E-41
SLC2A10	0.061704	0.119718	0.956212	1.93E-05	0.008511	-0.43655	1.57E-15
NT5DC4	0.881028	0.81274	-0.11639	1.93E-05	0.008545	-0.61701	3.55E-33
LPL	0.359378	0.420568	0.226836	2.18E-05	0.009624	-0.32476	7.15E-09
RP11-496f	0.837892	0.854744	0.028728	2.87E-05	0.012666	-0.33285	2.85E-09
LY6G6D	0.489977	0.402763	-0.28278	2.88E-05	0.012716	-0.58326	5.20E-29
CTD-3060	0.93247	0.873479	-0.09428	2.99E-05	0.01322	-0.32784	5.05E-09
RGN	0.599679	0.666636	0.152707	3.73E-05	0.016483	-0.5159	5.24E-22
QPCT	0.336294	0.33595	-0.00147	4.04E-05	0.017867	-0.3623	7.89E-11
AK4	0.234333	0.252465	0.107518	5.52E-05	0.024402	-0.35371	2.33E-10
ZNF543	0.118565	0.307191	1.373459	7.18E-05	0.031715	-0.73019	1.01E-51
FAM221A	0.367038	0.404408	0.139881	8.70E-05	0.038441	-0.41197	7.65E-14
TUSC1	0.110467	0.105828	-0.0619	8.83E-05	0.039011	-0.39627	7.80E-13
EVI2A	0.7948	0.822485	0.049398	8.86E-05	0.039155	-0.41657	3.79E-14
TRPV2	0.660228	0.694054	0.072084	9.64E-05	0.042601	-0.34206	9.65E-10
NAPRT	0.292625	0.277005	-0.07914	0.000102	0.045165	-0.36082	9.53E-11
ZNF721	0.572462	0.526927	-0.11958	0.000113	0.049824	-0.33678	1.80E-09