Supplemental Table 10. Gene Expression Fold Change in Macrophages of WT vs. RNLS KO tumors

gene_name	p_val	avg_log2FC	pct.1	pct.2	p_val_adj	cluster	gene	pct.diff
Hbb-bs	0	3.05392174	0.997	0.478	0	WT	Hbb-bs	0.519
mt-Atp8	1.4322E-299	3.5400738	0.973	0.633	4.4474E-295	WT	mt-Atp8	0.34
Hbb-bt	8.3899E-286	4.64290415	0.882	0.105	2.6053E-281	WT	Hbb-bt	0.777
mt-Atp6	9.9112E-282	2.02219781	1	0.988	3.0777E-277	WT	mt-Atp6	0.012
Hba-a1	2.8614E-264	3.30639723	0.877	0.159	8.8856E-260	WT	Hba-a1	0.718
Hba-a2	2.9578E-228	3.09266581	0.802	0.119	9.1849E-224	WT	Hba-a2	0.683
Lgals1	3.9256E-197	1.76786048	0.948	0.832	1.219E-192	WT	Lgals1	0.116
Rps2	1.9901E-192	1.47638261	0.956	0.834	6.1799E-188	WT	Rps2	0.122
mt-Nd4l	1.291E-191	2.53853582	0.914	0.622	4.009E-187	WT	mt-Nd4l	0.292
Rpl13	3.9058E-191	1.07984888	0.986	0.96	1.2129E-186	WT	Rpl13	0.026
Rpl11	5.0026E-184	1.16643932	0.965	0.879	1.5535E-179	WT	Rpl11	0.086
Sh3bgrl3	2.0357E-179	1.51706195	0.922	0.802	6.3213E-175	WT	Sh3bgrl3	0.12
Rpl32	4.9904E-164	1.00436861	0.974	0.941	1.5497E-159	WT	Rpl32	0.033
mt-Nd5	1.4275E-161	2.15257468	0.932	0.757	4.4327E-157	WT	mt-Nd5	0.175
Gapdh	2.1247E-160	1.24753468	0.986	0.853	6.5978E-156	WT	Gapdh	0.133
Rpl18	6.2987E-157	1.08150103	0.961	0.891	1.9559E-152	WT	Rpl18	0.07
Rps18	1.6364E-153	1.2450785	0.947	0.868	5.0814E-149	WT	Rps18	0.079
Rpl18a	2.9866E-150	0.9267398	0.977	0.931	9.2744E-146	WT	Rpl18a	0.046
Rpl26	2.9499E-148	0.93071737	0.968	0.892	9.1604E-144	WT	Rpl26	0.076
mt-Co3	1.2399E-143	1.12676419	1	0.991	3.8502E-139	WT	mt-Co3	0.009
mt-Co2	2.7185E-141	1.06254467	1	0.987	8.4417E-137	WT	mt-Co2	0.013
Rpl15	8.8642E-140	1.13753106	0.931	0.874	2.7526E-135	WT	Rpl15	0.057
Rpl28	3.3448E-139	0.93128441	0.961	0.909	1.0387E-134	WT	Rpl28	0.052
Rpl8	4.0025E-136	0.95017635	0.962	0.937	1.2429E-131	WT	Rpl8	0.025
Rpl12	2.7587E-133	1.14889572	0.916	0.85	8.5665E-129	WT	Rpl12	0.066
mt-Cytb	4.7698E-132	1.21997863	0.999	0.968	1.4812E-127	WT	mt-Cytb	0.031
Rps3	7.802E-131	1.04941831	0.941	0.881	2.4228E-126	WT	Rps3	0.06
Rplp0	2.9199E-129	0.99632161	0.962	0.931	9.067E-125	WT	Rplp0	0.031
Rbm3	7.1301E-128	1.27467463	0.883	0.842	2.2141E-123	WT	Rbm3	0.041
Rpl36	1.4349E-127	0.8452235	0.971	0.916	4.4559E-123	WT	Rpl36	0.055
Rpl21	1.1368E-123	1.11514115	0.909	0.833	3.5302E-119	WT	Rpl21	0.076
Ppia	8.2849E-123	0.9533389	0.97	0.952	2.5727E-118	WT	Ppia	0.018
Rps11	5.832E-118	0.84447118	0.961	0.923	1.811E-113	WT	Rps11	0.038
Rpl14	1.9029E-115	1.00099102	0.907	0.858	5.909E-111	WT	Rpl14	0.049
Rpl29	3.8461E-113	1.16161596	0.874	0.778	1.1943E-108	WT	Rpl29	0.096
Rps19	3.6589E-106	0.73556793	0.976	0.951	1.1362E-101	WT	Rps19	0.025
Rpl39	1.7512E-105	0.71681099	0.972	0.935	5.4379E-101	WT	Rpl39	0.037
Rpl24	8.3501E-103	0.77044023	0.946	0.915	2.59297E-98	WT	Rpl24	0.031
Clic1	5.0151E-102	1.33368944	0.825	0.73	1.55734E-97	WT	Clic1	0.095
Rpl22l1	2.38495E-92	1.36827949	0.809	0.668	7.40599E-88	WT	Rpl22l1	0.141
Rps15a	9.56181E-91	0.74998405	0.964	0.884	2.96923E-86	WT	Rps15a	0.08
Ubb	2.1196E-90	0.96001423	0.939	0.857	6.58199E-86	WT	Ubb	0.082
Xist	1.08621E-84	1.1948465	0.879	0.753	3.37301E-80	WT	Xist	0.126
Fcer1g	4.77799E-82	0.78604029	0.944	0.891	1.48371E-77	WT	Fcer1g	0.053
Atp5g1	5.4795E-81	1.40597769	0.754	0.656	1.70155E-76	WT	Atp5g1	0.098
Mif	2.85621E-80	1.04505819	0.927	0.817	8.86938E-76	WT	Mif	0.11
Pfn1	2.38536E-78	0.72433595	0.933	0.931	7.40726E-74	WT	Pfn1	0.002
Rps5	3.5686E-76	0.70390628	0.942	0.927	1.10816E-71	WT	Rps5	0.015
Rpl10a	6.079E-76	0.74147673	0.926	0.903	1.88771E-71	WT	Rpl10a	0.023
H3f3a	7.99822E-75	0.75759404	0.931	0.892	2.48369E-70	WT	H3f3a	0.039
Elob	1.42823E-74	1.01323688	0.819	0.73	4.43509E-70	WT	Elob	0.089

Gene	p_val	avg_logFC	pct.1	pct.2	p_val_adj	cluster	Gene	value
Uqcrb	3.48748E-67	1.04116041	0.782	0.737	1.08297E-62	WT	Uqcrb	0.045
Mt1	2.47649E-62	0.83974752	0.886	0.76	7.69024E-58	WT	Mt1	0.126
Eif5a	5.10552E-62	1.07432729	0.786	0.764	1.58542E-57	WT	Eif5a	0.022
Hint1	1.47458E-57	0.89736698	0.812	0.784	4.57901E-53	WT	Hint1	0.028
Pkm	1.69946E-55	0.72056803	0.934	0.846	5.27733E-51	WT	Pkm	0.088
S100a9	3.00439E-54	5.25890546	0.261	0.001	9.32953E-50	WT	S100a9	0.26
Naca	4.05215E-54	0.71072085	0.866	0.841	1.25831E-49	WT	Naca	0.025
Eif4ebp1	1.50038E-52	1.65649281	0.612	0.418	4.65913E-48	WT	Eif4ebp1	0.194
Ssr4	2.87878E-52	1.11662455	0.718	0.656	8.93947E-48	WT	Ssr4	0.062
Prdx2	7.87633E-47	1.37553829	0.665	0.593	2.44584E-42	WT	Prdx2	0.072
Ctla2a	1.06328E-45	3.5846832	0.287	0.044	3.3018E-41	WT	Ctla2a	0.243
Aprt	4.80507E-45	0.86347841	0.781	0.724	1.49212E-40	WT	Aprt	0.057
Tagln2	4.4164E-44	0.94376053	0.757	0.726	1.37142E-39	WT	Tagln2	0.031
Pgam1	3.382E-42	0.80107143	0.823	0.716	1.05021E-37	WT	Pgam1	0.107
Stmn1	1.56996E-40	1.97619437	0.408	0.179	4.87521E-36	WT	Stmn1	0.229
Ifitm2	2.74577E-40	0.95936155	0.817	0.781	8.52642E-36	WT	Ifitm2	0.036
Park7	6.12349E-40	1.26911023	0.612	0.519	1.90153E-35	WT	Park7	0.093
0610012G03R	8.97071E-38	1.3384693	0.605	0.515	2.78568E-33	WT	0610012G03	0.09
Ppib	3.01439E-37	0.84120113	0.736	0.676	9.36057E-33	WT	Ppib	0.06
Sparc	4.22641E-36	2.44040605	0.319	0.105	1.31243E-31	WT	Sparc	0.214
Cd81	2.48064E-35	2.0056166	0.372	0.159	7.70313E-31	WT	Cd81	0.213
Alas2	1.32423E-34	4.01736211	0.189	0.008	4.11213E-30	WT	Alas2	0.181
Psmb3	1.47623E-34	1.02739198	0.662	0.629	4.58414E-30	WT	Psmb3	0.033
Scand1	1.50082E-34	0.77017563	0.767	0.754	4.66048E-30	WT	Scand1	0.013
S100a8	3.02361E-34	5.06047426	0.308	0.112	9.38921E-30	WT	S100a8	0.196
Wfdc17	3.37907E-34	0.85608494	0.87	0.844	1.0493E-29	WT	Wfdc17	0.026
Bax	2.0488E-33	1.07889621	0.648	0.586	6.36215E-29	WT	Bax	0.062
Edf1	2.20099E-33	1.01116761	0.666	0.619	6.83472E-29	WT	Edf1	0.047
Fkbp5	8.58372E-33	2.45575398	0.285	0.088	2.6655E-28	WT	Fkbp5	0.197
Snrpd2	9.27161E-33	1.07317826	0.637	0.597	2.87911E-28	WT	Snrpd2	0.04
Dab2	3.64633E-32	0.94335974	0.681	0.606	1.13229E-27	WT	Dab2	0.075
H2afj	5.11393E-31	0.82165142	0.751	0.73	1.58803E-26	WT	H2afj	0.021
D8Ertd738e	8.3156E-30	0.87080892	0.695	0.66	2.58224E-25	WT	D8Ertd738e	0.035
Tubb5	1.11385E-29	0.86018635	0.746	0.752	3.45885E-25	WT	Tubb5	-0.006
Atp5d	2.52213E-28	0.87231628	0.682	0.673	7.83196E-24	WT	Atp5d	0.009
Psmb2	6.74239E-28	1.01354321	0.602	0.579	2.09371E-23	WT	Psmb2	0.023
Hmgn1	9.81837E-28	1.55813435	0.439	0.292	3.0489E-23	WT	Hmgn1	0.147
Rnh1	1.81787E-27	0.84649774	0.694	0.619	5.64505E-23	WT	Rnh1	0.075
Cope	3.17133E-27	1.22581332	0.561	0.494	9.84793E-23	WT	Cope	0.067
Ppp1r14b	5.1295E-27	1.20073063	0.581	0.546	1.59286E-22	WT	Ppp1r14b	0.035
Dynll1	5.67086E-27	0.86342373	0.699	0.68	1.76097E-22	WT	Dynll1	0.019
Ap2s1	7.1572E-27	0.78645613	0.682	0.673	2.22253E-22	WT	Ap2s1	0.009
Hgsnat	1.38521E-26	2.20998221	0.348	0.187	4.30148E-22	WT	Hgsnat	0.161
Ran	1.46112E-26	0.93458183	0.65	0.646	4.53722E-22	WT	Ran	0.004
Pgls	9.53241E-26	0.9433928	0.629	0.619	2.9601E-21	WT	Pgls	0.01
Ranbp1	2.51434E-25	1.39984624	0.535	0.493	7.80779E-21	WT	Ranbp1	0.042
Igfbp7	5.46851E-25	2.74052688	0.192	0.04	1.69814E-20	WT	Igfbp7	0.152
Srsf3	1.00285E-24	0.8234379	0.674	0.676	3.11415E-20	WT	Srsf3	-0.002
Fabp4	1.04739E-24	0.76303408	0.479	0.272	3.25246E-20	WT	Fabp4	0.207
H2afz	1.82978E-24	0.72930558	0.819	0.841	5.68202E-20	WT	H2afz	-0.022
Pycard	1.88651E-24	0.84867616	0.708	0.724	5.85816E-20	WT	Pycard	-0.016
Ndufa11	6.16991E-24	0.94128188	0.606	0.567	1.91594E-19	WT	Ndufa11	0.039
Clec4a2	2.31245E-23	1.08367878	0.57	0.505	7.18086E-19	WT	Clec4a2	0.065
Ms4a6d	3.94702E-23	0.97238211	0.633	0.59	1.22567E-18	WT	Ms4a6d	0.043

Birc5	6.81743E-23	2.37912337	0.25	0.096	2.11702E-18	WT	Birc5	0.154
Selenoh	7.44003E-23	1.72007623	0.419	0.307	2.31035E-18	WT	Selenoh	0.112
Sumo2	7.7797E-23	0.92611177	0.63	0.653	2.41583E-18	WT	Sumo2	-0.023
Stab1	1.55211E-22	1.29200648	0.507	0.389	4.81978E-18	WT	Stab1	0.118
Eef1d	2.09962E-22	0.95381013	0.595	0.589	6.51995E-18	WT	Eef1d	0.006
Bpgm	6.79599E-21	3.63285034	0.161	0.033	2.11036E-16	WT	Bpgm	0.128
Krtcap2	3.95292E-20	1.24104779	0.529	0.486	1.2275E-15	WT	Krtcap2	0.043
Timm13	1.8169E-19	0.8202177	0.635	0.641	5.64203E-15	WT	Timm13	-0.006
Nt5dc2	1.85895E-19	2.17678269	0.241	0.105	5.7726E-15	WT	Nt5dc2	0.136
Ptgds	2.81557E-19	2.37882309	0.221	0.087	8.74318E-15	WT	Ptgds	0.134
Rbfa	4.6865E-19	1.79855714	0.329	0.206	1.4553E-14	WT	Rbfa	0.123
Card19	1.29476E-18	1.01302723	0.615	0.575	4.02062E-14	WT	Card19	0.04
Pclaf	3.26676E-18	1.3296038	0.22	0.088	1.01443E-13	WT	Pclaf	0.132
Tk1	3.35733E-18	2.4973527	0.157	0.039	1.04255E-13	WT	Tk1	0.118
Ddit4	3.9256E-18	2.36007888	0.153	0.036	1.21902E-13	WT	Ddit4	0.117
Dad1	8.54142E-18	0.75332477	0.626	0.646	2.65237E-13	WT	Dad1	-0.02
Higd1a	2.48451E-17	0.92577689	0.616	0.585	7.71514E-13	WT	Higd1a	0.031
Cdca3	3.03429E-17	2.05135082	0.192	0.069	9.42238E-13	WT	Cdca3	0.123
Acta2	3.51585E-17	4.25450326	0.116	0.016	1.09178E-12	WT	Acta2	0.1
Ube2c	4.68961E-17	2.03347724	0.213	0.088	1.45626E-12	WT	Ube2c	0.125
Cks1b	4.90061E-17	1.82424459	0.231	0.107	1.52179E-12	WT	Cks1b	0.124
Snrpd1	1.11033E-16	1.08567089	0.522	0.513	3.4479E-12	WT	Snrpd1	0.009
Retnlg	1.47666E-16	6.63458058	0.088	0.001	4.58548E-12	WT	Retnlg	0.087
Ndufa12	1.95426E-16	0.96331229	0.537	0.518	6.06856E-12	WT	Ndufa12	0.019
Tyms	3.13409E-16	2.38406463	0.151	0.043	9.7323E-12	WT	Tyms	0.108
Hist1h1d	3.26964E-16	3.26768572	0.152	0.044	1.01532E-11	WT	Hist1h1d	0.108
Hist1h2bj	3.71909E-16	3.93370638	0.109	0.015	1.15489E-11	WT	Hist1h2bj	0.094
Tmem167	4.37574E-16	0.97559738	0.543	0.535	1.3588E-11	WT	Tmem167	0.008
Nhp2	6.47094E-16	1.19347444	0.455	0.405	2.00942E-11	WT	Nhp2	0.05
Mrpl12	8.67176E-16	1.37658365	0.402	0.331	2.69284E-11	WT	Mrpl12	0.071
Mrpl30	1.64924E-15	0.9995818	0.517	0.494	5.12138E-11	WT	Mrpl30	0.023
Gfer	1.89321E-15	2.21438006	0.199	0.088	5.879E-11	WT	Gfer	0.111
Ndufb10	3.28834E-15	0.88238711	0.568	0.562	1.02113E-10	WT	Ndufb10	0.006
Sh2d1b1	3.48028E-15	3.41270552	0.104	0.015	1.08073E-10	WT	Sh2d1b1	0.089
Mrps24	4.18E-15	0.94663787	0.509	0.491	1.29802E-10	WT	Mrps24	0.018
Tubb4b	5.43174E-15	1.56409164	0.37	0.284	1.68672E-10	WT	Tubb4b	0.086
Tmed9	7.52345E-15	1.00212499	0.512	0.501	2.33626E-10	WT	Tmed9	0.011
Snca	1.06449E-14	2.94903972	0.126	0.031	3.30557E-10	WT	Snca	0.095
Prelid1	1.33562E-14	0.76237367	0.62	0.642	4.14749E-10	WT	Prelid1	-0.022
Gpihbp1	1.93736E-14	4.81206781	0.076	0.001	6.01607E-10	WT	Gpihbp1	0.075
Cdk1	6.6602E-14	2.23575191	0.191	0.087	2.06819E-09	WT	Cdk1	0.104
Manf	7.89519E-14	1.03131818	0.527	0.513	2.45169E-09	WT	Manf	0.014
Spc24	1.08865E-13	1.93695029	0.15	0.052	3.3806E-09	WT	Spc24	0.098
Dctpp1	1.5868E-13	1.5022418	0.307	0.215	4.92748E-09	WT	Dctpp1	0.092
Prune2	3.9502E-13	2.40938863	0.136	0.044	1.22666E-08	WT	Prune2	0.092
Ccnb2	5.17577E-13	2.14279576	0.141	0.048	1.60723E-08	WT	Ccnb2	0.093
Ndufv2	5.75689E-13	1.07252758	0.473	0.459	1.78769E-08	WT	Ndufv2	0.014
Hist1h1b	7.91487E-13	3.66263001	0.093	0.016	2.4578E-08	WT	Hist1h1b	0.077
8430408G22R	8.57048E-13	4.62556513	0.065	0	2.66139E-08	WT	8430408G22	0.065
Slc4a1	8.57048E-13	5.21657704	0.065	0	2.66139E-08	WT	Slc4a1	0.065
2410015M20|	9.31061E-13	0.88209326	0.527	0.523	2.89123E-08	WT	2410015M2(	0.004
Hras	9.38331E-13	1.36247025	0.339	0.259	2.9138E-08	WT	Hras	0.08
Ssr2	9.95244E-13	1.35148061	0.411	0.367	3.09053E-08	WT	Ssr2	0.044
Ube2m	9.96112E-13	1.0710288	0.473	0.465	3.09323E-08	WT	Ube2m	0.008

Polr2j	1.24778E-12	1.59735066	0.349	0.284	3.87474E-08	WT	Polr2j	0.065
Ms4a6b	2.09121E-12	1.01982224	0.475	0.425	6.49384E-08	WT	Ms4a6b	0.05
Cdkn3	3.03072E-12	2.70529204	0.109	0.028	9.41129E-08	WT	Cdkn3	0.081
Igfbp3	3.82416E-12	2.88847688	0.088	0.015	1.18752E-07	WT	Igfbp3	0.073
Ccnb1	5.62487E-12	2.19417145	0.117	0.035	1.74669E-07	WT	Ccnb1	0.082
Lcn2	6.0824E-12	4.98106827	0.07	0.005	1.88877E-07	WT	Lcn2	0.065
Aes	6.21332E-12	0.78454355	0.549	0.566	1.92942E-07	WT	Aes	-0.017
Gypa	6.57007E-12	4.9436338	0.06	0	2.0402E-07	WT	Gypa	0.06
Tmem37	6.60952E-12	1.97929247	0.223	0.131	2.05245E-07	WT	Tmem37	0.092
Hist1h1e	7.13059E-12	2.15554842	0.227	0.132	2.21426E-07	WT	Hist1h1e	0.095
Ccna2	7.54252E-12	1.84523833	0.127	0.043	2.34218E-07	WT	Ccna2	0.084
Cdca8	1.02497E-11	1.83626946	0.152	0.063	3.18284E-07	WT	Cdca8	0.089
Mki67	1.08099E-11	1.5012786	0.199	0.101	3.3568E-07	WT	Mki67	0.098
Bgn	1.49542E-11	2.42171866	0.105	0.028	4.64373E-07	WT	Bgn	0.077
Cirbp	1.54509E-11	1.36341922	0.332	0.251	4.79797E-07	WT	Cirbp	0.081
Bex3	2.19622E-11	1.65152114	0.229	0.138	6.81994E-07	WT	Bex3	0.091
Gm47283	2.31068E-11	1.39185743	0.322	0.236	7.17536E-07	WT	Gm47283	0.086
Col4a1	2.66901E-11	1.84254136	0.108	0.031	8.28808E-07	WT	Col4a1	0.077
Hist1h2br	5.78055E-11	3.77771438	0.077	0.012	1.79504E-06	WT	Hist1h2br	0.065
Arpp19	8.38702E-11	0.81284413	0.556	0.578	2.60442E-06	WT	Arpp19	-0.022
Rtraf	1.01225E-10	0.73042149	0.562	0.598	3.14334E-06	WT	Rtraf	-0.036
Mrpl20	1.10921E-10	0.81239246	0.512	0.529	3.44444E-06	WT	Mrpl20	-0.017
Gm32051	1.7514E-10	4.06856227	0.052	0	5.43862E-06	WT	Gm32051	0.052
Polr2f	2.06011E-10	1.11282671	0.444	0.425	6.39725E-06	WT	Polr2f	0.019
Cenpx	2.64445E-10	0.94913431	0.461	0.454	8.2118E-06	WT	Cenpx	0.007
Prdx4	2.70166E-10	1.15931074	0.379	0.334	8.38948E-06	WT	Prdx4	0.045
Dok3	3.11891E-10	1.58277505	0.231	0.148	9.68516E-06	WT	Dok3	0.083
Ankrd37	3.806E-10	1.98954182	0.141	0.061	1.18188E-05	WT	Ankrd37	0.08
Slc13a3	3.84788E-10	2.5985867	0.099	0.029	1.19488E-05	WT	Slc13a3	0.07
U2af1	3.85954E-10	1.0145282	0.443	0.426	1.1985E-05	WT	U2af1	0.017
Ifi213	4.81595E-10	4.12224771	0.052	0.001	1.4955E-05	WT	Ifi213	0.051
Adm	8.59865E-10	2.27823958	0.091	0.025	2.67014E-05	WT	Adm	0.066
Taf10	9.48579E-10	0.70407247	0.563	0.581	2.94562E-05	WT	Taf10	-0.018
Emcn	1.6452E-09	4.24386651	0.049	0.001	5.10885E-05	WT	Emcn	0.048
Ndufs8	1.7181E-09	0.94821427	0.441	0.418	5.33522E-05	WT	Ndufs8	0.023
Gadd45gip1	2.09291E-09	1.76596682	0.24	0.168	6.49911E-05	WT	Gadd45gip1	0.072
F11r	2.45117E-09	3.30858752	0.061	0.008	7.61161E-05	WT	F11r	0.053
Cdc20	4.06819E-09	2.55169227	0.085	0.024	0.000126329	WT	Cdc20	0.061
Gmnn	4.46946E-09	1.52649508	0.214	0.136	0.00013879	WT	Gmnn	0.078
Dtymk	5.63768E-09	1.27826087	0.297	0.235	0.000175067	WT	Dtymk	0.062
Slc25a4	6.21966E-09	0.77166694	0.472	0.461	0.000193139	WT	Slc25a4	0.011
Pdcd5	6.64409E-09	0.70605628	0.539	0.562	0.000206319	WT	Pdcd5	-0.023
1810058I24Ri	7.04325E-09	0.73178753	0.561	0.57	0.000218714	WT	1810058I24F	-0.009
Tpm2	8.50277E-09	3.63812886	0.048	0.003	0.000264036	WT	Tpm2	0.045
Hist1h2bb	8.92173E-09	3.19692829	0.051	0.004	0.000277046	WT	Hist1h2bb	0.047
Hist1h2bm	9.45682E-09	3.58347188	0.05	0.004	0.000293663	WT	Hist1h2bm	0.046
Lsm2	1.20027E-08	1.52900576	0.226	0.155	0.00037272	WT	Lsm2	0.071
Nsd2	1.86114E-08	1.6535212	0.239	0.17	0.00057794	WT	Nsd2	0.069
Incenp	1.9699E-08	1.78329799	0.147	0.076	0.000611714	WT	Incenp	0.071
Uqcrc1	2.06049E-08	0.96125307	0.444	0.442	0.000639845	WT	Uqcrc1	0.002
Shcbp1	2.39172E-08	2.19852792	0.064	0.013	0.0007427	WT	Shcbp1	0.051
S100a11	3.37034E-08	0.83993663	0.664	0.669	0.001046593	WT	S100a11	-0.005
Tpx2	3.8355E-08	1.67513847	0.114	0.049	0.001191036	WT	Tpx2	0.065
Pold4	4.17207E-08	1.15565214	0.399	0.383	0.001295554	WT	Pold4	0.016

Gene	p-value	log2FC	pct.1	pct.2	p_adj	Group	Gene	diff
Med21	4.68557E-08	1.43194137	0.307	0.256	0.001455011	WT	Med21	0.051
Tmem119	4.86792E-08	3.12668327	0.064	0.015	0.001511635	WT	Tmem119	0.049
Id1	5.62171E-08	3.53462191	0.053	0.008	0.001745709	WT	Id1	0.045
Nusap1	7.06513E-08	1.80596844	0.09	0.032	0.002193935	WT	Nusap1	0.058
Ecscr	7.57395E-08	2.75594246	0.048	0.005	0.00235194	WT	Ecscr	0.043
Fam96a	8.28462E-08	0.78209834	0.48	0.491	0.002572623	WT	Fam96a	-0.011
Ube2s	8.94101E-08	0.88571853	0.494	0.526	0.002776451	WT	Ube2s	-0.032
Aurkb	1.12427E-07	1.54314804	0.09	0.033	0.003491188	WT	Aurkb	0.057
Cenpf	1.13355E-07	1.92252363	0.09	0.033	0.003520026	WT	Cenpf	0.057
Tagln	1.35904E-07	3.38627959	0.044	0.004	0.004220219	WT	Tagln	0.04
Tomm40	1.46512E-07	1.24304568	0.259	0.195	0.004549624	WT	Tomm40	0.064
Mrpl54	1.5704E-07	0.8531329	0.486	0.51	0.004876554	WT	Mrpl54	-0.024
Hist1h3a	1.66376E-07	3.23480012	0.063	0.016	0.005166488	WT	Hist1h3a	0.047
Rnf7	1.76101E-07	0.87950835	0.479	0.506	0.005468453	WT	Rnf7	-0.027
Cenpk	1.93647E-07	2.76807596	0.055	0.011	0.006013332	WT	Cenpk	0.044
Camta1	2.09457E-07	1.64399415	0.19	0.126	0.006504278	WT	Camta1	0.064
Aurkaip1	2.21735E-07	0.8536223	0.487	0.506	0.006885533	WT	Aurkaip1	-0.019
Gdpd5	2.32547E-07	2.31660389	0.087	0.033	0.007221271	WT	Gdpd5	0.054
Scoc	2.47335E-07	1.54183219	0.186	0.121	0.007680502	WT	Scoc	0.065
Ifi206	2.73131E-07	3.35780851	0.04	0.003	0.008481525	WT	Ifi206	0.037
Ncapd2	3.12197E-07	1.6250765	0.105	0.047	0.009694646	WT	Ncapd2	0.058
Cenpm	3.2644E-07	1.86649647	0.07	0.021	0.010136952	WT	Cenpm	0.049
Apol11b	3.46962E-07	3.88062915	0.034	0	0.010774214	WT	Apol11b	0.034
Apold1	3.52417E-07	3.32051079	0.053	0.011	0.010943595	WT	Apold1	0.042
G0s2	3.75395E-07	1.32644025	0.036	0.001	0.011657139	WT	G0s2	0.035
Tm4sf1	3.96519E-07	2.07600772	0.075	0.025	0.01231312	WT	Tm4sf1	0.05
Mrps34	4.65307E-07	1.55207871	0.245	0.191	0.014449174	WT	Mrps34	0.054
Smc2	4.77221E-07	1.34742594	0.164	0.099	0.014819147	WT	Smc2	0.065
Wfdc21	4.90464E-07	3.99412473	0.038	0.003	0.015230364	WT	Wfdc21	0.035
Srm	5.16882E-07	1.42037473	0.167	0.104	0.01605074	WT	Srm	0.063
Atp13a2	5.35202E-07	0.90598274	0.491	0.499	0.016619641	WT	Atp13a2	-0.008
Bola3	5.40426E-07	1.09392774	0.338	0.302	0.016781841	WT	Bola3	0.036
Plvap	5.61004E-07	3.47120872	0.038	0.003	0.01742085	WT	Plvap	0.035
Gins2	7.65566E-07	2.01134374	0.11	0.055	0.023773127	WT	Gins2	0.055
Pfdn6	8.07066E-07	1.16973731	0.349	0.324	0.025061819	WT	Pfdn6	0.025
Egfl7	8.62262E-07	3.16358806	0.051	0.011	0.026775811	WT	Egfl7	0.04
Esam	9.30822E-07	3.67446986	0.031	0	0.028904818	WT	Esam	0.031
Rad51	9.76493E-07	2.09789604	0.059	0.016	0.030323041	WT	Rad51	0.043
Dtl	1.41665E-06	2.24454718	0.066	0.021	0.04399135	WT	Dtl	0.045
Carhsp1	1.55047E-06	1.57876994	0.227	0.172	0.048146854	WT	Carhsp1	0.055
Fundc2	1.70818E-06	0.87044808	0.415	0.414	0.053044224	WT	Fundc2	0.001
Myl9	1.85476E-06	2.29694119	0.033	0.001	0.057596006	WT	Myl9	0.032
Ngp	2.4943E-06	5.3954447	0.029	0	0.077455364	WT	Ngp	0.029
C1qbp	2.72956E-06	0.97563821	0.38	0.37	0.084761127	WT	C1qbp	0.01
Vcan	2.83149E-06	2.03494261	0.048	0.011	0.087926344	WT	Vcan	0.037
Mrps14	2.85841E-06	0.74075842	0.485	0.514	0.08876219	WT	Mrps14	-0.029
Car2	3.0453E-06	2.78843543	0.041	0.007	0.094565613	WT	Car2	0.034
Snx2	3.0635E-06	0.72642351	0.497	0.533	0.095130942	WT	Snx2	-0.036
Sparcl1	3.54866E-06	3.00363058	0.049	0.012	0.110196575	WT	Sparcl1	0.037
Pbk	3.71775E-06	1.17735818	0.056	0.016	0.115447152	WT	Pbk	0.04
Phb2	3.79502E-06	0.75446317	0.465	0.494	0.117846788	WT	Phb2	-0.029
Lipg	3.98251E-06	3.86737778	0.033	0.003	0.123668798	WT	Lipg	0.03
Mrpl17	4.07097E-06	1.15515505	0.344	0.331	0.126415712	WT	Mrpl17	0.013
Rgs5	4.10489E-06	3.36695861	0.036	0.004	0.127469096	WT	Rgs5	0.032

Gene	p-value	Col3	Col4	Col5	Col6	Col7	Gene	Col9
Cited1	4.29232E-06	2.48690819	0.055	0.016	0.133289331	WT	Cited1	0.039
Yif1b	4.36623E-06	0.97489586	0.336	0.31	0.135584391	WT	Yif1b	0.026
Pop5	4.52425E-06	1.14053464	0.205	0.15	0.140491655	WT	Pop5	0.055
Ctgf	4.66979E-06	3.44759431	0.03	0.001	0.14501092	WT	Ctgf	0.029
Dut	4.92794E-06	1.3716244	0.201	0.144	0.15302738	WT	Dut	0.057
Mrpl23	5.15023E-06	0.71069008	0.492	0.53	0.159930056	WT	Mrpl23	-0.038
Ech1	5.30197E-06	1.15436887	0.326	0.308	0.164642229	WT	Ech1	0.018
Ubl4a	5.59382E-06	1.15996097	0.275	0.235	0.173704942	WT	Ubl4a	0.04
Pin1	5.95386E-06	1.19512636	0.298	0.264	0.184885307	WT	Pin1	0.034
Aqp1	5.97667E-06	3.3376282	0.03	0.001	0.185593402	WT	Aqp1	0.029
Col4a2	6.1335E-06	1.7286009	0.061	0.02	0.190463603	WT	Col4a2	0.041
Esm1	6.18353E-06	2.42665756	0.032	0.003	0.192017266	WT	Esm1	0.029
Hist2h3b	6.53719E-06	3.28725211	0.037	0.005	0.202999257	WT	Hist2h3b	0.032
Magoh	6.96963E-06	1.02930396	0.345	0.326	0.216427918	WT	Magoh	0.019
Eif1ax	7.09763E-06	0.85593434	0.383	0.372	0.220402794	WT	Eif1ax	0.011
Kif22	7.31319E-06	2.21170438	0.072	0.029	0.227096552	WT	Kif22	0.043
Psat1	8.58274E-06	1.69339082	0.124	0.072	0.266519808	WT	Psat1	0.052
Mrps11	9.02443E-06	1.56840392	0.203	0.154	0.280235526	WT	Mrps11	0.049
Cenpe	9.32232E-06	1.7223557	0.074	0.031	0.2894859	WT	Cenpe	0.043
Ntpcr	9.78087E-06	1.37488752	0.25	0.21	0.303725229	WT	Ntpcr	0.04
Mest	9.82459E-06	3.32371758	0.028	0.001	0.305083134	WT	Mest	0.027
Cst6	1.05789E-05	2.00006224	0.047	0.012	0.328505513	WT	Cst6	0.035
Tmem252	1.23598E-05	3.36928873	0.025	0	0.383808273	WT	Tmem252	0.025
Cavin3	1.38419E-05	3.05092213	0.035	0.005	0.429831654	WT	Cavin3	0.03
Ska3	1.41707E-05	2.6631021	0.027	0.001	0.440044075	WT	Ska3	0.026
Hp	1.59864E-05	1.73902685	0.088	0.043	0.49642609	WT	Hp	0.045
Rbbp7	1.64608E-05	1.20442299	0.256	0.214	0.511157695	WT	Rbbp7	0.042
Cdh5	1.76619E-05	3.21168057	0.032	0.004	0.548454645	WT	Cdh5	0.028
Pilra	1.91847E-05	1.36516114	0.151	0.097	0.595742229	WT	Pilra	0.054
Tspo2	2.02242E-05	3.10568645	0.024	0	0.628023118	WT	Tspo2	0.024
Tacc3	2.16487E-05	1.23362189	0.133	0.08	0.67225574	WT	Tacc3	0.053
Hmgn2	2.21389E-05	1.07513807	0.349	0.338	0.687480016	WT	Hmgn2	0.011
Vdac3	2.47803E-05	0.71418826	0.457	0.493	0.769503145	WT	Vdac3	-0.036
Hmga1	2.54622E-05	2.29540194	0.089	0.045	0.790678405	WT	Hmga1	0.044
Cenpq	2.57101E-05	0.92822312	0.068	0.028	0.798376375	WT	Cenpq	0.04
Cox4i2	2.80098E-05	1.28677655	0.083	0.039	0.869787906	WT	Cox4i2	0.044
Tubg1	2.81409E-05	1.28204544	0.111	0.064	0.873858112	WT	Tubg1	0.047
Dct	3.09069E-05	1.04864708	0.354	0.331	0.959752663	WT	Dct	0.023
Pfdn1	3.70778E-05	0.89782979	0.405	0.426	1	WT	Pfdn1	-0.021
Cldn5	3.80011E-05	3.32107425	0.025	0.001	1	WT	Cldn5	0.024
Nr2c2ap	3.88057E-05	1.4977634	0.142	0.095	1	WT	Nr2c2ap	0.047
Cela1	4.0695E-05	0.91136044	0.164	0.112	1	WT	Cela1	0.052
Hist1h3e	4.08341E-05	2.63596083	0.049	0.016	1	WT	Hist1h3e	0.033
Rab33a	4.15323E-05	2.4512799	0.027	0.003	1	WT	Rab33a	0.024
Sgo2a	4.19306E-05	1.49594054	0.041	0.011	1	WT	Sgo2a	0.03
Nudc	4.29728E-05	0.94954596	0.357	0.351	1	WT	Nudc	0.006
Smagp	4.32306E-05	1.55301108	0.115	0.068	1	WT	Smagp	0.047
Mcm5	4.36873E-05	1.04006387	0.135	0.084	1	WT	Mcm5	0.051
mt-Nd6	4.5041E-05	1.65983146	0.197	0.152	1	WT	mt-Nd6	0.045
Gsto1	4.91165E-05	1.10207578	0.266	0.23	1	WT	Gsto1	0.036
Ncapg	5.23481E-05	1.43214481	0.063	0.025	1	WT	Ncapg	0.038
S100b	6.75613E-05	2.70306162	0.04	0.011	1	WT	S100b	0.029
Hist2h2bb	6.78961E-05	2.75569018	0.026	0.003	1	WT	Hist2h2bb	0.023
Alg5	7.14149E-05	1.19432491	0.291	0.271	1	WT	Alg5	0.02

Mad2l1	7.28836E-05	1.14195181	0.096	0.052	1 WT	Mad2l1	0.044
Tyrp1	7.35316E-05	1.26768839	0.212	0.167	1 WT	Tyrp1	0.045
Tfdp2	7.64658E-05	2.16263497	0.059	0.024	1 WT	Tfdp2	0.035
Rpa2	8.06065E-05	1.40262494	0.096	0.053	1 WT	Rpa2	0.043
Cenpu	8.20283E-05	1.86391864	0.047	0.016	1 WT	Cenpu	0.031
Cdkn2d	8.39258E-05	1.53633182	0.157	0.111	1 WT	Cdkn2d	0.046
Mrps26	8.75146E-05	1.04592212	0.238	0.2	1 WT	Mrps26	0.038
Rad51ap1	9.12526E-05	1.7221151	0.047	0.016	1 WT	Rad51ap1	0.031
Mgp	9.30996E-05	1.82835847	0.035	0.008	1 WT	Mgp	0.027
Hmgb3	9.3369E-05	1.70184379	0.066	0.029	1 WT	Hmgb3	0.037
Rnaseh2c	9.67916E-05	1.00725421	0.317	0.302	1 WT	Rnaseh2c	0.015
Prc1	9.88835E-05	0.70464333	0.082	0.041	1 WT	Prc1	0.041
Hist2h2aa1	0.000104127	2.06129346	0.099	0.057	1 WT	Hist2h2aa1	0.042
St3gal5	0.000104921	0.94944601	0.155	0.104	1 WT	St3gal5	0.051
1700003F12R	0.000105816	1.60434114	0.068	0.032	1 WT	1700003F12I	0.036
Spta1	0.000113565	2.44291748	0.02	0	1 WT	Spta1	0.02
Kif18a	0.000115343	2.21789788	0.022	0.001	1 WT	Kif18a	0.021
Tigd2	0.000116057	1.42768057	0.229	0.192	1 WT	Tigd2	0.037
Gstm5	0.000120882	2.16950425	0.066	0.031	1 WT	Gstm5	0.035
Kif20a	0.000125287	2.10409213	0.046	0.016	1 WT	Kif20a	0.03
Wdhd1	0.000126079	2.04106297	0.073	0.036	1 WT	Wdhd1	0.037
Psmc4	0.000126692	0.8536055	0.348	0.343	1 WT	Psmc4	0.005
Plk1	0.000127872	1.26721043	0.061	0.027	1 WT	Plk1	0.034
Alyref	0.000129376	0.75013896	0.408	0.438	1 WT	Alyref	-0.03
Map3k6	0.000130499	2.69514908	0.022	0.001	1 WT	Map3k6	0.021
Ppp1r3b	0.000140131	2.06225785	0.096	0.056	1 WT	Ppp1r3b	0.04
Col15a1	0.000149041	2.63045788	0.044	0.015	1 WT	Col15a1	0.029
Pdlim7	0.000169314	1.10211659	0.102	0.06	1 WT	Pdlim7	0.042
Top2a	0.000172953	1.06270693	0.164	0.117	1 WT	Top2a	0.047
Zfp593	0.00017694	1.19662159	0.219	0.182	1 WT	Zfp593	0.037
Mcm7	0.000179009	0.97308855	0.142	0.096	1 WT	Mcm7	0.046
Fignl1	0.000186447	1.51335192	0.043	0.015	1 WT	Fignl1	0.028
Angptl4	0.000188169	2.55119439	0.037	0.011	1 WT	Angptl4	0.026
Hist1h2bp	0.000221619	2.01647511	0.021	0.001	1 WT	Hist1h2bp	0.02
Mybl2	0.000225094	1.78683343	0.039	0.012	1 WT	Mybl2	0.027
Ptges3	0.000225946	0.82158878	0.4	0.422	1 WT	Ptges3	-0.022
Cyc1	0.000227788	0.84904272	0.404	0.431	1 WT	Cyc1	-0.027
Sptb	0.000242169	2.38557904	0.02	0.001	1 WT	Sptb	0.019
Ska1	0.000261581	1.96631248	0.04	0.013	1 WT	Ska1	0.027
Bub1	0.000263744	1.66669055	0.059	0.027	1 WT	Bub1	0.032
Kif4	0.000270025	2.19994446	0.04	0.013	1 WT	Kif4	0.027
Cenpw	0.00028763	1.60223845	0.13	0.089	1 WT	Cenpw	0.041
Tipin	0.000288006	1.24930042	0.139	0.097	1 WT	Tipin	0.042
Naa10	0.000288203	1.18910448	0.188	0.148	1 WT	Naa10	0.04
Foxm1	0.000295851	1.45041634	0.054	0.023	1 WT	Foxm1	0.031
Racgap1	0.000296791	1.27378626	0.145	0.103	1 WT	Racgap1	0.042
Uhrf1	0.000320153	1.37646855	0.092	0.053	1 WT	Uhrf1	0.039
Ptprm	0.000330373	2.56729046	0.031	0.008	1 WT	Ptprm	0.023
Cit	0.000332505	2.15353798	0.042	0.015	1 WT	Cit	0.027
Nid1	0.000344552	2.28230763	0.025	0.004	1 WT	Nid1	0.021
Hbq1b	0.00034561	2.35504274	0.017	0	1 WT	Hbq1b	0.017
Hist1h1a	0.000379011	2.47887383	0.029	0.007	1 WT	Hist1h1a	0.022
Trim10	0.000391219	2.57393115	0.017	0	1 WT	Trim10	0.017
Hist1h2bn	0.000391219	2.35881988	0.017	0	1 WT	Hist1h2bn	0.017

Elof1	0.000396343	0.89447962	0.353	0.359		1 WT	Elof1	-0.006
Slamf9	0.000408201	0.71724138	0.297	0.258		1 WT	Slamf9	0.039
Bhlhe41	0.000409777	1.58241035	0.142	0.101		1 WT	Bhlhe41	0.041
Gm26724	0.000422313	2.55921676	0.029	0.007		1 WT	Gm26724	0.022
Rrm1	0.000431442	0.76754867	0.17	0.126		1 WT	Rrm1	0.044
Gm38832	0.000449802	2.04540666	0.019	0.001		1 WT	Gm38832	0.018
Jpt2	0.000461002	1.23609418	0.122	0.083		1 WT	Jpt2	0.039
Gm5483	0.000501402	4.07577721	0.016	0		1 WT	Gm5483	0.016
Dnajc17	0.000501571	2.06675347	0.071	0.039		1 WT	Dnajc17	0.032
Ccdc124	0.000505564	1.06655094	0.333	0.34		1 WT	Ccdc124	-0.007
Hjurp	0.000520222	0.94470829	0.13	0.088		1 WT	Hjurp	0.042
Sap30	0.000523839	1.16487926	0.289	0.27		1 WT	Sap30	0.019
Mrps16	0.000536677	0.97123882	0.377	0.405		1 WT	Mrps16	-0.028
Cdkn2c	0.000559821	1.34263201	0.098	0.061		1 WT	Cdkn2c	0.037
Cdca5	0.000561817	2.07606461	0.036	0.012		1 WT	Cdca5	0.024
Lsm5	0.000564827	0.8219343	0.374	0.387		1 WT	Lsm5	-0.013
Galk1	0.000591411	0.88645558	0.246	0.212		1 WT	Galk1	0.034
Rac3	0.000609616	2.01141219	0.038	0.013		1 WT	Rac3	0.025
Clspn	0.00061419	1.30150868	0.063	0.032		1 WT	Clspn	0.031
Smn1	0.000623822	1.0378556	0.195	0.159		1 WT	Smn1	0.036
Cep55	0.0006386	1.4680343	0.045	0.019		1 WT	Cep55	0.026
Pkmyt1	0.000653357	0.84820338	0.07	0.037		1 WT	Pkmyt1	0.033
Cks2	0.000683951	0.74172148	0.204	0.166		1 WT	Cks2	0.038
Unc119	0.000690838	1.16536322	0.194	0.156		1 WT	Unc119	0.038
Adgrf5	0.000695067	2.3525727	0.02	0.003		1 WT	Adgrf5	0.017
Neil3	0.000706775	2.00419203	0.039	0.015		1 WT	Neil3	0.024
Timm50	0.000711673	1.28559844	0.21	0.179		1 WT	Timm50	0.031
Ssna1	0.000718618	1.17276892	0.245	0.223		1 WT	Ssna1	0.022
Asf1b	0.000724048	1.06315445	0.08	0.045		1 WT	Asf1b	0.035
Hist1h2ae	0.00072424	1.72824026	0.12	0.083		1 WT	Hist1h2ae	0.037
Bfsp2	0.000727964	2.45346624	0.015	0		1 WT	Bfsp2	0.015
Spata24	0.000750066	0.94536785	0.047	0.02		1 WT	Spata24	0.027
Bub1b	0.000753137	1.61148336	0.089	0.055		1 WT	Bub1b	0.034
Cdr2	0.000806846	1.73173298	0.048	0.021		1 WT	Cdr2	0.027
Col6a3	0.000810982	2.26415344	0.048	0.021		1 WT	Col6a3	0.027
Dlgap5	0.000818996	1.51731177	0.05	0.023		1 WT	Dlgap5	0.027
2610524H06R	0.000836632	1.51641779	0.129	0.092		1 WT	2610524H06	0.037
Skp2	0.000875415	1.6737937	0.059	0.029		1 WT	Skp2	0.03
Cald1	0.000889988	2.28219567	0.044	0.019		1 WT	Cald1	0.025
2610318N02R	0.000923397	1.89192321	0.024	0.005		1 WT	2610318N02	0.019
Gm807	0.000933832	2.02853427	0.014	0		1 WT	Gm807	0.014
Polr2e	0.000955047	0.85507641	0.291	0.272		1 WT	Polr2e	0.019
Poc1a	0.000969239	1.6948823	0.06	0.031		1 WT	Poc1a	0.029
Rbp7	0.000970685	2.35149506	0.027	0.007		1 WT	Rbp7	0.02
Col18a1	0.001020492	1.71161454	0.037	0.013		1 WT	Col18a1	0.024
Knl1	0.00106204	1.76355014	0.049	0.023		1 WT	Knl1	0.026
Rrm2	0.001074858	0.95061905	0.102	0.065		1 WT	Rrm2	0.037
Ifit3	0.001107569	0.90312235	0.057	0.092		1 WT	Ifit3	-0.035
Uchl3	0.00111089	1.43226277	0.156	0.121		1 WT	Uchl3	0.035
Gm5914	0.001116473	2.29407068	0.019	0.003		1 WT	Gm5914	0.016
E230001N04R	0.001168449	1.19079484	0.022	0.004		1 WT	E230001N04	0.018
Hist3h2ba	0.001234487	0.99286863	0.024	0.005		1 WT	Hist3h2ba	0.019
Nek2	0.001238673	1.35796817	0.036	0.013		1 WT	Nek2	0.023
Cdca2	0.001259676	1.1197556	0.034	0.012		1 WT	Cdca2	0.022

Prr11	0.001287658	1.40933913	0.038	0.015	1	WT	Prr11	0.023
Snrpa1	0.001334493	0.92148725	0.254	0.232	1	WT	Snrpa1	0.022
Rnf26	0.001378807	1.49595714	0.096	0.063	1	WT	Rnf26	0.033
Hist1h3i	0.001408362	2.1118165	0.021	0.004	1	WT	Hist1h3i	0.017
Nxt1	0.001416508	1.16195137	0.137	0.103	1	WT	Nxt1	0.034
Kif2c	0.001430023	1.78028298	0.045	0.02	1	WT	Kif2c	0.025
Mrpl50	0.001487874	1.44395476	0.146	0.113	1	WT	Mrpl50	0.033
Ska2	0.001504318	1.71388495	0.041	0.017	1	WT	Ska2	0.024
Plp2	0.001504566	1.10055259	0.193	0.162	1	WT	Plp2	0.031
Kif15	0.001505987	1.08790502	0.072	0.041	1	WT	Kif15	0.031
Lsm11	0.001519464	1.06534545	0.058	0.031	1	WT	Lsm11	0.027
Nuf2	0.001604885	1.65595162	0.045	0.02	1	WT	Nuf2	0.025
Gtf2a2	0.001608462	0.98718625	0.302	0.3	1	WT	Gtf2a2	0.002
Nrm	0.001702466	1.16544707	0.12	0.085	1	WT	Nrm	0.035
B930036N10F	0.001710114	1.60725818	0.086	0.055	1	WT	B930036N10	0.031
Pa2g4	0.00172803	0.93264063	0.334	0.339	1	WT	Pa2g4	-0.005
Actg2	0.001744049	2.35327605	0.013	0	1	WT	Actg2	0.013
Cd248	0.001766157	2.41000414	0.016	0.001	1	WT	Cd248	0.015
Lrr1	0.001808865	2.02044877	0.029	0.009	1	WT	Lrr1	0.02
Bora	0.001838669	1.03859642	0.053	0.027	1	WT	Bora	0.026
Spc25	0.001933499	1.00745414	0.071	0.041	1	WT	Spc25	0.03
Prss23	0.001943583	2.43606027	0.027	0.008	1	WT	Prss23	0.019
Tmem238	0.001955258	1.61583977	0.074	0.044	1	WT	Tmem238	0.03
Pmf1	0.001957093	0.80042709	0.216	0.187	1	WT	Pmf1	0.029
Psmc3ip	0.002031292	1.09946063	0.042	0.019	1	WT	Psmc3ip	0.023
Pgp	0.002075518	1.1927258	0.227	0.204	1	WT	Pgp	0.023
Stfa2l1	0.00224129	2.72887464	0.012	0	1	WT	Stfa2l1	0.012
Adrb1	0.002259748	2.26257272	0.015	0.001	1	WT	Adrb1	0.014
Haus4	0.002276648	0.87364426	0.081	0.051	1	WT	Haus4	0.03
Orc6	0.002298791	1.6276293	0.103	0.072	1	WT	Orc6	0.031
Pex13	0.002429305	1.33212551	0.189	0.163	1	WT	Pex13	0.026
Mrto4	0.002432579	1.17611176	0.216	0.195	1	WT	Mrto4	0.021
Camp	0.002541403	4.6470883	0.012	0	1	WT	Camp	0.012
Asprv1	0.002541403	2.46543182	0.012	0	1	WT	Asprv1	0.012
Gm42031	0.002541403	2.19755933	0.012	0	1	WT	Gm42031	0.012
Cdc25c	0.002558853	1.26696685	0.026	0.008	1	WT	Cdc25c	0.018
Mrps23	0.002644948	1.02305975	0.24	0.222	1	WT	Mrps23	0.018
Zfp958	0.002734492	1.87111386	0.024	0.007	1	WT	Zfp958	0.017
Ramp2	0.002742099	1.37479579	0.02	0.004	1	WT	Ramp2	0.016
Aspm	0.00275705	1.42991499	0.036	0.015	1	WT	Aspm	0.021
Lrg1	0.002770459	1.97697668	0.022	0.005	1	WT	Lrg1	0.017
Melk	0.002789698	0.72715033	0.038	0.016	1	WT	Melk	0.022
Crip2	0.002807403	2.19812293	0.046	0.023	1	WT	Crip2	0.023
Hspb1	0.002821032	1.67803586	0.036	0.015	1	WT	Hspb1	0.021
Cdkn2a	0.002882208	1.52245421	0.012	0	1	WT	Cdkn2a	0.012
Hist1h2bh	0.002982538	2.00920663	0.017	0.003	1	WT	Hist1h2bh	0.014
Oscp1	0.00300705	1.84886482	0.017	0.003	1	WT	Oscp1	0.014
Ctnnbip1	0.003021751	1.27408493	0.169	0.142	1	WT	Ctnnbip1	0.027
Pimreg	0.003052877	1.22167575	0.046	0.023	1	WT	Pimreg	0.023
Col5a3	0.003105905	2.05441148	0.023	0.007	1	WT	Col5a3	0.016
Ect2	0.003110579	1.70397845	0.035	0.015	1	WT	Ect2	0.02
Aurka	0.003162005	1.31806449	0.056	0.031	1	WT	Aurka	0.025
Cpe	0.00316637	1.70336396	0.046	0.023	1	WT	Cpe	0.023
Timm8a1	0.003233995	0.8885984	0.192	0.163	1	WT	Timm8a1	0.029

Hspg2	0.003444332	0.89157356	0.039	0.017	1 WT	Hspg2	0.022
Mcm6	0.003459311	1.07826072	0.164	0.132	1 WT	Mcm6	0.032
Pcdh17	0.003709165	2.24764778	0.011	0	1 WT	Pcdh17	0.011
Rnaset2b	0.00373773	1.72429753	0.033	0.013	1 WT	Rnaset2b	0.02
Adgrl4	0.00381337	2.52060043	0.016	0.003	1 WT	Adgrl4	0.013
Mrpl35	0.004010172	0.8705741	0.29	0.286	1 WT	Mrpl35	0.004
Hist1h2bg	0.004025157	2.45096855	0.027	0.009	1 WT	Hist1h2bg	0.018
Impa2	0.004116111	1.58606711	0.152	0.123	1 WT	Impa2	0.029
Mrnip	0.004137148	2.10369188	0.018	0.004	1 WT	Mrnip	0.014
Ube2o	0.00419436	1.66661945	0.083	0.055	1 WT	Ube2o	0.028
Pomk	0.004194762	1.83897443	0.05	0.027	1 WT	Pomk	0.023
Mlana	0.004305298	1.25564181	0.155	0.127	1 WT	Mlana	0.028
Cav1	0.004309278	1.40225335	0.033	0.013	1 WT	Cav1	0.02
Ebf1	0.004321465	2.7038491	0.016	0.003	1 WT	Ebf1	0.013
Ptp4a3	0.004322496	1.39545408	0.115	0.085	1 WT	Ptp4a3	0.03
8030462N17F	0.004418624	0.75190619	0.019	0.036	1 WT	8030462N17	-0.017
Cadm1	0.00446411	0.83321747	0.215	0.184	1 WT	Cadm1	0.031
Mcam	0.004513495	1.55677237	0.034	0.015	1 WT	Mcam	0.019
Zkscan14	0.004649272	1.93636675	0.058	0.033	1 WT	Zkscan14	0.025
Kif11	0.004752841	1.17765506	0.057	0.032	1 WT	Kif11	0.025
Myct1	0.004777409	2.30494297	0.011	0	1 WT	Myct1	0.011
Aunip	0.004873594	1.55586216	0.016	0.003	1 WT	Aunip	0.013
Suv39h2	0.005128737	0.92139637	0.022	0.007	1 WT	Suv39h2	0.015
1110008P14R	0.005189727	1.27280529	0.211	0.194	1 WT	1110008P14	0.017
Clpp	0.005338507	0.95191586	0.161	0.134	1 WT	Clpp	0.027
Map3k8	0.005383062	0.95460928	0.252	0.232	1 WT	Map3k8	0.02
Rfc4	0.005405276	1.03484893	0.094	0.065	1 WT	Rfc4	0.029
Tinagl1	0.005518719	1.93025556	0.03	0.012	1 WT	Tinagl1	0.018
Gys1	0.005530237	0.71850831	0.093	0.135	1 WT	Gys1	-0.042
Blm	0.005656155	1.13706781	0.053	0.029	1 WT	Blm	0.024
Ndufa4l2	0.005689999	1.43148759	0.028	0.011	1 WT	Ndufa4l2	0.017
Pgf	0.00569839	1.47764426	0.039	0.019	1 WT	Pgf	0.02
Eid1	0.00570914	0.71016024	0.411	0.437	1 WT	Eid1	-0.026
C1d	0.005857317	0.93337352	0.295	0.298	1 WT	C1d	-0.003
Chaf1b	0.005892942	1.63422803	0.083	0.056	1 WT	Chaf1b	0.027
Pigyl	0.005969476	1.16654904	0.148	0.12	1 WT	Pigyl	0.028
Commd9	0.005976447	1.44965402	0.15	0.124	1 WT	Commd9	0.026
Fbxo5	0.006101522	0.76258714	0.039	0.019	1 WT	Fbxo5	0.02
Fam220a	0.006233371	1.36344968	0.137	0.109	1 WT	Fam220a	0.028
Igsf9	0.00628244	2.21509322	0.026	0.009	1 WT	Igsf9	0.017
Agpat2	0.006413248	0.69375826	0.064	0.097	1 WT	Agpat2	-0.033
Pole	0.006636382	0.71211679	0.027	0.011	1 WT	Pole	0.016
Saa3	0.006705653	2.49377383	0.042	0.021	1 WT	Saa3	0.021
Sdhaf1	0.006714838	1.07318562	0.14	0.112	1 WT	Sdhaf1	0.028
Pald1	0.006736972	1.60502963	0.045	0.024	1 WT	Pald1	0.021
Mylk	0.006755397	1.78814382	0.023	0.008	1 WT	Mylk	0.015
Trem3	0.006911522	1.9961395	0.019	0.005	1 WT	Trem3	0.014
Hist1h4m	0.006996156	2.36848003	0.01	0	1 WT	Hist1h4m	0.01
Emc6	0.007045959	0.76929778	0.352	0.379	1 WT	Emc6	-0.027
Arl6ip4	0.007060915	0.81231705	0.245	0.232	1 WT	Arl6ip4	0.013
Serpinh1	0.007099692	1.45949967	0.069	0.044	1 WT	Serpinh1	0.025
Apoo	0.007186311	1.23896139	0.077	0.051	1 WT	Apoo	0.026
Mydgf	0.007320734	0.75301552	0.403	0.445	1 WT	Mydgf	-0.042
Dst	0.007382503	0.75805626	0.132	0.101	1 WT	Dst	0.031

Oip5	0.007506816	1.91050436	0.021	0.007	1	WT	Oip5	0.014
Mrpl55	0.007585154	0.95161506	0.236	0.222	1	WT	Mrpl55	0.014
Ifi27	0.007720221	0.81870775	0.328	0.334	1	WT	Ifi27	-0.006
Negr1	0.007814544	1.87728328	0.019	0.005	1	WT	Negr1	0.014
Rraga	0.007897378	1.02069922	0.278	0.278	1	WT	Rraga	0
Gipr	0.007929561	2.91528346	0.012	0.001	1	WT	Gipr	0.011
Sephs2	0.008018533	1.43273888	0.082	0.056	1	WT	Sephs2	0.026
Chtf18	0.008213782	1.89284528	0.029	0.012	1	WT	Chtf18	0.017
Iqgap3	0.008253591	1.1606485	0.068	0.043	1	WT	Iqgap3	0.025
Pfdn2	0.008329327	0.76859147	0.39	0.434	1	WT	Pfdn2	-0.044
Pole3	0.008348422	0.99691085	0.183	0.162	1	WT	Pole3	0.021
Enkd1	0.0083583	1.55053359	0.036	0.017	1	WT	Enkd1	0.019
Pkd2	0.008378981	0.75458076	0.029	0.049	1	WT	Pkd2	-0.02
Hist1h3d	0.008789262	1.31997094	0.027	0.011	1	WT	Hist1h3d	0.016
Zfp580	0.008893471	1.5283141	0.025	0.009	1	WT	Zfp580	0.016
Mphosph6	0.008932366	1.18541738	0.145	0.119	1	WT	Mphosph6	0.026
Smad7	0.008973003	0.73686619	0.087	0.124	1	WT	Smad7	-0.037
Hist1h3g	0.008992335	1.65614423	0.012	0.001	1	WT	Hist1h3g	0.011
Akap12	0.009029508	2.13786255	0.012	0.001	1	WT	Akap12	0.011
Cd300e	0.009482208	1.12485071	0.036	0.017	1	WT	Cd300e	0.019
Ppdpf	0.009533696	1.02634173	0.247	0.239	1	WT	Ppdpf	0.008
Eif1ad	0.009573063	0.82945621	0.268	0.264	1	WT	Eif1ad	0.004
Cox6b2	0.009699228	1.87932625	0.042	0.023	1	WT	Cox6b2	0.019
Dbn1	0.009802945	1.30471364	0.016	0.004	1	WT	Dbn1	0.012
Ifi202b	0	7.28847635	0.591	0	0	KO	Ifi202b	0.591
Il1b	0	5.14388449	0.678	0.077	0	KO	Il1b	0.601
Egr2	0	4.82742898	0.65	0.031	0	KO	Egr2	0.619
Nr4a1	0	4.40889882	0.728	0.067	0	KO	Nr4a1	0.661
Tnfaip2	0	4.00960679	0.753	0.131	0	KO	Tnfaip2	0.622
Cd83	0	3.77375322	0.825	0.188	0	KO	Cd83	0.637
H2-Aa	0	3.44948449	0.949	0.41	0	KO	H2-Aa	0.539
Fosb	3.7088E-299	3.38160842	0.734	0.118	1.1517E-294	KO	Fosb	0.616
Tnfaip3	4.8203E-299	3.3776113	0.776	0.149	1.4968E-294	KO	Tnfaip3	0.627
Egr1	2.6341E-268	3.94357421	0.64	0.093	8.1797E-264	KO	Egr1	0.547
H2-T23	1.016E-265	3.03126398	0.805	0.247	3.1549E-261	KO	H2-T23	0.558
Csrnp1	1.4329E-264	3.30133165	0.664	0.101	4.4496E-260	KO	Csrnp1	0.563
H2-Eb1	1.8883E-262	2.91325231	0.909	0.368	5.8636E-258	KO	H2-Eb1	0.541
Kdm6b	6.5025E-262	3.09744494	0.724	0.139	2.0192E-257	KO	Kdm6b	0.585
Gm42418	5.6531E-259	2.03999883	0.999	0.994	1.7555E-254	KO	Gm42418	0.005
H2-Ab1	7.5967E-259	2.95273078	0.944	0.5	2.359E-254	KO	H2-Ab1	0.444
Gpr132	2.1607E-243	4.2836523	0.438	0.027	6.7096E-239	KO	Gpr132	0.411
Irf1	4.7432E-237	3.183759	0.619	0.097	1.4729E-232	KO	Irf1	0.522
H2-K1	7.7082E-236	1.46472585	0.981	0.886	2.3936E-231	KO	H2-K1	0.095
Rel	1.2295E-235	2.80676953	0.649	0.111	3.8179E-231	KO	Rel	0.538
Rnf19b	1.9811E-235	2.68266186	0.758	0.193	6.152E-231	KO	Rnf19b	0.565
Egr3	8.424E-230	6.22045779	0.314	0.003	2.6159E-225	KO	Egr3	0.311
Nlrp3	5.42E-228	3.37152173	0.517	0.059	1.6831E-223	KO	Nlrp3	0.458
Ets2	4.6585E-227	2.47671717	0.702	0.144	1.4466E-222	KO	Ets2	0.558
Ptgs2	7.9608E-227	4.25196383	0.475	0.047	2.4721E-222	KO	Ptgs2	0.428
Tnip3	1.5624E-226	3.79917514	0.507	0.058	4.8518E-222	KO	Tnip3	0.449
Psap	1.0398E-224	1.67048984	0.993	0.94	3.2289E-220	KO	Psap	0.053
Cd74	1.5904E-224	2.52396034	0.957	0.638	4.9388E-220	KO	Cd74	0.319
Acod1	5.6181E-222	3.90148291	0.446	0.038	1.7446E-217	KO	Acod1	0.408
Junb	1.4009E-220	2.72453674	0.94	0.544	4.3503E-216	KO	Junb	0.396

Btg2	2.5209E-219	2.79279595	0.752	0.19	7.828E-215	KO	Btg2	0.562
Trib1	1.0121E-218	2.61967977	0.607	0.099	3.143E-214	KO	Trib1	0.508
Sgms1	3.4007E-218	2.76213073	0.629	0.111	1.056E-213	KO	Sgms1	0.518
Stat1	5.5951E-215	2.75488557	0.701	0.171	1.7374E-210	KO	Stat1	0.53
Retnla	8.6471E-213	11.2618874	0.286	0.002	2.6852E-208	KO	Retnla	0.284
Pde4b	6.4596E-211	2.71214592	0.55	0.077	2.0059E-206	KO	Pde4b	0.473
Malt1	2.6779E-209	3.01677222	0.575	0.093	8.3158E-205	KO	Malt1	0.482
Dusp5	3.6886E-209	3.68734241	0.469	0.051	1.1454E-204	KO	Dusp5	0.418
Nfkbia	5.2081E-208	2.80981567	0.885	0.451	1.6173E-203	KO	Nfkbia	0.434
C3	3.1201E-207	3.59045396	0.446	0.044	9.6888E-203	KO	C3	0.402
Zfp36	4.373E-206	2.96403315	0.907	0.469	1.3579E-201	KO	Zfp36	0.438
Nfkbie	9.7834E-205	3.37678934	0.374	0.022	3.038E-200	KO	Nfkbie	0.352
Pim1	1.5473E-204	2.39409889	0.885	0.378	4.805E-200	KO	Pim1	0.507
Samhd1	2.7602E-201	2.34608617	0.869	0.385	8.5713E-197	KO	Samhd1	0.484
Cd14	1.8582E-197	2.64177241	0.818	0.331	5.7704E-193	KO	Cd14	0.487
Slamf8	7.0108E-197	2.85931546	0.497	0.067	2.1771E-192	KO	Slamf8	0.43
Hbegf	9.8658E-195	4.96637258	0.302	0.009	3.0636E-190	KO	Hbegf	0.293
B2m	6.0079E-194	1.17952056	0.98	0.943	1.8656E-189	KO	B2m	0.037
Nr4a3	2.3479E-192	4.67619994	0.302	0.01	7.291E-188	KO	Nr4a3	0.292
Klf6	5.4867E-192	2.04290327	0.928	0.56	1.7038E-187	KO	Klf6	0.368
H2-DMb1	3.2666E-189	2.35683136	0.754	0.248	1.0144E-184	KO	H2-DMb1	0.506
Il1rn	8.7774E-187	2.89621691	0.736	0.24	2.7257E-182	KO	Il1rn	0.496
Cxcl2	7.0371E-186	2.05168167	0.761	0.245	2.1852E-181	KO	Cxcl2	0.516
Nfkbiz	3.6252E-183	2.90809628	0.684	0.192	1.1257E-178	KO	Nfkbiz	0.492
H2-D1	5.0295E-183	1.2261289	0.975	0.901	1.5618E-178	KO	H2-D1	0.074
Gbp4	2.7677E-182	2.96590945	0.433	0.05	8.5946E-178	KO	Gbp4	0.383
Klf4	1.5109E-180	2.79775469	0.652	0.162	4.6919E-176	KO	Klf4	0.49
Jund	4.2645E-180	1.91107993	0.964	0.673	1.3243E-175	KO	Jund	0.291
Gpr35	3.367E-179	2.48969037	0.511	0.083	1.0455E-174	KO	Gpr35	0.428
Fam26f	4.0812E-178	3.37166592	0.473	0.072	1.2673E-173	KO	Fam26f	0.401
Mmp19	3.0147E-176	3.28784755	0.463	0.067	9.3614E-172	KO	Mmp19	0.396
Gbp2b	4.6791E-176	5.94533661	0.254	0.004	1.453E-171	KO	Gbp2b	0.25
Cish	2.7753E-173	4.37711999	0.282	0.011	8.6183E-169	KO	Cish	0.271
Irgm1	9.3531E-171	2.74364595	0.457	0.066	2.9044E-166	KO	Irgm1	0.391
Cybb	2.919E-168	1.85843228	0.865	0.517	9.0644E-164	KO	Cybb	0.348
Adgre5	1.3736E-167	2.33529943	0.538	0.098	4.2656E-163	KO	Adgre5	0.44
Socs3	3.6846E-167	2.35895711	0.729	0.239	1.1442E-162	KO	Socs3	0.49
Dusp1	9.9375E-166	2.2018539	0.923	0.61	3.0859E-161	KO	Dusp1	0.313
Tapbp	1.7067E-165	1.81925071	0.834	0.395	5.2998E-161	KO	Tapbp	0.439
Nr4a2	7.4842E-164	3.37399727	0.311	0.02	2.3241E-159	KO	Nr4a2	0.291
Ralgds	4.5603E-163	2.43939162	0.505	0.089	1.4161E-158	KO	Ralgds	0.416
Gm6377	6.0997E-163	2.43395421	0.509	0.091	1.8941E-158	KO	Gm6377	0.418
Rcan1	3.2358E-162	3.52603585	0.385	0.045	1.0048E-157	KO	Rcan1	0.34
Ptafr	7.9573E-162	2.21002684	0.599	0.136	2.471E-157	KO	Ptafr	0.463
Tnf	1.0187E-160	3.4639782	0.506	0.099	3.1633E-156	KO	Tnf	0.407
Plekho2	1.8203E-160	1.80832043	0.742	0.251	5.6526E-156	KO	Plekho2	0.491
Mefv	1.0793E-159	3.05171932	0.314	0.022	3.3516E-155	KO	Mefv	0.292
Ly86	1.3666E-159	2.06719585	0.826	0.412	4.2436E-155	KO	Ly86	0.414
Nfkbid	2.7206E-157	3.2007227	0.36	0.038	8.4482E-153	KO	Nfkbid	0.322
Laptm5	9.6779E-157	1.22154796	0.951	0.789	3.0053E-152	KO	Laptm5	0.162
Fgl2	2.5763E-153	2.31283458	0.75	0.31	8.0001E-149	KO	Fgl2	0.44
Pabpc1	5.4867E-152	1.53714079	0.924	0.641	1.7038E-147	KO	Pabpc1	0.283
Ifrd1	6.164E-151	2.42505395	0.752	0.288	1.9141E-146	KO	Ifrd1	0.464
Prdm1	3.1498E-150	2.75022432	0.344	0.035	9.7809E-146	KO	Prdm1	0.309

Nfkb1	1.1451E-147	2.27323776	0.634	0.173	3.556E-143 KO	Nfkb1	0.461
Casp4	2.6001E-147	2.02761857	0.498	0.095	8.0741E-143 KO	Casp4	0.403
Fosl2	3.9793E-143	2.00815664	0.668	0.195	1.2357E-138 KO	Fosl2	0.473
Ell2	8.7431E-142	2.35950462	0.497	0.102	2.715E-137 KO	Ell2	0.395
Gbp5	2.7295E-141	3.08762026	0.344	0.041	8.4761E-137 KO	Gbp5	0.303
Plek	4.9239E-141	1.72544244	0.856	0.483	1.529E-136 KO	Plek	0.373
Ctss	2.0377E-140	1.50905368	0.971	0.899	6.3276E-136 KO	Ctss	0.072
Ciita	1.9995E-139	3.12823267	0.242	0.011	6.2091E-135 KO	Ciita	0.231
Tap2	3.0161E-138	1.96648883	0.562	0.137	9.3658E-134 KO	Tap2	0.425
Nfe2l2	3.0816E-137	1.93388149	0.686	0.23	9.5693E-133 KO	Nfe2l2	0.456
Ier2	1.2864E-135	2.48933456	0.652	0.205	3.9947E-131 KO	Ier2	0.447
Gbp2	2.7409E-135	2.32550622	0.662	0.227	8.5113E-131 KO	Gbp2	0.435
Nrros	9.228E-135	1.8909126	0.649	0.202	2.8656E-130 KO	Nrros	0.447
Ccl4	1.4762E-134	2.18573976	0.778	0.339	4.584E-130 KO	Ccl4	0.439
Ier5	2.5926E-133	1.79532241	0.794	0.347	8.0508E-129 KO	Ier5	0.447
Plbd1	1.0014E-132	2.18918776	0.717	0.273	3.1098E-128 KO	Plbd1	0.444
Itga4	3.1875E-132	2.12628061	0.482	0.1	9.8982E-128 KO	Itga4	0.382
Rab7b	3.279E-132	1.82663144	0.714	0.268	1.0182E-127 KO	Rab7b	0.446
Ahnak	7.3562E-132	1.61027274	0.887	0.55	2.2843E-127 KO	Ahnak	0.337
Ccrl2	8.9274E-132	1.75154547	0.614	0.173	2.7722E-127 KO	Ccrl2	0.441
Sema4a	3.0267E-131	2.49828782	0.348	0.045	9.3987E-127 KO	Sema4a	0.303
Rasgef1b	7.6117E-131	1.95713286	0.554	0.14	2.3637E-126 KO	Rasgef1b	0.414
Dusp2	8.4975E-131	3.24336626	0.393	0.067	2.6387E-126 KO	Dusp2	0.326
Maff	2.77E-130	2.39290287	0.326	0.038	8.6018E-126 KO	Maff	0.288
H2-Q7	5.4813E-130	1.61507717	0.662	0.208	1.7021E-125 KO	H2-Q7	0.454
Iigp1	5.4858E-128	2.65381	0.423	0.081	1.7035E-123 KO	Iigp1	0.342
Lacc1	2.3429E-124	2.1438968	0.449	0.091	7.2753E-120 KO	Lacc1	0.358
Cnn3	2.7504E-124	2.57222854	0.315	0.038	8.5407E-120 KO	Cnn3	0.277
Tec	3.0151E-124	2.34426135	0.314	0.037	9.3628E-120 KO	Tec	0.277
Dot1l	3.2343E-124	2.01833478	0.425	0.078	1.0044E-119 KO	Dot1l	0.347
Ubc	8.2339E-123	1.36033374	0.908	0.7	2.5569E-118 KO	Ubc	0.208
Sema4d	2.2368E-122	2.0139676	0.35	0.05	6.9459E-118 KO	Sema4d	0.3
Fos	2.1329E-121	1.69492043	0.844	0.436	6.6232E-117 KO	Fos	0.408
Mndal	2.7151E-121	1.76057516	0.649	0.21	8.4313E-117 KO	Mndal	0.439
Plk2	3.2533E-121	1.88398923	0.59	0.179	1.0102E-116 KO	Plk2	0.411
Prcp	3.2842E-121	1.64553265	0.69	0.242	1.0199E-116 KO	Prcp	0.448
Stxbp3	1.8302E-120	1.78484725	0.537	0.137	5.6832E-116 KO	Stxbp3	0.4
Il2rg	1.4016E-119	2.01403545	0.398	0.072	4.3524E-115 KO	Il2rg	0.326
H2-DMa	4.8134E-119	1.72229008	0.777	0.419	1.4947E-114 KO	H2-DMa	0.358
Il18bp	5.2514E-119	2.16603895	0.549	0.163	1.6307E-114 KO	Il18bp	0.386
Naaa	5.8932E-119	2.16762999	0.669	0.255	1.83E-114 KO	Naaa	0.414
Cd44	1.4226E-118	1.66161238	0.832	0.452	4.4177E-114 KO	Cd44	0.38
Ccr2	2.0325E-118	2.27505899	0.513	0.141	6.3116E-114 KO	Ccr2	0.372
Cox17	1.0545E-117	1.60019845	0.642	0.208	3.2747E-113 KO	Cox17	0.434
Csf2rb	8.9761E-117	1.4905097	0.626	0.193	2.7873E-112 KO	Csf2rb	0.433
4930523C07R	1.035E-116	2.20580862	0.355	0.056	3.2138E-112 KO	4930523C07	0.299
Actg1	2.5375E-116	0.94717638	0.979	0.961	7.8796E-112 KO	Actg1	0.018
H2-T22	2.7517E-116	1.67980188	0.582	0.175	8.5449E-112 KO	H2-T22	0.407
Prkcd	7.7032E-116	1.72203519	0.658	0.226	2.3921E-111 KO	Prkcd	0.432
Slc15a3	1.2679E-115	1.50246806	0.698	0.267	3.9372E-111 KO	Slc15a3	0.431
Cyth1	1.3124E-115	1.83369989	0.485	0.113	4.0755E-111 KO	Cyth1	0.372
Gatm	9.3418E-115	1.88415642	0.75	0.332	2.9009E-110 KO	Gatm	0.418
Myadm	2.2154E-114	1.94844008	0.431	0.09	6.8795E-110 KO	Myadm	0.341
Plaur	4.8243E-114	1.71021244	0.697	0.293	1.4981E-109 KO	Plaur	0.404

Birc3	7.1286E-114	1.92162896	0.43	0.089	2.2136E-109	KO	Birc3	0.341
Gbp3	1.4184E-113	2.11851257	0.418	0.088	4.4045E-109	KO	Gbp3	0.33
Ahr	3.174E-113	2.86599513	0.254	0.024	9.8562E-109	KO	Ahr	0.23
Tob2	5.4684E-113	2.02451755	0.485	0.12	1.6981E-108	KO	Tob2	0.365
Batf2	6.6182E-113	3.08705344	0.256	0.025	2.0552E-108	KO	Batf2	0.231
Ddx17	1.1687E-112	1.57061475	0.585	0.167	3.6292E-108	KO	Ddx17	0.418
Atp2b1	2.0485E-112	1.28068928	0.899	0.608	6.3612E-108	KO	Atp2b1	0.291
Btg1	1.2076E-111	1.36208909	0.917	0.66	3.75E-107	KO	Btg1	0.257
Adora2b	2.4578E-111	3.17837244	0.215	0.014	7.6323E-107	KO	Adora2b	0.201
Ldlr	4.7891E-111	2.22276871	0.368	0.065	1.4872E-106	KO	Ldlr	0.303
Ly6a	5.9809E-111	1.95623233	0.644	0.246	1.8572E-106	KO	Ly6a	0.398
Mpeg1	1.5192E-110	1.2902706	0.866	0.658	4.7175E-106	KO	Mpeg1	0.208
Serpina3f	3.8911E-110	3.56675424	0.206	0.012	1.2083E-105	KO	Serpina3f	0.194
Tap1	4.8221E-110	1.58826133	0.708	0.298	1.4974E-105	KO	Tap1	0.41
Sdc3	9.1036E-110	1.48459499	0.825	0.509	2.8269E-105	KO	Sdc3	0.316
Ccl24	9.097E-109	4.64005656	0.239	0.023	2.8249E-104	KO	Ccl24	0.216
Ifi47	1.5955E-108	2.10889179	0.462	0.115	4.9545E-104	KO	Ifi47	0.347
Ifi203	4.1534E-108	1.57067827	0.566	0.171	1.2898E-103	KO	Ifi203	0.395
Gbp7	4.815E-108	2.0250112	0.495	0.135	1.4952E-103	KO	Gbp7	0.36
Psme2b	4.8308E-108	2.96786131	0.211	0.014	1.5001E-103	KO	Psme2b	0.197
Cers6	9.9762E-108	1.68439237	0.41	0.084	3.0979E-103	KO	Cers6	0.326
Bach1	1.2825E-107	1.89637527	0.602	0.199	3.9825E-103	KO	Bach1	0.403
Slc39a1	1.9031E-107	1.67612802	0.545	0.153	5.9096E-103	KO	Slc39a1	0.392
Igtp	9.9232E-107	2.2437115	0.374	0.073	3.0814E-102	KO	Igtp	0.301
Clic4	4.2786E-106	1.55930221	0.704	0.291	1.3286E-101	KO	Clic4	0.413
Ly6c2	6.5137E-106	2.58552691	0.338	0.058	2.0227E-101	KO	Ly6c2	0.28
Plk3	8.151E-106	1.79505227	0.419	0.091	2.5311E-101	KO	Plk3	0.328
Lrrc8c	2.1656E-105	1.93845447	0.359	0.065	6.7249E-101	KO	Lrrc8c	0.294
Ptpn2	3.6467E-105	2.20618158	0.406	0.086	1.1324E-100	KO	Ptpn2	0.32
Mid1	4.127E-105	2.28542299	0.27	0.033	1.2815E-100	KO	Mid1	0.237
Glipr2	9.606E-105	2.07866556	0.33	0.053	2.9829E-100	KO	Glipr2	0.277
Crip1	1.813E-104	1.40190585	0.945	0.791	5.63E-100	KO	Crip1	0.154
Nabp1	4.5533E-104	2.15628672	0.348	0.062	1.4139E-99	KO	Nabp1	0.286
Sowahc	1.8516E-103	2.24441037	0.407	0.089	5.7499E-99	KO	Sowahc	0.318
Hsd17b11	1.4186E-102	1.65246021	0.462	0.114	4.40507E-98	KO	Hsd17b11	0.348
Rab11fip1	2.1685E-102	2.39704839	0.243	0.025	6.73389E-98	KO	Rab11fip1	0.218
Vim	2.9471E-102	0.82850135	0.975	0.946	9.15163E-98	KO	Vim	0.029
Cd300a	6.0732E-102	1.55405632	0.605	0.211	1.88591E-97	KO	Cd300a	0.394
Rab20	1.0682E-101	1.58951571	0.482	0.124	3.3171E-97	KO	Rab20	0.358
Atxn2l	4.5283E-101	1.43152408	0.486	0.123	1.40618E-96	KO	Atxn2l	0.363
Cox20	5.6515E-101	1.77709839	0.443	0.105	1.75495E-96	KO	Cox20	0.338
Ppp1r15a	5.7717E-101	2.09544976	0.613	0.222	1.79227E-96	KO	Ppp1r15a	0.391
Il10ra	9.2499E-101	1.54250473	0.487	0.128	2.87239E-96	KO	Il10ra	0.359
Gadd45b	1.6121E-100	1.44872565	0.7	0.297	5.00592E-96	KO	Gadd45b	0.403
Il1a	2.1461E-100	2.97566606	0.223	0.021	6.66415E-96	KO	Il1a	0.202
AI504432	2.3503E-100	2.37596963	0.295	0.045	7.29837E-96	KO	AI504432	0.25
Slfn2	5.123E-100	1.3855153	0.836	0.519	1.59086E-95	KO	Slfn2	0.317
Itgb7	2.536E-99	1.61277432	0.368	0.072	7.8749E-95	KO	Itgb7	0.296
Ncf2	2.639E-99	1.35301177	0.753	0.348	8.19496E-95	KO	Ncf2	0.405
Eif3j2	3.4122E-99	3.80935899	0.146	0.002	1.05958E-94	KO	Eif3j2	0.144
Cfap43	4.0973E-99	2.03748019	0.256	0.031	1.27235E-94	KO	Cfap43	0.225
Traf1	5.1614E-99	2.31184828	0.303	0.048	1.60278E-94	KO	Traf1	0.255
Kctd12	8.0489E-99	1.85275957	0.706	0.315	2.49942E-94	KO	Kctd12	0.391
Serpina3g	1.64139E-98	2.23110975	0.379	0.083	5.09701E-94	KO	Serpina3g	0.296

Sqstm1	2.02264E-98	1.7847702	0.68	0.273	6.2809E-94	KO	Sqstm1	0.407
Klf2	3.04834E-98	1.79313278	0.642	0.247	9.466E-94	KO	Klf2	0.395
Hk3	4.46196E-98	1.57056594	0.617	0.24	1.38557E-93	KO	Hk3	0.377
Ptpn12	5.27542E-98	1.81332652	0.394	0.086	1.63818E-93	KO	Ptpn12	0.308
Mgl2	1.77763E-97	4.48879496	0.2	0.016	5.52007E-93	KO	Mgl2	0.184
Ppp1r15b	2.74286E-97	1.43256888	0.523	0.15	8.51739E-93	KO	Ppp1r15b	0.373
Zc3h12a	2.9753E-97	1.61584111	0.425	0.101	9.23919E-93	KO	Zc3h12a	0.324
Nfil3	6.29352E-97	1.34066085	0.574	0.18	1.95433E-92	KO	Nfil3	0.394
Npc2	3.13536E-96	0.87428693	0.935	0.874	9.73625E-92	KO	Npc2	0.061
Ptprc	1.51333E-95	1.33507036	0.818	0.439	4.69933E-91	KO	Ptprc	0.379
Noct	1.43401E-94	1.56925349	0.491	0.14	4.45302E-90	KO	Noct	0.351
Creg1	2.34202E-94	1.90506673	0.8	0.474	7.27267E-90	KO	Creg1	0.326
Ndel1	1.54704E-93	1.37327816	0.57	0.183	4.80401E-89	KO	Ndel1	0.387
Scimp	1.84246E-93	1.76121101	0.358	0.073	5.7214E-89	KO	Scimp	0.285
Rgl1	8.06697E-93	1.3862019	0.633	0.239	2.50504E-88	KO	Rgl1	0.394
N4bp1	9.00653E-93	1.62996264	0.518	0.156	2.7968E-88	KO	N4bp1	0.362
Susd6	2.12222E-92	1.63163769	0.386	0.086	6.59012E-88	KO	Susd6	0.3
Myo1f	4.67324E-92	1.39189276	0.523	0.162	1.45118E-87	KO	Myo1f	0.361
Slc7a2	1.00376E-91	2.71436704	0.276	0.043	3.11697E-87	KO	Slc7a2	0.233
Rilpl2	1.02171E-91	1.27357456	0.677	0.274	3.17271E-87	KO	Rilpl2	0.403
Rnase6	1.77878E-91	2.61256883	0.211	0.021	5.52363E-87	KO	Rnase6	0.19
Spag9	2.91572E-91	1.41618534	0.593	0.205	9.05417E-87	KO	Spag9	0.388
Olr1	1.52589E-90	4.42979081	0.14	0.004	4.73836E-86	KO	Olr1	0.136
Irf4	2.18062E-90	5.02021475	0.134	0.002	6.77148E-86	KO	Irf4	0.132
Phlda1	4.53484E-90	2.56852845	0.401	0.103	1.4082E-85	KO	Phlda1	0.298
Rnf213	5.42458E-90	1.50636141	0.469	0.135	1.68449E-85	KO	Rnf213	0.334
Etv3	4.39926E-89	2.0495045	0.437	0.119	1.3661E-84	KO	Etv3	0.318
Itm2c	6.11901E-89	1.39318067	0.722	0.35	1.90014E-84	KO	Itm2c	0.372
Tmcc3	6.57046E-89	2.17963926	0.259	0.038	2.04032E-84	KO	Tmcc3	0.221
Marcksl1	7.44188E-88	2.53650204	0.477	0.158	2.31093E-83	KO	Marcksl1	0.319
Osm	2.06176E-87	2.29350097	0.415	0.112	6.40238E-83	KO	Osm	0.303
Pik3cd	2.55514E-87	1.64994843	0.454	0.127	7.93447E-83	KO	Pik3cd	0.327
Dyrk2	2.75658E-87	1.6243692	0.347	0.073	8.56002E-83	KO	Dyrk2	0.274
Arhgap31	3.45519E-87	2.01621927	0.383	0.093	1.07294E-82	KO	Arhgap31	0.29
Sp140	4.16904E-87	1.51183879	0.418	0.106	1.29461E-82	KO	Sp140	0.312
Sirpa	7.95476E-87	1.13656653	0.86	0.6	2.47019E-82	KO	Sirpa	0.26
Sdc4	2.12389E-86	1.85146426	0.828	0.55	6.59533E-82	KO	Sdc4	0.278
Clec10a	3.92047E-86	3.00223012	0.439	0.129	1.21742E-81	KO	Clec10a	0.31
Rgs2	6.41312E-86	1.86464867	0.577	0.219	1.99147E-81	KO	Rgs2	0.358
Hif1a	7.24302E-86	1.4337054	0.666	0.276	2.24918E-81	KO	Hif1a	0.39
Anpep	1.1271E-85	1.71076308	0.491	0.164	3.49997E-81	KO	Anpep	0.327
Plxnd1	1.20821E-85	1.63748079	0.409	0.105	3.75187E-81	KO	Plxnd1	0.304
Nfkb2	1.52649E-85	2.0194056	0.288	0.051	4.74021E-81	KO	Nfkb2	0.237
Cxcl10	1.76642E-85	2.5230755	0.371	0.094	5.48526E-81	KO	Cxcl10	0.277
St8sia4	3.17681E-85	1.50759919	0.375	0.086	9.86496E-81	KO	St8sia4	0.289
Pmaip1	4.077E-85	2.67859156	0.247	0.037	1.26603E-80	KO	Pmaip1	0.21
Cxcr4	5.44067E-85	1.50005223	0.525	0.175	1.68949E-80	KO	Cxcr4	0.35
Tmbim6	7.49124E-85	1.0539091	0.833	0.586	2.32625E-80	KO	Tmbim6	0.247
Tnfrsf1b	8.30348E-85	1.18054533	0.618	0.223	2.57848E-80	KO	Tnfrsf1b	0.395
Coro2a	9.46554E-85	1.6556115	0.355	0.079	2.93933E-80	KO	Coro2a	0.276
Il6	2.42025E-84	6.55720404	0.119	0.001	7.51562E-80	KO	Il6	0.118
Stx3	5.86011E-84	1.36523192	0.356	0.079	1.81974E-79	KO	Stx3	0.277
Sp110	6.9439E-84	1.46604978	0.479	0.142	2.15629E-79	KO	Sp110	0.337
Zyx	7.029E-84	1.38022941	0.749	0.388	2.18272E-79	KO	Zyx	0.361

Akap13	1.85972E-83	1.28077846	0.642	0.257	5.77498E-79 KO	Akap13	0.385
Mcl1	2.31608E-83	0.83625307	0.936	0.819	7.19211E-79 KO	Mcl1	0.117
Grb2	3.61497E-83	1.13703165	0.785	0.449	1.12256E-78 KO	Grb2	0.336
Il6ra	3.89957E-83	1.48116501	0.413	0.108	1.21093E-78 KO	Il6ra	0.305
Chd7	5.10264E-83	1.41172496	0.453	0.13	1.58452E-78 KO	Chd7	0.323
Rnaset2a	7.5895E-83	2.12852565	0.243	0.035	2.35677E-78 KO	Rnaset2a	0.208
Dennd4a	1.07748E-82	1.75415508	0.457	0.134	3.3459E-78 KO	Dennd4a	0.323
Rnase2a	1.79444E-82	6.86002072	0.124	0.003	5.57229E-78 KO	Rnase2a	0.121
Stat3	2.07689E-82	1.32139976	0.632	0.247	6.44937E-78 KO	Stat3	0.385
Cd40	2.6642E-82	1.71058391	0.352	0.08	8.27313E-78 KO	Cd40	0.272
Stk40	2.77999E-82	1.667814	0.296	0.055	8.63271E-78 KO	Stk40	0.241
Brd2	3.52336E-82	1.28262403	0.621	0.24	1.09411E-77 KO	Brd2	0.381
Tppp3	7.06565E-82	2.57011017	0.211	0.025	2.1941E-77 KO	Tppp3	0.186
Mthfs	1.14124E-81	1.49443466	0.259	0.041	3.54389E-77 KO	Mthfs	0.218
Tagap1	1.31206E-81	2.48383127	0.194	0.02	4.07433E-77 KO	Tagap1	0.174
Vwa5a	3.54461E-81	1.54546881	0.515	0.17	1.10071E-76 KO	Vwa5a	0.345
Marcks	3.69995E-81	1.13679199	0.884	0.634	1.14894E-76 KO	Marcks	0.25
Gas7	6.25988E-81	1.67067927	0.355	0.083	1.94388E-76 KO	Gas7	0.272
Cyfip1	1.04452E-80	1.22579758	0.692	0.307	3.24354E-76 KO	Cyfip1	0.385
Ly9	1.05483E-80	1.54363601	0.418	0.114	3.27555E-76 KO	Ly9	0.304
Tmbim1	3.59009E-80	1.6163871	0.385	0.097	1.11483E-75 KO	Tmbim1	0.288
Ptger4	8.87433E-80	2.02164585	0.287	0.055	2.75574E-75 KO	Ptger4	0.232
Hivep2	9.81633E-80	1.74294167	0.308	0.064	3.04827E-75 KO	Hivep2	0.244
F10	1.34416E-79	1.41662857	0.441	0.127	4.17402E-75 KO	F10	0.314
Slfn8	2.48634E-79	1.72483167	0.263	0.045	7.72083E-75 KO	Slfn8	0.218
Mob1a	3.59974E-79	1.25655437	0.661	0.273	1.11783E-74 KO	Mob1a	0.388
Klrk1	4.01515E-79	2.81444062	0.183	0.018	1.24682E-74 KO	Klrk1	0.165
Mapkapk2	1.62646E-78	1.2731104	0.725	0.362	5.05064E-74 KO	Mapkapk2	0.363
Tapbpl	2.59556E-78	2.38008909	0.231	0.034	8.05999E-74 KO	Tapbpl	0.197
Pirb	3.30113E-78	1.10936359	0.685	0.298	1.0251E-73 KO	Pirb	0.387
Unc93b1	5.48194E-78	0.99257445	0.844	0.589	1.70231E-73 KO	Unc93b1	0.255
Csf3r	7.09623E-78	1.34041589	0.343	0.079	2.20359E-73 KO	Csf3r	0.264
H2-Q6	1.36021E-77	1.27650995	0.311	0.065	4.22385E-73 KO	H2-Q6	0.246
Soat1	1.58666E-77	1.23792647	0.644	0.273	4.92707E-73 KO	Soat1	0.371
Map2k3	2.40985E-77	1.51245202	0.498	0.164	7.48332E-73 KO	Map2k3	0.334
Tlr12	2.53005E-77	3.52277099	0.127	0.005	7.85656E-73 KO	Tlr12	0.122
Srxn1	2.68053E-77	2.30517559	0.316	0.072	8.32384E-73 KO	Srxn1	0.244
Neurl3	2.97856E-77	1.47331968	0.403	0.108	9.24933E-73 KO	Neurl3	0.295
Dnase1l3	3.60626E-77	3.19644306	0.127	0.005	1.11985E-72 KO	Dnase1l3	0.122
Samd4b	4.20144E-77	1.22740992	0.372	0.091	1.30467E-72 KO	Samd4b	0.281
Ptpre	5.95333E-77	1.30984592	0.533	0.187	1.84869E-72 KO	Ptpre	0.346
Skil	8.14919E-77	1.18418471	0.506	0.167	2.53057E-72 KO	Skil	0.339
mt-Nd3	1.27239E-76	1.35431526	0.813	0.456	3.95116E-72 KO	mt-Nd3	0.357
Diaph1	1.34377E-76	1.10092495	0.629	0.252	4.1728E-72 KO	Diaph1	0.377
Rock1	2.07282E-76	1.25245295	0.529	0.183	6.43672E-72 KO	Rock1	0.346
Cebpg	5.32746E-76	0.99523234	0.47	0.142	1.65434E-71 KO	Cebpg	0.328
Tbxas1	6.00038E-76	1.33157425	0.574	0.218	1.8633E-71 KO	Tbxas1	0.356
Il3ra	1.74158E-75	1.59703137	0.366	0.092	5.40811E-71 KO	Il3ra	0.274
B4galt5	2.21236E-75	1.27972023	0.378	0.098	6.87003E-71 KO	B4galt5	0.28
Rasa3	3.30344E-75	1.42584884	0.346	0.083	1.02582E-70 KO	Rasa3	0.263
Gm10036	5.01949E-75	2.30589825	0.226	0.034	1.5587E-70 KO	Gm10036	0.192
Gpr65	5.62623E-75	1.62751213	0.462	0.152	1.74711E-70 KO	Gpr65	0.31
Ctdsp2	1.21063E-74	1.31660993	0.47	0.147	3.75937E-70 KO	Ctdsp2	0.323
Cap1	2.13214E-74	1.16898333	0.68	0.308	6.62094E-70 KO	Cap1	0.372

Iqgap1	3.80306E-74	0.91968082	0.893	0.7	1.18096E-69	KO	Iqgap1	0.193
Rabgef1	3.92593E-74	1.46680761	0.332	0.077	1.21912E-69	KO	Rabgef1	0.255
Tgif1	4.13743E-74	1.2157473	0.478	0.154	1.2848E-69	KO	Tgif1	0.324
Rbpj	9.2527E-74	1.06972585	0.774	0.402	2.87324E-69	KO	Rbpj	0.372
Irgm2	1.17298E-73	2.34466764	0.184	0.021	3.64247E-69	KO	Irgm2	0.163
Arhgap9	1.31191E-73	1.43932658	0.455	0.142	4.07387E-69	KO	Arhgap9	0.313
Prkx	1.81358E-73	1.58032118	0.299	0.064	5.6317E-69	KO	Prkx	0.235
Crem	2.16412E-73	1.91752495	0.263	0.05	6.72023E-69	KO	Crem	0.213
Pltp	4.09967E-73	1.97725913	0.546	0.231	1.27307E-68	KO	Pltp	0.315
Gpd2	5.98986E-73	1.75495321	0.288	0.061	1.86003E-68	KO	Gpd2	0.227
Ncf1	7.76698E-73	1.29663277	0.549	0.203	2.41188E-68	KO	Ncf1	0.346
Ywhaz	1.21119E-72	1.11702161	0.793	0.435	3.76112E-68	KO	Ywhaz	0.358
Zbp1	1.37447E-72	1.25664193	0.549	0.206	4.26814E-68	KO	Zbp1	0.343
Cflar	1.91467E-72	1.21135705	0.613	0.253	5.94561E-68	KO	Cflar	0.36
Apobec3	2.02938E-72	1.61184258	0.422	0.129	6.30182E-68	KO	Apobec3	0.293
Bcl2a1d	3.33168E-72	1.50047446	0.537	0.215	1.03459E-67	KO	Bcl2a1d	0.322
Zfp703	1.00316E-71	1.49801681	0.457	0.152	3.11512E-67	KO	Zfp703	0.305
Slc30a1	1.23157E-71	1.62965032	0.355	0.094	3.82439E-67	KO	Slc30a1	0.261
Ubash3b	1.76696E-71	1.43427942	0.403	0.117	5.48696E-67	KO	Ubash3b	0.286
Fam102b	2.0718E-71	1.37678269	0.372	0.101	6.43356E-67	KO	Fam102b	0.271
Rin2	2.16298E-71	1.2139551	0.478	0.161	6.7167E-67	KO	Rin2	0.317
Arl5c	2.28897E-71	1.89343402	0.239	0.041	7.10795E-67	KO	Arl5c	0.198
Arhgef3	2.35252E-71	1.75801438	0.28	0.058	7.30527E-67	KO	Arhgef3	0.222
Trim25	3.11977E-71	1.28252003	0.586	0.229	9.68781E-67	KO	Trim25	0.357
Icam1	3.37303E-71	1.88838186	0.39	0.113	1.04743E-66	KO	Icam1	0.277
Entpd1	3.84384E-71	1.26058933	0.497	0.173	1.19363E-66	KO	Entpd1	0.324
Dtx3l	4.65285E-71	1.57370444	0.31	0.071	1.44485E-66	KO	Dtx3l	0.239
Fam107b	4.91617E-71	1.38505404	0.417	0.125	1.52662E-66	KO	Fam107b	0.292
Trafd1	5.27063E-71	1.07884582	0.619	0.258	1.63669E-66	KO	Trafd1	0.361
Cdkn1a	6.72563E-71	1.29187765	0.81	0.53	2.08851E-66	KO	Cdkn1a	0.28
Pdcd6ip	6.87699E-71	1.113394	0.682	0.311	2.13551E-66	KO	Pdcd6ip	0.371
Ensa	8.41279E-71	1.06281086	0.434	0.129	2.61242E-66	KO	Ensa	0.305
Socs1	1.5671E-70	2.31490056	0.2	0.028	4.86632E-66	KO	Socs1	0.172
Itgal	1.58856E-70	1.89154247	0.258	0.05	4.93295E-66	KO	Itgal	0.208
Mafb	1.81374E-70	1.39773124	0.832	0.64	5.6322E-66	KO	Mafb	0.192
Ubl3	2.00333E-70	1.10111003	0.69	0.327	6.22094E-66	KO	Ubl3	0.363
Tlr2	2.18355E-70	1.79501478	0.395	0.119	6.78059E-66	KO	Tlr2	0.276
Psmb9	2.64462E-70	1.17510953	0.722	0.398	8.21233E-66	KO	Psmb9	0.324
Aph1c	3.51536E-70	1.41403263	0.379	0.107	1.09162E-65	KO	Aph1c	0.272
Sft2d2	4.23919E-70	1.80423648	0.272	0.056	1.3164E-65	KO	Sft2d2	0.216
Prrc2a	4.43317E-70	1.10024996	0.535	0.192	1.37663E-65	KO	Prrc2a	0.343
Fgr	1.26254E-69	1.51081218	0.33	0.081	3.92057E-65	KO	Fgr	0.249
Cd36	1.56997E-69	1.77135545	0.613	0.301	4.87523E-65	KO	Cd36	0.312
Ctsk	1.80158E-69	2.9158491	0.211	0.033	5.59443E-65	KO	Ctsk	0.178
Irf8	2.04798E-69	1.66751429	0.709	0.405	6.35958E-65	KO	Irf8	0.304
Trps1	6.22963E-69	1.51770989	0.43	0.136	1.93449E-64	KO	Trps1	0.294
Coq10b	7.51328E-69	1.3034569	0.355	0.095	2.3331E-64	KO	Coq10b	0.26
Areg	7.64986E-69	5.77908331	0.095	0.001	2.37551E-64	KO	Areg	0.094
Evl	9.45275E-69	1.25765702	0.566	0.235	2.93536E-64	KO	Evl	0.331
Ppp3ca	1.44433E-68	1.16943248	0.522	0.186	4.48508E-64	KO	Ppp3ca	0.336
Ak2	1.47508E-68	1.16335895	0.65	0.304	4.58057E-64	KO	Ak2	0.346
Zswim4	1.62549E-68	1.93263799	0.188	0.025	5.04764E-64	KO	Zswim4	0.163
Trf	2.49449E-68	1.57532849	0.446	0.151	7.74615E-64	KO	Trf	0.295
Gnpda1	2.7985E-68	1.22549772	0.409	0.124	8.69019E-64	KO	Gnpda1	0.285

Gpx1	3.63824E-68	0.95095227	0.913	0.795	1.12978E-63	KO	Gpx1	0.118
Ptpro	4.29373E-68	1.59163153	0.267	0.054	1.33333E-63	KO	Ptpro	0.213
Ccl7	5.51114E-68	2.00473639	0.7	0.436	1.71137E-63	KO	Ccl7	0.264
Srf	5.68391E-68	1.47375979	0.294	0.066	1.76503E-63	KO	Srf	0.228
Cd80	6.10593E-68	2.49656953	0.164	0.017	1.89607E-63	KO	Cd80	0.147
Arsb	1.01151E-67	2.58007861	0.198	0.029	3.14104E-63	KO	Arsb	0.169
Was	1.3997E-67	1.49879056	0.331	0.084	4.34648E-63	KO	Was	0.247
Abcg1	1.96203E-67	1.2537903	0.519	0.198	6.0927E-63	KO	Abcg1	0.321
Ccl5	2.45533E-67	1.07782489	0.274	0.059	7.62453E-63	KO	Ccl5	0.215
Dck	3.22115E-67	1.82863485	0.363	0.104	1.00026E-62	KO	Dck	0.259
Dusp16	3.7376E-67	1.85686175	0.218	0.036	1.16064E-62	KO	Dusp16	0.182
9930111J21Ri	3.75608E-67	1.88357941	0.2	0.03	1.16638E-62	KO	9930111J21F	0.17
Ppp1r9b	1.5332E-66	1.20994995	0.421	0.131	4.76104E-62	KO	Ppp1r9b	0.29
Themis2	2.31917E-66	1.4512829	0.327	0.084	7.20173E-62	KO	Themis2	0.243
Slfn5	2.92535E-66	1.22136802	0.423	0.134	9.0841E-62	KO	Slfn5	0.289
Plau	3.9031E-66	1.73427862	0.379	0.116	1.21203E-61	KO	Plau	0.263
Il7r	3.99467E-66	1.19002407	0.403	0.126	1.24046E-61	KO	Il7r	0.277
Dram1	4.11388E-66	1.81356148	0.299	0.072	1.27748E-61	KO	Dram1	0.227
Gbp8	4.52315E-66	2.19788865	0.24	0.047	1.40457E-61	KO	Gbp8	0.193
Hspa8	4.83758E-66	0.76115868	0.932	0.853	1.50221E-61	KO	Hspa8	0.079
Lbh	5.23772E-66	1.43124419	0.474	0.167	1.62647E-61	KO	Lbh	0.307
Dnajc3	7.40623E-66	1.0374657	0.534	0.202	2.29986E-61	KO	Dnajc3	0.332
Agtrap	8.24926E-66	1.57930625	0.394	0.12	2.56164E-61	KO	Agtrap	0.274
Txnrd1	1.30316E-65	1.59737026	0.451	0.158	4.04671E-61	KO	Txnrd1	0.293
Hnrnpa2b1	1.40441E-65	1.04873093	0.834	0.516	4.3611E-61	KO	Hnrnpa2b1	0.318
AB124611	1.76977E-65	1.14970712	0.577	0.245	5.49566E-61	KO	AB124611	0.332
Scpep1	2.36323E-65	1.14184036	0.555	0.218	7.33855E-61	KO	Scpep1	0.337
Plxnc1	2.67474E-65	1.86381819	0.24	0.046	8.30588E-61	KO	Plxnc1	0.194
Plekhm1	3.55329E-65	1.73616691	0.243	0.047	1.1034E-60	KO	Plekhm1	0.196
Arid5a	3.57673E-65	1.42450447	0.286	0.066	1.11068E-60	KO	Arid5a	0.22
Gbp6	4.6723E-65	2.2699957	0.155	0.016	1.45089E-60	KO	Gbp6	0.139
Trim30a	6.10013E-65	1.39113375	0.421	0.135	1.89427E-60	KO	Trim30a	0.286
Oasl2	6.19854E-65	1.08174889	0.364	0.102	1.92483E-60	KO	Oasl2	0.262
Gpcpd1	8.50631E-65	1.29452933	0.399	0.123	2.64146E-60	KO	Gpcpd1	0.276
Atp6v0d2	8.86237E-65	2.32635925	0.276	0.067	2.75203E-60	KO	Atp6v0d2	0.209
Etv6	1.12129E-64	1.43379697	0.323	0.084	3.48195E-60	KO	Etv6	0.239
Galnt7	1.90916E-64	1.43186559	0.397	0.123	5.92853E-60	KO	Galnt7	0.274
Runx1	2.27379E-64	1.14558217	0.582	0.242	7.06081E-60	KO	Runx1	0.34
Prr5l	2.29743E-64	2.05040087	0.159	0.017	7.1342E-60	KO	Prr5l	0.142
Tmem176a	2.56698E-64	2.14809564	0.298	0.077	7.97125E-60	KO	Tmem176a	0.221
Atf3	2.8151E-64	0.96193272	0.77	0.428	8.74174E-60	KO	Atf3	0.342
H2-M3	3.40137E-64	1.07514557	0.486	0.171	1.05623E-59	KO	H2-M3	0.315
Csf2rb2	3.96417E-64	1.0557333	0.358	0.098	1.23099E-59	KO	Csf2rb2	0.26
Ctsb	4.46485E-64	0.9307781	0.967	0.937	1.38647E-59	KO	Ctsb	0.03
Mycbp2	4.65883E-64	1.28435747	0.486	0.177	1.44671E-59	KO	Mycbp2	0.309
Sp100	9.4344E-64	1.21510209	0.474	0.168	2.92966E-59	KO	Sp100	0.306
Tmsb10	1.12017E-63	1.03277425	0.933	0.938	3.47847E-59	KO	Tmsb10	-0.005
Cytip	1.87817E-63	1.59229643	0.461	0.168	5.83227E-59	KO	Cytip	0.293
Arap1	2.24979E-63	1.04980488	0.551	0.216	6.98626E-59	KO	Arap1	0.335
Irf2	2.53078E-63	1.01187254	0.477	0.167	7.85884E-59	KO	Irf2	0.31
St3gal4	3.20639E-63	1.61296202	0.262	0.057	9.9568E-59	KO	St3gal4	0.205
BC017643	3.61736E-63	1.33679736	0.318	0.081	1.1233E-58	KO	BC017643	0.237
Smap2	3.67362E-63	1.08017422	0.527	0.202	1.14077E-58	KO	Smap2	0.325
Specc1l	3.74973E-63	1.2478035	0.302	0.073	1.1644E-58	KO	Specc1l	0.229

Atf6	5.84333E-63	1.08708525	0.407	0.125	1.81453E-58	KO	Atf6	0.282
Smpdl3a	6.27285E-63	1.16835689	0.63	0.311	1.94791E-58	KO	Smpdl3a	0.319
Lamp1	9.42093E-63	0.74696974	0.905	0.796	2.92548E-58	KO	Lamp1	0.109
Bst1	2.30762E-62	1.13560994	0.379	0.113	7.16586E-58	KO	Bst1	0.266
Anxa4	2.94883E-62	1.18686169	0.678	0.356	9.15701E-58	KO	Anxa4	0.322
Tab2	4.33366E-62	1.10618745	0.535	0.205	1.34573E-57	KO	Tab2	0.33
Sppl2a	6.44518E-62	1.09558373	0.585	0.245	2.00142E-57	KO	Sppl2a	0.34
Ly6e	9.06952E-62	1.2256429	0.782	0.571	2.81636E-57	KO	Ly6e	0.211
Dhrs9	1.71733E-61	2.14809959	0.144	0.014	5.33282E-57	KO	Dhrs9	0.13
Snap23	1.72601E-61	1.03347002	0.501	0.18	5.35977E-57	KO	Snap23	0.321
Arhgap15	1.79091E-61	1.37449908	0.379	0.117	5.56131E-57	KO	Arhgap15	0.262
Gpalpp1	2.30545E-61	1.52757858	0.288	0.07	7.15912E-57	KO	Gpalpp1	0.218
Crybg1	2.9869E-61	1.57778513	0.298	0.076	9.27522E-57	KO	Crybg1	0.222
Mir155hg	3.05715E-61	3.41082584	0.088	0.001	9.49337E-57	KO	Mir155hg	0.087
Rassf4	3.47716E-61	1.29423563	0.534	0.22	1.07976E-56	KO	Rassf4	0.314
Tgm2	5.42249E-61	1.45309646	0.609	0.312	1.68385E-56	KO	Tgm2	0.297
Pigt	5.70376E-61	1.17377235	0.521	0.205	1.77119E-56	KO	Pigt	0.316
Arid4a	7.41562E-61	1.20408748	0.307	0.079	2.30277E-56	KO	Arid4a	0.228
Nlrc5	7.65939E-61	1.35021965	0.272	0.063	2.37847E-56	KO	Nlrc5	0.209
Fam174a	1.07074E-60	1.1209046	0.567	0.237	3.32497E-56	KO	Fam174a	0.33
Zcchc6	1.13522E-60	1.02916355	0.493	0.177	3.5252E-56	KO	Zcchc6	0.316
Sec24b	1.37147E-60	1.30655051	0.34	0.095	4.25882E-56	KO	Sec24b	0.245
Tns3	1.42251E-60	1.12605345	0.478	0.176	4.41732E-56	KO	Tns3	0.302
Tarm1	2.3858E-60	1.89153226	0.232	0.047	7.40863E-56	KO	Tarm1	0.185
Lsp1	3.35263E-60	1.17278171	0.53	0.215	1.04109E-55	KO	Lsp1	0.315
Cmklr1	3.51824E-60	1.27986851	0.377	0.115	1.09252E-55	KO	Cmklr1	0.262
Hivep1	3.53027E-60	1.6367581	0.264	0.061	1.09625E-55	KO	Hivep1	0.203
Irs2	5.50809E-60	1.23144584	0.308	0.082	1.71043E-55	KO	Irs2	0.226
Ezr	7.28874E-60	1.22256334	0.537	0.214	2.26337E-55	KO	Ezr	0.323
Rassf3	8.55414E-60	1.37493096	0.402	0.132	2.65632E-55	KO	Rassf3	0.27
Ogfr	8.64607E-60	1.16390308	0.391	0.12	2.68486E-55	KO	Ogfr	0.271
Ptpn6	1.37496E-59	1.10486878	0.673	0.347	4.26965E-55	KO	Ptpn6	0.326
AC160336.1	1.67834E-59	1.29234275	0.549	0.235	5.21174E-55	KO	AC160336.1	0.314
Cd86	1.71197E-59	1.06407195	0.431	0.147	5.31618E-55	KO	Cd86	0.284
Slc29a3	2.53638E-59	1.11965261	0.454	0.162	7.87623E-55	KO	Slc29a3	0.292
Pla2g7	2.8926E-59	1.14120149	0.672	0.359	8.98238E-55	KO	Pla2g7	0.313
Wars	3.98404E-59	1.53794762	0.33	0.095	1.23716E-54	KO	Wars	0.235
Rnf114	4.46885E-59	1.10516466	0.389	0.122	1.38771E-54	KO	Rnf114	0.267
Tob1	7.06912E-59	1.81621483	0.211	0.039	2.19517E-54	KO	Tob1	0.172
Ogdh	9.0636E-59	1.05702958	0.495	0.186	2.81452E-54	KO	Ogdh	0.309
Tnfsf9	1.00073E-58	2.71349209	0.227	0.048	3.10758E-54	KO	Tnfsf9	0.179
Il12rb1	1.08056E-58	2.1873197	0.159	0.02	3.35546E-54	KO	Il12rb1	0.139
Pbxip1	1.10158E-58	1.59660496	0.226	0.045	3.42075E-54	KO	Pbxip1	0.181
Ifih1	1.46019E-58	1.44385557	0.316	0.089	4.53432E-54	KO	Ifih1	0.227
Mia3	1.82194E-58	1.23717213	0.393	0.125	5.65768E-54	KO	Mia3	0.268
Irf9	2.07219E-58	1.31939382	0.31	0.083	6.43478E-54	KO	Irf9	0.227
Tmem176b	3.11774E-58	2.08115001	0.35	0.117	9.68153E-54	KO	Tmem176b	0.233
Edn1	3.58471E-58	3.56212701	0.154	0.02	1.11316E-53	KO	Edn1	0.134
Oxct1	3.65631E-58	0.97283235	0.64	0.311	1.13539E-53	KO	Oxct1	0.329
Ier3ip1	4.64212E-58	0.97409116	0.652	0.303	1.44152E-53	KO	Ier3ip1	0.349
Mat2a	6.92365E-58	1.00957361	0.47	0.174	2.15E-53	KO	Mat2a	0.296
Atp6v1e1	7.50957E-58	1.05681987	0.778	0.472	2.33195E-53	KO	Atp6v1e1	0.306
Rock2	7.9377E-58	0.93479984	0.474	0.172	2.46489E-53	KO	Rock2	0.302
Gm14085	1.1769E-57	3.23932407	0.076	0	3.65464E-53	KO	Gm14085	0.076

Irf7	1.31151E-57	0.93468832	0.506	0.198	4.07263E-53	KO	Irf7	0.308
Sestd1	1.32748E-57	1.14463459	0.291	0.074	4.12224E-53	KO	Sestd1	0.217
Parp9	1.39289E-57	1.33667405	0.29	0.074	4.32533E-53	KO	Parp9	0.216
Pip4k2a	1.68969E-57	1.29529787	0.461	0.17	5.24699E-53	KO	Pip4k2a	0.291
Kat6a	2.30688E-57	1.49968311	0.228	0.047	7.16356E-53	KO	Kat6a	0.181
Tmem173	2.42139E-57	1.24175433	0.331	0.096	7.51915E-53	KO	Tmem173	0.235
Rsad2	2.98111E-57	1.29032704	0.445	0.17	9.25723E-53	KO	Rsad2	0.275
Hmga1b	3.11127E-57	2.48345749	0.083	0.001	9.66143E-53	KO	Hmga1b	0.082
Kdm7a	3.35374E-57	1.10746802	0.485	0.183	1.04144E-52	KO	Kdm7a	0.302
Trim12c	3.61992E-57	2.20632644	0.194	0.034	1.12409E-52	KO	Trim12c	0.16
Larp1	4.20937E-57	1.06712229	0.501	0.196	1.30714E-52	KO	Larp1	0.305
Asap1	4.31422E-57	1.29432543	0.328	0.094	1.33969E-52	KO	Asap1	0.234
Slc11a1	5.74497E-57	1.15685525	0.632	0.317	1.78399E-52	KO	Slc11a1	0.315
Nrg1	6.78662E-57	3.48287838	0.099	0.005	2.10745E-52	KO	Nrg1	0.094
Abl2	8.57302E-57	1.28820092	0.366	0.118	2.66218E-52	KO	Abl2	0.248
Ppp2r5a	1.0527E-56	0.98139035	0.498	0.189	3.26895E-52	KO	Ppp2r5a	0.309
Ccr1	1.12192E-56	0.97907364	0.642	0.306	3.4839E-52	KO	Ccr1	0.336
Ramp1	1.23743E-56	1.31122854	0.302	0.081	3.8426E-52	KO	Ramp1	0.221
Hexa	1.5742E-56	0.92960278	0.8	0.587	4.88836E-52	KO	Hexa	0.213
2610507B11R	1.73873E-56	1.16239571	0.395	0.133	5.39929E-52	KO	2610507B11	0.262
Grk2	1.91898E-56	0.98454185	0.694	0.342	5.95901E-52	KO	Grk2	0.352
Vegfa	2.69985E-56	1.14914805	0.389	0.13	8.38383E-52	KO	Vegfa	0.259
Kpna4	3.39504E-56	1.03822837	0.453	0.166	1.05426E-51	KO	Kpna4	0.287
Mdm2	3.72212E-56	0.84869636	0.526	0.206	1.15583E-51	KO	Mdm2	0.32
Rela	3.83595E-56	1.17001562	0.378	0.121	1.19118E-51	KO	Rela	0.257
Phlpp1	4.00487E-56	1.86133899	0.182	0.03	1.24363E-51	KO	Phlpp1	0.152
Irak2	4.12122E-56	1.19025185	0.302	0.081	1.27976E-51	KO	Irak2	0.221
Aig1	4.3294E-56	1.13146544	0.332	0.097	1.34441E-51	KO	Aig1	0.235
Tmem51	5.24273E-56	1.18843899	0.256	0.06	1.62802E-51	KO	Tmem51	0.196
Dusp3	6.19436E-56	0.93980101	0.517	0.207	1.92354E-51	KO	Dusp3	0.31
Filip1l	6.53868E-56	1.58636555	0.24	0.054	2.03046E-51	KO	Filip1l	0.186
Tnrc18	6.65176E-56	1.03722934	0.298	0.079	2.06557E-51	KO	Tnrc18	0.219
BC028528	6.90125E-56	1.10676867	0.402	0.136	2.14304E-51	KO	BC028528	0.266
Midn	7.95913E-56	1.24121448	0.332	0.098	2.47155E-51	KO	Midn	0.234
Cd300ld	8.74486E-56	1.54395682	0.312	0.089	2.71554E-51	KO	Cd300ld	0.223
Mitf	9.61078E-56	1.20919934	0.331	0.097	2.98443E-51	KO	Mitf	0.234
Tmed5	1.27446E-55	1.04800252	0.553	0.232	3.95759E-51	KO	Tmed5	0.321
Fbxw11	1.42444E-55	1.18787355	0.334	0.099	4.42332E-51	KO	Fbxw11	0.235
Sidt2	1.4876E-55	1.06161536	0.381	0.122	4.61945E-51	KO	Sidt2	0.259
Tle3	1.85412E-55	1.30748418	0.397	0.135	5.75761E-51	KO	Tle3	0.262
Atp6v1b2	2.22761E-55	0.90726985	0.75	0.445	6.91741E-51	KO	Atp6v1b2	0.305
Ptpra	2.66936E-55	1.06071285	0.501	0.196	8.28918E-51	KO	Ptpra	0.305
Nampt	2.91798E-55	1.0726616	0.746	0.445	9.06119E-51	KO	Nampt	0.301
Sod1	3.11837E-55	1.09220938	0.615	0.282	9.68348E-51	KO	Sod1	0.333
Tmem30a	3.37809E-55	1.14238832	0.523	0.209	1.049E-50	KO	Tmem30a	0.314
Ifngr2	3.66185E-55	1.08381162	0.414	0.142	1.13712E-50	KO	Ifngr2	0.272
Stap1	3.90289E-55	1.94025006	0.218	0.046	1.21196E-50	KO	Stap1	0.172
Fam49a	4.82487E-55	1.49786306	0.324	0.095	1.49827E-50	KO	Fam49a	0.229
Cd274	4.83205E-55	0.98191867	0.526	0.22	1.5005E-50	KO	Cd274	0.306
Ifngr1	5.23117E-55	1.03874954	0.586	0.258	1.62444E-50	KO	Ifngr1	0.328
Lcp2	7.85986E-55	1.07139214	0.586	0.267	2.44072E-50	KO	Lcp2	0.319
Ccl3	8.58553E-55	1.5346002	0.539	0.25	2.66607E-50	KO	Ccl3	0.289
Ddx6	1.05969E-54	0.9300045	0.575	0.248	3.29065E-50	KO	Ddx6	0.327
Usp16	1.07259E-54	1.33597993	0.303	0.084	3.33072E-50	KO	Usp16	0.219

Rpl23a	1.13455E-54	0.75640666	0.896	0.71	3.52311E-50	KO	Rpl23a	0.186
Cmtm3	1.36626E-54	0.99534562	0.45	0.165	4.24266E-50	KO	Cmtm3	0.285
Gm2a	1.67577E-54	0.92244955	0.772	0.54	5.20377E-50	KO	Gm2a	0.232
Pcmtd1	1.71211E-54	1.27941777	0.33	0.098	5.31662E-50	KO	Pcmtd1	0.232
Zfp608	1.87883E-54	2.1037051	0.136	0.015	5.83434E-50	KO	Zfp608	0.121
Dazap2	2.14054E-54	0.88647491	0.86	0.589	6.64703E-50	KO	Dazap2	0.271
Itgb2	3.01401E-54	0.92045728	0.681	0.359	9.3594E-50	KO	Itgb2	0.322
Evi2a	3.20352E-54	1.11054305	0.519	0.214	9.94789E-50	KO	Evi2a	0.305
Aplp2	3.2602E-54	1.19821901	0.577	0.271	1.01239E-49	KO	Aplp2	0.306
Dock8	3.6861E-54	1.46862993	0.274	0.071	1.14465E-49	KO	Dock8	0.203
Cxcl16	4.13464E-54	1.20606321	0.726	0.508	1.28393E-49	KO	Cxcl16	0.218
Cdc42se2	4.53584E-54	0.98400118	0.486	0.186	1.40851E-49	KO	Cdc42se2	0.3
Cfb	5.10754E-54	1.99784314	0.144	0.018	1.58604E-49	KO	Cfb	0.126
M6pr	7.5313E-54	0.93844936	0.724	0.402	2.3387E-49	KO	M6pr	0.322
Myo9b	9.0877E-54	0.88781202	0.49	0.19	2.822E-49	KO	Myo9b	0.3
Srpr	1.14063E-53	1.12200352	0.354	0.111	3.54199E-49	KO	Srpr	0.243
Hspa1b	1.18237E-53	1.83521642	0.419	0.16	3.6716E-49	KO	Hspa1b	0.259
Syk	1.38671E-53	0.83400567	0.615	0.271	4.30616E-49	KO	Syk	0.344
H2-Q4	1.44031E-53	0.93009892	0.409	0.142	4.4726E-49	KO	H2-Q4	0.267
Tbc1d9	1.45943E-53	1.04330809	0.286	0.076	4.53196E-49	KO	Tbc1d9	0.21
Clint1	1.58703E-53	1.07745853	0.458	0.172	4.92821E-49	KO	Clint1	0.286
Zdhhc9	1.76519E-53	1.19711495	0.252	0.061	5.48145E-49	KO	Zdhhc9	0.191
Spty2d1	1.97567E-53	0.99022982	0.3	0.083	6.13506E-49	KO	Spty2d1	0.217
Ear2	2.58244E-53	4.09734369	0.131	0.015	8.01925E-49	KO	Ear2	0.116
Hspa1a	4.13577E-53	1.42849324	0.514	0.223	1.28428E-48	KO	Hspa1a	0.291
Eloa	4.5519E-53	1.19704907	0.308	0.087	1.4135E-48	KO	Eloa	0.221
Nup98	5.68267E-53	1.17326759	0.342	0.107	1.76464E-48	KO	Nup98	0.235
Zfp263	7.8167E-53	1.37422135	0.262	0.067	2.42732E-48	KO	Zfp263	0.195
Map3k1	8.06009E-53	1.0436481	0.403	0.139	2.5029E-48	KO	Map3k1	0.264
Arfgef1	1.0618E-52	0.87199638	0.382	0.126	3.2972E-48	KO	Arfgef1	0.256
Chd1	1.38677E-52	0.97793119	0.262	0.066	4.30634E-48	KO	Chd1	0.196
Mindy1	1.5252E-52	1.227662	0.368	0.123	4.7362E-48	KO	Mindy1	0.245
Fuca1	1.62983E-52	0.90454353	0.701	0.404	5.0611E-48	KO	Fuca1	0.297
Usp12	1.65829E-52	0.99887047	0.244	0.058	5.1495E-48	KO	Usp12	0.186
D17Wsu92e	1.95871E-52	0.96969851	0.511	0.206	6.08239E-48	KO	D17Wsu92e	0.305
Mthfsl	2.90259E-52	1.00184047	0.292	0.08	9.01341E-48	KO	Mthfsl	0.212
Pira2	3.02735E-52	1.17635884	0.31	0.091	9.40085E-48	KO	Pira2	0.219
Lfng	5.85965E-52	1.74845993	0.288	0.083	1.8196E-47	KO	Lfng	0.205
Arf2	7.58978E-52	1.26404708	0.352	0.115	2.35686E-47	KO	Arf2	0.237
Vps4b	7.8572E-52	1.03526187	0.461	0.175	2.4399E-47	KO	Vps4b	0.286
P2rx4	9.96498E-52	0.91531639	0.561	0.253	3.09442E-47	KO	P2rx4	0.308
Stag2	1.02286E-51	1.00355321	0.389	0.131	3.17629E-47	KO	Stag2	0.258
Taok3	1.04744E-51	0.95138326	0.455	0.173	3.25262E-47	KO	Taok3	0.282
Ndufa1	1.1286E-51	0.88977968	0.708	0.43	3.50465E-47	KO	Ndufa1	0.278
Itpkb	1.16836E-51	0.9785656	0.538	0.232	3.62811E-47	KO	Itpkb	0.306
Parp14	1.22211E-51	1.10340745	0.398	0.141	3.79501E-47	KO	Parp14	0.257
Nadk	1.35512E-51	1.06403816	0.394	0.137	4.20804E-47	KO	Nadk	0.257
Fyb	2.162E-51	1.0274699	0.717	0.415	6.71366E-47	KO	Fyb	0.302
Arid5b	2.46813E-51	0.78983221	0.368	0.12	7.66429E-47	KO	Arid5b	0.248
Oas3	2.46972E-51	1.35977913	0.198	0.039	7.66922E-47	KO	Oas3	0.159
Etf1	2.61905E-51	0.89548837	0.602	0.284	8.13293E-47	KO	Etf1	0.318
Serpine1	3.20439E-51	2.57586742	0.203	0.044	9.9506E-47	KO	Serpine1	0.159
Gbp9	4.79361E-51	1.24759895	0.208	0.044	1.48856E-46	KO	Gbp9	0.164
9030624J02Ri	4.94123E-51	1.00907491	0.403	0.142	1.5344E-46	KO	9030624J02F	0.261

Clcf1	5.1914E-51	2.79788325	0.111	0.01	1.61209E-46	KO	Clcf1	0.101
Notch2	5.22752E-51	1.01126846	0.323	0.099	1.6233E-46	KO	Notch2	0.224
Fem1c	7.44382E-51	0.80151128	0.397	0.139	2.31153E-46	KO	Fem1c	0.258
Cd300lb	7.81416E-51	1.13508278	0.242	0.058	2.42653E-46	KO	Cd300lb	0.184
Tnpo3	8.4126E-51	0.81403252	0.36	0.116	2.61237E-46	KO	Tnpo3	0.244
Plekhb2	8.66199E-51	1.0044714	0.483	0.194	2.68981E-46	KO	Plekhb2	0.289
Gab2	1.01691E-50	1.10031102	0.335	0.105	3.15781E-46	KO	Gab2	0.23
Chd4	1.53858E-50	0.94126755	0.557	0.248	4.77776E-46	KO	Chd4	0.309
Litaf	1.58878E-50	0.77915442	0.802	0.546	4.93363E-46	KO	Litaf	0.256
Enc1	1.65247E-50	2.64205785	0.097	0.006	5.13142E-46	KO	Enc1	0.091
Paf1	1.67963E-50	1.46628653	0.311	0.095	5.21576E-46	KO	Paf1	0.216
Arl5b	1.84666E-50	1.40587171	0.214	0.047	5.73444E-46	KO	Arl5b	0.167
Trpc4ap	1.86865E-50	0.81287805	0.437	0.16	5.80271E-46	KO	Trpc4ap	0.277
Hsp90b1	2.14853E-50	0.79586593	0.899	0.692	6.67182E-46	KO	Hsp90b1	0.207
Zfp36l1	2.40799E-50	1.21318784	0.688	0.411	7.47752E-46	KO	Zfp36l1	0.277
Camk1d	3.61562E-50	1.14110972	0.304	0.091	1.12276E-45	KO	Camk1d	0.213
Anxa7	4.54001E-50	0.88548159	0.479	0.189	1.40981E-45	KO	Anxa7	0.29
Ezh1	6.38622E-50	1.39396258	0.204	0.043	1.98311E-45	KO	Ezh1	0.161
Rp2	7.27674E-50	1.39036459	0.314	0.098	2.25965E-45	KO	Rp2	0.216
Lap3	9.08214E-50	1.29712511	0.497	0.222	2.82028E-45	KO	Lap3	0.275
Bloc1s1	9.59495E-50	0.84845797	0.248	0.061	2.97952E-45	KO	Bloc1s1	0.187
Dock2	1.16168E-49	0.8347661	0.539	0.229	3.60736E-45	KO	Dock2	0.31
Crtc2	1.26225E-49	1.1304125	0.191	0.038	3.91968E-45	KO	Crtc2	0.153
Ighm	1.30486E-49	1.8649668	0.232	0.059	4.05199E-45	KO	Ighm	0.173
P2ry10b	1.354E-49	1.80738668	0.195	0.04	4.20457E-45	KO	P2ry10b	0.155
Rab8b	1.70049E-49	0.91765032	0.698	0.374	5.28052E-45	KO	Rab8b	0.324
Cep350	1.70446E-49	1.18522193	0.283	0.08	5.29287E-45	KO	Cep350	0.203
Ik	2.35183E-49	0.81077958	0.513	0.21	7.30313E-45	KO	Ik	0.303
Dusp18	2.38529E-49	2.66878614	0.091	0.005	7.40704E-45	KO	Dusp18	0.086
Grcc10	2.55016E-49	0.92026218	0.302	0.087	7.91902E-45	KO	Grcc10	0.215
Ralb	2.73473E-49	0.80442609	0.499	0.204	8.49216E-45	KO	Ralb	0.295
Ctdsp1	2.79338E-49	1.22045728	0.28	0.078	8.67427E-45	KO	Ctdsp1	0.202
Stx4a	2.85698E-49	0.82521909	0.622	0.296	8.87179E-45	KO	Stx4a	0.326
Zc3hav1	2.94012E-49	0.98528659	0.439	0.168	9.12996E-45	KO	Zc3hav1	0.271
Tifab	3.17651E-49	1.25187589	0.266	0.072	9.86401E-45	KO	Tifab	0.194
Cdk11b	3.41822E-49	1.16041422	0.414	0.151	1.06146E-44	KO	Cdk11b	0.263
Adgrg5	3.78775E-49	3.02524765	0.073	0.002	1.17621E-44	KO	Adgrg5	0.071
Capn1	3.99199E-49	0.9640166	0.347	0.113	1.23963E-44	KO	Capn1	0.234
Ugcg	5.30325E-49	0.95502227	0.366	0.126	1.64682E-44	KO	Ugcg	0.24
Lrch4	5.47642E-49	1.87305995	0.146	0.021	1.70059E-44	KO	Lrch4	0.125
Sdf2	5.53691E-49	1.01046443	0.379	0.131	1.71938E-44	KO	Sdf2	0.248
Anxa6	5.8437E-49	0.89972421	0.413	0.15	1.81464E-44	KO	Anxa6	0.263
AU020206	6.13723E-49	1.00236423	0.383	0.137	1.90579E-44	KO	AU020206	0.246
Ptpn1	7.50536E-49	0.95878233	0.681	0.377	2.33064E-44	KO	Ptpn1	0.304
Hpse	7.93993E-49	0.89981224	0.359	0.12	2.46559E-44	KO	Hpse	0.239
Jarid2	9.14687E-49	0.86217691	0.43	0.16	2.84038E-44	KO	Jarid2	0.27
Ddhd1	9.40571E-49	1.20178615	0.358	0.122	2.92076E-44	KO	Ddhd1	0.236
Rbms1	1.062E-48	0.78621869	0.772	0.478	3.29783E-44	KO	Rbms1	0.294
Zcchc2	1.13456E-48	0.88167505	0.258	0.067	3.52315E-44	KO	Zcchc2	0.191
Mcur1	1.1553E-48	1.16262671	0.375	0.129	3.58756E-44	KO	Mcur1	0.246
Flrt3	1.42944E-48	4.19643432	0.08	0.003	4.43883E-44	KO	Flrt3	0.077
Dse	1.45786E-48	1.17970561	0.401	0.151	4.52709E-44	KO	Dse	0.25
Myof	1.58163E-48	0.93230696	0.491	0.213	4.91145E-44	KO	Myof	0.278
Tmem106a	1.59691E-48	0.89886465	0.662	0.355	4.95889E-44	KO	Tmem106a	0.307

Gene							Gene	
Bcl2l11	1.68319E-48	1.1371878	0.406	0.152	5.22681E-44	KO	Bcl2l11	0.254
Prrc2c	2.00173E-48	0.81934667	0.558	0.246	6.21598E-44	KO	Prrc2c	0.312
Pea15a	2.16479E-48	0.99634945	0.406	0.147	6.72233E-44	KO	Pea15a	0.259
Gch1	2.26022E-48	0.95271277	0.331	0.106	7.01866E-44	KO	Gch1	0.225
Macf1	2.38539E-48	0.88864307	0.473	0.189	7.40734E-44	KO	Macf1	0.284
Dnmt3a	2.46694E-48	1.24095207	0.371	0.133	7.66059E-44	KO	Dnmt3a	0.238
Arih2	2.53282E-48	0.87611046	0.332	0.105	7.86518E-44	KO	Arih2	0.227
Xbp1	3.23158E-48	0.99572681	0.602	0.292	1.0035E-43	KO	Xbp1	0.31
Ptp4a2	4.07594E-48	0.79879557	0.81	0.535	1.2657E-43	KO	Ptp4a2	0.275
Rcbtb2	6.51864E-48	0.99129857	0.446	0.178	2.02423E-43	KO	Rcbtb2	0.268
Tpr	7.17533E-48	0.85772863	0.609	0.292	2.22815E-43	KO	Tpr	0.317
Hexb	7.56234E-48	1.25457649	0.677	0.412	2.34833E-43	KO	Hexb	0.265
Mmp14	8.2193E-48	1.17559645	0.473	0.203	2.55234E-43	KO	Mmp14	0.27
Cpq	8.81988E-48	1.15950653	0.263	0.072	2.73884E-43	KO	Cpq	0.191
Slco3a1	1.01092E-47	1.95189525	0.195	0.042	3.1392E-43	KO	Slco3a1	0.153
Ncoa7	1.06838E-47	1.57807308	0.232	0.059	3.31765E-43	KO	Ncoa7	0.173
Tfe3	1.10851E-47	1.00577117	0.352	0.119	3.44225E-43	KO	Tfe3	0.233
Crebbp	1.18209E-47	0.84733394	0.344	0.113	3.67073E-43	KO	Crebbp	0.231
Tspan13	1.27727E-47	1.31738301	0.192	0.04	3.9663E-43	KO	Tspan13	0.152
Hopx	1.48492E-47	1.2329806	0.178	0.034	4.61113E-43	KO	Hopx	0.144
Tnfsf12	1.58553E-47	0.91387121	0.442	0.173	4.92353E-43	KO	Tnfsf12	0.269
Aff1	2.03882E-47	0.78583421	0.315	0.098	6.33114E-43	KO	Aff1	0.217
Rasa4	2.57341E-47	0.7841064	0.494	0.199	7.9912E-43	KO	Rasa4	0.295
Spop	2.99355E-47	0.97230439	0.538	0.236	9.29586E-43	KO	Spop	0.302
Pla2g15	3.99897E-47	1.08759194	0.366	0.132	1.2418E-42	KO	Pla2g15	0.234
Tep1	4.90806E-47	0.98338687	0.47	0.192	1.5241E-42	KO	Tep1	0.278
Tpm3	5.07822E-47	0.77319819	0.801	0.537	1.57694E-42	KO	Tpm3	0.264
Daxx	5.37187E-47	1.10970724	0.238	0.061	1.66813E-42	KO	Daxx	0.177
Jak1	5.48681E-47	0.81423897	0.55	0.246	1.70382E-42	KO	Jak1	0.304
Bcl2a1a	5.77577E-47	1.40136942	0.363	0.136	1.79355E-42	KO	Bcl2a1a	0.227
Lmo4	6.07919E-47	1.60191457	0.395	0.153	1.88777E-42	KO	Lmo4	0.242
Man1a	8.04659E-47	1.20488814	0.39	0.146	2.49871E-42	KO	Man1a	0.244
Trp53inp2	8.23418E-47	0.96394419	0.232	0.058	2.55696E-42	KO	Trp53inp2	0.174
Zfp384	8.35866E-47	1.43058487	0.19	0.04	2.59561E-42	KO	Zfp384	0.15
Gm21188	1.00376E-46	0.92904972	0.383	0.137	3.11699E-42	KO	Gm21188	0.246
Snx20	1.0437E-46	1.01516398	0.429	0.169	3.24101E-42	KO	Snx20	0.26
Dhrs3	1.09363E-46	1.01651916	0.566	0.273	3.39604E-42	KO	Dhrs3	0.293
Ttyh3	1.11395E-46	0.78397245	0.409	0.15	3.45914E-42	KO	Ttyh3	0.259
Cerk	1.2086E-46	0.86465305	0.497	0.211	3.75308E-42	KO	Cerk	0.286
Rnasel	1.25921E-46	1.2941018	0.303	0.097	3.91023E-42	KO	Rnasel	0.206
Ttc7	1.30582E-46	0.96977097	0.334	0.109	4.05496E-42	KO	Ttc7	0.225
Prr13	1.4362E-46	0.97515954	0.59	0.287	4.45984E-42	KO	Prr13	0.303
Arl13b	2.25418E-46	1.49661572	0.155	0.027	6.99989E-42	KO	Arl13b	0.128
Epsti1	2.5752E-46	0.95743059	0.502	0.216	7.99678E-42	KO	Epsti1	0.286
Fgd4	2.64335E-46	1.02627077	0.356	0.124	8.20839E-42	KO	Fgd4	0.232
Hnrnph2	2.68072E-46	0.89737067	0.525	0.23	8.32445E-42	KO	Hnrnph2	0.295
Dgat1	3.15887E-46	1.7023047	0.234	0.061	9.80925E-42	KO	Dgat1	0.173
Znfx1	3.93447E-46	1.08775969	0.271	0.078	1.22177E-41	KO	Znfx1	0.193
Lst1	4.43233E-46	1.10968307	0.7	0.457	1.37637E-41	KO	Lst1	0.243
Sik1	4.48221E-46	0.98914709	0.334	0.111	1.39186E-41	KO	Sik1	0.223
Igf1	8.14551E-46	1.63306449	0.393	0.167	2.52943E-41	KO	Igf1	0.226
Tmem184b	8.49949E-46	1.09403108	0.202	0.045	2.63935E-41	KO	Tmem184b	0.157
Cyp4v3	8.5969E-46	1.11896887	0.247	0.066	2.6696E-41	KO	Cyp4v3	0.181
Furin	9.6856E-46	1.08135515	0.686	0.39	3.00767E-41	KO	Furin	0.296

Gene	p_val	avg_logFC	pct.1	pct.2	p_val_adj	cluster	Gene	value
Lamp2	1.04094E-45	0.75707558	0.809	0.545	3.23242E-41	KO	Lamp2	0.264
Gpr171	1.11759E-45	2.23397106	0.13	0.018	3.47046E-41	KO	Gpr171	0.112
Ripk2	1.11892E-45	1.24020263	0.18	0.037	3.47459E-41	KO	Ripk2	0.143
Azin1	1.16515E-45	0.78446391	0.561	0.26	3.61813E-41	KO	Azin1	0.301
BC005537	1.46069E-45	0.84049627	0.884	0.629	4.53587E-41	KO	BC005537	0.255
Atp1a1	2.94923E-45	0.854648	0.784	0.469	9.15824E-41	KO	Atp1a1	0.315
Slc28a2	3.02252E-45	1.01406552	0.266	0.077	9.38584E-41	KO	Slc28a2	0.189
Cd180	3.0697E-45	1.05390536	0.411	0.164	9.53235E-41	KO	Cd180	0.247
Parp8	3.42759E-45	1.77817837	0.194	0.043	1.06437E-40	KO	Parp8	0.151
Bcl10	3.60364E-45	0.91262519	0.401	0.151	1.11904E-40	KO	Bcl10	0.25
Synj1	3.65979E-45	1.07040658	0.426	0.168	1.13647E-40	KO	Synj1	0.258
Vdr	3.76904E-45	1.83933923	0.131	0.019	1.1704E-40	KO	Vdr	0.112
Parp11	4.03325E-45	1.5109991	0.142	0.022	1.25244E-40	KO	Parp11	0.12
AL590144.2	4.61817E-45	2.19091219	0.104	0.01	1.43408E-40	KO	AL590144.2	0.094
Slc35b2	5.61161E-45	1.27170378	0.328	0.111	1.74257E-40	KO	Slc35b2	0.217
Gm4951	7.65056E-45	1.90521748	0.18	0.038	2.37573E-40	KO	Gm4951	0.142
Itgax	7.95002E-45	1.48867868	0.27	0.083	2.46872E-40	KO	Itgax	0.187
Bnip2	8.8537E-45	0.95798011	0.526	0.236	2.74934E-40	KO	Bnip2	0.29
Gsdmd	9.10806E-45	0.79448477	0.338	0.113	2.82833E-40	KO	Gsdmd	0.225
Ms4a8a	1.27744E-44	1.44811978	0.196	0.045	3.96683E-40	KO	Ms4a8a	0.151
Sord	1.311E-44	1.25288433	0.188	0.041	4.07104E-40	KO	Sord	0.147
Scarf1	1.47887E-44	1.21750332	0.18	0.038	4.59233E-40	KO	Scarf1	0.142
Relb	1.53618E-44	1.32930848	0.183	0.039	4.7703E-40	KO	Relb	0.144
Atxn7l3b	1.59515E-44	0.74320972	0.463	0.186	4.95343E-40	KO	Atxn7l3b	0.277
Hacd4	1.67407E-44	0.95195659	0.415	0.165	5.1985E-40	KO	Hacd4	0.25
Ikbke	1.67842E-44	0.95760572	0.28	0.085	5.21198E-40	KO	Ikbke	0.195
Iqgap2	1.84437E-44	1.24699867	0.307	0.102	5.72734E-40	KO	Iqgap2	0.205
Dync1h1	2.32742E-44	0.72852815	0.566	0.256	7.22732E-40	KO	Dync1h1	0.31
Cebpa	2.53869E-44	0.97780672	0.466	0.2	7.8834E-40	KO	Cebpa	0.266
Notch1	3.05298E-44	1.07713793	0.252	0.071	9.48041E-40	KO	Notch1	0.181
Fam129a	3.25579E-44	1.45912928	0.216	0.055	1.01102E-39	KO	Fam129a	0.161
Peli1	3.27617E-44	0.78188903	0.421	0.166	1.01735E-39	KO	Peli1	0.255
Ccl2	3.72754E-44	1.38175101	0.765	0.58	1.15751E-39	KO	Ccl2	0.185
Cd209d	4.30145E-44	5.35306008	0.061	0.001	1.33573E-39	KO	Cd209d	0.06
Tor1aip1	4.66458E-44	0.74141851	0.561	0.256	1.44849E-39	KO	Tor1aip1	0.305
Sf1	4.92775E-44	0.85922635	0.577	0.267	1.53021E-39	KO	Sf1	0.31
Tollip	5.34903E-44	0.80049643	0.346	0.12	1.66103E-39	KO	Tollip	0.226
Adap1	5.94695E-44	1.07987515	0.282	0.086	1.84671E-39	KO	Adap1	0.196
Leng8	6.4196E-44	0.85063624	0.314	0.102	1.99348E-39	KO	Leng8	0.212
Ccnl1	6.50939E-44	0.75133709	0.685	0.361	2.02136E-39	KO	Ccnl1	0.324
Mgat1	7.34739E-44	0.90247908	0.425	0.17	2.28159E-39	KO	Mgat1	0.255
Khdrbs1	7.92426E-44	0.96338028	0.529	0.241	2.46072E-39	KO	Khdrbs1	0.288
Rnf130	8.70654E-44	0.80263952	0.682	0.384	2.70364E-39	KO	Rnf130	0.298
Supt5	1.08375E-43	1.00597853	0.421	0.166	3.36536E-39	KO	Supt5	0.255
Aagab	1.22008E-43	1.16822152	0.224	0.058	3.78871E-39	KO	Aagab	0.166
F7	1.68162E-43	1.18545025	0.279	0.088	5.22195E-39	KO	F7	0.191
Stra6l	2.01091E-43	1.33198204	0.092	0.008	6.24448E-39	KO	Stra6l	0.084
Pnpla7	2.04157E-43	0.89202534	0.276	0.083	6.3397E-39	KO	Pnpla7	0.193
Atp1a3	2.27077E-43	1.04291126	0.199	0.047	7.05142E-39	KO	Atp1a3	0.152
Usp8	2.52108E-43	0.92503769	0.415	0.162	7.82871E-39	KO	Usp8	0.253
Ptprj	2.60041E-43	0.90535725	0.513	0.229	8.07506E-39	KO	Ptprj	0.284
Lpl	2.61907E-43	1.25484682	0.662	0.41	8.133E-39	KO	Lpl	0.252
B3gnt5	3.23964E-43	2.54684912	0.104	0.011	1.006E-38	KO	B3gnt5	0.093
Alas1	3.2868E-43	1.26754644	0.331	0.117	1.02065E-38	KO	Alas1	0.214

Lair1	3.89474E-43	1.05509464	0.601	0.339	1.20943E-38	KO	Lair1	0.262
Cyp27a1	3.97534E-43	1.81136893	0.151	0.027	1.23446E-38	KO	Cyp27a1	0.124
Cdc5l	4.24478E-43	0.92673925	0.343	0.12	1.31813E-38	KO	Cdc5l	0.223
Nipbl	4.41651E-43	0.8118802	0.427	0.169	1.37146E-38	KO	Nipbl	0.258
Itsn2	4.44183E-43	0.73571647	0.423	0.166	1.37932E-38	KO	Itsn2	0.257
Atp6v1c1	5.23295E-43	0.8134135	0.554	0.26	1.62499E-38	KO	Atp6v1c1	0.294
Arg1	6.71758E-43	1.76420164	0.539	0.303	2.08601E-38	KO	Arg1	0.236
Ctdnep1	6.87989E-43	0.79867095	0.502	0.217	2.13641E-38	KO	Ctdnep1	0.285
Ehd4	7.18195E-43	0.92658448	0.623	0.34	2.23021E-38	KO	Ehd4	0.283
Akt2	7.83331E-43	0.87203129	0.314	0.103	2.43248E-38	KO	Akt2	0.211
Gpr183	7.916E-43	1.69276241	0.186	0.042	2.45816E-38	KO	Gpr183	0.144
Prdm2	8.38129E-43	1.40321504	0.174	0.036	2.60264E-38	KO	Prdm2	0.138
Ints12	9.21238E-43	1.04616915	0.21	0.052	2.86072E-38	KO	Ints12	0.158
Tdrd7	1.00859E-42	1.39677103	0.187	0.042	3.13199E-38	KO	Tdrd7	0.145
Pak2	1.033E-42	0.82673551	0.614	0.309	3.20778E-38	KO	Pak2	0.305
Tmem88	1.29213E-42	2.04731717	0.1	0.01	4.01246E-38	KO	Tmem88	0.09
Mapkapk3	1.30129E-42	1.21696482	0.22	0.058	4.04089E-38	KO	Mapkapk3	0.162
Tcp11l2	1.35755E-42	1.2544014	0.194	0.045	4.21559E-38	KO	Tcp11l2	0.149
Nfam1	1.3658E-42	1.06359266	0.331	0.115	4.24122E-38	KO	Nfam1	0.216
Gls	1.37349E-42	1.03349502	0.537	0.248	4.2651E-38	KO	Gls	0.289
Tor3a	1.45079E-42	1.02180552	0.296	0.096	4.50515E-38	KO	Tor3a	0.2
Rasgrp4	1.47837E-42	1.47331459	0.151	0.028	4.59079E-38	KO	Rasgrp4	0.123
Med13l	1.72339E-42	0.86875644	0.331	0.114	5.35166E-38	KO	Med13l	0.217
Trim30d	1.8211E-42	1.48849636	0.183	0.041	5.65505E-38	KO	Trim30d	0.142
Rufy3	2.06889E-42	0.83909235	0.374	0.137	6.42453E-38	KO	Rufy3	0.237
Ppp1r18	2.09742E-42	0.89033899	0.599	0.298	6.51312E-38	KO	Ppp1r18	0.301
Clec4a3	2.42361E-42	0.86540623	0.672	0.384	7.52603E-38	KO	Clec4a3	0.288
Atxn2	2.52477E-42	1.21312441	0.255	0.075	7.84016E-38	KO	Atxn2	0.18
Cdc42ep2	2.95142E-42	1.67366253	0.147	0.027	9.16503E-38	KO	Cdc42ep2	0.12
9530068E07R	2.98228E-42	0.89220316	0.493	0.215	9.26088E-38	KO	9530068E07	0.278
Mgrn1	3.09269E-42	0.77113616	0.429	0.172	9.60371E-38	KO	Mgrn1	0.257
Nfya	3.36517E-42	1.19334469	0.218	0.057	1.04499E-37	KO	Nfya	0.161
Hivep3	3.61066E-42	1.43479687	0.195	0.047	1.12122E-37	KO	Hivep3	0.148
Nr1h3	3.74457E-42	1.47583772	0.26	0.08	1.1628E-37	KO	Nr1h3	0.18
Arsa	3.84598E-42	1.20829498	0.152	0.028	1.19429E-37	KO	Arsa	0.124
Irf5	4.42699E-42	0.72816956	0.593	0.286	1.37471E-37	KO	Irf5	0.307
Mia2	5.20661E-42	0.84633355	0.45	0.187	1.61681E-37	KO	Mia2	0.263
Usp25	5.29795E-42	0.77242915	0.415	0.165	1.64517E-37	KO	Usp25	0.25
Ubn1	7.01934E-42	1.00628538	0.346	0.123	2.17971E-37	KO	Ubn1	0.223
Arhgef10l	8.81986E-42	1.32821672	0.19	0.045	2.73883E-37	KO	Arhgef10l	0.145
Adora2a	9.56633E-42	2.88051319	0.076	0.004	2.97063E-37	KO	Adora2a	0.072
Gltp	1.41458E-41	0.897146	0.696	0.392	4.39268E-37	KO	Gltp	0.304
Amz1	1.68082E-41	0.86241541	0.187	0.043	5.21944E-37	KO	Amz1	0.144
Ccnt1	1.71027E-41	0.73974209	0.308	0.103	5.3109E-37	KO	Ccnt1	0.205
Fam234a	1.75164E-41	0.84428834	0.291	0.094	5.43936E-37	KO	Fam234a	0.197
Tmem164	1.77352E-41	1.05348345	0.284	0.09	5.50732E-37	KO	Tmem164	0.194
Sh2d2a	1.93754E-41	2.92481113	0.084	0.006	6.01666E-37	KO	Sh2d2a	0.078
Eif2ak2	2.38784E-41	1.14475045	0.196	0.048	7.41497E-37	KO	Eif2ak2	0.148
Ube2r2	2.40741E-41	0.79888027	0.426	0.171	7.47573E-37	KO	Ube2r2	0.255
Plac8	2.75404E-41	1.31292309	0.417	0.182	8.55211E-37	KO	Plac8	0.235
Asph	2.7969E-41	0.77738473	0.483	0.211	8.68522E-37	KO	Asph	0.272
Krt80	2.85186E-41	1.78691592	0.124	0.019	8.85589E-37	KO	Krt80	0.105
Psme2	2.86195E-41	0.83379649	0.742	0.509	8.8872E-37	KO	Psme2	0.233
Hcls1	2.8792E-41	0.83849872	0.653	0.35	8.94079E-37	KO	Hcls1	0.303

Abca9	3.29967E-41	2.22900785	0.124	0.019	1.02465E-36	KO	Abca9	0.105
Fam20c	5.90042E-41	0.82146584	0.3	0.101	1.83226E-36	KO	Fam20c	0.199
Rbbp8	7.40432E-41	1.1006944	0.235	0.066	2.29926E-36	KO	Rbbp8	0.169
Ubd	7.91408E-41	4.06895073	0.059	0.001	2.45756E-36	KO	Ubd	0.058
Sgpl1	8.77624E-41	0.71670554	0.645	0.35	2.72529E-36	KO	Sgpl1	0.295
Rapgef6	9.02787E-41	0.91911256	0.27	0.084	2.80343E-36	KO	Rapgef6	0.186
Katna1	1.00815E-40	1.01600902	0.291	0.095	3.13062E-36	KO	Katna1	0.196
Xaf1	1.27446E-40	0.710053	0.29	0.094	3.95757E-36	KO	Xaf1	0.196
Usp19	1.42254E-40	0.98292366	0.3	0.1	4.41742E-36	KO	Usp19	0.2
Apaf1	1.44933E-40	0.90884291	0.248	0.073	4.50059E-36	KO	Apaf1	0.175
Ufsp2	1.5046E-40	0.78842834	0.316	0.108	4.67222E-36	KO	Ufsp2	0.208
Mtmr14	1.54067E-40	1.43244638	0.195	0.048	4.78425E-36	KO	Mtmr14	0.147
Sh3bp1	2.56829E-40	0.91635466	0.347	0.127	7.97531E-36	KO	Sh3bp1	0.22
Rnf13	2.58712E-40	0.83798456	0.489	0.217	8.03378E-36	KO	Rnf13	0.272
Tank	2.60326E-40	0.84704917	0.33	0.118	8.08389E-36	KO	Tank	0.212
Adar	2.72945E-40	0.97720802	0.231	0.064	8.47575E-36	KO	Adar	0.167
Rnf149	2.77503E-40	0.949517	0.745	0.497	8.61729E-36	KO	Rnf149	0.248
Pfkp	2.8002E-40	0.79873756	0.583	0.292	8.69545E-36	KO	Pfkp	0.291
Syvn1	3.20306E-40	1.27414567	0.198	0.049	9.94646E-36	KO	Syvn1	0.149
Sec62	3.26828E-40	0.76990863	0.522	0.24	1.0149E-35	KO	Sec62	0.282
Glg1	3.54601E-40	0.73095453	0.434	0.18	1.10114E-35	KO	Glg1	0.254
Gem	3.85524E-40	2.19638196	0.092	0.009	1.19717E-35	KO	Gem	0.083
Cdipt	4.82262E-40	0.98101002	0.386	0.153	1.49757E-35	KO	Cdipt	0.233
Neat1	5.77499E-40	0.82237459	0.854	0.594	1.79331E-35	KO	Neat1	0.26
Akr1a1	5.83429E-40	0.7423895	0.84	0.71	1.81172E-35	KO	Akr1a1	0.13
Edem1	6.4667E-40	0.82079747	0.622	0.324	2.0081E-35	KO	Edem1	0.298
Clec2d	6.89062E-40	0.95073738	0.526	0.255	2.13974E-35	KO	Clec2d	0.271
Zc3h12c	6.9178E-40	1.55203987	0.128	0.021	2.14818E-35	KO	Zc3h12c	0.107
Rap1gds1	7.10959E-40	0.90128826	0.339	0.123	2.20774E-35	KO	Rap1gds1	0.216
Aebp2	8.64558E-40	0.88301841	0.347	0.13	2.68471E-35	KO	Aebp2	0.217
Vrk3	1.01572E-39	1.04533506	0.254	0.077	3.15411E-35	KO	Vrk3	0.177
Chtf8	1.0967E-39	1.05235967	0.243	0.073	3.40559E-35	KO	Chtf8	0.17
Cdc42ep4	1.14863E-39	1.07432035	0.18	0.042	3.56683E-35	KO	Cdc42ep4	0.138
Plod3	1.15377E-39	0.81960291	0.294	0.097	3.58282E-35	KO	Plod3	0.197
Ankrd12	1.27865E-39	0.88177391	0.315	0.111	3.97059E-35	KO	Ankrd12	0.204
Ehd1	1.3327E-39	0.97485784	0.623	0.343	4.13844E-35	KO	Ehd1	0.28
Nrp1	1.33817E-39	0.82372997	0.466	0.21	4.15541E-35	KO	Nrp1	0.256
Homer1	1.48171E-39	1.54423162	0.168	0.037	4.60116E-35	KO	Homer1	0.131
Kat2b	1.64756E-39	1.31387316	0.231	0.067	5.11615E-35	KO	Kat2b	0.164
Usp7	1.73728E-39	0.76098859	0.398	0.157	5.39477E-35	KO	Usp7	0.241
Man2b2	1.99695E-39	1.32000978	0.184	0.044	6.20113E-35	KO	Man2b2	0.14
Herc6	2.03805E-39	0.99002901	0.194	0.048	6.32876E-35	KO	Herc6	0.146
Gsap	2.28771E-39	0.90420553	0.24	0.071	7.10403E-35	KO	Gsap	0.169
Rasgrp1	2.37445E-39	2.0524071	0.103	0.013	7.37337E-35	KO	Rasgrp1	0.09
Atxn7	2.40919E-39	1.03394048	0.216	0.059	7.48125E-35	KO	Atxn7	0.157
Ero1lb	2.49505E-39	1.3800882	0.174	0.039	7.74788E-35	KO	Ero1lb	0.135
Rgcc	2.83362E-39	1.36709227	0.367	0.155	8.79924E-35	KO	Rgcc	0.212
Snx9	3.04049E-39	0.90767258	0.346	0.128	9.44163E-35	KO	Snx9	0.218
Baz1a	3.29761E-39	0.76703425	0.389	0.152	1.02401E-34	KO	Baz1a	0.237
Stat5b	3.35328E-39	1.08121267	0.232	0.067	1.04129E-34	KO	Stat5b	0.165
Map4k1	3.91326E-39	1.39917161	0.166	0.036	1.21518E-34	KO	Map4k1	0.13
Arhgap18	5.0314E-39	0.99798465	0.324	0.117	1.5624E-34	KO	Arhgap18	0.207
Rc3h1	5.91626E-39	0.94911792	0.278	0.09	1.83718E-34	KO	Rc3h1	0.188
Adam17	6.49045E-39	0.70216168	0.51	0.232	2.01548E-34	KO	Adam17	0.278

Gene	p-value	log2FC	pct.1	pct.2	adj. p-value	Group	Gene	value
H2-T24	6.49251E-39	2.08990901	0.093	0.01	2.01612E-34	KO	H2-T24	0.083
Aftph	7.47168E-39	0.95028655	0.335	0.123	2.32018E-34	KO	Aftph	0.212
Fam114a2	7.63103E-39	0.99718221	0.246	0.075	2.36966E-34	KO	Fam114a2	0.171
Lipa	8.07375E-39	0.9171328	0.534	0.274	2.50714E-34	KO	Lipa	0.26
Ddx3x	8.58837E-39	0.79435609	0.64	0.339	2.66695E-34	KO	Ddx3x	0.301
BC037034	9.21066E-39	0.98923121	0.199	0.051	2.86019E-34	KO	BC037034	0.148
AI467606	9.2171E-39	1.73359737	0.14	0.027	2.86219E-34	KO	AI467606	0.113
Pros1	1.02199E-38	1.53660615	0.21	0.058	3.1736E-34	KO	Pros1	0.152
Itpr1	1.04855E-38	1.49184987	0.152	0.031	3.25608E-34	KO	Itpr1	0.121
Tlr4	1.09154E-38	1.04739994	0.274	0.089	3.38955E-34	KO	Tlr4	0.185
Jak2	1.19227E-38	1.2046103	0.278	0.092	3.70237E-34	KO	Jak2	0.186
Mpp1	1.21076E-38	0.77545881	0.579	0.294	3.75977E-34	KO	Mpp1	0.285
Cass4	1.21554E-38	2.55867952	0.085	0.008	3.77461E-34	KO	Cass4	0.077
Rabep1	1.22473E-38	0.9993387	0.266	0.085	3.80314E-34	KO	Rabep1	0.181
Tcirg1	1.35665E-38	0.71190044	0.706	0.415	4.21279E-34	KO	Tcirg1	0.291
Sgk3	1.39483E-38	1.03986248	0.288	0.098	4.33138E-34	KO	Sgk3	0.19
Sqor	1.41055E-38	1.1000786	0.247	0.076	4.38018E-34	KO	Sqor	0.171
Wac	1.51113E-38	0.74153708	0.395	0.157	4.6925E-34	KO	Wac	0.238
Sept9	1.63915E-38	0.70309031	0.571	0.277	5.09006E-34	KO	Sept9	0.294
Phf11b	1.665E-38	0.91330846	0.306	0.108	5.17032E-34	KO	Phf11b	0.198
Glipr1	1.80635E-38	0.97442278	0.34	0.13	5.60926E-34	KO	Glipr1	0.21
Gm15056	1.96499E-38	4.23737203	0.059	0.002	6.10189E-34	KO	Gm15056	0.057
Tpst1	2.17361E-38	1.53335229	0.159	0.034	6.74971E-34	KO	Tpst1	0.125
Rhbdf2	2.2632E-38	0.87156751	0.338	0.125	7.0279E-34	KO	Rhbdf2	0.213
Nod1	2.31078E-38	0.94622832	0.15	0.03	7.17565E-34	KO	Nod1	0.12
Tmem127	2.42065E-38	1.01173766	0.232	0.068	7.51685E-34	KO	Tmem127	0.164
Acp2	2.4241E-38	0.79345546	0.399	0.162	7.52755E-34	KO	Acp2	0.237
Rap2c	2.71979E-38	0.77255901	0.338	0.127	8.44578E-34	KO	Rap2c	0.211
Bscl2	3.39118E-38	0.830971	0.433	0.183	1.05306E-33	KO	Bscl2	0.25
Flt1	3.41828E-38	0.75504725	0.214	0.059	1.06148E-33	KO	Flt1	0.155
Slc25a25	4.69132E-38	1.20173127	0.167	0.038	1.4568E-33	KO	Slc25a25	0.129
Ppfia4	5.12397E-38	1.21160582	0.162	0.036	1.59115E-33	KO	Ppfia4	0.126
Inhba	5.15643E-38	2.26665347	0.136	0.026	1.60123E-33	KO	Inhba	0.11
Tmf1	5.5365E-38	0.94132403	0.268	0.088	1.71925E-33	KO	Tmf1	0.18
Pianp	5.99657E-38	1.57603021	0.146	0.03	1.86212E-33	KO	Pianp	0.116
Lrrc8d	6.22287E-38	0.85683367	0.294	0.101	1.93239E-33	KO	Lrrc8d	0.193
Strn3	6.41144E-38	0.80796032	0.346	0.13	1.99094E-33	KO	Strn3	0.216
Arhgap10	6.74585E-38	0.94164223	0.36	0.143	2.09479E-33	KO	Arhgap10	0.217
Ece1	7.5418E-38	1.58485148	0.16	0.035	2.34196E-33	KO	Ece1	0.125
Sbds	7.73249E-38	0.87170083	0.324	0.118	2.40117E-33	KO	Sbds	0.206
Polr2m	7.84548E-38	0.88572497	0.307	0.108	2.43626E-33	KO	Polr2m	0.199
Pepd	8.1386E-38	1.03795422	0.398	0.165	2.52728E-33	KO	Pepd	0.233
Mmp13	8.70531E-38	1.35569959	0.19	0.05	2.70326E-33	KO	Mmp13	0.14
Dgkd	9.01403E-38	1.07834552	0.239	0.073	2.79913E-33	KO	Dgkd	0.166
Bet1	9.15708E-38	0.76024779	0.34	0.126	2.84355E-33	KO	Bet1	0.214
Ap3d1	1.13907E-37	0.84254634	0.314	0.113	3.53714E-33	KO	Ap3d1	0.201
Acsl4	1.15195E-37	0.9559343	0.367	0.145	3.57715E-33	KO	Acsl4	0.222
Odc1	1.42333E-37	1.02589358	0.557	0.292	4.41987E-33	KO	Odc1	0.265
Rabgap1l	1.52973E-37	1.5412171	0.135	0.025	4.75028E-33	KO	Rabgap1l	0.11
Ftl1-ps1	1.60583E-37	0.8445884	0.399	0.163	4.98658E-33	KO	Ftl1-ps1	0.236
Gm48065	2.07307E-37	1.96700312	0.104	0.014	6.43751E-33	KO	Gm48065	0.09
Ptger2	2.55116E-37	1.63701314	0.131	0.024	7.92211E-33	KO	Ptger2	0.107
Dennd1b	3.20121E-37	0.71770819	0.342	0.128	9.94072E-33	KO	Dennd1b	0.214
Ccdc88b	3.36905E-37	0.84639178	0.248	0.077	1.04619E-32	KO	Ccdc88b	0.171

Gstm1	3.89743E-37	1.38821928	0.284	0.102	1.21027E-32	KO	Gstm1	0.182
Cand1	4.43734E-37	1.11076643	0.266	0.089	1.37793E-32	KO	Cand1	0.177
Tbl1xr1	4.52286E-37	1.00954875	0.327	0.122	1.40448E-32	KO	Tbl1xr1	0.205
Slk	5.63641E-37	0.86123867	0.431	0.188	1.75027E-32	KO	Slk	0.243
Ing4	6.36153E-37	0.88032873	0.203	0.055	1.97545E-32	KO	Ing4	0.148
Otud5	7.33263E-37	0.81855688	0.29	0.101	2.277E-32	KO	Otud5	0.189
Nrip1	9.09262E-37	1.04792322	0.303	0.11	2.82353E-32	KO	Nrip1	0.193
Myd88	9.27679E-37	0.92589246	0.311	0.114	2.88072E-32	KO	Myd88	0.197
Gm5547	1.19057E-36	2.12313477	0.097	0.012	3.69707E-32	KO	Gm5547	0.085
Itpkc	1.21586E-36	1.85394244	0.124	0.022	3.77561E-32	KO	Itpkc	0.102
Gns	1.52872E-36	0.72256931	0.736	0.491	4.74713E-32	KO	Gns	0.245
Dbnl	1.7014E-36	0.73424804	0.513	0.242	5.28336E-32	KO	Dbnl	0.271
Cd209a	1.73112E-36	4.49954193	0.049	0	5.37566E-32	KO	Cd209a	0.049
Plpp3	1.89528E-36	1.64645074	0.123	0.021	5.88541E-32	KO	Plpp3	0.102
Dnaaf3	1.97152E-36	1.86531624	0.072	0.005	6.12217E-32	KO	Dnaaf3	0.067
Sdhd	2.24213E-36	0.71669284	0.519	0.248	6.96249E-32	KO	Sdhd	0.271
Ssr3	2.4951E-36	0.71678095	0.694	0.393	7.74804E-32	KO	Ssr3	0.301
Fbxo32	2.55558E-36	2.23547537	0.112	0.018	7.93585E-32	KO	Fbxo32	0.094
Psmd2	2.6196E-36	0.82597875	0.587	0.299	8.13463E-32	KO	Psmd2	0.288
St3gal1	2.72911E-36	0.96330182	0.224	0.066	8.47471E-32	KO	St3gal1	0.158
Pex6	3.21243E-36	1.19808403	0.176	0.044	9.97555E-32	KO	Pex6	0.132
Mtmr10	3.36361E-36	0.78413349	0.231	0.07	1.0445E-31	KO	Mtmr10	0.161
Csf1	3.64425E-36	3.5015951	0.099	0.013	1.13165E-31	KO	Csf1	0.086
Zfp622	3.78055E-36	0.89505455	0.351	0.139	1.17397E-31	KO	Zfp622	0.212
Foxp1	5.5882E-36	0.72593463	0.537	0.269	1.7353E-31	KO	Foxp1	0.268
Slc31a1	5.98333E-36	0.73749291	0.469	0.217	1.858E-31	KO	Slc31a1	0.252
Sertad1	6.27014E-36	0.72491039	0.363	0.145	1.94707E-31	KO	Sertad1	0.218
Gfra2	6.3172E-36	3.51163263	0.052	0.001	1.96168E-31	KO	Gfra2	0.051
Olfm1	8.262E-36	1.41507778	0.274	0.099	2.5656E-31	KO	Olfm1	0.175
Add3	9.57179E-36	1.40355473	0.156	0.036	2.97233E-31	KO	Add3	0.12
Med12	1.15403E-35	1.0392332	0.192	0.052	3.5836E-31	KO	Med12	0.14
Mink1	1.17951E-35	0.90510461	0.222	0.067	3.66274E-31	KO	Mink1	0.155
Fam120a	1.2525E-35	0.94097103	0.491	0.232	3.88939E-31	KO	Fam120a	0.259
Cd2ap	1.29644E-35	1.05994887	0.34	0.135	4.02583E-31	KO	Cd2ap	0.205
Mbp	1.31487E-35	1.1138899	0.199	0.055	4.08307E-31	KO	Mbp	0.144
Ifi207	1.4176E-35	0.74498609	0.668	0.393	4.40208E-31	KO	Ifi207	0.275
AC149090.1	1.66565E-35	0.83500803	0.395	0.167	5.17235E-31	KO	AC149090.1	0.228
Fbrsl1	1.67254E-35	1.501669	0.158	0.037	5.19374E-31	KO	Fbrsl1	0.121
Cd93	1.81864E-35	0.87429767	0.642	0.414	5.64743E-31	KO	Cd93	0.228
Itpripl2	1.92639E-35	0.77981677	0.39	0.162	5.98202E-31	KO	Itpripl2	0.228
Exoc3l4	2.34531E-35	1.61305147	0.097	0.013	7.2829E-31	KO	Exoc3l4	0.084
Ric8a	2.36163E-35	0.73861037	0.288	0.102	7.33357E-31	KO	Ric8a	0.186
Cd22	2.53779E-35	1.22450752	0.152	0.034	7.88059E-31	KO	Cd22	0.118
Plcb2	2.78735E-35	1.0790277	0.143	0.03	8.65556E-31	KO	Plcb2	0.113
Tm6sf1	2.84355E-35	0.73818662	0.587	0.307	8.83007E-31	KO	Tm6sf1	0.28
Rab3d	2.85001E-35	0.83411866	0.214	0.063	8.85013E-31	KO	Rab3d	0.151
Zzef1	2.85696E-35	0.7275462	0.247	0.079	8.87173E-31	KO	Zzef1	0.168
Mbtd1	3.21611E-35	1.13037425	0.254	0.085	9.98698E-31	KO	Mbtd1	0.169
Abca1	3.50494E-35	0.90266387	0.545	0.289	1.08839E-30	KO	Abca1	0.256
Dennd5a	3.98689E-35	0.72406136	0.391	0.161	1.23805E-30	KO	Dennd5a	0.23
Ammecr1l	4.6472E-35	0.91491145	0.19	0.051	1.4431E-30	KO	Ammecr1l	0.139
Cnot6l	4.81767E-35	0.70560675	0.355	0.141	1.49603E-30	KO	Cnot6l	0.214
Serpinb8	5.1374E-35	1.55318605	0.176	0.046	1.59532E-30	KO	Serpinb8	0.13
Ikzf1	5.27395E-35	0.98823549	0.356	0.145	1.63772E-30	KO	Ikzf1	0.211

Eif4e3	6.32625E-35	0.97667408	0.247	0.081	1.96449E-30	KO	Eif4e3	0.166
Trim12a	6.33769E-35	0.97977703	0.182	0.048	1.96804E-30	KO	Trim12a	0.134
Fam20b	6.87815E-35	1.11611297	0.192	0.053	2.13587E-30	KO	Fam20b	0.139
Prex1	7.29842E-35	0.69955969	0.37	0.149	2.26638E-30	KO	Prex1	0.221
Tcea1	7.41601E-35	0.69415946	0.446	0.197	2.30289E-30	KO	Tcea1	0.249
1810030O07F	7.51978E-35	1.1631059	0.223	0.068	2.33512E-30	KO	1810030O07	0.155
Acer3	7.89609E-35	0.71738761	0.441	0.193	2.45197E-30	KO	Acer3	0.248
Hcst	8.42198E-35	0.72469813	0.43	0.191	2.61528E-30	KO	Hcst	0.239
Dirc2	1.00026E-34	0.73443022	0.204	0.058	3.10611E-30	KO	Dirc2	0.146
Gabarapl1	1.00263E-34	0.69936158	0.267	0.091	3.11346E-30	KO	Gabarapl1	0.176
Ptgs1	1.08303E-34	2.51489164	0.084	0.009	3.36314E-30	KO	Ptgs1	0.075
Pik3ca	1.11249E-34	0.88765029	0.202	0.058	3.45461E-30	KO	Pik3ca	0.144
Shtn1	1.18336E-34	1.19348551	0.34	0.138	3.6747E-30	KO	Shtn1	0.202
Klf13	1.24929E-34	0.70213776	0.579	0.307	3.8794E-30	KO	Klf13	0.272
Fam105a	1.26132E-34	0.70745846	0.368	0.152	3.91679E-30	KO	Fam105a	0.216
Erap1	1.28083E-34	0.82258427	0.295	0.107	3.97736E-30	KO	Erap1	0.188
Slc16a10	1.36958E-34	0.75569018	0.298	0.109	4.25297E-30	KO	Slc16a10	0.189
Kras	1.39173E-34	0.72261148	0.411	0.179	4.32175E-30	KO	Kras	0.232
Dapk1	1.41804E-34	1.4542556	0.16	0.039	4.40343E-30	KO	Dapk1	0.121
Dnajc14	1.46388E-34	1.02714734	0.215	0.064	4.54579E-30	KO	Dnajc14	0.151
Rapgef2	1.4801E-34	1.00908564	0.283	0.102	4.59616E-30	KO	Rapgef2	0.181
Rassf5	1.68861E-34	1.06079043	0.24	0.078	5.24364E-30	KO	Rassf5	0.162
Tmem50a	1.82299E-34	0.73737603	0.773	0.541	5.66093E-30	KO	Tmem50a	0.232
Fem1b	1.84536E-34	1.02823812	0.318	0.123	5.73039E-30	KO	Fem1b	0.195
Aff4	1.84858E-34	0.8477507	0.34	0.135	5.74041E-30	KO	Aff4	0.205
Nrp2	1.86957E-34	1.04638637	0.427	0.194	5.80556E-30	KO	Nrp2	0.233
Wdtc1	1.91846E-34	0.83295715	0.146	0.032	5.95739E-30	KO	Wdtc1	0.114
Il6st	2.0058E-34	0.94171772	0.236	0.076	6.22861E-30	KO	Il6st	0.16
Vmp1	2.27469E-34	0.78989146	0.68	0.395	7.06358E-30	KO	Vmp1	0.285
Ttc3	2.32583E-34	0.98366056	0.227	0.071	7.22241E-30	KO	Ttc3	0.156
Fbxw7	2.47395E-34	1.03510935	0.187	0.051	7.68236E-30	KO	Fbxw7	0.136
Cxcl9	2.89816E-34	2.03749382	0.441	0.242	8.99965E-30	KO	Cxcl9	0.199
Lag3	3.14918E-34	2.45645208	0.061	0.003	9.77914E-30	KO	Lag3	0.058
Fcho2	3.17886E-34	0.7026927	0.375	0.155	9.87131E-30	KO	Fcho2	0.22
Frat2	3.23437E-34	1.597108	0.105	0.017	1.00437E-29	KO	Frat2	0.088
Zfp516	3.24444E-34	1.0548084	0.231	0.074	1.0075E-29	KO	Zfp516	0.157
Lima1	3.32065E-34	1.19277726	0.262	0.091	1.03116E-29	KO	Lima1	0.171
Syngr2	3.48602E-34	0.90239154	0.591	0.314	1.08251E-29	KO	Syngr2	0.277
Fam168a	3.59577E-34	1.18956777	0.202	0.059	1.11659E-29	KO	Fam168a	0.143
Bin3	3.70035E-34	0.76737794	0.323	0.123	1.14907E-29	KO	Bin3	0.2
Ramp3	3.71664E-34	2.04591493	0.089	0.011	1.15413E-29	KO	Ramp3	0.078
Ppp1r12a	4.95079E-34	0.71773471	0.372	0.154	1.53737E-29	KO	Ppp1r12a	0.218
Mgst1	5.2646E-34	0.97545908	0.501	0.274	1.63482E-29	KO	Mgst1	0.227
Traf5	5.71556E-34	2.00457764	0.115	0.02	1.77485E-29	KO	Traf5	0.095
Il10	5.76101E-34	3.01772829	0.131	0.027	1.78897E-29	KO	Il10	0.104
Ccdc50	7.10798E-34	0.78417731	0.442	0.202	2.20724E-29	KO	Ccdc50	0.24
Srebf2	8.92937E-34	1.0541889	0.246	0.083	2.77284E-29	KO	Srebf2	0.163
Itpr2	9.5444E-34	1.4347935	0.162	0.04	2.96382E-29	KO	Itpr2	0.122
Fnbp1	1.13938E-33	0.91311284	0.407	0.181	3.53812E-29	KO	Fnbp1	0.226
Slc25a45	1.15035E-33	1.29691585	0.163	0.04	3.57218E-29	KO	Slc25a45	0.123
Ubr4	1.20183E-33	0.71554628	0.283	0.101	3.73206E-29	KO	Ubr4	0.182
Rps12-ps3	1.39435E-33	1.79958737	0.164	0.042	4.32987E-29	KO	Rps12-ps3	0.122
Dcstamp	1.53167E-33	3.55859989	0.045	0	4.75631E-29	KO	Dcstamp	0.045
Zfhx3	1.65229E-33	1.01857181	0.243	0.082	5.13086E-29	KO	Zfhx3	0.161

Ncoa3	1.84399E-33	0.74594593	0.354	0.144	5.72614E-29	KO	Ncoa3	0.21
Mllt10	2.01327E-33	1.1986444	0.226	0.071	6.25182E-29	KO	Mllt10	0.155
Lypla2	2.2784E-33	0.79737178	0.347	0.142	7.07511E-29	KO	Lypla2	0.205
Zmynd8	2.4744E-33	0.79149133	0.29	0.106	7.68377E-29	KO	Zmynd8	0.184
Il27	2.90928E-33	1.67393042	0.105	0.017	9.03418E-29	KO	Il27	0.088
Mertk	3.00856E-33	0.82056956	0.326	0.128	9.34247E-29	KO	Mertk	0.198
Lsr	3.31537E-33	0.9295516	0.135	0.028	1.02952E-28	KO	Lsr	0.107
Rnf6	3.39173E-33	0.75344214	0.242	0.08	1.05323E-28	KO	Rnf6	0.162
Btk	3.40747E-33	0.92340517	0.263	0.091	1.05812E-28	KO	Btk	0.172
Wfs1	3.49476E-33	2.08119476	0.095	0.014	1.08523E-28	KO	Wfs1	0.081
Smarca5	3.91241E-33	0.7561677	0.459	0.214	1.21492E-28	KO	Smarca5	0.245
Sik3	3.93849E-33	0.85484326	0.223	0.07	1.22302E-28	KO	Sik3	0.153
Rell1	4.09296E-33	1.05883294	0.258	0.09	1.27099E-28	KO	Rell1	0.168
Tnrc6b	4.85069E-33	0.9984073	0.256	0.089	1.50628E-28	KO	Tnrc6b	0.167
Colgalt1	5.05099E-33	0.89192033	0.487	0.242	1.56848E-28	KO	Colgalt1	0.245
Nab1	5.10109E-33	0.79954379	0.322	0.127	1.58404E-28	KO	Nab1	0.195
Rnf5	5.12941E-33	1.13230978	0.176	0.047	1.59283E-28	KO	Rnf5	0.129
Ago2	5.93855E-33	0.71927802	0.49	0.236	1.8441E-28	KO	Ago2	0.254
Ccl8	6.19102E-33	1.75145098	0.701	0.494	1.9225E-28	KO	Ccl8	0.207
P2ry14	6.67194E-33	0.95094755	0.256	0.09	2.07184E-28	KO	P2ry14	0.166
Zbtb21	8.15537E-33	1.20947315	0.15	0.035	2.53249E-28	KO	Zbtb21	0.115
Camkk2	1.03147E-32	1.24027238	0.226	0.074	3.20301E-28	KO	Camkk2	0.152
Lrmp	1.12857E-32	0.81941055	0.278	0.101	3.50456E-28	KO	Lrmp	0.177
Cpeb4	1.22683E-32	0.80711946	0.338	0.137	3.80969E-28	KO	Cpeb4	0.201
Arl5a	1.42597E-32	0.71262226	0.314	0.121	4.42806E-28	KO	Arl5a	0.193
Baz2a	1.57256E-32	0.74074756	0.256	0.089	4.88328E-28	KO	Baz2a	0.167
Far1	1.62682E-32	0.79045641	0.311	0.12	5.05177E-28	KO	Far1	0.191
Rras2	1.9153E-32	1.85085093	0.083	0.01	5.94757E-28	KO	Rras2	0.073
Helz2	2.01826E-32	1.19672169	0.126	0.025	6.26729E-28	KO	Helz2	0.101
Papss2	2.09129E-32	1.44675672	0.097	0.015	6.49409E-28	KO	Papss2	0.082
Ptgs2os2	2.2836E-32	1.72728719	0.075	0.008	7.09126E-28	KO	Ptgs2os2	0.067
Rara	2.35901E-32	0.88850832	0.288	0.108	7.32544E-28	KO	Rara	0.18
Pim3	2.54766E-32	0.82956915	0.272	0.1	7.91124E-28	KO	Pim3	0.172
Clasp2	2.78671E-32	0.80011195	0.267	0.095	8.65356E-28	KO	Clasp2	0.172
Frrs1	2.81489E-32	0.74738297	0.292	0.109	8.74108E-28	KO	Frrs1	0.183
Tmem229b	2.82595E-32	0.99972533	0.139	0.031	8.77542E-28	KO	Tmem229b	0.108
Ankrd11	2.93896E-32	0.87455135	0.459	0.218	9.12635E-28	KO	Ankrd11	0.241
Svil	2.99386E-32	0.93992847	0.203	0.062	9.29683E-28	KO	Svil	0.141
Enox2	3.02541E-32	1.39594778	0.159	0.041	9.3948E-28	KO	Enox2	0.118
Cep120	3.08543E-32	0.87180405	0.154	0.037	9.58118E-28	KO	Cep120	0.117
Dhdh	3.13569E-32	1.37011248	0.115	0.021	9.73724E-28	KO	Dhdh	0.094
Jup	4.08151E-32	1.09971594	0.128	0.027	1.26743E-27	KO	Jup	0.101
Baiap2	4.97555E-32	0.96530064	0.276	0.103	1.54506E-27	KO	Baiap2	0.173
Sirpb1c	4.99577E-32	0.81167525	0.372	0.164	1.55134E-27	KO	Sirpb1c	0.208
Dennd4b	5.51629E-32	0.79135878	0.254	0.089	1.71297E-27	KO	Dennd4b	0.165
St6galnac6	5.7957E-32	0.79349391	0.183	0.052	1.79974E-27	KO	St6galnac6	0.131
Secisbp2l	5.87753E-32	0.96531257	0.267	0.097	1.82515E-27	KO	Secisbp2l	0.17
Smarcc2	6.20902E-32	0.85101418	0.286	0.106	1.92809E-27	KO	Smarcc2	0.18
Ppfibp2	6.9803E-32	1.29573149	0.127	0.027	2.16759E-27	KO	Ppfibp2	0.1
Aldh3b1	7.07029E-32	0.69646501	0.389	0.17	2.19554E-27	KO	Aldh3b1	0.219
Carmil2	8.17053E-32	3.23400356	0.048	0.001	2.5372E-27	KO	Carmil2	0.047
Tyk2	9.23448E-32	0.69378947	0.195	0.058	2.86758E-27	KO	Tyk2	0.137
Bod1l	1.0767E-31	0.80619701	0.284	0.106	3.34349E-27	KO	Bod1l	0.178
Tbc1d13	1.09994E-31	0.70337612	0.226	0.073	3.41564E-27	KO	Tbc1d13	0.153

Rps6ka3	1.11306E-31	0.78126688	0.34	0.14	3.45638E-27	KO	Rps6ka3	0.2
Gm36161	1.2275E-31	1.52685083	0.085	0.011	3.81176E-27	KO	Gm36161	0.074
Ly6i	1.29788E-31	2.92035691	0.077	0.009	4.0303E-27	KO	Ly6i	0.068
Il1rl1	1.4373E-31	2.86223617	0.051	0.002	4.46324E-27	KO	Il1rl1	0.049
Dip2b	1.60198E-31	0.75782864	0.271	0.098	4.97464E-27	KO	Dip2b	0.173
Sulf2	1.65646E-31	1.34269298	0.21	0.068	5.14381E-27	KO	Sulf2	0.142
Uggt1	1.69696E-31	0.84933656	0.248	0.087	5.26958E-27	KO	Uggt1	0.161
Matk	2.33497E-31	1.2084799	0.156	0.04	7.25078E-27	KO	Matk	0.116
Csnk2a1	2.33904E-31	0.98730652	0.271	0.1	7.26341E-27	KO	Csnk2a1	0.171
C1ra	2.36404E-31	1.54555643	0.135	0.03	7.34106E-27	KO	C1ra	0.105
Mapkapk5	2.42038E-31	1.59677207	0.084	0.011	7.51602E-27	KO	Mapkapk5	0.073
Sell	2.79158E-31	1.56094638	0.113	0.022	8.66871E-27	KO	Sell	0.091
Actn4	3.0869E-31	0.83568865	0.55	0.292	9.58576E-27	KO	Actn4	0.258
Manba	3.1626E-31	1.0911166	0.164	0.044	9.82084E-27	KO	Manba	0.12
Opa3	3.54683E-31	0.90582633	0.15	0.037	1.1014E-26	KO	Opa3	0.113
Gapvd1	4.43424E-31	0.73261039	0.409	0.185	1.37697E-26	KO	Gapvd1	0.224
Ttyh2	4.601E-31	1.04289267	0.18	0.052	1.42875E-26	KO	Ttyh2	0.128
Oas1a	4.70378E-31	0.79144955	0.214	0.068	1.46067E-26	KO	Oas1a	0.146
Tiam1	5.03347E-31	1.21021684	0.162	0.043	1.56304E-26	KO	Tiam1	0.119
Vps13c	5.83961E-31	1.03450064	0.25	0.089	1.81337E-26	KO	Vps13c	0.161
Cul2	6.10437E-31	1.12028337	0.188	0.056	1.89559E-26	KO	Cul2	0.132
Isy1	6.16805E-31	1.05613792	0.258	0.094	1.91536E-26	KO	Isy1	0.164
Zufsp	6.41478E-31	0.86809302	0.208	0.066	1.99198E-26	KO	Zufsp	0.142
Serpinb9	7.56619E-31	1.75258272	0.119	0.024	2.34953E-26	KO	Serpinb9	0.095
Dennd6a	7.58785E-31	1.11474373	0.194	0.059	2.35625E-26	KO	Dennd6a	0.135
Pik3r5	7.81363E-31	0.69466062	0.379	0.166	2.42637E-26	KO	Pik3r5	0.213
Apba1	7.9337E-31	1.78040102	0.073	0.008	2.46365E-26	KO	Apba1	0.065
Dok2	8.75974E-31	0.91098025	0.481	0.248	2.72016E-26	KO	Dok2	0.233
Zdhhc21	9.21164E-31	0.72598778	0.232	0.079	2.86049E-26	KO	Zdhhc21	0.153
Irf2bp2	9.41931E-31	0.69960698	0.712	0.446	2.92498E-26	KO	Irf2bp2	0.266
Il11ra1	9.77434E-31	1.0312776	0.284	0.111	3.03523E-26	KO	Il11ra1	0.173
Abcg3	1.01317E-30	1.42733697	0.134	0.03	3.14618E-26	KO	Abcg3	0.104
Ppp4c	1.09318E-30	0.7072819	0.433	0.197	3.39464E-26	KO	Ppp4c	0.236
Arhgef1	1.11154E-30	0.7605725	0.377	0.164	3.45166E-26	KO	Arhgef1	0.213
Cox7a2l	1.24657E-30	0.70325019	0.717	0.454	3.87097E-26	KO	Cox7a2l	0.263
Ephx1	1.34835E-30	1.9940493	0.096	0.016	4.18703E-26	KO	Ephx1	0.08
Tex2	1.3555E-30	0.74930313	0.182	0.052	4.20924E-26	KO	Tex2	0.13
Stk10	1.39216E-30	1.16670553	0.147	0.036	4.32307E-26	KO	Stk10	0.111
Slc11a2	1.41075E-30	1.18776982	0.208	0.068	4.3808E-26	KO	Slc11a2	0.14
Cited2	1.47987E-30	0.96756813	0.489	0.256	4.59544E-26	KO	Cited2	0.233
Epb41l1	1.65942E-30	1.53964801	0.171	0.048	5.153E-26	KO	Epb41l1	0.123
Hsd17b4	1.70038E-30	0.95603928	0.256	0.092	5.28019E-26	KO	Hsd17b4	0.164
Mov10	2.11281E-30	0.78562518	0.115	0.023	6.5609E-26	KO	Mov10	0.092
Fxr1	2.18759E-30	0.69960186	0.382	0.165	6.79311E-26	KO	Fxr1	0.217
Vps37c	2.42738E-30	1.14996222	0.103	0.018	7.53774E-26	KO	Vps37c	0.085
Slc38a1	2.49131E-30	0.81278419	0.355	0.154	7.73625E-26	KO	Slc38a1	0.201
Tspan14	2.50062E-30	0.73330158	0.316	0.127	7.76518E-26	KO	Tspan14	0.189
Sdha	2.62082E-30	0.71348714	0.522	0.27	8.13842E-26	KO	Sdha	0.252
D16Ertd472e	2.85691E-30	1.83267476	0.116	0.024	8.87157E-26	KO	D16Ertd472e	0.092
Bsdc1	3.2889E-30	0.83364163	0.17	0.047	1.0213E-25	KO	Bsdc1	0.123
Arpc4	3.72346E-30	0.76488236	0.71	0.432	1.15625E-25	KO	Arpc4	0.278
Smim24	3.89234E-30	1.16879976	0.1	0.017	1.20869E-25	KO	Smim24	0.083
Lpar1	4.09118E-30	2.1629263	0.068	0.007	1.27043E-25	KO	Lpar1	0.061
Igbp1	4.14509E-30	0.84228761	0.383	0.17	1.28718E-25	KO	Igbp1	0.213

C6	5.45885E-30	4.69564968	0.039	0	1.69514E-25	KO	C6	0.039
Taz	5.51298E-30	1.26735647	0.211	0.07	1.71195E-25	KO	Taz	0.141
Eif1a	5.54384E-30	0.80360899	0.498	0.252	1.72153E-25	KO	Eif1a	0.246
Bcl3	5.57894E-30	1.04136963	0.215	0.072	1.73243E-25	KO	Bcl3	0.143
Acbd5	6.98493E-30	0.87169879	0.235	0.083	2.16903E-25	KO	Acbd5	0.152
Rinl	7.73353E-30	1.2468572	0.159	0.043	2.40149E-25	KO	Rinl	0.116
Tmem2	7.82396E-30	1.3556636	0.21	0.07	2.42957E-25	KO	Tmem2	0.14
Nsmaf	7.98143E-30	1.46128743	0.144	0.036	2.47847E-25	KO	Nsmaf	0.108
Ccr5	9.14727E-30	0.74713916	0.702	0.463	2.8405E-25	KO	Ccr5	0.239
Spata2	9.15892E-30	1.5777885	0.135	0.032	2.84412E-25	KO	Spata2	0.103
Adgre1	1.17337E-29	0.73313977	0.682	0.442	3.64367E-25	KO	Adgre1	0.24
Stk38l	1.22427E-29	1.57284545	0.112	0.022	3.80173E-25	KO	Stk38l	0.09
Dpf2	1.22705E-29	0.81562064	0.246	0.088	3.81035E-25	KO	Dpf2	0.158
Slc39a2	1.36428E-29	2.25560722	0.055	0.003	4.23649E-25	KO	Slc39a2	0.052
Eid3	1.5654E-29	2.64219158	0.053	0.003	4.86105E-25	KO	Eid3	0.05
Ebi3	1.62681E-29	1.08794621	0.178	0.052	5.05173E-25	KO	Ebi3	0.126
Dync1li1	1.7851E-29	1.0086004	0.279	0.108	5.54329E-25	KO	Dync1li1	0.171
Kmt2d	1.79603E-29	1.03886987	0.214	0.071	5.5772E-25	KO	Kmt2d	0.143
AW112010	1.89929E-29	1.09964728	0.688	0.513	5.89787E-25	KO	AW112010	0.175
Rab12	2.04416E-29	0.8554631	0.286	0.112	6.34775E-25	KO	Rab12	0.174
Batf3	2.11649E-29	1.11488829	0.294	0.121	6.57233E-25	KO	Batf3	0.173
4931406C07R	2.25981E-29	0.97123018	0.187	0.057	7.0174E-25	KO	4931406C07	0.13
Olfr1167	2.66943E-29	3.14979864	0.041	0.001	8.28939E-25	KO	Olfr1167	0.04
Irak4	2.84551E-29	1.15134378	0.203	0.066	8.83617E-25	KO	Irak4	0.137
Bhlhe40	2.96348E-29	0.72167819	0.435	0.216	9.2025E-25	KO	Bhlhe40	0.219
Plcl2	3.01742E-29	0.75654825	0.176	0.052	9.37E-25	KO	Plcl2	0.124
Sbno2	3.25362E-29	0.82699691	0.435	0.208	1.01035E-24	KO	Sbno2	0.227
Zfp800	3.71796E-29	1.24069628	0.188	0.059	1.15454E-24	KO	Zfp800	0.129
Ccdc88a	3.79853E-29	0.80301088	0.271	0.105	1.17956E-24	KO	Ccdc88a	0.166
Fchsd2	3.89962E-29	1.51112664	0.148	0.039	1.21095E-24	KO	Fchsd2	0.109
Tial1	3.9536E-29	0.80631668	0.378	0.169	1.22771E-24	KO	Tial1	0.209
Cacna1a	4.25278E-29	2.93727301	0.059	0.005	1.32062E-24	KO	Cacna1a	0.054
Rbm27	4.42098E-29	0.83164352	0.222	0.076	1.37285E-24	KO	Rbm27	0.146
H2-DMb2	5.0913E-29	2.06919713	0.088	0.014	1.581E-24	KO	H2-DMb2	0.074
G3bp2	5.8043E-29	0.72442785	0.474	0.236	1.80241E-24	KO	G3bp2	0.238
Mllt6	5.99951E-29	0.9327548	0.184	0.056	1.86303E-24	KO	Mllt6	0.128
Cdk5rap1	6.17655E-29	1.43192125	0.089	0.014	1.918E-24	KO	Cdk5rap1	0.075
Ids	6.49544E-29	1.1788895	0.235	0.085	2.01703E-24	KO	Ids	0.15
Cbfa2t3	6.60556E-29	1.88011942	0.095	0.016	2.05122E-24	KO	Cbfa2t3	0.079
Myh10	6.76141E-29	1.80117427	0.084	0.012	2.09962E-24	KO	Myh10	0.072
Lrrk2	6.91085E-29	1.88116259	0.064	0.006	2.14603E-24	KO	Lrrk2	0.058
Nedd9	6.92375E-29	1.06290562	0.143	0.036	2.15003E-24	KO	Nedd9	0.107
Eml4	7.04808E-29	0.91407427	0.226	0.078	2.18864E-24	KO	Eml4	0.148
Prpf18	7.15376E-29	0.8650159	0.19	0.059	2.22146E-24	KO	Prpf18	0.131
Akr1c13	7.20716E-29	1.51898519	0.16	0.045	2.23804E-24	KO	Akr1c13	0.115
Klc1	7.25402E-29	1.18507917	0.222	0.077	2.25259E-24	KO	Klc1	0.145
Slc7a11	8.42432E-29	1.24136103	0.164	0.047	2.616E-24	KO	Slc7a11	0.117
Ddx58	8.49124E-29	0.70967966	0.148	0.039	2.63678E-24	KO	Ddx58	0.109
Exoc6	8.97383E-29	1.25262188	0.127	0.029	2.78664E-24	KO	Exoc6	0.098
Dpp4	9.03911E-29	2.85067057	0.045	0.002	2.80691E-24	KO	Dpp4	0.043
Tm9sf2	1.20817E-28	0.7264304	0.358	0.155	3.75172E-24	KO	Tm9sf2	0.203
Kmt2a	1.39665E-28	0.7693625	0.226	0.079	4.337E-24	KO	Kmt2a	0.147
Crtc3	1.53601E-28	0.73045695	0.255	0.096	4.76978E-24	KO	Crtc3	0.159
Smim27	1.57948E-28	0.85953799	0.19	0.059	4.90476E-24	KO	Smim27	0.131

Gene	p-value	log FC	pct.1	pct.2	p-adj	group	Gene	value
Tor1b	1.94741E-28	1.09259671	0.218	0.075	6.04729E-24	KO	Tor1b	0.143
Gpbp1	2.01885E-28	0.69723644	0.385	0.173	6.26913E-24	KO	Gpbp1	0.212
Mta2	2.02974E-28	0.86852771	0.212	0.072	6.30294E-24	KO	Mta2	0.14
Pdlim5	2.41059E-28	0.75167627	0.312	0.131	7.4856E-24	KO	Pdlim5	0.181
Map2k7	2.50587E-28	0.82739773	0.243	0.088	7.78147E-24	KO	Map2k7	0.155
2310040G24R	2.5567E-28	1.23933172	0.097	0.017	7.93931E-24	KO	2310040G24	0.08
Gm19951	2.86859E-28	1.73976914	0.124	0.029	8.90785E-24	KO	Gm19951	0.095
Parp4	3.66647E-28	1.02606256	0.195	0.063	1.13855E-23	KO	Parp4	0.132
Cdk19	4.27556E-28	0.94076492	0.188	0.06	1.32769E-23	KO	Cdk19	0.128
Pld3	4.36066E-28	0.95664183	0.57	0.357	1.35411E-23	KO	Pld3	0.213
Pabpn1	4.36255E-28	1.19086107	0.158	0.045	1.3547E-23	KO	Pabpn1	0.113
Nck1	4.72013E-28	0.83921482	0.151	0.041	1.46574E-23	KO	Nck1	0.11
Fbxo4	5.10856E-28	1.13262164	0.175	0.053	1.58636E-23	KO	Fbxo4	0.122
Hmgcr	5.19042E-28	0.86232558	0.216	0.075	1.61178E-23	KO	Hmgcr	0.141
Uba7	5.77755E-28	0.76721733	0.192	0.062	1.7941E-23	KO	Uba7	0.13
Zdhhc5	5.79177E-28	0.75854417	0.235	0.084	1.79852E-23	KO	Zdhhc5	0.151
Rnf44	5.95413E-28	0.97589639	0.196	0.064	1.84893E-23	KO	Rnf44	0.132
Paxbp1	6.30118E-28	0.90729792	0.238	0.087	1.95671E-23	KO	Paxbp1	0.151
Zfp710	7.19177E-28	0.85127109	0.176	0.054	2.23326E-23	KO	Zfp710	0.122
Gnl1	7.84509E-28	0.83487452	0.29	0.118	2.43614E-23	KO	Gnl1	0.172
Ptpn11	8.22336E-28	0.73163476	0.254	0.096	2.5536E-23	KO	Ptpn11	0.158
Orai1	8.61701E-28	0.70003137	0.314	0.132	2.67584E-23	KO	Orai1	0.182
Cwc25	1.15405E-27	0.84316287	0.188	0.06	3.58368E-23	KO	Cwc25	0.128
Sec16a	1.16456E-27	0.73173264	0.184	0.058	3.6163E-23	KO	Sec16a	0.126
Slc2a6	1.22809E-27	2.01232657	0.075	0.01	3.8136E-23	KO	Slc2a6	0.065
Tmem26	1.29028E-27	2.25098805	0.081	0.012	4.0067E-23	KO	Tmem26	0.069
Tuba1c	1.56568E-27	0.7144965	0.533	0.279	4.8619E-23	KO	Tuba1c	0.254
Hadhb	1.57176E-27	0.76654404	0.389	0.178	4.88079E-23	KO	Hadhb	0.211
Cox16	1.634E-27	0.72635784	0.178	0.054	5.07406E-23	KO	Cox16	0.124
Zcchc24	2.07481E-27	0.93466708	0.23	0.084	6.44292E-23	KO	Zcchc24	0.146
Copz1	2.29502E-27	0.77234322	0.506	0.266	7.12674E-23	KO	Copz1	0.24
Insig1	2.49105E-27	0.87450684	0.208	0.071	7.73546E-23	KO	Insig1	0.137
Agpat4	2.51643E-27	0.84150529	0.228	0.082	7.81427E-23	KO	Agpat4	0.146
Cd69	2.96188E-27	1.90040112	0.092	0.016	9.19752E-23	KO	Cd69	0.076
2810403A07R	3.03072E-27	0.8483991	0.203	0.07	9.4113E-23	KO	2810403A07	0.133
Il2rb	3.08965E-27	2.44993253	0.077	0.011	9.59428E-23	KO	Il2rb	0.066
Retreg1	3.49604E-27	0.82846042	0.207	0.07	1.08563E-22	KO	Retreg1	0.137
Polr2l	4.19314E-27	0.76853864	0.315	0.136	1.3021E-22	KO	Polr2l	0.179
Snx27	4.26132E-27	0.84740353	0.248	0.094	1.32327E-22	KO	Snx27	0.154
Chd3	4.61447E-27	0.94767794	0.216	0.077	1.43293E-22	KO	Chd3	0.139
Dclre1c	4.61694E-27	1.01903242	0.167	0.05	1.4337E-22	KO	Dclre1c	0.117
Phf1	4.8556E-27	1.39195973	0.096	0.018	1.50781E-22	KO	Phf1	0.078
Ahnak2	5.30485E-27	0.79720606	0.178	0.056	1.64732E-22	KO	Ahnak2	0.122
Aida	5.62758E-27	0.75885866	0.284	0.116	1.74753E-22	KO	Aida	0.168
Eya3	5.97962E-27	1.10368694	0.126	0.03	1.85685E-22	KO	Eya3	0.096
Parp10	6.42429E-27	0.84736123	0.179	0.057	1.99494E-22	KO	Parp10	0.122
Tnfaip6	6.42527E-27	1.59595937	0.064	0.007	1.99524E-22	KO	Tnfaip6	0.057
Chordc1	6.50988E-27	0.73931861	0.191	0.062	2.02151E-22	KO	Chordc1	0.129
Ccl6	6.88506E-27	0.96672132	0.808	0.613	2.13802E-22	KO	Ccl6	0.195
Tmem140	7.28634E-27	0.88114246	0.19	0.062	2.26263E-22	KO	Tmem140	0.128
Slc25a20	8.8125E-27	1.00690067	0.143	0.039	2.73655E-22	KO	Slc25a20	0.104
Cyp4f16	9.3294E-27	0.8283553	0.184	0.06	2.89706E-22	KO	Cyp4f16	0.124
Trim26	9.7015E-27	0.74082332	0.224	0.082	3.01261E-22	KO	Trim26	0.142
Araf	9.84783E-27	0.8211107	0.254	0.098	3.05805E-22	KO	Araf	0.156

Gene	p-value	log2FC	pct.1	pct.2	p-adj	Type	Gene	value
Ube3b	1.05611E-26	0.86873096	0.199	0.067	3.27953E-22	KO	Ube3b	0.132
Senp6	1.13922E-26	0.76476648	0.251	0.096	3.53763E-22	KO	Senp6	0.155
Tlk2	1.21882E-26	0.74213249	0.192	0.063	3.7848E-22	KO	Tlk2	0.129
Fam219a	1.27848E-26	1.04160824	0.151	0.042	3.97007E-22	KO	Fam219a	0.109
Cyp4f13	1.34045E-26	0.83163938	0.159	0.046	4.16249E-22	KO	Cyp4f13	0.113
Selenop	1.47429E-26	1.17616538	0.774	0.586	4.5781E-22	KO	Selenop	0.188
Fbxl3	1.4975E-26	0.82917041	0.244	0.093	4.65019E-22	KO	Fbxl3	0.151
Trbc1	1.62465E-26	2.53513889	0.068	0.008	5.04504E-22	KO	Trbc1	0.06
Pml	1.77715E-26	1.1641377	0.156	0.046	5.51858E-22	KO	Pml	0.11
Eepd1	1.91786E-26	0.88162024	0.182	0.059	5.95553E-22	KO	Eepd1	0.123
Gpnmb	1.94882E-26	1.73881074	0.583	0.438	6.05167E-22	KO	Gpnmb	0.145
Fgfr1	2.10146E-26	2.46816118	0.067	0.008	6.52565E-22	KO	Fgfr1	0.059
Mgll	2.19189E-26	1.73207962	0.115	0.027	6.80647E-22	KO	Mgll	0.088
Procr	2.21277E-26	1.96511806	0.076	0.011	6.87131E-22	KO	Procr	0.065
Spata13	2.2183E-26	1.25519375	0.119	0.028	6.88849E-22	KO	Spata13	0.091
Errfi1	2.25225E-26	0.90754004	0.332	0.157	6.9939E-22	KO	Errfi1	0.175
Clec9a	2.2798E-26	2.53451985	0.037	0.001	7.07947E-22	KO	Clec9a	0.036
Bdp1	2.49797E-26	0.82301563	0.2	0.069	7.75694E-22	KO	Bdp1	0.131
Tsga10	2.86375E-26	1.33799995	0.076	0.011	8.89281E-22	KO	Tsga10	0.065
Synrg	3.42407E-26	1.03583541	0.163	0.049	1.06328E-21	KO	Synrg	0.114
Hs6st1	3.57383E-26	0.78761779	0.226	0.083	1.10978E-21	KO	Hs6st1	0.143
Cd209f	3.57464E-26	4.42544849	0.039	0.001	1.11003E-21	KO	Cd209f	0.038
Cs	3.75647E-26	0.70369263	0.407	0.198	1.1665E-21	KO	Cs	0.209
Map4	3.92836E-26	0.881327	0.3	0.127	1.21987E-21	KO	Map4	0.173
Uba6	4.07779E-26	1.05509232	0.184	0.061	1.26628E-21	KO	Uba6	0.123
Ripk1	4.53215E-26	0.70466125	0.29	0.12	1.40737E-21	KO	Ripk1	0.17
Vopp1	4.64627E-26	1.05382086	0.14	0.038	1.4428E-21	KO	Vopp1	0.102
Pik3r1	4.76758E-26	0.83503318	0.368	0.175	1.48048E-21	KO	Pik3r1	0.193
Tnrc6c	4.81232E-26	0.85772016	0.227	0.084	1.49437E-21	KO	Tnrc6c	0.143
Plekhg2	4.83583E-26	1.2813259	0.136	0.036	1.50167E-21	KO	Plekhg2	0.1
Fam46a	5.12697E-26	0.76727137	0.399	0.197	1.59208E-21	KO	Fam46a	0.202
Ythdf1	6.38811E-26	0.74030604	0.252	0.099	1.9837E-21	KO	Ythdf1	0.153
Tlr1	6.87463E-26	0.9205847	0.176	0.057	2.13478E-21	KO	Tlr1	0.119
Lars	7.4486E-26	0.81187387	0.247	0.096	2.31301E-21	KO	Lars	0.151
Pi4ka	8.60794E-26	0.74845541	0.238	0.091	2.67302E-21	KO	Pi4ka	0.147
Rffl	8.86841E-26	0.77469937	0.148	0.042	2.75391E-21	KO	Rffl	0.106
Arhgap19	9.83043E-26	0.84529869	0.255	0.103	3.05264E-21	KO	Arhgap19	0.152
Fyn	1.06407E-25	0.83231487	0.316	0.14	3.30427E-21	KO	Fyn	0.176
Dnajc1	1.19437E-25	0.76396793	0.234	0.089	3.70889E-21	KO	Dnajc1	0.145
Nt5dc3	1.2914E-25	1.39596273	0.105	0.023	4.01017E-21	KO	Nt5dc3	0.082
Lrp6	1.43714E-25	0.74407768	0.244	0.095	4.46274E-21	KO	Lrp6	0.149
Dlg1	1.45514E-25	0.71148756	0.175	0.056	4.51865E-21	KO	Dlg1	0.119
Gramd4	1.47531E-25	1.11569133	0.084	0.014	4.58129E-21	KO	Gramd4	0.07
Cdk17	1.61073E-25	0.95976312	0.187	0.063	5.00179E-21	KO	Cdk17	0.124
Taf1	1.77561E-25	0.90626854	0.207	0.074	5.5138E-21	KO	Taf1	0.133
Pctp	1.90828E-25	1.84969434	0.126	0.033	5.9258E-21	KO	Pctp	0.093
Gimap4	1.94705E-25	1.85437109	0.087	0.016	6.04618E-21	KO	Gimap4	0.071
Evi2	2.10311E-25	1.73821698	0.083	0.014	6.5308E-21	KO	Evi2	0.069
Trrap	2.11375E-25	0.79709837	0.188	0.064	6.56384E-21	KO	Trrap	0.124
Gm12185	2.16804E-25	2.25412935	0.036	0.001	6.73241E-21	KO	Gm12185	0.035
Pla2g4a	2.19465E-25	1.2337446	0.243	0.096	6.81506E-21	KO	Pla2g4a	0.147
Pptc7	2.51414E-25	1.1433363	0.117	0.029	7.80717E-21	KO	Pptc7	0.088
Vps54	2.70313E-25	0.93114002	0.198	0.069	8.39402E-21	KO	Vps54	0.129
Cyld	2.87176E-25	0.72523856	0.252	0.1	8.91769E-21	KO	Cyld	0.152

Clec4e	3.14724E-25	1.08873645	0.336	0.166	9.77314E-21	KO	Clec4e	0.17
Bcl2	3.1477E-25	0.94425292	0.139	0.039	9.77455E-21	KO	Bcl2	0.1
Slc26a2	4.11479E-25	0.85315947	0.178	0.058	1.27777E-20	KO	Slc26a2	0.12
Nipsnap2	4.17174E-25	0.82190298	0.178	0.058	1.29545E-20	KO	Nipsnap2	0.12
Cd209g	4.49049E-25	4.68393474	0.032	0	1.39443E-20	KO	Cd209g	0.032
Helz	4.52253E-25	1.09142466	0.135	0.037	1.40438E-20	KO	Helz	0.098
Abhd16a	4.6627E-25	0.71414443	0.268	0.112	1.44791E-20	KO	Abhd16a	0.156
Ctnnd1	4.77905E-25	0.77032768	0.274	0.114	1.48404E-20	KO	Ctnnd1	0.16
Thoc6	5.08012E-25	0.73833978	0.23	0.087	1.57753E-20	KO	Thoc6	0.143
Smim13	5.27091E-25	1.05188162	0.166	0.053	1.63677E-20	KO	Smim13	0.113
Hnrnph3	5.70918E-25	0.77903586	0.164	0.052	1.77287E-20	KO	Hnrnph3	0.112
H2-M2	6.15615E-25	3.70345049	0.044	0.002	1.91167E-20	KO	H2-M2	0.042
Nf2	7.35316E-25	0.90109103	0.14	0.039	2.28338E-20	KO	Nf2	0.101
Pqlc1	8.23802E-25	0.76523251	0.202	0.072	2.55815E-20	KO	Pqlc1	0.13
Numa1	8.24234E-25	0.71804557	0.274	0.113	2.55949E-20	KO	Numa1	0.161
Plscr1	8.89393E-25	1.1086181	0.176	0.059	2.76183E-20	KO	Plscr1	0.117
Plxdc2	8.98783E-25	2.78996075	0.057	0.006	2.79099E-20	KO	Plxdc2	0.051
Tmem50b	9.11351E-25	0.81900939	0.17	0.055	2.83002E-20	KO	Tmem50b	0.115
Reps2	9.25508E-25	2.21106974	0.075	0.012	2.87398E-20	KO	Reps2	0.063
Ccdc97	9.61052E-25	0.75481041	0.158	0.048	2.98436E-20	KO	Ccdc97	0.11
Ube2d1	1.06767E-24	0.76848686	0.171	0.056	3.31542E-20	KO	Ube2d1	0.115
Jak3	1.28936E-24	0.84472688	0.138	0.039	4.00386E-20	KO	Jak3	0.099
Thap2	1.38973E-24	1.31636005	0.116	0.029	4.31551E-20	KO	Thap2	0.087
Fbxo33	1.40858E-24	0.83707608	0.222	0.083	4.37406E-20	KO	Fbxo33	0.139
Gm35154	1.48011E-24	1.18944288	0.101	0.022	4.59618E-20	KO	Gm35154	0.079
Bag3	1.49378E-24	0.77163239	0.207	0.075	4.63865E-20	KO	Bag3	0.132
Idh1	1.58971E-24	0.77384171	0.37	0.178	4.93654E-20	KO	Idh1	0.192
Polr3gl	1.74317E-24	0.93309117	0.152	0.046	5.41307E-20	KO	Polr3gl	0.106
Gm26532	1.92159E-24	1.17696428	0.152	0.047	5.9671E-20	KO	Gm26532	0.105
Acadsb	1.93976E-24	1.04010682	0.15	0.045	6.02354E-20	KO	Acadsb	0.105
Rmdn3	1.97354E-24	0.72358287	0.139	0.039	6.12843E-20	KO	Rmdn3	0.1
Pak1	2.08007E-24	0.81419647	0.222	0.084	6.45923E-20	KO	Pak1	0.138
Arhgef6	2.62985E-24	0.71554089	0.279	0.119	8.16646E-20	KO	Arhgef6	0.16
Gimap3	2.87671E-24	3.13878689	0.048	0.004	8.93306E-20	KO	Gimap3	0.044
Calu	2.88613E-24	0.72975414	0.366	0.174	8.96231E-20	KO	Calu	0.192
Stim2	3.21298E-24	0.97334965	0.136	0.039	9.97727E-20	KO	Stim2	0.097
Lilra6	3.34325E-24	1.67591224	0.059	0.007	1.03818E-19	KO	Lilra6	0.052
Armc8	3.35891E-24	0.76609667	0.207	0.076	1.04304E-19	KO	Armc8	0.131
C5ar2	3.36485E-24	1.75981204	0.083	0.015	1.04489E-19	KO	C5ar2	0.068
Tmem131l	3.37071E-24	0.81370288	0.148	0.044	1.04671E-19	KO	Tmem131l	0.104
Rnft1	3.42709E-24	0.90983851	0.188	0.066	1.06421E-19	KO	Rnft1	0.122
Gse1	3.5371E-24	0.89269443	0.171	0.056	1.09838E-19	KO	Gse1	0.115
Cers5	3.60609E-24	0.70238763	0.191	0.068	1.1198E-19	KO	Cers5	0.123
Mlkl	3.63801E-24	0.86751767	0.172	0.057	1.12971E-19	KO	Mlkl	0.115
Arhgap4	3.80706E-24	1.17037312	0.15	0.046	1.18221E-19	KO	Arhgap4	0.104
Nfix	4.73257E-24	0.98343697	0.198	0.072	1.4696E-19	KO	Nfix	0.126
Rnf14	4.86478E-24	0.81934216	0.206	0.076	1.51066E-19	KO	Rnf14	0.13
Nuak2	5.16217E-24	0.87780922	0.186	0.064	1.60301E-19	KO	Nuak2	0.122
Tmem154	5.35879E-24	1.08345636	0.079	0.014	1.66406E-19	KO	Tmem154	0.065
Lhfpl2	6.14171E-24	0.69410293	0.29	0.129	1.90718E-19	KO	Lhfpl2	0.161
Usp18	6.67327E-24	0.72041012	0.105	0.024	2.07225E-19	KO	Usp18	0.081
Usp38	6.82538E-24	0.94437595	0.143	0.042	2.11948E-19	KO	Usp38	0.101
Cd200r4	6.89613E-24	0.84188452	0.218	0.083	2.14145E-19	KO	Cd200r4	0.135
Tmcc1	7.03116E-24	0.8081051	0.238	0.094	2.18339E-19	KO	Tmcc1	0.144

Gene						Gene	
Fcgrt	7.98556E-24	1.2438516	0.451	0.248	2.47975E-19 KO	Fcgrt	0.203
Fggy	8.00992E-24	1.07583039	0.097	0.021	2.48732E-19 KO	Fggy	0.076
Plekhm3	8.46226E-24	0.73942112	0.182	0.062	2.62778E-19 KO	Plekhm3	0.12
Prpf38a	8.92995E-24	0.74313261	0.263	0.11	2.77302E-19 KO	Prpf38a	0.153
Coq8b	1.02488E-23	0.91921686	0.168	0.056	3.18255E-19 KO	Coq8b	0.112
Ndst1	1.0385E-23	0.7311704	0.101	0.023	3.22486E-19 KO	Ndst1	0.078
Cog7	1.0946E-23	0.72687721	0.176	0.06	3.39907E-19 KO	Cog7	0.116
Ptgr2	1.15086E-23	0.74265248	0.155	0.048	3.57377E-19 KO	Ptgr2	0.107
Mrc1	1.15844E-23	0.8920335	0.678	0.459	3.59731E-19 KO	Mrc1	0.219
Mex3c	1.19921E-23	1.15477158	0.131	0.037	3.7239E-19 KO	Mex3c	0.094
Gm4070	1.33797E-23	1.45946261	0.059	0.007	4.15479E-19 KO	Gm4070	0.052
Lrrk1	1.42816E-23	0.90697868	0.146	0.044	4.43486E-19 KO	Lrrk1	0.102
Abcc5	1.46703E-23	0.74774009	0.222	0.086	4.55557E-19 KO	Abcc5	0.136
Lrp5	1.50385E-23	1.03561725	0.113	0.028	4.6699E-19 KO	Lrp5	0.085
Igf2bp2	1.60335E-23	0.93150076	0.104	0.024	4.97887E-19 KO	Igf2bp2	0.08
Ing3	1.63394E-23	0.72427688	0.124	0.033	5.07389E-19 KO	Ing3	0.091
Aco1	1.64996E-23	1.01166452	0.198	0.073	5.12364E-19 KO	Aco1	0.125
P2ry10	1.69186E-23	2.67163485	0.053	0.005	5.25374E-19 KO	P2ry10	0.048
Zfp704	1.86783E-23	1.04530715	0.116	0.03	5.80016E-19 KO	Zfp704	0.086
Tgtp2	1.97484E-23	2.11289751	0.048	0.004	6.13247E-19 KO	Tgtp2	0.044
Platr17	2.06449E-23	1.1928797	0.085	0.017	6.41087E-19 KO	Platr17	0.068
Lpgat1	2.06481E-23	0.74263904	0.203	0.075	6.41186E-19 KO	Lpgat1	0.128
Rpa3	2.11072E-23	0.74757457	0.156	0.05	6.55442E-19 KO	Rpa3	0.106
5430427O19F	2.12905E-23	1.30554788	0.128	0.036	6.61135E-19 KO	5430427O19	0.092
Cstf2t	2.20835E-23	1.56251078	0.128	0.036	6.85759E-19 KO	Cstf2t	0.092
Tceanc2	2.35365E-23	1.15691851	0.154	0.049	7.30878E-19 KO	Tceanc2	0.105
As3mt	2.36142E-23	0.9797617	0.183	0.064	7.33293E-19 KO	As3mt	0.119
Emp1	2.39608E-23	0.74336193	0.619	0.422	7.44056E-19 KO	Emp1	0.197
Ccdc71l	2.44118E-23	0.88382452	0.31	0.142	7.5806E-19 KO	Ccdc71l	0.168
Polb	2.65089E-23	0.78084425	0.211	0.079	8.23182E-19 KO	Polb	0.132
Stk38	2.69354E-23	0.93627579	0.274	0.119	8.36426E-19 KO	Stk38	0.155
Plxna4os1	2.88171E-23	1.09869603	0.081	0.015	8.94858E-19 KO	Plxna4os1	0.066
Klra2	3.18347E-23	0.86339211	0.263	0.116	9.88562E-19 KO	Klra2	0.147
Arhgap6	3.36433E-23	1.51256719	0.063	0.008	1.04473E-18 KO	Arhgap6	0.055
Atg2a	4.00829E-23	0.70893788	0.17	0.057	1.2447E-18 KO	Atg2a	0.113
Grk5	4.03379E-23	1.53268359	0.076	0.013	1.25261E-18 KO	Grk5	0.063
Abca3	4.15308E-23	0.7721251	0.196	0.072	1.28965E-18 KO	Abca3	0.124
Fam43a	4.32592E-23	2.33471274	0.087	0.018	1.34333E-18 KO	Fam43a	0.069
Gca	4.70713E-23	1.40448338	0.087	0.017	1.4617E-18 KO	Gca	0.07
Wdfy2	5.05399E-23	0.73358116	0.324	0.153	1.56942E-18 KO	Wdfy2	0.171
Kmo	5.23413E-23	2.50115982	0.037	0.002	1.62535E-18 KO	Kmo	0.035
Aldoc	5.46037E-23	1.21746791	0.097	0.022	1.69561E-18 KO	Aldoc	0.075
Rai1	5.76526E-23	1.16601628	0.097	0.022	1.79029E-18 KO	Rai1	0.075
Fam198b	5.85607E-23	0.92713184	0.16	0.052	1.81849E-18 KO	Fam198b	0.108
Tmem185b	6.27045E-23	0.84973966	0.136	0.04	1.94716E-18 KO	Tmem185b	0.096
Ppp2r3d	6.55654E-23	0.84173537	0.148	0.046	2.036E-18 KO	Ppp2r3d	0.102
A530040E14R	7.00856E-23	1.3665531	0.075	0.013	2.17637E-18 KO	A530040E14	0.062
Madd	7.26581E-23	0.71598285	0.164	0.055	2.25625E-18 KO	Madd	0.109
Grk3	7.43908E-23	1.21763192	0.154	0.049	2.31006E-18 KO	Grk3	0.105
Vps37b	7.56509E-23	0.99631146	0.215	0.084	2.34919E-18 KO	Vps37b	0.131
Hgf	8.66759E-23	0.79717877	0.155	0.05	2.69155E-18 KO	Hgf	0.105
Crnkl1	9.58226E-23	0.81219611	0.164	0.055	2.97558E-18 KO	Crnkl1	0.109
Slc35f5	1.00748E-22	0.70523784	0.134	0.039	3.12851E-18 KO	Slc35f5	0.095
Pdpn	1.038E-22	1.12890698	0.215	0.087	3.22329E-18 KO	Pdpn	0.128

Gene	p-value	log2FC	pct.1	pct.2	p-value adj	group	Gene	value
Tfrc	1.07416E-22	1.43185793	0.2	0.078	3.33558E-18	KO	Tfrc	0.122
Ext2	1.1408E-22	0.70005323	0.196	0.072	3.54254E-18	KO	Ext2	0.124
Umad1	1.1463E-22	1.31348447	0.111	0.028	3.55961E-18	KO	Umad1	0.083
Braf	1.19293E-22	0.73726329	0.199	0.074	3.7044E-18	KO	Braf	0.125
Fbxo28	1.48459E-22	0.73600761	0.166	0.055	4.61008E-18	KO	Fbxo28	0.111
Lrpprc	1.59968E-22	0.69825547	0.196	0.073	4.9675E-18	KO	Lrpprc	0.123
Gpc1	2.02617E-22	1.6401729	0.079	0.015	6.29185E-18	KO	Gpc1	0.064
Fam53c	2.11729E-22	0.92844021	0.154	0.05	6.57483E-18	KO	Fam53c	0.104
Orai3	2.18326E-22	0.98577649	0.162	0.054	6.77967E-18	KO	Orai3	0.108
Chfr	2.22863E-22	0.96757545	0.182	0.065	6.92055E-18	KO	Chfr	0.117
Prrc2b	2.42458E-22	0.79679552	0.216	0.085	7.52904E-18	KO	Prrc2b	0.131
Uhrf1bp1l	2.85877E-22	0.72049169	0.25	0.106	8.87733E-18	KO	Uhrf1bp1l	0.144
Samsn1	3.06298E-22	1.19952645	0.216	0.088	9.51147E-18	KO	Samsn1	0.128
Ccl9	3.08285E-22	0.98264367	0.717	0.544	9.57319E-18	KO	Ccl9	0.173
Slc35a2	3.54426E-22	1.05181123	0.136	0.041	1.1006E-17	KO	Slc35a2	0.095
Zbtb20	4.19404E-22	0.77303504	0.223	0.091	1.30238E-17	KO	Zbtb20	0.132
Tmem168	4.23227E-22	0.70092553	0.246	0.103	1.31425E-17	KO	Tmem168	0.143
Pygo2	4.43114E-22	1.0840798	0.111	0.029	1.376E-17	KO	Pygo2	0.082
Slc30a4	4.57698E-22	1.58391063	0.067	0.011	1.42129E-17	KO	Slc30a4	0.056
Gzma	4.70057E-22	2.55287705	0.036	0.002	1.45967E-17	KO	Gzma	0.034
Adprm	4.7217E-22	0.77938731	0.116	0.031	1.46623E-17	KO	Adprm	0.085
Ldb1	6.3682E-22	0.81462601	0.2	0.077	1.97752E-17	KO	Ldb1	0.123
Rbm45	6.49384E-22	1.12096005	0.061	0.009	2.01653E-17	KO	Rbm45	0.052
Nbn	7.57767E-22	1.22637345	0.095	0.022	2.35309E-17	KO	Nbn	0.073
Tnfrsf13b	8.27848E-22	0.72158457	0.22	0.088	2.57072E-17	KO	Tnfrsf13b	0.132
Rfx1	9.27288E-22	0.90867395	0.12	0.034	2.87951E-17	KO	Rfx1	0.086
Med1	9.29225E-22	0.73527934	0.26	0.111	2.88552E-17	KO	Med1	0.149
Atrnl1	9.94021E-22	1.20976008	0.077	0.015	3.08673E-17	KO	Atrnl1	0.062
Oasl1	1.11535E-21	0.85963452	0.236	0.1	3.46348E-17	KO	Oasl1	0.136
Wdr41	1.21463E-21	0.78787109	0.219	0.087	3.77179E-17	KO	Wdr41	0.132
Tsc22d1	1.36485E-21	0.91103382	0.17	0.06	4.23825E-17	KO	Tsc22d1	0.11
Phf8	1.41615E-21	1.14657277	0.121	0.035	4.39756E-17	KO	Phf8	0.086
Blnk	1.49701E-21	0.87095418	0.27	0.124	4.64866E-17	KO	Blnk	0.146
St6gal1	1.69685E-21	1.35394676	0.115	0.032	5.26923E-17	KO	St6gal1	0.083
Osgin2	1.72018E-21	0.89794671	0.135	0.042	5.34168E-17	KO	Osgin2	0.093
Gm4841	1.76424E-21	1.73785978	0.031	0.001	5.47849E-17	KO	Gm4841	0.03
Cfh	2.10579E-21	1.5233212	0.134	0.042	6.53911E-17	KO	Cfh	0.092
Lipe	2.53919E-21	1.13883608	0.116	0.033	7.88494E-17	KO	Lipe	0.083
Mogs	2.71943E-21	0.88897155	0.179	0.065	8.44463E-17	KO	Mogs	0.114
Rhou	2.76059E-21	1.09685543	0.085	0.018	8.57246E-17	KO	Rhou	0.067
Rab29	2.84481E-21	1.30574854	0.124	0.037	8.83398E-17	KO	Rab29	0.087
Slmap	3.01238E-21	0.71358214	0.186	0.069	9.35434E-17	KO	Slmap	0.117
Rtl5	3.31018E-21	0.95535432	0.088	0.02	1.02791E-16	KO	Rtl5	0.068
Prpf6	3.41652E-21	0.70193578	0.166	0.058	1.06093E-16	KO	Prpf6	0.108
Ednrb	3.51069E-21	2.63003473	0.113	0.033	1.09017E-16	KO	Ednrb	0.08
Akt3	3.63654E-21	0.81801475	0.105	0.027	1.12926E-16	KO	Akt3	0.078
Fh1	3.84902E-21	0.76389686	0.292	0.134	1.19524E-16	KO	Fh1	0.158
Vps13b	3.85532E-21	0.71659986	0.176	0.064	1.19719E-16	KO	Vps13b	0.112
Secisbp2	4.39464E-21	0.88456208	0.16	0.056	1.36467E-16	KO	Secisbp2	0.104
AC125149.3	4.48623E-21	1.38746132	0.036	0.002	1.39311E-16	KO	AC125149.3	0.034
Arfip1	5.05449E-21	0.72043033	0.135	0.042	1.56957E-16	KO	Arfip1	0.093
C4b	5.11153E-21	1.48024946	0.231	0.105	1.58728E-16	KO	C4b	0.126
Myo18a	5.20727E-21	0.84983525	0.156	0.053	1.61701E-16	KO	Myo18a	0.103
Pdlim4	5.32348E-21	0.81179873	0.33	0.163	1.6531E-16	KO	Pdlim4	0.167

Ern1	5.34023E-21	1.04882765	0.111	0.03	1.6583E-16	KO	Ern1	0.081
Hbs1l	5.51252E-21	0.76799747	0.179	0.066	1.7118E-16	KO	Hbs1l	0.113
Sgms2	5.54919E-21	1.15014857	0.104	0.027	1.72319E-16	KO	Sgms2	0.077
Smim3	5.58631E-21	0.79747199	0.25	0.109	1.73472E-16	KO	Smim3	0.141
Fbxo34	5.62144E-21	1.00563204	0.12	0.035	1.74562E-16	KO	Fbxo34	0.085
Lactb	5.82006E-21	0.70098737	0.232	0.098	1.8073E-16	KO	Lactb	0.134
Il1rl2	5.96177E-21	1.62939488	0.073	0.014	1.85131E-16	KO	Il1rl2	0.059
Gm15564	6.06461E-21	2.03710808	0.069	0.012	1.88324E-16	KO	Gm15564	0.057
Phyh	6.10628E-21	0.79968886	0.202	0.079	1.89618E-16	KO	Phyh	0.123
Tspan5	6.12477E-21	0.71111483	0.117	0.033	1.90193E-16	KO	Tspan5	0.084
Flt3l	6.64911E-21	1.62116712	0.073	0.014	2.06475E-16	KO	Flt3l	0.059
Slamf6	6.86989E-21	1.16037482	0.115	0.032	2.13331E-16	KO	Slamf6	0.083
Dennd1c	8.01729E-21	0.87387302	0.142	0.046	2.48961E-16	KO	Dennd1c	0.096
Stac2	8.95881E-21	1.93343568	0.028	0	2.78198E-16	KO	Stac2	0.028
Ssh3	1.07795E-20	1.00811557	0.075	0.014	3.34735E-16	KO	Ssh3	0.061
Atp6v0a1	1.12009E-20	0.74917014	0.414	0.227	3.47821E-16	KO	Atp6v0a1	0.187
Tmem35b	1.14547E-20	1.3260251	0.071	0.013	3.55704E-16	KO	Tmem35b	0.058
Ptgir	1.15766E-20	1.88877531	0.043	0.004	3.59487E-16	KO	Ptgir	0.039
Hspa4l	1.35048E-20	0.98258467	0.155	0.054	4.19364E-16	KO	Hspa4l	0.101
Heca	1.62824E-20	0.70941916	0.156	0.055	5.05616E-16	KO	Heca	0.101
Sirpb1b	1.6407E-20	0.98191481	0.112	0.031	5.09485E-16	KO	Sirpb1b	0.081
Slc4a11	1.65254E-20	2.52380608	0.029	0.001	5.13163E-16	KO	Slc4a11	0.028
Ddx60	1.68523E-20	1.06747539	0.144	0.048	5.23314E-16	KO	Ddx60	0.096
Treml2	1.75489E-20	0.71637698	0.105	0.028	5.44947E-16	KO	Treml2	0.077
Mcoln2	1.8334E-20	1.39746122	0.103	0.027	5.69325E-16	KO	Mcoln2	0.076
Dcun1d3	1.87873E-20	0.75565736	0.091	0.021	5.83402E-16	KO	Dcun1d3	0.07
Bambi	1.88553E-20	1.37881505	0.073	0.014	5.85512E-16	KO	Bambi	0.059
Phactr2	1.92868E-20	0.79742354	0.18	0.068	5.98912E-16	KO	Phactr2	0.112
Sphk1	2.06698E-20	1.50790289	0.065	0.011	6.4186E-16	KO	Sphk1	0.054
Mob3c	2.18135E-20	0.97382596	0.138	0.045	6.77375E-16	KO	Mob3c	0.093
Srek1ip1	2.25872E-20	0.90358284	0.175	0.064	7.014E-16	KO	Srek1ip1	0.111
Sec23b	2.40144E-20	0.87853856	0.263	0.118	7.45719E-16	KO	Sec23b	0.145
Ccnd2	2.67417E-20	0.85361526	0.242	0.107	8.30411E-16	KO	Ccnd2	0.135
Zfp62	2.6839E-20	0.75728274	0.13	0.04	8.3343E-16	KO	Zfp62	0.09
1700019L13R	2.73253E-20	1.69591529	0.067	0.012	8.48531E-16	KO	1700019L13I	0.055
Rnd3	2.86028E-20	0.99327589	0.15	0.052	8.88203E-16	KO	Rnd3	0.098
Adam19	3.45672E-20	2.23597524	0.077	0.016	1.07341E-15	KO	Adam19	0.061
Lysmd3	3.64186E-20	1.16674183	0.113	0.033	1.13091E-15	KO	Lysmd3	0.08
Gm20513	3.67123E-20	2.37148887	0.025	0	1.14003E-15	KO	Gm20513	0.025
Tmem198b	4.12755E-20	1.66204479	0.073	0.014	1.28173E-15	KO	Tmem198b	0.059
Kcnj10	4.2075E-20	1.5777972	0.044	0.004	1.30655E-15	KO	Kcnj10	0.04
AW011738	4.22576E-20	1.22578766	0.073	0.014	1.31222E-15	KO	AW011738	0.059
Idi1	4.29074E-20	1.41558518	0.111	0.032	1.3324E-15	KO	Idi1	0.079
Abhd4	4.54071E-20	0.73863123	0.136	0.044	1.41003E-15	KO	Abhd4	0.092
2610002M06I	4.6136E-20	0.82705177	0.175	0.066	1.43266E-15	KO	2610002M06	0.109
Blcap	4.87211E-20	0.71291664	0.167	0.06	1.51294E-15	KO	Blcap	0.107
Ercc3	5.00633E-20	0.73604656	0.148	0.05	1.55461E-15	KO	Ercc3	0.098
Fryl	5.10962E-20	0.79108956	0.183	0.07	1.58669E-15	KO	Fryl	0.113
Syt11	5.32311E-20	1.22058574	0.065	0.011	1.65299E-15	KO	Syt11	0.054
Ccser2	5.94226E-20	0.7215438	0.117	0.034	1.84525E-15	KO	Ccser2	0.083
Pigc	6.43867E-20	1.3292546	0.092	0.023	1.9994E-15	KO	Pigc	0.069
Slc9a9	6.73405E-20	0.83521904	0.184	0.071	2.09112E-15	KO	Slc9a9	0.113
Emsy	7.73559E-20	0.86200092	0.167	0.061	2.40213E-15	KO	Emsy	0.106
Traf3	8.04064E-20	0.70992303	0.152	0.053	2.49686E-15	KO	Traf3	0.099

Gene	p_val	avg_logFC	pct.1	pct.2	p_val_adj	group	Gene	value
Rpe	8.45593E-20	0.77154732	0.167	0.061	2.62582E-15	KO	Rpe	0.106
Ggct	9.08771E-20	0.77300113	0.136	0.045	2.82201E-15	KO	Ggct	0.091
Tmem161b	9.19583E-20	0.9528685	0.101	0.027	2.85558E-15	KO	Tmem161b	0.074
F830016B08R	9.68745E-20	2.03595734	0.057	0.009	3.00824E-15	KO	F830016B08	0.048
Gramd3	9.9895E-20	1.39327718	0.089	0.022	3.10204E-15	KO	Gramd3	0.067
Ptprs	1.07278E-19	1.03984947	0.152	0.054	3.33129E-15	KO	Ptprs	0.098
Mef2c	1.14714E-19	0.76401409	0.351	0.185	3.5622E-15	KO	Mef2c	0.166
Chsy1	1.18128E-19	1.03050476	0.108	0.03	3.66822E-15	KO	Chsy1	0.078
Palld	1.29697E-19	0.95065087	0.128	0.041	4.02748E-15	KO	Palld	0.087
Sorl1	1.39214E-19	1.10136336	0.121	0.037	4.323E-15	KO	Sorl1	0.084
Trmt1l	1.44469E-19	1.05852295	0.132	0.043	4.48618E-15	KO	Trmt1l	0.089
Cyp51	1.47141E-19	1.3882492	0.119	0.036	4.56917E-15	KO	Cyp51	0.083
Fas	1.77951E-19	1.03582792	0.123	0.038	5.5259E-15	KO	Fas	0.085
Phf11a	1.82281E-19	1.01175992	0.079	0.017	5.66037E-15	KO	Phf11a	0.062
Wdr37	1.84551E-19	0.9489772	0.178	0.068	5.73087E-15	KO	Wdr37	0.11
Banp	1.96224E-19	1.18837114	0.089	0.022	6.09335E-15	KO	Banp	0.067
Smg7	2.0012E-19	0.74864583	0.224	0.095	6.21432E-15	KO	Smg7	0.129
Hal	2.02581E-19	2.33160226	0.037	0.003	6.29073E-15	KO	Hal	0.034
Chp2	2.08098E-19	2.89610264	0.036	0.002	6.46207E-15	KO	Chp2	0.034
C77080	2.27523E-19	1.13345507	0.072	0.014	7.06528E-15	KO	C77080	0.058
Sgpp1	2.97807E-19	0.78980909	0.227	0.099	9.2478E-15	KO	Sgpp1	0.128
Sult1a1	3.17906E-19	1.99705248	0.077	0.017	9.87194E-15	KO	Sult1a1	0.06
Mpv17	3.28229E-19	0.93569922	0.115	0.034	1.01925E-14	KO	Mpv17	0.081
Cd209b	3.52705E-19	4.22117611	0.024	0	1.09525E-14	KO	Cd209b	0.024
Pla2g2d	3.52705E-19	4.21890665	0.024	0	1.09525E-14	KO	Pla2g2d	0.024
Ltbp3	3.53485E-19	1.90277653	0.072	0.015	1.09768E-14	KO	Ltbp3	0.057
Esr1	3.55006E-19	1.07879466	0.06	0.01	1.1024E-14	KO	Esr1	0.05
Snx29	3.60141E-19	1.05022401	0.159	0.058	1.11835E-14	KO	Snx29	0.101
Tmem39a	3.61946E-19	1.10421823	0.095	0.025	1.12395E-14	KO	Tmem39a	0.07
Inpp5b	4.34531E-19	0.97532835	0.132	0.044	1.34935E-14	KO	Inpp5b	0.088
Txlna	5.36986E-19	0.96364803	0.183	0.073	1.6675E-14	KO	Txlna	0.11
Nectin1	5.37923E-19	2.33082346	0.048	0.006	1.67041E-14	KO	Nectin1	0.042
Kif1bp	5.44397E-19	0.80786628	0.119	0.036	1.69052E-14	KO	Kif1bp	0.083
Trim35	5.4544E-19	0.7905853	0.286	0.138	1.69375E-14	KO	Trim35	0.148
Ifi44	5.58412E-19	1.26735462	0.059	0.01	1.73404E-14	KO	Ifi44	0.049
Galnt10	7.01288E-19	0.91609043	0.132	0.044	2.17771E-14	KO	Galnt10	0.088
Cst7	7.81597E-19	2.00591282	0.044	0.005	2.42709E-14	KO	Cst7	0.039
Dock1	8.16427E-19	0.88109457	0.144	0.051	2.53525E-14	KO	Dock1	0.093
Wnt11	8.18408E-19	2.82808567	0.025	0	2.5414E-14	KO	Wnt11	0.025
Fmnl1	8.87439E-19	0.74843139	0.284	0.137	2.75576E-14	KO	Fmnl1	0.147
Zfp513	9.6463E-19	0.81046754	0.124	0.04	2.99546E-14	KO	Zfp513	0.084
Itk	1.05221E-18	2.84597506	0.037	0.003	3.26743E-14	KO	Itk	0.034
Ccl22	1.14974E-18	2.11771709	0.037	0.003	3.57029E-14	KO	Ccl22	0.034
Rab2b	1.23156E-18	0.9999824	0.073	0.016	3.82437E-14	KO	Rab2b	0.057
Atp8b2	1.27581E-18	1.52347595	0.052	0.008	3.96178E-14	KO	Atp8b2	0.044
Hr	1.39748E-18	2.59072391	0.027	0.001	4.33958E-14	KO	Hr	0.026
Zbtb11	1.42811E-18	1.14636463	0.111	0.033	4.43472E-14	KO	Zbtb11	0.078
Daam1	1.58252E-18	0.75254362	0.115	0.035	4.91418E-14	KO	Daam1	0.08
Slfn9	1.60187E-18	1.24115975	0.121	0.039	4.97429E-14	KO	Slfn9	0.082
Tfec	1.63013E-18	0.81299794	0.159	0.06	5.06205E-14	KO	Tfec	0.099
Smarcal1	1.73821E-18	1.03677337	0.097	0.027	5.39766E-14	KO	Smarcal1	0.07
Adpgk	2.20317E-18	0.74361449	0.155	0.058	6.84151E-14	KO	Adpgk	0.097
Pdlim1	2.35746E-18	1.50294024	0.109	0.033	7.32062E-14	KO	Pdlim1	0.076
Gpr68	2.66659E-18	1.47754122	0.032	0.002	8.28055E-14	KO	Gpr68	0.03

Nploc4	2.67741E-18	0.79359421	0.188	0.077	8.31416E-14	KO	Nploc4	0.111
Ksr1	2.8064E-18	1.64338507	0.061	0.011	8.7147E-14	KO	Ksr1	0.05
Ptpn22	2.95451E-18	0.83599738	0.216	0.095	9.17463E-14	KO	Ptpn22	0.121
Hps5	3.04587E-18	1.12659348	0.13	0.044	9.45834E-14	KO	Hps5	0.086
Klhl18	3.12571E-18	0.92111897	0.091	0.024	9.70628E-14	KO	Klhl18	0.067
Ccdc163	3.27787E-18	1.19134345	0.088	0.023	1.01788E-13	KO	Ccdc163	0.065
Gm38335	3.98776E-18	1.33821884	0.072	0.016	1.23832E-13	KO	Gm38335	0.056
Acyp1	4.08016E-18	0.81254884	0.121	0.039	1.26701E-13	KO	Acyp1	0.082
Abcd2	4.31701E-18	1.25362328	0.089	0.023	1.34056E-13	KO	Abcd2	0.066
Siae	4.45843E-18	0.71256159	0.115	0.036	1.38448E-13	KO	Siae	0.079
Lrrc42	4.46051E-18	0.71927581	0.111	0.034	1.38512E-13	KO	Lrrc42	0.077
Mcoln1	4.855E-18	0.79801802	0.13	0.044	1.50762E-13	KO	Mcoln1	0.086
Zfp219	4.95081E-18	0.89894896	0.1	0.028	1.53737E-13	KO	Zfp219	0.072
Papd7	5.03738E-18	1.06723554	0.112	0.035	1.56426E-13	KO	Papd7	0.077
Tbc1d8	5.05015E-18	1.10477358	0.1	0.029	1.56822E-13	KO	Tbc1d8	0.071
Anks1	5.34249E-18	0.88970268	0.168	0.066	1.659E-13	KO	Anks1	0.102
Idua	5.45652E-18	0.70912233	0.109	0.033	1.69441E-13	KO	Idua	0.076
Rab27a	5.75908E-18	0.79088595	0.064	0.012	1.78837E-13	KO	Rab27a	0.052
Ext1	6.67262E-18	0.75797782	0.158	0.06	2.07205E-13	KO	Ext1	0.098
Steap3	6.86369E-18	0.87512068	0.12	0.039	2.13138E-13	KO	Steap3	0.081
Ctns	6.99695E-18	1.13964	0.104	0.031	2.17276E-13	KO	Ctns	0.073
Gtpbp1	1.04199E-17	0.75070625	0.138	0.048	3.23568E-13	KO	Gtpbp1	0.09
Rbms2	1.12054E-17	0.77039317	0.135	0.047	3.4796E-13	KO	Rbms2	0.088
Bmp2	1.29862E-17	3.10744196	0.025	0.001	4.0326E-13	KO	Bmp2	0.024
Atp2b4	1.33755E-17	0.90670413	0.089	0.024	4.15349E-13	KO	Atp2b4	0.065
Oit3	1.35598E-17	1.81302796	0.025	0.001	4.21073E-13	KO	Oit3	0.024
AI606181	1.41814E-17	1.02927406	0.065	0.013	4.40376E-13	KO	AI606181	0.052
Slc16a7	1.54494E-17	1.22360929	0.097	0.028	4.7975E-13	KO	Slc16a7	0.069
Rfx2	1.5864E-17	1.58777092	0.033	0.002	4.92623E-13	KO	Rfx2	0.031
Pgghg	1.75237E-17	1.18181171	0.069	0.015	5.44163E-13	KO	Pgghg	0.054
Id3	1.81294E-17	0.85503764	0.14	0.052	5.62973E-13	KO	Id3	0.088
Pou3f1	1.98842E-17	1.05794274	0.032	0.002	6.17464E-13	KO	Pou3f1	0.03
Gm14461	2.23676E-17	1.53740023	0.031	0.002	6.94582E-13	KO	Gm14461	0.029
Ddx23	2.28493E-17	0.83694685	0.134	0.047	7.09541E-13	KO	Ddx23	0.087
Tinf2	2.32977E-17	1.12845019	0.104	0.032	7.23464E-13	KO	Tinf2	0.072
Nod2	2.58517E-17	1.77746173	0.048	0.007	8.02774E-13	KO	Nod2	0.041
Rpl10-ps3	2.61206E-17	0.86925292	0.124	0.042	8.11123E-13	KO	Rpl10-ps3	0.082
Kitl	2.98223E-17	1.15617734	0.088	0.024	9.26072E-13	KO	Kitl	0.064
Dusp10	3.23302E-17	1.26923286	0.088	0.024	1.00395E-12	KO	Dusp10	0.064
Il13	3.25968E-17	3.56635712	0.021	0	1.01223E-12	KO	Il13	0.021
Kin	3.47405E-17	0.97628897	0.117	0.039	1.0788E-12	KO	Kin	0.078
Lyz1	3.51654E-17	3.85112451	0.087	0.024	1.09199E-12	KO	Lyz1	0.063
Mras	3.60978E-17	1.57042544	0.069	0.015	1.12094E-12	KO	Mras	0.054
Enpp4	4.02458E-17	1.2509278	0.061	0.012	1.24975E-12	KO	Enpp4	0.049
Mocos	4.06416E-17	0.79261521	0.068	0.015	1.26204E-12	KO	Mocos	0.053
Pcmtd2	4.09087E-17	1.07640761	0.093	0.027	1.27034E-12	KO	Pcmtd2	0.066
Pou2f2	4.13719E-17	0.80480137	0.286	0.145	1.28472E-12	KO	Pou2f2	0.141
Dnajb12	4.37825E-17	0.69538622	0.119	0.039	1.35958E-12	KO	Dnajb12	0.08
Oas2	5.29941E-17	1.14156852	0.101	0.031	1.64563E-12	KO	Oas2	0.07
A630001G21F	5.96674E-17	0.73949349	0.144	0.054	1.85285E-12	KO	A630001G21	0.09
Ankra2	6.78578E-17	1.09192276	0.105	0.033	2.10719E-12	KO	Ankra2	0.072
9130230L23R	7.32147E-17	1.38922584	0.043	0.005	2.27354E-12	KO	9130230L23I	0.038
Rhoq	7.95242E-17	0.77523335	0.186	0.079	2.46946E-12	KO	Rhoq	0.107
Trbc2	8.73228E-17	2.31251388	0.057	0.011	2.71164E-12	KO	Trbc2	0.046

Gene	p-value	log2FC	pct.1	pct.2	p-adj	Group	Gene	value
Cpped1	9.44149E-17	0.98355676	0.139	0.051	2.93187E-12	KO	Cpped1	0.088
Ankrd27	1.06692E-16	0.85828693	0.105	0.033	3.3131E-12	KO	Ankrd27	0.072
Eps8l1	1.20962E-16	1.94521112	0.032	0.002	3.75623E-12	KO	Eps8l1	0.03
Ttpal	1.4184E-16	0.88760069	0.085	0.023	4.40454E-12	KO	Ttpal	0.062
Mier3	1.54228E-16	1.13991723	0.073	0.018	4.78925E-12	KO	Mier3	0.055
Ppp1r12b	1.56144E-16	0.81396589	0.064	0.014	4.84874E-12	KO	Ppp1r12b	0.05
Crebl2	1.57898E-16	1.12524949	0.044	0.006	4.90322E-12	KO	Crebl2	0.038
Clec2g	1.63879E-16	2.53595168	0.025	0.001	5.08895E-12	KO	Clec2g	0.024
Siglecf	1.71869E-16	1.43314414	0.025	0.001	5.33704E-12	KO	Siglecf	0.024
Mag	1.81492E-16	1.17608211	0.068	0.015	5.63588E-12	KO	Mag	0.053
Tst	1.85417E-16	1.64468684	0.055	0.01	5.75775E-12	KO	Tst	0.045
Hspa1l	2.03719E-16	1.03340878	0.028	0.002	6.32608E-12	KO	Hspa1l	0.026
Ermard	2.17758E-16	1.07098646	0.099	0.03	6.76203E-12	KO	Ermard	0.069
Erich1	2.33628E-16	0.70454395	0.081	0.021	7.25486E-12	KO	Erich1	0.06
Gm20604	2.36156E-16	1.06594749	0.085	0.023	7.33337E-12	KO	Gm20604	0.062
Palm	2.41433E-16	0.82160964	0.087	0.024	7.49721E-12	KO	Palm	0.063
Pde7b	2.41435E-16	1.18399527	0.063	0.013	7.49727E-12	KO	Pde7b	0.05
Nkg7	2.70139E-16	1.89392961	0.059	0.012	8.38861E-12	KO	Nkg7	0.047
Gpr18	2.7747E-16	1.57393868	0.043	0.006	8.61626E-12	KO	Gpr18	0.037
Rusc1	3.05466E-16	0.92485964	0.097	0.03	9.48562E-12	KO	Rusc1	0.067
Hepacam2	3.13694E-16	2.30050404	0.02	0	9.74114E-12	KO	Hepacam2	0.02
Klrb1a	3.13694E-16	1.61239393	0.02	0	9.74114E-12	KO	Klrb1a	0.02
Ryr1	3.60522E-16	1.39751905	0.053	0.01	1.11953E-11	KO	Ryr1	0.043
Vill	4.08226E-16	0.70002573	0.162	0.066	1.26766E-11	KO	Vill	0.096
Hsph1	4.4966E-16	1.01299077	0.124	0.044	1.39633E-11	KO	Hsph1	0.08
Qpct	4.83415E-16	1.04612589	0.184	0.081	1.50115E-11	KO	Qpct	0.103
Fbxo30	5.58976E-16	0.85236505	0.134	0.05	1.73579E-11	KO	Fbxo30	0.084
Ldlrad3	6.79762E-16	1.10225856	0.067	0.015	2.11086E-11	KO	Ldlrad3	0.052
Otud1	6.95335E-16	0.87414281	0.08	0.021	2.15922E-11	KO	Otud1	0.059
Hmgxb4	7.51527E-16	1.15355022	0.089	0.026	2.33372E-11	KO	Hmgxb4	0.063
Atg2b	7.81286E-16	1.37202124	0.101	0.032	2.42613E-11	KO	Atg2b	0.069
Man2a2	8.72455E-16	0.75531394	0.191	0.084	2.70923E-11	KO	Man2a2	0.107
Cysltr2	9.34945E-16	2.32257463	0.036	0.004	2.90328E-11	KO	Cysltr2	0.032
Tusc1	1.00399E-15	1.04382151	0.117	0.041	3.11769E-11	KO	Tusc1	0.076
Unc13d	1.03696E-15	0.88038746	0.105	0.034	3.22008E-11	KO	Unc13d	0.071
Pdgfb	1.1504E-15	1.29053558	0.092	0.028	3.57234E-11	KO	Pdgfb	0.064
Tnfrsf18	1.22565E-15	1.60549879	0.047	0.008	3.806E-11	KO	Tnfrsf18	0.039
Bcl2l2	1.24345E-15	1.14443443	0.087	0.025	3.86129E-11	KO	Bcl2l2	0.062
Sc5d	1.28134E-15	0.86673197	0.08	0.022	3.97893E-11	KO	Sc5d	0.058
Cnnm4	1.30733E-15	0.98844373	0.067	0.016	4.05964E-11	KO	Cnnm4	0.051
Adgre4	1.47161E-15	2.63195395	0.028	0.002	4.56979E-11	KO	Adgre4	0.026
Gm26510	1.56989E-15	1.08373872	0.072	0.018	4.87499E-11	KO	Gm26510	0.054
Csf3	1.67922E-15	2.84517347	0.027	0.002	5.21448E-11	KO	Csf3	0.025
Mapre3	1.77552E-15	0.79203004	0.071	0.017	5.51353E-11	KO	Mapre3	0.054
Pld2	1.78824E-15	0.86829916	0.134	0.05	5.55302E-11	KO	Pld2	0.084
Zscan26	1.83515E-15	0.97628106	0.093	0.029	5.6987E-11	KO	Zscan26	0.064
Spic	2.14632E-15	2.11901052	0.043	0.006	6.66497E-11	KO	Spic	0.037
Isoc1	2.30046E-15	0.86471768	0.113	0.039	7.14362E-11	KO	Isoc1	0.074
Ccdc91	2.45443E-15	1.18904721	0.053	0.01	7.62175E-11	KO	Ccdc91	0.043
Ccdc102a	2.55022E-15	1.31030041	0.049	0.009	7.91921E-11	KO	Ccdc102a	0.04
Rnf25	2.63712E-15	0.83846614	0.092	0.028	8.18906E-11	KO	Rnf25	0.064
Acvr1b	2.70891E-15	0.7317437	0.089	0.027	8.41199E-11	KO	Acvr1b	0.062
Btbd17	3.02187E-15	1.713206	0.019	0	9.38381E-11	KO	Btbd17	0.019
Atxn3	3.55429E-15	0.86564436	0.142	0.055	1.10372E-10	KO	Atxn3	0.087

Fbxo38	3.58805E-15	0.70881269	0.152	0.061	1.1142E-10	KO	Fbxo38	0.091
Gm15987	3.65117E-15	1.40579644	0.044	0.007	1.1338E-10	KO	Gm15987	0.037
Casd1	3.87461E-15	0.69571724	0.108	0.037	1.20318E-10	KO	Casd1	0.071
Pprc1	4.21028E-15	0.71918761	0.101	0.033	1.30742E-10	KO	Pprc1	0.068
Slc39a9	4.26731E-15	0.77475705	0.131	0.049	1.32513E-10	KO	Slc39a9	0.082
9030025P20R	4.41175E-15	1.51689091	0.044	0.007	1.36998E-10	KO	9030025P20	0.037
Zfyve27	6.46255E-15	0.75163159	0.097	0.031	2.00681E-10	KO	Zfyve27	0.066
Sfi1	7.2066E-15	0.84132889	0.076	0.021	2.23787E-10	KO	Sfi1	0.055
Rgs14	7.79716E-15	0.81651998	0.088	0.027	2.42125E-10	KO	Rgs14	0.061
Ing5	8.14431E-15	1.09436802	0.103	0.035	2.52905E-10	KO	Ing5	0.068
Pak4	9.41551E-15	0.88066177	0.071	0.018	2.9238E-10	KO	Pak4	0.053
1110002J07Ri	9.91882E-15	1.94235523	0.028	0.002	3.08009E-10	KO	1110002J07F	0.026
Gpr176	1.00891E-14	1.09076843	0.028	0.002	3.13297E-10	KO	Gpr176	0.026
Tlr11	1.05427E-14	1.76520154	0.021	0.001	3.27383E-10	KO	Tlr11	0.02
Asgr2	1.07938E-14	2.03651645	0.021	0.001	3.3518E-10	KO	Asgr2	0.02
Gm47242	1.0973E-14	1.28357627	0.021	0.001	3.40746E-10	KO	Gm47242	0.02
Lipo3	1.16837E-14	1.14134063	0.103	0.035	3.62813E-10	KO	Lipo3	0.068
Rnf128	1.36981E-14	0.96385997	0.151	0.064	4.25367E-10	KO	Rnf128	0.087
Cpox	1.39273E-14	0.72175641	0.092	0.029	4.32484E-10	KO	Cpox	0.063
Tslp	1.41677E-14	2.1190562	0.025	0.002	4.39948E-10	KO	Tslp	0.023
Map3k4	1.54805E-14	0.77711885	0.105	0.036	4.80716E-10	KO	Map3k4	0.069
Ddx10	1.6614E-14	0.89103999	0.156	0.066	5.15915E-10	KO	Ddx10	0.09
Mut	1.76274E-14	1.05344926	0.116	0.042	5.47383E-10	KO	Mut	0.074
Mbd5	1.80173E-14	0.731029	0.081	0.024	5.59491E-10	KO	Mbd5	0.057
Leo1	1.92709E-14	0.89561749	0.101	0.034	5.98418E-10	KO	Leo1	0.067
Spry2	1.98478E-14	1.09275827	0.059	0.013	6.16334E-10	KO	Spry2	0.046
Alpk1	1.99064E-14	0.998132	0.064	0.016	6.18153E-10	KO	Alpk1	0.048
Supt6	2.07608E-14	0.71431318	0.191	0.088	6.44685E-10	KO	Supt6	0.103
Hdac3	2.22147E-14	0.82898158	0.196	0.091	6.89833E-10	KO	Hdac3	0.105
Nos2	2.43807E-14	1.13974809	0.097	0.033	7.57093E-10	KO	Nos2	0.064
Plekhg3	2.64451E-14	0.82075079	0.126	0.048	8.21201E-10	KO	Plekhg3	0.078
Icos	2.78983E-14	2.28348307	0.037	0.005	8.66326E-10	KO	Icos	0.032
Dcn	2.7989E-14	1.30943655	0.04	0.006	8.69144E-10	KO	Dcn	0.034
Cd209e	2.91484E-14	2.54417939	0.017	0	9.05147E-10	KO	Cd209e	0.017
Lrrc14b	2.91484E-14	2.1606593	0.017	0	9.05147E-10	KO	Lrrc14b	0.017
Pdcd4	3.21556E-14	1.21112383	0.111	0.04	9.98528E-10	KO	Pdcd4	0.071
Avpi1	3.22624E-14	1.07521784	0.144	0.06	1.00184E-09	KO	Avpi1	0.084
Ank	3.55958E-14	1.13740027	0.076	0.022	1.10536E-09	KO	Ank	0.054
Zbtb2	3.72126E-14	0.70182647	0.069	0.018	1.15556E-09	KO	Zbtb2	0.051
Il18r1	3.85004E-14	2.64422086	0.033	0.004	1.19555E-09	KO	Il18r1	0.029
Rasal3	3.99079E-14	0.75474275	0.099	0.033	1.23926E-09	KO	Rasal3	0.066
Flnb	4.04541E-14	1.03572145	0.057	0.013	1.25622E-09	KO	Flnb	0.044
Cep135	4.17163E-14	0.92359326	0.083	0.025	1.29542E-09	KO	Cep135	0.058
Klrb1b	4.43172E-14	1.59833699	0.053	0.011	1.37618E-09	KO	Klrb1b	0.042
Il18rap	4.5161E-14	1.0495983	0.067	0.017	1.40239E-09	KO	Il18rap	0.05
Dbp	4.99606E-14	0.72517635	0.093	0.031	1.55143E-09	KO	Dbp	0.062
Thap12	5.11227E-14	0.96098395	0.144	0.06	1.58751E-09	KO	Thap12	0.084
Gm12840	5.34206E-14	1.75119768	0.052	0.011	1.65887E-09	KO	Gm12840	0.041
Sdccag8	5.43866E-14	0.81868433	0.101	0.035	1.68887E-09	KO	Sdccag8	0.066
Zfp462	5.71563E-14	1.36480866	0.028	0.002	1.77487E-09	KO	Zfp462	0.026
Ctdspl	5.96969E-14	1.23768572	0.083	0.025	1.85377E-09	KO	Ctdspl	0.058
Htr7	7.34295E-14	1.44379666	0.032	0.004	2.2802E-09	KO	Htr7	0.028
Trim5	7.40674E-14	1.01120565	0.064	0.016	2.30001E-09	KO	Trim5	0.048
Akap7	7.62928E-14	0.725368	0.124	0.048	2.36912E-09	KO	Akap7	0.076

Plekhg5	7.84227E-14	2.07348476	0.037	0.005	2.43526E-09	KO	Plekhg5	0.032
2900089D17R	8.16677E-14	1.78362421	0.04	0.006	2.53603E-09	KO	2900089D17	0.034
Ticam2	8.57272E-14	0.70221195	0.092	0.03	2.66209E-09	KO	Ticam2	0.062
Mfap1a	8.93443E-14	0.76348179	0.115	0.043	2.77441E-09	KO	Mfap1a	0.072
Gm38843	9.41424E-14	1.48598515	0.037	0.005	2.9234E-09	KO	Gm38843	0.032
Slc41a1	9.6184E-14	0.90540473	0.075	0.021	2.9868E-09	KO	Slc41a1	0.054
Bex6	1.0038E-13	1.67091548	0.02	0.001	3.11711E-09	KO	Bex6	0.019
Endou	1.00615E-13	1.1382336	0.02	0.001	3.12439E-09	KO	Endou	0.019
H2-Ob	1.10827E-13	2.29278898	0.031	0.003	3.4415E-09	KO	H2-Ob	0.028
Mib2	1.12739E-13	0.70152372	0.079	0.023	3.50089E-09	KO	Mib2	0.056
Olfr433	1.21804E-13	1.66022123	0.021	0.001	3.78237E-09	KO	Olfr433	0.02
Dpys	1.2261E-13	1.8719357	0.021	0.001	3.80742E-09	KO	Dpys	0.02
Ddx4	1.23966E-13	1.60030725	0.021	0.001	3.84953E-09	KO	Ddx4	0.02
A4galt	1.26402E-13	2.23281559	0.023	0.001	3.92515E-09	KO	A4galt	0.022
Klre1	1.27731E-13	2.16614301	0.023	0.001	3.96642E-09	KO	Klre1	0.022
Asb11	1.29073E-13	1.2587434	0.023	0.001	4.00811E-09	KO	Asb11	0.022
Ggt5	1.33877E-13	1.30027538	0.06	0.015	4.1573E-09	KO	Ggt5	0.045
Tmem106c	1.42204E-13	0.69621955	0.164	0.073	4.41585E-09	KO	Tmem106c	0.091
Ccdc191	1.4667E-13	1.73307834	0.039	0.006	4.55453E-09	KO	Ccdc191	0.033
Pde4dip	1.5984E-13	0.81338474	0.057	0.014	4.96351E-09	KO	Pde4dip	0.043
Senp7	1.60875E-13	0.80658147	0.093	0.032	4.99565E-09	KO	Senp7	0.061
Gm13391	1.84027E-13	0.76567698	0.059	0.014	5.7146E-09	KO	Gm13391	0.045
Ivd	2.02169E-13	0.91717338	0.103	0.037	6.27796E-09	KO	Ivd	0.066
Hlcs	2.39737E-13	0.87918775	0.087	0.028	7.44454E-09	KO	Hlcs	0.059
Casp12	2.70608E-13	0.96914546	0.051	0.011	8.40319E-09	KO	Casp12	0.04
Ccr7	2.71397E-13	2.06023104	0.037	0.006	8.42768E-09	KO	Ccr7	0.031
Gpr162	2.81636E-13	1.22682058	0.016	0	8.74564E-09	KO	Gpr162	0.016
Traf3ip3	2.87794E-13	0.78733462	0.064	0.017	8.93686E-09	KO	Traf3ip3	0.047
Nostrin	2.89733E-13	0.75990246	0.103	0.037	8.99707E-09	KO	Nostrin	0.066
Polr3d	3.0585E-13	1.10785857	0.077	0.023	9.49755E-09	KO	Polr3d	0.054
Ttc38	3.44745E-13	0.96260576	0.06	0.015	1.07054E-08	KO	Ttc38	0.045
Fbxo25	3.91478E-13	0.72411422	0.06	0.015	1.21566E-08	KO	Fbxo25	0.045
Gm20186	3.94193E-13	2.49946088	0.065	0.018	1.22409E-08	KO	Gm20186	0.047
Ubxn11	4.10243E-13	1.847209	0.043	0.008	1.27393E-08	KO	Ubxn11	0.035
Slc9a7	4.66221E-13	1.64435855	0.031	0.004	1.44776E-08	KO	Slc9a7	0.027
Bckdhb	4.9177E-13	1.30475109	0.064	0.017	1.52709E-08	KO	Bckdhb	0.047
Hcfc2	5.81011E-13	0.74211061	0.095	0.033	1.80421E-08	KO	Hcfc2	0.062
Celf4	5.85089E-13	1.53237282	0.025	0.002	1.81688E-08	KO	Celf4	0.023
Llgl1	5.87189E-13	0.7358753	0.103	0.038	1.8234E-08	KO	Llgl1	0.065
Mettl17	5.95732E-13	0.93617758	0.053	0.012	1.84993E-08	KO	Mettl17	0.041
Krt28	6.10653E-13	1.93711795	0.017	0	1.89626E-08	KO	Krt28	0.017
Upb1	6.12175E-13	2.18090434	0.017	0	1.90099E-08	KO	Upb1	0.017
Ksr2	6.13701E-13	1.39048486	0.017	0	1.90573E-08	KO	Ksr2	0.017
Galm	6.23771E-13	0.91094577	0.077	0.024	1.937E-08	KO	Galm	0.053
Edc4	6.38551E-13	0.71429241	0.138	0.058	1.98289E-08	KO	Edc4	0.08
Nek1	6.62658E-13	1.23261218	0.056	0.014	2.05775E-08	KO	Nek1	0.042
Mid1ip1	6.82692E-13	0.710567	0.139	0.059	2.11996E-08	KO	Mid1ip1	0.08
Rtn1	7.54931E-13	2.3634779	0.024	0.002	2.34429E-08	KO	Rtn1	0.022
Gm15448	7.63568E-13	1.21598066	0.024	0.002	2.37111E-08	KO	Gm15448	0.022
Zdhhc13	8.95886E-13	0.84406845	0.101	0.037	2.78199E-08	KO	Zdhhc13	0.064
Kynu	9.17134E-13	1.51201411	0.019	0.001	2.84798E-08	KO	Kynu	0.018
Cdyl	1.03921E-12	1.1728586	0.083	0.027	3.22705E-08	KO	Cdyl	0.056
Adrb2	1.07061E-12	0.7321874	0.16	0.073	3.32455E-08	KO	Adrb2	0.087
Neil2	1.07286E-12	2.14478768	0.02	0.001	3.33156E-08	KO	Neil2	0.019

Gene	p-value	log2FC	pct.1	pct.2	p_adj	group	Gene	val
Cep290	1.11232E-12	0.85067112	0.1	0.037	3.4541E-08	KO	Cep290	0.063
Slc46a3	1.12402E-12	1.12841594	0.052	0.012	3.49042E-08	KO	Slc46a3	0.04
Clic5	1.2422E-12	1.50055866	0.028	0.003	3.85741E-08	KO	Clic5	0.025
Trim30c	1.2692E-12	1.40991461	0.028	0.003	3.94126E-08	KO	Trim30c	0.025
Krt71	1.2713E-12	1.37490537	0.028	0.003	3.94778E-08	KO	Krt71	0.025
Wdr82	1.29246E-12	0.77115754	0.14	0.06	4.01349E-08	KO	Wdr82	0.08
Fam53b	1.40732E-12	0.73618926	0.158	0.071	4.37016E-08	KO	Fam53b	0.087
Slc25a32	1.66932E-12	0.74983644	0.071	0.021	5.18375E-08	KO	Slc25a32	0.05
Map3k15	1.70899E-12	1.50126103	0.04	0.007	5.30692E-08	KO	Map3k15	0.033
Fry	1.73181E-12	0.88967825	0.071	0.021	5.37778E-08	KO	Fry	0.05
Pdgfc	1.77226E-12	0.8173839	0.154	0.07	5.50339E-08	KO	Pdgfc	0.084
Socs5	1.77949E-12	0.76280122	0.045	0.009	5.52586E-08	KO	Socs5	0.036
Ercc6	1.79372E-12	1.00941646	0.063	0.017	5.57003E-08	KO	Ercc6	0.046
Elmod2	1.79527E-12	0.70593107	0.105	0.04	5.57487E-08	KO	Elmod2	0.065
Slc20a2	1.8809E-12	0.74803382	0.071	0.021	5.84075E-08	KO	Slc20a2	0.05
Pcp4l1	1.91255E-12	1.8979066	0.027	0.003	5.93905E-08	KO	Pcp4l1	0.024
Cacnb4	2.03636E-12	1.06023699	0.027	0.003	6.3235E-08	KO	Cacnb4	0.024
Tmem64	2.12495E-12	0.84078464	0.061	0.017	6.59862E-08	KO	Tmem64	0.044
Ikzf2	2.54345E-12	1.30940665	0.053	0.013	7.89816E-08	KO	Ikzf2	0.04
Zbtb1	2.88591E-12	0.74883901	0.083	0.028	8.96163E-08	KO	Zbtb1	0.055
Prss46	3.10425E-12	1.75502548	0.032	0.005	9.63963E-08	KO	Prss46	0.027
Maml2	3.20253E-12	1.16710916	0.064	0.018	9.94483E-08	KO	Maml2	0.046
Gucd1	3.2143E-12	0.73391674	0.093	0.033	9.98137E-08	KO	Gucd1	0.06
Cmah	4.32826E-12	1.38023178	0.024	0.002	1.34406E-07	KO	Cmah	0.022
Capn15	4.34387E-12	0.96922774	0.079	0.026	1.3489E-07	KO	Capn15	0.053
Cd5l	4.73284E-12	2.09980744	0.041	0.008	1.46969E-07	KO	Cd5l	0.033
Lif	4.74147E-12	3.05568366	0.028	0.003	1.47237E-07	KO	Lif	0.025
Tmco6	4.77591E-12	0.79342654	0.049	0.011	1.48306E-07	KO	Tmco6	0.038
Oas1g	4.81668E-12	0.80925506	0.065	0.019	1.49572E-07	KO	Oas1g	0.046
Fndc7	4.95684E-12	1.69447351	0.028	0.003	1.53925E-07	KO	Fndc7	0.025
Ctsw	5.73731E-12	2.30850405	0.031	0.004	1.78161E-07	KO	Ctsw	0.027
Siglech	5.76534E-12	3.0841516	0.016	0	1.79031E-07	KO	Siglech	0.016
Tgtp1	5.83712E-12	1.60694382	0.016	0	1.8126E-07	KO	Tgtp1	0.016
C1qtnf1	5.93759E-12	1.50069604	0.023	0.002	1.8438E-07	KO	C1qtnf1	0.021
Lrrc20	6.30041E-12	1.2925554	0.037	0.007	1.95646E-07	KO	Lrrc20	0.03
1700061G19R	7.81923E-12	1.22943424	0.021	0.002	2.42811E-07	KO	1700061G19	0.019
4930512J16Ri	7.94134E-12	0.6933082	0.021	0.002	2.46602E-07	KO	4930512J16F	0.019
Cbarp	8.23828E-12	2.49035311	0.027	0.003	2.55823E-07	KO	Cbarp	0.024
Gm16094	8.3635E-12	1.4348399	0.017	0.001	2.59712E-07	KO	Gm16094	0.016
4631405K08R	8.49846E-12	2.1577981	0.017	0.001	2.63903E-07	KO	4631405K08	0.016
Cd200r3	8.53742E-12	1.31175428	0.017	0.001	2.65112E-07	KO	Cd200r3	0.016
AI839979	8.63006E-12	0.81607775	0.056	0.015	2.67989E-07	KO	AI839979	0.041
Vwa8	9.1628E-12	0.70844102	0.095	0.035	2.84532E-07	KO	Vwa8	0.06
Tnfsf8	9.19284E-12	1.76940784	0.02	0.001	2.85465E-07	KO	Tnfsf8	0.019
Zfp322a	9.25722E-12	0.7853781	0.085	0.03	2.87464E-07	KO	Zfp322a	0.055
Gm12216	1.04971E-11	0.809283	0.048	0.011	3.25965E-07	KO	Gm12216	0.037
Stat4	1.05216E-11	1.25461005	0.029	0.004	3.26728E-07	KO	Stat4	0.025
Kbtbd11	1.11732E-11	1.88015587	0.041	0.008	3.46962E-07	KO	Kbtbd11	0.033
Ints7	1.19106E-11	0.99018687	0.093	0.035	3.6986E-07	KO	Ints7	0.058
Gm9733	1.19715E-11	1.01074887	0.08	0.027	3.71751E-07	KO	Gm9733	0.053
Macrod1	1.25873E-11	0.98608042	0.06	0.017	3.90873E-07	KO	Macrod1	0.043
Ifitm6	1.27692E-11	0.96178004	0.084	0.03	3.96521E-07	KO	Ifitm6	0.054
Gm46224	1.39329E-11	0.76595756	0.084	0.03	4.32658E-07	KO	Gm46224	0.054
Kat6b	1.44206E-11	0.81974394	0.081	0.028	4.47803E-07	KO	Kat6b	0.053

Clec2i	1.44339E-11	0.90042671	0.087	0.031	4.48217E-07	KO	Clec2i	0.056
Neurl4	1.44821E-11	0.73947758	0.089	0.033	4.49714E-07	KO	Neurl4	0.056
Kdm2b	1.48632E-11	0.7027325	0.183	0.092	4.61546E-07	KO	Kdm2b	0.091
Cd2	1.52048E-11	1.73782481	0.033	0.005	4.72155E-07	KO	Cd2	0.028
Nhsl2	1.57891E-11	1.10593334	0.053	0.014	4.903E-07	KO	Nhsl2	0.039
Pi16	1.65594E-11	1.28182881	0.037	0.007	5.14218E-07	KO	Pi16	0.03
Bcl9	1.70204E-11	1.22196713	0.053	0.014	5.28534E-07	KO	Bcl9	0.039
Ptgfrn	1.78875E-11	0.74610627	0.044	0.01	5.55461E-07	KO	Ptgfrn	0.034
Gm28809	2.13206E-11	1.25635928	0.024	0.002	6.6207E-07	KO	Gm28809	0.022
Tbc1d32	2.14711E-11	0.95994241	0.06	0.017	6.66742E-07	KO	Tbc1d32	0.043
Fcho1	2.48001E-11	1.14816853	0.065	0.02	7.70118E-07	KO	Fcho1	0.045
1110034G24R	2.53886E-11	0.96275462	0.064	0.019	7.88392E-07	KO	1110034G24	0.045
Mettl25	2.61433E-11	0.72573051	0.04	0.008	8.11828E-07	KO	Mettl25	0.032
Gm8113	2.64792E-11	2.46456251	0.013	0	8.2226E-07	KO	Gm8113	0.013
Cd209c	2.64792E-11	1.74741944	0.013	0	8.2226E-07	KO	Cd209c	0.013
Serpinb6b	2.69605E-11	2.41304418	0.041	0.009	8.37203E-07	KO	Serpinb6b	0.032
Hectd4	2.83802E-11	0.88621052	0.079	0.027	8.81292E-07	KO	Hectd4	0.052
Trim56	2.85207E-11	0.80793876	0.108	0.044	8.85653E-07	KO	Trim56	0.064
Gpr84	3.19847E-11	1.25228928	0.023	0.002	9.9322E-07	KO	Gpr84	0.021
Txk	3.29613E-11	1.17750508	0.027	0.003	1.02355E-06	KO	Txk	0.024
Rpl3l	3.35278E-11	1.16680341	0.027	0.003	1.04114E-06	KO	Rpl3l	0.024
Tenm4	3.52831E-11	1.28197099	0.029	0.004	1.09564E-06	KO	Tenm4	0.025
Gm15445	3.65729E-11	1.32585128	0.029	0.004	1.1357E-06	KO	Gm15445	0.025
Gm19705	3.72388E-11	0.71499655	0.06	0.017	1.15638E-06	KO	Gm19705	0.043
Sirpb1a	4.08922E-11	0.83372685	0.072	0.024	1.26982E-06	KO	Sirpb1a	0.048
Cd226	4.50242E-11	1.73192111	0.021	0.002	1.39814E-06	KO	Cd226	0.019
Dmkn	4.8375E-11	1.12798506	0.033	0.006	1.50219E-06	KO	Dmkn	0.027
Nprl3	4.86168E-11	1.28499075	0.056	0.016	1.5097E-06	KO	Nprl3	0.04
Cd55	4.95008E-11	3.09253172	0.025	0.003	1.53715E-06	KO	Cd55	0.022
Mepce	5.18669E-11	0.81183456	0.121	0.053	1.61062E-06	KO	Mepce	0.068
Acad11	5.20982E-11	0.76405855	0.039	0.008	1.6178E-06	KO	Acad11	0.031
Cyp2ab1	5.5645E-11	1.73889463	0.015	0	1.72795E-06	KO	Cyp2ab1	0.015
St18	5.61063E-11	1.44820846	0.025	0.003	1.74227E-06	KO	St18	0.022
Slc2a9	5.75892E-11	1.0297764	0.053	0.014	1.78832E-06	KO	Slc2a9	0.039
Lsmem1	6.14473E-11	1.46598281	0.02	0.002	1.90812E-06	KO	Lsmem1	0.018
Hs3st3b1	6.2034E-11	1.01938245	0.02	0.002	1.92634E-06	KO	Hs3st3b1	0.018
Kif9	6.27706E-11	0.72311836	0.031	0.005	1.94922E-06	KO	Kif9	0.026
Abtb2	6.3222E-11	0.97263711	0.059	0.017	1.96323E-06	KO	Abtb2	0.042
Pogk	6.34032E-11	0.80641416	0.052	0.014	1.96886E-06	KO	Pogk	0.038
Zfp456	6.36321E-11	1.64398639	0.028	0.004	1.97597E-06	KO	Zfp456	0.024
Hpn	6.42853E-11	1.66127974	0.028	0.004	1.99625E-06	KO	Hpn	0.024
Thap1	6.56412E-11	1.05682884	0.059	0.017	2.03836E-06	KO	Thap1	0.042
Ikzf3	7.17769E-11	3.02930498	0.019	0.001	2.22889E-06	KO	Ikzf3	0.018
Slc9a4	7.35739E-11	1.0171158	0.044	0.01	2.28469E-06	KO	Slc9a4	0.034
Gm13710	7.44981E-11	0.722228	0.044	0.01	2.31339E-06	KO	Gm13710	0.034
Matn4	7.46992E-11	2.37749903	0.019	0.001	2.31964E-06	KO	Matn4	0.018
Il27ra	7.65082E-11	1.12330194	0.019	0.001	2.37581E-06	KO	Il27ra	0.018
Gprc5a	7.97616E-11	2.2185436	0.017	0.001	2.47684E-06	KO	Gprc5a	0.016
Klhl33	8.21543E-11	2.05268368	0.017	0.001	2.55114E-06	KO	Klhl33	0.016
Cbx7	8.67608E-11	1.27990866	0.032	0.005	2.69418E-06	KO	Cbx7	0.027
Hacd3	8.78972E-11	0.99150315	0.109	0.046	2.72947E-06	KO	Hacd3	0.063
Fpr2	9.8552E-11	1.57419218	0.103	0.043	3.06033E-06	KO	Fpr2	0.06
Hif1an	1.05785E-10	0.96424366	0.085	0.032	3.28493E-06	KO	Hif1an	0.053
Atp11a	1.10584E-10	0.86360845	0.127	0.057	3.43395E-06	KO	Atp11a	0.07

Gene	p_val	avg_logFC	pct.1	pct.2	p_val_adj	cluster	Gene	value
Cebpe	1.124E-10	1.58571077	0.027	0.004	3.49037E-06	KO	Cebpe	0.023
Plekhf1	1.16319E-10	1.3480085	0.033	0.006	3.61204E-06	KO	Plekhf1	0.027
Gm15247	1.17344E-10	1.0123156	0.027	0.004	3.64387E-06	KO	Gm15247	0.023
Rrp12	1.24961E-10	1.09390141	0.088	0.034	3.88042E-06	KO	Rrp12	0.054
Tbc1d12	1.27555E-10	0.78614983	0.04	0.009	3.96097E-06	KO	Tbc1d12	0.031
Slc5a3	1.27598E-10	1.51451478	0.045	0.011	3.9623E-06	KO	Slc5a3	0.034
Usf3	1.29428E-10	0.97337581	0.081	0.03	4.01911E-06	KO	Usf3	0.051
Pex11a	1.33326E-10	0.87741212	0.051	0.014	4.14018E-06	KO	Pex11a	0.037
Zfp719	1.42612E-10	0.85906615	0.041	0.009	4.42853E-06	KO	Zfp719	0.032
Nlrp1b	1.43234E-10	1.20114422	0.044	0.011	4.44785E-06	KO	Nlrp1b	0.033
Dnajc27	1.46561E-10	0.90988477	0.043	0.01	4.55116E-06	KO	Dnajc27	0.033
Sectm1a	1.47371E-10	0.77034545	0.056	0.016	4.57632E-06	KO	Sectm1a	0.04
Afap1	1.51917E-10	1.08265232	0.045	0.011	4.71746E-06	KO	Afap1	0.034
B3galnt2	1.63233E-10	0.82843012	0.055	0.016	5.06887E-06	KO	B3galnt2	0.039
Cd4	1.64292E-10	1.30979663	0.031	0.005	5.10176E-06	KO	Cd4	0.026
Ythdc2	1.80316E-10	0.6932579	0.092	0.036	5.59935E-06	KO	Ythdc2	0.056
AI987944	1.84773E-10	0.78377901	0.068	0.023	5.73775E-06	KO	AI987944	0.045
Kif1a	2.31276E-10	1.04499445	0.021	0.002	7.18181E-06	KO	Kif1a	0.019
Cenpj	2.45799E-10	1.0545945	0.039	0.008	7.63279E-06	KO	Cenpj	0.031
Fam208b	2.47096E-10	0.8543879	0.083	0.031	7.67306E-06	KO	Fam208b	0.052
Itln1	2.58018E-10	2.23701947	0.012	0	8.01223E-06	KO	Itln1	0.012
Brpf3	2.66724E-10	1.2550059	0.06	0.019	8.28259E-06	KO	Brpf3	0.041
Epg5	2.8837E-10	0.82672866	0.071	0.024	8.95476E-06	KO	Epg5	0.047
Igip	3.26283E-10	2.00092258	0.035	0.007	1.01321E-05	KO	Igip	0.028
Atp10a	3.458E-10	1.76737902	0.024	0.003	1.07381E-05	KO	Atp10a	0.021
Gzmb	3.58226E-10	2.69533596	0.027	0.004	1.1124E-05	KO	Gzmb	0.023
Sh3d19	3.77054E-10	1.33066644	0.027	0.004	1.17086E-05	KO	Sh3d19	0.023
Tecpr2	4.15825E-10	0.84279631	0.051	0.014	1.29126E-05	KO	Tecpr2	0.037
Grasp	4.18176E-10	1.47086098	0.036	0.008	1.29856E-05	KO	Grasp	0.028
Creb3l2	4.71025E-10	0.73164117	0.071	0.025	1.46267E-05	KO	Creb3l2	0.046
Enkur	5.26461E-10	1.48280053	0.013	0	1.63482E-05	KO	Enkur	0.013
Gm34425	5.27745E-10	0.83791416	0.013	0	1.63881E-05	KO	Gm34425	0.013
Myrf	5.29033E-10	1.09765392	0.013	0	1.64281E-05	KO	Myrf	0.013
Fcor	5.43675E-10	0.95966893	0.041	0.01	1.68828E-05	KO	Fcor	0.031
Pdcl	5.48484E-10	0.7013004	0.115	0.051	1.70321E-05	KO	Pdcl	0.064
Polk	5.53131E-10	1.11144228	0.067	0.023	1.71764E-05	KO	Polk	0.044
AC165953.2	5.59308E-10	1.03614194	0.04	0.009	1.73682E-05	KO	AC165953.2	0.031
Tbc1d22b	5.90853E-10	0.71168843	0.08	0.03	1.83478E-05	KO	Tbc1d22b	0.05
Mis12	5.91396E-10	1.01228678	0.099	0.042	1.83646E-05	KO	Mis12	0.057
Tgif2	6.09029E-10	0.96793017	0.028	0.005	1.89122E-05	KO	Tgif2	0.023
4933430I17Ri	6.19609E-10	0.9949619	0.017	0.001	1.92407E-05	KO	4933430I17F	0.016
Dync1li2	6.58684E-10	0.72011864	0.126	0.058	2.04541E-05	KO	Dync1li2	0.068
Frmd6	6.73879E-10	0.86171075	0.052	0.015	2.09259E-05	KO	Frmd6	0.037
Gm2814	6.95072E-10	1.58741277	0.015	0.001	2.15841E-05	KO	Gm2814	0.014
Klra7	6.95607E-10	2.94273039	0.016	0.001	2.16007E-05	KO	Klra7	0.015
Lmtk3	6.96621E-10	2.14484909	0.015	0.001	2.16322E-05	KO	Lmtk3	0.014
Gprc5c	7.10179E-10	1.4277425	0.016	0.001	2.20532E-05	KO	Gprc5c	0.015
Slc36a2	7.13129E-10	1.24011409	0.016	0.001	2.21448E-05	KO	Slc36a2	0.015
Tmeff1	7.2205E-10	1.3431996	0.016	0.001	2.24218E-05	KO	Tmeff1	0.015
Faah	7.23548E-10	1.0292084	0.016	0.001	2.24683E-05	KO	Faah	0.015
Map3k5	7.41337E-10	0.86264512	0.088	0.035	2.30207E-05	KO	Map3k5	0.053
Trim36	7.56745E-10	0.95183838	0.049	0.014	2.34992E-05	KO	Trim36	0.035
Stk39	8.20284E-10	1.1341584	0.048	0.013	2.54723E-05	KO	Stk39	0.035
Setdb2	8.26707E-10	0.9783096	0.055	0.017	2.56717E-05	KO	Setdb2	0.038

Gm4610	9.92474E-10	1.33606981	0.021	0.002	3.08193E-05	KO	Gm4610	0.019
Mon1a	1.02938E-09	1.3651008	0.06	0.02	3.19653E-05	KO	Mon1a	0.04
Gm44751	1.03642E-09	0.94739973	0.037	0.008	3.2184E-05	KO	Gm44751	0.029
Cd1d1	1.08632E-09	1.27363655	0.031	0.006	3.37335E-05	KO	Cd1d1	0.025
Krt17	1.11938E-09	1.24888102	0.027	0.004	3.476E-05	KO	Krt17	0.023
AC163018.1	1.15034E-09	1.38317606	0.027	0.004	3.57214E-05	KO	AC163018.1	0.023
Slx4ip	1.18202E-09	0.69784864	0.06	0.02	3.67052E-05	KO	Slx4ip	0.04
Tnfsf13b	1.2363E-09	0.7762128	0.069	0.025	3.83907E-05	KO	Tnfsf13b	0.044
Sigirr	1.42222E-09	1.2574081	0.032	0.006	4.41643E-05	KO	Sigirr	0.026
Pdcd7	1.50786E-09	0.75207054	0.092	0.038	4.68236E-05	KO	Pdcd7	0.054
Zdhhc23	1.60936E-09	1.42674522	0.028	0.005	4.99755E-05	KO	Zdhhc23	0.023
Bcam	1.61819E-09	0.9934238	0.02	0.002	5.02497E-05	KO	Bcam	0.018
Glul	1.67206E-09	0.72639783	0.454	0.31	5.19225E-05	KO	Glul	0.144
Abcb1b	1.73292E-09	0.71229339	0.095	0.04	5.38123E-05	KO	Abcb1b	0.055
Nlk	1.83801E-09	0.71354619	0.083	0.033	5.70757E-05	KO	Nlk	0.05
Pigh	1.91531E-09	1.27389417	0.036	0.008	5.94762E-05	KO	Pigh	0.028
Fn1	2.07463E-09	1.67716496	0.326	0.225	6.44234E-05	KO	Fn1	0.101
Tmem150b	2.19507E-09	0.9516538	0.023	0.003	6.81634E-05	KO	Tmem150b	0.02
Foxp4	2.22933E-09	1.26957371	0.069	0.025	6.92273E-05	KO	Foxp4	0.044
Lin54	2.25155E-09	0.7279906	0.135	0.066	6.99173E-05	KO	Lin54	0.069
Gm37800	2.26547E-09	1.13354936	0.023	0.003	7.03495E-05	KO	Gm37800	0.02
Prf1	2.36511E-09	2.56306229	0.019	0.002	7.34437E-05	KO	Prf1	0.017
Folr2	2.43642E-09	0.94183786	0.342	0.239	7.56582E-05	KO	Folr2	0.103
Slc22a23	2.46605E-09	1.97339876	0.019	0.002	7.65784E-05	KO	Slc22a23	0.017
Gm26756	2.52572E-09	1.42020722	0.011	0	7.84313E-05	KO	Gm26756	0.011
Zfp180	2.61425E-09	0.90325572	0.075	0.028	8.11803E-05	KO	Zfp180	0.047
Padi2	2.61822E-09	0.98116468	0.053	0.017	8.13034E-05	KO	Padi2	0.036
Chn2	2.88313E-09	1.736493	0.043	0.011	8.95297E-05	KO	Chn2	0.032
Kantr	3.31796E-09	1.23308934	0.032	0.007	0.000103033	KO	Kantr	0.025
Tns4	3.37526E-09	0.79528361	0.045	0.013	0.000104812	KO	Tns4	0.032
Ifi214	3.38302E-09	0.8502213	0.032	0.007	0.000105053	KO	Ifi214	0.025
Zfp84	3.56491E-09	0.69546926	0.051	0.015	0.000110701	KO	Zfp84	0.036
Gpd1l	3.56797E-09	0.70880276	0.112	0.051	0.000110796	KO	Gpd1l	0.061
Pofut1	3.70077E-09	0.90767571	0.108	0.049	0.00011492	KO	Pofut1	0.059
Rrad	3.79714E-09	1.20830735	0.04	0.01	0.000117913	KO	Rrad	0.03
Pkp3	3.82216E-09	0.74533809	0.044	0.012	0.00011869	KO	Pkp3	0.032
Gpr155	4.05028E-09	1.32860612	0.037	0.009	0.000125773	KO	Gpr155	0.028
Pyroxd2	4.16682E-09	1.00182616	0.037	0.009	0.000129392	KO	Pyroxd2	0.028
Adcy9	4.16795E-09	0.82641184	0.036	0.008	0.000129427	KO	Adcy9	0.028
Cdc14a	4.702E-09	1.71479724	0.059	0.02	0.000146011	KO	Cdc14a	0.039
Ccdc171	4.90145E-09	1.69805254	0.016	0.001	0.000152205	KO	Ccdc171	0.015
Mt3	4.95573E-09	2.86264521	0.012	0	0.00015389	KO	Mt3	0.012
St8sia1	4.96741E-09	2.31786533	0.016	0.001	0.000154253	KO	St8sia1	0.015
Mab21l3	4.99174E-09	1.19973831	0.012	0	0.000155008	KO	Mab21l3	0.012
Cdh23	5.028E-09	0.84317109	0.012	0	0.000156135	KO	Cdh23	0.012
Ppargc1b	5.83484E-09	0.79636251	0.061	0.021	0.000181189	KO	Ppargc1b	0.04
Il4i1	6.01702E-09	2.20460242	0.015	0.001	0.000186847	KO	Il4i1	0.014
Bcl2a1c	6.06607E-09	1.07754749	0.015	0.001	0.00018837	KO	Bcl2a1c	0.014
Dpt	6.11551E-09	1.23604616	0.015	0.001	0.000189905	KO	Dpt	0.014
Kcnq1	6.31535E-09	1.85180256	0.013	0.001	0.000196111	KO	Kcnq1	0.012
Ripor3	6.31535E-09	1.05944081	0.013	0.001	0.000196111	KO	Ripor3	0.012
Gm13373	6.53684E-09	1.59821048	0.02	0.002	0.000202988	KO	Gm13373	0.018
5830416I19Ri	6.62008E-09	1.50213336	0.02	0.002	0.000205573	KO	5830416I19F	0.018
Rsph9	6.78966E-09	0.87877328	0.02	0.002	0.000210839	KO	Rsph9	0.018

Tbc1d4	6.81757E-09	1.19259528	0.071	0.027	0.000211706	KO	Tbc1d4	0.044
Gvin1	6.83272E-09	0.79807138	0.02	0.002	0.000212176	KO	Gvin1	0.018
Mlh1	7.08935E-09	0.90439183	0.069	0.026	0.000220146	KO	Mlh1	0.043
Invs	7.26499E-09	0.81791259	0.032	0.007	0.0002256	KO	Invs	0.025
Trac	7.3053E-09	0.95259797	0.032	0.007	0.000226851	KO	Trac	0.025
Rasal2	7.45282E-09	0.77706	0.04	0.011	0.000231432	KO	Rasal2	0.029
Ipcef1	8.33322E-09	0.98403838	0.027	0.005	0.000258771	KO	Ipcef1	0.022
Rnf8	8.38862E-09	0.93932908	0.096	0.042	0.000260492	KO	Rnf8	0.054
Lztr1	8.39146E-09	0.76626989	0.081	0.033	0.00026058	KO	Lztr1	0.048
Nrg2	8.39928E-09	1.06992168	0.051	0.016	0.000260823	KO	Nrg2	0.035
Ahi1	8.40515E-09	1.05127832	0.047	0.014	0.000261005	KO	Ahi1	0.033
Fam169b	1.11434E-08	1.18419907	0.019	0.002	0.000346036	KO	Fam169b	0.017
Fam71a	1.12897E-08	0.87044944	0.019	0.002	0.00035058	KO	Fam71a	0.017
Npy	1.18297E-08	1.00455508	0.068	0.026	0.000367348	KO	Npy	0.042
Gtf3c5	1.2175E-08	0.96192906	0.048	0.015	0.00037807	KO	Gtf3c5	0.033
Gfod1	1.22431E-08	1.41127688	0.029	0.006	0.000380185	KO	Gfod1	0.023
Sp4	1.22796E-08	1.33758245	0.048	0.015	0.000381319	KO	Sp4	0.033
Ttll4	1.39175E-08	0.9556122	0.051	0.016	0.000432179	KO	Ttll4	0.035
Cp	1.45737E-08	1.92242699	0.063	0.023	0.000452558	KO	Cp	0.04
Adra1a	1.64136E-08	0.7790659	0.033	0.008	0.000509692	KO	Adra1a	0.025
Hacl1	1.67929E-08	0.83122352	0.033	0.008	0.000521471	KO	Hacl1	0.025
Abcb9	1.74513E-08	2.27771598	0.017	0.002	0.000541915	KO	Abcb9	0.015
Gm43660	1.81129E-08	1.36351116	0.017	0.002	0.00056246	KO	Gm43660	0.015
Hemk1	2.06082E-08	1.29268505	0.041	0.012	0.000639945	KO	Hemk1	0.029
Usp20	2.12823E-08	0.8659617	0.043	0.012	0.000660879	KO	Usp20	0.031
Scnn1a	2.13568E-08	1.2142659	0.027	0.005	0.000663194	KO	Scnn1a	0.022
Slc1a5	2.15759E-08	0.7887357	0.135	0.07	0.000669996	KO	Slc1a5	0.065
Fxyd2	2.29195E-08	2.23731113	0.055	0.019	0.000711721	KO	Fxyd2	0.036
Spaca6	2.43482E-08	1.02620528	0.02	0.003	0.000756085	KO	Spaca6	0.017
Dhx57	2.47555E-08	0.97705807	0.056	0.02	0.000768733	KO	Dhx57	0.036
Scfd2	2.49955E-08	0.70089147	0.047	0.014	0.000776186	KO	Scfd2	0.033
Spata5	2.6316E-08	0.86892407	0.064	0.024	0.000817191	KO	Spata5	0.04
Pank4	2.63217E-08	0.86299435	0.049	0.016	0.000817366	KO	Pank4	0.033
Dnajc25	2.65498E-08	0.7316364	0.097	0.045	0.00082445	KO	Dnajc25	0.052
Dio2	2.72412E-08	1.36026437	0.016	0.002	0.00084592	KO	Dio2	0.014
Ccdc28a	2.88152E-08	0.8946442	0.039	0.011	0.000894797	KO	Ccdc28a	0.028
Sel1l3	2.95055E-08	0.98914844	0.029	0.006	0.000916235	KO	Sel1l3	0.023
Xlr	3.00136E-08	1.88109167	0.024	0.004	0.000932013	KO	Xlr	0.02
Gstp3	3.02748E-08	2.0431997	0.033	0.008	0.000940123	KO	Gstp3	0.025
Pdk2	3.16366E-08	1.22788235	0.024	0.004	0.00098241	KO	Pdk2	0.02
Zap70	3.17586E-08	1.47354486	0.024	0.004	0.0009862	KO	Zap70	0.02
Gprc5b	3.24262E-08	1.14605105	0.033	0.008	0.001006932	KO	Gprc5b	0.025
Perp	3.25422E-08	0.78582977	0.024	0.004	0.001010533	KO	Perp	0.02
Rab33b	3.43607E-08	0.75369437	0.055	0.019	0.001067002	KO	Rab33b	0.036
Spink2	3.88314E-08	1.13366837	0.015	0.001	0.00120583	KO	Spink2	0.014
Prm1	3.94131E-08	1.09387528	0.015	0.001	0.001223895	KO	Prm1	0.014
Fut7	3.98549E-08	0.81752209	0.015	0.001	0.001237616	KO	Fut7	0.014
Snn	4.07255E-08	2.11608785	0.021	0.003	0.001264648	KO	Snn	0.018
Kcnj2	4.23648E-08	0.979081	0.025	0.005	0.001315555	KO	Kcnj2	0.02
Fgfr3	4.7194E-08	2.09337949	0.011	0	0.001465516	KO	Fgfr3	0.011
Wdr95	4.75328E-08	2.22626797	0.011	0	0.001476035	KO	Wdr95	0.011
Fgfr2	4.77599E-08	1.19871991	0.011	0	0.001483088	KO	Fgfr2	0.011
Osbpl1a	4.78159E-08	0.98574419	0.085	0.037	0.001484827	KO	Osbpl1a	0.048
Myb	4.87598E-08	1.82009347	0.013	0.001	0.001514137	KO	Myb	0.012

Gene	p-value	Column3	Column4	Column5	Column6	Group	Gene	Value
Gm45902	4.93234E-08	0.72106096	0.055	0.019	0.001531639	KO	Gm45902	0.036
Ttbk2	4.99797E-08	0.94854694	0.027	0.005	0.001552021	KO	Ttbk2	0.022
Fcrla	5.09323E-08	1.14840135	0.013	0.001	0.001581602	KO	Fcrla	0.012
Tnfsf18	5.09323E-08	0.98519891	0.013	0.001	0.001581602	KO	Tnfsf18	0.012
A930033H14F	5.10333E-08	1.3234783	0.013	0.001	0.001584736	KO	A930033H14	0.012
Lrp4	5.11549E-08	0.88757467	0.027	0.005	0.001588513	KO	Lrp4	0.022
Panx1	5.39264E-08	0.9094834	0.064	0.025	0.001674577	KO	Panx1	0.039
Aldh1a2	5.57113E-08	1.57658102	0.012	0.001	0.001730003	KO	Aldh1a2	0.011
Skint3	5.59509E-08	1.83060632	0.012	0.001	0.001737445	KO	Skint3	0.011
Mill2	5.61916E-08	1.0665939	0.012	0.001	0.001744917	KO	Mill2	0.011
Stx1b	5.63123E-08	0.80545473	0.012	0.001	0.001748665	KO	Stx1b	0.011
Ccdc112	5.78424E-08	1.15175077	0.036	0.01	0.00179618	KO	Ccdc112	0.026
Skap1	6.05999E-08	1.29542183	0.023	0.004	0.001881809	KO	Skap1	0.019
P3h2	6.1233E-08	1.21742347	0.023	0.004	0.001901467	KO	P3h2	0.019
P2ry1	6.33349E-08	0.71840285	0.023	0.004	0.001966739	KO	P2ry1	0.019
Dnajb2	6.43468E-08	1.1534645	0.055	0.02	0.001998163	KO	Dnajb2	0.035
Tnfrsf4	6.75712E-08	0.82433595	0.032	0.008	0.002098289	KO	Tnfrsf4	0.024
Itpripl1	6.78652E-08	1.00611708	0.099	0.047	0.002107417	KO	Itpripl1	0.052
Il2ra	7.35106E-08	1.16262346	0.017	0.002	0.002282725	KO	Il2ra	0.015
Creb3l3	7.86542E-08	0.75797127	0.02	0.003	0.002442448	KO	Creb3l3	0.017
A230028O05F	7.88764E-08	0.98302195	0.02	0.003	0.002449349	KO	A230028O05	0.017
Vasn	7.95468E-08	1.11199015	0.02	0.003	0.002470165	KO	Vasn	0.017
Cfap97	7.98268E-08	0.71685216	0.073	0.031	0.002478862	KO	Cfap97	0.042
Spint2	7.9884E-08	0.76097858	0.02	0.003	0.002480638	KO	Spint2	0.017
Katnal1	9.59266E-08	1.02842207	0.037	0.011	0.002978807	KO	Katnal1	0.026
Ceacam1	1.11348E-07	0.97062326	0.035	0.009	0.003457692	KO	Ceacam1	0.026
Elk1	1.17488E-07	0.78516858	0.052	0.018	0.003648345	KO	Elk1	0.034
Gm11696	1.20549E-07	1.07612281	0.021	0.004	0.003743417	KO	Gm11696	0.017
Gimap8	1.22399E-07	1.58740142	0.016	0.002	0.003800855	KO	Gimap8	0.014
Gm28707	1.22801E-07	1.35491191	0.016	0.002	0.003813325	KO	Gm28707	0.014
Prr15	1.23608E-07	1.35733464	0.016	0.002	0.003838384	KO	Prr15	0.014
Krt25	1.2381E-07	1.8605954	0.016	0.002	0.003844674	KO	Krt25	0.014
Gm48066	1.24699E-07	1.00826506	0.032	0.008	0.003872267	KO	Gm48066	0.024
D930016D06F	1.32284E-07	1.02998157	0.029	0.007	0.00410781	KO	D930016D06	0.022
Nrde2	1.60038E-07	0.94655439	0.068	0.028	0.004969665	KO	Nrde2	0.04
Naip6	1.69145E-07	0.81103664	0.063	0.025	0.005252472	KO	Naip6	0.038
1700025G04F	1.70556E-07	0.79852449	0.083	0.037	0.00529626	KO	1700025G04	0.046
Arap2	1.91223E-07	0.84224079	0.068	0.028	0.005938038	KO	Arap2	0.04
Mllt1	1.92226E-07	0.77272024	0.059	0.023	0.005969185	KO	Mllt1	0.036
Mical2	1.96962E-07	0.85280042	0.036	0.01	0.006116274	KO	Mical2	0.026
Tex14	1.98696E-07	1.24616787	0.015	0.002	0.006170101	KO	Tex14	0.013
Rprd1a	2.00491E-07	1.42160762	0.035	0.01	0.006225838	KO	Rprd1a	0.025
Abcb1a	2.02812E-07	0.74805124	0.015	0.002	0.006297917	KO	Abcb1a	0.013
Pias2	2.04537E-07	0.69478055	0.1	0.048	0.006351478	KO	Pias2	0.052
Htr2b	2.04862E-07	0.72432086	0.024	0.005	0.006361586	KO	Htr2b	0.019
Gm4117	2.27955E-07	1.21171336	0.025	0.005	0.007078692	KO	Gm4117	0.02
Fhl2	2.29763E-07	1.41725047	0.02	0.003	0.007134827	KO	Fhl2	0.017
Mansc1	2.36297E-07	0.71781201	0.02	0.003	0.007337729	KO	Mansc1	0.017
Chil1	2.60741E-07	1.52293785	0.017	0.002	0.008096804	KO	Chil1	0.015
Dusp14	2.99078E-07	1.29096144	0.013	0.001	0.009287279	KO	Dusp14	0.012
Ccr9	3.00158E-07	2.35118232	0.013	0.001	0.009320802	KO	Ccr9	0.012
Sik2	3.04515E-07	0.76881672	0.065	0.027	0.009456092	KO	Sik2	0.038
Gja1	3.09729E-07	1.20502738	0.056	0.022	0.009618013	KO	Gja1	0.034
Sbk1	3.20308E-07	0.84548195	0.021	0.004	0.009946511	KO	Sbk1	0.017

Zc3h11a	3.2801E-07	0.88250292	0.021	0.004	0.010185687	KO	Zc3h11a	0.017
Rnd1	3.51441E-07	1.60025332	0.033	0.009	0.010913287	KO	Rnd1	0.024
Ctla4	3.5964E-07	0.94689881	0.035	0.01	0.011167897	KO	Ctla4	0.025
Sept10	3.67869E-07	0.85509958	0.049	0.018	0.011423446	KO	Sept10	0.031
Per2	3.83498E-07	0.94138668	0.047	0.016	0.011908748	KO	Per2	0.031
Mypop	4.13839E-07	1.04884569	0.012	0.001	0.012850937	KO	Mypop	0.011
Osbpl3	4.24136E-07	0.74411607	0.068	0.029	0.013170681	KO	Osbpl3	0.039
Nsun4	4.35927E-07	0.89473724	0.045	0.016	0.01353685	KO	Nsun4	0.029
Prkci	4.39517E-07	0.72495404	0.061	0.025	0.013648315	KO	Prkci	0.036
Fam189b	4.45238E-07	1.44152599	0.031	0.008	0.013825989	KO	Fam189b	0.023
Atpaf2	4.568E-07	0.88679423	0.092	0.045	0.014185013	KO	Atpaf2	0.047
Map2k3os	4.65014E-07	1.17961411	0.016	0.002	0.014440087	KO	Map2k3os	0.014
Atp1b1	4.88519E-07	1.39851331	0.011	0.001	0.015169973	KO	Atp1b1	0.01
Dlx3	4.89543E-07	1.98786087	0.011	0.001	0.015201777	KO	Dlx3	0.01
Slc52a3	4.9366E-07	0.8953542	0.011	0.001	0.015329638	KO	Slc52a3	0.01
Etfbkmt	5.10706E-07	1.22107535	0.029	0.008	0.015858939	KO	Etfbkmt	0.021
Afg1l	5.24403E-07	1.24705309	0.028	0.007	0.016284275	KO	Afg1l	0.021
Fam78b	5.27338E-07	0.81672016	0.041	0.014	0.016375423	KO	Fam78b	0.027
Gm9530	6.13084E-07	0.88174771	0.02	0.004	0.019038086	KO	Gm9530	0.016
Prkcq	6.19328E-07	1.21738249	0.02	0.004	0.019231991	KO	Prkcq	0.016
Rap1gap2	6.44393E-07	1.07642788	0.051	0.019	0.020010347	KO	Rap1gap2	0.032
Acap1	6.54727E-07	1.3263039	0.039	0.012	0.020331252	KO	Acap1	0.027
Hsd17b7	7.42811E-07	1.05460986	0.033	0.01	0.023066503	KO	Hsd17b7	0.023
Klrd1	7.64637E-07	1.89668233	0.031	0.008	0.023744278	KO	Klrd1	0.023
Pde8b	7.70407E-07	1.14146526	0.033	0.01	0.023923455	KO	Pde8b	0.023
Ikzf5	7.71192E-07	0.97486088	0.08	0.037	0.023947834	KO	Ikzf5	0.043
Plscr4	7.88034E-07	0.81680618	0.021	0.004	0.024470816	KO	Plscr4	0.017
Zc3h4	7.93106E-07	0.90354434	0.091	0.044	0.024628325	KO	Zc3h4	0.047
Trim29	8.10547E-07	2.18619072	0.017	0.003	0.025169922	KO	Trim29	0.014
Gm49339	8.11934E-07	1.58446337	0.015	0.002	0.025212999	KO	Gm49339	0.013
Ptprf	8.13217E-07	2.1570087	0.015	0.002	0.025252826	KO	Ptprf	0.013
Xcl1	8.2615E-07	1.25155433	0.015	0.002	0.025654443	KO	Xcl1	0.013
Lifr	8.65343E-07	0.90636865	0.108	0.058	0.0268715	KO	Lifr	0.05
Clec1b	8.8676E-07	0.71459472	0.031	0.008	0.027536568	KO	Clec1b	0.023
Aasdh	9.07195E-07	1.43468572	0.028	0.007	0.028171138	KO	Aasdh	0.021
Jag2	9.10007E-07	1.22760415	0.023	0.005	0.028258439	KO	Jag2	0.018
Acad12	9.17235E-07	0.88716909	0.023	0.005	0.028482886	KO	Acad12	0.018
Cd27	9.28705E-07	0.81782045	0.023	0.005	0.028839061	KO	Cd27	0.018
Shb	9.50738E-07	0.82403683	0.036	0.011	0.029523265	KO	Shb	0.025
Cd101	9.75714E-07	0.8495132	0.024	0.005	0.030298832	KO	Cd101	0.019
Thnsl1	1.02427E-06	0.85336067	0.027	0.007	0.031806647	KO	Thnsl1	0.02
Ccdc88c	1.17244E-06	0.96516917	0.047	0.017	0.036407913	KO	Ccdc88c	0.03
Ptpn4	1.26383E-06	1.54466484	0.04	0.014	0.039245615	KO	Ptpn4	0.026
Hoxb4	1.40195E-06	0.697901	0.032	0.009	0.04353489	KO	Hoxb4	0.023
Ptch1	1.49779E-06	1.00606608	0.031	0.009	0.046510725	KO	Ptch1	0.022
Tcf7	1.56715E-06	0.87681724	0.016	0.002	0.04866485	KO	Tcf7	0.014
Egfr	1.57161E-06	1.18498305	0.016	0.002	0.048803254	KO	Egfr	0.014
Gimap5	1.57968E-06	1.77558094	0.029	0.008	0.049053752	KO	Gimap5	0.021
Gjb2	1.63524E-06	1.44376624	0.029	0.008	0.050778955	KO	Gjb2	0.021
Serpinb1a	1.65617E-06	2.87186702	0.029	0.008	0.051429139	KO	Serpinb1a	0.021
Snx33	1.75204E-06	1.09768203	0.029	0.008	0.054405964	KO	Snx33	0.021
Arhgap23	1.79494E-06	0.8044971	0.064	0.028	0.055738157	KO	Arhgap23	0.036
Fmo5	1.83802E-06	0.72086202	0.021	0.005	0.05707589	KO	Fmo5	0.016
Itga1	1.85028E-06	0.76292199	0.047	0.017	0.057456632	KO	Itga1	0.03

Gene	p-value	logFC	pct.1	pct.2	p-adj	group	Gene	value
Phc1	1.86618E-06	0.69894548	0.039	0.013	0.057950461	KO	Phc1	0.026
Kif19a	1.88657E-06	1.73152306	0.024	0.006	0.058583739	KO	Kif19a	0.018
Hpgd	1.89443E-06	1.98964007	0.024	0.006	0.058827634	KO	Hpgd	0.018
Acsf2	1.91091E-06	1.02821057	0.049	0.019	0.059339414	KO	Acsf2	0.03
Fhl3	1.99202E-06	0.8146189	0.048	0.018	0.061858335	KO	Fhl3	0.03
Nipsnap1	2.10361E-06	0.72301164	0.025	0.006	0.065323496	KO	Nipsnap1	0.019
Plcg1	2.16093E-06	0.98430036	0.043	0.015	0.067103375	KO	Plcg1	0.028
Ovca2	2.19237E-06	1.92811222	0.012	0.001	0.068079614	KO	Ovca2	0.011
Mfsd4b3	2.21533E-06	1.03498658	0.012	0.001	0.068792655	KO	Mfsd4b3	0.011
Ptpn13	2.23077E-06	0.79860744	0.012	0.001	0.069271994	KO	Ptpn13	0.011
Galnt9	2.24241E-06	0.81313495	0.012	0.001	0.069633602	KO	Galnt9	0.011
S100a14	2.25021E-06	0.75864601	0.012	0.001	0.069875679	KO	S100a14	0.011
Slc14a1	2.31916E-06	1.21761149	0.017	0.003	0.072016731	KO	Slc14a1	0.014
Ryk	2.39811E-06	0.85669297	0.032	0.01	0.074468511	KO	Ryk	0.022
Crim1	2.85793E-06	1.10250709	0.048	0.019	0.088747258	KO	Crim1	0.029
Gata3	2.86092E-06	1.67761561	0.015	0.002	0.088840093	KO	Gata3	0.013
Fxyd3	2.88611E-06	1.44747594	0.015	0.002	0.089622315	KO	Fxyd3	0.013
Zfp619	2.92898E-06	1.80153746	0.019	0.004	0.090953688	KO	Zfp619	0.015
Ust	3.06356E-06	0.79080824	0.029	0.008	0.095132746	KO	Ust	0.021
Bco2	3.07108E-06	1.0941286	0.019	0.004	0.095366343	KO	Bco2	0.015
Mycl	3.26396E-06	0.87264298	0.011	0.001	0.101355786	KO	Mycl	0.01
Siglecg	3.27003E-06	1.62005205	0.011	0.001	0.101544243	KO	Siglecg	0.01
Sult2b1	3.27611E-06	1.43902836	0.011	0.001	0.101733037	KO	Sult2b1	0.01
Ifng	3.27611E-06	1.15193682	0.011	0.001	0.101733037	KO	Ifng	0.01
Polg2	3.45584E-06	1.14668582	0.04	0.014	0.107314235	KO	Polg2	0.026
Xlr4a	3.68105E-06	0.74406648	0.02	0.004	0.114307761	KO	Xlr4a	0.016
Treml4	3.73955E-06	1.3705287	0.021	0.005	0.116124377	KO	Treml4	0.016
Dmwd	3.86519E-06	0.85904773	0.025	0.007	0.120025619	KO	Dmwd	0.018
Gstt3	3.97152E-06	1.31791743	0.024	0.006	0.123327613	KO	Gstt3	0.018
Cracr2a	4.01627E-06	0.90603518	0.023	0.005	0.12471734	KO	Cracr2a	0.018
Lck	4.07491E-06	1.12496556	0.023	0.005	0.126538223	KO	Lck	0.018
Rfx5	4.45978E-06	0.92572105	0.045	0.017	0.13848962	KO	Rfx5	0.028
Zfp959	5.7579E-06	0.80561257	0.028	0.008	0.178799917	KO	Zfp959	0.02
Pdcd1	5.99979E-06	1.33544814	0.017	0.003	0.186311608	KO	Pdcd1	0.014
Gm3435	6.1943E-06	0.78970559	0.017	0.003	0.192351623	KO	Gm3435	0.014
Mfsd4b4	6.6403E-06	0.98230729	0.032	0.01	0.206201143	KO	Mfsd4b4	0.022
Rbm12b2	6.68766E-06	0.82130318	0.032	0.01	0.207671754	KO	Rbm12b2	0.022
Tyr	6.82475E-06	1.2645041	0.035	0.012	0.211929052	KO	Tyr	0.023
A130077B15R	7.18489E-06	1.01454217	0.019	0.004	0.223112456	KO	A130077B15	0.015
Pim2	7.18606E-06	2.24772196	0.024	0.006	0.223148767	KO	Pim2	0.018
Lrrc49	7.38115E-06	0.87962342	0.031	0.01	0.229206894	KO	Lrrc49	0.021
Tnfsf10	7.80917E-06	1.23877732	0.024	0.006	0.242498035	KO	Tnfsf10	0.018
2510002D24R	8.33177E-06	1.19730372	0.044	0.017	0.258726539	KO	2510002D24	0.027
Agrn	8.47678E-06	0.91736091	0.029	0.009	0.263229319	KO	Agrn	0.02
Acta1	9.24378E-06	2.42906668	0.012	0.002	0.28704723	KO	Acta1	0.01
Lef1	9.25836E-06	2.10273804	0.012	0.002	0.287499863	KO	Lef1	0.01
Ceacam19	9.27296E-06	1.74274605	0.012	0.002	0.287953179	KO	Ceacam19	0.01
Gm4631	9.28758E-06	1.40433502	0.012	0.002	0.288407178	KO	Gm4631	0.01
2610035D17R	9.33157E-06	0.86423006	0.012	0.002	0.28977328	KO	2610035D17	0.01
Tmtc2	9.39054E-06	0.71454833	0.012	0.002	0.291604369	KO	Tmtc2	0.01
Cdc42bpg	1.13425E-05	1.11691416	0.027	0.008	0.352218701	KO	Cdc42bpg	0.019
Efnb1	1.20894E-05	1.44533781	0.016	0.003	0.375410924	KO	Efnb1	0.013
Pced1a	1.23218E-05	1.04184201	0.036	0.013	0.382629951	KO	Pced1a	0.023
Xlr4b	1.44649E-05	0.86106103	0.029	0.009	0.449179128	KO	Xlr4b	0.02

Timp1	1.49182E-05	0.90405948	0.142	0.087	0.463255911	KO	Timp1	0.055
Krt75	1.57279E-05	1.75624609	0.011	0.001	0.488397057	KO	Krt75	0.01
Aqp9	1.58064E-05	1.17894038	0.011	0.001	0.49083614	KO	Aqp9	0.01
Klra9	1.58327E-05	1.72148243	0.011	0.001	0.491651744	KO	Klra9	0.01
Atg9b	1.5859E-05	1.48086869	0.011	0.001	0.492468641	KO	Atg9b	0.01
Nlrp1a	1.59117E-05	1.17269935	0.011	0.001	0.494106317	KO	Nlrp1a	0.01
1700034H15R	1.63343E-05	1.01712428	0.02	0.005	0.507229967	KO	1700034H15	0.015
Trim68	1.69242E-05	1.44043781	0.013	0.002	0.525546106	KO	Trim68	0.011
Cxcr6	1.69713E-05	0.95723247	0.013	0.002	0.527010501	KO	Cxcr6	0.011
Slx1b	1.82881E-05	1.10493684	0.041	0.016	0.567900158	KO	Slx1b	0.025
Krt5	1.98059E-05	0.81913729	0.027	0.008	0.615032809	KO	Krt5	0.019
Cd3g	2.21018E-05	1.01121364	0.025	0.008	0.686326324	KO	Cd3g	0.017
Gcnt2	2.23812E-05	0.98578522	0.073	0.037	0.695003053	KO	Gcnt2	0.036
Ccl17	2.30494E-05	2.34012888	0.015	0.003	0.715753005	KO	Ccl17	0.012
Rcn3	2.32546E-05	1.01980371	0.063	0.03	0.722125172	KO	Rcn3	0.033
Il33	2.38492E-05	1.39470989	0.015	0.003	0.740590618	KO	Il33	0.012
Ankrd13d	2.50744E-05	0.77389635	0.024	0.007	0.778635687	KO	Ankrd13d	0.017
B4galt4	2.80237E-05	1.44398119	0.023	0.006	0.870219135	KO	B4galt4	0.017
Grhl1	2.93973E-05	1.11136429	0.016	0.003	0.912875312	KO	Grhl1	0.013
Tacstd2	2.96036E-05	0.74676838	0.016	0.003	0.919280941	KO	Tacstd2	0.013
1110019D14R	3.01207E-05	0.89480798	0.021	0.006	0.935338267	KO	1110019D14	0.015
Pdcd1lg2	3.13097E-05	0.92144869	0.021	0.006	0.972259171	KO	Pdcd1lg2	0.015
Etl4	3.2042E-05	1.65667268	0.019	0.005	0.994999089	KO	Etl4	0.014
Ccpg1os	3.21499E-05	0.77423617	0.02	0.005	0.99835095	KO	Ccpg1os	0.015
Plat	3.25428E-05	1.45419072	0.019	0.005	1	KO	Plat	0.014
Fzd1	3.30852E-05	1.19329286	0.019	0.005	1	KO	Fzd1	0.014
6720427I07Ri	3.46884E-05	0.69806421	0.041	0.017	1	KO	6720427I07F	0.024
Dennd6b	3.78589E-05	0.93285635	0.025	0.008	1	KO	Dennd6b	0.017
Prdm10	4.45298E-05	0.96685431	0.031	0.011	1	KO	Prdm10	0.02
Emp2	4.65227E-05	1.87480258	0.013	0.002	1	KO	Emp2	0.011
Fgfrl1	4.71855E-05	1.22756946	0.013	0.002	1	KO	Fgfrl1	0.011
Prickle3	4.7487E-05	0.86149823	0.033	0.012	1	KO	Prickle3	0.021
Flt3	4.74897E-05	0.79767437	0.013	0.002	1	KO	Flt3	0.011
Gm32089	4.78573E-05	1.04930896	0.013	0.002	1	KO	Gm32089	0.011
Plcl1	4.89182E-05	1.23405259	0.023	0.007	1	KO	Plcl1	0.016
Lrsam1	5.03778E-05	0.80601645	0.037	0.015	1	KO	Lrsam1	0.022
Gapt	5.19945E-05	0.96816696	0.035	0.013	1	KO	Gapt	0.022
Usp2	5.32833E-05	0.71573743	0.052	0.024	1	KO	Usp2	0.028
Ccdc137	5.36176E-05	0.81120008	0.029	0.01	1	KO	Ccdc137	0.019
Rgs18	5.48047E-05	0.7161175	0.052	0.024	1	KO	Rgs18	0.028
Gcc1	5.59304E-05	0.79194958	0.052	0.024	1	KO	Gcc1	0.028
Yap1	5.65135E-05	0.81851317	0.021	0.006	1	KO	Yap1	0.015
Col16a1	5.74352E-05	1.45016464	0.015	0.003	1	KO	Col16a1	0.012
Tbc1d10c	5.79694E-05	0.75372272	0.029	0.01	1	KO	Tbc1d10c	0.019
Stox2	5.84331E-05	1.02065315	0.029	0.01	1	KO	Stox2	0.019
Bbs2	5.85969E-05	1.06578706	0.015	0.003	1	KO	Bbs2	0.012
Slc27a3	5.9017E-05	1.36707463	0.011	0.002	1	KO	Slc27a3	0.009
Fosl1	5.99946E-05	0.77723402	0.011	0.002	1	KO	Fosl1	0.009
Cacna1f	6.05306E-05	0.83917423	0.036	0.014	1	KO	Cacna1f	0.022
Gm13012	6.11683E-05	0.93889474	0.02	0.005	1	KO	Gm13012	0.015
Tex9	6.12966E-05	0.71278138	0.025	0.008	1	KO	Tex9	0.017
Slc40a1	6.35681E-05	2.177504	0.039	0.016	1	KO	Slc40a1	0.023
Znrf3	6.46792E-05	1.54051924	0.019	0.005	1	KO	Znrf3	0.014
Zrsr1	6.55089E-05	0.89333707	0.019	0.005	1	KO	Zrsr1	0.014

Gene	p-value	FC	col4	col5	col6	Gene2	col8
Cd6	6.56769E-05	1.43812575	0.017	0.004	1 KO	Cd6	0.013
Myom1	6.64956E-05	1.37322146	0.017	0.004	1 KO	Myom1	0.013
Znrd1as	6.68826E-05	1.01828786	0.031	0.011	1 KO	Znrd1as	0.02
Rwdd2b	6.74652E-05	1.21756201	0.028	0.01	1 KO	Rwdd2b	0.018
9130011E15R	8.41826E-05	1.3525999	0.023	0.007	1 KO	9130011E15	0.016
Stab2	9.29413E-05	0.74112606	0.012	0.002	1 KO	Stab2	0.01
Acad10	9.80214E-05	0.7546465	0.021	0.006	1 KO	Acad10	0.015
F5	0.000113765	1.45141629	0.013	0.003	1 KO	F5	0.01
Eml6	0.000116233	0.86665319	0.013	0.003	1 KO	Eml6	0.01
Ak8	0.000116511	0.77546674	0.013	0.003	1 KO	Ak8	0.01
Coro2b	0.00011968	0.81290057	0.019	0.005	1 KO	Coro2b	0.014
Ppp1r16b	0.000127246	1.26367909	0.017	0.005	1 KO	Ppp1r16b	0.012
Dclk2	0.000128999	0.90244598	0.017	0.005	1 KO	Dclk2	0.012
Zfyve28	0.000129434	0.96689342	0.015	0.003	1 KO	Zfyve28	0.012
Dsp	0.000129576	1.07929905	0.015	0.003	1 KO	Dsp	0.012
C1s1	0.000129576	1.01350071	0.015	0.003	1 KO	C1s1	0.012
Fads6	0.000131701	0.85652483	0.016	0.004	1 KO	Fads6	0.012
5031425F14R	0.000132656	1.19425398	0.016	0.004	1 KO	5031425F14	0.012
Usp11	0.000133617	0.79610922	0.016	0.004	1 KO	Usp11	0.012
Bend3	0.000136541	0.80254421	0.016	0.004	1 KO	Bend3	0.012
Nsun6	0.000136842	0.74302258	0.064	0.033	1 KO	Nsun6	0.031
BC035044	0.000172486	1.30704076	0.024	0.008	1 KO	BC035044	0.016
Lyve1	0.000173148	1.56266586	0.031	0.012	1 KO	Lyve1	0.019
Fasl	0.000182149	1.07951775	0.011	0.002	1 KO	Fasl	0.009
Zkscan7	0.000182889	0.7682963	0.011	0.002	1 KO	Zkscan7	0.009
Dcun1d4	0.000183806	0.78153424	0.029	0.011	1 KO	Dcun1d4	0.018
A530064D06F	0.000201508	0.80795435	0.031	0.012	1 KO	A530064D06	0.019
Rbm12b1	0.000214538	1.15003502	0.019	0.005	1 KO	Rbm12b1	0.014
Gm10521	0.000233324	1.21594951	0.012	0.002	1 KO	Gm10521	0.01
Adgb	0.000235022	1.19235711	0.012	0.002	1 KO	Adgb	0.01
Osbpl5	0.000235306	1.30245889	0.012	0.002	1 KO	Osbpl5	0.01
Cd8a	0.000238478	1.31227085	0.017	0.005	1 KO	Cd8a	0.012
Btbd3	0.00023855	0.72442355	0.025	0.009	1 KO	Btbd3	0.016
Slco4a1	0.000239317	0.98243444	0.012	0.002	1 KO	Slco4a1	0.01
Akr1c12	0.000241461	0.73040559	0.025	0.009	1 KO	Akr1c12	0.016
Chst7	0.000264494	0.73051009	0.013	0.003	1 KO	Chst7	0.01
Bbs10	0.000266844	1.07720886	0.013	0.003	1 KO	Bbs10	0.01
Dynlt1b	0.000268917	0.86833422	0.013	0.003	1 KO	Dynlt1b	0.01
Rbm41	0.00027102	0.70294032	0.021	0.007	1 KO	Rbm41	0.014
Plxnb1	0.000272168	1.04411395	0.015	0.004	1 KO	Plxnb1	0.011
Nol9	0.000272229	1.02875383	0.043	0.02	1 KO	Nol9	0.023
Utp14b	0.00027441	1.1262117	0.027	0.01	1 KO	Utp14b	0.017
Fcna	0.000306204	1.6247841	0.079	0.046	1 KO	Fcna	0.033
Usp35	0.000312562	0.89053354	0.02	0.006	1 KO	Usp35	0.014
0610040B10R	0.00031617	1.4014635	0.028	0.011	1 KO	0610040B10	0.017
Mirt1	0.000322675	0.72536821	0.02	0.006	1 KO	Mirt1	0.014
Tmod1	0.00034453	0.97537747	0.023	0.008	1 KO	Tmod1	0.015
Cebpd	0.0003597	0.800667	0.142	0.095	1 KO	Cebpd	0.047
Prdm15	0.000375474	0.77805132	0.025	0.009	1 KO	Prdm15	0.016
Mamld1	0.000428061	1.07313918	0.017	0.005	1 KO	Mamld1	0.012
Ms4a4b	0.000430869	1.14782104	0.04	0.019	1 KO	Ms4a4b	0.021
Echdc3	0.000431073	0.71632771	0.017	0.005	1 KO	Echdc3	0.012
Zfp947	0.000471092	0.84598582	0.016	0.005	1 KO	Zfp947	0.011
Bcl11b	0.000480102	1.18283349	0.011	0.002	1 KO	Bcl11b	0.009

3110001I22Ri	0.000515252	0.87449136	0.02	0.007	1 KO	3110001I22F	0.013
Lat	0.000520504	1.02848842	0.02	0.007	1 KO	Lat	0.013
Fam187b	0.00052553	0.77530206	0.015	0.004	1 KO	Fam187b	0.011
Jakmip1	0.000542321	1.16313617	0.012	0.003	1 KO	Jakmip1	0.009
Lama5	0.000545706	1.01785516	0.013	0.003	1 KO	Lama5	0.01
Sept1	0.000554325	0.69853861	0.039	0.018	1 KO	Sept1	0.021
Gtf2e1	0.000577445	0.71545956	0.049	0.025	1 KO	Gtf2e1	0.024
9930104L06R	0.000640709	1.09668232	0.024	0.009	1 KO	9930104L06I	0.015
Tchh	0.000729638	1.00235416	0.017	0.005	1 KO	Tchh	0.012
Acrbp	0.000812634	1.00884952	0.027	0.011	1 KO	Acrbp	0.016
Pla1a	0.000845243	0.93389807	0.016	0.005	1 KO	Pla1a	0.011
Zbtb40	0.000938427	0.76615595	0.024	0.009	1 KO	Zbtb40	0.015
Etv1	0.000965652	0.82750535	0.069	0.041	1 KO	Etv1	0.028
Tspan10	0.001021046	0.74688989	0.021	0.008	1 KO	Tspan10	0.013
Kit	0.001090742	1.02993057	0.011	0.002	1 KO	Kit	0.009
Nppb	0.001093192	1.45741588	0.011	0.002	1 KO	Nppb	0.009
Adgrl1	0.001094418	1.72347597	0.011	0.002	1 KO	Adgrl1	0.009
Hoxb3	0.001108132	1.08806441	0.012	0.003	1 KO	Hoxb3	0.009
Gm43936	0.001109239	0.91880485	0.011	0.002	1 KO	Gm43936	0.009
Mrm1	0.00114161	1.01531627	0.032	0.014	1 KO	Mrm1	0.018
Adamts10	0.001177838	0.85527055	0.059	0.033	1 KO	Adamts10	0.026
Cd8b1	0.001364663	1.53574902	0.016	0.005	1 KO	Cd8b1	0.011
Cx3cr1	0.001425877	0.71142733	0.109	0.073	1 KO	Cx3cr1	0.036
Cd3e	0.001455225	0.96374003	0.019	0.007	1 KO	Cd3e	0.012
Tmc4	0.001519455	0.93725058	0.019	0.007	1 KO	Tmc4	0.012
Ltc4s	0.001671391	1.01376361	0.052	0.029	1 KO	Ltc4s	0.023
Ptpn21	0.00167733	1.0586564	0.023	0.009	1 KO	Ptpn21	0.014
Klhl42	0.001704172	0.81645365	0.023	0.009	1 KO	Klhl42	0.014
Prpf40b	0.001908354	0.70178779	0.017	0.006	1 KO	Prpf40b	0.011
Suox	0.001910108	1.26203129	0.013	0.004	1 KO	Suox	0.009
Kctd12b	0.001918102	0.73850563	0.036	0.018	1 KO	Kctd12b	0.018
Dgkg	0.00212307	1.02663846	0.012	0.003	1 KO	Dgkg	0.009
Zc3hav1l	0.002127117	0.71252556	0.012	0.003	1 KO	Zc3hav1l	0.009
Cacnb1	0.00214542	0.70997201	0.012	0.003	1 KO	Cacnb1	0.009
Ahrr	0.002262189	0.98905594	0.011	0.003	1 KO	Ahrr	0.008
Lins1	0.002271198	0.83943334	0.016	0.005	1 KO	Lins1	0.011
Krtcap3	0.002271501	0.71702742	0.011	0.003	1 KO	Krtcap3	0.008
Parp16	0.002290617	1.43115583	0.016	0.005	1 KO	Parp16	0.011
Mmp2	0.002665558	1.31562589	0.015	0.005	1 KO	Mmp2	0.01
Ift81	0.003281061	0.74049017	0.013	0.004	1 KO	Ift81	0.009
Rab44	0.003391334	0.78344093	0.019	0.007	1 KO	Rab44	0.012
Rnase4	0.003612274	0.85319848	0.34	0.265	1 KO	Rnase4	0.075
Adam33	0.003781402	1.06122551	0.012	0.004	1 KO	Adam33	0.008
Cdh1	0.003791444	1.4864621	0.012	0.004	1 KO	Cdh1	0.008
Camk2n1	0.003818339	0.85896569	0.012	0.004	1 KO	Camk2n1	0.008
Mybpc3	0.003842014	0.74353716	0.012	0.004	1 KO	Mybpc3	0.008
Ccdc126	0.004030899	0.74667018	0.035	0.018	1 KO	Ccdc126	0.017
Zbtb10	0.004377447	1.03444481	0.015	0.005	1 KO	Zbtb10	0.01
Olfr920	0.005032992	0.8846069	0.027	0.013	1 KO	Olfr920	0.014
Tns2	0.00527329	1.36623264	0.013	0.005	1 KO	Tns2	0.008
Ckm	0.006404429	1.75886209	0.012	0.004	1 KO	Ckm	0.008
Il17rc	0.006678446	1.33118532	0.015	0.005	1 KO	Il17rc	0.01
Patj	0.007704655	1.13883814	0.011	0.003	1 KO	Patj	0.008
Gimap9	0.007838536	1.01798993	0.016	0.006	1 KO	Gimap9	0.01

Rgs12	0.008198804	0.84236826	0.023	0.011	1 KO	Rgs12	0.012
Rab6b	0.00822795	0.76131381	0.013	0.005	1 KO	Rab6b	0.008
A330069E16R	0.008440451	1.02756084	0.017	0.007	1 KO	A330069E16	0.01
C030034I22Ri	0.008795774	0.76739247	0.017	0.007	1 KO	C030034I22F	0.01
Urb2	0.009621488	0.87617128	0.031	0.016	1 KO	Urb2	0.015
Oplah	0.009680676	1.41751664	0.015	0.006	1 KO	Oplah	0.009