

Supplementary table 1:

Clinical characteristics of patients with cervical squamous caner in TCGA

Variable	N	%
Total	254	
Age	48.9	20-88
Vital Status		
Alive	193	76.0
Dead	61	24.0
Tumor Status		
Tumor Free	158	62.2
With Tumor	63	24.8
Not Available	33	13.0
Grade		
G1	12	4.7
G2	110	43.3
G3	103	40.6
G4	1	0.4
Gx	20	7.9
Not available	8	3.1
T Stage		
T1	111	43.7
T2	58	22.8
T3	19	7.5
T4	9	3.5
Tis	1	0.4
Tx	15	5.9
Not Available	41	16.1
N Stage		
N0	105	41.3
N1	51	20.1
Nx	57	22.4
Not available	41	16.1
M Stage		
M0	102	40.2
M1	7	2.8
Mx	99	39.0
Not available	46	18.1
HPV		
Positive	17	6.7
Not application	37	14.6
Not available	200	78.7

Supplementary table 2:

Performance characteristics of the five genes in the different groups

Group	MCM2	MCM4	MCM5	PCNA	RNASEH2A	
Cancer VS. normal (%)	99.5	99.5	99.5	99.5	99.5	Sensitivity
	100.00	100.00	100.00	100.00	100	Specificity
	0.996	0.996	0.996	0.996	0.996	AUC
	100.00	100.00	100.00	100.00	100	PPV
	75.282	75.282	75.282	75.282	75.282	NPV
Grade (G1 VS. G2/3) (%)	31.5	18.5	85.1	33.9	59.5	Sensitivity
	90.9	100	45.5	81.8	63.6	Specificity
	0.52	0.541	0.629	0.522	0.548	AUC
	98.126	100	95.939	96.573	96.114	PPV
	8.064	7.502	16.794	7.561	9.404	NPV
Stage (I-IIA VS. IIB-IV) (%)	52.9	72.9	60	40	61.4	Sensitivity
	55.5	38.3	60.2	73.4	46.9	Specificity
	0.519	0.53	0.588	0.53	0.524	AUC
	33.33	36.36	64.06	35.35	34.34	PPV
	39.446	39.301	45.239	45.177	38.787	NPV
NO VS. N1 (%)	39.1	52.2	93.5	39.1	65.2	Sensitivity
	73.7	58.6	15.2	78.8	45.5	Specificity
	0.508	0.528	0.517	0.532	0.505	AUC
	40.829	36.917	33.851	46.121	35.702	PPV
	72.279	72.538	83.439	73.6	73.802	NPV

Abbreviations: AUC: Area Under Curve; PPV: Positive Predictive Value; NPV: Negative Predictive Value.

Supplementary Table 3 Significant genes list obtained by univariate Cox regression analysis

gene.name	exp(coef)	exp(-coef)	lower .95	upper .95	p-value
PSMA8	0.2666	3.7512	0.1484	0.4788	2.11E-06
ARHGAP4	0.2857	3.5007	0.1645	0.4961	2.35E-06
BTNL8	0.2809	3.5604	0.1585	0.4976	3.44E-06

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LAGE3	0.3145	3.1796	0.1821	0.5432	1.22E-05
TREX1	0.3141	3.1836	0.1790	0.5512	2.05E-05
PBX4	0.3209	3.1158	0.1845	0.5582	2.28E-05
NCAPH2	0.3350	2.9849	0.1963	0.5717	2.67E-05
TPRN	0.3404	2.9374	0.1962	0.5907	6.10E-05
IL8	2.8308	0.3533	1.6612	4.8242	6.57E-05
LGALS9	0.3518	2.8422	0.2054	0.6027	7.13E-05
DPEP2	0.3581	2.7924	0.2108	0.6084	7.38E-05
S1PR4	0.3506	2.8522	0.2038	0.6032	7.48E-05
GTSF1L	0.3527	2.8354	0.2055	0.6054	8.04E-05
LOC282997	0.3478	2.8748	0.2005	0.6036	8.53E-05
MCM5	0.3599	2.7786	0.2112	0.6133	9.12E-05
RBM38	0.3510	2.8493	0.2023	0.6089	9.77E-05
ISY1	0.3662	2.7310	0.2164	0.6196	9.85E-05
JAK3	0.3602	2.7761	0.2093	0.6198	0.000119
MEI1	0.3657	2.7346	0.2140	0.6249	0.000131
ISCU	0.3729	2.6814	0.2193	0.6343	0.000154
C9orf84	0.3708	2.6969	0.2173	0.6326	0.000162
FASN	2.7265	0.3668	1.5830	4.6961	0.000167
NUBP1	0.3586	2.7885	0.2048	0.6278	0.000179
SLC25A35	0.3806	2.6272	0.2252	0.6432	0.00018
RCAN3	2.7469	0.3640	1.5817	4.7704	0.000184
ARRB2	0.3795	2.6349	0.2241	0.6428	0.000184
CD6	0.3781	2.6445	0.2223	0.6433	0.000195
SLN	2.6634	0.3755	1.5566	4.5571	0.000204
SSBP3	0.3804	2.6291	0.2237	0.6466	0.00021
HNRNPA3P1	0.3787	2.6403	0.2223	0.6454	0.000213
LOC644165	0.3691	2.7092	0.2126	0.6408	0.000225
VMA21	0.3771	2.6515	0.2198	0.6472	0.000238
BUB3	0.3836	2.6072	0.2246	0.6550	0.000267
PARP6	0.3854	2.5949	0.2262	0.6566	0.000276
LOC100188949	0.3846	2.6003	0.2251	0.6569	0.000281
PTK2B	0.3839	2.6051	0.2244	0.6568	0.000286
FAM129C	0.3879	2.5778	0.2282	0.6595	0.000288
BDH1	0.3859	2.5914	0.2261	0.6586	0.000294
LSP1	0.3897	2.5661	0.2294	0.6621	0.000303
FBXO25	0.3783	2.6432	0.2187	0.6546	0.000311
P2RY14	0.3818	2.6192	0.2217	0.6574	0.000312
ANGPTL6	0.3950	2.5316	0.2340	0.6669	0.000315
CSK	0.3894	2.5683	0.2279	0.6653	0.000345
PRSS36	0.3854	2.5947	0.2240	0.6632	0.000352
HHEX	0.3933	2.5424	0.2313	0.6687	0.000359
ITGAD	0.3926	2.5474	0.2299	0.6704	0.000384
RAD9B	0.3939	2.5390	0.2313	0.6706	0.000387

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P2RY8	0.3928	2.5460	0.2299	0.6710	0.000392
AKNA	0.3957	2.5269	0.2316	0.6762	0.000443
TNFRSF13C	0.4045	2.4721	0.2400	0.6819	0.000452
POP5	0.4005	2.4969	0.2356	0.6808	0.00047
TTC24	0.3970	2.5186	0.2323	0.6788	0.000474
CD27	0.4017	2.4893	0.2365	0.6822	0.000479
HNRNPA3	0.3991	2.5058	0.2340	0.6806	0.000492
RPA2	0.4049	2.4694	0.2390	0.6862	0.000518
RIBC2	0.4053	2.4673	0.2390	0.6873	0.000551
RAB8A	0.4067	2.4588	0.2401	0.6889	0.000562
DDX26B	0.4055	2.4662	0.2386	0.6890	0.000576
ITGA5	2.4444	0.4091	1.4436	4.1390	0.000596
EGLN1	2.4466	0.4087	1.4413	4.1530	0.000618
AGPAT4	2.4973	0.4004	1.4509	4.2982	0.000628
KIF22	0.4009	2.4943	0.2330	0.6899	0.000635
TAF1A	2.5266	0.3958	1.4562	4.3840	0.000637
PSCA	0.4056	2.4656	0.2374	0.6929	0.000639
LGALS9C	0.4065	2.4598	0.2384	0.6934	0.000645
KLF1	0.4096	2.4414	0.2411	0.6958	0.000649
SLC25A14	0.4081	2.4503	0.2398	0.6946	0.000651
WWC2	2.4620	0.4062	1.4403	4.2086	0.000662
INO80C	0.4072	2.4558	0.2386	0.6948	0.000675
CD1E	0.4168	2.3995	0.2476	0.7016	0.000683
VAC14	0.4159	2.4045	0.2463	0.7024	0.000704
C3orf70	0.3972	2.5176	0.2283	0.6912	0.00072
SPIB	0.4117	2.4287	0.2421	0.7003	0.000728
KEL	0.4153	2.4080	0.2454	0.7027	0.000729
CHCHD6	0.4196	2.3832	0.2495	0.7058	0.000736
CCDC56	0.4101	2.4386	0.2396	0.7018	0.000785
C6orf136	0.4195	2.3839	0.2488	0.7071	0.000788
UNC45B	0.4129	2.4216	0.2425	0.7033	0.00079
FAM50A	0.4115	2.4303	0.2407	0.7033	0.000798
IDH3G	0.4149	2.4102	0.2441	0.7053	0.000798
RFC2	0.4115	2.4302	0.2409	0.7028	0.000803
SEMA3A	2.4551	0.4073	1.4260	4.2268	0.000808
C8orf30A	2.3919	0.4181	1.4137	4.0469	0.000809
C9orf142	0.3969	2.5197	0.2266	0.6950	0.00081
AKR1A1	0.4198	2.3819	0.2485	0.7093	0.000822
LATS2	2.4350	0.4107	1.4202	4.1749	0.00084
CDH26	0.4191	2.3863	0.2474	0.7098	0.000859
LILRA4	0.4210	2.3755	0.2490	0.7116	0.000871
TSHR	0.4189	2.3869	0.2469	0.7110	0.000877
CCR7	0.4192	2.3853	0.2469	0.7119	0.000904
MAP4K1	0.4198	2.3820	0.2474	0.7124	0.000906

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NUP62CL	0.4204	2.3784	0.2482	0.7123	0.000907
COQ4	0.4119	2.4279	0.2394	0.7087	0.000941
MTCP1NB	0.4200	2.3810	0.2472	0.7137	0.000941
C1orf59	0.4245	2.3558	0.2514	0.7168	0.000951
SERPINA5	2.4065	0.4155	1.4055	4.1206	0.000962
ASTE1	0.4291	2.3303	0.2559	0.7197	0.000965
THOP1	0.4210	2.3755	0.2480	0.7146	0.000969
KIAA0922	0.4216	2.3717	0.2487	0.7149	0.000977
CHAF1A	0.4262	2.3463	0.2529	0.7183	0.000978
TFEB	0.4268	2.3429	0.2532	0.7196	0.00101
DCBLD1	2.3865	0.4190	1.3973	4.0760	0.001013
VPS33A	0.4267	2.3435	0.2528	0.7204	0.001021
ABHD10	0.4201	2.3802	0.2460	0.7175	0.001057
STARD3NL	2.3624	0.4233	1.3887	4.0186	0.001079
IQCB1	0.4292	2.3297	0.2547	0.7235	0.001086
CPE	2.3736	0.4213	1.3900	4.0531	0.001091
RPL19P12	0.4281	2.3357	0.2532	0.7239	0.001119
LSMD1	0.4215	2.3722	0.2466	0.7206	0.001132
PCDHGA11	2.3472	0.4260	1.3833	3.9826	0.001138
CXorf65	0.4280	2.3363	0.2530	0.7241	0.001138
SLAMF1	0.4261	2.3471	0.2509	0.7234	0.00114
EAF2	0.4284	2.3342	0.2533	0.7247	0.001159
ZBTB48	0.4263	2.3456	0.2505	0.7255	0.001211
LY9	0.4318	2.3158	0.2557	0.7291	0.001215
SCAND3	2.3198	0.4311	1.3721	3.9220	0.001229
POLL	0.4284	2.3340	0.2522	0.7278	0.001237
SFRS5	0.4266	2.3440	0.2505	0.7267	0.001252
SERPINA3	2.3391	0.4275	1.3753	3.9783	0.001264
DYSFIP1	0.4277	2.3383	0.2513	0.7277	0.001282
WDR34	0.4254	2.3507	0.2488	0.7273	0.001294
CKB	0.4309	2.3208	0.2543	0.7301	0.001294
CAMP	0.4297	2.3269	0.2530	0.7300	0.001302
FARSA	0.4371	2.2877	0.2602	0.7343	0.001314
INPP5K	0.4314	2.3182	0.2543	0.7318	0.00132
ASCL4	0.4258	2.3486	0.2489	0.7284	0.001333
SELL	0.4350	2.2990	0.2577	0.7342	0.001346
MED26	0.4291	2.3304	0.2520	0.7308	0.001348
CD5	0.4350	2.2988	0.2577	0.7344	0.001353
TAZ	0.4365	2.2907	0.2590	0.7359	0.001383
AMDHD2	0.4321	2.3144	0.2544	0.7340	0.001395
GATS	0.4389	2.2785	0.2610	0.7381	0.001406
THSD1	2.3131	0.4323	1.3627	3.9264	0.001416
TIMM17B	0.4291	2.3303	0.2515	0.7323	0.001419
MSRB3	2.3293	0.4293	1.3634	3.9796	0.001438

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MCM3	0.4373	2.2865	0.2591	0.7383	0.001464
SBF1P1	0.4365	2.2907	0.2582	0.7381	0.001474
TMEM180	0.4385	2.2806	0.2598	0.7401	0.001493
TMED10P1	2.3223	0.4306	1.3593	3.9673	0.001494
INPP5D	0.4335	2.3068	0.2548	0.7376	0.001531
APOBEC3B	0.4454	2.2454	0.2665	0.7441	0.001532
RAB2A	2.2890	0.4369	1.3525	3.8740	0.001545
C16orf75	0.4388	2.2790	0.2597	0.7413	0.001559
GINS2	0.4378	2.2843	0.2588	0.7406	0.001576
CHAF1B	0.4345	2.3013	0.2554	0.7392	0.001582
GMIP	0.4402	2.2718	0.2607	0.7432	0.001592
BTLA	0.4365	2.2912	0.2571	0.7410	0.001594
SNAI3	0.4411	2.2668	0.2614	0.7446	0.001631
CORT	0.4286	2.3332	0.2490	0.7377	0.001631
DEF6	0.4390	2.2777	0.2586	0.7453	0.001715
KLHDC3	0.4342	2.3033	0.2538	0.7426	0.001726
ERG	2.3224	0.4306	1.3494	3.9970	0.001732
EXT1	2.3822	0.4198	1.3602	4.1721	0.001742
HPS1	0.4395	2.2753	0.2588	0.7463	0.001742
AGAP11	0.4334	2.3074	0.2530	0.7424	0.001767
MAP3K14	0.4442	2.2514	0.2632	0.7496	0.001791
THYN1	0.4267	2.3434	0.2460	0.7402	0.001799
C6orf59	2.2699	0.4406	1.3369	3.8539	0.001808
PTPRM	2.2441	0.4456	1.3323	3.7801	0.001815
PLAC8	0.4471	2.2365	0.2659	0.7517	0.00182
LCN10	0.4443	2.2509	0.2629	0.7508	0.001844
FGD3	0.4453	2.2457	0.2638	0.7516	0.001861
TIPIN	0.4373	2.2869	0.2561	0.7466	0.001865
POM121L10P	0.4343	2.3026	0.2526	0.7468	0.001898
L3MBTL2	0.4478	2.2334	0.2659	0.7541	0.001929
CIDECP	0.4390	2.2780	0.2569	0.7502	0.001966
RFC5	0.4456	2.2439	0.2635	0.7538	0.001985
GZMH	0.4358	2.2948	0.2534	0.7495	0.002019
LOXL2	2.2336	0.4477	1.3227	3.7717	0.002022
UBXN11	0.4410	2.2676	0.2583	0.7529	0.002036
PLA2G2D	0.4553	2.1965	0.2726	0.7603	0.002048
FITM1	0.4399	2.2735	0.2571	0.7526	0.002068
SLC25A28	0.4451	2.2465	0.2622	0.7558	0.002075
ACTR3	2.3214	0.4308	1.3365	4.0319	0.00209
HESX1	0.4450	2.2471	0.2617	0.7567	0.00215
DENND2D	0.4509	2.2176	0.2673	0.7609	0.002181
PIN1L	0.4497	2.2239	0.2660	0.7601	0.002206
HIST1H1D	0.4400	2.2729	0.2565	0.7547	0.002209
SC4MOL	2.2789	0.4388	1.3247	3.9205	0.002213

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SHISA4	2.2450	0.4454	1.3185	3.8223	0.002229
FAM83A	2.2235	0.4497	1.3154	3.7586	0.002232
INPP5B	0.4544	2.2007	0.2704	0.7636	0.002245
NDUFS7	0.4480	2.2321	0.2641	0.7601	0.002252
SERINC3	2.2786	0.4389	1.3234	3.9234	0.002258
OSBPL2	0.4516	2.2146	0.2675	0.7623	0.002273
CYP4F12	0.4532	2.2066	0.2690	0.7636	0.002292
NLRC3	0.4488	2.2282	0.2645	0.7615	0.002296
PNPLA1	0.4534	2.2056	0.2691	0.7638	0.002309
GPR114	0.4489	2.2274	0.2646	0.7618	0.002313
CDK8	2.2240	0.4496	1.3124	3.7690	0.002314
PLA1A	0.4526	2.2096	0.2681	0.7638	0.002318
SLC25A19	0.4555	2.1953	0.2710	0.7658	0.002347
SLC6A17	2.2160	0.4513	1.3096	3.7496	0.002363
DUOX1	0.4527	2.2089	0.2682	0.7643	0.002363
ARID3A	2.2428	0.4459	1.3136	3.8294	0.002371
PDIA6	2.2334	0.4477	1.3123	3.8010	0.002379
PTPRN	2.2022	0.4541	1.3061	3.7131	0.002383
EREG	2.1897	0.4567	1.3034	3.6788	0.00239
SYNGR2	0.4556	2.1951	0.2708	0.7665	0.002391
C22orf43	0.4493	2.2259	0.2642	0.7639	0.002419
ZC3H13	2.2499	0.4445	1.3129	3.8557	0.002439
SLAMF6	0.4544	2.2007	0.2693	0.7668	0.002441
NFATC3	0.4529	2.2080	0.2677	0.7662	0.00245
GDAP1	2.1974	0.4551	1.3016	3.7097	0.002489
SOX21	0.4444	2.2504	0.2592	0.7618	0.002497
HELLS	0.4519	2.2129	0.2665	0.7661	0.002499
SIT1	0.4581	2.1831	0.2726	0.7697	0.002507
GOT1	0.4576	2.1854	0.2722	0.7693	0.002508
FUNDC2	0.4588	2.1796	0.2734	0.7698	0.002508
ARRDC2	0.4572	2.1874	0.2717	0.7692	0.002515
GEFT	2.1936	0.4559	1.3007	3.6994	0.002551
SS18L2	0.4507	2.2188	0.2650	0.7665	0.002552
SULT1A3	0.4517	2.2139	0.2659	0.7674	0.002558
EIF3H	2.1869	0.4573	1.2988	3.6824	0.002561
IL18BP	0.4559	2.1935	0.2700	0.7698	0.002595
C3orf67	2.1936	0.4559	1.2984	3.7061	0.002612
ZDHHC20	2.2441	0.4456	1.3076	3.8515	0.002623
PGP	0.4489	2.2279	0.2626	0.7674	0.002654
MFSD3	2.1748	0.4598	1.2944	3.6541	0.002685
FOXP3	0.4642	2.1542	0.2778	0.7756	0.002706
SPRED3	2.2235	0.4497	1.3006	3.8013	0.002712
SUV39H1	0.4587	2.1799	0.2721	0.7734	0.002742
EPHX2	0.4547	2.1993	0.2678	0.7720	0.002751

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HCG26	0.4546	2.1999	0.2677	0.7719	0.002752
TARDBP	0.4633	2.1587	0.2765	0.7760	0.002793
ZNF831	0.4585	2.1812	0.2715	0.7743	0.002794
P2RY13	0.4592	2.1777	0.2722	0.7748	0.002795
DOK3	0.4635	2.1574	0.2765	0.7771	0.002827
RDH5	0.4506	2.2193	0.2634	0.7709	0.002828
ASF1B	0.4650	2.1505	0.2778	0.7785	0.002853
EMD	0.4612	2.1683	0.2740	0.7763	0.002856
GRTP1	0.4546	2.1999	0.2672	0.7733	0.002857
BCAS3	0.4653	2.1489	0.2781	0.7787	0.002875
NQO2	0.4545	2.2002	0.2673	0.7728	0.002892
WNT3A	0.4576	2.1851	0.2702	0.7752	0.002907
GPS2	0.4567	2.1896	0.2688	0.7759	0.002948
DNAJC9	0.4587	2.1799	0.2710	0.7765	0.002948
SLC22A20	0.4644	2.1535	0.2768	0.7791	0.002955
NUPL1	2.1875	0.4572	1.2888	3.7127	0.002957
TNFRSF10D	2.1593	0.4631	1.2837	3.6320	0.002971
SMYD2	2.1565	0.4637	1.2827	3.6255	0.002987
TAF11	0.4635	2.1576	0.2755	0.7797	0.003
ZNF541	0.4628	2.1608	0.2749	0.7792	0.003017
CCDC42B	0.4586	2.1806	0.2703	0.7781	0.003034
SH3GLB2	0.4561	2.1925	0.2680	0.7762	0.003035
NLRC5	0.4616	2.1665	0.2733	0.7795	0.003045
ADAMTS12	2.1669	0.4615	1.2824	3.6613	0.003059
ITGB3	2.1702	0.4608	1.2831	3.6704	0.003073
SYNGR3	0.4633	2.1586	0.2749	0.7808	0.003091
NCF1C	0.4661	2.1454	0.2775	0.7830	0.003118
TUBA4B	0.4594	2.1767	0.2707	0.7798	0.003138
LDLR	2.2427	0.4459	1.2930	3.8901	0.003143
MCM2	0.4659	2.1463	0.2771	0.7833	0.003157
CD3G	0.4604	2.1722	0.2714	0.7809	0.003183
SLFN14	0.4634	2.1578	0.2746	0.7822	0.003192
HDHD3	0.4539	2.2032	0.2650	0.7774	0.003204
RAMP3	0.4636	2.1572	0.2746	0.7826	0.003207
FAM160B2	0.4617	2.1661	0.2726	0.7817	0.003221
ARHGAP25	0.4641	2.1546	0.2750	0.7833	0.003234
TLL1	2.1602	0.4629	1.2767	3.6552	0.003286
MLNR	2.2109	0.4523	1.2849	3.8042	0.003292
NEU4	0.4574	2.1861	0.2679	0.7811	0.003306
FHAD1	0.4655	2.1483	0.2758	0.7855	0.00333
UBASH3A	0.4684	2.1349	0.2788	0.7869	0.003353
SLC7A3	0.4695	2.1298	0.2800	0.7873	0.003355
C17orf90	0.4684	2.1351	0.2787	0.7870	0.003377
ARRDC5	0.4686	2.1338	0.2788	0.7876	0.003395

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CCR2	0.4661	2.1453	0.2761	0.7870	0.003429
CENPH	0.4593	2.1770	0.2694	0.7832	0.003442
USP27X	0.4659	2.1462	0.2757	0.7875	0.003484
ANKRD20B	0.4684	2.1349	0.2782	0.7887	0.003488
C14orf2	0.4590	2.1788	0.2687	0.7839	0.003502
TOR1AIP2	2.1620	0.4625	1.2722	3.6744	0.003512
FSTL1	2.1329	0.4688	1.2672	3.5902	0.003522
C22orf13	0.4633	2.1583	0.2728	0.7869	0.003533
MKNK1	0.4687	2.1335	0.2783	0.7894	0.00355
ANGPT2	2.1548	0.4641	1.2694	3.6577	0.003567
CDK5RAP3	0.4605	2.1714	0.2697	0.7865	0.003582
PLA2G7	0.4734	2.1125	0.2829	0.7922	0.003592
SELPLG	0.4675	2.1390	0.2768	0.7895	0.003594
SNRPA	0.4634	2.1581	0.2726	0.7876	0.003603
RHOD	2.1569	0.4636	1.2691	3.6660	0.003627
PEAR1	2.1405	0.4672	1.2661	3.6190	0.003651
CASP2	0.4665	2.1435	0.2753	0.7905	0.003721
CRADD	0.4692	2.1314	0.2779	0.7920	0.003721
MAX	0.4759	2.1011	0.2849	0.7951	0.003729
USP20	0.4722	2.1177	0.2809	0.7937	0.003739
TNRC18	2.1223	0.4712	1.2612	3.5712	0.003743
RASGRP2	0.4699	2.1283	0.2785	0.7927	0.00375
FAM38A	2.1615	0.4626	1.2657	3.6914	0.003835
SGK1	0.4672	2.1402	0.2753	0.7929	0.003884
TRIM6	2.1638	0.4622	1.2662	3.6974	0.003893
MLC1	0.4636	2.1568	0.2715	0.7917	0.003898
ZNF589	0.4726	2.1159	0.2805	0.7962	0.003968
UXT	0.4699	2.1283	0.2777	0.7949	0.003972
SLFN13	0.4645	2.1528	0.2721	0.7930	0.003979
CCDC34	0.4679	2.1373	0.2756	0.7944	0.004006
TAS2R10	2.1076	0.4745	1.2534	3.5441	0.004024
TTC19	0.4650	2.1506	0.2722	0.7944	0.004098
ORC6L	0.4723	2.1175	0.2795	0.7978	0.004118
FUT7	0.4761	2.1005	0.2833	0.8000	0.004127
EPHB6	0.4783	2.0907	0.2857	0.8008	0.004131
SEC63	2.1466	0.4659	1.2567	3.6665	0.00416
DMAP1	0.4727	2.1153	0.2797	0.7990	0.004174
PANK2	0.4738	2.1104	0.2810	0.7990	0.004176
LOC643008	0.4751	2.1046	0.2822	0.7999	0.00418
ATP2A3	0.4731	2.1136	0.2802	0.7989	0.004181
CNIH	2.1475	0.4657	1.2564	3.6706	0.004206
CERCAM	2.1033	0.4754	1.2495	3.5406	0.004211
APOBEC3H	0.4768	2.0974	0.2838	0.8009	0.004218
C16orf54	0.4765	2.0985	0.2835	0.8009	0.004218

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TTC16	0.4738	2.1104	0.2807	0.7998	0.004219
GSTM4	0.4740	2.1095	0.2809	0.8001	0.004252
TMEM165	2.1175	0.4723	1.2509	3.5844	0.004286
APOBEC3D	0.4804	2.0816	0.2871	0.8040	0.004332
MYBPC3	0.4711	2.1225	0.2776	0.7996	0.004352
RPP30	0.4708	2.1240	0.2770	0.8001	0.004367
ZNF813	2.0901	0.4785	1.2435	3.5130	0.004437
ZER1	0.4808	2.0801	0.2868	0.8058	0.00448
FGL2	0.4794	2.0858	0.2854	0.8054	0.004513
GTPBP1	0.4823	2.0735	0.2883	0.8068	0.004526
FAIM2	0.4726	2.1161	0.2783	0.8024	0.004527
OLFM1	0.4775	2.0941	0.2834	0.8046	0.004537
SLC11A2	2.1170	0.4724	1.2459	3.5971	0.004548
RBP3	0.4784	2.0902	0.2842	0.8052	0.0046
ITK	0.4775	2.0943	0.2830	0.8057	0.004621
DSE	2.1124	0.4734	1.2439	3.5873	0.004628
KIAA0090	2.1714	0.4605	1.2519	3.7662	0.00467
HAUS7	0.4783	2.0908	0.2836	0.8065	0.004691
ORC1L	0.4849	2.0624	0.2904	0.8097	0.004697
GPX1	0.4662	2.1448	0.2711	0.8020	0.004718
CD1C	0.4803	2.0822	0.2855	0.8079	0.004727
PHKG2	0.4746	2.1070	0.2796	0.8058	0.004736
ANXA2	2.0820	0.4803	1.2372	3.5036	0.004753
TMC8	0.4786	2.0895	0.2835	0.8078	0.004786
YPEL3	0.4779	2.0923	0.2828	0.8077	0.004801
UQCDFS1	0.4785	2.0899	0.2831	0.8086	0.004862
RBPJ	0.4749	2.1055	0.2794	0.8073	0.004892
FZR1	0.4786	2.0893	0.2833	0.8087	0.004893
LUZP1	2.1187	0.4720	1.2407	3.6180	0.004893
SYCE2	0.4799	2.0836	0.2845	0.8095	0.004915
ORMDL1	0.4785	2.0897	0.2830	0.8091	0.004929
PCDHGC5	2.0983	0.4766	1.2369	3.5596	0.004932
DTL	0.4833	2.0689	0.2880	0.8111	0.004943
CETN2	0.4817	2.0762	0.2861	0.8108	0.004964
AGAP2	0.4827	2.0718	0.2872	0.8113	0.004964
FUCA2	2.1055	0.4750	1.2383	3.5799	0.004992
DES	0.4802	2.0827	0.2843	0.8109	0.005049
TBC1D12	0.4826	2.0720	0.2867	0.8123	0.005065
C4orf38	2.0569	0.4862	1.2284	3.4443	0.005074
ABHD12	0.4867	2.0546	0.2909	0.8144	0.005135
KTELC1	0.4872	2.0523	0.2912	0.8153	0.005163
CD2	0.4841	2.0656	0.2879	0.8140	0.005194
TP53I3	2.0774	0.4814	1.2302	3.5080	0.005218
WHAMM	0.4855	2.0599	0.2891	0.8153	0.005221

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GPBAR1	0.4822	2.0737	0.2857	0.8140	0.005243
IL1A	2.0530	0.4871	1.2261	3.4375	0.005247
TRAPPC1	0.4844	2.0642	0.2880	0.8148	0.005259
CXCL1	2.0494	0.4879	1.2250	3.4288	0.005281
HTATSF1	0.4890	2.0448	0.2927	0.8170	0.005299
TADA3	0.4792	2.0870	0.2823	0.8132	0.005322
C1orf74	2.1238	0.4709	1.2347	3.6529	0.005338
LOC100129066	0.4832	2.0694	0.2864	0.8153	0.005351
NDUFA6	0.4816	2.0763	0.2848	0.8143	0.005352
SCN2A	2.0562	0.4863	1.2251	3.4509	0.005353
HOXA1	2.0766	0.4816	1.2277	3.5122	0.005358
C1orf228	0.4859	2.0581	0.2891	0.8168	0.005383
C19orf43	0.4787	2.0890	0.2817	0.8136	0.005396
PLD4	0.4912	2.0359	0.2944	0.8196	0.005452
TMED2	2.0584	0.4858	1.2235	3.4630	0.005457
PMEPA1	2.0660	0.4840	1.2240	3.4871	0.00548
CD3D	0.4841	2.0656	0.2869	0.8170	0.00549
RFX2	0.4869	2.0537	0.2898	0.8183	0.005513
PPP1R16B	0.4849	2.0623	0.2875	0.8179	0.005534
SP140	0.4875	2.0512	0.2903	0.8189	0.005552
C16orf79	0.4774	2.0948	0.2796	0.8150	0.00556
CD48	0.4876	2.0510	0.2903	0.8190	0.005567
PVRL3	2.0709	0.4829	1.2241	3.5032	0.005567
HIST1H1C	0.4841	2.0657	0.2868	0.8173	0.005583
DCI	0.4840	2.0659	0.2864	0.8182	0.005647
RSPH3	2.0971	0.4768	1.2266	3.5856	0.005651
GALNT2	2.0619	0.4850	1.2213	3.4811	0.005651
TMEM130	0.4884	2.0473	0.2909	0.8202	0.005655
ASCL2	0.4778	2.0929	0.2797	0.8163	0.005687
FAM65B	0.4858	2.0586	0.2879	0.8196	0.005711
PRR13	0.4879	2.0494	0.2902	0.8205	0.005735
NMRAL1	0.4800	2.0833	0.2819	0.8174	0.00574
TRIM31	0.4889	2.0455	0.2910	0.8214	0.005763
BIN2	0.4913	2.0353	0.2936	0.8223	0.005769
PKD2L1	0.4891	2.0444	0.2911	0.8219	0.005781
FUT11	2.0485	0.4882	1.2177	3.4461	0.0058
FNDC4	2.0449	0.4890	1.2169	3.4361	0.005821
MMP8	2.0700	0.4831	1.2201	3.5117	0.005827
COX4I1	0.4825	2.0724	0.2841	0.8195	0.005831
HSPA14	0.4885	2.0469	0.2904	0.8220	0.005848
PDIA3	2.0647	0.4843	1.2181	3.4998	0.005912
OGFOD2	0.4898	2.0416	0.2914	0.8233	0.005915
HDAC5	0.4921	2.0321	0.2939	0.8241	0.005916
XRCC3	0.4897	2.0422	0.2912	0.8235	0.005948

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FAM127B	0.4903	2.0398	0.2919	0.8233	0.005954
UBAC1	0.4870	2.0534	0.2885	0.8222	0.005961
IKBKB	0.4898	2.0416	0.2912	0.8239	0.006003
STX7	2.0666	0.4839	1.2169	3.5094	0.006084
ABHD14B	0.4881	2.0487	0.2892	0.8239	0.006094
HCCS	0.4943	2.0230	0.2957	0.8262	0.006103
FAM102A	0.4917	2.0337	0.2928	0.8258	0.006167
MYO7B	0.4938	2.0253	0.2948	0.8271	0.006188
FAIM3	0.4885	2.0470	0.2892	0.8251	0.006218
VEPH1	2.0439	0.4893	1.2117	3.4476	0.006237
STAC3	0.4917	2.0336	0.2925	0.8267	0.00626
TOMM20L	0.4924	2.0310	0.2931	0.8272	0.006262
EXO1	0.4936	2.0259	0.2945	0.8274	0.006314
FAM73B	0.4899	2.0414	0.2903	0.8266	0.006343
SQLE	2.0406	0.4901	1.2096	3.4423	0.006346
LOC606724	0.4900	2.0408	0.2902	0.8275	0.006424
WEE1	0.4918	2.0332	0.2920	0.8284	0.006488
MRPS18C	0.4920	2.0327	0.2923	0.8280	0.006491
COL4A6	2.0397	0.4903	1.2073	3.4462	0.006504
THEG	0.4933	2.0273	0.2933	0.8296	0.006514
C2orf85	0.4907	2.0379	0.2906	0.8286	0.006546
SLC14A1	0.4910	2.0366	0.2910	0.8286	0.006553
APOBEC3G	0.4964	2.0145	0.2966	0.8309	0.006586
IHH	0.4881	2.0489	0.2877	0.8281	0.006604
GLS2	0.4909	2.0369	0.2905	0.8295	0.006616
LRRC16B	0.4925	2.0307	0.2923	0.8297	0.006616
AURKB	0.4899	2.0413	0.2896	0.8287	0.006617
ATF5	0.4878	2.0502	0.2873	0.8280	0.006621
KRI1	0.4960	2.0162	0.2958	0.8315	0.006635
KIAA1671	0.5000	1.9999	0.3001	0.8331	0.006655
CCNI2	0.4960	2.0161	0.2958	0.8316	0.006656
ZNF827	2.1060	0.4748	1.2140	3.6535	0.006679
GGA2	0.4954	2.0186	0.2951	0.8317	0.00674
PMM1	0.4947	2.0216	0.2942	0.8317	0.00675
LOC339674	0.4975	2.0102	0.2971	0.8328	0.006766
TMEM116	0.4918	2.0333	0.2910	0.8311	0.006794
APOM	0.4886	2.0468	0.2877	0.8298	0.006797
TIMD4	0.4883	2.0477	0.2874	0.8297	0.006802
ANKRD55	0.4930	2.0286	0.2921	0.8320	0.006864
SLC2A8	0.4889	2.0455	0.2878	0.8306	0.006874
ZNF18	0.4930	2.0284	0.2920	0.8325	0.00691
HIST1H3G	0.4945	2.0221	0.2936	0.8331	0.006961
PPP2R3B	0.4966	2.0139	0.2955	0.8344	0.006988
WAS	0.4969	2.0125	0.2958	0.8346	0.007003

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PPCDC	0.4865	2.0555	0.2848	0.8311	0.007049
MOBKL2C	0.4979	2.0084	0.2967	0.8356	0.00708
PRKAA2	2.0099	0.4975	1.1969	3.3754	0.007093
MGMT	0.4956	2.0176	0.2943	0.8348	0.007103
C6orf211	2.0312	0.4923	1.1990	3.4409	0.007142
PISD	0.4980	2.0082	0.2967	0.8357	0.00715
CTU1	2.0078	0.4981	1.1958	3.3710	0.00718
NHEDC1	0.4998	2.0007	0.2985	0.8370	0.007185
ATG3	0.5017	1.9930	0.3004	0.8379	0.007196
SIRT7	0.5004	1.9984	0.2989	0.8378	0.00723
KIAA0114	0.4981	2.0077	0.2965	0.8369	0.007246
RPL23AP7	2.0492	0.4880	1.1999	3.4997	0.007272
CHIT1	0.5029	1.9886	0.3014	0.8391	0.007285
ADORA2A	0.4985	2.0062	0.2967	0.8373	0.007285
CDH2	2.0002	0.5000	1.1931	3.3533	0.007312
LOC284023	0.4973	2.0108	0.2954	0.8373	0.007317
C17orf59	0.4991	2.0035	0.2972	0.8381	0.007334
SEC31A	1.9997	0.5001	1.1931	3.3517	0.00734
HECW1	2.0063	0.4984	1.1933	3.3731	0.007362
ZNF488	0.4995	2.0019	0.2978	0.8379	0.007382
TNFRSF13B	0.5028	1.9888	0.3011	0.8396	0.007384
HDAC8	0.5002	1.9991	0.2983	0.8388	0.007427
DUOX1	0.4989	2.0042	0.2969	0.8386	0.007435
PLCB2	0.5019	1.9924	0.3000	0.8398	0.007453
FAM20C	2.0157	0.4961	1.1948	3.4006	0.007457
TLL2	0.5000	1.9999	0.2979	0.8392	0.007466
PDK2	0.4995	2.0021	0.2973	0.8392	0.007468
KIF25	0.5006	1.9974	0.2986	0.8393	0.007472
RBM22	0.4926	2.0301	0.2901	0.8365	0.007473
UNG	0.4929	2.0289	0.2903	0.8367	0.007485
1-Sep	0.5018	1.9928	0.2997	0.8403	0.007499
RPGR	0.5022	1.9911	0.3005	0.8394	0.007512
ACOT1	0.5015	1.9939	0.2994	0.8401	0.007521
LOC388588	2.0132	0.4967	1.1925	3.3989	0.007545
PYHIN1	0.5023	1.9908	0.3001	0.8407	0.007563
MDM1	0.5000	2.0000	0.2976	0.8400	0.007609
CST7	0.5006	1.9974	0.2982	0.8406	0.007619
RASSF5	0.4995	2.0020	0.2969	0.8403	0.007621
AKAP11	2.0457	0.4888	1.1959	3.4993	0.007627
RBMX2	0.4974	2.0106	0.2947	0.8395	0.007637
EEFSEC	0.5028	1.9888	0.3003	0.8419	0.007645
YBX2	0.4955	2.0181	0.2927	0.8388	0.007672
RCC2	0.5028	1.9890	0.3003	0.8418	0.007691
RBM28	2.0258	0.4936	1.1923	3.4422	0.007724

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PDE5A	0.5037	1.9852	0.3012	0.8425	0.007737
PGK1	1.9936	0.5016	1.1869	3.3486	0.007776
CENPP	0.4994	2.0022	0.2964	0.8415	0.007795
NKAP	0.5014	1.9943	0.2985	0.8423	0.007817
NPL	0.5012	1.9952	0.2981	0.8426	0.007871
MSRA	0.4958	2.0168	0.2922	0.8413	0.007955
C17orf49	0.4960	2.0161	0.2923	0.8416	0.007958
ISG20	0.5020	1.9921	0.2988	0.8435	0.007972
ZNF77	0.5024	1.9906	0.2993	0.8431	0.007982
WDR45	0.5045	1.9822	0.3012	0.8449	0.008017
C1orf161	2.0183	0.4955	1.1884	3.4276	0.008023
GNB1	2.0022	0.4994	1.1857	3.3811	0.008076
HIST1H4I	0.5020	1.9919	0.2986	0.8442	0.008088
ACSBG1	0.5021	1.9915	0.2986	0.8445	0.008107
HRASLS2	0.5028	1.9889	0.2994	0.8444	0.008114
RNF212	0.5034	1.9866	0.2997	0.8454	0.008131
IFI30	0.5055	1.9783	0.3021	0.8459	0.008142
LCMT1	0.5062	1.9756	0.3026	0.8467	0.008173
FMR1	0.5069	1.9728	0.3034	0.8468	0.008179
SLC19A3	2.0024	0.4994	1.1846	3.3848	0.008185
CACNA1D	0.5035	1.9861	0.2998	0.8457	0.008201
SPRY4	1.9856	0.5036	1.1820	3.3356	0.008213
POU2AF1	0.5009	1.9966	0.2968	0.8451	0.008215
GGN	1.9909	0.5023	1.1832	3.3500	0.00823
OBFC2B	0.4971	2.0118	0.2927	0.8442	0.008299
DERL3	0.5016	1.9937	0.2972	0.8464	0.008349
TCF7	0.5050	1.9803	0.3010	0.8472	0.008381
NSMCE4A	0.4983	2.0067	0.2938	0.8454	0.008382
MMP1	1.9880	0.5030	1.1806	3.3478	0.00841
SCML4	0.5017	1.9932	0.2973	0.8467	0.008441
SLC30A1	2.0030	0.4993	1.1826	3.3924	0.008448
PSTPIP1	0.5023	1.9909	0.2977	0.8474	0.008486
OSTM1	1.9969	0.5008	1.1805	3.3781	0.008518
NDUFB7	0.5033	1.9870	0.2988	0.8478	0.008519
HPCA	0.5057	1.9776	0.3012	0.8490	0.008554
CXCR5	0.5052	1.9793	0.3007	0.8490	0.008564
C12orf47	0.4991	2.0036	0.2942	0.8468	0.008582
KCNJ10	0.5082	1.9679	0.3036	0.8504	0.008663
KCNK5	0.5074	1.9709	0.3029	0.8499	0.008667
DHRS4L1	0.5059	1.9768	0.3009	0.8504	0.008711
IFT27	0.5085	1.9665	0.3038	0.8511	0.008714
MND1	0.5050	1.9804	0.3003	0.8489	0.008724
ZIC2	0.5082	1.9677	0.3034	0.8513	0.008737
CYP19A1	2.0011	0.4997	1.1791	3.3962	0.008763

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MME	1.9995	0.5001	1.1794	3.3898	0.008767
LBX2	0.4997	2.0012	0.2944	0.8483	0.00877
IKBKG	0.5084	1.9669	0.3036	0.8513	0.008777
POLR3K	0.5059	1.9765	0.3009	0.8506	0.008833
SLC25A23	0.5076	1.9699	0.3026	0.8516	0.008883
YWHAG	2.0152	0.4962	1.1792	3.4441	0.0089
RIMS4	1.9994	0.5002	1.1776	3.3948	0.00893
IL21R	0.5094	1.9631	0.3043	0.8526	0.008936
SLC35F5	1.9842	0.5040	1.1755	3.3494	0.00894
IGF2R	2.0306	0.4925	1.1804	3.4931	0.008953
IGJ	0.5075	1.9703	0.3022	0.8525	0.008966
PIM2	0.5113	1.9556	0.3063	0.8537	0.008969
SHC1	1.9689	0.5079	1.1736	3.3032	0.008978
GNG3	0.5064	1.9747	0.3008	0.8524	0.009077
LILRB3	0.5078	1.9694	0.3023	0.8528	0.009078
HMHA1	0.5052	1.9796	0.2994	0.8524	0.009087
MCCC1	0.5053	1.9789	0.2995	0.8526	0.009088
ZCWPW1	0.5109	1.9573	0.3055	0.8545	0.009108
USP45	1.9919	0.5020	1.1742	3.3789	0.009121
ALG1L	0.5106	1.9583	0.3051	0.8545	0.00913
LOC148709	0.5050	1.9801	0.2992	0.8526	0.009173
ZFP3	0.5026	1.9896	0.2966	0.8516	0.009202
GPN3	0.5108	1.9578	0.3052	0.8548	0.009208
CLDN1	0.5133	1.9482	0.3079	0.8557	0.009225
PEF1	0.5085	1.9666	0.3025	0.8546	0.00923
CDCA2	0.5039	1.9845	0.2978	0.8526	0.009239
FGL1	1.9647	0.5090	1.1698	3.2998	0.009244
DNAH8	0.5132	1.9485	0.3077	0.8559	0.009244
LOC100130872	0.5076	1.9699	0.3016	0.8544	0.009276
NFATC2IP	0.5086	1.9662	0.3027	0.8545	0.009288
LTK	0.5090	1.9646	0.3030	0.8550	0.009295
SNX20	0.5115	1.9549	0.3058	0.8558	0.009316
BLM	0.5063	1.9753	0.3001	0.8540	0.009336
AMPD1	0.5078	1.9691	0.3018	0.8547	0.009338
BZW1	1.9541	0.5117	1.1676	3.2706	0.00936
C18orf8	0.5059	1.9765	0.2997	0.8543	0.00937
LOC728743	0.4933	2.0270	0.2862	0.8503	0.009389
ZSCAN5B	2.0042	0.4990	1.1737	3.4221	0.009392
FAM32A	0.5092	1.9637	0.3030	0.8558	0.009468
RIBC1	0.5099	1.9612	0.3036	0.8565	0.0095
CDK11B	0.5126	1.9509	0.3063	0.8578	0.009524
WRAP53	0.5077	1.9698	0.3009	0.8565	0.009581
MUC21	0.5099	1.9610	0.3034	0.8572	0.0096
ITIH1	0.5097	1.9620	0.3031	0.8570	0.009613

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PTPN18	0.5108	1.9578	0.3041	0.8580	0.009646
IGSF6	0.5132	1.9485	0.3068	0.8585	0.009664
PCDHB12	1.9576	0.5108	1.1654	3.2884	0.009687
SCML1	0.5139	1.9460	0.3075	0.8587	0.009689
ANAPC13	0.5108	1.9576	0.3042	0.8579	0.009692
TUBGCP6	0.5141	1.9453	0.3077	0.8588	0.009696
LCK	0.5132	1.9486	0.3067	0.8588	0.009722
CTRL	0.5074	1.9707	0.3005	0.8570	0.00975
EML6	0.5154	1.9404	0.3089	0.8599	0.009781
SFT2D1	1.9654	0.5088	1.1657	3.3135	0.0098
TCN2	0.5112	1.9563	0.3043	0.8587	0.009808
NAT8B	0.5153	1.9407	0.3087	0.8602	0.009821
PIK3AP1	0.5118	1.9541	0.3047	0.8594	0.009886
SUCLA2	1.9610	0.5100	1.1648	3.3013	0.009894
WDR76	0.5105	1.9590	0.3035	0.8587	0.009897
ZNF26	0.5103	1.9596	0.3032	0.8589	0.009912
NRF1	0.5116	1.9546	0.3045	0.8597	0.009918
RHOG	0.5140	1.9455	0.3070	0.8606	0.00999
CLIC4	1.9787	0.5054	1.1655	3.3594	0.010001
DLG3	0.5143	1.9442	0.3073	0.8609	0.01001
FAM118A	0.5126	1.9509	0.3054	0.8602	0.010012
C14orf139	0.5140	1.9454	0.3070	0.8606	0.010016
P2RY10	0.5126	1.9510	0.3052	0.8607	0.010055
RHOH	0.5150	1.9416	0.3079	0.8616	0.010073
GALNT10	1.9758	0.5061	1.1645	3.3524	0.010075
SYT14	1.9623	0.5096	1.1628	3.3113	0.010077
KLHL17	1.9657	0.5087	1.1637	3.3203	0.010082
SPNS3	0.5129	1.9497	0.3054	0.8613	0.010116
C20orf43	0.5154	1.9401	0.3081	0.8622	0.0102
BRAP	0.5102	1.9601	0.3023	0.8611	0.010216
TYMS	0.5128	1.9499	0.3051	0.8619	0.010217
CXCR3	0.5154	1.9404	0.3079	0.8625	0.010217
FBXO31	0.5134	1.9477	0.3058	0.8621	0.01025
TIGIT	0.5159	1.9385	0.3084	0.8630	0.010271
MYLIP	0.5137	1.9468	0.3058	0.8627	0.010298
FGD2	0.5180	1.9303	0.3106	0.8639	0.010309
OSMR	1.9864	0.5034	1.1630	3.3927	0.010401
GSG2	0.5110	1.9569	0.3028	0.8623	0.010416
LILRB4	0.5180	1.9305	0.3104	0.8645	0.010424
ZNF80	0.5163	1.9367	0.3085	0.8642	0.01045
SEC23A	1.9687	0.5080	1.1601	3.3407	0.010483
OMA1	0.5146	1.9433	0.3064	0.8643	0.010515
SFRS3	0.5150	1.9418	0.3070	0.8638	0.010525
RPA1	0.5139	1.9460	0.3055	0.8644	0.010593

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CPNE9	0.5167	1.9354	0.3085	0.8653	0.010655
DMC1	0.5167	1.9352	0.3086	0.8653	0.010656
GPKOW	0.5179	1.9309	0.3098	0.8658	0.010657
MEPCE	0.5142	1.9447	0.3058	0.8648	0.010661
F5	0.5179	1.9308	0.3095	0.8668	0.010773
FLJ33360	0.5158	1.9387	0.3071	0.8664	0.010865
RNASEH2A	0.5153	1.9407	0.3065	0.8663	0.010871
LYSMD4	0.5127	1.9505	0.3036	0.8659	0.010873
COPS3	0.5131	1.9491	0.3041	0.8654	0.01088
CD177	0.5199	1.9236	0.3113	0.8682	0.010939
GCH1	0.5212	1.9187	0.3125	0.8692	0.011024
TCTN1	0.5133	1.9482	0.3041	0.8665	0.011055
SLC39A1	1.9313	0.5178	1.1523	3.2371	0.011055
ELK3	1.9743	0.5065	1.1563	3.3709	0.011082
C9orf37	0.5142	1.9449	0.3048	0.8674	0.011088
OXNAD1	0.5167	1.9352	0.3076	0.8680	0.011102
HSF5	0.5213	1.9184	0.3124	0.8697	0.01111
TSPAN32	0.5192	1.9261	0.3102	0.8690	0.01114
SEMA4D	0.5205	1.9211	0.3117	0.8695	0.011157
ZNF688	0.5070	1.9722	0.2970	0.8657	0.011164
C1orf61	0.5173	1.9332	0.3080	0.8687	0.011191
SYF2	0.5134	1.9477	0.3039	0.8673	0.011196
NCSTN	1.9569	0.5110	1.1534	3.3203	0.011237
IL3RA	0.5204	1.9216	0.3111	0.8706	0.011328
PABPN1	0.5178	1.9314	0.3084	0.8694	0.011341
NOS2	0.5190	1.9269	0.3096	0.8701	0.011349
TEX12	0.5117	1.9541	0.3016	0.8682	0.011359
LFNG	0.5148	1.9427	0.3049	0.8691	0.011402
UPB1	0.5192	1.9259	0.3097	0.8705	0.011437
NSDHL	0.5184	1.9289	0.3089	0.8701	0.011446
CYP2D6	0.5206	1.9208	0.3112	0.8709	0.011463
ABCB9	0.5180	1.9307	0.3082	0.8705	0.011466
FAM171B	1.9267	0.5190	1.1485	3.2322	0.011478
CD46	1.9487	0.5132	1.1507	3.2999	0.011478
CCDC101	0.5199	1.9236	0.3102	0.8712	0.011493
SLC2A9	1.9258	0.5193	1.1485	3.2293	0.011501
SV2A	1.9542	0.5117	1.1509	3.3180	0.011505
CSPG4	1.9152	0.5221	1.1469	3.1983	0.011516
SPG21	0.5206	1.9209	0.3110	0.8713	0.011531
C19orf52	0.5152	1.9409	0.3050	0.8703	0.011585
ADAMTS3	1.9377	0.5161	1.1488	3.2686	0.011588
GRB7	0.5190	1.9268	0.3090	0.8716	0.011602
ZNF524	0.5196	1.9245	0.3097	0.8718	0.011632
TCP11	0.5206	1.9208	0.3108	0.8722	0.011646

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C16orf55	0.5159	1.9384	0.3055	0.8712	0.011705
ADAM9	1.9282	0.5186	1.1466	3.2426	0.011715
SPTLC3	1.9410	0.5152	1.1474	3.2834	0.011783
JUN	1.9154	0.5221	1.1445	3.2055	0.011822
ZNF469	1.9176	0.5215	1.1443	3.2135	0.011889
TAF5	0.5211	1.9191	0.3107	0.8737	0.011895
C6orf26	0.5169	1.9348	0.3062	0.8725	0.011897
SMO	1.9160	0.5219	1.1442	3.2084	0.011915
LRRC27	0.5131	1.9489	0.3021	0.8714	0.011916
GXYLT2	1.9276	0.5188	1.1455	3.2437	0.011958
SLC39A4	1.9239	0.5198	1.1445	3.2340	0.011986
HLA-DPB1	0.5219	1.9161	0.3116	0.8741	0.012
CNKSR2	0.5140	1.9454	0.3029	0.8725	0.012005
MSL2	0.5250	1.9048	0.3148	0.8757	0.012009
CLOCK	1.9335	0.5172	1.1452	3.2644	0.012018
NMNAT1	1.9216	0.5204	1.1438	3.2283	0.012037
ABHD1	1.9456	0.5140	1.1463	3.3022	0.01204
BRCC3	0.5220	1.9159	0.3113	0.8750	0.012085
VAV3	0.5234	1.9105	0.3129	0.8756	0.012127
LOC285696	1.9432	0.5146	1.1451	3.2975	0.012186
SHANK2	1.9090	0.5238	1.1412	3.1933	0.012199
OTUB2	1.9198	0.5209	1.1427	3.2253	0.012216
SLC1A4	0.5236	1.9097	0.3130	0.8761	0.012238
STARD4	1.9302	0.5181	1.1430	3.2593	0.012241
LOC100132831	0.5206	1.9207	0.3097	0.8752	0.012254
KNTC1	0.5211	1.9189	0.3100	0.8760	0.01229
PCDHA1	1.8979	0.5269	1.1396	3.1607	0.012297
TBC1D15	0.5271	1.8973	0.3165	0.8777	0.012298
KIFC1	0.5255	1.9030	0.3148	0.8771	0.012309
C5orf20	0.5263	1.8999	0.3156	0.8778	0.012364
ELP2P	0.5109	1.9575	0.2989	0.8732	0.01238
MLLT4	1.9411	0.5152	1.1430	3.2965	0.012458
C3orf42	0.5235	1.9104	0.3124	0.8771	0.012467
SERPINB3	1.9118	0.5231	1.1397	3.2069	0.012512
PTPN14	1.9524	0.5122	1.1434	3.3339	0.012566
ENTPD3	1.9135	0.5226	1.1389	3.2150	0.012571
SYTL3	0.5244	1.9070	0.3132	0.8780	0.012573
LOC399815	0.5229	1.9123	0.3116	0.8775	0.012578
RAD54L	0.5277	1.8950	0.3166	0.8795	0.012595
DDX27	0.5252	1.9041	0.3139	0.8788	0.012633
CSRNP3	1.9234	0.5199	1.1396	3.2463	0.01268
P4HA1	1.8937	0.5281	1.1361	3.1565	0.012682
CARNS1	0.5261	1.9006	0.3149	0.8791	0.012693
SERPINE1	1.9350	0.5168	1.1401	3.2840	0.012706

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ACAD10	0.5171	1.9338	0.3047	0.8775	0.012832
FAM3B	0.5234	1.9106	0.3116	0.8792	0.012849
TRAF3IP2	1.9102	0.5235	1.1363	3.2110	0.012894
INHBA	1.9022	0.5257	1.1358	3.1858	0.012898
FLNA	1.9322	0.5175	1.1391	3.2777	0.012899
PDXP	0.5266	1.8988	0.3149	0.8807	0.012953
CTAGE4	1.9189	0.5211	1.1369	3.2390	0.012957
C6orf97	0.5245	1.9067	0.3123	0.8807	0.01304
ENO1	1.9325	0.5175	1.1377	3.2824	0.013105
TFF3	0.5250	1.9047	0.3127	0.8814	0.013138
DEFA1B	1.9055	0.5248	1.1347	3.1998	0.013144
CD300LF	0.5292	1.8896	0.3174	0.8825	0.013158
MAN2A1	1.9200	0.5208	1.1361	3.2447	0.013176
ANKRD22	0.5211	1.9192	0.3084	0.8802	0.013207
FAM180B	0.5272	1.8969	0.3151	0.8820	0.013211
CYP11A1	1.8937	0.5281	1.1329	3.1654	0.013223
CYTH4	0.5275	1.8956	0.3153	0.8826	0.01326
GBE1	1.9058	0.5247	1.1335	3.2042	0.013303
IL10RA	0.5282	1.8933	0.3158	0.8833	0.013325
ASCC3	1.9276	0.5188	1.1354	3.2728	0.013338
E2F1	0.5277	1.8951	0.3153	0.8831	0.01334
HK3	0.5304	1.8854	0.3181	0.8843	0.013415
SKIL	1.9061	0.5246	1.1331	3.2062	0.013429
COPE	0.5196	1.9246	0.3063	0.8814	0.013443
SFRS7	0.5298	1.8877	0.3175	0.8838	0.013492
KLRK1	0.5232	1.9114	0.3101	0.8826	0.013497
ZAP70	0.5302	1.8861	0.3178	0.8844	0.013506
FAM190A	1.8993	0.5265	1.1321	3.1863	0.01351
ATG4D	0.5223	1.9145	0.3091	0.8828	0.013576
XAB2	0.5263	1.9000	0.3133	0.8842	0.013606
ZNF385B	1.9123	0.5229	1.1324	3.2293	0.013629
PQBP1	0.5256	1.9026	0.3126	0.8836	0.013657
C1orf200	0.5324	1.8782	0.3200	0.8859	0.013673
ACAP1	0.5268	1.8984	0.3137	0.8846	0.013684
ADCY6	1.8919	0.5286	1.1302	3.1672	0.013699
C13orf27	0.5258	1.9019	0.3127	0.8840	0.013708
ARHGAP28	1.9022	0.5257	1.1307	3.2002	0.013713
DARC	0.5297	1.8877	0.3168	0.8860	0.013745
BIN3	0.5252	1.9039	0.3120	0.8842	0.013755
LRRC3	1.9098	0.5236	1.1314	3.2238	0.013758
SELO	0.5208	1.9203	0.3069	0.8835	0.013761
APITD1	0.5279	1.8942	0.3149	0.8851	0.013767
CBX7	0.5305	1.8849	0.3176	0.8861	0.013774
RSP01	0.5295	1.8884	0.3166	0.8858	0.013796

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CNP	0.5283	1.8928	0.3152	0.8855	0.013819
CD79B	0.5273	1.8965	0.3139	0.8857	0.013834
PPP1R10	0.5293	1.8893	0.3163	0.8857	0.013847
C6orf72	1.9258	0.5193	1.1320	3.2765	0.01388
ARF1	1.8992	0.5265	1.1297	3.1929	0.013889
C18orf21	0.5206	1.9207	0.3067	0.8837	0.013891
TMEM63B	1.9195	0.5210	1.1313	3.2568	0.013896
PDIA3P	1.8984	0.5268	1.1288	3.1928	0.013905
MAMDC2	1.8978	0.5269	1.1291	3.1900	0.013913
TIAF1	0.5264	1.8999	0.3129	0.8854	0.013933
TNFAIP6	1.8955	0.5276	1.1287	3.1834	0.013949
IL12RB1	0.5304	1.8854	0.3172	0.8868	0.013967
TMEM9	1.9056	0.5248	1.1298	3.2140	0.013982
POSTN	1.8955	0.5276	1.1285	3.1838	0.013985
FAM21C	0.5312	1.8825	0.3180	0.8873	0.014007
SOCS6	1.8862	0.5302	1.1269	3.1570	0.014008
FAM57B	0.5287	1.8915	0.3153	0.8863	0.014024
CCDC159	0.5250	1.9047	0.3112	0.8859	0.014041
C4orf23	0.5251	1.9045	0.3112	0.8861	0.014077
DENND1C	0.5345	1.8711	0.3214	0.8886	0.014077
ZNF101	0.5343	1.8716	0.3210	0.8893	0.014257
TTC39B	0.5336	1.8740	0.3203	0.8891	0.014286
MNT	0.5285	1.8921	0.3147	0.8877	0.014296
UBE2NL	0.5311	1.8829	0.3174	0.8887	0.014327
HMX2	0.5289	1.8908	0.3150	0.8881	0.014336
ANO6	1.9015	0.5259	1.1268	3.2088	0.014352
POLE3	0.5316	1.8812	0.3178	0.8892	0.014398
SCG2	1.8889	0.5294	1.1250	3.1718	0.014436
TRAFD1	0.5294	1.8890	0.3153	0.8889	0.014461
CYP2W1	0.5288	1.8911	0.3145	0.8889	0.01447
GCHFR	0.5324	1.8784	0.3185	0.8899	0.014522
LMF2	0.5309	1.8834	0.3169	0.8897	0.014527
SIVA1	0.5266	1.8989	0.3122	0.8883	0.014562
EGF	1.9099	0.5236	1.1260	3.2396	0.014579
ANO9	0.5296	1.8883	0.3151	0.8901	0.014615
EIF4E3	0.5297	1.8879	0.3153	0.8897	0.014621
PILRA	0.5361	1.8652	0.3224	0.8917	0.014647
CXCR6	0.5344	1.8711	0.3205	0.8911	0.014662
BFSP2	0.5266	1.8991	0.3118	0.8893	0.014694
PMPCA	0.5280	1.8939	0.3133	0.8898	0.014736
LRRN4	1.8970	0.5272	1.1239	3.2018	0.01474
PRKCB	0.5306	1.8845	0.3160	0.8911	0.014874
MR1	1.9395	0.5156	1.1270	3.3377	0.014882
FREM1	0.5332	1.8754	0.3188	0.8918	0.014921

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NCF1B	0.5313	1.8822	0.3165	0.8919	0.01494
ZNF174	0.5324	1.8782	0.3179	0.8918	0.014947
GBAS	1.8795	0.5321	1.1212	3.1506	0.014966
EGFR	1.9219	0.5203	1.1251	3.2829	0.014969
SH3GL1	0.5275	1.8957	0.3125	0.8905	0.015017
SULT1E1	0.5283	1.8928	0.3131	0.8915	0.015036
FCER2	0.5328	1.8769	0.3181	0.8925	0.015047
MRVI1	0.5274	1.8960	0.3122	0.8912	0.015074
CXorf40B	0.5357	1.8666	0.3211	0.8938	0.015132
PTPN22	0.5314	1.8817	0.3164	0.8926	0.015158
TIFAB	0.5355	1.8674	0.3209	0.8935	0.015166
TRIOBP	0.5361	1.8654	0.3214	0.8940	0.01517
NMNAT3	0.5323	1.8787	0.3171	0.8936	0.015224
FANCE	0.5357	1.8666	0.3210	0.8940	0.015264
SPOP	0.5343	1.8717	0.3193	0.8941	0.015326
ACTN3	1.9045	0.5251	1.1212	3.2349	0.015381
MEST	1.8789	0.5322	1.1184	3.1565	0.015427
EFNA1	1.8647	0.5363	1.1174	3.1120	0.015467
PDCD1	0.5326	1.8776	0.3171	0.8945	0.015496
CASQ1	0.5372	1.8616	0.3221	0.8957	0.015535
TMOD3	1.8781	0.5325	1.1174	3.1567	0.015564
AIF1	0.5354	1.8677	0.3201	0.8957	0.015585
OTUD5	0.5367	1.8632	0.3216	0.8957	0.015609
THEMIS	0.5354	1.8678	0.3200	0.8957	0.015623
ABCG4	1.8629	0.5368	1.1160	3.1097	0.015625
CLEC4A	0.5376	1.8600	0.3225	0.8963	0.01563
MYO1F	0.5360	1.8658	0.3205	0.8961	0.015674
MYO1A	0.5380	1.8587	0.3228	0.8968	0.015693
C8G	0.5347	1.8701	0.3191	0.8959	0.01571
PCYOX1	1.8871	0.5299	1.1172	3.1876	0.015801
PLLP	0.5335	1.8744	0.3176	0.8963	0.015879
STAP2	0.5308	1.8840	0.3145	0.8958	0.0159
DBF4	0.5372	1.8613	0.3216	0.8975	0.015912
SIRPG	0.5383	1.8577	0.3227	0.8979	0.015934
CD28	0.5357	1.8668	0.3199	0.8971	0.015935
NDUFA11	0.5328	1.8767	0.3168	0.8963	0.01594
CXCL9	0.5381	1.8585	0.3226	0.8975	0.015943
RUFY4	0.5382	1.8582	0.3225	0.8979	0.015955
PFKM	1.8948	0.5278	1.1162	3.2165	0.016023
CXorf40A	0.5398	1.8525	0.3242	0.8988	0.016026
CCL23	0.5341	1.8722	0.3180	0.8970	0.016043
C16orf93	0.5282	1.8933	0.3113	0.8961	0.016044
RPUSD1	0.5284	1.8926	0.3115	0.8962	0.016049
PRKACA	0.5363	1.8647	0.3203	0.8979	0.016071

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CPSF3L	0.5327	1.8774	0.3162	0.8974	0.016082
BRD7	0.5393	1.8542	0.3236	0.8989	0.016103
RAB3B	1.8714	0.5344	1.1138	3.1441	0.016119
JMJD5	0.5335	1.8744	0.3170	0.8978	0.016119
SASH3	0.5371	1.8618	0.3211	0.8984	0.016142
TNN	0.5372	1.8614	0.3212	0.8986	0.016172
FNBP1	0.5365	1.8639	0.3204	0.8984	0.016197
NBPF15	1.8712	0.5344	1.1136	3.1442	0.016204
KLHL6	0.5380	1.8588	0.3218	0.8995	0.016272
RERGL	0.5366	1.8634	0.3205	0.8986	0.016281
CCNH	0.5317	1.8809	0.3149	0.8975	0.016291
CLTC	1.8711	0.5344	1.1129	3.1461	0.016341
CCL17	0.5283	1.8927	0.3110	0.8975	0.016343
GPR172B	0.5373	1.8611	0.3209	0.8998	0.016354
BAIAP2L1	1.8689	0.5351	1.1127	3.1390	0.016383
BLOC1S1	0.5291	1.8899	0.3118	0.8978	0.016432
SIGLEC1	0.5426	1.8430	0.3267	0.9011	0.016433
DKFZp566F0947	1.8951	0.5277	1.1140	3.2240	0.016469
ZNF134	1.8569	0.5385	1.1106	3.1047	0.016484
CYTIP	0.5358	1.8663	0.3191	0.8998	0.016533
C10orf95	0.5364	1.8644	0.3194	0.9006	0.016577
VCAM1	0.5359	1.8660	0.3191	0.9001	0.016588
ANKRD20A3	0.5386	1.8566	0.3220	0.9010	0.016588
GLUD1	0.5409	1.8489	0.3246	0.9011	0.016605
SULT4A1	1.8487	0.5409	1.1086	3.0827	0.016745
PPP1CC	0.5389	1.8556	0.3222	0.9015	0.016764
CD200R1	0.5393	1.8544	0.3223	0.9021	0.01683
DHFR	0.5337	1.8737	0.3163	0.9006	0.016887
ZCCHC18	0.5393	1.8541	0.3224	0.9023	0.016911
P4HA2	1.8551	0.5391	1.1083	3.1052	0.01695
A2M	0.5340	1.8725	0.3164	0.9013	0.01697
MYO10	1.8634	0.5367	1.1087	3.1319	0.017007
NHEJ1	0.5380	1.8589	0.3209	0.9020	0.017015
PLK2	1.8642	0.5364	1.1082	3.1360	0.017028
SERP1	0.5405	1.8501	0.3236	0.9029	0.017032
PLEKHA9	1.8552	0.5390	1.1076	3.1074	0.017058
DCLRE1C	0.5440	1.8383	0.3272	0.9043	0.017065
UMODL1	0.5397	1.8529	0.3226	0.9029	0.017075
LYZ	0.5425	1.8433	0.3256	0.9038	0.017095
PIP4K2A	0.5392	1.8544	0.3220	0.9030	0.017122
TTC36	1.8467	0.5415	1.1070	3.0805	0.017123
CALML4	0.5399	1.8523	0.3226	0.9035	0.017188
ZNF266	0.5397	1.8529	0.3225	0.9032	0.017206
FERMT3	0.5425	1.8432	0.3254	0.9045	0.017271

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ANAPC5	0.5427	1.8427	0.3255	0.9049	0.017289
ARHGEF19	0.5383	1.8578	0.3204	0.9044	0.017383
NETO1	1.8601	0.5376	1.1071	3.1253	0.01742
EFS	0.5377	1.8597	0.3197	0.9043	0.017441
TXNDC2	1.8673	0.5355	1.1066	3.1510	0.017499
CDIPT	0.5435	1.8400	0.3260	0.9062	0.017503
PIR	0.5380	1.8586	0.3201	0.9045	0.017516
LDHC	0.5432	1.8409	0.3258	0.9057	0.017526
IDO2	0.5385	1.8571	0.3205	0.9047	0.017541
ADORA1	1.8486	0.5409	1.1053	3.0919	0.017543
COQ10A	0.5378	1.8593	0.3198	0.9044	0.017551
CXCL3	1.8435	0.5424	1.1038	3.0790	0.017594
MTHFD1	0.5440	1.8384	0.3265	0.9062	0.017616
LEPR	1.8667	0.5357	1.1055	3.1522	0.01764
TSKS	0.5384	1.8574	0.3202	0.9051	0.017643
INSM1	0.5429	1.8420	0.3253	0.9061	0.017654
ABHD11	0.5394	1.8539	0.3215	0.9049	0.017665
MYOM1	0.5416	1.8464	0.3237	0.9063	0.017766
SCARNA10	0.5396	1.8532	0.3216	0.9055	0.017775
CENPM	0.5406	1.8497	0.3227	0.9059	0.017789
NUDT1	0.5378	1.8593	0.3194	0.9057	0.017802
NRP1	1.8492	0.5408	1.1034	3.0992	0.017809
CD79A	0.5422	1.8444	0.3241	0.9070	0.017841
ZNF776	1.8355	0.5448	1.1021	3.0570	0.017843
SDR16C5	0.5362	1.8649	0.3175	0.9055	0.017865
HSP90AB2P	1.8745	0.5335	1.1049	3.1801	0.017871
LENG8	1.8446	0.5421	1.1027	3.0856	0.01789
TAB1	0.5432	1.8408	0.3253	0.9071	0.01789
CNBP	0.5439	1.8385	0.3260	0.9074	0.017922
CD8A	0.5401	1.8516	0.3217	0.9068	0.017949
MGC16703	0.5397	1.8528	0.3213	0.9066	0.017962
GMFB	1.8727	0.5340	1.1035	3.1781	0.018022
10-Sep	1.8625	0.5369	1.1032	3.1442	0.018041
PCDHGB1	1.8745	0.5335	1.1040	3.1827	0.01807
GPR120	0.5447	1.8359	0.3267	0.9082	0.018075
CAMK2N2	0.5443	1.8373	0.3262	0.9083	0.018079
SNHG9	0.5338	1.8733	0.3144	0.9063	0.018118
F8	0.5403	1.8507	0.3216	0.9078	0.018124
CPLX1	1.8507	0.5403	1.1019	3.1084	0.018147
C21orf56	1.8482	0.5411	1.1020	3.0996	0.018165
UMPS	0.5465	1.8299	0.3284	0.9092	0.018178
KRT36	0.5431	1.8412	0.3249	0.9080	0.018206
PPIF	0.5398	1.8525	0.3211	0.9076	0.018217
TIMELESS	0.5469	1.8284	0.3289	0.9096	0.018233

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ZNF557	0.5419	1.8453	0.3233	0.9083	0.018291
FURIN	1.8506	0.5404	1.1011	3.1104	0.018296
WDR62	0.5433	1.8407	0.3248	0.9088	0.018318
CKLF	0.5423	1.8441	0.3235	0.9090	0.018366
CLDN12	1.8602	0.5376	1.1012	3.1425	0.018373
OFD1	0.5407	1.8495	0.3219	0.9083	0.018396
NTSR1	1.8580	0.5382	1.1007	3.1366	0.018459
FOXO3	1.8826	0.5312	1.1024	3.2150	0.01848
ACAD9	0.5412	1.8477	0.3220	0.9096	0.018538
HEXIM2	0.5353	1.8680	0.3155	0.9084	0.018573
SCUBE1	0.5445	1.8366	0.3257	0.9102	0.018618
CD37	0.5463	1.8305	0.3276	0.9110	0.018668
APLN	1.8562	0.5387	1.0995	3.1335	0.018694
KISS1R	1.8543	0.5393	1.0990	3.1288	0.018789
C16orf5	0.5453	1.8338	0.3262	0.9116	0.018812
CD247	0.5449	1.8352	0.3258	0.9114	0.018822
ZFAND2B	0.5361	1.8654	0.3159	0.9097	0.018857
TRMU	0.5427	1.8425	0.3234	0.9108	0.018879
MBOAT1	0.5418	1.8457	0.3223	0.9108	0.018942
BEAN	1.8274	0.5472	1.0962	3.0462	0.018984
PINX1	0.5420	1.8449	0.3225	0.9110	0.019019
PDE6B	0.5432	1.8411	0.3235	0.9118	0.019032
SPSB3	0.5432	1.8408	0.3234	0.9124	0.019066
CRYGS	0.5405	1.8503	0.3203	0.9119	0.019079
CP110	0.5489	1.8217	0.3301	0.9130	0.019089
PCDHGC3	1.8471	0.5414	1.0973	3.1095	0.019103
SLC25A45	0.5456	1.8328	0.3261	0.9129	0.019127
ETV7	0.5480	1.8248	0.3288	0.9133	0.019188
GJB4	0.5459	1.8318	0.3264	0.9131	0.019191
C17orf99	0.5453	1.8338	0.3258	0.9127	0.019233
PCDHGB2	1.8613	0.5373	1.0971	3.1579	0.019283
APEX2	0.5439	1.8386	0.3239	0.9133	0.019301
CCDC60	0.5464	1.8301	0.3268	0.9136	0.019319
ABCA17P	0.5446	1.8361	0.3248	0.9132	0.019356
CD80	0.5485	1.8231	0.3291	0.9142	0.01937
ITGB1	1.8389	0.5438	1.0947	3.0888	0.0194
TMEM150B	0.5500	1.8181	0.3307	0.9146	0.01942
STXBP5	1.8783	0.5324	1.0976	3.2145	0.019449
SULT1A1	0.5442	1.8375	0.3241	0.9139	0.01949
GJA1	1.8230	0.5486	1.0930	3.0404	0.019527
TSEN54	0.5451	1.8346	0.3250	0.9142	0.019534
TNPO2	0.5447	1.8360	0.3245	0.9142	0.019582
NBPF10	1.8602	0.5376	1.0951	3.1601	0.019689
ZNF860	1.8301	0.5464	1.0929	3.0645	0.019712

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SFI1	0.5498	1.8190	0.3299	0.9160	0.019727
HP	1.8357	0.5447	1.0928	3.0836	0.019787
HEATR4	0.5478	1.8255	0.3278	0.9154	0.019803
SETD1A	0.5480	1.8248	0.3277	0.9164	0.019949
FLT3LG	0.5474	1.8267	0.3270	0.9164	0.019952
MUC4	0.5489	1.8219	0.3287	0.9165	0.019961
ITGAV	1.8255	0.5478	1.0910	3.0545	0.019971
GLRX3	0.5457	1.8324	0.3250	0.9164	0.020055
IDI1	1.8417	0.5430	1.0919	3.1064	0.020069
H2AFZ	0.5442	1.8376	0.3234	0.9157	0.020082
RILPL2	0.5506	1.8162	0.3303	0.9178	0.020134
FARS2	0.5470	1.8281	0.3264	0.9168	0.020137
CCL19	0.5481	1.8244	0.3276	0.9172	0.020141
LOC93622	0.5387	1.8565	0.3170	0.9154	0.020171
TNFAIP3	1.8324	0.5457	1.0907	3.0785	0.02018
KIAA0802	1.8217	0.5489	1.0905	3.0432	0.020183
HTR7	1.8262	0.5476	1.0904	3.0586	0.020193
MAP2K2	0.5453	1.8338	0.3243	0.9169	0.020224
HIST1H2BE	0.5484	1.8235	0.3277	0.9176	0.02028
C16orf59	0.5481	1.8245	0.3273	0.9177	0.020339
AGBL3	0.5395	1.8536	0.3176	0.9164	0.020346
NFAM1	0.5509	1.8153	0.3304	0.9185	0.02038
MTMR1	0.5515	1.8133	0.3311	0.9185	0.0204
UCP2	0.5510	1.8149	0.3304	0.9189	0.020447
MORN3	0.5488	1.8220	0.3279	0.9187	0.020511
CRTAC1	1.8173	0.5503	1.0883	3.0345	0.020517
CLNK	0.5470	1.8281	0.3256	0.9190	0.020598
ACVR2A	0.5500	1.8183	0.3292	0.9188	0.020606
MRPS25	0.5466	1.8295	0.3251	0.9190	0.020674
DNPEP	0.5514	1.8135	0.3307	0.9196	0.02068
CABC1	0.5498	1.8188	0.3286	0.9200	0.020691
DDX17	0.5495	1.8197	0.3284	0.9196	0.020762
CELF2	0.5500	1.8183	0.3288	0.9198	0.020771
N4BP2L1	0.5493	1.8204	0.3281	0.9196	0.020784
RAD1	0.5494	1.8203	0.3281	0.9198	0.020827
MAP3K7	1.8468	0.5415	1.0884	3.1336	0.020847
MAGIX	0.5508	1.8154	0.3297	0.9202	0.02085
RREB1	1.8468	0.5415	1.0885	3.1333	0.020897
C18orf10	0.5475	1.8264	0.3260	0.9196	0.020916
TTC30B	1.8347	0.5450	1.0869	3.0969	0.020937
KLRB1	0.5482	1.8242	0.3265	0.9205	0.021048
NUP88	0.5507	1.8160	0.3293	0.9210	0.021093
CHIC2	0.5481	1.8245	0.3262	0.9209	0.02112
RPS26P11	0.5519	1.8118	0.3306	0.9213	0.021141

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MAST4	1.8361	0.5446	1.0868	3.1022	0.021158
HIST1H3F	0.5517	1.8126	0.3303	0.9214	0.021194
ADH7	0.5478	1.8254	0.3259	0.9207	0.021195
KCNA3	0.5513	1.8138	0.3297	0.9220	0.021215
NASP	0.5505	1.8165	0.3288	0.9217	0.021231
SLU7	0.5449	1.8353	0.3224	0.9207	0.021239
PRPS2	0.5499	1.8186	0.3281	0.9216	0.021291
SH2D4B	0.5528	1.8091	0.3313	0.9222	0.021305
FLJ40330	0.5516	1.8128	0.3299	0.9224	0.021316
RPL13AP3	0.5495	1.8198	0.3276	0.9218	0.021328
LYPD5	0.5535	1.8068	0.3321	0.9223	0.021335
TNFRSF12A	1.8310	0.5461	1.0850	3.0899	0.021348
KCNA5	0.5510	1.8147	0.3293	0.9222	0.021366
NGFR	0.5491	1.8212	0.3272	0.9216	0.021373
TMEM45B	0.5456	1.8329	0.3230	0.9215	0.021386
NARF	0.5512	1.8141	0.3293	0.9228	0.021441
GATM	0.5520	1.8116	0.3301	0.9231	0.021493
PON2	1.8251	0.5479	1.0843	3.0720	0.021531
PDK1	1.8131	0.5515	1.0837	3.0337	0.021546
RENBP	0.5544	1.8038	0.3327	0.9239	0.021567
CPT1B	0.5509	1.8151	0.3289	0.9228	0.021595
SMPD3	0.5520	1.8117	0.3298	0.9236	0.021648
SLA	0.5557	1.7995	0.3342	0.9240	0.021653
FAM53B	0.5496	1.8194	0.3272	0.9234	0.021658
LOC646982	1.8219	0.5489	1.0833	3.0638	0.021661
RABL2B	0.5532	1.8076	0.3315	0.9233	0.021662
FANCB	0.5538	1.8056	0.3320	0.9238	0.021679
P4HA3	1.8184	0.5499	1.0830	3.0532	0.021694
SCARA3	0.5533	1.8074	0.3314	0.9236	0.021717
RRN3P1	0.5540	1.8050	0.3321	0.9241	0.021718
ASAP1	1.8527	0.5397	1.0851	3.1636	0.021738
ERLEC1	1.8253	0.5479	1.0840	3.0736	0.021738
MYH16	1.8389	0.5438	1.0838	3.1200	0.021769
EXOSC7	0.5519	1.8119	0.3297	0.9238	0.02178
REEP4	0.5491	1.8211	0.3264	0.9238	0.021819
TAS1R1	0.5472	1.8276	0.3242	0.9234	0.021951
SEZ6L2	1.8184	0.5499	1.0822	3.0552	0.021954
C11orf90	1.8171	0.5503	1.0817	3.0524	0.021964
HOXA5	1.8153	0.5509	1.0820	3.0455	0.021988
DPYSL2	0.5523	1.8106	0.3299	0.9247	0.021988
CCDC144A	1.8294	0.5466	1.0827	3.0913	0.021997
PCDHB3	1.8031	0.5546	1.0808	3.0080	0.022049
MRPL2	0.5537	1.8060	0.3314	0.9250	0.022062
TMEM55A	1.8127	0.5517	1.0813	3.0387	0.022066

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RTN4R	1.8266	0.5475	1.0824	3.0825	0.022069
POU2F1	0.5509	1.8151	0.3281	0.9251	0.022083
PRRG1	1.8169	0.5504	1.0814	3.0529	0.022139
LOC151174	0.5558	1.7991	0.3336	0.9261	0.022186
MEGF10	1.8183	0.5500	1.0812	3.0581	0.022203
TBC1D10C	0.5539	1.8054	0.3313	0.9261	0.022261
LAT	0.5507	1.8159	0.3277	0.9255	0.022274
C14orf169	0.5525	1.8098	0.3298	0.9259	0.022276
LMBRD1	1.8157	0.5507	1.0802	3.0521	0.022303
FKBP10	1.8176	0.5502	1.0808	3.0567	0.022308
UBL4A	0.5539	1.8055	0.3312	0.9263	0.022314
CITED1	0.5529	1.8086	0.3304	0.9253	0.022315
IL17RB	0.5487	1.8226	0.3252	0.9255	0.022349
AGTRAP	1.8352	0.5449	1.0823	3.1117	0.022364
TK1	0.5531	1.8081	0.3304	0.9257	0.022375
SEC24A	1.8074	0.5533	1.0795	3.0261	0.02242
LPHN2	1.7988	0.5559	1.0787	2.9995	0.022465
SFRS1	0.5523	1.8108	0.3294	0.9258	0.022481
LASS4	0.5503	1.8170	0.3269	0.9264	0.022508
LAX1	0.5564	1.7973	0.3338	0.9275	0.022512
RGS5	0.5518	1.8124	0.3285	0.9266	0.022559
TRIM56	1.8350	0.5450	1.0805	3.1163	0.022572
GRK4	1.7962	0.5567	1.0778	2.9934	0.022707
IGSF10	1.8213	0.5490	1.0787	3.0753	0.02274
TFDP2	0.5585	1.7904	0.3358	0.9291	0.022915
RARRES3	0.5551	1.8014	0.3319	0.9285	0.022916
GAD1	0.5552	1.8011	0.3320	0.9287	0.022928
GPR18	0.5551	1.8015	0.3319	0.9285	0.022928
EPM2AIP1	0.5524	1.8104	0.3288	0.9278	0.022948
RASAL3	0.5568	1.7960	0.3338	0.9289	0.022951
DNASE1L2	0.5516	1.8130	0.3278	0.9280	0.022958
FOXL1	1.7949	0.5571	1.0767	2.9919	0.022996
WDR81	0.5558	1.7990	0.3324	0.9295	0.023049
KCNMB1	0.5573	1.7942	0.3343	0.9292	0.023121
LDHD	0.5575	1.7937	0.3343	0.9297	0.023122
POPDC2	0.5550	1.8019	0.3315	0.9289	0.023154
P2RX1	0.5560	1.7986	0.3324	0.9299	0.023164
HSD3B7	0.5534	1.8069	0.3296	0.9294	0.023167
TFAP2C	0.5576	1.7934	0.3343	0.9301	0.023195
AMPD3	0.5568	1.7961	0.3335	0.9296	0.023202
GALNT9	0.5580	1.7923	0.3347	0.9301	0.023241
VIPR2	0.5506	1.8163	0.3264	0.9288	0.023276
CNTD1	0.5576	1.7935	0.3342	0.9302	0.023306
ENDOD1	1.7905	0.5585	1.0749	2.9826	0.023308

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SRC	0.5551	1.8016	0.3313	0.9301	0.023343
TMEM155	0.5562	1.7978	0.3326	0.9302	0.023344
CBS	0.5583	1.7912	0.3349	0.9308	0.023396
CAMKV	0.5507	1.8157	0.3264	0.9292	0.023408
DSG2	1.8142	0.5512	1.0753	3.0610	0.023443
LOC284578	0.5535	1.8067	0.3294	0.9300	0.023508
DSTYK	1.8016	0.5551	1.0747	3.0200	0.023527
PCDHB17	1.7992	0.5558	1.0746	3.0121	0.023543
RBMS3	1.7981	0.5561	1.0738	3.0112	0.023594
LOC645431	0.5523	1.8106	0.3279	0.9302	0.023624
CHST7	0.5547	1.8028	0.3306	0.9306	0.023651
C10orf54	0.5558	1.7993	0.3318	0.9309	0.02367
LOC150786	1.8056	0.5538	1.0741	3.0353	0.023727
ZC3H11A	1.7952	0.5570	1.0734	3.0023	0.023732
SERPINB4	1.8030	0.5546	1.0739	3.0271	0.023757
LRRC56	0.5559	1.7989	0.3316	0.9318	0.023771
PTX3	1.8046	0.5541	1.0732	3.0345	0.023821
SPPL2B	0.5575	1.7937	0.3335	0.9321	0.023863
C15orf62	0.5594	1.7877	0.3354	0.9329	0.023891
FAM73A	1.8352	0.5449	1.0747	3.1339	0.02395
CD300E	1.8051	0.5540	1.0731	3.0363	0.02398
RPSAP9	0.5566	1.7967	0.3323	0.9323	0.023996
TCAM1P	0.5577	1.7931	0.3335	0.9327	0.024017
ECSIT	0.5591	1.7886	0.3350	0.9332	0.024043
HSPBAP1	0.5597	1.7868	0.3356	0.9335	0.024062
VPS29	0.5560	1.7986	0.3316	0.9323	0.024118
ZNF623	1.7941	0.5574	1.0718	3.0032	0.024137
ERO1LB	0.5555	1.8002	0.3308	0.9329	0.024184
C10orf116	0.5567	1.7962	0.3322	0.9329	0.024201
C11orf93	0.5610	1.7824	0.3368	0.9345	0.024333
UBE2Q2P1	1.8080	0.5531	1.0714	3.0510	0.024405
TSC22D4	0.5602	1.7852	0.3358	0.9343	0.024409
15-Sep	1.8116	0.5520	1.0714	3.0634	0.024468
PLOD1	1.7796	0.5619	1.0695	2.9614	0.024477
B3GALNT1	0.5625	1.7778	0.3383	0.9353	0.024515
SLC29A3	0.5581	1.7917	0.3336	0.9339	0.024543
PSMD12	1.7975	0.5563	1.0700	3.0196	0.024555
IL12B	0.5572	1.7946	0.3323	0.9342	0.024559
ADAM6	0.5593	1.7881	0.3344	0.9352	0.024573
PATL2	0.5537	1.8060	0.3282	0.9340	0.024583
JMJD7-PLA2G4B	0.5530	1.8083	0.3274	0.9341	0.024596
CCDC146	0.5593	1.7879	0.3345	0.9352	0.024676
STC1	1.7873	0.5595	1.0690	2.9883	0.02471
CN5H6.4	0.5622	1.7788	0.3378	0.9355	0.024726

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ESM1	1.7955	0.5569	1.0693	3.0148	0.024735
MGC12982	0.5609	1.7829	0.3361	0.9361	0.024767
KCNG2	1.7904	0.5585	1.0693	2.9977	0.024783
ADAMTS5	1.7774	0.5626	1.0683	2.9572	0.024791
ASRGL1	0.5595	1.7873	0.3346	0.9357	0.024826
SCD	1.7850	0.5602	1.0684	2.9824	0.02493
TSIX	0.5550	1.8019	0.3293	0.9353	0.024974
ERN1	1.8155	0.5508	1.0695	3.0820	0.025017
MSH6	0.5615	1.7810	0.3365	0.9368	0.025032
IRAK2	0.5577	1.7931	0.3321	0.9365	0.025058
MC1R	1.7790	0.5621	1.0670	2.9661	0.025068
MFAP3L	1.7816	0.5613	1.0674	2.9736	0.025093
TMEM126A	0.5596	1.7870	0.3345	0.9363	0.025098
LOC100302640	1.7972	0.5564	1.0682	3.0237	0.025133
CPNE6	0.5639	1.7733	0.3391	0.9377	0.025171
SCARB2	1.7909	0.5584	1.0680	3.0033	0.025198
GRIP2	0.5578	1.7926	0.3323	0.9364	0.0252
GLI3	1.7856	0.5601	1.0669	2.9883	0.025225
OR5K2	0.5571	1.7951	0.3315	0.9362	0.025252
CNIH4	1.7845	0.5604	1.0671	2.9842	0.025291
ZSCAN12P1	1.8018	0.5550	1.0674	3.0414	0.025294
MRPL28	0.5612	1.7818	0.3360	0.9374	0.025321
BTBD19	1.7950	0.5571	1.0669	3.0201	0.02537
TMEM90B	1.7864	0.5598	1.0664	2.9925	0.025373
ASMTL	0.5611	1.7821	0.3358	0.9377	0.025411
KPNA3	1.7934	0.5576	1.0659	3.0175	0.02553
MRPL47	0.5614	1.7813	0.3360	0.9380	0.025538
CPT1A	0.5596	1.7869	0.3338	0.9382	0.025538
CAGE1	1.8004	0.5554	1.0670	3.0381	0.02554
SLC25A17	0.5627	1.7772	0.3375	0.9380	0.025544
GAS2L1	0.5589	1.7894	0.3330	0.9378	0.02555
HADH	0.5624	1.7782	0.3368	0.9391	0.025604
PARP14	0.5633	1.7752	0.3380	0.9388	0.025613
ZNF281	1.7900	0.5586	1.0656	3.0069	0.025686
FAM103A1	0.5613	1.7814	0.3356	0.9388	0.0257
SPP1	1.7919	0.5581	1.0656	3.0131	0.025701
FAHD2A	0.5631	1.7758	0.3376	0.9393	0.025744
TM2D1	1.8009	0.5553	1.0659	3.0428	0.025777
PCDHGA10	1.7787	0.5622	1.0648	2.9714	0.025782
ARHGAP23	0.5653	1.7691	0.3400	0.9397	0.025787
UQCRC1	0.5516	1.8130	0.3244	0.9377	0.025807
C19orf38	0.5584	1.7909	0.3321	0.9388	0.025813
ZFP36L2	1.7746	0.5635	1.0643	2.9590	0.025816
ZDHHC4	1.7987	0.5560	1.0651	3.0374	0.025818

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CYP4B1	0.5614	1.7813	0.3356	0.9391	0.025837
HLF	0.5624	1.7782	0.3365	0.9399	0.025921
SYCP2	0.5628	1.7767	0.3371	0.9398	0.025935
RPS6KL1	0.5567	1.7963	0.3300	0.9392	0.025952
CCDC136	0.5594	1.7878	0.3330	0.9395	0.025954
PCDHGA2	1.7790	0.5621	1.0632	2.9767	0.026044
LRRFIP2	0.5591	1.7886	0.3327	0.9394	0.026064
PFKP	1.7799	0.5618	1.0639	2.9777	0.026118
PARP15	0.5642	1.7724	0.3384	0.9406	0.026139
CX3CL1	0.5626	1.7776	0.3365	0.9406	0.02614
ETFB	0.5653	1.7689	0.3397	0.9407	0.026147
TAF9B	0.5636	1.7742	0.3378	0.9404	0.026171
ARMC7	0.5644	1.7719	0.3384	0.9412	0.026197
PZP	0.5595	1.7872	0.3330	0.9402	0.026209
TFCP2	1.8050	0.5540	1.0638	3.0628	0.026278
MRPL4	0.5602	1.7852	0.3336	0.9405	0.026333
FADD	1.7960	0.5568	1.0638	3.0321	0.026345
LRMP	0.5634	1.7748	0.3373	0.9411	0.026364
CD19	0.5631	1.7759	0.3367	0.9418	0.026407
TGFBI	1.7833	0.5607	1.0621	2.9943	0.026418
SEC61G	1.7770	0.5628	1.0620	2.9734	0.026435
SLC25A5	0.5637	1.7739	0.3375	0.9416	0.026458
POLA1	0.5634	1.7749	0.3372	0.9414	0.02649
UGT2B15	0.5634	1.7750	0.3371	0.9415	0.026545
LOC647288	1.7932	0.5577	1.0624	3.0268	0.02656
NCKAP5	1.7751	0.5633	1.0610	2.9699	0.026585
CCDC48	0.5656	1.7682	0.3393	0.9427	0.0266
CUZD1	0.5648	1.7704	0.3384	0.9428	0.026624
PTPN7	0.5662	1.7662	0.3401	0.9424	0.026645
NCKAP1	1.7846	0.5604	1.0615	3.0001	0.026662
LRAT	1.7772	0.5627	1.0617	2.9750	0.02667
RAB37	0.5669	1.7641	0.3408	0.9429	0.026671
FOXN1	0.5610	1.7824	0.3341	0.9420	0.026697
ZDHHC3	0.5601	1.7853	0.3331	0.9418	0.026707
NUS1	1.7814	0.5614	1.0608	2.9914	0.026713
C17orf66	0.5606	1.7839	0.3335	0.9421	0.02676
RAB36	0.5635	1.7747	0.3369	0.9423	0.026778
C16orf42	0.5633	1.7753	0.3365	0.9429	0.026816
NEIL2	0.5614	1.7814	0.3343	0.9425	0.026831
DYNC1I2	1.7827	0.5610	1.0607	2.9959	0.026848
ZNF292	1.8019	0.5550	1.0617	3.0581	0.026875
CHCHD1	0.5608	1.7831	0.3335	0.9431	0.026962
ZNF57	0.5645	1.7714	0.3379	0.9432	0.026995
ADARB2	0.5588	1.7895	0.3312	0.9427	0.02704

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HNFA4	0.5620	1.7794	0.3348	0.9433	0.027052
HEXDC	0.5662	1.7661	0.3395	0.9444	0.027169
REM1	0.5621	1.7790	0.3348	0.9438	0.027189
TDP2	0.5646	1.7712	0.3376	0.9443	0.027207
FXD1	0.5654	1.7687	0.3386	0.9441	0.027209
VBP1	0.5643	1.7722	0.3372	0.9441	0.027239
FOXRED2	0.5667	1.7645	0.3400	0.9448	0.027325
SLC15A3	0.5655	1.7683	0.3385	0.9447	0.027346
C20orf197	0.5691	1.7573	0.3425	0.9454	0.027411
DDX49	0.5650	1.7699	0.3379	0.9448	0.027413
C9orf139	0.5673	1.7627	0.3404	0.9454	0.027431
IL22RA2	0.5663	1.7659	0.3394	0.9449	0.027459
SPOCK2	0.5683	1.7597	0.3416	0.9453	0.027462
HSD17B10	0.5654	1.7686	0.3384	0.9447	0.02748
TMEM173	0.5631	1.7760	0.3354	0.9454	0.027492
ZNF548	1.7757	0.5632	1.0579	2.9806	0.027535
PDGFC	1.7761	0.5630	1.0576	2.9826	0.027536
LOC283070	0.5659	1.7670	0.3388	0.9452	0.027549
FAM98C	0.5654	1.7685	0.3380	0.9460	0.027599
SLC6A11	1.7960	0.5568	1.0585	3.0473	0.027697
DHCR7	1.7867	0.5597	1.0581	3.0170	0.027707
ZNF285	1.7589	0.5686	1.0571	2.9265	0.027708
TLX2	0.5635	1.7745	0.3357	0.9461	0.027734
RGL4	0.5667	1.7645	0.3395	0.9460	0.027762
NPY6R	0.5652	1.7694	0.3378	0.9457	0.027776
RNF39	0.5677	1.7614	0.3405	0.9466	0.027839
CRYBA4	0.5673	1.7627	0.3400	0.9466	0.027947
SCXB	1.7603	0.5681	1.0563	2.9335	0.027991
CCDC28A	0.5660	1.7669	0.3384	0.9465	0.027992
GTF2IRD2B	0.5658	1.7673	0.3382	0.9467	0.028
GIMAP5	0.5696	1.7555	0.3426	0.9473	0.028041
PER3	0.5664	1.7656	0.3387	0.9471	0.028057
PPP1R14A	1.7665	0.5661	1.0557	2.9559	0.028062
TSFM	0.5670	1.7636	0.3394	0.9473	0.028088
TREM2	0.5707	1.7524	0.3437	0.9476	0.028094
CDC45	0.5670	1.7636	0.3395	0.9469	0.02811
TNFAIP1	1.7682	0.5655	1.0558	2.9613	0.028123
SNRNP40	0.5658	1.7676	0.3380	0.9470	0.028144
DAZL	0.5665	1.7652	0.3387	0.9476	0.028146
KIAA0748	0.5686	1.7586	0.3412	0.9476	0.028183
PCDHGB4	1.7654	0.5665	1.0554	2.9528	0.028209
COL5A1	1.7596	0.5683	1.0549	2.9350	0.028213
RGS9	0.5667	1.7646	0.3389	0.9477	0.028223
LRRC39	1.7736	0.5638	1.0557	2.9797	0.028263

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SPAG8	0.5661	1.7666	0.3383	0.9473	0.028267
SUSD5	1.7648	0.5667	1.0548	2.9525	0.028337
C6orf147	0.5668	1.7643	0.3389	0.9478	0.028353
FRAT2	0.5694	1.7561	0.3417	0.9490	0.028405
BCM01	0.5690	1.7575	0.3414	0.9484	0.028445
C5	0.5689	1.7578	0.3410	0.9490	0.028502
LOC401127	0.5638	1.7738	0.3352	0.9482	0.028509
DDIT4	1.7647	0.5667	1.0542	2.9539	0.028524
SFXN5	0.5693	1.7566	0.3415	0.9489	0.028533
ZNF232	0.5677	1.7615	0.3397	0.9487	0.028578
LOC440563	0.5666	1.7649	0.3385	0.9484	0.028606
RAB26	0.5669	1.7638	0.3387	0.9490	0.028652
IFT172	0.5639	1.7733	0.3352	0.9486	0.028705
LNX2	1.7681	0.5656	1.0537	2.9670	0.028808
FLJ45244	0.5680	1.7605	0.3396	0.9501	0.02883
HINT3	1.7795	0.5620	1.0539	3.0046	0.028837
RASGEF1B	0.5705	1.7529	0.3427	0.9498	0.02885
HTR3A	0.5702	1.7539	0.3421	0.9503	0.028861
SELP	0.5719	1.7484	0.3442	0.9504	0.028923
ZNF438	0.5716	1.7495	0.3437	0.9505	0.028948
PCNA	0.5679	1.7609	0.3395	0.9499	0.02895
SLC45A3	1.7608	0.5679	1.0521	2.9466	0.029044
LIMD2	0.5696	1.7558	0.3412	0.9508	0.029056
RNF113A	0.5703	1.7534	0.3420	0.9510	0.029085
OCLM	1.7612	0.5678	1.0523	2.9478	0.029109
SLC6A16	0.5685	1.7592	0.3400	0.9504	0.029147
WDFY4	0.5682	1.7600	0.3396	0.9506	0.029176
OBFC1	0.5706	1.7526	0.3423	0.9512	0.029178
SAP30BP	0.5706	1.7526	0.3422	0.9513	0.029215
MYBPC2	0.5649	1.7703	0.3358	0.9503	0.029216
ACER1	0.5703	1.7534	0.3419	0.9512	0.029259
GPR172A	1.7545	0.5700	1.0515	2.9275	0.029265
RDH11	1.7507	0.5712	1.0513	2.9154	0.029303
GCDH	0.5724	1.7471	0.3441	0.9520	0.029323
NUDT16	0.5732	1.7445	0.3452	0.9518	0.029328
DBN1	1.7536	0.5703	1.0515	2.9245	0.029343
ANKRD24	0.5696	1.7555	0.3412	0.9511	0.029354
C22orf31	0.5668	1.7643	0.3378	0.9511	0.029404
CTAGE9	1.7646	0.5667	1.0509	2.9633	0.029405
HAPLN3	0.5658	1.7673	0.3367	0.9509	0.029424
RPL39	0.5645	1.7714	0.3351	0.9510	0.029448
NUP50	0.5721	1.7480	0.3439	0.9518	0.02949
C14orf19	0.5667	1.7644	0.3378	0.9509	0.029553
DMRTA1	0.5675	1.7620	0.3385	0.9516	0.029561

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RAB6B	1.7507	0.5712	1.0500	2.9190	0.029563
PLAC1	1.7842	0.5605	1.0517	3.0269	0.029591
C6orf41	0.5666	1.7648	0.3372	0.9523	0.029687
ROCK2	1.7656	0.5664	1.0505	2.9678	0.029693
ZNF2	0.5695	1.7558	0.3404	0.9528	0.029755
CDK5RAP2	0.5701	1.7540	0.3411	0.9530	0.029808
C22orf32	0.5693	1.7565	0.3402	0.9526	0.02981
TTC25	0.5670	1.7637	0.3376	0.9522	0.029814
CLVS1	1.7556	0.5696	1.0496	2.9365	0.029825
SH2D1A	0.5716	1.7496	0.3427	0.9532	0.029852
TCEAL2	0.5716	1.7495	0.3428	0.9531	0.02986
RPL7L1	1.7707	0.5648	1.0496	2.9871	0.029878
LOC341056	0.5704	1.7532	0.3415	0.9527	0.029927
ARMCX1	1.7493	0.5716	1.0489	2.9176	0.029945
CD1A	0.5712	1.7508	0.3422	0.9532	0.029957
NFYC	0.5696	1.7557	0.3403	0.9533	0.029973
TRAPPC2	0.5680	1.7605	0.3386	0.9529	0.02998
PM20D1	0.5717	1.7492	0.3428	0.9533	0.030009
TYRP1	1.7508	0.5712	1.0487	2.9229	0.030054
LOC284441	1.7825	0.5610	1.0498	3.0266	0.030059
EHBP1	1.7621	0.5675	1.0487	2.9609	0.030082
ASTN1	0.5721	1.7478	0.3432	0.9539	0.030133
SLC4A5	0.5699	1.7548	0.3405	0.9537	0.030139
ATG5	1.7924	0.5579	1.0494	3.0615	0.030165
ARHGAP15	0.5700	1.7544	0.3407	0.9538	0.030168
FGFR2	0.5710	1.7514	0.3417	0.9541	0.030223
AKR7L	0.5707	1.7524	0.3412	0.9544	0.030283
DDX39	0.5696	1.7555	0.3401	0.9542	0.030344
DNASE1L3	0.5652	1.7694	0.3351	0.9532	0.030362
RBBP7	0.5730	1.7453	0.3438	0.9550	0.030417
MRS2P2	0.5723	1.7472	0.3431	0.9548	0.030417
LONRF1	0.5698	1.7551	0.3402	0.9543	0.030484
SLC48A1	0.5732	1.7447	0.3437	0.9558	0.030597
PSMD10	0.5724	1.7472	0.3429	0.9552	0.030604
AGFG2	0.5733	1.7444	0.3440	0.9554	0.030614
BCAS4	0.5739	1.7425	0.3447	0.9554	0.030628
ZXDC	0.5751	1.7387	0.3460	0.9560	0.030639
POLE2	0.5718	1.7490	0.3423	0.9550	0.030641
RAB33A	0.5719	1.7484	0.3421	0.9562	0.030862
FAM106C	1.7583	0.5687	1.0463	2.9549	0.03087
RNF125	0.5715	1.7499	0.3415	0.9563	0.030878
AKAP8	0.5751	1.7388	0.3458	0.9566	0.030925
TBL3	0.5719	1.7487	0.3419	0.9566	0.030956
RUNDC3A	1.7470	0.5724	1.0457	2.9186	0.030966

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PSIMCT-1	1. 7766	0. 5629	1. 0465	3. 0163	0. 030988
TMEM22	1. 7579	0. 5689	1. 0458	2. 9549	0. 030989
RALY	0. 5740	1. 7420	0. 3444	0. 9568	0. 031033
COR01C	0. 5718	1. 7488	0. 3421	0. 9558	0. 031037
TP73	0. 5752	1. 7387	0. 3457	0. 9568	0. 031049
CLEC3B	0. 5695	1. 7559	0. 3392	0. 9563	0. 031061
TES	1. 7737	0. 5638	1. 0454	3. 0095	0. 03107
KLF2	0. 5691	1. 7572	0. 3387	0. 9561	0. 031081
WDR90	0. 5737	1. 7431	0. 3440	0. 9568	0. 031101
FAM83F	0. 5726	1. 7465	0. 3426	0. 9568	0. 03111
SRRT	0. 5727	1. 7462	0. 3427	0. 9569	0. 031193
FLJ22536	1. 7470	0. 5724	1. 0448	2. 9213	0. 031217
SEMA5B	1. 7452	0. 5730	1. 0448	2. 9151	0. 031247
LIME1	0. 5719	1. 7485	0. 3418	0. 9570	0. 031256
TIGD1	0. 5670	1. 7638	0. 3359	0. 9570	0. 031287
HERPUD2	1. 7410	0. 5744	1. 0444	2. 9023	0. 031298
C19orf55	1. 7555	0. 5696	1. 0447	2. 9498	0. 03133
P2RX6	1. 7420	0. 5741	1. 0446	2. 9050	0. 031353
PLP1	0. 5743	1. 7414	0. 3444	0. 9577	0. 031367
CLECL1	0. 5725	1. 7468	0. 3422	0. 9578	0. 031368
SPON1	1. 7435	0. 5736	1. 0438	2. 9124	0. 031456
TOX4	0. 5789	1. 7274	0. 3496	0. 9585	0. 031459
ULK3	0. 5720	1. 7482	0. 3415	0. 9582	0. 031493
CTLA4	0. 5746	1. 7403	0. 3445	0. 9584	0. 031551
NSUN6	0. 5714	1. 7502	0. 3407	0. 9581	0. 031552
SPN	0. 5750	1. 7390	0. 3450	0. 9584	0. 031566
MLLT1	0. 5750	1. 7390	0. 3449	0. 9587	0. 031578
RGS13	0. 5678	1. 7613	0. 3365	0. 9580	0. 031651
ABCB1	0. 5769	1. 7334	0. 3471	0. 9588	0. 031664
PTTG2	0. 5716	1. 7495	0. 3410	0. 9581	0. 031686
INPP1	0. 5754	1. 7379	0. 3452	0. 9591	0. 031717
TRIM54	0. 5748	1. 7398	0. 3445	0. 9588	0. 03176
EFR3A	1. 7522	0. 5707	1. 0432	2. 9433	0. 031781
C5AR1	0. 5769	1. 7333	0. 3469	0. 9594	0. 031864
TRIM69	0. 5734	1. 7439	0. 3428	0. 9591	0. 031869
PM20D2	1. 7689	0. 5653	1. 0429	3. 0006	0. 031907
ADAMTS15	1. 7382	0. 5753	1. 0419	2. 8998	0. 031971
PPP1R2P1	0. 5714	1. 7500	0. 3404	0. 9593	0. 031973
KLRC2	0. 5714	1. 7500	0. 3402	0. 9597	0. 031976
CUX2	0. 5733	1. 7442	0. 3426	0. 9595	0. 032015
PRDM4	1. 7511	0. 5711	1. 0423	2. 9418	0. 032049
PPM1N	0. 5755	1. 7375	0. 3450	0. 9601	0. 032093
PWP2	1. 7519	0. 5708	1. 0423	2. 9444	0. 032121
PVR	1. 7587	0. 5686	1. 0421	2. 9683	0. 032137

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C6orf227	1.7435	0.5736	1.0415	2.9187	0.032152
EGLN3	1.7438	0.5735	1.0418	2.9188	0.032158
SLC23A1	0.5732	1.7447	0.3423	0.9597	0.03217
LRP5	1.7585	0.5687	1.0422	2.9671	0.032182
HOMEZ	1.7692	0.5652	1.0426	3.0019	0.032183
NDUFB1	0.5732	1.7444	0.3423	0.9600	0.032199
APOLD1	0.5742	1.7417	0.3433	0.9601	0.032201
FLJ36031	1.7526	0.5706	1.0414	2.9493	0.032227
ITGAL	0.5775	1.7317	0.3472	0.9604	0.032229
EVI2B	0.5740	1.7423	0.3431	0.9602	0.032244
SLC30A6	1.7691	0.5653	1.0421	3.0032	0.03226
IRF4	0.5789	1.7273	0.3488	0.9611	0.032324
IRF8	0.5762	1.7354	0.3456	0.9608	0.032405
SAPS2	0.5780	1.7300	0.3477	0.9609	0.03241
COX6A1	0.5730	1.7452	0.3417	0.9608	0.032414
FBXL4	1.7575	0.5690	1.0410	2.9669	0.032499
SEMA6B	1.7498	0.5715	1.0408	2.9417	0.032629
ZNF671	0.5747	1.7402	0.3434	0.9617	0.032642
CDC14A	0.5765	1.7347	0.3456	0.9615	0.032644
NDUFA12	0.5788	1.7277	0.3483	0.9619	0.032659
RFNG	0.5747	1.7399	0.3434	0.9618	0.032689
LOC100271836	1.7552	0.5697	1.0402	2.9616	0.032734
ZDHHC18	0.5746	1.7402	0.3434	0.9616	0.032748
C7orf59	0.5765	1.7346	0.3454	0.9622	0.03279
EAPP	0.5767	1.7339	0.3458	0.9618	0.0328
TCEB2	0.5696	1.7556	0.3373	0.9619	0.032858
LOC162632	1.7448	0.5731	1.0393	2.9291	0.03288
ZBTB32	0.5786	1.7282	0.3478	0.9626	0.032929
ST8SIA4	0.5756	1.7373	0.3443	0.9625	0.032986
LDLRAD3	1.7535	0.5703	1.0393	2.9584	0.033007
TBCCD1	0.5788	1.7277	0.3478	0.9633	0.033066
RNASE6	0.5791	1.7267	0.3483	0.9629	0.033091
SLC25A11	0.5755	1.7377	0.3439	0.9630	0.033098
MSL3	0.5796	1.7252	0.3487	0.9635	0.033146
BCL2	0.5788	1.7277	0.3478	0.9632	0.033149
ADORA3	0.5793	1.7262	0.3484	0.9634	0.033236
LEPROT	1.7536	0.5703	1.0386	2.9608	0.033258
ADORA2B	0.5724	1.7469	0.3404	0.9626	0.033285
GRM7	0.5754	1.7380	0.3438	0.9630	0.033317
SLAIN1	0.5734	1.7439	0.3414	0.9633	0.033346
GDPD3	0.5705	1.7529	0.3378	0.9634	0.033437
MYO9B	0.5782	1.7294	0.3468	0.9643	0.033469
TAX1BP3	0.5680	1.7607	0.3347	0.9638	0.033519
PLBD2	1.7521	0.5707	1.0376	2.9588	0.033529

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RPL32P3	0.5801	1.7238	0.3489	0.9646	0.033562
KIAA0776	1.7414	0.5742	1.0368	2.9249	0.033621
LAPTM5	0.5754	1.7380	0.3433	0.9642	0.033663
GABRR2	1.7507	0.5712	1.0372	2.9550	0.033666
GPR113	0.5790	1.7271	0.3476	0.9645	0.033689
C11orf48	0.5776	1.7312	0.3458	0.9648	0.033724
RPAIN	0.5767	1.7340	0.3447	0.9649	0.0338
LILRP2	0.5771	1.7327	0.3451	0.9652	0.033848
NDUFA2	0.5748	1.7397	0.3423	0.9653	0.033893
ELK1	0.5798	1.7247	0.3483	0.9652	0.033934
CORO2B	1.7264	0.5792	1.0359	2.8771	0.033934
MEOX1	0.5792	1.7264	0.3474	0.9657	0.033939
GPR144	0.5777	1.7311	0.3457	0.9653	0.033949
ZNF582	0.5720	1.7482	0.3391	0.9650	0.033962
GOLT1B	1.7349	0.5764	1.0358	2.9059	0.033968
FNDC3B	1.7483	0.5720	1.0358	2.9506	0.033997
TIGD3	0.5746	1.7405	0.3419	0.9657	0.034041
LOC100216545	0.5743	1.7414	0.3416	0.9653	0.034048
KCNF1	1.7243	0.5799	1.0355	2.8715	0.034057
LOC100133545	1.7574	0.5690	1.0361	2.9808	0.034065
CDH3	1.7224	0.5806	1.0353	2.8656	0.034075
TPBG	1.7401	0.5747	1.0354	2.9245	0.034089
AMICA1	0.5797	1.7249	0.3479	0.9661	0.03415
IER3	1.7259	0.5794	1.0350	2.8782	0.034155
C22orf40	0.5752	1.7385	0.3425	0.9660	0.034249
TBP	1.7391	0.5750	1.0349	2.9225	0.034257
ZYG11A	0.5803	1.7231	0.3485	0.9664	0.034261
SYCP2L	1.7403	0.5746	1.0352	2.9257	0.034311
EXOC5	1.7484	0.5720	1.0352	2.9527	0.034312
UCHL5	1.7376	0.5755	1.0349	2.9175	0.034332
TMEM186	0.5779	1.7304	0.3455	0.9667	0.034342
USP35	1.7494	0.5716	1.0354	2.9558	0.034367
RAB11FIP1	0.5795	1.7256	0.3473	0.9668	0.034372
FUT5	0.5807	1.7220	0.3488	0.9668	0.034411
S100B	0.5796	1.7253	0.3476	0.9666	0.034437
AMY2A	0.5799	1.7245	0.3477	0.9671	0.034619
DUSP2	0.5814	1.7200	0.3495	0.9671	0.034655
HAUS8	0.5788	1.7277	0.3465	0.9669	0.03467
ARGFXP2	1.7248	0.5798	1.0337	2.8779	0.034677
NDUFB10	0.5759	1.7365	0.3428	0.9675	0.034681
NDRG1	1.7291	0.5784	1.0338	2.8919	0.03471
CYSLTR2	0.5823	1.7173	0.3504	0.9678	0.03474
C17orf55	1.7183	0.5820	1.0337	2.8562	0.034749
ADCY5	0.5762	1.7356	0.3431	0.9675	0.034761

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NDUFS5	0.5736	1.7433	0.3400	0.9677	0.034773
TNFRSF11B	1.7250	0.5797	1.0330	2.8806	0.034916
CCL25	0.5779	1.7303	0.3450	0.9681	0.034946
SOAT2	0.5805	1.7228	0.3479	0.9683	0.034956
CRB2	0.5784	1.7290	0.3456	0.9679	0.034995
KIAA1755	0.5805	1.7226	0.3480	0.9684	0.035013
RNF167	0.5791	1.7267	0.3463	0.9684	0.035023
INADL	1.7354	0.5762	1.0326	2.9166	0.035096
SCGB1A1	0.5787	1.7281	0.3457	0.9686	0.035119
SNX10	1.7273	0.5790	1.0317	2.8918	0.035174
S100A4	0.5708	1.7518	0.3365	0.9685	0.035178
YIPF6	1.7538	0.5702	1.0328	2.9781	0.035179
DNAL1	0.5812	1.7204	0.3487	0.9689	0.0352
FAM131B	0.5815	1.7198	0.3488	0.9693	0.035223
BCS1L	0.5785	1.7286	0.3454	0.9690	0.035237
TARSL2	0.5791	1.7270	0.3460	0.9690	0.035266
MPV17L2	0.5805	1.7227	0.3478	0.9690	0.035266
LGALS2	0.5831	1.7150	0.3506	0.9696	0.035375
ZNF534	0.5827	1.7163	0.3502	0.9694	0.03538
GDF15	0.5801	1.7239	0.3471	0.9693	0.035386
DGKB	0.5828	1.7158	0.3504	0.9693	0.035422
NGF	1.7251	0.5797	1.0313	2.8856	0.035425
RBM10	0.5796	1.7254	0.3465	0.9694	0.035425
FMNL3	0.5847	1.7104	0.3524	0.9700	0.035452
FAM163A	1.7188	0.5818	1.0310	2.8654	0.035557
CXorf42	0.5827	1.7162	0.3502	0.9696	0.03556
FLJ90757	1.7206	0.5812	1.0311	2.8711	0.035566
C1QB	0.5833	1.7145	0.3507	0.9702	0.035594
LOC100303728	0.5835	1.7137	0.3508	0.9705	0.03565
COL4A4	1.7194	0.5816	1.0306	2.8688	0.035658
ADI1	0.5821	1.7178	0.3492	0.9704	0.035672
TDRD7	0.5833	1.7143	0.3505	0.9707	0.035721
IFNG	0.5774	1.7318	0.3438	0.9699	0.035731
B3GALT4	0.5841	1.7121	0.3513	0.9710	0.035764
RRN3P3	0.5843	1.7116	0.3515	0.9711	0.035821
FABP7	0.5837	1.7131	0.3509	0.9711	0.035849
SESN2	1.7393	0.5750	1.0304	2.9357	0.035878
NCAN	0.5844	1.7110	0.3518	0.9711	0.035896
RPL15	0.5775	1.7317	0.3435	0.9707	0.035942
ALDH4A1	0.5800	1.7240	0.3464	0.9713	0.035958
HIST1H2BD	0.5807	1.7220	0.3472	0.9714	0.036067
TNFRSF1A	1.7331	0.5770	1.0303	2.9156	0.036086
ZNF10	0.5816	1.7193	0.3482	0.9715	0.036088
TUBB3	1.7151	0.5830	1.0289	2.8589	0.036088

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CXorf21	0.5828	1.7159	0.3496	0.9715	0.03612
LRCH1	1.7302	0.5780	1.0289	2.9096	0.036153
LMAN1	1.7168	0.5825	1.0285	2.8658	0.036233
NUB1	0.5813	1.7203	0.3477	0.9718	0.036234
FBXO30	1.7364	0.5759	1.0290	2.9302	0.036234
TCTEX1D2	0.5809	1.7216	0.3473	0.9715	0.036273
NROB1	0.5813	1.7202	0.3476	0.9722	0.036274
TAF3	0.5858	1.7070	0.3530	0.9723	0.036284
LRRC26	0.5826	1.7163	0.3492	0.9721	0.036292
CCNO	0.5813	1.7204	0.3476	0.9720	0.036384
KIAA0101	0.5822	1.7175	0.3488	0.9718	0.03647
SUMF2	1.7359	0.5761	1.0289	2.9287	0.036481
PRDX2	0.5822	1.7176	0.3486	0.9723	0.036488
PRPF18	0.5836	1.7134	0.3501	0.9730	0.036552
TAPT1	0.5792	1.7265	0.3450	0.9725	0.036553
KCTD11	1.7075	0.5856	1.0281	2.8361	0.036559
CLEC2B	0.5792	1.7267	0.3449	0.9724	0.036566
RTP4	0.5858	1.7070	0.3528	0.9726	0.036569
CPSF7	0.5837	1.7133	0.3501	0.9731	0.036592
LTBR	1.7283	0.5786	1.0282	2.9051	0.036609
KANK3	0.5794	1.7258	0.3451	0.9729	0.036614
PSEN1	1.7555	0.5696	1.0282	2.9974	0.0367
CCL22	0.5818	1.7187	0.3478	0.9732	0.036714
FLNB	1.7149	0.5831	1.0279	2.8609	0.036753
NDUFB6	0.5822	1.7176	0.3483	0.9732	0.036783
GLB1L2	0.5830	1.7153	0.3492	0.9734	0.036802
CDC7	0.5852	1.7089	0.3517	0.9737	0.036807
VGLL3	1.7244	0.5799	1.0268	2.8959	0.036874
STAT5A	0.5842	1.7118	0.3503	0.9740	0.036889
PMCH	0.5819	1.7184	0.3478	0.9737	0.03693
JOSD1	0.5864	1.7052	0.3532	0.9738	0.036947
MPND	0.5844	1.7112	0.3505	0.9743	0.036979
NDUFAF2	0.5788	1.7278	0.3441	0.9733	0.036992
ZFHX3	1.7145	0.5833	1.0269	2.8623	0.037013
PIPOX	0.5856	1.7076	0.3521	0.9739	0.037015
TMEM40	0.5795	1.7255	0.3450	0.9735	0.037028
BLCAP	0.5853	1.7085	0.3518	0.9737	0.03706
RCL1	0.5826	1.7164	0.3486	0.9736	0.037073
SIRT6	0.5822	1.7176	0.3479	0.9743	0.037137
BCL6B	0.5820	1.7182	0.3477	0.9742	0.037171
PTGFRN	1.7179	0.5821	1.0265	2.8749	0.037215
HAP1	0.5832	1.7146	0.3490	0.9746	0.037321
BOLA2	0.5805	1.7226	0.3456	0.9750	0.03734
NAB1	1.7585	0.5687	1.0265	3.0123	0.037357

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STX4	0.5835	1.7139	0.3491	0.9750	0.03738
EIF3IP1	0.5841	1.7121	0.3499	0.9751	0.037432
CCDC36	0.5747	1.7400	0.3387	0.9751	0.037455
CNIH3	1.7222	0.5807	1.0253	2.8927	0.037464
PADI2	0.5828	1.7157	0.3484	0.9752	0.037512
TMEM87B	1.7312	0.5776	1.0256	2.9223	0.037522
CLDND2	0.5834	1.7140	0.3491	0.9751	0.037599
PAR6A	0.5835	1.7139	0.3489	0.9759	0.037621
SNX6	1.7309	0.5777	1.0250	2.9229	0.037622
ING3	0.5794	1.7258	0.3442	0.9753	0.037644
FAM95B1	0.5837	1.7131	0.3491	0.9760	0.037686
GPR21	0.5826	1.7164	0.3480	0.9753	0.037693
SF3A2	0.5843	1.7116	0.3499	0.9756	0.037705
ICOS	0.5863	1.7057	0.3522	0.9757	0.037717
ZZEF1	0.5830	1.7152	0.3484	0.9757	0.03773
LLGL2	0.5837	1.7131	0.3490	0.9764	0.037813
CXCR7	1.7136	0.5836	1.0243	2.8670	0.037866
PPFIA4	1.6990	0.5886	1.0245	2.8174	0.037892
C17orf87	0.5871	1.7034	0.3530	0.9763	0.037897
LOC284749	0.5777	1.7310	0.3419	0.9762	0.037905
VEGFA	1.7077	0.5856	1.0240	2.8479	0.037909
CDT1	0.5858	1.7071	0.3513	0.9767	0.037922
KRT24	0.5826	1.7164	0.3478	0.9760	0.037961
IL1B	1.7090	0.5852	1.0242	2.8516	0.038007
FIGN	1.7072	0.5858	1.0238	2.8467	0.038014
VAMP2	0.5789	1.7273	0.3432	0.9767	0.038044
RNF222	0.5787	1.7281	0.3428	0.9769	0.038047
GINS4	0.5833	1.7145	0.3484	0.9763	0.038058
UPK3A	0.5837	1.7131	0.3488	0.9769	0.038167
C17orf48	0.5840	1.7125	0.3490	0.9770	0.038179
GABRP	0.5877	1.7015	0.3535	0.9772	0.038251
LSS	1.7187	0.5818	1.0236	2.8857	0.038283
ZDHHC8	1.7195	0.5816	1.0232	2.8898	0.038348
GRIPAP1	0.5867	1.7044	0.3520	0.9780	0.03844
GAPDH	1.7050	0.5865	1.0224	2.8431	0.038455
ICAM2	0.5844	1.7111	0.3492	0.9781	0.038507
ENTPD5	1.7365	0.5759	1.0229	2.9480	0.038508
SNRPD3	0.5841	1.7121	0.3489	0.9779	0.038526
EGFL6	0.5834	1.7140	0.3482	0.9776	0.03856
GAL3ST1	1.7016	0.5877	1.0222	2.8325	0.038631
NFRKB	0.5820	1.7183	0.3462	0.9784	0.038644
ZNF12	1.7089	0.5852	1.0219	2.8577	0.03876
PSMD9	0.5882	1.7002	0.3534	0.9788	0.038813
TTBK1	0.5888	1.6985	0.3542	0.9788	0.038831

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MRPS11	0.5879	1.7009	0.3530	0.9791	0.038875
ELM01	0.5871	1.7032	0.3522	0.9789	0.038888
HIST1H2BJ	0.5870	1.7034	0.3522	0.9786	0.038891
PTCRA	0.5888	1.6984	0.3541	0.9789	0.038897
CFP	0.5853	1.7087	0.3499	0.9791	0.038901
CPNE7	0.5879	1.7011	0.3529	0.9793	0.038904
MYO3B	1.7029	0.5872	1.0214	2.8393	0.038907
TRIM26	0.5891	1.6976	0.3545	0.9790	0.038911
ZNF575	0.5853	1.7086	0.3499	0.9790	0.038929
PLCD1	0.5812	1.7206	0.3451	0.9788	0.038934
CCDC59	0.5874	1.7024	0.3524	0.9792	0.039046
C20orf203	0.5877	1.7016	0.3528	0.9790	0.039056
PAPPA	1.7024	0.5874	1.0206	2.8395	0.039135
LILRB1	0.5878	1.7014	0.3527	0.9796	0.039137
LATS1	1.7116	0.5842	1.0210	2.8693	0.039154
BBS2	1.7024	0.5874	1.0208	2.8392	0.039174
FAM122C	0.5906	1.6931	0.3561	0.9797	0.039214
LRRC37A4	0.5879	1.7010	0.3527	0.9800	0.039281
GIMAP4	0.5894	1.6967	0.3544	0.9800	0.039328
ELAVL1	0.5861	1.7061	0.3506	0.9799	0.039348
INSL3	0.5878	1.7012	0.3526	0.9801	0.03935
TACC2	0.5855	1.7078	0.3498	0.9801	0.039392
ACAD8	0.5805	1.7227	0.3438	0.9802	0.039439
ZNF700	0.5877	1.7016	0.3522	0.9806	0.039448
CD40LG	0.5895	1.6964	0.3544	0.9804	0.03947
PTHLH	1.7074	0.5857	1.0197	2.8589	0.039567
SPATA2	0.5882	1.7001	0.3527	0.9808	0.039571
GFPT2	1.6957	0.5897	1.0194	2.8207	0.03967
CSF1	1.7192	0.5817	1.0191	2.9005	0.039768
ZFR2	0.5898	1.6956	0.3543	0.9818	0.039845
FOXD4	0.5864	1.7054	0.3503	0.9815	0.039902
NRGN	0.5848	1.7101	0.3484	0.9816	0.039937
GZMK	0.5889	1.6981	0.3532	0.9819	0.039988
C7orf49	1.6976	0.5891	1.0189	2.8283	0.040042
RLTPR	0.5890	1.6978	0.3533	0.9819	0.040054
MYH3	0.5898	1.6956	0.3541	0.9823	0.040105
RNPS1	0.5872	1.7029	0.3511	0.9822	0.04012
TNNI2	0.5882	1.7001	0.3523	0.9820	0.040187
IL12A	0.5894	1.6967	0.3536	0.9823	0.040206
RGPD3	1.6987	0.5887	1.0180	2.8346	0.040244
SIGLEC10	0.5910	1.6920	0.3555	0.9825	0.040264
ABCC4	0.5897	1.6957	0.3541	0.9821	0.040277
SEC31B	0.5893	1.6971	0.3534	0.9826	0.040291
HOXA6	1.7136	0.5836	1.0180	2.8846	0.040303

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SNRNP25	0.5858	1.7071	0.3492	0.9826	0.040396
RPL7	1.6927	0.5908	1.0174	2.8162	0.040405
CATSPER2P1	1.6992	0.5885	1.0170	2.8391	0.04042
HDAC10	0.5915	1.6906	0.3558	0.9834	0.040585
ATP1A4	0.5915	1.6906	0.3557	0.9836	0.0406
RPL26	0.5868	1.7041	0.3502	0.9834	0.040669
SLC12A3	0.5911	1.6917	0.3553	0.9836	0.04072
CYSLTR1	0.5902	1.6944	0.3540	0.9839	0.040722
CCR6	0.5905	1.6936	0.3543	0.9840	0.040816
AP1B1	0.5905	1.6933	0.3543	0.9843	0.040847
GSDMB	0.5902	1.6943	0.3540	0.9841	0.040918
ZNF44	0.5866	1.7048	0.3498	0.9837	0.040947
TNFAIP8L2	0.5908	1.6926	0.3545	0.9847	0.041024
NXF1	0.5901	1.6946	0.3538	0.9843	0.041024
ANKRD32	0.5886	1.6991	0.3520	0.9841	0.041028
C15orf59	1.6936	0.5905	1.0155	2.8243	0.041042
3-Mar	0.5906	1.6933	0.3540	0.9851	0.041194
FAM21B	0.5906	1.6933	0.3539	0.9854	0.041281
CSNK1A1P	0.5917	1.6902	0.3554	0.9849	0.041284
TFRC	1.7137	0.5835	1.0149	2.8934	0.041293
SLC4A11	0.5885	1.6991	0.3516	0.9852	0.041354
ZFP92	1.7053	0.5864	1.0146	2.8659	0.041385
LY75	0.5944	1.6825	0.3585	0.9854	0.041385
FAM81A	0.5908	1.6925	0.3542	0.9855	0.041491
UNC50	1.7038	0.5869	1.0147	2.8609	0.041518
RNF166	0.5857	1.7073	0.3481	0.9857	0.041538
GTPBP8	0.5937	1.6844	0.3576	0.9856	0.041542
CD226	0.5924	1.6880	0.3561	0.9856	0.041563
ICOSLG	0.5888	1.6984	0.3515	0.9863	0.041594
ATP5S	0.5923	1.6882	0.3559	0.9859	0.041636
ASAM	1.6967	0.5894	1.0142	2.8387	0.041689
PARL	0.5915	1.6905	0.3549	0.9859	0.041693
EDF1	0.5843	1.7113	0.3462	0.9862	0.041745
TMPO	0.5929	1.6866	0.3565	0.9862	0.041758
MFSD4	0.5910	1.6921	0.3542	0.9860	0.041821
FOXF1	0.5873	1.7027	0.3496	0.9865	0.04183
ZRANB2	0.5866	1.7048	0.3488	0.9864	0.041874
PVRIG	0.5935	1.6850	0.3569	0.9869	0.041876
RSAD1	0.5901	1.6947	0.3528	0.9869	0.041883
PRIM1	0.5920	1.6891	0.3552	0.9869	0.041887
SARM1	0.5919	1.6895	0.3551	0.9866	0.041921
FAM100B	0.5920	1.6891	0.3551	0.9870	0.042009
TMEM149	0.5940	1.6836	0.3574	0.9873	0.042069
C8orf80	0.5922	1.6886	0.3552	0.9875	0.042159

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TUBB2C	0.5813	1.7202	0.3421	0.9877	0.04225
WISP3	1.6874	0.5926	1.0123	2.8127	0.042302
FBX04	0.5899	1.6951	0.3524	0.9874	0.042345
FCRL3	0.5942	1.6829	0.3573	0.9882	0.042389
HAUS1	0.5907	1.6930	0.3531	0.9880	0.042406
PAR6G	0.5882	1.7000	0.3503	0.9877	0.042452
LOC100271722	0.5880	1.7008	0.3500	0.9877	0.042487
RFC4	0.5936	1.6847	0.3566	0.9879	0.04254
SERPINF2	0.5887	1.6988	0.3506	0.9882	0.042553
LOC100130932	0.5914	1.6908	0.3540	0.9880	0.042554
PICK1	0.5928	1.6870	0.3554	0.9888	0.042577
C5orf35	0.5922	1.6885	0.3550	0.9879	0.04261
KBTBD2	1.6923	0.5909	1.0115	2.8312	0.042725
FNDC3A	1.6939	0.5904	1.0110	2.8381	0.042731
POLI	1.6809	0.5949	1.0110	2.7946	0.042812
CLTCL1	1.6818	0.5946	1.0112	2.7971	0.042909
GLRB	1.6866	0.5929	1.0111	2.8132	0.042919
PA2G4P4	0.5944	1.6825	0.3574	0.9886	0.042923
PSMG2	0.5884	1.6997	0.3500	0.9890	0.04294
ESRRB	0.5916	1.6903	0.3538	0.9892	0.042952
SLC25A33	0.5939	1.6837	0.3565	0.9896	0.042973
CPNE5	0.5934	1.6852	0.3558	0.9895	0.042993
IL18RAP	0.5938	1.6841	0.3562	0.9899	0.043061
SFXN2	0.5948	1.6812	0.3575	0.9897	0.043067
NMNAT2	1.6917	0.5911	1.0105	2.8320	0.04307
LOC147727	0.5912	1.6913	0.3533	0.9896	0.043077
MCM6	0.5951	1.6804	0.3579	0.9896	0.043096
ERCC5	0.5934	1.6852	0.3559	0.9893	0.043106
PFKFB4	1.6774	0.5962	1.0104	2.7847	0.043177
TMEM86A	0.5918	1.6897	0.3537	0.9902	0.043179
HCK	0.5956	1.6791	0.3583	0.9899	0.043231
CCND2	0.5943	1.6826	0.3567	0.9903	0.043342
ACAT2	1.6888	0.5921	1.0099	2.8241	0.043398
PTPRCAP	0.5941	1.6832	0.3564	0.9905	0.0434
RALGDS	0.5943	1.6826	0.3567	0.9903	0.043456
SIGLEC8	0.5973	1.6742	0.3601	0.9907	0.043483
LOC284100	0.5923	1.6883	0.3541	0.9908	0.043492
ZGLP1	0.5870	1.7034	0.3479	0.9905	0.043521
SSR4	0.5925	1.6876	0.3543	0.9911	0.04362
EXD1	0.5937	1.6844	0.3558	0.9906	0.043724
4-Mar	1.6778	0.5960	1.0086	2.7909	0.043822
TP53	0.5915	1.6906	0.3529	0.9913	0.043823
KIAA1522	0.5947	1.6814	0.3567	0.9917	0.043872
HAAO	0.5928	1.6869	0.3545	0.9913	0.043909

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BICD1	1.6942	0.5903	1.0083	2.8466	0.044031
IFT122	0.5929	1.6867	0.3542	0.9922	0.044054
ADAMTS8	0.5976	1.6735	0.3601	0.9915	0.044061
GNA12	1.6896	0.5919	1.0083	2.8312	0.044064
TRAT1	0.5948	1.6811	0.3567	0.9918	0.044085
PKM2	1.6831	0.5941	1.0080	2.8105	0.044098
CEND1	0.5908	1.6926	0.3519	0.9919	0.044104
NCF1	0.5975	1.6736	0.3599	0.9921	0.044127
NDUFS4	0.5929	1.6866	0.3544	0.9921	0.044159
SLC10A3	0.5966	1.6762	0.3587	0.9923	0.044175
REL	1.7011	0.5879	1.0077	2.8715	0.044219
C1orf204	0.5930	1.6864	0.3544	0.9922	0.044228
POLR2J3	0.5933	1.6854	0.3547	0.9925	0.044269
SESN3	1.6790	0.5956	1.0069	2.7995	0.044346
CAV2	1.6912	0.5913	1.0070	2.8404	0.044375
AIDA	1.6726	0.5979	1.0076	2.7765	0.044376
CAP2	1.6757	0.5968	1.0073	2.7877	0.044448
C10orf46	0.5977	1.6729	0.3597	0.9932	0.044532
NAP1L5	0.5951	1.6803	0.3566	0.9931	0.044564
WBP4	1.6945	0.5901	1.0068	2.8521	0.044576
MATN3	1.6848	0.5935	1.0067	2.8198	0.04458
DDX21	1.6909	0.5914	1.0068	2.8399	0.044626
PWWP2B	1.6792	0.5955	1.0069	2.8005	0.04463
RHOQ	1.6907	0.5915	1.0064	2.8402	0.044656
GRRP1	0.5974	1.6738	0.3593	0.9934	0.044683
BNIP3	1.6775	0.5961	1.0065	2.7956	0.044793
DTX3L	0.5979	1.6724	0.3598	0.9936	0.044859
AMMECR1L	1.7090	0.5852	1.0061	2.9029	0.044888
AVPR2	0.5977	1.6732	0.3593	0.9940	0.044894
TBC1D24	1.6830	0.5942	1.0061	2.8152	0.04493
SGCB	1.6732	0.5977	1.0058	2.7832	0.045106
PPP4R1	1.6786	0.5957	1.0059	2.8011	0.045146
TYROBP	0.5983	1.6714	0.3599	0.9947	0.045194
OVCA2	0.5937	1.6843	0.3544	0.9947	0.045273
EDEM3	1.6893	0.5920	1.0052	2.8390	0.045305
TMC01	1.6753	0.5969	1.0055	2.7913	0.045349
DSCR9	0.5958	1.6783	0.3568	0.9949	0.045356
C12orf36	0.5962	1.6774	0.3572	0.9949	0.045404
PON1	1.7005	0.5880	1.0053	2.8765	0.045407
STAG2	0.5979	1.6725	0.3592	0.9953	0.045459
ZNF304	1.6705	0.5986	1.0047	2.7776	0.04546
SMN2	0.5943	1.6827	0.3550	0.9950	0.04547
CD8B	0.5947	1.6815	0.3555	0.9948	0.045471
MBNL1	0.5971	1.6748	0.3583	0.9951	0.045609

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PTPLAD2	1.7031	0.5872	1.0041	2.8889	0.045612
SLC7A1	1.6806	0.5950	1.0042	2.8127	0.045616
TERF2IP	0.5973	1.6741	0.3585	0.9954	0.045648
GLYATL2	0.5984	1.6710	0.3598	0.9953	0.045669
C19orf10	1.6775	0.5961	1.0042	2.8025	0.045748
KIRREL	1.6757	0.5968	1.0043	2.7958	0.045751
LRFN3	1.6867	0.5929	1.0044	2.8327	0.045767
RFPL1S	0.5985	1.6708	0.3597	0.9958	0.045792
CRB1	1.6760	0.5966	1.0040	2.7979	0.045812
FA2H	0.5928	1.6869	0.3527	0.9963	0.045878
NKX2-5	1.6860	0.5931	1.0040	2.8310	0.045919
CA5B	0.5995	1.6682	0.3607	0.9963	0.045926
SLC24A3	1.6741	0.5974	1.0037	2.7922	0.045943
SEMA3C	1.6774	0.5962	1.0034	2.8042	0.045945
BCL2L14	0.5990	1.6694	0.3603	0.9958	0.045951
EIF2A	0.5954	1.6796	0.3559	0.9960	0.045953
ANXA2P2	1.6745	0.5972	1.0032	2.7951	0.045957
SETDB2	0.5948	1.6812	0.3553	0.9959	0.045971
FSTL3	1.6783	0.5958	1.0032	2.8079	0.045975
LST1	0.5982	1.6716	0.3590	0.9967	0.046028
TNFRSF1B	0.5975	1.6735	0.3582	0.9968	0.046231
RHOT1	1.6833	0.5941	1.0026	2.8262	0.046255
OSR2	0.5989	1.6697	0.3597	0.9973	0.046385
FKBP14	1.6996	0.5884	1.0019	2.8830	0.046457
RHOB	1.6732	0.5977	1.0025	2.7927	0.046458
CYBB	0.5999	1.6669	0.3609	0.9973	0.046464
CSF2RB	0.5959	1.6781	0.3559	0.9979	0.046523
RPP40	0.5987	1.6702	0.3595	0.9972	0.046525
ICAM4	0.5995	1.6679	0.3603	0.9976	0.046528
C19orf54	0.5986	1.6706	0.3591	0.9977	0.046537
CLK2	1.6717	0.5982	1.0027	2.7870	0.04655
C5orf33	0.5988	1.6700	0.3593	0.9981	0.046606
RBM8A	0.5995	1.6680	0.3603	0.9974	0.046654
PPP1R3D	0.6012	1.6634	0.3621	0.9981	0.046674
REEP1	0.5989	1.6697	0.3594	0.9980	0.046699
TOPBP1	0.6016	1.6621	0.3626	0.9982	0.04672
HCLS1	0.5989	1.6698	0.3592	0.9984	0.04675
FPR1	0.5970	1.6751	0.3569	0.9986	0.046833
LOC729375	0.5990	1.6694	0.3593	0.9985	0.046867
TRPV2	0.5993	1.6686	0.3597	0.9986	0.046899
GZF1	1.6754	0.5969	1.0015	2.8028	0.046906
ASPG	0.6005	1.6653	0.3610	0.9988	0.04692
HEY2	0.5984	1.6711	0.3586	0.9985	0.046934
C22orf25	0.5992	1.6689	0.3595	0.9987	0.04698

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ZP1	1.6807	0.5950	1.0010	2.8219	0.047017
ZMAT2	0.6001	1.6664	0.3606	0.9985	0.04703
HBS1L	1.6881	0.5924	1.0006	2.8478	0.047045
CECR1	0.6006	1.6649	0.3612	0.9987	0.047097
PLEC	1.6709	0.5985	1.0010	2.7891	0.047185
GNPAT	1.6645	0.6008	1.0010	2.7678	0.047188
CLEC12A	0.5998	1.6671	0.3600	0.9995	0.047247
TMEM184C	1.6964	0.5895	0.9997	2.8787	0.047257
ERO1L	1.6738	0.5975	1.0007	2.7996	0.047272
GNGT1	1.6797	0.5954	1.0004	2.8201	0.04733
ECHDC2	0.5956	1.6788	0.3547	1.0003	0.047394
ELOVL3	1.6744	0.5972	1.0004	2.8026	0.047396
PSMA3	0.5997	1.6675	0.3598	0.9995	0.047398
RCSL1	0.5994	1.6684	0.3594	0.9996	0.047413
C1orf182	1.6732	0.5977	1.0003	2.7988	0.04745
ATP2B2	0.5991	1.6691	0.3590	0.9998	0.047525
CACNA1A	0.5982	1.6716	0.3578	1.0002	0.047621
HSH2D	0.5977	1.6732	0.3571	1.0002	0.04769
IL9R	0.5981	1.6719	0.3576	1.0003	0.047696
HIST1H2BK	0.5999	1.6668	0.3598	1.0004	0.047726
FGR	0.5981	1.6720	0.3578	0.9998	0.047738
APBB1IP	0.6002	1.6662	0.3601	1.0003	0.047745
TSC22D3	0.6017	1.6618	0.3621	1.0000	0.047751
MPEG1	0.6002	1.6660	0.3601	1.0005	0.047767
AADACL2	0.5983	1.6713	0.3578	1.0007	0.047808
MORN1	0.5927	1.6872	0.3511	1.0005	0.047814
SUMO2	0.6011	1.6637	0.3610	1.0007	0.047916
BNIP1	0.6005	1.6652	0.3602	1.0012	0.047936
ADAL	0.5981	1.6718	0.3576	1.0005	0.047944
FAM182A	0.6007	1.6647	0.3604	1.0012	0.047985
MDH1	0.5962	1.6774	0.3550	1.0011	0.048006
SLAMF8	0.6026	1.6596	0.3628	1.0007	0.04801
LASS2	1.6679	0.5996	0.9990	2.7846	0.048135
GPRC5A	1.6656	0.6004	0.9983	2.7790	0.048178
CLIC5	0.6016	1.6624	0.3615	1.0010	0.048251
TXNIP	0.5999	1.6671	0.3593	1.0014	0.048274
GIMAP1	0.6024	1.6601	0.3623	1.0015	0.048299
CRAT	0.6018	1.6617	0.3616	1.0016	0.04831
FZD3	1.6724	0.5979	0.9986	2.8007	0.048311
PCDHB6	1.6707	0.5986	0.9983	2.7959	0.048317
VWA3B	0.6026	1.6596	0.3626	1.0014	0.048398
HIST1H2BG	0.5973	1.6741	0.3561	1.0019	0.048461
FRAT1	0.6000	1.6667	0.3592	1.0023	0.048462
VCL	1.6825	0.5944	0.9971	2.8389	0.048463

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JAK2	0.6024	1.6599	0.3621	1.0022	0.048483
ONECUT2	0.6006	1.6650	0.3600	1.0021	0.048555
LRP11	1.6738	0.5974	0.9969	2.8103	0.048585
CBFB	0.6002	1.6661	0.3594	1.0025	0.048611
MGC12916	0.6043	1.6548	0.3645	1.0020	0.048627
KREMEN1	0.6015	1.6626	0.3609	1.0025	0.048636
CDC27	1.6602	0.6023	0.9978	2.7625	0.048668
STMN1	0.5996	1.6677	0.3585	1.0028	0.048731
LOC401588	0.5994	1.6683	0.3584	1.0027	0.048815
ZNF391	1.6818	0.5946	0.9966	2.8381	0.048832
LOC728554	0.5981	1.6719	0.3566	1.0032	0.048866
KCNT2	1.6816	0.5947	0.9967	2.8373	0.048922
CCDC46	1.6626	0.6015	0.9967	2.7733	0.049
ADRB1	0.6032	1.6577	0.3628	1.0029	0.049024
S100Z	0.6009	1.6641	0.3601	1.0028	0.049071
C22orf34	0.6024	1.6601	0.3616	1.0035	0.049158
PGM2	1.6684	0.5994	0.9964	2.7937	0.049172
NICN1	0.6001	1.6665	0.3587	1.0037	0.04921
AES	0.6018	1.6616	0.3609	1.0037	0.049215
RPS6KB2	0.5989	1.6697	0.3574	1.0036	0.049278
GPC6	1.6723	0.5980	0.9955	2.8093	0.049385
CCDC144B	1.6662	0.6002	0.9958	2.7879	0.049459
PDK3	0.6027	1.6592	0.3618	1.0040	0.04946
SIAE	1.6654	0.6004	0.9954	2.7866	0.049491
PCGF6	0.6021	1.6608	0.3610	1.0044	0.049514
ELOF1	0.6020	1.6611	0.3608	1.0044	0.049548
GTF2F1	0.6027	1.6591	0.3617	1.0044	0.049567
TBX21	0.6029	1.6586	0.3618	1.0048	0.049629
OST4	1.6603	0.6023	0.9955	2.7690	0.049751
CT62	1.6708	0.5985	0.9948	2.8060	0.049769
UBE2D2	0.5959	1.6782	0.3532	1.0053	0.049799
PTTG1IP	1.6580	0.6032	0.9948	2.7631	0.049805
HCN3	0.6041	1.6554	0.3631	1.0051	0.049821
SOD1	0.5991	1.6693	0.3570	1.0051	0.049905
COMMD4	0.6012	1.6633	0.3594	1.0056	0.049936

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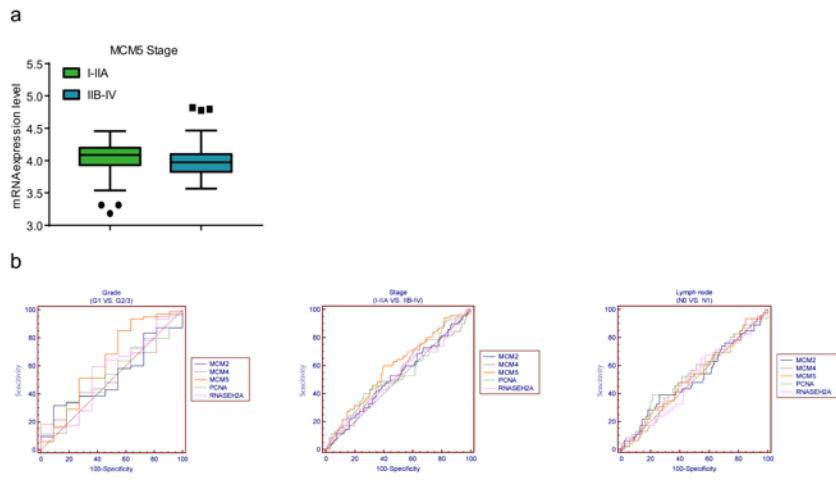


Figure S 1

