Probe_Set_ID	Gene_Accession	Gene_Symbol	Gene_Description	Start	Stop	transcript_cluster_id	Log FC	p Value
TC0100000001.mm.1	NM_007428	Agt	angiotensinogen (serpin peptidase inhibitor, cl	124556534	124576893	TC0800003171.mm.1	1.6	1.54E-08
TC0100000003.mm.1	NM_016704	C6	complement component 6	4727175	4815456	TC1500000014.mm.1	1.3	7.38E-08
TC0100000008.mm.1	NM_011957	Creb3l1	cAMP responsive element binding protein 3-like	91982328	92024502	TC0200004133.mm.1	1.1	2.97E-07
TC0100000014.mm.1	NM_013462	Adrb3	adrenergic receptor, beta 3	27225776	27229588	TC0800001955.mm.1	1.2	3.41E-07
TC0100000030.mm.1	NM_173866	Gpt2	glutamic pyruvate transaminase (alanine aminot	85492576	85527560	TC0800000991.mm.1	1.0	4.29E-07
TC0100000031.mm.1	NM_016667	Sntb1	syntrophin, basic 1	55638843	55906949	TC1500001544.mm.1	2.0	4.33E-07
TC0100000034.mm.1	NM_001033369	Acvr1c	activin A receptor, type IC	58267453	58357895	TC0200003576.mm.1	1.7	7.92E-07
TC0100000037.mm.1	ENSMUST00000160126	Gm454	predicted gene 454	138203609	138207308	TC0500003476.mm.1	1.4	8.91E-07
TC0100000038.mm.1	NM_023850	Chst1	carbohydrate (keratan sulfate Gal-6) sulfotrans	92599707	92615252	TC0200001441.mm.1	1.5	1.27E-06
TC0100000039.mm.1	NM_011977	Slc27a1	solute carrier family 27 (fatty acid transporte	71568927	71586708	TC0800000796.mm.1	1.3	1.63E-06
TC0100000040.mm.1	NM_001008424	Cdsn	corneodesmosin	35552128	35557180	TC1700000694.mm.1	1.4	1.69E-06
TC0100000054.mm.1	NM_019516	Lgals12	lectin, galactose binding, soluble 12	7596656	7607193	TC1900001051.mm.1	2.6	1.83E-06
TC0100000059.mm.1	NM_011395	Slc22a3	solute carrier family 22 (organic cation transp	12419972	12507704	TC1700001449.mm.1	1.2	2.26E-06
TC0100000061.mm.1	NM_178728	Napepld	N-acyl phosphatidylethanolamine phospholipase	21662901	21701396	TC0500002021.mm.1	1.3	2.78E-06
TC0100000062.mm.1	NM_009675	Aoc3	amine oxidase, copper containing 3	101330605	101341938	TC1100001651.mm.1	2.8	2.94E-06
TC0100000064.mm.1	NM_139292	Reep6	receptor accessory protein 6	80329953	80336441	TC1000000852.mm.1	1.5	2.95E-06
TC0100000076.mm.1	uc012bne.1	Gm5098	SubName: Full=Putative uncharacterized protein	47262304	47264044	TC1900000720.mm.1	0.6	4.15E-06
TC0100000081.mm.1	NM_009252	Serpina	serine (or cysteine) peptidase inhibitor, clade	104406708	104414329	TC1200001047.mm.1	2.6	4.33E-06
TC0100000090.mm.1	NM_175520	Gpr81	G protein-coupled receptor 81	123876736	123880020	TC0500003244.mm.1	1.2	4.36E-06
TC0100000092.mm.1	NM_010128	Emp1	epithelial membrane protein 1	135362931	135383173	TC0600001606.mm.1	1.5	4.41E-06
TC0100000096.mm.1	NM_023061	Mcam	melanoma cell adhesion molecule	44134469	44142727	TC0900000500.mm.1	1.7	4.87E-06
TC0100000103.mm.1	NM_001114385	Chrdl1	chordin-like 1	143285674	143394262	TC0X00003113.mm.1	1.8	5.20E-06
TC0100000112.mm.1	NM_001166580	8430408	RIKEN cDNA 8430408G22 gene	116650684	116652847	TC0600001308.mm.1	1.0	5.37E-06
TC0100000133.mm.1	NM_008728	Npr3	natriuretic peptide receptor 3	11839896	11907371	TC1500001215.mm.1	2.6	5.48E-06
TC0100000136.mm.1	ENSMUST00000121730	Gm15696	predicted gene 15696	31970362	31970806	TC1600001494.mm.1	-0.7	5.77E-06
TC0100000171.mm.1	NM_027511	Hrct1	histidine rich carboxyl terminus 1	43727188	43728639	TC0400000450.mm.1	0.3	5.98E-06
TC0100000184.mm.1	NM_178405	Atp1a2	ATPase, Na+/K+ transporting, alpha 2 polypeptid	172271709	172298064	TC0100003566.mm.1	1.6	6.23E-06
TC0100000185.mm.1	NM_001193309	Morc4	microrchidia 4	139821632	139871677	TC0X00003066.mm.1	0.6	6.24E-06
TC0100000187.mm.1	NM_028783	Robo4	roundabout homolog 4 (Drosophila)	37401897	37414023	TC0900000365.mm.1	0.6	6.33E-06
TC0100000193.mm.1	NM_001159628	Heph	hephaestin	96455359	96574485	TC0X00000919.mm.1	0.9	6.62E-06
TC0100000196.mm.1	XM_001473099	Gm10029	predicted gene 10029	6662562	6662894	TC1300001396.mm.1	-1.1	6.81E-06
TC0100000198.mm.1	NM_008055	Fzd4	frizzled homolog 4 (Drosophila)	89404366	89410110	TC0700001264.mm.1	2.5	6.90E-06
TC0100000212.mm.1	NM_019634	Tspan7	tetraspanin 7	10485116	10596605	TC0X00000126.mm.1	1.3	7.52E-06
TC0100000213.mm.1	NM_023587	Ptplb	protein tyrosine phosphatase-like (proline inst	35022421	35109175	TC1600000489.mm.1	1.7	8.38E-06
TC0100000222.mm.1	NM_001277756	Cav2	caveolin 2	17281185	17289130	TC0600000127.mm.1	1.9	8.52E-06
TC0100000223.mm.1	ENSMUST00000090395	Gm10247	predicted gene 10247	8922057	8922389	TC1600001181.mm.1	-1.2	9.60E-06
TC0100000224.mm.1	NM_027987	Cd300lg	CD300 antigen like family member G	102041509	102055620	TC1100001677.mm.1	1.0	1.03E-05
TC0100000233.mm.1	NM_025962	Mmachc	methylmalonic aciduria cblC type, with homocys	116702279	116708406	TC0400003349.mm.1	0.6	1.05E-05
TC0100000237.mm.1	NM_007473	Aqp7	aquaporin 7	41033074	41048139	TC0400002455.mm.1	2.2	1.11E-05
TC0100000251.mm.1	NM_011979	Vnn3	vanin 3	23851462	23869843	TC1000000192.mm.1	0.5	1.16E-05
TC0100000253.mm.1	BC057005	Spry4	sprouty homolog 4 (Drosophila)	38586265	38601268	TC1800001234.mm.1	0.7	1.27E-05
TC0100000255.mm.1	NM_001113404	Tshr	thyroid stimulating hormone receptor	91400993	91540509	TC1200000943.mm.1	2.4	1.28E-05
TC0100000256.mm.1	NM_008858	Prkd1	protein kinase D1	50341231	50649223	TC1200001704.mm.1	0.8	1.33E-05
TC0100000260.mm.1	ENSMUST00000122341	Gm12778	predicted gene 12778	34175712	34176044	TC0700000630.mm.1	-1.0	1.38E-05
TC0100000280.mm.1	NM_153507	Cpne2	copine II	94532990	94570529	TC0800001112.mm.1	0.8	1.43E-05
TC0100000283.mm.1	NM_020568	Plin4	perilipin 4	56100591	56109802	TC1700002313.mm.1	2.4	1.44E-05
TC0100000284.mm.1	NM_001276301	Ampd3	adenosine monophosphate deaminase 3	110768206	110812408	TC0700001631.mm.1	0.6	1.48E-05
TC0100000292.mm.1	NM_009135	Scn7a	sodium channel, voltage-gated, type VII, alpha	66673425	66784914	TC0200003682.mm.1	2.2	1.50E-05
TC0100000295.mm.1	NM_008455	Klkb1	kallikrein B, plasma 1	45269442	45333216	TC0800002144.mm.1	0.4	1.55E-05
TC0100000297.mm.1	NM_009868	Cdh5	cadherin 5	104101625	104144502	TC0800001176.mm.1	2.1	1.56E-05
TC0100000298.mm.1	NM_011435	Sod3	superoxide dismutase 3, extracellular	52363804	52371405	TC0500000527.mm.1	0.8	1.59E-05
TC0100000302.mm.1	NM_029796	Lrg1	leucine-rich alpha-2-glycoprotein 1	56119676	56121946	TC1700002315.mm.1	1.5	1.68E-05
TC0100000315.mm.1	XM_283860	Dcst2	DC-STAMP domain containing 2	89365400	89373620	TC0300000761.mm.1	0.3	1.73E-05
TC0100000318.mm.1	OTTMUST00000078288	Ankrd5	---	136501910	136562098	TC0200002075.mm.1	0.5	1.80E-05
TC0100000321.mm.1	NM_008871	Serpine	serine (or cysteine) peptidase inhibitor, clade	137061504	137072272	TC0500003431.mm.1	0.6	1.85E-05
TC0100000330.mm.1	NM_153781	Pygb	brain glycogen phosphorylase	150786735	150831758	TC0200002228.mm.1	1.0	2.07E-05
TC0100000331.mm.1	NCBI_Gene:10004256	Trav13n	Trav13n-1 T cell receptor alpha variable 13N-1	53162399	53162910	TC1400000665.mm.1	-0.7	2.15E-05
TC0100000332.mm.1	NM_026189	Eepd1	endonuclease/exonuclease/phosphatase family	25481547	25604110	TC0900000247.mm.1	1.0	2.25E-05
TC0100000348.mm.1	NM_001093764	Myadm	myeloid-associated differentiation marker	3289038	3299349	TC0700000005.mm.1	1.3	2.31E-05
TC0100000352.mm.1	ENSMUST00000120385	Gm16200	predicted gene 16200	90221295	90221625	TC0900002824.mm.1	-1.0	2.33E-05
TC0100000354.mm.1	NM_010216	Figf	c-fos induced growth factor	164373378	164402650	TC0X00001667.mm.1	1.1	2.45E-05
TC0100000367.mm.1	NM_009676	Aox1	aldehyde oxidase 1	58029931	58106413	TC0100000427.mm.1	1.0	2.52E-05
TC0100000372.mm.1	ENSMUST00000158307	Gm25920	predicted gene, 25920	137912990	137913088	TC0300003012.mm.1	0.4	2.55E-05
TC0100000374.mm.1	ENSMUST00000104944	Gm2399	predicted gene 2399	12702362	12702589	TC1300000076.mm.1	2.5	2.57E-05
TC0100000375.mm.1	NM_153068	Ehd2	EH-domain containing 2	15946977	15967567	TC0700002417.mm.1	2.6	2.58E-05
TC0100000384.mm.1	NM_153100	Rtp3	receptor transporter protein 3	110984935	110989713	TC0900003122.mm.1	0.3	2.60E-05
TC0100000399.mm.1	NM_010332	Ednra	endothelin receptor type A	77663029	77724464	TC0800002505.mm.1	0.8	2.66E-05
TC0100000403.mm.1	ENSMUST00000116189	Gm12468	predicted gene 12468	53877925	53878328	TC0400000591.mm.1	-0.6	2.68E-05
TC0100000404.mm.1	NM_054071	Fgfrl1	fibroblast growth factor receptor-like 1	108694229	108706950	TC0500001113.mm.1	0.8	2.68E-05
TC0100000420.mm.1	XM_977110	Rps12-p	ribosomal protein S12, pseudogene 12	124599329	124599833	TC0X00002934.mm.1	-0.8	2.76E-05
TC0100000422.mm.1	XM_978135	Rps12-p	ribosomal protein S12, pseudogene 14	125857648	125858152	TC0X00002941.mm.1	-0.8	2.76E-05
TC0100000423.mm.1	ENSMUST00000120378	Rpl27-p	ribosomal protein L27, pseudogene 2	101939501	101939899	TC1100001673.mm.1	-0.9	2.84E-05
TC0100000427.mm.1	ENSMUST00000080603	Rpl35a-	ribosomal protein L35A, pseudogene 7	47815300	47815632	TC0600002213.mm.1	-1.0	2.88E-05
TC0100000436.mm.1	NM_023168	Grina	glutamate receptor, ionotropic, N-methyl D-aspa	76246798	76249912	TC1500000580.mm.1	1.4	3.08E-05
TC0100000437.mm.1	NM_027878	Dram1	DNA-damage regulated autophagy modulator 1	88322804	88379080	TC1000002642.mm.1	1.1	3.10E-05
TC0100000440.mm.1	NM_080462	Hnmt	histamine N-methyltransferase	24002910	24049394	TC0200003109.mm.1	1.0	3.16E-05
TC0100000443.mm.1	NM_013822	Jag1	jagged 1	137081451	137116644	TC0200004713.mm.1	0.8	3.17E-05

TC0100000450.mm.1	NM_008493	Lep	leptin	29060220	29073877	TC0600000222.mm.1	2.6	3.29E-05
TC0100000453.mm.1	NM_009549	Zfp185	zinc finger protein 185	72987339	73031543	TC0X00000670.mm.1	0.6	3.29E-05
TC0100000456.mm.1	NM_019707	Cdh13	cadherin 13	118283733	119324921	TC0800001414.mm.1	0.7	3.32E-05
TC0100000457.mm.1	ENSMUST00000184962	RP24-68	N/A	85599533	85599872	TC1700001276.mm.1	-0.4	3.38E-05
TC0100000458.mm.1	NM_008520	Ltbp3	latent transforming growth factor beta binding	5740904	5758532	TC1900000082.mm.1	0.7	3.42E-05
TC0100000459.mm.1	ENSMUST00000180629	Rpl31-p	ribosomal protein L31, pseudogene 7	47785996	47786374	TC0600002210.mm.1	-0.7	3.48E-05
TC0100000460.mm.1	NM_139236	Nol6	nucleolar protein family 6 (RNA-associated)	41114427	41124455	TC0400002457.mm.1	0.6	3.53E-05
TC0100000466.mm.1	NM_021890	Fads3	fatty acid desaturase 3	10041548	10059671	TC1900000186.mm.1	2.6	3.55E-05
TC0100000469.mm.1	XM_001477422	Gm3470	predicted gene 3470	99021740	99022440	TC0500002815.mm.1	1.1	3.75E-05
TC0100000475.mm.1	NM_030127	Htra3	HtrA serine peptidase 3	35652026	35679782	TC0500002252.mm.1	1.4	3.93E-05
TC0100000482.mm.1	NM_144862	Lims2	LIM and senescent cell antigen like domains 2	31931507	31958619	TC1800000249.mm.1	1.5	3.97E-05
TC0100000486.mm.1	NM_010359	Gstm3	glutathione S-transferase, mu 3	107963696	107969174	TC0300003246.mm.1	0.7	4.04E-05
TC0100000490.mm.1	XM_001473434	Gm14680	predicted gene 14680	62775128	62776742	TC0X00002325.mm.1	-0.6	4.36E-05
TC0100000491.mm.1	ENSMUST00000165914	Gm9027	predicted gene 9027	61377256	61377916	TC1600000781.mm.1	-1.2	4.48E-05
TC0100000495.mm.1	ENSMUST00000119199	Gm6630	predicted pseudogene 6630	23179556	23180011	TC1600000333.mm.1	-0.8	4.74E-05
TC0100000508.mm.1	NM_054098	Steap4	STEAP family member 4	7960472	7982213	TC0500000043.mm.1	2.3	4.90E-05
TC0100000514.mm.1	NM_019946	Mgst1	microsomal glutathione S-transferase 1	138140316	138156755	TC0600001639.mm.1	1.1	4.91E-05
TC0100000520.mm.1	NM_010917	Nid1	nidogen 1	13437602	13512275	TC1300000087.mm.1	2.5	4.97E-05
TC0100000521.mm.1	ENSMUST00000166014	Rpl35a-	ribosomal protein L35A, pseudogene 2	181241945	181242367	TC0100003686.mm.1	-0.7	5.10E-05
TC0100000522.mm.1	NM_011430	Sncg	synuclein, gamma	34370274	34374789	TC1400001725.mm.1	2.3	5.11E-05
TC0100000532.mm.1	XM_980899	Gm7889	predicted gene 7889	93975852	93985819	TC0100000950.mm.1	0.3	5.13E-05
TC0100000533.mm.1	NM_144512	Slc6a13	solute carrier family 6 (neurotransmitter trans	121300227	121337733	TC0600001370.mm.1	1.4	5.27E-05
TC0100000535.mm.1	NM_020581	Angptl4	angiopoietin-like 4	33773750	33781575	TC1700001877.mm.1	1.5	5.39E-05
TC0100000548.mm.1	NM_144942	Csad	cysteine sulfinic acid decarboxylase	102176998	102203163	TC1500002285.mm.1	0.6	5.42E-05
TC0100000554.mm.1	NM_145394	Slc44a3	solute carrier family 44, member 3	121459528	121532344	TC0300002840.mm.1	0.7	5.52E-05
TC0100000557.mm.1	ENSMUST00000119773	Rps12-p	ribosomal protein S12, pseudogene 19	75070814	75071213	TC1100003213.mm.1	-1.2	5.52E-05
TC0100000561.mm.1	NM_008458	Serpina	serine (or cysteine) peptidase inhibitor, clade	104146382	104153872	TC1200002289.mm.1	2.4	5.57E-05
TC0100000570.mm.1	NM_133186	Steap3	STEAP family member 3	120190757	120272705	TC0100002965.mm.1	0.4	5.71E-05
TC0100000574.mm.1	NM_011782	Adamts5	a disintegrin-like and metallopeptidase (reprol	85858157	85901125	TC1600001976.mm.1	2.3	5.75E-05
TC0100000576.mm.1	NM_172778	Maob	monoamine oxidase B	16709281	16817366	TC0X00001892.mm.1	1.0	5.79E-05
TC0100000579.mm.1	ENSMUST00000116696	Gm24588	predicted gene, 24588	62779594	62779676	TC1300000761.mm.1	-1.1	5.98E-05
TC0100000587.mm.1	NM_011255	Rbp4	retinol binding protein 4, plasma	38116620	38125321	TC1900001464.mm.1	1.9	6.03E-05
TC0100000594.mm.1	NM_175640	Plin1	perilipin 1	79721164	79732776	TC0700003567.mm.1	2.1	6.05E-05
TC0100000596.mm.1	NM_010466	Hoxc8	homeobox C8	102990539	102994267	TC1500001120.mm.1	1.6	6.07E-05
TC0100000598.mm.1	NM_010612	Kdr	kinase insert domain protein receptor	75932827	75978458	TC0500002623.mm.1	1.4	6.33E-05
TC0100000599.mm.1	NM_001081039	Dock9	dedicator of cytokinesis 9	121542039	121797734	TC1400002740.mm.1	0.7	6.37E-05
TC0100000600.mm.1	NM_012056	Fkbp9	FK506 binding protein 9	56832059	56879360	TC0600000678.mm.1	1.1	6.51E-05
TC0100000605.mm.1	NM_177709	Tusc5	tumor suppressor candidate 5	76679808	76698664	TC1100001106.mm.1	2.2	6.66E-05
TC0100000609.mm.1	NM_001018063	Cxx1b	CAAX box 1B	53669177	53670408	TC0X00002242.mm.1	0.9	6.75E-05
TC0100000617.mm.1	NM_013484	C2	complement component 2 (within H-2S)	34862602	34882100	TC1700002817.mm.1	1.0	7.05E-05
TC0100000619.mm.1	ENSMUST00000121451	Gm12005	predicted gene 12005	14162079	14162457	TC1100000143.mm.1	-1.0	7.07E-05
TC0100000622.mm.1	ENSMUST00000097682	Rpl27	ribosomal protein L27	6332590	6333064	TC1800000044.mm.1	-0.7	7.26E-05
TC0100000623.mm.1	NM_008695	Nid2	nidogen 2	19751257	19811787	TC1400000158.mm.1	1.1	7.40E-05
TC0100000633.mm.1	NM_027875	Syde1	synapse defective 1, Rho GTPase, homolog 1 (C.	78584503	78591964	TC1000002458.mm.1	0.5	7.65E-05
TC0100000634.mm.1	NM_001127330	Pparg	peroxisome proliferator activated receptor gamı	115361221	115490401	TC0600001279.mm.1	1.5	7.82E-05
TC0100000642.mm.1	NM_054077	Prelp	proline arginine-rich end leucine-rich repeat	133910304	133921414	TC0100003099.mm.1	2.6	7.82E-05
TC0100000643.mm.1	ENSMUST00000121251	Rpl19-p	ribosomal protein L19, pseudogene 12	6071222	6071812	TC0X00000045.mm.1	-1.1	7.85E-05
TC0100000652.mm.1	XM_001002242	Gm8430	predicted pseudogene 8430	122456872	122457421	TC0600001383.mm.1	-1.4	7.85E-05
TC0100000660.mm.1	NCBI_Gene:21637:pr	Tcrg-V3	T cell receptor gamma, variable 3	19242845	19243301	TC1300000142.mm.1	-0.6	8.03E-05
TC0100000662.mm.1	NM_007568	Btc	betacellulin, epidermal growth factor family me	91357261	91402994	TC0500002738.mm.1	0.3	8.10E-05
TC0100000668.mm.1	ENSMUST00000120423	Gm9083	predicted gene 9083	20239469	20240287	TC0X00000202.mm.1	-0.7	8.11E-05
TC0100000682.mm.1	NM_019444	Ramp2	receptor (calcitonin) activity modifying protei	101246028	101248251	TC1100004277.mm.1	0.3	8.14E-05
TC0100000685.mm.1	NM_001113379	Lrrc32	leucine rich repeat containing 32	98494222	98501831	TC0700001368.mm.1	0.9	8.35E-05
TC0100000691.mm.1	NM_133764	Atp6v0e	ATPase, H+ transporting, lysosomal V0 subunit E	48537569	48541801	TC0600000556.mm.1	0.8	8.46E-05
TC0100000707.mm.1	ENSMUST00000121333	Gm2214	predicted gene 2214	144320926	144321255	TC0X00003125.mm.1	-0.8	8.50E-05
TC0100000711.mm.1	ENSMUST00000121742	Gm11759	predicted gene 11759	145510194	145510657	TC0200004769.mm.1	-1.0	8.50E-05
TC0100000721.mm.1	ENSMUST00000088784	Rpl27-p	ribosomal protein L27, pseudogene 1	171305084	171305494	TC0100003539.mm.1	-0.7	8.56E-05
TC0100000722.mm.1	NCBI_Gene:10012468	Trbv23	T cell receptor beta, variable V23	41216073	41216526	TC0600000432.mm.1	-0.4	8.74E-05
TC0100000723.mm.1	NM_145434	Nr1d1	nuclear receptor subfamily 1, group D, member	98767932	98775377	TC1100003688.mm.1	1.4	8.92E-05
TC0100000724.mm.1	ENSMUST00000074353	Rps10-p	ribosomal protein S10, pseudogene 1	95622278	95622775	TC0300000907.mm.1	-0.9	9.01E-05
TC0100000726.mm.1	ENSMUST00000121220	Gm13862	predicted gene 13862	34810631	34810827	TC0600002053.mm.1	-0.8	9.03E-05
TC0100000734.mm.1	NM_001290278	Rcor3	REST corepressor 3 (Rcor3), transcript variant	0	0	TSUnmapped0000001	0.4	9.17E-05
TC0100000735.mm.1	NM_133189	Cacng7	calcium channel, voltage-dependent, gamma sut	3332955	3368216	TC0700000007.mm.1	0.4	9.22E-05
TC0100000736.mm.1	NM_172939	Sowahc	sosondowah ankyrin repeat domain family mem	59221922	59226434	TC1000000529.mm.1	0.9	9.26E-05
TC0100000757.mm.1	ENSMUST00000054104	Gm9294	predicted pseudogene 9294	42953597	42954388	TC0700002939.mm.1	-0.9	9.31E-05
TC0100000768.mm.1	ENSMUST00000121779	Rpl35a-	ribosomal protein 35A, pseudogene 4	108874926	108875258	TC0200004296.mm.1	-1.1	9.35E-05
TC0100000774.mm.1	ENSMUST00000148282	Rpl35a-	ribosomal protein L35A, pseudogene 6	123255481	123255813	TC0500003229.mm.1	-1.1	9.35E-05
TC0100000778.mm.1	ENSMUST00000147311	Rpl35a-	ribosomal protein L35A, pseudogene 3	29136972	29137304	TC1700001779.mm.1	-1.1	9.35E-05
TC0100000780.mm.1	NM_001012765	Adcy5	adenylate cyclase 5	35154877	35305737	TC1600000491.mm.1	0.7	9.88E-05
TC0100000785.mm.1	NM_008115	Gfra2	glial cell line derived neurotrophic factor fam	70890130	70979838	TC1400001012.mm.1	0.4	0.000101
TC0100000790.mm.1	ENSMUST00000181363	Gm8652	predicted gene 8652	6351304	6352267	TC0600001819.mm.1	-0.9	0.000101
TC0100000811.mm.1	ENSMUST00000122161	Gm16210	predicted gene 16210	39752259	39752868	TC1000002028.mm.1	-1.1	0.000101
TC0100000812.mm.1	NM_001013367	Prkaa1	protein kinase, AMP-activated, alpha 1 catalyti	5143861	5181899	TC1500000021.mm.1	0.5	0.000102
TC0100000818.mm.1	NM_010698	Ldb2	LIM domain binding 2	44472133	44799746	TC0500002328.mm.1	0.5	0.000103
TC0100000827.mm.1	NM_001271421	Ephx2	epoxide hydrolase 2, cytoplasmic	66084372	66124522	TC1400002266.mm.1	1.5	0.000109
TC0100000829.mm.1	ENSMUST00000179134	Gm10243	predicted gene 10243	48523456	48523885	TC0600000555.mm.1	-0.6	0.000111
TC0100000833.mm.1	NM_009236	Sox18	SRY-box containing gene 18	181669836	181671640	TC0200005453.mm.1	0.5	0.000114
TC0100000834.mm.1	ENSMUST00000168993	Gm7289	predicted gene 7289	84658932	84659844	TC1800001711.mm.1	-1.1	0.000114

TC0100000835.mm.1	NM_008483	Lamb2	laminin, beta 2	108479862	108490530	TC0900001408.mm.1	0.8	0.000118
TC0100000836.mm.1	NM_013467	Aldh1a1	aldehyde dehydrogenase family 1, subfamily A1	20601961	20643462	TC1900000335.mm.1	1.9	0.000119
TC0100000843.mm.1	ENSMUST00000116081	Gm14853	predicted gene 14853	105844465	105845013	TC0X00002821.mm.1	-1.1	0.000119
TC0100000844.mm.1	NM_001081147	Oxtr	oxytocin receptor	112473684	112489808	TC0600002901.mm.1	1.8	0.000119
TC0100000847.mm.1	NM_031180	Klb	klotho beta	65348322	65384003	TC0500000609.mm.1	1.1	0.000122
TC0100000862.mm.1	ENSMUST00000119807	Gm15745	predicted gene 15745	87067477	87067591	TC1200000868.mm.1	-0.4	0.000123
TC0100000870.mm.1	NM_007446	Amy1	amylase 1, salivary	113555710	113577830	TC0300003247.mm.1	1.2	0.000125
TC0100000878.mm.1	NM_013902	Fkbp3	FK506 binding protein 3	65062432	65073944	TC1200001832.mm.1	-0.7	0.000125
TC0100000883.mm.1	ENSMUST00000139165	Rps12-p	ribosomal protein S12, pseudogene 9	123206623	123207021	TC0800001512.mm.1	-1.0	0.000127
TC0100000884.mm.1	NM_001040684	Hsd3b7	hydroxy-delta-5-steroid dehydrogenase, 3 beta-	127800604	127803802	TC0700004630.mm.1	0.4	0.000128
TC0100000890.mm.1	NM_008630	Mt2	metallothionein 2	94172618	94173567	TC0800001094.mm.1	1.1	0.000128
TC0100000891.mm.1	NM_013623	Orm3	orosomucoid 3	63356162	63359511	TC0400000720.mm.1	0.5	0.000129
TC0100000897.mm.1	ENSMUST00000180440	Rpl31-p	ribosomal protein L31, pseudogene 23	35132995	35133532	TC0800002043.mm.1	-0.8	0.000129
TC0100000916.mm.1	NM_133237	Apcdd1	adenomatosis polyposis coli down-regulated 1	62922327	62953655	TC1800000646.mm.1	1.0	0.000137
TC0100000917.mm.1	XM_484529	Gm5481	predicted gene 5481	16275603	16275950	TC1600000195.mm.1	-0.7	0.000143
TC0100000919.mm.1	ENSMUST00000161787	Rps19-p	ribosomal protein S19, pseudogene 9	87948464	87948877	TC0600002670.mm.1	-0.6	0.000145
TC0100000929.mm.1	NCBI_Gene:107575:p	Tcrg-C3	T cell receptor gamma, constant 3	19260884	19263397	TC1300000144.mm.1	-2.0	0.000146
TC0100000932.mm.1	NM_172721	Fbxw8	F-box and WD-40 domain protein 8	118064981	118155458	TC0500003136.mm.1	0.7	0.000148
TC0100000934.mm.1	NM_021318	Fhl5	four and a half LIM domains 5	25199908	25242876	TC0400002315.mm.1	0.9	0.000148
TC0100000936.mm.1	NM_028030	Rbpms2	RNA binding protein with multiple splicing 2	65629648	65660528	TC0900000848.mm.1	0.9	0.00015
TC0100000937.mm.1	NM_033569	Cnnm2	cyclin M2	46761596	46878795	TC1900000711.mm.1	1.0	0.000152
TC0100000942.mm.1	NM_016723	Uchl3	ubiquitin carboxyl-terminal esterase L3 (ubiqui	101653967	101696125	TC1400001174.mm.1	-0.6	0.000153
TC0100000944.mm.1	NM_001163476	Gins1	GINS complex subunit 1 (Psf1 homolog)	150905400	150931280	TC0200002232.mm.1	-0.6	0.000153
TC0100000946.mm.1	ENSMUST00000097103	Gm8420	predicted gene 8420	51940650	51941261	TC0100002312.mm.1	-1.3	0.000162
TC0100000950.mm.1	NM_033584	Pcdhga1	protocadherin gamma subfamily A, 1	37661945	37841962	TC1800001741.mm.1	0.3	0.000163
TC0100000957.mm.1	NM_011921	Aldh1a7	aldehyde dehydrogenase family 1, subfamily A7	20692953	20727562	TC1900001246.mm.1	1.8	0.000164
TC0100000959.mm.1	ENSMUST00000120718	Akt2-ps	thymoma viral proto-oncogene 2, pseudogene	16514533	16515981	TC1100000158.mm.1	1.0	0.000166
TC0100000964.mm.1	ENSMUST00000117955	Gm14263	predicted gene 14263	170954079	170954824	TC0200005260.mm.1	-0.7	0.000167
TC0100000965.mm.1	NM_001277328	Sox6	SRY-box containing gene 6	115470872	116038744	TC0700004148.mm.1	0.3	0.000169
TC0100000967.mm.1	NM_007874	Reep5	receptor accessory protein 5	34344885	34373415	TC1800001147.mm.1	1.1	0.00017
TC0100000973.mm.1	ENSMUST00000119546	H3f3a-p	H3 histone, family 3A, pseudogene 1	101824515	101824924	TC0X00000987.mm.1	-0.9	0.000171
TC0100000978.mm.1	NM_001111049	Cd151	CD151 antigen	141467362	141471481	TC0700002055.mm.1	1.5	0.000173
TC0100000981.mm.1	NM_016972	Slc7a8	solute carrier family 7 (cationic amino acid tr	54722215	54781886	TC1400002067.mm.1	1.3	0.000177
TC0100000984.mm.1	NM_013602	Mt1	metallothionein 1	94179089	94180327	TC0800001095.mm.1	1.3	0.000177
TC0100000988.mm.1	NM_001171007	Nod1	nucleotide-binding oligomerization domain cont	54923942	54972612	TC0600002323.mm.1	0.3	0.000178
TC0100000998.mm.1	NM_001033156	Fbxo33	F-box protein 33	59200655	59219725	TC1200001816.mm.1	-0.4	0.000178
TC0100001005.mm.1	ENSMUST00000118297	Gm13196	predicted gene 13196	4700238	4700639	TC0200000032.mm.1	-0.9	0.00018
TC0100001006.mm.1	NM_022032	Perp	PERP, TP53 apoptosis effector	18845071	18857078	TC1000000133.mm.1	-0.7	0.000181
TC0100001010.mm.1	NM_026700	Dopey2	dopey family member 2	93711907	93810588	TC1600001047.mm.1	0.5	0.000185
TC0100001016.mm.1	NM_153533	Tenc1	tensin like C1 domain-containing phosphatase	102100413	102116401	TC1500001088.mm.1	1.1	0.000186
TC0100001024.mm.1	ENSMUST00000171003	Gm5778	predicted gene 5778	73201695	73202766	TC1000000697.mm.1	-0.9	0.000192
TC0100001040.mm.1	NCBI_Gene:10012643	Trgj1	T cell receptor gamma joining 1	19210341	19217024	TC1300002762.mm.1	-1.9	0.000194
TC0100001056.mm.1	NM_026163	Pkp2	plakophilin 2	16213318	16272712	TC1600000193.mm.1	1.1	0.000196
TC0100001058.mm.1	NM_013759	Msrb1	methionine sulfoxide reductase B1	24736642	24742778	TC1700000351.mm.1	0.6	0.000197
TC0100001076.mm.1	NM_198105	Fam120c	family with sequence similarity 120, member C	151344175	151474136	TC0X00001515.mm.1	0.3	0.000205
TC0100001077.mm.1	ENSMUST00000122378	Gm14730	predicted gene 14730	71197127	71198171	TC0X00000648.mm.1	-0.8	0.00021
TC0100001101.mm.1	NM_028804	Ccdc3	coiled-coil domain containing 3	5137776	5230878	TC0200000048.mm.1	1.6	0.000211
TC0100001103.mm.1	NM_001037726	Creb1	cAMP responsive element binding protein 1	64532804	64604548	TC0100000535.mm.1	-0.8	0.000214
TC0100001105.mm.1	NM_018868	Nop58	NOP58 ribonucleoprotein	59685005	59711510	TC0100000456.mm.1	-1.1	0.000214
TC0100001107.mm.1	NM_011692	Vbp1	von Hippel-Lindau binding protein 1	75514297	75534946	TC0X00000745.mm.1	-0.5	0.000215
TC0100001111.mm.1	NM_015734	Col5a1	collagen, type V, alpha 1	27886425	28039514	TC0200000478.mm.1	0.2	0.000216
TC0100001114.mm.1	ENSMUST00000177870	Gm6625	predicted gene 6625	89146747	89147247	TC0800002669.mm.1	-0.7	0.000216
TC0100001117.mm.1	NM_134042	Aldh6a1	aldehyde dehydrogenase family 6, subfamily A1	84430717	84450950	TC1200002078.mm.1	2.1	0.000217
TC0100001119.mm.1	ENSMUST00000119927	Gm12331	predicted gene 12331	74077519	74078140	TC1100003186.mm.1	-1.2	0.000217
TC0100001123.mm.1	NM_174848	Crybg3	beta-gamma crystallin domain containing 3	59490775	59555752	TC1600001805.mm.1	0.6	0.000222
TC0100001124.mm.1	NM_145930	AW54987	expressed sequence AW549877	3982035	3995752	TC1500001145.mm.1	0.7	0.000223
TC0100001128.mm.1	NM_010255	Gamt	guanidinoacetate methyltransferase	80258151	80261012	TC1000002493.mm.1	0.3	0.000224
TC0100001138.mm.1	ENSMUST00000119731	Gm4986	predicted pseudogene 4986	40137008	40137556	TC0X00002103.mm.1	-0.7	0.000228
TC0100001158.mm.1	ENSMUST00000121609	Gm12267	predicted gene 12267	60449210	60449970	TC1100002875.mm.1	-0.4	0.000234
TC0100001168.mm.1	NM_053173	Kifc5b	kinesin family member C5B	26917091	26932579	TC1700000424.mm.1	-0.2	0.00024
TC0100001170.mm.1	NM_007715	Clock	circadian locomotor output cycles kaput	76209868	76304792	TC0500002628.mm.1	0.9	0.000241
TC0100001173.mm.1	NM_011723	Xdh	xanthine dehydrogenase	73883895	73950196	TC1700002526.mm.1	1.0	0.000244
TC0100001177.mm.1	NM_018733	Scn1a	sodium channel, voltage-gated, type I, alpha	66270781	66440840	TC0200003674.mm.1	-0.3	0.000245
TC0100001188.mm.1	NM_207237	Man1c1	mannosidase, alpha, class 1C, member 1	134561690	134704290	TC0400003742.mm.1	0.7	0.000246
TC0100001195.mm.1	ENSMUST00000094754	Rpl7a-p	ribosomal protein L7A, pseudogene 8	19953783	19954583	TC0700000314.mm.1	-0.7	0.000249
TC0100001196.mm.1	NM_009906	Tpp1	tripeptidyl peptidase I	105744847	105752207	TC0700003990.mm.1	1.2	0.000249
TC0100001201.mm.1	ENSMUST00000122265	Rpl30-p	ribosomal protein L30, pseudogene 9	105278637	105278984	TC0X00002813.mm.1	-0.7	0.00025
TC0100001206.mm.1	NM_029094	Pik3cb	phosphatidylinositol 3-kinase, catalytic, beta	99038402	99140621	TC0900002915.mm.1	0.5	0.00025
TC0100001208.mm.1	NM_001163574	Tjp1	tight junction protein 1	65296165	65371244	TC0700003420.mm.1	1.0	0.000251
TC0100001218.mm.1	ENSMUST00000086764	Gm21571	predicted gene, 21571 // ribosomal protein S12	59322290	59322783	TC1900000851.mm.1	-0.9	0.000253
TC0100001219.mm.1	ENSMUST00000174736	Gm8741	predicted gene 8741	35335909	35336292	TC1700000681.mm.1	-0.8	0.000255
TC0100001231.mm.1	NM_013648	Rtn2	reticulon 2 (Z-band associated protein)	19282624	19296164	TC0700000296.mm.1	0.3	0.000258
TC0100001238.mm.1	ENSMUST00000080355	Gm21571	predicted gene, 21571 // ribosomal protein S12	56013933	56014428	TC0700000935.mm.1	-0.7	0.00026
TC0100001244.mm.1	ENSMUST00000184038	Gm5269	predicted gene 5269	45889525	45890273	TC0100002284.mm.1	-0.5	0.000261
TC0100001247.mm.1	ENSMUST00000184830	RP23-47	N/A	64839100	64839418	TC1400000929.mm.1	-0.4	0.000264
TC0100001249.mm.1	ENSMUST00000071565	Gm4978	predicted gene 4978	69450232	69451035	TC0900002580.mm.1	-0.5	0.000264
TC0100001252.mm.1	ENSMUST00000121557	Gm13688	predicted gene 13688	80602733	80603340	TC0200001175.mm.1	-0.9	0.000265
TC0100001256.mm.1	NM_001135172	C1qtnf7	C1q and tumor necrosis factor related protein 7	43515569	43618817	TC0500000462.mm.1	0.3	0.000272

TC0100001271.mm.1	ENSMUST00000181233	Rps19-p	ribosomal protein S19, pseudogene 6	110898114	110898551	TC1200001221.mm.1	-1.2	0.000272
TC0100001274.mm.1	NM_008972	Ptma	prothymosin alpha	86526736	86530700	TC0100000790.mm.1	-1.2	0.000272
TC0100001277.mm.1	NM_146241	Trhde	TRH-degrading enzyme	114398821	114802307	TC1000002886.mm.1	0.6	0.000273
TC0100001279.mm.1	NM_007483	Rhob	ras homolog gene family, member B	8497758	8499996	TC1200001397.mm.1	0.8	0.000274
TC0100001292.mm.1	NM_008489	Lbp	lipopolysaccharide binding protein	158306493	158332852	TC0200002426.mm.1	1.9	0.000274
TC0100001307.mm.1	ENSMUST00000177641	Gm8260	predicted gene 8260	64047554	64047906	TC0X00002330.mm.1	-0.7	0.000279
TC0100001311.mm.1	NM_009825	Serpinh	serine (or cysteine) peptidase inhibitor, clade	99345375	99353239	TC0700003797.mm.1	0.6	0.000282
TC0100001312.mm.1	NM_177648	Dolk	dolichol kinase	30284229	30286354	TC0200003267.mm.1	0.6	0.000283
TC0100001315.mm.1	OTTMUST00000010011	RP23-38	---	8456166	8456504	TC0400002176.mm.1	-0.5	0.000284
TC0100001317.mm.1	NM_007409	Adh1	alcohol dehydrogenase 1 (class I)	138260991	138290698	TC0300001409.mm.1	1.4	0.000285
TC0100001324.mm.1	NM_011158	Prkar2b	protein kinase, cAMP dependent regulatory, typ	31958476	32061296	TC1200001602.mm.1	1.9	0.000286
TC0100001329.mm.1	NM_146094	Fads1	fatty acid desaturase 1	10182888	10196874	TC1900000188.mm.1	0.7	0.000287
TC0100001332.mm.1	XM_003084942	Gm10257	predicted gene 10257	100946405	100946815	TC1300002545.mm.1	-0.8	0.00029
TC0100001338.mm.1	NR_033639	Rps19-p	ribosomal protein S19, pseudogene 3	147821777	147822202	TC0400003999.mm.1	-0.5	0.000295
TC0100001347.mm.1	NR_033402	Tyms	thymidylate synthase	30058200	30073625	TC0500002152.mm.1	-0.5	0.000296
TC0100001351.mm.1	XM_892026	Gm6749	predicted pseudogene 6749	108880794	108882411	TC0600001209.mm.1	-0.8	0.000298
TC0100001353.mm.1	ENSMUST00000116438	Gm7091	predicted gene 7091	140821938	140822523	TC0X00003080.mm.1	-0.8	0.000298
TC0100001369.mm.1	NM_009026	Rasd1	RAS, dexamethasone-induced 1	59963181	59964944	TC1100002865.mm.1	1.1	0.000304
TC0100001375.mm.1	OTTMUST00000044756	RP23-38	---	124469959	124470357	TC0X00002933.mm.1	-1.1	0.000307
TC0100001378.mm.1	OTTMUST00000044766	RP23-32	---	124973550	124973948	TC0X00002937.mm.1	-1.1	0.000307
TC0100001381.mm.1	XM_003688976	Gm21571	predicted gene, 21571	125404959	125405357	TC0X00002938.mm.1	-1.1	0.000307
TC0100001382.mm.1	OTTMUST00000044767	RP23-30	---	125674833	125675231	TC0X00002940.mm.1	-1.1	0.000307
TC0100001388.mm.1	ENSMUST00000100614	Rps19-p	ribosomal protein S19, pseudogene 2	52902793	52903230	TC1400000642.mm.1	-0.9	0.000307
TC0100001392.mm.1	ENSMUST00000168472	Rps19-p	ribosomal protein S19, pseudogene 1	53213730	53214167	TC1400000672.mm.1	-0.9	0.000307
TC0100001397.mm.1	ENSMUST00000052888	Gm10254	predicted gene 10254	54810564	54811250	TC0300001990.mm.1	-0.9	0.000311
TC0100001400.mm.1	NCBI_Gene:21632:pr	Gm16602	T cell receptor gamma, variable 1	19339934	19352763	TC1300000145.mm.1	-0.7	0.000312
TC0100001405.mm.1	ENSMUST00000096279	Gm10343	predicted gene 10343	10801369	10801716	TC1600000120.mm.1	-0.7	0.000315
TC0100001412.mm.1	NM_178901	AI46760	expressed sequence AI467606	127091436	127094049	TC0700001833.mm.1	-0.9	0.000315
TC0100001414.mm.1	ENSMUST00000117876	Gm13886	predicted gene 13886	104820179	104821361	TC0200001571.mm.1	-0.5	0.000317
TC0100001425.mm.1	NM_001145959	Ndrg2	N-myc downstream regulated gene 2	51905271	51913488	TC1400002017.mm.1	1.4	0.000326
TC0100001431.mm.1	NM_144953	1700019	RIKEN cDNA 1700019D03 gene	52922324	52963260	TC0100002330.mm.1	-0.4	0.000326
TC0100001433.mm.1	ENSMUST00000120970	Gm15750	predicted gene 15750	4764834	4765647	TC0500000027.mm.1	-0.7	0.000327
TC0100001446.mm.1	NM_026212	Agpat2	1-acylglycerol-3-phosphate O-acyltransferase 2	26593057	26604417	TC0200003195.mm.1	1.0	0.00033
TC0100001449.mm.1	ENSMUST00000117875	Gm13607	predicted gene 13607	68081791	68082329	TC0200000984.mm.1	-0.4	0.000333
TC0100001452.mm.1	NR_028142	Pnpla2	patatin-like phospholipase domain containing 2	141455188	141460743	TC0700002053.mm.1	2.2	0.000333
TC0100001455.mm.1	NM_009621	Adamts1	a disintegrin-like and metallopeptidase (reprol	85793827	85803115	TC1600001974.mm.1	0.6	0.000334
TC0100001458.mm.1	ENSMUST00000083277	Gm26265	predicted gene, 26265	95756950	95757084	TC0800002753.mm.1	-0.5	0.000334
TC0100001487.mm.1	NM_026159	Retsat	retinol saturase (all trans retinol 13,14 reduc	72598475	72608425	TC0600000854.mm.1	0.9	0.000334
TC0100001489.mm.1	XM_893413	Gm6901	predicted gene 6901	65559166	65559714	TC1300000796.mm.1	-0.8	0.000335
TC0100001491.mm.1	NM_007722	Cxcr7	chemokine (C-X-C motif) receptor 7	90203980	90216751	TC0100000870.mm.1	0.3	0.000343
TC0100001494.mm.1	NR_036615	Srsf7	serine/arginine-rich splicing factor 7	80200080	80207305	TC1700002583.mm.1	-0.7	0.000351
TC0100001496.mm.1	ENSMUST00000118307	Gm12191	predicted gene 12191	49678710	49679057	TC1100002660.mm.1	-0.7	0.000351
TC0100001498.mm.1	NM_007951	Erh	enhancer of rudimentary homolog (Drosophila)	80634022	80644341	TC1200002002.mm.1	-0.4	0.000356
TC0100001501.mm.1	NM_010447	Hnrnpa1	heterogeneous nuclear ribonucleoprotein A1	103240397	103246698	TC1500001127.mm.1	-0.8	0.000365
TC0100001502.mm.1	BC103795	Eif3m	eukaryotic translation initiation factor 3, sub	104999656	105017080	TC0200004253.mm.1	-0.6	0.000367
TC0100001510.mm.1	ENSMUST00000080443	Gm10260	predicted gene 10260	107262817	107263248	TC0800002875.mm.1	-0.8	0.000368
TC0100001513.mm.1	NM_019562	Uchl5	ubiquitin carboxyl-terminal esterase L5	143777278	143807466	TC0100001317.mm.1	-0.8	0.00037
TC0100001526.mm.1	NM_008891	Pnn	pinin	59066919	59074017	TC1200000500.mm.1	-0.5	0.000372
TC0100001532.mm.1	NM_001206368	Gsn	gelsolin	35256359	35307902	TC0200000636.mm.1	1.5	0.000374
TC0100001538.mm.1	NM_001033324	Zbtb16	zinc finger and BTB domain containing 16	48654297	48836222	TC0900002241.mm.1	1.0	0.000377
TC0100001548.mm.1	ENSMUST00000178086	Gm4761	predicted gene 4761	67414431	67415012	TC0600002424.mm.1	-0.6	0.000378
TC0100001549.mm.1	ENSMUST00000121828	Gm15730	predicted gene 15730	8055139	8055553	TC0500000045.mm.1	-0.5	0.000379
TC0100001550.mm.1	NM_144816	Rhbdl1	rhomboid, veinlet-like 1 (Drosophila)	25834465	25837295	TC1700002801.mm.1	0.3	0.000379
TC0100001566.mm.1	NM_029556	Clybl	citrate lyase beta like	122181694	122402234	TC1400001331.mm.1	1.2	0.000381
TC0100001567.mm.1	ENSMUST00000121688	Gm12732	predicted gene 12732	77639854	77640033	TC1100001130.mm.1	-0.4	0.000384
TC0100001568.mm.1	ENSMUST00000178210	Rpl35a-	ribosomal protein L35A, pseudogene 5	33075995	33076411	TC0500000352.mm.1	-0.8	0.000385
TC0100001569.mm.1	NM_001276296	Ednrb	endothelin receptor type B	103814615	103844476	TC1400002641.mm.1	1.1	0.000388
TC0100001575.mm.1	NM_001085515	AI46413	expressed sequence AI464131	41495601	41503076	TC0400002469.mm.1	0.6	0.000393
TC0100001580.mm.1	NM_001195681	Gm684	predicted gene 684	51270258	51278554	TC0900002287.mm.1	0.6	0.000395
TC0100001585.mm.1	ENSMUST00000118644	Gm8662	predicted gene 8662	158248797	158249370	TC0X00001605.mm.1	-1.0	0.000397
TC0100001586.mm.1	ENSMUST00000119630	Rpl30-p	ribosomal protein L30, pseudogene 11	12456886	12457230	TC0X00001855.mm.1	-0.7	0.000398
TC0100001593.mm.1	XM_983917	Gm8112	predicted gene 8112	81693718	81694185	TC1000002552.mm.1	-0.9	0.000403
TC0100001597.mm.1	XM_984537	Gm8158	predicted gene 8158	81985935	81986402	TC1000002557.mm.1	-0.9	0.000403
TC0100001600.mm.1	ENSMUST00000118088	Gm8731	predicted gene 8731	60778983	60779394	TC1800001407.mm.1	-0.6	0.000403
TC0100001603.mm.1	ENSMUST00000120842	Gm8152	predicted gene 8152	107381381	107382017	TC0500002923.mm.1	-0.9	0.000405
TC0100001604.mm.1	ENSMUST00000087025	Rpl7a-p	ribosomal protein L7A, pseudogene 11	166854190	166855053	TC0X00001688.mm.1	-0.7	0.000406
TC0100001605.mm.1	ENSMUST00000091925	Rps19-p	ribosomal protein S19, pseudogene 4	42252398	42252835	TC1800000433.mm.1	-1.1	0.000409
TC0100001615.mm.1	ENSMUST00000120025	Gm9183	predicted gene 9183	47620771	47622339	TC1700002209.mm.1	-0.5	0.000411
TC0100001621.mm.1	ENSMUST00000072391	Hist1h2	histone cluster 1, H2aa	23934462	23934851	TC1300000268.mm.1	-1.1	0.000413
TC0100001632.mm.1	NM_001163170	Lix1l	Lix1-like	96601133	96625352	TC0300000952.mm.1	0.5	0.000416
TC0100001634.mm.1	ENSMUST00000118980	Gm11473	predicted gene 11473	167281419	167281777	TC0200005185.mm.1	-0.4	0.000418
TC0100001657.mm.1	NM_008150	Gpc4	glypican 4	52053018	52165252	TC0X00002207.mm.1	1.2	0.000418
TC0100001661.mm.1	NM_011843	Esyt1	extended synaptotagmin-like protein 1	128510248	128525859	TC1000003148.mm.1	0.9	0.00042
TC0100001664.mm.1	NM_001143848	Pde2a	phosphodiesterase 2A, cGMP-stimulated	101421691	101512829	TC0700001432.mm.1	1.2	0.00042
TC0100001671.mm.1	NM_010729	Loxl1	lysyl oxidase-like 1	58287723	58313212	TC0900002391.mm.1	0.9	0.000425
TC0100001676.mm.1	NM_011639	Trip6	thyroid hormone receptor interactor 6	137309899	137314241	TC0500003441.mm.1	0.2	0.000428
TC0100001684.mm.1	OTTMUST00000036996	RP23-27	---	122219993	122220391	TC0200001842.mm.1	-0.9	0.000431
TC0100001693.mm.1	ENSMUST00000118272	Rps12-p	ribosomal protein S12, pseudogene 5	30263263	30263651	TC0700000555.mm.1	-0.9	0.000434

TC0100001711.mm.1	ENSMUST00000175818	Gm19815	predicted gene, 19815	90567423	90567757	TC1700002733.mm.1	-0.8	0.000435
TC0100001720.mm.1	XM_001479052	Rps12l2	ribosomal protein S12-like 2	36025753	36026136	TC0800000440.mm.1	-0.9	0.000436
TC0100001722.mm.1	NM_001164787	Sprr2a2	small proline-rich protein 2A2	92215835	92258373	TC0300000821.mm.1	-0.5	0.000438
TC0100001724.mm.1	NM_008482	Lamb1	laminin B1	31265234	31329644	TC1200000263.mm.1	0.7	0.00044
TC0100001731.mm.1	ENSMUST00000121940	Gm16471	predicted gene 16471	102138613	102139230	TC0X00000991.mm.1	-0.7	0.000441
TC0100001745.mm.1	ENSMUST00000120175	Gm11830	predicted gene 11830	11144710	11145270	TC0400000083.mm.1	-0.6	0.000448
TC0100001754.mm.1	ENSMUST00000119767	Rpl30-p	ribosomal protein L30, pseudogene 1	38376807	38377154	TC0600000373.mm.1	-0.7	0.000449
TC0100001765.mm.1	NM_016919	Col5a3	collagen, type V, alpha 3	20770050	20815067	TC0900001846.mm.1	0.3	0.000451
TC0100001781.mm.1	ENSMUST00000121692	Rpl7a-p	ribosomal protein L7A, pseudogene 13	67726244	67726806	TC0X00000606.mm.1	-0.4	0.000452
TC0100001790.mm.1	ENSMUST00000118173	Gm6274	predicted gene 6274	36668217	36669013	TC0X00000324.mm.1	-0.8	0.000455
TC0100001793.mm.1	ENSMUST00000118080	Hspe1-p	heat shock protein 1 (chaperonin 10), pseudoger	72955898	72956194	TC0200001063.mm.1	-0.4	0.000455
TC0100001800.mm.1	NM_017370	Hp	haptoglobin	109575128	109579172	TC0800002905.mm.1	2.2	0.000458
TC0100001804.mm.1	NM_172780	Slc9a6	solute carrier family 9 (sodium/hydrogen exchan	56609757	56664230	TC0X00000522.mm.1	0.7	0.000459
TC0100001819.mm.1	OTTMUST00000044770	RP24-21	---	125986966	125987364	TC0X00002942.mm.1	-1.0	0.000459
TC0100001836.mm.1	NM_023449	Slc9a3r	solute carrier family 9 (sodium/hydrogen exchan	24639282	24650305	TC1700001634.mm.1	0.5	0.000459
TC0100001838.mm.1	NM_007639	Cd1d1	CD1d1 antigen	86995834	86999441	TC0300002277.mm.1	1.0	0.00046
TC0100001844.mm.1	NM_001109913	Hnrnpm	heterogeneous nuclear ribonucleoprotein M	33646233	33685458	TC1700002808.mm.1	-0.8	0.000462
TC0100001858.mm.1	ENSMUST00000174777	Gm8696	predicted gene 8696	34954328	34954712	TC1700001934.mm.1	-0.6	0.000463
TC0100001865.mm.1	NM_198649	Ablim3	actin binding LIM protein family, member 3	61799392	61911852	TC1800001431.mm.1	0.7	0.000464
TC0100001888.mm.1	NM_007918	Eif4ebp	eukaryotic translation initiation factor 4E bin	27260327	27275656	TC0800000353.mm.1	0.9	0.000467
TC0100001907.mm.1	XM_001002232	Gm8264	predicted gene 8264	81818473	81818940	TC1000002554.mm.1	-0.9	0.000467
TC0100001913.mm.1	XM_984283	Gm8137	predicted gene 8137	81852812	81853279	TC1000002555.mm.1	-0.9	0.000467
TC0100001918.mm.1	ENSMUST00000093326	Gm5356	predicted pseudogene 5356	89186943	89187560	TC0800002670.mm.1	-0.4	0.00047
TC0100001923.mm.1	XR_035706	Gm5879	predicted gene 5879	87764877	87766225	TC0600002662.mm.1	-1.0	0.000472
TC0100001935.mm.1	NM_009368	Tgfb3	transforming growth factor, beta 3	86056743	86079041	TC1200002103.mm.1	0.5	0.000472
TC0100001945.mm.1	ENSMUST00000116491	Gm14239	predicted gene 14239	155459501	155460892	TC0200004960.mm.1	-0.4	0.000473
TC0100001946.mm.1	ENSMUST00000160362	Gm2976	predicted gene 2976	22479934	22480446	TC0900001911.mm.1	-0.7	0.000478
TC0100001948.mm.1	NM_008398	Itga7	integrin alpha 7	128933813	128958286	TC1000001626.mm.1	0.9	0.000484
TC0100001949.mm.1	NM_009204	Slc2a4	solute carrier family 2 (facilitated glucose tr	69942286	69948190	TC1100003078.mm.1	0.7	0.000484
TC0100001952.mm.1	ENSMUST00000121118	Gm13529	predicted gene 13529	33652389	33652798	TC0200003330.mm.1	-0.8	0.000484
TC0100001960.mm.1	NM_028132	Pgm2	phosphoglucomutase 2	99929414	99987294	TC0400001010.mm.1	0.6	0.000485
TC0100001961.mm.1	NCBI_Gene:10004259	Trav13n	Trav13n-2 T cell receptor alpha variable 13N-2	53253792	53254317	TC1400002815.mm.1	-0.7	0.000485
TC0100001963.mm.1	NM_020559	Alas1	aminolevulinic acid synthase 1	106233455	106248126	TC0900003004.mm.1	0.7	0.000493
TC0100001975.mm.1	ENSMUST00000118723	Rps24-p	ribosomal protein S24, pseudogene 3	79195047	79195448	TC0X00000793.mm.1	-1.1	0.000493
TC0100001978.mm.1	NM_175236	Adhfe1	alcohol dehydrogenase, iron containing, 1	9547948	9577970	TC0100000039.mm.1	1.4	0.000494
TC0100001983.mm.1	NM_007881	Atn1	atrophin 1	124742544	124756524	TC0600003604.mm.1	0.2	0.000498
TC0100001988.mm.1	NM_172541	Tmem120	transmembrane protein 120A	135735333	135744271	TC0500003404.mm.1	0.6	0.000501
TC0100001992.mm.1	ENSMUST00000178147	Gm6472	predicted pseudogene 6472	152909504	152910155	TC0X00003201.mm.1	-1.1	0.000509
TC0100001999.mm.1	ENSMUST00000118753	Gm12832	predicted gene 12832	115543385	115545064	TC0400003319.mm.1	0.6	0.000513
TC0100002008.mm.1	ENSMUST00000178248	Gm2877	predicted gene 2877	3735760	3736963	TC1400001368.mm.1	-0.5	0.000519
TC0100002011.mm.1	ENSMUST00000162128	Gm16111	predicted gene 16111	21889780	21890064	TC0500000179.mm.1	-0.9	0.000522
TC0100002012.mm.1	NM_031170	Krt8	keratin 8	101996709	102004342	TC1500002282.mm.1	-1.5	0.000523
TC0100002021.mm.1	NM_001289916	Rora	RAR-related orphan receptor alpha (Rora), trans	0	0	TSUnmapped0000004	0.7	0.000527
TC0100002023.mm.1	ENSMUST00000121305	Gm11472	predicted gene 11472	167087184	167087739	TC0200005182.mm.1	-0.8	0.00053
TC0100002027.mm.1	ENSMUST00000119126	Gm9078	predicted gene 9078	101062260	101063058	TC0X00000967.mm.1	-1.0	0.000531
TC0100002028.mm.1	ENSMUST00000166453	Gm4462	predicted gene 4462	20664116	20664607	TC1600000287.mm.1	-0.9	0.000537
TC0100002030.mm.1	NM_138741	Sdpr	serum deprivation response	51289126	51302960	TC0100000372.mm.1	1.8	0.00054
TC0100002031.mm.1	NM_001081260	Tnks1bp	tankyrase 1 binding protein 1	85048022	85073048	TC0200001230.mm.1	0.2	0.000542
TC0100002033.mm.1	ENSMUST00000179239	Rps12-p	ribosomal protein S12, pseudogene 6	124349725	124350123	TC0X00002932.mm.1	-1.0	0.000546
TC0100002034.mm.1	OTTMUST00000044764	RP23-32	---	124855729	124856127	TC0X00002935.mm.1	-1.0	0.000546
TC0100002044.mm.1	ENSMUST00000179067	Rps12-p	ribosomal protein S12, pseudogene 17	125547773	125548171	TC0X00002939.mm.1	-1.0	0.000546
TC0100002071.mm.1	NM_013472	Anxa6	annexin A6	54978962	55033471	TC1100002772.mm.1	1.2	0.000548
TC0100002075.mm.1	NM_021424	Pvrl1	poliovirus receptor-related 1	43744576	43807461	TC0900000492.mm.1	-0.3	0.000549
TC0100002076.mm.1	ENSMUST00000119544	H3f3a-p	H3 histone, family 3A, pseudogene 2	91114189	91114599	TC1600002063.mm.1	-0.9	0.000552
TC0100002083.mm.1	XM_620643	Gm5908	predicted gene 5908	32476883	32477329	TC0800001994.mm.1	-0.8	0.000554
TC0100002103.mm.1	ENSMUST00000184303	RP24-28	N/A	72409268	72409878	TC0900000965.mm.1	-0.5	0.000559
TC0100002109.mm.1	ENSMUST00000121177	Gm5383	predicted gene 5383	18942612	18943228	TC0X00000195.mm.1	-0.2	0.000577
TC0100002110.mm.1	ENSMUST00000121510	Gm16436	predicted gene 16436	58630187	58632738	TC0X00002286.mm.1	-0.7	0.000578
TC0100002115.mm.1	NM_018825	Sh2b2	SH2B adaptor protein 2	136218149	136244903	TC0500003417.mm.1	0.3	0.000578
TC0100002142.mm.1	ENSMUST00000121367	Rpl5-ps	ribosomal protein L5, pseudogene 1	14865072	14865965	TC0100000081.mm.1	-1.1	0.00058
TC0100002145.mm.1	NM_001163481	Fkbp10	FK506 binding protein 10	100415694	100424840	TC1100001624.mm.1	0.2	0.000583
TC0100002150.mm.1	NM_013901	Slc39a1	solute carrier family 39 (zinc transporter), me	90248172	90253612	TC0300000785.mm.1	0.6	0.000585
TC0100002151.mm.1	NM_011446	Sox7	SRY-box containing gene 7	63943674	63950732	TC1400000912.mm.1	0.3	0.000586
TC0100002187.mm.1	ENSMUST00000159343	Gm16238	predicted gene 16238	127691935	127692522	TC0300002913.mm.1	-0.9	0.000588
TC0100002193.mm.1	NM_031176	Tnxb	tenascin XB	34670535	34719815	TC1700000644.mm.1	0.8	0.000589
TC0100002198.mm.1	NM_175174	Klhl5	kelch-like 5	65107568	65168188	TC0500000605.mm.1	0.5	0.000591
TC0100002214.mm.1	ENSMUST00000136332	Gm6425	predicted pseudogene 6425	8588407	8589196	TC1900001062.mm.1	-0.4	0.000592
TC0100002236.mm.1	NR_033589	Hmgb1-r	high mobility group box 1, related sequence 17	33484311	33485757	TC0800000389.mm.1	-0.6	0.000593
TC0100002238.mm.1	NM_032400	Sucnr1	succinate receptor 1	60081869	60087566	TC0300000484.mm.1	1.2	0.000594
TC0100002239.mm.1	ENSMUST00000119959	Rpl31-p	ribosomal protein L31, pseudogene 6	123466509	123466886	TC0500001420.mm.1	-0.4	0.000597
TC0100002243.mm.1	ENSMUST00000119629	Gm11979	predicted gene 11979	6785838	6786580	TC1100002188.mm.1	-0.6	0.0006
TC0100002252.mm.1	XR_105470	Gm3625	predicted gene 3625	4586882	4602007	TC1200001358.mm.1	-0.8	0.000601
TC0100002259.mm.1	NM_001190258	Gm9846	predicted gene 9846	114982366	114982739	TC0900003179.mm.1	-1.4	0.000605
TC0100002268.mm.1	NCBI_Gene:639655:p	Trav13d	T cell receptor alpha variable 13D-4	53072763	53073275	TC1400000656.mm.1	-0.4	0.000606
TC0100002270.mm.1	ENSMUST00000073014	Gm8991	predicted pseudogene 8991	16729993	16731074	TC0500001988.mm.1	-1.1	0.000608
TC0100002283.mm.1	XM_003084518	Gm14279	predicted gene 14279	157521696	157522028	TC0200005020.mm.1	-1.1	0.000608
TC0100002284.mm.1	NM_054042	Cd248	CD248 antigen, endosialin	5068078	5070640	TC1900000055.mm.1	1.0	0.000625
TC0100002291.mm.1	NM_021041	Abcc9	ATP-binding cassette, sub-family C (CFTR/MRP),	142587862	142702274	TC0600003379.mm.1	0.9	0.000625

TC0100002294.mm.1	NM_001270996	Adam9	a disintegrin and metallopeptidase domain 9 (m	24949611	25016922	TC0800001901.mm.1	0.9	0.000628
TC0100002297.mm.1	ENSMUST00000074680	Gm9000	predicted gene 9000	108670580	108671440	TC1300001211.mm.1	-0.9	0.000629
TC0100002298.mm.1	ENSMUST00000091531	Gm5196	predicted gene 5196	66864524	66865075	TC1300000812.mm.1	-0.6	0.000634
TC0100002301.mm.1	NM_206882	Hist3h2	histone cluster 3, H2bb, pseudogene	58954048	58954512	TC1100002837.mm.1	-1.7	0.000634
TC0100002311.mm.1	NM_139303	Kif18a	kinesin family member 18A	109280738	109341747	TC0200001620.mm.1	-0.6	0.00064
TC0100002312.mm.1	XM_884704	Gm6109	predicted gene 6109	93448488	93448835	TC1300001049.mm.1	-0.7	0.00064
TC0100002318.mm.1	ENSMUST00000031305	LOC1010	uncharacterized LOC101055802	118065360	118069710	TC0500001305.mm.1	0.4	0.000642
TC0100002321.mm.1	OTTMUST00000112316	RP23-10	---	6019022	6019468	TC0700000064.mm.1	-0.6	0.000645
TC0100002330.mm.1	NM_030565	Fam20c	family with sequence similarity 20, member C	138754514	138810077	TC0500001663.mm.1	0.5	0.000645
TC0100002336.mm.1	NM_026764	Gstm4	glutathione S-transferase, mu 4	108040408	108044894	TC0300002728.mm.1	0.6	0.000645
TC0100002340.mm.1	ENSMUST00000091539	Gm6917	predicted gene 6917	65894209	65894745	TC1300002222.mm.1	-0.6	0.000646
TC0100002347.mm.1	ENSMUST00000178911	Gm8324	predicted gene 8324	3496367	3497570	TC1400001364.mm.1	-0.4	0.000653
TC0100002348.mm.1	ENSMUST00000184247	Rpl15-p	ribosomal protein L15, pseudogene 2	72060937	72061549	TC0900000954.mm.1	-1.2	0.000654
TC0100002350.mm.1	ENSMUST00000179328	Gm8807	predicted gene 8807	75182218	75182709	TC1800001597.mm.1	-1.0	0.000655
TC0100002354.mm.1	ENSMUST00000122361	Gm12696	predicted gene 12696	97521428	97522332	TC0400003104.mm.1	-0.7	0.000655
TC0100002355.mm.1	ENSMUST00000080152	Gm10131	predicted pseudogene 10131	34111143	34111736	TC0800002022.mm.1	-1.0	0.000656
TC0100002357.mm.1	ENSMUST00000072779	Gm5805	predicted gene 5805	81972390	81972845	TC1500000734.mm.1	-0.8	0.000659
TC0100002359.mm.1	ENSMUST00000120752	Gm3835	predicted pseudogene 3835	72429550	72429952	TC0800002462.mm.1	-0.8	0.000661
TC0100002366.mm.1	ENSMUST00000118761	Gm14292	predicted gene 14292	179177425	179177880	TC0200002768.mm.1	-0.7	0.000662
TC0100002371.mm.1	ENSMUST00000082401	mt-Ty	mitochondrially encoded tRNA tyrosine	5260	5326	TC0M00000024.mm.1	1.9	0.000671
TC0100002372.mm.1	NR_076393	Gm6756	3-phosphoglycerate dehydrogenase pseudogene	36920305	36922207	TC1800000351.mm.1	0.3	0.000673
TC0100002377.mm.1	NM_145480	Rfc4	replication factor C (activator 1) 4	23113943	23127737	TC1600001390.mm.1	-0.9	0.000675
TC0100002384.mm.1	NM_133977	Trf	transferrin	103204001	103230444	TC0900003344.mm.1	1.9	0.000677
TC0100002388.mm.1	XR_104853	Sprr2a3	small proline-rich protein 2A3	92285446	92289254	TC0300000822.mm.1	-1.4	0.000678
TC0100002395.mm.1	ENSMUST00000096427	LOC1010	60S ribosomal protein L7a-like	93421682	93422488	TC0100000934.mm.1	-0.7	0.00068
TC0100002445.mm.1	NM_011122	Plod1	procollagen-lysine, 2-oxoglutarate 5-dioxygenas	147909753	147936776	TC0400004004.mm.1	0.6	0.000684
TC0100002450.mm.1	NM_001163472	Cyp2d22	cytochrome P450, family 2, subfamily d, polypep	82370527	82380260	TC1500001944.mm.1	0.5	0.000688
TC0100002451.mm.1	XM_358238	Gm5396	predicted pseudogene 5396	153112896	153113462	TC0X00003205.mm.1	-0.8	0.00069
TC0100002453.mm.1	NM_013647	Rps16	ribosomal protein S16	28350652	28352698	TC0700000495.mm.1	-0.5	0.000695
TC0100002460.mm.1	ENSMUST00000180186	Gm15387	predicted gene 15387	74093183	74094402	TC1500001705.mm.1	-1.2	0.000695
TC0100002470.mm.1	ENSMUST00000176461	Gm5871	predicted gene 5871	109016198	109016915	TC0500002961.mm.1	-0.4	0.000697
TC0100002472.mm.1	NM_027182	Trip13	thyroid hormone receptor interactor 13	73912462	73937767	TC1300002306.mm.1	-0.4	0.000699
TC0100002473.mm.1	NM_181588	Cmbl	carboxymethylenebutenolidase-like (Pseudomor	31568791	31590119	TC1500000207.mm.1	1.5	0.000704
TC0100002477.mm.1	ENSMUST00000176164	Gm3307	predicted gene 3307	63606019	63606650	TC0700000969.mm.1	-1.0	0.000707
TC0100002481.mm.1	ENSMUST00000121434	Gm14052	predicted gene 14052	132099869	132100899	TC0200002029.mm.1	-0.5	0.000711
TC0100002483.mm.1	NM_023887	Gcnt2	glucosaminyl (N-acetyl) transferase 2, I-branch	40859768	40960892	TC1300000460.mm.1	0.6	0.000713
TC0100002495.mm.1	ENSMUST00000110225	Gm11037	predicted gene 11037	131133497	131134215	TC0200002006.mm.1	0.4	0.000715
TC0100002496.mm.1	XR_105665	Gm5144	predicted gene 5144	11906519	11907396	TC1500000094.mm.1	0.3	0.000728
TC0100002498.mm.1	NM_021320	Ntn4	netrin 4	93640681	93747207	TC1000001138.mm.1	0.3	0.00073
TC0100002538.mm.1	NM_178373	Cidec	cell death-inducing DFFA-like effector c	113424634	113435760	TC0600002920.mm.1	2.3	0.000733
TC0100002544.mm.1	NM_028299	2700029	RIKEN cDNA 2700029M09 gene	60890418	60907580	TC0800000648.mm.1	-0.4	0.000739
TC0100002552.mm.1	ENSMUST00000117119	Rpl30-p	ribosomal protein L30, pseudogene 10	71803688	71804034	TC0X00000655.mm.1	-0.7	0.000745
TC0100002554.mm.1	NCBI_Gene:10012643	Trgj3	T cell receptor gamma joining 3	19257117	19257176	TC1300000143.mm.1	-1.3	0.000747
TC0100002574.mm.1	NM_009537	Yy1	YY1 transcription factor	108792973	108816632	TC1200001113.mm.1	-0.5	0.000749
TC0100002581.mm.1	NM_029823	Arxes2	adipocyte-related X-chromosome expressed seq	135993820	135995359	TC0X00001316.mm.1	1.3	0.000749
TC0100002582.mm.1	ENSMUST00000160070	Rpl30-p	ribosomal protein L30, pseudogene 2	22230902	22231192	TC0800001865.mm.1	-0.7	0.000756
TC0100002587.mm.1	ENSMUST00000118446	Rpsa-ps	ribosomal protein SA, pseudogene 11	59162268	59163156	TC0400002749.mm.1	-0.5	0.000762
TC0100002598.mm.1	ENSMUST00000134617	Gm12254	predicted gene 12254	58508791	58509261	TC1100002822.mm.1	-0.9	0.000764
TC0100002601.mm.1	XM_619114	Gm5792	predicted pseudogene 5792	65416599	65417147	TC1300000794.mm.1	-0.5	0.000766
TC0100002604.mm.1	ENSMUST00000076373	Gm8730	predicted pseudogene 8730	102864779	102865853	TC0800002790.mm.1	-1.0	0.000771
TC0100002608.mm.1	ENSMUST00000027231	Slc9a2	solute carrier family 9 (sodium/hydrogen exchan	40681712	40768885	TC0100000302.mm.1	-0.3	0.000772
TC0100002623.mm.1	NM_008715	Ints6	integrator complex subunit 6	62676325	62761115	TC1400002208.mm.1	-0.3	0.000775
TC0100002639.mm.1	NM_133675	Sptssb	serine palmitoyltransferase, small subunit B	69819538	69859896	TC0300002143.mm.1	-0.3	0.000775
TC0100002641.mm.1	ENSMUST00000071235	Gm10064	predicted gene 10064	122697196	122697603	TC0500003218.mm.1	-0.9	0.000777
TC0100002642.mm.1	NM_009176	St3gal3	ST3 beta-galactoside alpha-2,3-sialyltransferas	117932153	118134946	TC0400003383.mm.1	0.6	0.00079
TC0100002647.mm.1	NM_009804	Cat	catalase	103453849	103485160	TC0200004227.mm.1	1.6	0.00079
TC0100002668.mm.1	NM_027371	Rpf1	ribosome production factor 1 homolog (S. cerevi	146506344	146521423	TC0300003101.mm.1	-0.7	0.000794
TC0100002671.mm.1	NM_025541	Asf1a	ASF1 anti-silencing function 1 homolog A (S. ce	53596961	53609225	TC1000000484.mm.1	-0.8	0.000797
TC0100002690.mm.1	ENSMUST00000165131	Gm6665	predicted gene 6665	31819862	31820413	TC1800001116.mm.1	1.3	0.000799
TC0100002702.mm.1	ENSMUST00000117283	Gm15198	predicted gene 15198	42435880	42436065	TC1000000381.mm.1	-0.6	0.000805
TC0100002721.mm.1	NM_001033466	Zbtb2	zinc finger and BTB domain containing 2	4367074	4388108	TC1000001675.mm.1	-0.3	0.000808
TC0100002740.mm.1	NCBI_Gene:107574:p	Tcrg-C2	T-cell receptor gamma, constant 2	19304649	19337169	TC1300001519.mm.1	-1.2	0.000812
TC0100002742.mm.1	NM_011469	Sprr2b	small proline-rich protein 2B	92316705	92318085	TC0300000823.mm.1	-0.5	0.000815
TC0100002752.mm.1	ENSMUST00000184467	RP23-29	N/A	72209555	72210170	TC0900000958.mm.1	-0.7	0.000817
TC0100002761.mm.1	NM_178795	Ppip5k1	diphosphoinositol pentakisphosphate kinase 1	121310561	121355396	TC0200004485.mm.1	0.4	0.00082
TC0100002775.mm.1	NM_030013	Cyp20a1	cytochrome P450, family 20, subfamily a, polype	60343323	60388060	TC0100000469.mm.1	0.6	0.00082
TC0100002776.mm.1	ENSMUST00000040649	Gm10052	predicted pseudogene 10052	123689230	123690192	TC0900003309.mm.1	-1.2	0.000824
TC0100002798.mm.1	NM_008059	G0s2	G0/G1 switch gene 2	193272160	193273188	TC0100003838.mm.1	0.8	0.000826
TC0100002800.mm.1	ENSMUST00000121173	Gm11765	predicted gene 11765	81455943	81461732	TC0400002920.mm.1	-0.2	0.000828
TC0100002801.mm.1	XR_141286	Gm10808	predicted gene 10808	45128531	45130874	TC1600000669.mm.1	0.7	0.000832
TC0100002805.mm.1	NM_008567	Mcm6	minichromosome maintenance deficient 6 (MIS5	128331590	128359664	TC0100003026.mm.1	-1.2	0.000837
TC0100002837.mm.1	ENSMUST00000173370	Hmg1l1	high-mobility group (nonhistone chromosomal) p	42020836	42021483	TC0700000735.mm.1	-1.2	0.000843
TC0100002840.mm.1	XR_105934	Gm19389	predicted gene, 19389	23310020	23659719	TC1800000179.mm.1	0.2	0.000853
TC0100002841.mm.1	NR_030454	Mir684-	microRNA 684-1	80628705	80628790	TC0200003841.mm.1	-1.1	0.000858
TC0100002842.mm.1	NM_030152	Nol3	nucleolar protein 3 (apoptosis repressor with C	105276420	105281939	TC0800001210.mm.1	0.4	0.000862
TC0100002844.mm.1	ENSMUST00000050143	Gm7729	predicted gene 7729	27598644	27599759	TC1800000226.mm.1	-1.1	0.000869
TC0100002849.mm.1	OTTMUST00000044462	RP23-34	---	114980970	114981317	TC0X00002888.mm.1	-0.6	0.000869
TC0100002852.mm.1	ENSMUST00000179326	Gm5473	predicted pseudogene 5473	63631697	63632338	TC1500000462.mm.1	-1.2	0.000873

TC0100002863.mm.1	XM_356811	Gm5215	predicted gene 5215	54311961	54312365	TC1500001529.mm.1	-0.4	0.000881
TC0100002868.mm.1	NM_011587	Tie1	tyrosine kinase with immunoglobulin-like and EG	118471191	118490061	TC0400003393.mm.1	0.5	0.000882
TC0100002873.mm.1	NM_027541	Prpf3	PRP3 pre-mRNA processing factor 3 homolog (ye	95830124	95855885	TC0300002487.mm.1	-0.2	0.000883
TC0100002877.mm.1	ENSMUST00000116122	Rps19-p	ribosomal protein S19, pseudogene 7	140073032	140073469	TC0200004727.mm.1	-0.6	0.000886
TC0100002880.mm.1	NM_013662	Sema6b	sema domain, transmembrane domain (TM), an	56123085	56140343	TC1700002316.mm.1	0.2	0.000889
TC0100002890.mm.1	NM_025558	Cyb5b	cytochrome b5 type B	107150640	107187471	TC0800001265.mm.1	0.8	0.000892
TC0100002895.mm.1	XM_886771	Gm6314	predicted pseudogene 6314	140315666	140316058	TC0700002009.mm.1	-0.4	0.000893
TC0100002902.mm.1	NM_009673	Anxa5	annexin A5	36448923	36475887	TC0300001850.mm.1	1.1	0.000896
TC0100002903.mm.1	ENSMUST00000172249	Gm7803	predicted gene 7803	50325517	50326532	TC0X00002180.mm.1	-1.0	0.000897
TC0100002904.mm.1	NM_011803	Klf6	Kruppel-like factor 6	5861489	5870393	TC1300000028.mm.1	0.5	0.000906
TC0100002909.mm.1	ENSMUST00000121664	Gm13445	predicted gene 13445	35491213	35491519	TC0200003369.mm.1	-0.6	0.000915
TC0100002912.mm.1	ENSMUST00000162550	Gm16550	predicted gene 16550	165148824	165148949	TC0100003438.mm.1	-1.2	0.000916
TC0100002921.mm.1	NM_010358	Gstm1	glutathione S-transferase, mu 1	108012250	108017973	TC0300002725.mm.1	1.9	0.000917
TC0100002929.mm.1	ENSMUST00000177590	Rpl3-ps	ribosomal protein L3, pseudogene 1	13202546	13203838	TC0X00000164.mm.1	-1.1	0.000918
TC0100002936.mm.1	ENSMUST00000073722	Gm10073	predicted pseudogene 10073	106572966	106573461	TC0800002858.mm.1	-0.8	0.000921
TC0100002945.mm.1	NCBI_Gene:434036:p	Igkv13-	Igkv13-85 immunoglobulin kappa chain variable	68930269	68930734	TC0600003552.mm.1	-0.9	0.000923
TC0100002964.mm.1	ENSMUST00000120015	Gm6461	predicted gene 6461	115443399	115444031	TC0X00002891.mm.1	-0.7	0.000924
TC0100002965.mm.1	NM_033602	Peli2	pellino 2	48120869	48260883	TC1400000524.mm.1	0.4	0.000926
TC0100002967.mm.1	NM_010498	Ids	iduronate 2-sulfatase	70343069	70365085	TC0X00002384.mm.1	0.5	0.000933
TC0100002973.mm.1	ENSMUST00000118690	Gm12901	predicted gene 12901	123258046	123258904	TC0400001394.mm.1	-0.5	0.000943
TC0100002980.mm.1	ENSMUST00000135190	Gm8292	predicted gene 8292	55335367	55335883	TC0100000403.mm.1	-0.6	0.000956
TC0100002993.mm.1	NM_194344	Sh3tc1	SH3 domain and tetratricopeptide repeats 1	35697180	35729276	TC0500002253.mm.1	0.3	0.000957
TC0100003006.mm.1	NM_009712	Arsb	arylsulfatase B	93771679	93943016	TC1300001052.mm.1	0.6	0.000959
TC0100003026.mm.1	ENSMUST00000087137	Gm7335	predicted gene 7335	37713521	37713929	TC1700002079.mm.1	0.5	0.000959
TC0100003029.mm.1	NM_053269	Rad51c	RAD51 homolog C	87376645	87404954	TC1100003478.mm.1	-0.3	0.000961
TC0100003031.mm.1	NM_001110205	Acvr1	activin A receptor, type 1	58388644	58567157	TC0200003579.mm.1	0.2	0.000965
TC0100003032.mm.1	NM_028222	Cdkn3	cyclin-dependent kinase inhibitor 3	46760541	46771525	TC1400000501.mm.1	-0.8	0.000965
TC0100003051.mm.1	NM_028677	Ppih	peptidyl prolyl isomerase H	119300010	119320546	TC0400003422.mm.1	-0.7	0.000967
TC0100003052.mm.1	NM_009443	Tgoln1	trans-golgi network protein	72495397	72617000	TC0600002492.mm.1	1.0	0.000968
TC0100003055.mm.1	NM_145546	Gtf2b	general transcription factor IIB	142765226	142783606	TC0300001449.mm.1	-0.6	0.00098
TC0100003056.mm.1	NR_002883	Gm5643	heterogeneous nuclear ribonucleoprotein A1 pse	142297505	142299237	TC0X00001403.mm.1	-0.7	0.000981
TC0100003058.mm.1	NM_024264	Cyp27a1	cytochrome P450, family 27, subfamily a, polype	74713574	74737892	TC0100000642.mm.1	0.6	0.000983
TC0100003062.mm.1	NM_001165971	Gm5803	predicted gene 5803	22713820	22714984	TC1500001262.mm.1	-0.7	0.000986
TC0100003064.mm.1	ENSMUST00000118281	Hmgb1-p	high mobility group box 1, pseudogene 4	6592602	6593236	TC1900001015.mm.1	-1.2	0.000988
TC0100003069.mm.1	ENSMUST00000119643	Gm6758	predicted gene 6758	74135133	74136187	TC0X00003433.mm.1	-0.9	0.000989
TC0100003090.mm.1	NM_028048	Slc25a3	solute carrier family 25, member 35	68968131	68974365	TC1100000887.mm.1	0.6	0.000991
TC0100003092.mm.1	NM_033444	Clic1	chloride intracellular channel 1	35049966	35058749	TC1700000662.mm.1	-0.7	0.000994
TC0100003094.mm.1	NR_030454_4	Gm10241	predicted pseudogene 10241	24257528	24257612	TC0500000210.mm.1	-1.1	0.000998
TC0100003095.mm.1	NR_030454_3	Gm10241	predicted pseudogene 10241	127398916	127399000	TC0700001845.mm.1	-1.1	0.000998
TC0100003099.mm.1	NR_030454_2	Gm10241	predicted pseudogene 10241	7753089	7753173	TC0X00000067.mm.1	-1.1	0.000998
TC0100003102.mm.1	NR_030454_9	Gm10241	predicted pseudogene 10241	129665755	129665839	TC1000001650.mm.1	-1.1	0.000998
TC0100003106.mm.1	NR_030454_7	Gm10241	predicted pseudogene 10241	75065907	75065991	TC1100003211.mm.1	-1.1	0.000998
TC0100003108.mm.1	NM_145468	Skp2	S-phase kinase-associated protein 2 (p45)	9111982	9155425	TC1500001192.mm.1	-0.4	0.001001
TC0100003121.mm.1	NM_001190403	Amy2b	amylase 2b	113147656	113156727	TC0300002778.mm.1	0.4	0.001012
TC0100003125.mm.1	ENSMUST00000117715	Gm11971	predicted gene 11971	6453151	6453438	TC1100000098.mm.1	-0.9	0.001014
TC0100003138.mm.1	NM_008252	Hmgb2	high mobility group box 2	57511843	57515999	TC0800000629.mm.1	-1.2	0.001015
TC0100003145.mm.1	ENSMUST00000072429	Rps10-p	ribosomal protein S10, pseudogene 2	20822103	20822677	TC1600001355.mm.1	-0.9	0.001018
TC0100003154.mm.1	NM_011830	Impdh2	inosine 5-phosphate dehydrogenase 2	108560491	108565573	TC0900001414.mm.1	-0.7	0.001019
TC0100003157.mm.1	NM_007640	Cd1d2	CD1d2 antigen	86986586	86989533	TC0300000689.mm.1	1.0	0.001019
TC0100003159.mm.1	NM_001172093	Depdc1a	DEP domain containing 1a	159495433	159529955	TC0300001587.mm.1	-1.0	0.00102
TC0100003161.mm.1	NM_133692	Pold3	polymerase (DNA-directed), delta 3, accessory s	100082111	100121565	TC0700003815.mm.1	-0.4	0.001024
TC0100003166.mm.1	NM_021355	Fmod	fibromodulin	134037254	134048277	TC0100001218.mm.1	0.4	0.001026
TC0100003178.mm.1	ENSMUST00000120650	Gm14926	predicted gene 14926	119413252	119413989	TC0X00001170.mm.1	-0.7	0.00103
TC0100003180.mm.1	XR_140792	Gm9794	predicted pseudogene 9794	66875262	66875759	TC0600002420.mm.1	-0.7	0.001032
TC0100003190.mm.1	NM_001111058	Cd33	CD33 antigen	43527456	43544428	TC0700002950.mm.1	0.3	0.001042
TC0100003191.mm.1	NM_007392	Acta2	actin, alpha 2, smooth muscle, aorta	34240336	34255373	TC1900001415.mm.1	1.3	0.001049
TC0100003192.mm.1	NM_016744	Pde1a	phosphodiesterase 1A, calmodulin-dependent	79834453	80129458	TC0200003830.mm.1	0.6	0.001051
TC0100003193.mm.1	ENSMUST00000032395	Gm7399	predicted gene 7399	59806557	59807414	TC1000000539.mm.1	-0.9	0.001056
TC0100003209.mm.1	ENSMUST00000121704	Gm5832	predicted gene 5832	88022381	88023962	TC0100000834.mm.1	-0.5	0.001066
TC0100003210.mm.1	NM_009849	Entpd2	ectonucleoside triphosphate diphosphohydrolas	25395874	25401323	TC0200005462.mm.1	0.4	0.001066
TC0100003211.mm.1	NM_010664	Krt18	keratin 18	102028216	102032026	TC1500001084.mm.1	-1.8	0.001067
TC0100003212.mm.1	NM_011607	Tnc	tenascin C	63959785	64047015	TC0400002812.mm.1	-1.0	0.001077
TC0100003223.mm.1	NM_018743	Agpat6	1-acylglycerol-3-phosphate O-acyltransferase 6	23172946	23208453	TC0800001883.mm.1	0.4	0.001085
TC0100003232.mm.1	NM_133659	Erg	avian erythroblastosis virus E-26 (v-ets) oncog	95359169	95586593	TC1600002128.mm.1	0.6	0.001085
TC0100003240.mm.1	NM_010144	Ephb4	Eph receptor B4	137350109	137378669	TC0500001623.mm.1	0.3	0.001087
TC0100003242.mm.1	NM_001013578	Thoc7	THO complex 7 homolog (Drosophila)	13949012	13961313	TC1400001470.mm.1	-0.3	0.001087
TC0100003249.mm.1	NM_009502	Vcl	vinculin	20929433	21033673	TC1400000177.mm.1	0.9	0.001089
TC0100003254.mm.1	NM_001161457	Cbfb	core binding factor beta	105170674	105217989	TC0800001204.mm.1	-0.6	0.001089
TC0100003259.mm.1	XR_002363	Gm5601	predicted pseudogene 5601	119739914	119742226	TC0700001714.mm.1	-0.7	0.001098
TC0100003267.mm.1	ENSMUST00000119032	Gm12034	predicted gene 12034	20446412	20446810	TC1100000197.mm.1	-0.7	0.0011
TC0100003272.mm.1	NM_008613	Mns1	meiosis-specific nuclear structural protein 1	72438011	72459199	TC0900000966.mm.1	-0.9	0.001105
TC0100003280.mm.1	NM_181390	Mustn1	musculoskeletal, embryonic nuclear protein 1	30879257	30881610	TC1400000316.mm.1	0.6	0.001106
TC0100003289.mm.1	ENSMUST00000121084	Smt3h2-	SMT3 suppressor of mif two 3 homolog 2, pseud	7752130	7752414	TC0X00000066.mm.1	-0.9	0.001106
TC0100003293.mm.1	ENSMUST00000121596	Gm12912	predicted gene 12912	75147609	75148989	TC0400000786.mm.1	-0.5	0.001107
TC0100003300.mm.1	NM_030166	Galnt15	UDP-N-acetyl-alpha-D-galactosamine:polypeptid	32028989	32062197	TC1400000336.mm.1	0.4	0.001129
TC0100003301.mm.1	ENSMUST00000181079	Ptma-ps	prothymosin alpha, pseudogene 1	24063832	24064164	TC0700000366.mm.1	-0.7	0.001132
TC0100003315.mm.1	ENSMUST00000117834	Gm12859	predicted gene 12859	118490782	118497642	TC0400003394.mm.1	-0.4	0.001134
TC0100003316.mm.1	NM_175501	Adamts1	a disintegrin-like and metallopeptidase (reprol	11064790	11346867	TC1500000090.mm.1	0.7	0.001134

TC0100003321.mm.1	ENSMUST00000104977	Gm4877	predicted gene 4877	42519516	42520325	TC0600002173.mm.1	-0.3	0.001136
TC0100003342.mm.1	BC052077	Prpf38b	PRP38 pre-mRNA processing factor 38 (yeast) do	108902667	108911727	TC0300002756.mm.1	-0.5	0.001141
TC0100003343.mm.1	NM_025914	Actr6	ARP6 actin-related protein 6	89711971	89732295	TC1000002660.mm.1	-0.3	0.001142
TC0100003351.mm.1	NM_207624	Ace	angiotensin I converting enzyme (peptidyl-dipep	105967945	105989964	TC1100001767.mm.1	1.2	0.001145
TC0100003361.mm.1	NM_016740	S100a11	S100 calcium binding protein A11 (calgizzarin)	93520488	93526288	TC0300000852.mm.1	1.3	0.001149
TC0100003367.mm.1	NR_035452	Mir1931	microRNA 1931	93162785	93162903	TC1000001125.mm.1	-0.5	0.001151
TC0100003370.mm.1	ENSMUST00000116005	Gm11951	predicted gene 11951	3633012	3633442	TC1100002095.mm.1	1.0	0.001162
TC0100003376.mm.1	NM_175225	Tasp1	taspase, threonine aspartase 1	139833479	140066805	TC0200004725.mm.1	-0.2	0.001175
TC0100003398.mm.1	NM_177342	Taf5	TAF5 RNA polymerase II, TATA box binding prote	47067748	47083479	TC1900000717.mm.1	-0.5	0.001178
TC0100003401.mm.1	ENSMUST00000160969	Gm15795	predicted gene 15795	20444258	20444560	TC0100002030.mm.1	-1.1	0.001181
TC0100003408.mm.1	NM_020587	Srsf4	serine/arginine-rich splicing factor 4	131873617	131901725	TC0400001570.mm.1	-0.5	0.001184
TC0100003412.mm.1	NM_001081187	Htra4	HtrA serine peptidase 4	25024928	25038962	TC0800001902.mm.1	0.5	0.001189
TC0100003422.mm.1	ENSMUST00000079841	Rps6-ps	ribosomal protein S6, pseudogene 2	88806391	88807140	TC0800001039.mm.1	-0.5	0.001189
TC0100003432.mm.1	NM_025844	Chordc1	cysteine and histidine-rich domain (CHORD)-cont	18292267	18314001	TC0900000132.mm.1	-0.6	0.001195
TC0100003438.mm.1	NM_022420	Gprc5b	G protein-coupled receptor, family C, group 5,	118972040	118995211	TC0700004179.mm.1	0.5	0.001196
TC0100003439.mm.1	NM_001040611	Peg10	paternally expressed 10	4747306	4760517	TC0600000014.mm.1	0.7	0.001201
TC0100003454.mm.1	NM_011580	Thbs1	thrombospondin 1	118111876	118127133	TC0200001729.mm.1	1.4	0.001203
TC0100003469.mm.1	NM_008029	Flt4	FMS-like tyrosine kinase 4	49609263	49652739	TC1100000519.mm.1	0.2	0.00121
TC0100003474.mm.1	NM_009780	C4b	complement component 4B (Chido blood group)	34728380	34743897	TC1700002814.mm.1	1.7	0.001211
TC0100003477.mm.1	NM_027695	Oxsm	3-oxoacyl-ACP synthase, mitochondrial	16238656	16249808	TC1400001486.mm.1	0.4	0.001221
TC0100003478.mm.1	NM_013415	Atp1b2	ATPase, Na+/K+ transporting, beta 2 polypeptide	69599736	69605960	TC1100003049.mm.1	0.2	0.001227
TC0100003482.mm.1	ENSMUST00000117924	Gm14512	predicted gene 14512	11984475	11984650	TC0X00000148.mm.1	-0.3	0.001229
TC0100003498.mm.1	ENSMUST00000118662	Gm15616	predicted gene 15616	72047205	72047579	TC0500000667.mm.1	-1.0	0.00123
TC0100003503.mm.1	NM_027816	Cyp2u1	cytochrome P450, family 2, subfamily u, polypep	131290491	131303227	TC0300002957.mm.1	0.3	0.001231
TC0100003505.mm.1	ENSMUST00000119478	Gm12852	predicted gene 12852	99103060	99103778	TC0400003126.mm.1	-0.6	0.001233
TC0100003514.mm.1	ENSMUST00000164671	Gm17450	predicted gene, 17450	91220452	91220878	TC1300001018.mm.1	-0.4	0.001243
TC0100003516.mm.1	XM_003085105	Gm20056	predicted gene, 20056	32408524	32409057	TC1600000441.mm.1	0.9	0.001248
TC0100003518.mm.1	ENSMUST00000120953	Gm13413	predicted gene 13413	32406055	32406656	TC0200000580.mm.1	-1.3	0.001248
TC0100003520.mm.1	ENSMUST00000076166	Rpl30-p	ribosomal protein L30, pseudogene 8	99047230	99047577	TC1200000979.mm.1	-0.7	0.001255
TC0100003521.mm.1	ENSMUST00000120104	Gm12129	predicted gene 12129	38219069	38220215	TC1100000396.mm.1	-0.7	0.001258
TC0100003524.mm.1	ENSMUST00000097581	Gm10540	predicted gene 10540	45285833	45286108	TC1800001285.mm.1	-0.8	0.001259
TC0100003528.mm.1	NM_146090	Zadh2	zinc binding alcohol dehydrogenase, domain con	84088158	84097514	TC1800000884.mm.1	0.5	0.001265
TC0100003531.mm.1	NM_207298	Cercam	cerebral endothelial cell adhesion molecule	29869164	29882840	TC0200000514.mm.1	0.2	0.001268
TC0100003539.mm.1	NR_029733	Mir15a	microRNA 15a	61632027	61632110	TC1400002197.mm.1	-0.4	0.001276
TC0100003550.mm.1	NM_198654	Nsl1	NSL1, MIND kinetochore complex component, h	191063012	191084558	TC0100001836.mm.1	-0.4	0.001276
TC0100003553.mm.1	NR_030455	Mir684-	microRNA 684-2	11134097	11134182	TC0400000082.mm.1	-1.1	0.001276
TC0100003554.mm.1	NM_001122739	Inppl1	inositol polyphosphate phosphatase-like 1	101822632	101838226	TC0700003844.mm.1	0.4	0.001279
TC0100003562.mm.1	NM_016852	Wbp2	WW domain binding protein 2	116078573	116086995	TC1100004102.mm.1	0.4	0.001289
TC0100003566.mm.1	NM_197982	Ddx39	DEAD (Asp-Glu-Ala-Asp) box polypeptide 39	83715177	83726892	TC0800000932.mm.1	-0.3	0.001291
TC0100003577.mm.1	NM_026533	Rps13	ribosomal protein S13	116331507	116334190	TC0700004155.mm.1	-0.6	0.001293
TC0100003579.mm.1	OTTMUST00000025902	RP23-28	---	145646771	145647115	TC0400003967.mm.1	-0.5	0.001299
TC0100003590.mm.1	NM_025982	Tspan31	tetraspanin 31	127067289	127070261	TC1000003096.mm.1	1.0	0.001308
TC0100003593.mm.1	ENSMUST00000177820	Gm9242	predicted pseudogene 9242	97490047	97491120	TC1600001091.mm.1	-1.1	0.001313
TC0100003595.mm.1	NM_012060	Bcap31	B cell receptor associated protein 31	73686178	73716175	TC0X00002433.mm.1	0.8	0.001314
TC0100003599.mm.1	ENSMUST00000121764	Gm15644	predicted gene 15644	67012485	67012871	TC0600000778.mm.1	-0.5	0.001326
TC0100003610.mm.1	NM_021462	Mknk2	MAP kinase-interacting serine/threonine kinase	80665327	80676293	TC1000002509.mm.1	1.1	0.001329
TC0100003611.mm.1	OTTMUST00000112310	RP23-58	---	43943902	43944483	TC0500002318.mm.1	-1.0	0.001332
TC0100003615.mm.1	NM_010329	Pdpn	podoplanin	143267422	143299564	TC0400003917.mm.1	0.4	0.001333
TC0100003620.mm.1	ENSMUST00000053326	Gm5612	predicted gene 5612	18427543	18428806	TC0900000134.mm.1	0.5	0.001335
TC0100003627.mm.1	NM_023842	Dsp	desmoplakin	38151294	38198577	TC1300000442.mm.1	-1.3	0.001336
TC0100003641.mm.1	NM_133784	Wwtr1	WW domain containing transcription regulator 1	57455644	57575910	TC0300002025.mm.1	0.7	0.001338
TC0100003642.mm.1	NM_024208	Echdc3	enoyl Coenzyme A hydratase domain containing	6188465	6213033	TC0200002890.mm.1	0.2	0.00134
TC0100003644.mm.1	ENSMUST00000118614	Gm12058	predicted gene 12058	22786811	22787247	TC1100002353.mm.1	-0.5	0.00134
TC0100003646.mm.1	ENSMUST00000173076	Gm3617	predicted gene 3617	39314899	39315453	TC0100000283.mm.1	-1.3	0.00135
TC0100003665.mm.1	NM_011044	Pck1	phosphoenolpyruvate carboxykinase 1, cytosolic	173153048	173159273	TC0200002683.mm.1	2.1	0.001351
TC0100003679.mm.1	ENSMUST00000078030	Gm6104	predicted gene 6104	4879202	4880669	TC0100001913.mm.1	-0.5	0.001362
TC0100003686.mm.1	ENSMUST00000119552	Gm13804	predicted gene 13804	98291403	98291574	TC0200001500.mm.1	-0.5	0.001365
TC0100003696.mm.1	NM_145942	Hmgcs1	3-hydroxy-3-methylglutaryl-Coenzyme A synthas	119690446	119708086	TC1300001353.mm.1	1.2	0.001374
TC0100003697.mm.1	NM_001276446	Alad	aminolevulinate, delta-, dehydratase	62505984	62520063	TC0400002791.mm.1	0.3	0.001376
TC0100003698.mm.1	ENSMUST00000119745	Gm13864	predicted gene 13864	34786679	34787463	TC0600000338.mm.1	-1.0	0.001381
TC0100003709.mm.1	OTTMUST00000012973	RP23-15	---	61416402	61416815	TC1100002911.mm.1	-0.4	0.001389
TC0100003713.mm.1	ENSMUST00000104797	Gm23134	predicted gene, 23134	157562361	157562447	TC0200005024.mm.1	0.9	0.00139
TC0100003715.mm.1	NM_019414	Selenbp	selenium binding protein 2	94693556	94704413	TC0300000875.mm.1	1.0	0.00139
TC0100003723.mm.1	NM_001290122	Rbm4	RNA binding motif protein 4 (Rbm4), transcript	0	0	TSUnmapped0000002	-0.8	0.001393
TC0100003736.mm.1	NM_010656	Sspn	sarcospan	145931641	145965225	TC0600001729.mm.1	0.3	0.001395
TC0100003738.mm.1	XM_884320	Gm6115	predicted gene 6115	101038599	101039246	TC1300002547.mm.1	-1.2	0.001396
TC0100003740.mm.1	NM_027334	Mettl7a	methyltransferase like 7A1	100304817	100328662	TC1500001040.mm.1	1.2	0.0014
TC0100003742.mm.1	NCBI_Gene:640931:p	Trav13d	T cell receptor alpha variable 13D-1	52851290	52851866	TC1400000635.mm.1	-0.4	0.001403
TC0100003751.mm.1	NM_153127	Mmrn2	multimerin 2	34375504	34404287	TC1400000376.mm.1	0.7	0.001403
TC0100003754.mm.1	NM_009352	Terf1	telomeric repeat binding factor 1	15805646	15844052	TC0100000092.mm.1	-0.6	0.00141
TC0100003773.mm.1	ENSMUST00000084171	Gm5518	predicted gene 5518	29160118	29160765	TC1900000438.mm.1	-1.2	0.001411
TC0100003775.mm.1	NM_007408	Plin2	perilipin 2	86648386	86670060	TC0400002980.mm.1	1.0	0.001417
TC0100003780.mm.1	NM_029938	H2afv	H2A histone family, member V	6427226	6444443	TC1100002170.mm.1	-0.7	0.001431
TC0100003786.mm.1	NM_026185	Abhd15	abhydrolase domain containing 15	77515117	77538607	TC1100001127.mm.1	0.5	0.001431
TC0100003804.mm.1	NM_001081059	Mcur1	mitochondrial calcium uniporter regulator 1	43538406	43560191	TC1300001886.mm.1	0.7	0.001434
TC0100003805.mm.1	XM_894495	Gm6988	predicted gene 6988	110315983	110316367	TC1200001206.mm.1	-0.8	0.001437
TC0100003817.mm.1	NM_027667	Arhgap1	Rho GTPase activating protein 19	41766588	41802084	TC1900001510.mm.1	-0.6	0.001445
TC0100003824.mm.1	NM_029383	Cldn22	claudin 22	47824482	47825475	TC0800000561.mm.1	0.3	0.001452

TC0100003825.mm.1	ENSMUST00000178193	Gm5540	predicted pseudogene 5540	65393301	65395231	TC0300000525.mm.1	0.2	0.001454
TC0100003838.mm.1	NM_030707	Fcrls	Fc receptor-like S, scavenger receptor	87250758	87263738	TC0300002284.mm.1	0.5	0.001455
TC0100003855.mm.1	NR_036572	Rps15a-	ribosomal protein S15A, pseudogene 4	132219893	132220589	TC0400003661.mm.1	-0.3	0.001457
TC0100003857.mm.1	XM_003688934	Gm21451	predicted gene, 21451	69390793	69695834	TC1400000976.mm.1	0.4	0.001465
TC0100003866.mm.1	NM_007630	Ccnb2	cyclin B2	70407689	70421554	TC0900002593.mm.1	-1.3	0.00148
TC0100003867.mm.1	NM_011707	Vtn	vitronectin	78499091	78502325	TC1100001162.mm.1	0.3	0.001486
TC0100003872.mm.1	NM_009636	Aebp1	AE binding protein 1	5861866	5872225	TC1100000081.mm.1	0.9	0.001489
TC0100003875.mm.1	ENSMUST00000060994	Rpl31-p	ribosomal protein L31, pseudogene 13	100415565	100415942	TC1300001137.mm.1	-1.2	0.001494
TC0100003877.mm.1	NM_024222	Stt3b	STT3, subunit of the oligosaccharyltransferase	115242581	115310421	TC0900003182.mm.1	0.7	0.001498
TC0100003879.mm.1	NM_008713	Nos3	nitric oxide synthase 3, endothelial cell	24364810	24384474	TC0500000212.mm.1	0.4	0.001499
TC0100003884.mm.1	ENSMUST00000080234	Rpl27a-	ribosomal protein L27A, pseudogene 2	108692194	108692643	TC1400002677.mm.1	-0.5	0.00151
TC0100003885.mm.1	NCBI_Gene:195296:p	Trav4d-	Trav4d-4 T cell receptor alpha variable 4D-4	52990889	52991390	TC1400000650.mm.1	-0.5	0.001513
TC0100003886.mm.1	NM_028803	Gbe1	glucan (1,4-alpha-), branching enzyme 1	70313949	70569720	TC1600000810.mm.1	0.6	0.001514
TC0100003888.mm.1	ENSMUST00000169135	Gm11847	predicted gene 11847	12232780	12238024	TC0400000109.mm.1	-0.4	0.001515
TC0100003891.mm.1	ENSMUST00000074072	Gm17352	predicted gene, 17352	97760130	97760588	TC1300002491.mm.1	-0.8	0.001516
TC0200000001.mm.1	NM_030018	Tmem50b	transmembrane protein 50B	91574503	91597800	TC1600002080.mm.1	0.8	0.001517
TC0200000002.mm.1	NM_013505	Dsc2	desmocollin 2	20030633	20059554	TC1800001043.mm.1	-0.5	0.001527
TC0200000007.mm.1	ENSMUST00000092620	LOC1010	60S ribosomal protein L12-like // 60S ribosoma	29698746	29699379	TC1000001939.mm.1	-1.3	0.001528
TC0200000009.mm.1	NM_016962	Spast	spastin	74338987	74391113	TC1700001156.mm.1	-0.4	0.001547
TC0200000012.mm.1	ENSMUST00000159764	Gm8783	predicted pseudogene 8783	40622460	40622981	TC1900000574.mm.1	0.9	0.001553
TC0200000013.mm.1	ENSMUST00000120920	Gm15801	predicted gene 15801	40560537	40561058	TC1900001492.mm.1	0.9	0.001553
TC0200000014.mm.1	NM_023625	Plbd2	phospholipase B domain containing 2	120483282	120503625	TC0500003168.mm.1	0.3	0.001557
TC0200000032.mm.1	NM_172555	Papolg	poly(A) polymerase gamma	23862646	23895270	TC1100002379.mm.1	-0.5	0.001566
TC0200000048.mm.1	ENSMUST00000104933	Gm12355	predicted gene 12355	98624351	98625661	TC1100003684.mm.1	-0.4	0.001567
TC0200000049.mm.1	NM_024207	Derl1	Der1-like domain family, member 1	57869502	57892448	TC1500001560.mm.1	0.5	0.00157
TC0200000051.mm.1	NM_001015046	Rap1gap	RAP1 GTPase activating protein 2	74383356	74610915	TC1100003193.mm.1	0.3	0.001574
TC0200000053.mm.1	NM_173404	Bmp3	bone morphogenetic protein 3	98854439	98880960	TC0500000953.mm.1	0.8	0.001575
TC0200000067.mm.1	NM_027519	Medag	mesenteric estrogen dependent adipogenesis	149411749	149431723	TC0500003722.mm.1	0.6	0.001582
TC0200000069.mm.1	NM_026095	Snrpd3	small nuclear ribonucleoprotein D3	75518042	75535463	TC1000000716.mm.1	-0.5	0.001583
TC0200000081.mm.1	ENSMUST00000116168	Rpl12-p	ribosomal protein L12, pseudogene 1	36957930	36958427	TC0100002198.mm.1	-0.6	0.001587
TC0200000082.mm.1	NM_001037999	Dbi	diazepam binding inhibitor	120113280	120121096	TC0100002964.mm.1	0.8	0.001589
TC0200000088.mm.1	NM_013867	Bcar3	breast cancer anti-estrogen resistance 3	122419780	122530183	TC0300001247.mm.1	0.8	0.00159
TC0200000089.mm.1	NM_030082	Hist3h2	histone cluster 3, H2ba	58948911	58949533	TC1100000712.mm.1	-0.9	0.001594
TC0200000090.mm.1	ENSMUST00000121140	Gm12109	predicted gene 12109	32185005	32185701	TC1100000332.mm.1	-0.6	0.001602
TC0200000091.mm.1	ENSMUST00000121087	Gm7308	predicted pseudogene 7308	127282063	127282509	TC0600003170.mm.1	-0.5	0.001607
TC0200000092.mm.1	ENSMUST00000082150	Hmgb1l	high mobility group box 1-like	131608293	131608871	TC0600003270.mm.1	-0.4	0.001609
TC0200000094.mm.1	NM_001042556	Rpf2	ribosome production factor 2 homolog (S. cerevi	40223246	40247039	TC1000002041.mm.1	-0.4	0.001622
TC0200000095.mm.1	ENSMUST00000117145	Gm13216	predicted gene 13216	5603571	5604161	TC0200000053.mm.1	-0.7	0.001626
TC0200000096.mm.1	NR_002888	Smarca5	SWI/SNF related, matrix associated, actin depen	145464204	145467961	TC0400001863.mm.1	-0.3	0.001629
TC0200000097.mm.1	NM_031874	Rab3d	RAB3D, member RAS oncogene family	21907491	21918192	TC0900001887.mm.1	0.4	0.001629
TC0200000098.mm.1	NM_001081415	Samd1	sterile alpha motif domain containing 1	83997672	84000386	TC0800000941.mm.1	-0.3	0.00163
TC0200000099.mm.1	NM_001080134	Tmpo	thymopoietin	91147571	91171619	TC1000002671.mm.1	-0.8	0.001631
TC0200000100.mm.1	NM_026517	Rpl22l1	ribosomal protein L22 like 1	28805436	28807419	TC0300000182.mm.1	-0.4	0.001632
TC0200000101.mm.1	ENSMUST00000119766	Gm12118	predicted gene 12118	33438449	33438980	TC1100000356.mm.1	-0.8	0.00164
TC0200000102.mm.1	ENSMUST00000117928	Rpl30-p	ribosomal protein L30, pseudogene 3	90747616	90747963	TC0200004099.mm.1	-0.6	0.001641
TC0200000104.mm.1	NR_035474	Mir669m	microRNA 669m-1	78929670	79515904	TC0500002656.mm.1	0.6	0.001642
TC0200000105.mm.1	NM_021053	Slc46a2	solute carrier family 46, member 2	59905126	59915056	TC0400002765.mm.1	-0.8	0.001646
TC0200000106.mm.1	NCBI_Gene:620191:p	Igkv6-2	immunoglobulin kappa chain variable 6-29	70138462	70139082	TC0600002449.mm.1	-1.2	0.001648
TC0200000107.mm.1	NM_001081224	Prr16	proline rich 16	51117898	51420044	TC1800000516.mm.1	0.6	0.001649
TC0200000108.mm.1	NM_009612	Acvrl1	activin A receptor, type II-like 1	101128522	101145336	TC1500001061.mm.1	0.4	0.001664
TC0200000109.mm.1	NM_029541	Arxes1	adipocyte-related X-chromosome expressed seq	136033367	136034946	TC0X00001317.mm.1	1.2	0.001668
TC0200000110.mm.1	ENSMUST00000162120	Gm7418	predicted pseudogene 7418	94835717	94836517	TC0800001122.mm.1	-0.9	0.001671
TC0200000111.mm.1	NCBI_Gene:10004321	Trav14d	Trav14d-2 T cell receptor alpha variable 14D-2	52948583	52949267	TC1400002802.mm.1	-0.6	0.00169
TC0200000112.mm.1	NCBI_Gene:193574:p	Trav14n	Trav14n-2 T cell receptor alpha variable 14N-2	53259593	53260277	TC1400002820.mm.1	-0.6	0.00169
TC0200000113.mm.1	NM_010571	Irs3	insulin receptor substrate 3	137643031	137645714	TC0500003451.mm.1	0.5	0.001691
TC0200000114.mm.1	NM_008229	Hdac2	histone deacetylase 2	36974544	37001889	TC1000000312.mm.1	-0.7	0.001708
TC0200000115.mm.1	NM_029555	Gstk1	glutathione S-transferase kappa 1	42245935	42250444	TC0600000454.mm.1	0.9	0.001711
TC0200000116.mm.1	ENSMUST00000184536	FAS-AS1	FAS antisense RNA 1 conserved region	34294137	34294295	TC1900000498.mm.1	-0.2	0.001716
TC0200000117.mm.1	NM_001003912	Arhgef1	Rho guanine nucleotide exchange factor (GEF) 1	87617559	87738034	TC0300000700.mm.1	0.2	0.00172
TC0200000118.mm.1	ENSMUST00000178763	Gm5903	predicted gene 5903	130343525	130354373	TC0700004382.mm.1	-0.5	0.001721
TC0200000119.mm.1	ENSMUST00000091130	Hnrnpa3	heterogeneous nuclear ribonucleoprotein A3	54481429	54482923	TC0300000409.mm.1	-1.1	0.001727
TC0200000120.mm.1	ENSMUST00000079844	Gm13642	predicted gene 13642	71412531	71412917	TC0200003724.mm.1	-0.7	0.001737
TC0200000121.mm.1	ENSMUST00000122151	Gm13237	predicted gene 13237	146564453	146565087	TC0400003976.mm.1	-1.8	0.001739
TC0200000122.mm.1	ENSMUST00000119147	Rpl9-ps	ribosomal protein L9, pseudogene 3	53501184	53501762	TC1100000607.mm.1	-0.3	0.001746
TC0200000123.mm.1	NM_021788	Sap30	sin3 associated polypeptide	57482702	57487860	TC0800002252.mm.1	-0.4	0.001754
TC0200000124.mm.1	NM_023844	Jam2	junction adhesion molecule 2	84774123	84826380	TC1600000938.mm.1	0.7	0.001761
TC0200000125.mm.1	ENSMUST00000117464	Gm14537	predicted gene 14537	20391709	20392501	TC0X00000206.mm.1	-0.6	0.001763
TC0200000126.mm.1	NM_001252531	Slco2b1	solute carrier organic anion transporter family	99657804	99711340	TC0700003804.mm.1	0.5	0.001764
TC0200000127.mm.1	XM_003688790	Gm20764	predicted gene, 20764	34311003	34311485	TC0400002382.mm.1	-0.3	0.001768
TC0200000128.mm.1	ENSMUST00000121562	Gm11855	predicted gene 11855	15819074	15821370	TC0400002242.mm.1	-0.3	0.001776
TC0200000129.mm.1	ENSMUST00000122289	Gm14970	predicted gene 14970	127446562	127446916	TC0X00002954.mm.1	-0.9	0.001778
TC0200000130.mm.1	ENSMUST00000091375	Rps24-p	ribosomal protein S24, pseudogene 2	3791897	3792295	TC0300000007.mm.1	-0.8	0.001783
TC0200000131.mm.1	NM_025900	Dek	DEK oncogene (DNA binding)	47084767	47106221	TC1300001928.mm.1	-0.7	0.001792
TC0200000132.mm.1	ENSMUST00000121942	Gm6161	predicted gene 6161	9574548	9575649	TC0100000040.mm.1	-1.1	0.001798
TC0200000133.mm.1	ENSMUST00000172910	Gm9581	predicted gene 9581	59558013	59600886	TC1600001806.mm.1	0.6	0.001805
TC0200000134.mm.1	ENSMUST00000091762	Gm5446	predicted gene 5446	19995021	19995803	TC1300001527.mm.1	-0.7	0.001806
TC0200000135.mm.1	NM_027406	Aldh1l1	aldehyde dehydrogenase 1 family, member L1	90486427	90600203	TC0600001076.mm.1	0.7	0.001811
TC0200000136.mm.1	NM_001142731	Kctd1	potassium channel tetramerisation domain cont	14968685	15151446	TC1800001012.mm.1	-0.3	0.001831

TC0200000137.mm.1	NM_011784	Aplnr	apelin receptor	85136225	85139923	TC0200001234.mm.1	0.6	0.001837
TC0200000138.mm.1	ENSMUST00000122008	Gm13363	predicted gene 13363	19992921	19993442	TC0200000322.mm.1	0.9	0.001842
TC0200000139.mm.1	ENSMUST00000128343	Gm3160	predicted pseudogene 3160	14136310	14136916	TC0800000142.mm.1	-1.0	0.001843
TC0200000140.mm.1	NCBI_Gene:620126:p	Igkv8-3	Igkv8-34 immunoglobulin kappa variable 8-34	70044112	70044678	TC0600002448.mm.1	-0.5	0.001845
TC0200000141.mm.1	ENSMUST00000180422	Gm9625	predicted gene 9625	67810246	67811200	TC1300000830.mm.1	-1.0	0.001848
TC0200000142.mm.1	ENSMUST00000104916	Gm9493	predicted gene 9493	23619742	23620320	TC1900000378.mm.1	-1.2	0.001856
TC0200000143.mm.1	NM_181748	Ffar4	free fatty acid receptor 4	38097079	38114263	TC1900000545.mm.1	0.5	0.001863
TC0200000144.mm.1	NM_001083903	Sbsn	suprabasin	30751471	30756134	TC0700004620.mm.1	0.3	0.00187
TC0200000145.mm.1	NM_010554	Il1a	interleukin 1 alpha	129299609	129309972	TC0200004599.mm.1	-0.3	0.001877
TC0200000146.mm.1	ENSMUST00000120384	Rpl7a-p	ribosomal protein L7A, pseudogene 12	152908778	152910296	TC0X00003200.mm.1	-0.3	0.001881
TC0200000147.mm.1	ENSMUST00000181857	Rpl31-p	ribosomal protein L31, pseudogene 15	37734730	37735104	TC0300000292.mm.1	-0.9	0.001881
TC0200000148.mm.1	NM_009794	Capn2	calpain 2	182467256	182517495	TC0100003715.mm.1	0.7	0.001882
TC0200000149.mm.1	NM_009257	Serpinb	serine (or cysteine) peptidase inhibitor, clade	106861173	106883348	TC0100001024.mm.1	-0.5	0.001884
TC0200000150.mm.1	ENSMUST00000122190	Gm4879	predicted pseudogene 4879	13178903	13180174	TC0700000158.mm.1	-0.7	0.001893
TC0200000151.mm.1	ENSMUST00000177677	Gm8888	predicted gene 8888	96766761	96767141	TC1500002145.mm.1	-0.2	0.001895
TC0200000152.mm.1	NCBI_Gene:108024:p	Igkv6-2	immunoglobulin kappa variable 6-20	70335841	70336479	TC0600003592.mm.1	-1.5	0.001896
TC0200000153.mm.1	NM_028306	Hspa12b	heat shock protein 12B	131127280	131146321	TC0200002005.mm.1	0.4	0.001896
TC0200000154.mm.1	NM_025321	Sdhc	succinate dehydrogenase complex, subunit C, int	171127165	171150603	TC0100003528.mm.1	0.5	0.001898
TC0200000155.mm.1	ENSMUST00000058706	Gm7816	predicted pseudogene 7816	39798214	39799407	TC0500000449.mm.1	-0.5	0.0019
TC0200000156.mm.1	XM_001002269	Gm8290	predicted gene 8290	82008391	82008858	TC1000000913.mm.1	-0.8	0.001912
TC0200000157.mm.1	ENSMUST00000118441	Gm13160	predicted gene 13160	147086358	147086984	TC0400003982.mm.1	-1.6	0.001917
TC0200000158.mm.1	NM_146007	Col6a2	collagen, type VI, alpha 2	76595756	76623630	TC1000002405.mm.1	0.7	0.001934
TC0200000159.mm.1	NM_001081013	Rlf	rearranged L-myc fusion sequence	121145373	121215084	TC0400003456.mm.1	-0.3	0.001936
TC0200000160.mm.1	ENSMUST00000122125	Rplp0-p	ribosomal protein, large, P0, pseudogene 1	93278141	93279073	TC0300000845.mm.1	-0.9	0.001944
TC0200000161.mm.1	ENSMUST00000177906	Gm7879	predicted pseudogene 7879	43913170	43913898	TC0500000470.mm.1	-0.8	0.001945
TC0200000162.mm.1	XM_619909	Gm5848	predicted pseudogene 5848	68308825	68309181	TC0300002118.mm.1	-0.6	0.001947
TC0200000163.mm.1	NM_008340	Igfals	insulin-like growth factor binding protein, aci	24878770	24882008	TC1700000355.mm.1	1.2	0.00195
TC0200000164.mm.1	NM_001290123	Rbm4	RNA binding motif protein 4 (Rbm4), transcript	0	0	TSUnmapped0000002	-0.8	0.001967
TC0200000165.mm.1	NM_172442	Dtx4	deltex 4 homolog (Drosophila)	12466336	12502145	TC1900001163.mm.1	0.6	0.001977
TC0200000166.mm.1	NM_145459	Zfp503	zinc finger protein 503	21983962	21989601	TC1400001561.mm.1	0.2	0.001978
TC0200000167.mm.1	NM_001162938	Pydc3	pyrin domain containing 3	173673675	173698392	TC0100001634.mm.1	-0.4	0.001982
TC0200000168.mm.1	NM_001170786	Mthfd1l	methylenetetrahydrofolate dehydrogenase (NAI	3973075	4167081	TC1000000015.mm.1	-0.4	0.002002
TC0200000169.mm.1	NCBI_Gene:547328:p	Trav13n	T cell receptor alpha variable 13N-3	53337122	53337639	TC1400000686.mm.1	-0.4	0.002003
TC0200000170.mm.1	NM_173864	Gm5077	predicted gene 5077	124624625	124636085	TC0600003109.mm.1	1.0	0.002008
TC0200000171.mm.1	ENSMUST00000118573	Gm12387	predicted gene 12387	39895208	39896162	TC0400002431.mm.1	-0.5	0.00201
TC0200000172.mm.1	ENSMUST00000179113	Gm14231	predicted gene 14231	156789810	156790403	TC0200004998.mm.1	-0.6	0.002031
TC0200000173.mm.1	NM_009378	Thbd	thrombomodulin	148404466	148408188	TC0200004808.mm.1	0.8	0.002033
TC0200000174.mm.1	NM_001161623	Cdc45	cell division cycle 45	18780447	18811987	TC1600001320.mm.1	-0.5	0.002037
TC0200000175.mm.1	ENSMUST00000180067	Gm1815	predicted gene 1815	41657593	41658669	TC0800002123.mm.1	-0.6	0.002049
TC0200000176.mm.1	NM_172904	Fsd2	fibronectin type III and SPRY domain containing	81533308	81566981	TC0700003613.mm.1	0.3	0.002055
TC0200000177.mm.1	NM_178711	Plscr4	phospholipid scramblase 4	92457378	92493510	TC0900001173.mm.1	0.4	0.002065
TC0200000178.mm.1	NM_008566	Mcm5	minichromosome maintenance deficient 5, cell c	75109528	75128439	TC0800000846.mm.1	-1.0	0.002074
TC0200000179.mm.1	NM_146208	Neil3	nei like 3 (E. coli)	53586867	53639065	TC0800002235.mm.1	-0.3	0.002075
TC0200000182.mm.1	ENSMUST00000120433	Gm11793	predicted gene 11793	121106147	121107127	TC1100004245.mm.1	-0.7	0.002079
TC0200000183.mm.1	NM_030139	Zfp449	zinc finger protein 449	56346400	56365674	TC0X00000515.mm.1	0.3	0.002081
TC0200000184.mm.1	NM_177811	Zfp459	zinc finger protein 459	67405712	67421418	TC1300002247.mm.1	-0.2	0.002089
TC0200000185.mm.1	NM_147218	Abca6	ATP-binding cassette, sub-family A (ABC1), mem	110176820	110251776	TC1100004002.mm.1	0.5	0.00209
TC0200000186.mm.1	ENSMUST00000090170	Rpl7a-p	ribosomal protein L7A, pseudogene 3	36308144	36308956	TC1500001372.mm.1	-0.8	0.00209
TC0200000187.mm.1	OTTMUST00000060666	RP23-18	---	122696001	122696882	TC0600001390.mm.1	-0.5	0.00209
TC0200000188.mm.1	NM_177390	Myo1d	myosin ID	80482126	80780025	TC1100003345.mm.1	0.6	0.002096
TC0200000189.mm.1	ENSMUST00000117863	Gm13311	predicted gene 13311	14692872	14693251	TC0200003000.mm.1	-0.5	0.002108
TC0200000190.mm.1	ENSMUST00000119220	Gm11631	predicted gene 11631	98063888	98064043	TC1100001556.mm.1	-1.2	0.002113
TC0200000191.mm.1	NM_010680	Lama3	laminin, alpha 3	12334024	12583013	TC1800000103.mm.1	-0.2	0.002116
TC0200000192.mm.1	ENSMUST00000178171	Gm8494	predicted gene 8494	146575194	146576123	TC0500001792.mm.1	-0.6	0.002117
TC0200000193.mm.1	ENSMUST00000118777	Gm11671	predicted gene 11671	108716483	108716906	TC1100001817.mm.1	-0.6	0.002125
TC0200000194.mm.1	NM_013642	Dusp1	dual specificity phosphatase 1	26505590	26508519	TC1700001699.mm.1	0.9	0.002127
TC0200000195.mm.1	ENSMUST00000157141	Gm23982	predicted gene, 23982	42832779	42832884	TC0600000469.mm.1	0.3	0.002128
TC0200000196.mm.1	NM_011806	Dmtf1	cyclin D binding myb-like transcription factor	9118801	9161776	TC0500001938.mm.1	-0.3	0.002129
TC0200000197.mm.1	ENSMUST00000179566	Gm6132	predicted pseudogene 6132	70007204	70007614	TC1300002283.mm.1	-0.6	0.002133
TC0200000198.mm.1	NM_010097	Sparcl1	SPARC-like 1	104079108	104114088	TC0500002887.mm.1	1.4	0.002133
TC0200000199.mm.1	NM_172133	Adap2	ArfGAP with dual PH domains 2	80154105	80178958	TC1100001196.mm.1	0.8	0.002153
TC0200000200.mm.1	NM_010110	Efnb1	ephrin B1	99136130	99148991	TC0X00000934.mm.1	0.4	0.002155
TC0200000201.mm.1	ENSMUST00000098546	Fam83b	family with sequence similarity 83, member B	76490054	76567116	TC0900002688.mm.1	-0.3	0.002157
TC0200000202.mm.1	NM_023127	Polr2k	polymerase (RNA) II (DNA directed) polypeptide	36174010	36177012	TC1500000262.mm.1	-0.3	0.00216
TC0200000203.mm.1	NM_023203	Dctpp1	dCTP pyrophosphatase 1	127256959	127260709	TC0700004320.mm.1	-0.3	0.002192
TC0200000204.mm.1	NM_007475	Rplp0	ribosomal protein, large, P0	115559467	115563729	TC0500001266.mm.1	-0.4	0.00221
TC0200000205.mm.1	NM_010231	Fmo1	flavin containing monooxygenase 1	162829561	162866548	TC0100003401.mm.1	1.2	0.002211
TC0200000211.mm.1	ENSMUST00000117169	Rps12-p	ribosomal protein S12, pseudogene 7	151165725	151166109	TC0X00001511.mm.1	-0.5	0.002211
TC0200000218.mm.1	NM_019571	Tspan5	tetraspanin 5	138742195	138904433	TC0300001423.mm.1	0.3	0.002212
TC0200000219.mm.1	ENSMUST00000122370	Smt3h2-	SMT3 suppressor of mif two 3 homolog 2, pseud	127397978	127398265	TC0700001844.mm.1	-0.8	0.002213
TC0200000240.mm.1	ENSMUST00000117548	Hmgb1-p	high mobility group box 1, pseudogene 2	146175942	146176577	TC0X00001441.mm.1	-1.2	0.002216
TC0200000246.mm.1	NM_011509	Gm3258	predicted gene 3258	31413726	31414435	TC1000001957.mm.1	-0.7	0.002219
TC0200000267.mm.1	NM_133670	Sult1a1	sulfotransferase family 1A, phenol-preferring,	126672865	126676432	TC0700004291.mm.1	0.8	0.00222
TC0200000277.mm.1	ENSMUST00000161973	Gm6397	predicted gene 6397	143683230	143684298	TC0100001315.mm.1	-1.0	0.002221
TC0200000297.mm.1	ENSMUST00000071732	Gm6793	predicted gene 6793	112013433	112015036	TC0800002962.mm.1	-0.8	0.002224
TC0200000298.mm.1	ENSMUST00000121100	Gm5135	predicted pseudogene 5135	41923255	41923827	TC0X00002113.mm.1	-0.3	0.002226
TC0200000300.mm.1	ENSMUST00000177572	Gm9046	predicted gene 9046	118342011	118343255	TC1000002988.mm.1	-0.4	0.002227
TC0200000316.mm.1	NM_026730	Gpihbp1	GPI-anchored HDL-binding protein 1	75596658	75598213	TC1500000557.mm.1	0.6	0.002227

TC0200000318.mm.1	ENSMUST00000076703	LOC1010	60S ribosomal protein L12-like // 60S ribosoma	130068412	130068978	TC0300001317.mm.1	-1.4	0.002235
TC0200000321.mm.1	ENSMUST00000121816	Gm13232	predicted gene 13232	145729581	145730212	TC0400003968.mm.1	-1.8	0.002239
TC0200000322.mm.1	NM_001252056	Ly6c1	lymphocyte antigen 6 complex, locus C1	75044018	75048837	TC1500001729.mm.1	0.5	0.00224
TC0200000327.mm.1	ENSMUST00000099968	Gm13690	predicted gene 13690	80629281	80629568	TC0200003842.mm.1	-0.9	0.00224
TC0200000341.mm.1	NM_027030	Dcps	decapping enzyme, scavenger	35124408	35176061	TC0900002007.mm.1	-0.3	0.002243
TC0200000345.mm.1	ENSMUST00000118081	Gm6335	predicted gene 6335	112162554	112163747	TC0X00001121.mm.1	-0.3	0.002247
TC0200000349.mm.1	NM_001167921	Gtf2e2	general transcription factor II E, polypeptide	33731914	33777173	TC0800000396.mm.1	-0.3	0.002261
TC0200000355.mm.1	NM_007577	C5ar1	complement component 5a receptor 1	16246743	16259540	TC0700002422.mm.1	0.4	0.002266
TC0200000364.mm.1	NM_001204910	AI60787	expressed sequence AI607873	173723427	173741809	TC0100003593.mm.1	0.7	0.002268
TC0200000371.mm.1	NM_007481	Arf6	ADP-ribosylation factor 6	69372150	69375980	TC1200000569.mm.1	-0.4	0.00227
TC0200000375.mm.1	ENSMUST00000054664	Gm6430	predicted gene 6430	97024681	97025928	TC0100000967.mm.1	-0.9	0.002271
TC0200000390.mm.1	ENSMUST00000119156	Rpl17-p	ribosomal protein L17, pseudogene 1	61075674	61076225	TC0100000491.mm.1	-1.0	0.002275
TC0200000394.mm.1	ENSMUST00000118665	Gm15773	predicted gene 15773	12603196	12604643	TC0700000142.mm.1	-0.6	0.00228
TC0200000398.mm.1	NM_001290124	Rbm4	RNA binding motif protein 4 (Rbm4), transcript	0	0	TSUnmapped0000002	-0.5	0.002281
TC0200000400.mm.1	NM_030725	Syt13	synaptotagmin XIII	92915098	92956058	TC0200001445.mm.1	-0.5	0.002291
TC0200000404.mm.1	NM_009949	Cpt2	carnitine palmitoyltransferase 2	107903981	107923610	TC0400003230.mm.1	0.8	0.002303
TC0200000406.mm.1	NM_001159718	2-Sep	septin 2	93478964	93510260	TC0100000936.mm.1	0.4	0.002305
TC0200000409.mm.1	NM_025311	Tmem254	transmembrane protein 254a	25923298	25927672	TC1400001605.mm.1	0.6	0.002311
TC0200000410.mm.1	NM_198014	Slain1	SLAIN motif family, member 1	103650228	103704907	TC1400001189.mm.1	-0.7	0.002316
TC0200000420.mm.1	ENSMUST00000121857	Gm15793	predicted gene 15793	66849108	66849602	TC0100002496.mm.1	-1.2	0.002319
TC0200000432.mm.1	ENSMUST00000071866	Rpl13a-	ribosomal protein 13A, pseudogene 1	50030124	50030735	TC1900001648.mm.1	-0.6	0.002322
TC0200000433.mm.1	NM_008185	Gstt1	glutathione S-transferase, theta 1	75783813	75798584	TC1000002383.mm.1	0.6	0.002322
TC0200000458.mm.1	ENSMUST00000161714	Gm16134	predicted gene 16134	63446930	63447265	TC1300002187.mm.1	-0.3	0.002333
TC0200000470.mm.1	NM_029068	Snx16	sorting nexin 16	10417817	10440130	TC0300001647.mm.1	-0.3	0.002342
TC0200000478.mm.1	NM_175149	2310022	RIKEN cDNA 2310022B05 gene	124635756	124663369	TC0800003172.mm.1	0.3	0.002346
TC0200000480.mm.1	NM_026672	Gstm7	glutathione S-transferase, mu 7	107926334	107931817	TC0300002722.mm.1	0.4	0.002358
TC0200000482.mm.1	NM_007556	Bmp6	bone morphogenetic protein 6	38345716	38499728	TC1300000445.mm.1	0.6	0.002358
TC0200000483.mm.1	uc029usn.1	Gm5859	SubName: Full=Putative uncharacterized protein	42244548	42245272	TC0400000402.mm.1	0.4	0.002361
TC0200000485.mm.1	XM_003688909	Gm21188	predicted gene, 21188	120034605	120052194	TC1300002756.mm.1	0.5	0.002366
TC0200000488.mm.1	ENSMUST00000181557	Rpl31-p	ribosomal protein L31. pseudogene 25	81791555	81791933	TC1700002614.mm.1	-0.3	0.002368
TC0200000489.mm.1	BC158083	Gm5580	predicted pseudogene 5580	116551141	116552502	TC0600001305.mm.1	-0.3	0.002377
TC0200000493.mm.1	ENSMUST00000088183	Gm5940	predicted gene 5940	80456737	80458551	TC0X00000796.mm.1	-0.9	0.002378
TC0200000505.mm.1	NM_011121	Plk1	polo-like kinase 1	122159437	122169875	TC0700004624.mm.1	-1.1	0.002384
TC0200000514.mm.1	NM_033521	Laptm4b	lysosomal-associated protein transmembrane 4E	34238026	34284307	TC1500000235.mm.1	0.8	0.002391
TC0200000526.mm.1	ENSMUST00000146593	Gm15843	predicted gene 15843	72459499	72460027	TC0100000605.mm.1	-0.7	0.002394
TC0200000528.mm.1	ENSMUST00000139696	Gm8062	predicted pseudogene 8062	73829932	73830375	TC1300000889.mm.1	-0.9	0.002397
TC0200000540.mm.1	ENSMUST00000057752	Gm6776	predicted pseudogene 6776	43280798	43281697	TC1900000625.mm.1	-0.5	0.002398
TC0200000543.mm.1	NM_011182	Cyth3	cytohesin 3	143622447	143710250	TC0500001737.mm.1	0.4	0.002402
TC0200000545.mm.1	XM_003085343	Gm15466	predicted gene 15466	8882235	8882695	TC0300001622.mm.1	-0.9	0.00241
TC0200000548.mm.1	ENSMUST00000118359	Gm13623	predicted gene 13623	69766182	69766806	TC0200001010.mm.1	-0.7	0.002414
TC0200000566.mm.1	NM_013866	Zfp385a	zinc finger protein 385A	103313895	103340086	TC1500002317.mm.1	0.3	0.002423
TC0200000568.mm.1	NM_178213	Hist2h2	histone cluster 2, H2ab	96219865	96220308	TC0300000929.mm.1	-1.2	0.002425
TC0200000569.mm.1	ENSMUST00000121722	Gm12366	predicted gene 12366	35202058	35202975	TC0400002404.mm.1	-0.7	0.002431
TC0200000570.mm.1	NM_008485	Lamc2	laminin, gamma 2	153122756	153186447	TC0100003272.mm.1	-0.3	0.00244
TC0200000573.mm.1	NM_026560	Cdca8	cell division cycle associated 8	124918464	124939311	TC0400003516.mm.1	-0.4	0.002452
TC0200000575.mm.1	NM_178200	Hist1h2	histone cluster 1, H2bm	21722044	21722567	TC1300000175.mm.1	-0.8	0.002461
TC0200000578.mm.1	NM_027246	Snrpf	small nuclear ribonucleoprotein polypeptide F	93583029	93589706	TC1000002696.mm.1	-0.4	0.002461
TC0200000580.mm.1	NM_146067	Cpped1	calcineurin-like phosphoesterase domain contair	11803708	11909445	TC1600001218.mm.1	0.4	0.002466
TC0200000581.mm.1	NM_010171	F3	coagulation factor III	121723537	121735052	TC0300001236.mm.1	0.4	0.002479
TC0200000589.mm.1	ENSMUST00000120596	Rpsa-ps	ribosomal protein SA, pseudogene 12	149142497	149143388	TC0400004033.mm.1	-0.9	0.002486
TC0200000590.mm.1	ENSMUST00000118985	Gm14541	predicted gene 14541	36839137	36839293	TC0X00002051.mm.1	-1.0	0.002493
TC0200000593.mm.1	ENSMUST00000119350	Hmgb1-p	high mobility group box 1, pseudogene 1	41141763	41142396	TC1100000410.mm.1	-1.2	0.002504
TC0200000603.mm.1	ENSMUST00000085507	Gm6254	predicted gene 6254	122117938	122119009	TC1400001328.mm.1	-1.0	0.002515
TC0200000604.mm.1	NM_007472	Aqp1	aquaporin 1	55336299	55348555	TC0600000664.mm.1	1.4	0.002518
TC0200000616.mm.1	XM_001478560	Gm6750	predicted gene 6750	116507612	116507884	TC1200002500.mm.1	-1.1	0.002519
TC0200000624.mm.1	NM_028444	Prkcdbp	protein kinase C, delta binding protein	105480605	105482197	TC0700003978.mm.1	1.1	0.002521
TC0200000628.mm.1	NM_145611	Kank2	KN motif and ankyrin repeat domains 2	21766773	21798546	TC0900001884.mm.1	0.4	0.002523
TC0200000634.mm.1	NM_023279	Tubb3	tubulin, beta 3 class III	123411424	123422015	TC0800001522.mm.1	-0.3	0.002537
TC0200000636.mm.1	NM_001081106	Cytl1	cytokine-like 1	37735519	37739820	TC0500000425.mm.1	0.2	0.002539
TC0200000638.mm.1	NM_007652	Cd59a	CD59a antigen	104095801	104115410	TC0200001552.mm.1	1.4	0.002542
TC0200000657.mm.1	NM_010353	Gsg2	germ cell-specific gene 2	73135484	73138294	TC1100003156.mm.1	-0.4	0.002543
TC0200000673.mm.1	ENSMUST00000120676	Gm12712	predicted gene 12712	72572530	72573330	TC1100003148.mm.1	-0.7	0.002545
TC0200000674.mm.1	ENSMUST00000121009	Gm14049	predicted gene 14049	130987984	130988619	TC0200002000.mm.1	-0.7	0.002552
TC0200000681.mm.1	OTTMUST00000024892	RP23-36	---	147281446	147281790	TC0400003984.mm.1	-0.6	0.002572
TC0200000684.mm.1	NM_011426	Siglec1	sialic acid binding Ig-like lectin 1, sialoadhe	131069220	131086765	TC0200004647.mm.1	0.3	0.002578
TC0200000685.mm.1	ENSMUST00000158070	Gm22334	predicted gene, 22334	155652892	155653024	TC0200004968.mm.1	-0.7	0.00258
TC0200000699.mm.1	NM_021282	Cyp2e1	cytochrome P450, family 2, subfamily e, polypep	140763739	140774981	TC0700002023.mm.1	2.5	0.002587
TC0200000700.mm.1	NM_009605	Adipoq	adiponectin, C1Q and collagen domain containin	23146536	23158028	TC1600000331.mm.1	1.5	0.002599
TC0200000702.mm.1	OTTMUST00000112139	RP24-18	---	160893120	160893584	TC0100001458.mm.1	-0.8	0.0026
TC0200000711.mm.1	ENSMUST00000120191	Gm11824	predicted gene 11824	14170066	14170911	TC0400000122.mm.1	-0.6	0.002603
TC0200000720.mm.1	ENSMUST00000169588	Gm4775	predicted gene 4775	106100753	106101157	TC1400002669.mm.1	-0.3	0.002611
TC0200000737.mm.1	ENSMUST00000117287	Gm14398	predicted gene 14398	181216727	181217799	TC0200002816.mm.1	-0.9	0.002613
TC0200000773.mm.1	ENSMUST00000074648	Gm10357	predicted gene 10357	8289846	8290115	TC1300001407.mm.1	-1.1	0.002618
TC0200000797.mm.1	NM_144731	Galnt7	UDP-N-acetyl-alpha-D-galactosamine: polypeptic	57523825	57653055	TC0800002256.mm.1	-0.4	0.002621
TC0200000798.mm.1	NM_030694	Ifitm2	interferon induced transmembrane protein 2	140954837	140955961	TC0700004513.mm.1	1.3	0.002629
TC0200000802.mm.1	NM_018764	Pcdh7	protocadherin 7	57718021	58132240	TC0500000560.mm.1	0.5	0.002632
TC0200000819.mm.1	ENSMUST00000119868	Gm13717	predicted gene 13717	29750761	29751125	TC0600000244.mm.1	-0.3	0.002634
TC0200000829.mm.1	NM_009031	Rbbp7	retinoblastoma binding protein 7	162760372	162779092	TC0X00001651.mm.1	-0.5	0.002634

TC0200000847.mm.1	ENSMUST00000048361	Gm5331	predicted gene 5331	96173940	96174365	TC0500000924.mm.1	0.5	0.002636
TC0200000848.mm.1	ENSMUST00000097661	5830472	RIKEN cDNA 5830472F04 gene	87796467	87796817	TC0100000827.mm.1	-0.2	0.002638
TC0200000866.mm.1	NM_025394	Tomm7	translocase of outer mitochondrial membrane 7	23838944	23844161	TC0500002065.mm.1	-0.4	0.00264
TC0200000874.mm.1	ENSMUST00000121088	Gm11307	predicted gene 11307	22675660	22676969	TC1300000216.mm.1	-0.5	0.002641
TC0200000885.mm.1	ENSMUST00000163806	Rpl15-p	ribosomal protein L15, pseudogene 3	22185557	22186256	TC0900001901.mm.1	-0.8	0.002651
TC0200000886.mm.1	XM_485921	Gm5593	predicted gene 5593	42105803	42107185	TC0700002918.mm.1	-1.2	0.002655
TC0200000908.mm.1	ENSMUST00000120180	Gm12587	predicted gene 12587	121886542	121886968	TC1100004258.mm.1	-1.1	0.002655
TC0200000920.mm.1	OTTMUST00000019371	RP23-21	---	112955075	112956286	TC0400003294.mm.1	-0.7	0.002657
TC0200000926.mm.1	ENSMUST00000170279	Rpl26-p	ribosomal protein L26, pseudogene 4	17711668	17712105	TC1600000223.mm.1	-0.4	0.002676
TC0200000942.mm.1	NM_009970	Csf2ra	colony stimulating factor 2 receptor, alpha, lo	61224402	61228418	TC1900001762.mm.1	0.6	0.002699
TC0200000948.mm.1	NM_019971	Pdgfc	platelet-derived growth factor, C polypeptide	81036416	81214040	TC0300000631.mm.1	0.4	0.002709
TC0200000963.mm.1	NM_019861	Ctsf	cathepsin F	4855129	4860918	TC1900000046.mm.1	0.5	0.002738
TC0200000964.mm.1	ENSMUST00000122473	Gm25108	predicted gene, 25108	42275650	42275727	TC0600000457.mm.1	-0.5	0.002769
TC0200000967.mm.1	NM_177740	Rgma	RGM domain family, member A	73375520	73419899	TC0700001064.mm.1	0.2	0.00277
TC0200000968.mm.1	NM_010201	Fgf14	fibroblast growth factor 14	123977907	124677127	TC1400002764.mm.1	-0.5	0.002779
TC0200000977.mm.1	NM_009103	Rrm1	ribonucleotide reductase M1	102441695	102469771	TC0700001455.mm.1	-1.3	0.002781
TC0200000984.mm.1	NM_010743	Il1rl1	interleukin 1 receptor-like 1	40429570	40465415	TC0100000298.mm.1	0.2	0.002781
TC0200000988.mm.1	NM_145632	Polr2h	polymerase (RNA) II (DNA directed) polypeptide	20717665	20722267	TC1600000291.mm.1	-0.2	0.002792
TC0200001002.mm.1	NM_027343	Cd209g	CD209g antigen	4134733	4137707	TC0800000027.mm.1	0.6	0.002801
TC0200001010.mm.1	NM_010008	Cyp2j6	cytochrome P450, family 2, subfamily j, polypep	96516138	96553661	TC0400003097.mm.1	0.6	0.002801
TC0200001013.mm.1	NM_007876	Dpep1	dipeptidase 1 (renal)	123186235	123201813	TC0800001511.mm.1	1.0	0.002808
TC0200001020.mm.1	NM_019577	Ccl24	chemokine (C-C motif) ligand 24	135569937	135573049	TC0500003399.mm.1	0.4	0.002822
TC0200001032.mm.1	NM_007638	Cct7	chaperonin containing Tcp1, subunit 7 (eta)	85451505	85468477	TC0600000963.mm.1	-0.4	0.002823
TC0200001034.mm.1	NM_172892	Slc13a4	solute carrier family 13 (sodium/sulfate sympor	35267953	35308131	TC0600002066.mm.1	0.5	0.002828
TC0200001060.mm.1	NM_173758	Vwa8	von Willebrand factor A domain containing 8	78849178	79202310	TC1400001094.mm.1	0.6	0.002834
TC0200001063.mm.1	NM_001034882	Zbtbd6	kelch repeat and BTB (POZ) domain containing 6	79451835	79454816	TC1400001104.mm.1	-0.4	0.002835
TC0200001068.mm.1	ENSMUST00000109139	Aurka	aurora kinase A	172356190	172370535	TC0200005271.mm.1	-0.7	0.002839
TC0200001089.mm.1	NM_207635	Rps24	ribosomal protein S24	24490681	24496146	TC1400000231.mm.1	-0.4	0.002843
TC0200001096.mm.1	NM_008768	Orm1	orosomucoid 1	63344560	63348163	TC0400000718.mm.1	1.5	0.002843
TC0200001102.mm.1	NM_011150	Lgals3b	lectin, galactoside-binding, soluble, 3 binding	118392751	118402092	TC1100004159.mm.1	1.0	0.002852
TC0200001107.mm.1	NM_029537	Tmem98	transmembrane protein 98	80810175	80822033	TC1100001209.mm.1	0.5	0.002874
TC0200001125.mm.1	NM_024170	Cxx1a	CAAX box 1A	53642488	53643763	TC0X00002241.mm.1	0.3	0.002897
TC0200001130.mm.1	ENSMUST00000121977	Rps2-ps	ribosomal protein S2, pseudogene 4	53645744	53646376	TC1100000610.mm.1	-0.4	0.002899
TC0200001137.mm.1	ENSMUST00000118554	Gm13167	predicted gene 13167	146224036	146224613	TC0400003973.mm.1	-1.9	0.002902
TC0200001160.mm.1	ENSMUST00000118415	Hmgb1-p	high mobility group box 1, pseudogene 3	63846183	63846818	TC1100002965.mm.1	-1.2	0.002908
TC0200001164.mm.1	NM_009349	Inmt	indolethylamine N-methyltransferase	55170626	55175043	TC0600002326.mm.1	0.4	0.002911
TC0200001168.mm.1	NM_013522	Frg1	FSHD region gene 1	41397454	41417118	TC0800002121.mm.1	-0.4	0.002914
TC0200001170.mm.1	NM_183046	Kif20b	kinesin family member 20B	34922358	34975731	TC1900000508.mm.1	-0.6	0.002928
TC0200001174.mm.1	ENSMUST00000105169	Gm4294	predicted gene 4294	12023043	12023657	TC1200000096.mm.1	-0.9	0.002929
TC0200001175.mm.1	ENSMUST00000118931	Gm14627	predicted gene 14627	56190932	56191498	TC0X00000513.mm.1	-0.4	0.002948
TC0200001180.mm.1	NM_027382	Hdac8	histone deacetylase 8	102284639	102505359	TC0X00002741.mm.1	-0.2	0.00295
TC0200001196.mm.1	NM_008495	Lgals1	lectin, galactose binding, soluble 1	78926725	78930465	TC1500000658.mm.1	1.0	0.002968
TC0200001206.mm.1	NM_009227	Snrpe	small nuclear ribonucleoprotein E	133603871	133610291	TC0100003092.mm.1	-0.4	0.002983
TC0200001207.mm.1	NM_198605	Ska3	spindle and kinetochore associated complex sub	57806561	57826163	TC1400002150.mm.1	-0.5	0.00299
TC0200001208.mm.1	ENSMUST00000118270	Gm14923	predicted gene 14923	112774104	112775727	TC0X00001131.mm.1	-0.5	0.003007
TC0200001209.mm.1	NM_011300	Rps7	ribosomal protein S7	28630847	28635953	TC1200001568.mm.1	-0.7	0.003026
TC0200001210.mm.1	NM_174857	Mamdc2	MAM domain containing 2	23302609	23448352	TC1900001266.mm.1	0.4	0.003028
TC0200001211.mm.1	ENSMUST00000158989	Gm23505	predicted gene, 23505	51493653	51493782	TC0200003518.mm.1	-0.6	0.003029
TC0200001212.mm.1	NCBI_Gene:21638:pr	Tcrg-V4	T cell receptor gamma, variable 4	19184981	19185506	TC1300002761.mm.1	-0.5	0.003031
TC0200001215.mm.1	NM_021455	Mlxipl	MLX interacting protein-like	135106891	135138382	TC0500001575.mm.1	0.4	0.003035
TC0200001219.mm.1	ENSMUST00000119727	Gm6368	predicted gene 6368	141980175	141982321	TC0X00001398.mm.1	-0.3	0.003043
TC0200001222.mm.1	NM_144517	Tbc1d19	TBC1 domain family, member 19	53809627	53904380	TC0500000542.mm.1	0.6	0.003047
TC0200001223.mm.1	ENSMUST00000118629	Gm6952	predicted gene 6952	80197081	80197239	TC0X00002533.mm.1	-0.3	0.003052
TC0200001224.mm.1	NM_134081	Dnajc9	DnaJ (Hsp40) homolog, subfamily C, member 9	20384638	20388910	TC1400001533.mm.1	-0.4	0.003053
TC0200001225.mm.1	ENSMUST00000111755	Nup35	nucleoporin 35	116082863	116084635	TC0700004152.mm.1	-0.4	0.003058
TC0200001230.mm.1	ENSMUST00000073056	Gm6252	predicted gene 6252	125219449	125219886	TC0700004252.mm.1	-0.4	0.003073
TC0200001234.mm.1	ENSMUST00000119775	Gm6506	predicted gene 6506	77443285	77444420	TC1500001811.mm.1	-0.5	0.003075
TC0200001238.mm.1	ENSMUST00000183537	Gm15013	predicted gene 15013	139713681	139714481	TC0X00003063.mm.1	-0.6	0.003083
TC0200001241.mm.1	ENSMUST00000079733	Gm10036	predicted gene 10036	15832794	15833330	TC1800000134.mm.1	-1.1	0.003086
TC0200001249.mm.1	XM_001481032	Gm10224	predicted pseudogene 10224	122677578	122699028	TC0600003073.mm.1	-1.3	0.003097
TC0200001260.mm.1	NM_026038	L3hypdh	L-3-hydroxyproline dehydratase (trans-)	72073428	72085439	TC1200001899.mm.1	0.2	0.003105
TC0200001264.mm.1	NM_027930	Mtfr2	mitochondrial fission regulator 2	20347819	20361669	TC1000000158.mm.1	-0.3	0.003138
TC0200001267.mm.1	NM_027289	Nt5dc2	5-nucleotidase domain containing 2	31134853	31139124	TC1400000322.mm.1	-0.9	0.003141
TC0200001268.mm.1	XM_001481155	Gm10166	60S ribosomal protein L17, pseudogene	36117385	36118881	TC0700000671.mm.1	-0.5	0.003144
TC0200001283.mm.1	NM_026785	Ube2c	ubiquitin-conjugating enzyme E2C	164769898	164778822	TC0200002532.mm.1	-1.0	0.003147
TC0200001284.mm.1	NM_008418	Kcna3	potassium voltage-gated channel, shaker-relatec	107036162	107038129	TC0300001109.mm.1	-0.8	0.003155
TC0200001286.mm.1	ENSMUST00000164501	Gm17214	predicted gene 17214	69320045	69320585	TC0300002134.mm.1	-0.7	0.003163
TC0200001290.mm.1	NM_001033420	Dock1	dedicator of cytokinesis 1	134670687	135173647	TC0700001951.mm.1	0.5	0.003174
TC0200001306.mm.1	NM_010370	Gzma	granzyme A	113093825	113100981	TC1300002691.mm.1	-1.0	0.003175
TC0200001337.mm.1	NM_198607	Them6	thioesterase superfamily member 6	74721234	74724373	TC1500000543.mm.1	-0.6	0.003184
TC0200001345.mm.1	ENSMUST00000117362	Gm12568	predicted gene 12568	46243571	46244194	TC1100002600.mm.1	-1.0	0.003185
TC0200001381.mm.1	NM_001081019	Gm12657	predicted gene 12657	94593650	94600319	TC0400000948.mm.1	-0.7	0.003188
TC0200001397.mm.1	NM_010119	Ehd1	EH-domain containing 1	6276725	6300096	TC1900000111.mm.1	0.3	0.00319
TC0200001412.mm.1	NM_145741	Gdf10	growth differentiation factor 10	33923587	33935285	TC1400000363.mm.1	0.9	0.003192
TC0200001441.mm.1	NR_029529	Mir15b	microRNA 15b	69009756	69009853	TC0300000575.mm.1	-0.5	0.003211
TC0200001445.mm.1	ENSMUST00000120159	Gm6276	predicted pseudogene 6276	75165207	75165785	TC1700001168.mm.1	-0.3	0.003219
TC0200001457.mm.1	ENSMUST00000061746	Gm7148	predicted gene 7148	40115358	40116071	TC1700000811.mm.1	-0.3	0.003219
TC0200001467.mm.1	NM_001198933	Me1	malic enzyme 1, NADP(+)-dependent, cytosolic	86581363	86695914	TC0900002780.mm.1	1.5	0.003222

TC0200001469.mm.1	NM_008212	Hadh	hydroxyacyl-Coenzyme A dehydrogenase	131233419	131272101	TC0300002955.mm.1	1.0	0.003242
TC0200001471.mm.1	ENSMUST00000120838	Rps18-p	ribosomal protein S18, pseudogene 1	71370738	71371196	TC0400002852.mm.1	-0.9	0.003261
TC0200001489.mm.1	ENSMUST00000119738	Gm12335	predicted gene 12335	75066436	75066762	TC1100003212.mm.1	-0.9	0.003262
TC0200001500.mm.1	XR_140881	Gm19269	predicted gene, 19269	57639169	57640154	TC0800002261.mm.1	-0.3	0.003265
TC0200001513.mm.1	NM_008513	Lrp5	low density lipoprotein receptor-related protei	3584825	3686564	TC1900000882.mm.1	0.4	0.003275
TC0200001525.mm.1	NM_007934	Enpep	glutamyl aminopeptidase	129269175	129332749	TC0300002926.mm.1	0.7	0.003286
TC0200001547.mm.1	NM_178206	Hist1h3	histone cluster 1, H3h	21717628	21718115	TC1300000174.mm.1	-0.8	0.003308
TC0200001550.mm.1	ENSMUST00000053575	Snrpg	small nuclear ribonucleoprotein polypeptide G	26098872	26099257	TC1700001690.mm.1	-0.8	0.003322
TC0200001551.mm.1	NCBI_Gene:667596:p	Trav13d	T cell receptor alpha variable 13D-3	53032902	53033419	TC1400000653.mm.1	-0.4	0.003329
TC0200001552.mm.1	NM_008563	Mcm3	minichromosome maintenance deficient 3 (S. ce	20802974	20820278	TC0100002033.mm.1	-0.8	0.003337
TC0200001553.mm.1	OTTMUST00000045487	RP23-15	---	144268049	144268204	TC0X00003122.mm.1	-1.0	0.003338
TC0200001555.mm.1	NM_001114332	Slc16a1	solute carrier family 16 (monocarboxylic acid t	40033535	40142254	TC1000002036.mm.1	0.5	0.003339
TC0200001556.mm.1	NM_026760	2310036	RIKEN cDNA 2310036O22 gene	85026823	85030286	TC0800000976.mm.1	-0.5	0.003355
TC0200001559.mm.1	NM_130904	Cd209d	CD209d antigen	3871824	3878555	TC0800001623.mm.1	0.4	0.003363
TC0200001563.mm.1	NM_001024726	Zfp607	zinc finger proten 607	27860585	27880825	TC0700000476.mm.1	-0.3	0.003364
TC0200001571.mm.1	NM_001083959	Spo11	SPO11 meiotic protein covalently bound to DSB	172977700	172993576	TC0200002675.mm.1	-0.4	0.003366
TC0200001575.mm.1	NCBI_Gene:195297:p	Trav16n	Trav16n T cell receptor alpha variable 16n	53743104	53743706	TC1400000708.mm.1	-0.5	0.003394
TC0200001579.mm.1	NM_026374	Ilf2	interleukin enhancer binding factor 2	90476201	90488379	TC0300000799.mm.1	-0.5	0.003397
TC0200001586.mm.1	NM_013548	Hist1h3	histone cluster 1, H3f	23544052	23545312	TC1300000247.mm.1	-0.4	0.0034
TC0200001589.mm.1	ENSMUST00000079114	Rpl31-p	ribosomal protein L31, pseudogene 4	87549062	87549451	TC1600001988.mm.1	-0.5	0.003406
TC0200001592.mm.1	ENSMUST00000120203	Gm12933	predicted gene 12933	126665254	126666125	TC0400001468.mm.1	-0.6	0.003421
TC0200001600.mm.1	ENSMUST00000167274	Gm14494	predicted gene 14494	153826053	153826834	TC0200002325.mm.1	-0.4	0.003426
TC0200001607.mm.1	ENSMUST00000121585	Gm15542	predicted gene 15542	140890887	140892080	TC0700002029.mm.1	-0.5	0.003427
TC0200001616.mm.1	ENSMUST00000153606	Gm6542	predicted gene 6542	36609958	36610729	TC1800000336.mm.1	-0.6	0.003429
TC0200001617.mm.1	ENSMUST00000120994	Gm13246	predicted gene 13246	145844404	145844718	TC0400003969.mm.1	-0.4	0.003437
TC0200001620.mm.1	ENSMUST00000183926	RP24-28	N/A	72431127	72431643	TC0900002638.mm.1	-1.2	0.003437
TC0200001630.mm.1	ENSMUST00000082400	mt-Tc	mitochondrially encoded tRNA cysteine	5192	5257	TC0M00000023.mm.1	1.3	0.003442
TC0200001644.mm.1	NM_029364	Gns	glucosamine (N-acetyl)-6-sulfatase	121365090	121397253	TC1000001493.mm.1	0.8	0.003442
TC0200001651.mm.1	ENSMUST00000057074	Nanp	N-acetylneuraminic acid phosphatase	91236787	91238116	TC1700001335.mm.1	-0.4	0.003443
TC0200001663.mm.1	ENSMUST00000117240	Gm11989	predicted gene 11989	8383182	8383853	TC1100002206.mm.1	-1.0	0.003445
TC0200001675.mm.1	ENSMUST00000119183	Gm13337	predicted gene 13337	22067826	22069419	TC0200000345.mm.1	0.2	0.003451
TC0200001676.mm.1	ENSMUST00000121187	Rpl36-p	ribosomal protein L36, pseudogene 8	116839907	116840221	TC0400003353.mm.1	-0.7	0.003483
TC0200001679.mm.1	ENSMUST00000072166	Scp2-ps	sterol carrier protein 2, pseudogene 2	123307508	123307939	TC0900003303.mm.1	1.4	0.003504
TC0200001681.mm.1	ENSMUST00000167128	Gm7241	predicted pseudogene 7241	132284447	132284809	TC0100001188.mm.1	-0.4	0.003516
TC0200001701.mm.1	NM_178196	Hist1h2	histone cluster 1, H2bg	23571396	23572014	TC1300000249.mm.1	-1.3	0.003522
TC0200001722.mm.1	NM_011962	Plod3	procollagen-lysine, 2-oxoglutarate 5-dioxygenas	136987019	136996648	TC0500001615.mm.1	0.5	0.003523
TC0200001723.mm.1	ENSMUST00000184004	RP23-13	N/A	83073223	83073388	TC0900002762.mm.1	-0.4	0.003528
TC0200001729.mm.1	NM_012052	Rps3	ribosomal protein S3	99477896	99483738	TC0700003798.mm.1	-0.4	0.003532
TC0200001735.mm.1	NM_025711	Aspn	asporin	49544443	49567565	TC1300000566.mm.1	0.9	0.003544
TC0200001740.mm.1	NM_053247	Lyve1	lymphatic vessel endothelial hyaluronan recepto	110850607	110863059	TC0700004104.mm.1	1.0	0.003548
TC0200001748.mm.1	ENSMUST00000100687	Gm16439	predicted pseudogene 16439	44596665	44597228	TC1400000470.mm.1	1.3	0.003561
TC0200001750.mm.1	ENSMUST00000184266	RP24-22	N/A	69158671	69159519	TC1400000970.mm.1	-0.5	0.003561
TC0200001751.mm.1	NM_010663	Krt17	keratin 17	100256217	100261029	TC1100003763.mm.1	-0.7	0.003565
TC0200001763.mm.1	NM_173441	Iws1	IWS1 homolog (S. cerevisiae)	32067734	32104331	TC1800000253.mm.1	-0.4	0.003568
TC0200001769.mm.1	ENSMUST00000120819	Gm12516	predicted gene 12516	55392317	55392701	TC0400002685.mm.1	-0.4	0.003577
TC0200001777.mm.1	ENSMUST00000169692	Gm6970	predicted gene 6970	47170469	47171134	TC1900001626.mm.1	-0.3	0.003592
TC0200001793.mm.1	NM_177640	D030056	RIKEN cDNA D030056L22 gene	18713193	18718429	TC1900000325.mm.1	-0.2	0.003594
TC0200001797.mm.1	NM_133978	Cmtm7	CKLF-like MARVEL transmembrane domain conta	114756836	114781993	TC0900003176.mm.1	-0.6	0.003604
TC0200001808.mm.1	NM_009104	Rrm2	ribonucleotide reductase M2	24708241	24714146	TC1200000203.mm.1	-1.3	0.003614
TC0200001812.mm.1	NM_172253	Twistnb	TWIST neighbor	33429624	33439380	TC1200000294.mm.1	-0.7	0.003615
TC0200001819.mm.1	NM_013730	Slamf1	signaling lymphocytic activation molecule famil	171767127	171801184	TC0100001600.mm.1	-0.7	0.003618
TC0200001831.mm.1	NM_175160	Zdhhc1	zinc finger, DHHC domain containing 1	105472425	105496870	TC0800002823.mm.1	0.3	0.003623
TC0200001842.mm.1	NM_024266	Rps25	ribosomal protein S25	44407697	44410406	TC0900000511.mm.1	-0.7	0.003627
TC0200001843.mm.1	NM_198052	Tbx3	T-box 3	119670669	119684724	TC0500001327.mm.1	0.2	0.003634
TC0200001850.mm.1	NM_030234	Wdr76	WD repeat domain 76	121506723	121544860	TC0200001819.mm.1	-0.6	0.003643
TC0200001853.mm.1	ENSMUST00000073088	Gm16372	predicted pseudogene 16372	24493207	24493656	TC1200001534.mm.1	-0.3	0.003646
TC0200001863.mm.1	NM_008565	Mcm4	minichromosome maintenance deficient 4 homc	15623897	15637400	TC1600001254.mm.1	-0.8	0.003651
TC0200001876.mm.1	NM_001038614	Olfm1	olfactomedin 1	28192992	28230736	TC0200000480.mm.1	0.7	0.003717
TC0200001879.mm.1	NCBI_Gene:621968:p	Trbv1	T cell receptor beta, variable 1	40891229	40891887	TC0600000417.mm.1	-1.2	0.003731
TC0200001886.mm.1	ENSMUST00000118871	Gm15484	predicted gene 15484	110118022	110118849	TC0500002982.mm.1	-0.8	0.003733
TC0200001896.mm.1	NM_019402	Pabpn1	poly(A) binding protein, nuclear 1	54892500	54898927	TC1400002832.mm.1	-0.3	0.00375
TC0200001900.mm.1	NM_010615	Kif11	kinesin family member 11	37376403	37421859	TC1900000529.mm.1	-1.6	0.003764
TC0200001905.mm.1	NM_025915	Tmem88	transmembrane protein 88	69396516	69398234	TC1100003042.mm.1	0.5	0.003778
TC0200001906.mm.1	NM_172598	Wdhd1	WD repeat and HMG-box DNA binding protein 1	47240944	47276857	TC1400001931.mm.1	-0.5	0.00379
TC0200001909.mm.1	NM_126166	Tlr3	toll-like receptor 3	45395665	45410608	TC0800002146.mm.1	0.3	0.003792
TC0200001910.mm.1	NR_030454	Mir684-	microRNA 684-1	20176131	20177124	TC1600001338.mm.1	-0.6	0.003797
TC0200001911.mm.1	NM_030206	Cygb	cytoglobin	116645595	116654313	TC1100004123.mm.1	0.3	0.003799
TC0200001919.mm.1	ENSMUST00000071184	Rpl10a-	ribosomal protein L10A, pseudogene 2	8940333	8940977	TC1300001414.mm.1	-0.3	0.003803
TC0200001923.mm.1	NM_024245	Kif23	kinesin family member 23	61917277	61946799	TC0900002451.mm.1	-0.6	0.003806
TC0200001939.mm.1	ENSMUST00000121569	Smt3h2-	SMT3 suppressor of mif two 3 homolog 2, pseud	14839869	14840156	TC0100001988.mm.1	-0.8	0.00383
TC0200001949.mm.1	NM_019551	Tdp2	tyrosyl-DNA phosphodiesterase 2	24831659	24842153	TC1300000280.mm.1	-0.2	0.003836
TC0200001962.mm.1	NM_026576	Etaa1	Ewings tumor-associated antigen 1	17938749	17953875	TC1100002255.mm.1	-0.4	0.003839
TC0200001966.mm.1	NM_009601	Chrnb1	cholinergic receptor, nicotinic, beta polypepti	69784036	69795943	TC1100003063.mm.1	0.2	0.003867
TC0200001967.mm.1	ENSMUST00000085632	Rpl23a-	ribosomal protein 23A, pseudogene 1	45981548	45982015	TC0100000352.mm.1	-0.5	0.003885
TC0200001973.mm.1	ENSMUST00000118217	Gm6023	predicted gene 6023	36213524	36214129	TC0X00002042.mm.1	-0.7	0.003905
TC0200001981.mm.1	ENSMUST00000179892	Gm14253	predicted gene 14253	156346804	156347997	TC0200004987.mm.1	-0.7	0.003927
TC0200001985.mm.1	NM_001034880	Gm5460	predicted gene 5460	34041078	34046981	TC1400000366.mm.1	0.3	0.003933
TC0200001990.mm.1	NM_009779	C3ar1	complement component 3a receptor 1	122847138	122856161	TC0600003079.mm.1	0.8	0.003954

TC0200001991.mm.1	NM_029249	Parpbp	PARP1 binding protein	88091398	88146941	TC1000002639.mm.1	-0.5	0.003957
TC0200001997.mm.1	NM_152810	Cdc5l	cell division cycle 5-like (S. pombe)	45391887	45433707	TC1700002145.mm.1	-0.6	0.00397
TC0200002000.mm.1	NCBI_Gene:16016:pr	Ighg2b	immunoglobulin heavy constant gamma 2B	113302967	113307933	TC1200002539.mm.1	-1.3	0.003978
TC0200002005.mm.1	ENSMUST00000117939	Rps13-p	ribosomal protein S13, pseudogene 5	61205720	61206175	TC1100002906.mm.1	-0.7	0.003979
TC0200002006.mm.1	ENSMUST00000121188	Gm13365	predicted gene 13365	15396750	15397716	TC0200000267.mm.1	0.2	0.003986
TC0200002021.mm.1	NM_001170395	Cd163	CD163 antigen	124304651	124330527	TC0600001418.mm.1	0.6	0.003989
TC0200002029.mm.1	NM_001101561	Gm6251	predicted gene 6251	20208439	20209030	TC1000000152.mm.1	-0.9	0.003993
TC0200002039.mm.1	NM_001168512	Ffar2	free fatty acid receptor 2	30818357	30823775	TC0700002776.mm.1	0.2	0.003995
TC0200002044.mm.1	NM_178211	Hist1h4	histone cluster 1, H4k	21750142	21750553	TC1300001557.mm.1	-0.5	0.004006
TC0200002046.mm.1	NCBI_Gene:630086:p	Trav12-	Trav12-1 T cell receptor alpha variable 12-1	53538260	53724937	TC1400000700.mm.1	-0.5	0.004016
TC0200002049.mm.1	NM_008628	Msh2	mutS homolog 2 (E. coli)	87672330	87723713	TC1700001313.mm.1	-0.5	0.004022
TC0200002075.mm.1	ENSMUST00000093546	Gm5670	predicted gene 5670	22558082	22558453	TC1400001565.mm.1	-0.2	0.004023
TC0200002088.mm.1	NM_011081	Piga	phosphatidylinositol glycan anchor biosynthesis	164419787	164433916	TC0X00001668.mm.1	-0.2	0.004023
TC0200002094.mm.1	NR_029471	Rps15a-	ribosomal protein S15A, pseudogene 6	6172508	6173331	TC1100002163.mm.1	-0.4	0.004034
TC0200002116.mm.1	NM_010497	Idh1	isocitrate dehydrogenase 1 (NADP+), soluble	65158616	65186479	TC0100002481.mm.1	0.7	0.004049
TC0200002122.mm.1	ENSMUST00000120291	Glns-ps	glutamine synthetase pseudogene 1	19720355	19721472	TC1100000185.mm.1	1.1	0.00405
TC0200002124.mm.1	NM_008354	Il12rb2	interleukin 12 receptor, beta 2	67291318	67376188	TC0600002423.mm.1	-0.5	0.00406
TC0200002129.mm.1	ENSMUST00000146791	Gm12091	predicted gene 12091	29601784	29602613	TC1100002423.mm.1	-0.3	0.004062
TC0200002134.mm.1	XR_001587	Gm6252	predicted gene 6252	9215845	9217505	TC1900000174.mm.1	-0.3	0.004068
TC0200002136.mm.1	ENSMUST00000121866	Gm13007	predicted gene 13007	135997523	135997887	TC0400001672.mm.1	-0.9	0.004086
TC0200002151.mm.1	NM_012039	Zw10	zw10 kinetochore protein	49055581	49078773	TC0900000590.mm.1	-0.3	0.004094
TC0200002166.mm.1	ENSMUST00000117614	Gm11531	predicted gene 11531	96392112	96392666	TC1100001503.mm.1	-1.0	0.004103
TC0200002168.mm.1	NM_021436	Tmeff1	transmembrane protein with EGF-like and two fo	48585174	48663131	TC0400000535.mm.1	0.3	0.004141
TC0200002174.mm.1	NM_010327	Gp1bb	glycoprotein Ib, beta polypeptide	18620319	18629939	TC1600001319.mm.1	0.2	0.004178
TC0200002183.mm.1	NM_010638	Klf9	Kruppel-like factor 9	23141226	23166911	TC1900000373.mm.1	0.8	0.00418
TC0200002196.mm.1	NM_010424	Hfe	hemochromatosis	23702034	23710854	TC1300001641.mm.1	0.9	0.004206
TC0200002197.mm.1	NM_013459	Cfd	complement factor D (adipsin)	79890853	79892656	TC1000000824.mm.1	2.2	0.004207
TC0200002207.mm.1	ENSMUST00000117602	Gm15148	predicted gene 15148	151493114	151493269	TC0X00003180.mm.1	-1.0	0.004215
TC0200002211.mm.1	ENSMUST00000177264	Gm6695	predicted gene 6695	58091076	58092669	TC0600000702.mm.1	-0.6	0.004216
TC0200002213.mm.1	NM_145541	Rap1a	RAS-related protein-1a	105727260	105801381	TC0300002674.mm.1	-0.5	0.004216
TC0200002214.mm.1	NCBI_Gene:10012468	Trbv17	T cell receptor beta, variable 17	41163062	41163556	TC0600000429.mm.1	-1.5	0.004218
TC0200002215.mm.1	NM_011458	Serpina	serine (or cysteine) peptidase inhibitor, clade	104338486	104394257	TC1200001044.mm.1	0.5	0.004223
TC0200002219.mm.1	NR_030609	Mir511	microRNA 511	14261003	14261081	TC0200000246.mm.1	0.2	0.004254
TC0200002223.mm.1	ENSMUST00000140065	Gm6969	predicted pseudogene 6969	24638669	24639010	TC1200001535.mm.1	-0.6	0.004277
TC0200002228.mm.1	NM_001001183	Tmem204	transmembrane protein 204	25057702	25081181	TC1700001652.mm.1	0.3	0.004281
TC0200002231.mm.1	NM_001113417	Thrb	thyroid hormone receptor beta	17660960	18038088	TC1400000135.mm.1	0.4	0.004302
TC0200002232.mm.1	ENSMUST00000118760	Gm13233	predicted gene 13233	146580629	146582312	TC0400001887.mm.1	0.7	0.004304
TC0200002236.mm.1	NM_025440	Mrps16	mitochondrial ribosomal protein S16	20391227	20393555	TC1400001535.mm.1	-0.3	0.004316
TC0200002259.mm.1	NM_010830	Msh6	mutS homolog 6 (E. coli)	87975050	87990892	TC1700001315.mm.1	-0.9	0.004326
TC0200002260.mm.1	ENSMUST00000160308	Rps19-p	ribosomal protein S19, pseudogene 11	43373488	43373920	TC1000002083.mm.1	-0.5	0.004329
TC0200002261.mm.1	NM_153526	Insig1	insulin induced gene 1	28071363	28078662	TC0500000260.mm.1	0.9	0.00433
TC0200002272.mm.1	XR_141116	Gm10933	predicted gene 10933	35055101	35056959	TC1200000304.mm.1	-0.2	0.004338
TC0200002276.mm.1	NM_033037	Cdo1	cysteine dioxygenase 1, cytosolic	46713205	46728342	TC1800001307.mm.1	2.4	0.004338
TC0200002281.mm.1	NM_001190717	Dbf4	DBF4 homolog (S. cerevisiae)	8396969	8422716	TC0500001931.mm.1	-0.4	0.004341
TC0200002291.mm.1	NM_001197046	Fgfr1op	Fgfr1 oncogene partner	8165501	8196804	TC1700000081.mm.1	-0.3	0.004355
TC0200002296.mm.1	ENSMUST00000120980	Gm13461	predicted gene 13461	41987473	41988829	TC0200003455.mm.1	-0.6	0.004369
TC0200002298.mm.1	NM_139206	Arap3	ArfGAP with RhoGAP domain, ankyrin repeat an	37972623	37998969	TC1800001222.mm.1	0.2	0.004373
TC0200002299.mm.1	NM_011119	Pa2g4	proliferation-associated 2G4	128557766	128565934	TC1000003152.mm.1	-0.7	0.004382
TC0200002300.mm.1	NM_145588	Kif22	kinesin family member 22	127027731	127042420	TC0700004310.mm.1	-0.7	0.004389
TC0200002308.mm.1	OTTMUST00000001770	RP23-39	---	83027500	83027997	TC1100003384.mm.1	-1.3	0.004394
TC0200002312.mm.1	NM_016661	Ahcy	S-adenosylhomocysteine hydrolase	155059310	155074497	TC0200004953.mm.1	-0.4	0.004401
TC0200002314.mm.1	NM_010892	Nek2	NIMA (never in mitosis gene a)-related expresse	191821444	191833050	TC0100001858.mm.1	-0.5	0.004414
TC0200002325.mm.1	NM_177794	Tmem26	transmembrane protein 26	68723746	68782654	TC1000000653.mm.1	-0.2	0.004417
TC0200002349.mm.1	NM_207649	Rcan2	regulator of calcineurin 2	43801851	44039516	TC1700000839.mm.1	0.2	0.004426
TC0200002362.mm.1	NM_175483	Snx33	sorting nexin 33	56917200	56928371	TC0900002359.mm.1	0.5	0.004427
TC0200002363.mm.1	NM_018753	Ywhab	tyrosine 3-monooxygenase/tryptophan 5-monoo	163994960	164018588	TC0200002499.mm.1	0.7	0.004431
TC0200002364.mm.1	NM_011515	Vamp7	vesicle-associated membrane protein 7	10738	39148	TCX_GL456233_rand	-0.4	0.004439
TC0200002374.mm.1	ENSMUST00000081132	Gm5848	predicted pseudogene 5848	53525703	53526059	TC1300000619.mm.1	-0.5	0.004446
TC0200002382.mm.1	NCBI_Gene:10012466	Trbv4	T cell receptor beta, variable 10	41055883	41063102	TC0600003492.mm.1	-1.3	0.004447
TC0200002402.mm.1	ENSMUST00000083022	Gm24918	predicted gene, 24918	3352657	3352786	TC0900000014.mm.1	-0.3	0.004451
TC0200002417.mm.1	ENSMUST00000056396	Sarnp	SAP domain containing ribonucleoprotein	23675844	23676712	TC1900000381.mm.1	-0.5	0.004453
TC0200002419.mm.1	NR_038089	Gm6654	predicted pseudogene 6654	146647177	146647802	TC0600003441.mm.1	-0.4	0.004456
TC0200002421.mm.1	NM_029321	Ttc32	tetratricopeptide repeat domain 32	9029997	9036397	TC1200000075.mm.1	-0.2	0.004472
TC0200002426.mm.1	NM_134102	Pla1a	phospholipase A1 member A	38396117	38433145	TC1600001604.mm.1	0.6	0.004481
TC0200002428.mm.1	ENSMUST00000119632	Gm15607	predicted gene 15607	135637139	135637496	TC0500003401.mm.1	-0.5	0.004482
TC0200002434.mm.1	NM_175204	Psmb11	proteasome (prosome, macropain) subunit, beta	54625310	54629556	TC1400000753.mm.1	-1.5	0.004494
TC0200002438.mm.1	NM_029008	4833403	RIKEN cDNA 4833403I15 gene	46850039	46905446	TC1800000488.mm.1	0.2	0.004495
TC0200002441.mm.1	ENSMUST00000159750	Rps19-p	ribosomal protein S19, pseudogene 10	52384659	52385093	TC1000002158.mm.1	-0.7	0.004524
TC0200002442.mm.1	ENSMUST00000119636	Gm14131	predicted gene 14131	149356687	149357405	TC0200002207.mm.1	-0.4	0.004525
TC0200002445.mm.1	ENSMUST00000117906	Gm14127	predicted gene 14127	150469411	150470165	TC0200004838.mm.1	-0.5	0.004546
TC0200002451.mm.1	ENSMUST00000061073	Gm5812	predicted gene 5812	6121208	6122164	TC1700001379.mm.1	-0.5	0.004564
TC0200002464.mm.1	NM_009105	Rsu1	Ras suppressor protein 1	13076967	13271431	TC0200002982.mm.1	0.5	0.004567
TC0200002473.mm.1	NR_036616	Srsf9	serine/arginine-rich splicing factor 9	115327177	115333080	TC0500001255.mm.1	-0.3	0.004575
TC0200002476.mm.1	ENSMUST00000147976	Rin2	Ras and Rab interactor 2	145784734	145887616	TC0200002166.mm.1	0.3	0.004589
TC0200002477.mm.1	ENSMUST00000077389	Gm8213	predicted pseudogene 8213 // predicted gene 1	24333046	24333552	TC0300000148.mm.1	-0.5	0.004606
TC0200002480.mm.1	ENSMUST00000121488	Gm6451	predicted gene 6451	151413668	151414384	TC0X00003179.mm.1	-0.5	0.004612
TC0200002482.mm.1	XM_620258	Gm6139	predicted gene 6139	129622946	129623871	TC0500003304.mm.1	-0.6	0.004613
TC0200002489.mm.1	ENSMUST00000122355	Gm11760	predicted gene 11760	74044388	74045183	TC0400000775.mm.1	-0.3	0.004623

TC0200002499.mm.1	ENSMUST00000117843	Gm15673	predicted gene 15673	101238341	101239278	TC0700001428.mm.1	-0.3	0.004628
TC0200002517.mm.1	ENSMUST00000117531	Gm14044	predicted gene 14044	130384883	130385329	TC0200004621.mm.1	-0.7	0.004634
TC0200002523.mm.1	ENSMUST00000122326	Gm14045	predicted gene 14045	129378271	129379396	TC0200004603.mm.1	-0.4	0.004637
TC0200002530.mm.1	NM_146015	Efemp1	epidermal growth factor-containing fibulin-like	28853204	28926743	TC1100000284.mm.1	1.4	0.004648
TC0200002532.mm.1	ENSMUST00000122215	Anp32b-	Bacidic (leucine-rich) nuclear phosphoprotein 3	143389659	143390417	TC0400001823.mm.1	-0.9	0.004686
TC0200002562.mm.1	NM_008669	Naga	N-acetyl galactosaminidase, alpha	82329532	82338826	TC1500001942.mm.1	0.3	0.004693
TC0200002573.mm.1	ENSMUST00000179988	Gm25701	predicted gene, 25701	10477710	10477836	TC0200000113.mm.1	-0.3	0.0047
TC0200002574.mm.1	ENSMUST00000180199	Gm26431	predicted gene, 26431	10487507	10487633	TC0200000135.mm.1	-0.3	0.0047
TC0200002580.mm.1	ENSMUST00000179934	Gm24488	predicted gene, 24488	10494882	10495008	TC0200000153.mm.1	-0.3	0.0047
TC0200002581.mm.1	ENSMUST00000118949	Gm12435	predicted gene 12435	48344215	48345230	TC0400002624.mm.1	-0.9	0.004723
TC0200002589.mm.1	NM_173024	Serpina	serine (or cysteine) peptidase inhibitor, clade	104127996	104139545	TC1200001039.mm.1	0.5	0.004759
TC0200002594.mm.1	NR_029825	Mir7-1	microRNA 7-1	58392779	58392886	TC1300002100.mm.1	-0.4	0.00476
TC0200002606.mm.1	NM_026368	Caap1	caspase activity and apoptosis inhibitor 1	94500079	94556796	TC0400003071.mm.1	-0.3	0.00476
TC0200002611.mm.1	ENSMUST00000103281	Trbv29	T cell receptor beta, variable 29	41271403	41271881	TC0600000434.mm.1	-1.7	0.00476
TC0200002613.mm.1	NM_013805	Cldn5	claudin 5	18776847	18778262	TC1600000249.mm.1	0.9	0.004781
TC0200002620.mm.1	NM_023716	Tubb2b	tubulin, beta 2B class IIB	34127008	34130354	TC1300001781.mm.1	-0.9	0.004784
TC0200002640.mm.1	NR_030556	Mir327	microRNA 327	44947443	44947511	TC1400001893.mm.1	0.3	0.004784
TC0200002645.mm.1	NR_030556	Mir327	microRNA 327	0	0	TSUnmapped0000012	0.3	0.004784
TC0200002666.mm.1	NM_011391	Slc16a7	solute carrier family 16 (monocarboxylic acid t	125226464	125328963	TC1000003078.mm.1	0.7	0.004797
TC0200002667.mm.1	NM_001122603	Fcgbp	Fc fragment of IgG binding protein	28071236	28120864	TC0700000484.mm.1	-0.9	0.004812
TC0200002669.mm.1	NM_001290014	Pemt	phosphatidylethanolamine N-methyltransferase	0	0	TSUnmapped0000003	0.2	0.004825
TC0200002675.mm.1	NCBI_Gene:10012429	Traj59	T cell receptor alpha joining 59	54156133	54156196	TC1400000725.mm.1	-0.8	0.004837
TC0200002678.mm.1	NM_011682	Utrn	utrophin	12382188	12869365	TC1000001755.mm.1	0.7	0.004843
TC0200002683.mm.1	NM_009438	Rpl13a	ribosomal protein L13A	45125558	45128748	TC0700004648.mm.1	-0.3	0.004853
TC0200002698.mm.1	NM_033573	Prcc	papillary renal cell carcinoma (translocation-a	87858900	87885608	TC0300002292.mm.1	-0.3	0.004857
TC0200002699.mm.1	ENSMUST00000179957	Gm25673	predicted gene, 25673	10502191	10502317	TC0200000171.mm.1	-0.3	0.004863
TC0200002701.mm.1	ENSMUST00000140537	Gm13316	predicted gene 13316	14811848	14812538	TC0200003003.mm.1	-0.6	0.004874
TC0200002703.mm.1	NCBI_Gene:10010148	Trav10d	T cell receptor alpha variable 10D	52810934	52811496	TC1400000630.mm.1	-0.4	0.004886
TC0200002706.mm.1	ENSMUST00000077163	Gm11361	predicted pseudogene 11361	28257636	28258094	TC1300000310.mm.1	-0.8	0.004889
TC0200002712.mm.1	NM_172506	Boc	biregional cell adhesion molecule-related/down-	44485045	44558897	TC1600001643.mm.1	0.4	0.00491
TC0200002713.mm.1	NM_024184	Asf1b	ASF1 anti-silencing function 1 homolog B (S. ce	83955507	83970197	TC0800000937.mm.1	-0.8	0.004927
TC0200002715.mm.1	XM_003085380	Gm19505	predicted gene, 19505	6027533	6027865	TC1900000996.mm.1	-0.4	0.004937
TC0200002730.mm.1	ENSMUST00000122095	Gm15546	predicted gene 15546	121471563	121472388	TC0500003189.mm.1	0.2	0.004949
TC0200002731.mm.1	NM_029975	Ulbp1	UL16 binding protein 1	7444873	7473477	TC1000001696.mm.1	-0.5	0.004955
TC0200002732.mm.1	ENSMUST00000119589	Gm16071	predicted gene 16071	31094202	31094994	TC0900000274.mm.1	-0.2	0.004955
TC0200002734.mm.1	ENSMUST00000052615	Gm9800	predicted gene 9800	8799589	8800504	TC1400001442.mm.1	-1.0	0.004965
TC0200002735.mm.1	NM_017480	Icos	inducible T cell co-stimulator	60977914	61000321	TC0100000490.mm.1	-0.5	0.004973
TC0200002736.mm.1	NM_010436	H2afx	H2A histone family, member X	44334694	44336077	TC0900000505.mm.1	-1.3	0.004975
TC0200002738.mm.1	ENSMUST00000184369	Gm17190	predicted gene 17190	96082054	96083231	TC1300001084.mm.1	-0.6	0.004986
TC0200002741.mm.1	NM_026662	Prps2	phosphoribosyl pyrophosphate synthetase 2	167346322	167382749	TC0X00003361.mm.1	-1.0	0.004987
TC0200002746.mm.1	NM_133792	Pla2g15	phospholipase A2, group XV	106150399	106164715	TC0800001244.mm.1	0.6	0.005005
TC0200002747.mm.1	NM_001166407	Kif20a	kinesin family member 20A	34624624	34633277	TC1800000291.mm.1	-0.7	0.005006
TC0200002748.mm.1	NM_011421	Smpd1	sphingomyelin phosphodiesterase 1, acid lysosor	105554360	105558389	TC0700001554.mm.1	0.3	0.005015
TC0200002752.mm.1	NM_001037859	Csf1r	colony stimulating factor 1 receptor	61105572	61132149	TC1800000625.mm.1	0.7	0.005019
TC0200002755.mm.1	ENSMUST00000122244	Gm5648	predicted pseudogene 5648	121334988	121336574	TC0X00002916.mm.1	-1.0	0.005077
TC0200002768.mm.1	ENSMUST00000085128	Rpl31-p	ribosomal protein L31, pseudogene 1	91890896	91891273	TC1200002159.mm.1	-1.2	0.005078
TC0200002796.mm.1	NM_134188	Acot2	acyl-CoA thioesterase 2	83987861	83993877	TC1200000797.mm.1	0.7	0.005107
TC0200002798.mm.1	NM_001101445	Cyp4f17	cytochrome P450, family 4, subfamily f, polypep	32506462	32528894	TC1700000563.mm.1	0.3	0.00512
TC0200002805.mm.1	NM_025422	Cd302	CD302 antigen	60251993	60284488	TC0200003599.mm.1	0.8	0.005129
TC0200002816.mm.1	NM_029075	Stx11	syntaxin 11	12939983	12964259	TC1000001761.mm.1	-0.2	0.005135
TC0200002819.mm.1	NM_008532	Epcam	epithelial cell adhesion molecule	87635979	87651129	TC1700001312.mm.1	-0.4	0.005135
TC0200002836.mm.1	ENSMUST00000164656	Gm3326	predicted gene 3326	5214084	5215126	TC1400001388.mm.1	-0.3	0.005137
TC0200002837.mm.1	NM_001001981	Utp14b	UTP14, U3 small nucleolar ribonucleoprotein, ho	78657825	78707743	TC0100000682.mm.1	-0.3	0.005143
TC0200002841.mm.1	NM_147220	Abca9	ATP-binding cassette, sub-family A (ABC1), mem	110100749	110168196	TC1100004000.mm.1	0.7	0.005154
TC0200002843.mm.1	BC119390	Phxr2	per-hexamer repeat gene 2	99125167	99126325	TC1000002759.mm.1	-0.5	0.005176
TC0200002844.mm.1	ENSMUST00000122046	Gm8080	predicted gene 8080	107020137	107025325	TC0100002902.mm.1	-0.5	0.005186
TC0200002846.mm.1	NM_019737	B4galt6	UDP-Gal:betaGlcNAc beta 1,4-galactosyltransfer	20684599	20746404	TC1800001048.mm.1	0.6	0.005193
TC0200002859.mm.1	ENSMUST00000119790	Gm13680	predicted gene 13680	83353157	83353949	TC0200003854.mm.1	-0.8	0.005195
TC0200002864.mm.1	NM_031405	Srrt	serrate RNA effector molecule homolog (Arabido	137295704	137307674	TC0500003439.mm.1	-0.4	0.005196
TC0200002872.mm.1	NM_007634	Ccnf	cyclin F	24223228	24251409	TC1700001622.mm.1	-0.7	0.00521
TC0200002882.mm.1	NM_028315	Dis3	DIS3 mitotic control homolog (S. cerevisiae)	99076634	99099770	TC1400002600.mm.1	-0.4	0.005213
TC0200002890.mm.1	NM_008564	Mcm2	minichromosome maintenance deficient 2 mitot	88883474	88898780	TC0600002690.mm.1	-0.8	0.005215
TC0200002911.mm.1	NM_144938	C1s	complement component 1, s subcomponent	124530344	124542359	TC0600003108.mm.1	1.0	0.005231
TC0200002912.mm.1	ENSMUST00000117499	Gm12261	predicted gene 12261	59577992	59578636	TC1100002856.mm.1	-0.6	0.005238
TC0200002928.mm.1	NM_028375	Cxx1c	CAAX box 1C	53607922	53609135	TC0X00000479.mm.1	0.5	0.005241
TC0200002929.mm.1	NM_007778	Csf1	colony stimulating factor 1 (macrophage)	107741048	107760469	TC0300002718.mm.1	0.3	0.005243
TC0200002937.mm.1	OTTMUST00000112305	Rpl31-p	---	30160620	30160997	TC1900000454.mm.1	-0.9	0.005246
TC0200002942.mm.1	ENSMUST00000053876	G6pd2	glucose-6-phosphate dehydrogenase 2	61808843	61810477	TC0500000580.mm.1	0.4	0.005251
TC0200002944.mm.1	NM_025912	Fam210b	family with sequence similarity 210, member B	172345565	172355749	TC0200002666.mm.1	0.2	0.005283
TC0200002945.mm.1	ENSMUST00000085163	Gm10263	predicted gene 10263	73317844	73318143	TC1300000880.mm.1	-0.9	0.005304
TC0200002950.mm.1	NM_174847	C2cd2	C2 calcium-dependent domain containing 2	97855209	97922633	TC1600002158.mm.1	0.3	0.005305
TC0200002951.mm.1	NM_008524	Lum	lumican	97565501	97572703	TC1000001190.mm.1	0.9	0.005313
TC0200002952.mm.1	NM_013515	Stom	stomatin	35313985	35337009	TC0200003362.mm.1	0.9	0.005313
TC0200002959.mm.1	OTTMUST00000051740	AC16703	---	84963669	84964559	TC0100000726.mm.1	1.1	0.005316
TC0200002971.mm.1	NM_032003	Enpp5	ectonucleotide pyrophosphatase/phosphodieste	44078813	44086567	TC1700000842.mm.1	0.7	0.005319
TC0200002982.mm.1	ENSMUST00000089593	Gm7551	predicted gene 7551	65785141	65785932	TC0700000986.mm.1	-1.1	0.00532
TC0200002998.mm.1	NM_008253	Hmgb3	high mobility group box 3	71555918	71560676	TC0X00000652.mm.1	-0.3	0.005344
TC0200003000.mm.1	XM_001478655	Gm3934	predicted gene 3934	192073733	192074452	TC0100003825.mm.1	0.5	0.005386

TC0200003003.mm.1	NM_008362	Il1r1	interleukin 1 receptor, type I	40225080	40316198	TC0100000295.mm.1	0.5	0.00539
TC0200003011.mm.1	NM_009662	Alox5	arachidonate 5-lipoxygenase	116410071	116461178	TC0600002975.mm.1	0.2	0.005404
TC0200003023.mm.1	NM_178600	Vkorc1	vitamin K epoxide reductase complex, subunit 1	127893063	127895617	TC0700004665.mm.1	0.7	0.005427
TC0200003031.mm.1	ENSMUST00000121971	Gm12013	predicted gene 12013	17095490	17095644	TC1100002250.mm.1	-1.1	0.005434
TC0200003051.mm.1	NM_176963	Galm	galactose mutarotase	80127471	80185101	TC1700001209.mm.1	0.6	0.005436
TC0200003053.mm.1	NM_013899	Timm10	translocase of inner mitochondrial membrane 1(	84826997	84830213	TC0200001223.mm.1	0.2	0.005454
TC0200003067.mm.1	NM_016965	Nckap1	NCK-associated protein 1	80500512	80581380	TC0200003837.mm.1	0.6	0.00547
TC0200003074.mm.1	ENSMUST00000097040	Rpl31-p	ribosomal protein L31, pseudogene 17	54701329	54701706	TC1200001750.mm.1	-1.1	0.005496
TC0200003089.mm.1	NM_011952	Mapk3	mitogen-activated protein kinase 3	126759601	126765819	TC0700001814.mm.1	0.5	0.005504
TC0200003094.mm.1	NM_010313	Gnb5	guanine nucleotide binding protein (G protein),	75306288	75345923	TC0900001012.mm.1	0.3	0.005516
TC0200003107.mm.1	ENSMUST00000088040	Pcna-ps	proliferating cell nuclear antigen pseudogene 2	9283238	9284494	TC1900000175.mm.1	-1.5	0.005517
TC0200003109.mm.1	NM_009351	Tep1	telomerase associated protein 1	50824061	50870560	TC1400001988.mm.1	0.2	0.005528
TC0200003113.mm.1	NM_009916	Ccr4	chemokine (C-C motif) receptor 4	114490316	114496544	TC0900003169.mm.1	-0.8	0.005547
TC0200003117.mm.1	NM_011058	Pdgfra	platelet derived growth factor receptor, alpha	75152291	75198204	TC0500000709.mm.1	0.6	0.005563
TC0200003124.mm.1	XM_001479761	Gm10237	predicted gene 10237	35892578	35920799	TC1600000499.mm.1	-0.4	0.005565
TC0200003125.mm.1	NM_019922	Crtap	cartilage associated protein	114375131	114390712	TC0900003168.mm.1	0.5	0.005567
TC0200003126.mm.1	ENSMUST00000158383	Gm23859	predicted gene, 23859	90228899	90228962	TC1800000914.mm.1	0.3	0.005577
TC0200003127.mm.1	ENSMUST00000117206	Gm6964	predicted gene 6964	85793684	85794120	TC0X00002559.mm.1	-0.3	0.005598
TC0200003135.mm.1	NM_011766	Zfpm2	zinc finger protein, multitype 2	40655042	41104592	TC1500000317.mm.1	0.2	0.005599
TC0200003151.mm.1	NM_008558	Max	Max protein	76937269	76962248	TC1200001959.mm.1	-0.5	0.005612
TC0200003157.mm.1	ENSMUST00000092523	Gm10712	predicted gene 10712	13332646	13333257	TC0700002368.mm.1	-1.1	0.005616
TC0200003165.mm.1	NM_001081286	Fat1	FAT tumor suppressor homolog 1 (Drosophila)	44950208	45052257	TC0800000509.mm.1	0.3	0.005622
TC0200003182.mm.1	NM_001081406	Lrr1	leucine rich repeat protein 1	69168814	69179010	TC1200000562.mm.1	-0.3	0.005627
TC0200003186.mm.1	NCBI_Gene:10004241	Trav7d-	Trav7d-2 T cell receptor alpha variable 7D-2	52683964	52684472	TC1400000621.mm.1	-0.5	0.005637
TC0200003190.mm.1	ENSMUST00000165525	Gm16494	predicted gene 16494	47016696	47016956	TC1700002201.mm.1	-0.9	0.005649
TC0200003195.mm.1	ENSMUST00000120712	Gm6292	predicted gene 6292	105140849	105141943	TC0X00001057.mm.1	-0.3	0.00565
TC0200003203.mm.1	NM_029775	Dcun1d5	DCN1, defective in cullin neddylation 1, domain	7184566	7207031	TC0900000040.mm.1	-0.6	0.005654
TC0200003205.mm.1	ENSMUST00000177937	Gm10592	predicted gene 10592	42083899	42084291	TC0400002490.mm.1	0.2	0.005657
TC0200003212.mm.1	ENSMUST00000178742	Gm10592	predicted gene 10592	42581229	42581621	TC0400002502.mm.1	0.2	0.005657
TC0200003219.mm.1	ENSMUST00000178091	Gm10592	predicted gene 10592	91391	91783	TC4_JH584293_rand	0.2	0.005657
TC0200003237.mm.1	ENSMUST00000145241	Gm16259	predicted gene 16259	105292432	105292984	TC1400002657.mm.1	-0.8	0.005661
TC0200003240.mm.1	NM_025648	Farsa	phenylalanyl-tRNA synthetase, alpha subunit	84856986	84869257	TC0800000965.mm.1	-0.2	0.005668
TC0200003243.mm.1	NM_008481	Lama2	laminin, alpha 2	26981285	27616942	TC1000001919.mm.1	0.7	0.005669
TC0200003259.mm.1	XR_140976	Gm20262	predicted gene, 20262	28872867	28877213	TC1000000259.mm.1	-0.9	0.0057
TC0200003262.mm.1	NM_024406	Fabp4	fatty acid binding protein 4, adipocyte	10204328	10208576	TC0300001639.mm.1	1.9	0.005709
TC0200003264.mm.1	ENSMUST00000177744	Gm9048	predicted gene 9048	118347435	118348679	TC1000002989.mm.1	-0.4	0.005722
TC0200003267.mm.1	NM_030026	Mccc2	methylcrotonoyl-Coenzyme A carboxylase 2 (bet	99948532	100015639	TC1300002526.mm.1	0.5	0.00574
TC0200003270.mm.1	ENSMUST00000158586	Gm23387	predicted gene, 23387	45486224	45486330	TC1300001910.mm.1	0.4	0.005763
TC0200003272.mm.1	NM_011029	Rpsa	ribosomal protein SA	120127766	120132369	TC0900001595.mm.1	-0.5	0.005786
TC0200003279.mm.1	NM_153131	Unc5a	unc-5 homolog A (C. elegans)	54949411	55006018	TC1300000643.mm.1	0.3	0.005799
TC0200003306.mm.1	NM_172838	Slc16a1	solute carrier family 16 (monocarboxylic acid t	34668403	34747289	TC1900001425.mm.1	0.7	0.0058
TC0200003313.mm.1	NM_029100	Sepn1	selenoprotein N, 1	134537892	134552166	TC0400003741.mm.1	0.4	0.005807
TC0200003322.mm.1	ENSMUST00000121691	Rpsa-ps	ribosomal protein S4, pseudogene 4	33038816	33039703	TC1100002483.mm.1	-0.6	0.005835
TC0200003325.mm.1	ENSMUST00000119765	Gm9431	predicted gene 9431	9009027	9010077	TC0X00001818.mm.1	-0.9	0.005856
TC0200003326.mm.1	NM_008829	Pgr	progesterone receptor	8899833	8968611	TC0900000069.mm.1	-0.2	0.005859
TC0200003327.mm.1	NM_009775	Tspo	translocator protein	83563573	83574203	TC1500000776.mm.1	0.6	0.005874
TC0200003330.mm.1	NM_013733	Chaf1a	chromatin assembly factor 1, subunit A (p150)	56040416	56070276	TC1700000997.mm.1	-0.3	0.005889
TC0200003346.mm.1	NM_007817	Cyp2f2	cytochrome P450, family 2, subfamily f, polypep	27119909	27133660	TC0700000447.mm.1	0.8	0.00589
TC0200003350.mm.1	NM_198645	Ccdc58	coiled-coil domain containing 58	36071660	36092118	TC1600000503.mm.1	-0.4	0.005896
TC0200003353.mm.1	NM_001004164	Gnptab	N-acetylglucosamine-1-phosphate transferase, a	88379132	88447329	TC1000001079.mm.1	0.6	0.005902
TC0200003356.mm.1	ENSMUST00000119646	Gm13245	predicted gene 13245	146480667	146480926	TC0400001886.mm.1	-0.4	0.005903
TC0200003362.mm.1	NM_025959	Psmc6	proteasome (prosome, macropain) 26S subunit,	45329824	45349071	TC1400000485.mm.1	-0.5	0.005933
TC0200003368.mm.1	NCBI_Gene:10010149	Trav15d	T cell receptor alpha variable 15D-2-DV6D-2	52956818	52958177	TC1400002803.mm.1	-0.2	0.005946
TC0200003369.mm.1	NM_008521	Ltc4s	leukotriene C4 synthase	50236469	50238616	TC1100002666.mm.1	0.8	0.005949
TC0200003376.mm.1	NM_134005	Enpp3	ectonucleotide pyrophosphatase/phosphodieste	24773814	24836195	TC1000001895.mm.1	0.4	0.005966
TC0200003384.mm.1	NM_027497	Epc1	enhancer of polycomb homolog 1 (Drosophila)	6435951	6516108	TC1800000950.mm.1	-0.3	0.005968
TC0200003399.mm.1	ENSMUST00000086236	Gm10180	predicted gene 10180	25101404	25101481	TC0900001926.mm.1	-0.8	0.005969
TC0200003405.mm.1	ENSMUST00000178135	Gm3699	predicted gene 3699	43456424	43456501	TC1000002084.mm.1	-0.8	0.005969
TC0200003421.mm.1	ENSMUST00000122438	Gm11204	predicted gene 11204	79905981	79906127	TC1100001192.mm.1	-1.2	0.005986
TC0200003422.mm.1	NM_029482	4930579	RIKEN cDNA 4930579G24 gene	79629079	79632820	TC0300000624.mm.1	-0.3	0.005995
TC0200003440.mm.1	NM_153563	Strip1	striatin interacting protein 1	107612532	107631710	TC0300002714.mm.1	-0.4	0.006002
TC0200003455.mm.1	NM_133221	Slc24a6	solute carrier family 24 (sodium/potassium/calc	120511168	120534024	TC0500001338.mm.1	0.2	0.006006
TC0200003467.mm.1	NM_020034	Hist1h1	histone cluster 1, H1b	21779883	21780625	TC1300001560.mm.1	-1.6	0.006008
TC0200003484.mm.1	ENSMUST00000118652	Rpl22-p	ribosomal protein L22, pseudogene 1	8038611	8038996	TC0X00001791.mm.1	-0.5	0.006008
TC0200003486.mm.1	NM_001081211	Ptafr	platelet-activating factor receptor	132564067	132582683	TC0400001593.mm.1	0.7	0.006017
TC0200003496.mm.1	NM_207161	Dnph1	2-deoxynucleoside 5-phosphate N-hydrolase 1	46496789	46499618	TC1700000896.mm.1	-0.2	0.006022
TC0200003503.mm.1	NM_009976	Cst3	cystatin C	148871722	148875692	TC0200004816.mm.1	0.7	0.006047
TC0200003505.mm.1	ENSMUST00000171334	Gm4938	predicted pseudogene 4938	104918779	104919186	TC1300001182.mm.1	-0.5	0.006069
TC0200003506.mm.1	NM_018853	Rplp1	ribosomal protein, large, P1	61913283	61914538	TC0900002450.mm.1	-0.8	0.006095
TC0200003512.mm.1	ENSMUST00000118252	Gm5687	predicted gene 5687	12898427	12899066	TC1800000109.mm.1	-0.9	0.006112
TC0200003518.mm.1	ENSMUST00000066378	Gm6457	predicted pseudogene 6457	14570101	14570915	TC1800000121.mm.1	-0.5	0.006114
TC0200003524.mm.1	NR_037281	Mir3098	microRNA 3098	131142469	131604824	TC0200004648.mm.1	0.9	0.006116
TC0200003548.mm.1	ENSMUST00000122061	Gm14138	predicted gene 14138	119187517	119188261	TC0200001763.mm.1	-0.7	0.006121
TC0200003549.mm.1	ENSMUST00000071172	Gm5619	predicted gene 5619	85781863	85782663	TC0900002774.mm.1	-0.9	0.006132
TC0200003554.mm.1	ENSMUST00000143596	Rpl31-p	ribosomal protein L31, pseudogene 14	66948563	66948940	TC0100002498.mm.1	-1.2	0.006149
TC0200003563.mm.1	NM_008760	Ogn	osteoglycin	49608071	49624500	TC1300000569.mm.1	1.8	0.006152
TC0200003569.mm.1	ENSMUST00000117403	Gm14513	predicted gene 14513	11684002	11684124	TC0X00001849.mm.1	-0.4	0.006159
TC0200003576.mm.1	NM_008037	Fosl2	fos-like antigen 2	32136472	32157840	TC0500000334.mm.1	0.2	0.006168

TC0200003579.mm.1	ENSMUST00000177762	Gm9040	predicted gene 9040	118325725	118326969	TC1000002985.mm.1	-0.5	0.006172
TC0200003589.mm.1	ENSMUST00000179851	Gm9044	predicted gene 9044	118331164	118332408	TC1000002986.mm.1	-0.5	0.006172
TC0200003597.mm.1	ENSMUST00000121859	Gm13935	predicted gene 13935	110418170	110419619	TC0200004310.mm.1	-0.5	0.006175
TC0200003599.mm.1	NM_001109991	Col18a1	collagen, type XVIII, alpha 1	77052178	77166548	TC1000002418.mm.1	0.2	0.006179
TC0200003601.mm.1	NM_001252096	Mettl20	methyltransferase like 20	149139849	149151171	TC0600001768.mm.1	0.2	0.006185
TC0200003603.mm.1	NM_011701	Vim	vimentin	13573927	13582826	TC0200000240.mm.1	1.1	0.006203
TC0200003616.mm.1	ENSMUST00000117277	Gm11488	predicted gene 11488	73497615	73498477	TC0400002860.mm.1	-1.2	0.006204
TC0200003621.mm.1	NM_207523	Rpl23a	ribosomal protein L23A	78180932	78183584	TC1100003288.mm.1	-0.5	0.006227
TC0200003640.mm.1	ENSMUST00000180284	Gm7488	predicted gene 7488	21049445	21050525	TC0300000142.mm.1	-0.4	0.006231
TC0200003653.mm.1	ENSMUST00000120413	Gm11605	predicted gene 11605	63364720	63365365	TC0100002453.mm.1	-0.6	0.006239
TC0200003670.mm.1	NM_178197	Hist1h2	histone cluster 1, H2bh	23542922	23543444	TC1300001630.mm.1	-0.7	0.00624
TC0200003674.mm.1	ENSMUST00000121462	Rpsa-ps	ribosomal protein SA, pseudogene 5	28956724	28957608	TC1100000285.mm.1	-0.3	0.006258
TC0200003682.mm.1	NM_001122596	A630033	RIKEN cDNA A630033H20 gene	107148927	107173661	TC0X00001084.mm.1	-0.5	0.006269
TC0200003688.mm.1	NM_011716	Wfs1	Wolfram syndrome 1 homolog (human)	36966104	36988982	TC0500002268.mm.1	0.3	0.006275
TC0200003710.mm.1	NM_001290128	Rbm14-r	Rbm14-Rbm4 readthrough (Rbm14-rbm4), trans	0	0	TSUnmapped0000002	-0.8	0.006291
TC0200003724.mm.1	NM_177263	Zhx3	zinc fingers and homeoboxes 3	160765734	160872990	TC0200005514.mm.1	0.3	0.006293
TC0200003740.mm.1	NM_022984	Retn	resistin	3655770	3660110	TC0800000019.mm.1	2.3	0.006294
TC0200003746.mm.1	ENSMUST00000177657	Rpl7a-p	ribosomal protein L7A, pseudogene 10	97179179	97179979	TC0900001223.mm.1	-0.9	0.00631
TC0200003747.mm.1	NCBI_Gene:110315:p	Trbv26	T cell receptor beta, variable 26	41227525	41227993	TC0600003495.mm.1	-1.2	0.006315
TC0200003749.mm.1	NM_178207	Hist1h3	histone cluster 1, H3i	21782915	21783397	TC1300001561.mm.1	-0.8	0.006334
TC0200003752.mm.1	ENSMUST00000057740	Rpsa-ps	ribosomal protein SA, pseudogene 10	150072590	150073620	TC0300003128.mm.1	-0.9	0.006341
TC0200003759.mm.1	NM_008409	Itm2a	integral membrane protein 2A	107397099	107403376	TC0X00002845.mm.1	-1.3	0.00636
TC0200003767.mm.1	ENSMUST00000117768	Gm12025	predicted gene 12025	19360926	19361069	TC1100002278.mm.1	-0.5	0.006365
TC0200003773.mm.1	NM_001039723	Tmem120	transmembrane protein 120B	123068415	123117749	TC0500001408.mm.1	0.5	0.006368
TC0200003782.mm.1	NM_019482	Panx1	pannexin 1	15005161	15045478	TC0900001781.mm.1	-0.3	0.006375
TC0200003805.mm.1	ENSMUST00000117147	Gm12460	predicted gene 12460	51190107	51190463	TC0400000558.mm.1	-0.6	0.006388
TC0200003820.mm.1	XM_484272	Gm5451	predicted gene 5451	66874081	66874659	TC1300000813.mm.1	-0.9	0.006394
TC0200003822.mm.1	ENSMUST00000184633	RP24-57	N/A	36813133	36813874	TC0900002039.mm.1	-0.9	0.006402
TC0200003826.mm.1	ENSMUST00000184135	RP23-16	N/A	71908843	71909551	TC0900000951.mm.1	-0.5	0.006408
TC0200003830.mm.1	NM_172435	P2ry10	purinergic receptor P2Y, G-protein coupled 10	107088492	107104974	TC0X00001083.mm.1	-0.8	0.006412
TC0200003837.mm.1	NM_001177513	Gm7102	predicted gene 7102	61174686	61176309	TC1900001760.mm.1	-0.3	0.006414
TC0200003841.mm.1	NCBI_Gene:10012646	Trav13n	T cell receptor alpha variable 13N-4	53362368	53364107	TC1400000689.mm.1	-0.5	0.006415
TC0200003842.mm.1	NM_027179	Tecr	trans-2,3-enoyl-CoA reductase	83571698	83594491	TC0800002553.mm.1	0.6	0.006437
TC0200003844.mm.1	NM_001290127	Rbm14-r	Rbm14-Rbm4 readthrough (Rbm14-rbm4), trans	0	0	TSUnmapped0000002	-0.8	0.006445
TC0200003847.mm.1	NM_001039214	Mex3c	mex3 homolog C (C. elegans)	73572705	73592578	TC1800000771.mm.1	-0.3	0.006481
TC0200003848.mm.1	NCBI_Gene:547424:p	Trav15n	T cell receptor alpha variable 15N-2	53267953	53269312	TC1400002821.mm.1	-0.2	0.006488
TC0200003851.mm.1	ENSMUST00000121456	Gm14165	predicted gene 14165	152353615	152354566	TC0200002281.mm.1	-1.0	0.006495
TC0200003854.mm.1	NM_178187	Hist1h2	histone cluster 1, H2ae	23570517	23571220	TC1300001634.mm.1	-0.4	0.006521
TC0200003855.mm.1	NM_013553	Hoxc4	homeobox C4	103018936	103036852	TC1500001123.mm.1	0.2	0.006523
TC0200003876.mm.1	NM_001159529	Cox7a2l	cytochrome c oxidase subunit VIIa polypeptide 2	83501917	83514333	TC1700002629.mm.1	-0.4	0.006542
TC0200003879.mm.1	NM_001033228	Itga1	integrin alpha 1	114958079	115101964	TC1300002717.mm.1	0.8	0.006568
TC0200003907.mm.1	NM_020567	Gmnn	geminin	24751845	24761937	TC1300001666.mm.1	-0.3	0.006578
TC0200003909.mm.1	NM_153535	Fam149a	family with sequence similarity 149, member A	45336715	45382291	TC0800002145.mm.1	0.5	0.006596
TC0200003913.mm.1	NM_009296	Supt4a	suppressor of Ty 4A	87737527	87743623	TC1100001349.mm.1	-0.5	0.006598
TC0200003928.mm.1	ENSMUST00000117940	Hmgb1-r	high mobility group box 1, related sequence 18	67518306	67518932	TC0400002832.mm.1	-0.5	0.006605
TC0200003930.mm.1	NCBI_Gene:10004247	Trav4d-	T cell receptor alpha variable 4D-3	52899969	52900470	TC1400000641.mm.1	-0.7	0.006615
TC0200003935.mm.1	ENSMUST00000141391	Gm11281	predicted gene 11281	21953053	21953628	TC1300001570.mm.1	-0.5	0.006622
TC0200003942.mm.1	NM_010476	Hsd17b7	hydroxysteroid (17-beta) dehydrogenase 7	169949535	169969241	TC0100003505.mm.1	0.3	0.006639
TC0200003957.mm.1	NM_025932	Syap1	synapse associated protein 1	162856843	162888462	TC0X00003313.mm.1	0.8	0.006659
TC0200003966.mm.1	NM_007452	Prdx3	peroxiredoxin 3	60864051	60874556	TC1900001754.mm.1	0.5	0.006673
TC0200003977.mm.1	NM_145442	Mbip	MAP3K12 binding inhibitory protein 1	56328306	56345894	TC1200001785.mm.1	-0.3	0.006685
TC0200003985.mm.1	NM_007823	Cyp4b1	cytochrome P450, family 4, subfamily b, polypep	115624725	115647709	TC0400003321.mm.1	0.9	0.006704
TC0200004006.mm.1	ENSMUST00000180583	Gm13679	predicted gene 13679	83390129	83390612	TC0200001196.mm.1	-0.3	0.006723
TC0200004015.mm.1	NM_011057	Pdgfb	platelet derived growth factor, B polypeptide	79995874	80014808	TC1500001891.mm.1	0.3	0.006739
TC0200004026.mm.1	NM_134122	Nrm	nurim (nuclear envelope membrane protein)	35861318	35865402	TC1700000706.mm.1	-0.4	0.006742
TC0200004029.mm.1	NM_019686	Cib2	calcium and integrin binding family member 2	54544794	54560218	TC0900002321.mm.1	0.9	0.006748
TC0200004037.mm.1	ENSMUST00000140507	Rpl9-ps	ribosomal protein L9, pseudogene 7	70458982	70459560	TC0200001020.mm.1	-0.7	0.006754
TC0200004039.mm.1	NM_010193	Fem1b	feminization 1 homolog b (C. elegans)	62791821	62811648	TC0900002465.mm.1	-0.3	0.006758
TC0200004040.mm.1	NM_028787	Slc35f5	solute carrier family 35, member F5	125561016	125595817	TC0100001111.mm.1	0.4	0.006763
TC0200004054.mm.1	ENSMUST00000161190	Rpl18a-	ribosomal protein L18A, pseudogene 1	55395707	55396229	TC1200001765.mm.1	-0.7	0.006773
TC0200004063.mm.1	XR_032609	Gm17014	predicted gene 17014	78845162	78845784	TC0200003822.mm.1	-0.5	0.006783
TC0200004070.mm.1	NM_001205181	Abhd4	abhydrolase domain containing 4	54254129	54269169	TC1400000742.mm.1	0.5	0.006785
TC0200004080.mm.1	NM_010689	Lat	linker for activation of T cells	126363827	126369543	TC0700004273.mm.1	-1.2	0.00683
TC0200004082.mm.1	NCBI_Gene:269846:p	Trbv31	T cell receptor beta, variable 31	41557691	41558371	TC0600002157.mm.1	-1.5	0.006832
TC0200004086.mm.1	NM_001102607	Col6a6	collagen, type VI, alpha 6	105689417	105828085	TC0900002997.mm.1	0.3	0.006864
TC0200004099.mm.1	NCBI_Gene:10012467	Trbv13-	T cell receptor beta, variable 13-3	41130147	41140170	TC0600000425.mm.1	-1.0	0.006881
TC0200004111.mm.1	NM_175656	Hist1h4	histone cluster 1, H4i	22040636	22041362	TC1300001575.mm.1	-0.5	0.006887
TC0200004118.mm.1	NM_001161371	Ss18	synovial sarcoma translocation, Chromosome 18	14624198	14682914	TC1800001009.mm.1	-0.2	0.006907
TC0200004121.mm.1	NM_001014996	Cenpj	centromere protein J	56526761	56571846	TC1400002122.mm.1	-0.3	0.006921
TC0200004127.mm.1	ENSMUST00000060997	Gm9791	predicted pseudogene 9791	34004779	34005511	TC0300001820.mm.1	0.7	0.006922
TC0200004129.mm.1	NM_001276413	Fn1	fibronectin 1	71585473	71653234	TC0100002544.mm.1	1.3	0.006931
TC0200004133.mm.1	NM_001166064	Syde2	synapse defective 1, Rho GTPase, homolog 2 (C.	145987870	146021720	TC0300001486.mm.1	0.2	0.006948
TC0200004141.mm.1	ENSMUST00000145247	Gm6286	predicted gene 6286	166945597	166946358	TC0100003474.mm.1	-0.9	0.006978
TC0200004173.mm.1	NM_011065	Per1	period circadian clock 1	69095217	69109960	TC1100000900.mm.1	0.3	0.006983
TC0200004179.mm.1	NM_007798	Ctsb	cathepsin B	63122462	63145923	TC1400000895.mm.1	1.1	0.006992
TC0200004184.mm.1	NR_024139	Prmt6	protein arginine N-methyltransferase 6	110246104	110250999	TC0300002770.mm.1	-0.3	0.007003
TC0200004188.mm.1	NM_001042421	Kntc1	kinetochore associated 1	123749726	123821593	TC0500001428.mm.1	-0.5	0.007006
TC0200004194.mm.1	ENSMUST00000075251	Gm5582	predicted gene 5582	131253528	131254049	TC0600003265.mm.1	0.8	0.007006

TC0200004195.mm.1	NM_010271	Gpd1	glycerol-3-phosphate dehydrogenase 1 (soluble)	99717515	99725008	TC1500001023.mm.1	1.8	0.007033
TC0200004196.mm.1	NCBI_Gene:386446:p	Trav15-	Trav15-1-dv6-1 T cell receptor alpha variable 1	53559676	53560247	TC1400002830.mm.1	-0.4	0.00704
TC0200004200.mm.1	NM_001142706	Cfb	complement factor B	34856374	34862518	TC1700002816.mm.1	0.8	0.007051
TC0200004219.mm.1	NCBI_Gene:10012467	Trbv15	T cell receptor beta, variable 15	41141188	41141662	TC0600000427.mm.1	-1.4	0.007066
TC0200004227.mm.1	NCBI_Gene:10012467	Trbv12-	T cell receptor beta, variable 12-1	41113550	41114067	TC0600000423.mm.1	-1.4	0.007071
TC0200004232.mm.1	ENSMUST00000076708	Rps16-p	ribosomal protein S16, pseudogene 2	129128020	129128571	TC0500003300.mm.1	-0.6	0.007075
TC0200004236.mm.1	XR_106474	Gm19576	predicted gene, 19576	107984500	107989016	TC1200002343.mm.1	-0.6	0.00708
TC0200004251.mm.1	NM_144552	Stxbp6	syntaxin binding protein 6 (amisyn)	44852486	45074493	TC1200001686.mm.1	0.2	0.007088
TC0200004253.mm.1	NCBI_Gene:10012524	Trbd1	T cell receptor beta, D region 1	41533106	41548352	TC0600003496.mm.1	-1.5	0.007104
TC0200004264.mm.1	ENSMUST00000121308	Gm5931	predicted pseudogene 5931	10660522	10660998	TC0X00000129.mm.1	-0.8	0.007125
TC0200004266.mm.1	NM_010098	Opn3	opsin 3	175662421	175692776	TC0100003611.mm.1	0.3	0.007131
TC0200004287.mm.1	ENSMUST00000102283	Gm22582	predicted gene, 22582	92587214	92587307	TC1000001119.mm.1	-0.5	0.007133
TC0200004288.mm.1	NM_010772	Maz	MYC-associated zinc finger protein (purine-bind	127022134	127027019	TC0700004309.mm.1	-0.4	0.007178
TC0200004295.mm.1	ENSMUST00000078729	Gm20900	predicted gene, 20900	120304194	120304655	TC1300002760.mm.1	-0.8	0.007183
TC0200004296.mm.1	NM_011812	Fbln5	fibulin 5	101746565	101819119	TC1200002242.mm.1	0.9	0.007202
TC0200004297.mm.1	ENSMUST00000183380	RP23-29	N/A	72292542	72293340	TC0900002635.mm.1	-0.9	0.007208
TC0200004298.mm.1	NM_009120	Sar1a	SAR1 gene homolog A (S. cerevisiae)	61680310	61693297	TC1000000572.mm.1	0.6	0.007208
TC0200004307.mm.1	NM_138596	Med10	mediator of RNA polymerase II transcription, su	69809882	69816100	TC1300000857.mm.1	-0.4	0.007218
TC0200004310.mm.1	NM_145532	Mall	mal, T cell differentiation protein-like	127704386	127729932	TC0200004564.mm.1	0.2	0.007251
TC0200004321.mm.1	NM_025447	Dimt1	DIM1 dimethyladenosine transferase 1-like (S. c	106947129	106960224	TC1300001190.mm.1	-0.3	0.007261
TC0200004325.mm.1	NM_001177438	Aldh3b2	aldehyde dehydrogenase 3 family, member B2	3972328	3981665	TC1900000021.mm.1	0.6	0.007264
TC0200004330.mm.1	NCBI_Gene:10012465	Trbv2	T cell receptor beta, variable 2	41047340	41047995	TC0600000419.mm.1	-1.3	0.007265
TC0200004332.mm.1	NM_026602	Bcas2	breast carcinoma amplified sequence 2	103171655	103179166	TC0300001047.mm.1	-0.2	0.00727
TC0200004342.mm.1	NR_045710	Gm9833	myelin basic protein expression factor 2, repre	10088173	10092564	TC0300000062.mm.1	-0.3	0.007276
TC0200004352.mm.1	NCBI_Gene:213480:p	Trav7-6	T cell receptor alpha variable 7-6	53716716	53717291	TC1400000707.mm.1	-0.4	0.00728
TC0200004354.mm.1	NM_001110162	Cdca2	cell division cycle associated 2	67676331	67715841	TC1400002290.mm.1	-0.4	0.007294
TC0200004369.mm.1	ENSMUST00000119165	Gm14335	predicted gene 14335	115638250	115639059	TC0600002956.mm.1	-0.4	0.007295
TC0200004388.mm.1	NCBI_Gene:668589:p	Ighv1-8	immunoglobulin heavy variable 1-80	115912344	115912776	TC1200002659.mm.1	-1.5	0.007306
TC0200004393.mm.1	NM_019674	Ppp4c	protein phosphatase 4, catalytic subunit	126785868	126792471	TC0700004295.mm.1	-0.6	0.007306
TC0200004396.mm.1	NM_198606	Dcaf13	DDB1 and CUL4 associated factor 13	39112874	39146856	TC1500000301.mm.1	-0.4	0.007313
TC0200004405.mm.1	NM_183170	Mpv17l2	MPV17 mitochondrial membrane protein-like 2	70758649	70760922	TC0800002402.mm.1	0.3	0.00732
TC0200004406.mm.1	NM_001290180	Nudt7	nudix (nucleoside diphosphate linked moiety X)-	0	0	TSUnmapped0000001	0.6	0.007326
TC0200004407.mm.1	ENSMUST00000178807	Gm4479	predicted gene 4479	56787517	56787687	TC1400002131.mm.1	-0.6	0.007329
TC0200004422.mm.1	NM_008706	Nqo1	NAD(P)H dehydrogenase, quinone 1	107388225	107403206	TC0800002877.mm.1	-0.5	0.007376
TC0200004444.mm.1	ENSMUST00000183480	AL92896	N/A	87256795	87256904	TC0200003977.mm.1	0.3	0.007384
TC0200004445.mm.1	XR_105781	Gm6030	predicted gene 6030	45200198	45216850	TC1600000673.mm.1	-0.2	0.007392
TC0200004448.mm.1	ENSMUST00000182963	Gm9135	predicted gene 9135	32171714	32172703	TC0700000595.mm.1	0.1	0.007397
TC0200004450.mm.1	ENSMUST00000117680	Gm14733	predicted gene 14733	80932816	80932948	TC0X00002536.mm.1	-0.3	0.007408
TC0200004466.mm.1	NM_181796	Gstp2	glutathione S-transferase, pi 2	4040285	4042221	TC1900000897.mm.1	0.4	0.007456
TC0200004480.mm.1	ENSMUST00000179487	AC13310	N/A	113868	114758	TC1_GL456211_rand	0.9	0.007499
TC0200004481.mm.1	NR_029959	Mir365-	microRNA 365-2	79726400	79726511	TC1100001189.mm.1	0.3	0.007507
TC0200004485.mm.1	ENSMUST00000104377	Gm23201	predicted gene, 23201	167064998	167065086	TC0200002581.mm.1	-1.5	0.007513
TC0200004490.mm.1	NM_010687	Large	like-glycosyltransferase	72814599	73353540	TC0800002471.mm.1	0.5	0.007522
TC0200004491.mm.1	ENSMUST00000119471	Gm12856	predicted gene 12856	118942060	118943352	TC0400003408.mm.1	-0.5	0.007532
TC0200004492.mm.1	ENSMUST00000120248	Gm8401	predicted gene 8401	70517777	70519515	TC0X00000633.mm.1	-0.5	0.007536
TC0200004502.mm.1	ENSMUST00000117910	Gm13176	predicted gene 13176	4834136	4834612	TC0200002864.mm.1	-0.5	0.007556
TC0200004507.mm.1	ENSMUST00000117711	Gm11892	predicted gene 11892	24238100	24239301	TC0400000205.mm.1	-0.5	0.007569
TC0200004512.mm.1	NM_172663	Epc2	enhancer of polycomb homolog 2 (Drosophila)	49451486	49551948	TC0200000798.mm.1	-0.4	0.007587
TC0200004534.mm.1	NM_009447	Tuba4a	tubulin, alpha 4A	75214974	75219253	TC0100002604.mm.1	-0.6	0.007588
TC0200004537.mm.1	ENSMUST00000112150	Tpt1-ps	tumor protein, translationally-controlled, pseu	37696515	37697033	TC0900000372.mm.1	-0.7	0.00761
TC0200004541.mm.1	XM_891806	Gm6570	predicted gene 6570	87679651	87679998	TC0300002289.mm.1	-0.5	0.007624
TC0200004548.mm.1	ENSMUST00000081565	Gm12222	predicted gene 12222	54199430	54199692	TC1100000619.mm.1	0.9	0.007692
TC0200004556.mm.1	NM_007658	Cdc25a	cell division cycle 25A	109875579	109893890	TC0900001442.mm.1	-0.5	0.007699
TC0200004563.mm.1	NM_013908	Fbxw5	F-box and WD-40 domain protein 5	25500750	25505471	TC0200000420.mm.1	0.7	0.007702
TC0200004564.mm.1	ENSMUST00000079684	Gm8394	predicted gene 8394	85313488	85314439	TC1000001028.mm.1	-0.4	0.007706
TC0200004567.mm.1	NM_026444	Cs	citrate synthase	128337817	128362479	TC1000001599.mm.1	0.8	0.00771
TC0200004577.mm.1	NM_010219	Fkbp4	FK506 binding protein 4	128429735	128438677	TC0600003205.mm.1	-0.3	0.007735
TC0200004585.mm.1	OTTMUST00000077070	AC10488	---	119602170	119602625	TC0800003026.mm.1	-0.9	0.007776
TC0200004599.mm.1	NM_007486	Arhgdib	Rho, GDP dissociation inhibitor (GDI) beta	136923523	136941899	TC0600003337.mm.1	-0.7	0.007784
TC0200004600.mm.1	NM_031201	Tsta3	tissue specific transplantation antigen P35B	75924683	75929732	TC1500001754.mm.1	-0.3	0.007785
TC0200004601.mm.1	ENSMUST00000095218	Rpl7a-p	ribosomal protein L7A, pseudogene 5	57838427	57839233	TC1700002357.mm.1	-0.8	0.007801
TC0200004603.mm.1	ENSMUST00000091031	Gm6361	predicted gene 6361	31446380	31446817	TC1500001322.mm.1	-0.9	0.007803
TC0200004621.mm.1	NM_027135	Sec24d	Sec24 related gene family, member D (S. cerevis	123267496	123365636	TC0300001255.mm.1	0.3	0.007841
TC0200004623.mm.1	NM_023143	C1ra	complement component 1, r subcomponent A	124512405	124523440	TC0600001422.mm.1	0.6	0.007862
TC0200004628.mm.1	NM_026396	Brix1	BRX1, biogenesis of ribosomes, homolog (S. cere	10474779	10485947	TC1500001202.mm.1	-0.6	0.007867
TC0200004634.mm.1	ENSMUST00000160167	Gm15664	predicted gene 15664	105520460	105520643	TC1000001253.mm.1	0.9	0.007882
TC0200004647.mm.1	NM_011196	Ptger3	prostaglandin E receptor 3 (subtype EP3)	157566892	157644758	TC0300001578.mm.1	1.0	0.007888
TC0200004648.mm.1	NCBI_Gene:21507:pr	Trav5-4	T cell receptor alpha variable 5-4	53704007	53704514	TC1400000706.mm.1	-0.6	0.007906
TC0200004672.mm.1	ENSMUST00000122241	Gm13182	predicted gene 13182	3550757	3551068	TC0200000012.mm.1	-0.3	0.007906
TC0200004681.mm.1	NM_178918	Utp15	UTP15, U3 small nucleolar ribonucleoprotein, ho	98246845	98262992	TC1300002499.mm.1	-0.3	0.007909
TC0200004689.mm.1	NM_207231	Arl5c	ADP-ribosylation factor-like 5C	97989578	97996181	TC1100003663.mm.1	-0.7	0.007938
TC0200004693.mm.1	NM_010559	Il6ra	interleukin 6 receptor, alpha	89869324	89913162	TC0300002357.mm.1	0.3	0.007945
TC0200004713.mm.1	NCBI_Gene:434040:p	Igkv8-2	immunoglobulin kappa variable 8-28	70143593	70144161	TC0600003587.mm.1	-0.6	0.007947
TC0200004717.mm.1	NM_001177544	Hist1h2	histone cluster 1, H2ao	21810367	21810944	TC1300000181.mm.1	-0.7	0.007947
TC0200004725.mm.1	NCBI_Gene:692152:p	Igkv13-	immunoglobulin kappa chain variable 13-84	68939602	68940067	TC0600003524.mm.1	-1.0	0.007966
TC0200004727.mm.1	NM_009870	Cdk4	cyclin-dependent kinase 4	127063534	127067920	TC1000001546.mm.1	-0.6	0.007971
TC0200004732.mm.1	ENSMUST00000085365	Gm16477	predicted pseudogene 16477	131614188	131614988	TC0700004401.mm.1	-1.0	0.007981
TC0200004734.mm.1	NM_011877	Ptpn21	protein tyrosine phosphatase, non-receptor type	98676741	98737405	TC1200002194.mm.1	0.2	0.008013

TC0200004737.mm.1	NM_026820	Ifitm1	interferon induced transmembrane protein 1	140967221	140969827	TC0700002034.mm.1	0.1	0.008014
TC0200004752.mm.1	NM_010882	Ndn	necdin	62348277	62349928	TC0700000961.mm.1	0.7	0.008025
TC0200004757.mm.1	ENSMUST00000076982	Gm17728	predicted gene, 17728	9422060	9422458	TC1700000099.mm.1	-0.4	0.008037
TC0200004758.mm.1	ENSMUST00000027054	Gm5045	predicted gene 5045	59210908	59211720	TC1500000428.mm.1	-0.6	0.008041
TC0200004765.mm.1	ENSMUST00000119875	Gm13163	predicted gene 13163	147194876	147195211	TC0400003983.mm.1	-0.5	0.008049
TC0200004769.mm.1	NM_175528	E330009	RIKEN cDNA E330009J07 gene	40401375	40436135	TC0600002137.mm.1	-0.2	0.008085
TC0200004786.mm.1	NM_009510	Ezr	ezrin	6738041	6782784	TC1700001390.mm.1	-0.9	0.008099
TC0200004793.mm.1	ENSMUST00000181606	Gm1972	predicted pseudogene 1972	22224280	22253819	TC1000000177.mm.1	-0.3	0.008103
TC0200004797.mm.1	ENSMUST00000086423	Kpna2	karyopherin (importin) alpha 2	89908511	89910449	TC1700002723.mm.1	-1.2	0.008113
TC0200004798.mm.1	NM_134010	Nup107	nucleoporin 107	117750621	117792705	TC1000002944.mm.1	-0.5	0.008148
TC0200004802.mm.1	ENSMUST00000120702	Rpsa-ps	ribosomal protein SA, pseudogene 9	28477166	28478050	TC0200000483.mm.1	-1.0	0.008159
TC0200004808.mm.1	ENSMUST00000119768	Gm5909	predicted gene 5909	80110806	80112086	TC0800002526.mm.1	-0.6	0.008163
TC0200004816.mm.1	NM_015817	Ppap2c	phosphatidic acid phosphatase type 2C	79526429	79533787	TC1000002467.mm.1	0.3	0.008175
TC0200004821.mm.1	NM_008800	Pde1b	phosphodiesterase 1B, Ca2+-calmodulin depend	103503034	103530056	TC1500001133.mm.1	0.2	0.008193
TC0200004829.mm.1	NM_010907	Nfkbia	nuclear factor of kappa light polypeptide gene	55489409	55492647	TC1200001768.mm.1	-0.5	0.008193
TC0200004835.mm.1	ENSMUST00000117292	Gm15516	predicted gene 15516	45713132	45713324	TC1400001910.mm.1	-0.6	0.0082
TC0200004836.mm.1	NM_001190466	Dact1	dapper homolog 1, antagonist of beta-catenin (x	71309884	71320107	TC1200000608.mm.1	0.3	0.008206
TC0200004837.mm.1	ENSMUST00000122273	Gm12269	predicted gene 12269	61130591	61131307	TC1100002903.mm.1	-0.3	0.008243
TC0200004838.mm.1	ENSMUST00000183478	Rps13-p	ribosomal protein S13, pseudogene 1	87047689	87048226	TC0800001012.mm.1	-0.9	0.008249
TC0200004839.mm.1	NM_026611	Rnaset2	ribonuclease T2B	6978595	7087597	TC1700000069.mm.1	-0.2	0.008251
TC0200004840.mm.1	ENSMUST00000131442	Gm15277	predicted gene 15277	33283741	33284031	TC0X00002023.mm.1	-0.3	0.008257
TC0200004848.mm.1	NM_016959	Rps3a1	ribosomal protein S3A1	86137940	86142702	TC0300002263.mm.1	-0.6	0.008262
TC0200004903.mm.1	OTTMUST00000112371	RP23-45	---	35281518	35281835	TC0900002011.mm.1	-0.7	0.008274
TC0200004908.mm.1	ENSMUST00000108272	Gm13827	predicted gene 13827	115053421	115053846	TC0500003085.mm.1	-0.3	0.008307
TC0200004914.mm.1	NM_177663	Isg20l2	interferon stimulated exonuclease gene 20-like	87930314	87940687	TC0300000709.mm.1	-0.5	0.008367
TC0200004919.mm.1	XM_894484	Gm6613	predicted gene 6613	84794150	84794704	TC1000002600.mm.1	-0.7	0.008371
TC0200004925.mm.1	NM_178915	Tmem179	transmembrane protein 179	112500184	112511169	TC1200002432.mm.1	0.2	0.008375
TC0200004932.mm.1	NM_178183	Hist1h2	histone cluster 1, H2ak	21753395	21753912	TC1300001558.mm.1	-1.9	0.008397
TC0200004949.mm.1	ENSMUST00000165157	Gm10232	predicted pseudogene 10232	3043884	3044750	TC1700001346.mm.1	-0.5	0.00842
TC0200004953.mm.1	ENSMUST00000118285	Gm13798	predicted gene 13798	95677717	95677855	TC0200001467.mm.1	-0.8	0.00842
TC0200004956.mm.1	NM_031403	Dbr1	debranching enzyme homolog 1 (S. cerevisiae)	99575799	99584463	TC0900001252.mm.1	-0.2	0.008427
TC0200004960.mm.1	NM_027011	Krt5	keratin 5	101707070	101712891	TC1500002269.mm.1	-1.3	0.008427
TC0200004965.mm.1	NM_001003948	Pid1	phosphotyrosine interaction domain containing	84036293	84364180	TC0100002690.mm.1	0.2	0.008431
TC0200004968.mm.1	NM_175666	Hist2h2	histone cluster 2, H2bb	96269700	96279001	TC0300000935.mm.1	-1.4	0.008441
TC0200004971.mm.1	NCBI_Gene:10012467	Trbv13-	T cell receptor beta, variable 13-1	41116010	41126262	TC0600003493.mm.1	-0.8	0.008467
TC0200004978.mm.1	NM_001081354	Mamld1	mastermind-like domain containing 1	71050256	71156056	TC0X00000643.mm.1	0.3	0.008475
TC0200004987.mm.1	NM_173001	Kdm3a	lysine (K)-specific demethylase 3A	71588970	71632917	TC0600002472.mm.1	-0.4	0.008483
TC0200004991.mm.1	NM_030239	Abcg3	ATP-binding cassette, sub-family G (WHITE), mer	104935057	104982718	TC0500002893.mm.1	-0.7	0.008504
TC0200004998.mm.1	NM_175665	Hist1h2	histone cluster 1, H2bk	22035821	22036345	TC1300000191.mm.1	-0.9	0.00851
TC0200005002.mm.1	ENSMUST00000120833	Gm14414	predicted gene 14414	177460275	177460847	TC0200002747.mm.1	-1.1	0.008537
TC0200005003.mm.1	NM_010444	Nr4a1	nuclear receptor subfamily 4, group A, member	101266846	101274795	TC1500001067.mm.1	-0.5	0.008543
TC0200005007.mm.1	NM_178186	Hist1h2	histone cluster 1, H2ag	22042460	22042949	TC1300001576.mm.1	-1.2	0.008544
TC0200005020.mm.1	NM_177586	Eif5a2	eukaryotic translation initiation factor 5A2	28781311	28798846	TC0300000181.mm.1	-0.2	0.008549
TC0200005021.mm.1	NM_009506	Vegfc	vascular endothelial growth factor C	54077532	54186454	TC0800000587.mm.1	0.3	0.00856
TC0200005024.mm.1	NCBI_Gene:667881:p	Igkv6-1	immunoglobulin kappa variable 6-14	70434952	70435476	TC0600003596.mm.1	-1.3	0.008563
TC0200005028.mm.1	NCBI_Gene:10004328	Trav3n-	T cell receptor alpha variable 3N-3	53283585	53284181	TC1400002822.mm.1	-0.4	0.008564
TC0200005036.mm.1	NM_013725	Rps11	ribosomal protein S11	45122386	45124389	TC0700002990.mm.1	-0.9	0.008568
TC0200005052.mm.1	NM_145158	Emilin2	elastin microfibril interfacer 2	71252172	71311556	TC1700002490.mm.1	0.3	0.008576
TC0200005084.mm.1	NM_080435	Adcy4	adenylate cyclase 4	55769058	55784042	TC1400002102.mm.1	0.2	0.00858
TC0200005087.mm.1	NM_018794	Atp6ap1	ATPase, H+ transporting, lysosomal accessory pr	74297097	74304721	TC0X00000708.mm.1	0.5	0.008591
TC0200005102.mm.1	NM_013630	Pkd1	polycystic kidney disease 1 homolog	24549950	24596514	TC1700000344.mm.1	0.2	0.008599
TC0200005106.mm.1	NM_027409	Mospd1	motile sperm domain containing 1	53344598	53370502	TC0X00002238.mm.1	0.6	0.008612
TC0200005108.mm.1	NM_172086	Rpl32	ribosomal protein L32	115805505	115808747	TC0600002960.mm.1	-0.8	0.00862
TC0200005110.mm.1	ENSMUST00000073645	Gm9392	predicted pseudogene 9392	46820267	46822048	TC0700003043.mm.1	-0.4	0.008687
TC0200005112.mm.1	NM_028399	Ccnt2	cyclin T2	127774164	127808061	TC0100001124.mm.1	-0.3	0.008698
TC0200005132.mm.1	ENSMUST00000099328	Gm6843	predicted pseudogene 6843	95672991	95673451	TC1000002731.mm.1	-0.3	0.008708
TC0200005139.mm.1	NM_019685	Ruvbl1	RuvB-like protein 1	88465409	88497572	TC0600001033.mm.1	-0.3	0.008737
TC0200005144.mm.1	NM_001048204	Zfp455	zinc finger protein 455	67194506	67209298	TC1300000819.mm.1	-0.2	0.008738
TC0200005146.mm.1	OTTMUST00000065229	Rps15a-	---	105797287	105797743	TC0500002904.mm.1	-0.3	0.008749
TC0200005151.mm.1	NM_025509	Ostc	oligosaccharyltransferase complex subunit	130695917	130709444	TC0300002944.mm.1	-0.5	0.008757
TC0200005158.mm.1	ENSMUST00000178542	Gm5973	predicted gene 5973	40863734	40864219	TC0100002252.mm.1	-0.3	0.0088
TC0200005176.mm.1	ENSMUST00000118634	Gm6433	predicted gene 6433	141267581	141268455	TC0500003521.mm.1	-0.5	0.008807
TC0200005181.mm.1	NM_172274	Cc2d2a	coiled-coil and C2 domain containing 2A	43662379	43740972	TC0500000465.mm.1	0.2	0.008827
TC0200005182.mm.1	NM_172508	Dse	dermatan sulfate epimerase	34151393	34207551	TC1000001995.mm.1	0.5	0.00883
TC0200005185.mm.1	NM_001003919	Ddx11	DEAD/H (Asp-Glu-Ala-Asp/His) box helicase 11	66123520	66152168	TC1700001084.mm.1	-0.2	0.008833
TC0200005194.mm.1	ENSMUST00000161498	Gm16303	predicted gene 16303	125739406	125739795	TC0600001464.mm.1	-0.4	0.008857
TC0200005195.mm.1	NM_001134741	Tdrd5	tudor domain containing 5	156255296	156303664	TC0100003316.mm.1	-0.7	0.008865
TC0200005207.mm.1	ENSMUST00000120558	Gm13992	predicted gene 13992	106015200	106015355	TC0200001592.mm.1	-0.2	0.008869
TC0200005210.mm.1	ENSMUST00000075650	Gm9761	predicted gene 9761	116561085	116561426	TC0300002809.mm.1	-0.9	0.008904
TC0200005217.mm.1	NM_144830	Tmem106	transmembrane protein 106A	101582242	101591788	TC1100001661.mm.1	0.5	0.008924
TC0200005218.mm.1	ENSMUST00000079261	Rps2-ps	ribosomal protein S2, pseudogene 13	52898577	52899509	TC0X00000469.mm.1	-0.5	0.008927
TC0200005224.mm.1	ENSMUST00000121985	Gm14162	predicted gene 14162	152745707	152746307	TC0200002299.mm.1	-0.4	0.008934
TC0200005225.mm.1	ENSMUST00000178019	Gm20784	predicted gene, 20784	119962244	119963227	TC1300001358.mm.1	-0.4	0.008944
TC0200005235.mm.1	ENSMUST00000178830	Gm21378	predicted gene, 21378	120099349	120100332	TC1300002757.mm.1	-0.4	0.008944
TC0200005260.mm.1	NM_001004140	Ckap2	cytoskeleton associated protein 2	22168152	22185819	TC0800001863.mm.1	-0.5	0.008952
TC0200005271.mm.1	NM_009020	Rag2	recombination activating gene 2	101624718	101632529	TC0200001513.mm.1	-1.4	0.008959
TC0200005273.mm.1	NCBI_Gene:232065:p	Igkv8-1	immunoglobulin kappa variable 8-19	70340876	70341448	TC0600003593.mm.1	-0.7	0.008989
TC0200005280.mm.1	NM_029631	Abhd14b	abhydrolase domain containing 14b	106448640	106452918	TC0900001348.mm.1	0.5	0.008993

TC0200005281.mm.1	NCBI_Gene:10012468	Trbv19	T cell receptor beta, variable 19	41178441	41179048	TC0600003494.mm.1	-1.7	0.009011
TC0200005290.mm.1	ENSMUST00000104925	Gm8290	predicted gene 8290 // predicted gene 8264 //	34170655	34171168	TC1400000371.mm.1	-0.9	0.00902
TC0200005313.mm.1	NM_008014	Ppm1g	protein phosphatase 1G (formerly 2C), magnesiu	31202668	31220545	TC0500002178.mm.1	-0.8	0.009051
TC0200005314.mm.1	ENSMUST00000117107	Gm15560	predicted gene 15560	7808116	7808758	TC1000001702.mm.1	-0.4	0.009074
TC0200005317.mm.1	XM_001004898	Gm14217	predicted gene 14217	154700721	154704765	TC0200002349.mm.1	-0.2	0.009098
TC0200005327.mm.1	NM_145491	Rhoq	ras homolog gene family, member Q	86963082	87000069	TC1700001303.mm.1	0.5	0.009103
TC0200005328.mm.1	NM_001014976	Espl1	extra spindle poles-like 1 (S. cerevisiae)	102296293	102324357	TC1500001095.mm.1	-0.2	0.009105
TC0200005331.mm.1	NM_001005423	Mreg	melanoregulin	72159233	72212307	TC0100002552.mm.1	-0.7	0.009107
TC0200005335.mm.1	NM_008381	Inhbb	inhibin beta-B	119415465	119422248	TC0100002945.mm.1	0.3	0.009111
TC0200005341.mm.1	NCBI_Gene:630415:p	Trav14d	T cell receptor alpha variable 14D-1	52855614	52856166	TC1400000636.mm.1	-0.6	0.009115
TC0200005342.mm.1	NM_001045489	Mfge8	milk fat globule-EGF factor 8 protein	79133768	79149060	TC0700003552.mm.1	1.0	0.009134
TC0200005343.mm.1	ENSMUST00000091289	Kpna2	karyopherin (importin) alpha 2	25210764	25212720	TC0300001725.mm.1	-1.1	0.009138
TC0200005345.mm.1	ENSMUST00000184561	RP23-29	N/A	72289667	72290111	TC0900000961.mm.1	-0.6	0.009189
TC0200005346.mm.1	NM_153799	Edc3	enhancer of mRNA decapping 3 homolog (S. cere	57708540	57752499	TC0900000714.mm.1	-0.3	0.009201
TC0200005347.mm.1	NM_175554	Clspn	claspin	126556935	126593903	TC0400001465.mm.1	-0.5	0.009211
TC0200005348.mm.1	ENSMUST00000104990	Gm7290	predicted pseudogene 7290	142757256	142757852	TC0700004574.mm.1	-0.8	0.009218
TC0200005358.mm.1	NM_010495	Id1	inhibitor of DNA binding 1	152736251	152737410	TC0200002298.mm.1	0.2	0.00922
TC0200005359.mm.1	ENSMUST00000117567	Gm11560	predicted gene 11560	99932162	99933109	TC1100001611.mm.1	-0.6	0.009234
TC0200005362.mm.1	NM_172907	Olfml1	olfactomedin-like 1	107567433	107591365	TC0700001580.mm.1	0.6	0.009236
TC0200005363.mm.1	NM_146235	Ercc6l	excision repair cross-complementing rodent repa	102141716	102157091	TC0X00002736.mm.1	-0.3	0.00925
TC0200005364.mm.1	NM_011763	Zfp9	zinc finger protein 9	118461950	118479320	TC0600003002.mm.1	0.2	0.009298
TC0200005377.mm.1	NM_011845	Mid2	midline 2	140664599	140767715	TC0X00001383.mm.1	0.4	0.009298
TC0200005398.mm.1	NM_009361	Tfdp1	transcription factor Dp 1	13338751	13377702	TC0800000126.mm.1	-0.5	0.009309
TC0200005425.mm.1	NM_053257	Rpl31	ribosomal protein L31	39367851	39371911	TC0100000284.mm.1	-0.4	0.009319
TC0200005426.mm.1	NM_010798	Mif	macrophage migration inhibitory factor	75859353	75860250	TC1000002388.mm.1	-0.7	0.009321
TC0200005429.mm.1	ENSMUST00000119164	Gm11572	predicted gene 11572	97116796	97116915	TC1100003637.mm.1	-1.1	0.009331
TC0200005433.mm.1	ENSMUST00000121873	Gm11675	predicted gene 11675	111276100	111276931	TC1100001850.mm.1	-0.4	0.009337
TC0200005438.mm.1	XM_990438	Gm8618	predicted gene 8618	134109368	134109799	TC0100001219.mm.1	-0.8	0.00935
TC0200005453.mm.1	ENSMUST00000079818	Gm8973	predicted gene 8973	99006056	99006370	TC1500001001.mm.1	-0.5	0.009359
TC0200005462.mm.1	NM_008433	Kcnn4	potassium intermediate/small conductance calci	24370263	24385212	TC0700000381.mm.1	-0.7	0.009401
TC0200005468.mm.1	ENSMUST00000179528	Gm9045	predicted gene 9045	118336587	118337831	TC1000002987.mm.1	-0.5	0.009405
TC0200005471.mm.1	ENSMUST00000178998	Gm9049	predicted gene 9049	118352861	118354105	TC1000002990.mm.1	-0.5	0.009405
TC0200005489.mm.1	ENSMUST00000079960	Rpl13-p	ribosomal protein L13, pseudogene 3	58893506	58894129	TC1400000832.mm.1	-0.8	0.009461
TC0200005490.mm.1	ENSMUST00000121003	Gm11829	predicted gene 11829	11133327	11133608	TC0400000081.mm.1	-0.5	0.009465
TC0200005491.mm.1	NR_037189	Gm9696	arylacetamide deacetylase-like 2 pseudogene	59952309	59973594	TC0300000480.mm.1	0.3	0.009486
TC0200005492.mm.1	ENSMUST00000177599	Gm5070	predicted gene 5070	95410346	95411176	TC0300002479.mm.1	-0.6	0.009489
TC0200005494.mm.1	NM_013723	Podxl	podocalyxin-like	31519488	31563981	TC0600002020.mm.1	0.5	0.009502
TC0200005512.mm.1	NM_026015	Zmat5	zinc finger, matrin type 5	4704671	4737669	TC1100000049.mm.1	-0.2	0.009509
TC0200005514.mm.1	ENSMUST00000129154	Hnrnpa1	heterogeneous nuclear ribonucleoprotein A1-lik	74864305	74865356	TC1300000907.mm.1	-0.6	0.009513
TC0300000006.mm.1	NM_009678	Ap1m2	adaptor protein complex AP-1, mu 2 subunit	21295457	21312333	TC0900001868.mm.1	-0.2	0.009523
TC0300000007.mm.1	NM_001082960	Itgam	integrin alpha M	128062640	128128160	TC0700001875.mm.1	0.6	0.009536
TC0300000009.mm.1	NM_008344	Igfbp6	insulin-like growth factor binding protein 6	102144186	102149512	TC1500001089.mm.1	0.3	0.009551
TC0300000011.mm.1	NM_139306	Acer2	alkaline ceramidase 2	86874396	86934822	TC0400000873.mm.1	0.3	0.009574
TC0300000012.mm.1	NM_001177307	Aldoa	aldolase A, fructose-bisphosphate	126795234	126800751	TC0700004296.mm.1	0.4	0.009588
TC0300000027.mm.1	ENSMUST00000167222	Gm9307	predicted gene 9307	82543947	82544189	TC1200000774.mm.1	-0.5	0.009592
TC0300000028.mm.1	NCBI_Gene:630461:p	Trav9-4	T cell receptor alpha variable 9-4	53676141	53676630	TC1400000705.mm.1	-1.0	0.009601
TC0300000041.mm.1	NM_009764	Brca1	breast cancer 1	101488764	101551955	TC1100003808.mm.1	-0.3	0.009628
TC0300000043.mm.1	ENSMUST00000166546	Rps2-ps	ribosomal protein S2, pseudogene 5	34290274	34291092	TC1200001626.mm.1	-0.4	0.00964
TC0300000062.mm.1	NM_001033122	Cd69	CD69 antigen	129267324	129275369	TC0600003229.mm.1	-0.8	0.009645
TC0300000076.mm.1	NM_139117	Ybx3	Y box protein 3	131364856	131388450	TC0600003268.mm.1	0.4	0.009661
TC0300000077.mm.1	NM_177698	Psd3	pleckstrin and Sec7 domain containing 3 (Psd3),	0	0	TSUnmapped0000002	0.3	0.009691
TC0300000089.mm.1	NM_133955	Rhou	ras homolog gene family, member U	123653929	123663884	TC0800001531.mm.1	0.3	0.009743
TC0300000092.mm.1	ENSMUST00000174010	Gm20386	predicted gene 20386	110738350	110738481	TC0600001214.mm.1	0.3	0.009748
TC0300000096.mm.1	ENSMUST00000093344	Gm15483	predicted gene 15483 // ribosomal protein S13,	88530405	88530925	TC0700003708.mm.1	-1.0	0.009757
TC0300000101.mm.1	NM_172517	Rbbp5	retinoblastoma binding protein 5	132477367	132505665	TC0100001195.mm.1	-0.3	0.009783
TC0300000117.mm.1	ENSMUST00000167233	Gm6136	predicted pseudogene 6136	86908762	86909703	TC0100002752.mm.1	-0.8	0.0098
TC0300000119.mm.1	NM_013608	Naca	nascent polypeptide-associated complex alpha p	128035346	128048637	TC1000001580.mm.1	-0.4	0.009804
TC0300000130.mm.1	ENSMUST00000082724	Gm24166	predicted gene, 24166	44736813	44736947	TC0900002174.mm.1	-0.7	0.009808
TC0300000139.mm.1	NM_008536	Tm4sf1	transmembrane 4 superfamily member 1	57285611	57301919	TC0300002023.mm.1	0.5	0.009823
TC0300000142.mm.1	NM_016854	Ppp1r3c	protein phosphatase 1, regulatory (inhibitor) s	36731731	36736653	TC1900001445.mm.1	0.4	0.009836
TC0300000148.mm.1	NCBI_Gene:10012435	Traj35	T cell receptor alpha joining 35	54183774	54183838	TC1400000733.mm.1	-0.9	0.009846
TC0300000150.mm.1	ENSMUST00000074245	Gm10119	predicted gene 10119	88122971	88123833	TC1400002521.mm.1	-0.8	0.009866
TC0300000157.mm.1	ENSMUST00000120830	Gm13665	predicted gene 13665	73116748	73117275	TC0200001068.mm.1	-0.4	0.009872
TC0300000159.mm.1	NM_007723	Cnga1	cyclic nucleotide gated channel alpha 1	72603696	72642752	TC0500002578.mm.1	-0.2	0.009899
TC0300000177.mm.1	ENSMUST00000166459	Gm6788	predicted gene 6788	28763161	28763430	TC1900001330.mm.1	-0.6	0.009912
TC0300000180.mm.1	ENSMUST00000165944	Gm11362	predicted gene 11362	28836859	28837724	TC1300000312.mm.1	-0.4	0.009927
TC0300000181.mm.1	NCBI_Gene:10011537	Trdj1	T cell receptor delta joining 1	54122274	54146163	TC1400000720.mm.1	-0.8	0.009941
TC0300000182.mm.1	ENSMUST00000158052	Gm22804	predicted gene, 22804	94487883	94487983	TC0400000944.mm.1	-0.4	0.009965
TC0300000192.mm.1	NM_001033213	Ttc7b	tetratricopeptide repeat domain 7B	100300770	100520822	TC1200002224.mm.1	0.5	0.009978
TC0300000199.mm.1	ENSMUST00000128900	Hba-ps4	hemoglobin alpha, pseudogene 4	26286363	26287061	TC1700001694.mm.1	0.6	0.009983
TC0300000203.mm.1	NM_001110009	Apoc1	apolipoprotein C-I	19689480	19692659	TC0700002496.mm.1	0.6	0.009988
TC0300000210.mm.1	NM_011581	Thbs2	thrombospondin 2	14665500	14694262	TC1700001484.mm.1	0.5	0.010004
TC0300000227.mm.1	NM_133777	Ube2s	ubiquitin-conjugating enzyme E2S	4808014	4812351	TC0700002173.mm.1	-0.7	0.010014
TC0300000230.mm.1	NCBI_Gene:10012467	Trbv14	T cell receptor beta, variable 14	41135167	41135616	TC0600000426.mm.1	-1.0	0.01002
TC0300000255.mm.1	NM_177564	Dhrs11	dehydrogenase/reductase (SDR family) member	84820726	84829003	TC1100003418.mm.1	0.1	0.010024
TC0300000257.mm.1	NM_001198790	Ak1	adenylate kinase 1	32621758	32635058	TC0200005471.mm.1	0.2	0.010048
TC0300000260.mm.1	XM_915945	Gm14407	predicted gene 14407	177064935	177085802	TC0200005358.mm.1	-0.5	0.010125
TC0300000269.mm.1	ENSMUST00000174284	Gm18889	predicted gene, 18889	36119998	36120926	TC1500001367.mm.1	-0.4	0.01016

TC0300000275.mm.1	ENSMUST00000104970	Gm16499	predicted gene 16499	53819975	53820040	TC0600000645.mm.1	0.3	0.01017
TC0300000288.mm.1	ENSMUST00000117058	Gm13410	predicted gene 13410	24178834	24180317	TC0200000375.mm.1	-0.3	0.010175
TC0300000291.mm.1	XM_145468	Gm4883	predicted gene 4883	30709736	30710302	TC0700000572.mm.1	-1.0	0.01019
TC0300000292.mm.1	OTTMUST00000054089	AC12734	---	133738479	133738934	TC0700004430.mm.1	-0.9	0.010202
TC0300000299.mm.1	BC062898	Dnaaf2	dynein, axonemal assembly factor 2	69189087	69198429	TC1200002528.mm.1	-0.2	0.010204
TC0300000301.mm.1	ENSMUST00000082863	Gm24357	predicted gene, 24357	15315522	15315595	TC0900000119.mm.1	-1.6	0.010213
TC0300000304.mm.1	ENSMUST00000167629	Gm17366	predicted gene, 17366	106698109	106698298	TC1400002674.mm.1	-0.4	0.010223
TC0300000312.mm.1	XR_140964	Gm20326	predicted gene, 20326	112138578	112141500	TC0900003142.mm.1	-0.9	0.010233
TC0300000314.mm.1	NR_030780	Ankrd10	ankyrin repeat domain 10	11611581	11635757	TC0800001701.mm.1	-0.3	0.010247
TC0300000323.mm.1	ENSMUST00000165577	Gm17150	predicted gene 17150	58790195	58790575	TC1900000844.mm.1	-0.5	0.010268
TC0300000333.mm.1	ENSMUST00000179174	Gm8532	predicted gene 8532	131632506	131632874	TC0100003064.mm.1	-0.4	0.010285
TC0300000339.mm.1	NM_145831	Dmrt2	doublesex and mab-3 related transcription facto	25672411	25679010	TC1900000407.mm.1	0.6	0.010291
TC0300000340.mm.1	NCBI_Gene:381784:p	Igkv6-2	immunoglobulin kappa chain variable 6-25	70215433	70215957	TC0600003526.mm.1	-1.8	0.010335
TC0300000341.mm.1	NM_011133	Pole2	polymerase (DNA directed), epsilon 2 (p59 subur	69201775	69228190	TC1200001861.mm.1	-0.4	0.010347
TC0300000342.mm.1	ENSMUST00000019997	Tnfaip3	tumor necrosis factor, alpha-induced protein 3	19000910	19015657	TC1000001813.mm.1	-0.5	0.010356
TC0300000343.mm.1	ENSMUST00000182794	Gm27038	predicted gene, 27038	94756698	94756872	TC1700002756.mm.1	-0.3	0.010365
TC0300000347.mm.1	XM_001472394	Gm9780	predicted gene 9780	26027278	26042860	TC1400001608.mm.1	0.6	0.010371
TC0300000349.mm.1	NM_026069	Rpl37	ribosomal protein L37	5116613	5119140	TC1500000019.mm.1	-0.5	0.010403
TC0300000354.mm.1	NM_009427	Tob1	transducer of ErbB-2.1	94211454	94215495	TC1100001430.mm.1	0.3	0.010415
TC0300000357.mm.1	ENSMUST00000121411	Gm15536	predicted gene 15536	7038661	7038774	TC1000000042.mm.1	-1.1	0.010429
TC0300000360.mm.1	ENSMUST00000184373	RP23-29	N/A	72618693	72619520	TC0900002645.mm.1	-0.5	0.010431
TC0300000370.mm.1	NM_010117	Rhbdf1	rhomboid family 1 (Drosophila)	32209585	32222300	TC1100002471.mm.1	0.2	0.010432
TC0300000382.mm.1	NCBI_Gene:10004320	Trav3d-	T cell receptor alpha variable 3D-3	52972532	52973038	TC1400000649.mm.1	-0.6	0.010432
TC0300000396.mm.1	NM_153053	Sf3b4	splicing factor 3b, subunit 4	96172332	96177564	TC0300000926.mm.1	-0.2	0.010473
TC0300000399.mm.1	NM_009896	Socs1	suppressor of cytokine signaling 1	10783808	10785536	TC1600001198.mm.1	-0.2	0.010495
TC0300000404.mm.1	NCBI_Gene:10077517	Ighv1-8	immunoglobulin heavy variable 1-82	115952538	115952831	TC1200002661.mm.1	-1.9	0.010498
TC0300000409.mm.1	NM_053137	Pcdhb12	protocadherin beta 12	37435621	37438654	TC1800000368.mm.1	0.2	0.010526
TC0300000412.mm.1	ENSMUST00000178617	Gm7083	predicted gene 7083	59977722	59978171	TC1500000441.mm.1	-0.6	0.010533
TC0300000416.mm.1	XR_105988	Gm19788	predicted gene, 19788	53893830	53896554	TC1900000764.mm.1	-0.2	0.010535
TC0300000423.mm.1	NM_175663	Hist1h2	histone cluster 1, H2ba	23933768	23934156	TC1300001652.mm.1	-0.7	0.010536
TC0300000430.mm.1	NM_001195431	Islr	immunoglobulin superfamily containing leucine-	58156264	58159221	TC0900002387.mm.1	0.5	0.010551
TC0300000459.mm.1	NM_144944	Prokr2	prokineticin receptor 2	132337733	132385447	TC0200004672.mm.1	-0.3	0.010593
TC0300000465.mm.1	NM_001190356	Gm4832	predicted gene 4832	88125512	88131116	TC1700001316.mm.1	-0.4	0.010605
TC0300000480.mm.1	NM_173417	Kcns3	potassium voltage-gated channel, delayed-rectif	11090202	11150842	TC1200001416.mm.1	0.2	0.010614
TC0300000484.mm.1	NM_001195421	Hist1h4	histone cluster 1, H4m	21811746	21812150	TC1300000182.mm.1	-1.1	0.010618
TC0300000487.mm.1	NM_001045516	Proca1	protein interacting with cyclin A1	78193392	78205763	TC1100001150.mm.1	0.2	0.01064
TC0300000491.mm.1	ENSMUST00000119844	Gm12428	predicted gene 12428	98821038	98821764	TC0300000983.mm.1	-0.6	0.010695
TC0300000499.mm.1	NM_153063	Zfp472	zinc finger protein 472	32965814	32979233	TC1700000571.mm.1	-0.2	0.010706
TC0300000507.mm.1	NM_053261	Impa2	inositol (myo)-1(or 4)-monophosphatase 2	67289223	67319146	TC1800000700.mm.1	-0.3	0.010709
TC0300000510.mm.1	NM_175660	Hist1h2	histone cluster 1, H2ab	23751088	23751598	TC1300000260.mm.1	-1.4	0.010729
TC0300000525.mm.1	uc029vco.1	Gm5859	SubName: Full=Putative uncharacterized protein	222571	223717	TC4_GL456350_rand	0.5	0.010744
TC0300000527.mm.1	NM_001122873	Ubl7	ubiquitin-like 7 (bone marrow stromal cell-deri	57910986	57929968	TC0900000719.mm.1	0.6	0.010772
TC0300000539.mm.1	NM_011324	Scnn1a	sodium channel, nonvoltage-gated 1 alpha	125320659	125344943	TC0600001458.mm.1	-0.4	0.010824
TC0300000550.mm.1	NM_029522	Gpsm2	G-protein signalling modulator 2 (AGS3-like, C.	108678638	108722309	TC0300002750.mm.1	-0.3	0.010864
TC0300000555.mm.1	ENSMUST00000117231	Gm11191	predicted gene 11191	77747041	77748041	TC1100001132.mm.1	-0.4	0.010865
TC0300000559.mm.1	NM_013863	Bag3	BCL2-associated athanogene 3	128523583	128546981	TC0700001886.mm.1	0.4	0.010891
TC0300000568.mm.1	NM_001013390	Scn4b	sodium channel, type IV, beta	45138437	45154152	TC0900000535.mm.1	-0.3	0.01091
TC0300000575.mm.1	NM_001004154	Rragb	Ras-related GTP binding B	153139958	153171943	TC0X00001555.mm.1	-0.2	0.010921
TC0300000576.mm.1	NM_030609	Hist1h1	histone cluster 1, H1a	23763668	23764414	TC1300000262.mm.1	-1.7	0.010922
TC0300000579.mm.1	NM_007826	Dach1	dachshund 1 (Drosophila)	97786846	98169765	TC1400002578.mm.1	0.2	0.010929
TC0300000585.mm.1	ENSMUST00000123179	Gm12666	predicted gene 12666	92190744	92191749	TC0400003051.mm.1	-0.5	0.010931
TC0300000591.mm.1	NM_001252647	4833439	RIKEN cDNA 4833439L19 gene	54551192	54565435	TC1300002034.mm.1	0.7	0.010932
TC0300000599.mm.1	NM_181415	Atrnl1	attractin like 1	57611034	58133343	TC1900000819.mm.1	0.4	0.010941
TC0300000607.mm.1	ENSMUST00000179051	Gm7658	predicted gene 7658	21511870	21513127	TC0100002044.mm.1	-0.3	0.010955
TC0300000616.mm.1	NM_181858	Cd59b	CD59b antigen	104069805	104091190	TC0200001551.mm.1	0.3	0.010958
TC0300000617.mm.1	NM_026047	Rnf219	ring finger protein 219	104477534	104522666	TC1400002649.mm.1	-0.2	0.01097
TC0300000618.mm.1	ENSMUST00000139887	Gm15274	predicted gene 15274	33426304	33426594	TC0X00000291.mm.1	-0.2	0.011012
TC0300000624.mm.1	ENSMUST00000157136	Gm23981	predicted gene, 23981	77807535	77807640	TC0800000868.mm.1	0.2	0.011032
TC0300000631.mm.1	NM_001081189	Uprt	uracil phosphoribosyltransferase (FUR1) homolo	104482782	104507490	TC0X00001047.mm.1	0.6	0.011069
TC0300000640.mm.1	NM_198613	Ap2s1	adaptor-related protein complex 2, sigma 1 subu	16738410	16749294	TC0700000234.mm.1	-0.2	0.011081
TC0300000641.mm.1	NM_025889	Tmem134	transmembrane protein 134	4125934	4132307	TC1900000028.mm.1	0.2	0.011098
TC0300000646.mm.1	NM_173762	Cenpe	centromere protein E	135212563	135273540	TC0300001364.mm.1	-0.7	0.011105
TC0300000647.mm.1	NM_013853	Abcf2	ATP-binding cassette, sub-family F (GCN20), mer	24565341	24577467	TC0500002085.mm.1	-0.5	0.011131
TC0300000667.mm.1	NM_008160	Gpx1	glutathione peroxidase 1	108339080	108340344	TC0900001402.mm.1	0.8	0.011148
TC0300000673.mm.1	NM_178205	Hist1h3	histone cluster 1, H3e	23561534	23562369	TC1300001633.mm.1	-1.2	0.011184
TC0300000677.mm.1	NM_178210	Hist1h4	histone cluster 1, H4j	21735034	21735837	TC1300000176.mm.1	-0.5	0.011185
TC0300000685.mm.1	ENSMUST00000118292	Gm14571	predicted gene 14571	39796584	39797153	TC0X00000381.mm.1	-0.3	0.011189
TC0300000688.mm.1	ENSMUST00000117116	Gm13047	predicted gene 13047	141084864	141085678	TC0400001776.mm.1	-0.3	0.011198
TC0300000689.mm.1	ENSMUST00000164923	Gm5277	predicted gene 5277	78891864	78892451	TC0300002182.mm.1	-0.7	0.011221
TC0300000690.mm.1	ENSMUST00000180073	Gm23571	predicted gene, 23571	10499763	10499889	TC0200000165.mm.1	-0.3	0.011228
TC0300000693.mm.1	NM_013859	Znhit2	zinc finger, HIT domain containing 2	6061192	6062472	TC1900000097.mm.1	-0.2	0.011234
TC0300000695.mm.1	ENSMUST00000117851	Gm11478	predicted gene 11478	86630428	86631026	TC1100003452.mm.1	-1.0	0.011257
TC0300000697.mm.1	ENSMUST00000118817	Gm5764	predicted gene 5764	158833435	158834319	TC0X00001610.mm.1	-0.3	0.011262
TC0300000699.mm.1	NM_030724	Uck2	uridine-cytidine kinase 2	167226083	167285127	TC0100003478.mm.1	-0.9	0.011275
TC0300000700.mm.1	NM_028292	Ppme1	protein phosphatase methylesterase 1	100326737	100371896	TC0700003818.mm.1	-0.3	0.011282
TC0300000706.mm.1	ENSMUST00000116032	Gm16073	predicted gene 16073	65838167	65838683	TC0900000853.mm.1	-0.5	0.011288
TC0300000707.mm.1	NM_023215	Chtop	chromatin target of PRMT1	90498956	90509498	TC0300002373.mm.1	-0.3	0.011308
TC0300000709.mm.1	ENSMUST00000112525	Pla2r1	phospholipase A2 receptor 1	60417543	60553308	TC0200003603.mm.1	0.2	0.011312

TC0300000714.mm.1	ENSMUST00000157353	Gm23713	predicted gene, 23713	62136762	62136831	TC1300000750.mm.1	-0.7	0.011318
TC0300000722.mm.1	ENSMUST00000158102	Gm22615	predicted gene, 22615	62543434	62543503	TC1300002168.mm.1	-0.7	0.011318
TC0300000724.mm.1	ENSMUST00000117894	Gm14529	predicted gene 14529	20339299	20339704	TC0X00000203.mm.1	-0.4	0.011324
TC0300000730.mm.1	NM_013762	Rpl3	ribosomal protein L3	80077781	80083406	TC1500001896.mm.1	-0.6	0.011332
TC0300000731.mm.1	ENSMUST00000170335	Gm8842	predicted gene 8842 // predicted gene 8841 //	61259040	61259987	TC1800001416.mm.1	-0.6	0.011339
TC0300000734.mm.1	ENSMUST00000122012	Gm6285	predicted gene 6285	104947785	104948282	TC0X00001052.mm.1	-1.4	0.011353
TC0300000735.mm.1	NM_011923	Angptl2	angiopoietin-like 2	33215961	33247717	TC0200000603.mm.1	0.4	0.011368
TC0300000739.mm.1	NCBI_Gene:10011341	Trav13-	Trav13-4-dv7 T cell receptor alpha variable 13-	53757356	53757921	TC1400002818.mm.1	-0.4	0.01137
TC0300000741.mm.1	ENSMUST00000118055	Gm15399	predicted gene 15399	123984097	123985063	TC0300002883.mm.1	-0.3	0.011377
TC0300000750.mm.1	NCBI_Gene:381783:p	Igkv5-4	immunoglobulin kappa chain variable 5-43	69823355	69823911	TC0600003580.mm.1	-1.7	0.011387
TC0300000753.mm.1	NM_029936	Ddx10	DEAD (Asp-Glu-Ala-Asp) box polypeptide 10	53098454	53248112	TC0900002302.mm.1	-0.4	0.011393
TC0300000761.mm.1	NR_110572	Zeb2os	zinc finger E-box binding homeobox 2, opposite	0	0	TSUnmapped0000007	0.4	0.011406
TC0300000766.mm.1	NM_009656	Aldh2	aldehyde dehydrogenase 2, mitochondrial	121566027	121593824	TC0500003193.mm.1	1.1	0.01143
TC0300000772.mm.1	ENSMUST00000117031	Gm23990	predicted gene, 23990	105597625	105597741	TC1100001757.mm.1	0.4	0.011459
TC0300000781.mm.1	NM_134082	Farp1	FERM, RhoGEF (Arhgef) and pleckstrin domain p	121035200	121283744	TC1400001315.mm.1	0.3	0.011474
TC0300000782.mm.1	NM_029835	Ticrr	TOPBP1-interacting checkpoint and replication r	79660196	79698148	TC0700001131.mm.1	-0.5	0.011568
TC0300000785.mm.1	NM_009875	Cdkn1b	cyclin-dependent kinase inhibitor 1B	134920401	134925525	TC0600001595.mm.1	-0.6	0.011619
TC0300000787.mm.1	NR_030555	Mir297c	microRNA 297c	185537336	185988795	TC0100001790.mm.1	0.6	0.01162
TC0300000799.mm.1	NM_009648	Akap1	A kinase (PRKA) anchor protein 1	88830792	88864586	TC1100003505.mm.1	0.2	0.011623
TC0300000800.mm.1	NM_009381	Thrsp	thyroid hormone responsive	97412938	97417730	TC0700003764.mm.1	1.5	0.011636
TC0300000801.mm.1	NM_001290282	Rcor3	REST corepressor 3 (Rcor3), transcript variant	0	0	TSUnmapped0000000	0.3	0.011696
TC0300000802.mm.1	NM_018780	Sfrp5	secreted frizzled-related sequence protein 5	42197971	42202252	TC1900001522.mm.1	0.9	0.011702
TC0300000809.mm.1	NM_001198894	Gpr56	G protein-coupled receptor 56	94977109	95014208	TC0800001126.mm.1	0.5	0.011742
TC0300000811.mm.1	NM_001017441	Tbata	thymus, brain and testes associated	61171954	61188841	TC1000000560.mm.1	-0.9	0.011771
TC0300000817.mm.1	ENSMUST00000121059	Rpl19-p	ribosomal protein L19, pseudogene 1	85012114	85012704	TC0100000734.mm.1	-0.9	0.011782
TC0300000821.mm.1	NM_009156	Sepw1	selenoprotein W, muscle 1	15917208	15922402	TC0700002414.mm.1	0.6	0.011826
TC0300000822.mm.1	NM_024495	Car13	carbonic anhydrase 13	14641727	14663002	TC0300000092.mm.1	0.4	0.011832
TC0300000823.mm.1	NM_130449	Colec12	collectin sub-family member 12	9707648	9877995	TC1800000063.mm.1	0.8	0.011844
TC0300000828.mm.1	NCBI_Gene:10012645	Trav6n-	T cell receptor alpha variable 6N-7	53318812	54224204	TC1400000684.mm.1	-0.7	0.011848
TC0300000833.mm.1	NM_007883	Dsg2	desmoglein 2	20558074	20604526	TC1800000157.mm.1	-0.3	0.011864
TC0300000835.mm.1	NM_008329	Ifi204	interferon activated gene 204	173747293	173766919	TC0100003888.mm.1	0.5	0.0119
TC0300000837.mm.1	NM_027212	Med30	mediator complex subunit 30	52712445	52730433	TC1500000380.mm.1	-0.6	0.011917
TC0300000840.mm.1	NM_011295	Rps12	ribosomal protein S12	23785183	23787209	TC1000001881.mm.1	-0.4	0.011922
TC0300000845.mm.1	NM_001143671	Tmem255	transmembrane protein 255B	13435459	13461452	TC0800000128.mm.1	0.4	0.011958
TC0300000852.mm.1	NM_012030	Slc9a3r	solute carrier family 9 (sodium/hydrogen exchan	115163341	115181181	TC1100001886.mm.1	-0.6	0.011959
TC0300000858.mm.1	ENSMUST00000074645	Gm11353	predicted gene 11353	26492514	26493219	TC1300000290.mm.1	-0.6	0.011968
TC0300000864.mm.1	NCBI_Gene:638566:p	Trav13-	T cell receptor alpha variable 13-2	53634829	53635399	TC1400000703.mm.1	-0.3	0.011991
TC0300000865.mm.1	ENSMUST00000183619	RP23-29	N/A	72551728	72551935	TC0900000972.mm.1	-0.2	0.012019
TC0300000872.mm.1	NM_001177352	Myc	myelocytomatosis oncogene	61985341	61990374	TC1500000453.mm.1	-0.5	0.012037
TC0300000873.mm.1	NM_001081258	Kif14	kinesin family member 14	136467848	136531511	TC0100001271.mm.1	-0.5	0.012049
TC0300000875.mm.1	XM_001478111	Gm10193	predicted gene 10193	105764444	105764674	TC0100001010.mm.1	-0.5	0.012054
TC0300000887.mm.1	NM_009293	Sts	steroid sulfatase	0	0	TSUnmapped0000005	0.2	0.012091
TC0300000890.mm.1	NM_007570	Btg2	B cell translocation gene 2, anti-proliferative	134074865	134079155	TC0100003102.mm.1	-0.5	0.012121
TC0300000891.mm.1	NM_007388	Acp5	acid phosphatase 5, tartrate resistant	22126727	22135746	TC0900001900.mm.1	0.6	0.012122
TC0300000902.mm.1	ENSMUST00000119465	Gm12757	predicted gene 12757	33879295	33880094	TC0700000623.mm.1	-0.3	0.012129
TC0300000903.mm.1	NM_026282	Spc24	SPC24, NDC80 kinetochore complex component,	21755442	21760289	TC0900001883.mm.1	-0.5	0.012131
TC0300000907.mm.1	NR_035491	Mir1965	microRNA 1965	80152890	80153015	TC0700003584.mm.1	-0.2	0.012153
TC0300000910.mm.1	ENSMUST00000167150	Rpl19-p	ribosomal protein L19, pseudogene 7	13777814	13778440	TC1400001468.mm.1	-0.8	0.012175
TC0300000922.mm.1	NM_013598	Kitl	kit ligand	100015630	100100413	TC1000001216.mm.1	0.3	0.012187
TC0300000926.mm.1	NM_007484	Rhoc	ras homolog gene family, member C	104789011	104794459	TC0300001081.mm.1	0.5	0.012212
TC0300000927.mm.1	NM_029498	Zmym2	zinc finger, MYM-type 2	56886653	56962579	TC1400000813.mm.1	-0.4	0.012225
TC0300000929.mm.1	ENSMUST00000121155	Gm5391	predicted gene 5391	68319638	68320250	TC0X00002372.mm.1	-0.4	0.012232
TC0300000930.mm.1	NM_001276492	Dag1	dystroglycan 1	108204861	108263958	TC0900003055.mm.1	0.3	0.012261
TC0300000934.mm.1	NM_146061	Prr5	proline rich 5 (renal)	84663244	84703673	TC1500000791.mm.1	0.4	0.012269
TC0300000935.mm.1	ENSMUST00000084614	Gm10288	predicted gene 10288	146838775	146839365	TC0300003108.mm.1	-0.7	0.012271
TC0300000936.mm.1	NM_016910	Ppm1d	protein phosphatase 1D magnesium-dependent,	85311244	85347071	TC1100001291.mm.1	-0.3	0.012287
TC0300000941.mm.1	NM_026481	Tppp3	tubulin polymerization-promoting protein family	105467492	105471526	TC0800002822.mm.1	0.2	0.012307
TC0300000942.mm.1	NCBI_Gene:547330:p	Trav14-	T cell receptor alpha variable 14-3	53763083	54149146	TC1400002809.mm.1	-0.6	0.012328
TC0300000947.mm.1	XM_001476133	Gm3362	predicted pseudogene 3362	37943279	37950528	TC1500001402.mm.1	-1.0	0.012354
TC0300000952.mm.1	NM_001011852	Olfr102	olfactory receptor 1029	85975213	85976273	TC0200001260.mm.1	0.2	0.012364
TC0300000956.mm.1	ENSMUST00000121969	Gm11334	predicted gene 11334	23382505	23382660	TC1300000241.mm.1	-0.5	0.012372
TC0300000958.mm.1	NM_027852	Rarres2	retinoic acid receptor responder (tazarotene in	48569468	48572690	TC0600002225.mm.1	0.8	0.012414
TC0300000979.mm.1	NM_021309	Sh2d2a	SH2 domain protein 2A	87846755	87855722	TC0300000706.mm.1	-0.6	0.012417
TC0300000983.mm.1	NM_007853	Degs1	degenerative spermatocyte homolog 1 (Drosoph	182275770	182282804	TC0100003709.mm.1	0.3	0.012439
TC0300000991.mm.1	NM_010828	Cited2	Cbp/p300-interacting transactivator, with Glu/A	17723228	17725674	TC1000000122.mm.1	0.3	0.01246
TC0300000995.mm.1	ENSMUST00000118709	Rps8-ps	ribosomal protein S8, pseudogene 2	175804983	175805609	TC0200005343.mm.1	-1.1	0.012478
TC0300000996.mm.1	NM_027297	Prpf4	PRP4 pre-mRNA processing factor 4 homolog (ye	62408783	62426990	TC0400000700.mm.1	-0.3	0.012497
TC0300001040.mm.1	NM_001115010	Lin54	lin-54 homolog (C. elegans)	100441918	100500639	TC0500002836.mm.1	-0.2	0.012541
TC0300001047.mm.1	ENSMUST00000081336	Gm6065	predicted gene 6065	17792574	17793065	TC0700000258.mm.1	-0.5	0.012558
TC0300001052.mm.1	XM_889893	H3f3c	H3 histone, family 3C	119665626	119666152	TC0200004444.mm.1	-0.7	0.012567
TC0300001061.mm.1	NM_007589	Calm2	calmodulin 2	87433401	87446935	TC1700002692.mm.1	-0.4	0.012571
TC0300001072.mm.1	NCBI_Gene:436479:p	Trav9-2	T cell receptor alpha variable 9-2	53590974	53592110	TC1400002813.mm.1	-0.7	0.012575
TC0300001076.mm.1	NM_152839	Igj	immunoglobulin joining chain	88519809	88527897	TC0500002712.mm.1	-0.8	0.012695
TC0300001079.mm.1	ENSMUST00000120054	Gm5406	predicted gene 5406	45411580	45412345	TC1600000677.mm.1	-0.3	0.012723
TC0300001081.mm.1	NM_019759	Dpt	dermatopontin	164796718	164824273	TC0100001510.mm.1	1.6	0.012726
TC0300001094.mm.1	NM_008035	Folr2	folate receptor 2 (fetal)	101839988	101845331	TC0700003845.mm.1	1.1	0.012776
TC0300001100.mm.1	ENSMUST00000136893	Rpl36-p	ribosomal protein L36, pseudogene 2	76601319	76601629	TC1100001102.mm.1	-0.7	0.012781
TC0300001109.mm.1	NM_007929	Emp2	epithelial membrane protein 2	10281749	10313968	TC1600001191.mm.1	0.2	0.012785

TC0300001111.mm.1	NM_153062	Slc37a1	solute carrier family 37 (glycerol-3-phosphate	31295483	31350709	TC1700000533.mm.1	-0.2	0.01279
TC0300001116.mm.1	NM_009860	Cdc25c	cell division cycle 25C	34732995	34751533	TC1800001156.mm.1	-0.5	0.012807
TC0300001124.mm.1	NM_018779	Pde3a	phosphodiesterase 3A, cGMP inhibited	141249269	141499351	TC0600001664.mm.1	0.2	0.012864
TC0300001127.mm.1	ENSMUST00000178899	Gm21182	predicted gene, 21182	20556695	20557333	TC0800001827.mm.1	-0.2	0.012885
TC0300001153.mm.1	XM_001480849	Gm9525	predicted gene 9525	22535025	22535297	TC1600001383.mm.1	-0.7	0.012899
TC0300001159.mm.1	NCBI_Gene:667567:p	Trav14-	T cell receptor alpha variable 14-2	53640701	53641225	TC1400002808.mm.1	-0.6	0.012906
TC0300001161.mm.1	NCBI_Gene:384411:p	Igkv12-	immunoglobulin kappa chain variable 12-89	68834846	68835307	TC0600003549.mm.1	-0.6	0.012952
TC0300001164.mm.1	ENSMUST00000172723	Gm5967	predicted gene 5967	37947192	37947685	TC1700000791.mm.1	-0.2	0.012973
TC0300001175.mm.1	NM_133815	Lbr	lamin B receptor	181815315	181842401	TC0100003697.mm.1	-1.2	0.012974
TC0300001181.mm.1	ENSMUST00000183828	RP23-16	N/A	71948879	71948977	TC0900000952.mm.1	-0.5	0.013007
TC0300001184.mm.1	NM_026031	Utp11l	UTP11-like, U3 small nucleolar ribonucleoprotei	124678160	124693600	TC0400003506.mm.1	-0.3	0.013016
TC0300001192.mm.1	ENSMUST00000119515	Gm11814	predicted gene 11814	10438815	10439743	TC0400002193.mm.1	0.4	0.013024
TC0300001198.mm.1	NCBI_Gene:667765:p	Trav10	T cell receptor alpha variable 10	53505727	53506286	TC1400000698.mm.1	-0.4	0.013032
TC0300001214.mm.1	NM_173385	Cilp	cartilage intermediate layer protein, nucleotid	65265180	65280608	TC0900000834.mm.1	0.3	0.013034
TC0300001225.mm.1	NM_133687	Cxxc5	CXXC finger 5	35829818	35861688	TC1800000319.mm.1	-0.2	0.013039
TC0300001226.mm.1	NM_019489	Ppie	peptidylprolyl isomerase E (cyclophilin E)	123127115	123139951	TC0400003478.mm.1	-0.1	0.01307
TC0300001228.mm.1	NM_001080158	Cenpm	centromere protein M	82233762	82244747	TC1500001940.mm.1	-0.4	0.013075
TC0300001229.mm.1	NM_001163769	U2af1	U2 small nuclear ribonucleoprotein auxiliary fa	31647082	31658754	TC1700001824.mm.1	-0.8	0.013125
TC0300001232.mm.1	NM_022024	Gmfg	glia maturation factor, gamma	28437447	28448233	TC0700000501.mm.1	-0.6	0.013147
TC0300001236.mm.1	NCBI_Gene:432702:p	Ighv1-4	immunoglobulin heavy variable 1-4	114487136	114487569	TC1200002600.mm.1	-1.4	0.013161
TC0300001245.mm.1	NM_001146224	Dpy30	dpy-30 homolog (C. elegans)	74299474	74323944	TC1700002534.mm.1	-0.1	0.013164
TC0300001247.mm.1	NM_013546	Hebp1	heme binding protein 1	135137519	135168215	TC0600003314.mm.1	0.6	0.013216
TC0300001249.mm.1	NM_010655	Kpna2	karyopherin (importin) alpha 2	106988629	106999541	TC1100003941.mm.1	-0.8	0.013223
TC0300001250.mm.1	NM_027722	Nudt4	nudix (nucleoside diphosphate linked moiety X)-	95547007	95564167	TC1000002729.mm.1	0.8	0.013231
TC0300001252.mm.1	ENSMUST00000118590	Gm14769	predicted gene 14769	84063333	84063764	TC0X00000819.mm.1	-0.2	0.013247
TC0300001255.mm.1	NM_011322	Scn1b	sodium channel, voltage-gated, type I, beta	31116524	31127023	TC0700002791.mm.1	0.3	0.013258
TC0300001263.mm.1	ENSMUST00000118636	Gm6097	predicted pseudogene 6097	92024567	92024911	TC0300000817.mm.1	-0.3	0.013363
TC0300001287.mm.1	ENSMUST00000080671	Gm14173	predicted gene 14173	156410896	156411174	TC0200004991.mm.1	-0.6	0.013392
TC0300001291.mm.1	NM_178576	Cpsf4	cleavage and polyadenylation specific factor 4	145167213	145182041	TC0500001767.mm.1	-0.3	0.013409
TC0300001306.mm.1	NM_001163522	Emcn	endomucin	137341067	137432185	TC0300001391.mm.1	0.7	0.01344
TC0300001317.mm.1	XR_140487	Gm10115	predicted gene 10115	6950439	6951680	TC0200002912.mm.1	0.5	0.013457
TC0300001319.mm.1	NM_026555	Rcn3	reticulocalbin 3, EF-hand calcium binding domai	45082913	45092221	TC0700002988.mm.1	0.4	0.013464
TC0300001338.mm.1	NM_013536	Emg1	EMG1 nucleolar protein homolog (S. cerevisiae)	124704370	124712178	TC0600003110.mm.1	-0.3	0.013477
TC0300001347.mm.1	NCBI_Gene:627273:p	Trav7d-	T cell receptor alpha variable 7D-5	52835840	52836387	TC1400000633.mm.1	-0.7	0.013497
TC0300001351.mm.1	NCBI_Gene:667635:p	Trav7n-	Trav7n-5 T cell receptor alpha variable 7N-5	53146922	53147448	TC1400000663.mm.1	-0.7	0.013497
TC0300001363.mm.1	NM_008650	Mut	methylmalonyl-Coenzyme A mutase	40934685	40961989	TC1700000819.mm.1	0.6	0.013516
TC0300001364.mm.1	NCBI_Gene:10012468	Trbv20	T cell receptor beta, variable 20	41188273	41188977	TC0600000430.mm.1	-1.9	0.013517
TC0300001365.mm.1	NM_011016	Orm2	orosomucoid 2	63362449	63365878	TC0400000721.mm.1	0.5	0.013529
TC0300001378.mm.1	NM_001204129	C1qtnf1	C1q and tumor necrosis factor related protein 1	118428203	118451782	TC1100001988.mm.1	0.2	0.013541
TC0300001390.mm.1	NM_080289	Grhpr	glyoxylate reductase/hydroxypyruvate reductase	44981395	44990734	TC0400000481.mm.1	0.3	0.01355
TC0300001391.mm.1	ENSMUST00000085720	Rpl36-p	ribosomal protein L36, pseudogene 3	12911986	12912369	TC1200000106.mm.1	-0.7	0.013564
TC0300001393.mm.1	NM_001033196	Znfx1	zinc finger, NFX1-type containing 1	167035793	167063015	TC0200005181.mm.1	0.2	0.013571
TC0300001395.mm.1	ENSMUST00000083820	Gm22723	predicted gene, 22723	60071058	60071186	TC0600002390.mm.1	-0.4	0.013613
TC0300001396.mm.1	ENSMUST00000117512	Gm7222	predicted gene 7222	134828140	134829045	TC0X00003001.mm.1	-0.2	0.013616
TC0300001409.mm.1	NM_007713	Clk3	CDC-like kinase 3	57750709	57765860	TC0900002380.mm.1	-0.7	0.013635
TC0300001413.mm.1	ENSMUST00000122076	Gm14122	predicted gene 14122	150398256	150399399	TC0200004836.mm.1	-0.7	0.013636
TC0300001416.mm.1	ENSMUST00000120190	Gm13991	predicted gene 13991	116527843	116528490	TC0200004388.mm.1	0.3	0.013639
TC0300001417.mm.1	NM_030693	Atf5	activating transcription factor 5	44812256	44816658	TC0700002974.mm.1	0.1	0.013644
TC0300001423.mm.1	NM_009369	Tgfbi	transforming growth factor, beta induced	56609603	56639339	TC1300000691.mm.1	0.5	0.01368
TC0300001444.mm.1	NM_030172	Efcab11	EF-hand calcium binding domain 11	99693047	99883442	TC1200002213.mm.1	-0.1	0.013699
TC0300001447.mm.1	NM_172502	Dcaf15	DDB1 and CUL4 associated factor 15	84097072	84104773	TC0800002569.mm.1	-0.3	0.013745
TC0300001449.mm.1	NM_028264	Tmem55a	transmembrane protein 55A	14864076	14915262	TC0400000127.mm.1	0.2	0.013762
TC0300001451.mm.1	ENSMUST00000117199	Rpl9-ps	ribosomal protein L9, pseudogene 1	83645046	83645621	TC1100003400.mm.1	-0.6	0.013868
TC0300001453.mm.1	NM_020509	Retnla	resistin like alpha	48842552	48844461	TC1600000698.mm.1	1.5	0.013912
TC0300001478.mm.1	NM_026483	Mphosph	M-phase phosphoprotein 10 (U3 small nucleolar	64376541	64392268	TC0700003413.mm.1	-0.2	0.013958
TC0300001486.mm.1	NM_025286	Slc31a2	solute carrier family 31, member 2	62262562	62298411	TC0400000696.mm.1	0.4	0.013971
TC0300001488.mm.1	NM_026418	Rgs10	regulator of G-protein signalling 10	128373621	128418758	TC0700004363.mm.1	-0.2	0.013983
TC0300001490.mm.1	NM_146171	Ncapd2	non-SMC condensin I complex, subunit D2	125168007	125191595	TC0600003136.mm.1	-0.9	0.014003
TC0300001492.mm.1	NM_013487	Cd3d	CD3 antigen, delta polypeptide	44981786	44987052	TC0900000529.mm.1	-1.2	0.014014
TC0300001493.mm.1	NM_029983	Sla2	Src-like-adaptor 2	156872457	156887192	TC0200005003.mm.1	-0.8	0.014035
TC0300001510.mm.1	NM_174960	Gimap9	GTPase, IMAP family member 9	48676129	48679114	TC0600000565.mm.1	-0.8	0.01404
TC0300001522.mm.1	ENSMUST00000120629	Gm6640	predicted gene 6640	23717169	23718755	TC1600001396.mm.1	-0.2	0.014072
TC0300001540.mm.1	NM_028626	Mcee	methylmalonyl CoA epimerase	64392645	64412121	TC0700000979.mm.1	0.5	0.014077
TC0300001544.mm.1	NCBI_Gene:545850:p	Igkv5-4	immunoglobulin kappa chain variable 5-45	69775750	69776306	TC0600003578.mm.1	-1.2	0.014093
TC0300001545.mm.1	ENSMUST00000050706	Gm5815	predicted pseudogene 5815	58593659	58594843	TC1700001038.mm.1	-1.6	0.014115
TC0300001546.mm.1	BC132145	Pde8a	phosphodiesterase 8A	81213596	81334533	TC0700001169.mm.1	0.5	0.014128
TC0300001548.mm.1	ENSMUST00000165025	Traj61	T cell receptor alpha joining 61	54155005	54155076	TC1400000723.mm.1	-1.1	0.014187
TC0300001550.mm.1	NCBI_Gene:692169:p	Igkv15-	immunoglobulin kappa chain variable 15-103	68437468	68437925	TC0600003520.mm.1	-1.1	0.014197
TC0300001556.mm.1	ENSMUST00000122090	Gm13169	predicted gene 13169	146239954	146241633	TC0400001880.mm.1	0.6	0.014216
TC0300001558.mm.1	NM_001113356	C1rb	complement component 1, r subcomponent B	124570294	124581171	TC0600001424.mm.1	0.7	0.014221
TC0300001570.mm.1	NM_001160400	Megf8	multiple EGF-like-domains 8	25317164	25365917	TC0700000413.mm.1	0.1	0.014259
TC0300001574.mm.1	NM_025364	Sarnp	SAP domain containing ribonucleoprotein	128821771	128877638	TC1000001624.mm.1	-0.4	0.014277
TC0300001575.mm.1	NM_001081161	Fam171a	family with sequence similarity 171, member A1	3114224	3227809	TC0200000002.mm.1	0.3	0.01428
TC0300001577.mm.1	NM_013825	Ly75	lymphocyte antigen 75	60292103	60383303	TC0200003601.mm.1	-1.2	0.01431
TC0300001578.mm.1	XM_001003873	Gm9386	predicted pseudogene 9386	80938184	80938714	TC1700002594.mm.1	-0.5	0.014317
TC0300001581.mm.1	NCBI_Gene:10012467	Trbv12-	T cell receptor beta, variable 12-2	41118864	41119368	TC0600003497.mm.1	-1.7	0.01432
TC0300001587.mm.1	NM_001130459	Tcn2	transcobalamin 2	3917077	3932159	TC1100002103.mm.1	0.8	0.014334
TC0300001591.mm.1	uc007pum.1	Gm9998	SubName: Full=Histone protein Hist1h1e;	23684232	23684612	TC1300001639.mm.1	-1.8	0.014367

TC0300001597.mm.1	ENSMUST00000029124	Gm9826	predicted gene 9826	7177739	7179037	TC0100000030.mm.1	-0.3	0.014416
TC0300001604.mm.1	NR_034052	Snora2b	small nucleolar RNA, H/ACA box 2B	98526346	98526482	TC1500002179.mm.1	-0.9	0.014452
TC0300001605.mm.1	NM_010022	Dbt	dihydrolipoamide branched chain transacylase E	116513070	116549981	TC0300001192.mm.1	0.6	0.014464
TC0300001606.mm.1	XM_980604	Gm7866	predicted gene 7866	72174579	72196843	TC0900002630.mm.1	-0.2	0.014489
TC0300001614.mm.1	ENSMUST00000071458	Gm4968	predicted gene 4968	127233756	127234619	TC0600001480.mm.1	-0.5	0.01452
TC0300001615.mm.1	NM_029576	Rab1b	RAB1B, member RAS oncogene family	5099205	5106996	TC1900000952.mm.1	0.5	0.014525
TC0300001616.mm.1	BC057341	Rasgrp1	RAS guanyl releasing protein 1	117279993	117343001	TC0200004396.mm.1	-1.5	0.014567
TC0300001622.mm.1	NM_009281	Zfp143	zinc finger protein 143	110061702	110095394	TC0700001623.mm.1	-0.5	0.014612
TC0300001626.mm.1	XM_887972	Gm6436	predicted gene 6436	61710582	61714802	TC1300002154.mm.1	-0.3	0.014624
TC0300001632.mm.1	NM_177698	Psd3	pleckstrin and Sec7 domain containing 3 (Psd3),	67689082	68062286	TC0800002339.mm.1	0.2	0.014626
TC0300001639.mm.1	ENSMUST00000118846	Csnk2a1	casein kinase 2, alpha 1, pseudogene	16610252	16611426	TC0X00000180.mm.1	-0.2	0.014632
TC0300001643.mm.1	NM_183287	2610318	RIKEN cDNA 2610318N02 gene	17113398	17125106	TC1600001277.mm.1	-0.6	0.014638
TC0300001644.mm.1	XM_001474178	Gm2573	predicted gene 2573	12181147	12181467	TC1500000102.mm.1	0.6	0.014666
TC0300001647.mm.1	BC023893	Creld1	cysteine-rich with EGF-like domains 1	113483297	113493341	TC0600001253.mm.1	0.1	0.014681
TC0300001653.mm.1	NM_029634	Ip6k2	inositol hexaphosphate kinase 2	108783796	108806333	TC0900001422.mm.1	-0.2	0.014683
TC0300001654.mm.1	ENSMUST00000083713	Gm25896	predicted gene, 25896	87418909	87419044	TC1600001984.mm.1	-1.2	0.014705
TC0300001663.mm.1	ENSMUST00000179601	Rpl36-p	ribosomal protein L36, pseudogene 4	87920977	87921393	TC1700001314.mm.1	-0.2	0.014743
TC0300001664.mm.1	NM_016966	Phgdh	3-phosphoglycerate dehydrogenase	98313170	98339990	TC0300002549.mm.1	0.6	0.01475
TC0300001665.mm.1	ENSMUST00000171339	Gm17430	predicted gene, 17430	9726197	9726670	TC1800000965.mm.1	-0.5	0.014788
TC0300001666.mm.1	NM_028979	Cyp2j9	cytochrome P450, family 2, subfamily j, polypep	96568429	96591578	TC0400003100.mm.1	0.4	0.014807
TC0300001674.mm.1	NM_026496	Grhl2	grainyhead-like 2 (Drosophila)	37233036	37363569	TC1500000278.mm.1	-0.1	0.014824
TC0300001679.mm.1	NM_028133	Egln3	EGL nine homolog 3 (C. elegans)	54178981	54203874	TC1200001742.mm.1	-0.3	0.014833
TC0300001681.mm.1	ENSMUST00000178840	Tes3-ps	testis derived transcript 3, pseudogene	49493615	49494819	TC1300000564.mm.1	-0.5	0.014836
TC0300001689.mm.1	ENSMUST00000084908	Gm12918	predicted gene 12918	10848403	10849093	TC0400000075.mm.1	-0.9	0.014848
TC0300001690.mm.1	XM_001480180	Gm15583	predicted gene 15583	146725581	146729490	TC0100001332.mm.1	-0.8	0.014862
TC0300001701.mm.1	ENSMUST00000121487	Gm11604	predicted gene 11604	98185366	98186107	TC1100001559.mm.1	-0.8	0.014877
TC0300001704.mm.1	NM_001254735	BC01764	cDNA sequence BC017643	121222588	121229322	TC1100004249.mm.1	-0.2	0.014918
TC0300001708.mm.1	ENSMUST00000119247	Gm15653	predicted gene 15653	73476444	73477353	TC0500002593.mm.1	-0.4	0.014952
TC0300001717.mm.1	NM_001146117	Smim19	small integral membrane protein 19	22462614	22476879	TC0800001870.mm.1	0.3	0.014953
TC0300001725.mm.1	ENSMUST00000120046	Gm5942	predicted gene 5942	114774319	114774757	TC0X00002887.mm.1	-0.3	0.014987
TC0300001755.mm.1	ENSMUST00000075898	Gm5921	predicted gene 5921	115437700	115438581	TC0900003189.mm.1	-0.3	0.015036
TC0300001763.mm.1	ENSMUST00000082738	Gm22806	predicted gene, 22806	51648199	51648334	TC1300000601.mm.1	-1.7	0.015045
TC0300001765.mm.1	NM_009084	Rpl37a	ribosomal protein L37a	72711260	72713813	TC0100000609.mm.1	-0.4	0.015046
TC0300001769.mm.1	ENSMUST00000157629	Gm24289	predicted gene, 24289	64295931	64296065	TC0900000820.mm.1	-1.3	0.015049
TC0300001786.mm.1	NM_025280	Kin	antigenic determinant of rec-A protein	10080593	10092806	TC0200000082.mm.1	-0.2	0.015075
TC0300001800.mm.1	NM_028245	Zfp131	zinc finger protein 131	119765187	119791107	TC1300002748.mm.1	-0.2	0.01508
TC0300001804.mm.1	ENSMUST00000081138	Gm6984	predicted gene 6984	73953922	73955586	TC1400002400.mm.1	-0.8	0.01513
TC0300001810.mm.1	ENSMUST00000122418	Gm14323	predicted gene 14323	177892638	177893264	TC0200002752.mm.1	-1.0	0.015159
TC0300001811.mm.1	NM_021391	Ppp1r1a	protein phosphatase 1, regulatory (inhibitor) s	103530279	103537992	TC1500002323.mm.1	0.5	0.015179
TC0300001818.mm.1	ENSMUST00000104605	Gm25565	predicted gene, 25565	1308273	1308377	TC0Y00000237.mm.1	0.1	0.015274
TC0300001820.mm.1	NM_026479	Zcchc10	zinc finger, CCHC domain containing 10	53324679	53333301	TC1100000600.mm.1	-0.1	0.015305
TC0300001850.mm.1	NM_027139	Taf9	TAF9 RNA polymerase II, TATA box binding prote	100651343	100666415	TC1300001139.mm.1	-0.3	0.015308
TC0300001855.mm.1	ENSMUST00000178641	Gm17535	predicted gene, 17535	3034599	3035805	TC0900000007.mm.1	0.9	0.015337
TC0300001868.mm.1	ENSMUST00000051629	Gm6960	predicted pseudogene 6960	60426292	60426934	TC1800000611.mm.1	-0.5	0.015352
TC0300001869.mm.1	NM_001163379	Agpat1	1-acylglycerol-3-phosphate O-acyltransferase 1	34604262	34613449	TC1700000639.mm.1	0.2	0.015352
TC0300001871.mm.1	NCBI_Gene:10012439	Traj3	T cell receptor alpha joining 3	54217292	54217357	TC1400000738.mm.1	-0.4	0.015369
TC0300001874.mm.1	NM_028370	Pot1b	protection of telomeres 1B	55652025	55712628	TC1700002298.mm.1	-0.2	0.015374
TC0300001882.mm.1	NM_001081306	Ptprz1	protein tyrosine phosphatase, receptor type Z,	22875502	23052916	TC0600000193.mm.1	-0.3	0.015389
TC0300001883.mm.1	ENSMUST00000121757	Gm13294	predicted gene 13294	11099788	11100264	TC0200002952.mm.1	-0.4	0.015399
TC0300001892.mm.1	NM_013471	Anxa4	annexin A4	86736840	86793584	TC0600002644.mm.1	0.5	0.015399
TC0300001894.mm.1	NM_009994	Cyp1b1	cytochrome P450, family 1, subfamily b, polypep	79706894	79715041	TC1700002571.mm.1	0.4	0.01542
TC0300001903.mm.1	NM_009321	Tbca	tubulin cofactor A	94788920	94842923	TC1300001066.mm.1	-0.4	0.015423
TC0300001906.mm.1	ENSMUST00000161469	Gm16379	predicted pseudogene 16379	14845365	14845712	TC0900001778.mm.1	-0.6	0.015433
TC0300001909.mm.1	NM_080635	Eif3h	eukaryotic translation initiation factor 3, sub	51786558	51865483	TC1500001504.mm.1	-0.8	0.015446
TC0300001913.mm.1	ENSMUST00000117629	Gm15175	predicted gene 15175	157604351	157604482	TC0X00001599.mm.1	-0.3	0.015489
TC0300001924.mm.1	NM_025846	Rras2	related RAS viral (r-ras) oncogene homolog 2	114046782	114117781	TC0700004132.mm.1	-0.2	0.015515
TC0300001927.mm.1	NM_011874	Psmc4	proteasome (prosome, macropain) 26S subunit,	28041702	28050101	TC0700002685.mm.1	-0.4	0.015548
TC0300001975.mm.1	ENSMUST00000117202	Gm13301	predicted gene 13301	42240639	42242685	TC0400000401.mm.1	0.4	0.015575
TC0300001979.mm.1	NM_145073	Hist1h3	histone cluster 1, H3g	23535418	23535951	TC1300000246.mm.1	-0.5	0.015576
TC0300001986.mm.1	NM_008990	Pvrl2	poliovirus receptor-related 2	19716644	19749573	TC0700002499.mm.1	0.1	0.015588
TC0300001990.mm.1	ENSMUST00000102181	Gm24276	predicted gene, 24276	8816138	8816247	TC0100000034.mm.1	-0.5	0.015623
TC0300001993.mm.1	ENSMUST00000119850	Gm12917	predicted gene 12917	124718999	124719637	TC0400001422.mm.1	-0.1	0.015643
TC0300001996.mm.1	NM_001033266	Gm525	predicted gene 525	89073841	89093064	TC1100001389.mm.1	-0.3	0.015661
TC0300002007.mm.1	NM_027860	610010	RIKEN cDNA 0610010F05 gene	23564961	23633639	TC1100002369.mm.1	0.3	0.015661
TC0300002021.mm.1	NM_013456	Actn3	actinin alpha 3	4861216	4877909	TC1900000939.mm.1	-0.2	0.015665
TC0300002023.mm.1	NM_001164156	Mcrs1	microspherule protein 1	99242817	99251961	TC1500002206.mm.1	-0.3	0.015697
TC0300002025.mm.1	NR_110499	Rpl14-p	ribosomal protein L14, pseudogene 1 (Rpl14-ps1	0	0	TSUnmapped0000008	-0.8	0.015706
TC0300002030.mm.1	ENSMUST00000120823	Prkaca-	protein kinase, cAMP dependent, catalytic, alph	161485567	161486485	TC0X00003283.mm.1	0.2	0.015731
TC0300002035.mm.1	ENSMUST00000052882	Gm6863	predicted gene 6863	96922420	96923061	TC1200002173.mm.1	-0.7	0.015755
TC0300002036.mm.1	NM_029415	Slc10a6	solute carrier family 10 (sodium/bile acid cotr	103605711	103629403	TC0500002875.mm.1	0.2	0.015792
TC0300002040.mm.1	NM_144535	Ap5m1	adaptor-related protein complex 5, mu 1 subunit	49066495	49087723	TC1400000541.mm.1	-0.2	0.015814
TC0300002041.mm.1	NR_040420	Gm6568	DnaJ (Hsp40) homolog, subfamily B, member 9 p	157540685	157541782	TC0X00001598.mm.1	0.2	0.015852
TC0300002042.mm.1	ENSMUST00000184890	RP24-37	N/A	7193548	7194172	TC0600001837.mm.1	-0.3	0.015863
TC0300002053.mm.1	NM_011281	Rorc	RAR-related orphan receptor gamma	94372794	94398276	TC0300000864.mm.1	-0.9	0.015885
TC0300002056.mm.1	NCBI_Gene:328482:p	Trav9d-	Trav9d-2 T cell receptor alpha variable 9D-2	52892018	52892708	TC1400002800.mm.1	-0.7	0.015964
TC0300002060.mm.1	NM_178195	Hist1h2	histone cluster 1, H2bf	23573736	23574196	TC1300001635.mm.1	-1.1	0.015989
TC0300002065.mm.1	NM_013868	Hspb7	heat shock protein family, member 7 (cardiovasc	141420779	141425311	TC0400001790.mm.1	1.0	0.01601
TC0300002074.mm.1	ENSMUST00000099049	Gm10719	predicted gene 10719 // predicted gene 11167	3017408	3021593	TC0900000005.mm.1	0.8	0.016014

TC0300002081.mm.1	NM_027494	Zcchc8	zinc finger, CCHC domain containing 8	123698302	123721044	TC0500003240.mm.1	-0.6	0.01604
TC0300002090.mm.1	NM_011865	Pcbp1	poly(rC) binding protein 1	86524492	86526321	TC0600002639.mm.1	-0.2	0.016058
TC0300002091.mm.1	ENSMUST00000118025	Gm15766	predicted gene 15766	147271837	147272649	TC0600001747.mm.1	-0.4	0.016065
TC0300002100.mm.1	ENSMUST00000167829	Traj36	T cell receptor alpha joining 36	54182402	54182464	TC1400000732.mm.1	-0.8	0.016092
TC0300002105.mm.1	NM_001081020	Adamts6	a disintegrin-like and metallopeptidase (reprol	104287873	104494763	TC1300001173.mm.1	-0.2	0.016174
TC0300002112.mm.1	XM_003688789	Gm21104	predicted gene, 21104	42070962	42073398	TC0400002489.mm.1	-0.1	0.0162
TC0300002113.mm.1	NM_025661	Ormdl3	ORM1-like 3 (S. cerevisiae)	98581256	98587368	TC1100003683.mm.1	0.3	0.016202
TC0300002114.mm.1	ENSMUST00000082943	Gm23377	predicted gene, 23377	110121680	110121805	TC0900003103.mm.1	-0.3	0.016242
TC0300002118.mm.1	NCBI_Gene:636127:p	Trav7n-	T cell receptor alpha variable 7N-4	53091239	53091875	TC1400002810.mm.1	-0.6	0.016267
TC0300002124.mm.1	ENSMUST00000086918	Gm5560	predicted pseudogene 5560	97264828	97265719	TC0500000938.mm.1	-0.6	0.016304
TC0300002125.mm.1	NM_008873	Plau	plasminogen activator, urokinase	20836662	20843388	TC1400000176.mm.1	0.8	0.016311
TC0300002134.mm.1	NM_012053	Rpl8	ribosomal protein L8	76904071	76906318	TC1500000614.mm.1	-0.7	0.016357
TC0300002138.mm.1	NM_013470	Anxa3	annexin A3	96793385	96845968	TC0500000928.mm.1	0.5	0.016363
TC0300002139.mm.1	NM_011232	Rad1	RAD1 homolog (S. pombe)	10486018	10499063	TC1500000081.mm.1	-0.1	0.016469
TC0300002143.mm.1	ENSMUST00000120546	Gm12686	predicted gene 12686	99418773	99419169	TC0400001002.mm.1	-0.3	0.016482
TC0300002150.mm.1	ENSMUST00000181797	Gm3466	predicted gene 3466	6690690	6691881	TC1400000063.mm.1	-0.3	0.016483
TC0300002161.mm.1	ENSMUST00000171235	Gm5459	predicted gene 5459	31076635	31077447	TC1400001668.mm.1	-0.9	0.016483
TC0300002176.mm.1	ENSMUST00000080062	Gm17541	predicted gene, 17541	4689402	4689926	TC1200001361.mm.1	-0.7	0.016485
TC0300002182.mm.1	NM_008640	Laptm4a	lysosomal-associated protein transmembrane 4A	8921307	8938742	TC1200000071.mm.1	0.4	0.016489
TC0300002203.mm.1	NR_046364	Map1lc3	microtubule-associated protein 1 light chain 3	155276297	155278073	TC0200002363.mm.1	0.1	0.016489
TC0300002219.mm.1	ENSMUST00000121665	Gm13440	predicted gene 13440	36909095	36909590	TC0200000674.mm.1	-0.4	0.016561
TC0300002220.mm.1	NM_024446	Nudt7	nudix (nucleoside diphosphate linked moiety X)-	114133557	114152312	TC0800001358.mm.1	0.3	0.016618
TC0300002230.mm.1	XR_141348	Gm10554	predicted gene 10554	9879895	9882639	TC1800000069.mm.1	0.3	0.016621
TC0300002236.mm.1	NM_177816	Sh2d4b	SH2 domain containing 4B	40813789	40893266	TC1400001779.mm.1	-0.2	0.01665
TC0300002241.mm.1	NM_008903	Ppap2a	phosphatidic acid phosphatase type 2A	112800777	112867894	TC1300001270.mm.1	0.4	0.016659
TC0300002257.mm.1	ENSMUST00000120290	Gm6142	predicted pseudogene 6142	4320356	4320680	TC1600001125.mm.1	-0.5	0.016668
TC0300002259.mm.1	NM_021606	Nek6	NIMA (never in mitosis gene a)-related expresse	38511643	38588041	TC0200000702.mm.1	0.4	0.016728
TC0300002263.mm.1	NM_146144	Usp1	ubiquitin specific peptidase 1	98923810	98935543	TC0400000992.mm.1	-0.5	0.016753
TC0300002264.mm.1	NM_026121	Bag4	BCL2-associated athanogene 4	25764538	25785287	TC0800001919.mm.1	0.2	0.016788
TC0300002265.mm.1	NM_177583	Aph1b	anterior pharynx defective 1b homolog (C. elega	66775202	66795490	TC0900002529.mm.1	0.2	0.016818
TC0300002266.mm.1	ENSMUST00000082925	Gm24524	predicted gene, 24524	86079766	86079935	TC0500000786.mm.1	-0.4	0.01683
TC0300002269.mm.1	ENSMUST00000116908	Gm22091	predicted gene, 22091	10508453	10508579	TC0200000183.mm.1	-0.2	0.016846
TC0300002273.mm.1	ENSMUST00000098496	BC00718	cDNA sequence BC007180	154762157	154767787	TC0300001556.mm.1	-0.2	0.016858
TC0300002277.mm.1	NM_016770	Folh1	folate hydrolase 1	86718976	86775864	TC0700003699.mm.1	0.9	0.016948
TC0300002282.mm.1	NM_025821	Carhsp1	calcium regulated heat stable protein 1	8658580	8672153	TC1600001177.mm.1	0.6	0.016982
TC0300002284.mm.1	ENSMUST00000120076	Gm8806	predicted gene 8806	80533745	80535151	TC0X00002535.mm.1	-0.7	0.016984
TC0300002289.mm.1	NM_001168577	Nat2	N-acetyltransferase 2 (arylamine N-acetyltransf	67494867	67502580	TC0800000694.mm.1	-0.2	0.017007
TC0300002292.mm.1	NM_011239	Ranbp1	RAN binding protein 1	18239784	18248732	TC1600001308.mm.1	-0.2	0.017017
TC0300002297.mm.1	NM_010027	Ddt	D-dopachrome tautomerase	75771225	75773414	TC1000003225.mm.1	0.3	0.017109
TC0300002300.mm.1	NM_011195	Ptcra	pre T cell antigen receptor alpha	46755663	46763712	TC1700002190.mm.1	-0.5	0.017123
TC0300002303.mm.1	ENSMUST00000099050	Gm10720	predicted gene 10720	3015654	3017210	TC0900000004.mm.1	0.9	0.017157
TC0300002310.mm.1	ENSMUST00000164712	Gm17149	predicted gene 17149	18656615	18656989	TC0800001796.mm.1	-0.7	0.017179
TC0300002311.mm.1	NM_025943	Dzip1	DAZ interacting protein 1	118875520	118925387	TC1400002719.mm.1	-0.3	0.01718
TC0300002316.mm.1	ENSMUST00000118718	Gm15464	predicted gene 15464	60117252	60117685	TC0100000466.mm.1	-0.6	0.017182
TC0300002318.mm.1	NM_011693	Vcam1	vascular cell adhesion molecule 1	116109949	116129688	TC0300002802.mm.1	-0.9	0.017298
TC0300002331.mm.1	NM_030215	Wrnip1	Werner helicase interacting protein 1	32802030	32822610	TC1300000359.mm.1	-0.2	0.017305
TC0300002332.mm.1	ENSMUST00000121232	Gm9430	predicted gene 9430	8662302	8663828	TC0X00001805.mm.1	-0.4	0.017324
TC0300002333.mm.1	NM_013550	Hist1h3	histone cluster 1, H3a	23761853	23762386	TC1300001646.mm.1	-0.9	0.017342
TC0300002334.mm.1	ENSMUST00000078034	Rpl9-ps	ribosomal protein L9, pseudogene 6	32465885	32466575	TC1900001395.mm.1	-0.7	0.01735
TC0300002335.mm.1	NM_153407	Csrnp2	cysteine-serine-rich nuclear protein 2	100479570	100495239	TC1500002240.mm.1	-0.2	0.01735
TC0300002339.mm.1	NM_009345	Dntt	deoxynucleotidyltransferase, terminal	41029275	41059525	TC1900000583.mm.1	-2.1	0.017479
TC0300002341.mm.1	NCBI_Gene:547428:p	Trav19	Trav19 T cell receptor alpha variable 19	53845234	53845831	TC1400000711.mm.1	-0.2	0.017535
TC0300002344.mm.1	NM_027975	Fam83d	family with sequence similarity 83, member D	158768093	158786637	TC0200002442.mm.1	-0.3	0.017569
TC0300002346.mm.1	NR_033581	Adh6-ps	alcohol dehydrogenase 6 (class V), pseudogene 1	138374121	138388291	TC0300001413.mm.1	0.2	0.017626
TC0300002347.mm.1	ENSMUST00000181818	Kansl2-	KAT8 regulatory NSL complex subunit 2, pseudog	72672818	72674278	TC0700001056.mm.1	-0.4	0.017628
TC0300002351.mm.1	NM_178113	Ncapd3	non-SMC condensin II complex, subunit D3	27030175	27095315	TC0900000255.mm.1	-0.7	0.017646
TC0300002352.mm.1	ENSMUST00000179442	Gm21896	predicted gene, 21896	35235411	35236037	TC0Y00000110.mm.1	0.2	0.017679
TC0300002357.mm.1	ENSMUST00000118618	Gm5638	predicted gene 5638	68629428	68630685	TC0X00000611.mm.1	-0.2	0.017706
TC0300002359.mm.1	ENSMUST00000098952	Gm10704	predicted pseudogene 10704	88576245	88577208	TC0300002318.mm.1	-0.5	0.017728
TC0300002362.mm.1	ENSMUST00000158177	Gm24073	predicted gene, 24073	114980428	114980533	TC1400002700.mm.1	0.3	0.01774
TC0300002363.mm.1	uc012ekq.2	TCRB	clone 114908252830411G T-cell receptor beta cl	41139322	41533910	TC0600002151.mm.1	-1.3	0.017806
TC0300002370.mm.1	NM_177372	Dna2	DNA replication helicase 2 homolog (yeast)	62947026	62974188	TC1000000592.mm.1	-0.2	0.017824
TC0300002373.mm.1	ENSMUST00000177265	Gm5777	predicted gene 5777	57782354	57782801	TC1000000507.mm.1	-0.4	0.017842
TC0300002374.mm.1	ENSMUST00000168310	Igkv17-	immunoglobulin kappa chain variable 17-134	67720729	67721225	TC0600002430.mm.1	-0.2	0.017858
TC0300002375.mm.1	ENSMUST00000122052	Gm12785	predicted gene 12785	101210416	101210587	TC0400003153.mm.1	-0.3	0.017866
TC0300002376.mm.1	BC139809	Hist1h4	histone cluster 1, H4c	23698060	23698454	TC1300001640.mm.1	-1.3	0.017901
TC0300002381.mm.1	ENSMUST00000175037	Gm26199	predicted gene, 26199	82317222	82317303	TC1500000749.mm.1	0.5	0.017936
TC0300002382.mm.1	NM_001001186	Zfp456	zinc finger protein 456	67362113	67375810	TC1300002774.mm.1	-0.2	0.017952
TC0300002390.mm.1	NM_015829	Slc25a1	solute carrier family 25 (mitochondrial carrier	6041218	6217173	TC0600001813.mm.1	-0.3	0.018013
TC0300002391.mm.1	NCBI_Gene:667435:p	Igkv17-	immunoglobulin kappa variable 17-121	68036818	68037318	TC0600003514.mm.1	-1.2	0.018016
TC0300002394.mm.1	NM_134138	Psmg2	proteasome (prosome, macropain) assembly cha	67641599	67654162	TC1800000708.mm.1	-0.3	0.018034
TC0300002402.mm.1	ENSMUST00000118899	Gm4991	predicted gene 4991	109910221	109911772	TC0X00001106.mm.1	-0.3	0.018035
TC0300002403.mm.1	NM_008798	Pdcd1	programmed cell death 1	94038305	94052553	TC0100002840.mm.1	-0.3	0.018054
TC0300002416.mm.1	NM_008859	Prkcq	protein kinase C, theta	11172113	11301226	TC0200000211.mm.1	-0.8	0.018087
TC0300002417.mm.1	NM_015767	Ttpa	tocopherol (alpha) transfer protein	20007938	20030785	TC0400000168.mm.1	0.1	0.018095
TC0300002421.mm.1	NM_001166432	Hnrnpf	heterogeneous nuclear ribonucleoprotein F	117900324	117925622	TC0600001322.mm.1	-0.4	0.018104
TC0300002434.mm.1	NM_016928	Tlr5	toll-like receptor 5	182954788	182976044	TC0100001754.mm.1	0.3	0.018107
TC0300002451.mm.1	NM_207022	Tas2r11	taste receptor, type 2, member 118	23969161	23970060	TC0600001938.mm.1	0.2	0.018198

TC0300002452.mm.1	NM_175668	Gpr4	G protein-coupled receptor 4	19212538	19224176	TC0700000292.mm.1	0.2	0.018206
TC0300002453.mm.1	ENSMUST00000101994	Gm24539	predicted gene, 24539	62136930	62137062	TC1300000751.mm.1	-0.4	0.018238
TC0300002460.mm.1	ENSMUST00000177835	Gm24315	predicted gene, 24315	10480165	10480291	TC0200000118.mm.1	-0.3	0.018252
TC0300002464.mm.1	NM_177870	Slc5a6	solute carrier family 5 (sodium-dependent vitam	31036036	31048924	TC0500002170.mm.1	0.1	0.018303
TC0300002467.mm.1	NM_016792	Txnl1	thioredoxin-like 1	63662801	63692386	TC1800001453.mm.1	-0.3	0.01831
TC0300002470.mm.1	NM_008741	Nsg2	neuron specific gene family member 2	32000459	32059202	TC1100000327.mm.1	-0.9	0.018325
TC0300002473.mm.1	NM_019398	Ear5	eosinophil-associated, ribonuclease A family, m	51162260	51163018	TC1400000581.mm.1	0.2	0.018326
TC0300002475.mm.1	NCBI_Gene:10012646	Trav13-	T cell receptor alpha variable 13-1	53545014	53545525	TC1400002816.mm.1	-0.4	0.018372
TC0300002479.mm.1	ENSMUST00000180094	Gm26060	predicted gene, 26060	10486946	10487068	TC0200000134.mm.1	-0.2	0.01839
TC0300002483.mm.1	ENSMUST00000177866	Gm26426	predicted gene, 26426	10494321	10494443	TC0200000152.mm.1	-0.2	0.01839
TC0300002487.mm.1	NM_011594	Timp2	tissue inhibitor of metalloproteinase 2	118301061	118355740	TC1100004157.mm.1	0.7	0.018457
TC0300002490.mm.1	ENSMUST00000118044	Gm12699	predicted gene 12699	100567108	100568048	TC0400003146.mm.1	0.6	0.018461
TC0300002492.mm.1	NM_001168578	Tceal8	transcription elongation factor A (SII)-like 8	136168984	136172342	TC0X00003021.mm.1	0.2	0.018461
TC0300002499.mm.1	NM_008459	Klra10	killer cell lectin-like receptor subfamily A, m	130269194	130281928	TC0600003612.mm.1	-0.3	0.018468
TC0300002500.mm.1	NM_028060	Slc35f2	solute carrier family 35, member F2	53771535	53818161	TC0900000647.mm.1	-0.2	0.018507
TC0300002501.mm.1	NCBI_Gene:10012468	Trbv16	T cell receptor beta, variable 16	41151174	41152230	TC0600000428.mm.1	-0.9	0.018509
TC0300002504.mm.1	NM_021719	Cldn15	claudin 15	136966616	136975858	TC0500001614.mm.1	0.4	0.018531
TC0300002506.mm.1	ENSMUST00000179168	Gm16378	predicted gene 16378	122841731	122842072	TC0800001500.mm.1	-0.5	0.018531
TC0300002508.mm.1	ENSMUST00000179015	Gm26398	predicted gene, 26398	10504647	10504773	TC0200000176.mm.1	-0.3	0.018535
TC0300002517.mm.1	XM_001480721	Gm4604	predicted gene 4604	108140120	108140509	TC0600002882.mm.1	-0.6	0.018573
TC0300002518.mm.1	ENSMUST00000157287	Gm24916	predicted gene, 24916	31015148	31015226	TC1400001667.mm.1	-0.8	0.018582
TC0300002524.mm.1	uc029urg.1	Gm5859	SubName: Full=Putative uncharacterized protein	41886578	41887367	TC0400000385.mm.1	0.3	0.018607
TC0300002527.mm.1	ENSMUST00000075573	Gm10106	predicted gene 10106 // predicted gene 10717	3025417	3033289	TC0900000006.mm.1	0.8	0.018613
TC0300002528.mm.1	ENSMUST00000082678	Gm26457	predicted gene, 26457	63178677	63178754	TC0100000520.mm.1	-0.9	0.018617
TC0300002531.mm.1	NM_019949	Ube2l6	ubiquitin-conjugating enzyme E2L 6	84798828	84810335	TC0200001222.mm.1	0.2	0.018661
TC0300002541.mm.1	NM_001029844	Vrk1	vaccinia related kinase 1	106010228	106077410	TC1200001077.mm.1	-0.3	0.018663
TC0300002542.mm.1	ENSMUST00000100555	Gm7935	predicted pseudogene 7935	74080234	74081511	TC1500001704.mm.1	-0.5	0.018664
TC0300002549.mm.1	ENSMUST00000182000	Gm17786	predicted gene, 17786	121581765	121582191	TC0800001464.mm.1	-0.8	0.018665
TC0300002551.mm.1	NM_008876	Pld2	phospholipase D2	70540064	70558110	TC1100000956.mm.1	0.1	0.018686
TC0300002554.mm.1	NCBI_Gene:10012645	Trav16n	T cell receptor alpha variable 16n	53351028	53351621	TC1400000688.mm.1	-0.4	0.0187
TC0300002557.mm.1	NM_173740	Maoa	monoamine oxidase A	16619698	16687818	TC0X00000181.mm.1	0.5	0.018748
TC0300002558.mm.1	NM_008845	Pip4k2a	phosphatidylinositol-5-phosphate 4-kinase, type	18842255	18998126	TC0200003051.mm.1	-0.8	0.018753
TC0300002559.mm.1	NM_178182	Hist1h2	histone cluster 1, H2ai	21716412	21717454	TC1300000173.mm.1	-0.5	0.018773
TC0300002563.mm.1	NM_024217	Cmtm3	CKLF-like MARVEL transmembrane domain conta	104340594	104347672	TC0800001182.mm.1	0.4	0.018798
TC0300002564.mm.1	ENSMUST00000158223	Gm26352	predicted gene, 26352	43902928	43903052	TC0100000331.mm.1	0.3	0.018854
TC0300002566.mm.1	OTTMUST00000113549	RP23-46	novel transcript (RIKEN cDNA A930002I21 gene)	107090880	107098401	TC0300001111.mm.1	-0.5	0.018855
TC0300002569.mm.1	NM_001080706	Btaf1	BTAF1 RNA polymerase II, B-TFIID transcription	36926079	37014057	TC1900000523.mm.1	-0.2	0.018855
TC0300002576.mm.1	ENSMUST00000155807	Gm10715	predicted gene 10715	3036877	3038316	TC0900000008.mm.1	0.8	0.018917
TC0300002599.mm.1	NM_178198	Hist1h2	histone cluster 1, H2bj	22043214	22043676	TC1300000192.mm.1	-0.9	0.018987
TC0300002612.mm.1	NM_178199	Hist1h2	histone cluster 1, H2bl	21715763	21716143	TC1300001555.mm.1	-1.3	0.018993
TC0300002621.mm.1	ENSMUST00000172394	Gm17060	predicted gene 17060	49424061	49424884	TC0600002243.mm.1	-0.3	0.01901
TC0300002625.mm.1	NM_145600	Zfp330	zinc finger protein 330	82763620	82774160	TC0800002544.mm.1	-0.2	0.019021
TC0300002627.mm.1	ENSMUST00000177903	Gm15500	predicted pseudogene 15500	114705216	114706235	TC0700004143.mm.1	-0.6	0.019049
TC0300002628.mm.1	NM_018754	Sfn	stratifin	133600556	133602168	TC0400003707.mm.1	-0.2	0.019057
TC0300002633.mm.1	NM_172146	Ppat	phosphoribosyl pyrophosphate amidotransferase	76913249	76951578	TC0500002642.mm.1	-0.3	0.01906
TC0300002652.mm.1	ENSMUST00000120110	Gm13204	predicted gene 13204	148569056	148569876	TC0400004024.mm.1	-0.2	0.019094
TC0300002665.mm.1	NM_010942	Nsg1	neuron specific gene family member 1	38137193	38159467	TC0500002280.mm.1	0.1	0.019108
TC0300002672.mm.1	ENSMUST00000177733	Gm24167	predicted gene, 24167	10489410	10489533	TC0200000140.mm.1	-0.3	0.019152
TC0300002674.mm.1	ENSMUST00000178991	Gm24028	predicted gene, 24028	10496791	10496914	TC0200000158.mm.1	-0.3	0.019152
TC0300002688.mm.1	NM_001110145	Ssb	Sjogren syndrome antigen B	69861562	69871846	TC0200001013.mm.1	-0.5	0.019179
TC0300002695.mm.1	NM_009898	Coro1a	coronin, actin binding protein 1A	126699773	126707787	TC0700004293.mm.1	-0.7	0.019242
TC0300002706.mm.1	NM_133664	Lad1	ladinin	135818598	135833341	TC0100001256.mm.1	-0.2	0.019272
TC0300002714.mm.1	ENSMUST00000072389	Slc39a1	solute carrier family 39 (zinc transporter), me	30159395	30160366	TC0200000526.mm.1	0.5	0.019295
TC0300002718.mm.1	NM_027828	Fam110c	family with sequence similarity 110, member C	31073968	31079944	TC1200000260.mm.1	0.5	0.019335
TC0300002722.mm.1	NM_175662	Hist2h2	histone cluster 2, H2ac	96220361	96220880	TC0300002499.mm.1	-1.4	0.019364
TC0300002725.mm.1	ENSMUST00000164001	Gm5244	predicted pseudogene 5244	12846773	12847273	TC1900000256.mm.1	-0.2	0.019378
TC0300002728.mm.1	NM_007465	Birc2	baculoviral IAP repeat-containing 2	7818226	7835255	TC0900001720.mm.1	-0.2	0.019409
TC0300002731.mm.1	NM_021887	Il21r	interleukin 21 receptor	125603429	125633570	TC0700001794.mm.1	-0.4	0.019427
TC0300002734.mm.1	NM_001163815	Vav1	vav 1 oncogene	57279100	57329236	TC1700001033.mm.1	-0.8	0.019513
TC0300002742.mm.1	ENSMUST00000157479	Gm22380	predicted gene, 22380	24351118	24351212	TC0900000234.mm.1	-0.2	0.019528
TC0300002747.mm.1	NM_178610	Krr1	KRR1, small subunit (SSU) processome compone	111972664	111988432	TC1000001304.mm.1	-0.2	0.019534
TC0300002750.mm.1	ENSMUST00000119853	Gm12174	predicted gene 12174	46727818	46728630	TC1100000482.mm.1	-1.0	0.019535
TC0300002756.mm.1	NM_001029841	Sla	src-like adaptor	66780819	66831829	TC1500001656.mm.1	-1.0	0.019539
TC0300002758.mm.1	ENSMUST00000122451	Gm1947	predicted pseudogene 1947	157429417	157430326	TC0X00001594.mm.1	-0.3	0.019573
TC0300002770.mm.1	XR_105304	Gm16794	predicted gene, 16794	95942045	95959393	TC0900002873.mm.1	-0.2	0.019632
TC0300002776.mm.1	NCBI_Gene:640196:p	Trav11d	T cell receptor alpha variable 11D	52824340	52824913	TC1400000632.mm.1	-0.4	0.019647
TC0300002777.mm.1	NM_172635	Patl1	protein associated with topoisomerase II homolo	11912399	11945096	TC1900000235.mm.1	-0.2	0.01968
TC0300002778.mm.1	NM_009859	7-Sep	septin 7	25252439	25308571	TC0900000244.mm.1	-0.4	0.019691
TC0300002785.mm.1	ENSMUST00000120646	Gm7722	predicted gene 7722	46535855	46536625	TC0X00002147.mm.1	-0.3	0.019721
TC0300002790.mm.1	XM_286185	Gm5093	predicted gene 5093	46439503	46440099	TC1700002176.mm.1	-0.5	0.019739
TC0300002791.mm.1	NM_019687	Slc22a4	solute carrier family 22 (organic cation transp	53983123	54028090	TC1100002754.mm.1	0.5	0.019742
TC0300002797.mm.1	ENSMUST00000082661	Gm22300	predicted gene, 22300	56913642	56913767	TC0400000623.mm.1	-0.3	0.019751
TC0300002801.mm.1	NCBI_Gene:10012645	Trav8n-	T cell receptor alpha variable 8n-2	53345890	53346424	TC1400002827.mm.1	-0.4	0.019765
TC0300002802.mm.1	NM_008551	Mapkapk	MAP kinase-activated protein kinase 2	131053700	131097543	TC0100003051.mm.1	0.3	0.01978
TC0300002805.mm.1	NM_175482	Usp28	ubiquitin specific peptidase 28	48985385	49042517	TC0900000589.mm.1	-0.2	0.019806
TC0300002807.mm.1	NM_009846	Cd24a	CD24a antigen	43579169	43584265	TC1000000402.mm.1	-1.1	0.019819
TC0300002809.mm.1	NM_001081234	Pigg	phosphatidylinositol glycan anchor biosynthesis	108312609	108349355	TC0500001099.mm.1	0.2	0.019845
TC0300002823.mm.1	NM_029701	Spcs3	signal peptidase complex subunit 3 homolog (S.	54520433	54529998	TC0800002236.mm.1	-0.3	0.019851

TC0300002827.mm.1	NM_021551	Slc22a1	solute carrier family 22 (organic cation transp	54906304	54913132	TC1400002071.mm.1	0.1	0.019861
TC0300002832.mm.1	ENSMUST00000104106	Gm24123	predicted gene, 24123	93164902	93164984	TC0X00000880.mm.1	-0.6	0.019865
TC0300002834.mm.1	NM_145503	Lzts2	leucine zipper, putative tumor suppressor 2	45015176	45027104	TC1900000662.mm.1	0.1	0.019906
TC0300002837.mm.1	ENSMUST00000165299	LOC5467	40S ribosomal protein S25-like	35770318	35770671	TC1800000317.mm.1	-0.2	0.019945
TC0300002840.mm.1	NM_133887	Stx12	syntaxin 12	132853501	132884509	TC0400003685.mm.1	0.3	0.019951
TC0300002856.mm.1	NR_102685	Gm6815	zinc finger, BED domain containing 4 pseudogen	36194480	36197886	TC1600001566.mm.1	-0.2	0.019952
TC0300002857.mm.1	NM_028679	Irak3	interleukin-1 receptor-associated kinase 3	120141648	120202130	TC1000003019.mm.1	0.4	0.019984
TC0300002867.mm.1	ENSMUST00000158887	Gm26287	predicted gene, 26287	59704258	59704338	TC0100000459.mm.1	-0.9	0.019984
TC0300002871.mm.1	ENSMUST00000078052	Gm6054	predicted gene 6054	147408982	147409359	TC0500001806.mm.1	0.5	0.020021
TC0300002876.mm.1	ENSMUST00000134558	Gm16265	predicted gene 16265	12670635	12670742	TC0X00000153.mm.1	-0.4	0.020038
TC0300002882.mm.1	NM_009886	Celsr1	cadherin, EGF LAG seven-pass G-type receptor 1	85898758	86033777	TC1500002010.mm.1	-0.3	0.020043
TC0300002883.mm.1	NM_010684	Lamp1	lysosomal-associated membrane protein 1	13159135	13175338	TC0800000123.mm.1	0.8	0.020051
TC0300002895.mm.1	NM_022021	Cables1	CDK5 and Abl enzyme substrate 1	11839220	11945627	TC1800000094.mm.1	0.2	0.020124
TC0300002906.mm.1	ENSMUST00000172445	Rps8-ps	ribosomal protein S8, pseudogene 1	56354619	56355074	TC1000002187.mm.1	-1.1	0.020133
TC0300002913.mm.1	ENSMUST00000178288	Gm8546	predicted gene 8546	89577155	89578413	TC1300002391.mm.1	-0.2	0.020159
TC0300002916.mm.1	NM_175649	Tnfrsf2	tumor necrosis factor receptor superfamily, mer	143607685	143627892	TC0700004591.mm.1	-0.4	0.020173
TC0300002920.mm.1	ENSMUST00000178167	GM6489	---	31286945	31287706	TC0100000196.mm.1	-0.3	0.020241
TC0300002923.mm.1	ENSMUST00000158888	Gm24875	predicted gene, 24875	25031350	25031453	TC0200003126.mm.1	0.1	0.020257
TC0300002926.mm.1	ENSMUST00000075549	Rpl9-ps	ribosomal protein L9, pseudogene 4	72454762	72455340	TC1300002292.mm.1	-0.7	0.020351
TC0300002933.mm.1	XM_001474690	Gm10071	predicted gene 10071	58987170	58987805	TC0300000465.mm.1	-0.8	0.020365
TC0300002938.mm.1	NM_024223	Crip2	cysteine rich protein 2	113140236	113145506	TC1200001281.mm.1	0.5	0.020372
TC0300002944.mm.1	NM_001037997	Fert2	fer (fms/fps related) protein kinase, testis sp	63863981	64139496	TC1700001053.mm.1	0.3	0.020379
TC0300002955.mm.1	NM_010705	Lgals3	lectin, galactose binding, soluble 3	47367751	47386167	TC1400000513.mm.1	0.2	0.020384
TC0300002957.mm.1	NCBI_Gene:620297:p	Trav6n-	T cell receptor alpha variable 6N-6	53132700	53133137	TC1400002805.mm.1	-0.7	0.020448
TC0300002965.mm.1	ENSMUST00000157165	Gm25970	predicted gene, 25970	65056573	65056658	TC1200000527.mm.1	-0.8	0.020466
TC0300002969.mm.1	ENSMUST00000105172	Gm6096	predicted gene 6096	34251038	34251493	TC0700000635.mm.1	-0.2	0.020477
TC0300002981.mm.1	NM_172609	Tomm22	translocase of outer mitochondrial membrane 2	79670861	79672866	TC1500000678.mm.1	-0.3	0.020529
TC0300002983.mm.1	ENSMUST00000178097	Tpd52-p	tumor protein D52, pseudogene	79680266	79680824	TC0800002522.mm.1	-0.2	0.020566
TC0300002993.mm.1	ENSMUST00000081864	Gm5239	predicted pseudogene 5239	35536583	35536951	TC1800000309.mm.1	-0.5	0.020631
TC0300002997.mm.1	NM_024290	Tnfrsf2	tumor necrosis factor receptor superfamily, mer	143665807	143685872	TC0700004593.mm.1	0.3	0.02065
TC0300002998.mm.1	NM_027539	Dclk2	doublecortin-like kinase 2	86786150	86920884	TC0300002273.mm.1	-0.2	0.020654
TC0300003007.mm.1	NM_025586	Rpl15	ribosomal protein L15	18267823	18271391	TC1400001500.mm.1	-0.2	0.020674
TC0300003012.mm.1	NCBI_Gene:10004332	Trav12-	T cell receptor alpha variable 12-2	53616315	53616915	TC1400000702.mm.1	-0.5	0.020707
TC0300003020.mm.1	NM_025813	Mfsd1	major facilitator superfamily domain containing	67582768	67604233	TC0300000555.mm.1	0.5	0.020735
TC0300003022.mm.1	NM_008902	Endou	endonuclease, polyU-specific	97711019	97731405	TC1500002155.mm.1	-1.0	0.020784
TC0300003030.mm.1	NM_175540	Eda2r	ectodysplasin A2 receptor	97333840	97377216	TC0X00002685.mm.1	0.1	0.020808
TC0300003053.mm.1	NCBI_Gene:381778:p	Igkv16-	immunoglobulin kappa variable 16-104	68425605	68426072	TC0600003519.mm.1	-0.9	0.020858
TC0300003071.mm.1	NM_016958	Krt14	keratin 14	100203162	100207548	TC1100003760.mm.1	-0.4	0.020904
TC0300003087.mm.1	NM_031842	Smarcd1	SWI/SNF related, matrix associated, actin depen	99702287	99713995	TC1500001022.mm.1	-0.3	0.020909
TC0300003093.mm.1	NM_145478	Pim3	proviral integration site 3	88862186	88865726	TC1500000854.mm.1	0.2	0.020909
TC0300003098.mm.1	ENSMUST00000122768	Gm24630	predicted gene, 24630	150708044	150708149	TC0500001870.mm.1	-0.4	0.020952
TC0300003100.mm.1	NM_001166540	Hmga1	high mobility group AT-hook 1	27556574	27563674	TC1700000461.mm.1	-0.3	0.020982
TC0300003101.mm.1	NM_001081188	Exosc7	exosome component 7	123113215	123136129	TC0900001656.mm.1	-0.2	0.021027
TC0300003108.mm.1	NM_020332	Ank	progressive ankylosis	27466677	27594909	TC1500000175.mm.1	0.4	0.021037
TC0300003128.mm.1	NM_027629	Pgm2l1	phosphoglucomutase 2-like 1	100227394	100278872	TC0700001402.mm.1	-0.2	0.021048
TC0300003129.mm.1	ENSMUST00000155839	Gm4835	predicted pseudogene 4835	15988368	15989339	TC1800000136.mm.1	-0.3	0.02108
TC0300003134.mm.1	NM_001042580	Cd63	CD63 antigen	128908919	128912822	TC1000001625.mm.1	0.6	0.021097
TC0300003137.mm.1	ENSMUST00000121512	Gm12444	predicted gene 12444	46243014	46243890	TC0400002593.mm.1	0.3	0.02111
TC0300003140.mm.1	ENSMUST00000083918	Gm22353	predicted gene, 22353	38058285	38058420	TC1500000287.mm.1	-1.1	0.021116
TC0300003151.mm.1	XM_001474105	Gm15501	ribosomal protein S8 pseudogene	93178983	93179669	TC0700003747.mm.1	-0.9	0.021183
TC0300003165.mm.1	NM_001199433	Dnmt1	DNA methyltransferase (cytosine-5) 1	20907206	20959888	TC0900001851.mm.1	-0.7	0.021185
TC0300003171.mm.1	ENSMUST00000139070	Gm7613	predicted gene 7613	59766717	59767203	TC0900002422.mm.1	-0.8	0.021195
TC0300003172.mm.1	ENSMUST00000171547	Gm6467	predicted gene 6467	21896506	21897116	TC1600000306.mm.1	-0.7	0.021197
TC0300003184.mm.1	ENSMUST00000170943	Gm8775	predicted gene 8775	4211716	4212228	TC0300000009.mm.1	-0.5	0.021212
TC0300003190.mm.1	BC137721	Ddx20	DEAD (Asp-Glu-Ala-Asp) box polypeptide 20	105678270	105687574	TC0300002672.mm.1	-0.3	0.021217
TC0300003191.mm.1	ENSMUST00000163185	Gm7701	predicted gene 7701	24257378	24258856	TC1800000192.mm.1	-0.1	0.021252
TC0300003194.mm.1	NM_023135	Sult1e1	sulfotransferase family 1E, member 1	87575968	87591611	TC0500002700.mm.1	0.8	0.021344
TC0300003206.mm.1	ENSMUST00000095396	Gm4799	predicted gene 4799	82954344	82955000	TC1000000936.mm.1	-0.4	0.021367
TC0300003210.mm.1	ENSMUST00000119653	Gm16148	predicted gene 16148	3946199	3947091	TC1000001672.mm.1	-0.3	0.021435
TC0300003215.mm.1	ENSMUST00000042280	Gm7964	predicted gene 7964	83755904	83757356	TC0700001201.mm.1	-0.8	0.021444
TC0300003216.mm.1	XM_001478802	Gm4199	predicted gene 4199	108094129	108094485	TC0700004045.mm.1	-0.4	0.021486
TC0300003225.mm.1	NM_026532	Nutf2	nuclear transport factor 2	105860580	105880402	TC0800001231.mm.1	-0.4	0.021524
TC0300003226.mm.1	NM_010608	Kcnk3	potassium channel, subfamily K, member 3	30588170	30625270	TC0500000295.mm.1	0.3	0.021526
TC0300003246.mm.1	NM_027967	Fam217a	family with sequence similarity 217, member A	34909964	34919992	TC1300001792.mm.1	0.3	0.021527
TC0300003247.mm.1	NM_175661	Hist1h2	histone cluster 1, H2af	23533906	23534304	TC1300000245.mm.1	-1.3	0.021529
TC0300003250.mm.1	NM_172682	Fam160a	family with sequence similarity 160, member A1	85660061	85746266	TC0300002257.mm.1	0.1	0.021543
TC0300003251.mm.1	NM_009903	Cldn4	claudin 4	134945123	134946934	TC0500003384.mm.1	-0.3	0.021551
TC0300003252.mm.1	NCBI_Gene:667476:p	Trav8d-	T cell receptor alpha variable 8D-1	52778447	52778995	TC1400000627.mm.1	-0.3	0.021619
TC0400000007.mm.1	NM_001252089	Rbmxl1	RNA binding motif protein, X linked-like-1	78505269	78508928	TC0800002510.mm.1	-0.2	0.021657
TC0400000010.mm.1	ENSMUST00000140747	Gm16305	predicted gene 16305	138991550	138992021	TC0100003180.mm.1	-0.4	0.021669
TC0400000036.mm.1	NM_001289915	Cd83	CD83 antigen (Cd83), transcript variant 2, mRNA	0	0	TSUnmapped0000004	-0.8	0.021669
TC0400000048.mm.1	ENSMUST00000180049	Gm6919	predicted gene 6919	53598181	53598663	TC1700002284.mm.1	-0.3	0.021683
TC0400000050.mm.1	NM_138584	Spg21	spastic paraplegia 21 homolog (human)	65460937	65488470	TC0900000845.mm.1	0.3	0.02171
TC0400000052.mm.1	NCBI_Gene:10004330	Trav14n	T cell receptor alpha variable 14N-3	53370054	53370575	TC1400002807.mm.1	-0.5	0.021728
TC0400000063.mm.1	ENSMUST00000120436	Gm10601	predicted pseudogene 10601	41809083	41810504	TC0400000383.mm.1	0.3	0.021737
TC0400000067.mm.1	NM_027558	Pgrmc2	progesterone receptor membrane component 2	41066326	41083046	TC0300001909.mm.1	0.2	0.021764
TC0400000074.mm.1	NM_001081007	Zfp382	zinc finger protein 382	30121942	30135032	TC0700000548.mm.1	-0.2	0.021779
TC0400000075.mm.1	ENSMUST00000092020	Gm8444	predicted gene 8444	81843343	81843699	TC1500001930.mm.1	-0.5	0.02182

TC0400000076.mm.1	XR_104866	2310067	RIKEN cDNA 2310067E19 gene	82454770	82458099	TC0400002936.mm.1	0.2	0.021838
TC0400000081.mm.1	NR_029726	Mirlet7	microRNA let7a-2	41536716	41536811	TC0900000470.mm.1	0.2	0.021842
TC0400000082.mm.1	ENSMUST00000082002	Gm7808	predicted pseudogene 7808	19927896	19928282	TC0900001826.mm.1	-0.6	0.021857
TC0400000083.mm.1	XR_141370	Gm19939	predicted gene, 19939	51130503	51133337	TC1800000518.mm.1	0.3	0.021862
TC0400000089.mm.1	ENSMUST00000168856	Gm17181	predicted gene 17181	87514175	87514297	TC0100000818.mm.1	-0.4	0.021866
TC0400000093.mm.1	NM_009768	Bsg	basigin	79704358	79711979	TC1000000812.mm.1	0.7	0.021951
TC0400000096.mm.1	NM_022996	Ndfip1	Nedd4 family interacting protein 1	38418975	38464839	TC1800000401.mm.1	0.4	0.021963
TC0400000106.mm.1	XM_001478520	Gm10177	predicted gene 10177	37252922	37253365	TC0900000360.mm.1	-0.4	0.021967
TC0400000109.mm.1	ENSMUST00000089898	Rps15-p	ribosomal protein S15, pseudogene 2	58017490	58017975	TC0600000701.mm.1	-0.6	0.022007
TC0400000113.mm.1	NM_009338	Acat2	acetyl-Coenzyme A acetyltransferase 2	12942890	12960747	TC1700001459.mm.1	0.3	0.022087
TC0400000122.mm.1	NM_030564	Rnf34	ring finger protein 34	122823771	122868945	TC0500001403.mm.1	-0.2	0.022117
TC0400000124.mm.1	NM_027237	2010003	RIKEN cDNA 2010003K11 gene	4496788	4498583	TC1900000924.mm.1	0.1	0.022209
TC0400000127.mm.1	ENSMUST00000122256	Gm14200	predicted gene 14200	158468169	158468360	TC0200005036.mm.1	-0.6	0.022229
TC0400000133.mm.1	NM_001290010	Ache	acetylcholinesterase (Ache), transcript variant	0	0	TSUnmapped0000003	-0.5	0.022252
TC0400000134.mm.1	NM_024255	Hsdl2	hydroxysteroid dehydrogenase like 2	59581563	59618694	TC0400000659.mm.1	0.4	0.022286
TC0400000137.mm.1	ENSMUST00000162698	Gm3531	predicted pseudogene 3531	97948901	97949389	TC0100002868.mm.1	-0.6	0.0223
TC0400000140.mm.1	NM_007720	Ccr8	chemokine (C-C motif) receptor 8	120092133	120094906	TC0900001592.mm.1	-0.2	0.022305
TC0400000144.mm.1	ENSMUST00000121107	Gm13450	predicted gene 13450	34964877	34964904	TC0200003356.mm.1	-1.0	0.022307
TC0400000147.mm.1	NM_033596	Hist2h4	histone cluster 2, H4	96261682	96263317	TC0300002504.mm.1	-0.6	0.022307
TC0400000163.mm.1	ENSMUST00000120328	Gm13729	predicted gene 13729	87304739	87305144	TC0200001284.mm.1	-0.3	0.022364
TC0400000167.mm.1	NM_026453	Mak16	MAK16 homolog (S. cerevisiae)	31159467	31168739	TC0800001977.mm.1	-0.4	0.022397
TC0400000168.mm.1	XM_003688930	Gm21685	predicted gene, 21685	69555401	69585613	TC1400000980.mm.1	0.3	0.022413
TC0400000169.mm.1	NM_153173	Hist1h4	histone cluster 1, H4h	23531044	23531522	TC1300000244.mm.1	-0.5	0.022437
TC0400000171.mm.1	NM_146203	Zfp764	zinc finger protein 764	127403668	127406822	TC0700004326.mm.1	-0.2	0.022478
TC0400000175.mm.1	NM_008048	Igfbp7	insulin-like growth factor binding protein 7	77349240	77408045	TC0500002651.mm.1	1.0	0.022512
TC0400000198.mm.1	NM_030710	Slamf6	SLAM family member 6	171917537	171953167	TC0100001604.mm.1	-1.1	0.022529
TC0400000205.mm.1	NM_025485	Mrps22	mitochondrial ribosomal protein S22	98588730	98601679	TC0900002908.mm.1	-0.2	0.022545
TC0400000219.mm.1	NM_031395	Sytl3	synaptotagmin-like 3	6659093	6738044	TC1700000064.mm.1	-0.4	0.022562
TC0400000223.mm.1	NM_145492	Zfp521	zinc finger protein 521	13687013	13972733	TC1800001005.mm.1	0.2	0.022602
TC0400000227.mm.1	NM_145619	Parp3	poly (ADP-ribose) polymerase family, member 3	106470322	106476949	TC0900003011.mm.1	0.3	0.022634
TC0400000228.mm.1	ENSMUST00000088648	Rpl31-p	ribosomal protein L31, pseudogene 8	90764246	90764679	TC1500002069.mm.1	-1.2	0.022773
TC0400000238.mm.1	NM_001048061	Hnrnpab	heterogeneous nuclear ribonucleoprotein A/B	51600100	51606881	TC1100002694.mm.1	-0.6	0.022783
TC0400000248.mm.1	ENSMUST00000164523	Gm5611	predicted gene 5611	17030045	17030899	TC0900000131.mm.1	-0.8	0.022793
TC0400000253.mm.1	NM_053168	Trim11	tripartite motif-containing 11	58978093	58991458	TC1100000715.mm.1	-0.2	0.022799
TC0400000277.mm.1	ENSMUST00000158110	Gm23897	predicted gene, 23897	64318407	64318564	TC0300002081.mm.1	-0.4	0.022809
TC0400000281.mm.1	NM_010724	Psmb8	proteasome (prosome, macropain) subunit, beta	34197721	34201454	TC1700000622.mm.1	-0.5	0.022809
TC0400000296.mm.1	NM_175688	A530099	RIKEN cDNA A530099J19 gene	19727417	19732951	TC1300001525.mm.1	-0.3	0.022826
TC0400000300.mm.1	NM_019580	Gde1	glycerophosphodiester phosphodiesterase 1	118688545	118705778	TC0700004176.mm.1	0.3	0.02286
TC0400000303.mm.1	NM_001017422	Ear4	eosinophil-associated, ribonuclease A family, m	51203689	51204156	TC1400000583.mm.1	0.2	0.022862
TC0400000320.mm.1	NM_008137	Gna14	guanine nucleotide binding protein, alpha 14	16435667	16610818	TC1900000309.mm.1	-0.2	0.022871
TC0400000355.mm.1	ENSMUST00000120609	Gm13161	predicted gene 13161	147443471	147444029	TC0400001909.mm.1	-0.2	0.022875
TC0400000361.mm.1	ENSMUST00000175771	Gm9399	predicted gene 9399	122494613	122495251	TC1400002755.mm.1	-0.2	0.022893
TC0400000365.mm.1	NM_001168672	Gtse1	G two S phase expressed protein 1	85859707	85876573	TC1500000826.mm.1	-0.3	0.022919
TC0400000374.mm.1	ENSMUST00000118855	Gm13244	predicted gene 13244	145745746	145747401	TC0400001871.mm.1	0.5	0.022939
TC0400000383.mm.1	ENSMUST00000121853	Gm11263	predicted gene 11263	79327708	79328456	TC0400000804.mm.1	-0.9	0.022944
TC0400000385.mm.1	NCBI_Gene:320898:p	Trav3-3	Trav3-3 T cell receptor alpha variable 3-3	53665929	53668335	TC1400002823.mm.1	-0.3	0.022961
TC0400000387.mm.1	XM_001472963	Gm2260	predicted gene 2260	26012802	26026574	TC1400000252.mm.1	0.3	0.022981
TC0400000389.mm.1	NM_010577	Itga5	integrin alpha 5 (fibronectin receptor alpha)	103344286	103366763	TC1500002318.mm.1	0.3	0.02302
TC0400000393.mm.1	NM_173867	Rcc2	regulator of chromosome condensation 2	140700541	140723220	TC0400001766.mm.1	-0.6	0.023068
TC0400000394.mm.1	NM_001253874	Itgal	integrin alpha L	127296260	127335137	TC0700001841.mm.1	-0.9	0.023069
TC0400000401.mm.1	NM_001161768	Galnt6	UDP-N-acetyl-alpha-D-galactosamine:polypeptid	100689915	100729376	TC1500002250.mm.1	-0.2	0.023077
TC0400000402.mm.1	NCBI_Gene:10004319	Trav12d	Trav12d-2 T cell receptor alpha variable 12D-2	52915909	52916431	TC1400000643.mm.1	-0.6	0.023222
TC0400000409.mm.1	NM_175542	Rttn	rotatin	88971790	89131014	TC1800000908.mm.1	-0.2	0.023243
TC0400000412.mm.1	NM_001085500	Cisd3	CDGSH iron sulfur domain 3	97685596	97688625	TC1100001545.mm.1	0.3	0.02326
TC0400000413.mm.1	NM_183249	1100001	RIKEN cDNA 1100001G20 gene	83746940	83752646	TC1100001267.mm.1	0.5	0.02331
TC0400000416.mm.1	ENSMUST00000121695	Gm12164	predicted gene 12164	45829319	45829887	TC1100000458.mm.1	0.8	0.023325
TC0400000445.mm.1	ENSMUST00000118337	Gm11212	predicted gene 11212	63350411	63353846	TC0400000719.mm.1	0.1	0.023335
TC0400000449.mm.1	NM_011512	Surf4	surfeit gene 4	26920040	26933928	TC0200003205.mm.1	0.3	0.02334
TC0400000450.mm.1	NM_133720	Cysltr2	cysteinyl leukotriene receptor 2	73029128	73049114	TC1400002378.mm.1	-0.3	0.023395
TC0400000458.mm.1	NM_024190	Chmp1b	charged multivesicular body protein 1B	67205359	67207887	TC1800000698.mm.1	-0.3	0.023408
TC0400000460.mm.1	ENSMUST00000101625	Gm9144	predicted gene 9144	7859827	7861205	TC1200000056.mm.1	-0.4	0.023477
TC0400000476.mm.1	NM_007650	Cd5	CD5 antigen	10718143	10738974	TC1900001113.mm.1	-0.9	0.023479
TC0400000481.mm.1	NM_001123371	Pnp2	purine-nucleoside phosphorylase 2	50955992	50964749	TC1400000575.mm.1	0.4	0.023484
TC0400000490.mm.1	NM_018730	Rpl36	ribosomal protein L36	56613395	56614246	TC1700001012.mm.1	-0.7	0.023596
TC0400000508.mm.1	NR_045113	Gm2027	nuclear assembly factor 1 homolog pseudogene	44221356	44313437	TC1200000387.mm.1	0.4	0.023616
TC0400000514.mm.1	NM_152812	Otud6b	OTU domain containing 6B	14809498	14826587	TC0400002236.mm.1	0.3	0.023641
TC0400000516.mm.1	NM_011909	Usp18	ubiquitin specific peptidase 18	121245906	121270917	TC0600001369.mm.1	-0.5	0.023661
TC0400000522.mm.1	NM_011960	Parg	poly (ADP-ribose) glycohydrolase	32201949	32297550	TC1400000341.mm.1	-0.2	0.023674
TC0400000524.mm.1	NM_199195	Bckdhb	branched chain ketoacid dehydrogenase E1, beta	83925150	84124240	TC0900001103.mm.1	0.5	0.023677
TC0400000526.mm.1	NM_022419	Abhd8	abhydrolase domain containing 8	71456700	71463657	TC0800002425.mm.1	-0.3	0.023692
TC0400000535.mm.1	NM_007771	Cry1	cryptochrome 1 (photolyase-like)	85131700	85185054	TC1000002605.mm.1	-0.3	0.023765
TC0400000538.mm.1	ENSMUST00000118779	Gm11313	predicted gene 11313	22758927	22759358	TC1300000218.mm.1	-0.3	0.023766
TC0400000544.mm.1	ENSMUST00000098307	Gm6091	predicted pseudogene 6091	126476248	126476412	TC0800003190.mm.1	-0.3	0.02377
TC0400000558.mm.1	NM_008550	Man2b2	mannosidase 2, alpha B2	36806813	36830653	TC0500002266.mm.1	0.4	0.023808
TC0400000561.mm.1	NM_001033300	Gmps	guanine monophosphate synthetase	63976106	64022579	TC0300000507.mm.1	-0.3	0.02381
TC0400000563.mm.1	NM_015797	Fbxo6	F-box protein 6	148145716	148152140	TC0400004014.mm.1	0.2	0.023867
TC0400000565.mm.1	NM_009325	Tbxa2r	thromboxane A2 receptor	81328703	81335174	TC1000000894.mm.1	-0.4	0.023908
TC0400000573.mm.1	ENSMUST00000086233	Gm10179	predicted gene 10179	12085922	12086612	TC0700002334.mm.1	0.4	0.023917

TC0400000591.mm.1	ENSMUST00000122138	Gm12749	predicted gene 12749	109373701	109374859	TC0400003265.mm.1	-0.3	0.023994
TC0400000592.mm.1	XM_357051	Ms4a14	membrane-spanning 4-domains, subfamily A, me	11301494	11314333	TC1900001130.mm.1	0.2	0.024035
TC0400000610.mm.1	ENSMUST00000082636	Gm25800	predicted gene, 25800	62456987	62457120	TC1700002367.mm.1	-0.7	0.024116
TC0400000623.mm.1	NM_032398	Plvap	plasmalemma vesicle associated protein	71497753	71511769	TC0800002429.mm.1	0.4	0.024187
TC0400000649.mm.1	XM_001002180	Gm9234	predicted pseudogene 9234	121014929	121015633	TC0700004202.mm.1	-0.6	0.024198
TC0400000659.mm.1	ENSMUST00000120024	Gm8659	predicted gene 8659	158150096	158151179	TC0X00001603.mm.1	0.3	0.02427
TC0400000663.mm.1	NM_001033220	AU02109	expressed sequence AU021092	5211819	5222299	TC1600001156.mm.1	0.1	0.024281
TC0400000664.mm.1	XM_001472223	Gm15032	predicted gene 15032	142622492	142625562	TC0X00003105.mm.1	-0.2	0.024288
TC0400000667.mm.1	NCBI_Gene:10004256	Trav11n	Trav11n T cell receptor alpha variable 11N	53135122	53135678	TC1400000662.mm.1	-0.3	0.024302
TC0400000676.mm.1	NM_146057	Dap	death-associated protein	31224385	31274341	TC1500000199.mm.1	0.7	0.024326
TC0400000679.mm.1	XM_001487797	Xlr4d-p	X-linked lymphocyte-regulated 4D, pseudogene	74727229	74734141	TC0X00000724.mm.1	-0.5	0.024337
TC0400000696.mm.1	NM_172546	Cnksr3	Cnksr family member 3	7119062	7212237	TC1000001694.mm.1	0.2	0.024402
TC0400000697.mm.1	ENSMUST00000120403	Gm6184	predicted gene 6184	101518985	101520245	TC0X00000978.mm.1	-0.2	0.024408
TC0400000700.mm.1	NM_146236	Tceal1	transcription elongation factor A (SII)-like 1	136707982	136711478	TC0X00001335.mm.1	0.2	0.024422
TC0400000702.mm.1	NM_011304	Ruvbl2	RuvB-like protein 2	45421852	45438096	TC0700003005.mm.1	-0.3	0.024423
TC0400000717.mm.1	ENSMUST00000082602	Gm23615	predicted gene, 23615	73809417	73809481	TC0X00000697.mm.1	-0.8	0.02443
TC0400000718.mm.1	NM_001080995	4632434	RIKEN cDNA 4632434I11 gene	92857526	92874232	TC0700003743.mm.1	-0.3	0.024474
TC0400000719.mm.1	NR_004417	Snord73	small nucleolar RNA, C/D box U73A	86138791	86138858	TC0300002264.mm.1	-1.1	0.024505
TC0400000720.mm.1	NM_001110498	Ifnar2	interferon (alpha and beta) receptor 2	91372783	91405589	TC1600002172.mm.1	0.4	0.024506
TC0400000721.mm.1	ENSMUST00000117264	Gm13416	predicted gene 13416	24592902	24594513	TC0200003117.mm.1	0.3	0.024529
TC0400000725.mm.1	ENSMUST00000119494	Plk-ps1	polo-like kinase, pseudogene 1	35554184	35555971	TC0500000396.mm.1	-0.2	0.024536
TC0400000742.mm.1	NM_027706	Nbas	neuroblastoma amplified sequence	13269127	13583811	TC1200000110.mm.1	0.2	0.02459
TC0400000745.mm.1	NM_001113367	Boll	bol, boule-like (Drosophila)	55248658	55363469	TC0100002357.mm.1	-0.2	0.024596
TC0400000748.mm.1	ENSMUST00000167999	Cct3-ps	chaperonin containing Tcp1, subunit 3 (gamma)	52900599	52902683	TC0400000573.mm.1	-0.3	0.024643
TC0400000750.mm.1	NM_025980	Nrarp	Notch-regulated ankyrin repeat protein	25180758	25183339	TC0200000398.mm.1	0.2	0.024668
TC0400000751.mm.1	ENSMUST00000085711	Gm5121	predicted gene 5121	57334128	57334754	TC0900000700.mm.1	-0.8	0.024716
TC0400000765.mm.1	NM_009919	Cnih	cornichon homolog (Drosophila)	46775567	46788411	TC1400001920.mm.1	0.2	0.024717
TC0400000775.mm.1	ENSMUST00000171712	Gm9364	predicted gene 9364	122861884	122862676	TC0300001250.mm.1	-0.3	0.024744
TC0400000776.mm.1	NM_183016	Cdc42bp	CDC42 binding protein kinase beta	111292972	111377718	TC1200002402.mm.1	0.3	0.024773
TC0400000783.mm.1	ENSMUST00000120096	Gm16219	predicted gene 16219	75969898	75970171	TC1000000732.mm.1	-0.2	0.024779
TC0400000786.mm.1	ENSMUST00000119855	Gm12919	predicted gene 12919	10853843	10855436	TC0400000076.mm.1	-0.4	0.024801
TC0400000804.mm.1	ENSMUST00000102782	Rpl35	ribosomal protein L35	156366040	156366484	TC0100001414.mm.1	-0.8	0.024833
TC0400000811.mm.1	NM_028006	Tube1	epsilon-tubulin 1	39134023	39151058	TC1000000324.mm.1	-0.6	0.024884
TC0400000820.mm.1	NM_010330	Emb	embigin	117220573	117274415	TC1300001326.mm.1	-0.5	0.024901
TC0400000831.mm.1	NCBI_Gene:10004317	Trav12d	Trav12d-1 T cell receptor alpha variable 12D-1	52844465	52845369	TC1400000634.mm.1	-0.3	0.024956
TC0400000844.mm.1	NCBI_Gene:10004321	Trav12n	T cell receptor alpha variable 12N-1	53155512	53156416	TC1400000664.mm.1	-0.3	0.024956
TC0400000847.mm.1	NM_134130	Abhd3	abhydrolase domain containing 3	10644411	10706771	TC1800000980.mm.1	0.3	0.024993
TC0400000850.mm.1	ENSMUST00000117230	Gm11221	predicted gene 11221	69691978	69692574	TC0400000750.mm.1	-0.2	0.024995
TC0400000865.mm.1	ENSMUST00000119505	Gm13922	predicted gene 13922	111698723	111698878	TC0200004330.mm.1	-0.2	0.025003
TC0400000867.mm.1	NM_009915	Ccr2	chemokine (C-C motif) receptor 2	124101950	124113557	TC0900001674.mm.1	0.4	0.025016
TC0400000873.mm.1	NM_001242940	E130003	RIKEN cDNA E130003G02 gene	25291220	25298928	TC0200000409.mm.1	0.2	0.025031
TC0400000876.mm.1	NM_001038231	Banf1	barrier to autointegration factor 1	5364633	5366876	TC1900000960.mm.1	-0.2	0.025076
TC0400000877.mm.1	NM_178357	Klf11	Kruppel-like factor 11	24651371	24662782	TC1200000201.mm.1	0.1	0.025088
TC0400000889.mm.1	NM_008256	Hmgcs2	3-hydroxy-3-methylglutaryl-Coenzyme A synthas	98280431	98310738	TC0300000979.mm.1	0.6	0.025093
TC0400000890.mm.1	NCBI_Gene:381831:p	Igkv4-5	immunoglobulin kappa variable 4-58	69500254	69500758	TC0600003568.mm.1	-0.8	0.025107
TC0400000898.mm.1	NM_001101657	Gm11711	predicted gene 11711	115020689	115027012	TC1100004057.mm.1	0.4	0.025141
TC0400000915.mm.1	ENSMUST00000177630	Gm22775	predicted gene, 22775	10485250	10485369	TC0200000130.mm.1	-0.2	0.0252
TC0400000917.mm.1	NM_027654	Pcgf6	polycomb group ring finger 6	47033617	47050884	TC1900001619.mm.1	-0.2	0.02522
TC0400000921.mm.1	XR_104530	Gm7634	predicted gene 7634	16053335	16053906	TC0100000096.mm.1	-0.2	0.025311
TC0400000939.mm.1	NM_009786	Cacybp	calcyclin binding protein	160202367	160212892	TC0100003351.mm.1	-0.4	0.025395
TC0400000941.mm.1	NM_010360	Gstm5	glutathione S-transferase, mu 5	107895821	107898686	TC0300001124.mm.1	0.4	0.025398
TC0400000944.mm.1	NM_001008506	Zc3h14	zinc finger CCCH type containing 14	98746968	98787774	TC1200000970.mm.1	-0.3	0.025406
TC0400000948.mm.1	ENSMUST00000182857	Gm18822	predicted gene, 18822	8615275	8616504	TC0300001615.mm.1	-0.2	0.025418
TC0400000954.mm.1	NM_028074	Ddx42	DEAD (Asp-Glu-Ala-Asp) box polypeptide 42	106216926	106249140	TC1100001776.mm.1	-0.2	0.02551
TC0400000960.mm.1	NM_205823	Tlr12	toll-like receptor 12	128615446	128618619	TC0400003577.mm.1	-0.4	0.025512
TC0400000978.mm.1	NM_007999	Fen1	flap structure specific endonuclease 1	10199132	10204169	TC1900001096.mm.1	-0.2	0.025527
TC0400000985.mm.1	NM_026841	1110059	RIKEN cDNA 1110059M19 gene	45090904	45092791	TC0X00000414.mm.1	0.5	0.025569
TC0400000988.mm.1	NM_018877	Setdb1	SET domain, bifurcated 1	95323525	95357202	TC0300002475.mm.1	-0.2	0.025586
TC0400000992.mm.1	NM_013494	Cpe	carboxypeptidase E	64592542	64693040	TC0800002310.mm.1	0.4	0.025625
TC0400001002.mm.1	ENSMUST00000082518	Gm24564	predicted gene, 24564	109631074	109631148	TC1200001147.mm.1	0.5	0.025627
TC0400001010.mm.1	ENSMUST00000175224	Gm22242	predicted gene, 22242	52756908	52757025	TC0900000634.mm.1	0.3	0.025654
TC0400001027.mm.1	ENSMUST00000181256	Gm2907	predicted gene 2907	3876445	3877636	TC1400001370.mm.1	-0.2	0.025685
TC0400001038.mm.1	NM_178751	Orai2	ORAI calcium release-activated calcium modulat	136147459	136170656	TC0500003415.mm.1	-0.2	0.025736
TC0400001039.mm.1	ENSMUST00000178509	Gm4199	predicted gene 4199 // family with sequence si	44464243	44464602	TC0900000512.mm.1	-0.4	0.025744
TC0400001041.mm.1	NM_009716	Atf4	activating transcription factor 4	80255184	80257545	TC1500000698.mm.1	-0.2	0.025779
TC0400001074.mm.1	NM_172410	Nup93	nucleoporin 93	94214597	94317227	TC0800001097.mm.1	-0.2	0.025788
TC0400001075.mm.1	ENSMUST00000179075	CR97458	N/A	41306	43295	TC4_JH584293_rand	-0.2	0.025828
TC0400001080.mm.1	NM_026635	Fam96a	family with sequence similarity 96, member A	66126611	66138968	TC0900000863.mm.1	-0.3	0.02587
TC0400001101.mm.1	ENSMUST00000116034	Rpl31-p	ribosomal protein L31, pseudogene 10	137395299	137395676	TC0400001706.mm.1	-1.1	0.025909
TC0400001107.mm.1	ENSMUST00000075049	Gm10136	predicted pseudogene 10136	29003405	29003842	TC1900001335.mm.1	-0.7	0.025921
TC0400001137.mm.1	NM_007637	Cct5	chaperonin containing Tcp1, subunit 5 (epsilon)	31590800	31601847	TC1500001326.mm.1	-0.3	0.025935
TC0400001148.mm.1	NM_017469	Gucy1b3	guanylate cyclase 1, soluble, beta 3	82032004	82074711	TC0300002219.mm.1	0.3	0.025936
TC0400001158.mm.1	ENSMUST00000119692	Gm5760	predicted gene 5760	99081401	99082402	TC0X00002696.mm.1	-0.2	0.025946
TC0400001166.mm.1	NM_025748	Adat2	adenosine deaminase, tRNA-specific 2	13552894	13563376	TC1000000097.mm.1	-0.2	0.02598
TC0400001171.mm.1	NM_133934	Isy1	ISY1 splicing factor homolog (S. cerevisiae)	87818447	87838759	TC0600002666.mm.1	-0.3	0.026142
TC0400001184.mm.1	NM_026947	Eci3	enoyl-Coenzyme A delta isomerase 3	34946614	34963810	TC1300001793.mm.1	0.5	0.026181
TC0400001197.mm.1	NM_145946	Fanci	Fanconi anemia, complementation group I	79391929	79450265	TC0700001122.mm.1	-0.3	0.02621
TC0400001198.mm.1	ENSMUST00000120368	Gm15465	predicted gene 15465	24322660	24322784	TC0700002596.mm.1	-0.2	0.026239

TC0400001216.mm.1	ENSMUST00000177887	Gm7061	predicted gene 7061	94772616	94774034	TC0X00002652.mm.1	-0.2	0.026315
TC0400001221.mm.1	NM_010278	Gfi1	growth factor independent 1	107716655	107726036	TC0500002932.mm.1	-0.3	0.026325
TC0400001229.mm.1	ENSMUST00000099418	Gm10770	predicted gene 10770	150178882	150179679	TC0200004829.mm.1	-0.3	0.026327
TC0400001230.mm.1	NM_010930	Nov	nephroblastoma overexpressed gene	54745702	54754039	TC1500000389.mm.1	0.2	0.026438
TC0400001235.mm.1	XR_141249	D130046	RIKEN cDNA D130046C19 gene	26840249	26841654	TC1500001294.mm.1	0.2	0.026446
TC0400001238.mm.1	NM_153550	Dirc2	disrupted in renal carcinoma 2 (human)	35694062	35769356	TC1600001553.mm.1	0.2	0.026456
TC0400001253.mm.1	NM_183160	Tmem252	transmembrane protein 252	24674005	24679661	TC1900000397.mm.1	0.1	0.026497
TC0400001258.mm.1	NM_018859	Akr1e1	aldo-keto reductase family 1, member E1	4590757	4609174	TC1300001383.mm.1	0.4	0.026549
TC0400001271.mm.1	NM_021475	Adamdec	ADAM-like, decysin 1	68563380	68582086	TC1400002302.mm.1	-0.4	0.026599
TC0400001273.mm.1	ENSMUST00000118231	Gm13469	predicted gene 13469	46406220	46406569	TC0200003484.mm.1	-0.2	0.026607
TC0400001275.mm.1	NM_013654	Ccl7	chemokine (C-C motif) ligand 7	82045712	82047525	TC1100001220.mm.1	0.3	0.026621
TC0400001283.mm.1	ENSMUST00000158437	Gm22838	predicted gene, 22838	99928283	99928381	TC0500002825.mm.1	0.3	0.02664
TC0400001284.mm.1	NM_001025244	Krtap31	keratin associated protein 31-2	99936291	99937225	TC1100001612.mm.1	0.1	0.026652
TC0400001294.mm.1	NM_008947	Psmc1	protease (prosome, macropain) 26S subunit, ATF	100110168	100123365	TC1200000990.mm.1	-0.4	0.026683
TC0400001324.mm.1	BC104361	Hddc2	HD domain containing 2	31313382	31328204	TC1000000279.mm.1	-0.1	0.026708
TC0400001325.mm.1	XR_105545	Gm4130	predicted gene 4130	91261430	91262672	TC1300002410.mm.1	-0.5	0.026746
TC0400001326.mm.1	NM_153585	Cnot10	CCR4-NOT transcription complex, subunit 10	114585874	114640200	TC0900003172.mm.1	-0.2	0.026796
TC0400001327.mm.1	NM_001161737	Siva1	SIVA1, apoptosis-inducing factor	112644828	112649152	TC1200001263.mm.1	-0.3	0.026806
TC0400001337.mm.1	NM_001033337	Ttc38	tetratricopeptide repeat domain 38	85832304	85858822	TC1500000825.mm.1	0.4	0.026846
TC0400001352.mm.1	NM_001081043	Ptpn23	protein tyrosine phosphatase, non-receptor type	110385089	110408210	TC0900003110.mm.1	0.1	0.026861
TC0400001358.mm.1	ENSMUST00000175023	Gm23362	predicted gene, 23362	149145724	149145821	TC0500001841.mm.1	-0.9	0.026876
TC0400001374.mm.1	NM_175370	Als2cr1	amyotrophic lateral sclerosis 2 (juvenile) chro	58658117	58695989	TC0100002388.mm.1	0.3	0.026919
TC0400001387.mm.1	NM_016926	Sart3	squamous cell carcinoma antigen recognized by	113742444	113771649	TC0500003047.mm.1	-0.3	0.026981
TC0400001394.mm.1	NM_021896	Gucy1a3	guanylate cyclase 1, soluble, alpha 3	82092427	82145877	TC0300002220.mm.1	0.4	0.026982
TC0400001396.mm.1	ENSMUST00000057361	Gm8396	predicted gene 8396	7801208	7802030	TC1400000070.mm.1	-0.5	0.026995
TC0400001397.mm.1	NM_026174	Entpd4	ectonucleoside triphosphate diphosphohydrolas	69337151	69367270	TC1400000975.mm.1	0.3	0.027006
TC0400001418.mm.1	NM_008773	P2ry2	purinergic receptor P2Y, G-protein coupled 2	100996572	101012013	TC0700003831.mm.1	0.2	0.027077
TC0400001419.mm.1	ENSMUST00000085368	Gm5786	predicted pseudogene 5786	59081019	59081900	TC1200000501.mm.1	-0.6	0.027107
TC0400001422.mm.1	NCBI_Gene:637227:p	Igkv6-2	immunoglobulin kappa variable 6-23	70260409	70260933	TC0600003590.mm.1	-1.2	0.027247
TC0400001423.mm.1	ENSMUST00000122602	Gm24839	predicted gene, 24839	126513875	126513981	TC0500003279.mm.1	0.3	0.027323
TC0400001424.mm.1	XM_001473015	Gm2274	predicted gene 2274	26152416	26166181	TC1400000255.mm.1	0.3	0.027324
TC0400001429.mm.1	NCBI_Gene:10004261	Trav5n-	Trav5n-4 T cell receptor alpha variable 5N-4	53312904	53313422	TC1400000683.mm.1	-0.4	0.027332
TC0400001430.mm.1	NM_007931	Endog	endonuclease G	30171493	30174069	TC0200000528.mm.1	0.2	0.027336
TC0400001452.mm.1	ENSMUST00000117560	Gm7834	predicted gene 7834	51212511	51212947	TC0X00002196.mm.1	-0.3	0.027349
TC0400001455.mm.1	NM_026570	Yeats4	YEATS domain containing 4	117215141	117224507	TC1000002926.mm.1	-0.3	0.027353
TC0400001458.mm.1	ENSMUST00000082666	Gm25636	predicted gene, 25636	110023210	110023342	TC0700001621.mm.1	-1.1	0.027354
TC0400001462.mm.1	NM_153561	Nudt6	nudix (nucleoside diphosphate linked moiety X)-	37404910	37420211	TC0300001871.mm.1	0.1	0.027466
TC0400001465.mm.1	NM_009539	Zap70	zeta-chain (TCR) associated protein kinase	36761798	36782820	TC0100000255.mm.1	-0.4	0.027479
TC0400001467.mm.1	ENSMUST00000120127	Amd-ps1	S-adenosylmethionine decarboxylase, pseudoge	155155195	155156188	TC0X00001576.mm.1	-0.2	0.027498
TC0400001468.mm.1	ENSMUST00000110797	Gm8818	predicted pseudogene 8818	153305432	153306478	TC0100001375.mm.1	-0.2	0.0275
TC0400001469.mm.1	NM_025736	Emc2	ER membrane protein complex subunit 2	43477229	43527777	TC1500000344.mm.1	0.6	0.027522
TC0400001487.mm.1	NM_008622	Mpv17	MpV17 mitochondrial inner membrane protein	31140660	31154290	TC0500003723.mm.1	0.2	0.027557
TC0400001514.mm.1	NM_177460	Parp16	poly (ADP-ribose) polymerase family, member 1	65214690	65239219	TC0900000833.mm.1	0.2	0.027557
TC0400001517.mm.1	NM_133223	Rac3	RAS-related C3 botulinum substrate 3	120721468	120723969	TC1100002045.mm.1	-0.1	0.027566
TC0400001522.mm.1	ENSMUST00000093758	Gm13268	predicted gene 13268	14626880	14627323	TC0200002998.mm.1	-0.6	0.027575
TC0400001525.mm.1	NM_010102	S1pr4	sphingosine-1-phosphate receptor 4	81497745	81500137	TC1000002545.mm.1	-0.3	0.027577
TC0400001541.mm.1	ENSMUST00000072739	Lsm7	LSM7 homolog, U6 small nuclear RNA associatec	78393309	78393756	TC1000000783.mm.1	-0.3	0.027585
TC0400001543.mm.1	BC040792	Anpep	alanyl (membrane) aminopeptidase	79821803	79848210	TC0700003570.mm.1	0.6	0.0277
TC0400001547.mm.1	NCBI_Gene:434028:p	Igkv1-9	immunoglobulin kappa variable 1-99	68541644	68542422	TC0600003522.mm.1	-0.9	0.027703
TC0400001550.mm.1	NM_175655	Hist1h4	histone cluster 1, H4f	23551258	23551648	TC1300001631.mm.1	-0.5	0.027754
TC0400001552.mm.1	ENSMUST00000118269	Gm13611	predicted gene 13611	32271845	32272162	TC0200000573.mm.1	-0.6	0.027803
TC0400001553.mm.1	ENSMUST00000122652	Gm23111	predicted gene, 23111	33959663	33959767	TC1700000605.mm.1	-0.2	0.027812
TC0400001563.mm.1	ENSMUST00000122145	Gm11688	predicted gene 11688	144261234	144261541	TC0200004757.mm.1	-0.3	0.027872
TC0400001570.mm.1	NM_018750	Rassf5	Ras association (RalGDS/AF-6) domain family me	131176410	131245258	TC0100003056.mm.1	-0.3	0.027876
TC0400001574.mm.1	NM_008238	Foxn1	forkhead box N1	78357577	78386608	TC1100003295.mm.1	-0.3	0.027877
TC0400001583.mm.1	NM_009128	Scd2	stearoyl-Coenzyme A desaturase 2	44293676	44306864	TC1900000646.mm.1	0.9	0.02805
TC0400001586.mm.1	NM_007875	Dpagt1	dolichyl-phosphate (UDP-N-acetylglucosamine) a	44326845	44333601	TC0900000504.mm.1	0.2	0.028068
TC0400001587.mm.1	NM_177081	Ptpn7	protein tyrosine phosphatase, non-receptor type	135132725	135145320	TC0100001244.mm.1	-0.7	0.028196
TC0400001593.mm.1	NM_001080557	Vamp1	vesicle-associated membrane protein 1	125215551	125222306	TC0600003534.mm.1	-0.3	0.028254
TC0400001611.mm.1	ENSMUST00000178837	Gm3893	predicted gene 3893	83395	84475	TC4_JH584293_rand	0.3	0.028257
TC0400001615.mm.1	ENSMUST00000157685	Gm26183	predicted gene, 26183	11695041	11695179	TC1900000228.mm.1	-0.2	0.028288
TC0400001631.mm.1	XM_983460	Gm8069	predicted pseudogene 8069	54651966	54652121	TC0500002434.mm.1	-0.3	0.028303
TC0400001642.mm.1	XM_003084551	Amy2a1	amylase 2a1	113528209	113532428	TC0300002785.mm.1	0.2	0.028313
TC0400001647.mm.1	ENSMUST00000104531	Gm25724	predicted gene, 25724	104628944	104629060	TC1400002651.mm.1	0.3	0.028323
TC0400001655.mm.1	ENSMUST00000158683	Gm24837	predicted gene, 24837	41211502	41211582	TC0400002462.mm.1	-0.9	0.028387
TC0400001672.mm.1	NM_001045529	Morc3	microrchidia 3	93832121	93876073	TC1600001048.mm.1	-0.3	0.028431
TC0400001679.mm.1	ENSMUST00000118749	Gm4909	predicted gene 4909	60706270	60707063	TC0X00002315.mm.1	-0.2	0.028515
TC0400001681.mm.1	ENSMUST00000157903	Gm26084	predicted gene, 26084	41345848	41345951	TC0400002466.mm.1	-0.1	0.028574
TC0400001698.mm.1	ENSMUST00000179193	Gm6762	predicted pseudogene 6762	35574110	35574400	TC0900002019.mm.1	0.2	0.028602
TC0400001699.mm.1	NM_019793	Tspan3	tetraspanin 3	56131725	56161070	TC0900002346.mm.1	0.3	0.028616
TC0400001700.mm.1	ENSMUST00000118978	Gm13127	predicted gene 13127	144587244	144588632	TC0400001853.mm.1	-0.4	0.028619
TC0400001702.mm.1	XM_986941	Ms4a4a	membrane-spanning 4-domains, subfamily A, me	11375523	11393315	TC1900000216.mm.1	0.2	0.028626
TC0400001706.mm.1	NM_080433	Fezf2	Fez family zinc finger 2	12341892	12345865	TC1400001455.mm.1	-0.3	0.028675
TC0400001722.mm.1	ENSMUST00000086725	Gm3608	predicted gene 3608	105455971	105458829	TC0100001005.mm.1	-0.7	0.028715
TC0400001726.mm.1	NM_026456	Tceb1	transcription elongation factor B (SIII), polyp	16642765	16657042	TC0100002008.mm.1	-0.4	0.02874
TC0400001733.mm.1	ENSMUST00000077997	Gm16380	predicted pseudogene 16380	53884082	53884561	TC0900000649.mm.1	-0.2	0.028744
TC0400001737.mm.1	XR_106131	Gm20269	predicted gene, 20269	121840149	121841816	TC0800001472.mm.1	-0.2	0.028812
TC0400001738.mm.1	ENSMUST00000183894	AC11645	N/A	49709794	49709872	TC1900001647.mm.1	-0.9	0.028907

TC0400001743.mm.1	NM_007990	Fau	Finkel-Biskis-Reilly murine sarcoma virus (FBR-	6057888	6059524	TC1900000096.mm.1	-0.4	0.028933
TC0400001745.mm.1	NCBI_Gene:667660:p	Trav9n-	Trav9n-2 T cell receptor alpha variable 9N-2	53202954	53203644	TC1400000670.mm.1	-0.6	0.028968
TC0400001746.mm.1	NM_010362	Gsto1	glutathione S-transferase omega 1	47854970	47864791	TC1900000727.mm.1	0.4	0.029007
TC0400001765.mm.1	NM_016697	Gpc3	glypican 3	52272426	52613974	TC0X00002211.mm.1	0.5	0.029016
TC0400001766.mm.1	ENSMUST00000120029	Gm6263	predicted gene 6263	74018793	74020134	TC1300002310.mm.1	0.2	0.029061
TC0400001771.mm.1	ENSMUST00000083063	Gm24095	predicted gene, 24095	62543203	62543335	TC1300002167.mm.1	-0.4	0.029063
TC0400001776.mm.1	NM_008828	Pgk1	phosphoglycerate kinase 1	106187100	106203699	TC0X00001071.mm.1	-0.3	0.029088
TC0400001779.mm.1	NM_013477	Atp6v0d	ATPase, H+ transporting, lysosomal V0 subunit D	105524465	105566047	TC0800002824.mm.1	0.4	0.029092
TC0400001780.mm.1	NCBI_Gene:10012434	Traj46	T cell receptor alpha joining 46	54172336	54172398	TC1400000730.mm.1	-0.3	0.029101
TC0400001786.mm.1	ENSMUST00000184794	NAMA_1	MAP kinase and growth arrest RNA conserved re	47593337	47593463	TC0400000524.mm.1	0.2	0.029108
TC0400001790.mm.1	ENSMUST00000122220	Rpl26-p	ribosomal protein L26, pseudogene 5	142570508	142570966	TC0200002122.mm.1	-0.1	0.029114
TC0400001823.mm.1	NM_008368	Il2rb	interleukin 2 receptor, beta chain	78480548	78495066	TC1500001833.mm.1	-0.3	0.029178
TC0400001833.mm.1	ENSMUST00000122102	Xlr4e-p	X-linked lymphocyte-regulated 4E, pseudogene	74944963	74952044	TC0X00000732.mm.1	-0.4	0.029208
TC0400001845.mm.1	NM_025668	Spcs2	signal peptidase complex subunit 2 homolog (S.	99837569	99858893	TC0700003807.mm.1	-0.3	0.029231
TC0400001847.mm.1	NM_009395	Tnfaip1	tumor necrosis factor, alpha-induced protein 1	78522850	78536332	TC1100003299.mm.1	0.4	0.029271
TC0400001853.mm.1	NCBI_Gene:279882:p	Trav9n-	T cell receptor alpha variable 9N-4	53294533	53296227	TC1400000681.mm.1	-0.8	0.029346
TC0400001855.mm.1	ENSMUST00000082759	Gm24150	predicted gene, 24150	79196374	79196477	TC0300000618.mm.1	-0.3	0.029371
TC0400001860.mm.1	NM_026063	Mnf1	mitochondrial nucleoid factor 1	27122663	27133916	TC1700001716.mm.1	-0.1	0.029413
TC0400001862.mm.1	NM_001190483	Pcsk5	proprotein convertase subtilisin/kexin type 5	17432832	17837632	TC1900001219.mm.1	0.1	0.02942
TC0400001863.mm.1	NM_175653	Hist1h3	histone cluster 1, H3c	23744973	23745602	TC1300001642.mm.1	-0.6	0.029432
TC0400001866.mm.1	ENSMUST00000078810	Gm15772	predicted gene 15772	3236389	3236907	TC0500000005.mm.1	-0.4	0.029432
TC0400001868.mm.1	ENSMUST00000184812	mmu-mir	mmu-mir-6989	6346480	6346544	TC1900000115.mm.1	-0.2	0.029462
TC0400001869.mm.1	NM_027008	Kctd5	potassium channel tetramerisation domain cont	24047720	24073485	TC1700001614.mm.1	-0.2	0.029543
TC0400001871.mm.1	ENSMUST00000118116	Gm12418	predicted gene 12418	84915896	84916837	TC0400000850.mm.1	-0.2	0.029584
TC0400001876.mm.1	NM_133671	U2af2	U2 small nuclear ribonucleoprotein auxiliary fa	5062143	5079945	TC0700000057.mm.1	-0.5	0.029617
TC0400001880.mm.1	NM_030715	Polh	polymerase (DNA directed), eta (RAD 30 related)	46171993	46202625	TC1700002167.mm.1	-0.5	0.029629
TC0400001885.mm.1	NM_011573	Tex264	testis expressed gene 264	106658746	106685952	TC0900003016.mm.1	0.1	0.029637
TC0400001886.mm.1	ENSMUST00000157920	Gm25982	predicted gene, 25982	156023058	156023158	TC0400004165.mm.1	0.3	0.029643
TC0400001887.mm.1	NM_008276	Hoxd8	homeobox D8	74704615	74707933	TC0200001096.mm.1	0.1	0.029644
TC0400001891.mm.1	NM_001290280	Rcor3	REST corepressor 3 (Rcor3), transcript variant	0	0	TSUnmapped0000000	0.1	0.029655
TC0400001892.mm.1	ENSMUST00000062226	Rps11-p	ribosomal protein S11, pseudogene 4	51297487	51297963	TC1200000414.mm.1	-0.4	0.029697
TC0400001896.mm.1	ENSMUST00000178933	Gm5558	predicted gene 5558	91806576	91807073	TC0500002740.mm.1	-0.4	0.029739
TC0400001901.mm.1	NM_001081361	1-Mar	mitochondrial amidoxime reducing component 1	184786767	184811313	TC0100003738.mm.1	0.5	0.029862
TC0400001902.mm.1	NM_020517	Lenep	lens epithelial protein	89400988	89411870	TC0300002351.mm.1	0.2	0.029874
TC0400001903.mm.1	ENSMUST00000117967	Gm12527	predicted gene 12527	59368303	59368866	TC0400002756.mm.1	-0.2	0.029901
TC0400001909.mm.1	ENSMUST00000118818	Gm7927	predicted gene 7927	55845759	55846638	TC0X00002258.mm.1	-0.4	0.029922
TC0400001920.mm.1	ENSMUST00000157683	Gm24507	predicted gene, 24507	90098981	90099114	TC1300001013.mm.1	-0.6	0.029955
TC0400001926.mm.1	NM_008152	Gpr65	G-protein coupled receptor 65	98268635	98276722	TC1200000959.mm.1	-0.4	0.029959
TC0400001930.mm.1	ENSMUST00000177722	Gm11168	predicted gene 11168	3003346	3006948	TC0900000002.mm.1	0.7	0.029994
TC0400001932.mm.1	NM_032465	Cd96	CD96 antigen	46035657	46120251	TC1600001675.mm.1	-1.1	0.03007
TC0400001947.mm.1	NM_010472	Agfg1	ArfGAP with FG repeats 1	82839446	82896275	TC0100000711.mm.1	-0.2	0.030143
TC0400001953.mm.1	NCBI_Gene:10003979	Trbv3	T cell receptor beta, variable 3	41048298	41048830	TC0600000420.mm.1	-1.3	0.030161
TC0400001964.mm.1	NM_016694	Park2	Parkinson disease (autosomal recessive, juvenil	10840384	12063361	TC1700000110.mm.1	0.1	0.030198
TC0400001970.mm.1	ENSMUST00000175520	Gm23416	predicted gene, 23416	87068993	87069087	TC1500000839.mm.1	0.4	0.030238
TC0400001977.mm.1	NM_176971	Rab9b	RAB9B, member RAS oncogene family	136858147	136868755	TC0X00003041.mm.1	0.2	0.030262
TC0400001993.mm.1	XM_484309	Gm5453	predicted gene 5453	98904224	98904670	TC1300001122.mm.1	-0.5	0.030361
TC0400002010.mm.1	NM_009008	Rac2	RAS-related C3 botulinum substrate 2	78559169	78572783	TC1500001838.mm.1	-1.3	0.030391
TC0400002011.mm.1	NM_013587	Lrpap1	low density lipoprotein receptor-related protei	35091490	35105766	TC0500002244.mm.1	0.5	0.030403
TC0400002035.mm.1	NCBI_Gene:10011341	Trav4-4	T cell receptor alpha variable 4-4-DV10	53683647	53684177	TC1400002826.mm.1	-0.4	0.030425
TC0400002040.mm.1	NCBI_Gene:10003885	Trav9d-	Trav9d-3 T cell receptor alpha variable 9D-3	52920502	52922377	TC1400000644.mm.1	-0.5	0.030441
TC0400002041.mm.1	NM_011400	Slc2a1	solute carrier family 2 (facilitated glucose tr	119108711	119137330	TC0400001325.mm.1	-0.2	0.030453
TC0400002057.mm.1	NM_145385	Mlf2	myeloid leukemia factor 2	124931388	124937238	TC0600001436.mm.1	0.3	0.030454
TC0400002063.mm.1	NM_007901	S1pr1	sphingosine-1-phosphate receptor 1	115710433	115715055	TC0300002797.mm.1	0.4	0.030495
TC0400002077.mm.1	ENSMUST00000120735	Gm5883	predicted gene 5883	123218953	123219447	TC0600003083.mm.1	-0.4	0.030548
TC0400002081.mm.1	NM_026412	Knstrn	kinetochore-localized astrin/SPAG5 binding	118814003	118853957	TC0200001748.mm.1	-0.4	0.030619
TC0400002089.mm.1	NM_009864	Cdh1	cadherin 1	106603351	106670246	TC0800001255.mm.1	-0.4	0.03068
TC0400002091.mm.1	ENSMUST00000104080	Gm24433	predicted gene, 24433	95898603	95898735	TC1000001170.mm.1	0.3	0.030692
TC0400002099.mm.1	NM_028131	Cenpn	centromere protein N	116921740	116941504	TC0800001390.mm.1	-0.5	0.030729
TC0400002116.mm.1	ENSMUST00000157893	Gm24438	predicted gene, 24438	116748842	116748956	TC0X00001160.mm.1	-1.0	0.030779
TC0400002119.mm.1	ENSMUST00000120476	Gm13559	predicted gene 13559	58740639	58741501	TC0200000885.mm.1	-0.3	0.030784
TC0400002124.mm.1	NM_028276	Utp14a	UTP14, U3 small nucleolar ribonucleoprotein, ho	48256862	48282453	TC0X00000429.mm.1	-0.2	0.030788
TC0400002125.mm.1	NCBI_Gene:10004244	Trav6d-	T cell receptor alpha variable 6D-6	52821860	52822359	TC1400000631.mm.1	-0.4	0.03079
TC0400002130.mm.1	NM_001271477	Pglyrp2	peptidoglycan recognition protein 2	32412461	32424167	TC1700001846.mm.1	-0.3	0.030802
TC0400002134.mm.1	NM_008359	Il17ra	interleukin 17 receptor A	120463197	120483727	TC0600001347.mm.1	-0.6	0.030822
TC0400002148.mm.1	NM_009464	Ucp3	uncoupling protein 3 (mitochondrial, proton car	100472990	100486432	TC0700001408.mm.1	0.2	0.030837
TC0400002158.mm.1	NCBI_Gene:10004260	Trav4n-	Trav4n-4 T cell receptor alpha variable 4N-4	53302036	53302560	TC1400002824.mm.1	-0.5	0.030844
TC0400002175.mm.1	ENSMUST00000098432	Rpl10-p	ribosomal protein L10, pseudogene 2	106927769	106928413	TC0800002863.mm.1	-0.2	0.03093
TC0400002176.mm.1	NM_029601	Ift43	intraflagellar transport 43 homolog (Chlamydom	86082561	86162459	TC1200000846.mm.1	0.1	0.031117
TC0400002193.mm.1	NM_001081110	Cd8a	CD8 antigen, alpha chain	71373427	71379171	TC0600000827.mm.1	-1.9	0.03113
TC0400002196.mm.1	NM_176837	Arhgap1	Rho GTPase activating protein 18	26753421	26918650	TC1000000240.mm.1	0.5	0.031138
TC0400002207.mm.1	ENSMUST00000081455	LOC1008	chromobox protein homolog 3-like // predicted	58646608	58648317	TC0100000437.mm.1	-0.6	0.031151
TC0400002216.mm.1	BC063254	Aph1c	anterior pharynx defective 1c homolog (C. elega	66814994	66834726	TC0900002532.mm.1	0.2	0.031166
TC0400002223.mm.1	ENSMUST00000145305	Gm14368	predicted gene 14368	4341036	4343915	TC0X00001737.mm.1	-0.4	0.031169
TC0400002227.mm.1	NM_020588	Tmem183	transmembrane protein 183A	134346097	134361999	TC0100003108.mm.1	-0.2	0.031169
TC0400002229.mm.1	NM_001167775	Rbm10	RNA binding motif protein 10	20617503	20650905	TC0X00000210.mm.1	-0.3	0.03121
TC0400002236.mm.1	NM_013792	Naglu	alpha-N-acetylglucosaminidase (Sanfilippo disea	101069877	101077672	TC1100001638.mm.1	0.2	0.031214
TC0400002242.mm.1	ENSMUST00000120111	Gm13435	predicted gene 13435	37207051	37208073	TC0200000681.mm.1	-0.2	0.031242
TC0400002243.mm.1	ENSMUST00000184362	uc_338	TUC338	86651170	86651254	TC1200000853.mm.1	-1.2	0.031255

TC0400002250.mm.1	NM_001177568	Gm14420	predicted gene 14420	177464733	177479194	TC0200002748.mm.1	0.7	0.031263
TC0400002251.mm.1	NM_138593	Larp7	La ribonucleoprotein domain family, member 7	127154346	127553349	TC0300002906.mm.1	-0.4	0.031289
TC0400002252.mm.1	NM_001170954	A4galt	alpha 1,4-galactosyltransferase	83226722	83251774	TC1500001968.mm.1	0.1	0.03134
TC0400002254.mm.1	NM_146106	Lyplal1	lysophospholipase-like 1	186087731	186117310	TC0100003751.mm.1	0.6	0.031349
TC0400002265.mm.1	NM_027978	Coq2	coenzyme Q2 homolog, prenyltransferase (yeast	100654691	100675140	TC0500002842.mm.1	0.2	0.031357
TC0400002275.mm.1	XM_001475503	Gm10362	predicted gene 10362	73428317	73471359	TC1500001697.mm.1	-0.1	0.031375
TC0400002302.mm.1	ENSMUST00000082812	Gm24707	predicted gene, 24707	15412300	15412406	TC1100000151.mm.1	-0.2	0.031393
TC0400002308.mm.1	NR_038088	Bc1	brain cytoplasmic RNA 1	144914470	144914623	TC0700002115.mm.1	0.7	0.031404
TC0400002315.mm.1	NM_175563	Prr11	proline rich 11	87089153	87108714	TC1100003470.mm.1	-0.4	0.031431
TC0400002316.mm.1	ENSMUST00000158362	Gm25602	predicted gene, 25602	54712976	54713037	TC1000002182.mm.1	-0.2	0.031489
TC0400002320.mm.1	ENSMUST00000115904	CR97458	N/A	103128	104629	TC4_JH584293_rand	-0.2	0.031584
TC0400002327.mm.1	NCBI_Gene:10012434	Traj47	Traj47 T cell receptor alpha joining 47	54171797	54171856	TC1400000729.mm.1	-0.9	0.031642
TC0400002328.mm.1	NM_011514	Suv39h1	suppressor of variegation 3-9 homolog 1 (Drosoր	8061171	8074760	TC0X00001793.mm.1	-0.2	0.031652
TC0400002338.mm.1	NR_028568	Scarna9	small Cajal body-specific RNA 9	15326264	15326333	TC0900001787.mm.1	-1.1	0.031742
TC0400002339.mm.1	NM_001113283	Fam214a	family with sequence similarity 214, member A	74952884	75032468	TC0900001005.mm.1	0.3	0.031748
TC0400002350.mm.1	NM_177688	H2afj	H2A histone family, member J	136808244	136810074	TC0600001628.mm.1	-0.3	0.031759
TC0400002359.mm.1	NM_177606	Plekhh2	pleckstrin homology domain containing, family H	84511895	84622142	TC1700001262.mm.1	0.3	0.031768
TC0400002365.mm.1	NM_177411	Rab5b	RAB5B, member RAS oncogene family	128677179	128696268	TC1000003159.mm.1	0.2	0.031809
TC0400002377.mm.1	NM_199311	Clec4a1	C-type lectin domain family 4, member a1	122921848	122934619	TC0600001397.mm.1	0.5	0.031975
TC0400002382.mm.1	NM_146550	Olfr810	olfactory receptor 810	129790609	129791614	TC1000003191.mm.1	-0.2	0.032004
TC0400002404.mm.1	NCBI_Gene:626545:p	Trdv5	T cell receptor delta variable 5	54148662	54149294	TC1400002049.mm.1	-0.4	0.032028
TC0400002414.mm.1	XM_204772	Gm5068	predicted gene 5068	73949004	73961447	TC1200000654.mm.1	0.1	0.032077
TC0400002418.mm.1	NM_026793	Myct1	myc target 1	5593728	5606791	TC1000000035.mm.1	0.4	0.032097
TC0400002425.mm.1	NM_013738	Plek2	pleckstrin 2	78888691	78906964	TC1200001972.mm.1	-0.3	0.032111
TC0400002431.mm.1	XM_001004798	Gm9178	predicted gene 9178	20417704	20418441	TC1200000176.mm.1	-0.2	0.032123
TC0400002432.mm.1	NM_028986	Gzf1	GDNF-inducible zinc finger protein 1	148681023	148692949	TC0200002197.mm.1	0.2	0.032149
TC0400002433.mm.1	NM_001024955	Pik3r1	phosphatidylinositol 3-kinase, regulatory subun	101680761	101768217	TC1300002553.mm.1	0.5	0.032175
TC0400002436.mm.1	ENSMUST00000053686	Uck2	uridine-cytidine kinase 2	167223827	167223919	TC0100003477.mm.1	-0.3	0.032186
TC0400002437.mm.1	NM_177603	Frat2	frequently rearranged in advanced T cell lympho	41845972	41848132	TC1900001511.mm.1	-0.2	0.032279
TC0400002441.mm.1	NM_001004156	Plekhg5	pleckstrin homology domain containing, family G	152072498	152115404	TC0400002011.mm.1	0.1	0.032371
TC0400002448.mm.1	NM_001195090	Tmc8	transmembrane channel-like gene family 8	117782076	117793137	TC1100001969.mm.1	-0.3	0.032402
TC0400002450.mm.1	ENSMUST00000089430	Uba52	ubiquitin A-52 residue ribosomal protein fusion	3973092	3973595	TC0400002134.mm.1	-0.5	0.032482
TC0400002451.mm.1	NM_001111099	Cdkn1a	cyclin-dependent kinase inhibitor 1A (P21)	29090979	29100722	TC1700000496.mm.1	0.7	0.032595
TC0400002452.mm.1	NM_183390	Klhl6	kelch-like 6	19946492	19983049	TC1600001337.mm.1	-0.8	0.032627
TC0400002454.mm.1	NM_207213	Snx25	sorting nexin 25	46033261	46152159	TC0800002154.mm.1	-0.2	0.032703
TC0400002455.mm.1	NM_023735	Actr3	ARP3 actin-related protein 3	125392905	125435727	TC0100002993.mm.1	-0.4	0.032717
TC0400002456.mm.1	ENSMUST00000060640	Gm7984	predicted gene 7984	75398511	75399048	TC0800000849.mm.1	-0.3	0.032725
TC0400002457.mm.1	ENSMUST00000119822	Gm13408	predicted gene 13408	34564999	34565796	TC0200000616.mm.1	-0.7	0.032762
TC0400002461.mm.1	ENSMUST00000117232	Gm8216	predicted gene 8216	144847683	144848283	TC0X00001429.mm.1	-0.2	0.032844
TC0400002462.mm.1	NM_010658	Mafb	v-maf musculoaponeurotic fibrosarcoma oncoge	160363677	160367065	TC0200005052.mm.1	0.3	0.032861
TC0400002466.mm.1	NM_145624	Zfp709	zinc finger protein 709	71882068	71892565	TC0800000803.mm.1	-0.2	0.032928
TC0400002469.mm.1	NM_024219	Hsbp1	heat shock factor binding protein 1	119344538	119348929	TC0800001418.mm.1	0.6	0.032928
TC0400002477.mm.1	ENSMUST00000111976	Cfh	complement component factor h	140085855	140183411	TC0100003193.mm.1	1.0	0.032974
TC0400002483.mm.1	NM_177201	Phf8	PHD finger protein 8	151520672	151633859	TC0X00001520.mm.1	0.2	0.032986
TC0400002486.mm.1	ENSMUST00000095633	Gm5145	predicted pseudogene 5145	20570362	20571198	TC1700000248.mm.1	-0.2	0.033035
TC0400002488.mm.1	NM_026111	Qpctl	glutaminyl-peptide cyclotransferase-like	19140217	19149206	TC0700002471.mm.1	0.4	0.03305
TC0400002489.mm.1	NM_181277	Col14a1	collagen, type XIV, alpha 1	55307750	55520803	TC1500000395.mm.1	0.4	0.033063
TC0400002490.mm.1	ENSMUST00000116755	Gm23651	predicted gene, 23651	10482812	10482931	TC0200000124.mm.1	-0.2	0.033115
TC0400002495.mm.1	NR_028561	Snord45	small nucleolar RNA, C/D box 45B	153910563	153910633	TC0300003171.mm.1	-1.4	0.033132
TC0400002498.mm.1	NM_013632	Pnp	purine-nucleoside phosphorylase	50944302	50965237	TC1400000574.mm.1	0.4	0.033185
TC0400002500.mm.1	NM_146162	Tmem119	transmembrane protein 119	113793729	113800516	TC0500003048.mm.1	0.2	0.03322
TC0400002502.mm.1	NM_033613	Dom3z	DOM-3 homolog Z (C. elegans)	34837019	34839233	TC1700000646.mm.1	0.1	0.033228
TC0400002503.mm.1	NM_001033284	BC02658	cDNA sequence BC026585	157458580	157489062	TC0100001433.mm.1	0.4	0.033231
TC0400002506.mm.1	NM_001013769	Rsl1	regulator of sex limited protein 1	67173182	67183499	TC1300000818.mm.1	-0.3	0.033237
TC0400002516.mm.1	ENSMUST00000119744	Psmb5-p	proteasome (prosome, macropain) subunit, beta	102659128	102659925	TC1100003850.mm.1	-0.2	0.033272
TC0400002518.mm.1	NM_001081359	Ubr5	ubiquitin protein ligase E3 component n-recogni	37967328	38078854	TC1500001403.mm.1	0.3	0.033321
TC0400002522.mm.1	ENSMUST00000117774	Gm14107	predicted gene 14107	147642848	147643177	TC0200004797.mm.1	-0.2	0.033371
TC0400002529.mm.1	NCBI_Gene:10012646	Trav6-5	T cell receptor alpha variable 6-5	53491115	53491622	TC1400000697.mm.1	-0.6	0.033379
TC0400002532.mm.1	NM_201363	Serpinb	serine (or cysteine) peptidase inhibitor, clade	107271201	107278371	TC0100003885.mm.1	-0.1	0.033436
TC0400002544.mm.1	ENSMUST00000182350	Xcr1	chemokine (C motif) receptor 1	123852315	123862029	TC0900003312.mm.1	-0.2	0.033508
TC0400002550.mm.1	XR_140431	Gm5526	myosin, light polypeptide 6, alkali, smooth mus	45857132	45857787	TC0100002283.mm.1	0.5	0.03353
TC0400002560.mm.1	NM_001168240	Irak1bp	interleukin-1 receptor-associated kinase 1 bind	82829806	82847688	TC0900001083.mm.1	0.2	0.033566
TC0400002568.mm.1	NM_009126	Serpinb	serine (or cysteine) peptidase inhibitor, clade	107045587	107052337	TC0100002903.mm.1	-0.4	0.033585
TC0400002570.mm.1	NM_020561	Smpdl3a	sphingomyelin phosphodiesterase, acid-like 3A	57794335	57811830	TC1000000509.mm.1	0.6	0.033592
TC0400002572.mm.1	NM_011896	Spry1	sprouty homolog 1 (Drosophila)	37639947	37644599	TC0300000288.mm.1	0.2	0.033612
TC0400002592.mm.1	NR_002843	Rnu3b4	U3B small nuclear RNA 4	0	0	TSUnmapped0000013	-0.9	0.033613
TC0400002593.mm.1	NM_001113355	Vps26a	vacuolar protein sorting 26 homolog A (yeast)	62454843	62486805	TC1000002259.mm.1	0.2	0.033674
TC0400002599.mm.1	XM_001478256	Gm3837	predicted gene 3837	189277308	189277823	TC0100003780.mm.1	-0.4	0.033701
TC0400002601.mm.1	NM_008908	Ppic	peptidylprolyl isomerase C	53406341	53418022	TC1800001338.mm.1	0.7	0.033715
TC0400002624.mm.1	ENSMUST00000100510	Gm16409	predicted gene 16409	73796541	73797290	TC1400002398.mm.1	-0.9	0.03375
TC0400002630.mm.1	NM_026119	Med4	mediator of RNA polymerase II transcription, su	73510049	73518545	TC1400001035.mm.1	-0.4	0.03376
TC0400002631.mm.1	NM_178201	Hist1h2	histone cluster 1, H2bn	21754123	21754503	TC1300000177.mm.1	-1.2	0.033787
TC0400002633.mm.1	ENSMUST00000116999	Gm26156	predicted gene, 26156	10499204	10499326	TC0200000164.mm.1	-0.2	0.033827
TC0400002637.mm.1	NM_053191	Pi15	peptidase inhibitor 15	17601901	17630939	TC0100000112.mm.1	0.2	0.033855
TC0400002645.mm.1	ENSMUST00000104431	Gm25495	predicted gene, 25495	90356387	90356517	TC1400001138.mm.1	-0.2	0.034093
TC0400002650.mm.1	ENSMUST00000120241	Rpl17-p	ribosomal protein L17, pseudogene 4	63895545	63896099	TC0400002810.mm.1	-0.7	0.034098
TC0400002653.mm.1	ENSMUST00000120962	Gm13310	predicted gene 13310	12082612	12084003	TC0200002971.mm.1	-0.3	0.034098
TC0400002660.mm.1	NM_019743	Rybp	RING1 and YY1 binding protein	100228565	100287441	TC0600002853.mm.1	-0.1	0.034138

TC0400002683.mm.1	NM_001170911	Prr13	proline rich 13	102459028	102462806	TC1500001101.mm.1	0.3	0.034208
TC0400002685.mm.1	NM_023258	Pycard	PYD and CARD domain containing	127991373	127993867	TC0700004351.mm.1	-0.3	0.034259
TC0400002690.mm.1	NR_037603	Kat5	K(lysine) acetyltransferase 5	5603014	5610094	TC1900000975.mm.1	-0.2	0.03427
TC0400002694.mm.1	NM_009856	Cd83	CD83 antigen	43785107	43803132	TC1300000498.mm.1	-0.5	0.034278
TC0400002701.mm.1	NM_028784	F13a1	coagulation factor XIII, A1 subunit	36867178	37050244	TC1300001814.mm.1	0.7	0.034343
TC0400002711.mm.1	ENSMUST00000178810	Gm25314	predicted gene, 25314	59371975	59372053	TC0700003146.mm.1	-0.1	0.034348
TC0400002722.mm.1	ENSMUST00000104249	n-R5s17	nuclear encoded rRNA 5S 178	134416239	134416352	TC0500001554.mm.1	0.2	0.034371
TC0400002727.mm.1	NM_001163743	Nlrx1	NLR family member X1	44252713	44268599	TC0900002152.mm.1	0.1	0.034412
TC0400002728.mm.1	ENSMUST00000122583	n-R5s21	nuclear encoded rRNA 5S 218	149734750	149734858	TC0100003232.mm.1	0.3	0.034491
TC0400002731.mm.1	ENSMUST00000184893	CT02558	N/A	38899833	38899944	TC1400001759.mm.1	0.2	0.034506
TC0400002737.mm.1	ENSMUST00000177872	Gm24388	predicted gene, 24388	40421515	40421621	TC1400000406.mm.1	-0.3	0.034715
TC0400002744.mm.1	NM_023503	Ing2	inhibitor of growth family, member 2	47667178	47675556	TC0800002178.mm.1	-0.1	0.03475
TC0400002749.mm.1	NM_001159910	Ccdc85c	coiled-coil domain containing 85C	108206345	108275417	TC1200002346.mm.1	-0.1	0.034785
TC0400002756.mm.1	NCBI_Gene:667441:p	Trav3-1	T cell receptor alpha variable 3-1	52580665	52581217	TC1400000616.mm.1	-0.2	0.034793
TC0400002765.mm.1	NM_147155	Tagap1	T cell activation GTPase activating protein 1	6954965	6961156	TC1700001395.mm.1	-0.4	0.034806
TC0400002766.mm.1	ENSMUST00000161062	Gm6428	predicted pseudogene 6428	36601802	36602146	TC0100000251.mm.1	-0.5	0.034858
TC0400002768.mm.1	NM_001113368	Ceacam2	carcinoembryonic antigen-related cell adhesion	25516042	25540004	TC0700002636.mm.1	0.3	0.03487
TC0400002769.mm.1	NM_145975	Ddx46	DEAD (Asp-Glu-Ala-Asp) box polypeptide 46	55634999	55681267	TC1300000671.mm.1	-0.4	0.03494
TC0400002770.mm.1	ENSMUST00000119442	Gm13369	predicted gene 13369	24993357	24994343	TC0200003124.mm.1	-0.3	0.034992
TC0400002771.mm.1	ENSMUST00000102083	Gm22752	predicted gene, 22752	93433197	93433766	TC0300002421.mm.1	0.1	0.035015
TC0400002775.mm.1	NCBI_Gene:10012436	Traj29	T cell receptor alpha joining 29	54190946	54191005	TC1400000734.mm.1	-0.3	0.035039
TC0400002776.mm.1	ENSMUST00000119516	Gm15824	predicted gene 15824	64190032	64190989	TC0500002465.mm.1	-0.1	0.035066
TC0400002778.mm.1	XM_001003926	Rps6-ps	ribosomal protein S6, pseudogene 4	75190997	75191854	TC0200003782.mm.1	-0.7	0.035148
TC0400002779.mm.1	NM_175423	Orai1	ORAI calcium release-activated calcium modulat	123015074	123030452	TC0500001405.mm.1	-0.1	0.035227
TC0400002786.mm.1	NM_178695	Prrg4	proline rich Gla (G-carboxyglutamic acid) 4 (tr	104830741	104849876	TC0200004251.mm.1	-0.2	0.035267
TC0400002788.mm.1	NM_023740	Zdhhc16	zinc finger, DHHC domain containing 16	41933472	41944103	TC1900000602.mm.1	-0.3	0.035273
TC0400002791.mm.1	NM_015776	Mfap5	microfibrillar associated protein 5	122505845	122529290	TC0600001384.mm.1	0.4	0.035334
TC0400002796.mm.1	NM_017461	1-Sep	septin 1	127214442	127218498	TC0700004318.mm.1	-0.8	0.035364
TC0400002797.mm.1	NM_028932	Eaf1	ELL associated factor 1	31495079	31509858	TC1400000329.mm.1	-0.2	0.035376
TC0400002807.mm.1	NM_133911	Gpr125	G protein-coupled receptor 125	49959951	50058996	TC0500002386.mm.1	0.3	0.03538
TC0400002810.mm.1	NM_030226	9130019	RIKEN cDNA 9130019O22 gene	127382260	127387166	TC0700004662.mm.1	-0.2	0.03548
TC0400002812.mm.1	NM_001159578	Lnx1	ligand of numb-protein X 1	74592446	74702911	TC0500002608.mm.1	0.1	0.035504
TC0400002832.mm.1	ENSMUST00000118646	Gm1826	predicted gene 1826	87393483	87394644	TC0200001290.mm.1	-0.2	0.035543
TC0400002833.mm.1	XM_003688940	LOC1008	zinc finger protein 292-like	64786675	64851652	TC1600001839.mm.1	-0.3	0.035558
TC0400002845.mm.1	ENSMUST00000117842	Gm11652	predicted gene 11652	105773518	105774784	TC1100001762.mm.1	-0.5	0.035591
TC0400002846.mm.1	ENSMUST00000158560	Gm22940	predicted gene, 22940	11279265	11279419	TC0400002207.mm.1	0.2	0.035674
TC0400002849.mm.1	NM_001097979	Hist1h2	histone cluster 1, H2bq	21806412	21810199	TC1300001563.mm.1	-0.2	0.035833
TC0400002852.mm.1	NM_001166477	Hmga1-r	high mobility group AT-hook I, related sequence	120762794	120764419	TC1100002046.mm.1	-0.5	0.035843
TC0400002855.mm.1	NM_001038627	Smurf1	SMAD specific E3 ubiquitin protein ligase 1	144876495	144965847	TC0500003585.mm.1	0.2	0.0359
TC0400002856.mm.1	XR_035179	A530021	Riken cDNA A530021J07 gene	83148470	83179438	TC0700001196.mm.1	0.2	0.036045
TC0400002859.mm.1	NM_010696	Lcp2	lymphocyte cytosolic protein 2	34046920	34092295	TC1100000362.mm.1	-0.9	0.036055
TC0400002860.mm.1	NM_001039186	Ceacam1	carcinoembryonic antigen-related cell adhesion	25461702	25489492	TC0700002635.mm.1	0.5	0.036057
TC0400002873.mm.1	NM_001172104	Zbtb25	zinc finger and BTB domain containing 25	76347782	76369602	TC1200001947.mm.1	-0.1	0.036081
TC0400002874.mm.1	NM_021384	Rsad2	radical S-adenosyl methionine domain containin	26442743	26456452	TC1200001552.mm.1	0.3	0.036088
TC0400002895.mm.1	NM_175378	Clip4	CAP-GLY domain containing linker protein family	71769691	71864210	TC1700001143.mm.1	-0.3	0.036163
TC0400002919.mm.1	NM_133990	Il13ra1	interleukin 13 receptor, alpha 1	36112110	36171262	TC0X00000316.mm.1	-0.2	0.036197
TC0400002920.mm.1	ENSMUST00000119417	Gm5844	predicted gene 5844	18008806	18010996	TC0300000117.mm.1	-0.5	0.036213
TC0400002921.mm.1	NM_010903	Nfe2l3	nuclear factor, erythroid derived 2, like 3	51432670	51458772	TC0600000606.mm.1	-0.1	0.036314
TC0400002928.mm.1	ENSMUST00000102085	Gm22137	predicted gene, 22137	8623163	8623720	TC1600001173.mm.1	0.3	0.036344
TC0400002936.mm.1	BC106857	Mcoln3	mucolipin 3	146117459	146141806	TC0300001488.mm.1	-0.3	0.036365
TC0400002946.mm.1	ENSMUST00000062429	Gm16433	predicted gene 16433	108563445	108565693	TC0600002885.mm.1	-0.3	0.036369
TC0400002953.mm.1	ENSMUST00000175582	Gm24970	predicted gene, 24970	31564962	31565043	TC1700001821.mm.1	-0.2	0.036391
TC0400002969.mm.1	NM_178683	Depdc1b	DEP domain containing 1B	108316332	108407782	TC1300001205.mm.1	-0.2	0.036441
TC0400002973.mm.1	ENSMUST00000075609	Gm10043	predicted pseudogene 10043	10145453	10145965	TC1800000971.mm.1	-0.2	0.036504
TC0400002978.mm.1	ENSMUST00000117125	Gm13303	predicted gene 13303	42025429	42026712	TC0400002486.mm.1	0.3	0.036574
TC0400002979.mm.1	NR_037992	Jmjd4	jumonji domain containing 4	59450045	59458567	TC1100000722.mm.1	-0.2	0.036594
TC0400002980.mm.1	NM_146900	Olfr122	olfactory receptor 1220	89096938	89097963	TC0200004040.mm.1	0.3	0.036686
TC0400002986.mm.1	ENSMUST00000120799	Gm11786	predicted gene 11786	3327175	3327329	TC0400000007.mm.1	-0.3	0.036745
TC0400003001.mm.1	NM_007672	Cdr2	cerebellar degeneration-related 2	120957036	120982312	TC0700004201.mm.1	0.4	0.036818
TC0400003005.mm.1	NM_027088	Bap1	Brca1 associated protein 1	31251489	31259930	TC1400000326.mm.1	-0.2	0.036855
TC0400003009.mm.1	NM_181848	Optn	optineurin	5020642	5064051	TC0200002872.mm.1	0.3	0.036893
TC0400003011.mm.1	NM_010651	Klra9	killer cell lectin-like receptor subfamily A, m	130178682	130193112	TC0600003611.mm.1	-0.3	0.036907
TC0400003012.mm.1	ENSMUST00000116350	Tpm3-rs	tropomyosin 3, related sequence 2	27996583	27996905	TC0400002339.mm.1	-0.8	0.036935
TC0400003016.mm.1	ENSMUST00000104059	Gm24263	predicted gene, 24263	23296329	23296435	TC1900000377.mm.1	0.3	0.036941
TC0400003018.mm.1	NM_016856	Cpsf2	cleavage and polyadenylation specific factor 2	101975974	102005993	TC1200001009.mm.1	-0.3	0.036966
TC0400003020.mm.1	NM_029250	Etnk1	ethanolamine kinase 1	143167230	143208547	TC0600001696.mm.1	-0.5	0.037028
TC0400003027.mm.1	NM_172713	Sdad1	SDA1 domain containing 1	92284010	92310024	TC0500002754.mm.1	-0.2	0.037036
TC0400003031.mm.1	NCBI_Gene:780804:p	Ighv11-	immunoglobulin heavy variable 11-1	113981879	113982341	TC1200002579.mm.1	1.3	0.037086
TC0400003041.mm.1	ENSMUST00000085340	Gm10268	predicted gene 10268	38244828	38245382	TC1800000393.mm.1	-0.9	0.037091
TC0400003047.mm.1	ENSMUST00000118131	Gm8503	predicted gene 8503	75155819	75156273	TC0X00000739.mm.1	-0.4	0.037092
TC0400003048.mm.1	OTTMUST00000054917	AC11062	---	104821204	104822256	TC0700001534.mm.1	0.3	0.037104
TC0400003051.mm.1	NM_026654	Toe1	target of EGR1, member 1 (nuclear)	116794310	116807640	TC0400003351.mm.1	-0.1	0.037138
TC0400003055.mm.1	ENSMUST00000158636	Mir669n	microRNA 669n	115979902	115979955	TC0300001184.mm.1	0.4	0.037275
TC0400003059.mm.1	ENSMUST00000166026	Gm14387	predicted gene 14387	175086501	175089918	TC0200002715.mm.1	0.6	0.037368
TC0400003060.mm.1	NM_025974	Rpl14	ribosomal protein L14	120571517	120574653	TC0900001605.mm.1	-0.7	0.037372
TC0400003062.mm.1	NM_028015	Cers5	ceramide synthase 5	99733506	99772885	TC1500002221.mm.1	0.2	0.03738
TC0400003071.mm.1	NCBI_Gene:108022:p	Igkv6-1	immunoglobulin kappa variable 6-15	70406469	70406992	TC0600003595.mm.1	-1.4	0.037399
TC0400003074.mm.1	ENSMUST00000079663	Gm2174	predicted gene 2174	56447965	56448366	TC0X00000518.mm.1	-0.9	0.037411

TC0400003079.mm.1	XM_001480943	Gm9840	predicted gene 9840	35935462	35937997	TC1700001988.mm.1	-0.2	0.037449
TC0400003085.mm.1	NM_007693	Chga	chromogranin A	102554969	102565027	TC1200001018.mm.1	-0.2	0.03745
TC0400003090.mm.1	NM_011943	Map2k6	mitogen-activated protein kinase kinase 6	110399122	110525522	TC1100001841.mm.1	-0.2	0.03748
TC0400003092.mm.1	ENSMUST00000099936	Gm10813	predicted gene 10813	36235604	36235697	TC1600001568.mm.1	0.2	0.037646
TC0400003094.mm.1	ENSMUST00000097987	Gm10582	predicted gene 10582	88761101	88761500	TC0400003020.mm.1	-0.1	0.037712
TC0400003096.mm.1	ENSMUST00000118873	Gm6382	predicted gene 6382	142210884	142211825	TC0X00001400.mm.1	-0.5	0.037745
TC0400003097.mm.1	NM_008940	Klk8	kallikrein related-peptidase 8	43797577	43803822	TC0700000775.mm.1	-0.1	0.037747
TC0400003100.mm.1	NR_035410	Mir669k	microRNA 669k	10475300	10475426	TC0200000107.mm.1	-0.3	0.037792
TC0400003101.mm.1	NM_023343	Ilkap	integrin-linked kinase-associated serine/threon	91373861	91398783	TC0100002798.mm.1	-0.1	0.037803
TC0400003104.mm.1	ENSMUST00000121149	Gm12096	predicted gene 12096	30528295	30529401	TC1100000312.mm.1	-0.4	0.037812
TC0400003117.mm.1	NM_053069	Atg5	autophagy related 5	44268358	44364291	TC1000000413.mm.1	-0.2	0.037841
TC0400003118.mm.1	ENSMUST00000117075	Gm4913	predicted gene 4913	119966284	119967573	TC0X00001174.mm.1	-0.2	0.037859
TC0400003119.mm.1	ENSMUST00000158068	Gm22330	predicted gene, 22330	31352980	31353094	TC1300000345.mm.1	0.4	0.037925
TC0400003126.mm.1	NM_001081430	Naa30	N(alpha)-acetyltransferase 30, NatC catalytic s	49172226	49191031	TC1400000542.mm.1	-0.2	0.037928
TC0400003146.mm.1	NM_007977	F8	coagulation factor VIII	75172715	75382615	TC0X00002472.mm.1	0.2	0.03809
TC0400003149.mm.1	ENSMUST00000083060	Gm22422	predicted gene, 22422	56035753	56035887	TC1600001748.mm.1	-1.0	0.03812
TC0400003153.mm.1	NM_009331	Tcf7	transcription factor 7, T cell specific	52252295	52283014	TC1100002715.mm.1	-1.7	0.038123
TC0400003163.mm.1	ENSMUST00000119178	Gm13065	predicted gene 13065	149793279	149793419	TC0400004052.mm.1	-0.3	0.038201
TC0400003164.mm.1	NCBI_Gene:10004327	Trav9n-	T cell receptor alpha variable 9N-3	53231466	53233367	TC1400002812.mm.1	-0.5	0.038262
TC0400003170.mm.1	ENSMUST00000084199	Gm6378	predicted pseudogene 6378	21076667	21077110	TC1800001053.mm.1	-0.2	0.038269
TC0400003179.mm.1	NM_029357	Pcdh1	protocadherin 1	38185915	38212053	TC1800001227.mm.1	0.2	0.038277
TC0400003184.mm.1	NM_009911	Cxcr4	chemokine (C-X-C motif) receptor 4	128588199	128592299	TC0100003029.mm.1	-1.5	0.038278
TC0400003196.mm.1	NR_027863	Rnu3b2	U3B small nuclear RNA 2	0	0	TSUnmapped0000017	-0.8	0.038313
TC0400003220.mm.1	NR_004416	Rnu3b3	U3B small nuclear RNA 3	0	0	TSUnmapped0000018	-0.8	0.038313
TC0400003225.mm.1	NR_004415	Rnu3b1	U3B small nuclear RNA 1	0	0	TSUnmapped0000018	-0.8	0.038313
TC0400003226.mm.1	NM_021552	Nsa2	NSA2 ribosome biogenesis homolog (S. cerevisia	97129427	97137926	TC1300002479.mm.1	-0.4	0.038343
TC0400003230.mm.1	NCBI_Gene:667924:p	Igkv3-1	immunoglobulin kappa variable 3-10	70572633	70573230	TC0600003527.mm.1	-1.4	0.038354
TC0400003244.mm.1	NM_144921	Atp1a3	ATPase, Na+/K+ transporting, alpha 3 polypeptid	24978167	25005957	TC0700002617.mm.1	0.3	0.038424
TC0400003246.mm.1	ENSMUST00000104369	Gm23706	predicted gene, 23706	8480660	8480741	TC1600001172.mm.1	-0.6	0.038458
TC0400003256.mm.1	ENSMUST00000112589	Gm11099	predicted gene 11099	58859434	58907618	TC0200000886.mm.1	0.4	0.038458
TC0400003265.mm.1	ENSMUST00000179471	Gm22951	predicted gene, 22951	99368029	99368135	TC1500002210.mm.1	-0.5	0.038465
TC0400003289.mm.1	NR_028144	Lrrc28	leucine rich repeat containing 28	67513410	67645236	TC0700003448.mm.1	-0.2	0.038489
TC0400003290.mm.1	ENSMUST00000158843	Gm24354	predicted gene, 24354	116478218	116478281	TC1200002499.mm.1	-0.1	0.038489
TC0400003291.mm.1	ENSMUST00000175292	Gm23630	predicted gene, 23630	94184027	94184130	TC0200004173.mm.1	0.3	0.038496
TC0400003294.mm.1	BC055316	Pim1	proviral integration site 1	29490812	29495465	TC1700000505.mm.1	-0.4	0.038517
TC0400003306.mm.1	ENSMUST00000036712	Tom1	target of myb1 homolog (chicken)	128644838	128647096	TC0600001514.mm.1	0.4	0.038542
TC0400003307.mm.1	NR_003363	Gm6548	eukaryotic translation elongation factor 1 alph	78850505	78852544	TC1700002557.mm.1	-0.3	0.038552
TC0400003315.mm.1	ENSMUST00000119295	Gm14098	predicted gene 14098	132678269	132679239	TC0200002039.mm.1	-0.2	0.038579
TC0400003319.mm.1	NM_023485	Sync	syncoilin	129287617	129308559	TC0400001517.mm.1	0.1	0.038591
TC0400003321.mm.1	NM_178908	Fam26e	family with sequence similarity 26, member E	34091352	34096519	TC1000001993.mm.1	0.2	0.038666
TC0400003335.mm.1	XM_001473957	Gm10349	predicted gene 10349	10483083	10483545	TC1800000975.mm.1	-0.4	0.038691
TC0400003349.mm.1	ENSMUST00000117214	Gm13870	predicted gene 13870	104537437	104538459	TC0200001559.mm.1	-0.2	0.038694
TC0400003351.mm.1	NM_153387	Tubgcp4	tubulin, gamma complex associated protein 4	121170654	121198770	TC0200001808.mm.1	-0.2	0.038711
TC0400003353.mm.1	NM_019814	Higd1a	HIG1 domain family, member 1A	121848560	121858000	TC0900003275.mm.1	0.2	0.038719
TC0400003355.mm.1	NCBI_Gene:780818:p	Ighv11-	immunoglobulin heavy variable V11-2	114048241	114054514	TC1200002581.mm.1	1.2	0.038748
TC0400003361.mm.1	NCBI_Gene:547420:p	Trav7-3	T cell receptor alpha variable 7-3	53443249	53443839	TC1400000693.mm.1	-0.4	0.038767
TC0400003363.mm.1	ENSMUST00000158365	Gm22767	predicted gene, 22767	132838383	132838547	TC0400003684.mm.1	-1.2	0.038898
TC0400003364.mm.1	ENSMUST00000116793	Gm25847	predicted gene, 25847	87034766	87034861	TC1200000867.mm.1	0.3	0.038901
TC0400003365.mm.1	ENSMUST00000117051	Gm14445	predicted gene 14445	175038121	175041036	TC0200002713.mm.1	0.1	0.038911
TC0400003369.mm.1	NR_003568	Gpr137b	G protein-coupled receptor 137B, pseudogene	12614065	12650395	TC1300001451.mm.1	0.4	0.038964
TC0400003374.mm.1	NM_001252437	Mgrn1	mahogunin, ring finger 1	4886100	4938296	TC1600000038.mm.1	0.3	0.038998
TC0400003380.mm.1	ENSMUST00000175080	Gm23163	predicted gene, 23163	109425644	109425744	TC0800002900.mm.1	0.3	0.039065
TC0400003383.mm.1	NM_175113	Trmt6	tRNA methyltransferase 6	132804207	132816055	TC0200004681.mm.1	-0.1	0.039119
TC0400003386.mm.1	NM_007649	Cd48	CD48 antigen	171682009	171705258	TC0100001597.mm.1	-0.5	0.039143
TC0400003393.mm.1	ENSMUST00000158022	Gm26487	predicted gene, 26487	59190773	59190866	TC0X00000544.mm.1	0.2	0.039199
TC0400003394.mm.1	NM_001290273	1-Mar	mitochondrial amidoxime reducing component 1	0	0	TSUnmapped0000000	0.5	0.039275
TC0400003408.mm.1	NM_016851	Irf6	interferon regulatory factor 6	193153112	193172042	TC0100003872.mm.1	-0.1	0.039327
TC0400003417.mm.1	NM_138956	Rassf3	Ras association (RalGDS/AF-6) domain family me	121410350	121476305	TC1000003047.mm.1	0.2	0.039338
TC0400003418.mm.1	XM_003085121	Gm17748	predicted gene, 17748	9421940	9429394	TC1700001422.mm.1	-0.3	0.039358
TC0400003422.mm.1	NM_198937	Hn1l	hematological and neurological expressed 1-like	24937419	24960652	TC1700001648.mm.1	0.3	0.03936
TC0400003433.mm.1	NM_201361	Rmdn2	regulator of microtubule dynamics 2	79614900	79682152	TC1700001197.mm.1	0.2	0.039439
TC0400003441.mm.1	ENSMUST00000073637	Gm7331	predicted gene 7331	162566816	162567309	TC0X00001645.mm.1	-0.4	0.039442
TC0400003445.mm.1	ENSMUST00000175418	Gm25037	predicted gene, 25037	4854314	4854423	TC0500001901.mm.1	0.3	0.039521
TC0400003446.mm.1	NM_177864	Skint9	selection and upkeep of intraepithelial T cells	112385969	112433985	TC0400003290.mm.1	-0.2	0.039531
TC0400003448.mm.1	NCBI_Gene:384419:p	Igkv8-3	immunoglobulin kappa chain variable 8-30	70117061	70117617	TC0600003586.mm.1	-1.4	0.039683
TC0400003452.mm.1	NM_026472	Mki67ip	Mki67 (FHA domain) interacting nucleolar phosp	118321839	118333831	TC0100001058.mm.1	-0.4	0.039711
TC0400003456.mm.1	ENSMUST00000121348	Gm7638	predicted gene 7638	11185133	11186099	TC1600001211.mm.1	-0.1	0.039729
TC0400003465.mm.1	NM_145467	Itgbl1	integrin, beta-like 1	123659971	123975618	TC1400001346.mm.1	0.1	0.039763
TC0400003466.mm.1	ENSMUST00000158370	Gm22764	predicted gene, 22764	111965957	111966048	TC1400002694.mm.1	0.3	0.039819
TC0400003478.mm.1	NM_026892	Eif1b	eukaryotic translation initiation factor 1B	120492606	120495330	TC0900001603.mm.1	-0.2	0.039849
TC0400003488.mm.1	NM_009422	Traf2	TNF receptor-associated factor 2	25517982	25546940	TC0200003157.mm.1	-0.2	0.039856
TC0400003490.mm.1	NM_009401	Tnfrsf8	tumor necrosis factor receptor superfamily, mer	145267137	145315164	TC0400003958.mm.1	-0.2	0.039956
TC0400003506.mm.1	ENSMUST00000096481	Gm14539	predicted gene 14539	20581138	20581314	TC0X00001925.mm.1	-0.6	0.039961
TC0400003514.mm.1	NM_009808	Casp12	caspase 12	5345430	5373034	TC0900000033.mm.1	0.3	0.039967
TC0400003516.mm.1	ENSMUST00000121259	Gm14845	predicted gene 14845	101691545	101691850	TC0X00002725.mm.1	0.4	0.040046
TC0400003522.mm.1	NCBI_Gene:667604:p	Trav8d-	Trav8d-2 T cell receptor alpha variable 8D-2	53042428	53042891	TC1400000654.mm.1	-0.4	0.040059
TC0400003526.mm.1	NM_007725	Cnn2	calponin 2	79988584	79996062	TC1000000834.mm.1	-0.4	0.040077
TC0400003529.mm.1	NM_027249	Tlcd2	TLC domain containing 2	75468079	75470899	TC1100004270.mm.1	0.4	0.040124

TC0400003532.mm.1	NM_026991	Sat2	spermidine/spermine N1-acetyl transferase 2	69622024	69623870	TC1100000917.mm.1	0.2	0.040128
TC0400003542.mm.1	NM_019680	Elf4	E74-like factor 4 (ets domain transcription fac	48411046	48463132	TC0X00002161.mm.1	-0.4	0.040149
TC0400003543.mm.1	NM_001033236	Mettl21	methyltransferase like 21D	69577628	69583110	TC1200001868.mm.1	-0.1	0.04015
TC0400003544.mm.1	NM_019912	Ube2d2a	ubiquitin-conjugating enzyme E2D 2A	35771559	35807172	TC1800000318.mm.1	-0.3	0.040205
TC0400003549.mm.1	ENSMUST00000170136	Gm15710	predicted gene 15710	92140256	92140960	TC0500002749.mm.1	-0.5	0.040253
TC0400003567.mm.1	NM_019454	Dll4	delta-like 4 (Drosophila)	119325784	119335962	TC0200001769.mm.1	0.3	0.040265
TC0400003577.mm.1	ENSMUST00000118467	Rap1a-p	RAS related protein-1a, pseudogene 2	117240883	117241441	TC0200001722.mm.1	-0.3	0.04037
TC0400003579.mm.1	NM_027446	Fam86	family with sequence similarity 86	5244152	5255983	TC1600001158.mm.1	0.1	0.040377
TC0400003589.mm.1	ENSMUST00000097152	Gm10356	predicted gene 10356	47050382	47051641	TC0300001924.mm.1	-0.4	0.040446
TC0400003593.mm.1	NCBI_Gene:668389:p	Ighv2-4	immunoglobulin heavy variable V2-4	113653291	113653724	TC1200002559.mm.1	-0.9	0.040452
TC0400003611.mm.1	NCBI_Gene:108004:p	Igkv3-1	immunoglobulin kappa variable 3-1	70703578	70704177	TC0600003531.mm.1	-1.2	0.040475
TC0400003616.mm.1	NM_011738	Ywhah	tyrosine 3-monooxygenase/tryptophan 5-monoc	33018816	33027966	TC0500000349.mm.1	-0.2	0.040538
TC0400003629.mm.1	NM_145463	Shisa2	shisa homolog 2 (Xenopus laevis)	59625281	59631660	TC1400000837.mm.1	-0.3	0.040554
TC0400003655.mm.1	NM_007802	Ctsk	cathepsin K	95499210	95509387	TC0300000902.mm.1	0.4	0.040575
TC0400003659.mm.1	NM_001276315	Cdkl2	cyclin-dependent kinase-like 2 (CDC2-related ki	92006074	92043042	TC0500002744.mm.1	0.2	0.040621
TC0400003661.mm.1	ENSMUST00000121238	Gm11805	predicted gene 11805	3720427	3721026	TC0400002124.mm.1	-0.3	0.040626
TC0400003664.mm.1	ENSMUST00000182930	Gm9169	predicted gene 9169	95144371	95144906	TC0300000891.mm.1	-0.1	0.040636
TC0400003672.mm.1	NM_009778	C3	complement component 3	57203970	57228136	TC1700002352.mm.1	0.9	0.040719
TC0400003676.mm.1	OTTMUST00000017720	RP23-27	---	60818796	60819278	TC1100002898.mm.1	-0.5	0.040719
TC0400003681.mm.1	ENSMUST00000118935	Gm15235	predicted gene 15235	94589466	94589659	TC0300000872.mm.1	-0.6	0.040872
TC0400003684.mm.1	NM_033217	Ngfr	nerve growth factor receptor (TNFR superfamily,	95568818	95587735	TC1100003593.mm.1	-0.1	0.040874
TC0400003685.mm.1	NCBI_Gene:667899:p	Igkv6-1	immunoglobulin kappa variable 6-13	70457501	70458036	TC0600003597.mm.1	-1.0	0.040914
TC0400003687.mm.1	NM_025884	Zfp830	zinc finger protein 830	82764345	82767622	TC1100001231.mm.1	-0.2	0.040983
TC0400003688.mm.1	NM_029077	Trim14	tripartite motif-containing 14	46493781	46536144	TC0400002601.mm.1	0.2	0.041006
TC0400003695.mm.1	ENSMUST00000182081	Gm9162	predicted gene 9162	33137119	33138109	TC0700000608.mm.1	0.1	0.041037
TC0400003706.mm.1	NM_010900	Nfatc2i	nuclear factor of activated T cells, cytoplasmi	126382854	126396737	TC0700004276.mm.1	-0.3	0.041106
TC0400003707.mm.1	NM_001166753	Vmn1r15	vomeronasal 1 receptor 155	20668918	20669841	TC0700000322.mm.1	0.2	0.041121
TC0400003709.mm.1	NM_001166753	Vmn1r15	vomeronasal 1 receptor 155	22658018	22658941	TC0700000343.mm.1	0.2	0.041121
TC0400003716.mm.1	ENSMUST00000165691	Gm5529	predicted pseudogene 5529	79922536	79923426	TC0100002647.mm.1	-0.3	0.041173
TC0400003736.mm.1	NM_007983	Faf1	Fas-associated factor 1	109676588	109963960	TC0400001171.mm.1	-0.2	0.041195
TC0400003741.mm.1	ENSMUST00000083701	Gm24253	predicted gene, 24253	56263165	56263240	TC1100002793.mm.1	-1.3	0.0412
TC0400003742.mm.1	ENSMUST00000082406	mt-Tk	mitochondrially encoded tRNA lysine	7700	7764	TC0M00000008.mm.1	0.6	0.041208
TC0400003749.mm.1	ENSMUST00000056452	Gm11223	predicted gene 11223	69925201	69926171	TC0400002845.mm.1	-1.3	0.041256
TC0400003758.mm.1	NM_001204281	Hdac7	histone deacetylase 7	97792664	97844502	TC1500002158.mm.1	-0.5	0.041263
TC0400003761.mm.1	NM_001142963_2	Gm4767	predicted gene 4767	81812186	81826490	TC1000000909.mm.1	-0.3	0.041326
TC0400003763.mm.1	ENSMUST00000086887	Gm10197	predicted gene 10197	53371566	53371766	TC1900001670.mm.1	-0.2	0.041343
TC0400003765.mm.1	ENSMUST00000178971	Gm6900	predicted gene 6900	10656479	10656820	TC0700002316.mm.1	-0.4	0.041361
TC0400003771.mm.1	ENSMUST00000084003	Gm25627	predicted gene, 25627	146116102	146116254	TC0300003093.mm.1	0.2	0.041391
TC0400003773.mm.1	NM_178799	Acad12	acyl-Coenzyme A dehydrogenase family, membe	121598281	121618938	TC0500003194.mm.1	0.2	0.041421
TC0400003777.mm.1	NM_029738	Cluap1	clusterin associated protein 1	3908801	3941147	TC1600002167.mm.1	-0.1	0.041459
TC0400003788.mm.1	NM_020028	Lpar2	lysophosphatidic acid receptor 2	69822429	69831102	TC0800000726.mm.1	-0.1	0.041468
TC0400003792.mm.1	NM_001166218	Zfp712	zinc finger protein 712	67038594	67061170	TC1300002239.mm.1	-0.2	0.041473
TC0400003794.mm.1	NM_021394	Zbp1	Z-DNA binding protein 1	173206612	173218923	TC0200005290.mm.1	-0.3	0.041486
TC0400003821.mm.1	ENSMUST00000135410	Eif5al3	eukaryotic translation initiation factor 5A-lik	90132229	90132675	TC0500000831.mm.1	-1.0	0.041553
TC0400003827.mm.1	ENSMUST00000157922	Gm24965	predicted gene, 24965	25940365	25940470	TC0400000219.mm.1	0.2	0.041683
TC0400003833.mm.1	ENSMUST00000121781	Gm12094	predicted gene 12094	29840375	29840846	TC1100000306.mm.1	-0.4	0.041784
TC0400003834.mm.1	ENSMUST00000184700	RP24-22	N/A	72128587	72129391	TC0900000956.mm.1	-0.1	0.041827
TC0400003836.mm.1	NM_001004191	Gm5617	predicted gene 5617	48495343	48495975	TC0900000586.mm.1	0.3	0.04185
TC0400003848.mm.1	NM_001013380	Dync1li	dynein, cytoplasmic 1 light intermediate chain	104417674	104443047	TC0800002802.mm.1	0.3	0.04185
TC0400003851.mm.1	ENSMUST00000121654	Gm12372	predicted gene 12372	37139107	37139874	TC0400002418.mm.1	-0.5	0.041883
TC0400003880.mm.1	ENSMUST00000163360	D17H6S5	DNA segment, Chr 17, human D6S56E 5	34996736	35000958	TC1700001938.mm.1	-0.7	0.041887
TC0400003894.mm.1	NM_007679	Cebpd	CCAAT/enhancer binding protein (C/EBP), delta	15887286	15889545	TC1600000192.mm.1	0.3	0.041895
TC0400003907.mm.1	NM_021720	Donson	downstream neighbor of SON	91677268	91688765	TC1600002182.mm.1	-0.2	0.041937
TC0400003914.mm.1	NM_201641	Ugt1a10	UDP glycosyltransferase 1 family, polypeptide A	88055388	88220002	TC0100000836.mm.1	0.5	0.042007
TC0400003917.mm.1	NM_001103367	Rai2	retinoic acid induced 2	161717036	161779496	TC0X00001639.mm.1	0.1	0.042007
TC0400003925.mm.1	NM_138953	Ell2	elongation factor RNA polymerase II 2	75707484	75772361	TC1300000912.mm.1	0.4	0.042038
TC0400003958.mm.1	NM_019965	Dnajb12	DnaJ (Hsp40) homolog, subfamily B, member 12	59879556	59899302	TC1000000540.mm.1	0.2	0.042083
TC0400003965.mm.1	NM_001039483	Tmco1	transmembrane and coiled-coil domains 1	167308670	167333978	TC0100001548.mm.1	0.3	0.042109
TC0400003967.mm.1	uc007ljs.1	OTTMUSG	predicted gene, OTTMUSG00000002180, mRNA	99798186	99809892	TC1100001602.mm.1	-0.2	0.042123
TC0400003968.mm.1	NM_011293	Polr2j	polymerase (RNA) II (DNA directed) polypeptide	136116631	136122947	TC0500001598.mm.1	-0.2	0.042227
TC0400003969.mm.1	ENSMUST00000157452	Gm22814	predicted gene, 22814	33004663	33004766	TC1800001137.mm.1	-0.2	0.042254
TC0400003973.mm.1	NM_025684	Nepn	nephrocan	52388972	52404607	TC1000000468.mm.1	0.2	0.042265
TC0400003976.mm.1	ENSMUST00000051437	Hspe1-p	heat shock protein 1 (chaperonin 10), pseudoger	81399812	81400123	TC1200000755.mm.1	-0.2	0.042274
TC0400003977.mm.1	ENSMUST00000118681	Gm2810	predicted pseudogene 2810	40328438	40329427	TC0500000450.mm.1	-0.3	0.042297
TC0400003982.mm.1	NCBI_Gene:10012467	Trbv13-	T cell receptor beta, variable 13-2	41121396	41121832	TC0600003498.mm.1	-1.6	0.042305
TC0400003983.mm.1	NM_025372	Tipin	timeless interacting protein	64281607	64304794	TC0900000819.mm.1	-0.5	0.042312
TC0400003984.mm.1	NM_008428	Kcnj8	potassium inwardly-rectifying channel, subfamil	142564839	142571357	TC0600003378.mm.1	0.4	0.042371
TC0400003995.mm.1	ENSMUST00000114578	Vma21-p	VMA21 vacuolar H+-ATPase homolog (S. cerevisi	52496939	52497244	TC0400002660.mm.1	0.4	0.042399
TC0400003996.mm.1	NM_023824	Paqr4	progestin and adipoQ receptor family member IV	23736186	23740330	TC1700001602.mm.1	0.2	0.042413
TC0400003999.mm.1	NM_011186	Psmb5	proteasome (prosome, macropain) subunit, beta	54614119	54618003	TC1400002061.mm.1	-0.3	0.042471
TC0400004000.mm.1	ENSMUST00000079363	Gm10093	predicted pseudogene 10093	78491565	78493541	TC1700001186.mm.1	-0.6	0.042485
TC0400004004.mm.1	ENSMUST00000084813	Gm10157	predicted gene 10157	118837613	118837955	TC0900003229.mm.1	-0.4	0.042488
TC0400004009.mm.1	ENSMUST00000161442	Gm16585	predicted gene 16585	177786856	177787465	TC0100001676.mm.1	-0.6	0.042512
TC0400004010.mm.1	NM_177387	Ust	uronyl-2-sulfotransferase	8204753	8518825	TC1000001708.mm.1	0.2	0.042517
TC0400004014.mm.1	NM_008204	H2-M2	histocompatibility 2, M region locus 2	37480851	37483552	TC1700002071.mm.1	-0.4	0.042537
TC0400004021.mm.1	ENSMUST00000075768	Gm6055	predicted gene 6055	48079136	48079806	TC1400001942.mm.1	0.5	0.042539
TC0400004022.mm.1	NM_183275	Tefm	transcription elongation factor, mitochondrial	80136678	80142175	TC1100003340.mm.1	-0.2	0.042639
TC0400004023.mm.1	NM_001114174	Fam189a	family with sequence similarity 189, member A2	23972750	24031019	TC1900001270.mm.1	0.2	0.042652

TC0400004024.mm.1	NM_011968	Psma6	proteasome (prosome, macropain) subunit, alph	55384222	55418459	TC1200000467.mm.1	-0.4	0.042656
TC0400004033.mm.1	ENSMUST00000116865	Gm22196	predicted gene, 22196	7888685	7888793	TC0500000042.mm.1	0.4	0.042801
TC0400004049.mm.1	ENSMUST00000121060	Gm14287	predicted gene 14287	157528869	157528985	TC0200005021.mm.1	-0.4	0.042808
TC0400004052.mm.1	ENSMUST00000072982	Gm5513	predicted pseudogene 5513	14959549	14960766	TC1900001200.mm.1	-0.4	0.042822
TC0400004083.mm.1	NCBI_Gene:10012645	Trav7n-	T cell receptor alpha variable 7N-6	53324632	53326266	TC1400000685.mm.1	-0.3	0.042843
TC0400004091.mm.1	ENSMUST00000178460	Gm12989	predicted gene 12989	135715868	135716598	TC0400003771.mm.1	-0.7	0.042856
TC0400004092.mm.1	NCBI_Gene:667626:p	Trav10n	T cell receptor alpha variable 10N	53122114	53122611	TC1400000661.mm.1	-0.4	0.043044
TC0400004099.mm.1	NM_029509	Gbp8	guanylate-binding protein 8	105014153	105053561	TC0500003729.mm.1	-0.4	0.04308
TC0400004100.mm.1	NM_010258	Gata6	GATA binding protein 6	11052510	11085635	TC1800000091.mm.1	0.2	0.043095
TC0400004118.mm.1	NM_029620	Pcolce2	procollagen C-endopeptidase enhancer 2	95637601	95698096	TC0900001200.mm.1	0.5	0.043138
TC0400004127.mm.1	NM_178646	Tigd5	tigger transposable element derived 5	75909735	75914535	TC1500000566.mm.1	-0.2	0.04314
TC0400004145.mm.1	NM_201638	Mettl14	methyltransferase like 14	123364645	123385990	TC0300002876.mm.1	-0.2	0.043264
TC0400004151.mm.1	NM_028994	Pck2	phosphoenolpyruvate carboxykinase 2 (mitocho	55540266	55550017	TC1400000781.mm.1	0.1	0.043317
TC0400004165.mm.1	NM_178909	Wdr92	WD repeat domain 92	17211893	17235200	TC1100004262.mm.1	-0.2	0.043347
TC0400004170.mm.1	ENSMUST00000119005	Gm11222	predicted gene 11222	69853947	69854684	TC0400000751.mm.1	-0.2	0.043358
TC0400004171.mm.1	ENSMUST00000089689	Gm10238	predicted pseudogene 10238	75235649	75238768	TC1500001733.mm.1	0.2	0.043387
TC0400004174.mm.1	XM_992869	Gm8841	predicted gene 8841	105585319	105586200	TC0800002828.mm.1	-0.5	0.043402
TC0400004187.mm.1	NM_029454	Pibf1	progesterone immunomodulatory binding factor	99099424	99254494	TC1400001153.mm.1	-0.1	0.043465
TC0400004188.mm.1	ENSMUST00000175130	Gm22646	predicted gene, 22646	43622446	43622560	TC1900000631.mm.1	0.4	0.043558
TC0400004190.mm.1	NM_028138	Thumpd2	THUMP domain containing 2	81026327	81065085	TC1700002595.mm.1	-0.1	0.043578
TC0400004202.mm.1	NM_013541	Gstp1	glutathione S-transferase, pi 1	4035407	4037921	TC1900000896.mm.1	0.5	0.043585
TC0400004205.mm.1	NCBI_Gene:633457:p	Ighv3-5	Ighv3-5 immunoglobulin heavy variable 3-5	114262652	114262950	TC1200002588.mm.1	-0.4	0.043602
TC0400004208.mm.1	NM_001290125	Rbm4	RNA binding motif protein 4 (Rbm4), transcript	0	0	TSUnmapped0000002	-0.2	0.043635
TC0400004210.mm.1	NM_144933	Med17	mediator complex subunit 17	15260351	15279867	TC0900001784.mm.1	-0.2	0.043693
TC0400004212.mm.1	ENSMUST00000183259	Gm8565	predicted gene 8565	69566451	69567464	TC0300002138.mm.1	0.2	0.043698
TC0400004214.mm.1	NM_027434	Rprd1b	regulation of nuclear pre-mRNA domain contain	158028497	158132297	TC0200002421.mm.1	-0.2	0.043701
TC0400004215.mm.1	ENSMUST00000157216	Gm25623	predicted gene, 25623	34086126	34086233	TC0400000296.mm.1	0.2	0.043704
TC0400004224.mm.1	NM_021433	Stx6	syntaxin 6	155158703	155208256	TC0100001397.mm.1	-0.5	0.043802
TC0500000005.mm.1	NCBI_Gene:279872:p	Trav9n-	T cell receptor alpha variable 9N-1	53101693	53102401	TC1400000659.mm.1	-0.3	0.043857
TC0500000016.mm.1	NM_177364	Sh3pxd2	SH3 and PX domains 2B	32347811	32428183	TC1100000341.mm.1	0.3	0.043876
TC0500000027.mm.1	ENSMUST00000091905	Gm4950	predicted pseudogene 4950	51865264	51865881	TC1800001328.mm.1	-0.2	0.043923
TC0500000032.mm.1	NM_020566	Dnajc4	DnaJ (Hsp40) homolog, subfamily C, member 4	6987911	6992503	TC1900001028.mm.1	0.3	0.044007
TC0500000039.mm.1	ENSMUST00000165229	Gm10269	predicted gene 10269	20682592	20682963	TC1800001047.mm.1	-0.8	0.04411
TC0500000041.mm.1	ENSMUST00000119735	Gm11644	predicted gene 11644	143349512	143349661	TC0200002129.mm.1	-0.3	0.044152
TC0500000042.mm.1	ENSMUST00000061772	Rbm15	RNA binding motif protein 15	107326110	107333289	TC0300002706.mm.1	-0.3	0.044204
TC0500000043.mm.1	ENSMUST00000158371	Gm22765	predicted gene, 22765	9614314	9614441	TC1800000061.mm.1	-0.2	0.044208
TC0500000045.mm.1	ENSMUST00000145417	Cd63-ps	CD63 antigen, pseudogene	50134726	50135600	TC1800000510.mm.1	0.3	0.04439
TC0500000047.mm.1	NM_133740	Prmt3	protein arginine N-methyltransferase 3	49778346	49858265	TC0700000904.mm.1	-0.1	0.044393
TC0500000055.mm.1	NM_001104927	Cyp2j8	cytochrome P450, family 2, subfamily j, polypep	96444588	96507386	TC0400003096.mm.1	0.1	0.044427
TC0500000058.mm.1	NM_019992	Stap1	signal transducing adaptor family member 1	86071746	86103993	TC0500000785.mm.1	-0.8	0.044447
TC0500000070.mm.1	ENSMUST00000157125	Gm23468	predicted gene, 23468	77569495	77569602	TC0800002502.mm.1	0.2	0.044513
TC0500000083.mm.1	XM_195264	Gm5058	predicted gene 5058	32704473	32704940	TC0700002801.mm.1	-0.2	0.044574
TC0500000107.mm.1	XM_001001333	Gm9156	predicted gene 9156	32931370	32931837	TC0700002804.mm.1	-0.2	0.044574
TC0500000108.mm.1	ENSMUST00000104206	Gm24339	predicted gene, 24339	15326464	15326539	TC0900001788.mm.1	-0.9	0.04458
TC0500000109.mm.1	NCBI_Gene:10012645	Trav6n-	T cell receptor alpha variable 6N-5	53104871	53105369	TC1400000660.mm.1	-0.7	0.044651
TC0500000152.mm.1	ENSMUST00000180098	Gm26139	predicted gene, 26139	98624190	98624296	TC1400001150.mm.1	0.2	0.044656
TC0500000161.mm.1	NM_001253804	Slc12a4	solute carrier family 12, member 4	105943590	105966115	TC0800002844.mm.1	0.2	0.044669
TC0500000171.mm.1	NM_001035228	St3gal5	ST3 beta-galactoside alpha-2,3-sialyltransferas	72097608	72154570	TC0600000841.mm.1	0.2	0.044726
TC0500000172.mm.1	ENSMUST00000117205	Gm13423	predicted gene 13423	23202033	23203683	TC0200000364.mm.1	-0.2	0.044736
TC0500000179.mm.1	NM_001009573	Unc13d	unc-13 homolog D (C. elegans)	116062095	116077961	TC1100004101.mm.1	-0.1	0.044757
TC0500000200.mm.1	NR_040440	Alms1-p	Alstrom syndrome 1, pseudogene 2	85774393	85804057	TC0600000968.mm.1	-0.1	0.04479
TC0500000210.mm.1	ENSMUST00000117401	Gm9266	predicted gene 9266	42951724	42952207	TC0700000748.mm.1	-0.1	0.044799
TC0500000212.mm.1	NM_020601	Tbl1x	transducin (beta)-like 1 X-linked	77511013	77662983	TC0X00000772.mm.1	0.3	0.044831
TC0500000217.mm.1	NR_035488	Mir1962	microRNA 1962	135566162	135566282	TC0700001961.mm.1	0.2	0.044867
TC0500000220.mm.1	NM_178692	C130074	RIKEN cDNA C130074G19 gene	184871926	184883218	TC0100003742.mm.1	0.2	0.044891
TC0500000221.mm.1	ENSMUST00000101630	Ap3s1-p	adaptor-related protein complex 3, sigma 1 subu	38685518	38686277	TC0X00002088.mm.1	-0.3	0.044896
TC0500000233.mm.1	NM_021476	Cysltr1	cysteinyl leukotriene receptor 1	106574346	106603679	TC0X00002834.mm.1	0.2	0.044901
TC0500000240.mm.1	NM_144923	Blvrb	biliverdin reductase B (flavin reductase (NADPH	27447978	27466144	TC0700000458.mm.1	0.2	0.044907
TC0500000260.mm.1	NM_001040403	Flot2	flotillin 2	78037931	78060434	TC1100001140.mm.1	0.2	0.04491
TC0500000273.mm.1	NM_007684	Cetn3	centrin 3	81783258	81797157	TC1300000969.mm.1	-0.3	0.044911
TC0500000274.mm.1	NM_027857	Acy3	aspartoacylase (aminoacylase) 3	3986571	3990007	TC1900000022.mm.1	0.6	0.04495
TC0500000287.mm.1	NM_008704	Nme1	NME/NM23 nucleoside diphosphate kinase 1	93956979	93968521	TC1100004296.mm.1	-0.1	0.044983
TC0500000295.mm.1	NM_010807	Marcksl	MARCKS-like 1	129513581	129515985	TC0400001525.mm.1	-0.1	0.045046
TC0500000301.mm.1	NM_007534	Bcl2a1b	B cell leukemia/lymphoma 2 related protein A1b	89199209	89207838	TC0900003331.mm.1	-0.2	0.045057
TC0500000303.mm.1	NM_001085390	Dusp5	dual specificity phosphatase 5	53529109	53542431	TC1900000756.mm.1	-0.2	0.045106
TC0500000316.mm.1	ENSMUST00000079229	Gm10323	predicted gene 10323	66852174	66854872	TC1300002235.mm.1	-0.2	0.045113
TC0500000321.mm.1	ENSMUST00000104062	Gm26075	predicted gene, 26075	8501236	8501356	TC0600001849.mm.1	-0.2	0.045135
TC0500000325.mm.1	NM_053223	V1ra8	vomeronasal 1 receptor, A8	90202793	90203682	TC0600001065.mm.1	0.2	0.045159
TC0500000334.mm.1	NR_033574	Nutf2-p	nuclear transport factor 2, pseudogene 1	53588151	53589067	TC1900001677.mm.1	-0.9	0.045232
TC0500000336.mm.1	NM_001034851	Fam134b	family with sequence similarity 134, member B	25843264	25973696	TC1500000165.mm.1	-0.2	0.045245
TC0500000338.mm.1	NCBI_Gene:10004327	Trav12n	Trav12n-2 T cell receptor alpha variable 12N-2	53226773	53227405	TC1400000673.mm.1	-0.3	0.045257
TC0500000339.mm.1	ENSMUST00000180120	Gm23569	predicted gene, 23569	10492620	10492739	TC0200000148.mm.1	-0.2	0.045265
TC0500000348.mm.1	NM_029682	Stambpl	STAM binding protein like 1	34192229	34240333	TC1900000495.mm.1	-0.3	0.045286
TC0500000349.mm.1	NM_016861	Pdlim1	PDZ and LIM domain 1 (elfin)	40221173	40271842	TC1900001484.mm.1	-0.3	0.045315
TC0500000352.mm.1	NR_029963	Mir450-	microRNA 450-1	53048154	53048244	TC0X00002231.mm.1	0.2	0.045393
TC0500000356.mm.1	NM_021528	Chst12	carbohydrate sulfotransferase 12	140505550	140525724	TC0500001694.mm.1	0.1	0.045482
TC0500000362.mm.1	NM_020619	Mogs	mannosyl-oligosaccharide glucosidase	83115496	83118898	TC0600000922.mm.1	-0.2	0.045573
TC0500000369.mm.1	ENSMUST00000166375	Defa-ps	defensin, alpha, pseudogene 7	21231327	21232233	TC0800001840.mm.1	-0.2	0.04559

TC0500000378.mm.1	ENSMUST00000178243	Gm4904	predicted gene 4904	3254679	3255873	TC1400001360.mm.1	-0.2	0.04564
TC0500000379.mm.1	NM_018883	Camkk1	calcium/calmodulin-dependent protein kinase ki	73019008	73042073	TC1100001012.mm.1	-0.2	0.045671
TC0500000388.mm.1	ENSMUST00000157169	Gm25966	predicted gene, 25966	61798180	61798296	TC0200000926.mm.1	-0.3	0.045684
TC0500000396.mm.1	ENSMUST00000062156	Gm9795	predicted pseudogene 9795	56655949	56656889	TC1000000497.mm.1	0.2	0.045686
TC0500000409.mm.1	NM_018808	Dnajb1	DnaJ (Hsp40) homolog, subfamily B, member 1	83608175	83611903	TC0800000929.mm.1	-0.2	0.045707
TC0500000413.mm.1	NM_001199940	Serpina	serine (or cysteine) peptidase inhibitor, clade	104263122	104269372	TC1200001041.mm.1	-0.1	0.045708
TC0500000425.mm.1	ENSMUST00000082900	Gm25696	predicted gene, 25696	35735373	35735477	TC0300000257.mm.1	0.3	0.045721
TC0500000434.mm.1	ENSMUST00000082854	Gm22683	predicted gene, 22683	102829878	102830014	TC1100001699.mm.1	-0.3	0.045727
TC0500000436.mm.1	ENSMUST00000158220	Gm26355	predicted gene, 26355	116904637	116904741	TC0400001271.mm.1	0.3	0.045738
TC0500000441.mm.1	NM_026506	Snrpg	small nuclear ribonucleoprotein polypeptide G	86371504	86378903	TC0600000986.mm.1	-0.2	0.045757
TC0500000449.mm.1	ENSMUST00000082580	Gm22455	predicted gene, 22455	64177123	64177193	TC0900000815.mm.1	-0.5	0.045777
TC0500000450.mm.1	NM_008799	Pdcd2	programmed cell death 2	15519208	15527301	TC1700001500.mm.1	-0.2	0.045794
TC0500000462.mm.1	ENSMUST00000120511	Gm16053	predicted gene 16053	97406140	97406327	TC0700001350.mm.1	-0.4	0.045795
TC0500000465.mm.1	NM_133966	Taf5l	TAF5-like RNA polymerase II, p300/CBP-associat	123996310	124021309	TC0800003164.mm.1	-0.3	0.04582
TC0500000468.mm.1	ENSMUST00000178832	Gm21958	predicted gene, 21958	54713176	54714353	TC0300001986.mm.1	0.3	0.045826
TC0500000470.mm.1	NR_039597	Mir5135	microRNA 5135	76533134	76533212	TC1200001951.mm.1	-0.2	0.046124
TC0500000505.mm.1	NR_030153	Mir470	microRNA 470	66813951	66814025	TC0X00002353.mm.1	0.2	0.046138
TC0500000512.mm.1	ENSMUST00000098479	Zfp319	zinc finger protein 319	95323014	95325263	TC0800002742.mm.1	-0.2	0.046146
TC0500000516.mm.1	ENSMUST00000119371	Gm9103	predicted gene 9103	102178194	102178657	TC0X00002737.mm.1	-0.8	0.046165
TC0500000519.mm.1	ENSMUST00000098864	Gm10689	predicted gene 10689	25454260	25454704	TC0800000320.mm.1	-0.5	0.046189
TC0500000527.mm.1	ENSMUST00000122484	Gm25945	predicted gene, 25945	88707158	88707292	TC0300000735.mm.1	-0.1	0.046247
TC0500000531.mm.1	NM_008187	Gtl3	gene trap locus 3	95420249	95434869	TC0800002744.mm.1	-0.1	0.046266
TC0500000542.mm.1	ENSMUST00000174935	Gm24104	predicted gene, 24104	10172022	10172099	TC0600001856.mm.1	-0.3	0.046281
TC0500000547.mm.1	NM_011606	Clec3b	C-type lectin domain family 3, member b	123150946	123157432	TC0900001658.mm.1	0.3	0.046359
TC0500000554.mm.1	ENSMUST00000178959	Gm7901	predicted gene 7901	75711462	75713288	TC0800002488.mm.1	0.4	0.046377
TC0500000560.mm.1	NM_146230	Acaa1b	acetyl-Coenzyme A acyltransferase 1B	119148023	119157093	TC0900003234.mm.1	0.3	0.046441
TC0500000579.mm.1	ENSMUST00000084009	Gm23794	predicted gene, 23794	162114238	162114341	TC0X00001642.mm.1	0.3	0.046445
TC0500000580.mm.1	NM_001079865	Ces2f	carboxylesterase 2F	104947356	104958577	TC0800001197.mm.1	-0.1	0.046448
TC0500000584.mm.1	ENSMUST00000120026	Gm13588	predicted gene 13588	38490104	38490238	TC0200000700.mm.1	-1.1	0.046525
TC0500000589.mm.1	NM_145428	Dhrs7b	dehydrogenase/reductase (SDR family) member	60830631	60860195	TC1100000767.mm.1	0.3	0.046551
TC0500000603.mm.1	NM_008517	Lta4h	leukotriene A4 hydrolase	93453396	93484896	TC1000001131.mm.1	-0.4	0.046586
TC0500000605.mm.1	NM_001162933	Rpl10l	ribosomal protein L10-like	66283379	66284401	TC1200001841.mm.1	-0.2	0.046635
TC0500000606.mm.1	NM_007920	Elf1	E74-like factor 1	79481194	79582491	TC1400001105.mm.1	-0.9	0.046646
TC0500000609.mm.1	ENSMUST00000117234	Gm14400	predicted gene 14400	177225473	177228963	TC0200005362.mm.1	0.6	0.046674
TC0500000621.mm.1	NM_144849	Ankrd54	ankyrin repeat domain 54	79053094	79062893	TC1500001859.mm.1	-0.1	0.046697
TC0500000624.mm.1	NM_007381	Acadl	acyl-Coenzyme A dehydrogenase, long-chain	66830839	66863309	TC0100002495.mm.1	0.7	0.046706
TC0500000633.mm.1	NM_001198949	Ralbp1	ralA binding protein 1	65848415	65885755	TC1700002416.mm.1	-0.2	0.046805
TC0500000643.mm.1	NM_001113470	Ctdsp2	CTD (carboxy-terminal domain, RNA polymerase	126978717	126999975	TC1000001542.mm.1	0.4	0.046828
TC0500000660.mm.1	NM_007405	Adcy6	adenylate cyclase 6	98589978	98607633	TC1500002181.mm.1	0.2	0.046902
TC0500000662.mm.1	ENSMUST00000160140	Gm16165	predicted gene 16165	22669734	22670528	TC0900001913.mm.1	-0.3	0.046907
TC0500000667.mm.1	ENSMUST00000117071	Gm11249	predicted gene 11249	67930881	67931739	TC0400000745.mm.1	-0.4	0.047101
TC0500000675.mm.1	ENSMUST00000183660	AL59096	N/A	100442395	100442475	TC1100003772.mm.1	-0.3	0.04716
TC0500000707.mm.1	NM_001042710	Prss57	protease, serine 57	79781474	79790961	TC1000002479.mm.1	-0.1	0.047192
TC0500000709.mm.1	XM_003688879	Gm20746	predicted gene, 20746	130592136	130594245	TC1000003212.mm.1	0.7	0.047392
TC0500000715.mm.1	NCBI_Gene:243433:p	Igkv17-	immunoglobulin kappa variable 17-127	67861159	67861659	TC0600003510.mm.1	-1.0	0.047432
TC0500000724.mm.1	NM_026321	Fam174a	family with sequence similarity 174, member A	95313623	95335284	TC0100000957.mm.1	0.2	0.047533
TC0500000731.mm.1	NM_178192	Hist1h4	histone cluster 1, H4a	23760692	23761249	TC1300001645.mm.1	-0.3	0.047605
TC0500000739.mm.1	NM_010881	Ncoa1	nuclear receptor coactivator 1	4247362	4477182	TC1200001353.mm.1	0.3	0.047612
TC0500000746.mm.1	NM_001081034	Fbxo11	F-box protein 11	87990859	88065291	TC1700002701.mm.1	-0.2	0.047624
TC0500000747.mm.1	NM_001081005	1500012	RIKEN cDNA 1500012F01 gene	167062934	167065862	TC0200002580.mm.1	-0.2	0.047634
TC0500000748.mm.1	NR_037282	Mir3100	microRNA 3100	19086828	19086892	TC0700000286.mm.1	0.2	0.047681
TC0500000749.mm.1	ENSMUST00000158610	Gm23119	predicted gene, 23119	74778561	74778700	TC1800001591.mm.1	-0.6	0.047682
TC0500000772.mm.1	ENSMUST00000117806	Gm15576	predicted gene 15576	100726234	100726760	TC0600001155.mm.1	-0.3	0.047883
TC0500000783.mm.1	XM_001480374	Gm11686	predicted gene 11686	143877464	143881509	TC0200002134.mm.1	-0.2	0.047949
TC0500000785.mm.1	ENSMUST00000158924	Gm25831	predicted gene, 25831	97967829	97967991	TC1400002584.mm.1	0.2	0.048091
TC0500000786.mm.1	NM_026873	Ptcd2	pentatricopeptide repeat domain 2	99319649	99344678	TC1300002517.mm.1	-0.3	0.048238
TC0500000796.mm.1	NM_016905	Galk1	galactokinase 1	116008357	116012719	TC1100004099.mm.1	-0.2	0.048268
TC0500000809.mm.1	NR_028521	Snord11	small nucleolar RNA, C/D box 11	59704790	59704873	TC0100000460.mm.1	-1.4	0.048269
TC0500000813.mm.1	NM_007795	Ctf1	cardiotrophin 1	127712736	127718192	TC0700001860.mm.1	-0.2	0.048273
TC0500000830.mm.1	ENSMUST00000075377	Gm6564	predicted pseudogene 6564	22931390	22932034	TC0500002043.mm.1	-0.3	0.048311
TC0500000831.mm.1	NM_001081317	Zfand4	zinc finger, AN1-type domain 4	116264222	116330298	TC0600001294.mm.1	-0.2	0.048437
TC0500000834.mm.1	ENSMUST00000154610	Gm12906	predicted gene 12906	107760025	107760468	TC0400003226.mm.1	-0.2	0.048462
TC0500000836.mm.1	NM_033174	Snurf	SNRPN upstream reading frame	59982495	60140219	TC0700004652.mm.1	0.3	0.048466
TC0500000842.mm.1	ENSMUST00000182436	Gm5864	predicted gene 5864	32420003	32420972	TC0500000338.mm.1	-0.3	0.048521
TC0500000843.mm.1	NM_021505	Anapc5	anaphase-promoting complex subunit 5	122787459	122821342	TC0500003220.mm.1	-0.5	0.048521
TC0500000844.mm.1	XM_003084682	Gm15448	predicted gene 15448	3816781	3825687	TC0700004633.mm.1	0.2	0.048522
TC0500000868.mm.1	ENSMUST00000092720	5430403	RIKEN cDNA 5430403G16 gene	109674545	109691041	TC0500002971.mm.1	-0.3	0.048583
TC0500000869.mm.1	NM_011332	Ccl17	chemokine (C-C motif) ligand 17	94810453	94812036	TC0800001121.mm.1	-0.3	0.048588
TC0500000901.mm.1	NCBI_Gene:671927:p	Trav9d-	T cell receptor alpha variable 9D-1	52792208	52792913	TC1400000628.mm.1	-0.3	0.048624
TC0500000920.mm.1	NM_001110195	Echdc1	enoyl Coenzyme A hydratase domain containing	29313166	29346661	TC1000000265.mm.1	0.3	0.048666
TC0500000921.mm.1	NM_020295	Lmbr1	limb region 1	29229802	29378390	TC0500002139.mm.1	0.2	0.048676
TC0500000922.mm.1	ENSMUST00000117765	Gm6226	predicted gene 6226	58836793	58837938	TC0700003115.mm.1	-0.3	0.048786
TC0500000924.mm.1	NM_008593	Foxd2	forkhead box D2	114906280	114908898	TC0400003307.mm.1	-0.2	0.048874
TC0500000925.mm.1	NM_001101472	Serpina	serine (or cysteine) peptidase inhibitor, clade	104314553	104320725	TC1200001043.mm.1	0.1	0.048874
TC0500000928.mm.1	NM_181821	Hcfc1r1	host cell factor C1 regulator 1 (XPO1-dependent	23673596	23675524	TC1700000315.mm.1	0.2	0.048883
TC0500000938.mm.1	NM_019421	Cd320	CD320 antigen	33843091	33849774	TC1700000595.mm.1	0.2	0.048947
TC0500000946.mm.1	ENSMUST00000114212	Igkv12-	immunoglobulin kappa variable 12-47	69750856	69751310	TC0600002444.mm.1	-0.2	0.04902
TC0500000948.mm.1	ENSMUST00000120661	Gm9159	predicted gene 9159	103597771	103598336	TC0X00001035.mm.1	-0.4	0.049104

TC0500000951.mm.1	NM_025658	Ms4a4d	membrane-spanning 4-domains, subfamily A, me	11536801	11558467	TC1900000226.mm.1	0.3	0.049119
TC0500000952.mm.1	NM_010059	Dmc1	DMC1 dosage suppressor of mck1 homolog, mei	79561498	79605109	TC1500001878.mm.1	-0.1	0.049136
TC0500000953.mm.1	NM_015755	Hunk	hormonally upregulated Neu-associated kinase	90386336	90499553	TC1600000982.mm.1	-0.1	0.04915
TC0500000969.mm.1	ENSMUST00000170101	Gm17576	predicted gene, 17576	71042645	71043040	TC0800002418.mm.1	-0.3	0.049171
TC0500000971.mm.1	NM_134068	Dusp22	dual specificity phosphatase 22	30659999	30711232	TC1300000336.mm.1	0.2	0.049185
TC0500000976.mm.1	NM_025543	Mcts2	malignant T cell amplified sequence 2	152687035	152687951	TC0200002296.mm.1	-0.2	0.049262
TC0500000977.mm.1	ENSMUST00000102084	Gm22774	predicted gene, 22774	6131836	6132405	TC1700001380.mm.1	0.7	0.049309
TC0500000978.mm.1	NM_023260	Mrps34	mitochondrial ribosomal protein S34	24895116	24896289	TC1700002770.mm.1	0.1	0.049323
TC0500000981.mm.1	NCBI_Gene:10012647	Trav4-3	T cell receptor alpha variable 4-3	53598857	53599414	TC1400002825.mm.1	-0.4	0.049329
TC0500000986.mm.1	NCBI_Gene:10012429	Traj57	T cell receptor alpha joining 57	54158505	54158569	TC1400000726.mm.1	-0.5	0.04942
TC0500001014.mm.1	NM_001198955	Gm7694	predicted gene 7694	170298193	170306332	TC0100003886.mm.1	0.2	0.04953
TC0500001017.mm.1	NCBI_Gene:668597:p	Ighv1-8	immunoglobulin heavy variable 1-85	116000028	116000461	TC1200002664.mm.1	-1.2	0.049614
TC0500001022.mm.1	NM_020590	Gabarap	gamma-aminobutyric acid (GABA) A receptor-as	129533192	129542331	TC0600001536.mm.1	0.5	0.049727
TC0500001024.mm.1	ENSMUST00000178107	Ap3s1-p	adaptor-related protein complex 3, sigma 1 subu	94405211	94405792	TC0800001108.mm.1	-0.7	0.04994
TC0500001028.mm.1	ENSMUST00000077516	Gm10169	predicted pseudogene 10169	29965100	29965640	TC0700002739.mm.1	-0.5	0.049989
TC0500001034.mm.1	NM_011277	Rnf2	ring finger protein 2	151469406	151500823	TC0100003254.mm.1	-0.3	0.050004
TC0500001035.mm.1	NM_181344	C1rl	complement component 1, r subcomponent-like	124493113	124510643	TC0600001421.mm.1	0.2	0.050029
TC0500001038.mm.1	ENSMUST00000052440	Oaz1-ps	ornithine decarboxylase antizyme 1, pseudogene	17345456	17346140	TC1700001512.mm.1	-0.5	0.050137
TC0500001062.mm.1	NM_018738	Igtp	interferon gamma induced GTPase	58199556	58207592	TC1100004265.mm.1	-0.5	0.050144
TC0500001063.mm.1	ENSMUST00000119004	Gm12565	predicted gene 12565	37599424	37600072	TC0300001874.mm.1	-0.3	0.050175
TC0500001075.mm.1	NM_198301	Fam105a	family with sequence similarity 105, member A	27655071	27681542	TC1500001300.mm.1	-0.3	0.050373
TC0500001088.mm.1	ENSMUST00000103739	Traj1	T cell receptor alpha joining 1	54218814	54218840	TC1400000740.mm.1	-0.6	0.050401
TC0500001089.mm.1	NM_019583	Il17rb	interleukin 17 receptor B	29996138	30008896	TC1400001655.mm.1	-0.2	0.05043
TC0500001099.mm.1	XR_141372	Gm9938	predicted gene 9938	23722586	23725752	TC1900000383.mm.1	0.2	0.050433
TC0500001113.mm.1	NM_001163794	Pdik1l	PDLIM1 interacting kinase 1 like	134275002	134287895	TC0400003736.mm.1	-0.2	0.05044
TC0500001124.mm.1	ENSMUST00000158804	Gm26004	predicted gene, 26004	181840453	181840568	TC0100003698.mm.1	-0.4	0.050489
TC0500001131.mm.1	NM_013933	Vapa	vesicle-associated membrane protein, associated	65580053	65613555	TC1700002411.mm.1	-0.3	0.050491
TC0500001136.mm.1	ENSMUST00000082458	Gm23626	predicted gene, 23626	84380449	84380581	TC0800002581.mm.1	-0.7	0.050515
TC0500001149.mm.1	ENSMUST00000170565	Gm14416	predicted gene 14416	177138660	177142331	TC0200005492.mm.1	0.6	0.050557
TC0500001152.mm.1	NM_025424	Nenf	neuron derived neurotrophic factor	191306789	191318194	TC0100003805.mm.1	0.2	0.05057
TC0500001155.mm.1	ENSMUST00000158617	Gm24056	predicted gene, 24056	77242406	77242551	TC1500001803.mm.1	0.2	0.050596
TC0500001162.mm.1	ENSMUST00000121414	Rps2-ps	ribosomal protein S2, pseudogene 9	27784427	27785243	TC1700000466.mm.1	-0.4	0.050597
TC0500001170.mm.1	NM_019547	Rbm38	RNA binding motif protein 38	173020498	173034734	TC0200002678.mm.1	-0.2	0.050695
TC0500001180.mm.1	NM_008331	Ifit1	interferon-induced protein with tetratricopepti	34640871	34650009	TC1900000504.mm.1	-0.3	0.050711
TC0500001183.mm.1	NM_145449	Ifi27l2	interferon, alpha-inducible protein 27 like 2B	103450898	103457223	TC1200002270.mm.1	0.1	0.050781
TC0500001188.mm.1	ENSMUST00000122422	Rpl19-p	ribosomal protein L19, pseudogene 11	19492906	19493623	TC0800000188.mm.1	-0.8	0.050833
TC0500001202.mm.1	ENSMUST00000122385	Gm15975	predicted gene 15975	55624188	55625593	TC0500000554.mm.1	-0.3	0.050909
TC0500001210.mm.1	NM_008012	Akr1b8	aldo-keto reductase family 1, member B8	34354119	34368463	TC0600000324.mm.1	0.5	0.050911
TC0500001217.mm.1	NM_001166736	Vmn1r91	vomeronasal 1 receptor 91	20101158	20102081	TC0700000317.mm.1	0.2	0.050964
TC0500001219.mm.1	NM_145484	Zfp758	zinc finger protein 758	22361453	22377281	TC1700000290.mm.1	-0.2	0.051085
TC0500001223.mm.1	NM_007636	Cct2	chaperonin containing Tcp1, subunit 2 (beta)	117050998	117063814	TC1000002920.mm.1	-0.5	0.051088
TC0500001225.mm.1	NM_028836	Ctbs	chitobiase, di-N-acetyl-	146450470	146465849	TC0300001492.mm.1	0.3	0.051162
TC0500001233.mm.1	ENSMUST00000121374	Gm12151	predicted gene 12151	43463196	43463485	TC1100002568.mm.1	-0.3	0.051265
TC0500001237.mm.1	XM_485792	Gm5576	predicted pseudogene 5576	78215878	78217113	TC0600000873.mm.1	-0.3	0.051315
TC0500001252.mm.1	ENSMUST00000082464	Gm23628	predicted gene, 23628	20614523	20614695	TC0X00001926.mm.1	-0.2	0.051346
TC0500001255.mm.1	NM_010210	Fhit	fragile histidine triad gene	9550092	11162035	TC1400001445.mm.1	0.1	0.051395
TC0500001257.mm.1	ENSMUST00000158968	Gm26159	predicted gene, 26159	8336993	8337096	TC1600000086.mm.1	0.3	0.051461
TC0500001262.mm.1	NM_030225	Dlst	dihydrolipoamide S-succinyltransferase (E2 comp	85110833	85134845	TC1200000828.mm.1	0.4	0.051463
TC0500001263.mm.1	NM_028151	Skiv2l2	superkiller viralicidic activity 2-like 2 (S. c	112867772	112927380	TC1300002686.mm.1	-0.3	0.051565
TC0500001266.mm.1	NM_009091	Rps15	ribosomal protein S15	80292431	80294114	TC1000000850.mm.1	-0.4	0.051567
TC0500001305.mm.1	NM_198671	Gse1	genetic suppressor element 1	120230536	120581390	TC0800001437.mm.1	-0.2	0.051656
TC0500001307.mm.1	NM_019925	Gpr132	G protein-coupled receptor 132	112850876	112860916	TC1200002440.mm.1	-0.4	0.051763
TC0500001308.mm.1	NCBI_Gene:547329:p	Trav16d	T cell receptor alpha variable 16D-DV11	53047287	53047821	TC1400000655.mm.1	-0.9	0.051804
TC0500001322.mm.1	ENSMUST00000165448	Gm8379	predicted gene 8379	7418908	7420099	TC1400000066.mm.1	-0.2	0.051954
TC0500001327.mm.1	NR_004418	Rnu73b	U73B small nuclear RNA	86140617	86140688	TC0300002265.mm.1	-0.8	0.051979
TC0500001331.mm.1	ENSMUST00000079794	Gm15732	predicted gene 15732	37404384	37404941	TC0500002273.mm.1	-0.2	0.052017
TC0500001332.mm.1	NM_001100606	Adat3	adenosine deaminase, tRNA-specific 3	80602880	80615784	TC1000000864.mm.1	0.2	0.05204
TC0500001334.mm.1	XR_140718	2310040	RIKEN cDNA 2310040G07 gene	76928368	76947758	TC0500000731.mm.1	0.2	0.052076
TC0500001338.mm.1	NM_009982	Ctsc	cathepsin C	88278085	88310888	TC0700001258.mm.1	0.3	0.052107
TC0500001342.mm.1	ENSMUST00000121029	Gm14776	predicted gene 14776	87771339	87772352	TC0X00002581.mm.1	-0.2	0.052152
TC0500001354.mm.1	NR_040256	Gm14405	predicted gene 14405	176289943	176302568	TC0200002736.mm.1	0.4	0.052196
TC0500001382.mm.1	NM_025415	Cks2	CDC28 protein kinase regulatory subunit 2	51645232	51650662	TC1300000599.mm.1	-0.2	0.052231
TC0500001388.mm.1	ENSMUST00000026901	Rpl14-p	ribosomal protein L14, pseudogene 1	45324941	45325651	TC0700000839.mm.1	-0.8	0.052305
TC0500001390.mm.1	NM_009606	Acta1	actin, alpha 1, skeletal muscle	123891758	123894775	TC0800003161.mm.1	0.1	0.052316
TC0500001394.mm.1	NM_008889	Ppp1r14	protein phosphatase 1, regulatory (inhibitor) s	6975048	6977324	TC1900000127.mm.1	-0.4	0.052318
TC0500001396.mm.1	NM_153119	Plekho2	pleckstrin homology domain containing, family C	65552577	65580087	TC0900002514.mm.1	0.2	0.05238
TC0500001403.mm.1	NR_038097	Gm11696	predicted gene 11696	109354778	109363654	TC1100003988.mm.1	-0.1	0.052384
TC0500001405.mm.1	NM_018869	Grk5	G protein-coupled receptor kinase 5	60889749	61092556	TC1900000866.mm.1	0.4	0.052388
TC0500001407.mm.1	NM_001085543	Gm14347	predicted gene 14347	4196576	4198535	TC0X00000018.mm.1	0.2	0.052399
TC0500001408.mm.1	ENSMUST00000157653	Gm23121	predicted gene, 23121	77579487	77579659	TC0X00000776.mm.1	0.2	0.052401
TC0500001414.mm.1	NM_017374	Ppp2cb	protein phosphatase 2 (formerly 2A), catalytic	33599621	33619804	TC0800000392.mm.1	-0.3	0.052449
TC0500001416.mm.1	NR_035500	Mir1983	microRNA 1983	21896918	21897049	TC1300001568.mm.1	-0.2	0.052454
TC0500001420.mm.1	NM_010742	Ly6d	lymphocyte antigen 6 complex, locus D	74762056	74763567	TC1500001718.mm.1	-1.3	0.052478
TC0500001425.mm.1	NM_145625	Eif4b	eukaryotic translation initiation factor 4B	102073773	102097173	TC1500001085.mm.1	-0.4	0.05248
TC0500001428.mm.1	ENSMUST00000095364	Gm17686	predicted gene, 17686	114630680	114630973	TC1200001293.mm.1	-0.2	0.052572
TC0500001437.mm.1	ENSMUST00000120751	Gm11556	predicted gene 11556	99839973	99840260	TC1100003742.mm.1	-0.2	0.05261
TC0500001445.mm.1	NM_207255	Zfp532	zinc finger protein 532	65580230	65689443	TC1800000677.mm.1	0.1	0.052627
TC0500001447.mm.1	NM_009770	Btg3	B cell translocation gene 3	78359860	78377192	TC1600001939.mm.1	-0.2	0.052641

TC0500001489.mm.1	NM_001011862	Olfr699	olfactory receptor 699	106790049	106790999	TC0700004018.mm.1	0.2	0.0527
TC0500001490.mm.1	NM_008250	Hlx	H2.0-like homeobox	184727140	184732619	TC0100003736.mm.1	0.1	0.052719
TC0500001491.mm.1	ENSMUST00000158195	Gm25224	predicted gene, 25224	109689477	109689544	TC1200001164.mm.1	0.1	0.052731
TC0500001508.mm.1	NM_018822	Sgsh	N-sulfoglucosamine sulfohydrolase (sulfamidase)	119343425	119355536	TC1100004183.mm.1	0.3	0.05275
TC0500001512.mm.1	ENSMUST00000119218	Gm13231	predicted gene 13231	145641357	145644399	TC0400001868.mm.1	-0.2	0.052775
TC0500001513.mm.1	NM_177161	P4ha3	procollagen-proline, 2-oxoglutarate 4-dioxygena	100285520	100319699	TC0700001404.mm.1	-0.2	0.052873
TC0500001514.mm.1	ENSMUST00000179126	Rps16-p	ribosomal protein S16, pseudogene 3	10808730	10809170	TC0800001687.mm.1	-0.2	0.052891
TC0500001516.mm.1	NM_001039522	Leo1	Leo1, Paf1/RNA polymerase II complex compone	75441524	75466432	TC0900001016.mm.1	-0.3	0.052896
TC0500001521.mm.1	NM_145585	Thumpd1	THUMP domain containing 1	119715093	119720798	TC0700004188.mm.1	-0.1	0.052908
TC0500001526.mm.1	NR_039541	Mir3096	microRNA 3096b	23852201	23852291	TC0500000200.mm.1	-0.7	0.052908
TC0500001527.mm.1	NM_025626	Fam107b	family with sequence similarity 107, member B	3613758	3782142	TC0200000013.mm.1	-0.2	0.052924
TC0500001530.mm.1	NM_153592	Erlin2	ER lipid raft associated 2	27023799	27039437	TC0800000345.mm.1	0.3	0.052935
TC0500001544.mm.1	NM_010819	Clec4d	C-type lectin domain family 4, member d	123262107	123275268	TC0600001404.mm.1	0.2	0.052937
TC0500001554.mm.1	ENSMUST00000118911	Gm11687	predicted gene 11687	144142488	144143373	TC0200004752.mm.1	-0.3	0.052999
TC0500001555.mm.1	ENSMUST00000117963	Ccnd3-p	cyclin D3, pseudogene	139345300	139346180	TC0400003848.mm.1	-0.7	0.053052
TC0500001560.mm.1	NM_020024	Taf10	TAF10 RNA polymerase II, TATA box binding prot	105739393	105744361	TC0700003989.mm.1	-0.2	0.05318
TC0500001569.mm.1	NM_023517	Tnfsf13	tumor necrosis factor (ligand) superfamily, mem	69682577	69696098	TC1100003059.mm.1	0.2	0.053236
TC0500001571.mm.1	NM_028009	Rpusd1	RNA pseudouridylate synthase domain containin	25727751	25731464	TC1700000383.mm.1	-0.1	0.053277
TC0500001573.mm.1	ENSMUST00000158301	Gm22687	predicted gene, 22687	166189697	166189801	TC0200002562.mm.1	0.2	0.053374
TC0500001575.mm.1	NM_023907	Foxi1	forkhead box I1	34204338	34208089	TC1100002496.mm.1	-0.2	0.053378
TC0500001589.mm.1	ENSMUST00000130431	4930570	RIKEN cDNA 4930570D08 gene	133898699	133901213	TC0X00002984.mm.1	0.2	0.053379
TC0500001590.mm.1	NM_009439	Psmd3	proteasome (prosome, macropain) 26S subunit,	98682554	98695979	TC1100001578.mm.1	-0.2	0.053462
TC0500001598.mm.1	NM_133747	Fam98a	family with sequence similarity 98, member A	75537086	75551946	TC1700002541.mm.1	-0.2	0.053475
TC0500001599.mm.1	NM_025856	Sh3d21	SH3 domain containing 21	126150602	126163491	TC0400003529.mm.1	0.1	0.053538
TC0500001610.mm.1	NM_023060	Eefsec	eukaryotic elongation factor, selenocysteine-tR	88257334	88446539	TC0600002681.mm.1	-0.4	0.053553
TC0500001614.mm.1	XM_003688881	Gm8738	predicted gene 8738	103879523	103880243	TC1100003883.mm.1	0.4	0.053563
TC0500001615.mm.1	NM_027354	Poc1a	POC1 centriolar protein homolog A (Chlamydom	106281061	106349891	TC0900001344.mm.1	-0.1	0.053651
TC0500001623.mm.1	NM_026883	Fam216a	family with sequence similarity 216, member A	122364580	122372364	TC0500003208.mm.1	-0.2	0.053699
TC0500001638.mm.1	ENSMUST00000179984	Gm2871	predicted gene 2871	3713109	3714312	TC1400000012.mm.1	-0.2	0.053711
TC0500001642.mm.1	ENSMUST00000168436	Gm8323	predicted gene 8323	3479745	3480945	TC1400001363.mm.1	-0.2	0.053711
TC0500001643.mm.1	NM_133703	Fam220a	family with sequence similarity 220, member A	143548706	143564531	TC0500001735.mm.1	0.1	0.05374
TC0500001645.mm.1	ENSMUST00000054760	Gm7075	predicted gene 7075	63421401	63421739	TC1000002282.mm.1	-0.4	0.053743
TC0500001647.mm.1	ENSMUST00000097415	Gm11585	predicted gene 11585	102124046	102124657	TC1100001680.mm.1	-0.4	0.05375
TC0500001648.mm.1	ENSMUST00000122562	Gm22481	predicted gene, 22481	22595029	22595220	TC1600000318.mm.1	0.1	0.053875
TC0500001655.mm.1	ENSMUST00000175265	Gm24157	predicted gene, 24157	52099043	52099153	TC1100002710.mm.1	-0.7	0.053954
TC0500001658.mm.1	NM_001163525	S100a14	S100 calcium binding protein A14	90526849	90528837	TC0300000801.mm.1	-0.3	0.053998
TC0500001659.mm.1	ENSMUST00000121792	Gm13797	predicted gene 13797	95697917	95698036	TC0200004188.mm.1	-0.7	0.05402
TC0500001662.mm.1	ENSMUST00000121899	Gm14830	predicted gene 14830	94774978	94775677	TC0X00002653.mm.1	-0.2	0.054028
TC0500001663.mm.1	NCBI_Gene:638605:p	Ighv2-5	immunoglobulin heavy variable 2-5	113685482	113685915	TC1200002561.mm.1	-0.6	0.054031
TC0500001667.mm.1	ENSMUST00000120048	Gm11485	predicted gene 11485	73422145	73423319	TC0400002859.mm.1	-0.2	0.054069
TC0500001670.mm.1	ENSMUST00000120534	Gm12599	predicted gene 12599	11436984	11437775	TC1100000129.mm.1	-0.2	0.054119
TC0500001676.mm.1	ENSMUST00000173086	Mrpl23-	mitichondrial ribosomal protein L23, pseudogen	74591330	74591917	TC0200003773.mm.1	-0.4	0.054133
TC0500001689.mm.1	NM_016904	Cks1b	CDC28 protein kinase 1b	89415472	89418383	TC0300002352.mm.1	-0.2	0.054152
TC0500001692.mm.1	NM_001081212	Irs2	insulin receptor substrate 2	10986961	11008458	TC0800001694.mm.1	0.2	0.054159
TC0500001694.mm.1	NM_025642	Mis18a	MIS18 kinetochore protein homolog A (S. pombe	90719312	90727404	TC1600002055.mm.1	-0.2	0.054168
TC0500001695.mm.1	ENSMUST00000121323	Gm8199	predicted gene 8199	144232759	144233581	TC0X00003120.mm.1	-0.4	0.054335
TC0500001696.mm.1	XM_884324	Gm13770	predicted gene 13770	91523573	91523884	TC0200004121.mm.1	0.2	0.054418
TC0500001716.mm.1	BC116857	Hist1h2	histone cluster 1, H2bb	23746734	23747241	TC1300000259.mm.1	-0.4	0.054435
TC0500001724.mm.1	NM_025384	Dnajc15	DnaJ (Hsp40) homolog, subfamily C, member 15	77826217	77874917	TC1400002464.mm.1	-0.4	0.054489
TC0500001732.mm.1	ENSMUST00000117504	Gm6580	predicted gene 6580	46027428	46028784	TC1400000493.mm.1	-0.2	0.054541
TC0500001735.mm.1	NM_009515	Was	Wiskott-Aldrich syndrome homolog (human)	8081453	8090498	TC0X00001795.mm.1	-0.3	0.054548
TC0500001737.mm.1	ENSMUST00000117677	Gm13386	predicted gene 13386	28807708	28807831	TC0200003237.mm.1	-0.3	0.05456
TC0500001744.mm.1	ENSMUST00000158375	Gm23853	predicted gene, 23853	111879304	111879407	TC0800001339.mm.1	0.2	0.05457
TC0500001758.mm.1	ENSMUST00000158651	Gm24545	predicted gene, 24545	59626580	59626664	TC0100000453.mm.1	0.2	0.054694
TC0500001767.mm.1	NM_008147	Gp49a	glycoprotein 49 A	51480632	51486316	TC1000003213.mm.1	0.4	0.054713
TC0500001771.mm.1	NM_009878	Cdkn2d	cyclin-dependent kinase inhibitor 2D (p19, inhi	21288463	21291209	TC0900001867.mm.1	-0.4	0.054852
TC0500001782.mm.1	NM_172530	She	src homology 2 domain-containing transforming	89831370	89858846	TC0300000772.mm.1	0.1	0.054919
TC0500001792.mm.1	ENSMUST00000122020	Gm8163	predicted gene 8163	60726389	60727448	TC0X00002316.mm.1	-0.2	0.054933
TC0500001796.mm.1	NCBI_Gene:10077517	Ighv1-7	immunoglobulin heavy variable 1-76	115847881	115848174	TC1200002656.mm.1	-1.2	0.054995
TC0500001798.mm.1	NM_010629	Kifap3	kinesin-associated protein 3	163779583	163917109	TC0100001491.mm.1	0.2	0.055008
TC0500001799.mm.1	NM_133953	Sf3b3	splicing factor 3b, subunit 3	110810492	110846803	TC0800002927.mm.1	-0.4	0.055024
TC0500001806.mm.1	ENSMUST00000180045	Chn1	chimerin (chimaerin) 1	73610660	73775346	TC0200003759.mm.1	0.1	0.055035
TC0500001818.mm.1	ENSMUST00000119095	Gm14016	predicted gene 14016	118594079	118594564	TC0200001740.mm.1	-0.3	0.055063
TC0500001823.mm.1	ENSMUST00000083381	Gm26064	predicted gene, 26064	43425742	43425850	TC1300001883.mm.1	-0.2	0.055082
TC0500001830.mm.1	ENSMUST00000158254	Gm25867	predicted gene, 25867	79635311	79635413	TC1100003328.mm.1	0.2	0.05512
TC0500001832.mm.1	ENSMUST00000175344	Gm24325	predicted gene, 24325	48420769	48420842	TC0600000552.mm.1	-0.2	0.055133
TC0500001841.mm.1	ENSMUST00000102409	Gm24049	predicted gene, 24049	27401852	27401951	TC0200000470.mm.1	0.2	0.055148
TC0500001844.mm.1	ENSMUST00000117106	Gm15151	predicted gene 15151	151758017	151758193	TC0X00003182.mm.1	-0.5	0.055152
TC0500001865.mm.1	NM_008156	Gpld1	glycosylphosphatidylinositol specific phospholi	24943152	24991936	TC1300000284.mm.1	0.1	0.05518
TC0500001870.mm.1	XM_001474959	Gm2790	predicted gene 2790	31253762	31255381	TC0X00000273.mm.1	0.1	0.055215
TC0500001876.mm.1	ENSMUST00000177607	Gm23864	predicted gene, 23864	35699203	35699309	TC1700001977.mm.1	0.2	0.055311
TC0500001894.mm.1	ENSMUST00000119030	Gm12020	predicted gene 12020	18325630	18327671	TC1100002258.mm.1	-0.2	0.055403
TC0500001896.mm.1	NM_001161731	Ang	angiogenin, ribonuclease, RNase A family, 5	51091077	51106151	TC1400000578.mm.1	0.3	0.055509
TC0500001901.mm.1	NM_019817	Copz1	coatomer protein complex, subunit zeta 1	103272909	103299869	TC1500001128.mm.1	0.2	0.055539
TC0500001903.mm.1	NM_001004157	Scarf1	scavenger receptor class F, member 1	75513540	75526582	TC1100001071.mm.1	0.2	0.055583
TC0500001915.mm.1	ENSMUST00000095028	Gm13436	predicted gene 13436	36807808	36808425	TC0200003384.mm.1	-0.5	0.055642
TC0500001916.mm.1	NM_028199	Plxdc1	plexin domain containing 1	97923237	97986446	TC1100003659.mm.1	-0.3	0.055664
TC0500001917.mm.1	NM_009532	Xrcc1	X-ray repair complementing defective repair in	24546295	24573438	TC0700000387.mm.1	-0.1	0.05567

TC0500001920.mm.1	ENSMUST00000090731	Tmx2	thioredoxin-related transmembrane protein 2	87078263	87080230	TC1700001309.mm.1	0.5	0.055714
TC0500001924.mm.1	NM_030686	Dhrs4	dehydrogenase/reductase (SDR family) member	55478758	55490340	TC1400000777.mm.1	0.4	0.055814
TC0500001928.mm.1	ENSMUST00000170267	Taar8c	trace amine-associated receptor 8C	24100843	24101951	TC1000001885.mm.1	0.3	0.055835
TC0500001931.mm.1	NM_027890	Susd2	sushi domain containing 2	75636619	75644008	TC1000002380.mm.1	0.4	0.056008
TC0500001936.mm.1	NM_027924	Pdgfd	platelet-derived growth factor, D polypeptide	6168612	6378846	TC0900000035.mm.1	0.4	0.056046
TC0500001938.mm.1	ENSMUST00000103474	Ighv7-1	immunoglobulin heavy variable 7-1	113896410	113896946	TC1200002574.mm.1	-0.7	0.056175
TC0500001947.mm.1	NM_028031	Zdhhc13	zinc finger, DHHC domain containing 13	48789003	48827440	TC0700000894.mm.1	-0.3	0.056201
TC0500001962.mm.1	ENSMUST00000122073	Gm12551	predicted gene 12551	86627075	86631251	TC0400002979.mm.1	0.4	0.056226
TC0500001963.mm.1	ENSMUST00000174919	Gm22403	predicted gene, 22403	61762386	61762469	TC0200003621.mm.1	0.4	0.056265
TC0500001968.mm.1	NM_001025309	Pja2	praja 2, RING-H2 motif containing	64281005	64331916	TC1700002400.mm.1	0.3	0.05628
TC0500001972.mm.1	NM_023113	Aspa	aspartoacylase	73304988	73329596	TC1100003161.mm.1	0.4	0.056281
TC0500001975.mm.1	ENSMUST00000164544	Gm3526	predicted gene 3526	5253907	5260580	TC1400002837.mm.1	0.1	0.056348
TC0500001984.mm.1	NM_145462	Haus4	HAUS augmin-like complex, subunit 4	54541785	54554361	TC1400002058.mm.1	-0.2	0.056353
TC0500001986.mm.1	NCBI_Gene:780884:p	Ighv1-2	immunoglobulin heavy variable V1-23	114764450	114764874	TC1200002615.mm.1	-0.9	0.056354
TC0500001988.mm.1	NM_001008421	Nol10	nucleolar protein 10	17348458	17430095	TC1200000140.mm.1	-0.2	0.056432
TC0500001991.mm.1	NM_016923	Ly96	lymphocyte antigen 96	16688456	16709605	TC0100000103.mm.1	0.7	0.056541
TC0500002020.mm.1	ENSMUST00000184987	adapt33	Adaptive response 33 conserved region 3	100429101	100429238	TC0500000978.mm.1	-0.2	0.05659
TC0500002021.mm.1	NM_175313	Eogt	EGF domain-specific O-linked N-acetylglucosami	97110024	97149182	TC0600002796.mm.1	0.2	0.056642
TC0500002035.mm.1	ENSMUST00000122676	Gm25544	predicted gene, 25544	22902388	22902507	TC0200000355.mm.1	-0.2	0.056724
TC0500002038.mm.1	ENSMUST00000157913	Gm23276	predicted gene, 23276	97336495	97336632	TC1400002577.mm.1	0.2	0.056884
TC0500002039.mm.1	ENSMUST00000120677	Gm12583	predicted gene 12583	37108174	37109026	TC0300000275.mm.1	-0.3	0.056918
TC0500002043.mm.1	NM_145437	Cd300ld	CD300 molecule-like family member d	114982274	114989922	TC1100004053.mm.1	0.5	0.056977
TC0500002056.mm.1	NM_010324	Got1	glutamate oxaloacetate transaminase 1, soluble	43499752	43524605	TC1900001541.mm.1	-0.2	0.056994
TC0500002062.mm.1	NCBI_Gene:385047:p	Trav6d-	T cell receptor alpha variable 6D-7	53007626	53008098	TC1400002804.mm.1	-0.7	0.056999
TC0500002064.mm.1	ENSMUST00000102274	Gm25594	predicted gene, 25594	74910152	74910233	TC1800001594.mm.1	-0.3	0.057008
TC0500002065.mm.1	ENSMUST00000122035	Mkrn1-p	makorin, ring finger protein 1, pseudogene 1	88838009	88839402	TC0500002716.mm.1	-0.2	0.057135
TC0500002077.mm.1	NM_016813	Nxf1	nuclear RNA export factor 1	8757073	8772475	TC1900000156.mm.1	-0.4	0.057237
TC0500002079.mm.1	ENSMUST00000117952	Gm11427	predicted gene 11427	83254196	83260534	TC1100001244.mm.1	-0.3	0.057246
TC0500002085.mm.1	ENSMUST00000051371	Gm11993	predicted gene 11993	9149778	9150597	TC1100002215.mm.1	-0.5	0.057266
TC0500002086.mm.1	ENSMUST00000119952	Gm15836	predicted gene 15836	57435721	57436513	TC1400002144.mm.1	-0.2	0.057269
TC0500002093.mm.1	ENSMUST00000117213	Gm13142	predicted gene 13142	147102327	147103981	TC0400001896.mm.1	0.3	0.057344
TC0500002099.mm.1	NM_029614	Prss23	protease, serine, 23	89507785	89527175	TC0700003714.mm.1	0.2	0.057347
TC0500002101.mm.1	XM_885368	Gm6195	predicted pseudogene 6195	9802103	9802553	TC0100001945.mm.1	-0.2	0.057379
TC0500002114.mm.1	ENSMUST00000122417	Gm14117	predicted gene 14117	146305547	146306389	TC0200002174.mm.1	-0.1	0.057413
TC0500002117.mm.1	NM_017366	Acadvl	acyl-Coenzyme A dehydrogenase, very long chai	70010183	70015428	TC1100003083.mm.1	0.4	0.057429
TC0500002118.mm.1	ENSMUST00000118764	Gm13831	predicted gene 13831	115263093	115263394	TC0500001252.mm.1	-0.4	0.057476
TC0500002126.mm.1	NM_023131	Rce1	RCE1 homolog, prenyl protein peptidase (S. cere	4622551	4625617	TC1900000926.mm.1	-0.2	0.057905
TC0500002139.mm.1	ENSMUST00000083049	Gm25258	predicted gene, 25258	133584315	133584421	TC0200004689.mm.1	-0.8	0.057937
TC0500002141.mm.1	NM_026553	Yif1a	Yip1 interacting factor homolog A (S. cerevisia	5088538	5092879	TC1900000056.mm.1	0.2	0.057943
TC0500002143.mm.1	NM_009053	Rfng	RFNG O-fucosylpeptide 3-beta-N-acetylglucosam	120780745	120784207	TC1100004231.mm.1	0.2	0.057967
TC0500002152.mm.1	NM_001004149	Zfp366	zinc finger protein 366	99184823	99247037	TC1300001128.mm.1	0.2	0.058022
TC0500002153.mm.1	ENSMUST00000157752	Gm25183	predicted gene, 25183	99133067	99133172	TC1500002204.mm.1	-0.2	0.058057
TC0500002159.mm.1	NM_001024385	Crls1	cardiolipin synthase 1	132846666	132866785	TC0200002044.mm.1	0.2	0.058088
TC0500002167.mm.1	NM_001193645	Galns	galactosamine (N-acetyl)-6-sulfate sulfatase	122578237	122611487	TC0800003077.mm.1	0.2	0.058108
TC0500002168.mm.1	NM_134084	Ppif	peptidylprolyl isomerase F (cyclophilin F)	25694154	25700468	TC1400000246.mm.1	-0.2	0.058131
TC0500002170.mm.1	NM_133940	Fbxl14	F-box and leucine-rich repeat protein 14	119479668	119483886	TC0600001336.mm.1	-0.3	0.058155
TC0500002172.mm.1	NM_178392	Snapc1	small nuclear RNA activating complex, polypepti	73964530	73984820	TC1200000655.mm.1	-0.2	0.058221
TC0500002178.mm.1	NM_025313	Atp5d	ATP synthase, H+ transporting, mitochondrial F1	80141457	80145818	TC1000003218.mm.1	0.4	0.058285
TC0500002182.mm.1	ENSMUST00000179933	Gm25235	predicted gene, 25235	170832765	170832871	TC0100003516.mm.1	-0.2	0.05831
TC0500002214.mm.1	NM_172693	Galnt12	UDP-N-acetyl-alpha-D-galactosamine:polypeptid	47091909	47123070	TC0400000514.mm.1	-0.2	0.05834
TC0500002218.mm.1	NCBI_Gene:780891:p	Ighv1-3	immunoglobulin heavy variable 1-39	114914599	114915032	TC1200002623.mm.1	-1.0	0.058362
TC0500002221.mm.1	XR_104643	Gm10851	predicted gene 10851	11521707	11530836	TC0200000219.mm.1	0.2	0.058373
TC0500002223.mm.1	ENSMUST00000077976	Rps23-p	ribosomal protein S23, pseudogene	37714717	37715212	TC0300000291.mm.1	-0.4	0.058452
TC0500002234.mm.1	NM_008694	Ngp	neutrophilic granule protein	110419750	110423012	TC0900001461.mm.1	-0.2	0.058458
TC0500002237.mm.1	NM_172894	Ppp6r1	protein phosphatase 6, regulatory subunit 1	4631495	4658950	TC0700002166.mm.1	-0.5	0.058561
TC0500002240.mm.1	NM_138592	Usp39	ubiquitin specific peptidase 39	72318676	72345184	TC0600002484.mm.1	-0.2	0.05868
TC0500002242.mm.1	NM_152817	Ttc27	tetratricopeptide repeat domain 27	74717750	74863570	TC1700001163.mm.1	-0.2	0.058699
TC0500002244.mm.1	NM_007719	Ccr7	chemokine (C-C motif) receptor 7	99144196	99155077	TC1100003696.mm.1	-0.6	0.058763
TC0500002252.mm.1	ENSMUST00000083412	Gm25582	predicted gene, 25582	95624502	95624611	TC0900001198.mm.1	-0.3	0.058769
TC0500002253.mm.1	NCBI_Gene:243420:p	Igkv1-1	immunoglobulin kappa variable 1-135	67609745	67610508	TC0600003505.mm.1	-1.4	0.058793
TC0500002258.mm.1	ENSMUST00000158087	Gm22728	predicted gene, 22728	92056064	92056192	TC0500002746.mm.1	-0.2	0.058836
TC0500002260.mm.1	NM_026737	Phf5a	PHD finger protein 5A	81864516	81871911	TC1500001932.mm.1	-0.2	0.058909
TC0500002263.mm.1	NM_022430	Ms4a8a	membrane-spanning 4-domains, subfamily A, me	11067471	11081103	TC1900001124.mm.1	0.2	0.059017
TC0500002265.mm.1	NM_016714	Nup50	nucleoporin 50	84923401	84942963	TC1500000797.mm.1	-0.4	0.059104
TC0500002266.mm.1	NM_001011865	Olfr624	olfactory receptor 624	103418755	103671029	TC0700003889.mm.1	0.2	0.059144
TC0500002268.mm.1	NM_028667	D3Ertd7	DNA segment, Chr 3, ERATO Doi 751, expressed	41742611	41759389	TC0300000323.mm.1	0.1	0.059164
TC0500002270.mm.1	NM_001271409	Sorbs3	sorbin and SH3 domain containing 3	70180468	70211989	TC1400002334.mm.1	0.2	0.059222
TC0500002273.mm.1	ENSMUST00000095471	Rps2-ps	ribosomal protein S2, pseudogene 6	76236648	76237353	TC1400002441.mm.1	-0.4	0.059256
TC0500002274.mm.1	NCBI_Gene:671652:p	Trav7-1	Trav7-1 T cell receptor alpha variable 7-1	52654817	52655329	TC1400000619.mm.1	-0.4	0.059373
TC0500002280.mm.1	NM_201639	Synm	synemin, intermediate filament protein	67730161	67759742	TC0700003451.mm.1	-0.3	0.059402
TC0500002286.mm.1	NM_001289920	E2f3	E2F transcription factor 3 (E2f3), transcript v	0	0	TSUnmapped0000004	-0.2	0.059505
TC0500002288.mm.1	ENSMUST00000183949	MESTIT1	MEST intronic transcript 1, antisense RNA conse	30734418	30734647	TC0600000278.mm.1	0.2	0.059563
TC0500002289.mm.1	NM_153795	Fermt3	fermitin family homolog 3 (Drosophila)	6998958	7019469	TC1900001030.mm.1	-0.5	0.059627
TC0500002302.mm.1	NM_010591	Jun	Jun oncogene	95049034	95052222	TC0400003079.mm.1	0.3	0.05978
TC0500002306.mm.1	XM_001004356	Gm8842	predicted gene 8842	107084507	107085388	TC0800002872.mm.1	-0.3	0.05986
TC0500002318.mm.1	NCBI_Gene:777686:p	Ighv2-2	immunoglobulin heavy variable 2-2	113588267	113588700	TC1200002555.mm.1	-0.9	0.059883
TC0500002319.mm.1	NM_172883	Mfsd7a	major facilitator superfamily domain containing	108441054	108448891	TC0500002945.mm.1	0.2	0.059943
TC0500002320.mm.1	ENSMUST00000082748	Gm25813	predicted gene, 25813	52336915	52337105	TC0800002233.mm.1	-1.0	0.060016

TC0500002325.mm.1	ENSMUST00000082403	mt-Ts1	mitochondrially encoded tRNA serine 1	6870	6938	TC0M00000025.mm.1	1.1	0.060036
TC0500002328.mm.1	ENSMUST00000117028	Gm23334	predicted gene, 23334	34068931	34069054	TC1900000492.mm.1	0.2	0.060038
TC0500002343.mm.1	NM_013610	Ninj1	ninjurin 1	49187485	49196251	TC1300000560.mm.1	0.1	0.060076
TC0500002386.mm.1	ENSMUST00000169678	Gm6576	predicted gene 6576	27025386	27026207	TC1500000174.mm.1	-0.6	0.06008
TC0500002389.mm.1	NM_025722	4921524	RIKEN cDNA 4921524J17 gene	85408759	85432841	TC0800002612.mm.1	-0.2	0.060159
TC0500002411.mm.1	OTTMUST00000090515	RP23-28	---	69209762	69213098	TC1000002338.mm.1	0.1	0.06025
TC0500002416.mm.1	NM_020003	610031	RIKEN cDNA 0610031J06 gene	88325023	88331313	TC0300000722.mm.1	0.2	0.060259
TC0500002428.mm.1	NM_026107	Zkscan6	zinc finger with KRAB and SCAN domains 6	65807175	65829239	TC1100000839.mm.1	-0.1	0.060355
TC0500002432.mm.1	ENSMUST00000121800	Gm8880	predicted gene 8880	88959217	88959670	TC0X00000856.mm.1	-0.5	0.060365
TC0500002434.mm.1	NM_001033158	Rasl12	RAS-like, family 12	65398488	65414853	TC0900000842.mm.1	0.2	0.060487
TC0500002435.mm.1	NM_019712	Rbx1	ring-box 1	81466316	81476369	TC1500000721.mm.1	-0.1	0.060501
TC0500002439.mm.1	ENSMUST00000183778	AC10275	N/A	115172273	115172352	TC0700001677.mm.1	-1.0	0.060503
TC0500002446.mm.1	NCBI_Gene:243439:p	Igkv14-	immunoglobulin kappa chain variable 14-100	68519012	68519477	TC0600003521.mm.1	-0.8	0.060506
TC0500002450.mm.1	NM_025449	Nicn1	nicolin 1	108290448	108296498	TC0900001398.mm.1	0.3	0.060509
TC0500002457.mm.1	NCBI_Gene:791089:p	Ighv2-9	immunoglobulin heavy variable 2-9-1	113769850	113770283	TC1200002566.mm.1	-0.8	0.060515
TC0500002462.mm.1	NM_001165930	Glt8d1	glycosyltransferase 8 domain containing 1	31001393	31012441	TC1400000319.mm.1	0.2	0.060622
TC0500002463.mm.1	ENSMUST00000119431	Gm14227	predicted gene 14227	155198632	155199260	TC0200004956.mm.1	-0.3	0.060654
TC0500002464.mm.1	NM_026301	Rnf125	ring finger protein 125	20944625	20983848	TC1800000160.mm.1	0.4	0.060672
TC0500002465.mm.1	NM_027879	Cdc40	cell division cycle 40	40831621	40883143	TC1000002046.mm.1	-0.3	0.060736
TC0500002480.mm.1	NR_035493	Mir1967	microRNA 1967	124022641	124022722	TC0800001542.mm.1	-0.3	0.060772
TC0500002483.mm.1	ENSMUST00000117339	Gm12626	predicted gene 12626	60631047	60633029	TC1100002886.mm.1	-0.2	0.060778
TC0500002486.mm.1	NM_011487	Stat4	signal transducer and activator of transcriptio	51987148	52107188	TC0100000374.mm.1	-0.5	0.060859
TC0500002507.mm.1	ENSMUST00000177586	Gm5814	predicted pseudogene 5814	47410363	47410740	TC1700000914.mm.1	-0.2	0.060897
TC0500002529.mm.1	ENSMUST00000104692	Gm24557	predicted gene, 24557	188519353	188519443	TC0100003773.mm.1	0.6	0.060929
TC0500002533.mm.1	NM_023049	Asb2	ankyrin repeat and SOCS box-containing 2	103321142	103356001	TC1200002263.mm.1	-0.1	0.060933
TC0500002548.mm.1	NM_001039138	Camk2g	calcium/calmodulin-dependent protein kinase II	20734873	20794088	TC1400001551.mm.1	-0.4	0.060987
TC0500002552.mm.1	ENSMUST00000118924	Gm14934	predicted gene 14934	96484859	96485479	TC0X00000920.mm.1	-0.7	0.060989
TC0500002554.mm.1	ENSMUST00000121014	Vmn1r-p	vomeronasal 1 receptor, pseudogene 111	22690970	22691966	TC1300001598.mm.1	0.3	0.061032
TC0500002555.mm.1	ENSMUST00000157472	Gm23671	predicted gene, 23671	82897397	82897499	TC0X00002549.mm.1	0.1	0.061074
TC0500002556.mm.1	ENSMUST00000158455	Gm24003	predicted gene, 24003	32913631	32913730	TC0500000348.mm.1	-0.1	0.061095
TC0500002567.mm.1	ENSMUST00000117186	Gm5228	predicted gene 5228	47936090	47936446	TC1700000927.mm.1	-0.2	0.061135
TC0500002571.mm.1	NM_009696	Apoe	apolipoprotein E	19696109	19699166	TC0700002497.mm.1	0.5	0.061146
TC0500002576.mm.1	NM_001025575	Cfhr2	complement factor H-related 2	139810292	140018921	TC0100003191.mm.1	0.4	0.061157
TC0500002578.mm.1	ENSMUST00000104487	Gm24469	predicted gene, 24469	18512515	18512645	TC0800001792.mm.1	0.2	0.061185
TC0500002583.mm.1	NM_019772	1110004	RIKEN cDNA 1110004F10 gene	116093301	116105210	TC0700001681.mm.1	-0.2	0.061323
TC0500002584.mm.1	NM_181075	2610524	RIKEN cDNA 2610524H06 gene	114821935	114823468	TC0500003735.mm.1	-0.2	0.061377
TC0500002593.mm.1	ENSMUST00000116714	Gm25777	predicted gene, 25777	18240717	18240842	TC1600001309.mm.1	-0.6	0.061388
TC0500002608.mm.1	NM_133993	Pwp1	PWP1 homolog (S. cerevisiae)	85871831	85889103	TC1000001038.mm.1	-0.2	0.061408
TC0500002620.mm.1	NM_010227	Flna	filamin, alpha	74223461	74249820	TC0X00002447.mm.1	0.3	0.061545
TC0500002623.mm.1	NM_018749	Eif3d	eukaryotic translation initiation factor 3, sub	77958998	77970824	TC1500001824.mm.1	-0.3	0.06156
TC0500002624.mm.1	ENSMUST00000180333	Gm14176	predicted gene 14176	157901469	157902522	TC0200002417.mm.1	-0.4	0.061664
TC0500002627.mm.1	NM_026382	Snrnp48	small nuclear ribonucleoprotein 48 (U11/U12)	38204939	38227663	TC1300000443.mm.1	-0.2	0.061673
TC0500002628.mm.1	NCBI_Gene:619994:p	Ighv1-7	immunoglobulin heavy variable 1-77	115861867	115862160	TC1200002657.mm.1	-1.2	0.061688
TC0500002642.mm.1	NM_020012	Rnf14	ring finger protein 14	38296635	38317849	TC1800000396.mm.1	0.2	0.061704
TC0500002651.mm.1	ENSMUST00000077208	LOC1000	40S ribosomal protein S26-like // ribosomal pr	107439176	107439585	TC0800002879.mm.1	-0.5	0.061753
TC0500002656.mm.1	ENSMUST00000183571	CT57303	N/A	34770579	34770645	TC1700001926.mm.1	0.2	0.061809
TC0500002665.mm.1	NM_009423	Traf4	TNF receptor associated factor 4	78158423	78165589	TC1100003285.mm.1	-0.2	0.061832
TC0500002669.mm.1	NM_029227	Tomm20l	translocase of outer mitochondrial membrane 2(	71111428	71123222	TC1200000605.mm.1	-0.1	0.061842
TC0500002679.mm.1	NM_025997	Fam103a	family with sequence similarity 103, member A1	81762925	81769491	TC0700001177.mm.1	-0.1	0.061863
TC0500002688.mm.1	NM_025768	Grtp1	GH regulated TBC protein 1	13176869	13200624	TC0800001728.mm.1	0.2	0.061886
TC0500002689.mm.1	NM_010240	Ftl1	ferritin light chain 1	45457944	45459886	TC0700003006.mm.1	0.4	0.062114
TC0500002691.mm.1	OTTMUST00000021432	RP23-27	---	116200563	116200952	TC0400003335.mm.1	-0.3	0.062206
TC0500002693.mm.1	ENSMUST00000175562	Gm23800	predicted gene, 23800	39007026	39007089	TC1900001474.mm.1	0.2	0.062246
TC0500002694.mm.1	ENSMUST00000119405	Gm13302	predicted gene 13302	41893388	41895236	TC0400000387.mm.1	0.2	0.06236
TC0500002696.mm.1	ENSMUST00000118720	Gm11599	predicted gene 11599	62660839	62661716	TC0100000508.mm.1	-0.3	0.062454
TC0500002699.mm.1	NCBI_Gene:634132:p	Trav7-2	T cell receptor alpha variable 7-2	53390570	53391142	TC1400000690.mm.1	-0.3	0.062544
TC0500002700.mm.1	NR_028566	Snord11	small nucleolar RNA, C/D box 118	7478518	7478561	TC1900000139.mm.1	-0.2	0.062579
TC0500002709.mm.1	NM_178644	Oaf	OAF homolog (Drosophila)	43221278	43239821	TC0900002128.mm.1	0.2	0.062642
TC0500002712.mm.1	NM_030701	Niacr1	niacin receptor 1	123863570	123865516	TC0500003243.mm.1	0.2	0.062747
TC0500002715.mm.1	ENSMUST00000122207	Gm12864	predicted gene 12864	118987014	118988019	TC0400001324.mm.1	0.1	0.062753
TC0500002716.mm.1	ENSMUST00000171857	Rpl10a-	ribosomal protein L10A, pseudogene 1	64993924	64994631	TC0100002472.mm.1	-0.6	0.062783
TC0500002717.mm.1	NCBI_Gene:780793:p	Ighv2-7	immunoglobulin heavy variable 2-7	113807314	113807747	TC1200002569.mm.1	-0.3	0.062864
TC0500002732.mm.1	NM_146767	Olfr110	olfactory receptor 1104	87021610	87022542	TC0200003966.mm.1	0.2	0.062943
TC0500002735.mm.1	ENSMUST00000102076	Gm22750	predicted gene, 22750	8921336	8921438	TC1300001413.mm.1	0.2	0.062999
TC0500002738.mm.1	NM_001039951	Zfp606	zinc finger protein 606	12478293	12496235	TC0700000138.mm.1	-0.1	0.063086
TC0500002740.mm.1	NM_026347	Iah1	isoamyl acetate-hydrolyzing esterase 1 homolog	21316389	21323607	TC1200000183.mm.1	0.2	0.063142
TC0500002744.mm.1	NM_029005	Mlkl	mixed lineage kinase domain-like	111311797	111338177	TC0800002947.mm.1	0.2	0.063146
TC0500002746.mm.1	NM_016763	Hsd17b1	hydroxysteroid (17-beta) dehydrogenase 10	152001845	152004442	TC0X00001533.mm.1	0.2	0.063416
TC0500002747.mm.1	ENSMUST00000121776	Gm14078	predicted gene 14078	140955765	140956249	TC0200004734.mm.1	0.3	0.063494
TC0500002749.mm.1	ENSMUST00000082947	Gm22265	predicted gene, 22265	192745571	192745686	TC0100001865.mm.1	-1.1	0.063524
TC0500002754.mm.1	NM_001254946	BC03504	cDNA sequence BC035044	128848044	128891126	TC0600003216.mm.1	-0.3	0.063572
TC0500002755.mm.1	NM_138669	Eif4a3	eukaryotic translation initiation factor 4A3	119288363	119300089	TC1100004182.mm.1	-0.3	0.06363
TC0500002760.mm.1	ENSMUST00000082501	Gm25588	predicted gene, 25588	153440079	153440218	TC0100001378.mm.1	-0.3	0.063636
TC0500002775.mm.1	NM_183250	Tma7	translational machinery associated 7 homolog (S	109077988	109082381	TC0900003074.mm.1	-0.5	0.063646
TC0500002777.mm.1	ENSMUST00000157414	Gm24994	predicted gene, 24994	78165546	78165666	TC1200000697.mm.1	0.2	0.063848
TC0500002812.mm.1	NM_001081429	Ccdc15	coiled-coil domain containing 15	37275835	37348392	TC0900002047.mm.1	-0.2	0.063882
TC0500002815.mm.1	NR_028091	Snord72	small nucleolar RNA, C/D box 72	5118404	5118484	TC1500000020.mm.1	-1.0	0.063929
TC0500002825.mm.1	NM_053129	Pcdhb4	protocadherin beta 4	37307455	37311173	TC1800000358.mm.1	0.2	0.064017

TC0500002836.mm.1	NM_026904	Anapc10	anaphase promoting complex subunit 10	79711820	79777321	TC0800000885.mm.1	-0.2	0.06402
TC0500002838.mm.1	ENSMUST00000166589	Gm17581	predicted gene, 17581	155735810	155735866	TC0200004971.mm.1	0.2	0.064106
TC0500002842.mm.1	ENSMUST00000161562	Gm5822	predicted gene 5822	28862330	28863707	TC1900001332.mm.1	-0.3	0.064161
TC0500002843.mm.1	ENSMUST00000104646	Gm26052	predicted gene, 26052	113336553	113336641	TC1100001856.mm.1	0.5	0.06417
TC0500002856.mm.1	NM_008220	Hbb-bt	hemoglobin, beta adult t chain	103812524	103813996	TC0700003908.mm.1	0.9	0.064183
TC0500002875.mm.1	ENSMUST00000175519	Gm23415	predicted gene, 23415	10592484	10592566	TC1300001435.mm.1	0.5	0.064296
TC0500002879.mm.1	NM_011526	Tagln	transgelin	45929628	45936058	TC0900002212.mm.1	0.3	0.064316
TC0500002885.mm.1	NM_028725	Sdr42e1	short chain dehydrogenase/reductase family 42E	117661399	117673689	TC0800003011.mm.1	0.1	0.064365
TC0500002887.mm.1	ENSMUST00000179958	Gm25253	predicted gene, 25253	10555554	10555660	TC0100001960.mm.1	-0.2	0.064387
TC0500002893.mm.1	NM_001201391	Hbb-bs	hemoglobin, beta adult s chain	103826523	103828096	TC0700003909.mm.1	0.5	0.064394
TC0500002895.mm.1	NM_013834	Sfrp1	secreted frizzled-related protein 1	23411502	23449632	TC0800000297.mm.1	0.4	0.064399
TC0500002896.mm.1	NM_026528	2700060	RIKEN cDNA 2700060E02 gene	19811402	19823823	TC1400001523.mm.1	-0.4	0.06459
TC0500002904.mm.1	ENSMUST00000122523	n-R5s23	nuclear encoded rRNA 5S 23	24686168	24686282	TC1800001085.mm.1	0.2	0.064643
TC0500002906.mm.1	NM_016767	Batf	basic leucine zipper transcription factor, ATF-	85686669	85709087	TC1200000838.mm.1	-0.1	0.064758
TC0500002908.mm.1	ENSMUST00000120692	Gm8545	predicted gene 8545	74006702	74007502	TC0X00000699.mm.1	-0.2	0.064771
TC0500002910.mm.1	NM_013532	Lilrb4	leukocyte immunoglobulin-like receptor, subfam	51490970	51496613	TC1000003214.mm.1	0.6	0.064797
TC0500002923.mm.1	NM_172967	4930503	RIKEN cDNA 4930503L19 gene	70453140	70472480	TC1800001539.mm.1	-0.2	0.064904
TC0500002926.mm.1	ENSMUST00000165994	Gm13241	predicted gene 13241	146475329	146476111	TC0400001885.mm.1	-0.1	0.064915
TC0500002932.mm.1	ENSMUST00000163646	Gm5263	predicted gene 5263	146420434	146420874	TC0100001329.mm.1	-0.2	0.06493
TC0500002936.mm.1	ENSMUST00000158566	Gm25770	predicted gene, 25770	137093612	137093726	TC0X00003044.mm.1	-0.1	0.06497
TC0500002945.mm.1	ENSMUST00000122024	Gm11581	predicted gene 11581	60809116	60809942	TC0100000482.mm.1	0.2	0.064988
TC0500002947.mm.1	ENSMUST00000121667	Gm6039	predicted gene 6039	75233063	75234312	TC0X00000740.mm.1	-0.2	0.065116
TC0500002961.mm.1	ENSMUST00000083096	n-R5s16	nuclear encoded rRNA 5S 160	12742899	12743018	TC0600000089.mm.1	0.1	0.065155
TC0500002971.mm.1	ENSMUST00000157780	Gm25886	predicted gene, 25886	89393076	89393189	TC1400001134.mm.1	-0.1	0.065254
TC0500002974.mm.1	NM_178650	Tbc1d10	TBC1 domain family, member 10c	4184357	4191047	TC1900000907.mm.1	-0.4	0.065263
TC0500002982.mm.1	ENSMUST00000158129	Gm24905	predicted gene, 24905	34916250	34916353	TC0200000628.mm.1	0.1	0.065347
TC0500002985.mm.1	NM_001024474	Diras2	DIRAS family, GTP-binding RAS-like 2	52504375	52530836	TC1300002006.mm.1	-0.2	0.065355
TC0500002989.mm.1	ENSMUST00000165508	Gm8340	predicted gene 8340	6358497	6359687	TC1400000061.mm.1	-0.2	0.06541
TC0500002993.mm.1	ENSMUST00000177317	Gm25591	predicted gene, 25591	108428067	108428160	TC1000001273.mm.1	-0.4	0.065479
TC0500002996.mm.1	NM_178184	Hist1h2	histone cluster 1, H2an	21786826	21787218	TC1300001562.mm.1	-0.9	0.065487
TC0500003001.mm.1	NM_009705	Arg2	arginase type II	79130777	79156301	TC1200000715.mm.1	-0.1	0.065568
TC0500003004.mm.1	ENSMUST00000117514	Gm7856	predicted gene 7856	91513141	91514633	TC1600002077.mm.1	-0.2	0.065577
TC0500003047.mm.1	ENSMUST00000175168	Gm25732	predicted gene, 25732	139338206	139338265	TC0400001745.mm.1	-0.5	0.065592
TC0500003048.mm.1	NM_001146196	Scin	scinderin	40059769	40134228	TC1200001660.mm.1	-0.2	0.065664
TC0500003053.mm.1	ENSMUST00000169322	Gm17404	predicted gene, 17404	66851343	66851513	TC1300002233.mm.1	-0.2	0.065714
TC0500003058.mm.1	NR_002865	Rnu11	U11 small nuclear RNA	132270079	132270213	TC0400003664.mm.1	-0.9	0.065716
TC0500003060.mm.1	NCBI_Gene:692165:p	Igkv10-	immunoglobulin kappa variable 10-96	68631950	68704996	TC0600003544.mm.1	-1.1	0.065847
TC0500003061.mm.1	ENSMUST00000118476	Gm12220	predicted gene 12220	53929305	53929476	TC1100002750.mm.1	0.5	0.065911
TC0500003063.mm.1	ENSMUST00000158108	Gm23895	predicted gene, 23895	78648128	78648287	TC1800000841.mm.1	0.2	0.066103
TC0500003064.mm.1	NM_029998	6030458	RIKEN cDNA 6030458C11 gene	12808177	12824657	TC1500001234.mm.1	-0.1	0.066132
TC0500003072.mm.1	XR_141229	BC00551	cDNA sequence BC005512	114094905	114106953	TC1400002697.mm.1	0.2	0.066189
TC0500003085.mm.1	NM_175646	Txnl4b	thioredoxin-like 4B	109565892	109574051	TC0800001297.mm.1	0.2	0.066204
TC0500003086.mm.1	NM_021542	Kcnk5	potassium channel, subfamily K, member 5	20140057	20181784	TC1400001528.mm.1	-0.2	0.06633
TC0500003088.mm.1	XM_001472641	Gm6158	predicted gene 6158	24069924	24070637	TC1400000218.mm.1	-0.6	0.066442
TC0500003089.mm.1	ENSMUST00000059524	LOC1010	adenosylhomocysteinase-like // S-adenosylhom	46152997	46155077	TC1600001677.mm.1	-0.3	0.066454
TC0500003094.mm.1	ENSMUST00000182353	Gm5597	predicted gene 5597	76244746	76245938	TC0700003536.mm.1	-0.3	0.066485
TC0500003110.mm.1	NM_001099217	Ly6c2	lymphocyte antigen 6 complex, locus C2	75108160	75111949	TC1500001730.mm.1	0.6	0.066517
TC0500003126.mm.1	NM_133238	Cd209a	CD209a antigen	3743395	3748984	TC0800001619.mm.1	0.2	0.066522
TC0500003133.mm.1	NM_010261	Rabac1	Rab acceptor 1 (prenylated)	24969750	24972728	TC0700002615.mm.1	0.3	0.066528
TC0500003136.mm.1	NM_011840	Map2k5	mitogen-activated protein kinase kinase 5	63163768	63377902	TC0900002472.mm.1	-0.2	0.066543
TC0500003138.mm.1	NM_153583	Atg4d	autophagy related 4D, cysteine peptidase	21265285	21274837	TC0900000191.mm.1	-0.1	0.066718
TC0500003168.mm.1	NM_183175	C1qtnf9	C1q and tumor necrosis factor related protein 9	60768134	60780869	TC1400000853.mm.1	0.4	0.066792
TC0500003179.mm.1	ENSMUST00000077435	Gm6807	predicted gene 6807	45450308	45451195	TC1900001581.mm.1	-0.6	0.067118
TC0500003180.mm.1	ENSMUST00000071101	Gm10010	predicted gene 10010	128187818	128200623	TC0600003194.mm.1	0.1	0.067181
TC0500003181.mm.1	NM_001007460	Zdhhc23	zinc finger, DHHC domain containing 23	43969078	43979788	TC1600001638.mm.1	-0.1	0.067232
TC0500003188.mm.1	NCBI_Gene:434031:p	Igkv10-	immunoglobulin kappa variable 10-95	68680379	68680848	TC0600000800.mm.1	-1.0	0.067254
TC0500003189.mm.1	NM_146103	Tmem185	transmembrane protein 185B	119526154	119528983	TC0100001076.mm.1	-0.1	0.06731
TC0500003193.mm.1	NM_175036	Leprot	leptin receptor overlapping transcript	101647718	101659364	TC0400001038.mm.1	0.2	0.067322
TC0500003194.mm.1	ENSMUST00000103503	Ighv1-3	immunoglobulin heavy variable 1-30	114817099	114817390	TC1200002618.mm.1	-1.1	0.067375
TC0500003195.mm.1	NM_009164	Sh3bp1	SH3-domain binding protein 1	78899768	78912052	TC1500002333.mm.1	-0.2	0.067428
TC0500003198.mm.1	NM_177700	Atmin	ATM interactor	116943393	116960445	TC0800001392.mm.1	-0.3	0.067502
TC0500003208.mm.1	NM_025281	Lyar	Ly1 antibody reactive clone	38220470	38234306	TC0500000434.mm.1	-0.2	0.06752
TC0500003218.mm.1	NM_172707	Ppp1cb	protein phosphatase 1, catalytic subunit, beta	32458970	32517433	TC0500000339.mm.1	-0.2	0.06753
TC0500003220.mm.1	NM_028077	1810055	RIKEN cDNA 1810055G02 gene	3708333	3717881	TC1900000015.mm.1	0.1	0.06762
TC0500003225.mm.1	NCBI_Gene:213570:p	Ighv1-7	immunoglobulin heavy variable 1-78	115868773	115869066	TC1200002658.mm.1	-0.9	0.067624
TC0500003229.mm.1	NM_177628	Fam167a	family with sequence similarity 167, member A	63436394	63465502	TC1400000899.mm.1	-0.1	0.067684
TC0500003236.mm.1	NM_009858	Cd8b1	CD8 antigen, beta chain 1	71322812	71337477	TC0600000826.mm.1	-1.7	0.067701
TC0500003240.mm.1	XM_888439	Gm6462	predicted gene 6462	28938035	28938340	TC0100000184.mm.1	-0.4	0.067744
TC0500003243.mm.1	NM_001110517	Gm14446	predicted gene 14446	34592888	34662419	TC1900001422.mm.1	-0.2	0.067831
TC0500003244.mm.1	ENSMUST00000122405	Gm13602	predicted gene 13602	66942558	66943050	TC0200000964.mm.1	-0.3	0.067841
TC0500003247.mm.1	NCBI_Gene:382180:p	Trav7d-	T cell receptor alpha variable 7D-4	52769753	52770392	TC1400000626.mm.1	-0.5	0.067843
TC0500003253.mm.1	NM_009632	Parp2	poly (ADP-ribose) polymerase family, member 2	50807946	50821300	TC1400000569.mm.1	-0.2	0.067891
TC0500003256.mm.1	ENSMUST00000099961	Gm6043	predicted gene 6043	29217639	29218130	TC1400000293.mm.1	-0.2	0.067939
TC0500003258.mm.1	NM_033526	Ubqln4	ubiquilin 4	88553716	88569725	TC0300000730.mm.1	0.1	0.06798
TC0500003261.mm.1	NM_019676	Plcd1	phospholipase C, delta 1	119071527	119093496	TC0900003233.mm.1	0.2	0.067987
TC0500003264.mm.1	ENSMUST00000105805	Gm13030	predicted gene 13030	138870992	138873964	TC0400003834.mm.1	0.1	0.067991
TC0500003273.mm.1	ENSMUST00000104029	Gm23951	predicted gene, 23951	83366870	83367001	TC1100003392.mm.1	0.2	0.067998
TC0500003274.mm.1	ENSMUST00000083119	Gm25705	predicted gene, 25705	31174909	31175012	TC0400002350.mm.1	0.2	0.068077

TC0500003277.mm.1	NCBI_Gene:436467:p	Trav14-	Trav14-1 T cell receptor alpha variable 14-1	53554022	53554749	TC1400002829.mm.1	-0.4	0.068103
TC0500003279.mm.1	ENSMUST00000105060	Gm14188	predicted gene 14188	99763933	99764100	TC1100003734.mm.1	-0.4	0.068115
TC0500003284.mm.1	ENSMUST00000157085	Gm22235	predicted gene, 22235	86703298	86703407	TC1700002674.mm.1	0.2	0.068181
TC0500003300.mm.1	NM_001007575	Zfp58	zinc finger protein 58	67490167	67500555	TC1300002775.mm.1	-0.2	0.068181
TC0500003304.mm.1	NCBI_Gene:380824:p	Ighv1-6	immunoglobulin heavy variable 1-66	115593110	115593543	TC1200002644.mm.1	-1.0	0.068183
TC0500003305.mm.1	BC115617	Ddrgk1	DDRGK domain containing 1	130653960	130664659	TC0200004634.mm.1	0.1	0.068226
TC0500003316.mm.1	XM_487135	Gm5174	predicted gene 5174	86655939	86657411	TC1000001048.mm.1	0.2	0.068257
TC0500003318.mm.1	NM_001112700	Cyth1	cytohesin 1	118132019	118248592	TC1100004152.mm.1	-0.2	0.068306
TC0500003371.mm.1	NM_027892	Ppp1r12	protein phosphatase 1, regulatory (inhibitor) s	108162193	108277575	TC1000001266.mm.1	-0.2	0.068321
TC0500003373.mm.1	ENSMUST00000082684	n-R5s95	nuclear encoded rRNA 5S 95	9568132	9568249	TC0800001674.mm.1	0.2	0.068326
TC0500003376.mm.1	NM_029638	Abp1	amiloride binding protein 1 (amine oxidase, cop	48895254	48909188	TC0600000572.mm.1	-0.1	0.068363
TC0500003378.mm.1	NR_002172	Snord15	small nucleolar RNA, C/D box 15A	99482785	99482932	TC0700003799.mm.1	-1.3	0.068377
TC0500003384.mm.1	NM_001163378	2700049	RIKEN cDNA 2700049A03 gene	71136848	71243303	TC1200000606.mm.1	-0.2	0.068397
TC0500003389.mm.1	ENSMUST00000175498	Gm24106	predicted gene, 24106	64225523	64225649	TC0900000817.mm.1	0.2	0.068398
TC0500003390.mm.1	NM_144835	Heatr1	HEAT repeat containing 1	12395375	12440289	TC1300000070.mm.1	-0.2	0.068469
TC0500003391.mm.1	NM_025666	Ubr7	ubiquitin protein ligase E3 component n-recogni	102757975	102777707	TC1200001021.mm.1	-0.2	0.068491
TC0500003399.mm.1	NM_027455	Qpct	glutaminyl-peptide cyclotransferase (glutaminyl	79051906	79090353	TC1700001194.mm.1	0.2	0.068603
TC0500003401.mm.1	XR_140488	Gm10855	predicted gene 10855	6932541	6935081	TC0200002911.mm.1	0.2	0.068625
TC0500003404.mm.1	NM_001033178	Tmem181	transmembrane protein 181A	6270470	6308314	TC1700000055.mm.1	0.2	0.068635
TC0500003407.mm.1	NM_009144	Sfrp2	secreted frizzled-related protein 2	83766321	83774316	TC0300000647.mm.1	0.2	0.068701
TC0500003412.mm.1	NM_021345	Ptplad1	protein tyrosine phosphatase-like A domain cont	64986983	65021717	TC0900002503.mm.1	-0.2	0.068771
TC0500003415.mm.1	ENSMUST00000120561	Gm12991	predicted gene 12991	135377158	135377235	TC0400001655.mm.1	-0.3	0.068958
TC0500003417.mm.1	NM_001198839	Bcar1	breast cancer anti-estrogen resistance 1	111710474	111743849	TC0800002953.mm.1	0.1	0.068972
TC0500003420.mm.1	BC119090	Plp2	proteolipid protein 2	7667941	7671390	TC0X00001780.mm.1	0.3	0.069002
TC0500003429.mm.1	NM_173424	Zbtb37	zinc finger and BTB domain containing 37	161008794	161034849	TC0100003370.mm.1	0.1	0.069006
TC0500003430.mm.1	NM_010423	Hey1	hairy/enhancer-of-split related with YRPW motif	8663359	8667039	TC0300001616.mm.1	-0.4	0.069048
TC0500003431.mm.1	ENSMUST00000079706	Gm5417	predicted gene 5417	83405612	83406105	TC1500001975.mm.1	0.2	0.069058
TC0500003439.mm.1	NM_019410	Pfn2	profilin 2	57841895	57847757	TC0300002035.mm.1	-0.1	0.069072
TC0500003441.mm.1	BC094644	Rpl38	ribosomal protein L38	114668524	114672331	TC1100001874.mm.1	-0.3	0.069076
TC0500003448.mm.1	NM_001083320	Magi1	membrane associated guanylate kinase, WW and	93675453	94283917	TC0600002763.mm.1	0.2	0.069088
TC0500003451.mm.1	NM_183027	Ap1s3	adaptor-related protein complex AP-1, sigma 3	79606876	79671972	TC0100002642.mm.1	-0.2	0.069123
TC0500003460.mm.1	NM_001252458	Prkd2	protein kinase D2	16842902	16870461	TC0700000239.mm.1	-0.7	0.06913
TC0500003463.mm.1	NM_028982	8430419	RIKEN cDNA 8430419L09 gene	135197977	135244955	TC0600001605.mm.1	-0.2	0.069198
TC0500003464.mm.1	NM_011380	Six2	sine oculis-related homeobox 2	85684268	85688274	TC1700002662.mm.1	-0.1	0.069253
TC0500003465.mm.1	NCBI_Gene:668549:p	Ighv1-6	Ighv1-62-3 immunoglobulin heavy variable 1-62-	115460999	115461431	TC1200002641.mm.1	-1.0	0.069258
TC0500003474.mm.1	ENSMUST00000118988	Gm5385	predicted gene 5385	41248575	41250133	TC0X00000386.mm.1	0.1	0.069308
TC0500003476.mm.1	NM_177030	Dock6	dedicator of cytokinesis 6	21800180	21852635	TC0900001885.mm.1	0.1	0.069339
TC0500003479.mm.1	ENSMUST00000122140	Gm9575	predicted gene 9575	50665008	50666346	TC1600001712.mm.1	-0.3	0.06937
TC0500003490.mm.1	ENSMUST00000116949	Gm24640	predicted gene, 24640	10489971	10490096	TC0200000141.mm.1	-0.1	0.069469
TC0500003497.mm.1	ENSMUST00000116990	Gm22626	predicted gene, 22626	10497352	10497477	TC0200000159.mm.1	-0.1	0.069469
TC0500003506.mm.1	NM_153554	Aldh18a	aldehyde dehydrogenase 18 family, member A1	40550257	40588463	TC1900001490.mm.1	-0.2	0.069494
TC0500003507.mm.1	ENSMUST00000158431	Gm23016	predicted gene, 23016	64728066	64728127	TC1800000664.mm.1	0.2	0.069516
TC0500003509.mm.1	NM_172748	Fbxl19	F-box and leucine-rich repeat protein 19	127746775	127768928	TC0700001861.mm.1	-0.1	0.069542
TC0500003516.mm.1	ENSMUST00000126680	Gm5834	predicted pseudogene 5834	139939601	139994205	TC0100003192.mm.1	0.4	0.06967
TC0500003518.mm.1	NM_206816	Olfr128	olfactory receptor 128	37923516	37924555	TC1700000790.mm.1	0.2	0.069684
TC0500003521.mm.1	NM_024173	Atp6v1g	ATPase, H+ transporting, lysosomal V1 subunit G	63544765	63550750	TC0400000725.mm.1	-0.1	0.069706
TC0500003524.mm.1	NM_009009	Rad21	RAD21 homolog (S. pombe)	51962604	51991760	TC1500001506.mm.1	-0.6	0.06971
TC0500003535.mm.1	NM_138589	Ubfd1	ubiquitin family domain containing 1	122067175	122082199	TC0700001749.mm.1	-0.1	0.069731
TC0500003538.mm.1	NM_016674	Cldn1	claudin 1	26356642	26371841	TC1600001419.mm.1	-0.3	0.069762
TC0500003549.mm.1	NCBI_Gene:674098:p	Trav8-1	T cell receptor alpha variable 8-1	53469756	53470231	TC1400000695.mm.1	-0.3	0.069787
TC0500003566.mm.1	NM_016847	Avpr1a	arginine vasopressin receptor 1A	122448499	122453453	TC1000001506.mm.1	0.3	0.069799
TC0500003568.mm.1	ENSMUST00000164855	A730015	RIKEN cDNA A730015C16 gene	108847399	108848619	TC0400003256.mm.1	-0.2	0.069915
TC0500003576.mm.1	ENSMUST00000083414	Gm25577	predicted gene, 25577	118504928	118505034	TC1200002508.mm.1	-0.8	0.069978
TC0500003581.mm.1	NM_029720	Creld2	cysteine-rich with EGF-like domains 2	88819646	88826683	TC1500000852.mm.1	-0.3	0.07
TC0500003585.mm.1	NM_011804	Creg1	cellular repressor of E1A-stimulated genes 1	165763746	165775308	TC0100001526.mm.1	0.4	0.070012
TC0500003590.mm.1	NR_029800	Mir219-	microRNA 219-1	34024966	34025092	TC1700001894.mm.1	-0.3	0.070094
TC0500003592.mm.1	NM_020623	Pth	parathyroid hormone	113385576	113388573	TC0700004128.mm.1	-0.5	0.070177
TC0500003599.mm.1	NM_011095	Lilrb3	leukocyte immunoglobulin-like receptor, subfam	3711409	3720391	TC0700004631.mm.1	0.2	0.070237
TC0500003615.mm.1	ENSMUST00000122492	Gm26255	predicted gene, 26255	110732036	110732138	TC1400001232.mm.1	0.3	0.070252
TC0500003617.mm.1	ENSMUST00000119332	Gm13604	predicted gene 13604	67707290	67707771	TC0200003688.mm.1	-0.5	0.070355
TC0500003621.mm.1	XM_001476757	Gm10144	predicted pseudogene 10144	65600067	65600273	TC0900002515.mm.1	-0.2	0.070366
TC0500003635.mm.1	ENSMUST00000122782	Gm25806	predicted gene, 25806	83690004	83690125	TC0500002669.mm.1	0.2	0.070517
TC0500003638.mm.1	ENSMUST00000158207	Gm23543	predicted gene, 23543	65864171	65864276	TC0600002409.mm.1	0.1	0.070591
TC0500003643.mm.1	NM_001177902	Zfp518b	zinc finger protein 518B	38668484	38684826	TC0500002288.mm.1	0.1	0.070602
TC0500003651.mm.1	ENSMUST00000132939	Gm9013	predicted gene 9013	60039610	60040491	TC1400002170.mm.1	-0.5	0.070681
TC0500003655.mm.1	NM_008910	Ppm1a	protein phosphatase 1A, magnesium dependent,	72761211	72794940	TC1200000626.mm.1	0.2	0.070729
TC0500003660.mm.1	NM_028061	Cyb561d	cytochrome b-561 domain containing 1	108195687	108201212	TC0300002734.mm.1	-0.1	0.070741
TC0500003661.mm.1	ENSMUST00000120849	Gm13578	predicted gene 13578	64867999	64868588	TC0200003653.mm.1	-0.3	0.070797
TC0500003682.mm.1	NR_045522	2-Mar	membrane-associated ring finger (C3HC4) 2	33685692	33718677	TC1700002809.mm.1	0.2	0.070811
TC0500003692.mm.1	NM_026341	Nudt13	nudix (nucleoside diphosphate linked moiety X)-	20294690	20317575	TC1400000163.mm.1	0.2	0.070852
TC0500003706.mm.1	NM_026474	Sugt1	SGT1, suppressor of G2 allele of SKP1 (S. cerev	79587691	79629755	TC1400001107.mm.1	-0.2	0.070904
TC0500003707.mm.1	ENSMUST00000119327	Gm13382	predicted gene 13382	23876030	23876161	TC0200003107.mm.1	0.1	0.071016
TC0500003715.mm.1	OTTMUST00000030075	Bloc1s2	---	52619732	52620601	TC0200000829.mm.1	-0.1	0.071057
TC0500003722.mm.1	ENSMUST00000122799	Gm25289	predicted gene, 25289	12163438	12163556	TC1800000099.mm.1	0.1	0.071202
TC0500003723.mm.1	ENSMUST00000075602	Gm7931	predicted pseudogene 7931 // predicted gene 9	72304118	72305276	TC0800002456.mm.1	-0.7	0.071202
TC0500003725.mm.1	ENSMUST00000157583	Gm23751	predicted gene, 23751	125121724	125121859	TC0600001447.mm.1	-0.6	0.071243
TC0500003729.mm.1	NM_013777	Akr1c12	aldo-keto reductase family 1, member C12	4268172	4279433	TC1300001378.mm.1	0.1	0.071284
TC0500003730.mm.1	ENSMUST00000104685	Gm23961	predicted gene, 23961	22768106	22768202	TC0600001924.mm.1	0.3	0.071511

TC0500003731.mm.1	ENSMUST00000052902	LOC1010	mitochondrial import inner membrane transloca	11609257	11610438	TC1000000084.mm.1	-0.2	0.071574
TC0500003734.mm.1	NCBI_Gene:667542:p	Trav12d	T cell receptor alpha variable 12D-3	52929789	52930282	TC1400000646.mm.1	-0.4	0.071622
TC0500003735.mm.1	ENSMUST00000120584	Gm15610	predicted gene 15610	8971948	8972142	TC0500000055.mm.1	-0.5	0.071633
TC0500003740.mm.1	ENSMUST00000119840	Gm13140	predicted gene 13140	146942476	146945825	TC0400001892.mm.1	-0.4	0.07166
TC0500003744.mm.1	NM_027218	Clec4b1	C-type lectin domain family 4, member b1	123049962	123071555	TC0600001400.mm.1	0.2	0.071706
TC0500003745.mm.1	NM_144932	Acsf3	acyl-CoA synthetase family member 3	122775505	122817881	TC0800001497.mm.1	0.1	0.071871
TC0600000001.mm.1	ENSMUST00000076828	Gm5265	predicted pseudogene 5265	169453528	169453869	TC0100003498.mm.1	-0.3	0.071894
TC0600000004.mm.1	NM_054093	Ube3b	ubiquitin protein ligase E3B	114380607	114421168	TC0500001223.mm.1	0.3	0.071916
TC0600000007.mm.1	NCBI_Gene:633568:p	Ighv5-1	immunoglobulin heavy variable 5-16	113838526	113838983	TC1200002571.mm.1	-0.7	0.071944
TC0600000008.mm.1	NM_144854	Map3k7c	Map3k7 C-terminal like	87553330	87595336	TC1600000957.mm.1	0.2	0.071994
TC0600000014.mm.1	ENSMUST00000162199	Gm8429	predicted gene 8429	11179793	11180618	TC1400000092.mm.1	-0.2	0.072014
TC0600000041.mm.1	NR_028551	Snord53	small nucleolar RNA, C/D box 53	71640879	71641659	TC1700001140.mm.1	-0.5	0.072018
TC0600000087.mm.1	NM_011349	Sema3f	sema domain, immunoglobulin domain (Ig), shor	107681502	107710475	TC0900003042.mm.1	0.2	0.072024
TC0600000089.mm.1	NM_007961	Etv6	ets variant gene 6 (TEL oncogene)	134035700	134270158	TC0600001579.mm.1	-0.2	0.072175
TC0600000093.mm.1	NM_008610	Mmp2	matrix metallopeptidase 2	92827328	92853420	TC0800001077.mm.1	0.5	0.072207
TC0600000097.mm.1	NM_001033484	Iqgap3	IQ motif containing GTPase activating protein 3	88081971	88121048	TC0300000714.mm.1	-0.1	0.072247
TC0600000102.mm.1	NM_001110234	Ngfrap1	nerve growth factor receptor (TNFRSF16) associa	136270253	136271978	TC0X00001323.mm.1	-0.1	0.072256
TC0600000113.mm.1	NM_001042659	Fzd5	frizzled homolog 5 (Drosophila)	64730558	64737750	TC0100002470.mm.1	0.2	0.072257
TC0600000127.mm.1	ENSMUST00000179221	Gm23002	predicted gene, 23002	112592967	112593073	TC0600002902.mm.1	0.2	0.072283
TC0600000130.mm.1	XM_485592	Gm5553	predicted gene 5553	34306715	34307176	TC0500002234.mm.1	-0.2	0.072297
TC0600000136.mm.1	NM_001159599	Nol9	nucleolar protein 9	152039321	152061494	TC0400002010.mm.1	-0.2	0.072343
TC0600000138.mm.1	ENSMUST00000118010	Rps6-ps	ribosomal protein S6, pseudogene 3	53689534	53690283	TC0900002311.mm.1	-0.7	0.072363
TC0600000139.mm.1	ENSMUST00000184667	AC11871	N/A	82612887	82612946	TC1500001951.mm.1	-0.2	0.072372
TC0600000141.mm.1	ENSMUST00000171662	Gm9613	predicted gene 9613	35561923	35562118	TC1700001970.mm.1	-0.4	0.072457
TC0600000144.mm.1	NM_001033464	Efcab4b	EF-hand calcium binding domain 4B	127577897	127630033	TC0600001483.mm.1	-0.1	0.072502
TC0600000148.mm.1	NCBI_Gene:667681:p	Trav12n	T cell receptor alpha variable 12N-3	53240751	53241244	TC1400000677.mm.1	-0.4	0.07255
TC0600000149.mm.1	NM_021296	Grpel2	GrpE-like 2, mitochondrial	61710346	61726331	TC1800001429.mm.1	-0.1	0.072622
TC0600000155.mm.1	ENSMUST00000086958	Gm7027	predicted gene 7027	101573460	101574321	TC0700003840.mm.1	-0.6	0.072793
TC0600000192.mm.1	NM_001146174	Rangap1	RAN GTPase activating protein 1	81704248	81729919	TC1500001927.mm.1	-0.3	0.072896
TC0600000193.mm.1	ENSMUST00000104642	Gm26051	predicted gene, 26051	25168372	25168464	TC0500002099.mm.1	0.3	0.072938
TC0600000196.mm.1	ENSMUST00000119578	Gm11643	predicted gene 11643	103600242	103601105	TC1100003876.mm.1	-0.2	0.072957
TC0600000198.mm.1	NM_026864	Rasl11a	RAS-like, family 11, member A	146844245	146847726	TC0500001796.mm.1	0.1	0.073028
TC0600000212.mm.1	NM_001243067	Zfp433	RIKEN cDNA 1700123A16 gene	81704825	81721976	TC1000000908.mm.1	-0.3	0.073037
TC0600000213.mm.1	NM_028922	Ppapdc2	phosphatidic acid phosphatase type 2 domain co	28963920	28966811	TC1900000427.mm.1	0.3	0.073043
TC0600000222.mm.1	NM_026880	Pink1	PTEN induced putative kinase 1	138313409	138326307	TC0400003821.mm.1	0.3	0.073079
TC0600000225.mm.1	NCBI_Gene:692187:p	Igkv2-1	immunoglobulin kappa chain variable 2-137	67555636	67556216	TC0600003504.mm.1	-0.9	0.073121
TC0600000226.mm.1	NM_001085374	Mcc	mutated in colorectal cancers	44425060	44812182	TC1800001280.mm.1	0.2	0.073152
TC0600000227.mm.1	NM_009841	Cd14	CD14 antigen	36725067	36726736	TC1800001197.mm.1	0.2	0.073212
TC0600000232.mm.1	NM_013533	Gpr162	G protein-coupled receptor 162	124858444	124863917	TC0600003123.mm.1	-0.3	0.07323
TC0600000233.mm.1	NM_175654	Hist1h4	histone cluster 1, H4d	23581598	23581990	TC1300000250.mm.1	-0.8	0.07331
TC0600000240.mm.1	ENSMUST00000119885	Gm12727	predicted gene 12727	106098924	106099282	TC0400001101.mm.1	0.5	0.07345
TC0600000244.mm.1	NM_010104	Edn1	endothelin 1	42301270	42307990	TC1300000481.mm.1	0.1	0.073534
TC0600000256.mm.1	NM_177692	Bloc1s3	biogenesis of lysosome-related organelles compl	19505804	19508331	TC0700002486.mm.1	-0.2	0.073554
TC0600000264.mm.1	NM_001080386	Clta	clathrin, light polypeptide (Lca)	44004452	44032846	TC0400000460.mm.1	-0.2	0.073727
TC0600000278.mm.1	ENSMUST00000182774	Gm6085	predicted gene 6085	4687934	4689403	TC0100001907.mm.1	-0.2	0.073788
TC0600000279.mm.1	NM_031182	Tfap4	transcription factor AP4	4544661	4559720	TC1600001131.mm.1	-0.1	0.073793
TC0600000280.mm.1	ENSMUST00000119242	Gm14115	predicted gene 14115	147280603	147281084	TC0200004793.mm.1	-0.5	0.073849
TC0600000324.mm.1	NM_153143	Kctd11	potassium channel tetramerisation domain cont	69878261	69881406	TC1100003072.mm.1	0.1	0.073856
TC0600000338.mm.1	NM_001163269	Lpar5	lysophosphatidic acid receptor 5	125067920	125082472	TC0600001443.mm.1	-0.1	0.073936
TC0600000345.mm.1	ENSMUST00000178481	Gm5644	predicted gene 5644	145601811	145602301	TC0X00003135.mm.1	-0.3	0.073954
TC0600000349.mm.1	ENSMUST00000157969	Gm23965	predicted gene, 23965	103236626	103236767	TC0100002880.mm.1	0.2	0.073958
TC0600000353.mm.1	NM_022422	Gng13	guanine nucleotide binding protein (G protein),	25717171	25719406	TC1700000382.mm.1	0.1	0.074008
TC0600000356.mm.1	ENSMUST00000184218	AL59385	N/A	174247928	174247995	TC0200002699.mm.1	0.2	0.074038
TC0600000360.mm.1	ENSMUST00000118633	Gm8802	predicted gene 8802	7857108	7857847	TC0500000041.mm.1	-0.2	0.074193
TC0600000373.mm.1	NM_011681	Scgb1a1	secretoglobin, family 1A, member 1 (uteroglobir	9083636	9087958	TC1900001080.mm.1	0.2	0.074313
TC0600000415.mm.1	NM_010493	Icam1	intercellular adhesion molecule 1	21015960	21028814	TC0900000184.mm.1	-0.2	0.074347
TC0600000416.mm.1	ENSMUST00000120741	Gm13720	predicted gene 13720	85816013	85816208	TC0200003907.mm.1	-0.3	0.074419
TC0600000417.mm.1	BC158101	Gm6133	60S ribosomal protein L17 pseudogene	78349754	78350701	TC1800000838.mm.1	-0.2	0.074507
TC0600000419.mm.1	NM_001164177	Psmd10	proteasome (prosome, macropain) 26S subunit,	140948425	140956728	TC0X00003082.mm.1	-0.2	0.074522
TC0600000420.mm.1	NCBI_Gene:667583:p	Trav5d-	Trav5d-4 T cell receptor alpha variable 5D-4	53001713	53002232	TC1400000651.mm.1	-0.4	0.074524
TC0600000423.mm.1	ENSMUST00000164699	Gm6245	predicted gene 6245	40778040	40778807	TC1300000459.mm.1	0.4	0.074547
TC0600000425.mm.1	NCBI_Gene:628056:p	Igkv1-1	Igkv1-131 immunoglobulin kappa variable 1-131	67766036	67766772	TC0600002431.mm.1	-0.4	0.074617
TC0600000426.mm.1	NM_013745	Nufip1	nuclear fragile X mental retardation protein in	76110891	76137379	TC1400001067.mm.1	-0.2	0.074623
TC0600000427.mm.1	NM_025454	Ing5	inhibitor of growth family, member 5	93803965	93822101	TC0100000946.mm.1	-0.2	0.07466
TC0600000428.mm.1	NM_023371	Pin1	protein (peptidyl-prolyl cis/trans isomerase) N	20652130	20666584	TC0900000177.mm.1	-0.1	0.074795
TC0600000429.mm.1	ENSMUST00000180022	Gm8305	predicted gene 8305	4922785	4923979	TC1400001384.mm.1	-0.2	0.074795
TC0600000430.mm.1	ENSMUST00000122790	Gm22067	predicted gene, 22067	81592093	81592199	TC1500000724.mm.1	-0.4	0.074861
TC0600000431.mm.1	NM_016876	Eif3g	eukaryotic translation initiation factor 3, sub	20894349	20898600	TC0900001850.mm.1	-0.3	0.074877
TC0600000432.mm.1	NR_030491	Mir710	microRNA 710	64514332	64514441	TC0800002309.mm.1	0.1	0.07518
TC0600000434.mm.1	NM_172621	Clic5	chloride intracellular channel 5	44188572	44280168	TC1700000846.mm.1	-0.4	0.075282
TC0600000444.mm.1	ENSMUST00000158018	Gm26484	predicted gene, 26484	29487717	29487822	TC0600001982.mm.1	0.2	0.075314
TC0600000445.mm.1	NM_001081471	Mettl7a	methyltransferase like 7A3	100334929	100340341	TC1500001041.mm.1	0.2	0.075333
TC0600000446.mm.1	NM_001011736	Olfr205	olfactory receptor 205	59328543	59329532	TC1600001800.mm.1	0.1	0.075349
TC0600000454.mm.1	ENSMUST00000158486	Gm25907	predicted gene, 25907	81965710	81965834	TC0700001180.mm.1	-0.3	0.075421
TC0600000457.mm.1	ENSMUST00000121997	Gm15167	predicted gene 15167	147733154	147733481	TC0X00001461.mm.1	-0.1	0.075468
TC0600000459.mm.1	NM_026720	Ankrd13	ankyrin repeat domain 13 family, member D	4270180	4283137	TC1900000915.mm.1	-0.1	0.075475
TC0600000469.mm.1	NM_011622	Tom1	target of myb1 homolog (chicken)	75033686	75070121	TC0800000844.mm.1	0.2	0.075557
TC0600000470.mm.1	ENSMUST00000175097	Gm24824	predicted gene, 24824	20823737	20823814	TC0X00001929.mm.1	-0.3	0.075638

TC0600000479.mm.1	ENSMUST00000052877	Gm12663	predicted gene 12663	16634962	16636140	TC1100002241.mm.1	-0.2	0.075653
TC0600000481.mm.1	NM_009742	Bcl2a1a	B cell leukemia/lymphoma 2 related protein A1a	88956920	88962416	TC0900001142.mm.1	-0.2	0.075656
TC0600000486.mm.1	ENSMUST00000117821	Gm15528	predicted gene 15528	75929465	75930328	TC1300002337.mm.1	-0.1	0.075757
TC0600000532.mm.1	ENSMUST00000083775	Gm22341	predicted gene, 22341	99113155	99113283	TC0300002569.mm.1	-0.2	0.075851
TC0600000534.mm.1	NCBI_Gene:627324:p	Trav9-1	T cell receptor alpha variable 9-1	53487998	53488703	TC1400000696.mm.1	-0.4	0.075876
TC0600000536.mm.1	NCBI_Gene:628027:p	Igkv1-1	immunoglobulin kappa variable 1-133	67724914	67725661	TC0600003506.mm.1	-1.1	0.075887
TC0600000540.mm.1	NM_181590	Shq1	SHQ1 homolog (S. cerevisiae)	100573081	100671157	TC0600002858.mm.1	-0.1	0.075906
TC0600000542.mm.1	NM_001081280	Nlrc3	NLR family, CARD domain containing 3	3945007	3976632	TC1600001111.mm.1	-0.2	0.075907
TC0600000546.mm.1	NM_026316	Aldh3b1	aldehyde dehydrogenase 3 family, member B1	3913491	3929761	TC1900000890.mm.1	0.2	0.075916
TC0600000552.mm.1	ENSMUST00000118119	Gm14388	predicted gene 14388	122442023	122442499	TC0700001759.mm.1	-0.2	0.075932
TC0600000555.mm.1	NM_010637	Klf4	Kruppel-like factor 4 (gut)	55527137	55532475	TC0400002694.mm.1	0.2	0.075955
TC0600000556.mm.1	NM_010515	Igf2r	insulin-like growth factor 2 receptor	12682406	12769706	TC1700001451.mm.1	0.2	0.075982
TC0600000562.mm.1	NM_025445	Arfgap3	ADP-ribosylation factor GTPase activating prote	83299739	83350247	TC1500001971.mm.1	0.3	0.075993
TC0600000564.mm.1	ENSMUST00000175621	Gm22802	predicted gene, 22802	111282046	111282134	TC1400001234.mm.1	0.6	0.075998
TC0600000565.mm.1	NM_013527	Gdf7	growth differentiation factor 7	8297918	8301954	TC1200001393.mm.1	-0.1	0.076003
TC0600000566.mm.1	NR_029725	Mirlet7	microRNA let7a-1	48538171	48538272	TC1300001943.mm.1	0.2	0.076057
TC0600000570.mm.1	NM_026345	Mansc1	MANSC domain containing 1	134609207	134632488	TC0600003305.mm.1	0.1	0.076074
TC0600000572.mm.1	NM_001290279	Rcor3	REST corepressor 3 (Rcor3), transcript variant	0	0	TSUnmapped0000000	0.1	0.076089
TC0600000578.mm.1	NM_027194	Tm2d2	TM2 domain containing 2	25017211	25023260	TC0800000312.mm.1	0.2	0.076192
TC0600000588.mm.1	NM_011175	Lgmn	legumain	102394084	102439813	TC1200002251.mm.1	0.6	0.076242
TC0600000591.mm.1	NCBI_Gene:627171:p	Trav1	T cell receptor alpha variable 1	52427928	52428876	TC1400000613.mm.1	-0.1	0.076259
TC0600000606.mm.1	NR_030252	Mir484	microRNA 484	14159626	14159692	TC1600000175.mm.1	0.3	0.076314
TC0600000612.mm.1	NM_026845	Ppil1	peptidylprolyl isomerase (cyclophilin)-like 1	29250803	29264158	TC1700001781.mm.1	-0.1	0.076378
TC0600000624.mm.1	NM_009212	Ighmbp2	immunoglobulin mu binding protein 2	3259076	3283017	TC1900000878.mm.1	-0.1	0.076475
TC0600000639.mm.1	NM_029344	Acyp2	acylphosphatase 2, muscle type	30505991	30649587	TC1100002438.mm.1	0.3	0.076489
TC0600000645.mm.1	ENSMUST00000120791	Gm6823	predicted gene 6823	70420716	70422554	TC0X00002388.mm.1	-0.3	0.076547
TC0600000659.mm.1	NM_019570	Rev1	REV1 homolog (S. cerevisiae)	38052786	38129662	TC0100002214.mm.1	-0.1	0.076642
TC0600000661.mm.1	NM_010421	Hexa	hexosaminidase A	59539667	59565110	TC0900000748.mm.1	0.4	0.076762
TC0600000664.mm.1	ENSMUST00000171515	Gm17268	predicted gene, 17268	82028224	82038562	TC1100003361.mm.1	0.1	0.076784
TC0600000678.mm.1	NM_023121	Gngt2	guanine nucleotide binding protein (G protein),	95837216	95845734	TC1100001474.mm.1	-0.1	0.07682
TC0600000681.mm.1	NM_024499	Sgta	small glutamine-rich tetratricopeptide repeat (	81044073	81060178	TC1000002524.mm.1	0.4	0.076823
TC0600000685.mm.1	NM_001168472	Dynll2	dynein light chain LC8-type 2	87979525	87998298	TC1100003491.mm.1	0.1	0.076829
TC0600000695.mm.1	NM_134028	Tubg2	tubulin, gamma 2	101155884	101161787	TC1100001643.mm.1	-0.3	0.076855
TC0600000697.mm.1	XM_357752	Gm5331	predicted gene 5331	46832464	46839328	TC0700000880.mm.1	0.1	0.076916
TC0600000698.mm.1	NM_011213	Ptprf	protein tyrosine phosphatase, receptor type, F	118208213	118291405	TC0400003386.mm.1	-0.3	0.076948
TC0600000701.mm.1	NCBI_Gene:381777:p	Igkv1-1	immunoglobulin kappa variable 1-110	68270495	68271267	TC0600003517.mm.1	-1.2	0.076971
TC0600000702.mm.1	ENSMUST00000183908	AC16460	N/A	115499019	115499094	TC1200002485.mm.1	0.2	0.076988
TC0600000706.mm.1	NM_001039720	9030619	RIKEN cDNA 9030619P08 gene	75427606	75431829	TC1500001736.mm.1	0.3	0.077116
TC0600000722.mm.1	NM_008620	Gbp4	guanylate binding protein 4	105115767	105139586	TC0500003731.mm.1	-0.4	0.07714
TC0600000753.mm.1	ENSMUST00000121031	Gm13136	predicted gene 13136	147735477	147738426	TC0400003996.mm.1	-0.3	0.07715
TC0600000757.mm.1	ENSMUST00000184712	AC15899	N/A	73005211	73005316	TC0900000986.mm.1	-0.3	0.077183
TC0600000778.mm.1	NM_025378	Ifitm3	interferon induced transmembrane protein 3	141009586	141010770	TC0700004515.mm.1	0.4	0.077225
TC0600000779.mm.1	NM_021440	BC10045	cDNA sequence BC100451	118332360	118342542	TC1100004158.mm.1	0.1	0.077241
TC0600000786.mm.1	NM_026405	Rab32	RAB32, member RAS oncogene family	10545011	10558233	TC1000001744.mm.1	0.2	0.077256
TC0600000793.mm.1	NM_008784	Igbp1	immunoglobulin (CD79A) binding protein 1	100494291	100516125	TC0X00000951.mm.1	-0.2	0.077292
TC0600000794.mm.1	NM_029640	Trappc9	trafficking protein particle complex 9	72589620	73061204	TC1500001684.mm.1	0.2	0.07731
TC0600000799.mm.1	NM_023322	Zkscan1	zinc finger with KRAB and SCAN domains 14	145194946	145201882	TC0500003592.mm.1	-0.1	0.077321
TC0600000800.mm.1	NM_019419	Arl6ip1	ADP-ribosylation factor-like 6 interacting prot	118118890	118129625	TC0700004165.mm.1	-0.4	0.077408
TC0600000802.mm.1	NM_007533	Bckdha	branched chain ketoacid dehydrogenase E1, alpl	25629852	25658761	TC0700002639.mm.1	0.3	0.077509
TC0600000807.mm.1	NM_146032	Srp68	signal recognition particle 68	116245166	116274217	TC1100004110.mm.1	-0.3	0.077522
TC0600000811.mm.1	NM_019883	Uba52	ubiquitin A-52 residue ribosomal protein fusion	70508263	70510801	TC0800003244.mm.1	-0.1	0.077599
TC0600000821.mm.1	NM_144824	Wrap53	WD repeat containing, antisense to TP53	69561754	69580256	TC1100003047.mm.1	-0.1	0.077657
TC0600000826.mm.1	NM_013559	Hsph1	heat shock 105kDa/110kDa protein 1	149614287	149636376	TC0500003660.mm.1	-0.2	0.077697
TC0600000827.mm.1	NM_019805	Anapc7	anaphase promoting complex subunit 7	122421693	122444912	TC0500001394.mm.1	-0.1	0.077827
TC0600000834.mm.1	XM_001478911	Gm10294	predicted pseudogene 10294	72648757	72669596	TC0700003486.mm.1	-0.1	0.077829
TC0600000841.mm.1	BC016578	Gm20274	predicted gene, 20274	122995348	122995918	TC0700001767.mm.1	-0.2	0.078
TC0600000849.mm.1	ENSMUST00000118579	Gm11624	predicted gene 11624	105033034	105034074	TC1100003904.mm.1	-0.2	0.078007
TC0600000854.mm.1	NM_022015	Taf8	TAF8 RNA polymerase II, TATA box binding prote	47488050	47502287	TC1700002207.mm.1	-0.2	0.07809
TC0600000867.mm.1	NM_201406	Pigs	phosphatidylinositol glycan anchor biosynthesis	78328415	78343010	TC1100001157.mm.1	0.2	0.078147
TC0600000873.mm.1	NCBI_Gene:628268:p	Igkv2-1	immunoglobulin kappa variable 2-109	68302439	68303160	TC0600003518.mm.1	-0.6	0.078192
TC0600000880.mm.1	NM_080463	Pofut1	protein O-fucosyltransferase 1	153241532	153270253	TC0200002312.mm.1	0.1	0.078298
TC0600000884.mm.1	NCBI_Gene:545847:p	Igkv14-	immunoglobulin kappa variable 14-111	68256404	68256869	TC0600003516.mm.1	-0.7	0.078319
TC0600000898.mm.1	NM_007426	Angpt2	angiopoietin 2	18690263	18741562	TC0800001797.mm.1	0.1	0.078379
TC0600000899.mm.1	NM_011760	Zfp54	zinc finger protein 54	21423227	21435640	TC1700000270.mm.1	-0.1	0.078387
TC0600000916.mm.1	NM_175659	Hist1h2	histone cluster 1, H2ah	22035113	22035643	TC1300001574.mm.1	-0.3	0.078412
TC0600000922.mm.1	NM_009183	St8sia4	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyl	95587682	95667594	TC0100002844.mm.1	-0.3	0.078458
TC0600000934.mm.1	NM_028044	Cnn3	calponin 3, acidic	121426540	121458205	TC0300001232.mm.1	-0.5	0.078499
TC0600000936.mm.1	NCBI_Gene:630061:p	Trav7-5	Trav7-5 T cell receptor alpha variable 7-5	53530783	53531313	TC1400000699.mm.1	-0.5	0.07861
TC0600000937.mm.1	NM_030729	Nckipsd	NCK interacting protein with SH3 domain	108808380	108818450	TC0900001423.mm.1	0.1	0.078682
TC0600000952.mm.1	XM_003688896	Gm21559	predicted gene, 21559	87765371	87766300	TC1200002129.mm.1	-0.1	0.078702
TC0600000954.mm.1	NM_001048206	Traf3	TNF receptor-associated factor 3	111166370	111267155	TC1200001231.mm.1	-0.1	0.07872
TC0600000956.mm.1	NM_178246	Smg5	Smg-5 homolog, nonsense mediated mRNA deca	88336260	88362337	TC0300000724.mm.1	-0.1	0.078721
TC0600000957.mm.1	NM_172756	Ankle1	ankyrin repeat and LEM domain containing 1	71406010	71409904	TC0800000787.mm.1	-0.1	0.078779
TC0600000958.mm.1	NM_029857	Tmco4	transmembrane and coiled-coil domains 4	138972888	139059171	TC0400001738.mm.1	-0.1	0.078831
TC0600000963.mm.1	ENSMUST00000180307	Gm23190	predicted gene, 23190	116242504	116242567	TC1200002494.mm.1	0.4	0.078861
TC0600000967.mm.1	ENSMUST00000104192	Gm22661	predicted gene, 22661	95332618	95332749	TC1300001077.mm.1	-0.3	0.078875
TC0600000968.mm.1	NM_029999	Lbh	limb-bud and heart	72918305	72941946	TC1700001147.mm.1	-0.5	0.078961
TC0600000980.mm.1	NM_025531	Slmo2	slowmo homolog 2 (Drosophila)	174465067	174473081	TC0200005317.mm.1	-0.2	0.079047

TC0600000982.mm.1	NCBI_Gene:629897:p	Ighv1-3	immunoglobulin heavy variable 1-36	114879888	114880321	TC1200002621.mm.1	-0.8	0.079059
TC0600000985.mm.1	NM_008843	Pip	prolactin induced protein	41847549	41852065	TC0600000446.mm.1	-0.7	0.079072
TC0600000986.mm.1	NM_146218	Rfwd3	ring finger and WD repeat domain 3	111270944	111300222	TC0800002945.mm.1	-0.3	0.07921
TC0600001014.mm.1	ENSMUST00000116917	Gm25680	predicted gene, 25680	10485051	10485176	TC0200000129.mm.1	-0.2	0.079338
TC0600001016.mm.1	ENSMUST00000116962	Gm22635	predicted gene, 22635	10492421	10492546	TC0200000147.mm.1	-0.2	0.079338
TC0600001027.mm.1	ENSMUST00000118168	Gm11336	predicted gene 11336	23746166	23746499	TC1300001643.mm.1	-0.4	0.079347
TC0600001033.mm.1	BC119204	Chp2	calcineurin-like EF hand protein 2	122219496	122222824	TC0700001754.mm.1	0.2	0.079545
TC0600001051.mm.1	ENSMUST00000178853	Gm8034	predicted gene 8034	6044691	6044822	TC1900000997.mm.1	-0.8	0.079626
TC0600001055.mm.1	NM_173032	Tbck	TBC1 domain containing kinase	132684144	132838506	TC0300001347.mm.1	0.2	0.079708
TC0600001061.mm.1	NM_025674	Tcf19	transcription factor 19	35512734	35516824	TC1700001969.mm.1	-0.2	0.079734
TC0600001065.mm.1	NM_026832	Cgrrf1	cell growth regulator with ring finger domain 1	46832134	46854198	TC1400000502.mm.1	0.2	0.079738
TC0600001072.mm.1	NM_146043	Spin1	spindlin 1	51100880	51152562	TC1300000594.mm.1	-0.2	0.079739
TC0600001074.mm.1	NM_001033988	Ncoa4	nuclear receptor coactivator 4	32159865	32179855	TC1400000340.mm.1	0.3	0.079751
TC0600001076.mm.1	NM_027295	Rab28	RAB28, member RAS oncogene family	41624976	41708155	TC0500002302.mm.1	0.2	0.079797
TC0600001078.mm.1	NM_181419	Zfp599	zinc finger protein 599	22247430	22259895	TC0900001903.mm.1	-0.2	0.080031
TC0600001080.mm.1	NM_007508	Atp6v1a	ATPase, H+ transporting, lysosomal V1 subunit A	44085402	44139705	TC1600001641.mm.1	0.3	0.080057
TC0600001085.mm.1	NM_001033320	Rltpr	RGD motif, leucine rich repeats, tropomodulin d	105690906	105698178	TC0800001226.mm.1	-0.3	0.080106
TC0600001092.mm.1	NM_019986	Habp4	hyaluronic acid binding protein 4	64161866	64186537	TC1300000778.mm.1	0.1	0.080162
TC0600001108.mm.1	NM_026229	Gpr89	G protein-coupled receptor 89	96868281	96905346	TC0300002531.mm.1	0.1	0.080326
TC0600001110.mm.1	ENSMUST00000104170	Gm26293	predicted gene, 26293	59692509	59692592	TC0100000458.mm.1	-0.9	0.08048
TC0600001119.mm.1	NCBI_Gene:328483:p	Trav6-3	T cell receptor alpha variable 6-3	53428711	53430377	TC1400000692.mm.1	-0.2	0.08055
TC0600001120.mm.1	NM_198424	Orai3	ORAI calcium release-activated calcium modulat	127769815	127775150	TC0700001862.mm.1	0.2	0.080558
TC0600001129.mm.1	NM_172775	Plxnb1	plexin B1	109095436	109119915	TC0900001434.mm.1	-0.1	0.080575
TC0600001134.mm.1	ENSMUST00000052867	Fau	Finkel-Biskis-Reilly murine sarcoma virus (FBR-	76403209	76403712	TC1600001925.mm.1	-0.6	0.080645
TC0600001146.mm.1	NM_009114	S100a9	S100 calcium binding protein A9 (calgranulin B)	90692630	90695721	TC0300002376.mm.1	-0.2	0.080654
TC0600001154.mm.1	NM_008791	Pcp4	Purkinje cell protein 4	96467606	96525793	TC1600002175.mm.1	-0.3	0.080704
TC0600001155.mm.1	ENSMUST00000120617	Gm13396	predicted gene 13396	29093835	29094105	TC0200003243.mm.1	-0.3	0.080722
TC0600001174.mm.1	ENSMUST00000109187	Hsp25-p	heat shock protein 25, pseudogene 1	45078498	45079127	TC1300001906.mm.1	0.4	0.080748
TC0600001177.mm.1	NR_000003	Snord35	small nucleolar RNA, C/D box 35A	45126346	45126435	TC0700002993.mm.1	-1.0	0.080753
TC0600001178.mm.1	NM_009665	Amd1	S-adenosylmethionine decarboxylase 1	40287458	40302188	TC1000002043.mm.1	-1.0	0.08076
TC0600001188.mm.1	NCBI_Gene:385277:p	Igkv4-6	Igkv4-60 immunoglobulin kappa variable 4-60	69463288	69463725	TC0600003567.mm.1	-1.0	0.080764
TC0600001192.mm.1	NR_000004	Snord35	small nucleolar RNA, C/D box 35B	45123025	45123111	TC0700002991.mm.1	-1.0	0.080819
TC0600001203.mm.1	NR_030534	Mir181d	microRNA 181d	84178716	84178787	TC0800002572.mm.1	0.2	0.080829
TC0600001207.mm.1	NR_035502	Mir1981	microRNA 1981	184822407	184822488	TC0100003740.mm.1	0.1	0.08099
TC0600001209.mm.1	NM_028658	Ppp1r21	protein phosphatase 1, regulatory subunit 21	88530124	88588367	TC1700001322.mm.1	-0.2	0.081019
TC0600001214.mm.1	NR_037920	Zfa-ps	zinc finger protein, autosomal, pseudogene	52542318	52545739	TC1000002160.mm.1	-0.2	0.081058
TC0600001234.mm.1	NM_001010837	Taar8b	trace amine-associated receptor 8B	24091195	24092320	TC1000001884.mm.1	0.2	0.081073
TC0600001235.mm.1	NM_001002239	Rpl17	ribosomal protein L17	75000477	75003381	TC1800000797.mm.1	-0.5	0.081129
TC0600001237.mm.1	XM_003084766	Gm10015	predicted gene 10015	61364019	61364483	TC0800002295.mm.1	-0.3	0.081199
TC0600001243.mm.1	ENSMUST00000157135	Gm23980	predicted gene, 23980	23646420	23646577	TC1500001264.mm.1	0.2	0.081242
TC0600001246.mm.1	ENSMUST00000156439	Gm6182	predicted gene 6182	176201042	176203572	TC0200002734.mm.1	0.1	0.081374
TC0600001250.mm.1	ENSMUST00000166096	Gm17257	predicted gene, 17257	80507787	80508254	TC0700001156.mm.1	0.3	0.081385
TC0600001253.mm.1	NM_183017	Ttll12	tubulin tyrosine ligase-like family, member 12	83575094	83595157	TC1500001979.mm.1	-0.3	0.081565
TC0600001257.mm.1	NM_025441	Nemf	nuclear export mediator factor	69311543	69357176	TC1200001863.mm.1	-0.3	0.081786
TC0600001259.mm.1	NM_029575	Tgfbr2	transforming growth factor, beta receptor II	116087695	116175363	TC0900003199.mm.1	0.3	0.081881
TC0600001269.mm.1	ENSMUST00000118511	Gm11977	predicted gene 11977	6781678	6783138	TC1100002187.mm.1	-0.2	0.081927
TC0600001274.mm.1	NM_001199308	Gm14440	predicted gene 14440	175785502	175801093	TC0200005342.mm.1	0.5	0.081997
TC0600001278.mm.1	ENSMUST00000120174	Gm8566	predicted pseudogene 8566	67205619	67206083	TC0600000786.mm.1	0.5	0.082051
TC0600001279.mm.1	NM_023906	Asb3	ankyrin repeat and SOCS box-containing 3	30954395	31102704	TC1100000316.mm.1	-0.1	0.082272
TC0600001283.mm.1	NM_177815	Rft1	RFT1 homolog (S. cerevisiae)	30654360	30691317	TC1400000309.mm.1	0.2	0.082288
TC0600001285.mm.1	ENSMUST00000082896	Gm25699	predicted gene, 25699	73422793	73422959	TC1600001883.mm.1	0.2	0.082309
TC0600001287.mm.1	NM_001160043	Exo5	exonuclease 5	120921196	120925017	TC0400003445.mm.1	-0.2	0.082317
TC0600001293.mm.1	NM_001013787	Vmn1r20	vomeronasal 1 receptor 209	22805580	22806518	TC1300001603.mm.1	0.2	0.082332
TC0600001294.mm.1	ENSMUST00000082975	Gm25401	predicted gene, 25401	41339436	41339541	TC0900002108.mm.1	-0.3	0.082345
TC0600001305.mm.1	NM_009096	Rps6	ribosomal protein S6	86854099	86857412	TC0400002986.mm.1	-0.2	0.082406
TC0600001308.mm.1	NCBI_Gene:668517:p	Ighv1-3	immunoglobulin heavy variable 1-37	114896238	114896671	TC1200002622.mm.1	-0.9	0.08242
TC0600001313.mm.1	NM_198617	Tspyl3	TSPY-like 3	153222370	153225441	TC0200004925.mm.1	-0.1	0.082438
TC0600001318.mm.1	NM_145591	Zfp958	zinc finger protein 958	4613167	4630231	TC0800000039.mm.1	-0.1	0.082451
TC0600001322.mm.1	ENSMUST00000158625	Gm25713	predicted gene, 25713	12158333	12158441	TC1500001220.mm.1	0.1	0.082509
TC0600001325.mm.1	NM_001081419	Dip2a	DIP2 disco-interacting protein 2 homolog A (Dro	76259429	76345291	TC1000002399.mm.1	0.1	0.082513
TC0600001331.mm.1	NM_011517	Sycp3	synaptonemal complex protein 3	88459569	88473236	TC1000001081.mm.1	0.6	0.082514
TC0600001336.mm.1	XM_003688933	Gm21162	predicted gene, 21162	43513408	43517178	TC1400001858.mm.1	0.2	0.082522
TC0600001341.mm.1	NCBI_Gene:780883:p	Ighv1-2	immunoglobulin heavy variable 1-22	114746273	114746706	TC1200002614.mm.1	-0.9	0.082525
TC0600001342.mm.1	NCBI_Gene:435331:p	Ighv1-7	Ighv1-79 immunoglobulin heavy variable 1-79	115888096	115888389	TC1200002488.mm.1	-0.5	0.082559
TC0600001347.mm.1	XM_484880	Gm5528	predicted gene 5528	72004288	72004770	TC0100000594.mm.1	-0.4	0.082587
TC0600001350.mm.1	ENSMUST00000165071	Traj54	T cell receptor alpha joining 54	54161990	54162043	TC1400000728.mm.1	-0.4	0.082688
TC0600001366.mm.1	NM_028728	Nfam1	Nfat activating molecule with ITAM motif 1	82996736	83033397	TC1500001963.mm.1	0.1	0.082759
TC0600001368.mm.1	ENSMUST00000083865	Gm25517	predicted gene, 25517	75972486	75972619	TC1400002436.mm.1	-0.3	0.082813
TC0600001369.mm.1	ENSMUST00000118327	Gm7199	predicted gene 7199	163477652	163479136	TC0X00001657.mm.1	-0.1	0.082817
TC0600001370.mm.1	NR_028273	Snord14	small nucleolar RNA, C/D box 14A	116333171	116333257	TC0700004156.mm.1	-0.6	0.082841
TC0600001371.mm.1	NM_010188	Fcgr3	Fc receptor, IgG, low affinity III	171051169	171064935	TC0100003524.mm.1	0.3	0.082854
TC0600001373.mm.1	NM_001164604	Nsmce2	non-SMC element 2 homolog (MMS21, S. cerevis	59374198	59601684	TC1500000433.mm.1	-0.3	0.082882
TC0600001377.mm.1	NM_023732	Abcb6	ATP-binding cassette, sub-family B (MDR/TAP), n	75171640	75180392	TC0100002601.mm.1	0.1	0.08296
TC0600001380.mm.1	NM_173764	Tapt1	transmembrane anterior posterior transformatic	44175159	44226606	TC0500002325.mm.1	-0.8	0.083017
TC0600001381.mm.1	NM_153806	Dnttip2	deoxynucleotidyltransferase, terminal, interact	122274414	122285271	TC0300001245.mm.1	-0.3	0.083044
TC0600001383.mm.1	NM_178791	Vstm4	V-set and transmembrane domain containing 4	32856756	32939489	TC1400000352.mm.1	0.2	0.083058
TC0600001384.mm.1	NCBI_Gene:386450:p	Trav7-4	Trav7-4 T cell receptor alpha variable 7-4	53461099	53461738	TC1400002811.mm.1	-0.5	0.083084
TC0600001387.mm.1	NCBI_Gene:692154:p	Igkv1-8	immunoglobulin kappa chain variable 1-88	68862265	68863031	TC0600003550.mm.1	-0.7	0.08311

TC0600001390.mm.1	NR_004414	Rnu2-10	U2 small nuclear RNA 10	101658238	101658428	TC1100001667.mm.1	-1.1	0.083214
TC0600001394.mm.1	NM_030198	Gins3	GINS complex subunit 3 (Psf3 homolog)	95633559	95645059	TC0800001142.mm.1	-0.2	0.083218
TC0600001397.mm.1	NM_028117	Chst14	carbohydrate (N-acetylgalactosamine 4-0) sulfot	118926496	118928585	TC0200001751.mm.1	0.1	0.083241
TC0600001398.mm.1	ENSMUST00000173648	Gm20478	predicted gene 20478	36167982	36171805	TC1700000724.mm.1	-0.1	0.083315
TC0600001400.mm.1	NM_026040	Srfbp1	serum response factor binding protein 1	52465693	52491267	TC1800000523.mm.1	-0.2	0.083326
TC0600001401.mm.1	ENSMUST00000158806	Gm23196	predicted gene, 23196	132939870	132939976	TC0300001351.mm.1	0.2	0.083418
TC0600001404.mm.1	ENSMUST00000082633	Gm24143	predicted gene, 24143	72616006	72616150	TC1100003150.mm.1	-0.5	0.083427
TC0600001413.mm.1	NM_023173	Dusp12	dual specificity phosphatase 12	170873498	170885540	TC0100003518.mm.1	-0.1	0.083433
TC0600001418.mm.1	ENSMUST00000083866	Gm23042	predicted gene, 23042	66119303	66119403	TC0700003433.mm.1	0.1	0.083454
TC0600001421.mm.1	ENSMUST00000109069	Gm14444	predicted gene 14444	175010241	175019248	TC0200002712.mm.1	0.3	0.0835
TC0600001422.mm.1	ENSMUST00000179149	Gm6660	predicted gene 6660	55311386	55326515	TC0X00000503.mm.1	0.1	0.083515
TC0600001424.mm.1	NM_172993	Zfp512	zinc finger protein 512	31452436	31481754	TC0500000321.mm.1	-0.2	0.083557
TC0600001435.mm.1	NM_024212	Rpl4	ribosomal protein L4	64173387	64178562	TC0900000810.mm.1	-0.4	0.083812
TC0600001436.mm.1	NM_153791	Flywch1	FLYWCH-type zinc finger 1	23752797	23771591	TC1700001604.mm.1	0.1	0.08392
TC0600001437.mm.1	NM_144897	Apoa1bp	apolipoprotein A-I binding protein	88056520	88058495	TC0300002297.mm.1	0.2	0.083962
TC0600001443.mm.1	ENSMUST00000082996	Gm23723	predicted gene, 23723	90126535	90126666	TC0300000781.mm.1	-0.5	0.084033
TC0600001447.mm.1	ENSMUST00000129517	Gm16373	predicted pseudogene 16373	116886881	116887183	TC0X00001161.mm.1	-0.8	0.084085
TC0600001448.mm.1	ENSMUST00000122611	Gm26478	predicted gene, 26478	11087781	11087913	TC0200002951.mm.1	0.2	0.084136
TC0600001449.mm.1	NM_025841	Kdelr2	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum p	143403820	143421904	TC0500001732.mm.1	0.3	0.084172
TC0600001451.mm.1	NM_001164679	Ano8	anoctamin 8	71476019	71486067	TC0800002428.mm.1	0.1	0.084187
TC0600001458.mm.1	NM_001199309	Gm4559	predicted gene 4559	142273764	142274363	TC0700004561.mm.1	-0.2	0.084263
TC0600001464.mm.1	NM_007480	Arf5	ADP-ribosylation factor 5	28423560	28426602	TC0600000213.mm.1	-0.2	0.084272
TC0600001465.mm.1	ENSMUST00000120762	Gm8172	predicted pseudogene 8172	69605496	69606245	TC0X00002380.mm.1	-0.7	0.084272
TC0600001480.mm.1	NM_023514	Mrps9	mitochondrial ribosomal protein S9	42851233	42905683	TC0100000315.mm.1	-0.1	0.084489
TC0600001483.mm.1	ENSMUST00000122236	Gm13776	predicted gene 13776	91716159	91717419	TC0200004127.mm.1	-0.1	0.084507
TC0600001514.mm.1	ENSMUST00000101619	Gm10483	predicted gene 10483	42526585	42529330	TC0X00000406.mm.1	-0.3	0.084604
TC0600001525.mm.1	NM_019761	Nxt1	NTF2-related export protein 1	148672601	148676027	TC0200002196.mm.1	-0.1	0.084746
TC0600001530.mm.1	NR_015476	1500011	RIKEN cDNA 1500011K16 gene	127791377	127792488	TC0200004567.mm.1	0.2	0.084808
TC0600001534.mm.1	NCBI_Gene:380823:p	Ighv1-6	immunoglobulin heavy variable 1-64	115507545	115507977	TC1200002643.mm.1	-1.3	0.084817
TC0600001536.mm.1	NM_010669	Krt6b	keratin 6B	101676023	101694307	TC1500002268.mm.1	-0.3	0.084824
TC0600001539.mm.1	NM_011185	Psmb1	proteasome (prosome, macropain) subunit, beta	15475721	15498277	TC1700001499.mm.1	-0.3	0.084902
TC0600001540.mm.1	NM_013603	Mt3	metallothionein 3	94152607	94154148	TC0800001093.mm.1	-0.1	0.08496
TC0600001541.mm.1	ENSMUST00000082983	Gm22574	predicted gene, 22574	86044989	86045048	TC1300002383.mm.1	-0.1	0.084962
TC0600001542.mm.1	ENSMUST00000157618	Gm25914	predicted gene, 25914	20173087	20173239	TC0900000162.mm.1	0.1	0.084996
TC0600001543.mm.1	NM_178189	Hist1h2	histone cluster 1, H2ac	23681467	23683959	TC1300001638.mm.1	-0.2	0.085006
TC0600001544.mm.1	ENSMUST00000083886	Gm26316	predicted gene, 26316	101604850	101605040	TC1100001662.mm.1	-1.0	0.085043
TC0600001545.mm.1	ENSMUST00000152173	Gm15692	predicted gene 15692	78964114	78964465	TC1600000907.mm.1	-0.2	0.085208
TC0600001546.mm.1	NM_024227	Mrpl28	mitochondrial ribosomal protein L28	26123503	26126613	TC1700000403.mm.1	-0.1	0.085209
TC0600001547.mm.1	ENSMUST00000175230	Gm25931	predicted gene, 25931	40850320	40850402	TC0400002452.mm.1	0.5	0.085257
TC0600001552.mm.1	NM_026609	Leprotl	leptin receptor overlapping transcript-like 1	34135572	34147033	TC0800002023.mm.1	-0.3	0.08544
TC0600001556.mm.1	NCBI_Gene:629884:p	Ighv1-2	immunoglobulin heavy variable 1-26	114788372	114788805	TC1200002617.mm.1	-1.1	0.085543
TC0600001558.mm.1	NR_039559	Mir5100	microRNA 5100	60728663	60728726	TC1100000761.mm.1	-0.2	0.085549
TC0600001563.mm.1	NCBI_Gene:277146:p	Trav6d-	T cell receptor alpha variable 6D-4	52753367	52753846	TC1400000625.mm.1	-0.2	0.08555
TC0600001574.mm.1	ENSMUST00000174907	Gm23566	predicted gene, 23566	51765294	51765401	TC1300000606.mm.1	0.5	0.085616
TC0600001579.mm.1	NR_028545	Scarna8	small Cajal body-specific RNA 8	86586453	86586583	TC0400002978.mm.1	-0.4	0.085877
TC0600001589.mm.1	ENSMUST00000175387	Gm24369	predicted gene, 24369	109951399	109951494	TC1400001230.mm.1	0.5	0.085896
TC0600001595.mm.1	ENSMUST00000118050	Gm15264	predicted gene 15264	94720023	94758116	TC0300002452.mm.1	-0.3	0.085958
TC0600001602.mm.1	NM_001113374	Mocs2	molybdenum cofactor synthesis 2	114818236	114832275	TC1300001318.mm.1	0.1	0.086024
TC0600001603.mm.1	ENSMUST00000169624	Gm19840	predicted gene, 19840	22935487	22937241	TC1500000145.mm.1	-0.2	0.08604
TC0600001605.mm.1	NM_009681	Ap3s1	adaptor-related protein complex 3, sigma 1 subu	46741917	46790826	TC1800000484.mm.1	-0.5	0.086058
TC0600001606.mm.1	NM_011970	Psmb2	proteasome (prosome, macropain) subunit, beta	126677630	126709715	TC0400001469.mm.1	-0.1	0.086078
TC0600001607.mm.1	ENSMUST00000122149	Gm13050	predicted gene 13050	143242024	143243368	TC0400003914.mm.1	-0.5	0.086087
TC0600001611.mm.1	NCBI_Gene:654838:p	Traj2	T cell receptor alpha joining 2	54217836	54217901	TC1400000739.mm.1	-0.8	0.086194
TC0600001617.mm.1	ENSMUST00000159498	Alms1-p	Alstrom syndrome 1, pseudogene 1	85721925	85756526	TC0600000967.mm.1	-0.1	0.086248
TC0600001628.mm.1	ENSMUST00000116787	Gm24274	predicted gene, 24274	67213296	67213419	TC0800002335.mm.1	0.2	0.086283
TC0600001634.mm.1	NM_177909	Slc9a9	solute carrier family 9 (sodium/hydrogen exchan	94669892	95230452	TC0900001182.mm.1	-0.5	0.086423
TC0600001639.mm.1	NM_030262	Pofut2	protein O-fucosyltransferase 2	77259233	77269586	TC1000000753.mm.1	0.2	0.086473
TC0600001647.mm.1	ENSMUST00000110798	Gm4204	predicted gene 4204	135232045	135233404	TC0100001247.mm.1	-0.3	0.086544
TC0600001648.mm.1	ENSMUST00000157813	Gm25387	predicted gene, 25387	27318847	27318978	TC1100002400.mm.1	0.2	0.086664
TC0600001650.mm.1	NCBI_Gene:667946:p	Igkv3-3	immunoglobulin kappa variable 3-3	70686946	70687534	TC0600003529.mm.1	-0.7	0.086686
TC0600001652.mm.1	NM_201359	Tmem106	transmembrane protein 106C	97964229	97970286	TC1500000967.mm.1	0.1	0.086687
TC0600001659.mm.1	NM_145943	Sde2	SDE2 telomere maintenance homolog (S. pombe	180851151	180868114	TC0100001720.mm.1	-0.3	0.086733
TC0600001664.mm.1	NR_029728	Mirlet7	microRNA let7c-1	77599652	77599759	TC1600000878.mm.1	0.2	0.086746
TC0600001696.mm.1	NM_001099634	Myof	myoferlin	37899036	38043577	TC1900001461.mm.1	0.3	0.086879
TC0600001717.mm.1	ENSMUST00000121648	Gm6067	predicted gene 6067	142405951	142406441	TC0X00003101.mm.1	-0.3	0.086941
TC0600001721.mm.1	ENSMUST00000116740	Gm23784	predicted gene, 23784	93052583	93052672	TC0300000840.mm.1	0.4	0.086951
TC0600001729.mm.1	ENSMUST00000158779	Gm24877	predicted gene, 24877	94958778	94958893	TC1100001449.mm.1	0.2	0.087084
TC0600001736.mm.1	ENSMUST00000083889	n-R5s18	nuclear encoded rRNA 5S 182	12812706	12812812	TC0400000113.mm.1	0.3	0.087225
TC0600001741.mm.1	NM_015781	Nap1l1	nucleosome assembly protein 1-like 1	111473192	111498150	TC1000001298.mm.1	-0.2	0.087239
TC0600001744.mm.1	NM_026330	Nsmce1	non-SMC element 1 homolog (S. cerevisiae)	125467640	125491596	TC0700004258.mm.1	-0.2	0.087239
TC0600001745.mm.1	ENSMUST00000158208	Gm23542	predicted gene, 23542	10511370	10511465	TC0200000191.mm.1	0.2	0.087311
TC0600001747.mm.1	NM_007557	Bmp7	bone morphogenetic protein 7	172868012	172940321	TC0200005281.mm.1	-0.2	0.087349
TC0600001754.mm.1	NM_001081049	Kmt2a	lysine (K)-specific methyltransferase 2A	44803355	44881296	TC0900002181.mm.1	-0.3	0.087449
TC0600001767.mm.1	NM_194339	Bms1	BMS1 homolog, ribosome assembly protein (yea	118383381	118419417	TC0600003000.mm.1	-0.2	0.087585
TC0600001768.mm.1	ENSMUST00000103960	Gm22935	predicted gene, 22935	89097910	89098013	TC0300002335.mm.1	-0.2	0.087587
TC0600001772.mm.1	NM_148926	Zfand3	zinc finger, AN1-type domain 3	30005087	30210020	TC1700000513.mm.1	0.2	0.087641
TC0600001778.mm.1	NM_009663	Alox5ap	arachidonate 5-lipoxygenase activating protein	149265058	149288047	TC0500001844.mm.1	0.4	0.08775
TC0600001779.mm.1	ENSMUST00000178786	Gm25360	predicted gene, 25360	72226240	72226430	TC0100000596.mm.1	-1.0	0.087825

TC0600001787.mm.1	ENSMUST00000118650	Gm6767	predicted gene 6767	51362452	51363832	TC1600001716.mm.1	-0.5	0.087869
TC0600001788.mm.1	NM_026539	Chd1l	chromodomain helicase DNA binding protein 1-l	97560740	97610203	TC0300002541.mm.1	-0.2	0.087872
TC0600001813.mm.1	NM_010764	Man2b1	mannosidase 2, alpha B1	85083269	85098739	TC0800000983.mm.1	0.4	0.087954
TC0600001819.mm.1	NM_023721	Atp6v1d	ATPase, H+ transporting, lysosomal V1 subunit D	78842982	78861638	TC1200001971.mm.1	-0.3	0.087961
TC0600001821.mm.1	NM_007680	Ephb6	Eph receptor B6	41605482	41620509	TC0600000444.mm.1	-0.3	0.087991
TC0600001824.mm.1	ENSMUST00000175075	Gm23637	predicted gene, 23637	9827026	9827119	TC1800000967.mm.1	0.5	0.087993
TC0600001834.mm.1	NM_025525	Rnf113a	ring finger protein 113A2	84417194	84418578	TC1200000811.mm.1	-0.1	0.088335
TC0600001835.mm.1	NCBI_Gene:668474:p	Ighv1-7	immunoglobulin heavy variable V1-7	114538495	114538928	TC1200002604.mm.1	-0.9	0.088433
TC0600001837.mm.1	NM_010617	Kif13a	kinesin family member 13A	46749087	46929718	TC1300001922.mm.1	0.1	0.088474
TC0600001842.mm.1	NM_206869	Vmn1r18	vomeronasal 1 receptor 180	23952387	23953356	TC0700000362.mm.1	0.2	0.088492
TC0600001849.mm.1	ENSMUST00000178432	Gm11008	predicted gene 11008	176097450	176100706	TC0200002732.mm.1	0.6	0.088512
TC0600001852.mm.1	ENSMUST00000120170	Gm11526	predicted gene 11526	95761491	95761665	TC1100001473.mm.1	-0.3	0.08853
TC0600001856.mm.1	ENSMUST00000158435	Gm22361	predicted gene, 22361	116448389	116448564	TC0300002805.mm.1	0.1	0.088631
TC0600001859.mm.1	NM_001146708	Fas	Fas (TNF receptor superfamily member 6)	34290659	34327770	TC1900000497.mm.1	-0.4	0.088759
TC0600001862.mm.1	NM_001101598	Isoc2a	isochorismatase domain containing 2a	4877053	4895717	TC0700000047.mm.1	0.4	0.08877
TC0600001871.mm.1	XM_003689120	Gm21111	predicted gene, 21111	75539578	75541911	TC0Y00000473.mm.1	0.2	0.088831
TC0600001897.mm.1	NM_001162506	Troap	trophinin associated protein	99074575	99083409	TC1500001005.mm.1	-0.2	0.088854
TC0600001909.mm.1	NM_024460	Ost4	oligosaccharyltransferase 4 homolog (S. cerevis	30905885	30907788	TC0500002167.mm.1	0.3	0.088877
TC0600001924.mm.1	ENSMUST00000121511	Gm14460	predicted gene 14460	78512698	78513336	TC0200003820.mm.1	-0.4	0.088888
TC0600001926.mm.1	NM_009985	Ctsw	cathepsin W	5465240	5468498	TC1900000967.mm.1	-0.2	0.088931
TC0600001927.mm.1	NM_016742	Cdc37	cell division cycle 37	21138541	21149929	TC0900001859.mm.1	-0.2	0.088977
TC0600001928.mm.1	NM_001177400	Etohi1	ethanol induced 1	178023284	178035859	TC0200002755.mm.1	0.6	0.089046
TC0600001938.mm.1	NM_001162884	Igsf10	immunoglobulin superfamily, member 10	59316735	59344256	TC0300002056.mm.1	0.3	0.08905
TC0600001940.mm.1	NM_001039353	Nolc1	nucleolar and coiled-body phosphoprotein 1	46075847	46085543	TC1900000683.mm.1	-0.3	0.089082
TC0600001948.mm.1	ENSMUST00000121678	Gm13356	predicted gene 13356	22762744	22763078	TC0200003094.mm.1	-0.2	0.089111
TC0600001950.mm.1	ENSMUST00000169120	Gm8164	predicted gene 8164	4577811	4579002	TC1400001379.mm.1	-0.2	0.089201
TC0600001966.mm.1	NM_020520	Slc25a2	solute carrier family 25 (mitochondrial carniti	108662098	108684641	TC0900001418.mm.1	0.5	0.089361
TC0600001969.mm.1	NM_001081077	Cwf19l1	CWF19-like 1, cell cycle control (S. pombe)	44108637	44135876	TC1900001553.mm.1	-0.2	0.089367
TC0600001971.mm.1	NM_030074	Zfp687	zinc finger protein 687	95006590	95015448	TC0300002460.mm.1	-0.1	0.089413
TC0600001974.mm.1	NM_010273	Gdi1	guanosine diphosphate (GDP) dissociation inhibi	74304998	74311867	TC0X00000709.mm.1	0.3	0.089414
TC0600001982.mm.1	XM_889722	Gm5621	predicted gene 5621	105560061	105560797	TC0900002993.mm.1	-0.4	0.089421
TC0600002015.mm.1	NM_020270	Scamp5	secretory carrier membrane protein 5	57441327	57468024	TC0900002369.mm.1	0.2	0.08949
TC0600002020.mm.1	BC115520	Fam57a	family with sequence similarity 57, member A	76179671	76215293	TC1100001095.mm.1	-0.1	0.089563
TC0600002044.mm.1	NM_010145	Ephx1	epoxide hydrolase 1, microsomal	180976155	181020904	TC0100003679.mm.1	0.4	0.089568
TC0600002053.mm.1	NM_011862	Pacsin2	protein kinase C and casein kinase substrate in	83375607	83464606	TC1500001973.mm.1	0.2	0.089689
TC0600002066.mm.1	ENSMUST00000120467	Gm13537	predicted gene 13537	33323171	33323437	TC0200000604.mm.1	-0.4	0.08972
TC0600002071.mm.1	NM_026634	A930018	RIKEN cDNA A930018P22 gene	104122769	104124749	TC0200001553.mm.1	0.1	0.089778
TC0600002119.mm.1	NM_018739	Rp9	retinitis pigmentosa 9 (human)	22448311	22468356	TC0900001910.mm.1	-0.3	0.089838
TC0600002121.mm.1	NM_019668	Ube2a	ubiquitin-conjugating enzyme E2A	36874358	36884222	TC0X00000329.mm.1	-0.2	0.089907
TC0600002133.mm.1	ENSMUST00000109141	Gm15427	predicted pseudogene 15427	95498584	95499187	TC0100000959.mm.1	-0.6	0.089927
TC0600002137.mm.1	NM_009178	St3gal4	ST3 beta-galactoside alpha-2,3-sialyltransferas	35046579	35116810	TC0900002003.mm.1	0.1	0.090051
TC0600002140.mm.1	NM_007781	Csf2rb2	colony stimulating factor 2 receptor, beta 2, l	78282508	78305721	TC1500001828.mm.1	0.2	0.090135
TC0600002151.mm.1	ENSMUST00000175183	Gm24560	predicted gene, 24560	46195379	46195486	TC0400002592.mm.1	0.3	0.090163
TC0600002154.mm.1	ENSMUST00000157700	Gm25668	predicted gene, 25668	98069752	98069880	TC1500000968.mm.1	0.2	0.090166
TC0600002157.mm.1	NCBI_Gene:628144:p	Igkv9-1	immunoglobulin kappa variable 9-123	67954228	67954690	TC0600003543.mm.1	-0.4	0.090242
TC0600002168.mm.1	NM_008716	Notch3	notch 3	32120820	32166880	TC1700001834.mm.1	0.1	0.090272
TC0600002173.mm.1	ENSMUST00000059546	Rpsa-ps	ribosomal protein SA, pseudogene 2	128776742	128777251	TC1000003162.mm.1	-0.6	0.090281
TC0600002181.mm.1	NM_008764	Tnfrsf1	tumor necrosis factor receptor superfamily, mer	54250619	54278484	TC1500001528.mm.1	0.1	0.090285
TC0600002183.mm.1	ENSMUST00000038304	Gm6781	predicted gene 6781	18531363	18532460	TC1400000145.mm.1	0.3	0.090327
TC0600002193.mm.1	NM_133800	Nol12	nucleolar protein 12	78934933	78943634	TC1500000659.mm.1	-0.1	0.090352
TC0600002194.mm.1	ENSMUST00000116776	Gm24834	predicted gene, 24834	68698201	68698288	TC1500001669.mm.1	0.5	0.090382
TC0600002210.mm.1	NCBI_Gene:780960:p	Ighv8-1	immunoglobulin heavy variable V8-12	115647945	115648361	TC1200002647.mm.1	-1.0	0.090498
TC0600002211.mm.1	NM_001160304	Gm4788	predicted gene 4788	139697635	139781239	TC0100003190.mm.1	0.4	0.090612
TC0600002212.mm.1	NCBI_Gene:193587:p	Trav8-2	Trav8-2 T-cell receptor alpha variable 8-2	53738302	53741038	TC1400002828.mm.1	-0.2	0.09062
TC0600002213.mm.1	NM_024221	Pdhb	pyruvate dehydrogenase (lipoamide) beta	8165991	8172992	TC1400001436.mm.1	0.4	0.090648
TC0600002216.mm.1	ENSMUST00000103862	Gm24544	predicted gene, 24544	73146849	73146958	TC0300000599.mm.1	-0.1	0.09065
TC0600002223.mm.1	NM_029976	Cdkn2ai	CDKN2A interacting protein N-terminal like	51967631	51977336	TC1100000582.mm.1	-0.4	0.090711
TC0600002225.mm.1	NM_030557	Mynn	myoneurin	30602087	30619873	TC0300000199.mm.1	-0.1	0.090764
TC0600002233.mm.1	ENSMUST00000158313	Gm22989	predicted gene, 22989	49788284	49788369	TC1400000547.mm.1	0.3	0.090801
TC0600002237.mm.1	ENSMUST00000119956	Gm11573	predicted gene 11573	97096933	97097326	TC1100001532.mm.1	-0.1	0.090802
TC0600002243.mm.1	ENSMUST00000121383	Gm12870	predicted gene 12870	107327484	107328499	TC0400003220.mm.1	-0.2	0.09086
TC0600002253.mm.1	NM_008043	Frat1	frequently rearranged in advanced T cell lympho	41829970	41832583	TC1900000598.mm.1	-0.1	0.090865
TC0600002269.mm.1	ENSMUST00000121864	Gm14048	predicted gene 14048	130880866	130882133	TC0200001997.mm.1	-0.3	0.090885
TC0600002279.mm.1	NM_025827	Lonp2	lon peptidase 2, peroxisomal	86624043	86723873	TC0800001003.mm.1	0.3	0.090899
TC0600002280.mm.1	NM_001113478	Frrs1	ferric-chelate reductase 1	116859567	116903750	TC0300001198.mm.1	0.3	0.090978
TC0600002307.mm.1	ENSMUST00000082395	mt-Tm	mitochondrially encoded tRNA methionine	3845	5016	TC0M00000005.mm.1	0.4	0.090989
TC0600002323.mm.1	NM_172685	Slc25a2	solute carrier family 25 (mitochondrial carrier	109123149	109168457	TC0300001159.mm.1	0.3	0.091219
TC0600002326.mm.1	NM_001081353	2210408	RIKEN cDNA 2210408I21 gene	77135536	77613679	TC1300000934.mm.1	0.1	0.091261
TC0600002328.mm.1	NM_007383	Acads	acyl-Coenzyme A dehydrogenase, short chain	115110299	115119346	TC0500003088.mm.1	0.2	0.091354
TC0600002335.mm.1	NR_029555	Mir142	microRNA 142	87756864	87756927	TC1100001351.mm.1	-0.4	0.091407
TC0600002336.mm.1	NM_080558	Ssfa2	sperm specific antigen 2	79635352	79672966	TC0200001164.mm.1	0.2	0.091606
TC0600002346.mm.1	NM_001081984	Popdc2	popeye domain containing 2	38362173	38378216	TC1600002171.mm.1	0.1	0.091688
TC0600002355.mm.1	ENSMUST00000158917	Gm25835	predicted gene, 25835	69668852	69668995	TC1100003057.mm.1	-1.1	0.091726
TC0600002356.mm.1	NM_026441	Pef1	penta-EF hand domain containing 1	130102558	130128138	TC0400001541.mm.1	0.2	0.091748
TC0600002357.mm.1	NM_016978	Oat	ornithine aminotransferase	132557475	132576398	TC0700004409.mm.1	0.4	0.091795
TC0600002358.mm.1	ENSMUST00000086606	Gm10713	predicted pseudogene 10713	40006220	40006555	TC1400000404.mm.1	-0.3	0.091855
TC0600002362.mm.1	ENSMUST00000019980	Amd-ps4	S-adenosylmethionine decarboxylase, pseudoge	51253025	51254145	TC0400002650.mm.1	-1.0	0.091857
TC0600002365.mm.1	NM_007930	Enc1	ectodermal-neural cortex 1	97241105	97253040	TC1300001100.mm.1	0.1	0.091909

TC0600002380.mm.1	ENSMUST00000110441	Gm11042	predicted gene 11042	74315110	74316394	TC1200001926.mm.1	0.5	0.091929
TC0600002385.mm.1	ENSMUST00000157599	Gm25406	predicted gene, 25406	73193912	73194016	TC1700001151.mm.1	0.2	0.091959
TC0600002388.mm.1	NM_001172136	Exog	endo/exonuclease (5-3), endonuclease G-like	119444923	119465518	TC0900001582.mm.1	-0.1	0.092007
TC0600002390.mm.1	NM_009593	Abcg1	ATP-binding cassette, sub-family G (WHITE), mer	31057694	31117984	TC1700000528.mm.1	-0.4	0.092092
TC0600002409.mm.1	NM_153405	Rbm45	RNA binding motif protein 45	76369984	76383768	TC0200001125.mm.1	-0.2	0.092215
TC0600002410.mm.1	NM_011326	Scnn1g	sodium channel, nonvoltage-gated 1 gamma	121734479	121768477	TC0700001746.mm.1	-0.2	0.092246
TC0600002420.mm.1	NM_139143	Slc39a6	solute carrier family 39 (metal ion transporter	24579881	24603817	TC1800001083.mm.1	-0.3	0.092265
TC0600002422.mm.1	ENSMUST00000091117	Gm5537	predicted gene 5537	58102609	58104269	TC0300002040.mm.1	-0.4	0.092335
TC0600002423.mm.1	ENSMUST00000119791	Gm12620	predicted gene 12620	60682179	60684164	TC1100002892.mm.1	-0.1	0.092363
TC0600002424.mm.1	ENSMUST00000119837	Gm11539	predicted gene 11539	96248633	96249189	TC1100001489.mm.1	-0.8	0.09241
TC0600002425.mm.1	NM_153505	Nckap1l	NCK associated protein 1 like	103453825	103498800	TC1500001131.mm.1	-0.6	0.092587
TC0600002427.mm.1	NM_029578	Tgds	TDP-glucose 4,6-dehydratase	118111911	118132765	TC1400002711.mm.1	-0.1	0.092622
TC0600002430.mm.1	NM_175362	Card11	caspase recruitment domain family, member 11	140872990	141000596	TC0500003518.mm.1	-0.4	0.092734
TC0600002431.mm.1	ENSMUST00000150411	Gm10167	predicted pseudogene 10167	148182899	148184377	TC0500003635.mm.1	-0.3	0.092918
TC0600002432.mm.1	NM_001101516	Gpr25	G protein-coupled receptor 25	136258914	136260873	TC0100003145.mm.1	-0.1	0.092931
TC0600002442.mm.1	NM_199308	Mast3	microtubule associated serine/threonine kinase	70778117	70796988	TC0800002405.mm.1	-0.2	0.093103
TC0600002444.mm.1	NM_176993	Mpzl3	myelin protein zero-like 3	45055181	45077437	TC0900000532.mm.1	-0.1	0.093117
TC0600002445.mm.1	NR_028556	Snord92	small nucleolar RNA, C/D box 92	71631279	71631365	TC1700001139.mm.1	-0.4	0.093119
TC0600002446.mm.1	NM_026298	Ift172	intraflagellar transport 172	31253279	31291114	TC0500002182.mm.1	0.1	0.093235
TC0600002447.mm.1	NM_013765	Rps26	ribosomal protein S26	128624529	128626506	TC1000003155.mm.1	-0.6	0.093249
TC0600002448.mm.1	ENSMUST00000169610	Gm3344	predicted gene 3344	5610194	5613188	TC1400001398.mm.1	0.1	0.093262
TC0600002449.mm.1	ENSMUST00000157759	Gm24690	predicted gene, 24690	38356578	38356674	TC1800000400.mm.1	0.2	0.093278
TC0600002450.mm.1	NM_145395	Duoxa1	dual oxidase maturation factor 1	122302191	122313730	TC0200004507.mm.1	0.2	0.093382
TC0600002452.mm.1	ENSMUST00000105073	Gm14190	predicted gene 14190	99690588	99690740	TC1100003731.mm.1	-0.3	0.093408
TC0600002458.mm.1	NM_011330	Ccl11	chemokine (C-C motif) ligand 11	82057823	82062955	TC1100001221.mm.1	0.5	0.093547
TC0600002460.mm.1	NCBI_Gene:619916:p	Ighv1-7	immunoglobulin heavy variable 1-72	115757984	115758416	TC1200002650.mm.1	-0.9	0.09355
TC0600002472.mm.1	ENSMUST00000174978	Gm22859	predicted gene, 22859	128925571	128925692	TC0200004585.mm.1	0.3	0.093558
TC0600002475.mm.1	ENSMUST00000120607	Gm13525	predicted gene 13525	49680499	49680976	TC0200000802.mm.1	-0.4	0.093603
TC0600002480.mm.1	NM_134218	Vmn1r20	vomeronasal 1 receptor 208	22772327	22773325	TC1300001602.mm.1	0.2	0.093739
TC0600002484.mm.1	ENSMUST00000090043	Gm9864	predicted gene 9864	107595630	107600539	TC0200004287.mm.1	-0.6	0.09387
TC0600002487.mm.1	ENSMUST00000083229	Gm22169	predicted gene, 22169	68461339	68461445	TC0900002569.mm.1	-0.7	0.094
TC0600002492.mm.1	NR_030269	Mir494	microRNA 494	109715318	109715402	TC1200001174.mm.1	0.3	0.094057
TC0600002504.mm.1	NM_177622	Zfp595	zinc finger protein 595	67312998	67332560	TC1300002772.mm.1	-0.1	0.094078
TC0600002506.mm.1	ENSMUST00000071842	Gm5828	predicted gene 5828	16768270	16770138	TC0100002011.mm.1	-0.1	0.094155
TC0600002511.mm.1	ENSMUST00000116751	Gm23653	predicted gene, 23653	48506964	48507060	TC0900002238.mm.1	0.2	0.094232
TC0600002512.mm.1	NM_138952	Ripk2	receptor (TNFRSF)-interacting serine-threonine	16122733	16163647	TC0400002251.mm.1	0.1	0.094281
TC0600002517.mm.1	ENSMUST00000158640	Gm22888	predicted gene, 22888	41203057	41203133	TC0400002461.mm.1	-0.3	0.094337
TC0600002518.mm.1	NM_001168334	Gm2799	predicted gene 2799	32278394	32562009	TC0X00000279.mm.1	0.1	0.094345
TC0600002536.mm.1	NM_001177406	Gm14431	predicted gene 14431	176521004	176533821	TC0200002738.mm.1	0.6	0.094546
TC0600002543.mm.1	OTTMUST00000086224	RP23-29	---	175690881	175703698	TC0200005341.mm.1	0.6	0.094546
TC0600002554.mm.1	NM_011093	Pira6	paired-Ig-like receptor A6	4274143	4282928	TC0700000030.mm.1	0.3	0.094561
TC0600002555.mm.1	ENSMUST00000121152	Gm14633	predicted gene 14633	56447888	56448357	TC0X00002263.mm.1	-0.5	0.094565
TC0600002558.mm.1	NM_001242944	Gm14306	predicted gene 14306	176670522	176681090	TC0200005489.mm.1	0.5	0.094571
TC0600002561.mm.1	ENSMUST00000180137	Gm23143	predicted gene, 23143	117202528	117202643	TC0400001283.mm.1	-1.1	0.094606
TC0600002573.mm.1	ENSMUST00000104671	Gm25567	predicted gene, 25567	16168953	16169041	TC1800001022.mm.1	0.4	0.094649
TC0600002581.mm.1	NM_146240	Rassf9	Ras association (RalGDS/AF-6) domain family (N-	102512222	102546560	TC1000001239.mm.1	0.2	0.094695
TC0600002585.mm.1	ENSMUST00000158334	Gm24947	predicted gene, 24947	125884415	125884524	TC0600001465.mm.1	-0.1	0.094819
TC0600002586.mm.1	NM_009082	Rpl29	ribosomal protein L29	106429454	106431568	TC0900001347.mm.1	-0.4	0.09484
TC0600002592.mm.1	NM_001205188	Ppp2r2a	protein phosphatase 2 (formerly 2A), regulatory	67014056	67072471	TC1400002283.mm.1	-0.3	0.094871
TC0600002605.mm.1	ENSMUST00000175212	Gm26217	predicted gene, 26217	5127632	5127715	TC0700002187.mm.1	-0.2	0.094888
TC0600002615.mm.1	NM_001017959	Lamp2	lysosomal-associated membrane protein 2	38401357	38456455	TC0X00002085.mm.1	0.3	0.095002
TC0600002616.mm.1	NCBI_Gene:546213:p	Igkv4-5	immunoglobulin kappa variable 4-53	69648824	69649354	TC0600003573.mm.1	-1.0	0.095198
TC0600002627.mm.1	ENSMUST00000120348	Gm12123	predicted gene 12123	35323199	35323670	TC1100002508.mm.1	-0.4	0.095385
TC0600002639.mm.1	NM_010588	Jag2	jagged 2	112908590	112929495	TC1200002443.mm.1	-0.1	0.095394
TC0600002640.mm.1	ENSMUST00000069552	Gm5160	predicted gene 5160	14424868	14425311	TC1800000119.mm.1	-0.2	0.095407
TC0600002644.mm.1	ENSMUST00000174973	Gm22854	predicted gene, 22854	18460210	18460293	TC0900001803.mm.1	0.5	0.095526
TC0600002656.mm.1	NM_007665	Cdh3	cadherin 3	106510852	106556911	TC0800001253.mm.1	-0.1	0.095623
TC0600002658.mm.1	NM_025933	Higd2a	HIG1 domain family, member 2A	54590207	54591158	TC1300000633.mm.1	0.5	0.09567
TC0600002662.mm.1	NM_139063	Bloc1s5	biogenesis of organelles complex-1, subunit 5,	38602698	38635109	TC1300001836.mm.1	0.1	0.095759
TC0600002666.mm.1	NM_001146120	Psap	prosaposin	60277627	60302600	TC1000000547.mm.1	0.5	0.09576
TC0600002670.mm.1	NM_138598	Fam104a	family with sequence similarity 104, member A	113661319	113684155	TC1100004035.mm.1	-0.1	0.095949
TC0600002680.mm.1	NM_010635	Klf1	Kruppel-like factor 1 (erythroid)	84901928	84905295	TC0800000971.mm.1	0.1	0.096004
TC0600002681.mm.1	ENSMUST00000158782	Gm24878	predicted gene, 24878	36666409	36666512	TC0500002260.mm.1	0.2	0.096031
TC0600002688.mm.1	NM_010295	Gclc	glutamate-cysteine ligase, catalytic subunit	77754535	77794489	TC0900001038.mm.1	-0.2	0.096054
TC0600002690.mm.1	ENSMUST00000158325	Gm24939	predicted gene, 24939	59813137	59813273	TC1100000737.mm.1	0.2	0.096146
TC0600002694.mm.1	ENSMUST00000172589	Vmn2r-p	vomeronasal 2, receptor, pseudogene 36	7417668	7441299	TC0700002232.mm.1	0.1	0.096195
TC0600002698.mm.1	NM_001290011	Pemt	phosphatidylethanolamine N-methyltransferase	0	0	TSUnmapped0000003	0.2	0.096234
TC0600002705.mm.1	ENSMUST00000175232	Gm25071	predicted gene, 25071	80925736	80925805	TC1800001669.mm.1	0.5	0.096315
TC0600002719.mm.1	ENSMUST00000117628	Gm13135	predicted gene 13135	147275976	147279096	TC0400001903.mm.1	-0.2	0.096319
TC0600002721.mm.1	ENSMUST00000082788	Gm25857	predicted gene, 25857	119740828	119740956	TC0200004445.mm.1	-0.4	0.096397
TC0600002728.mm.1	BC058537	Ikzf5	IKAROS family zinc finger 5	131388649	131410521	TC0700004399.mm.1	-0.2	0.096413
TC0600002730.mm.1	NM_001198833	Ddr1	discoidin domain receptor family, member 1	35681567	35704621	TC1700001976.mm.1	0.1	0.096542
TC0600002757.mm.1	NM_001025312	Dclre1b	DNA cross-link repair 1B, PSO2 homolog (S. cere	103800605	103809444	TC0300002633.mm.1	-0.2	0.09659
TC0600002759.mm.1	NM_175092	Rhof	ras homolog gene family, member f	123103044	123132692	TC0500003225.mm.1	-0.1	0.096592
TC0600002763.mm.1	NM_153570	Noc4l	nucleolar complex associated 4 homolog (S. cere	110648418	110653417	TC0500002993.mm.1	-0.1	0.096645
TC0600002773.mm.1	ENSMUST00000122157	Gm12634	predicted gene 12634	90368731	90369722	TC0400000921.mm.1	-0.2	0.096713
TC0600002776.mm.1	NM_020026	B3galnt	UDP-GalNAc:betaGlcNAc beta 1,3-galactosaminy	69573919	69598960	TC0300002139.mm.1	0.1	0.096723
TC0600002780.mm.1	NM_153088	Ctdsp1	CTD (carboxy-terminal domain, RNA polymerase	74391509	74397285	TC0100000633.mm.1	0.2	0.096938

TC0600002783.mm.1	NR_035412	Mir466i	microRNA 466i	17747473	17747593	TC1300000124.mm.1	0.3	0.096968
TC0600002793.mm.1	ENSMUST00000118921	Gm11877	predicted gene 11877	19298333	19299184	TC0400000163.mm.1	-0.2	0.097026
TC0600002796.mm.1	NM_001166634	Gm4302	predicted gene 4302	100340836	100341762	TC1000001223.mm.1	-0.2	0.097062
TC0600002798.mm.1	NM_172694	Megf9	multiple EGF-like-domains 9	70427065	70534995	TC0400002849.mm.1	0.3	0.097094
TC0600002806.mm.1	NM_025928	Pmf1	polyamine-modulated factor 1	88394138	88410316	TC0300002310.mm.1	-0.2	0.097155
TC0600002807.mm.1	NM_019696	Cpxm1	carboxypeptidase X 1 (M14 family)	130390775	130397629	TC0200004623.mm.1	0.3	0.097199
TC0600002811.mm.1	NM_025370	Aaed1	AhpC/TSA antioxidant enzyme domain containin	64291836	64312710	TC1300002201.mm.1	0.2	0.097341
TC0600002813.mm.1	NM_010422	Hexb	hexosaminidase B	97176331	97198357	TC1300002481.mm.1	-0.3	0.097357
TC0600002823.mm.1	NM_011309	S100a1	S100 calcium binding protein A1	90511034	90514392	TC0300002374.mm.1	0.4	0.097403
TC0600002837.mm.1	NM_022025	Slc5a7	solute carrier family 5 (choline transporter),	54273590	54299034	TC1700002293.mm.1	0.4	0.097415
TC0600002845.mm.1	ENSMUST00000157737	Gm23498	predicted gene, 23498	145366858	145366944	TC0600001717.mm.1	0.2	0.097417
TC0600002853.mm.1	ENSMUST00000106581	Cd300lb	CD300 antigen like family member B	114922781	114934386	TC1100004051.mm.1	0.2	0.097432
TC0600002858.mm.1	ENSMUST00000104829	Gm26429	predicted gene, 26429	39460330	39460439	TC1700002098.mm.1	-0.2	0.097516
TC0600002877.mm.1	NM_020022	Rfc2	replication factor C (activator 1) 2	134582690	134598328	TC0500001560.mm.1	-0.3	0.09761
TC0600002879.mm.1	NM_023737	Ehhadh	enoyl-Coenzyme A, hydratase/3-hydroxyacyl Coe	21761285	21787844	TC1600001368.mm.1	0.6	0.097649
TC0600002882.mm.1	NCBI_Gene:629871:p	Ighv1-1	immunoglobulin heavy variable V1-18	114682632	114683065	TC1200002610.mm.1	-1.0	0.097675
TC0600002885.mm.1	NM_031254	Trem2	triggering receptor expressed on myeloid cells	48346401	48354147	TC1700000937.mm.1	0.2	0.097757
TC0600002897.mm.1	ENSMUST00000180085	Gm24657	predicted gene, 24657	59366366	59366444	TC0700003143.mm.1	-0.2	0.097763
TC0600002901.mm.1	ENSMUST00000178792	Gm23922	predicted gene, 23922	59370106	59370184	TC0700003145.mm.1	-0.2	0.097763
TC0600002902.mm.1	ENSMUST00000180236	Gm22996	predicted gene, 22996	59375713	59375791	TC0700003148.mm.1	-0.2	0.097763
TC0600002909.mm.1	ENSMUST00000157263	U7	U7 small nuclear RNA	7886444	7886505	TC1100002200.mm.1	0.2	0.097916
TC0600002918.mm.1	NM_001042592	Arrdc4	arrestin domain containing 4	68736994	68749241	TC0700003464.mm.1	0.1	0.097934
TC0600002920.mm.1	XM_003689058	Gm21268	predicted gene, 21268	53050773	53051486	TC0Y00000370.mm.1	0.2	0.097948
TC0600002925.mm.1	XM_001478251	Gm20936	predicted gene, 20936	65648471	65649184	TC0Y00000429.mm.1	0.2	0.097948
TC0600002955.mm.1	NM_030257	Lysmd3	LysM, putative peptidoglycan-binding, domain co	81657806	81671892	TC1300000965.mm.1	-0.2	0.097961
TC0600002956.mm.1	NM_183145	Zfp748	zinc finger protein 748	67538641	67553152	TC1300002252.mm.1	-0.3	0.09801
TC0600002958.mm.1	NM_018864	Impa1	inositol (myo)-1(or 4)-monophosphatase 1	10313540	10331439	TC0300001643.mm.1	-0.2	0.098024
TC0600002959.mm.1	NM_007915	Ei24	etoposide induced 2.4 mRNA	36779153	36797393	TC0900002038.mm.1	0.2	0.098115
TC0600002960.mm.1	NM_001081431	Zscan25	zinc finger and SCAN domain containing 25	145283343	145291469	TC0500001771.mm.1	-0.1	0.098153
TC0600002961.mm.1	NM_146289	Olfr113	olfactory receptor 113	37574454	37575448	TC1700002074.mm.1	0.2	0.098161
TC0600002974.mm.1	ENSMUST00000158851	Gm25364	predicted gene, 25364	115601656	115601762	TC1100001900.mm.1	0.2	0.098176
TC0600002975.mm.1	ENSMUST00000083310	Gm22296	predicted gene, 22296	55910821	55910923	TC1200001775.mm.1	0.2	0.09818
TC0600002978.mm.1	ENSMUST00000099009	2210418	RIKEN cDNA 2210418O10 gene	176226569	176261852	TC0200002735.mm.1	0.3	0.098438
TC0600002980.mm.1	NM_198011	E430018	RIKEN cDNA E430018J23 gene	127389673	127393629	TC0700004663.mm.1	-0.1	0.098456
TC0600002983.mm.1	NM_017396	Cyp3a41	cytochrome P450, family 3, subfamily a, polypep	145694049	145720136	TC0500003745.mm.1	-0.1	0.09853
TC0600002993.mm.1	NM_026032	Lsm1	LSM1 homolog, U6 small nuclear RNA associatec	25785317	25803975	TC0800000330.mm.1	-0.1	0.098559
TC0600002994.mm.1	ENSMUST00000119495	Gm14311	predicted gene 14311	60361639	60361786	TC0400000667.mm.1	0.1	0.098806
TC0600002995.mm.1	ENSMUST00000158331	Gm24945	predicted gene, 24945	60804578	60804703	TC1100000765.mm.1	-0.2	0.098818
TC0600003000.mm.1	NM_025652	Gtf3a	general transcription factor III A	146948657	146955614	TC0500001798.mm.1	-0.2	0.098852
TC0600003002.mm.1	ENSMUST00000178873	Gm21869	predicted gene, 21869	74950655	74951338	TC0Y00000469.mm.1	0.1	0.099124
TC0600003003.mm.1	ENSMUST00000146939	Gm10186	predicted gene 10186	3583799	3584233	TC0800001611.mm.1	-0.4	0.099188
TC0600003037.mm.1	ENSMUST00000122345	Gm14126	predicted gene 14126	150378878	150379272	TC0200004835.mm.1	-0.2	0.099313
TC0600003040.mm.1	NM_001112744	Arhgef1	Rho guanine nucleotide exchange factor (GEF) 1(	154278470	154301676	TC0400004118.mm.1	-0.1	0.099392
TC0600003045.mm.1	ENSMUST00000175136	Gm23053	predicted gene, 23053	35524543	35524638	TC0600002071.mm.1	0.5	0.099437
TC0600003046.mm.1	ENSMUST00000118291	Gm16166	predicted gene 16166	120928186	120928972	TC1000001489.mm.1	-0.1	0.09944
TC0600003063.mm.1	NM_026331	Slc25a3	solute carrier family 25, member 37	69241848	69285112	TC1400002310.mm.1	-0.2	0.09951
TC0600003069.mm.1	NM_009418	Tpp2	tripeptidyl peptidase II	43934002	44002999	TC0100000332.mm.1	-0.3	0.099575
TC0600003073.mm.1	NM_177250	Lingo4	leucine rich repeat and Ig domain containing 4	94398517	94404501	TC0300000865.mm.1	-0.1	0.099721
TC0600003076.mm.1	NCBI_Gene:10004241	Trav7d-	T cell receptor alpha variable 7D-3	52744249	53022049	TC1400000624.mm.1	-0.2	0.099768
TC0600003079.mm.1	NM_001001806	Zfp36l2	zinc finger protein 36, C3H type-like 2	84183924	84187947	TC1700002647.mm.1	0.3	0.099861
TC0600003083.mm.1	NM_145512	Sft2d2	SFT2 domain containing 2	165174341	165194433	TC0100003439.mm.1	0.3	0.100024
TC0600003091.mm.1	ENSMUST00000127327	Gm11749	predicted gene 11749	118866257	118867220	TC1100004168.mm.1	-0.2	0.100076
TC0600003092.mm.1	NR_028558	Snora41	small nucleolar RNA, H/ACA box 41	63179004	63179135	TC0100000521.mm.1	-0.8	0.100154
TC0600003102.mm.1	ENSMUST00000179745	Gm8266	predicted gene 8266	5566713	5567904	TC1400001397.mm.1	-0.2	0.100177
TC0600003108.mm.1	XM_001473737	Gm2483	predicted gene 2483	42489691	42491983	TC0X00000404.mm.1	-0.2	0.100183
TC0600003109.mm.1	ENSMUST00000121361	Gm12009	predicted gene 12009	15049158	15050257	TC1100000149.mm.1	-0.4	0.100314
TC0600003110.mm.1	NCBI_Gene:382692:p	Ighv1-1	immunoglobulin heavy variable V1-19	114708648	114709081	TC1200002612.mm.1	-1.0	0.100315
TC0600003123.mm.1	NM_001081247	Polr3a	polymerase (RNA) III (DNA directed) polypeptide	24448694	24487046	TC1400001579.mm.1	-0.1	0.100333
TC0600003136.mm.1	NM_010281	Ggh	gamma-glutamyl hydrolase	20042052	20066750	TC0400000169.mm.1	0.2	0.100343
TC0600003139.mm.1	NM_178214	Hist2h2	histone cluster 2, H2be	96221119	96223740	TC0300000930.mm.1	-0.4	0.10036
TC0600003144.mm.1	ENSMUST00000158509	Gm24767	predicted gene, 24767	115099554	115099648	TC0600001274.mm.1	0.2	0.100532
TC0600003159.mm.1	ENSMUST00000175081	Gm23162	predicted gene, 23162	13622643	13622763	TC0400002227.mm.1	0.4	0.100628
TC0600003165.mm.1	ENSMUST00000083181	Gm23298	predicted gene, 23298	80911477	80911583	TC1200000749.mm.1	-0.9	0.100681
TC0600003168.mm.1	NM_001166635	Mid1ip1	Mid1 interacting protein 1 (gastrulation specif	10715013	10719702	TC0X00000131.mm.1	0.1	0.100864
TC0600003170.mm.1	NM_027726	Dlg5	discs, large homolog 5 (Drosophila)	24133953	24245920	TC1400001573.mm.1	0.1	0.100921
TC0600003189.mm.1	NR_029781	Mir1a-2	microRNA 1a-2	10785481	10785552	TC1800000983.mm.1	0.2	0.100926
TC0600003194.mm.1	XR_105587	Gm10736	predicted gene 10736	111588072	111593652	TC1300002665.mm.1	-0.6	0.101078
TC0600003195.mm.1	BC119609	Phxr1	per-hexamer repeat gene 1	3431868	3432385	TC0200000007.mm.1	-0.2	0.101219
TC0600003196.mm.1	NM_177778	Armc7	armadillo repeat containing 7	115475667	115490467	TC1100001896.mm.1	-0.1	0.101253
TC0600003205.mm.1	ENSMUST00000183692	AC14219	N/A	129189015	129189124	TC0600003226.mm.1	0.2	0.101275
TC0600003212.mm.1	NM_021499	Wrap73	WD repeat containing, antisense to Trp73	154142372	154168263	TC0400002041.mm.1	-0.1	0.10135
TC0600003216.mm.1	ENSMUST00000083833	Gm23849	predicted gene, 23849	101627366	101627556	TC1100001665.mm.1	-1.0	0.101381
TC0600003222.mm.1	ENSMUST00000083317	Gm23971	predicted gene, 23971	101645740	101645930	TC1100003811.mm.1	-1.0	0.101381
TC0600003226.mm.1	NM_033398	Jmjd6	jumonji domain containing 6	116837432	116843449	TC1100004127.mm.1	-0.1	0.101409
TC0600003229.mm.1	ENSMUST00000104461	Gm24989	predicted gene, 24989	77244928	77245015	TC1100003264.mm.1	-0.9	0.101602
TC0600003236.mm.1	NM_025404	Arl4d	ADP-ribosylation factor-like 4D	101665541	101667832	TC1100001668.mm.1	-0.1	0.10165
TC0600003265.mm.1	ENSMUST00000104485	Gm24471	predicted gene, 24471	99692399	99692529	TC1300002524.mm.1	0.2	0.101714
TC0600003268.mm.1	ENSMUST00000184220	MESTIT1	MEST intronic transcript 1, antisense RNA conse	30735964	30736062	TC0600000279.mm.1	0.1	0.10178

TC0600003269.mm.1	NM_175507	Slc35g1	solute carrier family 35, member G1	38395969	38405607	TC1900000549.mm.1	0.1	0.101817
TC0600003270.mm.1	ENSMUST00000104384	Gm24886	predicted gene, 24886	21794933	21795055	TC0200003089.mm.1	0.3	0.101832
TC0600003293.mm.1	NR_028547	Snord11	small nucleolar RNA, C/D box 110	130275506	130275573	TC0200001973.mm.1	-1.1	0.102066
TC0600003295.mm.1	ENSMUST00000101582	Gm3944	predicted gene 3944	18853872	18854207	TC1200000156.mm.1	0.1	0.102201
TC0600003305.mm.1	XR_106365	Gm11709	predicted gene 11709	115010335	115016193	TC1100004056.mm.1	0.3	0.102202
TC0600003307.mm.1	ENSMUST00000117621	Gm13750	predicted gene 13750	64150201	64150665	TC0100000532.mm.1	-0.2	0.102223
TC0600003314.mm.1	ENSMUST00000177756	Gm22114	predicted gene, 22114	169799450	169799556	TC0100003503.mm.1	-0.6	0.10244
TC0600003319.mm.1	ENSMUST00000104625	Gm24387	predicted gene, 24387	98558739	98558831	TC0600002813.mm.1	0.4	0.102449
TC0600003327.mm.1	NR_027465	Wac	WW domain containing adaptor with coiled-coil	7868832	7973547	TC1800000052.mm.1	-0.2	0.102528
TC0600003329.mm.1	ENSMUST00000104238	Gm26387	predicted gene, 26387	107907345	107907476	TC0500001089.mm.1	-0.7	0.102543
TC0600003335.mm.1	NM_001081149	Kat6a	K(lysine) acetyltransferase 6A	22859535	22943262	TC0800000288.mm.1	-0.3	0.102588
TC0600003336.mm.1	ENSMUST00000104840	Gm24683	predicted gene, 24683	116123900	116123987	TC0X00001155.mm.1	0.5	0.102689
TC0600003337.mm.1	NM_001164059	Sell	selectin, lymphocyte	164062076	164080785	TC0100001496.mm.1	-1.1	0.102775
TC0600003354.mm.1	NM_001007581	2810408	RIKEN cDNA 2810408M09 gene	165490110	165493324	TC0200005151.mm.1	-0.1	0.10279
TC0600003365.mm.1	ENSMUST00000103310	Igkv14-	immunoglobulin kappa variable 14-126	67896172	67896642	TC0600003511.mm.1	0.8	0.103005
TC0600003369.mm.1	NM_009950	Cradd	CASP2 and RIPK1 domain containing adaptor wit	95174740	95324133	TC1000002721.mm.1	0.1	0.103153
TC0600003375.mm.1	ENSMUST00000120258	Gm16420	predicted gene 16420	120114974	120115829	TC0X00001175.mm.1	-0.2	0.103369
TC0600003378.mm.1	NM_008872	Plat	plasminogen activator, tissue	22757744	22782848	TC0800000286.mm.1	0.3	0.103424
TC0600003379.mm.1	ENSMUST00000179815	Gm25352	predicted gene, 25352	5881041	5881150	TC0300000027.mm.1	0.2	0.103445
TC0600003394.mm.1	ENSMUST00000179561	Gm25144	predicted gene, 25144	5885595	5885704	TC0300000028.mm.1	0.2	0.103445
TC0600003412.mm.1	NM_130876	Krtap19	keratin associated protein 19-1	88868918	88869410	TC1600002016.mm.1	-0.1	0.103451
TC0600003420.mm.1	NM_001025388	Gm5506	predicted gene 5506	48045335	48048383	TC1800000498.mm.1	0.2	0.103477
TC0600003441.mm.1	ENSMUST00000127465	Vmn1r23	vomeronasal 1 receptor 239, pseudogene	147452748	147453710	TC0X00003145.mm.1	0.3	0.103597
TC0600003465.mm.1	ENSMUST00000083753	Gm23734	predicted gene, 23734	127375131	127375239	TC0100001119.mm.1	-1.1	0.103602
TC0600003469.mm.1	NM_028440	Abracl	ABRA C-terminal like	18011260	18023252	TC1000001802.mm.1	-0.2	0.103706
TC0600003472.mm.1	NM_010306	Gnai3	guanine nucleotide binding protein (G protein),	108107275	108146152	TC0300002731.mm.1	-0.2	0.103779
TC0600003479.mm.1	NM_080638	Mvp	major vault protein	126986860	127014621	TC0700004660.mm.1	0.2	0.103885
TC0600003492.mm.1	ENSMUST00000118382	Gm12604	predicted gene 12604	87580789	87581560	TC0400000877.mm.1	-0.1	0.103891
TC0600003493.mm.1	NM_011758	Zfp39	zinc finger protein 39	58888153	58904225	TC1100002835.mm.1	-0.2	0.103955
TC0600003494.mm.1	ENSMUST00000137642	Gm15534	predicted gene 15534	64990955	64991508	TC0600000757.mm.1	0.1	0.10397
TC0600003495.mm.1	ENSMUST00000165968	Serpina	serine (or cysteine) peptidase inhibitor, clade	104189517	104192926	TC1200002291.mm.1	0.2	0.104056
TC0600003496.mm.1	XM_001472376	Gm20783	predicted gene, 20783	124428076	124440899	TC0900003319.mm.1	-0.1	0.104064
TC0600003497.mm.1	NCBI_Gene:692245:p	Igkv12-	immunoglobulin kappa variable 12-46	69764523	69764992	TC0600003577.mm.1	-0.8	0.104113
TC0600003498.mm.1	ENSMUST00000104292	Gm23439	predicted gene, 23439	107886508	107886639	TC0200004288.mm.1	0.2	0.104172
TC0600003504.mm.1	NM_174875	Atg4a	autophagy related 4A, cysteine peptidase	103643953	103646069	TC0300002627.mm.1	-0.1	0.104236
TC0600003505.mm.1	NM_178758	Acsm5	acyl-CoA synthetase medium-chain family memb	119526265	119543793	TC0700001709.mm.1	0.2	0.104282
TC0600003506.mm.1	NM_019645	Pkp1	plakophilin 1	135871395	135919207	TC0100003138.mm.1	-0.2	0.104353
TC0600003507.mm.1	NM_015786	Hist1h1	histone cluster 1, H1c	23738807	23740367	TC1300000258.mm.1	0.3	0.104355
TC0600003508.mm.1	ENSMUST00000158712	Gm24346	predicted gene, 24346	65777014	65777207	TC0500000624.mm.1	-0.1	0.104398
TC0600003509.mm.1	ENSMUST00000175084	Gm23164	predicted gene, 23164	76479219	76479329	TC0200001130.mm.1	0.3	0.104533
TC0600003510.mm.1	NM_008771	P2rx1	purinergic receptor P2X, ligand-gated ion chann	72999103	73015200	TC1100001011.mm.1	-0.1	0.104603
TC0600003511.mm.1	NM_011181	Cyth2	cytohesin 2	45806637	45814581	TC0700003022.mm.1	-0.1	0.104651
TC0600003514.mm.1	ENSMUST00000158141	Gm24394	predicted gene, 24394	36612117	36612239	TC1400000389.mm.1	-0.2	0.104699
TC0600003515.mm.1	NM_133763	Dnttip1	deoxynucleotidyltransferase, terminal, interact	164745983	164768607	TC0200002530.mm.1	-0.1	0.104954
TC0600003516.mm.1	ENSMUST00000158392	Gm25519	predicted gene, 25519	112198915	112199041	TC0300002776.mm.1	0.2	0.104971
TC0600003517.mm.1	ENSMUST00000116986	Gm25510	predicted gene, 25510	115382099	115382221	TC0900001534.mm.1	0.2	0.105003
TC0600003518.mm.1	NM_026908	Cab39l	calcium binding protein 39-like	59440965	59548903	TC1400000835.mm.1	0.4	0.105092
TC0600003519.mm.1	ENSMUST00000082423	mt-Tp	mitochondrially encoded tRNA proline	15356	15422	TC0M00000029.mm.1	0.8	0.105232
TC0600003520.mm.1	ENSMUST00000183549	RP23-34	N/A	14856953	14857340	TC0700002393.mm.1	-0.2	0.105278
TC0600003521.mm.1	NM_030601	Clca2	chloride channel calcium activated 2	144796559	144819494	TC0300003252.mm.1	-0.1	0.105309
TC0600003522.mm.1	ENSMUST00000119050	Gm12186	predicted gene 12186	48996687	48997713	TC1100002646.mm.1	-0.3	0.105324
TC0600003524.mm.1	ENSMUST00000083135	Gm26072	predicted gene, 26072	70550841	70550947	TC0500002556.mm.1	0.2	0.105326
TC0600003525.mm.1	ENSMUST00000119777	Gm12848	predicted gene 12848	115652389	115653480	TC0400001230.mm.1	-0.2	0.105343
TC0600003526.mm.1	XM_001480560	Gm5633	predicted gene 5633	21776099	21776836	TC1200001499.mm.1	-0.2	0.105372
TC0600003527.mm.1	ENSMUST00000102183	Gm26384	predicted gene, 26384	21284103	21284212	TC1700001553.mm.1	-0.3	0.105398
TC0600003528.mm.1	NM_178215	Hist2h3	histone cluster 2, H3b	96268654	96269141	TC0300000934.mm.1	-0.2	0.105476
TC0600003529.mm.1	NCBI_Gene:674018:p	Ighv1-6	immunoglobulin heavy variable 1-61	115359140	115359572	TC1200002638.mm.1	-1.1	0.105481
TC0600003530.mm.1	NM_009624	Adcy9	adenylate cyclase 9	4287529	4420498	TC1600001124.mm.1	0.1	0.105522
TC0600003531.mm.1	ENSMUST00000178723	CR97458	N/A	85974	120530	TC4_JH584293_rand	0.1	0.105534
TC0600003534.mm.1	ENSMUST00000121666	Gm13505	predicted gene 13505	54240569	54241385	TC0200000848.mm.1	-0.2	0.105553
TC0600003536.mm.1	NM_026369	Arpc5	actin related protein 2/3 complex, subunit 5	152766542	152775597	TC0100001369.mm.1	-0.3	0.105558
TC0600003540.mm.1	NM_001122851	Faim	Fas apoptotic inhibitory molecule	98986373	99002019	TC0900001243.mm.1	-0.1	0.105653
TC0600003542.mm.1	ENSMUST00000118596	Gm12235	predicted gene 12235	55463840	55464009	TC1100002786.mm.1	-0.1	0.105709
TC0600003543.mm.1	ENSMUST00000121169	Gm13534	predicted gene 13534	58108060	58108572	TC0200000874.mm.1	-0.1	0.105751
TC0600003544.mm.1	NM_145422	D10Wsu5	DNA segment, Chr 10, Wayne State University 5	85938637	85957823	TC1000002612.mm.1	-0.2	0.10581
TC0600003545.mm.1	NM_177682	Ccz1	CCZ1 vacuolar protein trafficking and biogenesi	143987909	144014853	TC0500003568.mm.1	-0.2	0.106009
TC0600003546.mm.1	NM_011394	Slc20a2	solute carrier family 20, member 2	22476700	22569616	TC0800000277.mm.1	0.1	0.106028
TC0600003547.mm.1	NM_021430	Rilpl1	Rab interacting lysosomal protein-like 1	124493080	124531391	TC0500003258.mm.1	0.1	0.106059
TC0600003548.mm.1	NM_178708	Pcid2	PCI domain containing 2	13077189	13105459	TC0800001727.mm.1	-0.2	0.106087
TC0600003549.mm.1	NM_007747	Cox5a	cytochrome c oxidase subunit Va	57521232	57532427	TC0900000705.mm.1	-0.2	0.106128
TC0600003550.mm.1	ENSMUST00000119414	Gm15575	predicted gene 15575	38748729	38750309	TC1600001615.mm.1	-0.1	0.106158
TC0600003551.mm.1	ENSMUST00000178194	Gm13910	predicted gene 13910	108948780	108950727	TC0200001617.mm.1	0.5	0.106224
TC0600003552.mm.1	NM_010241	Aktip	thymoma viral proto-oncogene 1 interacting pro	91112041	91135496	TC0800002680.mm.1	0.2	0.106239
TC0600003553.mm.1	NR_035417	Mir669i	microRNA 669i	10517604	10517730	TC0200000204.mm.1	-0.1	0.106341
TC0600003554.mm.1	NM_175358	Zdhhc15	zinc finger, DHHC domain containing 15	104536969	104671064	TC0X00002803.mm.1	-0.2	0.106347
TC0600003555.mm.1	NM_001167743	Slfn8	schlafen 8	83002158	83020810	TC1100003382.mm.1	-0.3	0.106347
TC0600003557.mm.1	ENSMUST00000118061	Gm13812	predicted gene 13812	100460188	100461534	TC0200004200.mm.1	-0.2	0.106499
TC0600003558.mm.1	NM_001289927	Egr3	early growth response 3 (Egr3), transcript vari	0	0	TSUnmapped0000004	-0.1	0.106527

TC0600003559.mm.1	NCBI_Gene:692161:p	Igkv19-	immunoglobulin kappa chain variable 19-93	68736297	68736764	TC0600003545.mm.1	-1.2	0.106567
TC0600003560.mm.1	NM_007783	Csk	c-src tyrosine kinase	57626646	57653631	TC0900002377.mm.1	-0.4	0.106628
TC0600003561.mm.1	NM_001001488	Atp8b1	ATPase, class I, type 8B, member 1	64528979	64661000	TC1800001463.mm.1	0.2	0.106832
TC0600003562.mm.1	NM_176840	Osbpl11	oxysterol binding protein-like 11	33185071	33243312	TC1600000464.mm.1	0.3	0.107033
TC0600003563.mm.1	ENSMUST00000158861	Gm24737	predicted gene, 24737	93956310	93956409	TC1300001054.mm.1	0.2	0.107074
TC0600003564.mm.1	NCBI_Gene:668577:p	Ighv1-7	immunoglobulin heavy variable 1-73	115790593	115790887	TC1200002652.mm.1	-1.0	0.107104
TC0600003565.mm.1	NM_029282	Tti1	TELO2 interacting protein 1	157981803	158028433	TC0200005028.mm.1	-0.2	0.10711
TC0600003566.mm.1	NCBI_Gene:622728:p	Ighv1-7	immunoglobulin heavy variable 1-75	115833950	115834396	TC1200002655.mm.1	-1.2	0.107144
TC0600003567.mm.1	NM_173761	Ythdf1	YTH domain family 1	180904377	180920949	TC0200005425.mm.1	-0.2	0.107292
TC0600003568.mm.1	NCBI_Gene:629908:p	Ighv1-4	immunoglobulin heavy variable V1-43	114945950	114946243	TC1200002625.mm.1	-1.3	0.107336
TC0600003569.mm.1	ENSMUST00000179897	Gm24870	predicted gene, 24870	103641926	103642032	TC1300001165.mm.1	-0.8	0.107358
TC0600003570.mm.1	NM_025380	Eef1e1	eukaryotic translation elongation factor 1 epsi	38645689	38659028	TC1300001837.mm.1	-0.3	0.107426
TC0600003571.mm.1	NM_030692	Sacm1l	SAC1 (suppressor of actin mutations 1, homolog	123529882	123592598	TC0900001666.mm.1	0.2	0.107491
TC0600003572.mm.1	XM_988334	Gm13570	predicted gene 13570	60098346	60099088	TC0200003597.mm.1	-0.2	0.107678
TC0600003573.mm.1	NM_009055	Rfx1	regulatory factor X, 1 (influences HLA class II	84066836	84096992	TC0800000945.mm.1	-0.1	0.10768
TC0600003574.mm.1	ENSMUST00000119249	Gm15358	predicted gene 15358	19513878	19514397	TC0800001810.mm.1	0.2	0.10773
TC0600003575.mm.1	NM_001105159	Cyp3a41	cytochrome P450, family 3, subfamily a, polypep	145558664	145584730	TC0500003744.mm.1	-0.1	0.107739
TC0600003576.mm.1	NM_146436	Olfr998	olfactory receptor 998	85590510	85591521	TC0200001241.mm.1	0.2	0.107747
TC0600003577.mm.1	NM_130905	Cd209e	CD209e antigen	3847965	3854309	TC0800001622.mm.1	-0.1	0.107802
TC0600003578.mm.1	ENSMUST00000104806	Gm23135	predicted gene, 23135	167626315	167626403	TC0200005194.mm.1	0.6	0.107862
TC0600003579.mm.1	NCBI_Gene:780932:p	Ighv1-5	immunoglobulin heavy variable 1-55	115208095	115208527	TC1200002632.mm.1	-1.3	0.107909
TC0600003580.mm.1	NM_019984	Tgm1	transglutaminase 1, K polypeptide	55700009	55713492	TC1400002098.mm.1	-0.1	0.107983
TC0600003581.mm.1	NM_026370	Kat8	K(lysine) acetyltransferase 8	127912517	127925832	TC0700001870.mm.1	-0.1	0.108045
TC0600003582.mm.1	ENSMUST00000082608	Gm22980	predicted gene, 22980	117154093	117154162	TC0400003363.mm.1	-1.1	0.10807
TC0600003584.mm.1	NM_144959	Hltf	helicase-like transcription factor	20057811	20118491	TC0300000139.mm.1	-0.1	0.10808
TC0600003585.mm.1	ENSMUST00000182254	Gm9146	predicted gene 9146	32473252	32474257	TC0700000598.mm.1	-0.1	0.108085
TC0600003586.mm.1	ENSMUST00000061679	4921508	RIKEN cDNA 4921508M14 gene	34873730	34874828	TC1200001632.mm.1	0.1	0.108178
TC0600003587.mm.1	NM_146748	Olfr661	olfactory receptor 661	104688013	104688976	TC0700001532.mm.1	-0.2	0.108252
TC0600003588.mm.1	XM_893730	Gm6934	predicted gene 6934	51832160	51864780	TC1700000957.mm.1	-0.2	0.108298
TC0600003589.mm.1	ENSMUST00000083339	Gm25128	predicted gene, 25128	35247175	35247250	TC1700000679.mm.1	-1.1	0.108411
TC0600003590.mm.1	ENSMUST00000118187	Gm11875	predicted gene 11875	21626380	21627178	TC0400000175.mm.1	-0.2	0.108448
TC0600003591.mm.1	ENSMUST00000083445	Gm22743	predicted gene, 22743	104251012	104251144	TC1100003888.mm.1	-0.2	0.108453
TC0600003592.mm.1	NCBI_Gene:620240:p	Igkv8-2	immunoglobulin kappa variable 8-26	70193225	70740554	TC0600003525.mm.1	-0.7	0.10846
TC0600003593.mm.1	ENSMUST00000080330	Gm10916	predicted gene 10916	50769248	50769730	TC1400000566.mm.1	-0.4	0.108484
TC0600003594.mm.1	ENSMUST00000158284	Gm25432	predicted gene, 25432	5435900	5435965	TC1900000066.mm.1	-0.3	0.108591
TC0600003595.mm.1	NM_029612	Slamf9	SLAM family member 9	172475358	172478575	TC0100001615.mm.1	0.3	0.108648
TC0600003596.mm.1	NM_021339	Cdon	cell adhesion molecule-related/down-regulated	35421124	35507652	TC0900000336.mm.1	0.3	0.10874
TC0600003597.mm.1	ENSMUST00000120022	Gm12821	predicted gene 12821	112537061	112537660	TC0400001198.mm.1	-0.1	0.108748
TC0600003599.mm.1	NM_001100596_2	Gm13305	predicted gene 13305	42655275	42665763	TC0400002503.mm.1	0.1	0.108777
TC0600003600.mm.1	NM_001100596_3	Gm13305	predicted gene 13305	7078	17566	TC4_JH584293_rand	0.1	0.108777
TC0600003602.mm.1	NM_001100596_4	Gm13305	predicted gene 13305	3084	13572	TC4_JH584294_rand	0.1	0.108777
TC0600003604.mm.1	NM_177305	Arl4c	ADP-ribosylation factor-like 4C	88673125	88702221	TC0100002776.mm.1	-0.1	0.10888
TC0600003606.mm.1	ENSMUST00000118265	Anp32-p	acidic (leucine-rich) nuclear phosphoprotein 32	33394879	33395266	TC1100002491.mm.1	-0.4	0.108941
TC0600003610.mm.1	NM_026775	Tmed10	transmembrane emp24-like trafficking protein 1	85340614	85374717	TC1200002094.mm.1	0.3	0.108955
TC0600003611.mm.1	NM_001160143	Gm20823	predicted gene, 20823	62462510	62464845	TC0Y00000415.mm.1	-0.2	0.109088
TC0600003612.mm.1	NM_027420	2610034	RIKEN cDNA 2610034B18 gene	79925359	79935359	TC0700003574.mm.1	0.1	0.109128
TC0600003613.mm.1	ENSMUST00000118260	Gm14415	predicted gene 14415	177103564	177106488	TC0200005359.mm.1	0.1	0.10915
TC0700000001.mm.1	NM_181325	Slc25a1	solute carrier family 25 (mitochondrial carrier	22375550	22398621	TC0800001867.mm.1	0.2	0.109218
TC0700000003.mm.1	NM_007984	Fscn1	fascin homolog 1, actin bundling protein (Stron	142960343	142973189	TC0500001724.mm.1	0.2	0.109316
TC0700000005.mm.1	ENSMUST00000082906	Gm26204	predicted gene, 26204	85908353	85908459	TC0300002259.mm.1	-0.8	0.109387
TC0700000007.mm.1	ENSMUST00000178453	Got2-ps	glutamate oxaloacetate transaminase 2, mitoch	138364173	138365580	TC0500003479.mm.1	-0.4	0.109435
TC0700000013.mm.1	NM_011914	Nelfa	negative elongation factor complex member A, \	33896936	33936413	TC0500002223.mm.1	-0.2	0.109471
TC0700000015.mm.1	ENSMUST00000082663	Gm22299	predicted gene, 22299	58041516	58041651	TC1500001566.mm.1	-0.2	0.109492
TC0700000018.mm.1	ENSMUST00000158138	Gm24391	predicted gene, 24391	120524897	120524998	TC0600001350.mm.1	0.2	0.109534
TC0700000022.mm.1	ENSMUST00000083170	Gm26128	predicted gene, 26128	65626394	65626503	TC1100000838.mm.1	-0.7	0.109592
TC0700000030.mm.1	XM_003688788	LOC1008	c-C motif chemokine 19-like	41920842	41923020	TC0400000389.mm.1	-0.1	0.109605
TC0700000040.mm.1	NM_007780	Csf2rb	colony stimulating factor 2 receptor, beta, low	78325798	78353847	TC1500000641.mm.1	0.2	0.109723
TC0700000047.mm.1	NCBI_Gene:627813:p	Trdv1	T cell receptor delta variable 1	53881532	53882217	TC1400000712.mm.1	-0.2	0.109828
TC0700000048.mm.1	NCBI_Gene:668599:p	Ighv1-8	Ighv1-86 immunoglobulin heavy variable 1-86	116009659	116009954	TC1200002665.mm.1	-0.7	0.109847
TC0700000049.mm.1	NM_011408	Slfn2	schlafen 2	83065112	83070678	TC1100001238.mm.1	-0.4	0.109873
TC0700000051.mm.1	ENSMUST00000119397	Gm5913	predicted gene 5913	97427712	97429110	TC0800002763.mm.1	-0.4	0.10988
TC0700000052.mm.1	ENSMUST00000120657	Gm12201	predicted gene 12201	51106631	51107869	TC1100000562.mm.1	-0.3	0.109948
TC0700000057.mm.1	NM_010023	Eci1	enoyl-Coenzyme A delta isomerase 1	24426683	24439318	TC1700000337.mm.1	0.3	0.109976
TC0700000063.mm.1	NM_013468	Ankrd1	ankyrin repeat domain 1 (cardiac muscle)	36111965	36119844	TC1900001437.mm.1	-0.2	0.110008
TC0700000064.mm.1	ENSMUST00000120641	Gm15925	predicted gene 15925	3795904	3799631	TC0700002139.mm.1	0.3	0.110206
TC0700000075.mm.1	ENSMUST00000104130	Gm24173	predicted gene, 24173	11134111	11134238	TC0100001963.mm.1	-0.1	0.110219
TC0700000082.mm.1	XM_001473255	Gm5471	predicted pseudogene 5471	44971794	44972135	TC1500001469.mm.1	-0.4	0.110395
TC0700000084.mm.1	NM_001190371	Ankrd29	ankyrin repeat domain 29	12252357	12305720	TC1800000995.mm.1	0.2	0.110441
TC0700000099.mm.1	NM_178193	Hist1h4	histone cluster 1, H4b	23756937	23757427	TC1300000261.mm.1	-0.2	0.110497
TC0700000107.mm.1	NM_020557	Cmpk2	cytidine monophosphate (UMP-CMP) kinase 2, n	26469204	26479837	TC1200000225.mm.1	0.1	0.110559
TC0700000138.mm.1	NM_010340	Gpr50	G-protein-coupled receptor 50	71663667	71669257	TC0X00000653.mm.1	0.6	0.110612
TC0700000142.mm.1	ENSMUST00000120353	Gm14240	predicted gene 14240	156056128	156056673	TC0200002382.mm.1	-0.1	0.110645
TC0700000149.mm.1	ENSMUST00000117893	Gm12251	predicted gene 12251	58392769	58393563	TC1100002815.mm.1	0.3	0.110737
TC0700000150.mm.1	NM_001085546	Gm14393	predicted gene 14393	175061549	175067781	TC0200005328.mm.1	0.4	0.110737
TC0700000152.mm.1	ENSMUST00000075147	Gm9770	predicted gene 9770	130412499	130413312	TC1000001664.mm.1	0.3	0.110767
TC0700000153.mm.1	NM_011124	Ccl21a	chemokine (C-C motif) ligand 21A (serine)	42772860	42773993	TC0400002506.mm.1	-1.0	0.110779
TC0700000158.mm.1	ENSMUST00000117005	Gm24482	predicted gene, 24482	3425023	3425115	TC1000000004.mm.1	0.3	0.110793
TC0700000171.mm.1	NM_001033375	A230046	RIKEN cDNA A230046K03 gene	83543941	83596473	TC1000001010.mm.1	-0.2	0.110796

TC0700000181.mm.1	NM_018857	Msln	mesothelin	25748613	25754378	TC1700001671.mm.1	0.1	0.110807
TC0700000185.mm.1	NM_001005421	Amica1	adhesion molecule, interacts with CXADR antigei	45079183	45108531	TC0900000533.mm.1	-0.1	0.110943
TC0700000208.mm.1	ENSMUST00000157633	Gm24291	predicted gene, 24291	113528510	113528671	TC0800002969.mm.1	0.1	0.111008
TC0700000210.mm.1	ENSMUST00000120400	Gm14650	predicted gene 14650	58630400	58631288	TC0X00002287.mm.1	-0.2	0.111148
TC0700000225.mm.1	NM_010481	Hspa9	heat shock protein 9	34937414	34954357	TC1800001163.mm.1	0.3	0.111181
TC0700000228.mm.1	NM_133240	Acot8	acyl-CoA thioesterase 8	164792768	164804882	TC0200005132.mm.1	-0.1	0.111182
TC0700000229.mm.1	ENSMUST00000168236	Gm17538	predicted gene, 17538	77674376	77674702	TC1700002546.mm.1	0.2	0.111247
TC0700000233.mm.1	NR_002868	Gm5476	type II keratin Kb17P pseudogene	101587317	101588572	TC1500002265.mm.1	-0.1	0.111252
TC0700000234.mm.1	NCBI_Gene:629906:p	Ighv1-4	immunoglobulin heavy variable V1-42	114937113	114937544	TC1200002624.mm.1	-1.3	0.111301
TC0700000239.mm.1	NM_028041	Ddx54	DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	120613130	120628592	TC0500001342.mm.1	-0.3	0.111431
TC0700000254.mm.1	ENSMUST00000171531	Gm2431	predicted gene 2431	142257647	142258354	TC0700004560.mm.1	-0.3	0.111542
TC0700000258.mm.1	NM_011829	Impdh1	inosine 5-phosphate dehydrogenase 1	29200434	29216364	TC0600001974.mm.1	-0.2	0.1116
TC0700000261.mm.1	NM_009733	Axin1	axin 1	26138686	26195811	TC1700000404.mm.1	-0.1	0.111622
TC0700000266.mm.1	ENSMUST00000112062	Gm11084	predicted gene 11084	72971548	72986716	TC0200003747.mm.1	-0.4	0.111714
TC0700000275.mm.1	NM_181316	Bbs9	Bardet-Biedl syndrome 9 (human)	22475715	22888280	TC0900000223.mm.1	-0.2	0.111743
TC0700000280.mm.1	XM_001477705	Lipo4	lipase, member O4	33498037	33517780	TC1900001773.mm.1	0.1	0.111795
TC0700000281.mm.1	NR_028531	Snord69	small nucleolar RNA, C/D box 69	31014287	31014366	TC1400001666.mm.1	-0.9	0.111833
TC0700000286.mm.1	ENSMUST00000175375	Gm22698	predicted gene, 22698	98560354	98560461	TC1300001119.mm.1	0.3	0.111905
TC0700000287.mm.1	NCBI_Gene:619806:p	Igkv4-5	Igkv4-51 immunoglobulin kappa chain variable 4	69681406	69681939	TC0600003574.mm.1	-0.7	0.112015
TC0700000290.mm.1	ENSMUST00000104352	Gm24079	predicted gene, 24079	62523408	62523539	TC0500002457.mm.1	-0.2	0.112031
TC0700000292.mm.1	NM_011087	Pira1	paired-Ig-like receptor A1	3731630	3739889	TC0700004632.mm.1	0.3	0.112088
TC0700000294.mm.1	ENSMUST00000158962	Gm23339	predicted gene, 23339	105232605	105232743	TC0600001177.mm.1	-0.2	0.112089
TC0700000296.mm.1	NM_183358	Gadd45g	growth arrest and DNA-damage-inducible, gamn	84831522	84835482	TC0800000962.mm.1	-0.1	0.112154
TC0700000314.mm.1	NM_010738	Ly6a	lymphocyte antigen 6 complex, locus A	74994877	74998031	TC1500001728.mm.1	0.6	0.112202
TC0700000317.mm.1	NM_178856	Gins2	GINS complex subunit 2 (Psf2 homolog)	120578633	120589304	TC0800003037.mm.1	-0.1	0.112203
TC0700000322.mm.1	ENSMUST00000158045	Gm23663	predicted gene, 23663	119746401	119746480	TC1100002009.mm.1	0.4	0.112238
TC0700000323.mm.1	NR_030532	Mir743	microRNA 743	66776757	66776818	TC0X00002341.mm.1	0.2	0.112351
TC0700000325.mm.1	NM_153136	Nudt18	nudix (nucleoside diphosphate linked moiety X)-	70577847	70582571	TC1400001002.mm.1	0.1	0.112401
TC0700000327.mm.1	ENSMUST00000175172	Gm24085	predicted gene, 24085	12865125	12865240	TC1700001455.mm.1	0.3	0.112402
TC0700000328.mm.1	NR_028548	Snord16	small nucleolar RNA, C/D box 16A	64175423	64175522	TC0900000812.mm.1	-1.1	0.112461
TC0700000338.mm.1	NM_172790	Ankrd52	ankyrin repeat domain 52	128377115	128408704	TC1000001601.mm.1	-0.1	0.112477
TC0700000343.mm.1	ENSMUST00000117152	Gm14086	predicted gene 14086	122427194	122427469	TC0200001850.mm.1	-0.2	0.112538
TC0700000344.mm.1	NCBI_Gene:436539:p	Trav6-2	T cell receptor alpha variable 6-2	52667411	52667864	TC1400000620.mm.1	-0.2	0.112579
TC0700000345.mm.1	NCBI_Gene:628614:p	Ighv1-3	immunoglobulin heavy variable 1-34	114851190	114851623	TC1200002620.mm.1	-1.2	0.112598
TC0700000352.mm.1	NM_172911	D8Ertd8	DNA segment, Chr 8, ERATO Doi 82, expressed	36094828	36147787	TC0800000441.mm.1	0.1	0.112626
TC0700000362.mm.1	NM_001039170	Eif4e2	eukaryotic translation initiation factor 4E mem	87213914	87240488	TC0100000811.mm.1	-0.1	0.112799
TC0700000364.mm.1	ENSMUST00000120422	Gm13787	predicted gene 13787	91344022	91344189	TC0200004118.mm.1	-0.1	0.112834
TC0700000366.mm.1	ENSMUST00000074205	Rps6-ps	ribosomal protein S6, pseudogene 1	76337616	76338365	TC1500000586.mm.1	-0.6	0.112993
TC0700000371.mm.1	ENSMUST00000121855	Gm12834	predicted gene 12834	115238754	115241582	TC0400003315.mm.1	-0.3	0.113232
TC0700000374.mm.1	ENSMUST00000063197	Gm5867	predicted gene 5867	69461151	69461741	TC0500000660.mm.1	-0.2	0.113233
TC0700000381.mm.1	ENSMUST00000179641	Gm22450	predicted gene, 22450	135875657	135875763	TC0500001589.mm.1	-0.8	0.11325
TC0700000383.mm.1	NM_010911	Nfs1	nitrogen fixation gene 1 (S. cerevisiae)	156123637	156144186	TC0200005512.mm.1	0.2	0.11326
TC0700000384.mm.1	ENSMUST00000104359	Gm22019	predicted gene, 22019	141181216	141181311	TC0700004524.mm.1	0.2	0.113276
TC0700000386.mm.1	NM_001163246	AA98716	expressed sequence AA987161	67589439	67609707	TC1300002253.mm.1	-0.3	0.113302
TC0700000387.mm.1	NM_181401	Tmem64	transmembrane protein 64	15265820	15286753	TC0400000133.mm.1	0.2	0.113316
TC0700000388.mm.1	ENSMUST00000157988	Gm23411	predicted gene, 23411	34188878	34188939	TC1800001145.mm.1	0.2	0.113364
TC0700000399.mm.1	NCBI_Gene:633740:p	Trav5-1	Trav5-1 T cell receptor alpha variable 5-1	52622566	52623082	TC1400000617.mm.1	-0.2	0.113397
TC0700000402.mm.1	ENSMUST00000157876	Gm22788	predicted gene, 22788	34024220	34024280	TC1800001143.mm.1	0.2	0.113459
TC0700000405.mm.1	ENSMUST00000169025	Gm4202	predicted gene 4202	92689425	92690163	TC0300000833.mm.1	-0.3	0.1137
TC0700000407.mm.1	NM_008644	Prol1	proline rich, lacrimal 1	88317312	88328817	TC0500000809.mm.1	-0.9	0.113728
TC0700000410.mm.1	NCBI_Gene:238448:p	Ighv1-6	immunoglobulin heavy variable 1-62-2	115446409	115446710	TC1200002640.mm.1	-1.1	0.113735
TC0700000413.mm.1	NCBI_Gene:619886:p	Ighv1-7	immunoglobulin heavy variable 1-71	115742205	115742506	TC1200002649.mm.1	-1.1	0.113735
TC0700000421.mm.1	ENSMUST00000121131	Gm14922	predicted gene 14922	112773953	112774115	TC0X00002874.mm.1	-0.2	0.113739
TC0700000423.mm.1	ENSMUST00000082499	Gm25586	predicted gene, 25586	29280964	29281075	TC0100002109.mm.1	0.1	0.11383
TC0700000424.mm.1	NM_028870	Cltb	clathrin, light polypeptide (Lcb)	54592401	54611344	TC1300002037.mm.1	0.2	0.113834
TC0700000429.mm.1	NM_001083891	Ndufv3	NADH dehydrogenase (ubiquinone) flavoprotein	31520115	31531326	TC1700000539.mm.1	0.3	0.11398
TC0700000439.mm.1	ENSMUST00000175135	mmu-mir	mmu-mir-9-1	88215589	88215696	TC0300002303.mm.1	0.2	0.113988
TC0700000445.mm.1	NM_172148	B9d2	B9 protein domain 2	25680780	25686558	TC0700000423.mm.1	-0.2	0.114135
TC0700000447.mm.1	NM_181818	Olfr141	olfactory receptor 141	86806021	86806997	TC0200003957.mm.1	0.1	0.114224
TC0700000457.mm.1	ENSMUST00000104402	Gm26015	predicted gene, 26015	65405846	65405970	TC1200001836.mm.1	0.1	0.114232
TC0700000458.mm.1	NR_037682	Snord42	small nucleolar RNA, C/D box 42A	78181299	78181363	TC1100003289.mm.1	-0.9	0.11424
TC0700000460.mm.1	ENSMUST00000082713	Gm23301	predicted gene, 23301	75001455	75001519	TC1800000799.mm.1	-0.8	0.1143
TC0700000476.mm.1	NM_011419	Kdm5d	lysine (K)-specific demethylase 5D	897788	956781	TC0Y00000005.mm.1	-0.1	0.114329
TC0700000484.mm.1	NM_138747	Nop2	NOP2 nucleolar protein	125131883	125144753	TC0600001448.mm.1	-0.2	0.114424
TC0700000485.mm.1	NM_199465	Nexn	nexilin	152236982	152266320	TC0300003140.mm.1	0.1	0.114456
TC0700000488.mm.1	ENSMUST00000182354	Gm9578	predicted gene 9578	80341733	80342485	TC1400002498.mm.1	-0.1	0.114495
TC0700000494.mm.1	ENSMUST00000104780	Gm26260	predicted gene, 26260	119558303	119558394	TC1000001471.mm.1	0.5	0.114597
TC0700000495.mm.1	ENSMUST00000103811	Gm22426	predicted gene, 22426	105574687	105574782	TC0100001006.mm.1	-0.3	0.114687
TC0700000496.mm.1	NM_011089	Pira2	paired-Ig-like receptor A2	3836810	3898125	TC0700004634.mm.1	0.2	0.114697
TC0700000501.mm.1	NM_172760	Elmo3	engulfment and cell motility 3	105305601	105310623	TC0800001213.mm.1	0.1	0.114781
TC0700000504.mm.1	ENSMUST00000120952	Gm13998	predicted gene 13998	119878069	119878403	TC0200004450.mm.1	-0.5	0.114836
TC0700000509.mm.1	ENSMUST00000104497	Gm22498	predicted gene, 22498	56837071	56837156	TC1400002134.mm.1	-0.2	0.114921
TC0700000510.mm.1	NR_028552	Snord58	small nucleolar RNA, C/D box 58B	75001058	75001123	TC1800000798.mm.1	-1.2	0.114937
TC0700000512.mm.1	NM_015816	Lsm4	LSM4 homolog, U6 small nuclear RNA associatec	70673231	70678752	TC0800000759.mm.1	-0.2	0.114973
TC0700000519.mm.1	NM_023331	Mrpl46	mitochondrial ribosomal protein L46	78775236	78783531	TC0700003547.mm.1	-0.1	0.115067
TC0700000525.mm.1	ENSMUST00000119046	Gm15808	predicted gene 15808	14067403	14068006	TC1600000172.mm.1	-0.2	0.115094
TC0700000526.mm.1	ENSMUST00000158006	Gm22311	predicted gene, 22311	83764638	83764747	TC1100003403.mm.1	0.2	0.115229
TC0700000539.mm.1	NM_011882	Rnasel	ribonuclease L (2, 5-oligoisoadenylate syntheta	153749426	153764221	TC0100001382.mm.1	0.2	0.115262

TC0700000548.mm.1	ENSMUST00000120372	Gm12990	predicted gene 12990	135403189	135403656	TC0400003763.mm.1	-0.4	0.115265
TC0700000551.mm.1	ENSMUST00000121496	Gm12779	predicted gene 12779	34068555	34068746	TC0700002824.mm.1	-0.2	0.115551
TC0700000552.mm.1	NM_199317	Phf16	PHD finger protein 16	20425688	20519939	TC0X00000207.mm.1	-0.2	0.115581
TC0700000555.mm.1	NM_001033534	Layn	layilin	51054640	51077094	TC0900002283.mm.1	0.2	0.115763
TC0700000561.mm.1	NM_172590	Wdr41	WD repeat domain 41	94976344	95023316	TC1300001069.mm.1	0.2	0.115766
TC0700000562.mm.1	NM_178706	Siglech	sialic acid binding Ig-like lectin H	55768178	55778925	TC0700000931.mm.1	-0.1	0.11613
TC0700000572.mm.1	ENSMUST00000158750	Snord10	small nucleolar RNA, C/D box 107	59980876	59980945	TC0700003347.mm.1	0.2	0.11613
TC0700000576.mm.1	NR_027357	Slc25a4	solute carrier family 25, member 44	88410494	88425141	TC0300002311.mm.1	0.3	0.116155
TC0700000591.mm.1	NM_178385	Tbcc	tubulin-specific chaperone C	46890621	46892463	TC1700000904.mm.1	-0.2	0.116158
TC0700000595.mm.1	NCBI_Gene:629925:p	Ighv1-4	immunoglobulin heavy variable 1-49	115055223	115055516	TC1200002481.mm.1	-0.3	0.11617
TC0700000596.mm.1	NM_008132	Glrp1	glutamine repeat protein 1	88499871	88510066	TC0100002775.mm.1	0.1	0.116252
TC0700000597.mm.1	ENSMUST00000177868	Gm24497	predicted gene, 24497	72244213	72244403	TC0100000599.mm.1	-1.0	0.116304
TC0700000598.mm.1	ENSMUST00000101806	Gm23472	predicted gene, 23472	72236946	72237136	TC0100000598.mm.1	-1.0	0.116488
TC0700000600.mm.1	ENSMUST00000082922	Gm23444	predicted gene, 23444	83271498	83271688	TC1100001245.mm.1	-1.0	0.116488
TC0700000601.mm.1	ENSMUST00000089101	Gm6358	predicted gene 6358	89140944	89141099	TC1600000971.mm.1	-0.4	0.116519
TC0700000602.mm.1	ENSMUST00000185141	RP23-26	N/A	14991920	14992298	TC0700002397.mm.1	-0.1	0.116593
TC0700000603.mm.1	ENSMUST00000118450	Gm11516	predicted gene 11516	90859767	90861348	TC1100003541.mm.1	-0.2	0.116594
TC0700000604.mm.1	XR_140969	Gm10615	predicted gene 10615	110117703	110120335	TC0900001452.mm.1	-0.1	0.116672
TC0700000606.mm.1	NM_027264	Zfp715	zinc finger protein 715	43296197	43313294	TC0700002944.mm.1	-0.1	0.116811
TC0700000608.mm.1	ENSMUST00000157811	Gm25382	predicted gene, 25382	17116804	17116900	TC1000000119.mm.1	0.2	0.116836
TC0700000611.mm.1	NM_030749	Sil1	endoplasmic reticulum chaperone SIL1 homolog	35266396	35498925	TC1800001171.mm.1	0.2	0.116885
TC0700000613.mm.1	ENSMUST00000083370	Gm23245	predicted gene, 23245	129789539	129789673	TC0500001513.mm.1	-0.8	0.116908
TC0700000621.mm.1	NR_039584	Mir5123	microRNA 5123	40850056	40850138	TC0400002450.mm.1	0.4	0.117068
TC0700000623.mm.1	NM_080553	Itpr3	inositol 1,4,5-triphosphate receptor 3	27057304	27122223	TC1700000431.mm.1	-0.2	0.117074
TC0700000628.mm.1	NM_019649	Clptm1	cleft lip and palate associated transmembrane p	19631580	19665030	TC0700002492.mm.1	0.2	0.117129
TC0700000629.mm.1	NM_001146047	Lrrc49	leucine rich repeat containing 49	60568859	60688158	TC0900002435.mm.1	0.1	0.117189
TC0700000630.mm.1	NM_001164205	Tsen34	tRNA splicing endonuclease 34 homolog (S. cere	3693375	3701035	TC0700000018.mm.1	0.1	0.117307
TC0700000635.mm.1	NM_023277	Jam3	junction adhesion molecule 3	27097384	27155421	TC0900001946.mm.1	0.1	0.117403
TC0700000649.mm.1	ENSMUST00000119949	Gm3788	predicted gene 3788	86672033	86672168	TC0300002269.mm.1	-0.8	0.117405
TC0700000656.mm.1	NM_052835	Rpl10	ribosomal protein L10	74270812	74273135	TC0X00000704.mm.1	-0.1	0.117424
TC0700000663.mm.1	NM_146075	Lemd2	LEM domain containing 2	27189600	27204438	TC1700001718.mm.1	-0.1	0.117432
TC0700000671.mm.1	ENSMUST00000104805	Mir466f	microRNA 466f-2	10468675	10468768	TC0200000097.mm.1	0.3	0.117516
TC0700000674.mm.1	ENSMUST00000083804	Gm24494	predicted gene, 24494	153911610	153911690	TC0300003172.mm.1	-0.7	0.117553
TC0700000675.mm.1	ENSMUST00000082422	mt-Tt	mitochondrially encoded tRNA threonine	15289	15355	TC0M00000017.mm.1	0.5	0.117573
TC0700000676.mm.1	ENSMUST00000176094	Vmn2r-p	vomeronasal 2, receptor, pseudogene 131	23147806	23150676	TC1700000308.mm.1	-0.2	0.117626
TC0700000695.mm.1	NM_009117	Saa1	serum amyloid A 1	46740499	46742980	TC0700003041.mm.1	-0.3	0.117626
TC0700000696.mm.1	NM_013589	Ltbp2	latent transforming growth factor beta binding	84783212	84876532	TC1200002082.mm.1	0.1	0.117831
TC0700000697.mm.1	NM_028419	Glrx5	glutaredoxin 5 homolog (S. cerevisiae)	105032669	105040910	TC1200001051.mm.1	0.2	0.117949
TC0700000698.mm.1	ENSMUST00000118143	Gm16425	predicted gene 16425	19535904	19538583	TC0800000190.mm.1	-0.1	0.118029
TC0700000701.mm.1	NM_025673	Golph3	golgi phosphoprotein 3	12321496	12351594	TC1500000104.mm.1	-0.1	0.118103
TC0700000702.mm.1	NR_004414	Rnu2-10	U2 small nuclear RNA 10	0	0	TSUnmapped0000018	-1.0	0.118268
TC0700000708.mm.1	NM_025596	Prelid1	PRELI domain containing 1	55322055	55325272	TC1300000655.mm.1	-0.3	0.118411
TC0700000718.mm.1	ENSMUST00000082399	mt-Tn	mitochondrially encoded tRNA asparagine	5089	5159	TC0M00000022.mm.1	-0.8	0.11848
TC0700000720.mm.1	NM_025620	Rep15	RAB15 effector protein	147032537	147033518	TC0600001741.mm.1	-0.2	0.118681
TC0700000724.mm.1	NM_007861	Dld	dihydrolipoamide dehydrogenase	31331562	31351471	TC1200001593.mm.1	0.3	0.118784
TC0700000731.mm.1	ENSMUST00000120114	Olfr137	olfactory receptor 1374, pseudogene 1	51142532	51143467	TC1100000563.mm.1	0.1	0.118819
TC0700000733.mm.1	NCBI_Gene:620140:p	Ighv1-8	immunoglobulin heavy variable 1-83	115963793	115964196	TC1200002662.mm.1	-1.1	0.118963
TC0700000735.mm.1	ENSMUST00000099947	Gm13691	predicted gene 13691	83990553	83993045	TC0200001212.mm.1	-0.3	0.118969
TC0700000745.mm.1	ENSMUST00000082838	Gm25202	predicted gene, 25202	14315401	14315591	TC0X00001881.mm.1	-0.7	0.119146
TC0700000748.mm.1	NM_175436	Zfp526	zinc finger protein 526	25221451	25227507	TC0700000407.mm.1	-0.1	0.119166
TC0700000749.mm.1	NM_145519	Farp2	FERM, RhoGEF and pleckstrin domain protein 2	93512079	93621976	TC0100000937.mm.1	0.1	0.119173
TC0700000753.mm.1	NM_011919	Ing1	inhibitor of growth family, member 1	11555855	11563250	TC0800000091.mm.1	-0.2	0.119354
TC0700000754.mm.1	XR_140755	Gm15753	predicted gene 15753	137720333	137721740	TC0500003460.mm.1	-0.5	0.119429
TC0700000755.mm.1	NM_138603	Ccdc22	coiled-coil domain containing 22	7593809	7605517	TC0X00003412.mm.1	-0.1	0.119505
TC0700000759.mm.1	NM_029632	Ppp1r11	protein phosphatase 1, regulatory (inhibitor) s	36948355	36951792	TC1700002041.mm.1	-0.1	0.119679
TC0700000768.mm.1	NM_001033238	Cblb	Casitas B-lineage lymphoma b	52031549	52208047	TC1600000726.mm.1	0.2	0.119703
TC0700000771.mm.1	NM_009390	Tll1	tolloid-like	64014770	64205993	TC0800002307.mm.1	0.1	0.119802
TC0700000775.mm.1	NM_001044741	Cacnb3	calcium channel, voltage-dependent, beta 3 subu	98632220	98644536	TC1500000982.mm.1	-0.1	0.119815
TC0700000782.mm.1	NM_011149	Ppib	peptidylprolyl isomerase B	66060169	66066629	TC0900000862.mm.1	-0.2	0.119877
TC0700000783.mm.1	NM_133976	Imp3	IMP3, U3 small nucleolar ribonucleoprotein, hon	56937475	56938398	TC0900000689.mm.1	-0.3	0.119927
TC0700000784.mm.1	NM_172393	Aim1	absent in melanoma 1	43950307	44004846	TC1000002093.mm.1	-0.1	0.120291
TC0700000785.mm.1	ENSMUST00000179708	Gm22286	predicted gene, 22286	47525616	47525722	TC0900002230.mm.1	-0.7	0.120322
TC0700000786.mm.1	NM_024465	Abhd12	abhydrolase domain containing 12	150832493	150904741	TC0200004848.mm.1	0.2	0.120334
TC0700000787.mm.1	ENSMUST00000109711	Ighv1-2	immunoglobulin heavy variable 1-2	114469105	114469227	TC1200002598.mm.1	-1.1	0.120458
TC0700000788.mm.1	ENSMUST00000182391	Gm26913	predicted gene, 26913	84690210	84690941	TC1300002377.mm.1	-0.1	0.120495
TC0700000789.mm.1	NM_001290013	Pemt	phosphatidylethanolamine N-methyltransferase	0	0	TSUnmapped0000003	0.2	0.120543
TC0700000790.mm.1	ENSMUST00000120788	Gm12791	predicted gene 12791	101875347	101876001	TC0400001041.mm.1	-0.3	0.120548
TC0700000791.mm.1	NM_001167891	Nrg2	neuregulin 2	36017649	36197380	TC1800001186.mm.1	-0.1	0.120566
TC0700000792.mm.1	XM_357202	Gm13637	predicted gene 13637	72570451	72570822	TC0200003740.mm.1	-0.3	0.120726
TC0700000793.mm.1	ENSMUST00000119463	Gm12844	predicted gene 12844	117728718	117729299	TC0400003374.mm.1	-0.2	0.120958
TC0700000794.mm.1	ENSMUST00000178572	Gm5225	predicted gene 5225	24023859	24024182	TC1700000331.mm.1	-0.2	0.121336
TC0700000795.mm.1	NM_025947	Dynlrb1	dynein light chain roadblock-type 1	155236533	155250277	TC0200002362.mm.1	0.3	0.12134
TC0700000796.mm.1	ENSMUST00000083973	Gm26108	predicted gene, 26108	110622832	110623022	TC0X00002861.mm.1	-0.3	0.12134
TC0700000799.mm.1	NM_021501	Pias4	protein inhibitor of activated STAT 4	81153266	81167923	TC1000002527.mm.1	-0.1	0.121473
TC0700000810.mm.1	NM_015736	Galnt3	UDP-N-acetyl-alpha-D-galactosamine:polypeptid	66082766	66124994	TC0200003670.mm.1	-0.2	0.121497
TC0700000811.mm.1	NM_026604	Fam135a	family with sequence similarity 135, member A	24010758	24100341	TC0100002071.mm.1	0.2	0.121537
TC0700000819.mm.1	NR_002702	Npm3-ps	nucleoplasmin 3, pseudogene 1	85076141	85077126	TC0600000954.mm.1	-0.2	0.121546
TC0700000839.mm.1	NM_001169131	Papd7	PAP associated domain containing 7	69497959	69533864	TC1300002274.mm.1	-0.2	0.121616

TC0700000840.mm.1	NM_019990	Stard10	START domain containing 10	101317086	101346626	TC0700001430.mm.1	-0.1	0.121653
TC0700000860.mm.1	NCBI_Gene:620050:p	Igkv12-	immunoglobulin kappa chain variable 12-38	69943186	69943648	TC0600002445.mm.1	-0.2	0.121751
TC0700000861.mm.1	ENSMUST00000122737	Gm22027	predicted gene, 22027	96176361	96176487	TC0300000927.mm.1	-0.3	0.121789
TC0700000876.mm.1	NM_001122675	Zcchc2	zinc finger, CCHC domain containing 2	105990406	106034079	TC0100001016.mm.1	-0.1	0.121827
TC0700000878.mm.1	XR_140947	Gm19279	predicted gene, 19279	66885918	66886948	TC0900002535.mm.1	-0.1	0.121827
TC0700000879.mm.1	ENSMUST00000056948	Gm7887	predicted gene 7887	48524372	48525105	TC0600002223.mm.1	-0.1	0.121831
TC0700000880.mm.1	BC099486	Gm19924	predicted gene, 19924	20451675	20459211	TC1200000177.mm.1	-0.2	0.121851
TC0700000886.mm.1	ENSMUST00000178454	Gm10590	predicted gene 10590	42714926	42719893	TC0400000416.mm.1	0.2	0.121949
TC0700000888.mm.1	NM_012001	Cops4	COP9 (constitutive photomorphogenic) homolog	100518309	100547803	TC0500000981.mm.1	-0.1	0.122474
TC0700000894.mm.1	NM_008020	Fkbp2	FK506 binding protein 2	6977739	6980461	TC1900001026.mm.1	0.2	0.122515
TC0700000903.mm.1	BC147450	Gm6899	predicted gene 6899	26593241	26593862	TC1100000266.mm.1	0.1	0.122751
TC0700000904.mm.1	ENSMUST00000153140	Gm16060	predicted pseudogene 16060	138828685	138829162	TC0300003022.mm.1	-0.5	0.122765
TC0700000916.mm.1	NR_004412	Rnu1b1	U1b1 small nuclear RNA	96359953	96360117	TC0300002508.mm.1	-0.7	0.122843
TC0700000918.mm.1	ENSMUST00000158921	Gm25839	predicted gene, 25839	61470441	61470543	TC0100000495.mm.1	0.3	0.122845
TC0700000920.mm.1	NCBI_Gene:629826:p	Ighv14-	immunoglobulin heavy variable 14-4	114176438	114176867	TC1200002586.mm.1	-1.0	0.122874
TC0700000931.mm.1	NM_009728	Atp10a	ATPase, class V, type 10A	58658202	58829426	TC0700000946.mm.1	-0.3	0.123154
TC0700000935.mm.1	NM_207631	Olfr132	olfactory receptor 1321	49726944	49727999	TC0X00002176.mm.1	-0.1	0.123181
TC0700000936.mm.1	NM_001037925	BC14752	cDNA sequence BC147527	120300392	120308843	TC1300001366.mm.1	-0.2	0.123183
TC0700000939.mm.1	NR_024200	Rnu1b2	U1b2 small nuclear RNA	0	0	TSUnmapped0000017	-0.7	0.123183
TC0700000945.mm.1	NR_004412	Rnu1b1	U1b1 small nuclear RNA	0	0	TSUnmapped0000018	-0.7	0.123183
TC0700000946.mm.1	NM_025319	610009	RIKEN cDNA 0610009B22 gene	51685384	51688874	TC1100002698.mm.1	0.2	0.123198
TC0700000954.mm.1	ENSMUST00000083448	Gm23097	predicted gene, 23097	6706342	6706446	TC0900001714.mm.1	0.1	0.123242
TC0700000961.mm.1	NM_001113248	Sin3b	transcriptional regulator, SIN3B (yeast)	72723270	72758203	TC0800000834.mm.1	-0.2	0.123277
TC0700000963.mm.1	ENSMUST00000178300	Gm22614	predicted gene, 22614	96488729	96488893	TC0300000947.mm.1	-0.6	0.123476
TC0700000964.mm.1	ENSMUST00000177643	Gm25890	predicted gene, 25890	96486555	96486719	TC0300002518.mm.1	-0.6	0.123476
TC0700000967.mm.1	ENSMUST00000104569	Gm23532	predicted gene, 23532	52959351	52959462	TC0500002416.mm.1	-0.2	0.123498
TC0700000969.mm.1	ENSMUST00000122018	Gm13719	predicted gene 13719	86325641	86328569	TC0200003928.mm.1	-0.1	0.123566
TC0700000979.mm.1	NM_008009	Fgfbp1	fibroblast growth factor binding protein 1	43978858	43981799	TC0500002319.mm.1	0.2	0.123568
TC0700000986.mm.1	ENSMUST00000118840	Gm14933	predicted gene 14933	96358704	96359681	TC0X00002678.mm.1	-0.4	0.123584
TC0700000990.mm.1	ENSMUST00000062591	Gm7204	predicted pseudogene 7204	48218605	48219204	TC1600000691.mm.1	-0.3	0.12363
TC0700000991.mm.1	ENSMUST00000056409	Cflar	CASP8 and FADD-like apoptosis regulator	39357394	39359128	TC0300001892.mm.1	0.3	0.123657
TC0700000995.mm.1	NM_175111	Hspbap1	Hspb associated protein 1	35770386	35828462	TC1600000494.mm.1	-0.1	0.123681
TC0700000997.mm.1	NM_031249	Cstf2t	cleavage stimulation factor, 3 pre-RNA subunit	31082841	31086592	TC1900000460.mm.1	-0.2	0.123714
TC0700001045.mm.1	ENSMUST00000158973	Gm26158	predicted gene, 26158	60775521	60775639	TC1900001751.mm.1	-0.3	0.123723
TC0700001056.mm.1	NR_027677	E2f6	E2F transcription factor 6	16810965	16839742	TC1200000132.mm.1	0.1	0.12373
TC0700001064.mm.1	ENSMUST00000119037	Gm12986	predicted gene 12986	136608840	136609864	TC0400003788.mm.1	-0.2	0.12377
TC0700001075.mm.1	ENSMUST00000053212	Gm4895	predicted gene 4895	22153280	22154416	TC1000001853.mm.1	0.2	0.123861
TC0700001093.mm.1	NM_007535	Bcl2a1c	B cell leukemia/lymphoma 2 related protein A1c	114330135	114330578	TC0900001511.mm.1	-0.1	0.123884
TC0700001098.mm.1	ENSMUST00000116946	Gm22032	predicted gene, 22032	17591566	17591681	TC1500001251.mm.1	0.3	0.123933
TC0700001116.mm.1	NM_146009	Cep290	centrosomal protein 290	100488289	100573655	TC1000001224.mm.1	-0.1	0.124002
TC0700001122.mm.1	NM_026473	Tubb6	tubulin, beta 6 class V	67390717	67402749	TC1800000704.mm.1	-0.2	0.124045
TC0700001131.mm.1	NM_153804	Plekhg3	pleckstrin homology domain containing, family G	76533560	76579042	TC1200000682.mm.1	0.1	0.124056
TC0700001140.mm.1	ENSMUST00000174580	Gm20411	predicted gene 20411	9156853	9158528	TC0700002282.mm.1	0.2	0.124094
TC0700001141.mm.1	NM_001134646	Tomm5	translocase of outer mitochondrial membrane 5	45105208	45108114	TC0400002572.mm.1	-0.2	0.124097
TC0700001145.mm.1	ENSMUST00000119934	Gm13800	predicted gene 13800	96071529	96071694	TC0200001469.mm.1	0.3	0.124249
TC0700001149.mm.1	ENSMUST00000175175	Gm24082	predicted gene, 24082	138606699	138606781	TC0500001659.mm.1	-0.2	0.124402
TC0700001152.mm.1	ENSMUST00000158481	Gm23116	predicted gene, 23116	14382807	14382873	TC1600000180.mm.1	-0.7	0.124449
TC0700001156.mm.1	NM_001162989	Phax	phosphorylated adaptor for RNA export	56562443	56587712	TC1800000566.mm.1	-0.1	0.124511
TC0700001160.mm.1	NM_134100	Mfsd5	major facilitator superfamily domain containing	102279456	102281754	TC1500001093.mm.1	0.2	0.12456
TC0700001169.mm.1	ENSMUST00000104203	Gm24336	predicted gene, 24336	44113979	44114124	TC1900001554.mm.1	-0.7	0.124644
TC0700001177.mm.1	ENSMUST00000165702	Gm17138	predicted gene 17138	86714986	86715444	TC1200000857.mm.1	-0.3	0.124715
TC0700001180.mm.1	NM_134024	Tubg1	tubulin, gamma 1	101119938	101126419	TC1100001642.mm.1	-0.3	0.124734
TC0700001194.mm.1	ENSMUST00000122572	Gm24183	predicted gene, 24183	55085565	55085657	TC1800001352.mm.1	-0.2	0.124794
TC0700001196.mm.1	NM_080556	Tm9sf2	transmembrane 9 superfamily member 2	122107038	122159604	TC1400001327.mm.1	0.2	0.124823
TC0700001201.mm.1	NM_011314	Saa2	serum amyloid A 2	46751833	46754314	TC0700000878.mm.1	-0.1	0.124937
TC0700001258.mm.1	ENSMUST00000122364	Gm10156	predicted gene 10156	107863039	107863500	TC0700001584.mm.1	-0.6	0.124969
TC0700001262.mm.1	ENSMUST00000058881	Gm5341	predicted pseudogene 5341	90107477	90107968	TC0700003721.mm.1	-0.2	0.125018
TC0700001264.mm.1	ENSMUST00000119540	Gm12432	predicted gene 12432	98846339	98846524	TC0300002564.mm.1	-0.2	0.125047
TC0700001268.mm.1	ENSMUST00000104420	Gm22671	predicted gene, 22671	163054818	163054951	TC0100003408.mm.1	0.1	0.125075
TC0700001279.mm.1	ENSMUST00000121895	Gm15989	predicted gene 15989	110905244	110905741	TC0500001155.mm.1	-0.3	0.125121
TC0700001291.mm.1	ENSMUST00000174965	Gm24510	predicted gene, 24510	90262552	90262645	TC1700001330.mm.1	0.3	0.125206
TC0700001317.mm.1	NCBI_Gene:668497:p	Ighv1-2	immunoglobulin heavy variable V1-20	114723772	114724205	TC1200002613.mm.1	-0.8	0.125237
TC0700001325.mm.1	NM_023154	Ethe1	ethylmalonic encephalopathy 1	24587543	24608926	TC0700000388.mm.1	-0.2	0.12528
TC0700001347.mm.1	NCBI_Gene:780801:p	Ighv14-	immunoglobulin heavy variable 14-1	113931953	113932382	TC1200002576.mm.1	-1.0	0.125328
TC0700001349.mm.1	ENSMUST00000179093	Gm26378	predicted gene, 26378	32820693	32820799	TC1800000264.mm.1	-0.7	0.125366
TC0700001350.mm.1	ENSMUST00000117365	Gm4784	predicted gene 4784	109388744	109392165	TC0X00002860.mm.1	-0.3	0.125392
TC0700001354.mm.1	NM_011124	Ccl21a	chemokine (C-C motif) ligand 21A (serine)	120655	121788	TC4_JH584294_rand	-0.9	0.1254
TC0700001355.mm.1	NM_019393	Exosc9	exosome component 9	36552606	36566028	TC0300000269.mm.1	-0.1	0.125491
TC0700001361.mm.1	NM_007651	Cd53	CD53 antigen	106758861	106790149	TC0300002695.mm.1	-0.6	0.125648
TC0700001368.mm.1	NM_001166727	Vmn1r17	vomeronasal 1 receptor 175	23808286	23809200	TC0700002585.mm.1	0.1	0.125908
TC0700001369.mm.1	ENSMUST00000102024	Gm24830	predicted gene, 24830	96328425	96328590	TC0300000936.mm.1	-0.6	0.125986
TC0700001372.mm.1	ENSMUST00000083360	Gm26232	predicted gene, 26232	96450446	96450611	TC0300000942.mm.1	-0.6	0.125986
TC0700001377.mm.1	NR_004413	Rnu1b6	U1b6 small nuclear RNA	96460024	96460189	TC0300002517.mm.1	-0.6	0.125986
TC0700001388.mm.1	NR_004413	Rnu1b6	U1b6 small nuclear RNA	0	0	TSUnmapped0000017	-0.6	0.125986
TC0700001400.mm.1	NM_023465	Ctnnbip	catenin beta interacting protein 1	149518236	149566437	TC0400001953.mm.1	0.1	0.126093
TC0700001402.mm.1	NM_001010930	Mrps33	mitochondrial ribosomal protein S33	39801804	39810988	TC0600002133.mm.1	-0.2	0.126102
TC0700001404.mm.1	NM_001033040	Gm166	predicted gene 166	127582383	127588595	TC0700004332.mm.1	0.1	0.126171
TC0700001408.mm.1	NM_153778	Atoh8	atonal homolog 8 (Drosophila)	72206177	72235577	TC0600002480.mm.1	0.1	0.126255

TC0700001410.mm.1	NM_177632	Fam43a	family with sequence similarity 43, member A	30599723	30602797	TC1600000397.mm.1	0.1	0.126302
TC0700001428.mm.1	NM_001144988	Spg20	spastic paraplegia 20, spartin (Troyer syndrome	55112108	55137332	TC0300000416.mm.1	0.1	0.126528
TC0700001430.mm.1	NM_183221	Fat4	FAT tumor suppressor homolog 4 (Drosophila)	38886940	39011985	TC0300000299.mm.1	0.1	0.126552
TC0700001432.mm.1	NM_133840	Clp1	CLP1, cleavage and polyadenylation factor I sub	84722104	84727350	TC0200003876.mm.1	-0.1	0.126581
TC0700001433.mm.1	ENSMUST00000122504	Gm24596	predicted gene, 24596	126563874	126563980	TC0700004283.mm.1	-0.8	0.126586
TC0700001437.mm.1	NR_046118	n-R5s10	nuclear encoded rRNA 5S 100	123538784	123538904	TC0800003104.mm.1	-0.6	0.126676
TC0700001441.mm.1	NR_046119	n-R5s10	nuclear encoded rRNA 5S 103	123543871	123543991	TC0800003107.mm.1	-0.6	0.126676
TC0700001444.mm.1	NR_046120	n-R5s10	nuclear encoded rRNA 5S 104	123545576	123545696	TC0800003108.mm.1	-0.6	0.126676
TC0700001455.mm.1	NR_046122	n-R5s10	nuclear encoded rRNA 5S 105	123547263	123547383	TC0800003109.mm.1	-0.6	0.126676
TC0700001459.mm.1	ENSMUST00000179704	n-R5s10	nuclear encoded rRNA 5S 107	123550667	123550785	TC0800003111.mm.1	-0.6	0.126676
TC0700001475.mm.1	NR_046123	n-R5s10	nuclear encoded rRNA 5S 108	123552362	123552482	TC0800003112.mm.1	-0.6	0.126676
TC0700001493.mm.1	NR_046124	n-R5s11	nuclear encoded rRNA 5S 110	123555761	123555881	TC0800003114.mm.1	-0.6	0.126676
TC0700001499.mm.1	NR_046125	n-R5s11	nuclear encoded rRNA 5S 111	123557488	123557608	TC0800003115.mm.1	-0.6	0.126676
TC0700001520.mm.1	NR_046126	n-R5s11	nuclear encoded rRNA 5S 113	123560886	123561006	TC0800003117.mm.1	-0.6	0.126676
TC0700001522.mm.1	NR_046127	Rn5s10	5S RNA 10	123565967	123566087	TC0800003120.mm.1	-0.6	0.126676
TC0700001526.mm.1	NR_046128	n-R5s11	nuclear encoded rRNA 5S 117	123567635	123567755	TC0800003121.mm.1	-0.6	0.126676
TC0700001528.mm.1	NR_046129	n-R5s12	nuclear encoded rRNA 5S 121	123574395	123574515	TC0800003125.mm.1	-0.6	0.126676
TC0700001532.mm.1	NR_046130	n-R5s12	nuclear encoded rRNA 5S 122	123576074	123576194	TC0800003126.mm.1	-0.6	0.126676
TC0700001534.mm.1	NR_046132	n-R5s12	nuclear encoded rRNA 5S 123	123577753	123577873	TC0800003127.mm.1	-0.6	0.126676
TC0700001548.mm.1	NR_046133	n-R5s12	nuclear encoded rRNA 5S 124	123579448	123579568	TC0800003128.mm.1	-0.6	0.126676
TC0700001554.mm.1	NR_046134	n-R5s12	nuclear encoded rRNA 5S 128	123586240	123586360	TC0800003132.mm.1	-0.6	0.126676
TC0700001561.mm.1	NR_046140	Rn5s17	5S RNA 17	123593069	123593189	TC0800003136.mm.1	-0.6	0.126676
TC0700001563.mm.1	NR_046141	n-R5s13	nuclear encoded rRNA 5S 133	123594752	123594872	TC0800003137.mm.1	-0.6	0.126676
TC0700001580.mm.1	NR_046143	n-R5s13	nuclear encoded rRNA 5S 134	123596455	123596575	TC0800003138.mm.1	-0.6	0.126676
TC0700001581.mm.1	NR_030686	Rn5s	5S RNA	123598156	123598276	TC0800003139.mm.1	-0.6	0.126676
TC0700001584.mm.1	NR_046145	n-R5s13	nuclear encoded rRNA 5S 138	123603245	123603365	TC0800003142.mm.1	-0.6	0.126676
TC0700001585.mm.1	NR_046146	n-R5s13	nuclear encoded rRNA 5S 139	123604946	123605066	TC0800003143.mm.1	-0.6	0.126676
TC0700001596.mm.1	NR_046147	Rn5s23	5S RNA 23	123606611	123606731	TC0800003144.mm.1	-0.6	0.126676
TC0700001604.mm.1	NR_046148	n-R5s14	nuclear encoded rRNA 5S 141	123608318	123608438	TC0800003145.mm.1	-0.6	0.126676
TC0700001613.mm.1	NR_046149	n-R5s14	nuclear encoded rRNA 5S 142	123610015	123610135	TC0800003146.mm.1	-0.6	0.126676
TC0700001618.mm.1	NR_046150	n-R5s14	nuclear encoded rRNA 5S 143	123611713	123611833	TC0800003147.mm.1	-0.6	0.126676
TC0700001619.mm.1	NR_046151	n-R5s14	nuclear encoded rRNA 5S 144	123613412	123613532	TC0800003148.mm.1	-0.6	0.126676
TC0700001621.mm.1	NR_046152	Rn5s28	5S RNA 28	123615097	123615217	TC0800003149.mm.1	-0.6	0.126676
TC0700001623.mm.1	NR_046153	n-R5s14	nuclear encoded rRNA 5S 146	123616808	123616928	TC0800003150.mm.1	-0.6	0.126676
TC0700001630.mm.1	NR_046154	Rn5s30	5S RNA 30	123618534	123618654	TC0800003151.mm.1	-0.6	0.126676
TC0700001631.mm.1	NR_046155	Rn5s31	5S RNA 31	123620239	123620359	TC0800003152.mm.1	-0.6	0.126676
TC0700001640.mm.1	NR_046156	n-R5s14	nuclear encoded rRNA 5S 149	123621926	123622046	TC0800003153.mm.1	-0.6	0.126676
TC0700001659.mm.1	ENSMUST00000121639	Gm13508	predicted gene 13508	49327377	49328151	TC0200003496.mm.1	-0.2	0.126786
TC0700001660.mm.1	ENSMUST00000183442	mmu-mir	mmu-mir-7669	90011153	90011210	TC0300002363.mm.1	-0.1	0.126902
TC0700001666.mm.1	NM_001033362	Gm614	predicted gene 614	101261376	101263992	TC0X00003436.mm.1	-0.2	0.127074
TC0700001677.mm.1	XR_104698	Gm10912	predicted gene 10912	104065797	104067486	TC0200001550.mm.1	0.2	0.127494
TC0700001681.mm.1	ENSMUST00000157970	Gm24601	predicted gene, 24601	94826781	94826923	TC0600002776.mm.1	0.2	0.127541
TC0700001689.mm.1	NM_001252081	Zswim8	zinc finger SWIM-type containing 8	20707552	20723619	TC1400000174.mm.1	0.1	0.12755
TC0700001691.mm.1	NM_172288	Nup133	nucleoporin 133	123897123	123949265	TC0800003162.mm.1	-0.2	0.127624
TC0700001692.mm.1	NR_034044	Snora36	small nucleolar RNA, H/ACA box 36B	185242907	185243043	TC0100001781.mm.1	0.6	0.127628
TC0700001694.mm.1	NM_015818	Hs6st1	heparan sulfate 6-O-sulfotransferase 1	36068400	36106446	TC0100000237.mm.1	-0.3	0.127652
TC0700001705.mm.1	NM_180588	Reep4	receptor accessory protein 4	70545251	70548935	TC1400001000.mm.1	-0.3	0.127727
TC0700001709.mm.1	ENSMUST00000088080	Gm10217	predicted gene 10217	9864251	9870315	TC0800000072.mm.1	0.5	0.127743
TC0700001711.mm.1	NM_183183	Gprin3	GPRIN family member 3	59352461	59426290	TC0600002385.mm.1	0.2	0.12782
TC0700001714.mm.1	NM_001033540	Gm5113	predicted gene 5113	30169875	30180209	TC0700000551.mm.1	0.1	0.127861
TC0700001716.mm.1	ENSMUST00000175238	Gm25069	predicted gene, 25069	78302661	78302746	TC1700001180.mm.1	0.3	0.127945
TC0700001746.mm.1	NCBI_Gene:382695:p	Ighv1-5	immunoglobulin heavy variable 1-56	115242802	115243095	TC1200002633.mm.1	-1.0	0.128028
TC0700001747.mm.1	NCBI_Gene:243423:p	Igkv1-1	immunoglobulin kappa variable 1-132	67759700	67760413	TC0600003507.mm.1	-0.6	0.128057
TC0700001749.mm.1	ENSMUST00000175541	Gm22566	predicted gene, 22566	25054140	25054224	TC1000000220.mm.1	-1.7	0.128129
TC0700001754.mm.1	ENSMUST00000121737	Gm12815	predicted gene 12815	112146098	112146232	TC0400003289.mm.1	-0.2	0.128135
TC0700001755.mm.1	NM_153802	Zfp128	zinc finger protein 128	12881177	12893422	TC0700000149.mm.1	-0.1	0.128191
TC0700001759.mm.1	ENSMUST00000117001	Gm24483	predicted gene, 24483	22395371	22395458	TC1800000172.mm.1	0.5	0.128287
TC0700001764.mm.1	NM_023162	Znrd1	zinc ribbon domain containing, 1	36954356	36958559	TC1700002042.mm.1	-0.1	0.128338
TC0700001767.mm.1	NM_021429	Hs1bp3	HCLS1 binding protein 3	8313433	8343824	TC1200000061.mm.1	0.1	0.128355
TC0700001773.mm.1	NM_001163430	Sirt6	sirtuin 6 (silent mating type information regul	81621785	81627797	TC1000002551.mm.1	-0.1	0.128398
TC0700001777.mm.1	ENSMUST00000083912	Gm25937	predicted gene, 25937	95867334	95867440	TC0500000921.mm.1	-0.4	0.128401
TC0700001781.mm.1	ENSMUST00000119412	Gm6500	predicted gene 6500	117886441	117886891	TC0X00002899.mm.1	-0.1	0.128409
TC0700001793.mm.1	ENSMUST00000122531	n-R5s15	nuclear encoded rRNA 5S 155	90293734	90293846	TC0700001279.mm.1	0.3	0.128444
TC0700001794.mm.1	ENSMUST00000117332	Gm13731	predicted gene 13731	87333802	87333997	TC0200001286.mm.1	-0.1	0.128538
TC0700001804.mm.1	NM_011382	Six4	sine oculis-related homeobox 4	73099609	73114037	TC1200001913.mm.1	-0.1	0.128581
TC0700001814.mm.1	ENSMUST00000180065	Gm25448	predicted gene, 25448	62791507	62791613	TC1300000762.mm.1	-0.8	0.128609
TC0700001823.mm.1	ENSMUST00000178850	Gm24713	predicted gene, 24713	18009263	18009369	TC1500001252.mm.1	-0.8	0.128609
TC0700001832.mm.1	NM_025359	Tspan13	tetraspanin 13	36014555	36042500	TC1200001643.mm.1	-0.3	0.128618
TC0700001833.mm.1	ENSMUST00000120182	Gm15794	predicted gene 15794	66197906	66198423	TC0500002507.mm.1	-0.1	0.128733
TC0700001838.mm.1	NR_039585	Mir5124	microRNA 5124	40865791	40865862	TC1300000461.mm.1	0.1	0.128787
TC0700001841.mm.1	ENSMUST00000104810	Gm22008	predicted gene, 22008	117999336	117999430	TC0900001554.mm.1	0.3	0.128855
TC0700001844.mm.1	ENSMUST00000174983	Gm25677	predicted gene, 25677	9669279	9669350	TC0400000067.mm.1	-0.2	0.128909
TC0700001845.mm.1	NR_030579	Mir92b	microRNA 92b	89227116	89227198	TC0300002341.mm.1	0.1	0.128931
TC0700001847.mm.1	NM_172403	2810021	RIKEN cDNA 2810021J22 gene	58867216	58884338	TC1100000708.mm.1	-0.1	0.128975
TC0700001851.mm.1	ENSMUST00000083940	Gm25683	predicted gene, 25683	118153480	118153610	TC0700001692.mm.1	-0.3	0.129005
TC0700001853.mm.1	ENSMUST00000082558	Gm22060	predicted gene, 22060	32446822	32446928	TC0900001988.mm.1	-0.9	0.129032
TC0700001855.mm.1	ENSMUST00000057611	Gm7367	predicted pseudogene 7367	60155538	60156170	TC0700000954.mm.1	-0.1	0.12928
TC0700001860.mm.1	NM_033612	Cela1	chymotrypsin-like elastase family, member 1	100674421	100687920	TC1500002249.mm.1	0.1	0.129304

TC0700001861.mm.1	ENSMUST00000178061	Gm23151	predicted gene, 23151	126389548	126389654	TC0500003277.mm.1	-0.7	0.129414
TC0700001862.mm.1	NM_153566	Yrdc	yrdC domain containing (E.coli)	124850679	124855242	TC0400001430.mm.1	-0.1	0.129509
TC0700001870.mm.1	NM_001161816	Gm15455	predicted gene 15455	33835899	33838914	TC0100002142.mm.1	-0.1	0.129615
TC0700001872.mm.1	NM_001077411	Gba	glucosidase, beta, acid	89202928	89208681	TC0300000750.mm.1	0.3	0.129657
TC0700001875.mm.1	ENSMUST00000083917	Gm22352	predicted gene, 22352	125105009	125105115	TC0200001876.mm.1	-0.7	0.129812
TC0700001876.mm.1	ENSMUST00000157972	Gm24584	predicted gene, 24584	83702252	83702358	TC0300000646.mm.1	-0.7	0.129812
TC0700001877.mm.1	NM_033268	Actn2	actinin alpha 2	12269426	12340760	TC1300001447.mm.1	-0.1	0.129823
TC0700001878.mm.1	ENSMUST00000082989	Gm22042	predicted gene, 22042	51812483	51812647	TC0400002653.mm.1	-0.6	0.129876
TC0700001886.mm.1	NM_001034862	Erich1	glutamate rich 1	14027565	14090327	TC0800001752.mm.1	-0.1	0.129968
TC0700001888.mm.1	ENSMUST00000083084	Gm23511	predicted gene, 23511	48954722	48954885	TC0300000343.mm.1	-0.6	0.129997
TC0700001892.mm.1	ENSMUST00000178878	Gm5117	predicted gene 5117	31737054	31739763	TC0800001982.mm.1	-0.1	0.130019
TC0700001893.mm.1	NR_028549	Snord37	small nucleolar RNA, C/D box 37	81178950	81179013	TC1000000885.mm.1	-0.3	0.130154
TC0700001894.mm.1	NM_025859	Arl1	ADP-ribosylation factor-like 1	88730858	88744094	TC1000001084.mm.1	0.2	0.130171
TC0700001902.mm.1	ENSMUST00000083002	Gm23722	predicted gene, 23722	39573746	39573875	TC0100002239.mm.1	-0.1	0.130186
TC0700001926.mm.1	ENSMUST00000072359	Tpm3-rs	tropomyosin 3, related sequence 7	113314608	113316713	TC1400001242.mm.1	-0.4	0.13051
TC0700001927.mm.1	NM_033218	Srebf2	sterol regulatory element binding factor 2	82147266	82205376	TC1500000742.mm.1	-0.3	0.130551
TC0700001951.mm.1	ENSMUST00000104326	Gm25877	predicted gene, 25877	103586272	103586400	TC0400003179.mm.1	-0.3	0.13056
TC0700001961.mm.1	NM_145509	5430435	RIKEN cDNA 5430435G22 gene	131688695	131715439	TC0100001173.mm.1	0.2	0.13062
TC0700001974.mm.1	ENSMUST00000104232	Gm24282	predicted gene, 24282	51297179	51297244	TC0300000357.mm.1	0.2	0.130726
TC0700001980.mm.1	ENSMUST00000083868	Gm23041	predicted gene, 23041	109368088	109368193	TC1000002845.mm.1	-0.5	0.130799
TC0700001985.mm.1	ENSMUST00000105564	Gm10944	predicted gene 10944	10681348	10681858	TC1000000077.mm.1	-0.3	0.130826
TC0700001994.mm.1	NM_178798	Slc7a6	solute carrier family 7 (cationic amino acid tr	106168875	106198704	TC0800001245.mm.1	-0.1	0.130873
TC0700002000.mm.1	ENSMUST00000179699	Gm26229	predicted gene, 26229	10487704	10487824	TC0200000136.mm.1	-0.2	0.130921
TC0700002002.mm.1	ENSMUST00000177681	Gm25158	predicted gene, 25158	10495079	10495199	TC0200000154.mm.1	-0.2	0.130921
TC0700002009.mm.1	ENSMUST00000160298	Gm8113	predicted gene 8113	43925390	43933411	TC1400000453.mm.1	-0.2	0.131008
TC0700002011.mm.1	NM_001081054	Qrsl1	glutaminyl-tRNA synthase (glutamine-hydrolyzin	43874188	43901745	TC1000002092.mm.1	-0.1	0.131096
TC0700002015.mm.1	NR_046156	n-R5s14	nuclear encoded rRNA 5S 149	0	0	TSUnmapped0000013	-0.6	0.131241
TC0700002023.mm.1	NR_046155	Rn5s31	5S RNA 31	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002029.mm.1	NR_046154	Rn5s30	5S RNA 30	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002034.mm.1	NR_046153	n-R5s14	nuclear encoded rRNA 5S 146	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002036.mm.1	NR_046152	Rn5s28	5S RNA 28	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002045.mm.1	NR_046151	n-R5s14	nuclear encoded rRNA 5S 144	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002050.mm.1	NR_046150	n-R5s14	nuclear encoded rRNA 5S 143	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002053.mm.1	NR_046149	n-R5s14	nuclear encoded rRNA 5S 142	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002055.mm.1	NR_046148	n-R5s14	nuclear encoded rRNA 5S 141	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002068.mm.1	NR_046147	Rn5s23	5S RNA 23	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002069.mm.1	NR_046146	n-R5s13	nuclear encoded rRNA 5S 139	0	0	TSUnmapped0000014	-0.6	0.131241
TC0700002070.mm.1	NR_046145	n-R5s13	nuclear encoded rRNA 5S 138	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002073.mm.1	NR_046143	n-R5s13	nuclear encoded rRNA 5S 134	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002074.mm.1	NR_046141	n-R5s13	nuclear encoded rRNA 5S 133	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002115.mm.1	NR_046140	Rn5s17	5S RNA 17	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002128.mm.1	NR_046134	n-R5s12	nuclear encoded rRNA 5S 128	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002132.mm.1	NR_046133	n-R5s12	nuclear encoded rRNA 5S 124	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002138.mm.1	NR_046132	n-R5s12	nuclear encoded rRNA 5S 123	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002139.mm.1	NR_046130	n-R5s12	nuclear encoded rRNA 5S 122	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002140.mm.1	NR_046129	n-R5s12	nuclear encoded rRNA 5S 121	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002150.mm.1	NR_046128	n-R5s11	nuclear encoded rRNA 5S 117	0	0	TSUnmapped0000015	-0.6	0.131241
TC0700002154.mm.1	NR_046127	Rn5s10	5S RNA 10	0	0	TSUnmapped0000016	-0.6	0.131241
TC0700002155.mm.1	NR_046126	n-R5s11	nuclear encoded rRNA 5S 113	0	0	TSUnmapped0000016	-0.6	0.131241
TC0700002162.mm.1	NR_046125	n-R5s11	nuclear encoded rRNA 5S 111	0	0	TSUnmapped0000016	-0.6	0.131241
TC0700002164.mm.1	NR_046124	n-R5s11	nuclear encoded rRNA 5S 110	0	0	TSUnmapped0000016	-0.6	0.131241
TC0700002166.mm.1	NR_046123	n-R5s10	nuclear encoded rRNA 5S 108	0	0	TSUnmapped0000016	-0.6	0.131241
TC0700002167.mm.1	NR_046122	n-R5s10	nuclear encoded rRNA 5S 105	0	0	TSUnmapped0000016	-0.6	0.131241
TC0700002173.mm.1	NR_046120	n-R5s10	nuclear encoded rRNA 5S 104	0	0	TSUnmapped0000016	-0.6	0.131241
TC0700002181.mm.1	NR_046119	n-R5s10	nuclear encoded rRNA 5S 103	0	0	TSUnmapped0000016	-0.6	0.131241
TC0700002186.mm.1	NR_046118	n-R5s10	nuclear encoded rRNA 5S 100	0	0	TSUnmapped0000016	-0.6	0.131241
TC0700002187.mm.1	NR_030686	Rn5s	5S RNA	0	0	TSUnmapped0000017	-0.6	0.131241
TC0700002190.mm.1	NM_153564	Gbp5	guanylate binding protein 5	142496900	142619179	TC0300001444.mm.1	0.1	0.131249
TC0700002221.mm.1	ENSMUST00000179589	Gm24761	predicted gene, 24761	10482612	10482738	TC0200000123.mm.1	-0.2	0.131298
TC0700002223.mm.1	ENSMUST00000116759	Mir467h	microRNA 467h	115381819	115381939	TC0900001532.mm.1	0.3	0.131326
TC0700002230.mm.1	NM_007415	Parp1	poly (ADP-ribose) polymerase family, member 1	180568955	180601254	TC0100001711.mm.1	-0.3	0.131542
TC0700002232.mm.1	ENSMUST00000122543	n-R5s15	nuclear encoded rRNA 5S 157	116625122	116625242	TC0700004160.mm.1	0.2	0.131577
TC0700002238.mm.1	ENSMUST00000083818	Gm23344	predicted gene, 23344	64175048	64175115	TC0900000811.mm.1	-0.8	0.131579
TC0700002248.mm.1	NM_009034	Rbp2	retinol binding protein 2, cellular	98490537	98509771	TC0900001234.mm.1	0.1	0.131681
TC0700002268.mm.1	ENSMUST00000104630	Gm23051	predicted gene, 23051	24193472	24193564	TC1000001888.mm.1	0.4	0.131683
TC0700002270.mm.1	BC055438	Atp6v1e	ATPase, H+ transporting, lysosomal V1 subunit E	120795244	120822685	TC0600003045.mm.1	0.4	0.131724
TC0700002282.mm.1	ENSMUST00000083971	Gm26110	predicted gene, 26110	171027965	171028129	TC0100001575.mm.1	-0.6	0.131895
TC0700002283.mm.1	NM_001164600	Puf60	poly-U binding splicing factor 60	76070182	76080946	TC1500001762.mm.1	-0.2	0.132052
TC0700002290.mm.1	NM_133831	Gltscr2	glioma tumor suppressor candidate region gene	15937835	15946108	TC0700002415.mm.1	-0.2	0.132087
TC0700002292.mm.1	ENSMUST00000183717	DAOA-AS	DAOA antisense RNA 1 conserved region 1	7521636	7521834	TC0800000051.mm.1	0.2	0.132147
TC0700002316.mm.1	NM_029956	Mmab	methylmalonic aciduria (cobalamin deficiency) t	114431034	114444059	TC0500003061.mm.1	0.1	0.132254
TC0700002321.mm.1	NCBI_Gene:10010194	Trdv2-1	T cell receptor delta variable 2-1	53946073	53946660	TC1400000713.mm.1	-0.2	0.132298
TC0700002324.mm.1	NM_029083	Ddit4	DNA-damage-inducible transcript 4	59949675	59951770	TC1000002224.mm.1	-0.2	0.132468
TC0700002326.mm.1	NM_011777	Zyx	zyxin	42349828	42360213	TC0600000459.mm.1	0.1	0.132553
TC0700002332.mm.1	ENSMUST00000101946	Gm24701	predicted gene, 24701	14912358	14912462	TC0700000185.mm.1	0.3	0.132589
TC0700002334.mm.1	ENSMUST00000167847	Gm21655	predicted gene, 21655	25923498	25926215	TC0500002114.mm.1	-0.2	0.132603
TC0700002337.mm.1	ENSMUST00000158582	Gm26213	predicted gene, 26213	13969348	13969457	TC1600001239.mm.1	0.2	0.132918
TC0700002359.mm.1	NR_002903	Snord61	small nucleolar RNA, C/D box 61	57391448	57391519	TC0X00002273.mm.1	-0.9	0.132952

TC0700002368.mm.1	ENSMUST00000157682	Gm24505	predicted gene, 24505	35217235	35217360	TC0700000656.mm.1	0.3	0.132967
TC0700002385.mm.1	ENSMUST00000118553	Gm8534	predicted gene 8534	153656606	153657371	TC0X00001563.mm.1	-0.2	0.132988
TC0700002386.mm.1	ENSMUST00000104567	Gm23531	predicted gene, 23531	42522136	42522203	TC0800002127.mm.1	-0.2	0.133093
TC0700002390.mm.1	ENSMUST00000121409	Osbpl5	oxysterol binding protein-like 5	143688762	143756985	TC0700004595.mm.1	0.1	0.133097
TC0700002392.mm.1	NM_010799	Minpp1	multiple inositol polyphosphate histidine phosp	32485769	32515370	TC1900000465.mm.1	-0.2	0.133106
TC0700002393.mm.1	NM_009596	Scgb1b2	secretoglobin, family 1B, member 27	34021483	34022881	TC0700000628.mm.1	-0.2	0.133158
TC0700002394.mm.1	NM_133185	Rogdi	rogdi homolog (Drosophila)	5008729	5013553	TC1600001150.mm.1	0.1	0.133187
TC0700002396.mm.1	NM_133228	Zfp87	zinc finger protein 87	67515781	67526231	TC1300002776.mm.1	-0.2	0.133412
TC0700002397.mm.1	ENSMUST00000083269	Gm24614	predicted gene, 24614	8429158	8429264	TC0300000041.mm.1	-0.8	0.133543
TC0700002399.mm.1	ENSMUST00000179660	Gm16416	predicted gene 16416	103397109	103397591	TC1300001161.mm.1	-0.6	0.133612
TC0700002400.mm.1	NCBI_Gene:238447:p	Igha	Igha immunoglobulin heavy constant alpha	113254899	113429833	TC1200002537.mm.1	-0.4	0.133619
TC0700002401.mm.1	ENSMUST00000116848	Gm26302	predicted gene, 26302	26229983	26230064	TC0X00000250.mm.1	0.5	0.133629
TC0700002404.mm.1	ENSMUST00000104817	Gm23489	predicted gene, 23489	30353443	30353527	TC0200003270.mm.1	0.5	0.133721
TC0700002405.mm.1	ENSMUST00000175536	Gm26236	predicted gene, 26236	32675109	32675245	TC0200000590.mm.1	-0.5	0.133788
TC0700002406.mm.1	NM_001164742	Serpina	serine (or cysteine) peptidase inhibitor, clade	103688044	103695529	TC1200002274.mm.1	0.4	0.13379
TC0700002409.mm.1	NM_025789	Rsph3a	radial spoke 3A homolog (Chlamydomonas)	7945614	7979824	TC1700000078.mm.1	0.2	0.133909
TC0700002410.mm.1	ENSMUST00000175473	Gm25248	predicted gene, 25248	42281716	42281813	TC1200000383.mm.1	0.3	0.134161
TC0700002414.mm.1	XM_003084522	LOC1005	zinc finger protein 64-like	168893331	168955587	TC0200005225.mm.1	-0.1	0.134252
TC0700002415.mm.1	XM_893519	Gm6910	predicted gene 6910	66007615	66009240	TC1300000802.mm.1	-0.1	0.134306
TC0700002416.mm.1	NCBI_Gene:434041:p	Igkv8-2	immunoglobulin kappa chain variable 8-27	70171809	70172270	TC0600003588.mm.1	-0.4	0.134306
TC0700002417.mm.1	NM_030084	Gpr108	G protein-coupled receptor 108	57234914	57247641	TC1700002354.mm.1	0.2	0.13433
TC0700002421.mm.1	NM_001145900	Btbd6	BTB (POZ) domain containing 6	112976482	112978940	TC1200001275.mm.1	-0.1	0.134432
TC0700002422.mm.1	ENSMUST00000083425	Gm23136	predicted gene, 23136	64176661	64176759	TC0900000814.mm.1	-1.1	0.134491
TC0700002433.mm.1	NR_029412	Snora16	small nucleolar RNA, H/ACA box 16A	132309465	132309600	TC0400001583.mm.1	-0.9	0.134518
TC0700002435.mm.1	ENSMUST00000104161	Gm24867	predicted gene, 24867	13675376	13675482	TC1700000158.mm.1	0.2	0.134572
TC0700002437.mm.1	NR_034051	Snora34	small nucleolar RNA, H/ACA box 34	98519716	98519878	TC1500002177.mm.1	-1.0	0.134657
TC0700002442.mm.1	NM_207220	Gpr137	G protein-coupled receptor 137	6938069	6942450	TC1900001023.mm.1	0.1	0.134661
TC0700002448.mm.1	XR_105147	9130208	RIKEN cDNA 9130208D14 gene	105823257	105831515	TC0700003993.mm.1	0.1	0.134697
TC0700002451.mm.1	NM_024450	Scd3	stearoyl-coenzyme A desaturase 3	44203288	44244016	TC1900000645.mm.1	0.1	0.134795
TC0700002459.mm.1	NM_019420	B3galt4	UDP-Gal:betaGlcNAc beta 1,3-galactosyltransfer	33949909	33951488	TC1700001887.mm.1	-0.1	0.134828
TC0700002462.mm.1	ENSMUST00000082805	Gm23055	predicted gene, 23055	132442034	132442127	TC0400001587.mm.1	-0.2	0.134852
TC0700002468.mm.1	ENSMUST00000121098	Gm12642	predicted gene 12642	93265413	93266288	TC0400003055.mm.1	-0.1	0.134877
TC0700002471.mm.1	ENSMUST00000117993	Gm13641	predicted gene 13641	71319783	71320255	TC0200001034.mm.1	-0.6	0.134917
TC0700002481.mm.1	NM_144845	Ugt3a2	UDP glycosyltransferases 3 family, polypeptide	9335550	9370955	TC1500000073.mm.1	0.7	0.134941
TC0700002483.mm.1	NM_009977	Cst7	cystatin F (leukocystatin)	150570415	150578944	TC0200002223.mm.1	-0.1	0.135003
TC0700002486.mm.1	ENSMUST00000104660	Gm25062	predicted gene, 25062	37580335	37580427	TC0600000360.mm.1	0.4	0.135057
TC0700002487.mm.1	NM_008057	Fzd7	frizzled homolog 7 (Drosophila)	59482147	59486959	TC0100000450.mm.1	0.1	0.135086
TC0700002489.mm.1	ENSMUST00000174990	Gm24026	predicted gene, 24026	30967197	30967294	TC1700000527.mm.1	0.4	0.135155
TC0700002491.mm.1	ENSMUST00000118146	Gm11511	predicted gene 11511	90516777	90517316	TC1100003534.mm.1	0.1	0.135224
TC0700002492.mm.1	NM_008494	Lfng	LFNG O-fucosylpeptide 3-beta-N-acetylglucosam	140607320	140615545	TC0500001695.mm.1	0.1	0.135242
TC0700002496.mm.1	NM_001290012	Pemt	phosphatidylethanolamine N-methyltransferase	0	0	TSUnmapped0000003	0.2	0.135283
TC0700002497.mm.1	NM_028874	Snx19	sorting nexin 19	30427329	30466726	TC0900000271.mm.1	0.1	0.13549
TC0700002499.mm.1	NM_025517	Rtca	RNA 3-terminal phosphate cyclase	116488963	116508208	TC0300002807.mm.1	-0.1	0.13552
TC0700002510.mm.1	NCBI_Gene:629866:p	Ighv1-1	Ighv1-16 immunoglobulin heavy variable 1-16	114665872	114666165	TC1200002479.mm.1	-0.2	0.135527
TC0700002530.mm.1	ENSMUST00000104748	Mir466h	microRNA 466h	10514891	10514971	TC0200000199.mm.1	0.4	0.135557
TC0700002531.mm.1	ENSMUST00000175436	Gm23869	predicted gene, 23869	121230260	121230330	TC0300001228.mm.1	0.3	0.135665
TC0700002585.mm.1	NM_027318	Znhit1	zinc finger, HIT domain containing 1	136982164	136988021	TC0500003429.mm.1	0.1	0.135665
TC0700002588.mm.1	ENSMUST00000119135	Gm15470	predicted gene 15470	41490351	41491721	TC0700000731.mm.1	-0.2	0.135677
TC0700002593.mm.1	ENSMUST00000104755	Gm23438	predicted gene, 23438	10458178	10458271	TC1400000089.mm.1	0.4	0.135681
TC0700002596.mm.1	NR_029574	Mir188	microRNA 188	7247989	7248056	TC0X00001770.mm.1	0.1	0.135695
TC0700002598.mm.1	ENSMUST00000104415	Gm22673	predicted gene, 22673	59672990	59673120	TC1200000507.mm.1	-0.5	0.135723
TC0700002615.mm.1	NR_028078	Snora21	small nucleolar RNA, H/ACA box 21	97781639	97781775	TC1100003657.mm.1	-0.9	0.135765
TC0700002617.mm.1	ENSMUST00000119275	Gm8261	predicted gene 8261	146599751	146600958	TC0X00003139.mm.1	-0.1	0.13577
TC0700002627.mm.1	NR_030465	Mir692-	microRNA 692-1	6895229	6895337	TC1700001393.mm.1	0.5	0.135787
TC0700002628.mm.1	ENSMUST00000083744	Gm24261	predicted gene, 24261	100604359	100604462	TC1300001138.mm.1	-0.3	0.135805
TC0700002635.mm.1	NM_198647	Tbc1d22	TBC1 domain family, member 22B	29549788	29606895	TC1700002772.mm.1	-0.1	0.135916
TC0700002636.mm.1	ENSMUST00000120974	Gm12983	predicted gene 12983	135290366	135290675	TC0400003758.mm.1	-0.1	0.135943
TC0700002639.mm.1	NM_178202	Hist1h2	histone cluster 1, H2bp	21787461	21789213	TC1300000179.mm.1	-0.2	0.136063
TC0700002646.mm.1	XM_001473986	Gm2564	predicted gene 2564	42629332	42631714	TC0400000412.mm.1	-0.1	0.136077
TC0700002648.mm.1	ENSMUST00000158959	Gm23337	predicted gene, 23337	45978578	45978695	TC0300000340.mm.1	0.1	0.136198
TC0700002682.mm.1	NCBI_Gene:780931:p	Ighv1-5	immunoglobulin heavy variable 1-53	115158403	115158835	TC1200002630.mm.1	-1.2	0.13621
TC0700002685.mm.1	NM_013754	Insl6	insulin-like 6	29321344	29325356	TC1900001340.mm.1	-0.2	0.136281
TC0700002694.mm.1	NM_010510	Ifnb1	interferon beta 1, fibroblast	88522025	88522794	TC0400003001.mm.1	-0.1	0.136293
TC0700002696.mm.1	NM_013495	Cpt1a	carnitine palmitoyltransferase 1a, liver	3323301	3385733	TC1900000008.mm.1	0.4	0.136305
TC0700002697.mm.1	NR_030451	Mir682	microRNA 682	75644864	75645226	TC1300000910.mm.1	-0.5	0.136341
TC0700002699.mm.1	NM_001159603	Pum1	pumilio 1 (Drosophila)	130663321	130781565	TC0400001547.mm.1	-0.2	0.136342
TC0700002705.mm.1	ENSMUST00000157232	Gm22791	predicted gene, 22791	46985337	46985481	TC1800001311.mm.1	0.2	0.136353
TC0700002714.mm.1	NM_080446	Helb	helicase (DNA) B	120083608	120112987	TC1000003018.mm.1	-0.2	0.136378
TC0700002716.mm.1	NM_009774	Bub3	budding uninhibited by benzimidazoles 3 homolo	131560379	131571898	TC0700001927.mm.1	-0.4	0.136488
TC0700002718.mm.1	NR_028522	Snord13	small nucleolar RNA, C/D box 13	0	0	TSUnmapped0000017	-0.7	0.136663
TC0700002728.mm.1	NM_181594	Edc4	enhancer of mRNA decapping 4	105880881	105895023	TC0800001232.mm.1	-0.1	0.13682
TC0700002733.mm.1	ENSMUST00000101903	Gm25326	predicted gene, 25326	47413834	47413940	TC0700000888.mm.1	-0.9	0.137413
TC0700002739.mm.1	NM_001013806	Ankrd13	ankyrin repeat domain 13c	157947414	158006837	TC0300001581.mm.1	0.2	0.137436
TC0700002740.mm.1	NM_144870	Ndufs8	NADH dehydrogenase (ubiquinone) Fe-S protein	3908863	3912774	TC1900000889.mm.1	-0.3	0.137627
TC0700002742.mm.1	NM_001038651	Zfp953	zinc finger protein 953	67339307	67360605	TC1300002773.mm.1	-0.2	0.137757
TC0700002747.mm.1	ENSMUST00000083071	n-R5s79	nuclear encoded rRNA 5S 79	88710008	88710127	TC1000002648.mm.1	0.1	0.137826
TC0700002758.mm.1	ENSMUST00000182329	Gm7611	predicted gene 7611	20704383	20705382	TC1300001529.mm.1	-0.2	0.137951
TC0700002765.mm.1	NM_009765	Brca2	breast cancer 2	150522621	150570146	TC0500001865.mm.1	-0.1	0.138014

TC0700002766.mm.1	ENSMUST00000177614	Gm23355	predicted gene, 23355	82543229	82543335	TC1600000929.mm.1	-0.8	0.138189
TC0700002775.mm.1	NM_021434	Gpr180	G protein-coupled receptor 180	118137127	118164232	TC1400001275.mm.1	0.1	0.13831
TC0700002776.mm.1	ENSMUST00000082836	n-R5s29	nuclear encoded rRNA 5S 29	78858934	78859052	TC1700001189.mm.1	0.3	0.138339
TC0700002778.mm.1	XM_884867	Gm6155	predicted pseudogene 6155	84834539	84841692	TC0700003660.mm.1	-0.2	0.138432
TC0700002779.mm.1	NM_053172	Mepe	matrix extracellular phosphoglycoprotein with A	104325329	104338611	TC0500001024.mm.1	-0.1	0.13846
TC0700002781.mm.1	ENSMUST00000122482	n-R5s48	nuclear encoded rRNA 5S 48	77530398	77530507	TC1400001085.mm.1	0.1	0.138536
TC0700002783.mm.1	ENSMUST00000102350	Gm23063	predicted gene, 23063	17891959	17892051	TC1900001226.mm.1	0.2	0.138581
TC0700002784.mm.1	ENSMUST00000178199	AC13244	N/A	30394	32306	TC1_GL456221_rand	-0.7	0.138774
TC0700002787.mm.1	ENSMUST00000083911	Gm25189	predicted gene, 25189	117248271	117248434	TC0200001723.mm.1	-0.5	0.139009
TC0700002791.mm.1	NM_174849	Agbl5	ATP/GTP binding protein-like 5	30888694	30906965	TC0500000303.mm.1	-0.1	0.139038
TC0700002792.mm.1	ENSMUST00000083193	Gm26127	predicted gene, 26127	39027777	39027883	TC0200000720.mm.1	-0.8	0.13913
TC0700002796.mm.1	NR_037228	Mir3068	microRNA 3068	87437679	87437817	TC1200002126.mm.1	-0.1	0.139301
TC0700002798.mm.1	NCBI_Gene:10004312	Gm4242	Gm4242 predicted gene 4242	61232397	61232935	TC1900001763.mm.1	-1.0	0.139348
TC0700002801.mm.1	ENSMUST00000122083	Gm15757	predicted gene 15757	135006577	135006748	TC0500001571.mm.1	-0.4	0.139453
TC0700002804.mm.1	NM_001077698	Fmnl1	formin-like 1	103171107	103198901	TC1100001708.mm.1	-0.4	0.139453
TC0700002810.mm.1	XR_140632	Gm2163	predicted gene 2163	42466752	42590045	TC0400000409.mm.1	0.1	0.139478
TC0700002813.mm.1	NM_001033496	Zfp213	zinc finger protein 213	23556767	23564226	TC1700001593.mm.1	-0.1	0.139486
TC0700002820.mm.1	ENSMUST00000178455	Gm6686	predicted pseudogene 6686	15566161	15566421	TC1700001502.mm.1	-0.2	0.139531
TC0700002821.mm.1	NM_007750	Cox8a	cytochrome c oxidase subunit VIIIa	7215158	7217616	TC1900001036.mm.1	0.4	0.139551
TC0700002824.mm.1	ENSMUST00000083241	Gm23686	predicted gene, 23686	18177462	18177625	TC0300001690.mm.1	-0.5	0.139576
TC0700002828.mm.1	NR_029727	Mirlet7	microRNA let7b	85707319	85707403	TC1500000819.mm.1	0.2	0.139785
TC0700002841.mm.1	ENSMUST00000157787	Gm24241	predicted gene, 24241	92688864	92689008	TC1000002687.mm.1	-0.2	0.139879
TC0700002842.mm.1	NM_001170332	Clec4a2	C-type lectin domain family 4, member a2	123106428	123143999	TC0600001401.mm.1	0.2	0.139952
TC0700002849.mm.1	ENSMUST00000180367	Gm23148	predicted gene, 23148	62264314	62264420	TC0400000697.mm.1	-0.8	0.140019
TC0700002872.mm.1	NR_030459	Mir687	microRNA 687	73206763	73206851	TC1400002384.mm.1	-0.2	0.140107
TC0700002877.mm.1	NM_011831	Insl5	insulin-like 5	103017872	103026842	TC0400003170.mm.1	-0.2	0.140119
TC0700002880.mm.1	ENSMUST00000121818	Gm12920	predicted gene 12920	10813543	10814728	TC0400000074.mm.1	-0.1	0.14022
TC0700002885.mm.1	NM_001080390	Mark2	MAP/microtubule affinity-regulating kinase 2	7275396	7341860	TC1900001039.mm.1	-0.1	0.140256
TC0700002887.mm.1	NM_175145	Tmem127	transmembrane protein 127	127247908	127261107	TC0200001910.mm.1	0.1	0.140273
TC0700002911.mm.1	ENSMUST00000096092	Gm5301	predicted pseudogene 5301	23165338	23167413	TC0600001928.mm.1	-0.1	0.140375
TC0700002912.mm.1	ENSMUST00000082985	Gm22572	predicted gene, 22572	25208623	25208727	TC0200000400.mm.1	-0.2	0.140382
TC0700002918.mm.1	NM_009463	Ucp1	uncoupling protein 1 (mitochondrial, proton car	83290348	83298456	TC0800000919.mm.1	-0.9	0.140494
TC0700002919.mm.1	ENSMUST00000083157	Gm23678	predicted gene, 23678	19762668	19762774	TC0X00001917.mm.1	-0.5	0.140559
TC0700002927.mm.1	NM_138601	D10Jhu8	DNA segment, Chr 10, Johns Hopkins University	78162067	78169768	TC1000002442.mm.1	0.4	0.140668
TC0700002930.mm.1	ENSMUST00000104067	Gm26078	predicted gene, 26078	96762031	96762158	TC0100000965.mm.1	0.1	0.140695
TC0700002938.mm.1	NM_194350	Mafa	v-maf musculoaponeurotic fibrosarcoma oncoge	75746843	75747922	TC1500001743.mm.1	-0.1	0.140737
TC0700002939.mm.1	ENSMUST00000120893	Gm5389	predicted gene 5389	57659732	57660907	TC0X00000535.mm.1	0.1	0.14078
TC0700002944.mm.1	NM_019553	Ddx21	DEAD (Asp-Glu-Ala-Asp) box polypeptide 21	62580247	62602298	TC1000002264.mm.1	-0.3	0.140798
TC0700002950.mm.1	NM_026393	Nmral1	NmrA-like family domain containing 1	4710059	4719356	TC1600001135.mm.1	-0.1	0.140868
TC0700002967.mm.1	XM_001474822	Gm2808	predicted gene 2808	6509483	6583118	TC1700001385.mm.1	-0.2	0.140943
TC0700002974.mm.1	XM_003688870	LOC2158	uncharacterized LOC215866	25902398	25903940	TC1000000229.mm.1	-0.2	0.141001
TC0700002984.mm.1	NM_023633	2410016	RIKEN cDNA 2410016O06 gene	83950608	83952953	TC1200000796.mm.1	-0.2	0.141044
TC0700002988.mm.1	NM_029852	Ccdc41	coiled-coil domain containing 41	94688790	94790336	TC1000001153.mm.1	-0.2	0.14118
TC0700002990.mm.1	NM_028283	Uaca	uveal autoantigen with coiled-coil domains and	60794548	60880370	TC0900000769.mm.1	0.2	0.141267
TC0700002991.mm.1	NCBI_Gene:629859:p	Ighv1-1	Ighv1-11 immunoglobulin heavy variable V1-11	114612244	114612536	TC1200002606.mm.1	-0.7	0.141348
TC0700002993.mm.1	NM_029690	Actrt3	actin related protein T3	30597073	30599939	TC0300001786.mm.1	-0.2	0.141375
TC0700003000.mm.1	ENSMUST00000179499	Gm24863	predicted gene, 24863	79454970	79455076	TC1300000956.mm.1	-0.7	0.141507
TC0700003005.mm.1	NM_019742	Tusc2	tumor suppressor candidate 2	107563255	107566108	TC0900001374.mm.1	0.1	0.141515
TC0700003006.mm.1	ENSMUST00000083261	Gm26071	predicted gene, 26071	35441190	35441296	TC1200000308.mm.1	-0.8	0.141559
TC0700003007.mm.1	ENSMUST00000083372	Gm23264	predicted gene, 23264	66086094	66086200	TC1700001082.mm.1	-0.7	0.141776
TC0700003017.mm.1	ENSMUST00000175017	Gm25026	predicted gene, 25026	145878286	145878473	TC0200002168.mm.1	0.2	0.141798
TC0700003022.mm.1	ENSMUST00000082845	Gm22997	predicted gene, 22997	110218003	110218109	TC0200001630.mm.1	-0.8	0.141832
TC0700003023.mm.1	NM_013818	Gtpbp1	GTP binding protein 1	79690895	79721479	TC1500000679.mm.1	-0.3	0.1423
TC0700003024.mm.1	NM_145391	Tapbpl	TAP binding protein-like	125223933	125231860	TC0600003139.mm.1	-0.2	0.142322
TC0700003026.mm.1	ENSMUST00000104034	Gm22270	predicted gene, 22270	107905177	107905308	TC0500001088.mm.1	-1.1	0.142449
TC0700003028.mm.1	NM_015751	Abce1	ATP-binding cassette, sub-family E (OABP), mem	79683442	79711740	TC0800002523.mm.1	-0.2	0.142487
TC0700003030.mm.1	ENSMUST00000179018	Gm22969	predicted gene, 22969	46450413	46450519	TC0700000876.mm.1	-0.8	0.142495
TC0700003041.mm.1	NM_183146	A530054	RIKEN cDNA A530054K11 gene	67617001	67637791	TC1300002255.mm.1	-0.4	0.142499
TC0700003043.mm.1	NM_008477	Ktn1	kinectin 1	47649311	47736564	TC1400000517.mm.1	-0.2	0.142531
TC0700003059.mm.1	NM_011876	Twf2	twinfilin, actin-binding protein, homolog 2 (Dr	106203108	106215389	TC0900001337.mm.1	-0.3	0.142541
TC0700003061.mm.1	ENSMUST00000097218	Gm9008	predicted pseudogene 9008	76495475	76497784	TC0600002518.mm.1	-0.3	0.142642
TC0700003066.mm.1	ENSMUST00000120905	Gm12180	predicted gene 12180	48568355	48569015	TC1100000490.mm.1	-0.1	0.142687
TC0700003089.mm.1	NM_011653	Tuba1a	tubulin, alpha 1A	98949839	98953551	TC1500002200.mm.1	0.3	0.142735
TC0700003092.mm.1	NM_146211	Glt25d1	glycosyltransferase 25 domain containing 1	71610998	71624911	TC0800000798.mm.1	0.1	0.14282
TC0700003113.mm.1	NM_001099327	Gm14305	predicted gene 14305	176708328	176721813	TC0200005490.mm.1	0.5	0.142835
TC0700003115.mm.1	NM_145360	Idi1	isopentenyl-diphosphate delta isomerase	8885501	8892451	TC1300000045.mm.1	-0.1	0.142897
TC0700003135.mm.1	ENSMUST00000116893	Gm22709	predicted gene, 22709	5614473	5614583	TC1800000030.mm.1	-0.2	0.143121
TC0700003136.mm.1	NM_012021	Prdx5	peroxiredoxin 5	6906697	6910106	TC1900001019.mm.1	0.2	0.143125
TC0700003142.mm.1	ENSMUST00000116760	Gm26472	predicted gene, 26472	159331796	159331878	TC0100003343.mm.1	0.4	0.1432
TC0700003143.mm.1	NM_172938	Scml4	sex comb on midleg-like 4 (Drosophila)	42860370	42960782	TC1000000388.mm.1	-0.1	0.1432
TC0700003145.mm.1	ENSMUST00000116695	Gm24586	predicted gene, 24586	96266851	96266941	TC0100002852.mm.1	0.5	0.143202
TC0700003146.mm.1	OTTMUST00000062943	AC16411	---	144723627	144723812	TC0500003581.mm.1	-0.3	0.143232
TC0700003148.mm.1	NR_030566	Mir466f	microRNA 466f-1	12071790	12413554	TC1900000238.mm.1	0.5	0.143274
TC0700003151.mm.1	ENSMUST00000116799	Gm25738	predicted gene, 25738	83508654	83508745	TC0600002573.mm.1	0.5	0.143488
TC0700003154.mm.1	NR_030571	Mir467c	microRNA 467c	10473931	10474027	TC0200000104.mm.1	0.2	0.143507
TC0700003156.mm.1	ENSMUST00000179876	Gm25939	predicted gene, 25939	72255008	72255198	TC0100000600.mm.1	-0.9	0.143525
TC0700003157.mm.1	ENSMUST00000179159	Gm24112	predicted gene, 24112	40850144	40850226	TC0400002451.mm.1	0.4	0.143536
TC0700003160.mm.1	ENSMUST00000104867	Gm22824	predicted gene, 22824	28608195	28608286	TC0200000489.mm.1	0.4	0.143555

TC0700003161.mm.1	NM_023670	Igf2bp3	insulin-like growth factor 2 mRNA binding prote	49085218	49214954	TC0600002237.mm.1	-0.2	0.143556
TC0700003162.mm.1	NM_146035	Mgat2	mannoside acetylglucosaminyltransferase 2	69184157	69186773	TC1200000563.mm.1	-0.2	0.143562
TC0700003164.mm.1	NR_030500	Mir721	microRNA 721	136375716	136375803	TC0500003420.mm.1	-0.2	0.143634
TC0700003165.mm.1	ENSMUST00000163472	Gm17349	predicted gene, 17349	99702176	99705490	TC1500002219.mm.1	-0.1	0.143687
TC0700003166.mm.1	ENSMUST00000103887	Gm23358	predicted gene, 23358	8588615	8588724	TC0100001935.mm.1	-0.2	0.143806
TC0700003167.mm.1	XR_141374	LOC1008	uncharacterized LOC100861913	41005013	41013815	TC1900001500.mm.1	-0.1	0.14385
TC0700003168.mm.1	NM_198012	Trim68	tripartite motif-containing 68	102677579	102687326	TC0700003865.mm.1	0.1	0.143875
TC0700003172.mm.1	NM_028427	Tmem192	transmembrane protein 192	64947185	64969037	TC0800000674.mm.1	0.1	0.143894
TC0700003173.mm.1	ENSMUST00000160079	Gm3355	predicted gene 3355	13862317	13862803	TC1700001478.mm.1	-0.5	0.143934
TC0700003175.mm.1	ENSMUST00000055613	Gm7327	predicted gene 7327	61785381	61786032	TC0X00000568.mm.1	-0.3	0.144019
TC0700003177.mm.1	NM_144901	Csde1	cold shock domain containing E1, RNA binding	103020546	103058189	TC0300001040.mm.1	0.2	0.144081
TC0700003180.mm.1	ENSMUST00000158652	Gm24546	predicted gene, 24546	18679128	18679229	TC0900000138.mm.1	0.2	0.144128
TC0700003183.mm.1	NM_001110515	Psmg4	proteasome (prosome, macropain) assembly cha	34162964	34178172	TC1300000392.mm.1	-0.1	0.14415
TC0700003186.mm.1	ENSMUST00000089098	Gm7735	predicted gene 7735	89169490	89169648	TC1600000974.mm.1	-0.3	0.144333
TC0700003187.mm.1	ENSMUST00000179935	LOC1010	protein FAM205A-like // protein FAM205A-like	23801	25222	TC4_GL456350_rand	0.2	0.144378
TC0700003188.mm.1	ENSMUST00000140182	Gm12612	predicted gene 12612	60669140	60671125	TC1100002890.mm.1	-0.1	0.144455
TC0700003189.mm.1	NM_145156	Slc25a2	solute carrier family 25, member 28	43663801	43674881	TC1900001544.mm.1	0.1	0.14447
TC0700003190.mm.1	XR_106143	G430095	RIKEN cDNA G430095P16 gene	84723007	84726846	TC0800000960.mm.1	0.1	0.144479
TC0700003192.mm.1	ENSMUST00000082827	Gm23514	predicted gene, 23514	25685140	25685269	TC1100000262.mm.1	-0.3	0.144534
TC0700003193.mm.1	ENSMUST00000180171	Gm25196	predicted gene, 25196	23406996	23407105	TC0700000352.mm.1	-0.1	0.144555
TC0700003195.mm.1	NM_001161730	Tap1	transporter 1, ATP-binding cassette, sub-family	34187553	34197225	TC1700000621.mm.1	-0.3	0.144705
TC0700003196.mm.1	NM_053164	Mrpl43	mitochondrial ribosomal protein L43	45005014	45006442	TC1900001569.mm.1	-0.2	0.144786
TC0700003197.mm.1	NM_021518	Rab2a	RAB2A, member RAS oncogene family	8535644	8607778	TC0400000052.mm.1	0.2	0.144827
TC0700003198.mm.1	ENSMUST00000120406	Gm15554	predicted gene 15554	75772159	75773071	TC1600001918.mm.1	-0.1	0.145089
TC0700003200.mm.1	NM_130864	Acaa1a	acetyl-Coenzyme A acyltransferase 1A	119339676	119350299	TC0900001576.mm.1	0.1	0.145097
TC0700003202.mm.1	ENSMUST00000083459	Gm24861	predicted gene, 24861	78624747	78624853	TC1600000902.mm.1	-0.3	0.145172
TC0700003203.mm.1	NM_018798	Ubqln2	ubiquilin 2	153498227	153501570	TC0X00001558.mm.1	0.3	0.145312
TC0700003204.mm.1	NM_027181	Pin4	protein (peptidyl-prolyl cis/trans isomerase) N	102119447	102127673	TC0X00000990.mm.1	-0.2	0.145507
TC0700003206.mm.1	ENSMUST00000179057	Gm25101	predicted gene, 25101	21114369	21114475	TC1500000140.mm.1	-0.6	0.145543
TC0700003207.mm.1	NR_039564	Mir5105	microRNA 5105	146261003	146261084	TC0500001782.mm.1	0.4	0.145583
TC0700003208.mm.1	NM_011894	Sh3bp5	SH3-domain binding protein 5 (BTK-associated)	31359880	31436078	TC1400001676.mm.1	0.4	0.145595
TC0700003209.mm.1	ENSMUST00000104115	Gm22472	predicted gene, 22472	101242738	101242871	TC0X00000969.mm.1	-0.1	0.145663
TC0700003211.mm.1	ENSMUST00000098035	Gm21286	predicted gene, 21286	60838256	60839649	TC0400000679.mm.1	0.2	0.145749
TC0700003212.mm.1	ENSMUST00000175077	Gm22695	predicted gene, 22695	117546972	117547026	TC0800003010.mm.1	0.3	0.145861
TC0700003213.mm.1	NR_035469	Mir1947	microRNA 1947	33105361	33105445	TC1600000463.mm.1	-0.2	0.145868
TC0700003214.mm.1	NM_001195097	3425401	RIKEN cDNA 3425401B19 gene	32659119	32685272	TC1400001708.mm.1	0.1	0.145908
TC0700003215.mm.1	ENSMUST00000180226	Gm23144	predicted gene, 23144	88835300	88835406	TC1500000853.mm.1	-0.8	0.145921
TC0700003216.mm.1	ENSMUST00000095940	Rpl21-p	ribosomal protein L21, pseudogene 5	83371251	83371733	TC1600001957.mm.1	-0.6	0.145943
TC0700003217.mm.1	ENSMUST00000117265	Gm6134	predicted pseudogene 6134	112976213	112976383	TC0600001237.mm.1	-0.6	0.146014
TC0700003218.mm.1	ENSMUST00000082908	Gm26206	predicted gene, 26206	3102016	3102125	TC0100000003.mm.1	-0.2	0.146189
TC0700003219.mm.1	NM_001163729	Klhdc3	kelch domain containing 3	46674550	46680930	TC1700002185.mm.1	-0.2	0.146219
TC0700003220.mm.1	NM_019518	Grasp	GRP1 (general receptor for phosphoinositides 1)	101224207	101232756	TC1500001065.mm.1	0.2	0.146246
TC0700003221.mm.1	NM_134229	Vmn1r67	vomeronasal 1 receptor 67	10446789	10447787	TC0700000107.mm.1	0.1	0.146284
TC0700003222.mm.1	NM_001002898	Sirpb1a	signal-regulatory protein beta 1A	15371827	15575065	TC0300001674.mm.1	0.1	0.146348
TC0700003223.mm.1	XM_001472546	Gm12693	predicted gene 12693	94929401	94936269	TC0400000954.mm.1	-0.2	0.146366
TC0700003224.mm.1	NM_010748	Lyst	lysosomal trafficking regulator	13590409	13777440	TC1300000089.mm.1	-0.3	0.14646
TC0700003225.mm.1	NM_019930	Ranbp9	RAN binding protein 9	43402673	43480973	TC1300001882.mm.1	-0.2	0.146466
TC0700003226.mm.1	ENSMUST00000173935	Skiv2l-	superkiller viralicidic activity 2-like (S. cer	34769833	34771228	TC1700001925.mm.1	-0.1	0.146531
TC0700003227.mm.1	ENSMUST00000184975	AC12361	N/A	7975328	7975407	TC1500000052.mm.1	-0.8	0.146571
TC0700003228.mm.1	NM_025851	1700010	RIKEN cDNA 1700010I14 gene	8988333	9008319	TC1700000096.mm.1	-0.1	0.146715
TC0700003229.mm.1	ENSMUST00000052897	Tmsb10	thymosin, beta 10	24862202	24862697	TC0700000399.mm.1	-0.4	0.146748
TC0700003232.mm.1	ENSMUST00000119322	Gm13198	predicted gene 13198	5156392	5157217	TC0200000049.mm.1	-0.1	0.146781
TC0700003233.mm.1	NM_007761	Crcp	calcitonin gene-related peptide-receptor compo	130029290	130060790	TC0500001521.mm.1	-0.2	0.146795
TC0700003236.mm.1	NM_009749	Bex2	brain expressed X-linked 2	136066564	136068236	TC0X00003018.mm.1	-0.1	0.146828
TC0700003257.mm.1	ENSMUST00000082638	Gm25801	predicted gene, 25801	100769023	100769128	TC1200002234.mm.1	-0.8	0.146838
TC0700003258.mm.1	NM_001168497	Plscr3	phospholipid scramblase 3	69846372	69852058	TC1100000926.mm.1	0.1	0.146991
TC0700003259.mm.1	ENSMUST00000083426	Gm24412	predicted gene, 24412	97521808	97521916	TC0700001355.mm.1	-0.4	0.147095
TC0700003260.mm.1	ENSMUST00000157924	Gm24959	predicted gene, 24959	20844447	20844592	TC1800001050.mm.1	-0.2	0.147257
TC0700003262.mm.1	ENSMUST00000082950	Gm24204	predicted gene, 24204	80088447	80088553	TC1500001900.mm.1	-0.7	0.14737
TC0700003263.mm.1	ENSMUST00000170118	Gm17113	predicted gene 17113	29183036	29183383	TC0700000525.mm.1	-0.1	0.147554
TC0700003264.mm.1	ENSMUST00000116935	Gm23086	predicted gene, 23086	49637682	49637774	TC1300000570.mm.1	0.4	0.14765
TC0700003265.mm.1	NCBI_Gene:626583:p	Igkv3-2	immunoglobulin kappa variable 3-2	70698468	70699067	TC0600003530.mm.1	-1.4	0.147993
TC0700003266.mm.1	NCBI_Gene:626347:p	Igkv3-4	immunoglobulin kappa variable 3-4	70671789	70672377	TC0600003528.mm.1	-0.8	0.148041
TC0700003267.mm.1	NM_001081975	Mfap1b	microfibrillar-associated protein 1B	121460235	121474067	TC0200004491.mm.1	-0.3	0.14814
TC0700003268.mm.1	NR_028513	Snora73	small nucleolar RNA, H/ACA box 73b	0	0	TSUnmapped0000017	-0.8	0.148176
TC0700003269.mm.1	ENSMUST00000157563	Gm22214	predicted gene, 22214	136096260	136096431	TC0500003412.mm.1	0.1	0.148182
TC0700003272.mm.1	ENSMUST00000104700	Gm22901	predicted gene, 22901	146399134	146399217	TC0300003098.mm.1	0.3	0.148208
TC0700003273.mm.1	NM_010555	Il1r2	interleukin 1 receptor, type II	40084768	40125227	TC0100000292.mm.1	-0.1	0.148217
TC0700003274.mm.1	NM_146097	Cbwd1	COBW domain containing 1	24919916	24961616	TC1900001289.mm.1	-0.1	0.148256
TC0700003275.mm.1	NR_029572	Mir186	microRNA 186	157544279	157544349	TC0300001577.mm.1	-0.2	0.148308
TC0700003276.mm.1	NM_010431	Hif1a	hypoxia inducible factor 1, alpha subunit	73901375	73947530	TC1200000652.mm.1	-0.2	0.148337
TC0700003277.mm.1	ENSMUST00000158453	Gm24502	predicted gene, 24502	75561046	75561150	TC0500002620.mm.1	-0.2	0.148339
TC0700003278.mm.1	ENSMUST00000083809	Gm25008	predicted gene, 25008	45620679	45620759	TC1700000867.mm.1	-0.8	0.148384
TC0700003279.mm.1	NM_134158	AF25170	cDNA sequence AF251705	114996721	115001880	TC1100004054.mm.1	0.1	0.14844
TC0700003280.mm.1	NM_001193666	Gm13304	predicted gene 13304	42114787	42115917	TC0400000394.mm.1	-0.8	0.148513
TC0700003281.mm.1	ENSMUST00000183020	Gm5710	predicted gene 5710	121180103	121181097	TC0300002837.mm.1	-0.1	0.148532
TC0700003282.mm.1	NM_001024560	Snx32	sorting nexin 32	5494848	5510489	TC1900000971.mm.1	0.1	0.148674
TC0700003283.mm.1	NM_007756	Cplx1	complexin 1	108518554	108550027	TC0500002947.mm.1	-0.1	0.148754

TC0700003284.mm.1	ENSMUST00000083005	Gm23721	predicted gene, 23721	61936446	61936552	TC1100002928.mm.1	-0.8	0.148783
TC0700003285.mm.1	ENSMUST00000158667	Gm23209	predicted gene, 23209	150321193	150321302	TC0400001977.mm.1	0.2	0.148824
TC0700003286.mm.1	NM_019729	Usp8	ubiquitin specific peptidase 8	126707328	126759314	TC0200001900.mm.1	0.2	0.148922
TC0700003287.mm.1	ENSMUST00000116897	Gm22712	predicted gene, 22712	60954060	60954133	TC0200003616.mm.1	0.2	0.148932
TC0700003288.mm.1	NM_148947	Ly6g5c	lymphocyte antigen 6 complex, locus G5C	35108279	35111991	TC1700000667.mm.1	-0.1	0.149091
TC0700003289.mm.1	NM_025503	1700029	RIKEN cDNA 1700029P11 gene	81980540	81981563	TC1500000735.mm.1	-0.1	0.149226
TC0700003290.mm.1	NM_175406	Atp6v0d	ATPase, H+ transporting, lysosomal V0 subunit D	19876838	19922605	TC0400002275.mm.1	0.5	0.149259
TC0700003291.mm.1	NR_029419	Tmem161	transmembrane protein 161B	84222296	84295966	TC1300000983.mm.1	-0.1	0.149328
TC0700003292.mm.1	ENSMUST00000071781	Gm9234	predicted pseudogene 9234 // peptidylprolyl is	96895617	96896352	TC0900001219.mm.1	-0.4	0.149334
TC0700003293.mm.1	ENSMUST00000144091	Gm16357	predicted gene 16357	176116023	176117866	TC0200005345.mm.1	0.3	0.149376
TC0700003294.mm.1	NM_028976	Gorasp1	golgi reassembly stacking protein 1	119925673	119937558	TC0900003249.mm.1	0.1	0.149471
TC0700003295.mm.1	NM_001253386	Serinc2	serine incorporator 2	130253495	130279205	TC0400003629.mm.1	-0.1	0.149473
TC0700003296.mm.1	NM_001013369	Pfdn4	prefoldin 4	170496428	170519123	TC0200002645.mm.1	-0.1	0.14949
TC0700003297.mm.1	NM_025584	Cd99	CD99 antigen	0	0	TSUnmapped0000003	0.2	0.14963
TC0700003298.mm.1	ENSMUST00000104774	Gm24603	predicted gene, 24603	121970552	121970637	TC0200001831.mm.1	0.4	0.149653
TC0700003299.mm.1	ENSMUST00000082730	Gm24459	predicted gene, 24459	124357238	124357323	TC0800001543.mm.1	-0.2	0.149823
TC0700003300.mm.1	NM_011774	Slc30a4	solute carrier family 30 (zinc transporter), me	122681233	122702663	TC0200004512.mm.1	-0.2	0.150102
TC0700003301.mm.1	NM_008592	Foxc1	forkhead box C1	31806646	31810643	TC1300000353.mm.1	0.1	0.150347
TC0700003302.mm.1	NM_197993	Tut1	terminal uridylyl transferase 1, U6 snRNA-speci	8953847	8966210	TC1900000169.mm.1	-0.1	0.150384
TC0700003303.mm.1	NR_027817	1500011	RIKEN cDNA 1500011B03 gene	114808196	114813976	TC0500003734.mm.1	-0.1	0.150599
TC0700003304.mm.1	ENSMUST00000175101	Gm24333	predicted gene, 24333	65093831	65093914	TC0800002323.mm.1	-0.3	0.150867
TC0700003305.mm.1	NM_022328	Mllt1	myeloid/lymphoid or mixed-lineage leukemia (tr	56892611	56935388	TC1700002339.mm.1	-0.1	0.150932
TC0700003306.mm.1	NM_028543	Zfp763	zinc finger protein 763	33016863	33033402	TC1700001860.mm.1	-0.1	0.150963
TC0700003307.mm.1	NM_026156	Xab2	XPA binding protein 2	3608421	3621316	TC0800001612.mm.1	-0.2	0.151033
TC0700003308.mm.1	NM_026383	Pnrc2	proline-rich nuclear receptor coactivator 2	135870918	135873850	TC0400003773.mm.1	-0.3	0.151102
TC0700003309.mm.1	ENSMUST00000157640	Gm24784	predicted gene, 24784	103588704	103588765	TC0600001174.mm.1	-0.2	0.15112
TC0700003310.mm.1	ENSMUST00000184408	Vax2os1	Vax2os1 conserved region 3	83710739	83710932	TC0600000934.mm.1	-0.1	0.151218
TC0700003311.mm.1	ENSMUST00000118492	Gm15913	predicted gene 15913	13353876	13354007	TC1400001465.mm.1	-0.2	0.151316
TC0700003312.mm.1	NM_133357	Krt75	keratin 75	101563343	101573904	TC1500002264.mm.1	-0.1	0.15132
TC0700003313.mm.1	ENSMUST00000176889	Gm20691	predicted gene 20691	68903820	68904152	TC0300002125.mm.1	-0.1	0.15133
TC0700003314.mm.1	NR_030475	Mir695	microRNA 695	155356817	155356925	TC0200002364.mm.1	-0.1	0.151416
TC0700003315.mm.1	ENSMUST00000072582	Fabp5l2	fatty acid binding protein 5-like 2	7581516	7581923	TC1800000050.mm.1	-0.4	0.151468
TC0700003316.mm.1	NM_008750	Nxn	nucleoredoxin	76257198	76399141	TC1100003240.mm.1	-0.1	0.151495
TC0700003317.mm.1	NM_013566	Itgb7	integrin beta 7	102215995	102231935	TC1500002288.mm.1	-0.1	0.151705
TC0700003318.mm.1	NM_178648	Ubxn8	UBX domain protein 8	33619586	33641976	TC0800002008.mm.1	0.2	0.151988
TC0700003319.mm.1	NM_025683	Rpe	ribulose-5-phosphate-3-epimerase	66700831	66719805	TC0100000561.mm.1	0.2	0.152026
TC0700003320.mm.1	NM_134136	Fbxo38	F-box protein 38	62504059	62548743	TC1800001441.mm.1	-0.2	0.152067
TC0700003321.mm.1	ENSMUST00000101915	Gm26002	predicted gene, 26002	128650997	128651103	TC0800001597.mm.1	-0.3	0.152092
TC0700003322.mm.1	ENSMUST00000119257	Gm11598	predicted gene 11598	100243273	100243629	TC1100001619.mm.1	-0.3	0.152118
TC0700003323.mm.1	NM_028576	Camkmt	calmodulin-lysine N-methyltransferase	85090552	85458580	TC1700001270.mm.1	0.1	0.152142
TC0700003324.mm.1	ENSMUST00000139800	Gm5353	predicted gene 5353	76862256	76863048	TC0800002494.mm.1	-0.1	0.152217
TC0700003325.mm.1	ENSMUST00000120761	Gm7823	predicted gene 7823	133093940	133095562	TC0X00002979.mm.1	-0.2	0.152242
TC0700003326.mm.1	NM_177003	9630033	RIKEN cDNA 9630033F20 gene	127085116	127109552	TC0600003168.mm.1	0.1	0.152398
TC0700003327.mm.1	NM_001101475	F830016	RIKEN cDNA F830016B08 gene	60293380	60303016	TC1800000609.mm.1	-0.2	0.152431
TC0700003328.mm.1	ENSMUST00000157256	Gm22442	predicted gene, 22442	69350518	69350661	TC1100003038.mm.1	-0.3	0.152543
TC0700003329.mm.1	ENSMUST00000173587	Vmn2r-p	vomeronasal 2, receptor, pseudogene 41	9176976	9180099	TC0700002283.mm.1	0.1	0.15263
TC0700003330.mm.1	NM_009295	Stxbp1	syntaxin binding protein 1	32787602	32847239	TC0200003313.mm.1	0.1	0.152633
TC0700003331.mm.1	ENSMUST00000104868	Gm25172	predicted gene, 25172	70039104	70039190	TC0800000731.mm.1	0.4	0.152652
TC0700003333.mm.1	NR_046144	n-R5s13	nuclear encoded rRNA 5S 136	123599859	123599979	TC0800003140.mm.1	-0.7	0.152719
TC0700003334.mm.1	ENSMUST00000055871	Gm4989	predicted pseudogene 4989	74566925	74567706	TC0X00000719.mm.1	0.1	0.152787
TC0700003335.mm.1	NM_028812	Gtf2e1	general transcription factor II E, polypeptide	37509790	37539789	TC1600001592.mm.1	-0.1	0.152797
TC0700003336.mm.1	NM_001029933	Zfp114	zinc finger protein 114	24175045	24182879	TC0700000371.mm.1	-0.1	0.152866
TC0700003337.mm.1	ENSMUST00000120343	Gm14984	predicted gene 14984	130400957	130402219	TC0X00002964.mm.1	-0.1	0.152936
TC0700003338.mm.1	NM_026403	Nop9	NOP9 nucleolar protein	55745693	55755634	TC1400000791.mm.1	-0.2	0.152975
TC0700003339.mm.1	NM_019773	Rab9	RAB9, member RAS oncogene family	166457252	166479867	TC0X00003346.mm.1	0.2	0.152982
TC0700003340.mm.1	NM_025597	Ndufb3	NADH dehydrogenase (ubiquinone) 1 beta subcc	58586384	58595964	TC0100000436.mm.1	0.3	0.153025
TC0700003341.mm.1	NM_172944	Itgae	integrin alpha E, epithelial-associated	73090583	73147449	TC1100001015.mm.1	-0.1	0.153033
TC0700003343.mm.1	ENSMUST00000119389	Gm14046	predicted gene 14046	129749901	129750409	TC0200001962.mm.1	-0.2	0.153087
TC0700003347.mm.1	ENSMUST00000082801	Gm23057	predicted gene, 23057	72633447	72633553	TC0900000975.mm.1	-0.6	0.153231
TC0700003365.mm.1	ENSMUST00000122796	Gm25290	predicted gene, 25290	92193322	92193465	TC0500000869.mm.1	-0.1	0.153389
TC0700003366.mm.1	NM_031392	Wdr6	WD repeat domain 6	108572311	108578670	TC0900003064.mm.1	-0.2	0.153429
TC0700003369.mm.1	NM_178647	Cggbp1	CGG triplet repeat binding protein 1	64851996	64859507	TC1600000790.mm.1	-0.1	0.153496
TC0700003377.mm.1	ENSMUST00000106074	Krtap5-	keratin associated protein 5-1	142280268	142280939	TC0700004562.mm.1	-0.2	0.153561
TC0700003412.mm.1	NCBI_Gene:692182:p	Igkv9-1	immunoglobulin kappa variable 9-129	67839793	67840266	TC0600003509.mm.1	-0.4	0.153565
TC0700003413.mm.1	NM_019771	Dstn	destrin	143915320	143943324	TC0200002136.mm.1	0.2	0.153634
TC0700003416.mm.1	NM_134097	Topors	topoisomerase I binding, arginine/serine-rich	40259601	40269850	TC0400002436.mm.1	-0.1	0.153642
TC0700003420.mm.1	ENSMUST00000083407	Gm25579	predicted gene, 25579	126567044	126567149	TC0700004284.mm.1	0.2	0.153667
TC0700003433.mm.1	NM_025421	Acyp1	acylphosphatase 1, erythrocyte (common) type	85272398	85288438	TC1200002092.mm.1	-0.1	0.153681
TC0700003435.mm.1	NM_146055	2610301	RIKEN cDNA 2610301G19 gene	70138168	70153811	TC1400002331.mm.1	-0.2	0.153684
TC0700003448.mm.1	NM_010613	Khsrp	KH-type splicing regulatory protein	57021049	57031507	TC1700002344.mm.1	-0.3	0.153788
TC0700003451.mm.1	ENSMUST00000179807	Gm24638	predicted gene, 24638	101392979	101393110	TC0900002950.mm.1	0.2	0.153871
TC0700003452.mm.1	NM_001105060	Vmn2r63	vomeronasal 2, receptor 63	42903251	42933789	TC0700002938.mm.1	0.1	0.15388
TC0700003453.mm.1	NCBI_Gene:434039:p	Igkv6-3	immunoglobulin kappa variable 6-32	70074024	70074584	TC0600003585.mm.1	-0.8	0.153901
TC0700003464.mm.1	NM_172631	Ldlrad4	low density lipoprotein receptor class A domain	67933257	68255551	TC1800000714.mm.1	-0.2	0.153903
TC0700003466.mm.1	NM_013760	Dnajb9	DnaJ (Hsp40) homolog, subfamily B, member 9	44205895	44210068	TC1200001685.mm.1	0.2	0.153986
TC0700003469.mm.1	XM_001476155	Gm12508	predicted gene 12508	55254652	55255335	TC0400000610.mm.1	-0.4	0.154131
TC0700003470.mm.1	NM_026039	Med18	mediator of RNA polymerase II transcription, su	132458729	132463921	TC0400003672.mm.1	-0.1	0.154168
TC0700003473.mm.1	NM_025536	Commd5	COMM domain containing 5	76899910	76901305	TC1500000613.mm.1	-0.2	0.154223

TC0700003486.mm.1	NM_025285	Stmn2	stathmin-like 2	8509527	8561606	TC0300000043.mm.1	0.1	0.154337
TC0700003487.mm.1	NM_009085	Polr1c	polymerase (RNA) I polypeptide C	46243920	46248054	TC1700002170.mm.1	-0.1	0.154361
TC0700003488.mm.1	NM_009912	Ccr1	chemokine (C-C motif) receptor 1	123962126	123968692	TC0900003313.mm.1	0.1	0.154594
TC0700003521.mm.1	ENSMUST00000122442	Gm15335	predicted gene 15335	38717528	38718128	TC1800001235.mm.1	-0.1	0.154881
TC0700003529.mm.1	NM_213733	Npepl1	aminopeptidase-like 1	174110349	174123070	TC0200002698.mm.1	0.1	0.154944
TC0700003530.mm.1	NR_028515	Snora78	small nucleolar RNA, H/ACA box 7	24719676	24719832	TC1700001641.mm.1	-0.3	0.155093
TC0700003536.mm.1	ENSMUST00000158572	Gm25767	predicted gene, 25767	36671658	36671781	TC0500000413.mm.1	0.2	0.155124
TC0700003538.mm.1	NM_001003913	Mars	methionine-tRNA synthetase	127296221	127311786	TC1000003112.mm.1	-0.1	0.155203
TC0700003547.mm.1	ENSMUST00000175383	Gm24366	predicted gene, 24366	122471627	122471712	TC0800003073.mm.1	0.5	0.155302
TC0700003552.mm.1	ENSMUST00000104307	Gm23594	predicted gene, 23594	99943709	99943842	TC0900001256.mm.1	0.1	0.155393
TC0700003564.mm.1	ENSMUST00000066794	Gm8935	predicted pseudogene 8935	12855836	12858633	TC0300000077.mm.1	-0.2	0.155446
TC0700003566.mm.1	ENSMUST00000122635	n-R5s15	nuclear encoded rRNA 5S 15	152304001	152304111	TC0X00001544.mm.1	0.2	0.155533
TC0700003567.mm.1	ENSMUST00000120640	Gm11792	predicted gene 11792	121092392	121092559	TC1100004243.mm.1	-0.2	0.155562
TC0700003570.mm.1	NM_008772	P2ry1	purinergic receptor P2Y, G-protein coupled 1	61002785	61008982	TC0300000491.mm.1	0.1	0.155621
TC0700003572.mm.1	ENSMUST00000173594	Gm18737	predicted gene, 18737	37860807	37861743	TC1700000788.mm.1	-0.1	0.155737
TC0700003574.mm.1	ENSMUST00000178731	Gm22006	predicted gene, 22006	135384915	135385028	TC0X00003009.mm.1	-0.2	0.155776
TC0700003575.mm.1	ENSMUST00000178874	Gm24416	predicted gene, 24416	135445519	135445632	TC0X00003010.mm.1	-0.2	0.155776
TC0700003584.mm.1	NM_026725	Dusp23	dual specificity phosphatase 23	172630769	172632974	TC0100003577.mm.1	0.2	0.15597
TC0700003593.mm.1	XR_104542	D1Ertd4	DNA segment, Chr 1, ERATO Doi 448, expressed	34445790	34449348	TC0100000223.mm.1	-0.2	0.156001
TC0700003604.mm.1	NM_199027	Zfp335	zinc finger protein 335	164891882	164911757	TC0200005139.mm.1	-0.1	0.156298
TC0700003606.mm.1	ENSMUST00000104114	Gm22473	predicted gene, 22473	6634164	6634295	TC0400002158.mm.1	0.1	0.156328
TC0700003613.mm.1	NM_028312	Ccdc12	coiled-coil domain containing 12	110656503	110711593	TC0900001467.mm.1	-0.1	0.156393
TC0700003618.mm.1	ENSMUST00000158960	Gm23338	predicted gene, 23338	40458939	40459033	TC0400002441.mm.1	-0.1	0.1565
TC0700003620.mm.1	NM_001174078	Smarca4	SWI/SNF related, matrix associated, actin depen	21616169	21704230	TC0900000203.mm.1	-0.3	0.156516
TC0700003625.mm.1	NM_009450	Tubb2a	tubulin, beta 2A class IIA	34074278	34078008	TC1300001779.mm.1	-0.4	0.156552
TC0700003653.mm.1	ENSMUST00000104773	Gm24604	predicted gene, 24604	24448064	24448158	TC0200003113.mm.1	0.4	0.15657
TC0700003658.mm.1	NM_028288	Cul4b	cullin 4B	38531616	38576196	TC0X00003425.mm.1	-0.1	0.156635
TC0700003660.mm.1	NR_037297	Mir3110	microRNA 3110	38210441	38210520	TC0X00000364.mm.1	-0.1	0.156715
TC0700003689.mm.1	NM_001029872	Itgad	integrin, alpha D	128154376	128223816	TC0700001877.mm.1	-0.1	0.15678
TC0700003693.mm.1	NM_133744	Ccdc71	coiled-coil domain containing 71	108460518	108465945	TC0900001406.mm.1	-0.1	0.156834
TC0700003695.mm.1	NM_172300	Ube2z	ubiquitin-conjugating enzyme E2Z (putative)	96047431	96065388	TC1100003609.mm.1	-0.1	0.157034
TC0700003699.mm.1	ENSMUST00000179794	Gm25173	predicted gene, 25173	27700671	27700777	TC0400000223.mm.1	-0.7	0.157057
TC0700003704.mm.1	ENSMUST00000177553	Gm25211	predicted gene, 25211	86916216	86916322	TC0500002689.mm.1	-0.7	0.157057
TC0700003708.mm.1	ENSMUST00000083073	Gm26324	predicted gene, 26324	99856308	99856414	TC1100001603.mm.1	-0.7	0.157057
TC0700003711.mm.1	ENSMUST00000083751	Gm23732	predicted gene, 23732	116173313	116173419	TC1200001300.mm.1	-0.7	0.157057
TC0700003712.mm.1	ENSMUST00000119733	Gm13509	predicted gene 13509	49308155	49309462	TC0200000797.mm.1	-0.2	0.157102
TC0700003714.mm.1	NM_009045	Rela	v-rel reticuloendotheliosis viral oncogene homo	5637483	5648130	TC1900000078.mm.1	0.3	0.157254
TC0700003721.mm.1	NM_007421	Adssl1	adenylosuccinate synthetase like 1	112620045	112641358	TC1200001262.mm.1	-0.1	0.157261
TC0700003730.mm.1	NM_009812	Casp8	caspase 8	58795374	58847503	TC0100000440.mm.1	0.4	0.157284
TC0700003733.mm.1	NM_019437	Rfk	riboflavin kinase	17394043	17401349	TC1900000317.mm.1	0.2	0.157536
TC0700003737.mm.1	NM_130456	Nphs2	nephrosis 2 homolog, podocin (human)	156310727	156328035	TC0100001412.mm.1	-0.1	0.157556
TC0700003743.mm.1	NM_001163266	Lsm10	U7 snRNP-specific Sm-like protein LSM10	126096623	126098584	TC0400001452.mm.1	0.1	0.157556
TC0700003746.mm.1	ENSMUST00000083236	Gm23730	predicted gene, 23730	70521598	70521704	TC0900002597.mm.1	-0.6	0.157767
TC0700003747.mm.1	ENSMUST00000082870	Gm22622	predicted gene, 22622	59705746	59705874	TC0600002388.mm.1	-0.1	0.157862
TC0700003751.mm.1	ENSMUST00000157438	Gm24477	predicted gene, 24477	166768745	166768847	TC0200002573.mm.1	0.1	0.157884
TC0700003761.mm.1	NM_001159948	Als2	amyotrophic lateral sclerosis 2 (juvenile)	59162756	59237231	TC0100003879.mm.1	-0.1	0.158031
TC0700003764.mm.1	NM_023556	Mvk	mevalonate kinase	114444269	114460591	TC0500001225.mm.1	0.2	0.158039
TC0700003790.mm.1	ENSMUST00000082824	Gm26331	predicted gene, 26331	89589435	89589541	TC0800002672.mm.1	-0.7	0.158113
TC0700003797.mm.1	NM_001162974	Lrrc51	leucine rich repeat containing 51	101912984	101933895	TC0700003848.mm.1	0.1	0.158186
TC0700003798.mm.1	ENSMUST00000121000	Gm13937	predicted gene 13937	110209178	110210165	TC0200004307.mm.1	0.1	0.158361
TC0700003799.mm.1	ENSMUST00000167167	Rpl17-p	ribosomal protein L17, pseudogene 5	22612591	22613217	TC0500002039.mm.1	-0.4	0.158383
TC0700003804.mm.1	NM_001024928	Zfp667	zinc finger protein 667	6286579	6307883	TC0700000075.mm.1	-0.1	0.158495
TC0700003806.mm.1	NM_198024	Ranbp3l	RAN binding protein 3-like	8967949	9067333	TC1500000062.mm.1	0.2	0.158581
TC0700003807.mm.1	NM_001252473	Tjap1	tight junction associated protein 1	46257851	46283026	TC1700002171.mm.1	-0.1	0.158591
TC0700003815.mm.1	NCBI_Gene:10004247	Trav3d-	Trav3d-2 T cell receptor alpha variable 3D-2	52887587	52888080	TC1400000639.mm.1	-0.2	0.158672
TC0700003818.mm.1	NR_028522	Snord13	small nucleolar RNA, C/D box 13	31149861	31149967	TC0800001976.mm.1	-0.7	0.158732
TC0700003822.mm.1	ENSMUST00000121199	Gm12466	predicted gene 12466	52240903	52241522	TC0400000565.mm.1	-0.2	0.158902
TC0700003825.mm.1	ENSMUST00000077309	Gm4953	predicted pseudogene 4953	159168157	159168642	TC0100003342.mm.1	-0.2	0.158945
TC0700003826.mm.1	NM_001033448	Ap5b1	adaptor-related protein complex 5, beta 1 subur	5568025	5571261	TC1900000075.mm.1	-0.1	0.159113
TC0700003827.mm.1	ENSMUST00000179288	Gm22821	predicted gene, 22821	109295542	109295648	TC0900003081.mm.1	-0.8	0.159165
TC0700003831.mm.1	ENSMUST00000178217	Gm25484	predicted gene, 25484	109347524	109347630	TC0900003083.mm.1	-0.8	0.159165
TC0700003840.mm.1	ENSMUST00000178055	Gm24641	predicted gene, 24641	109358229	109358335	TC0900003084.mm.1	-0.8	0.159165
TC0700003842.mm.1	ENSMUST00000117121	Gm7785	predicted gene 7785	91296045	91296936	TC0100000891.mm.1	-0.2	0.159184
TC0700003844.mm.1	NM_145393	Ythdf2	YTH domain family 2	132184912	132212303	TC0400003659.mm.1	-0.2	0.15922
TC0700003845.mm.1	ENSMUST00000104336	n-R5s67	nuclear encoded rRNA 5S 67	6273311	6273424	TC1100000092.mm.1	0.2	0.159223
TC0700003848.mm.1	NM_008279	Map4k1	mitogen-activated protein kinase kinase kinase	28982050	29003279	TC0700000519.mm.1	-0.4	0.159227
TC0700003857.mm.1	NR_028275	Snord14	small nucleolar RNA, C/D box 14E	0	0	TSUnmapped0000017	-0.9	0.159386
TC0700003860.mm.1	ENSMUST00000101968	n-R5s2	nuclear encoded rRNA 5S 2	6106891	6107009	TC0X00000046.mm.1	-0.5	0.159388
TC0700003861.mm.1	XM_483949	Gm5428	predicted gene 5428	111125851	111126780	TC1000001285.mm.1	-0.3	0.159398
TC0700003862.mm.1	NM_007922	Elk1	ELK1, member of ETS oncogene family	20933395	20950608	TC0X00003419.mm.1	0.1	0.159507
TC0700003865.mm.1	BC058415	Rnf220	ring finger protein 220	117271463	117497052	TC0400003369.mm.1	-0.1	0.159588
TC0700003882.mm.1	NM_175334	Maml1	mastermind like 1 (Drosophila)	50255634	50292336	TC1100002667.mm.1	-0.1	0.159749
TC0700003883.mm.1	ENSMUST00000157896	Gm26088	predicted gene, 26088	77676821	77676951	TC1300000937.mm.1	0.2	0.159816
TC0700003885.mm.1	NCBI_Gene:667449:p	Trav6-1	T cell receptor alpha variable 6-1	52638515	52638962	TC1400000618.mm.1	-0.1	0.159824
TC0700003887.mm.1	NM_008608	Mmp14	matrix metallopeptidase 14 (membrane-insertec	54431604	54441264	TC1400000745.mm.1	0.3	0.159839
TC0700003889.mm.1	ENSMUST00000101833	Gm24265	predicted gene, 24265	115489459	115489599	TC0500001262.mm.1	-0.6	0.159902
TC0700003903.mm.1	NM_029884	Hgsnat	heparan-alpha-glucosaminide N-acetyltransferas	25944459	25976744	TC0800001925.mm.1	0.2	0.159945
TC0700003904.mm.1	NCBI_Gene:629863:p	Ighv1-1	immunoglobulin heavy variable 1-14	114646572	114646865	TC1200002608.mm.1	-1.0	0.16041

TC0700003908.mm.1	ENSMUST00000103850	Mir669f	microRNA 669f	10467229	10467349	TC0200000092.mm.1	0.2	0.160436
TC0700003909.mm.1	ENSMUST00000116715	Gm25776	predicted gene, 25776	91573430	91573572	TC1200002153.mm.1	-0.4	0.160511
TC0700003916.mm.1	NM_007890	Dyrk1a	dual-specificity tyrosine-(Y)-phosphorylation r	94570010	94695519	TC1600001064.mm.1	-0.2	0.160515
TC0700003940.mm.1	ENSMUST00000178688	Gm23092	predicted gene, 23092	91217898	91218004	TC0500002735.mm.1	-0.7	0.160545
TC0700003946.mm.1	ENSMUST00000179440	Gm24242	predicted gene, 24242	151700202	151700308	TC0500003706.mm.1	-0.7	0.160545
TC0700003948.mm.1	NM_026220	Mfap1a	microfibrillar-associated protein 1A	121491911	121506665	TC0200004492.mm.1	-0.3	0.160576
TC0700003953.mm.1	ENSMUST00000158574	Gm25772	predicted gene, 25772	137325559	137325614	TC0400001702.mm.1	-0.7	0.16065
TC0700003960.mm.1	NR_028555	Snord89	small nucleolar RNA, C/D box 89	39548745	39548854	TC0100002238.mm.1	-0.7	0.160935
TC0700003972.mm.1	NM_027748	Taf3	TAF3 RNA polymerase II, TATA box binding prote	9914552	10048609	TC0200002937.mm.1	-0.1	0.160939
TC0700003978.mm.1	NM_024248	Cars2	cysteinyl-tRNA synthetase 2 (mitochondrial)(put	11514017	11550771	TC0800001700.mm.1	-0.1	0.16096
TC0700003986.mm.1	NM_009413	Tpd52l1	tumor protein D52-like 1	31332380	31445921	TC1000001955.mm.1	-0.2	0.161096
TC0700003989.mm.1	ENSMUST00000054148	Gm9790	predicted gene 9790	85915722	85916163	TC0300000673.mm.1	0.3	0.161124
TC0700003990.mm.1	NM_173376	Rbmx2	RNA binding motif protein, X-linked 2	48695004	48710723	TC0X00000439.mm.1	-0.1	0.161278
TC0700003993.mm.1	ENSMUST00000178689	Gm21767	predicted gene, 21767	13941738	13942280	TC0Y00000036.mm.1	0.1	0.161296
TC0700003999.mm.1	ENSMUST00000179302	Gm21822	predicted gene, 21822	18654482	18655024	TC0Y00000051.mm.1	0.1	0.161296
TC0700004002.mm.1	ENSMUST00000107276	Gm10972	predicted gene 10972	94643112	94643600	TC0300000873.mm.1	-0.2	0.161328
TC0700004003.mm.1	ENSMUST00000178491	Gm26245	predicted gene, 26245	96617099	96617205	TC0100000964.mm.1	-0.5	0.16134
TC0700004007.mm.1	NM_201376	Serpinb	serine (or cysteine) peptidase inhibitor, clade	107078167	107083506	TC0100002904.mm.1	-0.1	0.161467
TC0700004008.mm.1	NM_025273	Pcbd1	pterin 4 alpha carbinolamine dehydratase/dimer	61089331	61094329	TC1000000558.mm.1	0.5	0.161508
TC0700004009.mm.1	NM_028036	Tmco6	transmembrane and coiled-coil domains 6	36735068	36742395	TC1800000342.mm.1	-0.1	0.161515
TC0700004015.mm.1	ENSMUST00000122527	Gm25781	predicted gene, 25781	120798853	120798936	TC1400001312.mm.1	-0.8	0.161579
TC0700004018.mm.1	ENSMUST00000175393	Gm25996	predicted gene, 25996	43797417	43797533	TC1600000645.mm.1	0.2	0.161854
TC0700004035.mm.1	NM_026490	Mrpl19	mitochondrial ribosomal protein L19	81957826	81965958	TC0600002543.mm.1	-0.1	0.161898
TC0700004045.mm.1	ENSMUST00000121555	Rpl18-p	ribosomal protein L18, pseudogene 1	60900898	60901422	TC0100000486.mm.1	-0.5	0.161906
TC0700004047.mm.1	ENSMUST00000121172	Gm11952	predicted gene 11952	3872955	3873775	TC1100000024.mm.1	-0.1	0.16192
TC0700004048.mm.1	NM_009938	Copa	coatomer protein complex subunit alpha	172082529	172122332	TC0100001605.mm.1	0.2	0.162033
TC0700004069.mm.1	NM_027346	Taco1	translational activator of mitochondrially enco	106066061	106073612	TC1100001771.mm.1	-0.1	0.162103
TC0700004074.mm.1	NM_027052	Slc38a4	solute carrier family 38, member 4	96994823	97055956	TC1500002147.mm.1	-0.1	0.162199
TC0700004076.mm.1	NM_001081349	Slc43a1	solute carrier family 43, member 1	84838850	84863594	TC0200001224.mm.1	-0.2	0.162212
TC0700004078.mm.1	NCBI_Gene:780885:p	Ighv1-2	immunoglobulin heavy variable V1-24	114772928	114773221	TC1200002616.mm.1	-0.2	0.162241
TC0700004080.mm.1	XM_001479065	Gm8526	predicted gene 8526	88467543	88479056	TC1300000996.mm.1	-0.3	0.162362
TC0700004082.mm.1	ENSMUST00000119381	Gm14828	predicted gene 14828	100337514	100338668	TC0X00000947.mm.1	0.1	0.162429
TC0700004088.mm.1	ENSMUST00000158489	Gm25906	predicted gene, 25906	70123028	70123153	TC0800002384.mm.1	0.1	0.162491
TC0700004104.mm.1	ENSMUST00000179177	Gm26365	predicted gene, 26365	59693220	59693313	TC0700003276.mm.1	0.1	0.162582
TC0700004114.mm.1	NM_010626	Kif7	kinesin family member 7	79698098	79715720	TC0700003566.mm.1	-0.1	0.162729
TC0700004116.mm.1	NM_001081366	Vps8	vacuolar protein sorting 8 homolog (S. cerevisi	21423118	21644681	TC1600000301.mm.1	0.1	0.162784
TC0700004119.mm.1	NR_029547	Mir133a	microRNA 133a-1	10782899	10782985	TC1800000982.mm.1	0.1	0.163133
TC0700004123.mm.1	NM_026719	Lmbrd1	LMBR1 domain containing 1	24678544	24766301	TC0100000171.mm.1	0.2	0.163159
TC0700004128.mm.1	NM_001128634	Tppp2	tubulin polymerization-promoting protein family	51918425	51920700	TC1400000596.mm.1	0.2	0.163222
TC0700004130.mm.1	NR_004410	Snord87	small nucleolar RNA, C/D box 87	9942463	9942549	TC0100001948.mm.1	-0.5	0.16347
TC0700004132.mm.1	NM_029092	Trmt10c	tRNA methyltransferase 10C	56032609	56037819	TC1600001747.mm.1	-0.1	0.163542
TC0700004143.mm.1	NM_153783	Paox	polyamine oxidase (exo-N4-amino)	140115899	140134334	TC0700002002.mm.1	0.1	0.163666
TC0700004144.mm.1	NM_021409	Pard6b	par-6 (partitioning defective 6) homolog beta (	168081004	168101203	TC0200002606.mm.1	-0.1	0.163675
TC0700004148.mm.1	NM_023523	Pecr	peroxisomal trans-2-enoyl-CoA reductase	72259167	72284314	TC0100002554.mm.1	0.3	0.163701
TC0700004152.mm.1	ENSMUST00000083234	Gm25987	predicted gene, 25987	68671416	68671522	TC1500000499.mm.1	-0.5	0.163729
TC0700004155.mm.1	NM_178687	Cd226	CD226 antigen	89176969	89270327	TC1800000909.mm.1	-0.2	0.163735
TC0700004156.mm.1	NM_023637	Sars2	seryl-aminoacyl-tRNA synthetase 2	28741968	28753879	TC0700000509.mm.1	-0.1	0.163737
TC0700004160.mm.1	ENSMUST00000117207	Itpa-ps	inosine triphosphatase (nucleoside triphosphate	94384502	94385098	TC0200004179.mm.1	-0.2	0.163805
TC0700004163.mm.1	ENSMUST00000083111	Gm24046	predicted gene, 24046	89967999	89968163	TC0300002359.mm.1	-0.4	0.163808
TC0700004165.mm.1	ENSMUST00000083792	Gm26163	predicted gene, 26163	30052379	30052556	TC1500001316.mm.1	-0.2	0.163855
TC0700004176.mm.1	ENSMUST00000178139	Gm25245	predicted gene, 25245	91921309	91921415	TC1600002086.mm.1	-0.7	0.16388
TC0700004179.mm.1	NM_134090	Kdelr3	KDEL (Lys-Asp-Glu-Leu) endoplasmic reticulum p	79516408	79527739	TC1500000676.mm.1	0.1	0.164084
TC0700004181.mm.1	NM_018771	Gipc1	GIPC PDZ domain containing family, member 1	83652678	83664789	TC0800000930.mm.1	-0.1	0.164132
TC0700004182.mm.1	NM_175143	Qrich1	glutamine-rich 1	108517087	108560167	TC0900001411.mm.1	-0.2	0.164266
TC0700004188.mm.1	NCBI_Gene:384417:p	Igkv5-3	immunoglobulin kappa variable 5-37	69963312	69963861	TC0600003582.mm.1	-0.2	0.164318
TC0700004201.mm.1	ENSMUST00000119858	Gm6829	predicted pseudogene 6829	9327749	9328108	TC0X00001827.mm.1	-0.1	0.164388
TC0700004202.mm.1	NM_030100	Wibg	within bgcn homolog (Drosophila)	128747879	128766568	TC1000001620.mm.1	-0.2	0.1644
TC0700004203.mm.1	ENSMUST00000103358	Igkv4-5	immunoglobulin kappa chain variable 4-56	69587295	69587580	TC0600002442.mm.1	-0.5	0.1644
TC0700004205.mm.1	ENSMUST00000178754	Gm22243	predicted gene, 22243	115411234	115411353	TC0900003188.mm.1	0.3	0.164552
TC0700004207.mm.1	NM_144509	Arl6ip4	ADP-ribosylation factor-like 6 interacting prot	124116089	124118196	TC0500001437.mm.1	-0.2	0.164561
TC0700004219.mm.1	NM_001039084	Mrpl1	mitochondrial ribosomal protein L1	96209493	96266727	TC0500000925.mm.1	-0.1	0.164595
TC0700004220.mm.1	NM_026401	Mrp63	mitochondrial ribosomal protein 63	57826239	57828745	TC1400000827.mm.1	-0.1	0.164624
TC0700004233.mm.1	NM_016720	Neu3	neuraminidase 3	99811439	99828417	TC0700003806.mm.1	-0.2	0.164705
TC0700004252.mm.1	ENSMUST00000083406	Gm25578	predicted gene, 25578	124490856	124490959	TC0100001107.mm.1	-0.2	0.164815
TC0700004258.mm.1	ENSMUST00000130905	Gm6689	predicted gene 6689	21091366	21091846	TC0800000216.mm.1	-0.3	0.16486
TC0700004261.mm.1	NM_178050	Atl2	atlastin GTPase 2	79848390	79896123	TC1700002573.mm.1	-0.4	0.165024
TC0700004269.mm.1	ENSMUST00000082784	Gm25929	predicted gene, 25929	61334761	61334867	TC1100000778.mm.1	-0.5	0.165062
TC0700004273.mm.1	ENSMUST00000179713	Gm23712	predicted gene, 23712	72418713	72418819	TC0500002571.mm.1	-0.6	0.165072
TC0700004276.mm.1	NM_025390	Pop4	processing of precursor 4, ribonuclease P/MRP f	38262816	38271369	TC0700002880.mm.1	-0.4	0.165098
TC0700004277.mm.1	ENSMUST00000120438	Gm15368	predicted gene 15368	88186662	88187519	TC0100000843.mm.1	0.1	0.165176
TC0700004281.mm.1	NM_001111304	Tbc1d9	TBC1 domain family, member 9	83165352	83272940	TC0800000916.mm.1	-0.1	0.165262
TC0700004282.mm.1	NM_001040686	Zfp692	zinc finger protein 692	58307069	58314627	TC1100000686.mm.1	-0.1	0.165393
TC0700004283.mm.1	ENSMUST00000083739	Gm24258	predicted gene, 24258	66970452	66970584	TC1400000953.mm.1	0.1	0.165421
TC0700004284.mm.1	ENSMUST00000175540	Gm22565	predicted gene, 22565	5705427	5705495	TC0800000046.mm.1	0.2	0.1657
TC0700004291.mm.1	XR_140551	Gm14399	predicted gene 14399	175129099	175142012	TC0200005331.mm.1	0.5	0.165738
TC0700004293.mm.1	ENSMUST00000180129	Gm23805	predicted gene, 23805	175904545	175904651	TC0100001657.mm.1	-0.6	0.165777
TC0700004295.mm.1	NM_025431	Llph	LLP homolog, long-term synaptic facilitation (A	120227060	120232582	TC1000001480.mm.1	-0.1	0.165816
TC0700004296.mm.1	ENSMUST00000083788	Gm26166	predicted gene, 26166	58290251	58290357	TC0300002041.mm.1	-0.3	0.165831

TC0700004300.mm.1	ENSMUST00000181006	Gm26875	predicted gene, 26875	67699082	67700031	TC1300000827.mm.1	-0.1	0.165946
TC0700004305.mm.1	ENSMUST00000178643	Gm22260	predicted gene, 22260	25279445	25279551	TC0100002083.mm.1	-0.6	0.166095
TC0700004309.mm.1	ENSMUST00000105311	Gm6712	predicted gene 6712	17294443	17319511	TC1700000200.mm.1	-0.3	0.166165
TC0700004310.mm.1	ENSMUST00000068987	Fam136b	family with sequence similarity 136, member B,	31276491	31276907	TC1500000201.mm.1	-0.2	0.166289
TC0700004315.mm.1	BC056433	Shpk	sedoheptulokinase	73199460	73224511	TC1100001018.mm.1	0.1	0.166403
TC0700004318.mm.1	NM_001173459	LOC1000	signal-regulatory protein beta 1-like	15795145	15848528	TC0300003225.mm.1	0.2	0.166435
TC0700004320.mm.1	ENSMUST00000082775	Gm22509	predicted gene, 22509	76274344	76274450	TC0800002490.mm.1	-0.2	0.16645
TC0700004321.mm.1	XR_141226	Gm19422	predicted gene, 19422	101467121	101469892	TC1400002622.mm.1	-0.2	0.166458
TC0700004323.mm.1	ENSMUST00000157513	Gm22894	predicted gene, 22894	102373118	102373220	TC0900001287.mm.1	0.1	0.16651
TC0700004324.mm.1	NM_008044	Fxn	frataxin	24261453	24280605	TC1900001276.mm.1	-0.1	0.166514
TC0700004326.mm.1	NM_177717	4732456	RIKEN cDNA 4732456N10 gene	101552356	101562950	TC1500002263.mm.1	-0.2	0.166568
TC0700004332.mm.1	ENSMUST00000119105	Gm12263	predicted gene 12263	59474284	59475765	TC1100002853.mm.1	-0.1	0.166763
TC0700004346.mm.1	ENSMUST00000117547	Gm13803	predicted gene 13803	97949191	97949679	TC0200004194.mm.1	-0.3	0.166784
TC0700004351.mm.1	NM_018879	Nprl2	nitrogen permease regulator-like 2	107542209	107545706	TC0900001371.mm.1	-0.1	0.166809
TC0700004353.mm.1	ENSMUST00000175313	Gm24811	predicted gene, 24811	117848553	117848652	TC0300002823.mm.1	0.4	0.167012
TC0700004354.mm.1	NM_010478	Hspa1b	heat shock protein 1B	34956429	34959422	TC1700001935.mm.1	-0.1	0.167206
TC0700004358.mm.1	NM_019932	Pf4	platelet factor 4	90772435	90773383	TC0500000843.mm.1	0.4	0.16721
TC0700004360.mm.1	NR_046144	n-R5s13	nuclear encoded rRNA 5S 136	0	0	TSUnmapped0000013	-0.6	0.167227
TC0700004363.mm.1	NM_029600	Abcc3	ATP-binding cassette, sub-family C (CFTR/MRP),	94343295	94392997	TC1100003561.mm.1	0.1	0.167315
TC0700004367.mm.1	NM_033616	Csprs	component of Sp100-rs	111558	163011	TC1_GL456221_rand	0.2	0.167522
TC0700004370.mm.1	NM_022418	Tmub1	transmembrane and ubiquitin-like domain conta	24445458	24447854	TC0500002079.mm.1	-0.1	0.1676
TC0700004372.mm.1	NM_008787	Pcnt	pericentrin (kendrin)	76351254	76442912	TC1000002400.mm.1	-0.1	0.167672
TC0700004382.mm.1	NM_028617	Mvb12a	multivesicular body subunit 12A	71542930	71548026	TC0800000795.mm.1	-0.1	0.167684
TC0700004384.mm.1	NM_175383	B3gnt1	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosam	5038826	5049917	TC1900000052.mm.1	-0.1	0.167705
TC0700004392.mm.1	NM_011929	Clcn6	chloride channel 6	148004259	148038821	TC0400004009.mm.1	0.1	0.16788
TC0700004397.mm.1	NM_030165	Csgalna	chondroitin sulfate N-acetylgalactosaminyltrans	118107452	118139140	TC0600002994.mm.1	0.1	0.168029
TC0700004399.mm.1	NM_138684	Wfdc12	WAP four-disulfide core domain 12	164189231	164190608	TC0200005106.mm.1	-0.2	0.168052
TC0700004401.mm.1	ENSMUST00000083367	Gm23248	predicted gene, 23248	65900201	65900308	TC0900000856.mm.1	-0.4	0.168252
TC0700004403.mm.1	NM_016798	Pdlim3	PDZ and LIM domain 3	45885485	45919548	TC0800000521.mm.1	0.1	0.168268
TC0700004409.mm.1	NM_008410	Itm2b	integral membrane protein 2B	73362231	73385280	TC1400002392.mm.1	0.3	0.168307
TC0700004428.mm.1	ENSMUST00000085262	Gm10163	predicted pseudogene 10163	88390807	88391351	TC0900001129.mm.1	-0.4	0.168356
TC0700004430.mm.1	ENSMUST00000158972	Gm24976	predicted gene, 24976	29459194	29459328	TC0200000505.mm.1	0.1	0.16838
TC0700004433.mm.1	ENSMUST00000085379	Rpl26-p	ribosomal protein L26, pseudogene 2	57632578	57633015	TC1200001806.mm.1	-0.1	0.168515
TC0700004445.mm.1	NM_146126	Sord	sorbitol dehydrogenase	122234749	122265340	TC0200001843.mm.1	0.4	0.168554
TC0700004449.mm.1	NM_139001	Cspg4	chondroitin sulfate proteoglycan 4	56865104	56899870	TC0900000686.mm.1	0.1	0.168563
TC0700004469.mm.1	ENSMUST00000185045	5S_rRNA	5S ribosomal RNA	76619155	76619282	TC0800002493.mm.1	0.1	0.168635
TC0700004473.mm.1	NM_178757	Irf2bp1	interferon regulatory factor 2 binding protein	19004065	19006763	TC0700000281.mm.1	-0.1	0.168864
TC0700004481.mm.1	ENSMUST00000179211	AC13310	N/A	30483	32396	TC1_GL456211_rand	-0.6	0.168894
TC0700004484.mm.1	NM_001085383	Anxa9	annexin A9	95296093	95307176	TC0300002473.mm.1	0.1	0.168932
TC0700004489.mm.1	NM_001145881	Zfp212	Zinc finger protein 212	47920476	47932639	TC0600000542.mm.1	-0.1	0.168974
TC0700004496.mm.1	NM_007702	Cidea	cell death-inducing DNA fragmentation factor, a	67343564	67367794	TC1800000702.mm.1	-0.3	0.168996
TC0700004508.mm.1	NM_011783	Agr2	anterior gradient 2 (Xenopus laevis)	35992907	36004087	TC1200000316.mm.1	-0.2	0.168998
TC0700004510.mm.1	ENSMUST00000184547	AC13286	N/A	162674158	162674220	TC0100003398.mm.1	-0.3	0.169012
TC0700004513.mm.1	ENSMUST00000108959	Gm14412	predicted gene 14412	177314520	177324307	TC0200005364.mm.1	0.4	0.169131
TC0700004515.mm.1	NM_028173	Tram1	translocating chain-associating membrane prote	13564702	13589864	TC0100001978.mm.1	-0.3	0.169163
TC0700004519.mm.1	XM_003688779	Gm14419	predicted gene 14419	177000951	177035267	TC0200005491.mm.1	0.4	0.169172
TC0700004524.mm.1	NM_172738	Zfp954	zinc finger protein 954	7114683	7121476	TC0700002221.mm.1	-0.1	0.16936
TC0700004525.mm.1	ENSMUST00000117000	Gm22048	predicted gene, 22048	81735918	81736011	TC0500000772.mm.1	0.3	0.169444
TC0700004531.mm.1	NM_173751	Ilvbl	ilvB (bacterial acetolactate synthase)-like	78574500	78584502	TC1000000789.mm.1	-0.1	0.169451
TC0700004535.mm.1	NM_019993	Aldh9a1	aldehyde dehydrogenase 9, subfamily A1	167349991	167368530	TC0100001550.mm.1	0.2	0.169468
TC0700004542.mm.1	ENSMUST00000179244	Gm22623	predicted gene, 22623	30493942	30494048	TC1000000275.mm.1	-0.8	0.169609
TC0700004548.mm.1	ENSMUST00000157702	Gm25666	predicted gene, 25666	30514578	30514684	TC0500002159.mm.1	0.1	0.169688
TC0700004556.mm.1	ENSMUST00000179110	Gm25354	predicted gene, 25354	15593231	15593335	TC0700000208.mm.1	0.2	0.169878
TC0700004557.mm.1	NM_027328	Prpf31	PRP31 pre-mRNA processing factor 31 homolog	3629985	3642486	TC0700000015.mm.1	-0.2	0.169919
TC0700004560.mm.1	ENSMUST00000120855	Gm15190	predicted gene 15190	159584783	159585058	TC0X00003267.mm.1	-0.6	0.169944
TC0700004561.mm.1	NM_008933	Prm2	protamine 2	10791380	10792105	TC1600001201.mm.1	0.5	0.170106
TC0700004562.mm.1	NM_010260	Gbp2	guanylate binding protein 2	142620602	142638008	TC0300001447.mm.1	0.3	0.170398
TC0700004563.mm.1	ENSMUST00000158530	Gm23582	predicted gene, 23582	21249422	21249560	TC1100002322.mm.1	-0.1	0.170687
TC0700004572.mm.1	ENSMUST00000158199	Gm25222	predicted gene, 25222	64894471	64894596	TC0300002091.mm.1	0.2	0.170747
TC0700004574.mm.1	ENSMUST00000121734	Gm12770	predicted gene 12770	33567253	33567714	TC0700002813.mm.1	-0.1	0.170966
TC0700004585.mm.1	NM_025358	Ndufa9	NADH dehydrogenase (ubiquinone) 1 alpha subc	126821863	126849144	TC0600003165.mm.1	0.3	0.17108
TC0700004586.mm.1	NR_030484	Mir703	microRNA 703	98475556	98475664	TC0500002812.mm.1	-0.5	0.17109
TC0700004588.mm.1	ENSMUST00000143807	Cep110	centrosomal protein 110	35109492	35178822	TC0200000634.mm.1	-0.3	0.171195
TC0700004591.mm.1	NR_035474	Mir669m	microRNA 669m-1	10512790	10512887	TC0200000194.mm.1	0.2	0.171356
TC0700004593.mm.1	ENSMUST00000116734	Gm22105	predicted gene, 22105	39749317	39749432	TC1000000333.mm.1	-0.2	0.171417
TC0700004595.mm.1	NM_020006	Cdc42ep	CDC42 effector protein (Rho GTPase binding) 4	113726850	113751881	TC1100004039.mm.1	0.1	0.171431
TC0700004596.mm.1	NM_025324	Zfp524	zinc finger protein 524	5015501	5018488	TC0700000051.mm.1	-0.1	0.171438
TC0700004601.mm.1	ENSMUST00000083232	Gm24018	predicted gene, 24018	17809591	17809697	TC1300001507.mm.1	-0.8	0.171578
TC0700004607.mm.1	ENSMUST00000177960	Gm23568	predicted gene, 23568	21456090	21456181	TC0800001845.mm.1	0.2	0.171708
TC0700004610.mm.1	ENSMUST00000179245	Gm24829	predicted gene, 24829	21594038	21594129	TC0800001849.mm.1	0.2	0.171708
TC0700004620.mm.1	NR_030469	Mir669b	microRNA 669b	10467790	10467886	TC0200000094.mm.1	0.2	0.171759
TC0700004621.mm.1	ENSMUST00000158762	Gm24679	predicted gene, 24679	66549935	66550045	TC1800001483.mm.1	0.3	0.171797
TC0700004622.mm.1	NM_027201	Zfp511	zinc finger protein 511	140036391	140040605	TC0700002000.mm.1	-0.2	0.171826
TC0700004623.mm.1	ENSMUST00000181162	Gm7389	predicted gene 7389	3994628	3997505	TC0800000025.mm.1	-0.1	0.171827
TC0700004624.mm.1	ENSMUST00000050717	Gm5422	predicted pseudogene 5422	31248140	31251045	TC1000000278.mm.1	-0.2	0.17183
TC0700004629.mm.1	ENSMUST00000175410	Gm23617	predicted gene, 23617	67631825	67631919	TC0500002529.mm.1	0.3	0.171851
TC0700004630.mm.1	ENSMUST00000178232	Ppp1r2-	protein phosphatase 1, regulatory (inhibitor) s	6324022	6324642	TC1700001382.mm.1	0.2	0.171877
TC0700004631.mm.1	NM_172564	Tns4	tensin 4	99065678	99089306	TC1100003694.mm.1	-0.1	0.171961

TC0700004632.mm.1	NM_178380	Dhx38	DEAH (Asp-Glu-Ala-His) box polypeptide 38	109548011	109565601	TC0800002904.mm.1	-0.1	0.172015
TC0700004633.mm.1	NM_172142	Nfkbid	nuclear factor of kappa light polypeptide gene	30421732	30428746	TC0700000562.mm.1	-0.2	0.172108
TC0700004634.mm.1	ENSMUST00000160554	Gm15662	predicted gene 15662	105238134	105238292	TC1000001252.mm.1	0.3	0.172162
TC0700004635.mm.1	ENSMUST00000118151	Gm12799	predicted gene 12799	102046568	102049127	TC0400003164.mm.1	-0.1	0.17219
TC0700004642.mm.1	NM_133705	Pycr2	pyrroline-5-carboxylate reductase family, memb	180904274	180908088	TC0100001722.mm.1	-0.1	0.172194
TC0700004648.mm.1	ENSMUST00000104234	Gm24281	predicted gene, 24281	157430604	157430739	TC0X00001595.mm.1	0.2	0.172396
TC0700004652.mm.1	NM_008492	Ldhb	lactate dehydrogenase B	142490249	142507957	TC0600003375.mm.1	-0.4	0.172425
TC0700004660.mm.1	ENSMUST00000178659	Gm23610	predicted gene, 23610	46900801	46900907	TC1800000489.mm.1	-0.6	0.172612
TC0700004662.mm.1	NM_027206	Tnfaip8	tumor necrosis factor, alpha-induced protein 8-	95139521	95142360	TC0300002467.mm.1	-0.3	0.172684
TC0700004663.mm.1	NM_001114663	Plcl1	phospholipase C-like 1	55405946	55754285	TC0100000404.mm.1	-0.1	0.172719
TC0700004665.mm.1	ENSMUST00000083078	Gm23507	predicted gene, 23507	88905121	88905227	TC1100001383.mm.1	-0.8	0.172877
TC0800000001.mm.1	NM_029231	Pelp1	proline, glutamic acid and leucine rich protein	70392881	70410031	TC1100003095.mm.1	0.1	0.172899
TC0800000009.mm.1	ENSMUST00000156603	Gm15930	predicted gene 15930	3756905	3764030	TC0700002138.mm.1	0.2	0.172927
TC0800000011.mm.1	ENSMUST00000158310	Gm25924	predicted gene, 25924	121024360	121024462	TC0700004203.mm.1	0.1	0.172945
TC0800000019.mm.1	XM_003688781	LOC1008	ubiquitin-conjugating enzyme E2 L3-like	74242264	74257336	TC0300002161.mm.1	-0.3	0.173041
TC0800000022.mm.1	NM_001081185	Flnc	filamin C, gamma	29433153	29461888	TC0600000232.mm.1	0.1	0.173055
TC0800000024.mm.1	ENSMUST00000158649	Gm24547	predicted gene, 24547	122510549	122510697	TC0100001101.mm.1	0.2	0.173142
TC0800000025.mm.1	NM_177708	Rtn4rl1	reticulon 4 receptor-like 1	75193783	75267769	TC1100001063.mm.1	0.1	0.173233
TC0800000026.mm.1	NM_027715	Otud1	OTU domain containing 1	19657752	19660590	TC0200000316.mm.1	-0.1	0.17326
TC0800000027.mm.1	XM_003688827	Gm21135	predicted gene, 21135	32622259	32622699	TC0700000602.mm.1	-0.1	0.17331
TC0800000032.mm.1	NM_001161419	Atp5g1	ATP synthase, H+ transporting, mitochondrial F0	96068852	96075694	TC1100003610.mm.1	-0.1	0.173331
TC0800000039.mm.1	NM_027134	Mtfmt	mitochondrial methionyl-tRNA formyltransferase	65435782	65453054	TC0900000844.mm.1	-0.1	0.173332
TC0800000043.mm.1	ENSMUST00000102332	Gm24273	predicted gene, 24273	131498639	131498802	TC0100003062.mm.1	0.1	0.173443
TC0800000045.mm.1	ENSMUST00000179578	Gm24390	predicted gene, 24390	72490958	72491019	TC1500001680.mm.1	-0.2	0.173466
TC0800000046.mm.1	NM_178245	Bsx	brain specific homeobox	40874127	40877972	TC0900000461.mm.1	-0.1	0.173519
TC0800000051.mm.1	ENSMUST00000157194	Gm25117	predicted gene, 25117	111481493	111481636	TC1000001299.mm.1	-0.3	0.173546
TC0800000064.mm.1	XR_140429	Gm10567	predicted gene 10567	9960163	9967932	TC0100001949.mm.1	0.1	0.173554
TC0800000072.mm.1	ENSMUST00000179333	Ppp1r2-	protein phosphatase 1, regulatory (inhibitor) s	6253903	6254523	TC1700000053.mm.1	0.2	0.173753
TC0800000091.mm.1	ENSMUST00000119271	Gm15285	predicted gene 15285	111361203	111361675	TC1300002658.mm.1	0.3	0.173773
TC0800000109.mm.1	ENSMUST00000083209	Gm25644	predicted gene, 25644	51239690	51239796	TC1900001660.mm.1	-0.2	0.173795
TC0800000123.mm.1	NM_009707	Arhgap6	Rho GTPase activating protein 6	168795099	169304440	TC0X00001700.mm.1	0.1	0.17382
TC0800000124.mm.1	ENSMUST00000082898	n-R5s16	nuclear encoded rRNA 5S 166	132564972	132565092	TC0600001556.mm.1	0.3	0.173853
TC0800000126.mm.1	NR_028526	Snord49	small nucleolar RNA, C/D box 49B	62603079	62603150	TC1100000804.mm.1	-0.7	0.173889
TC0800000128.mm.1	NM_011835	Katna1	katanin p60 (ATPase-containing) subunit A1	7726000	7763150	TC1000000050.mm.1	-0.1	0.174022
TC0800000130.mm.1	NM_028230	Shmt2	serine hydroxymethyltransferase 2 (mitochondri	127517123	127522444	TC1000003117.mm.1	-0.2	0.174028
TC0800000132.mm.1	NR_037277	Mir3094	microRNA 3094	40993695	40993758	TC0400000355.mm.1	0.1	0.174156
TC0800000135.mm.1	ENSMUST00000121016	Gm5898	predicted gene 5898	63542479	63544549	TC0700000967.mm.1	-0.4	0.174175
TC0800000137.mm.1	NM_019953	Cnpy2	canopy 2 homolog (zebrafish)	128322459	128327187	TC1000001598.mm.1	-0.2	0.174199
TC0800000142.mm.1	ENSMUST00000120513	Gm15842	predicted gene 15842	122302422	122303039	TC0500001388.mm.1	-0.2	0.174354
TC0800000157.mm.1	ENSMUST00000082963	Gm22504	predicted gene, 22504	105642338	105642476	TC0700003986.mm.1	-0.1	0.174388
TC0800000158.mm.1	NM_024182	Riok3	RIO kinase 3	12128812	12157367	TC1800000098.mm.1	0.2	0.174615
TC0800000164.mm.1	ENSMUST00000104678	Gm23914	predicted gene, 23914	46255928	46256019	TC1800000476.mm.1	0.4	0.174631
TC0800000176.mm.1	ENSMUST00000085735	Pgk1	phosphoglycerate kinase 1	10898566	10900296	TC1200001415.mm.1	-0.3	0.174689
TC0800000179.mm.1	NM_026445	Sumf2	sulfatase modifying factor 2	129846990	129864050	TC0500001514.mm.1	0.1	0.174792
TC0800000180.mm.1	OTTMUST00000071811	RP23-73	---	29308138	29308620	TC1700000501.mm.1	-0.4	0.174818
TC0800000182.mm.1	NM_178670	8030462	RIKEN cDNA 8030462N17 gene	77633281	77714486	TC1800001628.mm.1	-0.1	0.174876
TC0800000183.mm.1	NR_028554	Snord70	small nucleolar RNA, C/D box 70	59691934	59692020	TC0100000457.mm.1	-0.9	0.1749
TC0800000184.mm.1	NM_001081382	Zfp777	zinc finger protein 777	48024188	48048911	TC0600002216.mm.1	-0.1	0.174919
TC0800000185.mm.1	NM_001033256	Spata5l	spermatogenesis associated 5-like 1	122630625	122636477	TC0200001853.mm.1	-0.1	0.174924
TC0800000188.mm.1	XR_141220	Gm20290	predicted gene, 20290	73372861	73375780	TC1400002393.mm.1	-0.2	0.175388
TC0800000190.mm.1	ENSMUST00000093696	Gm24089	predicted gene, 24089	123601572	123601680	TC0800003141.mm.1	-0.7	0.175509
TC0800000208.mm.1	ENSMUST00000175042	Gm23647	predicted gene, 23647	123623637	123623745	TC0800003154.mm.1	-0.7	0.175509
TC0800000209.mm.1	NM_001122818	Pnpla6	patatin-like phospholipase domain containing 6	3515384	3544267	TC0800000011.mm.1	0.1	0.175512
TC0800000211.mm.1	ENSMUST00000104730	Gm22441	predicted gene, 22441	76333424	76333516	TC1000000738.mm.1	0.4	0.175592
TC0800000212.mm.1	NM_177158	Rinl	Ras and Rab interactor-like	28788969	28798966	TC0700000512.mm.1	-0.1	0.17598
TC0800000213.mm.1	NM_028820	1700017	RIKEN cDNA 1700017B05 gene	57252322	57262599	TC0900002367.mm.1	-0.1	0.176013
TC0800000216.mm.1	ENSMUST00000116945	Gm22031	predicted gene, 22031	3603272	3603397	TC1500001142.mm.1	0.2	0.176069
TC0800000218.mm.1	NM_009206	Slc4a1a	solute carrier family 4 (anion exchanger), memb	31526995	31554042	TC0500000325.mm.1	-0.1	0.176085
TC0800000219.mm.1	OTTMUST00000060650	RP23-21	---	122391379	122392687	TC0600001381.mm.1	0.1	0.17622
TC0800000226.mm.1	NR_028421	D430020	RIKEN cDNA D430020J02 gene	116401947	116405161	TC1200002497.mm.1	-0.1	0.1764
TC0800000227.mm.1	ENSMUST00000174923	Gm22406	predicted gene, 22406	105816908	105817000	TC1400001208.mm.1	0.4	0.176522
TC0800000231.mm.1	NM_033144	8-Sep	septin 8	53519257	53549565	TC1100000608.mm.1	0.2	0.176666
TC0800000232.mm.1	NM_001244617	B4galnt	beta-1,4-N-acetyl-galactosaminyl transferase 1	127165156	127172340	TC1000001551.mm.1	-0.3	0.177069
TC0800000234.mm.1	XM_484215	Gm5445	predicted gene 5445	12378158	12378640	TC1300000069.mm.1	-0.4	0.177093
TC0800000238.mm.1	ENSMUST00000120659	Gm12459	predicted gene 12459	49746731	49747246	TC0400002645.mm.1	-0.1	0.177364
TC0800000241.mm.1	ENSMUST00000101848	Gm23142	predicted gene, 23142	21040256	21040360	TC0800001836.mm.1	0.1	0.177493
TC0800000242.mm.1	XR_033816	Gm7072	predicted gene 7072	22286590	22314946	TC1700001572.mm.1	-0.1	0.177524
TC0800000243.mm.1	ENSMUST00000118084	Gm14801	predicted gene 14801	98009245	98009691	TC0X00002686.mm.1	0.3	0.177652
TC0800000249.mm.1	NM_008518	Ltb	lymphotoxin B	35194439	35196320	TC1700000673.mm.1	-0.5	0.177814
TC0800000254.mm.1	NM_011025	Oxt	oxytocin	130576169	130577054	TC0200001991.mm.1	-0.1	0.177887
TC0800000256.mm.1	ENSMUST00000158532	Gm22425	predicted gene, 22425	67792439	67792576	TC0600002432.mm.1	0.1	0.177894
TC0800000257.mm.1	NM_001146049	Htatip2	HIV-1 tat interactive protein 2, homolog (human	49759106	49774000	TC0700000903.mm.1	0.1	0.178069
TC0800000259.mm.1	ENSMUST00000122376	Gm11452	predicted gene 11452	162907924	162908613	TC0200002473.mm.1	-0.1	0.17815
TC0800000260.mm.1	NR_030545	Mir876	microRNA 876	36645373	36645453	TC0400002414.mm.1	0.1	0.178152
TC0800000261.mm.1	ENSMUST00000181063	Gm11960	predicted gene 11960	4561780	4564637	TC1100000045.mm.1	0.2	0.178163
TC0800000262.mm.1	ENSMUST00000098127	Gm10594	predicted gene 10594	42035113	42035538	TC0400000393.mm.1	0.1	0.178229
TC0800000276.mm.1	ENSMUST00000098118	Gm10594	predicted gene 10594	42458751	42459176	TC0400002500.mm.1	0.1	0.178229
TC0800000277.mm.1	ENSMUST00000178800	Gm10594	predicted gene 10594	80399	80824	TC4_GL456350_rand	0.1	0.178229

TC0800000278.mm.1	ENSMUST00000179681	Gm10594	predicted gene 10594	140144	140569	TC4_JH584293_rand	0.1	0.178229
TC0800000286.mm.1	ENSMUST00000183599	AC16429	N/A	66586810	66586916	TC1300002232.mm.1	0.5	0.178355
TC0800000288.mm.1	ENSMUST00000068960	D830050	RIKEN cDNA D830050J10 gene	115675995	115677136	TC0600001285.mm.1	0.1	0.178534
TC0800000293.mm.1	ENSMUST00000118176	Gm11633	predicted gene 11633	97968792	97969235	TC1100001554.mm.1	-0.2	0.178548
TC0800000297.mm.1	NM_001012330	Zbtb18	zinc finger and BTB domain containing 18	177442407	177450764	TC0100001671.mm.1	-0.1	0.178612
TC0800000309.mm.1	ENSMUST00000102349	Gm23062	predicted gene, 23062	94169302	94169411	TC1600002116.mm.1	0.1	0.178769
TC0800000312.mm.1	NCBI_Gene:432708:p	Ighv1-5	immunoglobulin heavy variable V1-59	115335057	115335514	TC1200002636.mm.1	-0.5	0.178777
TC0800000320.mm.1	NM_009547	Zbtb14	zinc finger and BTB domain containing 14	69383050	69390750	TC1700001110.mm.1	-0.1	0.178903
TC0800000330.mm.1	ENSMUST00000143083	Gm10721	predicted gene 10721	3013140	3014344	TC0900000003.mm.1	0.3	0.178929
TC0800000336.mm.1	NM_001012638	Acd	adrenocortical dysplasia	105695860	105701095	TC0800002831.mm.1	-0.2	0.179039
TC0800000345.mm.1	ENSMUST00000118257	Gm4875	predicted gene 4875	117997207	117997992	TC0600001325.mm.1	0.2	0.179292
TC0800000346.mm.1	NM_025442	Alg5	asparagine-linked glycosylation 5 (dolichyl-pho	54735539	54751127	TC0300000412.mm.1	0.1	0.179308
TC0800000353.mm.1	ENSMUST00000157426	Gm26150	predicted gene, 26150	36406094	36406244	TC0800002063.mm.1	-0.1	0.179429
TC0800000370.mm.1	NM_011335	Ccl21b	chemokine (C-C motif) ligand 21B (leucine)	1	1131	TC4_GL456350_rand	-0.8	0.179611
TC0800000382.mm.1	NR_029650	Mir299	microRNA 299	109710638	109710700	TC1200001168.mm.1	0.1	0.179702
TC0800000384.mm.1	NM_019868	Hnrnph2	heterogeneous nuclear ribonucleoprotein H2	134601179	134607060	TC0X00001283.mm.1	-0.1	0.179706
TC0800000389.mm.1	ENSMUST00000103898	Mir669o	microRNA 669o	10514300	10514395	TC0200000197.mm.1	0.2	0.179896
TC0800000392.mm.1	NM_008874	Plcb3	phospholipase C, beta 3	6952325	6969759	TC1900001025.mm.1	0.1	0.180002
TC0800000394.mm.1	ENSMUST00000120626	Gm12922	predicted gene 12922	123709219	123710027	TC0400003488.mm.1	-0.2	0.180161
TC0800000395.mm.1	NM_001040399	Larp1b	La ribonucleoprotein domain family, member 1B	40950631	40977793	TC0300000312.mm.1	0.1	0.18044
TC0800000396.mm.1	NM_001014981	Wdr7	WD repeat domain 7	63708695	63989760	TC1800000655.mm.1	0.2	0.18051
TC0800000403.mm.1	ENSMUST00000118124	Gm11771	predicted gene 11771	120765310	120767365	TC1100002047.mm.1	-0.1	0.180555
TC0800000406.mm.1	NM_197989	Fam58b	family with sequence similarity 58, member B	78750506	78751729	TC1100003310.mm.1	-0.2	0.180592
TC0800000416.mm.1	ENSMUST00000157978	Gm24192	predicted gene, 24192	39830656	39830800	TC1100000400.mm.1	0.1	0.180601
TC0800000424.mm.1	NM_023547	Ino80b	INO80 complex subunit B	83121765	83125431	TC0600002561.mm.1	-0.1	0.180685
TC0800000440.mm.1	ENSMUST00000175391	Gm25993	predicted gene, 25993	176879834	176879913	TC0100001664.mm.1	-0.1	0.180748
TC0800000441.mm.1	NM_019405	Cetn2	centrin 2	72913532	72918411	TC0X00002415.mm.1	-0.1	0.180956
TC0800000463.mm.1	NM_001081465	Gtf2ird	general transcription factor II I repeat domain	134357661	134456716	TC0500003371.mm.1	-0.2	0.181011
TC0800000498.mm.1	NM_024440	Derl3	Der1-like domain family, member 3	75893398	75895941	TC1000000726.mm.1	-0.1	0.181058
TC0800000506.mm.1	NM_145836	Irf2bpl	interferon regulatory factor 2 binding protein-	86880703	86884814	TC1200002110.mm.1	0.1	0.181122
TC0800000509.mm.1	NM_020614	Taf1b	TATA box binding protein (Tbp)-associated facto	24498581	24558571	TC1200000197.mm.1	-0.2	0.181151
TC0800000521.mm.1	NM_145508	Dyrk3	dual-specificity tyrosine-(Y)-phosphorylation r	131128441	131138234	TC0100003055.mm.1	0.1	0.181383
TC0800000523.mm.1	ENSMUST00000121574	Gm13502	predicted gene 13502	53696121	53696804	TC0200003548.mm.1	-0.3	0.181395
TC0800000527.mm.1	ENSMUST00000104653	Gm24093	predicted gene, 24093	86845811	86845908	TC1000001053.mm.1	0.3	0.181435
TC0800000533.mm.1	NM_027868	Slc41a3	solute carrier family 41, member 3	90604725	90646412	TC0600001078.mm.1	0.1	0.181558
TC0800000534.mm.1	ENSMUST00000179621	Gm22513	predicted gene, 22513	54696782	54696945	TC1200000450.mm.1	-0.3	0.181582
TC0800000553.mm.1	ENSMUST00000082474	Gm23924	predicted gene, 23924	74451797	74451904	TC0600002511.mm.1	-0.8	0.181648
TC0800000557.mm.1	NM_001081116	Arhgef1	Rho guanine nucleotide exchange factor (GEF) 1	100869746	100932161	TC0700003827.mm.1	0.1	0.181719
TC0800000561.mm.1	NM_172437	Pus7l	pseudouridylate synthase 7 homolog (S. cerevisi	94522640	94543547	TC1500002110.mm.1	-0.1	0.182005
TC0800000564.mm.1	XM_891048	Gm6676	predicted gene 6676	7116798	7125412	TC1400001420.mm.1	0.1	0.182168
TC0800000582.mm.1	XM_001477839	Gm16434	predicted gene 16434	7185927	7194540	TC1400001421.mm.1	0.1	0.182168
TC0800000585.mm.1	ENSMUST00000083161	Gm23679	predicted gene, 23679	137150815	137150933	TC0X00001354.mm.1	-0.2	0.182308
TC0800000587.mm.1	NM_175417	Adtrp	androgen dependent TFPI regulating protein	41763148	41847684	TC1300001868.mm.1	0.2	0.18231
TC0800000594.mm.1	NM_146202	Zfp768	zinc finger protein 768	127342795	127345314	TC0700004323.mm.1	0.1	0.182555
TC0800000624.mm.1	ENSMUST00000119542	Gm15921	predicted gene 15921	130208080	130208562	TC0500003316.mm.1	-0.4	0.182721
TC0800000629.mm.1	NM_198680	Serpinb	serine (or cysteine) peptidase inhibitor, clade	107153940	107161114	TC0100003884.mm.1	-0.1	0.182758
TC0800000631.mm.1	XM_003085585	LOC1005	eukaryotic translation initiation factor 1A, X-	88323832	88329682	TC1200000894.mm.1	-0.2	0.182982
TC0800000641.mm.1	ENSMUST00000118750	Gm4459	predicted gene 4459	139659688	139660155	TC0700004484.mm.1	0.3	0.182996
TC0800000643.mm.1	ENSMUST00000174952	Gm22923	predicted gene, 22923	75764322	75764431	TC1600000852.mm.1	0.2	0.183346
TC0800000645.mm.1	ENSMUST00000103834	Gm22707	predicted gene, 22707	43204352	43204461	TC0700000754.mm.1	-0.1	0.183426
TC0800000648.mm.1	NM_053232	Vmn1r29	vomeronasal 1 receptor 29	58307268	58308290	TC0600000706.mm.1	-0.1	0.183544
TC0800000653.mm.1	NM_007995	Fcna	ficolin A	25624666	25628030	TC0200003165.mm.1	0.2	0.183669
TC0800000669.mm.1	ENSMUST00000160287	Gm3555	predicted pseudogene 3555	98457768	98459162	TC0100000978.mm.1	-0.1	0.183692
TC0800000670.mm.1	NM_011879	Ik	IK cytokine	36744656	36757639	TC1800000343.mm.1	-0.2	0.183795
TC0800000674.mm.1	NM_172964	Arhgap2	Rho GTPase activating protein 28	67842706	68004120	TC1700002454.mm.1	0.1	0.183922
TC0800000678.mm.1	NM_001253716	Msra	methionine sulfoxide reductase A	64122621	64455903	TC1400002231.mm.1	0.1	0.183992
TC0800000682.mm.1	ENSMUST00000118577	Gm16418	predicted pseudogene 16418	166431705	166431875	TC0100003469.mm.1	0.3	0.184102
TC0800000691.mm.1	ENSMUST00000175054	Gm22690	predicted gene, 22690	16129566	16129675	TC0400002252.mm.1	0.4	0.184206
TC0800000694.mm.1	ENSMUST00000083231	Gm23815	predicted gene, 23815	69498579	69498685	TC0700003469.mm.1	-0.7	0.184256
TC0800000698.mm.1	NM_199305	Tmem39b	transmembrane protein 39b	129676355	129696838	TC0400003611.mm.1	-0.1	0.184369
TC0800000700.mm.1	ENSMUST00000102075	Gm24098	predicted gene, 24098	38238572	38238680	TC1500000289.mm.1	0.3	0.18438
TC0800000714.mm.1	ENSMUST00000102078	Gm25381	predicted gene, 25381	39308470	39308578	TC1500001429.mm.1	0.3	0.18438
TC0800000726.mm.1	ENSMUST00000179111	Gm23934	predicted gene, 23934	80135466	80135572	TC0100000691.mm.1	-0.7	0.184412
TC0800000731.mm.1	ENSMUST00000179419	Gm24182	predicted gene, 24182	167349025	167349131	TC0100001549.mm.1	-0.7	0.184412
TC0800000732.mm.1	ENSMUST00000178275	Gm25829	predicted gene, 25829	54249102	54249208	TC0100002347.mm.1	-0.7	0.184412
TC0800000744.mm.1	ENSMUST00000179775	Gm22360	predicted gene, 22360	95832129	95832235	TC0100002849.mm.1	-0.7	0.184412
TC0800000754.mm.1	ENSMUST00000083413	Gm25583	predicted gene, 25583	141640490	141640596	TC0200002116.mm.1	-0.7	0.184412
TC0800000756.mm.1	ENSMUST00000083150	Gm26496	predicted gene, 26496	126109908	126110014	TC0200004534.mm.1	-0.7	0.184412
TC0800000759.mm.1	ENSMUST00000083311	Gm22295	predicted gene, 22295	67055958	67056064	TC0300000539.mm.1	-0.7	0.184412
TC0800000773.mm.1	ENSMUST00000083855	Gm25869	predicted gene, 25869	103427437	103427543	TC0300001052.mm.1	-0.7	0.184412
TC0800000774.mm.1	ENSMUST00000083854	Gm22682	predicted gene, 22682	130205465	130205571	TC0300001319.mm.1	-0.7	0.184412
TC0800000780.mm.1	ENSMUST00000083336	Gm25127	predicted gene, 25127	149028932	149029038	TC0300001510.mm.1	-0.7	0.184412
TC0800000782.mm.1	ENSMUST00000083204	Gm24458	predicted gene, 24458	151608343	151608449	TC0300001522.mm.1	-0.7	0.184412
TC0800000786.mm.1	ENSMUST00000083992	Gm22798	predicted gene, 22798	52722649	52722755	TC0300001975.mm.1	-0.7	0.184412
TC0800000787.mm.1	ENSMUST00000083741	Gm24260	predicted gene, 24260	139417757	139417863	TC0300003030.mm.1	-0.7	0.184412
TC0800000790.mm.1	ENSMUST00000179782	Gm24978	predicted gene, 24978	16675923	16676029	TC0400000147.mm.1	-0.7	0.184412
TC0800000795.mm.1	ENSMUST00000179791	Gm24967	predicted gene, 24967	108466944	108467050	TC0400003244.mm.1	-0.7	0.184412
TC0800000796.mm.1	ENSMUST00000178290	Gm22092	predicted gene, 22092	116922384	116922490	TC0400003355.mm.1	-0.7	0.184412

TC0800000798.mm.1	ENSMUST00000179274	Gm25737	predicted gene, 25737	13549506	13549612	TC0600000097.mm.1	-0.7	0.184412
TC0800000800.mm.1	ENSMUST00000180294	Gm26058	predicted gene, 26058	10840587	10840693	TC0600001859.mm.1	-0.7	0.184412
TC0800000803.mm.1	ENSMUST00000082973	Gm25405	predicted gene, 25405	104423274	104423380	TC0700001522.mm.1	-0.7	0.184412
TC0800000813.mm.1	ENSMUST00000083434	Gm24414	predicted gene, 24414	11967150	11967256	TC0700002332.mm.1	-0.7	0.184412
TC0800000817.mm.1	ENSMUST00000083293	Gm25790	predicted gene, 25790	84323309	84323415	TC0700003653.mm.1	-0.7	0.184412
TC0800000818.mm.1	ENSMUST00000177941	Gm22822	predicted gene, 22822	109774612	109774718	TC0700004082.mm.1	-0.7	0.184412
TC0800000823.mm.1	ENSMUST00000083885	Gm24693	predicted gene, 24693	99072463	99072569	TC0800001160.mm.1	-0.7	0.184412
TC0800000832.mm.1	ENSMUST00000093648	Gm26427	predicted gene, 26427	7428222	7428328	TC0800001649.mm.1	-0.7	0.184412
TC0800000834.mm.1	ENSMUST00000082953	Gm24205	predicted gene, 24205	66002346	66002452	TC0800002326.mm.1	-0.7	0.184412
TC0800000840.mm.1	ENSMUST00000179535	Gm25064	predicted gene, 25064	63133283	63133389	TC0900000797.mm.1	-0.7	0.184412
TC0800000844.mm.1	ENSMUST00000179904	Gm22288	predicted gene, 22288	50405813	50405919	TC0X00000451.mm.1	-0.7	0.184412
TC0800000846.mm.1	ENSMUST00000083727	Gm22580	predicted gene, 22580	83536031	83536137	TC0X00000814.mm.1	-0.7	0.184412
TC0800000849.mm.1	ENSMUST00000083894	Gm26317	predicted gene, 26317	162069457	162069563	TC0X00001641.mm.1	-0.7	0.184412
TC0800000852.mm.1	ENSMUST00000177746	Gm25256	predicted gene, 25256	19782854	19782960	TC1000000146.mm.1	-0.7	0.184412
TC0800000868.mm.1	ENSMUST00000178420	Gm24486	predicted gene, 24486	70882104	70882210	TC1000000683.mm.1	-0.7	0.184412
TC0800000885.mm.1	ENSMUST00000178620	Gm24019	predicted gene, 24019	79909195	79909301	TC1000000826.mm.1	-0.7	0.184412
TC0800000891.mm.1	ENSMUST00000179260	Gm26243	predicted gene, 26243	79985506	79985612	TC1000000832.mm.1	-0.7	0.184412
TC0800000895.mm.1	ENSMUST00000178844	Gm25709	predicted gene, 25709	117662282	117662388	TC1000002939.mm.1	-0.7	0.184412
TC0800000910.mm.1	ENSMUST00000083693	Gm24803	predicted gene, 24803	4324149	4324255	TC1100002111.mm.1	-0.7	0.184412
TC0800000916.mm.1	ENSMUST00000082729	Gm24859	predicted gene, 24859	52603788	52603894	TC1200000429.mm.1	-0.7	0.184412
TC0800000919.mm.1	ENSMUST00000082478	Gm22246	predicted gene, 22246	95619818	95619924	TC1200000950.mm.1	-0.7	0.184412
TC0800000929.mm.1	ENSMUST00000097247	Gm22170	predicted gene, 22170	13507862	13507968	TC1200001440.mm.1	-0.7	0.184412
TC0800000930.mm.1	ENSMUST00000082555	Gm23296	predicted gene, 23296	52604485	52604591	TC1200001734.mm.1	-0.7	0.184412
TC0800000931.mm.1	ENSMUST00000179101	Gm24873	predicted gene, 24873	17440790	17440896	TC1300000119.mm.1	-0.7	0.184412
TC0800000932.mm.1	ENSMUST00000179754	Gm22823	predicted gene, 22823	41247686	41247792	TC1400000414.mm.1	-0.7	0.184412
TC0800000937.mm.1	ENSMUST00000177627	Gm24540	predicted gene, 24540	73767862	73767968	TC1400002397.mm.1	-0.7	0.184412
TC0800000941.mm.1	ENSMUST00000178183	Gm24753	predicted gene, 24753	77067791	77067897	TC1500000618.mm.1	-0.7	0.184412
TC0800000945.mm.1	ENSMUST00000178482	Gm23217	predicted gene, 23217	72255350	72255456	TC1500001678.mm.1	-0.7	0.184412
TC0800000949.mm.1	ENSMUST00000179690	Gm26295	predicted gene, 26295	30814162	30814268	TC1600000399.mm.1	-0.7	0.184412
TC0800000951.mm.1	ENSMUST00000178877	Gm25547	predicted gene, 25547	14807163	14807269	TC1600001250.mm.1	-0.7	0.184412
TC0800000959.mm.1	ENSMUST00000179017	Gm24722	predicted gene, 24722	84391429	84391535	TC1700001261.mm.1	-0.7	0.184412
TC0800000960.mm.1	NR_003027	Rnu6	U6 small nuclear RNA	13432033	13432139	TC1700001471.mm.1	-0.7	0.184412
TC0800000962.mm.1	ENSMUST00000180237	Gm23512	predicted gene, 23512	67174885	67174991	TC1800001498.mm.1	-0.7	0.184412
TC0800000965.mm.1	NM_144945	Lgi2	leucine-rich repeat LGI family, member 2	52537864	52566303	TC0500002411.mm.1	0.1	0.184483
TC0800000971.mm.1	NM_026585	Fam21	family with sequence similarity 21	116208033	116262671	TC0600001293.mm.1	0.2	0.184587
TC0800000975.mm.1	NM_029891	Nkrf	NF-kappaB repressing factor	36887540	36902899	TC0X00002052.mm.1	-0.2	0.18459
TC0800000976.mm.1	ENSMUST00000083869	Gm23040	predicted gene, 23040	98506954	98507116	TC0700001369.mm.1	0.1	0.184783
TC0800000977.mm.1	ENSMUST00000032981	Gm9755	predicted pseudogene 9755	67514000	67515606	TC0800002338.mm.1	-0.2	0.184896
TC0800000978.mm.1	NR_028480	Gm12238	predicted gene 12238	55482694	55482833	TC1100000648.mm.1	-0.9	0.184914
TC0800000983.mm.1	ENSMUST00000122785	Gm25804	predicted gene, 25804	13329484	13329671	TC1300000084.mm.1	-0.1	0.18495
TC0800000991.mm.1	ENSMUST00000083785	n-R5s12	nuclear encoded rRNA 5S 12	136277505	136277623	TC0X00001324.mm.1	0.1	0.185211
TC0800001002.mm.1	NM_009087	Polr1d	polymerase (RNA) I polypeptide D	147077050	147111361	TC0500001799.mm.1	-0.1	0.185222
TC0800001003.mm.1	NM_009853	Cd68	CD68 antigen	69664213	69666153	TC1100003055.mm.1	0.5	0.185229
TC0800001012.mm.1	XM_485703	Gm5566	predicted pseudogene 5566	149660652	149668937	TC0500003661.mm.1	-0.2	0.185402
TC0800001016.mm.1	NCBI_Gene:668493:p	Ighv1-1	Ighv1-19-1 immunoglobulin heavy variable 1-19-	114704147	114704440	TC1200002611.mm.1	-0.6	0.185559
TC0800001031.mm.1	ENSMUST00000093411	Gm8054	predicted pseudogene 8054	78869401	78869868	TC0800002513.mm.1	-0.4	0.185637
TC0800001039.mm.1	ENSMUST00000175594	Gm22119	predicted gene, 22119	2446010	2446108	TC0Y00000239.mm.1	0.2	0.185675
TC0800001069.mm.1	NM_011564	Sry	sex determining region of Chr Y	2662471	2663658	TC0Y00000240.mm.1	-0.4	0.185851
TC0800001077.mm.1	ENSMUST00000183616	RP23-93	N/A	32709652	32711171	TC0900001996.mm.1	-0.2	0.185973
TC0800001092.mm.1	ENSMUST00000122502	Gm24594	predicted gene, 24594	60928086	60928184	TC1300000740.mm.1	0.1	0.186107
TC0800001093.mm.1	NM_019966	Mlycd	malonyl-CoA decarboxylase	119394878	119411102	TC0800001419.mm.1	0.1	0.186358
TC0800001094.mm.1	NM_010922	Mrpl40	mitochondrial ribosomal protein L40	18872018	18876767	TC1600001322.mm.1	-0.1	0.186524
TC0800001095.mm.1	NM_028182	Sh2d4a	SH2 domain containing 4A	68276528	68347704	TC0800000700.mm.1	0.1	0.186534
TC0800001097.mm.1	NM_029841	2510039	RIKEN cDNA 2510039O18 gene	147940895	147947314	TC0400001920.mm.1	-0.2	0.186641
TC0800001103.mm.1	NCBI_Gene:629893:p	Ighv1-3	immunoglobulin heavy variable 1-31	114829264	114829557	TC1200002619.mm.1	-0.9	0.186847
TC0800001108.mm.1	NM_024233	Rexo2	REX2, RNA exonuclease 2 homolog (S. cerevisiae	48468512	48480611	TC0900002235.mm.1	0.2	0.186885
TC0800001112.mm.1	OTTMUST00000062119	AC16053	---	88739247	88739729	TC0500002715.mm.1	-0.5	0.186983
TC0800001121.mm.1	ENSMUST00000083108	Gm24043	predicted gene, 24043	96444955	96445070	TC1400001145.mm.1	-0.4	0.187066
TC0800001122.mm.1	NM_001025589	Rfxank	regulatory factor X-associated ankyrin-containi	70130806	70139197	TC0800002385.mm.1	-0.2	0.187234
TC0800001124.mm.1	ENSMUST00000083981	Gm24445	predicted gene, 24445	122982837	122982943	TC0800003088.mm.1	-0.5	0.187351
TC0800001126.mm.1	ENSMUST00000180256	Rpl28-p	ribosomal protein L28, pseudogene 1	128038527	128039022	TC0100001128.mm.1	-0.4	0.187383
TC0800001142.mm.1	ENSMUST00000091520	Zfp85-r	zinc finger protein 85, related sequence 1	67747800	67755228	TC1300002260.mm.1	-0.2	0.187393
TC0800001147.mm.1	NM_001162903	Ccdc71l	coiled-coil domain containing 71 like	32378704	32382943	TC1200000278.mm.1	-0.1	0.187498
TC0800001152.mm.1	NM_001164107	Ripk3	receptor-interacting serine-threonine kinase 3	55784995	55788857	TC1400002103.mm.1	-0.2	0.187503
TC0800001155.mm.1	ENSMUST00000179317	Gm7258	predicted gene 7258	128595973	128596278	TC0700004370.mm.1	0.1	0.187546
TC0800001156.mm.1	NM_008856	Prkch	protein kinase C, eta	73584797	73778185	TC1200000647.mm.1	-0.3	0.187572
TC0800001157.mm.1	NM_011156	Prep	prolyl endopeptidase	45067206	45158997	TC1000000422.mm.1	-0.4	0.187583
TC0800001160.mm.1	ENSMUST00000183151	Gm26977	predicted gene, 26977	79875587	79876582	TC1800001649.mm.1	-0.1	0.187691
TC0800001164.mm.1	NM_001101486	Fam71f2	family with sequence similarity 71, member F2	29279593	29290680	TC0600000227.mm.1	0.1	0.187704
TC0800001169.mm.1	NM_133362	Erdr1	erythroid differentiation regulator 1	90784610	90816465	TC0Y00000223.mm.1	-0.3	0.187734
TC0800001176.mm.1	NM_172281	Rnf40	ring finger protein 40	127588698	127603605	TC0700001855.mm.1	-0.1	0.18774
TC0800001182.mm.1	NM_022325	Ctsz	cathepsin Z	174427493	174439039	TC0200005314.mm.1	0.3	0.187819
TC0800001195.mm.1	ENSMUST00000083950	Gm22864	predicted gene, 22864	75280626	75280755	TC0400002874.mm.1	-0.3	0.187839
TC0800001197.mm.1	NM_175245	Mzt1	mitotic spindle organizing protein 1	99034544	99046136	TC1400002598.mm.1	-0.2	0.18797
TC0800001204.mm.1	NM_008965	Ptger4	prostaglandin E receptor 4 (subtype EP4)	5206661	5244187	TC1500001155.mm.1	-0.2	0.188053
TC0800001205.mm.1	NM_001037711	Cgn	cingulin	94760069	94786515	TC0300002453.mm.1	-0.1	0.188099
TC0800001206.mm.1	ENSMUST00000185094	CT03064	N/A	61336455	61336561	TC1300000742.mm.1	0.5	0.188128
TC0800001207.mm.1	NM_175168	Ptk7	PTK7 protein tyrosine kinase 7	46564451	46629504	TC1700002181.mm.1	-0.1	0.188149

TC0800001210.mm.1	NM_153151	Acat3	acetyl-Coenzyme A acetyltransferase 3	12923833	12940402	TC1700001458.mm.1	0.1	0.188196
TC0800001213.mm.1	ENSMUST00000157990	Gm22485	predicted gene, 22485	27489269	27489377	TC1400000279.mm.1	0.1	0.188224
TC0800001219.mm.1	NM_146089	Haus1	HAUS augmin-like complex, subunit 1	77757567	77767780	TC1800001632.mm.1	-0.2	0.18836
TC0800001221.mm.1	NM_001081128	Mtr	5-methyltetrahydrofolate-homocysteine methyl	12186538	12258113	TC1300001445.mm.1	-0.1	0.188499
TC0800001226.mm.1	NCBI_Gene:238418:p	Ighv14-	immunoglobulin heavy variable V14-3	114059844	114060321	TC1200002582.mm.1	-0.5	0.188667
TC0800001230.mm.1	NM_001001181	BC03118	cDNA sequence BC031181	75005868	75009934	TC1800000801.mm.1	0.2	0.188792
TC0800001231.mm.1	NM_009553	Zscan2	zinc finger and SCAN domain containing 2	80860920	80876516	TC0700001160.mm.1	-0.1	0.18894
TC0800001232.mm.1	NM_011998	Chst4	carbohydrate (chondroitin 6/keratan) sulfotrans	110029075	110039354	TC0800002918.mm.1	0.1	0.188982
TC0800001233.mm.1	ENSMUST00000077420	Rpl21-p	ribosomal protein L21, pseudogene 7	83288546	83289028	TC1700001238.mm.1	-0.5	0.189075
TC0800001236.mm.1	BC092139	Rpl31	ribosomal protein L31	101790292	101790881	TC0700001437.mm.1	-0.1	0.1893
TC0800001244.mm.1	NM_133229	Ripply3	ripply3 homolog (zebrafish)	94328420	94336935	TC1600001054.mm.1	0.1	0.189403
TC0800001245.mm.1	ENSMUST00000083225	Gm25482	predicted gene, 25482	44945022	44945128	TC1900000657.mm.1	0.2	0.189505
TC0800001251.mm.1	NM_025989	Gp2	glycoprotein 2 (zymogen granule membrane)	119442544	119459272	TC0700004182.mm.1	-0.1	0.189582
TC0800001253.mm.1	ENSMUST00000120088	Gm15519	predicted gene 15519	112563642	112565207	TC0600001234.mm.1	0.3	0.189767
TC0800001255.mm.1	NM_011392	Slc34a1	solute carrier family 34 (sodium phosphate), me	55399648	55414695	TC1300000658.mm.1	0.8	0.18978
TC0800001256.mm.1	NM_008838	Pigf	phosphatidylinositol glycan anchor biosynthesis	86997256	87025406	TC1700002680.mm.1	-0.1	0.189981
TC0800001258.mm.1	NM_028228	Pinx1	PIN2/TERF1 interacting, telomerase inhibitor 1	63860312	63919859	TC1400000910.mm.1	-0.2	0.190105
TC0800001265.mm.1	NM_009359	Tex9	testis expressed gene 9	72450394	72510922	TC0900002640.mm.1	-0.1	0.190222
TC0800001279.mm.1	ENSMUST00000083453	n-R5s85	nuclear encoded rRNA 5S 85	65836353	65836465	TC0900000852.mm.1	0.3	0.190276
TC0800001280.mm.1	ENSMUST00000179236	Gm26138	predicted gene, 26138	57877389	57877495	TC0400002728.mm.1	-0.7	0.190296
TC0800001281.mm.1	ENSMUST00000082660	Gm23330	predicted gene, 23330	19560253	19560416	TC0300000130.mm.1	-0.3	0.190318
TC0800001297.mm.1	ENSMUST00000117826	Gm5510	predicted pseudogene 5510	6152715	6153200	TC1900000104.mm.1	0.1	0.190396
TC0800001300.mm.1	ENSMUST00000116952	Gm23842	predicted gene, 23842	59815975	59816064	TC0200003589.mm.1	0.4	0.190562
TC0800001302.mm.1	NM_012048	Polk	polymerase (DNA directed), kappa	96480689	96542546	TC1300002471.mm.1	-0.1	0.190614
TC0800001316.mm.1	ENSMUST00000178604	Gm5472	predicted gene 5472	45978358	45980037	TC1500001472.mm.1	-0.1	0.190627
TC0800001325.mm.1	NCBI_Gene:110785:p	Iglc1	Iglc1 immunoglobulin lambda constant 1	19061382	19260844	TC1600001324.mm.1	-0.8	0.190645
TC0800001329.mm.1	ENSMUST00000120352	Gm5555	predicted pseudogene 5555	49552257	49553270	TC0500000512.mm.1	-0.2	0.190742
TC0800001336.mm.1	NCBI_Gene:382696:p	Ighv1-5	immunoglobulin heavy variable 1-52	115145487	115145919	TC1200002629.mm.1	-1.0	0.19108
TC0800001339.mm.1	ENSMUST00000121801	Rpl13-p	ribosomal protein L13, pseudogene 1	85111126	85111793	TC1100003425.mm.1	-0.2	0.191082
TC0800001343.mm.1	NR_028512	Snora73	small nucleolar RNA, H/ACA box 73a	0	0	TSUnmapped0000017	-0.7	0.191108
TC0800001344.mm.1	ENSMUST00000117029	Gm23488	predicted gene, 23488	60241709	60241799	TC1000000546.mm.1	0.4	0.191212
TC0800001345.mm.1	ENSMUST00000078232	Gm10129	predicted gene 10129	38151433	38151792	TC1300001831.mm.1	-0.1	0.191325
TC0800001358.mm.1	NM_011216	Ptpro	protein tyrosine phosphatase, receptor type, O	137252299	137464634	TC0600001634.mm.1	0.1	0.191398
TC0800001390.mm.1	NM_011224	Pygm	muscle glycogen phosphorylase	6384399	6398459	TC1900000117.mm.1	0.1	0.191525
TC0800001392.mm.1	ENSMUST00000100617	Gm6740	predicted gene 6740	52861767	52862630	TC1400002041.mm.1	0.1	0.191531
TC0800001398.mm.1	ENSMUST00000100598	Gm6755	predicted gene 6755	53172727	53173590	TC1400002043.mm.1	0.1	0.191531
TC0800001407.mm.1	NM_001081112	Ankrd26	ankyrin repeat domain 26	118502564	118562256	TC0600003003.mm.1	-0.1	0.191589
TC0800001413.mm.1	ENSMUST00000180276	Gm22347	predicted gene, 22347	102329530	102329661	TC1400002628.mm.1	0.2	0.191646
TC0800001414.mm.1	NM_145413	Fam20b	family with sequence similarity 20, member B	156678545	156719001	TC0100003321.mm.1	0.2	0.191658
TC0800001416.mm.1	NM_029627	Ly6k	lymphocyte antigen 6 complex, locus K	74796874	74799986	TC1500001720.mm.1	-0.1	0.192039
TC0800001418.mm.1	NM_133755	Tubgcp2	tubulin, gamma complex associated protein 2	139995955	140036674	TC0700004489.mm.1	-0.2	0.192155
TC0800001419.mm.1	NM_145953	Cth	cystathionase (cystathionine gamma-lyase)	157894248	157925077	TC0300003194.mm.1	0.3	0.192542
TC0800001429.mm.1	NM_133673	Tor1b	torsin family 1, member B	30952959	30959015	TC0200000545.mm.1	0.1	0.192635
TC0800001436.mm.1	ENSMUST00000158291	Gm22607	predicted gene, 22607	9834498	9834602	TC0100001946.mm.1	0.2	0.192659
TC0800001437.mm.1	ENSMUST00000116782	Gm23178	predicted gene, 23178	67274869	67274963	TC1400002285.mm.1	0.3	0.19276
TC0800001451.mm.1	NM_134007	Cisd1	CDGSH iron sulfur domain 1	71330480	71344954	TC1000002358.mm.1	0.2	0.19283
TC0800001464.mm.1	ENSMUST00000083972	Gm26107	predicted gene, 26107	137067892	137067998	TC0300001390.mm.1	-0.6	0.19285
TC0800001472.mm.1	ENSMUST00000080726	Gm10040	predicted gene 10040	68733137	68738077	TC0300000568.mm.1	-0.4	0.192928
TC0800001487.mm.1	ENSMUST00000104684	Gm23913	predicted gene, 23913	17949458	17949548	TC1200001476.mm.1	0.3	0.192935
TC0800001494.mm.1	ENSMUST00000178090	Gm5808	predicted gene 5808	99555836	99556192	TC1500002215.mm.1	-0.2	0.192965
TC0800001497.mm.1	NM_001160135	Gm20806	predicted gene, 20806	78835721	78836719	TC0Y00000485.mm.1	0.2	0.192968
TC0800001500.mm.1	XM_001474425	Gm20841	predicted gene, 20841	80756212	80757210	TC0Y00000495.mm.1	0.2	0.192968
TC0800001511.mm.1	NM_147007	Olfr394	olfactory receptor 394	73887438	73888370	TC1100003181.mm.1	0.1	0.193015
TC0800001512.mm.1	NM_019434	Mcm3ap	minichromosome maintenance deficient 3 (S. ce	76468971	76515857	TC1000000743.mm.1	-0.1	0.193187
TC0800001514.mm.1	ENSMUST00000082868	Gm24036	predicted gene, 24036	12054148	12054303	TC1100002231.mm.1	0.1	0.193432
TC0800001518.mm.1	ENSMUST00000082560	Gm22063	predicted gene, 22063	105172496	105172602	TC0800001205.mm.1	-0.7	0.193591
TC0800001522.mm.1	ENSMUST00000082490	Gm22749	predicted gene, 22749	101223592	101223698	TC1200002240.mm.1	-0.6	0.193654
TC0800001525.mm.1	ENSMUST00000103461	Ighv7-3	immunoglobulin heavy variable 7-3	114153184	114153644	TC1200002585.mm.1	-0.8	0.19376
TC0800001528.mm.1	NM_170599	Igsf11	immunoglobulin superfamily, member 11	38901471	39027159	TC1600000564.mm.1	0.1	0.193786
TC0800001531.mm.1	ENSMUST00000082790	Gm25852	predicted gene, 25852	97547438	97547567	TC0600002806.mm.1	-0.2	0.193788
TC0800001533.mm.1	ENSMUST00000117498	Gm15770	predicted gene 15770	142852616	142853199	TC0500003535.mm.1	-0.1	0.193995
TC0800001542.mm.1	ENSMUST00000104647	Gm23401	predicted gene, 23401	87727241	87727333	TC0600001014.mm.1	0.4	0.194113
TC0800001543.mm.1	NR_029732	Mirlet7	microRNA let7f-2	151912346	151912428	TC0X00001529.mm.1	0.1	0.194183
TC0800001547.mm.1	ENSMUST00000071118	Plp2	proteolipid protein 2	97098237	97099296	TC1300002477.mm.1	0.3	0.194392
TC0800001551.mm.1	NM_009022	Aldh1a2	aldehyde dehydrogenase family 1, subfamily A2	71215789	71296243	TC0900000950.mm.1	0.2	0.194424
TC0800001556.mm.1	NR_028557	Snord98	small nucleolar RNA, C/D box 98	62765576	62765640	TC1000002268.mm.1	-0.4	0.194474
TC0800001572.mm.1	NR_029740	Mir23a	microRNA 23a	84208518	84208592	TC0800000951.mm.1	0.1	0.194591
TC0800001577.mm.1	ENSMUST00000175310	Gm24813	predicted gene, 24813	63347671	63347754	TC1700001051.mm.1	-0.8	0.194656
TC0800001585.mm.1	NCBI_Gene:434025:p	Igkv9-1	immunoglobulin kappa chain variable 9-120	68049983	68050456	TC0600003515.mm.1	-0.8	0.19479
TC0800001597.mm.1	NM_026876	Trmt1l	tRNA methyltransferase 1 like	151428648	151458183	TC0100001353.mm.1	-0.1	0.194945
TC0800001602.mm.1	ENSMUST00000121408	Gm15329	predicted gene 15329	34521750	34521904	TC1700001915.mm.1	-0.2	0.195128
TC0800001604.mm.1	NM_199008	Cox11	cytochrome c oxidase assembly protein 11	90638173	90645977	TC1100001400.mm.1	-0.1	0.1952
TC0800001606.mm.1	NR_035494	Mir1968	microRNA 1968	13189031	13189098	TC0800001729.mm.1	-0.1	0.195253
TC0800001611.mm.1	NM_001162910	Gm3604	predicted gene 3604	62367716	62383174	TC1300002161.mm.1	-0.2	0.19531
TC0800001612.mm.1	ENSMUST00000178898	Gm21830	predicted gene, 21830	67413725	67433086	TC0200000967.mm.1	0.2	0.195639
TC0800001613.mm.1	ENSMUST00000183509	SMAD5-A	SMAD5 antisense RNA 1 conserved region 4	56704030	56704199	TC1300000696.mm.1	-0.2	0.195663
TC0800001619.mm.1	NCBI_Gene:10004257	Trav3n-	Trav3n-2 T cell receptor alpha variable 3N-2	53198525	53199018	TC1400000669.mm.1	-0.1	0.195861
TC0800001622.mm.1	NM_008949	Psmc3ip	proteasome (prosome, macropain) 26S subunit,	101091823	101095436	TC1100003792.mm.1	-0.1	0.195889

TC0800001623.mm.1	NM_001166413	Arhgef2	Rho guanine nucleotide exchange factor (GEF) 2	127182521	127190054	TC1000003103.mm.1	0.0	0.196003
TC0800001632.mm.1	NM_001166581	BC00556	cDNA sequence BC005561	104508352	104522383	TC0500001028.mm.1	-0.1	0.196153
TC0800001633.mm.1	ENSMUST00000064995	Gm13835	predicted gene 13835	31141979	31142663	TC0600002015.mm.1	-0.3	0.196235
TC0800001641.mm.1	NM_001160251	Zfp281	zinc finger protein 281	136624901	136630391	TC0100001274.mm.1	-0.1	0.19629
TC0800001643.mm.1	ENSMUST00000158430	Gm22675	predicted gene, 22675	28595127	28595230	TC0200000488.mm.1	0.2	0.196352
TC0800001647.mm.1	NM_011801	Cfdp1	craniofacial development protein 1	111768473	111854310	TC0800002955.mm.1	-0.2	0.196446
TC0800001649.mm.1	NM_025873	Trit1	tRNA isopentenyltransferase 1	123016597	123054949	TC0400001387.mm.1	-0.2	0.196573
TC0800001654.mm.1	ENSMUST00000180191	Gm25473	predicted gene, 25473	86236855	86236961	TC0500002679.mm.1	-0.7	0.19658
TC0800001674.mm.1	ENSMUST00000157272	Gm25283	predicted gene, 25283	47637143	47637219	TC0600000532.mm.1	0.2	0.196595
TC0800001687.mm.1	NM_011734	Siae	sialic acid acetylesterase	37613847	37648318	TC0900000370.mm.1	0.2	0.196757
TC0800001694.mm.1	ENSMUST00000106916	Gm12790	predicted gene 12790	101967453	101981049	TC0400003163.mm.1	0.1	0.19685
TC0800001700.mm.1	ENSMUST00000104709	Gm25787	predicted gene, 25787	111792920	111793011	TC0700004114.mm.1	0.3	0.196924
TC0800001701.mm.1	NM_018775	Tbc1d8	TBC1 domain family, member 8	39371495	39478747	TC0100002236.mm.1	-0.1	0.196928
TC0800001705.mm.1	NM_001166390	Ptp4a3	protein tyrosine phosphatase 4a3	73723145	73758766	TC1500000524.mm.1	-0.3	0.197053
TC0800001727.mm.1	NR_028129	AF35739	snoRNA AF357399	28351508	28351633	TC0700000496.mm.1	-0.7	0.197056
TC0800001728.mm.1	ENSMUST00000144172	Gm12226	predicted pseudogene 12226	54401092	54401967	TC1100000623.mm.1	-0.2	0.197057
TC0800001729.mm.1	NM_172429	Smndc1	survival motor neuron domain containing 1	53379214	53390573	TC1900001671.mm.1	-0.1	0.197152
TC0800001734.mm.1	NM_144549	Trib1	tribbles homolog 1 (Drosophila)	59648350	59657099	TC1500000439.mm.1	0.1	0.197156
TC0800001737.mm.1	NM_027193	Dph5	DPH5 homolog (S. cerevisiae)	115888165	115934361	TC0300001181.mm.1	-0.1	0.197232
TC0800001745.mm.1	ENSMUST00000082933	Gm25039	predicted gene, 25039	86384247	86384353	TC0300000685.mm.1	-0.6	0.197259
TC0800001752.mm.1	ENSMUST00000157801	Gm22555	predicted gene, 22555	130011837	130011898	TC0600001542.mm.1	0.2	0.197266
TC0800001766.mm.1	ENSMUST00000120888	Gm15267	predicted gene 15267	152043049	152043512	TC0X00003186.mm.1	-0.3	0.197343
TC0800001790.mm.1	NM_001008700	Il4ra	interleukin 4 receptor, alpha	125552282	125579474	TC0700001793.mm.1	-0.3	0.197423
TC0800001792.mm.1	ENSMUST00000082719	Gm26129	predicted gene, 26129	14087439	14087545	TC1300000096.mm.1	-0.6	0.197449
TC0800001794.mm.1	NM_026784	Pmvk	phosphomevalonate kinase	89454541	89469013	TC0300000766.mm.1	0.1	0.197545
TC0800001796.mm.1	NM_207253	Olfr137	olfactory receptor 1371	52213052	52213987	TC1100002714.mm.1	0.1	0.197605
TC0800001797.mm.1	NM_007913	Egr1	early growth response 1	34859823	34864984	TC1800000301.mm.1	-0.1	0.197724
TC0800001808.mm.1	NM_001013792	Fam105b	family with sequence similarity 105, member B	27605919	27630693	TC1500001299.mm.1	-0.1	0.197764
TC0800001810.mm.1	NM_020625	Zbtb22	zinc finger and BTB domain containing 22	33915904	33919325	TC1700002777.mm.1	0.1	0.197845
TC0800001827.mm.1	NM_001243048	Arntl	aryl hydrocarbon receptor nuclear translocator-	113207465	113314126	TC0700001660.mm.1	-0.3	0.197883
TC0800001836.mm.1	NCBI_Gene:384514:p	Igkv4-5	immunoglobulin kappa variable 4-57-1	69544359	69544892	TC0600003569.mm.1	-0.7	0.197886
TC0800001838.mm.1	NM_178417	Zfp867	zinc finger protein 867	59461197	59472474	TC1100002852.mm.1	-0.1	0.198021
TC0800001840.mm.1	NCBI_Gene:627394:p	Trav6d-	T cell receptor alpha variable 6D-3	52725299	52726920	TC1400000623.mm.1	-0.2	0.198066
TC0800001843.mm.1	NM_025649	Mad2l1b	MAD2L1 binding protein	46147385	46153553	TC1700002165.mm.1	-0.1	0.198089
TC0800001845.mm.1	ENSMUST00000103760	Mir467e	microRNA 467e	10505721	10505807	TC0200000177.mm.1	0.2	0.198097
TC0800001847.mm.1	ENSMUST00000182253	Gm5205	predicted gene 5205	40557238	40558240	TC1400000408.mm.1	-0.1	0.198187
TC0800001849.mm.1	NM_175381	2700081	RIKEN cDNA 2700081O15 gene	7417625	7425904	TC1900000137.mm.1	-0.1	0.198348
TC0800001851.mm.1	NR_002852	Rnu5g	RNA, U5G small nuclear	65201726	65201841	TC0900002506.mm.1	-0.7	0.198352
TC0800001852.mm.1	NR_002852	Rnu5g	RNA, U5G small nuclear	0	0	TSUnmapped0000017	-0.7	0.198352
TC0800001855.mm.1	NM_133661	Slc6a12	solute carrier family 6 (neurotransmitter trans	121343076	121365775	TC0600001371.mm.1	0.1	0.198606
TC0800001856.mm.1	ENSMUST00000119404	Gm13603	predicted gene 13603	67765977	67766059	TC0200000977.mm.1	-0.2	0.198646
TC0800001857.mm.1	NM_001039546	Myo6	myosin VI	80165031	80311729	TC0900001070.mm.1	0.3	0.198672
TC0800001863.mm.1	ENSMUST00000179774	Gm22550	predicted gene, 22550	54118995	54119101	TC0X00000488.mm.1	-0.7	0.198889
TC0800001865.mm.1	NM_007917	Eif4e	eukaryotic translation initiation factor 4E	138526191	138557599	TC0300001416.mm.1	-0.2	0.198921
TC0800001867.mm.1	ENSMUST00000082971	Gm25403	predicted gene, 25403	65367301	65367443	TC0800000678.mm.1	0.3	0.198944
TC0800001870.mm.1	NM_001252456	Ptprs	protein tyrosine phosphatase, receptor type, S	56412426	56476483	TC1700002324.mm.1	0.1	0.199017
TC0800001871.mm.1	NM_001033481	Myrf	myelin regulatory factor	10208271	10240748	TC1900001097.mm.1	0.2	0.19904
TC0800001875.mm.1	ENSMUST00000080279	Rpl21-p	ribosomal protein L21, pseudogene 14	4861169	4861651	TC0800000043.mm.1	-0.4	0.199124
TC0800001878.mm.1	ENSMUST00000083259	Gm23459	predicted gene, 23459	106261123	106261253	TC1400002671.mm.1	-0.1	0.19924
TC0800001881.mm.1	ENSMUST00000104721	Gm22976	predicted gene, 22976	51223587	51223680	TC0500000519.mm.1	0.3	0.199255
TC0800001883.mm.1	NM_182782	Klhl25	kelch-like 25	75848338	75874130	TC0700001098.mm.1	-0.1	0.199314
TC0800001884.mm.1	ENSMUST00000179460	TUBB5	---	7179365	7180699	TC0500000039.mm.1	-0.2	0.199321
TC0800001886.mm.1	ENSMUST00000184721	AC16681	N/A	45160695	45160801	TC0300000333.mm.1	0.4	0.199323
TC0800001891.mm.1	ENSMUST00000118301	Gm12230	predicted gene 12230	54947435	54947888	TC1100000639.mm.1	-0.1	0.199324
TC0800001901.mm.1	NM_001033765	1700071	RIKEN cDNA 1700071K01 gene	81572502	81573539	TC1100003356.mm.1	0.1	0.199435
TC0800001902.mm.1	NM_023054	Utp3	UTP3, small subunit (SSU) processome compone	88554469	88556083	TC0500000813.mm.1	-0.2	0.199629
TC0800001903.mm.1	NM_010648	Klra3	killer cell lectin-like receptor, subfamily A,	130323287	130337626	TC0600003613.mm.1	-0.1	0.19966
TC0800001919.mm.1	ENSMUST00000103318	Igkv2-1	immunoglobulin kappa variable 2-116	68151885	68152619	TC0600000793.mm.1	-0.3	0.199688
TC0800001925.mm.1	ENSMUST00000104460	Gm24988	predicted gene, 24988	160876202	160876322	TC0100003367.mm.1	-0.4	0.199869
TC0800001926.mm.1	NCBI_Gene:629865:p	Ighv1-1	immunoglobulin heavy variable 1-15	114657353	114657777	TC1200002609.mm.1	-0.5	0.199875
TC0800001927.mm.1	ENSMUST00000181698	Gm5421	predicted gene 5421	22343439	22345792	TC1000000179.mm.1	0.2	0.199927
TC0800001951.mm.1	NM_025644	Exosc1	exosome component 1	41922980	41933314	TC1900001514.mm.1	-0.2	0.200101
TC0800001955.mm.1	NM_133884	Gpn2	GPN-loop GTPase 2	133584362	133591735	TC0400001615.mm.1	-0.1	0.200111
TC0800001960.mm.1	NM_001043322	Fmn1	formin 1	113327736	113716767	TC0200001681.mm.1	0.1	0.2002
TC0800001961.mm.1	ENSMUST00000120427	Gm11448	predicted gene 11448	161287220	161287669	TC0200002464.mm.1	-0.2	0.200279
TC0800001963.mm.1	ENSMUST00000072532	Rpl21-p	ribosomal protein L21-ps13	139719399	139719881	TC0700001994.mm.1	-0.5	0.200334
TC0800001976.mm.1	BC128266	Olfr545	olfactory receptor 545	102493823	102494773	TC0700003861.mm.1	0.1	0.20035
TC0800001977.mm.1	NR_102282	Cops5	COP9 (constitutive photomorphogenic) homolog	10024600	10038159	TC0100001952.mm.1	-0.1	0.20036
TC0800001981.mm.1	ENSMUST00000167577	Gm7352	predicted gene 7352	19511367	19512558	TC1400000154.mm.1	-0.2	0.200414
TC0800001982.mm.1	NM_011313	S100a6	S100 calcium binding protein A6 (calcyclin)	90612894	90614415	TC0300000809.mm.1	0.2	0.20043
TC0800001994.mm.1	ENSMUST00000177864	Gm24407	predicted gene, 24407	115490254	115490394	TC0500001263.mm.1	-0.4	0.200464
TC0800002003.mm.1	ENSMUST00000175512	Gm22930	predicted gene, 22930	24423394	24423492	TC0X00001963.mm.1	0.3	0.200499
TC0800002004.mm.1	NM_025700	Pgm1	phosphoglucomutase 1	64092936	64128355	TC0500000589.mm.1	-0.1	0.20059
TC0800002008.mm.1	NM_146699	Olfr144	olfactory receptor 1445	12883855	12884855	TC1900000258.mm.1	0.1	0.200994
TC0800002021.mm.1	NM_146201	Zfp553	zinc finger protein 553	127233061	127508184	TC0700001838.mm.1	0.0	0.201046
TC0800002022.mm.1	NR_003547	Zf12	Zf12 pseudogene	268799	270075	TCX_GL456233_rand	-0.2	0.201223
TC0800002023.mm.1	NM_019832	Gkap1	G kinase anchoring protein 1	58233351	58274188	TC1300002096.mm.1	0.2	0.20136
TC0800002026.mm.1	NM_178876	Ints3	integrator complex subunit 3	90391380	90433636	TC0300002370.mm.1	-0.1	0.20139

TC0800002027.mm.1	NCBI_Gene:668478:p	Ighv1-9	immunoglobulin heavy variable V1-9	114583569	114584002	TC1200002605.mm.1	-0.7	0.201435
TC0800002043.mm.1	XM_001476571	Gm3244	predicted pseudogene 3244	73809458	73809911	TC1500001702.mm.1	0.3	0.201436
TC0800002058.mm.1	ENSMUST00000119107	Pgam1-p	phosphoglycerate mutase 1, pseudogene 1	21683308	21684056	TC1100002331.mm.1	-0.1	0.201475
TC0800002062.mm.1	ENSMUST00000140484	Gm11382	predicted pseudogene 11382	32938524	32938691	TC1300001765.mm.1	0.1	0.201536
TC0800002063.mm.1	NM_172540	Trmt2b	TRM2 tRNA methyltransferase 2B	134222339	134276984	TC0X00002990.mm.1	-0.1	0.201569
TC0800002086.mm.1	ENSMUST00000120059	Gm5388	predicted gene 5388	51218877	51219993	TC0X00002197.mm.1	-0.1	0.201661
TC0800002089.mm.1	ENSMUST00000118705	Gm14039	predicted gene 14039	129362759	129362859	TC0200004601.mm.1	-0.2	0.201777
TC0800002091.mm.1	NM_027381	Cactin	cactin, spliceosome C complex subunit	81321103	81326251	TC1000000893.mm.1	-0.1	0.201839
TC0800002100.mm.1	ENSMUST00000175176	Mir3472	microRNA 3472	145039344	145039414	TC0X00001433.mm.1	0.2	0.201863
TC0800002101.mm.1	NR_037309	Mir3472	microRNA 3472	0	0	TSUnmapped0000012	0.2	0.201863
TC0800002110.mm.1	ENSMUST00000109160	Gm11011	predicted gene 11011	169582845	169587745	TC0200005235.mm.1	0.2	0.201909
TC0800002121.mm.1	ENSMUST00000104459	Gm24981	predicted gene, 24981	67566850	67566981	TC1400000961.mm.1	0.2	0.202055
TC0800002122.mm.1	NM_011755	Zfp35	zinc finger protein 35	23989632	24005376	TC1800000190.mm.1	-0.1	0.202134
TC0800002123.mm.1	NM_025295	Btd	biotinidase	31641028	31668579	TC1400000331.mm.1	0.1	0.2022
TC0800002127.mm.1	NM_198608	Aars2	alanyl-tRNA synthetase 2, mitochondrial (putati	45506841	45520843	TC1700000862.mm.1	-0.1	0.202243
TC0800002130.mm.1	ENSMUST00000104266	Gm25918	predicted gene, 25918	34162324	34162426	TC0500000369.mm.1	-0.1	0.202299
TC0800002131.mm.1	NR_033580	4933401	GLE1 RNA export mediator pseudogene	107542479	107543800	TC0X00001089.mm.1	0.1	0.202448
TC0800002136.mm.1	ENSMUST00000083386	Gm22056	predicted gene, 22056	113928724	113928804	TC0500003053.mm.1	-0.3	0.202474
TC0800002144.mm.1	ENSMUST00000178517	Gm26465	predicted gene, 26465	88970623	88970729	TC0300002331.mm.1	-0.7	0.202556
TC0800002145.mm.1	ENSMUST00000179184	Gm25021	predicted gene, 25021	17436306	17436412	TC0600000130.mm.1	-0.7	0.202556
TC0800002146.mm.1	ENSMUST00000178706	Gm24864	predicted gene, 24864	83938369	83938475	TC0900002769.mm.1	-0.7	0.202556
TC0800002148.mm.1	ENSMUST00000179714	Gm24424	predicted gene, 24424	54449958	54450064	TC1400002056.mm.1	-0.7	0.202556
TC0800002154.mm.1	ENSMUST00000179962	Gm24389	predicted gene, 24389	34687696	34687802	TC1700001921.mm.1	-0.7	0.202556
TC0800002156.mm.1	ENSMUST00000179703	Gm14675	predicted gene 14675	65103824	65104270	TC0X00000589.mm.1	0.2	0.202598
TC0800002157.mm.1	ENSMUST00000118619	Gm8644	predicted gene 8644	157650704	157651299	TC0X00003254.mm.1	-0.1	0.20276
TC0800002178.mm.1	NM_019786	Tbk1	TANK-binding kinase 1	121546455	121586794	TC1000003049.mm.1	-0.2	0.202787
TC0800002180.mm.1	NR_029731	Mirlet7	microRNA let7f-1	48537829	48537917	TC1300001942.mm.1	0.2	0.20281
TC0800002233.mm.1	ENSMUST00000120972	Defa-ps	defensin, alpha, pseudogene 8	21270693	21271997	TC0800000227.mm.1	-0.2	0.202946
TC0800002235.mm.1	NM_001011776	Olfr527	olfactory receptor 527	140335843	140336820	TC0700002011.mm.1	-0.2	0.203043
TC0800002236.mm.1	NM_177140	Tmem251	transmembrane protein 251	102743740	102747561	TC1200001020.mm.1	-0.1	0.203137
TC0800002243.mm.1	ENSMUST00000175443	Gm25693	predicted gene, 25693	38037179	38037263	TC1100002537.mm.1	0.3	0.203139
TC0800002252.mm.1	ENSMUST00000116867	Gm23109	predicted gene, 23109	29334934	29335059	TC1100000292.mm.1	0.1	0.203218
TC0800002256.mm.1	ENSMUST00000158346	Gm23764	predicted gene, 23764	102806099	102806146	TC1400001179.mm.1	-0.5	0.203218
TC0800002261.mm.1	ENSMUST00000054322	Gm15163	predicted gene 15163	157015331	157120545	TC0X00003245.mm.1	0.1	0.203324
TC0800002287.mm.1	ENSMUST00000120915	Gm12400	predicted gene 12400	98680832	98688182	TC0300002557.mm.1	-0.2	0.203337
TC0800002292.mm.1	NM_028347	Neil1	nei endonuclease VIII-like 1 (E. coli)	57142798	57148212	TC0900002365.mm.1	-0.2	0.203351
TC0800002295.mm.1	NM_001171739	Bag1	BCL2-associated athanogene 1	40936398	40948294	TC0400002454.mm.1	0.3	0.203496
TC0800002307.mm.1	ENSMUST00000098955	Gm16589	predicted gene 16589	4087543	4089900	TC0800000026.mm.1	0.2	0.203524
TC0800002309.mm.1	NM_001112729	Tti2	TELO2 interacting protein 2	31150316	31164703	TC0800000370.mm.1	-0.1	0.203566
TC0800002310.mm.1	ENSMUST00000117838	Gm13226	predicted gene 13226	145576889	145577292	TC0400003965.mm.1	-0.3	0.20358
TC0800002323.mm.1	ENSMUST00000117320	Gm15578	predicted gene 15578	156816037	156816511	TC0300001570.mm.1	-0.1	0.203587
TC0800002324.mm.1	XR_104842	Gm19451	predicted gene, 19451	88138135	88139656	TC0300002300.mm.1	0.1	0.203626
TC0800002326.mm.1	ENSMUST00000122573	Gm25819	predicted gene, 25819	68996002	68996085	TC1100000889.mm.1	0.2	0.203644
TC0800002335.mm.1	NM_175439	Mars2	methionine-tRNA synthetase 2 (mitochondrial)	55237124	55240058	TC0100000399.mm.1	-0.1	0.20377
TC0800002336.mm.1	NM_134178	Vmn1r22	vomeronasal 1 receptor 22	57899959	57901054	TC0600002358.mm.1	0.1	0.203855
TC0800002338.mm.1	ENSMUST00000104214	Gm25418	predicted gene, 25418	90504615	90504743	TC1800000915.mm.1	0.2	0.203969
TC0800002339.mm.1	ENSMUST00000178461	Gm22549	predicted gene, 22549	87341455	87341561	TC0100002761.mm.1	-0.3	0.204102
TC0800002376.mm.1	NM_029037	4930444	RIKEN cDNA 4930444A02 gene	25980604	25994121	TC0800001926.mm.1	0.2	0.204129
TC0800002384.mm.1	NM_001243307	Ccdc85b	coiled-coil domain containing 85B	5453163	5457563	TC1900000965.mm.1	-0.1	0.20415
TC0800002385.mm.1	ENSMUST00000122493	Gm26253	predicted gene, 26253	20194633	20194735	TC1100002295.mm.1	-0.2	0.204288
TC0800002390.mm.1	NCBI_Gene:195180:p	Ighv9-1	immunoglobulin heavy variable 9-1	114093928	114141163	TC1200002583.mm.1	-0.7	0.204304
TC0800002392.mm.1	NM_025432	Trappc2	trafficking protein particle complex 2	166440574	166453140	TC0X00001684.mm.1	0.1	0.204345
TC0800002398.mm.1	ENSMUST00000178565	Gm25633	predicted gene, 25633	49825869	49825975	TC0900002259.mm.1	-0.6	0.204387
TC0800002401.mm.1	ENSMUST00000157630	Gm24288	predicted gene, 24288	6223819	6223962	TC0800001647.mm.1	-0.1	0.204543
TC0800002402.mm.1	NM_024442	Cyp4f16	cytochrome P450, family 4, subfamily f, polypep	32536558	32551798	TC1700000564.mm.1	0.1	0.204605
TC0800002403.mm.1	NM_027123	Fastkd3	FAST kinase domains 3	68582248	68592338	TC1300000838.mm.1	-0.1	0.204618
TC0800002405.mm.1	OTTMUST00000042178	RP23-3G	---	53882343	53884556	TC0X00002250.mm.1	-0.2	0.204716
TC0800002410.mm.1	NM_001142943	Zfp949	zinc finger protein 949	88548020	88571086	TC0900001132.mm.1	-0.1	0.2049
TC0800002412.mm.1	NM_013607	Myh11	myosin, heavy polypeptide 11, smooth muscle	14194527	14291408	TC1600001247.mm.1	0.2	0.204918
TC0800002414.mm.1	ENSMUST00000103972	Gm24118	predicted gene, 24118	56240560	56240685	TC1400000802.mm.1	0.1	0.204958
TC0800002418.mm.1	ENSMUST00000080237	Rpl21-p	ribosomal protein L21, pseudogene 4	11227552	11227992	TC1400000093.mm.1	-0.5	0.205619
TC0800002425.mm.1	NM_009090	Polr2c	polymerase (RNA) II (DNA directed) polypeptide	94857450	94864242	TC0800001124.mm.1	-0.3	0.205755
TC0800002428.mm.1	NM_030133	Srbd1	S1 RNA binding domain 1	85984665	86145175	TC1700002665.mm.1	-0.1	0.20594
TC0800002429.mm.1	ENSMUST00000098889	Defa-ps	defensin, alpha, pseudogene 18	21445069	21446004	TC0800000238.mm.1	-0.1	0.206208
TC0800002431.mm.1	ENSMUST00000077493	Gm8412	predicted gene 8412	27858058	27858497	TC1900000421.mm.1	-0.4	0.206211
TC0800002432.mm.1	NM_001033929	Thnsl2	threonine synthase-like 2 (bacterial)	71128166	71144380	TC0600002460.mm.1	0.2	0.206417
TC0800002440.mm.1	ENSMUST00000178587	Gm25229	predicted gene, 25229	59414091	59414169	TC0700003164.mm.1	-0.1	0.206509
TC0800002447.mm.1	NM_001081282	Ibtk	inhibitor of Bruton agammaglobulinemia tyrosin	85687360	85749334	TC0900002772.mm.1	-0.1	0.206581
TC0800002453.mm.1	XR_140554	LOC6281	zinc finger protein 709-like	176140919	176153422	TC0200005346.mm.1	0.4	0.206713
TC0800002456.mm.1	NR_030448	Mir680-	microRNA 680-2	22057713	22379223	TC0900001896.mm.1	-0.1	0.206797
TC0800002462.mm.1	ENSMUST00000157109	Gm24646	predicted gene, 24646	45879550	45879648	TC0900002210.mm.1	-0.2	0.207088
TC0800002463.mm.1	NM_008224	Hcfc1	host cell factor C1	73942792	73966357	TC0X00002441.mm.1	-0.3	0.207263
TC0800002466.mm.1	NM_201358	Lyrm4	LYR motif containing 4	35978797	36117357	TC1300001806.mm.1	-0.1	0.207311
TC0800002468.mm.1	ENSMUST00000122596	n-R5s80	nuclear encoded rRNA 5S 80	105804087	105804197	TC1000002807.mm.1	0.2	0.207354
TC0800002471.mm.1	ENSMUST00000111862	Gm6490	predicted gene 6490	41517217	41519215	TC1400000417.mm.1	-0.1	0.207424
TC0800002481.mm.1	NM_010454	Hoxa6	homeobox A6	52205431	52208722	TC0600002280.mm.1	0.1	0.207437
TC0800002486.mm.1	NM_015732	Axin2	axin2	108920349	108950783	TC1100001820.mm.1	0.1	0.207495
TC0800002488.mm.1	NM_026849	Mtmr14	myotubularin related protein 14	113237843	113281392	TC0600001243.mm.1	-0.1	0.207594

TC0800002490.mm.1	ENSMUST00000184465	AC12532	N/A	22274070	22274176	TC1500000141.mm.1	0.4	0.207716
TC0800002493.mm.1	NCBI_Gene:780939:p	Ighv1-5	immunoglobulin heavy variable 1-58	115312166	115312599	TC1200002635.mm.1	-0.5	0.207888
TC0800002494.mm.1	ENSMUST00000121346	Gm11383	predicted gene 11383	33120516	33121322	TC1300001768.mm.1	-0.1	0.208144
TC0800002495.mm.1	ENSMUST00000116718	Gm25773	predicted gene, 25773	26626185	26626311	TC0300001755.mm.1	0.2	0.208319
TC0800002497.mm.1	NM_172630	Mppe1	metallophosphoesterase 1	67225047	67245830	TC1800001500.mm.1	-0.1	0.208436
TC0800002502.mm.1	ENSMUST00000104584	Gm22373	predicted gene, 22373	59923034	59923122	TC0700003343.mm.1	0.2	0.208503
TC0800002505.mm.1	NM_001113486	9-Sep	septin 9	117199661	117362325	TC1100001956.mm.1	-0.2	0.208662
TC0800002510.mm.1	NM_001198985	Tjp2	tight junction protein 2	24094502	24225026	TC1900001273.mm.1	0.1	0.208736
TC0800002513.mm.1	ENSMUST00000177609	Gm22308	predicted gene, 22308	59214946	59215052	TC0500002446.mm.1	-0.7	0.209068
TC0800002514.mm.1	ENSMUST00000117016	Gm25000	predicted gene, 25000	60529296	60529409	TC1300002136.mm.1	0.4	0.209079
TC0800002516.mm.1	ENSMUST00000104827	Gm23029	predicted gene, 23029	112893734	112893825	TC0X00001133.mm.1	0.3	0.209188
TC0800002518.mm.1	ENSMUST00000179427	Gm23287	predicted gene, 23287	117210844	117210959	TC0400001284.mm.1	-0.8	0.209324
TC0800002522.mm.1	NM_025807	Slc16a9	solute carrier family 16 (monocarboxylic acid t	70245100	70285968	TC1000000674.mm.1	0.1	0.209327
TC0800002523.mm.1	NM_023900	Plekhj1	pleckstrin homology domain containing, family J	80796099	80798626	TC1000002514.mm.1	0.1	0.209417
TC0800002526.mm.1	NR_028263	B130006	RIKEN cDNA B130006D01 gene	95723586	95726773	TC1100001470.mm.1	-0.1	0.209448
TC0800002535.mm.1	ENSMUST00000168078	Gm17046	predicted gene 17046	5877076	5877925	TC1400000052.mm.1	0.2	0.209475
TC0800002537.mm.1	ENSMUST00000157835	Gm24747	predicted gene, 24747	72111234	72111320	TC0800000813.mm.1	0.1	0.209497
TC0800002542.mm.1	NM_020010	Cyp51	cytochrome P450, family 51	4080674	4104746	TC0500001894.mm.1	0.2	0.20964
TC0800002544.mm.1	ENSMUST00000083942	Gm25682	predicted gene, 25682	10100953	10101116	TC1000000070.mm.1	-0.3	0.209666
TC0800002553.mm.1	NM_013640	Psmb10	proteasome (prosome, macropain) subunit, beta	105935728	105938392	TC0800002842.mm.1	-0.3	0.209691
TC0800002561.mm.1	NM_172660	D2Wsu81	DNA segment, Chr 2, Wayne State University 81,	30173447	30178459	TC0200003264.mm.1	-0.1	0.20975
TC0800002565.mm.1	ENSMUST00000108961	Gm11009	predicted gene 11009	176317638	176319494	TC0200005347.mm.1	0.2	0.209802
TC0800002567.mm.1	NM_001163748	Pde9a	phosphodiesterase 9A	31386234	31476310	TC1700000535.mm.1	0.1	0.210021
TC0800002569.mm.1	ENSMUST00000082828	Gm23738	predicted gene, 23738	68182532	68182702	TC0400000748.mm.1	-0.1	0.210048
TC0800002572.mm.1	XM_003689046	Gm21661	predicted gene, 21661	23097865	23098578	TC0Y00000062.mm.1	0.2	0.210129
TC0800002576.mm.1	XM_001477562	Gm20919	predicted gene, 20919	79074227	79074940	TC0Y00000486.mm.1	0.2	0.210129
TC0800002578.mm.1	NM_009398	Tnfaip6	tumor necrosis factor alpha induced protein 6	52038009	52056686	TC0200000819.mm.1	0.1	0.210141
TC0800002579.mm.1	NM_008214	Hars	histidyl-tRNA synthetase	36766528	36783205	TC1800001200.mm.1	-0.2	0.210148
TC0800002581.mm.1	NM_024262	Smg8	smg-8 homolog, nonsense mediated mRNA deca	87077732	87086777	TC1100003469.mm.1	-0.2	0.210202
TC0800002585.mm.1	ENSMUST00000119849	Gm12623	predicted gene 12623	60573567	60575549	TC1100002880.mm.1	-0.2	0.210259
TC0800002599.mm.1	ENSMUST00000122726	Gm26026	predicted gene, 26026	14718358	14718480	TC1900001199.mm.1	-0.2	0.210356
TC0800002603.mm.1	NM_001145209	Hbs1l	Hbs1-like (S. cerevisiae)	21295979	21368889	TC1000000165.mm.1	-0.1	0.210567
TC0800002605.mm.1	NM_010194	Fes	feline sarcoma oncogene	80377758	80387946	TC0700003593.mm.1	0.1	0.21066
TC0800002608.mm.1	NM_028794	Nudt9	nudix (nucleoside diphosphate linked moiety X)-	104046306	104065379	TC0500001017.mm.1	0.1	0.210672
TC0800002612.mm.1	NR_030254	Mir486	microRNA 486	23142555	23142682	TC0800000293.mm.1	-0.1	0.210804
TC0800002617.mm.1	NM_145501	Pi4k2a	phosphatidylinositol 4-kinase type 2 alpha	42090435	42122218	TC1900000609.mm.1	0.1	0.210859
TC0800002629.mm.1	ENSMUST00000104639	Gm23237	predicted gene, 23237	3555465	3555556	TC0300000006.mm.1	0.3	0.210865
TC0800002630.mm.1	NM_024172	Hspbp1	HSPA (heat shock 70kDa) binding protein, cytopl	4660521	4684963	TC0700002167.mm.1	-0.1	0.21091
TC0800002658.mm.1	NM_011590	Timm17a	translocase of inner mitochondrial membrane 17	135301532	135313778	TC0100003125.mm.1	0.2	0.210918
TC0800002665.mm.1	ENSMUST00000083156	Gm23677	predicted gene, 23677	115591170	115591273	TC0800002990.mm.1	0.1	0.210943
TC0800002669.mm.1	ENSMUST00000157269	Gm25280	predicted gene, 25280	138827376	138827476	TC0400003833.mm.1	0.1	0.211017
TC0800002670.mm.1	NM_152821	Purg	purine-rich element binding protein G	33386325	33417469	TC0800000384.mm.1	-0.1	0.211162
TC0800002672.mm.1	ENSMUST00000157209	Gm23957	predicted gene, 23957	66370392	66370481	TC0700003435.mm.1	0.2	0.211213
TC0800002678.mm.1	NM_023172	Ndufb9	NADH dehydrogenase (ubiquinone) 1 beta subcc	58933810	58939489	TC1500000423.mm.1	0.4	0.21137
TC0800002680.mm.1	NM_033074	Tars	threonyl-tRNA synthetase	11383663	11399658	TC1500001214.mm.1	-0.2	0.211435
TC0800002690.mm.1	ENSMUST00000157481	Gm22378	predicted gene, 22378	109499714	109499824	TC1100003991.mm.1	-0.2	0.211435
TC0800002696.mm.1	ENSMUST00000180104	Gm24508	predicted gene, 24508	84294535	84294641	TC1600000931.mm.1	-0.7	0.211491
TC0800002697.mm.1	NM_019490	Uso1	USO1 vesicle docking factor	92137938	92202795	TC0500000868.mm.1	0.2	0.211636
TC0800002700.mm.1	ENSMUST00000080223	Rpl21-p	ribosomal protein L21, pseudogene 3	59094055	59094537	TC1200001815.mm.1	-0.5	0.211852
TC0800002701.mm.1	ENSMUST00000158836	Gm23698	predicted gene, 23698	110796173	110796300	TC1000001283.mm.1	-0.1	0.212066
TC0800002704.mm.1	ENSMUST00000117011	Gm25003	predicted gene, 25003	104744670	104744759	TC0100000998.mm.1	0.3	0.21218
TC0800002721.mm.1	NM_133716	Smap2	stromal membrane-associated GTPase-activating	120968317	121017247	TC0400003448.mm.1	-0.3	0.212268
TC0800002725.mm.1	NM_028003	Rpap3	RNA polymerase II associated protein 3	97675097	97705825	TC1500002154.mm.1	-0.1	0.212373
TC0800002739.mm.1	ENSMUST00000083230	Gm23814	predicted gene, 23814	119793942	119794043	TC0200004448.mm.1	-0.6	0.212393
TC0800002742.mm.1	NM_026983	Erp27	endoplasmic reticulum protein 27	136907311	136922180	TC0600003336.mm.1	-0.1	0.212484
TC0800002743.mm.1	NR_028575	Snord12	small nucleolar RNA, C/D box 123	32241845	32241932	TC1500001329.mm.1	0.5	0.212505
TC0800002744.mm.1	NM_153414	Ints9	integrator complex subunit 9	64950045	65039835	TC1400000930.mm.1	-0.2	0.212586
TC0800002751.mm.1	NM_007502	Atp1b3	ATPase, Na+/K+ transporting, beta 3 polypeptide	96332657	96364304	TC0900002875.mm.1	0.2	0.212837
TC0800002753.mm.1	NM_199199	Tmem199	transmembrane protein 199	78507055	78512172	TC1100003298.mm.1	0.0	0.212841
TC0800002760.mm.1	NM_001205214	Rxrb	retinoid X receptor beta	34031812	34038403	TC1700000611.mm.1	-0.1	0.213029
TC0800002763.mm.1	NM_001045524	AK12934	cDNA sequence AK129341	8076632	8134294	TC0900001726.mm.1	-0.1	0.213133
TC0800002764.mm.1	NR_029802	Mir320	microRNA 320	70443510	70443591	TC1400000997.mm.1	0.2	0.213177
TC0800002782.mm.1	ENSMUST00000106431	Gm10959	predicted gene 10959	122913070	122919360	TC0300002867.mm.1	0.2	0.213229
TC0800002783.mm.1	NM_008598	Mgmt	O-6-methylguanine-DNA methyltransferase	136894611	137128188	TC0700001974.mm.1	0.1	0.213339
TC0800002787.mm.1	ENSMUST00000084006	Gm23795	predicted gene, 23795	68952100	68952236	TC0700003466.mm.1	-0.7	0.213342
TC0800002790.mm.1	XR_141007	Gm19337	predicted gene, 19337	63250932	63252515	TC1000000599.mm.1	-0.1	0.213353
TC0800002797.mm.1	ENSMUST00000110100	Gm11035	predicted gene 11035	64979544	65014904	TC1500001642.mm.1	0.3	0.21336
TC0800002802.mm.1	ENSMUST00000104449	Gm22771	predicted gene, 22771	74906109	74906199	TC1100001053.mm.1	-0.1	0.213524
TC0800002804.mm.1	ENSMUST00000104632	Gm23235	predicted gene, 23235	15178139	15178231	TC0900000115.mm.1	0.3	0.213551
TC0800002806.mm.1	ENSMUST00000093626	Gm23087	predicted gene, 23087	11350450	11350525	TC0700002326.mm.1	0.1	0.213721
TC0800002807.mm.1	NM_181650	Prdm4	PR domain containing 4	85891966	85917142	TC1000002611.mm.1	-0.1	0.213735
TC0800002808.mm.1	NM_001168538	Cdadc1	cytidine and dCMP deaminase domain containin	59559388	59597959	TC1400002165.mm.1	0.1	0.213829
TC0800002822.mm.1	NM_007485	Rhod	ras homolog gene family, member D	4425457	4439433	TC1900000921.mm.1	0.1	0.213862
TC0800002823.mm.1	NM_008390	Irf1	interferon regulatory factor 1	53770014	53778374	TC1100000614.mm.1	-0.1	0.214074
TC0800002824.mm.1	NM_016804	Mtx2	metaxin 2	74825803	74878431	TC0200001102.mm.1	0.1	0.214359
TC0800002828.mm.1	NM_013571	Ksr1	kinase suppressor of ras 1	79013440	79146407	TC1100003315.mm.1	0.1	0.214512
TC0800002830.mm.1	NM_183149	Zfp598	zinc finger protein 598	24669752	24682016	TC1700000347.mm.1	0.1	0.214554
TC0800002831.mm.1	ENSMUST00000083140	Gm24535	predicted gene, 24535	21901732	21901838	TC0X00001947.mm.1	-0.7	0.214727

TC0800002842.mm.1	ENSMUST00000104628	Gm22735	predicted gene, 22735	128435255	128435347	TC0500001491.mm.1	0.3	0.214755
TC0800002844.mm.1	ENSMUST00000179147	Gm23191	predicted gene, 23191	87364040	87364146	TC1000002631.mm.1	-0.7	0.214779
TC0800002848.mm.1	ENSMUST00000082755	Gm25815	predicted gene, 25815	16953395	16953501	TC0700002442.mm.1	-0.3	0.214835
TC0800002850.mm.1	ENSMUST00000158200	Gm25223	predicted gene, 25223	49906771	49906880	TC0200003503.mm.1	-0.2	0.214853
TC0800002854.mm.1	NM_020577	As3mt	arsenic (+3 oxidation state) methyltransferase	46707443	46741095	TC1900000709.mm.1	-0.2	0.214983
TC0800002858.mm.1	NM_001007582	AY76118	cDNA sequence AY761184	21702519	21703647	TC0800001851.mm.1	-0.1	0.215287
TC0800002863.mm.1	ENSMUST00000118660	Gm12099	predicted gene 12099	30705152	30705901	TC1100002441.mm.1	-0.1	0.215589
TC0800002869.mm.1	NM_178605	Nop16	NOP16 nucleolar protein	54584185	54590090	TC1300002036.mm.1	-0.1	0.215591
TC0800002872.mm.1	NM_008553	Ascl1	achaete-scute complex homolog 1 (Drosophila)	87490819	87493660	TC1000002632.mm.1	-0.1	0.215684
TC0800002875.mm.1	NM_138586	Exosc5	exosome component 5	25659153	25668032	TC0700000421.mm.1	-0.1	0.21569
TC0800002877.mm.1	ENSMUST00000091481	Zfp72	zinc finger protein 72	74371426	74376566	TC1300002321.mm.1	0.1	0.215725
TC0800002879.mm.1	NR_002851	Snord82	small nucleolar RNA, C/D box 82	86356260	86356330	TC0100002742.mm.1	-0.3	0.215726
TC0800002881.mm.1	NM_138745	Mthfd1	methylenetetrahydrofolate dehydrogenase (NAI	76255232	76319820	TC1200000675.mm.1	-0.2	0.215746
TC0800002898.mm.1	NM_001109747	Cenpw	centromere protein W	30194580	30200540	TC1000001941.mm.1	-0.1	0.215783
TC0800002900.mm.1	NM_178635	Uvrag	UV radiation resistance associated gene	98886743	99141144	TC0700003790.mm.1	-0.2	0.215865
TC0800002904.mm.1	NM_008302	Hsp90ab	heat shock protein 90 alpha (cytosolic), class	45567775	45573271	TC1700002151.mm.1	-0.2	0.215886
TC0800002905.mm.1	ENSMUST00000157210	Gm24481	predicted gene, 24481	92949158	92949259	TC0300002416.mm.1	0.2	0.215897
TC0800002913.mm.1	ENSMUST00000116795	Gm25850	predicted gene, 25850	107605337	107605434	TC0800001279.mm.1	0.3	0.21613
TC0800002918.mm.1	ENSMUST00000119086	Gm13651	predicted gene 13651	77291331	77292440	TC0200001137.mm.1	-0.2	0.216141
TC0800002922.mm.1	NM_023596	Slc29a3	solute carrier family 29 (nucleoside transporte	60712072	60752794	TC1000002234.mm.1	0.2	0.216232
TC0800002927.mm.1	NM_146467	Olfr138	olfactory receptor 1388	49443853	49444788	TC1100000510.mm.1	0.1	0.216378
TC0800002928.mm.1	ENSMUST00000175471	Gm25249	predicted gene, 25249	64956499	64956576	TC0700003416.mm.1	0.2	0.216507
TC0800002929.mm.1	XR_140584	Gm9916	predicted gene 9916	118434721	118435997	TC0300001214.mm.1	-0.1	0.216533
TC0800002935.mm.1	NM_001142322	Myo9b	myosin IXb	71272714	71360712	TC0800000782.mm.1	-0.2	0.216629
TC0800002936.mm.1	NM_031199	Tgfa	transforming growth factor alpha	86195251	86275449	TC0600000980.mm.1	0.0	0.216816
TC0800002937.mm.1	NM_010501	Ifit3	interferon-induced protein with tetratricopepti	34583529	34588982	TC1900000501.mm.1	0.1	0.216864
TC0800002945.mm.1	ENSMUST00000177706	Gm26178	predicted gene, 26178	57239007	57239113	TC1500001551.mm.1	-0.6	0.216872
TC0800002947.mm.1	ENSMUST00000105067	Gm14193	predicted gene 14193	99730175	99730327	TC1100001599.mm.1	-0.2	0.216935
TC0800002953.mm.1	NM_011474	Sprr2h	small proline-rich protein 2H	92385685	92387324	TC0300000828.mm.1	-0.1	0.217111
TC0800002955.mm.1	ENSMUST00000175373	Gm22696	predicted gene, 22696	77116365	77116432	TC1200001963.mm.1	0.2	0.217119
TC0800002957.mm.1	NM_023912	Scyl1	SCY1-like 1 (S. cerevisiae)	5758427	5771401	TC1900000983.mm.1	0.1	0.217167
TC0800002961.mm.1	NM_001083114	Pphln1	periphilin 1	93398350	93491913	TC1500000921.mm.1	-0.2	0.217349
TC0800002962.mm.1	ENSMUST00000094035	Gm13597	predicted gene 13597	68554501	68555750	TC0200000988.mm.1	0.2	0.21751
TC0800002968.mm.1	ENSMUST00000083947	Gm22866	predicted gene, 22866	90351995	90352171	TC0900001160.mm.1	-0.5	0.217513
TC0800002969.mm.1	ENSMUST00000122739	n-R5s43	nuclear encoded rRNA 5S 43	100449684	100449793	TC1500001046.mm.1	0.1	0.217596
TC0800002983.mm.1	NM_023056	Tmem176	transmembrane protein 176B	48833811	48841374	TC0600002233.mm.1	0.3	0.217618
TC0800002990.mm.1	ENSMUST00000082598	Gm23614	predicted gene, 23614	122265094	122265200	TC0700001755.mm.1	-0.5	0.217664
TC0800003007.mm.1	ENSMUST00000178536	Gm24317	predicted gene, 24317	15383148	15383254	TC0400000134.mm.1	-0.5	0.217675
TC0800003010.mm.1	ENSMUST00000158449	Gm23817	predicted gene, 23817	80622830	80622933	TC1200002001.mm.1	-0.1	0.217835
TC0800003011.mm.1	NM_011171	Procr	protein C receptor, endothelial	155751117	155755478	TC0200002374.mm.1	0.1	0.218124
TC0800003015.mm.1	NM_172549	Cabin1	calcineurin binding protein 1	75646110	75764357	TC1000002381.mm.1	-0.1	0.218142
TC0800003017.mm.1	ENSMUST00000178377	Rab11b-	RAB11b, member RAS oncogene family, pseudog	7398421	7399077	TC1900001044.mm.1	0.4	0.218259
TC0800003026.mm.1	ENSMUST00000137730	Gm16196	predicted gene 16196	29014642	29015897	TC1700001775.mm.1	0.1	0.2183
TC0800003037.mm.1	XR_141217	Gm10002	predicted gene 10002	69654835	69658661	TC1400002323.mm.1	-0.1	0.218356
TC0800003045.mm.1	ENSMUST00000122308	Gm12443	predicted gene 12443	46419980	46420302	TC0400002599.mm.1	-0.2	0.218392
TC0800003064.mm.1	NM_001077638	Prmt2	protein arginine N-methyltransferase 2	76207222	76237865	TC1000002398.mm.1	0.1	0.218473
TC0800003069.mm.1	NM_001142916	Plod2	procollagen lysine, 2-oxoglutarate 5-dioxygenas	92542223	92608428	TC0900001175.mm.1	-0.1	0.218528
TC0800003073.mm.1	ENSMUST00000179834	Gm22633	predicted gene, 22633	12374936	12375042	TC0100000059.mm.1	-0.8	0.218937
TC0800003076.mm.1	NM_134089	Scrib	scribbled homolog (Drosophila)	76047158	76069784	TC1500001760.mm.1	-0.1	0.218938
TC0800003077.mm.1	ENSMUST00000096145	Gm10337	predicted gene 10337	102503722	102503886	TC1500001103.mm.1	-0.2	0.218959
TC0800003088.mm.1	NM_028037	Acad10	acyl-Coenzyme A dehydrogenase family, membe	121621026	121660514	TC0500003195.mm.1	0.1	0.219003
TC0800003104.mm.1	ENSMUST00000118490	Gm14519	predicted gene 14519	15365179	15365490	TC0X00000176.mm.1	-0.5	0.219066
TC0800003105.mm.1	NCBI_Gene:638634:p	Ighv1-7	Ighv1-70 immunoglobulin heavy variable 1-70	115691889	115692182	TC1200002648.mm.1	-0.7	0.219165
TC0800003106.mm.1	NM_026861	Ubac2	ubiquitin associated domain containing 2	121878606	122021035	TC1400001321.mm.1	-0.1	0.219188
TC0800003107.mm.1	ENSMUST00000082595	Gm26437	predicted gene, 26437	39305377	39305481	TC0X00002094.mm.1	-0.2	0.219248
TC0800003108.mm.1	NM_011078	Phf2	PHD finger protein 2	48801750	48870885	TC1300001949.mm.1	-0.3	0.2193
TC0800003109.mm.1	NM_001033318	Cog7	component of oligomeric golgi complex 7	121922839	121981711	TC0700004219.mm.1	0.1	0.219373
TC0800003110.mm.1	NM_177596	Zfp947	zinc finger protein 947	22144359	22166190	TC1700001570.mm.1	-0.1	0.219386
TC0800003111.mm.1	ENSMUST00000179192	Gm13698	predicted gene 13698	83955693	83958185	TC0200001206.mm.1	-0.3	0.219405
TC0800003112.mm.1	ENSMUST00000178960	Gm13693	predicted gene 13693	83961503	83963995	TC0200001207.mm.1	-0.3	0.219405
TC0800003113.mm.1	ENSMUST00000180347	Gm13696	predicted gene 13696	83973123	83975615	TC0200001209.mm.1	-0.3	0.219405
TC0800003114.mm.1	ENSMUST00000178533	Gm13694	predicted gene 13694	83978933	83981425	TC0200001210.mm.1	-0.3	0.219405
TC0800003115.mm.1	ENSMUST00000099948	Gm13697	predicted gene 13697	83984743	83987235	TC0200001211.mm.1	-0.3	0.219405
TC0800003116.mm.1	ENSMUST00000104719	n-R5s19	nuclear encoded rRNA 5S 194	4338998	4339116	TC0300000011.mm.1	-0.5	0.219599
TC0800003117.mm.1	NM_145986	Fam83f	family with sequence similarity 83, member F	80671847	80700425	TC1500000704.mm.1	-0.1	0.219619
TC0800003118.mm.1	NM_178883	Gorab	golgin, RAB6-interacting	163384909	163403641	TC0100003412.mm.1	-0.1	0.219642
TC0800003119.mm.1	XR_140471	Gm10521	predicted gene 10521	171895664	171898237	TC0100001603.mm.1	0.1	0.21967
TC0800003120.mm.1	ENSMUST00000111844	Gm11077	predicted gene 11077	140729284	140756053	TC0600001659.mm.1	-0.1	0.219764
TC0800003121.mm.1	NM_001123367	Gm3448	predicted gene 3448	14995783	15010184	TC1700002795.mm.1	0.1	0.219788
TC0800003122.mm.1	ENSMUST00000180326	Gm22418	predicted gene, 22418	107001452	107001558	TC0600001188.mm.1	-0.6	0.219888
TC0800003123.mm.1	NM_134059	Ddx41	DEAD (Asp-Glu-Ala-Asp) box polypeptide 41	55530410	55536658	TC1300002063.mm.1	-0.2	0.219945
TC0800003124.mm.1	NCBI_Gene:10011490	Trdv4	T cell receptor delta variable 4	54072412	54075515	TC1400000715.mm.1	-0.1	0.220119
TC0800003125.mm.1	ENSMUST00000117793	Gm15289	predicted gene 15289	111361676	111361919	TC1300001249.mm.1	-0.4	0.220152
TC0800003126.mm.1	ENSMUST00000122498	Gm26251	predicted gene, 26251	78603710	78603831	TC1400001090.mm.1	0.1	0.220276
TC0800003127.mm.1	ENSMUST00000170469	Gm3317	predicted gene 3317	5630281	5633028	TC1400001399.mm.1	0.1	0.220732
TC0800003128.mm.1	ENSMUST00000117747	Gm14060	predicted gene 14060	138453878	138454324	TC0200004717.mm.1	0.4	0.220741
TC0800003129.mm.1	NM_178045	Rassf4	Ras association (RalGDS/AF-6) domain family me	116633008	116673836	TC0600002978.mm.1	0.2	0.220757
TC0800003130.mm.1	ENSMUST00000179268	Gm26491	predicted gene, 26491	10475500	10475620	TC0200000108.mm.1	0.2	0.220788

TC0800003131.mm.1	ENSMUST00000157938	Gm23779	predicted gene, 23779	21486338	21486401	TC1300001543.mm.1	0.1	0.220941
TC0800003132.mm.1	NM_183136	Spink8	serine peptidase inhibitor, Kazal type 8	109812280	109826633	TC0900001440.mm.1	0.2	0.220996
TC0800003133.mm.1	NM_013785	Ip6k1	inositol hexaphosphate kinase 1	108002501	108048782	TC0900003337.mm.1	-0.1	0.221044
TC0800003134.mm.1	XR_105121	AU02020	expressed sequence AU020206	75769039	75782099	TC0700003530.mm.1	-0.2	0.221307
TC0800003135.mm.1	NM_008142	Gnb1	guanine nucleotide binding protein (G protein),	155491361	155559269	TC0400002077.mm.1	0.2	0.221349
TC0800003136.mm.1	ENSMUST00000117335	Gm11821	predicted gene 11821	11400346	11401324	TC0400000089.mm.1	-0.1	0.221393
TC0800003137.mm.1	ENSMUST00000115928	AC12514	N/A	147792	149707	TC1_GL456210_rand	-0.6	0.221424
TC0800003138.mm.1	ENSMUST00000083253	Gm25136	predicted gene, 25136	135584192	135584306	TC0600001607.mm.1	-0.2	0.221426
TC0800003139.mm.1	ENSMUST00000183076	Gm5345	predicted gene 5345	40853828	40855027	TC0800002110.mm.1	-0.1	0.221502
TC0800003140.mm.1	ENSMUST00000104548	Gm24555	predicted gene, 24555	83921918	83922041	TC0100000723.mm.1	0.2	0.221598
TC0800003141.mm.1	ENSMUST00000077278	Rpl21-p	ribosomal protein L21, pseudogene 11	96666515	96666982	TC0300002524.mm.1	-0.4	0.221714
TC0800003142.mm.1	XR_105947	3222401	RIKEN cDNA 3222401L13 gene	37655690	37659137	TC1800000380.mm.1	0.1	0.221814
TC0800003143.mm.1	ENSMUST00000083860	Gm25514	predicted gene, 25514	116968039	116968173	TC0200004393.mm.1	-0.5	0.221882
TC0800003144.mm.1	NM_001195437	Gm590	predicted gene 590	110914739	110916861	TC0900003120.mm.1	-0.1	0.222005
TC0800003145.mm.1	NM_146405	Olfr228	olfactory receptor 228	86482799	86483767	TC0200003942.mm.1	0.1	0.222081
TC0800003146.mm.1	NM_010516	Cyr61	cysteine rich protein 61	145646971	145649985	TC0300003087.mm.1	0.3	0.222174
TC0800003147.mm.1	NM_011827	Hcst	hematopoietic cell signal transducer	30417712	30419854	TC0700002758.mm.1	-0.1	0.22218
TC0800003148.mm.1	ENSMUST00000148614	Gm5125	predicted gene 5125	102106603	102107226	TC0X00002735.mm.1	-0.1	0.222253
TC0800003149.mm.1	ENSMUST00000122677	Gm25985	predicted gene, 25985	115116127	115116233	TC1300001320.mm.1	0.1	0.222282
TC0800003150.mm.1	ENSMUST00000083791	Gm26165	predicted gene, 26165	144261589	144261726	TC0200004758.mm.1	-0.6	0.222531
TC0800003151.mm.1	NM_011908	Ubl3	ubiquitin-like 3	148504631	148552789	TC0500003638.mm.1	0.2	0.222624
TC0800003152.mm.1	NM_001081288	Taf2	TAF2 RNA polymerase II, TATA box binding prote	55015129	55072152	TC1500001533.mm.1	-0.1	0.222668
TC0800003153.mm.1	NM_152804	Plk2	polo-like kinase 2	110395044	110400844	TC1300001242.mm.1	0.3	0.222714
TC0800003154.mm.1	ENSMUST00000172431	Gm3512	predicted gene 3512	7144121	7244706	TC1400002850.mm.1	0.1	0.222883
TC0800003161.mm.1	ENSMUST00000184627	AC13836	N/A	8690181	8690233	TC0800000064.mm.1	-0.1	0.222938
TC0800003162.mm.1	NM_009256	Serpinb	serine (or cysteine) peptidase inhibitor, clade	33003250	33017957	TC1300000364.mm.1	0.1	0.223028
TC0800003164.mm.1	ENSMUST00000082806	Gm24706	predicted gene, 24706	82401091	82401227	TC0X00002544.mm.1	-0.1	0.223134
TC0800003171.mm.1	NM_009269	Sptlc1	serine palmitoyltransferase, long chain base su	53332716	53377365	TC1300002017.mm.1	0.1	0.223181
TC0800003172.mm.1	NM_001142539	Gm9992	predicted gene 9992	7363712	7385305	TC1700001400.mm.1	0.1	0.223196
TC0800003184.mm.1	ENSMUST00000104783	Gm26258	predicted gene, 26258	82976323	82976414	TC1800000877.mm.1	0.4	0.223257
TC0800003190.mm.1	ENSMUST00000180301	Gm23648	predicted gene, 23648	18727292	18727398	TC0600000148.mm.1	-0.7	0.22336
TC0800003201.mm.1	NM_027909	C2cd2l	C2 calcium-dependent domain containing 2-like	44309237	44320282	TC0900002156.mm.1	0.1	0.223412
TC0800003212.mm.1	ENSMUST00000104093	Gm26396	predicted gene, 26396	94792205	94792336	TC0200004184.mm.1	0.1	0.223412
TC0800003213.mm.1	NCBI_Gene:619833:p	Ighv1-6	immunoglobulin heavy variable 1-69	115623161	115623595	TC1200002646.mm.1	-1.0	0.223506
TC0800003217.mm.1	ENSMUST00000104129	Gm25785	predicted gene, 25785	51607544	51607668	TC1800001327.mm.1	-0.4	0.223701
TC0800003221.mm.1	ENSMUST00000104454	Gm24984	predicted gene, 24984	72527550	72527682	TC1000000692.mm.1	0.1	0.223792
TC0800003228.mm.1	XM_001477137	Gm3552	predicted gene 3552	48695517	48732770	TC1400001950.mm.1	-0.1	0.223812
TC0800003231.mm.1	ENSMUST00000082578	Gm22456	predicted gene, 22456	94919709	94919833	TC1100001447.mm.1	-0.3	0.22384
TC0800003244.mm.1	NM_001163751	Spsb3	splA/ryanodine receptor domain and SOCS box c	24886643	24892152	TC1700000356.mm.1	-0.1	0.22385
TC0800003245.mm.1	NM_028260	Immp1l	IMP1 inner mitochondrial membrane peptidase-	105904638	105965558	TC0200001586.mm.1	-0.2	0.223886
TC0900000002.mm.1	NM_172570	Trim47	tripartite motif-containing 47	116105750	116110246	TC1100004301.mm.1	0.1	0.224013
TC0900000003.mm.1	NM_177075	Fndc9	fibronectin type III domain containing 9	46235531	46239872	TC1100000469.mm.1	-0.1	0.224033
TC0900000004.mm.1	XR_105872	Gm19773	predicted gene, 19773	86970372	86974882	TC1700001304.mm.1	0.2	0.224149
TC0900000005.mm.1	NM_207147	Olfr813	olfactory receptor 813	129856520	129857452	TC1000001656.mm.1	0.1	0.224177
TC0900000006.mm.1	ENSMUST00000116888	Gm25541	predicted gene, 25541	27539805	27539930	TC0200003219.mm.1	-0.5	0.224448
TC0900000007.mm.1	NM_145500	Ubtd1	ubiquitin domain containing 1	41981763	42034643	TC1900000604.mm.1	0.1	0.2245
TC0900000008.mm.1	ENSMUST00000172151	Gm8046	predicted gene 8046	43635674	43638776	TC1400000444.mm.1	-0.1	0.224527
TC0900000014.mm.1	NM_178919	Lmf2	lipase maturation factor 2	89351004	89355659	TC1500002050.mm.1	0.2	0.224537
TC0900000016.mm.1	ENSMUST00000104959	Cdk2ap1	CDK2 (cyclin-dependent kinase 2)-associated pro	48825346	48826655	TC1100002638.mm.1	-0.1	0.224577
TC0900000025.mm.1	NM_010390	H2-Q1	histocompatibility 2, Q region locus 1	35320405	35325099	TC1700002791.mm.1	-0.1	0.224645
TC0900000031.mm.1	ENSMUST00000101982	Gm24423	predicted gene, 24423	21548060	21548165	TC0800001847.mm.1	0.1	0.224898
TC0900000033.mm.1	NM_212449	AU01982	expressed sequence AU019823	50605240	50617464	TC0900002272.mm.1	-0.1	0.22497
TC0900000035.mm.1	ENSMUST00000179533	Gm26366	predicted gene, 26366	59486818	59486896	TC0700003203.mm.1	-0.1	0.225015
TC0900000040.mm.1	uc029sxk.1	LOC4328	non-coding RNA, oocyte_clustered_small_RNA4	48541237	50335509	TC1600000695.mm.1	0.4	0.225031
TC0900000054.mm.1	ENSMUST00000083725	Gm23103	predicted gene, 23103	29737318	29737424	TC0700002728.mm.1	-0.7	0.225092
TC0900000055.mm.1	NM_019924	Rps6ka4	ribosomal protein S6 kinase, polypeptide 4	6829084	6840627	TC1900001017.mm.1	0.0	0.225139
TC0900000069.mm.1	NCBI_Gene:243453:p	Igkv4-8	immunoglobulin kappa variable 4-81	68990758	68991294	TC0600003553.mm.1	-0.4	0.225246
TC0900000075.mm.1	NM_009777	C1qb	complement component 1, q subcomponent, be	136880129	136886187	TC0400003792.mm.1	0.5	0.2253
TC0900000082.mm.1	NM_177256	Prdx6b	peroxiredoxin 6B	80292470	80295358	TC0200001170.mm.1	0.1	0.225329
TC0900000086.mm.1	NM_007910	Efna4	ephrin A4	89333390	89338028	TC0300002347.mm.1	-0.1	0.225459
TC0900000111.mm.1	NM_001135112	Dnaja3	DnaJ (Hsp40) homolog, subfamily A, member 3	4684070	4707695	TC1600002169.mm.1	0.1	0.225588
TC0900000115.mm.1	ENSMUST00000178101	Gm23729	predicted gene, 23729	29732942	29733036	TC1300000321.mm.1	0.2	0.225668
TC0900000118.mm.1	NM_011113	Plaur	plasminogen activator, urokinase receptor	24462500	24475873	TC0700000383.mm.1	0.1	0.225717
TC0900000119.mm.1	ENSMUST00000122762	Gm24629	predicted gene, 24629	105203993	105204081	TC0800001206.mm.1	0.1	0.225885
TC0900000124.mm.1	NM_027103	1700030	RIKEN cDNA 1700030J22 gene	116969599	116978959	TC0800003007.mm.1	-0.1	0.22591
TC0900000131.mm.1	NM_025326	Tmem176	transmembrane protein 176A	48841483	48845858	TC0600000570.mm.1	0.2	0.22592
TC0900000132.mm.1	NM_001111272	Stau2	staufen (RNA binding protein) homolog 2 (Droso	16228674	16520112	TC0100001999.mm.1	0.1	0.225949
TC0900000133.mm.1	ENSMUST00000179063	Gm13443	predicted gene 13443	35340361	35341316	TC0200000638.mm.1	0.3	0.226092
TC0900000134.mm.1	ENSMUST00000117047	Gm12165	predicted gene 12165	46036440	46036781	TC1100000463.mm.1	-0.1	0.226182
TC0900000135.mm.1	NM_001199270	Aldoart	aldolase 1 A, retrogene 1	72850583	72852634	TC0400002855.mm.1	0.2	0.226341
TC0900000138.mm.1	NR_038122	Elmo1	engulfment and cell motility 1	20090507	20608356	TC1300000148.mm.1	-0.3	0.226528
TC0900000146.mm.1	ENSMUST00000081668	Rpl21-p	ribosomal protein L21, pseudogene 12	90844978	90845460	TC0600002721.mm.1	-0.5	0.226557
TC0900000149.mm.1	NCBI_Gene:668544:p	Ighv1-6	Ighv1-62-1 immunoglobulin heavy variable 1-62-	115386707	115386988	TC1200002639.mm.1	-0.7	0.226587
TC0900000159.mm.1	NM_001081433	Ankrd44	ankyrin repeat domain 44	54645340	54926387	TC0100002350.mm.1	-0.2	0.226596
TC0900000162.mm.1	ENSMUST00000104624	Gm22734	predicted gene, 22734	92402197	92402280	TC0700003737.mm.1	0.3	0.226616
TC0900000170.mm.1	NM_001199059	Rabgef1	RAB guanine nucleotide exchange factor (GEF) 1	130171798	130214342	TC0500001526.mm.1	0.1	0.226627
TC0900000177.mm.1	NCBI_Gene:434034:p	Igkv4-9	immunoglobulin kappa chain variable 4-90	68807180	68807708	TC0600003548.mm.1	-0.3	0.226699
TC0900000183.mm.1	ENSMUST00000179599	Gm12183	predicted gene 12183	48751760	48753770	TC1100002631.mm.1	-0.4	0.226834

TC0900000184.mm.1	ENSMUST00000157977	Gm24191	predicted gene, 24191	106669999	106670120	TC0500001063.mm.1	-0.1	0.226908
TC0900000191.mm.1	NM_009796	Capn7	calpain 7	31336638	31371986	TC1400000327.mm.1	-0.1	0.227132
TC0900000196.mm.1	ENSMUST00000178423	Gm25670	predicted gene, 25670	110597616	110597722	TC1400002688.mm.1	-0.7	0.227167
TC0900000199.mm.1	ENSMUST00000169818	Gm17606	predicted gene, 17606	54640952	54648293	TC1400000755.mm.1	-0.2	0.227245
TC0900000202.mm.1	NM_001081687	Gm5150	predicted gene 5150	15948070	16006332	TC0300003226.mm.1	0.1	0.227401
TC0900000203.mm.1	ENSMUST00000157559	Gm23137	predicted gene, 23137	87444474	87444580	TC1100003479.mm.1	-0.7	0.227446
TC0900000204.mm.1	NM_153548	E430025	RIKEN cDNA E430025E21 gene	59331997	59374167	TC1500001596.mm.1	0.2	0.227554
TC0900000210.mm.1	NM_001033978	H2-Eb2	histocompatibility 2, class II antigen E beta2	34325665	34341410	TC1700000628.mm.1	-0.4	0.227901
TC0900000214.mm.1	NCBI_Gene:668421:p	Ighv14-	immunoglobulin heavy variable 14-2	113994469	113994898	TC1200002580.mm.1	-0.7	0.228014
TC0900000216.mm.1	NM_172121	Zc3h3	zinc finger CCCH type containing 3	75754432	75841915	TC1500001744.mm.1	0.0	0.228017
TC0900000223.mm.1	NM_020583	Isg20	interferon-stimulated protein	78913424	78920396	TC0700001116.mm.1	-0.1	0.228132
TC0900000234.mm.1	NM_010833	Msn	moesin	96096042	96168553	TC0X00000916.mm.1	0.2	0.228209
TC0900000240.mm.1	NM_010302	Gna12	guanine nucleotide binding protein, alpha 12	140758408	140830431	TC0500003516.mm.1	0.2	0.22822
TC0900000244.mm.1	NM_001135568	1190007	RIKEN cDNA 1190007I07 gene	82619851	82623228	TC1000002570.mm.1	-0.1	0.228298
TC0900000247.mm.1	NM_008349	Il10rb	interleukin 10 receptor, beta	91406164	91425834	TC1600002173.mm.1	0.2	0.228382
TC0900000254.mm.1	NM_010361	Gstt2	glutathione S-transferase, theta 2	75831845	75834881	TC1000002385.mm.1	0.2	0.228386
TC0900000255.mm.1	ENSMUST00000179942	Gm26180	predicted gene, 26180	89821340	89821446	TC1000002662.mm.1	-0.7	0.228411
TC0900000271.mm.1	ENSMUST00000083298	Gm22973	predicted gene, 22973	59040335	59040525	TC1200000499.mm.1	-0.6	0.228428
TC0900000274.mm.1	NM_013664	Sh3gl1	SH3-domain GRB2-like 1	56016750	56036637	TC1700002311.mm.1	-0.1	0.228861
TC0900000279.mm.1	NM_020289	Olfr544	olfactory receptor 544	102484114	102488307	TC0700003860.mm.1	0.1	0.228972
TC0900000289.mm.1	ENSMUST00000175608	Gm26120	predicted gene, 26120	89534871	89534975	TC1300002390.mm.1	0.1	0.228994
TC0900000291.mm.1	NM_176933	Dusp4	dual specificity phosphatase 4	34807297	34819894	TC0800000416.mm.1	0.1	0.22901
TC0900000307.mm.1	NM_026276	Aasdhpp	aminoadipate-semialdehyde dehydrogenase-phc	4294793	4309494	TC0900001692.mm.1	0.1	0.229025
TC0900000309.mm.1	XM_001473924	Gm10051	predicted pseudogene 10051	133475091	133475647	TC0500001544.mm.1	-0.4	0.229106
TC0900000325.mm.1	ENSMUST00000183977	Pinc	Pregnancy induced noncoding RNA	73392246	73392399	TC0100000617.mm.1	0.1	0.229171
TC0900000329.mm.1	ENSMUST00000108963	LOC1000	zinc finger protein 120-like	177264654	177267036	TC0200005363.mm.1	0.3	0.22923
TC0900000336.mm.1	ENSMUST00000157111	Gm24648	predicted gene, 24648	87053694	87053825	TC1700002682.mm.1	-0.1	0.229416
TC0900000338.mm.1	ENSMUST00000121608	4930595	RIKEN cDNA 4930595D18 gene	111159850	111184491	TC1200002401.mm.1	0.1	0.229459
TC0900000344.mm.1	ENSMUST00000116876	Mir466j	microRNA 466j	60960723	60960844	TC1000000556.mm.1	0.3	0.229628
TC0900000345.mm.1	NM_028863	Isca2	iron-sulfur cluster assembly 2 homolog (S. cere	84773270	84775089	TC1200000819.mm.1	0.1	0.229702
TC0900000346.mm.1	ENSMUST00000074615	Gm5426	predicted pseudogene 5426	96136603	96136914	TC1000001174.mm.1	-0.2	0.229733
TC0900000354.mm.1	ENSMUST00000175360	Gm25533	predicted gene, 25533	61673829	61673907	TC0700003366.mm.1	0.3	0.229766
TC0900000358.mm.1	ENSMUST00000118685	Gm13172	predicted gene 13172	152677748	152678003	TC0400004099.mm.1	-0.1	0.22982
TC0900000360.mm.1	NM_001199331	Gm20822	predicted gene, 20822	11197162	11197848	TC0Y00000266.mm.1	0.1	0.23005
TC0900000365.mm.1	NM_001199331	Gm20822	predicted gene, 20822	15882559	15883245	TC0Y00000274.mm.1	0.1	0.23005
TC0900000370.mm.1	NM_172518	Fbxo42	F-box protein 42	141147913	141204062	TC0400001780.mm.1	-0.2	0.230081
TC0900000371.mm.1	ENSMUST00000059329	Gm17449	predicted gene, 17449	66851847	66852017	TC1300002234.mm.1	-0.2	0.230085
TC0900000372.mm.1	ENSMUST00000082698	Gm25142	predicted gene, 25142	5251850	5251956	TC1100000065.mm.1	-0.6	0.230126
TC0900000383.mm.1	NM_028121	Adpgk	ADP-dependent glucokinase	59291572	59316200	TC0900000746.mm.1	0.1	0.230265
TC0900000388.mm.1	ENSMUST00000083964	Gm24522	predicted gene, 24522	128700546	128700653	TC0X00001251.mm.1	-0.5	0.230594
TC0900000403.mm.1	NM_010661	Krt12	keratin 12	99415664	99422259	TC1100003707.mm.1	-0.1	0.230596
TC0900000405.mm.1	NR_035475	Mir669m	microRNA 669m-2	77164403	77475936	TC0X00002497.mm.1	0.3	0.230654
TC0900000415.mm.1	NM_026748	Ints1	integrator complex subunit 1	139751282	139775678	TC0500003497.mm.1	-0.1	0.230903
TC0900000423.mm.1	NM_026377	Sfr1	SWI5 dependent recombination repair 1	47731756	47735588	TC1900000725.mm.1	0.3	0.231063
TC0900000424.mm.1	NM_020262	Zfp109	zinc finger protein 109	24227795	24237598	TC0700002593.mm.1	-0.1	0.231298
TC0900000430.mm.1	NM_013651	Sf3a2	splicing factor 3a, subunit 2	80798198	80804924	TC1000000871.mm.1	-0.2	0.231327
TC0900000438.mm.1	NR_035420	Mir467f	microRNA 467f	52822108	52902647	TC1800001336.mm.1	0.5	0.231366
TC0900000461.mm.1	ENSMUST00000122262	Gm6298	predicted gene 6298	140084480	140085460	TC0X00003070.mm.1	-0.1	0.23155
TC0900000470.mm.1	NM_025417	Commd4	COMM domain containing 4	57155039	57158299	TC0900002366.mm.1	-0.2	0.231698
TC0900000492.mm.1	NCBI_Gene:629915:p	Ighv1-4	immunoglobulin heavy variable 1-47	114991108	114991401	TC1200002626.mm.1	-0.4	0.231705
TC0900000500.mm.1	NM_027481	Sugp1	SURP and G patch domain containing 1	70042813	70071957	TC0800000732.mm.1	-0.2	0.231778
TC0900000503.mm.1	NM_178071	Nme7	NME/NM23 family member 7	164307301	164437300	TC0100001502.mm.1	-0.1	0.232051
TC0900000504.mm.1	ENSMUST00000103877	Gm25040	predicted gene, 25040	118852723	118852788	TC1100004167.mm.1	0.3	0.232085
TC0900000505.mm.1	ENSMUST00000180099	Gm24565	predicted gene, 24565	97730439	97730545	TC0600001134.mm.1	-0.7	0.232122
TC0900000509.mm.1	NR_002842 // NR_	Rnu3a	U3A small nuclear RNA // U3A small nuclear RN	0	0	TSUnmapped0000018	-0.7	0.232215
TC0900000511.mm.1	NR_028310	4930503	eukaryotic translation initiation factor 3, sub	124469074	124524488	TC1000001526.mm.1	-0.1	0.232391
TC0900000512.mm.1	NM_175134	Ankrd46	ankyrin repeat domain 46	36477668	36496791	TC1500001376.mm.1	0.1	0.232411
TC0900000529.mm.1	ENSMUST00000082984	Gm22571	predicted gene, 22571	64175873	64175942	TC0900000813.mm.1	-0.2	0.232601
TC0900000532.mm.1	ENSMUST00000184836	AC15358	N/A	122200137	122200246	TC0600001377.mm.1	0.2	0.232729
TC0900000533.mm.1	ENSMUST00000158646	Gm24552	predicted gene, 24552	91242995	91243097	TC0700001291.mm.1	0.1	0.232811
TC0900000535.mm.1	ENSMUST00000104387	Gm24888	predicted gene, 24888	109521280	109521409	TC0700001613.mm.1	-0.9	0.232822
TC0900000541.mm.1	NM_053272	Dhcr24	24-dehydrocholesterol reductase	106561038	106589113	TC0400001107.mm.1	-0.2	0.232926
TC0900000559.mm.1	NM_021557	Rdh11	retinol dehydrogenase 11	79174335	79192293	TC1200001981.mm.1	-0.2	0.233045
TC0900000566.mm.1	NM_018736	Mre11a	meiotic recombination 11 homolog A (S. cerevisi	14784654	14837123	TC0900000111.mm.1	-0.1	0.233059
TC0900000586.mm.1	NM_013757	Sytl4	synaptotagmin-like 4	133936385	133981812	TC0X00002985.mm.1	0.1	0.233106
TC0900000589.mm.1	NM_015783	Isg15	ISG15 ubiquitin-like modifier	156199424	156200818	TC0400004171.mm.1	-0.1	0.233261
TC0900000590.mm.1	NM_009884	Cebpg	CCAAT/enhancer binding protein (C/EBP), gamm	35046422	35056566	TC0700002842.mm.1	0.1	0.23341
TC0900000598.mm.1	NM_028959	Cep72	centrosomal protein 72	74036495	74062285	TC1300002311.mm.1	-0.1	0.233439
TC0900000601.mm.1	NM_009876	Cdkn1c	cyclin-dependent kinase inhibitor 1C (P57)	143458339	143461050	TC0700004585.mm.1	0.1	0.233525
TC0900000611.mm.1	ENSMUST00000104215	Gm25419	predicted gene, 25419	55299655	55299845	TC0400002683.mm.1	-0.4	0.233652
TC0900000615.mm.1	NM_181596	Retnlg	resistin like gamma	48872608	48874498	TC1600000699.mm.1	0.2	0.23407
TC0900000630.mm.1	NM_001005847	Aga	aspartylglucosaminidase	53511702	53523422	TC0800000585.mm.1	0.1	0.234098
TC0900000634.mm.1	NM_013638	Prm3	protamine 3	10790505	10790914	TC1600001200.mm.1	-0.1	0.234141
TC0900000645.mm.1	ENSMUST00000158343	Gm22113	predicted gene, 22113	7246709	7246812	TC1900000132.mm.1	-0.5	0.23421
TC0900000647.mm.1	NM_017404	Mrpl39	mitochondrial ribosomal protein L39	84717576	84735742	TC1600001961.mm.1	-0.1	0.234257
TC0900000648.mm.1	ENSMUST00000171257	Gm9894	predicted gene 9894	67763798	67773629	TC1300002261.mm.1	-0.1	0.23428
TC0900000649.mm.1	ENSMUST00000158287	Gm22610	predicted gene, 22610	123095384	123095443	TC0100001105.mm.1	0.2	0.234529
TC0900000660.mm.1	ENSMUST00000158820	Gm22530	predicted gene, 22530	81806791	81806908	TC0600000899.mm.1	-0.1	0.234618

TC0900000686.mm.1	NM_011066	Per2	period circadian clock 2	91415982	91459330	TC0100002801.mm.1	0.1	0.234697
TC0900000689.mm.1	ENSMUST00000082919	Gm23442	predicted gene, 23442	35162563	35162696	TC1700001951.mm.1	-0.3	0.234737
TC0900000690.mm.1	NM_007429	Agtr2	angiotensin II receptor, type 2	21484544	21489164	TC0X00000226.mm.1	0.1	0.234906
TC0900000700.mm.1	NM_181403	Vps37c	vacuolar protein sorting 37C (yeast)	10688735	10714419	TC1900000208.mm.1	0.1	0.234941
TC0900000702.mm.1	NR_028559	Snord11	small nucleolar RNA, C/D box 111	110838528	110838616	TC0800002928.mm.1	-0.6	0.235087
TC0900000705.mm.1	NM_025332	Gtpbp8	GTP-binding protein 8 (putative)	44736768	44746363	TC1600001648.mm.1	0.1	0.235106
TC0900000709.mm.1	NM_001164426	Kcnk13	potassium channel, subfamily K, member 13	99964499	100062682	TC1200000989.mm.1	-0.1	0.235324
TC0900000711.mm.1	ENSMUST00000181450	4921514	---	141115660	141118087	TC0400001779.mm.1	-0.1	0.235366
TC0900000714.mm.1	ENSMUST00000155376	Gm16354	predicted gene 16354	175023354	175023503	TC0200005327.mm.1	0.4	0.235502
TC0900000719.mm.1	NM_177472	Slx4	SLX4 structure-specific endonuclease subunit ho	3979105	4003770	TC1600001112.mm.1	-0.1	0.235678
TC0900000730.mm.1	NCBI_Gene:243431:p	Igkv9-1	immunoglobulin kappa chain variable 9-124	67942074	67942540	TC0600003542.mm.1	-0.6	0.23572
TC0900000746.mm.1	ENSMUST00000083399	Gm24928	predicted gene, 24928	25702642	25702748	TC1600001411.mm.1	-0.7	0.235794
TC0900000748.mm.1	ENSMUST00000179144	Gm25450	predicted gene, 25450	109076136	109076242	TC0700004069.mm.1	-0.7	0.235823
TC0900000750.mm.1	ENSMUST00000184201	AC10273	N/A	153313713	153313824	TC0300001540.mm.1	-0.1	0.235825
TC0900000763.mm.1	NM_025854	Cir1	corepressor interacting with RBPJ, 1	73283105	73312701	TC0200003752.mm.1	-0.2	0.235865
TC0900000769.mm.1	NCBI_Gene:636260:p	Ighv9-4	Ighv9-4 immunoglobulin heavy variable 9-4	114299961	114300254	TC1200002591.mm.1	-0.5	0.235911
TC0900000776.mm.1	NM_001024731	Gm20939	predicted gene, 20939	94864918	94878321	TC1700001345.mm.1	-0.1	0.235971
TC0900000781.mm.1	NM_009075	Rpia	ribose 5-phosphate isomerase A	70765720	70792232	TC0600002452.mm.1	-0.1	0.236272
TC0900000795.mm.1	NM_001081151	Gan	giant axonal neuropathy	117158135	117205834	TC0800001398.mm.1	0.0	0.236379
TC0900000797.mm.1	NM_016859	Bysl	bystin-like	47599331	47611492	TC1700002208.mm.1	-0.2	0.236502
TC0900000802.mm.1	NM_013699	Ubp1	upstream binding protein 1	113930934	113977202	TC0900001507.mm.1	-0.1	0.236683
TC0900000804.mm.1	ENSMUST00000179060	n-R5s10	nuclear encoded rRNA 5S 106	123548956	123549074	TC0800003110.mm.1	-0.4	0.236831
TC0900000810.mm.1	ENSMUST00000179887	n-R5s11	nuclear encoded rRNA 5S 118	123569328	123569446	TC0800003122.mm.1	-0.4	0.236831
TC0900000811.mm.1	ENSMUST00000178677	Gm24312	predicted gene, 24312	123582850	123582968	TC0800003130.mm.1	-0.4	0.236831
TC0900000812.mm.1	ENSMUST00000178128	n-R5s13	nuclear encoded rRNA 5S 130	123589654	123589772	TC0800003134.mm.1	-0.4	0.236831
TC0900000813.mm.1	ENSMUST00000116868	Gm22193	predicted gene, 22193	110842383	110842458	TC0800002929.mm.1	-0.3	0.236856
TC0900000814.mm.1	XM_003688809	Gm21698	predicted gene, 21698	25984150	25988579	TC0500002118.mm.1	-0.1	0.236887
TC0900000815.mm.1	ENSMUST00000122165	Gm11895	predicted gene 11895	25867989	25868455	TC0400002328.mm.1	-0.1	0.236977
TC0900000817.mm.1	NM_011414	Slpi	secretory leukocyte peptidase inhibitor	164354070	164389095	TC0200005112.mm.1	0.1	0.237017
TC0900000818.mm.1	ENSMUST00000104191	Gm25170	predicted gene, 25170	130915299	130915427	TC0X00002968.mm.1	0.1	0.237031
TC0900000819.mm.1	ENSMUST00000099666	Gm10799	predicted gene 10799	104068047	104068550	TC0200004236.mm.1	0.1	0.237153
TC0900000820.mm.1	ENSMUST00000158999	Gm25444	predicted gene, 25444	14628619	14628731	TC1300001480.mm.1	0.1	0.237172
TC0900000826.mm.1	NM_008259	Foxa1	forkhead box A1	57540631	57546121	TC1200001803.mm.1	-0.3	0.237219
TC0900000833.mm.1	ENSMUST00000170205	LOC1010	protein transport protein Sec61 subunit beta-li	98489348	98492001	TC1300002503.mm.1	-0.1	0.237226
TC0900000834.mm.1	ENSMUST00000120192	Gm9115	predicted gene 9115	102724402	102725749	TC0X00002757.mm.1	-0.2	0.237835
TC0900000842.mm.1	NM_029278	Nop14	NOP14 nucleolar protein	34638532	34660148	TC0500002240.mm.1	-0.2	0.237841
TC0900000844.mm.1	NM_001003667	Krt77	keratin 77	101858732	101869705	TC1500002276.mm.1	-0.1	0.238066
TC0900000845.mm.1	ENSMUST00000122560	Gm24517	predicted gene, 24517	134280885	134280991	TC0100003106.mm.1	-0.4	0.238147
TC0900000848.mm.1	ENSMUST00000115902	AC08755	N/A	26214	60779	TC4_GL456350_rand	0.1	0.238397
TC0900000852.mm.1	NM_025341	Abhd6	abhydrolase domain containing 6	8002902	8056555	TC1400000072.mm.1	0.2	0.238493
TC0900000853.mm.1	NM_001033326	Dhrsx	dehydrogenase/reductase (SDR family) X chrom	15881	36213	TC4_GL456216_rand	0.0	0.238622
TC0900000856.mm.1	ENSMUST00000119539	Gm14234	predicted gene 14234	168417730	168418574	TC0200005217.mm.1	-0.1	0.23902
TC0900000862.mm.1	XR_105488	Spanxn4	SPANX family, member N4	62687804	62688324	TC1200000516.mm.1	0.1	0.239159
TC0900000863.mm.1	ENSMUST00000121389	Gm11662	predicted gene 11662	104679105	104680655	TC1100003902.mm.1	-0.1	0.239196
TC0900000890.mm.1	NR_037275	Mir3092	microRNA 3092	27584900	27584995	TC0300001763.mm.1	0.1	0.239621
TC0900000920.mm.1	ENSMUST00000115149	Tm4sf19	transmembrane 4 L six family member 19	32400506	32408227	TC1600000440.mm.1	0.2	0.239714
TC0900000927.mm.1	ENSMUST00000179879	Gm26189	predicted gene, 26189	13275516	13275622	TC0900000082.mm.1	-0.7	0.239781
TC0900000937.mm.1	NM_153594	Pcmtd2	protein-L-isoaspartate (D-aspartate) O-methyltr	181837854	181857461	TC0200002836.mm.1	-0.2	0.239878
TC0900000942.mm.1	ENSMUST00000157494	Gm24060	predicted gene, 24060	118180941	118181035	TC1100004153.mm.1	-0.3	0.239889
TC0900000946.mm.1	NM_011834	Aadat	aminoadipate aminotransferase	60506124	60545677	TC0800000645.mm.1	0.8	0.23989
TC0900000950.mm.1	ENSMUST00000083437	Gm22739	predicted gene, 22739	4484234	4484393	TC1000000029.mm.1	-0.3	0.24027
TC0900000951.mm.1	NM_007933	Eno3	enolase 3, beta muscle	70657176	70662513	TC1100000964.mm.1	0.0	0.240415
TC0900000952.mm.1	NM_025402	Ogfod3	2-oxoglutarate and iron-dependent oxygenase d	121177591	121204711	TC1100004248.mm.1	0.1	0.240592
TC0900000954.mm.1	ENSMUST00000169443	Rpl21-p	ribosomal protein L21, pseudogene 15	151215135	151215687	TC0X00003176.mm.1	-0.3	0.240987
TC0900000956.mm.1	XM_001475449	Gm10145	predicted gene 10145	27936344	27936828	TC1000000244.mm.1	-0.3	0.241095
TC0900000958.mm.1	NM_019774	Akap8	A kinase (PRKA) anchor protein 8	32303676	32321153	TC1700001838.mm.1	-0.3	0.24136
TC0900000961.mm.1	ENSMUST00000127246	Gm8778	predicted gene 8778	128976866	128977972	TC0600003222.mm.1	-0.1	0.241492
TC0900000965.mm.1	ENSMUST00000157769	Gm26312	predicted gene, 26312	56725073	56725237	TC0X00000524.mm.1	0.1	0.24167
TC0900000966.mm.1	NR_030645	Mir467e	microRNA 467e	10708387	10865874	TC0100001961.mm.1	0.2	0.241827
TC0900000972.mm.1	NM_029353	Malsu1	mitochondrial assembly of ribosomal large subu	49073795	49086751	TC0600000578.mm.1	-0.1	0.241848
TC0900000975.mm.1	NR_030578	Mir654	microRNA 654	109723218	109723301	TC1200001183.mm.1	-0.1	0.241957
TC0900000978.mm.1	NM_016899	Rab25	RAB25, member RAS oncogene family	88542029	88548300	TC0300002316.mm.1	-0.1	0.24197
TC0900000982.mm.1	ENSMUST00000083303	Gm22975	predicted gene, 22975	74624642	74624748	TC0200001089.mm.1	-0.1	0.242044
TC0900000984.mm.1	NM_023363	Zfp788	zinc finger protein 788	41633203	41651534	TC0700000733.mm.1	-0.1	0.242069
TC0900000986.mm.1	ENSMUST00000082495	Gm22747	predicted gene, 22747	127079481	127079587	TC0700001832.mm.1	-0.6	0.242326
TC0900000996.mm.1	ENSMUST00000158003	Gm23315	predicted gene, 23315	53700847	53700955	TC0200003549.mm.1	0.1	0.242374
TC0900000999.mm.1	ENSMUST00000157089	Gm25827	predicted gene, 25827	108521924	108522030	TC0400003246.mm.1	-0.1	0.242515
TC0900001005.mm.1	XR_141136	Gm20235	predicted gene, 20235	73910555	73914501	TC1200000653.mm.1	-0.1	0.242804
TC0900001008.mm.1	NM_026960	Gsdmd	gasdermin D	75862339	75867408	TC1500000565.mm.1	-0.1	0.243162
TC0900001012.mm.1	ENSMUST00000095268	Rpl21-p	ribosomal protein L21, pseudogene 7	45465788	45466270	TC1700000860.mm.1	-0.4	0.243303
TC0900001016.mm.1	NM_015735	Ddb1	damage specific DNA binding protein 1	10605625	10629822	TC1900000205.mm.1	0.2	0.243436
TC0900001028.mm.1	ENSMUST00000083251	Gm25137	predicted gene, 25137	116674153	116674262	TC0400001258.mm.1	-0.5	0.243568
TC0900001036.mm.1	ENSMUST00000104354	Gm22023	predicted gene, 22023	164283096	164283225	TC0X00001666.mm.1	0.2	0.243821
TC0900001038.mm.1	NM_001039647	Gbp11	guanylate binding protein 11	105323026	105346472	TC0500002896.mm.1	-0.2	0.243956
TC0900001049.mm.1	NM_176917	Mettl4	methyltransferase like 4	94727080	94750019	TC1700002755.mm.1	-0.1	0.244054
TC0900001050.mm.1	NM_026436	Tmem86a	transmembrane protein 86A	47050640	47054776	TC0700000886.mm.1	0.1	0.244258
TC0900001070.mm.1	NM_010813	Mnt	max binding protein	74830920	74845725	TC1100001050.mm.1	-0.1	0.244266
TC0900001071.mm.1	ENSMUST00000083389	Gm24319	predicted gene, 24319	15680004	15680110	TC1900000293.mm.1	-0.7	0.24437

TC0900001078.mm.1	ENSMUST00000141865	Gm13898	predicted gene 13898	17710598	17711207	TC0600001897.mm.1	-0.1	0.24443
TC0900001083.mm.1	NM_001167818	Rnls	renalase, FAD-dependent amine oxidase	33137744	33392295	TC1900001404.mm.1	0.1	0.244659
TC0900001103.mm.1	NM_001001185	BC04850	cDNA sequence BC048507	67863326	67863923	TC1300000833.mm.1	-0.2	0.244692
TC0900001106.mm.1	NM_138677	Edem1	ER degradation enhancer, mannosidase alpha-lik	108828641	108859356	TC0600001207.mm.1	-0.4	0.244693
TC0900001109.mm.1	ENSMUST00000082459	Gm23627	predicted gene, 23627	110421361	110421467	TC0800002922.mm.1	-0.7	0.244711
TC0900001110.mm.1	NCBI_Gene:629842:p	Ighv13-	Ighv13-2 immunoglobulin heavy variable 13-2	114357759	114358218	TC1200002593.mm.1	-0.3	0.244802
TC0900001115.mm.1	ENSMUST00000157510	Gm22588	predicted gene, 22588	29849461	29849600	TC1100000307.mm.1	0.2	0.244889
TC0900001117.mm.1	ENSMUST00000167814	Gm17530	predicted gene, 17530	86546682	86546795	TC0900002778.mm.1	0.1	0.244924
TC0900001119.mm.1	NM_016677	Hpcal1	hippocalcin-like 1	17690814	17791930	TC1200000145.mm.1	-0.2	0.244926
TC0900001122.mm.1	ENSMUST00000184837	RP23-26	N/A	36482296	36482494	TC0900000346.mm.1	-0.3	0.245019
TC0900001123.mm.1	ENSMUST00000184257	Gm11983	predicted gene 11983	6835626	6837654	TC1100002190.mm.1	-0.1	0.245074
TC0900001128.mm.1	ENSMUST00000082956	Gm22505	predicted gene, 22505	99707740	99707847	TC0300002576.mm.1	-0.7	0.245135
TC0900001129.mm.1	ENSMUST00000083100	Gm22363	predicted gene, 22363	42775573	42775680	TC0600002181.mm.1	-0.7	0.245135
TC0900001132.mm.1	NM_001122829	Upf1	UPF1 regulator of nonsense transcripts homolog	70331522	70353273	TC0800002390.mm.1	-0.2	0.245188
TC0900001142.mm.1	NCBI_Gene:668591:p	Ighv1-8	immunoglobulin heavy variable 1-81	115920279	115920712	TC1200002660.mm.1	-0.8	0.245386
TC0900001144.mm.1	NM_177647	Cdnf	cerebral dopamine neurotrophic factor	3513030	3526376	TC0200000009.mm.1	0.1	0.245445
TC0900001145.mm.1	ENSMUST00000184716	RP23-14	N/A	106091210	106092475	TC0700003999.mm.1	-0.1	0.245689
TC0900001155.mm.1	NM_008063	Slc37a4	solute carrier family 37 (glucose-6-phosphate t	44396971	44402966	TC0900000509.mm.1	0.2	0.245732
TC0900001159.mm.1	NM_027485	Med26	mediator complex subunit 26	72494558	72548310	TC0800002466.mm.1	-0.1	0.245771
TC0900001160.mm.1	ENSMUST00000184441	RP23-2C	N/A	14304780	14305569	TC0700000171.mm.1	-0.1	0.24585
TC0900001162.mm.1	NM_016922	Gal3st1	galactose-3-O-sulfotransferase 1	3983636	3999328	TC1100000029.mm.1	-0.1	0.245931
TC0900001173.mm.1	ENSMUST00000180247	Gm25740	predicted gene, 25740	46377609	46377715	TC1000000435.mm.1	0.1	0.246139
TC0900001175.mm.1	ENSMUST00000083151	Gm23448	predicted gene, 23448	63300280	63300383	TC0100002451.mm.1	0.1	0.246147
TC0900001179.mm.1	NM_018783	Tfip11	tuftelin interacting protein 11	112326358	112338083	TC0500001180.mm.1	-0.1	0.246212
TC0900001182.mm.1	NR_029458	A530088	RIKEN cDNA A530088E08 gene	32403006	32404808	TC1700000560.mm.1	-0.1	0.246286
TC0900001198.mm.1	ENSMUST00000122626	Gm23656	predicted gene, 23656	105873824	105873935	TC0X00001064.mm.1	0.1	0.246303
TC0900001200.mm.1	NM_013560	Hspb1	heat shock protein 1	135887919	135889563	TC0500001590.mm.1	0.1	0.246341
TC0900001219.mm.1	ENSMUST00000156818	Gm8975	predicted gene 8975	33459609	33473191	TC1900001406.mm.1	0.1	0.246538
TC0900001223.mm.1	ENSMUST00000175261	Gm24154	predicted gene, 24154	112618096	112618225	TC0700004123.mm.1	0.1	0.24658
TC0900001232.mm.1	XM_001477899	Gm10705	predicted gene 10705	87207541	87208025	TC0300002282.mm.1	-0.2	0.24662
TC0900001234.mm.1	ENSMUST00000179026	Gm26435	predicted gene, 26435	30291868	30291974	TC0900001969.mm.1	-0.4	0.246805
TC0900001243.mm.1	ENSMUST00000157602	Gm22597	predicted gene, 22597	55179840	55179919	TC1800000559.mm.1	-0.2	0.246818
TC0900001247.mm.1	NM_023311	Yipf5	Yip1 domain family, member 5	40204865	40219399	TC1800001246.mm.1	0.1	0.246823
TC0900001252.mm.1	ENSMUST00000120231	Gm12461	predicted gene 12461	51892893	51894131	TC0400000563.mm.1	-0.1	0.246903
TC0900001256.mm.1	NM_021326	Rbak	RB-associated KRAB repressor	143172186	143180775	TC0500003549.mm.1	0.0	0.246961
TC0900001275.mm.1	XR_141279	Gm10866	predicted gene 10866	78898207	78899712	TC1500001853.mm.1	-0.1	0.246982
TC0900001281.mm.1	ENSMUST00000082469	Gm23928	predicted gene, 23928	91667149	91667293	TC0700003733.mm.1	-0.3	0.246985
TC0900001287.mm.1	NM_133779	Pigt	phosphatidylinositol glycan anchor biosynthesis	164497520	164508301	TC0200002517.mm.1	0.2	0.247049
TC0900001290.mm.1	NM_011704	Vnn1	vanin 1	23894688	23905343	TC1000000193.mm.1	0.2	0.247154
TC0900001299.mm.1	NM_009627	Adm	adrenomedullin	110627669	110629820	TC0700001630.mm.1	0.2	0.247191
TC0900001317.mm.1	ENSMUST00000121581	Gm14451	predicted gene 14451	5869686	5871506	TC0X00001754.mm.1	-0.1	0.247247
TC0900001329.mm.1	NM_001201367	Tmem200	transmembrane protein 200B	131921771	131923140	TC0400001574.mm.1	0.1	0.247257
TC0900001337.mm.1	ENSMUST00000104668	Gm25568	predicted gene, 25568	19921310	19921399	TC0100002027.mm.1	0.3	0.247263
TC0900001339.mm.1	ENSMUST00000158032	Gm24847	predicted gene, 24847	59559315	59559422	TC0800000641.mm.1	0.1	0.247279
TC0900001344.mm.1	NM_023418	Pgam1	phosphoglycerate mutase 1	41911871	41918665	TC1900000600.mm.1	0.2	0.247284
TC0900001347.mm.1	ENSMUST00000082465	Gm23629	predicted gene, 23629	63099536	63099642	TC1400000894.mm.1	-0.3	0.247345
TC0900001348.mm.1	ENSMUST00000068006	Mocos	molybdenum cofactor sulfurase	24653691	24701556	TC1800000200.mm.1	0.1	0.247356
TC0900001349.mm.1	NM_031185	Akap12	A kinase (PRKA) anchor protein (gravin) 12	4266329	4359471	TC1000000021.mm.1	0.2	0.24742
TC0900001360.mm.1	ENSMUST00000157971	Gm24602	predicted gene, 24602	102523894	102523956	TC0800001169.mm.1	-0.1	0.247433
TC0900001362.mm.1	XR_141104	Gm20169	predicted gene, 20169	68149883	68151887	TC1100000869.mm.1	0.1	0.247459
TC0900001363.mm.1	NR_030449	Mir680-	microRNA 680-3	35194811	35194897	TC1200001637.mm.1	-0.1	0.247561
TC0900001365.mm.1	NCBI_Gene:434609:p	Ighv1-8	immunoglobulin heavy variable 1-84	115980702	115981134	TC1200002663.mm.1	-0.6	0.24762
TC0900001371.mm.1	NR_039540	Mir3963	microRNA 3963	151023792	151023862	TC0300003129.mm.1	0.1	0.247649
TC0900001374.mm.1	ENSMUST00000104779	Mir466f	microRNA 466f-1	10466944	10467037	TC0200000091.mm.1	0.3	0.247653
TC0900001375.mm.1	NM_001168488	Men1	multiple endocrine neoplasia 1	6334979	6340894	TC1900000113.mm.1	-0.1	0.247874
TC0900001377.mm.1	ENSMUST00000175427	Gm22990	predicted gene, 22990	21564561	21564649	TC1100002330.mm.1	0.2	0.247918
TC0900001398.mm.1	XM_001478799	Gm4024	predicted pseudogene 4024	35990861	35991542	TC1300001807.mm.1	0.4	0.247976
TC0900001402.mm.1	ENSMUST00000183069	Gm8793	predicted gene 8793	31639158	31640460	TC1000000282.mm.1	0.1	0.24806
TC0900001406.mm.1	NM_025920	Thap4	THAP domain containing 4	93705390	93754864	TC0100002837.mm.1	-0.1	0.248418
TC0900001408.mm.1	ENSMUST00000122549	n-R5s98	nuclear encoded rRNA 5S 98	54866261	54866379	TC0800000594.mm.1	0.2	0.248475
TC0900001411.mm.1	ENSMUST00000083319	Gm23970	predicted gene, 23970	20280519	20280625	TC0200000327.mm.1	0.2	0.248657
TC0900001414.mm.1	NM_008415	Jrk	jerky	74702412	74709535	TC1500001713.mm.1	-0.1	0.248738
TC0900001416.mm.1	NM_182957	Gm17019	predicted gene 17019	15028950	15033007	TC0500001975.mm.1	-0.1	0.248787
TC0900001418.mm.1	ENSMUST00000102415	Gm22369	predicted gene, 22369	9855319	9855422	TC1900000178.mm.1	0.1	0.24897
TC0900001422.mm.1	NM_028762	Rbm19	RNA binding motif protein 19	120116510	120198981	TC0500001332.mm.1	-0.1	0.249067
TC0900001423.mm.1	ENSMUST00000183570	BX32259	N/A	26579877	26579982	TC0X00001984.mm.1	0.5	0.249085
TC0900001426.mm.1	ENSMUST00000175324	Gm23154	predicted gene, 23154	87432272	87432336	TC0400000876.mm.1	-0.5	0.24915
TC0900001427.mm.1	ENSMUST00000055878	Gm5548	predicted pseudogene 5548	113053889	113054284	TC0300002777.mm.1	0.1	0.249381
TC0900001431.mm.1	NM_178916	Rfesd	Rieske (Fe-S) domain containing	76001535	76018712	TC1300002339.mm.1	-0.1	0.249394
TC0900001433.mm.1	NM_013499	Cr1l	complement component (3b/4b) receptor 1-like	195097382	195131570	TC0100003855.mm.1	0.2	0.249402
TC0900001434.mm.1	NM_001167679	Wdr67	WD repeat domain 67	57912199	57970068	TC1500000407.mm.1	-0.1	0.249534
TC0900001440.mm.1	ENSMUST00000117532	Gm16202	predicted gene 16202	86316141	86316684	TC0900002777.mm.1	-0.1	0.249593
TC0900001442.mm.1	NM_001198789	Gm5918	predicted gene 5918	72979722	72985382	TC0900002651.mm.1	0.2	0.249616
TC0900001452.mm.1	NR_035455	Mir1934	microRNA 1934	69663043	69663125	TC1100000920.mm.1	0.1	0.249669
TC0900001458.mm.1	ENSMUST00000179034	Gm22129	predicted gene, 22129	17205792	17205898	TC1600001284.mm.1	-0.6	0.249933
TC0900001461.mm.1	NCBI_Gene:10077517	Gm16710	predicted gene, 16710	115802648	115803080	TC1200002653.mm.1	-0.8	0.250007
TC0900001463.mm.1	uc029xle.1	LOC4328	non-coding RNA, oocyte_clustered_small_RNA4	80623097	80980748	TC0X00000798.mm.1	0.3	0.25005
TC0900001467.mm.1	NM_010111	Efnb2	ephrin B2	8617434	8661061	TC0800001654.mm.1	0.2	0.25012

TC0900001476.mm.1	ENSMUST00000093714	Gm22886	predicted gene, 22886	21380825	21380931	TC1800001059.mm.1	-0.4	0.250235
TC0900001483.mm.1	NM_175026	Pyhin1	pyrin and HIN domain family, member 1	173630859	173647928	TC0100001632.mm.1	-0.5	0.25039
TC0900001496.mm.1	NM_019985	Clec1b	C-type lectin domain family 1, member b	129397297	129405413	TC0600003536.mm.1	-0.3	0.250451
TC0900001507.mm.1	uc009uyu.1	Ube1y1	ubiquitin-activating enzyme E1, Chr Y 1 (Ube1y1	670179	695295	TC0Y00000226.mm.1	-0.2	0.250566
TC0900001511.mm.1	NM_009437	Tst	thiosulfate sulfurtransferase, mitochondrial	78399556	78405859	TC1500001831.mm.1	-0.1	0.250616
TC0900001516.mm.1	NM_008795	Cdk18	cyclin-dependent kinase 18	132113547	132139685	TC0100003069.mm.1	0.1	0.250624
TC0900001517.mm.1	NM_001033252	Gm732	predicted gene 732	107945735	107948465	TC0X00002848.mm.1	0.1	0.250692
TC0900001521.mm.1	XR_106142	Gm10644	predicted gene 10644	83932320	83955205	TC0800002561.mm.1	-0.1	0.250702
TC0900001532.mm.1	NM_016764	Prdx4	peroxiredoxin 4	155323918	155340754	TC0X00003239.mm.1	-0.1	0.250752
TC0900001533.mm.1	NM_001159404	Llgl1	lethal giant larvae homolog 1 (Drosophila)	60699690	60714188	TC1100000759.mm.1	-0.1	0.25077
TC0900001534.mm.1	ENSMUST00000115924	AC16897	N/A	128553	151235	TC1_GL456212_rand	-0.2	0.250818
TC0900001554.mm.1	NM_019719	Stub1	STIP1 homology and U-Box containing protein 1	25830636	25833361	TC1700001675.mm.1	0.1	0.250956
TC0900001576.mm.1	NM_144875	Rab7l1	RAB7, member RAS oncogene family-like 1	131867224	131872889	TC0100001177.mm.1	0.1	0.250987
TC0900001578.mm.1	ENSMUST00000180212	Gm24659	predicted gene, 24659	89291190	89291299	TC0700003711.mm.1	0.1	0.25101
TC0900001582.mm.1	ENSMUST00000179283	Gm22171	predicted gene, 22171	89295755	89295864	TC0700003712.mm.1	0.1	0.25101
TC0900001592.mm.1	ENSMUST00000177816	Gm25871	predicted gene, 25871	15413980	15414089	TC0800000157.mm.1	0.1	0.25101
TC0900001595.mm.1	NM_173381	6720489	RIKEN cDNA 6720489N17 gene	62603015	62624182	TC1300002169.mm.1	-0.1	0.251135
TC0900001596.mm.1	NM_001160149	Cgref1	cell growth regulator with EF hand domain 1	30933143	30945480	TC0500002168.mm.1	0.1	0.251221
TC0900001598.mm.1	NM_021789	Trappc4	trafficking protein particle complex 4	44403759	44407548	TC0900002164.mm.1	0.2	0.251253
TC0900001603.mm.1	NR_028550	Snord49	small nucleolar RNA, C/D box 49A	62603450	62603521	TC1100000805.mm.1	-0.7	0.251272
TC0900001605.mm.1	XM_126432	Gm4802	predicted gene 4802	49412250	49425168	TC1600001697.mm.1	-0.2	0.251593
TC0900001612.mm.1	NM_001252266	Ica1	islet cell autoantigen 1	8630527	8778488	TC0600001852.mm.1	0.1	0.251728
TC0900001650.mm.1	XR_141238	Gm19703	predicted gene, 19703	40930246	40931086	TC1400001784.mm.1	0.1	0.251766
TC0900001654.mm.1	ENSMUST00000181168	B430218	---	118386630	118388124	TC1300001340.mm.1	0.1	0.25182
TC0900001656.mm.1	ENSMUST00000177600	Gm3757	predicted pseudogene 3757	4882376	4883086	TC0X00000030.mm.1	-0.1	0.251955
TC0900001658.mm.1	NM_201357	Tssc1	tumor suppressing subtransferable candidate 1	28751828	28867491	TC1200000239.mm.1	-0.1	0.252024
TC0900001659.mm.1	NM_001033405	Treml2	triggering receptor expressed on myeloid cells-	48299498	48312534	TC1700000935.mm.1	-0.3	0.252039
TC0900001665.mm.1	XM_985877	Gm8279	predicted gene 8279	5131519	5139959	TC1400000039.mm.1	0.1	0.252077
TC0900001666.mm.1	ENSMUST00000185179	HOTTIP_	HOXA transcript at the distal tip, conserved re	52261154	52261212	TC0600000624.mm.1	-0.1	0.252226
TC0900001672.mm.1	ENSMUST00000121276	Gm13674	predicted gene 13674	80131930	80132752	TC0200001168.mm.1	-0.1	0.252332
TC0900001674.mm.1	ENSMUST00000082498	Gm25587	predicted gene, 25587	105040273	105040438	TC1000001251.mm.1	-0.2	0.252419
TC0900001681.mm.1	NM_177380	Cyp3a44	cytochrome P450, family 3, subfamily a, polypep	145773983	145805874	TC0500003599.mm.1	-0.1	0.252445
TC0900001690.mm.1	NM_026835	Ms4a6d	membrane-spanning 4-domains, subfamily A, me	11586604	11604849	TC1900001137.mm.1	0.2	0.252596
TC0900001692.mm.1	ENSMUST00000158846	Gm25367	predicted gene, 25367	164268071	164268176	TC0X00003333.mm.1	0.1	0.252695
TC0900001693.mm.1	NM_019871	Slc35g3	solute carrier family 35, member G3	69759884	69761968	TC1100003062.mm.1	-0.1	0.252714
TC0900001714.mm.1	ENSMUST00000122467	Gm14373	predicted gene 14373	5699727	5701884	TC0X00001752.mm.1	-0.1	0.252776
TC0900001720.mm.1	ENSMUST00000104315	Gm24231	predicted gene, 24231	15227405	15227537	TC0800001766.mm.1	0.1	0.252835
TC0900001721.mm.1	ENSMUST00000082735	Gm24461	predicted gene, 24461	80558685	80558787	TC0200001174.mm.1	0.1	0.252907
TC0900001725.mm.1	ENSMUST00000082821	Gm26328	predicted gene, 26328	52342777	52342883	TC1400000610.mm.1	-0.6	0.253009
TC0900001726.mm.1	ENSMUST00000157311	Gm23675	predicted gene, 23675	53512002	53512126	TC0300000399.mm.1	0.2	0.253036
TC0900001740.mm.1	NM_028718	Traf3ip	TRAF3 interacting protein 1	91494668	91529307	TC0100000897.mm.1	0.0	0.253074
TC0900001742.mm.1	NR_046064	Gm10373	predicted gene 10373	43430943	43477036	TC1500001461.mm.1	-0.1	0.253083
TC0900001743.mm.1	ENSMUST00000118998	Gm15920	predicted gene 15920	130188395	130188796	TC0500001527.mm.1	0.4	0.253146
TC0900001764.mm.1	NM_147001	Olfr172	olfactory receptor 172	58760152	58761240	TC1600001779.mm.1	0.1	0.253173
TC0900001778.mm.1	NM_001039666	Krt40	keratin 40	99537485	99543158	TC1100003711.mm.1	-0.1	0.253195
TC0900001781.mm.1	NM_028749	Npl	N-acetylneuraminate pyruvate lyase	153503015	153549714	TC0100003280.mm.1	-0.1	0.253338
TC0900001784.mm.1	ENSMUST00000183722	RP24-84	N/A	15118004	15118384	TC0700002400.mm.1	-0.1	0.25372
TC0900001787.mm.1	ENSMUST00000102388	Gm25213	predicted gene, 25213	96357111	96357223	TC1300001086.mm.1	0.1	0.253827
TC0900001788.mm.1	ENSMUST00000108934	C330013	RIKEN cDNA C330013J21 gene	177903064	177925650	TC0200005377.mm.1	0.1	0.25389
TC0900001803.mm.1	ENSMUST00000181588	C630004	---	10047838	10049519	TC0200000081.mm.1	-0.1	0.254003
TC0900001826.mm.1	NM_053231	Vmn1r10	vomeronasal 1 receptor 10	57113396	57114367	TC0600000685.mm.1	0.1	0.25402
TC0900001846.mm.1	NM_009504	Vdr	vitamin D receptor	97854425	97910630	TC1500002159.mm.1	-0.1	0.254104
TC0900001850.mm.1	NM_001290181	Nudt7	nudix (nucleoside diphosphate linked moiety X)-	0	0	TSUnmapped0000001	0.1	0.254196
TC0900001851.mm.1	NM_025901	Polr3k	polymerase (RNA) III (DNA directed) polypeptide	181864337	181870830	TC0200002837.mm.1	-0.1	0.25457
TC0900001857.mm.1	NM_134116	Gpsm3	G-protein signalling modulator 3 (AGS3-like, C.	34589806	34591754	TC1700002783.mm.1	-0.1	0.254683
TC0900001858.mm.1	NM_026536	Atp5s	ATP synthase, H+ transporting, mitochondrial F0	69724962	69744660	TC1200000576.mm.1	0.1	0.254946
TC0900001859.mm.1	ENSMUST00000116857	Gm22071	predicted gene, 22071	179990797	179990882	TC0200005398.mm.1	0.3	0.255049
TC0900001867.mm.1	NM_176843	Ints5	integrator complex subunit 5	8892987	8897890	TC1900000164.mm.1	-0.1	0.255099
TC0900001868.mm.1	NM_001007573	Maneal	mannosidase, endo-alpha-like	124855239	124862171	TC0400003514.mm.1	-0.2	0.25522
TC0900001874.mm.1	ENSMUST00000116932	Gm24907	predicted gene, 24907	150807859	150807986	TC0X00003169.mm.1	0.1	0.255294
TC0900001879.mm.1	ENSMUST00000169031	Gm17192	predicted gene 17192	61460962	61461472	TC1600000782.mm.1	-0.1	0.255315
TC0900001883.mm.1	ENSMUST00000082880	Gm23939	predicted gene, 23939	133601223	133601355	TC0100001208.mm.1	-0.3	0.255469
TC0900001884.mm.1	ENSMUST00000099951	Gm13695	predicted gene 13695	83967313	83969805	TC0200001208.mm.1	-0.3	0.255597
TC0900001885.mm.1	NCBI_Gene:620400:p	Igkv8-2	immunoglobulin kappa variable 8-21	70314895	70315452	TC0600003591.mm.1	-0.4	0.255759
TC0900001887.mm.1	NM_029553	Ttc8	tetratricopeptide repeat domain 8	98920574	98983238	TC1200000978.mm.1	0.1	0.255774
TC0900001895.mm.1	ENSMUST00000184484	AL66998	N/A	131992218	131992289	TC0400003655.mm.1	-0.1	0.255819
TC0900001896.mm.1	ENSMUST00000158685	Gm23181	predicted gene, 23181	95039934	95040043	TC0100002842.mm.1	0.1	0.256118
TC0900001899.mm.1	NM_001177369	Nfkb2	nuclear factor of kappa light polypeptide gene	46304737	46312385	TC1900000689.mm.1	-0.1	0.256215
TC0900001900.mm.1	NM_001205057	Gm14295	predicted gene 14295	176798600	176811223	TC0200002741.mm.1	0.4	0.256237
TC0900001901.mm.1	ENSMUST00000104259	Gm23129	predicted gene, 23129	94987007	94987138	TC1500002114.mm.1	-0.1	0.256298
TC0900001903.mm.1	ENSMUST00000082412	mt-Tr	mitochondrially encoded tRNA arginine	9808	9875	TC0M00000012.mm.1	0.3	0.256445
TC0900001910.mm.1	NM_199032	Cep135	centrosomal protein 135	76588698	76646466	TC0500000724.mm.1	-0.1	0.256667
TC0900001911.mm.1	ENSMUST00000146065	Gm16345	predicted gene 16345	32031089	32031246	TC1800000252.mm.1	-0.4	0.256681
TC0900001913.mm.1	NR_038126	610009	RIKEN cDNA 0610009L18 gene	120348678	120351190	TC1100002024.mm.1	0.1	0.256832
TC0900001915.mm.1	NM_054078	Baz2a	bromodomain adjacent to zinc finger domain, 2A	128091610	128129303	TC1000001587.mm.1	-0.1	0.257015
TC0900001926.mm.1	NM_011198	Ptgs2	prostaglandin-endoperoxide synthase 2	150100124	150108017	TC0100001338.mm.1	0.5	0.25713
TC0900001937.mm.1	ENSMUST00000117738	Gm13819	predicted gene 13819	114828573	114829215	TC0500003072.mm.1	-0.1	0.257212
TC0900001946.mm.1	NM_178715	Tmem30b	transmembrane protein 30B	73543114	73546395	TC1200001921.mm.1	-0.1	0.257339

TC0900001969.mm.1	NM_025892	Cep19	centrosomal protein 19	32099800	32108069	TC1600000429.mm.1	-0.1	0.257449
TC0900001985.mm.1	ENSMUST00000082921	Gm24526	predicted gene, 24526	63027560	63027717	TC0900000795.mm.1	0.1	0.257634
TC0900001987.mm.1	ENSMUST00000157665	Gm26413	predicted gene, 26413	116163910	116164036	TC1100004106.mm.1	-0.1	0.257944
TC0900001988.mm.1	NR_037271	Mir3088	microRNA 3088	28733278	28733351	TC0200000493.mm.1	-0.1	0.257945
TC0900001996.mm.1	ENSMUST00000158740	Gm23823	predicted gene, 23823	77540642	77540765	TC1400002458.mm.1	0.2	0.25801
TC0900002003.mm.1	NM_028546	1700066	RIKEN cDNA 1700066M21 gene	57377620	57385423	TC0100000420.mm.1	-0.1	0.2583
TC0900002007.mm.1	NM_146047	Clptm1l	CLPTM1-like	73604002	73620639	TC1300000884.mm.1	0.2	0.258383
TC0900002011.mm.1	ENSMUST00000118400	Gm14724	predicted gene 14724	70539310	70539846	TC0X00002394.mm.1	-0.1	0.258702
TC0900002019.mm.1	ENSMUST00000158549	Gm22434	predicted gene, 22434	163118227	163118348	TC0100001487.mm.1	-0.1	0.258721
TC0900002029.mm.1	NM_001177502	1700013	RIKEN cDNA 1700013D24 gene	124347593	124357086	TC0600003102.mm.1	0.1	0.258731
TC0900002033.mm.1	NM_146151	Tesk2	testis-specific kinase 2	116720948	116805956	TC0400004190.mm.1	0.1	0.258744
TC0900002038.mm.1	NM_022813	Scamp2	secretory carrier membrane protein 2	57560944	57588798	TC0900000709.mm.1	0.1	0.258839
TC0900002039.mm.1	NM_007960	Etv1	ets variant gene 1	38779380	38868215	TC1200000348.mm.1	0.1	0.258863
TC0900002043.mm.1	ENSMUST00000082487	Gm23140	predicted gene, 23140	47058162	47058268	TC1900000716.mm.1	-0.7	0.258971
TC0900002044.mm.1	NM_016967	Olig2	oligodendrocyte transcription factor 2	91225550	91228677	TC1600000998.mm.1	-0.1	0.259081
TC0900002047.mm.1	ENSMUST00000106038	Gm11658	predicted gene 11658	109159187	109160194	TC1100003984.mm.1	-0.2	0.259556
TC0900002053.mm.1	ENSMUST00000162514	Cyp2j7-	cytochrome P450, family 2, subfamily j, polypep	96195197	96236659	TC0400003092.mm.1	0.1	0.25959
TC0900002054.mm.1	NR_004411	Rnu1a1	U1a1 small nuclear RNA	87422867	87423030	TC1100001337.mm.1	-0.2	0.259665
TC0900002058.mm.1	ENSMUST00000082761	Gm22068	predicted gene, 22068	87426716	87426879	TC1100001338.mm.1	-0.2	0.259665
TC0900002061.mm.1	ENSMUST00000177653	Gm22634	predicted gene, 22634	54710308	54710471	TC1200000451.mm.1	-0.2	0.259665
TC0900002066.mm.1	ENSMUST00000179675	Gm23804	predicted gene, 23804	54714218	54714381	TC1200000452.mm.1	-0.2	0.259665
TC0900002069.mm.1	ENSMUST00000178333	Gm26444	predicted gene, 26444	54729602	54729765	TC1200000453.mm.1	-0.2	0.259665
TC0900002089.mm.1	ENSMUST00000101973	Gm25679	predicted gene, 25679	54719163	54719326	TC1200001751.mm.1	-0.2	0.259665
TC0900002091.mm.1	ENSMUST00000178469	Gm22317	predicted gene, 22317	54738459	54738622	TC1200001754.mm.1	-0.2	0.259665
TC0900002108.mm.1	ENSMUST00000084007	Gm24924	predicted gene, 24924	14647767	14647930	TC1800001010.mm.1	-0.2	0.259665
TC0900002118.mm.1	NR_004411	Rnu1a1	U1a1 small nuclear RNA	0	0	TSUnmapped0000016	-0.2	0.259665
TC0900002122.mm.1	ENSMUST00000179155	Gm24305	predicted gene, 24305	54734555	54734718	TC1200001753.mm.1	-0.2	0.25968
TC0900002128.mm.1	ENSMUST00000121202	Gm4852	predicted pseudogene 4852	47365644	47366372	TC0100002291.mm.1	-0.1	0.25983
TC0900002151.mm.1	NM_012006	Acot1	acyl-CoA thioesterase 1	84009498	84017674	TC1200000798.mm.1	0.1	0.259849
TC0900002152.mm.1	ENSMUST00000083007	Gm23238	predicted gene, 23238	18732741	18732904	TC1900000326.mm.1	-0.2	0.259887
TC0900002155.mm.1	ENSMUST00000083375	Gm23244	predicted gene, 23244	113035843	113035934	TC0600002909.mm.1	-0.5	0.259966
TC0900002156.mm.1	ENSMUST00000181965	Gm26528	predicted gene, 26528	22281454	22281736	TC1000001857.mm.1	0.1	0.26012
TC0900002159.mm.1	NM_011454	Serpinb	serine (or cysteine) peptidase inhibitor, clade	32965209	32979067	TC1300000362.mm.1	-0.1	0.260187
TC0900002161.mm.1	ENSMUST00000119328	Gm14648	predicted gene 14648	47900345	47900827	TC0X00000423.mm.1	-0.4	0.260279
TC0900002164.mm.1	ENSMUST00000083152	Gm26495	predicted gene, 26495	116340583	116340719	TC1000001337.mm.1	0.1	0.260305
TC0900002165.mm.1	NM_010700	Ldlr	low density lipoprotein receptor	21723576	21749919	TC0900000204.mm.1	0.1	0.260307
TC0900002168.mm.1	ENSMUST00000082909	Gm26207	predicted gene, 26207	25453960	25454063	TC1900001296.mm.1	0.2	0.260422
TC0900002171.mm.1	ENSMUST00000104236	Gm24279	predicted gene, 24279	98541484	98541614	TC0500000951.mm.1	0.3	0.260827
TC0900002174.mm.1	NM_198104	Tcte3	t-complex-associated testis expressed 3	15027151	15041559	TC1700002796.mm.1	0.1	0.26085
TC0900002175.mm.1	ENSMUST00000099736	Vdac3-p	voltage-dependent anion channel 3, pseudogene	18030324	18031629	TC1300001510.mm.1	-0.2	0.260853
TC0900002180.mm.1	NM_139221	Defb11	defensin beta 11	21905374	21906432	TC0800001856.mm.1	-0.1	0.26098
TC0900002181.mm.1	NM_010872	Naip2	NLR family, apoptosis inhibitory protein 2	100144063	100202122	TC1300002530.mm.1	0.1	0.261139
TC0900002197.mm.1	NM_146175	Zfp282	zinc finger protein 282	47877204	47908485	TC0600000540.mm.1	-0.1	0.261328
TC0900002203.mm.1	NM_030750	Sgpp1	sphingosine-1-phosphate phosphatase 1	75714248	75735729	TC1200001939.mm.1	-0.1	0.261492
TC0900002207.mm.1	NM_175677	Trim12c	tripartite motif-containing 12C	104338754	104353362	TC0700003940.mm.1	-0.3	0.261535
TC0900002210.mm.1	ENSMUST00000158410	Gm22157	predicted gene, 22157	41901651	41901754	TC1300000475.mm.1	-0.2	0.261663
TC0900002212.mm.1	NM_011090	Lilra6	leukocyte immunoglobulin-like receptor, subfam	3908280	3915503	TC0700004635.mm.1	0.1	0.261715
TC0900002223.mm.1	ENSMUST00000093713	n-R5s33	nuclear encoded rRNA 5S 33	33001903	33002021	TC1600000459.mm.1	-0.5	0.261728
TC0900002230.mm.1	ENSMUST00000165535	Gm17271	predicted gene, 17271	76797628	76798029	TC1500000610.mm.1	-0.1	0.261926
TC0900002235.mm.1	NM_139308	Stard7	START domain containing 7	127270218	127298934	TC0200001911.mm.1	-0.1	0.262378
TC0900002238.mm.1	ENSMUST00000082526	Gm25080	predicted gene, 25080	137715658	137715764	TC0300001396.mm.1	-0.6	0.262438
TC0900002241.mm.1	NM_144838	Sgtb	small glutamine-rich tetratricopeptide repeat (	104109741	104141735	TC1300001169.mm.1	0.1	0.262598
TC0900002252.mm.1	ENSMUST00000080097	Gm16415	predicted pseudogene 16415	42441019	42441507	TC1800000437.mm.1	-0.4	0.262643
TC0900002259.mm.1	ENSMUST00000117018	Gm24999	predicted gene, 24999	60293672	60293772	TC1300000732.mm.1	0.2	0.262948
TC0900002260.mm.1	ENSMUST00000175291	Gm23631	predicted gene, 23631	133939619	133939741	TC0700004433.mm.1	0.2	0.263228
TC0900002263.mm.1	ENSMUST00000120941	Tcp1-ps	t-complex protein 1, pseudogene 1	68301246	68303290	TC0400002833.mm.1	-0.1	0.263245
TC0900002268.mm.1	ENSMUST00000118609	Gm13223	predicted gene 13223	145455633	145456379	TC0400001862.mm.1	-0.1	0.263335
TC0900002271.mm.1	NM_024467	Zfp319	zinc finger protein 319	95326136	95331950	TC0800002743.mm.1	-0.1	0.263506
TC0900002272.mm.1	NM_017476	Akap8l	A kinase (PRKA) anchor protein 8-like	32321424	32350581	TC1700001839.mm.1	-0.1	0.263592
TC0900002277.mm.1	NM_175087	Aqp6	aquaporin 6	99601400	99605477	TC1500001019.mm.1	0.1	0.263593
TC0900002283.mm.1	NM_009866	Cdh11	cadherin 11	102632995	102785111	TC0800002783.mm.1	0.2	0.263736
TC0900002285.mm.1	NCBI_Gene:243461:p	Igkv7-3	immunoglobulin kappa chain variable 7-33	70058632	70059199	TC0600003584.mm.1	-0.2	0.263964
TC0900002286.mm.1	ENSMUST00000104228	Gm23747	predicted gene, 23747	75759859	75759989	TC1500000562.mm.1	0.3	0.264201
TC0900002287.mm.1	ENSMUST00000084002	Gm25628	predicted gene, 25628	64025948	64026052	TC1500000471.mm.1	-0.1	0.264221
TC0900002302.mm.1	NM_078477	Klf16	Kruppel-like factor 16	80567121	80577321	TC1000002505.mm.1	-0.1	0.264221
TC0900002311.mm.1	ENSMUST00000166583	Gm6736	predicted gene 6736	13455020	13455970	TC1200001438.mm.1	0.3	0.26424
TC0900002321.mm.1	NM_001289925	Egr3	early growth response 3 (Egr3), transcript vari	0	0	TSUnmapped0000004	0.1	0.264245
TC0900002326.mm.1	ENSMUST00000181445	Gm7741	predicted gene 7741	35863877	35864865	TC0300000260.mm.1	-0.1	0.2643
TC0900002328.mm.1	NM_020009	Mtor	mechanistic target of rapamycin (serine/threoni	148448582	148557685	TC0400001930.mm.1	0.1	0.264311
TC0900002338.mm.1	ENSMUST00000121461	Gm7862	predicted gene 7862	76152336	76152627	TC1200001943.mm.1	-0.1	0.264345
TC0900002346.mm.1	ENSMUST00000166332	Rpl21-p	ribosomal protein L21, pseudogene 8	82523539	82524021	TC1800001681.mm.1	-0.4	0.264434
TC0900002348.mm.1	ENSMUST00000120208	Gm11796	predicted gene 11796	5854516	5855487	TC0400002148.mm.1	-0.2	0.264482
TC0900002359.mm.1	ENSMUST00000082752	Gm25810	predicted gene, 25810	22224244	22224351	TC1600000309.mm.1	-0.5	0.264489
TC0900002365.mm.1	NM_176987	Simc1	SUMO-interacting motifs containing 1	54503779	54551290	TC1300000626.mm.1	-0.1	0.264573
TC0900002366.mm.1	ENSMUST00000082781	Gm24207	predicted gene, 24207	105276879	105276986	TC1400002656.mm.1	0.2	0.264706
TC0900002367.mm.1	NM_008341	Igfbp1	insulin-like growth factor binding protein 1	7197779	7202546	TC1100000112.mm.1	-0.1	0.264757
TC0900002369.mm.1	NM_027166	Ypel5	yippee-like 5 (Drosophila)	72836704	72851195	TC1700001145.mm.1	0.1	0.264782
TC0900002374.mm.1	NM_027450	Glipr2	GLI pathogenesis-related 2	43957401	43979118	TC0400000458.mm.1	0.1	0.264846

TC0900002375.mm.1	ENSMUST00000121483	Gm13210	predicted gene 13210	7631076	7631348	TC0200000069.mm.1	-0.2	0.264871
TC0900002377.mm.1	ENSMUST00000163570	Gm7152	predicted gene 7152	42825371	42828470	TC1400000432.mm.1	-0.1	0.265128
TC0900002380.mm.1	NM_010594	Kap	kidney androgen regulated protein	133849854	133853667	TC0600003295.mm.1	1.0	0.265233
TC0900002387.mm.1	ENSMUST00000083726	n-R5s17	nuclear encoded rRNA 5S 170	22430331	22430443	TC0500002035.mm.1	0.1	0.265248
TC0900002391.mm.1	NM_001100464	Scgb2b2	secretoglobin, family 2B, member 27	34011919	34013942	TC0700002821.mm.1	-0.1	0.265465
TC0900002396.mm.1	NM_024199	Cstf1	cleavage stimulation factor, 3 pre-RNA, subunit	172370681	172382448	TC0200002667.mm.1	-0.1	0.265545
TC0900002398.mm.1	ENSMUST00000082736	Gm22808	predicted gene, 22808	87621014	87621120	TC1600001990.mm.1	-0.2	0.265625
TC0900002422.mm.1	NM_053075	Rheb	Ras homolog enriched in brain	24802823	24842624	TC0500002093.mm.1	0.1	0.265645
TC0900002429.mm.1	NR_029759	Mir325	microRNA 325	107761061	107761087	TC1300002630.mm.1	0.3	0.265726
TC0900002435.mm.1	ENSMUST00000083116	Gm25704	predicted gene, 25704	133008487	133008654	TC0200002046.mm.1	-0.2	0.265867
TC0900002450.mm.1	NM_001144992	2810459	RIKEN cDNA 2810459M11 gene	86045863	86055456	TC0100000778.mm.1	-0.1	0.265886
TC0900002451.mm.1	ENSMUST00000122804	Gm22452	predicted gene, 22452	23663021	23663124	TC1300000254.mm.1	0.1	0.266033
TC0900002452.mm.1	ENSMUST00000118888	Gm8855	predicted gene 8855	87672992	87673869	TC0X00002579.mm.1	-0.1	0.266062
TC0900002465.mm.1	NM_001253910	Gm4477	predicted gene 4477	85706707	85713205	TC0600002616.mm.1	0.3	0.266072
TC0900002467.mm.1	ENSMUST00000122178	Gm14328	predicted gene 14328	74303524	74303931	TC1800001587.mm.1	-0.4	0.266252
TC0900002472.mm.1	ENSMUST00000104053	Gm23272	predicted gene, 23272	143465269	143465397	TC0600003394.mm.1	0.1	0.266347
TC0900002502.mm.1	ENSMUST00000104802	Gm23937	predicted gene, 23937	4355004	4355096	TC0300000012.mm.1	0.3	0.266767
TC0900002503.mm.1	ENSMUST00000104409	Gm26017	predicted gene, 26017	86509152	86509225	TC0400000865.mm.1	-0.2	0.26681
TC0900002506.mm.1	NM_145929	Gga1	golgi associated, gamma adaptin ear containing,	78877190	78894585	TC1500000655.mm.1	0.1	0.266925
TC0900002508.mm.1	ENSMUST00000082591	Gm26440	predicted gene, 26440	57697809	57697937	TC1400000822.mm.1	-0.8	0.267067
TC0900002510.mm.1	NM_016671	Il27ra	interleukin 27 receptor, alpha	84030286	84042575	TC0800002565.mm.1	-0.1	0.267116
TC0900002514.mm.1	NM_024175	Rps23	ribosomal protein S23	90923122	90924942	TC1300001017.mm.1	-0.2	0.267122
TC0900002515.mm.1	ENSMUST00000183799	AC12287	N/A	51837151	51837257	TC1400000592.mm.1	0.3	0.26714
TC0900002524.mm.1	NM_026718	Ankrd13	ankyrin repeat domain 13a	114774677	114806200	TC0500001233.mm.1	-0.2	0.26721
TC0900002529.mm.1	NM_007924	Ell	elongation factor RNA polymerase II	70539675	70592858	TC0800000754.mm.1	0.1	0.267234
TC0900002531.mm.1	NM_133801	Gtf2f1	general transcription factor IIF, polypeptide 1	57003402	57011418	TC1700002343.mm.1	-0.2	0.267285
TC0900002532.mm.1	NM_178391	Setmar	SET domain without mariner transposase fusion	108065045	108077127	TC0600001192.mm.1	-0.1	0.267309
TC0900002535.mm.1	NM_026931	1810011	RIKEN cDNA 1810011O10 gene	24437615	24438946	TC0800001891.mm.1	0.1	0.267332
TC0900002537.mm.1	ENSMUST00000179197	Gm20760	predicted gene, 20760	146932742	146933389	TC0400001891.mm.1	-0.1	0.26736
TC0900002538.mm.1	ENSMUST00000109987	Gm11034	predicted gene 11034	72213494	72213636	TC0800002453.mm.1	-0.3	0.26743
TC0900002543.mm.1	ENSMUST00000179603	Gm23963	predicted gene, 23963	9240756	9240832	TC0200002929.mm.1	-0.3	0.267572
TC0900002569.mm.1	ENSMUST00000157648	Gm23123	predicted gene, 23123	26223502	26223645	TC1700000408.mm.1	-0.2	0.26783
TC0900002580.mm.1	ENSMUST00000158230	Gm24724	predicted gene, 24724	53159757	53159863	TC1900001667.mm.1	0.1	0.267842
TC0900002589.mm.1	NM_024216	Gpn3	GPN-loop GTPase 3	122371876	122382902	TC0500001390.mm.1	-0.1	0.267884
TC0900002593.mm.1	ENSMUST00000104462	Gm23320	predicted gene, 23320	75886083	75886209	TC0X00000752.mm.1	-0.1	0.268
TC0900002594.mm.1	NM_133796	Arhgdia	Rho GDP dissociation inhibitor (GDI) alpha	120577235	120581624	TC1100004217.mm.1	0.2	0.268131
TC0900002597.mm.1	ENSMUST00000062242	Gm8181	predicted gene 8181	43171159	43171827	TC1800000442.mm.1	0.2	0.268268
TC0900002629.mm.1	ENSMUST00000178619	Eif4a-p	eukaryotic translation initiation factor 4A, ps	60703918	60705656	TC0100000475.mm.1	-0.2	0.268513
TC0900002630.mm.1	NM_009197	Slc16a2	solute carrier family 16 (monocarboxylic acid t	103697414	103821988	TC0X00002783.mm.1	0.1	0.268566
TC0900002635.mm.1	NM_027870	Armcx3	armadillo repeat containing, X-linked 3	134756568	134761456	TC0X00001288.mm.1	0.0	0.268846
TC0900002638.mm.1	NR_039566	Mir3473	microRNA 3473c	191998554	191998634	TC0100003824.mm.1	0.1	0.268855
TC0900002640.mm.1	NM_026758	Mphosph	M phase phosphoprotein 6	117791644	117801929	TC0800003015.mm.1	-0.1	0.269042
TC0900002641.mm.1	ENSMUST00000074828	Rpl21-p	ribosomal protein L21, pseudogene 6	55915403	55915870	TC1700002305.mm.1	-0.4	0.26905
TC0900002644.mm.1	NM_001003950	Rab3ip	RAB3A interacting protein	116905784	116950380	TC1000002916.mm.1	-0.1	0.269068
TC0900002645.mm.1	ENSMUST00000104397	Gm24375	predicted gene, 24375	56521372	56521503	TC0800002243.mm.1	0.2	0.269212
TC0900002651.mm.1	NM_134021	Pnpo	pyridoxine 5-phosphate oxidase	96937816	96944019	TC1100003629.mm.1	0.1	0.269344
TC0900002682.mm.1	ENSMUST00000180111	Gm25672	predicted gene, 25672	106072327	106072433	TC0500002908.mm.1	-0.6	0.269379
TC0900002684.mm.1	ENSMUST00000120603	Gm14465	predicted gene 14465	79161029	79161595	TC0200003826.mm.1	-0.1	0.269462
TC0900002688.mm.1	NM_026780	Syf2	SYF2 homolog, RNA splicing factor (S. cerevisia	134930898	134937548	TC0400001647.mm.1	-0.1	0.269578
TC0900002691.mm.1	NM_011187	Psmb7	proteasome (prosome, macropain) subunit, beta	38588036	38644087	TC0200003421.mm.1	-0.2	0.269746
TC0900002696.mm.1	NM_001252639	Tbc1d7	TBC1 domain family, member 7	43151740	43171501	TC1300001877.mm.1	0.1	0.269998
TC0900002711.mm.1	NM_172162	Hinfp	histone H4 transcription factor	44295673	44305671	TC0900002155.mm.1	-0.1	0.270145
TC0900002720.mm.1	NM_147101	Olfr549	olfactory receptor 549	102554286	102555236	TC0700001459.mm.1	-0.1	0.270265
TC0900002727.mm.1	ENSMUST00000175690	Gm20650	predicted gene 20650	126891622	126897236	TC0700001823.mm.1	0.1	0.270501
TC0900002731.mm.1	NR_028281	Snord43	small nucleolar RNA, C/D box 43	80082859	80082906	TC1500001899.mm.1	-0.3	0.270599
TC0900002737.mm.1	NM_001162926	Fam84b	family with sequence similarity 84, member B	60818996	60825080	TC1500001606.mm.1	0.1	0.27068
TC0900002747.mm.1	ENSMUST00000178842	Gm26239	predicted gene, 26239	93807298	93807404	TC1000001142.mm.1	-0.6	0.270781
TC0900002762.mm.1	ENSMUST00000120419	Gm13488	predicted gene 13488	50521682	50521860	TC0200003506.mm.1	-0.2	0.270949
TC0900002769.mm.1	ENSMUST00000178716	Gm10590	predicted gene 10590	63267	63692	TC4_JH584294_rand	0.1	0.270954
TC0900002772.mm.1	ENSMUST00000118197	Gm14888	predicted gene 14888	58845560	58845733	TC0X00000542.mm.1	0.5	0.271037
TC0900002773.mm.1	NM_001011790	Olfr138	olfactory receptor 1382	49535187	49536122	TC1100000516.mm.1	-0.1	0.271158
TC0900002774.mm.1	XR_035730	6030426	RIKEN cDNA 6030426L16 gene	21729738	21784556	TC1200001498.mm.1	-0.1	0.271239
TC0900002776.mm.1	NM_001080965	Aurkc	aurora kinase C	6995385	7003091	TC0700000099.mm.1	-0.1	0.271502
TC0900002777.mm.1	NM_001004141	Cyp2j11	cytochrome P450, family 2, subfamily j, polypep	96294508	96348680	TC0400003094.mm.1	0.4	0.271618
TC0900002778.mm.1	ENSMUST00000184477	mmu-mir	mmu-mir-6412	122648339	122648435	TC1000001510.mm.1	-0.1	0.271644
TC0900002779.mm.1	ENSMUST00000157175	Gm25569	predicted gene, 25569	165270046	165270176	TC0200005144.mm.1	-0.2	0.271666
TC0900002780.mm.1	NM_027817	Grap	GRB2-related adaptor protein	61653265	61672784	TC1100000785.mm.1	-0.3	0.271816
TC0900002782.mm.1	NM_177470	Acaa2	acetyl-Coenzyme A acyltransferase 2 (mitochonc	74779197	74806208	TC1800000794.mm.1	0.3	0.272065
TC0900002800.mm.1	XR_105198	Gm20359	predicted gene, 20359	35375741	35388139	TC0800000424.mm.1	-0.1	0.272125
TC0900002806.mm.1	NM_011592	Timm44	translocase of inner mitochondrial membrane 4	4259731	4275913	TC0800001633.mm.1	-0.1	0.272277
TC0900002810.mm.1	ENSMUST00000121351	Gm6175	predicted gene 6175	100585009	100585408	TC0X00000955.mm.1	-0.1	0.272451
TC0900002824.mm.1	ENSMUST00000118822	Rpl7l1-	ribosomal protein L7-like 1, pseudogene 1	60971990	60972714	TC0X00002319.mm.1	-0.1	0.272583
TC0900002848.mm.1	NM_027727	Dym	dymeclin	75018772	75286966	TC1800000802.mm.1	0.1	0.272664
TC0900002873.mm.1	NM_001037665	Zfp1	zinc finger protein 1	111643443	111671011	TC0800001336.mm.1	-0.1	0.272861
TC0900002875.mm.1	ENSMUST00000082785	Gm25930	predicted gene, 25930	53390402	53390508	TC1100000602.mm.1	-0.7	0.272888
TC0900002882.mm.1	ENSMUST00000179484	Gm25618	predicted gene, 25618	24362438	24362544	TC1700001625.mm.1	-0.6	0.272914
TC0900002884.mm.1	NM_134221	Vmn1r20	vomeronasal 1 receptor 201	22474617	22475521	TC1300000209.mm.1	0.1	0.272998
TC0900002908.mm.1	NM_008796	Pctp	phosphatidylcholine transfer protein	89982665	90002894	TC1100003523.mm.1	0.1	0.273096

TC0900002915.mm.1	ENSMUST00000083397	Gm24927	predicted gene, 24927	17341906	17342012	TC1600001288.mm.1	-0.2	0.273145	
TC0900002922.mm.1	ENSMUST00000050774	Gm9816	predicted pseudogene 9816	62716953	62718810	TC1600000785.mm.1	-0.1	0.273176	
TC0900002950.mm.1	NM_010380	H2-D1	histocompatibility 2, D region locus 1	35262730	35267499	TC1700002790.mm.1	0.3	0.273342	
TC0900002963.mm.1	ENSMUST00000101103	Tnfrsf1	tumor necrosis factor receptor superfamily, mer	61126755	61149372	TC1100000774.mm.1	-0.1	0.27339	
TC0900002993.mm.1	NM_024236	Qdpr	quinoid dihydropteridine reductase	45434032	45450235	TC0500002343.mm.1	0.1	0.273631	
TC0900002996.mm.1	NM_008327	Ifi202b	interferon activated gene 202B	173962568	174031755	TC0100003599.mm.1	0.1	0.273649	
TC0900002997.mm.1	ENSMUST00000116975	Gm22679	predicted gene, 22679	29301480	29301579	TC0100000185.mm.1	0.1	0.273722	
TC0900003002.mm.1	ENSMUST00000178130	Gm23402	predicted gene, 23402	165809636	165809742	TC0100003454.mm.1	-0.6	0.273723	
TC0900003004.mm.1	NM_178889	Zscan29	zinc finger SCAN domains 29	121157427	121171149	TC0200004481.mm.1	-0.1	0.273965	
TC0900003008.mm.1	NM_031197	Slc2a2	solute carrier family 2 (facilitated glucose tr	28697903	28728361	TC0300000180.mm.1	0.2	0.27409	
TC0900003011.mm.1	ENSMUST00000179670	Gm22995	predicted gene, 22995	13888537	13888643	TC1000001779.mm.1	-0.7	0.274106	
TC0900003016.mm.1	ENSMUST00000157370	Gm25054	predicted gene, 25054	83721296	83721392	TC0600000936.mm.1	0.1	0.274266	
TC0900003033.mm.1	NM_019977	Miox	myo-inositol oxygenase	89334398	89337015	TC1500000870.mm.1	0.5	0.274338	
TC0900003037.mm.1	NM_024441	Hspb2	heat shock protein 2	50751072	50752354	TC0900002277.mm.1	0.0	0.274476	
TC0900003038.mm.1	ENSMUST00000158401	Gm25014	predicted gene, 25014	13283115	13283217	TC0800001734.mm.1	-0.1	0.274632	
TC0900003042.mm.1	NM_011712	Wbp5	WW domain binding protein 5	136245079	136247139	TC0X00001322.mm.1	-0.2	0.274724	
TC0900003051.mm.1	NM_019728	Defb4	defensin beta 4	19198704	19201547	TC0800000180.mm.1	0.1	0.274731	
TC0900003055.mm.1	ENSMUST00000116887	Gm23019	predicted gene, 23019	78361097	78361189	TC1300000952.mm.1	0.3	0.274754	
TC0900003062.mm.1	NM_008186	Gtf2h1	general transcription factor II H, polypeptide	46796094	46823800	TC0700000879.mm.1	-0.1	0.27485	
TC0900003064.mm.1	ENSMUST00000184093	RP24-19	N/A	14965334	14965622	TC0700002396.mm.1	-0.2	0.275015	
TC0900003068.mm.1	NM_153551	Dennd1c	DENN/MADD domain containing 1C	57066055	57078510	TC1700002347.mm.1	-0.2	0.275129	
TC0900003074.mm.1	NM_153796	Peo1	progressive external ophthalmoplegia 1 (human)	45005692	45012762	TC1900000661.mm.1	-0.1	0.275368	
TC0900003081.mm.1	NM_010496	Id2	inhibitor of DNA binding 2	25093799	25096092	TC1200001544.mm.1	-0.2	0.275383	
TC0900003083.mm.1	XM_001477767	Gm20925	predicted gene, 20925	23306767	23307480	TC0Y00000064.mm.1	0.2	0.275576	
TC0900003084.mm.1	NM_183195	Marveld	MARVEL (membrane-associating) domain contai	42147389	42151703	TC1900000610.mm.1	0.1	0.275651	
TC0900003097.mm.1	ENSMUST00000104013	Gm25614	predicted gene, 25614	58650268	58650400	TC1400002154.mm.1	-0.1	0.275767	
TC0900003098.mm.1	NM_026998	Snx6	sorting nexin 6	54746349	54795703	TC1200001755.mm.1	-0.1	0.275942	
TC0900003103.mm.1	NM_007505	Atp5a1	ATP synthase, H+ transporting, mitochondrial F1	77773729	77782869	TC1800000833.mm.1	0.3	0.275964	
TC0900003109.mm.1	ENSMUST00000097644	Hdac4	histone deacetylase 4	91928785	91931176	TC0100002805.mm.1	-0.1	0.276144	
TC0900003110.mm.1	ENSMUST00000175406	Gm23369	predicted gene, 23369	32593469	32593573	TC0200003306.mm.1	-0.5	0.276228	
TC0900003112.mm.1	NM_009910	Cxcr3	chemokine (C-X-C motif) receptor 3	101731535	101734269	TC0X00002727.mm.1	-0.1	0.276259	
TC0900003116.mm.1	ENSMUST00000032517	Clec2j	C-type lectin domain family 2, member J	128652438	128657032	TC0600003212.mm.1	-0.2	0.276275	
TC0900003120.mm.1	ENSMUST00000083036	Gm23690	predicted gene, 23690	181813607	181813700	TC0100003696.mm.1	-0.7	0.276338	
TC0900003122.mm.1	ENSMUST00000083244	Gm22126	predicted gene, 22126	35662135	35662276	TC1300000406.mm.1	-0.4	0.276425	
TC0900003133.mm.1	ENSMUST00000158384	Gm23858	predicted gene, 23858	121135191	121135296	TC0200004480.mm.1	-0.1	0.276466	
TC0900003142.mm.1	NM_028746	Slc7a13	solute carrier family 7, (cationic amino acid t	19818725	19842218	TC0400000167.mm.1	0.1	0.276485	
TC0900003162.mm.1	ENSMUST00000083374	Gm24136	predicted gene, 24136	96422733	96422897	TC0300000941.mm.1	-0.5	0.276648	
TC0900003168.mm.1	NM_028070	Alkbh4	alkB, alkylation repair homolog 4 (E. coli)	136136146	136141615	TC0500001599.mm.1	-0.1	0.276654	
TC0900003169.mm.1	ENSMUST00000099835	Olfr116	olfactory receptor 1163	88070365	88071407	TC0200004006.mm.1	0.1	0.276825	
TC0900003172.mm.1	ENSMUST00000157262	Gm23598	predicted gene, 23598	150883723	150883866	TC0200002231.mm.1	-0.2	0.27689	
TC0900003173.mm.1	NM_001161410	Trappc1	trafficking protein particle complex 12	28690628	28750453	TC1200001569.mm.1	-0.1	0.27732	
TC0900003176.mm.1	ENSMUST00000178559	Gm21800	predicted gene, 21800	41406498	41407040	TC0Y00000133.mm.1	0.1	0.27747	
TC0900003179.mm.1	ENSMUST00000117367	Gm12892	predicted gene 12892	122008193	122009338	TC0400001374.mm.1	0.1	0.277553	
TC0900003182.mm.1	NM_021028	Tk2	thymidine kinase 2, mitochondrial	104226691	104248558	TC0800002797.mm.1	0.2	0.277609	
TC0900003188.mm.1	NM_029751	Rpl18a	ribosomal protein L18A	70894722	70897443	TC0800002412.mm.1	-0.1	0.277632	
TC0900003189.mm.1	NM_019726	Gps2	G protein pathway suppressor 2	69913888	69916591	TC1100000929.mm.1	-0.1	0.277655	
TC0900003191.mm.1	ENSMUST00000083864	Gm25518	predicted gene, 25518	25006152	25006258	TC0200003125.mm.1	-0.4	0.277706	
TC0900003199.mm.1	ENSMUST00000158698	Gm25978	predicted gene, 25978	23626656	23626745	TC0400002302.mm.1	0.1	0.277781	
TC0900003220.mm.1	ENSMUST00000120117	Gm13181	predicted gene 13181	3686362	3687430	TC0200000014.mm.1	-0.1	0.277939	
TC0900003225.mm.1	ENSMUST00000122420	Gm8577	predicted gene 8577	154774453	154775438	TC0X00001572.mm.1	-0.1	0.278036	
TC0900003229.mm.1	ENSMUST00000104528	Gm25725	predicted gene, 25725	141386495	141386624	TC0700004535.mm.1	0.1	0.278044	
TC0900003233.mm.1	NM_001135115	Gm12250	predicted gene 12250	58183843	58190198	TC1100000681.mm.1	-0.1	0.278161	
TC0900003234.mm.1	ENSMUST00000157182	Gm25559	predicted gene, 25559	117570134	117570207	TC0400001294.mm.1	0.1	0.278215	
TC0900003236.mm.1	ENSMUST00000176997	Vmn1r-p	vomeronasal 1 receptor, pseudogene 149	21269288	21269470	TC1700001552.mm.1	0.1	0.278225	
TC0900003237.mm.1	ENSMUST00000093636	Gm23947	predicted gene, 23947	88392826	88392932	TC1700002713.mm.1	-0.6	0.278289	
TC0900003240.mm.1	ENSMUST00000100697	Gm3633	predicted gene 3633	42636467	42641917	TC1400001837.mm.1	0.1	0.278313	
TC0900003241.mm.1	NM_011897	Spry2	sprouty homolog 2 (Drosophila)	105891947	105896819	TC1400002666.mm.1	0.1	0.278419	
TC0900003248.mm.1	NR_039562	Mir5103	microRNA 5103	34433121	34433199	TC0100002150.mm.1	-0.2	0.278463	
TC0900003249.mm.1	NM_030685	Serp1	stress-associated endoplasmic reticulum protein	58521969	58525884	TC0300002042.mm.1	-0.1	0.278508	
TC0900003275.mm.1	ENSMUST00000179451	Gm26432	predicted gene, 26432	59496169	59496247	TC0700003208.mm.1	-0.1	0.27856	
TC0900003276.mm.1	ENSMUST00000184585	AC13224	N/A	30333291	30333397	TC0100002115.mm.1	0.3	0.27887	
TC0900003303.mm.1	NM_025427	Rgcc	regulator of cell cycle	79288750	79301645	TC1400002487.mm.1	0.2	0.278881	
TC0900003306.mm.1	NM_026228	Slc39a8	solute carrier family 39 (metal ion transporter	135825279	135888572	TC0300001378.mm.1	0.1	0.278973	
TC0900003307.mm.1	NM_025969	Timm21	tranlocase of inner mitochondrial membrane 21	84947294	84951524	TC1800001719.mm.1	-0.2	0.279094	
TC0900003309.mm.1	NR_002900	Snora69	small nucleolar RNA, H/ACA box 69	37082912	37083042	TC0X00002058.mm.1	-0.8	0.27911	
TC0900003312.mm.1	NM_011740	Ywhaz	tyrosine 3-monooxygenase/tryptophan 5-monoc	36770261	36802984	TC1500001384.mm.1	-0.1	0.279215	
TC0900003313.mm.1	NM_025407	Uqcrc1	ubiquinol-cytochrome c reductase core protein 1	108936648	108949641	TC0900001427.mm.1	0.3	0.279523	
TC0900003318.mm.1	ENSMUST00000083286	Gm25794	predicted gene, 25794	79703484	79703590	TC1000002476.mm.1	-0.5	0.279627	
TC0900003319.mm.1	NCBI_Gene:432709:p	Ighv8-9	immunoglobulin heavy variable V8-9	115468331	115468632	TC1200002484.mm.1	-0.5	0.280086	
TC0900003322.mm.1	NM_018758	Apba3	amyloid beta (A4) precursor protein-binding, fa	81268172	81273247	TC1000000891.mm.1	0.1	0.280086	
TC0900003331.mm.1	ENSMUST00000119811	Gm7189	predicted pseudogene 7189	40000782	40001210	TC0X00002100.mm.1	-0.1	0.280212	
TC0900003337.mm.1	NCBI_Gene:243451:p	Igkv4-8	immunoglobulin kappa variable 4-86	68910411	68910938	TC0600003551.mm.1	-0.8	0.280333	
TC0900003341.mm.1	NM_009251	Serpina	serine (or cysteine) peptidase inhibitor, clade	104236242	104241939	TC1200002525.mm.1	-0.2	0.280602	
TC0900003343.mm.1	ENSMUST00000082557	Gm22061	predicted gene, 22061	98946444	98946550	TC1100001588.mm.1	-0.6	0.280692	
TC0900003344.mm.1	NM_009531	Xpc	xeroderma pigmentosum, complementation gro	91489305	91515888	TC0600002730.mm.1	-0.1	0.280732	
TC0M00000001.mm.1	NM_147070	Olfr603	olfactory receptor 603	103383062	103384000	TC0700003887.mm.1	0.1	0.280893	
TC0M00000003.mm.1	ENSMUST00000183673	GNAS-AS	GNAS antisense RNA 1 conserved region 5	174295337	174295461	TC0200002703.mm.1	-0.1	0.280962	
TC0M00000005.mm.1	NM_026428	Dcxr	dicarbonyl L-xylulose reductase	120724546	120727281	TC1100004228.mm.1	0.1	0.28102	

TC0M00000006.mm.1	ENSMUST00000180263	Gm25327	predicted gene, 25327	120143644	120143750	TC0600003037.mm.1	-0.5	0.281081
TC0M00000007.mm.1	NM_001142441	Gm10094	predicted gene 10094	95825354	95826156	TC0800001147.mm.1	-0.2	0.281111
TC0M00000008.mm.1	NM_172594	Dhx29	DEAH (Asp-Glu-Ala-His) box polypeptide 29	112927720	112969432	TC1300001273.mm.1	-0.1	0.281112
TC0M00000009.mm.1	ENSMUST00000178125	SNORA43	Small nucleolar RNA SNORA43	74635214	74635351	TC0400000783.mm.1	0.1	0.281133
TC0M00000010.mm.1	NM_018791	Zfp108	zinc finger protein 108	24254794	24262445	TC0700000374.mm.1	-0.1	0.281286
TC0M00000011.mm.1	NM_001011830	Olfr119	olfactory receptor 119	37696664	37701818	TC1700000779.mm.1	0.1	0.281645
TC0M00000012.mm.1	ENSMUST00000157635	Gm24780	predicted gene, 24780	33393057	33393199	TC0300001811.mm.1	-0.2	0.28169
TC0M00000013.mm.1	ENSMUST00000173442	Gm20505	predicted gene 20505	8718833	8720540	TC0700002268.mm.1	0.1	0.281719
TC0M00000014.mm.1	ENSMUST00000180296	Gm20435	predicted gene 20435	9458656	9460363	TC0700002290.mm.1	0.1	0.281719
TC0M00000015.mm.1	NR_030473	Mir669c	microRNA 669c	91110229	91123337	TC1200000942.mm.1	0.3	0.281783
TC0M00000017.mm.1	ENSMUST00000158614	Gm22200	predicted gene, 22200	34941234	34941300	TC1800001164.mm.1	-0.1	0.281915
TC0M00000020.mm.1	NM_153780	2610044	RIKEN cDNA 2610044O15 gene	129216354	129234046	TC0800003217.mm.1	-0.1	0.282023
TC0M00000021.mm.1	NM_027898	Gramd1a	GRAM domain containing 1A	31130127	31151050	TC0700002792.mm.1	-0.1	0.282111
TC0M00000022.mm.1	XM_003688810	Gm21083	predicted gene, 21083	15577337	15582097	TC0500000109.mm.1	0.1	0.282132
TC0M00000023.mm.1	NM_026858	Xrcc6bp	XRCC6 binding protein 1	126868427	126901371	TC1000003090.mm.1	-0.1	0.282236
TC0M00000024.mm.1	NR_035420	Mir467f	microRNA 467f	69635400	69635519	TC1100003053.mm.1	0.2	0.282263
TC0M00000025.mm.1	NM_027360	2010107	RIKEN cDNA 2010107E04 gene	111961375	111966977	TC1200002421.mm.1	-0.3	0.282452
TC0M00000028.mm.1	XM_620107	Gm13213	predicted gene 13213	133638210	133638683	TC0400003709.mm.1	-0.5	0.282487
TC0M00000029.mm.1	NM_146655	Olfr441	olfactory receptor 441	43115744	43116676	TC0600000479.mm.1	-0.1	0.282547
TC0X00000014.mm.1	NM_009315	Taf6	TAF6 RNA polymerase II, TATA box binding prote	138178617	138187451	TC0500003474.mm.1	-0.1	0.282699
TC0X00000018.mm.1	NM_019415	Slc12a3	solute carrier family 12, member 3	94329192	94366222	TC0800001103.mm.1	0.5	0.28273
TC0X00000020.mm.1	ENSMUST00000104564	Gm23530	predicted gene, 23530	47800673	47800809	TC1500000365.mm.1	-0.2	0.28274
TC0X00000030.mm.1	NM_008369	Il3ra	interleukin 3 receptor, alpha chain	14346495	14355490	TC1400000112.mm.1	0.0	0.282876
TC0X00000035.mm.1	NM_028295	Pdia5	protein disulfide isomerase associated 5	35397312	35490873	TC1600001548.mm.1	0.1	0.282936
TC0X00000036.mm.1	NR_029640	Mir290	microRNA 290	3218626	3218708	TC0700000003.mm.1	0.1	0.283003
TC0X00000044.mm.1	ENSMUST00000180253	Gm6100	predicted gene 6100	34307301	34307687	TC0800002027.mm.1	-0.2	0.283206
TC0X00000045.mm.1	NM_009987	Cx3cr1	chemokine (C-X3-C) receptor 1	119901616	120068296	TC0900003248.mm.1	-0.1	0.283392
TC0X00000046.mm.1	ENSMUST00000180018	Gm21741	predicted gene, 21741	83715099	83715782	TC0Y00000512.mm.1	0.1	0.283403
TC0X00000065.mm.1	NM_027843	Arl14	ADP-ribosylation factor-like 14	69222419	69223618	TC0300000579.mm.1	0.1	0.283524
TC0X00000066.mm.1	NM_028634	Cby1	chibby homolog 1 (Drosophila)	79659227	79667661	TC1500000677.mm.1	-0.1	0.283879
TC0X00000067.mm.1	NM_153422	Pde5a	phosphodiesterase 5A, cGMP-specific	122729158	122859374	TC0300001249.mm.1	-0.1	0.283971
TC0X00000071.mm.1	NM_001163085	Map3k15	mitogen-activated protein kinase kinase kinase	159988433	160123351	TC0X00001629.mm.1	0.1	0.283974
TC0X00000076.mm.1	NM_025274	Dppa5a	developmental pluripotency associated 5A	78367052	78368199	TC0900002720.mm.1	-0.1	0.283997
TC0X00000080.mm.1	ENSMUST00000121568	Gm6977	predicted gene 6977	90744546	90745062	TC0X00002608.mm.1	0.2	0.284203
TC0X00000098.mm.1	ENSMUST00000083719	Gm23105	predicted gene, 23105	108363665	108363798	TC1000001271.mm.1	-0.4	0.284351
TC0X00000099.mm.1	NM_025836	Plin3	perilipin 3	56278962	56290511	TC1700002321.mm.1	0.2	0.28454
TC0X00000100.mm.1	ENSMUST00000117877	Gm11873	predicted gene 11873	20391096	20392399	TC0400000171.mm.1	-0.2	0.284561
TC0X00000112.mm.1	ENSMUST00000177920	Gm22911	predicted gene, 22911	38615375	38615481	TC1000002014.mm.1	-0.4	0.284761
TC0X00000126.mm.1	ENSMUST00000121022	Gm11836	predicted gene 11836	14433891	14434337	TC0400000124.mm.1	-0.3	0.284807
TC0X00000129.mm.1	NM_001256066	Scgb1b2	secretoglobin, family 1B, member 29	32441525	32442844	TC0700000597.mm.1	0.1	0.284906
TC0X00000130.mm.1	ENSMUST00000117021	Gm23335	predicted gene, 23335	55966856	55966949	TC1800001359.mm.1	0.3	0.284923
TC0X00000131.mm.1	XR_141487	Gm19578	predicted gene, 19578	77658872	77662794	TC1800001629.mm.1	-0.1	0.285041
TC0X00000146.mm.1	NM_001253848	Cbll1	Casitas B-lineage lymphoma-like 1	31484829	31499616	TC1200001594.mm.1	-0.1	0.285082
TC0X00000148.mm.1	ENSMUST00000121388	Olfr139	olfactory receptor 1397, pseudogene 1	108687074	108688035	TC1100003978.mm.1	0.1	0.285147
TC0X00000151.mm.1	NCBI_Gene:381782:p	Igkv4-5	immunoglobulin kappa variable 4-50	69700767	69701287	TC0600003575.mm.1	-0.7	0.285474
TC0X00000153.mm.1	NM_001177832	Gm10324	predicted gene 10324	66113453	66164861	TC1300000803.mm.1	0.0	0.285539
TC0X00000156.mm.1	ENSMUST00000184385	RP23-26	N/A	76658075	76658450	TC0900001028.mm.1	-0.1	0.28566
TC0X00000162.mm.1	NM_019449	Unc93b1	unc-93 homolog B1 (C. elegans)	3935186	3949340	TC1900000019.mm.1	0.3	0.285662
TC0X00000163.mm.1	ENSMUST00000175475	Gm25247	predicted gene, 25247	36430611	36430700	TC0700000676.mm.1	-0.3	0.286085
TC0X00000164.mm.1	ENSMUST00000164167	Gm7535	predicted gene 7535	17911039	17911947	TC1700001524.mm.1	-0.2	0.286168
TC0X00000169.mm.1	ENSMUST00000158780	Gm24876	predicted gene, 24876	75745849	75745940	TC1400002429.mm.1	0.1	0.28617
TC0X00000170.mm.1	NM_133807	Lrrc59	leucine rich repeat containing 59	94629767	94645216	TC1100001442.mm.1	0.2	0.286256
TC0X00000176.mm.1	ENSMUST00000158499	Gm26402	predicted gene, 26402	75613157	75613269	TC1000002378.mm.1	0.1	0.286326
TC0X00000178.mm.1	ENSMUST00000175510	Gm22932	predicted gene, 22932	10273750	10273821	TC1600000113.mm.1	-0.1	0.286373
TC0X00000180.mm.1	NCBI_Gene:668582:p	Ighv8-1	immunoglobulin heavy variable 8-14	115808427	115808727	TC1200002654.mm.1	-0.3	0.286377
TC0X00000181.mm.1	ENSMUST00000116982	Gm25508	predicted gene, 25508	74659031	74659119	TC1700001162.mm.1	0.3	0.28662
TC0X00000184.mm.1	ENSMUST00000082494	Gm22746	predicted gene, 22746	163150391	163150497	TC0X00003318.mm.1	-0.1	0.286829
TC0X00000193.mm.1	ENSMUST00000118977	Gm12647	predicted gene 12647	94061373	94061637	TC0400000941.mm.1	-0.2	0.286988
TC0X00000194.mm.1	ENSMUST00000122189	Gm5392	predicted gene 5392	107354879	107357447	TC0X00002844.mm.1	-0.1	0.287145
TC0X00000195.mm.1	ENSMUST00000158167	Gm22539	predicted gene, 22539	51844685	51844801	TC0X00000459.mm.1	-0.1	0.287236
TC0X00000202.mm.1	ENSMUST00000117802	Gm11367	predicted gene 11367	30112474	30112596	TC1300000329.mm.1	-0.1	0.287348
TC0X00000203.mm.1	ENSMUST00000177935	Gm22584	predicted gene, 22584	59713534	59713625	TC0700003284.mm.1	0.2	0.287356
TC0X00000206.mm.1	ENSMUST00000104304	Gm23596	predicted gene, 23596	55161477	55161608	TC1400002082.mm.1	-0.1	0.287361
TC0X00000207.mm.1	ENSMUST00000175627	Gm22800	predicted gene, 22800	118248689	118248782	TC0200004407.mm.1	0.3	0.287394
TC0X00000210.mm.1	NM_026416	S100a16	S100 calcium binding protein A16	90537254	90543151	TC0300000802.mm.1	0.1	0.287452
TC0X00000212.mm.1	ENSMUST00000117942	Tcea1-p	transcription elongation factor A (SII) 1, pseu	90882615	90883518	TC1500000891.mm.1	-0.2	0.287471
TC0X00000216.mm.1	ENSMUST00000120115	Gm5678	predicted gene 5678	93628097	93630346	TC1600001043.mm.1	0.1	0.287659
TC0X00000219.mm.1	NM_178616	Psmd11	proteasome (prosome, macropain) 26S subunit,	80428615	80473248	TC1100001206.mm.1	-0.2	0.287835
TC0X00000223.mm.1	ENSMUST00000138684	Gm15839	predicted gene 15839	56886367	56889453	TC1600000749.mm.1	0.1	0.288014
TC0X00000224.mm.1	NM_001033260	Stox1	storkhead box 1	62659043	62726128	TC1000002266.mm.1	0.0	0.288047
TC0X00000226.mm.1	ENSMUST00000174652	Gm20399	predicted gene 20399	5905019	5905156	TC0700000063.mm.1	-0.1	0.288071
TC0X00000232.mm.1	ENSMUST00000159115	Gm16560	predicted gene 16560	94173080	94173483	TC0300002434.mm.1	-0.1	0.288092
TC0X00000235.mm.1	ENSMUST00000082891	n-R5s19	nuclear encoded rRNA 5S 195	39635964	39636082	TC0300001894.mm.1	-0.3	0.2881
TC0X00000241.mm.1	NM_028119	Ddb2	damage specific DNA binding protein 2	91211572	91237066	TC0200004111.mm.1	-0.1	0.288122
TC0X00000250.mm.1	ENSMUST00000071237	Rpl21-p	ribosomal protein L21, pseudogene 10	38107440	38107922	TC0300001883.mm.1	-0.5	0.28822
TC0X00000273.mm.1	NM_023627	Isyna1	myo-inositol 1-phosphate synthase A1	70594481	70597290	TC0800000756.mm.1	-0.2	0.28832
TC0X00000279.mm.1	NM_023040	Gfer	growth factor, erv1 (S. cerevisiae)-like (augme	24693190	24696156	TC1700001637.mm.1	0.1	0.28857
TC0X00000284.mm.1	ENSMUST00000096101	Gm5874	predicted gene 5874	18824552	18825058	TC0600000149.mm.1	-0.1	0.288582

TC0X00000288.mm.1	ENSMUST00000158231	Gm24727	predicted gene, 24727	33691801	33691944	TC0800000395.mm.1	-0.2	0.288667
TC0X00000289.mm.1	NCBI_Gene:16017:pr	Ighg1	immunoglobulin heavy constant gamma 1 (G1m	113325246	113339382	TC1200002540.mm.1	-0.2	0.288794
TC0X00000291.mm.1	BC040084	Ier5l	immediate early response 5-like	30471537	30474219	TC0200003272.mm.1	0.1	0.288909
TC0X00000313.mm.1	NR_030154	Mir471	microRNA 471	66792595	66792661	TC0X00002346.mm.1	0.1	0.289017
TC0X00000316.mm.1	NM_011258	Rfc1	replication factor C (activator 1) 1	65261852	65335670	TC0500002483.mm.1	-0.2	0.289066
TC0X00000323.mm.1	ENSMUST00000180078	Gm23186	predicted gene, 23186	4678020	4678126	TC1700000020.mm.1	-0.2	0.289128
TC0X00000324.mm.1	NM_144548	Il23r	interleukin 23 receptor	67422932	67491855	TC0600002425.mm.1	-0.1	0.289214
TC0X00000326.mm.1	ENSMUST00000157431	Gm24262	predicted gene, 24262	35144636	35144779	TC0900000329.mm.1	-0.1	0.289301
TC0X00000327.mm.1	ENSMUST00000116676	Gm23425	predicted gene, 23425	40851799	40851883	TC1800000425.mm.1	0.3	0.289343
TC0X00000329.mm.1	ENSMUST00000161107	Gm16298	predicted gene 16298	53767891	53768310	TC1900001680.mm.1	-0.3	0.289595
TC0X00000354.mm.1	NM_023248	Sbds	Shwachman-Bodian-Diamond syndrome homolo	130245731	130255530	TC0500003318.mm.1	0.1	0.289711
TC0X00000356.mm.1	ENSMUST00000158939	Gm24664	predicted gene, 24664	12980829	12980928	TC1500000111.mm.1	-0.1	0.289738
TC0X00000361.mm.1	NM_172943	Alkbh5	alkB, alkylation repair homolog 5 (E. coli)	60536381	60558512	TC1100000756.mm.1	0.1	0.289956
TC0X00000362.mm.1	NM_001139504	Dnlz	DNL-type zinc finger	26348118	26352110	TC0200003186.mm.1	0.1	0.290107
TC0X00000364.mm.1	NM_145128	Mgat5	mannoside acetylglucosaminyltransferase 5	127204986	127483704	TC0100001114.mm.1	-0.2	0.290174
TC0X00000381.mm.1	ENSMUST00000178568	Gm22910	predicted gene, 22910	53872017	53872148	TC0600002307.mm.1	0.2	0.290267
TC0X00000386.mm.1	NM_001100449	Taf4b	TAF4B RNA polymerase II, TATA box binding prot	14783245	14900359	TC1800000124.mm.1	-0.1	0.2904
TC0X00000404.mm.1	ENSMUST00000183968	AC16157	N/A	54008473	54008580	TC0700003092.mm.1	0.1	0.290464
TC0X00000406.mm.1	ENSMUST00000082948	Gm24202	predicted gene, 24202	27761009	27761111	TC0800001961.mm.1	-0.3	0.290618
TC0X00000407.mm.1	ENSMUST00000158565	Gm25771	predicted gene, 25771	122553173	122553316	TC0100001103.mm.1	-0.1	0.29063
TC0X00000414.mm.1	NM_008649	Mup5	major urinary protein 5	61831319	61835233	TC0400002771.mm.1	-0.3	0.291049
TC0X00000419.mm.1	ENSMUST00000167906	Gm17571	predicted gene, 17571	13444034	13446753	TC0900001764.mm.1	0.3	0.291059
TC0X00000420.mm.1	NCBI_Gene:629845:p	Ighv6-3	immunoglobulin heavy variable 6-3	114391712	114392169	TC1200002595.mm.1	-0.6	0.291077
TC0X00000423.mm.1	ENSMUST00000184380	pRNA	NoRC assoicated RNA, pRNA	109599079	109599163	TC0500001124.mm.1	0.1	0.291104
TC0X00000428.mm.1	ENSMUST00000065243	Gm6180	predicted pseudogene 6180	42246911	42247411	TC0800000498.mm.1	-0.3	0.291155
TC0X00000429.mm.1	NM_001163996	Zfp605	zinc finger protein 605	110110092	110132015	TC0500001131.mm.1	-0.1	0.291226
TC0X00000436.mm.1	ENSMUST00000083349	Gm24454	predicted gene, 24454	79893584	79893715	TC1100003333.mm.1	-0.2	0.291266
TC0X00000438.mm.1	NM_001166590	Eif5a	eukaryotic translation initiation factor 5A	69916712	69921958	TC1100003076.mm.1	-0.1	0.291292
TC0X00000439.mm.1	NM_008320	Irf8	interferon regulatory factor 8	120736358	120756694	TC0800001451.mm.1	-0.2	0.291387
TC0X00000445.mm.1	ENSMUST00000118494	Gm5400	predicted gene 5400	94311894	94312836	TC0X00000895.mm.1	0.1	0.291403
TC0X00000451.mm.1	NM_001174170	Serpinb	serine (or cysteine) peptidase inhibitor, clade	107511423	107525600	TC0100003866.mm.1	-0.1	0.291416
TC0X00000459.mm.1	NM_174989	Ticam1	toll-like receptor adaptor molecule 1	56269319	56276786	TC1700002320.mm.1	-0.1	0.291544
TC0X00000469.mm.1	NM_134066	Akr1c18	aldo-keto reductase family 1, member C18	4132615	4150654	TC1300001377.mm.1	-0.1	0.291608
TC0X00000471.mm.1	NM_178029	Setd1a	SET domain containing 1A	127776670	127800122	TC0700004629.mm.1	-0.1	0.291621
TC0X00000475.mm.1	ENSMUST00000104649	Gm26053	predicted gene, 26053	31573894	31573965	TC1600001486.mm.1	0.2	0.291647
TC0X00000479.mm.1	NM_001081340	Setd2	SET domain containing 2	110532597	110618633	TC0900001463.mm.1	-0.2	0.291742
TC0X00000488.mm.1	ENSMUST00000121478	Gm14737	predicted gene 14737	82161187	82161360	TC0X00002541.mm.1	0.4	0.291858
TC0X00000503.mm.1	ENSMUST00000157372	Gm25056	predicted gene, 25056	151926348	151926409	TC0300003137.mm.1	0.1	0.291914
TC0X00000510.mm.1	ENSMUST00000121753	Gm7180	predicted pseudogene 7180	81222362	81222874	TC0700003606.mm.1	0.2	0.29201
TC0X00000513.mm.1	NM_001256073	Scgb1b3	secretoglobin, family 1B, member 3	31375592	31376916	TC0700000591.mm.1	0.1	0.29206
TC0X00000515.mm.1	ENSMUST00000157939	Gm23782	predicted gene, 23782	137987657	137987776	TC0100003166.mm.1	-0.1	0.292231
TC0X00000518.mm.1	ENSMUST00000122032	Gm7150	predicted gene 7150	153403090	153404070	TC0X00003206.mm.1	-0.1	0.292266
TC0X00000522.mm.1	ENSMUST00000177528	Gm20620	predicted gene 20620	58695844	58696011	TC0900002398.mm.1	-0.4	0.292312
TC0X00000524.mm.1	NM_025772	Dtnbp1	dystrobrevin binding protein 1	44922079	45002096	TC1300001902.mm.1	0.1	0.292628
TC0X00000530.mm.1	ENSMUST00000179389	Gm25449	predicted gene, 25449	59419323	59419401	TC0700003167.mm.1	-0.1	0.29271
TC0X00000535.mm.1	ENSMUST00000104042	Gm25097	predicted gene, 25097	145160477	145160621	TC0X00001434.mm.1	-0.2	0.292786
TC0X00000537.mm.1	ENSMUST00000183769	AC16633	N/A	79045608	79045701	TC0100000685.mm.1	0.2	0.292842
TC0X00000540.mm.1	ENSMUST00000184804	SNORA7	Small nucleolar RNA SNORA7	121040344	121040480	TC0700004205.mm.1	-0.2	0.292988
TC0X00000542.mm.1	ENSMUST00000179336	LOC1010	uncharacterized LOC101055632	59396324	59424653	TC0Y00000162.mm.1	-0.1	0.293305
TC0X00000544.mm.1	NM_025686	Brf2	BRF2, subunit of RNA polymerase III transcripti	27123830	27128632	TC0800001951.mm.1	-0.1	0.293361
TC0X00000550.mm.1	NM_030259	Rilpl2	Rab interacting lysosomal protein-like 2	124463265	124478366	TC0500003256.mm.1	-0.1	0.293472
TC0X00000563.mm.1	NM_029971	Pmch	pro-melanin-concentrating hormone	88091072	88092375	TC1000001072.mm.1	-0.1	0.293507
TC0X00000568.mm.1	ENSMUST00000116697	Gm24587	predicted gene, 24587	96855582	96855670	TC1000002745.mm.1	0.1	0.293597
TC0X00000570.mm.1	ENSMUST00000083395	Gm22054	predicted gene, 22054	23836167	23836321	TC0500002064.mm.1	0.2	0.293789
TC0X00000580.mm.1	ENSMUST00000119237	Gm13668	predicted gene 13668	73959669	73960669	TC0200003767.mm.1	-0.1	0.293911
TC0X00000589.mm.1	ENSMUST00000158557	Gm22945	predicted gene, 22945	104471051	104471207	TC1000002789.mm.1	0.1	0.293937
TC0X00000597.mm.1	ENSMUST00000121539	Gm12430	predicted gene 12430	47453632	47454953	TC0400000522.mm.1	-0.1	0.293991
TC0X00000606.mm.1	NM_001111312	Lrrfip1	leucine rich repeat (in FLII) interacting prote	90998727	91128944	TC0100000884.mm.1	-0.1	0.294171
TC0X00000611.mm.1	XM_619973	Gm5858	predicted gene 5858	153693901	153694365	TC0300003165.mm.1	-0.2	0.294282
TC0X00000616.mm.1	ENSMUST00000157844	Gm24751	predicted gene, 24751	41948997	41949098	TC1500000339.mm.1	0.1	0.294348
TC0X00000617.mm.1	NR_034155	Olfr137	olfactory receptor 1372, pseudogene 1	52154876	52157907	TC1100002713.mm.1	-0.1	0.294404
TC0X00000627.mm.1	NM_001199246	Maged2	melanoma antigen, family D, 2	150806370	150814345	TC0X00003168.mm.1	0.1	0.294546
TC0X00000633.mm.1	ENSMUST00000184252	Gm11214	predicted gene 11214	63662359	63663379	TC0400002807.mm.1	-0.1	0.294772
TC0X00000635.mm.1	NM_007536	Bcl2a1d	B cell leukemia/lymphoma 2 related protein A1c	88723287	88731850	TC0900002806.mm.1	-0.1	0.294821
TC0X00000643.mm.1	ENSMUST00000104261	Gm23127	predicted gene, 23127	75768068	75768197	TC1300000916.mm.1	-0.2	0.294846
TC0X00000645.mm.1	NM_029091	Klc4	kinesin light chain 4	46630624	46646022	TC1700002183.mm.1	0.0	0.294981
TC0X00000648.mm.1	NM_009471	Umps	uridine monophosphate synthetase	33954782	33967038	TC1600001527.mm.1	-0.1	0.295129
TC0X00000652.mm.1	ENSMUST00000104317	Gm24233	predicted gene, 24233	59134072	59134193	TC1200000504.mm.1	-0.6	0.295453
TC0X00000653.mm.1	NM_198304	Nup188	nucleoporin 188	30286397	30344266	TC0200005468.mm.1	-0.1	0.295488
TC0X00000655.mm.1	NM_001033449	Tmem237	transmembrane protein 237	59100593	59120382	TC0100002395.mm.1	0.1	0.295536
TC0X00000670.mm.1	NM_173781	Rab6b	RAB6B, member RAS oncogene family	103112074	103185270	TC0900001299.mm.1	-0.1	0.295539
TC0X00000671.mm.1	NM_001277202	Clec2f	C-type lectin domain family 2, member f	129014112	129020527	TC0600001525.mm.1	-0.1	0.295561
TC0X00000691.mm.1	ENSMUST00000083038	Gm26055	predicted gene, 26055	95378845	95378951	TC1200002167.mm.1	-0.1	0.295565
TC0X00000697.mm.1	ENSMUST00000082700	Gm22620	predicted gene, 22620	15315189	15315321	TC0900000118.mm.1	-0.7	0.295878
TC0X00000699.mm.1	NM_013463	Gla	galactosidase, alpha	134588149	134601125	TC0X00002995.mm.1	0.1	0.296159
TC0X00000704.mm.1	ENSMUST00000116474	Gm13343	predicted gene 13343	19652244	19652348	TC0200003067.mm.1	-0.1	0.296309
TC0X00000708.mm.1	ENSMUST00000074761	Gm10134	predicted gene 10134	28506095	28506475	TC0200000485.mm.1	0.2	0.296406
TC0X00000709.mm.1	ENSMUST00000178683	Gm26177	predicted gene, 26177	54311225	54311331	TC1000002181.mm.1	-0.3	0.296443

TC0X00000718.mm.1	ENSMUST00000083857	Gm25516	predicted gene, 25516	147874772	147874878	TC0200004798.mm.1	-0.5	0.296471
TC0X00000719.mm.1	ENSMUST00000081004	Gm6644	predicted gene 6644	55443733	55445064	TC0100002359.mm.1	0.3	0.296595
TC0X00000724.mm.1	NM_028611	Ndufaf7	NADH dehydrogenase (ubiquinone) 1 alpha subc	78937135	78948052	TC1700001192.mm.1	0.1	0.296741
TC0X00000727.mm.1	NM_025399	Nudt14	nudix (nucleoside diphosphate linked moiety X)-	112934733	112942118	TC1200002445.mm.1	-0.1	0.296788
TC0X00000732.mm.1	ENSMUST00000175092	Gm24823	predicted gene, 24823	144618143	144618233	TC0200004765.mm.1	0.1	0.296795
TC0X00000736.mm.1	NM_033607	Uchl4	ubiquitin carboxyl-terminal esterase L4	64235201	64236362	TC0900000818.mm.1	-0.1	0.296802
TC0X00000738.mm.1	XR_106057	Gm20264	predicted gene, 20264	152919862	152921060	TC0X00003202.mm.1	-0.1	0.296802
TC0X00000739.mm.1	ENSMUST00000083750	Gm23733	predicted gene, 23733	120317884	120317989	TC0300002832.mm.1	-0.3	0.296828
TC0X00000740.mm.1	XR_105655	Gm3601	predicted gene 3601	49971363	49989708	TC1400001972.mm.1	-0.4	0.297011
TC0X00000745.mm.1	ENSMUST00000177427	Gm22395	predicted gene, 22395	64107407	64107502	TC0500002464.mm.1	-0.2	0.297078
TC0X00000750.mm.1	NM_145934	Stap2	signal transducing adaptor family member 2	55997076	56005606	TC1700002308.mm.1	0.0	0.297183
TC0X00000752.mm.1	ENSMUST00000183875	FTX_3	FTX transcript, XIST regulator conserved region	103606323	103606449	TC0X00001037.mm.1	0.1	0.297235
TC0X00000765.mm.1	NM_138595	Gldc	glycine decarboxylase	30098441	30175441	TC1900001355.mm.1	0.3	0.297265
TC0X00000772.mm.1	ENSMUST00000158097	Gm22211	predicted gene, 22211	52075424	52075579	TC0700003089.mm.1	-0.1	0.297593
TC0X00000776.mm.1	ENSMUST00000181964	Gm11385	predicted gene 11385	33217268	33218151	TC1300001770.mm.1	-0.1	0.297647
TC0X00000784.mm.1	ENSMUST00000104456	Gm24982	predicted gene, 24982	114832383	114832514	TC0700004144.mm.1	0.2	0.297678
TC0X00000793.mm.1	NM_145944	Ccdc25	coiled-coil domain containing 25	65837302	65866604	TC1400000941.mm.1	-0.1	0.297681
TC0X00000796.mm.1	ENSMUST00000104471	Gm23323	predicted gene, 23323	123162371	123162503	TC0900001659.mm.1	0.2	0.297809
TC0X00000798.mm.1	NCBI_Gene:10012436	Traj25	T cell receptor alpha joining 25	54194815	54194871	TC1400000735.mm.1	-0.1	0.297963
TC0X00000804.mm.1	NM_019545	Hao2	hydroxyacid oxidase 2	98874519	98893239	TC0300002566.mm.1	0.6	0.297981
TC0X00000812.mm.1	NM_027554	Usp38	ubiquitin specific peptidase 38	80980733	81014906	TC0800002535.mm.1	-0.2	0.29818
TC0X00000814.mm.1	NM_023137	Ubd	ubiquitin D	37193892	37196101	TC1700000761.mm.1	-0.2	0.298205
TC0X00000819.mm.1	NM_026064	Myl12a	myosin, light chain 12A, regulatory, non-sarcom	70993656	71002878	TC1700002488.mm.1	0.1	0.298914
TC0X00000845.mm.1	NM_007793	Cstb	cystatin B	78425670	78427622	TC1000000784.mm.1	-0.3	0.29932
TC0X00000849.mm.1	NM_030260	Zxdc	ZXD family zinc finger C	90369492	90403490	TC0600001072.mm.1	-0.1	0.299399
TC0X00000854.mm.1	NM_009698	Aprt	adenine phosphoribosyl transferase	122574636	122576907	TC0800003076.mm.1	-0.1	0.299442
TC0X00000856.mm.1	ENSMUST00000116790	Gm25848	predicted gene, 25848	32243712	32243855	TC1600001504.mm.1	-0.4	0.299586
TC0X00000864.mm.1	NM_010749	M6pr	mannose-6-phosphate receptor, cation depende	122308720	122317680	TC0600001380.mm.1	0.2	0.299769
TC0X00000873.mm.1	XR_140545	Gm4631	predicted gene 4631	175192005	175338212	TC0200005335.mm.1	0.3	0.300019
TC0X00000876.mm.1	ENSMUST00000103988	Gm25759	predicted gene, 25759	124146281	124146409	TC0700001777.mm.1	-0.1	0.300049
TC0X00000878.mm.1	NM_053214	Myo1f	myosin IF	33555707	33607764	TC1700000585.mm.1	0.1	0.30022
TC0X00000880.mm.1	ENSMUST00000083324	Gm23969	predicted gene, 23969	26911261	26911334	TC0200000458.mm.1	-0.7	0.300294
TC0X00000892.mm.1	NM_145510	Rabif	RAB interacting factor	134494660	134507889	TC0100001231.mm.1	-0.1	0.300315
TC0X00000895.mm.1	ENSMUST00000169555	Gm3755	predicted gene 3755	7440924	7450917	TC1400001427.mm.1	0.1	0.300378
TC0X00000902.mm.1	NM_138685	Wfdc15b	WAP four-disulfide core domain 15B	164214454	164221663	TC0200005108.mm.1	0.5	0.300499
TC0X00000916.mm.1	ENSMUST00000157435	Gm24475	predicted gene, 24475	74000860	74001002	TC1700001155.mm.1	-0.1	0.300512
TC0X00000917.mm.1	NM_021387	Vstm2b	V-set and transmembrane domain containing 2B	40899278	40929968	TC0700000720.mm.1	0.1	0.300514
TC0X00000919.mm.1	ENSMUST00000073933	Olfr328	olfactory receptor 328	58551305	58554642	TC1100002826.mm.1	-0.1	0.3006
TC0X00000920.mm.1	NM_172407	Cdkn2ai	CDKN2A interacting protein	47709344	47713931	TC0800002180.mm.1	-0.1	0.300695
TC0X00000925.mm.1	NCBI_Gene:780929:p	Ighv1-5	immunoglobulin heavy variable 1-50	115119748	115120180	TC1200002628.mm.1	-0.8	0.300702
TC0X00000934.mm.1	XM_001477721	Gm9736	predicted gene 9736	77750521	77751354	TC1000002426.mm.1	-0.1	0.300773
TC0X00000947.mm.1	NCBI_Gene:545851:p	Igkv12-	immunoglobulin kappa variable 12-44	69814631	69858922	TC0600003579.mm.1	-0.4	0.30078
TC0X00000951.mm.1	NM_001081473	Zxdb	zinc finger, X-linked, duplicated B	94724569	94730191	TC0X00000902.mm.1	-0.1	0.300819
TC0X00000955.mm.1	ENSMUST00000060066	4930555	RIKEN cDNA 4930555K19 gene	41173701	41173871	TC1500000329.mm.1	-0.1	0.300829
TC0X00000964.mm.1	ENSMUST00000121735	Oaz2-ps	ornithine decarboxylase antizyme 2, pseudogene	135525964	135526532	TC0300002993.mm.1	-0.2	0.301002
TC0X00000965.mm.1	NM_175560	Zfp747	zinc finger protein 747	127372537	127376050	TC0700004324.mm.1	-0.1	0.301034
TC0X00000967.mm.1	NM_009690	Cd5l	CD5 antigen-like	87357881	87371074	TC0300000693.mm.1	-0.1	0.301144
TC0X00000969.mm.1	XR_105914	BC02310	cDNA sequence BC023105	60439295	60443852	TC1800000612.mm.1	0.1	0.301222
TC0X00000978.mm.1	NM_001037907	Ripply2	ripply2 homolog (zebrafish)	87015537	87019916	TC0900001122.mm.1	-0.1	0.301403
TC0X00000987.mm.1	ENSMUST00000119458	Gm5943	predicted pseudogene 5943	114989150	114989608	TC0X00001150.mm.1	-0.3	0.301869
TC0X00000990.mm.1	ENSMUST00000082831	Gm26456	predicted gene, 26456	155092018	155092128	TC0300001558.mm.1	0.2	0.302115
TC0X00000991.mm.1	ENSMUST00000175317	Gm24810	predicted gene, 24810	62652935	62653004	TC1500001613.mm.1	0.1	0.302473
TC0X00001005.mm.1	NM_028808	P2ry13	purinergic receptor P2Y, G-protein coupled 13	59207892	59210882	TC0300002053.mm.1	-0.2	0.302508
TC0X00001034.mm.1	NM_001204241	Clec4a3	C-type lectin domain family 4, member a3	122952515	122969878	TC0600001398.mm.1	0.2	0.302819
TC0X00001035.mm.1	ENSMUST00000117165	Cbfa2t2	core-binding factor, runt domain, alpha subunit	60231482	60232198	TC0500000579.mm.1	-0.1	0.30282
TC0X00001037.mm.1	ENSMUST00000083198	Gm24456	predicted gene, 24456	123743297	123743403	TC0300002882.mm.1	-0.6	0.302848
TC0X00001047.mm.1	ENSMUST00000117964	Gm13722	predicted gene 13722	86090336	86093401	TC0200003913.mm.1	-0.1	0.30292
TC0X00001049.mm.1	ENSMUST00000184813	RP24-19	N/A	15086769	15087026	TC0700002399.mm.1	-0.2	0.302929
TC0X00001052.mm.1	ENSMUST00000116907	Gm24397	predicted gene, 24397	126468135	126468224	TC0100003006.mm.1	0.2	0.302997
TC0X00001057.mm.1	ENSMUST00000116752	Gm23652	predicted gene, 23652	78246205	78246311	TC1400002468.mm.1	0.2	0.303026
TC0X00001058.mm.1	NR_028479	Snora20	small nucleolar RNA, H/ACA box 20	12922790	12922917	TC1700000144.mm.1	-0.4	0.303042
TC0X00001059.mm.1	NM_177325	Tsr1	TSR1 20S rRNA accumulation	74898071	74909342	TC1100001051.mm.1	-0.1	0.303115
TC0X00001064.mm.1	NM_001081099	Clhc1	clathrin heavy chain linker domain containing 1	134510999	134523927	TC0400001642.mm.1	-0.1	0.303119
TC0X00001069.mm.1	NM_146466	Olfr165	olfactory receptor 165	19407039	19408078	TC1600001328.mm.1	0.1	0.30334
TC0X00001071.mm.1	NM_001277230	Zbtb24	zinc finger and BTB domain containing 24	41450358	41465582	TC1000000364.mm.1	-0.1	0.303556
TC0X00001074.mm.1	NM_009682	Ap3s2	adaptor-related protein complex 3, sigma 2 subu	79875325	79920640	TC0700003572.mm.1	0.1	0.30356
TC0X00001078.mm.1	ENSMUST00000082848	Gm22685	predicted gene, 22685	49289298	49289403	TC0400000544.mm.1	-0.5	0.30358
TC0X00001083.mm.1	ENSMUST00000104216	Gm25420	predicted gene, 25420	80707589	80707715	TC0200001180.mm.1	0.1	0.303601
TC0X00001084.mm.1	NM_009851	Cd44	CD44 antigen	102811141	102901665	TC0200004219.mm.1	0.1	0.303804
TC0X00001089.mm.1	NM_011950	Mapk13	mitogen-activated protein kinase 13	28769307	28778704	TC1700000487.mm.1	0.0	0.303811
TC0X00001098.mm.1	ENSMUST00000082682	Gm26454	predicted gene, 26454	49009883	49009989	TC1200000406.mm.1	-0.2	0.303924
TC0X00001106.mm.1	NM_146229	Dync1li	dynein cytoplasmic 1 light intermediate chain 1	114688790	114724302	TC0900001517.mm.1	-0.1	0.304072
TC0X00001121.mm.1	ENSMUST00000157300	Gm23232	predicted gene, 23232	114602088	114602192	TC0900003173.mm.1	-0.1	0.304317
TC0X00001131.mm.1	NM_207207	Mrps26	mitochondrial ribosomal protein S26	130563742	130568695	TC0200001990.mm.1	-0.1	0.304374
TC0X00001133.mm.1	NM_001254725	Lce3e	late cornified envelope 3E	92967061	92968281	TC0300000837.mm.1	-0.1	0.304409
TC0X00001150.mm.1	NM_008510	Xcl1	chemokine (C motif) ligand 1	164931644	164935527	TC0100003432.mm.1	-0.1	0.304572
TC0X00001155.mm.1	NM_013709	Sh3yl1	Sh3 domain YSC-like 1	30911668	30960162	TC1200000258.mm.1	0.0	0.304586
TC0X00001157.mm.1	ENSMUST00000082800	Gm23445	predicted gene, 23445	126915720	126915826	TC0700004305.mm.1	-0.4	0.30464

TC0X00001160.mm.1	NM_021704	Cxcl12	chemokine (C-X-C motif) ligand 12	117168535	117181368	TC0600001313.mm.1	-0.1	0.304897
TC0X00001161.mm.1	ENSMUST00000115764	Dynlt1-	dynein light chain Tctex-type 1, pseudogene 1	135349088	135349780	TC0600003319.mm.1	-0.3	0.304917
TC0X00001168.mm.1	NM_009196	Slc16a1	solute carrier family 16 (monocarboxylic acid t	104638664	104658462	TC0300001076.mm.1	-0.2	0.304986
TC0X00001170.mm.1	ENSMUST00000118512	Gm14700	predicted gene 14700	68992932	68993378	TC0X00000617.mm.1	0.2	0.305028
TC0X00001174.mm.1	ENSMUST00000119008	Gm7645	predicted gene 7645	181292148	181292935	TC0200002819.mm.1	-0.1	0.305076
TC0X00001175.mm.1	NM_010120	Eif1a	eukaryotic translation initiation factor 1A	46597704	46610225	TC1800000480.mm.1	0.1	0.305269
TC0X00001176.mm.1	ENSMUST00000170447	Rpl28-p	ribosomal protein L28, pseudogene 4	117213656	117214048	TC0600002983.mm.1	-0.1	0.305285
TC0X00001177.mm.1	NM_080461	Zfp358	zinc finger protein 358	3493138	3497210	TC0800000009.mm.1	0.1	0.30529
TC0X00001185.mm.1	ENSMUST00000157465	Gm23668	predicted gene, 23668	60042069	60042179	TC0900002429.mm.1	0.1	0.305368
TC0X00001186.mm.1	ENSMUST00000104442	Gm22149	predicted gene, 22149	82772321	82772456	TC1200002036.mm.1	0.2	0.305604
TC0X00001189.mm.1	NM_007451	Slc25a5	solute carrier family 25 (mitochondrial carrier	36795651	36798807	TC0X00000327.mm.1	-0.2	0.305736
TC0X00001192.mm.1	ENSMUST00000104571	Gm23528	predicted gene, 23528	160645573	160645704	TC0100001455.mm.1	0.2	0.306273
TC0X00001193.mm.1	ENSMUST00000132554	Gm5924	predicted gene 5924	5338792	5340451	TC0X00000036.mm.1	-0.1	0.306498
TC0X00001196.mm.1	ENSMUST00000085450	Klk1b3	kallikrein 1-related peptidase b3	44198191	44202351	TC0700000793.mm.1	0.1	0.306589
TC0X00001201.mm.1	ENSMUST00000184242	AL67207	N/A	24617213	24617318	TC0X00001967.mm.1	0.5	0.306609
TC0X00001208.mm.1	ENSMUST00000116912	Gm26043	predicted gene, 26043	27363314	27363401	TC0700000457.mm.1	0.2	0.306755
TC0X00001251.mm.1	ENSMUST00000083772	Gm22830	predicted gene, 22830	85772351	85772480	TC0900002773.mm.1	-0.2	0.306786
TC0X00001262.mm.1	ENSMUST00000107486	Gm10974	predicted gene 10974	66365905	66386309	TC0700000995.mm.1	0.3	0.306792
TC0X00001275.mm.1	NM_172606	6-Mar	membrane-associated ring finger (C3HC4) 6	31455899	31531037	TC1500001323.mm.1	0.1	0.306819
TC0X00001283.mm.1	ENSMUST00000120961	Gm12026	predicted gene 12026	19383685	19384708	TC1100000182.mm.1	-0.1	0.306871
TC0X00001288.mm.1	NM_001256263	3110082	RIKEN cDNA 3110082J24 gene	30103584	30106086	TC0500002153.mm.1	0.1	0.306884
TC0X00001292.mm.1	NM_029878	Tbcd	tubulin-specific chaperone d	121451949	121617170	TC1100002066.mm.1	0.1	0.306896
TC0X00001305.mm.1	ENSMUST00000117931	Gm12365	predicted gene 12365	35436214	35436781	TC0400000320.mm.1	-0.1	0.306995
TC0X00001316.mm.1	NM_010709	Eif2d	eukaryotic translation initiation factor 2D	131153181	131187658	TC0100001168.mm.1	-0.1	0.307053
TC0X00001317.mm.1	ENSMUST00000175293	Gm23633	predicted gene, 23633	27380732	27380850	TC1400001630.mm.1	0.2	0.307071
TC0X00001319.mm.1	ENSMUST00000178758	Gm25944	predicted gene, 25944	59731223	59731316	TC0700003291.mm.1	0.2	0.307257
TC0X00001322.mm.1	ENSMUST00000104086	Gm22786	predicted gene, 22786	86087301	86087422	TC0100000780.mm.1	-0.4	0.307292
TC0X00001323.mm.1	NM_019521	Gas6	growth arrest specific 6	13465374	13494535	TC0800001737.mm.1	0.2	0.307411
TC0X00001324.mm.1	ENSMUST00000179259	Gm23714	predicted gene, 23714	15695213	15695317	TC0700000210.mm.1	-0.6	0.307478
TC0X00001326.mm.1	NM_170777	Elof1	elongation factor 1 homolog (ELF1, S. cerevisia	22112989	22117169	TC0900001899.mm.1	-0.1	0.307486
TC0X00001335.mm.1	NM_010660	Krt10	keratin 10	99385254	99389364	TC1100003706.mm.1	-0.1	0.307622
TC0X00001347.mm.1	NM_080852	Slc7a12	solute carrier family 7 (cationic amino acid tr	14480697	14505830	TC0300000089.mm.1	0.6	0.307721
TC0X00001348.mm.1	ENSMUST00000184785	AC14164	N/A	33592607	33592713	TC1900001409.mm.1	0.4	0.30776
TC0X00001349.mm.1	NM_177214	Snrnp20	small nuclear ribonucleoprotein 200 (U5)	127208386	127240451	TC0200001909.mm.1	-0.1	0.307843
TC0X00001354.mm.1	ENSMUST00000154752	Gm15275	predicted gene 15275	33282100	33282446	TC0X00000288.mm.1	0.1	0.308096
TC0X00001369.mm.1	ENSMUST00000082473	Gm23926	predicted gene, 23926	86311289	86311378	TC1400002514.mm.1	-0.3	0.308193
TC0X00001371.mm.1	ENSMUST00000118620	Gm14654	predicted gene 14654	46361460	46361906	TC0X00000419.mm.1	0.3	0.30851
TC0X00001383.mm.1	ENSMUST00000158936	Gm24669	predicted gene, 24669	46272051	46272147	TC0800000534.mm.1	-0.2	0.308591
TC0X00001385.mm.1	NM_053215	Ugt2b37	UDP glucuronosyltransferase 2 family, polypepti	87240492	87254804	TC0500002694.mm.1	0.1	0.308789
TC0X00001388.mm.1	NM_207021	Tas2r11	taste receptor, type 2, member 117	132802818	132803975	TC0600001563.mm.1	0.1	0.30883
TC0X00001398.mm.1	ENSMUST00000081471	Gm10139	predicted gene 10139	65512678	65512848	TC1300000795.mm.1	-0.2	0.308949
TC0X00001400.mm.1	BC049102	Exoc2	exocyst complex component 2	30813918	30974047	TC1300001737.mm.1	-0.2	0.308955
TC0X00001403.mm.1	NM_027840	Snx20	sorting nexin 20	88626827	88636128	TC0800002658.mm.1	-0.2	0.309129
TC0X00001412.mm.1	ENSMUST00000083831	Gm23851	predicted gene, 23851	124964285	124964387	TC0600001437.mm.1	0.1	0.309129
TC0X00001420.mm.1	ENSMUST00000083939	n-R5s18	nuclear encoded rRNA 5S 183	41303158	41303272	TC0400000365.mm.1	0.0	0.309217
TC0X00001429.mm.1	ENSMUST00000082992	Gm22044	predicted gene, 22044	79014364	79014470	TC0800002514.mm.1	-0.5	0.309452
TC0X00001433.mm.1	ENSMUST00000167282	Gm10039	predicted pseudogene 10039	100361618	100362151	TC1100003768.mm.1	-0.3	0.309544
TC0X00001434.mm.1	NM_146578	Olfr103	olfactory receptor 1033	86020640	86044808	TC0200001264.mm.1	0.1	0.309649
TC0X00001437.mm.1	ENSMUST00000082757	Gm24149	predicted gene, 24149	109066984	109067090	TC1100003982.mm.1	-0.5	0.309701
TC0X00001441.mm.1	ENSMUST00000184529	AC12432	N/A	93072755	93072822	TC1600001035.mm.1	-0.2	0.309887
TC0X00001446.mm.1	ENSMUST00000117937	Gm12282	predicted gene 12282	62750064	62751280	TC1100002947.mm.1	-0.1	0.309949
TC0X00001461.mm.1	ENSMUST00000163316	LOC1010	39S ribosomal protein L41, mitochondrial-like	25882012	25882407	TC0700002648.mm.1	-0.2	0.309986
TC0X00001511.mm.1	ENSMUST00000157709	Gm22842	predicted gene, 22842	180837838	180837955	TC0200002805.mm.1	0.1	0.310065
TC0X00001515.mm.1	ENSMUST00000119871	Gm12733	predicted gene 12733	77644144	77644910	TC1100003271.mm.1	-0.1	0.310149
TC0X00001520.mm.1	ENSMUST00000118045	Gm15896	predicted gene 15896	82202648	82203398	TC0900001078.mm.1	-0.1	0.310157
TC0X00001523.mm.1	ENSMUST00000184613	RP24-84	N/A	15288251	15289190	TC0700002401.mm.1	0.3	0.310661
TC0X00001524.mm.1	XM_003688794	Gm21404	predicted gene, 21404	121907890	121920833	TC0400003465.mm.1	-0.1	0.31077
TC0X00001529.mm.1	XM_987080	Gm10573	predicted gene 10573	122300878	122313819	TC0400003466.mm.1	-0.1	0.31077
TC0X00001530.mm.1	NM_029499	Ms4a4c	membrane-spanning 4-domains, subfamily A, me	11404770	11427246	TC1900000217.mm.1	-0.5	0.310873
TC0X00001531.mm.1	XM_993473	Gm8894	predicted gene 8894	55420269	55422933	TC1400002083.mm.1	0.1	0.31091
TC0X00001533.mm.1	NM_198326	Nsfl1c	NSFL1 (p97) cofactor (p47)	151494182	151511414	TC0200002261.mm.1	-0.1	0.310975
TC0X00001544.mm.1	NM_010107	Efna1	ephrin A1	89271730	89281142	TC0300002344.mm.1	0.1	0.311187
TC0X00001555.mm.1	NM_011407	Slfn1	schlafen 1	83116845	83122670	TC1100001239.mm.1	-0.1	0.311274
TC0X00001558.mm.1	BC058361	Snrnp35	small nuclear ribonucleoprotein 35 (U11/U12)	124483134	124491124	TC0500001445.mm.1	0.1	0.311315
TC0X00001563.mm.1	NM_178911	Pld4	phospholipase D family, member 4	112760655	112768988	TC1200001272.mm.1	0.3	0.311472
TC0X00001564.mm.1	ENSMUST00000083115	Gm24041	predicted gene, 24041	58819323	58819478	TC1500001581.mm.1	0.1	0.311539
TC0X00001571.mm.1	NM_009003	Rab4a	RAB4A, member RAS oncogene family	123805985	123835291	TC0800001533.mm.1	0.1	0.311633
TC0X00001572.mm.1	NM_146885	Olfr129	olfactory receptor 1294	111537349	111538290	TC0200004325.mm.1	0.1	0.311901
TC0X00001573.mm.1	NM_144821	AI31739	expressed sequence AI317395	40001573	40025268	TC1000002035.mm.1	0.1	0.312483
TC0X00001574.mm.1	NM_016857	Exoc7	exocyst complex component 7	116287998	116307233	TC1100004113.mm.1	-0.1	0.31255
TC0X00001576.mm.1	NM_027439	Atp6ap2	ATPase, H+ transporting, lysosomal accessory pr	12587759	12617051	TC0X00000151.mm.1	-0.1	0.312616
TC0X00001585.mm.1	ENSMUST00000164794	Rpl29-p	ribosomal protein L29, pseudogene 5	30459083	30459559	TC1800001103.mm.1	-0.4	0.312697
TC0X00001593.mm.1	ENSMUST00000083439	Gm22740	predicted gene, 22740	113044144	113044252	TC0500001188.mm.1	-0.5	0.312702
TC0X00001594.mm.1	ENSMUST00000116735	Gm22104	predicted gene, 22104	15250085	15250174	TC1500001248.mm.1	0.2	0.31275
TC0X00001595.mm.1	NM_144916	Tmem150	transmembrane protein 150A	72355447	72359762	TC0600000849.mm.1	0.1	0.312767
TC0X00001598.mm.1	ENSMUST00000116837	Gm23492	predicted gene, 23492	49895731	49895845	TC1100000529.mm.1	0.3	0.312964
TC0X00001599.mm.1	NM_008422	Kcnc3	potassium voltage gated channel, Shaw-related s	44590664	44604754	TC0700000811.mm.1	0.1	0.313026
TC0X00001603.mm.1	NM_009899	Clca1	chloride channel calcium activated 1	144729677	144760977	TC0300003251.mm.1	-0.1	0.313108

TC0X00001605.mm.1	NM_133255	Hook2	hook homolog 2 (Drosophila)	84990595	85003364	TC0800000975.mm.1	0.0	0.313211
TC0X00001610.mm.1	ENSMUST00000082643	Gm25799	predicted gene, 25799	34899017	34899123	TC1100000373.mm.1	-0.6	0.31322
TC0X00001620.mm.1	ENSMUST00000102182	Gm24951	predicted gene, 24951	7959530	7959638	TC1900001058.mm.1	-0.2	0.313439
TC0X00001629.mm.1	NM_011141	Pou3f1	POU domain, class 3, transcription factor 1	124656807	124660655	TC0400001418.mm.1	-0.1	0.31345
TC0X00001630.mm.1	NM_010398	H2-T23	histocompatibility 2, T region locus 23	36029773	36032855	TC1700002819.mm.1	-0.1	0.313495
TC0X00001632.mm.1	NM_027388	Pigw	phosphatidylinositol glycan anchor biosynthesis	84876313	84880285	TC1100003420.mm.1	0.0	0.313617
TC0X00001639.mm.1	NR_039590	Mir5128	microRNA 5128	113951596	113993800	TC0900003162.mm.1	0.3	0.313681
TC0X00001641.mm.1	ENSMUST00000082871	Gm24037	predicted gene, 24037	85885155	85885334	TC0200003909.mm.1	-0.1	0.313717
TC0X00001642.mm.1	NM_008206	H2-Oa	histocompatibility 2, O region alpha locus	34092340	34095234	TC1700000614.mm.1	-0.3	0.313733
TC0X00001643.mm.1	ENSMUST00000083145	Gm23464	predicted gene, 23464	90560556	90560702	TC0300002375.mm.1	0.1	0.313783
TC0X00001645.mm.1	ENSMUST00000165950	Gm7707	predicted gene 7707	32266593	32267748	TC1400001699.mm.1	-0.1	0.313799
TC0X00001651.mm.1	ENSMUST00000183058	Gm21045	predicted gene, 21045	78068568	78069587	TC0600002536.mm.1	-0.1	0.313857
TC0X00001657.mm.1	NM_008245	Hhex	hematopoietically expressed homeobox	37432887	37440731	TC1900000531.mm.1	0.1	0.31402
TC0X00001661.mm.1	ENSMUST00000104515	Gm24066	predicted gene, 24066	64736402	64736532	TC1200000519.mm.1	0.2	0.314145
TC0X00001662.mm.1	OTTMUST00000032001	RP23-26	---	75192277	75192759	TC0200001107.mm.1	-0.4	0.314246
TC0X00001663.mm.1	ENSMUST00000157430	Gm26148	predicted gene, 26148	15911567	15911634	TC0400002243.mm.1	0.3	0.314278
TC0X00001666.mm.1	NM_145406	Slc10a3	solute carrier family 10 (sodium/bile acid cotr	74369217	74373349	TC0X00003435.mm.1	0.1	0.314415
TC0X00001667.mm.1	NM_029342	Nhej1	nonhomologous end-joining factor 1	74967139	75046653	TC0100002598.mm.1	-0.1	0.314715
TC0X00001668.mm.1	ENSMUST00000122406	Gm12929	predicted gene 12929	126476302	126476671	TC0400003543.mm.1	0.2	0.314734
TC0X00001671.mm.1	ENSMUST00000175394	Gm25997	predicted gene, 25997	98359194	98359303	TC0400003117.mm.1	0.3	0.3151
TC0X00001676.mm.1	NM_175331	Nt5dc3	5-nucleotidase domain containing 3	86779005	86838389	TC1000003220.mm.1	-0.1	0.315103
TC0X00001684.mm.1	ENSMUST00000104160	Gm24665	predicted gene, 24665	130086041	130086169	TC0200001967.mm.1	0.1	0.315181
TC0X00001688.mm.1	ENSMUST00000178616	LOC1010	Y-linked testis-specific protein 1-like	67948842	67949525	TC0Y00000181.mm.1	0.1	0.315236
TC0X00001694.mm.1	NM_001142734	Gm8994	predicted gene 8994	136327539	136329983	TC0600001617.mm.1	-0.1	0.315299
TC0X00001700.mm.1	NM_026512	Bphl	biphenyl hydrolase-like (serine hydrolase, brea	34037641	34074074	TC1300000385.mm.1	0.1	0.31554
TC0X00001715.mm.1	ENSMUST00000179509	Gm25457	predicted gene, 25457	141298100	141298206	TC0100001311.mm.1	-0.4	0.315548
TC0X00001719.mm.1	ENSMUST00000104666	Gm25063	predicted gene, 25063	12870269	12870362	TC0X00001862.mm.1	0.2	0.31557
TC0X00001723.mm.1	ENSMUST00000162696	Gm16580	predicted gene 16580	26269336	26270379	TC1700000411.mm.1	-0.2	0.315675
TC0X00001728.mm.1	ENSMUST00000158282	Gm25437	predicted gene, 25437	19275899	19276030	TC1900000328.mm.1	0.2	0.315723
TC0X00001737.mm.1	NR_035411	Mir669g	microRNA 669g	10477150	10477272	TC0200000112.mm.1	-0.1	0.315767
TC0X00001747.mm.1	NM_016974	Dbp	D site albumin promoter binding protein	45705088	45710203	TC0700000861.mm.1	0.1	0.315845
TC0X00001752.mm.1	XM_003689099	LOC1008	Y-linked testis-specific protein 1-like	84562575	84564907	TC0Y00000518.mm.1	0.1	0.315916
TC0X00001754.mm.1	NM_001205052	Jdp2	Jun dimerization protein 2	85599105	85639878	TC1200000837.mm.1	0.0	0.316019
TC0X00001760.mm.1	NM_029875	Slc35e3	solute carrier family 35, member E3	117733678	117746365	TC1000002943.mm.1	0.1	0.316059
TC0X00001770.mm.1	XR_140856	Gm9990	predicted gene 9990	97720839	97723202	TC0700001361.mm.1	-0.1	0.316106
TC0X00001775.mm.1	ENSMUST00000098517	Gm6658	predicted gene 6658	90907939	90908415	TC0800002678.mm.1	0.0	0.316202
TC0X00001780.mm.1	NM_008655	Gadd45b	growth arrest and DNA-damage-inducible 45 bet	80930090	80932204	TC1000000877.mm.1	-0.1	0.316248
TC0X00001784.mm.1	NM_026787	1110012	RIKEN cDNA 1110012L19 gene	70385877	70389417	TC0X00000627.mm.1	-0.1	0.316474
TC0X00001785.mm.1	NM_029643	Slc52a2	solute carrier protein 52, member 2	76538883	76542130	TC1500000596.mm.1	0.1	0.316505
TC0X00001787.mm.1	ENSMUST00000180026	Gm23379	predicted gene, 23379	157398262	157398368	TC0300003191.mm.1	-0.6	0.316569
TC0X00001790.mm.1	NM_172310	Tarsl2	threonyl-tRNA synthetase-like 2	65644898	65692093	TC0700004621.mm.1	0.0	0.316571
TC0X00001791.mm.1	NCBI_Gene:434033:p	Igkv4-9	immunoglobulin kappa chain variable 4-91	68768555	68769103	TC0600003547.mm.1	-0.6	0.316837
TC0X00001793.mm.1	BC107174	V1rd19	vomeronasal 1 receptor, D19	24003091	24004247	TC0700000364.mm.1	0.1	0.316926
TC0X00001795.mm.1	NM_175476	Arhgap2	Rho GTPase activating protein 25	87458545	87533259	TC0600002656.mm.1	-0.3	0.317015
TC0X00001798.mm.1	ENSMUST00000103987	Gm25758	predicted gene, 25758	89828871	89828999	TC0500000830.mm.1	-0.1	0.317164
TC0X00001805.mm.1	NM_027896	Coasy	Coenzyme A synthase	101082565	101086619	TC1100001640.mm.1	0.1	0.317223
TC0X00001818.mm.1	NM_001083928	Tle3	transducin-like enhancer of split 3, homolog of	61372366	61418497	TC0900000776.mm.1	0.1	0.317438
TC0X00001827.mm.1	NM_009283	Stat1	signal transducer and activator of transcriptio	52119438	52161865	TC0100000375.mm.1	-0.3	0.31753
TC0X00001849.mm.1	ENSMUST00000104212	Gm25417	predicted gene, 25417	92527578	92527708	TC0900002848.mm.1	0.2	0.317575
TC0X00001850.mm.1	ENSMUST00000158288	Gm22611	predicted gene, 22611	76974086	76974235	TC1100001110.mm.1	0.2	0.318054
TC0X00001855.mm.1	NCBI_Gene:791090:p	Ighv2-6	immunoglobulin heavy variable 2-6-8	113796138	113796567	TC1200002567.mm.1	-0.4	0.318087
TC0X00001862.mm.1	NM_025701	Trappc5	trafficking protein particle complex 5	3676299	3681255	TC0800000022.mm.1	0.0	0.318178
TC0X00001866.mm.1	ENSMUST00000157930	Gm22098	predicted gene, 22098	45875547	45875631	TC0700003026.mm.1	-0.1	0.318234
TC0X00001867.mm.1	ENSMUST00000121309	Gm13370	predicted gene 13370	24985984	24986466	TC0200000394.mm.1	-0.3	0.318392
TC0X00001870.mm.1	ENSMUST00000089785	Gm10240	predicted gene 10240	68309819	68310301	TC1500000498.mm.1	-0.3	0.318392
TC0X00001881.mm.1	NM_172785	Zc3h12d	zinc finger CCCH type containing 12D	7832470	7870397	TC1000000056.mm.1	-0.1	0.318991
TC0X00001885.mm.1	NM_011660	Txn1	thioredoxin 1	57943373	57956411	TC0400002731.mm.1	-0.2	0.31902
TC0X00001887.mm.1	ENSMUST00000170685	Gm13217	predicted gene 13217	9041117	9042484	TC0200002928.mm.1	0.1	0.319079
TC0X00001892.mm.1	NCBI_Gene:780829:p	Ighv3-6	immunoglobulin heavy variable 3-6	114288152	114288582	TC1200002590.mm.1	-0.8	0.319185
TC0X00001907.mm.1	NM_176958	Hif1an	hypoxia-inducible factor 1, alpha subunit inhib	44562850	44576274	TC1900000650.mm.1	-0.1	0.31937
TC0X00001917.mm.1	ENSMUST00000120359	Gm12104	predicted gene 12104	30906942	30907920	TC1100002447.mm.1	-0.1	0.31939
TC0X00001922.mm.1	NM_001085547	Krtap4-	keratin associated protein 4-8	99779722	99780704	TC1100003736.mm.1	-0.1	0.319405
TC0X00001924.mm.1	NM_139219	Defb9	defensin beta 9	21881713	21885434	TC0800001855.mm.1	-0.1	0.319545
TC0X00001925.mm.1	ENSMUST00000157174	Gm25961	predicted gene, 25961	89249468	89249602	TC0600002694.mm.1	-0.1	0.319556
TC0X00001926.mm.1	ENSMUST00000165626	Gm17332	predicted gene, 17332	31182376	31182462	TC1100002455.mm.1	0.1	0.319576
TC0X00001927.mm.1	NM_026566	9430023	RIKEN cDNA 9430023L20 gene	101284301	101290940	TC1500001068.mm.1	-0.1	0.319638
TC0X00001928.mm.1	ENSMUST00000157305	Gm26048	predicted gene, 26048	140003825	140003966	TC0100001307.mm.1	0.4	0.31964
TC0X00001929.mm.1	NM_011625	Ppp1r13	protein phosphatase 1, regulatory (inhibitor) s	111828457	111908081	TC1200002416.mm.1	-0.1	0.319769
TC0X00001944.mm.1	ENSMUST00000104199	Gm22656	predicted gene, 22656	25510865	25511035	TC0500000233.mm.1	0.1	0.320166
TC0X00001947.mm.1	NM_145441	Ubxn2a	UBX domain protein 2A	4879032	4907705	TC1200001369.mm.1	0.1	0.320218
TC0X00001963.mm.1	NR_029855	Mir365-	microRNA 365-1	13453840	13453926	TC1600000158.mm.1	0.1	0.320332
TC0X00001966.mm.1	ENSMUST00000157912	Gm23279	predicted gene, 23279	127731594	127731690	TC0300001291.mm.1	0.1	0.320381
TC0X00001967.mm.1	ENSMUST00000104299	Gm23440	predicted gene, 23440	78979922	78980051	TC0300000617.mm.1	0.1	0.320395
TC0X00001975.mm.1	ENSMUST00000183288	Gm7833	predicted gene 7833	94820530	94821519	TC0600001119.mm.1	-0.1	0.320584
TC0X00001978.mm.1	ENSMUST00000118956	Gm14584	predicted gene 14584	53418331	53418967	TC0X00000475.mm.1	-0.2	0.320759
TC0X00001981.mm.1	NM_172990	Pank4	pantothenate kinase 4	154964123	154980938	TC0400002063.mm.1	-0.1	0.320804
TC0X00001984.mm.1	ENSMUST00000119713	Gm12141	predicted gene 12141	41498737	41500901	TC1100000414.mm.1	-0.2	0.320878
TC0X00002007.mm.1	NM_001099314	Msmp	microseminoprotein, prostate associated	43583216	43584494	TC0400002532.mm.1	0.1	0.320926

TC0X00002014.mm.1	ENSMUST00000175220	Gm22239	predicted gene, 22239	10510461	10510563	TC0200000189.mm.1	-0.1	0.32098
TC0X00002016.mm.1	NM_001007567	Slc7a6o	solute carrier family 7, member 6 opposite stra	106200438	106210933	TC0800002854.mm.1	-0.1	0.321011
TC0X00002023.mm.1	NM_025689	Ccdc51	coiled-coil domain containing 51	109082496	109093363	TC0900001433.mm.1	0.0	0.3211
TC0X00002032.mm.1	NM_022423	Rnf187	ring finger protein 187	58932288	58938916	TC1100002836.mm.1	-0.2	0.32117
TC0X00002042.mm.1	NM_013590	Lyz1	lysozyme 1	117287795	117292868	TC1000002930.mm.1	0.4	0.32118
TC0X00002045.mm.1	ENSMUST00000151901	1700031	RIKEN cDNA 1700031F10 gene	88222602	88225678	TC0600002680.mm.1	-0.1	0.321267
TC0X00002051.mm.1	NM_008469	Krt15	keratin 15	100131758	100135949	TC1100003757.mm.1	-0.1	0.32128
TC0X00002052.mm.1	ENSMUST00000178263	Gm12651	predicted gene 12651	93904024	93904470	TC0400003062.mm.1	0.2	0.321378
TC0X00002058.mm.1	NM_001167593	Spata31	spermatogenesis associated 31 subfamily D, mer	59712284	59719289	TC1300000726.mm.1	-0.1	0.321696
TC0X00002061.mm.1	NM_008599	Cxcl9	chemokine (C-X-C motif) ligand 9	92321331	92328079	TC0500002755.mm.1	0.3	0.321824
TC0X00002063.mm.1	NM_016783	Pgrmc1	progesterone receptor membrane component 1	36598206	36606079	TC0X00000323.mm.1	0.2	0.32187
TC0X00002069.mm.1	ENSMUST00000168516	Gm17709	predicted gene, 17709	121972727	121973822	TC0800003064.mm.1	-0.2	0.321897
TC0X00002074.mm.1	ENSMUST00000071737	Gm10126	predicted gene 10126	73988963	73989148	TC1300002308.mm.1	-0.4	0.321972
TC0X00002085.mm.1	NM_001111141	Sprtn	SprT-like N-terminal domain	124897886	124903813	TC0800001551.mm.1	-0.1	0.321983
TC0X00002088.mm.1	NM_025966	2310039	RIKEN cDNA 2310039H08 gene	46772635	46773407	TC1700000902.mm.1	0.1	0.322372
TC0X00002090.mm.1	NM_009275	Srprb	signal recognition particle receptor, B subunit	103188033	103202137	TC0900003343.mm.1	0.1	0.322429
TC0X00002094.mm.1	ENSMUST00000175420	Gm22183	predicted gene, 22183	126036827	126036899	TC1000001532.mm.1	0.1	0.322736
TC0X00002099.mm.1	ENSMUST00000120244	Gm12437	predicted gene 12437	48807137	48807391	TC0400000538.mm.1	0.2	0.32274
TC0X00002100.mm.1	ENSMUST00000177971	Gm22392	predicted gene, 22392	44432595	44432701	TC1500000352.mm.1	-0.6	0.322867
TC0X00002103.mm.1	ENSMUST00000116649	Gm12419	predicted gene 12419	84923554	84924189	TC0400002969.mm.1	-0.1	0.32294
TC0X00002106.mm.1	NM_001039889	Smok3b	sperm motility kinase 3B	138037224	138050635	TC0500003715.mm.1	0.1	0.323125
TC0X00002113.mm.1	ENSMUST00000083058	Gm22421	predicted gene, 22421	132082286	132082392	TC0300002965.mm.1	-0.4	0.323301
TC0X00002127.mm.1	NR_035426	Mir669e	microRNA 669e	39467448	40227787	TC0800002101.mm.1	0.4	0.323375
TC0X00002131.mm.1	NR_039588	Mir5126	microRNA 5126	84695839	84695915	TC0100000724.mm.1	0.1	0.323393
TC0X00002142.mm.1	NM_026821	Lurap1l	leucine rich adaptor protein 1-like	80910646	80955628	TC0400000811.mm.1	0.1	0.323833
TC0X00002147.mm.1	NM_028112	Seh1l	SEH1-like (S. cerevisiae	67774876	67795487	TC1800000710.mm.1	-0.1	0.32398
TC0X00002161.mm.1	ENSMUST00000158339	Gm22087	predicted gene, 22087	44597240	44597327	TC1000002102.mm.1	0.1	0.32414
TC0X00002176.mm.1	NM_145743	Lace1	lactation elevated 1	42312585	42478565	TC1000002063.mm.1	0.1	0.324194
TC0X00002180.mm.1	ENSMUST00000117466	Gm14944	predicted gene 14944	122246835	122246966	TC0X00002918.mm.1	-0.1	0.324433
TC0X00002196.mm.1	NM_001163713	Tufm	Tu translation elongation factor, mitochondrial	126487355	126490731	TC0700001804.mm.1	-0.1	0.324447
TC0X00002197.mm.1	ENSMUST00000104390	Gm25631	predicted gene, 25631	105223269	105223398	TC1300002611.mm.1	-0.1	0.3247
TC0X00002202.mm.1	NM_178924	Upk1b	uroplakin 1B	38773184	38800203	TC1600001616.mm.1	0.3	0.324788
TC0X00002207.mm.1	ENSMUST00000184045	RP23-44	N/A	4359027	4359507	TC0600000008.mm.1	0.1	0.324933
TC0X00002211.mm.1	ENSMUST00000185004	AL67207	N/A	24617011	24617117	TC0X00001966.mm.1	0.4	0.325076
TC0X00002231.mm.1	ENSMUST00000122223	Gm12819	predicted gene 12819	112512740	112521472	TC0400001197.mm.1	0.1	0.325375
TC0X00002238.mm.1	ENSMUST00000158752	Gm22135	predicted gene, 22135	43160795	43160902	TC1900001536.mm.1	-0.1	0.3254
TC0X00002241.mm.1	NM_024240	Gins4	GINS complex subunit 4 (Sld5 homolog)	23226610	23237668	TC0800001884.mm.1	-0.2	0.325487
TC0X00002242.mm.1	NM_010870	Naip5	NLR family, apoptosis inhibitory protein 5	100211739	100247336	TC1300002531.mm.1	0.1	0.325671
TC0X00002247.mm.1	NM_146947	Olfr338	olfactory receptor 338	36376778	36377698	TC0200000657.mm.1	-0.1	0.325695
TC0X00002250.mm.1	ENSMUST00000119638	Gm13222	predicted gene 13222	145579036	145579173	TC0400001866.mm.1	0.1	0.32575
TC0X00002258.mm.1	NM_025848	Sdhd	succinate dehydrogenase complex, subunit D, int	50596338	50603849	TC0900002271.mm.1	0.2	0.325817
TC0X00002263.mm.1	NM_001177543 //	610010	RIKEN cDNA 0610010B08 gene // predicted gen	175965331	175981734	TC0200002731.mm.1	0.3	0.325891
TC0X00002273.mm.1	ENSMUST00000158859	Gm24735	predicted gene, 24735	22822428	22822545	TC0800001878.mm.1	-0.2	0.326051
TC0X00002276.mm.1	ENSMUST00000158642	Gm22890	predicted gene, 22890	84323209	84323352	TC1500001986.mm.1	-0.1	0.326226
TC0X00002284.mm.1	NM_207540	Mrgprx1	MAS-related GPR, member X1	48020971	48027601	TC0700003061.mm.1	-0.1	0.326497
TC0X00002286.mm.1	ENSMUST00000083341	n-R5s21	nuclear encoded rRNA 5S 217	138878262	138878377	TC0100003178.mm.1	0.1	0.326737
TC0X00002287.mm.1	NM_175421	Plekhb2	pleckstrin homology domain containing, family E	34849959	34879585	TC0100000233.mm.1	0.1	0.326775
TC0X00002304.mm.1	NM_018756	Tcstv1	2-cell-stage, variable group, member 1	119893388	119894767	TC1300002751.mm.1	-0.1	0.326888
TC0X00002311.mm.1	ENSMUST00000117737	Gm8749	predicted gene 8749	78357794	78358124	TC0X00002512.mm.1	-0.1	0.326892
TC0X00002313.mm.1	ENSMUST00000119998	Mup-ps2	major urinary protein, pseudogene 21	62029342	62031662	TC0400002778.mm.1	0.3	0.327018
TC0X00002315.mm.1	ENSMUST00000121699	Gm15065	predicted gene 15065	75705409	75705681	TC0X00000750.mm.1	-0.2	0.327128
TC0X00002316.mm.1	ENSMUST00000083095	Gm25199	predicted gene, 25199	103445697	103445800	TC0300002625.mm.1	-0.3	0.327258
TC0X00002319.mm.1	ENSMUST00000082809	Gm24856	predicted gene, 24856	93413218	93413324	TC1100003550.mm.1	-0.5	0.32732
TC0X00002320.mm.1	NM_053092	Kars	lysyl-tRNA synthetase	111993439	112011354	TC0800002961.mm.1	-0.2	0.327619
TC0X00002323.mm.1	ENSMUST00000183517	RP23-29	N/A	72613790	72617053	TC0900002644.mm.1	-0.1	0.327671
TC0X00002325.mm.1	NM_001204908	Zfp648	zinc finger protein 648	154201187	154205674	TC0100001392.mm.1	-0.1	0.327896
TC0X00002330.mm.1	NM_144794	Tmem63a	transmembrane protein 63a	180942344	180975112	TC0100001724.mm.1	0.1	0.327963
TC0X00002338.mm.1	NM_019479	Hes6	hairy and enhancer of split 6	91411483	91414038	TC0100002800.mm.1	-0.1	0.327995
TC0X00002341.mm.1	ENSMUST00000083388	Gm22055	predicted gene, 22055	45548743	45548849	TC0400000490.mm.1	-0.1	0.328046
TC0X00002346.mm.1	NM_025591	Fam136a	family with sequence similarity 136, member A	86365682	86370058	TC0600000985.mm.1	-0.1	0.32868
TC0X00002348.mm.1	NM_199252	Unc93a	unc-93 homolog A (C. elegans)	13108617	13131791	TC1700001465.mm.1	0.1	0.329011
TC0X00002353.mm.1	ENSMUST00000082737	Gm22807	predicted gene, 22807	20847753	20847881	TC1100002317.mm.1	-0.5	0.329012
TC0X00002362.mm.1	NM_001033281	Prdm6	PR domain containing 6	53464516	53575907	TC1800000538.mm.1	0.0	0.329289
TC0X00002372.mm.1	NM_010070	Dok1	docking protein 1	83030934	83033471	TC0600002554.mm.1	-0.1	0.329434
TC0X00002378.mm.1	ENSMUST00000118719	Gm4993	predicted gene 4993	120957711	120958884	TC0X00001185.mm.1	-0.1	0.329464
TC0X00002380.mm.1	ENSMUST00000082583	Gm22454	predicted gene, 22454	107096951	107097057	TC0900001360.mm.1	-0.3	0.329733
TC0X00002381.mm.1	NR_029753	Mir98	microRNA 98	151913214	151913321	TC0X00001530.mm.1	0.1	0.329756
TC0X00002384.mm.1	NM_008747	Ntsr2	neurotensin receptor 2	16653470	16660236	TC1200000130.mm.1	0.1	0.329777
TC0X00002388.mm.1	ENSMUST00000083873	Gm23038	predicted gene, 23038	155788365	155788468	TC0300003184.mm.1	-0.2	0.329993
TC0X00002394.mm.1	ENSMUST00000179841	Gm24267	predicted gene, 24267	107756602	107756708	TC0100002912.mm.1	-0.5	0.330004
TC0X00002404.mm.1	NR_029770	Mir341	microRNA 341	109611500	109611595	TC1200001143.mm.1	-0.1	0.330153
TC0X00002415.mm.1	NM_016778	Bok	BCL2-related ovarian killer protein	93685694	93695764	TC0100000942.mm.1	0.0	0.330296
TC0X00002424.mm.1	NM_198631	Zc3h4	zinc finger CCCH-type containing 4	16401196	16437696	TC0700000225.mm.1	-0.1	0.330335
TC0X00002428.mm.1	ENSMUST00000104052	Gm23271	predicted gene, 23271	38511173	38511296	TC0900000405.mm.1	0.1	0.330482
TC0X00002433.mm.1	NM_025433	Rpl7l1	ribosomal protein L7-like 1	46773907	46782656	TC1700002191.mm.1	-0.1	0.330622
TC0X00002441.mm.1	ENSMUST00000102244	Gm23255	predicted gene, 23255	73641396	73641505	TC0800002481.mm.1	0.2	0.330768
TC0X00002447.mm.1	ENSMUST00000104081	Gm24434	predicted gene, 24434	39621415	39621546	TC1200000353.mm.1	0.1	0.330853
TC0X00002458.mm.1	NM_183253	Defa21	defensin, alpha, 21	21025545	21026517	TC0800000211.mm.1	-0.1	0.330859

TC0X00002467.mm.1	NM_138675	Med9	mediator of RNA polymerase II transcription, su	59948206	59963306	TC1100000742.mm.1	0.0	0.330969
TC0X00002472.mm.1	ENSMUST00000157727	Gm24013	predicted gene, 24013	3788892	3788990	TC1100000023.mm.1	-0.1	0.331048
TC0X00002495.mm.1	NM_009446	Tuba3a	tubulin, alpha 3A	125278274	125286042	TC0600003144.mm.1	-0.1	0.331106
TC0X00002497.mm.1	NR_030417	Mir744	microRNA 744	65734733	65734832	TC1100002990.mm.1	0.1	0.331151
TC0X00002498.mm.1	ENSMUST00000131139	Gm10059	predicted pseudogene 10059	33759366	33759536	TC0500000362.mm.1	-0.5	0.331348
TC0X00002503.mm.1	ENSMUST00000121516	Gm15057	predicted gene 15057	145990742	145991275	TC0X00001437.mm.1	0.1	0.331493
TC0X00002512.mm.1	NM_019507	Tbx21	T-box 21	97098007	97115331	TC1100003636.mm.1	0.0	0.331497
TC0X00002515.mm.1	NM_010893	Neu1	neuraminidase 1	34931253	34937297	TC1700000652.mm.1	0.1	0.331613
TC0X00002519.mm.1	ENSMUST00000182862	Gm7456	predicted gene 7456	49140256	49141266	TC1200000407.mm.1	-0.1	0.331663
TC0X00002531.mm.1	NM_026073	Rabl5	RAB, member of RAS oncogene family-like 5	136908150	136913244	TC0500001610.mm.1	0.1	0.331745
TC0X00002532.mm.1	ENSMUST00000083362	Gm26122	predicted gene, 26122	94184492	94184573	TC1000002703.mm.1	-0.7	0.331778
TC0X00002533.mm.1	NM_001167535	Vmn1r3	vomeronasal 1 receptor 3	3184348	3185358	TC0400002116.mm.1	0.1	0.331874
TC0X00002535.mm.1	ENSMUST00000082521	n-R5s56	nuclear encoded rRNA 5S 56	103396202	103396306	TC1300001160.mm.1	-0.4	0.331988
TC0X00002536.mm.1	ENSMUST00000118689	Gm11405	predicted gene 11405	74228197	74229752	TC0400000776.mm.1	-0.2	0.332112
TC0X00002541.mm.1	NM_145916	Zfp7	zinc finger protein 7	76879259	76892395	TC1500000612.mm.1	0.0	0.332159
TC0X00002544.mm.1	NM_013778	Akr1c13	aldo-keto reductase family 1, member C13	4191184	4205603	TC1300000019.mm.1	0.1	0.332191
TC0X00002549.mm.1	NCBI_Gene:780825:p	Ighv9-3	immunoglobulin heavy variable V9-3	114140692	114141122	TC1200002584.mm.1	-0.7	0.332623
TC0X00002550.mm.1	ENSMUST00000082620	n-R5s17	nuclear encoded rRNA 5S 173	107401319	107401437	TC0500001075.mm.1	0.3	0.332925
TC0X00002559.mm.1	ENSMUST00000105066	Gm14180	predicted gene 14180	99734213	99734290	TC1100003733.mm.1	-0.2	0.333025
TC0X00002568.mm.1	NM_032541	Hamp	hepcidin antimicrobial peptide	30942368	30944017	TC0700002783.mm.1	-0.1	0.333059
TC0X00002579.mm.1	ENSMUST00000179510	Gm24520	predicted gene, 24520	17610766	17610875	TC0700000254.mm.1	-0.1	0.333438
TC0X00002581.mm.1	NM_030251	Abtb1	ankyrin repeat and BTB (POZ) domain containing	88835914	88841935	TC0600002688.mm.1	-0.1	0.333458
TC0X00002589.mm.1	ENSMUST00000178103	Gm24797	predicted gene, 24797	38792638	38792744	TC0700000697.mm.1	-0.3	0.333524
TC0X00002608.mm.1	ENSMUST00000161575	Gm15838	predicted gene 15838	44018470	44018649	TC0100002270.mm.1	-0.2	0.333528
TC0X00002609.mm.1	ENSMUST00000118804	Gm15707	predicted gene 15707	145315613	145316608	TC0600003420.mm.1	0.1	0.333889
TC0X00002616.mm.1	XM_001475316	Gm2904	predicted pseudogene 2904	3051649	3052513	TC1400001355.mm.1	0.2	0.334272
TC0X00002626.mm.1	ENSMUST00000117331	Gm16221	predicted gene 16221	75945295	75945687	TC1000002394.mm.1	-0.1	0.334606
TC0X00002635.mm.1	ENSMUST00000179346	Gm21060	predicted gene, 21060	61296902	61297069	TC1900001764.mm.1	-0.1	0.334662
TC0X00002652.mm.1	ENSMUST00000122169	Gm11203	predicted gene 11203	79897222	79897962	TC1100001191.mm.1	-0.1	0.33471
TC0X00002653.mm.1	NR_004419	Rny1	RNA, Y1 small cytoplasmic, Ro-associated	47788069	47788180	TC0600002211.mm.1	-0.5	0.334739
TC0X00002675.mm.1	NM_024178	Alg14	asparagine-linked glycosylation 14	121291817	121362011	TC0300001229.mm.1	0.2	0.334979
TC0X00002678.mm.1	XM_003688913	Gm10340	predicted gene 10340	3332626	3354799	TC1400002783.mm.1	0.1	0.335299
TC0X00002685.mm.1	NM_029816	2610028	RIKEN cDNA 2610028H24 gene	76449081	76461218	TC1000000742.mm.1	0.0	0.335508
TC0X00002686.mm.1	NM_030711	Erap1	endoplasmic reticulum aminopeptidase 1	74639866	74691875	TC1300000904.mm.1	-0.1	0.335851
TC0X00002696.mm.1	NM_144826	Utp6	UTP6, small subunit (SSU) processome compone	79932321	79962390	TC1100003334.mm.1	-0.1	0.335891
TC0X00002701.mm.1	XM_001474021	Gm20840	predicted gene, 20840	23868563	23869246	TC0Y00000067.mm.1	0.1	0.335997
TC0X00002706.mm.1	XM_001476818	Gm20898	predicted gene, 20898	36091591	36092274	TC0Y00000117.mm.1	0.1	0.335997
TC0X00002725.mm.1	XM_003689059	Gm21275	predicted gene, 21275	53125523	53126206	TC0Y00000371.mm.1	0.1	0.335997
TC0X00002727.mm.1	XM_001478227	Gm20934	predicted gene, 20934	65723236	65723919	TC0Y00000430.mm.1	0.1	0.335997
TC0X00002735.mm.1	XM_001474479	Gm20847	predicted gene, 20847	72894521	72895204	TC0Y00000456.mm.1	0.1	0.335997
TC0X00002736.mm.1	XM_001474518	Gm20848	predicted gene, 20848	72968026	72968709	TC0Y00000457.mm.1	0.1	0.335997
TC0X00002737.mm.1	NM_021457	Fzd1	frizzled homolog 1 (Drosophila)	4753839	4758216	TC0500001896.mm.1	0.1	0.336076
TC0X00002740.mm.1	ENSMUST00000179961	Gm24180	predicted gene, 24180	43918777	43918886	TC0100002268.mm.1	-0.1	0.336393
TC0X00002741.mm.1	ENSMUST00000093715	Gm24704	predicted gene, 24704	24562074	24562180	TC0300000150.mm.1	-0.3	0.336431
TC0X00002757.mm.1	ENSMUST00000102029	Gm24121	predicted gene, 24121	86928903	86929008	TC0500002691.mm.1	-0.3	0.336494
TC0X00002759.mm.1	NM_173432	Pskh1	protein serine kinase H1	105900441	105931805	TC0800001233.mm.1	0.1	0.33655
TC0X00002762.mm.1	ENSMUST00000178059	Gm24955	predicted gene, 24955	119528000	119528106	TC0400001337.mm.1	-0.2	0.336558
TC0X00002768.mm.1	ENSMUST00000161613	Gm3076	predicted gene 3076	154132340	154132790	TC0300001550.mm.1	-0.2	0.336677
TC0X00002769.mm.1	NM_027127	Gpx8	glutathione peroxidase 8 (putative)	113042761	113046388	TC1300002689.mm.1	0.3	0.336686
TC0X00002783.mm.1	NM_207567	Olfr119	olfactory receptor 1198	88745960	88746886	TC0200004026.mm.1	0.1	0.336731
TC0X00002787.mm.1	NM_145932	Slc51a	solute carrier family 51, alpha subunit	32475522	32487879	TC1600001509.mm.1	0.1	0.336917
TC0X00002792.mm.1	ENSMUST00000182995	Gm5335	predicted gene 5335	72989154	72990153	TC0700003488.mm.1	-0.1	0.337
TC0X00002793.mm.1	NM_019418	Tnfsf14	tumor necrosis factor (ligand) superfamily, mem	57189474	57194189	TC1700002351.mm.1	0.0	0.337159
TC0X00002798.mm.1	ENSMUST00000183205	Gm7627	predicted gene 7627	69605842	69606840	TC0700003470.mm.1	-0.1	0.337249
TC0X00002803.mm.1	ENSMUST00000179464	Gm26297	predicted gene, 26297	46219836	46219967	TC1600000685.mm.1	-0.1	0.337264
TC0X00002806.mm.1	ENSMUST00000178054	Gm26430	predicted gene, 26430	78533458	78533564	TC1800000840.mm.1	-0.6	0.337267
TC0X00002813.mm.1	ENSMUST00000175150	Gm23810	predicted gene, 23810	40518818	40518891	TC0300000304.mm.1	0.2	0.337302
TC0X00002821.mm.1	ENSMUST00000167995	Gm4781	predicted gene 4781	100396287	100397072	TC1000002774.mm.1	-0.1	0.337432
TC0X00002826.mm.1	NM_178923	Scaf4	SR-related CTD-associated factor 4	90228952	90284425	TC1600002045.mm.1	-0.1	0.337497
TC0X00002834.mm.1	ENSMUST00000175070	Gm23636	predicted gene, 23636	22666658	22666752	TC0200000349.mm.1	0.2	0.337536
TC0X00002835.mm.1	ENSMUST00000157179	Gm23434	predicted gene, 23434	99017364	99017463	TC0100000981.mm.1	0.1	0.337892
TC0X00002838.mm.1	NM_025305	Mrps7	mitchondrial ribosomal protein S7	115603925	115608036	TC1100004280.mm.1	0.1	0.337921
TC0X00002844.mm.1	NM_001039160	Gvin1	GTPase, very large interferon inducible 1	106156535	106215340	TC0700004002.mm.1	0.3	0.338065
TC0X00002845.mm.1	NM_026502	1110004	RIKEN cDNA 1110004E09 gene	90925809	90934927	TC1600002059.mm.1	0.0	0.338065
TC0X00002848.mm.1	ENSMUST00000157170	Gm25965	predicted gene, 25965	142795102	142795194	TC0300001451.mm.1	-0.1	0.338124
TC0X00002853.mm.1	NM_145421	Abhd17a	abhydrolase domain containing 17A	80583649	80590341	TC1000002506.mm.1	-0.1	0.338193
TC0X00002854.mm.1	ENSMUST00000122793	n-R5s19	nuclear encoded rRNA 5S 19	6144732	6144851	TC1900000103.mm.1	0.1	0.338221
TC0X00002857.mm.1	NM_175095	Commd2	COMM domain containing 2	57642904	57651715	TC0300002030.mm.1	-0.1	0.338257
TC0X00002860.mm.1	ENSMUST00000175052	Mir466m	microRNA 466m	10466663	10466746	TC0200000090.mm.1	0.2	0.338385
TC0X00002861.mm.1	NM_013756	Defb3	defensin beta 3	19293360	19295339	TC0800000185.mm.1	-0.1	0.338431
TC0X00002871.mm.1	ENSMUST00000158585	Gm23386	predicted gene, 23386	19693155	19693298	TC1100002283.mm.1	-0.1	0.338472
TC0X00002873.mm.1	NR_045380	1700034	FUN14 domain containing 2 pseudogene	40900199	40902543	TC0300001906.mm.1	0.1	0.338526
TC0X00002874.mm.1	NR_035457	Mir1936	microRNA 1936	102684928	102685020	TC1200002254.mm.1	0.1	0.338567
TC0X00002886.mm.1	NM_026390	Ubxn4	UBX domain protein 4	128244162	128279377	TC0100001138.mm.1	-0.2	0.338937
TC0X00002887.mm.1	NM_011722	Dctn6	dynactin 6	34090420	34108796	TC0800002021.mm.1	-0.1	0.338965
TC0X00002888.mm.1	NCBI_Gene:780831:p	Ighv3-8	immunoglobulin heavy variable V3-8	114322374	114323087	TC1200002592.mm.1	-0.2	0.339034
TC0X00002891.mm.1	ENSMUST00000179978	Gm24466	predicted gene, 24466	72130210	72130318	TC1200001901.mm.1	0.2	0.339165
TC0X00002892.mm.1	NM_026344	Dph2	DPH2 homolog (S. cerevisiae)	117888643	117892032	TC0400003380.mm.1	0.0	0.339248

TC0X00002899.mm.1	NM_022017	Trpv4	transient receptor potential cation channel, su	114622152	114658421	TC0500003063.mm.1	0.1	0.339512
TC0X00002907.mm.1	ENSMUST00000104433	Gm23772	predicted gene, 23772	22846868	22846969	TC1100000228.mm.1	-0.2	0.339547
TC0X00002916.mm.1	ENSMUST00000180118	Gm22756	predicted gene, 22756	151062004	151062110	TC0100003242.mm.1	-0.6	0.339643
TC0X00002918.mm.1	ENSMUST00000101885	Gm22003	predicted gene, 22003	4758547	4758653	TC1200000031.mm.1	-0.6	0.339643
TC0X00002932.mm.1	NM_146738	Olfr497	olfactory receptor 497	108422571	108423517	TC0700001596.mm.1	-0.1	0.339843
TC0X00002933.mm.1	NM_008356	Il13ra2	interleukin 13 receptor, alpha 2	147383476	147429192	TC0X00003143.mm.1	0.1	0.339844
TC0X00002934.mm.1	ENSMUST00000175530	Gm26233	predicted gene, 26233	18449271	18449340	TC0600001909.mm.1	0.1	0.340138
TC0X00002935.mm.1	ENSMUST00000120256	Gm4992	predicted pseudogene 4992	121913227	121913994	TC0X00001192.mm.1	-0.2	0.340436
TC0X00002937.mm.1	ENSMUST00000185108	AC17025	N/A	178363401	178363521	TC0100003646.mm.1	0.1	0.340459
TC0X00002938.mm.1	ENSMUST00000104272	Gm26419	predicted gene, 26419	32065910	32066042	TC1600000428.mm.1	-0.1	0.340659
TC0X00002939.mm.1	ENSMUST00000082949	Gm24203	predicted gene, 24203	98275725	98275838	TC0400000978.mm.1	-0.2	0.340932
TC0X00002940.mm.1	XM_003084719	Dnajc19	DnaJ (Hsp40) homolog, subfamily C, member 19,	103882575	103883119	TC0700003916.mm.1	-0.1	0.340956
TC0X00002941.mm.1	NM_027044	Pfdn5	prefoldin 5	102326116	102331490	TC1500002337.mm.1	-0.2	0.341094
TC0X00002942.mm.1	NM_019914	Mllt11	myeloid/lymphoid or mixed-lineage leukemia (tr	95218544	95228677	TC0300002470.mm.1	-0.1	0.341124
TC0X00002954.mm.1	ENSMUST00000179396	Gm23793	predicted gene, 23793	130557348	130557464	TC1000003211.mm.1	-0.1	0.341211
TC0X00002958.mm.1	ENSMUST00000182082	Gm8957	predicted gene 8957	14511084	14512095	TC0300001665.mm.1	-0.1	0.341876
TC0X00002964.mm.1	ENSMUST00000083811	Gm25004	predicted gene, 25004	95524044	95524204	TC0400000960.mm.1	0.1	0.341931
TC0X00002967.mm.1	XM_001478071	Gm10338	predicted gene 10338	7580617	7595592	TC1400002855.mm.1	0.1	0.341948
TC0X00002968.mm.1	NM_001083936	Pth1r	parathyroid hormone 1 receptor	110722085	110747145	TC0900003116.mm.1	0.2	0.341948
TC0X00002976.mm.1	NM_198936	Slu7	SLU7 splicing factor homolog (S. cerevisiae)	43433731	43447981	TC1100000426.mm.1	-0.2	0.341975
TC0X00002977.mm.1	NM_031868	Ppp1ca	protein phosphatase 1, catalytic subunit, alpha	4192158	4195423	TC1900000033.mm.1	-0.2	0.342547
TC0X00002979.mm.1	NM_001159565	Dctn3	dynactin 3	41714798	41723170	TC0400002477.mm.1	0.2	0.342549
TC0X00002984.mm.1	ENSMUST00000184513	AL80802	N/A	32173171	32173249	TC0200000568.mm.1	-0.1	0.342609
TC0X00002985.mm.1	ENSMUST00000157242	Gm24443	predicted gene, 24443	25078772	25078903	TC0600001950.mm.1	-0.1	0.342656
TC0X00002990.mm.1	XM_621081	Gm6604	predicted gene 6604	123581700	123602172	TC0X00001208.mm.1	-0.1	0.342776
TC0X00002993.mm.1	ENSMUST00000183666	CDKN2B-	CDKN2B antisense RNA 1 intronic convserved re	89445219	89445367	TC0400000917.mm.1	-0.1	0.342794
TC0X00002995.mm.1	ENSMUST00000112755	Gm8334	predicted gene 8334	148613253	148615153	TC0X00003150.mm.1	-0.1	0.342835
TC0X00002996.mm.1	ENSMUST00000117036	Gm24806	predicted gene, 24806	10517337	10517426	TC0200000203.mm.1	-0.1	0.342911
TC0X00003001.mm.1	NM_001099312	Gm11569	predicted gene 11569	99803548	99804446	TC1100003739.mm.1	-0.1	0.343134
TC0X00003009.mm.1	OTTMUST00000007580	RP23-35	---	115724326	115724808	TC1100004088.mm.1	-0.3	0.343158
TC0X00003010.mm.1	ENSMUST00000179033	Gm24897	predicted gene, 24897	103898879	103898985	TC0500001014.mm.1	-0.5	0.343288
TC0X00003011.mm.1	ENSMUST00000083749	Gm23731	predicted gene, 23731	102897960	102898066	TC0200001525.mm.1	-0.6	0.343331
TC0X00003018.mm.1	ENSMUST00000082916	Gm23443	predicted gene, 23443	93545150	93545277	TC0400003059.mm.1	-0.2	0.343435
TC0X00003021.mm.1	NM_020498	Ly6i	lymphocyte antigen 6 complex, locus I	74979812	74983430	TC1500001727.mm.1	0.1	0.343713
TC0X00003022.mm.1	ENSMUST00000175249	Mir446q	microRNA 446q	28419943	28420018	TC0300000177.mm.1	0.2	0.343753
TC0X00003028.mm.1	ENSMUST00000180915	Gm7672	predicted gene 7672	22046114	22046985	TC1000001848.mm.1	0.0	0.343782
TC0X00003041.mm.1	NM_001136087	Slc6a18	solute carrier family 6 (neurotransmitter trans	73661750	73678023	TC1300002302.mm.1	0.3	0.343852
TC0X00003042.mm.1	ENSMUST00000158827	Gm24223	predicted gene, 24223	104700870	104700959	TC0300001079.mm.1	-0.1	0.344029
TC0X00003044.mm.1	NM_009044	Rel	reticuloendotheliosis oncogene	23741514	23770970	TC1100002374.mm.1	-0.3	0.344113
TC0X00003045.mm.1	ENSMUST00000177893	G530011	---	90754513	90754821	TC0Y00000551.mm.1	0.1	0.344327
TC0X00003053.mm.1	ENSMUST00000179623	G530011	---	90838869	90839177	TC0Y00000552.mm.1	0.1	0.344327
TC0X00003054.mm.1	NM_007562	Bnc1	basonuclin 1	81966662	81992299	TC0700003625.mm.1	0.1	0.344352
TC0X00003062.mm.1	ENSMUST00000049508	Gm12231	predicted gene 12231	55118101	55118795	TC1100002775.mm.1	-0.2	0.34454
TC0X00003063.mm.1	ENSMUST00000104842	Gm24684	predicted gene, 24684	46080888	46080983	TC0800000527.mm.1	0.2	0.344566
TC0X00003064.mm.1	ENSMUST00000119479	Gm11333	predicted gene 11333	23298049	23298196	TC1300000238.mm.1	0.1	0.344671
TC0X00003066.mm.1	ENSMUST00000105167	Gm9257	predicted gene 9257	19606929	19607264	TC1200000169.mm.1	0.1	0.345278
TC0X00003070.mm.1	ENSMUST00000104651	Gm22230	predicted gene, 22230	97007793	97007883	TC1200002174.mm.1	0.2	0.345282
TC0X00003080.mm.1	NM_026143	Far1	fatty acyl CoA reductase 1	113513834	113571511	TC0700001666.mm.1	-0.1	0.345384
TC0X00003082.mm.1	ENSMUST00000158811	Gm23198	predicted gene, 23198	116675878	116675968	TC1300001324.mm.1	-0.1	0.345461
TC0X00003093.mm.1	NM_172776	Slc22a2	solute carrier family 22. member 29	8160165	8218900	TC1900001767.mm.1	0.1	0.345521
TC0X00003097.mm.1	ENSMUST00000158925	Gm24179	predicted gene, 24179	126840375	126840501	TC1000003089.mm.1	0.1	0.345541
TC0X00003101.mm.1	NM_001168505	Shoc2	soc-2 (suppressor of clear) homolog (C. elegans	53944306	54033278	TC1900000766.mm.1	0.1	0.345751
TC0X00003102.mm.1	ENSMUST00000088514	Magi2	membrane associated guanylate kinase, WW an	20539890	20540404	TC0500000161.mm.1	0.1	0.345775
TC0X00003105.mm.1	ENSMUST00000103301	Gm20730	predicted gene, 20730	43081515	43082097	TC0600002183.mm.1	-0.3	0.345984
TC0X00003106.mm.1	NM_023184	Klf15	Kruppel-like factor 15	90462576	90475238	TC0600001074.mm.1	0.1	0.346068
TC0X00003112.mm.1	NR_037248	Mir4660	microRNA 4660	70308505	70669399	TC1200000586.mm.1	0.2	0.34624
TC0X00003113.mm.1	ENSMUST00000101814	Gm25414	predicted gene, 25414	14506587	14506693	TC1200000115.mm.1	-0.4	0.346821
TC0X00003120.mm.1	NM_025593	Polr2l	polymerase (RNA) II (DNA directed) polypeptide	141471860	141475153	TC0700004542.mm.1	-0.1	0.347178
TC0X00003122.mm.1	NM_026442	Cmc1	COX assembly mitochondrial protein 1	118064522	118150196	TC0900003220.mm.1	0.1	0.347202
TC0X00003125.mm.1	ENSMUST00000178907	Gm21834	predicted gene, 21834	57741767	57742219	TC1700002356.mm.1	-0.1	0.347326
TC0X00003131.mm.1	NM_001040396	2810407	RIKEN cDNA 2810407C02 gene	58576636	58593546	TC0300000459.mm.1	-0.1	0.347374
TC0X00003135.mm.1	NM_177396	Ifnl3	interferon lambda 3	28522835	28524322	TC0700000504.mm.1	-0.1	0.347429
TC0X00003139.mm.1	ENSMUST00000073111	Gm10061	predicted gene 10061	89151139	89151303	TC1600000972.mm.1	-0.2	0.347725
TC0X00003143.mm.1	NM_007911	Efnb3	ephrin B3	69554092	69560237	TC1100003046.mm.1	0.1	0.347864
TC0X00003145.mm.1	NM_013895	Timm13	translocase of inner mitochondrial membrane 13	80899450	80900969	TC1000002518.mm.1	-0.1	0.347988
TC0X00003147.mm.1	ENSMUST00000158758	Gm24676	predicted gene, 24676	130081419	130081493	TC0600001543.mm.1	0.1	0.348061
TC0X00003150.mm.1	NM_146135	Pias3	protein inhibitor of activated STAT 3	96696375	96706070	TC0300000956.mm.1	0.0	0.348094
TC0X00003156.mm.1	NR_030688	Gm6402	ribosomal protein S17 pseudogene	30394825	30396180	TC1700001802.mm.1	-0.1	0.348137
TC0X00003168.mm.1	NM_020047	Tacstd2	tumor-associated calcium signal transducer 2	67534059	67535822	TC0600002427.mm.1	0.1	0.348217
TC0X00003169.mm.1	NM_011415	Snai2	snail homolog 2 (Drosophila)	14705852	14709395	TC1600000184.mm.1	0.1	0.348264
TC0X00003176.mm.1	ENSMUST00000118302	Gm6733	predicted gene 6733	72833461	72835380	TC1100001007.mm.1	0.1	0.348349
TC0X00003177.mm.1	ENSMUST00000166899	Gm17316	predicted gene, 17316	137671524	137672540	TC0300001395.mm.1	0.5	0.348566
TC0X00003179.mm.1	NM_183257	Hamp2	hepcidin antimicrobial peptide 2	30922372	30924181	TC0700002781.mm.1	-0.1	0.348625
TC0X00003180.mm.1	NR_027857	Nkx6-2	NK6 homeobox 2	139579376	139582797	TC0700004481.mm.1	-0.1	0.349127
TC0X00003181.mm.1	ENSMUST00000104173	Gm23481	predicted gene, 23481	46658508	46658638	TC1000002116.mm.1	0.1	0.349271
TC0X00003182.mm.1	XR_105528	Gm19865	predicted gene, 19865	35543902	35545484	TC1300000404.mm.1	0.1	0.349307
TC0X00003186.mm.1	ENSMUST00000184654	Gm14214	predicted gene 14214	154769255	154770030	TC0200004949.mm.1	-0.1	0.349347
TC0X00003187.mm.1	ENSMUST00000157594	Gm22077	predicted gene, 22077	80080251	80080343	TC1500001898.mm.1	-0.1	0.349433

TC0X00003200.mm.1	ENSMUST00000122042	Gm4996	predicted gene 4996	146932685	146934254	TC0X00001446.mm.1	-0.2	0.349761
TC0X00003201.mm.1	ENSMUST00000121815	Gm12725	predicted gene 12725	106136111	106137778	TC0400003196.mm.1	0.3	0.349785
TC0X00003202.mm.1	ENSMUST00000083369	Gm23249	predicted gene, 23249	93746502	93746662	TC1200000947.mm.1	0.1	0.350184
TC0X00003205.mm.1	ENSMUST00000103978	Gm24120	predicted gene, 24120	69957776	69957904	TC0700003473.mm.1	0.1	0.350309
TC0X00003206.mm.1	ENSMUST00000103842	Gm23931	predicted gene, 23931	13604999	13605107	TC1900001185.mm.1	0.1	0.350365
TC0X00003208.mm.1	NM_023733	Crot	carnitine O-octanoyltransferase	8966033	8997427	TC0500001936.mm.1	0.1	0.350447
TC0X00003231.mm.1	ENSMUST00000084598	Gm10155	predicted gene 10155	126299434	126299916	TC0700004269.mm.1	-0.3	0.35058
TC0X00003234.mm.1	NM_001077410	Gimap8	GTPase, IMAP family member 8	48647234	48660875	TC0600000564.mm.1	-0.2	0.350689
TC0X00003239.mm.1	ENSMUST00000158091	Gm22724	predicted gene, 22724	123736886	123737012	TC0600003091.mm.1	-0.1	0.350725
TC0X00003243.mm.1	NM_134149	AI83718	expressed sequence AI837181	5425144	5427317	TC1900000065.mm.1	-0.1	0.35074
TC0X00003245.mm.1	NM_025811	Nhlrc2	NHL repeat containing 2	56548261	56598846	TC1900000801.mm.1	-0.1	0.350784
TC0X00003247.mm.1	NM_027016	Sec62	SEC62 homolog (S. cerevisiae)	30792876	30821263	TC0300000203.mm.1	-0.1	0.350838
TC0X00003248.mm.1	ENSMUST00000178972	Gm25312	predicted gene, 25312	178028033	178028139	TC0100003641.mm.1	-0.6	0.350959
TC0X00003251.mm.1	NM_146939	Olfr354	olfactory receptor 354	36906911	36907994	TC0200000673.mm.1	0.1	0.35134
TC0X00003254.mm.1	NM_001190800	Ddx19b	DEAD (Asp-Glu-Ala-Asp) box polypeptide 19b	111003186	111031751	TC0800002935.mm.1	-0.1	0.351416
TC0X00003267.mm.1	NM_146972	Olfr123	olfactory receptor 1233	89339307	89340348	TC0200004054.mm.1	0.1	0.351575
TC0X00003283.mm.1	ENSMUST00000158409	Gm22156	predicted gene, 22156	12676933	12677073	TC1100000140.mm.1	0.1	0.351591
TC0X00003312.mm.1	ENSMUST00000170703	Gm3571	predicted gene 3571	93778611	93779772	TC1000001141.mm.1	-0.1	0.351618
TC0X00003313.mm.1	ENSMUST00000119742	Gm15029	predicted gene 15029	20911596	20911794	TC0X00000219.mm.1	-0.1	0.351692
TC0X00003314.mm.1	NM_205820	Tlr13	toll-like receptor 13	106143204	106160493	TC0X00001069.mm.1	0.2	0.351821
TC0X00003315.mm.1	NM_001025241	Gm20747	predicted gene, 20747	53415957	53418307	TC0Y00000374.mm.1	0.1	0.352614
TC0X00003316.mm.1	ENSMUST00000157964	Gm22961	predicted gene, 22961	138587624	138587729	TC0400003827.mm.1	0.1	0.352979
TC0X00003318.mm.1	NM_175150	Txndc15	thioredoxin domain containing 15	55714650	55726228	TC1300000674.mm.1	0.2	0.353098
TC0X00003333.mm.1	NM_020626	Tmem27	transmembrane protein 27	164088830	164118860	TC0X00001661.mm.1	0.5	0.353263
TC0X00003337.mm.1	ENSMUST00000120233	Vcp-rs	valosin containing protein, related sequence	104345829	104348234	TC0X00002798.mm.1	-0.2	0.353324
TC0X00003345.mm.1	NM_001145978	Parp4	poly (ADP-ribose) polymerase family, member 4	56575619	56659798	TC1400000808.mm.1	0.1	0.353417
TC0X00003346.mm.1	ENSMUST00000117002	Gm22051	predicted gene, 22051	10506555	10506681	TC0200000179.mm.1	-0.1	0.35349
TC0X00003349.mm.1	NM_177397	Atp6v1g	ATPase, H+ transporting, lysosomal V1 subunit G	138273738	138289462	TC0100001292.mm.1	0.1	0.35363
TC0X00003358.mm.1	NM_001185002	Rhox13	reproductive homeobox 13	38120840	38129966	TC0X00000361.mm.1	-0.1	0.353809
TC0X00003361.mm.1	NR_030702	Snord4a	small nucleolar RNA, C/D box 4A	78181686	78181756	TC1100003290.mm.1	-0.3	0.353897
TC0X00003362.mm.1	ENSMUST00000083037	Gm26054	predicted gene, 26054	116952589	116952695	TC0700004163.mm.1	-0.5	0.353948
TC0X00003376.mm.1	ENSMUST00000083272	Gm24611	predicted gene, 24611	42337677	42337783	TC0600002168.mm.1	-0.1	0.354006
TC0X00003377.mm.1	NM_010860	Myl6	myosin, light polypeptide 6, alkali, smooth mus	128490860	128493875	TC1000003145.mm.1	0.1	0.35416
TC0X00003380.mm.1	XR_001846	1700049	RIKEN cDNA 1700049E17 gene, gene 1	41924949	41933037	TC1400000420.mm.1	-0.1	0.354196
TC0X00003382.mm.1	NM_178603	Mrpl50	mitochondrial ribosomal protein L50	49512596	49521093	TC0400002637.mm.1	0.1	0.354438
TC0X00003383.mm.1	NM_178308	Scgb2b2	secretoglobin, family 2B, member 26	33942997	33945040	TC0700002820.mm.1	-0.1	0.354791
TC0X00003388.mm.1	NM_009277	Trim21	tripartite motif-containing 21	102557920	102565482	TC0700003862.mm.1	-0.1	0.354804
TC0X00003389.mm.1	NM_153571	Hscb	HscB iron-sulfur cluster co-chaperone homolog (	110829070	110839777	TC0500003001.mm.1	-0.1	0.354842
TC0X00003391.mm.1	ENSMUST00000164067	Cby3	chibby homolog 3 (Drosophila)	50354462	50359699	TC1100000543.mm.1	-0.1	0.355012
TC0X00003400.mm.1	NM_001099333	Gm2863	predicted gene 2863	33313338	33315288	TC0X00000289.mm.1	-0.1	0.355186
TC0X00003412.mm.1	NM_021325	Cd200r1	CD200 receptor 1	44765736	44794978	TC1600000662.mm.1	0.1	0.35527
TC0X00003419.mm.1	NM_177723	Vsig8	V-set and immunoglobulin domain containing 8	172555938	172563717	TC0100001621.mm.1	0.1	0.355295
TC0X00003425.mm.1	NM_177353	Slc9a7	solute carrier family 9 (sodium/hydrogen exchan	20105755	20291807	TC0X00001922.mm.1	-0.2	0.355365
TC0X00003426.mm.1	NM_011051	Pdcd6	programmed cell death 6	74303121	74317326	TC1300002316.mm.1	-0.1	0.355456
TC0X00003433.mm.1	NM_008777	Pah	phenylalanine hydroxylase	87521795	87584137	TC1000001063.mm.1	0.5	0.355532
TC0X00003435.mm.1	NM_146616	Olfr305	olfactory receptor 305	86363376	86364335	TC0700003693.mm.1	-0.1	0.355757
TC0X00003436.mm.1	ENSMUST00000157223	Gm25621	predicted gene, 25621	69685467	69685580	TC0300000585.mm.1	0.1	0.355981
TC0X00003438.mm.1	ENSMUST00000104277	Gm26423	predicted gene, 26423	89158999	89159126	TC0900001145.mm.1	-0.1	0.356013
TC0Y00000005.mm.1	NM_009153	Sema3b	sema domain, immunoglobulin domain (Ig), shor	107597674	107609241	TC0900003037.mm.1	0.0	0.356331
TC0Y00000018.mm.1	ENSMUST00000082811	Gm24708	predicted gene, 24708	16624575	16624677	TC0700002433.mm.1	-0.2	0.356342
TC0Y00000020.mm.1	NR_029769	Mir340	microRNA 340	50069702	50069799	TC1100000534.mm.1	0.1	0.356643
TC0Y00000024.mm.1	ENSMUST00000122650	n-R5s70	nuclear encoded rRNA 5S 70	72281016	72281131	TC1100000988.mm.1	0.1	0.357209
TC0Y00000036.mm.1	NM_001128609	Dedd	death effector domain-containing	171329145	171342501	TC0100001585.mm.1	0.0	0.357331
TC0Y00000051.mm.1	ENSMUST00000174949	Gm22655	predicted gene, 22655	101881184	101881279	TC0700001441.mm.1	-0.2	0.35751
TC0Y00000055.mm.1	NM_001029938	Rilp	Rab interacting lysosomal protein	75510094	75513168	TC1100001070.mm.1	0.0	0.357551
TC0Y00000062.mm.1	NM_001012310	Slc25a4	solute carrier family 25, member 47	108851129	108856815	TC1200001118.mm.1	-0.1	0.35759
TC0Y00000064.mm.1	ENSMUST00000082596	Gm23613	predicted gene, 23613	36776619	36776705	TC0X00000326.mm.1	0.1	0.357706
TC0Y00000067.mm.1	ENSMUST00000116939	Gm23368	predicted gene, 23368	30100840	30100935	TC0700002742.mm.1	-0.3	0.358015
TC0Y00000069.mm.1	ENSMUST00000177876	Gm23725	predicted gene, 23725	157237225	157237331	TC0300003190.mm.1	-0.3	0.358367
TC0Y00000072.mm.1	ENSMUST00000174960	Gm24515	predicted gene, 24515	129684133	129684241	TC0300002933.mm.1	0.2	0.358474
TC0Y00000073.mm.1	ENSMUST00000179376	Gm22618	predicted gene, 22618	50290380	50290486	TC0500002389.mm.1	-0.6	0.358574
TC0Y00000074.mm.1	ENSMUST00000120151	Gm14782	predicted gene 14782	91859498	91859692	TC0X00002616.mm.1	-0.1	0.358728
TC0Y00000075.mm.1	NM_009285	Stc1	stanniocalcin 1	69029279	69041401	TC1400000968.mm.1	-0.1	0.358916
TC0Y00000077.mm.1	NCBI_Gene:668469:p	Ighv1-5	immunoglobulin heavy variable V1-5	114513330	114513623	TC1200002601.mm.1	-0.7	0.358941
TC0Y00000078.mm.1	ENSMUST00000082651	Gm25129	predicted gene, 25129	158379534	158379666	TC0200002428.mm.1	0.1	0.358999
TC0Y00000080.mm.1	ENSMUST00000083083	Gm23510	predicted gene, 23510	97572076	97572238	TC0600002807.mm.1	-0.3	0.359002
TC0Y00000082.mm.1	ENSMUST00000158612	Gm22206	predicted gene, 22206	153708911	153709026	TC0300001544.mm.1	0.1	0.359083
TC0Y00000083.mm.1	NM_133839	Mmadhc	methylmalonic aciduria (cobalamin deficiency) c	50279881	50296801	TC0200003505.mm.1	-0.1	0.359098
TC0Y00000084.mm.1	ENSMUST00000170790	Gm10340	predicted gene 10340	3133997	3141609	TC1400002781.mm.1	0.1	0.359301
TC0Y00000086.mm.1	NM_008163	Grb2	growth factor receptor bound protein 2	115644045	115708597	TC1100004084.mm.1	-0.1	0.359314
TC0Y00000107.mm.1	ENSMUST00000183481	RP23-34	N/A	14893847	14894231	TC0700002394.mm.1	0.0	0.359376
TC0Y00000108.mm.1	NM_001009547	Adam26b	a disintegrin and metallopeptidase domain 26B	43519864	43528137	TC0800002131.mm.1	-0.1	0.359398
TC0Y00000109.mm.1	NM_024284	Hagh	hydroxyacyl glutathione hydrolase	24840143	24864450	TC1700000354.mm.1	0.1	0.359679
TC0Y00000110.mm.1	XM_990209	Gm14757	predicted gene 14757	74677268	74678045	TC0X00002458.mm.1	0.1	0.359761
TC0Y00000111.mm.1	ENSMUST00000104285	Gm24790	predicted gene, 24790	5189803	5189934	TC1300001384.mm.1	0.1	0.359786
TC0Y00000114.mm.1	NM_001081133	Kif16b	kinesin family member 16B	142617474	142901531	TC0200004737.mm.1	-0.1	0.359891
TC0Y00000117.mm.1	NM_029115	Ccdc181	coiled-coil domain containing 181	164275585	164287847	TC0100001501.mm.1	-0.1	0.360037
TC0Y00000118.mm.1	NM_025857	Aagab	alpha- and gamma-adaptin binding protein	63602655	63641893	TC0900000804.mm.1	-0.1	0.360045

TC0Y00000119.mm.1	ENSMUST00000104480	Gm26143	predicted gene, 26143	142424795	142424902	TC0700002074.mm.1	0.1	0.360196
TC0Y00000124.mm.1	NM_027198	Zswim7	zinc finger SWIM-type containing 7	62267224	62281395	TC1100002932.mm.1	0.1	0.360673
TC0Y00000126.mm.1	ENSMUST00000179697	Gm24464	predicted gene, 24464	18745103	18745209	TC0700002459.mm.1	-0.4	0.360693
TC0Y00000130.mm.1	XM_001478153	Gm15210	predicted gene 15210	100030487	100032156	TC0800001164.mm.1	-0.1	0.3609
TC0Y00000131.mm.1	NM_203319	Dhx37	DEAH (Asp-Glu-Ala-His) box polypeptide 37	125414403	125434066	TC0500003274.mm.1	-0.1	0.361066
TC0Y00000132.mm.1	NM_172624	Dpp9	dipeptidylpeptidase 9	56186682	56218889	TC1700002318.mm.1	-0.1	0.361073
TC0Y00000133.mm.1	NR_035464	Mir1943	microRNA 1943	79375228	79375300	TC1500001871.mm.1	-0.1	0.361107
TC0Y00000142.mm.1	NM_001146198	Nkx2-1	NK2 homeobox 1	56531935	56536908	TC1200001791.mm.1	-0.1	0.361121
TC0Y00000148.mm.1	ENSMUST00000178586	Gm22887	predicted gene, 22887	22534737	22534843	TC0500002038.mm.1	0.1	0.361164
TC0Y00000156.mm.1	XR_140591	Gm19816	predicted gene, 19816	60577699	60581360	TC0300000487.mm.1	-0.2	0.361176
TC0Y00000162.mm.1	ENSMUST00000131638	Gm5970	predicted gene 5970	60220843	60222058	TC1800000607.mm.1	0.1	0.361222
TC0Y00000169.mm.1	XR_105475	Gm4983	predicted gene 4983	17992855	18065610	TC1200000152.mm.1	0.0	0.361242
TC0Y00000173.mm.1	ENSMUST00000101821	Gm25524	predicted gene, 25524	74212813	74212919	TC0100000623.mm.1	0.1	0.361246
TC0Y00000181.mm.1	NM_016681	Chek2	checkpoint kinase 2	110840009	110874133	TC0500001152.mm.1	-0.1	0.361252
TC0Y00000182.mm.1	NM_025546	Rsl1d1	ribosomal L1 domain containing 1	11192970	11203331	TC1600001213.mm.1	-0.2	0.3613
TC0Y00000184.mm.1	ENSMUST00000082402	COX1	cytochrome c oxidase subunit I	5327	6938	TC0M00000006.mm.1	0.1	0.361346
TC0Y00000185.mm.1	ENSMUST00000104389	Gm24890	predicted gene, 24890	70428496	70428597	TC1400002339.mm.1	-0.3	0.361401
TC0Y00000186.mm.1	ENSMUST00000157470	Gm23669	predicted gene, 23669	118299990	118300117	TC1400001281.mm.1	-0.1	0.361413
TC0Y00000187.mm.1	ENSMUST00000098624	Gm9387	predicted pseudogene 9387	128953782	128955098	TC0300002923.mm.1	-0.1	0.361526
TC0Y00000200.mm.1	NM_022997	Vps35	vacuolar protein sorting 35	85260392	85299513	TC0800002608.mm.1	0.1	0.361593
TC0Y00000205.mm.1	NM_024253	Nkg7	natural killer cell group 7 sequence	43437073	43438249	TC0700000759.mm.1	-0.1	0.36177
TC0Y00000212.mm.1	ENSMUST00000178053	Gm24926	predicted gene, 24926	59477493	59477571	TC0700003198.mm.1	-0.1	0.361814
TC0Y00000223.mm.1	ENSMUST00000178266	Gm22632	predicted gene, 22632	59481219	59481297	TC0700003200.mm.1	-0.1	0.361814
TC0Y00000224.mm.1	NM_146249	Zfp119b	zinc finger protein 119b	55938373	55949500	TC1700002306.mm.1	0.0	0.361846
TC0Y00000225.mm.1	NM_007527	Bax	BCL2-associated X protein	45461695	45466898	TC0700003007.mm.1	0.0	0.361963
TC0Y00000226.mm.1	NM_173052	Serpinb	serine (or cysteine) peptidase inhibitor, clade	33084103	33094380	TC1300000366.mm.1	0.0	0.362133
TC0Y00000230.mm.1	XM_889816	Gm6415	predicted pseudogene 6415	81161393	81164003	TC0700003604.mm.1	-0.1	0.362152
TC0Y00000237.mm.1	NM_001166744	Vmn1r11	vomeronasal 1 receptor 116	20872256	20873179	TC0700000325.mm.1	0.1	0.362527
TC0Y00000239.mm.1	ENSMUST00000182020	Gm7481	predicted gene 7481	49840757	49841751	TC1200001702.mm.1	-0.1	0.362583
TC0Y00000240.mm.1	ENSMUST00000098994	LOC1005	60S ribosomal protein L29-like // predicted ge	7751672	7752325	TC0900000054.mm.1	-0.4	0.362588
TC0Y00000264.mm.1	ENSMUST00000157133	Gm23466	predicted gene, 23466	34434296	34434401	TC0400000300.mm.1	0.1	0.362674
TC0Y00000266.mm.1	NM_001097621	Kif26a	kinesin family member 26A	112146208	112181747	TC1200001257.mm.1	0.0	0.362734
TC0Y00000274.mm.1	NM_027873	Ubiad1	UbiA prenyltransferase domain containing 1	148434495	148444771	TC0400004021.mm.1	0.0	0.362776
TC0Y00000277.mm.1	NM_008244	Hgs	HGF-regulated tyrosine kinase substrate	120467635	120483984	TC1100002028.mm.1	0.1	0.362958
TC0Y00000287.mm.1	ENSMUST00000083891	Gm26314	predicted gene, 26314	11850484	11850590	TC0X00000146.mm.1	-0.3	0.362978
TC0Y00000292.mm.1	NCBI_Gene:628398:p	Ighv6-4	immunoglobulin heavy variable V6-4	114406474	114406773	TC1200002474.mm.1	-0.1	0.362986
TC0Y00000293.mm.1	ENSMUST00000104784	Gm26376	predicted gene, 26376	40051904	40052013	TC1700000810.mm.1	-0.1	0.362998
TC0Y00000319.mm.1	NM_013752	Nbn	nibrin	15957925	15992589	TC0400000140.mm.1	-0.1	0.363045
TC0Y00000326.mm.1	NM_016710	Hmgn5	high-mobility group nucleosome binding domain	109004534	109013404	TC0X00002853.mm.1	-0.2	0.363128
TC0Y00000351.mm.1	NM_009921	Camp	cathelicidin antimicrobial peptide	109847375	109849456	TC0900003098.mm.1	0.0	0.363129
TC0Y00000359.mm.1	ENSMUST00000083357	Gm26125	predicted gene, 26125	74534285	74534391	TC0X00000718.mm.1	-0.5	0.363164
TC0Y00000362.mm.1	ENSMUST00000104610	Gm23803	predicted gene, 23803	59817666	59817797	TC1000002220.mm.1	0.2	0.363174
TC0Y00000363.mm.1	NM_175352	Unc119b	unc-119 homolog B (C. elegans)	115122550	115134975	TC0500003089.mm.1	-0.1	0.363543
TC0Y00000365.mm.1	XM_001477101	Gm3476	predicted gene 3476	6117368	6172001	TC1400001407.mm.1	0.1	0.363627
TC0Y00000370.mm.1	NM_027895	Ulk3	unc-51-like kinase 3	57589452	57596233	TC0900000711.mm.1	0.0	0.363701
TC0Y00000371.mm.1	NM_177298	Pisd	phosphatidylserine decarboxylase	32736301	32785646	TC0500003725.mm.1	0.1	0.363766
TC0Y00000374.mm.1	XM_001473616	Gm2444	predicted gene 2444	12259448	12260839	TC1300001446.mm.1	0.2	0.363779
TC0Y00000377.mm.1	ENSMUST00000116811	Gm22488	predicted gene, 22488	58146616	58146742	TC1500000410.mm.1	-0.6	0.363826
TC0Y00000381.mm.1	NM_175305	Lrrc19	leucine rich repeat containing 19	94636653	94650144	TC0400003074.mm.1	0.3	0.364104
TC0Y00000382.mm.1	NM_010489	Hyal2	hyaluronoglucosaminidase 2	107569117	107572778	TC0900001375.mm.1	0.1	0.36413
TC0Y00000384.mm.1	NM_013860	Limd1	LIM domains containing 1	123478701	123521552	TC0900001665.mm.1	-0.1	0.364376
TC0Y00000386.mm.1	ENSMUST00000104071	Gm23979	predicted gene, 23979	9643690	9643817	TC1200001409.mm.1	-0.1	0.364476
TC0Y00000390.mm.1	ENSMUST00000177597	Gm24418	predicted gene, 24418	59438019	59438097	TC0700003177.mm.1	0.1	0.364506
TC0Y00000391.mm.1	ENSMUST00000178518	Gm24639	predicted gene, 24639	59443631	59443709	TC0700003180.mm.1	0.1	0.364506
TC0Y00000394.mm.1	ENSMUST00000179082	Gm23076	predicted gene, 23076	59449243	59449321	TC0700003183.mm.1	0.1	0.364506
TC0Y00000410.mm.1	ENSMUST00000179157	Gm25077	predicted gene, 25077	59473776	59473854	TC0700003196.mm.1	0.1	0.364506
TC0Y00000411.mm.1	ENSMUST00000122085	Gm15593	predicted gene 15593	18144734	18145741	TC0600000144.mm.1	-0.1	0.364787
TC0Y00000413.mm.1	ENSMUST00000157941	Gm23783	predicted gene, 23783	128734202	128734303	TC0700001892.mm.1	0.2	0.36493
TC0Y00000415.mm.1	NM_133737	Lancl2	LanC (bacterial lantibiotic synthetase componen	57702455	57739449	TC0600000698.mm.1	-0.1	0.365084
TC0Y00000421.mm.1	ENSMUST00000157960	Gm22963	predicted gene, 22963	10921670	10921760	TC0100000054.mm.1	0.1	0.365215
TC0Y00000422.mm.1	NM_029554	610040	RIKEN cDNA 0610040J01 gene	63812495	63899621	TC0500000584.mm.1	-0.1	0.365314
TC0Y00000424.mm.1	ENSMUST00000119293	Gm16056	predicted gene 16056	26859967	26860101	TC0500002126.mm.1	0.2	0.365347
TC0Y00000429.mm.1	NR_039586	Mir5125	microRNA 5125	23823291	23823369	TC1700000324.mm.1	0.2	0.365455
TC0Y00000430.mm.1	NM_001081265	Heatr2	HEAT repeat containing 2	139150223	139186510	TC0500001667.mm.1	0.2	0.365607
TC0Y00000439.mm.1	ENSMUST00000122505	Gm24592	predicted gene, 24592	120381034	120381139	TC0600003040.mm.1	-0.6	0.365772
TC0Y00000440.mm.1	ENSMUST00000083352	Gm23727	predicted gene, 23727	78911167	78911330	TC0600000880.mm.1	0.1	0.365858
TC0Y00000441.mm.1	NM_172796	Slfn9	schlafen 9	82979629	82991830	TC1100003379.mm.1	-0.1	0.365862
TC0Y00000450.mm.1	ENSMUST00000104589	Gm22372	predicted gene, 22372	106426712	106426847	TC0700001563.mm.1	0.1	0.365866
TC0Y00000456.mm.1	NM_019875	Abcb9	ATP-binding cassette, sub-family B (MDR/TAP), m	124061530	124095798	TC0500003247.mm.1	0.0	0.365901
TC0Y00000457.mm.1	ENSMUST00000139695	Gm14798	predicted gene 14798	94028854	94099304	TC0X00000892.mm.1	-0.1	0.365926
TC0Y00000463.mm.1	ENSMUST00000116110	Gm11799	predicted gene 11799	8166894	8167353	TC0400002175.mm.1	-0.1	0.366185
TC0Y00000464.mm.1	ENSMUST00000104529	Gm25726	predicted gene, 25726	57859820	57859948	TC0600002356.mm.1	0.1	0.366246
TC0Y00000465.mm.1	NM_008233	Hdgfrp2	hepatoma-derived growth factor, related protei	56079657	56100598	TC1700000998.mm.1	-0.1	0.366319
TC0Y00000467.mm.1	NM_011680	Usf2	upstream transcription factor 2	30945248	30956803	TC0700002784.mm.1	-0.1	0.366581
TC0Y00000469.mm.1	NM_133683	Tmem19	transmembrane protein 19	115339674	115362262	TC1000002900.mm.1	0.1	0.366675
TC0Y00000470.mm.1	NM_172402	Slc25a3	solute carrier family 25, member 32	39094191	39112716	TC1500001424.mm.1	-0.1	0.366944
TC0Y00000473.mm.1	ENSMUST00000083798	Gm24492	predicted gene, 24492	84287641	84287747	TC1700002649.mm.1	-0.5	0.366985
TC0Y00000476.mm.1	ENSMUST00000157810	Gm25383	predicted gene, 25383	79161719	79161862	TC1300000954.mm.1	-0.1	0.367126

TC0Y00000477.mm.1	NM_001079690	Slc12a1	solute carrier family 12, member 1	125152505	125230002	TC0200001879.mm.1	0.5	0.367405
TC0Y00000478.mm.1	NM_013667	Slc22a2	solute carrier family 22 (organic cation transp	12584189	12628488	TC1700000124.mm.1	0.2	0.367411
TC0Y00000479.mm.1	NM_010851	Myd88	myeloid differentiation primary response gene 8	119335934	119341411	TC0900003241.mm.1	0.1	0.367415
TC0Y00000481.mm.1	NM_026772	Cdc42ep	CDC42 effector protein (Rho GTPase binding) 2	5917556	5924816	TC1900000991.mm.1	0.1	0.367456
TC0Y00000484.mm.1	ENSMUST00000122624	n-R5s30	nuclear encoded rRNA 5S 30	5324036	5324157	TC1600001159.mm.1	0.1	0.367771
TC0Y00000485.mm.1	ENSMUST00000157314	Gm23676	predicted gene, 23676	4749752	4749856	TC1200000030.mm.1	0.1	0.367985
TC0Y00000486.mm.1	ENSMUST00000158264	Gm24211	predicted gene, 24211	74728403	74728509	TC1100001048.mm.1	0.1	0.368165
TC0Y00000487.mm.1	XR_140702	Gm19409	predicted gene, 19409	30815620	30818477	TC0500000301.mm.1	0.1	0.368179
TC0Y00000488.mm.1	NR_029721	Mir196a	microRNA 196a-1	96265164	96265265	TC1100001491.mm.1	0.1	0.368424
TC0Y00000491.mm.1	NM_011030	P4ha1	procollagen-proline, 2-oxoglutarate 4-dioxygena	59323296	59373304	TC1000000531.mm.1	0.1	0.368467
TC0Y00000494.mm.1	ENSMUST00000083301	Gm22974	predicted gene, 22974	80893654	80893756	TC0500000749.mm.1	-0.3	0.368586
TC0Y00000495.mm.1	NM_053113	Ear11	eosinophil-associated, ribonuclease A family, m	51255261	51256112	TC1400002002.mm.1	0.1	0.36864
TC0Y00000497.mm.1	ENSMUST00000158791	Gm22116	predicted gene, 22116	49520029	49520169	TC1400001962.mm.1	-0.1	0.369043
TC0Y00000500.mm.1	ENSMUST00000117384	Gm14087	predicted gene 14087	120550619	120550758	TC0200001793.mm.1	0.4	0.369157
TC0Y00000502.mm.1	NM_001164488	Wars	tryptophanyl-tRNA synthetase	108860030	108894174	TC1200002359.mm.1	0.1	0.369191
TC0Y00000503.mm.1	NM_022881	Rgs18	regulator of G-protein signaling 18	144752683	144775435	TC0100003210.mm.1	0.3	0.369299
TC0Y00000506.mm.1	NM_001038015	Gnpda2	glucosamine-6-phosphate deaminase 2	69573108	69592337	TC0500002552.mm.1	-0.1	0.369309
TC0Y00000509.mm.1	NM_175398	Fam212b	family with sequence similarity 212, member B	105704599	105720842	TC0300001094.mm.1	0.0	0.369471
TC0Y00000510.mm.1	ENSMUST00000108970	Gm14401	predicted gene 14401	177074320	177087347	TC0200002746.mm.1	0.2	0.369523
TC0Y00000512.mm.1	NM_145622	Zfp71-r	zinc finger protein 71, related sequence	67705306	67729173	TC1300002259.mm.1	-0.1	0.369547
TC0Y00000516.mm.1	ENSMUST00000115821	Gm10563	predicted gene 10563	155614413	155645408	TC0400004145.mm.1	0.1	0.369649
TC0Y00000518.mm.1	NM_021793	Tmem8	transmembrane protein 8 (five membrane-spanr	26113316	26123254	TC1700000402.mm.1	0.1	0.369654
TC0Y00000520.mm.1	NM_013581	Cog1	component of oligomeric golgi complex 1	113649169	113667054	TC1100001860.mm.1	-0.1	0.369662
TC0Y00000525.mm.1	NM_001033139	AI84614	expressed sequence AI846148	7356464	7383026	TC1900001042.mm.1	0.0	0.369683
TC0Y00000529.mm.1	NM_007785	Csn1s2a	casein alpha s2-like A	87774567	87788797	TC0500000796.mm.1	0.1	0.369778
TC0Y00000533.mm.1	ENSMUST00000157666	Gm26412	predicted gene, 26412	171732060	171732114	TC0100003553.mm.1	-0.4	0.369816
TC0Y00000534.mm.1	NM_021427	Fam181b	family with sequence similarity 181, member B	93079879	93081722	TC0700001325.mm.1	0.1	0.370004
TC0Y00000536.mm.1	ENSMUST00000158299	Gm24298	predicted gene, 24298	120605537	120605596	TC1000001483.mm.1	0.4	0.37015
TC0Y00000537.mm.1	ENSMUST00000157491	Gm24063	predicted gene, 24063	117776794	117776898	TC0700001691.mm.1	0.2	0.370152
TC0Y00000544.mm.1	NM_008060	Ganab	alpha glucosidase 2 alpha neutral subunit	8898090	8916666	TC1900000165.mm.1	0.1	0.370304
TC0Y00000551.mm.1	ENSMUST00000177769	LOC1010	Y-linked testis-specific protein 1-like // Y-l	82019244	82020055	TC0Y00000502.mm.1	-0.1	0.370462
TC0Y00000552.mm.1	NM_175419	Actr5	ARP5 actin-related protein 5	158624888	158639211	TC0200002438.mm.1	0.0	0.370495
TC0Y00000563.mm.1	ENSMUST00000185135	SPRY4-I	SPRY4-IT1 conserved region 2	38594365	38594483	TC1800000405.mm.1	-0.1	0.370497
TC0Y00000565.mm.1	NR_033601	4930519	pyruvate dehydrogenase E1 alpha 1 pseudogene	28880921	28923507	TC1000001928.mm.1	-0.1	0.370674
TC1000000004.mm.1	NM_008404	Itgb2	integrin beta 2	77530252	77565708	TC1000000759.mm.1	-0.3	0.370865
TC1000000015.mm.1	NM_198019	Cep78	centrosomal protein 78	15955773	15984989	TC1900001205.mm.1	0.0	0.370943
TC1000000016.mm.1	NR_027897	610012	RIKEN cDNA 0610012G03 gene	31947051	31948521	TC1600001492.mm.1	-0.1	0.37135
TC1000000019.mm.1	ENSMUST00000082543	Gm23404	predicted gene, 23404	156455999	156456095	TC0X00003243.mm.1	-0.1	0.371418
TC1000000021.mm.1	ENSMUST00000103968	n-R5s90	nuclear encoded rRNA 5S 90	111613898	111614015	TC0900003133.mm.1	0.3	0.371645
TC1000000029.mm.1	ENSMUST00000157156	Gm23168	predicted gene, 23168	124492906	124493048	TC0700001781.mm.1	-0.1	0.371678
TC1000000031.mm.1	NCBI_Gene:640340:p	Igkv8-1	immunoglobulin kappa variable 8-16	70386672	70387238	TC0600003594.mm.1	-0.3	0.371794
TC1000000035.mm.1	NM_025710	Uqcrfs1	ubiquinol-cytochrome c reductase, Rieske iron-s	30540308	30545362	TC1300001733.mm.1	0.0	0.371865
TC1000000037.mm.1	NM_023423	Akirin1	akirin 1	123734559	123750345	TC0400003490.mm.1	-0.1	0.372003
TC1000000042.mm.1	NM_177582	Mlxip	MLX interacting protein	123394798	123457932	TC0500001416.mm.1	0.1	0.37218
TC1000000050.mm.1	ENSMUST00000117979	Gm11189	predicted gene 11189	53200684	53201058	TC1100000599.mm.1	0.1	0.372202
TC1000000056.mm.1	NM_027853	Mettl7b	methyltransferase like 7B	128958275	128960988	TC1000003169.mm.1	0.2	0.372269
TC1000000057.mm.1	NM_054045	Hist2h3	histone cluster 2, H3c2	96238108	96239127	TC0300002500.mm.1	-0.1	0.372398
TC1000000070.mm.1	NM_025622	Lgals2	lectin, galactose-binding, soluble 2	78850860	78855529	TC1500001849.mm.1	0.1	0.372439
TC1000000077.mm.1	NM_153072	Hus1b	Hus1 homolog b (S. pombe)	30946573	30947761	TC1300001739.mm.1	-0.1	0.372588
TC1000000080.mm.1	ENSMUST00000035626	4930480	RIKEN cDNA 4930480E11 gene	78369643	78371128	TC0X00000784.mm.1	-0.1	0.372595
TC1000000084.mm.1	NM_025630	Aggf1	angiogenic factor with G patch and FHA domains	95350683	95375357	TC1300002457.mm.1	-0.1	0.372775
TC1000000087.mm.1	NM_001010833	Mdc1	mediator of DNA damage checkpoint 1	35841498	35859670	TC1700000705.mm.1	-0.1	0.372822
TC1000000090.mm.1	ENSMUST00000184232	mmu-mir	mmu-mir-378d	126710282	126710391	TC1000003087.mm.1	-0.1	0.372843
TC1000000097.mm.1	NR_105841	Mir378d	microRNA mir-378d (Mir378d), microRNA.	0	0	TSUnmapped0000011	-0.1	0.372843
TC1000000100.mm.1	NR_030262	Mir539	microRNA 539	109728129	109728202	TC1200001189.mm.1	0.1	0.372911
TC1000000107.mm.1	ENSMUST00000157760	Gm24689	predicted gene, 24689	50918425	50918528	TC1400000572.mm.1	0.1	0.373042
TC1000000119.mm.1	ENSMUST00000178571	Gm9167	predicted gene 9167	33312135	33313101	TC0700000611.mm.1	-0.1	0.373085
TC1000000122.mm.1	ENSMUST00000117568	Gm11628	predicted gene 11628	102492439	102492609	TC1100003842.mm.1	0.1	0.373136
TC1000000133.mm.1	NM_025894	Psmd12	proteasome (prosome, macropain) 26S subunit,	107479484	107504362	TC1100001799.mm.1	-0.2	0.373189
TC1000000146.mm.1	XM_987009	Gm8362	predicted gene 8362	6765962	6774411	TC1400001416.mm.1	0.1	0.37323
TC1000000150.mm.1	NM_011267	Rgs16	regulator of G-protein signaling 16	153740349	153745468	TC0100001381.mm.1	-0.1	0.373397
TC1000000152.mm.1	NM_022992	Arl6ip5	ADP-ribosylation factor-like 6 interacting prot	97210689	97233315	TC0600001129.mm.1	-0.1	0.373407
TC1000000158.mm.1	NM_008231	Hdgf	hepatoma-derived growth factor	87906321	87916132	TC0300000707.mm.1	-0.1	0.373553
TC1000000164.mm.1	ENSMUST00000157322	Gm24249	predicted gene, 24249	88087188	88087251	TC0700003704.mm.1	0.1	0.373612
TC1000000165.mm.1	ENSMUST00000082987	Gm22229	predicted gene, 22229	70537814	70537921	TC0900000937.mm.1	0.1	0.373836
TC1000000174.mm.1	NM_020604	Jph1	junctophilin 1	16994938	17097889	TC0100002012.mm.1	0.1	0.373854
TC1000000177.mm.1	NR_037269	Mir466n	microRNA 466n	10513741	10513834	TC0200000196.mm.1	0.1	0.374184
TC1000000179.mm.1	ENSMUST00000166597	Trp53-p	transformation related protein 53, pseudogene	54420055	54420195	TC1700000983.mm.1	-0.2	0.374305
TC1000000192.mm.1	ENSMUST00000158005	Gm22312	predicted gene, 22312	93509573	93509702	TC0600001108.mm.1	0.1	0.374366
TC1000000193.mm.1	NM_175086	Agtr1b	angiotensin II receptor, type 1b	20314473	20367177	TC0300001708.mm.1	0.1	0.374572
TC1000000199.mm.1	NM_146757	Olfr583	olfactory receptor 583	103051300	103052259	TC0700001475.mm.1	0.1	0.374682
TC1000000202.mm.1	NM_016771	Sult1d1	sulfotransferase family 1D, member 1	87554645	87569027	TC0500002699.mm.1	0.5	0.374878
TC1000000203.mm.1	NR_046286	H2-T10	histocompatibility 2, T region locus 10	36115871	36121465	TC1700002823.mm.1	-0.1	0.374982
TC1000000205.mm.1	ENSMUST00000175489	Gm24109	predicted gene, 24109	87617399	87617501	TC0300000699.mm.1	0.1	0.375148
TC1000000208.mm.1	NCBI_Gene:238412:p	Ighv2-3	Ighv2-3 immunoglobulin heavy variable 2-3	113611184	113611617	TC1200002557.mm.1	-0.3	0.375213
TC1000000215.mm.1	ENSMUST00000104788	Mir466f	microRNA 466f-3	10471953	10472046	TC0200000100.mm.1	0.2	0.37542
TC1000000220.mm.1	ENSMUST00000164344	Gm17617	predicted gene, 17617	55132962	55133548	TC1300002049.mm.1	0.1	0.375536
TC1000000229.mm.1	NM_010871	Naip6	NLR family, apoptosis inhibitory protein 6	100281121	100317688	TC1300002532.mm.1	0.1	0.375537

TC1000000232.mm.1	NM_025464	Tmem218	transmembrane protein 218	37208333	37223211	TC0900000358.mm.1	0.1	0.375948
TC1000000240.mm.1	ENSMUST00000083138	Gm24533	predicted gene, 24533	73141485	73141680	TC0600002506.mm.1	-0.1	0.375961
TC1000000243.mm.1	ENSMUST00000099683	Gm10800	predicted gene 10800	98666547	98667301	TC0200004196.mm.1	0.1	0.376066
TC1000000244.mm.1	ENSMUST00000054878	C330006	RIKEN cDNA C330006D17 gene	7836687	7837064	TC0900001721.mm.1	0.0	0.37607
TC1000000259.mm.1	NM_001033525	Kcnk6	potassium inwardly-rectifying channel, subfamil	29221928	29232522	TC0700002718.mm.1	0.1	0.376098
TC1000000260.mm.1	ENSMUST00000157410	Gm22885	predicted gene, 22885	36162015	36162121	TC1600001563.mm.1	0.1	0.376277
TC1000000265.mm.1	ENSMUST00000116058	Rpl28-p	ribosomal protein L28, pseudogene 3	126069867	126070280	TC0400003526.mm.1	-0.2	0.376293
TC1000000266.mm.1	NM_199447	Rrp12	ribosomal RNA processing 12 homolog (S. cerevi	41862851	41896173	TC1900001512.mm.1	-0.1	0.376379
TC1000000269.mm.1	ENSMUST00000105149	Ifna13	interferon alpha 13	88643641	88644459	TC0400003009.mm.1	-0.1	0.376384
TC1000000275.mm.1	ENSMUST00000083363	Gm26123	predicted gene, 26123	65902057	65902191	TC0800000682.mm.1	-0.2	0.376603
TC1000000278.mm.1	NM_021400	Prg4	proteoglycan 4 (megakaryocyte stimulating factc	150449412	150466165	TC0100003240.mm.1	0.3	0.376679
TC1000000279.mm.1	NM_025429	Serpinb	serine (or cysteine) peptidase inhibitor, clade	32842092	32851185	TC1300001762.mm.1	-0.3	0.377305
TC1000000282.mm.1	NM_008116	Ggt1	gamma-glutamyltransferase 1	75561604	75586200	TC1000000717.mm.1	0.2	0.377371
TC1000000297.mm.1	ENSMUST00000115931	AC12514	N/A	135395	136519	TC1_GL456210_rand	-0.4	0.377491
TC1000000301.mm.1	ENSMUST00000157905	Gm23280	predicted gene, 23280	76830034	76830172	TC0X00000765.mm.1	-0.1	0.377538
TC1000000303.mm.1	NM_010209	Fh1	fumarate hydratase 1	175600374	175625635	TC0100003610.mm.1	0.1	0.377554
TC1000000312.mm.1	NM_009113	S100a13	S100 calcium binding protein A13	90514435	90524581	TC0300000800.mm.1	0.1	0.377634
TC1000000317.mm.1	NM_201372	Ccdc84	coiled-coil domain containing 84	44410159	44418021	TC0900002165.mm.1	0.0	0.377678
TC1000000324.mm.1	NM_001276684	Arc	activity regulated cytoskeletal-associated prot	74669081	74672570	TC1500001712.mm.1	-0.1	0.377816
TC1000000333.mm.1	ENSMUST00000157803	Gm22556	predicted gene, 22556	115052814	115052913	TC0800002983.mm.1	0.1	0.377988
TC1000000342.mm.1	ENSMUST00000182071	Gm9034	predicted pseudogene 9034	43821231	43822238	TC1000000407.mm.1	-0.1	0.377991
TC1000000360.mm.1	NM_029019	Stard6	StAR-related lipid transfer (START) domain cont	70472454	70501066	TC1800000758.mm.1	0.0	0.378084
TC1000000363.mm.1	ENSMUST00000180040	Gm21921	predicted gene, 21921	24795161	24796243	TC0Y00000287.mm.1	-0.1	0.378399
TC1000000364.mm.1	NR_003644	1700049	hematological and neurological expressed 1-like	71979885	71980694	TC1000002363.mm.1	-0.1	0.378414
TC1000000370.mm.1	NM_019662	Rrad	Ras-related associated with diabetes	104628066	104631321	TC0800002807.mm.1	-0.1	0.378591
TC1000000381.mm.1	NM_021898	Tsga8	testis specific gene A8	83486674	83487924	TC0X00002550.mm.1	-0.1	0.378904
TC1000000388.mm.1	NM_001033981	Hbq1b	hemoglobin, theta 1B	32286964	32287912	TC1100000337.mm.1	0.1	0.379119
TC1000000401.mm.1	ENSMUST00000100173	Gm13414	predicted gene 13414	34648895	34650362	TC0200003346.mm.1	-0.1	0.379483
TC1000000402.mm.1	ENSMUST00000104211	Gm24335	predicted gene, 24335	23290033	23290164	TC0800001886.mm.1	0.1	0.379832
TC1000000407.mm.1	NM_015808	Krtap5-	keratin associated protein 5-1	142296334	142297072	TC0700004563.mm.1	-0.1	0.379929
TC1000000409.mm.1	ENSMUST00000122575	Gm24184	predicted gene, 24184	31661331	31661431	TC0800001981.mm.1	0.1	0.379941
TC1000000413.mm.1	NR_028146	Stoml1	stomatin-like 1	58253164	58263209	TC0900000730.mm.1	0.0	0.380047
TC1000000415.mm.1	NM_021513	Thap11	THAP domain containing 11	105855103	105856950	TC0800001230.mm.1	-0.1	0.380469
TC1000000418.mm.1	ENSMUST00000082849	Gm22684	predicted gene, 22684	20033504	20033635	TC1900001238.mm.1	-0.1	0.380957
TC1000000420.mm.1	ENSMUST00000157558	Gm22215	predicted gene, 22215	80033514	80033609	TC1700001205.mm.1	-0.1	0.38096
TC1000000422.mm.1	ENSMUST00000104538	Gm22900	predicted gene, 22900	124501574	124501703	TC0300001263.mm.1	0.2	0.381151
TC1000000429.mm.1	ENSMUST00000047870	Olfr101	olfactory receptor 1015	85785474	85786489	TC0200001249.mm.1	0.1	0.381232
TC1000000435.mm.1	ENSMUST00000121854	Gm5809	predicted pseudogene 5809	22230391	22230919	TC1600000310.mm.1	-0.1	0.381355
TC1000000440.mm.1	ENSMUST00000104121	n-R5s8	nuclear encoded rRNA 5S 8	71131237	71131354	TC0X00000645.mm.1	0.1	0.381367
TC1000000468.mm.1	NM_029887	Yif1b	Yip1 interacting factor homolog B (S. cerevisia	29238323	29247593	TC0700000526.mm.1	0.1	0.381542
TC1000000484.mm.1	ENSMUST00000097166	Gm6419	predicted gene 6419	74862988	74863419	TC1000002369.mm.1	0.1	0.381544
TC1000000492.mm.1	NM_009608	Actc1	actin, alpha, cardiac muscle 1	114047282	114053548	TC0200004369.mm.1	-0.1	0.381584
TC1000000497.mm.1	ENSMUST00000158078	Gm25555	predicted gene, 25555	32804867	32804977	TC1700001850.mm.1	0.1	0.381632
TC1000000507.mm.1	ENSMUST00000157850	Gm23084	predicted gene, 23084	3648537	3648650	TC1300000010.mm.1	-0.1	0.381815
TC1000000509.mm.1	ENSMUST00000163826	Gm8374	predicted gene 8374	7362097	7365134	TC1400001425.mm.1	-0.1	0.381861
TC1000000527.mm.1	ENSMUST00000181591	Gm8177	predicted gene 8177	57135496	57136831	TC0300002021.mm.1	-0.1	0.381873
TC1000000529.mm.1	ENSMUST00000089182	Gm10231	predicted pseudogene 10231	5816054	5816700	TC1700001373.mm.1	-0.1	0.381888
TC1000000531.mm.1	NM_010382	H2-Eb1	histocompatibility 2, class II antigen E beta	34305867	34316674	TC1700002782.mm.1	-0.4	0.381905
TC1000000533.mm.1	ENSMUST00000122463	Gm8089	predicted gene 8089	107290341	107302354	TC0100002909.mm.1	-0.1	0.381937
TC1000000536.mm.1	ENSMUST00000083710	Gm25859	predicted gene, 25859	19934863	19934953	TC0200000321.mm.1	-0.1	0.382096
TC1000000539.mm.1	ENSMUST00000093693	Gm22444	predicted gene, 22444	52927070	52927177	TC0700000920.mm.1	-0.4	0.382121
TC1000000540.mm.1	NM_001033416	Gal3st4	galactose-3-O-sulfotransferase 4	138264921	138272840	TC0500003740.mm.1	-0.1	0.382127
TC1000000541.mm.1	ENSMUST00000104145	Gm23015	predicted gene, 23015	57128645	57128772	TC0500002439.mm.1	-0.1	0.382144
TC1000000543.mm.1	NCBI_Gene:380808:p	Ighv10-	immunoglobulin heavy variable 10-1	114479005	114479451	TC1200002599.mm.1	-0.3	0.382226
TC1000000546.mm.1	NCBI_Gene:668438:p	Ighv3-3	immunoglobulin heavy variable V3-3	114196439	114196875	TC1200002472.mm.1	-0.1	0.382318
TC1000000547.mm.1	NM_008199	H2-Bl	histocompatibility 2, blastocyst	36080111	36084398	TC1700001998.mm.1	0.0	0.382361
TC1000000556.mm.1	ENSMUST00000085491	Gm6822	predicted pseudogene 6822	55160740	55161053	TC0100002355.mm.1	-0.1	0.382479
TC1000000558.mm.1	NM_009451	Tubb4a	tubulin, beta 4A class IVA	57080066	57087782	TC1700002348.mm.1	-0.1	0.38258
TC1000000560.mm.1	NR_029716	Mir30c-	microRNA 30c-1	120769534	120769622	TC0400003441.mm.1	0.1	0.382585
TC1000000566.mm.1	ENSMUST00000122021	Gm14702	predicted gene 14702	68970505	68970950	TC0X00000616.mm.1	0.2	0.382774
TC1000000572.mm.1	NM_001081957	Wfdc17	WAP four-disulfide core domain 17	83703991	83706269	TC1100001264.mm.1	-0.2	0.382875
TC1000000575.mm.1	NM_010007	Cyp2j5	cytochrome P450, family 2, subfamily j, polypep	96627432	96664154	TC0400003101.mm.1	0.5	0.382961
TC1000000578.mm.1	NM_025551	Ndufa12	NADH dehydrogenase (ubiquinone) 1 alpha subc	94198955	94221443	TC1000001148.mm.1	0.1	0.383393
TC1000000592.mm.1	NM_030017	Rdh12	retinol dehydrogenase 12	79208914	79222665	TC1200000718.mm.1	-0.1	0.3835
TC1000000596.mm.1	NR_030442	Mir677	microRNA 677	128085286	128085363	TC1000001586.mm.1	-0.3	0.38352
TC1000000599.mm.1	ENSMUST00000082639	Gm25802	predicted gene, 25802	100303288	100303364	TC0300000995.mm.1	0.1	0.383593
TC1000000604.mm.1	NR_029884	Mir383	microRNA 383	38252131	38252204	TC0800002091.mm.1	0.1	0.383639
TC1000000618.mm.1	NM_001167736	Chchd6	coiled-coil-helix-coiled-coil-helix domain cont	89383146	89595652	TC0600002698.mm.1	0.1	0.383646
TC1000000636.mm.1	ENSMUST00000104762	Gm22007	predicted gene, 22007	97292019	97292108	TC1300001102.mm.1	0.2	0.383812
TC1000000653.mm.1	NM_009202	Slc22a1	solute carrier family 22 (organic cation transp	12648874	12675838	TC1700001450.mm.1	0.2	0.383981
TC1000000674.mm.1	ENSMUST00000157745	Gm22880	predicted gene, 22880	17865317	17865419	TC1900001225.mm.1	-0.1	0.384001
TC1000000683.mm.1	NM_134032	Hoxb2	homeobox B2	96350525	96354016	TC1100001500.mm.1	0.0	0.384003
TC1000000692.mm.1	ENSMUST00000184479	DLEU2_1	Deleted in lymphocytic leukemia 2 conserved re	61629093	61629206	TC1400000868.mm.1	0.1	0.384186
TC1000000697.mm.1	ENSMUST00000171906	Gm3667	predicted gene 3667	6868502	6889962	TC1400002847.mm.1	0.1	0.384351
TC1000000708.mm.1	ENSMUST00000104055	Gm23270	predicted gene, 23270	58615359	58615489	TC1800001390.mm.1	0.2	0.384446
TC1000000711.mm.1	NR_033472	Gm10768	predicted gene 10768	43838803	43840845	TC1900000637.mm.1	0.1	0.384523
TC1000000713.mm.1	ENSMUST00000082872	Gm24038	predicted gene, 24038	48230286	48230444	TC0X00000428.mm.1	0.1	0.384722
TC1000000716.mm.1	NCBI_Gene:545848:p	Igkv4-8	immunoglobulin kappa variable 4-80	69016558	69017080	TC0600003554.mm.1	-0.6	0.384747

TC1000000717.mm.1	ENSMUST00000158368	Gm22770	predicted gene, 22770	17483083	17483149	TC1600001290.mm.1	0.2	0.384937
TC1000000726.mm.1	ENSMUST00000157433	Gm26153	predicted gene, 26153	84737350	84737476	TC1600000937.mm.1	0.0	0.384938
TC1000000729.mm.1	NM_007801	Ctsh	cathepsin H	90054152	90076095	TC0900001155.mm.1	0.3	0.385345
TC1000000732.mm.1	ENSMUST00000082890	Gm22443	predicted gene, 22443	13301001	13301107	TC1900001180.mm.1	0.2	0.385522
TC1000000736.mm.1	XM_001472957	Gm20805	predicted gene, 20805	74300212	74300895	TC0Y00000465.mm.1	0.1	0.38557
TC1000000738.mm.1	NM_001013755	5730409	RIKEN cDNA 5730409E04Rik gene	126609818	126614371	TC0400001467.mm.1	-0.1	0.385592
TC1000000742.mm.1	ENSMUST00000175411	Gm25032	predicted gene, 25032	39075411	39075494	TC0900000424.mm.1	-0.1	0.385596
TC1000000743.mm.1	ENSMUST00000119395	Gm5466	predicted gene 5466	181896823	181898712	TC0200002841.mm.1	-0.1	0.385622
TC1000000753.mm.1	NM_001001176	Taf9b	TAF9B RNA polymerase II, TATA box binding pro	106206874	106221158	TC0X00002826.mm.1	0.0	0.385765
TC1000000759.mm.1	NM_001142410	Gm14124	predicted gene 14124	150257517	150270300	TC0200002215.mm.1	0.0	0.385933
TC1000000763.mm.1	NM_015809	Krtap5-	keratin associated protein 5-4	142303502	142304503	TC0700002073.mm.1	-0.1	0.386033
TC1000000765.mm.1	ENSMUST00000104379	Gm23200	predicted gene, 23200	53613067	53613198	TC1500001523.mm.1	0.1	0.386097
TC1000000768.mm.1	ENSMUST00000061681	Btg3	B cell translocation gene 3	50698525	50699880	TC1700000955.mm.1	-0.1	0.386144
TC1000000769.mm.1	NM_028333	Angptl1	angiopoietin-like 1	156838562	156861079	TC0100001425.mm.1	0.1	0.386283
TC1000000770.mm.1	ENSMUST00000034916	Gm5564	predicted gene 5564	138504712	138505951	TC0500001658.mm.1	-0.1	0.386283
TC1000000778.mm.1	NR_028271	Phxr4	per-hexamer repeat gene 4	13431361	13432751	TC0900000086.mm.1	0.1	0.386354
TC1000000782.mm.1	NM_178732	Zfp324	zinc finger protein 324	12965838	12974236	TC0700000153.mm.1	-0.1	0.386476
TC1000000783.mm.1	NM_030691	Igsf6	immunoglobulin superfamily, member 6	121064067	121074530	TC0700004207.mm.1	0.2	0.386729
TC1000000784.mm.1	ENSMUST00000082877	Gm22358	predicted gene, 22358	24811447	24811568	TC1300001668.mm.1	-0.5	0.386826
TC1000000788.mm.1	ENSMUST00000104231	Gm23744	predicted gene, 23744	155954574	155954722	TC0100001405.mm.1	-0.2	0.386919
TC1000000789.mm.1	ENSMUST00000162660	Nat8b	N-acetyltransferase 8B	85932681	85933379	TC0600002627.mm.1	-0.1	0.386987
TC1000000809.mm.1	NR_028562	Snord91	small nucleolar RNA, C/D box 91A	74905424	74905516	TC1100001052.mm.1	-0.1	0.387006
TC1000000810.mm.1	ENSMUST00000121726	Gm14581	predicted gene 14581	51629490	51629687	TC0X00002202.mm.1	-0.1	0.387232
TC1000000812.mm.1	ENSMUST00000111423	LOC6647	Sp110 nuclear body protein-like	17591	30203	TC1_GL456221_rand	-0.1	0.387327
TC1000000819.mm.1	NR_035463	Mir1942	microRNA 1942	76215611	76215673	TC1500001768.mm.1	0.1	0.38749
TC1000000824.mm.1	ENSMUST00000178362	Gm23660	predicted gene, 23660	59387953	59388031	TC0700003154.mm.1	-0.1	0.387709
TC1000000826.mm.1	NM_013930	Aass	aminoadipate-semialdehyde synthase	23072173	23132986	TC0600001926.mm.1	0.3	0.387812
TC1000000828.mm.1	ENSMUST00000116710	Gm25779	predicted gene, 25779	153013490	153013584	TC0400004100.mm.1	0.1	0.38818
TC1000000829.mm.1	NM_001024673	Ifnl2	interferon lambda 2	28508836	28510455	TC0700002699.mm.1	-0.1	0.388206
TC1000000830.mm.1	ENSMUST00000179674	Gm22638	predicted gene, 22638	38380349	38380455	TC0700000695.mm.1	-0.3	0.388264
TC1000000832.mm.1	NM_178589	Tnfrsf2	tumor necrosis factor receptor superfamily, mer	43016555	43089188	TC1700000829.mm.1	0.1	0.388291
TC1000000834.mm.1	XM_001473465	Gm4988	predicted gene 4988	61290803	61292480	TC0X00000563.mm.1	-0.1	0.388356
TC1000000835.mm.1	ENSMUST00000157600	Gm22598	predicted gene, 22598	3535485	3535611	TC1600001102.mm.1	0.1	0.388472
TC1000000839.mm.1	NM_177711	Spata31	spermatogenesis associated 31 subfamily D, mer	59725925	59731752	TC1300002123.mm.1	-0.1	0.389084
TC1000000850.mm.1	ENSMUST00000104019	Gm25609	predicted gene, 25609	137215544	137215647	TC0100003159.mm.1	-0.1	0.389424
TC1000000852.mm.1	NM_201407	Dennd4b	DENN/MADD domain containing 4B	90265185	90280669	TC0300000787.mm.1	-0.1	0.389427
TC1000000859.mm.1	ENSMUST00000158117	Gm23222	predicted gene, 23222	100500143	100500218	TC0500002838.mm.1	-0.1	0.389763
TC1000000864.mm.1	NM_026152	Hoga1	4-hydroxy-2-oxoglutarate aldolase 1	42045610	42070953	TC1900000607.mm.1	0.1	0.389832
TC1000000866.mm.1	NM_133825	D1Ertd6	DNA segment, Chr 1, ERATO Doi 622, expressed	97643902	97662074	TC0100002863.mm.1	0.0	0.389976
TC1000000869.mm.1	ENSMUST00000103990	Gm25756	predicted gene, 25756	78779859	78779994	TC0500000747.mm.1	0.2	0.390121
TC1000000871.mm.1	ENSMUST00000118518	Gm12003	predicted gene 12003	12936834	12937938	TC1100002234.mm.1	-0.1	0.390386
TC1000000877.mm.1	ENSMUST00000083774	Gm22826	predicted gene, 22826	102951949	102952113	TC0300002621.mm.1	0.1	0.390563
TC1000000884.mm.1	NM_007646	Cd38	CD38 antigen	43868809	43912375	TC0500000468.mm.1	0.4	0.390607
TC1000000885.mm.1	ENSMUST00000184593	AC15282	N/A	110674100	110674202	TC1200001212.mm.1	0.1	0.390676
TC1000000886.mm.1	NM_009343	Phf1	PHD finger protein 1	26933127	26937890	TC1700000426.mm.1	0.1	0.390849
TC1000000891.mm.1	ENSMUST00000099365	Gm10760	predicted gene 10760	76384318	76385028	TC1300002344.mm.1	-0.1	0.390888
TC1000000893.mm.1	ENSMUST00000082841	Gm25205	predicted gene, 25205	64413648	64413750	TC0600000753.mm.1	-0.2	0.390931
TC1000000894.mm.1	NM_001033217	Prickle	prickle homolog 1 (Drosophila)	93499114	93595891	TC1500002100.mm.1	-0.1	0.391205
TC1000000895.mm.1	NM_029546	Pwp2	PWP2 periodic tryptophan protein homolog (yea	78170909	78185149	TC1000002443.mm.1	-0.1	0.391214
TC1000000903.mm.1	ENSMUST00000104150	Gm23294	predicted gene, 23294	32800567	32800730	TC1700001849.mm.1	0.1	0.391277
TC1000000908.mm.1	ENSMUST00000175021	Gm24209	predicted gene, 24209	101140454	101140509	TC1100003794.mm.1	-0.3	0.391279
TC1000000909.mm.1	NM_027402	Fndc5	fibronectin type III domain containing 5	129136999	129144593	TC0400001514.mm.1	0.0	0.391309
TC1000000913.mm.1	ENSMUST00000121385	Gm12464	predicted gene 12464	100413560	100414575	TC0300000996.mm.1	0.1	0.391637
TC1000000915.mm.1	ENSMUST00000147879	Gm6963	predicted gene 6963	39424618	39424996	TC1000002021.mm.1	0.1	0.391934
TC1000000919.mm.1	ENSMUST00000118177	Gm15294	predicted gene 15294	141873409	141875235	TC0X00003093.mm.1	-0.1	0.392033
TC1000000924.mm.1	NM_009205	Slc3a1	solute carrier family 3, member 1	85028347	85064243	TC1700001268.mm.1	0.4	0.392177
TC1000000927.mm.1	NM_019435	Ndufb11	NADH dehydrogenase (ubiquinone) 1 beta subcc	20615326	20617619	TC0X00001927.mm.1	-0.2	0.392217
TC1000000936.mm.1	ENSMUST00000118325	Gm6418	predicted gene 6418	112459033	112462903	TC0X00002871.mm.1	-0.1	0.39227
TC1000000940.mm.1	NR_035486	Mir1960	microRNA 1960	30170739	30170816	TC0500000287.mm.1	0.0	0.3924
TC1000001010.mm.1	NM_009376	Ift88	intraflagellar transport 88	57424062	57517936	TC1400000817.mm.1	0.0	0.392499
TC1000001020.mm.1	ENSMUST00000184919	mmu-mir	mmu-mir-6967	26920962	26921019	TC1700000425.mm.1	0.1	0.392799
TC1000001027.mm.1	ENSMUST00000185129	mmu-mir	mmu-mir-6967	33886676	33886733	TC1700001883.mm.1	0.1	0.392799
TC1000001028.mm.1	ENSMUST00000083970	Gm26109	predicted gene, 26109	34942644	34942713	TC1800001165.mm.1	-0.3	0.392829
TC1000001029.mm.1	ENSMUST00000172625	Gm18128	predicted gene, 18128	42734409	42734919	TC0700000745.mm.1	-0.1	0.393216
TC1000001038.mm.1	NM_145553	Fam76a	family with sequence similarity 76, member A	132899213	132922558	TC0400003687.mm.1	0.0	0.393405
TC1000001048.mm.1	NM_001044704	Zscan21	zinc finger and SCAN domain containing 21	138116903	138134265	TC0500001642.mm.1	-0.1	0.393497
TC1000001053.mm.1	NCBI_Gene:434685:p	Igkv8-2	Igkv8-23-1 immunoglobulin kappa variable 8-23-	70240427	70240710	TC0600000807.mm.1	-0.2	0.393524
TC1000001063.mm.1	NCBI_Gene:619846:p	Igkv5-4	immunoglobulin kappa variable 5-48	69726573	69727125	TC0600003576.mm.1	-0.5	0.393655
TC1000001072.mm.1	NM_138950	Wdr81	WD repeat domain 81	75440943	75454717	TC1100003225.mm.1	0.0	0.393662
TC1000001079.mm.1	NM_015730	Chrna4	cholinergic receptor, nicotinic, alpha polypept	181018380	181043546	TC0200005429.mm.1	0.1	0.393664
TC1000001081.mm.1	ENSMUST00000082632	Gm24144	predicted gene, 24144	8220004	8220114	TC1500000055.mm.1	-0.3	0.393774
TC1000001084.mm.1	ENSMUST00000157812	Gm24198	predicted gene, 24198	54458162	54458269	TC1100000628.mm.1	-0.1	0.393906
TC1000001085.mm.1	ENSMUST00000116777	Gm24835	predicted gene, 24835	91252637	91252747	TC0X00002609.mm.1	0.1	0.393909
TC1000001099.mm.1	NM_010011	Cyp4a10	cytochrome P450, family 4, subfamily a, polypep	115518264	115533649	TC0400004187.mm.1	0.3	0.393941
TC1000001109.mm.1	ENSMUST00000170414	Gm17121	predicted gene 17121	7565259	7566105	TC1400000067.mm.1	0.2	0.394055
TC1000001119.mm.1	ENSMUST00000180135	Gm17222	predicted gene 17222	3210975	3211821	TC1400001359.mm.1	0.2	0.394055
TC1000001125.mm.1	NM_144543	Thyn1	thymocyte nuclear protein 1	26999677	27007334	TC0900000254.mm.1	-0.1	0.394095
TC1000001131.mm.1	NM_054048	Rcor2	REST corepressor 2	7267325	7275225	TC1900000134.mm.1	-0.1	0.394115

TC1000001138.mm.1	ENSMUST00000083027	Gm22704	predicted gene, 22704	168335700	168335836	TC0200002611.mm.1	-0.1	0.394361
TC1000001141.mm.1	ENSMUST00000179213	Gm23288	predicted gene, 23288	10490167	10490287	TC0200000142.mm.1	-0.1	0.394409
TC1000001142.mm.1	ENSMUST00000178419	Gm22166	predicted gene, 22166	10497548	10497668	TC0200000160.mm.1	-0.1	0.394409
TC1000001148.mm.1	ENSMUST00000157798	Gm22554	predicted gene, 22554	36775785	36775931	TC1000002006.mm.1	-0.2	0.394452
TC1000001153.mm.1	ENSMUST00000179052	Gm25474	predicted gene, 25474	59784293	59784386	TC0700003312.mm.1	0.1	0.394569
TC1000001162.mm.1	ENSMUST00000179176	Gm22047	predicted gene, 22047	59791844	59791937	TC0700003315.mm.1	0.1	0.394569
TC1000001170.mm.1	ENSMUST00000178411	Gm23619	predicted gene, 23619	59804471	59804564	TC0700003320.mm.1	0.1	0.394569
TC1000001174.mm.1	ENSMUST00000158399	Gm25016	predicted gene, 25016	25266045	25266175	TC1000001902.mm.1	0.1	0.394577
TC1000001175.mm.1	NR_030611	Mir598	microRNA 598	63727189	63727268	TC1400000903.mm.1	-0.1	0.394605
TC1000001190.mm.1	NM_016800	Vti1b	vesicle transport through interaction with t-SN	79156017	79172667	TC1200001979.mm.1	0.1	0.39475
TC1000001193.mm.1	ENSMUST00000083913	Gm25188	predicted gene, 25188	86100534	86100655	TC0300000677.mm.1	-0.3	0.394818
TC1000001204.mm.1	NM_001146330	Gpr52	G protein-coupled receptor 52	160576668	160577753	TC0100003361.mm.1	-0.1	0.394897
TC1000001207.mm.1	NM_001037247	Defb36	defensin beta 36	152604327	152612729	TC0200002291.mm.1	-0.1	0.394921
TC1000001216.mm.1	NM_026211	Tmed9	transmembrane emp24 protein transport domai	55592952	55597697	TC1300000667.mm.1	-0.1	0.394965
TC1000001219.mm.1	NM_001272033	AA41476	expressed sequence AA414768	12936872	12938541	TC0X00000156.mm.1	-0.1	0.394967
TC1000001220.mm.1	NM_019794	Dnaja2	DnaJ (Hsp40) homolog, subfamily A, member 2	85537640	85555368	TC0800002617.mm.1	-0.1	0.395097
TC1000001223.mm.1	NM_010925	Rrp1	ribosomal RNA processing 1 homolog (S. cerevisi	78400362	78413043	TC1000002451.mm.1	-0.2	0.395368
TC1000001224.mm.1	NM_133823	Mmaa	methylmalonic aciduria (cobalamin deficiency) t	79266424	79294956	TC0800002516.mm.1	0.0	0.39552
TC1000001239.mm.1	ENSMUST00000181607	Gm5974	predicted gene 5974	48313866	48314851	TC0100002297.mm.1	-0.1	0.395777
TC1000001244.mm.1	ENSMUST00000157710	Gm22843	predicted gene, 22843	78550746	78550879	TC0X00002515.mm.1	-0.1	0.395851
TC1000001249.mm.1	ENSMUST00000158677	Gm26208	predicted gene, 26208	24680814	24680937	TC0800000309.mm.1	0.1	0.396045
TC1000001251.mm.1	NM_170759	Zfp628	zinc finger protein 628	4915217	4922003	TC0700000048.mm.1	0.0	0.396087
TC1000001252.mm.1	ENSMUST00000082692	Gm22306	predicted gene, 22306	37282051	37282157	TC0200000684.mm.1	-0.5	0.396104
TC1000001253.mm.1	XR_105595	Gm3373	predicted gene 3373	5718334	5741602	TC1400002839.mm.1	0.1	0.396186
TC1000001259.mm.1	NCBI_Gene:238427:p	Ighv6-6	immunoglobulin heavy variable 6-6	114434788	114435244	TC1200002596.mm.1	-0.6	0.396263
TC1000001266.mm.1	XM_892661	Scgb2b1	secretoglobin, family 2B, member 10	32092145	32093939	TC0700002798.mm.1	-0.1	0.396521
TC1000001270.mm.1	ENSMUST00000083033	Gm24405	predicted gene, 24405	178636905	178637071	TC0100001693.mm.1	-0.4	0.396569
TC1000001271.mm.1	ENSMUST00000178711	Gm7929	predicted gene 7929	41747282	41750595	TC1400001807.mm.1	0.1	0.396734
TC1000001273.mm.1	ENSMUST00000158088	Gm22729	predicted gene, 22729	119306629	119306757	TC0900003240.mm.1	-0.1	0.39684
TC1000001283.mm.1	ENSMUST00000083396	Gm25755	predicted gene, 25755	65771511	65771617	TC0300002100.mm.1	-0.2	0.396857
TC1000001284.mm.1	ENSMUST00000171706	Gm3629	predicted gene 3629	6583959	6590613	TC1400002845.mm.1	0.1	0.396952
TC1000001285.mm.1	ENSMUST00000184367	AC15480	N/A	40367836	40367937	TC1600001620.mm.1	0.0	0.397022
TC1000001298.mm.1	ENSMUST00000128361	Pabpc1l	poly(A) binding protein, cytoplasmic 1-like 2A,	103066668	103067180	TC0X00002768.mm.1	-0.1	0.397232
TC1000001299.mm.1	ENSMUST00000179195	n-R5s10	nuclear encoded rRNA 5S 109	123554060	123554178	TC0800003113.mm.1	-0.4	0.39738
TC1000001301.mm.1	NM_029366	Kxd1	KxDL motif containing 1	70513396	70527956	TC0800003245.mm.1	0.1	0.397419
TC1000001304.mm.1	ENSMUST00000116930	Mir466f	microRNA 466f-4	71107089	71107209	TC1300000868.mm.1	0.2	0.397486
TC1000001316.mm.1	NR_035408	Mir669a	microRNA 669a-1	51147896	51613053	TC1700000956.mm.1	0.1	0.397686
TC1000001320.mm.1	NM_001256431	Agap3	ArfGAP with GTPase domain, ankyrin repeat and	24452177	24502047	TC0500000217.mm.1	0.0	0.397869
TC1000001325.mm.1	NM_011383	Six5	sine oculis-related homeobox 5	19094544	19098549	TC0700000287.mm.1	0.1	0.398167
TC1000001332.mm.1	ENSMUST00000104225	Gm23389	predicted gene, 23389	94615636	94615704	TC0100002841.mm.1	-0.1	0.398231
TC1000001333.mm.1	ENSMUST00000118877	Gm13082	predicted gene 13082	143671124	143671684	TC0400001833.mm.1	-0.2	0.398246
TC1000001337.mm.1	XM_894949	Gm7020	predicted gene 7020	104573547	104573897	TC1100001729.mm.1	0.1	0.398447
TC1000001471.mm.1	ENSMUST00000116879	Gm23882	predicted gene, 23882	35952824	35952907	TC1800000321.mm.1	0.2	0.398451
TC1000001480.mm.1	XM_001473011	Gm20813	predicted gene, 20813	75025392	75026075	TC0Y00000470.mm.1	0.1	0.398544
TC1000001483.mm.1	XM_001475119	Gm20860	predicted gene, 20860	86434211	86434894	TC0Y00000534.mm.1	0.1	0.398544
TC1000001489.mm.1	NM_024195	Cyb5r4	cytochrome b5 reductase 4	87022014	87077774	TC0900001123.mm.1	-0.1	0.398563
TC1000001493.mm.1	NM_019395	Fbp1	fructose bisphosphatase 1	62864753	62888282	TC1300002176.mm.1	0.4	0.398674
TC1000001504.mm.1	NM_010156	Samd9l	sterile alpha motif domain containing 9-like	3372257	3399571	TC0600001787.mm.1	0.2	0.398745
TC1000001506.mm.1	NM_013812	Cdk2ap1	CDK2 (cyclin-dependent kinase 2)-associated pro	124345417	124354671	TC0500003253.mm.1	-0.1	0.398754
TC1000001510.mm.1	NM_010477	Hspd1	heat shock protein 1 (chaperonin)	55077834	55088243	TC0100002354.mm.1	-0.1	0.398827
TC1000001526.mm.1	NM_001166493	Rasgrp3	RAS, guanyl releasing protein 3	75435905	75529054	TC1700001173.mm.1	0.3	0.398935
TC1000001532.mm.1	NM_207232	Ptpdc1	protein tyrosine phosphatase domain containing	48577872	48625573	TC1300001946.mm.1	0.0	0.398997
TC1000001542.mm.1	ENSMUST00000104553	Gm26344	predicted gene, 26344	116065788	116065919	TC0300002801.mm.1	0.1	0.399113
TC1000001544.mm.1	NM_146392	Olfr720	olfactory receptor 720	14175095	14176117	TC1400001472.mm.1	-0.1	0.399125
TC1000001546.mm.1	NR_028061	Gm8615	glucosamine-6-phosphate deaminase 1 pseudog	149154128	149156192	TC0500003651.mm.1	-0.1	0.399379
TC1000001551.mm.1	NM_026035	Mrpl55	mitochondrial ribosomal protein L55	59202486	59206134	TC1100000717.mm.1	0.1	0.399528
TC1000001556.mm.1	NM_133724	Bloc1s4	biogenesis of organelles complex-1, subunit 4,	36747374	36748679	TC0500002263.mm.1	0.1	0.399548
TC1000001575.mm.1	ENSMUST00000122559	Gm25325	predicted gene, 25325	103666542	103666627	TC0300002628.mm.1	-0.1	0.399604
TC1000001576.mm.1	ENSMUST00000083270	Gm24610	predicted gene, 24610	46359036	46359144	TC1900000698.mm.1	-0.1	0.399626
TC1000001580.mm.1	NR_035430	Mir1198	microRNA 1198	7807101	7807221	TC0X00000071.mm.1	0.1	0.399796
TC1000001585.mm.1	ENSMUST00000083410	Gm25581	predicted gene, 25581	39259631	39259794	TC0400002425.mm.1	-0.3	0.399806
TC1000001586.mm.1	NM_001166754	Vmn1r15	vomeronasal 1 receptor 157	22761697	22762590	TC0700000344.mm.1	-0.1	0.399849
TC1000001587.mm.1	ENSMUST00000175216	Gm26219	predicted gene, 26219	18361436	18361506	TC1600001315.mm.1	-0.1	0.39995
TC1000001592.mm.1	ENSMUST00000118414	Gm14870	predicted gene 14870	108893496	108893651	TC0X00001098.mm.1	-0.2	0.40003
TC1000001596.mm.1	ENSMUST00000179254	Gm22448	predicted gene, 22448	66254786	66254892	TC1600000801.mm.1	-0.3	0.400113
TC1000001598.mm.1	ENSMUST00000082988	Gm22628	predicted gene, 22628	16041046	16041152	TC1300001492.mm.1	-0.5	0.400223
TC1000001599.mm.1	ENSMUST00000174956	Gm22925	predicted gene, 22925	10510791	10510892	TC0200000190.mm.1	0.1	0.400237
TC1000001600.mm.1	ENSMUST00000090195	Gm11027	predicted gene 11027	116275386	116275612	TC1200001301.mm.1	0.1	0.400269
TC1000001601.mm.1	NM_172842	Lax1	lymphocyte transmembrane adaptor 1	133679029	133690108	TC0100003094.mm.1	-0.2	0.400489
TC1000001604.mm.1	NCBI_Gene:780938:p	Ighv8-8	Ighv8-8 immunoglobulin heavy variable 8-8	115294066	115567634	TC1200002634.mm.1	-0.4	0.4008
TC1000001606.mm.1	XM_983271	Gm7160	predicted gene 7160	105979350	105990276	TC0100002890.mm.1	0.1	0.400866
TC1000001620.mm.1	NM_010446	Foxa2	forkhead box A2	148042877	148046969	TC0200004802.mm.1	-0.1	0.400867
TC1000001622.mm.1	ENSMUST00000080066	Gm7099	predicted gene 7099	9429546	9430099	TC1200000082.mm.1	-0.1	0.400888
TC1000001624.mm.1	ENSMUST00000133235	Gm10130	predicted gene 10130	150323702	150363071	TC0200002219.mm.1	-0.1	0.400978
TC1000001625.mm.1	NM_178374	Snupn	snurportin 1	56950878	56983206	TC0900000690.mm.1	0.0	0.401002
TC1000001626.mm.1	ENSMUST00000087222	Gm3695	predicted gene 3695	81372213	81373221	TC1200002016.mm.1	-0.1	0.401204
TC1000001635.mm.1	ENSMUST00000163525	Gm3239	predicted gene 3239	4664192	4670850	TC1400000030.mm.1	0.1	0.401308
TC1000001637.mm.1	NM_026219	Uqcrb	ubiquinol-cytochrome c reductase binding prote	66900617	66905378	TC1300002236.mm.1	0.3	0.401342

TC1000001650.mm.1	NM_027196	Pold4	polymerase (DNA-directed), delta 4	4231899	4233634	TC1900000036.mm.1	0.2	0.401535
TC1000001653.mm.1	ENSMUST00000104681	Gm23728	predicted gene, 23728	69671352	69671421	TC0900000920.mm.1	0.2	0.401805
TC1000001656.mm.1	ENSMUST00000119938	Gm15238	predicted gene 15238	167776261	167777556	TC0X00001694.mm.1	0.0	0.401855
TC1000001657.mm.1	ENSMUST00000178702	Gm23771	predicted gene, 23771	29985934	29986043	TC0100000187.mm.1	-0.1	0.401858
TC1000001660.mm.1	NM_146703	Olfr144	olfactory receptor 1447	12900749	12901861	TC1900001173.mm.1	0.1	0.401893
TC1000001664.mm.1	NM_001033308	Themis2	thymocyte selection associated family member 2	132781843	132796413	TC0400003681.mm.1	0.2	0.402042
TC1000001672.mm.1	ENSMUST00000083299	n-R5s60	nuclear encoded rRNA 5S 60	67489113	67489231	TC1200001855.mm.1	0.2	0.402109
TC1000001675.mm.1	ENSMUST00000158253	Gm25868	predicted gene, 25868	135165848	135165961	TC0X00001292.mm.1	0.1	0.402153
TC1000001689.mm.1	ENSMUST00000157464	Gm22233	predicted gene, 22233	135506257	135506370	TC0X00003011.mm.1	0.1	0.402153
TC1000001694.mm.1	NR_035517	Mir2137	microRNA 2137	72992079	72992144	TC0X00000671.mm.1	0.1	0.402239
TC1000001696.mm.1	NM_025373	1110008	RIKEN cDNA 1110008L16 gene	55299577	55382533	TC1200000464.mm.1	0.1	0.402286
TC1000001702.mm.1	NR_028534	Snord88	small nucleolar RNA, C/D box 88C	44249852	44249941	TC0700000799.mm.1	-0.1	0.402358
TC1000001708.mm.1	XM_001480506	Gm4450	predicted gene 4450	98445674	98510567	TC0300002551.mm.1	0.3	0.402414
TC1000001717.mm.1	ENSMUST00000083287	Gm25793	predicted gene, 25793	153576488	153576594	TC0X00003208.mm.1	-0.2	0.402441
TC1000001735.mm.1	NM_175021	Samd4b	sterile alpha motif domain containing 4B	28399522	28436191	TC0700004642.mm.1	0.1	0.402539
TC1000001740.mm.1	NM_028123	Slc37a3	solute carrier family 37 (glycerol-3-phosphate	39334770	39377707	TC0600002121.mm.1	0.1	0.402751
TC1000001744.mm.1	ENSMUST00000158528	Gm23579	predicted gene, 23579	69994790	69994892	TC1200001881.mm.1	-0.3	0.402858
TC1000001755.mm.1	ENSMUST00000157728	Gm24014	predicted gene, 24014	57467870	57468026	TC0100000423.mm.1	-0.1	0.403034
TC1000001759.mm.1	NM_028933	Fam134c	family with sequence similarity 134, member C	101096322	101119893	TC1100003793.mm.1	-0.1	0.403148
TC1000001761.mm.1	ENSMUST00000101943	Gm25538	predicted gene, 25538	12700039	12700145	TC1200000100.mm.1	-0.2	0.403279
TC1000001764.mm.1	NM_001039202	Hdhd2	haloacid dehalogenase-like hydrolase domain co	76944115	76972902	TC1800001746.mm.1	0.1	0.403615
TC1000001767.mm.1	ENSMUST00000082733	Gm25453	predicted gene, 25453	86349586	86349692	TC1800000896.mm.1	-0.2	0.403616
TC1000001779.mm.1	ENSMUST00000083724	Gm23102	predicted gene, 23102	94869873	94869988	TC1700002763.mm.1	-0.1	0.403632
TC1000001780.mm.1	ENSMUST00000182945	Gm8955	predicted gene 8955	14428492	14435009	TC0300001664.mm.1	-0.1	0.403641
TC1000001793.mm.1	ENSMUST00000157082	Gm22999	predicted gene, 22999	118726900	118726987	TC0800001416.mm.1	0.1	0.403823
TC1000001794.mm.1	NR_030450	Mir681	microRNA 681	69763835	69763944	TC1200001876.mm.1	-0.1	0.403868
TC1000001799.mm.1	ENSMUST00000163830	Gm6611	predicted gene 6611	32923218	32924489	TC1600000455.mm.1	0.0	0.403873
TC1000001802.mm.1	ENSMUST00000158598	Gm25048	predicted gene, 25048	98423290	98423380	TC1100003676.mm.1	-0.1	0.404033
TC1000001813.mm.1	XM_984287	Gm8138	predicted gene 8138	43410827	43416350	TC1400001857.mm.1	0.1	0.404422
TC1000001838.mm.1	NM_134110	Kcne2	potassium voltage-gated channel, Isk-related su	92292389	92298133	TC1600001024.mm.1	0.1	0.40444
TC1000001846.mm.1	NM_025809	Clec14a	C-type lectin domain family 14, member a	58264720	58269258	TC1200001810.mm.1	0.1	0.40449
TC1000001848.mm.1	ENSMUST00000180655	Gm5262	predicted gene 5262	145183894	145184889	TC0100001324.mm.1	-0.1	0.404506
TC1000001853.mm.1	BC151028	Polr3c	polymerase (RNA) III (DNA directed) polypeptide	96711490	96727628	TC0300002527.mm.1	-0.1	0.404637
TC1000001857.mm.1	ENSMUST00000179103	Gm24862	predicted gene, 24862	59391690	59391768	TC0700003156.mm.1	-0.1	0.40474
TC1000001869.mm.1	ENSMUST00000179105	Gm23310	predicted gene, 23310	59514667	59514745	TC0700003214.mm.1	-0.1	0.40474
TC1000001881.mm.1	ENSMUST00000179293	Gm25461	predicted gene, 25461	59516539	59516617	TC0700003215.mm.1	-0.1	0.40474
TC1000001884.mm.1	NM_010418	Herc2	hect (homologous to the E6-AP (UBE3A) carboxy	56050155	56231800	TC0700000936.mm.1	0.1	0.405017
TC1000001885.mm.1	NM_001164290	Cuedc2	CUE domain containing 2	46329812	46338660	TC1900001600.mm.1	0.0	0.405099
TC1000001888.mm.1	ENSMUST00000093736	Gm23520	predicted gene, 23520	38798171	38798277	TC1100002541.mm.1	-0.5	0.405157
TC1000001895.mm.1	NM_016797	Stx7	syntaxin 7	24149317	24188959	TC1000000208.mm.1	0.1	0.405167
TC1000001902.mm.1	ENSMUST00000083771	Gm22829	predicted gene, 22829	66170401	66170506	TC1000002298.mm.1	-0.2	0.405181
TC1000001909.mm.1	NM_031373	Ogfr	opioid growth factor receptor	180589245	180595837	TC0200002796.mm.1	-0.1	0.405451
TC1000001917.mm.1	NR_003965	Gm10653	ribsomal protein S2 pseudogene	62841477	62868000	TC0900002467.mm.1	-0.1	0.405474
TC1000001919.mm.1	ENSMUST00000083017	Gm23412	predicted gene, 23412	83285804	83285910	TC0400002946.mm.1	-0.4	0.405477
TC1000001926.mm.1	ENSMUST00000104453	Gm24987	predicted gene, 24987	87925431	87925564	TC1800001725.mm.1	0.1	0.405723
TC1000001928.mm.1	ENSMUST00000118054	Gm15666	predicted gene 15666	105506216	105507139	TC1000002801.mm.1	0.0	0.405873
TC1000001939.mm.1	ENSMUST00000083446	Gm23095	predicted gene, 23095	33954235	33954341	TC1900000487.mm.1	-0.5	0.40609
TC1000001941.mm.1	ENSMUST00000157258	Gm23602	predicted gene, 23602	100252917	100253048	TC0100002873.mm.1	-0.1	0.406117
TC1000001950.mm.1	NM_009800	Car11	carbonic anhydrase 11	45699843	45704682	TC0700000860.mm.1	0.0	0.406329
TC1000001951.mm.1	NM_183035	Defb34	defensin beta 34	19123752	19126540	TC0800000176.mm.1	0.1	0.406335
TC1000001955.mm.1	NM_026177	1200011	RIKEN cDNA 1200011I18 gene	76086232	76110815	TC1400002439.mm.1	-0.1	0.406372
TC1000001957.mm.1	ENSMUST00000157507	Gm22586	predicted gene, 22586	64161405	64161526	TC0800000670.mm.1	0.1	0.406399
TC1000001962.mm.1	NM_001163627	Fam151b	family with sequence similarity 151, member B	92449620	92484031	TC1300002422.mm.1	0.0	0.406527
TC1000001987.mm.1	ENSMUST00000169672	Gm4535	predicted gene 4535	141406530	141407326	TC0700002050.mm.1	0.1	0.406548
TC1000001993.mm.1	ENSMUST00000082570	Gm24311	predicted gene, 24311	144013998	144014101	TC0500001744.mm.1	-0.5	0.406693
TC1000001995.mm.1	NR_030472	Mir467b	microRNA 467b	10481248	10481320	TC0200000120.mm.1	0.1	0.406713
TC1000002000.mm.1	ENSMUST00000104398	Gm24377	predicted gene, 24377	59665654	59665784	TC1200001820.mm.1	0.1	0.406782
TC1000002003.mm.1	NR_033803	6030408	RIKEN cDNA 6030408B16 gene	101293212	101297426	TC1500001069.mm.1	0.0	0.406831
TC1000002006.mm.1	uc029vkc.1	LOC4328	non-coding RNA, oocyte_clustered_small_RNA4	104067472	104475542	TC0500002885.mm.1	0.2	0.406864
TC1000002014.mm.1	ENSMUST00000182716	Gm6771	predicted gene 6771	41345997	41346997	TC1700000820.mm.1	-0.1	0.406882
TC1000002021.mm.1	NM_175300	Anapc2	anaphase promoting complex subunit 2	25272466	25285916	TC0200000406.mm.1	0.1	0.406953
TC1000002028.mm.1	ENSMUST00000185017	CR55670	N/A	25679415	25679520	TC0X00001975.mm.1	0.2	0.406977
TC1000002030.mm.1	NR_037250	Mir669a	microRNA 669a-4	10479311	10479407	TC0200000117.mm.1	-0.1	0.407038
TC1000002031.mm.1	NR_037251 // NR_	Mir669a	microRNA 669a-5 // microRNA 669a-4	10481757	10481853	TC0200000122.mm.1	-0.1	0.407038
TC1000002032.mm.1	NR_037253 // NR_	Mir669a	microRNA 669a-6 // microRNA 669a-4	10484192	10484288	TC0200000127.mm.1	-0.1	0.407038
TC1000002035.mm.1	NR_037255 // NR_	Mir669a	microRNA 669a-7 // microRNA 669a-4	10486649	10486745	TC0200000133.mm.1	-0.1	0.407038
TC1000002036.mm.1	NR_037259 // NR_	Mir669a	microRNA 669a-8 // microRNA 669a-4	10491562	10491658	TC0200000145.mm.1	-0.1	0.407038
TC1000002041.mm.1	NR_037260 // NR_	Mir669a	microRNA 4669a-9 // microRNA 669a-4	10494024	10494120	TC0200000151.mm.1	-0.1	0.407038
TC1000002042.mm.1	NR_037264 // NR_	Mir669a	microRNA 669a-10 // microRNA 669a-4	10498907	10499003	TC0200000163.mm.1	-0.1	0.407038
TC1000002043.mm.1	NR_037266 // NR_	Mir669a	microRNA 669a-11 // microRNA 669a-4	10501335	10501431	TC0200000169.mm.1	-0.1	0.407038
TC1000002046.mm.1	NR_037268 // NR_	Mir669a	microRNA 669a-12 // microRNA 669a-4	10503787	10503883	TC0200000175.mm.1	-0.1	0.407038
TC1000002050.mm.1	ENSMUST00000180032	Gm21980	predicted gene 21980	42293436	42293841	TC0400002498.mm.1	0.1	0.407044
TC1000002059.mm.1	NM_025287	Spop	speckle-type POZ protein	95414080	95493410	TC1100001461.mm.1	0.1	0.407156
TC1000002063.mm.1	ENSMUST00000159000	Gm25443	predicted gene, 25443	11695267	11695342	TC1900000229.mm.1	-0.4	0.407165
TC1000002083.mm.1	ENSMUST00000168753	Gm3170	predicted gene 3170	5738334	5739177	TC1400000049.mm.1	0.2	0.407226
TC1000002084.mm.1	ENSMUST00000177002	Gm24756	predicted gene, 24756	59337051	59337146	TC1100002849.mm.1	-0.1	0.407233
TC1000002092.mm.1	NM_001010839	Taar7f	trace amine-associated receptor 7F	24049482	24050652	TC1000000205.mm.1	0.1	0.407387
TC1000002093.mm.1	ENSMUST00000174942	Gm25747	predicted gene, 25747	113424645	113424722	TC1200002454.mm.1	0.4	0.407581

TC1000002102.mm.1	ENSMUST00000158175	Gm24075	predicted gene, 24075	18969762	18969833	TC0100002023.mm.1	0.1	0.407672
TC1000002106.mm.1	NM_203492	Mrgprg	MAS-related GPR, member G	143763710	143766993	TC0700004596.mm.1	0.0	0.408185
TC1000002108.mm.1	ENSMUST00000082488	Gm22502	predicted gene, 22502	180698063	180698169	TC0200002798.mm.1	-0.2	0.408259
TC1000002116.mm.1	NM_007644	Scarb2	scavenger receptor class B, member 2	92443873	92505608	TC0500002760.mm.1	0.1	0.408274
TC1000002117.mm.1	ENSMUST00000102021	Gm22834	predicted gene, 22834	59475622	59475700	TC0700003197.mm.1	-0.1	0.408355
TC1000002119.mm.1	ENSMUST00000120260	Gm15784	predicted gene 15784	149361686	149363147	TC0600001772.mm.1	-0.1	0.408407
TC1000002158.mm.1	NM_013871	Mapk12	mitogen-activated protein kinase 12	89130584	89140703	TC1500002038.mm.1	0.0	0.408537
TC1000002160.mm.1	ENSMUST00000179673	Gm12424	predicted gene 12424	47101032	47101478	TC0400000516.mm.1	0.3	0.408796
TC1000002175.mm.1	XR_106078	Gm20253	predicted gene, 20253	99183168	99190371	TC0100000984.mm.1	-0.1	0.408917
TC1000002181.mm.1	NM_010644	Klk1b26	kallikrein 1-related petidase b26	44012678	44016969	TC0700000787.mm.1	0.1	0.408961
TC1000002182.mm.1	NM_023764	Tollip	toll interacting protein	141874813	141918507	TC0700004548.mm.1	0.1	0.409475
TC1000002187.mm.1	ENSMUST00000083215	n-R5s86	nuclear encoded rRNA 5S 86	74059339	74059457	TC0900000996.mm.1	0.3	0.409485
TC1000002208.mm.1	ENSMUST00000083266	Gm24613	predicted gene, 24613	31258933	31259062	TC1200001592.mm.1	-0.5	0.409542
TC1000002220.mm.1	ENSMUST00000122558	Gm25321	predicted gene, 25321	109840588	109840689	TC0800002913.mm.1	-0.4	0.409572
TC1000002224.mm.1	ENSMUST00000089275	Gm10233	predicted pseudogene 10233	66044988	66045877	TC1400000943.mm.1	0.2	0.409816
TC1000002231.mm.1	ENSMUST00000103992	Gm25094	predicted gene, 25094	93335458	93335588	TC0600002759.mm.1	0.1	0.409893
TC1000002234.mm.1	NM_025550	Psmd6	proteasome (prosome, macropain) 26S subunit,	14112184	14120984	TC1400001471.mm.1	-0.1	0.409934
TC1000002248.mm.1	ENSMUST00000157200	Gm22279	predicted gene, 22279	65525701	65525793	TC0300000527.mm.1	0.1	0.409942
TC1000002256.mm.1	ENSMUST00000116905	Gm24396	predicted gene, 24396	30769471	30769563	TC1800001106.mm.1	0.2	0.410438
TC1000002259.mm.1	ENSMUST00000104441	Gm23769	predicted gene, 23769	59225723	59225843	TC1700002362.mm.1	0.1	0.410507
TC1000002264.mm.1	ENSMUST00000083373	Gm23247	predicted gene, 23247	83521156	83521262	TC1100001254.mm.1	-0.1	0.410512
TC1000002266.mm.1	ENSMUST00000117094	Gm11914	predicted gene 11914	27867149	27867655	TC0400002338.mm.1	-0.2	0.410572
TC1000002268.mm.1	NM_009467	Ugt2b5	UDP glucuronosyltransferase 2 family, polypepti	87124946	87140340	TC0500002693.mm.1	0.1	0.410592
TC1000002282.mm.1	NM_001243908	Zfp383	zinc finger protein 383	29908517	29916813	TC0700000539.mm.1	0.0	0.410702
TC1000002295.mm.1	NM_026464	Wdr55	WD repeat domain 55	36760239	36763708	TC1800000344.mm.1	-0.1	0.411064
TC1000002298.mm.1	ENSMUST00000121208	Gm12350	predicted gene 12350	34485832	34486293	TC0400000303.mm.1	-0.2	0.411084
TC1000002308.mm.1	ENSMUST00000158527	Gm22424	predicted gene, 22424	130071724	130071810	TC0200001966.mm.1	0.1	0.411378
TC1000002330.mm.1	XM_356848	Gm5218	predicted gene 5218	81499084	81512226	TC1500001923.mm.1	-0.1	0.411389
TC1000002338.mm.1	ENSMUST00000178598	Gm9825	predicted gene 9825	7981829	7983430	TC0600001842.mm.1	-0.2	0.411428
TC1000002358.mm.1	NM_029571	Kti12	KTI12 homolog, chromatin associated (S. cerevis	108847785	108849413	TC0400001158.mm.1	-0.1	0.411601
TC1000002363.mm.1	XR_001590	Atp5c1-	ATP synthase, H+ transporting, mitochondrial F1	77668929	77670403	TC1300002348.mm.1	-0.1	0.411681
TC1000002369.mm.1	NM_001126047	Sema4c	sema domain, immunoglobulin domain (Ig), tran	36548640	36558381	TC0100002187.mm.1	0.0	0.411786
TC1000002374.mm.1	ENSMUST00000175107	Gm23263	predicted gene, 23263	137184065	137184140	TC0400001700.mm.1	-0.1	0.411819
TC1000002378.mm.1	NM_028203	Wdr89	WD repeat domain 89	75630594	75669537	TC1200001938.mm.1	-0.1	0.411943
TC1000002380.mm.1	ENSMUST00000179304	Gm22510	predicted gene, 22510	59454855	59454933	TC0700003186.mm.1	-0.1	0.411946
TC1000002381.mm.1	ENSMUST00000179628	Gm26390	predicted gene, 26390	59484948	59485026	TC0700003202.mm.1	-0.1	0.411946
TC1000002383.mm.1	ENSMUST00000179449	Gm26336	predicted gene, 26336	59488689	59488767	TC0700003204.mm.1	-0.1	0.411946
TC1000002385.mm.1	XM_001478694	Gm3993	predicted gene 3993	20071882	20092359	TC1200000172.mm.1	0.1	0.411999
TC1000002388.mm.1	ENSMUST00000158382	Gm23877	predicted gene, 23877	11014762	11014890	TC0200002950.mm.1	-0.1	0.412094
TC1000002391.mm.1	NM_016680	Clasrp	CLK4-associating serine/arginine rich protein	19581043	19604468	TC0700002489.mm.1	0.0	0.412281
TC1000002394.mm.1	ENSMUST00000178415	Gm22131	predicted gene, 22131	59681055	59681148	TC0700003274.mm.1	0.1	0.412299
TC1000002398.mm.1	NM_008248	Hint1	histidine triad nucleotide binding protein 1	54866383	54870501	TC1100000637.mm.1	-0.1	0.412394
TC1000002399.mm.1	NM_009507	Vhl	von Hippel-Lindau tumor suppressor	113623959	113631633	TC0600001257.mm.1	0.1	0.412417
TC1000002400.mm.1	ENSMUST00000177732	Gm26502	predicted gene, 26502	59756514	59756607	TC0700003301.mm.1	0.1	0.412424
TC1000002405.mm.1	ENSMUST00000178931	Gm23313	predicted gene, 23313	59759026	59759119	TC0700003302.mm.1	0.1	0.412424
TC1000002418.mm.1	ENSMUST00000177977	Gm23446	predicted gene, 23446	59766611	59766704	TC0700003305.mm.1	0.1	0.412424
TC1000002422.mm.1	ENSMUST00000082416	mt-Ts2	mitochondrially encoded tRNA serine 2	11613	11741	TC0M00000015.mm.1	0.3	0.412507
TC1000002426.mm.1	NM_001198794	AB12461	cDNA sequence AB124611	21526176	21545333	TC0900000199.mm.1	-0.1	0.412518
TC1000002427.mm.1	NM_146469	Olfr138	olfactory receptor 1381	49551749	49552684	TC1100000517.mm.1	0.1	0.41254
TC1000002428.mm.1	NR_035473	Mir1950	microRNA 1950	34965396	34965469	TC1900000509.mm.1	0.1	0.412613
TC1000002430.mm.1	NM_021567	Pcbp4	poly(rC) binding protein 4	106453838	106464012	TC0900001349.mm.1	0.0	0.412857
TC1000002431.mm.1	ENSMUST00000082452	Gm26449	predicted gene, 26449	14878495	14878598	TC1200000118.mm.1	-0.1	0.412909
TC1000002435.mm.1	NM_007450	Slc25a4	solute carrier family 25 (mitochondrial carrier	46206797	46211284	TC0800002156.mm.1	0.1	0.412919
TC1000002442.mm.1	NM_001009550	Mup21	major urinary protein 21	62147832	62150863	TC0400004215.mm.1	-0.2	0.412941
TC1000002443.mm.1	ENSMUST00000119586	Gm13224	predicted gene 13224	145404306	145404399	TC0400001860.mm.1	-0.2	0.412975
TC1000002445.mm.1	NM_001077348	Plin5	perilipin 5	56111601	56117596	TC1700002314.mm.1	0.0	0.413057
TC1000002451.mm.1	NR_033611	Gm12669	glutaredoxin 3 pseudogene	91805349	91806561	TC0400003047.mm.1	0.1	0.413097
TC1000002458.mm.1	ENSMUST00000121466	Gm8722	predicted gene 8722	77757378	77758146	TC0X00002503.mm.1	-0.1	0.413289
TC1000002467.mm.1	ENSMUST00000179407	Gm22474	predicted gene, 22474	46232725	46232831	TC1700002169.mm.1	-0.5	0.413465
TC1000002475.mm.1	ENSMUST00000116762	Gm26474	predicted gene, 26474	120287726	120287847	TC0500001334.mm.1	0.1	0.413498
TC1000002476.mm.1	NM_019441	Ppt2	palmitoyl-protein thioesterase 2	34616662	34628510	TC1700002813.mm.1	0.0	0.413534
TC1000002479.mm.1	ENSMUST00000182176	Gm26956	predicted gene, 26956	11939558	11940543	TC1300000067.mm.1	-0.1	0.413636
TC1000002484.mm.1	ENSMUST00000104601	n-R5s26	nuclear encoded rRNA 5S 26	6147419	6147540	TC1700000051.mm.1	0.1	0.413966
TC1000002485.mm.1	NM_001163332	Cttnbp2	CTTNBP2 N-terminal like	105001915	105053146	TC0300002665.mm.1	0.1	0.414318
TC1000002493.mm.1	ENSMUST00000175414	Gm25035	predicted gene, 25035	74586896	74586972	TC0100002587.mm.1	0.2	0.414383
TC1000002495.mm.1	NM_011299	Rps6ka2	ribosomal protein S6 kinase, polypeptide 2	7170115	7303316	TC1700000070.mm.1	0.0	0.414417
TC1000002498.mm.1	NCBI_Gene:546244:p	Igkv4-6	immunoglobulin kappa chain variable 4-61	69416893	69417425	TC0600003565.mm.1	-0.6	0.414473
TC1000002499.mm.1	ENSMUST00000157879	Gm26490	predicted gene, 26490	89182981	89183120	TC0400003031.mm.1	0.1	0.414473
TC1000002504.mm.1	ENSMUST00000158328	Gm24942	predicted gene, 24942	63032706	63032819	TC0100000514.mm.1	0.0	0.414588
TC1000002505.mm.1	ENSMUST00000183866	mmu-mir	mmu-mir-7667	29595538	29595600	TC1700000507.mm.1	0.1	0.414653
TC1000002506.mm.1	NM_007668	Cdk5	cyclin-dependent kinase 5	24418241	24423530	TC0500002077.mm.1	0.1	0.414761
TC1000002509.mm.1	NM_025475	Haus2	HAUS augmin-like complex, subunit 2	120609383	120621560	TC0200001797.mm.1	-0.1	0.414777
TC1000002514.mm.1	NM_001122822	Wrn	Werner syndrome homolog (human)	33234373	33385527	TC0800002004.mm.1	-0.1	0.414911
TC1000002516.mm.1	NM_026378	Dalrd3	DALR anticodon binding domain containing 3	108569892	108572774	TC0900001416.mm.1	-0.1	0.415128
TC1000002518.mm.1	NM_178376	Rraga	Ras-related GTP binding A	86575668	86577285	TC0400000867.mm.1	-0.1	0.415196
TC1000002522.mm.1	ENSMUST00000117317	Gm5187	predicted gene 5187	107205076	107206066	TC1200002333.mm.1	-0.1	0.41521
TC1000002524.mm.1	ENSMUST00000067523	Gm9945	predicted gene 9945	53480166	53481097	TC1100000606.mm.1	-0.1	0.415456
TC1000002527.mm.1	NR_027478	Gm8580	ribosomal protein L29 pseudogene	93665244	93665854	TC1000002697.mm.1	-0.3	0.415549

TC1000002534.mm.1	BC117079	Tmem256	transmembrane protein 256	69838514	69839618	TC1100000925.mm.1	-0.1	0.415678
TC1000002545.mm.1	ENSMUST00000165619	Gm3252	predicted gene 3252	4726775	4747493	TC1400002792.mm.1	0.1	0.415762
TC1000002551.mm.1	NM_001164099	Add3	adducin 3 (gamma)	53140443	53247399	TC1900000748.mm.1	0.2	0.416183
TC1000002552.mm.1	NR_035473	Mir1950	microRNA 1950	40529091	40910666	TC0600002140.mm.1	0.3	0.416223
TC1000002554.mm.1	NM_019720	Cyb561d	cytochrome b-561 domain containing 2	107539011	107542118	TC0900003033.mm.1	-0.1	0.416357
TC1000002555.mm.1	ENSMUST00000083387	Gm22057	predicted gene, 22057	138303307	138303413	TC0X00003053.mm.1	-0.5	0.416747
TC1000002556.mm.1	NM_001081236	2410131	RIKEN cDNA 2410131K14 gene	118245227	118266093	TC0500001308.mm.1	0.1	0.416803
TC1000002557.mm.1	ENSMUST00000157820	Gm23557	predicted gene, 23557	93573731	93573868	TC0X00002635.mm.1	-0.1	0.416911
TC1000002562.mm.1	ENSMUST00000158545	Gm22431	predicted gene, 22431	56535971	56536077	TC1400000807.mm.1	0.1	0.416968
TC1000002570.mm.1	ENSMUST00000175007	Gm22175	predicted gene, 22175	113425150	113425227	TC1200002456.mm.1	0.5	0.416988
TC1000002594.mm.1	ENSMUST00000104475	Gm26144	predicted gene, 26144	56678904	56679035	TC0400002701.mm.1	0.1	0.417016
TC1000002600.mm.1	ENSMUST00000087819	Olfr143	olfactory receptor 1432	12228615	12229544	TC1900001158.mm.1	-0.1	0.417042
TC1000002605.mm.1	ENSMUST00000083278	Gm26264	predicted gene, 26264	81638311	81638469	TC0600000898.mm.1	-0.2	0.417185
TC1000002607.mm.1	ENSMUST00000185088	RP23-51	N/A	14529625	14530066	TC0700002386.mm.1	0.1	0.417198
TC1000002611.mm.1	NM_010590	Ajuba	ajuba LIM protein	54567469	54577661	TC1400002059.mm.1	-0.1	0.417457
TC1000002612.mm.1	ENSMUST00000083094	Gm25200	predicted gene, 25200	118120954	118121083	TC0800001413.mm.1	-0.1	0.417466
TC1000002628.mm.1	NCBI_Gene:639510:p	Ighv6-5	immunoglobulin heavy variable V6-5	114416596	114416895	TC1200002475.mm.1	-0.2	0.417556
TC1000002631.mm.1	NM_021604	Agrn	agrin	156165290	156197488	TC0400004170.mm.1	0.0	0.417597
TC1000002632.mm.1	ENSMUST00000183429	AC10921	N/A	39431507	39431613	TC0700000702.mm.1	0.3	0.417784
TC1000002639.mm.1	ENSMUST00000083438	Gm22741	predicted gene, 22741	20745308	20745472	TC1600000293.mm.1	0.1	0.417871
TC1000002642.mm.1	NM_017372	Lyz2	lysozyme 2	117277333	117282274	TC1000002929.mm.1	0.4	0.417909
TC1000002648.mm.1	NM_001163064	AU04113	expressed sequence AU041133	82128013	82153065	TC1000000919.mm.1	-0.1	0.418175
TC1000002650.mm.1	NM_178741	Klhl8	kelch-like 8	103861973	103911259	TC0500002879.mm.1	0.0	0.418245
TC1000002657.mm.1	NM_011399	Slc25a1	solute carrier family 25 (mitochondrial carrier	81318916	81360767	TC1500001919.mm.1	0.1	0.418357
TC1000002660.mm.1	ENSMUST00000104421	Gm25795	predicted gene, 25795	157299490	157299621	TC0X00003247.mm.1	0.2	0.418587
TC1000002662.mm.1	NM_144785	Slc22a1	solute carrier family 22 (organic anion transpo	7673061	7711310	TC1900001053.mm.1	0.2	0.418682
TC1000002671.mm.1	NM_008508	Lor	loricrin	92080271	92083142	TC0300002382.mm.1	-0.2	0.419069
TC1000002687.mm.1	NM_020011	Sphk2	sphingosine kinase 2	45709463	45718002	TC0700003017.mm.1	0.0	0.419143
TC1000002696.mm.1	ENSMUST00000104518	n-R5s72	nuclear encoded rRNA 5S 72	90185009	90185127	TC1100003527.mm.1	0.1	0.419309
TC1000002697.mm.1	NM_001122820	Ap3m2	adaptor-related protein complex 3, mu 2 subunit	22787354	22805654	TC0800001875.mm.1	0.1	0.419613
TC1000002703.mm.1	NM_001159645	Araf	v-raf murine sarcoma 3611 viral oncogene homc	20797814	20860521	TC0X00000216.mm.1	0.1	0.419666
TC1000002721.mm.1	ENSMUST00000162990	Gm10171	predicted gene 10171	172144272	172144901	TC0100003562.mm.1	0.2	0.420094
TC1000002729.mm.1	NM_026655	2310057	RIKEN cDNA 2310057M21 gene	131342718	131362706	TC0700004397.mm.1	-0.1	0.420094
TC1000002731.mm.1	NM_011669	Usp12	ubiquitin specific peptidase 12	146734809	146795006	TC0500003615.mm.1	0.0	0.420199
TC1000002745.mm.1	NM_020275	Tnfrsf1	tumor necrosis factor receptor superfamily, mer	69767472	69784411	TC1400000986.mm.1	0.1	0.420433
TC1000002759.mm.1	NM_177646	Dgkd	diacylglycerol kinase, delta	87853287	87944489	TC0100000829.mm.1	-0.1	0.420652
TC1000002774.mm.1	NM_001042699	Syne3	spectrin repeat containing, nuclear envelope fa	104929933	105009809	TC1200002299.mm.1	0.0	0.420677
TC1000002789.mm.1	ENSMUST00000178332	Gm21882	predicted gene, 21882	40380441	40381523	TC0Y00000326.mm.1	-0.1	0.420702
TC1000002791.mm.1	NM_001013371	Dtx3l	deltex 3-like (Drosophila)	35926511	35939151	TC1600001557.mm.1	-0.1	0.42078
TC1000002793.mm.1	ENSMUST00000135240	Gm15409	predicted gene 15409	148959278	148961712	TC0500001832.mm.1	-0.1	0.420796
TC1000002801.mm.1	NM_001201389	Gm11128	predicted gene 11128	85808044	85810040	TC0600003599.mm.1	0.2	0.420832
TC1000002807.mm.1	ENSMUST00000167348	Gm17678	predicted gene, 17678	133701639	133701881	TC0100003095.mm.1	-0.2	0.420887
TC1000002809.mm.1	NM_007600	Capn1	calpain 1	5988545	6015825	TC1900000995.mm.1	-0.1	0.421254
TC1000002822.mm.1	ENSMUST00000170967	Rb1	retinoblastoma 1	73238546	73239786	TC1400002387.mm.1	-0.1	0.421306
TC1000002845.mm.1	ENSMUST00000121643	Gm7618	predicted pseudogene 7618	148900968	148901138	TC0600003472.mm.1	-0.4	0.421307
TC1000002886.mm.1	NM_026183	Slc47a1	solute carrier family 47, member 1	61343400	61378345	TC1100002909.mm.1	0.2	0.421325
TC1000002897.mm.1	ENSMUST00000075723	Gm13493	predicted gene 13493	51871124	51871618	TC0200003524.mm.1	-0.1	0.421338
TC1000002900.mm.1	NM_001142655	Arpp19	cAMP-regulated phosphoprotein 19	75037614	75060313	TC0900001008.mm.1	0.0	0.421526
TC1000002909.mm.1	ENSMUST00000179019	n-R5s11	nuclear encoded rRNA 5S 115	123564286	123564404	TC0800003119.mm.1	-0.4	0.421567
TC1000002916.mm.1	ENSMUST00000158605	Gm22203	predicted gene, 22203	38176614	38176671	TC0700002877.mm.1	0.1	0.421815
TC1000002920.mm.1	NM_023312	Ndufa13	NADH dehydrogenase (ubiquinone) 1 alpha subc	69894180	69902558	TC0800002376.mm.1	0.1	0.42192
TC1000002921.mm.1	ENSMUST00000158123	Gm23219	predicted gene, 23219	78824387	78824473	TC1100001168.mm.1	0.2	0.421973
TC1000002924.mm.1	ENSMUST00000104073	Gm24431	predicted gene, 24431	106990402	106990467	TC1300002620.mm.1	0.2	0.422263
TC1000002926.mm.1	NM_011449	Spa17	sperm autoantigenic protein 17	37603292	37613720	TC0900002053.mm.1	0.1	0.422277
TC1000002929.mm.1	ENSMUST00000116899	Gm22715	predicted gene, 22715	102487199	102487291	TC0800002782.mm.1	0.1	0.422304
TC1000002930.mm.1	ENSMUST00000082776	Gm22950	predicted gene, 22950	171733299	171733405	TC0100003554.mm.1	-0.4	0.422342
TC1000002939.mm.1	NM_008918	Ppy	pancreatic polypeptide	102099930	102101319	TC1100003822.mm.1	-0.1	0.422518
TC1000002943.mm.1	ENSMUST00000177749	Gm21912	predicted gene, 21912	54489128	54489811	TC0Y00000382.mm.1	0.1	0.422641
TC1000002944.mm.1	ENSMUST00000177558	Gm21819	predicted gene, 21819	56323637	56324320	TC0Y00000391.mm.1	0.1	0.422641
TC1000002985.mm.1	ENSMUST00000157617	Gm25913	predicted gene, 25913	31858458	31858592	TC1200000274.mm.1	-0.1	0.422707
TC1000002986.mm.1	ENSMUST00000182835	Gm5839	predicted gene 5839	48626704	48627710	TC1800000500.mm.1	-0.1	0.422954
TC1000002987.mm.1	ENSMUST00000078739	Gm17383	predicted gene, 17383	82338774	82339816	TC1800000867.mm.1	0.1	0.423048
TC1000002988.mm.1	ENSMUST00000091776	Bhmt	betaine-homocysteine methyltransferase	87756286	87758143	TC1800000904.mm.1	-0.1	0.423136
TC1000002989.mm.1	NM_018793	Tyk2	tyrosine kinase 2	21104068	21131275	TC0900001858.mm.1	-0.1	0.423241
TC1000002990.mm.1	ENSMUST00000116947	Gm22033	predicted gene, 22033	126377139	126377231	TC0400001462.mm.1	0.2	0.423247
TC1000002998.mm.1	NR_030150	Mir466	microRNA 466	10507918	10507990	TC0200000182.mm.1	0.1	0.423273
TC1000003007.mm.1	ENSMUST00000179335	Gm23694	predicted gene, 23694	70027982	70028091	TC0600002447.mm.1	-0.1	0.423301
TC1000003018.mm.1	NM_021888	Qtrt1	queuine tRNA-ribosyltransferase 1	21411837	21420279	TC0900000196.mm.1	0.0	0.423554
TC1000003019.mm.1	NM_001163672	Mapk9	mitogen-activated protein kinase 9	49846751	49886421	TC1100000527.mm.1	0.1	0.423582
TC1000003026.mm.1	NM_025903	Ifrd2	interferon-related developmental regulator 2	107587718	107593038	TC0900001377.mm.1	0.0	0.4236
TC1000003036.mm.1	ENSMUST00000157478	Gm23993	predicted gene, 23993	8242723	8242866	TC0500000047.mm.1	-0.1	0.423626
TC1000003047.mm.1	ENSMUST00000157415	Gm23329	predicted gene, 23329	60807739	60807846	TC0800002287.mm.1	0.1	0.423864
TC1000003049.mm.1	NM_010170	F2rl2	coagulation factor II (thrombin) receptor-like	95696853	95702768	TC1300001081.mm.1	0.1	0.423925
TC1000003078.mm.1	ENSMUST00000108743	Gm10999	predicted gene 10999	129129097	129131661	TC0800003213.mm.1	0.1	0.423974
TC1000003087.mm.1	ENSMUST00000157958	Gm22965	predicted gene, 22965	122506789	122506889	TC0500001396.mm.1	0.1	0.424028
TC1000003089.mm.1	NM_177838	Fam163a	family with sequence similarity 163, member A	156075956	156205026	TC0100003315.mm.1	0.0	0.424065
TC1000003090.mm.1	ENSMUST00000157283	Gm22034	predicted gene, 22034	102953415	102953548	TC0100002877.mm.1	-0.1	0.424108
TC1000003096.mm.1	ENSMUST00000180275	Gm24518	predicted gene, 24518	59728681	59728774	TC0700003290.mm.1	0.1	0.424217

TC1000003103.mm.1	NR_035496	Mir1946	microRNA 1946b	96080596	96148402	TC0300000922.mm.1	0.2	0.424246
TC1000003105.mm.1	ENSMUST00000104306	Gm23595	predicted gene, 23595	107164977	107165106	TC0900001362.mm.1	0.1	0.424266
TC1000003112.mm.1	ENSMUST00000121030	Gm12804	predicted gene 12804	111290118	111291116	TC0400001184.mm.1	-0.1	0.424635
TC1000003117.mm.1	NM_023860	Krtap5-	keratin associated protein 5-3	142201364	142203015	TC0700002069.mm.1	-0.1	0.424654
TC1000003120.mm.1	ENSMUST00000184969	Gm20624	predicted gene 20624	15319972	15320260	TC0700002404.mm.1	-0.1	0.424744
TC1000003123.mm.1	NM_011507	Suclg2	succinate-Coenzyme A ligase, GDP-forming, beta	95473009	95718846	TC0600002783.mm.1	0.1	0.424786
TC1000003132.mm.1	ENSMUST00000184583	AC14033	N/A	38086202	38086317	TC1300000441.mm.1	-0.1	0.42482
TC1000003135.mm.1	ENSMUST00000175412	Gm25033	predicted gene, 25033	35081910	35081979	TC0700000649.mm.1	0.3	0.424959
TC1000003140.mm.1	ENSMUST00000116741	Gm23785	predicted gene, 23785	29361275	29361370	TC0100002110.mm.1	0.1	0.425056
TC1000003141.mm.1	ENSMUST00000104444	Gm23266	predicted gene, 23266	71233807	71233940	TC1100003127.mm.1	0.0	0.425086
TC1000003145.mm.1	ENSMUST00000082648	Gm25135	predicted gene, 25135	43454255	43454397	TC1700000834.mm.1	0.1	0.425202
TC1000003148.mm.1	ENSMUST00000178309	AC13244	N/A	32239	47294	TC1_GL456221_rand	-0.3	0.425738
TC1000003152.mm.1	ENSMUST00000104083	Gm22781	predicted gene, 22781	3796447	3796583	TC0400002125.mm.1	0.1	0.426054
TC1000003153.mm.1	NM_021334	Itgax	integrin alpha X	128129547	128150657	TC0700001876.mm.1	0.2	0.426063
TC1000003155.mm.1	NM_153419	Grwd1	glutamate-rich WD repeat containing 1	45825223	45830944	TC0700003024.mm.1	0.0	0.426096
TC1000003158.mm.1	ENSMUST00000118953	Gm13744	predicted gene 13744	87559920	87560769	TC0200003985.mm.1	0.1	0.426449
TC1000003159.mm.1	NM_199197	Rbfa	ribosome binding factor A	80192264	80200658	TC1800001654.mm.1	-0.1	0.42649
TC1000003162.mm.1	NM_010781	Tpsb2	tryptase beta 2	25366333	25368094	TC1700000374.mm.1	0.1	0.426702
TC1000003164.mm.1	NM_009894	Cideb	cell death-inducing DNA fragmentation factor, a	55754045	55758458	TC1400002101.mm.1	0.1	0.426875
TC1000003169.mm.1	NM_026423	Mri1	methylthioribose-1-phosphate isomerase homol	84249906	84257326	TC0800002579.mm.1	0.0	0.426973
TC1000003171.mm.1	NM_153159	Zc3h12a	zinc finger CCCH type containing 12A	125118414	125127881	TC0400003522.mm.1	-0.1	0.427022
TC1000003176.mm.1	NM_133772	Ssbp4	single stranded DNA binding protein 4	70597490	70608872	TC0800002398.mm.1	-0.1	0.427309
TC1000003182.mm.1	ENSMUST00000073080	Cycs	cytochrome c, somatic	24875686	24876634	TC1900000398.mm.1	0.2	0.427457
TC1000003183.mm.1	NM_001145863	Gm14139	predicted gene 14139	150181755	150193279	TC0200002213.mm.1	0.1	0.4275
TC1000003185.mm.1	NM_027438	Pnma1	paraneoplastic antigen MA1	84146131	84148489	TC1200002069.mm.1	0.0	0.427572
TC1000003191.mm.1	NM_029269	Spp2	secreted phosphoprotein 2	88406961	88426438	TC0100000847.mm.1	0.2	0.427773
TC1000003211.mm.1	NM_030712	Cxcr6	chemokine (C-X-C motif) receptor 6	123806477	123811754	TC0900001672.mm.1	-0.1	0.427798
TC1000003212.mm.1	NM_030252	Smim12	small integral membrane protein 12	127243784	127247809	TC0400001487.mm.1	0.1	0.428136
TC1000003213.mm.1	NM_198113	Ssh3	slingshot homolog 3 (Drosophila)	4261668	4269172	TC1900000913.mm.1	0.0	0.428207
TC1000003214.mm.1	ENSMUST00000184669	U6	U6 spliceosomal RNA	84703262	84703362	TC0200001219.mm.1	0.1	0.428338
TC1000003218.mm.1	ENSMUST00000158776	Gm24880	predicted gene, 24880	70752416	70752500	TC0700001045.mm.1	-0.1	0.42859
TC1000003220.mm.1	NM_001085548	Krtap4-	keratin associated protein 4-9	99785200	99786258	TC1100001600.mm.1	0.1	0.429132
TC1000003221.mm.1	NM_016858	Rab33b	RAB33B, member of RAS oncogene family	51483966	51496228	TC0300000360.mm.1	-0.1	0.429423
TC1000003222.mm.1	ENSMUST00000082808	Gm24705	predicted gene, 24705	54581177	54581283	TC1400000752.mm.1	-0.2	0.429499
TC1000003224.mm.1	NM_001081316	Dsel	dermatan sulfate epimerase-like	111858702	111864918	TC0100002921.mm.1	0.1	0.429749
TC1000003225.mm.1	ENSMUST00000120494	Gm14395	predicted gene 14395	7535571	7536133	TC0X00001775.mm.1	-0.1	0.42975
TC1100000023.mm.1	NM_001252463	Mlst8	MTOR associated protein, LST8 homolog (S. cere	24473550	24479078	TC1700001631.mm.1	-0.1	0.429811
TC1100000024.mm.1	ENSMUST00000178307	Gm26501	predicted gene, 26501	95100201	95100307	TC0600002780.mm.1	-0.5	0.429993
TC1100000027.mm.1	ENSMUST00000083836	Gm22155	predicted gene, 22155	6924118	6924279	TC0600001835.mm.1	-0.3	0.430206
TC1100000028.mm.1	ENSMUST00000180190	Gm23523	predicted gene, 23523	170751717	170751823	TC0100003514.mm.1	-0.4	0.430315
TC1100000029.mm.1	NM_008548	Man1a	mannosidase 1, alpha	53904788	54075796	TC1000002175.mm.1	0.2	0.430441
TC1100000031.mm.1	ENSMUST00000083216	Gm22251	predicted gene, 22251	13209702	13209808	TC1800001003.mm.1	-0.3	0.430468
TC1100000036.mm.1	NM_026879	Chmp2b	charged multivesicular body protein 2B	65539129	65562726	TC1600001847.mm.1	-0.1	0.430664
TC1100000039.mm.1	ENSMUST00000157716	Gm25465	predicted gene, 25465	36359218	36359322	TC1600000515.mm.1	-0.1	0.430738
TC1100000045.mm.1	NM_007763	Crip1	cysteine-rich protein 1 (intestinal)	113152012	113153879	TC1200001282.mm.1	-0.2	0.430844
TC1100000047.mm.1	NCBI_Gene:780792:p	Ighv5-1	immunoglobulin heavy variable 5-15	113826646	113827121	TC1200002570.mm.1	-0.2	0.430966
TC1100000049.mm.1	ENSMUST00000095920	Gm11360	predicted gene 11360	27956155	27956415	TC1300000307.mm.1	-0.1	0.431173
TC1100000065.mm.1	NM_001031667	Gsk3a	glycogen synthase kinase 3 alpha	25228258	25237851	TC0700002627.mm.1	-0.1	0.431234
TC1100000072.mm.1	NM_001081237	Klhl42	kelch-like 42	147091075	147112778	TC0600001744.mm.1	-0.1	0.431276
TC1100000081.mm.1	NM_023175	Nit2	nitrilase family, member 2	57156665	57167332	TC1600001757.mm.1	0.1	0.431371
TC1100000085.mm.1	NM_009028	Rasl2-9	RAS-like, family 2, locus 9	5124938	5125952	TC0700002186.mm.1	-0.1	0.43141
TC1100000092.mm.1	ENSMUST00000082783	Gm24208	predicted gene, 24208	13163629	13163763	TC1200001434.mm.1	-0.2	0.431876
TC1100000095.mm.1	NM_172256	Dync2li	dynein cytoplasmic 2 light intermediate chain 1	84626496	84655579	TC1700001264.mm.1	0.1	0.431883
TC1100000098.mm.1	ENSMUST00000064353	Gm8174	predicted gene 8174	10560524	10561524	TC1500001206.mm.1	-0.1	0.432245
TC1100000106.mm.1	NM_145371	Eif2b1	eukaryotic translation initiation factor 2B, su	124570213	124579131	TC0500003261.mm.1	-0.1	0.432362
TC1100000112.mm.1	NM_183025	A430033	RIKEN cDNA A430033K04 gene	138622859	138648917	TC0500001662.mm.1	0.0	0.432515
TC1100000129.mm.1	ENSMUST00000104137	Gm25833	predicted gene, 25833	68532744	68532876	TC0600000799.mm.1	0.1	0.432948
TC1100000140.mm.1	ENSMUST00000122352	Gm11953	predicted gene 11953	3951714	3952716	TC1100000027.mm.1	0.1	0.432961
TC1100000143.mm.1	ENSMUST00000175035	Gm26195	predicted gene, 26195	9670941	9671041	TC0900001740.mm.1	0.2	0.433013
TC1100000149.mm.1	NR_030565	Mir466b	microRNA 466b-3	10503565	10503645	TC0200000174.mm.1	0.1	0.433253
TC1100000151.mm.1	NM_009466	Ugdh	UDP-glucose dehydrogenase	65413202	65435946	TC0500002486.mm.1	0.1	0.433289
TC1100000152.mm.1	ENSMUST00000119663	Gm4760	predicted gene 4760	143183508	143184537	TC0X00003112.mm.1	-0.1	0.433643
TC1100000158.mm.1	NR_039578	Mir5118	microRNA 5118	55494731	55494797	TC1600000735.mm.1	-0.1	0.433863
TC1100000176.mm.1	NR_039578	Mir5118	microRNA 5118	0	0	TSUnmapped0000011	-0.1	0.433863
TC1100000182.mm.1	NM_028360	Ttc19	tetratricopeptide repeat domain 19	62281473	62328451	TC1100000794.mm.1	0.1	0.433924
TC1100000185.mm.1	ENSMUST00000119895	Gm14588	predicted gene 14588	43473783	43473954	TC0X00002127.mm.1	-0.1	0.433934
TC1100000187.mm.1	NM_031193	Ren2	renin 2 tandem duplication of Ren1	133350510	133360325	TC0100001206.mm.1	0.1	0.433957
TC1100000197.mm.1	NM_133894	Ugt2b38	UDP glucuronosyltransferase 2 family, polypepti	87409939	87424203	TC0500002696.mm.1	0.3	0.434166
TC1100000228.mm.1	NM_025526	Iscu	IscU iron-sulfur cluster scaffold homolog (E. c	113772748	113778288	TC0500001210.mm.1	0.1	0.434171
TC1100000230.mm.1	ENSMUST00000158396	Gm25012	predicted gene, 25012	40009902	40010065	TC1400000405.mm.1	0.1	0.434176
TC1100000231.mm.1	NM_172371	Slc16a1	solute carrier family 16 (monocarboxylic acid t	70216789	70220994	TC1100003086.mm.1	0.1	0.434269
TC1100000245.mm.1	NM_211358	Slc35c1	solute carrier family 35, member C1	92452764	92460538	TC0200004141.mm.1	0.0	0.434409
TC1100000262.mm.1	ENSMUST00000122754	Gm22985	predicted gene, 22985	88526679	88526794	TC0900002800.mm.1	0.1	0.434722
TC1100000266.mm.1	ENSMUST00000122568	Gm22480	predicted gene, 22480	49491351	49491478	TC0300000347.mm.1	-0.2	0.434941
TC1100000268.mm.1	XR_032476	Gm10693	predicted pseudogene 10693	3860681	3869170	TC0700002140.mm.1	0.0	0.434953
TC1100000271.mm.1	NM_173436	Cypt2	cysteine-rich perinuclear theca 2	105499772	105500639	TC0X00001059.mm.1	0.1	0.435295
TC1100000284.mm.1	ENSMUST00000082645	Gm25796	predicted gene, 25796	45817736	45817898	TC0300000339.mm.1	0.1	0.435318
TC1100000285.mm.1	NM_001033246	Ccdc110	coiled-coil domain containing 110	45934619	45944145	TC0800000523.mm.1	-0.1	0.435369

TC1100000292.mm.1	ENSMUST00000082624	Gm24620	predicted gene, 24620	46767520	46767649	TC1300001923.mm.1	0.4	0.435696
TC1100000306.mm.1	ENSMUST00000083080	Gm23509	predicted gene, 23509	93138030	93138189	TC1400002537.mm.1	0.1	0.435807
TC1100000307.mm.1	ENSMUST00000082897	Gm25698	predicted gene, 25698	16732605	16732711	TC1100002244.mm.1	-0.5	0.435899
TC1100000312.mm.1	NM_009556	Zfp42	zinc finger protein 42	43295067	43307009	TC0800002130.mm.1	0.0	0.435922
TC1100000315.mm.1	NM_001033550	Lrrc8b	leucine rich repeat containing 8 family, member	105415775	105486189	TC0500001038.mm.1	-0.1	0.436021
TC1100000316.mm.1	ENSMUST00000179007	Gm23649	predicted gene, 23649	72987798	72987904	TC1700001148.mm.1	-0.3	0.436058
TC1100000327.mm.1	NCBI_Gene:636752:p	Igkv4-6	immunoglobulin kappa variable 4-62	69399810	69400344	TC0600003564.mm.1	-0.7	0.436412
TC1100000332.mm.1	ENSMUST00000157695	Gm25665	predicted gene, 25665	18274712	18274821	TC0800001790.mm.1	0.1	0.436414
TC1100000337.mm.1	ENSMUST00000179817	Gm24968	predicted gene, 24968	71174822	71174928	TC1600001880.mm.1	-0.3	0.436559
TC1100000341.mm.1	ENSMUST00000083380	Gm26065	predicted gene, 26065	20800332	20800436	TC0X00001928.mm.1	-0.1	0.436577
TC1100000343.mm.1	ENSMUST00000122271	Gm14646	predicted gene 14646	58401850	58401981	TC0X00000540.mm.1	0.2	0.436687
TC1100000356.mm.1	NM_025755	Pacrgl	PARK2 co-regulated-like	48372330	48388756	TC0500000505.mm.1	0.0	0.436732
TC1100000362.mm.1	NM_001163833	Msl3l2	male-specific lethal 3-like 2 (Drosophila)	56106917	56116880	TC1000000492.mm.1	0.1	0.436791
TC1100000373.mm.1	NM_010957	Ogg1	8-oxoguanine DNA-glycosylase 1	113326972	113335068	TC0600001246.mm.1	0.0	0.436837
TC1100000375.mm.1	NM_207239	Gtf3c1	general transcription factor III C 1	125640954	125707780	TC0700004261.mm.1	-0.1	0.437439
TC1100000391.mm.1	NM_008648	Mup4	major urinary protein 4	59956804	59960710	TC0400002766.mm.1	-0.2	0.437465
TC1100000396.mm.1	NM_001164173	Cpsf1	cleavage and polyadenylation specific factor 1	76595808	76607591	TC1500001782.mm.1	-0.1	0.437523
TC1100000400.mm.1	NM_009834	Ccrn4l	CCR4 carbon catabolite repression 4-like (S. ce	51224447	51251654	TC0300000354.mm.1	0.0	0.437903
TC1100000410.mm.1	BC011101	Armcx3	armadillo repeat containing, X-linked 3	128039019	128042418	TC0700004353.mm.1	0.2	0.438088
TC1100000414.mm.1	ENSMUST00000178825	Gm24168	predicted gene, 24168	30942379	30942485	TC1000001950.mm.1	-0.4	0.43888
TC1100000426.mm.1	ENSMUST00000182336	Gm5652	predicted gene 5652	5589617	5590624	TC1200001380.mm.1	-0.1	0.439065
TC1100000427.mm.1	ENSMUST00000179266	Gm17048	predicted gene 17048	5958445	5959291	TC1400000054.mm.1	0.2	0.439351
TC1100000438.mm.1	ENSMUST00000157895	Gm24712	predicted gene, 24712	130146881	130146954	TC0600001545.mm.1	-0.1	0.439509
TC1100000454.mm.1	ENSMUST00000178922	Gm23552	predicted gene, 23552	130176753	130176826	TC0600001546.mm.1	-0.1	0.439509
TC1100000458.mm.1	ENSMUST00000178506	Gm24072	predicted gene, 24072	130320874	130320947	TC0600001547.mm.1	-0.1	0.439509
TC1100000463.mm.1	NM_026795	Tm2d3	TM2 domain containing 3	65693062	65701913	TC0700004622.mm.1	-0.1	0.439553
TC1100000469.mm.1	NM_023718	Slco1a6	solute carrier organic anion transporter family	142085761	142208521	TC0600003369.mm.1	0.3	0.439567
TC1100000482.mm.1	NM_001033275	Gxylt1	glucoside xylosyltransferase 1	93239742	93275179	TC1500002092.mm.1	0.0	0.439732
TC1100000483.mm.1	ENSMUST00000104144	Gm23014	predicted gene, 23014	83836937	83837066	TC0600002585.mm.1	0.1	0.439956
TC1100000484.mm.1	NR_037610	Pafah1b	platelet-activating factor acetylhydrolase, iso	74673949	74724670	TC1100003198.mm.1	-0.1	0.440115
TC1100000490.mm.1	ENSMUST00000083903	Gm23503	predicted gene, 23503	63432088	63432194	TC0200003640.mm.1	-0.2	0.440144
TC1100000494.mm.1	ENSMUST00000103961	Gm22934	predicted gene, 22934	82994835	82994966	TC0700001194.mm.1	0.2	0.440164
TC1100000504.mm.1	NR_037272	Mir3089	microRNA 3089	30721210	30721293	TC0200000540.mm.1	-0.1	0.440235
TC1100000510.mm.1	NM_199149	Ppp1r37	protein phosphatase 1, regulatory subunit 37	19530800	19562398	TC0700002487.mm.1	0.1	0.440243
TC1100000516.mm.1	ENSMUST00000179295	Gm5435	predicted gene 5435	82495419	82496537	TC1200002034.mm.1	0.0	0.440353
TC1100000517.mm.1	ENSMUST00000178398	Gm24465	predicted gene, 24465	98049822	98049928	TC0100000973.mm.1	-0.3	0.44045
TC1100000518.mm.1	NM_133862	Fgg	fibrinogen gamma chain	83007859	83015053	TC0300000640.mm.1	-0.2	0.440451
TC1100000519.mm.1	ENSMUST00000104561	Gm26341	predicted gene, 26341	35112198	35112331	TC1000000303.mm.1	0.1	0.440458
TC1100000524.mm.1	NM_001082975	Sdr39u1	short chain dehydrogenase/reductase family 39U	55897285	55900232	TC1400002106.mm.1	0.1	0.440565
TC1100000527.mm.1	NM_001024230	Gm5431	predicted gene 5431	48887422	48902152	TC1100002642.mm.1	0.2	0.44066
TC1100000529.mm.1	NM_016696	Gpc1	glypican 1	92831645	92860198	TC0100000916.mm.1	0.1	0.440884
TC1100000534.mm.1	ENSMUST00000177365	Vmn1r-p	vomeronasal 1 receptor, pseudogene 15	58077173	58078082	TC0600002365.mm.1	0.0	0.441012
TC1100000543.mm.1	NM_025559	Mien1	migration and invasion enhancer 1	98437708	98438991	TC1100003677.mm.1	0.1	0.441043
TC1100000545.mm.1	ENSMUST00000179890	AC13310	N/A	66955	67326	TC1_GL456211_rand	-0.2	0.441214
TC1100000562.mm.1	NR_030251	Mir483	microRNA 483	142654924	142654996	TC0700004572.mm.1	0.1	0.441341
TC1100000563.mm.1	NM_010018	Dao	D-amino acid oxidase	114003703	114025676	TC0500001217.mm.1	0.1	0.441465
TC1100000574.mm.1	NM_001012726	Aym1	activator of yeast meiotic promoters 1	113357294	113357821	TC0500001202.mm.1	0.1	0.441527
TC1100000582.mm.1	ENSMUST00000097132	Atp5l-p	ATP synthase, H+ transporting, mitochondrial F0	62476306	62476617	TC0700000963.mm.1	-0.1	0.441692
TC1100000585.mm.1	ENSMUST00000175487	Gm25748	predicted gene, 25748	64396334	64396403	TC0100000533.mm.1	0.1	0.442017
TC1100000599.mm.1	NR_033590	Gm8096	3-phosphoglycerate dehydrogenase pseudogene	28083194	28084853	TC0800001963.mm.1	0.0	0.442061
TC1100000600.mm.1	ENSMUST00000154520	Gm6569	predicted gene 6569	73834561	73839908	TC1500000526.mm.1	-0.1	0.442369
TC1100000602.mm.1	ENSMUST00000183142	Gm10292	predicted gene 10292	68333197	68333777	TC0300000559.mm.1	0.0	0.442525
TC1100000606.mm.1	ENSMUST00000179358	Gm25361	predicted gene, 25361	128402758	128402833	TC1000001604.mm.1	0.1	0.442627
TC1100000607.mm.1	NM_013501	Cryaa	crystallin, alpha A	31677931	31681730	TC1700000542.mm.1	0.0	0.442816
TC1100000608.mm.1	XM_001472176	Gm20795	predicted gene, 20795	40806531	40807229	TC0Y00000132.mm.1	-0.1	0.442879
TC1100000610.mm.1	NM_026305	Tceb2	transcription elongation factor B (SIII), polyp	23824739	23829109	TC1700001606.mm.1	-0.1	0.442958
TC1100000612.mm.1	ENSMUST00000103883	mmu-mir	mmu-mir-466e // mmu-mir-466b-8	10476628	10476713	TC0200000110.mm.1	0.1	0.443002
TC1100000614.mm.1	ENSMUST00000103910	mmu-mir	mmu-mir-466e // mmu-mir-466b-8	10479086	10479171	TC0200000116.mm.1	0.1	0.443002
TC1100000618.mm.1	ENSMUST00000175429	Gm23873	predicted gene, 23873	61750468	61750537	TC0700003377.mm.1	0.1	0.443022
TC1100000619.mm.1	NM_001270842	Gm3558	predicted gene 3558	7545151	7568566	TC1400002854.mm.1	0.1	0.443054
TC1100000623.mm.1	ENSMUST00000177923	Gm26285	predicted gene, 26285	139443599	139443705	TC0500001676.mm.1	-0.5	0.443067
TC1100000625.mm.1	ENSMUST00000157957	Gm22966	predicted gene, 22966	148326980	148327108	TC0100003223.mm.1	-0.1	0.443088
TC1100000628.mm.1	ENSMUST00000103789	Gm26067	predicted gene, 26067	25861239	25861348	TC0400002327.mm.1	-0.1	0.443272
TC1100000637.mm.1	ENSMUST00000082577	Gm22459	predicted gene, 22459	53404086	53404193	TC1600001733.mm.1	-0.2	0.443297
TC1100000639.mm.1	NM_146068	2310008	RIKEN cDNA 2310008H04 gene	15889225	16146851	TC1600001256.mm.1	0.0	0.443828
TC1100000642.mm.1	ENSMUST00000119873	Gm14614	predicted gene 14614	41685994	41686377	TC0X00002106.mm.1	-0.1	0.444014
TC1100000648.mm.1	NM_145968	Tagap	T cell activation Rho GTPase activating protein	7926000	7934897	TC1700000077.mm.1	-0.2	0.444017
TC1100000666.mm.1	NM_172599	Atg14	autophagy related 14	47540893	47568434	TC1400001937.mm.1	0.0	0.444032
TC1100000667.mm.1	ENSMUST00000116774	Mir466k	microRNA 466k	85467377	85467498	TC0300000667.mm.1	0.1	0.444168
TC1100000668.mm.1	ENSMUST00000097514	Gm10530	predicted gene 10530	159614749	159684875	TC0100001449.mm.1	0.1	0.444455
TC1100000681.mm.1	ENSMUST00000082888	Gm24292	predicted gene, 24292	7835177	7835283	TC1800000051.mm.1	-0.4	0.444858
TC1100000686.mm.1	NM_025396	Pgls	6-phosphogluconolactonase	71592176	71596269	TC0800003228.mm.1	0.0	0.445031
TC1100000697.mm.1	NM_172261	Ppp1r9b	protein phosphatase 1, regulatory subunit 9B	94991035	95006899	TC1100001451.mm.1	0.1	0.445031
TC1100000708.mm.1	ENSMUST00000180794	Gm5976	predicted gene 5976	52503234	52504229	TC0100002321.mm.1	-0.1	0.445563
TC1100000712.mm.1	ENSMUST00000182150	Gm5210	predicted gene 5210	8917798	8929171	TC1500001189.mm.1	-0.1	0.445646
TC1100000715.mm.1	NR_004419	Rny1	RNA, Y1 small cytoplasmic, Ro-associated	0	0	TSUnmapped0000018	-0.3	0.445743
TC1100000717.mm.1	ENSMUST00000158066	Gm22331	predicted gene, 22331	112467911	112468046	TC0100001040.mm.1	0.2	0.445883
TC1100000718.mm.1	ENSMUST00000174895	Gm26381	predicted gene, 26381	41217745	41217836	TC1600000603.mm.1	-0.4	0.445987

TC1100000722.mm.1	NM_172688	Map3k7	mitogen-activated protein kinase kinase kinase	31964097	32023467	TC0400000248.mm.1	-0.1	0.44611
TC1100000737.mm.1	ENSMUST00000117734	Gm15176	predicted gene 15176	157604033	157604167	TC0X00003251.mm.1	-0.1	0.446163
TC1100000738.mm.1	NR_035422	Mir1191	microRNA 1191	76206229	76469519	TC0500002627.mm.1	-0.3	0.446169
TC1100000742.mm.1	NM_025786	Rnf186	ring finger protein 186	138967112	138968366	TC0400001737.mm.1	-0.1	0.446182
TC1100000744.mm.1	NM_134469	Fdps	farnesyl diphosphate synthetase	89093588	89101967	TC0300002334.mm.1	-0.1	0.446329
TC1100000750.mm.1	ENSMUST00000163885	Gm3248	predicted gene 3248	5939225	5961745	TC1400001404.mm.1	0.0	0.44655
TC1100000756.mm.1	NM_001033793	Ubtfl1	upstream binding transcription factor, RNA poly	18404418	18411502	TC0900000133.mm.1	-0.1	0.446785
TC1100000759.mm.1	ENSMUST00000174996	Gm24022	predicted gene, 24022	113424749	113424818	TC1200002455.mm.1	0.4	0.446824
TC1100000761.mm.1	NM_053238	Vmn1r25	vomeronasal 1 receptor 25	57978299	57979351	TC0600002362.mm.1	-0.1	0.446889
TC1100000765.mm.1	NM_010142	Ephb2	Eph receptor B2	136616183	136835988	TC0400004224.mm.1	0.1	0.447211
TC1100000767.mm.1	ENSMUST00000184997	AC14722	N/A	20920214	20920320	TC1500000138.mm.1	0.2	0.447387
TC1100000774.mm.1	ENSMUST00000083093	Gm25201	predicted gene, 25201	47840816	47840985	TC1700002215.mm.1	0.0	0.447566
TC1100000778.mm.1	NM_194345	Fam160b	family with sequence similarity 160, member B2	70583295	70599835	TC1400002345.mm.1	0.0	0.447656
TC1100000785.mm.1	NM_019699	Fads2	fatty acid desaturase 2	10064102	10101503	TC1900001095.mm.1	0.1	0.447955
TC1100000794.mm.1	ENSMUST00000118203	Gm12197	predicted gene 12197	50446577	50447023	TC1100000545.mm.1	0.2	0.448189
TC1100000801.mm.1	XM_003689105	Gm21462	predicted gene, 21462	86869372	86870055	TC0Y00000536.mm.1	0.1	0.448522
TC1100000804.mm.1	NM_001080969	Thg1l	tRNA-histidine guanylyltransferase 1-like (S. c	45946843	45955494	TC1100002593.mm.1	0.0	0.44854
TC1100000805.mm.1	NM_173430	Fkrp	fukutin related protein	16809267	16816732	TC0700002437.mm.1	-0.1	0.448595
TC1100000820.mm.1	NR_030150	Mir466	microRNA 466	112021430	112058438	TC1400001239.mm.1	-0.2	0.448684
TC1100000838.mm.1	ENSMUST00000177562	AC12514	N/A	108372	113811	TC1_GL456210_rand	-0.3	0.448735
TC1100000839.mm.1	NM_146487	Olfr130	olfactory receptor 130	38067173	38068126	TC1700000794.mm.1	0.1	0.448867
TC1100000869.mm.1	NM_029901	Akr1c21	aldo-keto reductase family 1, member C21	4574075	4586543	TC1300000023.mm.1	0.3	0.448899
TC1100000885.mm.1	ENSMUST00000181399	Gm26571	predicted gene, 26571	83950690	83951355	TC1200002059.mm.1	0.0	0.448913
TC1100000887.mm.1	NM_147069	Olfr686	olfactory receptor 686	105203359	105204376	TC0700003972.mm.1	-0.1	0.449246
TC1100000889.mm.1	NM_026633	Fam195a	family with sequence similarity 195, member A	25863698	25868738	TC1700001677.mm.1	0.0	0.449503
TC1100000893.mm.1	NR_030568	Mir466f	microRNA 466f-3	75004110	75388146	TC1400002413.mm.1	0.2	0.449548
TC1100000895.mm.1	ENSMUST00000121823	Gm5257	predicted gene 5257	75636390	75637179	TC0100000668.mm.1	-0.1	0.449662
TC1100000896.mm.1	ENSMUST00000104492	Gm22495	predicted gene, 22495	23147094	23147219	TC1800000178.mm.1	0.1	0.44969
TC1100000897.mm.1	ENSMUST00000116817	Gm22487	predicted gene, 22487	69699865	69699960	TC0X00002381.mm.1	0.1	0.449796
TC1100000900.mm.1	NR_035418	Mir669h	microRNA 669h	113586578	113614774	TC1000001320.mm.1	0.2	0.449884
TC1100000901.mm.1	NM_173070	Sprr4	small proline-rich protein 4	92500263	92500493	TC0300002394.mm.1	-0.1	0.450263
TC1100000910.mm.1	NM_001039593	1700015	RIKEN cDNA 1700015E13 gene	170308803	170312125	TC0100001569.mm.1	0.0	0.450472
TC1100000917.mm.1	ENSMUST00000103964	Gm24579	predicted gene, 24579	8402814	8402957	TC1600000087.mm.1	0.1	0.450508
TC1100000920.mm.1	XM_001476724	Gm20896	predicted gene, 20896	35895525	35920106	TC0Y00000319.mm.1	-0.1	0.450741
TC1100000925.mm.1	ENSMUST00000175561	Gm23801	predicted gene, 23801	29336780	29336846	TC0500002141.mm.1	0.2	0.450925
TC1100000926.mm.1	ENSMUST00000178283	Gm24485	predicted gene, 24485	129733232	129733298	TC1000001653.mm.1	0.2	0.450925
TC1100000929.mm.1	ENSMUST00000175099	Gm24331	predicted gene, 24331	84182278	84182344	TC1300000982.mm.1	0.2	0.450925
TC1100000932.mm.1	ENSMUST00000082990	Gm24268	predicted gene, 24268	155046610	155046719	TC0X00001574.mm.1	-0.1	0.45101
TC1100000945.mm.1	NM_018820	Sertad1	SERTA domain containing 1	27486910	27490316	TC0700000460.mm.1	0.0	0.451026
TC1100000956.mm.1	ENSMUST00000083826	Gm23848	predicted gene, 23848	49538195	49538300	TC1500000368.mm.1	0.1	0.451067
TC1100000964.mm.1	NM_008112	Gdi2	guanosine diphosphate (GDP) dissociation inhibi	3538075	3566261	TC1300000006.mm.1	0.2	0.451091
TC1100000967.mm.1	NM_144863	Wdr36	WD repeat domain 36	32837225	32866420	TC1800000265.mm.1	-0.1	0.451091
TC1100000988.mm.1	NM_025864	Tmem206	transmembrane protein 206	191325912	191352925	TC0100001844.mm.1	0.0	0.451113
TC1100000989.mm.1	ENSMUST00000177640	Gm25145	predicted gene, 25145	92061397	92061506	TC0300002381.mm.1	-0.1	0.451232
TC1100001007.mm.1	OTTMUST00000077949	AC14780	---	85468233	85527161	TC0100002721.mm.1	0.1	0.451386
TC1100001008.mm.1	ENSMUST00000177813	Gm3348	predicted gene 3348	5385805	5386651	TC1400000044.mm.1	0.2	0.451629
TC1100001011.mm.1	NM_007791	Csrp1	cysteine and glycine-rich protein 1	135720061	135752232	TC0100001252.mm.1	-0.1	0.45166
TC1100001012.mm.1	ENSMUST00000082810	n-R5s92	nuclear encoded rRNA 5S 92	115626600	115626718	TC0900003191.mm.1	0.1	0.451683
TC1100001015.mm.1	ENSMUST00000093672	Gm24817	predicted gene, 24817	172843534	172843638	TC0100003579.mm.1	0.1	0.451791
TC1100001016.mm.1	NM_146205	Armc5	armadillo repeat containing 5	128237357	128245100	TC0700001878.mm.1	-0.1	0.451834
TC1100001018.mm.1	ENSMUST00000157096	Gm26280	predicted gene, 26280	135150666	135150766	TC0100003121.mm.1	0.1	0.451972
TC1100001027.mm.1	NM_028195	Cyth4	cytohesin 4	78597047	78622019	TC1500000649.mm.1	0.1	0.452043
TC1100001042.mm.1	ENSMUST00000182678	Gm7191	predicted gene 7191	97565603	97566592	TC0800002764.mm.1	-0.1	0.452189
TC1100001048.mm.1	ENSMUST00000082551	Gm23735	predicted gene, 23735	72131088	72131221	TC1400001022.mm.1	0.1	0.4523
TC1100001050.mm.1	ENSMUST00000104813	Gm26301	predicted gene, 26301	102732390	102732484	TC0800002787.mm.1	0.1	0.452357
TC1100001051.mm.1	ENSMUST00000104608	Gm25562	predicted gene, 25562	52291199	52291331	TC0900000630.mm.1	0.1	0.452397
TC1100001052.mm.1	ENSMUST00000141816	Gm16686	predicted gene, 16686	88755195	88755590	TC0400003018.mm.1	-0.1	0.452768
TC1100001053.mm.1	ENSMUST00000120804	Gm14186	predicted gene 14186	99718892	99719028	TC1100003732.mm.1	-0.1	0.452775
TC1100001063.mm.1	ENSMUST00000184911	AC16141	N/A	71119342	71119448	TC0800000780.mm.1	0.2	0.452799
TC1100001069.mm.1	NM_013736	Tceb3	transcription elongation factor B (SIII), polyp	136003368	136021763	TC0400003777.mm.1	0.1	0.452974
TC1100001070.mm.1	NM_024454	Rab21	RAB21, member RAS oncogene family	115289862	115315591	TC1000002897.mm.1	-0.1	0.452976
TC1100001071.mm.1	NM_153403	Ago1	argonaute RISC catalytic subunit 1	126435012	126468583	TC0400003542.mm.1	-0.1	0.453215
TC1100001073.mm.1	NM_001025605	Gm527	predicted gene 527	64917911	64924591	TC1200000521.mm.1	-0.1	0.453682
TC1100001078.mm.1	ENSMUST00000175199	Gm22617	predicted gene, 22617	36789738	36789807	TC1600000524.mm.1	0.4	0.453947
TC1100001082.mm.1	ENSMUST00000175509	Gm22745	predicted gene, 22745	94869464	94869533	TC1600001068.mm.1	0.4	0.453947
TC1100001095.mm.1	ENSMUST00000175632	Gm23075	predicted gene, 23075	35276453	35276522	TC1900001430.mm.1	0.4	0.453947
TC1100001100.mm.1	NM_146116	Tubb4b	tubulin, beta 4B class IVB	25222158	25224702	TC0200003135.mm.1	-0.1	0.453953
TC1100001102.mm.1	ENSMUST00000158883	Gm23473	predicted gene, 23473	85778812	85778927	TC1100001300.mm.1	-0.1	0.453987
TC1100001106.mm.1	ENSMUST00000175578	Gm25467	predicted gene, 25467	11696615	11696858	TC0800001705.mm.1	-0.1	0.454152
TC1100001108.mm.1	ENSMUST00000097953	Gm10576	predicted gene 10576	101054558	101055262	TC0400003149.mm.1	0.3	0.454374
TC1100001110.mm.1	NCBI_Gene:213684:p	Igkv4-7	immunoglobulin kappa variable 4-79	69042972	69043505	TC0600003555.mm.1	-0.5	0.454467
TC1100001111.mm.1	ENSMUST00000169972	LOC1010	disks large homolog 5-like	42291907	42297358	TC1400001827.mm.1	0.1	0.454485
TC1100001113.mm.1	NM_008046	Fst	follistatin	114452262	114458775	TC1300002711.mm.1	0.0	0.454494
TC1100001127.mm.1	NM_019754	Tagln3	transgelin 3	45711230	45724608	TC1600001663.mm.1	0.0	0.454503
TC1100001130.mm.1	ENSMUST00000157901	Gm26087	predicted gene, 26087	39981497	39981558	TC0400002432.mm.1	0.1	0.454505
TC1100001132.mm.1	NM_198666	Gm9758	predicted gene 9758	14910122	14914899	TC0500001972.mm.1	-0.1	0.454519
TC1100001140.mm.1	ENSMUST00000184747	U6	U6 spliceosomal RNA	139588227	139588330	TC0200002088.mm.1	-0.1	0.454604
TC1100001150.mm.1	NM_178390	Fam53a	family with sequence similarity 53, member A	33600351	33629635	TC0500002218.mm.1	0.0	0.454629

TC1100001157.mm.1	ENSMUST00000098589	Gm10642	predicted gene 10642	70656251	70657860	TC0900000942.mm.1	0.1	0.455036
TC1100001162.mm.1	NM_172998	Rnft2	ring finger protein, transmembrane 2	118190736	118245116	TC0500003138.mm.1	0.0	0.455218
TC1100001165.mm.1	ENSMUST00000082550	Gm24091	predicted gene, 24091	130766331	130766413	TC0400001552.mm.1	-0.1	0.455319
TC1100001168.mm.1	ENSMUST00000083856	Gm23711	predicted gene, 23711	130775741	130775823	TC0400001553.mm.1	-0.1	0.455319
TC1100001184.mm.1	NR_028420	Zfp809	zinc finger protein 809	22225703	22243354	TC0900000216.mm.1	0.1	0.455384
TC1100001189.mm.1	NR_030571	Mir467c	microRNA 467c	86415844	86520291	TC1100001314.mm.1	-0.2	0.455425
TC1100001191.mm.1	NM_008061	G6pc	glucose-6-phosphatase, catalytic	101367561	101377903	TC1100001654.mm.1	0.3	0.455608
TC1100001192.mm.1	NM_024237	Fbln7	fibulin 7	128862981	128897034	TC0200001939.mm.1	0.0	0.455617
TC1100001196.mm.1	XM_003688798	Gm13123	predicted gene 13123	144247184	144248785	TC0400001845.mm.1	0.0	0.455684
TC1100001206.mm.1	ENSMUST00000117437	Gm11874	predicted gene 11874	16120759	16120888	TC0400002250.mm.1	-0.1	0.455719
TC1100001209.mm.1	NM_001177470	Gm7325	predicted gene 7325	45600967	45602102	TC1700002153.mm.1	-0.1	0.455746
TC1100001220.mm.1	NM_019752	Htra2	HtrA serine peptidase 2	83051266	83055273	TC0600002555.mm.1	-0.1	0.455768
TC1100001221.mm.1	NM_145505	Fam160b	family with sequence similarity 160, member B1	57361009	57389594	TC1900000813.mm.1	-0.1	0.455804
TC1100001223.mm.1	NR_040408	Gm7977	tyrosine 3-monooxygenase/tryptophan 5-monoc	48026012	48026759	TC0300001927.mm.1	0.1	0.455899
TC1100001231.mm.1	ENSMUST00000174722	Gm20391	predicted gene 20391	36237254	36237359	TC1700002013.mm.1	0.1	0.455951
TC1100001238.mm.1	ENSMUST00000179870	Gm22253	predicted gene, 22253	59600776	59600854	TC0700003260.mm.1	-0.1	0.456194
TC1100001239.mm.1	NM_008507	Sh2b3	SH2B adaptor protein 3	121815488	121836859	TC0500003198.mm.1	0.1	0.456378
TC1100001244.mm.1	ENSMUST00000157338	Gm25394	predicted gene, 25394	49684301	49684433	TC1300000573.mm.1	-0.4	0.456426
TC1100001245.mm.1	NM_019484	Alyref2	Aly/REF export factor 2	171503478	171504750	TC0100001593.mm.1	-0.1	0.456497
TC1100001254.mm.1	ENSMUST00000109799	Hck	hemopoietic cell kinase	153108468	153151441	TC0200002308.mm.1	-0.1	0.45658
TC1100001264.mm.1	NM_011727	Xlr3c	X-linked lymphocyte-regulated 3C	73254540	73265390	TC0X00002424.mm.1	0.0	0.456613
TC1100001267.mm.1	ENSMUST00000101953	Gm23941	predicted gene, 23941	159916255	159916361	TC0300003206.mm.1	-0.1	0.456716
TC1100001271.mm.1	NM_010811	Ndst2	N-deacetylase/N-sulfotransferase (heparan gluc	20723730	20734562	TC1400001550.mm.1	0.0	0.456747
TC1100001274.mm.1	NM_001085528	Gm13271	predicted gene 13271	88754868	88755416	TC0400000889.mm.1	0.0	0.456771
TC1100001284.mm.1	ENSMUST00000116850	Gm22072	predicted gene, 22072	10465287	10465407	TC0200000088.mm.1	-0.1	0.456954
TC1100001287.mm.1	NM_028303	Pdzd11	PDZ domain containing 11	100622883	100626568	TC0X00002706.mm.1	0.0	0.457253
TC1100001289.mm.1	ENSMUST00000082731	Gm24460	predicted gene, 24460	151539700	151539805	TC0X00003181.mm.1	-0.1	0.457332
TC1100001291.mm.1	ENSMUST00000093745	Gm25207	predicted gene, 25207	15685285	15685391	TC0X00001885.mm.1	-0.1	0.457407
TC1100001295.mm.1	ENSMUST00000157641	Gm24782	predicted gene, 24782	27703876	27704007	TC1900001314.mm.1	-0.1	0.457702
TC1100001300.mm.1	NM_025667	Tmem222	transmembrane protein 222	133266045	133277792	TC0400003695.mm.1	0.0	0.457844
TC1100001302.mm.1	ENSMUST00000157785	Gm24240	predicted gene, 24240	83269971	83270105	TC1700001237.mm.1	0.1	0.457871
TC1100001314.mm.1	ENSMUST00000184334	mmu-mir	mmu-mir-6380	137783535	137783615	TC0300003007.mm.1	-0.1	0.458126
TC1100001317.mm.1	NM_182806	Gpr18	G protein-coupled receptor 18	121911434	121915774	TC1400002744.mm.1	-0.3	0.458203
TC1100001337.mm.1	NM_025833	Baiap2l	BAI1-associated protein 2-like 1	144264525	144358112	TC0500003576.mm.1	-0.1	0.458207
TC1100001338.mm.1	XM_003689092	Gm21282	predicted gene, 21282	81203810	81204493	TC0Y00000497.mm.1	0.1	0.458266
TC1100001349.mm.1	NM_001099311	Gm11596	predicted gene 11596	99792389	99793467	TC1100003737.mm.1	0.1	0.458285
TC1100001351.mm.1	ENSMUST00000082609	Gm22979	predicted gene, 22979	36169796	36169954	TC1500000261.mm.1	-0.1	0.458328
TC1100001369.mm.1	NM_130450	Elovl6	ELOVL family member 6, elongation of long chai	129532386	129638495	TC0300001306.mm.1	0.2	0.458581
TC1100001374.mm.1	ENSMUST00000104154	Gm24670	predicted gene, 24670	19691288	19691419	TC0200000318.mm.1	0.0	0.458649
TC1100001383.mm.1	NM_021432	Nap1l5	nucleosome assembly protein 1-like 5	58905233	58907126	TC0600002380.mm.1	0.0	0.458703
TC1100001389.mm.1	NM_007808	Cycs	cytochrome c, somatic	50562563	50566538	TC0600002253.mm.1	0.1	0.45882
TC1100001400.mm.1	ENSMUST00000119390	Ldha-ps	lactate dehydrogenase A, pseudogene	60134055	60135049	TC0200000908.mm.1	0.1	0.45904
TC1100001430.mm.1	NM_001270898	Gm21293	predicted gene, 21293	104194042	104196522	TC1000001249.mm.1	-0.1	0.459269
TC1100001431.mm.1	NM_028956	Pus10	pseudouridylate synthase 10	23665674	23732876	TC1100000245.mm.1	0.1	0.459361
TC1100001442.mm.1	NM_010234	Fos	FBJ osteosarcoma oncogene	85473890	85477273	TC1200000833.mm.1	0.1	0.459371
TC1100001447.mm.1	NCBI_Gene:780802:p	Ighv4-1	immunoglobulin heavy variable 4-1	113948282	113948732	TC1200002577.mm.1	-0.4	0.459544
TC1100001449.mm.1	NM_001252628	Cdh16	cadherin 16	104601915	104624396	TC0800002806.mm.1	0.3	0.459555
TC1100001451.mm.1	NM_001039560	Gcnt7	glucosaminyl (N-acetyl) transferase family memt	172450313	172458596	TC0200005273.mm.1	0.0	0.459811
TC1100001461.mm.1	ENSMUST00000171974	Bdh2	3-hydroxybutyrate dehydrogenase, type 2	135281221	135304426	TC0300001365.mm.1	0.1	0.459839
TC1100001470.mm.1	ENSMUST00000122795	Gm25291	predicted gene, 25291	51737779	51737922	TC1100002700.mm.1	-0.1	0.459978
TC1100001473.mm.1	NM_001177484	Gm11559	predicted gene 11559	99864476	99865571	TC1100001605.mm.1	0.0	0.460009
TC1100001474.mm.1	XM_003689098	Gm21380	predicted gene, 21380	84440144	84442478	TC0Y00000516.mm.1	0.1	0.460235
TC1100001489.mm.1	NM_183112	1700029	RIKEN cDNA 1700029I15 gene	92382918	92385708	TC0200001412.mm.1	0.1	0.460334
TC1100001491.mm.1	ENSMUST00000177596	Gm22716	predicted gene, 22716	110677124	110677230	TC0500002996.mm.1	-0.3	0.460441
TC1100001495.mm.1	ENSMUST00000120816	Gm13328	predicted gene 13328	20235045	20236064	TC0200003074.mm.1	-0.1	0.460818
TC1100001498.mm.1	NM_001159502	Ddx24	DEAD (Asp-Glu-Ala-Asp) box polypeptide 24	103407976	103425867	TC1200002267.mm.1	0.1	0.460926
TC1100001500.mm.1	ENSMUST00000180258	Gm25412	predicted gene, 25412	61938891	61938997	TC0X00000570.mm.1	-0.5	0.461076
TC1100001503.mm.1	NM_026534	Ubxn2b	UBX domain protein 2B	6191098	6221688	TC0400000036.mm.1	-0.1	0.461324
TC1100001532.mm.1	NM_206822	Olfr10	olfactory receptor 10	49317548	49318489	TC1100000504.mm.1	0.0	0.461359
TC1100001535.mm.1	uc029seq.1	Gm10021	SubName: Full=Putative uncharacterized protein	5454529	5460536	TC1400002857.mm.1	0.0	0.461406
TC1100001540.mm.1	ENSMUST00000122524	Gm25784	predicted gene, 25784	40879658	40879738	TC0700000718.mm.1	-0.1	0.461531
TC1100001545.mm.1	NM_010500	Ier5	immediate early response 5	155096367	155099636	TC0100003300.mm.1	-0.1	0.461682
TC1100001549.mm.1	NM_011956	Nubp2	nucleotide binding protein 2	24882611	24886350	TC1700001646.mm.1	-0.1	0.461734
TC1100001554.mm.1	NM_019753	Cdh17	cadherin 17	11758147	11817905	TC0400000093.mm.1	0.0	0.46174
TC1100001556.mm.1	NM_009040	Rdh16	retinol dehydrogenase 16	127801152	127815839	TC1000003221.mm.1	0.2	0.461754
TC1100001559.mm.1	NM_010886	Ndufa4	NADH dehydrogenase (ubiquinone) 1 alpha subc	11900372	11907446	TC0600001862.mm.1	0.2	0.461859
TC1100001566.mm.1	ENSMUST00000184715	GNAS-AS	GNAS antisense RNA 1 conserved region 1	174286608	174286671	TC0200002701.mm.1	-0.1	0.461925
TC1100001570.mm.1	NM_053197	Sfxn3	sideroflexin 3	45047576	45056383	TC1900000664.mm.1	0.1	0.461977
TC1100001578.mm.1	NM_008963	Ptgds	prostaglandin D2 synthase (brain)	25466709	25470046	TC0200003151.mm.1	0.0	0.462032
TC1100001588.mm.1	NM_026675	Nudt22	nudix (nucleoside diphosphate linked moiety X)-	6993018	6996117	TC1900001029.mm.1	0.0	0.462229
TC1100001590.mm.1	ENSMUST00000177871	Gm23977	predicted gene, 23977	129897932	129898005	TC0600001541.mm.1	-0.1	0.462326
TC1100001598.mm.1	NM_028753	Pop7	processing of precursor 7, ribonuclease P famil	137501438	137502518	TC0500003448.mm.1	0.0	0.4624
TC1100001599.mm.1	NM_001168386	Ccdc125	coiled-coil domain containing 125	100669481	100697240	TC1300001140.mm.1	0.1	0.462428
TC1100001600.mm.1	ENSMUST00000083321	Gm23974	predicted gene, 23974	45746895	45747025	TC0100000348.mm.1	0.3	0.46263
TC1100001602.mm.1	XR_104601	B230369	RIKEN cDNA B230369F24 gene	178313328	178319102	TC0100003644.mm.1	0.0	0.462787
TC1100001603.mm.1	NM_009169	Shfm1	split hand/foot malformation (ectrodactyly) typ	6557294	6578658	TC0600001821.mm.1	-0.1	0.463037
TC1100001605.mm.1	NM_181072	Myo1e	myosin IE	70207350	70400067	TC0900000927.mm.1	0.2	0.463102
TC1100001606.mm.1	NM_026701	Pbld1	phenazine biosynthesis-like protein domain cont	63060713	63077962	TC1000000596.mm.1	0.1	0.463189

TC1100001607.mm.1	NM_008645	Mug1	murinoglobulin 1	121838541	121889057	TC0600001373.mm.1	-0.1	0.463215
TC1100001611.mm.1	XM_003689090	Gm21248	predicted gene, 21248	79958259	79959257	TC0Y00000491.mm.1	0.1	0.463434
TC1100001612.mm.1	ENSMUST00000117815	Gm16464	predicted gene 16464	104501055	104502149	TC0700003948.mm.1	0.1	0.46344
TC1100001619.mm.1	NM_028782	Lonp1	lon peptidase 1, mitochondrial	56614297	56626903	TC1700002333.mm.1	0.1	0.463527
TC1100001622.mm.1	NM_027472	5730455	RIKEN cDNA 5730455P16 gene	80360492	80378034	TC1100003342.mm.1	0.1	0.463692
TC1100001624.mm.1	NM_145490	Zfp959	zinc finger protein 959	55892093	55898932	TC1700000991.mm.1	-0.1	0.463726
TC1100001638.mm.1	XR_140445	Gm19537	predicted gene, 19537	82282210	82285248	TC0100002668.mm.1	0.1	0.464048
TC1100001640.mm.1	ENSMUST00000178746	Gm25935	predicted gene, 25935	93246708	93246814	TC1700002751.mm.1	-0.4	0.464096
TC1100001642.mm.1	ENSMUST00000158044	Gm25336	predicted gene, 25336	154080095	154080199	TC0100003289.mm.1	0.1	0.464127
TC1100001643.mm.1	NM_009687	Apex1	apurinic/apyrimidinic endonuclease 1	50924949	50927188	TC1400000573.mm.1	-0.1	0.46429
TC1100001646.mm.1	ENSMUST00000122630	Gm23661	predicted gene, 23661	69919095	69919181	TC0500000662.mm.1	0.1	0.464324
TC1100001649.mm.1	NM_010116	Klk1b9	kallikrein 1-related peptidase b9	43976061	43980376	TC0700000785.mm.1	0.2	0.464377
TC1100001650.mm.1	ENSMUST00000122520	Gm22956	predicted gene, 22956	138219737	138219816	TC0500001647.mm.1	-0.1	0.464544
TC1100001651.mm.1	NM_177318	Zfp653	zinc finger protein 653	22055460	22071345	TC0900001895.mm.1	0.0	0.464667
TC1100001654.mm.1	NM_001081422	Bod1l	biorientation of chromosomes in cell division 1	41787538	41844315	TC0500002306.mm.1	-0.1	0.464742
TC1100001657.mm.1	NM_001164734	Mpp6	membrane protein, palmitoylated 6 (MAGUK p5	50110241	50198598	TC0600000591.mm.1	-0.1	0.464887
TC1100001661.mm.1	NM_028426	3110007	RIKEN cDNA 3110007F17 gene	123103495	123188795	TC0X00001201.mm.1	0.0	0.464908
TC1100001662.mm.1	ENSMUST00000116854	Mir669d	microRNA 669d-2	10471644	10471729	TC0200000099.mm.1	0.1	0.46491
TC1100001665.mm.1	ENSMUST00000180019	Gm22307	predicted gene, 22307	4529017	4529123	TC0100000008.mm.1	-0.4	0.46498
TC1100001667.mm.1	ENSMUST00000083282	Gm25818	predicted gene, 25818	53433974	53434137	TC0600000639.mm.1	-0.4	0.46502
TC1100001668.mm.1	NM_001011808	Olfr198	olfactory receptor 198	59201466	59202519	TC1600001795.mm.1	0.1	0.465045
TC1100001673.mm.1	NM_001081372	Ces1b	carboxylesterase 1B	93056727	93080017	TC0800002700.mm.1	0.0	0.465309
TC1100001677.mm.1	ENSMUST00000177928	Gm23018	predicted gene, 23018	69561229	69561337	TC1200001867.mm.1	0.2	0.465532
TC1100001680.mm.1	NM_145217	Diras1	DIRAS family, GTP-binding RAS-like 1	81019589	81025662	TC1000002522.mm.1	0.0	0.46638
TC1100001694.mm.1	NM_008952	Pipox	pipecolic acid oxidase	77880615	77894096	TC1100003276.mm.1	0.2	0.466559
TC1100001699.mm.1	ENSMUST00000182201	Gm5300	predicted gene 5300	13055595	13056597	TC0600001871.mm.1	0.0	0.46665
TC1100001708.mm.1	ENSMUST00000182555	Gm8048	predicted gene 8048	98153181	98154176	TC0500000946.mm.1	-0.1	0.466829
TC1100001710.mm.1	ENSMUST00000179790	Gm25286	predicted gene, 25286	38613149	38613253	TC0700000696.mm.1	-0.2	0.466932
TC1100001728.mm.1	ENSMUST00000178612	Gm25671	predicted gene, 25671	38928775	38928879	TC0700000698.mm.1	-0.2	0.466932
TC1100001729.mm.1	BC107324	Grifin	galectin-related inter-fiber protein	140563119	140565071	TC0500003509.mm.1	0.0	0.466954
TC1100001742.mm.1	ENSMUST00000183270	Gm17799	predicted gene, 17799	19723312	19723978	TC1600000263.mm.1	0.0	0.466981
TC1100001757.mm.1	ENSMUST00000180270	Ppp2r3d	protein phosphatase 2 (formerly 2A), regulatory	124422622	124424507	TC0900003318.mm.1	0.0	0.466999
TC1100001762.mm.1	NM_023059	Sigirr	single immunoglobulin and toll-interleukin 1 re	141091175	141100546	TC0700004519.mm.1	0.0	0.467131
TC1100001767.mm.1	NM_001173500	G630090	RIKEN cDNA G630090E17 gene	39946907	39986646	TC1000002032.mm.1	0.1	0.46726
TC1100001771.mm.1	ENSMUST00000102245	Gm23659	predicted gene, 23659	65432137	65432246	TC1600000792.mm.1	-0.1	0.467286
TC1100001776.mm.1	ENSMUST00000090488	Gm10250	predicted pseudogene 10250	5120602	5121172	TC1500001153.mm.1	-0.2	0.467491
TC1100001777.mm.1	ENSMUST00000104140	Gm25832	predicted gene, 25832	66866797	66866926	TC0100000570.mm.1	0.1	0.467568
TC1100001778.mm.1	NM_001014397	Gm13154	predicted gene 13154	147553277	147585201	TC0400004205.mm.1	-0.1	0.467693
TC1100001783.mm.1	ENSMUST00000072455	4930423	RIKEN cDNA 4930423O20 gene	70381819	70382385	TC1600001879.mm.1	0.2	0.468332
TC1100001784.mm.1	NM_022324	Sdf2l1	stromal cell-derived factor 2-like 1	17130138	17132383	TC1600001280.mm.1	-0.1	0.468458
TC1100001785.mm.1	NR_028539	Snord23	small nucleolar RNA, C/D box 23	15938762	15938870	TC0700002416.mm.1	0.2	0.468674
TC1100001794.mm.1	NM_133928	Chchd4	coiled-coil-helix-coiled-coil-helix domain cont	91464276	91473423	TC0600002728.mm.1	0.0	0.46876
TC1100001799.mm.1	NR_030773	Zfp821	zinc finger protein 821	109705546	109724932	TC0800001300.mm.1	-0.1	0.468827
TC1100001817.mm.1	ENSMUST00000082994	Gm22045	predicted gene, 22045	96671793	96671900	TC1500000955.mm.1	-0.2	0.468835
TC1100001820.mm.1	ENSMUST00000102225	Gm24938	predicted gene, 24938	42605156	42605265	TC0700002930.mm.1	0.1	0.468924
TC1100001841.mm.1	NM_144869	BC02161	cDNA sequence BC021614	4057477	4059444	TC1900000898.mm.1	0.0	0.468941
TC1100001848.mm.1	ENSMUST00000184058	RP23-34	N/A	14837774	14838029	TC0700002392.mm.1	-0.1	0.468942
TC1100001850.mm.1	NM_008456	Klk1b5	kallikrein 1-related peptidase b5	44216474	44220703	TC0700000795.mm.1	0.3	0.468978
TC1100001856.mm.1	NM_007994	Fbp2	fructose bisphosphatase 2	62836877	62858400	TC1300002175.mm.1	0.1	0.469156
TC1100001860.mm.1	NM_010186	Fcgr1	Fc receptor, IgG, high affinity I	96282909	96293969	TC0300002506.mm.1	0.1	0.469315
TC1100001863.mm.1	NM_008637	Nudt1	nudix (nucleoside diphosphate linked moiety X)-	140331860	140338137	TC0500001689.mm.1	0.0	0.469332
TC1100001874.mm.1	NM_001009947	Dock11	dedicator of cytokinesis 11	35888832	36076562	TC0X00000313.mm.1	-0.2	0.469345
TC1100001886.mm.1	ENSMUST00000175137	Gm25642	predicted gene, 25642	38752062	38752127	TC0X00002090.mm.1	0.1	0.469363
TC1100001896.mm.1	NM_001164838	Lrrfip2	leucine rich repeat (in FLII) interacting prote	111118111	111225668	TC0900001483.mm.1	0.1	0.469435
TC1100001900.mm.1	ENSMUST00000118889	Gm15711	predicted gene 15711	43312594	43313128	TC1600000629.mm.1	0.0	0.469624
TC1100001907.mm.1	NM_001081493	Cartpt	CART prepropeptide	99898483	99900683	TC1300002525.mm.1	0.0	0.469715
TC1100001951.mm.1	ENSMUST00000104011	Gm22266	predicted gene, 22266	104070189	104070326	TC0X00002793.mm.1	0.1	0.469784
TC1100001956.mm.1	NM_031367	Ifi44l	interferon-induced protein 44 like	151758737	151762906	TC0300003134.mm.1	0.1	0.469892
TC1100001969.mm.1	NM_174846	Glyctk	glycerate kinase	106152857	106158138	TC0900003002.mm.1	0.0	0.469904
TC1100001988.mm.1	BC049276	Sulf1	sulfatase 1	12692430	12860372	TC0100000064.mm.1	0.1	0.470109
TC1100001989.mm.1	NM_001004143	Usp22	ubiquitin specific peptidase 22	61151781	61175059	TC1100002904.mm.1	-0.1	0.470163
TC1100002003.mm.1	NM_001081103	Stim2	stromal interaction molecule 2	53998417	54121057	TC0500000547.mm.1	0.1	0.470248
TC1100002007.mm.1	NM_001029982	Sec23ip	Sec23 interacting protein	128744870	128784836	TC0700001893.mm.1	-0.1	0.470344
TC1100002009.mm.1	NR_002902	Snora62	small nucleolar RNA, H/ACA box 62	120130415	120130563	TC0900001598.mm.1	-0.3	0.47035
TC1100002017.mm.1	ENSMUST00000177797	Gm23616	predicted gene, 23616	104297188	104297297	TC0500001022.mm.1	-0.1	0.470408
TC1100002018.mm.1	NM_011396	Slc22a5	solute carrier family 22 (organic cation transp	53864542	53891703	TC1100002748.mm.1	0.1	0.470505
TC1100002021.mm.1	NM_023355	Timm22	translocase of inner mitochondrial membrane 22	76406952	76416312	TC1100001100.mm.1	0.0	0.470699
TC1100002024.mm.1	ENSMUST00000099751	Olfr127	olfactory receptor 1271	90265511	90266428	TC0200004086.mm.1	0.1	0.470818
TC1100002028.mm.1	NM_001253812	Elp3	elongator acetyltransferase complex subunit 3	65530446	65593112	TC1400002259.mm.1	0.1	0.470839
TC1100002029.mm.1	NM_001166740	Vmn1r12	vomeronasal 1 receptor 125	21272179	21273102	TC0700000328.mm.1	0.1	0.470848
TC1100002044.mm.1	ENSMUST00000102437	Gm25992	predicted gene, 25992	56561301	56561409	TC0800000624.mm.1	0.1	0.470884
TC1100002045.mm.1	NM_001039544	Mup3	major urinary protein 3	62083476	62087342	TC0400004214.mm.1	-0.2	0.470908
TC1100002046.mm.1	ENSMUST00000122453	Gm12017	predicted gene 12017	17973788	17974790	TC1100002256.mm.1	-0.1	0.471124
TC1100002047.mm.1	ENSMUST00000180321	Lysmd1	LysM, putative peptidoglycan-binding, domain co	93927004	93929102	TC1200002166.mm.1	-0.1	0.471155
TC1100002066.mm.1	NM_183031	Gpr183	G protein-coupled receptor 183	121952331	121965193	TC1400002746.mm.1	-0.2	0.471178
TC1100002080.mm.1	NM_001170489	Aplf	aprataxin and PNKP like factor	87628429	87672168	TC0600002658.mm.1	0.0	0.471242
TC1100002089.mm.1	ENSMUST00000104771	Gm24606	predicted gene, 24606	22449696	22449796	TC1700000293.mm.1	0.1	0.471322
TC1100002095.mm.1	NM_001195075	Klhl3	kelch-like 3	58004221	58113592	TC1300002090.mm.1	0.0	0.471425

TC1100002103.mm.1	ENSMUST00000175165	Gm25736	predicted gene, 25736	51015313	51015413	TC0100000367.mm.1	0.2	0.471464
TC1100002111.mm.1	NM_009984	Ctsl	cathepsin L	64363214	64370306	TC1300002204.mm.1	-0.3	0.471494
TC1100002144.mm.1	NM_207236	Olfr128	olfactory receptor 1283	111368591	111369616	TC0200001644.mm.1	0.1	0.472054
TC1100002153.mm.1	ENSMUST00000103993	Gm25093	predicted gene, 25093	44364085	44364216	TC1500000349.mm.1	-0.1	0.472152
TC1100002163.mm.1	ENSMUST00000158933	Gm24174	predicted gene, 24174	140166535	140166645	TC0600003354.mm.1	-0.1	0.47217
TC1100002170.mm.1	ENSMUST00000158467	Gm25654	predicted gene, 25654	64296437	64296524	TC1300002202.mm.1	-0.1	0.472437
TC1100002182.mm.1	ENSMUST00000082753	Gm25811	predicted gene, 25811	86043394	86043494	TC0400002973.mm.1	0.1	0.473532
TC1100002187.mm.1	NM_001081369	Ccdc153	coiled-coil domain containing 153	44240677	44247306	TC0900000503.mm.1	0.0	0.473915
TC1100002188.mm.1	NM_026703	Ndufa8	NADH dehydrogenase (ubiquinone) 1 alpha subc	36036326	36049406	TC0200003376.mm.1	0.2	0.473921
TC1100002190.mm.1	ENSMUST00000043711	Gm10135	predicted gene 10135	72965808	72974702	TC0500002583.mm.1	0.1	0.474204
TC1100002195.mm.1	ENSMUST00000098689	Gm6166	predicted gene 6166	57483913	57484585	TC0900000702.mm.1	-0.3	0.474468
TC1100002200.mm.1	XM_990932	Gm8672	predicted gene 8672	49858694	49864130	TC1300001966.mm.1	-0.1	0.474581
TC1100002202.mm.1	ENSMUST00000104085	Gm22779	predicted gene, 22779	38699706	38699812	TC0500002289.mm.1	0.1	0.474626
TC1100002206.mm.1	NM_001024626	Zfp873	zinc finger protein 873	82048127	82061586	TC1000000915.mm.1	-0.1	0.47467
TC1100002215.mm.1	ENSMUST00000183502	SMCR2_1	Smith-Magenis syndrome chromosome region, c	60099547	60099673	TC1100000744.mm.1	0.1	0.47509
TC1100002226.mm.1	NM_001013028	AI59746	expressed sequence AI597468	85102627	85120618	TC1000001027.mm.1	-0.1	0.475149
TC1100002231.mm.1	XM_994638	6530409	RIKEN cDNA 6530409C15 gene	28215555	28260862	TC0600000212.mm.1	0.0	0.475168
TC1100002234.mm.1	ENSMUST00000181751	Gm26825	predicted gene, 26825	5781530	5783636	TC0500000032.mm.1	0.2	0.475215
TC1100002241.mm.1	NR_030601	Mir466d	microRNA 466d	5379390	5483389	TC0200000051.mm.1	0.1	0.475308
TC1100002242.mm.1	ENSMUST00000103867	Gm24543	predicted gene, 24543	9234897	9234978	TC1900001083.mm.1	-0.1	0.475344
TC1100002243.mm.1	NM_008535	Lyl1	lymphoblastomic leukemia 1	84701457	84704716	TC0800000959.mm.1	0.1	0.475947
TC1100002244.mm.1	ENSMUST00000168090	Igkv1-1	immunoglobulin kappa variable 1-115	68161415	68161756	TC0600000794.mm.1	-0.1	0.476436
TC1100002249.mm.1	ENSMUST00000177964	Ang-ps3	angiogenin, ribonuclease A family, pseudogene 3	43912992	43913424	TC1400000452.mm.1	-0.1	0.476546
TC1100002250.mm.1	ENSMUST00000183067	Gm9358	predicted gene 9358	138914388	138915314	TC0700001985.mm.1	-0.1	0.476575
TC1100002251.mm.1	NR_035427	Mir1195	microRNA 1195	70860478	70860600	TC1700002482.mm.1	-0.1	0.476677
TC1100002255.mm.1	NM_013478	Azgp1	alpha-2-glycoprotein 1, zinc	137981521	137990233	TC0500001638.mm.1	-0.1	0.476742
TC1100002256.mm.1	ENSMUST00000093663	Gm24164	predicted gene, 24164	62571036	62571139	TC1600000784.mm.1	0.1	0.476743
TC1100002258.mm.1	NM_175450	Wdr18	WD repeat domain 18	79960152	79969246	TC1000000830.mm.1	0.1	0.476929
TC1100002278.mm.1	NM_138758	Tmlhe	trimethyllysine hydroxylase, epsilon	159647	334187	TCX_GL456233_rand	0.1	0.476939
TC1100002283.mm.1	NM_146746	Olfr935	olfactory receptor 935	38994507	38995433	TC0900002066.mm.1	0.1	0.477034
TC1100002295.mm.1	NM_001038995	Gm4787	predicted gene 4787	81376991	81379486	TC1200002017.mm.1	0.1	0.477097
TC1100002301.mm.1	ENSMUST00000178720	Gm24097	predicted gene, 24097	104936651	104936757	TC0500001035.mm.1	-0.2	0.477207
TC1100002303.mm.1	ENSMUST00000082993	Gm22043	predicted gene, 22043	40992693	40992850	TC0300000314.mm.1	0.1	0.477251
TC1100002317.mm.1	ENSMUST00000120647	Gm11839	predicted gene 11839	12114284	12116236	TC0400000106.mm.1	-0.1	0.477296
TC1100002318.mm.1	NR_030569	Mir466g	microRNA 466g	61317752	61358085	TC1700001045.mm.1	-0.2	0.47739
TC1100002322.mm.1	ENSMUST00000104745	Gm24132	predicted gene, 24132	96656129	96656219	TC0800001155.mm.1	0.1	0.477481
TC1100002323.mm.1	ENSMUST00000166016	Gm17376	predicted gene, 17376	98745735	98745822	TC0400000988.mm.1	-0.1	0.477608
TC1100002325.mm.1	NM_016689	Aqp3	aquaporin 3	41092722	41098183	TC0400002456.mm.1	-0.1	0.477667
TC1100002330.mm.1	ENSMUST00000158326	Gm24940	predicted gene, 24940	163402283	163402390	TC0100001489.mm.1	0.1	0.477705
TC1100002331.mm.1	NM_183026	Defb14	defensin beta 14	19194328	19195309	TC0800000179.mm.1	0.1	0.477707
TC1100002353.mm.1	NM_010155	Erf	Ets2 repressor factor	25242560	25250761	TC0700002628.mm.1	0.0	0.477735
TC1100002363.mm.1	NM_015774	Ero1l	ERO1-like (S. cerevisiae)	45283087	45318572	TC1400001898.mm.1	-0.1	0.47785
TC1100002369.mm.1	ENSMUST00000116306	Gm14777	predicted gene 14777	92429239	92429414	TC0X00000873.mm.1	-0.1	0.477943
TC1100002374.mm.1	ENSMUST00000122751	Gm22984	predicted gene, 22984	99352048	99352169	TC1400002603.mm.1	-0.2	0.47798
TC1100002379.mm.1	NM_008452	Klf2	Kruppel-like factor 2 (lung)	72319033	72321656	TC0800000823.mm.1	0.2	0.478003
TC1100002388.mm.1	ENSMUST00000122415	Gm9025	predicted gene 9025	111882393	111884177	TC1300002669.mm.1	0.2	0.478107
TC1100002391.mm.1	NM_181470	Ltv1	LTV1 homolog (S. cerevisiae)	13178637	13193137	TC1000001767.mm.1	-0.1	0.478161
TC1100002395.mm.1	ENSMUST00000110799	Gm6374	predicted gene 6374	83314513	83315300	TC0100000721.mm.1	0.1	0.47848
TC1100002400.mm.1	ENSMUST00000180080	Gm25942	predicted gene, 25942	22789818	22789927	TC0600000192.mm.1	-0.1	0.478526
TC1100002404.mm.1	ENSMUST00000104265	Gm25915	predicted gene, 25915	142485322	142485447	TC0X00003102.mm.1	0.1	0.47853
TC1100002423.mm.1	ENSMUST00000122672	Gm25106	predicted gene, 25106	98473675	98473808	TC1100003681.mm.1	-0.2	0.478571
TC1100002438.mm.1	NM_001081205	Nipal1	NIPA-like domain containing 1	72647796	72671078	TC0500000675.mm.1	0.0	0.478676
TC1100002439.mm.1	NM_031178	Tlr9	toll-like receptor 9	106222598	106226876	TC0900001339.mm.1	0.2	0.478729
TC1100002440.mm.1	ENSMUST00000093668	n-R5s71	nuclear encoded rRNA 5S 71	74319792	74319910	TC1100001042.mm.1	-0.4	0.479482
TC1100002441.mm.1	ENSMUST00000179169	Gm23403	predicted gene, 23403	133191792	133191901	TC0600001574.mm.1	-0.1	0.479527
TC1100002447.mm.1	ENSMUST00000122206	Gm15530	predicted gene 15530	38685315	38685869	TC1600001614.mm.1	-0.1	0.479609
TC1100002451.mm.1	ENSMUST00000157996	Gm23033	predicted gene, 23033	29888341	29888474	TC1500001313.mm.1	-0.1	0.479942
TC1100002455.mm.1	XM_357111	Gm5258	predicted gene 5258	86323267	86325433	TC0100000785.mm.1	0.0	0.479959
TC1100002461.mm.1	NM_028761	Parn	poly(A)-specific ribonuclease (deadenylation nu	13537960	13668170	TC1600001231.mm.1	0.0	0.480043
TC1100002471.mm.1	ENSMUST00000181181	Gm3272	predicted pseudogene 3272	92715747	92716975	TC0800002696.mm.1	0.2	0.480064
TC1100002483.mm.1	ENSMUST00000101978	Gm25431	predicted gene, 25431	3136984	3137090	TC1900000876.mm.1	-0.3	0.480203
TC1100002484.mm.1	XR_140479	4930527	RIKEN cDNA 4930527J03 gene	178276047	178278811	TC0100003642.mm.1	0.0	0.480224
TC1100002489.mm.1	NM_021538	Cope	coatomer protein complex, subunit epsilon	70302518	70312993	TC0800000744.mm.1	-0.1	0.480695
TC1100002491.mm.1	NM_029623	3110002	RIKEN cDNA 3110002H16 gene	12168717	12189997	TC1800000100.mm.1	0.1	0.480873
TC1100002496.mm.1	NM_145531	Spg11	spastic paraplegia 11	122053520	122118386	TC0200004502.mm.1	0.1	0.480877
TC1100002508.mm.1	NM_001039695	Rhox4d	reproductive homeobox 4D	37514359	37519176	TC0X00003389.mm.1	0.0	0.480897
TC1100002537.mm.1	NM_027222	Mzb1	marginal zone B and B1 cell-specific protein 1	35647265	35649367	TC1800001176.mm.1	-0.2	0.480967
TC1100002541.mm.1	ENSMUST00000184329	mmu-mir	mmu-mir-6362	22605326	22605432	TC1600000319.mm.1	-0.1	0.48165
TC1100002547.mm.1	NM_011650	Tsn	translin	118298517	118311167	TC0100002936.mm.1	-0.1	0.481654
TC1100002563.mm.1	NM_198305	Klhl17	kelch-like 17	156229044	156234857	TC0400004174.mm.1	0.0	0.481766
TC1100002568.mm.1	NCBI_Gene:385291:p	Igkv4-5	immunoglobulin kappa chain variable 4-54	69631646	69632178	TC0600003572.mm.1	-0.6	0.48187
TC1100002578.mm.1	ENSMUST00000082861	Gm22423	predicted gene, 22423	96083673	96083856	TC1100003611.mm.1	-0.2	0.481929
TC1100002586.mm.1	NM_019963	Stat2	signal transducer and activator of transcriptio	128270576	128292849	TC1000001596.mm.1	-0.1	0.481981
TC1100002588.mm.1	NM_010462	Hoxc10	homeobox C10	102966796	102971898	TC1500002339.mm.1	-0.2	0.482419
TC1100002593.mm.1	NM_029562	Cyp2d26	cytochrome P450, family 2, subfamily d, polypep	82790105	82794245	TC1500001957.mm.1	0.2	0.482564
TC1100002600.mm.1	NM_173429	Zfp775	zinc finger protein 775	48605536	48623227	TC0600000562.mm.1	0.0	0.482669
TC1100002630.mm.1	ENSMUST00000182882	Gm9211	predicted gene 9211	36234292	36235266	TC0700000674.mm.1	-0.1	0.482681
TC1100002631.mm.1	ENSMUST00000118624	Gm13700	predicted gene 13700	80861155	80862282	TC0200003844.mm.1	0.0	0.482751

TC1100002637.mm.1	NM_001103168	Zglp1	zinc finger, GATA-like protein 1	21062393	21092008	TC0900001857.mm.1	-0.1	0.482751
TC1100002638.mm.1	ENSMUST00000164512	Gm2974	predicted gene 2974	4182576	4204895	TC1400002789.mm.1	0.1	0.483033
TC1100002642.mm.1	ENSMUST00000184264	SNORA62	Small nucleolar RNA SNORA62/SNORA6 family	85168849	85169001	TC1600000943.mm.1	0.0	0.483083
TC1100002646.mm.1	NM_027419	2810408	RIKEN cDNA 2810408A11 gene	69897352	69900987	TC1100003075.mm.1	0.0	0.483085
TC1100002648.mm.1	ENSMUST00000157117	Gm25152	predicted gene, 25152	27108982	27109095	TC0300000157.mm.1	0.1	0.483371
TC1100002660.mm.1	NM_008272	Hoxc9	homeobox C9	102976439	102985099	TC1500001119.mm.1	0.0	0.483511
TC1100002666.mm.1	NR_004432	Rnu12	RNA U12, small nuclear	83149644	83149794	TC1500000767.mm.1	-0.3	0.484284
TC1100002667.mm.1	NM_001037762	Zdhhc12	zinc finger, DHHC domain containing 12	30090944	30093648	TC0200003262.mm.1	0.0	0.484577
TC1100002694.mm.1	NM_011427	Snai1	snail homolog 1 (Drosophila)	167538195	167542814	TC0200002589.mm.1	0.1	0.48458
TC1100002698.mm.1	ENSMUST00000050108	Gm5479	predicted gene 5479	3056687	3057121	TC1700000002.mm.1	-0.1	0.484601
TC1100002700.mm.1	ENSMUST00000173416	Gm20526	predicted gene 20526	36723948	36724275	TC1700000741.mm.1	-0.1	0.484842
TC1100002710.mm.1	ENSMUST00000183485	RP24-67	N/A	69348897	69352259	TC1400002313.mm.1	0.0	0.484883
TC1100002712.mm.1	ENSMUST00000175470	Gm25250	predicted gene, 25250	77577714	77577789	TC0900001036.mm.1	-0.1	0.484888
TC1100002713.mm.1	ENSMUST00000181779	Gm10410	predicted gene 10410	3884172	3921640	TC1400000015.mm.1	0.0	0.484926
TC1100002714.mm.1	ENSMUST00000158708	Gm24343	predicted gene, 24343	14233513	14233623	TC1000000107.mm.1	0.0	0.485087
TC1100002715.mm.1	NM_011715	Wdr1	WD repeat domain 1	38526813	38561666	TC0500002286.mm.1	-0.1	0.485199
TC1100002736.mm.1	NM_025655	Tmigd1	transmembrane and immunoglobulin domain co	76902159	76916587	TC1100001108.mm.1	0.1	0.48545
TC1100002748.mm.1	ENSMUST00000179402	Gm15260	predicted gene 15260	4366897	4367779	TC0X00000020.mm.1	-0.1	0.485647
TC1100002750.mm.1	ENSMUST00000170706	Gm5456	predicted gene 5456	7241442	7242290	TC1400000064.mm.1	0.2	0.48569
TC1100002754.mm.1	ENSMUST00000157207	Gm23958	predicted gene, 23958	138422715	138422819	TC0X00003054.mm.1	-0.1	0.486146
TC1100002765.mm.1	XM_982314	Gm7980	predicted gene 7980	41901813	41907290	TC1400001810.mm.1	0.0	0.486382
TC1100002772.mm.1	NM_144546	Zfp119a	zinc finger protein 119a	55864927	55944906	TC1700002303.mm.1	0.1	0.486451
TC1100002773.mm.1	NM_021431	Nudt11	nudix (nucleoside diphosphate linked moiety X)-	6047453	6055110	TC0X00000044.mm.1	0.0	0.486524
TC1100002775.mm.1	NM_007836	Gadd45a	growth arrest and DNA-damage-inducible 45 alp	67035096	67037457	TC0600002422.mm.1	0.0	0.486633
TC1100002786.mm.1	NM_001024919	Bod1	biorientation of chromosomes in cell division 1	31665150	31671919	TC1100002461.mm.1	0.0	0.48672
TC1100002793.mm.1	NM_001190444	Aamp	angio-associated migratory protein	74279840	74284738	TC0100002582.mm.1	0.1	0.486751
TC1100002815.mm.1	NM_009942	Cox5b	cytochrome c oxidase subunit Vb	36691487	36693388	TC0100000253.mm.1	0.1	0.486836
TC1100002818.mm.1	ENSMUST00000080835	Olfr979	olfactory receptor 979	40000206	40001250	TC0900002089.mm.1	0.1	0.487014
TC1100002822.mm.1	ENSMUST00000104513	Gm24068	predicted gene, 24068	14079809	14079940	TC0400002229.mm.1	0.1	0.487167
TC1100002826.mm.1	ENSMUST00000139711	Defa-ps	defensin, alpha, pseudogene 1	21695012	21695853	TC0800000254.mm.1	0.0	0.488127
TC1100002833.mm.1	ENSMUST00000177720	Gm16368	predicted pseudogene 16368	88083697	88084131	TC1200000891.mm.1	0.1	0.488202
TC1100002834.mm.1	ENSMUST00000175120	Gm25707	predicted gene, 25707	132408309	132408404	TC0400001586.mm.1	-0.2	0.488203
TC1100002835.mm.1	NM_145476	Tbc1d22	TBC1 domain family, member 22a	86214459	86498503	TC1500000835.mm.1	-0.1	0.488222
TC1100002836.mm.1	NM_001005358	Zfp960	zinc finger protein 960	17064103	17089631	TC1700000194.mm.1	-0.2	0.488262
TC1100002837.mm.1	NM_001100181	Cyp4a32	cytochrome P450, family 4, subfamily a, polypep	115600938	115622366	TC0400004188.mm.1	0.2	0.48828
TC1100002849.mm.1	ENSMUST00000116469	Gm13768	predicted gene 13768	90174097	90195152	TC0200001345.mm.1	0.1	0.488286
TC1100002852.mm.1	NM_023645	Kdelc1	KDEL (Lys-Asp-Glu-Leu) containing 1	44106546	44118808	TC0100003877.mm.1	0.0	0.488342
TC1100002853.mm.1	NM_010639	Klk1	kallikrein 1	44225437	44229618	TC0700000796.mm.1	0.5	0.48862
TC1100002855.mm.1	NM_029293	Phpt1	phosphohistidine phosphatase 1	25573430	25575224	TC0200005494.mm.1	0.0	0.48865
TC1100002856.mm.1	NM_172378	Slc22a2	solute carrier family 22 (organic cation transp	57243767	57477625	TC1500001552.mm.1	0.2	0.488703
TC1100002860.mm.1	XM_003084912	Gm10465	predicted gene 10465	54512133	54517079	TC1200001745.mm.1	0.0	0.488845
TC1100002861.mm.1	NM_001033202	Usp30	ubiquitin specific peptidase 30	114100333	114123506	TC0500001219.mm.1	0.1	0.48949
TC1100002865.mm.1	NM_026173	Poc5	POC5 centriolar protein homolog (Chlamydomor	96388294	96415587	TC1300001087.mm.1	-0.1	0.489626
TC1100002875.mm.1	ENSMUST00000175499	Gm24573	predicted gene, 24573	48762851	48762962	TC0400002631.mm.1	-0.3	0.489792
TC1100002880.mm.1	ENSMUST00000083177	Gm25141	predicted gene, 25141	102627779	102627885	TC1500002298.mm.1	-0.1	0.490046
TC1100002886.mm.1	ENSMUST00000158638	Gm22892	predicted gene, 22892	135740997	135741101	TC0600001611.mm.1	0.0	0.490055
TC1100002890.mm.1	XM_003689029	Gm21412	predicted gene, 21412	24969429	24970420	TC0Y00000072.mm.1	0.1	0.490303
TC1100002892.mm.1	ENSMUST00000178701	Gm23269	predicted gene, 23269	89201167	89201273	TC0300002339.mm.1	-0.4	0.490361
TC1100002898.mm.1	ENSMUST00000169373	Olfr100	olfactory receptor 100 // olfactory receptor 1	37313411	37314437	TC1700002066.mm.1	0.0	0.490411
TC1100002899.mm.1	NR_030499	Mir505	microRNA 505	60394403	60394492	TC0X00002311.mm.1	-0.1	0.490435
TC1100002903.mm.1	NCBI_Gene:632654:p	Ighv7-4	immunoglobulin heavy variable 7-4	114222788	114223254	TC1200002587.mm.1	-0.1	0.490501
TC1100002904.mm.1	NM_023422	Hist1h2	histone cluster 1, H2bc	23684199	23692488	TC1300000255.mm.1	-0.1	0.490563
TC1100002906.mm.1	ENSMUST00000178592	Gm24100	predicted gene, 24100	59598904	59598982	TC0700003259.mm.1	-0.1	0.490861
TC1100002909.mm.1	ENSMUST00000120148	Gm15019	predicted gene 15019	135726998	135729474	TC0X00001305.mm.1	0.1	0.490943
TC1100002911.mm.1	NR_033629	BC02176	cingulin pseudogene	94660589	94670696	TC0300002451.mm.1	0.0	0.491046
TC1100002914.mm.1	ENSMUST00000082460	Gm23622	predicted gene, 23622	75651423	75651529	TC1400002425.mm.1	-0.2	0.491257
TC1100002919.mm.1	ENSMUST00000102377	Gm24715	predicted gene, 24715	18417839	18417933	TC0700002451.mm.1	0.2	0.491393
TC1100002928.mm.1	NM_001039392	Tmsb10	thymosin, beta 10	72957347	72958748	TC0600002504.mm.1	0.0	0.491532
TC1100002932.mm.1	NCBI_Gene:630486:p	Ighv2-6	immunoglobulin heavy variable 2-6	113716670	113717103	TC1200002563.mm.1	-0.2	0.49163
TC1100002947.mm.1	ENSMUST00000120685	Gm16179	predicted gene 16179	61112130	61112502	TC0800002292.mm.1	-0.1	0.491774
TC1100002957.mm.1	ENSMUST00000122283	Gm15599	predicted gene 15599	5110781	5112119	TC1700001365.mm.1	-0.2	0.491834
TC1100002965.mm.1	NM_199017	9230110	RIKEN cDNA 9230110C19 gene	8021672	8042823	TC0900001725.mm.1	0.1	0.49185
TC1100002967.mm.1	ENSMUST00000083844	Gm22154	predicted gene, 22154	123293152	123293282	TC0400001397.mm.1	0.3	0.491895
TC1100002990.mm.1	NR_033504	Gm9962	predicted gene 9962	57387272	57409941	TC0700000939.mm.1	0.0	0.49193
TC1100003013.mm.1	NM_027394	Ube2cbp	ubiquitin-conjugating enzyme E2C binding protei	86307234	86464950	TC0900002776.mm.1	0.0	0.492205
TC1100003038.mm.1	NM_008389	Ipp	IAP promoted placental gene	116507549	116538243	TC0400001253.mm.1	0.0	0.492332
TC1100003041.mm.1	ENSMUST00000175217	Mir5128	microRNA 5128	37688201	37688284	TC0200003405.mm.1	-0.1	0.492526
TC1100003042.mm.1	uc029vhq.1	LOC4328	non-coding RNA, oocyte_clustered_small_RNA4	54553179	55011991	TC0500002432.mm.1	0.2	0.49261
TC1100003043.mm.1	NCBI_Gene:628541:p	Igkv4-6	immunoglobulin kappa variable 4-69	69283794	69284319	TC0600003561.mm.1	-0.4	0.492704
TC1100003045.mm.1	NM_174877	Zar1	zygote arrest 1	72577114	72581084	TC0500002576.mm.1	0.0	0.492705
TC1100003046.mm.1	NM_001080817	Prdm10	PR domain containing 10	31280538	31378543	TC0900000279.mm.1	-0.1	0.492796
TC1100003047.mm.1	NM_175308	Mob3c	MOB kinase activator 3C	115828092	115836185	TC0400001238.mm.1	0.0	0.493108
TC1100003049.mm.1	ENSMUST00000179124	AC13310	N/A	54469	54840	TC1_GL456211_rand	-0.2	0.493234
TC1100003053.mm.1	ENSMUST00000180119	AC13244	N/A	58743	59114	TC1_GL456221_rand	-0.2	0.493234
TC1100003055.mm.1	ENSMUST00000179292	AC13244	N/A	46295	46666	TC1_GL456221_rand	-0.2	0.493234
TC1100003057.mm.1	ENSMUST00000158082	Gm25551	predicted gene, 25551	37092258	37092360	TC0500002270.mm.1	0.0	0.49325
TC1100003059.mm.1	ENSMUST00000116000	Gm10698	predicted gene 10698	33728213	33728889	TC0900000307.mm.1	0.1	0.493335
TC1100003062.mm.1	NM_001190474	Dapk3	death-associated protein kinase 3	81183007	81193197	TC1000000886.mm.1	0.0	0.493418

TC1100003063.mm.1	NM_130873	Krtap19	keratin associated protein 19-4	88884786	88885089	TC1600002019.mm.1	-0.1	0.493535
TC1100003069.mm.1	NM_172277	Snx8	sorting nexin 8	140340303	140389251	TC0500003507.mm.1	0.1	0.493573
TC1100003072.mm.1	NM_028810	Rnd3	Rho family GTPase 3	51130438	51149111	TC0200003512.mm.1	0.1	0.493758
TC1100003075.mm.1	ENSMUST00000087348	Gm10203	predicted gene 10203	149130170	149130710	TC0600001767.mm.1	-0.1	0.493807
TC1100003076.mm.1	ENSMUST00000123422	Gm12162	predicted gene 12162	45452399	45468504	TC1100002588.mm.1	-0.1	0.494016
TC1100003078.mm.1	NM_008959	Ptdss1	phosphatidylserine synthase 1	66932830	66998401	TC1300000815.mm.1	0.1	0.494216
TC1100003083.mm.1	ENSMUST00000185055	AC15441	N/A	91752106	91752185	TC1300001029.mm.1	-0.1	0.494416
TC1100003086.mm.1	ENSMUST00000095646	Gm10322	predicted gene 10322	59616063	59616398	TC1000000536.mm.1	0.1	0.49469
TC1100003089.mm.1	NM_013614	Odc1	ornithine decarboxylase, structural 1	17544873	17551502	TC1200000142.mm.1	-0.1	0.495026
TC1100003093.mm.1	NM_001166658	Cdr1	cerebellar degeneration related antigen 1	61183246	61185558	TC0X00002320.mm.1	-0.1	0.495068
TC1100003095.mm.1	ENSMUST00000122488	Gm23428	predicted gene, 23428	66360641	66360742	TC0900002524.mm.1	-0.2	0.495087
TC1100003106.mm.1	NM_130858	Nxph3	neurexophilin 3	95509845	95514570	TC1100003592.mm.1	0.0	0.495106
TC1100003115.mm.1	ENSMUST00000178603	AC13310	N/A	160447	165925	TC1_GL456211_rand	-0.3	0.49522
TC1100003120.mm.1	NR_028535	Snord90	small nucleolar RNA, C/D box 90	37400047	37400157	TC0200003399.mm.1	-0.3	0.495428
TC1100003127.mm.1	NM_001164634	Slc22a8	solute carrier family 22 (organic anion transpo	8591254	8611835	TC1900000148.mm.1	0.2	0.495499
TC1100003134.mm.1	ENSMUST00000055593	Gm8258	predicted gene 8258	104775911	104776824	TC0500001034.mm.1	-0.1	0.496202
TC1100003148.mm.1	ENSMUST00000082751	Gm25812	predicted gene, 25812	22434414	22434516	TC0X00000232.mm.1	-0.2	0.496331
TC1100003150.mm.1	ENSMUST00000082641	Gm25798	predicted gene, 25798	138101433	138101539	TC0700004469.mm.1	-0.2	0.496339
TC1100003156.mm.1	NM_177721	Ranbp6	RAN binding protein 6	29808108	29812974	TC1900001353.mm.1	0.0	0.496639
TC1100003161.mm.1	NM_011823	Gpr34	G protein-coupled receptor 34	13632089	13640858	TC0X00000169.mm.1	0.1	0.49679
TC1100003175.mm.1	ENSMUST00000175553	Gm25399	predicted gene, 25399	137183987	137184062	TC0400001699.mm.1	-0.1	0.497022
TC1100003181.mm.1	ENSMUST00000082721	Gm25788	predicted gene, 25788	123291344	123291474	TC0400001396.mm.1	0.4	0.497277
TC1100003186.mm.1	ENSMUST00000082714	Gm23303	predicted gene, 23303	148443334	148443485	TC0400004022.mm.1	0.1	0.497289
TC1100003193.mm.1	NM_001024142	Fbxo10	F-box protein 10	45034247	45084604	TC0400002570.mm.1	0.0	0.49739
TC1100003198.mm.1	ENSMUST00000082739	Gm22805	predicted gene, 22805	46630113	46630219	TC0900002223.mm.1	-0.2	0.497395
TC1100003204.mm.1	NM_001037917	Gm6377	predicted gene 6377	109196756	109200445	TC0X00003400.mm.1	-0.1	0.497461
TC1100003211.mm.1	ENSMUST00000082588	Gm26442	predicted gene, 26442	66088109	66088261	TC0300002105.mm.1	0.2	0.497479
TC1100003212.mm.1	NM_146008	Tcp11l2	t-complex 11 (mouse) like 2	84576626	84614359	TC1000001020.mm.1	-0.1	0.497533
TC1100003213.mm.1	XM_001475976	Gm3115	predicted gene 3115	4084120	4099306	TC1400000018.mm.1	0.0	0.497945
TC1100003217.mm.1	ENSMUST00000184860	AC11459	N/A	74235558	74235664	TC0700001075.mm.1	0.3	0.498114
TC1100003224.mm.1	ENSMUST00000104092	Gm25764	predicted gene, 25764	129302091	129302224	TC1000001635.mm.1	0.1	0.498183
TC1100003225.mm.1	NCBI_Gene:385109:p	Igkv4-7	immunoglobulin kappa chain variable 4-72	69226853	69227423	TC0600003558.mm.1	-0.5	0.49822
TC1100003229.mm.1	NR_028566	Snord11	small nucleolar RNA, C/D box 118	69073426	69073562	TC1100000895.mm.1	-0.3	0.498247
TC1100003240.mm.1	NM_177777	D11Wsu4	DNA segment, Chr 11, Wayne State University 47	113684406	113726467	TC1100001863.mm.1	0.0	0.498308
TC1100003264.mm.1	ENSMUST00000116869	Gm22194	predicted gene, 22194	11940973	11941067	TC1000000087.mm.1	0.1	0.498325
TC1100003265.mm.1	BC059222	Dpp8	dipeptidylpeptidase 8	65032458	65082651	TC0900000826.mm.1	0.1	0.498403
TC1100003271.mm.1	XM_003689015	Gm21117	predicted gene, 21117	51126646	51151286	TC0Y00000148.mm.1	-0.1	0.498621
TC1100003272.mm.1	NM_001033364	Cdhr2	cadherin-related family member 2	54701461	54736662	TC1300000635.mm.1	0.0	0.498667
TC1100003276.mm.1	XM_003689107	Gm21477	predicted gene, 21477	87116821	87142912	TC0Y00000212.mm.1	-0.1	0.498797
TC1100003281.mm.1	NM_175329	Chchd10	coiled-coil-helix-coiled-coil-helix domain cont	75933467	75937744	TC1000000729.mm.1	0.1	0.499009
TC1100003283.mm.1	ENSMUST00000158353	Gm23757	predicted gene, 23757	26357947	26358046	TC1000000232.mm.1	0.1	0.499542
TC1100003285.mm.1	ENSMUST00000121413	Mrpl48-	mitochondrial ribosomal protein L48 pseudogen	88599175	88599810	TC0400003005.mm.1	-0.1	0.499594
TC1100003288.mm.1	NM_001039078	Prosc	proline synthetase co-transcribed	27042555	27056132	TC0800000346.mm.1	0.1	0.499829
TC1100003289.mm.1	NM_026510	Ftsj2	FtsJ homolog 2 (E. coli)	140327674	140331898	TC0500003506.mm.1	0.0	0.499866
TC1100003290.mm.1	ENSMUST00000073636	Olfr117	olfactory receptor 117	37659378	37660331	TC1700002078.mm.1	0.0	0.499972
TC1100003293.mm.1	ENSMUST00000061226	Gm8508	predicted gene 8508	109757522	109757931	TC0500002974.mm.1	-0.1	0.500085
TC1100003295.mm.1	NM_028730	Pex26	peroxisomal biogenesis factor 26	121183667	121198837	TC0600001366.mm.1	0.0	0.500146
TC1100003298.mm.1	ENSMUST00000175316	Gm22132	predicted gene, 22132	136757510	136757609	TC0100003154.mm.1	0.2	0.50039
TC1100003299.mm.1	NCBI_Gene:780794:p	Ighv5-1	immunoglobulin heavy variable 5-17	113859149	113859616	TC1200002572.mm.1	-0.4	0.500651
TC1100003300.mm.1	NM_133660	Ces1e	carboxylesterase 1E	93201218	93229619	TC0800002704.mm.1	0.1	0.500718
TC1100003310.mm.1	ENSMUST00000178379	LOC1010	centrin-1-like	21272338	21273082	TC0100000136.mm.1	0.1	0.500768
TC1100003311.mm.1	ENSMUST00000157608	Gm25428	predicted gene, 25428	123471384	123471497	TC0800001525.mm.1	0.1	0.500958
TC1100003315.mm.1	NM_025716	Spryd4	SPRY domain containing 4	128209908	128211794	TC1000003132.mm.1	0.0	0.500982
TC1100003321.mm.1	ENSMUST00000178200	Gm22264	predicted gene, 22264	43070300	43070406	TC1800001266.mm.1	0.0	0.501006
TC1100003326.mm.1	NM_029025	Tmem81	transmembrane protein 81	132506230	132508639	TC0100001196.mm.1	0.0	0.501185
TC1100003328.mm.1	NM_011765	Zfp97	zinc finger protein 97	17121383	17146878	TC1700000198.mm.1	-0.1	0.501303
TC1100003333.mm.1	NCBI_Gene:235952:p	Igkv4-5	immunoglobulin kappa variable 4-57	69575975	69576500	TC0600003570.mm.1	-0.5	0.501376
TC1100003334.mm.1	NM_180678	Gars	glycyl-tRNA synthetase	55038001	55079504	TC0600000661.mm.1	-0.1	0.501457
TC1100003340.mm.1	ENSMUST00000181879	Gm7678	predicted gene 7678	22124496	22125438	TC1000000174.mm.1	0.0	0.501584
TC1100003342.mm.1	NM_172734	Stk38l	serine/threonine kinase 38 like	146724930	146778814	TC0600001736.mm.1	0.0	0.501662
TC1100003345.mm.1	ENSMUST00000114214	Igkv13-	immunoglobulin kappa variable 13-87	68895624	68903249	TC0600000802.mm.1	-0.1	0.50172
TC1100003356.mm.1	NM_011663	Zrsr1	zinc finger (CCCH type), RNA binding motif and	22972005	22976496	TC1100000231.mm.1	0.1	0.501984
TC1100003361.mm.1	ENSMUST00000182170	Gm4819	predicted gene 4819	56250069	56251077	TC1400000803.mm.1	0.0	0.502012
TC1100003365.mm.1	NM_021517	Pdzk1	PDZ domain containing 1	96829284	96870926	TC0300000958.mm.1	0.2	0.502263
TC1100003369.mm.1	NM_027782	Kctd6	potassium channel tetramerisation domain cont	8214148	8223570	TC1400000078.mm.1	0.0	0.502437
TC1100003379.mm.1	NM_023290	Mkrn2	makorin, ring finger protein, 2	115601928	115618670	TC0600001283.mm.1	-0.1	0.502567
TC1100003382.mm.1	XM_001475120	Gm20855	predicted gene, 20855	35105689	35131848	TC0Y00000563.mm.1	-0.1	0.50269
TC1100003384.mm.1	NM_021435	Slc35b4	solute carrier family 35, member B4	34153380	34177111	TC0600002044.mm.1	0.1	0.503029
TC1100003392.mm.1	ENSMUST00000082387	mt-Tf	mitochondrially encoded tRNA phenylalanine	1	68	TC0M00000001.mm.1	0.3	0.503169
TC1100003400.mm.1	ENSMUST00000083723	Gm25337	predicted gene, 25337	102549196	102549299	TC1100003846.mm.1	-0.3	0.503239
TC1100003401.mm.1	NM_026937	Ascc1	activating signal cointegrator 1 complex subuni	60002805	60099990	TC1000000541.mm.1	0.0	0.503254
TC1100003402.mm.1	NM_133998	Fam207a	family with sequence similarity 207, member A	77486655	77515813	TC1000002422.mm.1	0.0	0.50339
TC1100003403.mm.1	ENSMUST00000082685	Gm23975	predicted gene, 23975	16861689	16861794	TC0400002254.mm.1	0.1	0.503404
TC1100003406.mm.1	NM_007952	Pdia3	protein disulfide isomerase associated 3	121413775	121438687	TC0200001812.mm.1	-0.1	0.50382
TC1100003418.mm.1	ENSMUST00000180439	Gm14332	predicted gene 14332	3276856	3278543	TC0X00001719.mm.1	0.0	0.503874
TC1100003420.mm.1	NCBI_Gene:110761:p	Igkj3	immunoglobulin kappa joining 3	70723223	70723260	TC0600000811.mm.1	-0.4	0.503878
TC1100003425.mm.1	NM_001177481	Gm10104	predicted gene 10104	21065038	21089644	TC0800000213.mm.1	0.1	0.504013
TC1100003452.mm.1	NR_030477	Mir455	microRNA 455	63256851	63256932	TC0400000717.mm.1	-0.1	0.504291

TC1100003462.mm.1	NM_177067	Fam118a	family with sequence similarity 118, member A	85037062	85062830	TC1500000801.mm.1	0.0	0.504305
TC1100003469.mm.1	ENSMUST00000083768	Gm22828	predicted gene, 22828	19624609	19624715	TC0600000155.mm.1	0.1	0.5046
TC1100003470.mm.1	NR_035483	Mir1957	microRNA 1957	119129779	119129844	TC0400001326.mm.1	0.1	0.504932
TC1100003474.mm.1	ENSMUST00000120701	Gm1866	predicted gene 1866	114592048	114592524	TC0X00002886.mm.1	-0.1	0.504965
TC1100003478.mm.1	NM_001163700	Nr1h4	nuclear receptor subfamily 1, group H, member	89454234	89533622	TC1000002657.mm.1	0.1	0.505159
TC1100003479.mm.1	XR_106408	Gm11555	predicted gene 11555	99649599	99650236	TC1100003726.mm.1	-0.1	0.505223
TC1100003491.mm.1	NM_026399	Wdr83	WD repeat domain containing 83	85075035	85081306	TC0800002603.mm.1	0.0	0.505303
TC1100003505.mm.1	ENSMUST00000116792	Gm25753	predicted gene, 25753	10502391	10502511	TC0200000172.mm.1	-0.1	0.505357
TC1100003523.mm.1	ENSMUST00000118182	Gm5944	predicted gene 5944	115458894	115459894	TC0X00002892.mm.1	-0.1	0.505562
TC1100003527.mm.1	ENSMUST00000182565	Gm8825	predicted gene 8825	25795810	25796807	TC1900001298.mm.1	-0.1	0.506018
TC1100003534.mm.1	NM_001037915	Ripply1	ripply1 homolog (zebrafish)	139779549	139782353	TC0X00003064.mm.1	0.0	0.506104
TC1100003541.mm.1	ENSMUST00000157962	Gm22962	predicted gene, 22962	68510163	68510235	TC0900000890.mm.1	0.1	0.506182
TC1100003544.mm.1	ENSMUST00000185097	RP23-16	N/A	15566485	15566869	TC0700002410.mm.1	-0.1	0.50645
TC1100003550.mm.1	ENSMUST00000177817	Gm21738	predicted gene, 21738	19415857	19418930	TC1400001514.mm.1	0.1	0.506461
TC1100003561.mm.1	NM_001162932	Rmi2	RMI2, RecQ mediated genome instability 2, hom	10835059	10892966	TC1600000124.mm.1	0.0	0.506605
TC1100003584.mm.1	NM_025556	Coprs	coordinator of PRMT5, differentiation stimulato	13884788	13890271	TC0800001745.mm.1	0.0	0.506794
TC1100003592.mm.1	ENSMUST00000104189	Gm25168	predicted gene, 25168	15757832	15757963	TC0100000090.mm.1	0.1	0.506872
TC1100003593.mm.1	NM_001270685	Gm21637	predicted gene, 21637	3835879	3837534	TC0X00001728.mm.1	-0.1	0.506879
TC1100003596.mm.1	ENSMUST00000104542	Gm23609	predicted gene, 23609	78013972	78014098	TC0900002711.mm.1	0.1	0.506965
TC1100003609.mm.1	NM_028410	Prkrir	protein-kinase, interferon-inducible double str	98703103	98718062	TC0700001372.mm.1	0.0	0.507016
TC1100003610.mm.1	NM_013819	H2-M3	histocompatibility 2, M region locus 3	37270220	37274488	TC1700000765.mm.1	-0.1	0.507157
TC1100003611.mm.1	NM_146982	Olfr125	olfactory receptor 1257	89878444	89881809	TC0200001337.mm.1	-0.1	0.507429
TC1100003627.mm.1	ENSMUST00000163003	Gm16103	predicted gene 16103	43785910	43787188	TC0100000330.mm.1	0.1	0.507454
TC1100003629.mm.1	XR_140613	Gm12526	predicted gene 12526	57756340	57763901	TC0400002727.mm.1	-0.1	0.507659
TC1100003630.mm.1	ENSMUST00000121611	Mup-ps2	major urinary protein, pseudogene 22	55123695	55123937	TC1100000642.mm.1	-0.2	0.507789
TC1100003636.mm.1	ENSMUST00000178527	Gm25646	predicted gene, 25646	59379451	59379529	TC0700003151.mm.1	-0.1	0.507832
TC1100003637.mm.1	NM_028491	1700040	RIKEN cDNA 1700040L02 gene	68430953	68541896	TC1000002330.mm.1	0.1	0.507968
TC1100003643.mm.1	ENSMUST00000082780	n-R5s62	nuclear encoded rRNA 5S 62	82150468	82150563	TC1200000768.mm.1	0.2	0.508034
TC1100003657.mm.1	XM_001472358	Gm2036	predicted gene 2036	26415053	26415711	TC0X00001981.mm.1	0.0	0.508079
TC1100003659.mm.1	NM_026145	Kctd10	potassium channel tetramerisation domain cont	114363567	114380515	TC0500003060.mm.1	0.0	0.508417
TC1100003660.mm.1	NM_146499	Olfr484	olfactory receptor 484	108124199	108125296	TC0700004048.mm.1	-0.1	0.508427
TC1100003663.mm.1	ENSMUST00000157324	Gm24251	predicted gene, 24251	53886828	53886941	TC0100002340.mm.1	0.1	0.509201
TC1100003676.mm.1	NM_197944	Hsh2d	hematopoietic SH2 domain containing	72189668	72200996	TC0800000817.mm.1	-0.1	0.50928
TC1100003677.mm.1	ENSMUST00000179680	Gm10595	predicted gene 10595	41870187	41870612	TC0400002483.mm.1	0.1	0.509516
TC1100003681.mm.1	ENSMUST00000180030	Gm10595	predicted gene 10595	42219428	42219853	TC0400002495.mm.1	0.1	0.509516
TC1100003683.mm.1	ENSMUST00000082972	n-R5s20	nuclear encoded rRNA 5S 204	119631118	119631236	TC0200001777.mm.1	-0.1	0.509538
TC1100003684.mm.1	ENSMUST00000175018	Gm25025	predicted gene, 25025	78050717	78050827	TC1600000891.mm.1	0.1	0.509721
TC1100003688.mm.1	ENSMUST00000117933	Gm15191	predicted gene 15191	151945368	151946367	TC0X00001531.mm.1	0.1	0.50976
TC1100003694.mm.1	NM_012050	Omd	osteomodulin	49582747	49592611	TC1300000568.mm.1	0.0	0.509829
TC1100003696.mm.1	NM_001001446	Cyp2c44	cytochrome P450, family 2, subfamily c, polypep	44005022	44029247	TC1900001550.mm.1	0.1	0.509957
TC1100003704.mm.1	NM_030599	Klrb1b	killer cell lectin-like receptor subfamily B me	128813706	128826331	TC0600003606.mm.1	0.0	0.510016
TC1100003706.mm.1	ENSMUST00000178831	Gm24954	predicted gene, 24954	6343449	6343558	TC0300001605.mm.1	-0.1	0.510136
TC1100003707.mm.1	ENSMUST00000082537	Gm23406	predicted gene, 23406	90602496	90602617	TC1600000986.mm.1	-0.4	0.510161
TC1100003711.mm.1	ENSMUST00000104347	Gm22543	predicted gene, 22543	40306219	40306312	TC1600000582.mm.1	-0.1	0.51065
TC1100003720.mm.1	NM_009787	Pdia4	protein disulfide isomerase associated 4	47796141	47813512	TC0600002212.mm.1	0.2	0.510684
TC1100003721.mm.1	ENSMUST00000082829	Gm23515	predicted gene, 23515	65667595	65667701	TC0800002324.mm.1	0.1	0.510708
TC1100003724.mm.1	ENSMUST00000104837	Mir466d	microRNA 466d	10511967	10512062	TC0200000192.mm.1	0.1	0.510932
TC1100003725.mm.1	ENSMUST00000095717	Gm4795	predicted pseudogene 4795	45006110	45007117	TC1000000420.mm.1	-0.1	0.510977
TC1100003726.mm.1	ENSMUST00000118277	Gm12098	predicted gene 12098	30568182	30568898	TC1100002439.mm.1	0.1	0.511015
TC1100003731.mm.1	NM_027155	2310061	RIKEN cDNA 2310061N02 gene	88707171	88707962	TC1600002011.mm.1	-0.1	0.511093
TC1100003732.mm.1	ENSMUST00000179167	Gm23307	predicted gene, 23307	39283976	39284080	TC0700000701.mm.1	-0.1	0.511187
TC1100003733.mm.1	NM_013823	Kl	klotho	150952607	150993817	TC0500001876.mm.1	0.3	0.511312
TC1100003734.mm.1	XR_140909	Gm10643	predicted gene 10643	84063558	84065137	TC0800002567.mm.1	0.0	0.511335
TC1100003735.mm.1	NM_010226	Foxs1	forkhead box S1	152931894	152933208	TC0200004919.mm.1	0.0	0.511408
TC1100003736.mm.1	XR_104780	Gm19725	predicted gene, 19725	64850562	64867244	TC0200000942.mm.1	0.0	0.511519
TC1100003737.mm.1	ENSMUST00000104168	Gm26288	predicted gene, 26288	58148096	58148227	TC0700003113.mm.1	0.2	0.511893
TC1100003738.mm.1	NM_019915	Art2b	ADP-ribosyltransferase 2b	101578860	101581161	TC0700003842.mm.1	0.1	0.511912
TC1100003739.mm.1	NM_010030	Defb2	defensin beta 2	21839926	21843482	TC0800000261.mm.1	-0.1	0.512004
TC1100003740.mm.1	NM_146193	Btbd1	BTB (POZ) domain containing 1	81792074	81829464	TC0700003618.mm.1	0.1	0.512159
TC1100003742.mm.1	NCBI_Gene:10012468	Trbv21	T cell receptor beta, variable 21	41202587	41203044	TC0600000431.mm.1	0.0	0.512181
TC1100003747.mm.1	NM_177374	Trmt61a	tRNA methyltransferase 61A	111678105	111683902	TC1200001243.mm.1	0.0	0.512256
TC1100003757.mm.1	XM_003689109	Gm21524	predicted gene, 21524	69982876	69983559	TC0Y00000441.mm.1	0.1	0.512321
TC1100003758.mm.1	XM_003689116	Gm21715	predicted gene, 21715	74011477	74012160	TC0Y00000463.mm.1	0.1	0.512321
TC1100003760.mm.1	XM_001478443	Gm3873	predicted gene 3873	25033142	25033531	TC1900000401.mm.1	0.2	0.512472
TC1100003763.mm.1	NM_134247	Acot4	acyl-CoA thioesterase 4	84038379	84044723	TC1200000799.mm.1	0.0	0.512513
TC1100003768.mm.1	XR_105293	Gm7265	predicted gene 7265	72691550	72695054	TC0900000978.mm.1	0.1	0.51257
TC1100003772.mm.1	NCBI_Gene:21640:pr	Tcrg-V6	T cell receptor gamma, variable 6	19190368	19190929	TC1300000140.mm.1	0.0	0.512736
TC1100003774.mm.1	ENSMUST00000120250	Gm15703	predicted gene 15703	31924989	31925868	TC1600000422.mm.1	-0.1	0.513499
TC1100003779.mm.1	ENSMUST00000117788	Gm11930	predicted gene 11930	33201764	33201953	TC0400000281.mm.1	-0.2	0.513703
TC1100003781.mm.1	NM_030717	Lactb	lactamase, beta	66955390	66975484	TC0900002537.mm.1	0.0	0.513802
TC1100003792.mm.1	ENSMUST00000122474	Gm25109	predicted gene, 25109	94517162	94517275	TC1300001064.mm.1	-0.1	0.513875
TC1100003793.mm.1	NR_037220	Mir3060	microRNA 3060	4139364	4139446	TC1100000036.mm.1	0.1	0.51388
TC1100003794.mm.1	NM_001085541	Gm13128	predicted gene 13128	144330249	144333465	TC0400001847.mm.1	-0.1	0.514076
TC1100003799.mm.1	ENSMUST00000158681	Gm24842	predicted gene, 24842	109988078	109988131	TC0700001618.mm.1	-0.1	0.514202
TC1100003802.mm.1	ENSMUST00000082415	mt-Th	mitochondrially encoded tRNA histidine	11546	11612	TC0M00000014.mm.1	-0.3	0.514223
TC1100003808.mm.1	NM_153513	BC02852	cDNA sequence BC028528	95883954	95892005	TC0300002490.mm.1	0.1	0.514323
TC1100003811.mm.1	ENSMUST00000184689	PCGEM1	Prostate-specific transcript 1	50222389	50222520	TC0100002301.mm.1	0.1	0.514477
TC1100003822.mm.1	NM_025968	Ptgr1	prostaglandin reductase 1	58965439	58987119	TC0400002744.mm.1	0.0	0.514537

TC1100003842.mm.1	XM_001475283	Gm2888	predicted gene 2888	3030002	3038762	TC1400000001.mm.1	0.0	0.514658
TC1100003846.mm.1	NM_008033	Fnta	farnesyltransferase, CAAX box, alpha	25998722	26015608	TC0800001927.mm.1	0.1	0.514721
TC1100003850.mm.1	NM_012002	Cops6	COP9 (constitutive photomorphogenic) homolog	138161071	138164646	TC0500001643.mm.1	-0.1	0.514997
TC1100003876.mm.1	ENSMUST00000104323	Gm25875	predicted gene, 25875	60084788	60084894	TC1500000442.mm.1	-0.1	0.515021
TC1100003883.mm.1	ENSMUST00000083935	Gm24917	predicted gene, 24917	22868901	22869004	TC1100000230.mm.1	-0.2	0.515138
TC1100003888.mm.1	ENSMUST00000175833	Vmn2r-p	vomeronasal 2, receptor, pseudogene 12	64744749	64745645	TC0300002090.mm.1	0.0	0.515231
TC1100003902.mm.1	ENSMUST00000102372	Gm26338	predicted gene, 26338	128094917	128095026	TC0600003189.mm.1	0.0	0.51534
TC1100003904.mm.1	NM_001081163	Chsy1	chondroitin sulfate synthase 1	66109515	66173798	TC0700000991.mm.1	-0.1	0.515489
TC1100003919.mm.1	NR_030426	Mir667	microRNA 667	109720006	109720097	TC1200001180.mm.1	-0.1	0.515587
TC1100003920.mm.1	NM_001177427	Eid2b	EP300 interacting inhibitor of differentiation	28277706	28280129	TC0700000494.mm.1	0.0	0.515633
TC1100003941.mm.1	ENSMUST00000099799	Olfr121	olfactory receptor 1217	89022995	89024099	TC0200004037.mm.1	0.0	0.515634
TC1100003962.mm.1	NM_013512	Epb4.1l	erythrocyte protein band 4.1-like 4a	33796327	34007206	TC1800001141.mm.1	0.0	0.515935
TC1100003978.mm.1	NM_007449	Ang2	angiogenin, ribonuclease A family, member 2	51195486	51195923	TC1400002001.mm.1	0.0	0.516042
TC1100003982.mm.1	NM_028625	Lce1a2	late cornified envelope 1A2	92668613	92670315	TC0300002403.mm.1	-0.1	0.516187
TC1100003984.mm.1	NM_001254747	Il15	interleukin 15	82331624	82403222	TC0800002542.mm.1	0.0	0.516232
TC1100003988.mm.1	NM_001164437	Tmem212	transmembrane protein 212	27866065	27896368	TC0300001765.mm.1	0.1	0.516371
TC1100003991.mm.1	ENSMUST00000119314	Gm13915	predicted gene 13915	108572594	108573524	TC0200001616.mm.1	-0.1	0.516413
TC1100004000.mm.1	NM_021511	Rrs1	RRS1 ribosome biogenesis regulator homolog (S.	9545408	9547455	TC0100000038.mm.1	0.0	0.516586
TC1100004002.mm.1	ENSMUST00000157643	Gm24776	predicted gene, 24776	72971179	72971264	TC0500002584.mm.1	0.1	0.516587
TC1100004035.mm.1	NM_013897	Timm8b	translocase of inner mitochondrial membrane 8I	50603901	50614192	TC0900000601.mm.1	-0.1	0.517138
TC1100004039.mm.1	ENSMUST00000175407	Gm23375	predicted gene, 23375	133761688	133761770	TC0600003293.mm.1	-0.1	0.517162
TC1100004045.mm.1	ENSMUST00000122476	Gm25104	predicted gene, 25104	37267076	37267238	TC1700002062.mm.1	0.0	0.517496
TC1100004051.mm.1	ENSMUST00000167374	Ripk1	receptor (TNFRSF)-interacting serine-threonine	34002363	34037147	TC1300000384.mm.1	0.1	0.517578
TC1100004053.mm.1	NM_001081168	Sap30l	SAP30-like	57801637	57810615	TC1100000668.mm.1	0.1	0.518593
TC1100004054.mm.1	NR_037252	Mir467a	microRNA 467a-3	10483678	10483760	TC0200000125.mm.1	-0.1	0.518668
TC1100004056.mm.1	ENSMUST00000177790	mmu-mir	mmu-mir-467a-3 // mmu-mir-467a-6 // mmu-m	10491048	10491130	TC0200000143.mm.1	-0.1	0.518668
TC1100004057.mm.1	NR_037267 // NR_	Mir467a	microRNA 467a-10 // microRNA 467a-6	10503273	10503355	TC0200000173.mm.1	-0.1	0.518668
TC1100004084.mm.1	ENSMUST00000158490	Gm25905	predicted gene, 25905	118834900	118835000	TC0600001331.mm.1	0.1	0.518833
TC1100004088.mm.1	ENSMUST00000122704	Gm26091	predicted gene, 26091	104601158	104601239	TC0300002652.mm.1	0.1	0.518864
TC1100004099.mm.1	ENSMUST00000074239	Gm5915	predicted pseudogene 5915	105660334	105660787	TC0800002830.mm.1	-0.2	0.518918
TC1100004101.mm.1	ENSMUST00000157768	Gm26308	predicted gene, 26308	128377831	128377899	TC1000003141.mm.1	0.1	0.518964
TC1100004102.mm.1	XM_001001188	Scgb1b1	secretoglobin, family 1B, member 12	32334198	32335382	TC0700000596.mm.1	0.1	0.518972
TC1100004106.mm.1	NM_012014	Gprin1	G protein-regulated inducer of neurite outgrowt	54736671	54749874	TC1300002040.mm.1	0.0	0.51908
TC1100004110.mm.1	ENSMUST00000122571	U2	U2 spliceosomal RNA	50830	50978	TC4_GL456216_rand	0.1	0.519263
TC1100004113.mm.1	NM_025570	Mrpl20	mitochondrial ribosomal protein L20	155802878	155809975	TC0400002091.mm.1	0.0	0.519453
TC1100004114.mm.1	NM_201640	Cyp4a31	cytochrome P450, family 4, subfamily a, polypep	115563649	115579015	TC0400001229.mm.1	0.2	0.519702
TC1100004118.mm.1	NM_013518	Fgf9	fibroblast growth factor 9	58070547	58112720	TC1400000829.mm.1	0.0	0.520001
TC1100004122.mm.1	ENSMUST00000122693	Gm24384	predicted gene, 24384	63909082	63909156	TC1800001454.mm.1	0.0	0.520069
TC1100004123.mm.1	ENSMUST00000158189	Gm22385	predicted gene, 22385	113403088	113403188	TC1300001288.mm.1	0.1	0.520264
TC1100004127.mm.1	NM_001081381	Elp6	elongator acetyltransferase complex subunit 6	110305192	110322102	TC0900001458.mm.1	0.0	0.520342
TC1100004152.mm.1	NM_008929	Dnajc3	DnaJ (Hsp40) homolog, subfamily C, member 3	118937932	118981702	TC1400001290.mm.1	-0.1	0.520495
TC1100004153.mm.1	NM_013474	Apoa2	apolipoprotein A-II	171225054	171226379	TC0100001580.mm.1	-0.1	0.520549
TC1100004157.mm.1	ENSMUST00000177997	Gm24754	predicted gene, 24754	46018067	46018173	TC1600001673.mm.1	-0.1	0.520768
TC1100004158.mm.1	ENSMUST00000157688	Gm26182	predicted gene, 26182	119526544	119526659	TC0X00002907.mm.1	0.1	0.520809
TC1100004159.mm.1	ENSMUST00000119445	Gm13444	predicted gene 13444	35483384	35483905	TC0200003368.mm.1	0.0	0.521057
TC1100004160.mm.1	ENSMUST00000117312	Gm14509	predicted gene 14509	8971505	8972790	TC0X00000099.mm.1	-0.1	0.52112
TC1100004167.mm.1	NM_009640	Angpt1	angiopoietin 1	42424667	42676977	TC1500001450.mm.1	-0.1	0.52133
TC1100004168.mm.1	ENSMUST00000184727	AC10723	N/A	47591668	47591747	TC0800000553.mm.1	-0.1	0.521331
TC1100004182.mm.1	NM_010153	Erbb3	v-erb-b2 erythroblastic leukemia viral oncogene	128567523	128589652	TC1000003153.mm.1	-0.1	0.521351
TC1100004183.mm.1	NM_028768	Armc8	armadillo repeat containing 8	99478391	99568899	TC0900002922.mm.1	0.0	0.521436
TC1100004201.mm.1	ENSMUST00000083030	Gm25147	predicted gene, 25147	18158687	18158791	TC0200000297.mm.1	-0.1	0.521721
TC1100004212.mm.1	ENSMUST00000078264	Olfr137	olfactory receptor 1373	52144593	52145528	TC1100002712.mm.1	0.1	0.521741
TC1100004217.mm.1	NM_080560	Ube2n	ubiquitin-conjugating enzyme E2N	95515162	95545658	TC1000001162.mm.1	0.1	0.52176
TC1100004228.mm.1	NM_009692	Apoa1	apolipoprotein A-I	46228580	46230469	TC0900000559.mm.1	-0.1	0.521796
TC1100004231.mm.1	XR_106226	A430108	RIKEN cDNA A430108G06 gene	53564668	53567313	TC1100002736.mm.1	0.0	0.522065
TC1100004243.mm.1	NM_008197	H1f0	H1 histone family, member 0	79028212	79030504	TC1500000662.mm.1	0.1	0.522244
TC1100004245.mm.1	ENSMUST00000175997	Vmn2r-p	vomeronasal 2, receptor, pseudogene 116	18763265	18763390	TC1700000225.mm.1	0.0	0.522371
TC1100004248.mm.1	NM_009789	S100g	S100 calcium binding protein G	162961992	162964599	TC0X00003316.mm.1	0.3	0.522417
TC1100004249.mm.1	ENSMUST00000118508	Gm13146	predicted gene 13146	147187708	147188487	TC0400001901.mm.1	-0.1	0.522517
TC1100004257.mm.1	ENSMUST00000099454	AI60618	expressed sequence AI606181	41593363	41596158	TC1900000593.mm.1	-0.1	0.522841
TC1100004258.mm.1	ENSMUST00000083055	Gm23242	predicted gene, 23242	110428157	110428263	TC1400002687.mm.1	0.1	0.522885
TC1100004259.mm.1	NM_134174	Vmn1r5	vomeronasal 1 receptor 5	56985295	56986350	TC0600000681.mm.1	-0.1	0.522977
TC1100004261.mm.1	NM_001162381	Fam166b	family with sequence similarity 166, member B	43427019	43429134	TC0400002522.mm.1	0.0	0.523066
TC1100004262.mm.1	ENSMUST00000102345	Gm23060	predicted gene, 23060	34395647	34395755	TC1900001417.mm.1	-0.1	0.523074
TC1100004265.mm.1	ENSMUST00000158184	Gm24078	predicted gene, 24078	22747131	22747233	TC0400000198.mm.1	-0.1	0.52315
TC1100004266.mm.1	ENSMUST00000083239	Gm22127	predicted gene, 22127	36722882	36722987	TC1100000391.mm.1	-0.3	0.523503
TC1100004270.mm.1	NM_026194	Ufl1	UFM1 specific ligase 1	25248586	25281821	TC0400002316.mm.1	0.1	0.524081
TC1100004277.mm.1	NM_001025432	Crebbp	CREB binding protein	4084048	4213404	TC1600001117.mm.1	-0.1	0.524188
TC1100004280.mm.1	ENSMUST00000070435	Fabp3-p	fatty acid binding protein 3, muscle and heart,	86731754	86732409	TC1000002628.mm.1	-0.2	0.524304
TC1100004290.mm.1	ENSMUST00000180559	ENSMUSG	---	70661248	70662108	TC0200003710.mm.1	0.0	0.524422
TC1100004292.mm.1	NM_177073	Relt	RELT tumor necrosis factor receptor	100845848	100863446	TC0700003826.mm.1	0.0	0.524558
TC1100004295.mm.1	NCBI_Gene:236047:p	Igkv4-7	immunoglobulin kappa variable 4-74	69184825	69185366	TC0600003557.mm.1	-0.4	0.524704
TC1100004296.mm.1	NM_011828	Hs2st1	heparan sulfate 2-O-sulfotransferase 1	144431103	144570216	TC0300003071.mm.1	0.0	0.524713
TC1100004301.mm.1	ENSMUST00000121403	Gm11954	predicted gene 11954	4002457	4002805	TC1100000031.mm.1	-0.1	0.524886
TC1100004302.mm.1	ENSMUST00000185192	AC15384	N/A	45537244	45537350	TC1000000429.mm.1	0.2	0.524926
TC1200000015.mm.1	ENSMUST00000173709	Gm7031	predicted gene 7031	37175854	37176772	TC1700000760.mm.1	-0.1	0.525202
TC1200000021.mm.1	ENSMUST00000083106	Gm24977	predicted gene, 24977	25566660	25566822	TC0400002320.mm.1	-0.1	0.525258
TC1200000030.mm.1	NM_023697	Rdh14	retinol dehydrogenase 14 (all-trans and 9-cis)	10390780	10395562	TC1200000086.mm.1	-0.1	0.525319

TC1200000031.mm.1	ENSMUST00000177308	Gm18588	predicted gene, 18588	68902267	68902758	TC0300002124.mm.1	0.1	0.525967
TC1200000033.mm.1	ENSMUST00000116834	Gm25233	predicted gene, 25233	6370870	6370960	TC0500001917.mm.1	0.1	0.526031
TC1200000046.mm.1	ENSMUST00000116765	Gm26469	predicted gene, 26469	169061120	169061240	TC0200002620.mm.1	0.2	0.526332
TC1200000056.mm.1	ENSMUST00000103970	Gm24578	predicted gene, 24578	12333776	12333904	TC1400001454.mm.1	0.1	0.526644
TC1200000057.mm.1	NR_037280	Mir3097	microRNA 3097	35021049	35021115	TC0500000388.mm.1	-0.1	0.526646
TC1200000061.mm.1	ENSMUST00000157819	Gm22187	predicted gene, 22187	151059955	151060083	TC0200002236.mm.1	-0.1	0.52668
TC1200000071.mm.1	ENSMUST00000116699	Gm24590	predicted gene, 24590	62598892	62599010	TC1200001825.mm.1	0.1	0.526891
TC1200000074.mm.1	ENSMUST00000116172	Gm11175	predicted gene 11175	70699538	70700080	TC0800002401.mm.1	0.0	0.527025
TC1200000075.mm.1	ENSMUST00000171202	Gm17027	predicted gene 17027	42157290	42162622	TC1400001819.mm.1	0.0	0.527062
TC1200000082.mm.1	ENSMUST00000103768	Mir297a	microRNA 297a-3	10515820	10515921	TC0200000200.mm.1	0.1	0.527332
TC1200000086.mm.1	ENSMUST00000175299	Gm26141	predicted gene, 26141	158740138	158740263	TC0200002441.mm.1	-0.1	0.527608
TC1200000095.mm.1	ENSMUST00000118736	Olfr111	olfactory receptor 1117, pseudogene 1	87284352	87285272	TC0200001283.mm.1	0.1	0.527798
TC1200000096.mm.1	ENSMUST00000163460	Gm13394	predicted gene 13394	28933475	28934652	TC0200003240.mm.1	0.1	0.527955
TC1200000097.mm.1	ENSMUST00000178937	Gm23726	predicted gene, 23726	18069326	18069392	TC0300000119.mm.1	0.2	0.528186
TC1200000100.mm.1	ENSMUST00000179099	Gm25570	predicted gene, 25570	105399719	105399798	TC0600001178.mm.1	-0.1	0.52854
TC1200000106.mm.1	NM_175451	Ckap4	cytoskeleton-associated protein 4	84526305	84534036	TC1000002594.mm.1	0.0	0.528598
TC1200000110.mm.1	ENSMUST00000102327	Gm24271	predicted gene, 24271	44922067	44922177	TC1000002106.mm.1	0.1	0.528606
TC1200000114.mm.1	NM_026636	Babam1	BRISC and BRCA1 A complex member 1	71396855	71404772	TC0800000786.mm.1	0.1	0.528746
TC1200000115.mm.1	ENSMUST00000178311	Ak3l2-p	adenylate kinase 3-like 2, pseudogene	72633868	72634767	TC0200001060.mm.1	-0.1	0.528995
TC1200000118.mm.1	ENSMUST00000122698	Gm24382	predicted gene, 24382	60127641	60127747	TC0300002060.mm.1	-0.1	0.529282
TC1200000122.mm.1	NM_022417	Itm2c	integral membrane protein 2C	85894281	85908699	TC0100000774.mm.1	0.1	0.529541
TC1200000130.mm.1	ENSMUST00000158402	Gm25013	predicted gene, 25013	120609966	120610093	TC0300002834.mm.1	0.1	0.529541
TC1200000132.mm.1	ENSMUST00000102368	Gm26339	predicted gene, 26339	42274964	42275062	TC1900000615.mm.1	0.1	0.529733
TC1200000135.mm.1	NCBI_Gene:668395:p	Ighv5-1	immunoglobulin heavy variable 5-12	113702124	113702578	TC1200002562.mm.1	-0.3	0.529799
TC1200000140.mm.1	NCBI_Gene:380809:p	Ighv10-	immunoglobulin heavy variable V10-3	114523441	114523887	TC1200002603.mm.1	-0.3	0.529845
TC1200000141.mm.1	ENSMUST00000116911	Gm26042	predicted gene, 26042	165024345	165024456	TC0100001513.mm.1	0.1	0.529853
TC1200000142.mm.1	NR_030549	Mir193b	microRNA 193b	13449523	13449601	TC1600000157.mm.1	-0.1	0.529881
TC1200000143.mm.1	ENSMUST00000167475	Gm3760	predicted gene 3760	7498713	7506148	TC1400001428.mm.1	0.0	0.530373
TC1200000145.mm.1	NM_028038	Ddx28	DEAD (Asp-Glu-Ala-Asp) box polypeptide 28	106009616	106011882	TC0800002848.mm.1	-0.1	0.530404
TC1200000152.mm.1	ENSMUST00000164484	Gm8237	predicted gene 8237	5857918	5880382	TC1400001402.mm.1	0.0	0.530587
TC1200000153.mm.1	ENSMUST00000082622	Gm24625	predicted gene, 24625	62521023	62521152	TC1400000881.mm.1	-0.1	0.530615
TC1200000155.mm.1	ENSMUST00000083709	Gm25897	predicted gene, 25897	99803020	99803126	TC1500002224.mm.1	-0.1	0.530617
TC1200000156.mm.1	NM_133983	Cd276	CD276 antigen	58524298	58555132	TC0900002396.mm.1	0.1	0.530657
TC1200000169.mm.1	NM_001164574	Kbtbd3	kelch repeat and BTB (POZ) domain containing 3	4309743	4331732	TC0900000025.mm.1	0.0	0.530914
TC1200000170.mm.1	NM_001101631	Gm3285	predicted gene 3285	77861975	77862638	TC1000000770.mm.1	-0.1	0.531101
TC1200000172.mm.1	ENSMUST00000157715	Gm22338	predicted gene, 22338	61492766	61492894	TC0200000920.mm.1	-0.1	0.531178
TC1200000175.mm.1	NM_017399	Fabp1	fatty acid binding protein 1, liver	71199827	71205023	TC0600000821.mm.1	-0.1	0.531396
TC1200000176.mm.1	ENSMUST00000158019	Gm26485	predicted gene, 26485	16823249	16823312	TC0300001679.mm.1	-0.2	0.531553
TC1200000177.mm.1	NM_001080742	Vamp5	vesicle-associated membrane protein 5	72368049	72380468	TC0600002487.mm.1	0.0	0.531705
TC1200000181.mm.1	NM_173051	Serpinb	serine (or cysteine) peptidase inhibitor, clade	32881397	32898161	TC1300001764.mm.1	-0.1	0.531713
TC1200000182.mm.1	ENSMUST00000157911	Gm23278	predicted gene, 23278	87346245	87346387	TC1400001124.mm.1	-0.1	0.532318
TC1200000183.mm.1	NM_010124	Eif4ebp	eukaryotic translation initiation factor 4E bin	61432493	61452766	TC1000003224.mm.1	0.0	0.532537
TC1200000184.mm.1	ENSMUST00000104545	Gm23608	predicted gene, 23608	10075653	10075780	TC0200002944.mm.1	0.1	0.532719
TC1200000189.mm.1	ENSMUST00000082410	mt-Tg	mitochondrially encoded tRNA glycine	9391	9458	TC0M00000010.mm.1	-0.1	0.532755
TC1200000190.mm.1	NM_013848	Ermap	erythroblast membrane-associated protein	119175457	119190011	TC0400003418.mm.1	0.0	0.532839
TC1200000197.mm.1	NR_033123	4933409	RIKEN cDNA 4933409K07 gene	42031296	42055130	TC0400002488.mm.1	0.0	0.533033
TC1200000201.mm.1	ENSMUST00000179816	Gm22289	predicted gene, 22289	59904755	59904848	TC0700003341.mm.1	-0.1	0.533047
TC1200000203.mm.1	ENSMUST00000157855	Gm23643	predicted gene, 23643	3770741	3770804	TC1800000925.mm.1	0.1	0.533737
TC1200000217.mm.1	NM_001010827	Taar7b	trace amine-associated receptor 7B	23999938	24001015	TC1000000199.mm.1	-0.1	0.533821
TC1200000225.mm.1	ENSMUST00000158055	Gm23997	predicted gene, 23997	7259941	7260061	TC1900000133.mm.1	0.1	0.534007
TC1200000231.mm.1	NM_023815	Trp53rk	transformation related protein 53 regulating ki	166792531	166799505	TC0200002574.mm.1	0.0	0.534067
TC1200000239.mm.1	ENSMUST00000121490	Gm5578	predicted pseudogene 5578	112605544	112606779	TC0600001235.mm.1	-0.1	0.534183
TC1200000255.mm.1	NM_133735	Ptcd1	pentatricopeptide repeat domain 1	145147378	145167108	TC0500003590.mm.1	0.0	0.5342
TC1200000258.mm.1	NM_013831	Pstpip2	proline-serine-threonine phosphatase-interactin	77789913	77882879	TC1800000834.mm.1	0.1	0.534234
TC1200000260.mm.1	ENSMUST00000119288	Gm12345	predicted gene 12345	77149628	77150525	TC1100001113.mm.1	-0.1	0.534334
TC1200000263.mm.1	NM_007825	Cyp7b1	cytochrome P450, family 7, subfamily b, polypep	18071950	18243338	TC0300001689.mm.1	0.0	0.534616
TC1200000274.mm.1	NM_010386	H2-DMa	histocompatibility 2, class II, locus DMa	34122832	34139101	TC1700000618.mm.1	-0.1	0.534694
TC1200000278.mm.1	NM_001101630	Gm3238	predicted gene 3238	77770633	77771325	TC1000002428.mm.1	-0.1	0.534852
TC1200000279.mm.1	ENSMUST00000117436	Gm13400	predicted gene 13400	30923978	30924357	TC0200003279.mm.1	0.0	0.534907
TC1200000285.mm.1	ENSMUST00000117799	Gm13036	predicted gene 13036	146058776	146059523	TC0400001876.mm.1	0.0	0.534924
TC1200000294.mm.1	NM_175118	Dusp28	dual specificity phosphatase 28	92906989	92908620	TC0100000919.mm.1	-0.1	0.535275
TC1200000300.mm.1	NM_008437	Napsa	napsin A aspartic peptidase	44572432	44586862	TC0700000810.mm.1	0.3	0.53536
TC1200000304.mm.1	NM_175431	Fam228b	family with sequence similarity 228, member B	4746216	4769267	TC1200001364.mm.1	0.0	0.535391
TC1200000308.mm.1	NM_009997	Cyp2a4	cytochrome P450, family 2, subfamily a, polypep	26307169	26315088	TC0700000439.mm.1	0.2	0.535406
TC1200000316.mm.1	NM_020510	Fzd2	frizzled homolog 2 (Drosophila)	102604396	102608058	TC1100001694.mm.1	0.0	0.535521
TC1200000319.mm.1	NM_008148	Gp5	glycoprotein 5 (platelet)	30307685	30310781	TC1600001460.mm.1	0.0	0.535904
TC1200000328.mm.1	ENSMUST00000121711	Gm13419	predicted gene 13419	34830930	34831110	TC0200000624.mm.1	-0.1	0.536068
TC1200000348.mm.1	ENSMUST00000120625	Gm14026	predicted gene 14026	129168700	129170488	TC0200001949.mm.1	0.1	0.536104
TC1200000352.mm.1	ENSMUST00000184926	AC13170	N/A	60699179	60699291	TC1600001820.mm.1	0.1	0.536149
TC1200000353.mm.1	NM_001253814	Ankle2	ankyrin repeat and LEM domain containing 2	110231004	110256651	TC0500001136.mm.1	-0.1	0.536293
TC1200000383.mm.1	ENSMUST00000111364	AC12514	N/A	123792	124928	TC1_GL456210_rand	-0.3	0.536476
TC1200000385.mm.1	NCBI_Gene:628072:p	Igkv14-	immunoglobulin kappa variable 14-130	67791046	67791511	TC0600003508.mm.1	-0.1	0.536488
TC1200000387.mm.1	NM_023053	Twsg1	twisted gastrulation homolog 1 (Drosophila)	65921972	65951187	TC1700002418.mm.1	0.1	0.536543
TC1200000406.mm.1	ENSMUST00000120693	Gm12431	predicted gene 12431	98842871	98843038	TC0300002563.mm.1	0.1	0.536705
TC1200000407.mm.1	XM_003689106	Gm21470	predicted gene, 21470	86943636	86944319	TC0Y00000537.mm.1	0.0	0.536937
TC1200000414.mm.1	NR_030559	Mir453	microRNA 453	109735619	109735700	TC1200001193.mm.1	0.1	0.536982
TC1200000419.mm.1	NM_177574	Vps37d	vacuolar protein sorting 37D (yeast)	135072900	135078266	TC0500003390.mm.1	0.0	0.536992
TC1200000429.mm.1	ENSMUST00000082485	Gm22249	predicted gene, 22249	38546458	38546593	TC0500000441.mm.1	0.0	0.537166

TC1200000445.mm.1	NM_019396	Cyhr1	cysteine and histidine rich 1	76643395	76660208	TC1500001785.mm.1	0.0	0.537227
TC1200000450.mm.1	NM_001164327	Phf11b	PHD finger protein 11B	59320964	59341335	TC1400002162.mm.1	-0.2	0.537245
TC1200000451.mm.1	NCBI_Gene:435321:p	Ighv12-	immunoglobulin heavy variable V12-3	114366526	114366954	TC1200002594.mm.1	-0.2	0.537696
TC1200000452.mm.1	NM_001039039	Kctd21	potassium channel tetramerisation domain cont	97332323	97350216	TC0700001347.mm.1	0.1	0.53771
TC1200000453.mm.1	ENSMUST00000083018	Gm24920	predicted gene, 24920	95090625	95090709	TC0300002464.mm.1	-0.2	0.537779
TC1200000464.mm.1	OTTMUST00000098038	RP23-14	---	5415565	5415759	TC1900000963.mm.1	0.1	0.53785
TC1200000466.mm.1	NM_001048054	Dusp16	dual specificity phosphatase 16	134715468	134792628	TC0600003307.mm.1	0.0	0.537869
TC1200000467.mm.1	NM_026738	1110007	RIKEN cDNA 1110007C09 gene	49202951	49216026	TC1300001954.mm.1	0.0	0.538026
TC1200000471.mm.1	ENSMUST00000083379	Gm26062	predicted gene, 26062	18549085	18549191	TC0700000266.mm.1	0.1	0.538203
TC1200000474.mm.1	NR_029600	Mir122a	microRNA 122a	65248861	65248926	TC1800000668.mm.1	0.1	0.538275
TC1200000499.mm.1	NCBI_Gene:641178:p	Ighv5-9	immunoglobulin heavy variable 5-9-1	113736111	113736570	TC1200002564.mm.1	-0.3	0.538333
TC1200000500.mm.1	ENSMUST00000157083	Gm23000	predicted gene, 23000	66728415	66728553	TC0X00000597.mm.1	0.1	0.538428
TC1200000501.mm.1	NR_029647	Mir297-	microRNA 297-1	34645144	34653574	TC1400001733.mm.1	0.2	0.5386
TC1200000502.mm.1	NM_001039646	Gbp10	guanylate-binding protein 10	105215525	105293699	TC0500002895.mm.1	-0.1	0.538733
TC1200000504.mm.1	XM_985542	Gm8246	predicted gene 8246	5469438	5477830	TC1400001394.mm.1	0.1	0.538764
TC1200000505.mm.1	NM_027002	Polr2d	polymerase (RNA) II (DNA directed) polypeptide	31789159	31796701	TC1800000243.mm.1	-0.1	0.538865
TC1200000507.mm.1	ENSMUST00000083433	Gm24410	predicted gene, 24410	27421324	27421430	TC0800001960.mm.1	0.0	0.538922
TC1200000516.mm.1	ENSMUST00000083217	Gm25480	predicted gene, 25480	66544061	66544193	TC0400000742.mm.1	0.0	0.539024
TC1200000519.mm.1	NCBI_Gene:629930:p	Ighv8-6	immunoglobulin heavy variable V8-6	115165777	115166077	TC1200002483.mm.1	-0.2	0.539406
TC1200000520.mm.1	NR_030552	Mir297a	microRNA 297a-4	10472254	10511775	TC0200000101.mm.1	0.1	0.539525
TC1200000521.mm.1	NM_010012	Cyp8b1	cytochrome P450, family 8, subfamily b, polypep	121914356	121916305	TC0900003276.mm.1	-0.1	0.53974
TC1200000527.mm.1	NM_020584	Terf2ip	telomeric repeat binding factor 2, interacting	112011359	112020528	TC0800001343.mm.1	0.0	0.539801
TC1200000562.mm.1	ENSMUST00000083686	Gm24764	predicted gene, 24764	37822586	37822784	TC0900002058.mm.1	0.1	0.539849
TC1200000563.mm.1	NM_008295	Hsd3b5	hydroxy-delta-5-steroid dehydrogenase, 3 beta-	98618634	98645534	TC0300002554.mm.1	0.1	0.539888
TC1200000569.mm.1	ENSMUST00000182374	Gm7719	predicted gene 7719	59291964	59292938	TC1200000505.mm.1	0.0	0.540141
TC1200000576.mm.1	ENSMUST00000178472	Gm13018	predicted gene 13018	142557390	142557836	TC0400003907.mm.1	0.2	0.54017
TC1200000580.mm.1	NR_029771	Mir342	microRNA 342	108658620	108658718	TC1200001112.mm.1	-0.1	0.540203
TC1200000586.mm.1	NR_029771	Mir342	microRNA 342	0	0	TSUnmapped0000012	-0.1	0.540203
TC1200000596.mm.1	NM_134239	Vmn1r21	vomeronasal 1 receptor 217	23113834	23114730	TC1300001615.mm.1	0.0	0.540343
TC1200000605.mm.1	ENSMUST00000116874	Gm23879	predicted gene, 23879	69955004	69955129	TC0100002538.mm.1	-0.1	0.540459
TC1200000606.mm.1	NM_011785	Akt3	thymoma viral proto-oncogene 3	177020073	177258203	TC0100003627.mm.1	-0.1	0.540464
TC1200000608.mm.1	NM_001081432	Ptprq	protein tyrosine phosphatase, receptor type, Q	107517360	107720027	TC1000002822.mm.1	0.0	0.540615
TC1200000626.mm.1	NM_029790	Mettl15	methyltransferase like 15	109092297	109280748	TC0200004297.mm.1	0.0	0.540629
TC1200000647.mm.1	ENSMUST00000104654	Gm22232	predicted gene, 22232	134809275	134809368	TC0100001238.mm.1	0.1	0.540696
TC1200000652.mm.1	ENSMUST00000158562	Gm22949	predicted gene, 22949	49573214	49573318	TC1400001963.mm.1	0.1	0.541091
TC1200000653.mm.1	ENSMUST00000178954	Gm23189	predicted gene, 23189	67973676	67973777	TC0100000579.mm.1	0.2	0.541365
TC1200000654.mm.1	ENSMUST00000177687	Gm25708	predicted gene, 25708	144979484	144979585	TC0100003212.mm.1	0.2	0.541365
TC1200000655.mm.1	ENSMUST00000175112	Gm25959	predicted gene, 25959	47541984	47542085	TC0200000773.mm.1	0.2	0.541365
TC1200000675.mm.1	ENSMUST00000175102	Gm24332	predicted gene, 24332	84928074	84928175	TC0200001225.mm.1	0.2	0.541365
TC1200000682.mm.1	ENSMUST00000175565	Gm23802	predicted gene, 23802	152772788	152772889	TC0200004914.mm.1	0.2	0.541365
TC1200000693.mm.1	ENSMUST00000175193	Gm22903	predicted gene, 22903	122232535	122232636	TC0300002857.mm.1	0.2	0.541365
TC1200000697.mm.1	ENSMUST00000178322	Gm25571	predicted gene, 25571	139588876	139588977	TC0400003851.mm.1	0.2	0.541365
TC1200000700.mm.1	ENSMUST00000178068	Gm23049	predicted gene, 23049	29988388	29988489	TC0600000256.mm.1	0.2	0.541365
TC1200000715.mm.1	ENSMUST00000178007	Gm24370	predicted gene, 24370	73392142	73392243	TC0600000867.mm.1	0.2	0.541365
TC1200000718.mm.1	ENSMUST00000175264	Gm24159	predicted gene, 24159	93933835	93933936	TC0800002721.mm.1	0.2	0.541365
TC1200000731.mm.1	ENSMUST00000175283	Gm25299	predicted gene, 25299	23982185	23982286	TC0X00000241.mm.1	0.2	0.541365
TC1200000749.mm.1	ENSMUST00000175560	Gm23798	predicted gene, 23798	157191659	157191760	TC0X00001593.mm.1	0.2	0.541365
TC1200000755.mm.1	ENSMUST00000175237	Gm25070	predicted gene, 25070	95879716	95879817	TC1500002130.mm.1	0.2	0.541365
TC1200000757.mm.1	ENSMUST00000175169	Gm22475	predicted gene, 22475	5421464	5421565	TC1700000035.mm.1	0.2	0.541365
TC1200000768.mm.1	ENSMUST00000174994	Gm23400	predicted gene, 23400	82235877	82235978	TC1700001232.mm.1	0.2	0.541365
TC1200000774.mm.1	ENSMUST00000157997	Gm23316	predicted gene, 23316	20477865	20477978	TC0900000170.mm.1	-0.1	0.541392
TC1200000792.mm.1	NM_145825	Cetn4	centrin 4	37307749	37312708	TC0300001869.mm.1	0.0	0.541616
TC1200000796.mm.1	XM_001472737	Gm16500	predicted gene 16500	135963459	135972795	TC0300002997.mm.1	0.0	0.541741
TC1200000797.mm.1	NM_138656	Mvd	mevalonate (diphospho) decarboxylase	122433596	122443422	TC0800003069.mm.1	0.0	0.542014
TC1200000798.mm.1	ENSMUST00000119527	Iffo1	intermediate filament family orphan 1	125145241	125161782	TC0600001449.mm.1	0.0	0.542115
TC1200000799.mm.1	ENSMUST00000175104	Gm24328	predicted gene, 24328	25055109	25055175	TC0200003127.mm.1	-0.1	0.54235
TC1200000800.mm.1	NM_146063	Krt79	keratin 79	101929332	101940324	TC1500002279.mm.1	0.0	0.542373
TC1200000811.mm.1	ENSMUST00000082910	Gm26202	predicted gene, 26202	75001880	75001944	TC1800000800.mm.1	-0.1	0.542447
TC1200000813.mm.1	NM_212457	Bex4	brain expressed gene 4	136138996	136140443	TC0X00001319.mm.1	0.0	0.542575
TC1200000819.mm.1	NM_029797	Mnd1	meiotic nuclear divisions 1 homolog (S. cerevis	84087933	84155786	TC0300002241.mm.1	0.0	0.542632
TC1200000828.mm.1	ENSMUST00000083455	Gm23100	predicted gene, 23100	110003578	110003718	TC0700001619.mm.1	0.1	0.542669
TC1200000833.mm.1	ENSMUST00000103816	Gm23876	predicted gene, 23876	130531678	130531744	TC0200004628.mm.1	-0.1	0.54278
TC1200000837.mm.1	NM_001085477	Olfr765	olfactory receptor 765	129046132	129047061	TC1000003171.mm.1	-0.1	0.542935
TC1200000838.mm.1	ENSMUST00000083835	Gm23846	predicted gene, 23846	140440541	140440647	TC0200004732.mm.1	-0.1	0.543173
TC1200000846.mm.1	ENSMUST00000157966	Gm23964	predicted gene, 23964	94764825	94764931	TC1700001342.mm.1	0.0	0.543185
TC1200000853.mm.1	NM_001159497	Ppm1b	protein phosphatase 1B, magnesium dependent,	84956741	85023992	TC1700001266.mm.1	0.0	0.54343
TC1200000854.mm.1	NM_009449	Tuba3b	tubulin, alpha 3B	145615757	145621479	TC0600001721.mm.1	0.0	0.543511
TC1200000857.mm.1	NM_020493	Srf	serum response factor	46546839	46556175	TC1700002179.mm.1	-0.1	0.543608
TC1200000867.mm.1	NM_023878	Cldn10	claudin 10	118787871	118875489	TC1400001288.mm.1	0.1	0.543696
TC1200000868.mm.1	NM_146101	Habp2	hyaluronic acid binding protein 2	56287137	56320822	TC1900000795.mm.1	0.1	0.54371
TC1200000878.mm.1	NM_018866	Cxcl13	chemokine (C-X-C motif) ligand 13	95956928	95961068	TC0500000922.mm.1	-0.4	0.543751
TC1200000888.mm.1	ENSMUST00000121310	Gm8682	predicted gene 8682	160036321	160036818	TC0X00001630.mm.1	-0.1	0.543899
TC1200000891.mm.1	ENSMUST00000158374	Gm22763	predicted gene, 22763	123954883	123954989	TC0600001413.mm.1	0.1	0.543904
TC1200000894.mm.1	ENSMUST00000083799	Gm24491	predicted gene, 24491	106649913	106650019	TC0X00002838.mm.1	-0.1	0.543943
TC1200000908.mm.1	NM_023734	Pi16	peptidase inhibitor 16	29318877	29329413	TC1700000502.mm.1	0.0	0.544121
TC1200000936.mm.1	XM_001473318	1700066	RIKEN cDNA 1700066C05 gene	79999382	80000544	TC1600000911.mm.1	0.1	0.544144
TC1200000937.mm.1	ENSMUST00000121275	Gm14603	predicted gene 14603	44313270	44313717	TC0X00002131.mm.1	-0.1	0.544254
TC1200000942.mm.1	NM_001205035	Gm10142	predicted gene 10142	77715807	77716169	TC1000000765.mm.1	-0.1	0.544383

TC1200000943.mm.1	ENSMUST00000158937	Gm24666	predicted gene, 24666	9169063	9169229	TC0500000058.mm.1	0.1	0.54461
TC1200000947.mm.1	ENSMUST00000120179	Gm14883	predicted gene 14883	18343798	18343954	TC0X00000193.mm.1	0.0	0.544768
TC1200000950.mm.1	ENSMUST00000086013	Atp5g2	ATP synthase, H+ transporting, mitochondrial F0	23946649	23947237	TC0700002588.mm.1	-0.1	0.54479
TC1200000959.mm.1	ENSMUST00000175065	Gm26463	predicted gene, 26463	151702368	151702468	TC0500003707.mm.1	0.2	0.545138
TC1200000970.mm.1	ENSMUST00000178492	Gm24975	predicted gene, 24975	47773329	47773429	TC0600000534.mm.1	0.2	0.545138
TC1200000978.mm.1	ENSMUST00000179750	Gm25100	predicted gene, 25100	3589164	3589264	TC0700000013.mm.1	0.2	0.545138
TC1200000979.mm.1	ENSMUST00000178138	Gm26282	predicted gene, 26282	72541480	72541580	TC0800002468.mm.1	0.2	0.545138
TC1200000989.mm.1	ENSMUST00000178705	CAAA012	N/A	31243	31343	TCUn_GL4563850000	0.2	0.545138
TC1200000990.mm.1	NM_144902	Slc35a3	solute carrier family 35 (UDP-N-acetylglucosami	116669469	116712831	TC0300003250.mm.1	0.0	0.545356
TC1200001002.mm.1	ENSMUST00000061311	Mrps36-	mitichondrial ribosomal protein S36, pseudogen	53866417	53867041	TC1700002288.mm.1	-0.1	0.54568
TC1200001004.mm.1	ENSMUST00000173375	Tyw1	tRNA-yW synthesizing protein 1 homolog (S. cer	130255619	130341567	TC0500001530.mm.1	0.1	0.545743
TC1200001009.mm.1	NR_039568	Mir5108	microRNA 5108	61774737	61774821	TC1000000575.mm.1	0.1	0.545767
TC1200001017.mm.1	NM_001172146	Aimp2	aminoacyl tRNA synthetase complex-interacting	143902704	143909847	TC0500003566.mm.1	-0.1	0.545808
TC1200001018.mm.1	ENSMUST00000104465	Gm23321	predicted gene, 23321	119306123	119306248	TC0700004181.mm.1	0.1	0.546146
TC1200001020.mm.1	ENSMUST00000120212	Gm15042	predicted gene 15042	137108605	137109487	TC0X00001348.mm.1	-0.1	0.546255
TC1200001021.mm.1	ENSMUST00000117359	Gm15045	predicted gene 15045	137109973	137110855	TC0X00001349.mm.1	-0.1	0.546255
TC1200001025.mm.1	NM_008127	Gjb4	gap junction protein, beta 4	127351086	127354081	TC0400003567.mm.1	0.1	0.546288
TC1200001039.mm.1	XM_003084943	LOC1005	leucine-rich repeat-containing protein 70-like	106794439	106936915	TC1300002617.mm.1	-0.1	0.546396
TC1200001041.mm.1	ENSMUST00000158315	Gm24930	predicted gene, 24930	38473120	38473202	TC1900001470.mm.1	0.1	0.546623
TC1200001043.mm.1	ENSMUST00000120021	Olfr129	olfactory receptor 1293, pseudogene	111527304	111528242	TC0200001651.mm.1	0.1	0.546758
TC1200001044.mm.1	ENSMUST00000082476	Gm22247	predicted gene, 22247	46495155	46495285	TC0400000508.mm.1	-0.1	0.547019
TC1200001047.mm.1	ENSMUST00000083102	Gm22362	predicted gene, 22362	131380273	131380406	TC0600003269.mm.1	0.2	0.547147
TC1200001051.mm.1	ENSMUST00000157459	Gm25342	predicted gene, 25342	106055958	106056079	TC1000002809.mm.1	0.1	0.547309
TC1200001068.mm.1	NM_027027	Asb9	ankyrin repeat and SOCS box-containing 9	164497903	164539752	TC0X00001671.mm.1	0.0	0.547451
TC1200001077.mm.1	NM_025582	Fam213b	family with sequence similarity 213, member B	154895504	154899135	TC0400004127.mm.1	0.1	0.547471
TC1200001112.mm.1	XM_003689096	Gm21344	predicted gene, 21344	82787060	82787743	TC0Y00000506.mm.1	0.1	0.547536
TC1200001113.mm.1	ENSMUST00000025669	Gm16437	predicted pseudogene 16437	7668287	7668793	TC1900000143.mm.1	0.1	0.547595
TC1200001118.mm.1	ENSMUST00000113205	Gm11114	predicted gene 11114	85312773	85312860	TC0900001109.mm.1	0.2	0.547849
TC1200001130.mm.1	ENSMUST00000157471	Gm23672	predicted gene, 23672	144609004	144609110	TC0100003209.mm.1	0.1	0.547994
TC1200001143.mm.1	ENSMUST00000083691	Gm24765	predicted gene, 24765	9458670	9458772	TC0100000037.mm.1	0.1	0.548029
TC1200001145.mm.1	ENSMUST00000177631	Gm25626	predicted gene, 25626	41387900	41388006	TC1000000363.mm.1	-0.1	0.548349
TC1200001147.mm.1	ENSMUST00000158759	Gm24680	predicted gene, 24680	94929701	94929826	TC1400001141.mm.1	0.1	0.548364
TC1200001164.mm.1	ENSMUST00000178413	Gm21740	predicted gene, 21740	54414835	54415539	TC0Y00000381.mm.1	0.1	0.548376
TC1200001168.mm.1	ENSMUST00000178346	Gm21733	predicted gene, 21733	55483303	55484007	TC0Y00000386.mm.1	0.1	0.548376
TC1200001174.mm.1	ENSMUST00000179016	Gm21851	predicted gene, 21851	56249470	56250174	TC0Y00000390.mm.1	0.1	0.548376
TC1200001175.mm.1	ENSMUST00000178649	Gm21868	predicted gene, 21868	57457286	57457990	TC0Y00000394.mm.1	0.1	0.548376
TC1200001180.mm.1	XM_003084987	Gm3095	predicted gene 3095	3960179	4132784	TC1400002788.mm.1	0.0	0.548396
TC1200001183.mm.1	ENSMUST00000184357	AC14710	N/A	59237107	59237176	TC1200001818.mm.1	-0.1	0.548446
TC1200001185.mm.1	NM_007641	Ms4a1	membrane-spanning 4-domains, subfamily A, me	11250603	11266151	TC1900001128.mm.1	-0.4	0.548618
TC1200001189.mm.1	BC057325	Gsr	glutathione reductase	33652523	33698163	TC0800000394.mm.1	-0.1	0.548832
TC1200001190.mm.1	NM_019661	Ykt6	YKT6 homolog (S. Cerevisiae)	5955693	5967781	TC1100000085.mm.1	-0.1	0.548852
TC1200001193.mm.1	ENSMUST00000158934	Gm23421	predicted gene, 23421	35049218	35049321	TC1700000661.mm.1	-0.1	0.54891
TC1200001206.mm.1	NM_153179	Pkhd1	polycystic kidney and hepatic disease 1	20057779	20618064	TC0100002028.mm.1	0.2	0.54906
TC1200001212.mm.1	XM_003085265	Gm14925	predicted gene 14925	96188003	96194488	TC0X00000917.mm.1	0.0	0.549074
TC1200001220.mm.1	ENSMUST00000177921	AC13244	N/A	151235	152734	TC1_GL456221_rand	0.2	0.549352
TC1200001221.mm.1	NM_001136054	Ate1	arginyltransferase 1	130391493	130520369	TC0700004384.mm.1	0.0	0.549429
TC1200001231.mm.1	NM_145983	Kcna5	potassium voltage-gated channel, shaker-relatec	126532551	126698192	TC0600003159.mm.1	0.1	0.549469
TC1200001234.mm.1	ENSMUST00000158238	Gm23067	predicted gene, 23067	70186785	70186846	TC0500002555.mm.1	0.1	0.549572
TC1200001235.mm.1	ENSMUST00000176946	Vmn1r-p	vomeronasal 1 receptor, pseudogene 12	57872415	57872916	TC0600002357.mm.1	0.0	0.549716
TC1200001243.mm.1	ENSMUST00000157383	Gm25492	predicted gene, 25492	135053988	135054116	TC0500003389.mm.1	0.3	0.549825
TC1200001248.mm.1	NM_147064	Olfr449	olfactory receptor 449	42837852	42838888	TC0600000470.mm.1	0.1	0.55
TC1200001257.mm.1	ENSMUST00000158157	Gm25375	predicted gene, 25375	30889096	30889230	TC1600000402.mm.1	0.1	0.5503
TC1200001262.mm.1	XM_003085155	Gm20026	predicted gene, 20026	26232344	26232881	TC1700000409.mm.1	-0.1	0.550465
TC1200001263.mm.1	NM_010196	Fga	fibrinogen alpha chain	83026153	83033627	TC0300000641.mm.1	-0.1	0.550466
TC1200001269.mm.1	NM_016718	Ninj2	ninjurin 2	120093350	120200339	TC0600001342.mm.1	0.0	0.550498
TC1200001272.mm.1	NM_001039123	Defb18	defensin beta 18	18236473	18237443	TC0100002021.mm.1	-0.1	0.550529
TC1200001273.mm.1	NM_053100	Trim8	tripartite motif-containing 8	46501648	46516455	TC1900000703.mm.1	0.0	0.550582
TC1200001275.mm.1	NM_008818	Rhox5	reproductive homeobox 5	37754608	37808878	TC0X00000354.mm.1	0.0	0.550621
TC1200001281.mm.1	ENSMUST00000097669	Gm10553	predicted gene 10553	85100164	85100535	TC0100000736.mm.1	-0.1	0.550818
TC1200001282.mm.1	ENSMUST00000170892	Gm17387	predicted gene, 17387	141029131	141029620	TC0700002036.mm.1	-0.1	0.550926
TC1200001293.mm.1	NM_145390	Tnpo2	transportin 2 (importin 3, karyopherin beta 2b)	85036915	85057583	TC0800000977.mm.1	0.1	0.551022
TC1200001300.mm.1	XR_035443	Gm9734	predicted gene 9734	120185343	120186676	TC1100002021.mm.1	-0.1	0.551123
TC1200001301.mm.1	ENSMUST00000158411	Gm22158	predicted gene, 22158	19307699	19307824	TC1600000258.mm.1	0.1	0.551203
TC1200001316.mm.1	NM_145450	BC02268	cDNA sequence BC022687	112808975	112816252	TC1200001273.mm.1	0.0	0.551295
TC1200001353.mm.1	NM_007757	Cpox	coproporphyrinogen oxidase	58670208	58680391	TC1600000763.mm.1	0.0	0.55148
TC1200001358.mm.1	NM_145368	Acnat2	acyl-coenzyme A amino acid N-acyltransferase 2	49379840	49408151	TC0400002633.mm.1	0.1	0.551501
TC1200001361.mm.1	NM_001029983	Man1b1	mannosidase, alpha, class 1B, member 1	25332338	25352213	TC0200000410.mm.1	0.1	0.551512
TC1200001364.mm.1	XR_140477	A430110	RIKEN cDNA A430110L20 gene	181225986	181228498	TC0100001731.mm.1	0.0	0.551551
TC1200001369.mm.1	ENSMUST00000164408	Gm3591	predicted gene 3591	6405827	6412482	TC1400002844.mm.1	0.1	0.551561
TC1200001380.mm.1	NM_009215	Sst	somatostatin	23889579	23890844	TC1600001398.mm.1	0.0	0.551587
TC1200001389.mm.1	NM_025931	Ift27	intraflagellar transport 27	78159463	78174108	TC1500001826.mm.1	0.0	0.551619
TC1200001393.mm.1	NM_010413	Hdac6	histone deacetylase 6	7930120	7947889	TC0X00001787.mm.1	0.0	0.55194
TC1200001397.mm.1	NCBI_Gene:384515:p	Igkv4-6	immunoglobulin kappa variable 4-68	69304834	69305363	TC0600003562.mm.1	-0.3	0.552105
TC1200001409.mm.1	NM_177429	Ofd1	oral-facial-digital syndrome 1 gene homolog (hu	166390033	166440704	TC0X00003345.mm.1	0.0	0.552122
TC1200001410.mm.1	ENSMUST00000083909	Gm25186	predicted gene, 25186	31737633	31737740	TC1300001750.mm.1	-0.1	0.552476
TC1200001415.mm.1	ENSMUST00000083735	Gm22581	predicted gene, 22581	96724265	96724400	TC0300002528.mm.1	-0.2	0.552527
TC1200001416.mm.1	ENSMUST00000158090	Gm22727	predicted gene, 22727	137734318	137734433	TC0100001279.mm.1	0.1	0.552664
TC1200001434.mm.1	NM_010169	F2r	coagulation factor II (thrombin) receptor	95601789	95618459	TC1300002462.mm.1	-0.1	0.552725

TC1200001436.mm.1	NM_001099774	Krtap17	keratin associated protein 17-1	99993232	99993994	TC1100003747.mm.1	-0.1	0.552746
TC1200001438.mm.1	ENSMUST00000095050	Gm10307	predicted gene 10307	31615458	31616843	TC0100000198.mm.1	0.1	0.552881
TC1200001439.mm.1	XR_035373	AA47440	expressed sequence AA474408	110057987	110061373	TC0700004088.mm.1	-0.1	0.552947
TC1200001440.mm.1	NR_035421	Mir1190	microRNA 1190	101021673	101021793	TC1200002238.mm.1	0.1	0.553396
TC1200001443.mm.1	uc029wdl.1	Pol	RecName: Full=Retrovirus-related Pol polyprotei	6551451	6557390	TC0700000084.mm.1	0.2	0.553922
TC1200001448.mm.1	NM_029671	1700034	RIKEN cDNA 1700034O15 gene	41684431	41685717	TC0600000445.mm.1	0.1	0.553947
TC1200001476.mm.1	NM_133999	Fig4	FIG4 homolog (S. cerevisiae)	41188172	41303241	TC1000002050.mm.1	-0.1	0.554016
TC1200001482.mm.1	ENSMUST00000184586	AC13287	N/A	82504596	82504655	TC1500000758.mm.1	0.0	0.554106
TC1200001485.mm.1	ENSMUST00000184556	AC13287	N/A	82548624	82548683	TC1500001948.mm.1	0.0	0.554106
TC1200001498.mm.1	ENSMUST00000183530	U6	U6 spliceosomal RNA	32758202	32758310	TC1300000358.mm.1	0.0	0.554108
TC1200001499.mm.1	ENSMUST00000100848	Gm10401	predicted gene 10401	115097689	115098295	TC0500003086.mm.1	-0.1	0.554255
TC1200001500.mm.1	NR_028478	Snora75	small nucleolar RNA, H/ACA box 75	86351169	86351301	TC0100002740.mm.1	-0.4	0.554344
TC1200001507.mm.1	NM_028662	Slc35b2	solute carrier family 35, member B2	45563960	45567704	TC1700000865.mm.1	0.0	0.554393
TC1200001523.mm.1	NM_011492	Stk11	serine/threonine kinase 11	80115803	80130682	TC1000000839.mm.1	0.1	0.554486
TC1200001525.mm.1	NM_001079933	Defa26	defensin, alpha, 26	21618168	21618972	TC0800000249.mm.1	-0.1	0.554531
TC1200001527.mm.1	NM_133662	Ier3	immediate early response 3	35821684	35822923	TC1700000703.mm.1	0.0	0.554549
TC1200001534.mm.1	ENSMUST00000082547	Gm23737	predicted gene, 23737	89019221	89019379	TC1500000857.mm.1	-0.2	0.5546
TC1200001535.mm.1	XM_003688939	Gm9763	predicted pseudogene 9763	99897085	99898556	TC1500002228.mm.1	0.0	0.554884
TC1200001544.mm.1	ENSMUST00000180393	C130032	---	114515697	114516424	TC0900001516.mm.1	0.0	0.554885
TC1200001552.mm.1	NM_010114	Klk1b22	kallikrein 1-related peptidase b22	44112673	44116922	TC0700000790.mm.1	0.2	0.555226
TC1200001568.mm.1	ENSMUST00000158237	Gm23066	predicted gene, 23066	23425651	23425721	TC1600000342.mm.1	0.0	0.555286
TC1200001569.mm.1	ENSMUST00000122313	Gm11594	predicted gene 11594	97322328	97322489	TC1100003643.mm.1	-0.1	0.555521
TC1200001586.mm.1	NM_008296	Hsf1	heat shock factor 1	76477435	76500972	TC1500000593.mm.1	-0.1	0.555625
TC1200001589.mm.1	ENSMUST00000157535	Gm23538	predicted gene, 23538	100760168	100760268	TC1400002617.mm.1	0.1	0.555714
TC1200001592.mm.1	NM_007751	Cox8b	cytochrome c oxidase subunit VIIIb	140898942	140900446	TC0700004510.mm.1	-0.1	0.555805
TC1200001593.mm.1	NM_146907	Olfr128	olfactory receptor 1282	111335159	111336076	TC0200004321.mm.1	0.0	0.555852
TC1200001594.mm.1	NM_016908	Syt5	synaptotagmin V	4539765	4546567	TC0700002162.mm.1	0.0	0.555883
TC1200001595.mm.1	NM_026819	Dhrs1	dehydrogenase/reductase (SDR family) member	55739020	55745690	TC1400002100.mm.1	0.1	0.556179
TC1200001597.mm.1	ENSMUST00000103950	Gm23577	predicted gene, 23577	4580069	4580178	TC0700002164.mm.1	0.0	0.556274
TC1200001602.mm.1	NM_027921	Slc16a1	solute carrier family 16 (monocarboxylic acid t	84905898	84935125	TC0100002702.mm.1	0.1	0.556295
TC1200001626.mm.1	ENSMUST00000082455	Gm26446	predicted gene, 26446	93363255	93363357	TC0100000932.mm.1	-0.1	0.556354
TC1200001632.mm.1	ENSMUST00000182021	Gm4929	predicted gene 4929	13752674	13753665	TC1200001443.mm.1	0.1	0.556513
TC1200001637.mm.1	NM_001013389	Mrs2	MRS2 magnesium homeostasis factor homolog (	24992295	25020379	TC1300001672.mm.1	0.1	0.556659
TC1200001643.mm.1	NM_011254	Rbp1	retinol binding protein 1, cellular	98422961	98446551	TC0900001232.mm.1	0.1	0.556845
TC1200001660.mm.1	ENSMUST00000074819	Gm8116	predicted gene 8116	78820423	78821892	TC0900002731.mm.1	-0.1	0.557122
TC1200001674.mm.1	NM_001040700	BC05101	cDNA sequence BC051019	109712181	109723850	TC0700004078.mm.1	0.0	0.557249
TC1200001685.mm.1	ENSMUST00000093728	Gm23516	predicted gene, 23516	15896663	15896769	TC0X00001887.mm.1	-0.1	0.557421
TC1200001686.mm.1	ENSMUST00000180206	CAAA012	N/A	32719	32818	TCUn_GL4563850000	0.2	0.557775
TC1200001697.mm.1	NM_018872	Tmem131	transmembrane protein 131	36792189	36939527	TC0100002193.mm.1	-0.1	0.557783
TC1200001702.mm.1	ENSMUST00000118611	Gm12328	predicted gene 12328	73771924	73772120	TC1100003175.mm.1	-0.1	0.557869
TC1200001704.mm.1	ENSMUST00000159182	Gm16557	predicted gene 16557	122563283	122563473	TC0600003069.mm.1	-0.1	0.557883
TC1200001715.mm.1	ENSMUST00000075585	Gm10080	predicted gene 10080	44374595	44375209	TC0900002161.mm.1	0.1	0.557921
TC1200001721.mm.1	XM_003688883	Gm9631	predicted gene 9631	121905762	121947734	TC1100004259.mm.1	0.0	0.557957
TC1200001734.mm.1	NCBI_Gene:434586:p	Igkv4-7	immunoglobulin kappa chain variable 4-71	69243158	69243688	TC0600003559.mm.1	-0.5	0.55809
TC1200001736.mm.1	NM_177713	Gapt	Grb2-binding adaptor, transmembrane	110352615	110357172	TC1300002654.mm.1	0.1	0.558093
TC1200001742.mm.1	ENSMUST00000119611	Gm6444	predicted gene 6444	123066242	123066699	TC0500001407.mm.1	-0.1	0.558196
TC1200001745.mm.1	NM_181849	Fgb	fibrinogen beta chain	83042247	83049803	TC0300002230.mm.1	-0.1	0.558362
TC1200001748.mm.1	NM_016781	Prkag1	protein kinase, AMP-activated, gamma 1 non-ca	98812797	98831508	TC1500002191.mm.1	-0.1	0.558509
TC1200001750.mm.1	ENSMUST00000118914	Gm15039	predicted gene 15039	137107246	137108120	TC0X00001347.mm.1	-0.1	0.558578
TC1200001751.mm.1	ENSMUST00000093707	n-R5s13	nuclear encoded rRNA 5S 13	151777671	151777789	TC0X00001524.mm.1	-0.2	0.558582
TC1200001753.mm.1	ENSMUST00000158825	Gm24225	predicted gene, 24225	66981088	66981185	TC0900002538.mm.1	0.1	0.558685
TC1200001754.mm.1	ENSMUST00000115822	Gm11172	predicted gene 11172	10812915	10812994	TC1600000122.mm.1	-0.1	0.558809
TC1200001755.mm.1	ENSMUST00000083378	Gm26063	predicted gene, 26063	46151698	46151804	TC1500001474.mm.1	0.1	0.558942
TC1200001761.mm.1	ENSMUST00000104603	Gm25563	predicted gene, 25563	76420417	76420490	TC1200001950.mm.1	-0.3	0.558979
TC1200001762.mm.1	NM_001195390	Commd7	COMM domain containing 7	153616930	153632781	TC0200004932.mm.1	0.0	0.559096
TC1200001763.mm.1	NM_025304	Lcmt1	leucine carboxyl methyltransferase 1	123377982	123430358	TC0700001773.mm.1	-0.1	0.559187
TC1200001765.mm.1	NM_026807	Krtap4-	keratin associated protein 4-2	99634111	99635084	TC1100003724.mm.1	0.1	0.559253
TC1200001768.mm.1	NCBI_Gene:435328:p	Ighv1-6	immunoglobulin heavy variable V1-67	115603940	115604233	TC1200002645.mm.1	-0.3	0.559381
TC1200001775.mm.1	ENSMUST00000092511	Timm23	translocase of inner mitochondrial membrane 23	59395632	59396757	TC1000000533.mm.1	0.1	0.559592
TC1200001781.mm.1	NM_178641	Inpp5f	inositol polyphosphate-5-phosphatase F	128611328	128696436	TC0700001888.mm.1	0.0	0.5596
TC1200001785.mm.1	NM_007906	Eef1a2	eukaryotic translation elongation factor 1 alph	181147653	181157015	TC0200005433.mm.1	0.0	0.559691
TC1200001791.mm.1	ENSMUST00000085228	Ube2nl	ubiquitin-conjugating enzyme E2N-like	61549243	61549701	TC0700003365.mm.1	-0.1	0.559774
TC1200001803.mm.1	ENSMUST00000092138	Gm21769	predicted gene, 21769	20122307	20151685	TC0800003221.mm.1	0.2	0.55983
TC1200001806.mm.1	ENSMUST00000158008	Gm22313	predicted gene, 22313	97237818	97237946	TC0200001489.mm.1	0.1	0.559842
TC1200001810.mm.1	ENSMUST00000082914	Gm23932	predicted gene, 23932	69386066	69386172	TC0500002548.mm.1	-0.1	0.559913
TC1200001815.mm.1	NM_015737	Galnt4	UDP-N-acetyl-alpha-D-galactosamine:polypeptid	99108135	99113247	TC1000001204.mm.1	0.1	0.559934
TC1200001816.mm.1	NR_003953	1700022	glycerol-3-phosphate dehydrogenase 1-like pseu	24645453	24648860	TC0500000220.mm.1	0.0	0.559983
TC1200001818.mm.1	NM_023480	Fahd1	fumarylacetoacetate hydrolase domain containi	24848896	24850302	TC1700001644.mm.1	0.1	0.560112
TC1200001820.mm.1	NM_001005858	I830012	RIKEN cDNA I830012O16 gene	34607933	34613401	TC1900000502.mm.1	0.1	0.56012
TC1200001825.mm.1	NM_145963	Kcnj14	potassium inwardly-rectifying channel, subfamil	45816460	45824756	TC0700003023.mm.1	0.0	0.560167
TC1200001832.mm.1	ENSMUST00000177933	Gm22255	predicted gene, 22255	59510934	59511012	TC0700003212.mm.1	-0.1	0.560181
TC1200001836.mm.1	NR_002890	Gm12070	glyceraldehyde-3-phosphate dehydrogenase pse	26785108	26787859	TC1100000268.mm.1	0.1	0.560295
TC1200001837.mm.1	XM_621554	Olfr117	olfactory receptor 1174, pseudogene	88310832	88314908	TC0200004015.mm.1	0.1	0.560342
TC1200001841.mm.1	NM_198619	Zfp933	zinc finger protein 933	147822986	147848375	TC0400004000.mm.1	0.0	0.560426
TC1200001844.mm.1	NM_021525	Rcl1	RNA terminal phosphate cyclase-like 1	29101375	29143846	TC1900000432.mm.1	0.0	0.560525
TC1200001855.mm.1	ENSMUST00000121386	Gm13805	predicted gene 13805	98182565	98182668	TC0200004195.mm.1	0.2	0.560695
TC1200001858.mm.1	ENSMUST00000081204	Gm10110	predicted gene 10110	89896223	89898466	TC1400002524.mm.1	0.1	0.560948
TC1200001861.mm.1	XM_003689030	Gm21427	predicted gene, 21427	25482524	25483515	TC0Y00000074.mm.1	0.1	0.561138

TC1200001863.mm.1	ENSMUST00000182069	Gm18848	predicted gene, 18848	101205723	101206514	TC1200001002.mm.1	-0.1	0.561199
TC1200001867.mm.1	ENSMUST00000175024	Gm23363	predicted gene, 23363	32318249	32318356	TC0200000575.mm.1	0.0	0.561505
TC1200001868.mm.1	ENSMUST00000121279	Gm8839	predicted gene 8839	86270712	86272356	TC0X00000845.mm.1	-0.1	0.561772
TC1200001870.mm.1	ENSMUST00000120125	Gm5255	predicted gene 5255	65550464	65551237	TC0100002483.mm.1	-0.1	0.561899
TC1200001875.mm.1	ENSMUST00000122776	Gm24141	predicted gene, 24141	74362610	74362724	TC0900000999.mm.1	-0.1	0.561925
TC1200001876.mm.1	ENSMUST00000175538	Gm26238	predicted gene, 26238	3652544	3652660	TC0500000016.mm.1	0.1	0.562075
TC1200001879.mm.1	XM_001003833	Gm13931	predicted gene 13931	111844262	111851838	TC0200004332.mm.1	0.1	0.562186
TC1200001881.mm.1	XM_001476500	Gm3269	predicted gene 3269	4838106	4846867	TC1400000033.mm.1	0.0	0.562193
TC1200001893.mm.1	ENSMUST00000162856	Gm16232	predicted gene 16232	152876051	152876217	TC0300003151.mm.1	-0.1	0.562425
TC1200001897.mm.1	NM_022019	Dusp10	dual specificity phosphatase 10	184013302	184075636	TC0100001765.mm.1	-0.1	0.56244
TC1200001898.mm.1	XR_106194	Gm14964	predicted gene 14964	6530694	6532808	TC1900001011.mm.1	0.0	0.562456
TC1200001899.mm.1	NM_146328	Olfr110	olfactory receptor 110	37492468	37499674	TC1700000775.mm.1	0.1	0.562495
TC1200001901.mm.1	NM_013641	Ptger1	prostaglandin E receptor 1 (subtype EP1)	83666640	83672753	TC0800000931.mm.1	0.0	0.562742
TC1200001913.mm.1	NM_008466	Kpna3	karyopherin (importin) alpha 3	61365186	61439947	TC1400002189.mm.1	-0.1	0.562843
TC1200001914.mm.1	NM_008261	Hnf4a	hepatic nuclear factor 4, alpha	163506808	163572910	TC0200002489.mm.1	0.1	0.563127
TC1200001916.mm.1	NM_153108	Defb8	defensin beta 8	19445769	19447606	TC0800001808.mm.1	0.0	0.563189
TC1200001921.mm.1	XM_003688927	Gm21560	predicted gene, 21560	6210617	6219292	TC1400002842.mm.1	0.0	0.563233
TC1200001926.mm.1	NM_024179	610009	RIKEN cDNA 0610009O20 gene	38250249	38262629	TC1800000394.mm.1	0.0	0.563371
TC1200001938.mm.1	NM_134139	Wdr74	WD repeat domain 74	8735839	8740624	TC1900000152.mm.1	-0.2	0.563375
TC1200001939.mm.1	NM_001160039	Ndufs1	NADH dehydrogenase (ubiquinone) Fe-S protein	63143590	63176822	TC0100002445.mm.1	0.1	0.563566
TC1200001943.mm.1	ENSMUST00000103771	Mir669l	microRNA 669l	10468971	10469068	TC0200000098.mm.1	0.1	0.56364
TC1200001947.mm.1	NM_001142750	Tgif2lx	TGFB-induced factor homeobox 2-like, X-linked 2	118427227	118428258	TC0X00001168.mm.1	0.1	0.563799
TC1200001950.mm.1	NM_027335	2210016	RIKEN cDNA 2210016F16 gene	58380046	58385225	TC1300002098.mm.1	0.1	0.563835
TC1200001951.mm.1	NM_152803	Hpse	heparanase	100679484	100719716	TC0500002843.mm.1	0.1	0.564188
TC1200001959.mm.1	ENSMUST00000104260	Gm23126	predicted gene, 23126	42866685	42866818	TC0100002259.mm.1	0.1	0.564484
TC1200001963.mm.1	ENSMUST00000178338	Gm24866	predicted gene, 24866	59393561	59393639	TC0700003157.mm.1	-0.1	0.564778
TC1200001971.mm.1	ENSMUST00000179405	Gm25463	predicted gene, 25463	59412802	59412880	TC0700003162.mm.1	-0.1	0.564778
TC1200001972.mm.1	ENSMUST00000179164	Gm24528	predicted gene, 24528	59415590	59415668	TC0700003165.mm.1	-0.1	0.564778
TC1200001979.mm.1	ENSMUST00000177610	Gm23356	predicted gene, 23356	59417457	59417535	TC0700003166.mm.1	-0.1	0.564778
TC1200001981.mm.1	ENSMUST00000178434	Gm24872	predicted gene, 24872	59421187	59421265	TC0700003168.mm.1	-0.1	0.564778
TC1200001997.mm.1	ENSMUST00000177611	Gm24027	predicted gene, 24027	59460677	59460755	TC0700003188.mm.1	-0.1	0.564778
TC1200002001.mm.1	ENSMUST00000178357	Gm22524	predicted gene, 22524	59462548	59462626	TC0700003189.mm.1	-0.1	0.564778
TC1200002002.mm.1	ENSMUST00000177781	Gm22630	predicted gene, 22630	59464420	59464498	TC0700003190.mm.1	-0.1	0.564778
TC1200002016.mm.1	ENSMUST00000179825	Gm25741	predicted gene, 25741	59466292	59466370	TC0700003192.mm.1	-0.1	0.564778
TC1200002017.mm.1	ENSMUST00000177865	Gm26059	predicted gene, 26059	59468163	59468241	TC0700003193.mm.1	-0.1	0.564778
TC1200002020.mm.1	ENSMUST00000177628	Gm22511	predicted gene, 22511	59471904	59471982	TC0700003195.mm.1	-0.1	0.564778
TC1200002034.mm.1	ENSMUST00000177580	Gm25098	predicted gene, 25098	59492432	59492510	TC0700003206.mm.1	-0.1	0.564778
TC1200002036.mm.1	ENSMUST00000178965	Gm24702	predicted gene, 24702	59494300	59494378	TC0700003207.mm.1	-0.1	0.564778
TC1200002049.mm.1	ENSMUST00000177833	Gm25462	predicted gene, 25462	59498041	59498119	TC0700003209.mm.1	-0.1	0.564778
TC1200002059.mm.1	ENSMUST00000178044	Gm25523	predicted gene, 25523	59509068	59509146	TC0700003211.mm.1	-0.1	0.564778
TC1200002069.mm.1	ENSMUST00000179190	Gm22909	predicted gene, 22909	59520284	59520362	TC0700003217.mm.1	-0.1	0.564778
TC1200002074.mm.1	ENSMUST00000179661	Gm26392	predicted gene, 26392	59527771	59527849	TC0700003221.mm.1	-0.1	0.564778
TC1200002078.mm.1	ENSMUST00000179861	Gm24219	predicted gene, 24219	59529643	59529721	TC0700003222.mm.1	-0.1	0.564778
TC1200002082.mm.1	ENSMUST00000179740	Gm25230	predicted gene, 25230	59531515	59531593	TC0700003223.mm.1	-0.1	0.564778
TC1200002092.mm.1	ENSMUST00000178127	Gm22627	predicted gene, 22627	59533386	59533464	TC0700003224.mm.1	-0.1	0.564778
TC1200002094.mm.1	ENSMUST00000178104	Gm24585	predicted gene, 24585	59535256	59535334	TC0700003225.mm.1	-0.1	0.564778
TC1200002099.mm.1	ENSMUST00000179011	Gm24206	predicted gene, 24206	59538998	59539076	TC0700003227.mm.1	-0.1	0.564778
TC1200002103.mm.1	ENSMUST00000179576	Gm25209	predicted gene, 25209	59542742	59542820	TC0700003229.mm.1	-0.1	0.564778
TC1200002110.mm.1	ENSMUST00000179403	Gm26334	predicted gene, 26334	59548359	59548437	TC0700003232.mm.1	-0.1	0.564778
TC1200002113.mm.1	ENSMUST00000179530	Gm25742	predicted gene, 25742	59550238	59550316	TC0700003233.mm.1	-0.1	0.564778
TC1200002126.mm.1	ENSMUST00000177976	Gm25146	predicted gene, 25146	59595165	59595243	TC0700003257.mm.1	-0.1	0.564778
TC1200002129.mm.1	ENSMUST00000179827	Gm24759	predicted gene, 24759	59597035	59597113	TC0700003258.mm.1	-0.1	0.564778
TC1200002135.mm.1	ENSMUST00000178406	Gm23575	predicted gene, 23575	59604519	59604597	TC0700003262.mm.1	-0.1	0.564778
TC1200002153.mm.1	ENSMUST00000178924	Gm22449	predicted gene, 22449	59608262	59608340	TC0700003264.mm.1	-0.1	0.564778
TC1200002157.mm.1	ENSMUST00000178242	Gm22912	predicted gene, 22912	59612005	59612083	TC0700003266.mm.1	-0.1	0.564778
TC1200002159.mm.1	ENSMUST00000178367	Gm25710	predicted gene, 25710	59613876	59613954	TC0700003267.mm.1	-0.1	0.564778
TC1200002166.mm.1	ENSMUST00000179778	Gm26434	predicted gene, 26434	59615744	59615822	TC0700003268.mm.1	-0.1	0.564778
TC1200002167.mm.1	ENSMUST00000177782	Gm23560	predicted gene, 23560	59617612	59617690	TC0700003269.mm.1	-0.1	0.564778
TC1200002173.mm.1	NM_027275	Ptcd3	pentatricopeptide repeat domain 3	71880638	71908762	TC0600002475.mm.1	0.1	0.564788
TC1200002174.mm.1	NR_029648	Mir297-	microRNA 297-2	104494178	104609625	TC0800002804.mm.1	0.2	0.564931
TC1200002194.mm.1	NCBI_Gene:385120:p	Igkv4-7	immunoglobulin kappa chain variable 4-70	69267888	69268412	TC0600003560.mm.1	-0.4	0.565063
TC1200002213.mm.1	NM_010779	Mcpt4	mast cell protease 4	56059743	56062310	TC1400002112.mm.1	0.1	0.565073
TC1200002216.mm.1	ENSMUST00000158755	Gm24677	predicted gene, 24677	67279082	67279231	TC0800002336.mm.1	0.1	0.565095
TC1200002224.mm.1	NM_011206	Ptpn18	protein tyrosine phosphatase, non-receptor type	34459746	34475733	TC0100000224.mm.1	0.0	0.565202
TC1200002234.mm.1	NM_001081186	Tmem52b	transmembrane protein 52B	129512557	129519227	TC0600001534.mm.1	0.2	0.565318
TC1200002238.mm.1	ENSMUST00000083924	Gm22350	predicted gene, 22350	18445875	18446030	TC1400000143.mm.1	0.1	0.565379
TC1200002240.mm.1	NCBI_Gene:667683:p	Igkv4-5	immunoglobulin kappa variable 4-59	69438218	69438741	TC0600003566.mm.1	-0.5	0.565415
TC1200002242.mm.1	ENSMUST00000102452	Gm22689	predicted gene, 22689	7120394	7120503	TC1300001400.mm.1	0.0	0.565444
TC1200002251.mm.1	NM_172265	Eif2b5	eukaryotic translation initiation factor 2B, su	20498817	20509955	TC1600000277.mm.1	-0.1	0.565473
TC1200002254.mm.1	NM_001099637	Cep170	centrosomal protein 170	176733653	176807124	TC0100003620.mm.1	-0.1	0.565531
TC1200002263.mm.1	NM_172486	Zfp677	zinc finger protein 677	21383748	21399265	TC1700000269.mm.1	-0.1	0.565651
TC1200002267.mm.1	NM_001037957	Dyrk1b	dual-specificity tyrosine-(Y)-phosphorylation r	28179469	28187298	TC0700000488.mm.1	0.1	0.565752
TC1200002270.mm.1	NM_145424	BC08959	cDNA sequence BC089597	127866474	127877319	TC1000001576.mm.1	0.2	0.566321
TC1200002274.mm.1	ENSMUST00000117030	Gm23989	predicted gene, 23989	89431336	89431401	TC1200000908.mm.1	0.1	0.566365
TC1200002280.mm.1	ENSMUST00000179911	Gm22069	predicted gene, 22069	45634706	45634812	TC0900002203.mm.1	0.1	0.566367
TC1200002285.mm.1	NM_001098799	Tox2	TOX high mobility group box family member 2	163203125	163324170	TC0200002482.mm.1	0.0	0.566447
TC1200002289.mm.1	ENSMUST00000178208	n-R5s11	nuclear encoded rRNA 5S 112	123559201	123559319	TC0800003116.mm.1	-0.3	0.56653
TC1200002291.mm.1	ENSMUST00000180000	n-R5s12	nuclear encoded rRNA 5S 120	123572710	123572828	TC0800003124.mm.1	-0.3	0.56653

TC1200002299.mm.1	ENSMUST00000179377	n-R5s12	nuclear encoded rRNA 5S 125	123581155	123581273	TC0800003129.mm.1	-0.3	0.56653
TC1200002333.mm.1	NM_010602	Kcnj11	potassium inwardly rectifying channel, subfamil	46097123	46100764	TC0700003030.mm.1	0.0	0.566555
TC1200002343.mm.1	ENSMUST00000175491	mmu-let	mmu-let-7f-1	48537825	48537921	TC1300000554.mm.1	0.0	0.566715
TC1200002346.mm.1	ENSMUST00000083808	Gm25007	predicted gene, 25007	48551308	48551440	TC1500000366.mm.1	0.1	0.566741
TC1200002355.mm.1	NM_001102409	Kng2	kininogen 2	22985852	23029101	TC1600001387.mm.1	0.2	0.566818
TC1200002359.mm.1	ENSMUST00000176047	Atpaf1	ATP synthase mitochondrial F1 complex assembl	115784812	115818828	TC0400001235.mm.1	0.0	0.567115
TC1200002366.mm.1	NM_027968	Fbxo30	F-box protein 30	11281330	11298052	TC1000000080.mm.1	0.0	0.567157
TC1200002367.mm.1	ENSMUST00000082926	n-R5s22	nuclear encoded rRNA 5S 220	154311408	154311527	TC0100003293.mm.1	0.1	0.567233
TC1200002396.mm.1	NM_023140	Glrx3	glutaredoxin 3	137437648	137468594	TC0700001980.mm.1	0.1	0.567258
TC1200002401.mm.1	NM_133719	Metrn	meteorin, glial cell differentiation regulator	25794571	25797136	TC1700001674.mm.1	0.0	0.56736
TC1200002402.mm.1	ENSMUST00000083305	Gm22971	predicted gene, 22971	96469435	96469531	TC0600002793.mm.1	-0.2	0.567475
TC1200002413.mm.1	NM_023231	Stoml2	stomatin (Epb7.2)-like 2	43027690	43031710	TC0400002516.mm.1	0.0	0.567489
TC1200002416.mm.1	ENSMUST00000104058	Gm23273	predicted gene, 23273	35975330	35975464	TC0600000349.mm.1	0.1	0.567498
TC1200002421.mm.1	NM_026796	Smyd2	SET and MYND domain containing 2	189880492	189922363	TC0100003786.mm.1	0.0	0.567534
TC1200002432.mm.1	ENSMUST00000175273	Gm22464	predicted gene, 22464	15707782	15707845	TC0X00000178.mm.1	0.2	0.567616
TC1200002440.mm.1	NM_027353	Cd2bp2	CD2 antigen (cytoplasmic tail) binding protein	127191660	127196077	TC0700004315.mm.1	0.0	0.567681
TC1200002443.mm.1	NM_008774	Pabpc1	poly(A) binding protein, cytoplasmic 1	36595658	36608973	TC1500001379.mm.1	-0.1	0.568011
TC1200002445.mm.1	NM_024462	Ccdc23	coiled-coil domain containing 23	119195306	119201298	TC0400001327.mm.1	0.0	0.568033
TC1200002454.mm.1	NM_001024225	Defa24	defensin, alpha, 24	21734494	21735471	TC0800000257.mm.1	0.0	0.568045
TC1200002455.mm.1	ENSMUST00000105596	Gm10945	predicted gene 10945	6740629	6761761	TC1000001689.mm.1	-0.1	0.568186
TC1200002456.mm.1	NM_144934	Mbd3l2	methyl-CpG binding domain protein 3-like 2	18430615	18446316	TC0900000135.mm.1	0.0	0.568219
TC1200002469.mm.1	XM_001472881	Gm20804	predicted gene, 20804	62020395	62021078	TC0Y00000413.mm.1	0.1	0.568478
TC1200002472.mm.1	NM_011070	Pfdn2	prefoldin 2	171345670	171359254	TC0100001586.mm.1	0.0	0.568652
TC1200002474.mm.1	NM_008600	Mip	major intrinsic protein of eye lens fiber	128225838	128231812	TC1000001592.mm.1	0.0	0.56867
TC1200002475.mm.1	NM_175022	Prr12	proline rich 12	45027707	45052881	TC0700002984.mm.1	0.0	0.56875
TC1200002476.mm.1	NM_178802	Trim65	tripartite motif-containing 65	116121846	116131128	TC1100004302.mm.1	0.0	0.568798
TC1200002479.mm.1	ENSMUST00000178741	Gm22851	predicted gene, 22851	59774190	59774283	TC0700003308.mm.1	0.0	0.568916
TC1200002480.mm.1	ENSMUST00000082512	Gm26228	predicted gene, 26228	33644495	33644601	TC1400000361.mm.1	0.1	0.568935
TC1200002481.mm.1	ENSMUST00000104457	Gm24983	predicted gene, 24983	59458815	59458883	TC0700003187.mm.1	0.1	0.568954
TC1200002483.mm.1	NM_007894	Ear1	eosinophil-associated, ribonuclease A family, m	43818765	43875517	TC1400001868.mm.1	0.1	0.569311
TC1200002484.mm.1	NM_207142	Olfr103	olfactory receptor 1036	86074704	86075718	TC0200001267.mm.1	0.1	0.569448
TC1200002485.mm.1	ENSMUST00000177693	Gm25700	predicted gene, 25700	86725823	86725932	TC1300002384.mm.1	0.1	0.569547
TC1200002488.mm.1	ENSMUST00000164042	Gm17555	predicted gene, 17555	126215100	126216212	TC0200001896.mm.1	0.1	0.569586
TC1200002494.mm.1	NM_133707	1810019	RIKEN cDNA 1810019J16 gene	133518963	133530790	TC0400001611.mm.1	0.0	0.569642
TC1200002497.mm.1	NR_035427	Mir1195	microRNA 1195	30368176	31275697	TC1600001462.mm.1	-0.2	0.569704
TC1200002499.mm.1	NM_009990	Clip2	CAP-GLY domain containing linker protein 2	134489383	134552434	TC0500003373.mm.1	0.0	0.57001
TC1200002500.mm.1	ENSMUST00000157297	Gm23229	predicted gene, 23229	118279861	118279965	TC0700001694.mm.1	0.0	0.57005
TC1200002508.mm.1	ENSMUST00000183257	Gm7693	predicted gene 7693	72712634	72713621	TC0700003487.mm.1	0.0	0.570264
TC1200002516.mm.1	NM_177919	Tceal5	transcription elongation factor A (SII)-like 5	136200948	136203876	TC0X00003022.mm.1	0.0	0.570424
TC1200002524.mm.1	NM_013659	Sema4b	sema domain, immunoglobulin domain (Ig), tran	80186841	80226524	TC0700001145.mm.1	-0.1	0.570728
TC1200002525.mm.1	ENSMUST00000178157	Gm24925	predicted gene, 24925	50920542	50920648	TC1600001715.mm.1	-0.1	0.570918
TC1200002528.mm.1	ENSMUST00000165744	Gm3739	predicted gene 3739	7293648	7315049	TC1400002851.mm.1	0.0	0.570992
TC1200002531.mm.1	XR_105167	B230325	RIKEN cDNA B230325K18 gene	127982526	127985701	TC0700001872.mm.1	-0.1	0.571152
TC1200002532.mm.1	NM_001034859	Gm4841	predicted gene 4841	60268301	60273267	TC1800001396.mm.1	0.0	0.57117
TC1200002533.mm.1	ENSMUST00000122716	Gm23214	predicted gene, 23214	33011958	33012114	TC0300000230.mm.1	0.0	0.571288
TC1200002534.mm.1	ENSMUST00000104393	Gm24373	predicted gene, 24373	157210929	157211060	TC0300001574.mm.1	0.1	0.571573
TC1200002537.mm.1	ENSMUST00000053865	Gm5424	predicted gene 5424	62071015	62072609	TC1000000578.mm.1	0.3	0.57176
TC1200002539.mm.1	NM_001163718	Tsr3	TSR3 20S rRNA accumulation	25240170	25242799	TC1700000367.mm.1	0.0	0.571865
TC1200002540.mm.1	NM_009115	S100b	S100 protein, beta polypeptide, neural	76253836	76261319	TC1000000736.mm.1	0.0	0.571904
TC1200002541.mm.1	NM_001081671	1700042	RIKEN cDNA 1700042B14 gene	155124917	155147849	TC0X00003234.mm.1	0.1	0.571953
TC1200002554.mm.1	ENSMUST00000157908	Gm24998	predicted gene, 24998	34106156	34106244	TC1400000369.mm.1	0.1	0.572651
TC1200002555.mm.1	NM_012033	Tinag	tubulointerstitial nephritis antigen	76951693	77045794	TC0900002696.mm.1	0.1	0.572834
TC1200002556.mm.1	ENSMUST00000082672	Gm25899	predicted gene, 25899	83527628	83527768	TC0400002953.mm.1	-0.1	0.572986
TC1200002557.mm.1	XM_985134	Gm8210	predicted pseudogene 8210	43189119	43189773	TC0100000321.mm.1	-0.2	0.573003
TC1200002558.mm.1	NR_029568	Mir181a	microRNA 181a-2	38852735	38852810	TC0200000711.mm.1	0.0	0.573034
TC1200002559.mm.1	NM_001163538	Pgam5	phosphoglycerate mutase family member 5	110259130	110269913	TC0500002985.mm.1	0.0	0.573104
TC1200002560.mm.1	ENSMUST00000183839	RP24-37	N/A	7194272	7195216	TC0600000041.mm.1	0.0	0.573206
TC1200002561.mm.1	ENSMUST00000083532	n-R5s89	nuclear encoded rRNA 5S 89	103011417	103011520	TC0900002963.mm.1	-0.2	0.573437
TC1200002562.mm.1	NR_030445	Mir679	microRNA 679	109715577	109715650	TC1200001175.mm.1	0.1	0.57374
TC1200002563.mm.1	NR_073535	Gm10364	glyceraldehyde-3-phosphate dehydrogenase pse	55038462	55042979	TC1400000771.mm.1	0.0	0.573743
TC1200002564.mm.1	ENSMUST00000082917	Gm24525	predicted gene, 24525	7177706	7177856	TC0500001920.mm.1	-0.2	0.573923
TC1200002565.mm.1	ENSMUST00000177834	SLY	---	55731744	55757903	TC0Y00000156.mm.1	0.0	0.573946
TC1200002566.mm.1	NM_030098	Rnase6	ribonuclease, RNase A family, 6	51129064	51131122	TC1400000580.mm.1	-0.2	0.574014
TC1200002567.mm.1	ENSMUST00000116535	Gm15380	predicted gene 15380	75143688	75144470	TC0X00000738.mm.1	0.0	0.574115
TC1200002569.mm.1	NR_003027	Rnu6	U6 small nuclear RNA	14438480	14438506	TC1900001195.mm.1	-0.4	0.574202
TC1200002570.mm.1	ENSMUST00000157376	Gm22883	predicted gene, 22883	87318694	87318799	TC1100003474.mm.1	-0.1	0.574271
TC1200002571.mm.1	NM_001081633	Dgcr14	DiGeorge syndrome critical region gene 14	17900709	17911348	TC1600001301.mm.1	-0.1	0.574376
TC1200002572.mm.1	NM_177798	Frs2	fibroblast growth factor receptor substrate 2	117070127	117148510	TC1000002921.mm.1	0.0	0.574537
TC1200002573.mm.1	ENSMUST00000083938	Gm25681	predicted gene, 25681	109863780	109863885	TC0300001164.mm.1	-0.1	0.574551
TC1200002574.mm.1	XM_001001111	Gm8539	predicted gene 8539	21613991	21614530	TC0500002020.mm.1	-0.1	0.574821
TC1200002575.mm.1	NM_028780	Tm9sf1	transmembrane 9 superfamily member 1	55635965	55643806	TC1400002864.mm.1	0.0	0.574951
TC1200002576.mm.1	ENSMUST00000158168	Gm22540	predicted gene, 22540	44476416	44476532	TC0900002168.mm.1	0.1	0.575372
TC1200002577.mm.1	ENSMUST00000082825	Gm25475	predicted gene, 25475	101397589	101397768	TC1100003802.mm.1	-0.1	0.575509
TC1200002578.mm.1	NR_035415	Mir1187	microRNA 1187	82798944	82799065	TC0500002665.mm.1	0.1	0.575664
TC1200002579.mm.1	NM_010821	Mpeg1	macrophage expressed gene 1	12460779	12465285	TC1900000246.mm.1	-0.2	0.575769
TC1200002580.mm.1	NM_027000	Gtpbp4	GTP binding protein 4	8972071	8996017	TC1300001419.mm.1	-0.1	0.576294
TC1200002581.mm.1	ENSMUST00000171980	Gm17631	predicted gene, 17631	129862649	129864393	TC0600001540.mm.1	0.1	0.576581
TC1200002582.mm.1	NM_175382	Fam72a	family with sequence similarity 72, member A	131527903	131539872	TC0100001170.mm.1	0.0	0.576631

TC1200002583.mm.1	NM_009801	Car2	carbonic anhydrase 2	14886426	14900770	TC0300000096.mm.1	0.2	0.5767
TC1200002584.mm.1	NM_029929	Vps33a	vacuolar protein sorting 33A (yeast)	123528757	123573015	TC0500003236.mm.1	0.1	0.57679
TC1200002585.mm.1	NM_138653	Bspry	B-box and SPRY domain containing	62480051	62497298	TC0400000702.mm.1	0.0	0.576886
TC1200002586.mm.1	NM_009247	Serpina	serine (or cysteine) peptidase inhibitor, clade	103946931	103958975	TC1200002285.mm.1	-0.1	0.577354
TC1200002587.mm.1	ENSMUST00000178740	Gm21735	predicted gene, 21735	38247727	38248431	TC0Y00000124.mm.1	0.1	0.577387
TC1200002588.mm.1	NM_001018031	Otol1	otolin 1 homolog (zebrafish)	70007613	70028708	TC0300000591.mm.1	0.0	0.577399
TC1200002590.mm.1	NM_001037719	Btla	B and T lymphocyte associated	45224315	45252895	TC1600000674.mm.1	-0.3	0.577505
TC1200002591.mm.1	NM_001025208	LOC5473	MHC class I family member	0	0	TSUnmapped0000003	0.0	0.577623
TC1200002592.mm.1	ENSMUST00000082398	mt-Ta	mitochondrially encoded tRNA alanine	5018	5086	TC0M00000021.mm.1	0.4	0.577651
TC1200002593.mm.1	NM_172871	Klhl9	kelch-like 9	88718292	88722508	TC0400003016.mm.1	-0.1	0.577673
TC1200002594.mm.1	NM_009303	Syngr1	synaptogyrin 1	80091296	80119501	TC1500000693.mm.1	0.0	0.577735
TC1200002595.mm.1	NM_001012323	Mup20	major urinary protein 20	62050234	62054158	TC0400002779.mm.1	-0.3	0.57774
TC1200002596.mm.1	NM_153542	Lrrc20	leucine rich repeat containing 20	61475833	61582242	TC1000000566.mm.1	0.0	0.57775
TC1200002597.mm.1	NM_001033499	Sh2d1b2	SH2 domain protein 1B2	170232749	170253608	TC0100001567.mm.1	0.0	0.577804
TC1200002598.mm.1	ENSMUST00000082928	Gm25038	predicted gene, 25038	78423730	78423859	TC1600001940.mm.1	0.0	0.577966
TC1200002599.mm.1	NM_009699	Aqp2	aquaporin 2	99579056	99584545	TC1500001017.mm.1	0.1	0.578018
TC1200002600.mm.1	NR_030564	Mir466b	microRNA 466b-2	10498685	10498766	TC0200000162.mm.1	0.1	0.578144
TC1200002601.mm.1	NM_145423	Slc5a8	solute carrier family 5 (iodide transporter), m	88885992	88936085	TC1000001085.mm.1	0.1	0.578244
TC1200002603.mm.1	NM_028069	Cdhr5	cadherin-related family member 5	141269083	141276786	TC0700004531.mm.1	0.1	0.578314
TC1200002604.mm.1	NM_011136	Pou2af1	POU domain, class 2, associating factor 1	51213690	51240079	TC0900000615.mm.1	-0.3	0.578385
TC1200002605.mm.1	NM_172989	Lpar1	lysophosphatidic acid receptor 1	58435252	58553898	TC0400002737.mm.1	0.0	0.578644
TC1200002606.mm.1	ENSMUST00000179846	Gm25121	predicted gene, 25121	59364496	59364574	TC0700003142.mm.1	0.0	0.57905
TC1200002607.mm.1	NM_013909	Fbxl6	F-box and leucine-rich repeat protein 6	76535723	76538746	TC1500001780.mm.1	0.0	0.579219
TC1200002608.mm.1	NCBI_Gene:385253:p	Igkv4-5	immunoglobulin kappa variable 4-55	69607275	69607801	TC0600003571.mm.1	-0.5	0.579239
TC1200002609.mm.1	NM_001099346	Gm11937	predicted gene 11937	99609794	99610189	TC1100003721.mm.1	-0.1	0.579324
TC1200002610.mm.1	NM_173449	Pp2d1	protein phosphatase 2C-like domain containing 1	53507460	53539451	TC1700002282.mm.1	-0.1	0.579507
TC1200002611.mm.1	NM_010666	Krt27	keratin 27	99345565	99351118	TC1100003704.mm.1	0.0	0.579649
TC1200002612.mm.1	NM_001243150	Gm13286	predicted gene 13286	88757844	88758392	TC0400000890.mm.1	0.0	0.579872
TC1200002613.mm.1	NM_025849	3110001	RIKEN cDNA 3110001D03 gene	75277354	75278305	TC0400002873.mm.1	-0.1	0.580061
TC1200002614.mm.1	ENSMUST00000103956	Gm22938	predicted gene, 22938	76716628	76716747	TC0900002691.mm.1	0.1	0.580117
TC1200002615.mm.1	NR_105748	Mir6240	microRNA mir-6240 (Mir6240), microRNA.	0	0	TSUnmapped0000011	0.1	0.58032
TC1200002616.mm.1	ENSMUST00000083447	Gm23096	predicted gene, 23096	49658763	49658869	TC0300000349.mm.1	-0.1	0.580362
TC1200002617.mm.1	ENSMUST00000182346	Gm9081	predicted gene 9081	122169373	122170363	TC1000001504.mm.1	-0.1	0.580379
TC1200002618.mm.1	ENSMUST00000111107	Gm11060	predicted gene 11060	105092018	105093760	TC0200001575.mm.1	0.1	0.580394
TC1200002619.mm.1	NM_172565	Klhl11	kelch-like 11	100462612	100472782	TC1100003774.mm.1	-0.1	0.580522
TC1200002620.mm.1	XM_001473500	Gm2423	predicted gene 2423	13232158	13234194	TC1300001457.mm.1	0.1	0.580895
TC1200002621.mm.1	NR_029743	Mir26b	microRNA 26b	74394310	74394394	TC0100000634.mm.1	0.0	0.581034
TC1200002622.mm.1	ENSMUST00000123949	Gm12264	predicted gene 12264	59775286	59780321	TC1100002860.mm.1	0.0	0.581091
TC1200002623.mm.1	NM_010183	Fbrs	fibrosin	127485221	127491513	TC0700001847.mm.1	-0.1	0.581121
TC1200002624.mm.1	ENSMUST00000121915	Gm16077	predicted gene 16077	5092497	5093246	TC1500000018.mm.1	0.2	0.581201
TC1200002625.mm.1	ENSMUST00000157519	Gm24559	predicted gene, 24559	74906314	74906434	TC1800001593.mm.1	-0.1	0.581312
TC1200002626.mm.1	NM_172478	Tbc1d25	TBC1 domain family, member 25	8154472	8176181	TC0X00001798.mm.1	0.0	0.581477
TC1200002627.mm.1	NM_027097	Klk12	kallikrein related-peptidase 12	43768897	43773576	TC0700000771.mm.1	0.0	0.581621
TC1200002628.mm.1	XM_001472638	Gm20801	predicted gene, 20801	81799149	81801497	TC0Y00000500.mm.1	0.0	0.581686
TC1200002629.mm.1	ENSMUST00000159889	Gm6493	predicted gene 6493	23014208	23017038	TC1600001388.mm.1	-0.1	0.582013
TC1200002630.mm.1	NM_007572	C1qa	complement component 1, q subcomponent, alp	136895916	136898844	TC0400003794.mm.1	0.1	0.582086
TC1200002631.mm.1	NM_001198859	Ctbp1	C-terminal binding protein 1	33247723	33275004	TC0500002214.mm.1	-0.1	0.582427
TC1200002632.mm.1	ENSMUST00000180317	Gm25873	predicted gene, 25873	43126233	43126339	TC1600000624.mm.1	-0.2	0.582601
TC1200002633.mm.1	NM_133358	Zfp617	zinc finger protein 617	71922825	71934630	TC0800003231.mm.1	0.0	0.582826
TC1200002634.mm.1	NM_001161745	Hsd3b3	hydroxy-delta-5-steroid dehydrogenase, 3 beta-	98741476	98763128	TC0300002559.mm.1	0.1	0.582999
TC1200002635.mm.1	ENSMUST00000083155	Gm26493	predicted gene, 26493	95746060	95746195	TC0800002751.mm.1	-0.3	0.583492
TC1200002636.mm.1	NR_029722	Mir196a	microRNA 196a-2	102973341	102973450	TC1500001118.mm.1	0.1	0.583502
TC1200002638.mm.1	NM_027256	Ints4	integrator complex subunit 4	97480956	97541398	TC0700001354.mm.1	0.1	0.583591
TC1200002639.mm.1	NM_181444	Gprc5a	G protein-coupled receptor, family C, group 5,	135065651	135084709	TC0600001602.mm.1	0.1	0.583638
TC1200002640.mm.1	ENSMUST00000083728	n-R5s16	nuclear encoded rRNA 5S 161	30379101	30379214	TC0600000264.mm.1	0.1	0.583651
TC1200002641.mm.1	ENSMUST00000158376	Gm23852	predicted gene, 23852	61070018	61070094	TC1600000779.mm.1	0.1	0.583819
TC1200002642.mm.1	XR_140494	Gm20099	predicted gene, 20099	18916652	18918882	TC0200003053.mm.1	-0.1	0.583974
TC1200002643.mm.1	ENSMUST00000120390	Mup-ps1	major urinary protein, pseudogene 19	61957149	61959911	TC0400002776.mm.1	-0.3	0.583976
TC1200002644.mm.1	ENSMUST00000183140	Gm5181	predicted gene 5181	130120239	130121209	TC1000001660.mm.1	0.0	0.583997
TC1200002645.mm.1	ENSMUST00000116906	Mir467g	microRNA 467g	34732853	34732972	TC0500002242.mm.1	0.1	0.584012
TC1200002646.mm.1	NM_013556	Hprt	hypoxanthine guanine phosphoribosyl transferas	52988078	53021660	TC0X00000471.mm.1	0.1	0.58412
TC1200002647.mm.1	ENSMUST00000082697	n-R5s42	nuclear encoded rRNA 5S 42	87169113	87169216	TC1500000841.mm.1	0.1	0.584318
TC1200002648.mm.1	ENSMUST00000175128	Gm22192	predicted gene, 22192	32221970	32222054	TC0200000569.mm.1	-0.2	0.584397
TC1200002649.mm.1	ENSMUST00000083112	Gm25632	predicted gene, 25632	32225653	32225737	TC0200000570.mm.1	-0.2	0.584397
TC1200002650.mm.1	ENSMUST00000104116	Gm22471	predicted gene, 22471	5560606	5560735	TC1100002144.mm.1	0.0	0.584426
TC1200002651.mm.1	NM_028469	3110082	RIKEN cDNA 3110082I17 gene	139359739	139460534	TC0500003490.mm.1	0.0	0.584585
TC1200002652.mm.1	NM_001162494	Fzd6	frizzled homolog 6 (Drosophila)	39006280	39038192	TC1500000298.mm.1	0.0	0.58479
TC1200002653.mm.1	ENSMUST00000083394	Gm22053	predicted gene, 22053	10478674	10478873	TC1400000090.mm.1	-0.1	0.584895
TC1200002654.mm.1	ENSMUST00000164967	Gm7954	predicted gene 7954	41448203	41453518	TC1400001797.mm.1	0.0	0.585037
TC1200002655.mm.1	NM_007457	Ap1s1	adaptor protein complex AP-1, sigma 1	137034993	137046135	TC0500003430.mm.1	0.0	0.585299
TC1200002656.mm.1	ENSMUST00000104313	Gm24230	predicted gene, 24230	54974651	54974779	TC0600000659.mm.1	0.1	0.585347
TC1200002657.mm.1	ENSMUST00000177419	Gm20677	predicted gene 20677	18846035	18846182	TC1400000150.mm.1	0.1	0.585358
TC1200002658.mm.1	NR_028565	Snord85	small nucleolar RNA, C/D box 85	130749634	130749706	TC0400001550.mm.1	0.1	0.585492
TC1200002659.mm.1	NM_023873	Cep70	centrosomal protein 70	99243442	99300404	TC0900001247.mm.1	0.0	0.585659
TC1200002660.mm.1	NCBI_Gene:628571:p	Igkv4-6	immunoglobulin kappa variable 4-63	69377944	69378472	TC0600003563.mm.1	-0.4	0.585827
TC1200002661.mm.1	ENSMUST00000086238	Gm10181	predicted gene 10181	25089422	25089490	TC0900000240.mm.1	-0.2	0.58587
TC1200002662.mm.1	ENSMUST00000158857	Gm24741	predicted gene, 24741	117574342	117574447	TC1200001316.mm.1	0.1	0.585887
TC1200002663.mm.1	NR_030447	Mir680-	microRNA 680-1	0	0	TSUnmapped0000013	0.1	0.585897

TC1200002664.mm.1	ENSMUST00000158026	Gm24853	predicted gene, 24853	81501240	81501360	TC1200000757.mm.1	-0.1	0.585986
TC1200002665.mm.1	ENSMUST00000083227	n-R5s16	nuclear encoded rRNA 5S 167	132591058	132591178	TC0600001558.mm.1	-0.1	0.586146
TC1300000006.mm.1	ENSMUST00000157423	Gm23331	predicted gene, 23331	60500833	60500940	TC0500002450.mm.1	-0.1	0.586257
TC1300000010.mm.1	NM_028603	Zbtb8a	zinc finger and BTB domain containing 8a	129353628	129378116	TC0400003593.mm.1	0.0	0.586316
TC1300000019.mm.1	NM_009700	Aqp4	aquaporin 4	15389394	15410982	TC1800001017.mm.1	0.0	0.58635
TC1300000023.mm.1	ENSMUST00000083006	Gm23239	predicted gene, 23239	77910140	77910320	TC0700003538.mm.1	0.1	0.586816
TC1300000028.mm.1	NM_026129	Erp29	endoplasmic reticulum protein 29	121428590	121452506	TC0500003188.mm.1	0.0	0.587225
TC1300000033.mm.1	NM_027889	Vps11	vacuolar protein sorting 11 (yeast)	44348105	44361670	TC0900002159.mm.1	0.1	0.587297
TC1300000045.mm.1	ENSMUST00000117034	Gm23988	predicted gene, 23988	10501633	10501754	TC0200000170.mm.1	0.1	0.587382
TC1300000047.mm.1	NR_028282	Snord83	small nucleolar RNA, C/D box 83B	80078498	80078591	TC1500001897.mm.1	-0.2	0.587435
TC1300000067.mm.1	NM_007838	Ddost	dolichyl-di-phosphooligosaccharide-protein glyc	138304730	138312628	TC0400001722.mm.1	0.1	0.587558
TC1300000069.mm.1	NM_146296	Olfr437	olfactory receptor 437	43167010	43168027	TC0600000481.mm.1	0.1	0.587723
TC1300000070.mm.1	NR_029654	Mir34c	microRNA 34c	51103034	51103110	TC0900002285.mm.1	-0.1	0.587808
TC1300000072.mm.1	ENSMUST00000119238	Gm5761	predicted gene 5761	137103889	137104722	TC0X00003045.mm.1	0.0	0.587867
TC1300000076.mm.1	ENSMUST00000157402	Gm22144	predicted gene, 22144	23643409	23643510	TC1900000379.mm.1	0.1	0.587943
TC1300000084.mm.1	NM_178691	Yod1	YOD1 OTU deubiquitinating enzyme 1 homologu	130717327	130722073	TC0100001158.mm.1	0.0	0.588061
TC1300000087.mm.1	NM_001037742	Tyw5	tRNA-yW synthesizing protein 5	57388237	57407101	TC0100002371.mm.1	0.0	0.588091
TC1300000089.mm.1	NM_009479	Uros	uroporphyrinogen III synthase	133686243	133710072	TC0700004428.mm.1	0.0	0.588131
TC1300000096.mm.1	NM_001252149	Klra14	killer cell lectin-like receptor subfamily A, m	130082711	130162612	TC0600003610.mm.1	0.0	0.588903
TC1300000117.mm.1	NM_001081060	Slc9a3	solute carrier family 9 (sodium/hydrogen exchan	74121515	74169441	TC1300000894.mm.1	0.1	0.589024
TC1300000119.mm.1	NM_001033438	Gm906	predicted gene 906	50245181	50250308	TC1300001971.mm.1	-0.1	0.589115
TC1300000124.mm.1	NM_027947	Zbtb43	zinc finger and BTB domain containing 43	33450287	33468559	TC0200003327.mm.1	-0.1	0.589275
TC1300000126.mm.1	NM_009944	Cox7a1	cytochrome c oxidase subunit VIIa 1	30184171	30186030	TC0700000552.mm.1	-0.1	0.589445
TC1300000140.mm.1	XM_001481340	Ssxa1	synovial sarcoma, X member A, breakpoint 1	21115820	21122088	TC0X00000223.mm.1	0.0	0.589638
TC1300000142.mm.1	NM_183256	Cox14	cytochrome c oxidase assembly protein 14	99725618	99728136	TC1500001024.mm.1	0.0	0.589645
TC1300000143.mm.1	ENSMUST00000179186	Gm22254	predicted gene, 22254	74505055	74505164	TC0600002512.mm.1	0.1	0.589726
TC1300000144.mm.1	NM_145604	D230025	RIKEN cDNA D230025D16 gene	105225145	105253053	TC0800001207.mm.1	0.0	0.589743
TC1300000145.mm.1	ENSMUST00000059005	Gm11868	predicted gene 11868	18844202	18845679	TC0400002265.mm.1	0.0	0.589773
TC1300000148.mm.1	ENSMUST00000117970	Gm13526	predicted gene 13526	57214054	57214242	TC0200003563.mm.1	0.0	0.58989
TC1300000160.mm.1	NM_001242945	Gm3264	predicted gene 3264	4855576	4875851	TC1400002793.mm.1	0.0	0.590024
TC1300000162.mm.1	ENSMUST00000118021	Defa-ps	defensin, alpha, pseudogene 4	21119166	21119348	TC0800000218.mm.1	0.0	0.590224
TC1300000163.mm.1	NM_025806	Plbd1	phospholipase B domain containing 1	136612070	136661928	TC0600003329.mm.1	0.1	0.590291
TC1300000173.mm.1	ENSMUST00000158536	Gm24130	predicted gene, 24130	65158258	65158408	TC1300000788.mm.1	-0.1	0.590516
TC1300000174.mm.1	ENSMUST00000157723	Gm23865	predicted gene, 23865	29931427	29931523	TC0200003259.mm.1	-0.1	0.590658
TC1300000175.mm.1	ENSMUST00000158013	Gm25846	predicted gene, 25846	75714790	75714924	TC0300000607.mm.1	0.1	0.590834
TC1300000176.mm.1	ENSMUST00000118667	Mup-ps5	major urinary protein, pseudogene 5	60597597	60597695	TC0400000676.mm.1	-0.1	0.59111
TC1300000177.mm.1	ENSMUST00000118093	Gm11865	predicted gene 11865	16246269	16249514	TC0400000144.mm.1	0.1	0.591372
TC1300000179.mm.1	XM_001473524	Gm2427	predicted gene 2427	85498215	85514726	TC0100000757.mm.1	0.1	0.591394
TC1300000181.mm.1	NM_054094	Acsm1	acyl-CoA synthetase medium-chain family memb	119607026	119662515	TC0700001711.mm.1	0.1	0.591408
TC1300000182.mm.1	NM_022889	Pes1	pescadillo homolog 1, containing BRCT domain (	3963975	3980004	TC1100000028.mm.1	-0.1	0.591621
TC1300000191.mm.1	NM_013719	Eif2ak4	eukaryotic translation initiation factor 2 alph	118388617	118475234	TC0200001735.mm.1	0.0	0.591718
TC1300000192.mm.1	ENSMUST00000122180	Gm12138	predicted gene 12138	40672906	40673856	TC1100002547.mm.1	0.1	0.592012
TC1300000199.mm.1	ENSMUST00000178117	Gm6728	predicted gene 6728	136486122	136490139	TC0600003327.mm.1	0.1	0.592183
TC1300000209.mm.1	NM_175224	Metap1	methionyl aminopeptidase 1	138458956	138489382	TC0300003020.mm.1	0.1	0.592189
TC1300000216.mm.1	ENSMUST00000103976	Gm22115	predicted gene, 22115	8949921	8950053	TC1300001416.mm.1	-0.1	0.5924
TC1300000218.mm.1	ENSMUST00000104108	Gm23923	predicted gene, 23923	8955932	8956064	TC1300001417.mm.1	-0.1	0.5924
TC1300000238.mm.1	XM_001480439	Gm10480	predicted gene 10480	18195513	18217757	TC1200000153.mm.1	-0.1	0.592577
TC1300000241.mm.1	ENSMUST00000082631	Gm24145	predicted gene, 24145	11167105	11167267	TC1600001210.mm.1	0.1	0.59272
TC1300000244.mm.1	ENSMUST00000174153	Mthfr-p	5,10-methylenetetrahydrofolate reductase, pseu	78473885	78474735	TC0500000746.mm.1	0.0	0.592799
TC1300000245.mm.1	ENSMUST00000157747	Gm22881	predicted gene, 22881	135148648	135148781	TC0600001603.mm.1	0.0	0.592838
TC1300000246.mm.1	ENSMUST00000178512	Gm24307	predicted gene, 24307	149576461	149576561	TC0600001778.mm.1	0.2	0.592846
TC1300000247.mm.1	NM_001277310	Mea1	male enhanced antigen 1	46680453	46683126	TC1700000900.mm.1	0.0	0.593057
TC1300000249.mm.1	NM_020288	Olfr749	olfactory receptor 749	50736218	50744324	TC1400001984.mm.1	0.0	0.593058
TC1300000250.mm.1	NM_001008232	Asap3	ArfGAP with SH3 domain, ankyrin repeat and PH	136206365	136246573	TC0400001679.mm.1	0.0	0.593741
TC1300000254.mm.1	XM_001477820	Gm20927	predicted gene, 20927	54968754	54969437	TC0Y00000384.mm.1	0.1	0.593788
TC1300000255.mm.1	ENSMUST00000114231	Gm11146	predicted gene 11146	77588578	77602094	TC1600001934.mm.1	0.1	0.593985
TC1300000258.mm.1	NM_027204	Mrpl12	mitochondrial ribosomal protein L12	120484613	120489065	TC1100002029.mm.1	0.0	0.594174
TC1300000259.mm.1	NM_027227	Glod5	glyoxalase domain containing 5	8004200	8018492	TC0X00001790.mm.1	0.1	0.594312
TC1300000260.mm.1	NM_008339	Cd79b	CD79B antigen	106311341	106314762	TC1100003920.mm.1	-0.4	0.594347
TC1300000261.mm.1	ENSMUST00000157890	Gm23043	predicted gene, 23043	51655767	51655875	TC0400000561.mm.1	0.1	0.594475
TC1300000262.mm.1	NR_040456_2	RP23-14	N/A	106185743	106190099	TC0700004003.mm.1	0.1	0.594609
TC1300000266.mm.1	NM_026373	Cdk2ap2	CDK2-associated protein 2	4097182	4099019	TC1900000026.mm.1	0.0	0.59488
TC1300000268.mm.1	ENSMUST00000157836	Gm24748	predicted gene, 24748	191196906	191197013	TC0100001838.mm.1	0.0	0.594903
TC1300000280.mm.1	NM_001163528	Itpripl	inositol 1,4,5-triphosphate receptor interactin	127138769	127143457	TC0200004548.mm.1	0.1	0.594924
TC1300000284.mm.1	NM_009721	Atp1b1	ATPase, Na+/K+ transporting, beta 1 polypeptide	164437099	164458355	TC0100003422.mm.1	-0.3	0.595312
TC1300000290.mm.1	ENSMUST00000175405	Gm23370	predicted gene, 23370	127331813	127331941	TC0100001117.mm.1	-0.2	0.595573
TC1300000307.mm.1	NM_026678	Blvra	biliverdin reductase A	127070657	127097084	TC0200001906.mm.1	0.0	0.595646
TC1300000310.mm.1	NM_146441	Olfr933	olfactory receptor 933	38975651	38976653	TC0900000423.mm.1	0.1	0.595719
TC1300000312.mm.1	NM_001024853	Timm9	translocase of inner mitochondrial membrane 9	71123172	71136675	TC1200001893.mm.1	0.0	0.595814
TC1300000321.mm.1	XM_003689071	Gm21497	predicted gene, 21497	61648177	61672669	TC0Y00000169.mm.1	0.0	0.595893
TC1300000329.mm.1	ENSMUST00000119438	Rpl10-p	ribosomal protein L10, pseudogene 1	105554201	105554845	TC0200004266.mm.1	-0.1	0.596046
TC1300000336.mm.1	NM_001101503	A230065	RIKEN cDNA A230065H16 gene	111406809	111412077	TC1200001235.mm.1	0.0	0.596091
TC1300000338.mm.1	NM_172049	Tmem18	transmembrane protein 18	30584443	30591219	TC1200000255.mm.1	0.1	0.596135
TC1300000345.mm.1	NM_018855	Gas8	growth arrest specific 8	123518835	123536650	TC0800001528.mm.1	0.0	0.596393
TC1300000346.mm.1	NM_026833	Wash	WAS protein family homolog	66111546	66120503	TC1700001083.mm.1	0.0	0.596588
TC1300000353.mm.1	ENSMUST00000119380	Gm8312	predicted gene 8312	67169613	67170230	TC0X00002362.mm.1	0.0	0.597132
TC1300000358.mm.1	ENSMUST00000175421	Gm22184	predicted gene, 22184	86574100	86574161	TC0600002640.mm.1	0.1	0.597407
TC1300000359.mm.1	ENSMUST00000158101	Gm22210	predicted gene, 22210	63533068	63533211	TC1800000653.mm.1	0.0	0.597486

TC1300000362.mm.1	NM_013549	Hist2h2	histone cluster 2, H2aa1	96239716	96240374	TC0300002501.mm.1	0.1	0.59754
TC1300000364.mm.1	ENSMUST00000178475	Gm22070	predicted gene, 22070	114991541	114991647	TC1000001325.mm.1	-0.1	0.597758
TC1300000366.mm.1	NM_053225	Vmn1r50	vomeronasal 1 receptor 50	90107275	90108207	TC0600001061.mm.1	0.0	0.597771
TC1300000379.mm.1	NM_001253685	Dnajc12	DnaJ (Hsp40) homolog, subfamily C, member 12	63382443	63408840	TC1000000604.mm.1	0.0	0.5979
TC1300000384.mm.1	NM_025837	Mpi	mannose phosphate isomerase	57544256	57552763	TC0900002374.mm.1	0.0	0.597977
TC1300000385.mm.1	NM_026432	Tmem66	transmembrane protein 66	34154563	34170847	TC0800000403.mm.1	-0.1	0.598097
TC1300000392.mm.1	ENSMUST00000122640	Gm25176	predicted gene, 25176	26260369	26260493	TC1900001300.mm.1	-0.1	0.598233
TC1300000395.mm.1	NM_146565	Olfr837	olfactory receptor 837	19136928	19137967	TC0900000146.mm.1	0.1	0.598452
TC1300000404.mm.1	ENSMUST00000082843	Gm25204	predicted gene, 25204	36767425	36767530	TC1400000390.mm.1	-0.1	0.598509
TC1300000406.mm.1	ENSMUST00000178550	Gm21742	predicted gene, 21742	90843934	90844074	TC0Y00000225.mm.1	-0.1	0.598683
TC1300000409.mm.1	ENSMUST00000094335	Gm6505	predicted pseudogene 6505	28764234	28765364	TC0300001769.mm.1	0.1	0.59943
TC1300000425.mm.1	ENSMUST00000118421	Gm13880	predicted gene 13880	103819003	103819476	TC0200004232.mm.1	-0.1	0.599629
TC1300000441.mm.1	ENSMUST00000178782	Gm25074	predicted gene, 25074	59776724	59776817	TC0700003309.mm.1	-0.1	0.599711
TC1300000442.mm.1	NM_008285	Hrh1	histamine receptor H1	114397936	114483296	TC0600001269.mm.1	0.0	0.599731
TC1300000443.mm.1	NM_198862	Nlgn2	neuroligin 2	69823122	69837784	TC1100003069.mm.1	0.0	0.599746
TC1300000445.mm.1	NM_007907	Eef2	eukaryotic translation elongation factor 2	81176631	81182509	TC1000000884.mm.1	-0.1	0.599754
TC1300000459.mm.1	ENSMUST00000102000	Gm23422	predicted gene, 23422	70596815	70596921	TC0100000587.mm.1	0.1	0.599756
TC1300000460.mm.1	ENSMUST00000178715	Gm10784	predicted pseudogene 10784	49945096	49945335	TC1300001968.mm.1	-0.1	0.599962
TC1300000461.mm.1	NCBI_Gene:780803:p	Ighv3-1	immunoglobulin heavy variable 3-1	113964388	113964818	TC1200002578.mm.1	-0.2	0.600062
TC1300000463.mm.1	ENSMUST00000164753	Gm17420	predicted gene, 17420	116032146	116032313	TC0500003110.mm.1	0.1	0.600123
TC1300000475.mm.1	NCBI_Gene:10012435	Traj38	T cell receptor alpha joining 38	54180574	54180635	TC1400000731.mm.1	-0.2	0.600159
TC1300000476.mm.1	ENSMUST00000083228	Gm23645	predicted gene, 23645	106260206	106260313	TC1100001778.mm.1	-0.2	0.600244
TC1300000481.mm.1	NM_007843	Defb1	defensin beta 1	21776555	21795185	TC0800000259.mm.1	0.2	0.600343
TC1300000490.mm.1	ENSMUST00000121941	Gm13077	predicted gene 13077	152157007	152157490	TC0400004091.mm.1	0.0	0.600878
TC1300000498.mm.1	ENSMUST00000158186	Gm22381	predicted gene, 22381	73756037	73756143	TC1100001027.mm.1	-0.1	0.601142
TC1300000537.mm.1	ENSMUST00000175088	Gm23159	predicted gene, 23159	76958422	76958498	TC0400002895.mm.1	-0.1	0.601229
TC1300000540.mm.1	NM_146355	Olfr692	olfactory receptor 692	105368230	105369355	TC0700001548.mm.1	0.1	0.601251
TC1300000554.mm.1	NM_024256	B3gat3	beta-1,3-glucuronyltransferase 3 (glucuronosylt	8920374	8927236	TC1900000166.mm.1	0.0	0.601537
TC1300000560.mm.1	ENSMUST00000178312	Gm21897	predicted gene, 21897	15317458	15318957	TC1600000188.mm.1	0.2	0.601639
TC1300000564.mm.1	ENSMUST00000180363	Gm10858	predicted gene 10858	146895792	146896196	TC0500003617.mm.1	-0.1	0.601743
TC1300000566.mm.1	NM_001252330	Slc6a15	solute carrier family 6 (neurotransmitter trans	103367808	103419379	TC1000001244.mm.1	0.1	0.60221
TC1300000568.mm.1	NR_030449	Mir680-	microRNA 680-3	25867370	25894505	TC1000001909.mm.1	-0.1	0.602512
TC1300000569.mm.1	NM_146342	Olfr126	olfactory receptor 1269	90118600	90119617	TC0200004080.mm.1	0.0	0.60265
TC1300000570.mm.1	ENSMUST00000101568	Gm10479	predicted gene 10479	20415938	20433699	TC1200000175.mm.1	-0.1	0.602915
TC1300000573.mm.1	NM_183222	Fcrl5	Fc receptor-like 5	87435782	87500678	TC0300000695.mm.1	-0.1	0.602932
TC1300000588.mm.1	ENSMUST00000083757	n-R5s77	nuclear encoded rRNA 5S 77	78314165	78314283	TC1000000782.mm.1	0.1	0.603658
TC1300000589.mm.1	ENSMUST00000180218	Gm24415	predicted gene, 24415	90054409	90054515	TC1500002063.mm.1	0.1	0.603809
TC1300000590.mm.1	NM_133803	Dpp3	dipeptidylpeptidase 3	4907229	4928287	TC1900000941.mm.1	-0.1	0.603944
TC1300000594.mm.1	NM_001177485	Gm15284	predicted gene 15284	21134642	21135598	TC0800000219.mm.1	0.0	0.604033
TC1300000599.mm.1	NM_176968	Nt5dc1	5-nucleotidase domain containing 1	34288288	34418552	TC1000002000.mm.1	-0.1	0.604059
TC1300000601.mm.1	NM_001271772	Skil	SKI-like	31095058	31122923	TC0300000210.mm.1	0.0	0.604076
TC1300000606.mm.1	ENSMUST00000104007	Gm24796	predicted gene, 24796	93600979	93601085	TC0400000939.mm.1	0.1	0.604181
TC1300000607.mm.1	ENSMUST00000102365	Gm26340	predicted gene, 26340	134448574	134448672	TC0500001555.mm.1	0.0	0.604482
TC1300000612.mm.1	NM_001024721	BC09491	cDNA sequence BC094916	173519717	173535957	TC0100003590.mm.1	-0.2	0.604594
TC1300000619.mm.1	NM_001033532	AW55491	expressed sequence AW554918	25168999	25467321	TC1800000209.mm.1	0.0	0.604624
TC1300000626.mm.1	NM_027327	2210013	RIKEN cDNA 2210013O21 gene	153723554	153741322	TC0X00001564.mm.1	0.0	0.60465
TC1300000633.mm.1	ENSMUST00000083863	Gm25512	predicted gene, 25512	164601936	164602042	TC0200002523.mm.1	0.1	0.604665
TC1300000635.mm.1	NM_194269	Morn2	MORN repeat containing 2	80290212	80297476	TC1700001213.mm.1	0.1	0.604736
TC1300000643.mm.1	NM_145451	Gpx6	glutathione peroxidase 6	21312203	21319624	TC1300000162.mm.1	0.1	0.604761
TC1300000655.mm.1	NM_026520	Fam122a	family with sequence similarity 122, member A	24475779	24477474	TC1900001282.mm.1	0.0	0.604796
TC1300000658.mm.1	NR_033120	Klk1b7-	kallikrein 1-related peptidase b7, pseudogene	43942662	43945927	TC0700000782.mm.1	-0.1	0.604807
TC1300000667.mm.1	NR_029791	Mir139	microRNA 139	101475376	101475443	TC0700001433.mm.1	0.1	0.605093
TC1300000670.mm.1	NM_009324	Tbx2	T-box 2	85832551	85841948	TC1100001302.mm.1	0.0	0.605247
TC1300000671.mm.1	ENSMUST00000170766	Gm14038	predicted gene 14038	134762073	134763642	TC0200004693.mm.1	0.1	0.605319
TC1300000674.mm.1	ENSMUST00000174597	Stk19-p	serine/threonine kinase 19, pseudogene 1	34744753	34747154	TC1700001924.mm.1	0.0	0.605335
TC1300000675.mm.1	NM_001243760	Ciita	class II transactivator	10480072	10527564	TC1600000116.mm.1	-0.2	0.605346
TC1300000691.mm.1	ENSMUST00000120720	Mup-ps1	major urinary protein, pseudogene 1	60085840	60088577	TC0400000664.mm.1	-0.1	0.605445
TC1300000696.mm.1	NM_007664	Cdh2	cadherin 2	16588877	16809246	TC1800001026.mm.1	0.0	0.605494
TC1300000726.mm.1	XM_156070	Gm4758	predicted gene 4758	36308039	36312653	TC1600000513.mm.1	0.1	0.60554
TC1300000732.mm.1	ENSMUST00000104230	Gm23745	predicted gene, 23745	53905696	53905820	TC0400000592.mm.1	0.1	0.605742
TC1300000740.mm.1	NM_007797	Ctla2b	cytotoxic T lymphocyte-associated protein 2 bet	60895351	60897447	TC1300002141.mm.1	0.1	0.605758
TC1300000742.mm.1	NM_001163552	Ap4b1	adaptor-related protein complex AP-4, beta 1	103809517	103822025	TC0300001061.mm.1	0.0	0.605851
TC1300000749.mm.1	NM_025779	Ccdc109	coiled-coil domain containing 109B	129914960	129970206	TC0300002938.mm.1	0.0	0.606003
TC1300000750.mm.1	NM_011237	Rad9a	RAD9 homolog A	4195196	4201603	TC1900000908.mm.1	-0.1	0.606195
TC1300000751.mm.1	NM_021278	Tmsb4x	thymosin, beta 4, X chromosome	167207093	167209315	TC0X00003358.mm.1	0.0	0.606475
TC1300000754.mm.1	ENSMUST00000158983	Gm22503	predicted gene, 22503	44732353	44732467	TC1000000418.mm.1	0.1	0.606639
TC1300000761.mm.1	ENSMUST00000178574	Gm25198	predicted gene, 25198	88015924	88016033	TC0100000833.mm.1	0.1	0.60686
TC1300000762.mm.1	NR_027990	Enoph1	enolase-phosphatase 1	100039994	100068765	TC0500000971.mm.1	0.0	0.607013
TC1300000778.mm.1	NM_026062	Fam69a	family with sequence similarity 69, member A	107908042	107987085	TC0500002936.mm.1	0.1	0.607068
TC1300000788.mm.1	NM_026184	Ero1lb	ERO1-like beta (S. cerevisiae)	12565883	12611396	TC1300000072.mm.1	-0.1	0.60723
TC1300000794.mm.1	ENSMUST00000083281	Gm26263	predicted gene, 26263	77898283	77898446	TC0100002623.mm.1	0.1	0.607342
TC1300000795.mm.1	ENSMUST00000082534	Gm25081	predicted gene, 25081	38480338	38480445	TC0200000699.mm.1	-0.1	0.607507
TC1300000796.mm.1	ENSMUST00000096093	Gm5989	predicted pseudogene 5989	23157986	23160061	TC0600001927.mm.1	0.0	0.60763
TC1300000802.mm.1	ENSMUST00000104123	Gm24709	predicted gene, 24709	56583715	56583846	TC0600002335.mm.1	0.1	0.607745
TC1300000803.mm.1	NM_145985	Arcn1	archain 1	44741564	44767845	TC0900002175.mm.1	-0.1	0.607756
TC1300000812.mm.1	ENSMUST00000122603	Gm24840	predicted gene, 24840	123628201	123628347	TC0500001425.mm.1	0.1	0.608216
TC1300000813.mm.1	ENSMUST00000118427	Gm12717	predicted gene 12717	103940959	103941941	TC0400001080.mm.1	-0.1	0.608571
TC1300000814.mm.1	NM_001013773	Nxpe5	neurexophilin and PC-esterase domain family, m	138225898	138253363	TC0500001648.mm.1	0.0	0.608806

TC1300000815.mm.1	ENSMUST00000158285	Gm22608	predicted gene, 22608	68908020	68908122	TC1100000885.mm.1	0.1	0.608977
TC1300000817.mm.1	NM_011397	Slc23a1	solute carrier family 23 (nucleobase transporte	35614604	35627244	TC1800001175.mm.1	0.1	0.609233
TC1300000818.mm.1	NM_026958	Slirp	SRA stem-loop interacting RNA binding protein	87443896	87452206	TC1200000878.mm.1	-0.1	0.609253
TC1300000819.mm.1	NM_008138	Gnai2	guanine nucleotide binding protein (G protein),	107614138	107635342	TC0900003038.mm.1	0.1	0.609702
TC1300000827.mm.1	NM_001033432	Heca	headcase homolog (Drosophila)	17900084	17948067	TC1000001799.mm.1	0.0	0.609754
TC1300000830.mm.1	ENSMUST00000119335	Gm9051	predicted gene 9051	96224308	96225727	TC0X00002675.mm.1	0.0	0.609798
TC1300000833.mm.1	ENSMUST00000118700	Gm9164	predicted gene 9164	103887599	103888612	TC0X00002787.mm.1	0.0	0.610122
TC1300000838.mm.1	ENSMUST00000179948	Gm23003	predicted gene, 23003	55594782	55594888	TC1600001738.mm.1	-0.1	0.610283
TC1300000846.mm.1	ENSMUST00000104484	Gm24472	predicted gene, 24472	87066893	87067024	TC0300000690.mm.1	0.2	0.610364
TC1300000857.mm.1	NM_001146711	Ppp1r18	protein phosphatase 1, regulatory subunit 18	35865593	35875596	TC1700000707.mm.1	0.0	0.610843
TC1300000861.mm.1	NM_009244	Serpina	serine (or cysteine) preptidase inhibitor, clad	103728156	103738189	TC1200002531.mm.1	-0.1	0.611053
TC1300000868.mm.1	ENSMUST00000119937	Gm15574	predicted gene 15574	32880011	32880608	TC0300001804.mm.1	0.1	0.611143
TC1300000880.mm.1	NM_001033305	Ndufb6	NADH dehydrogenase (ubiquinone) 1 beta subcc	40270591	40279421	TC0400002437.mm.1	0.1	0.611278
TC1300000884.mm.1	NM_001011866	Olfr309	olfactory receptor 309	86306185	86313509	TC0700003689.mm.1	-0.1	0.611291
TC1300000887.mm.1	NM_001168506	Zfp574	zinc finger protein 574	25077205	25083492	TC0700000405.mm.1	0.0	0.611431
TC1300000889.mm.1	NM_199015	Phf11d	PHD finger protein 11D	59347407	59365490	TC1400002869.mm.1	0.0	0.611484
TC1300000894.mm.1	ENSMUST00000104687	Gm23912	predicted gene, 23912	109618114	109618200	TC1200001145.mm.1	-0.1	0.611576
TC1300000904.mm.1	NM_027172	Slc52a3	solute carrier protein family 52, member 3	151996511	152009258	TC0200002272.mm.1	0.0	0.611659
TC1300000907.mm.1	NM_172830	Slc4a9	solute carrier family 4, sodium bicarbonate cot	36528152	36556273	TC1800000331.mm.1	0.0	0.612222
TC1300000910.mm.1	ENSMUST00000104060	Gm23275	predicted gene, 23275	3395439	3395542	TC0900000016.mm.1	0.1	0.612334
TC1300000912.mm.1	NR_037617	St5	suppression of tumorigenicity 5	109523911	109617147	TC0700004076.mm.1	0.1	0.612538
TC1300000916.mm.1	NM_001164823	Tmem42	transmembrane protein 42	123021326	123023491	TC0900001654.mm.1	0.0	0.61259
TC1300000919.mm.1	NM_001045526	Scimp	SLP adaptor and CSK interacting membrane prot	70790932	70812586	TC1100003115.mm.1	-0.1	0.612652
TC1300000920.mm.1	NM_153545	Lrrc45	leucine rich repeat containing 45	120713925	120721128	TC1100002044.mm.1	0.0	0.612679
TC1300000931.mm.1	ENSMUST00000157873	Gm24402	predicted gene, 24402	151260824	151260914	TC0100003249.mm.1	0.1	0.612738
TC1300000934.mm.1	ENSMUST00000121321	Rpl10-p	ribosomal protein L10, pseudogene 6	37295155	37295796	TC1900001455.mm.1	-0.1	0.612791
TC1300000937.mm.1	XR_002343	Gm5067	predicted gene 5067	26006989	26070851	TC0500000240.mm.1	0.0	0.61282
TC1300000952.mm.1	NM_028593	Cybrd1	cytochrome b reductase 1	71117923	71142926	TC0200001032.mm.1	0.0	0.613105
TC1300000954.mm.1	NM_008597	Mgp	matrix Gla protein	136872435	136875805	TC0600003335.mm.1	0.2	0.613519
TC1300000956.mm.1	ENSMUST00000049117	Gm5830	predicted pseudogene 5830	78967637	78968079	TC0100002639.mm.1	0.1	0.61367
TC1300000961.mm.1	ENSMUST00000103871	Gm24541	predicted gene, 24541	79949187	79949282	TC0700001140.mm.1	-0.1	0.613874
TC1300000965.mm.1	NM_026267	Necap1	NECAP endocytosis associated 1	122874474	122888942	TC0600001394.mm.1	0.0	0.614007
TC1300000967.mm.1	ENSMUST00000104237	Gm24280	predicted gene, 24280	104971427	104971560	TC1400001197.mm.1	-0.1	0.614009
TC1300000969.mm.1	ENSMUST00000112956	Gm11111	predicted gene 11111	98552695	98553744	TC0500000952.mm.1	0.1	0.614182
TC1300000970.mm.1	NM_001101647	Prlh	prolactin releasing hormone	90953108	90954012	TC0100000883.mm.1	0.0	0.614317
TC1300000982.mm.1	ENSMUST00000074759	Tpt1-ps	tumor protein, translationally-controlled, pseu	99877747	99878433	TC0600002845.mm.1	-0.1	0.614423
TC1300000983.mm.1	ENSMUST00000179548	Gm25617	predicted gene, 25617	38158008	38158140	TC1600000546.mm.1	0.2	0.614428
TC1300000994.mm.1	ENSMUST00000175581	Gm24971	predicted gene, 24971	54666677	54666786	TC1200001748.mm.1	-0.1	0.614553
TC1300000996.mm.1	NM_008471	Krt19	keratin 19	100140810	100148665	TC1100003758.mm.1	0.0	0.614562
TC1300001013.mm.1	NM_008683	Nedd8	neural precursor cell expressed, developmentall	55662263	55671906	TC1400002094.mm.1	-0.1	0.614564
TC1300001016.mm.1	NM_009630	Adora2a	adenosine A2a receptor	75316943	75334788	TC1000000711.mm.1	0.0	0.614591
TC1300001017.mm.1	NR_037304	Mir3471	microRNA 3471-1	23813938	24129968	TC0500002062.mm.1	0.2	0.61476
TC1300001018.mm.1	ENSMUST00000158355	Mir669m	microRNA 669m-2	10513434	10513531	TC0200000195.mm.1	-0.1	0.6148
TC1300001028.mm.1	ENSMUST00000104282	Gm24789	predicted gene, 24789	39040579	39040709	TC1500000299.mm.1	0.0	0.614885
TC1300001029.mm.1	NM_008586	Mep1b	meprin 1 beta	21072344	21100199	TC1800000165.mm.1	0.2	0.614948
TC1300001041.mm.1	ENSMUST00000179470	Gm21028	predicted gene, 21028	42578466	42578588	TC0700002927.mm.1	0.1	0.614983
TC1300001049.mm.1	ENSMUST00000118752	Gm6982	predicted gene 6982	92593809	92595368	TC0X00000876.mm.1	-0.1	0.615037
TC1300001052.mm.1	NM_053108	Glrx	glutaredoxin	75839868	75850151	TC1300000919.mm.1	0.0	0.615086
TC1300001054.mm.1	NM_007792	Csrp2	cysteine and glycine-rich protein 2	110920176	110939599	TC1000001284.mm.1	0.1	0.61523
TC1300001061.mm.1	NM_030248	Cdk5rap	CDK5 regulatory subunit associated protein 3	96907426	96916496	TC1100003627.mm.1	0.0	0.615337
TC1300001064.mm.1	NM_178628	Atl1	atlastin GTPase 1	69893105	69969744	TC1200000580.mm.1	0.0	0.615431
TC1300001066.mm.1	ENSMUST00000122740	n-R5s18	nuclear encoded rRNA 5S 18	164133385	164133505	TC0X00001662.mm.1	-0.1	0.615736
TC1300001069.mm.1	NM_033321	P2rx5	purinergic receptor P2X, ligand-gated ion chann	73160421	73172687	TC1100001016.mm.1	0.0	0.615813
TC1300001076.mm.1	ENSMUST00000119007	Gm14869	predicted gene 14869	109120801	109121684	TC0X00002857.mm.1	0.0	0.615974
TC1300001077.mm.1	ENSMUST00000158603	Gm25044	predicted gene, 25044	80476352	80476455	TC1000000859.mm.1	-0.1	0.616025
TC1300001081.mm.1	NR_033726	Ces2d-p	carboxylesterase 2D, pseudogene	104867424	104874082	TC0800001195.mm.1	0.0	0.616055
TC1300001084.mm.1	XM_003084464	Gm16340	predicted gene 16340	173775837	173802720	TC0100003595.mm.1	0.1	0.616096
TC1300001086.mm.1	XM_001477592	Gm20914	predicted gene, 20914	5727496	5728179	TC0Y00000020.mm.1	0.0	0.61616
TC1300001087.mm.1	ENSMUST00000157183	Gm23435	predicted gene, 23435	35243595	35243750	TC0600000345.mm.1	0.1	0.616226
TC1300001088.mm.1	NM_018762	Gp9	glycoprotein 9 (platelet)	87778136	87779762	TC0600001016.mm.1	0.1	0.616443
TC1300001100.mm.1	ENSMUST00000185060	HYMAI	Hydatidiform mole associated and imprinted cor	13091581	13091817	TC1000001764.mm.1	0.0	0.616473
TC1300001102.mm.1	NR_030720_2	Gm21884	predicted gene, 21884	106322396	106330688	TC0700004007.mm.1	0.1	0.616511
TC1300001119.mm.1	ENSMUST00000158252	Gm25860	predicted gene, 25860	93147846	93147971	TC0700003746.mm.1	-0.1	0.616692
TC1300001122.mm.1	NR_035428	Mir1196	microRNA 1196	61752220	61752338	TC1400002201.mm.1	0.1	0.616785
TC1300001128.mm.1	NM_025852	Rexo1	REX1, RNA exonuclease 1 homolog (S. cerevisiae	80540922	80561560	TC1000002504.mm.1	0.0	0.616789
TC1300001131.mm.1	ENSMUST00000084675	Mir669c	microRNA 669c	10509296	10509404	TC0200000185.mm.1	-0.1	0.616831
TC1300001137.mm.1	ENSMUST00000082612	Gm24538	predicted gene, 24538	29481525	29481631	TC0500002143.mm.1	-0.1	0.616945
TC1300001138.mm.1	NM_019423	Elovl2	elongation of very long chain fatty acids (FEN1	41182382	41220405	TC1300001859.mm.1	0.1	0.616972
TC1300001139.mm.1	ENSMUST00000082804	Gm23054	predicted gene, 23054	88862919	88863080	TC0300000739.mm.1	0.1	0.617111
TC1300001140.mm.1	NM_019866	Spib	Spi-B transcription factor (Spi-1/PU.1 related)	44525995	44532071	TC0700002967.mm.1	-0.2	0.617131
TC1300001155.mm.1	ENSMUST00000104219	Gm25422	predicted gene, 25422	105140207	105140335	TC1000002793.mm.1	0.1	0.617353
TC1300001159.mm.1	NM_207568	Olfr125	olfactory receptor 1252	89721103	89722206	TC0200004070.mm.1	-0.1	0.617555
TC1300001160.mm.1	NM_139222	Defb15	defensin beta 15	21929799	21932710	TC0800001857.mm.1	0.0	0.617883
TC1300001161.mm.1	ENSMUST00000083858	Gm25515	predicted gene, 25515	4104313	4104469	TC1000000019.mm.1	-0.1	0.618237
TC1300001165.mm.1	NM_001190830	Jak3	Janus kinase 3	71676296	71690577	TC0800000800.mm.1	0.0	0.618383
TC1300001169.mm.1	NM_010817	Psmd7	proteasome (prosome, macropain) 26S subunit,	107580380	107588482	TC0800002881.mm.1	-0.1	0.618517
TC1300001173.mm.1	NM_010908	Nfkbib	nuclear factor of kappa light polypeptide gene	28758251	28767512	TC0700002705.mm.1	-0.1	0.618538
TC1300001182.mm.1	NM_001170479	Loh12cr	loss of heterozygosity, 12, chromosomal region	134639512	134711184	TC0600001589.mm.1	0.0	0.618756

TC1300001190.mm.1	ENSMUST00000179823	Gm23966	predicted gene, 23966	58466515	58466621	TC0100002384.mm.1	-0.1	0.618915
TC1300001204.mm.1	ENSMUST00000104111	Gm24126	predicted gene, 24126	76074546	76074651	TC1700001175.mm.1	0.1	0.618952
TC1300001205.mm.1	ENSMUST00000103916	Gm25263	predicted gene, 25263	10509885	10509984	TC0200000187.mm.1	-0.1	0.619035
TC1300001211.mm.1	NM_026364	Prpsap1	phosphoribosyl pyrophosphate synthetase-assoc	116470816	116494202	TC1100004118.mm.1	0.0	0.619059
TC1300001242.mm.1	ENSMUST00000120311	Gm12266	predicted gene 12266	60343245	60344206	TC1100000750.mm.1	0.0	0.619151
TC1300001249.mm.1	ENSMUST00000122555	Gm25323	predicted gene, 25323	126201175	126201277	TC0400003532.mm.1	0.0	0.619676
TC1300001251.mm.1	NM_001081476	Gm14725	predicted gene 14725	70545558	70546385	TC0X00000635.mm.1	0.1	0.619848
TC1300001270.mm.1	ENSMUST00000179973	Gm21870	predicted gene, 21870	33985639	33986816	TC0X00002032.mm.1	0.0	0.62001
TC1300001273.mm.1	ENSMUST00000118202	Gm13914	predicted gene 13914	108733212	108734202	TC0200004295.mm.1	0.0	0.620098
TC1300001280.mm.1	NM_030113	Arhgap1	Rho GTPase activating protein 10	77250366	77517907	TC0800002497.mm.1	-0.1	0.620506
TC1300001281.mm.1	ENSMUST00000104428	Gm25502	predicted gene, 25502	59070988	59071118	TC0100000443.mm.1	0.1	0.620695
TC1300001288.mm.1	ENSMUST00000117665	Gm12492	predicted gene 12492	43798896	43800255	TC0400002544.mm.1	-0.1	0.620907
TC1300001298.mm.1	ENSMUST00000082683	n-R5s17	nuclear encoded rRNA 5S 176	120064335	120064443	TC0500001331.mm.1	0.3	0.621166
TC1300001315.mm.1	ENSMUST00000158797	Gm26008	predicted gene, 26008	39265844	39265942	TC0600002119.mm.1	0.1	0.621207
TC1300001318.mm.1	ENSMUST00000118792	Gm12117	predicted gene 12117	17820946	17821770	TC1300000126.mm.1	0.1	0.621354
TC1300001320.mm.1	NM_001085507	Zbtb34	zinc finger and BTB domain containing 34	33406108	33431324	TC0200003326.mm.1	0.0	0.621376
TC1300001324.mm.1	ENSMUST00000116861	Gm22195	predicted gene, 22195	4271130	4271237	TC0900001690.mm.1	0.1	0.621514
TC1300001326.mm.1	NM_001030014	Mcat	malonyl CoA:ACP acyltransferase (mitochondrial	83546797	83555711	TC1500001978.mm.1	0.0	0.621606
TC1300001340.mm.1	ENSMUST00000082493	Gm22748	predicted gene, 22748	17546146	17546281	TC1200000143.mm.1	-0.3	0.621914
TC1300001349.mm.1	ENSMUST00000122428	Gm14629	predicted gene 14629	57670344	57670487	TC0X00002276.mm.1	0.1	0.622138
TC1300001353.mm.1	NM_007631	Ccnd1	cyclin D1	144929931	144939925	TC0700004610.mm.1	0.0	0.622474
TC1300001356.mm.1	ENSMUST00000116845	Gm26303	predicted gene, 26303	115381960	115382078	TC0900001533.mm.1	0.1	0.622724
TC1300001358.mm.1	ENSMUST00000158080	Gm25549	predicted gene, 25549	131073658	131073751	TC0100003052.mm.1	-0.1	0.622801
TC1300001360.mm.1	NM_175490	Gpr75	G protein-coupled receptor 75	30885358	30893729	TC1100000315.mm.1	0.0	0.622885
TC1300001366.mm.1	ENSMUST00000178841	Gm23147	predicted gene, 23147	6338882	6338991	TC0300001604.mm.1	0.0	0.622904
TC1300001376.mm.1	ENSMUST00000179354	Gm23936	predicted gene, 23936	120837488	120837597	TC0400001358.mm.1	0.0	0.622904
TC1300001377.mm.1	ENSMUST00000178287	Gm24496	predicted gene, 24496	10290478	10290587	TC0900001742.mm.1	0.0	0.622904
TC1300001378.mm.1	ENSMUST00000179931	Gm25086	predicted gene, 25086	10295047	10295156	TC0900001743.mm.1	0.0	0.622904
TC1300001383.mm.1	XM_001477326	Gm14535	predicted pseudogene 14535	13217909	13218655	TC0X00001867.mm.1	0.0	0.622926
TC1300001384.mm.1	ENSMUST00000082690	Gm22305	predicted gene, 22305	86671236	86671343	TC0800002630.mm.1	0.0	0.623149
TC1300001392.mm.1	NM_013797	Slco1a1	solute carrier organic anion transporter family	141907281	141946962	TC0600003365.mm.1	0.1	0.623195
TC1300001396.mm.1	NM_178263	Ankrd27	ankyrin repeat domain 27 (VPS9 domain)	35586247	35639237	TC0700000663.mm.1	0.1	0.623386
TC1300001400.mm.1	ENSMUST00000116916	Gm26044	predicted gene, 26044	69752403	69752528	TC0500002554.mm.1	0.0	0.623653
TC1300001406.mm.1	ENSMUST00000051687	Gm1840	predicted gene 1840	5639584	5640996	TC0800000045.mm.1	0.1	0.623959
TC1300001407.mm.1	ENSMUST00000161387	Gm9727	predicted gene 9727	107478526	107479080	TC0500002926.mm.1	-0.1	0.624001
TC1300001413.mm.1	NR_030434	Mir763	microRNA 763	120447991	120448110	TC1000003026.mm.1	0.0	0.624008
TC1300001414.mm.1	NR_030434	Mir763	microRNA 763	0	0	TSUnmapped0000013	0.0	0.624008
TC1300001416.mm.1	NM_052973	Strn3	striatin, calmodulin binding protein 3	51608541	51691914	TC1200001715.mm.1	-0.1	0.624016
TC1300001417.mm.1	NM_008430	Kcnk1	potassium channel, subfamily K, member 1	125995102	126030688	TC0800001572.mm.1	0.0	0.624377
TC1300001419.mm.1	NM_001163688	Ptpra	protein tyrosine phosphatase, receptor type, A	130450278	130554300	TC0200001985.mm.1	0.1	0.624811
TC1300001428.mm.1	NM_178608	Reep1	receptor accessory protein 1	71707561	71810710	TC0600000834.mm.1	0.0	0.624825
TC1300001435.mm.1	ENSMUST00000183951	RP23-44	N/A	33931644	33931875	TC0900000309.mm.1	0.1	0.62536
TC1300001445.mm.1	ENSMUST00000061241	Apoo	apolipoprotein O	107413865	107414767	TC1300002624.mm.1	-0.1	0.626127
TC1300001446.mm.1	NM_010717	Limk1	LIM-domain containing, protein kinase	134656039	134688590	TC0500003378.mm.1	0.0	0.626132
TC1300001447.mm.1	NM_133826	Atp6v1h	ATPase, H+ transporting, lysosomal V1 subunit H	5083172	5162549	TC0100000014.mm.1	0.1	0.626333
TC1300001451.mm.1	NR_038088	Bc1	brain cytoplasmic RNA 1	79697305	80369637	TC1000002475.mm.1	0.0	0.626432
TC1300001457.mm.1	ENSMUST00000158606	Gm23112	predicted gene, 23112	14267315	14267439	TC0300001663.mm.1	0.0	0.626525
TC1300001480.mm.1	NR_030704	Snord55	small nucleolar RNA, C/D box 55	117155770	117155848	TC0400003364.mm.1	-0.3	0.626818
TC1300001492.mm.1	NM_133980	Slc22a1	solute carrier family 22 (organic cation transp	119192974	119209105	TC0900003236.mm.1	0.1	0.627037
TC1300001507.mm.1	NM_029613	Krtap4-	keratin associated protein 4-7	99643106	99644089	TC1100003725.mm.1	0.1	0.627127
TC1300001508.mm.1	ENSMUST00000184224	CR97445	N/A	35868302	35868397	TC1700001984.mm.1	0.0	0.627573
TC1300001510.mm.1	NM_179203	Atad3a	ATPase family, AAA domain containing 3A	155740640	155761098	TC0400004151.mm.1	0.0	0.627673
TC1300001519.mm.1	NM_009258	Spink3	serine peptidase inhibitor, Kazal type 3	43728069	43737237	TC1800001274.mm.1	0.2	0.628125
TC1300001520.mm.1	NM_030004	Cryl1	crystallin, lambda 1	57275034	57398500	TC1400002142.mm.1	0.1	0.628463
TC1300001525.mm.1	XM_984338	Gm11787	predicted gene 11787	3425651	3516515	TC0400002119.mm.1	0.2	0.628748
TC1300001527.mm.1	NM_001163575	Parp10	poly (ADP-ribose) polymerase family, member 1(	76232791	76243441	TC1500002347.mm.1	0.0	0.629055
TC1300001529.mm.1	ENSMUST00000184078	AC02591	N/A	78525989	78526110	TC1000000788.mm.1	0.0	0.629124
TC1300001543.mm.1	NR_033117	Gm3020	predicted gene 3020	3412614	3433857	TC1400002784.mm.1	0.0	0.629321
TC1300001545.mm.1	NM_001166632	Havcr1	hepatitis A virus cellular receptor 1	46735080	46779578	TC1100000483.mm.1	-0.1	0.629373
TC1300001553.mm.1	ENSMUST00000158386	Gm24879	predicted gene, 24879	31747200	31747342	TC1600001489.mm.1	-0.1	0.629507
TC1300001555.mm.1	ENSMUST00000121106	Gm15432	predicted gene 15432	29564014	29564208	TC0X00002007.mm.1	0.1	0.629579
TC1300001557.mm.1	ENSMUST00000157348	Gm23716	predicted gene, 23716	85420137	85420280	TC0200001238.mm.1	-0.1	0.629594
TC1300001558.mm.1	ENSMUST00000118388	Gm14270	predicted gene 14270	170285035	170285880	TC0200002640.mm.1	-0.1	0.630281
TC1300001560.mm.1	NM_011584	Nr1d2	nuclear receptor subfamily 1, group D, member 2	18204054	18239127	TC1400001499.mm.1	0.1	0.6306
TC1300001561.mm.1	ENSMUST00000104391	Gm24891	predicted gene, 24891	87528030	87528165	TC1600001987.mm.1	0.1	0.63078
TC1300001562.mm.1	NM_001160215	Fcrla	Fc receptor-like A	170917576	170927583	TC0100003520.mm.1	-0.2	0.631059
TC1300001563.mm.1	NM_146619	Olfr303	olfactory receptor 303	86394496	86395535	TC0700003695.mm.1	0.0	0.631069
TC1300001568.mm.1	NR_106197	Mir8117	microRNA mir-8117 (Mir8117), microRNA.	0	0	TSUnmapped0000010	0.1	0.631114
TC1300001570.mm.1	NM_134125	Trip10	thyroid hormone receptor interactor 10	57249451	57263697	TC1700001032.mm.1	0.0	0.631209
TC1300001574.mm.1	ENSMUST00000177701	Gm25525	predicted gene, 25525	138378591	138378697	TC0500001655.mm.1	-0.1	0.631595
TC1300001575.mm.1	ENSMUST00000157092	Gm25824	predicted gene, 25824	79553557	79553677	TC1800001648.mm.1	0.0	0.631772
TC1300001576.mm.1	NCBI_Gene:544896:p	Ighv5-9	immunoglobulin heavy variable 5-9	113661769	113662228	TC1200002560.mm.1	0.2	0.631819
TC1300001583.mm.1	NM_021710	Ap4s1	adaptor-related protein complex AP-4, sigma 1	51690966	51738939	TC1200000419.mm.1	0.0	0.631907
TC1300001587.mm.1	NM_001007571	D8Ertd7	DNA segment, Chr 8, ERATO Doi 738, expressed	84246226	84249761	TC0800002578.mm.1	-0.1	0.631994
TC1300001588.mm.1	NCBI_Gene:211331:p	Ighv1-5	immunoglobulin heavy variable V1-54	115193675	115194108	TC1200002631.mm.1	-0.2	0.632063
TC1300001598.mm.1	NM_026933	Triap1	TP53 regulated inhibitor of apoptosis 1	115341225	115343569	TC0500001257.mm.1	0.0	0.632138
TC1300001602.mm.1	ENSMUST00000082300	Gm8399	predicted gene 8399	81064684	81065803	TC1300000961.mm.1	0.1	0.632153
TC1300001603.mm.1	ENSMUST00000158876	Gm23479	predicted gene, 23479	98935894	98936015	TC0700001377.mm.1	0.0	0.632382

TC1300001604.mm.1	ENSMUST00000119600	Gm13829	predicted gene 13829	115291763	115291900	TC0500003094.mm.1	0.0	0.63252
TC1300001609.mm.1	NM_177337	Arl11	ADP-ribosylation factor-like 11	61309753	61311936	TC1400000862.mm.1	0.0	0.632682
TC1300001615.mm.1	NR_001585	Speer7-	spermatogenesis associated glutamate (E)-rich p	15536013	15714596	TC0500000108.mm.1	0.0	0.632729
TC1300001630.mm.1	NM_028873	Dnajc14	DnaJ (Hsp40) homolog, subfamily C, member 14	128805580	128819446	TC1000001622.mm.1	0.0	0.632774
TC1300001631.mm.1	ENSMUST00000083703	Gm26397	predicted gene, 26397	126944847	126944980	TC0800003201.mm.1	-0.1	0.633073
TC1300001633.mm.1	ENSMUST00000183890	ST7-OT3	ST7 overlapping transcript 3 conserved region 3	17907172	17907291	TC0600000141.mm.1	0.0	0.633253
TC1300001634.mm.1	XM_894313	Gm6747	predicted gene 6747	41525264	41526311	TC1900000588.mm.1	-0.1	0.633336
TC1300001635.mm.1	ENSMUST00000183246	Gm2193	predicted gene 2193	41608668	41609669	TC0800002122.mm.1	0.1	0.633338
TC1300001638.mm.1	XR_141178	Gm3609	predicted gene 3609	62402700	62411725	TC1300002162.mm.1	0.0	0.63337
TC1300001639.mm.1	ENSMUST00000174977	Gm22860	predicted gene, 22860	108567310	108567383	TC0300002747.mm.1	0.1	0.6335
TC1300001640.mm.1	ENSMUST00000101960	Gm24142	predicted gene, 24142	13490509	13490615	TC1200001439.mm.1	-0.1	0.633586
TC1300001641.mm.1	ENSMUST00000085949	Gm17428	predicted gene, 17428	54976933	54977025	TC1400000767.mm.1	-0.2	0.63377
TC1300001642.mm.1	NR_102395	Fgf18	fibroblast growth factor 18	33116978	33147400	TC1100002484.mm.1	0.0	0.633866
TC1300001643.mm.1	ENSMUST00000120728	Gm16177	predicted gene 16177	86659318	86660035	TC0800002629.mm.1	0.1	0.633915
TC1300001645.mm.1	ENSMUST00000093657	Gm25821	predicted gene, 25821	21287927	21288059	TC1200000182.mm.1	0.0	0.634179
TC1300001646.mm.1	NM_010642	Klk1b21	kallikrein 1-related peptidase b21	44102292	44106583	TC0700000789.mm.1	0.1	0.634347
TC1300001652.mm.1	NM_010318	Gng5	guanine nucleotide binding protein (G protein),	146499834	146505572	TC0300001493.mm.1	0.0	0.634428
TC1300001666.mm.1	ENSMUST00000181451	Gm8941	predicted gene 8941	151136507	151137780	TC0100001347.mm.1	0.0	0.634664
TC1300001668.mm.1	NM_001160136	Gm20917	predicted gene, 20917	79148793	79149787	TC0Y00000487.mm.1	0.1	0.635246
TC1300001669.mm.1	NM_001011769	Olfr317	olfactory receptor 317	58732096	58733223	TC1100002833.mm.1	0.0	0.635547
TC1300001672.mm.1	NM_009203	Slc22a1	solute carrier family 22 (organic anion/cation	6535845	6543070	TC1900001012.mm.1	0.1	0.635593
TC1300001725.mm.1	NM_153529	Nrn1	neuritin 1	36725622	36734477	TC1300001812.mm.1	0.0	0.635823
TC1300001733.mm.1	NM_001011753	Olfr115	olfactory receptor 115	37609785	37627109	TC1700002076.mm.1	-0.1	0.6362
TC1300001737.mm.1	NR_029877	Mir376a	microRNA 376a	109723781	109723848	TC1200001185.mm.1	0.0	0.636401
TC1300001739.mm.1	NM_030684	Trim34a	tripartite motif-containing 34A	104244457	104340693	TC0700001520.mm.1	-0.1	0.636618
TC1300001750.mm.1	ENSMUST00000119726	Gm7079	predicted pseudogene 7079	8047229	8047399	TC0X00000080.mm.1	-0.2	0.636628
TC1300001762.mm.1	NM_001034900	Zfp345	zinc finger protein 345	150470991	150485091	TC0200004839.mm.1	0.0	0.636931
TC1300001764.mm.1	ENSMUST00000175153	Gm23813	predicted gene, 23813	49771833	49771909	TC1100000524.mm.1	0.1	0.636972
TC1300001765.mm.1	ENSMUST00000175309	Gm24814	predicted gene, 24814	8738321	8738390	TC1600000096.mm.1	0.0	0.637245
TC1300001768.mm.1	NM_172725	Ap5z1	adaptor-related protein complex 5, zeta 1 subun	142463931	142478715	TC0500001716.mm.1	0.0	0.637281
TC1300001770.mm.1	NM_023320	Plekho1	pleckstrin homology domain containing, family C	95988429	95996001	TC0300002492.mm.1	0.0	0.637282
TC1300001774.mm.1	ENSMUST00000120456	Gm14884	predicted gene 14884	20459490	20459685	TC0X00001924.mm.1	0.0	0.638028
TC1300001779.mm.1	ENSMUST00000082844	Gm25206	predicted gene, 25206	128084143	128084216	TC1000001585.mm.1	-0.2	0.638413
TC1300001781.mm.1	NM_001164048	Mb	myoglobin	77015487	77050670	TC1500001798.mm.1	0.0	0.638422
TC1300001792.mm.1	NM_146916	Olfr134	olfactory receptor 1346	6474088	6475153	TC0700000082.mm.1	0.1	0.638475
TC1300001793.mm.1	ENSMUST00000179161	Gm24196	predicted gene, 24196	8203866	8203975	TC0500001928.mm.1	-0.1	0.638915
TC1300001806.mm.1	NM_001127188	Zfp534	zinc finger protein 534	147673502	147702631	TC0400003995.mm.1	0.0	0.639047
TC1300001807.mm.1	ENSMUST00000104357	Gm22018	predicted gene, 22018	68010340	68010470	TC0800000698.mm.1	0.1	0.639163
TC1300001812.mm.1	NM_029494	Rab30	RAB30, member RAS oncogene family	92741603	92837117	TC0700001317.mm.1	0.1	0.639209
TC1300001814.mm.1	ENSMUST00000116680	Gm22468	predicted gene, 22468	137621474	137621593	TC0300001393.mm.1	0.1	0.639264
TC1300001831.mm.1	NCBI_Gene:547427:p	Trav18	T cell receptor alpha variable 18	53831105	53831827	TC1400000710.mm.1	0.0	0.639339
TC1300001836.mm.1	NM_010321	Gnmt	glycine N-methyltransferase	46725664	46729168	TC1700002187.mm.1	0.0	0.639576
TC1300001837.mm.1	NM_011731	Slc6a20	solute carrier family 6 (neurotransmitter trans	123593820	123632565	TC0900003306.mm.1	0.1	0.639645
TC1300001859.mm.1	ENSMUST00000082508	Gm26225	predicted gene, 26225	64753918	64754052	TC1400000926.mm.1	-0.1	0.639667
TC1300001861.mm.1	ENSMUST00000122034	Gm12438	predicted gene 12438	48745515	48745850	TC0400002630.mm.1	0.0	0.639667
TC1300001866.mm.1	ENSMUST00000117258	Gm7781	predicted gene 7781	130524637	130525424	TC0X00001262.mm.1	0.0	0.639767
TC1300001868.mm.1	ENSMUST00000178005	Gm23567	predicted gene, 23567	72969602	72969708	TC0900000984.mm.1	0.0	0.639826
TC1300001877.mm.1	NM_001033383	Zfp865	zinc finger protein 865	5020376	5033223	TC0700000052.mm.1	0.0	0.639894
TC1300001882.mm.1	NM_178875	Zfp935	zinc finger protein 935	62453016	62466812	TC1300002767.mm.1	-0.1	0.639988
TC1300001883.mm.1	NM_001112738	Atp5c1	ATP synthase, H+ transporting, mitochondrial F1	10056016	10080510	TC0200002942.mm.1	0.1	0.640242
TC1300001886.mm.1	ENSMUST00000104036	Gm23437	predicted gene, 23437	106766030	106766156	TC1400001226.mm.1	0.1	0.640369
TC1300001902.mm.1	ENSMUST00000120886	Gm13882	predicted gene 13882	104291574	104292575	TC0200001556.mm.1	0.1	0.640442
TC1300001906.mm.1	ENSMUST00000181525	Gm5706	predicted gene 5706	182392543	182393535	TC0100003713.mm.1	0.0	0.64066
TC1300001907.mm.1	NR_039558	Mir5099	microRNA 5099	36816205	36816278	TC1200000328.mm.1	0.0	0.640743
TC1300001910.mm.1	NR_039558	Mir5099	microRNA 5099	0	0	TSUnmapped0000010	0.0	0.640743
TC1300001922.mm.1	ENSMUST00000121267	Gm12155	predicted gene 12155	44387115	44387274	TC1100002578.mm.1	0.0	0.640763
TC1300001923.mm.1	NR_029655	Mir34b	microRNA 34b	51103562	51103645	TC0900002286.mm.1	0.1	0.640785
TC1300001928.mm.1	ENSMUST00000161109	Gm15790	predicted pseudogene 15790	129796608	129797858	TC0100003032.mm.1	-0.1	0.640801
TC1300001942.mm.1	ENSMUST00000104000	Gm25090	predicted gene, 25090	159139361	159139492	TC0200002445.mm.1	0.1	0.640841
TC1300001943.mm.1	ENSMUST00000183723	RP24-10	N/A	15408520	15408864	TC0700002406.mm.1	0.0	0.640861
TC1300001945.mm.1	NM_138746	Fam50b	family with sequence similarity 50, member B	34734850	34747622	TC1300000395.mm.1	0.0	0.640976
TC1300001946.mm.1	NM_008181	Gsta1	glutathione S-transferase, alpha 1 (Ya)	78230656	78269166	TC0900001049.mm.1	0.1	0.640989
TC1300001947.mm.1	ENSMUST00000137737	Gm7855	predicted gene 7855	134625058	134625744	TC0X00002996.mm.1	-0.1	0.641182
TC1300001949.mm.1	ENSMUST00000158775	Gm23050	predicted gene, 23050	13120531	13120695	TC1700001466.mm.1	0.0	0.641572
TC1300001954.mm.1	NM_008950	Psmc5	protease (prosome, macropain) 26S subunit, ATF	106256154	106263120	TC1100001777.mm.1	-0.1	0.641598
TC1300001965.mm.1	NM_148944	Chrnb4	cholinergic receptor, nicotinic, beta polypepti	55028156	55048544	TC0900002328.mm.1	0.0	0.641837
TC1300001966.mm.1	XR_106397	Gm9796	predicted gene 9796	95696894	95699143	TC1100003596.mm.1	0.0	0.64217
TC1300001968.mm.1	NR_037281	Mir3098	microRNA 3098	125195792	125195878	TC0600001451.mm.1	0.1	0.64237
TC1300001970.mm.1	XM_003688808	Gm21680	predicted gene, 21680	25968057	25972588	TC0500002117.mm.1	0.0	0.642631
TC1300001971.mm.1	ENSMUST00000157418	Gm23328	predicted gene, 23328	67420031	67420162	TC0200000968.mm.1	0.0	0.64269
TC1300002006.mm.1	ENSMUST00000158814	Gm23195	predicted gene, 23195	90815197	90815325	TC1200000937.mm.1	0.1	0.642831
TC1300002017.mm.1	ENSMUST00000158425	Gm23353	predicted gene, 23353	27452289	27452360	TC1000000243.mm.1	0.0	0.642916
TC1300002031.mm.1	ENSMUST00000183861	TTC28-A	TTC28 antisense RNA 1 conserved region 4	111274984	111275094	TC0500003004.mm.1	0.0	0.643023
TC1300002034.mm.1	ENSMUST00000177881	Gm5866	predicted gene 5866	52582320	52583227	TC0500000531.mm.1	0.1	0.643122
TC1300002036.mm.1	ENSMUST00000172591	Gm20492	predicted gene 20492	127288514	127289681	TC1000001556.mm.1	0.0	0.643289
TC1300002037.mm.1	NM_026010	Lipt2	lipoyl(octanoyl) transferase 2 (putative)	100159277	100161365	TC0700001400.mm.1	0.0	0.643463
TC1300002040.mm.1	NM_025443	Pno1	partner of NOB1 homolog (S. cerevisiae)	17203198	17211589	TC1100002251.mm.1	0.1	0.643551
TC1300002049.mm.1	ENSMUST00000099988	Gm10819	predicted gene 10819	16267061	16267621	TC1900001207.mm.1	-0.1	0.643697

TC1300002052.mm.1	ENSMUST00000116686	Gm25111	predicted gene, 25111	36699397	36699543	TC0600000353.mm.1	-0.1	0.643794
TC1300002062.mm.1	NM_008180	Gss	glutathione synthetase	155563181	155592810	TC0200004965.mm.1	0.0	0.643835
TC1300002063.mm.1	NM_145548	Cyp2j13	cytochrome P450, family 2, subfamily j, polypep	96027534	96077546	TC0400003085.mm.1	0.1	0.64396
TC1300002079.mm.1	NM_016801	Stx1a	syntaxin 1A (brain)	135023482	135051100	TC0500001573.mm.1	0.0	0.643998
TC1300002090.mm.1	ENSMUST00000157575	Gm23753	predicted gene, 23753	126634539	126634687	TC0200004541.mm.1	0.0	0.644086
TC1300002096.mm.1	NR_037207	Mir1843	microRNA Mir1843	80391613	80391751	TC1200001997.mm.1	0.1	0.644123
TC1300002098.mm.1	NM_024174	Mrps23	mitochondrial ribosomal protein S23	88204388	88211507	TC1100001369.mm.1	0.1	0.644256
TC1300002100.mm.1	BC125003	Efna3	ephrin A3	89313899	89322965	TC0300002346.mm.1	0.0	0.64433
TC1300002121.mm.1	NM_007746	Map3k8	mitogen-activated protein kinase kinase kinase	4331327	4353015	TC1800000929.mm.1	0.0	0.644378
TC1300002123.mm.1	NM_001146022	Wdfy4	WD repeat and FYVE domain containing 4	32959547	33185508	TC1400001709.mm.1	-0.1	0.644378
TC1300002136.mm.1	NCBI_Gene:640046:p	Ighv2-9	immunoglobulin heavy variable 2-9	113879096	113879529	TC1200002573.mm.1	-0.2	0.644508
TC1300002139.mm.1	NM_001010835	Taar7e	trace amine-associated receptor 7E	24037548	24038762	TC1000000203.mm.1	0.1	0.644546
TC1300002140.mm.1	ENSMUST00000184942	adapt33	Adaptive response 33 conserved region 2	100426736	100426804	TC0500000977.mm.1	-0.1	0.644562
TC1300002141.mm.1	NR_029808	Mir224	microRNA 224	72261031	72261112	TC0X00002404.mm.1	-0.1	0.644796
TC1300002143.mm.1	NR_029808	Mir224	microRNA 224	0	0	TSUnmapped0000008	-0.1	0.644796
TC1300002154.mm.1	ENSMUST00000116957	Gm23839	predicted gene, 23839	21878784	21878892	TC1000001846.mm.1	0.0	0.644846
TC1300002157.mm.1	ENSMUST00000053066	LOC1010	uncharacterized LOC101056603 // uncharacteri	10319945	10320229	TC1700001436.mm.1	0.0	0.644916
TC1300002158.mm.1	ENSMUST00000104512	Gm24069	predicted gene, 24069	39461530	39461656	TC1200000352.mm.1	0.1	0.645015
TC1300002161.mm.1	NR_110894	Pld6	phospholipase D family, member 6 (Pld6), transc	0	0	TSUnmapped0000006	0.0	0.645017
TC1300002162.mm.1	NR_030147	Mir463	microRNA 463	66799223	66799297	TC0X00002348.mm.1	0.0	0.645062
TC1300002166.mm.1	uc029yhh.1	Mid1	clone MEX2A-1 Mid1 mRNA, partial sequence.	90833347	90842916	TC0Y00000224.mm.1	-0.1	0.645119
TC1300002167.mm.1	NM_001163618	Tars2	threonyl-tRNA synthetase 2, mitochondrial (puta	95739974	95754977	TC0300002483.mm.1	0.0	0.645168
TC1300002168.mm.1	NM_010056	Dlx5	distal-less homeobox 5	6877801	6882085	TC0600001834.mm.1	0.0	0.645415
TC1300002169.mm.1	ENSMUST00000182390	Gm6216	predicted gene 6216	12655867	12656553	TC0100000062.mm.1	0.0	0.645415
TC1300002172.mm.1	NM_177002	Slc22a3	solute carrier family 22, member 30	8335371	8405111	TC1900001768.mm.1	0.1	0.645434
TC1300002175.mm.1	NM_001256055	Eif3j2	eukaryotic translation initiation factor 3, sub	43475418	43477836	TC1800001270.mm.1	-0.1	0.645728
TC1300002176.mm.1	ENSMUST00000103907	Gm24342	predicted gene, 24342	10509584	10509687	TC0200000186.mm.1	0.1	0.645882
TC1300002183.mm.1	ENSMUST00000120883	Gm13989	predicted gene 13989	123273146	123273345	TC0200001863.mm.1	0.1	0.646116
TC1300002187.mm.1	XM_003085302	Gm15266	predicted gene 15266	152110432	152111461	TC0X00003187.mm.1	-0.1	0.646601
TC1300002201.mm.1	ENSMUST00000181479	B230364	---	14758635	14760720	TC1000001794.mm.1	0.0	0.646631
TC1300002202.mm.1	NR_029784	Mir10a	microRNA 10a	96316684	96321638	TC1100001498.mm.1	0.0	0.646768
TC1300002204.mm.1	NM_017379	Tuba8	tubulin, alpha 8	121210734	121226854	TC0600001368.mm.1	0.0	0.646905
TC1300002222.mm.1	ENSMUST00000175439	Gm25690	predicted gene, 25690	141346164	141346240	TC0400001786.mm.1	0.1	0.646938
TC1300002226.mm.1	NM_001122660	Gm10639	predicted gene 10639	78289923	78305525	TC0900001050.mm.1	0.1	0.647356
TC1300002232.mm.1	NM_183022	Asic4	acid-sensing (proton-gated) ion channel family	75450436	75474343	TC0100000660.mm.1	0.0	0.647378
TC1300002233.mm.1	NM_134069	Slc17a3	solute carrier family 17 (sodium phosphate), me	23839434	23860714	TC1300000266.mm.1	0.1	0.647562
TC1300002234.mm.1	ENSMUST00000075401	Ppp1r2-	protein phosphatase 1, regulatory (inhibitor) s	66805306	66805938	TC0900002531.mm.1	0.1	0.647822
TC1300002235.mm.1	ENSMUST00000182730	Gm5272	predicted gene 5272	6450607	6451588	TC0300001606.mm.1	0.0	0.647923
TC1300002236.mm.1	ENSMUST00000127214	Gm9428	predicted gene 9428	5276735	5278427	TC0X00001747.mm.1	0.0	0.648358
TC1300002239.mm.1	NM_010175	Fadd	Fas (TNFRSF6)-associated via death domain	144577318	144582463	TC0700004607.mm.1	0.0	0.648368
TC1300002247.mm.1	NR_028542	Snord8	small nucleolar RNA, C/D box 8	52209785	52209894	TC1400002028.mm.1	-0.3	0.648383
TC1300002252.mm.1	NM_012051	Etv3	ets variant gene 3	87525407	87540158	TC0300000697.mm.1	0.0	0.648795
TC1300002253.mm.1	NR_035454	Mir1933	microRNA 1933	21344588	21344675	TC1100002325.mm.1	0.0	0.648881
TC1300002255.mm.1	NM_011467	Spr	sepiapterin reductase	85133678	85137766	TC0600002605.mm.1	0.0	0.648993
TC1300002259.mm.1	NM_130892	Rtn4ip1	reticulon 4 interacting protein 1	43901807	43947863	TC1000000409.mm.1	0.0	0.649002
TC1300002260.mm.1	NM_153067	Mrgpra3	MAS-related GPR, member A3	47588950	47601372	TC0700003059.mm.1	0.0	0.649167
TC1300002261.mm.1	NM_010645	Klk1b1	kallikrein 1-related peptidase b1	43966751	43971318	TC0700000784.mm.1	0.1	0.649217
TC1300002269.mm.1	ENSMUST00000184989	FTX_1	FTX transcript, XIST regulator conserved region	103595938	103596008	TC0X00001034.mm.1	-0.1	0.649313
TC1300002274.mm.1	ENSMUST00000120160	Gm9105	predicted gene 9105	109387478	109388875	TC0700004074.mm.1	0.0	0.649617
TC1300002283.mm.1	ENSMUST00000175157	Gm23806	predicted gene, 23806	159449277	159449385	TC0X00001620.mm.1	0.1	0.649718
TC1300002292.mm.1	ENSMUST00000175207	Gm23393	predicted gene, 23393	116394342	116394413	TC0100002929.mm.1	0.1	0.649796
TC1300002299.mm.1	NR_033215	3000002	glyceraldehyde-3-phosphate dehydrogenase pse	109827943	109832706	TC0900003097.mm.1	0.0	0.649911
TC1300002302.mm.1	NM_027844	Krtap5-	keratin associated protein 5-2	142174532	142176005	TC0700004557.mm.1	0.0	0.650005
TC1300002303.mm.1	NM_001045525	Cyb5d1	cytochrome b5 domain containing 1	69391925	69395631	TC1100003041.mm.1	0.1	0.650173
TC1300002306.mm.1	NM_010780	Cma1	chymase 1, mast cell	55941451	55944661	TC1400002108.mm.1	0.0	0.650319
TC1300002307.mm.1	NM_031375	Ngrn	neugrin, neurite outgrowth associated	80261215	80658799	TC0700001149.mm.1	0.0	0.650673
TC1300002308.mm.1	NM_020560	Mrps31	mitochondrial ribosomal protein S31	22411340	22429665	TC0800000276.mm.1	0.0	0.650906
TC1300002310.mm.1	XM_001477500	Gm3650	predicted gene 3650	43445110	43475271	TC1800000444.mm.1	0.0	0.651088
TC1300002311.mm.1	NM_007443	Ambp	alpha 1 microglobulin/bikunin	63143275	63154799	TC0400002796.mm.1	0.0	0.65109
TC1300002316.mm.1	ENSMUST00000165358	Gm17622	predicted gene, 17622	96490733	96491120	TC1300001088.mm.1	-0.1	0.651174
TC1300002321.mm.1	ENSMUST00000182418	Gm7069	predicted gene 7069	76293972	76294979	TC0800000852.mm.1	0.0	0.65134
TC1300002337.mm.1	NM_001142411	Zfp937	zinc finger protein 937	150218073	150244874	TC0200002214.mm.1	0.0	0.651377
TC1300002339.mm.1	ENSMUST00000120922	Gm15027	predicted gene 15027	13179443	13179580	TC0X00000162.mm.1	-0.1	0.651558
TC1300002343.mm.1	ENSMUST00000118324	Gm14536	predicted gene 14536	13189538	13189675	TC0X00000163.mm.1	-0.1	0.651558
TC1300002344.mm.1	NM_146285	Olfr801	olfactory receptor 801	129669561	129670517	TC1000003185.mm.1	-0.1	0.652076
TC1300002345.mm.1	NM_022983	Lpar3	lysophosphatidic acid receptor 3	146220961	146286214	TC0300001490.mm.1	0.0	0.652083
TC1300002348.mm.1	NM_030180	Usp54	ubiquitin specific peptidase 54	20548912	20618354	TC1400001544.mm.1	0.0	0.652173
TC1300002375.mm.1	ENSMUST00000082712	Gm23300	predicted gene, 23300	38071929	38072053	TC1900000544.mm.1	-0.1	0.652188
TC1300002377.mm.1	ENSMUST00000057649	Pam16	presequence translocase-asssociated motor 16 h	43524102	43524617	TC1000000401.mm.1	-0.1	0.652278
TC1300002378.mm.1	NM_026855	Arv1	ARV1 homolog (yeast)	124722139	124734123	TC0800001547.mm.1	0.0	0.652597
TC1300002383.mm.1	NM_009328	Tcf15	transcription factor 15	152143561	152149097	TC0200002276.mm.1	0.0	0.652736
TC1300002384.mm.1	NM_001080944	Atp8b4	ATPase, class I, type 8B, member 4	126320973	126500674	TC0200004537.mm.1	0.0	0.652843
TC1300002390.mm.1	NM_031257	Plekha2	pleckstrin homology domain-containing, family A	25039144	25102194	TC0800001903.mm.1	-0.1	0.65294
TC1300002391.mm.1	XM_001476230	Gm20885	predicted gene, 20885	63747922	63772561	TC0Y00000173.mm.1	0.0	0.653004
TC1300002398.mm.1	NM_008026	Fli1	Friend leukemia integration 1	32422204	32542861	TC0900001987.mm.1	-0.1	0.653025
TC1300002410.mm.1	ENSMUST00000104074	n-R5s16	nuclear encoded rRNA 5S 165	112234163	112234262	TC0600002897.mm.1	0.1	0.653119
TC1300002422.mm.1	ENSMUST00000182279	Gm4891	predicted gene 4891	80933677	80934588	TC0800000895.mm.1	-0.1	0.65323
TC1300002436.mm.1	ENSMUST00000158446	Gm24499	predicted gene, 24499	69152274	69152377	TC1200001858.mm.1	0.1	0.653914

TC1300002437.mm.1	NM_001104531	Cyp2d11	cytochrome P450, family 2, subfamily d, polypep	82389154	82394022	TC1500001945.mm.1	0.0	0.654003
TC1300002441.mm.1	ENSMUST00000104247	Gm22590	predicted gene, 22590	121011835	121011962	TC0X00001186.mm.1	0.1	0.654221
TC1300002457.mm.1	ENSMUST00000182599	Gm6967	predicted gene 6967	46674273	46675279	TC1900001613.mm.1	0.0	0.654463
TC1300002462.mm.1	NM_001017426	Kdm6b	KDM1 lysine (K)-specific demethylase 6B	69398508	69416194	TC1100003043.mm.1	-0.1	0.6547
TC1300002464.mm.1	ENSMUST00000083878	Gm24696	predicted gene, 24696	61357871	61358004	TC1500001609.mm.1	0.0	0.654765
TC1300002471.mm.1	ENSMUST00000082867	Gm24035	predicted gene, 24035	118426493	118426599	TC0800003017.mm.1	0.1	0.655013
TC1300002477.mm.1	NM_033604	Rnf111	ring finger 111	70425429	70503725	TC0900002594.mm.1	0.0	0.655199
TC1300002479.mm.1	NM_001024712	Gm3696	predicted gene 3696	7083025	7105457	TC1400002849.mm.1	0.0	0.655203
TC1300002481.mm.1	NM_001146100	Hk1	hexokinase 1	62268855	62379908	TC1000002256.mm.1	0.0	0.655252
TC1300002486.mm.1	NM_030150	Dhx58	DEXH (Asp-Glu-X-His) box polypeptide 58	100694884	100704271	TC1100003779.mm.1	0.0	0.655305
TC1300002491.mm.1	NM_001290183	Ddit3	DNA-damage inducible transcript 3 (Ddit3), tran	0	0	TSUnmapped0000001	0.0	0.655401
TC1300002499.mm.1	ENSMUST00000120750	Gm13801	predicted gene 13801	96133435	96133594	TC0200001471.mm.1	0.1	0.655773
TC1300002501.mm.1	NM_018861	Slc1a4	solute carrier family 1 (glutamate/neutral amin	20302180	20332713	TC1100002301.mm.1	0.0	0.655965
TC1300002503.mm.1	ENSMUST00000121923	Gm4908	predicted gene 4908	47471808	47472812	TC0X00000420.mm.1	-0.1	0.656037
TC1300002505.mm.1	NM_001252207	Kcnj16	potassium inwardly-rectifying channel, subfamil	110968033	111027968	TC1100001848.mm.1	0.1	0.656059
TC1300002517.mm.1	NM_023397	Mdp1	magnesium-dependent phosphatase 1	55657879	55660508	TC1400002093.mm.1	0.0	0.656063
TC1300002524.mm.1	NCBI_Gene:10004237	Trav2	T cell receptor alpha variable 2	52567198	52568053	TC1400000615.mm.1	0.0	0.656079
TC1300002525.mm.1	ENSMUST00000083740	Gm24259	predicted gene, 24259	108738752	108738858	TC0900003068.mm.1	-0.1	0.656166
TC1300002526.mm.1	NM_018867	Cpxm2	carboxypeptidase X 2 (M14 family)	132042810	132154741	TC0700004403.mm.1	0.0	0.656297
TC1300002530.mm.1	ENSMUST00000104295	Gm25273	predicted gene, 25273	37172880	37172994	TC0900002043.mm.1	-0.1	0.656882
TC1300002531.mm.1	NM_001254761	Rnf128	ring finger protein 128	139563316	139673145	TC0X00001371.mm.1	0.1	0.65714
TC1300002532.mm.1	NM_019568	Cxcl14	chemokine (C-X-C motif) ligand 14	56288643	56296551	TC1300002079.mm.1	0.0	0.657168
TC1300002536.mm.1	ENSMUST00000172263	Gm1848	predicted gene 1848	21146806	21147640	TC0X00000224.mm.1	0.1	0.657175
TC1300002545.mm.1	NM_010006	Cyp2d9	cytochrome P450, family 2, subfamily d, polypep	82452377	82456827	TC1500000757.mm.1	0.0	0.657316
TC1300002547.mm.1	NM_134183	Vmn1r21	vomeronasal 1 receptor 21	57843464	57844498	TC0600002355.mm.1	0.1	0.657353
TC1300002553.mm.1	ENSMUST00000082688	Gm22304	predicted gene, 22304	53639977	53640105	TC0900000645.mm.1	0.1	0.657366
TC1300002574.mm.1	NM_029580	Trmt5	TRM5 tRNA methyltransferase 5	73280011	73286711	TC1200001916.mm.1	-0.1	0.657379
TC1300002611.mm.1	ENSMUST00000101990	n-R5s10	nuclear encoded rRNA 5S 102	123542178	123542296	TC0800003106.mm.1	0.2	0.657483
TC1300002616.mm.1	NR_037257	Mir669p	microRNA 669p-1	10489116	10489202	TC0200000139.mm.1	0.0	0.657754
TC1300002617.mm.1	NR_037262	Mir669p	microRNA 669p-2	10496497	10496583	TC0200000157.mm.1	0.0	0.657754
TC1300002620.mm.1	XR_002345	Gm5861	predicted gene 5861	11182060	11187810	TC0500000070.mm.1	0.0	0.657793
TC1300002624.mm.1	XM_003689131	Gm21287	predicted gene, 21287	88804770	88805474	TC0Y00000544.mm.1	0.0	0.657799
TC1300002630.mm.1	NM_027344	Ctsll3	cathepsin L-like 3	60798250	60802844	TC1300002139.mm.1	0.0	0.658021
TC1300002654.mm.1	NM_010616	Kif12	kinesin family member 12	63165634	63172131	TC0400002797.mm.1	0.0	0.658055
TC1300002658.mm.1	ENSMUST00000179654	Gm21726	predicted gene, 21726	90583400	90583765	TC1300001016.mm.1	0.0	0.658176
TC1300002665.mm.1	NM_178595	Ptrh1	peptidyl-tRNA hydrolase 1 homolog (S. cerevisia	32775786	32790171	TC0200000593.mm.1	0.0	0.658211
TC1300002669.mm.1	ENSMUST00000109588	Gm12033	predicted gene 12033	20334834	20336086	TC1100002303.mm.1	0.1	0.658226
TC1300002686.mm.1	ENSMUST00000158345	Gm23763	predicted gene, 23763	136990211	136990270	TC0100003157.mm.1	0.0	0.658356
TC1300002689.mm.1	NM_011319	Sars	seryl-aminoacyl-tRNA synthetase	108424864	108445259	TC0300002742.mm.1	-0.1	0.658367
TC1300002691.mm.1	NM_001166750	Vmn1r14	vomeronasal 1 receptor 143	22189377	22190300	TC0700000338.mm.1	0.0	0.658459
TC1300002711.mm.1	NM_010213	Fhl3	four and a half LIM domains 3	124700699	124708611	TC0400001419.mm.1	0.0	0.65853
TC1300002715.mm.1	XM_001477777	Gm3250	predicted gene 3250	77781850	77782542	TC1000002430.mm.1	0.0	0.658703
TC1300002717.mm.1	NM_201355	Nat14	N-acetyltransferase 14	4922251	4925006	TC0700000049.mm.1	0.0	0.658743
TC1300002748.mm.1	NR_030405	Mir302d	microRNA 302d	127545624	127545689	TC0300001287.mm.1	0.0	0.658806
TC1300002751.mm.1	ENSMUST00000104540	Gm22899	predicted gene, 22899	37995105	37995235	TC0300001882.mm.1	0.1	0.659217
TC1300002754.mm.1	ENSMUST00000157509	Gm22310	predicted gene, 22310	142786896	142787011	TC0200002124.mm.1	0.1	0.659219
TC1300002756.mm.1	NM_001099301	Obp2b	odorant binding protein 2B	25737009	25740097	TC0200000433.mm.1	0.0	0.659371
TC1300002757.mm.1	NM_009116	Prrx2	paired related homeobox 2	30834972	30881255	TC0200000543.mm.1	0.0	0.659606
TC1300002760.mm.1	ENSMUST00000163566	Gm6401	predicted gene 6401	41962708	41967927	TC1400001812.mm.1	0.0	0.660154
TC1300002761.mm.1	NM_027215	Tmem147	transmembrane protein 147	30727701	30729534	TC0700002775.mm.1	0.1	0.660185
TC1300002762.mm.1	NR_102704	Gm6083	developmental pluripotency associated 5 pseudo	29537949	29538624	TC0500000273.mm.1	0.0	0.66024
TC1300002767.mm.1	ENSMUST00000082619	Gm24622	predicted gene, 24622	106587481	106587642	TC0X00002835.mm.1	-0.1	0.660295
TC1300002772.mm.1	XM_001471962	Gm1988	predicted gene 1988	39170500	39179653	TC0700002887.mm.1	0.0	0.660298
TC1300002773.mm.1	NM_010131	Emx1	empty spiracles homeobox 1	85187438	85429184	TC0600000958.mm.1	0.0	0.660317
TC1300002774.mm.1	ENSMUST00000158041	Gm25329	predicted gene, 25329	73763710	73763835	TC0100000619.mm.1	0.0	0.660345
TC1300002775.mm.1	NM_001036293	Nrbf2	nuclear receptor binding factor 2	67266689	67285305	TC1000002308.mm.1	0.0	0.6604
TC1300002776.mm.1	NM_021460	Lipa	lysosomal acid lipase A	34492316	34527474	TC1900001419.mm.1	-0.1	0.660456
TC1400000001.mm.1	ENSMUST00000116981	Gm25507	predicted gene, 25507	24679568	24679711	TC1100002388.mm.1	0.1	0.660474
TC1400000004.mm.1	ENSMUST00000082552	Gm23293	predicted gene, 23293	79595165	79595268	TC1100001184.mm.1	-0.1	0.660539
TC1400000006.mm.1	NM_011748	Zfp14	zinc finger protein 14	30036359	30051396	TC0700002740.mm.1	0.0	0.660637
TC1400000007.mm.1	ENSMUST00000158684	Gm24838	predicted gene, 24838	77146351	77146480	TC0800002495.mm.1	-0.1	0.660652
TC1400000011.mm.1	NR_037293	Mir3107	microRNA 3107	23142573	23142662	TC0800001881.mm.1	0.0	0.660854
TC1400000012.mm.1	ENSMUST00000158114	Gm23891	predicted gene, 23891	47200627	47200764	TC0300000342.mm.1	0.0	0.660902
TC1400000014.mm.1	NM_001199046	Tubd1	tubulin, delta 1	86544991	86567360	TC1100001317.mm.1	0.0	0.660984
TC1400000015.mm.1	NM_028238	Rab38	RAB38, member of RAS oncogene family	88430273	88491572	TC0700001262.mm.1	0.1	0.661143
TC1400000018.mm.1	ENSMUST00000117949	Gm13600	predicted gene 13600	66863262	66864775	TC0200000963.mm.1	0.0	0.661217
TC1400000020.mm.1	ENSMUST00000083173	n-R5s88	nuclear encoded rRNA 5S 88	102127888	102128005	TC0900001281.mm.1	-0.3	0.66123
TC1400000023.mm.1	ENSMUST00000121649	Defa-ps	defensin, alpha, pseudogene 10	21722070	21722240	TC0800000256.mm.1	0.0	0.661351
TC1400000024.mm.1	NM_026935	Sult1c2	sulfotransferase family, cytosolic, 1C, member	53829637	53846339	TC1700002287.mm.1	0.1	0.661557
TC1400000026.mm.1	ENSMUST00000166700	Gm17305	predicted gene, 17305	69364019	69369408	TC1100000910.mm.1	0.0	0.661571
TC1400000029.mm.1	NM_001033231	Fam195b	family with sequence similarity 195, member B	120542888	120549727	TC1100004212.mm.1	0.0	0.661615
TC1400000030.mm.1	ENSMUST00000120983	Gm6441	predicted gene 6441	145264831	145265526	TC0X00003131.mm.1	0.0	0.661651
TC1400000033.mm.1	NM_173382	Proser1	proline and serine rich 1	53463666	53481760	TC0300000396.mm.1	-0.1	0.661738
TC1400000034.mm.1	NM_001123372	Gm3435	predicted gene 3435	15009840	15041419	TC1700002769.mm.1	0.1	0.661962
TC1400000039.mm.1	ENSMUST00000137155	Gm14349	predicted gene 14349	4118240	4119931	TC0X00000014.mm.1	0.0	0.662026
TC1400000040.mm.1	NM_172491	D130040	RIKEN cDNA D130040H23 gene	69271080	69303375	TC0800000714.mm.1	0.0	0.662152
TC1400000041.mm.1	ENSMUST00000180627	Gm26897	predicted gene, 26897	111733924	111734574	TC0500001170.mm.1	-0.1	0.662295
TC1400000044.mm.1	ENSMUST00000159524	Gm5286	predicted gene 5286	94196714	94199802	TC0300000858.mm.1	-0.1	0.662447

TC1400000046.mm.1	NM_025540	Sln	sarcolipin	53850251	53853849	TC0900000648.mm.1	-0.1	0.66257
TC1400000049.mm.1	ENSMUST00000032353	PIK3C2G	---	139599480	139636074	TC0600001647.mm.1	0.1	0.662578
TC1400000052.mm.1	NM_146787	Olfr920	olfactory receptor 920	38752796	38756863	TC0900000415.mm.1	0.0	0.662658
TC1400000054.mm.1	NM_146863	Olfr770	olfactory receptor 770	129132831	129133766	TC1000003176.mm.1	0.0	0.662911
TC1400000056.mm.1	ENSMUST00000166110	Gm17654	predicted gene, 17654	43573843	43579146	TC1400001860.mm.1	0.0	0.663201
TC1400000061.mm.1	ENSMUST00000121056	Gm6517	predicted gene 6517	66890364	66890884	TC0500000643.mm.1	0.2	0.663247
TC1400000063.mm.1	NR_026831	Gm10272	keratin associated protein 12-4	77706587	77706986	TC1000000763.mm.1	0.0	0.663295
TC1400000064.mm.1	XM_003688804	Gm21082	predicted gene, 21082	146828618	146836618	TC0400003977.mm.1	-0.1	0.663358
TC1400000066.mm.1	NM_133933	Rpn1	ribophorin I	88084473	88105304	TC0600001027.mm.1	-0.1	0.663494
TC1400000067.mm.1	NR_029774	Mir346	microRNA 346	34894609	34894706	TC1400000386.mm.1	0.0	0.663578
TC1400000070.mm.1	ENSMUST00000158429	Gm23350	predicted gene, 23350	9763160	9763262	TC1800000966.mm.1	0.1	0.663589
TC1400000072.mm.1	NM_028898	Rptor	regulatory associated protein of MTOR, complex	119602905	119899591	TC1100002007.mm.1	0.0	0.663642
TC1400000078.mm.1	XM_003689086	Gm21151	predicted gene, 21151	69092807	69093490	TC0Y00000187.mm.1	0.0	0.663733
TC1400000089.mm.1	XM_001477915	Gm20932	predicted gene, 20932	69625835	69626518	TC0Y00000440.mm.1	0.0	0.663733
TC1400000090.mm.1	XM_003689117	Gm21076	predicted gene, 21076	74788963	74789646	TC0Y00000467.mm.1	0.0	0.663733
TC1400000092.mm.1	XM_003689122	Gm21155	predicted gene, 21155	76500784	76501467	TC0Y00000476.mm.1	0.0	0.663733
TC1400000093.mm.1	XM_001475158	Gm20861	predicted gene, 20861	86365740	86366423	TC0Y00000533.mm.1	0.0	0.663733
TC1400000103.mm.1	NCBI_Gene:620017:p	Igkv5-3	immunoglobulin kappa variable 5-39	69900424	69900995	TC0600003581.mm.1	0.4	0.663945
TC1400000112.mm.1	ENSMUST00000118349	Gm14556	predicted gene 14556	38180728	38181626	TC0X00000362.mm.1	0.1	0.664575
TC1400000135.mm.1	ENSMUST00000158159	Gm25370	predicted gene, 25370	142153864	142153957	TC0700002068.mm.1	0.1	0.66469
TC1400000143.mm.1	NM_025954	Pgp	phosphoglycolate phosphatase	24470435	24472862	TC1700000339.mm.1	0.0	0.664712
TC1400000145.mm.1	ENSMUST00000178222	Gm21864	predicted gene, 21864	83287896	83288579	TC0Y00000509.mm.1	0.0	0.665235
TC1400000150.mm.1	ENSMUST00000082847	Gm22686	predicted gene, 22686	82187682	82187781	TC0X00000804.mm.1	0.0	0.665421
TC1400000154.mm.1	ENSMUST00000104181	Gm23485	predicted gene, 23485	71039579	71039733	TC0600002458.mm.1	0.0	0.665469
TC1400000158.mm.1	ENSMUST00000104405	Gm26014	predicted gene, 26014	77682614	77682745	TC1800000830.mm.1	0.1	0.665705
TC1400000163.mm.1	ENSMUST00000182552	Gm27034	predicted gene, 27034	98714813	98715752	TC1400001151.mm.1	0.0	0.665721
TC1400000174.mm.1	ENSMUST00000179678	Gm22621	predicted gene, 22621	130113291	130113364	TC0600001544.mm.1	0.0	0.66593
TC1400000176.mm.1	NM_134246	Acot3	acyl-CoA thioesterase 3	84052144	84059565	TC1200000800.mm.1	0.0	0.666026
TC1400000177.mm.1	NM_008289	Hsd11b2	hydroxysteroid 11-beta dehydrogenase 2	105518746	105523988	TC0800001219.mm.1	0.1	0.666027
TC1400000199.mm.1	ENSMUST00000097832	4732440	RIKEN cDNA 4732440D04 gene	6214612	6215292	TC0100001923.mm.1	0.0	0.666124
TC1400000218.mm.1	ENSMUST00000179642	Gm26097	predicted gene, 26097	59796905	59796997	TC0700003317.mm.1	0.0	0.66633
TC1400000231.mm.1	NM_146284	Olfr780	olfactory receptor 780	129321569	129322593	TC1000001637.mm.1	-0.1	0.666375
TC1400000246.mm.1	NM_029377	Lin37	lin-37 homolog (C. elegans)	30555441	30559838	TC0700002765.mm.1	0.0	0.666382
TC1400000252.mm.1	NM_011674	Ugt8a	UDP galactosyltransferase 8A	125865343	125956653	TC0300002895.mm.1	0.0	0.66668
TC1400000255.mm.1	ENSMUST00000117926	Gm13527	predicted gene 13527	57079748	57080438	TC0200000866.mm.1	0.0	0.666945
TC1400000279.mm.1	ENSMUST00000104588	Gm22371	predicted gene, 22371	57422244	57422373	TC0100002372.mm.1	0.0	0.667291
TC1400000293.mm.1	NM_001170955	Gm15299	predicted pseudogene 15299	21315546	21316481	TC0800000231.mm.1	0.0	0.667407
TC1400000309.mm.1	ENSMUST00000184709	CT03023	N/A	67074830	67074947	TC1400000954.mm.1	0.0	0.667428
TC1400000316.mm.1	NM_001191001	Lins	lines homolog (Drosophila)	66689889	66717256	TC0700000997.mm.1	0.0	0.667443
TC1400000318.mm.1	ENSMUST00000157916	Gm24963	predicted gene, 24963	17251301	17251444	TC0300001681.mm.1	0.0	0.667756
TC1400000319.mm.1	ENSMUST00000104404	Gm26013	predicted gene, 26013	150710846	150710964	TC0500003692.mm.1	0.0	0.667782
TC1400000322.mm.1	NR_035495	Mir1969	microRNA 1969	70925525	70925618	TC0800000774.mm.1	-0.1	0.667928
TC1400000326.mm.1	ENSMUST00000082795	Gm22005	predicted gene, 22005	3291378	3291518	TC0200002843.mm.1	0.0	0.667952
TC1400000327.mm.1	NR_037248	Mir4660	microRNA 4660	10472540	10472623	TC0200000102.mm.1	0.0	0.668152
TC1400000329.mm.1	ENSMUST00000165220	Gm9742	predicted gene 9742	8029828	8038106	TC1300001406.mm.1	0.0	0.668211
TC1400000331.mm.1	NM_028113	Amer2	APC membrane recruitment 2	60378286	60381003	TC1400000846.mm.1	0.0	0.668245
TC1400000335.mm.1	NM_207104	Haus7	HAUS augmin-like complex, subunit 7	73437315	73459044	TC0X00002428.mm.1	0.0	0.668308
TC1400000336.mm.1	ENSMUST00000117703	Gm15209	predicted gene 15209	162894755	162895154	TC0X00003315.mm.1	0.0	0.668568
TC1400000340.mm.1	NM_009433	Tspyl1	testis-specific protein, Y-encoded-like 1	34282190	34285275	TC1000000297.mm.1	-0.1	0.6686
TC1400000341.mm.1	NR_028518	Scarna3	small Cajal body-specific RNA 3A	159340283	159340424	TC0100001446.mm.1	0.1	0.668601
TC1400000352.mm.1	NM_013850	Abca7	ATP-binding cassette, sub-family A (ABC1), mem	79996494	80015572	TC1000000835.mm.1	0.0	0.668862
TC1400000354.mm.1	NM_001081309	Pik3r4	phosphatidylinositol 3 kinase, regulatory subun	105642995	105687655	TC0900001329.mm.1	0.0	0.668917
TC1400000356.mm.1	ENSMUST00000082590	Gm26441	predicted gene, 26441	151261918	151262021	TC0X00003177.mm.1	0.0	0.668998
TC1400000361.mm.1	ENSMUST00000082884	Gm22359	predicted gene, 22359	154711258	154711365	TC0X00001571.mm.1	-0.1	0.669064
TC1400000363.mm.1	ENSMUST00000104084	Gm22780	predicted gene, 22780	96318487	96318618	TC0800002760.mm.1	0.1	0.669231
TC1400000366.mm.1	ENSMUST00000126961	Gm15280	predicted gene 15280	31347183	31347822	TC0X00002014.mm.1	0.1	0.669263
TC1400000369.mm.1	ENSMUST00000184596	AC16772	N/A	107448819	107448944	TC0600002879.mm.1	0.1	0.669724
TC1400000371.mm.1	ENSMUST00000182524	Gm2076	predicted gene 2076	93293781	93294751	TC1300001041.mm.1	0.1	0.669845
TC1400000376.mm.1	NM_001110242	1810043	RIKEN cDNA 1810043H04 gene	120098928	120100704	TC1100002018.mm.1	0.0	0.669913
TC1400000386.mm.1	NR_003650	Ppp1r2-	protein phosphatase 1, regulatory (inhibitor) s	30538876	30539679	TC1900001359.mm.1	-0.1	0.670004
TC1400000389.mm.1	ENSMUST00000101993	Gm26135	predicted gene, 26135	88857693	88857764	TC0900002810.mm.1	0.2	0.67011
TC1400000390.mm.1	NM_026914	Smdt1	single-pass membrane protein with aspartate ric	82345954	82349091	TC1500002336.mm.1	-0.1	0.670783
TC1400000394.mm.1	XM_001474206	Gm6445	predicted gene 6445	9597692	9608485	TC1900000176.mm.1	0.0	0.671041
TC1400000404.mm.1	NM_001013820	Slc22a2	solute carrier family 22, member 28	8062209	8131982	TC1900001059.mm.1	0.1	0.671828
TC1400000405.mm.1	XM_991187	Gm8700	predicted gene 8700	50099026	50104045	TC1300001970.mm.1	-0.1	0.672609
TC1400000406.mm.1	NM_028775	Cyp2s1	cytochrome P450, family 2, subfamily s, polypep	25802471	25816913	TC0700002646.mm.1	0.0	0.672745
TC1400000408.mm.1	ENSMUST00000184021	ST7-OT4	ST7 overlapping transcript 4 conserved region 4	17703231	17703416	TC0600000139.mm.1	0.1	0.6728
TC1400000414.mm.1	ENSMUST00000169219	Gm7809	predicted gene 7809	21966175	21968272	TC1700001566.mm.1	0.0	0.673311
TC1400000417.mm.1	ENSMUST00000104293	Gm25272	predicted gene, 25272	123933718	123933845	TC1400001350.mm.1	-0.1	0.673545
TC1400000420.mm.1	ENSMUST00000158793	Gm22016	predicted gene, 22016	141314355	141314468	TC0100001312.mm.1	0.1	0.673901
TC1400000426.mm.1	ENSMUST00000157270	Gm25281	predicted gene, 25281	85333901	85334004	TC1000001029.mm.1	0.1	0.673928
TC1400000432.mm.1	NM_008013	Fgl2	fibrinogen-like protein 2	21372642	21378386	TC0500000171.mm.1	0.0	0.67411
TC1400000443.mm.1	NM_023386	Rtp4	receptor transporter protein 4	23609919	23614222	TC1600000346.mm.1	0.0	0.674153
TC1400000444.mm.1	NM_001077529	Nme2	NME/NM23 nucleoside diphosphate kinase 2	93949814	93956259	TC1100004295.mm.1	0.0	0.674155
TC1400000452.mm.1	NM_001031664	Nudt10	nudix (nucleoside diphosphate linked moiety X)-	6168696	6173015	TC0X00001760.mm.1	0.0	0.674205
TC1400000453.mm.1	NM_011418	Smarcb1	SWI/SNF related, matrix associated, actin depen	75896769	75921617	TC1000002391.mm.1	0.0	0.674292
TC1400000459.mm.1	NM_153510	Pilra	paired immunoglobin-like type 2 receptor alpha	137821952	137836278	TC0500003463.mm.1	0.0	0.674334
TC1400000470.mm.1	ENSMUST00000182941	Gm7583	predicted gene 7583	67782777	67783781	TC0700003453.mm.1	0.0	0.674359

TC1400000485.mm.1	NM_029398	Tmem14a	transmembrane protein 14A	21218575	21230167	TC0100000133.mm.1	0.0	0.674838
TC1400000493.mm.1	ENSMUST00000157570	Gm23901	predicted gene, 23901	162850158	162850264	TC0X00003312.mm.1	0.0	0.674926
TC1400000501.mm.1	NM_146085	Apbb3	amyloid beta (A4) precursor protein-binding, fa	36671159	36679366	TC1800001748.mm.1	0.0	0.6751
TC1400000502.mm.1	NM_145131	Pitrm1	pitrilysin metallepetidase 1	6548157	6580158	TC1300000033.mm.1	-0.1	0.67565
TC1400000513.mm.1	ENSMUST00000077150	LOC1010	uncharacterized LOC101056542 // uncharacteri	131647825	131648594	TC0200002021.mm.1	0.0	0.676088
TC1400000517.mm.1	NM_175638	Wnk4	WNK lysine deficient protein kinase 4	101260567	101277409	TC1100001646.mm.1	0.1	0.676148
TC1400000524.mm.1	NM_026181	Gpatch1	G patch domain containing 1	35276536	35318440	TC0700002849.mm.1	0.0	0.676248
TC1400000528.mm.1	ENSMUST00000175604	Gm26112	predicted gene, 26112	106071615	106071874	TC0800002850.mm.1	0.0	0.67645
TC1400000529.mm.1	NM_028890	4931414	RIKEN cDNA 4931414P19 gene	54583663	54605908	TC1400002060.mm.1	0.0	0.67673
TC1400000541.mm.1	ENSMUST00000182449	Gm6944	predicted gene 6944	55972286	55973291	TC1800000561.mm.1	0.1	0.676879
TC1400000542.mm.1	NR_037301	Mir3470	microRNA 3470a	83090311	83090387	TC0600002558.mm.1	-0.1	0.676993
TC1400000547.mm.1	ENSMUST00000087884	Gm10212	predicted pseudogene 10212	11569447	11573114	TC1900000227.mm.1	0.0	0.677381
TC1400000552.mm.1	NM_007517	Aup1	ancient ubiquitous protein 1	83054653	83057682	TC0600000916.mm.1	0.0	0.6774
TC1400000565.mm.1	ENSMUST00000184260	RP23-21	N/A	108708908	108712653	TC0300001153.mm.1	0.0	0.677409
TC1400000566.mm.1	NM_001136066	Hmox2	heme oxygenase (decycling) 2	4726361	4766742	TC1600000033.mm.1	0.0	0.677487
TC1400000569.mm.1	ENSMUST00000173265	Gm18200	predicted gene, 18200	7982512	7986446	TC0700002248.mm.1	0.0	0.678052
TC1400000572.mm.1	ENSMUST00000173820	Gm18199	predicted gene, 18199	9519901	9523828	TC0700002292.mm.1	0.0	0.678052
TC1400000573.mm.1	NM_172603	Phf11a	PHD finger protein 11A	59276913	59297522	TC1400002161.mm.1	-0.1	0.678306
TC1400000574.mm.1	ENSMUST00000175041	Gm23045	predicted gene, 23045	140692697	140692792	TC0400001765.mm.1	-0.1	0.678377
TC1400000575.mm.1	NM_009680	Ap3b1	adaptor-related protein complex 3, beta 1 subur	94358960	94566316	TC1300001061.mm.1	-0.1	0.678392
TC1400000578.mm.1	ENSMUST00000122577	n-R5s19	nuclear encoded rRNA 5S 192	124820821	124820939	TC0400001429.mm.1	0.0	0.678465
TC1400000580.mm.1	ENSMUST00000122670	Gm25045	predicted gene, 25045	72121806	72121904	TC0900002629.mm.1	0.0	0.678555
TC1400000581.mm.1	ENSMUST00000121910	Gm11284	predicted gene 11284	22163886	22165807	TC1300001583.mm.1	-0.1	0.678584
TC1400000583.mm.1	ENSMUST00000119907	Gm11966	predicted gene 11966	5818497	5818583	TC1100002153.mm.1	-0.1	0.67884
TC1400000592.mm.1	NR_037310	Mir1186	microRNA 1186b	95963544	95963607	TC0800001152.mm.1	-0.1	0.679162
TC1400000594.mm.1	NM_021422	Dnaja4	DnaJ (Hsp40) homolog, subfamily A, member 4	54698873	54716317	TC0900000660.mm.1	0.0	0.679294
TC1400000596.mm.1	ENSMUST00000118219	Gm12039	predicted gene 12039	21280045	21280224	TC1100002323.mm.1	0.1	0.679294
TC1400000610.mm.1	NM_024180	Ormdl2	ORM1-like 2 (S. cerevisiae)	128817457	128821631	TC1000003164.mm.1	0.0	0.679437
TC1400000613.mm.1	ENSMUST00000179579	Gm25255	predicted gene, 25255	15418536	15418645	TC0800000158.mm.1	0.1	0.67946
TC1400000615.mm.1	NM_146774	Olfr472	olfactory receptor 472	107902627	107903709	TC0700001585.mm.1	0.0	0.679796
TC1400000616.mm.1	NM_001146005	C5ar2	complement component 5a receptor 2	16234585	16244154	TC0700002421.mm.1	0.0	0.679849
TC1400000617.mm.1	ENSMUST00000180973	Gm3809	predicted gene 3809	186960508	186961513	TC0100001800.mm.1	0.1	0.679904
TC1400000618.mm.1	ENSMUST00000117483	Gm13378	predicted gene 13378	21244105	21244440	TC0200000341.mm.1	-0.1	0.680173
TC1400000619.mm.1	NM_194057	Ffar1	free fatty acid receptor 1	30860473	30861564	TC0700002778.mm.1	0.0	0.680304
TC1400000620.mm.1	ENSMUST00000157712	Gm22845	predicted gene, 22845	9865347	9865450	TC1200001410.mm.1	0.1	0.680435
TC1400000621.mm.1	ENSMUST00000183930	AC15835	N/A	15020535	15020644	TC1200001448.mm.1	0.1	0.680651
TC1400000623.mm.1	XM_001472958	Gm20808	predicted gene, 20808	78761355	78762038	TC0Y00000484.mm.1	0.0	0.680738
TC1400000624.mm.1	XM_001471505	Gm20791	predicted gene, 20791	80681820	80682503	TC0Y00000494.mm.1	0.0	0.680738
TC1400000625.mm.1	NM_019821	Gltp	glycolipid transfer protein	114669403	114690984	TC0500003064.mm.1	0.1	0.681067
TC1400000626.mm.1	NM_194335	Naif1	nuclear apoptosis inducing factor 1	32450457	32456953	TC0200000581.mm.1	0.0	0.681119
TC1400000627.mm.1	NM_178772	Nceh1	neutral cholesterol ester hydrolase 1	27182965	27284608	TC0300000159.mm.1	0.1	0.681238
TC1400000628.mm.1	ENSMUST00000158367	Gm22769	predicted gene, 22769	63747437	63747534	TC1600001831.mm.1	0.0	0.681313
TC1400000629.mm.1	NM_011863	Papss1	3-phosphoadenosine 5-phosphosulfate synthase	131564768	131643671	TC0300001338.mm.1	0.0	0.68136
TC1400000630.mm.1	ENSMUST00000183825	mmu-mir	mmu-mir-7660	115775657	115775719	TC0600001287.mm.1	0.0	0.681632
TC1400000631.mm.1	NR_106120	Mir7660	microRNA mir-7660 (Mir7660), microRNA.	0	0	TSUnmapped0000010	0.0	0.681632
TC1400000632.mm.1	ENSMUST00000167421	CAAA011	N/A	25190	25788	TCX_GL456233_rand	0.1	0.681648
TC1400000633.mm.1	NM_026753	Fam96b	family with sequence similarity 96, member B	104639838	104641965	TC0800002808.mm.1	0.0	0.681964
TC1400000634.mm.1	ENSMUST00000185162	SNORA7	Small nucleolar RNA SNORA7	51938974	51939095	TC0100002311.mm.1	-0.1	0.682058
TC1400000635.mm.1	ENSMUST00000104076	Gm24429	predicted gene, 24429	34895024	34895155	TC1200000300.mm.1	0.1	0.682245
TC1400000636.mm.1	NM_033523	Spred2	sprouty-related, EVH1 domain containing 2	19924372	20024026	TC1100000187.mm.1	0.0	0.682687
TC1400000639.mm.1	NM_133805	Cops8	COP9 (constitutive photomorphogenic) homolog	90603425	90613341	TC0100000878.mm.1	0.0	0.683382
TC1400000641.mm.1	ENSMUST00000104267	Gm25917	predicted gene, 25917	56252315	56252444	TC1200001781.mm.1	0.1	0.683512
TC1400000642.mm.1	NM_008158	Gpr27	G protein-coupled receptor 27	99692679	99693818	TC0600001146.mm.1	0.0	0.683565
TC1400000643.mm.1	NM_001166657	Cdkl3	cyclin-dependent kinase-like 3	52004221	52089784	TC1100000585.mm.1	0.0	0.683581
TC1400000644.mm.1	NM_021550	C1galt1	C1GALT1-specific chaperone 1	38630783	38635143	TC0X00003426.mm.1	0.0	0.683934
TC1400000646.mm.1	NM_025548	Tbcb	tubulin folding cofactor B	30224131	30232272	TC0700002747.mm.1	0.0	0.683941
TC1400000649.mm.1	NR_029735	Mir16-2	microRNA 16-2	69009902	69009996	TC0300000576.mm.1	0.0	0.684042
TC1400000650.mm.1	ENSMUST00000174903	Gm23564	predicted gene, 23564	84893087	84893153	TC1100001284.mm.1	0.1	0.684103
TC1400000651.mm.1	ENSMUST00000182585	Gm7765	predicted gene 7765	16365184	16366157	TC1600001260.mm.1	0.0	0.684392
TC1400000653.mm.1	NM_009660	Alox15	arachidonate 15-lipoxygenase	70344147	70352031	TC1100003093.mm.1	-0.1	0.684416
TC1400000654.mm.1	NM_001123370	9030025	RIKEN cDNA 9030025P20 gene	14978864	14991577	TC1700002768.mm.1	0.1	0.684436
TC1400000655.mm.1	NM_008562	Mcl1	myeloid cell leukemia sequence 1	95658721	95663179	TC0300000910.mm.1	-0.1	0.684529
TC1400000656.mm.1	NM_183315	Ctxn1	cortexin 1	4257646	4259274	TC0800001632.mm.1	0.0	0.684801
TC1400000659.mm.1	NM_029341	Capsl	calcyphosine-like	9436028	9466035	TC1500000074.mm.1	0.0	0.684821
TC1400000660.mm.1	ENSMUST00000178281	Gm21879	predicted gene, 21879	85016812	85017495	TC0Y00000520.mm.1	0.0	0.685043
TC1400000661.mm.1	ENSMUST00000175148	Gm22121	predicted gene, 22121	44469013	44469066	TC1100000438.mm.1	0.1	0.685453
TC1400000662.mm.1	NM_001168294	Serpina	serine (or cysteine) peptidase inhibitor, clade	104214544	104221129	TC1200002524.mm.1	0.0	0.68547
TC1400000663.mm.1	NM_033041	Hes7	hairy and enhancer of split 7 (Drosophila)	69120404	69124055	TC1100000901.mm.1	0.0	0.685843
TC1400000664.mm.1	NR_073378	Gm8363	non-SMC condensin II complex, subunit H2 pseu	5480989	5483069	TC1700001368.mm.1	0.0	0.6861
TC1400000665.mm.1	NM_008631	Mt4	metallothionein 4	94137204	94139031	TC0800001092.mm.1	0.0	0.686411
TC1400000669.mm.1	NM_001039119	Defb33	defensin beta 33	20892667	20897723	TC0800000209.mm.1	0.0	0.686413
TC1400000670.mm.1	ENSMUST00000052528	Gm9847	predicted pseudogene 9847	14494561	14495157	TC1200000114.mm.1	0.0	0.686695
TC1400000672.mm.1	NM_028769	Syvn1	synovial apoptosis inhibitor 1, synoviolin	6046576	6053718	TC1900000094.mm.1	0.0	0.687734
TC1400000673.mm.1	NM_153193	Hsd3b2	hydroxy-delta-5-steroid dehydrogenase, 3 beta-	98709255	98724576	TC0300002558.mm.1	0.1	0.687739
TC1400000677.mm.1	NM_001080964	Sp2	Sp2 transcription factor	96953337	96982959	TC1100003630.mm.1	0.0	0.687796
TC1400000681.mm.1	NM_028116	Pygo1	pygopus 1	72925645	72952181	TC0900000982.mm.1	0.0	0.687959
TC1400000683.mm.1	ENSMUST00000183577	AC12505	N/A	5201198	5201303	TC1900000955.mm.1	-0.1	0.688134
TC1400000684.mm.1	ENSMUST00000104472	Gm24257	predicted gene, 24257	70148806	70148936	TC0900002589.mm.1	0.1	0.688366

TC1400000685.mm.1	ENSMUST00000104333	Gm25378	predicted gene, 25378	28365316	28365444	TC0400000228.mm.1	0.1	0.688749
TC1400000686.mm.1	NM_001033297	Gm561	predicted gene 561	144594054	144595366	TC0200002151.mm.1	0.0	0.688815
TC1400000688.mm.1	NR_034045	Snora30	small nucleolar RNA, H/ACA box 30	127527874	127528003	TC0700001853.mm.1	-0.2	0.688922
TC1400000689.mm.1	ENSMUST00000178600	Gm17045	predicted gene 17045	6034967	6035810	TC1400000056.mm.1	0.1	0.689124
TC1400000690.mm.1	ENSMUST00000127017	Gm11192	predicted gene 11192	78278738	78279066	TC1100003293.mm.1	0.0	0.689157
TC1400000692.mm.1	ENSMUST00000178653	Gm25754	predicted gene, 25754	83795912	83796032	TC0100000722.mm.1	0.1	0.689356
TC1400000693.mm.1	ENSMUST00000178897	Gm24802	predicted gene, 24802	195228278	195228398	TC0100001888.mm.1	0.1	0.689356
TC1400000695.mm.1	ENSMUST00000178780	Gm22419	predicted gene, 22419	47749279	47749399	TC0100002294.mm.1	0.1	0.689356
TC1400000696.mm.1	ENSMUST00000117032	Gm22112	predicted gene, 22112	82396697	82396817	TC0100002671.mm.1	0.1	0.689356
TC1400000697.mm.1	ENSMUST00000116833	Gm24744	predicted gene, 24744	119831937	119832057	TC0300001225.mm.1	0.1	0.689356
TC1400000698.mm.1	ENSMUST00000116701	Gm26137	predicted gene, 26137	119837904	119838024	TC0300001226.mm.1	0.1	0.689356
TC1400000699.mm.1	ENSMUST00000116940	Gm22029	predicted gene, 22029	55162314	55162434	TC0300001993.mm.1	0.1	0.689356
TC1400000700.mm.1	ENSMUST00000117026	Gm25347	predicted gene, 25347	115484016	115484136	TC0300002791.mm.1	0.1	0.689356
TC1400000702.mm.1	ENSMUST00000179294	Gm24567	predicted gene, 24567	15819909	15820029	TC0400000137.mm.1	0.1	0.689356
TC1400000703.mm.1	ENSMUST00000178126	Gm22991	predicted gene, 22991	155911630	155911750	TC0400002099.mm.1	0.1	0.689356
TC1400000705.mm.1	ENSMUST00000180209	Gm23304	predicted gene, 23304	33628841	33628961	TC0400002377.mm.1	0.1	0.689356
TC1400000706.mm.1	ENSMUST00000116717	Gm25774	predicted gene, 25774	103415806	103415926	TC0700001493.mm.1	0.1	0.689356
TC1400000707.mm.1	ENSMUST00000116713	Gm25778	predicted gene, 25778	128826347	128826467	TC0700001894.mm.1	0.1	0.689356
TC1400000708.mm.1	ENSMUST00000116700	Gm26248	predicted gene, 26248	11303218	11303338	TC0700002324.mm.1	0.1	0.689356
TC1400000710.mm.1	ENSMUST00000116959	Gm23844	predicted gene, 23844	67778410	67778530	TC0700003452.mm.1	0.1	0.689356
TC1400000711.mm.1	ENSMUST00000116784	Gm23177	predicted gene, 23177	34295856	34295976	TC0800002026.mm.1	0.1	0.689356
TC1400000712.mm.1	ENSMUST00000116704	Gm26190	predicted gene, 26190	25812855	25812975	TC0900001937.mm.1	0.1	0.689356
TC1400000713.mm.1	ENSMUST00000116730	Gm22102	predicted gene, 22102	106697078	106697198	TC0X00001078.mm.1	0.1	0.689356
TC1400000715.mm.1	ENSMUST00000116801	Gm24193	predicted gene, 24193	61823544	61823664	TC1300002157.mm.1	0.1	0.689356
TC1400000720.mm.1	ENSMUST00000178964	Gm25208	predicted gene, 25208	42274419	42274539	TC1400001825.mm.1	0.1	0.689356
TC1400000723.mm.1	ENSMUST00000180121	Gm25228	predicted gene, 25228	42614226	42614346	TC1400001835.mm.1	0.1	0.689356
TC1400000725.mm.1	ENSMUST00000116896	Gm24427	predicted gene, 24427	24304669	24304789	TC1700000334.mm.1	0.1	0.689356
TC1400000726.mm.1	ENSMUST00000116918	Gm22346	predicted gene, 22346	87184105	87184225	TC1700002684.mm.1	0.1	0.689356
TC1400000727.mm.1	ENSMUST00000116938	Gm23606	predicted gene, 23606	24558602	24558722	TC1800000198.mm.1	0.1	0.689356
TC1400000728.mm.1	ENSMUST00000116705	Gm24617	predicted gene, 24617	46367365	46367485	TC1800000478.mm.1	0.1	0.689356
TC1400000729.mm.1	ENSMUST00000117009	Gm24484	predicted gene, 24484	9908158	9908278	TC1900000180.mm.1	0.1	0.689356
TC1400000730.mm.1	NM_001085545	Gm14345	predicted gene 14345	3441731	3443690	TC0X00001723.mm.1	0.0	0.689374
TC1400000731.mm.1	ENSMUST00000042595	Gm6685	predicted pseudogene 6685	28339104	28339867	TC1100002404.mm.1	0.1	0.690053
TC1400000732.mm.1	NM_001163585	Prom1	prominin 1	43993622	44102032	TC0500002320.mm.1	0.1	0.690231
TC1400000733.mm.1	XM_001477846	Rnf213	ring finger protein 213	119393100	119487425	TC1100002003.mm.1	0.1	0.690248
TC1400000734.mm.1	ENSMUST00000117256	Gm12306	predicted gene 12306	69074490	69074660	TC1100000896.mm.1	0.0	0.690264
TC1400000735.mm.1	ENSMUST00000124513	Gm15247	predicted gene 15247	169985801	169986939	TC0X00003380.mm.1	0.0	0.690644
TC1400000736.mm.1	NM_027994	Cand1	cullin associated and neddylation disassociated	119198812	119240055	TC1000003007.mm.1	0.0	0.690674
TC1400000738.mm.1	NM_133746	Calhm2	calcium homeostasis modulator 2	47105353	47138294	TC1900001622.mm.1	-0.1	0.690721
TC1400000739.mm.1	NM_001160144	Gm20816	predicted gene, 20816	68537955	68540286	TC0Y00000185.mm.1	0.0	0.690745
TC1400000740.mm.1	XM_003689125	Gm21180	predicted gene, 21180	77073914	77076246	TC0Y00000478.mm.1	0.0	0.690745
TC1400000742.mm.1	NM_133995	Upb1	ureidopropionase, beta	75406911	75441679	TC1000000713.mm.1	0.0	0.690809
TC1400000745.mm.1	ENSMUST00000182522	Gm3534	predicted pseudogene 3534	48408618	48409618	TC1400000529.mm.1	0.1	0.690932
TC1400000747.mm.1	ENSMUST00000109542	Gm17132	predicted gene 17132	127877333	127878490	TC0500001489.mm.1	0.2	0.69113
TC1400000752.mm.1	ENSMUST00000174927	Gm22401	predicted gene, 22401	100700621	100700737	TC1400001167.mm.1	0.0	0.691133
TC1400000753.mm.1	XR_141309	Gm15821	predicted gene 15821	34211312	34214459	TC1700001904.mm.1	0.0	0.691167
TC1400000755.mm.1	XM_001473587	Gm2436	predicted gene 2436	55142077	55154918	TC1200001761.mm.1	0.0	0.691472
TC1400000767.mm.1	XM_001473627	Gm2446	predicted gene 2446	55217141	55229982	TC1200001762.mm.1	0.0	0.691472
TC1400000771.mm.1	ENSMUST00000091897	Gm5507	predicted gene 5507	53984321	53985328	TC1800000546.mm.1	0.1	0.691573
TC1400000777.mm.1	ENSMUST00000047300	Gm9774	predicted pseudogene 9774	92428066	92429423	TC0300002390.mm.1	0.0	0.692127
TC1400000781.mm.1	ENSMUST00000178295	Gm23108	predicted gene, 23108	10484490	10484613	TC0200000128.mm.1	0.0	0.692129
TC1400000791.mm.1	ENSMUST00000116948	Gm24673	predicted gene, 24673	10491860	10491983	TC0200000146.mm.1	0.0	0.692129
TC1400000802.mm.1	NM_177471	Ccdc69	coiled-coil domain containing 69	55049731	55078131	TC1100002773.mm.1	0.0	0.692491
TC1400000803.mm.1	ENSMUST00000102348	Gm23061	predicted gene, 23061	17928111	17928226	TC1900000318.mm.1	0.0	0.69256
TC1400000807.mm.1	ENSMUST00000166618	Gm6356	predicted gene 6356	6965447	6997291	TC1400001418.mm.1	0.0	0.692561
TC1400000808.mm.1	ENSMUST00000185041	AC10038	N/A	85284233	85284333	TC1000002607.mm.1	0.0	0.692603
TC1400000813.mm.1	NM_008109	Gdf5	growth differentiation factor 5	155941023	155945367	TC0200004978.mm.1	0.0	0.692772
TC1400000817.mm.1	NM_024209	Ppp6c	protein phosphatase 6, catalytic subunit	39194354	39226451	TC0200003440.mm.1	-0.1	0.692903
TC1400000822.mm.1	NM_026689	Mul1	mitochondrial ubiquitin ligase activator of NFK	138434671	138442265	TC0400001726.mm.1	0.0	0.692927
TC1400000827.mm.1	ENSMUST00000165289	Gm3173	predicted gene 3173 // predicted gene 3095	5015891	5019119	TC1400002794.mm.1	0.1	0.692989
TC1400000829.mm.1	NM_028281	Pcbd2	pterin 4 alpha carbinolamine dehydratase/dimer	55727368	55776830	TC1300000675.mm.1	0.0	0.693336
TC1400000832.mm.1	XM_003688921	Gm21103	predicted gene, 21103	6296365	6304843	TC1400001408.mm.1	0.0	0.693584
TC1400000835.mm.1	ENSMUST00000096847	Gm21784	predicted gene, 21784	74225857	74226539	TC0Y00000464.mm.1	0.0	0.69361
TC1400000837.mm.1	NM_007596	Caml	calcium modulating ligand	55623005	55632416	TC1300000670.mm.1	0.0	0.693637
TC1400000846.mm.1	ENSMUST00000173464	Gm20525	predicted gene 20525	36723234	36723281	TC1700000740.mm.1	0.1	0.693702
TC1400000853.mm.1	NM_010203	Fgf5	fibroblast growth factor 5	98254184	98277033	TC0500000948.mm.1	-0.1	0.694156
TC1400000854.mm.1	ENSMUST00000184754	5S_rRNA	5S ribosomal RNA	162237099	162237226	TC0X00001643.mm.1	0.0	0.694364
TC1400000862.mm.1	NM_178601	Imp4	IMP4, U3 small nucleolar ribonucleoprotein, hon	34439829	34445747	TC0100000222.mm.1	-0.1	0.694607
TC1400000868.mm.1	NM_033175	Lce3c	late cornified envelope 3C	92944486	92945730	TC0300000835.mm.1	0.0	0.69462
TC1400000870.mm.1	ENSMUST00000182720	Gm8349	predicted gene 8349	61461859	61462861	TC0300002065.mm.1	0.1	0.694624
TC1400000881.mm.1	ENSMUST00000104097	Gm26394	predicted gene, 26394	98999508	98999622	TC1100001590.mm.1	0.1	0.694654
TC1400000894.mm.1	ENSMUST00000157925	Gm22099	predicted gene, 22099	60419863	60419985	TC0900000763.mm.1	0.1	0.694678
TC1400000895.mm.1	ENSMUST00000179494	n-R5s20	nuclear encoded rRNA 5S 209	26959103	26959221	TC0100002103.mm.1	-0.1	0.694683
TC1400000899.mm.1	XM_003688833	Gm21129	predicted gene, 21129	38816997	38846884	TC0700002885.mm.1	0.0	0.694734
TC1400000903.mm.1	ENSMUST00000158546	Gm22430	predicted gene, 22430	104616865	104616971	TC0X00001049.mm.1	0.1	0.694834
TC1400000910.mm.1	ENSMUST00000182773	Gm7545	predicted gene 7545	86284887	86285894	TC0600000982.mm.1	0.0	0.694951
TC1400000912.mm.1	NM_010558	Il5	interleukin 5	53720794	53725106	TC1100000612.mm.1	0.0	0.695165
TC1400000926.mm.1	NR_030469	Mir669b	microRNA 669b	114863253	115027151	TC0300001175.mm.1	-0.2	0.695252

TC1400000929.mm.1	NM_029965	Rnf170	ring finger protein 170	26119368	26143871	TC0800000336.mm.1	0.0	0.695645
TC1400000930.mm.1	ENSMUST00000102440	Gm25990	predicted gene, 25990	82408458	82408543	TC1500000756.mm.1	0.0	0.69572
TC1400000941.mm.1	XR_106344	Gm3510	predicted gene 3510	15923754	15933406	TC0500001984.mm.1	-0.1	0.695757
TC1400000943.mm.1	NM_001177550	Zfp442	zinc finger protein 442	150407133	150451494	TC0200004837.mm.1	0.1	0.695898
TC1400000953.mm.1	ENSMUST00000183743	mmu-mir	mmu-mir-3473f	106546496	106546631	TC0100002895.mm.1	0.0	0.695912
TC1400000954.mm.1	NM_001081016	Zc3h7b	zinc finger CCCH type containing 7B	81744848	81796269	TC1500000729.mm.1	0.0	0.696195
TC1400000961.mm.1	XM_001476707	Gm20899	predicted gene, 20899	38619733	38620965	TC0Y00000126.mm.1	0.1	0.696303
TC1400000962.mm.1	ENSMUST00000157576	Gm23754	predicted gene, 23754	36205260	36205322	TC1500000264.mm.1	-0.1	0.696402
TC1400000968.mm.1	NR_002445	BC00216	NADH dehydrogenase Fe-S protein 5 pseudogen	42955560	42956079	TC1600000620.mm.1	0.1	0.696605
TC1400000970.mm.1	NM_147021	Olfr105	olfactory receptor 1055	86346724	86347764	TC0200003930.mm.1	0.1	0.69662
TC1400000975.mm.1	NM_001159620	Pigp	phosphatidylinositol glycan anchor biosynthesis	94358763	94371015	TC1600002118.mm.1	0.0	0.696747
TC1400000976.mm.1	NM_018858	Pebp1	phosphatidylethanolamine binding protein 1	117282651	117287625	TC0500003126.mm.1	0.0	0.696811
TC1400000980.mm.1	ENSMUST00000104208	Gm24340	predicted gene, 24340	7350097	7350193	TC0200000067.mm.1	0.1	0.696817
TC1400000986.mm.1	NM_026513	Pdf	peptide deformylase (mitochondrial)	107044698	107056737	TC0800002869.mm.1	0.0	0.696901
TC1400000997.mm.1	NM_001253832	Fibp	fibroblast growth factor (acidic) intracellular	5460607	5465052	TC1900000069.mm.1	0.0	0.696931
TC1400001000.mm.1	NM_007435	Abcd1	ATP-binding cassette, sub-family D (ALD), memb	73716597	73738535	TC0X00000691.mm.1	0.0	0.696982
TC1400001002.mm.1	NM_001110239	Acp1	acid phosphatase 1, soluble	30893326	30911612	TC1200001589.mm.1	0.0	0.697066
TC1400001012.mm.1	ENSMUST00000158761	Gm25989	predicted gene, 25989	43886682	43886814	TC1600001636.mm.1	-0.2	0.697182
TC1400001022.mm.1	NM_183021	Thada	thyroid adenoma associated	84190056	84466208	TC1700002648.mm.1	0.0	0.697251
TC1400001035.mm.1	ENSMUST00000083053	Gm25260	predicted gene, 25260	67027043	67027176	TC0600000779.mm.1	0.1	0.697302
TC1400001039.mm.1	NM_175427	Fam163b	family with sequence similarity 163, member B	27110379	27142491	TC0200003212.mm.1	0.0	0.697474
TC1400001052.mm.1	NM_024479	Wbscr27	Williams Beuren syndrome chromosome region	134932368	134942637	TC0500001569.mm.1	0.0	0.697808
TC1400001062.mm.1	ENSMUST00000182581	Gm4335	predicted gene 4335	93196595	93197598	TC1500000917.mm.1	0.1	0.698018
TC1400001067.mm.1	NM_027976	Acsl5	acyl-CoA synthetase long-chain family member 5	55253369	55296628	TC1900000776.mm.1	-0.1	0.698028
TC1400001085.mm.1	NM_010483	Htr5b	5-hydroxytryptamine (serotonin) receptor 5B	121509758	121528465	TC0100002973.mm.1	0.0	0.698172
TC1400001090.mm.1	NM_025887	Rab5a	RAB5A, member RAS oncogene family	53479234	53507680	TC1700000973.mm.1	0.0	0.698382
TC1400001094.mm.1	NM_021300	Rhox4b	reproductive homeobox 4B	37432494	37437279	TC0X00003388.mm.1	0.0	0.69858
TC1400001104.mm.1	NM_001136090	Poli	polymerase (DNA directed), iota	70508680	70530620	TC1800001541.mm.1	0.0	0.698587
TC1400001105.mm.1	NM_001252528	Pqbp1	polyglutamine binding protein 1	7894519	7899269	TC0X00001784.mm.1	-0.1	0.698629
TC1400001107.mm.1	NR_037226	Mir3066	microRNA 3066	17355392	17355474	TC1200000141.mm.1	0.0	0.698673
TC1400001124.mm.1	ENSMUST00000103764	Gm24934	predicted gene, 24934	3781020	3781130	TC0800000024.mm.1	0.0	0.698675
TC1400001134.mm.1	ENSMUST00000180354	Gm23689	predicted gene, 23689	5223364	5223473	TC1600000046.mm.1	-0.1	0.698871
TC1400001138.mm.1	ENSMUST00000179270	Gm26095	predicted gene, 26095	5227920	5228029	TC1600000047.mm.1	-0.1	0.698871
TC1400001141.mm.1	uc029tku.1	fas apo	Fas mRNA containing retrotransposable element	82160342	82160436	TC1700001230.mm.1	-0.1	0.698914
TC1400001145.mm.1	ENSMUST00000158745	Gm22140	predicted gene, 22140	32186129	32186248	TC0800000382.mm.1	0.0	0.698936
TC1400001146.mm.1	NM_015820	Hs6st3	heparan sulfate 6-O-sulfotransferase 3	119138265	119869815	TC1400001293.mm.1	0.0	0.69912
TC1400001147.mm.1	ENSMUST00000121452	Gm4917	predicted gene 4917	136338065	136338714	TC0X00001326.mm.1	0.0	0.699217
TC1400001150.mm.1	NR_035462	Mir1941	microRNA 1941	101369352	101369434	TC1500001072.mm.1	0.0	0.69928
TC1400001151.mm.1	ENSMUST00000121379	Gm11295	predicted gene 11295	22282353	22283548	TC1300000199.mm.1	0.2	0.699312
TC1400001153.mm.1	NM_133218	Zfp704	zinc finger protein 704	9427010	9610085	TC0300001626.mm.1	0.0	0.699372
TC1400001167.mm.1	ENSMUST00000169362	Gm3542	predicted gene 3542	5326255	5334928	TC1400001392.mm.1	0.0	0.699634
TC1400001174.mm.1	ENSMUST00000165814	Gm9603	predicted gene 9603	5678784	5687457	TC1400001400.mm.1	0.0	0.699634
TC1400001179.mm.1	XM_001476781	Gm3460	predicted gene 3460	6613967	6622418	TC1400001413.mm.1	0.0	0.699814
TC1400001189.mm.1	NM_025996	Tomm34	translocase of outer mitochondrial membrane 34	164053540	164071169	TC0200005102.mm.1	0.0	0.699861
TC1400001194.mm.1	NM_001109040	Kif21a	kinesin family member 21A	90933275	91049951	TC1500002071.mm.1	0.0	0.70032
TC1400001197.mm.1	ENSMUST00000182754	Gm8330	predicted gene 8330	13890646	13891653	TC1000001780.mm.1	0.1	0.700334
TC1400001199.mm.1	NM_019799	Rhcg	Rhesus blood group-associated C glycoprotein	79593363	79617657	TC0700003564.mm.1	0.1	0.700383
TC1400001208.mm.1	NM_021608	Dctn5	dynactin 5	122133041	122149044	TC0700004623.mm.1	0.1	0.700486
TC1400001226.mm.1	ENSMUST00000082576	Gm22458	predicted gene, 22458	157365998	157366104	TC0300001575.mm.1	0.0	0.700508
TC1400001230.mm.1	ENSMUST00000158324	Gm24931	predicted gene, 24931	92118177	92118283	TC0500002747.mm.1	0.0	0.700815
TC1400001231.mm.1	NM_194444	Cdk10	cyclin-dependent kinase 10	123224841	123232256	TC0800001514.mm.1	0.0	0.701301
TC1400001232.mm.1	NR_029900	Mir335	microRNA 335	30741299	30741396	TC0600000280.mm.1	0.1	0.701476
TC1400001234.mm.1	NM_028022	Gatsl3	GATS protein-like 3	4218225	4222409	TC1100000039.mm.1	0.1	0.701525
TC1400001239.mm.1	NM_138951	Ttc36	tetratricopeptide repeat domain 36	44799400	44802957	TC0900002180.mm.1	0.1	0.701785
TC1400001242.mm.1	NM_010451	Hoxa2	homeobox A2	52162351	52165413	TC0600003540.mm.1	0.0	0.701941
TC1400001275.mm.1	ENSMUST00000179173	Gm21823	predicted gene, 21823	79590278	79590982	TC0Y00000488.mm.1	0.0	0.702115
TC1400001281.mm.1	ENSMUST00000174981	Gm23992	predicted gene, 23992	4371269	4371335	TC0900001693.mm.1	0.1	0.70212
TC1400001287.mm.1	NM_146379	Olfr654	olfactory receptor 654	104587719	104588874	TC0700001526.mm.1	-0.1	0.702705
TC1400001288.mm.1	ENSMUST00000184446	RP23-51	N/A	14517971	14518670	TC0700002385.mm.1	0.0	0.70302
TC1400001290.mm.1	NM_172777	Gbp9	guanylate-binding protein 9	105078394	105110292	TC0500003730.mm.1	-0.1	0.70304
TC1400001293.mm.1	NR_037302	Mir3470	microRNA 3470b	44013852	44013977	TC1600000649.mm.1	0.1	0.703254
TC1400001306.mm.1	XM_001002281	Gm6866	predicted gene 6866	41210165	41219259	TC0700000724.mm.1	0.0	0.703389
TC1400001312.mm.1	ENSMUST00000178891	Gm21885	predicted gene, 21885	94284652	94285985	TC1100001431.mm.1	0.0	0.703503
TC1400001315.mm.1	NM_001099312	Gm11569	predicted gene 11569	99798064	99809896	TC1100003738.mm.1	-0.1	0.703694
TC1400001321.mm.1	NM_026812	Hddc3	HD domain containing 3	80343124	80346097	TC0700001152.mm.1	0.0	0.703733
TC1400001327.mm.1	NR_030703	Snord10	small nucleolar RNA, C/D box 104	106500991	106501063	TC1100001783.mm.1	-0.2	0.70385
TC1400001328.mm.1	ENSMUST00000052072	Tmem221	transmembrane protein 221	71554303	71558871	TC0800002432.mm.1	0.0	0.704086
TC1400001331.mm.1	ENSMUST00000102019	n-R5s64	nuclear encoded rRNA 5S 64	85718477	85718595	TC1200002099.mm.1	-0.1	0.704513
TC1400001346.mm.1	ENSMUST00000083359	Gm26124	predicted gene, 26124	76111197	76111304	TC1700002542.mm.1	-0.1	0.704559
TC1400001350.mm.1	ENSMUST00000082835	Gm23518	predicted gene, 23518	35387933	35388085	TC1600001547.mm.1	0.0	0.704575
TC1400001355.mm.1	ENSMUST00000158118	Gm23221	predicted gene, 23221	62020594	62020686	TC0900000781.mm.1	0.1	0.704762
TC1400001359.mm.1	NM_029389	Fam35a	family with sequence similarity 35, member A	34237033	34310503	TC1400001723.mm.1	0.0	0.704873
TC1400001360.mm.1	NM_001178059	Txnrd3	thioredoxin reductase 3	89643988	89675529	TC0600001051.mm.1	0.0	0.704887
TC1400001363.mm.1	ENSMUST00000104464	Gm23322	predicted gene, 23322	109009681	109009847	TC0X00002854.mm.1	-0.1	0.704983
TC1400001364.mm.1	NR_027984	2810025	RIKEN cDNA 2810025M15 gene	157412352	157420236	TC0100001431.mm.1	0.0	0.704995
TC1400001368.mm.1	NM_026757	610010	RIKEN cDNA 0610010K14 gene	70235204	70239852	TC1100003089.mm.1	0.0	0.705301
TC1400001370.mm.1	ENSMUST00000050255	Olfr125	olfactory receptor 125	37834911	37836028	TC1700000786.mm.1	0.0	0.705341
TC1400001379.mm.1	NM_027861	Brox	BRO1 domain and CAAX motif containing	183276342	183297256	TC0100003723.mm.1	0.0	0.705755

TC1400001384.mm.1	NM_029001	Elovl7	ELOVL family member 7, elongation of long chai	108214404	108287109	TC1300001204.mm.1	-0.1	0.705969
TC1400001388.mm.1	ENSMUST00000157500	Gm26070	predicted gene, 26070	35214401	35214537	TC1100000375.mm.1	0.0	0.706096
TC1400001392.mm.1	NM_019873	Fkbpl	FK506 binding protein-like	34644764	34646327	TC1700000642.mm.1	0.0	0.706335
TC1400001394.mm.1	ENSMUST00000157379	Gm24786	predicted gene, 24786	9829620	9829728	TC0300001632.mm.1	-0.1	0.706342
TC1400001397.mm.1	NM_145139	Eif3l	eukaryotic translation initiation factor 3, sub	79075223	79094400	TC1500000665.mm.1	-0.1	0.706557
TC1400001398.mm.1	ENSMUST00000119676	Gm11442	predicted gene 11442	85216597	85217054	TC1100001289.mm.1	0.0	0.706594
TC1400001399.mm.1	NM_011905	Tlr2	toll-like receptor 2	83836272	83841767	TC0300002236.mm.1	0.0	0.706836
TC1400001400.mm.1	NM_001195091	Gm6537	predicted gene 6537	28756174	28758965	TC0700000510.mm.1	0.0	0.706854
TC1400001402.mm.1	ENSMUST00000158774	Gm23312	predicted gene, 23312	9758839	9758940	TC0500001947.mm.1	0.1	0.707032
TC1400001404.mm.1	ENSMUST00000155424	Gm16218	predicted gene 16218	65297532	65297919	TC0900002508.mm.1	0.0	0.707561
TC1400001407.mm.1	NR_037294	Mir3074	microRNA 3074-2	84208825	84208907	TC0800002576.mm.1	0.0	0.707673
TC1400001408.mm.1	NM_052994	Spock2	sparc/osteonectin, cwcv and kazal-like domains	60106219	60135198	TC1000000543.mm.1	0.0	0.707692
TC1400001409.mm.1	NM_008370	Il5ra	interleukin 5 receptor, alpha	106710375	106749037	TC0600002877.mm.1	-0.1	0.707838
TC1400001410.mm.1	NR_033509	Gm9961	predicted gene 9961	11901363	11930600	TC1600000142.mm.1	0.0	0.707846
TC1400001411.mm.1	ENSMUST00000158580	Gm24577	predicted gene, 24577	101005821	101005883	TC0X00000964.mm.1	0.0	0.708138
TC1400001412.mm.1	ENSMUST00000179610	Gm26443	predicted gene, 26443	33808117	33808226	TC0700000621.mm.1	0.0	0.708154
TC1400001413.mm.1	ENSMUST00000173278	Gm8750	predicted pseudogene 8750	35400799	35403727	TC1700000686.mm.1	0.0	0.708234
TC1400001415.mm.1	ENSMUST00000158148	Gm26041	predicted gene, 26041	76788422	76788529	TC0X00002495.mm.1	0.0	0.70825
TC1400001416.mm.1	NM_016892	Ccs	copper chaperone for superoxide dismutase	4825366	4839322	TC1900000937.mm.1	0.0	0.708365
TC1400001418.mm.1	NM_023463	Ly6g6c	lymphocyte antigen 6 complex, locus G6C	35067325	35070050	TC1700002786.mm.1	0.0	0.708499
TC1400001419.mm.1	ENSMUST00000079237	Zfp125	zinc finger protein 125	20899822	20900867	TC1200001485.mm.1	0.1	0.708525
TC1400001420.mm.1	NM_011986	Ncdn	neurochondrin	126743750	126753438	TC0400003549.mm.1	0.0	0.708738
TC1400001421.mm.1	ENSMUST00000082646	Gm25134	predicted gene, 25134	19242130	19242289	TC0700000294.mm.1	-0.1	0.708922
TC1400001422.mm.1	ENSMUST00000171469	LOC1010	putative E3 ubiquitin-protein ligase UNKL-like	8694077	8694541	TC1800000059.mm.1	0.0	0.709043
TC1400001425.mm.1	XR_105836	Gm19450	predicted gene, 19450	34099929	34109826	TC1700000615.mm.1	0.0	0.709167
TC1400001427.mm.1	NM_001037756	Brms1l	breast cancer metastasis-suppressor 1-like	55836366	55869736	TC1200000474.mm.1	0.0	0.709177
TC1400001428.mm.1	ENSMUST00000118418	Gm14941	predicted gene 14941	122359447	122359890	TC0X00001196.mm.1	0.1	0.709366
TC1400001429.mm.1	ENSMUST00000117535	Gm14365	predicted gene 14365	5193483	5194069	TC0X00000035.mm.1	0.0	0.709543
TC1400001436.mm.1	NM_153559	Qsox2	quiescin Q6 sulfhydryl oxidase 2	26208637	26237525	TC0200003182.mm.1	0.0	0.709589
TC1400001442.mm.1	NM_023348	Snap29	synaptosomal-associated protein 29	17406000	17430826	TC1600000215.mm.1	0.1	0.709592
TC1400001445.mm.1	ENSMUST00000117720	Gm16205	predicted gene 16205	37787666	37788692	TC0800002089.mm.1	0.0	0.70991
TC1400001451.mm.1	NM_027066	Tmem89	transmembrane protein 89	108914619	108915563	TC0900001426.mm.1	0.0	0.710123
TC1400001454.mm.1	NR_028481	Snora31	small nucleolar RNA, H/ACA box 31	75847905	75848034	TC1400001062.mm.1	-0.2	0.710262
TC1400001455.mm.1	NM_027935	Tmem50a	transmembrane protein 50A	134897849	134915024	TC0400003749.mm.1	0.1	0.710304
TC1400001465.mm.1	NM_010217	Ctgf	connective tissue growth factor	24595442	24598683	TC1000000215.mm.1	0.0	0.710306
TC1400001468.mm.1	NM_001012335	Mdk	midkine	91929805	91932297	TC0200004129.mm.1	0.0	0.710425
TC1400001470.mm.1	NM_019586	Ube2j1	ubiquitin-conjugating enzyme E2J 1	33031416	33052364	TC0400000277.mm.1	0.0	0.710697
TC1400001471.mm.1	ENSMUST00000180292	Gm21920	predicted gene, 21920	53712736	53713418	TC0Y00000377.mm.1	0.0	0.710733
TC1400001472.mm.1	NM_197998	Cdpf1	cysteine rich, DPF motif domain containing 1	85806972	85811697	TC1500002007.mm.1	0.0	0.710748
TC1400001486.mm.1	NM_146784	Olfr916	olfactory receptor 916	38657458	38658390	TC0900002061.mm.1	0.0	0.710864
TC1400001499.mm.1	NM_001025607	Gm5168	predicted gene 5168	26028214	26051041	TC0X00001978.mm.1	0.0	0.710876
TC1400001500.mm.1	NM_013731	Sgk2	serum/glucocorticoid regulated kinase 2	162987330	163014127	TC0200002476.mm.1	0.0	0.710999
TC1400001514.mm.1	NCBI_Gene:777688:p	Ighv5-4	immunoglobulin heavy variable 5-4	113597446	113597905	TC1200002556.mm.1	-0.2	0.71133
TC1400001516.mm.1	NM_023124	H2-Q8	histocompatibility 2, Q region locus 8	35424847	35430055	TC1700002788.mm.1	-0.1	0.711334
TC1400001519.mm.1	NM_026116	Bbs2	Bardet-Biedl syndrome 2 (human)	94067954	94098811	TC0800002725.mm.1	0.0	0.711401
TC1400001523.mm.1	ENSMUST00000157569	Gm23900	predicted gene, 23900	81543235	81543342	TC0200003848.mm.1	0.0	0.711567
TC1400001528.mm.1	ENSMUST00000083312	Gm22297	predicted gene, 22297	70996539	70996644	TC1100003120.mm.1	0.1	0.711641
TC1400001533.mm.1	NR_035461	Mir1940	microRNA 1940	95330580	95330737	TC1300001076.mm.1	0.2	0.712127
TC1400001535.mm.1	ENSMUST00000083877	Gm24695	predicted gene, 24695	91349702	91349784	TC1600002073.mm.1	-0.1	0.712233
TC1400001544.mm.1	NM_001143689	H2-Q4	histocompatibility 2, Q region locus 4	35379617	35385290	TC1700000684.mm.1	-0.1	0.712424
TC1400001550.mm.1	NM_007620	Cbr1	carbonyl reductase 1	93607837	93610505	TC1600001042.mm.1	0.1	0.712551
TC1400001551.mm.1	NR_037269	Mir466n	microRNA 466n	114344526	114749749	TC1100004045.mm.1	0.0	0.712582
TC1400001561.mm.1	ENSMUST00000104557	Gm26342	predicted gene, 26342	67257224	67257352	TC0100000574.mm.1	0.0	0.712764
TC1400001565.mm.1	ENSMUST00000157339	Gm25388	predicted gene, 25388	57653672	57653822	TC0200003569.mm.1	-0.1	0.712834
TC1400001573.mm.1	XR_141356	A730085	RIKEN cDNA A730085E03 gene	69198064	69199000	TC1800000738.mm.1	0.0	0.712857
TC1400001579.mm.1	NM_024270	Stard3n	STARD3 N-terminal like	19357676	19395752	TC1300001520.mm.1	0.0	0.713243
TC1400001605.mm.1	NM_008539	Smad1	SMAD family member 1	79338395	79399518	TC0800002518.mm.1	0.0	0.713275
TC1400001608.mm.1	XR_140480	Gm21710	predicted gene, 21710	187215508	187351704	TC0100001804.mm.1	0.0	0.713405
TC1400001630.mm.1	XM_001476676	Gm3278	predicted gene 3278	4892416	4902431	TC1400000034.mm.1	0.0	0.713437
TC1400001634.mm.1	ENSMUST00000118918	Gm11907	predicted gene 11907	28353783	28354789	TC0400000227.mm.1	0.0	0.713683
TC1400001645.mm.1	NM_024274	Fars2	phenylalanine-tRNA synthetase 2 (mitochondrial	36117411	36537595	TC1300000409.mm.1	0.0	0.713765
TC1400001655.mm.1	NM_025316	Ndufb5	NADH dehydrogenase (ubiquinone) 1 beta subcc	32736990	32751566	TC0300000227.mm.1	0.0	0.713951
TC1400001666.mm.1	XM_003084997	Gm3173	predicted gene 3173	4415448	4519621	TC1400002791.mm.1	0.0	0.714067
TC1400001667.mm.1	NM_178216	Hist2h3	histone cluster 2, H3c1	96246685	96248509	TC0300003216.mm.1	-0.1	0.714259
TC1400001668.mm.1	NM_133759	Zbtb3	zinc finger and BTB domain containing 3	8802496	8804854	TC1900000158.mm.1	0.0	0.714377
TC1400001676.mm.1	ENSMUST00000177988	mmu-mir	mmu-mir-466b-1 // mmu-mir-466b-4 // mmu-n	10474215	10474304	TC0200000105.mm.1	0.0	0.714479
TC1400001699.mm.1	ENSMUST00000178801	mmu-mir	mmu-mir-466b-1 // mmu-mir-466b-4 // mmu-n	10486423	10486512	TC0200000132.mm.1	0.0	0.714479
TC1400001708.mm.1	ENSMUST00000103900	mmu-mir	mmu-mir-466b-1 // mmu-mir-466b-5 // mmu-n	10488887	10488974	TC0200000138.mm.1	0.0	0.714479
TC1400001709.mm.1	ENSMUST00000180061	mmu-mir	mmu-mir-466b-1 // mmu-mir-466b-4 // mmu-n	10493798	10493887	TC0200000150.mm.1	0.0	0.714479
TC1400001723.mm.1	ENSMUST00000103804	mmu-mir	mmu-mir-466b-1 // mmu-mir-466b-5 // mmu-n	10496268	10496355	TC0200000156.mm.1	0.0	0.714479
TC1400001724.mm.1	ENSMUST00000103791	mmu-mir	mmu-mir-466b-1 // mmu-mir-466b-4 // mmu-n	10501109	10501198	TC0200000168.mm.1	0.0	0.714479
TC1400001725.mm.1	ENSMUST00000175235	Gm24710	predicted gene, 24710	37931680	37931780	TC1000000317.mm.1	0.1	0.714583
TC1400001733.mm.1	ENSMUST00000179085	Gm24135	predicted gene, 24135	12572430	12572530	TC1500001230.mm.1	0.1	0.714583
TC1400001740.mm.1	NM_019519	Rabggta	Rab geranylgeranyl transferase, a subunit	55715873	55722257	TC1400002099.mm.1	0.0	0.714712
TC1400001748.mm.1	ENSMUST00000121650	Gm5395	predicted gene 5395	151655188	151656102	TC0X00001523.mm.1	0.0	0.714808
TC1400001759.mm.1	ENSMUST00000121314	Gm6031	predicted gene 6031	15426151	15427204	TC1600000189.mm.1	0.0	0.714923
TC1400001775.mm.1	XM_003085238	Gm19956	predicted gene, 19956	59661329	59681210	TC1900000857.mm.1	0.0	0.715155
TC1400001779.mm.1	ENSMUST00000117792	Gm15069	predicted gene 15069	170746836	170747207	TC0X00003382.mm.1	0.0	0.715226

TC1400001784.mm.1	ENSMUST00000119796	Gm15068	predicted gene 15068	170869589	170869960	TC0X00003383.mm.1	0.0	0.715226
TC1400001797.mm.1	ENSMUST00000117259	Prdx2-r	peroxiredoxin 2, related sequence 3	144791837	144792660	TC0400001855.mm.1	0.0	0.715262
TC1400001807.mm.1	NM_153129	Pacs1	phosphofurin acidic cluster sorting protein 1	5133685	5273119	TC1900000954.mm.1	0.0	0.715328
TC1400001810.mm.1	NM_024459	Ppp3r1	protein phosphatase 3, regulatory subunit B, al	17151139	17200380	TC1100004261.mm.1	0.0	0.715394
TC1400001812.mm.1	NR_035468	Mir1946	microRNA 1946a	32267450	32267583	TC1600001505.mm.1	0.0	0.7155
TC1400001819.mm.1	ENSMUST00000158266	Gm22516	predicted gene, 22516	31189691	31189814	TC0200000548.mm.1	0.0	0.715595
TC1400001825.mm.1	NM_010499	Ier2	immediate early response 2	84661331	84662852	TC0800002585.mm.1	0.0	0.71593
TC1400001826.mm.1	NR_030447	Mir680-	microRNA 680-1	129691535	129691643	TC0600001539.mm.1	0.0	0.715972
TC1400001827.mm.1	ENSMUST00000179342	Gm23305	predicted gene, 23305	59537128	59537206	TC0700003226.mm.1	0.0	0.716127
TC1400001835.mm.1	ENSMUST00000180298	Gm25085	predicted gene, 25085	59540870	59540948	TC0700003228.mm.1	0.0	0.716127
TC1400001836.mm.1	ENSMUST00000082662	Gm22298	predicted gene, 22298	54100430	54100562	TC0200000847.mm.1	0.0	0.716128
TC1400001837.mm.1	ENSMUST00000116977	Gm22677	predicted gene, 22677	10465760	10465867	TC0200000089.mm.1	0.0	0.716465
TC1400001849.mm.1	NM_026526	N6amt2	N-6 adenine-specific DNA methyltransferase 2 (p	57549596	57571569	TC1400002146.mm.1	-0.1	0.716466
TC1400001857.mm.1	NM_009838	Cct6a	chaperonin containing Tcp1, subunit 6a (zeta)	129787356	129846443	TC0500001512.mm.1	-0.1	0.716467
TC1400001858.mm.1	NM_008533	Cd180	CD180 antigen	102693558	102739629	TC1300001155.mm.1	0.2	0.716527
TC1400001860.mm.1	NM_013650	S100a8	S100 calcium binding protein A8 (calgranulin A)	90669071	90670034	TC0300000811.mm.1	0.1	0.716531
TC1400001868.mm.1	ENSMUST00000121454	Gm12161	predicted gene 12161	45280594	45280954	TC1100002586.mm.1	0.0	0.716572
TC1400001893.mm.1	XR_106321	Srsy	serine-rich, secreted, Y-linked	17935713	17937330	TC0Y00000277.mm.1	0.0	0.716708
TC1400001898.mm.1	NM_026774	Lamtor5	late endosomal/lysosomal adaptor, MAPK and M	107278858	107284082	TC0300001116.mm.1	0.0	0.716885
TC1400001901.mm.1	NM_146200	Eif3c	eukaryotic translation initiation factor 3, sub	126546455	126566411	TC0700004282.mm.1	-0.1	0.717005
TC1400001910.mm.1	ENSMUST00000103776	Gm23252	predicted gene, 23252	129582786	129582895	TC1000003182.mm.1	0.0	0.71712
TC1400001920.mm.1	ENSMUST00000178214	Gm23953	predicted gene, 23953	59736313	59736406	TC0700003293.mm.1	0.1	0.717134
TC1400001931.mm.1	ENSMUST00000179813	Gm26332	predicted gene, 26332	59738848	59738941	TC0700003294.mm.1	0.1	0.717134
TC1400001933.mm.1	ENSMUST00000180265	Gm22863	predicted gene, 22863	59743912	59744005	TC0700003296.mm.1	0.1	0.717134
TC1400001937.mm.1	ENSMUST00000177718	Gm24618	predicted gene, 24618	59746425	59746518	TC0700003297.mm.1	0.1	0.717134
TC1400001942.mm.1	ENSMUST00000083343	Gm25126	predicted gene, 25126	37317477	37317578	TC0800002086.mm.1	0.1	0.717213
TC1400001945.mm.1	ENSMUST00000114890	Gm17604	predicted gene, 17604	165003765	165004829	TC0X00003337.mm.1	-0.1	0.717216
TC1400001950.mm.1	NR_035416	Mir669j	microRNA 669j	10477910	10478030	TC0200000114.mm.1	0.0	0.717223
TC1400001955.mm.1	ENSMUST00000102422	Gm22370	predicted gene, 22370	28214039	28214121	TC1000001926.mm.1	0.0	0.717255
TC1400001960.mm.1	NM_001270812	LOC1008	alpha takusan-like	6259747	6287250	TC1400002843.mm.1	0.0	0.717308
TC1400001962.mm.1	NM_013676	Supt5	suppressor of Ty 5	28314894	28338719	TC0700002694.mm.1	-0.1	0.717383
TC1400001963.mm.1	NM_177271	Samd5	sterile alpha motif domain containing 5	9627259	9675208	TC1000001735.mm.1	0.0	0.71747
TC1400001972.mm.1	NM_011439	Sox13	SRY-box containing gene 13	133382300	133424377	TC0100003090.mm.1	0.0	0.71766
TC1400001981.mm.1	ENSMUST00000182989	Gm4691	predicted gene 4691	128202013	128203276	TC0600003195.mm.1	0.1	0.717738
TC1400001984.mm.1	ENSMUST00000104088	Gm22784	predicted gene, 22784	55956782	55956913	TC0300002007.mm.1	0.0	0.717882
TC1400001988.mm.1	ENSMUST00000179862	LOC6376	ragulator complex protein LAMTOR3-like // late	104949176	104950441	TC0700003960.mm.1	0.0	0.717923
TC1400001993.mm.1	NM_133783	Ptges2	prostaglandin E synthase 2	32395890	32402740	TC0200000578.mm.1	0.0	0.7181
TC1400001995.mm.1	ENSMUST00000175495	Gm24108	predicted gene, 24108	30261441	30261517	TC1900001357.mm.1	-0.1	0.718248
TC1400002001.mm.1	NM_175244	Hectd3	HECT domain containing 3	116995317	117005277	TC0400001273.mm.1	0.0	0.718351
TC1400002002.mm.1	XR_141500	Gm9783	predicted gene 9783	5845623	5853036	TC1900000089.mm.1	0.0	0.718578
TC1400002004.mm.1	NM_001100614	Gm11564	predicted gene 11564	99814976	99815666	TC1100003740.mm.1	0.0	0.718595
TC1400002017.mm.1	XR_106483	A230087	RIKEN cDNA A230087F16 gene	111284759	111293988	TC1200001234.mm.1	0.0	0.718747
TC1400002028.mm.1	ENSMUST00000157157	Gm23169	predicted gene, 23169	13334498	13334609	TC0100001975.mm.1	0.1	0.71876
TC1400002041.mm.1	NM_026241	Ankrd39	ankyrin repeat domain 39	36538173	36547231	TC0100003875.mm.1	0.0	0.719307
TC1400002043.mm.1	NM_007545	Hrk	harakiri, BCL2 interacting protein (contains on	118164648	118189478	TC0500001307.mm.1	0.0	0.719418
TC1400002049.mm.1	ENSMUST00000179983	Gm21728	predicted gene, 21728	82093823	82094505	TC0Y00000503.mm.1	0.0	0.719615
TC1400002050.mm.1	NM_001145935	Zfp691	zinc finger protein 691	119169513	119174195	TC0400003417.mm.1	0.0	0.719723
TC1400002054.mm.1	NM_007812	Cyp2a5	cytochrome P450, family 2, subfamily a, polypep	26835305	26843548	TC0700000445.mm.1	0.1	0.719731
TC1400002056.mm.1	ENSMUST00000119771	Gm11198	predicted gene 11198	79371257	79372230	TC1100003321.mm.1	0.0	0.719862
TC1400002058.mm.1	ENSMUST00000158181	Gm23513	predicted gene, 23513	52105015	52105147	TC1600001719.mm.1	-0.1	0.720045
TC1400002059.mm.1	ENSMUST00000158480	Gm23115	predicted gene, 23115	71506436	71506543	TC1700002498.mm.1	0.0	0.720083
TC1400002060.mm.1	XM_001475423	Gm20862	predicted gene, 20862	83789754	83927911	TC0Y00000565.mm.1	0.0	0.720089
TC1400002061.mm.1	NM_001163284	Zbtb5	zinc finger and BTB domain containing 5	44991242	45012412	TC0400002568.mm.1	0.0	0.720124
TC1400002067.mm.1	ENSMUST00000175171	Gm24086	predicted gene, 24086	136697374	136697471	TC0100001277.mm.1	0.0	0.720222
TC1400002071.mm.1	ENSMUST00000157123	Gm25154	predicted gene, 25154	65136302	65136420	TC0500000606.mm.1	-0.1	0.72051
TC1400002082.mm.1	XM_484312	Gm5454	predicted gene 5454	103356250	103357704	TC1300001159.mm.1	0.0	0.720552
TC1400002083.mm.1	ENSMUST00000163135	Gm17068	predicted gene 17068	16277797	16278776	TC1900000304.mm.1	0.0	0.720577
TC1400002093.mm.1	ENSMUST00000180100	Gm10097	predicted gene 10097	5069192	5071975	TC1000000031.mm.1	0.0	0.720596
TC1400002094.mm.1	ENSMUST00000157734	Gm24009	predicted gene, 24009	23674289	23674381	TC0500002056.mm.1	0.0	0.720628
TC1400002098.mm.1	ENSMUST00000178682	Gm23141	predicted gene, 23141	59705968	59706061	TC0700003281.mm.1	0.1	0.720692
TC1400002099.mm.1	NM_001105557	Zfp938	zinc finger protein 938	82224850	82241280	TC1000002562.mm.1	0.0	0.720767
TC1400002100.mm.1	ENSMUST00000086960	Gm10198	predicted gene 10198	111592785	111592856	TC1300001251.mm.1	0.0	0.720772
TC1400002101.mm.1	NM_001033041	Acmsd	amino carboxymuconate semialdehyde decarbo:	127729413	127767564	TC0100001123.mm.1	0.1	0.720912
TC1400002102.mm.1	NR_035484	Mir1958	microRNA 1958	63980973	63984483	TC0100002460.mm.1	0.1	0.721172
TC1400002103.mm.1	ENSMUST00000076364	Gm5621	predicted gene 5621 // ribosomal protein L10	50344240	50344981	TC0900002263.mm.1	-0.1	0.721204
TC1400002106.mm.1	NM_008117	Gh	growth hormone	106300261	106301896	TC1100003919.mm.1	0.0	0.72146
TC1400002108.mm.1	ENSMUST00000122608	Gm25279	predicted gene, 25279	151854823	151854955	TC0100003259.mm.1	0.0	0.721482
TC1400002112.mm.1	NM_009265	Sprr1b	small proline-rich protein 1B	92436809	92438779	TC0300002391.mm.1	0.0	0.721526
TC1400002122.mm.1	ENSMUST00000181173	GAPDH	---	11280735	11356726	TC1400001451.mm.1	0.0	0.721557
TC1400002131.mm.1	ENSMUST00000104994	Gm17374	predicted gene, 17374	140152043	140153532	TC0200002094.mm.1	-0.1	0.721812
TC1400002134.mm.1	NM_030254	Tusc3	tumor suppressor candidate 3	39005867	39167041	TC0800000463.mm.1	0.0	0.721916
TC1400002136.mm.1	ENSMUST00000178417	Gm24463	predicted gene, 24463	89075336	89075407	TC0900001144.mm.1	0.2	0.721916
TC1400002142.mm.1	ENSMUST00000104254	Gm23132	predicted gene, 23132	77658576	77658707	TC1100003272.mm.1	0.1	0.721929
TC1400002144.mm.1	ENSMUST00000158214	Gm23541	predicted gene, 23541	101005896	101005959	TC0X00000965.mm.1	0.1	0.721982
TC1400002146.mm.1	ENSMUST00000119602	Hspa9-p	heat shock protein 9, pseudogene 1	60576946	60578878	TC0X00002313.mm.1	0.0	0.722354
TC1400002150.mm.1	NM_026519	Emc4	ER membrane protein complex subunit 4	112363011	112368027	TC0200004352.mm.1	0.0	0.722442
TC1400002152.mm.1	NM_177321	Mia2	melanoma inhibitory activity 2	59095799	59109130	TC1200000502.mm.1	0.1	0.722653
TC1400002154.mm.1	ENSMUST00000158964	Gm23343	predicted gene, 23343	44948104	44948246	TC1500000358.mm.1	0.0	0.722692

TC1400002160.mm.1	NM_146796	Olfr149	olfactory receptor 1499	13814607	13815658	TC1900001188.mm.1	0.0	0.722906
TC1400002161.mm.1	ENSMUST00000158632	Gm25718	predicted gene, 25718	81026773	81026890	TC1800000858.mm.1	0.1	0.723115
TC1400002162.mm.1	NM_147098	Olfr630	olfactory receptor 630	103754150	103757350	TC0700003904.mm.1	0.0	0.723148
TC1400002165.mm.1	ENSMUST00000082657	Gm22302	predicted gene, 22302	37824242	37824347	TC0700002872.mm.1	-0.1	0.72317
TC1400002170.mm.1	NM_001166031	Mrps2	mitochondrial ribosomal protein S2	28467961	28471178	TC0200000482.mm.1	0.0	0.723401
TC1400002189.mm.1	NM_011577	Tgfb1	transforming growth factor, beta 1	25687002	25705077	TC0700000424.mm.1	-0.1	0.723731
TC1400002193.mm.1	NM_008134	Glycam1	glycosylation dependent cell adhesion molecule	103562760	103565081	TC1500002324.mm.1	0.0	0.723933
TC1400002197.mm.1	NM_001166707	Vmn1r12	vomeronasal 1 receptor 123	21162185	21163108	TC0700000327.mm.1	0.0	0.724052
TC1400002201.mm.1	ENSMUST00000157950	Gm24537	predicted gene, 24537	4738832	4738933	TC0700000040.mm.1	0.0	0.724175
TC1400002208.mm.1	ENSMUST00000184198	RP23-14	N/A	106123174	106124730	TC0700001561.mm.1	0.0	0.724198
TC1400002213.mm.1	ENSMUST00000175397	Gm25998	predicted gene, 25998	33362994	33363046	TC0200003325.mm.1	0.0	0.724701
TC1400002219.mm.1	ENSMUST00000164535	Gm20727	predicted gene, 20727	80271509	80271661	TC1200000731.mm.1	0.1	0.724898
TC1400002231.mm.1	ENSMUST00000183103	Gm6931	predicted gene 6931	49424681	49425814	TC1600000703.mm.1	0.0	0.725027
TC1400002259.mm.1	NM_207230	Olfr320	olfactory receptor 320	58683875	58684802	TC1100000697.mm.1	0.0	0.72533
TC1400002266.mm.1	NM_001042768	Proc	protein C	32123126	32139570	TC1800001122.mm.1	0.0	0.725413
TC1400002267.mm.1	NM_175475	Cyp26b1	cytochrome P450, family 26, subfamily b, polype	84571414	84593908	TC0600002592.mm.1	0.0	0.725476
TC1400002283.mm.1	ENSMUST00000158512	Gm24768	predicted gene, 24768	44940542	44940635	TC1500000357.mm.1	0.1	0.725598
TC1400002285.mm.1	NM_001005477	Barhl2	BarH-like 2 (Drosophila)	106452514	106458440	TC0500002910.mm.1	0.0	0.725659
TC1400002290.mm.1	ENSMUST00000115156	Gm14543	predicted gene 14543	37886439	37897232	TC0X00002074.mm.1	0.0	0.725875
TC1400002302.mm.1	NM_001164727	Gm10406	predicted gene 10406	7006115	7027449	TC1400002848.mm.1	0.0	0.725953
TC1400002310.mm.1	ENSMUST00000083990	Gm22797	predicted gene, 22797	71663788	71663918	TC1600000819.mm.1	0.0	0.726025
TC1400002313.mm.1	NM_144536	Cdkal1	CDK5 regulatory subunit associated protein 1-li	29191746	29855674	TC1300001725.mm.1	0.0	0.726041
TC1400002323.mm.1	ENSMUST00000158550	Gm22433	predicted gene, 22433	63152217	63152358	TC0300000499.mm.1	0.0	0.726096
TC1400002327.mm.1	ENSMUST00000182266	Gm2467	predicted gene 2467	21289219	21290228	TC1000000164.mm.1	0.0	0.726141
TC1400002331.mm.1	ENSMUST00000087891	Gm6206	predicted pseudogene 6206	103162894	103165427	TC0X00002769.mm.1	0.0	0.726175
TC1400002334.mm.1	ENSMUST00000175481	Gm25464	predicted gene, 25464	122388054	122388160	TC1400002751.mm.1	0.0	0.726226
TC1400002339.mm.1	ENSMUST00000157914	Gm23277	predicted gene, 23277	121712089	121712224	TC0X00001189.mm.1	0.0	0.726673
TC1400002341.mm.1	ENSMUST00000111360	LOC1000	nuclear body protein SP140-like	167446	196575	TC1_GL456211_rand	-0.1	0.726677
TC1400002345.mm.1	ENSMUST00000083166	Gm26132	predicted gene, 26132	110923116	110923263	TC0800001325.mm.1	-0.1	0.726703
TC1400002378.mm.1	XR_105170	Gm5602	predicted gene 5602	130861285	130866330	TC0700004392.mm.1	0.0	0.727023
TC1400002384.mm.1	NM_028900	Gcc1	golgi coiled coil 1	28416091	28428390	TC0600001966.mm.1	0.0	0.727187
TC1400002387.mm.1	ENSMUST00000121891	Gm14719	predicted gene 14719	49660960	49661190	TC0X00000445.mm.1	-0.1	0.727192
TC1400002392.mm.1	NM_009807	Casp1	caspase 1	5298517	5307281	TC0900000031.mm.1	0.1	0.727201
TC1400002393.mm.1	NM_199062	Zfp781	zinc finger protein 781	81901911	81930480	TC1000002556.mm.1	0.0	0.727289
TC1400002397.mm.1	NM_199067	Defb50	defensin beta 50	21823539	21831296	TC0800000260.mm.1	0.0	0.727738
TC1400002398.mm.1	ENSMUST00000175342	Gm24323	predicted gene, 24323	117085836	117085912	TC1100001951.mm.1	-0.1	0.727815
TC1400002400.mm.1	NM_026822	Lce1b	late cornified envelope 1B	92655650	92656926	TC0300002402.mm.1	0.0	0.727865
TC1400002413.mm.1	ENSMUST00000084011	Gm23796	predicted gene, 23796	39666288	39666447	TC0300000301.mm.1	0.0	0.72789
TC1400002425.mm.1	ENSMUST00000083168	n-R5s50	nuclear encoded rRNA 5S 50	110161835	110161945	TC1400001231.mm.1	0.1	0.728042
TC1400002429.mm.1	NM_025724	Ccer1	coiled coil glutamate rich protein 1	97693059	97694926	TC1000001193.mm.1	0.0	0.728086
TC1400002430.mm.1	ENSMUST00000182757	Gm9658	predicted gene 9658	43217150	43218161	TC1500001458.mm.1	0.0	0.728197
TC1400002436.mm.1	NM_009288	Stk10	serine/threonine kinase 10	32533266	32624595	TC1100000343.mm.1	-0.1	0.728379
TC1400002439.mm.1	ENSMUST00000165001	Gm6872	predicted gene 6872	41668609	41669308	TC0700002911.mm.1	0.0	0.728462
TC1400002441.mm.1	ENSMUST00000083196	Gm24457	predicted gene, 24457	142772972	142773076	TC0300003053.mm.1	-0.1	0.728771
TC1400002458.mm.1	XR_105990	5730409	RIKEN cDNA 5730409K12 gene	7086037	7090204	TC1900000130.mm.1	0.0	0.728823
TC1400002464.mm.1	NM_001025106	Tmem201	transmembrane protein 201	149715375	149738068	TC0400004049.mm.1	0.0	0.728843
TC1400002468.mm.1	NR_035430	Mir1198	microRNA 1198	55370695	55491306	TC1200000466.mm.1	-0.1	0.729014
TC1400002470.mm.1	ENSMUST00000104281	Gm25922	predicted gene, 25922	34943856	34943985	TC0700002841.mm.1	0.0	0.729115
TC1400002487.mm.1	NM_011228	Rab33a	RAB33A, member of RAS oncogene family	48519285	48530240	TC0X00000436.mm.1	0.0	0.72924
TC1400002492.mm.1	NM_019640	Pitpnb	phosphatidylinositol transfer protein, beta	111330763	111388359	TC0500001162.mm.1	-0.1	0.729259
TC1400002498.mm.1	ENSMUST00000158842	Gm23700	predicted gene, 23700	113666915	113667016	TC0700004130.mm.1	-0.1	0.729297
TC1400002514.mm.1	ENSMUST00000177661	Gm23047	predicted gene, 23047	59733770	59733863	TC0700003292.mm.1	0.0	0.729597
TC1400002521.mm.1	NM_008431	Kcnk4	potassium channel, subfamily K, member 4	6925690	6934515	TC1900001022.mm.1	0.0	0.729606
TC1400002524.mm.1	NR_029830	Mir194-	microRNA 194-2	6264643	6264728	TC1900000109.mm.1	0.0	0.729863
TC1400002537.mm.1	ENSMUST00000179216	Gm24269	predicted gene, 24269	110925403	110925479	TC0900001476.mm.1	0.1	0.729971
TC1400002575.mm.1	XM_001478004	Gm20935	predicted gene, 20935	68023542	68024225	TC0Y00000182.mm.1	0.0	0.729976
TC1400002577.mm.1	NM_001244649	Gm8765	predicted gene 8765	50698329	50703409	TC1300000590.mm.1	-0.1	0.730103
TC1400002578.mm.1	XM_001472852	Gm2244	predicted gene 2244	19532896	19549958	TC1400001516.mm.1	0.0	0.730224
TC1400002584.mm.1	NM_145496	Dak	dihydroxyacetone kinase 2 homolog (yeast)	10587791	10605432	TC1900001109.mm.1	0.1	0.730297
TC1400002598.mm.1	ENSMUST00000171004	Gm3104	predicted gene 3104	3086001	3087834	TC0700000001.mm.1	0.0	0.73038
TC1400002600.mm.1	NM_146312	Olfr657	olfactory receptor 657	104635676	104636636	TC0700001528.mm.1	0.0	0.730403
TC1400002603.mm.1	NM_026514	Cdc42ep	CDC42 effector protein (Rho GTPase binding) 3	79334025	79355091	TC1700002564.mm.1	0.0	0.730637
TC1400002617.mm.1	ENSMUST00000157945	Gm24531	predicted gene, 24531	57922088	57922187	TC0300002036.mm.1	0.0	0.730674
TC1400002622.mm.1	NM_021448	Elp2	elongator acetyltransferase complex subunit 2	24603961	24638830	TC1800000199.mm.1	-0.1	0.730763
TC1400002628.mm.1	ENSMUST00000104021	Gm25608	predicted gene, 25608	64002353	64002484	TC0500002462.mm.1	0.0	0.730959
TC1400002637.mm.1	NM_201394	Plec	plectin	76170974	76232570	TC1500002346.mm.1	0.0	0.731304
TC1400002641.mm.1	NM_008348	Il10ra	interleukin 10 receptor, alpha	45253837	45269149	TC0900002197.mm.1	-0.1	0.731496
TC1400002649.mm.1	ENSMUST00000083803	Gm24490	predicted gene, 24490	86292501	86292598	TC0800001002.mm.1	0.0	0.73156
TC1400002651.mm.1	ENSMUST00000180010	Gm22645	predicted gene, 22645	25694114	25694220	TC1700001666.mm.1	0.0	0.731608
TC1400002656.mm.1	ENSMUST00000118965	Gm5319	predicted gene 5319	4176363	4177235	TC0700002150.mm.1	0.0	0.731772
TC1400002657.mm.1	NM_009845	Cd22	CD22 antigen	30865402	30880342	TC0700002779.mm.1	-0.2	0.732125
TC1400002666.mm.1	ENSMUST00000120199	Gm12969	predicted gene 12969	128868393	128869396	TC0400003579.mm.1	0.0	0.732156
TC1400002669.mm.1	NM_001198977	Syk	spleen tyrosine kinase	52583173	52648792	TC1300000612.mm.1	-0.1	0.732229
TC1400002671.mm.1	NM_025542	Rtfdc1	replication termination factor 2 domain contain	172440556	172469908	TC0200002669.mm.1	0.1	0.732363
TC1400002674.mm.1	NM_008155	Gpi1	glucose phosphate isomerase 1	34201327	34230336	TC0700002828.mm.1	0.1	0.73239
TC1400002677.mm.1	NM_011747	Zfp13	zinc finger protein 13	23575844	23599487	TC1700001595.mm.1	0.0	0.732414
TC1400002687.mm.1	NM_001101533	Vmn1r20	vomeronasal 1 receptor 20	57431644	57432695	TC0600000695.mm.1	0.0	0.732572
TC1400002688.mm.1	NM_139138	Emr4	EGF-like module containing, mucin-like, hormon	55749984	55853662	TC1700000990.mm.1	0.0	0.733335

TC1400002694.mm.1	ENSMUST00000178227	Gm21847	predicted gene, 21847	15483291	15656679	TC0500000107.mm.1	0.0	0.733337
TC1400002697.mm.1	ENSMUST00000118210	Gm11550	predicted gene 11550	36539383	36540081	TC0300001855.mm.1	0.0	0.733345
TC1400002700.mm.1	NR_028546	Snora7a	small nucleolar RNA, H/ACA box 7A	115807975	115808114	TC0600002961.mm.1	-0.2	0.733565
TC1400002711.mm.1	ENSMUST00000183053	Gm7507	predicted gene 7507	84812240	84813247	TC0600000952.mm.1	0.1	0.733762
TC1400002714.mm.1	ENSMUST00000101878	Gm23691	predicted gene, 23691	4380961	4381067	TC0200002859.mm.1	0.0	0.733844
TC1400002718.mm.1	ENSMUST00000102400	Gm23526	predicted gene, 23526	42862051	42862129	TC0900002122.mm.1	-0.1	0.733856
TC1400002719.mm.1	ENSMUST00000122472	Gm25107	predicted gene, 25107	147484293	147484421	TC0X00003147.mm.1	0.2	0.73394
TC1400002740.mm.1	ENSMUST00000179475	Gm23308	predicted gene, 23308	119813233	119813339	TC1300001356.mm.1	0.1	0.734168
TC1400002744.mm.1	NM_026123	Unc50	unc-50 homolog (C. elegans)	37430170	37439124	TC0100000260.mm.1	0.0	0.734446
TC1400002746.mm.1	XR_140837	Gm20115	predicted gene, 20115	74536654	74537788	TC0700003521.mm.1	0.0	0.734495
TC1400002751.mm.1	NM_001163564	Naf1	nuclear assembly factor 1 homolog (S. cerevisia	66860217	66890564	TC0800000691.mm.1	0.0	0.734648
TC1400002755.mm.1	ENSMUST00000097237	Gm23741	predicted gene, 23741	4101890	4102060	TC0700000022.mm.1	0.1	0.734834
TC1400002764.mm.1	NM_133351	Prss8	protease, serine, 8 (prostasin)	127925717	127930113	TC0700004346.mm.1	0.1	0.735078
TC1400002780.mm.1	NM_027482	5730508	RIKEN cDNA 5730508B09 gene	127869688	127896323	TC0300002920.mm.1	0.0	0.735156
TC1400002781.mm.1	NM_145972	BC02723	cDNA sequence BC027231	44724301	44737284	TC1600000659.mm.1	0.0	0.735241
TC1400002783.mm.1	NM_001164082	Polr3d	polymerase (RNA) III (DNA directed) polypeptide	70438748	70443471	TC1400002341.mm.1	0.0	0.735457
TC1400002784.mm.1	ENSMUST00000083029	Gm23570	predicted gene, 23570	20092615	20092718	TC0500000152.mm.1	-0.1	0.736231
TC1400002788.mm.1	ENSMUST00000177665	Gm21833	predicted gene, 21833	82828382	82829881	TC1600000930.mm.1	0.1	0.736373
TC1400002789.mm.1	BC119790	Mfsd12	major facilitator superfamily domain containing	81357491	81366225	TC1000000895.mm.1	0.0	0.736519
TC1400002790.mm.1	NM_025403	Nop10	NOP10 ribonucleoprotein	112261926	112263269	TC0200001663.mm.1	0.0	0.736542
TC1400002791.mm.1	NR_033628	AA47433	expressed sequence AA474331	39890018	39899238	TC1000002030.mm.1	0.0	0.73674
TC1400002792.mm.1	NM_053109	Clec2d	C-type lectin domain family 2, member d	129180615	129186535	TC0600001530.mm.1	-0.1	0.736796
TC1400002793.mm.1	ENSMUST00000174979	Gm25675	predicted gene, 25675	119919324	119919441	TC1200002516.mm.1	-0.2	0.73686
TC1400002794.mm.1	ENSMUST00000082556	Gm22283	predicted gene, 22283	76200118	76200278	TC0600002517.mm.1	0.0	0.73689
TC1400002800.mm.1	NM_010174	Fabp3	fatty acid binding protein 3, muscle and heart	130308595	130315463	TC0400001543.mm.1	-0.1	0.736916
TC1400002802.mm.1	ENSMUST00000158619	Gm24054	predicted gene, 24054	13902770	13902874	TC0500001968.mm.1	0.0	0.736922
TC1400002803.mm.1	ENSMUST00000182954	Gm8318	predicted gene 8318	18163886	18164752	TC1500000124.mm.1	0.0	0.73693
TC1400002804.mm.1	NR_073559	Stxbp3b	syntaxin-binding protein 3B	9557606	9559248	TC1900001085.mm.1	0.0	0.736942
TC1400002805.mm.1	ENSMUST00000102469	Gm25986	predicted gene, 25986	62808349	62808416	TC1600000786.mm.1	0.1	0.736971
TC1400002807.mm.1	NCBI_Gene:629860:p	Ighv1-1	immunoglobulin heavy variable V1-12	114615850	114616143	TC1200002607.mm.1	-0.1	0.73701
TC1400002808.mm.1	ENSMUST00000182514	Gm9568	predicted gene 9568	75854819	75856228	TC1500001746.mm.1	0.0	0.737064
TC1400002809.mm.1	ENSMUST00000104447	Gm22150	predicted gene, 22150	55469025	55469159	TC0400002690.mm.1	0.1	0.737106
TC1400002810.mm.1	NM_001145832	Kifc3	kinesin family member C3	95099828	95142540	TC0800002739.mm.1	0.0	0.737181
TC1400002811.mm.1	XM_001477730	Gm3233	predicted gene 3233	77758990	77759682	TC1000002427.mm.1	0.0	0.737245
TC1400002812.mm.1	OTTMUST00000059639	RP23-34	---	117808720	117809220	TC0600001318.mm.1	0.0	0.737496
TC1400002813.mm.1	ENSMUST00000083988	n-R5-8s	nuclear encoded rRNA 5.8S 1	73533403	73533550	TC1800001576.mm.1	0.1	0.737585
TC1400002815.mm.1	NM_011542	Tcea3	transcription elongation factor A (SII), 3	136247729	136274899	TC0400001681.mm.1	0.0	0.737751
TC1400002816.mm.1	ENSMUST00000157332	Gm22560	predicted gene, 22560	63509895	63510014	TC1800000652.mm.1	0.0	0.738158
TC1400002818.mm.1	NM_025518	Dus2l	dihydrouridine synthase 2-like (SMM1, S. cerevi	105991337	106053840	TC0800001236.mm.1	0.0	0.738307
TC1400002820.mm.1	ENSMUST00000157865	Gm24400	predicted gene, 24400	43857245	43857351	TC1900001548.mm.1	0.0	0.73853
TC1400002821.mm.1	ENSMUST00000104520	Gm24071	predicted gene, 24071	48617823	48617954	TC1700000945.mm.1	0.0	0.739027
TC1400002822.mm.1	ENSMUST00000157355	Gm22226	predicted gene, 22226	96919994	96920102	TC0700003761.mm.1	-0.1	0.739257
TC1400002823.mm.1	ENSMUST00000082803	Gm23056	predicted gene, 23056	128885909	128886019	TC0100003031.mm.1	0.0	0.739428
TC1400002824.mm.1	ENSMUST00000158500	Gm26403	predicted gene, 26403	61138509	61138613	TC1800001414.mm.1	0.0	0.739674
TC1400002825.mm.1	NM_026042	Med29	mediator complex subunit 29	28385247	28392708	TC0700002697.mm.1	0.0	0.73977
TC1400002826.mm.1	ENSMUST00000158067	Gm23838	predicted gene, 23838	6014863	6015024	TC0500001916.mm.1	0.0	0.739804
TC1400002827.mm.1	XM_003689112	Gm21658	predicted gene, 21658	78035031	78035714	TC0Y00000481.mm.1	0.0	0.740103
TC1400002828.mm.1	NM_028748	Paqr5	progestin and adipoQ receptor family member V	61953481	62026856	TC0900002452.mm.1	0.0	0.740382
TC1400002829.mm.1	NM_144874	Cox15	cytochrome c oxidase assembly protein 15	43733254	43753000	TC1900001545.mm.1	0.0	0.740448
TC1400002830.mm.1	NM_023792	Pank1	pantothenate kinase 1	34806936	34879455	TC1900001428.mm.1	0.1	0.740474
TC1400002832.mm.1	NM_026938	Tmem160	transmembrane protein 160	16452779	16455490	TC0700000228.mm.1	0.0	0.740585
TC1400002837.mm.1	ENSMUST00000116724	Gm22953	predicted gene, 22953	121450670	121450770	TC0200004490.mm.1	0.0	0.740641
TC1400002838.mm.1	NM_001081300	Tshz1	teashirt zinc finger family member 1	84011627	84086562	TC1800001700.mm.1	0.0	0.740867
TC1400002839.mm.1	NM_001082532	Pigyl	phosphatidylinositol glycan anchor biosynthesis	22156846	22158358	TC0900000214.mm.1	0.0	0.74102
TC1400002841.mm.1	NM_181394	Anapc13	anaphase promoting complex subunit 13	102626296	102634244	TC0900001290.mm.1	0.1	0.741175
TC1400002842.mm.1	NM_013465	Ahsg	alpha-2-HS-glycoprotein	22892015	22899451	TC1600000323.mm.1	-0.1	0.741311
TC1400002843.mm.1	NM_001160356	AI46249	expressed sequence AI462493	8880014	8880933	TC1900001073.mm.1	0.0	0.741381
TC1400002844.mm.1	NM_008537	Amacr	alpha-methylacyl-CoA racemase	10981756	10996624	TC1500000087.mm.1	0.0	0.741419
TC1400002845.mm.1	NM_001011791	Olfr193	olfactory receptor 193	59109625	59110633	TC1600001791.mm.1	0.0	0.741721
TC1400002846.mm.1	ENSMUST00000158000	Gm23318	predicted gene, 23318	148555697	148555804	TC0400001932.mm.1	0.0	0.742006
TC1400002847.mm.1	ENSMUST00000083162	Gm23680	predicted gene, 23680	12363410	12363573	TC1000000090.mm.1	-0.1	0.742072
TC1400002848.mm.1	XM_003689085	Gm21127	predicted gene, 21127	68464868	68465551	TC0Y00000184.mm.1	0.0	0.742096
TC1400002849.mm.1	XM_001476336	Gm20887	predicted gene, 20887	50954848	50955531	TC0Y00000359.mm.1	0.0	0.742096
TC1400002850.mm.1	XM_003689055	Gm21245	predicted gene, 21245	52261943	52262626	TC0Y00000365.mm.1	0.0	0.742096
TC1400002851.mm.1	XM_001477750	Gm20921	predicted gene, 20921	64858669	64859352	TC0Y00000424.mm.1	0.0	0.742096
TC1400002853.mm.1	XM_001474123	Gm20842	predicted gene, 20842	72039009	72039692	TC0Y00000450.mm.1	0.0	0.742096
TC1400002854.mm.1	NM_019566	Rhog	ras homolog gene family, member G	102239123	102250123	TC0700003857.mm.1	0.0	0.742322
TC1400002855.mm.1	NM_009330	Hnf1b	HNF1 homeobox B	83850063	83905917	TC1100001271.mm.1	0.0	0.742328
TC1400002856.mm.1	ENSMUST00000122132	Gm14006	predicted gene 14006	128557254	128558234	TC0200004577.mm.1	0.0	0.742391
TC1400002857.mm.1	NM_146611	Olfr970	olfactory receptor 970	39819641	39820576	TC0900000438.mm.1	0.0	0.742397
TC1400002864.mm.1	XR_140492	Gm20038	predicted gene, 20038	16457654	16461843	TC0200000277.mm.1	0.0	0.742735
TC1400002869.mm.1	ENSMUST00000104205	Gm24338	predicted gene, 24338	101222952	101223078	TC0900001275.mm.1	0.0	0.74304
TC1500000014.mm.1	NR_040686	8430423	RIKEN cDNA 8430423G03 gene	148950250	148951658	TC0500001830.mm.1	0.0	0.743097
TC1500000017.mm.1	NM_013898	Timm8a1	translocase of inner mitochondrial membrane 8/	134537256	134541865	TC0X00002993.mm.1	0.0	0.743193
TC1500000018.mm.1	NM_008223	Serpind	serine (or cysteine) peptidase inhibitor, clade	17331371	17343575	TC1600000214.mm.1	0.0	0.743248
TC1500000019.mm.1	ENSMUST00000158225	Gm24729	predicted gene, 24729	66305889	66306025	TC0100000554.mm.1	0.0	0.743425
TC1500000020.mm.1	ENSMUST00000160944	Gm16088	predicted gene 16088	3054233	3054733	TC0100000001.mm.1	0.0	0.743498
TC1500000021.mm.1	NM_001177715	Gm2897	predicted gene 2897	3049285	3077025	TC1400002780.mm.1	0.0	0.743548

TC1500000022.mm.1	NM_177010	F630003	RIKEN cDNA F630003A18 gene	0	0	TSUnmapped0000005	0.0	0.743604
TC1500000052.mm.1	NM_011852	Oas1g	2-5 oligoadenylate synthetase 1G	120876142	120887613	TC0500003180.mm.1	0.0	0.743936
TC1500000055.mm.1	NM_021426	Nkain4	Na+/K+ transporting ATPase interacting 4	180934770	180954699	TC0200005426.mm.1	0.0	0.743988
TC1500000062.mm.1	ENSMUST00000119399	Gm11719	predicted gene 11719	107330708	107331058	TC1100001794.mm.1	0.0	0.744179
TC1500000073.mm.1	ENSMUST00000095320	Gm10313	predicted pseudogene 10313	46254677	46255678	TC0800002157.mm.1	0.0	0.744293
TC1500000074.mm.1	ENSMUST00000099450	Gm6478	predicted pseudogene 6478	62035420	62036163	TC1300000749.mm.1	0.0	0.744332
TC1500000081.mm.1	ENSMUST00000157869	Gm24399	predicted gene, 24399	65660806	65660879	TC0500000621.mm.1	0.0	0.744428
TC1500000087.mm.1	NM_028153	Eml2	echinoderm microtubule associated protein like	19176421	19206482	TC0700000290.mm.1	0.0	0.74447
TC1500000090.mm.1	NM_146899	Olfr121	olfactory receptor 1219	89074154	89075089	TC0200004039.mm.1	0.0	0.744567
TC1500000094.mm.1	ENSMUST00000120130	Atp5l2	ATP synthase, H+ transporting, mitochondrial FC	97768060	97768371	TC1100001549.mm.1	-0.1	0.744663
TC1500000102.mm.1	NM_028189	B3gnt3	UDP-GlcNAc:betaGal beta-1,3-N-acetylglucosam	71691719	71703534	TC0800002440.mm.1	0.0	0.74499
TC1500000104.mm.1	ENSMUST00000104039	Gm22272	predicted gene, 22272	11933495	11933628	TC1900001149.mm.1	0.0	0.745017
TC1500000109.mm.1	ENSMUST00000157181	Gm23432	predicted gene, 23432	119638744	119638874	TC0300002827.mm.1	0.0	0.74503
TC1500000111.mm.1	NM_029982	A930009	RIKEN cDNA A930009A15 gene	115569986	115582454	TC1000001332.mm.1	0.0	0.745044
TC1500000124.mm.1	ENSMUST00000082970	Gm25404	predicted gene, 25404	55548446	55548552	TC0300000430.mm.1	-0.1	0.74507
TC1500000138.mm.1	ENSMUST00000118647	Gm16123	predicted gene 16123	12565518	12567222	TC0600000087.mm.1	0.0	0.745392
TC1500000140.mm.1	NR_030602	Mir449b	microRNA 449b	113037419	113037498	TC1300001280.mm.1	0.0	0.745696
TC1500000141.mm.1	NM_146878	Olfr30	olfactory receptor 30	58454915	58455980	TC1100002818.mm.1	0.0	0.745788
TC1500000145.mm.1	ENSMUST00000103982	SNORA43	Small nucleolar RNA SNORA43	56897625	56897757	TC0400002711.mm.1	0.2	0.745986
TC1500000165.mm.1	NM_001168679	Tspan8	tetraspanin 8	115817283	115849893	TC1000001333.mm.1	0.1	0.746097
TC1500000174.mm.1	NM_008853	Pja1	praja1, RING-H2 motif containing	99465734	99471273	TC0X00002701.mm.1	0.0	0.746099
TC1500000175.mm.1	ENSMUST00000104195	Gm22659	predicted gene, 22659	46562974	46563103	TC0900000566.mm.1	0.0	0.746283
TC1500000199.mm.1	ENSMUST00000083384	Gm24099	predicted gene, 24099	112590772	112590878	TC0400003291.mm.1	0.0	0.746463
TC1500000201.mm.1	ENSMUST00000157840	Gm24745	predicted gene, 24745	107136974	107137058	TC1000001259.mm.1	0.0	0.746493
TC1500000207.mm.1	ENSMUST00000184268	AC11298	N/A	117561230	117561339	TC0100001056.mm.1	0.0	0.746509
TC1500000235.mm.1	ENSMUST00000184396	AC14485	N/A	40684181	40684290	TC0Y00000130.mm.1	0.0	0.746509
TC1500000261.mm.1	ENSMUST00000103869	AC14485	N/A	40688738	40688847	TC0Y00000131.mm.1	0.0	0.746509
TC1500000262.mm.1	ENSMUST00000179691	Gm24755	predicted gene, 24755	60369054	60369163	TC1600001817.mm.1	0.0	0.746509
TC1500000264.mm.1	NM_001033209	Xylb	xylulokinase homolog (H. influenzae)	119357381	119393797	TC0900001578.mm.1	0.1	0.746757
TC1500000278.mm.1	NM_001177504	Gm6588	predicted gene 6588	112449426	112451738	TC0500001183.mm.1	0.0	0.746761
TC1500000280.mm.1	ENSMUST00000183415	AC11398	N/A	33260716	33260820	TC0300001810.mm.1	0.0	0.746767
TC1500000287.mm.1	NR_039586	Mir5125	microRNA 5125	48219730	48301462	TC1200001697.mm.1	0.1	0.746836
TC1500000289.mm.1	ENSMUST00000104213	n-R5s82	nuclear encoded rRNA 5S 82	37026399	37026507	TC0900000354.mm.1	0.0	0.747356
TC1500000296.mm.1	NM_001081094	Znhit6	zinc finger, HIT type 6	145576208	145605245	TC0300001478.mm.1	0.0	0.747443
TC1500000298.mm.1	NM_174990	Gimap4	GTPase, IMAP family member 4	48684549	48692062	TC0600000566.mm.1	-0.1	0.747471
TC1500000299.mm.1	ENSMUST00000179454	Gm23139	predicted gene, 23139	6151217	6151348	TC1500001162.mm.1	0.0	0.747661
TC1500000301.mm.1	ENSMUST00000058103	Gm5436	predicted pseudogene 5436	84258332	84258973	TC1200002074.mm.1	-0.1	0.747825
TC1500000317.mm.1	NCBI_Gene:628098:p	Ighv5-1	Ighv5-12-4 immunoglobulin heavy variable 5-12-	113762251	113762544	TC1200002565.mm.1	0.1	0.747948
TC1500000329.mm.1	ENSMUST00000175422	Gm22994	predicted gene, 22994	129282865	129282946	TC0400003589.mm.1	-0.1	0.748063
TC1500000339.mm.1	NM_177135	D830030	RIKEN cDNA D830030K20 gene	3208493	3234351	TC1400000004.mm.1	0.0	0.748143
TC1500000344.mm.1	NM_011756	Zfp36	zinc finger protein 36	28376784	28379255	TC0700002696.mm.1	-0.1	0.748191
TC1500000349.mm.1	ENSMUST00000182991	Gm4575	predicted gene 4575	91428883	91429884	TC0600001085.mm.1	0.1	0.74828
TC1500000352.mm.1	ENSMUST00000101958	Gm23940	predicted gene, 23940	3490309	3490413	TC1900000012.mm.1	0.0	0.748343
TC1500000353.mm.1	NM_146934	Olfr46	olfactory receptor 46	140601340	140611124	TC0700002015.mm.1	0.0	0.748377
TC1500000355.mm.1	NM_201360	Cyp2d12	cytochrome P450, family 2, subfamily d, polypep	82555098	82559413	TC1500000760.mm.1	0.0	0.748535
TC1500000357.mm.1	NM_001099330	Scgb1b3	secretoglobin, family 1B, member 30	34095431	34100837	TC0700000629.mm.1	0.0	0.748579
TC1500000358.mm.1	NM_145965	Gphn	gephyrin	78226655	78684772	TC1200000700.mm.1	0.1	0.748585
TC1500000365.mm.1	ENSMUST00000082955	Gm24200	predicted gene, 24200	94284496	94284652	TC0900001179.mm.1	0.0	0.748659
TC1500000366.mm.1	ENSMUST00000157862	Gm26045	predicted gene, 26045	32023344	32023440	TC1400000335.mm.1	0.0	0.748701
TC1500000368.mm.1	ENSMUST00000178790	Gm24655	predicted gene, 24655	23166865	23166971	TC1000001869.mm.1	-0.1	0.748782
TC1500000380.mm.1	NM_025753	Tmem239	transmembrane 239	130406478	130407899	TC0200001981.mm.1	0.0	0.748835
TC1500000389.mm.1	NM_010237	Frk	fyn-related kinase	34483399	34611232	TC1000000301.mm.1	0.0	0.748973
TC1500000395.mm.1	ENSMUST00000117854	Gm13296	predicted gene 13296	11420222	11421236	TC0200000218.mm.1	0.0	0.74902
TC1500000407.mm.1	ENSMUST00000082794	Gm25851	predicted gene, 25851	58357952	58358058	TC0X00002284.mm.1	0.0	0.749512
TC1500000410.mm.1	NM_173733	Suox	sulfite oxidase	128669887	128673918	TC1000003158.mm.1	0.0	0.749602
TC1500000417.mm.1	ENSMUST00000072887	Olfr664	olfactory receptor 664	104733385	104734362	TC0700003953.mm.1	0.0	0.74975
TC1500000423.mm.1	ENSMUST00000116985	Gm25509	predicted gene, 25509	72899882	72899987	TC1800001572.mm.1	0.0	0.749764
TC1500000428.mm.1	NM_146952	Olfr522	olfactory receptor 522	140161939	140163014	TC0700004496.mm.1	0.0	0.749808
TC1500000433.mm.1	ENSMUST00000168877	Gm17657	predicted gene, 17657	29519281	29519790	TC1700001786.mm.1	0.0	0.749956
TC1500000439.mm.1	ENSMUST00000083959	n-R5s15	nuclear encoded rRNA 5S 151	16471813	16471931	TC0700000229.mm.1	-0.2	0.750058
TC1500000441.mm.1	NM_009434	Phlda2	pleckstrin homology-like domain, family A, mem	143501545	143502541	TC0700004586.mm.1	0.0	0.750281
TC1500000442.mm.1	NM_029497	Urb1	URB1 ribosome biogenesis 1 homolog (S. cerevis	90751527	90810413	TC1600002056.mm.1	0.0	0.750395
TC1500000453.mm.1	ENSMUST00000055830	4930500	RIKEN cDNA 4930500M09 gene	170214860	170215556	TC0100001566.mm.1	0.0	0.750494
TC1500000462.mm.1	NM_177570	Slfnl1	schlafen like 1	120532231	120536661	TC0400001352.mm.1	0.0	0.750552
TC1500000471.mm.1	ENSMUST00000182596	Gm5732	predicted gene 5732	33402819	33403825	TC0700000613.mm.1	0.0	0.750681
TC1500000474.mm.1	NM_009056	Rfx2	regulatory factor X, 2 (influences HLA class II	56775897	56831013	TC1700002337.mm.1	0.0	0.750785
TC1500000475.mm.1	NM_001033400	Gm806	predicted gene 806	50467307	50475355	TC1300000588.mm.1	0.0	0.750825
TC1500000480.mm.1	ENSMUST00000158149	Gm26036	predicted gene, 26036	154134030	154134173	TC0400002040.mm.1	0.0	0.750964
TC1500000498.mm.1	NM_001145969	Rwdd2a	RWD domain containing 2A	86571988	86574899	TC0900001115.mm.1	0.0	0.751311
TC1500000499.mm.1	ENSMUST00000175601	Gm26119	predicted gene, 26119	8698253	8698356	TC1800000959.mm.1	0.0	0.751589
TC1500000509.mm.1	NM_177673	Cep104	centrosomal protein 104	153975194	154008732	TC0400002035.mm.1	0.0	0.751604
TC1500000524.mm.1	ENSMUST00000104063	Gm26074	predicted gene, 26074	43833683	43833811	TC1600001634.mm.1	0.0	0.751651
TC1500000525.mm.1	NM_173753	Fnip1	folliculin interacting protein 1	54438179	54518241	TC1100000625.mm.1	0.0	0.752057
TC1500000526.mm.1	ENSMUST00000185037	SCARNA1	small Cajal body-specific RNA 17	156964158	156964293	TC0200005007.mm.1	0.0	0.752163
TC1500000528.mm.1	XR_032520	Gm10021	predicted gene 10021	5607620	5813031	TC1400002838.mm.1	0.0	0.752167
TC1500000543.mm.1	ENSMUST00000158879	Gm23475	predicted gene, 23475	58143208	58143269	TC1500001569.mm.1	0.0	0.752274
TC1500000557.mm.1	ENSMUST00000122544	Gm22106	predicted gene, 22106	73729164	73729290	TC1500000525.mm.1	0.0	0.752493
TC1500000562.mm.1	NM_199310	Ccdc32	coiled-coil domain containing 32	119017779	119029393	TC0200004422.mm.1	0.0	0.752505

TC1500000565.mm.1	NM_207683	Pik3c2g	phosphatidylinositol 3-kinase, C2 domain contai	139715859	139969284	TC0600001648.mm.1	0.0	0.752691
TC1500000566.mm.1	NM_009000	Rab24	RAB24, member RAS oncogene family	55319223	55321980	TC1300002052.mm.1	0.0	0.752746
TC1500000567.mm.1	NCBI_Gene:629919:p	Ighv8-4	immunoglobulin heavy variable V8-4	115024026	115024319	TC1200002480.mm.1	0.0	0.752877
TC1500000570.mm.1	ENSMUST00000157250	Gm26104	predicted gene, 26104	176700617	176700724	TC0100001661.mm.1	0.0	0.753053
TC1500000571.mm.1	ENSMUST00000122380	Gm8061	predicted gene 8061	139358468	139359257	TC0X00001369.mm.1	0.0	0.753149
TC1500000580.mm.1	NM_001045523	Bahd1	bromo adjacent homology domain containing 1	118900377	118924528	TC0200001750.mm.1	0.0	0.753196
TC1500000586.mm.1	ENSMUST00000158155	Gm22447	predicted gene, 22447	21703175	21703266	TC0800001852.mm.1	0.0	0.753385
TC1500000587.mm.1	uc029wod.1	Mir1196	microRNA 1196 (Mir1196), microRNA.	121943060	121953464	TC0700004220.mm.1	-0.1	0.753396
TC1500000593.mm.1	NM_145211	Oas1a	2-5 oligoadenylate synthetase 1A	120896256	120907525	TC0500003181.mm.1	0.0	0.753591
TC1500000596.mm.1	ENSMUST00000103770	Gm24935	predicted gene, 24935	87456778	87456887	TC1300000994.mm.1	0.0	0.753706
TC1500000610.mm.1	NM_028790	Acot12	acyl-CoA thioesterase 12	91741512	91786148	TC1300001028.mm.1	0.0	0.753866
TC1500000612.mm.1	ENSMUST00000104502	Gm25232	predicted gene, 25232	48572253	48572384	TC1300001945.mm.1	0.0	0.754033
TC1500000613.mm.1	ENSMUST00000175282	Gm25304	predicted gene, 25304	122305544	122305798	TC0600003063.mm.1	0.0	0.754056
TC1500000614.mm.1	ENSMUST00000083289	Gm25792	predicted gene, 25792	33293676	33293775	TC0100000212.mm.1	0.0	0.754215
TC1500000618.mm.1	ENSMUST00000169023	Gm5799	predicted gene 5799	43543576	43551213	TC1400000443.mm.1	0.0	0.754239
TC1500000641.mm.1	ENSMUST00000182724	Gm9149	predicted gene 9149	32604815	32605821	TC0700000601.mm.1	0.0	0.754708
TC1500000649.mm.1	ENSMUST00000175274	Gm22463	predicted gene, 22463	5644645	5644745	TC0100001918.mm.1	0.1	0.754795
TC1500000655.mm.1	ENSMUST00000175374	Gm25972	predicted gene, 25972	84150055	84150155	TC0200001215.mm.1	0.1	0.754795
TC1500000658.mm.1	ENSMUST00000175281	Gm22547	predicted gene, 22547	11154337	11154437	TC0300000076.mm.1	0.1	0.754795
TC1500000659.mm.1	ENSMUST00000175001	Gm23976	predicted gene, 23976	4305193	4305293	TC0300001597.mm.1	0.1	0.754795
TC1500000662.mm.1	ENSMUST00000178407	Gm26386	predicted gene, 26386	24143368	24143468	TC0600000198.mm.1	0.1	0.754795
TC1500000665.mm.1	ENSMUST00000178981	Gm25458	predicted gene, 25458	55308805	55308905	TC0600002328.mm.1	0.1	0.754795
TC1500000666.mm.1	ENSMUST00000175618	Gm23292	predicted gene, 23292	36302515	36302615	TC0700000675.mm.1	0.1	0.754795
TC1500000667.mm.1	ENSMUST00000175466	Gm22414	predicted gene, 22414	18017252	18017352	TC0700002448.mm.1	0.1	0.754795
TC1500000676.mm.1	ENSMUST00000178119	Gm23646	predicted gene, 23646	107840957	107841057	TC0800001280.mm.1	0.1	0.754795
TC1500000677.mm.1	ENSMUST00000179444	Gm22825	predicted gene, 22825	107842451	107842551	TC0800001281.mm.1	0.1	0.754795
TC1500000678.mm.1	ENSMUST00000174944	Gm26241	predicted gene, 26241	44547974	44548074	TC0800002136.mm.1	0.1	0.754795
TC1500000679.mm.1	ENSMUST00000175588	Gm24973	predicted gene, 24973	92989095	92989195	TC0X00002626.mm.1	0.1	0.754795
TC1500000680.mm.1	ENSMUST00000175297	Gm22913	predicted gene, 22913	96164331	96164431	TC1000001175.mm.1	0.1	0.754795
TC1500000693.mm.1	ENSMUST00000175556	Gm25084	predicted gene, 25084	22204575	22204675	TC1300001587.mm.1	0.1	0.754795
TC1500000696.mm.1	ENSMUST00000175306	Gm23282	predicted gene, 23282	22212419	22212519	TC1300001588.mm.1	0.1	0.754795
TC1500000698.mm.1	ENSMUST00000178350	Gm24302	predicted gene, 24302	12695124	12695224	TC1500000109.mm.1	0.1	0.754795
TC1500000704.mm.1	ENSMUST00000178305	Gm24643	predicted gene, 24643	89888952	89889052	TC1500002062.mm.1	0.1	0.754795
TC1500000715.mm.1	ENSMUST00000175533	Gm26235	predicted gene, 26235	18099560	18099660	TC1800000147.mm.1	0.1	0.754795
TC1500000721.mm.1	NM_145998	Hmx2	H6 homeobox 2	131548773	131556588	TC0700001926.mm.1	0.0	0.754981
TC1500000722.mm.1	NM_001167587	Gm5916	predicted gene 5916	36119934	36128779	TC0900002029.mm.1	0.0	0.755053
TC1500000724.mm.1	NM_010399	H2-T9	histocompatibility 2, T region locus 9	36037128	36042747	TC1700002822.mm.1	0.0	0.755346
TC1500000729.mm.1	ENSMUST00000121213	Gm12605	predicted gene 12605	89216864	89217816	TC0400000915.mm.1	0.0	0.755443
TC1500000734.mm.1	ENSMUST00000082064	Gm6316	predicted pseudogene 6316	69920471	69921491	TC1200001879.mm.1	0.0	0.75555
TC1500000735.mm.1	NM_011591	Timm17b	translocase of inner mitochondrial membrane 17	7899357	7908351	TC0X00000076.mm.1	0.0	0.755983
TC1500000742.mm.1	ENSMUST00000122752	n-R5s87	nuclear encoded rRNA 5S 87	96549594	96549709	TC0900002884.mm.1	0.0	0.756041
TC1500000749.mm.1	ENSMUST00000083907	Gm25257	predicted gene, 25257	154979339	154979448	TC0X00001573.mm.1	-0.1	0.756109
TC1500000751.mm.1	NM_139225	Defb10	defensin beta 10	21858901	21862011	TC0800000262.mm.1	0.0	0.756357
TC1500000756.mm.1	ENSMUST00000121582	Gm11438	predicted gene 11438	83681538	83681726	TC1100003402.mm.1	0.0	0.75651
TC1500000757.mm.1	NM_026225	Cog6	component of oligomeric golgi complex 6	52982123	53017223	TC0300001979.mm.1	0.0	0.756578
TC1500000758.mm.1	NM_001098841	Gm13278	predicted gene 13278	88790895	88792357	TC0400000898.mm.1	0.0	0.756821
TC1500000760.mm.1	NM_001145799	Ctla2a	cytotoxic T lymphocyte-associated protein 2 alp	60934155	60936625	TC1300002143.mm.1	0.1	0.756848
TC1500000767.mm.1	NR_035418	Mir669h	microRNA 669h	10518155	10518279	TC0200000205.mm.1	0.0	0.75703
TC1500000773.mm.1	NM_025829	Eif4e3	eukaryotic translation initiation factor 4E mem	99625135	99666771	TC0600003602.mm.1	0.0	0.757094
TC1500000775.mm.1	NM_053091	Cox4i2	cytochrome c oxidase subunit IV isoform 2	152754173	152765037	TC0200002300.mm.1	0.0	0.75747
TC1500000776.mm.1	ENSMUST00000082814	n-R5s28	nuclear encoded rRNA 5S 28	47848834	47848952	TC1700000925.mm.1	0.2	0.757511
TC1500000784.mm.1	NM_176848	Fbxo2	F-box protein 2	148160621	148166424	TC0400001926.mm.1	0.0	0.75769
TC1500000791.mm.1	ENSMUST00000179875	Gm22188	predicted gene, 22188	59871864	59871957	TC0700003327.mm.1	0.0	0.757756
TC1500000794.mm.1	NR_037244	Mir3083	microRNA 3083	26948056	26948119	TC1700001713.mm.1	0.0	0.757821
TC1500000797.mm.1	NM_027320	Ifi35	interferon-induced protein 35	101448407	101458701	TC1100001657.mm.1	0.0	0.758042
TC1500000801.mm.1	NM_025272	Atp6v0e	ATPase, H+ transporting, lysosomal V0 subunit E	26676396	26699647	TC1700000418.mm.1	0.1	0.758054
TC1500000819.mm.1	NM_020268	Klk1b27	kallikrein 1-related peptidase b27	44052290	44056712	TC0700000788.mm.1	0.0	0.75828
TC1500000825.mm.1	ENSMUST00000182028	Gm8919	predicted gene 8919	11658497	11659510	TC0300001654.mm.1	0.0	0.758364
TC1500000826.mm.1	NM_011527	Tal1	T cell acute lymphocytic leukemia 1	115056426	115071755	TC0400001216.mm.1	0.0	0.75864
TC1500000835.mm.1	ENSMUST00000158505	Gm24770	predicted gene, 24770	96945019	96945110	TC1400001147.mm.1	0.0	0.758827
TC1500000839.mm.1	ENSMUST00000175012	Gm26400	predicted gene, 26400	58938025	58938109	TC0400000649.mm.1	0.0	0.758915
TC1500000841.mm.1	NM_172595	Arl15	ADP-ribosylation factor-like 15	113794505	114157461	TC1300001298.mm.1	0.0	0.759173
TC1500000852.mm.1	NM_013605	Muc1	mucin 1, transmembrane	89229052	89233381	TC0300000753.mm.1	0.0	0.759648
TC1500000853.mm.1	NM_146541	Olfr136	olfactory receptor 1361	21658368	21659321	TC1300001553.mm.1	0.0	0.759694
TC1500000854.mm.1	NM_001272035	Slc33a1	solute carrier family 33 (acetyl-CoA transporte	63933507	63964768	TC0300002074.mm.1	0.0	0.759809
TC1500000857.mm.1	ENSMUST00000122517	Gm22960	predicted gene, 22960	46902589	46902692	TC1300000537.mm.1	0.0	0.759894
TC1500000860.mm.1	NM_001080971	Tubb1	tubulin, beta 1 class VI	174450595	174458380	TC0200002706.mm.1	-0.1	0.75998
TC1500000862.mm.1	ENSMUST00000118643	Gm14921	predicted gene 14921	112660521	112661428	TC0X00002873.mm.1	0.0	0.760026
TC1500000870.mm.1	ENSMUST00000170585	Traj55	T cell receptor alpha joining 55	54161439	54161501	TC1400000727.mm.1	0.0	0.760068
TC1500000886.mm.1	ENSMUST00000175449	Gm22875	predicted gene, 22875	24936831	24936956	TC0200000390.mm.1	0.0	0.760095
TC1500000891.mm.1	ENSMUST00000130812	Gm13113	predicted gene 13113	154837459	154839275	TC0400002057.mm.1	0.0	0.760145
TC1500000917.mm.1	ENSMUST00000097146	Gm10355	predicted gene 10355	101306561	101307079	TC0300002599.mm.1	0.0	0.760246
TC1500000921.mm.1	NM_026579	D10Wsu1	DNA segment, Chr 10, Wayne State University 1(	83360221	83368835	TC1000000940.mm.1	0.0	0.760369
TC1500000955.mm.1	ENSMUST00000082621	Gm24626	predicted gene, 24626	85829627	85829787	TC0500000783.mm.1	0.1	0.760715
TC1500000960.mm.1	NM_028242	Htatsf1	HIV TAT specific factor 1	57053570	57067183	TC0X00000530.mm.1	0.0	0.760739
TC1500000967.mm.1	NM_001145929	Thap3	THAP domain containing, apoptosis associated p	151982638	151988997	TC0400004083.mm.1	0.0	0.760795
TC1500000968.mm.1	XM_146296	Gm4889	predicted gene 4889	34326934	34328395	TC0800000406.mm.1	0.0	0.761083
TC1500000971.mm.1	ENSMUST00000104555	n-R5s16	nuclear encoded rRNA 5S 16	155543290	155543408	TC0X00001585.mm.1	0.0	0.76149

TC1500000974.mm.1	NM_183154	Zfyve1	zinc finger, FYVE domain containing 1	83546930	83597147	TC1200002049.mm.1	0.0	0.761507
TC1500000982.mm.1	ENSMUST00000182734	Gm26950	predicted gene, 26950	48220204	48220840	TC0700003066.mm.1	0.0	0.761557
TC1500001001.mm.1	ENSMUST00000177655	Gm22290	predicted gene, 22290	105250010	105250116	TC1400001199.mm.1	-0.1	0.761652
TC1500001002.mm.1	NM_025790	Acot13	acyl-CoA thioesterase 13	24817948	24831517	TC1300001669.mm.1	-0.1	0.761674
TC1500001005.mm.1	ENSMUST00000158840	Gm23702	predicted gene, 23702	34960019	34960148	TC0900000325.mm.1	0.0	0.761746
TC1500001017.mm.1	NM_173453	Tmem11	transmembrane protein 11	60864452	60879272	TC1100002899.mm.1	0.0	0.76177
TC1500001019.mm.1	NM_024211	Slc25a1	solute carrier family 25 (mitochondrial carrier	70644019	70647479	TC1100003106.mm.1	0.0	0.762048
TC1500001022.mm.1	ENSMUST00000169844	Gm2959	predicted gene 2959	42411451	42414526	TC1400000426.mm.1	0.0	0.762154
TC1500001023.mm.1	ENSMUST00000099956	Gm8055	predicted pseudogene 8055	40011866	40012873	TC1000000342.mm.1	0.0	0.762164
TC1500001024.mm.1	NM_133658	Ercc3	excision repair cross-complementing rodent repa	32240300	32270151	TC1800000259.mm.1	-0.1	0.762208
TC1500001040.mm.1	ENSMUST00000116926	Gm25171	predicted gene, 25171	103260883	103261003	TC0700003882.mm.1	0.1	0.762633
TC1500001041.mm.1	ENSMUST00000116684	Gm25110	predicted gene, 25110	84156757	84156877	TC0800000949.mm.1	0.1	0.762633
TC1500001046.mm.1	ENSMUST00000116716	Gm25775	predicted gene, 25775	3099386	3099506	TC0800001606.mm.1	0.1	0.762633
TC1500001051.mm.1	ENSMUST00000116737	Gm24795	predicted gene, 24795	39455015	39455135	TC1600000569.mm.1	0.1	0.762633
TC1500001061.mm.1	ENSMUST00000104280	Gm26416	predicted gene, 26416	31194205	31194338	TC1500001319.mm.1	0.0	0.762634
TC1500001065.mm.1	ENSMUST00000182243	Gm4217	predicted gene 4217	84866317	84867318	TC1500000794.mm.1	0.0	0.762979
TC1500001067.mm.1	NM_172279	Mark4	MAP/microtubule affinity-regulating kinase 4	19426075	19458494	TC0700002483.mm.1	0.0	0.763119
TC1500001068.mm.1	XM_003084736	Srcap	Snf2-related CREBBP activator protein	127511983	127567054	TC0700001851.mm.1	0.0	0.763163
TC1500001069.mm.1	ENSMUST00000177616	Gm21905	predicted gene, 21905	67927261	67946421	TC0500002533.mm.1	0.0	0.763436
TC1500001072.mm.1	NM_025387	Tmem14c	transmembrane protein 14C	41016250	41022582	TC1300000463.mm.1	0.0	0.764284
TC1500001084.mm.1	NM_010858	Myl4	myosin, light polypeptide 4	104550663	104595753	TC1100001728.mm.1	0.0	0.764324
TC1500001085.mm.1	ENSMUST00000082614	n-R5s65	nuclear encoded rRNA 5S 65	90801619	90801735	TC1200000936.mm.1	0.1	0.764517
TC1500001088.mm.1	ENSMUST00000178089	Gm25244	predicted gene, 25244	90997862	90997993	TC0400003041.mm.1	0.0	0.764737
TC1500001089.mm.1	ENSMUST00000116826	Gm25316	predicted gene, 25316	10499966	10500083	TC0200000166.mm.1	0.0	0.764853
TC1500001093.mm.1	NM_001198998	Vdac3	voltage-dependent anion channel 3	22577075	22593813	TC0800001871.mm.1	-0.1	0.765
TC1500001095.mm.1	NM_001011739	Olfr885	olfactory receptor 885	38061322	38062251	TC0900000383.mm.1	0.0	0.765561
TC1500001101.mm.1	XR_141059	Gm20255	predicted gene, 20255	83997831	84000922	TC1100001274.mm.1	0.0	0.765739
TC1500001103.mm.1	ENSMUST00000082859	Gm24356	predicted gene, 24356	28123254	28123359	TC0700000485.mm.1	0.0	0.766076
TC1500001118.mm.1	NM_146664	Olfr734	olfactory receptor 734	50319836	50320868	TC1400001981.mm.1	0.0	0.766159
TC1500001119.mm.1	ENSMUST00000179604	Gm24957	predicted gene, 24957	112522529	112522660	TC0900001496.mm.1	0.0	0.766229
TC1500001120.mm.1	NM_001025381	Gpr17	G protein-coupled receptor 17	31942997	31949636	TC1800001119.mm.1	0.0	0.766317
TC1500001123.mm.1	ENSMUST00000167127	Gm4482	predicted gene 4482	122792581	122792775	TC0600003076.mm.1	0.0	0.766506
TC1500001127.mm.1	NM_178614	Samm50	sorting and assembly machinery component 50 h	84192233	84214702	TC1500000784.mm.1	0.0	0.766588
TC1500001128.mm.1	XM_001473314	Gm20818	predicted gene, 20818	69017824	69018507	TC0Y00000186.mm.1	0.0	0.766686
TC1500001131.mm.1	XM_003689123	Gm21163	predicted gene, 21163	76575727	76576410	TC0Y00000477.mm.1	0.0	0.766686
TC1500001133.mm.1	ENSMUST00000083696	Gm24256	predicted gene, 24256	48619312	48619395	TC1000002119.mm.1	0.0	0.766731
TC1500001142.mm.1	NM_008905	Ppfibp2	PTPRF interacting protein, binding protein 2 (l	107595051	107748583	TC0700001581.mm.1	0.0	0.766734
TC1500001143.mm.1	ENSMUST00000116877	Gm23880	predicted gene, 23880	81586133	81586186	TC1500000722.mm.1	0.0	0.766908
TC1500001145.mm.1	ENSMUST00000178264	Gm21785	predicted gene, 21785	85453833	85454516	TC0Y00000525.mm.1	0.0	0.767105
TC1500001153.mm.1	ENSMUST00000177729	Gm21881	predicted gene, 21881	85814226	85814909	TC0Y00000529.mm.1	0.0	0.767105
TC1500001155.mm.1	ENSMUST00000104481	Gm24255	predicted gene, 24255	25238588	25238715	TC1100002391.mm.1	0.0	0.767107
TC1500001162.mm.1	ENSMUST00000104495	Gm22494	predicted gene, 22494	62611657	62611784	TC0700000964.mm.1	0.0	0.767232
TC1500001181.mm.1	ENSMUST00000088299	Atp5l	ATP synthase, H+ transporting, mitochondrial F0	24581458	24581879	TC0500002086.mm.1	0.1	0.767419
TC1500001189.mm.1	NM_172529	Gnptg	N-acetylglucosamine-1-phosphotransferase, gam	25233331	25240124	TC1700001655.mm.1	0.0	0.767472
TC1500001192.mm.1	NM_028261	Tmem173	transmembrane protein 173	35733678	35740554	TC1800001181.mm.1	-0.1	0.767507
TC1500001202.mm.1	ENSMUST00000104008	Gm22267	predicted gene, 22267	24894670	24894800	TC0600001948.mm.1	0.0	0.767642
TC1500001206.mm.1	NM_001025086	Rhox7	reproductive homeobox 7	37831686	37841275	TC0X00000356.mm.1	0.0	0.767841
TC1500001214.mm.1	NM_022007	Fxyd7	FXYD domain-containing ion transport regulator	31042514	31051467	TC0700002787.mm.1	0.0	0.768108
TC1500001215.mm.1	ENSMUST00000082725	Gm26131	predicted gene, 26131	22861936	22862045	TC0X00000235.mm.1	0.0	0.768708
TC1500001220.mm.1	ENSMUST00000104156	Gm24326	predicted gene, 24326	27631803	27631927	TC1200000231.mm.1	0.0	0.768785
TC1500001226.mm.1	ENSMUST00000082457	Gm23625	predicted gene, 23625	65989640	65989739	TC0600002410.mm.1	0.0	0.768809
TC1500001230.mm.1	NM_138743	Smim11	small integral membrane protein 11	92301286	92313041	TC1600001025.mm.1	0.0	0.769141
TC1500001234.mm.1	ENSMUST00000179812	Gm23561	predicted gene, 23561	21326548	21326639	TC0800001843.mm.1	0.0	0.769479
TC1500001248.mm.1	NM_001267591	Cant1	calcium activated nucleotidase 1	118406289	118419118	TC1100004160.mm.1	0.0	0.769498
TC1500001251.mm.1	ENSMUST00000157151	Gm22322	predicted gene, 22322	132787225	132787335	TC0300002969.mm.1	0.0	0.769562
TC1500001252.mm.1	NM_017464	Nedd9	neural precursor cell expressed, developmentall	41309916	41487360	TC1300001861.mm.1	0.1	0.769656
TC1500001259.mm.1	ENSMUST00000154873	Tead3	TEA domain family member 3	28331671	28350805	TC1700001755.mm.1	0.0	0.769705
TC1500001262.mm.1	NM_008457	Klk1b8	kallikrein 1-related peptidase b8	43950664	43954941	TC0700000783.mm.1	0.0	0.769859
TC1500001264.mm.1	ENSMUST00000103981	Gm25396	predicted gene, 25396	31466235	31466367	TC1800001112.mm.1	0.0	0.770606
TC1500001294.mm.1	ENSMUST00000158389	Gm25520	predicted gene, 25520	75101409	75101526	TC0X00000736.mm.1	0.0	0.770689
TC1500001295.mm.1	ENSMUST00000177836	Gm25615	predicted gene, 25615	59864240	59864333	TC0700003324.mm.1	0.0	0.770722
TC1500001299.mm.1	NM_146182	Klc3	kinesin light chain 3	19394437	19404104	TC0700002481.mm.1	0.0	0.77103
TC1500001300.mm.1	NM_001039122	Defb25	defensin beta 25	152622356	152623053	TC0200004908.mm.1	0.0	0.771073
TC1500001313.mm.1	NM_020258	Slc37a2	solute carrier family 37 (glycerol-3-phosphate	37229149	37255738	TC0900002044.mm.1	-0.1	0.771218
TC1500001315.mm.1	ENSMUST00000119189	Gm12673	predicted gene 12673	96170207	96170385	TC0400003090.mm.1	0.0	0.771339
TC1500001316.mm.1	NM_146803	Olfr906	olfactory receptor 906	38488031	38488966	TC0900000403.mm.1	0.0	0.771373
TC1500001319.mm.1	ENSMUST00000184773	mmu-mir	mmu-mir-8117	50252762	50252868	TC0500000516.mm.1	0.0	0.771433
TC1500001322.mm.1	ENSMUST00000104432	n-R5s9	nuclear encoded rRNA 5S 9	83345743	83345859	TC0X00000812.mm.1	0.0	0.771834
TC1500001323.mm.1	ENSMUST00000082647	Gm25133	predicted gene, 25133	96588827	96588956	TC1400001146.mm.1	-0.1	0.772015
TC1500001326.mm.1	ENSMUST00000105038	Gm3550	predicted gene 3550	34736359	34738014	TC1800000293.mm.1	0.0	0.772263
TC1500001329.mm.1	NM_019443	Ndufa1	NADH dehydrogenase (ubiquinone) 1 alpha subc	37187588	37191238	TC0X00002061.mm.1	0.0	0.772547
TC1500001363.mm.1	NM_183032	Rnase9	ribonuclease, RNase A family, 9 (non-active)	51038459	51041869	TC1400001995.mm.1	0.0	0.772622
TC1500001367.mm.1	NM_001110330	Fiz1	Flt3 interacting zinc finger protein 1	5007056	5014728	TC0700002181.mm.1	0.0	0.772765
TC1500001370.mm.1	ENSMUST00000166227	Gm17651	predicted gene, 17651	97673031	97674694	TC0300002542.mm.1	-0.1	0.772855
TC1500001372.mm.1	NM_001290148	Snx29	sorting nexin 29 (Snx29), transcript variant 2,	0	0	TSUnmapped0000002	-0.1	0.772919
TC1500001376.mm.1	ENSMUST00000082907	Gm26205	predicted gene, 26205	121205010	121205143	TC0500001354.mm.1	-0.1	0.773035
TC1500001379.mm.1	ENSMUST00000121180	Gm14993	predicted gene 14993	136367249	136367412	TC0X00003028.mm.1	0.0	0.773086
TC1500001384.mm.1	NM_027829	Izumo4	IZUMO family member 4	80702693	80705382	TC1000000869.mm.1	0.0	0.773137

TC1500001385.mm.1	NM_008744	Ntn1	netrin 1	68209364	68400823	TC1100003013.mm.1	0.0	0.77351
TC1500001402.mm.1	XM_001472859	Gm20810	predicted gene, 20810	28733498	28734181	TC0Y00000086.mm.1	0.0	0.773514
TC1500001403.mm.1	NM_020044	Lat2	linker for activation of T cells family, member	134600103	134615025	TC0500003376.mm.1	0.0	0.773515
TC1500001424.mm.1	NM_001168508	Mapk14	mitogen-activated protein kinase 14	28691342	28748405	TC1700000484.mm.1	0.0	0.773636
TC1500001429.mm.1	XR_105791	Gm5965	predicted gene 5965	88777835	88778546	TC1600000965.mm.1	0.0	0.773707
TC1500001450.mm.1	NR_028560	Scarna1	small Cajal body-specific RNA 17	74778391	74778469	TC1800001590.mm.1	-0.2	0.773887
TC1500001458.mm.1	NR_035449	Mir1928	microRNA 1928	74206554	74206620	TC0100002581.mm.1	0.0	0.774077
TC1500001461.mm.1	ENSMUST00000104583	Gm22374	predicted gene, 22374	129113295	129113426	TC0800003212.mm.1	0.0	0.774188
TC1500001469.mm.1	ENSMUST00000118148	Gm13592	predicted gene 13592	65277417	65278426	TC0200000948.mm.1	0.0	0.774193
TC1500001472.mm.1	ENSMUST00000177910	n-R5s10	nuclear encoded rRNA 5S 101	123540493	123540611	TC0800003105.mm.1	0.1	0.774583
TC1500001474.mm.1	ENSMUST00000178297	n-R5s11	nuclear encoded rRNA 5S 114	123562595	123562713	TC0800003118.mm.1	0.1	0.774583
TC1500001476.mm.1	ENSMUST00000178861	n-R5s11	nuclear encoded rRNA 5S 119	123571001	123571119	TC0800003123.mm.1	0.1	0.774583
TC1500001488.mm.1	ENSMUST00000180122	n-R5s12	nuclear encoded rRNA 5S 129	123587959	123588077	TC0800003133.mm.1	0.1	0.774583
TC1500001504.mm.1	ENSMUST00000180280	n-R5s13	nuclear encoded rRNA 5S 131	123591371	123591489	TC0800003135.mm.1	0.1	0.774583
TC1500001506.mm.1	ENSMUST00000175591	Gm22639	predicted gene, 22639	44865307	44865431	TC0400000476.mm.1	0.0	0.774698
TC1500001523.mm.1	OTTMUST00000092478	Cic	---	25267699	25294159	TC0700000410.mm.1	0.0	0.77473
TC1500001528.mm.1	ENSMUST00000175372	Gm22702	predicted gene, 22702	92024345	92024413	TC1100003544.mm.1	0.0	0.774743
TC1500001529.mm.1	NM_013923	Rnf19a	ring finger protein 19A	36239934	36283147	TC1500001370.mm.1	0.0	0.774877
TC1500001533.mm.1	ENSMUST00000174930	Gm24103	predicted gene, 24103	111041948	111042024	TC0800002937.mm.1	0.1	0.775036
TC1500001544.mm.1	ENSMUST00000182270	Gm27037	predicted gene, 27037	89943353	89944312	TC1800001736.mm.1	0.0	0.775066
TC1500001551.mm.1	ENSMUST00000122557	Gm23792	predicted gene, 23792	33981410	33981502	TC0100002145.mm.1	0.0	0.775111
TC1500001552.mm.1	NM_013718	Trappc3	trafficking protein particle complex 3	126262325	126275883	TC0400001458.mm.1	0.0	0.775205
TC1500001560.mm.1	ENSMUST00000104048	Gm22439	predicted gene, 22439	104578945	104579076	TC0200001563.mm.1	0.0	0.775328
TC1500001566.mm.1	NM_024210	2310033	RIKEN cDNA 2310033P09 gene	59208321	59210738	TC1100000718.mm.1	0.0	0.775473
TC1500001569.mm.1	NR_039563	Mir5104	microRNA 5104	7836381	7836474	TC1000000057.mm.1	0.1	0.775477
TC1500001581.mm.1	NM_008925	Prkcsh	protein kinase C substrate 80K-H	22003018	22014222	TC0900000210.mm.1	0.0	0.775525
TC1500001596.mm.1	NM_028372	Mblac2	metallo-beta-lactamase domain containing 2	81711417	81753275	TC1300000967.mm.1	0.0	0.775821
TC1500001600.mm.1	ENSMUST00000103902	Gm22117	predicted gene, 22117	60211185	60211251	TC1000002231.mm.1	0.0	0.776058
TC1500001606.mm.1	ENSMUST00000164420	Gm17131	predicted gene 17131	127878531	127882376	TC0500001490.mm.1	0.1	0.776134
TC1500001609.mm.1	NM_146370	Olfr47	olfactory receptor 47	43235578	43236636	TC0600000486.mm.1	0.0	0.776158
TC1500001613.mm.1	ENSMUST00000158771	Gm23027	predicted gene, 23027	76036459	76036616	TC1500000571.mm.1	0.0	0.776463
TC1500001642.mm.1	NM_145834	Il17c	interleukin 17C	122422020	122423639	TC0800001487.mm.1	0.0	0.776489
TC1500001645.mm.1	NM_198642	5031414	RIKEN cDNA 5031414D18 gene	75016027	75052532	TC1400001052.mm.1	-0.1	0.776672
TC1500001656.mm.1	ENSMUST00000181051	Gm2574	predicted pseudogene 2574	142962561	142963792	TC0300001453.mm.1	0.1	0.776825
TC1500001669.mm.1	ENSMUST00000184096	AC12417	N/A	121084609	121084706	TC0800003045.mm.1	0.0	0.776837
TC1500001673.mm.1	ENSMUST00000050914	LOC1010	uncharacterized LOC101055747	108940053	108940445	TC0300002758.mm.1	0.0	0.776938
TC1500001678.mm.1	NM_011337	Ccl3	chemokine (C-C motif) ligand 3	83647843	83649378	TC1100003401.mm.1	0.0	0.777096
TC1500001680.mm.1	NM_020293	Cldn9	claudin 9	23682584	23684026	TC1700001599.mm.1	0.0	0.777142
TC1500001684.mm.1	NM_018778	Cldn8	claudin 8	88560826	88563183	TC1600002005.mm.1	0.0	0.777604
TC1500001697.mm.1	ENSMUST00000180054	Gm24694	predicted gene, 24694	16013818	16013927	TC0300000101.mm.1	0.0	0.777783
TC1500001702.mm.1	ENSMUST00000184839	AC13259	N/A	5542752	5542861	TC0Y00000018.mm.1	0.0	0.777783
TC1500001704.mm.1	ENSMUST00000182698	Gm4398	predicted gene 4398	32791496	32792487	TC0700000604.mm.1	0.0	0.77794
TC1500001705.mm.1	ENSMUST00000178535	Gm26032	predicted gene, 26032	59741373	59741466	TC0700003295.mm.1	0.0	0.778036
TC1500001712.mm.1	ENSMUST00000179027	Gm22046	predicted gene, 22046	59748956	59749049	TC0700003298.mm.1	0.0	0.778036
TC1500001713.mm.1	ENSMUST00000180126	Gm25471	predicted gene, 25471	59761554	59761647	TC0700003303.mm.1	0.0	0.778036
TC1500001718.mm.1	ENSMUST00000178813	Gm25210	predicted gene, 25210	59769138	59769231	TC0700003306.mm.1	0.0	0.778036
TC1500001720.mm.1	NM_153504	Rnf183	ring finger protein 183	62427540	62435252	TC0400002788.mm.1	0.0	0.778288
TC1500001727.mm.1	ENSMUST00000178360	Gm14121	predicted gene 14121	150499466	150500845	TC0200004840.mm.1	0.0	0.778353
TC1500001728.mm.1	NM_133706	Tmem97	transmembrane protein 97	78541817	78550777	TC1100003300.mm.1	0.0	0.778495
TC1500001729.mm.1	ENSMUST00000133758	2610020	RIKEN cDNA 2610020H08 gene	119794006	119848943	TC0700001716.mm.1	0.0	0.778562
TC1500001730.mm.1	ENSMUST00000113255	Gm11115	predicted gene 11115	88154023	88154099	TC0500002709.mm.1	-0.1	0.778845
TC1500001733.mm.1	ENSMUST00000178645	AC13310	N/A	226405	229375	TC1_GL456211_rand	-0.1	0.779047
TC1500001736.mm.1	NM_023456	Npy	neuropeptide Y	49822710	49829507	TC0600000588.mm.1	0.0	0.77915
TC1500001743.mm.1	ENSMUST00000158057	Gm23999	predicted gene, 23999	29009696	29009799	TC1400001645.mm.1	0.0	0.779213
TC1500001744.mm.1	ENSMUST00000083861	Gm25513	predicted gene, 25513	55303420	55303581	TC0500002435.mm.1	0.0	0.779273
TC1500001746.mm.1	NM_008377	Lrig1	leucine-rich repeats and immunoglobulin-like do	94604529	94700158	TC0600002773.mm.1	0.0	0.779276
TC1500001754.mm.1	NM_030218	Misp	mitotic spindle positioning	79821021	79830490	TC1000000819.mm.1	0.0	0.779546
TC1500001760.mm.1	NM_146374	Olfr368	olfactory receptor 368	37331749	37332733	TC0200000685.mm.1	0.0	0.779725
TC1500001762.mm.1	XR_001595	Gm5946	predicted gene 5946	150220709	150228504	TC0X00003156.mm.1	0.0	0.779768
TC1500001768.mm.1	NM_027404	Bag5	BCL2-associated athanogene 5	111709488	111713257	TC1200002413.mm.1	0.0	0.779961
TC1500001780.mm.1	ENSMUST00000158639	Gm22889	predicted gene, 22889	127677670	127677727	TC0200001919.mm.1	0.0	0.780167
TC1500001782.mm.1	ENSMUST00000179031	Gm25598	predicted gene, 25598	15837549	15837655	TC1700001507.mm.1	0.1	0.780456
TC1500001785.mm.1	NM_153121	Lysmd1	LysM, putative peptidoglycan-binding, domain cc	95134088	95139525	TC0300000890.mm.1	0.0	0.780494
TC1500001798.mm.1	NM_001080979	Tead4	TEA domain family member 4	128224288	128300823	TC0600003196.mm.1	0.0	0.7806
TC1500001803.mm.1	ENSMUST00000175182	Gm24561	predicted gene, 24561	168178158	168178252	TC0200005210.mm.1	0.0	0.780662
TC1500001811.mm.1	ENSMUST00000103800	mmu-mir	mmu-mir-297a-1	10958437	10958512	TC0700002321.mm.1	0.0	0.780704
TC1500001824.mm.1	XM_001476172	Gm3159	predicted gene 3159	4397526	4406347	TC1400000024.mm.1	0.0	0.780765
TC1500001826.mm.1	ENSMUST00000083013	Gm23790	predicted gene, 23790	31163526	31163632	TC1000001951.mm.1	0.0	0.780775
TC1500001828.mm.1	NM_145359	Ubald1	UBA-like domain containing 1	4874778	4880315	TC1600001143.mm.1	0.0	0.780848
TC1500001831.mm.1	NM_001146000	Zfp710	zinc finger protein 710	80024814	80092751	TC0700001141.mm.1	0.0	0.780874
TC1500001833.mm.1	NM_021390	Sall1	sal-like 1 (Drosophila)	89027242	89044162	TC0800002665.mm.1	0.0	0.781014
TC1500001838.mm.1	NM_011390	Slc12a7	solute carrier family 12, member 7	73733094	73816743	TC1300000887.mm.1	0.0	0.781156
TC1500001849.mm.1	NM_183139	Pld6	phospholipase D family, member 6	59783893	59787657	TC1100002861.mm.1	0.0	0.781357
TC1500001853.mm.1	NR_039554	Mir3473	microRNA 3473b	41670739	41670793	TC1000000370.mm.1	0.0	0.781383
TC1500001859.mm.1	NR_039554	Mir3473	microRNA 3473b	0	0	TSUnmapped0000008	0.0	0.781383
TC1500001871.mm.1	ENSMUST00000082574	n-R5s96	nuclear encoded rRNA 5S 96	47719246	47719369	TC0800000557.mm.1	-0.1	0.781494
TC1500001878.mm.1	NM_016968	Olig1	oligodendrocyte transcription factor 1	91269769	91271939	TC1600000999.mm.1	0.0	0.781513
TC1500001880.mm.1	NM_001166742	Vmn1r11	vomeronasal 1 receptor 118	20911427	20912347	TC0700002531.mm.1	0.0	0.781594

TC1500001883.mm.1	ENSMUST00000181201	Gm7713	predicted gene 7713	59993886	59994892	TC1500001600.mm.1	0.0	0.781613
TC1500001891.mm.1	ENSMUST00000175576	Gm25470	predicted gene, 25470	15404981	15405091	TC0600000113.mm.1	0.0	0.781901
TC1500001896.mm.1	NM_007444	Amd2	S-adenosylmethionine decarboxylase 2	35708691	35711891	TC1000002003.mm.1	0.0	0.782389
TC1500001897.mm.1	ENSMUST00000082509	Gm26226	predicted gene, 26226	140918684	140918799	TC0400001771.mm.1	-0.1	0.782612
TC1500001898.mm.1	NM_133193	Il1rl2	interleukin 1 receptor-like 2	40324627	40365471	TC0100000297.mm.1	0.0	0.782865
TC1500001899.mm.1	OTTMUST00000025659	RP23-13	---	148068031	148068492	TC0400004010.mm.1	-0.1	0.782878
TC1500001900.mm.1	NCBI_Gene:640506:p	Ighv8-5	immunoglobulin heavy variable V8-5	115067560	115067996	TC1200002627.mm.1	-0.1	0.78288
TC1500001905.mm.1	NM_177771	Klhl18	kelch-like 18	110425926	110476694	TC0900003112.mm.1	0.0	0.782894
TC1500001919.mm.1	ENSMUST00000184108	AL66990	N/A	48644340	48644458	TC0X00000438.mm.1	0.0	0.782927
TC1500001923.mm.1	ENSMUST00000101995	Gm25823	predicted gene, 25823	59522156	59522233	TC0700003218.mm.1	0.0	0.783051
TC1500001927.mm.1	ENSMUST00000101832	Gm25647	predicted gene, 25647	59524028	59524105	TC0700003219.mm.1	0.0	0.783051
TC1500001930.mm.1	NM_001033342	Cdc42bp	CDC42 binding protein kinase gamma (DMPK-like	6306456	6325652	TC1900000112.mm.1	0.0	0.783114
TC1500001932.mm.1	ENSMUST00000175490	Gm25297	predicted gene, 25297	109320970	109321036	TC1200002367.mm.1	-0.1	0.783155
TC1500001939.mm.1	ENSMUST00000178609	Gm12396	predicted gene 12396	40775133	40775725	TC0400002448.mm.1	0.1	0.783252
TC1500001940.mm.1	ENSMUST00000179100	Gm24088	predicted gene, 24088	59410933	59411011	TC0700003161.mm.1	0.0	0.783383
TC1500001942.mm.1	NR_037306	Mir3471	microRNA 3471-2	3537090	3537191	TC0400000010.mm.1	0.1	0.783428
TC1500001944.mm.1	NR_037306	Mir3471	microRNA 3471-2	0	0	TSUnmapped0000012	0.1	0.783428
TC1500001945.mm.1	NM_198615	Mex3d	mex3 homolog D (C. elegans)	80380355	80387659	TC1000002498.mm.1	0.0	0.783515
TC1500001946.mm.1	NM_134078	Chmp7	charged multivesicular body protein 7	69716979	69732570	TC1400002327.mm.1	0.0	0.78371
TC1500001948.mm.1	NM_001082545	Stfa2	stefin A2	36403946	36408457	TC1600001574.mm.1	0.0	0.783743
TC1500001951.mm.1	NM_028157	Spata31	spermatogenesis associated 31 subfamily D, mer	59700083	59706197	TC1300002121.mm.1	0.0	0.784049
TC1500001957.mm.1	NM_009402	Pglyrp1	peptidoglycan recognition protein 1	18884680	18890441	TC0700000275.mm.1	0.0	0.784112
TC1500001963.mm.1	NM_172285	Plcg2	phospholipase C, gamma 2	117498291	117635142	TC0800001407.mm.1	-0.1	0.784331
TC1500001965.mm.1	ENSMUST00000083731	Gm22577	predicted gene, 22577	92962008	92962116	TC0300002417.mm.1	0.0	0.784691
TC1500001968.mm.1	ENSMUST00000104594	Gm24160	predicted gene, 24160	79513739	79513864	TC0100002641.mm.1	0.1	0.784766
TC1500001971.mm.1	XM_983617	Gm4943	predicted pseudogene 4943	22053504	22053935	TC1600000308.mm.1	0.0	0.784833
TC1500001973.mm.1	ENSMUST00000158053	Gm23666	predicted gene, 23666	53006408	53006523	TC0800000582.mm.1	0.0	0.785059
TC1500001975.mm.1	ENSMUST00000175476	Gm25246	predicted gene, 25246	13653381	13653449	TC0X00000170.mm.1	0.0	0.785694
TC1500001978.mm.1	NM_007880	Arid3a	AT rich interactive domain 3A (BRIGHT-like)	79927043	79955018	TC1000000829.mm.1	0.0	0.785834
TC1500001979.mm.1	ENSMUST00000104117	Gm22470	predicted gene, 22470	17034662	17034791	TC1800000145.mm.1	0.0	0.785873
TC1500001986.mm.1	ENSMUST00000175605	Gm26115	predicted gene, 26115	4215402	4215488	TC1900000910.mm.1	0.0	0.785909
TC1500002001.mm.1	NM_133916	Eif3b	eukaryotic translation initiation factor 3, sub	140419305	140443360	TC0500001692.mm.1	0.0	0.785965
TC1500002007.mm.1	NM_029070	Cldn26	claudin 26	8409276	8425136	TC1600001168.mm.1	0.0	0.786007
TC1500002010.mm.1	NR_029559	Mir149	microRNA 149	92850378	92850443	TC0100000917.mm.1	0.0	0.786035
TC1500002014.mm.1	NM_144872	Eml3	echinoderm microtubule associated protein like	8929675	8941582	TC1900000167.mm.1	0.0	0.786234
TC1500002038.mm.1	NM_022985	Zfand6	zinc finger, AN1-type domain 6	84615049	84689853	TC0700003658.mm.1	0.0	0.786252
TC1500002039.mm.1	NM_001001447	Zscan22	zinc finger and SCAN domain containing 22	12897815	12909083	TC0700000150.mm.1	0.0	0.786328
TC1500002050.mm.1	NM_026268	Dusp6	dual specificity phosphatase 6	99263231	99267489	TC1000001207.mm.1	0.0	0.786455
TC1500002052.mm.1	ENSMUST00000101881	Gm23692	predicted gene, 23692	94429073	94429232	TC1600001060.mm.1	0.0	0.786528
TC1500002062.mm.1	NM_022884	Bhmt2	betaine-homocysteine methyltransferase 2	93655720	93674302	TC1300002437.mm.1	0.0	0.786625
TC1500002063.mm.1	XM_001473811	Gm20824	predicted gene, 20824	8257892	8283913	TC0Y00000024.mm.1	0.0	0.786676
TC1500002069.mm.1	ENSMUST00000168137	5830462	RIKEN cDNA 5830462I19 gene	110372048	110375430	TC0900003109.mm.1	0.0	0.786756
TC1500002071.mm.1	ENSMUST00000178431	Gm24799	predicted gene, 24799	59409063	59409141	TC0700003160.mm.1	0.0	0.786881
TC1500002092.mm.1	NM_133256	Gsx2	GS homeobox 2	75075464	75077893	TC0500000707.mm.1	0.0	0.787523
TC1500002100.mm.1	NM_146223	Cplx3	complexin 3	57599992	57606281	TC0900002375.mm.1	0.0	0.787537
TC1500002110.mm.1	ENSMUST00000158233	Gm24723	predicted gene, 24723	20842535	20842666	TC0100002034.mm.1	0.0	0.787648
TC1500002112.mm.1	NM_027457	Tmem242	transmembrane protein 242	5410864	5440260	TC1700001366.mm.1	0.0	0.787858
TC1500002114.mm.1	NM_001177525	EU59904	expressed sequence EU599041	43214039	43226842	TC0700000755.mm.1	0.0	0.788076
TC1500002130.mm.1	NM_001277875	Tpm2	tropomyosin 2, beta	43513726	43523765	TC0400002529.mm.1	0.0	0.788079
TC1500002145.mm.1	NM_008269	Hoxb6	homeobox B6	96292476	96301569	TC1100001495.mm.1	0.0	0.788114
TC1500002147.mm.1	NM_026618	Coa3	cytochrome C oxidase assembly factor 3	101277968	101279114	TC1100003799.mm.1	0.0	0.788178
TC1500002154.mm.1	XR_104749	4930518	RIKEN cDNA 4930518I15 gene	156856615	156858069	TC0200005002.mm.1	0.0	0.788556
TC1500002155.mm.1	ENSMUST00000061991	Gm5763	predicted pseudogene 5763	142631483	142634015	TC0X00003106.mm.1	0.0	0.788587
TC1500002158.mm.1	ENSMUST00000158531	Gm23581	predicted gene, 23581	63508169	63508231	TC1800000651.mm.1	0.0	0.78877
TC1500002159.mm.1	ENSMUST00000175190	Gm22904	predicted gene, 22904	33062441	33062600	TC1200000285.mm.1	0.0	0.789311
TC1500002177.mm.1	NM_001081074	A1cf	APOBEC1 complementation factor	31868761	31949406	TC1900000461.mm.1	0.0	0.789391
TC1500002179.mm.1	ENSMUST00000135189	Gm16362	predicted gene 16362	176452627	176452840	TC0200005348.mm.1	0.0	0.790028
TC1500002181.mm.1	NM_023557	Slc44a4	solute carrier family 44, member 4	34914466	34930436	TC1700000651.mm.1	0.0	0.790141
TC1500002191.mm.1	NM_011867	Slc26a4	solute carrier family 26, member 4	31519819	31559969	TC1200001595.mm.1	0.0	0.79021
TC1500002199.mm.1	NM_001042489	Hvcn1	hydrogen voltage-gated channel 1	122206804	122242297	TC0500001382.mm.1	0.1	0.790338
TC1500002200.mm.1	ENSMUST00000082942	Gm23378	predicted gene, 23378	104001373	104001479	TC0X00002792.mm.1	0.0	0.790406
TC1500002203.mm.1	ENSMUST00000104436	Gm23834	predicted gene, 23834	137025684	137025812	TC0400001698.mm.1	0.0	0.790544
TC1500002204.mm.1	ENSMUST00000158645	Gm24551	predicted gene, 24551	149566194	149566285	TC0200004821.mm.1	0.0	0.79084
TC1500002205.mm.1	XR_140474	Gm9982	predicted gene 9982	178256103	178257301	TC0100001684.mm.1	0.0	0.79091
TC1500002206.mm.1	ENSMUST00000104009	Gm22268	predicted gene, 22268	76132541	76132671	TC1600001920.mm.1	0.0	0.791242
TC1500002210.mm.1	NM_009943	Cox6a2	cytochrome c oxidase subunit VIa polypeptide 2	128205435	128206366	TC0700004358.mm.1	0.0	0.791435
TC1500002215.mm.1	ENSMUST00000083766	Gm22827	predicted gene, 22827	112062505	112062611	TC0800001344.mm.1	0.0	0.791725
TC1500002219.mm.1	ENSMUST00000083308	Gm22294	predicted gene, 22294	17325315	17325418	TC0X00000184.mm.1	0.0	0.791834
TC1500002221.mm.1	NM_134002	Csnk1g2	casein kinase 1, gamma 2	80622780	80640771	TC1000000866.mm.1	-0.1	0.792039
TC1500002224.mm.1	ENSMUST00000104171	Gm25308	predicted gene, 25308	118077805	118077962	TC0200004405.mm.1	0.0	0.792083
TC1500002228.mm.1	XM_003688914	Gm3642	predicted gene 3642	6087295	6108665	TC1400002841.mm.1	0.0	0.792205
TC1500002233.mm.1	NM_026468	Atp5g2	ATP synthase, H+ transporting, mitochondrial F0	102662864	102671047	TC1500002299.mm.1	-0.1	0.792242
TC1500002238.mm.1	NM_021281	Ctss	cathepsin S	95526786	95556405	TC0300000903.mm.1	0.1	0.792267
TC1500002240.mm.1	NM_175109	Rps19bp	ribosomal protein S19 binding protein 1	80260614	80264306	TC1500001905.mm.1	0.0	0.7924
TC1500002249.mm.1	NR_033512	Gm6194	transmembrane protein 189 pseudogene	8461387	8463098	TC0300001614.mm.1	0.0	0.792435
TC1500002250.mm.1	ENSMUST00000157856	Gm23644	predicted gene, 23644	77105209	77105285	TC0300002176.mm.1	0.0	0.792531
TC1500002263.mm.1	NM_021500	Maea	macrophage erythroblast attacher	33335572	33373294	TC0500000356.mm.1	0.0	0.792715
TC1500002264.mm.1	NM_026454	Ube2f	ubiquitin-conjugating enzyme E2F (putative)	91250311	91288877	TC0100000890.mm.1	0.0	0.793208

TC1500002265.mm.1	ENSMUST00000121760	Gm5863	predicted gene 5863	120160710	120161717	TC0X00001176.mm.1	0.0	0.793219
TC1500002268.mm.1	ENSMUST00000183005	Gm8984	predicted gene 8984	16508165	16509183	TC0500001986.mm.1	0.0	0.793268
TC1500002269.mm.1	NM_001164202	Gm8369	predicted gene 8369	11492038	11512577	TC1900000224.mm.1	-0.1	0.79351
TC1500002276.mm.1	NM_008393	Irx3	Iroquois related homeobox 3 (Drosophila)	91798511	91802067	TC0800002690.mm.1	0.0	0.793664
TC1500002279.mm.1	ENSMUST00000183341	5S_rRNA	5S ribosomal RNA	96495132	96495213	TC0900002882.mm.1	0.0	0.793668
TC1500002282.mm.1	ENSMUST00000158734	Gm25490	predicted gene, 25490	15452422	15452551	TC1100000152.mm.1	0.0	0.793845
TC1500002285.mm.1	ENSMUST00000177688	n-R5s21	nuclear encoded rRNA 5S 210	37005439	37005557	TC0100000256.mm.1	0.2	0.794024
TC1500002288.mm.1	NR_035413	Mir1b	microRNA 1b	10785446	10785567	TC1800000087.mm.1	0.0	0.794388
TC1500002298.mm.1	ENSMUST00000083188	Gm26126	predicted gene, 26126	84649496	84649659	TC0900001106.mm.1	0.0	0.794406
TC1500002299.mm.1	NM_007530	Bcap29	B cell receptor associated protein 29	31595354	31634658	TC1200001597.mm.1	0.0	0.794745
TC1500002300.mm.1	ENSMUST00000158637	Gm22893	predicted gene, 22893	85150336	85150451	TC0600000956.mm.1	0.0	0.795042
TC1500002317.mm.1	NR_003628	Gm5766	ribosomal protein L7a pseudogene	4229229	4231206	TC1600000023.mm.1	0.0	0.795482
TC1500002318.mm.1	NM_172462	Zfp11	zinc finger protein 11	129654593	129670099	TC0500003305.mm.1	0.0	0.795621
TC1500002323.mm.1	ENSMUST00000104819	Gm23487	predicted gene, 23487	93898042	93898133	TC0200001457.mm.1	0.1	0.795868
TC1500002324.mm.1	NM_008396	Itga2	integrin alpha 2	114835912	114932041	TC1300002715.mm.1	0.0	0.795873
TC1500002326.mm.1	NR_035480	Mir1955	microRNA 1955	92191977	92192074	TC0200001397.mm.1	0.0	0.795948
TC1500002328.mm.1	ENSMUST00000083948	n-R5s16	nuclear encoded rRNA 5S 168	140319630	140319733	TC0600001652.mm.1	0.1	0.796062
TC1500002333.mm.1	ENSMUST00000104118	Gm22469	predicted gene, 22469	37224869	37225001	TC1400000394.mm.1	0.0	0.796177
TC1500002336.mm.1	NM_206867	Gm13280	predicted gene 13280	88675915	88676924	TC0400003011.mm.1	0.0	0.796188
TC1500002337.mm.1	NM_008328	Ifi203	interferon activated gene 203	173920400	173942672	TC0100003891.mm.1	0.1	0.796201
TC1500002339.mm.1	NR_004447	Gm5523	glyceraldehyde-3-phosphate dehydrogenase pse	13785685	13786929	TC0100001983.mm.1	0.1	0.79665
TC1500002346.mm.1	ENSMUST00000183460	adapt33	Adaptive response 33 conserved region 1	100421968	100422041	TC0500000976.mm.1	0.0	0.796802
TC1500002347.mm.1	NM_146219	Klhl36	kelch-like 36	119862305	119876989	TC0800001429.mm.1	0.0	0.79684
TC1500002348.mm.1	ENSMUST00000158650	Gm24548	predicted gene, 24548	58154981	58155088	TC0100002377.mm.1	0.0	0.797075
TC1600000003.mm.1	XM_001476166	Gm20884	predicted gene, 20884	51391032	51391845	TC0Y00000362.mm.1	0.0	0.797132
TC1600000023.mm.1	XM_003689082	Gm21654	predicted gene, 21654	64012307	64013120	TC0Y00000421.mm.1	0.0	0.797132
TC1600000033.mm.1	ENSMUST00000182273	Gm26931	predicted gene, 26931	34481914	34482522	TC0500002237.mm.1	0.0	0.797138
TC1600000038.mm.1	XR_104651	Gm13199	predicted gene 13199	5861876	5862934	TC0200002882.mm.1	0.0	0.797301
TC1600000040.mm.1	ENSMUST00000157634	Gm24290	predicted gene, 24290	105141214	105141309	TC1100001742.mm.1	0.0	0.797596
TC1600000046.mm.1	NM_001159331	N6amt1	N-6 adenine-specific DNA methyltransferase 1 (p	87354185	87368742	TC1600000952.mm.1	0.0	0.797925
TC1600000047.mm.1	NM_001146349	Rnf217	ring finger protein 217	31501887	31609725	TC1000001962.mm.1	0.0	0.798121
TC1600000086.mm.1	ENSMUST00000184285	AC14479	N/A	96040845	96040968	TC1600002137.mm.1	0.0	0.798388
TC1600000087.mm.1	ENSMUST00000083813	Gm25006	predicted gene, 25006	88192617	88192723	TC0X00000849.mm.1	0.0	0.798399
TC1600000096.mm.1	XM_001476453	Gm20891	predicted gene, 20891	27924318	27925001	TC0Y00000082.mm.1	0.0	0.798635
TC1600000113.mm.1	XM_003689044	Gm21642	predicted gene, 21642	28443743	28444426	TC0Y00000084.mm.1	0.0	0.798635
TC1600000116.mm.1	XM_001472428	Gm20799	predicted gene, 20799	35301254	35301937	TC0Y00000111.mm.1	0.0	0.798635
TC1600000120.mm.1	ENSMUST00000185000	CT03068	N/A	97049481	97049585	TC1400002575.mm.1	0.0	0.798841
TC1600000122.mm.1	NM_007420	Adrb2	adrenergic receptor, beta 2	62177713	62179981	TC1800001437.mm.1	-0.1	0.798957
TC1600000124.mm.1	NM_172145	Eva1b	eva-1 homolog B (C. elegans)	126147744	126149875	TC0400001455.mm.1	0.0	0.799005
TC1600000127.mm.1	ENSMUST00000175253	Gm23918	predicted gene, 23918	37179186	37179291	TC1900000526.mm.1	0.0	0.799048
TC1600000138.mm.1	NM_146457	Olfr282	olfactory receptor 282	98437470	98438397	TC1500000974.mm.1	0.0	0.799646
TC1600000142.mm.1	ENSMUST00000184884	Metazoa	Metazoan signal recognition particle RNA	139312424	139312700	TC0500001670.mm.1	0.0	0.799802
TC1600000157.mm.1	OTTMUST00000044377	RP23-41	---	60045111	60046229	TC0X00002304.mm.1	0.1	0.799925
TC1600000158.mm.1	ENSMUST00000178707	Gm9824	predicted pseudogene 9824	29030128	29030691	TC1000000260.mm.1	0.0	0.799939
TC1600000172.mm.1	NM_001146023	Fam98c	family with sequence similarity 98, member C	29152510	29156234	TC0700002714.mm.1	0.0	0.800108
TC1600000175.mm.1	NM_134241	Vmn1r21	vomeronasal 1 receptor 212	22883042	22884205	TC1300001609.mm.1	0.0	0.80021
TC1600000180.mm.1	ENSMUST00000114639	Rbpsuh-	recombining binding protein suppressor of hairl	46529351	46530922	TC0600002194.mm.1	0.0	0.800457
TC1600000184.mm.1	ENSMUST00000183964	RP23-35	N/A	24430370	24430890	TC0400002308.mm.1	0.0	0.80049
TC1600000188.mm.1	ENSMUST00000167639	Gm6395	predicted gene 6395	64786192	64787683	TC1200000520.mm.1	0.0	0.800584
TC1600000189.mm.1	NM_029839	Trub1	TruB pseudouridine (psi) synthase homolog 1 (E.	57452906	57491005	TC1900000814.mm.1	0.0	0.800605
TC1600000190.mm.1	NM_026685	Tmem174	transmembrane protein 174	98634978	98637410	TC1300002505.mm.1	0.1	0.800783
TC1600000192.mm.1	ENSMUST00000082394	mt-Tq	mitochondrially encoded tRNA glutamine	3772	3842	TC0M00000020.mm.1	0.2	0.800883
TC1600000193.mm.1	ENSMUST00000083829	Gm23847	predicted gene, 23847	130035094	130035203	TC0700001902.mm.1	-0.1	0.801267
TC1600000195.mm.1	ENSMUST00000082923	n-R5s25	nuclear encoded rRNA 5S 25	34647400	34647518	TC1800000292.mm.1	0.2	0.801273
TC1600000214.mm.1	NM_023493	Cml5	camello-like 5	85817218	85820972	TC0600003600.mm.1	0.0	0.801297
TC1600000215.mm.1	ENSMUST00000118356	Gm13085	predicted gene 13085	143663143	143663787	TC0400003925.mm.1	0.0	0.801306
TC1600000223.mm.1	ENSMUST00000117039	Gm23987	predicted gene, 23987	69685578	69685706	TC1500001673.mm.1	0.0	0.80133
TC1600000224.mm.1	NM_020008	Clec7a	C-type lectin domain family 7, member a	129461591	129472777	TC0600003236.mm.1	-0.1	0.801343
TC1600000232.mm.1	ENSMUST00000104644	Mir669d	microRNA 669d	10468343	10468463	TC0200000096.mm.1	0.0	0.801377
TC1600000238.mm.1	ENSMUST00000157543	Gm23540	predicted gene, 23540	121083986	121084149	TC0400003452.mm.1	-0.1	0.801546
TC1600000249.mm.1	NM_011502	Stx3	syntaxin 3	11775118	11819403	TC1900001144.mm.1	0.0	0.801568
TC1600000258.mm.1	NM_019549	Plek	pleckstrin	16971206	17052381	TC1100002249.mm.1	0.1	0.801612
TC1600000263.mm.1	ENSMUST00000175454	Gm25472	predicted gene, 25472	85763794	85763871	TC0100000768.mm.1	0.0	0.801704
TC1600000277.mm.1	NM_001039554	Angptl7	angiopoietin-like 7	148495183	148500462	TC0400004023.mm.1	0.0	0.80178
TC1600000280.mm.1	NM_031376	Pik3ap1	phosphoinositide-3-kinase adaptor protein 1	41274218	41385070	TC1900001506.mm.1	0.1	0.801888
TC1600000287.mm.1	XM_981561	Gm7664	predicted gene 7664	62528210	62528959	TC1300002166.mm.1	0.0	0.802006
TC1600000289.mm.1	ENSMUST00000082782	Gm23423	predicted gene, 23423	9210003	9210108	TC0400000063.mm.1	0.0	0.802226
TC1600000291.mm.1	ENSMUST00000115650	Gm8597	predicted gene 8597	13401493	13404191	TC1700001470.mm.1	0.0	0.802424
TC1600000293.mm.1	NM_010704	Lepr	leptin receptor	101717404	101815354	TC0400001039.mm.1	0.0	0.802495
TC1600000301.mm.1	NM_001083808	Rusc1	RUN and SH3 domain containing 1	89083977	89093363	TC0300002333.mm.1	0.0	0.802556
TC1600000306.mm.1	NM_001253680	Slc7a7	solute carrier family 7 (cationic amino acid tr	54369442	54417702	TC1400002054.mm.1	0.0	0.802617
TC1600000308.mm.1	NM_146931	Olfr796	olfactory receptor 796	129607547	129608479	TC1000003183.mm.1	0.0	0.802716
TC1600000309.mm.1	ENSMUST00000158709	Gm24349	predicted gene, 24349	53100050	53100150	TC0100000384.mm.1	0.0	0.802872
TC1600000310.mm.1	ENSMUST00000117309	Gm15236	predicted gene 15236	165680204	165680582	TC0X00001676.mm.1	0.0	0.803116
TC1600000318.mm.1	NM_031188	Mup1	major urinary protein 1	60498012	60501960	TC0400002768.mm.1	-0.2	0.803304
TC1600000319.mm.1	ENSMUST00000104547	Gm24556	predicted gene, 24556	147200124	147200253	TC0500003621.mm.1	0.0	0.80334
TC1600000323.mm.1	NM_025474	Mrps14	mitochondrial ribosomal protein S14	160195215	160202170	TC0100001452.mm.1	0.0	0.803428
TC1600000331.mm.1	ENSMUST00000082886	Gm25739	predicted gene, 25739	51254169	51254275	TC1800001326.mm.1	-0.1	0.803619

TC1600000333.mm.1	ENSMUST00000158444	Gm22840	predicted gene, 22840	93890615	93890750	TC0600001110.mm.1	0.0	0.803709
TC1600000342.mm.1	NM_011849	Nek4	NIMA (never in mitosis gene a)-related expresse	30951486	30987449	TC1400000318.mm.1	0.0	0.803906
TC1600000346.mm.1	ENSMUST00000182375	Gm8492	predicted gene 8492	9320395	9321381	TC1700001420.mm.1	0.0	0.803951
TC1600000362.mm.1	NR_030463	Mir690	microRNA 690	28599935	28600043	TC1600001434.mm.1	0.0	0.804019
TC1600000397.mm.1	ENSMUST00000083883	Gm24698	predicted gene, 24698	13876097	13876226	TC0800000135.mm.1	-0.2	0.804155
TC1600000399.mm.1	NM_027617	Spata1	spermatogenesis associated 1	146457203	146499753	TC0300003100.mm.1	0.0	0.804189
TC1600000402.mm.1	NM_026242	Mrfap1	Morf4 family associated protein 1	36794867	36796772	TC0500002265.mm.1	0.0	0.804306
TC1600000422.mm.1	ENSMUST00000183970	CU20733	N/A	3075107	3075213	TC0200000001.mm.1	0.0	0.804804
TC1600000425.mm.1	ENSMUST00000104350	Gm22545	predicted gene, 22545	129017890	129018021	TC0800001602.mm.1	0.0	0.80482
TC1600000426.mm.1	XM_001476000	Gm3213	predicted gene 3213	6363096	6368487	TC1000000037.mm.1	0.0	0.804842
TC1600000428.mm.1	NM_023289	Ceacam1	carcinoembryonic antigen-related cell adhesion	17972124	17978556	TC0700000261.mm.1	0.0	0.805081
TC1600000429.mm.1	ENSMUST00000104068	Gm26081	predicted gene, 26081	46289833	46289964	TC0300000341.mm.1	0.0	0.805098
TC1600000440.mm.1	NR_030464	Mir691	microRNA 691	74341990	74342067	TC1600001896.mm.1	0.0	0.805279
TC1600000441.mm.1	ENSMUST00000082977	Gm25023	predicted gene, 25023	57989473	57989579	TC0X00000537.mm.1	0.0	0.805415
TC1600000455.mm.1	NM_001126319	Mup9	major urinary protein 9	60218621	60421952	TC0400004210.mm.1	-0.2	0.805578
TC1600000459.mm.1	ENSMUST00000083197	Gm22287	predicted gene, 22287	60257552	60257658	TC0X00000550.mm.1	0.0	0.805801
TC1600000463.mm.1	ENSMUST00000157331	Gm22561	predicted gene, 22561	58786608	58786691	TC1900001725.mm.1	0.0	0.80581
TC1600000464.mm.1	NM_001256489	9030624	RIKEN cDNA 9030624G23 gene	24043202	24097269	TC1200001527.mm.1	0.0	0.806041
TC1600000489.mm.1	NM_001033463	Tatdn2	TatD DNase domain containing 2	113697050	113711069	TC0600001259.mm.1	0.0	0.806319
TC1600000491.mm.1	ENSMUST00000083326	Gm23453	predicted gene, 23453	33422733	33422838	TC0100000213.mm.1	0.0	0.806583
TC1600000494.mm.1	NM_001276442	Acy1	aminoacylase 1	106432981	106438236	TC0900003008.mm.1	0.0	0.806635
TC1600000499.mm.1	ENSMUST00000180005	mmu-mir	mmu-mir-466c-1 // mmu-mir-466c-2	10481531	10481620	TC0200000121.mm.1	0.0	0.806669
TC1600000502.mm.1	ENSMUST00000180211	mmu-mir	mmu-mir-466c-1 // mmu-mir-466c-2	10483966	10484055	TC0200000126.mm.1	0.0	0.806669
TC1600000503.mm.1	ENSMUST00000178951	mmu-mir	mmu-mir-466c-1 // mmu-mir-466c-2	10491336	10491425	TC0200000144.mm.1	0.0	0.806669
TC1600000513.mm.1	ENSMUST00000177832	Gm25451	predicted gene, 25451	10480365	10480485	TC0200000119.mm.1	0.0	0.80686
TC1600000515.mm.1	ENSMUST00000083780	Gm25652	predicted gene, 25652	5035360	5035462	TC1500000017.mm.1	0.0	0.80691
TC1600000524.mm.1	ENSMUST00000158463	Gm24001	predicted gene, 24001	43036845	43036929	TC0100000318.mm.1	0.0	0.806967
TC1600000540.mm.1	ENSMUST00000103870	Gm24542	predicted gene, 24542	101554079	101554188	TC1200001004.mm.1	0.0	0.806967
TC1600000546.mm.1	ENSMUST00000118284	Gm13354	predicted gene 13354	18494369	18494537	TC0200000298.mm.1	0.0	0.807297
TC1600000564.mm.1	XR_140771	Gm19665	predicted gene, 19665	99099255	99102944	TC0600002823.mm.1	0.0	0.80736
TC1600000565.mm.1	NM_001081055	Trappc1	trafficking protein particle complex 10	78186725	78244642	TC1000002445.mm.1	0.0	0.807502
TC1600000569.mm.1	NM_027113	Wdr5b	WD repeat domain 5B	36041190	36042974	TC1600000502.mm.1	0.0	0.807805
TC1600000582.mm.1	NM_001099318	Rhox2c	reproductive homeobox 2C	37453659	37458377	TC0X00003391.mm.1	0.0	0.80789
TC1600000603.mm.1	ENSMUST00000116856	Gm25042	predicted gene, 25042	133431703	133431823	TC0300002981.mm.1	0.1	0.808319
TC1600000620.mm.1	NM_019652	Asna1	arsA arsenite transporter, ATP-binding, homolog	85017929	85025278	TC0800002599.mm.1	0.0	0.808641
TC1600000624.mm.1	ENSMUST00000104597	Gm23910	predicted gene, 23910	73145774	73145905	TC1200001914.mm.1	0.0	0.808675
TC1600000629.mm.1	ENSMUST00000170946	Ighv2-1	immunoglobulin heavy variable 2-1	113574242	113574681	TC1200002469.mm.1	0.0	0.808762
TC1600000645.mm.1	ENSMUST00000083853	Gm22681	predicted gene, 22681	144960734	144960839	TC0100003211.mm.1	0.0	0.808809
TC1600000649.mm.1	ENSMUST00000177845	Gm23521	predicted gene, 23521	12358898	12359007	TC0700002337.mm.1	0.0	0.808852
TC1600000659.mm.1	NM_001177348	Gm3646	predicted gene 3646	39804141	39805332	TC0100002243.mm.1	0.0	0.809076
TC1600000662.mm.1	ENSMUST00000104332	Gm25526	predicted gene, 25526	41216045	41216176	TC1000000360.mm.1	0.0	0.809518
TC1600000669.mm.1	NM_021529	Ppp2r3c	protein phosphatase 2, regulatory subunit B, ga	55280715	55303000	TC1200001763.mm.1	0.0	0.809523
TC1600000673.mm.1	ENSMUST00000158422	Gm26171	predicted gene, 26171	12106737	12106867	TC1200000097.mm.1	0.0	0.809678
TC1600000674.mm.1	NM_021487	Kcne1l	potassium voltage-gated channel, Isk-related fa	142304752	142306294	TC0X00003097.mm.1	0.0	0.809696
TC1600000677.mm.1	ENSMUST00000179334	Gm24798	predicted gene, 24798	120045334	120045439	TC1300001360.mm.1	0.0	0.809776
TC1600000679.mm.1	ENSMUST00000177961	Gm22108	predicted gene, 22108	120017108	120017213	TC1300002754.mm.1	0.0	0.809776
TC1600000685.mm.1	ENSMUST00000179547	Gm21789	predicted gene, 21789	32941768	32942945	TC0X00000284.mm.1	0.0	0.809826
TC1600000691.mm.1	ENSMUST00000157229	Gm22790	predicted gene, 22790	105645843	105645971	TC1200001068.mm.1	0.0	0.810094
TC1600000695.mm.1	NM_007605	Capza3	capping protein (actin filament) muscle Z-line,	140041525	140042789	TC0600001650.mm.1	0.0	0.810157
TC1600000698.mm.1	ENSMUST00000082653	Gm25131	predicted gene, 25131	81039643	81039793	TC1500000715.mm.1	0.1	0.810212
TC1600000699.mm.1	NR_030569	Mir466g	microRNA 466g	10514595	10514674	TC0200000198.mm.1	0.0	0.810451
TC1600000703.mm.1	NM_001167586	Gm7257	predicted gene 7257	36431884	36434938	TC0900000344.mm.1	0.0	0.8107
TC1600000715.mm.1	ENSMUST00000184289	AL80779	N/A	106426057	106426166	TC0X00001074.mm.1	0.0	0.810756
TC1600000726.mm.1	ENSMUST00000178449	Gm26335	predicted gene, 26335	32175099	32175205	TC0500000336.mm.1	-0.1	0.810806
TC1600000734.mm.1	NM_025781	Tmem170	transmembrane protein 170	111864898	111876750	TC0800002957.mm.1	0.0	0.810833
TC1600000735.mm.1	NM_025289	Tbrg1	transforming growth factor beta regulated gene	37649182	37657312	TC0900002054.mm.1	0.0	0.810861
TC1600000749.mm.1	ENSMUST00000119510	Gm15375	predicted gene 15375	88025211	88026059	TC0100000835.mm.1	0.0	0.810928
TC1600000763.mm.1	ENSMUST00000158211	Gm23546	predicted gene, 23546	33211805	33211941	TC0200003322.mm.1	0.0	0.811336
TC1600000779.mm.1	NM_001033194	Gtf3c3	general transcription factor IIIC, polypeptide	54397581	54438971	TC0100002348.mm.1	0.0	0.811408
TC1600000781.mm.1	ENSMUST00000167981	Gm17353	predicted gene, 17353	66227319	66227573	TC1300002226.mm.1	0.0	0.811469
TC1600000782.mm.1	ENSMUST00000082652	Gm25132	predicted gene, 25132	55305317	55305423	TC0300000423.mm.1	-0.1	0.811983
TC1600000784.mm.1	NM_144819	Ccdc92	coiled-coil domain containing 92	124834418	124862424	TC0500003264.mm.1	0.0	0.812253
TC1600000785.mm.1	ENSMUST00000183704	AC16121	N/A	74270247	74270436	TC0800000840.mm.1	0.0	0.812261
TC1600000786.mm.1	NM_153598	Ugt2b34	UDP glucuronosyltransferase 2 family, polypepti	86889767	86906937	TC0500002688.mm.1	0.0	0.812308
TC1600000790.mm.1	ENSMUST00000083872	n-R5s69	nuclear encoded rRNA 5S 69	57764427	57764545	TC1100000667.mm.1	0.0	0.812409
TC1600000792.mm.1	ENSMUST00000104163	Gm24350	predicted gene, 24350	42809035	42809167	TC0200000737.mm.1	0.0	0.812936
TC1600000801.mm.1	ENSMUST00000177899	Gm22852	predicted gene, 22852	103853419	103853519	TC1500002326.mm.1	0.1	0.813012
TC1600000810.mm.1	ENSMUST00000163636	Gm8356	predicted gene 8356	6528612	6537290	TC1400001412.mm.1	0.0	0.813026
TC1600000819.mm.1	ENSMUST00000117763	Gm11235	predicted gene 11235	72542666	72542998	TC0400000765.mm.1	0.0	0.813072
TC1600000852.mm.1	ENSMUST00000160487	Gm2389	predicted pseudogene 2389	85061154	85062642	TC0100000735.mm.1	0.1	0.813262
TC1600000861.mm.1	NM_001276288	Aes	amino-terminal enhancer of split	81559444	81566371	TC1000000903.mm.1	-0.1	0.813267
TC1600000878.mm.1	NM_001195726	Fam181a	family with sequence similarity 181, member A	103314959	103317065	TC1200001025.mm.1	0.0	0.81334
TC1600000891.mm.1	NM_026850	Pdcl3	phosducin-like 3	38987804	38997236	TC0100000280.mm.1	0.0	0.813399
TC1600000902.mm.1	ENSMUST00000118730	Gm13326	predicted gene 13326	16978821	16979831	TC0200003011.mm.1	0.0	0.813403
TC1600000907.mm.1	NM_001168259	Tmem40	transmembrane protein 40	115729131	115762466	TC0600002958.mm.1	0.0	0.813752
TC1600000911.mm.1	NM_175133	Gucd1	guanylyl cyclase domain containing 1	75351111	75517972	TC1000002374.mm.1	0.0	0.813849
TC1600000929.mm.1	BC150481	Adam4	a disintegrin and metallopeptidase domain 4	81419443	81421946	TC1200002020.mm.1	0.0	0.813899
TC1600000930.mm.1	ENSMUST00000083248	Gm25138	predicted gene, 25138	82409091	82409226	TC0800000910.mm.1	-0.1	0.814093

TC1600000931.mm.1	ENSMUST00000157453	Gm22813	predicted gene, 22813	106809336	106809458	TC0200001600.mm.1	0.1	0.814116
TC1600000937.mm.1	NM_026240	Gramd3	GRAM domain containing 3	56400337	56503792	TC1800000564.mm.1	0.0	0.814251
TC1600000938.mm.1	NM_001199004	Golga5	golgi autoantigen, golgin subfamily a, 5	102469134	102497907	TC1200001017.mm.1	0.0	0.814299
TC1600000943.mm.1	ENSMUST00000084000	Gm25630	predicted gene, 25630	35474885	35475046	TC0900000338.mm.1	0.0	0.814448
TC1600000952.mm.1	ENSMUST00000178301	Gm6803	predicted gene 6803	88018337	88018771	TC1200002135.mm.1	0.0	0.814657
TC1600000957.mm.1	ENSMUST00000158445	Gm24498	predicted gene, 24498	89927442	89927543	TC1300002398.mm.1	0.0	0.814766
TC1600000965.mm.1	NM_203320	Cxcl3	chemokine (C-X-C motif) ligand 3	90786101	90788093	TC0500000844.mm.1	0.0	0.814835
TC1600000971.mm.1	ENSMUST00000182705	Gm8343	predicted gene 8343	37685941	37686934	TC0900000371.mm.1	0.0	0.814941
TC1600000972.mm.1	NM_029639	1600029	RIKEN cDNA 1600029D21 gene	50494525	50505639	TC0900000598.mm.1	0.0	0.815047
TC1600000974.mm.1	NM_001256501	Gm10408	predicted gene 10408	3449312	3459287	TC1400000007.mm.1	0.0	0.815102
TC1600000982.mm.1	NM_175347	Srl	sarcalumenin	4480216	4541816	TC1600001130.mm.1	0.0	0.815173
TC1600000986.mm.1	NM_133968	Snapc2	small nuclear RNA activating complex, polypepti	4253102	4256220	TC0800000032.mm.1	0.0	0.815341
TC1600000993.mm.1	ENSMUST00000183445	ST7-OT4	ST7 overlapping transcript 4 conserved region 1	17694902	17695085	TC0600000136.mm.1	0.0	0.815524
TC1600000998.mm.1	NM_138585	Cherp	calcium homeostasis endoplasmic reticulum pro	72460483	72475233	TC0800002463.mm.1	0.0	0.815602
TC1600000999.mm.1	ENSMUST00000157267	Gm25278	predicted gene, 25278	16852168	16852287	TC0800000164.mm.1	0.0	0.815713
TC1600001024.mm.1	ENSMUST00000082864	n-R5s19	nuclear encoded rRNA 5S 193	149817732	149817840	TC0400001964.mm.1	-0.1	0.815821
TC1600001025.mm.1	NM_054097	Pip4k2c	phosphatidylinositol-5-phosphate 4-kinase, type	127197067	127211622	TC1000003105.mm.1	0.0	0.815862
TC1600001035.mm.1	NM_027010	Crygf	crystallin, gamma F	65926522	65928307	TC0100000548.mm.1	0.0	0.816008
TC1600001042.mm.1	NM_001252569	Serpina	serine (or cysteine) peptidase inhibitor, clade	103853295	103863619	TC1200002533.mm.1	0.1	0.816043
TC1600001043.mm.1	ENSMUST00000145845	Gm11612	predicted gene 11612	97566711	97576186	TC1100001540.mm.1	0.0	0.816199
TC1600001047.mm.1	ENSMUST00000157271	Gm25282	predicted gene, 25282	75668873	75668956	TC0700001093.mm.1	0.0	0.816344
TC1600001048.mm.1	NM_001081057	Tecpr2	tectonin beta-propeller repeat containing 2	110889264	110972396	TC1200001220.mm.1	0.0	0.816424
TC1600001053.mm.1	NM_153680	Snx17	sorting nexin 17	31193227	31198900	TC0500000316.mm.1	0.0	0.816648
TC1600001054.mm.1	ENSMUST00000104406	Gm26018	predicted gene, 26018	70168832	70168959	TC1300000861.mm.1	0.0	0.816698
TC1600001060.mm.1	NM_001014390	Dyrk2	dual-specificity tyrosine-(Y)-phosphorylation r	118859349	118868903	TC1000002998.mm.1	0.0	0.816717
TC1600001064.mm.1	XR_105542	Gm5665	predicted gene 5665	62699406	62726689	TC1300002172.mm.1	0.0	0.816731
TC1600001068.mm.1	ENSMUST00000120198	Gm14928	predicted gene 14928	120178939	120179415	TC0X00001177.mm.1	0.0	0.816783
TC1600001091.mm.1	ENSMUST00000083340	Gm25125	predicted gene, 25125	85472734	85472869	TC0900001110.mm.1	0.0	0.816983
TC1600001102.mm.1	ENSMUST00000178225	Gm26488	predicted gene, 26488	59355152	59355230	TC0700003135.mm.1	0.0	0.817045
TC1600001111.mm.1	ENSMUST00000177753	Gm24220	predicted gene, 24220	59357021	59357099	TC0700003136.mm.1	0.0	0.817045
TC1600001112.mm.1	ENSMUST00000183465	Metazoa	Metazoan signal recognition particle RNA	156860305	156860550	TC0200002402.mm.1	0.0	0.8171
TC1600001115.mm.1	ENSMUST00000083902	Gm23502	predicted gene, 23502	21812711	21812855	TC1400000199.mm.1	-0.1	0.817176
TC1600001117.mm.1	NM_053111	Ear6	eosinophil-associated, ribonuclease A family, m	51853699	51854643	TC1400000594.mm.1	0.0	0.817526
TC1600001124.mm.1	NM_145522	Rabepk	Rab9 effector protein with kelch motifs	34777556	34799912	TC0200003350.mm.1	0.0	0.817582
TC1600001125.mm.1	NM_133656	Crk	v-crk sarcoma virus CT10 oncogene homolog (av	75679259	75708428	TC1100001078.mm.1	0.0	0.817808
TC1600001130.mm.1	ENSMUST00000104056	Gm23274	predicted gene, 23274	7265803	7265932	TC0100000031.mm.1	0.0	0.817864
TC1600001131.mm.1	ENSMUST00000184492	RP23-38	N/A	66074552	66091807	TC1500000480.mm.1	0.0	0.817866
TC1600001135.mm.1	ENSMUST00000148069	Gm14457	predicted gene 14457	8981822	8982982	TC0X00000100.mm.1	0.0	0.818133
TC1600001143.mm.1	ENSMUST00000179003	Gm23550	predicted gene, 23550	103267115	103267235	TC0700003883.mm.1	0.1	0.818257
TC1600001150.mm.1	ENSMUST00000175284	Gm25300	predicted gene, 25300	75970944	75971027	TC0900002684.mm.1	0.0	0.818282
TC1600001154.mm.1	ENSMUST00000103986	Gm25757	predicted gene, 25757	153831170	153831292	TC0300001546.mm.1	0.0	0.818795
TC1600001156.mm.1	ENSMUST00000117013	Gm25002	predicted gene, 25002	11948887	11948950	TC0400000096.mm.1	0.0	0.818804
TC1600001158.mm.1	NM_001205158	Yipf2	Yip1 domain family, member 2	21588682	21592831	TC0900001879.mm.1	0.0	0.818809
TC1600001159.mm.1	ENSMUST00000116698	Gm24591	predicted gene, 24591	44039250	44039361	TC0800000506.mm.1	0.0	0.819052
TC1600001168.mm.1	ENSMUST00000098874	Gm17312	predicted gene, 17312	73661225	73662721	TC1400001039.mm.1	0.0	0.819215
TC1600001172.mm.1	ENSMUST00000178634	Gm22776	predicted gene, 22776	59764088	59764181	TC0700003304.mm.1	0.0	0.819362
TC1600001173.mm.1	ENSMUST00000083258	Gm23460	predicted gene, 23460	52444436	52444544	TC0100002318.mm.1	0.0	0.819399
TC1600001177.mm.1	ENSMUST00000185159	5S_rRNA	5S ribosomal RNA	44668384	44668494	TC1000000415.mm.1	0.0	0.819425
TC1600001180.mm.1	ENSMUST00000083070	Gm26326	predicted gene, 26326	43743037	43743165	TC1200000385.mm.1	0.0	0.819445
TC1600001181.mm.1	NM_009536	Ywhae	tyrosine 3-monooxygenase/tryptophan 5-monoc	75732869	75765845	TC1100001082.mm.1	0.0	0.819459
TC1600001191.mm.1	NM_001033131	Krtdap	keratinocyte differentiation associated protein	30787905	30791083	TC0700000576.mm.1	0.0	0.819464
TC1600001198.mm.1	NM_021610	Gpa33	glycoprotein A33 (transmembrane)	166130238	166166510	TC0100001532.mm.1	0.0	0.819515
TC1600001200.mm.1	NM_025291	Sra1	steroid receptor RNA activator 1	36667187	36670311	TC1800001747.mm.1	0.0	0.819539
TC1600001201.mm.1	NM_054074	Defb6	defensin beta 6	19225478	19228209	TC0800000182.mm.1	0.0	0.819633
TC1600001203.mm.1	NM_001098203	Hic1	hypermethylated in cancer 1	75164565	75170255	TC1100003217.mm.1	0.0	0.819693
TC1600001210.mm.1	NR_037304	Mir3471	microRNA 3471-1	10845500	10845630	TC0400002196.mm.1	0.0	0.820457
TC1600001211.mm.1	NR_033303	Slc22a1	solute carrier family 22 (organic cation transp	119220488	119231692	TC0900003237.mm.1	0.0	0.820609
TC1600001213.mm.1	NM_001177583	Gm20580	predicted gene, 20580	40598594	40602618	TC1700000814.mm.1	0.0	0.820763
TC1600001218.mm.1	NM_153601	Lgsn	lengsin, lens protein with glutamine synthetase	31176406	31204725	TC0100000193.mm.1	0.0	0.820813
TC1600001230.mm.1	NM_001177584	Gm17495	predicted gene, 17495	40520022	40530702	TC1700000812.mm.1	0.0	0.820935
TC1600001231.mm.1	ENSMUST00000157298	Gm23230	predicted gene, 23230	114844985	114845117	TC0400003306.mm.1	0.0	0.820939
TC1600001239.mm.1	XM_001476114	Gm3149	predicted gene 3149	4317283	4325721	TC1400000023.mm.1	0.0	0.82103
TC1600001243.mm.1	NM_009895	Cish	cytokine inducible SH2-containing protein	107296026	107302784	TC0900001365.mm.1	0.0	0.821074
TC1600001247.mm.1	NM_148934	Tpgs1	tubulin polyglutamylase complex subunit 1	79669369	79676126	TC1000000809.mm.1	0.0	0.821082
TC1600001250.mm.1	NM_008284	Hras1	Harvey rat sarcoma virus oncogene 1	141189105	141194005	TC0700004525.mm.1	0.0	0.821316
TC1600001254.mm.1	ENSMUST00000183473	RP23-44	N/A	22438520	22448865	TC1900001259.mm.1	0.0	0.821322
TC1600001256.mm.1	NM_001159527	Wdr35	WD repeat domain 35	8973892	9028847	TC1200000074.mm.1	0.0	0.821481
TC1600001260.mm.1	NM_033134	Inpp5e	inositol polyphosphate-5-phosphatase E	26396249	26409203	TC0200003190.mm.1	0.0	0.82157
TC1600001274.mm.1	NM_134184	Vmn1r16	vomeronasal 1 receptor 16	57322645	57323657	TC0600002346.mm.1	0.0	0.822041
TC1600001277.mm.1	NM_009844	Cd19	CD19 antigen	126408448	126414870	TC0700004277.mm.1	-0.1	0.822222
TC1600001280.mm.1	ENSMUST00000175611	Gm23291	predicted gene, 23291	99982775	99982852	TC1200002216.mm.1	-0.1	0.822425
TC1600001284.mm.1	ENSMUST00000173568	Olfr755	olfactory receptor 755, pseudogene 1	37276648	37278105	TC1700000766.mm.1	0.0	0.822856
TC1600001288.mm.1	NM_028596	Fbrsl1	fibrosin-like 1	110361751	110448503	TC0500002989.mm.1	0.0	0.822863
TC1600001290.mm.1	NM_013891	Spdef	SAM pointed domain containing ets transcriptio	27714352	27728951	TC1700001743.mm.1	0.0	0.823251
TC1600001301.mm.1	ENSMUST00000183049	Gm5787	predicted gene 5787	36372599	36373642	TC0800002062.mm.1	0.0	0.82341
TC1600001308.mm.1	ENSMUST00000158982	Gm22500	predicted gene, 22500	38927209	38927307	TC1600000565.mm.1	0.0	0.8235
TC1600001309.mm.1	NM_008191	Guca2b	guanylate cyclase activator 2b (retina)	119656601	119658954	TC0400003433.mm.1	0.0	0.823556
TC1600001315.mm.1	NM_008756	Ocln	occludin	100496507	100552718	TC1300002536.mm.1	0.0	0.823682

TC1600001319.mm.1	NM_001037713	Xaf1	XIAP associated factor 1	72301629	72313733	TC1100000989.mm.1	0.0	0.823706
TC1600001320.mm.1	ENSMUST00000173652	Gm20450	predicted gene 20450	36597898	36598044	TC1700000737.mm.1	0.0	0.823716
TC1600001322.mm.1	NM_054056	Pawr	PRKC, apoptosis, WT1, regulator	108332189	108414391	TC1000001270.mm.1	0.0	0.823767
TC1600001324.mm.1	NM_133895	Slc15a4	solute carrier family 15, member 4	127595664	127632897	TC0500003284.mm.1	0.0	0.823799
TC1600001328.mm.1	ENSMUST00000179918	Gm23576	predicted gene, 23576	60174317	60174426	TC1800000605.mm.1	0.0	0.823923
TC1600001337.mm.1	NM_173037	Tango6	transport and golgi organization 6	106683068	106851439	TC0800001256.mm.1	0.0	0.824138
TC1600001338.mm.1	ENSMUST00000103807	Gm26140	predicted gene, 26140	23199780	23199889	TC1200000190.mm.1	0.0	0.824423
TC1600001355.mm.1	ENSMUST00000089584	Spr-ps1	sepiapterin reductase pseudogene 1	85155005	85156234	TC0600000957.mm.1	0.0	0.824502
TC1600001368.mm.1	ENSMUST00000103727	Traj14	T cell receptor alpha joining 14	54205111	54205143	TC1400000736.mm.1	0.1	0.824564
TC1600001373.mm.1	ENSMUST00000181493	Gm3200	predicted pseudogene 3200	100760805	100761806	TC0700003825.mm.1	0.0	0.82463
TC1600001383.mm.1	ENSMUST00000122632	Gm25179	predicted gene, 25179	35234796	35234923	TC1600001542.mm.1	0.0	0.824689
TC1600001387.mm.1	uc029qyg.1	Pol	RecName: Full=Retrovirus-related Pol polyprotei	65939794	65944772	TC1000000618.mm.1	0.1	0.824712
TC1600001388.mm.1	XM_001475808	Gm3141	predicted gene 3141	43120933	43150222	TC1400001849.mm.1	0.0	0.824762
TC1600001390.mm.1	ENSMUST00000084055	Gm7676	predicted gene 7676	13895816	13896613	TC0800000137.mm.1	0.0	0.824893
TC1600001396.mm.1	NM_001177521	Gm15308	predicted gene 15308	21529030	21530012	TC0800000243.mm.1	0.0	0.824906
TC1600001398.mm.1	NM_010915	Klk1b4	kallikrein 1-related pepidase b4	44207435	44211754	TC0700000794.mm.1	0.1	0.825242
TC1600001411.mm.1	NM_001195074	Kcnmb3	potassium large conductance calcium-activated	32472321	32491969	TC0300001800.mm.1	0.0	0.825308
TC1600001419.mm.1	NM_031190	Pgk2	phosphoglycerate kinase 2	40207018	40208609	TC1700002101.mm.1	0.0	0.82532
TC1600001434.mm.1	NM_001033573	Zdhhc6	zinc finger, DHHC domain containing 6	55271291	55316032	TC1900001694.mm.1	0.0	0.825459
TC1600001460.mm.1	ENSMUST00000157451	Gm22815	predicted gene, 22815	9301391	9301452	TC0900000075.mm.1	0.0	0.825519
TC1600001462.mm.1	ENSMUST00000175033	Gm26197	predicted gene, 26197	78311226	78311340	TC1400002470.mm.1	0.0	0.825552
TC1600001486.mm.1	ENSMUST00000175432	Gm23872	predicted gene, 23872	108721848	108721924	TC1200002355.mm.1	-0.1	0.825944
TC1600001489.mm.1	NM_025858	Shisa5	shisa homolog 5 (Xenopus laevis)	109038565	109057792	TC0900001431.mm.1	0.0	0.826113
TC1600001492.mm.1	NM_017473	Rdh7	retinol dehydrogenase 7	127884027	127889247	TC1000003123.mm.1	0.0	0.826323
TC1600001494.mm.1	XM_003689124	Gm21173	predicted gene, 21173	76761585	76787724	TC0Y00000200.mm.1	0.0	0.826332
TC1600001504.mm.1	XM_001473243	Gm20817	predicted gene, 20817	68806601	68832743	TC0Y00000439.mm.1	0.0	0.826332
TC1600001505.mm.1	NM_172770	Ttc12	tetratricopeptide repeat domain 12	49436961	49486225	TC0900002252.mm.1	0.0	0.826532
TC1600001509.mm.1	ENSMUST00000179496	mmu-mir	mmu-mir-1194	166620362	166620482	TC0100001538.mm.1	0.1	0.826588
TC1600001527.mm.1	ENSMUST00000180257	mmu-mir	mmu-mir-1194	189393350	189393470	TC0100001819.mm.1	0.1	0.826588
TC1600001542.mm.1	ENSMUST00000179154	mmu-mir	mmu-mir-1194	107697834	107697954	TC0400003225.mm.1	0.1	0.826588
TC1600001547.mm.1	ENSMUST00000116733	mmu-mir	mmu-mir-1194	56070664	56070784	TC0X00000510.mm.1	0.1	0.826588
TC1600001548.mm.1	ENSMUST00000179867	mmu-mir	mmu-mir-1194	42280342	42280462	TC1400001826.mm.1	0.1	0.826588
TC1600001549.mm.1	ENSMUST00000116812	mmu-mir	mmu-mir-1194	42624917	42625037	TC1400001836.mm.1	0.1	0.826588
TC1600001553.mm.1	ENSMUST00000179366	mmu-mir	mmu-mir-1194	45404840	45404960	TC1400001901.mm.1	0.1	0.826588
TC1600001554.mm.1	NM_009358	Ppp2r5d	protein phosphatase 2, regulatory subunit B (B5	46682991	46705002	TC1700002186.mm.1	0.0	0.8266
TC1600001557.mm.1	ENSMUST00000104494	Gm22493	predicted gene, 22493	56600818	56600949	TC0600002336.mm.1	0.1	0.826701
TC1600001563.mm.1	ENSMUST00000079189	4922502	RIKEN cDNA 4922502B01 gene	109250481	109251728	TC0800002898.mm.1	0.0	0.82673
TC1600001566.mm.1	NM_178379	Cox10	cytochrome c oxidase assembly protein 10	63962627	64079472	TC1100002967.mm.1	0.0	0.827304
TC1600001568.mm.1	NM_146215	Ftsjd1	FtsJ methyltransferase domain containing 1	110217960	110224489	TC0800001316.mm.1	0.0	0.827327
TC1600001570.mm.1	ENSMUST00000183818	RP24-88	N/A	32508413	32516958	TC0900000291.mm.1	0.0	0.82743
TC1600001574.mm.1	NM_147002	Olfr175	olfactory receptor 175, pseudogene 1	58823781	58826761	TC1600001781.mm.1	0.0	0.828007
TC1600001592.mm.1	NM_019659	Kcnj1	potassium inwardly-rectifying channel, subfamil	32372418	32399197	TC0900000289.mm.1	0.0	0.828274
TC1600001604.mm.1	ENSMUST00000174920	Gm22402	predicted gene, 22402	82061112	82061221	TC0400002928.mm.1	0.0	0.828299
TC1600001614.mm.1	ENSMUST00000177759	Gm25988	predicted gene, 25988	59428665	59428743	TC0700003172.mm.1	0.0	0.828308
TC1600001615.mm.1	ENSMUST00000180051	Gm25221	predicted gene, 25221	59430536	59430614	TC0700003173.mm.1	0.0	0.828308
TC1600001616.mm.1	ENSMUST00000177886	Gm23471	predicted gene, 23471	59434277	59434355	TC0700003175.mm.1	0.0	0.828308
TC1600001620.mm.1	ENSMUST00000179208	Gm23449	predicted gene, 23449	59512795	59512873	TC0700003213.mm.1	0.0	0.828308
TC1600001634.mm.1	ENSMUST00000157357	Gm22224	predicted gene, 22224	8873079	8873171	TC1600001180.mm.1	0.0	0.828362
TC1600001636.mm.1	ENSMUST00000125096	Gm12221	predicted gene 12221	54158926	54160056	TC1100000618.mm.1	0.0	0.828425
TC1600001638.mm.1	ENSMUST00000104381	Gm24608	predicted gene, 24608	90010595	90010730	TC0300002362.mm.1	0.0	0.828738
TC1600001641.mm.1	NM_011841	Mapk7	mitogen-activated protein kinase 7	61488812	61494406	TC1100002914.mm.1	0.0	0.82885
TC1600001643.mm.1	ENSMUST00000083149	n-R5s20	nuclear encoded rRNA 5S 205	120640711	120640835	TC0200004466.mm.1	-0.1	0.829168
TC1600001648.mm.1	ENSMUST00000083107	Gm24044	predicted gene, 24044	120128780	120128935	TC0900001596.mm.1	-0.1	0.829207
TC1600001663.mm.1	NM_001128510	Gm9513	predicted gene 9513	36475638	36477212	TC0900000345.mm.1	0.0	0.829598
TC1600001673.mm.1	NM_019440	Irgm2	immunity-related GTPase family M member 2	58214977	58222783	TC1100004266.mm.1	0.0	0.829599
TC1600001675.mm.1	NM_013595	Mbd3	methyl-CpG binding domain protein 3	80392539	80399550	TC1000002499.mm.1	0.0	0.829603
TC1600001677.mm.1	ENSMUST00000120145	Mup-ps1	major urinary protein, pseudogene 18	61874700	61883296	TC0400002775.mm.1	-0.1	0.829686
TC1600001693.mm.1	ENSMUST00000083009	Gm23240	predicted gene, 23240	48462173	48462293	TC0100002298.mm.1	0.0	0.829692
TC1600001697.mm.1	NM_026232	Slc25a3	solute carrier family 25, member 30	75761999	75787037	TC1400002430.mm.1	0.0	0.829748
TC1600001712.mm.1	NM_001171003	Mgam	maltase-glucoamylase	40628831	40769123	TC0600000416.mm.1	0.0	0.829839
TC1600001715.mm.1	XR_105345	Gm10826	predicted gene 10826	21030490	21033793	TC1000001838.mm.1	0.0	0.829926
TC1600001716.mm.1	BC053003	Rap2a	RAS related protein 2a	120478461	120507194	TC1400001306.mm.1	0.0	0.829959
TC1600001719.mm.1	BC119035	Upf3a	UPF3 regulator of nonsense transcripts homolog	13785615	13798538	TC0800000132.mm.1	0.0	0.830339
TC1600001732.mm.1	NM_134235	Vmn1r21	vomeronasal 1 receptor 210	22827194	22828114	TC1300001604.mm.1	0.0	0.830498
TC1600001733.mm.1	ENSMUST00000158622	Gm24051	predicted gene, 24051	8004942	8005016	TC1100002202.mm.1	0.0	0.830521
TC1600001738.mm.1	NM_010643	Klk1b24	kallikrein 1-related peptidase b24	44188236	44192452	TC0700000792.mm.1	0.0	0.83062
TC1600001747.mm.1	ENSMUST00000104598	Gm23909	predicted gene, 23909	37437490	37437620	TC1400001748.mm.1	0.0	0.830671
TC1600001748.mm.1	XM_003689053	Gm21201	predicted gene, 21201	34561734	34562417	TC0Y00000108.mm.1	0.0	0.830695
TC1600001757.mm.1	NM_144955	Nkx6-1	NK6 homeobox 1	101658139	101665226	TC0500002856.mm.1	0.0	0.830731
TC1600001777.mm.1	NM_207550	Olfr199	olfactory receptor 199	59215685	59216615	TC1600001796.mm.1	0.0	0.830767
TC1600001778.mm.1	NM_147013	Olfr103	olfactory receptor 1038, pseudogene	86120224	86123037	TC0200001268.mm.1	0.0	0.83086
TC1600001779.mm.1	NM_011498	Bhlhe40	basic helix-loop-helix family, member e40	108660629	108666925	TC0600001203.mm.1	0.0	0.830908
TC1600001781.mm.1	ENSMUST00000175195	Gm22914	predicted gene, 22914	51621632	51621708	TC0600000612.mm.1	-0.1	0.830935
TC1600001784.mm.1	NM_177461	Micall1	microtubule associated monooxygenase, calponi	79108972	79136901	TC1500000666.mm.1	0.0	0.831135
TC1600001791.mm.1	ENSMUST00000157526	Gm26347	predicted gene, 26347	128435914	128436044	TC1000001606.mm.1	0.0	0.831171
TC1600001795.mm.1	NM_007546	Bik	BCL2-interacting killer	83526862	83544635	TC1500000775.mm.1	0.0	0.83127
TC1600001796.mm.1	NM_019491	Rala	v-ral simian leukemia viral oncogene homolog A	17880575	17944239	TC1300001508.mm.1	0.0	0.831409
TC1600001800.mm.1	ENSMUST00000178914	Gm25157	predicted gene, 25157	59779250	59779343	TC0700003310.mm.1	0.0	0.831439

TC1600001805.mm.1	ENSMUST00000179630	Gm22941	predicted gene, 22941	59786818	59786911	TC0700003313.mm.1	0.0	0.831439
TC1600001806.mm.1	ENSMUST00000177645	Gm22258	predicted gene, 22258	59799444	59799537	TC0700003318.mm.1	0.0	0.831439
TC1600001817.mm.1	ENSMUST00000180356	Gm22391	predicted gene, 22391	59606390	59606468	TC0700003263.mm.1	0.0	0.831638
TC1600001820.mm.1	ENSMUST00000180055	Gm24137	predicted gene, 24137	59610133	59610211	TC0700003265.mm.1	0.0	0.831638
TC1600001831.mm.1	NM_001011519	Olfr114	olfactory receptor 1148	87833041	87833985	TC0200001306.mm.1	0.0	0.832014
TC1600001839.mm.1	ENSMUST00000046721	LOC1010	uncharacterized LOC101055652	99979061	99979663	TC0500000969.mm.1	0.0	0.832116
TC1600001843.mm.1	NM_001081241	Fam65a	family with sequence similarity 65, member A	105605229	105622219	TC0800001221.mm.1	0.0	0.832164
TC1600001846.mm.1	NM_001081285	Mup6	major urinary protein 6	59964294	60007274	TC0400000663.mm.1	0.0	0.832246
TC1600001847.mm.1	NM_010899	Nfatc2	nuclear factor of activated T cells, cytoplasmi	168476410	168601657	TC0200005218.mm.1	0.0	0.832684
TC1600001879.mm.1	ENSMUST00000121012	Gm7820	predicted gene 7820	132888108	132889159	TC0X00002977.mm.1	0.0	0.832787
TC1600001880.mm.1	NM_001167877	Cyp2c50	cytochrome P450, family 2, subfamily c, polypep	40089679	40113955	TC1900000568.mm.1	0.0	0.832852
TC1600001883.mm.1	ENSMUST00000122695	Gm24379	predicted gene, 24379	158487602	158487687	TC0200002434.mm.1	0.0	0.833221
TC1600001896.mm.1	ENSMUST00000175600	Gm26116	predicted gene, 26116	54658497	54658573	TC1100002765.mm.1	0.0	0.8336
TC1600001918.mm.1	NM_001005341	Ypel2	yippee-like 2 (Drosophila)	86936425	86993762	TC1100003462.mm.1	0.0	0.833627
TC1600001920.mm.1	ENSMUST00000083793	Gm26164	predicted gene, 26164	60079590	60079693	TC0800000643.mm.1	0.0	0.833761
TC1600001925.mm.1	ENSMUST00000184331	7SK	7SK RNA	152201807	152202142	TC0400004092.mm.1	0.0	0.833812
TC1600001934.mm.1	ENSMUST00000083184	Gm23297	predicted gene, 23297	143531394	143531520	TC0700004588.mm.1	0.1	0.833842
TC1600001939.mm.1	NM_025494	Atp6v1c	ATPase, H+ transporting, lysosomal V1 subunit C	38661904	38692444	TC1500000296.mm.1	0.0	0.833843
TC1600001940.mm.1	NM_010984	Olfr263	olfactory receptor 263	21132698	21133784	TC1300000160.mm.1	0.0	0.833847
TC1600001957.mm.1	ENSMUST00000083267	Gm24612	predicted gene, 24612	82596073	82596179	TC1100003365.mm.1	0.0	0.834706
TC1600001961.mm.1	NR_028532	Snord71	small nucleolar RNA, C/D box 71	109839295	109839379	TC0800001302.mm.1	0.1	0.834835
TC1600001974.mm.1	ENSMUST00000119880	Gm15807	predicted gene 15807	14037736	14038861	TC1600001243.mm.1	0.0	0.835443
TC1600001976.mm.1	NM_175645	Xylt1	xylosyltransferase 1	117033971	117667751	TC0700001689.mm.1	0.0	0.835552
TC1600001984.mm.1	XR_141351	AA66720	expressed sequence AA667203	64894744	64901208	TC1800000666.mm.1	0.0	0.835571
TC1600001987.mm.1	ENSMUST00000082938	Gm23376	predicted gene, 23376	86930743	86930902	TC0300000688.mm.1	0.0	0.835596
TC1600001988.mm.1	NM_009827	Cckar	cholecystokinin A receptor	53698485	53707704	TC0500002428.mm.1	0.0	0.835604
TC1600001990.mm.1	NM_010503	Ifna2	interferon alpha 2	88682881	88683912	TC0400003012.mm.1	0.0	0.835645
TC1600002005.mm.1	NM_009367	Tgfb2	transforming growth factor, beta 2	186623186	186705992	TC0100003754.mm.1	0.0	0.835815
TC1600002011.mm.1	ENSMUST00000174624	Gm18191	predicted gene, 18191	8773326	8777247	TC0700002270.mm.1	0.0	0.835896
TC1600002016.mm.1	NM_028792	Josd1	Josephin domain containing 1	79674247	79687872	TC1500001883.mm.1	0.0	0.835907
TC1600002019.mm.1	ENSMUST00000175502	Gm24575	predicted gene, 24575	83516936	83517012	TC1500000773.mm.1	0.0	0.835983
TC1600002045.mm.1	ENSMUST00000157923	Gm24960	predicted gene, 24960	98383402	98383491	TC0400003118.mm.1	0.0	0.836057
TC1600002055.mm.1	NM_145921	Olah	oleoyl-ACP hydrolase	3341982	3366600	TC0200002846.mm.1	0.0	0.836139
TC1600002056.mm.1	ENSMUST00000185172	5S_rRNA	5S ribosomal RNA	23519746	23519856	TC0600000196.mm.1	-0.1	0.836398
TC1600002059.mm.1	ENSMUST00000101891	Gm22173	predicted gene, 22173	59897161	59897254	TC0700003338.mm.1	0.0	0.836605
TC1600002063.mm.1	NM_020593	Fbxo3	F-box protein 3	104027721	104063240	TC0200001547.mm.1	0.0	0.836816
TC1600002073.mm.1	ENSMUST00000104035	Gm22271	predicted gene, 22271	56277518	56277645	TC1900001702.mm.1	0.1	0.836916
TC1600002077.mm.1	NM_018742	Bet1l	blocked early in transport 1 homolog (S. cerevi	140853384	140856383	TC0700004508.mm.1	0.0	0.836987
TC1600002080.mm.1	NR_037216	Mir344d	microRNA 344d-2	61685272	61685351	TC0700003369.mm.1	0.0	0.837295
TC1600002086.mm.1	NM_178932	Aoc2	amine oxidase, copper containing 2 (retina-spec	101325063	101329702	TC1100001650.mm.1	0.0	0.83744
TC1600002087.mm.1	NM_025553	Mrpl11	mitochondrial ribosomal protein L11	4962306	4966995	TC1900000050.mm.1	0.0	0.83768
TC1600002094.mm.1	NCBI_Gene:10077517	Ighv8-1	immunoglobulin heavy variable 8-13	115765333	115765635	TC1200002651.mm.1	-0.1	0.83769
TC1600002116.mm.1	NM_001033350	Bank1	B cell scaffold protein with ankyrin repeats 1	136053363	136326046	TC0300002998.mm.1	-0.1	0.837717
TC1600002118.mm.1	NM_027495	Tmem144	transmembrane protein 144	79813146	79842662	TC0300002203.mm.1	0.0	0.837865
TC1600002128.mm.1	NM_029378	Dmrtc1a	DMRT-like family C1a	102903216	102908687	TC0X00002762.mm.1	0.0	0.837895
TC1600002137.mm.1	ENSMUST00000118181	Gm14794	predicted gene 14794	88749452	88749643	TC0X00000854.mm.1	0.0	0.83796
TC1600002152.mm.1	ENSMUST00000182798	Gm2445	predicted gene 2445	98402095	98403083	TC1300002501.mm.1	0.0	0.837973
TC1600002158.mm.1	ENSMUST00000103965	Gm24580	predicted gene, 24580	63878196	63878326	TC0800000669.mm.1	0.0	0.838048
TC1600002167.mm.1	ENSMUST00000184570	U6	U6 spliceosomal RNA	133330924	133330982	TC0200002049.mm.1	0.0	0.838055
TC1600002169.mm.1	NR_039583	Mir3473	microRNA 3473d	111016450	111016530	TC0800002936.mm.1	0.0	0.838105
TC1600002171.mm.1	XM_001477474	Gm3594	predicted gene 3594	6435796	6444611	TC1400001411.mm.1	0.0	0.83834
TC1600002172.mm.1	NM_134040	Ddx1	DEAD (Asp-Glu-Ala-Asp) box polypeptide 1	13219307	13249213	TC1200001436.mm.1	0.0	0.838397
TC1600002173.mm.1	ENSMUST00000118303	Gm14658	predicted gene 14658	63166983	63167238	TC0X00000580.mm.1	0.0	0.838472
TC1600002175.mm.1	ENSMUST00000121901	Gm13904	predicted gene 13904	107010938	107011774	TC0200001607.mm.1	0.0	0.838544
TC1600002180.mm.1	ENSMUST00000104364	Gm23709	predicted gene, 23709	43136499	43136628	TC0400002518.mm.1	0.0	0.838626
TC1600002182.mm.1	NM_025381	Atp6v1f	ATPase, H+ transporting, lysosomal V1 subunit F	29467718	29470512	TC0600000233.mm.1	0.0	0.838776
TC1700000002.mm.1	NM_025956	1700011	RIKEN cDNA 1700011H14 gene	49226358	49245428	TC1400001960.mm.1	0.0	0.839044
TC1700000020.mm.1	ENSMUST00000104132	Gm22284	predicted gene, 22284	45639383	45639514	TC1100000454.mm.1	0.0	0.839183
TC1700000035.mm.1	ENSMUST00000184566	RP23-16	N/A	15528046	15528427	TC0700002409.mm.1	0.0	0.839462
TC1700000051.mm.1	NM_138602	Praf2	PRA1 domain family 2	7728439	7731064	TC0X00000065.mm.1	0.0	0.839708
TC1700000053.mm.1	NM_010564	Inha	inhibin alpha	75507077	75510366	TC0100000662.mm.1	0.0	0.839822
TC1700000055.mm.1	NM_011976	Sema4g	sema domain, immunoglobulin domain (Ig), tran	44989101	45003397	TC1900000660.mm.1	0.0	0.839845
TC1700000064.mm.1	NR_035481	Mir1956	microRNA 1956	138526415	138526494	TC0300001417.mm.1	0.0	0.840109
TC1700000069.mm.1	NM_001242941_2	Gm3488	predicted gene, 3488	5501674	5522929	TC1400000046.mm.1	0.0	0.840238
TC1700000070.mm.1	NM_001001444	Defb29	defensin beta 29	152538714	152540098	TC0200004903.mm.1	0.0	0.840242
TC1700000075.mm.1	NM_001111288	Sco2	SCO cytochrome oxidase deficient homolog 2 (ye	89371637	89377039	TC1500002052.mm.1	0.0	0.840513
TC1700000077.mm.1	ENSMUST00000083041	Gm24316	predicted gene, 24316	50731053	50731159	TC1400000565.mm.1	0.0	0.840623
TC1700000078.mm.1	NR_030422	Mir551b	microRNA 551b	29416823	29416920	TC0300000192.mm.1	0.0	0.840732
TC1700000081.mm.1	XR_105192	2810030	RIKEN cDNA 2810030D12 gene	13200701	13207713	TC0800000124.mm.1	0.0	0.840964
TC1700000096.mm.1	ENSMUST00000108332	Gm7452	predicted pseudogene 7452	36956644	36960417	TC0600000356.mm.1	0.0	0.841284
TC1700000099.mm.1	ENSMUST00000104311	Gm23604	predicted gene, 23604	45581616	45581747	TC0800002148.mm.1	0.0	0.841856
TC1700000110.mm.1	ENSMUST00000175258	Gm23921	predicted gene, 23921	25868945	25869051	TC0700000429.mm.1	0.0	0.841896
TC1700000124.mm.1	NM_001166847	Vmn1r11	vomeronasal 1 receptor 112	20771185	20772078	TC0700000323.mm.1	0.0	0.84195
TC1700000144.mm.1	ENSMUST00000175419	Gm22773	predicted gene, 22773	172864264	172864341	TC0200005280.mm.1	0.0	0.842106
TC1700000158.mm.1	NM_021506	Sh3rf1	SH3 domain containing ring finger 1	61224171	61396072	TC0800000653.mm.1	0.0	0.842124
TC1700000170.mm.1	NM_001005788	Zfp69	zinc finger protein 69	120930137	120951701	TC0400003446.mm.1	0.0	0.842148
TC1700000194.mm.1	NM_029288	Gm10413	predicted gene 10413	3395093	3562944	TC1400000006.mm.1	0.0	0.842223
TC1700000198.mm.1	NR_029765	Mir337	microRNA 337	109585789	109585886	TC1200001130.mm.1	0.0	0.84246

TC1700000200.mm.1	NM_010744	Tmed1	transmembrane emp24 domain containing 1	21507380	21510234	TC0900001874.mm.1	0.0	0.842479
TC1700000223.mm.1	NM_010745	Ly86	lymphocyte antigen 86	37345345	37419036	TC1300000425.mm.1	0.1	0.842527
TC1700000225.mm.1	NM_026627	H2afb1	H2A histone family, member B1	17996417	17996958	TC0200003023.mm.1	0.0	0.842973
TC1700000248.mm.1	NM_178899	Hepacam	HEPACAM family member 2	3457089	3498297	TC0600001788.mm.1	0.0	0.843651
TC1700000269.mm.1	NM_001081181	9430016	RIKEN cDNA 9430016H08 gene	57406328	57417953	TC0100000422.mm.1	0.0	0.843743
TC1700000270.mm.1	ENSMUST00000179783	Gm22616	predicted gene, 22616	14182578	14182677	TC0100000076.mm.1	0.1	0.843813
TC1700000274.mm.1	NM_001031851	Agxt2	alanine-glyoxylate aminotransferase 2	10358532	10410153	TC1500002328.mm.1	0.0	0.843832
TC1700000290.mm.1	ENSMUST00000158060	Gm23995	predicted gene, 23995	144774425	144774553	TC0500001758.mm.1	0.0	0.843878
TC1700000293.mm.1	NM_001033314	Ccdc61	coiled-coil domain containing 61	18890883	18910415	TC0700002462.mm.1	0.0	0.843879
TC1700000308.mm.1	NM_011773	Slc30a3	solute carrier family 30 (zinc transporter), me	31086106	31108237	TC0500002172.mm.1	0.0	0.8439
TC1700000315.mm.1	ENSMUST00000043104	CR2	---	195165745	195171168	TC0100003857.mm.1	-0.1	0.844254
TC1700000324.mm.1	NM_010762	Mal	myelin and lymphocyte protein, T cell different	127633226	127656695	TC0200004563.mm.1	0.0	0.844295
TC1700000331.mm.1	NCBI_Gene:780800:p	Ighv7-2	immunoglobulin heavy variable 7-2	113912025	113912483	TC1200002575.mm.1	0.0	0.844477
TC1700000334.mm.1	ENSMUST00000103799	Gm24115	predicted gene, 24115	109148589	109148698	TC0200004298.mm.1	0.0	0.844527
TC1700000337.mm.1	ENSMUST00000180244	Gm24169	predicted gene, 24169	37256784	37256893	TC0300001868.mm.1	0.0	0.844527
TC1700000339.mm.1	ENSMUST00000103761	Gm22066	predicted gene, 22066	123015259	123015368	TC0300002871.mm.1	0.0	0.844527
TC1700000344.mm.1	ENSMUST00000103849	Gm24721	predicted gene, 24721	124735839	124735948	TC0400001424.mm.1	0.0	0.844527
TC1700000347.mm.1	ENSMUST00000179516	Gm22619	predicted gene, 22619	93745888	93745997	TC0400003060.mm.1	0.0	0.844527
TC1700000351.mm.1	ENSMUST00000180047	Gm23243	predicted gene, 23243	12940370	12940479	TC0500000083.mm.1	0.0	0.844527
TC1700000354.mm.1	ENSMUST00000103827	Gm22190	predicted gene, 22190	131532922	131533031	TC0600001552.mm.1	0.0	0.844527
TC1700000355.mm.1	ENSMUST00000179692	Gm26506	predicted gene, 26506	103581267	103581376	TC0700001499.mm.1	0.0	0.844527
TC1700000356.mm.1	ENSMUST00000177728	Gm25349	predicted gene, 25349	4388452	4388561	TC0700002154.mm.1	0.0	0.844527
TC1700000365.mm.1	ENSMUST00000178240	Gm24752	predicted gene, 24752	4393011	4393120	TC0700002155.mm.1	0.0	0.844527
TC1700000367.mm.1	ENSMUST00000103763	Gm24932	predicted gene, 24932	107319654	107319763	TC0700004035.mm.1	0.0	0.844527
TC1700000374.mm.1	ENSMUST00000103937	Gm26399	predicted gene, 26399	97255841	97255950	TC0800001157.mm.1	0.0	0.844527
TC1700000382.mm.1	ENSMUST00000178476	Gm25649	predicted gene, 25649	62013035	62013144	TC1300002158.mm.1	0.0	0.844527
TC1700000383.mm.1	ENSMUST00000103831	Gm22191	predicted gene, 22191	40215132	40215241	TC1400001775.mm.1	0.0	0.844527
TC1700000394.mm.1	ENSMUST00000178681	Gm25548	predicted gene, 25548	35440254	35440363	TC1600001549.mm.1	0.0	0.844527
TC1700000402.mm.1	ENSMUST00000103753	Gm22065	predicted gene, 22065	73624928	73625037	TC1800000775.mm.1	0.0	0.844527
TC1700000403.mm.1	NM_001130513	Ace2	angiotensin I converting enzyme (peptidyl-dipep	164139332	164188420	TC0X00001663.mm.1	0.0	0.844539
TC1700000404.mm.1	ENSMUST00000117779	Gm15302	predicted gene 15302	21330947	21333576	TC0800000232.mm.1	0.0	0.844554
TC1700000408.mm.1	NM_025613	Eid1	EP300 interacting inhibitor of differentiation	125673095	125675643	TC0200001886.mm.1	0.0	0.844619
TC1700000409.mm.1	ENSMUST00000104296	Gm25274	predicted gene, 25274	8945045	8945179	TC1300000047.mm.1	0.0	0.844682
TC1700000411.mm.1	NM_010885	Ndufa2	NADH dehydrogenase (ubiquinone) 1 alpha subc	36742332	36744587	TC1800001198.mm.1	0.0	0.844732
TC1700000418.mm.1	ENSMUST00000097296	Gm17199	predicted gene 17199	29855640	29856055	TC0700002733.mm.1	0.0	0.844941
TC1700000424.mm.1	ENSMUST00000173427	Gm8752	predicted pseudogene 8752	35445856	35448926	TC1700000687.mm.1	0.0	0.845222
TC1700000425.mm.1	NM_009320	Slc6a6	solute carrier family 6 (neurotransmitter trans	91684067	91759063	TC0600001092.mm.1	0.0	0.845446
TC1700000426.mm.1	XR_141199	Gm16440	predicted gene 16440	6380721	6390319	TC1400001410.mm.1	0.0	0.845531
TC1700000431.mm.1	NM_001198871	Scgb2b7	secretoglobin, family 2B, member 7	31703779	31705754	TC0700002796.mm.1	0.0	0.845572
TC1700000461.mm.1	ENSMUST00000183064	Gm7497	predicted gene 7497	9748722	9749724	TC1800000066.mm.1	0.0	0.845714
TC1700000466.mm.1	NM_013674	Irf4	interferon regulatory factor 4	30749226	30766927	TC1300000338.mm.1	0.0	0.845757
TC1700000480.mm.1	NM_008790	Pcp2	Purkinje cell protein 2 (L7)	3623371	3625545	TC0800001613.mm.1	0.0	0.845882
TC1700000484.mm.1	ENSMUST00000121660	Gm11918	predicted gene 11918	29125946	29126124	TC0400000238.mm.1	0.0	0.846052
TC1700000487.mm.1	ENSMUST00000121933	Gm5398	predicted gene 5398	77289832	77290815	TC0X00002498.mm.1	0.0	0.846148
TC1700000496.mm.1	ENSMUST00000104419	Gm25803	predicted gene, 25803	81338274	81338404	TC0400002919.mm.1	0.0	0.846179
TC1700000501.mm.1	NM_133947	Numa1	nuclear mitotic apparatus protein 1	101934111	102014959	TC0700001444.mm.1	0.0	0.846323
TC1700000502.mm.1	ENSMUST00000174682	Vmn2r-p	vomeronasal 2, receptor, pseudogene 37	7641854	7645329	TC0700002238.mm.1	0.0	0.846413
TC1700000505.mm.1	NM_019397	Egfl6	EGF-like-domain, multiple 6	166523007	166585720	TC0X00003349.mm.1	0.0	0.846649
TC1700000507.mm.1	ENSMUST00000185196	AC15920	N/A	58749589	58749684	TC1600001777.mm.1	0.0	0.846724
TC1700000513.mm.1	NM_028208	Ptar1	protein prenyltransferase alpha subunit repeat	23687400	23721129	TC1900000382.mm.1	0.0	0.846824
TC1700000527.mm.1	ENSMUST00000104473	n-R5s51	nuclear encoded rRNA 5S 51	118826909	118827031	TC1400002718.mm.1	0.0	0.846973
TC1700000528.mm.1	ENSMUST00000118175	Gm11929	predicted gene 11929	32207148	32208092	TC0400000253.mm.1	0.0	0.84723
TC1700000533.mm.1	NM_001277340	Aldoart	aldolase 1 A, retrogene 2	55565135	55566896	TC1200000471.mm.1	0.0	0.847411
TC1700000535.mm.1	ENSMUST00000113842	Gm5138	predicted gene 5138	83874199	83875380	TC0600002586.mm.1	0.0	0.847666
TC1700000539.mm.1	ENSMUST00000106032	M6pr-ps	mannose-6-phosphate receptor, pseudogene	99500024	99502645	TC0300000991.mm.1	0.0	0.848019
TC1700000542.mm.1	ENSMUST00000119457	Gm14788	predicted gene 14788	91289277	91289651	TC0X00000864.mm.1	0.0	0.848457
TC1700000548.mm.1	ENSMUST00000177767	Gm8355	predicted pseudogene 8355	14745362	14746117	TC1000001793.mm.1	0.0	0.848539
TC1700000559.mm.1	NM_026213	Ttc33	tetratricopeptide repeat domain 33	5185525	5218336	TC1500000022.mm.1	0.0	0.848611
TC1700000560.mm.1	NM_178933	Slc51b	solute carrier family 51, beta subunit	65412753	65422773	TC0900002510.mm.1	0.0	0.848644
TC1700000563.mm.1	NR_030471	Mir669a	microRNA 669a-3	10474433	10474541	TC0200000106.mm.1	0.0	0.848679
TC1700000564.mm.1	NM_146778	Olfr120	olfactory receptor 1208	88896574	88897648	TC0200004029.mm.1	0.0	0.848789
TC1700000571.mm.1	ENSMUST00000157854	Gm23077	predicted gene, 23077	104201110	104201225	TC0300001072.mm.1	0.0	0.848901
TC1700000585.mm.1	NR_003967	Gm4759	GTPase, very large interferon inducible 1 pseud	106417848	106441073	TC0700004008.mm.1	-0.1	0.848913
TC1700000595.mm.1	ENSMUST00000102235	Gm23256	predicted gene, 23256	42958351	42958460	TC0700000749.mm.1	0.0	0.848989
TC1700000604.mm.1	ENSMUST00000121849	Defa-ps	defensin, alpha, pseudogene 17	21473251	21473421	TC0800000241.mm.1	0.0	0.849028
TC1700000605.mm.1	NR_039552	Mir3970	microRNA 3970	33157112	33157201	TC1900000481.mm.1	0.0	0.849226
TC1700000611.mm.1	NM_026698	Tmem129	transmembrane protein 129	33653216	33657977	TC0500002221.mm.1	0.0	0.849341
TC1700000614.mm.1	NM_172480	Mtrr	5-methyltetrahydrofolate-homocysteine methyl	68560780	68582121	TC1300002269.mm.1	0.0	0.849405
TC1700000615.mm.1	ENSMUST00000103905	Gm24096	predicted gene, 24096	70147936	70148045	TC0600002450.mm.1	0.0	0.849905
TC1700000618.mm.1	NM_007655	Cd79a	CD79A antigen (immunoglobulin-associated alph	24897381	24902197	TC0700000402.mm.1	-0.1	0.850147
TC1700000621.mm.1	ENSMUST00000083121	n-R5s21	nuclear encoded rRNA 5S 213	82635013	82635110	TC0100000707.mm.1	-0.1	0.85018
TC1700000622.mm.1	ENSMUST00000104399	Gm24376	predicted gene, 24376	44412469	44412595	TC0400002560.mm.1	0.0	0.85022
TC1700000628.mm.1	NM_001099674	1810022	RIKEN cDNA 1810022K09 gene	14606289	14611256	TC0300001666.mm.1	0.0	0.850274
TC1700000639.mm.1	NM_177893	Fan1	FANCD2/FANCI-associated nuclease 1	64346758	64374095	TC0700003412.mm.1	0.0	0.850307
TC1700000642.mm.1	NR_030448	Mir680-	microRNA 680-2	144297790	144297899	TC0X00001420.mm.1	0.0	0.850634
TC1700000644.mm.1	ENSMUST00000083025	n-R5s41	nuclear encoded rRNA 5S 41	82342653	82342771	TC1500000751.mm.1	-0.1	0.850768
TC1700000646.mm.1	ENSMUST00000116972	Gm22676	predicted gene, 22676	112500869	112500997	TC0200001676.mm.1	0.1	0.850951
TC1700000651.mm.1	ENSMUST00000122692	n-R5s21	nuclear encoded rRNA 5S 21	43932316	43932432	TC1900000641.mm.1	0.0	0.850996

TC1700000652.mm.1	ENSMUST00000157979	Gm25820	predicted gene, 25820	88693930	88694057	TC0300000734.mm.1	0.1	0.85106
TC1700000661.mm.1	ENSMUST00000093750	Gm22365	predicted gene, 22365	61164365	61164481	TC1900001759.mm.1	0.0	0.851514
TC1700000662.mm.1	ENSMUST00000121523	Gm12097	predicted gene 12097	30572791	30574454	TC1100002440.mm.1	0.0	0.851769
TC1700000667.mm.1	ENSMUST00000117732	Gm11185	predicted gene 11185	83193988	83194994	TC0400000831.mm.1	0.0	0.851914
TC1700000673.mm.1	NM_001104547	Vmn2r96	vomeronasal 2, receptor 96	18581727	18598157	TC1700000223.mm.1	0.0	0.85194
TC1700000679.mm.1	NM_172287	Spire2	spire homolog 2 (Drosophila)	123332713	123369518	TC0800001518.mm.1	0.0	0.8521
TC1700000681.mm.1	NM_011817	Gadd45g	growth arrest and DNA-damage-inducible 45 gar	51846675	51848475	TC1300000607.mm.1	0.0	0.852187
TC1700000684.mm.1	NM_019952	Clcf1	cardiotrophin-like cytokine factor 1	4214238	4223490	TC1900000035.mm.1	0.0	0.852471
TC1700000686.mm.1	NM_178719	Smcr7l	Smith-Magenis syndrome chromosome region, c	80234080	80253371	TC1500000696.mm.1	0.0	0.85259
TC1700000687.mm.1	ENSMUST00000182691	Gm7286	predicted gene 7286	45835929	45836935	TC0900002207.mm.1	0.0	0.853014
TC1700000694.mm.1	NM_024444	Cyp4f18	cytochrome P450, family 4, subfamily f, polypep	71988482	72009626	TC0800002447.mm.1	0.0	0.853043
TC1700000703.mm.1	NM_009883	Cebpb	CCAAT/enhancer binding protein (C/EBP), beta	167688915	167690432	TC0200002594.mm.1	0.0	0.853656
TC1700000705.mm.1	ENSMUST00000177751	Gm21835	predicted gene, 21835	37430489	37431157	TC0Y00000119.mm.1	0.0	0.853842
TC1700000706.mm.1	ENSMUST00000103832	Gm22323	predicted gene, 22323	13599660	13599768	TC1900001184.mm.1	0.0	0.853947
TC1700000707.mm.1	ENSMUST00000174934	Gm25262	predicted gene, 25262	43631425	43631557	TC0400000445.mm.1	0.0	0.853984
TC1700000724.mm.1	NM_025539	Nudt2	nudix (nucleoside diphosphate linked moiety X)-	41465148	41480926	TC0400000374.mm.1	0.0	0.854062
TC1700000737.mm.1	ENSMUST00000042061	Gm5519	predicted pseudogene 5519	33822908	33825071	TC1900000485.mm.1	0.0	0.854355
TC1700000740.mm.1	NM_013807	Plk3	polo-like kinase 3	117128655	117133963	TC0400003361.mm.1	0.0	0.854671
TC1700000741.mm.1	NM_020505	Vav3	vav 3 oncogene	109340653	109685698	TC0300001161.mm.1	0.0	0.854983
TC1700000760.mm.1	NM_001193619	Cldn7	claudin 7	69964779	69967886	TC1100000932.mm.1	0.0	0.855172
TC1700000761.mm.1	NM_019819	Dusp14	dual specificity phosphatase 14	84048041	84069261	TC1100003406.mm.1	0.0	0.855365
TC1700000765.mm.1	ENSMUST00000082502	Gm25589	predicted gene, 25589	29113441	29113606	TC0600001969.mm.1	0.0	0.855594
TC1700000766.mm.1	ENSMUST00000184153	AC13550	N/A	82193755	82193864	TC1700001231.mm.1	0.0	0.855714
TC1700000775.mm.1	ENSMUST00000103822	Gm22189	predicted gene, 22189	19891976	19892061	TC1200000170.mm.1	0.0	0.855763
TC1700000779.mm.1	ENSMUST00000158322	Gm23257	predicted gene, 23257	43692686	43692817	TC0400000449.mm.1	0.0	0.855832
TC1700000786.mm.1	ENSMUST00000093724	Gm26327	predicted gene, 26327	39630392	39630502	TC0700000708.mm.1	0.0	0.855902
TC1700000788.mm.1	NM_026630	Gtsf1l	gametocyte specific factor 1-like	163087031	163089601	TC0200005087.mm.1	0.0	0.855927
TC1700000789.mm.1	ENSMUST00000158583	Gm26216	predicted gene, 26216	47290956	47291028	TC1700000908.mm.1	0.0	0.856113
TC1700000790.mm.1	NM_026885	Chmp2a	charged multivesicular body protein 2A	13032006	13034777	TC0700002359.mm.1	0.0	0.856195
TC1700000791.mm.1	NR_039545	Mir378b	microRNA 378b	88352773	88352864	TC1100001374.mm.1	0.0	0.856207
TC1700000794.mm.1	ENSMUST00000175094	Gm24819	predicted gene, 24819	41577909	41578074	TC1300001866.mm.1	0.0	0.856593
TC1700000810.mm.1	ENSMUST00000175272	Gm22461	predicted gene, 22461	97941671	97941740	TC1100003660.mm.1	0.0	0.856615
TC1700000811.mm.1	ENSMUST00000175331	Gm25950	predicted gene, 25950	114580495	114580594	TC1300001315.mm.1	0.0	0.856834
TC1700000812.mm.1	NM_026386	Snx2	sorting nexin 2	53176365	53220860	TC1800000534.mm.1	0.0	0.85694
TC1700000814.mm.1	NR_029747	Mir31	microRNA 31	88910557	88910662	TC0400003027.mm.1	0.0	0.856988
TC1700000819.mm.1	NR_003634	Rps4y2	ribosomal protein S4, Y-linked 2	148354656	148355598	TC0600001754.mm.1	0.0	0.85717
TC1700000820.mm.1	NCBI_Gene:380795:p	Ighg3	Ighg3 Immunoglobulin heavy constant gamma 3	113356223	113366477	TC1200002541.mm.1	0.0	0.857335
TC1700000829.mm.1	NM_001162366	Ptk2b	PTK2 protein tyrosine kinase 2 beta	66153257	66281052	TC1400002267.mm.1	0.0	0.857399
TC1700000834.mm.1	NR_039553	Mir3971	microRNA 3971	75551429	75551511	TC1100001073.mm.1	0.0	0.857683
TC1700000839.mm.1	ENSMUST00000122564	n-R5s17	nuclear encoded rRNA 5S 179	148753323	148753440	TC0500003643.mm.1	0.0	0.857771
TC1700000842.mm.1	NR_027958	D930048	RIKEN cDNA D930048N14 gene	51650954	51657681	TC1100000574.mm.1	0.0	0.858076
TC1700000846.mm.1	ENSMUST00000157341	Gm25390	predicted gene, 25390	91005741	91005843	TC1000001109.mm.1	0.0	0.858151
TC1700000854.mm.1	ENSMUST00000103977	Gm25546	predicted gene, 25546	94681255	94681386	TC1500002112.mm.1	0.0	0.858275
TC1700000860.mm.1	ENSMUST00000158083	Gm25558	predicted gene, 25558	50887950	50888055	TC0900000611.mm.1	0.0	0.858365
TC1700000862.mm.1	ENSMUST00000083136	n-R5s19	nuclear encoded rRNA 5S 196	51828912	51829028	TC0300000370.mm.1	0.0	0.858402
TC1700000865.mm.1	ENSMUST00000184498	AC20184	N/A	20134948	20135057	TC0Y00000055.mm.1	0.0	0.858526
TC1700000867.mm.1	NM_001098231	Pdp1	pyruvate dehyrogenase phosphatase catalytic su	11958184	11966452	TC0400002216.mm.1	0.0	0.858645
TC1700000896.mm.1	ENSMUST00000120392	Gm4773	predicted gene 4773	80061011	80061712	TC0X00002531.mm.1	0.0	0.858654
TC1700000900.mm.1	NM_020016	Magea2	melanoma antigen, family A, 2	155027201	155093666	TC0X00003231.mm.1	0.0	0.858708
TC1700000902.mm.1	NM_007895	Ear2	eosinophil-associated, ribonuclease A family, m	44102654	44103538	TC1400000459.mm.1	0.0	0.858763
TC1700000904.mm.1	NM_001024932	Pilrb2	paired immunoglobin-like type 2 receptor beta 2	137865829	137871758	TC0500003465.mm.1	0.0	0.859003
TC1700000908.mm.1	ENSMUST00000184707	DLEU2_5	Deleted in lymphocytic leukemia 2 conserved re	61643371	61643455	TC1400000870.mm.1	0.0	0.859008
TC1700000914.mm.1	NM_001039511	Ivns1ab	influenza virus NS1A binding protein	151344498	151364445	TC0100001351.mm.1	0.0	0.859128
TC1700000925.mm.1	NM_008096	Gc	group specific component	89417511	89457898	TC0500002717.mm.1	-0.1	0.859429
TC1700000927.mm.1	NM_008260	Foxa3	forkhead box A3	19013282	19023539	TC0700002468.mm.1	0.0	0.859491
TC1700000935.mm.1	ENSMUST00000158378	Gm23854	predicted gene, 23854	64304637	64304744	TC1000002295.mm.1	0.0	0.859602
TC1700000937.mm.1	NM_022816	Acot10	acyl-CoA thioesterase 10	20665214	20666750	TC1500001259.mm.1	0.0	0.859802
TC1700000945.mm.1	XR_106205	A030003	RIKEN cDNA A030003K02 gene	78030006	78032665	TC1100003281.mm.1	0.0	0.85991
TC1700000947.mm.1	NM_001199960	Ccl27b	chemokine (C-C motif) ligand 27b	42650604	42656005	TC0400000413.mm.1	0.0	0.860154
TC1700000955.mm.1	NM_020596	Egr4	early growth response 4	85511122	85513589	TC0600002615.mm.1	0.0	0.860181
TC1700000956.mm.1	ENSMUST00000177777	Gm13072	predicted gene 13072	149457297	149457872	TC0400001947.mm.1	-0.1	0.860187
TC1700000957.mm.1	ENSMUST00000104371	Gm23175	predicted gene, 23175	33959069	33959200	TC0300001818.mm.1	0.0	0.860317
TC1700000973.mm.1	NM_025842	Vps28	vacuolar protein sorting 28 (yeast)	76622088	76626037	TC1500002348.mm.1	0.0	0.860334
TC1700000983.mm.1	XM_001477440	Gm20911	predicted gene, 20911	81457992	81483890	TC0Y00000205.mm.1	0.0	0.860619
TC1700000990.mm.1	NR_002880	Gm21944	defensin beta 48 pseudogene	20876499	20889113	TC0800000208.mm.1	0.0	0.860629
TC1700000991.mm.1	NM_144515	Zfp52	zinc finger protein 52	21535539	21562602	TC1700000274.mm.1	0.0	0.860919
TC1700000997.mm.1	NM_025331	Gng11	guanine nucleotide binding protein (G protein),	4003943	4008446	TC0600000007.mm.1	0.0	0.860976
TC1700000998.mm.1	NM_025567	Cyc1	cytochrome c-1	76343523	76345937	TC1500000587.mm.1	0.0	0.861189
TC1700001012.mm.1	ENSMUST00000104455	Gm24985	predicted gene, 24985	13111299	13111427	TC0600000093.mm.1	0.0	0.861374
TC1700001015.mm.1	ENSMUST00000175322	Gm23152	predicted gene, 23152	166655027	166655142	TC0200005176.mm.1	0.1	0.861572
TC1700001032.mm.1	ENSMUST00000171455	Gm17572	predicted gene, 17572	31950549	31950968	TC1700000548.mm.1	0.0	0.861635
TC1700001033.mm.1	ENSMUST00000158724	Gm22670	predicted gene, 22670	47920755	47920897	TC0400000526.mm.1	0.0	0.861688
TC1700001038.mm.1	ENSMUST00000134226	Gm12590	predicted gene 12590	121882333	121883863	TC1100004257.mm.1	0.1	0.861733
TC1700001045.mm.1	ENSMUST00000119869	Gm12420	predicted gene 12420	84697863	84698910	TC0400000847.mm.1	0.0	0.86178
TC1700001047.mm.1	ENSMUST00000157857	Gm23641	predicted gene, 23641	150551707	150551807	TC0500003682.mm.1	0.0	0.862082
TC1700001051.mm.1	ENSMUST00000104570	Gm23527	predicted gene, 23527	116371939	116372068	TC0600002974.mm.1	0.0	0.862149
TC1700001053.mm.1	NM_133932	Tada3	transcriptional adaptor 3	113366025	113377883	TC0600002918.mm.1	0.0	0.862158
TC1700001069.mm.1	NM_011574	Cirh1a	cirrhosis, autosomal recessive 1A (human)	106893640	106923094	TC0800001258.mm.1	0.0	0.862205

TC1700001082.mm.1	ENSMUST00000083932	Gm24032	predicted gene, 24032	95896962	95897120	TC1300002464.mm.1	0.0	0.862341
TC1700001083.mm.1	NM_016736	Nub1	negative regulator of ubiquitin-like proteins 1	24685815	24710555	TC0500000221.mm.1	0.0	0.862556
TC1700001084.mm.1	ENSMUST00000157656	Gm23585	predicted gene, 23585	45254453	45254554	TC0700003000.mm.1	0.0	0.86364
TC1700001101.mm.1	ENSMUST00000103967	Gm24582	predicted gene, 24582	57741300	57741402	TC1100000666.mm.1	0.0	0.863764
TC1700001110.mm.1	ENSMUST00000104222	Gm23750	predicted gene, 23750	114824154	114824285	TC0300002790.mm.1	0.0	0.863932
TC1700001139.mm.1	ENSMUST00000082581	n-R5s16	nuclear encoded rRNA 5S 162	60250792	60250910	TC0600000722.mm.1	-0.1	0.864013
TC1700001140.mm.1	ENSMUST00000060680	2010001	RIKEN cDNA 2010001K21 gene	47010673	47011195	TC1300000540.mm.1	0.0	0.864102
TC1700001143.mm.1	NM_001033441	Alg10b	asparagine-linked glycosylation 10B (alpha-1,2-	90224311	90230554	TC1500000886.mm.1	0.0	0.864185
TC1700001145.mm.1	NM_198028	Serpinb	serine (or cysteine) peptidase inhibitor, clade	107529003	107549271	TC0100003867.mm.1	0.0	0.864371
TC1700001147.mm.1	ENSMUST00000179849	Gm21802	predicted gene, 21802	83361698	83362381	TC0Y00000510.mm.1	0.0	0.864402
TC1700001148.mm.1	ENSMUST00000182234	Gm4804	predicted gene 4804	15728097	15729095	TC1200000122.mm.1	0.0	0.864432
TC1700001151.mm.1	NM_146148	C8a	complement component 8, alpha polypeptide	104815679	104876398	TC0400003184.mm.1	0.0	0.864732
TC1700001155.mm.1	NM_134073	Kctd9	potassium channel tetramerisation domain cont	67715937	67742310	TC1400000962.mm.1	0.0	0.864771
TC1700001156.mm.1	NM_028643	Micu2	mitochondrial calcium uptake 2	57916280	57999262	TC1400002152.mm.1	0.0	0.864786
TC1700001162.mm.1	NM_009693	Apob	apolipoprotein B	7977648	8016839	TC1200000057.mm.1	0.0	0.864862
TC1700001163.mm.1	XR_106376	Gm11772	predicted gene 11772	120235187	120236122	TC1100004201.mm.1	0.0	0.865086
TC1700001168.mm.1	NM_027279	Mettl18	methyltransferase like 18	163994889	163997244	TC0100001494.mm.1	0.0	0.865086
TC1700001173.mm.1	NM_011540	Tcap	titin-cap	98383811	98384953	TC1100001566.mm.1	0.0	0.865414
TC1700001175.mm.1	ENSMUST00000179436	Cd99	CD99 antigen	66	1479	TC4_JH584295_rand	0.0	0.865604
TC1700001180.mm.1	ENSMUST00000116165	Gm14510	predicted gene 14510	8959312	8960403	TC0X00000098.mm.1	0.0	0.865757
TC1700001186.mm.1	NM_001167680	Rhbdf2	rhomboid 5 homolog 2 (Drosophila)	116598165	116627019	TC1100004122.mm.1	0.0	0.866177
TC1700001189.mm.1	NM_175446	Zmat1	zinc finger, matrin type 1	134971372	135009209	TC0X00003438.mm.1	0.0	0.866292
TC1700001192.mm.1	NM_023065	Ifi30	interferon gamma inducible protein 30	70762773	70766663	TC0800002403.mm.1	-0.1	0.866611
TC1700001194.mm.1	NM_007878	Drd4	dopamine receptor D4	141292006	141296464	TC0700002045.mm.1	0.0	0.866735
TC1700001197.mm.1	ENSMUST00000122404	Gm14150	predicted gene 14150	151458956	151460309	TC0200002260.mm.1	0.0	0.866751
TC1700001205.mm.1	NCBI_Gene:777685:p	Ighv5-2	immunoglobulin heavy variable 5-2	113578504	113578990	TC1200002554.mm.1	0.0	0.86699
TC1700001209.mm.1	ENSMUST00000183344	RP23-30	N/A	87203026	87293504	TC0800001016.mm.1	0.0	0.867082
TC1700001213.mm.1	NM_029283	Fam183b	family with sequence similarity 183, member B	58783892	58801960	TC1100002834.mm.1	0.0	0.867087
TC1700001227.mm.1	NM_008343	Igfbp3	insulin-like growth factor binding protein 3	7206086	7213923	TC1100002195.mm.1	0.0	0.867308
TC1700001230.mm.1	NM_001080967	Tmsb15b	thymosin beta 15b2	136954988	136976874	TC0X00003042.mm.1	0.0	0.867492
TC1700001231.mm.1	NM_026916	Nupr1l	nuclear protein transcriptional regulator 1 lik	129908540	129911281	TC0500001516.mm.1	0.0	0.867644
TC1700001232.mm.1	NM_008099	Gcsam	germinal center associated, signaling and motil	45610380	45622867	TC1600000679.mm.1	0.0	0.867756
TC1700001237.mm.1	ENSMUST00000182240	Gm8907	predicted gene 8907	50186043	50187045	TC0900002260.mm.1	0.0	0.868097
TC1700001238.mm.1	NM_172392	Zfp759	zinc finger protein 759	67128228	67141787	TC1300000817.mm.1	0.0	0.868174
TC1700001261.mm.1	NM_001134675	Mup7	major urinary protein 7	60066469	60070475	TC0400004208.mm.1	-0.1	0.868302
TC1700001262.mm.1	ENSMUST00000083755	n-R5s7	nuclear encoded rRNA 5S 7	68949564	68949684	TC0X00002378.mm.1	-0.1	0.868314
TC1700001264.mm.1	ENSMUST00000097943	Gm7579	predicted gene 7579	142211859	142212590	TC0700002070.mm.1	0.0	0.868554
TC1700001266.mm.1	ENSMUST00000103943	Gm23578	predicted gene, 23578	10468069	10468172	TC0200000095.mm.1	0.0	0.868581
TC1700001268.mm.1	NR_037604	Rdh18-p	retinol dehydrogenase 18, pseudogene	127824216	127846565	TC1000003222.mm.1	0.0	0.868724
TC1700001270.mm.1	NM_207706	Elmo2	engulfment and cell motility 2	165288031	165326479	TC0200005146.mm.1	0.0	0.868842
TC1700001276.mm.1	NM_025624	Pomp	proteasome maturation protein	147860628	147875782	TC0500001818.mm.1	0.0	0.868909
TC1700001283.mm.1	ENSMUST00000177784	Gm25872	predicted gene, 25872	7704840	7704939	TC1700000075.mm.1	0.1	0.868972
TC1700001303.mm.1	NM_001205009	Gm2696	predicted gene 2696	77814682	77837251	TC1000000768.mm.1	0.0	0.869045
TC1700001304.mm.1	ENSMUST00000104284	Gm24791	predicted gene, 24791	123389801	123389931	TC0100002980.mm.1	0.0	0.869316
TC1700001309.mm.1	ENSMUST00000179185	n-R5s12	nuclear encoded rRNA 5S 127	123584535	123584653	TC0800003131.mm.1	-0.1	0.869416
TC1700001312.mm.1	NM_001163675	Abcc4	ATP-binding cassette, sub-family C (CFTR/MRP),	118482692	118706219	TC1400002714.mm.1	0.0	0.869538
TC1700001313.mm.1	NM_001136088	Sh3bp2	SH3-domain binding protein 2	34525784	34563639	TC0500000378.mm.1	0.0	0.869676
TC1700001314.mm.1	ENSMUST00000177901	Gm24568	predicted gene, 24568	21095624	21095715	TC0800001838.mm.1	0.0	0.869699
TC1700001315.mm.1	NR_029961	Mir449a	microRNA 449a	113037534	113037624	TC1300001281.mm.1	0.0	0.869777
TC1700001316.mm.1	NM_001122895	Nab2	Ngfi-A binding protein 2	127660918	127668568	TC1000003120.mm.1	0.0	0.869912
TC1700001322.mm.1	ENSMUST00000082686	Gm22303	predicted gene, 22303	16939994	16940115	TC1200000135.mm.1	-0.1	0.869943
TC1700001330.mm.1	NM_197943	Sgsm2	small G protein signaling modulator 2	74849261	74897080	TC1100003204.mm.1	0.0	0.87026
TC1700001335.mm.1	ENSMUST00000083941	Gm25684	predicted gene, 25684	95442351	95442457	TC0700003751.mm.1	0.0	0.870361
TC1700001342.mm.1	NM_146450	Olfr131	olfactory receptor 1314	112091761	112092699	TC0200004342.mm.1	0.0	0.870378
TC1700001345.mm.1	ENSMUST00000143300	Gm16356	predicted gene 16356	175901725	175901893	TC0200002730.mm.1	0.0	0.870497
TC1700001346.mm.1	ENSMUST00000175482	Gm25752	predicted gene, 25752	79594668	79594793	TC1500001880.mm.1	0.0	0.87056
TC1700001347.mm.1	NR_028530	Snord66	small nucleolar RNA, C/D box 66	20684239	20684313	TC1600000289.mm.1	-0.1	0.870651
TC1700001365.mm.1	ENSMUST00000172146	Gm8893	predicted gene 8893	103817856	103822243	TC1200002280.mm.1	-0.1	0.870731
TC1700001366.mm.1	ENSMUST00000122599	n-R5s17	nuclear encoded rRNA 5S 175	119297245	119297361	TC0500001322.mm.1	0.0	0.870756
TC1700001368.mm.1	NM_001276398	Ms4a7	membrane-spanning 4-domains, subfamily A, me	11321039	11336146	TC1900001131.mm.1	0.0	0.870958
TC1700001373.mm.1	NR_102273	AA54340	myc-like oncogene, s-myc protein pseudogene	107192793	107194061	TC0900001363.mm.1	0.0	0.87131
TC1700001379.mm.1	NR_030460	Mir688	microRNA 688	102671792	102671866	TC1500002300.mm.1	0.0	0.871873
TC1700001380.mm.1	NM_026545	Psmd8	proteasome (prosome, macropain) 26S subunit,	29174187	29180701	TC0700002716.mm.1	0.0	0.872
TC1700001382.mm.1	NM_001013758	Lingo3	leucine rich repeat and Ig domain containing 3	80832801	80844039	TC1000002516.mm.1	0.0	0.872085
TC1700001385.mm.1	ENSMUST00000157679	Gm24504	predicted gene, 24504	64786329	64786428	TC1800001466.mm.1	0.0	0.872291
TC1700001390.mm.1	ENSMUST00000158372	Gm22766	predicted gene, 22766	21354354	21354452	TC1200000184.mm.1	0.0	0.872436
TC1700001393.mm.1	ENSMUST00000157772	Gm26311	predicted gene, 26311	117183335	117183411	TC1000002924.mm.1	0.0	0.872544
TC1700001395.mm.1	ENSMUST00000184379	RP24-19	N/A	14756555	14756924	TC0700002390.mm.1	0.0	0.872547
TC1700001400.mm.1	ENSMUST00000158671	Gm23205	predicted gene, 23205	38297939	38298041	TC1800000397.mm.1	0.0	0.872596
TC1700001401.mm.1	ENSMUST00000082770	n-R5s18	nuclear encoded rRNA 5S 180	149281118	149281223	TC0500003655.mm.1	0.0	0.872696
TC1700001420.mm.1	NM_138674	Pkhd1l1	polycystic kidney and hepatic disease 1-like 1	44457553	44601170	TC1500000353.mm.1	0.0	0.872726
TC1700001422.mm.1	ENSMUST00000083689	Gm24762	predicted gene, 24762	132547104	132547207	TC0400003676.mm.1	0.0	0.872885
TC1700001436.mm.1	NM_023785	Ppbp	pro-platelet basic protein	90768518	90770060	TC0500000842.mm.1	-0.1	0.873122
TC1700001447.mm.1	NM_146505	Olfr148	olfactory receptor 148	39613544	39614568	TC0900000430.mm.1	0.0	0.873212
TC1700001449.mm.1	NM_198627	Vstm2l	V-set and transmembrane domain containing 2-l	157914653	157944719	TC0200002419.mm.1	0.0	0.873285
TC1700001450.mm.1	ENSMUST00000082773	Gm22507	predicted gene, 22507	112931424	112931583	TC1000001316.mm.1	0.0	0.87337
TC1700001451.mm.1	NM_007614	Ctnnb1	catenin (cadherin associated protein), beta 1	120929216	120960507	TC0900001612.mm.1	0.0	0.873373
TC1700001455.mm.1	ENSMUST00000104616	Gm24403	predicted gene, 24403	89048998	89049127	TC0300002332.mm.1	0.0	0.873468

TC1700001458.mm.1	NR_035479	Mir1954	microRNA 1954	32652329	32652414	TC0200000589.mm.1	0.0	0.873524
TC1700001459.mm.1	ENSMUST00000179028	Gm21883	predicted gene, 21883	31573106	31574283	TC0X00002016.mm.1	0.0	0.873536
TC1700001465.mm.1	ENSMUST00000122462	Gm13685	predicted gene 13685	83538535	83538675	TC0200003855.mm.1	0.0	0.873612
TC1700001466.mm.1	NM_019431	Cacng4	calcium channel, voltage-dependent, gamma sut	107732357	107794557	TC1100003962.mm.1	0.0	0.873752
TC1700001470.mm.1	ENSMUST00000083782	Gm25651	predicted gene, 25651	169695781	169695899	TC0X00003377.mm.1	0.0	0.873941
TC1700001471.mm.1	ENSMUST00000083812	Gm25005	predicted gene, 25005	84742162	84742317	TC1800001716.mm.1	0.0	0.873969
TC1700001478.mm.1	NM_001205025	Jagn1	jagunal homolog 1 (Drosophila)	113442517	113448229	TC0600001250.mm.1	0.0	0.874591
TC1700001484.mm.1	ENSMUST00000177652	Ap3m1-p	adaptor-related protein complex 3, mu 1 subunit	82585406	82587534	TC1000000927.mm.1	0.0	0.87463
TC1700001485.mm.1	ENSMUST00000102411	Gm24048	predicted gene, 24048	135147408	135147513	TC0300001363.mm.1	0.0	0.87465
TC1700001499.mm.1	NCBI_Gene:620105:p	Igkv1-3	immunoglobulin kappa variable 1-35	70010949	70011673	TC0600002446.mm.1	0.0	0.87511
TC1700001500.mm.1	NM_178599	Commd8	COMM domain containing 8	72157000	72168183	TC0500002567.mm.1	0.0	0.875132
TC1700001502.mm.1	NM_013739	Dok3	docking protein 3	55523235	55528556	TC1300002062.mm.1	0.0	0.875198
TC1700001507.mm.1	NM_001114679	9930111	RIKEN cDNA 9930111J21 gene 1	48946150	48979398	TC1100004292.mm.1	-0.1	0.875354
TC1700001512.mm.1	NM_025498	Psenen	presenilin enhancer 2 homolog (C. elegans)	30561865	30563186	TC0700002766.mm.1	0.1	0.875357
TC1700001524.mm.1	ENSMUST00000184199	ZNFX1-A	ZNFX1 antisense RNA 1 conserved region 2	74764798	74764890	TC0100000643.mm.1	0.0	0.875538
TC1700001552.mm.1	NM_172709	Otop1	otopetrin 1	38275972	38304217	TC0500000436.mm.1	0.0	0.875773
TC1700001553.mm.1	NM_015790	Icosl	icos ligand	78069360	78079525	TC1000000778.mm.1	0.1	0.876104
TC1700001566.mm.1	ENSMUST00000169859	Gm17542	predicted gene, 17542	58713606	58718210	TC1000002208.mm.1	0.0	0.876124
TC1700001570.mm.1	BC117508	Sh2d1b1	SH2 domain protein 1B1	170277318	170285662	TC0100001568.mm.1	0.0	0.876247
TC1700001572.mm.1	NM_011600	Tle4	transducin-like enhancer of split 4, homolog of	14448072	14598051	TC1900001196.mm.1	0.0	0.87631
TC1700001593.mm.1	NM_007549	Blk	B lymphoid kinase	63372836	63417187	TC1400002219.mm.1	-0.1	0.876513
TC1700001595.mm.1	NM_019400	Rabep1	rabaptin, RAB GTPase binding effector protein 1	70844763	70943105	TC1100000967.mm.1	0.0	0.876601
TC1700001599.mm.1	NM_001242941	Gm3317	predicted gene 3317	5163642	5170292	TC1400000040.mm.1	0.0	0.876625
TC1700001602.mm.1	ENSMUST00000104300	Gm25276	predicted gene, 25276	13531428	13531551	TC1600001230.mm.1	0.0	0.876827
TC1700001603.mm.1	ENSMUST00000178153	Gm23215	predicted gene, 23215	3249584	3249704	TC1600000003.mm.1	0.1	0.877196
TC1700001604.mm.1	NM_009654	Alb	albumin	90460889	90476603	TC0500000834.mm.1	0.1	0.877239
TC1700001606.mm.1	NM_009266	Sephs2	selenophosphate synthetase 2	127271879	127274059	TC0700004321.mm.1	0.0	0.877401
TC1700001614.mm.1	ENSMUST00000182385	Gm26927	predicted gene, 26927	84339149	84340113	TC1300002375.mm.1	0.0	0.877673
TC1700001622.mm.1	ENSMUST00000175329	Gm25952	predicted gene, 25952	65989045	65989118	TC0500000633.mm.1	0.0	0.877841
TC1700001625.mm.1	NM_007893	E4f1	E4F transcription factor 1	24443779	24455370	TC1700001628.mm.1	0.0	0.878044
TC1700001628.mm.1	XR_105479	3110053	RIKEN cDNA 3110053B16 gene	20874095	20921275	TC1200001482.mm.1	0.0	0.878127
TC1700001631.mm.1	ENSMUST00000175312	Gm24815	predicted gene, 24815	7741553	7741622	TC1200001389.mm.1	0.0	0.878222
TC1700001634.mm.1	ENSMUST00000175341	Gm24322	predicted gene, 24322	90796186	90796255	TC0500002732.mm.1	0.0	0.878357
TC1700001637.mm.1	NM_028127	Frmd6	FERM domain containing 6	70825514	70902234	TC1200000596.mm.1	0.0	0.878463
TC1700001640.mm.1	NM_172150	Ift52	intraflagellar transport 52	163017354	163046141	TC0200002477.mm.1	0.0	0.878511
TC1700001641.mm.1	ENSMUST00000157826	Gm26368	predicted gene, 26368	167364180	167364297	TC0X00003362.mm.1	0.0	0.878659
TC1700001644.mm.1	ENSMUST00000177620	Gm22908	predicted gene, 22908	22040913	22041022	TC1200000189.mm.1	0.0	0.878677
TC1700001646.mm.1	NM_146173	Tspan33	tetraspanin 33	29694222	29718559	TC0600000240.mm.1	0.0	0.87869
TC1700001648.mm.1	ENSMUST00000177829	Gm11273	predicted gene 11273	21500953	21501430	TC1300001545.mm.1	0.0	0.878704
TC1700001652.mm.1	NM_053244	Kiss1r	KISS1 receptor	79916971	79922273	TC1000000828.mm.1	0.0	0.878716
TC1700001655.mm.1	ENSMUST00000182463	Gm3671	predicted gene 3671	75693653	75694659	TC0900002682.mm.1	0.0	0.879003
TC1700001659.mm.1	NM_175276	Fhod3	formin homology 2 domain containing 3	24708623	25133507	TC1800000201.mm.1	0.0	0.879021
TC1700001666.mm.1	NM_026485	Trabd	TraB domain containing	89075124	89087077	TC1500000860.mm.1	0.0	0.879669
TC1700001671.mm.1	BC060207	Bmyc	brain expressed myelocytomatosis oncogene	25706739	25707721	TC0200000432.mm.1	0.0	0.879679
TC1700001674.mm.1	ENSMUST00000178947	Gm23089	predicted gene, 23089	59718588	59718681	TC0700003286.mm.1	0.0	0.879959
TC1700001675.mm.1	ENSMUST00000178062	Gm24711	predicted gene, 24711	59721125	59721218	TC0700003287.mm.1	0.0	0.879959
TC1700001677.mm.1	ENSMUST00000179963	Gm26188	predicted gene, 26188	59723644	59723737	TC0700003288.mm.1	0.0	0.879959
TC1700001690.mm.1	ENSMUST00000078246	Gm10108	predicted pseudogene 10108	13121449	13121766	TC0500001963.mm.1	0.0	0.880238
TC1700001694.mm.1	NR_045392	Gm10731	FUN14 domain containing 2 pseudogene	40853476	40855285	TC0300001903.mm.1	0.0	0.880291
TC1700001699.mm.1	ENSMUST00000174687	Cd9-ps	Cd9 antigen, pseudogene	41682658	41683307	TC0700002912.mm.1	0.0	0.880376
TC1700001701.mm.1	XM_001477786	Gm7137	predicted gene 7137	77787490	77788200	TC1000002431.mm.1	0.0	0.880431
TC1700001713.mm.1	ENSMUST00000175036	Gm26194	predicted gene, 26194	39976301	39976371	TC0X00002099.mm.1	0.0	0.880442
TC1700001716.mm.1	ENSMUST00000103855	Gm22918	predicted gene, 22918	100139501	100139610	TC1000001219.mm.1	0.0	0.880674
TC1700001718.mm.1	ENSMUST00000103846	Gm25287	predicted gene, 25287	100144254	100144363	TC1000001220.mm.1	0.0	0.880674
TC1700001743.mm.1	NM_001195634	Defa2	defensin, alpha, 2	21378517	21379495	TC0800000234.mm.1	0.0	0.880968
TC1700001755.mm.1	NM_139142	Slc6a20	solute carrier family 6 (neurotransmitter trans	123636122	123678885	TC0900003307.mm.1	0.0	0.881274
TC1700001775.mm.1	ENSMUST00000180091	n-R5s93	nuclear encoded rRNA 5S 93	5069259	5069377	TC0800001641.mm.1	0.0	0.881326
TC1700001779.mm.1	NM_027759	Fsip1	fibrous sheath-interacting protein 1	118204888	118256966	TC0200004406.mm.1	0.0	0.881661
TC1700001781.mm.1	NM_008878	Serpinf	serine (or cysteine) peptidase inhibitor, clade	75431732	75439591	TC1100003224.mm.1	0.0	0.881687
TC1700001786.mm.1	ENSMUST00000104047	Gm25095	predicted gene, 25095	188622923	188623053	TC0100003775.mm.1	0.0	0.881823
TC1700001802.mm.1	ENSMUST00000118945	Gm15172	predicted gene 15172	157377939	157378984	TC0X00003248.mm.1	0.0	0.881911
TC1700001821.mm.1	NR_003518	Pisd-ps	phosphatidylserine decarboxylase, pseudogene 3	17987	59690	TCUn_JH5843040000	0.0	0.881947
TC1700001824.mm.1	NM_030199	Zfp623	zinc finger protein 623	75940952	75949402	TC1500000567.mm.1	0.0	0.881981
TC1700001834.mm.1	ENSMUST00000122803	Gm22451	predicted gene, 22451	72737831	72737981	TC0300002150.mm.1	0.0	0.881982
TC1700001838.mm.1	ENSMUST00000119246	Gm12286	predicted gene 12286	63312310	63313311	TC1100002957.mm.1	0.0	0.882187
TC1700001839.mm.1	ENSMUST00000158075	Gm25554	predicted gene, 25554	104289860	104289972	TC0200001555.mm.1	0.0	0.882244
TC1700001846.mm.1	ENSMUST00000116769	Gm26475	predicted gene, 26475	128522689	128522809	TC0X00002958.mm.1	0.1	0.882268
TC1700001849.mm.1	ENSMUST00000122433	Gm14148	predicted gene 14148	151374008	151375047	TC0200002259.mm.1	0.0	0.882276
TC1700001850.mm.1	NM_026752	Zfyve21	zinc finger, FYVE domain containing 21	111814170	111828388	TC1200001248.mm.1	0.0	0.882283
TC1700001860.mm.1	NM_028964	Snx29	sorting nexin 29	11322904	11755473	TC1600000138.mm.1	0.0	0.882412
TC1700001877.mm.1	OTTMUST00000112462	RP23-39	---	84742169	84744326	TC0200003879.mm.1	0.0	0.882548
TC1700001883.mm.1	ENSMUST00000179446	Gm23860	predicted gene, 23860	7820916	7821047	TC0400000048.mm.1	0.0	0.882773
TC1700001887.mm.1	ENSMUST00000083784	Gm25650	predicted gene, 25650	46838346	46838507	TC1000002117.mm.1	0.0	0.882836
TC1700001894.mm.1	ENSMUST00000183681	AC11090	N/A	80026418	80026513	TC0700003575.mm.1	0.0	0.88298
TC1700001904.mm.1	NR_030577	Mir574	microRNA 574	64970318	64970395	TC0500000603.mm.1	0.0	0.883208
TC1700001915.mm.1	OTTMUST00000060184	RP24-54	---	124916863	124925844	TC0600001435.mm.1	0.0	0.883228
TC1700001921.mm.1	NM_133678	Sac3d1	SAC3 domain containing 1	6116004	6118650	TC1900001002.mm.1	0.0	0.883665
TC1700001924.mm.1	NM_009457	Uba1	ubiquitin-like modifier activating enzyme 1	20658302	20683179	TC0X00000212.mm.1	0.0	0.883858

TC1700001925.mm.1	NM_029780	Raf1	v-raf-leukemia viral oncogene 1	115618067	115676635	TC0600002955.mm.1	0.0	0.883942
TC1700001926.mm.1	NM_145229	AY07488	cDNA sequence AY074887	54950230	54950998	TC0900002326.mm.1	0.0	0.883975
TC1700001934.mm.1	NR_037225	Mir3065	microRNA 3065	120014767	120014853	TC1100002017.mm.1	0.0	0.884316
TC1700001935.mm.1	ENSMUST00000158074	Gm22328	predicted gene, 22328	99484591	99484702	TC0600002837.mm.1	0.0	0.884491
TC1700001938.mm.1	ENSMUST00000104440	Gm23768	predicted gene, 23768	132553714	132553844	TC0X00002976.mm.1	0.0	0.884505
TC1700001949.mm.1	ENSMUST00000083657	Gm22753	predicted gene, 22753	23479561	23479667	TC1100002363.mm.1	0.0	0.884691
TC1700001951.mm.1	ENSMUST00000158016	Gm26483	predicted gene, 26483	12666095	12666198	TC0800000109.mm.1	0.0	0.884715
TC1700001969.mm.1	NM_029809	2310014	RIKEN cDNA 2310014L17 gene	12927416	12931072	TC0700000152.mm.1	0.0	0.884737
TC1700001970.mm.1	ENSMUST00000180002	Gm21872	predicted gene, 21872	35569461	35570165	TC0Y00000114.mm.1	0.0	0.884919
TC1700001976.mm.1	ENSMUST00000181461	Gm2383	predicted gene 2383	12565577	12566383	TC0100000061.mm.1	0.0	0.88531
TC1700001977.mm.1	NM_001080943	Zdhhc22	zinc finger, DHHC-type containing 22	86983381	86988676	TC1200002113.mm.1	0.0	0.885323
TC1700001984.mm.1	NM_146377	Olfr127	olfactory receptor 127	37903522	37904616	TC1700000789.mm.1	0.0	0.885339
TC1700001988.mm.1	ENSMUST00000158721	Gm22663	predicted gene, 22663	51740241	51740342	TC1200001721.mm.1	0.0	0.885567
TC1700001996.mm.1	NM_011388	Slc10a2	solute carrier family 10, member 2	5085623	5105232	TC0800001643.mm.1	0.0	0.885796
TC1700001998.mm.1	ENSMUST00000104424	Gm25498	predicted gene, 25498	33207152	33207280	TC1400000356.mm.1	0.0	0.885848
TC1700002013.mm.1	ENSMUST00000158647	Gm24549	predicted gene, 24549	54565998	54566136	TC0200003554.mm.1	0.0	0.886034
TC1700002041.mm.1	NM_001126322	Gm11595	predicted gene 11595	99771714	99772913	TC1100003735.mm.1	0.0	0.886166
TC1700002042.mm.1	NM_019770	Tmed2	transmembrane emp24 domain trafficking prote	124540695	124550506	TC0500001447.mm.1	0.0	0.886206
TC1700002062.mm.1	ENSMUST00000094175	Gm10291	predicted pseudogene 10291	78917258	78918259	TC0300000616.mm.1	0.0	0.886378
TC1700002066.mm.1	XR_141070	Gm21552	predicted gene, 21552	103310555	103332315	TC1100001710.mm.1	0.0	0.886432
TC1700002071.mm.1	ENSMUST00000157416	Gm25261	predicted gene, 25261	131239277	131239410	TC0400001563.mm.1	0.0	0.886477
TC1700002074.mm.1	NM_001024706	Gm5458	predicted gene 5458	19594138	19602587	TC1400001519.mm.1	0.0	0.886703
TC1700002076.mm.1	NM_134148	Carns1	carnosine synthase 1	4164324	4175479	TC1900000906.mm.1	0.0	0.886774
TC1700002078.mm.1	ENSMUST00000082617	Gm24624	predicted gene, 24624	116345732	116345895	TC0X00001157.mm.1	0.0	0.886867
TC1700002079.mm.1	NM_010346	Grb7	growth factor receptor bound protein 7	98446394	98455373	TC1100001570.mm.1	0.0	0.88693
TC1700002098.mm.1	NM_001039698	Rhox4g	reproductive homeobox 4G	37646501	37651327	TC0X00002069.mm.1	0.0	0.887024
TC1700002101.mm.1	NR_105769	Mir6351	microRNA mir-6351 (Mir6351), microRNA.	0	0	TSUnmapped0000011	0.0	0.887073
TC1700002145.mm.1	ENSMUST00000177157	Gm5873	predicted gene 5873	6735427	6736492	TC0600001824.mm.1	0.0	0.8872
TC1700002151.mm.1	NR_033633	Gm8709	glyceraldehyde-3-phosphate dehydrogenase pse	26673446	26674651	TC1000001917.mm.1	0.0	0.887237
TC1700002153.mm.1	NM_025994	Efhd2	EF hand domain containing 2	141858142	141874952	TC0400003894.mm.1	0.0	0.887419
TC1700002165.mm.1	NM_024220	Ndufc2	NADH dehydrogenase (ubiquinone) 1, subcompl	97400003	97407802	TC0700001349.mm.1	0.0	0.887614
TC1700002167.mm.1	NM_008943	Psen1	presenilin 1	83688172	83735199	TC1200000792.mm.1	0.0	0.887903
TC1700002169.mm.1	NM_001205239	Parp6	poly (ADP-ribose) polymerase family, member 6	59617284	59650290	TC0900000750.mm.1	0.0	0.888162
TC1700002170.mm.1	NM_001199995	Mup12	major urinary protein 12	60737381	60741326	TC0400004212.mm.1	-0.1	0.888374
TC1700002171.mm.1	NM_207000	H2afy2	H2A histone family, member Y2	61738647	61784147	TC1000002248.mm.1	0.0	0.888389
TC1700002175.mm.1	ENSMUST00000117712	Gm9062	predicted gene 9062	97826379	97827105	TC0X00000925.mm.1	0.0	0.88842
TC1700002176.mm.1	NM_018816	Apom	apolipoprotein M	35128997	35132050	TC1700001949.mm.1	0.0	0.888514
TC1700002179.mm.1	NM_007953	Esrra	estrogen related receptor, alpha	6910977	6921813	TC1900001020.mm.1	0.0	0.888696
TC1700002181.mm.1	NM_001025351	Defb46	defensin beta 46	19239915	19242143	TC0800000183.mm.1	0.0	0.888756
TC1700002183.mm.1	ENSMUST00000104339	Gm25506	predicted gene, 25506	85050207	85050276	TC0800000978.mm.1	0.0	0.888787
TC1700002184.mm.1	ENSMUST00000117696	Gm12389	predicted gene 12389	40116816	40117233	TC0400002433.mm.1	0.0	0.888911
TC1700002185.mm.1	NM_019466	Rcan1	regulator of calcineurin 1	92391951	92466169	TC1600002094.mm.1	0.0	0.888913
TC1700002186.mm.1	NM_010484	Slc6a4	solute carrier family 6 (neurotransmitter trans	76998597	77032343	TC1100001111.mm.1	0.0	0.889062
TC1700002187.mm.1	NM_183278	Fam25c	family with sequence similarity 25, member C	34351881	34355433	TC1400001724.mm.1	0.0	0.889113
TC1700002190.mm.1	NM_177001	9130023	RIKEN cDNA 9130023H24 gene	128234451	128238031	TC0700004360.mm.1	0.0	0.889163
TC1700002191.mm.1	NR_003630	Gm6498	glyceraldehyde-3-phosphate dehydrogenase pse	48198716	48228413	TC1400000528.mm.1	0.0	0.889184
TC1700002201.mm.1	ENSMUST00000082675	Gm25635	predicted gene, 25635	9852019	9852149	TC1000001740.mm.1	0.0	0.889216
TC1700002207.mm.1	NM_026239	Tmem35	transmembrane protein 35	134295225	134305969	TC0X00001275.mm.1	0.0	0.889271
TC1700002208.mm.1	NM_026246	Mrpl49	mitochondrial ribosomal protein L49	6053630	6057751	TC1900000999.mm.1	0.0	0.889405
TC1700002209.mm.1	NM_008454	Klk1b16	kallikrein 1-related peptidase b16	44136767	44141607	TC0700000791.mm.1	0.0	0.889744
TC1700002215.mm.1	ENSMUST00000069529	Gm7936	predicted pseudogene 7936	30495001	30495375	TC1800001104.mm.1	0.0	0.890075
TC1700002282.mm.1	NM_011109	Pla2g2d	phospholipase A2, group IID	138775735	138782143	TC0400001733.mm.1	0.0	0.89023
TC1700002284.mm.1	ENSMUST00000179278	Gm23767	predicted gene, 23767	59708469	59708562	TC0700003282.mm.1	0.0	0.890281
TC1700002287.mm.1	ENSMUST00000096117	Ppp1r2-	protein phosphatase 1, regulatory (inhibitor) s	90905699	90906507	TC0600001080.mm.1	0.0	0.890546
TC1700002288.mm.1	NM_001033227	Slc5a10	solute carrier family 5 (sodium/glucose cotrans	61672781	61720826	TC1100002919.mm.1	0.0	0.890753
TC1700002293.mm.1	NM_001200004	Mup15	major urinary protein 15	61224307	61674136	TC0400002769.mm.1	-0.1	0.890905
TC1700002298.mm.1	ENSMUST00000104099	Gm25763	predicted gene, 25763	18613981	18614109	TC0800001794.mm.1	0.0	0.890964
TC1700002303.mm.1	NM_001162944	Gm10318	predicted gene 10318	77852859	77853788	TC1000000769.mm.1	0.0	0.890981
TC1700002305.mm.1	NM_173757	Mrps27	mitochondrial ribosomal protein S27	99344786	99415561	TC1300001131.mm.1	0.0	0.891118
TC1700002306.mm.1	ENSMUST00000158772	Gm23026	predicted gene, 23026	37463746	37463851	TC1900000533.mm.1	0.0	0.89131
TC1700002308.mm.1	ENSMUST00000157506	Gm22897	predicted gene, 22897	4985111	4985237	TC0500001903.mm.1	0.0	0.89165
TC1700002311.mm.1	ENSMUST00000178071	Gm25020	predicted gene, 25020	17206021	17206127	TC1300000117.mm.1	0.0	0.89168
TC1700002313.mm.1	ENSMUST00000074576	Gm12338	predicted gene 12338	75599641	75600027	TC1100003229.mm.1	0.0	0.892
TC1700002314.mm.1	ENSMUST00000157724	Gm22335	predicted gene, 22335	117027211	117027309	TC0400001275.mm.1	0.0	0.892035
TC1700002315.mm.1	NM_145579	Mypop	Myb-related transcription factor, partner of pr	18991245	19001766	TC0700000280.mm.1	0.0	0.892196
TC1700002316.mm.1	BC125375	Caprin2	caprin family member 2	148842492	148896237	TC0600003469.mm.1	0.0	0.892223
TC1700002318.mm.1	NM_001099276	Pik3c2b	phosphoinositide-3-kinase, class 2, beta polype	133045667	133108688	TC0100001201.mm.1	0.0	0.892507
TC1700002320.mm.1	ENSMUST00000184817	RP24-12	N/A	81016088	81016958	TC0900002747.mm.1	0.0	0.892524
TC1700002321.mm.1	XM_003689051	Gm21184	predicted gene, 21184	34486834	34487517	TC0Y00000107.mm.1	0.0	0.892798
TC1700002324.mm.1	XM_003689018	Gm21247	predicted gene, 21247	46757399	46758082	TC0Y00000142.mm.1	0.0	0.892798
TC1700002332.mm.1	XM_003689021	Gm21281	predicted gene, 21281	48669776	48670459	TC0Y00000351.mm.1	0.0	0.892798
TC1700002333.mm.1	XM_003689076	Gm21573	predicted gene, 21573	61460032	61460715	TC0Y00000411.mm.1	0.0	0.892798
TC1700002337.mm.1	ENSMUST00000082743	Gm22809	predicted gene, 22809	128061705	128061860	TC0700004354.mm.1	0.0	0.892856
TC1700002339.mm.1	ENSMUST00000184281	mmu-mir	mmu-mir-6240	114851948	114852064	TC0500001237.mm.1	0.0	0.89289
TC1700002343.mm.1	XM_001475804	Gm16427	predicted gene 16427	93481827	93493684	TC0500002777.mm.1	0.0	0.892912
TC1700002344.mm.1	ENSMUST00000184184	ST7-OT4	ST7 overlapping transcript 4 conserved region 3	17696894	17697149	TC0600000138.mm.1	0.0	0.892943
TC1700002347.mm.1	ENSMUST00000178099	Gm26057	predicted gene, 26057	7374193	7374357	TC1700001401.mm.1	0.0	0.893176
TC1700002348.mm.1	ENSMUST00000178456	Gm25355	predicted gene, 25355	8235582	8235682	TC0400000050.mm.1	0.0	0.893179

TC1700002351.mm.1	ENSMUST00000179866	Gm23064	predicted gene, 23064	103471859	103471959	TC0400001074.mm.1	0.0	0.893179
TC1700002352.mm.1	ENSMUST00000104489	Gm24468	predicted gene, 24468	101186764	101186867	TC0400001027.mm.1	0.0	0.893294
TC1700002354.mm.1	ENSMUST00000117187	Gm6181	predicted pseudogene 6181	52755465	52755728	TC0700000918.mm.1	0.0	0.89344
TC1700002356.mm.1	NM_011192	Psme3	proteaseome (prosome, macropain) 28 subunit,	101316213	101323537	TC1100001649.mm.1	0.0	0.8937
TC1700002357.mm.1	NM_029557	Tsen54	tRNA splicing endonuclease 54 homolog (S. cere	115814710	115823102	TC1100001907.mm.1	0.0	0.893921
TC1700002362.mm.1	NM_031252	Il23a	interleukin 23, alpha subunit p19	128296139	128298084	TC1000003135.mm.1	0.0	0.894027
TC1700002367.mm.1	ENSMUST00000175108	Gm24327	predicted gene, 24327	168064820	168064897	TC0200005207.mm.1	0.0	0.894083
TC1700002400.mm.1	ENSMUST00000157891	Gm23044	predicted gene, 23044	12793875	12793974	TC1000001759.mm.1	0.0	0.894213
TC1700002411.mm.1	NM_133226	Pdzd3	PDZ domain containing 3	44247312	44251464	TC0900002151.mm.1	0.0	0.894897
TC1700002413.mm.1	NM_025337	Akr7a5	aldo-keto reductase family 7, member A5 (aflato	139310744	139318786	TC0400001743.mm.1	0.0	0.895019
TC1700002416.mm.1	NM_172945	Ankrd13	ankyrin repeat domain 13b	77470485	77489678	TC1100003265.mm.1	0.0	0.895109
TC1700002418.mm.1	ENSMUST00000183826	mmu-mir	mmu-mir-6351	73855477	73855575	TC0100002574.mm.1	0.0	0.89531
TC1700002454.mm.1	NM_024461	1810037	RIKEN cDNA 1810037I17 gene	122924362	122926194	TC0300001252.mm.1	0.0	0.895362
TC1700002482.mm.1	ENSMUST00000117257	Gm6088	predicted gene 6088	140797396	140799934	TC0X00001388.mm.1	0.0	0.895398
TC1700002488.mm.1	ENSMUST00000103788	Mir297c	microRNA 297c	10509016	10509113	TC0200000184.mm.1	0.0	0.895461
TC1700002490.mm.1	ENSMUST00000083377	n-R5s15	nuclear encoded rRNA 5S 156	99497718	99497822	TC0700001388.mm.1	0.1	0.895906
TC1700002498.mm.1	NM_177716	AI83600	expressed sequence AI836003	98167806	98170134	TC1500000971.mm.1	0.0	0.895986
TC1700002526.mm.1	ENSMUST00000158377	Gm23855	predicted gene, 23855	62384918	62385052	TC1300000754.mm.1	0.0	0.896048
TC1700002534.mm.1	ENSMUST00000116866	Gm22197	predicted gene, 22197	125064015	125064072	TC0800001556.mm.1	0.0	0.896106
TC1700002541.mm.1	NM_177135	D830030	RIKEN cDNA D830030K20 gene	3846245	3856085	TC1400000014.mm.1	0.0	0.896968
TC1700002542.mm.1	ENSMUST00000116852	Gm23551	predicted gene, 23551	3051289	3051409	TC0600001779.mm.1	-0.1	0.897152
TC1700002546.mm.1	NM_080554	Psmd5	proteasome (prosome, macropain) 26S subunit,	34852088	34870962	TC0200003353.mm.1	0.0	0.897191
TC1700002557.mm.1	NM_023524	Tfpt	TCF3 (E2A) fusion partner	3620324	3629929	TC0700002132.mm.1	0.0	0.897241
TC1700002564.mm.1	ENSMUST00000116709	Gm26250	predicted gene, 26250	13266985	13267050	TC0400002223.mm.1	0.0	0.897251
TC1700002571.mm.1	ENSMUST00000104353	Gm22021	predicted gene, 22021	104591094	104591200	TC1400001194.mm.1	0.0	0.897864
TC1700002573.mm.1	ENSMUST00000103851	Gm25537	predicted gene, 25537	100861793	100861901	TC0100000988.mm.1	0.0	0.897942
TC1700002583.mm.1	NM_001081341	Scaper	S phase cyclin A-associated protein in the ER	55549883	55938115	TC0900002338.mm.1	0.0	0.897943
TC1700002594.mm.1	NM_010473	Hrc	histidine rich calcium binding protein	45335269	45338973	TC0700000840.mm.1	0.0	0.897974
TC1700002595.mm.1	XR_140758	Gm10091	predicted gene 10091	140615695	140618343	TC0500001696.mm.1	0.0	0.897978
TC1700002614.mm.1	ENSMUST00000102382	Gm24714	predicted gene, 24714	16645438	16645538	TC1100002243.mm.1	0.0	0.898074
TC1700002629.mm.1	NM_001167828	Trim30d	tripartite motif-containing 30D	104470014	104507849	TC0700003946.mm.1	0.0	0.898122
TC1700002637.mm.1	ENSMUST00000083254	Gm25140	predicted gene, 25140	37980087	37980226	TC1600000540.mm.1	0.0	0.8983
TC1700002647.mm.1	NR_035476	Mir1951	microRNA 1951	115638725	115638813	TC0200001701.mm.1	0.0	0.898463
TC1700002648.mm.1	ENSMUST00000104414	Gm22672	predicted gene, 22672	24884173	24884306	TC1600000362.mm.1	0.0	0.898594
TC1700002649.mm.1	NR_037190	Gm9855	thymine DNA glycosylase pseudogene	42052558	42055453	TC1000002059.mm.1	0.0	0.898609
TC1700002662.mm.1	ENSMUST00000103962	Gm24581	predicted gene, 24581	135131514	135131646	TC0700004445.mm.1	0.0	0.898663
TC1700002665.mm.1	ENSMUST00000158688	Gm23182	predicted gene, 23182	128349241	128349375	TC1000001600.mm.1	0.0	0.898678
TC1700002674.mm.1	ENSMUST00000170669	1810022	RIKEN cDNA 1810022K09 gene	106034662	106035056	TC0300001100.mm.1	0.0	0.898804
TC1700002680.mm.1	ENSMUST00000158913	Gm25161	predicted gene, 25161	46481709	46481840	TC0600002193.mm.1	0.0	0.898901
TC1700002682.mm.1	NM_134157	Atp6v1b	ATPase, H+ transporting, lysosomal V1 subunit B	83743017	83758832	TC0600000937.mm.1	0.0	0.898936
TC1700002684.mm.1	ENSMUST00000158158	Gm25374	predicted gene, 25374	75909827	75909927	TC0500000715.mm.1	0.0	0.898961
TC1700002692.mm.1	NM_001272023	Scnn1b	sodium channel, nonvoltage-gated 1 beta	121865038	121918728	TC0700001747.mm.1	0.0	0.899438
TC1700002701.mm.1	NM_174987	Coa6	cytochrome c oxidase assembly factor 6	126422501	126425435	TC0800001577.mm.1	0.0	0.899524
TC1700002713.mm.1	ENSMUST00000158664	Gm26021	predicted gene, 26021	29234434	29234564	TC0600000225.mm.1	0.0	0.899571
TC1700002723.mm.1	NR_030479	Mir697	microRNA 697	124731694	124731802	TC0400001423.mm.1	0.0	0.899982
TC1700002733.mm.1	ENSMUST00000182893	Gm5313	predicted gene 5313	93137004	93137990	TC0600002757.mm.1	0.0	0.900098
TC1700002748.mm.1	NM_024439	Vimp	VCP-interacting membrane protein	66079649	66089412	TC0700000990.mm.1	0.0	0.900275
TC1700002749.mm.1	ENSMUST00000159266	Gm2962	predicted pseudogene 2962	170925309	170925644	TC0100003521.mm.1	0.0	0.900519
TC1700002751.mm.1	ENSMUST00000164366	Gm3752	predicted gene 3752	7466362	7483762	TC1400002853.mm.1	0.0	0.900998
TC1700002755.mm.1	ENSMUST00000166539	Gm2308	predicted gene 2308	42125200	42126203	TC0700002919.mm.1	0.0	0.901332
TC1700002756.mm.1	ENSMUST00000083794	Gm26175	predicted gene, 26175	97162817	97162947	TC0600002798.mm.1	0.0	0.901396
TC1700002763.mm.1	XM_003688864	Gm21399	peroxiredoxin 1 pseudogene	129252951	129282844	TC0800001604.mm.1	0.0	0.901428
TC1700002768.mm.1	ENSMUST00000158553	Gm22429	predicted gene, 22429	65170041	65170170	TC1600001846.mm.1	0.0	0.901554
TC1700002769.mm.1	ENSMUST00000158247	Gm25865	predicted gene, 25865	30457968	30458071	TC1200001586.mm.1	0.0	0.901557
TC1700002770.mm.1	NM_016753	Lxn	latexin	67457998	67463926	TC0300002113.mm.1	0.0	0.901648
TC1700002772.mm.1	NM_172832	Pcyox1l	prenylcysteine oxidase 1 like	61696837	61707635	TC1800001428.mm.1	0.0	0.901673
TC1700002777.mm.1	NM_028352	Pgm3	phosphoglucomutase 3	86552476	86571842	TC0900002779.mm.1	0.0	0.901799
TC1700002780.mm.1	ENSMUST00000158539	Gm24131	predicted gene, 24131	141566143	141566249	TC0500003524.mm.1	0.0	0.901854
TC1700002782.mm.1	NM_153112	Cadm4	cell adhesion molecule 4	24482023	24504539	TC0700000384.mm.1	0.0	0.90206
TC1700002783.mm.1	ENSMUST00000180320	Gm15429	predicted pseudogene 15429	161725536	161727682	TC0100003376.mm.1	0.0	0.902082
TC1700002786.mm.1	NM_001033268	Fam120a	family with sequence similarity 120, member A	48640837	48968017	TC1300001947.mm.1	0.0	0.902089
TC1700002788.mm.1	XM_001475054	Gm20853	predicted gene, 20853	34781126	34781809	TC0Y00000109.mm.1	0.0	0.902373
TC1700002790.mm.1	NM_028597	Thoc3	THO complex 3	54458837	54468849	TC1300002031.mm.1	0.0	0.902699
TC1700002791.mm.1	NM_022416	Stk32b	serine/threonine kinase 32B	37446825	37717153	TC0500002274.mm.1	0.0	0.902721
TC1700002795.mm.1	NCBI_Gene:677858:p	Igkv8-2	immunoglobulin kappa chain variable 8-24	70216858	70217421	TC0600003589.mm.1	-0.1	0.903201
TC1700002796.mm.1	ENSMUST00000104761	Mir297a	microRNA 297a-4	10517067	10517164	TC0200000202.mm.1	0.0	0.903205
TC1700002801.mm.1	ENSMUST00000099754	Olfr127	olfactory receptor 1270	90149019	90150036	TC0200004082.mm.1	0.0	0.90344
TC1700002808.mm.1	NM_007772	Hivep1	human immunodeficiency virus type I enhancer l	42052021	42185026	TC1300000476.mm.1	0.0	0.903467
TC1700002809.mm.1	NM_011873	Dazap2	DAZ associated protein 2	100615628	100620761	TC1500001051.mm.1	0.0	0.903558
TC1700002813.mm.1	NM_134137	Lars	leucyl-tRNA synthetase	42202349	42262122	TC1800001255.mm.1	0.0	0.90362
TC1700002814.mm.1	ENSMUST00000182832	Gm7734	predicted gene 7734	32897719	32898729	TC1400000354.mm.1	0.0	0.90371
TC1700002816.mm.1	ENSMUST00000118653	Gm8864	predicted gene 8864	88572051	88573060	TC0X00002589.mm.1	0.0	0.903747
TC1700002817.mm.1	NM_001003405	Try5	trypsin 5	41311232	41316841	TC0600002154.mm.1	0.0	0.903867
TC1700002819.mm.1	NM_025927	Mrpl45	mitochondrial ribosomal protein L45	97315716	97329920	TC1100001535.mm.1	0.0	0.904125
TC1700002822.mm.1	NM_016983	Vpreb2	pre-B lymphocyte gene 2	17980563	17981080	TC1600000232.mm.1	0.0	0.904213
TC1700002823.mm.1	ENSMUST00000082772	Gm22508	predicted gene, 22508	69777936	69778045	TC1800001531.mm.1	0.0	0.904215
TC1800000030.mm.1	NM_023167	Mrpl4	mitochondrial ribosomal protein L4	21002737	21008839	TC0900000183.mm.1	0.0	0.904398
TC1800000044.mm.1	ENSMUST00000178286	Gm21832	predicted gene, 21832	61385179	61385862	TC0Y00000410.mm.1	0.0	0.904738

TC1800000050.mm.1	ENSMUST00000119085	Gm14470	predicted gene 14470	10680964	10681429	TC0X00000130.mm.1	0.0	0.90519
TC1800000051.mm.1	XM_001476854	Gm14759	predicted gene 14759	74804799	74805560	TC0X00000727.mm.1	0.0	0.905244
TC1800000052.mm.1	XM_001476944	Gm16388	predicted pseudogene 16388	74889663	74890424	TC0X00002467.mm.1	0.0	0.905244
TC1800000059.mm.1	ENSMUST00000122185	Gm13676	predicted gene 13676	82543932	82544522	TC0200003851.mm.1	0.0	0.905336
TC1800000061.mm.1	OTTMUST00000092418	RP23-22	---	4334763	4354687	TC1400002790.mm.1	0.0	0.90542
TC1800000063.mm.1	ENSMUST00000178029	Gm8910	predicted gene 8910	11014399	11015163	TC0300001653.mm.1	0.0	0.9058
TC1800000066.mm.1	ENSMUST00000100608	Gm5046	predicted gene 5046	65015156	65015467	TC1500000475.mm.1	0.0	0.905839
TC1800000069.mm.1	ENSMUST00000118655	Gm12182	predicted gene 12182	48734554	48735561	TC1100002630.mm.1	0.0	0.906219
TC1800000087.mm.1	ENSMUST00000180349	LOC1010	Y-linked testis-specific protein 1-like // Y-l	37100588	37101292	TC0Y00000118.mm.1	0.0	0.906223
TC1800000091.mm.1	ENSMUST00000101956	Gm23942	predicted gene, 23942	5277344	5277450	TC0700002190.mm.1	0.0	0.906241
TC1800000094.mm.1	ENSMUST00000093641	n-R5s15	nuclear encoded rRNA 5S 152	20010084	20010202	TC0700002510.mm.1	0.0	0.906281
TC1800000098.mm.1	NM_023247	Ndufaf3	NADH dehydrogenase (ubiquinone) 1 alpha subc	108565865	108567382	TC0900003062.mm.1	0.0	0.906289
TC1800000099.mm.1	ENSMUST00000180342	Gm23862	predicted gene, 23862	59673461	59673554	TC0700003272.mm.1	0.0	0.906315
TC1800000100.mm.1	ENSMUST00000168858	Gm11096	predicted gene 11096	81441763	81441923	TC1700001227.mm.1	0.1	0.906358
TC1800000103.mm.1	ENSMUST00000177849	Snord11	small nucleolar RNA, C/D box 116	59754002	59754095	TC0700003300.mm.1	0.0	0.906443
TC1800000109.mm.1	ENSMUST00000180346	Snord11	small nucleolar RNA, C/D box 116	59771656	59771749	TC0700003307.mm.1	0.0	0.906443
TC1800000119.mm.1	ENSMUST00000178388	Snord11	small nucleolar RNA, C/D box 116	59789331	59789424	TC0700003314.mm.1	0.0	0.906443
TC1800000121.mm.1	ENSMUST00000179388	Snord11	small nucleolar RNA, C/D box 116	59794360	59794453	TC0700003316.mm.1	0.0	0.906443
TC1800000124.mm.1	ENSMUST00000178047	Snord11	small nucleolar RNA, C/D box 116	59801956	59802049	TC0700003319.mm.1	0.0	0.906443
TC1800000127.mm.1	ENSMUST00000178329	Snord11	small nucleolar RNA, C/D box 116	59806995	59807088	TC0700003321.mm.1	0.0	0.906443
TC1800000134.mm.1	ENSMUST00000180227	Snord11	small nucleolar RNA, C/D box 116	59859214	59859307	TC0700003322.mm.1	0.0	0.906443
TC1800000136.mm.1	ENSMUST00000178936	Snord11	small nucleolar RNA, C/D box 116	59861731	59861824	TC0700003323.mm.1	0.0	0.906443
TC1800000145.mm.1	ENSMUST00000178777	Snord11	small nucleolar RNA, C/D box 116	59866788	59866881	TC0700003325.mm.1	0.0	0.906443
TC1800000147.mm.1	ENSMUST00000177940	Snord11	small nucleolar RNA, C/D box 116	59869330	59869423	TC0700003326.mm.1	0.0	0.906443
TC1800000157.mm.1	ENSMUST00000177737	Snord11	small nucleolar RNA, C/D box 116	59874380	59874473	TC0700003328.mm.1	0.0	0.906443
TC1800000160.mm.1	ENSMUST00000179889	Snord11	small nucleolar RNA, C/D box 116	59879459	59879552	TC0700003330.mm.1	0.0	0.906443
TC1800000165.mm.1	ENSMUST00000179895	Snord11	small nucleolar RNA, C/D box 116	59881989	59882082	TC0700003331.mm.1	0.0	0.906443
TC1800000166.mm.1	ENSMUST00000179955	Snord11	small nucleolar RNA, C/D box 116	59884499	59884592	TC0700003333.mm.1	0.0	0.906443
TC1800000172.mm.1	ENSMUST00000179927	Snord11	small nucleolar RNA, C/D box 116	59887057	59887150	TC0700003334.mm.1	0.0	0.906443
TC1800000178.mm.1	ENSMUST00000177982	Snord11	small nucleolar RNA, C/D box 116	59889593	59889686	TC0700003335.mm.1	0.0	0.906443
TC1800000179.mm.1	ENSMUST00000178370	Snord11	small nucleolar RNA, C/D box 116	59892111	59892204	TC0700003336.mm.1	0.0	0.906443
TC1800000190.mm.1	ENSMUST00000179053	Snord11	small nucleolar RNA, C/D box 116	59899687	59899780	TC0700003339.mm.1	0.0	0.906443
TC1800000192.mm.1	ENSMUST00000180312	Snord11	small nucleolar RNA, C/D box 116	59902213	59902306	TC0700003340.mm.1	0.0	0.906443
TC1800000198.mm.1	ENSMUST00000157639	Gm24783	predicted gene, 24783	121914560	121914659	TC0X00001193.mm.1	0.0	0.90645
TC1800000199.mm.1	ENSMUST00000086830	Gm6990	predicted pseudogene 6990	56754999	56755346	TC1900001708.mm.1	0.0	0.906935
TC1800000200.mm.1	ENSMUST00000184937	U4	U4 spliceosomal RNA	22772751	22772835	TC0900001915.mm.1	0.0	0.907006
TC1800000201.mm.1	ENSMUST00000184486	Gm12117	predicted gene 12117	33275758	33276737	TC1100002489.mm.1	0.0	0.907053
TC1800000209.mm.1	NM_001103158	Gm13242	predicted gene 13242	145670685	145704441	TC0400001869.mm.1	0.0	0.90711
TC1800000226.mm.1	NM_025839	Nudt16l	nudix (nucleoside diphosphate linked moiety X)-	4939111	4941021	TC1600000040.mm.1	0.0	0.907453
TC1800000243.mm.1	ENSMUST00000158748	Gm22138	predicted gene, 22138	86703819	86703946	TC0900001117.mm.1	0.0	0.907565
TC1800000249.mm.1	ENSMUST00000175218	Gm26231	predicted gene, 26231	20035154	20035220	TC0900000159.mm.1	0.0	0.907596
TC1800000252.mm.1	ENSMUST00000174906	Gm22234	predicted gene, 22234	109319452	109319516	TC1200002366.mm.1	0.0	0.907596
TC1800000253.mm.1	BC115500	Krtap10	keratin associated protein 10-4	77826169	77827070	TC1000002435.mm.1	0.0	0.907662
TC1800000259.mm.1	NM_177344	Tmem203	transmembrane protein 203	25255439	25256352	TC0200000404.mm.1	0.0	0.90771
TC1800000261.mm.1	ENSMUST00000173338	Gm2991	predicted pseudogene 2991	65928454	65928933	TC1500001645.mm.1	0.0	0.907802
TC1800000264.mm.1	XM_003688893	Gm21067	predicted gene, 21067	23776486	23800646	TC1200001523.mm.1	0.0	0.907827
TC1800000265.mm.1	ENSMUST00000158290	Gm22606	predicted gene, 22606	79348365	79348467	TC0200001160.mm.1	0.0	0.907971
TC1800000291.mm.1	NM_001159536	Adcy3	adenylate cyclase 3	4133103	4213525	TC1200000021.mm.1	0.0	0.908017
TC1800000292.mm.1	NM_001177750	Gm10767	predicted gene 10767	66904914	66909236	TC1300000814.mm.1	0.0	0.908436
TC1800000293.mm.1	ENSMUST00000122703	Gm22717	predicted gene, 22717	90315910	90316080	TC0900001159.mm.1	0.0	0.908515
TC1800000301.mm.1	NM_001012307	Defa23	defensin, alpha, 23	21055040	21056017	TC0800000212.mm.1	0.0	0.908966
TC1800000309.mm.1	NM_144514	Commd1	COMM domain containing 1	22896136	22982382	TC1100004290.mm.1	0.0	0.909187
TC1800000317.mm.1	NM_174874	Atg4b	autophagy related 4B, cysteine peptidase	93751500	93789529	TC0100000944.mm.1	0.0	0.909533
TC1800000318.mm.1	ENSMUST00000158428	Gm23352	predicted gene, 23352	14791941	14792004	TC1700001485.mm.1	0.0	0.909582
TC1800000319.mm.1	ENSMUST00000082656	Gm22301	predicted gene, 22301	95099500	95099606	TC0300000887.mm.1	0.0	0.909719
TC1800000321.mm.1	ENSMUST00000157480	Gm22379	predicted gene, 22379	118775152	118775282	TC1400001287.mm.1	0.0	0.909943
TC1800000331.mm.1	NM_153519	Txndc2	thioredoxin domain containing 2 (spermatozoa)	65637505	65642204	TC1700002413.mm.1	0.0	0.910402
TC1800000336.mm.1	ENSMUST00000083302	n-R5s19	nuclear encoded rRNA 5S 197	88906510	88906628	TC0300000741.mm.1	0.0	0.910402
TC1800000342.mm.1	NM_181547	Nostrin	nitric oxide synthase trafficker	69135800	69189330	TC0200001002.mm.1	0.0	0.910456
TC1800000343.mm.1	NM_178848	Sirt5	sirtuin 5 (silent mating type information regul	43365506	43395203	TC1300000490.mm.1	0.0	0.910461
TC1800000344.mm.1	NM_146675	Olfr820	olfactory receptor 820	130017301	130018361	TC1000001657.mm.1	0.0	0.910546
TC1800000351.mm.1	NM_153134	Irgq	immunity-related GTPase family, Q	24530648	24538600	TC0700000386.mm.1	0.0	0.910631
TC1800000358.mm.1	ENSMUST00000083702	Gm24254	predicted gene, 24254	92039917	92040020	TC0800001069.mm.1	0.0	0.911021
TC1800000368.mm.1	NM_134029	Nt5m	5,3-nucleotidase, mitochondrial	59839447	59880968	TC1100000738.mm.1	0.0	0.911156
TC1800000380.mm.1	ENSMUST00000178787	OTTMUSG	---	124493731	124493793	TC0900003322.mm.1	0.0	0.911159
TC1800000393.mm.1	ENSMUST00000179230	Gm4076	predicted gene 4076	85126999	85127514	TC1300002378.mm.1	0.0	0.911287
TC1800000394.mm.1	ENSMUST00000104095	n-R5s15	nuclear encoded rRNA 5S 158	128774846	128774963	TC0700004372.mm.1	0.0	0.911336
TC1800000396.mm.1	NM_013565	Itga3	integrin alpha 3	95044474	95076801	TC1100003584.mm.1	0.0	0.911432
TC1800000397.mm.1	ENSMUST00000175985	Gm20706	predicted gene 20706	24138341	24140363	TC0600001940.mm.1	0.0	0.911506
TC1800000400.mm.1	NM_001163503	2010001	RIKEN cDNA 2010001E11 gene	39920382	39926923	TC1000002031.mm.1	0.0	0.911568
TC1800000401.mm.1	ENSMUST00000108014	Gm10985	predicted gene 10985	53845086	53845278	TC0300000404.mm.1	0.0	0.911758
TC1800000405.mm.1	ENSMUST00000157596	Gm22602	predicted gene, 22602	90450910	90451004	TC1000001099.mm.1	0.0	0.911953
TC1800000425.mm.1	ENSMUST00000122710	Gm22720	predicted gene, 22720	105673465	105673551	TC0900002996.mm.1	0.0	0.911991
TC1800000427.mm.1	ENSMUST00000158162	Gm25371	predicted gene, 25371	69075015	69075115	TC1100000897.mm.1	0.0	0.912336
TC1800000433.mm.1	ENSMUST00000157237	Gm23048	predicted gene, 23048	19437687	19437815	TC0900000149.mm.1	0.0	0.912413
TC1800000437.mm.1	NM_053162	Mrpl34	mitochondrial ribosomal protein L34	71464926	71465753	TC0800000790.mm.1	0.0	0.912475
TC1800000442.mm.1	NM_146724	Olfr512	olfactory receptor 512	108713320	108714375	TC0700001604.mm.1	0.0	0.912533
TC1800000444.mm.1	NM_008732	Slc11a2	solute carrier family 11 (proton-coupled divale	100387898	100425072	TC1500002238.mm.1	0.0	0.912563

TC1800000476.mm.1	ENSMUST00000082615	Gm22977	predicted gene, 22977	54972431	54972537	TC1600000734.mm.1	0.0	0.913062
TC1800000478.mm.1	ENSMUST00000180105	Gm21798	predicted gene, 21798	64817694	64937996	TC1500000474.mm.1	0.0	0.913085
TC1800000480.mm.1	ENSMUST00000083257	Gm23458	predicted gene, 23458	123360832	123361000	TC0500001414.mm.1	0.0	0.913404
TC1800000484.mm.1	ENSMUST00000104573	Gm25214	predicted gene, 25214	168882040	168882168	TC0200005224.mm.1	0.0	0.913446
TC1800000488.mm.1	XM_003084889	Gm19340	predicted gene, 19340	25282595	25282936	TC1200000217.mm.1	0.0	0.913727
TC1800000489.mm.1	NM_001167751	Ccdc132	coiled-coil domain containing 132	3498382	3603531	TC0600000004.mm.1	0.0	0.913821
TC1800000498.mm.1	NM_146691	Olfr146	olfactory receptor 1467	13364630	13365556	TC1900000271.mm.1	0.0	0.913865
TC1800000500.mm.1	NM_001195205	Trmt2a	TRM2 tRNA methyltransferase 2A	18248679	18254772	TC1600000238.mm.1	0.0	0.913974
TC1800000510.mm.1	ENSMUST00000082389	mt-Tv	mitochondrially encoded tRNA valine	1025	1093	TC0M00000003.mm.1	0.0	0.913983
TC1800000516.mm.1	NM_001177487	Gm15292	predicted gene 15292	21249754	21250556	TC0800000226.mm.1	0.0	0.914083
TC1800000518.mm.1	ENSMUST00000160999	Gm8185	predicted gene 8185	76935163	76935831	TC1300000931.mm.1	0.0	0.914142
TC1800000523.mm.1	ENSMUST00000083123	Gm25703	predicted gene, 25703	129315329	129315479	TC0200004600.mm.1	0.0	0.914147
TC1800000534.mm.1	ENSMUST00000082830	Gm23517	predicted gene, 23517	85351063	85351254	TC1500002001.mm.1	0.0	0.914149
TC1800000538.mm.1	NM_028844	Aven	apoptosis, caspase activation inhibitor	112492964	112634573	TC0200001675.mm.1	0.0	0.914276
TC1800000546.mm.1	ENSMUST00000083335	Gm23456	predicted gene, 23456	148642524	148642660	TC0600003465.mm.1	0.0	0.914281
TC1800000559.mm.1	ENSMUST00000083879	n-R5s3	nuclear encoded rRNA 5S 3	13215698	13215809	TC0X00001866.mm.1	0.0	0.914319
TC1800000561.mm.1	NM_001011789	Olfr222	olfactory receptor 222	59570695	59571813	TC1100002855.mm.1	0.0	0.914441
TC1800000564.mm.1	ENSMUST00000163410	Gm3030	predicted gene 3030	4536038	4538795	TC1400000026.mm.1	0.0	0.914752
TC1800000566.mm.1	ENSMUST00000175494	Gm23268	predicted gene, 23268	135837295	135837372	TC0500003407.mm.1	0.0	0.915548
TC1800000605.mm.1	NM_133739	Tmem123	transmembrane protein 123	7764041	7794333	TC0900000055.mm.1	0.0	0.915804
TC1800000607.mm.1	ENSMUST00000179316	Gm22252	predicted gene, 22252	59525899	59525977	TC0700003220.mm.1	0.0	0.915871
TC1800000609.mm.1	ENSMUST00000096579	Gm6304	predicted gene 6304	15011246	15011692	TC1800000127.mm.1	0.0	0.915941
TC1800000611.mm.1	XR_105200	Gm17491	predicted gene, 17491	22480261	22483332	TC0800000278.mm.1	0.0	0.916149
TC1800000612.mm.1	ENSMUST00000158350	Gm23760	predicted gene, 23760	14113316	14113431	TC0600000102.mm.1	0.0	0.916469
TC1800000617.mm.1	ENSMUST00000172308	Gm3715	predicted gene 3715	7223692	7229138	TC1400001422.mm.1	0.0	0.916515
TC1800000625.mm.1	ENSMUST00000104148	Gm23011	predicted gene, 23011	133588406	133588537	TC0300002983.mm.1	0.0	0.917175
TC1800000646.mm.1	NM_001081403	Klhl14	kelch-like 14	21550377	21654718	TC1800001060.mm.1	0.0	0.91728
TC1800000651.mm.1	NM_001168498	Ncmap	noncompact myelin associated protein	135369576	135398227	TC0400003761.mm.1	0.0	0.917362
TC1800000652.mm.1	ENSMUST00000104517	n-R5s20	nuclear encoded rRNA 5S 202	112469253	112469366	TC0200004354.mm.1	0.0	0.91745
TC1800000653.mm.1	NM_016860	Actr1a	ARP1 actin-related protein 1A, centractin alpha	46376813	46395735	TC1900001603.mm.1	0.0	0.917463
TC1800000655.mm.1	ENSMUST00000083985	Gm24449	predicted gene, 24449	69586153	69586258	TC1200001870.mm.1	0.0	0.917505
TC1800000664.mm.1	NM_011851	Nt5e	5 nucleotidase, ecto	88327609	88372089	TC0900001128.mm.1	0.0	0.917536
TC1800000666.mm.1	NM_001034893	Zfp936	zinc finger protein 936	43177588	43192109	TC0700000753.mm.1	0.0	0.917609
TC1800000668.mm.1	ENSMUST00000116942	Gm22030	predicted gene, 22030	35977516	35977578	TC0800002058.mm.1	0.0	0.917691
TC1800000677.mm.1	ENSMUST00000164491	Gm765	predicted gene 765	98238014	98342754	TC0600002811.mm.1	0.0	0.917805
TC1800000698.mm.1	NM_019741	Slc2a5	solute carrier family 2 (facilitated glucose tr	150119283	150144169	TC0400001970.mm.1	0.0	0.917975
TC1800000700.mm.1	XR_105063	1700124	RIKEN cDNA 1700124L16 gene	83761756	83762532	TC0600002581.mm.1	0.0	0.918024
TC1800000702.mm.1	ENSMUST00000175280	Gm25303	predicted gene, 25303	36798698	36798771	TC1500001385.mm.1	0.0	0.918039
TC1800000704.mm.1	XM_001475847	Gm3043	predicted gene 3043	3688719	3698681	TC1400000011.mm.1	0.0	0.918042
TC1800000708.mm.1	NR_033306	Ndufs6	NADH dehydrogenase (ubiquinone) Fe-S protein	73319874	73328542	TC1300002299.mm.1	0.0	0.918126
TC1800000710.mm.1	ENSMUST00000157326	Gm22558	predicted gene, 22558	17006107	17006201	TC1600001274.mm.1	0.0	0.918167
TC1800000714.mm.1	NM_008635	Map7	microtubule-associated protein 7	20148471	20281590	TC1000000150.mm.1	0.0	0.918169
TC1800000738.mm.1	ENSMUST00000104499	Gm22497	predicted gene, 22497	109537039	109537169	TC0400001166.mm.1	0.0	0.91832
TC1800000758.mm.1	NM_001042605	Cd74	CD74 antigen (invariant polypeptide of major hi	60803848	60812652	TC1800000617.mm.1	0.0	0.918501
TC1800000771.mm.1	NM_026527	Chac2	ChaC, cation transport regulator 2	30976707	30986365	TC1100002451.mm.1	0.0	0.918631
TC1800000775.mm.1	ENSMUST00000168292	Gm20721	predicted gene, 20721	174330319	174346712	TC0200005313.mm.1	0.0	0.918754
TC1800000794.mm.1	ENSMUST00000101884	Gm22004	predicted gene, 22004	86655125	86655231	TC1200000854.mm.1	0.0	0.918836
TC1800000797.mm.1	ENSMUST00000157693	Gm26187	predicted gene, 26187	87251148	87251248	TC0100000812.mm.1	0.0	0.91984
TC1800000798.mm.1	ENSMUST00000104983	B020018	RIKEN cDNA B020018G12 gene	175977777	175979114	TC0100003615.mm.1	0.0	0.919962
TC1800000799.mm.1	ENSMUST00000119613	Gm5939	predicted pseudogene 5939	78855408	78858281	TC0X00002519.mm.1	0.0	0.920075
TC1800000800.mm.1	ENSMUST00000102427	Gm23193	predicted gene, 23193	111194964	111195045	TC0800001329.mm.1	0.0	0.920159
TC1800000801.mm.1	NM_133214	Smco4	single-pass membrane protein with coiled-coil d	15493432	15545260	TC0900000124.mm.1	0.0	0.92024
TC1800000802.mm.1	NM_025697	Spryd7	SPRY domain containing 7	61531993	61556886	TC1400002193.mm.1	0.0	0.920265
TC1800000830.mm.1	ENSMUST00000083760	Gm25411	predicted gene, 25411	66436082	66436232	TC0100000557.mm.1	0.0	0.92037
TC1800000833.mm.1	ENSMUST00000175515	Gm22933	predicted gene, 22933	90953795	90953868	TC1600000993.mm.1	0.0	0.920559
TC1800000834.mm.1	ENSMUST00000158046	Gm23662	predicted gene, 23662	113119698	113119808	TC0700001659.mm.1	0.0	0.920623
TC1800000838.mm.1	NM_001163762	6430548	RIKEN cDNA 6430548M08 gene	120114152	120165307	TC0800001436.mm.1	0.0	0.920968
TC1800000840.mm.1	ENSMUST00000104425	Gm25497	predicted gene, 25497	41348441	41348572	TC1200001674.mm.1	0.0	0.920979
TC1800000841.mm.1	ENSMUST00000157566	Gm23903	predicted gene, 23903	27061736	27061866	TC1500001295.mm.1	0.0	0.921023
TC1800000858.mm.1	ENSMUST00000171360	Gm10128	predicted gene 10128	7640895	7643972	TC1400001429.mm.1	0.0	0.921023
TC1800000867.mm.1	ENSMUST00000104016	Gm25610	predicted gene, 25610	12013623	12013751	TC1200000095.mm.1	0.0	0.921028
TC1800000877.mm.1	NM_146598	Olfr695	olfactory receptor 695	106713732	106716345	TC0700004015.mm.1	0.0	0.921588
TC1800000884.mm.1	NR_034047	Snora19	small nucleolar RNA, H/ACA box 19	24942236	24942367	TC1900001290.mm.1	0.0	0.921645
TC1800000896.mm.1	NR_034047	Snora19	small nucleolar RNA, H/ACA box 19	60774330	60774461	TC1900001750.mm.1	0.0	0.921645
TC1800000904.mm.1	ENSMUST00000121005	Gm15192	predicted gene 15192	160298478	160298770	TC0X00001632.mm.1	0.0	0.921858
TC1800000908.mm.1	NM_009448	Tuba1c	tubulin, alpha 1C	99029891	99038112	TC1500001002.mm.1	0.0	0.921905
TC1800000909.mm.1	ENSMUST00000171036	Gm17391	predicted gene, 17391	22622752	22623087	TC1200001507.mm.1	0.0	0.921936
TC1800000911.mm.1	NM_138591	Gfm1	G elongation factor, mitochondrial 1	67430096	67476529	TC0300000550.mm.1	0.0	0.922028
TC1800000914.mm.1	ENSMUST00000157394	Gm23826	predicted gene, 23826	66561254	66561372	TC1200001844.mm.1	0.0	0.922182
TC1800000915.mm.1	NR_002901	Snora68	small nucleolar RNA, H/ACA box 68	70895759	70895889	TC0800002414.mm.1	0.0	0.922279
TC1800000925.mm.1	NM_028878	Slc6a19	solute carrier family 6 (neurotransmitter trans	73679745	73704865	TC1300002303.mm.1	0.0	0.922301
TC1800000929.mm.1	NM_008909	Ppl	periplakin	5086291	5132481	TC1600001154.mm.1	0.0	0.922593
TC1800000950.mm.1	ENSMUST00000157539	Gm23534	predicted gene, 23534	137367151	137367247	TC0100003161.mm.1	0.0	0.922692
TC1800000959.mm.1	NM_145521	Ppapdc3	phosphatidic acid phosphatase type 2 domain cc	32095528	32110820	TC0200000566.mm.1	0.0	0.923204
TC1800000965.mm.1	NM_026048	Cinp	cyclin-dependent kinase 2 interacting protein	110872610	110889145	TC1200002396.mm.1	0.0	0.923338
TC1800000966.mm.1	NM_183020	Atxn2l	ataxin 2-like	126491708	126503437	TC0700004281.mm.1	0.0	0.923475
TC1800000967.mm.1	ENSMUST00000184749	RP24-32	N/A	80802651	80864861	TC0900001071.mm.1	0.0	0.923619
TC1800000971.mm.1	ENSMUST00000162079	Gm16289	predicted gene 16289	51361675	51361857	TC1400002004.mm.1	0.0	0.923989

TC1800000975.mm.1	NM_023200	Ppp1r7	protein phosphatase 1, regulatory (inhibitor) s	93342854	93373489	TC0100000929.mm.1	0.0	0.924064
TC1800000980.mm.1	ENSMUST00000104850	Gm25529	predicted gene, 25529	39048558	39048649	TC0900002069.mm.1	0.0	0.924122
TC1800000982.mm.1	NM_026097	Rffl	ring finger and FYVE like domain containing pro	82802449	82871210	TC1100003369.mm.1	0.0	0.924922
TC1800000983.mm.1	NM_205819	Tlr11	toll-like receptor 11	50357914	50363663	TC1400000552.mm.1	0.0	0.924948
TC1800000995.mm.1	NM_028416	Kremen2	kringle containing transmembrane protein 2	23741199	23745829	TC1700001603.mm.1	0.0	0.924949
TC1800001003.mm.1	ENSMUST00000182417	Gm5354	predicted gene 5354	81308177	81309149	TC0800002537.mm.1	0.0	0.924964
TC1800001005.mm.1	ENSMUST00000120891	Gm13353	predicted gene 13353	18568126	18568198	TC0200000300.mm.1	0.0	0.92512
TC1800001009.mm.1	NM_018854	Ift20	intraflagellar transport 20	78536361	78541737	TC1100001165.mm.1	0.0	0.925188
TC1800001010.mm.1	ENSMUST00000179930	Gm3436	predicted pseudogene 3436	70852576	70853418	TC0900000946.mm.1	0.0	0.925248
TC1800001012.mm.1	ENSMUST00000117318	Gm11453	predicted gene 11453	162982255	162983261	TC0200005084.mm.1	0.0	0.925435
TC1800001017.mm.1	NM_001146307	Clcnka	chloride channel Ka	141384610	141398724	TC0400003880.mm.1	0.0	0.925589
TC1800001022.mm.1	ENSMUST00000157632	Gm24286	predicted gene, 24286	29395036	29395163	TC1000000269.mm.1	0.0	0.925641
TC1800001026.mm.1	NM_175315	Ceacam1	carcinoembryonic antigen-related cell adhesion	16671331	16675705	TC0700002435.mm.1	0.0	0.925795
TC1800001043.mm.1	ENSMUST00000175026	Gm23364	predicted gene, 23364	94823733	94823805	TC0600001120.mm.1	0.0	0.925863
TC1800001047.mm.1	ENSMUST00000174991	Gm24025	predicted gene, 24025	76321204	76321279	TC1300002343.mm.1	0.0	0.925863
TC1800001048.mm.1	NM_144539	Slamf7	SLAM family member 7	171632403	171653037	TC0100003550.mm.1	0.0	0.925893
TC1800001050.mm.1	NM_001024468	Bcat1	branched chain aminotransferase 1, cytosolic	144993835	145076184	TC0600003412.mm.1	0.0	0.926152
TC1800001053.mm.1	NM_009909	Cxcr2	chemokine (C-X-C motif) receptor 2	74153989	74161246	TC0100000622.mm.1	0.0	0.926222
TC1800001059.mm.1	NM_001164480	Sipa1	signal-induced proliferation associated gene 1	5651185	5663707	TC1900000977.mm.1	0.0	0.92647
TC1800001060.mm.1	NM_001081412	Bcr	breakpoint cluster region	75060896	75184923	TC1000000708.mm.1	0.0	0.926603
TC1800001070.mm.1	XM_985778	Gm8271	predicted gene 8271	5185793	5193743	TC1400000041.mm.1	0.0	0.926736
TC1800001075.mm.1	ENSMUST00000100115	Gm20775	predicted gene, 20775	10640942	10643315	TC0Y00000264.mm.1	0.0	0.927074
TC1800001083.mm.1	ENSMUST00000121399	Gm14113	predicted gene 14113	147289755	147290730	TC0200002183.mm.1	0.0	0.927171
TC1800001085.mm.1	NM_178768	Tmem72	transmembrane protein 72	116692630	116716913	TC0600002980.mm.1	0.0	0.92724
TC1800001103.mm.1	XM_001476708	Gm20895	predicted gene, 20895	26508824	26509507	TC0Y00000078.mm.1	0.0	0.927393
TC1800001104.mm.1	XM_003689033	Gm21476	predicted gene, 21476	27253916	27254599	TC0Y00000080.mm.1	0.0	0.927393
TC1800001106.mm.1	XM_001476476	Gm20893	predicted gene, 20893	27998840	27999523	TC0Y00000083.mm.1	0.0	0.927393
TC1800001112.mm.1	NM_028005	2310047	RIKEN cDNA 2310047M10 gene	69059717	69061578	TC1100000893.mm.1	0.0	0.927592
TC1800001116.mm.1	XR_104955	Gm19617	predicted gene, 19617	148456903	148464685	TC0500001823.mm.1	0.0	0.927774
TC1800001119.mm.1	NM_001077496	Evi2b	ecotropic viral integration site 2b	79513385	79530609	TC1100003326.mm.1	0.0	0.927785
TC1800001122.mm.1	NM_173378	Trp53bp	transformation related protein 53 binding prote	182409167	182462436	TC0100001745.mm.1	0.0	0.928054
TC1800001137.mm.1	NM_007776	Crygd	crystallin, gamma D	65061838	65063452	TC0100002477.mm.1	0.0	0.928072
TC1800001141.mm.1	NM_027244	Ndufa11	NADH dehydrogenase (ubiquinone) 1 alpha subc	56717762	56724248	TC1700001015.mm.1	0.0	0.928139
TC1800001143.mm.1	NM_146093	Ubxn1	UBX domain protein 1	8871496	8875663	TC1900000162.mm.1	0.0	0.928365
TC1800001145.mm.1	NM_183270	Coa4	cytochrome c oxidase assembly factor 4	100537071	100540369	TC0700001410.mm.1	0.0	0.928564
TC1800001147.mm.1	ENSMUST00000157129	Gm23470	predicted gene, 23470	49001717	49001836	TC1400001955.mm.1	0.0	0.928574
TC1800001156.mm.1	ENSMUST00000082561	Gm24313	predicted gene, 24313	6619808	6619940	TC1100002182.mm.1	0.0	0.928623
TC1800001163.mm.1	NM_001081337	Sipa1l2	signal-induced proliferation-associated 1 like	125418063	125569756	TC0800003184.mm.1	0.0	0.928687
TC1800001164.mm.1	NCBI_Gene:384410:p	Igkv4-9	immunoglobulin kappa variable 4-92	68755038	68755593	TC0600003546.mm.1	0.0	0.928706
TC1800001165.mm.1	ENSMUST00000182282	Gm17798	predicted gene, 17798	38184793	38185827	TC0900000388.mm.1	0.0	0.92889
TC1800001171.mm.1	NM_146702	Olfr144	olfactory receptor 1444	12861742	12862771	TC1900000257.mm.1	0.0	0.929024
TC1800001175.mm.1	XM_001476116	Gm3106	predicted gene 3106	94156577	94221533	TC0500000901.mm.1	0.0	0.92931
TC1800001176.mm.1	ENSMUST00000083077	Gm23506	predicted gene, 23506	85163077	85163183	TC1100001287.mm.1	0.0	0.929886
TC1800001181.mm.1	ENSMUST00000104866	Mir466l	microRNA 466l	10516097	10516217	TC0200000201.mm.1	0.0	0.929985
TC1800001186.mm.1	ENSMUST00000184176	Metazoa	Metazoan signal recognition particle RNA	115750366	115750615	TC0600002959.mm.1	0.0	0.930622
TC1800001197.mm.1	ENSMUST00000104017	Gm25611	predicted gene, 25611	35759933	35760065	TC1900001433.mm.1	0.0	0.930784
TC1800001198.mm.1	ENSMUST00000181011	Gm11395	predicted gene 11395	33741240	33742038	TC1300000379.mm.1	0.0	0.930838
TC1800001200.mm.1	NM_001190461	Hilpda	hypoxia inducible lipid droplet associated	29272488	29275449	TC0600000226.mm.1	0.0	0.930883
TC1800001222.mm.1	ENSMUST00000104268	Gm22927	predicted gene, 22927	71848076	71848206	TC1100003134.mm.1	0.0	0.931082
TC1800001227.mm.1	NM_144856	Slc22a7	solute carrier family 22 (organic anion transpo	46432183	46438477	TC1700002175.mm.1	0.0	0.93115
TC1800001234.mm.1	ENSMUST00000158204	Gm25227	predicted gene, 25227	15685935	15686046	TC0100001992.mm.1	0.0	0.931386
TC1800001235.mm.1	ENSMUST00000157168	Gm25967	predicted gene, 25967	35722087	35722233	TC1600001554.mm.1	0.0	0.931473
TC1800001246.mm.1	ENSMUST00000157555	Gm22218	predicted gene, 22218	56852830	56852888	TC1400002136.mm.1	0.0	0.931548
TC1800001255.mm.1	ENSMUST00000179656	Gm22631	predicted gene, 22631	59781780	59781873	TC0700003311.mm.1	0.0	0.931623
TC1800001266.mm.1	NM_145577	Zfp772	zinc finger protein 772	7202122	7209998	TC0700002223.mm.1	0.0	0.931752
TC1800001270.mm.1	NM_146821	Olfr629	olfactory receptor 629	103740201	103741322	TC0700003903.mm.1	0.0	0.931852
TC1800001274.mm.1	XM_001480781	Gm4553	predicted gene 4553	142164696	142167022	TC0700004556.mm.1	0.0	0.931871
TC1800001280.mm.1	ENSMUST00000182830	Gm8513	predicted gene 8513	45186534	45187536	TC1300001907.mm.1	0.0	0.932178
TC1800001285.mm.1	NM_007498	Atf3	activating transcription factor 3	191170296	191218039	TC0100003804.mm.1	0.0	0.932654
TC1800001307.mm.1	NM_173377	Svs3b	seminal vesicle secretory protein 3B	164254363	164256643	TC0200005110.mm.1	0.0	0.932893
TC1800001311.mm.1	NM_001039048	Trim63	tripartite motif-containing 63	134315120	134329629	TC0400001631.mm.1	0.0	0.933151
TC1800001326.mm.1	ENSMUST00000120559	Gm8668	predicted gene 8668	37421248	37422694	TC1500000280.mm.1	0.0	0.933191
TC1800001327.mm.1	NR_037235	Mir3074	microRNA 3074-1	63301180	63301296	TC1300002183.mm.1	0.0	0.933422
TC1800001328.mm.1	NM_007687	Cfl1	cofilin 1, non-muscle	5490455	5494033	TC1900000073.mm.1	0.0	0.933504
TC1800001331.mm.1	NM_026964	Ccdc124	coiled-coil domain containing 124	70868226	70873490	TC0800002410.mm.1	0.0	0.933792
TC1800001336.mm.1	ENSMUST00000122651	Gm22201	predicted gene, 22201	32389011	32389069	TC1700000559.mm.1	0.0	0.933847
TC1800001338.mm.1	ENSMUST00000082420	mt-Te	mitochondrially encoded tRNA glutamic acid	14071	14139	TC0M00000028.mm.1	0.0	0.934195
TC1800001352.mm.1	NM_001199336	Scgb2b1	secretoglobin, family 2B, member 19	33278366	33280341	TC0700002810.mm.1	0.0	0.934424
TC1800001359.mm.1	XM_001472207	Gm2046	predicted gene 2046	87973528	87980224	TC1200000888.mm.1	0.0	0.934548
TC1800001390.mm.1	ENSMUST00000118323	Gm11936	predicted gene 11936	32655929	32656088	TC0400002365.mm.1	0.0	0.934554
TC1800001396.mm.1	NM_025521	2310011	RIKEN cDNA 2310011J03 gene	80318254	80320548	TC1000002495.mm.1	0.0	0.934641
TC1800001407.mm.1	NM_025450	Mrps17	mitochondrial ribosomal protein S17	129715497	129718875	TC0500001508.mm.1	0.0	0.934776
TC1800001414.mm.1	NM_013852	Abcf3	ATP-binding cassette, sub-family F (GCN20), mer	20548577	20561603	TC1600000280.mm.1	0.0	0.935007
TC1800001416.mm.1	ENSMUST00000093682	n-R5s58	nuclear encoded rRNA 5S 58	53046708	53046826	TC1200001736.mm.1	0.0	0.935472
TC1800001428.mm.1	NM_019511	Ramp3	receptor (calcitonin) activity modifying protei	6658521	6677479	TC1100000106.mm.1	0.0	0.935474
TC1800001429.mm.1	NM_028075	Tnfrsf1	tumor necrosis factor receptor superfamily, mer	82221744	82224339	TC1500001939.mm.1	0.0	0.935723
TC1800001431.mm.1	ENSMUST00000083264	Gm23462	predicted gene, 23462	149074003	149074106	TC0600003479.mm.1	0.0	0.935724
TC1800001437.mm.1	NR_037311	Mir3473	microRNA 3473	162874918	162874995	TC0X00003314.mm.1	0.0	0.935741

TC1800001441.mm.1	NM_001199967	Gm11127	predicted gene 11127	36055816	36058371	TC1700001996.mm.1	0.0	0.935753
TC1800001453.mm.1	XM_486246	Gm5620	tubulin, alpha 1B pseudogene	91097148	91098662	TC0900001162.mm.1	0.0	0.935962
TC1800001454.mm.1	ENSMUST00000082679	Gm24621	predicted gene, 24621	129458351	129458490	TC0400001522.mm.1	0.0	0.93598
TC1800001463.mm.1	ENSMUST00000083134	n-R5s5	nuclear encoded rRNA 5S 5	18323444	18323562	TC0X00001907.mm.1	0.0	0.9361
TC1800001466.mm.1	NR_030570	Mir466h	microRNA 466h	81476309	81487013	TC0400002921.mm.1	0.0	0.936176
TC1800001483.mm.1	ENSMUST00000181990	Gm4823	predicted gene 4823	3745892	3746875	TC1500001143.mm.1	0.0	0.936189
TC1800001498.mm.1	NM_053227	Vmn1r44	vomeronasal 1 receptor 44	89893177	89894284	TC0600001055.mm.1	0.0	0.936278
TC1800001500.mm.1	ENSMUST00000158738	Gm23821	predicted gene, 23821	186123201	186123306	TC0100001793.mm.1	0.0	0.936616
TC1800001531.mm.1	NM_146383	Olfr460	olfactory receptor 460	40571357	40572417	TC0600000415.mm.1	0.0	0.936757
TC1800001539.mm.1	ENSMUST00000103773	Gm23251	predicted gene, 23251	75757259	75757368	TC0700003529.mm.1	0.0	0.937
TC1800001541.mm.1	ENSMUST00000182525	Gm5430	predicted gene 5430	25326612	25327526	TC1700001659.mm.1	0.0	0.937331
TC1800001572.mm.1	ENSMUST00000167618	Gm17304	predicted gene, 17304	106609098	106609201	TC0500001062.mm.1	0.0	0.937408
TC1800001576.mm.1	ENSMUST00000158298	Gm24295	predicted gene, 24295	82050751	82050881	TC1300000970.mm.1	0.0	0.937517
TC1800001587.mm.1	ENSMUST00000174914	Gm25238	predicted gene, 25238	60580529	60580617	TC1900000861.mm.1	0.0	0.937519
TC1800001590.mm.1	NM_173013	Map1s	microtubule-associated protein 1S	70905932	70917529	TC0800000773.mm.1	0.0	0.937527
TC1800001591.mm.1	NM_172573	Engase	endo-beta-N-acetylglucosaminidase	118476829	118489209	TC1100001989.mm.1	0.0	0.937831
TC1800001593.mm.1	NM_138659	Prpf8	pre-mRNA processing factor 8	75486777	75509449	TC1100001069.mm.1	0.0	0.937879
TC1800001594.mm.1	NM_144857	Rrp36	ribosomal RNA processing 36 homolog (S. cerevi	46667442	46674255	TC1700002184.mm.1	0.0	0.937968
TC1800001597.mm.1	ENSMUST00000158085	Gm22730	predicted gene, 22730	127046912	127047082	TC0800001585.mm.1	0.0	0.938223
TC1800001628.mm.1	ENSMUST00000083733	Gm22576	predicted gene, 22576	48942999	48943102	TC1600001693.mm.1	0.0	0.938257
TC1800001629.mm.1	ENSMUST00000158665	Gm23207	predicted gene, 23207	23817270	23817371	TC1800001070.mm.1	0.0	0.938283
TC1800001632.mm.1	ENSMUST00000176615	Gm25193	predicted gene, 25193	120797574	120797670	TC0600003046.mm.1	0.0	0.938486
TC1800001648.mm.1	NM_001134644_4	Mup19	major urinary protein 19	61778324	61782269	TC0400002770.mm.1	-0.1	0.938637
TC1800001649.mm.1	NM_022980	Rcan3	regulator of calcineurin 3	135412308	135433853	TC0400003765.mm.1	0.0	0.938875
TC1800001654.mm.1	NM_183162	Helz2	helicase with zinc finger 2, transcriptional co	181227615	181242027	TC0200005438.mm.1	0.0	0.939088
TC1800001669.mm.1	NM_007551	Cxcr5	chemokine (C-X-C motif) receptor 5	44511787	44556391	TC0900002171.mm.1	0.0	0.939106
TC1800001681.mm.1	NR_073181	Fth1	ferritin heavy chain 1	9980600	9985111	TC1900000183.mm.1	0.0	0.939285
TC1800001700.mm.1	OTTMUST00000054980	AC13906	---	27949155	27949763	TC0700002682.mm.1	0.0	0.939635
TC1800001711.mm.1	NM_146533	Olfr136	olfactory receptor 1367	21346910	21347964	TC1300000163.mm.1	0.0	0.939667
TC1800001716.mm.1	ENSMUST00000179835	Gm24264	predicted gene, 24264	59698307	59698400	TC0700003278.mm.1	0.0	0.939703
TC1800001719.mm.1	NR_030470	Mir669a	microRNA 669a-2	10510164	10510260	TC0200000188.mm.1	0.0	0.939799
TC1800001725.mm.1	ENSMUST00000083097	Gm22364	predicted gene, 22364	36409610	36409707	TC0X00002045.mm.1	0.0	0.940241
TC1800001736.mm.1	ENSMUST00000122566	Gm22479	predicted gene, 22479	118466984	118467064	TC0900003225.mm.1	0.0	0.940391
TC1800001741.mm.1	ENSMUST00000175187	Gm24563	predicted gene, 24563	48048703	48048795	TC0600000546.mm.1	0.0	0.940888
TC1800001746.mm.1	NM_026113	Gtf3c6	general transcription factor IIIC, polypeptide	40249203	40257671	TC1000002042.mm.1	0.0	0.940904
TC1800001747.mm.1	NM_022012	Map3k11	mitogen-activated protein kinase kinase kinase	5689131	5702865	TC1900000079.mm.1	0.0	0.941033
TC1800001748.mm.1	NM_011220	Pts	6-pyruvoyl-tetrahydropterin synthase	50521617	50528641	TC0900002268.mm.1	0.0	0.941098
TC1900000008.mm.1	NM_001166724	Vmn1r16	vomeronasal 1 receptor 160	22871224	22872147	TC0700000345.mm.1	0.0	0.941305
TC1900000012.mm.1	NM_001113358	Dad1	defender against cell death 1	54235479	54254104	TC1400002050.mm.1	0.0	0.941434
TC1900000015.mm.1	NM_027276	Cdc16	CDC16 cell division cycle 16	13757676	13781938	TC0800000130.mm.1	0.0	0.941498
TC1900000019.mm.1	NM_026979	C1qtnf2	C1q and tumor necrosis factor related protein 2	43474276	43491525	TC1100000427.mm.1	0.0	0.941516
TC1900000021.mm.1	ENSMUST00000082542	Gm23405	predicted gene, 23405	150964735	150964894	TC0400001993.mm.1	0.0	0.941652
TC1900000022.mm.1	NM_024478	Grpel1	GrpE-like 1, mitochondrial	36464998	36474080	TC0500000409.mm.1	0.0	0.941696
TC1900000026.mm.1	NM_030558	Car15	carbonic anhydrase 15	17835276	17838364	TC1600002180.mm.1	0.0	0.941735
TC1900000028.mm.1	ENSMUST00000083364	Gm26121	predicted gene, 26121	72881792	72881953	TC1100001008.mm.1	0.0	0.942014
TC1900000033.mm.1	ENSMUST00000179760	Gm21887	predicted gene, 21887	170009659	170019281	TC0X00001715.mm.1	0.0	0.942033
TC1900000035.mm.1	ENSMUST00000104479	Gm26147	predicted gene, 26147	118832565	118832678	TC0700001705.mm.1	0.0	0.942167
TC1900000036.mm.1	ENSMUST00000179715	AC16897	N/A	31113	45006	TC1_GL456212_rand	0.0	0.942182
TC1900000046.mm.1	NM_145964	Ap1ar	adaptor-related protein complex 1 associated re	127807264	127837492	TC0300002916.mm.1	0.0	0.942262
TC1900000050.mm.1	ENSMUST00000104530	Gm25723	predicted gene, 25723	52946804	52946929	TC1600001732.mm.1	0.0	0.942268
TC1900000051.mm.1	NM_011662	Tyrobp	TYRO protein tyrosine kinase binding protein	30413788	30417582	TC0700000561.mm.1	0.0	0.942682
TC1900000052.mm.1	ENSMUST00000178366	CAAA010	N/A	6884	13382	TCUn_GL4563720000	0.0	0.942787
TC1900000055.mm.1	NM_028747	610012	RIKEN cDNA 0610012H03 gene	105224320	105379860	TC0200001579.mm.1	0.0	0.942867
TC1900000056.mm.1	NM_026686	610011	RIKEN cDNA 0610011F06 gene	25875464	25886007	TC1700000394.mm.1	0.0	0.943173
TC1900000065.mm.1	ENSMUST00000082654	n-R5s74	nuclear encoded rRNA 5S 74	116326602	116326717	TC1100004114.mm.1	0.0	0.943205
TC1900000066.mm.1	NM_130453	Gpha2	glycoprotein hormone alpha 2	6226380	6227768	TC1900000106.mm.1	0.0	0.943427
TC1900000069.mm.1	ENSMUST00000104556	Gm26343	predicted gene, 26343	86275232	86275362	TC0300002266.mm.1	0.0	0.943571
TC1900000073.mm.1	ENSMUST00000122556	Gm25322	predicted gene, 25322	119530211	119530314	TC0100001077.mm.1	0.0	0.943664
TC1900000075.mm.1	NM_007976	F5	coagulation factor V	164151838	164220277	TC0100001498.mm.1	0.0	0.94377
TC1900000078.mm.1	NM_001033908	Med22	mediator complex subunit 22	26905262	26910677	TC0200003203.mm.1	0.0	0.943799
TC1900000079.mm.1	NM_146226	Apeh	acylpeptide hydrolase	108085413	108094480	TC0900003051.mm.1	0.0	0.943823
TC1900000082.mm.1	ENSMUST00000184154	mmu-mir	mmu-mir-7651	6401630	6401693	TC1100000095.mm.1	0.0	0.943901
TC1900000089.mm.1	NR_106109	Mir7651	microRNA mir-7651 (Mir7651), microRNA.	0	0	TSUnmapped0000011	0.0	0.943901
TC1900000090.mm.1	ENSMUST00000157286	Gm24913	predicted gene, 24913	132931211	132931317	TC0400003688.mm.1	0.0	0.944064
TC1900000094.mm.1	NM_172620	Vps52	vacuolar protein sorting 52 (yeast)	33955812	33966984	TC1700000604.mm.1	0.0	0.944116
TC1900000096.mm.1	ENSMUST00000082530	Gm25078	predicted gene, 25078	45795361	45795467	TC0X00002142.mm.1	0.0	0.944268
TC1900000097.mm.1	ENSMUST00000183730	AC12178	N/A	109728821	109728943	TC1200001190.mm.1	0.0	0.9446
TC1900000103.mm.1	ENSMUST00000121675	Gm14672	predicted gene 14672	65194669	65195115	TC0X00002338.mm.1	0.0	0.944675
TC1900000104.mm.1	XM_001480563	Gm4425	predicted gene 4425	22115756	22156646	TC1200001500.mm.1	0.0	0.94479
TC1900000106.mm.1	NM_011927	Ceacam9	carcinoembryonic antigen-related cell adhesion	16721929	16726110	TC0700000233.mm.1	0.0	0.944805
TC1900000109.mm.1	ENSMUST00000175535	Gm26237	predicted gene, 26237	72684314	72684438	TC0800000832.mm.1	0.0	0.944813
TC1900000111.mm.1	ENSMUST00000157743	Gm26323	predicted gene, 26323	23823053	23823227	TC0200000371.mm.1	0.0	0.944823
TC1900000112.mm.1	ENSMUST00000119851	Gm14111	predicted gene 14111	146754707	146755705	TC0200004786.mm.1	0.0	0.944846
TC1900000113.mm.1	ENSMUST00000083043	Gm26056	predicted gene, 26056	14778669	14778772	TC0700000181.mm.1	0.0	0.944942
TC1900000115.mm.1	NM_001206661	Tmem200	transmembrane protein 200C	68837136	68843138	TC1700001101.mm.1	0.0	0.945084
TC1900000117.mm.1	NM_001161516	Dctd	dCMP deaminase	48099092	48153233	TC0800000564.mm.1	0.0	0.94533
TC1900000121.mm.1	NM_010005	Cyp2d10	cytochrome P450, family 2, subfamily d, polypep	82402846	82407194	TC1500001946.mm.1	0.0	0.945355
TC1900000127.mm.1	ENSMUST00000157707	Gm22847	predicted gene, 22847	34530649	34530753	TC0500000379.mm.1	0.0	0.945716

TC1900000130.mm.1	NM_027159	Ccdc115	coiled-coil domain containing 115	34436670	34439672	TC0100002151.mm.1	0.0	0.945819
TC1900000132.mm.1	NM_007854	Slc29a2	solute carrier family 29 (nucleoside transporte	5023860	5031972	TC1900000051.mm.1	0.0	0.946115
TC1900000133.mm.1	NM_183150	BC00396	cDNA sequence BC003965	25184561	25187662	TC1700000365.mm.1	0.0	0.946122
TC1900000134.mm.1	NM_133209	Pilrb1	paired immunoglobin-like type 2 receptor beta 1	137852147	137858049	TC0500003464.mm.1	0.0	0.946243
TC1900000137.mm.1	NM_028754	610037	RIKEN cDNA 0610037L13 gene	107889813	107899384	TC0400001137.mm.1	0.0	0.946307
TC1900000139.mm.1	ENSMUST00000118417	Gm14130	predicted gene 14130	149743175	149744161	TC0200002211.mm.1	0.0	0.946461
TC1900000143.mm.1	ENSMUST00000178368	Gm25596	predicted gene, 25596	29349585	29349691	TC1000000266.mm.1	0.0	0.946579
TC1900000148.mm.1	NM_001101613	Gm11567	predicted gene 11567	99879187	99880229	TC1100001607.mm.1	0.0	0.946609
TC1900000149.mm.1	ENSMUST00000182438	Gm27039	predicted gene, 27039	92527273	92528510	TC1700002749.mm.1	0.0	0.946925
TC1900000152.mm.1	NM_175158	Utp20	UTP20, small subunit (SSU) processome compon	88746607	88826814	TC1000002650.mm.1	0.0	0.947092
TC1900000156.mm.1	ENSMUST00000179544	Gm21954	predicted gene, 21954	55461985	55472210	TC0300001996.mm.1	0.0	0.94739
TC1900000158.mm.1	NM_001146323	Hps3	Hermansky-Pudlak syndrome 3 homolog (humar	19995945	20035315	TC0300001701.mm.1	0.0	0.947447
TC1900000162.mm.1	NM_183268	Defa20	defensin, alpha, 20	21509256	21510237	TC0800000242.mm.1	0.0	0.947599
TC1900000164.mm.1	NR_029576	Mir190	microRNA 190	67236651	67236735	TC0900002543.mm.1	0.0	0.947779
TC1900000165.mm.1	NM_001081011	Srgap2	SLIT-ROBO Rho GTPase activating protein 2	131285251	131527361	TC0100003058.mm.1	0.0	0.948116
TC1900000166.mm.1	ENSMUST00000158139	Gm24395	predicted gene, 24395	153864807	153864931	TC0300001548.mm.1	0.0	0.948397
TC1900000167.mm.1	ENSMUST00000174902	Gm23562	predicted gene, 23562	46434808	46434869	TC1500001476.mm.1	0.0	0.948522
TC1900000169.mm.1	ENSMUST00000157847	Gm23079	predicted gene, 23079	123808105	123808221	TC0600003092.mm.1	0.0	0.948564
TC1900000174.mm.1	NM_020050	Tmem9b	TMEM9 domain family, member B	109735834	109752875	TC0700004080.mm.1	0.0	0.948862
TC1900000175.mm.1	ENSMUST00000082475	n-R5s40	nuclear encoded rRNA 5S 40	79692502	79692625	TC1500000680.mm.1	0.0	0.948952
TC1900000176.mm.1	NR_045443	1700019	RIKEN cDNA 1700019B21 gene	62510539	62527011	TC0X00002323.mm.1	0.0	0.949124
TC1900000178.mm.1	NR_024202	Rny3	RNA, Y3 small cytoplasmic (associated with Ro p	47781624	47781725	TC0600000536.mm.1	0.0	0.949283
TC1900000180.mm.1	NR_024202	Rny3	RNA, Y3 small cytoplasmic (associated with Ro p	0	0	TSUnmapped0000018	0.0	0.949283
TC1900000183.mm.1	NM_025693	Tmem41a	transmembrane protein 41a	21934326	21947552	TC1600001373.mm.1	0.0	0.949443
TC1900000186.mm.1	ENSMUST00000177270	Gm25442	predicted gene, 25442	35325614	35325705	TC0300000255.mm.1	0.0	0.949516
TC1900000188.mm.1	NR_036665	Schip1	schwannomin interacting protein 1	68064802	68626482	TC0300003210.mm.1	0.0	0.949616
TC1900000205.mm.1	ENSMUST00000120200	Gm11557	predicted gene 11557	99678126	99679133	TC1100001598.mm.1	0.0	0.949981
TC1900000208.mm.1	NM_010001	Cyp2c37	cytochrome P450, family 2. subfamily c, polypep	39992424	40012244	TC1900000567.mm.1	0.0	0.950409
TC1900000216.mm.1	NM_011161	Mapk11	mitogen-activated protein kinase 11	89142482	89149606	TC1500002039.mm.1	0.0	0.95061
TC1900000217.mm.1	NM_001165951	Vangl1	vang-like 1 (van gogh, Drosophila)	102155900	102204693	TC0300002612.mm.1	0.0	0.950896
TC1900000221.mm.1	NM_028453	Otud3	OTU domain containing 3	138895379	138913947	TC0400003836.mm.1	0.0	0.95111
TC1900000224.mm.1	ENSMUST00000183495	Six3os1	Six3os1 conserved region 6	85618067	85618265	TC1700001283.mm.1	0.0	0.951116
TC1900000226.mm.1	NM_053106	Lmod1	leiomodin 1 (smooth muscle)	135324807	135368065	TC0100001249.mm.1	0.0	0.951296
TC1900000227.mm.1	NM_025496	Cdrt4	CMT1A duplicated region transcript 4	62951193	62993095	TC1100000820.mm.1	0.0	0.951548
TC1900000228.mm.1	NM_207573	Olfr138	olfactory receptor 1380	49563923	49564860	TC1100000518.mm.1	0.0	0.951572
TC1900000229.mm.1	ENSMUST00000104242	Gm22592	predicted gene, 22592	21500366	21500496	TC0X00001944.mm.1	0.0	0.951666
TC1900000235.mm.1	ENSMUST00000083824	n-R5s10	nuclear encoded rRNA 5S 10	86406128	86406246	TC0X00002568.mm.1	0.0	0.951723
TC1900000238.mm.1	NM_018773	Skap2	src family associated phosphoprotein 2	51859165	52012549	TC0600002269.mm.1	0.0	0.951744
TC1900000246.mm.1	NM_001190732	Gm20594	predicted gene, 20594	79818031	79818364	TC0600000884.mm.1	0.0	0.952544
TC1900000256.mm.1	NM_001011662	Olfr180	olfactory receptor 180	58915686	58918486	TC1600001784.mm.1	0.0	0.952662
TC1900000257.mm.1	NM_001013376	Rpp38	ribonuclease P/MRP 38 subunit	3328949	3332643	TC0200002844.mm.1	0.0	0.952883
TC1900000258.mm.1	ENSMUST00000175289	Gm23632	predicted gene, 23632	120974301	120974425	TC1000003036.mm.1	0.0	0.952884
TC1900000271.mm.1	ENSMUST00000122639	n-R5s68	nuclear encoded rRNA 5S 68	27085126	27085207	TC1100000271.mm.1	0.0	0.952991
TC1900000293.mm.1	NM_021502	Trappc2	trafficking protein particle complex 2-like	122611626	122615591	TC0800001494.mm.1	0.0	0.953004
TC1900000304.mm.1	ENSMUST00000104101	Gm25766	predicted gene, 25766	113519476	113519606	TC0800002968.mm.1	0.0	0.95308
TC1900000309.mm.1	NM_001024602	Cep170b	centrosomal protein 170B	112722174	112746591	TC1200001269.mm.1	0.0	0.953101
TC1900000317.mm.1	ENSMUST00000179217	Gm2310	predicted gene 2310	8518683	8519953	TC1500001181.mm.1	0.0	0.953114
TC1900000318.mm.1	NM_025448	Ssr2	signal sequence receptor, beta	88579641	88588416	TC0300000731.mm.1	0.0	0.953136
TC1900000325.mm.1	ENSMUST00000158427	Gm23351	predicted gene, 23351	31427255	31427379	TC1300000346.mm.1	0.0	0.953394
TC1900000326.mm.1	ENSMUST00000119524	Gm16074	predicted gene 16074	3992371	3992814	TC1000000016.mm.1	0.0	0.953507
TC1900000328.mm.1	ENSMUST00000157420	Gm23327	predicted gene, 23327	30004186	30004263	TC1500001315.mm.1	0.0	0.953516
TC1900000335.mm.1	ENSMUST00000175531	Gm22355	predicted gene, 22355	167644364	167644459	TC0200005195.mm.1	0.0	0.953608
TC1900000373.mm.1	BC026878	Gm3912	predicted gene 3912	7366496	7374636	TC0700002230.mm.1	0.0	0.953625
TC1900000377.mm.1	NM_133869	Cept1	choline/ethanolaminephosphotransferase 1	106502260	106547802	TC0300002688.mm.1	0.0	0.953682
TC1900000378.mm.1	NM_177406	Cyp4a12	cytochrome P450, family 4, subfamily a, polypep	115299046	115332815	TC0400001221.mm.1	0.0	0.953928
TC1900000379.mm.1	ENSMUST00000166353	Gm17402	predicted gene, 17402	67365461	67375163	TC0300002112.mm.1	0.0	0.954455
TC1900000381.mm.1	NM_001146346	Emp3	epithelial membrane protein 3	45918023	45921426	TC0700003028.mm.1	0.0	0.954475
TC1900000382.mm.1	NM_011948	Map3k4	mitogen-activated protein kinase kinase kinase	12227621	12318660	TC1700001447.mm.1	0.0	0.954635
TC1900000383.mm.1	NM_001025084	Rhox1	reproductive homeobox 1	37213804	37222258	TC0X00002063.mm.1	0.0	0.955449
TC1900000397.mm.1	XM_003085242	Gm340	predicted gene 340	41575867	41586536	TC1900000591.mm.1	0.0	0.955521
TC1900000398.mm.1	NM_001045528	Fkbp15	FK506 binding protein 15	62300342	62360548	TC0400002786.mm.1	0.0	0.955611
TC1900000401.mm.1	ENSMUST00000104640	Gm26050	predicted gene, 26050	3699178	3699240	TC1200000015.mm.1	0.0	0.955687
TC1900000407.mm.1	NR_028499	Fxyd2	FXYD domain-containing ion transport regulator	45399709	45410278	TC0900000541.mm.1	0.0	0.955785
TC1900000421.mm.1	NM_009344	Phlda1	pleckstrin homology-like domain, family A, mem	111506286	111508649	TC1000001301.mm.1	0.0	0.956168
TC1900000427.mm.1	NM_178098	4930486	RIKEN cDNA 4930486L24 gene	60842612	60864416	TC1300002140.mm.1	0.0	0.956289
TC1900000432.mm.1	NM_178612	Cnpy4	canopy 4 homolog (zebrafish)	138187485	138193918	TC0500001645.mm.1	0.0	0.956808
TC1900000438.mm.1	ENSMUST00000083221	Gm25481	predicted gene, 25481	9317819	9317976	TC0X00000112.mm.1	0.0	0.956876
TC1900000454.mm.1	ENSMUST00000085094	Gm10160	predicted gene 10160	81855533	81855794	TC0700003620.mm.1	0.0	0.956879
TC1900000460.mm.1	NM_001033157	5730507	RIKEN cDNA 5730507C01 gene	18514510	18535254	TC1200000155.mm.1	0.0	0.956982
TC1900000461.mm.1	NM_174991	Bai1	brain-specific angiogenesis inhibitor 1	74516196	74589464	TC1500000528.mm.1	0.0	0.957258
TC1900000465.mm.1	NM_029101	Rrp7a	ribosomal RNA processing 7 homolog A (S. cerev	83113433	83122801	TC1500001965.mm.1	0.0	0.957302
TC1900000481.mm.1	ENSMUST00000176507	Gm26318	predicted gene, 26318	102255430	102255525	TC0X00002740.mm.1	0.0	0.957366
TC1900000485.mm.1	NM_173434	9930111	RIKEN cDNA 9930111J21 gene 2	49015874	49051242	TC1100002648.mm.1	0.0	0.957476
TC1900000487.mm.1	ENSMUST00000184028	DLG2-AS	DLG2 antisense RNA 1 conserved region 1	91126348	91126555	TC0700003730.mm.1	0.0	0.957538
TC1900000492.mm.1	NM_001166743	Vmn1r11	vomeronasal 1 receptor 117	20883198	20884121	TC0700002530.mm.1	0.0	0.957594
TC1900000495.mm.1	NR_003623	Gm5069	glyceraldehyde-3-phosphate dehydrogenase pse	180326969	180330550	TC0100003665.mm.1	0.0	0.957606
TC1900000497.mm.1	NM_009544	Zfp105	zinc finger protein 105	122923072	122931028	TC0900001650.mm.1	0.0	0.957821
TC1900000498.mm.1	XR_104786	Gm16508	predicted gene 16508	41286061	41290590	TC0300001913.mm.1	0.0	0.957968

TC1900000501.mm.1	ENSMUST00000083365	Gm23138	predicted gene, 23138	108498044	108498146	TC0400001148.mm.1	0.0	0.958151
TC1900000502.mm.1	NR_039556	Mir5097	microRNA 5097	41196449	41196531	TC1800000427.mm.1	0.0	0.958373
TC1900000504.mm.1	NM_178212	Hist2h2	histone cluster 2, H2aa2	96245457	96246115	TC0300003215.mm.1	0.0	0.958584
TC1900000508.mm.1	ENSMUST00000178031	Gm22583	predicted gene, 22583	110757085	110757191	TC0500001149.mm.1	0.0	0.9586
TC1900000509.mm.1	NM_013842	Xbp1	X-box binding protein 1	5520641	5525993	TC1100000072.mm.1	0.0	0.958733
TC1900000523.mm.1	NCBI_Gene:777780:p	Ighv5-6	immunoglobulin heavy variable 5-6	113625506	113625956	TC1200002558.mm.1	0.0	0.958744
TC1900000526.mm.1	NM_011377	Sim2	single-minded homolog 2 (Drosophila)	94085260	94127032	TC1600001053.mm.1	0.0	0.958775
TC1900000529.mm.1	ENSMUST00000116872	Gm23881	predicted gene, 23881	48364337	48364402	TC1400001945.mm.1	0.0	0.959158
TC1900000531.mm.1	NM_011764	Zfp90	zinc finger protein 90	106415339	106425895	TC0800001251.mm.1	0.0	0.959261
TC1900000533.mm.1	NM_133676	Osgep	O-sialoglycoprotein endopeptidase	50906478	50924893	TC1400001993.mm.1	0.0	0.959337
TC1900000544.mm.1	ENSMUST00000103894	Gm23766	predicted gene, 23766	45095629	45095708	TC1000002108.mm.1	0.0	0.959389
TC1900000545.mm.1	ENSMUST00000175076	Gm23158	predicted gene, 23158	133558824	133558949	TC0400003706.mm.1	0.0	0.959443
TC1900000549.mm.1	ENSMUST00000178926	Gm22259	predicted gene, 22259	52154501	52154607	TC1800001331.mm.1	0.0	0.959578
TC1900000567.mm.1	ENSMUST00000090720	Gm13721	predicted gene 13721	86397068	86398017	TC0200003935.mm.1	0.0	0.95983
TC1900000568.mm.1	ENSMUST00000157907	Gm22706	predicted gene, 22706	44081289	44081400	TC0400002550.mm.1	0.0	0.960052
TC1900000569.mm.1	NM_183294	Cdkl1	cyclin-dependent kinase-like 1 (CDC2-related ki	69746848	69790707	TC1200001875.mm.1	0.0	0.960463
TC1900000574.mm.1	ENSMUST00000122769	n-R5s18	nuclear encoded rRNA 5S 187	81918513	81918623	TC0400000820.mm.1	0.0	0.960764
TC1900000583.mm.1	NM_001122830	Klhl26	kelch-like 26	70450219	70476949	TC0800002392.mm.1	0.0	0.961291
TC1900000588.mm.1	ENSMUST00000122007	Gm13158	predicted gene 13158	147267373	147268108	TC0400001902.mm.1	0.0	0.961465
TC1900000591.mm.1	NM_007954	Ces1c	carboxylesterase 1C	93099015	93131283	TC0800002701.mm.1	0.0	0.961821
TC1900000593.mm.1	NM_018813	Cpsf3	cleavage and polyadenylation specificity factor	21286297	21315056	TC1200000181.mm.1	0.0	0.961883
TC1900000598.mm.1	NM_010387	H2-DMb1	histocompatibility 2, class II, locus Mb1	34153072	34160229	TC1700002780.mm.1	0.0	0.962033
TC1900000600.mm.1	ENSMUST00000175516	Gm25197	predicted gene, 25197	73924585	73924710	TC1300002307.mm.1	0.0	0.962073
TC1900000602.mm.1	ENSMUST00000104599	Gm23908	predicted gene, 23908	118111914	118112045	TC0600002995.mm.1	0.0	0.962139
TC1900000604.mm.1	NM_133907	Ube3c	ubiquitin protein ligase E3C	29569242	29676077	TC0500000274.mm.1	0.0	0.962416
TC1900000607.mm.1	ENSMUST00000104596	Gm23911	predicted gene, 23911	58005205	58005338	TC0700000945.mm.1	0.0	0.962423
TC1900000609.mm.1	ENSMUST00000157365	Gm25058	predicted gene, 25058	11913621	11913748	TC1100002226.mm.1	0.0	0.962487
TC1900000610.mm.1	NM_053166	Trim7	tripartite motif-containing 7	48826138	48852209	TC1100000494.mm.1	0.0	0.962541
TC1900000615.mm.1	ENSMUST00000118306	Gm12664	predicted gene 12664	16643009	16643921	TC1100002242.mm.1	0.0	0.962617
TC1900000625.mm.1	ENSMUST00000119836	Gm7278	predicted gene 7278	152729159	152730559	TC0100003267.mm.1	0.0	0.962729
TC1900000631.mm.1	ENSMUST00000083817	Gm23345	predicted gene, 23345	111947181	111947330	TC0700004116.mm.1	0.0	0.962759
TC1900000637.mm.1	ENSMUST00000175051	Gm22694	predicted gene, 22694	89733005	89733074	TC1800000911.mm.1	0.0	0.962975
TC1900000641.mm.1	NM_016668	Bhmt	betaine-homocysteine methyltransferase	93616891	93637961	TC1300002436.mm.1	0.0	0.963293
TC1900000645.mm.1	ENSMUST00000182456	Gm16470	predicted pseudogene 16470	40212382	40213379	TC1900000569.mm.1	0.0	0.963416
TC1900000646.mm.1	NM_022313	Eral1	Era (G-protein)-like 1 (E. coli)	78073376	78080383	TC1100003283.mm.1	0.0	0.963426
TC1900000650.mm.1	NM_016878	Dnpep	aspartyl aminopeptidase	75307896	75317637	TC0100002608.mm.1	0.0	0.963477
TC1900000657.mm.1	NM_015775	Tmprss2	transmembrane protease, serine 2	97564682	97611195	TC1600002152.mm.1	0.0	0.963541
TC1900000660.mm.1	ENSMUST00000179058	Gm23306	predicted gene, 23306	36285433	36285537	TC1600001570.mm.1	0.0	0.963876
TC1900000661.mm.1	XM_003689027	Gm21387	predicted gene, 21387	51605778	51607974	TC0Y00000363.mm.1	0.0	0.963892
TC1900000662.mm.1	XM_001476100	Gm20882	predicted gene, 20882	64227042	64229238	TC0Y00000422.mm.1	0.0	0.963892
TC1900000664.mm.1	ENSMUST00000117402	Gm7129	predicted gene 7129	13326023	13327019	TC0X00001870.mm.1	0.0	0.964331
TC1900000683.mm.1	NM_013637	Prm1	protamine 1	10796326	10796886	TC1600001203.mm.1	0.0	0.96463
TC1900000689.mm.1	NM_001164329	Gm6904	predicted gene 6904	59244441	59260216	TC1400002160.mm.1	0.0	0.964667
TC1900000698.mm.1	NM_011725	Xlr	X-linked lymphocyte-regulated complex	53777118	53797706	TC0X00002247.mm.1	0.0	0.964813
TC1900000703.mm.1	NM_009668	Bin1	bridging integrator 1	32377217	32435740	TC1800000261.mm.1	0.0	0.964852
TC1900000709.mm.1	ENSMUST00000176664	Gm25190	predicted gene, 25190	116531646	116531740	TC1000002909.mm.1	0.0	0.964922
TC1900000711.mm.1	ENSMUST00000120252	Gm7571	predicted gene 7571	147173481	147175116	TC0600001745.mm.1	0.0	0.965
TC1900000716.mm.1	NM_010257	Gast	gastrin	100334407	100336997	TC1100001622.mm.1	0.0	0.965192
TC1900000717.mm.1	NM_001163276	Med16	mediator complex subunit 16	79894707	79908938	TC1000002484.mm.1	0.0	0.965277
TC1900000720.mm.1	ENSMUST00000122606	Gm25270	predicted gene, 25270	133797582	133797719	TC0400003716.mm.1	0.0	0.96535
TC1900000725.mm.1	NM_025317	Mrpl54	mitochondrial ribosomal protein L54	81264713	81266934	TC1000002534.mm.1	0.0	0.965362
TC1900000727.mm.1	NR_037311	Mir3473	microRNA 3473	100078389	100188036	TC1500002233.mm.1	0.0	0.965378
TC1900000748.mm.1	NR_035408	Mir669a	microRNA 669a-1	10476853	10476949	TC0200000111.mm.1	0.0	0.965388
TC1900000756.mm.1	ENSMUST00000179798	mmu-mir	mmu-mir-669a-1 // mmu-mir-669a-4 // mmu-m	10512203	10512299	TC0200000193.mm.1	0.0	0.965388
TC1900000764.mm.1	ENSMUST00000082920	Gm24527	predicted gene, 24527	106780114	106780220	TC1300002616.mm.1	0.0	0.965431
TC1900000766.mm.1	ENSMUST00000175622	Gm22002	predicted gene, 22002	105992757	105992881	TC0200001589.mm.1	0.0	0.965465
TC1900000776.mm.1	ENSMUST00000179182	Gm24766	predicted gene, 24766	32690250	32690370	TC0700000603.mm.1	0.0	0.965531
TC1900000795.mm.1	ENSMUST00000177758	Gm25817	predicted gene, 25817	32917146	32917266	TC0700000606.mm.1	0.0	0.965531
TC1900000801.mm.1	BC063059	Usp25	ubiquitin specific peptidase 25	77014069	77116780	TC1600000861.mm.1	0.0	0.965549
TC1900000813.mm.1	ENSMUST00000122699	Gm24378	predicted gene, 24378	47270859	47270964	TC1400001933.mm.1	0.0	0.965671
TC1900000814.mm.1	NM_001037751	Defb48	defensin beta 48	62977524	62984510	TC1400002213.mm.1	0.0	0.965687
TC1900000819.mm.1	XR_141198	LOC1000	uncharacterized LOC100036572	5438065	5455467	TC1400002856.mm.1	0.0	0.965975
TC1900000844.mm.1	NM_145146	Afm	afamin	90518932	90553544	TC0500000836.mm.1	0.0	0.966177
TC1900000851.mm.1	NM_147222	Rdh19	retinol dehydrogenase 19	127849928	127861176	TC1000001575.mm.1	0.0	0.966612
TC1900000857.mm.1	ENSMUST00000174899	Gm22548	predicted gene, 22548	67616975	67617052	TC0100000576.mm.1	0.0	0.967141
TC1900000861.mm.1	ENSMUST00000158812	Gm23199	predicted gene, 23199	140679696	140679802	TC0X00001385.mm.1	0.0	0.967172
TC1900000866.mm.1	NM_011159	Prkdc	protein kinase, DNA activated, catalytic polype	15637866	15842239	TC1600000190.mm.1	0.0	0.967427
TC1900000876.mm.1	NM_010106	Eef1a1	eukaryotic translation elongation factor 1 alph	78478449	78489151	TC0900002727.mm.1	0.0	0.967563
TC1900000878.mm.1	NM_001033770	Gm904	predicted gene 904	50643228	50645838	TC1300000589.mm.1	0.0	0.967738
TC1900000882.mm.1	ENSMUST00000079884	Gm10042	predicted gene 10042	153785053	153785134	TC0300001545.mm.1	0.0	0.967773
TC1900000889.mm.1	ENSMUST00000116890	Gm22711	predicted gene, 22711	106501245	106501377	TC1100001784.mm.1	0.0	0.967804
TC1900000890.mm.1	ENSMUST00000083758	Gm25410	predicted gene, 25410	8824011	8824147	TC1000001717.mm.1	0.0	0.967873
TC1900000896.mm.1	ENSMUST00000175161	Gm25733	predicted gene, 25733	80721352	80721477	TC0800000891.mm.1	0.0	0.967889
TC1900000897.mm.1	ENSMUST00000093660	Gm24163	predicted gene, 24163	75905147	75905278	TC1300000920.mm.1	0.0	0.96793
TC1900000898.mm.1	NM_145582	Ctu1	cytosolic thiouridylase subunit 1 homolog (S. p	43672016	43678298	TC0700000768.mm.1	0.0	0.968029
TC1900000906.mm.1	NM_001111331	Kcnip3	Kv channel interacting protein 3, calsenilin	127456498	127522094	TC0200004556.mm.1	0.0	0.968349
TC1900000907.mm.1	OTTMUST00000090385	RP23-34	---	103159795	103164069	TC1300002574.mm.1	0.0	0.96849
TC1900000908.mm.1	NR_039557	Mir5098	microRNA 5098	77272757	77272838	TC0500000739.mm.1	0.0	0.96877

TC1900000910.mm.1	ENSMUST00000158519	Gm25264	predicted gene, 25264	46606967	46607083	TC0200003486.mm.1	0.0	0.968893
TC1900000913.mm.1	ENSMUST00000104778	Gm26259	predicted gene, 26259	5997455	5997551	TC1300001392.mm.1	0.0	0.969062
TC1900000915.mm.1	NM_172293	Pced1b	PC-esterase domain containing 1B	97247107	97385693	TC1500000960.mm.1	0.0	0.969067
TC1900000921.mm.1	ENSMUST00000166681	Gm17482	predicted gene, 17482	115227343	115259294	TC0600001278.mm.1	0.0	0.969189
TC1900000924.mm.1	XM_003084992	Gm8050	predicted gene 8050	6712183	6720251	TC1400001415.mm.1	0.0	0.969287
TC1900000926.mm.1	ENSMUST00000158856	Gm24738	predicted gene, 24738	76006319	76006441	TC0500002624.mm.1	0.0	0.969585
TC1900000937.mm.1	ENSMUST00000157612	Gm25424	predicted gene, 25424	108120470	108120527	TC0700004047.mm.1	0.0	0.969875
TC1900000939.mm.1	NCBI_Gene:667481:p	Trav6d-	T cell receptor alpha variable 6D-5	52795028	52795633	TC1400000629.mm.1	0.0	0.970028
TC1900000941.mm.1	ENSMUST00000175462	Gm22411	predicted gene, 22411	127891988	127892113	TC0200001923.mm.1	0.0	0.970056
TC1900000952.mm.1	NM_015814	Dkk3	dickkopf homolog 3 (Xenopus laevis)	112116017	112159057	TC0700004119.mm.1	0.0	0.97018
TC1900000954.mm.1	ENSMUST00000180521	1810049	---	12321438	12321899	TC1500001226.mm.1	0.0	0.970206
TC1900000955.mm.1	ENSMUST00000083450	Gm23093	predicted gene, 23093	18738695	18738796	TC1100000176.mm.1	0.0	0.970733
TC1900000960.mm.1	NM_021443	Ccl8	chemokine (C-C motif) ligand 8	82115185	82116799	TC1100001223.mm.1	0.0	0.971375
TC1900000963.mm.1	NR_033599	Gm6682	tubulin, alpha 1C pseudogene	4782170	4783512	TC1200000033.mm.1	0.0	0.971902
TC1900000965.mm.1	NM_134154	Slc25a4	solute carrier family 25, member 45	5877808	5885768	TC1900000090.mm.1	0.0	0.971921
TC1900000967.mm.1	ENSMUST00000175062	Gm23967	predicted gene, 23967	64101430	64101507	TC0500002463.mm.1	0.0	0.972245
TC1900000971.mm.1	XM_001477780	Gm3685	predicted gene 3685	7036535	7044970	TC1400001419.mm.1	0.0	0.972271
TC1900000975.mm.1	ENSMUST00000175061	Gm26460	predicted gene, 26460	6563780	6563905	TC1900000121.mm.1	0.0	0.972583
TC1900000977.mm.1	XR_105138	D630004	RIKEN cDNA D630004N19 gene	100545748	100608297	TC0700003822.mm.1	0.0	0.972667
TC1900000983.mm.1	ENSMUST00000175311	Gm24816	predicted gene, 24816	90681370	90681520	TC0600002719.mm.1	0.0	0.972693
TC1900000991.mm.1	ENSMUST00000175177	Gm24081	predicted gene, 24081	127040561	127040685	TC0200001905.mm.1	0.0	0.972752
TC1900000995.mm.1	ENSMUST00000158335	Gm22090	predicted gene, 22090	105020268	105020378	TC0X00002806.mm.1	0.0	0.973162
TC1900000996.mm.1	XR_105340	Gm20114	predicted gene, 20114	13966077	14151378	TC1000000100.mm.1	0.0	0.973171
TC1900000997.mm.1	NM_145377	Trim41	tripartite motif-containing 41	48806404	48817391	TC1100002637.mm.1	0.0	0.973173
TC1900000999.mm.1	ENSMUST00000177635	Gm24304	predicted gene, 24304	80098908	80099014	TC0500000748.mm.1	0.0	0.973251
TC1900001002.mm.1	NM_001127354	Gm11938	predicted gene 11938	99602646	99603308	TC1100003720.mm.1	0.0	0.973261
TC1900001011.mm.1	NM_001081040	Coq10a	coenzyme Q10 homolog A (yeast)	128363097	128370037	TC1000003140.mm.1	0.0	0.973378
TC1900001012.mm.1	ENSMUST00000175110	Gm25960	predicted gene, 25960	72950863	72950987	TC0200003746.mm.1	0.0	0.973382
TC1900001015.mm.1	ENSMUST00000105679	A930039	RIKEN cDNA A930039A15 gene	153905301	153916910	TC0100001388.mm.1	0.0	0.973438
TC1900001017.mm.1	XM_484483	K230010	RIKEN cDNA K230010J24 gene	76009069	76035239	TC1500000570.mm.1	0.0	0.973473
TC1900001019.mm.1	ENSMUST00000116950	Gm23840	predicted gene, 23840	78754426	78754522	TC1100003311.mm.1	0.0	0.973494
TC1900001020.mm.1	ENSMUST00000104507	Gm24519	predicted gene, 24519	76604319	76604450	TC1300002345.mm.1	0.0	0.973665
TC1900001022.mm.1	ENSMUST00000120431	Gm12846	predicted gene 12846	98664366	98666137	TC0400000985.mm.1	0.0	0.97378
TC1900001023.mm.1	NM_015741	Krtap9-	keratin associated protein 9-1	99873389	99874432	TC1100001606.mm.1	0.0	0.973793
TC1900001025.mm.1	ENSMUST00000157422	Gm23325	predicted gene, 23325	143413898	143414026	TC0X00001412.mm.1	0.0	0.973811
TC1900001026.mm.1	ENSMUST00000158038	Gm25332	predicted gene, 25332	92882451	92882555	TC0X00000878.mm.1	0.0	0.973983
TC1900001028.mm.1	XR_001627	Gm8995	predicted gene 8995	106503886	106529208	TC0700004009.mm.1	0.0	0.974258
TC1900001029.mm.1	ENSMUST00000083688	Gm24763	predicted gene, 24763	43254046	43254235	TC0X00000407.mm.1	0.0	0.974303
TC1900001030.mm.1	ENSMUST00000175951	Gm24758	predicted gene, 24758	5579181	5579263	TC1200000046.mm.1	0.0	0.974362
TC1900001036.mm.1	ENSMUST00000085330	Gm10491	predicted gene 10491	7907693	7907835	TC0X00001785.mm.1	0.0	0.974432
TC1900001039.mm.1	ENSMUST00000104166	Gm26286	predicted gene, 26286	100831281	100831414	TC0500000986.mm.1	0.0	0.974481
TC1900001042.mm.1	NM_133758	Usp47	ubiquitin specific peptidase 47	112023506	112111386	TC0700001640.mm.1	0.0	0.974695
TC1900001044.mm.1	ENSMUST00000179088	Gm5327	predicted pseudogene 5327	32545759	32546767	TC0700000600.mm.1	0.0	0.974733
TC1900001051.mm.1	ENSMUST00000175424	Gm22181	predicted gene, 22181	112218098	112218223	TC0800001345.mm.1	0.0	0.974763
TC1900001053.mm.1	XM_984543	Gm8159	predicted gene 8159	4632352	4656714	TC1400000029.mm.1	0.0	0.974807
TC1900001058.mm.1	NM_010118	Egr2	early growth response 2	67535475	67542188	TC1000000636.mm.1	0.0	0.975005
TC1900001059.mm.1	ENSMUST00000175333	Gm25949	predicted gene, 25949	86699043	86699156	TC0900002782.mm.1	0.0	0.975125
TC1900001062.mm.1	NM_026554	Ncbp2	nuclear cap binding protein subunit 2	31948513	31961781	TC1600000425.mm.1	0.0	0.975155
TC1900001073.mm.1	ENSMUST00000175384	Gm24365	predicted gene, 24365	128478014	128478138	TC0700004367.mm.1	0.0	0.975233
TC1900001080.mm.1	NM_145479	Klhl22	kelch-like 22	17759618	17793382	TC1600000224.mm.1	0.0	0.975254
TC1900001083.mm.1	ENSMUST00000175364	Gm25535	predicted gene, 25535	117935469	117935593	TC0600002993.mm.1	0.0	0.975432
TC1900001085.mm.1	ENSMUST00000083787	Gm26168	predicted gene, 26168	122623547	122623658	TC0600001387.mm.1	0.0	0.975491
TC1900001095.mm.1	NM_153152	2410015	RIKEN cDNA 2410015M20 gene	56607452	56609771	TC1700002332.mm.1	0.0	0.975502
TC1900001096.mm.1	ENSMUST00000177656	Gm25195	predicted gene, 25195	28526332	28526457	TC1700000480.mm.1	0.0	0.975613
TC1900001097.mm.1	ENSMUST00000175019	Gm23365	predicted gene, 23365	113528550	113528674	TC0600002925.mm.1	0.0	0.975729
TC1900001109.mm.1	ENSMUST00000175365	Gm25534	predicted gene, 25534	93923187	93923311	TC1300002441.mm.1	0.0	0.975816
TC1900001113.mm.1	ENSMUST00000083327	Gm23452	predicted gene, 23452	80984083	80984189	TC0200003847.mm.1	0.0	0.975856
TC1900001124.mm.1	ENSMUST00000175162	Gm25734	predicted gene, 25734	57565793	57566109	TC0600000697.mm.1	0.0	0.975888
TC1900001128.mm.1	ENSMUST00000184128	AL59612	N/A	69505358	69505435	TC1100003045.mm.1	0.0	0.976022
TC1900001130.mm.1	ENSMUST00000099773	Olfr124	olfactory receptor 1245	89574712	89575773	TC0200004063.mm.1	0.0	0.976039
TC1900001131.mm.1	ENSMUST00000158394	Gm25522	predicted gene, 25522	104865204	104865308	TC1000002791.mm.1	0.0	0.976109
TC1900001134.mm.1	ENSMUST00000178795	Gm22420	predicted gene, 22420	26580802	26580927	TC1700001701.mm.1	0.0	0.976134
TC1900001137.mm.1	ENSMUST00000175378	Gm25640	predicted gene, 25640	64971669	64971793	TC0900002502.mm.1	0.0	0.976165
TC1900001144.mm.1	NM_001170454	Tada2b	transcriptional adaptor 2B	36473670	36484285	TC0500002258.mm.1	0.0	0.976175
TC1900001149.mm.1	NM_173756	Lin52	lin-52 homolog (C. elegans)	84451422	84531533	TC1200000813.mm.1	0.0	0.976203
TC1900001156.mm.1	ENSMUST00000066954	LOC1008	uncharacterized LOC100862627 // RIKEN cDNA	25222848	25223153	TC0500002101.mm.1	0.0	0.976278
TC1900001158.mm.1	ENSMUST00000178610	Kat2b-p	K(lysine) acetyltransferase 2B, pseudogene	93390602	93393091	TC0500002775.mm.1	0.0	0.976348
TC1900001163.mm.1	ENSMUST00000158914	Gm25160	predicted gene, 25160	97222534	97222635	TC0800001156.mm.1	0.0	0.976426
TC1900001173.mm.1	ENSMUST00000109941	Gm11032	predicted gene 11032	4620067	4621698	TC1100000047.mm.1	0.0	0.976628
TC1900001180.mm.1	ENSMUST00000121384	Gm12403	predicted gene 12403	41168646	41169604	TC0400000361.mm.1	0.0	0.976649
TC1900001184.mm.1	NM_001039244	Gm7120	predicted gene 7120	119487941	119610459	TC1300001349.mm.1	0.0	0.97667
TC1900001185.mm.1	ENSMUST00000120986	Gm14422	predicted gene 14422	122612228	122612378	TC0700001764.mm.1	0.0	0.976761
TC1900001188.mm.1	NCBI_Gene:780956:p	Ighv1-6	immunoglobulin heavy variable V1-63	115495625	115496058	TC1200002642.mm.1	0.0	0.976809
TC1900001195.mm.1	NM_010453	Hoxa5	homeobox A5	52201754	52204587	TC0600002279.mm.1	0.0	0.977017
TC1900001196.mm.1	NM_010582	Itih2	inter-alpha trypsin inhibitor, heavy chain 2	10094591	10131396	TC0200002945.mm.1	0.0	0.977043
TC1900001199.mm.1	NCBI_Gene:629849:p	Ighv8-2	Ighv8-2 immunoglobulin heavy variable V8-2	114462290	114462589	TC1200002476.mm.1	0.0	0.977358
TC1900001200.mm.1	ENSMUST00000175055	Gm22692	predicted gene, 22692	165908051	165908175	TC0200005158.mm.1	0.0	0.977391
TC1900001205.mm.1	ENSMUST00000121919	Gm14491	predicted gene 14491	11913091	11913289	TC0X00001850.mm.1	0.0	0.977542

TC1900001207.mm.1	ENSMUST00000122258	Gm15376	predicted gene 15376	88191901	88192683	TC0100000844.mm.1	0.0	0.977686
TC1900001219.mm.1	ENSMUST00000104030	Gm23948	predicted gene, 23948	65562163	65562294	TC1200001837.mm.1	0.0	0.977973
TC1900001225.mm.1	ENSMUST00000175073	Gm23638	predicted gene, 23638	18129452	18129577	TC0200003031.mm.1	0.0	0.978061
TC1900001226.mm.1	ENSMUST00000178821	Gm23681	predicted gene, 23681	20937576	20937701	TC1100002318.mm.1	0.0	0.978061
TC1900001238.mm.1	ENSMUST00000176930	Gm25530	predicted gene, 25530	79562167	79562292	TC1400002492.mm.1	0.0	0.978061
TC1900001246.mm.1	ENSMUST00000158221	Gm26354	predicted gene, 26354	22409923	22410051	TC0300001717.mm.1	0.0	0.97809
TC1900001259.mm.1	ENSMUST00000175328	Gm23611	predicted gene, 23611	63198031	63198156	TC0100000522.mm.1	0.0	0.978195
TC1900001266.mm.1	ENSMUST00000174916	Gm25240	predicted gene, 25240	53443271	53443395	TC0100002336.mm.1	0.0	0.978429
TC1900001270.mm.1	NM_008444	Kif3b	kinesin family member 3B	153291413	153333390	TC0200002314.mm.1	0.0	0.978534
TC1900001273.mm.1	NM_001010838	Taar7d	trace amine-associated receptor 7D	24027221	24028298	TC1000000202.mm.1	0.0	0.978658
TC1900001276.mm.1	ENSMUST00000167402	Gm15459	predicted gene 15459	5781530	5783620	TC0500001915.mm.1	0.0	0.978683
TC1900001282.mm.1	ENSMUST00000175269	Gm22460	predicted gene, 22460	3957119	3957242	TC1300001376.mm.1	0.0	0.978865
TC1900001289.mm.1	NM_008222	Hccs	holocytochrome c synthetase	169250193	169320372	TC0X00003376.mm.1	0.0	0.978886
TC1900001290.mm.1	NM_026455	Fam32a	family with sequence similarity 32, member A	72219730	72223775	TC0800000818.mm.1	0.0	0.978962
TC1900001296.mm.1	ENSMUST00000175545	Gm22569	predicted gene, 22569	155315966	155316089	TC0100001400.mm.1	0.0	0.979095
TC1900001298.mm.1	NM_001167584	Gm17689	predicted gene, 17689	36581278	36582635	TC0900002033.mm.1	0.0	0.979159
TC1900001300.mm.1	ENSMUST00000119347	Gm6877	predicted pseudogene 6877	33191196	33192296	TC0800002003.mm.1	0.0	0.979252
TC1900001314.mm.1	ENSMUST00000184832	CAAA010	N/A	3004130	3004229	TC0300001591.mm.1	0.0	0.979298
TC1900001330.mm.1	ENSMUST00000093689	n-R5s21	nuclear encoded rRNA 5S 211	46374197	46374315	TC0100000354.mm.1	0.0	0.979339
TC1900001332.mm.1	ENSMUST00000175047	Gm23968	predicted gene, 23968	160624468	160624592	TC0200002451.mm.1	0.0	0.979398
TC1900001335.mm.1	ENSMUST00000175382	Gm22625	predicted gene, 22625	98557740	98557865	TC0400003119.mm.1	0.0	0.979399
TC1900001340.mm.1	ENSMUST00000175198	Gm22907	predicted gene, 22907	120852171	120852296	TC0500003179.mm.1	0.0	0.979399
TC1900001353.mm.1	ENSMUST00000177685	Gm26268	predicted gene, 26268	10965724	10965849	TC1600000127.mm.1	0.0	0.979399
TC1900001355.mm.1	ENSMUST00000178626	Gm24979	predicted gene, 24979	45209966	45210091	TC1700000854.mm.1	0.0	0.979399
TC1900001357.mm.1	ENSMUST00000103908	Gm22015	predicted gene, 22015	91791610	91791674	TC1200002157.mm.1	0.0	0.979485
TC1900001359.mm.1	ENSMUST00000183434	AL66983	N/A	129762311	129762436	TC0400003616.mm.1	0.0	0.979666
TC1900001395.mm.1	ENSMUST00000128841	Gm16024	predicted gene 16024	155616409	155616787	TC0400002081.mm.1	0.0	0.97985
TC1900001404.mm.1	ENSMUST00000082899	Gm25926	predicted gene, 25926	77418417	77418576	TC1200000693.mm.1	0.0	0.979892
TC1900001406.mm.1	NM_172926	Snx14	sorting nexin 14	88376747	88438958	TC0900003341.mm.1	0.0	0.979904
TC1900001409.mm.1	ENSMUST00000183751	AC15394	N/A	58965543	58965746	TC1000000527.mm.1	0.0	0.98001
TC1900001415.mm.1	ENSMUST00000183329	Gm7985	predicted gene 7985	71846311	71847291	TC1200001897.mm.1	0.0	0.980024
TC1900001417.mm.1	NM_198095	Bst2	bone marrow stromal cell antigen 2	71534256	71537437	TC0800002431.mm.1	0.0	0.980058
TC1900001419.mm.1	ENSMUST00000121335	Gm14423	predicted gene 14423	122550435	122550555	TC0700004233.mm.1	0.0	0.98012
TC1900001422.mm.1	NM_178724	Harbi1	harbinger transposase derived 1	91710852	91721566	TC0200001381.mm.1	0.0	0.980166
TC1900001425.mm.1	NR_110477	Gm12338	predicted gene 12338 (Gm12338), non-coding RI	0	0	TSUnmapped0000009	0.0	0.980197
TC1900001428.mm.1	ENSMUST00000157446	Gm22818	predicted gene, 22818	86212554	86212657	TC1500002014.mm.1	0.0	0.980223
TC1900001430.mm.1	NM_026270	Akt1s1	AKT1 substrate 1 (proline-rich)	44848991	44855421	TC0700000819.mm.1	0.0	0.980457
TC1900001433.mm.1	NM_019480	Ebag9	estrogen receptor-binding fragment-associated g	44619313	44641027	TC1500000355.mm.1	0.0	0.980603
TC1900001437.mm.1	ENSMUST00000175050	Gm22174	predicted gene, 22174	163092899	163093023	TC0200002480.mm.1	0.0	0.980637
TC1900001445.mm.1	NM_022993	Lrp10	low-density lipoprotein receptor-related protei	54464147	54471497	TC1400000747.mm.1	0.0	0.980899
TC1900001455.mm.1	ENSMUST00000175060	Gm24243	predicted gene, 24243	38637018	38637143	TC0200003422.mm.1	0.0	0.980963
TC1900001461.mm.1	ENSMUST00000174964	Gm24513	predicted gene, 24513	63273226	63273363	TC0100002450.mm.1	0.0	0.981072
TC1900001464.mm.1	ENSMUST00000178237	Gm24303	predicted gene, 24303	29150554	29150679	TC0600001971.mm.1	0.0	0.981152
TC1900001470.mm.1	ENSMUST00000185136	AL67023	N/A	155789581	155789706	TC0400002089.mm.1	0.0	0.981167
TC1900001474.mm.1	ENSMUST00000157729	Gm24012	predicted gene, 24012	24336340	24336465	TC0700002598.mm.1	0.0	0.981167
TC1900001484.mm.1	NM_024456	Rab5c	RAB5C, member RAS oncogene family	100715009	100738215	TC1100003781.mm.1	0.0	0.981542
TC1900001490.mm.1	ENSMUST00000158689	Gm23185	predicted gene, 23185	48906652	48906736	TC1500001488.mm.1	0.0	0.981631
TC1900001492.mm.1	ENSMUST00000174941	Gm22398	predicted gene, 22398	117158309	117158433	TC0400003365.mm.1	0.0	0.981691
TC1900001500.mm.1	ENSMUST00000175167	Gm25731	predicted gene, 25731	65509368	65509492	TC1700001069.mm.1	0.0	0.981691
TC1900001506.mm.1	ENSMUST00000182847	Gm4812	predicted gene 4812	69345655	69346647	TC1300000846.mm.1	0.0	0.981763
TC1900001510.mm.1	ENSMUST00000180144	Gm26269	predicted gene, 26269	31982109	31982234	TC1600000426.mm.1	0.0	0.981863
TC1900001511.mm.1	ENSMUST00000101896	Gm24310	predicted gene, 24310	59518411	59518489	TC0700003216.mm.1	0.0	0.982055
TC1900001512.mm.1	NM_021524	Nampt	nicotinamide phosphoribosyltransferase	32820335	32853369	TC1200000279.mm.1	0.0	0.982086
TC1900001514.mm.1	NM_177363	Tarm1	T cell-interacting, activating receptor on myel	3488991	3502552	TC0700002128.mm.1	0.0	0.982087
TC1900001522.mm.1	NM_181752	Gpr135	G protein-coupled receptor 135	72067976	72071053	TC1200001898.mm.1	0.0	0.982102
TC1900001536.mm.1	ENSMUST00000179485	Gm26266	predicted gene, 26266	72511209	72511334	TC0900002641.mm.1	0.0	0.982136
TC1900001541.mm.1	NM_010640	Klk1b11	kallikrein 1-related peptidase b11	43995877	43999875	TC0700000786.mm.1	0.0	0.982198
TC1900001544.mm.1	ENSMUST00000119639	Gm13784	predicted gene 13784	114237176	114237925	TC0500003058.mm.1	0.0	0.982288
TC1900001545.mm.1	NM_146033	Ankmy2	ankyrin repeat and MYND domain containing 2	36157124	36197291	TC1200000319.mm.1	0.0	0.982309
TC1900001548.mm.1	ENSMUST00000157619	Gm25909	predicted gene, 25909	3057799	3057919	TC1700001347.mm.1	0.0	0.982527
TC1900001550.mm.1	XR_106003	BE69200	expressed sequence BE692007	11470041	11484577	TC1900001134.mm.1	0.0	0.982595
TC1900001553.mm.1	NM_177994	R3hdm4	R3H domain containing 4	79910052	79917006	TC1000002485.mm.1	0.0	0.98274
TC1900001554.mm.1	NM_027905	1300018	RIKEN cDNA 1300018J18 gene	89089038	89100340	TC1500000862.mm.1	0.0	0.982761
TC1900001569.mm.1	NM_183131	4930451	RIKEN cDNA 4930451I11 gene	126830474	126831496	TC0700004300.mm.1	0.0	0.982763
TC1900001581.mm.1	ENSMUST00000083960	n-R5s46	nuclear encoded rRNA 5S 46	36855929	36856044	TC1400001740.mm.1	0.0	0.982918
TC1900001600.mm.1	ENSMUST00000158473	Gm25653	predicted gene, 25653	72906201	72906338	TC0400002856.mm.1	0.0	0.98299
TC1900001603.mm.1	NM_009945	Cox7a2	cytochrome c oxidase subunit VIIa 2	79755241	79759853	TC0900002737.mm.1	0.0	0.983482
TC1900001613.mm.1	ENSMUST00000157460	Gm25343	predicted gene, 25343	117976454	117976560	TC0500003133.mm.1	0.0	0.983764
TC1900001619.mm.1	ENSMUST00000144024	Gm12147	predicted gene 12147	43259791	43311088	TC1100002563.mm.1	0.0	0.983782
TC1900001622.mm.1	ENSMUST00000175396	Gm25995	predicted gene, 25995	63442319	63442460	TC0900000802.mm.1	0.0	0.984647
TC1900001626.mm.1	NR_035479	Mir1954	microRNA 1954	113220187	113423560	TC0200001679.mm.1	0.0	0.984711
TC1900001647.mm.1	ENSMUST00000082607	Gm22978	predicted gene, 22978	49292742	49292901	TC1700000947.mm.1	0.0	0.984731
TC1900001648.mm.1	ENSMUST00000102015	Gm25089	predicted gene, 25089	59555854	59555932	TC0700003236.mm.1	0.0	0.985003
TC1900001660.mm.1	NR_029581	Mir195	microRNA 195	70235042	70235135	TC1100000945.mm.1	0.0	0.985201
TC1900001667.mm.1	NR_037302	Mir3470	microRNA 3470b	143948405	144443433	TC0700004601.mm.1	0.0	0.985314
TC1900001670.mm.1	ENSMUST00000122689	Gm23889	predicted gene, 23889	114838173	114838276	TC0900001521.mm.1	0.0	0.985442
TC1900001671.mm.1	ENSMUST00000179888	Gm11945	predicted gene 11945	3470785	3471377	TC1100002089.mm.1	0.0	0.985515
TC1900001677.mm.1	ENSMUST00000022260	Gm5457	predicted pseudogene 5457	12867553	12867888	TC1400000103.mm.1	0.0	0.985527

TC1900001680.mm.1	ENSMUST00000183924	RP24-10	N/A	15369746	15370129	TC0700002405.mm.1	0.0	0.98577
TC1900001694.mm.1	NR_039569	Mir5109	microRNA 5109	17776749	17776835	TC0500001991.mm.1	0.0	0.986265
TC1900001702.mm.1	ENSMUST00000120530	Gm15405	predicted gene 15405	92039660	92040001	TC1700002748.mm.1	0.0	0.986348
TC1900001708.mm.1	ENSMUST00000104257	Gm23128	predicted gene, 23128	38982904	38983035	TC0800002100.mm.1	0.0	0.986777
TC1900001725.mm.1	ENSMUST00000104105	Gm24125	predicted gene, 24125	3857477	3857613	TC0400002130.mm.1	0.0	0.986813
TC1900001750.mm.1	NM_010246	Fzd9	frizzled homolog 9 (Drosophila)	135248938	135251230	TC0500003391.mm.1	0.0	0.986892
TC1900001751.mm.1	ENSMUST00000171153	Gm17330	predicted gene, 17330	23968510	23968845	TC1200001525.mm.1	0.0	0.986919
TC1900001754.mm.1	ENSMUST00000179241	Gm26272	predicted gene, 26272	42317550	42317681	TC0900002118.mm.1	0.0	0.987173
TC1900001759.mm.1	XR_035281	Gm4924	predicted gene 4924	82354255	82404033	TC1000000924.mm.1	0.0	0.987188
TC1900001760.mm.1	NM_172625	Ino80c	INO80 complex subunit C	24104757	24121953	TC1800001075.mm.1	0.0	0.987404
TC1900001762.mm.1	ENSMUST00000122491	Gm26254	predicted gene, 26254	31998624	31998741	TC0400002359.mm.1	0.0	0.987588
TC1900001763.mm.1	NM_198612	Gxylt2	glucoside xylosyltransferase 2	100704734	100805081	TC0600001154.mm.1	0.0	0.987758
TC1900001764.mm.1	ENSMUST00000117115	Gm12928	predicted gene 12928	126476727	126477299	TC0400003544.mm.1	0.0	0.987779
TC1900001767.mm.1	ENSMUST00000104407	Gm26019	predicted gene, 26019	58751478	58751596	TC1600001778.mm.1	0.0	0.988067
TC1900001768.mm.1	NM_001271373	Milr1	mast cell immunoglobulin like receptor 1	106751226	106768794	TC1100001785.mm.1	0.0	0.988097
TC1900001773.mm.1	ENSMUST00000175521	Gm23413	predicted gene, 23413	4057373	4057497	TC1600001115.mm.1	0.0	0.988103
TC1_GL456210_rand	NM_010792	Mettl1	methyltransferase like 1	127041414	127046365	TC1000001544.mm.1	0.0	0.988187
TC1_GL456210_rand	ENSMUST00000165431	Gm3138	predicted gene 3138	4249631	4258006	TC1400000020.mm.1	0.0	0.988397
TC1_GL456210_rand	ENSMUST00000157746	Gm25180	predicted gene, 25180	89563360	89563474	TC0100000862.mm.1	0.0	0.988431
TC1_GL456210_rand	ENSMUST00000103925	Mir466p	microRNA 466p	10506006	10506094	TC0200000178.mm.1	0.0	0.988496
TC1_GL456211_rand	ENSMUST00000117072	Gm9126	predicted pseudogene 9126	102818362	102820074	TC0X00001005.mm.1	0.0	0.988627
TC1_GL456211_rand	NM_001010834	Slc10a5	solute carrier family 10 (sodium/bile acid cotr	10331734	10335656	TC0300001644.mm.1	0.0	0.988703
TC1_GL456211_rand	ENSMUST00000083955	Gm22868	predicted gene, 22868	26337540	26337703	TC1100002395.mm.1	0.0	0.988843
TC1_GL456211_rand	ENSMUST00000182962	Gm8824	predicted gene 8824	50111073	50112062	TC1600000715.mm.1	0.0	0.988895
TC1_GL456211_rand	NR_003280	Rs5-8s1	5.8S ribosomal RNA (Rs5-8s1), ribosomal RNA.	0	0	TSUnmapped0000009	0.0	0.989152
TC1_GL456211_rand	NM_001164763	Rarres1	retinoic acid receptor responder (tazarotene in	67478886	67515523	TC0300002114.mm.1	0.0	0.98948
TC1_GL456211_rand	NR_002895	Snord11	small nucleolar RNA, C/D box 116	59675988	59676081	TC0700003273.mm.1	0.0	0.989554
TC1_GL456212_rand	NR_002895_4	Gm25350	predicted gene, 25350	59683586	59683679	TC0700003275.mm.1	0.0	0.989554
TC1_GL456212_rand	NR_002895_5	Gm25350	predicted gene, 25350	59695744	59695837	TC0700003277.mm.1	0.0	0.989554
TC1_GL456221_rand	NR_002895	Snord11	small nucleolar RNA, C/D box 116	59700878	59700971	TC0700003279.mm.1	0.0	0.989554
TC1_GL456221_rand	NR_002895_2	Gm25350	predicted gene, 25350	59703427	59703520	TC0700003280.mm.1	0.0	0.989554
TC1_GL456221_rand	NR_002895_3	Gm25350	predicted gene, 25350	59711009	59711102	TC0700003283.mm.1	0.0	0.989554
TC1_GL456221_rand	NR_002895_6	Gm25350	predicted gene, 25350	59716059	59716152	TC0700003285.mm.1	0.0	0.989554
TC1_GL456221_rand	NR_002895_7	Gm25350	predicted gene, 25350	59726161	59726254	TC0700003289.mm.1	0.0	0.989554
TC1_GL456221_rand	NR_002895_8	Gm25350	predicted gene, 25350	59751489	59751582	TC0700003299.mm.1	0.0	0.989554
TC1_GL456221_rand	NR_033779 // NR_	Snord11	small nucleolar RNA, C/D box 116-like 2 // pre	59876933	59877026	TC0700003329.mm.1	0.0	0.989554
TC4_GL456216_rand	ENSMUST00000179518	Snord11	small nucleolar RNA, C/D box 116	59894620	59894713	TC0700003337.mm.1	0.0	0.989554
TC4_GL456216_rand	ENSMUST00000118789	Gm6322	predicted gene 6322	139676087	139677489	TC0X00003062.mm.1	0.0	0.989649
TC4_GL456350_rand	NM_009037	Rcn1	reticulocalbin 1	105385948	105399319	TC0200004264.mm.1	0.0	0.989705
TC4_GL456350_rand	NM_009246	Serpina	serine (or cysteine) peptidase inhibitor, clade	103763587	103773633	TC1200002532.mm.1	0.0	0.98995
TC4_GL456350_rand	NM_001024702	C1ql4	complement component 1, q subcomponent-like	99084686	99087817	TC1500002203.mm.1	0.0	0.990193
TC4_GL456350_rand	NM_146682	Olfr76	olfactory receptor 76	12119653	12120700	TC1900001156.mm.1	0.0	0.990286
TC4_GL456350_rand	NR_037301	Mir3470	microRNA 3470a	3239902	3462990	TC1100002080.mm.1	0.0	0.990561
TC4_JH584293_rand	NM_019639	Ubc	ubiquitin C	125385965	125390202	TC0500003273.mm.1	0.0	0.99089
TC4_JH584293_rand	ENSMUST00000184087	AC12605	N/A	91944071	91944148	TC1600002087.mm.1	0.0	0.990962
TC4_JH584293_rand	NM_030734	Defb5	defensin beta 5	19247580	19250828	TC0800000184.mm.1	0.0	0.990996
TC4_JH584293_rand	NM_177613	Cdc34	cell division cycle 34	79682195	79688398	TC1000000810.mm.1	0.0	0.991289
TC4_JH584293_rand	ENSMUST00000179712	Gm23943	predicted gene, 23943	56999155	56999275	TC0100002366.mm.1	0.0	0.991344
TC4_JH584293_rand	NM_145959	D15Ertd	DNA segment, Chr 15, ERATO Doi 621, expressed	58415468	58457801	TC1500000417.mm.1	0.0	0.991411
TC4_JH584293_rand	ENSMUST00000104283	Gm24788	predicted gene, 24788	65001307	65001462	TC0100002473.mm.1	0.0	0.991418
TC4_JH584294_rand	ENSMUST00000175943	Gm5139	predicted gene 5139	64163390	64163638	TC0300000510.mm.1	0.0	0.991455
TC4_JH584294_rand	ENSMUST00000103852	Gm26209	predicted gene, 26209	130887669	130887778	TC0X00002967.mm.1	0.0	0.991499
TC4_JH584294_rand	NR_027900	Snhg9	small nucleolar RNA host gene (non-protein codi	24719531	24719965	TC1700001640.mm.1	0.0	0.991866
TC4_JH584294_rand	NR_002875	Gm1821	ubiquitin pseudogene	62551171	62553213	TC1100000801.mm.1	0.0	0.992052
TC4_JH584295_rand	ENSMUST00000089418	Vmn1r43	vomeronasal 1 receptor 43	89869461	89870529	TC0600002705.mm.1	0.0	0.992361
TCUn_GL4563720000	ENSMUST00000082404	mt-Td	mitochondrially encoded tRNA aspartic acid	6942	7699	TC0M00000007.mm.1	0.0	0.992496
TCUn_GL4563850000	NM_030682	Tlr1	toll-like receptor 1	64924680	64933560	TC0500002480.mm.1	0.0	0.992622
TCUn_GL4563850000	NM_177869	Fam185a	family with sequence similarity 185, member A	21424903	21482124	TC0500000172.mm.1	0.0	0.992701
TCUn_JH5843040000	NM_178619	1810026	RIKEN cDNA 1810026J23 gene	21592722	21595970	TC0900000202.mm.1	0.0	0.992799
TCX_GL456233_rand	ENSMUST00000080474	Olfr601	olfactory receptor 601	103358224	103359213	TC0700003885.mm.1	0.0	0.992855
TCX_GL456233_rand	XM_003688923	Gm3636	predicted gene 3636	6735685	6742332	TC1400002846.mm.1	0.0	0.992877
TCX_GL456233_rand	ENSMUST00000082671	Gm22220	predicted gene, 22220	54239238	54239386	TC1200000445.mm.1	0.0	0.992998
TCX_GL456233_rand	ENSMUST00000120911	Gm12416	predicted gene 12416	84104895	84105902	TC0400000844.mm.1	0.0	0.993279
TSUnmapped0000000	ENSMUST00000079345	Gm12715	predicted gene 12715	103563336	103565228	TC0400001075.mm.1	0.0	0.993319
TSUnmapped0000000	XM_001476508	Gm20890	predicted gene, 20890	26750801	26776814	TC0Y00000292.mm.1	0.0	0.993523
TSUnmapped0000000	XM_003689034	Gm21488	predicted gene, 21488	27495922	27521935	TC0Y00000293.mm.1	0.0	0.993523
TSUnmapped0000000	NM_146827	Olfr983	olfactory receptor 983	40092017	40093558	TC0900002091.mm.1	0.0	0.99369
TSUnmapped0000001	NM_178669	Clrn3	clarin 3	135511456	135528654	TC0700004449.mm.1	0.0	0.993995
TSUnmapped0000001	ENSMUST00000082411	ND3	NADH dehydrogenase subunit 3	9459	9806	TC0M00000011.mm.1	0.0	0.9942
TSUnmapped0000001	NR_035527	Mir599	microRNA 599	35660831	35660918	TC1500001363.mm.1	0.0	0.994239
TSUnmapped0000001	NCBI_Gene:432701:p	Ighv6-7	Ighv6-7 immunoglobulin heavy variable V6-7	114455626	114456083	TC1200002597.mm.1	0.0	0.994307
TSUnmapped0000002	ENSMUST00000120197	Gm12502	predicted gene 12502	108019885	108020328	TC0300001127.mm.1	0.0	0.994478
TSUnmapped0000002	NR_035406	Mir467a	microRNA 467a-1	10476346	10476418	TC0200000109.mm.1	0.0	0.994705
TSUnmapped0000002	NR_037249	Mir467a	microRNA 467a-2	10478798	10478880	TC0200000115.mm.1	0.0	0.994705
TSUnmapped0000002	NR_037249_5	Mir467a	microRNA 467a-4	10486135	10486217	TC0200000131.mm.1	0.0	0.994705
TSUnmapped0000002	NR_037249_4	Mir467a	microRNA 467a-4	10488599	10488681	TC0200000137.mm.1	0.0	0.994705
TSUnmapped0000002	NR_037249_3	Mir467a	microRNA 467a-4	10493510	10493592	TC0200000149.mm.1	0.0	0.994705
TSUnmapped0000002	NR_037249_2	Mir467a	microRNA 467a-4	10495980	10496062	TC0200000155.mm.1	0.0	0.994705

TSUnmapped0000002	NR_037249	Mir467a	microRNA 467a-2	10498393	10498475	TC0200000161.mm.1	0.0	0.994705
TSUnmapped0000003	NR_037249_7	Mir467a	microRNA 467a-4	10500822	10500904	TC0200000167.mm.1	0.0	0.994705
TSUnmapped0000003	NM_008209	Mr1	major histocompatibility complex, class I-relat	155127878	155146783	TC0100003301.mm.1	0.0	0.994708
TSUnmapped0000003	NM_007753	Cpa3	carboxypeptidase A3, mast cell	20215616	20242181	TC0300001704.mm.1	0.0	0.994828
TSUnmapped0000003	ENSMUST00000116963	Gm22151	predicted gene, 22151	92913132	92913189	TC0800002697.mm.1	0.0	0.995243
TSUnmapped0000003	NM_001199960_4	Ccl27a	chemokine (C-C motif) ligand 27A	1718	3814	TC4_JH584294_rand	0.0	0.99549
TSUnmapped0000003	ENSMUST00000177717	Gm21845	predicted gene, 21845	24381817	24382500	TC0Y00000069.mm.1	0.0	0.995825
TSUnmapped0000003	ENSMUST00000179773	Gm21791	predicted gene, 21791	25408061	25408744	TC0Y00000073.mm.1	0.0	0.995825
TSUnmapped0000004	ENSMUST00000178189	Gm21890	predicted gene, 21890	25921142	25921825	TC0Y00000075.mm.1	0.0	0.995825
TSUnmapped0000004	ENSMUST00000178570	Gm21755	predicted gene, 21755	26434218	26434901	TC0Y00000077.mm.1	0.0	0.995825
TSUnmapped0000004	NM_027115	Mapk1ip	mitogen-activated protein kinase 1 interacting	138835818	138846273	TC0700004473.mm.1	0.0	0.995892
TSUnmapped0000004	ENSMUST00000183250	Gm8756	predicted gene 8756	97458149	97459077	TC1300002486.mm.1	0.0	0.996014
TSUnmapped0000004	NM_001166376	Ms4a6c	membrane-spanning 4-domains, subfamily A, me	11469368	11482197	TC1900000221.mm.1	0.0	0.996035
TSUnmapped0000005	NM_177111	Ccdc66	coiled-coil domain containing 66	27482401	27508460	TC1400001634.mm.1	0.0	0.996105
TSUnmapped0000005	NM_007406	Adcy7	adenylate cyclase 7	88272403	88329962	TC0800001031.mm.1	0.0	0.996304
TSUnmapped0000006	ENSMUST00000181421	Gm11394	predicted gene 11394	33729033	33729849	TC1300001774.mm.1	0.0	0.996402
TSUnmapped0000007	NM_011654	Tuba1b	tubulin, alpha 1B	98931425	98934565	TC1500002199.mm.1	0.0	0.996554
TSUnmapped0000008	ENSMUST00000093665	Gm24162	predicted gene, 24162	20444811	20444912	TC0100002031.mm.1	0.0	0.996574
TSUnmapped0000008	ENSMUST00000157366	Gm25057	predicted gene, 25057	99174850	99174937	TC1500002205.mm.1	0.0	0.996598
TSUnmapped0000008	ENSMUST00000182928	Gm4960	predicted gene 4960	7399362	7400362	TC0500001924.mm.1	0.0	0.99662
TSUnmapped0000009	NM_001243138	Gm13247	predicted gene 13247	146502000	146539395	TC0400004202.mm.1	0.0	0.996663
TSUnmapped0000009	NM_008766	Slc22a6	solute carrier family 22 (organic anion transpo	8617996	8628299	TC1900000149.mm.1	0.0	0.9967
TSUnmapped0000009	NM_009245	Serpina	serine (or cysteine) peptidase inhibitor, clade	103894926	103904950	TC1200002534.mm.1	0.0	0.996783
TSUnmapped0000009	ENSMUST00000119785	Rab9b-p	RAB9B, member RAS oncogene family, pseudoge	105482098	105482703	TC0X00001058.mm.1	0.0	0.996796
TSUnmapped0000010	NM_011871	Prkra	protein kinase, interferon inducible double str	76629898	76648015	TC0200003805.mm.1	0.0	0.996808
TSUnmapped0000010	NM_178759	Timd4	T cell immunoglobulin and mucin domain contai	46810799	46844333	TC1100000484.mm.1	0.0	0.996853
TSUnmapped0000010	ENSMUST00000169182	Gm3756	predicted gene 3756	31936459	31936755	TC0900001985.mm.1	0.0	0.996888
TSUnmapped0000011	XM_003688922	LOC1008	uncharacterized LOC100861657	6313938	6352021	TC1400001409.mm.1	0.0	0.997302
TSUnmapped0000011	ENSMUST00000122578	Gm24185	predicted gene, 24185	90198682	90198786	TC0300000782.mm.1	0.0	0.997453
TSUnmapped0000011	ENSMUST00000119418	Gm13464	predicted gene 13464	43518464	43519398	TC0200003467.mm.1	0.0	0.997484
TSUnmapped0000011	ENSMUST00000120465	Gm11224	predicted gene 11224	69954166	69955276	TC0400002846.mm.1	0.0	0.997552
TSUnmapped0000011	NM_010766	Marco	macrophage receptor with collagenous structure	120474538	120505084	TC0100002967.mm.1	0.0	0.997788
TSUnmapped0000012	ENSMUST00000169661	Gm7346	predicted gene 7346	3093369	3095187	TC0800000001.mm.1	0.0	0.99798
TSUnmapped0000012	NR_039546	Mir101c	microRNA 101c	3038669	3038743	TC0900001681.mm.1	0.0	0.998032
TSUnmapped0000012	ENSMUST00000101925	n-R5s1	nuclear encoded rRNA 5S 1	991630	991748	TC0Y00000230.mm.1	0.0	0.99839
TSUnmapped0000012	NM_027436	Mipep	mitochondrial intermediate peptidase	60784566	60905481	TC1400000854.mm.1	0.0	0.998396
TSUnmapped0000013	ENSMUST00000157579	Gm23391	predicted gene, 23391	104994916	104995019	TC0900001317.mm.1	0.0	0.998403
TSUnmapped0000013	ENSMUST00000119978	Gm12671	predicted gene 12671	91851466	91852669	TC0400003048.mm.1	0.0	0.998525
TSUnmapped0000013	BC094021	Haao	3-hydroxyanthranilate 3,4-dioxygenase	83831354	83846790	TC1700002637.mm.1	0.0	0.998534
TSUnmapped0000013	ENSMUST00000158270	Gm22519	predicted gene, 22519	71794188	71794365	TC1500000509.mm.1	0.0	0.998557
TSUnmapped0000013	ENSMUST00000082911	Gm26203	predicted gene, 26203	191772721	191772834	TC0100003817.mm.1	0.0	0.998703
TSUnmapped0000013	ENSMUST00000107041	Gm3200	predicted pseudogene 3200	51746697	51747883	TC0700000916.mm.1	0.0	0.99873
TSUnmapped0000013	ENSMUST00000091621	Gm7251	predicted pseudogene 7251	49804944	49805952	TC1300001965.mm.1	0.0	0.998762
TSUnmapped0000014	ENSMUST00000118343	Gm6923	predicted pseudogene 6923	18920804	18921209	TC0X00000194.mm.1	0.0	0.998768
TSUnmapped0000014	XM_001475365	Gm20859	predicted gene, 20859	77148739	77149422	TC0Y00000479.mm.1	0.0	0.998915
TSUnmapped0000014	ENSMUST00000076317	Gm10293	predicted pseudogene 10293	52612835	52613836	TC0300000382.mm.1	0.0	0.99894
TSUnmapped0000014	ENSMUST00000157427	Gm26152	predicted gene, 26152	102856291	102856391	TC0X00002759.mm.1	0.0	0.99898
TSUnmapped0000014	ENSMUST00000108740	Gm10358	predicted gene 10358	75405334	75406519	TC0800002486.mm.1	0.0	0.999153
TSUnmapped0000014	ENSMUST00000104400	Gm24372	predicted gene, 24372	21302198	21302307	TC1800000166.mm.1	0.0	0.999279
TSUnmapped0000014	ENSMUST00000157655	Gm23584	predicted gene, 23584	48437822	48437950	TC1000000440.mm.1	0.0	0.9993
TSUnmapped0000014	NR_039575	Mir5115	microRNA 5115	73012854	73012927	TC0200003749.mm.1	0.0	0.999562
TSUnmapped0000014	ENSMUST00000071282	Gm3222	predicted pseudogene 3222	14709066	14710055	TC1700000170.mm.1	0.0	0.999573
TSUnmapped0000014	ENSMUST00000145057	Gm10284	predicted pseudogene 10284	57550299	57551303	TC0800000631.mm.1	0.0	0.999576
TSUnmapped0000015	ENSMUST00000180167	Gm10359	predicted gene 10359	105862701	105863702	TC0500002906.mm.1	0.0	0.999576
TSUnmapped0000015	ENSMUST00000165533	Gm13292	predicted gene 13292	11409030	11410031	TC0200002959.mm.1	0.0	0.999576
TSUnmapped0000015	ENSMUST00000119266	Gm12537	predicted gene 12537	57370953	57371954	TC0400002722.mm.1	0.0	0.999576
TSUnmapped0000015	ENSMUST00000099636	Actg-ps	actin, gamma, pseudogene 1	46229566	46229973	TC0800000533.mm.1	0.0	0.999576
TSUnmapped0000015	ENSMUST00000106443	Gm4609	predicted gene 4609	122230195	122231196	TC0300002856.mm.1	0.0	0.999576
TSUnmapped0000015	ENSMUST00000088336	Gm10222	predicted gene 10222	24612404	24612700	TC0100002075.mm.1	0.0	0.999576
TSUnmapped0000015	uc007ams.1	Atpase6	ATPase subunit 6 (Atpase6) mRNA, mitochondria	24613971	24614812	TC0100002076.mm.1	0.0	0.999576
TSUnmapped0000015	ENSMUST00000157621	Gm25911	predicted gene, 25911	167340369	167340424	TC0100003482.mm.1	0.0	0.999576
TSUnmapped0000015	uc029uih.1	Mir1935	microRNA 1935 (Mir1935), microRNA.	168690086	168711800	TC0200002613.mm.1	0.0	0.999576
TSUnmapped0000015	ENSMUST00000157318	Gm24245	predicted gene, 24245	139338304	139338360	TC0400001746.mm.1	0.0	0.999576
TSUnmapped0000016	NM_007393	Actb	actin, beta	142903115	142906754	TC0500003538.mm.1	0.0	0.999576
TSUnmapped0000016	NR_003278	Rn18s	18S ribosomal RNA	3180891	3201670	TC0600000001.mm.1	0.0	0.999576
TSUnmapped0000016	ENSMUST00000158588	Gm23388	predicted gene, 23388	85112012	85112068	TC0800002605.mm.1	0.0	0.999576
TSUnmapped0000016	ENSMUST00000102326	Gm24270	predicted gene, 24270	56223715	56223771	TC0900002348.mm.1	0.0	0.999576
TSUnmapped0000016	ENSMUST00000082407	ATP8	ATP synthase F0 subunit 8	7766	9390	TC0M00000009.mm.1	0.0	0.999576
TSUnmapped0000016	ENSMUST00000084013	ND4L	NADH dehydrogenase subunit 4L	9876	11544	TC0M00000013.mm.1	0.0	0.999576
TSUnmapped0000016	NR_035456	Mir1935	microRNA 1935	85522721	85522780	TC1100001295.mm.1	0.0	0.999576
TSUnmapped0000016	ENSMUST00000157984	Gm24187	predicted gene, 24187	9834469	9834525	TC1300001428.mm.1	0.0	0.999576
TSUnmapped0000016	ENSMUST00000175408	Gm23374	predicted gene, 23374	64918222	64918305	TC1600001843.mm.1	0.0	0.999576
TSUnmapped0000016	NR_003278	Rn18s	18S ribosomal RNA	0	0	TSUnmapped0000009	0.0	0.999576
TSUnmapped0000017	NR_003279	Rn28s1	28S ribosomal RNA	0	0	TSUnmapped0000009	0.0	0.999576
TSUnmapped0000017	NR_052008	Rn7s2	7S RNA 2	0	0	TSUnmapped0000013	0.0	0.999576
TSUnmapped0000017	NR_052007	Rn7s1	7S RNA 1	0	0	TSUnmapped0000013	0.0	0.999576
TSUnmapped0000017	NR_030687	Rn7sk	RNA, 7SK, nuclear	0	0	TSUnmapped0000017	0.0	0.999576
TSUnmapped0000017	ENSMUST00000178566	Gm14760	predicted gene 14760	80193663	80194852	TC0X00002532.mm.1	0.0	0.999577

TSUnmapped0000017	ENSMUST00000179006	Gm5559	predicted gene 5559	95861708	95862894	TC0500000920.mm.1	0.0	0.999578
TSUnmapped0000017	ENSMUST00000182630	Gm2546	predicted gene 2546	89607706	89608696	TC0700001268.mm.1	0.0	0.999579
TSUnmapped0000017	ENSMUST00000182372	Gm27023	predicted gene, 27023	61781683	61781967	TC1700001047.mm.1	0.0	0.999616
TSUnmapped0000017	ENSMUST00000160032	Gm16199	predicted gene 16199	120005998	120006285	TC0600001341.mm.1	0.0	0.999626
TSUnmapped0000017	NM_025557	Pcp4l1	Purkinje cell protein 4-like 1	171173262	171197035	TC0100003531.mm.1	0.0	0.999665
TSUnmapped0000018	NM_170755	Fam134a	family with sequence similarity 134, member A	75142786	75147909	TC0100000652.mm.1	0.0	0.999772
TSUnmapped0000018	NM_027231	Polr2f	polymerase (RNA) II (DNA directed) polypeptide	79141351	79151774	TC1500000667.mm.1	0.0	0.999774
TSUnmapped0000018	NM_178738	Prss35	protease, serine, 35	86743633	86758443	TC0900001119.mm.1	0.0	0.999783
TSUnmapped0000018	ENSMUST00000183305	Gm4654	predicted gene 4654	103370465	103371446	TC1400002637.mm.1	0.0	0.999804
TSUnmapped0000018	ENSMUST00000105222	Gm10327	predicted pseudogene 10327	33808497	33809498	TC1000001987.mm.1	0.0	0.999856
TSUnmapped0000018	ENSMUST00000179228	Gm10481	predicted gene 10481	13042247	13043434	TC0500001962.mm.1	0.0	0.9999
TSUnmapped0000018	NM_009046	Relb	avian reticuloendotheliosis viral (v-rel) oncog	19606217	19629438	TC0700002491.mm.1	0.0	1