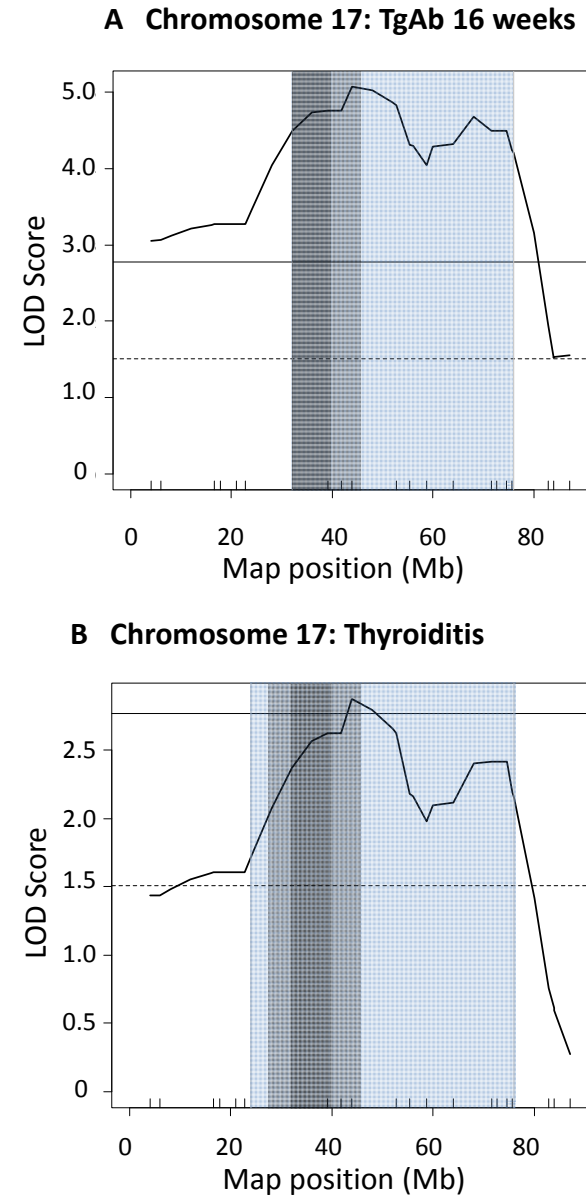


Supplementary Fig. S2. High resolution maps for loci on chromosomes 17 significantly linked to TgAb (panel A) and thyroiditis (panel B) in N2 mice to show the origin of the gene segments within the Bayes confidence interval:- dark grey, the MHC Locus (31.7-39.3 Mb) from the B10.A(4R) strain; light grey, non-MHC genes from the B10.A(4R) strain; pale blue, genes from the NOD strain.



Supplementary Table S1: Chromosome 17: 32,081,714-75,936,246 Mb.

Immune related biological process (BP) Gene Ontology (GO) terms in red. All protein coding genes

Ensembl Gene ID	Description	Gene Start (bp)	Gene End (bp)	Assc Name
ENSMUSG0000002076	heat shock transcription factor 2 binding protein [Source:MGI Symbol;Acc:MGI:19216]	3.2E+07	3E+07	Hsf2bp
ENSMUSG00000058392	ribosomal RNA processing 1 homolog B (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1919]	3.2E+07	3E+07	Rrp1b
ENSMUSG00000038146	Notch gene homolog 3 (Drosophila) [Source:MGI Symbol;Acc:MGI:99460]	3.2E+07	3E+07	Notch3
ENSMUSG00000037577	epoxide hydrolase 3 [Source:MGI Symbol;Acc:MGI:1919182]	3.2E+07	3E+07	Ephx3
ENSMUSG00000024002	bromodomain containing 4 [Source:MGI Symbol;Acc:MGI:1888520]	3.2E+07	3E+07	Brd4
ENSMUSG00000024045	A kinase (PRKA) anchor protein 8 [Source:MGI Symbol;Acc:MGI:1928488]	3.2E+07	3E+07	Akap8
ENSMUSG00000002625	A kinase (PRKA) anchor protein 8-like [Source:MGI Symbol;Acc:MGI:1860606]	3.2E+07	3E+07	Akap8l
ENSMUSG00000024050	widely-interspaced zinc finger motifs [Source:MGI Symbol;Acc:MGI:1332638]	3.2E+07	3E+07	Wiz
ENSMUSG00000052142	RAS protein activator like 3 [Source:MGI Symbol;Acc:MGI:2444128]	3.3E+07	3E+07	Rasal3
ENSMUSG00000053467	RIKEN cDNA A530088E08 gene [Source:MGI Symbol;Acc:MGI:3603459]	3.3E+07	3E+07	A530088E08Rik
ENSMUSG00000079563	peptidoglycan recognition protein 2 [Source:MGI Symbol;Acc:MGI:1928099]	3.3E+07	3E+07	Pglyrp2
ENSMUSG00000061126	cytochrome P450, family 4, subfamily f, polypeptide 39 [Source:MGI Symbol;Acc:MGI:2445]	3.3E+07	3E+07	Cyp4f39
ENSMUSG00000091586	cytochrome P450, family 4, subfamily f, polypeptide 17 [Source:MGI Symbol;Acc:MGI:3646]	3.3E+07	3E+07	Cyp4f17
ENSMUSG00000048440	cytochrome P450, family 4, subfamily f, polypeptide 16 [Source:MGI Symbol;Acc:MGI:1917]	3.3E+07	3E+07	Cyp4f16
ENSMUSG00000062464	predicted gene 9705 [Source:MGI Symbol;Acc:MGI:3780112]	3.3E+07	3E+07	Gm9705
ENSMUSG00000090700	cytochrome P450, family 4, subfamily f, polypeptide 40 [Source:MGI Symbol;Acc:MGI:3645]	3.3E+07	3E+07	Cyp4f40
ENSMUSG00000073424	cytochrome P450, family 4, subfamily f, polypeptide 15 [Source:MGI Symbol;Acc:MGI:2146]	3.3E+07	3E+07	Cyp4f15
ENSMUSG00000024298	zinc finger protein 871 [Source:MGI Symbol;Acc:MGI:1921793]	3.3E+07	3E+07	Zfp871
ENSMUSG00000055202	zinc finger protein 811 [Source:MGI Symbol;Acc:MGI:2682944]	3.3E+07	3E+07	Zfp811
ENSMUSG00000059000	zinc finger protein 799 [Source:MGI Symbol;Acc:MGI:2443934]	3.3E+07	3E+07	Zfp799
ENSMUSG00000057254	zinc finger protein 870 [Source:MGI Symbol;Acc:MGI:3029586]	3.3E+07	3E+07	Zfp870
ENSMUSG00000024292	cytochrome P450, family 4, subfamily f, polypeptide 14 [Source:MGI Symbol;Acc:MGI:1927]	3.3E+07	3E+07	Cyp4f14
ENSMUSG00000024055	cytochrome P450, family 4, subfamily f, polypeptide 13 [Source:MGI Symbol;Acc:MGI:2158]	3.3E+07	3E+07	Cyp4f13
ENSMUSG00000053600	zinc finger protein 472 [Source:MGI Symbol;Acc:MGI:2385049]	3.3E+07	3E+07	Zfp472
ENSMUSG00000053390	zinc finger protein 952 [Source:MGI Symbol;Acc:MGI:2441928]	3.3E+07	3E+07	Zfp952
ENSMUSG00000067430	zinc finger protein 763 [Source:MGI Symbol;Acc:MGI:1920701]	3.3E+07	3E+07	Zfp763
ENSMUSG00000023350	RIKEN cDNA 4921501E09 gene [Source:MGI Symbol;Acc:MGI:1921292]	3.3E+07	3E+07	4921501E09Rik
ENSMUSG00000067424	zinc finger protein 563 [Source:MGI Symbol;Acc:MGI:2677168]	3.3E+07	3E+07	Zfp563
ENSMUSG00000048602	microrchidia 2B [Source:MGI Symbol;Acc:MGI:3045293]	3.3E+07	3E+07	Morc2b
ENSMUSG00000079309	olfactory receptor 55 [Source:MGI Symbol;Acc:MGI:1333751]	3.3E+07	3E+07	Olf55
ENSMUSG00000079308	olfactory receptor 239 [Source:MGI Symbol;Acc:MGI:3030073]	3.3E+07	3E+07	Olf239
ENSMUSG00000079307	predicted gene 4461 [Source:MGI Symbol;Acc:MGI:3782645]	3.3E+07	3E+07	Gm4461
ENSMUSG00000008686	zinc finger protein 955A [Source:MGI Symbol;Acc:MGI:4834570]	3.3E+07	3E+07	Zfp955a
ENSMUSG00000054666	olfactory receptor 63 [Source:MGI Symbol;Acc:MGI:1335096]	3.3E+07	3E+07	Olf63
ENSMUSG00000061532	zinc finger protein 955B [Source:MGI Symbol;Acc:MGI:4834573]	3.3E+07	3E+07	Zfp955b

ENSMUSG00000091515	zinc finger protein 422, related sequence 1 [Source:MGI Symbol;Acc:MGI:3028594]	3.3E+07	3E+07	Zfp422-rs1
ENSMUSG00000003929	zinc finger protein 81 [Source:MGI Symbol;Acc:MGI:1890752]	3.3E+07	3E+07	Zfp81
ENSMUSG000000055240	zinc finger protein 101 [Source:MGI Symbol;Acc:MGI:107547]	3.3E+07	3E+07	Zfp101
ENSMUSG000000092519	actin-like 9 [Source:MGI Symbol;Acc:MGI:1916731]	3.4E+07	3E+07	Actl9
ENSMUSG000000024299	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 1	3.4E+07	3E+07	Adamts10
ENSMUSG00000024300	myosin IF [Source:MGI Symbol;Acc:MGI:107711]	3.4E+07	3E+07	Myo1f
ENSMUSG000000073423	zinc finger protein 414 [Source:MGI Symbol;Acc:MGI:1915641]	3.4E+07	3E+07	Zfp414
ENSMUSG00000032739	PML-RAR alpha-regulated adaptor molecule 1 [Source:MGI Symbol;Acc:MGI:3576625]	3.4E+07	3E+07	Pram1
ENSMUSG000000059208	heterogeneous nuclear ribonucleoprotein M [Source:MGI Symbol;Acc:MGI:1926465]	3.4E+07	3E+07	Hnrnpm
ENSMUSG000000079557	membrane-associated ring finger (C3HC4) 2 [Source:MGI Symbol;Acc:MGI:1925915]	3.4E+07	3E+07	March2
ENSMUSG000000077450	RAB11B, member RAS oncogene family [Source:MGI Symbol;Acc:MGI:99425]	3.4E+07	3E+07	Rab11b
ENSMUSG000000002289	angiopoietin-like 4 [Source:MGI Symbol;Acc:MGI:1888999]	3.4E+07	3E+07	Angptl4
ENSMUSG000000042099	KN motif and ankyrin repeat domains 3 [Source:MGI Symbol;Acc:MGI:1098615]	3.4E+07	3E+07	Kank3
ENSMUSG000000067288	ribosomal protein S28 [Source:MGI Symbol;Acc:MGI:1859516]	3.4E+07	3E+07	Rps28
ENSMUSG000000041881	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 7 (B14.5a) [Source:MGI Symbol;A	3.4E+07	3E+07	Ndufa7
ENSMUSG000000002308	CD320 antigen [Source:MGI Symbol;Acc:MGI:1860083]	3.4E+07	3E+07	Cd320
ENSMUSG000000079553	kinesin family member C1 [Source:MGI Symbol;Acc:MGI:109596]	3.4E+07	3E+07	Kifc1
ENSMUSG000000002307	Fas death domain-associated protein [Source:MGI Symbol;Acc:MGI:1197015]	3.4E+07	3E+07	Daxx
ENSMUSG00000024308	TAP binding protein [Source:MGI Symbol;Acc:MGI:1201689]	3.4E+07	3E+07	Tapbp
ENSMUSG000000051390	zinc finger and BTB domain containing 22 [Source:MGI Symbol;Acc:MGI:1931870]	3.4E+07	3E+07	Zbtb22
ENSMUSG000000041354	ral guanine nucleotide dissociation stimulator-like 2 [Source:MGI Symbol;Acc:MGI:107483]	3.4E+07	3E+07	Rgl2
ENSMUSG00000024309	H2-K region expressed gene 2 [Source:MGI Symbol;Acc:MGI:95908]	3.4E+07	3E+07	H2-Ke2
ENSMUSG000000024312	WD repeat domain 46 [Source:MGI Symbol;Acc:MGI:1931871]	3.4E+07	3E+07	Wdr46
ENSMUSG000000067370	UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 4 [Source:MGI Symbol;A	3.4E+07	3E+07	B3galt4
ENSMUSG000000008668	ribosomal protein S18 [Source:MGI Symbol;Acc:MGI:98146]	3.4E+07	3E+07	Rps18
ENSMUSG000000024319	vacuolar protein sorting 52 (yeast) [Source:MGI Symbol;Acc:MGI:1330304]	3.4E+07	3E+07	Vps52
ENSMUSG000000061232	histocompatibility 2, K1, K region [Source:MGI Symbol;Acc:MGI:95904]	3.4E+07	3E+07	H2-K1
ENSMUSG000000024325	ring finger protein 1 [Source:MGI Symbol;Acc:MGI:1101770]	3.4E+07	3E+07	Ring1
ENSMUSG000000073422	H2-K region expressed gene 6 [Source:MGI Symbol;Acc:MGI:95911]	3.4E+07	3E+07	H2-Ke6
ENSMUSG000000024327	solute carrier family 39 (zinc transporter), member 7 [Source:MGI Symbol;Acc:MGI:95909]	3.4E+07	3E+07	Slc39a7
ENSMUSG000000039656	retinoid X receptor beta [Source:MGI Symbol;Acc:MGI:98215]	3.4E+07	3E+07	Rxrb
ENSMUSG000000024330	collagen, type XI, alpha 2 [Source:MGI Symbol;Acc:MGI:88447]	3.4E+07	3E+07	Col11a2
ENSMUSG00000024334	histocompatibility 2, O region alpha locus [Source:MGI Symbol;Acc:MGI:95924]	3.4E+07	3E+07	H2-Oa
ENSMUSG000000024335	bromodomain containing 2 [Source:MGI Symbol;Acc:MGI:99495]	3.4E+07	3E+07	Brd2
ENSMUSG00000037649	histocompatibility 2, class II, locus DMa [Source:MGI Symbol;Acc:MGI:95921]	3.4E+07	3E+07	H2-DMa
ENSMUSG00000037548	histocompatibility 2, class II, locus Mb2 [Source:MGI Symbol;Acc:MGI:95923]	3.4E+07	3E+07	H2-DMb2
ENSMUSG000000079547	histocompatibility 2, class II, locus Mb1 [Source:MGI Symbol;Acc:MGI:95922]	3.4E+07	3E+07	H2-DMb1
ENSMUSG00000024337	proteasome (prosome, macropain) subunit, beta type 9 (large multifunctional peptida	3.4E+07	3E+07	Psmb9
ENSMUSG000000037321	transporter 1, ATP-binding cassette, sub-family B (MDR/TAP) [Source:MGI Symbol;A	3.4E+07	3E+07	Tap1
ENSMUSG00000024338	proteasome (prosome, macropain) subunit, beta type 8 (large multifunctional peptida	3.4E+07	3E+07	Psmb8

ENSMUSG00000092550	predicted gene 20496 [Source:MGI Symbol;Acc:MGI:5141961]	3.4E+07	3E+07	Gm20496
ENSMUSG00000024339	transporter 2, ATP-binding cassette, sub-family B (MDR/TAP) [Source:MGI Symbol;Acc:MGI:5141961]	3.4E+07	3E+07	Tap2
ENSMUSG00000081512	predicted gene 15821 [Source:MGI Symbol;Acc:MGI:3801940]	3.4E+07	3E+07	Gm15821
ENSMUSG00000041538	histocompatibility 2, O region beta locus [Source:MGI Symbol;Acc:MGI:95925]	3.4E+07	3E+07	H2-Ob
ENSMUSG00000073421	histocompatibility 2, class II antigen A, beta 1 [Source:MGI Symbol;Acc:MGI:103070]	3.4E+07	3E+07	H2-Ab1
ENSMUSG00000036594	histocompatibility 2, class II antigen A, alpha [Source:MGI Symbol;Acc:MGI:95895]	3.4E+07	3E+07	H2-Aa
ENSMUSG00000060586	histocompatibility 2, class II antigen E beta [Source:MGI Symbol;Acc:MGI:95901]	3.4E+07	3E+07	H2-Eb1
ENSMUSG00000067341	histocompatibility 2, class II antigen E beta2 [Source:MGI Symbol;Acc:MGI:95902]	3.4E+07	3E+07	H2-Eb2
ENSMUSG00000079538	predicted gene 11140 [Source:MGI Symbol;Acc:MGI:3779395]	3.4E+07	3E+07	Gm11140
ENSMUSG00000024340	butyrophilin-like 2 [Source:MGI Symbol;Acc:MGI:1859549]	3.4E+07	3E+07	Btnl2
ENSMUSG00000062638	butyrophilin-like 1 [Source:MGI Symbol;Acc:MGI:1932027]	3.5E+07	3E+07	Btnl1
ENSMUSG00000057246	cDNA sequence BC051142 [Source:MGI Symbol;Acc:MGI:3039565]	3.5E+07	3E+07	BC051142
ENSMUSG00000058435	butyrophilin-like 4 [Source:MGI Symbol;Acc:MGI:1932036]	3.5E+07	3E+07	Btnl4
ENSMUSG00000058762	butyrophilin-like 6 [Source:MGI Symbol;Acc:MGI:1932038]	3.5E+07	3E+07	Btnl6
ENSMUSG00000061728	butyrophilin-like 7 [Source:MGI Symbol;Acc:MGI:2388054]	3.5E+07	3E+07	Btnl7
ENSMUSG00000015468	Notch gene homolog 4 (Drosophila) [Source:MGI Symbol;Acc:MGI:107471]	3.5E+07	3E+07	Notch4
ENSMUSG00000034786	G-protein signalling modulator 3 (AGS3-like, C. elegans) [Source:MGI Symbol;Acc:MGI:107471]	3.5E+07	3E+07	Gpsm3
ENSMUSG00000034673	pre B cell leukemia homeobox 2 [Source:MGI Symbol;Acc:MGI:1341793]	3.5E+07	3E+07	Pbx2
ENSMUSG00000015452	advanced glycosylation end product-specific receptor [Source:MGI Symbol;Acc:MGI:1341793]	3.5E+07	3E+07	Ager
ENSMUSG00000015478	ring finger protein 5 [Source:MGI Symbol;Acc:MGI:1860076]	3.5E+07	3E+07	Rnf5
ENSMUSG00000034254	1-acylglycerol-3-phosphate O-acyltransferase 1 (lysophosphatidic acid acyltransferase, alpha) [Source:MGI Symbol;Acc:MGI:1860076]	3.5E+07	3E+07	Agpat1
ENSMUSG00000015467	EGF-like domain 8 [Source:MGI Symbol;Acc:MGI:1932094]	3.5E+07	3E+07	Egfl8
ENSMUSG00000015474	palmitoyl-protein thioesterase 2 [Source:MGI Symbol;Acc:MGI:1860075]	3.5E+07	3E+07	Ppt2
ENSMUSG00000015476	proline-rich transmembrane protein 1 [Source:MGI Symbol;Acc:MGI:1932118]	3.5E+07	3E+07	Prrt1
ENSMUSG00000033739	FK506 binding protein-like [Source:MGI Symbol;Acc:MGI:1932127]	3.5E+07	3E+07	Fkbp1
ENSMUSG00000015461	activating transcription factor 6 beta [Source:MGI Symbol;Acc:MGI:105121]	3.5E+07	3E+07	Atf6b
ENSMUSG00000033327	tenascin XB [Source:MGI Symbol;Acc:MGI:1932137]	3.5E+07	3E+07	Tnxb
ENSMUSG00000073418	complement component 4B (Chido blood group) [Source:MGI Symbol;Acc:MGI:88226]	3.5E+07	3E+07	C4b
ENSMUSG00000024365	cytochrome P450, family 21, subfamily a, polypeptide 1 [Source:MGI Symbol;Acc:MGI:88226]	3.5E+07	3E+07	Cyp21a1
ENSMUSG00000061207	serine/threonine kinase 19 [Source:MGI Symbol;Acc:MGI:1860085]	3.5E+07	3E+07	Stk19
ENSMUSG00000040482	DOM-3 homolog Z (C. elegans) [Source:MGI Symbol;Acc:MGI:1890444]	3.5E+07	3E+07	Dom3z
ENSMUSG00000040356	superkiller viralicidic activity 2-like (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1099835]	3.5E+07	3E+07	Skiv2l
ENSMUSG00000024369	RD RNA-binding protein [Source:MGI Symbol;Acc:MGI:102744]	3.5E+07	3E+07	Rdbp
ENSMUSG00000090231	complement factor B [Source:MGI Symbol;Acc:MGI:105975]	3.5E+07	3E+07	Cfb
ENSMUSG00000024371	complement component 2 (within H-2S) [Source:MGI Symbol;Acc:MGI:88226]	3.5E+07	4E+07	C2
ENSMUSG00000092511	predicted gene 20547 [Source:MGI Symbol;Acc:MGI:5142012]	3.5E+07	4E+07	Gm20547
ENSMUSG00000093620	complement factor B isoform 2 precursor [Source:RefSeq peptide;Acc:NP_001136178]	3.5E+07	3E+07	CT025759.1
ENSMUSG00000049823	zinc finger and BTB domain containing 12 [Source:MGI Symbol;Acc:MGI:88133]	3.5E+07	4E+07	Zbtb12
ENSMUSG00000013787	euchromatic histone lysine N-methyltransferase 2 [Source:MGI Symbol;Acc:MGI:2148922]	3.5E+07	4E+07	Ehmt2
ENSMUSG00000007034	solute carrier family 44, member 4 [Source:MGI Symbol;Acc:MGI:1917379]	3.5E+07	4E+07	Slc44a4

ENSMUSG00000007038	neuraminidase 1 [Source:MGI Symbol;Acc:MGI:97305]	3.5E+07	4E+07	Neu1
ENSMUSG00000090877	heat shock protein 1B [Source:MGI Symbol;Acc:MGI:99517]	3.5E+07	4E+07	Hspa1b
ENSMUSG00000091971	heat shock protein 1A [Source:MGI Symbol;Acc:MGI:96244]	3.5E+07	4E+07	Hspa1a
ENSMUSG00000092609	predicted gene 20481 [Source:MGI Symbol;Acc:MGI:5141946]	3.5E+07	4E+07	Gm20481
ENSMUSG00000007033	heat shock protein 1-like [Source:MGI Symbol;Acc:MGI:96231]	3.5E+07	4E+07	Hspa1l
ENSMUSG00000007050	LSM2 homolog, U6 small nuclear RNA associated (S. cerevisiae) [Source:MGI Symbol;Acc:	3.5E+07	4E+07	Lsm2
ENSMUSG00000091747	DNA segment, Chr 17, human D6S56E 5 [Source:MGI Symbol;Acc:MGI:1306799]	3.5E+07	4E+07	D17H6S56E-5
ENSMUSG00000007029	valyl-tRNA synthetase [Source:MGI Symbol;Acc:MGI:90675]	3.5E+07	4E+07	Vars
ENSMUSG00000007030	DNA segment, Chr 17, human D6S56E 3 [Source:MGI Symbol;Acc:MGI:1306798]	3.5E+07	4E+07	D17H6S56E-3
ENSMUSG00000036185	Ng23 protein [Source:MGI Symbol;Acc:MGI:2388100]	3.5E+07	4E+07	Ng23
ENSMUSG00000007035	mutS homolog 5 (E. coli) [Source:MGI Symbol;Acc:MGI:1329021]	3.5E+07	4E+07	Msh5
ENSMUSG00000007041	chloride intracellular channel 1 [Source:MGI Symbol;Acc:MGI:2148924]	3.5E+07	4E+07	Clic1
ENSMUSG00000007039	dimethylarginine dimethylaminohydrolase 2 [Source:MGI Symbol;Acc:MGI:1859016]	3.5E+07	4E+07	Ddah2
ENSMUSG00000073414	expressed sequence AU023871 [Source:MGI Symbol;Acc:MGI:2146995]	3.5E+07	4E+07	AU023871
ENSMUSG00000007044	lymphocyte antigen 6 complex, locus G6C [Source:MGI Symbol;Acc:MGI:2148930]	3.5E+07	4E+07	Ly6g6c
ENSMUSG00000073413	lymphocyte antigen 6 complex, locus G6D [Source:MGI Symbol;Acc:MGI:2148931]	3.5E+07	4E+07	Ly6g6d
ENSMUSG00000013766	lymphocyte antigen 6 complex, locus G6E [Source:MGI Symbol;Acc:MGI:1917524]	3.5E+07	4E+07	Ly6g6e
ENSMUSG00000034923	lymphocyte antigen 6 complex, locus G6F [Source:MGI Symbol;Acc:MGI:3616082]	3.5E+07	4E+07	Ly6g6f
ENSMUSG00000007036	abhydrolase domain containing 16A [Source:MGI Symbol;Acc:MGI:99476]	3.5E+07	4E+07	Abhd16a
ENSMUSG00000034482	lymphocyte antigen 6 complex, locus G5C [Source:MGI Symbol;Acc:MGI:2148974]	3.5E+07	4E+07	Ly6g5c
ENSMUSG00000043807	lymphocyte antigen 6 complex, locus G5B [Source:MGI Symbol;Acc:MGI:2385809]	3.5E+07	4E+07	Ly6g5b
ENSMUSG00000024387	casein kinase 2, beta polypeptide [Source:MGI Symbol;Acc:MGI:88548]	3.5E+07	4E+07	Csnk2b
ENSMUSG00000092417	G patch domain and ankyrin repeats 1 [Source:MGI Symbol;Acc:MGI:2148975]	3.5E+07	4E+07	Gpank1
ENSMUSG00000043311	DNA segment, Chr 17, human D6S53E [Source:MGI Symbol;Acc:MGI:90673]	3.5E+07	4E+07	D17H6S53E
ENSMUSG00000024391	apolipoprotein M [Source:MGI Symbol;Acc:MGI:1930124]	3.5E+07	4E+07	Apom
ENSMUSG00000024392	BCL2-associated athanogene 6 [Source:MGI Symbol;Acc:MGI:1919439]	3.5E+07	4E+07	Bag6
ENSMUSG00000024393	proline-rich coiled-coil 2A [Source:MGI Symbol;Acc:MGI:1915467]	3.5E+07	4E+07	Prrc2a
ENSMUSG00000024397	allograft inflammatory factor 1 [Source:MGI Symbol;Acc:MGI:1343098]	3.5E+07	4E+07	Aif1
ENSMUSG00000073412	leukocyte specific transcript 1 [Source:MGI Symbol;Acc:MGI:1096324]	3.5E+07	4E+07	Lst1
ENSMUSG00000024399	lymphotoxin B [Source:MGI Symbol;Acc:MGI:104796]	3.5E+07	4E+07	Ltb
ENSMUSG00000024401	tumor necrosis factor [Source:MGI Symbol;Acc:MGI:104798]	3.5E+07	4E+07	Tnf
ENSMUSG00000024402	lymphotoxin A [Source:MGI Symbol;Acc:MGI:104797]	3.5E+07	4E+07	Lta
ENSMUSG00000042419	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor like 1 [So	3.5E+07	4E+07	Nfkbil1
ENSMUSG00000081650	predicted gene 16181 [Source:MGI Symbol;Acc:MGI:3802038]	3.5E+07	4E+07	Gm16181
ENSMUSG00000024403	ATPase, H+ transporting, lysosomal V1 subunit G2 [Source:MGI Symbol;Acc:MGI:1913487]	3.5E+07	4E+07	Atp6v1g2
ENSMUSG00000019432	DEAD (Asp-Glu-Ala-Asp) box polypeptide 39B [Source:MGI Symbol;Acc:MGI:99240]	3.5E+07	4E+07	Ddx39b
ENSMUSG00000073411	histocompatibility 2, D region locus 1 [Source:MGI Symbol;Acc:MGI:95896]	3.5E+07	4E+07	H2-D1
ENSMUSG00000079507	histocompatibility 2, Q region locus 1 [Source:MGI Symbol;Acc:MGI:95928]	3.5E+07	4E+07	H2-Q1
ENSMUSG00000091705	histocompatibility 2, Q region locus 2 [Source:MGI Symbol;Acc:MGI:95931]	3.5E+07	4E+07	H2-Q2
ENSMUSG00000035929	histocompatibility 2, Q region locus 4 [Source:MGI Symbol;Acc:MGI:95933]	3.6E+07	4E+07	H2-Q4

ENSMUSG00000073409	histocompatibility 2, Q region locus 6 [Source:MGI Symbol;Acc:MGI:95935]	3.6E+07	4E+07	H2-Q6
ENSMUSG00000060550	histocompatibility 2, Q region locus 7 [Source:MGI Symbol;Acc:MGI:95936]	3.6E+07	4E+07	H2-Q7
ENSMUSG00000067235	histocompatibility 2, Q region locus 10 [Source:MGI Symbol;Acc:MGI:95929]	3.6E+07	4E+07	H2-Q10
ENSMUSG00000024406	POU domain, class 5, transcription factor 1 [Source:MGI Symbol;Acc:MGI:101893]	3.6E+07	4E+07	Pou5f1
ENSMUSG00000050410	transcription factor 19 [Source:MGI Symbol;Acc:MGI:103180]	3.6E+07	4E+07	Tcf19
ENSMUSG00000040312	coiled-coil alpha-helical rod protein 1 [Source:MGI Symbol;Acc:MGI:2385321]	3.6E+07	4E+07	Cchcr1
ENSMUSG00000024409	psoriasis susceptibility 1 candidate 2 (human) [Source:MGI Symbol;Acc:MGI:1930025]	3.6E+07	4E+07	Psors1c2
ENSMUSG00000039518	corneodesmosin [Source:MGI Symbol;Acc:MGI:3505689]	3.6E+07	4E+07	Cdsn
ENSMUSG00000039269	RIKEN cDNA 2300002M23 gene [Source:MGI Symbol;Acc:MGI:1916792]	3.6E+07	4E+07	2300002M23Rik
ENSMUSG00000090509	surfactant associated 2 [Source:MGI Symbol;Acc:MGI:3643293]	3.6E+07	4E+07	Sfta2
ENSMUSG00000090588	predicted gene 9573 [Source:MGI Symbol;Acc:MGI:3779983]	3.6E+07	4E+07	Gm9573
ENSMUSG00000073408	diffuse panbronchiolitis critical region 1 (human) [Source:MGI Symbol;Acc:MGI:2685476]	3.6E+07	4E+07	Dpcr1
ENSMUSG00000038838	valyl-tRNA synthetase 2, mitochondrial (putative) [Source:MGI Symbol;Acc:MGI:1916165]	3.6E+07	4E+07	Vars2
ENSMUSG00000001524	general transcription factor II H, polypeptide 4 [Source:MGI Symbol;Acc:MGI:1338799]	3.6E+07	4E+07	Gtf2h4
ENSMUSG00000003534	discoidin domain receptor family, member 1 [Source:MGI Symbol;Acc:MGI:99216]	3.6E+07	4E+07	Ddr1
ENSMUSG00000003541	immediate early response 3 [Source:MGI Symbol;Acc:MGI:104814]	3.6E+07	4E+07	Ier3
ENSMUSG00000059714	flotillin 1 [Source:MGI Symbol;Acc:MGI:1100500]	3.6E+07	4E+07	Flot1
ENSMUSG00000001525	tubulin, beta 5 class I [Source:MGI Symbol;Acc:MGI:107812]	3.6E+07	4E+07	Tubb5
ENSMUSG00000061607	mediator of DNA damage checkpoint 1 [Source:MGI Symbol;Acc:MGI:3525201]	3.6E+07	4E+07	Mdc1
ENSMUSG00000059791	nurim (nuclear envelope membrane protein) [Source:MGI Symbol;Acc:MGI:2146855]	3.6E+07	4E+07	Nrm
ENSMUSG00000034595	protein phosphatase 1, regulatory subunit 18 [Source:MGI Symbol;Acc:MGI:1923698]	3.6E+07	4E+07	Ppp1r18
ENSMUSG00000024422	DEAH (Asp-Glu-Ala-His) box polypeptide 16 [Source:MGI Symbol;Acc:MGI:1916442]	3.6E+07	4E+07	Dhx16
ENSMUSG00000050705	RIKEN cDNA 2310061I04 gene [Source:MGI Symbol;Acc:MGI:1916912]	3.6E+07	4E+07	2310061I04Rik
ENSMUSG00000024426	alpha tubulin acetyltransferase 1 [Source:MGI Symbol;Acc:MGI:1913869]	3.6E+07	4E+07	Atat1
ENSMUSG00000024436	mitochondrial ribosomal protein S18B [Source:MGI Symbol;Acc:MGI:1914223]	3.6E+07	4E+07	Mrps18b
ENSMUSG00000039220	protein phosphatase 1, regulatory subunit 10 [Source:MGI Symbol;Acc:MGI:1289273]	3.6E+07	4E+07	Ppp1r10
ENSMUSG00000038762	ATP-binding cassette, sub-family F (GCN20), member 1 [Source:MGI Symbol;Acc:MGI:135	3.6E+07	4E+07	Abcf1
ENSMUSG00000038500	proline-rich polypeptide 3 [Source:MGI Symbol;Acc:MGI:1922460]	3.6E+07	4E+07	Prr3
ENSMUSG00000024429	guanine nucleotide binding protein-like 1 [Source:MGI Symbol;Acc:MGI:95764]	3.6E+07	4E+07	Gnl1
ENSMUSG00000092604	predicted gene 20508 [Source:MGI Symbol;Acc:MGI:5141973]	3.6E+07	4E+07	Gm20508
ENSMUSG00000053835	histocompatibility 2, T region locus 24 [Source:MGI Symbol;Acc:MGI:95958]	3.6E+07	4E+07	H2-T24
ENSMUSG00000092126	predicted gene, 17579 [Source:MGI Symbol;Acc:MGI:4937213]	3.6E+07	4E+07	Gm17579
ENSMUSG00000067212	histocompatibility 2, T region locus 23 [Source:MGI Symbol;Acc:MGI:95957]	3.6E+07	4E+07	H2-T23
ENSMUSG00000056116	histocompatibility 2, T region locus 22 [Source:MGI Symbol;Acc:MGI:95956]	3.6E+07	4E+07	H2-T22
ENSMUSG00000073407	predicted gene 6034 [Source:MGI Symbol;Acc:MGI:3646212]	3.6E+07	4E+07	Gm6034
ENSMUSG00000079492	predicted gene 11127 [Source:MGI Symbol;Acc:MGI:3779381]	3.6E+07	4E+07	Gm11127
ENSMUSG00000092277	predicted gene, 19684 [Source:MGI Symbol;Acc:MGI:5011869]	3.6E+07	4E+07	Gm19684
ENSMUSG00000092243	predicted gene 7030 [Source:MGI Symbol;Acc:MGI:3647514]	3.6E+07	4E+07	Gm7030
ENSMUSG00000038311	RIKEN cDNA 2410017I17 gene [Source:MGI Symbol;Acc:MGI:1916967]	3.6E+07	4E+07	2410017I17Rik
ENSMUSG00000073402	predicted gene 8909 [Source:MGI Symbol;Acc:MGI:3704134]	3.6E+07	4E+07	Gm8909

ENSMUSG00000054128	histocompatibility 2, T region locus 3 [Source:MGI Symbol;Acc:MGI:95959]	3.6E+07	4E+07	H2-T3
ENSMUSG00000024446	ribonuclease P 21 subunit (human) [Source:MGI Symbol;Acc:MGI:1914926]	3.6E+07	4E+07	Rpp21
ENSMUSG00000045409	tripartite motif-containing 39 [Source:MGI Symbol;Acc:MGI:1890659]	3.6E+07	4E+07	Trim39
ENSMUSG00000023083	histocompatibility 2, M region locus 10.2 [Source:MGI Symbol;Acc:MGI:1276525]	3.6E+07	4E+07	H2-M10.2
ENSMUSG00000024448	histocompatibility 2, M region locus 10.1 [Source:MGI Symbol;Acc:MGI:1276522]	3.6E+07	4E+07	H2-M10.1
ENSMUSG00000058124	histocompatibility 2, M region locus 10.3 [Source:MGI Symbol;Acc:MGI:1276524]	3.7E+07	4E+07	H2-M10.3
ENSMUSG00000048231	histocompatibility 2, M region locus 10.4 [Source:MGI Symbol;Acc:MGI:1276527]	3.7E+07	4E+07	H2-M10.4
ENSMUSG00000037537	histocompatibility 2, M region locus 11 [Source:MGI Symbol;Acc:MGI:2676637]	3.7E+07	4E+07	H2-M11
ENSMUSG00000067201	histocompatibility 2, M region locus 9 [Source:MGI Symbol;Acc:MGI:1276570]	3.7E+07	4E+07	H2-M9
ENSMUSG00000037334	histocompatibility 2, M region locus 1 [Source:MGI Symbol;Acc:MGI:95913]	3.7E+07	4E+07	H2-M1
ENSMUSG00000037246	histocompatibility 2, M region locus 10.5 [Source:MGI Symbol;Acc:MGI:1276526]	3.7E+07	4E+07	H2-M10.5
ENSMUSG00000037130	histocompatibility 2, M region locus 10.6 [Source:MGI Symbol;Acc:MGI:2687364]	3.7E+07	4E+07	H2-M10.6
ENSMUSG00000024457	tripartite motif-containing 26 [Source:MGI Symbol;Acc:MGI:1337056]	3.7E+07	4E+07	Trim26
ENSMUSG00000050747	tripartite motif-containing 15 [Source:MGI Symbol;Acc:MGI:1916347]	3.7E+07	4E+07	Trim15
ENSMUSG00000073400	tripartite motif-containing 10 [Source:MGI Symbol;Acc:MGI:1338757]	3.7E+07	4E+07	Trim10
ENSMUSG00000073399	tripartite motif-containing 40 [Source:MGI Symbol;Acc:MGI:2684881]	3.7E+07	4E+07	Trim40
ENSMUSG00000058063	tripartite motif-containing 31 [Source:MGI Symbol;Acc:MGI:2385051]	3.7E+07	4E+07	Trim31
ENSMUSG00000036492	ring finger protein 39 [Source:MGI Symbol;Acc:MGI:2156378]	3.7E+07	4E+07	Rnf39
ENSMUSG00000036398	protein phosphatase 1, regulatory (inhibitor) subunit 11 [Source:MGI Symbol;Acc:MGI:1923	3.7E+07	4E+07	Ppp1r11
ENSMUSG00000036315	zinc ribbon domain containing, 1 [Source:MGI Symbol;Acc:MGI:1913386]	3.7E+07	4E+07	Znrd1
ENSMUSG00000036214	ZNRD1 antisense RNA [Source:MGI Symbol;Acc:MGI:1923666]	3.7E+07	4E+07	Znrd1as
ENSMUSG00000064308	RIKEN cDNA 2410137M14 gene [Source:MGI Symbol;Acc:MGI:1924047]	3.7E+07	4E+07	2410137M14Rik
ENSMUSG00000024459	histocompatibility 2, M region locus 5 [Source:MGI Symbol;Acc:MGI:95917]	3.7E+07	4E+07	H2-M5
ENSMUSG00000036036	zinc finger protein 57 [Source:MGI Symbol;Acc:MGI:99204]	3.7E+07	4E+07	Zfp57
ENSMUSG00000076439	myelin oligodendrocyte glycoprotein [Source:MGI Symbol;Acc:MGI:97435]	3.7E+07	4E+07	Mog
ENSMUSG00000024462	gamma-aminobutyric acid (GABA) B receptor, 1 [Source:MGI Symbol;Acc:MGI:1860139]	3.7E+07	4E+07	Gabbr1
ENSMUSG00000056600	olfactory receptor 90 [Source:MGI Symbol;Acc:MGI:2177473]	3.7E+07	4E+07	Olf90
ENSMUSG00000067192	olfactory receptor 91 [Source:MGI Symbol;Acc:MGI:2177474]	3.7E+07	4E+07	Olf91
ENSMUSG00000091153	olfactory receptor 92 [Source:MGI Symbol;Acc:MGI:2177475]	3.7E+07	4E+07	Olf92
ENSMUSG00000091601	olfactory receptor 93 [Source:MGI Symbol;Acc:MGI:2177476]	3.7E+07	4E+07	Olf93
ENSMUSG00000035186	ubiquitin D [Source:MGI Symbol;Acc:MGI:1344410]	3.7E+07	4E+07	Ubd
ENSMUSG00000043827	olfactory receptor 94 [Source:MGI Symbol;Acc:MGI:2177477]	3.7E+07	4E+07	Olf94
ENSMUSG00000049561	olfactory receptor 95 [Source:MGI Symbol;Acc:MGI:2177478]	3.7E+07	4E+07	Olf95
ENSMUSG00000064121	olfactory receptor 96 [Source:MGI Symbol;Acc:MGI:2177479]	3.7E+07	4E+07	Olf96
ENSMUSG00000058802	olfactory receptor 97 [Source:MGI Symbol;Acc:MGI:2177480]	3.7E+07	4E+07	Olf97
ENSMUSG00000063660	olfactory receptor 98 [Source:MGI Symbol;Acc:MGI:2177481]	3.7E+07	4E+07	Olf98
ENSMUSG00000016206	histocompatibility 2, M region locus 3 [Source:MGI Symbol;Acc:MGI:95915]	3.7E+07	4E+07	H2-M3
ENSMUSG00000061972	olfactory receptor 99 [Source:MGI Symbol;Acc:MGI:2177482]	3.7E+07	4E+07	Olf99
ENSMUSG00000092077	olfactory receptor 101 [Source:MGI Symbol;Acc:MGI:2177484]	3.7E+07	4E+07	Olf101
ENSMUSG00000091531	olfactory receptor 102 [Source:MGI Symbol;Acc:MGI:2177485]	3.7E+07	4E+07	Olf102

ENSMUSG00000049618	olfactory receptor 103 [Source:MGI Symbol;Acc:MGI:2177486]	3.7E+07	4E+07	Olfr103
ENSMUSG00000063188	olfactory receptor 107 [Source:MGI Symbol;Acc:MGI:2177490]	3.8E+07	4E+07	Olfr107
ENSMUSG00000059687	olfactory receptor 108 [Source:MGI Symbol;Acc:MGI:2177491]	3.8E+07	4E+07	Olfr108
ENSMUSG00000029184	olfactory receptor 109 [Source:MGI Symbol;Acc:MGI:2177492]	3.8E+07	4E+07	Olfr109
ENSMUSG00000016283	histocompatibility 2, M region locus 2 [Source:MGI Symbol;Acc:MGI:95914]	3.8E+07	4E+07	H2-M2
ENSMUSG00000090894	olfactory receptor 110 [Source:MGI Symbol;Acc:MGI:2177493]	3.8E+07	4E+07	Olfr110
ENSMUSG00000090675	olfactory receptor 111 [Source:MGI Symbol;Acc:MGI:2177494]	3.8E+07	4E+07	Olfr111
ENSMUSG00000051611	olfactory receptor 112 [Source:MGI Symbol;Acc:MGI:2177495]	3.8E+07	4E+07	Olfr112
ENSMUSG00000092292	olfactory receptor 113 [Source:MGI Symbol;Acc:MGI:2177496]	3.8E+07	4E+07	Olfr113
ENSMUSG00000062629	olfactory receptor 114 [Source:MGI Symbol;Acc:MGI:2177497]	3.8E+07	4E+07	Olfr114
ENSMUSG00000092413	olfactory receptor 115 [Source:MGI Symbol;Acc:MGI:2177498]	3.8E+07	4E+07	Olfr115
ENSMUSG00000061336	olfactory receptor 116 [Source:MGI Symbol;Acc:MGI:2177499]	3.8E+07	4E+07	Olfr116
ENSMUSG00000062337	olfactory receptor 117 [Source:MGI Symbol;Acc:MGI:2177500]	3.8E+07	4E+07	Olfr117
ENSMUSG00000080990	olfactory receptor 118 [Source:MGI Symbol;Acc:MGI:2177501]	3.8E+07	4E+07	Olfr118
ENSMUSG00000059964	olfactory receptor 119 [Source:MGI Symbol;Acc:MGI:2177502]	3.8E+07	4E+07	Olfr119
ENSMUSG00000063994	olfactory receptor 120 [Source:MGI Symbol;Acc:MGI:2177503]	3.8E+07	4E+07	Olfr120
ENSMUSG00000060017	olfactory receptor 121 [Source:MGI Symbol;Acc:MGI:2177504]	3.8E+07	4E+07	Olfr121
ENSMUSG00000083947	olfactory receptor 122 [Source:MGI Symbol;Acc:MGI:2177505]	3.8E+07	4E+07	Olfr122
ENSMUSG00000045202	olfactory receptor 123 [Source:MGI Symbol;Acc:MGI:2177506]	3.8E+07	4E+07	Olfr123
ENSMUSG00000044985	olfactory receptor 124 [Source:MGI Symbol;Acc:MGI:2177507]	3.8E+07	4E+07	Olfr124
ENSMUSG00000050613	olfactory receptor 125 [Source:MGI Symbol;Acc:MGI:2177508]	3.8E+07	4E+07	Olfr125
ENSMUSG00000061777	olfactory receptor 126 [Source:MGI Symbol;Acc:MGI:2177509]	3.8E+07	4E+07	Olfr126
ENSMUSG00000058114	olfactory receptor 127 [Source:MGI Symbol;Acc:MGI:2177510]	3.8E+07	4E+07	Olfr127
ENSMUSG00000059030	olfactory receptor 128 [Source:MGI Symbol;Acc:MGI:2177511]	3.8E+07	4E+07	Olfr128
ENSMUSG00000071084	olfactory receptor 761 [Source:MGI Symbol;Acc:MGI:3030595]	3.8E+07	4E+07	Olfr761
ENSMUSG00000081724	olfactory receptor 129 [Source:MGI Symbol;Acc:MGI:2177512]	3.8E+07	4E+07	Olfr129
ENSMUSG00000067187	olfactory receptor 130 [Source:MGI Symbol;Acc:MGI:2177513]	3.8E+07	4E+07	Olfr130
ENSMUSG00000043312	olfactory receptor 131 [Source:MGI Symbol;Acc:MGI:2177514]	3.8E+07	4E+07	Olfr131
ENSMUSG00000067186	olfactory receptor 132 [Source:MGI Symbol;Acc:MGI:2177515]	3.8E+07	4E+07	Olfr132
ENSMUSG00000063240	olfactory receptor 133 [Source:MGI Symbol;Acc:MGI:2177516]	3.8E+07	4E+07	Olfr133
ENSMUSG00000064153	olfactory receptor 134 [Source:MGI Symbol;Acc:MGI:2177517]	3.8E+07	4E+07	Olfr134
ENSMUSG00000057801	olfactory receptor 135 [Source:MGI Symbol;Acc:MGI:2177518]	3.8E+07	4E+07	Olfr135
ENSMUSG00000057443	olfactory receptor 138 [Source:MGI Symbol;Acc:MGI:2177521]	3.8E+07	4E+07	Olfr138
ENSMUSG00000054940	olfactory receptor 137 [Source:MGI Symbol;Acc:MGI:2177520]	3.8E+07	4E+07	Olfr137
ENSMUSG00000062695	olfactory receptor 136 [Source:MGI Symbol;Acc:MGI:2177519]	3.8E+07	4E+07	Olfr136
ENSMUSG00000092322	predicted gene 20408 [Source:MGI Symbol;Acc:MGI:5141873]	3.9E+07	4E+07	Gm20408
ENSMUSG00000092244	predicted gene 20410 [Source:MGI Symbol;Acc:MGI:5141875]	3.9E+07	4E+07	Gm20410
ENSMUSG00000092342	predicted gene 20516 [Source:MGI Symbol;Acc:MGI:5141981]	3.9E+07	4E+07	Gm20516
ENSMUSG00000031233	phosphoglycerate kinase 2 [Source:MGI Symbol;Acc:MGI:97563]	4E+07	4E+07	Pgk2
ENSMUSG00000025433	cysteine-rich secretory protein 3 [Source:MGI Symbol;Acc:MGI:102552]	4E+07	4E+07	Crisp3

ENSMUSG00000025431	cysteine-rich secretory protein 1 [Source:MGI Symbol;Acc:MGI:102553]	4E+07	4E+07	Crisp1
ENSMUSG00000090747	predicted gene, 17495 [Source:MGI Symbol;Acc:MGI:4937129]	4.1E+07	4E+07	Gm17495
ENSMUSG00000090897	predicted gene 5494 [Source:MGI Symbol;Acc:MGI:3643294]	4.1E+07	4E+07	Gm5494
ENSMUSG00000073396	predicted gene 6084 [Source:MGI Symbol;Acc:MGI:3645915]	4.1E+07	4E+07	Gm6084
ENSMUSG00000023930	cysteine-rich secretory protein 2 [Source:MGI Symbol;Acc:MGI:98815]	4.1E+07	4E+07	Crisp2
ENSMUSG00000023926	Rhesus blood group-associated A glycoprotein [Source:MGI Symbol;Acc:MGI:120271	4.1E+07	4E+07	Rhag
ENSMUSG00000054951	RIKEN cDNA 9130008F23 gene [Source:MGI Symbol;Acc:MGI:1918833]	4.1E+07	4E+07	9130008F23Rik
ENSMUSG00000091043	glycine-N-acyltransferase-like 3 [Source:MGI Symbol;Acc:MGI:3647683]	4.1E+07	4E+07	Glyat13
ENSMUSG00000023919	centromere protein Q [Source:MGI Symbol;Acc:MGI:1933744]	4.1E+07	4E+07	Cenpq
ENSMUSG00000023921	methylmalonyl-Coenzyme A mutase [Source:MGI Symbol;Acc:MGI:97239]	4.1E+07	4E+07	Mut
ENSMUSG00000042256	RIKEN cDNA 3110082D06 gene [Source:MGI Symbol;Acc:MGI:1920485]	4.2E+07	4E+07	3110082D06Rik
ENSMUSG00000043972	opsin 5 [Source:MGI Symbol;Acc:MGI:2662912]	4.3E+07	4E+07	Opn5
ENSMUSG00000023918	G protein-coupled receptor 115 [Source:MGI Symbol;Acc:MGI:1925499]	4.3E+07	4E+07	Gpr115
ENSMUSG00000057899	G protein-coupled receptor 111 [Source:MGI Symbol;Acc:MGI:2182728]	4.3E+07	4E+07	Gpr111
ENSMUSG00000061665	CD2-associated protein [Source:MGI Symbol;Acc:MGI:1330281]	4.3E+07	4E+07	Cd2ap
ENSMUSG00000023915	tumor necrosis factor receptor superfamily, member 21 [Source:MGI Symbol;Acc:MG	4.3E+07	4E+07	Tnfrsf21
ENSMUSG00000041293	G protein-coupled receptor 110 [Source:MGI Symbol;Acc:MGI:1924846]	4.3E+07	4E+07	Gpr110
ENSMUSG00000056492	G protein-coupled receptor 116 [Source:MGI Symbol;Acc:MGI:2182928]	4.4E+07	4E+07	Gpr116
ENSMUSG00000023914	meprin 1 alpha [Source:MGI Symbol;Acc:MGI:96963]	4.4E+07	4E+07	Mep1a
ENSMUSG00000023913	phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma) [Sou	4.4E+07	4E+07	Pla2g7
ENSMUSG00000040140	tudor domain containing 6 [Source:MGI Symbol;Acc:MGI:2679727]	4.4E+07	4E+07	Tdrd6
ENSMUSG00000023912	solute carrier family 25, member 27 [Source:MGI Symbol;Acc:MGI:1921261]	4.4E+07	4E+07	Slc25a27
ENSMUSG00000023963	cytochrome P450, family 39, subfamily a, polypeptide 1 [Source:MGI Symbol;Acc:MGI:1927	4.4E+07	4E+07	Cyp39a1
ENSMUSG00000039601	regulator of calcineurin 2 [Source:MGI Symbol;Acc:MGI:1858219]	4.4E+07	4E+07	Rcan2
ENSMUSG00000023960	ectonucleotide pyrophosphatase/phosphodiesterase 5 [Source:MGI Symbol;Acc:MGI:19338	4.4E+07	4E+07	Enpp5
ENSMUSG00000023961	ectonucleotide pyrophosphatase/phosphodiesterase 4 [Source:MGI Symbol;Acc:MGI:26826	4.4E+07	4E+07	Enpp4
ENSMUSG00000023959	chloride intracellular channel 5 [Source:MGI Symbol;Acc:MGI:1917912]	4.4E+07	4E+07	Clic5
ENSMUSG00000039153	runx related transcription factor 2 [Source:MGI Symbol;Acc:MGI:99829]	4.5E+07	4E+07	Runx2
ENSMUSG00000038954	suppressor of Ty 3 homolog (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:1923723]	4.5E+07	5E+07	Supt3h
ENSMUSG00000023932	cell division cycle 5-like (S. pombe) [Source:MGI Symbol;Acc:MGI:1918952]	4.6E+07	5E+07	Cdc5l
ENSMUSG00000023935	spermatogenesis associated, serine-rich 1 [Source:MGI Symbol;Acc:MGI:1918270]	4.6E+07	5E+07	Spats1
ENSMUSG00000071077	predicted gene 9104 [Source:MGI Symbol;Acc:MGI:3645365]	4.6E+07	5E+07	Gm9104
ENSMUSG00000023938	alanyl-tRNA synthetase 2, mitochondrial (putative) [Source:MGI Symbol;Acc:MGI:2681839]	4.6E+07	5E+07	Aars2
ENSMUSG00000023949	t-complex-associated testis expressed 1 [Source:MGI Symbol;Acc:MGI:98640]	4.6E+07	5E+07	Tcte1
ENSMUSG00000092070	predicted gene, 17441 [Source:MGI Symbol;Acc:MGI:4937075]	4.6E+07	5E+07	Gm17441
ENSMUSG00000050405	transmembrane protein 151B [Source:MGI Symbol;Acc:MGI:2685169]	4.6E+07	5E+07	Tmem151b
ENSMUSG00000023947	nuclear factor of kappa light polypeptide gene enhancer in B cells inhibitor, epsilon [Source:	4.6E+07	5E+07	Nfkbie
ENSMUSG00000037089	solute carrier family 35, member B2 [Source:MGI Symbol;Acc:MGI:1921086]	4.6E+07	5E+07	Slc35b2
ENSMUSG00000023944	heat shock protein 90 alpha (cytosolic), class B member 1 [Source:MGI Symbol;Acc:MGI:96	4.6E+07	5E+07	Hsp90ab1
ENSMUSG00000023942	solute carrier family 29 (nucleoside transporters), member 1 [Source:MGI Symbol;Acc:MGI:	4.6E+07	5E+07	Slc29a1

ENSMUSG00000079471	predicted gene 7325 [Source:MGI Symbol;Acc:MGI:3649059]	4.6E+07	5E+07	Gm7325
ENSMUSG00000058626	calpain 11 [Source:MGI Symbol;Acc:MGI:1352490]	4.6E+07	5E+07	Capn11
ENSMUSG00000036026	transmembrane protein 63b [Source:MGI Symbol;Acc:MGI:2387609]	4.6E+07	5E+07	Tmem63b
ENSMUSG00000023939	mitochondrial ribosomal protein L14 [Source:MGI Symbol;Acc:MGI:1333864]	4.6E+07	5E+07	Mrpl14
ENSMUSG00000023951	vascular endothelial growth factor A [Source:MGI Symbol;Acc:MGI:103178]	4.6E+07	5E+07	Vegfa
ENSMUSG00000023967	mitochondrial ribosomal protein S18A [Source:MGI Symbol;Acc:MGI:1915815]	4.6E+07	5E+07	Mrps18a
ENSMUSG00000023966	radial spoke head 9 homolog (Chlamydomonas) [Source:MGI Symbol;Acc:MGI:1922814]	4.6E+07	5E+07	Rsph9
ENSMUSG00000034509	MAD2L1 binding protein [Source:MGI Symbol;Acc:MGI:1913841]	4.6E+07	5E+07	Mad2l1bp
ENSMUSG00000023952	GTP binding protein 2 [Source:MGI Symbol;Acc:MGI:1860138]	4.6E+07	5E+07	Gtpbp2
ENSMUSG00000023953	polymerase (DNA directed), eta (RAD 30 related) [Source:MGI Symbol;Acc:MGI:1891457]	4.6E+07	5E+07	Polh
ENSMUSG00000067150	exportin 5 [Source:MGI Symbol;Acc:MGI:1913789]	4.6E+07	5E+07	Xpo5
ENSMUSG00000067148	polymerase (RNA) I polypeptide C [Source:MGI Symbol;Acc:MGI:103288]	4.6E+07	5E+07	Polr1c
ENSMUSG00000071074	Yip1 domain family, member 3 [Source:MGI Symbol;Acc:MGI:106280]	4.6E+07	5E+07	Yipf3
ENSMUSG00000071073	predicted gene 88 [Source:MGI Symbol;Acc:MGI:2684934]	4.6E+07	5E+07	Gm88
ENSMUSG00000012296	tight junction associated protein 1 [Source:MGI Symbol;Acc:MGI:1921344]	4.6E+07	5E+07	Tjap1
ENSMUSG00000047428	delta-like 2 homolog (Drosophila) [Source:MGI Symbol;Acc:MGI:2146838]	4.6E+07	5E+07	Dlk2
ENSMUSG00000032842	ATP-binding cassette, sub-family C (CFTR/MRP), member 10 [Source:MGI Symbol;Acc:MGI:1889348]	4.6E+07	5E+07	Abcc10
ENSMUSG00000015597	zinc finger protein 318 [Source:MGI Symbol;Acc:MGI:1889348]	4.7E+07	5E+07	Zfp318
ENSMUSG00000023968	cysteine-rich protein 3 [Source:MGI Symbol;Acc:MGI:2152434]	4.7E+07	5E+07	Crip3
ENSMUSG00000067144	solute carrier family 22 (organic anion transporter), member 7 [Source:MGI Symbol;Acc:MGI:1925559]	4.7E+07	5E+07	Slc22a7
ENSMUSG00000091742	predicted gene 5093 [Source:MGI Symbol;Acc:MGI:3644404]	4.7E+07	5E+07	Gm5093
ENSMUSG00000015599	tau tubulin kinase 1 [Source:MGI Symbol;Acc:MGI:2147036]	4.7E+07	5E+07	Ttbk1
ENSMUSG00000040658	cDNA sequence BC048355 [Source:MGI Symbol;Acc:MGI:3039376]	4.7E+07	5E+07	BC048355
ENSMUSG00000040327	cullin 9 [Source:MGI Symbol;Acc:MGI:1925559]	4.7E+07	5E+07	Cul9
ENSMUSG00000015605	serum response factor [Source:MGI Symbol;Acc:MGI:106658]	4.7E+07	5E+07	Srf
ENSMUSG00000023972	PTK7 protein tyrosine kinase 7 [Source:MGI Symbol;Acc:MGI:1918711]	4.7E+07	5E+07	Ptk7
ENSMUSG00000003546	kinesin light chain 4 [Source:MGI Symbol;Acc:MGI:1922014]	4.7E+07	5E+07	Klc4
ENSMUSG00000002767	mitochondrial ribosomal protein L2 [Source:MGI Symbol;Acc:MGI:1351622]	4.7E+07	5E+07	Mrpl2
ENSMUSG00000038545	cullin 7 [Source:MGI Symbol;Acc:MGI:1913765]	4.7E+07	5E+07	Cul7
ENSMUSG00000023971	ribosomal RNA processing 36 homolog (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:2385054]	4.7E+07	5E+07	Rrp36
ENSMUSG00000063576	kelch domain containing 3 [Source:MGI Symbol;Acc:MGI:2651568]	4.7E+07	5E+07	Klhdc3
ENSMUSG00000002768	male enhanced antigen 1 [Source:MGI Symbol;Acc:MGI:96957]	4.7E+07	5E+07	Mea1
ENSMUSG00000059409	protein phosphatase 2, regulatory subunit B (B56), delta isoform [Source:MGI Symbol;Acc:MGI:2385054]	4.7E+07	5E+07	Ppp2r5d
ENSMUSG00000002763	peroxisomal biogenesis factor 6 [Source:MGI Symbol;Acc:MGI:1202304]	4.7E+07	5E+07	Pex6
ENSMUSG00000002769	glycine N-methyltransferase [Source:MGI Symbol;Acc:MGI:1202304]	4.7E+07	5E+07	Gnmt
ENSMUSG00000023973	canopy 3 homolog (zebrafish) [Source:MGI Symbol;Acc:MGI:1919279]	4.7E+07	5E+07	Cnpy3
ENSMUSG00000062619	RIKEN cDNA 2310039H08 gene [Source:MGI Symbol;Acc:MGI:1914351]	4.7E+07	5E+07	2310039H08Rik
ENSMUSG00000063888	ribosomal protein L7-like 1 [Source:MGI Symbol;Acc:MGI:1913479]	4.7E+07	5E+07	Rpl7l1
ENSMUSG00000036568	cDNA sequence BC032203 [Source:MGI Symbol;Acc:MGI:2673855]	4.7E+07	5E+07	BC032203
ENSMUSG00000073388	RIKEN cDNA A330017A19 gene [Source:MGI Symbol;Acc:MGI:3045380]	4.7E+07	5E+07	A330017A19Rik

ENSMUSG00000036430	tubulin-specific chaperone C [Source:MGI Symbol;Acc:MGI:1919976]	4.7E+07	5E+07	Tbcc
ENSMUSG00000023978	peripherin 2 [Source:MGI Symbol;Acc:MGI:102791]	4.7E+07	5E+07	Prph2
ENSMUSG00000023977	ubiquitin protein ligase E3 component n-recognin 2 [Source:MGI Symbol;Acc:MGI:1861099]	4.7E+07	5E+07	Ubr2
ENSMUSG00000091775	predicted gene 16494 [Source:MGI Symbol;Acc:MGI:3641930]	4.7E+07	5E+07	Gm16494
ENSMUSG00000062472	predicted gene 4945 [Source:MGI Symbol;Acc:MGI:3647512]	4.7E+07	5E+07	Gm4945
ENSMUSG00000064043	transcriptional regulating factor 1 [Source:MGI Symbol;Acc:MGI:2442086]	4.7E+07	5E+07	Tref1
ENSMUSG00000034729	mitochondrial ribosomal protein S10 [Source:MGI Symbol;Acc:MGI:1928139]	4.8E+07	5E+07	Mrps10
ENSMUSG00000023979	guanylate cyclase activator 1B [Source:MGI Symbol;Acc:MGI:1194489]	4.8E+07	5E+07	Guca1b
ENSMUSG00000023982	guanylate cyclase activator 1a (retina) [Source:MGI Symbol;Acc:MGI:102770]	4.8E+07	5E+07	Guca1a
ENSMUSG00000047150	RIKEN cDNA 1700001C19 gene [Source:MGI Symbol;Acc:MGI:1922712]	4.8E+07	5E+07	1700001C19Rik
ENSMUSG00000034382	expressed sequence A1661453 [Source:MGI Symbol;Acc:MGI:2146908]	4.8E+07	5E+07	A1661453
ENSMUSG00000023980	TAF8 RNA polymerase II, TATA box binding protein (TBP)-associated factor q [Source:MGI	4.8E+07	5E+07	Taf8
ENSMUSG00000034165	cyclin D3 [Source:MGI Symbol;Acc:MGI:88315]	4.8E+07	5E+07	Ccnd3
ENSMUSG00000023988	bystin-like [Source:MGI Symbol;Acc:MGI:1858419]	4.8E+07	5E+07	Bysl
ENSMUSG00000092558	mediator complex subunit 20 [Source:MGI Symbol;Acc:MGI:1929648]	4.8E+07	5E+07	Med20
ENSMUSG00000023984	predicted gene 20517 [Source:MGI Symbol;Acc:MGI:5141982]	4.8E+07	5E+07	Gm20517
ENSMUSG00000090115	ubiquitin specific peptidase 49 [Source:MGI Symbol;Acc:MGI:2685391]	4.8E+07	5E+07	Usp49
ENSMUSG00000033475	translocase of outer mitochondrial membrane 6 homolog (yeast) [Source:MGI Symbol;Acc:M	4.8E+07	5E+07	Tomm6
ENSMUSG00000079444	prickle homolog 4 (Drosophila) [Source:MGI Symbol;Acc:MGI:2685785]	4.8E+07	5E+07	Prickle4
ENSMUSG00000023266	fibroblast growth factor receptor substrate 3 [Source:MGI Symbol;Acc:MGI:2135965]	4.8E+07	5E+07	Frs3
ENSMUSG00000023987	progastricsin (pepsinogen C) [Source:MGI Symbol;Acc:MGI:98909]	4.8E+07	5E+07	Pgc
ENSMUSG00000023990	transcription factor EB [Source:MGI Symbol;Acc:MGI:103270]	4.8E+07	5E+07	Tfeb
ENSMUSG00000032717	MyoD family inhibitor [Source:MGI Symbol;Acc:MGI:107687]	4.8E+07	5E+07	Mdfi
ENSMUSG00000023991	forkhead box P4 [Source:MGI Symbol;Acc:MGI:1921373]	4.8E+07	5E+07	Foxp4
ENSMUSG00000021545	RIKEN cDNA 1700067P10 gene [Source:MGI Symbol;Acc:MGI:1915474]	4.8E+07	5E+07	1700067P10Rik
ENSMUSG00000073386	RIKEN cDNA 9830107B12 gene [Source:MGI Symbol;Acc:MGI:3608415]	4.8E+07	5E+07	9830107B12Rik
ENSMUSG00000043939	RIKEN cDNA A530064D06 gene [Source:MGI Symbol;Acc:MGI:2443476]	4.8E+07	5E+07	A530064D06Rik
ENSMUSG00000042265	triggering receptor expressed on myeloid cells 1 [Source:MGI Symbol;Acc:MGI:19301	4.8E+07	5E+07	Trem1
ENSMUSG00000041754	triggering receptor expressed on myeloid cells 3 [Source:MGI Symbol;Acc:MGI:19301	4.8E+07	5E+07	Trem3
ENSMUSG00000051682	triggering receptor expressed on myeloid cells-like 4 [Source:MGI Symbol;Acc:MGI:1	4.8E+07	5E+07	Trem14
ENSMUSG00000071068	triggering receptor expressed on myeloid cells-like 2 [Source:MGI Symbol;Acc:MGI:2	4.8E+07	5E+07	Trem12
ENSMUSG00000043740	RIKEN cDNA B430306N03 gene [Source:MGI Symbol;Acc:MGI:2443478]	4.8E+07	5E+07	B430306N03Rik
ENSMUSG00000023992	triggering receptor expressed on myeloid cells 2 [Source:MGI Symbol;Acc:MGI:19131	4.8E+07	5E+07	Trem2
ENSMUSG00000023993	triggering receptor expressed on myeloid cells-like 1 [Source:MGI Symbol;Acc:MGI:1	4.8E+07	5E+07	Trem11
ENSMUSG00000023994	nuclear transcription factor-Y alpha [Source:MGI Symbol;Acc:MGI:97316]	4.9E+07	5E+07	Nfya
ENSMUSG00000040771	expressed sequence A1314976 [Source:MGI Symbol;Acc:MGI:2146818]	4.9E+07	5E+07	A1314976
ENSMUSG00000040694	apolipoprotein B mRNA editing enzyme, catalytic polypeptide 2 [Source:MGI Symbol;Acc:M	4.9E+07	5E+07	Apobec2
ENSMUSG00000023995	translocator protein 2 [Source:MGI Symbol;Acc:MGI:1917276]	4.9E+07	5E+07	Tspo2
ENSMUSG00000043592	unc-5 homolog C (C. elegans)-like [Source:MGI Symbol;Acc:MGI:1923839]	4.9E+07	5E+07	Unc5cl
ENSMUSG00000040490	leucine rich repeat and fibronectin type III domain containing 2 [Source:MGI Symbol;Acc:MC	4.9E+07	5E+07	Lfn2

ENSMUSG00000064120	molybdenum cofactor synthesis 1 [Source:MGI Symbol;Acc:MGI:1928904]	5E+07	5E+07	Mocs1
ENSMUSG00000040260	dishevelled associated activator of morphogenesis 2 [Source:MGI Symbol;Acc:MGI:192369]	5E+07	5E+07	Daam2
ENSMUSG00000023999	kinesin family member 6 [Source:MGI Symbol;Acc:MGI:1098238]	5E+07	5E+07	Kif6
ENSMUSG00000039316	raftlin lipid raft linker 1 [Source:MGI Symbol;Acc:MGI:1923688]	5E+07	5E+07	Rftn1
ENSMUSG00000067103	cDNA sequence AY702103 [Source:MGI Symbol;Acc:MGI:3525105]	5E+07	5E+07	AY702103
ENSMUSG00000010592	deleted in azoospermia-like [Source:MGI Symbol;Acc:MGI:1342328]	5E+07	5E+07	Dazl
ENSMUSG00000038910	phospholipase C-like 2 [Source:MGI Symbol;Acc:MGI:1352756]	5.1E+07	5E+07	Plcl2
ENSMUSG00000044645	predicted gene 7334 [Source:MGI Symbol;Acc:MGI:3647393]	5.1E+07	5E+07	Gm7334
ENSMUSG00000023923	TBC1 domain family, member 5 [Source:MGI Symbol;Acc:MGI:1919488]	5.1E+07	5E+07	Tbc1d5
ENSMUSG00000023927	special AT-rich sequence binding protein 1 [Source:MGI Symbol;Acc:MGI:105084]	5.2E+07	5E+07	Satb1
ENSMUSG00000035580	potassium voltage-gated channel, subfamily H (eag-related), member 8 [Source:MGI Symbol;Acc:MGI:105926]	5.3E+07	5E+07	Kcnh8
ENSMUSG00000023931	EF hand domain family, member B [Source:MGI Symbol;Acc:MGI:3045296]	5.4E+07	5E+07	Efhh
ENSMUSG00000017831	RAB5A, member RAS oncogene family [Source:MGI Symbol;Acc:MGI:105926]	5.4E+07	5E+07	Rab5a
ENSMUSG00000044957	RIKEN cDNA 4921523A10 gene [Source:MGI Symbol;Acc:MGI:3612067]	5.4E+07	5E+07	4921523A10Rik
ENSMUSG00000000708	K(lysine) acetyltransferase 2B [Source:MGI Symbol;Acc:MGI:1343094]	5.4E+07	5E+07	Kat2b
ENSMUSG00000023940	shugoshin-like 1 (S. pombe) [Source:MGI Symbol;Acc:MGI:1919665]	5.4E+07	5E+07	Sgol1
ENSMUSG00000023122	sulfotransferase family, cytosolic, 1C, member 2 [Source:MGI Symbol;Acc:MGI:1916333]	5.4E+07	5E+07	Sult1c2
ENSMUSG00000021631	mitochondrial ribosomal protein S36, pseudogene 1 [Source:MGI Symbol;Acc:MGI:3809201]	5.4E+07	5E+07	Mrps36-ps1
ENSMUSG00000023943	sulfotransferase family, cytosolic, 1C, member 1 [Source:MGI Symbol;Acc:MGI:102928]	5.4E+07	5E+07	Sult1c1
ENSMUSG00000023945	solute carrier family 5 (choline transporter), member 7 [Source:MGI Symbol;Acc:MGI:19271]	5.4E+07	5E+07	Slc5a7
ENSMUSG00000090831	predicted gene, 17474 [Source:MGI Symbol;Acc:MGI:4937108]	5.5E+07	5E+07	Gm17474
ENSMUSG00000024172	beta galactoside alpha 2,6 sialyltransferase 2 [Source:MGI Symbol;Acc:MGI:2445190]	5.6E+07	6E+07	St6gal2
ENSMUSG00000091504	vomeronal 2, receptor 118 [Source:MGI Symbol;Acc:MGI:3761695]	5.6E+07	6E+07	Vmn2r118
ENSMUSG00000024174	protection of telomeres 1B [Source:MGI Symbol;Acc:MGI:1920086]	5.6E+07	6E+07	Pot1b
ENSMUSG00000032915	EGF-like module containing, mucin-like, hormone receptor-like sequence 4 [Source:MGI Symbol;Acc:MGI:1345189]	5.6E+07	6E+07	Emr4
ENSMUSG00000057835	zinc finger protein 119a [Source:MGI Symbol;Acc:MGI:1345189]	5.6E+07	6E+07	Zfp119a
ENSMUSG00000003198	zinc finger protein 959 [Source:MGI Symbol;Acc:MGI:2385058]	5.6E+07	6E+07	Zfp959
ENSMUSG00000059912	ribosomal protein L21, pseudogene 6 [Source:MGI Symbol;Acc:MGI:3643554]	5.6E+07	6E+07	Rpl21-ps6
ENSMUSG00000062101	zinc finger protein 119b [Source:MGI Symbol;Acc:MGI:2385323]	5.6E+07	6E+07	Zfp119b
ENSMUSG00000003206	Epstein-Barr virus induced gene 3 [Source:MGI Symbol;Acc:MGI:1354171]	5.6E+07	6E+07	Ebi3
ENSMUSG00000003208	coiled-coil domain containing 94 [Source:MGI Symbol;Acc:MGI:1920136]	5.6E+07	6E+07	Ccdc94
ENSMUSG00000039154	src homology 2 domain-containing transforming protein D [Source:MGI Symbol;Acc:MGI:105926]	5.6E+07	6E+07	Shd
ENSMUSG00000011589	fibronectin type 3 and SPRY domain-containing protein [Source:MGI Symbol;Acc:MGI:1934]	5.6E+07	6E+07	Fsd1
ENSMUSG00000038781	signal transducing adaptor family member 2 [Source:MGI Symbol;Acc:MGI:2147039]	5.6E+07	6E+07	Stap2
ENSMUSG00000003199	MPN domain containing [Source:MGI Symbol;Acc:MGI:1915297]	5.6E+07	6E+07	Mpnd
ENSMUSG00000003200	SH3-domain GRB2-like 1 [Source:MGI Symbol;Acc:MGI:700010]	5.6E+07	6E+07	Sh3gl1
ENSMUSG00000002835	chromatin assembly factor 1, subunit A (p150) [Source:MGI Symbol;Acc:MGI:1351331]	5.6E+07	6E+07	Chaf1a
ENSMUSG00000019578	UBX domain protein 6 [Source:MGI Symbol;Acc:MGI:1913780]	5.6E+07	6E+07	Ubxn6
ENSMUSG00000002833	hepatoma-derived growth factor, related protein 2 [Source:MGI Symbol;Acc:MGI:1194492]	5.6E+07	6E+07	Hdgrp2
ENSMUSG00000002831	perilipin 4 [Source:MGI Symbol;Acc:MGI:1929709]	5.6E+07	6E+07	Plin4

ENSMUSG00000011305	perilipin 5 [Source:MGI Symbol;Acc:MGI:1914218]	5.6E+07	6E+07	Plin5
ENSMUSG00000037095	leucine-rich alpha-2-glycoprotein 1 [Source:MGI Symbol;Acc:MGI:1924155]	5.6E+07	6E+07	Lrg1
ENSMUSG00000001227	sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6B [Sc	5.6E+07	6E+07	Sema6b
ENSMUSG00000044469	tumor necrosis factor, alpha-induced protein 8-like 1 [Source:MGI Symbol;Acc:MGI:191369:	5.6E+07	6E+07	Tnfaip8l1
ENSMUSG00000019579	DNA segment, Chr 17, Wayne State University 104, expressed [Source:MGI Symbol;Acc:M	5.6E+07	6E+07	D17Wsu104e
ENSMUSG00000001229	dipeptidylpeptidase 9 [Source:MGI Symbol;Acc:MGI:2443967]	5.6E+07	6E+07	Dpp9
ENSMUSG00000043683	feminization 1 homolog a (C. elegans) [Source:MGI Symbol;Acc:MGI:1335089]	5.6E+07	6E+07	Fem1a
ENSMUSG00000047123	toll-like receptor adaptor molecule 1 [Source:MGI Symbol;Acc:MGI:2147032]	5.6E+07	6E+07	Ticam1
ENSMUSG000000024197	perilipin 3 [Source:MGI Symbol;Acc:MGI:1914155]	5.6E+07	6E+07	Plin3
ENSMUSG00000073380	arrestin domain containing 5 [Source:MGI Symbol;Acc:MGI:1924170]	5.6E+07	6E+07	Arrdc5
ENSMUSG00000001228	ubiquitin-like, containing PHD and RING finger domains, 1 [Source:MGI Symbol;Acc:MGI:1:	5.6E+07	6E+07	Uhrf1
ENSMUSG00000024201	lysine (K)-specific demethylase 4B [Source:MGI Symbol;Acc:MGI:2442355]	5.6E+07	6E+07	Kdm4b
ENSMUSG00000013236	protein tyrosine phosphatase, receptor type, S [Source:MGI Symbol;Acc:MGI:97815]	5.7E+07	6E+07	Ptprs
ENSMUSG00000044526	zinc and ring finger 4 [Source:MGI Symbol;Acc:MGI:1341258]	5.7E+07	6E+07	Znrf4
ENSMUSG00000042625	scaffold attachment factor B2 [Source:MGI Symbol;Acc:MGI:2146808]	5.7E+07	6E+07	Safb2
ENSMUSG00000071054	scaffold attachment factor B [Source:MGI Symbol;Acc:MGI:2146974]	5.7E+07	6E+07	Safb
ENSMUSG00000049760	RIKEN cDNA 2410015M20 gene [Source:MGI Symbol;Acc:MGI:2442174]	5.7E+07	6E+07	2410015M20Rik
ENSMUSG00000057863	ribosomal protein L36 [Source:MGI Symbol;Acc:MGI:1860603]	5.7E+07	6E+07	Rpl36
ENSMUSG00000041168	lon peptidase 1, mitochondrial [Source:MGI Symbol;Acc:MGI:1921392]	5.7E+07	6E+07	Lonp1
ENSMUSG00000040828	transmembrane protein 146 [Source:MGI Symbol;Acc:MGI:2147030]	5.7E+07	6E+07	Tmem146
ENSMUSG00000002372	RAN binding protein 3 [Source:MGI Symbol;Acc:MGI:1919060]	5.7E+07	6E+07	Ranbp3
ENSMUSG00000054723	vimentin-type intermediate filament associated coiled-coil protein [Source:MGI Symbol;Acc:	5.7E+07	6E+07	Vmac
ENSMUSG00000002379	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 11 [Source:MGI Symbol;Acc:MGI:	5.7E+07	6E+07	Ndufa11
ENSMUSG00000039481	neurturin [Source:MGI Symbol;Acc:MGI:108417]	5.7E+07	6E+07	Nrtn
ENSMUSG00000007603	dihydrouridine synthase 3-like (S. cerevisiae) [Source:MGI Symbol;Acc:MGI:2147092]	5.7E+07	6E+07	Dus3l
ENSMUSG00000090273	proline rich 22 [Source:MGI Symbol;Acc:MGI:2685392]	5.7E+07	6E+07	Prr22
ENSMUSG00000024206	regulatory factor X, 2 (influences HLA class II expression) [Source:MGI Symbol;Acc:MGI:10	5.7E+07	6E+07	Rfx2
ENSMUSG00000024207	acyl-CoA synthetase bubblegum family member 2 [Source:MGI Symbol;Acc:MGI:3587728]	5.7E+07	6E+07	Acsbg2
ENSMUSG00000024209	RIKEN cDNA 1700061G19 gene [Source:MGI Symbol;Acc:MGI:1925875]	5.7E+07	6E+07	1700061G19Rik
ENSMUSG00000024212	myeloid/lymphoid or mixed-lineage leukemia (trithorax homolog, Drosophila); translocated t	5.7E+07	6E+07	Mllt1
ENSMUSG00000045019	alkaline ceramidase 1 [Source:MGI Symbol;Acc:MGI:2181962]	5.7E+07	6E+07	Acer1
ENSMUSG00000002660	caseinolytic peptidase, ATP-dependent, proteolytic subunit homolog (E. coli) [Source:MGI S	5.7E+07	6E+07	Clpp
ENSMUSG00000002661	alkB, alkylation repair homolog 7 (E. coli) [Source:MGI Symbol;Acc:MGI:1913650]	5.7E+07	6E+07	Alkbh7
ENSMUSG00000002664	persephin [Source:MGI Symbol;Acc:MGI:1201684]	5.7E+07	6E+07	Pspn
ENSMUSG00000002658	general transcription factor IIF, polypeptide 1 [Source:MGI Symbol;Acc:MGI:1923848]	5.7E+07	6E+07	Gtf2f1
ENSMUSG00000007670	KH-type splicing regulatory protein [Source:MGI Symbol;Acc:MGI:1336214]	5.7E+07	6E+07	Khsrp
ENSMUSG00000011486	solute carrier family 25, member 41 [Source:MGI Symbol;Acc:MGI:2144215]	5.7E+07	6E+07	Slc25a41
ENSMUSG00000046329	solute carrier family 25 (mitochondrial carrier; phosphate carrier), member 23 [Source:MGI :	5.7E+07	6E+07	Slc25a23
ENSMUSG00000044279	crumbs homolog 3 (Drosophila) [Source:MGI Symbol;Acc:MGI:2670904]	5.7E+07	6E+07	Crb3
ENSMUSG00000002668	DENN/MADD domain containing 1C [Source:MGI Symbol;Acc:MGI:1918035]	5.7E+07	6E+07	Dennd1c

ENSMUSG00000062591	tubulin, beta 4A class IVA [Source:MGI Symbol;Acc:MGI:107848]	5.7E+07	6E+07	Tubb4a
ENSMUSG00000079414	predicted gene 11110 [Source:MGI Symbol;Acc:MGI:3779362]	5.7E+07	6E+07	Gm11110
ENSMUSG00000035678	tumor necrosis factor (ligand) superfamily, member 9 [Source:MGI Symbol;Acc:MGI:1195273]	5.7E+07	6E+07	Tnfsf9
ENSMUSG00000019489	CD70 antigen [Source:MGI Symbol;Acc:MGI:1195273]	5.7E+07	6E+07	Cd70
ENSMUSG00000005824	tumor necrosis factor (ligand) superfamily, member 14 [Source:MGI Symbol;Acc:MGI:1195273]	5.7E+07	6E+07	Tnfsf14
ENSMUSG00000024164	complement component 3 [Source:MGI Symbol;Acc:MGI:88227]	5.7E+07	6E+07	C3
ENSMUSG00000005823	G protein-coupled receptor 108 [Source:MGI Symbol;Acc:MGI:1925558]	5.7E+07	6E+07	Gpr108
ENSMUSG00000019487	thyroid hormone receptor interactor 10 [Source:MGI Symbol;Acc:MGI:2146901]	5.7E+07	6E+07	Trip10
ENSMUSG00000034116	vav 1 oncogene [Source:MGI Symbol;Acc:MGI:98923]	5.7E+07	6E+07	Vav1
ENSMUSG00000004730	EGF-like module containing, mucin-like, hormone receptor-like sequence 1 [Source:MGI Symbol;Acc:MGI:1195273]	5.7E+07	6E+07	Emr1
ENSMUSG00000090655	vomer nasal 2, receptor 120 [Source:MGI Symbol;Acc:MGI:3644483]	5.8E+07	6E+07	Vmn2r120
ENSMUSG00000038048	contactin associated protein-like 5C [Source:MGI Symbol;Acc:MGI:3646013]	5.8E+07	6E+07	Cntnap5c
ENSMUSG00000071052	ribosomal protein L7A, pseudogene 5 [Source:MGI Symbol;Acc:MGI:3643553]	5.8E+07	6E+07	Rpl7a-ps5
ENSMUSG00000024227	RIKEN cDNA 2610034M16 gene [Source:MGI Symbol;Acc:MGI:1916489]	5.9E+07	6E+07	2610034M16Rik
ENSMUSG00000024228	nudix (nucleoside diphosphate linked moiety X)-type motif 12 [Source:MGI Symbol;Acc:MGI:107444]	5.9E+07	6E+07	Nudt12
ENSMUSG00000048915	ephrin A5 [Source:MGI Symbol;Acc:MGI:107444]	6.3E+07	6E+07	EfnA5
ENSMUSG00000023965	F-box and leucine-rich repeat protein 17 [Source:MGI Symbol;Acc:MGI:1354704]	6.3E+07	6E+07	Fbxl17
ENSMUSG00000045506	RIKEN cDNA A930002H24 gene [Source:MGI Symbol;Acc:MGI:2443151]	6.4E+07	6E+07	A930002H24Rik
ENSMUSG00000000127	fer (fms/fps related) protein kinase [Source:MGI Symbol;Acc:MGI:105917]	6.4E+07	6E+07	Fer
ENSMUSG00000024083	praja 2, RING-H2 motif containing [Source:MGI Symbol;Acc:MGI:2159342]	6.5E+07	6E+07	Pja2
ENSMUSG00000073377	expressed sequence AU016765 [Source:MGI Symbol;Acc:MGI:3034888]	6.5E+07	6E+07	AU016765
ENSMUSG00000024085	mannosidase 2, alpha 1 [Source:MGI Symbol;Acc:MGI:104669]	6.5E+07	7E+07	Man2a1
ENSMUSG00000024088	RIKEN cDNA 4930583I09 gene [Source:MGI Symbol;Acc:MGI:1925307]	6.5E+07	7E+07	4930583I09Rik
ENSMUSG00000045036	transmembrane protein 232 [Source:MGI Symbol;Acc:MGI:2685786]	6.6E+07	7E+07	Tmem232
ENSMUSG00000024091	vesicle-associated membrane protein, associated protein A [Source:MGI Symbol;Acc:MGI:1916017]	6.6E+07	7E+07	Vapa
ENSMUSG00000050612	thioredoxin domain containing 2 (spermatzoa) [Source:MGI Symbol;Acc:MGI:2389312]	6.6E+07	7E+07	Txndc2
ENSMUSG00000056515	RAB31, member RAS oncogene family [Source:MGI Symbol;Acc:MGI:1914603]	6.6E+07	7E+07	Rab31
ENSMUSG00000061950	protein phosphatase 4, regulatory subunit 1 [Source:MGI Symbol;Acc:MGI:1917601]	6.6E+07	7E+07	Ppp4r1
ENSMUSG00000024096	ralA binding protein 1 [Source:MGI Symbol;Acc:MGI:108466]	6.6E+07	7E+07	Ralbp1
ENSMUSG00000024098	twisted gastrulation homolog 1 (Drosophila) [Source:MGI Symbol;Acc:MGI:2137520]	6.6E+07	7E+07	Twsg1
ENSMUSG00000034647	ankyrin repeat domain 12 [Source:MGI Symbol;Acc:MGI:1914357]	6.6E+07	7E+07	Ankrd12
ENSMUSG00000024099	NADH dehydrogenase (ubiquinone) flavoprotein 2 [Source:MGI Symbol;Acc:MGI:1920150]	6.6E+07	7E+07	Ndufv2
ENSMUSG00000024101	open reading frame 19 [Source:MGI Symbol;Acc:MGI:1916017]	6.6E+07	7E+07	ORF19
ENSMUSG00000035842	DEAD/H (Asp-Glu-Ala-Asp/His) box polypeptide 11 (CHL1-like helicase homolog, S. cerevisiae) [Source:MGI Symbol;Acc:MGI:10495]	6.6E+07	7E+07	Ddx11
ENSMUSG00000073376	predicted gene 10495 [Source:MGI Symbol;Acc:MGI:3642611]	6.7E+07	7E+07	Gm10495
ENSMUSG00000052105	RIKEN cDNA 1110012J17 gene [Source:MGI Symbol;Acc:MGI:1915867]	6.7E+07	7E+07	1110012J17Rik
ENSMUSG00000023460	RAB12, member RAS oncogene family [Source:MGI Symbol;Acc:MGI:894284]	6.7E+07	7E+07	Rab12
ENSMUSG00000024105	RIKEN cDNA 9130404H23 gene [Source:MGI Symbol;Acc:MGI:1921806]	6.7E+07	7E+07	9130404H23Rik
ENSMUSG00000033278	protein tyrosine phosphatase, receptor type, M [Source:MGI Symbol;Acc:MGI:102694]	6.7E+07	7E+07	Ptpm
ENSMUSG00000073375	leucine rich repeat containing 30 [Source:MGI Symbol;Acc:MGI:2685172]	6.8E+07	7E+07	Lrrc30

ENSMUSG00000032796	laminin, alpha 1 [Source:MGI Symbol;Acc:MGI:99892]	6.8E+07	7E+07	Lama1
ENSMUSG00000024043	Rho GTPase activating protein 28 [Source:MGI Symbol;Acc:MGI:2147003]	6.8E+07	7E+07	Arhgap28
ENSMUSG00000041565	l(3)mbt-like 4 (Drosophila) [Source:MGI Symbol;Acc:MGI:2444889]	6.9E+07	7E+07	L3mbtl4
ENSMUSG00000024044	erythrocyte protein band 4.1-like 3 [Source:MGI Symbol;Acc:MGI:103008]	7E+07	7E+07	Epb4.1l3
ENSMUSG00000049672	zinc finger protein 161 [Source:MGI Symbol;Acc:MGI:1195345]	7E+07	7E+07	Zfp161
ENSMUSG00000073374	RIKEN cDNA C030034I22 gene [Source:MGI Symbol;Acc:MGI:1924783]	7E+07	7E+07	C030034I22Rik
ENSMUSG00000091636	RIKEN cDNA A330050F15 gene [Source:MGI Symbol;Acc:MGI:2444600]	7E+07	7E+07	A330050F15Rik
ENSMUSG00000003279	discs, large (Drosophila) homolog-associated protein 1 [Source:MGI Symbol;Acc:MGI:1346]	7E+07	7E+07	Dlgap1
ENSMUSG00000047407	TGFB-induced factor homeobox 1 [Source:MGI Symbol;Acc:MGI:1194497]	7.1E+07	7E+07	Tgif1
ENSMUSG00000066983	predicted gene, 16519 [Source:MGI Symbol;Acc:MGI:4360871]	7.1E+07	7E+07	Gm16519
ENSMUSG00000034868	myosin, light chain 12B, regulatory [Source:MGI Symbol;Acc:MGI:107494]	7.1E+07	7E+07	Myl12b
ENSMUSG00000024048	myosin, light chain 12A, regulatory, non-sarcomeric [Source:MGI Symbol;Acc:MGI:1914518]	7.1E+07	7E+07	Myl12a
ENSMUSG00000024049	myomesin 1 [Source:MGI Symbol;Acc:MGI:1341430]	7.1E+07	7E+07	Myom1
ENSMUSG00000024052	lipin 2 [Source:MGI Symbol;Acc:MGI:1891341]	7.2E+07	7E+07	Lpin2
ENSMUSG00000024053	elastin microfibril interfacier 2 [Source:MGI Symbol;Acc:MGI:2389136]	7.2E+07	7E+07	Emilin2
ENSMUSG00000024054	SMC hinge domain containing 1 [Source:MGI Symbol;Acc:MGI:1921605]	7.2E+07	7E+07	Smchd1
ENSMUSG00000024056	NDC80 homolog, kinetochore complex component (S. cerevisiae) [Source:MGI Symbol;Acc:	7.2E+07	7E+07	Ndc80
ENSMUSG00000052525	speedy homolog A (Xenopus laevis) [Source:MGI Symbol;Acc:MGI:1918141]	7.2E+07	7E+07	Spdya
ENSMUSG00000041057	WD repeat domain 43 [Source:MGI Symbol;Acc:MGI:1919765]	7.2E+07	7E+07	Wdr43
ENSMUSG00000045761	family with sequence similarity 179, member A [Source:MGI Symbol;Acc:MGI:2443498]	7.2E+07	7E+07	Fam179a
ENSMUSG00000044375	cDNA sequence BC027072 [Source:MGI Symbol;Acc:MGI:2385061]	7.2E+07	7E+07	BC027072
ENSMUSG00000024059	CAP-GLY domain containing linker protein family, member 4 [Source:MGI Symbol;Acc:MGI:	7.2E+07	7E+07	Clip4
ENSMUSG00000055471	anaplastic lymphoma kinase [Source:MGI Symbol;Acc:MGI:103305]	7.2E+07	7E+07	Alk
ENSMUSG00000039770	yippee-like 5 (Drosophila) [Source:MGI Symbol;Acc:MGI:1916937]	7.3E+07	7E+07	Ypel5
ENSMUSG00000024063	limb-bud and heart [Source:MGI Symbol;Acc:MGI:1925139]	7.3E+07	7E+07	Lbh
ENSMUSG00000054469	lysocardiolipin acyltransferase 1 [Source:MGI Symbol;Acc:MGI:2684937]	7.3E+07	7E+07	Lclat1
ENSMUSG00000043705	calpain 13 [Source:MGI Symbol;Acc:MGI:2685789]	7.4E+07	7E+07	Capn13
ENSMUSG00000024064	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 14 [S:	7.4E+07	7E+07	Galnt14
ENSMUSG00000024065	EH-domain containing 3 [Source:MGI Symbol;Acc:MGI:1928900]	7.4E+07	7E+07	Ehd3
ENSMUSG00000024066	xanthine dehydrogenase [Source:MGI Symbol;Acc:MGI:98973]	7.4E+07	7E+07	Xdh
ENSMUSG00000038541	steroid 5 alpha-reductase 2 [Source:MGI Symbol;Acc:MGI:2150380]	7.4E+07	7E+07	Srd5a2
ENSMUSG00000058704	mediator of cell motility 1 [Source:MGI Symbol;Acc:MGI:1924140]	7.5E+07	7E+07	Memo1
ENSMUSG00000024067	dpy-30 homolog (C. elegans) [Source:MGI Symbol;Acc:MGI:1913560]	7.5E+07	7E+07	Dpy30
ENSMUSG00000024068	spastin [Source:MGI Symbol;Acc:MGI:1858896]	7.5E+07	7E+07	Spast
ENSMUSG00000024069	solute carrier family 30 (zinc transporter), member 6 [Source:MGI Symbol;Acc:MGI:238674:	7.5E+07	7E+07	Slc30a6
ENSMUSG00000039193	NLR family, CARD domain containing 4 [Source:MGI Symbol;Acc:MGI:3036243]	7.5E+07	7E+07	Nlr4
ENSMUSG00000024072	Yip1 domain family, member 4 [Source:MGI Symbol;Acc:MGI:1915114]	7.5E+07	7E+07	Yipf4
ENSMUSG00000024073	baculoviral IAP repeat-containing 6 [Source:MGI Symbol;Acc:MGI:1276108]	7.5E+07	8E+07	Birc6
ENSMUSG00000024078	tetratricopeptide repeat domain 27 [Source:MGI Symbol;Acc:MGI:1921446]	7.5E+07	8E+07	Ttc27
ENSMUSG00000001870	latent transforming growth factor beta binding protein 1 [Source:MGI Symbol;Acc:MGI:1091	7.5E+07	8E+07	Ltbp1

ENSMUSG00000071042	RAS, guanyl releasing protein 3 [Source:MGI Symbol;Acc:MGI:3028579]	7.6E+07	8E+07	Rasgrp3
ENSMUSG00000002017	family with sequence similarity 98, member A [Source:MGI Symbol;Acc:MGI:1919972]	7.6E+07	8E+07	Fam98a