

Gene ID	Gene Name	Mean Expression	Fold-change	log2Fold-Change	log2Fold-Change Standard Error	stat	p-value	Adjusted p-value	Gene Function
ENSMUSG00000069792	Gm11428	1765.1250	3.4192	-1.7737	0.1670	-10.6228	2.33E-26	2.43E-22	WAP four-disulfide core domain 17 [Source:MGI Symbol;Acc:MGI:3649773]
ENSMUSG00000001020	S100a4	6636.0288	2.4493	-1.2924	0.1529	-8.4515	2.87E-17	1.5E-13	S100 calcium binding protein A4 [Source:MGI Symbol;Acc:MGI:1330282]
ENSMUSG00000022769	Sdf2l1	3275.1328	2.2864	-1.1931	0.1433	-8.3272	8.28E-17	2.88E-13	stromal cell-derived factor 2-like 1 [Source:MGI Symbol;Acc:MGI:2149842]
ENSMUSG00000068220	Lgals1	10559.3538	2.8592	-1.5156	0.1920	-7.8938	2.93E-15	7.64E-12	lectin, galactose binding, soluble 1 [Source:MGI Symbol;Acc:MGI:96777]
ENSMUSG00000059325	Hopx	1100.0807	2.6143	-1.3864	0.1889	-7.3402	2.13E-13	4.45E-10	HOP homeobox [Source:MGI Symbol;Acc:MGI:1916782]
ENSMUSG00000018500	Adora2b	266.4642	3.1964	-1.6765	0.2314	-7.2452	4.32E-13	7.5E-10	adenosine A2b receptor [Source:MGI Symbol;Acc:MGI:99403]

ENSMUSG000000 05054	Cstb	1617.76 12	2.317 6	-1.2127	0.1788	- 6.781 6	1.19E- 11	1.77E- 08	cystatin B [Source:MGI Symbol;Acc:MGI:109514]
ENSMUSG000000 30793	Pycard	2338.91 88	2.564 0	-1.3584	0.2100	- 6.469 1	9.86E- 11	1.28E- 07	PYD and CARD domain containing [Source:MGI Symbol;Acc:MGI:1931465]
ENSMUSG000000 03541	Ier3	1216.92 66	2.031 4	-1.0225	0.1692	- 6.041 2	1.53E- 09	1.77E- 06	immediate early response 3 [Source:MGI Symbol;Acc:MGI:104814]
ENSMUSG000000 16256	Ctsz	8966.92 55	1.862 7	-0.8974	0.1516	- 5.921 3	3.19E- 09	3.33E- 06	cathepsin Z [Source:MGI Symbol;Acc:MGI:1891190]
ENSMUSG000000 41736	Tspo	7297.13 20	2.575 9	-1.3651	0.2319	- 5.887 0	3.93E- 09	3.73E- 06	translocator protein [Source:MGI Symbol;Acc:MGI:88222]
ENSMUSG000000 50335	Lgals3	16469.8 178	2.042 4	-1.0303	0.1802	- 5.718 5	1.07E- 08	9.34E- 06	lectin, galactose binding, soluble 3 [Source:MGI Symbol;Acc:MGI:96778]
ENSMUSG000000 20571	Pdia6	9472.76 98	1.970 4	-0.9785	0.1740	- 5.622 7	1.88E- 08	1.31E- 05	protein disulfide isomerase associated 6 [Source:MGI Symbol;Acc:MGI:1919103]

ENSMUSG000000 32966	Fkbp1a	2133.93 05	1.938 5	-0.9549	0.1698	- 5.622 7	1.88E- 08	1.31E- 05	FK506 binding protein 1a [Source:MGI Symbol;Acc:MGI:95541]
ENSMUSG000000 41959	S100a10	7128.70 97	2.173 4	-1.1200	0.1986	- 5.638 5	1.72E- 08	1.31E- 05	S100 calcium binding protein A10 (calpactin) [Source:MGI Symbol;Acc:MGI:1339468]
ENSMUSG000000 28041	Adam15	2083.53 92	2.122 7	-1.0859	0.1938	- 5.601 8	2.12E- 08	1.38E- 05	a disintegrin and metallopeptidase domain 15 (metargidin) [Source:MGI Symbol;Acc:MGI:1333882]
ENSMUSG000000 34659	Tmem109	2152.43 38	1.782 8	-0.8342	0.1497	- 5.573 3	2.5E- 08	1.53E- 05	transmembrane protein 109 [Source:MGI Symbol;Acc:MGI:1915789]
ENSMUSG000000 23367	Tmem176a	1092.47 74	2.383 4	-1.2530	0.2273	- 5.513 7	3.51E- 08	2.04E- 05	transmembrane protein 176A [Source:MGI Symbol;Acc:MGI:1913308]
ENSMUSG000000 26385	Dbi	3402.49 10	2.677 2	-1.4207	0.2599	- 5.467 0	4.58E- 08	2.51E- 05	diazepam binding inhibitor [Source:MGI Symbol;Acc:MGI:94865]
ENSMUSG000000 62070	Pgk1	12460.8 214	1.991 8	-0.9941	0.1824	- 5.449 6	5.05E- 08	2.58E- 05	phosphoglycerate kinase 1 [Source:MGI Symbol;Acc:MGI:97555]

ENSMUSG000000 72620	Slfn2	7904.84 82	2.117 4	-1.0823	0.1988	- 5.444 3	5.2E- 08	2.58E- 05	schlafen 2 [Source:MGI Symbol;Acc:MGI:1313258]
ENSMUSG000000 29322	Plac8	25370.6 166	1.960 0	-0.9708	0.1793	- 5.415 4	6.12E- 08	2.69E- 05	placenta-specific 8 [Source:MGI Symbol;Acc:MGI:2445289]
ENSMUSG000000 32231	Anxa2	13594.1 322	1.887 6	-0.9165	0.1693	- 5.414 8	6.14E- 08	2.69E- 05	annexin A2 [Source:MGI Symbol;Acc:MGI:88246]
ENSMUSG000000 49881	2810025M1 5Rik	584.479 5	2.110 2	-1.0774	0.1990	- 5.413 4	6.18E- 08	2.69E- 05	RIKEN cDNA 2810025M15 gene [Source:MGI Symbol;Acc:MGI:1917203]
ENSMUSG000000 53175	Bcl3	831.148 8	1.833 6	-0.8746	0.1619	- 5.402 5	6.57E- 08	2.74E- 05	B cell leukemia/lymphoma 3 [Source:MGI Symbol;Acc:MGI:88140]
ENSMUSG000000 28691	Prdx1	10328.2 922	1.909 4	-0.9332	0.1768	- 5.276 7	1.32E- 07	5.28E- 05	peroxiredoxin 1 [Source:MGI Symbol;Acc:MGI:99523]
ENSMUSG000000 38650	Rnh1	4678.63 42	1.819 9	-0.8638	0.1679	- 5.145 6	2.67E- 07	0.0001 03	ribonuclease/angiogenin inhibitor 1 [Source:MGI Symbol;Acc:MGI:1195456]
ENSMUSG000000 73987	Ggh	730.029 3	1.891 2	-0.9193	0.1796	- 5.117 5	3.1E- 07	0.0001 15	gamma-glutamyl hydrolase [Source:MGI Symbol;Acc:MGI:1329035]

ENSMUSG000000 30142	Clec4e	2084.44 62	2.061 5	-1.0437	0.2042	- 5.110 3	3.22E- 07	0.0001 16	C-type lectin domain family 4, member e [Source:MGI Symbol;Acc:MGI:1861232]
ENSMUSG000000 43252	Tmem64	988.323 9	0.609 8	0.7136	0.1401	5.091 8	3.55E- 07	0.0001 23	transmembrane protein 64 [Source:MGI Symbol;Acc:MGI:2140359]
ENSMUSG000000 48970	C1galt1c1	2007.53 35	2.153 2	-1.1065	0.2188	- 5.057 7	4.24E- 07	0.0001 43	C1GALT1-specific chaperone 1 [Source:MGI Symbol;Acc:MGI:1913493]
ENSMUSG000000 06378	Gcat	239.812 6	2.634 2	-1.3974	0.2822	- 4.951 5	7.36E- 07	0.0002 4	glycine C-acetyltransferase (2-amino-3-ketobutyrate- coenzyme A ligase) [Source:MGI Symbol;Acc:MGI:1349389]
ENSMUSG000000 25492	Ifitm3	7602.53 11	2.078 8	-1.0558	0.2140	- 4.932 7	8.11E- 07	0.0002 56	interferon induced transmembrane protein 3 [Source:MGI Symbol;Acc:MGI:1913391]
ENSMUSG000000 63694	Cyts	5477.96 72	1.853 7	-0.8904	0.1817	- 4.901 6	9.51E- 07	0.0002 92	cytochrome c, somatic [Source:MGI Symbol;Acc:MGI:88578]

ENSMUSG000000 21996	Esd	4245.60 85	1.698 9	-0.7646	0.1572	- 4.864 2	1.15E- 06	0.0003 42	esterase D/formylglutathione hydrolase [Source:MGI Symbol;Acc:MGI:95421]
ENSMUSG000000 33386	Frrs1	554.377 3	1.884 8	-0.9144	0.1919	- 4.764 5	1.89E- 06	0.0005 34	ferric-chelate reductase 1 [Source:MGI Symbol;Acc:MGI:108076]
ENSMUSG000000 60962	Dmkn	102.236 4	3.338 9	-1.7394	0.3650	- 4.764 8	1.89E- 06	0.0005 34	dermokine [Source:MGI Symbol;Acc:MGI:1920962]
ENSMUSG000000 18821	Avpi1	115.500 0	2.560 1	-1.3562	0.2871	- 4.724 0	2.31E- 06	0.0006 18	arginine vasopressin-induced 1 [Source:MGI Symbol;Acc:MGI:1916784]
ENSMUSG000000 25512	Chid1	1124.36 59	1.724 8	-0.7864	0.1664	- 4.725 2	2.3E- 06	0.0006 18	chitinase domain containing 1 [Source:MGI Symbol;Acc:MGI:1915288]
ENSMUSG000000 32381	Fam96a	5446.95 83	1.749 9	-0.8073	0.1721	- 4.690 3	2.73E- 06	0.0007 11	family with sequence similarity 96, member A [Source:MGI Symbol;Acc:MGI:1915500]
ENSMUSG000000 22218	Tgm1	222.531 3	3.064 0	-1.6154	0.3468	- 4.657 9	3.19E- 06	0.0008 12	transglutaminase 1, K polypeptide [Source:MGI Symbol;Acc:MGI:98730]

ENSMUSG000000 22584	Ly6c2	14141.5 951	1.852 6	-0.8896	0.1928	- 4.614 6	3.94E- 06	0.0009 78	lymphocyte antigen 6 complex, locus C2 [Source:MGI Symbol;Acc:MGI:3712069]
ENSMUSG000000 23992	Trem2	308.466 8	3.344 2	-1.7417	0.3812	- 4.569 1	4.9E- 06	0.0011 88	triggering receptor expressed on myeloid cells 2 [Source:MGI Symbol;Acc:MGI:1913150]
ENSMUSG000000 01227	Sema6b	394.546 8	3.154 6	-1.6574	0.3649	- 4.541 8	5.58E- 06	0.0013 22	sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6B [Source:MGI Symbol;Acc:MGI:1202889]
ENSMUSG000000 52310	Slc39a1	1911.78 80	1.687 7	-0.7551	0.1666	- 4.533 0	5.82E- 06	0.0013 48	solute carrier family 39 (zinc transporter), member 1 [Source:MGI Symbol;Acc:MGI:1353474]
ENSMUSG000000 30717	Nupr1	314.394 9	2.479 5	-1.3100	0.2894	- 4.526 4	6E-06	0.0013 6	nuclear protein transcription regulator 1 [Source:MGI Symbol;Acc:MGI:1891834]
ENSMUSG000000 21477	Ctsl	2097.70 32	1.847 0	-0.8852	0.1959	- 4.518 2	6.24E- 06	0.0013 76	cathepsin L [Source:MGI Symbol;Acc:MGI:88564]

ENSMUSG000000 38034	Igsf8	1691.00 36	1.693 6	-0.7601	0.1685	- 4.510 9	6.46E- 06	0.0013 76	immunoglobulin superfamily, member 8 [Source:MGI Symbol;Acc:MGI:2154090]
ENSMUSG000000 60703	Cd302	782.576 8	2.490 4	-1.3164	0.2918	- 4.510 5	6.47E- 06	0.0013 76	CD302 antigen [Source:MGI Symbol;Acc:MGI:1913455]
ENSMUSG000000 44060	A830010M2 ORik	111.944 0	0.452 1	1.1453	0.2549	4.493 7	7E-06	0.0014 6	RIKEN cDNA A830010M20 gene [Source:MGI Symbol;Acc:MGI:2445097]
ENSMUSG000000 06574	Slc4a1	1869.96 18	0.580 4	0.7850	0.1751	4.483 5	7.34E- 06	0.0015 02	solute carrier family 4 (anion exchanger), member 1 [Source:MGI Symbol;Acc:MGI:109393]
ENSMUSG000000 24644	Cndp2	3096.40 55	1.569 5	-0.6503	0.1454	- 4.473 6	7.69E- 06	0.0015 43	CNDP dipeptidase 2 (metallopeptidase M20 family) [Source:MGI Symbol;Acc:MGI:1913304]
ENSMUSG000000 21951	N6amt2	559.437 3	1.846 1	-0.8845	0.1982	- 4.461 5	8.14E- 06	0.0016 02	N-6 adenine-specific DNA methyltransferase 2 (putative) [Source:MGI Symbol;Acc:MGI:1915293]

ENSMUSG000000 19579	D17Wsu104 e	2337.10 22	1.963 7	-0.9735	0.2186	- 4.452 6	8.48E- 06	0.0016 09	myeloid derived growth factor [Source:MGI Symbol;Acc:MGI:2156020]
ENSMUSG000000 30339	Ltbr	1931.10 44	1.748 3	-0.8059	0.1809	- 4.455 7	8.36E- 06	0.0016 09	lymphotoxin B receptor [Source:MGI Symbol;Acc:MGI:104875]
ENSMUSG000000 30539	Sema4b	1444.28 84	0.554 2	0.8514	0.1917	4.441 4	8.94E- 06	0.0016 64	sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 4B [Source:MGI Symbol;Acc:MGI:107559]
ENSMUSG000000 28214	Gem	198.379 2	0.405 3	1.3030	0.2938	4.434 2	9.24E- 06	0.0016 91	GTP binding protein (gene overexpressed in skeletal muscle) [Source:MGI Symbol;Acc:MGI:99844]
ENSMUSG000000 29438	Bcl7a	2263.51 84	0.446 6	1.1631	0.2636	4.412 5	1.02E- 05	0.0018 38	B cell CLL/lymphoma 7A [Source:MGI Symbol;Acc:MGI:1924295]
ENSMUSG000000 49299	Trappc1	1569.77 78	1.751 4	-0.8085	0.1838	- 4.397 9	1.09E- 05	0.0019 32	trafficking protein particle complex 1 [Source:MGI Symbol;Acc:MGI:1098727]

ENSMUSG000000 19122	Ccl9	8979.47 95	2.059 9	-1.0426	0.2377	- 4.386 6	1.15E- 05	0.0020 01	chemokine (C-C motif) ligand 9 [Source:MGI Symbol;Acc:MGI:104533]
ENSMUSG000000 31556	Tm2d2	1229.57 60	1.649 5	-0.7220	0.1648	- 4.380 1	1.19E- 05	0.0020 01	TM2 domain containing 2 [Source:MGI Symbol;Acc:MGI:1916992]
ENSMUSG000000 79523	Tmsb10	14347.5 982	1.855 2	-0.8916	0.2036	- 4.379 5	1.19E- 05	0.0020 01	thymosin, beta 10 [Source:MGI Symbol;Acc:MGI:109146]
ENSMUSG000000 00562	Adora3	141.524 8	2.394 6	-1.2598	0.2896	- 4.349 9	1.36E- 05	0.0021 53	adenosine A3 receptor [Source:MGI Symbol;Acc:MGI:104847]
ENSMUSG000000 23272	Creld2	3041.89 07	1.746 2	-0.8042	0.1847	- 4.353 8	1.34E- 05	0.0021 53	cysteine-rich with EGF-like domains 2 [Source:MGI Symbol;Acc:MGI:1923987]
ENSMUSG000000 49577	Zfpm1	2220.82 04	0.479 5	1.0604	0.2437	4.350 4	1.36E- 05	0.0021 53	zinc finger protein, multitype 1 [Source:MGI Symbol;Acc:MGI:1095400]
ENSMUSG000000 60512	0610040J01 Rik	126.001 5	3.090 1	-1.6276	0.3739	- 4.353 3	1.34E- 05	0.0021 53	RIKEN cDNA 0610040J01 gene [Source:MGI Symbol;Acc:MGI:1923511]
ENSMUSG000000 31444	F10	3878.66 94	2.454 4	-1.2954	0.2993	- 4.327 4	1.51E- 05	0.0023 49	coagulation factor X [Source:MGI Symbol;Acc:MGI:103107]

ENSMUSG000000 48807	Slc35e4	246.925 2	1.953 6	-0.9662	0.2241	- 4.311 7	1.62E- 05	0.0024 49	solute carrier family 35, member E4 [Source:MGI Symbol;Acc:MGI:2144150]
ENSMUSG000000 50106	Tmc8	597.804 0	0.594 9	0.7492	0.1736	4.314 7	1.6E- 05	0.0024 49	transmembrane channel-like gene family 8 [Source:MGI Symbol;Acc:MGI:2669037]
ENSMUSG000000 41842	Fhdc1	216.425 8	0.475 0	1.0739	0.2496	4.302 4	1.69E- 05	0.0025 17	FH2 domain containing 1 [Source:MGI Symbol;Acc:MGI:2684972]
ENSMUSG000000 31168	Ebp	1633.08 31	1.721 6	-0.7838	0.1826	- 4.292 9	1.76E- 05	0.0025 9	phenylalkylamine Ca ²⁺ antagonist (emopamil) binding protein [Source:MGI Symbol;Acc:MGI:107822]
ENSMUSG000000 29413	Naaa	3536.52 51	2.215 0	-1.1473	0.2676	- 4.286 8	1.81E- 05	0.0026 25	N-acylethanolamine acid amidase [Source:MGI Symbol;Acc:MGI:1914361]
ENSMUSG000000 22844	Pdia5	319.167 3	1.893 6	-0.9211	0.2159	- 4.266 5	1.99E- 05	0.0028	protein disulfide isomerase associated 5 [Source:MGI Symbol;Acc:MGI:1919849]

ENSMUSG000000 32575	Manf	6582.26 59	1.990 1	-0.9929	0.2327	- 4.266 4	1.99E- 05	0.0028	mesencephalic astrocyte- derived neurotrophic factor [Source:MGI Symbol;Acc:MGI:1922090]
ENSMUSG000000 22587	Ly6e	27692.4 716	1.537 2	-0.6203	0.1459	- 4.250 5	2.13E- 05	0.0029 66	lymphocyte antigen 6 complex, locus E [Source:MGI Symbol;Acc:MGI:106651]
ENSMUSG000000 29304	Spp1	625.845 2	2.687 2	-1.4261	0.3361	- 4.243 5	2.2E- 05	0.0030 2	secreted phosphoprotein 1 [Source:MGI Symbol;Acc:MGI:98389]
ENSMUSG000000 27566	Psma7	7321.39 92	1.779 8	-0.8317	0.1962	- 4.239 4	2.24E- 05	0.0030 35	proteasome (prosome, macropain) subunit, alpha type 7 [Source:MGI Symbol;Acc:MGI:1347070]
ENSMUSG000000 38732	Mboat1	383.696 9	2.561 3	-1.3569	0.3209	- 4.228 3	2.35E- 05	0.0031 48	membrane bound O- acyltransferase domain containing 1 [Source:MGI Symbol;Acc:MGI:2387184]
ENSMUSG000000 21484	Lman2	7452.97 32	1.479 4	-0.5650	0.1347	- 4.195 8	2.72E- 05	0.0035 89	lectin, mannose-binding 2 [Source:MGI Symbol;Acc:MGI:1914140]

ENSMUSG000000 30062	Rpn1	8536.80 58	1.598 6	-0.6768	0.1627	- 4.159 0	3.2E- 05	0.0041 67	ribophorin I [Source:MGI Symbol;Acc:MGI:98084]
ENSMUSG000000 21486	Prelid1	6848.34 51	1.759 8	-0.8154	0.1968	- 4.143 8	3.42E- 05	0.0042 5	PRELI domain containing 1 [Source:MGI Symbol;Acc:MGI:1913744]
ENSMUSG000000 28248	Sfrs18	1378.84 11	0.654 5	0.6115	0.1475	4.145 7	3.39E- 05	0.0042 5	PNN interacting serine/arginine-rich [Source:MGI Symbol;Acc:MGI:1913875]
ENSMUSG000000 63229	Ldha	21435.8 265	1.682 8	-0.7509	0.1812	- 4.143 3	3.42E- 05	0.0042 5	lactate dehydrogenase A [Source:MGI Symbol;Acc:MGI:96759]
ENSMUSG000000 75702	Selm	409.910 3	2.813 5	-1.4924	0.3599	- 4.146 8	3.37E- 05	0.0042 5	selenoprotein M [Source:MGI Symbol;Acc:MGI:2149786]
ENSMUSG000000 41355	Ssr2	5364.93 71	1.797 5	-0.8460	0.2043	- 4.140 2	3.47E- 05	0.0042 57	signal sequence receptor, beta [Source:MGI Symbol;Acc:MGI:1913506]
ENSMUSG000000 24579	Pcyox1l	818.213 7	1.736 5	-0.7962	0.1925	- 4.135 3	3.54E- 05	0.0042 98	prenylcysteine oxidase 1 like [Source:MGI Symbol;Acc:MGI:3606062]
ENSMUSG000000 21871	Pnp	3541.03 42	1.645 3	-0.7184	0.1741	- 4.126 7	3.68E- 05	0.0044 11	purine-nucleoside phosphorylase [Source:MGI Symbol;Acc:MGI:97365]

ENSMUSG000000 25465	Echs1	2032.05 24	1.520 0	-0.6041	0.1466	- 4.120 2	3.79E- 05	0.0044 86	enoyl Coenzyme A hydratase, short chain, 1, mitochondrial [Source:MGI Symbol;Acc:MGI:2136460]
ENSMUSG000000 35678	Tnfsf9	97.8469	2.409 0	-1.2684	0.3082	- 4.115 5	3.86E- 05	0.0045 28	tumor necrosis factor (ligand) superfamily, member 9 [Source:MGI Symbol;Acc:MGI:1101058]
ENSMUSG000000 70369	Itgad	397.862 0	0.473 0	1.0802	0.2626	4.112 7	3.91E- 05	0.0045 32	integrin, alpha D [Source:MGI Symbol;Acc:MGI:3578624]
ENSMUSG000000 19528	Gyg	3807.02 55	1.492 2	-0.5775	0.1406	- 4.106 1	4.02E- 05	0.0046 11	glycogenin [Source:MGI Symbol;Acc:MGI:1351614]
ENSMUSG000000 23067	Cdkn1a	818.749 6	1.754 1	-0.8108	0.1977	- 4.100 0	4.13E- 05	0.0046 84	cyclin-dependent kinase inhibitor 1A (P21) [Source:MGI Symbol;Acc:MGI:104556]
ENSMUSG000000 32508	Myd88	2794.15 96	1.668 5	-0.7386	0.1812	- 4.076 7	4.57E- 05	0.0049 32	myeloid differentiation primary response gene 88 [Source:MGI Symbol;Acc:MGI:108005]

ENSMUSG000000 37278	Tmem97	1218.03 33	1.958 2	-0.9695	0.2376	- 4.080 8	4.49E- 05	0.0049 32	transmembrane protein 97 [Source:MGI Symbol;Acc:MGI:1916321]
ENSMUSG000000 42453	Reln	123.973 0	0.407 0	1.2968	0.3179	4.079 2	4.52E- 05	0.0049 32	reelin [Source:MGI Symbol;Acc:MGI:103022]
ENSMUSG000000 56413	Adap1	2229.46 00	1.634 2	-0.7086	0.1737	- 4.079 9	4.5E- 05	0.0049 32	ArfGAP with dual PH domains 1 [Source:MGI Symbol;Acc:MGI:2442201]
ENSMUSG000000 58818	Lilrb3	5989.98 30	1.661 7	-0.7327	0.1798	- 4.075 7	4.59E- 05	0.0049 32	paired Ig-like receptor B [Source:MGI Symbol;Acc:MGI:894311]
ENSMUSG000000 47379	B3gnt1	414.406 2	1.593 2	-0.6719	0.1651	- 4.069 4	4.71E- 05	0.0050 16	beta-1,4- glucuronyltransferase 1 [Source:MGI Symbol;Acc:MGI:1919680]
ENSMUSG000000 24462	Gabbr1	603.407 0	0.613 2	0.7055	0.1735	4.066 6	4.77E- 05	0.0050 24	gamma-aminobutyric acid (GABA) B receptor, 1 [Source:MGI Symbol;Acc:MGI:1860139]
ENSMUSG000000 27994	Ccdc109b	503.649 8	2.380 1	-1.2510	0.3079	- 4.062 6	4.85E- 05	0.0050 28	coiled-coil domain containing 109B [Source:MGI Symbol;Acc:MGI:1914065]

ENSMUSG000000 35493	Tgfb1	13071.4 574	2.938 8	-1.5552	0.3829	- 4.061 8	4.87E- 05	0.0050 28	transforming growth factor, beta induced [Source:MGI Symbol;Acc:MGI:99959]
ENSMUSG000000 12422	Tmem167	2676.68 82	1.519 3	-0.6034	0.1489	- 4.051 1	5.1E- 05	0.0052 11	transmembrane protein 167 [Source:MGI Symbol;Acc:MGI:1913324]
ENSMUSG000000 19996	Mtap7	480.347 9	0.581 4	0.7823	0.1939	4.034 7	5.47E- 05	0.0054 83	microtubule-associated protein 7 [Source:MGI Symbol;Acc:MGI:1328328]
ENSMUSG000000 20873	Slc35b1	1568.29 12	1.551 9	-0.6341	0.1571	- 4.036 2	5.43E- 05	0.0054 83	solute carrier family 35, member B1 [Source:MGI Symbol;Acc:MGI:1343133]
ENSMUSG000000 37759	Ptger2	326.447 3	1.640 9	-0.7145	0.1781	- 4.012 7	6E-05	0.0059 63	prostaglandin E receptor 2 (subtype EP2) [Source:MGI Symbol;Acc:MGI:97794]
ENSMUSG000000 28937	Acot7	1702.82 17	1.704 7	-0.7696	0.1925	- 3.998 2	6.38E- 05	0.0062 79	acyl-CoA thioesterase 7 [Source:MGI Symbol;Acc:MGI:1917275]

ENSMUSG000000 29406	Pitpnm2	574.133 3	0.569 1	0.8131	0.2041	3.984 4	6.77E- 05	0.0065 94	phosphatidylinositol transfer protein, membrane-associated 2 [Source:MGI Symbol;Acc:MGI:1336192]
ENSMUSG000000 20089	Ppa1	1541.78 38	1.658 7	-0.7301	0.1834	- 3.981 1	6.86E- 05	0.0066 23	pyrophosphatase (inorganic) 1 [Source:MGI Symbol;Acc:MGI:97831]
ENSMUSG000000 26696	Vamp4	1369.12 78	1.486 4	-0.5718	0.1444	- 3.960 9	7.47E- 05	0.0071 03	vesicle-associated membrane protein 4 [Source:MGI Symbol;Acc:MGI:1858730]
ENSMUSG000000 71379	Hpcal1	2742.94 64	1.559 4	-0.6410	0.1619	- 3.960 1	7.49E- 05	0.0071 03	hippocalcin-like 1 [Source:MGI Symbol;Acc:MGI:1855689]
ENSMUSG000000 24730	Ms4a8a	392.800 3	2.145 8	-1.1015	0.2790	- 3.948 0	7.88E- 05	0.0074 05	membrane-spanning 4-domains, subfamily A, member 8A [Source:MGI Symbol;Acc:MGI:1927657]
ENSMUSG000000 16528	Mapkapk2	9937.43 32	1.501 2	-0.5861	0.1488	- 3.938 1	8.21E- 05	0.0076 49	MAP kinase-activated protein kinase 2 [Source:MGI Symbol;Acc:MGI:109298]

ENSMUSG000000 24769	Cdc42bpg	321.815 6	0.577 2	0.7929	0.2019	3.927 8	8.57E- 05	0.0079 12	CDC42 binding protein kinase gamma (DMPK-like) [Source:MGI Symbol;Acc:MGI:2652845]
ENSMUSG000000 21178	Psmc1	4777.77 65	1.518 9	-0.6030	0.1536	- 3.925 2	8.67E- 05	0.0079 27	protease (prosome, macropain) 26S subunit, ATPase 1 [Source:MGI Symbol;Acc:MGI:106054]
ENSMUSG000000 48164	Gm7204	146.445 5	2.829 6	-1.5006	0.3826	- 3.922 0	8.78E- 05	0.0079 62	predicted pseudogene 7204 [Source:MGI Symbol;Acc:MGI:3645884]
ENSMUSG000000 41084	Ostc	3441.06 47	1.745 5	-0.8037	0.2054	- 3.913 6	9.09E- 05	0.0081 75	oligosaccharyltransferase complex subunit [Source:MGI Symbol;Acc:MGI:1913607]
ENSMUSG000000 11256	Adam19	1198.34 77	0.520 1	0.9432	0.2423	3.892 6	9.92E- 05	0.0087 81	a disintegrin and metallopeptidase domain 19 (meltrin beta) [Source:MGI Symbol;Acc:MGI:105377]
ENSMUSG000000 42747	Krtcap2	2728.44 31	1.918 2	-0.9398	0.2415	- 3.892 2	9.94E- 05	0.0087 81	keratinocyte associated protein 2 [Source:MGI Symbol;Acc:MGI:1913309]

ENSMUSG000000 74825	Itpril1	863.387 6	1.478 4	-0.5640	0.1452	- 3.883 7	0.0001 03	0.0090 17	inositol 1,4,5-triphosphate receptor interacting protein- like 1 [Source:MGI Symbol;Acc:MGI:1920588]
ENSMUSG000000 21338	Lrrc16a	226.298 8	0.418 7	1.2560	0.3244	3.872 1	0.0001 08	0.0093 03	leucine rich repeat containing 16A [Source:MGI Symbol;Acc:MGI:1915982]
ENSMUSG000000 28692	Akr1a1	12329.3 612	1.569 9	-0.6507	0.1681	- 3.872 0	0.0001 08	0.0093 03	aldo-keto reductase family 1, member A1 (aldehyde reductase) [Source:MGI Symbol;Acc:MGI:1929955]
ENSMUSG000000 22452	1500032L24 Rik	4016.22 21	2.028 4	-1.0203	0.2644	- 3.858 6	0.0001 14	0.0097 49	single-pass membrane protein with aspartate rich tail 1 [Source:MGI Symbol;Acc:MGI:1916279]
ENSMUSG000000 01473	Tubb6	291.304 0	2.187 8	-1.1295	0.2938	- 3.843 9	0.0001 21	0.0102 68	tubulin, beta 6 class V [Source:MGI Symbol;Acc:MGI:1915201]

ENSMUSG000000 26914	Psmc14	3118.02 32	1.494 7	-0.5799	0.1512	- 3.834 4	0.0001 26	0.0105 84	proteasome (prosome, macropain) 26S subunit, non- ATPase, 14 [Source:MGI Symbol;Acc:MGI:1913284]
ENSMUSG000000 44469	Tnfrsf811	166.828 1	1.991 5	-0.9938	0.2595	- 3.830 1	0.0001 28	0.0106 86	tumor necrosis factor, alpha- induced protein 8-like 1 [Source:MGI Symbol;Acc:MGI:1913693]
ENSMUSG000000 26604	Ptpn14	148.779 3	0.434 3	1.2033	0.3149	3.821 5	0.0001 33	0.0109 81	protein tyrosine phosphatase, non-receptor type 14 [Source:MGI Symbol;Acc:MGI:102467]
ENSMUSG000000 23456	Tpi1	8536.78 37	1.827 0	-0.8695	0.2281	- 3.812 5	0.0001 38	0.0112 45	triosephosphate isomerase 1 [Source:MGI Symbol;Acc:MGI:98797]
ENSMUSG000000 37692	Ahd1	377.870 2	0.548 7	0.8660	0.2272	3.811 7	0.0001 38	0.0112 45	AT hook, DNA binding motif, containing 1 [Source:MGI Symbol;Acc:MGI:2444218]
ENSMUSG000000 62115	Rai1	909.698 7	0.595 1	0.7489	0.1976	3.790 8	0.0001 5	0.0121 41	retinoic acid induced 1 [Source:MGI Symbol;Acc:MGI:103291]

ENSMUSG000000 30615	Tmem126a	565.936 9	1.589 6	-0.6687	0.1765	- 3.788 8	0.0001 51	0.0121 43	transmembrane protein 126A [Source:MGI Symbol;Acc:MGI:1913521]
ENSMUSG000000 69106	Gm8910	111.563 2	2.831 1	-1.5014	0.3980	- 3.772 6	0.0001 62	0.0128 62	NA
ENSMUSG000000 21242	Npc2	12017.0 830	1.633 2	-0.7077	0.1878	- 3.768 6	0.0001 64	0.0129 04	Niemann-Pick type C2 [Source:MGI Symbol;Acc:MGI:1915213]
ENSMUSG000000 21423	Ly86	3002.39 69	1.603 5	-0.6812	0.1809	- 3.766 1	0.0001 66	0.0129 04	lymphocyte antigen 86 [Source:MGI Symbol;Acc:MGI:1321404]
ENSMUSG000000 25270	Alas2	727.748 1	0.547 4	0.8694	0.2308	3.766 2	0.0001 66	0.0129 04	aminolevulinic acid synthase 2, erythroid [Source:MGI Symbol;Acc:MGI:87990]
ENSMUSG000000 31231	Cox7b	4570.75 38	1.696 0	-0.7621	0.2025	- 3.763 8	0.0001 67	0.0129 26	cytochrome c oxidase subunit VIIb [Source:MGI Symbol;Acc:MGI:1913392]
ENSMUSG000000 56749	Nfil3	1439.04 32	1.763 5	-0.8185	0.2177	- 3.759 0	0.0001 71	0.0130 8	nuclear factor, interleukin 3, regulated [Source:MGI Symbol;Acc:MGI:109495]

ENSMUSG000000 26347	Tmem163	236.442 7	0.557 1	0.8439	0.2248	3.754 5	0.0001 74	0.0131 88	transmembrane protein 163 [Source:MGI Symbol;Acc:MGI:1919410]
ENSMUSG000000 29810	Tmem176b	2151.45 75	1.889 7	-0.9182	0.2447	- 3.752 3	0.0001 75	0.0131 88	transmembrane protein 176B [Source:MGI Symbol;Acc:MGI:1916348]
ENSMUSG000000 57729	Prtn3	34287.4 572	2.218 8	-1.1498	0.3065	- 3.751 5	0.0001 76	0.0131 88	proteinase 3 [Source:MGI Symbol;Acc:MGI:893580]
ENSMUSG000000 22371	Col14a1	173.277 9	0.453 5	1.1410	0.3046	3.745 2	0.0001 8	0.0134 28	collagen, type XIV, alpha 1 [Source:MGI Symbol;Acc:MGI:1341272]
ENSMUSG000000 22489	Pde1b	750.062 9	0.644 8	0.6332	0.1693	3.739 7	0.0001 84	0.0136 27	phosphodiesterase 1B, Ca2+- calmodulin dependent [Source:MGI Symbol;Acc:MGI:97523]
ENSMUSG000000 26600	Soat1	2453.95 49	1.838 0	-0.8781	0.2350	- 3.736 1	0.0001 87	0.0136 31	sterol O-acyltransferase 1 [Source:MGI Symbol;Acc:MGI:104665]
ENSMUSG000000 32411	Tfdp2	934.327 6	0.608 5	0.7167	0.1918	3.736 6	0.0001 86	0.0136 31	transcription factor Dp 2 [Source:MGI Symbol;Acc:MGI:107167]

ENSMUSG000000 25289	Prdx4	2424.46 03	1.853 5	-0.8902	0.2386	- 3.730 9	0.0001 91	0.0138 16	peroxiredoxin 4 [Source:MGI Symbol;Acc:MGI:1859815]
ENSMUSG000000 28108	Ecm1	202.862 6	2.711 1	-1.4389	0.3865	- 3.722 7	0.0001 97	0.0141 75	extracellular matrix protein 1 [Source:MGI Symbol;Acc:MGI:103060]
ENSMUSG000000 20593	Lpin1	334.480 2	0.610 5	0.7120	0.1914	3.719 0	0.0002	0.0142 05	lipin 1 [Source:MGI Symbol;Acc:MGI:1891340]
ENSMUSG000000 75701	H47	2189.42 60	1.618 0	-0.6942	0.1867	- 3.718 7	0.0002	0.0142 05	VCP-interacting membrane protein [Source:MGI Symbol;Acc:MGI:95994]
ENSMUSG000000 34266	Batf	585.656 8	1.656 3	-0.7279	0.1959	- 3.715 3	0.0002 03	0.0143	basic leucine zipper transcription factor, ATF-like [Source:MGI Symbol;Acc:MGI:1859147]
ENSMUSG000000 28494	Plin2	4208.87 51	1.824 4	-0.8674	0.2342	- 3.703 6	0.0002 13	0.0148 75	perilipin 2 [Source:MGI Symbol;Acc:MGI:87920]
ENSMUSG000000 48440	Cyp4f16	926.299 9	1.824 8	-0.8677	0.2346	- 3.699 1	0.0002 16	0.0149 76	cytochrome P450, family 4, subfamily f, polypeptide 16 [Source:MGI Symbol;Acc:MGI:1917351]
ENSMUSG000000 72855	Gm10430	306.777 7	0.532 3	0.9096	0.2459	3.698 5	0.0002 17	0.0149 76	NA

ENSMUSG000000 51185	Fam174a	1368.13 90	1.554 3	-0.6362	0.1722	- 3.695 3	0.0002 2	0.0150 67	family with sequence similarity 174, member A [Source:MGI Symbol;Acc:MGI:1914948]
ENSMUSG000000 36781	Rps27l	4040.95 82	2.012 4	-1.0089	0.2734	- 3.690 3	0.0002 24	0.0152 68	ribosomal protein S27-like [Source:MGI Symbol;Acc:MGI:1915191]
ENSMUSG000000 22013	Dnajc15	984.259 1	1.892 7	-0.9205	0.2496	- 3.688 1	0.0002 26	0.0152 99	DnaJ (Hsp40) homolog, subfamily C, member 15 [Source:MGI Symbol;Acc:MGI:1913398]
ENSMUSG000000 62991	Nrg1	457.460 2	2.436 4	-1.2847	0.3487	- 3.684 6	0.0002 29	0.0154 13	neuregulin 1 [Source:MGI Symbol;Acc:MGI:96083]
ENSMUSG000000 32028	Fam55b	982.984 4	0.568 5	0.8148	0.2223	3.665 9	0.0002 46	0.0164 79	neurexophilin and PC- esterase domain family, member 2 [Source:MGI Symbol;Acc:MGI:1925502]
ENSMUSG000000 38831	Ralgps1	262.464 1	0.611 2	0.7104	0.1941	3.659 4	0.0002 53	0.0167 92	Ral GEF with PH domain and SH3 binding motif 1 [Source:MGI Symbol;Acc:MGI:1922008]

ENSMUSG000000 04655	Aqp1	10944.1 503	0.622 7	0.6835	0.1872	3.651 0	0.0002 61	0.0172 4	aquaporin 1 [Source:MGI Symbol;Acc:MGI:103201]
ENSMUSG000000 23328	Ache	195.372 8	0.506 1	0.9824	0.2693	3.647 9	0.0002 64	0.0172 6	acetylcholinesterase [Source:MGI Symbol;Acc:MGI:87876]
ENSMUSG000000 59743	Fdps	1934.37 11	1.660 3	-0.7314	0.2005	- 3.647 5	0.0002 65	0.0172 6	farnesyl diphosphate synthetase [Source:MGI Symbol;Acc:MGI:104888]
ENSMUSG000000 05667	Mthfd2	1712.70 04	1.586 5	-0.6659	0.1827	- 3.643 7	0.0002 69	0.0174 05	methylenetetrahydrofolate dehydrogenase (NAD+ dependent), methenyltetrahydrofolate cyclohydrolase [Source:MGI Symbol;Acc:MGI:1338850]
ENSMUSG000000 35227	Spcs2	7493.97 63	1.643 3	-0.7166	0.1972	- 3.634 3	0.0002 79	0.0179 45	signal peptidase complex subunit 2 homolog (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1913874]
ENSMUSG000000 70394	1810027010 Rik	3155.24 28	2.475 2	-1.3075	0.3601	- 3.630 9	0.0002 82	0.0180 68	transmembrane protein 256 [Source:MGI Symbol;Acc:MGI:1916436]

ENSMUSG000000 33253	Szt2	793.947 7	0.664 4	0.5899	0.1627	3.626 7	0.0002 87	0.0182 57	seizure threshold 2 [Source:MGI Symbol;Acc:MGI:3033336]
ENSMUSG000000 26721	Rabgap1l	2196.18 15	0.697 1	0.5205	0.1436	3.624 2	0.0002 9	0.0183 21	RAB GTPase activating protein 1-like [Source:MGI Symbol;Acc:MGI:1352507]
ENSMUSG000000 19832	Rab32	2892.48 96	1.652 0	-0.7242	0.2003	- 3.616 4	0.0002 99	0.0187 71	RAB32, member RAS oncogene family [Source:MGI Symbol;Acc:MGI:1915094]
ENSMUSG000000 18362	Kpna2	7625.17 47	1.469 0	-0.5549	0.1536	- 3.612 5	0.0003 03	0.0189 38	karyopherin (importin) alpha 2 [Source:MGI Symbol;Acc:MGI:103561]
ENSMUSG000000 22048	Dpysl2	700.621 0	2.002 9	-1.0021	0.2778	- 3.607 0	0.0003 1	0.0190 85	dihydropyrimidinase-like 2 [Source:MGI Symbol;Acc:MGI:1349763]
ENSMUSG000000 32131	Abcg4	472.410 9	0.570 3	0.8101	0.2247	3.605 9	0.0003 11	0.0190 85	ATP-binding cassette, sub- family G (WHITE), member 4 [Source:MGI Symbol;Acc:MGI:1890594]
ENSMUSG000000 36882	Arhgap33	282.779 6	0.587 5	0.7674	0.2127	3.608 5	0.0003 08	0.0190 85	Rho GTPase activating protein 33 [Source:MGI Symbol;Acc:MGI:2673998]

ENSMUSG000000 53317	Sec61b	6299.58 97	2.208 3	-1.1429	0.3177	- 3.597 8	0.0003 21	0.0195 75	Sec61 beta subunit [Source:MGI Symbol;Acc:MGI:1913462]
ENSMUSG000000 27173	Depdc7	266.297 2	1.744 4	-0.8027	0.2236	- 3.590 8	0.0003 3	0.0199 91	DEP domain containing 7 [Source:MGI Symbol;Acc:MGI:2139258]
ENSMUSG000000 02332	Dhrs1	1317.80 19	1.543 5	-0.6262	0.1746	- 3.586 4	0.0003 35	0.0201 65	dehydrogenase/reductase (SDR family) member 1 [Source:MGI Symbol;Acc:MGI:1196314]
ENSMUSG000000 03355	Fkbp11	343.669 6	1.996 6	-0.9975	0.2782	- 3.585 5	0.0003 36	0.0201 65	FK506 binding protein 11 [Source:MGI Symbol;Acc:MGI:1913370]
ENSMUSG000000 04846	Plod3	3224.52 95	1.592 7	-0.6715	0.1879	- 3.573 1	0.0003 53	0.0204 42	procollagen-lysine, 2- oxoglutarate 5-dioxygenase 3 [Source:MGI Symbol;Acc:MGI:1347008]
ENSMUSG000000 15947	Fcgr1	899.502 6	2.835 5	-1.5036	0.4202	- 3.578 5	0.0003 46	0.0204 42	Fc receptor, IgG, high affinity I [Source:MGI Symbol;Acc:MGI:95498]
ENSMUSG000000 20474	Polm	890.982 6	0.507 1	0.9797	0.2741	3.574 6	0.0003 51	0.0204 42	polymerase (DNA directed), mu [Source:MGI Symbol;Acc:MGI:1860191]

ENSMUSG000000 22092	Ppp3cc	638.869 0	0.523 8	0.9328	0.2609	3.575 8	0.0003 49	0.0204 42	protein phosphatase 3, catalytic subunit, gamma isoform [Source:MGI Symbol;Acc:MGI:107162]
ENSMUSG000000 23830	Igf2r	1022.84 83	0.670 0	0.5778	0.1617	3.573 3	0.0003 53	0.0204 42	insulin-like growth factor 2 receptor [Source:MGI Symbol;Acc:MGI:96435]
ENSMUSG000000 60143	Gm10076	268.625 7	2.931 0	-1.5514	0.4333	- 3.580 1	0.0003 43	0.0204 42	predicted gene 10076 [Source:MGI Symbol;Acc:MGI:3704451]
ENSMUSG000000 69255	Dusp22	526.565 1	1.601 0	-0.6790	0.1902	- 3.570 3	0.0003 57	0.0205 42	dual specificity phosphatase 22 [Source:MGI Symbol;Acc:MGI:1915926]
ENSMUSG000000 24683	Mrpl16	1288.13 91	1.719 7	-0.7821	0.2194	- 3.564 6	0.0003 64	0.0205 43	mitochondrial ribosomal protein L16 [Source:MGI Symbol;Acc:MGI:2137219]
ENSMUSG000000 26223	Itm2c	3942.61 62	1.611 4	-0.6884	0.1930	- 3.565 9	0.0003 63	0.0205 43	integral membrane protein 2C [Source:MGI Symbol;Acc:MGI:1927594]

ENSMUSG000000 30695	Aldoa	19972.4 979	1.702 1	-0.7673	0.2151	- 3.567 4	0.0003 61	0.0205 43	aldolase A, fructose- bisphosphate [Source:MGI Symbol;Acc:MGI:87994]
ENSMUSG000000 36078	Sigmar1	1205.45 11	1.737 7	-0.7972	0.2234	- 3.568 8	0.0003 59	0.0205 43	sigma non-opioid intracellular receptor 1 [Source:MGI Symbol;Acc:MGI:1195268]
ENSMUSG000000 02014	Ssr4	5019.93 22	1.746 3	-0.8043	0.2263	- 3.553 4	0.0003 8	0.0212 08	signal sequence receptor, delta [Source:MGI Symbol;Acc:MGI:1099464]
ENSMUSG000000 78974	Sec61g	4217.52 23	1.850 0	-0.8875	0.2497	- 3.554 5	0.0003 79	0.0212 08	SEC61, gamma subunit [Source:MGI Symbol;Acc:MGI:1202066]
ENSMUSG000000 18339	Gpx3	157.523 6	1.756 7	-0.8129	0.2293	- 3.545 8	0.0003 91	0.0217 13	glutathione peroxidase 3 [Source:MGI Symbol;Acc:MGI:105102]
ENSMUSG000000 53687	Dpep2	234.463 0	2.490 4	-1.3164	0.3715	- 3.543 4	0.0003 95	0.0217 97	dipeptidase 2 [Source:MGI Symbol;Acc:MGI:2442042]
ENSMUSG000000 29616	Erp29	9491.18 17	1.878 1	-0.9093	0.2568	- 3.540 7	0.0003 99	0.0219 06	endoplasmic reticulum protein 29 [Source:MGI Symbol;Acc:MGI:1914647]

ENSMUSG000000 13033	Lphn1	250.629 1	0.621 1	0.6871	0.1942	3.538 1	0.0004 03	0.0220 02	adhesion G protein-coupled receptor L1 [Source:MGI Symbol;Acc:MGI:1929461]
ENSMUSG000000 30188	Magohb	653.125 5	1.983 8	-0.9883	0.2802	- 3.527 1	0.0004 2	0.0227 04	mago-nashi homolog B (Drosophila) [Source:MGI Symbol;Acc:MGI:1913691]
ENSMUSG000000 30681	Mvp	1603.74 87	1.586 2	-0.6656	0.1887	- 3.527 1	0.0004 2	0.0227 04	major vault protein [Source:MGI Symbol;Acc:MGI:1925638]
ENSMUSG000000 21040	1810035L17 Rik	580.827 7	2.142 5	-1.0993	0.3119	- 3.524 9	0.0004 24	0.0227 77	SRA stem-loop interacting RNA binding protein [Source:MGI Symbol;Acc:MGI:1916394]
ENSMUSG000000 22594	Lynx1	112.825 3	0.486 4	1.0399	0.2955	3.519 1	0.0004 33	0.0229 26	Ly6/neurotoxin 1 [Source:MGI Symbol;Acc:MGI:1345180]
ENSMUSG000000 31024	St5	300.799 8	0.584 7	0.7743	0.2200	3.520 1	0.0004 31	0.0229 26	suppression of tumorigenicity 5 [Source:MGI Symbol;Acc:MGI:108517]
ENSMUSG000000 57133	Chd6	610.092 2	0.594 2	0.7509	0.2132	3.521 5	0.0004 29	0.0229 26	chromodomain helicase DNA binding protein 6 [Source:MGI Symbol;Acc:MGI:1918639]

ENSMUSG000000 15937	H2afy	14838.2 144	1.467 6	-0.5534	0.1576	- 3.512 2	0.0004 44	0.0230 52	H2A histone family, member Y [Source:MGI Symbol;Acc:MGI:1349392]
ENSMUSG000000 24012	Mtch1	4187.84 55	1.501 6	-0.5865	0.1669	- 3.513 9	0.0004 42	0.0230 52	mitochondrial carrier homolog 1 (C. elegans) [Source:MGI Symbol;Acc:MGI:1929261]
ENSMUSG000000 24892	Pcx	290.666 5	0.631 3	0.6635	0.1892	3.507 1	0.0004 53	0.0230 52	pyruvate carboxylase [Source:MGI Symbol;Acc:MGI:97520]
ENSMUSG000000 25534	Gusb	3984.91 73	1.628 2	-0.7032	0.2005	- 3.507 5	0.0004 52	0.0230 52	glucuronidase, beta [Source:MGI Symbol;Acc:MGI:95872]
ENSMUSG000000 35351	Nup37	698.287 0	1.494 9	-0.5801	0.1652	- 3.510 9	0.0004 47	0.0230 52	nucleoporin 37 [Source:MGI Symbol;Acc:MGI:1919964]
ENSMUSG000000 40204	2810417H13 Rik	6761.32 65	1.496 2	-0.5813	0.1654	- 3.515 5	0.0004 39	0.0230 52	RIKEN cDNA 2810417H13 gene [Source:MGI Symbol;Acc:MGI:1915276]
ENSMUSG000000 44894	Uqcrq	3729.35 44	2.179 6	-1.1241	0.3201	- 3.511 5	0.0004 46	0.0230 52	ubiquinol-cytochrome c reductase, complex III subunit VII [Source:MGI Symbol;Acc:MGI:107807]

ENSMUSG000000 45665	Mfsd5	1510.35 55	1.573 9	-0.6543	0.1866	- 3.507 0	0.0004 53	0.0230 52	major facilitator superfamily domain containing 5 [Source:MGI Symbol;Acc:MGI:2145901]
ENSMUSG000000 22362	9130401M0 1Rik	731.889 4	1.562 2	-0.6435	0.1836	- 3.504 4	0.0004 58	0.0231 7	predicted gene 29394 [Source:MGI Symbol;Acc:MGI:5580100]
ENSMUSG000000 30751	Psmal1	5738.55 83	1.478 7	-0.5643	0.1612	- 3.501 4	0.0004 63	0.0233 19	proteasome (prosome, macropain) subunit, alpha type 1 [Source:MGI Symbol;Acc:MGI:1347005]
ENSMUSG000000 28420	Tmem38b	1593.94 12	1.461 6	-0.5476	0.1569	- 3.490 6	0.0004 82	0.0241 61	transmembrane protein 38B [Source:MGI Symbol;Acc:MGI:1098718]
ENSMUSG000000 28007	Snx7	157.199 9	1.928 5	-0.9475	0.2716	- 3.489 0	0.0004 85	0.0241 92	sorting nexin 7 [Source:MGI Symbol;Acc:MGI:1923811]
ENSMUSG000000 33307	Mif	4713.69 52	2.146 4	-1.1019	0.3161	- 3.486 5	0.0004 89	0.0243 03	macrophage migration inhibitory factor [Source:MGI Symbol;Acc:MGI:96982]
ENSMUSG000000 03814	Calr	27621.3 835	1.592 8	-0.6715	0.1927	- 3.485 1	0.0004 92	0.0243 11	calreticulin [Source:MGI Symbol;Acc:MGI:88252]

ENSMUSG000000 00355	Mcts1	1576.59 44	1.740 1	-0.7992	0.2307	- 3.464 3	0.0005 32	0.0260 63	malignant T cell amplified sequence 1 [Source:MGI Symbol;Acc:MGI:1916245]
ENSMUSG000000 76435	Acsf2	437.005 3	0.526 9	0.9245	0.2669	3.463 9	0.0005 32	0.0260 63	acyl-CoA synthetase family member 2 [Source:MGI Symbol;Acc:MGI:2388287]
ENSMUSG000000 18585	Atox1	3254.18 15	2.145 2	-1.1011	0.3181	- 3.461 0	0.0005 38	0.0262 28	ATX1 (antioxidant protein 1) homolog 1 (yeast) [Source:MGI Symbol;Acc:MGI:1333855]
ENSMUSG000000 28671	Gale	505.499 6	1.642 0	-0.7154	0.2069	- 3.458 3	0.0005 44	0.0262 42	galactose-4-epimerase, UDP [Source:MGI Symbol;Acc:MGI:1921496]
ENSMUSG000000 38042	Ptpdc1	144.774 8	0.595 6	0.7475	0.2161	3.458 8	0.0005 43	0.0262 42	protein tyrosine phosphatase domain containing 1 [Source:MGI Symbol;Acc:MGI:2145430]
ENSMUSG000000 20048	Hsp90b1	14460.4 817	1.529 1	-0.6127	0.1773	- 3.455 5	0.0005 49	0.0263 14	heat shock protein 90, beta (Grp94), member 1 [Source:MGI Symbol;Acc:MGI:98817]

ENSMUSG000000 21728	Emb	7870.40 38	1.869 5	-0.9026	0.2614	- 3.452 4	0.0005 56	0.0263 14	embigin [Source:MGI Symbol;Acc:MGI:95321]
ENSMUSG000000 29804	Herc3	508.262 2	0.533 6	0.9063	0.2625	3.452 3	0.0005 56	0.0263 14	hect domain and RLD 3 [Source:MGI Symbol;Acc:MGI:1921248]
ENSMUSG000000 35835	BC005764	1116.62 29	1.751 9	-0.8089	0.2344	- 3.451 4	0.0005 58	0.0263 14	lipid phosphate phosphatase- related protein type 3 [Source:MGI Symbol;Acc:MGI:2388640]
ENSMUSG000000 55184	Fam72a	235.704 7	1.778 5	-0.8307	0.2406	- 3.453 1	0.0005 54	0.0263 14	family with sequence similarity 72, member A [Source:MGI Symbol;Acc:MGI:1919669]
ENSMUSG000000 40212	Emp3	6510.94 51	1.667 1	-0.7373	0.2138	- 3.448 6	0.0005 64	0.0264 76	epithelial membrane protein 3 [Source:MGI Symbol;Acc:MGI:1098729]
ENSMUSG000000 40616	Tmem51	450.062 2	1.723 4	-0.7852	0.2280	- 3.443 7	0.0005 74	0.0268 31	transmembrane protein 51 [Source:MGI Symbol;Acc:MGI:2384874]
ENSMUSG000000 29553	Tfec	1148.60 26	1.848 0	-0.8860	0.2576	- 3.439 8	0.0005 82	0.0271 06	transcription factor EC [Source:MGI Symbol;Acc:MGI:1333760]

ENSMUSG000000 31634	Ufsp2	1093.00 53	1.589 7	-0.6687	0.1945	- 3.437 3	0.0005 87	0.0271 1	UFM1-specific peptidase 2 [Source:MGI Symbol;Acc:MGI:1913679]
ENSMUSG000000 68749	Psma5	3567.11 15	1.609 1	-0.6863	0.1996	- 3.438 0	0.0005 86	0.0271 1	proteasome (prosome, macropain) subunit, alpha type 5 [Source:MGI Symbol;Acc:MGI:1347009]
ENSMUSG000000 06589	Aprt	4484.57 73	2.025 2	-1.0181	0.2968	- 3.430 3	0.0006 03	0.0276 97	adenine phosphoribosyl transferase [Source:MGI Symbol;Acc:MGI:88061]
ENSMUSG000000 20818	Mfsd11	687.741 9	1.502 7	-0.5876	0.1714	- 3.427 5	0.0006 09	0.0278 69	major facilitator superfamily domain containing 11 [Source:MGI Symbol;Acc:MGI:1917150]
ENSMUSG000000 30930	Chst15	1671.02 66	0.608 5	0.7167	0.2094	3.423 2	0.0006 19	0.0280 14	carbohydrate (N- acetylgalactosamine 4-sulfate 6-O) sulfotransferase 15 [Source:MGI Symbol;Acc:MGI:1924840]
ENSMUSG000000 32053	Pou2af1	4348.51 16	0.581 6	0.7820	0.2285	3.422 5	0.0006 2	0.0280 14	POU domain, class 2, associating factor 1 [Source:MGI Symbol;Acc:MGI:105086]

ENSMUSG000000 32306	Mpi	499.979 0	1.515 6	-0.5999	0.1752	- 3.423 2	0.0006 19	0.0280 14	mannose phosphate isomerase [Source:MGI Symbol;Acc:MGI:97075]
ENSMUSG000000 87260	Hbxip	1804.77 54	1.536 2	-0.6193	0.1814	- 3.413 6	0.0006 41	0.0288 16	late endosomal/lysosomal adaptor, MAPK and MTOR activator 5 [Source:MGI Symbol;Acc:MGI:1915826]
ENSMUSG000000 04849	Ap1s1	3027.55 87	1.869 2	-0.9024	0.2648	- 3.408 2	0.0006 54	0.0291 42	adaptor protein complex AP- 1, sigma 1 [Source:MGI Symbol;Acc:MGI:1098244]
ENSMUSG000000 79197	Psme2	5487.76 94	1.751 0	-0.8082	0.2371	- 3.408 5	0.0006 53	0.0291 42	proteasome (prosome, macropain) activator subunit 2 (PA28 beta) [Source:MGI Symbol;Acc:MGI:1096365]
ENSMUSG000000 40732	Erg	517.308 0	0.681 1	0.5541	0.1628	3.403 1	0.0006 66	0.0295 67	avian erythroblastosis virus E-26 (v-ets) oncogene related [Source:MGI Symbol;Acc:MGI:95415]

ENSMUSG000000 01027	Scn4a	163.962 3	0.388 1	1.3657	0.4020	3.397 2	0.0006 81	0.0300 88	sodium channel, voltage-gated, type IV, alpha [Source:MGI Symbol;Acc:MGI:98250]
ENSMUSG000000 28572	Hook1	244.489 4	0.622 9	0.6830	0.2012	3.394 1	0.0006 89	0.0302 97	hook homolog 1 (Drosophila) [Source:MGI Symbol;Acc:MGI:1925213]
ENSMUSG000000 03812	Dnase2a	1630.59 88	1.783 0	-0.8343	0.2460	- 3.391 5	0.0006 95	0.0304 65	deoxyribonuclease II alpha [Source:MGI Symbol;Acc:MGI:1329019]
ENSMUSG000000 27506	Tpd52	6181.22 25	1.596 0	-0.6745	0.1991	- 3.388 3	0.0007 03	0.0306 05	tumor protein D52 [Source:MGI Symbol;Acc:MGI:107749]
ENSMUSG000000 34424	Gcsh	677.173 8	1.574 5	-0.6549	0.1933	- 3.387 9	0.0007 04	0.0306 05	glycine cleavage system protein H (aminomethyl carrier) [Source:MGI Symbol;Acc:MGI:1915383]
ENSMUSG000000 42351	Grap2	301.063 1	0.401 3	1.3171	0.3892	3.384 0	0.0007 14	0.0309 11	GRB2-related adaptor protein 2 [Source:MGI Symbol;Acc:MGI:1333842]

ENSMUSG000000 24338	Psmb8	4706.26 42	1.819 6	-0.8636	0.2557	- 3.377 8	0.0007 31	0.0314 26	proteasome (prosome, macropain) subunit, beta type 8 (large multifunctional peptidase 7) [Source:MGI Symbol;Acc:MGI:1346527]
ENSMUSG000000 32220	Myo1e	591.608 3	0.441 8	1.1784	0.3489	3.377 1	0.0007 33	0.0314 26	myosin IE [Source:MGI Symbol;Acc:MGI:106621]
ENSMUSG000000 56501	Cebpb	4501.85 78	2.455 9	-1.2963	0.3840	- 3.376 1	0.0007 35	0.0314 26	CCAAT/enhancer binding protein (C/EBP), beta [Source:MGI Symbol;Acc:MGI:88373]
ENSMUSG000000 29530	Ccr9	259.696 6	0.464 3	1.1069	0.3284	3.370 4	0.0007 51	0.0317 76	chemokine (C-C motif) receptor 9 [Source:MGI Symbol;Acc:MGI:1341902]
ENSMUSG000000 33918	Parl	2049.30 29	1.630 7	-0.7055	0.2093	- 3.371 2	0.0007 48	0.0317 76	presenilin associated, rhomboid-like [Source:MGI Symbol;Acc:MGI:1277152]
ENSMUSG000000 52821	Cysltr1	277.036 8	2.587 0	-1.3713	0.4069	- 3.369 7	0.0007 53	0.0317 76	cysteinyl leukotriene receptor 1 [Source:MGI Symbol;Acc:MGI:1926218]

ENSMUSG000000 19850	Tnfaip3	1380.80 71	0.519 8	0.9439	0.2803	3.367 9	0.0007 57	0.0318 01	tumor necrosis factor, alpha- induced protein 3 [Source:MGI Symbol;Acc:MGI:1196377]
ENSMUSG000000 24397	Aif1	918.733 8	1.778 2	-0.8305	0.2466	- 3.367 2	0.0007 59	0.0318 01	allograft inflammatory factor 1 [Source:MGI Symbol;Acc:MGI:1343098]
ENSMUSG000000 20267	Hint1	6938.41 91	2.014 2	-1.0102	0.3004	- 3.363 3	0.0007 7	0.0318 68	histidine triad nucleotide binding protein 1 [Source:MGI Symbol;Acc:MGI:1321133]
ENSMUSG000000 22994	Adcy6	643.870 2	0.653 3	0.6142	0.1826	3.363 8	0.0007 69	0.0318 68	adenylate cyclase 6 [Source:MGI Symbol;Acc:MGI:87917]
ENSMUSG000000 31633	Slc25a4	3177.16 72	1.589 2	-0.6683	0.1987	- 3.364 1	0.0007 68	0.0318 68	solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 4 [Source:MGI Symbol;Acc:MGI:1353495]
ENSMUSG000000 32038	St3gal4	2217.55 73	1.358 4	-0.4419	0.1315	- 3.361 2	0.0007 76	0.0318 68	ST3 beta-galactoside alpha- 2,3-sialyltransferase 4 [Source:MGI Symbol;Acc:MGI:1316743]

ENSMUSG000000 33170	Card10	523.881 7	0.631 4	0.6634	0.1974	3.361 2	0.0007 76	0.0318 68	caspase recruitment domain family, member 10 [Source:MGI Symbol;Acc:MGI:2146012]
ENSMUSG000000 25044	Msr1	1254.89 56	2.269 0	-1.1820	0.3519	- 3.359 2	0.0007 82	0.0319 69	macrophage scavenger receptor 1 [Source:MGI Symbol;Acc:MGI:98257]
ENSMUSG000000 03585	Sec14l2	593.848 7	0.593 5	0.7528	0.2252	3.342 8	0.0008 29	0.0337 12	SEC14-like 2 (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1915065]
ENSMUSG000000 31605	Klhl2	882.919 8	1.425 7	-0.5117	0.1531	- 3.342 3	0.0008 31	0.0337 12	kelch-like 2, Mayven [Source:MGI Symbol;Acc:MGI:1924363]
ENSMUSG000000 38412	Higd1a	1302.19 43	1.948 5	-0.9623	0.2882	- 3.339 4	0.0008 4	0.0339 37	HIG1 domain family, member 1A [Source:MGI Symbol;Acc:MGI:1930666]
ENSMUSG000000 50856	Atp5k	4252.65 81	2.163 9	-1.1137	0.3336	- 3.337 9	0.0008 44	0.0339 89	ATP synthase, H ⁺ transporting, mitochondrial F1F0 complex, subunit E [Source:MGI Symbol;Acc:MGI:106636]

ENSMUSG000000 14226	Cacybp	4192.79 88	1.430 6	-0.5166	0.1548	- 3.336 8	0.0008 48	0.0339 97	calcyclin binding protein [Source:MGI Symbol;Acc:MGI:1270839]
ENSMUSG000000 27163	Commd9	803.857 9	1.719 0	-0.7815	0.2346	- 3.331 6	0.0008 64	0.0343 74	COMM domain containing 9 [Source:MGI Symbol;Acc:MGI:1923751]
ENSMUSG000000 47721	Bola2	2510.91 71	2.241 3	-1.1643	0.3494	- 3.332 0	0.0008 62	0.0343 74	bolA-like 2 (E. coli) [Source:MGI Symbol;Acc:MGI:1913412]
ENSMUSG000000 52698	Tln2	129.825 8	2.954 0	-1.5627	0.4696	- 3.327 9	0.0008 75	0.0347 04	talin 2 [Source:MGI Symbol;Acc:MGI:1917799]
ENSMUSG000000 34573	Ptpn13	103.961 1	0.458 6	1.1248	0.3384	3.324 1	0.0008 87	0.0350 37	protein tyrosine phosphatase, non-receptor type 13 [Source:MGI Symbol;Acc:MGI:103293]
ENSMUSG000000 37972	Snn	2283.27 75	0.418 4	1.2571	0.3785	3.321 2	0.0008 96	0.0352 72	stannin [Source:MGI Symbol;Acc:MGI:1276549]
ENSMUSG000000 02731	Prkra	772.420 6	1.594 2	-0.6728	0.2028	- 3.318 0	0.0009 07	0.0355 53	protein kinase, interferon inducible double stranded RNA dependent activator [Source:MGI Symbol;Acc:MGI:1344375]

ENSMUSG000000 31722	Hp	35401.5 797	1.815 7	-0.8606	0.2600	- 3.310 4	0.0009 32	0.0362 57	haptoglobin [Source:MGI Symbol;Acc:MGI:96211]
ENSMUSG000000 47222	Ear11	401.016 8	1.677 2	-0.7461	0.2254	- 3.310 5	0.0009 31	0.0362 57	ribonuclease, RNase A family, 2A (liver, eosinophil-derived neurotoxin) [Source:MGI Symbol;Acc:MGI:1890465]
ENSMUSG000000 36138	Acaa1a	1963.17 02	1.569 0	-0.6498	0.1965	- 3.307 5	0.0009 41	0.0363 58	acetyl-Coenzyme A acyltransferase 1A [Source:MGI Symbol;Acc:MGI:2148491]
ENSMUSG000000 38811	Gngt2	1121.06 52	1.816 4	-0.8611	0.2603	- 3.308 4	0.0009 38	0.0363 58	guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 2 [Source:MGI Symbol;Acc:MGI:893584]
ENSMUSG000000 30872	Gga2	2187.46 96	0.613 0	0.7061	0.2136	3.304 8	0.0009 5	0.0365 75	golgi associated, gamma adaptin ear containing, ARF binding protein 2 [Source:MGI Symbol;Acc:MGI:1921355]

ENSMUSG000000 79111	Kdelr2	2659.04 19	1.654 8	-0.7266	0.2200	- 3.303 5	0.0009 55	0.0366 1	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 2 [Source:MGI Symbol;Acc:MGI:1914163]
ENSMUSG000000 26849	Tor1a	2339.93 50	1.549 1	-0.6314	0.1912	- 3.302 1	0.0009 6	0.0366 59	torsin family 1, member A (torsin A) [Source:MGI Symbol;Acc:MGI:1353568]
ENSMUSG000000 29390	Tmed2	11227.6 793	1.369 0	-0.4531	0.1374	- 3.296 8	0.0009 78	0.0369 7	transmembrane emp24 domain trafficking protein 2 [Source:MGI Symbol;Acc:MGI:1929269]
ENSMUSG000000 62169	Cnih4	1240.54 64	1.631 8	-0.7065	0.2143	- 3.296 4	0.0009 79	0.0369 7	cornichon homolog 4 (Drosophila) [Source:MGI Symbol;Acc:MGI:1925828]
ENSMUSG000000 68735	Trp53i11	1070.41 80	0.538 8	0.8922	0.2707	3.295 7	0.0009 82	0.0369 7	transformation related protein 53 inducible protein 11 [Source:MGI Symbol;Acc:MGI:2670995]
ENSMUSG000000 73678	Pgap1	108.173 1	0.515 3	0.9566	0.2901	3.297 5	0.0009 75	0.0369 7	post-GPI attachment to proteins 1 [Source:MGI Symbol;Acc:MGI:2443342]

ENSMUSG000000 04552	Ctse	6825.43 66	0.687 4	0.5409	0.1655	3.267 8	0.0010 84	0.0376 89	cathepsin E [Source:MGI Symbol;Acc:MGI:107361]
ENSMUSG000000 05371	Fbxo11	1525.52 55	0.684 3	0.5473	0.1673	3.270 6	0.0010 73	0.0376 89	F-box protein 11 [Source:MGI Symbol;Acc:MGI:2147134]
ENSMUSG000000 15597	Zfp318	568.194 7	0.513 6	0.9614	0.2937	3.273 5	0.0010 62	0.0376 89	zinc finger protein 318 [Source:MGI Symbol;Acc:MGI:1889348]
ENSMUSG000000 15750	Aph1a	3709.83 56	1.366 7	-0.4507	0.1371	- 3.288 7	0.0010 06	0.0376 89	anterior pharynx defective 1a homolog (C. elegans) [Source:MGI Symbol;Acc:MGI:2385110]
ENSMUSG000000 19188	H13	5961.02 91	1.646 6	-0.7195	0.2200	- 3.270 1	0.0010 75	0.0376 89	histocompatibility 13 [Source:MGI Symbol;Acc:MGI:95886]
ENSMUSG000000 19876	Pkib	479.677 2	1.459 1	-0.5451	0.1662	- 3.279 1	0.0010 41	0.0376 89	protein kinase inhibitor beta, cAMP dependent, testis specific [Source:MGI Symbol;Acc:MGI:101937]
ENSMUSG000000 20387	Phf15	575.644 9	0.581 5	0.7820	0.2381	3.284 1	0.0010 23	0.0376 89	jade family PHD finger 2 [Source:MGI Symbol;Acc:MGI:1924151]

ENSMUSG000000 21061	Spnb1	2616.59 80	0.628 5	0.6700	0.2050	3.268 9	0.0010 8	0.0376 89	spectrin beta, erythrocytic [Source:MGI Symbol;Acc:MGI:98387]
ENSMUSG000000 27533	Fabp5	877.317 4	1.885 8	-0.9152	0.2797	- 3.271 9	0.0010 68	0.0376 89	fatty acid binding protein 5, epidermal [Source:MGI Symbol;Acc:MGI:101790]
ENSMUSG000000 29649	Pomp	4660.82 16	1.772 7	-0.8259	0.2512	- 3.288 0	0.0010 09	0.0376 89	proteasome maturation protein [Source:MGI Symbol;Acc:MGI:1913787]
ENSMUSG000000 31897	Psmb10	4240.83 10	1.973 8	-0.9810	0.3002	- 3.267 7	0.0010 84	0.0376 89	proteasome (prosome, macropain) subunit, beta type 10 [Source:MGI Symbol;Acc:MGI:1096380]
ENSMUSG000000 34612	Chst11	647.608 3	0.702 6	0.5092	0.1558	3.268 6	0.0010 81	0.0376 89	carbohydrate sulfotransferase 11 [Source:MGI Symbol;Acc:MGI:1927166]
ENSMUSG000000 37999	Arap2	489.661 4	0.484 7	1.0449	0.3186	3.280 1	0.0010 38	0.0376 89	ArfGAP with RhoGAP domain, ankyrin repeat and PH domain 2 [Source:MGI Symbol;Acc:MGI:2684416]

ENSMUSG000000 38725	Pkhd1l1	205.755 9	0.643 9	0.6351	0.1935	3.283 2	0.0010 26	0.0376 89	polycystic kidney and hepatic disease 1-like 1 [Source:MGI Symbol;Acc:MGI:2183153]
ENSMUSG000000 42851	Zc3h6	133.809 1	0.483 2	1.0493	0.3196	3.282 7	0.0010 28	0.0376 89	zinc finger CCCH type containing 6 [Source:MGI Symbol;Acc:MGI:1926001]
ENSMUSG000000 43091	Tuba1c	4437.80 76	1.776 4	-0.8289	0.2531	- 3.275 6	0.0010 54	0.0376 89	tubulin, alpha 1C [Source:MGI Symbol;Acc:MGI:1095409]
ENSMUSG000000 51355	Commd1	2014.21 25	1.815 6	-0.8604	0.2626	- 3.276 0	0.0010 53	0.0376 89	COMM domain containing 1 [Source:MGI Symbol;Acc:MGI:109474]
ENSMUSG000000 53113	Socs3	902.639 0	1.929 3	-0.9481	0.2893	- 3.276 7	0.0010 5	0.0376 89	suppressor of cytokine signaling 3 [Source:MGI Symbol;Acc:MGI:1201791]
ENSMUSG000000 56629	Fkbp2	2093.64 92	2.068 3	-1.0484	0.3205	- 3.271 6	0.0010 7	0.0376 89	FK506 binding protein 2 [Source:MGI Symbol;Acc:MGI:95542]
ENSMUSG000000 57244	Gm6139	541.375 6	2.205 6	-1.1412	0.3490	- 3.269 6	0.0010 77	0.0376 89	predicted gene 6139 [Source:MGI Symbol;Acc:MGI:3643279]

ENSMUSG000000 59796	Eif4a1	22883.0 836	1.457 8	-0.5438	0.1659	- 3.277 0	0.0010 49	0.0376 89	eukaryotic translation initiation factor 4A1 [Source:MGI Symbol;Acc:MGI:95303]
ENSMUSG000000 75289	Carns1	254.690 7	0.557 3	0.8434	0.2576	3.273 5	0.0010 62	0.0376 89	carnosine synthase 1 [Source:MGI Symbol;Acc:MGI:2147595]
ENSMUSG000000 78941	Taf9	716.921 3	1.787 8	-0.8382	0.2560	- 3.274 2	0.0010 6	0.0376 89	adenylate kinase 6 [Source:MGI Symbol;Acc:MGI:5510732]
ENSMUSG000000 23055	Calcoco1	854.115 2	0.618 5	0.6931	0.2122	3.266 5	0.0010 89	0.0377 3	calcium binding and coiled coil domain 1 [Source:MGI Symbol;Acc:MGI:1914738]
ENSMUSG000000 32221	Mns1	1330.56 22	0.694 7	0.5256	0.1611	3.262 7	0.0011 04	0.0381 15	meiosis-specific nuclear structural protein 1 [Source:MGI Symbol;Acc:MGI:107933]
ENSMUSG000000 57130	Txnl4a	643.235 5	1.923 4	-0.9437	0.2894	- 3.261 2	0.0011 1	0.0381 92	thioredoxin-like 4A [Source:MGI Symbol;Acc:MGI:1351613]
ENSMUSG000000 17781	Pitpna	8601.89 45	1.397 5	-0.4828	0.1482	- 3.259 0	0.0011 18	0.0383	phosphatidylinositol transfer protein, alpha [Source:MGI Symbol;Acc:MGI:99887]

ENSMUSG000000 45538	Ddx28	655.669 7	1.637 4	-0.7114	0.2183	- 3.258 5	0.0011 2	0.0383	DEAD (Asp-Glu-Ala-Asp) box polypeptide 28 [Source:MGI Symbol;Acc:MGI:1919236]
ENSMUSG000000 23216	Epb4.2	330.700 8	0.545 7	0.8738	0.2683	3.256 5	0.0011 28	0.0384 4	erythrocyte protein band 4.2 [Source:MGI Symbol;Acc:MGI:95402]
ENSMUSG000000 05125	Ndrp1	1305.38 27	1.526 5	-0.6102	0.1877	- 3.251 8	0.0011 47	0.0389 6	N-myc downstream regulated gene 1 [Source:MGI Symbol;Acc:MGI:1341799]
ENSMUSG000000 32301	Psma4	4240.83 98	1.540 1	-0.6230	0.1918	- 3.248 7	0.0011 59	0.0391 29	proteasome (prosome, macropain) subunit, alpha type 4 [Source:MGI Symbol;Acc:MGI:1347060]
ENSMUSG000000 47842	Diras2	127.084 4	0.467 2	1.0979	0.3379	3.249 5	0.0011 56	0.0391 29	DIRAS family, GTP-binding RAS-like 2 [Source:MGI Symbol;Acc:MGI:1915453]
ENSMUSG000000 29142	Mrpl33	5717.78 33	2.122 2	-1.0856	0.3343	- 3.247 5	0.0011 64	0.0391 63	NA
ENSMUSG000000 11752	Pgam1	8734.83 55	1.705 5	-0.7702	0.2374	- 3.244 1	0.0011 78	0.0392 52	phosphoglycerate mutase 1 [Source:MGI Symbol;Acc:MGI:97552]

ENSMUSG00000038967	Pdk2	274.2446	0.6129	0.7063	0.2177	3.2445	0.001177	0.039252	pyruvate dehydrogenase kinase, isoenzyme 2 [Source:MGI Symbol;Acc:MGI:1343087]
ENSMUSG00000057605	Gm6807	201.5407	2.6253	-1.3925	0.4291	-3.2452	0.001174	0.039252	predicted gene 6807 [Source:MGI Symbol;Acc:MGI:3649145]
ENSMUSG00000062963	Ufc1	2451.1403	1.7452	-0.8034	0.2479	-3.2411	0.001191	0.039541	ubiquitin-fold modifier conjugating enzyme 1 [Source:MGI Symbol;Acc:MGI:1913405]
ENSMUSG00000009687	Fxyd5	7933.1317	1.5645	-0.6457	0.1995	-3.2364	0.001211	0.040083	FXD domain-containing ion transport regulator 5 [Source:MGI Symbol;Acc:MGI:1201785]
ENSMUSG00000009863	Sdhd	4370.4343	1.5537	-0.6357	0.1966	-3.2337	0.001222	0.040263	succinate dehydrogenase complex, subunit B, iron sulfur (Ip) [Source:MGI Symbol;Acc:MGI:1914930]
ENSMUSG00000046959	Slc26a1	415.7931	0.5066	0.9810	0.3034	3.2333	0.001224	0.040263	solute carrier family 26 (sulfate transporter), member 1 [Source:MGI Symbol;Acc:MGI:2385894]

ENSMUSG000000 26672	Optn	726.172 9	0.707 3	0.4997	0.1548	3.228 3	0.0012 45	0.0408 34	optineurin [Source:MGI Symbol;Acc:MGI:1918898]
ENSMUSG000000 67653	Ankrd23	101.836 1	0.530 2	0.9153	0.2836	3.226 8	0.0012 52	0.0409 2	ankyrin repeat domain 23 [Source:MGI Symbol;Acc:MGI:1925571]
ENSMUSG000000 21214	Akr1c18	120.064 0	2.195 2	-1.1343	0.3518	- 3.224 2	0.0012 63	0.0411 74	aldo-keto reductase family 1, member C18 [Source:MGI Symbol;Acc:MGI:2145420]
ENSMUSG000000 34751	Mast4	184.741 6	0.516 4	0.9533	0.2959	3.222 2	0.0012 72	0.0413 31	microtubule associated serine/threonine kinase family member 4 [Source:MGI Symbol;Acc:MGI:1918885]
ENSMUSG000000 38510	Rpf2	1292.81 60	1.526 2	-0.6099	0.1897	- 3.215 9	0.0013	0.0421 11	ribosome production factor 2 homolog (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1914489]
ENSMUSG000000 26547	Tagln2	13093.8 658	1.568 7	-0.6495	0.2021	- 3.213 2	0.0013 13	0.0422 49	transgelin 2 [Source:MGI Symbol;Acc:MGI:1312985]

ENSMUSG000000 55943	2900064A13 Rik	2051.31 76	1.468 2	-0.5541	0.1724	- 3.214 0	0.0013 09	0.0422 49	ER membrane protein complex subunit 7 [Source:MGI Symbol;Acc:MGI:1920274]
ENSMUSG000000 18442	Derl2	1493.01 33	1.506 5	-0.5912	0.1843	- 3.207 6	0.0013 38	0.0427 75	Der1-like domain family, member 2 [Source:MGI Symbol;Acc:MGI:2151483]
ENSMUSG000000 30268	Bcat1	162.584 9	1.637 0	-0.7111	0.2217	- 3.207 6	0.0013 38	0.0427 75	branched chain aminotransferase 1, cytosolic [Source:MGI Symbol;Acc:MGI:104861]
ENSMUSG000000 40532	Abhd11	1144.80 03	1.538 4	-0.6214	0.1938	- 3.206 7	0.0013 43	0.0427 75	abhydrolase domain containing 11 [Source:MGI Symbol;Acc:MGI:1916008]
ENSMUSG000000 41035	Dpcd	723.466 6	2.035 5	-1.0254	0.3198	- 3.206 1	0.0013 45	0.0427 75	deleted in primary ciliary dyskinesia [Source:MGI Symbol;Acc:MGI:1924407]
ENSMUSG000000 26489	Adck3	417.656 6	0.599 4	0.7383	0.2306	3.202 2	0.0013 64	0.0430 97	aarF domain containing kinase 3 [Source:MGI Symbol;Acc:MGI:1914676]
ENSMUSG000000 32733	Snx33	230.015 8	0.614 7	0.7020	0.2192	3.202 6	0.0013 62	0.0430 97	sorting nexin 33 [Source:MGI Symbol;Acc:MGI:2443239]

ENSMUSG000000 06360	Crip1	8862.16 61	2.157 1	-1.1091	0.3469	- 3.197 6	0.0013 86	0.0434 07	cysteine-rich protein 1 (intestinal) [Source:MGI Symbol;Acc:MGI:88501]
ENSMUSG000000 25466	1810014F10 Rik	176.564 4	2.068 2	-1.0484	0.3277	- 3.198 9	0.0013 8	0.0434 07	fucose mutarotase [Source:MGI Symbol;Acc:MGI:1916314]
ENSMUSG000000 28478	Clta	8762.12 26	1.471 8	-0.5575	0.1744	- 3.197 6	0.0013 86	0.0434 07	clathrin, light polypeptide (Lca) [Source:MGI Symbol;Acc:MGI:894297]
ENSMUSG000000 40276	Pacsin1	183.601 5	0.534 3	0.9042	0.2829	3.196 5	0.0013 91	0.0434 35	protein kinase C and casein kinase substrate in neurons 1 [Source:MGI Symbol;Acc:MGI:1345181]
ENSMUSG000000 21520	Uqcrb	2722.69 05	1.956 5	-0.9682	0.3035	- 3.190 7	0.0014 19	0.0441 87	ubiquinol-cytochrome c reductase binding protein [Source:MGI Symbol;Acc:MGI:1914780]
ENSMUSG000000 27776	Il12a	337.480 7	0.597 4	0.7433	0.2331	3.188 9	0.0014 28	0.0443 36	interleukin 12a [Source:MGI Symbol;Acc:MGI:96539]
ENSMUSG000000 16024	Lbp	1666.53 07	1.695 9	-0.7621	0.2391	- 3.187 6	0.0014 35	0.0443 49	lipopolysaccharide binding protein [Source:MGI Symbol;Acc:MGI:1098776]

ENSMUSG000000 31266	Gla	427.428 8	1.830 1	-0.8719	0.2736	- 3.187 0	0.0014 37	0.0443 49	galactosidase, alpha [Source:MGI Symbol;Acc:MGI:1347344]
ENSMUSG000000 06301	Tmbim1	556.676 2	1.509 6	-0.5941	0.1866	- 3.184 2	0.0014 52	0.0443 96	transmembrane BAX inhibitor motif containing 1 [Source:MGI Symbol;Acc:MGI:1916910]
ENSMUSG000000 30760	Acer3	2051.20 56	1.673 6	-0.7429	0.2333	- 3.184 9	0.0014 48	0.0443 96	alkaline ceramidase 3 [Source:MGI Symbol;Acc:MGI:1913440]
ENSMUSG000000 90166	Ear10	249.420 2	2.653 6	-1.4079	0.4422	- 3.184 2	0.0014 52	0.0443 96	eosinophil-associated, ribonuclease A family, member 10 [Source:MGI Symbol;Acc:MGI:1890464]
ENSMUSG000000 28998	Tomm7	3846.41 29	2.029 1	-1.0208	0.3209	- 3.181 5	0.0014 65	0.0446 84	translocase of outer mitochondrial membrane 7 homolog (yeast) [Source:MGI Symbol;Acc:MGI:1913419]
ENSMUSG000000 06517	Mvd	633.138 1	1.557 2	-0.6389	0.2011	- 3.176 3	0.0014 92	0.0450 22	mevalonate (diphospho) decarboxylase [Source:MGI Symbol;Acc:MGI:2179327]

ENSMUSG000000 37601	Nme1	1985.67 52	2.334 4	-1.2231	0.3849	- 3.177 3	0.0014 87	0.0450 22	NME/NM23 nucleoside diphosphate kinase 1 [Source:MGI Symbol;Acc:MGI:97355]
ENSMUSG000000 58715	Fcer1g	7715.73 57	1.605 1	-0.6826	0.2149	- 3.175 9	0.0014 94	0.0450 22	Fc receptor, IgE, high affinity I, gamma polypeptide [Source:MGI Symbol;Acc:MGI:95496]
ENSMUSG000000 60992	Copz1	6388.01 89	1.570 1	-0.6508	0.2048	- 3.177 6	0.0014 85	0.0450 22	coatomer protein complex, subunit zeta 1 [Source:MGI Symbol;Acc:MGI:1929063]
ENSMUSG000000 54676	1600014C10 Rik	3107.17 54	1.529 8	-0.6133	0.1932	- 3.174 0	0.0015 04	0.0451 96	RIKEN cDNA 1600014C10 gene [Source:MGI Symbol;Acc:MGI:1919494]
ENSMUSG000000 71072	Ptges3	7646.34 48	1.602 3	-0.6802	0.2144	- 3.173 0	0.0015 08	0.0452 07	prostaglandin E synthase 3 (cytosolic) [Source:MGI Symbol;Acc:MGI:1929282]
ENSMUSG000000 32553	Srprb	954.656 5	1.609 9	-0.6869	0.2167	- 3.170 2	0.0015 23	0.0453 84	signal recognition particle receptor, B subunit [Source:MGI Symbol;Acc:MGI:102964]

ENSMUSG000000 59040	Gm5506	3059.15 72	1.519 1	-0.6032	0.1902	- 3.171 0	0.0015 19	0.0453 84	enolase 1B, retrotransposed [Source:MGI Symbol;Acc:MGI:3648653]
ENSMUSG000000 06567	Atp7b	694.382 6	0.634 5	0.6563	0.2072	3.168 1	0.0015 34	0.0455 87	ATPase, Cu++ transporting, beta polypeptide [Source:MGI Symbol;Acc:MGI:103297]
ENSMUSG000000 18770	Atp5g3	10374.4 972	1.867 4	-0.9011	0.2847	- 3.165 0	0.0015 51	0.0457 04	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit C3 (subunit 9) [Source:MGI Symbol;Acc:MGI:2442035]
ENSMUSG000000 20340	Cyfp2	5923.83 85	0.607 0	0.7203	0.2276	3.165 1	0.0015 5	0.0457 04	cytoplasmic FMR1 interacting protein 2 [Source:MGI Symbol;Acc:MGI:1924134]
ENSMUSG000000 20490	Butr1	543.069 9	0.671 0	0.5755	0.1818	3.164 9	0.0015 51	0.0457 04	butyrophilin-like 10 [Source:MGI Symbol;Acc:MGI:2182073]
ENSMUSG000000 35649	Zcchc7	1153.42 43	0.719 9	0.4741	0.1499	3.163 8	0.0015 57	0.0457 42	zinc finger, CCHC domain containing 7 [Source:MGI Symbol;Acc:MGI:2442912]

ENSMUSG000000 28496	Mllt3	784.009 2	0.695 2	0.5246	0.1659	3.162 2	0.0015 66	0.0458 73	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated to, 3 [Source:MGI Symbol;Acc:MGI:1917372]
ENSMUSG000000 26532	Spna1	1064.61 17	0.575 5	0.7971	0.2523	3.159 6	0.0015 8	0.0461 51	spectrin alpha, erythrocytic 1 [Source:MGI Symbol;Acc:MGI:98385]
ENSMUSG000000 39686	Zer1	1010.05 28	0.645 8	0.6309	0.2001	3.153 4	0.0016 14	0.0470 06	zyg-11 related, cell cycle regulator [Source:MGI Symbol;Acc:MGI:2442511]
ENSMUSG000000 21290	2010107E04 Rik	3773.41 03	2.015 9	-1.0114	0.3209	- 3.151 9	0.0016 22	0.0470 77	RIKEN cDNA 2010107E04 gene [Source:MGI Symbol;Acc:MGI:1917507]
ENSMUSG000000 78193	Gm2000	635.423 3	2.483 2	-1.3122	0.4164	- 3.151 4	0.0016 25	0.0470 77	predicted gene 2000 [Source:MGI Symbol;Acc:MGI:3780170]
ENSMUSG000000 28837	Psmb2	3494.79 21	1.562 1	-0.6435	0.2043	- 3.149 7	0.0016 34	0.0472 1	proteasome (prosome, macropain) subunit, beta type 2 [Source:MGI Symbol;Acc:MGI:1347045]

ENSMUSG000000 19782	Rwdd1	1836.96 29	1.590 8	-0.6698	0.2130	- 3.145 0	0.0016 61	0.0475 9	RWD domain containing 1 [Source:MGI Symbol;Acc:MGI:1913771]
ENSMUSG000000 38970	Lmtk2	1198.87 33	0.667 8	0.5826	0.1852	3.145 8	0.0016 56	0.0475 9	lemur tyrosine kinase 2 [Source:MGI Symbol;Acc:MGI:3036247]
ENSMUSG000000 40447	Spns2	440.643 3	0.588 2	0.7656	0.2434	3.145 6	0.0016 58	0.0475 9	spinster homolog 2 [Source:MGI Symbol;Acc:MGI:2384936]
ENSMUSG000000 30104	Edem1	6564.94 99	1.458 6	-0.5446	0.1732	- 3.144 0	0.0016 66	0.0476 13	ER degradation enhancer, mannosidase alpha-like 1 [Source:MGI Symbol;Acc:MGI:2180139]
ENSMUSG000000 24163	Mapk8ip3	1201.42 42	0.709 3	0.4955	0.1577	3.141 5	0.0016 81	0.0478 98	mitogen-activated protein kinase 8 interacting protein 3 [Source:MGI Symbol;Acc:MGI:1353598]
ENSMUSG000000 32330	Cox7a2	4313.01 54	1.910 8	-0.9342	0.2978	- 3.136 7	0.0017 09	0.0484 27	cytochrome c oxidase subunit VIIa 2 [Source:MGI Symbol;Acc:MGI:1316715]

ENSMUSG000000 40964	Arhgef10l	1139.68 85	1.884 5	-0.9142	0.2914	- 3.137 4	0.0017 05	0.0484 27	Rho guanine nucleotide exchange factor (GEF) 10-like [Source:MGI Symbol;Acc:MGI:1920004]
ENSMUSG000000 32123	Dpagt1	1093.06 33	1.486 5	-0.5719	0.1827	- 3.130 9	0.0017 43	0.0492 51	dolichyl-phosphate (UDP-N- acetylglucosamine) acetylglucosaminophosphotr ansferase 1 (GlcNAc-1-P transferase) [Source:MGI Symbol;Acc:MGI:1196396]
ENSMUSG000000 13160	Atp6v0d1	4264.15 55	1.552 6	-0.6347	0.2030	- 3.127 0	0.0017 66	0.0495 31	ATPase, H ⁺ transporting, lysosomal V0 subunit D1 [Source:MGI Symbol;Acc:MGI:1201778]
ENSMUSG000000 29066	Mrpl20	2457.94 74	1.793 5	-0.8428	0.2695	- 3.126 9	0.0017 67	0.0495 31	mitochondrial ribosomal protein L20 [Source:MGI Symbol;Acc:MGI:2137221]
ENSMUSG000000 50379	40791	2014.04 74	0.606 1	0.7223	0.2309	3.128 0	0.0017 6	0.0495 31	septin 6 [Source:MGI Symbol;Acc:MGI:1888939]

ENSMUSG000000 24121	Atp6v0c	10107.6 062	1.719 7	-0.7821	0.2502	- 3.125 5	0.0017 75	0.0496 35	ATPase, H ⁺ transporting, lysosomal V0 subunit C [Source:MGI Symbol;Acc:MGI:88116]
ENSMUSG000000 26750	Psmb7	5137.26 42	1.661 9	-0.7329	0.2346	- 3.123 6	0.0017 87	0.0498 18	proteasome (prosome, macropain) subunit, beta type 7 [Source:MGI Symbol;Acc:MGI:107637]
ENSMUSG000000 60591	Ifitm2	15103.0 691	1.451 7	-0.5378	0.1723	- 3.120 7	0.0018 04	0.0501 83	interferon induced transmembrane protein 2 [Source:MGI Symbol;Acc:MGI:1933382]
ENSMUSG000000 26433	Rab7l1	929.730 5	1.563 4	-0.6447	0.2067	- 3.119 7	0.0018 11	0.0502 2	RAB29, member RAS oncogene family [Source:MGI Symbol;Acc:MGI:2385107]
ENSMUSG000000 78572	1810043H04 Rik	621.565 3	1.993 7	-0.9955	0.3192	- 3.118 3	0.0018 19	0.0503 21	RIKEN cDNA 1810043H04 gene [Source:MGI Symbol;Acc:MGI:1913676]
ENSMUSG000000 62127	Cttnbp2nl	127.434 2	2.642 9	-1.4021	0.4505	- 3.112 4	0.0018 56	0.0512 07	CTTNBP2 N-terminal like [Source:MGI Symbol;Acc:MGI:1933137]

ENSMUSG000000 00563	Atp5f1	10310.5 744	1.564 2	-0.6454	0.2076	- 3.109 2	0.0018 76	0.0512 77	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit B1 [Source:MGI Symbol;Acc:MGI:1100495]
ENSMUSG000000 16933	Plcg1	588.583 3	0.592 3	0.7556	0.2429	3.110 1	0.0018 7	0.0512 77	phospholipase C, gamma 1 [Source:MGI Symbol;Acc:MGI:97615]
ENSMUSG000000 22193	Psmb5	2904.52 31	1.960 4	-0.9711	0.3123	- 3.109 2	0.0018 76	0.0512 77	proteasome (prosome, macropain) subunit, beta type 5 [Source:MGI Symbol;Acc:MGI:1194513]
ENSMUSG000000 26187	Xrcc5	507.484 2	0.661 3	0.5966	0.1919	3.108 8	0.0018 78	0.0512 77	X-ray repair complementing defective repair in Chinese hamster cells 5 [Source:MGI Symbol;Acc:MGI:104517]
ENSMUSG000000 29462	Vps29	1510.95 31	1.364 9	-0.4488	0.1444	- 3.107 4	0.0018 87	0.0513 89	vacuolar protein sorting 29 (S. pombe) [Source:MGI Symbol;Acc:MGI:1928344]
ENSMUSG000000 24424	Ttc39c	364.823 9	1.784 8	-0.8358	0.2691	- 3.106 2	0.0018 95	0.0514 61	tetratricopeptide repeat domain 39C [Source:MGI Symbol;Acc:MGI:1919997]

ENSMUSG00000039081	Zfp503	103.2163	1.7761	-0.8287	0.2669	-3.1051	0.001902	0.051534	zinc finger protein 503 [Source:MGI Symbol;Acc:MGI:1353644]
ENSMUSG00000031851	Ntpcr	765.7581	1.4554	-0.5414	0.1744	-3.1036	0.001912	0.051657	nucleoside-triphosphatase, cancer-related [Source:MGI Symbol;Acc:MGI:1913816]
ENSMUSG00000028334	Nans	3018.7745	1.4188	-0.5047	0.1628	-3.1009	0.00193	0.051864	N-acetylneuraminic acid synthase (sialic acid synthase) [Source:MGI Symbol;Acc:MGI:2149820]
ENSMUSG00000053617	Sh3pxd2a	285.8627	0.5488	0.8658	0.2792	3.1010	0.001929	0.051864	SH3 and PX domains 2A [Source:MGI Symbol;Acc:MGI:1298393]
ENSMUSG00000030225	Dera	1736.1144	1.3582	-0.4417	0.1425	-3.0988	0.001943	0.052086	2-deoxyribose-5-phosphate aldolase homolog (C. elegans) [Source:MGI Symbol;Acc:MGI:1913762]
ENSMUSG00000050914	Ankrd37	155.2917	1.9710	-0.9789	0.3162	-3.0957	0.001963	0.052506	ankyrin repeat domain 37 [Source:MGI Symbol;Acc:MGI:3603344]

ENSMUSG000000 16319	Slc25a5	18801.4 806	1.422 9	-0.5089	0.1645	- 3.094 1	0.0019 74	0.0526 62	solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 5 [Source:MGI Symbol;Acc:MGI:1353496]
ENSMUSG000000 00028	Cdc45	2352.24 79	1.430 2	-0.5162	0.1670	- 3.090 3	0.0019 99	0.0527 22	cell division cycle 45 [Source:MGI Symbol;Acc:MGI:1338073]
ENSMUSG000000 22453	Naga	1965.37 42	1.470 2	-0.5561	0.1799	- 3.090 8	0.0019 96	0.0527 22	N-acetyl galactosaminidase, alpha [Source:MGI Symbol;Acc:MGI:1261422]
ENSMUSG000000 34932	Mrpl54	1521.52 04	1.949 7	-0.9633	0.3117	- 3.089 9	0.0020 02	0.0527 22	mitochondrial ribosomal protein L54 [Source:MGI Symbol;Acc:MGI:1913297]
ENSMUSG000000 50373	Snx21	155.907 1	1.600 0	-0.6781	0.2193	- 3.091 5	0.0019 92	0.0527 22	sorting nexin family member 21 [Source:MGI Symbol;Acc:MGI:1917729]
ENSMUSG000000 52419	2610001J05 Rik	1226.18 25	1.471 2	-0.5570	0.1801	- 3.092 3	0.0019 86	0.0527 22	RIKEN cDNA 2610001J05 gene [Source:MGI Symbol;Acc:MGI:1913770]
ENSMUSG000000 09621	Vav2	1003.29 84	0.564 8	0.8243	0.2669	3.088 2	0.0020 14	0.0527 64	vav 2 oncogene [Source:MGI Symbol;Acc:MGI:102718]

ENSMUSG000000 38670	Mybpc2	109.524 6	0.435 0	1.2009	0.3888	3.088 8	0.0020 1	0.0527 64	myosin binding protein C, fast-type [Source:MGI Symbol;Acc:MGI:1336170]
ENSMUSG000000 24959	Bad	1073.88 99	1.759 8	-0.8154	0.2642	- 3.086 0	0.0020 29	0.0530 33	BCL2-associated agonist of cell death [Source:MGI Symbol;Acc:MGI:1096330]
ENSMUSG000000 27175	Tcp11l1	109.628 8	1.759 1	-0.8148	0.2642	- 3.083 6	0.0020 45	0.0531 9	t-complex 11 like 1 [Source:MGI Symbol;Acc:MGI:2444263]
ENSMUSG000000 31545	Agpat6	2131.16 16	1.351 6	-0.4347	0.1410	- 3.083 7	0.0020 44	0.0531 9	1-acylglycerol-3-phosphate O-acyltransferase 6 (lysophosphatidic acid acyltransferase, zeta) [Source:MGI Symbol;Acc:MGI:2142716]
ENSMUSG000000 59336	Slc14a1	1409.12 94	0.693 8	0.5274	0.1711	3.081 9	0.0020 57	0.0533 56	solute carrier family 14 (urea transporter), member 1 [Source:MGI Symbol;Acc:MGI:1351654]
ENSMUSG000000 79018	Ly6c1	764.165 8	1.515 7	-0.6000	0.1948	- 3.080 2	0.0020 69	0.0535 36	lymphocyte antigen 6 complex, locus C1 [Source:MGI Symbol;Acc:MGI:96882]

ENSMUSG000000 01847	Rac1	12027.0 857	1.375 0	-0.4595	0.1492	- 3.079 1	0.0020 76	0.0535 98	RAS-related C3 botulinum substrate 1 [Source:MGI Symbol;Acc:MGI:97845]
ENSMUSG000000 23944	Hsp90ab1	54763.6 234	1.311 0	-0.3906	0.1269	- 3.077 2	0.0020 89	0.0537 39	heat shock protein 90 alpha (cytosolic), class B member 1 [Source:MGI Symbol;Acc:MGI:96247]
ENSMUSG000000 69744	Psmb3	4989.30 89	1.831 8	-0.8733	0.2838	- 3.076 8	0.0020 92	0.0537 39	proteasome (prosome, macropain) subunit, beta type 3 [Source:MGI Symbol;Acc:MGI:1347014]
ENSMUSG000000 35585	Tsen34	1032.96 82	1.804 0	-0.8512	0.2768	- 3.074 9	0.0021 06	0.0539 64	tRNA splicing endonuclease 34 homolog (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1913328]
ENSMUSG000000 15568	Lpl	626.446 2	0.555 6	0.8478	0.2760	3.071 7	0.0021 29	0.0544 09	lipoprotein lipase [Source:MGI Symbol;Acc:MGI:96820]
ENSMUSG000000 22353	Mtss1	1598.63 45	0.553 8	0.8525	0.2777	3.069 5	0.0021 44	0.0546 72	metastasis suppressor 1 [Source:MGI Symbol;Acc:MGI:2384818]

ENSMUSG000000 24208	2900010M2 3Rik	1736.34 13	1.997 0	-0.9978	0.3252	- 3.068 7	0.0021 5	0.0546 92	ubiquinol-cytochrome c reductase complex assembly factor 2 [Source:MGI Symbol;Acc:MGI:1914517]
ENSMUSG000000 26203	Dnajb2	160.920 0	0.572 3	0.8053	0.2628	3.063 6	0.0021 87	0.0549 05	DnaJ (Hsp40) homolog, subfamily B, member 2 [Source:MGI Symbol;Acc:MGI:1928739]
ENSMUSG000000 35459	Stab2	95.9393	0.535 6	0.9008	0.2940	3.063 6	0.0021 87	0.0549 05	stabilin 2 [Source:MGI Symbol;Acc:MGI:2178743]
ENSMUSG000000 36053	Fmnl2	587.216 8	0.692 3	0.5304	0.1732	3.063 2	0.0021 9	0.0549 05	formin-like 2 [Source:MGI Symbol;Acc:MGI:1918659]
ENSMUSG000000 37922	Bank1	983.794 6	0.437 5	1.1927	0.3891	3.065 4	0.0021 73	0.0549 05	B cell scaffold protein with ankyrin repeats 1 [Source:MGI Symbol;Acc:MGI:2442120]
ENSMUSG000000 40669	Phc1	383.531 3	0.654 7	0.6112	0.1995	3.064 1	0.0021 83	0.0549 05	polyhomeotic-like 1 (Drosophila) [Source:MGI Symbol;Acc:MGI:103248]
ENSMUSG000000 49751	Rpl36al	10404.8 345	1.972 0	-0.9797	0.3196	- 3.064 8	0.0021 78	0.0549 05	ribosomal protein L36A-like [Source:MGI Symbol;Acc:MGI:1913733]

ENSMUSG000000 15127	Unkl	557.371 9	0.711 2	0.4916	0.1606	3.061 2	0.0022 05	0.0551 42	unkempt-like (Drosophila) [Source:MGI Symbol;Acc:MGI:1921404]
ENSMUSG000000 23243	Kcnk5	219.445 1	0.634 2	0.6569	0.2147	3.059 7	0.0022 16	0.0552 87	potassium channel, subfamily K, member 5 [Source:MGI Symbol;Acc:MGI:1336175]
ENSMUSG000000 47547	Cltb	773.006 9	1.663 7	-0.7344	0.2401	- 3.058 6	0.0022 23	0.0553 42	clathrin, light polypeptide (Lcb) [Source:MGI Symbol;Acc:MGI:1921575]
ENSMUSG000000 20635	Fkbp1b	222.481 9	1.752 3	-0.8092	0.2650	- 3.054 2	0.0022 57	0.0559 78	FK506 binding protein 1b [Source:MGI Symbol;Acc:MGI:1336205]
ENSMUSG000000 63556	Gm10132	278.459 2	2.327 2	-1.2186	0.3990	- 3.053 8	0.0022 6	0.0559 78	predicted gene 10132 [Source:MGI Symbol;Acc:MGI:3704449]
ENSMUSG000000 25218	Poll	553.879 8	1.510 8	-0.5953	0.1951	- 3.051 4	0.0022 78	0.0561 73	polymerase (DNA directed), lambda [Source:MGI Symbol;Acc:MGI:1889000]
ENSMUSG000000 27282	Mtch2	3024.73 80	1.513 6	-0.5979	0.1960	- 3.051 3	0.0022 78	0.0561 73	mitochondrial carrier homolog 2 (C. elegans) [Source:MGI Symbol;Acc:MGI:1929260]

ENSMUSG000000 32216	Nedd4	3580.22 98	0.586 7	0.7692	0.2523	3.048 9	0.0022 96	0.0564 34	neural precursor cell expressed, developmentally down-regulated 4 [Source:MGI Symbol;Acc:MGI:97297]
ENSMUSG000000 48232	Fbxo10	647.260 0	0.664 1	0.5905	0.1937	3.048 5	0.0023	0.0564 34	F-box protein 10 [Source:MGI Symbol;Acc:MGI:2686937]
ENSMUSG000000 05779	Psmb4	8241.49 17	1.850 7	-0.8881	0.2917	- 3.044 5	0.0023 31	0.0570 63	proteasome (prosome, macropain) subunit, beta type 4 [Source:MGI Symbol;Acc:MGI:1098257]
ENSMUSG000000 05732	Ranbp1	6607.45 94	1.749 2	-0.8067	0.2653	- 3.040 4	0.0023 63	0.0575 67	RAN binding protein 1 [Source:MGI Symbol;Acc:MGI:96269]
ENSMUSG000000 06095	Tbcb	1949.54 38	1.751 3	-0.8084	0.2658	- 3.041 0	0.0023 58	0.0575 67	tubulin folding cofactor B [Source:MGI Symbol;Acc:MGI:1913661]
ENSMUSG000000 44229	Fam55d	294.811 5	0.673 2	0.5709	0.1878	3.039 5	0.0023 7	0.0576 13	neurexophilin and PC- esterase domain family, member 4 [Source:MGI Symbol;Acc:MGI:1924792]

ENSMUSG000000 28861	Mrps15	1866.20 65	1.704 8	-0.7696	0.2534	- 3.037 5	0.0023 86	0.0578 02	mitochondrial ribosomal protein S15 [Source:MGI Symbol;Acc:MGI:1913657]
ENSMUSG000000 52949	Rnf157	418.953 2	0.565 2	0.8231	0.2710	3.037 1	0.0023 89	0.0578 02	ring finger protein 157 [Source:MGI Symbol;Acc:MGI:2442484]
ENSMUSG000000 38020	Rapgef1	349.793 9	0.515 9	0.9548	0.3149	3.032 2	0.0024 28	0.0586 06	Rap guanine nucleotide exchange factor (GEF)-like 1 [Source:MGI Symbol;Acc:MGI:3611446]
ENSMUSG000000 22440	C1qtnf6	348.457 8	1.886 8	-0.9159	0.3025	- 3.028 2	0.0024 6	0.0586 34	C1q and tumor necrosis factor related protein 6 [Source:MGI Symbol;Acc:MGI:1919959]
ENSMUSG000000 22684	Bfar	1337.57 31	1.364 6	-0.4484	0.1481	- 3.027 9	0.0024 63	0.0586 34	bifunctional apoptosis regulator [Source:MGI Symbol;Acc:MGI:1914368]
ENSMUSG000000 26576	Atp1b1	2514.76 19	0.484 6	1.0451	0.3452	3.027 3	0.0024 67	0.0586 34	ATPase, Na ⁺ /K ⁺ transporting, beta 1 polypeptide [Source:MGI Symbol;Acc:MGI:88108]

ENSMUSG000000 30245	Golt1b	1235.95 34	1.432 4	-0.5184	0.1711	- 3.029 3	0.0024 52	0.0586 34	golgi transport 1 homolog B (<i>S. cerevisiae</i>) [Source:MGI Symbol;Acc:MGI:1914214]
ENSMUSG000000 30337	Vamp1	266.344 1	0.592 0	0.7562	0.2499	3.025 6	0.0024 81	0.0586 34	vesicle-associated membrane protein 1 [Source:MGI Symbol;Acc:MGI:1313276]
ENSMUSG000000 30560	Ctsc	9524.65 43	2.406 6	-1.2670	0.4187	- 3.025 9	0.0024 79	0.0586 34	cathepsin C [Source:MGI Symbol;Acc:MGI:109553]
ENSMUSG000000 30842	2400001E08 Rik	3694.89 08	1.562 6	-0.6439	0.2125	- 3.030 2	0.0024 44	0.0586 34	late endosomal/lysosomal adaptor, MAPK and MTOR activator 1 [Source:MGI Symbol;Acc:MGI:1913758]
ENSMUSG000000 38312	Edem2	2944.12 85	1.408 8	-0.4945	0.1634	- 3.025 3	0.0024 84	0.0586 34	ER degradation enhancer, mannosidase alpha-like 2 [Source:MGI Symbol;Acc:MGI:1915540]
ENSMUSG000000 43424	Gm9781	627.810 9	1.530 5	-0.6140	0.2028	- 3.028 2	0.0024 6	0.0586 34	eukaryotic translation initiation factor 3, subunit J2 [Source:MGI Symbol;Acc:MGI:3704486]

ENSMUSG000000 55681	Cope	4586.28 45	1.550 9	-0.6331	0.2093	- 3.025 2	0.0024 85	0.0586 34	coatomer protein complex, subunit epsilon [Source:MGI Symbol;Acc:MGI:1891702]
ENSMUSG000000 20386	Sar1b	1409.62 30	1.374 4	-0.4588	0.1518	- 3.023 0	0.0025 03	0.0586 78	SAR1 gene homolog B (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1913647]
ENSMUSG000000 20834	Dhrs13	320.917 5	1.900 7	-0.9266	0.3065	- 3.023 4	0.0025	0.0586 78	dehydrogenase/reductase (SDR family) member 13 [Source:MGI Symbol;Acc:MGI:1917701]
ENSMUSG000000 41642	Kif21b	2484.60 94	0.637 3	0.6500	0.2150	3.022 9	0.0025 04	0.0586 78	kinesin family member 21B [Source:MGI Symbol;Acc:MGI:109234]
ENSMUSG000000 22820	Ndufb4	1582.18 43	1.908 6	-0.9325	0.3086	- 3.021 9	0.0025 12	0.0587 33	NADH dehydrogenase (ubiquinone) 1 beta subcomplex 4 [Source:MGI Symbol;Acc:MGI:1915444]
ENSMUSG000000 28035	Dnajb4	510.150 6	0.694 5	0.5260	0.1741	3.021 2	0.0025 17	0.0587 33	DnaJ (Hsp40) homolog, subfamily B, member 4 [Source:MGI Symbol;Acc:MGI:1914285]

ENSMUSG000000 24065	Ehd3	373.905 0	0.560 9	0.8342	0.2764	3.017 8	0.0025 46	0.0592 75	EH-domain containing 3 [Source:MGI Symbol;Acc:MGI:1928900]
ENSMUSG000000 18858	Ict1	1081.43 53	1.761 7	-0.8170	0.2712	- 3.012 5	0.0025 91	0.0600 96	immature colon carcinoma transcript 1 [Source:MGI Symbol;Acc:MGI:1915822]
ENSMUSG000000 28398	3110001D03 Rik	1616.76 06	1.874 5	-0.9065	0.3010	- 3.012 3	0.0025 93	0.0600 96	transmembrane protein 261 [Source:MGI Symbol;Acc:MGI:1914178]
ENSMUSG000000 21037	Ahsa1	4869.61 13	1.412 5	-0.4983	0.1655	- 3.010 2	0.0026 11	0.0602 39	AHA1, activator of heat shock protein ATPase 1 [Source:MGI Symbol;Acc:MGI:2387603]
ENSMUSG000000 27610	Gss	525.303 7	1.787 8	-0.8382	0.2784	- 3.010 8	0.0026 06	0.0602 39	glutathione synthetase [Source:MGI Symbol;Acc:MGI:95852]
ENSMUSG000000 14551	Mrps25	1066.52 53	1.635 1	-0.7094	0.2361	- 3.004 8	0.0026 58	0.0609 19	mitochondrial ribosomal protein S25 [Source:MGI Symbol;Acc:MGI:1928140]
ENSMUSG000000 27673	Ndufb5	2758.18 08	1.852 9	-0.8898	0.2960	- 3.005 7	0.0026 5	0.0609 19	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 5 [Source:MGI Symbol;Acc:MGI:1913296]

ENSMUSG000000 36526	Card11	1058.28 46	0.467 3	1.0976	0.3653	3.005 0	0.0026 56	0.0609 19	caspase recruitment domain family, member 11 [Source:MGI Symbol;Acc:MGI:1916978]
ENSMUSG000000 08333	Snrbp2	2246.97 20	1.477 6	-0.5633	0.1876	- 3.003 0	0.0026 73	0.0609 62	U2 small nuclear ribonucleoprotein B [Source:MGI Symbol;Acc:MGI:104805]
ENSMUSG000000 16534	Lamp2	7725.29 39	1.702 2	-0.7674	0.2558	- 2.999 9	0.0027 01	0.0609 62	lysosomal-associated membrane protein 2 [Source:MGI Symbol;Acc:MGI:96748]
ENSMUSG000000 29759	Pon3	641.917 0	1.645 1	-0.7182	0.2392	- 3.002 1	0.0026 81	0.0609 62	paraoxonase 3 [Source:MGI Symbol;Acc:MGI:106686]
ENSMUSG000000 34203	Chchd4	1054.72 36	1.701 3	-0.7667	0.2554	- 3.001 4	0.0026 87	0.0609 62	coiled-coil-helix-coiled-coil- helix domain containing 4 [Source:MGI Symbol;Acc:MGI:1919420]
ENSMUSG000000 37606	Osbpl5	224.573 0	0.546 4	0.8719	0.2905	3.001 2	0.0026 89	0.0609 62	oxysterol binding protein-like 5 [Source:MGI Symbol;Acc:MGI:1930265]

ENSMUSG000000 45071	E130308A19 Rik	308.858 0	0.671 0	0.5755	0.1918	3.000 3	0.0026 97	0.0609 62	RIKEN cDNA E130308A19 gene [Source:MGI Symbol;Acc:MGI:2442164]
ENSMUSG000000 57789	Bak1	2302.66 45	1.566 6	-0.6476	0.2158	- 3.000 6	0.0026 95	0.0609 62	BCL2-antagonist/killer 1 [Source:MGI Symbol;Acc:MGI:1097161]
ENSMUSG000000 36751	Cox6b1	7949.09 28	1.951 2	-0.9644	0.3218	- 2.997 2	0.0027 25	0.0613 6	cytochrome c oxidase, subunit VIb polypeptide 1 [Source:MGI Symbol;Acc:MGI:107460]
ENSMUSG000000 78485	Plekhn1	118.674 9	0.618 4	0.6935	0.2314	2.996 6	0.0027 3	0.0613 6	pleckstrin homology domain containing, family N member 1 [Source:MGI Symbol;Acc:MGI:2387630]
ENSMUSG000000 21113	Snapc1	232.113 1	1.517 5	-0.6017	0.2009	- 2.995 0	0.0027 45	0.0614 91	small nuclear RNA activating complex, polypeptide 1 [Source:MGI Symbol;Acc:MGI:1922877]
ENSMUSG000000 50965	Prkca	369.596 4	0.635 6	0.6537	0.2183	2.994 7	0.0027 48	0.0614 91	protein kinase C, alpha [Source:MGI Symbol;Acc:MGI:97595]

ENSMUSG000000 45404	Kcnk13	115.879 7	2.498 4	-1.3210	0.4413	- 2.993 4	0.0027 59	0.0616 04	potassium channel, subfamily K, member 13 [Source:MGI Symbol;Acc:MGI:2384976]
ENSMUSG000000 20180	Snrpd3	4172.58 06	1.676 5	-0.7454	0.2491	- 2.992 4	0.0027 68	0.0616 87	small nuclear ribonucleoprotein D3 [Source:MGI Symbol;Acc:MGI:1914582]
ENSMUSG000000 71528	Usmg5	2343.41 72	1.942 3	-0.9578	0.3203	- 2.990 2	0.0027 88	0.0618 1	upregulated during skeletal muscle growth 5 [Source:MGI Symbol;Acc:MGI:1891435]
ENSMUSG000000 72324	Gm8420	246.928 7	1.946 1	-0.9606	0.3213	- 2.989 8	0.0027 91	0.0618 1	predicted gene 8420 [Source:MGI Symbol;Acc:MGI:3645594]
ENSMUSG000000 78484	Klhl17	528.739 0	0.715 8	0.4824	0.1613	2.990 0	0.0027 9	0.0618 1	kelch-like 17 [Source:MGI Symbol;Acc:MGI:2678948]
ENSMUSG000000 33739	Fkbpl	216.074 2	1.587 7	-0.6669	0.2232	- 2.987 8	0.0028 1	0.0619 31	FK506 binding protein-like [Source:MGI Symbol;Acc:MGI:1932127]
ENSMUSG000000 44080	S100a1	1031.46 01	1.856 8	-0.8928	0.2989	- 2.987 3	0.0028 15	0.0619 31	S100 calcium binding protein A1 [Source:MGI Symbol;Acc:MGI:1338917]

ENSMUSG000000 63952	Brpf3	844.629 9	0.712 2	0.4897	0.1639	2.987 3	0.0028 15	0.0619 31	bromodomain and PHD finger containing, 3 [Source:MGI Symbol;Acc:MGI:2146836]
ENSMUSG000000 20019	Ntn4	114.824 4	0.616 5	0.6979	0.2339	2.983 3	0.0028 52	0.0623 87	netrin 4 [Source:MGI Symbol;Acc:MGI:1888978]
ENSMUSG000000 21832	Psmc6	3595.72 34	1.343 3	-0.4258	0.1427	- 2.983 1	0.0028 53	0.0623 87	proteasome (prosome, macropain) 26S subunit, ATPase, 6 [Source:MGI Symbol;Acc:MGI:1914339]
ENSMUSG000000 26796	Fam129b	1329.89 66	2.105 4	-1.0741	0.3600	- 2.983 8	0.0028 47	0.0623 87	family with sequence similarity 129, member B [Source:MGI Symbol;Acc:MGI:2442910]
ENSMUSG000000 01056	Nhp2	3614.06 23	1.922 4	-0.9429	0.3167	- 2.977 2	0.0029 09	0.0627 38	NHP2 ribonucleoprotein [Source:MGI Symbol;Acc:MGI:1098547]
ENSMUSG000000 24675	Ms4a4c	3146.14 91	2.032 1	-1.0230	0.3433	- 2.979 7	0.0028 86	0.0627 38	membrane-spanning 4-domains, subfamily A, member 4C [Source:MGI Symbol;Acc:MGI:1927656]

ENSMUSG000000 25357	Dgka	1195.58 57	0.487 9	1.0354	0.3479	2.976 3	0.0029 18	0.0627 38	diacylglycerol kinase, alpha [Source:MGI Symbol;Acc:MGI:102952]
ENSMUSG000000 26928	Card9	2511.71 00	1.498 0	-0.5830	0.1958	- 2.978 1	0.0029	0.0627 38	caspase recruitment domain family, member 9 [Source:MGI Symbol;Acc:MGI:2685628]
ENSMUSG000000 30335	Mrpl51	2929.20 75	1.797 2	-0.8457	0.2840	- 2.978 5	0.0028 97	0.0627 38	mitochondrial ribosomal protein L51 [Source:MGI Symbol;Acc:MGI:1913743]
ENSMUSG000000 38175	Mylip	966.487 1	0.587 8	0.7666	0.2573	2.979 6	0.0028 86	0.0627 38	myosin regulatory light chain interacting protein [Source:MGI Symbol;Acc:MGI:2388271]
ENSMUSG000000 38418	Egr1	1325.19 45	0.718 0	0.4779	0.1606	2.976 4	0.0029 16	0.0627 38	early growth response 1 [Source:MGI Symbol;Acc:MGI:95295]
ENSMUSG000000 41926	Rnpep	1797.60 73	1.810 4	-0.8563	0.2875	- 2.978 4	0.0028 98	0.0627 38	arginyl aminopeptidase (aminopeptidase B) [Source:MGI Symbol;Acc:MGI:2384902]

ENSMUSG000000 44068	Zrsr1	309.460 4	0.646 3	0.6296	0.2117	2.974 9	0.0029 31	0.0629 01	zinc finger (CCCH type), RNA binding motif and serine/arginine rich 1 [Source:MGI Symbol;Acc:MGI:98885]
ENSMUSG000000 04451	Ralb	2307.44 48	1.380 0	-0.4647	0.1564	- 2.971 0	0.0029 68	0.0635 65	v-ral simian leukemia viral oncogene homolog B (ras related) [Source:MGI Symbol;Acc:MGI:1927244]
ENSMUSG000000 13593	Ndufs2	5684.97 77	1.560 2	-0.6417	0.2161	- 2.969 9	0.0029 79	0.0636 26	NADH dehydrogenase (ubiquinone) Fe-S protein 2 [Source:MGI Symbol;Acc:MGI:2385112]
ENSMUSG000000 20085	Aifm2	329.390 4	1.619 7	-0.6957	0.2344	- 2.968 2	0.0029 96	0.0636 26	apoptosis-inducing factor, mitochondrion-associated 2 [Source:MGI Symbol;Acc:MGI:1918611]
ENSMUSG000000 28132	Tmem56	1172.93 37	0.632 4	0.6612	0.2227	2.968 7	0.0029 9	0.0636 26	transmembrane protein 56 [Source:MGI Symbol;Acc:MGI:1923195]

ENSMUSG000000 29632	Ndufa4	6162.32 22	1.901 4	-0.9271	0.3123	- 2.969 0	0.0029 87	0.0636 26	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4 [Source:MGI Symbol;Acc:MGI:107686]
ENSMUSG000000 01467	Cyp51	728.737 3	1.409 8	-0.4955	0.1670	- 2.967 4	0.0030 04	0.0636 67	cytochrome P450, family 51 [Source:MGI Symbol;Acc:MGI:106040]
ENSMUSG000000 29650	Slc46a3	522.553 1	0.658 5	0.6028	0.2032	2.966 7	0.0030 1	0.0636 71	solute carrier family 46, member 3 [Source:MGI Symbol;Acc:MGI:1918956]
ENSMUSG000000 36986	Pml	2521.46 24	0.601 7	0.7330	0.2472	2.965 5	0.0030 22	0.0636 71	promyelocytic leukemia [Source:MGI Symbol;Acc:MGI:104662]
ENSMUSG000000 37152	Ndufc1	1357.65 70	1.916 1	-0.9381	0.3164	- 2.965 5	0.0030 22	0.0636 71	NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 1 [Source:MGI Symbol;Acc:MGI:1913627]

ENSMUSG000000 42476	Abcb4	1651.61 14	0.609 7	0.7137	0.2408	2.964 2	0.0030 35	0.0638 12	ATP-binding cassette, sub-family B (MDR/TAP), member 4 [Source:MGI Symbol;Acc:MGI:97569]
ENSMUSG000000 31458	2410022L05 Rik	193.623 1	1.932 8	-0.9507	0.3208	- 2.963 5	0.0030 41	0.0638 18	coordinator of PRMT5, differentiation stimulator [Source:MGI Symbol;Acc:MGI:1913673]
ENSMUSG000000 43323	Fbrsl1	481.188 2	0.698 8	0.5170	0.1746	2.961 5	0.0030 61	0.0640 74	fibrosin-like 1 [Source:MGI Symbol;Acc:MGI:1920907]
ENSMUSG000000 72214	40790	1313.57 19	0.560 9	0.8342	0.2817	2.961 1	0.0030 66	0.0640 74	septin 5 [Source:MGI Symbol;Acc:MGI:1195461]
ENSMUSG000000 20219	Timm13	3877.91 31	2.133 2	-1.0930	0.3692	- 2.960 3	0.0030 73	0.0640 76	translocase of inner mitochondrial membrane 13 [Source:MGI Symbol;Acc:MGI:1353432]
ENSMUSG000000 34343	Ube2f	1936.30 20	1.379 9	-0.4645	0.1569	- 2.959 8	0.0030 78	0.0640 76	ubiquitin-conjugating enzyme E2F (putative) [Source:MGI Symbol;Acc:MGI:1915171]

ENSMUSG000000 17778	Cox7c	5706.00 53	2.064 1	-1.0455	0.3534	- 2.958 8	0.0030 89	0.0641 68	cytochrome c oxidase subunit VIIc [Source:MGI Symbol;Acc:MGI:103226]
ENSMUSG000000 01666	Ddt	176.533 4	1.959 6	-0.9705	0.3284	- 2.955 3	0.0031 23	0.0647 07	D-dopachrome tautomerase [Source:MGI Symbol;Acc:MGI:1298381]
ENSMUSG000000 35595	1600002K03 Rik	401.001 8	1.976 9	-0.9832	0.3327	- 2.955 0	0.0031 27	0.0647 07	RIKEN cDNA 1600002K03 gene [Source:MGI Symbol;Acc:MGI:1917020]
ENSMUSG000000 26399	Cd55	1679.95 45	0.529 7	0.9167	0.3104	2.953 0	0.0031 47	0.0649 4	CD55 antigen [Source:MGI Symbol;Acc:MGI:104850]
ENSMUSG000000 63856	Gpx1	37168.8 017	1.712 9	-0.7764	0.2630	- 2.952 6	0.0031 51	0.0649 4	glutathione peroxidase 1 [Source:MGI Symbol;Acc:MGI:104887]
ENSMUSG000000 43671	Dpy19l3	227.115 4	0.639 6	0.6447	0.2187	2.948 7	0.0031 91	0.0656 45	dpy-19-like 3 (C. elegans) [Source:MGI Symbol;Acc:MGI:2443952]
ENSMUSG000000 22956	Atp5o	5772.22 09	1.795 3	-0.8442	0.2865	- 2.946 6	0.0032 13	0.0659 6	ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit [Source:MGI Symbol;Acc:MGI:106341]

ENSMUSG000000 03882	Il7r	1128.84 05	0.498 6	1.0041	0.3410	2.944 2	0.0032 38	0.0661 18	interleukin 7 receptor [Source:MGI Symbol;Acc:MGI:96562]
ENSMUSG000000 06057	Atp5g1	4880.37 19	1.762 1	-0.8173	0.2776	- 2.944 0	0.0032 4	0.0661 18	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit C1 (subunit 9) [Source:MGI Symbol;Acc:MGI:107653]
ENSMUSG000000 26073	Il1r2	831.650 1	2.046 5	-1.0331	0.3508	- 2.945 2	0.0032 27	0.0661 18	interleukin 1 receptor, type II [Source:MGI Symbol;Acc:MGI:96546]
ENSMUSG000000 27199	Gatm	3557.90 59	1.946 8	-0.9611	0.3268	- 2.940 9	0.0032 73	0.0665 37	glycine amidinotransferase (L-arginine:glycine amidinotransferase) [Source:MGI Symbol;Acc:MGI:1914342]
ENSMUSG000000 28080	Lrba	629.685 2	0.641 1	0.6415	0.2181	2.941 4	0.0032 67	0.0665 37	LPS-responsive beige-like anchor [Source:MGI Symbol;Acc:MGI:1933162]
ENSMUSG000000 02102	Psmc3	5493.62 90	1.448 9	-0.5350	0.1820	- 2.938 7	0.0032 96	0.0666 85	proteasome (prosome, macropain) 26S subunit, ATPase 3 [Source:MGI Symbol;Acc:MGI:1098754]

ENSMUSG000000 20056	Ccdc53	948.688 1	1.636 2	-0.7104	0.2418	- 2.937 8	0.0033 06	0.0666 85	coiled-coil domain containing 53 [Source:MGI Symbol;Acc:MGI:1914532]
ENSMUSG000000 21607	Mrpl36	1552.42 20	1.654 4	-0.7263	0.2474	- 2.935 9	0.0033 26	0.0666 85	mitochondrial ribosomal protein L36 [Source:MGI Symbol;Acc:MGI:2137228]
ENSMUSG000000 21759	Ppap2a	150.777 8	0.618 6	0.6929	0.2359	2.936 8	0.0033 17	0.0666 85	phosphatidic acid phosphatase type 2A [Source:MGI Symbol;Acc:MGI:108412]
ENSMUSG000000 23828	Slc22a3	154.330 9	0.593 4	0.7529	0.2565	2.935 1	0.0033 34	0.0666 85	solute carrier family 22 (organic cation transporter), member 3 [Source:MGI Symbol;Acc:MGI:1333817]
ENSMUSG000000 30532	Hddc3	610.255 7	1.647 4	-0.7202	0.2452	- 2.936 6	0.0033 18	0.0666 85	HD domain containing 3 [Source:MGI Symbol;Acc:MGI:1915945]
ENSMUSG000000 31543	Ank1	1744.48 17	0.594 0	0.7515	0.2560	2.935 2	0.0033 34	0.0666 85	ankyrin 1, erythroid [Source:MGI Symbol;Acc:MGI:88024]

ENSMUSG000000 32035	Ets1	4706.37 99	0.518 0	0.9489	0.3230	2.937 7	0.0033 06	0.0666 85	E26 avian leukemia oncogene 1, 5' domain [Source:MGI Symbol;Acc:MGI:95455]
ENSMUSG000000 38690	Atp5j2	5127.34 88	1.864 4	-0.8987	0.3062	- 2.934 8	0.0033 38	0.0666 85	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit F2 [Source:MGI Symbol;Acc:MGI:1927558]
ENSMUSG000000 24902	Mrpl11	1376.99 03	1.856 9	-0.8929	0.3044	- 2.933 1	0.0033 56	0.0669 22	mitochondrial ribosomal protein L11 [Source:MGI Symbol;Acc:MGI:2137215]
ENSMUSG000000 29918	Mrps33	787.329 3	1.495 3	-0.5804	0.1980	- 2.931 7	0.0033 71	0.0670 98	mitochondrial ribosomal protein S33 [Source:MGI Symbol;Acc:MGI:1338046]
ENSMUSG000000 02308	Cd320	269.178 3	1.793 1	-0.8425	0.2875	- 2.930 5	0.0033 84	0.0672 18	CD320 antigen [Source:MGI Symbol;Acc:MGI:1860083]
ENSMUSG000000 02477	Snrpd1	4349.07 96	1.837 1	-0.8774	0.2997	- 2.927 8	0.0034 14	0.0675 05	small nuclear ribonucleoprotein D1 [Source:MGI Symbol;Acc:MGI:98344]

ENSMUSG000000 25781	Atp5c1	7954.52 53	1.370 1	-0.4543	0.1552	- 2.927 4	0.0034 18	0.0675 05	ATP synthase, H+ transporting, mitochondrial F1 complex, gamma polypeptide 1 [Source:MGI Symbol;Acc:MGI:1261437]
ENSMUSG000000 76437	2700094K13 Rik	2461.25 43	1.809 3	-0.8554	0.2921	- 2.928 4	0.0034 07	0.0675 05	RIKEN cDNA 2700094K13 gene [Source:MGI Symbol;Acc:MGI:1919907]
ENSMUSG000000 24800	Rpp30	757.121 4	1.463 2	-0.5491	0.1877	- 2.925 5	0.0034 39	0.0676 76	ribonuclease P/MRP 30 subunit [Source:MGI Symbol;Acc:MGI:1859683]
ENSMUSG000000 53398	Phgdh	4222.72 57	1.582 4	-0.6622	0.2263	- 2.925 7	0.0034 37	0.0676 76	3-phosphoglycerate dehydrogenase [Source:MGI Symbol;Acc:MGI:1355330]
ENSMUSG000000 62981	Mrpl42	1646.36 99	1.611 1	-0.6880	0.2354	- 2.923 1	0.0034 65	0.0680 56	mitochondrial ribosomal protein L42 [Source:MGI Symbol;Acc:MGI:1333774]
ENSMUSG000000 33793	Atp6v1h	2016.14 66	1.494 4	-0.5796	0.1985	- 2.920 4	0.0034 96	0.0682 78	ATPase, H+ transporting, lysosomal V1 subunit H [Source:MGI Symbol;Acc:MGI:1914864]

ENSMUSG000000 38965	Ube2l3	2992.58 81	1.605 8	-0.6833	0.2339	- 2.920 8	0.0034 91	0.0682 78	ubiquitin-conjugating enzyme E2L 3 [Source:MGI Symbol;Acc:MGI:109240]
ENSMUSG000000 73400	Trim10	659.464 2	0.669 5	0.5789	0.1982	2.921 5	0.0034 84	0.0682 78	tripartite motif-containing 10 [Source:MGI Symbol;Acc:MGI:1338757]
ENSMUSG000000 15671	Psm2	5529.06 78	1.544 2	-0.6269	0.2150	- 2.915 8	0.0035 47	0.0691 05	proteasome (prosome, macropain) subunit, alpha type 2 [Source:MGI Symbol;Acc:MGI:104885]
ENSMUSG000000 48351	2010305A19 Rik	331.599 3	1.590 7	-0.6697	0.2297	- 2.915 5	0.0035 52	0.0691 05	cytochrome c oxidase assembly factor 7 [Source:MGI Symbol;Acc:MGI:1917143]
ENSMUSG000000 00318	Clec10a	633.242 9	1.486 9	-0.5723	0.1964	- 2.913 9	0.0035 7	0.0693 28	C-type lectin domain family 10, member A [Source:MGI Symbol;Acc:MGI:96975]
ENSMUSG000000 38717	Atp5l	6986.20 34	2.044 2	-1.0316	0.3546	- 2.909 1	0.0036 25	0.0702 75	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit G [Source:MGI Symbol;Acc:MGI:1351597]

ENSMUSG000000 61981	Flot2	4498.13 07	1.424 7	-0.5107	0.1756	- 2.908 2	0.0036 36	0.0703 43	flotillin 2 [Source:MGI Symbol;Acc:MGI:103309]
ENSMUSG000000 26728	Vim	30980.1 488	1.530 6	-0.6141	0.2112	- 2.907 3	0.0036 45	0.0704 01	vimentin [Source:MGI Symbol;Acc:MGI:98932]
ENSMUSG000000 41849	Card6	519.911 2	0.546 7	0.8713	0.2999	2.905 5	0.0036 67	0.0706 9	caspase recruitment domain family, member 6 [Source:MGI Symbol;Acc:MGI:3032959]
ENSMUSG000000 24181	Mrpl28	3169.83 20	1.975 1	-0.9819	0.3383	- 2.902 4	0.0037 04	0.0712 64	mitochondrial ribosomal protein L28 [Source:MGI Symbol;Acc:MGI:1915861]
ENSMUSG000000 27712	Anxa5	4716.24 64	1.392 1	-0.4773	0.1646	- 2.899 4	0.0037 39	0.0713 77	annexin A5 [Source:MGI Symbol;Acc:MGI:106008]
ENSMUSG000000 27822	Slc33a1	700.413 8	1.392 8	-0.4780	0.1649	- 2.897 9	0.0037 57	0.0713 77	solute carrier family 33 (acetyl-CoA transporter), member 1 [Source:MGI Symbol;Acc:MGI:1332247]
ENSMUSG000000 30588	Yif1b	706.364 6	1.416 7	-0.5025	0.1734	- 2.897 8	0.0037 57	0.0713 77	Yip1 interacting factor homolog B (<i>S. cerevisiae</i>) [Source:MGI Symbol;Acc:MGI:1924504]

ENSMUSG000000 32890	Rims3	102.680 1	0.535 7	0.9006	0.3107	2.898 7	0.0037 47	0.0713 77	regulating synaptic membrane exocytosis 3 [Source:MGI Symbol;Acc:MGI:2443331]
ENSMUSG000000 70056	Mfhas1	719.126 3	0.607 8	0.7184	0.2477	2.900 1	0.0037 3	0.0713 77	malignant fibrous histiocytoma amplified sequence 1 [Source:MGI Symbol;Acc:MGI:1098644]
ENSMUSG000000 74677	Sirpb1c	1260.84 68	1.959 9	-0.9707	0.3348	- 2.899 7	0.0037 35	0.0713 77	signal-regulatory protein beta 1C [Source:MGI Symbol;Acc:MGI:3807521]
ENSMUSG000000 89847	Fxc1	352.834 1	2.052 6	-1.0374	0.3577	- 2.900 1	0.0037 3	0.0713 77	translocase of inner mitochondrial membrane 10B [Source:MGI Symbol;Acc:MGI:1315196]
ENSMUSG000000 31765	Mt1	3553.30 98	2.172 9	-1.1196	0.3866	- 2.896 5	0.0037 74	0.0715 54	metallothionein 1 [Source:MGI Symbol;Acc:MGI:97171]
ENSMUSG000000 52397	Ezr	5861.38 22	0.678 2	0.5601	0.1935	2.894 3	0.0038	0.0719 19	ezrin [Source:MGI Symbol;Acc:MGI:98931]

ENSMUSG000000 21285	Ppp1r13b	317.562 6	0.492 2	1.0228	0.3535	2.893 4	0.0038 11	0.0719 99	protein phosphatase 1, regulatory (inhibitor) subunit 13B [Source:MGI Symbol;Acc:MGI:1336199]
ENSMUSG000000 04110	Cacna1e	187.761 5	0.460 2	1.1198	0.3871	2.892 7	0.0038 19	0.0720 27	calcium channel, voltage- dependent, R type, alpha 1E subunit [Source:MGI Symbol;Acc:MGI:106217]
ENSMUSG000000 31875	Cmtm3	703.629 9	1.404 8	-0.4904	0.1696	- 2.890 7	0.0038 44	0.0723 62	CKLF-like MARVEL transmembrane domain containing 3 [Source:MGI Symbol;Acc:MGI:2447162]
ENSMUSG000000 24240	Epc1	1405.16 38	0.732 2	0.4497	0.1557	2.888 7	0.0038 68	0.0725 6	enhancer of polycomb homolog 1 (Drosophila) [Source:MGI Symbol;Acc:MGI:1278322]
ENSMUSG000000 26797	Stxbp1	240.130 7	0.657 7	0.6044	0.2092	2.888 7	0.0038 68	0.0725 6	syntaxin binding protein 1 [Source:MGI Symbol;Acc:MGI:107363]

ENSMUSG000000 30647	Ndufc2	2531.15 62	1.887 8	-0.9167	0.3175	- 2.887 1	0.0038 88	0.0726 59	NADH dehydrogenase (ubiquinone) 1, subcomplex unknown, 2 [Source:MGI Symbol;Acc:MGI:1344370]
ENSMUSG000000 38372	Gmids	463.290 0	1.573 8	-0.6542	0.2266	- 2.886 6	0.0038 95	0.0726 59	GDP-mannose 4, 6- dehydratase [Source:MGI Symbol;Acc:MGI:1891112]
ENSMUSG000000 44627	Swi5	4089.71 30	1.535 6	-0.6188	0.2143	- 2.887 4	0.0038 84	0.0726 59	SWI5 recombination repair homolog (yeast) [Source:MGI Symbol;Acc:MGI:1920181]
ENSMUSG000000 59518	Znhit1	1632.22 40	1.793 2	-0.8425	0.2919	- 2.885 9	0.0039 03	0.0726 91	zinc finger, HIT domain containing 1 [Source:MGI Symbol;Acc:MGI:1917353]
ENSMUSG000000 37204	9430023L20 Rik	2164.68 43	1.827 7	-0.8701	0.3015	- 2.885 3	0.0039 1	0.0726 95	autophagy related 101 [Source:MGI Symbol;Acc:MGI:1915368]
ENSMUSG000000 07987	Rab15	419.366 4	1.520 0	-0.6041	0.2094	- 2.884 6	0.0039 19	0.0727 22	intraflagellar transport 22 [Source:MGI Symbol;Acc:MGI:1914536]

ENSMUSG000000 52151	Ppap2c	230.023 8	1.601 1	-0.6791	0.2356	- 2.882 8	0.0039 42	0.0730 14	phosphatidic acid phosphatase type 2C [Source:MGI Symbol;Acc:MGI:1354945]
ENSMUSG000000 06058	Snf8	3409.45 30	1.822 2	-0.8656	0.3004	- 2.881 8	0.0039 54	0.0731 2	SNF8, ESCRT-II complex subunit, homolog (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1343161]
ENSMUSG000000 73616	Myeov2	2670.45 96	2.118 3	-1.0829	0.3760	- 2.880 4	0.0039 72	0.0733 22	myeloma overexpressed 2 [Source:MGI Symbol;Acc:MGI:1914165]
ENSMUSG000000 02602	Axl	1570.04 08	0.604 8	0.7254	0.2521	2.877 4	0.0040 1	0.0733 64	AXL receptor tyrosine kinase [Source:MGI Symbol;Acc:MGI:1347244]
ENSMUSG000000 29198	Grpel1	2320.10 86	1.574 5	-0.6549	0.2276	- 2.877 9	0.0040 03	0.0733 64	GrpE-like 1, mitochondrial [Source:MGI Symbol;Acc:MGI:1334417]
ENSMUSG000000 29430	Ran	15183.4 165	1.525 2	-0.6090	0.2116	- 2.878 0	0.0040 03	0.0733 64	RAN, member RAS oncogene family [Source:MGI Symbol;Acc:MGI:1333112]
ENSMUSG000000 41697	Cox6a1	8979.74 84	2.017 0	-1.0122	0.3517	- 2.877 8	0.0040 05	0.0733 64	cytochrome c oxidase subunit VIa polypeptide 1 [Source:MGI Symbol;Acc:MGI:103099]

ENSMUSG000000 45948	Mrps12	1029.48 12	1.853 9	-0.8905	0.3093	- 2.879 6	0.0039 82	0.0733 64	mitochondrial ribosomal protein S12 [Source:MGI Symbol;Acc:MGI:1346333]
ENSMUSG000000 21807	2700060E02 Rik	3470.54 09	1.556 4	-0.6382	0.2219	- 2.876 0	0.0040 28	0.0734 76	RIKEN cDNA 2700060E02 gene [Source:MGI Symbol;Acc:MGI:1915295]
ENSMUSG000000 26833	Olfm1	1319.73 88	2.044 1	-1.0315	0.3587	- 2.875 8	0.0040 3	0.0734 76	olfactomedin 1 [Source:MGI Symbol;Acc:MGI:1860437]
ENSMUSG000000 25487	Psm13	4875.48 93	1.739 4	-0.7986	0.2782	- 2.870 3	0.0041	0.0738 53	proteasome (prosome, macropain) 26S subunit, non- ATPase, 13 [Source:MGI Symbol;Acc:MGI:1345192]
ENSMUSG000000 30298	Sec13	3070.87 85	1.399 9	-0.4853	0.1689	- 2.872 5	0.0040 73	0.0738 53	SEC13 homolog (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:99832]
ENSMUSG000000 33735	Spr	738.299 7	1.581 9	-0.6617	0.2304	- 2.871 2	0.0040 89	0.0738 53	sepiapterin reductase [Source:MGI Symbol;Acc:MGI:103078]
ENSMUSG000000 41939	Mvk	377.356 1	1.592 8	-0.6716	0.2339	- 2.870 7	0.0040 96	0.0738 53	mevalonate kinase [Source:MGI Symbol;Acc:MGI:107624]

ENSMUSG000000 42462	Dctpp1	1804.22 54	1.955 7	-0.9677	0.3369	- 2.872 0	0.0040 79	0.0738 53	dCTP pyrophosphatase 1 [Source:MGI Symbol;Acc:MGI:1913672]
ENSMUSG000000 62421	Arf2	1278.28 07	1.386 6	-0.4716	0.1641	- 2.873 3	0.0040 62	0.0738 53	ADP-ribosylation factor 2 [Source:MGI Symbol;Acc:MGI:99595]
ENSMUSG000000 66861	Oas1g	101.458 2	2.520 0	-1.3334	0.4641	- 2.872 9	0.0040 68	0.0738 53	2'-5' oligoadenylate synthetase 1G [Source:MGI Symbol;Acc:MGI:97429]
ENSMUSG000000 40363	Bcor	1536.75 77	0.654 8	0.6109	0.2129	2.869 5	0.0041 11	0.0739 19	BCL6 interacting corepressor [Source:MGI Symbol;Acc:MGI:1918708]
ENSMUSG000000 53553	3110082117 Rik	557.407 9	1.686 5	-0.7541	0.2629	- 2.868 5	0.0041 24	0.0740 25	RIKEN cDNA 3110082117 gene [Source:MGI Symbol;Acc:MGI:1920462]
ENSMUSG000000 30000	Add2	1347.60 77	0.581 8	0.7815	0.2727	2.866 0	0.0041 58	0.0745	adducin 2 (beta) [Source:MGI Symbol;Acc:MGI:87919]
ENSMUSG000000 60063	Alox5ap	18687.9 789	1.723 8	-0.7856	0.2742	- 2.864 8	0.0041 73	0.0746 56	arachidonate 5-lipoxygenase activating protein [Source:MGI Symbol;Acc:MGI:107505]

ENSMUSG000000 24533	Spire1	1439.36 87	0.670 2	0.5773	0.2017	2.862 4	0.0042 04	0.0749 54	spire homolog 1 (Drosophila) [Source:MGI Symbol;Acc:MGI:1915416]
ENSMUSG000000 28343	Erp44	2650.41 35	1.374 3	-0.4587	0.1602	- 2.862 5	0.0042 03	0.0749 54	endoplasmic reticulum protein 44 [Source:MGI Symbol;Acc:MGI:1923549]
ENSMUSG000000 17400	Stac2	181.420 5	0.442 3	1.1770	0.4114	2.860 7	0.0042 27	0.0750 77	SH3 and cysteine rich domain 2 [Source:MGI Symbol;Acc:MGI:2144518]
ENSMUSG000000 25232	Hexa	5764.55 90	1.459 6	-0.5456	0.1907	- 2.860 3	0.0042 33	0.0750 77	hexosaminidase A [Source:MGI Symbol;Acc:MGI:96073]
ENSMUSG000000 40521	Tsfm	1229.50 78	1.878 4	-0.9095	0.3179	- 2.860 9	0.0042 24	0.0750 77	Ts translation elongation factor, mitochondrial [Source:MGI Symbol;Acc:MGI:1913649]
ENSMUSG000000 20022	Ndufa12	1797.25 11	1.647 1	-0.7199	0.2518	- 2.858 9	0.0042 52	0.0752 79	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 12 [Source:MGI Symbol;Acc:MGI:1913664]
ENSMUSG000000 32294	Pkm2	31899.7 753	1.515 1	-0.5994	0.2097	- 2.858 0	0.0042 64	0.0753 63	pyruvate kinase, muscle [Source:MGI Symbol;Acc:MGI:97591]

ENSMUSG000000 24099	Ndufv2	4629.05 31	1.774 5	-0.8274	0.2896	- 2.857 4	0.0042 71	0.0753 67	NADH dehydrogenase (ubiquinone) flavoprotein 2 [Source:MGI Symbol;Acc:MGI:1920150]
ENSMUSG000000 23089	Ndufa5	1754.28 16	2.052 6	-1.0375	0.3632	- 2.856 3	0.0042 86	0.0754 93	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 5 [Source:MGI Symbol;Acc:MGI:1915452]
ENSMUSG000000 63787	Chchd1	1719.81 98	1.869 7	-0.9028	0.3161	- 2.855 8	0.0042 93	0.0754 93	coiled-coil-helix-coiled-coil- helix domain containing 1 [Source:MGI Symbol;Acc:MGI:1913371]
ENSMUSG000000 59278	Lsmd1	554.420 1	1.647 8	-0.7205	0.2525	- 2.854 0	0.0043 18	0.0758 08	N(alpha)-acetyltransferase 38, NatC auxiliary subunit [Source:MGI Symbol;Acc:MGI:1925554]
ENSMUSG000000 21843	Ktn1	989.717 0	0.687 8	0.5398	0.1894	2.851 0	0.0043 59	0.0764 01	kinectin 1 [Source:MGI Symbol;Acc:MGI:109153]
ENSMUSG000000 52013	Btla	911.247 5	0.542 4	0.8824	0.3098	2.848 8	0.0043 88	0.0767 8	B and T lymphocyte associated [Source:MGI Symbol;Acc:MGI:2658978]

ENSMUSG000000 63931	Pepd	1606.11 75	1.345 4	-0.4280	0.1503	- 2.847 7	0.0044 04	0.0769 25	peptidase D [Source:MGI Symbol;Acc:MGI:97542]
ENSMUSG000000 25950	Idh1	2745.30 36	1.520 0	-0.6041	0.2122	- 2.846 6	0.0044 18	0.0769 43	isocitrate dehydrogenase 1 (NADP+), soluble [Source:MGI Symbol;Acc:MGI:96413]
ENSMUSG000000 29486	Mrpl1	853.692 5	1.509 6	-0.5942	0.2088	- 2.846 0	0.0044 27	0.0769 43	mitochondrial ribosomal protein L1 [Source:MGI Symbol;Acc:MGI:2137202]
ENSMUSG000000 74781	Ube2n	4340.28 14	1.392 8	-0.4780	0.1679	- 2.846 3	0.0044 24	0.0769 43	ubiquitin-conjugating enzyme E2N [Source:MGI Symbol;Acc:MGI:1934835]
ENSMUSG000000 42111	Ccdc115	1997.61 55	1.598 4	-0.6766	0.2378	- 2.845 0	0.0044 42	0.0770 77	coiled-coil domain containing 115 [Source:MGI Symbol;Acc:MGI:1916918]
ENSMUSG000000 38642	Ctss	11979.1 606	1.614 9	-0.6914	0.2431	- 2.844 4	0.0044 49	0.0770 82	cathepsin S [Source:MGI Symbol;Acc:MGI:107341]
ENSMUSG000000 41775	Mapk1ip1	221.377 0	0.669 4	0.5791	0.2038	2.841 9	0.0044 84	0.0775 59	mitogen-activated protein kinase 1 interacting protein 1 [Source:MGI Symbol;Acc:MGI:1916796]

ENSMUSG000000 75266	Cenpw	695.546 6	1.825 7	-0.8684	0.3056	- 2.841 3	0.0044 92	0.0775 7	centromere protein W [Source:MGI Symbol;Acc:MGI:1913561]
ENSMUSG000000 20802	Ube2o	871.394 8	0.713 7	0.4866	0.1713	2.840 0	0.0045 11	0.0777 65	ubiquitin-conjugating enzyme E20 [Source:MGI Symbol;Acc:MGI:2444266]
ENSMUSG000000 21458	2010111101 Rik	602.691 0	1.645 7	-0.7187	0.2535	- 2.835 1	0.0045 81	0.0785 79	RIKEN cDNA 2010111101 gene [Source:MGI Symbol;Acc:MGI:1919311]
ENSMUSG000000 30879	Mrpl17	1790.02 46	1.837 3	-0.8776	0.3095	- 2.835 8	0.0045 71	0.0785 79	mitochondrial ribosomal protein L17 [Source:MGI Symbol;Acc:MGI:1351608]
ENSMUSG000000 49191	Rgag4	180.797 2	0.590 4	0.7601	0.2681	2.835 1	0.0045 81	0.0785 79	retrotransposon gag domain containing 4 [Source:MGI Symbol;Acc:MGI:3045324]
ENSMUSG000000 60073	Psma3	5128.37 66	1.497 8	-0.5828	0.2056	- 2.834 4	0.0045 91	0.0786 15	proteasome (prosome, macropain) subunit, alpha type 3 [Source:MGI Symbol;Acc:MGI:104883]

ENSMUSG000000 08036	Ap2s1	6361.48 56	1.940 6	-0.9565	0.3376	- 2.833 0	0.0046 11	0.0788 4	adaptor-related protein complex 2, sigma 1 subunit [Source:MGI Symbol;Acc:MGI:2141861]
ENSMUSG000000 31609	Sap30	1671.04 50	1.615 6	-0.6921	0.2444	- 2.831 2	0.0046 37	0.0788 94	sin3 associated polypeptide [Source:MGI Symbol;Acc:MGI:1929129]
ENSMUSG000000 58833	2810428I15 Rik	1585.71 09	2.013 9	-1.0100	0.3567	- 2.831 5	0.0046 33	0.0788 94	RIKEN cDNA 2810428I15 gene [Source:MGI Symbol;Acc:MGI:1913712]
ENSMUSG000000 73676	Hspe1	5534.14 89	1.798 2	-0.8466	0.2990	- 2.831 7	0.0046 3	0.0788 94	heat shock protein 1 (chaperonin 10) [Source:MGI Symbol;Acc:MGI:104680]
ENSMUSG000000 59534	Uqcr10	3247.03 20	1.878 0	-0.9092	0.3212	- 2.830 6	0.0046 46	0.0789 09	ubiquinol-cytochrome c reductase, complex III subunit X [Source:MGI Symbol;Acc:MGI:1913402]
ENSMUSG000000 07050	Lsm2	2127.67 81	1.771 7	-0.8251	0.2917	- 2.828 5	0.0046 76	0.0791 66	LSM2 homolog, U6 small nuclear RNA associated (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:90676]

ENSMUSG000000 08193	Spib	5150.14 74	0.465 5	1.1031	0.3899	2.828 9	0.0046 71	0.0791 66	Spi-B transcription factor (Spi-1/PU.1 related) [Source:MGI Symbol;Acc:MGI:892986]
ENSMUSG000000 02804	Nudt14	383.152 9	1.733 4	-0.7936	0.2807	- 2.827 4	0.0046 93	0.0793 17	nudix (nucleoside diphosphate linked moiety X)-type motif 14 [Source:MGI Symbol;Acc:MGI:1913424]
ENSMUSG000000 18377	Vezf1	1859.04 26	0.719 5	0.4750	0.1681	2.824 7	0.0047 32	0.0796 48	vascular endothelial zinc finger 1 [Source:MGI Symbol;Acc:MGI:1313291]
ENSMUSG000000 45438	Cox19	841.290 0	1.604 7	-0.6823	0.2416	- 2.824 5	0.0047 35	0.0796 48	cytochrome c oxidase assembly protein 19 [Source:MGI Symbol;Acc:MGI:1915283]
ENSMUSG000000 70780	Rbm47	375.189 7	1.605 6	-0.6831	0.2418	- 2.825 4	0.0047 23	0.0796 48	RNA binding motif protein 47 [Source:MGI Symbol;Acc:MGI:2384294]
ENSMUSG000000 05465	Il27ra	451.943 5	0.552 3	0.8564	0.3034	2.822 8	0.0047 6	0.0796 9	interleukin 27 receptor, alpha [Source:MGI Symbol;Acc:MGI:1355318]

ENSMUSG000000 38347	Tcte2	112.995 6	1.898 8	-0.9251	0.3277	- 2.823 2	0.0047 55	0.0796 9	t-complex-associated testis expressed 2 [Source:MGI Symbol;Acc:MGI:98641]
ENSMUSG000000 60288	Ppih	1919.32 26	1.689 2	-0.7563	0.2679	- 2.822 9	0.0047 59	0.0796 9	peptidyl prolyl isomerase H [Source:MGI Symbol;Acc:MGI:106499]
ENSMUSG000000 18750	Zbtb4	440.600 9	0.536 1	0.8994	0.3188	2.821 2	0.0047 84	0.0798 86	zinc finger and BTB domain containing 4 [Source:MGI Symbol;Acc:MGI:1922830]
ENSMUSG000000 35547	Capn5	380.907 4	0.702 2	0.5100	0.1808	2.820 7	0.0047 92	0.0798 86	calpain 5 [Source:MGI Symbol;Acc:MGI:1100859]
ENSMUSG000000 39745	Htatip2	467.745 2	1.455 8	-0.5418	0.1921	- 2.820 5	0.0047 95	0.0798 86	HIV-1 tat interactive protein 2, homolog (human) [Source:MGI Symbol;Acc:MGI:1859271]
ENSMUSG000000 29651	Mtus2	136.863 9	1.735 1	-0.7950	0.2820	- 2.819 5	0.0048 1	0.0800 1	microtubule associated tumor suppressor candidate 2 [Source:MGI Symbol;Acc:MGI:1915388]
ENSMUSG000000 45598	Zfp553	464.636 1	0.677 9	0.5609	0.1990	2.818 3	0.0048 27	0.0801 65	zinc finger protein 553 [Source:MGI Symbol;Acc:MGI:2384725]

ENSMUSG000000 21497	Txndc15	1005.43 23	1.411 4	-0.4971	0.1764	- 2.817 5	0.0048 4	0.0802 41	thioredoxin domain containing 15 [Source:MGI Symbol;Acc:MGI:1916922]
ENSMUSG000000 22604	Cep97	385.426 7	0.682 0	0.5522	0.1961	2.816 2	0.0048 59	0.0804 38	centrosomal protein 97 [Source:MGI Symbol;Acc:MGI:1921451]
ENSMUSG000000 16756	Cmah	1636.46 58	0.568 2	0.8154	0.2898	2.813 4	0.0049 02	0.0805 27	cytidine monophospho-N- acetylneuraminic acid hydroxylase [Source:MGI Symbol;Acc:MGI:103227]
ENSMUSG000000 21018	Polr2h	1177.53 12	1.874 9	-0.9068	0.3223	- 2.813 3	0.0049 03	0.0805 27	polymerase (RNA) II (DNA directed) polypeptide H [Source:MGI Symbol;Acc:MGI:2384309]
ENSMUSG000000 30029	Lrig1	125.054 1	0.551 3	0.8591	0.3052	2.814 7	0.0048 83	0.0805 27	leucine-rich repeats and immunoglobulin-like domains 1 [Source:MGI Symbol;Acc:MGI:107935]
ENSMUSG000000 32010	Usp2	178.519 1	1.667 9	-0.7380	0.2623	- 2.814 0	0.0048 92	0.0805 27	ubiquitin specific peptidase 2 [Source:MGI Symbol;Acc:MGI:1858178]

ENSMUSG000000 50708	Ftl1	20391.4 112	1.395 4	-0.4806	0.1707	- 2.815 1	0.0048 75	0.0805 27	ferritin light chain 1 [Source:MGI Symbol;Acc:MGI:95589]
ENSMUSG000000 73240	2410017P09 Rik	221.810 4	1.829 6	-0.8715	0.3099	- 2.812 6	0.0049 14	0.0805 85	NA
ENSMUSG000000 21606	Ndufs6	2374.20 86	2.030 3	-1.0217	0.3634	- 2.811 3	0.0049 35	0.0807 35	NADH dehydrogenase (ubiquinone) Fe-S protein 6 [Source:MGI Symbol;Acc:MGI:107932]
ENSMUSG000000 35246	Pcyt1b	183.565 2	0.631 2	0.6639	0.2362	2.811 0	0.0049 39	0.0807 35	phosphate cytidyltransferase 1, choline, beta isoform [Source:MGI Symbol;Acc:MGI:2147987]
ENSMUSG000000 20277	Pfkl	2729.35 88	1.526 3	-0.6100	0.2173	- 2.807 5	0.0049 93	0.0811 18	phosphofructokinase, liver, B- type [Source:MGI Symbol;Acc:MGI:97547]
ENSMUSG000000 31818	Cox4i1	15123.3 060	1.879 7	-0.9105	0.3243	- 2.807 9	0.0049 87	0.0811 18	cytochrome c oxidase subunit IV isoform 1 [Source:MGI Symbol;Acc:MGI:88473]
ENSMUSG000000 37416	Dmxl1	990.806 4	0.561 3	0.8332	0.2968	2.807 5	0.0049 94	0.0811 18	Dmx-like 1 [Source:MGI Symbol;Acc:MGI:2443926]

ENSMUSG000000 71014	Ndufb6	921.665 8	1.689 5	-0.7566	0.2694	- 2.808 9	0.0049 71	0.0811 18	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 6 [Source:MGI Symbol;Acc:MGI:2684983]
ENSMUSG000000 20163	Uqcr11	3498.90 96	1.944 7	-0.9595	0.3421	- 2.805 2	0.0050 29	0.0815 7	ubiquinol-cytochrome c reductase, complex III subunit XI [Source:MGI Symbol;Acc:MGI:1913844]
ENSMUSG000000 27784	Ppm1l	320.598 6	0.622 3	0.6843	0.2440	2.804 5	0.0050 39	0.0816 06	protein phosphatase 1 (formerly 2C)-like [Source:MGI Symbol;Acc:MGI:2139740]
ENSMUSG000000 78348	Sf3b5	3256.28 05	1.957 6	-0.9691	0.3458	- 2.802 2	0.0050 75	0.0820 57	splicing factor 3b, subunit 5 [Source:MGI Symbol;Acc:MGI:1913375]
ENSMUSG000000 31698	Mylk3	472.828 2	0.633 0	0.6598	0.2355	2.801 6	0.0050 86	0.0821 01	myosin light chain kinase 3 [Source:MGI Symbol;Acc:MGI:2443063]
ENSMUSG000000 24414	Mrpl27	1039.30 76	1.754 4	-0.8110	0.2897	- 2.799 0	0.0051 26	0.0824 94	mitochondrial ribosomal protein L27 [Source:MGI Symbol;Acc:MGI:2137224]

ENSMUSG000000 41774	Ydjc	373.634 5	1.865 1	-0.8993	0.3212	- 2.799 3	0.0051 21	0.0824 94	YdjC homolog (bacterial) [Source:MGI Symbol;Acc:MGI:1916351]
ENSMUSG000000 91625	Lsm5	1781.66 29	1.952 2	-0.9651	0.3449	- 2.798 2	0.0051 39	0.0825 8	LSM5 homolog, U6 small nuclear RNA associated (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1913623]
ENSMUSG000000 57572	Zbtb8os	988.884 3	1.493 7	-0.5789	0.2071	- 2.795 6	0.0051 81	0.0828 74	zinc finger and BTB domain containing 8 opposite strand [Source:MGI Symbol;Acc:MGI:1914356]
ENSMUSG000000 58624	Gda	4506.28 49	1.557 5	-0.6392	0.2286	- 2.795 7	0.0051 79	0.0828 74	guanine deaminase [Source:MGI Symbol;Acc:MGI:95678]
ENSMUSG000000 71414	Gm6736	245.993 6	1.895 2	-0.9224	0.3299	- 2.795 9	0.0051 75	0.0828 74	predicted gene 6736 [Source:MGI Symbol;Acc:MGI:3643048]
ENSMUSG000000 35891	Cerk	3086.23 68	0.645 0	0.6327	0.2264	2.794 2	0.0052 03	0.0829 73	ceramide kinase [Source:MGI Symbol;Acc:MGI:2386052]
ENSMUSG000000 50271	D8Ertd82e	138.076 2	0.471 2	1.0855	0.3884	2.794 6	0.0051 96	0.0829 73	DNA segment, Chr 8, ERATO Doi 82, expressed [Source:MGI Symbol;Acc:MGI:1196223]

ENSMUSG000000 44348	Mcart6	276.427 7	0.619 9	0.6900	0.2470	2.793 3	0.0052 18	0.0830 79	solute carrier family 25, member 53 [Source:MGI Symbol;Acc:MGI:1914312]
ENSMUSG000000 24516	Sec11c	6539.34 39	1.681 9	-0.7501	0.2687	- 2.791 7	0.0052 43	0.0832 3	SEC11 homolog C (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1913536]
ENSMUSG000000 48277	Syngr2	5053.70 84	1.587 1	-0.6664	0.2387	- 2.791 7	0.0052 43	0.0832 3	synaptogyrin 2 [Source:MGI Symbol;Acc:MGI:1328324]
ENSMUSG000000 02778	Kdelr1	3637.53 29	1.387 3	-0.4723	0.1693	- 2.789 6	0.0052 78	0.0836 51	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum protein retention receptor 1 [Source:MGI Symbol;Acc:MGI:1915387]
ENSMUSG000000 20657	Dnajc27	301.445 4	0.687 9	0.5398	0.1936	2.788 1	0.0053 02	0.0837 86	DnaJ (Hsp40) homolog, subfamily C, member 27 [Source:MGI Symbol;Acc:MGI:2443036]
ENSMUSG000000 40270	Bach2	1035.72 37	0.465 2	1.1041	0.3960	2.788 1	0.0053 02	0.0837 86	BTB and CNC homology 2 [Source:MGI Symbol;Acc:MGI:894679]

ENSMUSG000000 11832	Evi5l	215.455 4	0.657 1	0.6058	0.2174	2.787 1	0.0053 19	0.0839 15	ecotropic viral integration site 5 like [Source:MGI Symbol;Acc:MGI:2442167]
ENSMUSG000000 35385	Ccl2	104.478 0	1.912 5	-0.9355	0.3357	- 2.786 3	0.0053 32	0.0839 94	chemokine (C-C motif) ligand 2 [Source:MGI Symbol;Acc:MGI:98259]
ENSMUSG000000 25130	P4hb	17791.0 830	1.680 0	-0.7484	0.2687	- 2.785 7	0.0053 41	0.0840 17	prolyl 4-hydroxylase, beta polypeptide [Source:MGI Symbol;Acc:MGI:97464]
ENSMUSG000000 23044	Csad	284.124 4	0.705 4	0.5036	0.1808	2.784 8	0.0053 55	0.0841 12	cysteine sulfinic acid decarboxylase [Source:MGI Symbol;Acc:MGI:2180098]
ENSMUSG000000 08845	Cd163	670.524 9	0.611 1	0.7105	0.2553	2.783 2	0.0053 83	0.0843 74	CD163 antigen [Source:MGI Symbol;Acc:MGI:2135946]
ENSMUSG000000 28648	Ndufs5	1493.18 99	1.970 5	-0.9785	0.3518	- 2.781 9	0.0054 04	0.0843 74	NADH dehydrogenase (ubiquinone) Fe-S protein 5 [Source:MGI Symbol;Acc:MGI:1890889]

ENSMUSG000000 59495	Arhgef12	496.193 6	0.645 5	0.6315	0.2269	2.782 8	0.0053 9	0.0843 74	Rho guanine nucleotide exchange factor (GEF) 12 [Source:MGI Symbol;Acc:MGI:1916882]
ENSMUSG000000 71451	Psmg4	900.659 8	1.859 4	-0.8948	0.3217	- 2.782 0	0.0054 02	0.0843 74	proteasome (prosome, macropain) assembly chaperone 4 [Source:MGI Symbol;Acc:MGI:1916916]
ENSMUSG000000 27997	Casp6	786.726 7	1.505 6	-0.5903	0.2123	- 2.780 7	0.0054 24	0.0845 48	caspase 6 [Source:MGI Symbol;Acc:MGI:1312921]
ENSMUSG000000 19494	Cops6	2683.28 12	1.432 6	-0.5187	0.1866	- 2.779 7	0.0054 42	0.0847 04	COP9 (constitutive photomorphogenic) homolog, subunit 6 (Arabidopsis thaliana) [Source:MGI Symbol;Acc:MGI:1349439]
ENSMUSG000000 17716	Birc5	5694.61 50	1.834 5	-0.8754	0.3152	- 2.777 0	0.0054 86	0.0847 67	baculoviral IAP repeat-containing 5 [Source:MGI Symbol;Acc:MGI:1203517]

ENSMUSG000000 32215	Rsl24d1	2398.15 16	1.778 1	-0.8304	0.2989	- 2.778 2	0.0054 66	0.0847 67	ribosomal L24 domain containing 1 [Source:MGI Symbol;Acc:MGI:2681840]
ENSMUSG000000 36372	1810006K21 Rik	2645.15 02	1.800 9	-0.8487	0.3056	- 2.777 3	0.0054 82	0.0847 67	transmembrane protein 258 [Source:MGI Symbol;Acc:MGI:1916288]
ENSMUSG000000 40229	Gpr34	107.905 2	0.600 2	0.7364	0.2650	2.778 5	0.0054 61	0.0847 67	G protein-coupled receptor 34 [Source:MGI Symbol;Acc:MGI:1346334]
ENSMUSG000000 42810	Krba1	137.403 3	0.594 6	0.7500	0.2701	2.776 5	0.0054 95	0.0847 67	KRAB-A domain containing 1 [Source:MGI Symbol;Acc:MGI:1925077]
ENSMUSG000000 78812	Eif5a	38838.9 446	1.657 5	-0.7290	0.2625	- 2.776 8	0.0054 89	0.0847 67	eukaryotic translation initiation factor 5A [Source:MGI Symbol;Acc:MGI:106248]
ENSMUSG000000 17417	Plxdc1	587.899 3	0.636 5	0.6518	0.2349	2.774 5	0.0055 28	0.0849 96	plexin domain containing 1 [Source:MGI Symbol;Acc:MGI:1919574]
ENSMUSG000000 29313	Aff1	1885.78 86	0.691 5	0.5321	0.1918	2.774 2	0.0055 34	0.0849 96	AF4/FMR2 family, member 1 [Source:MGI Symbol;Acc:MGI:1100819]

ENSMUSG000000 74364	Ehd2	295.086 1	0.514 3	0.9594	0.3458	2.774 3	0.0055 32	0.0849 96	EH-domain containing 2 [Source:MGI Symbol;Acc:MGI:2154274]
ENSMUSG000000 18923	Med11	1003.41 37	1.625 3	-0.7007	0.2528	- 2.771 5	0.0055 8	0.0852 87	mediator complex subunit 11 [Source:MGI Symbol;Acc:MGI:1913422]
ENSMUSG000000 34744	Nagk	463.628 3	1.431 2	-0.5172	0.1866	- 2.771 6	0.0055 79	0.0852 87	N-acetylglucosamine kinase [Source:MGI Symbol;Acc:MGI:1860418]
ENSMUSG000000 39183	Nubp2	2251.10 11	1.402 5	-0.4880	0.1761	- 2.771 2	0.0055 86	0.0852 87	nucleotide binding protein 2 [Source:MGI Symbol;Acc:MGI:1347072]
ENSMUSG000000 48058	Ldlrad3	484.099 6	0.623 3	0.6820	0.2460	2.771 9	0.0055 73	0.0852 87	low density lipoprotein receptor class A domain containing 3 [Source:MGI Symbol;Acc:MGI:2138856]
ENSMUSG000000 71653	1810009A15 Rik	1511.92 04	1.603 4	-0.6812	0.2459	- 2.770 3	0.0056 01	0.0854 04	RIKEN cDNA 1810009A15 gene [Source:MGI Symbol;Acc:MGI:1913526]

ENSMUSG000000 27346	Gpcpd1	2545.82 51	0.691 2	0.5329	0.1925	2.768 8	0.0056 26	0.0856 33	glycerophosphocholine phosphodiesterase GDE1 homolog (<i>S. cerevisiae</i>) [Source:MGI Symbol;Acc:MGI:104898]
ENSMUSG000000 50608	Minos1	4561.97 56	1.936 6	-0.9535	0.3444	- 2.768 4	0.0056 33	0.0856 33	mitochondrial inner membrane organizing system 1 [Source:MGI Symbol;Acc:MGI:1913628]
ENSMUSG000000 57363	Uxs1	1250.98 86	1.429 3	-0.5153	0.1862	- 2.767 3	0.0056 53	0.0858 14	UDP-glucuronate decarboxylase 1 [Source:MGI Symbol;Acc:MGI:1915133]
ENSMUSG000000 32265	Fam46a	1214.05 42	1.404 9	-0.4905	0.1773	- 2.765 9	0.0056 76	0.0860 39	family with sequence similarity 46, member A [Source:MGI Symbol;Acc:MGI:2670964]
ENSMUSG000000 20843	Timm22	935.713 3	1.511 0	-0.5955	0.2155	- 2.763 5	0.0057 18	0.0861 79	translocase of inner mitochondrial membrane 22 [Source:MGI Symbol;Acc:MGI:1929742]
ENSMUSG000000 29833	Trim24	689.340 0	0.719 2	0.4756	0.1722	2.762 1	0.0057 43	0.0861 79	tripartite motif-containing 24 [Source:MGI Symbol;Acc:MGI:109275]

ENSMUSG000000 31068	Glr3	4003.92 98	1.479 6	-0.5652	0.2045	- 2.764 2	0.0057 06	0.0861 79	glutaredoxin 3 [Source:MGI Symbol;Acc:MGI:1353653]
ENSMUSG000000 35215	Lsm7	1454.09 35	1.930 6	-0.9490	0.3435	- 2.762 9	0.0057 29	0.0861 79	LSM7 homolog, U6 small nuclear RNA associated (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1913344]
ENSMUSG000000 44678	Ly6k	253.199 8	2.100 8	-1.0709	0.3877	- 2.762 3	0.0057 4	0.0861 79	lymphocyte antigen 6 complex, locus K [Source:MGI Symbol;Acc:MGI:1923736]
ENSMUSG000000 46985	Tapt1	3001.78 67	0.707 1	0.5000	0.1809	2.763 8	0.0057 12	0.0861 79	transmembrane anterior posterior transformation 1 [Source:MGI Symbol;Acc:MGI:2683537]
ENSMUSG000000 66357	Wdr6	923.669 3	0.549 0	0.8652	0.3131	2.763 1	0.0057 26	0.0861 79	WD repeat domain 6 [Source:MGI Symbol;Acc:MGI:1930140]
ENSMUSG000000 13701	Timm23	3647.09 24	1.510 3	-0.5949	0.2156	- 2.758 9	0.0058	0.0866 57	translocase of inner mitochondrial membrane 23 [Source:MGI Symbol;Acc:MGI:1858317]

ENSMUSG000000 19797	1700021F05 Rik	557.463 4	1.686 8	-0.7543	0.2734	- 2.759 2	0.0057 95	0.0866 57	RIKEN cDNA 1700021F05 gene [Source:MGI Symbol;Acc:MGI:1915101]
ENSMUSG000000 55485	9830001H06 Rik	294.095 7	0.704 9	0.5046	0.1829	2.759 1	0.0057 96	0.0866 57	suppressor of glucose, autophagy associated 1 [Source:MGI Symbol;Acc:MGI:2444575]
ENSMUSG000000 18286	Psmb6	4459.49 64	1.749 7	-0.8071	0.2930	- 2.754 1	0.0058 85	0.0873 74	proteasome (prosome, macropain) subunit, beta type 6 [Source:MGI Symbol;Acc:MGI:104880]
ENSMUSG000000 22544	Fam86	419.624 8	1.409 3	-0.4950	0.1798	- 2.753 8	0.0058 91	0.0873 74	eukaryotic elongation factor 2 lysine methyltransferase [Source:MGI Symbol;Acc:MGI:1917761]
ENSMUSG000000 22912	Pros1	516.884 2	2.297 5	-1.2001	0.4358	- 2.753 4	0.0058 98	0.0873 74	protein S (alpha) [Source:MGI Symbol;Acc:MGI:1095733]
ENSMUSG000000 31388	Naa10	1438.78 16	1.904 1	-0.9291	0.3372	- 2.755 2	0.0058 65	0.0873 74	N(alpha)-acetyltransferase 10, NatA catalytic subunit [Source:MGI Symbol;Acc:MGI:1915255]

ENSMUSG000000 35674	Ndufa3	3147.61 73	1.997 0	-0.9978	0.3622	- 2.754 6	0.0058 77	0.0873 74	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 3 [Source:MGI Symbol;Acc:MGI:1913341]
ENSMUSG000000 55839	Tceb2	4073.30 58	1.834 9	-0.8757	0.3178	- 2.755 7	0.0058 57	0.0873 74	transcription elongation factor B (SIII), polypeptide 2 [Source:MGI Symbol;Acc:MGI:1914923]
ENSMUSG000000 01054	Rmnd5b	1418.53 50	0.735 3	0.4436	0.1614	2.749 4	0.0059 71	0.0875 68	required for meiotic nuclear division 5 homolog B (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1913339]
ENSMUSG000000 03062	Stard3nl	951.502 5	1.433 7	-0.5198	0.1890	- 2.750 0	0.0059 59	0.0875 68	STARD3 N-terminal like [Source:MGI Symbol;Acc:MGI:1923455]
ENSMUSG000000 06818	Sod2	2177.92 34	1.501 6	-0.5865	0.2138	- 2.742 8	0.0060 93	0.0875 68	superoxide dismutase 2, mitochondrial [Source:MGI Symbol;Acc:MGI:98352]

ENSMUSG000000 09739	Pou6f1	201.240 6	0.560 2	0.8359	0.3051	2.739 6	0.0061 51	0.0875 68	POU domain, class 6, transcription factor 1 [Source:MGI Symbol;Acc:MGI:102935]
ENSMUSG000000 13707	Tnfaip8l2	2319.77 77	1.550 2	-0.6324	0.2306	- 2.742 6	0.0060 95	0.0875 68	tumor necrosis factor, alpha- induced protein 8-like 2 [Source:MGI Symbol;Acc:MGI:1917019]
ENSMUSG000000 19842	Traf3ip2	166.260 9	0.497 7	1.0065	0.3670	2.742 4	0.0060 99	0.0875 68	TRAF3 interacting protein 2 [Source:MGI Symbol;Acc:MGI:2143599]
ENSMUSG000000 20921	Tmem101	648.389 9	1.587 4	-0.6667	0.2434	- 2.739 4	0.0061 55	0.0875 68	transmembrane protein 101 [Source:MGI Symbol;Acc:MGI:1923797]
ENSMUSG000000 22913	Psmg1	1018.76 69	1.610 2	-0.6873	0.2508	- 2.740 2	0.0061 4	0.0875 68	proteasome (prosome, macropain) assembly chaperone 1 [Source:MGI Symbol;Acc:MGI:1860263]
ENSMUSG000000 24074	Crim1	195.075 1	0.535 6	0.9007	0.3286	2.740 7	0.0061 31	0.0875 68	cysteine rich transmembrane BMP regulator 1 (chordin like) [Source:MGI Symbol;Acc:MGI:1354756]

ENSMUSG000000 25132	Arhgdia	17078.7 475	1.365 8	-0.4498	0.1639	- 2.743 5	0.0060 79	0.0875 68	Rho GDP dissociation inhibitor (GDI) alpha [Source:MGI Symbol;Acc:MGI:2178103]
ENSMUSG000000 25940	Tmem70	908.394 8	1.386 3	-0.4712	0.1715	- 2.748 1	0.0059 95	0.0875 68	transmembrane protein 70 [Source:MGI Symbol;Acc:MGI:1915068]
ENSMUSG000000 26939	Tmem141	333.961 0	1.701 8	-0.7670	0.2794	- 2.745 0	0.0060 51	0.0875 68	transmembrane protein 141 [Source:MGI Symbol;Acc:MGI:1098773]
ENSMUSG000000 30591	Psm8	5648.76 06	1.545 7	-0.6282	0.2288	- 2.745 2	0.0060 48	0.0875 68	proteasome (prosome, macropain) 26S subunit, non- ATPase, 8 [Source:MGI Symbol;Acc:MGI:1888669]
ENSMUSG000000 32370	Lactb	1091.13 23	1.391 2	-0.4763	0.1732	- 2.749 2	0.0059 74	0.0875 68	lactamase, beta [Source:MGI Symbol;Acc:MGI:1933395]
ENSMUSG000000 33295	Ptprf	137.717 3	0.628 8	0.6692	0.2433	2.750 6	0.0059 49	0.0875 68	protein tyrosine phosphatase, receptor type, F [Source:MGI Symbol;Acc:MGI:102695]

ENSMUSG000000 33916	Chmp2a	4431.55 91	1.639 6	-0.7133	0.2598	- 2.745 3	0.0060 46	0.0875 68	charged multivesicular body protein 2A [Source:MGI Symbol;Acc:MGI:1916203]
ENSMUSG000000 36561	Ppp6r2	636.588 8	0.635 2	0.6546	0.2385	2.745 3	0.0060 46	0.0875 68	protein phosphatase 6, regulatory subunit 2 [Source:MGI Symbol;Acc:MGI:1918724]
ENSMUSG000000 36661	Dennd3	1016.77 40	0.688 1	0.5394	0.1966	2.743 7	0.0060 76	0.0875 68	DENN/MADD domain containing 3 [Source:MGI Symbol;Acc:MGI:2146009]
ENSMUSG000000 41857	Oosp1	248.103 9	1.729 2	-0.7901	0.2878	- 2.744 8	0.0060 54	0.0875 68	oocyte secreted protein 1 [Source:MGI Symbol;Acc:MGI:2149290]
ENSMUSG000000 42312	S100a13	2129.69 54	1.921 9	-0.9426	0.3439	- 2.740 9	0.0061 26	0.0875 68	S100 calcium binding protein A13 [Source:MGI Symbol;Acc:MGI:109581]
ENSMUSG000000 45827	Serpinb9	226.386 5	0.668 7	0.5807	0.2112	2.749 2	0.0059 74	0.0875 68	serine (or cysteine) peptidase inhibitor, clade B, member 9 [Source:MGI Symbol;Acc:MGI:106603]

ENSMUSG000000 47880	Cxcr5	585.771 0	0.465 9	1.1018	0.4019	2.741 4	0.0061 19	0.0875 68	chemokine (C-X-C motif) receptor 5 [Source:MGI Symbol;Acc:MGI:103567]
ENSMUSG000000 50552	0910001L09 Rik	5798.28 94	2.003 9	-1.0028	0.3655	- 2.743 4	0.0060 8	0.0875 68	late endosomal/lysosomal adaptor, MAPK and MTOR activator 4 [Source:MGI Symbol;Acc:MGI:1913346]
ENSMUSG000000 54836	2610002I17 Rik	348.501 8	1.602 7	-0.6805	0.2479	- 2.745 5	0.0060 42	0.0875 68	elongator acetyltransferase complex subunit 6 [Source:MGI Symbol;Acc:MGI:1919349]
ENSMUSG000000 57286	St6galnac2	594.619 2	0.707 1	0.5001	0.1822	2.745 5	0.0060 42	0.0875 68	ST6 (alpha-N-acetyl- neuraminyl-2,3-beta- galactosyl-1,3)-N- acetylgalactosaminide alpha- 2,6-sialyltransferase 2 [Source:MGI Symbol;Acc:MGI:107553]
ENSMUSG000000 70808	Gltscr1	397.884 0	0.497 2	1.0081	0.3677	2.741 9	0.0061 09	0.0875 68	glioma tumor suppressor candidate region gene 1 [Source:MGI Symbol;Acc:MGI:2154263]

ENSMUSG000000 79419	Ms4a6c	7344.22 87	1.873 9	-0.9061	0.3295	- 2.749 9	0.0059 61	0.0875 68	membrane-spanning 4- domains, subfamily A, member 6C [Source:MGI Symbol;Acc:MGI:2385644]
ENSMUSG000000 90841	Myl6	22504.2 820	1.981 9	-0.9869	0.3591	- 2.748 1	0.0059 94	0.0875 68	myosin, light polypeptide 6, alkali, smooth muscle and non-muscle [Source:MGI Symbol;Acc:MGI:109318]
ENSMUSG000000 91537	Ccdc72	4842.93 12	1.734 7	-0.7947	0.2895	- 2.745 2	0.0060 47	0.0875 68	translational machinery associated 7 homolog (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1913417]
ENSMUSG000000 27131	Tmem85	786.349 5	1.403 4	-0.4890	0.1786	- 2.737 1	0.0061 98	0.0876 37	ER membrane protein complex subunit 4 [Source:MGI Symbol;Acc:MGI:1915282]
ENSMUSG000000 38387	Rras	433.860 9	1.380 9	-0.4656	0.1701	- 2.737 1	0.0061 98	0.0876 37	Harvey rat sarcoma oncogene, subgroup R [Source:MGI Symbol;Acc:MGI:98179]

ENSMUSG000000 38578	Susd1	1597.84 02	0.604 4	0.7264	0.2654	2.736 9	0.0062 02	0.0876 37	sushi domain containing 1 [Source:MGI Symbol;Acc:MGI:3651543]
ENSMUSG000000 42745	Id1	675.425 4	1.861 4	-0.8964	0.3275	- 2.736 9	0.0062 01	0.0876 37	inhibitor of DNA binding 1 [Source:MGI Symbol;Acc:MGI:96396]
ENSMUSG000000 43923	Ccdc84	169.950 3	0.601 1	0.7343	0.2681	2.738 7	0.0061 68	0.0876 37	coiled-coil domain containing 84 [Source:MGI Symbol;Acc:MGI:2685960]
ENSMUSG000000 38604	Fam65a	1357.38 03	0.704 4	0.5056	0.1847	2.736 5	0.0062 1	0.0876 41	family with sequence similarity 65, member A [Source:MGI Symbol;Acc:MGI:1922937]
ENSMUSG000000 03308	Keap1	1633.42 12	1.340 7	-0.4230	0.1547	- 2.733 2	0.0062 72	0.0876 69	kelch-like ECH-associated protein 1 [Source:MGI Symbol;Acc:MGI:1858732]
ENSMUSG000000 06998	Psm2	6933.98 44	1.322 7	-0.4035	0.1475	- 2.734 8	0.0062 43	0.0876 69	proteasome (prosome, macropain) 26S subunit, non- ATPase, 2 [Source:MGI Symbol;Acc:MGI:1096584]

ENSMUSG000000 16252	Atp5e	7237.11 18	2.075 7	-1.0536	0.3853	- 2.734 8	0.0062 43	0.0876 69	ATP synthase, H+ transporting, mitochondrial F1 complex, epsilon subunit [Source:MGI Symbol;Acc:MGI:1855697]
ENSMUSG000000 19362	D8Erttd738e	3380.07 58	1.661 9	-0.7329	0.2682	- 2.732 8	0.0062 79	0.0876 69	DNA segment, Chr 8, ERATO Doi 738, expressed [Source:MGI Symbol;Acc:MGI:1289231]
ENSMUSG000000 19823	Mical1	1091.11 05	0.543 4	0.8798	0.3218	2.733 9	0.0062 6	0.0876 69	microtubule associated monooxygenase, calponin and LIM domain containing 1 [Source:MGI Symbol;Acc:MGI:2385847]
ENSMUSG000000 29101	Rgs12	1068.85 09	0.754 1	0.4072	0.1489	2.734 4	0.0062 49	0.0876 69	regulator of G-protein signaling 12 [Source:MGI Symbol;Acc:MGI:1918979]
ENSMUSG000000 31584	Gsr	19393.4 095	1.387 2	-0.4722	0.1726	- 2.735 2	0.0062 34	0.0876 69	glutathione reductase [Source:MGI Symbol;Acc:MGI:95804]
ENSMUSG000000 78695	Cisd3	277.473 1	1.643 7	-0.7170	0.2623	- 2.733 3	0.0062 69	0.0876 69	CDGSH iron sulfur domain 3 [Source:MGI Symbol;Acc:MGI:101788]

ENSMUSG000000 28645	Slc2a1	881.611 4	1.715 1	-0.7783	0.2850	- 2.731 0	0.0063 14	0.0880 3	solute carrier family 2 (facilitated glucose transporter), member 1 [Source:MGI Symbol;Acc:MGI:95755]
ENSMUSG000000 29490	Mfsd7a	268.313 0	1.631 2	-0.7059	0.2587	- 2.729 1	0.0063 51	0.0884 28	major facilitator superfamily domain containing 7A [Source:MGI Symbol;Acc:MGI:2442629]
ENSMUSG000000 90258	Churc1	299.019 5	2.035 8	-1.0256	0.3760	- 2.727 8	0.0063 76	0.0886 59	churchill domain containing 1 [Source:MGI Symbol;Acc:MGI:1923684]
ENSMUSG000000 03072	Atp5d	5444.23 66	1.737 5	-0.7970	0.2924	- 2.725 9	0.0064 13	0.0888 66	ATP synthase, H+ transporting, mitochondrial F1 complex, delta subunit [Source:MGI Symbol;Acc:MGI:1913293]
ENSMUSG000000 05397	Nid1	140.098 9	0.468 8	1.0929	0.4012	2.723 9	0.0064 51	0.0888 66	nidogen 1 [Source:MGI Symbol;Acc:MGI:97342]
ENSMUSG000000 25521	Tmem192	879.441 2	1.558 6	-0.6402	0.2349	- 2.726 0	0.0064 1	0.0888 66	transmembrane protein 192 [Source:MGI Symbol;Acc:MGI:1920317]

ENSMUSG000000 27459	Fam110a	764.107 7	1.735 8	-0.7956	0.2921	- 2.723 2	0.0064 66	0.0888 66	family with sequence similarity 110, member A [Source:MGI Symbol;Acc:MGI:1921097]
ENSMUSG000000 27642	Rpn2	9177.85 40	1.453 1	-0.5391	0.1980	- 2.723 1	0.0064 67	0.0888 66	ribophorin II [Source:MGI Symbol;Acc:MGI:98085]
ENSMUSG000000 28567	Txndc12	1293.21 68	1.327 4	-0.4086	0.1500	- 2.724 3	0.0064 44	0.0888 66	thioredoxin domain containing 12 (endoplasmic reticulum) [Source:MGI Symbol;Acc:MGI:1913323]
ENSMUSG000000 30284	Creld1	260.831 4	1.407 2	-0.4928	0.1810	- 2.723 2	0.0064 66	0.0888 66	cysteine-rich with EGF-like domains 1 [Source:MGI Symbol;Acc:MGI:2152539]
ENSMUSG000000 30577	Cd22	2633.11 63	0.447 3	1.1607	0.4262	2.723 1	0.0064 67	0.0888 66	CD22 antigen [Source:MGI Symbol;Acc:MGI:88322]
ENSMUSG000000 58443	Rpl10-ps3	455.180 4	1.916 6	-0.9385	0.3447	- 2.723 1	0.0064 67	0.0888 66	ribosomal protein L10, pseudogene 3 [Source:MGI Symbol;Acc:MGI:3704336]

ENSMUSG000000 28644	Ermap	3432.62 82	0.690 6	0.5341	0.1963	2.721 2	0.0065 04	0.0892 49	erythroblast membrane-associated protein [Source:MGI Symbol;Acc:MGI:1349816]
ENSMUSG000000 21270	Hsp90aa1	19350.1 054	1.313 4	-0.3933	0.1446	- 2.720 0	0.0065 28	0.0893 47	heat shock protein 90, alpha (cytosolic), class A member 1 [Source:MGI Symbol;Acc:MGI:96250]
ENSMUSG000000 21773	Comtd1	133.730 5	2.065 2	-1.0463	0.3846	- 2.720 3	0.0065 23	0.0893 47	catechol-O-methyltransferase domain containing 1 [Source:MGI Symbol;Acc:MGI:1916406]
ENSMUSG000000 00171	Sdhd	5550.96 60	1.533 3	-0.6167	0.2269	- 2.718 4	0.0065 6	0.0894 78	succinate dehydrogenase complex, subunit D, integral membrane protein [Source:MGI Symbol;Acc:MGI:1914175]
ENSMUSG000000 34345	Gtf2h5	1765.06 00	1.766 0	-0.8205	0.3018	- 2.718 2	0.0065 63	0.0894 78	general transcription factor IIH, polypeptide 5 [Source:MGI Symbol;Acc:MGI:107227]

ENSMUSG000000 63605	Ccdc102a	218.892 7	1.475 9	-0.5616	0.2066	- 2.718 2	0.0065 63	0.0894 78	coiled-coil domain containing 102A [Source:MGI Symbol;Acc:MGI:2686927]
ENSMUSG000000 08200	Fnbp4	2286.50 69	0.722 5	0.4690	0.1727	2.716 3	0.0066 02	0.0898 31	formin binding protein 4 [Source:MGI Symbol;Acc:MGI:1860513]
ENSMUSG000000 37313	Tacc3	4108.08 19	1.383 0	-0.4678	0.1722	- 2.716 0	0.0066 07	0.0898 31	transforming, acidic coiled- coil containing protein 3 [Source:MGI Symbol;Acc:MGI:1341163]
ENSMUSG000000 05873	Reep5	6100.66 77	1.612 4	-0.6892	0.2539	- 2.714 2	0.0066 44	0.0902 23	receptor accessory protein 5 [Source:MGI Symbol;Acc:MGI:1270152]
ENSMUSG000000 00823	Znf512b	421.515 2	0.559 7	0.8374	0.3088	2.712 0	0.0066 88	0.0907 04	zinc finger protein 512B [Source:MGI Symbol;Acc:MGI:2685478]
ENSMUSG000000 37138	Aff3	781.926 8	0.580 8	0.7838	0.2891	2.710 8	0.0067 13	0.0909 17	AF4/FMR2 family, member 3 [Source:MGI Symbol;Acc:MGI:106927]
ENSMUSG000000 00088	Cox5a	1955.37 17	1.520 0	-0.6041	0.2230	- 2.709 1	0.0067 46	0.0911 54	cytochrome c oxidase subunit Va [Source:MGI Symbol;Acc:MGI:88474]

ENSMUSG000000 47557	Lxn	284.128 3	1.428 4	-0.5144	0.1899	- 2.709 1	0.0067 48	0.0911 54	latexin [Source:MGI Symbol;Acc:MGI:107633]
ENSMUSG000000 20328	Nudcd2	1910.26 36	1.524 6	-0.6084	0.2249	- 2.705 1	0.0068 28	0.0921 2	NudC domain containing 2 [Source:MGI Symbol;Acc:MGI:1277103]
ENSMUSG000000 57278	Snrpg	6074.52 98	1.827 4	-0.8698	0.3219	- 2.702 4	0.0068 84	0.0927 62	small nuclear ribonucleoprotein polypeptide G [Source:MGI Symbol;Acc:MGI:1915261]
ENSMUSG000000 69729	Arid1b	1660.12 19	0.675 9	0.5650	0.2092	2.700 8	0.0069 17	0.0930 86	AT rich interactive domain 1B (SWI-like) [Source:MGI Symbol;Acc:MGI:1926129]
ENSMUSG000000 25499	Hras1	1682.27 96	1.736 7	-0.7963	0.2950	- 2.699 4	0.0069 47	0.0933 65	Harvey rat sarcoma virus oncogene [Source:MGI Symbol;Acc:MGI:96224]
ENSMUSG000000 14769	Psmb1	7740.69 88	1.687 7	-0.7550	0.2800	- 2.696 3	0.0070 11	0.0940 44	proteasome (prosome, macropain) subunit, beta type 1 [Source:MGI Symbol;Acc:MGI:104884]

ENSMUSG000000 52738	Suc1g1	2619.46 09	1.400 0	-0.4854	0.1801	- 2.696 1	0.0070 16	0.0940 44	succinate-CoA ligase, GDP-forming, alpha subunit [Source:MGI Symbol;Acc:MGI:1927234]
ENSMUSG000000 44617	Zbtb39	392.145 7	0.708 7	0.4968	0.1843	2.695 5	0.0070 29	0.0941 06	zinc finger and BTB domain containing 39 [Source:MGI Symbol;Acc:MGI:2443316]
ENSMUSG000000 04610	Etfb	5029.92 70	1.803 9	-0.8511	0.3165	- 2.689 0	0.0071 67	0.0943 8	electron transferring flavoprotein, beta polypeptide [Source:MGI Symbol;Acc:MGI:106098]
ENSMUSG000000 19189	Rnf145	2035.63 08	0.745 6	0.4236	0.1574	2.691 5	0.0071 12	0.0943 8	ring finger protein 145 [Source:MGI Symbol;Acc:MGI:1921565]
ENSMUSG000000 19916	P4ha1	1005.71 32	1.635 1	-0.7093	0.2634	- 2.692 5	0.0070 91	0.0943 8	procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha 1 polypeptide [Source:MGI Symbol;Acc:MGI:97463]

ENSMUSG000000 21024	Psma6	6041.38 74	1.630 6	-0.7054	0.2623	- 2.689 4	0.0071 59	0.0943 8	proteasome (prosome, macropain) subunit, alpha type 6 [Source:MGI Symbol;Acc:MGI:1347006]
ENSMUSG000000 22378	Fam49b	13410.4 071	1.351 1	-0.4341	0.1612	- 2.692 2	0.0070 98	0.0943 8	family with sequence similarity 49, member B [Source:MGI Symbol;Acc:MGI:1923520]
ENSMUSG000000 28121	Bcar3	444.017 2	0.541 8	0.8843	0.3283	2.693 8	0.0070 65	0.0943 8	breast cancer anti-estrogen resistance 3 [Source:MGI Symbol;Acc:MGI:1352501]
ENSMUSG000000 29016	Clcn6	371.295 3	0.650 3	0.6208	0.2305	2.693 2	0.0070 76	0.0943 8	chloride channel 6 [Source:MGI Symbol;Acc:MGI:1347049]
ENSMUSG000000 36295	Lrrn3	113.462 9	0.563 3	0.8280	0.3078	2.690 1	0.0071 42	0.0943 8	leucine rich repeat protein 3, neuronal [Source:MGI Symbol;Acc:MGI:106036]
ENSMUSG000000 42148	Cox10	562.508 1	1.411 1	-0.4968	0.1847	- 2.690 2	0.0071 4	0.0943 8	cytochrome c oxidase assembly protein 10 [Source:MGI Symbol;Acc:MGI:1917633]

ENSMUSG000000 59734	Ndufs8	2732.55 57	1.636 0	-0.7102	0.2641	- 2.689 6	0.0071 53	0.0943 8	NADH dehydrogenase (ubiquinone) Fe-S protein 8 [Source:MGI Symbol;Acc:MGI:2385079]
ENSMUSG000000 67995	Gtf2f2	1280.42 00	1.438 5	-0.5246	0.1949	- 2.691 0	0.0071 23	0.0943 8	general transcription factor IIF, polypeptide 2 [Source:MGI Symbol;Acc:MGI:1915955]
ENSMUSG000000 78713	Tomm5	2720.46 51	1.818 9	-0.8630	0.3209	- 2.689 1	0.0071 64	0.0943 8	translocase of outer mitochondrial membrane 5 homolog (yeast) [Source:MGI Symbol;Acc:MGI:1915762]
ENSMUSG000000 90213	Tmem189	1565.02 07	1.448 1	-0.5342	0.1986	- 2.690 4	0.0071 36	0.0943 8	transmembrane protein 189 [Source:MGI Symbol;Acc:MGI:2142624]
ENSMUSG000000 02379	Ndufa11	2146.98 35	1.861 7	-0.8966	0.3338	- 2.686 1	0.0072 29	0.0946 55	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 11 [Source:MGI Symbol;Acc:MGI:1917125]
ENSMUSG000000 15013	Trappc2l	1288.53 70	1.759 5	-0.8151	0.3034	- 2.686 3	0.0072 25	0.0946 55	trafficking protein particle complex 2-like [Source:MGI Symbol;Acc:MGI:1916295]

ENSMUSG000000 38085	4921517L17 Rik	995.573 9	1.742 1	-0.8008	0.2981	- 2.686 1	0.0072 3	0.0946 55	cyclic nucleotide binding domain containing 2 [Source:MGI Symbol;Acc:MGI:1918123]
ENSMUSG000000 41237	Pklr	769.464 4	0.534 7	0.9031	0.3362	2.685 9	0.0072 34	0.0946 55	pyruvate kinase liver and red blood cell [Source:MGI Symbol;Acc:MGI:97604]
ENSMUSG000000 78784	1810022K09 Rik	829.204 2	1.708 3	-0.7726	0.2876	- 2.686 7	0.0072 16	0.0946 55	RIKEN cDNA 1810022K09 gene [Source:MGI Symbol;Acc:MGI:1916376]
ENSMUSG000000 41298	Katnal1	244.803 9	0.719 5	0.4749	0.1768	2.685 2	0.0072 48	0.0947 24	katanin p60 subunit A-like 1 [Source:MGI Symbol;Acc:MGI:2387638]
ENSMUSG000000 19158	Tmem160	1837.07 61	2.019 7	-1.0142	0.3780	- 2.683 0	0.0072 97	0.0947 73	transmembrane protein 160 [Source:MGI Symbol;Acc:MGI:1916344]
ENSMUSG000000 24966	Stip1	5386.27 53	1.279 5	-0.3556	0.1325	- 2.684 0	0.0072 75	0.0947 73	stress-induced phosphoprotein 1 [Source:MGI Symbol;Acc:MGI:109130]
ENSMUSG000000 28639	Ybx1	22572.7 453	1.309 6	-0.3891	0.1450	- 2.683 6	0.0072 82	0.0947 73	Y box protein 1 [Source:MGI Symbol;Acc:MGI:99146]

ENSMUSG000000 29048	Rer1	4174.02 57	1.418 5	-0.5044	0.1880	- 2.683 0	0.0072 96	0.0947 73	RER1 retention in endoplasmic reticulum 1 homolog (<i>S. cerevisiae</i>) [Source:MGI Symbol;Acc:MGI:1915080]
ENSMUSG000000 70733	Fryl	1720.91 89	0.629 4	0.6679	0.2489	2.683 4	0.0072 88	0.0947 73	furry homolog-like (<i>Drosophila</i>) [Source:MGI Symbol;Acc:MGI:1919563]
ENSMUSG000000 26365	Cfh	980.357 0	2.268 1	-1.1815	0.4412	- 2.677 8	0.0074 1	0.0960 04	complement component factor h [Source:MGI Symbol;Acc:MGI:88385]
ENSMUSG000000 42541	Shfm1	9924.71 71	1.841 0	-0.8805	0.3288	- 2.677 8	0.0074 1	0.0960 04	split hand/foot malformation (ectrodactyly) type 1 [Source:MGI Symbol;Acc:MGI:109238]
ENSMUSG000000 06800	Sulf2	713.278 7	0.661 8	0.5954	0.2225	2.676 7	0.0074 36	0.0962 11	sulfatase 2 [Source:MGI Symbol;Acc:MGI:1919293]
ENSMUSG000000 14599	Csf1	228.194 2	0.676 6	0.5637	0.2106	2.676 1	0.0074 48	0.0962 57	colony stimulating factor 1 (macrophage) [Source:MGI Symbol;Acc:MGI:1339753]

ENSMUSG000000 24201	Kdm4b	686.143 4	0.656 1	0.6080	0.2275	2.672 4	0.0075 3	0.0966 66	lysine (K)-specific demethylase 4B [Source:MGI Symbol;Acc:MGI:2442355]
ENSMUSG000000 25085	Ablim1	1300.93 45	0.488 2	1.0345	0.3871	2.672 2	0.0075 36	0.0966 66	actin-binding LIM protein 1 [Source:MGI Symbol;Acc:MGI:1194500]
ENSMUSG000000 29815	2410003K15 Rik	471.178 3	1.691 6	-0.7584	0.2837	- 2.673 0	0.0075 17	0.0966 66	mitochondrial assembly of ribosomal large subunit 1 [Source:MGI Symbol;Acc:MGI:1922843]
ENSMUSG000000 30512	Snrpa1	2518.66 10	1.600 3	-0.6784	0.2538	- 2.672 5	0.0075 29	0.0966 66	small nuclear ribonucleoprotein polypeptide A' [Source:MGI Symbol;Acc:MGI:1916231]
ENSMUSG000000 45409	Trim39	770.706 6	0.730 6	0.4528	0.1694	2.673 6	0.0075 04	0.0966 66	tripartite motif-containing 39 [Source:MGI Symbol;Acc:MGI:1890659]
ENSMUSG000000 50490	Gm8394	402.596 1	1.635 1	-0.7093	0.2653	- 2.674 2	0.0074 92	0.0966 66	predicted gene 8394 [Source:MGI Symbol;Acc:MGI:3647964]
ENSMUSG000000 39105	Atp6v1g1	5798.08 68	1.727 6	-0.7888	0.2953	- 2.671 4	0.0075 54	0.0967 81	ATPase, H ⁺ transporting, lysosomal V1 subunit G1 [Source:MGI Symbol;Acc:MGI:1913540]

ENSMUSG000000 06763	Saal1	817.800 3	1.429 5	-0.5155	0.1932	- 2.668 1	0.0076 28	0.0973 68	serum amyloid A-like 1 [Source:MGI Symbol;Acc:MGI:1926185]
ENSMUSG000000 17002	Slpi	9950.76 86	1.760 7	-0.8162	0.3060	- 2.666 9	0.0076 56	0.0973 68	secretory leukocyte peptidase inhibitor [Source:MGI Symbol;Acc:MGI:109297]
ENSMUSG000000 21190	Lgmn	1796.99 29	1.584 7	-0.6642	0.2489	- 2.668 5	0.0076 19	0.0973 68	legumain [Source:MGI Symbol;Acc:MGI:1330838]
ENSMUSG000000 25780	Itih5	336.817 3	0.702 5	0.5095	0.1910	2.667 0	0.0076 52	0.0973 68	inter-alpha (globulin) inhibitor H5 [Source:MGI Symbol;Acc:MGI:1925751]
ENSMUSG000000 27274	Mkks	625.281 8	1.503 6	-0.5884	0.2205	- 2.668 3	0.0076 24	0.0973 68	McKusick-Kaufman syndrome [Source:MGI Symbol;Acc:MGI:1891836]
ENSMUSG000000 30750	Nsmce1	2054.26 01	1.785 3	-0.8361	0.3135	- 2.667 4	0.0076 44	0.0973 68	non-SMC element 1 homolog (<i>S. cerevisiae</i>) [Source:MGI Symbol;Acc:MGI:1914961]
ENSMUSG000000 01999	Blvra	1265.82 87	1.425 9	-0.5119	0.1920	- 2.666 2	0.0076 72	0.0974 57	biliverdin reductase A [Source:MGI Symbol;Acc:MGI:88170]

ENSMUSG000000 26004	1110028C15 Rik	461.870 5	0.525 7	0.9276	0.3480	2.665 2	0.0076 94	0.0976 11	KAT8 regulatory NSL complex subunit 1-like [Source:MGI Symbol;Acc:MGI:1915941]
ENSMUSG000000 21660	Btf3	17891.9 355	1.759 0	-0.8147	0.3060	- 2.662 6	0.0077 53	0.0980 96	basic transcription factor 3 [Source:MGI Symbol;Acc:MGI:1202875]
ENSMUSG000000 28932	Psmc2	4060.41 96	1.359 1	-0.4427	0.1663	- 2.662 3	0.0077 6	0.0980 96	proteasome (prosome, macropain) 26S subunit, ATPase 2 [Source:MGI Symbol;Acc:MGI:109555]
ENSMUSG000000 64326	Siva1	2184.27 97	1.834 9	-0.8757	0.3289	- 2.662 5	0.0077 56	0.0980 96	SIVA1, apoptosis-inducing factor [Source:MGI Symbol;Acc:MGI:1353606]
ENSMUSG000000 04207	Psap	70277.2 797	1.406 9	-0.4926	0.1851	- 2.660 7	0.0077 97	0.0983 87	prosaposin [Source:MGI Symbol;Acc:MGI:97783]
ENSMUSG000000 30341	Tnfrsf1a	4515.05 41	1.369 9	-0.4541	0.1707	- 2.660 5	0.0078 02	0.0983 87	tumor necrosis factor receptor superfamily, member 1a [Source:MGI Symbol;Acc:MGI:1314884]

ENSMUSG000000 24217	Snrpc	2909.55 77	1.784 3	-0.8354	0.3141	- 2.659 8	0.0078 19	0.0984 77	U1 small nuclear ribonucleoprotein C [Source:MGI Symbol;Acc:MGI:109489]
ENSMUSG000000 38524	Fchsd1	170.388 7	0.575 2	0.7978	0.3000	2.659 2	0.0078 32	0.0985 33	FCH and double SH3 domains 1 [Source:MGI Symbol;Acc:MGI:2441771]
ENSMUSG000000 30706	Mrpl48	1212.65 25	1.604 4	-0.6820	0.2565	- 2.658 3	0.0078 53	0.0986 74	mitochondrial ribosomal protein L48 [Source:MGI Symbol;Acc:MGI:1289321]
ENSMUSG000000 40767	Snrnp25	1312.87 70	1.874 3	-0.9063	0.3411	- 2.657 5	0.0078 73	0.0986 84	small nuclear ribonucleoprotein 25 (U11/U12) [Source:MGI Symbol;Acc:MGI:1925622]
ENSMUSG000000 42207	Kdm5b	897.769 8	0.752 2	0.4109	0.1546	2.657 7	0.0078 67	0.0986 84	lysine (K)-specific demethylase 5B [Source:MGI Symbol;Acc:MGI:1922855]
ENSMUSG000000 27018	Hat1	2956.77 00	1.416 1	-0.5019	0.1890	- 2.655 3	0.0079 23	0.0991 97	histone aminotransferase 1 [Source:MGI Symbol;Acc:MGI:96013]
ENSMUSG000000 39640	Mrpl12	1396.95 37	1.665 1	-0.7356	0.2771	- 2.654 5	0.0079 43	0.0993 22	mitochondrial ribosomal protein L12 [Source:MGI Symbol;Acc:MGI:1926273]

ENSMUSG000000 19179	Mdh2	9224.03 93	1.388 5	-0.4735	0.1785	- 2.653 5	0.0079 67	0.0995	malate dehydrogenase 2, NAD (mitochondrial) [Source:MGI Symbol;Acc:MGI:97050]
ENSMUSG000000 44708	Kcnj10	122.005 7	0.524 2	0.9319	0.3513	2.652 4	0.0079 92	0.0995 76	potassium inwardly- rectifying channel, subfamily J, member 10 [Source:MGI Symbol;Acc:MGI:1194504]
ENSMUSG000000 62585	Cnr2	1688.42 57	0.646 5	0.6294	0.2372	2.652 8	0.0079 83	0.0995 76	cannabinoid receptor 2 (macrophage) [Source:MGI Symbol;Acc:MGI:104650]
ENSMUSG000000 00295	Hddc2	808.463 5	1.752 3	-0.8092	0.3055	- 2.649 2	0.0080 68	0.0996 44	HD domain containing 2 [Source:MGI Symbol;Acc:MGI:1916942]
ENSMUSG000000 11958	Bnip2	3972.40 21	1.303 8	-0.3827	0.1444	- 2.650 3	0.0080 41	0.0996 44	BCL2/adenovirus E1B interacting protein 2 [Source:MGI Symbol;Acc:MGI:109327]

ENSMUSG000000 14846	Tppp3	376.677 1	1.732 4	-0.7928	0.2992	- 2.649 8	0.0080 53	0.0996 44	tubulin polymerization- promoting protein family member 3 [Source:MGI Symbol;Acc:MGI:1915221]
ENSMUSG000000 21699	Pde4d	326.737 7	0.711 6	0.4909	0.1853	2.649 6	0.0080 59	0.0996 44	phosphodiesterase 4D, cAMP specific [Source:MGI Symbol;Acc:MGI:99555]
ENSMUSG000000 22890	Atp5j	4334.31 62	1.428 8	-0.5148	0.1943	- 2.649 0	0.0080 74	0.0996 44	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit F [Source:MGI Symbol;Acc:MGI:107777]
ENSMUSG000000 28447	Dctn3	1655.61 61	1.626 8	-0.7021	0.2649	- 2.650 6	0.0080 35	0.0996 44	dynactin 3 [Source:MGI Symbol;Acc:MGI:1859251]
ENSMUSG000000 32023	4931429I11 Rik	190.417 5	0.452 9	1.1427	0.4310	2.651 2	0.0080 2	0.0996 44	RIKEN cDNA 4931429I11 gene [Source:MGI Symbol;Acc:MGI:1918239]
ENSMUSG000000 38065	2410066E13 Rik	237.691 6	0.537 1	0.8967	0.3384	2.649 7	0.0080 57	0.0996 44	maturin, neural progenitor differentiation regulator homolog (Xenopus) [Source:MGI Symbol;Acc:MGI:1915485]

ENSMUSG000000 06179	Prss16	278.271 0	1.521 1	-0.6051	0.2286	- 2.647 3	0.0081 13	0.0997 91	protease, serine 16 (thymus) [Source:MGI Symbol;Acc:MGI:1859181]
ENSMUSG000000 24747	Aldh1a7	134.408 5	0.548 5	0.8664	0.3273	2.647 1	0.0081 19	0.0997 91	aldehyde dehydrogenase family 1, subfamily A7 [Source:MGI Symbol;Acc:MGI:1347050]
ENSMUSG000000 40658	BC048355	815.328 8	1.900 7	-0.9265	0.3500	- 2.647 3	0.0081 14	0.0997 91	2'-deoxynucleoside 5'- phosphate N-hydrolase 1 [Source:MGI Symbol;Acc:MGI:3039376]
ENSMUSG000000 45411	2410002F23 Rik	819.698 7	0.676 4	0.5640	0.2131	2.646 9	0.0081 24	0.0997 91	RIKEN cDNA 2410002F23 gene [Source:MGI Symbol;Acc:MGI:1914226]