

**Supplemental figure legends, figures, and tables:**

**Figure S1. Inactivation of Mtg16 leads to enhanced Gr1<sup>+</sup>/Mac1<sup>+</sup> production after competitive bone marrow transplantation with impaired lymphoid production.** (A) Flow cytometry analysis of CD45.2<sup>+</sup> bone marrow cells that were Gr1<sup>+</sup>/Mac1<sup>+</sup> or B220<sup>+</sup> 12 weeks after a competitive repopulation assay. Shown is a representative plot from an experiment performed in triplicate that is consistent with other biological replicates. (B) Flow cytometry analysis of CD45.2<sup>+</sup> thymocytes 12 weeks after a competitive repopulation assay. Shown is a representative plot from an experiment performed in triplicate that is consistent with other biological replicates.

**Figure S2. Flow cytometry analysis of LSK (A) or LSK/Flt3<sup>-</sup> (B) cells to determine the percentage of CD45.2 that had repopulated the bone marrow 12 weeks after a competitive repopulation assay.** Shown is a representative plot from an experiment performed in triplicate that is consistent with other biological replicates. Graphical representation of quantified data is shown in Fig. 2.

**Figure S3. Flow cytometry analysis of LSK (A) or LSK/Flt3<sup>-</sup> (B) cells to determine the percentage of CD45.2 that had repopulated the bone marrow 6 weeks after a secondary competitive bone marrow transplant.** Shown is a representative plot from an experiment performed in triplicate that is consistent with other biological replicates. Graphical representation of quantified data is shown in Fig. 3.

**Figure S4. Wild type stromal cells express low to undetectable levels of Mtg16.** Table displaying the average cycle threshold (C<sub>t</sub>) from quantitative real-time PCR for MTG family members in MEL cells, WT bone marrow stroma, and WT MEFs. MEL, murine erythroleukemia cells; WT, wild type; BM, bone marrow; MEF, murine embryo fibroblasts; N/D, not detected. Data are shown as an average from two biological replicates.

**Figure S5. Expression levels of Mtg16 mutant constructs.** (A) Immunoblot analysis of BOSC cell lysates shows the expression of Myc epitope tagged forms of Mtg16 protein after transfection with MSCV plasmids containing wild type (Mtg16) or Mtg16 mutant (F210A and R220A) constructs using anti-c-Myc. (B) Flow cytometry analysis of bone marrow cells 5 days after infection with indicated MSCV-Mtg16 constructs to detect GFP expression from the MSCV-Mtg16-IRES-GFP constructs.

**Figure S6. Chromatin immunoprecipitation analysis of *Cyclin D1*, *N-Myc* and *Mtg16*.** ChIP was performed with either control IgG or anti-Mtg16/Eto2 from lysates of MEL cells. Immunopurified DNA was amplified with primers flanking a TCF4 binding site or both an E box and a CSL binding site in the *Cyclin D1* gene (*Ccnd1*) or regions encompassing a TCF4 binding site in *N-Myc*. ChIP of an E box site in *Mtg16* was used as a positive control. Graph shows the level of quantitative PCR signal relative to IgG set to “1”.

**Figure S7. Quantification of cycling stem and progenitor cells.** (A) Graph shows the quantification of the number of LSK BrdU<sup>+</sup> cells from biological replicates in Fig. 7A. (B) Quantification of the percentage of G<sub>0</sub> LSK cells from biological replicates from Fig. 7B is shown graphically at the right (wild type, empty bars; *Mtg16*-null, full bars). (C) Cell cycle status of LSK/Flt3<sup>-</sup> cells was analyzed using BrdU. Mice were injected with 1 mg of BrdU, and 2 hours later the bone marrow was harvested and lineage depleted. The lineage negative cells were then stained using anti-c-Kit, anti-Sca1, anti-Flt3 and anti-BrdU. Shown is a representative FACS plot from an experiment performed with 6 mice that is consistent with other biological replicates. Graphical representation of quantified data is shown in Fig. 7C. (D) Cell cycle status of LSK/SLAM cells was analyzed using BrdU as described in C. The lineage negative cells were then stained using anti-c-Kit, anti-Sca1, anti-CD48, anti-CD150 and anti-BrdU. Shown is a

representative FACS plot from an experiment performed with 7 mice that is consistent with other biological replicates. Graphical representation of quantified data is shown in Fig. 7D.

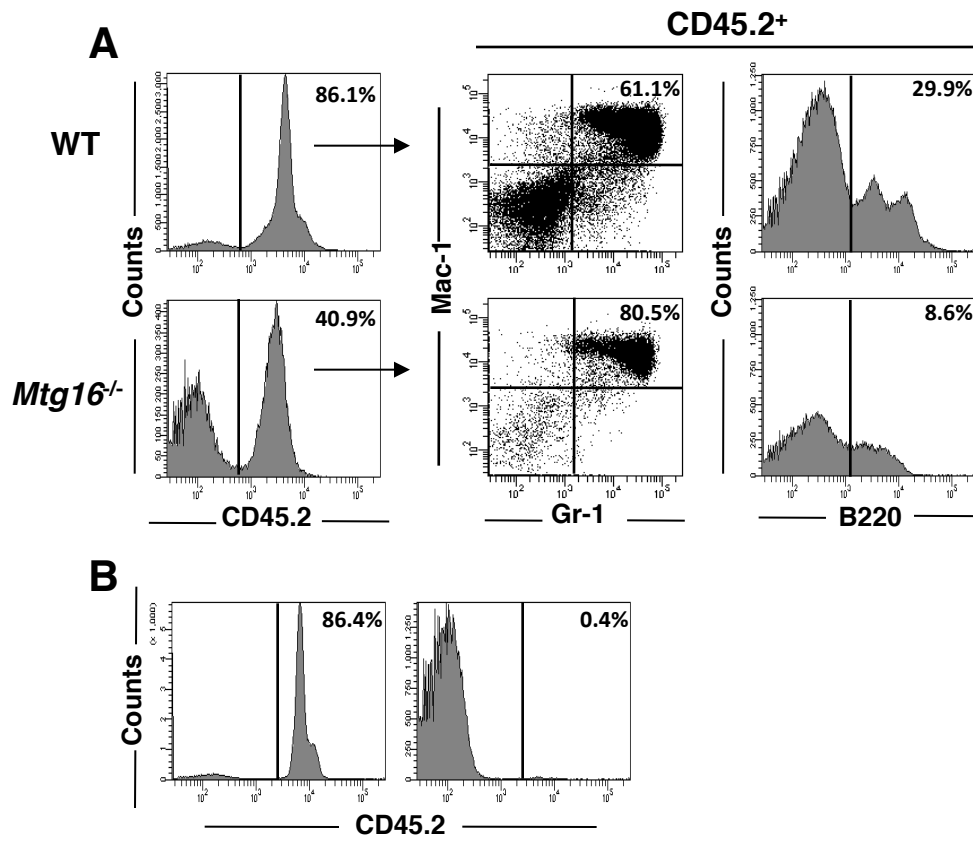


Figure S1

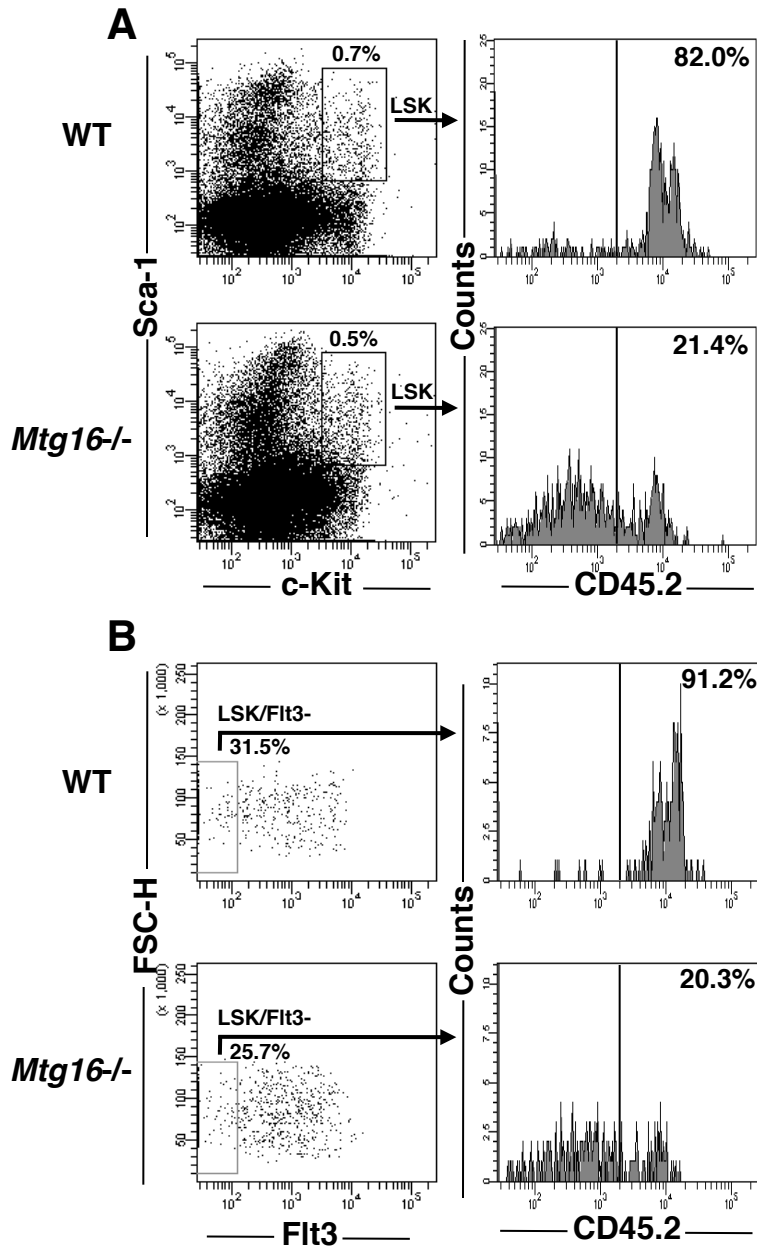


Figure S2

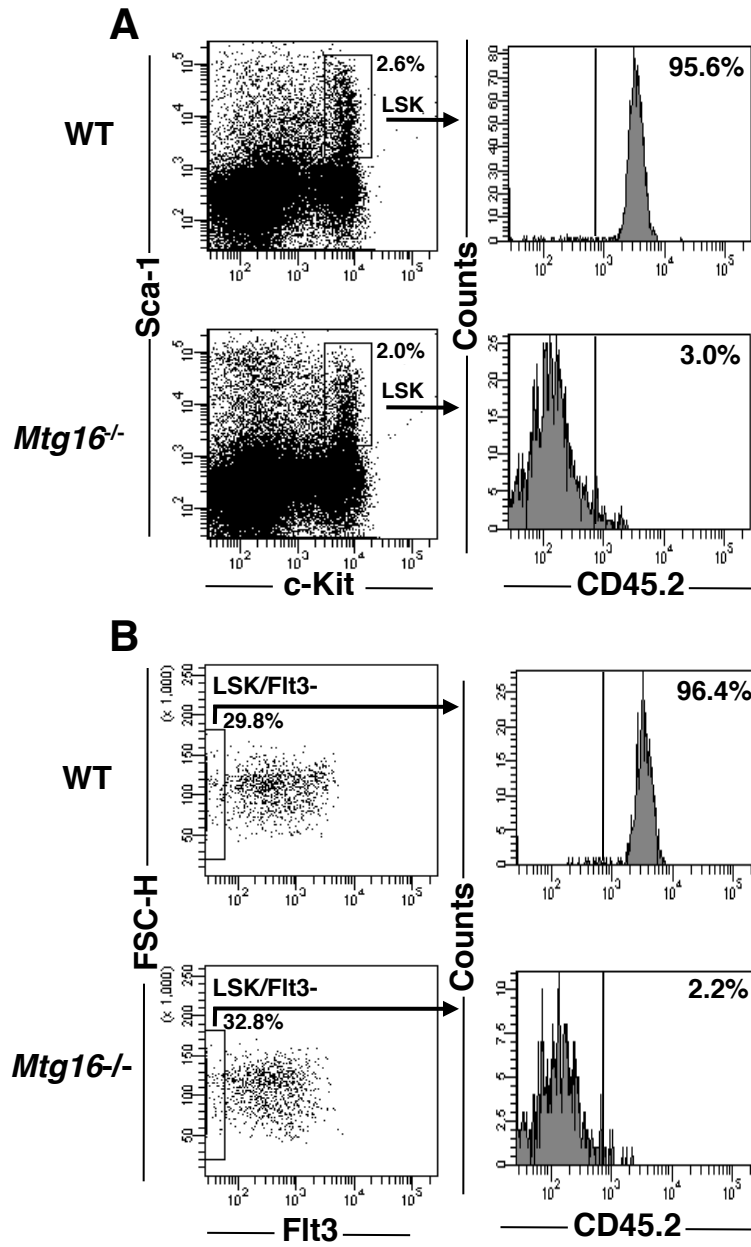


Figure S3

	<b>Gapdh</b>	<b>Mtg16</b>	<b>Mtg8</b>	<b>Mtgr1</b>
<b>MEL</b>	13.1	18.9	N/D	21.0
<b>WT BM Stroma</b>	13.1	26.9	N/D	22.2
<b>WT MEF</b>	13.1	27.6	21.9	21.5

**Figure S4**

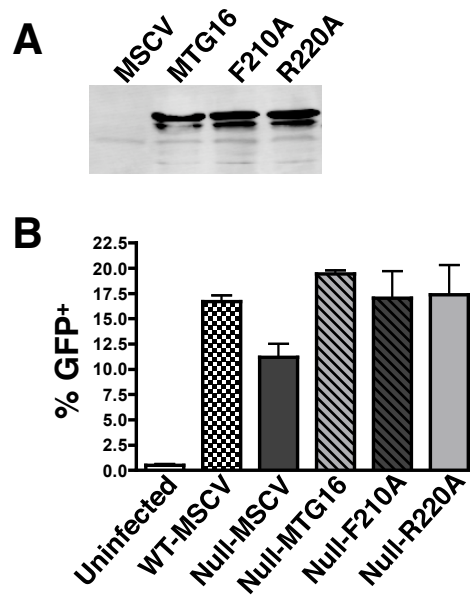


Figure S5



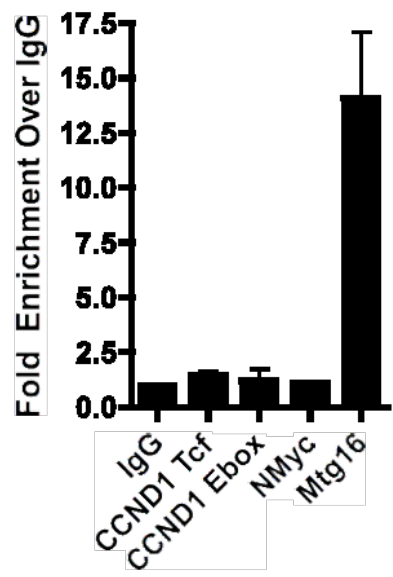


Figure S6

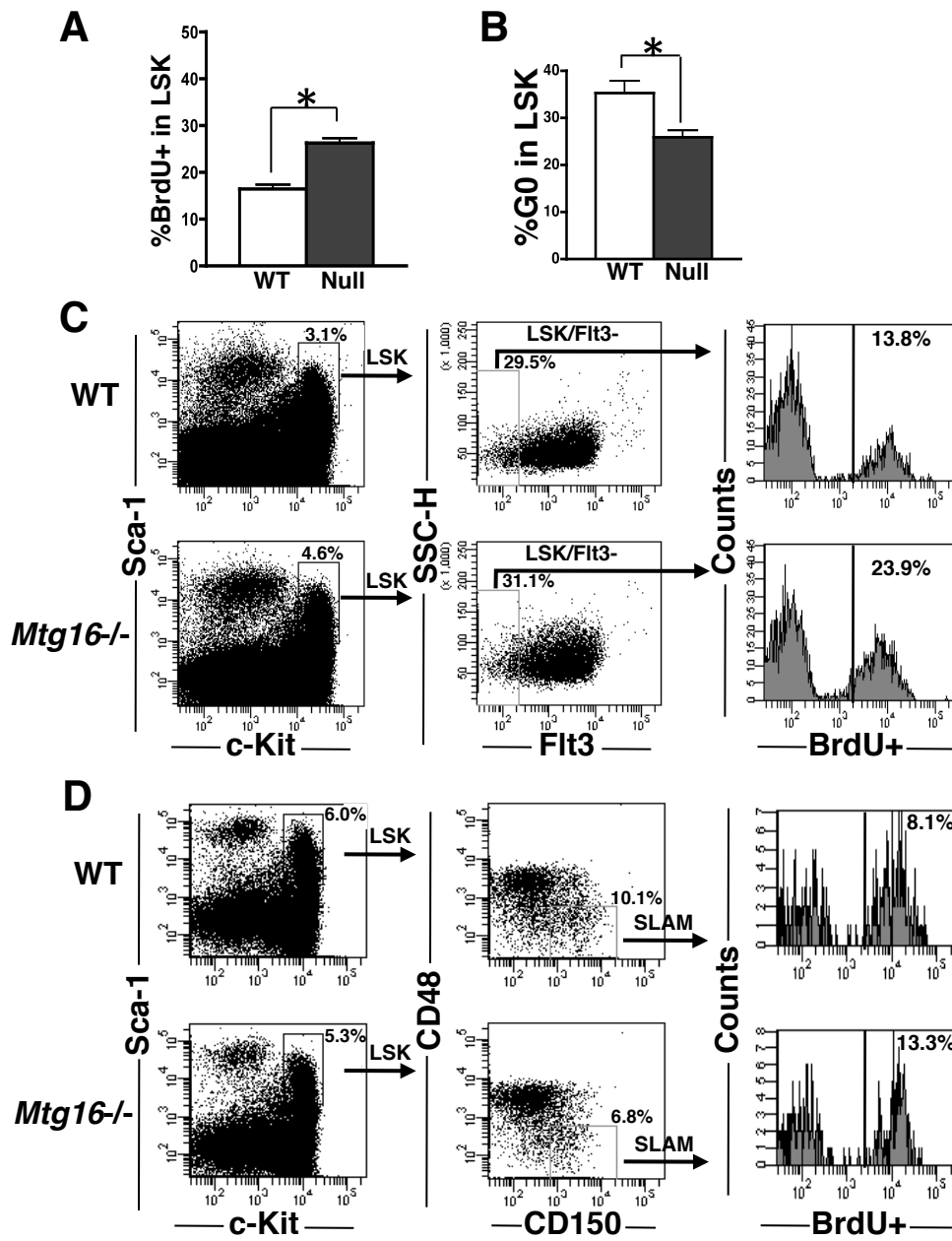


Figure S7

**Table S1. Up-regulated gene expression changes in *Mtg16*-null LSK cells.** An Excel spreadsheet containing the list of genes that were up-regulated at least 2-fold in *Mtg16*-null LSK cells with the average fold change between three separate microarrays displayed as a ratio to 1.

<b>Systematic</b>	<b>Average Fold Change</b>	<b>Gene Symbol</b>	<b>Gene Name</b>
591371	27.88	Hspa1a	heat shock protein 1A
345685	14.95	Centb1	centaurin, beta 1
876101	13.89	Erdr1	erythroid differentiation regulator 1
821318	13.70	Ivns1abp	influenza virus NS1A binding protein
865694	12.87	Rrm1	ribonucleotide reductase M1
926125	11.97	Elav14	ELAV (embryonic lethal, abnormal vision, <i>Drosophila</i> )-like 4 (Hu antigen D)
680809	10.59	Sla	src-like adaptor
383491	9.10	Trpc4ap	transient receptor potential cation channel, subfamily C, member 4 associated protein
513587	9.04	Cd276	CD276 antigen
406680	8.91	Hes1	hairy and enhancer of split 1 ( <i>Drosophila</i> )
923224	8.86	Rgs1	regulator of G-protein signaling 1
450603	7.78	Stxbp4	syntaxin binding protein 4
331501	7.49	Pabpc1	poly A binding protein, cytoplasmic 1
600731	7.46	Hk3	hexokinase 3
501289	7.31	Psen1	presenilin 1
676713	7.12	Casp2	caspase 2
511638	6.60	Id2	inhibitor of DNA binding 2
852613	6.43	Ccl3	chemokine (C-C motif) ligand 3
798198	6.37	Ddx6	DEAD (Asp-Glu-Ala-Asp) box polypeptide 6
436322	6.34	Calcr1	calcitonin receptor-like
408476	6.34	Ahcyl1	S-adenosylhomocysteine hydrolase-like 1
492624	6.33	Ccl4	chemokine (C-C motif) ligand 4
349496	6.11	Gem	GTP binding protein (gene overexpressed in skeletal muscle)
907300	5.62	Id1	inhibitor of DNA binding 1
671981	5.60	Clec4e	C-type lectin domain family 4, member e
499148	5.51	Olfir632	olfactory receptor 632
451340	5.36	Gdf3	growth differentiation factor 3
525210	5.29	Pik3cd	phosphatidylinositol 3-kinase catalytic delta polypeptide

437853	5.23	Gsk3b	glycogen synthase kinase 3 beta
336985	5.12	Angpt1	angiopoietin 1
605820	5.11	Rps13	ribosomal protein S13
532970	4.78	Smc11	SMC (structural maintenance of chromosomes 1)-like 1 ( <i>S. cerevisiae</i> )
564553	4.70	Il8rb	interleukin 8 receptor, beta
585703	4.69	Def6	differentially expressed in FDCP 6
930937	4.69	Spo11	sporulation protein, meiosis-specific, SPO11 homolog ( <i>S. cerevisiae</i> )
298459	4.67	Chd4	chromodomain helicase DNA binding protein 4
486725	4.66	Hcls1	hematopoietic cell specific Lyn substrate 1
583682	4.61	Gpr128	G protein-coupled receptor 128
650895	4.59	Serpin10	serine (or cysteine) peptidase inhibitor, clade B (ovalbumin), member 10
740005	4.45	Hbb-b2 Hbb-b1	hemoglobin, beta adult minor chain hemoglobin beta chain complex hemoglobin, beta adult major chain
668771	4.44	Itih5	inter-alpha (globulin) inhibitor H5
763662	4.44	Senp1	SUMO1/sentrin specific peptidase 1
430677	4.40	Gria2	glutamate receptor, ionotropic, AMPA2 (alpha 2)
875407	4.32	Dynll2	dynein light chain LC8-type 2
417877	4.28	Prkcq	protein kinase C, theta
647221	4.22	Sept 6	septin 6
674723	4.21	Phlda1	pleckstrin homology-like domain, family A, member 1
308861	4.17	Stxbp4	syntaxin binding protein 4
673350	4.08	Cdk2	cyclin-dependent kinase 2
338672	4.03	Tmem88	transmembrane protein 88
921937	4.02	Col18a1	procollagen, type XVIII, alpha 1
903894	4.01	Hnrpa3	heterogeneous nuclear ribonucleoprotein A3
697466	3.90	Smarcc1	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily c, member 1
932068	3.88	Chga	chromogranin A
551351	3.86	Cox4i2	cytochrome c oxidase subunit IV isoform 2
313808	3.86	Rbbp8	retinoblastoma binding protein 8
742622	3.83	Dusp2	dual specificity phosphatase 2
743607	3.81	Socs3	suppressor of cytokine signaling 3
528830	3.80	Arhgef2	rho/rac guanine nucleotide exchange factor (GEF) 2
419506	3.79	Dcx	doublecortin
397393	3.79	Ccng2	cyclin G2
434575	3.76	Cbx3	chromobox homolog 3 ( <i>Drosophila</i> HP1 gamma)
635231	3.74	Man2b1	mannosidase 2, alpha B1
609659	3.71	Ybx1	Y box protein 1

458649	3.70	Nbeal2	neurobeachin-like 2
331404	3.70	Dvl2	dishevelled 2, dsh homolog (Drosophila)
599323	3.65	Atp2a3	ATPase, Ca <sup>++</sup> transporting, ubiquitous
367849	3.62	Bpgm	2,3-bisphosphoglycerate mutase
522440	3.58	Rutbc2	RUN and TBC1 domain containing 2
370198	3.58	Chchd2	coiled-coil-helix-coiled-coil-helix domain containing 2
609379	3.58	Crkrs	Cdc2-related kinase, arginine/serine-rich
587320	3.56	Tmprss4	transmembrane protease, serine 4
550354	3.55	Phip	pleckstrin homology domain interacting protein
911717	3.53	Slc6a15	solute carrier family 6 (neurotransmitter transporter), member 15
584535	3.53	Fmo5	flavin containing monooxygenase 5
423512	3.52	Runx1	runt related transcription factor 1
705434	3.48	Alx3	aristaless 3
432495	3.44	Slc39a9	solute carrier family 39 (zinc transporter), member 9
602563	3.43	Hspa12b	heat shock protein 12B
890999	3.42	Zbtb11	zinc finger and BTB domain containing 11
383002	3.42	Prap1	proline-rich acidic protein 1
855018	3.41	Jak2	Janus kinase 2
568272	3.40	Top2b	topoisomerase (DNA) II beta
374634	3.36	Tec	cytoplasmic tyrosine kinase, Dscr28C related (Drosophila)
509058	3.33	Cebpz	CCAAT/enhancer binding protein zeta
489532	3.32	Stat3	signal transducer and activator of transcription 3
463565	3.30	Fos	FBJ osteosarcoma oncogene
520422	3.26	Hdgfrp3	hepatoma-derived growth factor, related protein 3
662485	3.25	Rasd1	RAS, dexamethasone-induced 1
477242	3.21	Pdcd1lg2	programmed cell death 1 ligand 2
706854	3.20	Add1	adducin 1 (alpha)
807992	3.20	Ddx27	DEAD (Asp-Glu-Ala-Asp) box polypeptide 27
858127	3.20	Arhgap25	Rho GTPase activating protein 25
360890	3.18	Tnrc6b	trinucleotide repeat containing 6b
700170	3.18	Tsc22d3	TSC22 domain family 3
805305	3.15	Grid1	glutamate receptor, ionotropic, delta 1
657515	3.14	Acvr1b	activin A receptor, type 1B
367379	3.14	Trpc6	transient receptor potential cation channel, subfamily C, member 6
684760	3.14	Spats1	spermatogenesis associated, serine-rich 1
428331	3.13	Gpr43	G protein-coupled receptor 43

519556	3.13	Itga9	integrin alpha 9
312249	3.08	Acox1	acyl-Coenzyme A oxidase 1, palmitoyl
639094	3.08	Gimap7	GTPase, IMAP family member 7
571155	3.07	Fmn2	formin 2
726308	3.07	Klhl24	kelch-like 24 (Drosophila)
701423	3.06	Irf6	interferon regulatory factor 6
679840	3.05	Myom1	myomesin 1
646764	3.03	Pik3ap1	phosphoinositide-3-kinase adaptor protein 1
905471	3.02	Ier3	immediate early response 3
705438	3.02	Slc16a9	solute carrier family 16 (monocarboxylic acid transporters), member 9
508929	3.00	Txndc14	thioredoxin domain containing 14
627739	2.96	Impact	imprinted and ancient
769774	2.95	Rps6ka6	ribosomal protein S6 kinase polypeptide 6
656054	2.95	Malat1	metastasis associated lung adenocarcinoma transcript 1 (non-coding RNA)
734593	2.95	Taf15	TAF15 RNA polymerase II, TATA box binding protein (TBP)-associated factor
558144	2.94	Gimap6	GTPase, IMAP family member 6
367319	2.94	Bat3	HLA-B-associated transcript 3
470968	2.92	Serpina3k	serine (or cysteine) peptidase inhibitor, clade A, member 3K
479998	2.91	Ehd3	EH-domain containing 3
864257	2.90	Csen	calnenilin, presenilin binding protein, EF hand transcription factor
769260	2.90	Pcf11	cleavage and polyadenylation factor subunit homolog (S. cerevisiae)
788428	2.90	Zmym6	zinc finger, MYM-type 6
450169	2.90	Diap1	diaphanous homolog 1 (Drosophila)
302054	2.90	Rapgef5	Rap guanine nucleotide exchange factor (GEF) 5
911454	2.89	Fgd5	FYVE, RhoGEF and PH domain containing 5
305716	2.89	Eif3s10	eukaryotic translation initiation factor 3, subunit 10 (theta)
620558	2.89	Smad1	MAD homolog 1 (Drosophila)
892217	2.87	Rab5b	RAB5B, member RAS oncogene family
687333	2.87	Prkd2	protein kinase D2
455664	2.86	Eprs	glutamyl-prolyl-tRNA synthetase
698480	2.85	Slmap	sarcolemma associated protein
831009	2.82	Bpil2	bactericidal/permeability-increasing protein-like 2
804642	2.82	Mgea5	meningioma expressed antigen 5 (hyaluronidase)
489010	2.81	Hmgb1	high mobility group box 1
778661	2.81	Esr1	estrogen receptor 1 (alpha)
851737	2.80	Arhgap30	Rho GTPase activating protein 30

309811	2.79	E2f2	E2F transcription factor 2
656444	2.79	Zc3h7a	zinc finger CCCH type containing 7 A
833914	2.78	Tcfcp2l1	transcription factor CP2-like 1
871459	2.77	Git2	G protein-coupled receptor kinase-interactor 2
807687	2.77	Mylk	myosin, light polypeptide kinase
466200	2.76	Bfsp2	beaded filament structural protein 2, phakinin
900558	2.75	Hnrpa3	heterogeneous nuclear ribonucleoprotein A3
375429	2.74	Lamb3	laminin, beta 3
536894	2.74	Zfp651	zinc finger protein 651
404203	2.74	Gimap8	GTPase, IMAP family member 8
815203	2.73	Sdccag3	serologically defined colon cancer antigen 3
802636	2.73	Tcfec	transcription factor EC
920680	2.73	Clnk	cytokine-dependent hematopoietic cell linker
358745	2.72	Dhx9	DEAH (Asp-Glu-Ala-His) box polypeptide 9
919347	2.71	Nrarp	Notch-regulated ankyrin repeat protein
614999	2.70	Slbp	stem-loop binding protein
684806	2.70	Cnd1	cyclin D1
317030	2.69	Mmrn1	multimerin 1
436792	2.69	Prpf38b	PRP38 pre-mRNA processing factor 38 (yeast) domain containing B
390678	2.68	Mctp1	multiple C2 domains, transmembrane 1
823093	2.68	Rel	reticuloendotheliosis oncogene
744282	2.66	Dnmt1	DNA methyltransferase (cytosine-5) 1
843663	2.65	Six6os1	Six6 opposite strand transcript 1
340636	2.64	Il10ra	interleukin 10 receptor, alpha
928412	2.63	Esam1	endothelial cell-specific adhesion molecule
431530	2.63	Myct1	myc target 1
355859	2.61	Mycn	v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)
619823	2.60	Syt15	synaptotagmin XV
349030	2.57	Colla2	procollagen, type I, alpha 2
596178	2.57	Irf2	interferon regulatory factor 2
788977	2.56	Cabyr	calcium-binding tyrosine-(Y)-phosphorylation regulated (fibrousheathin 2)
468532	2.56	Spnb2	spectrin beta 2
549481	2.56	Shank3	SH3/ankyrin domain gene 3
355535	2.56	Ctla2b	cytotoxic T lymphocyte-associated protein 2 beta
494195	2.55	Peg13	paternally expressed 13
704142	2.55	Thoc4	THO complex 4

514678	2.54	Ppic	peptidylprolyl isomerase C
658889	2.54	Tuba8	tubulin, alpha 8
794789	2.54	Tle6	transducin-like enhancer of split 6, homolog of Drosophila E(spl)
826056	2.53	Cflar	CASP8 and FADD-like apoptosis regulator
346781	2.53	Asah3l	N-acylsphingosine amidohydrolase 3-like
920226	2.53	Ptk7	PTK7 protein tyrosine kinase 7
385815	2.53	Eld1	EGF, latrophilin seven transmembrane domain containing 1
652183	2.52	Aggf1	angiogenic factor with G patch and FHA domains 1
534872	2.51	Mdga1	MAM domain containing glycosylphosphatidylinositol anchor 1
831158	2.50	Ltc4s	leukotriene C4 synthase
836251	2.50	Ppcdc	phosphopantothenoylecysteine decarboxylase
458888	2.50	Nedd9	neural precursor cell expressed, developmentally down-regulated gene 9
906691	2.49	Gfra1	glial cell line derived neurotrophic factor family receptor alpha 1
537416	2.49	Ctdspl	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase-like
910644	2.48	Il4	interleukin 4
437562	2.47	Bcr	breakpoint cluster region homolog
477323	2.47	Mbd2	methyl-CpG binding domain protein 2
462535	2.46	Il21r	interleukin 21 receptor
818660	2.46	Zfp503	zinc finger protein 503
722246	2.46	Bcl2l2	Bcl2-like 2
802691	2.46	Cdc14b	CDC14 cell division cycle 14 homolog B (S. cerevisiae)
486066	2.45	Csf2rb2	colony stimulating factor 2 receptor, beta 2, low-affinity (granulocyte-macrophage)
662835	2.45	Hdgfrp3	hepatoma-derived growth factor, related protein 3
380532	2.44	Maff	v-maf musculoaponeurotic fibrosarcoma oncogene family, protein F (avian)
496876	2.44	Dnajb12	DnaJ (Hsp40) homolog, subfamily B, member 12
546595	2.42	Zbtb20	zinc finger and BTB domain containing 20
698766	2.41	Hdgfrp3	hepatoma-derived growth factor, related protein 3
713990	2.41	Clk1	CDC-like kinase 1
502257	2.41	Higd1a	HIG1 domain family, member 1A
892920	2.40	Eif3s10	eukaryotic translation initiation factor 3, subunit 10 (theta)
517180	2.40	Tek	endothelial-specific receptor tyrosine kinase
879746	2.40	Ptgir	prostaglandin I receptor (IP)
734020	2.40	Myo18a	myosin XVIIIa
932163	2.40	Capn3	calpain 3
404373	2.39	Nnt	nicotinamide nucleotide transhydrogenase
507240	2.39	Sox12	SRY-box containing gene 12



387650	2.38	Nipbl	Nipped-B homolog (Drosophila)
831914	2.38	Mrgpra1	MAS-related GPR, member A1
316200	2.37	Kiss1	KiSS-1 metastasis-suppressor
536933	2.36	Dock8	dedicator of cytokinesis 8
890654	2.35	Esco1	establishment of cohesion 1 homolog 1 (S. cerevisiae)
425838	2.35	Rsnl2	restin-like 2
841070	2.35	Gtpbp2	GTP binding protein 2
624929	2.34	Cxcr3	chemokine (C-X-C motif) receptor 3
404045	2.34	Spry1	sprouty homolog 1 (Drosophila)
872855	2.33	Cdc27	cell division cycle 27 homolog (S. cerevisiae)
441024	2.33	Usp53	ubiquitin specific peptidase 53
569692	2.33	Cfc1	cripto, FRL-1, cryptic family 1
322891	2.33	Jph4	junctionophilin 4
576185	2.33	Wasf2	WAS protein family, member 2
861636	2.32	Capn5	calpain 5
300547	2.32	Pde4b	phosphodiesterase 4B, cAMP specific
513596	2.32	Sctr	secretin receptor
556869	2.32	Scarf1	scavenger receptor class F, member 1
803580	2.30	Syt14	synaptotagmin-like 4
841161	2.29	Cpd	carboxypeptidase D
487748	2.29	Bach2	BTB and CNC homology 2
385124	2.29	Ptpre	protein tyrosine phosphatase, receptor type, C
341768	2.28	Snx10	sorting nexin 10
385469	2.28	St6galnac	ST6 (alpha-N-acetyl-neuraminy-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 6
912603	2.26	Pcbp4	poly(rC) binding protein 4
928178	2.25	Dlk1	delta-like 1 homolog (Drosophila)
552621	2.25	Bach1	BTB and CNC homology 1
664685	2.24	Ebi3	Epstein-Barr virus induced gene 3
406238	2.24	Pik3r1	phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1 (p85 alpha)
347771	2.24	Lonrf1	LON peptidase N-terminal domain and ring finger 1
364376	2.24	Wars2	tryptophanyl tRNA synthetase 2 (mitochondrial)
366707	2.23	Sall2	sal-like 2 (Drosophila)
612691	2.23	Gadd45b	growth arrest and DNA-damage-inducible 45 beta
759808	2.23	Hist1h2ac	histone 1, H2ac
561615	2.23	Efhc2	EF-hand domain (C-terminal) containing 2
926414	2.23	Nsg2	neuron specific gene family member 2

412516	2.23	Zfp612	zinc finger protein 612
517043	2.23	Ldhd	lactate dehydrogenase D
443721	2.23	Hhex	hematopoietically expressed homeobox
712701	2.22	Rasgef1b	RasGEF domain family, member 1B
368174	2.22	Gchfr	GTP cyclohydrolase I feedback regulator
758704	2.22	Xpo7	exportin 7
847906	2.22	Raf1	v-raf-leukemia viral oncogene 1
673285	2.22	Clqtnf6	Clq and tumor necrosis factor related protein 6
766293	2.21	Hist1h4j	histone 1, H4j
349550	2.21	Hip1	huntingtin interacting protein 1
852800	2.21	Htatsf1	HIV TAT specific factor 1
318395	2.21	Wfdc2	WAP four-disulfide core domain 2
893571	2.20	Ptprz1	protein tyrosine phosphatase, receptor type Z, polypeptide 1
631440	2.20	Cdk5r2	cyclin-dependent kinase 5, regulatory subunit 2 (p39)
921190	2.20	Hemgn	hemogen
803407	2.19	Otos	otospiralin
452162	2.19	Za20d2	zinc finger, A20 domain containing 2
898183	2.19	Gpi1	glucose phosphate isomerase 1
622680	2.19	Pthr1	parathyroid hormone receptor 1
413018	2.19	Nox4	NADPH oxidase 4
648047	2.18	Zfp469	zinc finger protein 469
646744	2.18	Lemd3	LEM domain containing 3
595676	2.16	Fubp1	far upstream element (FUSE) binding protein 1
906895	2.16	Gpc2	glypican 2 (cerebroglycan)
926998	2.16	Rab38	Rab38, member of RAS oncogene family
832235	2.15	Ifnz	interferon zeta
753913	2.15	Pcdhb22	protocadherin beta 22
312356	2.14	Leng8	leukocyte receptor cluster (LRC) member 8
604718	2.14	Slco4a1	solute carrier organic anion transporter family, member 4a1
368164	2.14	Atp10a	ATPase, class V, type 10A
544312	2.13	Zc3h11a	zinc finger CCCH type containing 11A
433645	2.12	Ncoa7	nuclear receptor coactivator 7
411745	2.12	Itpkb	inositol 1,4,5-trisphosphate 3-kinase B
755587	2.10	Ckap4	cytoskeleton-associated protein 4
519196	2.10	Myl7	myosin, light polypeptide 7, regulatory
540897	2.09	Rexo1	REX1, RNA exonuclease 1 homolog (S. cerevisiae)

462366	2.09	Sorcs2	sortilin-related VPS10 domain containing receptor 2
926484	2.08	Cit	citron
754351	2.08	Arid5a	AT rich interactive domain 5A (Mrfl like)
463172	2.07	Ppp1r16b	protein phosphatase 1, regulatory (inhibitor) subunit 16B
359843	2.07	Itsn2	intersectin 2
734718	2.06	Troap	trophinin associated protein
432900	2.05	Eif4ebp1	eukaryotic translation initiation factor 4E binding protein 1
930564	2.05	Vat1	vesicle amine transport protein 1 homolog (T californica)
653387	2.04	VeZF1	vascular endothelial zinc finger 1
884651	2.04	Armc2	armadillo repeat containing 2
449492	2.04	Trib3	tribbles homolog 3 (Drosophila)
829781	2.03	Psma8	proteasome (prosome, macropain) subunit, alpha type, 8
851555	2.03	Lmo1	LIM domain only 1
492366	2.03	Il1r1	interleukin 1 receptor, type I
364885	2.02	Sh3yl1	Sh3 domain YSC-like 1
335445	2.02	Col4a1	procollagen, type IV, alpha 1
516673	2.02	Zfp326	zinc finger protein 326
577001	2.02	Zfp608	zinc finger protein 608 RIKEN cDNA D430007A19 gene
661508	2.02	Srms	src-related kinase lacking C-terminal regulatory tyrosine and N-terminal myristylation sites
905489	2.01	Pcmt2	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 2
525062	2.01	Zfp397	zinc finger protein 397
852065	2.01	Rhob	ras homolog gene family, member B
691622	2.00	Nr2c2	nuclear receptor subfamily 2, group C, member 2

**Table S2. Down-regulated gene expression changes in *Mtg16*-null LSK cells.** An Excel spreadsheet containing the list of genes that were down-regulated at least 2-fold in *Mtg16*-null LSK cells with the average fold change between three separate microarrays displayed as a ratio to 1.

Systematic	Average Fold Change	Gene Symbol	Gene Name
932062	58.69	Car1	carbonic anhydrase 1
618089	58.04	Car1	carbonic anhydrase 1
909884	57.65	Igl-V1	immunoglobulin lambda chain, variable 1 RIKEN cDNA 2010309G21 gene
538665	55.63	Igk-V38	immunoglobulin kappa chain variable 38(V38)
910033	29.09	Igk-V8	immunoglobulin kappa chain variable 8 (V8) immunoglobulin kappa chain, constant region immunoglobulin kappa chain variable 21 (V21) immunoglobulin kappa chain variable 28 (V28)
823783	25.02	Igk-V28	immunoglobulin kappa chain variable 28 (V28)
590082	20.87	Igk-V32	immunoglobulin kappa chain variable 32 (V32)
749478	18.74	Igj	immunoglobulin joining chain
738417	17.16	Igh-1a	immunoglobulin heavy chain 1a (serum IgG2a)
916906	14.19	Mt1	metallothionein 1
869794	13.23	Igk-V38	immunoglobulin kappa chain variable 38(V38)
446685	12.30	Rhag	Rhesus blood group-associated A glycoprotein
652756	11.53	Slc38a5	solute carrier family 38, member 5
620526	11.29	Hp	haptoglobin
452867	10.80	Igsf6	immunoglobulin superfamily, member 6
549834	10.27	Samd14	sterile alpha motif domain containing 14
352835	8.97	Prss34	protease, serine, 34
359954	8.92	Aplp2	amyloid beta (A4) precursor-like protein 2
899101	8.32	Igh-VJ55	immunoglobulin heavy chain (J558 family)
675426	8.23	Igh-1a	immunoglobulin heavy chain 1a (serum IgG2a)
926815	7.89	Gpx7	glutathione peroxidase 7
831777	7.30	Ela2	elastase 2, neutrophil
861056	7.27	Rtn4r11	reticulon 4 receptor-like 1
596021	6.96	IgM	null
495283	6.60	Ms4a4c	membrane-spanning 4-domains, subfamily A, member 4C
893766	6.60	Igh-VJ55	immunoglobulin heavy chain (J558 family)
460369	6.27	Ly6c	lymphocyte antigen 6 complex, locus C
771536	6.19	Zfp336	zinc finger protein 336

396393	5.95	Ly86	lymphocyte antigen 86
468149	5.91	Chst1	carbohydrate (keratan sulfate Gal-6) sulfotransferase 1
917278	5.83	Mt1	metallothionein 1
345690	5.80	Irf7	interferon regulatory factor 7
363757	5.77	Epdr2	ependymin related protein 2 (zebrafish)
579252	5.74	Igh-4	immunoglobulin heavy chain 4 (serum IgG1)
918570	5.65	Epor	erythropoietin receptor
924562	5.50	Oasl1	2'-5' oligoadenylate synthetase-like 1
648457	5.12	Ms4a6c	membrane-spanning 4-domains, subfamily A, member 6C
538717	5.08	Ifi27	interferon, alpha-inducible protein 27
926789	4.94	Uchl1	ubiquitin carboxy-terminal hydrolase L1
894906	4.93	Igh Igh-V	immunoglobulin heavy chain complex immunoglobulin heavy chain (J558 family)
460106	4.93	Igh	immunoglobulin heavy chain complex
710465	4.87	Wdfy1	WD repeat and FYVE domain containing 1
907810	4.86	Il17rb	interleukin 17 receptor B
574392	4.84	Myef2	myelin basic protein expression factor 2, repressor
314636	4.75	Sdpr	serum deprivation response
324309	4.69	Parn	poly(A)-specific ribonuclease (deadenylation nuclease)
546299	4.60	Slfn2	schlafen 2
921083	4.50	Clec2i	C-type lectin domain family 2, member i
721190	4.44	Nrp1	neuropilin 1
816794	4.44	Chd7	chromodomain helicase DNA binding protein 7
844589	4.36	Slmap	sarcolemma associated protein
544174	4.30	P2ry1	purinergic receptor P2Y, G-protein coupled 1
320413	4.30	Golph3	golgi phosphoprotein 3
833457	4.29	Ifi44	interferon-induced protein 44
339537	4.28	Cks2	CDC28 protein kinase regulatory subunit 2
811311	4.23	S100a9	S100 calcium binding protein A9 (calgranulin B)
339582	4.16	Igh-1a	immunoglobulin heavy chain 1a (serum IgG2a)
902343	4.15	Igh-VJ55	immunoglobulin heavy chain (J558 family)
438565	4.02	Trem3	triggering receptor expressed on myeloid cells 3
679113	4.02	Abcb4	ATP-binding cassette, sub-family B (MDR/TAP), member 4
563904	3.99	Slc12a4	solute carrier family 12, member 4
680551	3.96	Lmyc1	lung carcinoma myc related oncogene 1
598980	3.87	Nol10	nucleolar protein 10
829053	3.85	Blnk	B-cell linker

344219	3.79	Pon2	paraoxonase 2
748865	3.76	Rps6ka5	ribosomal protein S6 kinase, polypeptide 5
383820	3.73	Ccr2	chemokine (C-C motif) receptor 2
907925	3.73	Iigp1	interferon inducible GTPase 1
900801	3.72	Kpna2	karyopherin (importin) alpha 2
638728	3.70	Serpinf1	serine (or cysteine) peptidase inhibitor, clade F, member 1
403608	3.67	Abca1	ATP-binding cassette, sub-family A (ABC1), member 1
619067	3.65	Mcpt8	mast cell protease 8
776961	3.58	Sez6l	seizure related 6 homolog like
793478	3.55	Eif4ebp2	eukaryotic translation initiation factor 4E binding protein 2
757700	3.54	Bdh	3-hydroxybutyrate dehydrogenase (heart, mitochondrial)
753186	3.52	Trim2	tripartite motif protein 2
381483	3.50	Rhced	Rhesus blood group CE and D
726901	3.48	Lcn2	lipocalin 2
377864	3.46	Ifitm6	interferon induced transmembrane protein 6
585421	3.44	Mmp19	matrix metalloproteinase 19
455840	3.38	Mefv	Mediterranean fever
766141	3.37	Zfp367	zinc finger protein 367
920113	3.36	Slc7a5	solute carrier family 7 (cationic amino acid transporter, y+ system), member 5
363102	3.35	Trp53inp1	tumor protein p53 inducible nuclear protein 2
551683	3.33	Mpeg1	macrophage expressed gene 1
323576	3.33	Bcl2l11	BCL2-like 11 (apoptosis facilitator)
545933	3.32	Ctsg	cathepsin G
692827	3.30	Rad23b	RAD23b homolog (S. cerevisiae)
316223	3.28	ci12	null
593035	3.28	Dhx40	DEAH (Asp-Glu-Ala-His) box polypeptide 40
409394	3.28	Pfn4	profilin family, member 4
575878	3.27	Cxcl9	chemokine (C-X-C motif) ligand 9
460534	3.27	Camsap1	calmodulin regulated spectrin-associated protein 1-like 1
451973	3.26	Olfrl1214	olfactory receptor 1214
559153	3.24	Chst2	carbohydrate sulfotransferase 2
455908	3.24	P2ry13	purinergic receptor P2Y, G-protein coupled 13
666881	3.24	Tcrg-C	T-cell receptor gamma, constant region
574875	3.24	Zfp37	zinc finger protein 37
843747	3.23	Gna-rs1	guanine nucleotide binding protein, related sequence 1
899721	3.20	Hspa9a	heat shock protein 9A

894506	3.18	Ublcp1	ubiquitin-like domain containing CTD phosphatase 1
344972	3.15	Plxb2	plexin B2
888803	3.15	Rbpms2	RNA binding protein with multiple splicing 2
642165	3.15	Snx12	sorting nexin 12
628110	3.12	Ascl2	achaete-scute complex homolog-like 2 (Drosophila)
585281	3.10	Tmem48	transmembrane protein 48
848818	3.10	Xrcc2	X-ray repair complementing defective repair in Chinese hamster cells 2
653727	3.09	Tle1	transducin-like enhancer of split 1, homolog of Drosophila E(spl)
355486	3.08	Vcl	vinculin
335109	3.08	Trpm2	transient receptor potential cation channel, subfamily M, member 2
615460	3.07	Lancl2	LanC (bacterial lantibiotic synthetase component C)-like 2
548224	3.07	Ebi2	Epstein-Barr virus induced gene 2
917461	3.07	Tyki	thymidylate kinase family LPS-inducible member
722380	3.06	Per1	period homolog 1 (Drosophila)
363166	3.04	Gp1bb	glycoprotein Ib, beta polypeptide
590110	3.03	Ppp1r3e	protein phosphatase 1, regulatory (inhibitor) subunit 3E
656992	3.03	Pik3r2	phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 2 (p85 beta)
321427	3.02	Gpr17	G protein-coupled receptor 17
305669	3.01	Igk-V8	immunoglobulin kappa chain variable 8 (V8)
347623	3.01	Bace1	beta-site APP cleaving enzyme 1
554463	3.01	Serpine2	serine (or cysteine) peptidase inhibitor, clade E, member 2
830078	2.98	Zbp1	Z-DNA binding protein 1
380612	2.97	F2r12	coagulation factor II (thrombin) receptor-like 2
396741	2.96	Tmem106	transmembrane protein 106A
929928	2.96	Sgip1	SH3-domain GRB2-like (endophilin) interacting protein 1
588490	2.96	Slc22a4	solute carrier family 22 (organic cation transporter), member 4
927284	2.94	Chst7	carbohydrate (N-acetylglucosamino) sulfotransferase 7
734987	2.91	Zhx1	zinc fingers and homeoboxes protein 1
627396	2.90	Igf2	insulin-like growth factor 2
659464	2.90	Lpxn	leupaxin
481439	2.89	Nfia	nuclear factor I/A
535513	2.89	Pi4k2b	phosphatidylinositol 4-kinase type 2 beta
474404	2.88	Sgip1	SH3-domain GRB2-like (endophilin) interacting protein 1
351936	2.88	Ap2a1	adaptor protein complex AP-2, alpha 1 subunit
775978	2.86	Cd74	CD74 antigen (invariant polypeptide of major histocompatibility complex, class II antigen-associated)
749630	2.85	Camp	cathelicidin antimicrobial peptide

314325	2.84	Spire2	spire homolog 2 (Drosophila)
370259	2.84	Scin	scinderin
608001	2.84	Tnfaip2	tumor necrosis factor, alpha-induced protein 2
792947	2.83	Papss2	3'-phosphoadenosine 5'-phosphosulfate synthase 2
646473	2.80	Cyp11a1	cytochrome P450, family 11, subfamily a, polypeptide 1
446731	2.80	Mapk12	mitogen-activated protein kinase 12
666793	2.79	Zranb3	zinc finger, RAN-binding domain containing 3
336709	2.79	Card12	caspase recruitment domain family, member 12
860084	2.79	Abcd3	ATP-binding cassette, sub-family D (ALD), member 3
443626	2.78	Asph	aspartate-beta-hydroxylase
543555	2.77	Aldh4a1	aldehyde dehydrogenase 4 family, member A1
474771	2.77	Pspc1	paraspeckle protein 1
396297	2.77	Stom	stomatin
889712	2.76	Rbm3	RNA binding motif protein 3
427650	2.76	Ryk	receptor-like tyrosine kinase
379453	2.76	Pld4	phospholipase D family, member 4
531037	2.75	F2r12	coagulation factor II (thrombin) receptor-like 2
396012	2.72	Slc27a2	solute carrier family 27 (fatty acid transporter), member 2
589780	2.71	G6pd2	glucose-6-phosphate dehydrogenase 2
357196	2.71	Ptpn14	protein tyrosine phosphatase, non-receptor type 14
743442	2.70	Ubp1	upstream binding protein 1
912715	2.70	Pitpm1	phosphatidylinositol membrane-associated 1
332919	2.69	Nckap1	NCK-associated protein 1
450585	2.69	Perl1	per1-like domain containing 1
454527	2.68	Pde3b	phosphodiesterase 3B, cGMP-inhibited
446807	2.67	Usp18	ubiquitin specific peptidase 18
422133	2.66	Tprt	trans-prenyltransferase
667591	2.66	Dnaja4	DnaJ (Hsp40) homolog, subfamily A, member 4
806203	2.66	Uqcr	ubiquinol-cytochrome c reductase (6.4kD) subunit
852872	2.65	Agrn	agrin
628979	2.64	Bbs1	Bardet-Biedl syndrome 1 homolog (human)
327321	2.64	Sbf1	SET binding factor 1
867020	2.64	Galns	galactosamine (N-acetyl)-6-sulfate sulfatase
351154	2.63	Cox6a2	cytochrome c oxidase, subunit VI a, polypeptide 2
330030	2.62	Kpna1	karyopherin (importin) alpha 1
453393	2.61	Polr3f	polymerase (RNA) III (DNA directed) polypeptide F



770768	2.61	Zdhhc6	zinc finger, DHHC domain containing 6
575859	2.60	Kmo	kynurenine 3-monooxygenase (kynurenine 3-hydroxylase)
892804	2.60	Kpna2	karyopherin (importin) alpha 2
905559	2.59	Bcas1	breast carcinoma amplified sequence 1
417004	2.59	Sdc3	syndecan 3
818736	2.58	Sqrdl	sulfide quinone reductase-like (yeast)
930152	2.58	Cxcl10	chemokine (C-X-C motif) ligand 10
778878	2.57	Mamdc2	MAM domain containing 2
422587	2.57	Eppb9	endothelial precursor protein B9
902369	2.57	Hspd1	heat shock protein 1 (chaperonin)
773899	2.56	Spred1	sprouty protein with EVH-1 domain 1, related sequence
827226	2.56	Igf2r	insulin-like growth factor 2 receptor
724112	2.56	Taf9l	TAF9-like RNA polymerase II, TATA box binding protein (TBP)-associated factor
332817	2.56	Tcf20	transcription factor 20
619584	2.55	Sult1a1	sulfotransferase family 1A, phenol-preferring, member 1
461904	2.54	Slc14a1	solute carrier family 14 (urea transporter), member 1
324662	2.54	Tsga14	testis specific gene A14
869327	2.53	Sh2d4a	SH2 domain containing 4A
344622	2.52	Copb1	coatamer protein complex, subunit beta 1
873820	2.52	Tjp1	tight junction protein 1
743085	2.52	Gda	guanine deaminase
437964	2.49	Mcts1	malignant T cell amplified sequence 1
386295	2.48	Cxcl4	chemokine (C-X-C motif) ligand 4
464550	2.48	Slc2a8	solute carrier family 2, (facilitated glucose transporter), member 8
416337	2.48	Hsd11b1	hydroxysteroid 11-beta dehydrogenase 1
561901	2.47	Casp3	caspase 3
309377	2.47	Cars	cysteinyl-tRNA synthetase
909545	2.46	Hspa5bp	heat shock 70kDa protein 5 binding protein 1
611967	2.46	RP23-14I	null
847836	2.46	Gzmd	granzyme D
360619	2.45	Tbc1d12	TBC1D12: TBC1 domain family, member 12
704890	2.44	Clec12a	C-type lectin domain family 12, member a
712928	2.44	Pdzk4	PDZ domain containing 4
884267	2.43	Cd53	CD53 antigen
918558	2.41	Drd1ip	dopamine receptor D1 interacting protein
376218	2.41	Gpc1	glypican 1

401663	2.40	Plxnc1	plexin C1
643794	2.39	Rbm27	RNA binding motif protein 27
797894	2.38	Lgmn	legumain
690134	2.38	Metap1	methionyl aminopeptidase 1
837469	2.38	Mx2	myxovirus (influenza virus) resistance 2
585818	2.38	Ctss	cathepsin S
905318	2.38	Asahl	N-acylsphingosine amidohydrolase (acid ceramidase)-like
920516	2.37	Cdk5rap1	CDK5 regulatory subunit associated protein 1
353509	2.37	Icos	inducible T-cell co-stimulator
831603	2.36	Muted	muted
425787	2.35	Nkx2-3	NK2 transcription factor related, locus 3 (Drosophila)
463125	2.35	Ppp2r1b	protein phosphatase 2 (formerly 2A), regulatory subunit A (PR 65), beta isoform
733267	2.34	Fmn11	formin-like 1
635665	2.33	Rabl3	RAB, member of RAS oncogene family-like 3
639587	2.33	Gng12	guanine nucleotide binding protein (G protein), gamma 12
835985	2.33	Sec61a2	Sec61, alpha subunit 2 (S. cerevisiae)
573548	2.32	Ext2	exostoses (multiple) 2
697664	2.32	Evl	Ena-vasodilator stimulated phosphoprotein
860165	2.31	Sephs2	selenophosphate synthetase 2
906490	2.31	Apoe	apolipoprotein E
515157	2.31	Mipep	mitochondrial intermediate peptidase
336418	2.31	Mocs3	molybdenum cofactor synthesis 3
754600	2.31	Epn1	epsin 1
424542	2.30	Aarsl	alanyl-tRNA synthetase like
383522	2.30	Ankrd48	ankyrin repeat domain 48
528992	2.29	Cecr5	cat eye syndrome chromosome region, candidate 5 homolog (human)
772659	2.27	Slc30a3	solute carrier family 30 (zinc transporter), member 3
387395	2.27	Tmem49	transmembrane protein 49
928126	2.27	Tcf2a	transcription factor E2a
447951	2.26	Plvap	plasmalemma vesicle associated protein
629938	2.26	Galnt10	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase 10
536618	2.26	Lzf	leucine zipper domain protein
717650	2.25	Piga	phosphatidylinositol glycan, class A
916992	2.25	Sdf211	stromal cell-derived factor 2-like 1
633576	2.25	Upk3a	uroplakin 3A
419158	2.25	Abcb7	ATP-binding cassette, sub-family B (MDR/TAP), member 7

644283	2.25	Kif1c	kinesin family member 1C
932865	2.24	Sbk1	SH3-binding kinase 1
530448	2.22	Aars	alanyl-tRNA synthetase
580896	2.22	Rpl10a	ribosomal protein L10A
313957	2.22	Hmgcr	3-hydroxy-3-methylglutaryl-Coenzyme A reductase
604659	2.22	Wdr68	WD repeat domain 68
351320	2.22	Mcm2	minichromosome maintenance deficient 2 mitotin ( <i>S. cerevisiae</i> )
655072	2.22	Cad	carbamoyl-phosphate synthetase 2, aspartate transcarbamylase, and dihydroorotase
625863	2.21	Gp5	glycoprotein 5 (platelet)
834819	2.21	Gdpd1	glycerophosphodiester phosphodiesterase domain containing 1
776420	2.20	Dctn1	dynactin 1
785382	2.20	Slc7a3	solute carrier family 7 (cationic amino acid transporter, y <sup>+</sup> system), member 3
336724	2.19	Pklr	pyruvate kinase liver and red blood cell
667991	2.19	Phf11	PHD finger protein 11
678760	2.19	Ms4a6b	membrane-spanning 4-domains, subfamily A, member 6B
860102	2.18	Cacng6	calcium channel, voltage-dependent, gamma subunit 6
701888	2.18	Cox10	COX10 homolog, cytochrome c oxidase assembly protein, heme A: farnesyltransferase (yeast)
346743	2.17	Slc1a2	solute carrier family 1 (glial high affinity glutamate transporter), member 2
793521	2.17	Dhx38	DEAH (Asp-Glu-Ala-His) box polypeptide 38
332683	2.17	Olf129	olfactory receptor 129
582299	2.17	Kbtbd8	kelch repeat and BTB (POZ) domain containing 8
764650	2.16	Cic	capicua homolog ( <i>Drosophila</i> )
577661	2.16	Slc2a6	solute carrier family 2 (facilitated glucose transporter), member 6
328946	2.16	Wwp1	WW domain containing E3 ubiquitin protein ligase 1
852935	2.16	L3mbtl2	l(3)mbt-like 2 ( <i>Drosophila</i> )
928190	2.16	Cherp	calcium homeostasis endoplasmic reticulum protein
927515	2.15	Ncln	nicalin homolog (zebrafish)
924582	2.15	Capn1	calpain 1
391307	2.15	Mrps2	mitochondrial ribosomal protein S2
316561	2.15	Zdhhc13	zinc finger, DHHC domain containing 13
908186	2.15	Itgb2	integrin beta 2
387754	2.15	Atp7b	ATPase, Cu <sup>++</sup> transporting, beta polypeptide
651349	2.14	Mx1	myxovirus (influenza virus) resistance 1
803271	2.14	Cbr3	carbonyl reductase 3
335671	2.14	Park2	parkin
896311	2.14	Rfwd2	ring finger and WD repeat domain 2

572196	2.14	Sec23ip	Sec23 interacting protein
883690	2.14	Pfc	properdin factor, complement
464308	2.13	Oas2	2'-5' oligoadenylate synthetase 2
349419	2.13	Msl31	male-specific lethal-3 homolog 1 (Drosophila)
917039	2.13	Slc39a8	solute carrier family 39 (metal ion transporter), member 8
928327	2.13	Ccl6	chemokine (C-C motif) ligand 6
326326	2.13	Aytl1	acyltransferase like 1
310124	2.13	Gak	cyclin G associated kinase
849990	2.12	Def8	differentially expressed in FDCP 8
541982	2.12	Tmc5	transmembrane channel-like gene family 5
668434	2.11	Paqr5	progesterin and adipoQ receptor family member V
504114	2.11	Oat	ornithine aminotransferase
483005	2.11	Galgt1	UDP-N-acetyl-alpha-D-galactosamine:(N-acetylneuraminy)-galactosylglucosylceramide-beta-1, 4-N-acetylgalactosaminyltransferase
847789	2.11	Ccr5	chemokine (C-C motif) receptor 5
537829	2.10	Ppp2r5b	protein phosphatase 2, regulatory subunit B (B56), beta isoform
814027	2.10	Sympk	symplekin
699232	2.10	Tpbg	trophoblast glycoprotein
431194	2.10	Syvn1	synovial apoptosis inhibitor 1, synoviolin
534592	2.10	Rhot1	ras homolog gene family, member T1
656406	2.10	Pon2	paraoxonase 2
560649	2.09	Pyy	peptide YY
462996	2.09	Olfir591	olfactory receptor 591
780725	2.08	Nudcd1	NudC domain containing 1
811535	2.08	Txndc1	thioredoxin domain containing 1
713706	2.08	Bysl	bystin-like
482989	2.08	Cebpd	CCAAT/enhancer binding protein (C/EBP), delta
657040	2.07	Dlst	dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)
869360	2.07	Smpd1	sphingomyelin phosphodiesterase 1, acid lysosomal
759510	2.07	Npr2	natriuretic peptide receptor 2
623205	2.07	Gmppb	GDP-mannose pyrophosphorylase B
929349	2.07	Rps6ka4	ribosomal protein S6 kinase, polypeptide 4
723765	2.07	Ipo13	importin 13
547528	2.06	Apobec3	apolipoprotein B editing complex 3
480314	2.06	Magee2	melanoma antigen, family E, 2
751264	2.06	Rab11fip	RAB11 family interacting protein 1 (class I)

684049	2.05	Foxj3	forkhead box J3
663732	2.05	Sdccag8	serologically defined colon cancer antigen 8
918527	2.05	Sipa111	signal-induced proliferation-associated 1 like 1
389558	2.04	Snx25	sorting nexin 25
645493	2.03	Rbm15b	RNA binding motif protein 15B
522671	2.03	Gpr18	G protein-coupled receptor 18
311434	2.02	Pdia2	protein disulfide isomerase associated 2
894994	2.02	Amd2	S-adenosylmethionine decarboxylase 2
382399	2.02	Armc8	armadillo repeat containing 8
670317	2.02	Myh14	myosin, heavy polypeptide 14
686105	2.02	Slc20a1	solute carrier family 20, member 1
378643	2.02	Uty	ubiquitously transcribed tetratricopeptide repeat gene, Y chromosome
730256	2.02	Hbs11	Hbs1-like ( <i>S. cerevisiae</i> )
655779	2.02	Tmem18	transmembrane protein 18
372512	2.01	Fpgt	fucose-1-phosphate guanylyltransferase
361433	2.01	F2r	coagulation factor II (thrombin) receptor
466841	2.01	Ccne1	cyclin E1
864607	2.00	Psm11	proteasome (prosome, macropain) 26S subunit, non-ATPase, 11
447331	2.00	Thop1	thimet oligopeptidase 1
766063	2.00	Optc	opticin
854794	2.00	Zfp101	zinc finger protein 101
379462	2.00	Clu	clusterin
776862	2.00	Ap2b1	adaptor-related protein complex 2, beta 1 subunit
596173	2.00	Stk24	serine/threonine kinase 24 (STE20 homolog, yeast)
303973	2.00	Hsd17b4	hydroxysteroid (17-beta) dehydrogenase 4