

Supplemental Table S1: Rp58+/+ vs Rp58-/-

	Direction	log2FoldChar	pvalue	padj
Lmcd1	Down	-8.059545	0	0
Slc6a11	Down	-6.8301406	9.51E-196	2.41E-192
Cilp	Down	-6.6545613	1.66E-115	1.05E-112
BC034090	Down	-5.7095794	9.83E-161	1.94E-157
Mmp2	Down	-5.5899157	1.05E-197	3.11E-194
Gpr153	Down	-5.5719701	9.85E-146	1.75E-142
Kcnh1	Down	-5.4871749	6.22E-82	2.08E-79
Gpc3	Down	-5.434408	3.30E-71	8.73E-69
Irs4	Down	-5.0797428	8.22E-55	1.46E-52
Tril	Down	-5.0694093	1.43E-126	1.15E-123
Gdf10	Down	-4.9946117	1.31E-143	1.78E-140
Myo10	Down	-4.9640702	1.73E-89	6.84E-87
Lfng	Down	-4.9097122	2.89E-58	5.89E-56
Accn4	Down	-4.8539933	5.83E-43	6.76E-41
Finc	Down	-4.8193094	1.62E-129	1.51E-126
Gja1	Down	-4.8111807	5.97E-84	2.16E-81
Notum	Down	-4.7513822	7.94E-45	1.01E-42
Foxo1	Down	-4.7023688	3.55E-286	3.15E-282
Nptx2	Down	-4.6779367	1.24E-66	3.02E-64
Egfem1	Down	-4.6193585	2.97E-51	4.54E-49
Drd5	Down	-4.5458788	9.24E-41	1.01E-38
Met	Down	-4.5053176	4.21E-55	7.70E-53
Zcchc12	Down	-4.4830706	3.51E-131	3.46E-128
Fhl3	Down	-4.4517112	7.10E-54	1.22E-51
Hrh3	Down	-4.4108415	1.24E-66	3.02E-64
Rprml	Down	-4.2126457	7.57E-39	7.51E-37
Fbln2	Down	-4.1952622	4.91E-33	3.91E-31
Ppp1r17	Down	-4.1851568	3.51E-34	2.95E-32
Gm9581	Down	-4.181018	1.52E-39	1.55E-37
Col5a1	Down	-4.0506337	3.12E-141	3.69E-138
Fst	Down	-4.0407557	1.64E-67	4.15E-65
Hes1	Down	-3.876159	4.31E-39	4.33E-37
Npr3	Down	-3.8470476	3.20E-36	2.91E-34
Pde1c	Down	-3.8334854	2.78E-192	6.16E-189
Syt17	Down	-3.8226071	3.70E-46	4.90E-44
Cacng5	Down	-3.8025507	3.88E-38	3.70E-36
Phlda1	Down	-3.7900162	4.00E-105	2.22E-102
Tcerg1l	Down	-3.7222642	1.99E-51	3.10E-49
Rasgef1c	Down	-3.7023514	3.93E-40	4.17E-38

Tmem132e	Down	-3.6931476	1.04E-33	8.54E-32
Atoh8	Down	-3.688932	5.78E-49	8.34E-47
Synpr	Down	-3.6804238	5.48E-56	1.02E-53
D030025P21	Down	-3.6452392	4.91E-24	2.60E-22
Ramp1	Down	-3.6329239	5.20E-34	4.33E-32
Cacnb2	Down	-3.5764146	4.48E-57	8.84E-55
Greb1l	Down	-3.5559321	1.54E-26	9.51E-25
6530418L21F	Down	-3.5054653	1.54E-115	1.01E-112
Prox1	Down	-3.5036899	5.44E-31	4.06E-29
Dusp10	Down	-3.4888101	6.42E-50	9.41E-48
Cdh23	Down	-3.4870234	1.27E-24	7.09E-23
Rapgef3	Down	-3.4729674	2.53E-36	2.32E-34
Grin3a	Down	-3.4625578	3.22E-30	2.33E-28
Fam101b	Down	-3.4557915	4.86E-25	2.79E-23
Lamc2	Down	-3.4529415	4.75E-65	1.11E-62
Chsy3	Down	-3.4154444	1.45E-39	1.49E-37
Robo3	Down	-3.3964546	2.20E-25	1.27E-23
Grm4	Down	-3.3647023	4.19E-27	2.69E-25
Antxr2	Down	-3.3334719	3.86E-38	3.70E-36
Sema5b	Down	-3.3316265	3.59E-115	2.20E-112
Shroom2	Down	-3.325228	1.68E-57	3.36E-55
Kcnab1	Down	-3.3234716	5.31E-20	2.31E-18
Tnfaip8l3	Down	-3.2455319	4.66E-23	2.32E-21
Nr4a2	Down	-3.2282361	1.95E-27	1.28E-25
Kank2	Down	-3.1874363	3.48E-24	1.87E-22
A430110N23	Down	-3.1808605	1.68E-20	7.48E-19
Npy	Down	-3.1749502	1.96E-18	7.82E-17
Hspa2	Down	-3.1446507	9.11E-34	7.55E-32
Sv2b	Down	-3.1331153	8.93E-52	1.40E-49
Sorcs2	Down	-3.1256328	6.11E-76	1.78E-73
Pde7b	Down	-3.1213495	2.10E-38	2.05E-36
Cbln4	Down	-3.109906	6.35E-18	2.45E-16
Ildr2	Down	-3.0821683	1.67E-73	4.71E-71
Slc16a10	Down	-3.0759953	1.19E-78	3.71E-76
Sema5a	Down	-3.0749886	4.16E-56	7.85E-54
Crabp2	Down	-3.0703728	3.38E-40	3.62E-38
Htr3a	Down	-3.0480441	1.10E-17	4.19E-16
Mab21l2	Down	-3.0236055	4.37E-20	1.91E-18
Pou3f4	Down	-3.01951	6.56E-44	8.03E-42
Igdcc4	Down	-3.018681	1.36E-63	3.10E-61
Crhr1	Down	-3.004089	7.38E-31	5.46E-29
Zyx	Down	-3.0038986	2.49E-222	8.82E-219

Cpne2	Down	-2.9821069	3.83E-36	3.47E-34
Scn5a	Down	-2.9788745	8.52E-24	4.42E-22
Igfbp3	Down	-2.9772896	3.78E-82	1.29E-79
Lrtm2	Down	-2.9771146	1.83E-27	1.21E-25
AW551984	Down	-2.973663	6.48E-22	3.06E-20
Grasp	Down	-2.9623983	1.22E-143	1.78E-140
B3gnt9-ps	Down	-2.9369665	8.08E-45	1.02E-42
Fbln1	Down	-2.9228066	1.35E-77	4.13E-75
Insl6	Down	-2.8936581	1.94E-17	7.34E-16
Galr1	Down	-2.8840725	1.44E-16	5.09E-15
Slc2a13	Down	-2.8830219	3.53E-124	2.61E-121
Capn6	Down	-2.8816453	2.71E-15	8.78E-14
Ebf1	Down	-2.8814435	3.40E-50	5.12E-48
Zfp536	Down	-2.8771553	3.35E-61	7.24E-59
Htra1	Down	-2.8628412	2.84E-27	1.83E-25
Ak4	Down	-2.8554555	9.37E-99	4.62E-96
Cxxc4	Down	-2.8549658	2.76E-73	7.64E-71
Cbln2	Down	-2.852701	2.71E-43	3.25E-41
Cdhr1	Down	-2.8375585	6.64E-16	2.25E-14
Ascl1	Down	-2.8140515	3.71E-52	5.93E-50
Emilin1	Down	-2.802278	1.63E-19	6.92E-18
Sall1	Down	-2.8011302	1.24E-24	6.93E-23
Stard13	Down	-2.7968499	6.86E-18	2.64E-16
Slc6a1	Down	-2.7936841	3.47E-56	6.62E-54
Tacr3	Down	-2.7874381	1.59E-29	1.13E-27
Mylk	Down	-2.7871388	4.20E-15	1.34E-13
Mfng	Down	-2.7757873	3.22E-44	3.97E-42
Kitl	Down	-2.7601149	6.47E-40	6.80E-38
Six2	Down	-2.7423913	2.86E-14	8.66E-13
Timp3	Down	-2.7365868	2.43E-53	4.10E-51
Frmpd1	Down	-2.7332296	5.63E-20	2.44E-18
Ddit4l	Down	-2.7228453	1.66E-15	5.44E-14
Slc9a9	Down	-2.7195053	3.30E-17	1.21E-15
C1qtnf1	Down	-2.7077203	8.36E-14	2.45E-12
Megf10	Down	-2.7071303	1.22E-46	1.63E-44
Sypl2	Down	-2.7007252	1.45E-19	6.15E-18
1810011O10	Down	-2.6961766	4.70E-94	1.98E-91
Tec	Down	-2.694407	1.92E-18	7.70E-17
Sash1	Down	-2.6695899	5.46E-17	1.98E-15
Chodl	Down	-2.6681555	1.67E-18	6.73E-17
Ppap2b	Down	-2.664714	6.05E-55	1.09E-52
Bmp2	Down	-2.6588855	1.35E-18	5.50E-17

Cables1	Down	-2.6456695	1.67E-71	4.50E-69
Crb1	Down	-2.6423047	1.41E-20	6.31E-19
Btbd17	Down	-2.6389302	9.19E-34	7.58E-32
Tekt1	Down	-2.6370461	2.91E-62	6.54E-60
Lrfn2	Down	-2.6213837	3.93E-46	5.17E-44
Tac1	Down	-2.6057412	1.23E-13	3.54E-12
Ets2	Down	-2.5944858	2.11E-59	4.51E-57
Stc1	Down	-2.5923825	3.57E-33	2.87E-31
Prkg1	Down	-2.5874828	4.90E-13	1.35E-11
Creb3l2	Down	-2.5867868	1.64E-24	8.98E-23
Angpt1	Down	-2.5712505	9.34E-34	7.68E-32
Vwc2l	Down	-2.5649768	3.71E-14	1.12E-12
Ptgfrn	Down	-2.5419651	2.64E-37	2.49E-35
Ttc6	Down	-2.5297668	2.35E-12	6.12E-11
Agtr2	Down	-2.525535	3.20E-12	8.23E-11
Snai1	Down	-2.523376	3.56E-12	9.10E-11
Ndufa4l2	Down	-2.517881	6.79E-13	1.84E-11
Stat5b	Down	-2.5157742	3.53E-17	1.29E-15
Gm17180	Down	-2.5042575	4.63E-12	1.17E-10
Fgd6	Down	-2.5034579	1.96E-15	6.38E-14
Chrna3	Down	-2.490986	2.89E-19	1.21E-17
Vwa2	Down	-2.4865514	5.86E-12	1.46E-10
Ppapdc1a	Down	-2.4795407	3.32E-12	8.51E-11
Dscaml1	Down	-2.4711328	1.31E-34	1.13E-32
Plagl1	Down	-2.4596627	1.77E-83	6.29E-81
Reps2	Down	-2.4580792	4.66E-29	3.26E-27
Crabp1	Down	-2.4547066	1.80E-39	1.83E-37
D4Bwg0951e	Down	-2.4494462	4.71E-43	5.54E-41
Slc27a3	Down	-2.4396696	3.21E-76	9.49E-74
A330009N23	Down	-2.4294321	9.44E-32	7.22E-30
Lor	Down	-2.4118317	2.29E-11	5.34E-10
Smtnl2	Down	-2.4097173	7.80E-18	2.98E-16
Gabrg1	Down	-2.3939818	2.21E-11	5.16E-10
Onecut1	Down	-2.391889	4.31E-11	9.76E-10
Ntn4	Down	-2.3852276	2.95E-23	1.48E-21
Gm12371	Down	-2.3837189	2.97E-11	6.80E-10
Crybg3	Down	-2.3601329	1.64E-13	4.64E-12
Npas3	Down	-2.3457823	6.87E-31	5.10E-29
Eya1	Down	-2.3387865	8.02E-16	2.72E-14
Pon2	Down	-2.3303982	2.72E-14	8.25E-13
Fat1	Down	-2.3205739	2.73E-27	1.77E-25
Emid1	Down	-2.3173722	2.15E-27	1.41E-25

6330527006	Down	-2.3145293	6.08E-12	1.51E-10
Gprin3	Down	-2.3087602	1.78E-24	9.69E-23
Il11ra1	Down	-2.3081282	1.28E-16	4.55E-15
Igsf21	Down	-2.303701	3.03E-40	3.26E-38
Pgm5	Down	-2.3010952	2.29E-11	5.34E-10
Dmrta2	Down	-2.2923275	1.88E-34	1.60E-32
Chrm5	Down	-2.2921169	8.40E-11	1.84E-09
Ppp1r3b	Down	-2.2891815	1.03E-11	2.50E-10
4732444A12	Down	-2.2857899	2.16E-10	4.57E-09
Rtkn	Down	-2.2806244	1.04E-11	2.54E-10
Mest	Down	-2.2801728	3.64E-119	2.58E-116
Rasd1	Down	-2.2597461	2.38E-10	5.00E-09
Svil	Down	-2.2542473	1.83E-10	3.92E-09
Ctxn3	Down	-2.2541313	6.53E-21	2.97E-19
Ltbp2	Down	-2.2473115	3.71E-10	7.63E-09
Lingo2	Down	-2.2417722	7.36E-37	6.91E-35
Fgf18	Down	-2.2398823	2.50E-34	2.11E-32
Zfp941	Down	-2.2330855	2.04E-21	9.42E-20
Kcna5	Down	-2.2256618	8.43E-10	1.68E-08
Rell1	Down	-2.224703	1.08E-39	1.11E-37
Rorc	Down	-2.2199423	8.97E-14	2.62E-12
Tceal6	Down	-2.2107318	2.40E-24	1.30E-22
Neurod1	Down	-2.2058248	1.98E-25	1.15E-23
Cd97	Down	-2.2039323	1.47E-12	3.90E-11
Adamts1	Down	-2.2018961	7.40E-24	3.86E-22
Cntnap5b	Down	-2.193301	3.37E-18	1.32E-16
Arx	Down	-2.174428	2.13E-10	4.52E-09
Gfra1	Down	-2.1665548	1.13E-26	7.05E-25
Pcdh11x	Down	-2.1642421	9.76E-12	2.38E-10
Ssfa2	Down	-2.1554028	2.18E-30	1.58E-28
Adamts5	Down	-2.1514067	8.71E-40	9.04E-38
Tgfbr2	Down	-2.1513346	6.11E-11	1.36E-09
Klf15	Down	-2.1466377	1.81E-16	6.38E-15
Homer2	Down	-2.1453401	2.21E-22	1.07E-20
Grp	Down	-2.1453361	5.40E-10	1.09E-08
Mrc2	Down	-2.1369123	3.50E-14	1.05E-12
Cacna1g	Down	-2.1310872	2.97E-31	2.24E-29
Wscd1	Down	-2.1267721	4.62E-24	2.45E-22
Fam43a	Down	-2.1260132	9.42E-16	3.16E-14
Chd7	Down	-2.1237213	7.28E-19	3.03E-17
Tns3	Down	-2.1217315	4.73E-18	1.85E-16
Ajap1	Down	-2.1210719	2.15E-22	1.04E-20

Bcan	Down	-2.1119123	3.04E-11	6.93E-10
Sstr1	Down	-2.1052109	1.79E-11	4.22E-10
Akna	Down	-2.1021186	6.97E-17	2.51E-15
Epb4.1l4a	Down	-2.101758	3.60E-26	2.19E-24
Hrk	Down	-2.0941519	1.92E-24	1.04E-22
Chn2	Down	-2.0747142	4.07E-73	1.11E-70
Pappa	Down	-2.0736806	1.07E-09	2.10E-08
Adcyap1r1	Down	-2.0699507	8.92E-83	3.10E-80
Ntrk1	Down	-2.0694717	3.67E-10	7.55E-09
Ng23	Down	-2.0655855	8.32E-16	2.81E-14
Serpinh1	Down	-2.0646399	2.84E-66	6.82E-64
Frmpd3	Down	-2.0636194	1.48E-09	2.89E-08
Phactr2	Down	-2.0601021	1.30E-19	5.55E-18
Lcp2	Down	-2.0546401	1.69E-08	2.95E-07
Hs6st3	Down	-2.0541904	2.65E-09	5.05E-08
Slc4a4	Down	-2.0536842	1.46E-12	3.87E-11
Vav3	Down	-2.0450406	3.83E-17	1.40E-15
Pou4f1	Down	-2.0386444	8.54E-10	1.70E-08
Spon1	Down	-2.0374378	2.16E-10	4.57E-09
Adamts7	Down	-2.035661	1.95E-22	9.50E-21
Neurl1a	Down	-2.0294499	1.06E-23	5.47E-22
Kif4	Down	-2.0144324	7.74E-14	2.28E-12
Loxl1	Down	-2.0102743	7.74E-11	1.70E-09
Gucy1b2	Down	-2.0094339	1.91E-09	3.69E-08
Utrn	Down	-2.0062673	2.14E-17	8.05E-16
Igfbp4	Down	-1.9997	4.73E-67	1.18E-64
Sln	Down	-1.9988169	2.58E-20	1.14E-18
Csmd2	Down	-1.9982807	7.65E-14	2.25E-12
Dock10	Down	-1.9981419	3.88E-08	6.46E-07
1-Mar	Down	-1.9945806	8.24E-41	9.20E-39
Nqo1	Down	-1.993027	1.10E-08	1.97E-07
Gm6264	Down	-1.9862563	6.35E-10	1.28E-08
Dhrs7	Down	-1.9857019	9.07E-16	3.05E-14
CK137956	Down	-1.9791227	2.65E-08	4.50E-07
Cdc6	Down	-1.9771726	1.37E-11	3.28E-10
Inpp1	Down	-1.9758473	4.07E-43	4.84E-41
Gpr88	Down	-1.9723358	9.20E-09	1.65E-07
Stk33	Down	-1.9666613	4.37E-12	1.11E-10
Spock2	Down	-1.9632799	1.54E-53	2.62E-51
Depdc7	Down	-1.9622799	6.40E-09	1.17E-07
Wwtr1	Down	-1.9612994	6.32E-09	1.16E-07
Col4a1	Down	-1.9603929	9.05E-12	2.22E-10

Kcnd3	Down	-1.9506608	8.70E-49	1.24E-46
Galnt16	Down	-1.9492427	2.41E-08	4.12E-07
Cacng3	Down	-1.9469115	2.49E-08	4.25E-07
Rwdd3	Down	-1.9419355	8.20E-19	3.39E-17
Mfap4	Down	-1.9388916	1.10E-24	6.15E-23
Dkk2	Down	-1.93755	8.80E-09	1.59E-07
Sertad4	Down	-1.9327869	1.64E-30	1.20E-28
Lrrc10b	Down	-1.9322222	8.64E-08	1.38E-06
Kcnip1	Down	-1.9285694	3.72E-26	2.25E-24
Sox2	Down	-1.9260161	1.10E-11	2.65E-10
Ccnf	Down	-1.9167372	2.15E-33	1.74E-31
Rcn1	Down	-1.9138723	2.12E-08	3.65E-07
Slc43a1	Down	-1.9096108	1.45E-18	5.86E-17
B430305J03F	Down	-1.9068956	1.55E-08	2.73E-07
Grik2	Down	-1.9067875	7.58E-50	1.10E-47
6-Sep	Down	-1.9063298	1.49E-21	6.94E-20
Zfp36l1	Down	-1.9019591	1.56E-07	2.42E-06
Kif19a	Down	-1.8981225	1.87E-09	3.61E-08
Pitpnm3	Down	-1.8977171	1.07E-11	2.60E-10
Myo18b	Down	-1.8950017	2.02E-11	4.74E-10
Mdfi	Down	-1.8927241	3.90E-15	1.25E-13
Hspa12b	Down	-1.8908623	2.27E-09	4.34E-08
Gm16766	Down	-1.8829512	6.21E-08	1.01E-06
Col14a1	Down	-1.8772568	2.12E-07	3.20E-06
Ston2	Down	-1.8706631	1.15E-14	3.61E-13
Grik1	Down	-1.8667683	2.72E-07	4.06E-06
Bcl2l11	Down	-1.8667354	2.59E-17	9.64E-16
E130308A19I	Down	-1.8662374	1.40E-19	5.95E-18
Neurog2	Down	-1.8656314	4.99E-25	2.86E-23
Fam5b	Down	-1.8601864	4.95E-55	8.96E-53
Atp10d	Down	-1.8568442	8.82E-10	1.75E-08
Prss12	Down	-1.8547292	3.60E-08	6.01E-07
Cpne5	Down	-1.853541	2.21E-16	7.75E-15
6030419C18I	Down	-1.8457605	2.73E-79	8.67E-77
Sema3e	Down	-1.8398218	5.85E-09	1.08E-07
Pax6	Down	-1.8365624	6.73E-13	1.83E-11
Pdpn	Down	-1.8344116	2.50E-07	3.74E-06
Ptgis	Down	-1.8314627	4.64E-07	6.65E-06
Tmcc3	Down	-1.8259488	1.85E-10	3.95E-09
Nod1	Down	-1.8228396	2.89E-10	6.04E-09
Nhs	Down	-1.8197983	5.84E-07	8.27E-06
Snx8	Down	-1.817653	4.81E-22	2.28E-20

Bmp7	Down	-1.8125514	1.68E-22	8.20E-21
Maml3	Down	-1.8080164	1.09E-30	8.02E-29
Fzd4	Down	-1.8070873	2.28E-08	3.91E-07
Eln	Down	-1.802415	7.32E-11	1.61E-09
Card10	Down	-1.800464	1.93E-07	2.95E-06
Brca1	Down	-1.7992316	9.60E-26	5.66E-24
Dach1	Down	-1.7890903	7.51E-26	4.47E-24
Zcchc24	Down	-1.7737767	1.07E-06	1.45E-05
Neto1	Down	-1.7736105	5.84E-07	8.27E-06
Cntn5	Down	-1.7678063	5.70E-09	1.06E-07
Bmper	Down	-1.7662674	2.37E-09	4.52E-08
Cebpd	Down	-1.7586964	5.18E-07	7.37E-06
Map3k1	Down	-1.7550534	1.61E-14	4.99E-13
Dstyk	Down	-1.7542881	1.25E-25	7.35E-24
Il17d	Down	-1.7533302	5.32E-28	3.61E-26
Sstr4	Down	-1.753178	1.24E-06	1.66E-05
Tshr	Down	-1.7444936	1.52E-06	2.01E-05
Arap2	Down	-1.7406304	1.55E-06	2.05E-05
Sec16b	Down	-1.7374717	1.88E-06	2.43E-05
Mical2	Down	-1.7360081	2.72E-13	7.65E-12
Micalcl	Down	-1.7340265	3.38E-08	5.67E-07
Notch1	Down	-1.729463	3.42E-07	5.00E-06
Klhl3	Down	-1.7286455	6.26E-41	7.03E-39
Tmem132c	Down	-1.726541	3.03E-15	9.80E-14
Cntn6	Down	-1.7235194	1.58E-06	2.09E-05
Syt13	Down	-1.7230734	1.56E-09	3.04E-08
Gspt2	Down	-1.7212033	3.59E-21	1.64E-19
Adamtsl2	Down	-1.7202983	8.95E-07	1.24E-05
Ggta1	Down	-1.7199028	2.14E-08	3.69E-07
Thsd7b	Down	-1.7190556	3.53E-19	1.48E-17
Ampd3	Down	-1.7146479	1.75E-06	2.28E-05
Enpp3	Down	-1.7132679	2.43E-06	3.08E-05
Itga8	Down	-1.7116167	9.19E-09	1.65E-07
Col9a2	Down	-1.7100174	3.24E-15	1.04E-13
Dusp26	Down	-1.7094236	5.34E-21	2.43E-19
Celf4	Down	-1.7075791	1.57E-32	1.23E-30
Rln1	Down	-1.7027808	1.13E-08	2.02E-07
Kif26b	Down	-1.7023044	1.60E-06	2.10E-05
Lhfpl2	Down	-1.6940439	5.22E-16	1.78E-14
Fam163a	Down	-1.6927361	4.80E-10	9.74E-09
Col4a5	Down	-1.6820327	1.03E-06	1.41E-05
Nxph4	Down	-1.6776289	9.50E-26	5.62E-24

Nfatc2	Down	-1.6762002	3.41E-10	7.04E-09
Plxnc1	Down	-1.6729067	1.09E-28	7.52E-27
Slc1a6	Down	-1.6659651	5.85E-12	1.46E-10
Ksr1	Down	-1.6646066	2.78E-29	1.96E-27
Dock9	Down	-1.6633469	1.05E-44	1.31E-42
Sox6	Down	-1.6623455	1.25E-09	2.45E-08
Kazald1	Down	-1.6605707	1.61E-06	2.11E-05
Rmst	Down	-1.6583124	5.92E-13	1.62E-11
Dock11	Down	-1.6546712	2.20E-28	1.50E-26
Bhlhe41	Down	-1.6534634	1.90E-07	2.90E-06
Cerkl	Down	-1.652599	3.44E-08	5.77E-07
Ptpru	Down	-1.6510603	6.94E-22	3.27E-20
Magi1	Down	-1.6497671	1.76E-19	7.42E-18
Caskin1	Down	-1.642411	6.13E-24	3.22E-22
Ugt8a	Down	-1.6421715	2.10E-10	4.46E-09
Nrp2	Down	-1.641179	1.68E-15	5.50E-14
Galntl2	Down	-1.6367767	1.06E-19	4.54E-18
Zfp219	Down	-1.6359019	1.55E-27	1.03E-25
Tll1	Down	-1.6314295	5.14E-11	1.15E-09
Necab1	Down	-1.6275099	9.65E-11	2.10E-09
Tmeff2	Down	-1.6237178	1.86E-14	5.73E-13
Tshz1	Down	-1.6220364	8.55E-14	2.50E-12
Plch1	Down	-1.6220144	1.53E-13	4.35E-12
Kctd16	Down	-1.6209834	7.24E-06	8.44E-05
Dmd	Down	-1.6200692	1.53E-14	4.76E-13
Klf12	Down	-1.6198207	2.82E-47	3.85E-45
Gm16625	Down	-1.6182364	2.10E-07	3.19E-06
Ltbp4	Down	-1.6170181	5.26E-13	1.44E-11
Itga4	Down	-1.6153534	2.22E-12	5.80E-11
Ebf4	Down	-1.6039507	4.14E-24	2.21E-22
Plxdc2	Down	-1.6030626	3.02E-08	5.08E-07
C130039O16	Down	-1.6016862	6.73E-17	2.43E-15
Efhd2	Down	-1.5970774	1.50E-16	5.30E-15
Pgm1	Down	-1.5964146	3.53E-38	3.41E-36
Dlgap2	Down	-1.5938032	7.76E-10	1.55E-08
Tnfsf11	Down	-1.5890187	2.20E-06	2.81E-05
Thbd	Down	-1.5885582	6.46E-06	7.60E-05
Phka1	Down	-1.584858	6.91E-11	1.53E-09
Mylip	Down	-1.5824589	1.37E-07	2.14E-06
Il17ra	Down	-1.5818235	3.56E-29	2.50E-27
Tln2	Down	-1.5792421	6.30E-38	5.98E-36
Dlgap1	Down	-1.5763002	1.64E-24	9.00E-23

Islr	Down	-1.575893	3.71E-10	7.63E-09
Fam83f	Down	-1.5729406	9.39E-06	0.00010774
Lama5	Down	-1.5671228	3.23E-06	4.02E-05
Egfr	Down	-1.5653221	7.20E-07	1.00E-05
Olfml2b	Down	-1.5653079	5.30E-39	5.28E-37
Mmp14	Down	-1.5650115	4.35E-30	3.13E-28
Fam174a	Down	-1.5643612	5.63E-09	1.04E-07
Adamts10	Down	-1.5572083	4.35E-09	8.14E-08
Fam167a	Down	-1.5520629	1.39E-10	3.01E-09
Camk2d	Down	-1.5490993	9.35E-07	1.29E-05
Calb2	Down	-1.5438486	1.74E-07	2.68E-06
Kcnt1	Down	-1.5382766	1.31E-06	1.75E-05
Gm15383	Down	-1.5332686	1.38E-05	0.0001529
Chst3	Down	-1.5327093	1.56E-05	0.00017153
Gm8378	Down	-1.5292926	1.05E-05	0.0001187
Col12a1	Down	-1.5266412	1.84E-05	0.00019881
Ptn	Down	-1.5256952	1.26E-13	3.62E-12
Fbn1	Down	-1.5219652	9.81E-09	1.76E-07
Cxx1c	Down	-1.5159589	1.08E-18	4.43E-17
Cbfa2t3	Down	-1.5151817	4.71E-13	1.30E-11
2310015A10	Down	-1.5149366	4.02E-10	8.23E-09
Alk	Down	-1.5095834	3.01E-05	0.00031009
Gpr56	Down	-1.5089977	9.43E-129	7.97E-126
Gm11734	Down	-1.5089848	3.18E-05	0.00032407
Arl4d	Down	-1.5053422	4.17E-32	3.23E-30
Plod2	Down	-1.5044539	2.96E-08	4.99E-07
Abca8a	Down	-1.4969247	4.04E-05	0.00040275
Tpbg	Down	-1.4934824	2.44E-12	6.36E-11
Erbp4	Down	-1.4834818	4.35E-05	0.00042873
Eno4	Down	-1.4778795	3.44E-10	7.10E-09
Phldb2	Down	-1.4764406	9.54E-07	1.31E-05
Fjx1	Down	-1.4699389	3.67E-53	6.09E-51
Col8a1	Down	-1.4676731	1.22E-05	0.00013648
Nanos1	Down	-1.4616556	9.14E-41	1.01E-38
Sh3pxd2b	Down	-1.4610343	4.88E-32	3.77E-30
Adam12	Down	-1.4587252	7.83E-12	1.93E-10
Thsd7a	Down	-1.4574417	4.16E-07	6.02E-06
Slc22a23	Down	-1.4571594	1.88E-58	3.92E-56
Cd248	Down	-1.454637	1.10E-06	1.49E-05
Arhgef40	Down	-1.4537796	8.99E-09	1.62E-07
Zfhx4	Down	-1.4531272	1.10E-05	0.00012409
Cntnap2	Down	-1.4507642	3.99E-12	1.01E-10

Ankrd33b	Down	-1.4482105	6.96E-05	0.0006561
Foxp2	Down	-1.4441106	4.57E-13	1.26E-11
Efs	Down	-1.439616	3.99E-54	6.94E-52
Astn2	Down	-1.4349865	1.10E-11	2.65E-10
Sorcs3	Down	-1.434547	7.56E-05	0.00070518
Dgkb	Down	-1.433512	8.42E-05	0.00077417
Abca1	Down	-1.4323938	9.89E-06	0.00011277
Rnd3	Down	-1.4319419	1.12E-17	4.25E-16
Hdac7	Down	-1.4288991	2.11E-23	1.07E-21
Igdcc3	Down	-1.4283605	2.23E-09	4.29E-08
Lpar4	Down	-1.4239163	1.10E-11	2.65E-10
Nup62cl	Down	-1.4192917	7.89E-05	0.00073188
Prickle2	Down	-1.4162318	1.69E-12	4.45E-11
Tex15	Down	-1.4159253	4.71E-06	5.68E-05
Plxna1	Down	-1.4123942	2.65E-51	4.09E-49
Tmem176a	Down	-1.411607	2.04E-06	2.63E-05
Lypd6b	Down	-1.4110941	3.01E-10	6.26E-09
Cxzc5	Down	-1.4105737	6.41E-27	4.05E-25
1700095J03R	Down	-1.4092848	9.42E-05	0.00085555
Prss23	Down	-1.4087112	7.67E-05	0.00071424
Epha1	Down	-1.4006593	0.00011429	0.00100967
Gabrg3	Down	-1.4004367	5.82E-06	6.89E-05
Pik3r1	Down	-1.3983014	8.25E-42	9.38E-40
Mafb	Down	-1.3972051	1.05E-25	6.18E-24
Selenbp1	Down	-1.3965228	1.21E-06	1.64E-05
Prkcb	Down	-1.3961323	7.19E-13	1.95E-11
Ece1	Down	-1.3958734	7.20E-14	2.12E-12
Sp8	Down	-1.3948274	1.57E-05	0.00017188
D930048G16	Down	-1.3934479	6.32E-05	0.00059974
Kcns2	Down	-1.3933285	0.00012414	0.00108372
Col6a1	Down	-1.3923677	0.00012482	0.00108857
Prdm16	Down	-1.3921855	1.99E-08	3.43E-07
Tchh	Down	-1.390758	0.00010837	0.00096793
Podxl	Down	-1.3887694	6.21E-14	1.84E-12
Hcn1	Down	-1.3878871	2.03E-07	3.08E-06
5031434C07I	Down	-1.3873543	5.99E-05	0.00057227
Shisa7	Down	-1.3836041	9.61E-19	3.95E-17
Htr1a	Down	-1.375586	0.00015277	0.00130044
Igsf11	Down	-1.3752835	0.00012436	0.00108516
Pcdh7	Down	-1.3748205	1.74E-15	5.68E-14
Stat3	Down	-1.3747025	8.60E-16	2.90E-14
Sfxn5	Down	-1.374335	1.20E-10	2.61E-09

Rnasel	Down	-1.3740694	4.04E-10	8.26E-09
Cdhr3	Down	-1.3735755	0.00012565	0.00109476
Gm9968	Down	-1.3734545	7.72E-05	0.00071734
Gjd2	Down	-1.3732084	1.26E-06	1.69E-05
Gpd1	Down	-1.3713294	7.22E-11	1.59E-09
Smo	Down	-1.3685203	2.92E-24	1.57E-22
Wnt7a	Down	-1.3668156	1.02E-05	0.0001157
3010003L10f	Down	-1.3664845	7.61E-05	0.0007093
Sostdc1	Down	-1.3660133	0.00016728	0.00140841
Dock1	Down	-1.3649502	1.96E-09	3.77E-08
Nap1l5	Down	-1.364389	4.21E-27	2.70E-25
Acr	Down	-1.3638181	1.97E-05	0.00021181
Pvrl1	Down	-1.3637872	2.81E-22	1.35E-20
Gm6277	Down	-1.3637296	0.0001302	0.00112943
Myb	Down	-1.3563155	2.20E-06	2.81E-05
6330512M04	Down	-1.3536914	0.00018957	0.00157588
Adra2a	Down	-1.3532173	1.11E-06	1.50E-05
Prdm8	Down	-1.348076	4.33E-20	1.89E-18
Ly75	Down	-1.3480236	0.00018885	0.00157062
Itgb8	Down	-1.3457711	1.63E-06	2.14E-05
Grb10	Down	-1.3402761	7.89E-17	2.82E-15
Zic1	Down	-1.3394516	1.12E-05	0.00012656
E130114P18f	Down	-1.339379	1.28E-14	4.00E-13
Kcnab3	Down	-1.3389022	6.62E-15	2.11E-13
Nhlh2	Down	-1.3372313	1.08E-27	7.26E-26
Tmem191c	Down	-1.3332726	2.33E-05	0.0002458
Syt7	Down	-1.3307794	7.37E-49	1.05E-46
Gm16551	Down	-1.3299228	0.0002016	0.00165876
Gpr139	Down	-1.3289846	3.84E-05	0.00038348
Tmem90a	Down	-1.3287093	6.25E-09	1.15E-07
Nhlh1	Down	-1.3260002	6.24E-17	2.26E-15
Xkr4	Down	-1.3252805	1.06E-15	3.53E-14
Gm4793	Down	-1.32463	0.00025673	0.00205152
Gm17244	Down	-1.3220955	8.36E-05	0.00077029
RP23-454G7.	Down	-1.3202693	0.0002472	0.00198702
Rin2	Down	-1.3197228	1.00E-06	1.37E-05
Col19a1	Down	-1.3187671	0.00028972	0.00227621
Rhbdf1	Down	-1.3185684	0.0002672	0.00212564
Hap1	Down	-1.3148028	8.37E-11	1.84E-09
Arhgap28	Down	-1.3104105	1.51E-07	2.34E-06
Gm13111	Down	-1.3101765	0.00016105	0.00136237
Tlcd2	Down	-1.3097732	4.23E-10	8.61E-09

BC030500	Down	-1.3095467	9.23E-05	0.00084013
Nrgn	Down	-1.3071473	0.00024691	0.00198553
Zfpm1	Down	-1.3026444	1.58E-09	3.07E-08
Gm11537	Down	-1.3010554	2.67E-05	0.00027791
Lpar3	Down	-1.3002395	0.00025496	0.00204017
Gm11549	Down	-1.2986703	0.00014659	0.00125321
Trpc7	Down	-1.2977687	1.21E-09	2.37E-08
Col11a2	Down	-1.2965399	0.00035613	0.00271505
Bmp8b	Down	-1.2965329	0.00037354	0.00282233
Slc32a1	Down	-1.2952416	0.0002693	0.00214114
Cd63	Down	-1.2932737	1.17E-13	3.37E-12
Zbtb20	Down	-1.2900295	2.72E-08	4.60E-07
Gm17588	Down	-1.2858402	1.43E-09	2.80E-08
Kcnc2	Down	-1.2851276	1.49E-05	0.00016363
Pcdh15	Down	-1.2848886	0.00011429	0.00100967
Elfn1	Down	-1.2844004	1.85E-05	0.00020011
Cldn12	Down	-1.279228	9.92E-13	2.65E-11
Sec14l2	Down	-1.2785933	1.88E-05	0.00020315
Coro2b	Down	-1.2766171	8.64E-21	3.90E-19
Tgfb3	Down	-1.2748042	5.90E-12	1.46E-10
D17H6S56E-3	Down	-1.2738098	0.00037939	0.00285919
5330413P13I	Down	-1.2732842	0.00040739	0.00304055
Pls3	Down	-1.2729254	6.31E-14	1.87E-12
Slc10a6	Down	-1.2717669	0.00021361	0.00174387
Gm13889	Down	-1.2707833	0.00017558	0.00146994
Mob3b	Down	-1.269035	5.56E-05	0.00053517
Gm17685	Down	-1.2680389	0.00039792	0.00298362
Fam163b	Down	-1.2675984	8.94E-05	0.00081747
Hist1h1e	Down	-1.2656241	6.84E-06	8.01E-05
Olfm1	Down	-1.2645954	3.82E-32	2.97E-30
Irs1	Down	-1.2617854	2.14E-09	4.12E-08
Sh3pxd2a	Down	-1.2606903	1.31E-27	8.71E-26
E030013I19R	Down	-1.2582422	0.00054432	0.00390798
Dffb	Down	-1.2581066	2.81E-12	7.26E-11
Bai2	Down	-1.2561233	2.24E-13	6.31E-12
Rasl11a	Down	-1.2558934	3.26E-06	4.05E-05
Nynrin	Down	-1.253069	4.50E-17	1.64E-15
Dach2	Down	-1.2526586	3.52E-06	4.35E-05
Pard3	Down	-1.2510483	6.95E-10	1.39E-08
Nrcam	Down	-1.2482132	1.29E-17	4.90E-16
Sox21	Down	-1.247849	0.00035571	0.00271296
Gm15381	Down	-1.2465032	0.00036496	0.0027645

Pion	Down	-1.246034	3.83E-06	4.70E-05
Ccdc8	Down	-1.2389801	2.86E-07	4.24E-06
Cdh20	Down	-1.2363115	0.00029059	0.00227987
Tead3	Down	-1.2346236	1.73E-05	0.00018868
Clrn1	Down	-1.2342841	8.35E-05	0.00076932
Adamts6	Down	-1.2314457	0.0003956	0.0029675
Hcn4	Down	-1.2310907	9.67E-28	6.50E-26
Fam20a	Down	-1.2300817	0.00011274	0.0009985
Acss1	Down	-1.2300008	2.36E-11	5.47E-10
1110002J07R	Down	-1.2298824	8.87E-07	1.23E-05
Nwd1	Down	-1.228591	3.97E-06	4.85E-05
Adamts8	Down	-1.226872	0.00053252	0.0038326
Tmem132d	Down	-1.2265002	0.00044859	0.00331318
Bbc3	Down	-1.2262675	2.97E-09	5.63E-08
5330417C22I	Down	-1.2243172	9.89E-07	1.36E-05
Eomes	Down	-1.2239989	0.00058398	0.0041541
Gm5567	Down	-1.2227567	9.80E-27	6.15E-25
Kcnj6	Down	-1.2227522	0.00057267	0.00408348
Zic4	Down	-1.2206234	0.00077497	0.0052986
Rbms3	Down	-1.2195125	0.00010869	0.00097035
Mavs	Down	-1.2195046	0.00058021	0.00413056
Csdc2	Down	-1.2186809	4.82E-40	5.09E-38
Pgcp	Down	-1.215635	0.00083086	0.00562194
Cdk14	Down	-1.2138624	2.38E-16	8.30E-15
Tmc7	Down	-1.2125696	5.24E-12	1.31E-10
Zfp641	Down	-1.2120742	2.03E-05	0.00021752
Tfap2c	Down	-1.2116215	0.00016864	0.00141851
Amigo1	Down	-1.2113805	4.75E-33	3.80E-31
Id4	Down	-1.211211	3.08E-16	1.06E-14
Dlx5	Down	-1.2111582	0.0006922	0.00482529
Zc3h12c	Down	-1.2104948	1.42E-08	2.52E-07
Itga6	Down	-1.2083485	3.73E-19	1.55E-17
Fgf7	Down	-1.205309	0.00069512	0.00483992
Kcnh5	Down	-1.2037886	4.57E-08	7.53E-07
Tirap	Down	-1.2032199	5.50E-05	0.0005298
Slc24a3	Down	-1.2006043	0.00031217	0.0024236
Garnl3	Up	1.20076554	1.34E-13	3.83E-12
Palmd	Up	1.20092751	1.13E-06	1.54E-05
Lphn2	Up	1.20191521	2.67E-16	9.27E-15
Gm11818	Up	1.20341067	2.68E-16	9.30E-15
2810032G03	Up	1.20483025	6.28E-20	2.71E-18
Gm12522	Up	1.2052131	2.50E-05	0.00026203

Ldb3	Up	1.21056547	2.75E-06	3.45E-05
Gm12408	Up	1.21099814	0.00079805	0.00543049
Phgdh	Up	1.21361384	4.45E-11	1.00E-09
Rasal1	Up	1.21582047	0.0006865	0.00479119
Nrip1	Up	1.21619599	9.37E-29	6.52E-27
Satb2	Up	1.22236584	3.07E-10	6.38E-09
Gabrd	Up	1.22513842	0.0007722	0.00529149
Pmaip1	Up	1.22624731	0.00026359	0.00209876
Fam81a	Up	1.22678181	1.97E-08	3.42E-07
Hexb	Up	1.22729006	3.05E-08	5.12E-07
Cyp7b1	Up	1.2276772	8.98E-10	1.78E-08
Rasgef1b	Up	1.22838406	5.26E-32	4.04E-30
Cdkl1	Up	1.22905615	0.00055781	0.00399195
Foxred2	Up	1.23103306	3.44E-09	6.49E-08
Ppm1e	Up	1.23106738	9.67E-36	8.63E-34
Efhc2	Up	1.23523819	1.69E-05	0.00018439
Cnksr2	Up	1.23612553	8.63E-19	3.56E-17
Dok5	Up	1.23629034	4.74E-06	5.71E-05
Lrrc6	Up	1.23733402	1.03E-05	0.00011701
Gm15606	Up	1.23776332	0.00053035	0.00381855
Diras2	Up	1.23913287	3.93E-08	6.54E-07
Pgam1-ps2	Up	1.24180196	0.00010405	0.00093549
B230217O12	Up	1.24475991	0.0001332	0.00115153
Sec24d	Up	1.24648967	2.60E-18	1.03E-16
1110002E22f	Up	1.24702373	0.00062332	0.00440215
Nrip3	Up	1.25241769	1.64E-06	2.15E-05
Rnf17	Up	1.2546405	0.00033595	0.00258266
Fibcd1	Up	1.25564661	2.62E-06	3.31E-05
Pabpc1l	Up	1.26020382	4.61E-06	5.57E-05
Jakmip3	Up	1.26363652	2.73E-05	0.00028399
Dmrt2	Up	1.26409574	0.00030319	0.00236531
Kit	Up	1.26466757	2.41E-17	9.02E-16
Ezr	Up	1.26471852	1.31E-09	2.57E-08
Rftn1	Up	1.26736312	6.91E-05	0.00065164
Grem1	Up	1.26986495	2.09E-05	0.00022291
Mak	Up	1.273745	0.00047695	0.00348924
Prr5	Up	1.28725504	4.41E-09	8.23E-08
Gm8116	Up	1.28996536	0.00038379	0.00288865
Pdzrn4	Up	1.29086002	1.91E-05	0.0002059
Robo2	Up	1.29140415	1.64E-14	5.07E-13
Khdrbs2	Up	1.29545393	5.10E-13	1.40E-11
Zfp238	Up	1.2958895	0.00033522	0.00257886

Scd1	Up	1.30693719	5.08E-18	1.98E-16
A330102I10R	Up	1.30845157	6.78E-05	0.00064118
Cacna1i	Up	1.3158908	2.42E-05	0.00025479
Zfp503	Up	1.32373279	7.63E-06	8.86E-05
Hif3a	Up	1.32524457	1.55E-11	3.65E-10
D3Bwg0562e	Up	1.32639463	1.72E-07	2.65E-06
Wfs1	Up	1.32661747	4.67E-08	7.69E-07
Slc6a15	Up	1.32721468	9.18E-22	4.30E-20
Adamts13	Up	1.32887367	0.0002702	0.00214657
Slc1a3	Up	1.32940283	9.69E-16	3.24E-14
Scube1	Up	1.32975546	1.68E-20	7.48E-19
A330008L17I	Up	1.33327723	5.20E-07	7.38E-06
Kcnj9	Up	1.33384796	2.87E-05	0.00029641
Srgap1	Up	1.33736729	7.59E-18	2.91E-16
Rorb	Up	1.34342385	1.46E-18	5.91E-17
Mdga1	Up	1.34896299	6.05E-26	3.61E-24
1110007C09I	Up	1.34992232	2.29E-10	4.84E-09
Gfra2	Up	1.35326971	2.38E-07	3.58E-06
Sox2ot	Up	1.35401028	6.07E-06	7.17E-05
4430402I18R	Up	1.35479314	4.07E-05	0.00040473
Vrk2	Up	1.35557241	8.43E-05	0.00077417
9030418K01I	Up	1.36092091	5.56E-09	1.03E-07
Tmprss5	Up	1.36108414	0.00017737	0.00148281
Pappa2	Up	1.36345882	1.47E-15	4.84E-14
Sema6d	Up	1.36547052	4.55E-13	1.26E-11
Ifitm2	Up	1.36699819	7.19E-17	2.58E-15
2900079G21	Up	1.36904525	2.15E-06	2.75E-05
Wbscr17	Up	1.37325656	4.87E-30	3.49E-28
Gm13716	Up	1.37401171	1.43E-08	2.53E-07
Gm10118	Up	1.3741324	4.35E-05	0.00042873
Acot1	Up	1.37526147	4.49E-14	1.34E-12
Ntsr2	Up	1.37708712	0.00015711	0.00133483
Ucma	Up	1.38338796	0.00011198	0.00099321
Nrsn2	Up	1.38614045	1.08E-05	0.00012193
Cdkl2	Up	1.38650464	5.93E-11	1.32E-09
Gm16894	Up	1.39060552	0.0001044	0.0009377
A430078G23	Up	1.3915425	4.55E-07	6.53E-06
Itm2b	Up	1.39184865	9.62E-35	8.37E-33
Lrrtm3	Up	1.39260481	1.73E-08	3.02E-07
Pth1r	Up	1.39304426	2.12E-06	2.71E-05
Kcnk12	Up	1.39514996	3.12E-07	4.59E-06
Ankrd34a	Up	1.39919933	5.94E-11	1.32E-09

6330403L08F	Up	1.40067741	1.48E-06	1.97E-05
Stmn2	Up	1.40188541	1.78E-34	1.53E-32
Htati2	Up	1.40225802	1.77E-05	0.00019207
Opcml	Up	1.40257674	5.60E-18	2.16E-16
Efna1	Up	1.41285252	4.51E-06	5.45E-05
Tmtc1	Up	1.41775779	2.99E-13	8.36E-12
Ckmt1	Up	1.41824493	1.39E-25	8.08E-24
Gabrb2	Up	1.43085432	7.24E-21	3.28E-19
Ablim1	Up	1.43325107	8.56E-26	5.08E-24
Itm2a	Up	1.43880996	3.61E-12	9.22E-11
Dact2	Up	1.43924092	2.46E-06	3.12E-05
Hspa12a	Up	1.44075903	6.93E-51	1.05E-48
Klf8	Up	1.44077261	1.00E-32	7.95E-31
Grb14	Up	1.44222408	3.51E-07	5.13E-06
Prokr2	Up	1.4433285	2.31E-07	3.49E-06
Cntn1	Up	1.45131143	1.02E-15	3.41E-14
Fam43b	Up	1.45270419	2.00E-06	2.58E-05
Pcdh20	Up	1.4531849	4.02E-10	8.23E-09
Nos1	Up	1.45476507	1.57E-13	4.46E-12
Pbx1	Up	1.45659475	2.73E-48	3.84E-46
4933415D12	Up	1.45844011	7.14E-07	9.98E-06
Efcab6	Up	1.45855312	2.00E-07	3.05E-06
Slc26a7	Up	1.45877699	4.11E-05	0.00040844
Acbd4	Up	1.46551259	2.01E-16	7.07E-15
A930017M01	Up	1.46987171	4.19E-05	0.00041602
Timp2	Up	1.47110641	3.22E-19	1.35E-17
Fam160a1	Up	1.47277235	5.39E-05	0.00052191
Ccdc111	Up	1.47341115	7.12E-15	2.26E-13
Cys1	Up	1.47926539	6.68E-06	7.85E-05
Iqj	Up	1.48062418	1.48E-06	1.96E-05
Lamb1	Up	1.48738287	2.58E-24	1.39E-22
Gstm6	Up	1.48950676	4.34E-05	0.00042863
BC024139	Up	1.49059232	6.99E-18	2.69E-16
Ppp1r1b	Up	1.49352284	1.06E-23	5.46E-22
6330403A02	Up	1.49617565	6.76E-06	7.94E-05
Pde11a	Up	1.50399433	2.40E-08	4.10E-07
Lrrc55	Up	1.50744434	6.34E-25	3.60E-23
Pdgfc	Up	1.50746912	1.90E-14	5.83E-13
A730056A06	Up	1.51257918	1.31E-05	0.00014554
Ank1	Up	1.52166476	2.71E-08	4.59E-07
Fgfr2	Up	1.52481658	1.59E-13	4.51E-12
Fzd7	Up	1.52974074	1.19E-13	3.42E-12

Npas2	Up	1.53213544	6.62E-08	1.07E-06
Bmp3	Up	1.53321743	3.32E-13	9.26E-12
Penk	Up	1.55179962	7.67E-06	8.90E-05
Mfsd2a	Up	1.55256454	2.39E-17	8.95E-16
Gab1	Up	1.55886638	8.68E-41	9.63E-39
Gm11767	Up	1.55972883	4.65E-06	5.61E-05
Ptprt	Up	1.5608204	7.12E-07	9.96E-06
Spink13	Up	1.5641949	1.26E-05	0.00014099
2210404007	Up	1.56710419	2.94E-07	4.35E-06
Vsnl1	Up	1.56802585	1.69E-10	3.64E-09
Trim67	Up	1.57249108	4.15E-20	1.82E-18
Nfe2l3	Up	1.57259637	2.95E-21	1.35E-19
Hivep2	Up	1.57715081	7.02E-36	6.29E-34
Atp4a	Up	1.58210974	9.72E-07	1.33E-05
4833418N02	Up	1.58498568	1.35E-14	4.21E-13
Bag2	Up	1.58772081	2.59E-22	1.25E-20
2610019F03F	Up	1.58781824	1.73E-10	3.70E-09
Slc16a1	Up	1.58972169	2.63E-52	4.25E-50
Smad6	Up	1.59333679	3.57E-11	8.12E-10
Pcdh19	Up	1.59547663	8.45E-14	2.47E-12
Gm15672	Up	1.59848561	4.11E-06	5.01E-05
Nab2	Up	1.60268163	1.93E-14	5.92E-13
Tcf15	Up	1.6087	8.72E-06	0.00010097
Gnb4	Up	1.61211913	8.13E-45	1.02E-42
Kctd4	Up	1.61302506	3.38E-06	4.18E-05
Tnr	Up	1.61309459	1.88E-23	9.55E-22
Mta3	Up	1.61325465	2.84E-65	6.73E-63
Lnx2	Up	1.62781738	1.18E-31	8.89E-30
Dlc1	Up	1.64172388	3.99E-14	1.20E-12
Sel1l3	Up	1.64272052	1.72E-22	8.38E-21
Fbxl21	Up	1.64666566	4.91E-11	1.10E-09
Epb4.9	Up	1.64780292	1.94E-23	9.85E-22
Luzp2	Up	1.65261274	5.44E-12	1.36E-10
Ndrp1	Up	1.65405896	1.41E-24	7.84E-23
Ifngr2	Up	1.65643774	1.91E-42	2.20E-40
Ly6g6e	Up	1.65720246	2.75E-10	5.77E-09
Hapln3	Up	1.65932401	5.13E-06	6.14E-05
Pde4d	Up	1.66555584	9.93E-57	1.94E-54
Camk2a	Up	1.6717126	4.23E-15	1.35E-13
Plk2	Up	1.67416283	2.01E-17	7.56E-16
Syce2	Up	1.67784572	5.50E-17	1.99E-15
Tmem74	Up	1.68004882	7.70E-28	5.20E-26

Thbs1	Up	1.68161508	5.20E-08	8.51E-07
1700086L19F	Up	1.6922693	3.32E-06	4.12E-05
Camk4	Up	1.69701492	5.98E-28	4.05E-26
Tbata	Up	1.70377871	7.30E-09	1.33E-07
Tg	Up	1.71637703	1.64E-06	2.14E-05
Pnliprp1	Up	1.72240919	7.83E-08	1.26E-06
Trpc3	Up	1.72376837	3.95E-07	5.73E-06
Gpr26	Up	1.72578483	1.60E-23	8.19E-22
Dpp10	Up	1.73366547	5.05E-12	1.27E-10
Shisa6	Up	1.73428336	3.00E-12	7.74E-11
Slc17a7	Up	1.75281814	1.99E-29	1.41E-27
Aspg	Up	1.75374993	1.51E-06	2.00E-05
Bves	Up	1.75544642	1.42E-06	1.89E-05
Galntl4	Up	1.76189183	1.12E-19	4.80E-18
Ripply2	Up	1.77208618	9.70E-08	1.55E-06
Nav2	Up	1.77790107	2.56E-16	8.91E-15
Fras1	Up	1.78333054	1.13E-21	5.30E-20
Pcsk2	Up	1.79125053	2.84E-17	1.06E-15
A730046J19F	Up	1.79313482	5.89E-07	8.32E-06
Gm16871	Up	1.79839179	6.22E-09	1.14E-07
Dbpht2	Up	1.80352208	4.81E-07	6.89E-06
Akap12	Up	1.80462331	2.75E-14	8.34E-13
Adamts17	Up	1.81029214	6.20E-46	8.09E-44
D18Erttd653e	Up	1.81421212	2.89E-10	6.04E-09
2610035D17I	Up	1.81847483	1.41E-47	1.96E-45
Slc35f4	Up	1.81897882	6.44E-08	1.04E-06
Chrm1	Up	1.82672949	1.39E-11	3.32E-10
Cdh6	Up	1.82680985	4.67E-12	1.18E-10
Dusp15	Up	1.82857048	1.64E-28	1.13E-26
Adrb1	Up	1.83214502	5.10E-13	1.40E-11
Kcng3	Up	1.83749738	4.22E-07	6.10E-06
Kcng1	Up	1.84587827	2.43E-17	9.07E-16
St18	Up	1.84718892	1.99E-27	1.30E-25
Sox5	Up	1.85026453	1.42E-38	1.40E-36
Csrp2	Up	1.87060652	9.43E-30	6.72E-28
Peli2	Up	1.87532819	1.97E-30	1.44E-28
2900026A02I	Up	1.88585546	3.97E-20	1.75E-18
Gria3	Up	1.88729068	3.49E-53	5.84E-51
Kcnt2	Up	1.89144037	3.07E-23	1.53E-21
Bcl2	Up	1.91434419	1.44E-26	8.94E-25
Osbpl6	Up	1.93079969	2.39E-16	8.33E-15
Stac2	Up	1.93566293	2.75E-16	9.53E-15

Ucp2	Up	1.94205586	7.14E-46	9.25E-44
4-Mar	Up	1.94910782	2.01E-42	2.31E-40
Rspo3	Up	1.96946828	6.73E-82	2.21E-79
Fzd1	Up	1.97141957	7.89E-35	6.90E-33
Nptx1	Up	1.974991	2.18E-58	4.50E-56
Chdh	Up	1.99798222	1.58E-08	2.78E-07
Robo1	Up	1.99975738	1.61E-95	7.12E-93
2310069G16	Up	2.00308753	1.63E-08	2.86E-07
Slc5a5	Up	2.00807147	1.14E-11	2.74E-10
Pygl	Up	2.0135977	5.24E-11	1.17E-09
Glra2	Up	2.01650386	3.66E-24	1.96E-22
Frmd4a	Up	2.02113383	1.47E-47	2.02E-45
Rtn4rl1	Up	2.02832285	1.83E-23	9.32E-22
Nrp1	Up	2.03480285	1.64E-21	7.62E-20
Smarcd3	Up	2.04008397	1.94E-92	7.83E-90
Mapkapk3	Up	2.05122433	3.93E-09	7.38E-08
lyd	Up	2.05593577	1.59E-08	2.79E-07
Wdr66	Up	2.0591929	2.69E-14	8.19E-13
St3gal1	Up	2.06749985	1.84E-27	1.21E-25
Rnd1	Up	2.06996239	1.06E-36	9.88E-35
Ptprz1	Up	2.07202626	2.64E-87	9.96E-85
Prex1	Up	2.07794279	1.12E-81	3.62E-79
Bcl6b	Up	2.09024198	4.42E-27	2.82E-25
Rapgef11	Up	2.09201823	9.60E-32	7.31E-30
Dpf3	Up	2.12012217	1.99E-52	3.25E-50
Hs3st2	Up	2.12501667	5.20E-10	1.05E-08
Gucy1a3	Up	2.12833775	3.92E-17	1.43E-15
Lhfp	Up	2.13302481	9.96E-29	6.91E-27
Gipr	Up	2.1345329	1.66E-12	4.38E-11
2310046A06I	Up	2.13619003	1.21E-09	2.38E-08
Btbd11	Up	2.15440888	2.47E-23	1.24E-21
Mef2c	Up	2.19272947	6.07E-50	8.98E-48
Zfp703	Up	2.19662185	1.07E-43	1.30E-41
A830011K09I	Up	2.19760026	1.35E-13	3.85E-12
Adora1	Up	2.23298882	2.84E-59	6.00E-57
Rapgef5	Up	2.23424719	6.85E-27	4.31E-25
4833424O15	Up	2.23619365	6.22E-22	2.94E-20
Bend6	Up	2.2443296	1.74E-33	1.41E-31
Ttc7	Up	2.24485038	2.89E-17	1.07E-15
Ush1c	Up	2.24692678	3.96E-23	1.97E-21
Dync1i1	Up	2.26390418	1.51E-57	3.04E-55
Usp43	Up	2.27039127	9.32E-12	2.28E-10

Trim9	Up	2.28408967	5.42E-45	6.97E-43
Sla	Up	2.29619624	8.71E-23	4.32E-21
Klf4	Up	2.31500888	2.06E-12	5.40E-11
Ppp1r14c	Up	2.32508663	3.23E-15	1.04E-13
Wnt7b	Up	2.32716884	4.92E-50	7.33E-48
Grm1	Up	2.33065496	4.91E-16	1.68E-14
Inhbb	Up	2.33206435	5.30E-35	4.68E-33
Pkdcc	Up	2.33210931	8.82E-17	3.15E-15
Lrfn5	Up	2.34929977	1.16E-44	1.43E-42
Tusc5	Up	2.36043861	9.02E-11	1.97E-09
Fn1	Up	2.36507864	1.47E-26	9.14E-25
Nr0b1	Up	2.36605274	7.03E-11	1.55E-09
Gpr176	Up	2.38592999	2.07E-22	1.01E-20
Grik3	Up	2.39343094	6.50E-56	1.20E-53
Nr4a3	Up	2.41695714	7.74E-99	3.93E-96
Kcnq3	Up	2.4336326	3.40E-101	1.83E-98
Hs6st2	Up	2.43795659	4.12E-116	2.81E-113
Magi3	Up	2.43886157	6.26E-125	4.83E-122
Sh3bgrl2	Up	2.44112332	2.02E-96	9.17E-94
Arpp21	Up	2.45777422	1.32E-84	4.88E-82
Inhba	Up	2.46221187	1.41E-11	3.35E-10
Kcnh3	Up	2.46407519	2.71E-76	8.16E-74
Trnp1	Up	2.47830746	8.77E-65	2.02E-62
Cdh11	Up	2.49231766	1.79E-94	7.75E-92
Inf2	Up	2.5019784	1.53E-23	7.87E-22
Adamts20	Up	2.50918212	4.31E-22	2.05E-20
Slc44a5	Up	2.51064288	1.54E-43	1.86E-41
Rgnf	Up	2.54955301	1.99E-28	1.37E-26
Gnal	Up	2.55635569	2.20E-56	4.24E-54
Sstr3	Up	2.56010159	9.77E-32	7.41E-30
Cap2	Up	2.56992898	1.09E-30	8.02E-29
Syt4	Up	2.57146922	4.15E-71	1.08E-68
Chst8	Up	2.61118994	6.96E-35	6.12E-33
Mpped1	Up	2.63603605	2.67E-144	4.31E-141
Rgma	Up	2.65769467	4.10E-35	3.64E-33
Baiap2	Up	2.66468845	1.96E-54	3.44E-52
Enc1	Up	2.69155991	5.80E-129	5.15E-126
Tox	Up	2.73075121	1.78E-96	8.30E-94
Alg13	Up	2.76026447	2.08E-140	2.31E-137
Kcnv1	Up	2.78732463	3.54E-38	3.41E-36
Rph3a	Up	2.79989441	1.52E-33	1.23E-31
Ldb2	Up	2.80320244	9.58E-68	2.46E-65

Kctd8	Up	2.85777009	2.78E-40	3.01E-38
9930013L23F	Up	2.89663836	5.72E-43	6.68E-41
Rassf3	Up	2.9087857	3.44E-31	2.58E-29
S100a10	Up	2.92167547	9.56E-41	1.04E-38
Rgs6	Up	2.92274159	5.63E-36	5.07E-34
Mmp17	Up	2.92365119	6.98E-40	7.29E-38
Nin	Up	2.98709936	8.06E-47	1.08E-44
Arhgap29	Up	3.01352341	8.51E-53	1.40E-50
Ccdc109b	Up	3.05692316	3.01E-26	1.84E-24
Osbpl3	Up	3.12305726	1.55E-61	3.41E-59
Kirrel3	Up	3.21044241	8.36E-62	1.85E-59
Jakmip1	Up	3.2677993	5.51E-139	5.76E-136
Ntsr1	Up	3.29945476	4.00E-47	5.42E-45
Rbfox1	Up	3.36541969	4.83E-142	6.12E-139
Dlg2	Up	3.37875559	1.02E-88	3.94E-86
Sybu	Up	3.44835696	1.22E-74	3.49E-72
Hs3st3b1	Up	3.48023882	2.62E-26	1.61E-24
Lmo3	Up	3.52488209	2.81E-97	1.35E-94
Prkar1b	Up	3.53610627	6.40E-115	3.79E-112
Accn1	Up	3.54228958	1.98E-38	1.94E-36
Stom	Up	3.57579627	1.02E-100	5.35E-98
Hs3st5	Up	3.67860887	2.07E-36	1.90E-34
Cldn3	Up	3.95679326	3.81E-34	3.19E-32
Gas7	Up	3.98683058	3.37E-224	1.50E-220
Prickle1	Up	4.56221527	1.72E-93	7.09E-91
Alcam	Up	4.86679503	1.30E-261	7.72E-258
Mc4r	Up	5.63854695	2.17E-107	1.24E-104