Supplementary Table S1: RT-qPCR primer sequences for validated targets

Gene Symbol	Gene Name	Entrez Accession No.	Forward primer (5'-3')	Reverse primer (5'-3')
Reference Gene				
Actb	actin, beta	11461	ACCAACTGGGACGATATGGAGAAGA	TACGACCAGAGGCATACAGGGACAA
Adenosine Receptors				
Adora1	adenosine A1 receptor	11539	ATCCCTCTCCGGTACAAGACAGT	ACTCAGGTTGTTCCAGCCAAAC
Adora2a	adenosine A2a receptor	11540	CCTCACGCAGAGTTCCATCTT	TGTACCGGAGTGGAATTCGG
Adora2b	adenosine A2b receptor	11541	TCTTCCTCGCCTGCTTCGT	CCAGTGACCAAACCTTTATACCTGA
Adora3	adenosine A3 receptor	11542	ACTTCTATGCCTGCCTTTTCATGT	AACCGTTCTATATCTGACTGTCAGCTT
Microarray Validation				
Acta1	actin, alpha 1, skeletal muscle	11459	CTCTTCCAGCCTTCCTTTATCG	GCATACAGGTCCTTCCTGATGTC
Adipoq	adiponectin, C1Q and collagen domain containing	11450	AGATGCAGGTCTTCTTGGT	GAGCGATACACATAAGCGG
Car3	carbonic anhydrase 3	12350	GGTTCACTGGAATCCAAAGTATAACAC	CCTTTCTCCCGTCCTATCTTCA
Cidec	cell death-inducing DFFA-like effector c	14311	CCATCAGAACAGCGCAAGAA	TTCAGCTTGTACAGGTCGAAGGT
Dbp	D site albumin promoter binding protein	13170	CGCGCAGGCTTGACATCT	GCGGGATCAGGTTCAAAGGT
Il6	interleukin 6	16193	AAGCCAGAGTCCTTCAGAG	TTATCTGTTAGGAGAGCATTGG
Lcn2	lipocalin 2	16819	AAATATGCACAGGTATCCTCAG	CTCCTTGGTTCTTCCATACAG
Mapk8	mitogen-activated protein kinase 8	26419	AAGCCCCACCACCAAAGATC	TCCTCCAAATCCATTACCTCCTT
Stat1	signal transducer and activator of transcription 1	20846	GACCAAAGGAAGCACCAG	TCAGACACAGAAATCAACTCAG
Trpm7	transient receptor potential cation channel, subfamily M, member 7	58800	CTCTTCACTCGGTGCAAGCA	ATCTCGTAACCAATCCGGTAACAA
Txnip	thioredoxin interacting protein	56338	CTGTGAAGGTGATGACATCTCCAT	GCCATTGGCAAGGTAAGTGTGT

TABLE S2: Canonical pathways modified by A2AR KO

Ingenuity Canonical Pathways	-log(p-value)	Ratio	Molecules
Relaxin Signaling	2.45E00	1.99E-02	GNB1, PRKAR2B, PDE3B
Cardiac β-adrenergic Signaling	2.45E00	2.11E-02	GNB1, PRKAR2B, PDE3B
Cellular Effects of Sildenafil (Viagra)	2.4E00	1.99E-02	PRKAR2B, PDE3B, ACTA1
Protein Kinase A Signaling	2.22E00	1.26E-02	GNB1, PRKAR2B, PDE3B, NFATC2
Phototransduction Pathway	2.22E00	3.08E-02	GNB1, PRKAR2B
Germ Cell-Sertoli Cell Junction Signaling	2.2E00	1.88E-02	IQGAP1, ACTA1, MAP3K2
Calcium Signaling	2.06E00	1.47E-02	PRKAR2B, NFATC2, ACTA1
Glutamate Receptor Signaling	2.02E00	2.86E-02	GNB1, SLC38A1
Caveolar-mediated Endocytosis Signaling	1.85E00	2.35E-02	ACTA1, MAP3K2
Nitric Oxide Signaling in the Cardiovascular System	1.83E00	2.02E-02	PRKAR2B, PDE3B
Leptin Signaling in Obesity	1.81E00	2.38E-02	PRKAR2B, PDE3B
Cardiac Hypertrophy Signaling	1.75E00	1.22E-02	GNB1, PRKAR2B, MAP3K2
TR/RXR Activation	1.68E00	2.02E-02	HP, PDE3B
SAPK/JNK Signaling	1.67E00	1.98E-02	GNB1, MAP3K2
Colorectal Cancer Metastasis Signaling	1.67E00	1.17E-02	GNB1, PRKAR2B, PTGER3
α-Adrenergic Signaling	1.66E00	1.89E-02	GNB1, PRKAR2B
RANK Signaling in Osteoclasts	1.66E00	2.04E-02	NFATC2, MAP3K2
G Beta Gamma Signaling	1.65E00	1.68E-02	GNB1, PRKAR2B
IL-1 Signaling	1.64E00	1.89E-02	GNB1, PRKAR2B
fMLP Signaling in Neutrophils	1.53E00	1.57E-02	GNB1, NFATC2
PKCθ Signaling in T Lymphocytes	1.5E00	1.42E-02	NFATC2, MAP3K2
Androgen Signaling	1.48E00	1.39E-02	GNB1, PRKAR2B
P2Y Purigenic Receptor Signaling Pathway	1.45E00	1.47E-02	GNB1, PRKAR2B
GNRH Signaling	1.42E00	1.39E-02	PRKAR2B, MAP3K2
Insulin Receptor Signaling	1.37E00	1.41E-02	PRKAR2B, PDE3B
B Cell Receptor Signaling	1.29E00	1.28E-02	NFATC2, MAP3K2
One Carbon Pool by Folate	1.29E00	2.56E-02	MTR
cAMP-mediated Signaling	1.25E00	1.24E-02	PRKAR2B, PDE3B
Tight Junction Signaling	1.24E00	1.2E-02	PRKAR2B, ACTA1
Axonal Guidance Signaling	1.18E00	7.37E-03	GNB1, PRKAR2B, NFATC2
Role of NFAT in Regulation of the Immune Response	1.17E00	9.9E-03	GNB1, NFATC2
CREB Signaling in Neurons	1.17E00	1.01E-02	GNB1, PRKAR2B
Sonic Hedgehog Signaling	1.16E00	3.03E-02	PRKAR2B
Methionine Metabolism	1.12E00	1.25E-02	MTR
Role of NFAT in Cardiac Hypertrophy	1.1E00	9.57E-03	GNB1, PRKAR2B
G Protein Signaling Mediated by Tubby	1.09E00	2.44E-02	GNB1
Breast Cancer Regulation by Stathmin1	1.09E00	9.95E-03	GNB1, PRKAR2B
Neuroprotective Role of THOP1 in Alzheimer's Disease	1.05E00	1.85E-02	PRKAR2B
G-Protein Coupled Receptor Signaling	1.04E00	9.01E-03	PRKAR2B, PDE3B
Mechanisms of Viral Exit from Host Cells	1.03E00	2.27E-02	ACTA1
April Mediated Signaling	1.03E00	2.38E-02	NFATC2
B Cell Activating Factor Signaling	1.01E00	2.27E-02	NFATC2
Actin Cytoskeleton Signaling	1.01E00	8.44E-03	IQGAP1, ACTA1
MSP-RON Signaling Pathway	9.77E-01	2E-02	ACTA1
Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid	9.7E-01	8.47E-03	CTSK, NFATC2
Phospholipase C Signaling	9.57E-01	7.81E-03	GNB1, NFATC2
CD27 Signaling in Lymphocytes	9.22E-01	1.75E-02	MAP3K2
Nur77 Signaling in T Lymphocytes	9.22E-01	1.56E-02	MAP3K2
Amyloid Processing	8.97E-01	1.69E-02	PRKAR2B
Calcium-induced T Lymphocyte Apoptosis	8.67E-01	1.43E-02	NFATC2
PXR/RXR Activation	8.31E-01	1.1E-02	PRKAR2B
ERK5 Signaling	8.25E-01	1.41E-02	MAP3K2
CCR5 Signaling in Macrophages	8.18E-01	1.08E-02	GNB1
Eicosanoid Signaling	8.18E-01	1.2E-02	PTGER3
Melatonin Signaling	8.06E-01	1.3E-02	PRKAR2B
IL-4 Signaling	7.99E-01	1.33E-02	NFATC2
Agrin Interactions at Neuromuscular Junction	7.93E-01	1.45E-02	ACTA1
Aminosugars Metabolism	7.93E-01	8.26E-03	PDE3B
Role of Pattern Recognition Receptors in Recognition of Bacteria a	7.87E-01	1.22E-02	TICAM1
Antiproliferative Role of Somatostatin Receptor 2	7.87E-01	1.25E-02	GNB1
BMP signaling pathway	7.7E-01	1.25E-02	PRKAR2B
Crosstalk between Dendritic Cells and Natural Killer Cells	7.64E-01	1.02E-02	ACTA1
Dopamine Receptor Signaling	7.64E-01	1.08E-02	PRKAR2B
Regulation of Actin-based Motility by Rho	7.22E-01	1.09E-02	ACTA1
Regulation of IL-2 Expression in Activated and Anergic T Lymphocy	7.22E-01	1.11E-02	NFATC2
Role of Macrophages, Fibroblasts and Endothelial Cells in Rheuma	7.17E-01	5.57E-03	HP, NFATC2
Melanocyte Development and Pigmentation Signaling	7.13E-01	1.11E-02	PRKAR2B
Virus Entry via Endocytic Pathways	7.03E-01	1.02E-02	ACTA1
VEGF Signaling	7.03E-01	1.01E-02	ACTA1
FXR/RXR Activation	6.98E-01	9.71E-03	PON1
CDK5 Signaling	6.98E-01	1.06E-02	PRKAR2B
FAK Signaling	6.89E-01	9.8E-03	ACTA1
Fcγ Receptor-mediated Phagocytosis in Macrophages and Monocy	6.8E-01	9.9E-03	ACTA1
IGF-1 Signaling	6.8E-01	9.8E-03	PRKAR2B
Glycerolipid Metabolism	6.72E-01	6.41E-03	DGAT1
Neuropathic Pain Signaling In Dorsal Horn Neurons	6.59E-01	9.52E-03	PRKAR2B
T Cell Receptor Signaling	6.59E-01	9.17E-03	NFATC2
HGF Signaling	6.51E-01	9.52E-03	MAP3K2
Rac Signaling	6.31E-01	8.06E-03	IQGAP1
Synaptic Long Term Potentiation	6.28E-01	8.85E-03	PRKAR2B
iCOS-iCOSL Signaling in T Helper Cells	6.28E-01	8.06E-03	NFATC2
Renin-Angiotensin Signaling	6.24E-01	8.2E-03	PRKAR2B
Systemic Lupus Erythematosus Signaling	6.24E-01	6.13E-03	NFATC2
RhoA Signaling	6.2E-01	9.09E-03	ACTA1
Corticotropin Releasing Hormone Signaling	6.13E-01	7.35E-03	PRKAR2B
CCR3 Signaling in Eosinophils	6.02E-01	8.2E-03	GNB1
CD28 Signaling in T Helper Cells	5.95E-01	7.46E-03	NFATC2
Hepatic Cholestasis	5.57E-01	6.06E-03	PRKAR2B
Cdc42 Signaling	5.54E-01	5.59E-03	IQGAP1
Oxidative Phosphorylation	5.54E-01	6.06E-03	PPA1
AMPK Signaling	5.45E-01	5.99E-03	PRKAR2B
Ovarian Cancer Signaling	5.42E-01	7.04E-03	PRKAR2B
PI3K Signaling in B Lymphocytes	5.33E-01	6.8E-03	NFATC2
CXCR4 Signaling	4.87E-01	5.92E-03	GNB1
Production of Nitric Oxide and Reactive Oxygen Species in Macrop	4.87E-01	5.35E-03	MAP3K2
Clathrin-mediated Endocytosis Signaling	4.82E-01	5.92E-03	ACTA1
PPARα/RXRα Activation	4.72E-01	5.56E-03	PRKAR2B
RAR Activation	4.61E-01	5.52E-03	PRKAR2B
IL-8 Signaling	4.61E-01	5.32E-03	GNB1
Acute Phase Response Signaling	4.57E-01	5.62E-03	HP
NRF2-mediated Oxidative Stress Response	4.5E-01	5.41E-03	ACTA1
ILK Signaling	4.48E-01	5.32E-03	ACTA1
Ephrin Receptor Signaling	4.42E-01	5.05E-03	GNB1
Leukocyte Extravasation Signaling	4.4E-01	5.1E-03	ACTA1
ERK/MAPK Signaling	4.36E-01	5.13E-03	PRKAR2B
Integrin Signaling	4.16E-01	4.9E-03	ACTA1
Thrombin Signaling	4.13E-01	4.85E-03	GNB1
Huntington's Disease Signaling	3.75E-01	4.13E-03	GNB1
Glucocorticoid Receptor Signaling	3.28E-01	3.55E-03	NFATC2
Xenobiotic Metabolism Signaling	3.27E-01	3.38E-03	MAP3K2
Purine Metabolism	2.66E-01	2.28E-03	PDE3B
Molecular Mechanisms of Cancer	2.37E-01	2.67E-03	PRKAR2B

TABLE S3: Biological functions modified by A2AR KO

Category	p-value	Molecules
Cellular Development	7.34E-04-4.5E-02	MRAP, CTSK, SACS, PRKAR2B, PTGER3, NFATC2, TSLP, MAP3K2
Cellular Growth and Proliferation	7.34E-04-4.01E-02	MRAP, PPBP, NFATC2, TSLP
Hematological System Development and Function	7.34E-04-4.5E-02	HP, PTGER3, TICAM1, PPBP, NFATC2, TSLP, MAP3K2
Humoral Immune Response	7.34E-04-4.5E-02	NFATC2, FMOD, TSLP
Cell-To-Cell Signaling and Interaction	1.53E-03-4.74E-02	ANK3, PTGER3, TICAM1, PPBP, NFATC2, IQGAP1, TSLP, MAP3K2
Amino Acid Metabolism	2.55E-03-5.09E-03	SLC38A1
Carbohydrate Metabolism	2.55E-03-4.72E-02	GNB1, PON1, PPBP, PPA1
Cell Death	2.55E-03-4.5E-02	PPBP, NFATC2, TSLP, MAP3K2
Cell Morphology	2.55E-03-3.68E-02	ANK3, PTGER3, NFATC2, CNPY2, IQGAP1, TSLP
Cellular Assembly and Organization	2.55E-03-4.01E-02	ANK3, CTSK, NFATC2, FMOD, CNPY2, IQGAP1, ACTA1
Cellular Compromise	2.55E-03-4.01E-02	ANK3, HP, CTSK, PTGER3, PPBP
Cellular Function and Maintenance	2.55E-03-1.52E-02	HP, PPBP, NFATC2, TSLP, MAP3K2
Cellular Movement	2.55E-03-4.58E-02	GNB1, CTSK, HP, TICAM1, PPBP, NFATC2, IQGAP1, TSLP
Connective Tissue Development and Function	2.55E-03-3.02E-02	CTSK, RPL22, PTGER3, PDE3B, PPBP, CIDEC, NFATC2
Connective Tissue Disorders	2.55E-03-5.09E-03	NFATC2
Developmental Disorder	2.55E-03-2.55E-03	CTSK
Genetic Disorder	2.55E-03-4.01E-02	ANK3, CTSK, PTGER3, CIDEC, IQGAP1, TSLP, MRAP, GNB1, PON1, HP, PRKAR2B, PDE3B, NFATC2, DGAT1, ACTA1
Hair and Skin Development and Function	2.55E-03-5.09E-03	PTGER3, DGAT1
Immune Cell Trafficking	2.55E-03-3.51E-02	HP, TICAM1, PPBP, NFATC2, TSLP
Inflammatory Response	2.55E-03-4.67E-02	HP, PTGER3, TICAM1, PPBP, NFATC2, FMOD, TSLP
Lipid Metabolism	2.55E-03-4.25E-02	PON1, HP, PDE3B, PPBP, CIDEC, DGAT1
Molecular Transport	2.55E-03-4.25E-02	GNB1, PON1, HP, PDE3B, PTGER3, PPBP, CIDEC, SLC38A1, DGAT1
Nervous System Development and Function	2.55E-03-3.68E-02	MRAP, ANK3, NFATC2, IQGAP1, CNPY2
Neurological Disease	2.55E-03-3.76E-02	GNB1, ANK3, PON1, HP, PRKAR2B, PDE3B, NFATC2
Nucleic Acid Metabolism	2.55E-03-2.55E-03	PPA1
Organ Morphology	2.55E-03-1.02E-02	NFATC2, DGAT1
Skeletal and Muscular Disorders	2.55E-03-7.63E-03	CTSK, NFATC2, ACTA1
Skeletal and Muscular System Development and Function	2.55E-03-2.77E-02	CTSK, NFATC2, FMOD, TSLP, ACTA1
Small Molecule Biochemistry	2.55E-03-4.74E-02	GNB1, PON1, HP, PDE3B, PPBP, CIDEC, SLC38A1, DGAT1, PPA1
Tissue Development	2.55E-03-2.52E-02	CTSK, RPL22, PTGER3, FMOD, MAP3K2
Gastrointestinal Disease	2.6E-03-3.83E-02	HP, IQGAP1, TSLP
Hepatic System Disease	2.6E-03-3.83E-02	HP, DGAT1, IQGAP1, TSLP
Organismal Injury and Abnormalities	2.6E-03-4.74E-02	HP, NFATC2, TSLP
Cell Signaling	2.78E-03-3.34E-02	GNB1, HP, PTGER3, PPBP
Organismal Functions	4.82E-03-2.52E-02	PTGER3, DGAT1, FMOD
Cell-mediated Immune Response	5.09E-03-1.02E-02	NFATC2, TSLP, MAP3K2
Embryonic Development	5.09E-03-1.02E-02	MRAP, TSLP, MAP3K2
Endocrine System Disorders	5.09E-03-3.57E-02	MRAP, ANK3, PON1, CUX2, SLCO5A1, PTGER3, PDE3B, CIDEC, NFATC2, DGAT1, IQGAP1, ELL2
Hematopoiesis	5.09E-03-4.5E-02	NFATC2, TSLP, MAP3K2
Immunological Disease	5.09E-03-1.14E-02	ANK3, PON1, CUX2, HP, SLCO5A1, PTGER3, NFATC2, ELL2
Inflammatory Disease	5.09E-03-4.01E-02	HP, PTGER3, NFATC2, TSLP
Lymphoid Tissue Structure and Development	5.09E-03-2.77E-02	PPBP, NFATC2
Renal and Urological System Development and Function	5.09E-03-5.09E-03	PTGER3
Respiratory Disease	5.09E-03-4.01E-02	PTGER3, TSLP
Tissue Morphology	5.09E-03-3.27E-02	ANK3, CTSK, NFATC2, TSLP
Organismal Development	7.63E-03-7.63E-03	FMOD
Reproductive System Development and Function	7.63E-03-7.63E-03	PTGER3, DGAT1
Respiratory System Development and Function	7.63E-03-1.02E-02	PTGER3
Metabolic Disease	8.75E-03-4.23E-02	ANK3, PON1, CUX2, SLCO5A1, PTGER3, PDE3B, CIDEC, NFATC2, MTR, DGAT1, IQGAP1, ELL2
Cancer	1.02E-02-3.83E-02	HP, IQGAP1, TSLP
Cell Cycle	1.02E-02-3.02E-02	PDE3B, CIDEC, NFATC2, TSLP
Tumor Morphology	1.02E-02-1.02E-02	IQGAP1
Reproductive System Disease	1.13E-02-4.5E-02	ANK3, PON1, PTGER3, IQGAP1, ELL2
Behavior	1.52E-02-1.52E-02	GNB1
Antigen Presentation	1.77E-02-4.5E-02	PPBP, FMOD, TSLP
Gene Expression	1.77E-02-4.5E-02	PRKAR2B, NFATC2, ELL2
Vitamin and Mineral Metabolism	2.02E-02-3.34E-02	GNB1, PTGER3, PPBP, DGAT1
Cardiovascular System Development and Function	2.52E-02-2.52E-02	NFATC2
Organ Development	2.52E-02-2.52E-02	NFATC2
Renal and Urological Disease	3.02E-02-3.02E-02	PTGER3
Cardiovascular Disease	3.17E-02-4.85E-02	PON1, PDE3B, ACTA1
Hypersensitivity Response	3.27E-02-3.27E-02	TSLP
Post-Translational Modification	4.74E-02-4.74E-02	CTSK

TABLE S4 - Genes modified by LPS

Gene Symbol	Gene Name	Affymetrix ID	Fold-Change	%FDR
	Up-Regulated			
Lcn2	lipocalin 2	1427747_a_at	590.24	0.00
Saa3	serum amyloid A 3	1450826_a_at	515.71	0.00
Serpina3n	serine (or cysteine) peptidase inhibitor, clade A, member 3N	1419100_at	122.38	0.00
BC023105	cDNA sequence BC023105	1425394_at	106.76	0.00
Cxcl9	chemokine (C-X-C motif) ligand 9	1418652_at	100.82	0.00
Cxcl1	chemokine (C-X-C motif) ligand 1	1419209_at	88.95	0.00
Serpina3g	serine (or cysteine) peptidase inhibitor, clade A, member 3G	1424923_at	84.27	0.00
Ifit1	interferon-induced protein with tetratricopeptide repeats 1	1450783_at	83.36	0.00
Ifit3	interferon-induced protein with tetratricopeptide repeats 3	1449025_at	64.03	0.00
Cd274	CD274 antigen	1419714_at	58.61	0.00
Mt2	metallothionein 2	1428942_at	54.18	0.00
Cxcl5	chemokine (C-X-C motif) ligand 5	1419728_at	52.40	0.00
Mpa2l /// LOC626578 /// LOC673101	macrophage activation 2 like /// similar to macrophage activation 2 like /// similar to macrophage activation 2 like	1438676_at	51.37	0.00
Herc5	hect domain and RLD 5	1432026_a_at	43.64	0.00
Cxcl2	chemokine (C-X-C motif) ligand 2	1449984_at	35.84	0.00
Igtp	interferon gamma induced GTPase	1417141_at	35.14	0.00
Il6	interleukin 6	1450297_at	34.00	0.00
---	---	1458589_at	33.74	0.00
Usp18	ubiquitin specific peptidase 18	1418191_at	32.49	0.00
Cxcl10	chemokine (C-X-C motif) ligand 10	1418930_at	31.12	0.00
Ptx3	pentraxin related gene	1418666_at	31.06	0.00
Iigp1	interferon inducible GTPase 1	1419042_at	30.81	0.00
S100a9	S100 calcium binding protein A9 (calgranulin B)	1448756_at	30.15	0.00
Irf7	interferon regulatory factor 7	1417244_a_at	30.09	0.00
Ifit2	interferon-induced protein with tetratricopeptide repeats 2	1418293_at	30.01	0.00
S100a8	S100 calcium binding protein A8 (calgranulin A)	1419394_s_at	29.33	0.00
Iigp2	interferon inducible GTPase 2	1417793_at	29.12	0.00
Csf3	colony stimulating factor 3 (granulocyte)	1419427_at	27.79	0.00
Mpa2l /// LOC626578 /// LOC673101	macrophage activation 2 like /// similar to macrophage activation 2 like /// similar to macrophage activation 2 like	1447927_at	27.05	0.00
Cxcl1	chemokine (C-X-C motif) ligand 1	1457644_s_at	25.49	0.00
Rsad2	radical S-adenosyl methionine domain containing 2	1421008_at	23.83	0.00
Lrg1	leucine-rich alpha-2-glycoprotein 1	1417290_at	23.31	0.00
Irgm	immunity-related GTPase family, M	1418825_at	23.12	0.00
Fpr-rs2	formyl peptide receptor, related sequence 2	1422953_at	22.86	0.00
Rsad2	radical S-adenosyl methionine domain containing 2	1421009_at	22.65	0.00
Ifi44	interferon-induced protein 44	1423555_a_at	22.31	0.00
LOC677168	hypothetical protein LOC677168	1431591_s_at	21.06	0.00
Timp1	tissue inhibitor of metalloproteinase 1	1460227_at	20.72	0.00
Gbp2	guanylate nucleotide binding protein 2	1418240_at	20.65	0.00
Angptl4	angiopoietin-like 4	1417130_s_at	20.56	0.00
2210407C18Rik	RIKEN cDNA 2210407C18 gene	1425233_at	20.52	0.00
Gbp4	guanylate nucleotide binding protein 4	1418392_a_at	20.50	0.00
Plac8	placenta-specific 8	1451335_at	19.78	0.00
Mbd1	methyl-CpG binding domain protein 1	1453678_at	19.05	0.00
LOC240327	Hypothetical LOC240327	1439831_at	19.01	0.00
Inhbb	inhibin beta-B	1426858_at	18.79	0.00
Socs3	suppressor of cytokine signaling 3	1455899_x_at	18.78	0.00
Cxcl13	chemokine (C-X-C motif) ligand 13	1417851_at	18.46	0.00
Iigp1	interferon inducible GTPase 1	1419043_a_at	18.38	0.00
Gbp2	guanylate nucleotide binding protein 2	1435906_x_at	17.84	0.00
Slc10a6	solute carrier family 10 (sodium/bile acid cotransporter family), member 6	1428776_at	17.53	0.00
Socs3	suppressor of cytokine signaling 3	1456212_x_at	17.36	0.00
Ifi47	interferon gamma inducible protein 47	1417292_at	17.23	0.00
Samhd1	SAM domain and HD domain, 1	1418131_at	17.22	0.00
Tgtp	T-cell specific GTPase	1449009_at	17.17	0.00
AI451557	expressed sequence AI451557	1437176_at	17.12	0.00
Oasl2	2'-5' oligoadenylate synthetase-like 2	1453196_a_at	16.41	0.00
Hdc	histidine decarboxylase	1454713_s_at	15.94	0.00
Tap1	transporter 1, ATP-binding cassette, sub-family B (MDR/TAP)	1416016_at	15.48	0.00
Rsad2	radical S-adenosyl methionine domain containing 2	1436058_at	15.36	0.00
Cfb	complement factor B	1417314_at	15.05	0.00
Selp	selectin, platelet	1420558_at	15.05	0.00
Ifi202b	interferon activated gene 202B	1457666_s_at	14.59	0.00
AA467197	expressed sequence AA467197	1434046_at	14.22	0.01
Fbxo39	F-box protein 39	1443698_at	14.04	0.00
Nfkbiz	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta	1417483_at	13.27	0.00
Zbp1	Z-DNA binding protein 1	1429947_a_at	13.09	0.00
Herc5	hect domain and RLD 5	1438037_at	13.08	0.00
9830147J24Rik	RIKEN cDNA 9830147J24 gene	1434380_at	13.05	0.00
Stat1	signal transducer and activator of transcription 1	1450033_a_at	12.87	0.00
Adamts4	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 4	1452595_at	12.84	0.00
Rtp4	receptor transporter protein 4	1418580_at	12.83	0.00
Ms4a11	membrane-spanning 4-domains, subfamily A, member 11	1419599_s_at	12.70	0.00
Ankrd2	ankyrin repeat domain 2 (stretch responsive muscle)	1419621_at	12.43	0.00
Bst2	bone marrow stromal cell antigen 2	1424921_at	12.14	0.00
9830147J24Rik	RIKEN cDNA 9830147J24 gene	1425156_at	12.09	0.00
Psmb8	proteosome (prosome, macropain) subunit, beta type 8 (large multifunctional peptidase 7)	1422962_a_at	11.94	0.00
Slfn4	schlafen 4	1427102_at	11.93	0.00
Saa1	serum amyloid A 1	1419075_s_at	11.84	0.00
Psmb9	proteosome (prosome, macropain) subunit, beta type 9 (large multifunctional peptidase 2)	1450696_at	11.70	0.00
Ccl2	chemokine (C-C motif) ligand 2	1420380_at	11.64	0.00
Dscr1	Down syndrome critical region homolog 1 (human)	1416601_a_at	11.07	0.00
Cxcl13	chemokine (C-X-C motif) ligand 13	1448859_at	10.72	0.00
Mmp3	matrix metallopeptidase 3	1418945_at	10.70	0.00
---	Transcribed locus	1436274_at	10.69	0.02
Ms4a6d	membrane-spanning 4-domains, subfamily A, member 6D	1419598_at	10.65	0.00
Parp14	poly (ADP-ribose) polymerase family, member 14	1451564_at	10.62	0.00
---	---	1447285_at	10.49	0.00
Slc15a3	solute carrier family 15, member 3	1420697_at	10.43	0.00

Tlr2	toll-like receptor 2	1419132_at	10.38	0.00
D14Ertd668e	DNA segment, Chr 14, ERATO Doi 668, expressed	1438868_at	10.38	0.00
Cdkn1a	cyclin-dependent kinase inhibitor 1A (P21)	1424638_at	10.35	0.00
Irg1	immunoresponsive gene 1	1427381_at	10.28	0.00
Chi3l3	chitinase 3-like 3	1419764_at	10.27	0.00
Oasl1	2'-5' oligoadenylate synthetase-like 1	1424339_at	10.25	0.00
Ccl5	chemokine (C-C motif) ligand 5	1418126_at	10.03	0.00
---	---	1455393_at	9.90	0.00
Lox	lysyl oxidase	1416121_at	9.87	0.00
---	---	1438027_at	9.85	0.00
Mbd1	methyl-CpG binding domain protein 1	1430838_x_at	9.79	0.00
Msr1	macrophage scavenger receptor 1	1448061_at	9.74	0.00
Cxcl9	chemokine (C-X-C motif) ligand 9	1456907_at	9.48	0.00
Tapbpl	TAP binding protein-like	1451544_at	9.47	0.00
Cp	ceruloplasmin	1441326_at	9.39	0.00
Cyp1b1	cytochrome P450, family 1, subfamily b, polypeptide 1	1416613_at	9.38	0.00
Upp1	uridine phosphorylase 1	1448562_at	9.34	0.00
Icam1	intercellular adhesion molecule	1424067_at	9.32	0.00
Fkbp5	FK506 binding protein 5	1416125_at	9.28	0.00
Ifih1	interferon induced with helicase C domain 1	1426276_at	9.20	0.00
Ifi202b	interferon activated gene 202B	1421551_s_at	9.15	0.00
Casp4	caspase 4, apoptosis-related cysteine peptidase	1449591_at	9.12	0.00
Tnfaip3	tumor necrosis factor, alpha-induced protein 3	1433699_at	9.10	0.00
Ctla2b	cytotoxic T lymphocyte-associated protein 2 beta	1452352_at	9.01	0.00
Marco	macrophage receptor with collagenous structure	1449498_at	9.00	0.00
Lox	lysyl oxidase	1448228_at	9.00	0.00
Stat1	signal transducer and activator of transcription 1	1450034_at	8.99	0.00
LOC630509 /// LOC674192	similar to H-2 class I histocompatibility antigen, Q7 alpha chain precursor (QA-2 antigen) /// region containing histocompatibility 2, Q region locus 9; histocompatibility 2, Q region locus 7	1418536_at	8.96	0.00
Socs3	suppressor of cytokine signaling 3	1416576_at	8.91	0.00
Ms4a4c	membrane-spanning 4-domains, subfamily A, member 4C	1450291_s_at	8.87	0.00
Rnd1	Rho family GTPase 1	1455197_at	8.86	0.00
Lgals3bp	lectin, galactoside-binding, soluble, 3 binding protein	1448380_at	8.68	0.00
BC013672	cDNA sequence BC013672	1451777_at	8.66	0.00
Cebpd	CCAAT/enhancer binding protein (C/EBP), delta	1423233_at	8.64	0.00
Ifi204 /// LOC672547	interferon activated gene 204 /// similar to Interferon-activatable protein 204 (Ifi-204) (Interferon-inducible protein p204)	1419603_at	8.55	0.00
Dtx3l	deltex 3-like (Drosophila)	1435208_at	8.54	0.00
Stat1	signal transducer and activator of transcription 1	1420915_at	8.52	0.00
Ubd	ubiquitin D	1419762_at	8.29	0.00
Cp	ceruloplasmin	1448734_at	8.05	0.00
Ibrdc3	IBR domain containing 3	1432478_a_at	8.03	0.00
Cp	ceruloplasmin	1417495_x_at	8.00	0.00
Serpina3m	serine (or cysteine) peptidase inhibitor, clade A, member 3M	1421921_at	7.93	0.00
Psmb10	proteasome (prosome, macropain) subunit, beta type 10	1448632_at	7.91	0.00
H2-T23 /// C920025E04Rik /// LOC667803 /// LOC672711 /// LOC674134	histocompatibility 2, T region locus 23 /// RIKEN cDNA C920025E04 gene /// similar to H-2 class I histocompatibility antigen, D-37 alpha chain precursor /// similar to H-2 class I histocompatibility antigen, D-37 alpha chain precursor /// similar to H-2 class I histocompatibility antigen, D-37 alpha chain precursor	1449556_at	7.90	0.00
Parp9	poly (ADP-ribose) polymerase family, member 9	1416897_at	7.79	0.00
Cyp1b1	cytochrome P450, family 1, subfamily b, polypeptide 1	1416612_at	7.62	0.00
Fgl2	fibrinogen-like protein 2	1421854_at	7.58	0.01
Myc	myelocytomatosis oncogene	1424942_a_at	7.51	0.00
Mbd1	methyl-CpG binding domain protein 1	1417968_a_at	7.46	0.00
Sphk1	sphingosine kinase 1	1451596_a_at	7.44	0.00
Herc5	hect domain and RLD 5	1453757_at	7.41	0.00
0610037M15Rik	RIKEN cDNA 0610037M15 gene	1431008_at	7.37	0.00
Ube1l	ubiquitin-activating enzyme E1-like	1426971_at	7.36	0.00
Hp	haptoglobin	1448881_at	7.34	0.00
Cp	ceruloplasmin	1417494_a_at	7.27	0.00
Bcr	breakpoint cluster region homolog	1452368_at	7.11	0.00
Slc39a14	solute carrier family 39 (zinc transporter), member 14	1457770_at	7.08	0.00
Trim30	tripartite motif protein 30	1451860_a_at	6.98	0.00
Pfkfb3	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3	1416432_at	6.97	0.00
Nfkbiz	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta	1448728_a_at	6.86	0.00
Oas1a	2'-5' oligoadenylate synthetase 1A	1424775_at	6.80	0.00
---	---	1455660_at	6.79	0.00
Selp	selectin, platelet	1449906_at	6.78	0.00
Pgf	placental growth factor	1418471_at	6.76	0.00
Pap	pancreatitis-associated protein	1448290_at	6.75	0.00
Mt1	metallothionein 1	1422557_s_at	6.73	0.00
4833442J19Rik	RIKEN cDNA 4833442J19 gene	1457915_at	6.68	0.00
D11Lgp2e	DNA segment, Chr 11, Lothar Hennighausen 2, expressed	1451426_at	6.67	0.00
Clec4d	C-type lectin domain family 4, member d	1420804_s_at	6.66	0.00
H2-D1 /// H2-K1 /// LOC56628	histocompatibility 2, D region locus 1 /// histocompatibility 2, K1, K region /// MHC (A.CA/J(H-2K-f) class I antigen	1424948_x_at	6.64	0.00
Plaur	plasminogen activator, urokinase receptor	1452521_a_at	6.61	0.00
Sema5a	sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A	1434776_at	6.61	0.00
Dtx3l	deltex 3-like (Drosophila)	1439825_at	6.60	0.00
Mpeg1 /// LOC671359	macrophage expressed gene 1 /// similar to macrophage expressed gene 1	1427076_at	6.58	0.00
H2-K1	histocompatibility 2, K1, K region	1427746_x_at	6.57	0.00
Zfp697	zinc finger protein 697	1440999_at	6.55	0.00
Fgl2	fibrinogen-like protein 2	1421855_at	6.49	0.00
H2-Q1 /// 0610037M15Rik	histocompatibility 2, Q region locus 1 /// RIKEN cDNA 0610037M15 gene	1451644_a_at	6.47	0.00
Ccl7	chemokine (C-C motif) ligand 7	1421228_at	6.44	0.00
Map3k8	mitogen activated protein kinase kinase kinase 8	1419208_at	6.34	0.00
Parp12	poly (ADP-ribose) polymerase family, member 12	1426774_at	6.33	0.00
Tyki	thymidylate kinase family LPS-inducible member	1450484_a_at	6.30	0.00
Stat1	signal transducer and activator of transcription 1	1440481_at	6.14	0.00
Cxcl11	chemokine (C-X-C motif) ligand 11	1419697_at	6.13	0.02
Snx10	sorting nexin 10	1431055_a_at	6.11	0.00
Gbp1	guanylate nucleotide binding protein 1	1420549_at	6.08	0.00
Loh11cr2a	loss of heterozygosity, 11, chromosomal region 2, gene A homolog (human)	1426221_at	6.07	0.00
C1r	complement component 1, r subcomponent	1417009_at	6.07	0.00
Slc45a3	solute carrier family 45, member 3	1426663_s_at	6.05	0.00

Samhd1	SAM domain and HD domain, 1	1434438_at	6.05	0.00
Sh2d5	SH2 domain containing 5	1436100_at	6.03	0.01
Ifi35	interferon-induced protein 35	1445897_s_at	6.02	0.00
Ifi35	interferon-induced protein 35	1424617_at	6.01	0.00
Hmox1	heme oxygenase (decycling) 1	1448239_at	6.00	0.00
Hck	hemopoietic cell kinase	1449455_at	5.94	0.00
Zbp1	Z-DNA binding protein 1	1419604_at	5.94	0.00
LOC620695	hypothetical protein LOC620695	1455271_at	5.93	0.01
Asb4	ankyrin repeat and SOCS box-containing protein 4	1423422_at	5.93	0.00
Asb4	ankyrin repeat and SOCS box-containing protein 4	1433919_at	5.93	0.01
Il18bp	interleukin 18 binding protein	1450424_a_at	5.92	0.00
Ngp	neutrophilic granule protein	1418722_at	5.87	0.00
Clca1 /// Clca2	chloride channel calcium activated 1 /// chloride channel calcium activated 2	1460259_s_at	5.85	0.00
D11Ertd759e /// LOC672513	DNA segment, Chr 11, ERATO Doi 759, expressed /// similar to chromosome 17 open reading frame 27	1455500_at	5.80	0.00
6030422H21Rik	RIKEN cDNA 6030422H21 gene	1441799_at	5.79	0.00
E230013L22Rik	RIKEN cDNA E230013L22 gene	1439098_at	5.73	0.00
Irak3	interleukin-1 receptor-associated kinase 3	1435040_at	5.72	0.00
9230117N10Rik	RIKEN cDNA 9230117N10 gene	1416200_at	5.71	0.00
Fcgr3a	Fc fragment of IgG, low affinity IIIa, receptor	1425225_at	5.71	0.00
Ear1 /// Ear2 /// Ear3 /// Ear12	eosinophil-associated, ribonuclease A family, member 1 /// eosinophil-associated, ribonuclease A family, member 2 /// eosinophil-associated, ribonuclease A family, member 3 /// eosinophil-associated, ribonuclease A family, member 12	1422411_s_at	5.68	0.00
Cyp7b1	cytochrome P450, family 7, subfamily b, polypeptide 1	1421074_at	5.66	0.00
Hdc	histidine decarboxylase	1451796_s_at	5.63	0.00
C1r /// LOC667277 /// LOC677405	complement component 1, r subcomponent /// similar to Complement C1r-B subcomponent precursor (Complement component 1, r-B subcomponent) /// similar to complement component 1, r subcomponent	1456437_x_at	5.63	0.00
Itgam	integrin alpha M	1422046_at	5.60	0.00
Enc1	ectodermal-neural cortex 1	1420965_a_at	5.60	0.00
Nmi	N-myc (and STAT) interactor	1425719_a_at	5.60	0.00
C1s	complement component 1, s subcomponent	1424041_s_at	5.59	0.00
Saa1	serum amyloid A 1	1450788_at	5.54	0.00
1200016E24Rik	RIKEN cDNA 1200016E24 gene	1452418_at	5.52	0.00
Prg4	proteoglycan 4 (megakaryocyte stimulating factor, articular superficial zone protein)	1449824_at	5.51	0.00
Fkbp5	FK506 binding protein 5	1448231_at	5.46	0.00
Osmr	oncostatin M receptor	1418675_at	5.45	0.00
Stat2	signal transducer and activator of transcription 2	1450403_at	5.44	0.00
Sdc4	syndecan 4	1448793_a_at	5.44	0.00
Ifi35	interferon-induced protein 35	1459151_x_at	5.42	0.00
AI607873	expressed sequence AI607873	1457035_at	5.42	0.00
Ccl19	chemokine (C-C motif) ligand 19	1449277_at	5.39	0.00
Osmr	oncostatin M receptor	1418674_at	5.37	0.00
BC013672	cDNA sequence BC013672	1439114_at	5.36	0.01
Mlkl	mixed lineage kinase domain-like	1429570_at	5.36	0.00
Fpr1	formyl peptide receptor 1	1450808_at	5.36	0.00
Ube1l /// D330022A01Rik	ubiquitin-activating enzyme E1-like /// RIKEN cDNA D330022A01 gene	1426970_a_at	5.35	0.00
Slfn8	schlafen 8	1451655_at	5.34	0.00
Cdkn1a	cyclin-dependent kinase inhibitor 1A (P21)	1421679_a_at	5.31	0.00
Ibrdc3	IBR domain containing 3	1435226_at	5.31	0.00
Plec1 /// LOC671535	plectin 1 /// similar to poly (ADP-ribose) polymerase family, member 10	1452178_at	5.30	0.00
1110007F12Rik	RIKEN cDNA 1110007F12 gene	1424354_at	5.29	0.00
Syt12	synaptotagmin XII	1422878_at	5.29	0.00
Steap4	STEAP family member 4	1425829_a_at	5.26	0.01
Ctps	cytidine 5'-triphosphate synthase	1416563_at	5.20	0.00
Cp	ceruloplasmin	1417496_at	5.20	0.00
1200007C13Rik	RIKEN cDNA 1200007C13 gene	1431837_at	5.14	0.00
Pde4b	phosphodiesterase 4B, cAMP specific	1422473_at	5.13	0.01
Ddx58	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58	1436562_at	5.10	0.00
Trex1	three prime repair exonuclease 1	1450672_a_at	5.09	0.00
Ifitm1	interferon induced transmembrane protein 1	1424254_at	5.04	0.00
A630077B13Rik	RIKEN cDNA A630077B13 gene	1436576_at	5.03	0.02
H2-K1	Histocompatibility 2, K1, K region	1451593_at	5.03	0.00
H2-K1	histocompatibility 2, K1, K region	1425336_x_at	5.03	0.00
Casp12	caspase 12	1418981_at	5.01	0.00
Selp	selectin, platelet	1440173_x_at	5.00	0.00
Irf8	interferon regulatory factor 8	1416714_at	5.00	0.00
Fbp1	fructose bisphosphatase 1	1448470_at	4.98	0.00
Mbd1	methyl-CpG binding domain protein 1	1437061_at	4.98	0.00
Ctla2a	cytotoxic T lymphocyte-associated protein 2 alpha	1448471_a_at	4.97	0.00
Junb	Jun-B oncogene	1415899_at	4.97	0.00
Uck2	Uridine-cytidine kinase 2	1441858_at	4.96	0.01
Tmem38b	transmembrane protein 38B	1449677_s_at	4.95	0.00
Xdh	xanthine dehydrogenase	1451006_at	4.95	0.00
Tapbp	TAP binding protein	1450378_at	4.92	0.00
Slfn1	schlafen 1	1418612_at	4.92	0.00
Casp12	caspase 12	1449297_at	4.90	0.00
Ch25h	cholesterol 25-hydroxylase	1449227_at	4.89	0.00
2310016F22Rik /// BC020489	RIKEN cDNA 2310016F22 gene /// cDNA sequence BC020489	1424518_at	4.86	0.00
Cd14	CD14 antigen	1417268_at	4.86	0.00
Sema5a	sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A	1437422_at	4.86	0.00
Dscr1	Down syndrome critical region homolog 1 (human)	1416600_a_at	4.84	0.00
Tap2	transporter 2, ATP-binding cassette, sub-family B (MDR/TAP)	1453913_a_at	4.79	0.00
Enc1	ectodermal-neural cortex 1	1450061_at	4.79	0.00
Chac1	ChaC, cation transport regulator-like 1 (E. coli)	1451382_at	4.79	0.00
Trim34 /// LOC434218 /// LOC640746	tripartite motif protein 34 /// similar to Tripartite motif protein 34 /// similar to Tripartite motif protein 34	1421550_a_at	4.78	0.00
Pvr	poliovirus receptor	1423905_at	4.78	0.00
Pde4b	phosphodiesterase 4B, cAMP specific	1422474_at	4.78	0.02
Mt1	metallothionein 1	1451612_at	4.78	0.00
---	12 days embryo spinal cord cDNA, RIKEN full-length enriched library, clone:C530003P15 product:unclassifiable, full insert sequence	1458271_at	4.76	0.00
Anxa7	annexin A7	1416138_at	4.75	0.00
Stat2	signal transducer and activator of transcription 2	1421911_at	4.73	0.00
Cyb561	cytochrome b-561	1417507_at	4.72	0.00
LOC547343	similar to H-2 class I histocompatibility antigen, L-D alpha chain precursor	1451683_x_at	4.69	0.00

Fen1	flap structure specific endonuclease 1	1421731_a_at	4.67	0.00
Trim30	tripartite motif protein 30	1417961_a_at	4.66	0.00
Trim30 /// AI451617	tripartite motif protein 30 /// expressed sequence AI451617	1456494_a_at	4.66	0.00
Plscr1 /// LOC433328 /// LOC677340	phospholipid scramblase 1 /// hypothetical LOC433328 /// hypothetical protein LOC677340	1429527_a_at	4.65	0.00
Slc39a14	solute carrier family 39 (zinc transporter), member 14	1427035_at	4.62	0.00
Pvr	poliovirus receptor	1450295_s_at	4.61	0.00
Arts1	type 1 tumor necrosis factor receptor shedding aminopeptidase regulator	1439068_at	4.61	0.00
8430417A20Rik	RIKEN cDNA 8430417A20 gene	1430352_at	4.61	0.01
Fem1b	feminization 1 homolog b (C. elegans)	1418323_at	4.61	0.00
Ampd3	AMP deaminase 3	1422573_at	4.59	0.00
2610307O08Rik	RIKEN cDNA 2610307O08 gene	1447621_s_at	4.58	0.00
Plscr1	phospholipid scramblase 1	1453181_x_at	4.55	0.00
Gadd45g	growth arrest and DNA-damage-inducible 45 gamma	1453851_a_at	4.54	0.00
Indo	indoleamine-pyrrole 2,3 dioxygenase	1420437_at	4.50	0.00
Wars	tryptophanyl-tRNA synthetase	1425106_a_at	4.50	0.00
Nfkbia	nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	1449731_s_at	4.49	0.00
Arts1	type 1 tumor necrosis factor receptor shedding aminopeptidase regulator	1416942_at	4.48	0.00
Map3k6	mitogen-activated protein kinase kinase kinase 6	1449901_a_at	4.46	0.00
Ptp4a1	protein tyrosine phosphatase 4a1	1419024_at	4.45	0.00
Tapbp	TAP binding protein	1421812_at	4.45	0.00
Mbd1	methyl-CpG binding domain protein 1	1430837_a_at	4.45	0.00
Stno	strawberry notch homolog (Drosophila)	1458308_at	4.43	0.00
C3	complement component 3	1423954_at	4.43	0.00
Itgb3	integrin beta 3	1455257_at	4.42	0.00
A330021E22Rik	RIKEN cDNA A330021E22 gene	1455859_at	4.41	0.00
Birc3	baculoviral IAP repeat-containing 3	1421392_a_at	4.38	0.00
Tlr3	toll-like receptor 3	1422781_at	4.36	0.00
C330012H03Rik	RIKEN cDNA C330012H03 gene	1439764_s_at	4.36	0.00
Zbtb16	Zinc finger and BTB domain containing 16	1459557_at	4.34	0.00
Ctla2a /// Ctla2b	cytotoxic T lymphocyte-associated protein 2 alpha /// cytotoxic T lymphocyte-associated protein 2 beta	1416811_s_at	4.31	0.00
Sostdc1	sclerostin domain containing 1	1449340_at	4.30	0.00
Ifitm3	interferon induced transmembrane protein 3	1423754_at	4.30	0.00
AI447904	expressed sequence AI447904	1435331_at	4.28	0.00
Clca1	chloride channel calcium activated 1	1417852_x_at	4.28	0.00
Tlr3	toll-like receptor 3	1422782_s_at	4.27	0.00
Eif2ak2	eukaryotic translation initiation factor 2-alpha kinase 2	1440866_at	4.25	0.00
Nfkbie	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	1458299_s_at	4.25	0.00
Tgm2	transglutaminase 2, C polypeptide	1426004_a_at	4.24	0.00
Lman1l	lectin, mannose-binding 1 like	1451922_at	4.23	0.00
Wars	tryptophanyl-tRNA synthetase	1415694_at	4.22	0.00
Ier3	immediate early response 3	1419647_a_at	4.20	0.00
Eif1a	eukaryotic translation initiation factor 1A	1424344_s_at	4.19	0.00
Eif2ak2	eukaryotic translation initiation factor 2-alpha kinase 2	1422005_at	4.16	0.00
Ube2l6	ubiquitin-conjugating enzyme E2L 6	1417172_at	4.16	0.00
Isgf3g	interferon dependent positive acting transcription factor 3 gamma	1421322_a_at	4.15	0.00
Ucp3	uncoupling protein 3 (mitochondrial, proton carrier)	1420657_at	4.14	0.02
Sema3f	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3 F	1425840_a_at	4.13	0.00
Darc	Duffy blood group, chemokine receptor	1432273_a_at	4.11	0.00
Fcgr2b	Fc receptor, IgG, low affinity IIb	1435477_s_at	4.10	0.00
Slc39a14	solute carrier family 39 (zinc transporter), member 14	1438490_at	4.08	0.00
---	---	1430751_at	4.07	0.00
Nfkbia	nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	1448306_at	4.07	0.00
A130040M12Rik	RIKEN cDNA A130040M12 gene	1435640_x_at	4.04	0.00
A130040M12Rik	RIKEN cDNA A130040M12 gene	1428909_at	4.03	0.00
Uck2	uridine-cytidine kinase 2	1448604_at	4.02	0.00
H2-D1	histocompatibility 2, D region locus 1	1426324_at	4.02	0.00
H2-T22 /// H2-T9	histocompatibility 2, T region locus 22 /// histocompatibility 2, T region locus 9	1449875_s_at	4.02	0.00
Zfp36	zinc finger protein 36	1452519_a_at	4.00	0.00
Myd88	myeloid differentiation primary response gene 88	1419272_at	4.00	0.00
---	Transcribed locus	1435872_at	3.99	0.00
Stno	strawberry notch homolog (Drosophila)	1443721_x_at	3.99	0.00
Steap4	STEAP family member 4	1460197_a_at	3.98	0.00
Cenpj	centromere protein J	1437643_at	3.98	0.00
Serpine1	serine (or cysteine) peptidase inhibitor, clade E, member 1	1419149_at	3.98	0.01
Tmem38b	transmembrane protein 38B	1424700_at	3.97	0.00
Slc45a3	solute carrier family 45, member 3	1426664_x_at	3.97	0.00
Cnksr1 /// LOC637116	connector enhancer of kinase suppressor of Ras 1 /// similar to connector enhancer of kinase suppressor of Ras 1	1455399_at	3.96	0.00
B2m	Beta-2 microglobulin	1427511_at	3.96	0.00
Wars	tryptophanyl-tRNA synthetase	1434813_x_at	3.95	0.00
Batf2	basic leucine zipper transcription factor, ATF-like 2	1430005_a_at	3.95	0.00
2410006H16Rik	RIKEN cDNA 2410006H16 gene	1447936_at	3.95	0.00
Irf1	interferon regulatory factor 1	1448436_a_at	3.94	0.00
Cflar	CASP8 and FADD-like apoptosis regulator	1449317_at	3.93	0.01
Ogfr	opioid growth factor receptor	1422512_a_at	3.92	0.00
1200015M12Rik /// 1200016E24Rik /// A130040M12Rik /// E430024C06Rik	RIKEN cDNA 1200015M12 gene /// RIKEN cDNA 1200016E24 gene /// RIKEN cDNA A130040M12 gene /// RIKEN cDNA E430024C06 gene	1435137_s_at	3.90	0.00
Ly6a	lymphocyte antigen 6 complex, locus A	1417185_at	3.90	0.00
Nfkbia	nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	1438157_s_at	3.90	0.00
Eif1a	eukaryotic translation initiation factor 1A	1424343_a_at	3.87	0.00
---	Transcribed locus	1441150_x_at	3.86	0.00
Cyp7b1	cytochrome P450, family 7, subfamily b, polypeptide 1	1421075_s_at	3.85	0.00
Mcoln2	mucolipin 2	1431705_a_at	3.84	0.00
Mx2	myxovirus (influenza virus) resistance 2	1419676_at	3.84	0.00
Ifi205 /// Mnda	interferon activated gene 205 /// myeloid cell nuclear differentiation antigen	1452349_x_at	3.84	0.00
0610011I04Rik	RIKEN cDNA 0610011I04 gene	1425603_at	3.84	0.00
Shrm	shroom	1454211_a_at	3.81	0.00
Pim1	proviral integration site 1	1435458_at	3.80	0.00

Ifi203 /// Ifi204 /// LOC192690 /// Ifi205 /// Mnda /// LOC640890 /// LOC672547 /// LOC677184	interferon activated gene 203 /// interferon activated gene 204 /// similar to interferon activated gene 205 /// interferon activated gene 205 /// myeloid cell nuclear differentiation antigen /// similar to Interferon-activatable protein 205 (IFI-205) (D3 protein) /// similar to Interferon-activatable protein 204 (Ifi-204) (Interferon-inducible protein p204) /// similar to Interferon-activatable protein 204 (Ifi-204) (Interferon-inducible protein p204)	1452348_s_at	3.80	0.00
Psat1	phosphoserine aminotransferase 1	1454607_s_at	3.77	0.00
2310030G06Rik	RIKEN cDNA 2310030G06 gene	1449357_at	3.77	0.00
Bst1	bone marrow stromal cell antigen 1	1449453_at	3.76	0.00
Car4	carbonic anhydrase 4	1418094_s_at	3.75	0.00
Fas	Fas (TNF receptor superfamily member)	1460251_at	3.75	0.00
Bcl2a1a /// Bcl2a1b /// Bcl2a1d	B-cell leukemia/lymphoma 2 related protein A1a /// B-cell leukemia/lymphoma 2 related protein A1b /// B-cell leukemia/lymphoma 2 related protein A1d	1419004_s_at	3.74	0.00
Cebpb	CCAAT/enhancer binding protein (C/EBP), beta	1427844_a_at	3.72	0.00
Ccrl2	chemokine (C-C motif) receptor-like 2	1427736_a_at	3.71	0.01
1110025F24Rik	RIKEN cDNA 1110025F24 gene	1430530_s_at	3.69	0.00
Fmnl2	formin-like 2	1428579_at	3.69	0.00
Uck2	uridine-cytidine kinase 2	1439740_s_at	3.69	0.00
Cxcl1	chemokine (C-X-C motif) ligand 1	1441855_x_at	3.67	0.00
Nfkbia	Nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	1420089_at	3.66	0.00
1200003I10Rik /// 1200015M12Rik /// 1200016E24Rik /// A130040M12Rik /// E430024C06Rik	RIKEN cDNA 1200003I10 gene /// RIKEN cDNA 1200015M12 gene /// RIKEN cDNA 1200016E24 gene /// RIKEN cDNA A130040M12 gene /// RIKEN cDNA E430024C06 gene	1427932_s_at	3.65	0.00
Car4	carbonic anhydrase 4	1448949_at	3.65	0.00
Pde4b	phosphodiesterase 4B, cAMP specific	1442700_at	3.64	0.01
4833442J19Rik	RIKEN cDNA 4833442J19 gene	1427202_at	3.64	0.00
Clic4	chloride intracellular channel 4 (mitochondrial)	1423392_at	3.61	0.01
Pvr	poliovirus receptor	1423904_a_at	3.60	0.00
Capg	capping protein (actin filament), gelsolin-like	1450355_a_at	3.60	0.00
4930513N20Rik	RIKEN cDNA 4930513N20 gene	1433148_at	3.57	0.00
Anxa7	annexin A7	1416137_at	3.57	0.00
Axud1	AXIN1 up-regulated 1	1434350_at	3.57	0.00
Abhd1	abhydrolase domain containing 1	1418148_at	3.56	0.00
Tmem23	transmembrane protein 23	1426575_at	3.56	0.00
1110067D22Rik	RIKEN cDNA 1110067D22 gene	1424318_at	3.56	0.00
B2m	beta-2 microglobulin	1449289_a_at	3.55	0.00
Sprr1a	small proline-rich protein 1A	1449133_at	3.55	0.02
Gcnt2	glucosaminyl (N-acetyl) transferase 2, I-branching enzyme	1425503_at	3.54	0.00
Gna13	guanine nucleotide binding protein, alpha 13	1430295_at	3.53	0.00
Trim21	tripartite motif protein 21	1418077_at	3.53	0.00
Adfp	adipose differentiation related protein	1448318_at	3.52	0.00
Prkce	Protein kinase C, epsilon	1444649_at	3.52	0.00
AA408556	expressed sequence AA408556	1434239_at	3.52	0.00
Snord22	small nucleolar RNA, C/D box 22	1433674_a_at	3.52	0.00
Gm1960	gene model 1960, (NCBI)	1438148_at	3.51	0.00
---	Adult male bone cDNA, RIKEN full-length enriched library, clone:9830165G24 product:unclassifiable, full insert sequence	1457824_at	3.50	0.00
Pim3	proviral integration site 3	1451069_at	3.50	0.00
Adamts1	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 1	1450716_at	3.49	0.01
B2m	beta-2 microglobulin	1452428_a_at	3.49	0.00
Wars	tryptophanyl-tRNA synthetase	1437832_x_at	3.48	0.00
---	---	1420273_x_at	3.48	0.00
Maff	v-maf musculoaponeurotic fibrosarcoma oncogene family, protein F (avian)	1418936_at	3.47	0.00
---	---	1420272_at	3.47	0.00
Sele	selectin, endothelial cell	1421712_at	3.47	0.00
Ms4a6c	membrane-spanning 4-domains, subfamily A, member 6C	1450234_at	3.46	0.00
Lbp	lipopolysaccharide binding protein	1448550_at	3.45	0.00
---	---	1421326_at	3.44	0.00
Nfe2l2	nuclear factor, erythroid derived 2, like 2	1457117_at	3.44	0.00
1110067D22Rik	RIKEN cDNA 1110067D22 gene	1451313_a_at	3.43	0.00
Phf15	PHD finger protein 15	1455345_at	3.43	0.00
Mgst1	microsomal glutathione S-transferase 1	1415897_a_at	3.43	0.00
6330412F12Rik	RIKEN cDNA 6330412F12 gene	1452777_a_at	3.42	0.00
Clec4e	C-type lectin domain family 4, member e	1420330_at	3.42	0.00
Trim21	tripartite motif protein 21	1448940_at	3.42	0.00
Adar	adenosine deaminase, RNA-specific	1425405_a_at	3.41	0.00
---	---	1456544_at	3.40	0.00
Chi3l3 /// Chi3l4	chitinase 3-like 3 /// chitinase 3-like 4	1425451_s_at	3.40	0.00
Efhd2	EF hand domain containing 2	1431339_a_at	3.40	0.00
Psat1	phosphoserine aminotransferase 1	1451064_a_at	3.39	0.00
Pdk4	pyruvate dehydrogenase kinase, isoenzyme 4	1417273_at	3.39	0.00
Arrdc4	arrestin domain containing 4	1424759_at	3.39	0.00
Asns	asparagine synthetase	1433966_x_at	3.38	0.00
Tor3a	torsin family 3, member A	1428660_s_at	3.38	0.00
2810474O19Rik	RIKEN cDNA 2810474O19 gene	1452397_at	3.38	0.00
Parp14	poly (ADP-ribose) polymerase family, member 14	1432548_at	3.37	0.00
Dtna	dystrobrevin alpha	1419223_a_at	3.37	0.00
C2	Complement component 2 (within H-2S)	1457664_x_at	3.37	0.00
1200002N14Rik	RIKEN cDNA 1200002N14 gene	1424524_at	3.36	0.00
Shrm	shroom	1422629_s_at	3.35	0.00
Tgm2	transglutaminase 2, C polypeptide	1417500_a_at	3.35	0.00
---	---	1446346_at	3.34	0.00
Il4ra	interleukin 4 receptor, alpha	1421034_a_at	3.34	0.00
5133401N09Rik	RIKEN cDNA 5133401N09 gene	1424496_at	3.34	0.00
Slc39a14	solute carrier family 39 (zinc transporter), member 14	1425649_at	3.34	0.00
Cspg2	chondroitin sulfate proteoglycan 2	1421694_a_at	3.33	0.00
Hcls1	hematopoietic cell specific Lyn substrate 1	1418842_at	3.33	0.00
Cxcl14	chemokine (C-X-C motif) ligand 14	1418457_at	3.33	0.00
Cebpb	CCAAT/enhancer binding protein (C/EBP), beta	1418901_at	3.32	0.00
2810474O19Rik	RIKEN cDNA 2810474O19 gene	1429588_at	3.32	0.00
Tmem23	transmembrane protein 23	1426576_at	3.30	0.00
H2-L	histocompatibility 2, D region	1451931_x_at	3.30	0.00
Tmem23	transmembrane protein 23	1436499_at	3.30	0.00
---	---	1455965_at	3.29	0.00

3930401B19Rik /// 1200016E24Rik /// A130040M12Rik /// E430024C06Rik	RIKEN cDNA 3930401B19 gene /// RIKEN cDNA 1200016E24 gene /// RIKEN cDNA A130040M12 gene /// RIKEN cDNA E430024C06 gene	1453238_s_at	3.29	0.00
Ada	adenosine deaminase	1417976_at	3.28	0.00
Cxcl16	chemokine (C-X-C motif) ligand 16	1449195_s_at	3.28	0.00
Pim3	proviral integration site 3	1437100_x_at	3.28	0.00
Il1rn	interleukin 1 receptor antagonist	1451798_at	3.28	0.00
Arrdc2	arrestin domain containing 2	1428352_at	3.27	0.00
5230400M03Rik	RIKEN cDNA 5230400M03 gene	1441843_s_at	3.26	0.00
Ms4a6b	membrane-spanning 4-domains, subfamily A, member 6B	1418826_at	3.26	0.00
Tgm2	transglutaminase 2, C polypeptide	1455900_x_at	3.26	0.00
Tiparp	TCDD-inducible poly(ADP-ribose) polymerase	1452160_at	3.25	0.00
Trim68	tripartite motif containing 68	1455124_at	3.25	0.00
Tinagl	tubulointerstitial nephritis antigen-like	1417109_at	3.25	0.00
Irf8	interferon regulatory factor 8	1448452_at	3.24	0.01
Sell	selectin, lymphocyte	1419480_at	3.24	0.00
Fmnl2	Formin-like 2	1446245_at	3.23	0.00
Ms4a4c	membrane-spanning 4-domains, subfamily A, member 4C	1420671_x_at	3.23	0.00
Efhd2	EF hand domain containing 2	1437478_s_at	3.22	0.00
E030010A14Rik	RIKEN cDNA E030010A14 gene	1437595_at	3.22	0.00
Lgals9	lectin, galactose binding, soluble 9	1421217_a_at	3.22	0.00
Herc5	hect domain and RLD 5	1431095_a_at	3.21	0.00
Serpinb9	serine (or cysteine) peptidase inhibitor, clade B, member 9	1422601_at	3.20	0.00
Rtp4	receptor transporter protein 4	1449143_at	3.20	0.00
Soat1	Sterol O-acyltransferase 1	1426818_at	3.20	0.00
Ifitm6	interferon induced transmembrane protein 6	1440865_at	3.20	0.00
Mtus1	mitochondrial tumor suppressor 1	1436502_at	3.20	0.00
Ddx58	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58	1456890_at	3.20	0.00
Mvp	major vault protein	1456586_x_at	3.19	0.00
Steap2	six transmembrane epithelial antigen of prostate 2	1428636_at	3.19	0.00
Lgals3	lectin, galactose binding, soluble 3	1426808_at	3.19	0.00
Mvp	major vault protein	1448618_at	3.19	0.00
Jmjd1c	Jumonji domain containing 1C	1441592_at	3.18	0.01
Tgm2	transglutaminase 2, C polypeptide	1437277_x_at	3.17	0.00
C730049O14Rik	RIKEN cDNA C730049O14 gene	1435084_at	3.17	0.00
Gvin1	GTPase, very large interferon inducible 1	1429184_at	3.17	0.00
Glul	glutamate-ammonia ligase (glutamine synthetase)	1426235_a_at	3.17	0.00
Fbxo31	F-box only protein 31	1417969_at	3.16	0.00
Cblb	Casitas B-lineage lymphoma b	1455082_at	3.15	0.00
Ucp2	uncoupling protein 2 (mitochondrial, proton carrier)	1459740_s_at	3.15	0.00
Marcksl1	MARCKS-like 1	1437226_x_at	3.14	0.00
Shrm	shroom	1451854_a_at	3.14	0.00
H2-D1 /// H2-L /// LOC547343 /// LOC636948	histocompatibility 2, D region locus 1 /// histocompatibility 2, D region /// similar to H-2 class I histocompatibility antigen, L-D alpha chain precursor /// similar to H-2 class I histocompatibility antigen, D-B alpha chain precursor (H-2D(B))	1451784_x_at	3.13	0.00
AI426953	expressed sequence AI426953	1442018_at	3.13	0.01
Tiparp	TCDD-inducible poly(ADP-ribose) polymerase	1426721_s_at	3.12	0.00
Gpr133 /// LOC669205	G protein-coupled receptor 133 /// similar to G protein-coupled receptor 133	1455466_at	3.12	0.00
Ear2	eosinophil-associated, ribonuclease A family, member 2	1449846_at	3.11	0.00
Itgb2	integrin beta 2	1450678_at	3.10	0.00
4732416N19Rik	RIKEN cDNA 4732416N19 gene	1435261_at	3.10	0.00
Stno	strawberry notch homolog (Drosophila)	1439349_at	3.10	0.00
Ctsl	cathepsin L	1451310_a_at	3.10	0.00
2210403K04Rik	RIKEN cDNA 2210403K04 gene	1428562_at	3.09	0.02
Ptp4a1	protein tyrosine phosphatase 4a1	1455002_at	3.09	0.00
Gna13	guanine nucleotide binding protein, alpha 13	1453470_a_at	3.09	0.00
Asah3l	N-acylsphingosine amidohydrolase 3-like	1451355_at	3.07	0.00
H2-D1	histocompatibility 2, D region locus 1	1425545_x_at	3.07	0.00
Litaf	LPS-induced TN factor	1416303_at	3.07	0.00
Snord22	small nucleolar RNA, C/D box 22	1439399_a_at	3.07	0.00
Relb	avian reticuloendotheliosis viral (v-rel) oncogene related B	1417856_at	3.07	0.00
Ogfr	opioid growth factor receptor	1422511_a_at	3.06	0.00
Tbk1	TANK-binding kinase 1	1422469_at	3.06	0.00
St3gal1	ST3 beta-galactoside alpha-2,3-sialyltransferase 1	1418946_at	3.04	0.00
Pap	pancreatitis-associated protein	1416297_s_at	3.04	0.00
Acot1	acyl-CoA thioesterase 1	1449065_at	3.04	0.00
Psme2	proteasome (prosome, macropain) 28 subunit, beta	1417189_at	3.04	0.00
Rasd1	RAS, dexamethasone-induced 1	1423619_at	3.03	0.00
Cd38	CD38 antigen	1433741_at	3.03	0.00
D18Ertd232e	DNA segment, Chr 18, ERATO Doi 232, expressed	1441115_at	3.03	0.00
Bcl3	B-cell leukemia/lymphoma 3	1418133_at	3.03	0.00
Il2rg	interleukin 2 receptor, gamma chain	1416295_a_at	3.02	0.00
Igsf6	immunoglobulin superfamily, member 6	1421408_at	3.01	0.00
Nfkbia	nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, alpha	1420088_at	2.99	0.00
Snord22	small nucleolar RNA, C/D box 22	1433675_at	2.99	0.00
Gprc5b	G protein-coupled receptor, family C, group 5, member B	1424613_at	2.99	0.00
Irak3	interleukin-1 receptor-associated kinase 3	1430704_at	2.98	0.00
Hamp1	hepcidin antimicrobial peptide 1	1419197_x_at	2.98	0.00
Tgm2	transglutaminase 2, C polypeptide	1433428_x_at	2.98	0.00
Slfn2	schlafen 2	1450165_at	2.97	0.00
Fcgr1	Fc receptor, IgG, high affinity I	1417876_at	2.97	0.00
1110008H02Rik	RIKEN cDNA 1110008H02 gene	1436506_a_at	2.97	0.00
Abcc3	ATP-binding cassette, sub-family C (CFTR/MRP), member 3	1428988_at	2.96	0.00
4732473B16Rik	RIKEN cDNA 4732473B16 gene	1433877_at	2.96	0.00
Fkbp5	FK506 binding protein 5	1458089_at	2.96	0.00
Trafd1	TRAF type zinc finger domain containing 1	1428346_at	2.95	0.00
Klhl2	kelch-like 2, Mayven (Drosophila)	1458351_s_at	2.95	0.02
C4b /// LOC675521	complement component 4B (Childo blood group) /// similar to Complement C4 precursor	1418021_at	2.94	0.00
Fcgr2b	Fc receptor, IgG, low affinity IIb	1451941_a_at	2.94	0.00
Adh1	alcohol dehydrogenase 1 (class I)	1416225_at	2.93	0.00
Isg20	interferon-stimulated protein	1419569_a_at	2.92	0.00
2810474O19Rik	RIKEN cDNA 2810474O19 gene	1427334_s_at	2.92	0.13
AI649393	expressed sequence AI649393	1439050_at	2.91	0.00
Adamts9	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 9	1431399_at	2.91	0.03
Pvr	poliovirus receptor	1423903_at	2.91	0.00

Pml	promyelocytic leukemia	1459137_at	2.91	0.00
Rnf125	ring finger protein 125	1429399_at	2.90	0.00
Cblb	Casitas B-lineage lymphoma b	1458469_at	2.90	0.00
Tgoln1	trans-golgi network protein	1418520_at	2.90	0.00
Uap1 /// LOC640502	UDP-N-acetylglucosamine pyrophosphorylase 1 /// similar to UDP-N-acetylhexosamine pyrophosphorylase	1456516_x_at	2.90	0.00
Rrad	Ras-related associated with diabetes	1422562_at	2.89	0.00
Ucp3	uncoupling protein 3 (mitochondrial, proton carrier)	1420658_at	2.89	0.00
1200009I06Rik	RIKEN cDNA 1200009I06 gene	1428420_a_at	2.89	0.00
Bzrp	benzodiazepine receptor, peripheral	1456251_x_at	2.89	0.00
Sult1a1	sulfotransferase family 1A, phenol-preferring, member 1	1427345_a_at	2.89	0.00
Ptprf	protein tyrosine phosphatase, receptor type, F	1420842_at	2.89	0.00
Msr1	macrophage scavenger receptor 1	1422062_at	2.88	0.00
Fads3	fatty acid desaturase 3	1418773_at	2.88	0.00
Hamp1	hepcidin antimicrobial peptide 1	1419196_at	2.88	0.00
Gda	guanine deaminase	1435749_at	2.87	0.00
Rai14	retinoic acid induced 14	1417400_at	2.87	0.00
Slc11a1	solute carrier family 11 (proton-coupled divalent metal ion transporters), member 1	1420361_at	2.87	0.00
1190002H23Rik	RIKEN cDNA 1190002H23 gene	1418003_at	2.87	0.01
Gprc5b	G protein-coupled receptor, family C, group 5, member B	1451411_at	2.87	0.00
Fcer1g	Fc receptor, IgE, high affinity I, gamma polypeptide	1418340_at	2.86	0.00
Flot2	Flotillin 2	1436666_at	2.86	0.00
Tspan4	tetraspanin 4	1448276_at	2.86	0.00
Qscn6	quiescin Q6	1420831_at	2.86	0.00
Il17ra	interleukin 17 receptor A	1420905_at	2.86	0.00
1110003O08Rik	RIKEN cDNA 1110003O08 gene	1428926_at	2.85	0.00
Ms4a8a	membrane-spanning 4-domains, subfamily A, member 8A	1418797_at	2.85	0.00
Comt	catechol-O-methyltransferase	1449183_at	2.84	0.00
Stat3	signal transducer and activator of transcription 3	1460700_at	2.84	0.00
Adamts9	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 9	1437785_at	2.83	0.01
Klf10	Kruppel-like factor 10	1416029_at	2.83	0.02
BC006779	cDNA sequence BC006779	1435454_a_at	2.82	0.00
Clic4	chloride intracellular channel 4 (mitochondrial)	1423393_at	2.82	0.01
1190002H23Rik	RIKEN cDNA 1190002H23 gene	1438511_a_at	2.82	0.00
Ddx21	DEAD (Asp-Glu-Ala-Asp) box polypeptide 21	1448271_a_at	2.81	0.00
Rab20	RAB20, member RAS oncogene family	1438097_at	2.81	0.00
Uap1 /// LOC640502	UDP-N-acetylglucosamine pyrophosphorylase 1 /// similar to UDP-N-acetylhexosamine pyrophosphorylase	1416743_at	2.81	0.00
Eif4ebp1	eukaryotic translation initiation factor 4E binding protein 1	1434976_x_at	2.81	0.00
Ucp2	uncoupling protein 2 (mitochondrial, proton carrier)	1448188_at	2.80	0.00
AA536743	expressed sequence AA536743	1427243_at	2.80	0.00
---	Adult male cecum cDNA, RIKEN full-length enriched library, clone:9130204C03 product:unclassifiable, full insert sequence	1435265_at	2.80	0.00
Sema7a	sema domain, immunoglobulin domain (Ig), and GPI membrane anchor, (semaphorin) 7A	1459903_at	2.80	0.00
Susd2	sushi domain containing 2	1426511_at	2.79	0.00
Gpr146	G protein-coupled receptor 146	1451060_at	2.79	0.00
C330006D17Rik	RIKEN cDNA C330006D17 gene	1430752_at	2.79	0.00
Arid5a	AT rich interactive domain 5A (Mrf1 like)	1451340_at	2.79	0.00
Eif2ak2	eukaryotic translation initiation factor 2-alpha kinase 2	1422006_at	2.79	0.00
Tacc2	transforming, acidic coiled-coil containing protein 2	1425745_a_at	2.78	0.00
Uap1 /// LOC640502	UDP-N-acetylglucosamine pyrophosphorylase 1 /// similar to UDP-N-acetylhexosamine pyrophosphorylase	1437490_x_at	2.78	0.00
Bzrp	benzodiazepine receptor, peripheral	1438948_x_at	2.78	0.00
Mar-05	membrane-associated ring finger (C3HC4) 5	1452925_a_at	2.78	0.00
AA536743	expressed sequence AA536743	1452359_at	2.77	0.00
Ripk3	receptor-interacting serine-threonine kinase 3	1448449_at	2.77	0.00
Slc44a2	solute carrier family 44, member 2	1438559_x_at	2.77	0.00
Acvr1b	activin A receptor, type 1B	1433725_at	2.77	0.00
Litaf	LPS-induced TN factor	1416304_at	2.76	0.00
Pbef1	pre-B-cell colony-enhancing factor 1	1417190_at	2.76	0.00
Msn	moesin	1450379_at	2.76	0.01
Trim34	Tripartite motif protein 34	1443858_at	2.76	0.00
Pik3ap1	phosphoinositide-3-kinase adaptor protein 1	1429831_at	2.76	0.01
1110038F14Rik	RIKEN cDNA 1110038F14 gene	1416885_at	2.76	0.00
---	---	1431166_at	2.75	0.00
Zwint	ZW10 interactor	1429786_a_at	2.75	0.00
Errfi1	ERBB receptor feedback inhibitor 1	1416129_at	2.75	0.00
BC023818	cDNA sequence BC023818	1439855_at	2.75	0.00
1110018G07Rik	RIKEN cDNA 1110018G07 gene	1454721_at	2.75	0.00
Zc3h12a	zinc finger CCCH type containing 12A	1427348_at	2.73	0.00
Rac2	RAS-related C3 botulinum substrate 2	1417620_at	2.73	0.00
Pou3f1	POU domain, class 3, transcription factor 1	1460038_at	2.73	0.00
Ucp2	uncoupling protein 2 (mitochondrial, proton carrier)	1459741_x_at	2.73	0.00
1500012F01Rik	RIKEN cDNA 1500012F01 gene	1455010_at	2.72	0.00
Slc44a2	solute carrier family 44, member 2	1428065_at	2.72	0.00
Bst1	bone marrow stromal cell antigen 1	1449454_at	2.72	0.01
Sdc4	syndecan 4	1417654_at	2.71	0.00
Apold1	apolipoprotein L domain containing 1	1441228_at	2.70	0.02
Dnajb4	DnaJ (Hsp40) homolog, subfamily B, member 4	1431734_a_at	2.70	0.00
Cd47	CD47 antigen (Rh-related antigen, integrin-associated signal transducer)	1449507_a_at	2.70	0.00
Gadd45b	growth arrest and DNA-damage-inducible 45 beta	1449773_s_at	2.70	0.00
Pvr	poliovirus receptor	1451160_s_at	2.70	0.00
Tnfrsf1a	tumor necrosis factor receptor superfamily, member 1a	1417291_at	2.69	0.00
BC055107	cDNA sequence BC055107	1434202_a_at	2.69	0.01
Trp53inp1	transformation related protein 53 inducible nuclear protein 1	1416926_at	2.69	0.02
Rhoc	ras homolog gene family, member C	1448605_at	2.69	0.00
Tcf23	transcription factor 23	1421078_at	2.68	0.00
---	Transcribed locus	1443852_at	2.68	0.00
Tbk1	TANK-binding kinase 1	1460315_s_at	2.67	0.00
Jak2	Janus kinase 2	1421065_at	2.67	0.00
Acot9 /// Acot10	acyl-CoA thioesterase 9 /// acyl-CoA thioesterase 10	1449968_s_at	2.67	0.00
Il2rg	interleukin 2 receptor, gamma chain	1416296_at	2.67	0.00
Hist1h1c	histone 1, H1c	1416101_a_at	2.67	0.00
Eif4ebp1	eukaryotic translation initiation factor 4E binding protein 1	1417562_at	2.66	0.00
Tfdp2	transcription factor Dp 2	1443962_at	2.66	0.00
Trim25	tripartite motif protein 25	1425974_a_at	2.66	0.00

Slc44a2	solute carrier family 44, member 2	1438860_a_at	2.66	0.00
Nfkbiz	Nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta	1457404_at	2.65	0.00
1110006O17Rik	RIKEN cDNA 1110006O17 gene	1437451_at	2.65	0.00
4930573O21Rik	RIKEN cDNA 4930573O21 gene	1432590_at	2.65	0.02
Fosl2 /// LOC634417	fos-like antigen 2 /// similar to fos-like antigen 2	1437247_at	2.64	0.01
Ifitm2	interferon induced transmembrane protein 2	1417460_at	2.64	0.00
Ptpn2	protein tyrosine phosphatase, non-receptor type 2	1417140_a_at	2.64	0.00
Zfp52	zinc finger protein 52	1426471_at	2.64	0.00
8430408G22Rik	RIKEN cDNA 8430408G22 gene	1433837_at	2.64	0.00
2810026P18Rik	RIKEN cDNA 2810026P18 gene	1428529_at	2.64	0.00
Dph5	DPH5 homolog (S. cerevisiae)	1452839_at	2.63	0.00
Ncf4	neutrophil cytosolic factor 4	1418465_at	2.63	0.00
Lpxn	leupaxin	1424965_at	2.63	0.00
Fads3	fatty acid desaturase 3	1449219_at	2.63	0.00
Kcne4	potassium voltage-gated channel, Isk-related subfamily, gene 4	1418156_at	2.63	0.00
Scotin	scotin gene	1437503_a_at	2.63	0.00
Nudt6	nudix (nucleoside diphosphate linked moiety X)-type motif 6	1456945_at	2.63	0.00
Reg3a	regenerating islet-derived 3 alpha	1449495_at	2.63	0.00
Ptp4a1 /// LOC269859 /// LOC433406 /// LOC546482 /// LOC627166 /// LOC627200 /// LOC667723 /// LOC669215 /// LOC673579	protein tyrosine phosphatase 4a1 /// similar to protein tyrosine phosphatase 4a1 /// protein tyrosine phosphatase 4a1-like /// similar to protein tyrosine phosphatase 4a1 /// protein tyrosine phosphatase 4a1 pseudogene /// protein tyrosine phosphatase 4a1-like /// similar to protein tyrosine phosphatase 4a1 /// similar to protein tyrosine phosphatase 4a1 /// similar to protein tyrosine phosphatase 4a1	1449322_at	2.62	0.00
Samd9l	sterile alpha motif domain containing 9-like	1460603_at	2.62	0.00
Pla2g7	phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)	1430700_a_at	2.62	0.00
Phyhd1 /// Lrrc8a	phytanoyl-CoA dioxygenase domain containing 1 /// leucine rich repeat containing 8A	1428394_at	2.61	0.00
Btg2	B-cell translocation gene 2, anti-proliferative	1448272_at	2.61	0.02
5330406M23Rik	RIKEN cDNA 5330406M23 gene	1429900_at	2.60	0.00
0610011I04Rik	RIKEN cDNA 0610011I04 gene	1423909_at	2.60	0.01
Rlf	rearranged L-myc fusion sequence	1427171_at	2.60	0.00
Car13	carbonic anhydrase 13	1421307_at	2.60	0.00
1110038B12Rik	RIKEN cDNA 1110038B12 gene	1441081_a_at	2.60	0.00
Zfp445	zinc finger protein 445	1427255_s_at	2.60	0.00
Tgoln1 /// Tgoln2	trans-golgi network protein /// trans-golgi network protein 2	1423307_s_at	2.60	0.00
Mthfd2	methylenetetrahydrofolate dehydrogenase (NAD+ dependent), methenyltetrahydrofolate cyclohydrolase	1419254_at	2.59	0.00
Lilrb3 /// LOC619608	leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), member 3 /// hypothetical LOC619608	1424302_at	2.59	0.00
Vcam1	vascular cell adhesion molecule 1	1448162_at	2.59	0.00
Trim25	tripartite motif protein 25	1419879_s_at	2.59	0.00
Gpr146	G protein-coupled receptor 146	1423632_at	2.59	0.00
Masp1	mannan-binding lectin serine peptidase 1	1455346_at	2.58	0.00
AU021128	expressed sequence AU021128	1457575_at	2.58	0.02
T2bp	Traf2 binding protein	1426501_a_at	2.57	0.00
Zwint	ZW10 interactor	1427539_a_at	2.57	0.00
Rbm18	RNA binding motif protein 18	1420607_at	2.57	0.01
Tbl1xr1	transducin (beta)-like 1X-linked receptor 1	1450739_at	2.57	0.00
Asns	asparagine synthetase	1451095_at	2.56	0.00
Abi2	Abl-interactor 2	1444783_at	2.56	0.02
Arg1	arginase 1, liver	1419549_at	2.56	0.01
Trdn	triadin	1426143_at	2.56	0.00
Tor3a	torsin family 3, member A	1421998_at	2.56	0.00
Csf1	colony stimulating factor 1 (macrophage)	1448914_a_at	2.56	0.00
Nek6 /// LOC674247	NIMA (never in mitosis gene a)-related expressed kinase 6 /// similar to NIMA (never in mitosis gene a)-related expressed kinase 6	1423596_at	2.56	0.00
Lgals8	lectin, galactose binding, soluble 8	1422661_at	2.56	0.00
5330421F07Rik	RIKEN cDNA 5330421F07 gene	1443230_at	2.55	0.03
Sptlc2	serine palmitoyltransferase, long chain base subunit 2	1460243_at	2.55	0.00
Acot9	acyl-CoA thioesterase 9	1418073_at	2.54	0.00
Tmem71	transmembrane protein 71	1436212_at	2.54	0.00
BC023892	cDNA sequence BC023892	1437868_at	2.54	0.00
Adam9	a disintegrin and metallopeptidase domain 9 (meltrin gamma)	1416094_at	2.53	0.00
2900092N22Rik	RIKEN cDNA 2900092N22 gene	1454472_at	2.53	0.07
Tbc1d15	TBC1 domain family, member 15	1416061_at	2.53	0.00
1110061O04Rik	RIKEN cDNA 1110061O04 gene	1425066_a_at	2.53	0.00
Bzrp	benzodiazepine receptor, peripheral	1416695_at	2.53	0.00
Fbxo32	F-box only protein 32	1448747_at	2.53	0.00
Zwint	ZW10 interactor	1429787_x_at	2.53	0.00
Mid1ip1	Mid1 interacting protein 1 (gastrulation specific G12-like (zebrafish))	1416840_at	2.52	0.00
Rrbp1	ribosome binding protein 1	1449221_a_at	2.52	0.00
Daxx	Fas death domain-associated protein	1419026_at	2.52	0.00
Scotin	scotin gene	1423986_a_at	2.52	0.00
Edem1	ER degradation enhancer, mannosidase alpha-like 1	1424065_at	2.52	0.00
Gda	guanine deaminase	1435748_at	2.52	0.00
Mx1	myxovirus (influenza virus) resistance 1	1451905_a_at	2.52	0.00
Cblb	Casitas B-lineage lymphoma b	1437304_at	2.51	0.00
Olr1	oxidized low density lipoprotein (lectin-like) receptor 1	1419534_at	2.51	0.00
Fbxo32	F-box only protein 32	1417522_at	2.51	0.00
Rhoc	ras homolog gene family, member C	1435394_s_at	2.51	0.00
Adar	Adenosine deaminase, RNA-specific	1439276_at	2.51	0.00
Art5	ADP-ribosyltransferase 5	1427759_a_at	2.51	0.00
Irak1bp1	interleukin-1 receptor-associated kinase 1 binding protein 1	1431771_a_at	2.50	0.00
BB114266	Expressed sequence BB114266	1437694_at	2.50	0.00
AI481105	expressed sequence AI481105	1427091_at	2.49	0.00
Serinc3	serine incorporator 3	1456080_a_at	2.49	0.00
Slc2a1	solute carrier family 2 (facilitated glucose transporter), member 1	1426599_a_at	2.49	0.00
Rfx5	regulatory factor X, 5 (influences HLA class II expression)	1423103_at	2.49	0.00
Spon1	spondin 1, (f-spondin) extracellular matrix protein	1451342_at	2.49	0.00
Stat3	signal transducer and activator of transcription 3	1426587_a_at	2.49	0.00
Slfn9	schlafen 9	1436472_at	2.49	0.00
C330012H03Rik	RIKEN cDNA C330012H03 gene	1437103_at	2.48	0.00
Pml	promyelocytic leukemia	1448757_at	2.48	0.00
Saa2	serum amyloid A 2	1449326_x_at	2.48	0.00
Hist1h1c	histone 1, H1c	1436994_a_at	2.48	0.00
Mtus1	mitochondrial tumor suppressor 1	1436501_at	2.48	0.00
Ly6e	lymphocyte antigen 6 complex, locus E	1453304_s_at	2.48	0.00

Sema3f	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3 F	1420508_at	2.48	0.00
Tnfaip3	tumor necrosis factor, alpha-induced protein 3	1450829_at	2.47	0.00
Pnpla2	patatin-like phospholipase domain containing 2	1428143_a_at	2.47	0.00
Ly6e	lymphocyte antigen 6 complex, locus E	1439773_at	2.47	0.00
Rai14	retinoic acid induced 14	1441030_at	2.47	0.01
Hsd11b1	hydroxysteroid 11-beta dehydrogenase 1	1449038_at	2.46	0.00
C730024G19Rik	RIKEN cDNA C730024G19 gene	1454766_at	2.46	0.00
P2ry2	purinergic receptor P2Y, G-protein coupled 2	1450318_a_at	2.46	0.00
Vcam1	vascular cell adhesion molecule 1	1451314_a_at	2.46	0.00
Apod	Apolipoprotein D	1444749_at	2.46	0.00
C2	complement component 2 (within H-2S)	1416051_at	2.46	0.00
Gpr146	G protein-coupled receptor 146	1454685_at	2.46	0.00
1810009K13Rik	RIKEN cDNA 1810009K13 gene	1423358_at	2.45	0.00
Fmnl2	Formin-like 2	1440111_at	2.44	0.00
B4galt5	UDP-Gal:betaGlcNAc beta 1,4-galactosyltransferase, polypeptide 5	1433617_s_at	2.44	0.00
Ddit4	DNA-damage-inducible transcript 4	1428306_at	2.44	0.00
Rtn4rl2	reticulon 4 receptor-like 2	1439573_at	2.44	0.00
2200002D01Rik	RIKEN cDNA 2200002D01 gene	1428671_at	2.44	0.00
Tbrg1	transforming growth factor beta regulated gene 1	1452648_at	2.44	0.00
Tnip1	TNFAIP3 interacting protein 1	1427689_a_at	2.44	0.00
Gclm	glutamate-cysteine ligase , modifier subunit	1418627_at	2.43	0.00
Il13ra1	interleukin 13 receptor, alpha 1	1427164_at	2.43	0.01
Txnip	thioredoxin interacting protein	1415996_at	2.43	0.01
Comt	catechol-O-methyltransferase	1418701_at	2.43	0.00
H2-M3	histocompatibility 2, M region locus 3	1421358_at	2.43	0.00
Cyb561	Cytochrome b-561	1458496_at	2.43	0.00
Csf1	colony stimulating factor 1 (macrophage)	1460220_a_at	2.42	0.00
Sema5a	sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A	1422167_at	2.42	0.00
Errfi1	ERBB receptor feedback inhibitor 1	1419816_s_at	2.42	0.01
Rnf31	ring finger protein 31	1455051_at	2.42	0.00
Grhl1	grainyhead-like 1 (Drosophila)	1424030_at	2.42	0.00
Gosr1	golgi SNAP receptor complex member 1	1448256_at	2.42	0.01
Procr	protein C receptor, endothelial	1420664_s_at	2.42	0.00
Slc39a6	solute carrier family 39 (metal ion transporter), member 6	1424674_at	2.42	0.00
---	---	1439537_at	2.42	0.00
Rtn4	reticulon 4	1437224_at	2.42	0.00
AW112010	expressed sequence AW112010	1434372_at	2.42	0.00
Apod	apolipoprotein D	1416371_at	2.41	0.00
---	Transcribed locus	1442338_at	2.41	0.00
Noc4l	nucleolar complex associated 4 homolog (S. cerevisiae)	1443794_x_at	2.41	0.00
Adck4	aarF domain containing kinase 4	1448490_at	2.41	0.00
Gsdmdc1	gasdermin domain containing 1	1428767_at	2.41	0.00
1810009M01Rik	RIKEN cDNA 1810009M01 gene	1418004_a_at	2.40	0.00
Egfr	epidermal growth factor receptor	1424932_at	2.40	0.00
Dbn1	drebrin 1	1426024_a_at	2.40	0.00
Bcl2l1	Bcl2-like 1	1420888_at	2.39	0.00
2310008H04Rik	RIKEN cDNA 2310008H04 gene	1451171_at	2.39	0.00
Sfi1 /// LOC673404 /// LOC673420 /// LOC673566	Sfi1 homolog, spindle assembly associated (yeast) /// similar to spindle assembly associated Sfi1 homolog isoform b /// similar to spindle assembly associated Sfi1 homolog isoform b /// similar to Sfi1 homolog, spindle assembly associated (yeast)	1426787_at	2.39	0.00
Pde4b	Phosphodiesterase 4B, cAMP specific	1445449_at	2.39	0.02
Gm489	gene model 489, (NCBI)	1457707_at	2.39	0.00
Bid	BH3 interacting domain death agonist	1417045_at	2.39	0.00
Tor1aip1	torsin A interacting protein 1	1426084_a_at	2.38	0.00
Dnajb4	DnaJ (Hsp40) homolog, subfamily B, member 4	1443611_at	2.38	0.00
H3f3b	H3 histone, family 3B	1430357_at	2.38	0.00
BC032204	cDNA sequence BC032204	1456014_s_at	2.37	0.00
Thbs4	thrombospondin 4	1449388_at	2.37	0.02
Clec2d	C-type lectin domain family 2, member d	1419477_at	2.36	0.00
Gprk5	G protein-coupled receptor kinase 5	1449514_at	2.36	0.00
C2	complement component 2 (within H-2S)	1441912_x_at	2.36	0.00
2810416G20Rik	RIKEN cDNA 2810416G20 gene	1431220_at	2.36	0.00
Rras2	related RAS viral (r-ras) oncogene homolog 2	1417398_at	2.36	0.03
Pnp	purine-nucleoside phosphorylase	1416530_a_at	2.36	0.00
Ccr1	chemokine (C-C motif) receptor 1	1419609_at	2.35	0.00
Parp3	poly (ADP-ribose) polymerase family, member 3	1451969_s_at	2.35	0.00
Birc2	baculoviral IAP repeat-containing 2	1418854_at	2.35	0.00
4933426M11Rik	RIKEN cDNA 4933426M11 gene	1456808_at	2.34	0.00
Steap1	six transmembrane epithelial antigen of the prostate 1	1451532_s_at	2.34	0.00
Khk	ketohexokinase	1449062_at	2.34	0.00
Fcgr2b	Fc receptor, IgG, low affinity IIb	1455332_x_at	2.34	0.00
Zfp445	zinc finger protein 445	1454774_at	2.34	0.00
LOC671237	similar to Putative RNA-binding protein 3 (RNA-binding motif protein 3)	1422660_at	2.34	0.00
Lincr	lung-inducible neuralized-related C3HC4 RING domain protein	1444003_at	2.33	0.01
Slc2a1	solute carrier family 2 (facilitated glucose transporter), member 1	1434773_a_at	2.33	0.00
Serpinb1a	serine (or cysteine) peptidase inhibitor, clade B, member 1a	1416318_at	2.33	0.00
8430408G22Rik	RIKEN cDNA 8430408G22 gene	1433836_a_at	2.33	0.00
Mar-05	membrane-associated ring finger (C3HC4) 5	1428843_at	2.33	0.00
Gda	guanine deaminase	1422868_s_at	2.32	0.00
Il17ra	interleukin 17 receptor A	1420904_at	2.32	0.00
Lgals8	lectin, galactose binding, soluble 8	1422662_at	2.32	0.00
Rrbp1	ribosome binding protein 1	1426123_a_at	2.32	0.00
Gna13	guanine nucleotide binding protein, alpha 13	1460317_s_at	2.32	0.00
Irak2	interleukin-1 receptor-associated kinase 2	1436507_at	2.31	0.00
6330412F12Rik	RIKEN cDNA 6330412F12 gene	1420535_a_at	2.31	0.00
Il1r2	interleukin 1 receptor, type II	1419532_at	2.31	0.00
Rtn4	reticulon 4	1421116_a_at	2.31	0.01
2610301K12Rik	RIKEN cDNA 2610301K12 gene	1429337_at	2.31	0.01
Eif4a1	eukaryotic translation initiation factor 4A1	1430980_a_at	2.31	0.00
Gins4	GINS complex subunit 4 (Sld5 homolog)	1452598_at	2.31	0.00
Art5	ADP-ribosyltransferase 5	1451553_at	2.31	0.00
Rab5c	RAB5C, member RAS oncogene family	1424684_at	2.30	0.00
BC032204	cDNA sequence BC032204	1433963_a_at	2.30	0.00
Gdap10	ganglioside-induced differentiation-associated-protein 10	1420342_at	2.30	0.00
5230400M03Rik	RIKEN cDNA 5230400M03 gene	1437493_at	2.30	0.00

Tnfsf10	tumor necrosis factor (ligand) superfamily, member 10	1420412_at	2.29	0.00
Ccl6	chemokine (C-C motif) ligand 6	1420249_s_at	2.29	0.17
Tmem119	transmembrane protein 119	1451344_at	2.28	0.00
Apobec1	apolipoprotein B editing complex 1	1451755_a_at	2.28	0.00
Uck2	uridine-cytidine kinase 2	1426909_at	2.28	0.00
Noc4l	Nucleolar complex associated 4 homolog (S. cerevisiae)	1438095_x_at	2.28	0.00
BC055107	cDNA sequence BC055107	1435918_at	2.28	0.00
Cyp4b1	cytochrome P450, family 4, subfamily b, polypeptide 1	1416194_at	2.28	0.00
Rab4b	RAB4B, member RAS oncogene family	1451643_a_at	2.27	0.00
Sell	selectin, lymphocyte	1419481_at	2.27	0.00
Pnp /// LOC545044 /// LOC667034	purine-nucleoside phosphorylase /// similar to purine-nucleoside phosphorylase /// similar to purine-nucleoside phosphorylase	1453299_a_at	2.27	0.00
Parp3	poly (ADP-ribose) polymerase family, member 3	1426210_x_at	2.27	0.00
Cish	cytokine inducible SH2-containing protein	1448724_at	2.27	0.00
Pilra	paired immunoglobin-like type 2 receptor alpha	1427327_at	2.27	0.00
2410024N18Rik	RIKEN cDNA 2410024N18 gene	1452914_at	2.27	0.00
Hif1a	hypoxia inducible factor 1, alpha subunit	1427418_a_at	2.27	0.02
Cul4b	cullin 4B	1417453_at	2.27	0.00
3110043J09Rik	RIKEN cDNA 3110043J09 gene	1451320_at	2.26	0.00
Cd24a	CD24a antigen	1437502_x_at	2.26	0.00
Slfn3 /// Slfn4	schlafen 3 /// schlafen 4	1450322_s_at	2.26	0.00
Flot1	flotillin 1	1448559_at	2.26	0.00
Smad1	MAD homolog 1 (Drosophila)	1459843_s_at	2.26	0.01
Gadd45b	growth arrest and DNA-damage-inducible 45 beta	1450971_at	2.25	0.00
Itgb4bp	integrin beta 4 binding protein	1427578_a_at	2.25	0.00
Zbtb16	Zinc finger and BTB domain containing 16	1456986_at	2.25	0.00
Dph5	DPH5 homolog (S. cerevisiae)	1439049_at	2.25	0.00
Mid1	midline 1	1438239_at	2.24	0.00
Zfp445	zinc finger protein 445	1427254_at	2.24	0.10
Cd44	CD44 antigen	1423760_at	2.24	0.00
Pnpo	pyridoxine 5'-phosphate oxidase	1415793_at	2.24	0.00
Arid5b	AT rich interactive domain 5B (Mrf1 like)	1420973_at	2.24	0.01
---	---	1442025_a_at	2.24	0.01
Cd44	CD44 antigen	1434376_at	2.24	0.00
Pak6	p21 (CDKN1A)-activated kinase 6	1455200_at	2.24	0.02
1500032H18Rik	RIKEN cDNA 1500032H18 gene	1426133_a_at	2.24	0.00
Cyp2b10	cytochrome P450, family 2, subfamily b, polypeptide 10	1451787_at	2.24	0.05
Trim34 /// LOC434218	tripartite motif protein 34 /// similar to Tripartite motif protein 34	1424857_a_at	2.23	0.00
Nubp1	nucleotide binding protein 1	1418905_at	2.23	0.00
---	---	1460268_at	2.23	0.00
Hcn1	hyperpolarization-activated, cyclic nucleotide-gated K+ 1	1450193_at	2.23	0.02
Slc7a2	solute carrier family 7 (cationic amino acid transporter, y+ system), member 2	1436555_at	2.23	0.00
1110018G07Rik	RIKEN cDNA 1110018G07 gene	1433767_at	2.23	0.00
Smad1	MAD homolog 1 (Drosophila)	1448208_at	2.22	0.00
Ptpn2	protein tyrosine phosphatase, non-receptor type 2	1438562_a_at	2.22	0.01
Pml	promyelocytic leukemia	1456103_at	2.22	0.00
Cacnb2	Calcium channel, voltage-dependent, beta 2 subunit	1444693_at	2.22	0.01
Gmfg	glia maturation factor, gamma	1419194_s_at	2.22	0.00
Bcl2l1	Bcl2-like 1	1420887_a_at	2.21	0.00
H2-K1	Histocompatibility 2, K1, K region	1450170_x_at	2.21	0.00
Tbk1	TANK-binding kinase 1	1445571_at	2.21	0.00
Lrrc59	leucine rich repeat containing 59	1416235_at	2.21	0.00
---	Transcribed locus	1439965_at	2.20	0.00
Rnase1	ribonuclease, RNase A family, 1 (pancreatic)	1416523_at	2.20	0.00
Psmf1	proteasome (prosome, macropain) inhibitor subunit 1	1424370_s_at	2.20	0.00
Ctss	cathepsin S	1448591_at	2.20	0.00
6330412F12Rik	RIKEN cDNA 6330412F12 gene	1452776_a_at	2.20	0.00
---	---	1442880_at	2.20	0.00
Lcp2	lymphocyte cytosolic protein 2	1418641_at	2.19	0.00
Mmp8	matrix metallopeptidase 8	1449366_at	2.19	0.00
Snord22	small nucleolar RNA, C/D box 22	1454703_x_at	2.19	0.00
Cstb	cystatin B	1422506_a_at	2.19	0.00
Tpm3	tropomyosin 3, gamma	1449996_a_at	2.19	0.02
Serpinb9	serine (or cysteine) peptidase inhibitor, clade B, member 9	1439790_at	2.19	0.00
5830472M02Rik	RIKEN cDNA 5830472M02 gene	1429684_at	2.19	0.01
Clic4	chloride intracellular channel 4 (mitochondrial)	1438606_a_at	2.19	0.00
S3-12	plasma membrane associated protein, S3-12	1418595_at	2.19	0.00
Chi3l1	chitinase 3-like 1	1451537_at	2.19	0.00
Syk	spleen tyrosine kinase	1425797_a_at	2.19	0.00
Fah	fumarylacetoacetate hydrolase	1417220_at	2.19	0.00
5830443L24Rik /// LOC626578	RIKEN cDNA 5830443L24 gene /// similar to macrophage activation 2 like	1418776_at	2.19	0.01
Atp8b1	ATPase, class I, type 8B, member 1	1455396_at	2.18	0.00
Cstb	cystatin B	1422507_at	2.18	0.00
Tnfaip6	tumor necrosis factor alpha induced protein 6	1418424_at	2.18	0.00
Pim1	proviral integration site 1	1423006_at	2.18	0.00
Scara5	scavenger receptor class A, member 5 (putative)	1451204_at	2.18	0.00
Fads3	fatty acid desaturase 3	1435910_at	2.18	0.00
Arid5b	AT rich interactive domain 5B (Mrf1 like)	1434283_at	2.17	0.00
Art1	ADP-ribosyltransferase 1	1422375_a_at	2.17	0.00
Fxyd5	FXYD domain-containing ion transport regulator 5	1418296_at	2.17	0.00
2310016C08Rik	RIKEN cDNA 2310016C08 gene	1421031_a_at	2.17	0.01
Tgoln1	trans-golgi network protein	1423308_at	2.17	0.00
Tpmt	thiopurine methyltransferase	1430889_a_at	2.16	0.00
Anxa4	annexin A4	1424176_a_at	2.16	0.00
Ptpre	protein tyrosine phosphatase, receptor type, E	1418539_a_at	2.16	0.00
0610033I05Rik	RIKEN cDNA 0610033I05 gene	1451321_a_at	2.16	0.00
Map1lc3b	microtubule-associated protein 1 light chain 3 beta	1415930_a_at	2.16	0.00
Msr1	macrophage scavenger receptor 1	1425434_a_at	2.16	0.00
Plscr2	phospholipid scramblase 2	1448961_at	2.16	0.01
2900072G11Rik	RIKEN cDNA 2900072G11 gene	1429702_at	2.16	0.00
Serping1	serine (or cysteine) peptidase inhibitor, clade G, member 1	1416625_at	2.15	0.00
Nfkb2	nuclear factor of kappa light polypeptide gene enhancer in B-cells 2, p49/p100	1425902_a_at	2.15	0.00
Slc41a2	solute carrier family 41, member 2	1452445_at	2.14	0.00
Psma5	proteasome (prosome, macropain) subunit, alpha type 5	1424681_a_at	2.14	0.00
Oas2	2'-5' oligoadenylate synthetase 2	1425065_at	2.13	0.00
Mtus1	mitochondrial tumor suppressor 1	1454824_s_at	2.13	0.00
Hspb1	heat shock protein 1	1425964_x_at	2.13	0.00

Nola2	nucleolar protein family A, member 2	1416605_at	2.13	0.00
---	---	1443673_x_at	2.13	0.00
Oprs1	Opioid receptor, sigma 1	1435579_at	2.13	0.00
Ankrd1	ankyrin repeat domain 1 (cardiac muscle)	1420991_at	2.13	0.00
LOC669660	similar to PDZ and LIM domain protein 5 (Enigma homolog) (Enigma-like PDZ and LIM domains protein)	1422861_s_at	2.13	0.02
Acsl5	acyl-CoA synthetase long-chain family member 5	1428082_at	2.13	0.00
Sdf2l1	stromal cell-derived factor 2-like 1	1418206_at	2.12	0.00
Tpm3	tropomyosin 3, gamma	1427567_a_at	2.12	0.00
Glrx	glutaredoxin	1416592_at	2.12	0.04
1300018I05Rik	RIKEN cDNA 1300018I05 gene	1451082_at	2.12	0.00
Ly6c	lymphocyte antigen 6 complex, locus C	1421571_a_at	2.12	0.00
Nek7	NIMA (never in mitosis gene a)-related expressed kinase 7	1444753_at	2.12	0.00
Gfpt2	glutamine fructose-6-phosphate transaminase 2	1418753_at	2.12	0.00
Slc7a6	solute carrier family 7 (cationic amino acid transporter, y+ system), member 6	1460541_at	2.11	0.01
Tbc1d15	TBC1 domain family, member 15	1416060_at	2.11	0.02
Sra1	steroid receptor RNA activator 1	1437423_a_at	2.11	0.00
2210038L17Rik	RIKEN cDNA 2210038L17 gene	1434585_at	2.11	0.00
Selenbp1	selenium binding protein 1	1417580_s_at	2.11	0.00
AI480535	expressed sequence AI480535	1455320_at	2.11	0.02
Nek7	NIMA (never in mitosis gene a)-related expressed kinase 7	1442198_at	2.11	0.02
Aldh3a1	aldehyde dehydrogenase family 3, subfamily A1	1418752_at	2.11	0.00
1110014F24Rik	RIKEN cDNA 1110014F24 gene	1428781_at	2.11	0.02
Gas5	growth arrest specific 5	1419291_x_at	2.10	0.00
Arl4a	ADP-ribosylation factor-like 4A	1431429_a_at	2.10	0.00
Hfe	hemochromatosis	1422645_at	2.10	0.00
Pik3r5	phosphoinositide-3-kinase, regulatory subunit 5, p101	1434980_at	2.09	0.00
Serinc3	serine incorporator 3	1417816_s_at	2.09	0.00
2810416G20Rik	RIKEN cDNA 2810416G20 gene	1435171_at	2.09	0.00
Mad2l2	MAD2 mitotic arrest deficient-like 2 (yeast)	1460348_at	2.09	0.00
Mmp14	matrix metallopeptidase 14 (membrane-inserted)	1448383_at	2.09	0.00
Tnfaip2	tumor necrosis factor, alpha-induced protein 2	1438855_x_at	2.09	0.02
Gas5	growth arrest specific 5	1455904_at	2.09	0.02
LOC56628	MHC (A.CA/J(H-2K-f) class I antigen	1450534_x_at	2.08	0.00
Gas5	growth arrest specific 5	1436222_at	2.08	0.01
AI662270	expressed sequence AI662270	1434067_at	2.08	0.01
Tbl1xr1	transducin (beta)-like 1X-linked receptor 1	1434839_s_at	2.08	0.00
St7l	Suppression of tumorigenicity 7-like	1456363_at	2.08	0.01
Bak1	BCL2-antagonist/killer 1	1418991_at	2.08	0.00
Socs2	suppressor of cytokine signaling 2	1438470_at	2.08	0.00
Tpm3	tropomyosin 3, gamma	1427260_a_at	2.08	0.00
Map1lc3b	microtubule-associated protein 1 light chain 3 beta	1415929_at	2.08	0.00
Slco2a1	solute carrier organic anion transporter family, member 2a1	1420913_at	2.07	0.00
2310073E15Rik	RIKEN cDNA 2310073E15 gene	1428534_at	2.07	0.00
Itpkc	inositol 1,4,5-trisphosphate 3-kinase C	1454755_at	2.07	0.00
Acsl4	acyl-CoA synthetase long-chain family member 4	1433531_at	2.07	0.04
Stat3	Signal transducer and activator of transcription 3	1459961_a_at	2.07	0.00
C030027K23Rik /// Parp4	RIKEN cDNA C030027K23 gene /// poly (ADP-ribose) polymerase family, member 4	1452351_at	2.07	0.00
Ddi2 /// Rsc1a1	DNA-damage inducible protein 2 /// regulatory solute carrier protein, family 1, member 1	1422560_at	2.07	0.03
Smad1	MAD homolog 1 (Drosophila)	1416081_at	2.07	0.04
Klhl2	kelch-like 2, Mayven (Drosophila)	1426978_at	2.07	0.02
Cx3cl1	chemokine (C-X3-C motif) ligand 1	1415803_at	2.07	0.00
Nfkbib	nuclear factor of kappa light chain gene enhancer in B-cells inhibitor, beta	1421266_s_at	2.07	0.00
Atf3	activating transcription factor 3	1449363_at	2.07	0.02
Ear3	eosinophil-associated, ribonuclease A family, member 3	1422412_x_at	2.07	0.00
Scap2	src family associated phosphoprotein 2	1418895_at	2.07	0.00
Slc43a3	solute carrier family 43, member 3	1422788_at	2.07	0.00
Ihpk2	inositol hexaphosphate kinase 2	1428373_at	2.06	0.00
Msn	moesin	1421814_at	2.06	0.00
Etohi1 /// 6230416C02Rik /// LOC667962 /// LOC668009	ethanol induced 1 /// RIKEN cDNA 6230416C02 gene /// similar to zinc finger protein 97 /// similar to zinc finger protein 97	1429712_at	2.06	0.00
Traf3ip2	Traf3 interacting protein 2	1448508_at	2.06	0.00
Tapbpl	TAP binding protein-like	1424961_at	2.06	0.00
Gliprl2	GLI pathogenesis-related 2	1428492_at	2.06	0.00
Clic5	chloride intracellular channel 5	1456873_at	2.06	0.01
Cd300lf	CD300 antigen like family member F	1427994_at	2.06	0.00
4933426M11Rik	RIKEN cDNA 4933426M11 gene	1454606_at	2.06	0.00
Cdc42ep4	CDC42 effector protein (Rho GTPase binding) 4	1416511_a_at	2.06	0.00
Capn10	calpain 10	1416265_at	2.06	0.00
Rac1	RAS-related C3 botulinum substrate 1	1423734_at	2.05	0.00
Lpin3	lipin 3	1449440_at	2.05	0.00
Nts	neurotensin	1422860_at	2.05	0.00
Slc10a3	solute carrier family 10 (sodium/bile acid cotransporter family), member 3	1451227_a_at	2.05	0.00
Ctps2	cytidine 5'-triphosphate synthase 2	1448111_at	2.05	0.00
Tcirg1	T-cell, immune regulator 1, ATPase, H+ transporting, lysosomal V0 protein A3	1420635_a_at	2.05	0.00
Socs2	suppressor of cytokine signaling 2	1418507_s_at	2.05	0.01
Nek7	NIMA (never in mitosis gene a)-related expressed kinase 7	1444447_at	2.05	0.00
Gtf3c3	general transcription factor IIIC, polypeptide 3	1454765_at	2.05	0.00
Cndp2	CNDP dipeptidase 2 (metallopeptidase M20 family)	1448263_a_at	2.05	0.00
4833438C02Rik	RIKEN cDNA 4833438C02 gene	1436524_at	2.04	0.00
Nek6 /// LOC674247	NIMA (never in mitosis gene a)-related expressed kinase 6 /// similar to NIMA (never in mitosis gene a)-related expressed kinase 6	1425850_a_at	2.04	0.00
LOC669660	similar to PDZ and LIM domain protein 5 (Enigma homolog) (Enigma-like PDZ and LIM domains protein)	1422862_at	2.04	0.02
2610002M06Rik	RIKEN cDNA 2610002M06 gene	1419690_at	2.04	0.01
Chmp4b	chromatin modifying protein 4B	1426240_at	2.04	0.00
Gramd1a	GRAM domain containing 1A	1416708_a_at	2.04	0.00
Rasip1	Ras interacting protein 1	1428016_a_at	2.04	0.00
Apxl /// LOC670546	apical protein, Xenopus laevis-like /// similar to Apical-like protein (APXL protein)	1433992_at	2.04	0.00
Selenbp1	selenium binding protein 1	1450699_at	2.04	0.00
Psmf1	proteasome (prosome, macropain) inhibitor subunit 1	1424369_at	2.04	0.00
Galntl2	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 2	1429235_at	2.04	0.00
Psma5	proteasome (prosome, macropain) subunit, alpha type 5	1434356_a_at	2.04	0.00
Limd1	LIM domains containing 1	1422731_at	2.04	0.00
Pgs1	phosphatidylglycerophosphate synthase 1	1455229_x_at	2.04	0.00
Crbn	cereblon	1423094_at	2.04	0.00

Syn2	synapsin II	1428460_at	2.03	0.00
Ercc1	excision repair cross-complementing rodent repair deficiency, complementation group 1	1417328_at	2.03	0.00
Ctsz	cathepsin Z	1417869_s_at	2.03	0.00
Syk	spleen tyrosine kinase	1418261_at	2.03	0.00
4930486L24Rik	RIKEN cDNA 4930486L24 gene	1430051_at	2.03	0.02
LOC669660	similar to PDZ and LIM domain protein 5 (Enigma homolog) (Enigma-like PDZ and LIM domains protein)	1427475_a_at	2.03	0.00
Loxl3	lysyl oxidase-like 3	1418269_at	2.03	0.00
Lrp8	low density lipoprotein receptor-related protein 8, apolipoprotein e receptor	1440882_at	2.03	0.02
Cdc42ep4	CDC42 effector protein (Rho GTPase binding) 4	1436801_x_at	2.02	0.00
9830115L13Rik	RIKEN cDNA 9830115L13 gene	1436183_at	2.02	0.00
Gas5	growth arrest specific 5	1449410_a_at	2.02	0.00
Man2a1	mannosidase 2, alpha 1	1448647_at	2.01	0.00
Phactr1	phosphatase and actin regulator 1	1454832_at	2.01	0.00
5830428H23Rik	RIKEN cDNA 5830428H23 gene	1436672_at	2.01	0.00
Eif4a1	eukaryotic translation initiation factor 4A1	1427058_at	2.01	0.00
Nucb2	nucleobindin 2	1418355_at	2.01	0.00
Cp	ceruloplasmin	1448735_at	2.01	0.00
Shc1	src homology 2 domain-containing transforming protein C1	1422853_at	2.01	0.00
Ncf1	neutrophil cytosolic factor 1	1456772_at	2.01	0.00
5830472M02Rik	RIKEN cDNA 5830472M02 gene	1428457_at	2.01	0.00
Raph1	Ras association (RalGDS/AF-6) and pleckstrin homology domains 1	1456918_at	2.01	0.00
Bnip3	BCL2/adenovirus E1B interacting protein 1, NIP3	1422470_at	2.01	0.00
Ccnd3	Cyclin D3	1437584_at	2.01	0.02
Snord22	small nucleolar RNA, C/D box 22	1437658_a_at	2.01	0.01
Gch1	GTP cyclohydrolase 1	1420499_at	2.01	0.00
Parp11	poly (ADP-ribose) polymerase family, member 11	1434139_at	2.01	0.00
Cd44	CD44 antigen	1452483_a_at	2.00	0.01
Tor3a	torsin family 3, member A	1450454_at	2.00	0.00
Gng12	guanine nucleotide binding protein (G protein), gamma 12	1455089_at	2.00	0.00
Ugdh	UDP-glucose dehydrogenase	1416308_at	2.00	0.00
C1qb	complement component 1, q subcomponent, beta polypeptide	1437726_x_at	2.00	0.02
Tuba6 /// LOC626534	tubulin, alpha 6 /// similar to Tubulin alpha-6 chain (Alpha-tubulin 6)	1448232_x_at	2.00	0.00
D2Ertd391e	DNA segment, Chr 2, ERATO Doi 391, expressed	1423794_at	2.00	0.00
Itga5	integrin alpha 5 (fibronectin receptor alpha)	1423267_s_at	1.99	0.00
Kcna5	potassium voltage-gated channel, shaker-related subfamily, member 5	1417680_at	1.99	0.02
Samhd1	SAM domain and HD domain, 1	1444064_at	1.99	0.00
Ptp4a1 /// LOC433406 /// LOC627166 /// LOC627200 /// LOC667723	protein tyrosine phosphatase 4a1 /// protein tyrosine phosphatase 4a1-like /// protein tyrosine phosphatase 4a1 pseudogene /// protein tyrosine phosphatase 4a1-like /// similar to protein tyrosine phosphatase 4a1	1438657_x_at	1.99	0.00
Rai14	retinoic acid induced 14	1417401_at	1.99	0.02
9230105E10Rik	RIKEN cDNA 9230105E10 gene	1445271_at	1.99	0.02
Chst11 /// Phactr1	carbohydrate sulfotransferase 11 /// phosphatase and actin regulator 1	1456606_a_at	1.99	0.01
Acsl4	acyl-CoA synthetase long-chain family member 4	1451828_a_at	1.99	0.02
Cdkn2d	cyclin-dependent kinase inhibitor 2D (p19, inhibits CDK4)	1416253_at	1.99	0.00
Tsc22d1	TSC22 domain family, member 1	1454758_a_at	1.99	0.00
Gna13	guanine nucleotide binding protein, alpha 13	1433749_at	1.98	0.02
Ccrn4l /// LOC280487 /// LOC639390	CCR4 carbon catabolite repression 4-like (S. cerevisiae) /// pol polyprotein /// gag protein	1455316_x_at	1.98	0.00
Akap2	A kinase (PRKA) anchor protein 2	1449168_a_at	1.98	0.04
Pla1a	phospholipase A1 member A	1417785_at	1.98	0.00
Cd24a	CD24a antigen	1448182_a_at	1.98	0.00
Camkk2	calcium/calmodulin-dependent protein kinase kinase 2, beta	1424474_a_at	1.98	0.00
LOC669660	similar to PDZ and LIM domain protein 5 (Enigma homolog) (Enigma-like PDZ and LIM domains protein)	1450786_x_at	1.98	0.07
Adamtsl4	ADAMTS-like 4	1451932_a_at	1.98	0.00
Anxa4	annexin A4	1421223_a_at	1.98	0.00
Tgfbr2	transforming growth factor, beta receptor II	1426397_at	1.98	0.00
Phb	Prohibitin	1435144_at	1.98	0.01
Cttn	cortactin	1421315_s_at	1.98	0.00
Mafk	v-maf musculoaponeurotic fibrosarcoma oncogene family, protein K (avian)	1418616_at	1.98	0.00
Pgm3	phosphoglucomutase 3	1428228_at	1.98	0.00
1300018I05Rik	RIKEN cDNA 1300018I05 gene	1423681_at	1.98	0.00
Stk11ip	serine/threonine kinase 11 interacting protein	1431792_a_at	1.98	0.00
Flot2	flotillin 2	1438164_x_at	1.98	0.00
2310005L22Rik	RIKEN cDNA 2310005L22 gene	1436040_at	1.98	0.02
Art3	ADP-ribosyltransferase 3	1452474_a_at	1.98	0.00
---	---	1442026_at	1.97	0.02
5830400J07Rik	RIKEN cDNA 5830400J07 gene	1431689_at	1.97	0.00
Sfi1 /// LOC673420 /// LOC673566	Sfi1 homolog, spindle assembly associated (yeast) /// similar to spindle assembly associated Sfi1 homolog isoform b /// similar to Sfi1 homolog, spindle assembly associated (yeast)	1447901_x_at	1.97	0.04
Zwint	ZW10 interactor	1423724_at	1.97	0.00
Tmbim1	transmembrane BAX inhibitor motif containing 1	1417162_at	1.97	0.00
Dbnl	drebrin-like	1460334_at	1.97	0.00
Dctn6	dynactin 6	1416499_a_at	1.97	0.02
Eif4e2	eukaryotic translation initiation factor 4E member 2	1435803_a_at	1.97	0.00
Tlr4	toll-like receptor 4	1418163_at	1.97	0.00
Coro1a	coronin, actin binding protein 1A	1416246_a_at	1.97	0.01
Cd302	CD302 antigen	1448919_at	1.96	0.00
Tnfaip2	tumor necrosis factor, alpha-induced protein 2	1416273_at	1.96	0.01
A330021E22Rik	RIKEN cDNA A330021E22 gene	1440796_at	1.96	0.00
Slc2a1	solute carrier family 2 (facilitated glucose transporter), member 1	1426600_at	1.96	0.00
Sertad1	SERTA domain containing 1	1417406_at	1.96	0.00
Txnrd1	thioredoxin reductase 1	1421529_a_at	1.96	0.00
Art1	ADP-ribosyltransferase 1	1451372_a_at	1.96	0.00
Entpd1	ectonucleoside triphosphate diphosphohydrolase 1	1423326_at	1.96	0.00
2610307O08Rik	RIKEN cDNA 2610307O08 gene	1427911_at	1.95	0.00
AB124611	cDNA sequence AB124611	1438475_at	1.95	0.00
5033414K04Rik	RIKEN cDNA 5033414K04 gene	1440790_x_at	1.95	0.00
Psmd11	proteasome (prosome, macropain) 26S subunit, non-ATPase, 11	1429370_a_at	1.95	0.00
Hspb1	heat shock protein 1	1422943_a_at	1.95	0.00
Serinc3	serine incorporator 3	1448847_at	1.95	0.00
Nubp1	nucleotide binding protein 1	1430778_a_at	1.95	0.00
Slc39a1	solute carrier family 39 (zinc transporter), member 1	1424424_at	1.94	0.00
Ddx21	DEAD (Asp-Glu-Ala-Asp) box polypeptide 21	1448270_at	1.94	0.01
Ebp	phenylalkylamine Ca2+ antagonist (emopamil) binding protein	1416667_at	1.94	0.00

Ube1l	ubiquitin-activating enzyme E1-like	1437317_at	1.94	0.00
Fstl3	follistatin-like 3	1422803_at	1.94	0.00
Rarres2	retinoic acid receptor responder (tazarotene induced) 2	1437902_s_at	1.94	0.00
Arpc1b	actin related protein 2/3 complex, subunit 1B	1416226_at	1.94	0.00
Stx11	syntaxin 11	1453228_at	1.94	0.03
Serinc3	serine incorporator 3	1434548_at	1.93	0.00
Nek7	NIMA (never in mitosis gene a)-related expressed kinase 7	1416817_at	1.93	0.00
Qscn6	quiescin Q6	1420832_at	1.93	0.00
Gcnt2	glucosaminyl (N-acetyl) transferase 2, I-branching enzyme	1430826_s_at	1.93	0.02
Scarb2	scavenger receptor class B, member 2	1460235_at	1.93	0.00
Tlk2	tousled-like kinase 2 (Arabidopsis)	1454018_at	1.93	0.02
Coro1a	coronin, actin binding protein 1A	1455269_a_at	1.93	0.01
Cxcl12	chemokine (C-X-C motif) ligand 12	1448823_at	1.93	0.00
Rnf122	ring finger protein 122	1447101_at	1.93	0.00
---	---	1416035_at	1.93	0.02
Slc43a2	solute carrier family 43, member 2	1434308_at	1.93	0.00
Ercc1	excision repair cross-complementing rodent repair deficiency, complementation group 1	1437447_s_at	1.93	0.00
Il6ra	interleukin 6 receptor, alpha	1452416_at	1.93	0.00
Rarres2	retinoic acid receptor responder (tazarotene induced) 2	1428538_s_at	1.92	0.00
Pnpla2	patatin-like phospholipase domain containing 2	1428591_at	1.92	0.00
Tfdp2	transcription factor Dp 2	1437174_at	1.92	0.00
2010209O12Rik	RIKEN cDNA 2010209O12 gene	1452170_at	1.92	0.00
Syn2	synapsin II	1460230_at	1.92	0.00
---	---	1435263_at	1.92	0.00
Cggbp1	CGG triplet repeat binding protein 1	1455658_at	1.92	0.00
Riok3	RIO kinase 3 (yeast)	1422650_a_at	1.92	0.00
Etv6	ets variant gene 6 (TEL oncogene)	1434880_at	1.92	0.00
Tpm3	Tropomyosin 3, gamma	1436958_x_at	1.92	0.00
Tmem106a	transmembrane protein 106A	1425025_at	1.91	0.00
Gldc	glycine decarboxylase	1416049_at	1.91	0.00
Csnk1d	casein kinase 1, delta	1418889_a_at	1.91	0.00
Pgs1	phosphatidylglycerophosphate synthase 1	1454045_a_at	1.91	0.00
Ccrn4l /// Sgip1 /// LOC280487 /// LOC639390	CCR4 carbon catabolite repression 4-like (S. cerevisiae) /// SH3-domain GRB2-like (endophilin) interacting protein 1 /// pol polyprotein /// gag protein	1448715_x_at	1.91	0.00
Gag	Gag	1451626_x_at	1.90	0.00
LOC669660	similar to PDZ and LIM domain protein 5 (Enigma homolog) (Enigma-like PDZ and LIM domains protein)	1422863_s_at	1.90	0.02
Klf6	Kruppel-like factor 6	1418280_at	1.90	0.06
Nola2	nucleolar protein family A, member 2	1416606_s_at	1.90	0.00
Rhou	ras homolog gene family, member U	1449027_at	1.90	0.00
Trim25	tripartite motif protein 25	1426415_a_at	1.90	0.00
2610301K12Rik	RIKEN cDNA 2610301K12 gene	1429336_at	1.90	0.10
B4galt1	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1	1418014_a_at	1.90	0.00
BC063749	cDNA sequence BC063749	1433943_at	1.90	0.00
Tdrd7	tudor domain containing 7	1426716_at	1.90	0.00
Il1r1	interleukin 1 receptor, type I	1448950_at	1.90	0.00
Tgfb2	transforming growth factor, beta 2	1450922_a_at	1.90	0.05
Pes1	pescadillo homolog 1, containing BRCT domain (zebrafish)	1416172_at	1.90	0.00
Grn	granulin	1448148_at	1.90	0.00
B4galt1	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1	1458616_at	1.89	0.00
2010106G01Rik	RIKEN cDNA 2010106G01 gene	1425193_at	1.89	0.02
Kbtbd11 /// LOC632344	kelch repeat and BTB (POZ) domain containing 11 /// similar to Protein KIAA0711	1435465_at	1.89	0.04
Grn	granulin	1438629_x_at	1.89	0.00
Mcl1	myeloid cell leukemia sequence 1	1416881_at	1.89	0.00
Plat	plasminogen activator, tissue	1415806_at	1.89	0.01
Adar	adenosine deaminase, RNA-specific	1434268_at	1.89	0.00
A930035D04Rik	RIKEN cDNA A930035D04 gene	1436942_at	1.89	0.00
Chd6	chromodomain helicase DNA binding protein 6	1427384_at	1.89	0.01
0610041E09Rik	RIKEN cDNA 0610041E09 gene	1425780_a_at	1.89	0.01
Adam8	a disintegrin and metallopeptidase domain 8	1416871_at	1.89	0.00
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Stno	Strawberry notch homolog (Drosophila)	1441840_x_at	1.89	0.02
Nek7	NIMA (never in mitosis gene a)-related expressed kinase 7	1416816_at	1.89	0.00
Tpbg	trophoblast glycoprotein	1423311_s_at	1.88	0.00
Ptpn2	protein tyrosine phosphatase, non-receptor type 2	1425198_at	1.88	0.02
Lrrc59	leucine rich repeat containing 59	1416234_at	1.88	0.00
AI851523	expressed sequence AI851523	1440156_s_at	1.88	0.00
Josd3	Josephin domain containing 3	1430147_a_at	1.88	0.00
Cab39l	calcium binding protein 39-like	1449966_s_at	1.88	0.00
Ell	elongation factor RNA polymerase II	1460643_at	1.88	0.00
Gpr178	G protein-coupled receptor 178	1435948_at	1.88	0.00
LOC677168	hypothetical protein LOC677168	1453939_x_at	1.88	0.00
Dcn	decorin	1441506_at	1.88	0.00
Tmem2	transmembrane protein 2	1451458_at	1.87	0.02
Nubp2	nucleotide binding protein 2	1459842_x_at	1.87	0.00
Ugcg	UDP-glucose ceramide glucosyltransferase	1435133_at	1.87	0.00
Gnl3	guanine nucleotide binding protein-like 3 (nucleolar)	1433656_a_at	1.87	0.00
AI843639	expressed sequence AI843639	1436614_at	1.87	0.02
Atf4	activating transcription factor 4	1438992_x_at	1.87	0.01
Cxcl16	chemokine (C-X-C motif) ligand 16	1418718_at	1.87	0.00
Uck2	uridine-cytidine kinase 2	1439741_x_at	1.87	0.00
Mocos	molybdenum cofactor sulfurase	1429352_at	1.87	0.00
Fen1	flap structure specific endonuclease 1	1436454_x_at	1.87	0.00
Amotl2	angiomotin like 2	1452387_a_at	1.87	0.00
Slc31a2	solute carrier family 31, member 2	1453721_a_at	1.87	0.00
Pgs1	phosphatidylglycerophosphate synthase 1	1454046_x_at	1.87	0.00
Tbl1xr1	transducin (beta)-like 1X-linked receptor 1	1422761_at	1.87	0.03
Timp4	tissue inhibitor of metalloproteinase 4	1423405_at	1.87	0.03
Zfp313	Zinc finger protein 313	1438257_at	1.87	0.00
Clu	clusterin	1418626_a_at	1.87	0.00
Myd116	myeloid differentiation primary response gene 116	1448325_at	1.87	0.00
Syn2	synapsin II	1449030_at	1.87	0.03
Cib1	calcium and integrin binding 1 (calmyrin)	1448564_at	1.87	0.00
Plekhc1	pleckstrin homology domain containing, family C (with FERM domain) member 1	1434181_at	1.86	0.02
Pfkp	phosphofructokinase, platelet	1416069_at	1.86	0.00
Bicd1	bicaudal D homolog 1 (Drosophila)	1451684_a_at	1.86	0.00

Plekha4	pleckstrin homology domain containing, family A (phosphoinositide binding specific) member 4	1426013_s_at	1.86	0.00
Entpd1	ectonucleoside triphosphate diphosphohydrolase 1	1450939_at	1.86	0.00
Ptprk	protein tyrosine phosphatase, receptor type, K	1423277_at	1.86	0.00
Wdr26	WD repeat domain 26	1423961_at	1.86	0.00
AI838057	expressed sequence AI838057	1434447_at	1.86	0.01
Cspg2	chondroitin sulfate proteoglycan 2	1427256_at	1.86	0.00
6430537K16Rik	RIKEN cDNA 6430537K16 gene	1438878_at	1.86	0.00
Usp3	ubiquitin specific peptidase 3	1425022_at	1.86	0.00
Gba	glucosidase, beta, acid	1437044_a_at	1.86	0.00
Psma7	proteasome (prosome, macropain) subunit, alpha type 7	1423568_at	1.86	0.00
H3f3b	H3 histone, family 3B	1455725_a_at	1.86	0.01
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Hpse	Heparanase	1433930_at	1.86	0.00
Ppa1	pyrophosphatase (inorganic) 1	1416939_at	1.85	0.00
Mar-01	membrane-associated ring finger (C3HC4) 1	1440209_at	1.85	0.00
Zbtb16	zinc finger and BTB domain containing 16	1419874_x_at	1.85	0.02
Ss18l1	Synovial sarcoma translocation gene on chromosome 18-like 1	1458785_at	1.85	0.02
D030070L09Rik	RIKEN cDNA D030070L09 gene	1433859_at	1.85	0.00
Ereg	epiregulin	1419431_at	1.85	0.00
Psmd4	proteasome (prosome, macropain) 26S subunit, non-ATPase, 4	1425859_a_at	1.85	0.00
Grn	granulin	1456567_x_at	1.85	0.00
3110024A21Rik	RIKEN cDNA 3110024A21 gene	1447703_x_at	1.85	0.00
Ninj1	ninjurin 1	1438928_x_at	1.85	0.00
Jak2	Janus kinase 2	1421066_at	1.85	0.00
Sfxn1	sideroflexin 1	1417559_at	1.85	0.01
Fem1c	fem-1 homolog c (C.elegans)	1438075_at	1.84	0.10
Ets2	E26 avian leukemia oncogene 2, 3' domain	1416268_at	1.84	0.00
Rab7l1	RAB7, member RAS oncogene family-like 1	1451362_at	1.84	0.00
Zbtb16	zinc finger and BTB domain containing 16	1439163_at	1.84	0.03
Ninj1	ninjurin 1	1448417_at	1.84	0.00
Ank3	ankyrin 3, epithelial	1425202_a_at	1.84	0.00
St6galnac4	ST6 (alpha-N-acetyl-neuraminyl-2,3-beta-galactosyl-1,3)-N-acetylgalactosaminide alpha-2,6-sialyltransferase 4	1418075_at	1.84	0.00
Tgfbr2	transforming growth factor, beta receptor II	1425444_a_at	1.84	0.00
Gna13	guanine nucleotide binding protein, alpha 13	1450656_at	1.84	0.02
Nadk	NAD kinase	1416248_at	1.84	0.00
---	---	1435361_at	1.84	0.01
Midn	midnolin	1449188_at	1.84	0.00
Snrpa1	small nuclear ribonucleoprotein polypeptide A'	1417351_a_at	1.84	0.00
Numa1	Nuclear mitotic apparatus protein 1	1441090_at	1.84	0.01
Rbed1	RNA binding motif and ELMO domain 1	1451392_at	1.84	0.00
Steap1	six transmembrane epithelial antigen of the prostate 1	1424938_at	1.84	0.02
Tmem50a	transmembrane protein 50A	1453155_at	1.84	0.00
Cndp2	CNDP dipeptidase 2 (metallopeptidase M20 family)	1460177_at	1.84	0.00
U2af1-rs2	U2 small nuclear ribonucleoprotein auxiliary factor (U2AF) 1, related sequence 2	1455727_at	1.84	0.00
Clec1a	C-type lectin domain family 1, member a	1460039_at	1.84	0.01
Snap29	synaptosomal-associated protein	1423355_at	1.84	0.00
Syk	spleen tyrosine kinase	1418262_at	1.84	0.00
Pglyrp1	peptidoglycan recognition protein 1	1449184_at	1.83	0.00
Bclaf1	BCL2-associated transcription factor 1	1428844_a_at	1.83	0.00
Tsc22d1	TSC22 domain family, member 1	1433899_x_at	1.83	0.00
Ggps1	geranylgeranyl diphosphate synthase 1	1419505_a_at	1.83	0.00
Tnfsf10	tumor necrosis factor (ligand) superfamily, member 10	1439680_at	1.83	0.00
Ripk2	receptor (TNFRSF)-interacting serine-threonine kinase 2	1450173_at	1.83	0.00
---	---	1437916_at	1.83	0.00
Tsr1	TSR1, 20S rRNA accumulation, homolog (yeast)	1433502_s_at	1.83	0.00
Trim34	tripartite motif protein 34	1426093_at	1.83	0.00
Etf1	eukaryotic translation termination factor 1	1451208_at	1.83	0.00
Kif22	kinesin family member 22	1437716_x_at	1.83	0.00
Nubp1	nucleotide binding protein 1	1418906_at	1.83	0.00
Gtpbp4	GTP binding protein 4	1423143_at	1.82	0.00
Rbm18	RNA binding motif protein 18	1420608_at	1.82	0.02
Gsr	glutathione reductase 1	1421817_at	1.82	0.00
Cttn	cortactin	1423917_a_at	1.82	0.00
LOC433237	hypothetical gene supported by AK028012	1444178_at	1.82	0.04
Rlf	Rearranged L-myc fusion sequence	1440020_at	1.82	0.00
Sdad1	SDA1 domain containing 1	1452454_at	1.82	0.00
Ftsj3	FtsJ homolog 3 (E. coli)	1451026_at	1.82	0.00
Mmd /// LOC676546	monocyte to macrophage differentiation-associated /// similar to monocyte to macrophage differentiation-associated	1435645_at	1.82	0.00
Pold4	polymerase (DNA-directed), delta 4	1427885_at	1.82	0.00
Ugcg	UDP-glucose ceramide glucosyltransferase	1421268_at	1.82	0.02
AI413194	expressed sequence AI413194	1441320_a_at	1.82	0.00
Bin3	bridging integrator 3	1417691_at	1.82	0.00
Hivep3	human immunodeficiency virus type I enhancer binding protein 3	1458802_at	1.82	0.00
Cpne8	copine VIII	1431146_a_at	1.82	0.02
Flot2	flotillin 2	1417544_a_at	1.82	0.00
2400006N03Rik	RIKEN cDNA 2400006N03 gene	1428828_at	1.82	0.00
Plod3	procollagen-lysine, 2-oxoglutarate 5-dioxygenase 3	1415901_at	1.82	0.00
Dnttip2	deoxynucleotidyltransferase, terminal, interacting protein 2	1427881_at	1.82	0.00
---	---	1458980_at	1.81	0.00
1700047I17Rik /// LOC665155	RIKEN cDNA 1700047I17 gene /// similar to signal recognition particle 54	1460466_at	1.81	0.00
Serpine2	serine (or cysteine) peptidase inhibitor, clade E, member 2	1416666_at	1.81	0.00
4930504E06Rik	RIKEN cDNA 4930504E06 gene	1438321_x_at	1.81	0.00
Mybbp1a	MYB binding protein (P160) 1a	1423430_at	1.81	0.00
Dpysl3	dihydropyrimidinase-like 3	1438789_s_at	1.81	0.00
2310044G17Rik	RIKEN cDNA 2310044G17 gene	1424913_at	1.81	0.00
D13Wsu177e	DNA segment, Chr 13, Wayne State University 177, expressed	1424620_at	1.81	0.00
Cttn	cortactin	1433908_a_at	1.81	0.00
Ogfrl1 /// LOC673882	opioid growth factor receptor-like 1 /// similar to opioid growth factor receptor-like 1	1424414_at	1.81	0.00
Josd3	Josephin domain containing 3	1430271_x_at	1.81	0.01
Osr1	odd-skipped related 1 (Drosophila)	1449350_at	1.81	0.02
Tbc1d15	TBC1 domain family, member 15	1416062_at	1.80	0.07
Tmem23	Transmembrane protein 23	1457968_at	1.80	0.11
Scarb2	scavenger receptor class B, member 2	1454704_at	1.80	0.00
Baiap2	brain-specific angiogenesis inhibitor 1-associated protein 2	1425656_a_at	1.80	0.00

Ctsz	cathepsin Z	1417868_a_at	1.80	0.00
Usp54	ubiquitin specific peptidase 54	1428731_at	1.80	0.00
Casp8	caspase 8	1424552_at	1.80	0.00
Spcs3	signal peptidase complex subunit 3 homolog (S. cerevisiae)	1451175_at	1.80	0.00
Ctsz	cathepsin Z	1417870_x_at	1.80	0.00
Tnrc9	trinucleotide repeat containing 9	1436600_at	1.80	0.04
Csf2rb2	colony stimulating factor 2 receptor, beta 2, low-affinity (granulocyte-macrophage)	1449360_at	1.80	0.00
Paox	polyamine oxidase (exo-N4-amino)	1428859_at	1.80	0.00
Ets2	E26 avian leukemia oncogene 2, 3' domain	1447685_x_at	1.80	0.00
Mtmr1	myotubularin related protein 1	1421879_at	1.80	0.02
Fbxw17	F-box and WD-40 domain protein 17	1434991_at	1.80	0.00
Atf6	activating transcription factor 6	1453288_at	1.80	0.00
Steap2	six transmembrane epithelial antigen of prostate 2	1438773_at	1.79	0.02
Gas5	growth arrest specific 5	1424843_a_at	1.79	0.02
Usp3	ubiquitin specific peptidase 3	1425023_at	1.79	0.00
Rfxank	regulatory factor X-associated ankyrin-containing protein	1455371_at	1.79	0.00
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Dnajb4	DnaJ (Hsp40) homolog, subfamily B, member 4	1451177_at	1.79	0.00
Tpd52	tumor protein D52	1419494_a_at	1.79	0.03
Fbxl5	F-box and leucine-rich repeat protein 5	1456223_at	1.79	0.00
Tsc22d1	TSC22 domain family, member 1	1425742_a_at	1.79	0.01
Cd33	CD33 antigen	1450513_at	1.78	0.00
Mtf1	metal response element binding transcription factor 1	1429170_a_at	1.78	0.00
B4galt1	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1	1458773_at	1.78	0.14
Hap1	huntingtin-associated protein 1	1416997_a_at	1.78	0.00
Atxn10	ataxin 10	1422576_at	1.78	0.00
Mtdh	Metadherin	1434882_at	1.78	0.00
Ypel5	yippee-like 5 (Drosophila)	1433593_at	1.78	0.02
Map1lc3b	microtubule-associated protein 1 light chain 3 beta	1415928_a_at	1.78	0.00
Cd40	CD40 antigen	1439221_s_at	1.78	0.00
Edg1	endothelial differentiation sphingolipid G-protein-coupled receptor 1	1423571_at	1.78	0.02
Ptpn2	protein tyrosine phosphatase, non-receptor type 2	1425197_at	1.78	0.10
Star	steroidogenic acute regulatory protein	1418728_at	1.78	0.05
Mtmr1	myotubularin related protein 1	1421880_at	1.78	0.01
Cttnbp2nl	CTTNBP2 N-terminal like	1449300_at	1.78	0.00
Txn1	thioredoxin 1	1416119_at	1.78	0.00
Hpxn	hemopexin	1423944_at	1.78	0.00
5033413D16Rik	RIKEN cDNA 5033413D16 gene	1428694_at	1.78	0.02
Prss23	protease, serine, 23	1431057_a_at	1.77	0.08
H6pd	hexose-6-phosphate dehydrogenase (glucose 1-dehydrogenase)	1452145_at	1.77	0.00
Hspa2	heat shock protein 2	1417101_at	1.77	0.04
Gpr84	G protein-coupled receptor 84	1420591_at	1.77	0.00
Athl1	ATH1, acid trehalase-like 1 (yeast)	1423765_at	1.77	0.00
Hmga1	high mobility group AT-hook 1	1416184_s_at	1.77	0.00
Psmd11 /// LOC627316 /// LOC671671	proteasome (prosome, macropain) 26S subunit, non-ATPase, 11 /// similar to 26S proteasome non-ATPase regulatory subunit 11 (26S proteasome regulatory subunit S9) (26S proteasome regulatory subunit p44.5) /// similar to 26S proteasome non-ATPase regulatory subunit 11 (26S proteasome regulatory subunit S9) (26S proteasome regulatory subunit p44.5)	1437080_s_at	1.77	0.00
Rps25	ribosomal protein S25	1430978_at	1.77	0.00
Chst11	carbohydrate sulfotransferase 11	1428902_at	1.77	0.02
Ddx54	DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	1460396_at	1.77	0.00
Pacrg	Park2 co-regulated	1428751_at	1.77	0.00
Klf6	Kruppel-like factor 6	1433508_at	1.77	0.02
Sfrs7	splicing factor, arginine/serine-rich 7	1436871_at	1.77	0.03
Xpa	xeroderma pigmentosum, complementation group A	1460725_at	1.77	0.00
Sec1	secretory blood group 1	1455784_at	1.77	0.02
Cpeb1	cytoplasmic polyadenylation element binding protein 1	1417960_at	1.77	0.00
H3f3b	H3 histone, family 3B	1420376_a_at	1.76	0.04
Orm1	orosomucoid 1	1451054_at	1.76	0.01
Egfr	epidermal growth factor receptor	1435888_at	1.76	0.02
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Rnf122	ring finger protein 122	1454857_at	1.76	0.02
Sec61a1	Sec61 alpha 1 subunit (S. cerevisiae)	1416189_a_at	1.76	0.00
Samsn1	SAM domain, SH3 domain and nuclear localization signals, 1	1421457_a_at	1.76	0.00
BC031353	cDNA sequence BC031353	1436033_at	1.76	0.00
1810011O16Rik	RIKEN cDNA 1810011O16 gene	1432444_a_at	1.76	0.00
C130047D21Rik	RIKEN cDNA C130047D21 gene	1439293_at	1.76	0.00
Xbp1	X-box binding protein 1	1420886_a_at	1.76	0.00
Slc7a6	solute carrier family 7 (cationic amino acid transporter, y+ system), member 6	1433467_at	1.75	0.00
Trim34	Tripartite motif protein 34	1446939_at	1.75	0.04
Clic1	chloride intracellular channel 1	1416656_at	1.75	0.00
Psmd10	proteosome (prosome, macropain) 26S subunit, non-ATPase, 10	1436559_a_at	1.75	0.00
Ctdsp2	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase 2	1423661_s_at	1.75	0.00
Clic5	chloride intracellular channel 5	1439505_at	1.75	0.01
Acp2	acid phosphatase 2, lysosomal	1424655_at	1.75	0.00
---	---	1457438_at	1.75	0.00
Rnh1	ribonuclease/angiogenin inhibitor 1	1451201_s_at	1.75	0.00
Ggps1	geranylgeranyl diphosphate synthase 1	1419805_s_at	1.75	0.01
Eif4a1	eukaryotic translation initiation factor 4A1	1434985_a_at	1.75	0.00
Tlr13	toll-like receptor 13	1457753_at	1.75	0.03
Dsg2	desmoglein 2	1425619_s_at	1.75	0.01
Tuba6 /// LOC626534	tubulin, alpha 6 /// similar to Tubulin alpha-6 chain (Alpha-tubulin 6)	1416128_at	1.75	0.00
1110033J19Rik	RIKEN cDNA 1110033J19 gene	1452730_at	1.75	0.02
D10Ertd438e	DNA segment, Chr 10, ERATO Doi 438, expressed	1420646_at	1.74	0.02
Wdr68	WD repeat domain 68	1429385_at	1.74	0.00
Ddx54	DEAD (Asp-Glu-Ala-Asp) box polypeptide 54	1438853_x_at	1.74	0.00
Il13ra1	interleukin 13 receptor, alpha 1	1454783_at	1.74	0.04
Zfp259	zinc finger protein 259	1419281_a_at	1.74	0.00
Nr1h2	nuclear receptor subfamily 1, group H, member 2	1416353_at	1.74	0.00
Fbxo4	F-box only protein 4	1427121_at	1.74	0.00
Tpte2	transmembrane phosphoinositide 3-phosphatase and tensin homolog 2	1418097_a_at	1.74	0.00
Galntl2	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 2	1429236_at	1.74	0.00
Hip1	huntingtin interacting protein 1	1434557_at	1.74	0.00
Creb3l1	cAMP responsive element binding protein 3-like 1	1419295_at	1.74	0.00
Abhd4	abhydrolase domain containing 4	1439259_x_at	1.74	0.00

Cd53	CD53 antigen	1448617_at	1.74	0.00
Cyld	cylindromatosis (turban tumor syndrome)	1429617_at	1.74	0.02
Ralb	v-ral simian leukemia viral oncogene homolog B (ras related)	1435517_x_at	1.74	0.00
Fmnl2	Formin-like 2	1457910_at	1.73	0.01
Ninj1	ninjurin 1	1441281_s_at	1.73	0.00
Clu	clusterin	1437689_x_at	1.73	0.00
Armcx5	armadillo repeat containing, X-linked 5	1424481_s_at	1.73	0.00
Mknk2	MAP kinase-interacting serine/threonine kinase 2	1418300_a_at	1.73	0.00
Itgb1	integrin beta 1 (fibronectin receptor beta)	1427771_x_at	1.73	0.02
BC028799 /// 4922501C03Rik	cDNA sequence BC028799 /// RIKEN cDNA 4922501C03 gene	1443899_at	1.73	0.00
Prpf31	PRP31 pre-mRNA processing factor 31 homolog (yeast)	1448633_at	1.73	0.00
Creb3	cAMP responsive element binding protein 3	1424740_at	1.73	0.01
Gng12	guanine nucleotide binding protein (G protein), gamma 12	1421947_at	1.73	0.01
Ric8	resistance to inhibitors of cholinesterase 8 homolog (C. elegans)	1424819_a_at	1.73	0.00
Actn1	actinin, alpha 1	1428585_at	1.73	0.02
Tgoln1	trans-golgi network protein	1423309_at	1.73	0.00
2010003J03Rik	RIKEN cDNA 2010003J03 gene	1428542_at	1.73	0.00
Akap2	A kinase (PRKA) anchor protein 2	1455870_at	1.73	0.04
Psma7	proteasome (prosome, macropain) subunit, alpha type 7	1423567_a_at	1.73	0.00
Prss23	protease, serine, 23	1437671_x_at	1.73	0.06
Fgr	Gardner-Rasheed feline sarcoma viral (Fgr) oncogene homolog	1442804_at	1.73	0.00
Psme1	proteasome (prosome, macropain) 28 subunit, alpha	1417056_at	1.73	0.00
Hspb1	heat shock protein 1	1427853_a_at	1.73	0.00
1300018I05Rik	RIKEN cDNA 1300018I05 gene	1443388_at	1.73	0.00
Dtna	dystrobrevin alpha	1425292_at	1.72	0.03
Nadk	NAD kinase	1416249_at	1.72	0.00
Ccdc86	coiled-coil domain containing 86	1454197_a_at	1.72	0.00
4932414K18Rik	RIKEN cDNA 4932414K18 gene	1454730_at	1.72	0.00
---	---	1440253_at	1.72	0.00
Ifrd1	interferon-related developmental regulator 1	1416067_at	1.72	0.02
Ptpre	protein tyrosine phosphatase, receptor type, E	1418540_a_at	1.72	0.01
Smpdl3b	sphingomyelin phosphodiesterase, acid-like 3B	1417300_at	1.72	0.00
Ints12	integrator complex subunit 12	1452316_at	1.72	0.00
Noc4l	nucleolar complex associated 4 homolog (S. cerevisiae)	1423826_at	1.72	0.00
Psmb8	proteosome (prosome, macropain) subunit, beta type 8 (large multifunctional peptidase 7)	1444619_x_at	1.72	0.00
Klf6	Kruppel-like factor 6	1447448_s_at	1.72	0.01
Col4a1	procollagen, type IV, alpha 1	1452035_at	1.72	0.01
Hgs	HGF-regulated tyrosine kinase substrate	1416540_at	1.72	0.00
---	---	1456787_at	1.72	0.01
Tsc22d1	TSC22 domain family, member 1	1454971_x_at	1.72	0.00
Rsc1a1	regulatory solute carrier protein, family 1, member 1	1435536_at	1.72	0.00
Crbn	cereblon	1423095_s_at	1.72	0.00
Pex12	peroxisomal biogenesis factor 12	1416259_at	1.72	0.00
Spon1	spondin 1, (f-spondin) extracellular matrix protein	1424415_s_at	1.72	0.00
Anxa7	annexin A7	1438764_at	1.72	0.00
Eif4e3	eukaryotic translation initiation factor 4E member 3	1417977_at	1.72	0.00
Ahcy	S-adenosylhomocysteine hydrolase	1417125_at	1.71	0.00
Ypel3	yippee-like 3 (Drosophila)	1426624_a_at	1.71	0.00
Bzw1	basic leucine zipper and W2 domains 1	1423040_at	1.71	0.02
---	---	1430630_at	1.71	0.00
1110012M11Rik	RIKEN cDNA 1110012M11 gene	1455895_x_at	1.71	0.00
Ddx27	DEAD (Asp-Glu-Ala-Asp) box polypeptide 27	1424161_at	1.71	0.00
Plekhm1	pleckstrin homology domain containing, family M (with RUN domain) member 1	1454746_at	1.71	0.00
Ube2j1	ubiquitin-conjugating enzyme E2, J1	1448824_at	1.71	0.00
Tpd52	tumor protein D52	1419493_a_at	1.71	0.00
Isg20l1	interferon stimulated exonuclease gene 20-like 1	1450506_a_at	1.71	0.00
Bicd1	bicaudal D homolog 1 (Drosophila)	1437548_at	1.71	0.07
Rps6ka3	ribosomal protein S6 kinase polypeptide 3	1427299_at	1.71	0.00
Cltb	clathrin, light polypeptide (Lcb)	1453063_at	1.71	0.00
Akt3	thymoma viral proto-oncogene 3	1435879_at	1.71	0.03
0610011I04Rik	RIKEN cDNA 0610011I04 gene	1441811_x_at	1.71	0.00
Nek7	NIMA (never in mitosis gene a)-related expressed kinase 7	1448474_at	1.70	0.00
Tbl1xr1	transducin (beta)-like 1X-linked receptor 1	1455109_at	1.70	0.02
Nfil3	nuclear factor, interleukin 3, regulated	1418932_at	1.70	0.05
Xbp1	X-box binding protein 1	1420011_s_at	1.70	0.00
Oprs1	Opioid receptor, sigma 1	1457324_at	1.70	0.00
Ric8	resistance to inhibitors of cholinesterase 8 homolog (C. elegans)	1455809_x_at	1.70	0.00
1700023B02Rik	RIKEN cDNA 1700023B02 gene	1423375_at	1.70	0.01
Dnajc3	DnaJ (Hsp40) homolog, subfamily C, member 3	1449372_at	1.70	0.02
Whdc1	WAS protein homology region 2 domain containing 1	1436792_at	1.70	0.00
Ddx58	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58	1446457_at	1.70	0.00
Masp1	mannan-binding lectin serine peptidase 1	1425985_s_at	1.70	0.00
Tubb6	tubulin, beta 6	1416431_at	1.70	0.02
Nip7	nuclear import 7 homolog (S. cerevisiae)	1448480_at	1.70	0.00
H13	histocompatibility 13	1417287_at	1.70	0.00
---	---	1447851_x_at	1.70	0.00
Ctla4	cytotoxic T-lymphocyte-associated protein 4	1419334_at	1.70	0.01
Serinc3	serine incorporator 3	1417815_a_at	1.70	0.00
Creld2	cysteine-rich with EGF-like domains 2	1452754_at	1.70	0.00
Nsmce1	non-SMC element 1 homolog (S. cerevisiae)	1436121_a_at	1.70	0.00
Fcgr3	Fc receptor, IgG, low affinity III	1448620_at	1.70	0.00
AI429214	expressed sequence AI429214	1455199_at	1.70	0.00
Cd47	CD47 antigen (Rh-related antigen, integrin-associated signal transducer)	1419554_at	1.70	0.00
Riok2	RIO kinase 2 (yeast)	1423481_at	1.70	0.02
9530028C05	hypothetical protein 9530028C05	1436172_at	1.70	0.03
Zfand2a	zinc finger, AN1-type domain 2A	1415940_at	1.70	0.00
Cdc42se1	CDC42 small effector 1	1428132_at	1.70	0.00
Anxa4	annexin A4	1457658_x_at	1.70	0.00
Birc3	baculoviral IAP repeat-containing 3	1425223_at	1.69	0.00
Rdh10	retinol dehydrogenase 10 (all-trans)	1426968_a_at	1.69	0.03
Slc31a2	solute carrier family 31, member 2	1416654_at	1.69	0.00
9130404D14Rik	RIKEN cDNA 9130404D14 gene	1426812_a_at	1.69	0.00
Pfkfb3	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 3	1456676_a_at	1.69	0.02
Psmc4	proteasome (prosome, macropain) 26S subunit, ATPase, 4	1416291_at	1.69	0.00
Rhoj	ras homolog gene family, member J	1418892_at	1.69	0.10
Ugcgl1	UDP-glucose ceramide glucosyltransferase-like 1	1455839_at	1.69	0.00
Nmt1	N-myristoyltransferase 1	1415683_at	1.69	0.00

Ccdc86	coiled-coil domain containing 86	1452414_s_at	1.69	0.00
Ssh3	slingshot homolog 3 (Drosophila)	1447929_at	1.69	0.00
Gpr35	G protein-coupled receptor 35	1449976_a_at	1.69	0.00
Thrap2	thyroid hormone receptor associated protein 2	1434603_at	1.69	0.00
D10Wsu52e	DNA segment, Chr 10, Wayne State University 52, expressed	1423880_at	1.69	0.00
Gpr56	G protein-coupled receptor 56	1421118_a_at	1.69	0.00
Pilrb	paired immunoglobin-like type 2 receptor beta	1422041_at	1.69	0.02
Rnmt	RNA (guanine-7-) methyltransferase	1453106_a_at	1.69	0.00
Hook3	hook homolog 3 (Drosophila)	1446737_a_at	1.69	0.00
Eif4ebp1	eukaryotic translation initiation factor 4E binding protein 1	1417563_at	1.69	0.00
Tor1aip2	torsin A interacting protein 2	1435526_at	1.68	0.03
Psmd4	proteasome (prosome, macropain) 26S subunit, non-ATPase, 4	1418874_a_at	1.68	0.00
Wdfy1	WD repeat and FYVE domain containing 1	1424749_at	1.68	0.00
Nubp2	nucleotide binding protein 2	1416512_at	1.68	0.00
Thumpd3	THUMP domain containing 3	1417684_at	1.68	0.00
Nat2	N-acetyltransferase 2 (arylamine N-acetyltransferase)	1449981_a_at	1.68	0.02
Ankfy1	ankyrin repeat and FYVE domain containing 1	1417685_at	1.68	0.00
Marcksl1 /// LOC673071	MARCKS-like 1 /// similar to MARCKS-related protein (MARCKS-like protein 1) (Macrophage myristoylated alanine-rich C kinase substrate) (Mac-MARCKS) (MacMARCKS) (Brain protein F52)	1435627_x_at	1.68	0.00
Il6st	interleukin 6 signal transducer	1437303_at	1.68	0.02
Atp10d	ATPase, Class V, type 10D	1436544_at	1.68	0.00
Sumf1	sulfatase modifying factor 1	1424603_at	1.68	0.00
Scyl3	SCY1-like 3 (S. cerevisiae)	1428918_at	1.68	0.00
Nras	neuroblastoma ras oncogene	1422688_a_at	1.68	0.00
Malat1	metastasis associated lung adenocarcinoma transcript 1 (non-coding RNA)	1436202_at	1.68	0.04
Map2k3	mitogen activated protein kinase kinase 3	1425456_a_at	1.68	0.00
Clu	clusterin	1437458_x_at	1.68	0.00
Itga7	integrin alpha 7	1418393_a_at	1.68	0.00
Fscn1	fascin homolog 1, actin bundling protein (Strongylocentrotus) purpuratus)	1416514_a_at	1.68	0.01
9030607L20Rik	RIKEN cDNA 9030607L20 gene	1430103_at	1.68	0.00
Carhsp1	calcium regulated heat stable protein 1	1415975_at	1.68	0.00
Card14	caspase recruitment domain family, member 14	1450142_a_at	1.68	0.03
Slc11a2	solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2	1452078_a_at	1.67	0.00
Trpv4	transient receptor potential cation channel, subfamily V, member 4	1417545_at	1.67	0.00
Ascc3	activating signal cointegrator 1 complex subunit 3	1457069_at	1.67	0.02
Gba	glucosidase, beta, acid	1450099_a_at	1.67	0.00
Adamts15	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 15	1427056_at	1.67	0.02
Med8	mediator of RNA polymerase II transcription, subunit 8 homolog (yeast)	1431423_a_at	1.67	0.00
Hamp2	hepcidin antimicrobial peptide 2	1436643_x_at	1.67	0.00
Hrbl	HIV-1 Rev binding protein-like	1437642_at	1.67	0.00
Creb3	cAMP responsive element binding protein 3	1424741_s_at	1.67	0.00
Tmem2	transmembrane protein 2	1424711_at	1.67	0.02
Timp4	tissue inhibitor of metalloproteinase 4	1450974_at	1.67	0.03
D3Ucla1	DNA segment, Chr 3, University of California at Los Angeles 1	1415828_a_at	1.67	0.00
Ripk1	receptor (TNFRSF)-interacting serine-threonine kinase 1	1419508_at	1.67	0.01
Cd40	CD40 antigen	1449473_s_at	1.67	0.00
Elf1	E74-like factor 1	1417540_at	1.67	0.03
Cxcl14	chemokine (C-X-C motif) ligand 14	1418456_a_at	1.67	0.00
Sec61a1	Sec61 alpha 1 subunit (S. cerevisiae)	1434986_a_at	1.67	0.00
---	Transcribed locus	1442634_at	1.66	0.02
Npm1	nucleophosmin 1	1432416_a_at	1.66	0.00
Rhobtb1	Rho-related BTB domain containing 1	1429206_at	1.66	0.00
---	---	1439956_at	1.66	0.00
C330023M02Rik	RIKEN cDNA C330023M02 gene	1433766_at	1.66	0.00
Phc2	polyhomeotic-like 2 (Drosophila)	1437239_x_at	1.66	0.00
Pcqap	positive cofactor 2, multiprotein complex, glutamine/Q-rich-associated protein	1448435_at	1.66	0.00
Suv39h1	suppressor of variegation 3-9 homolog 1 (Drosophila)	1427382_a_at	1.66	0.00
Kars /// LOC631033	lysyl-tRNA synthetase /// similar to lysyl-tRNA synthetase	1416068_at	1.66	0.00
Snrpa1	small nuclear ribonucleoprotein polypeptide A'	1417353_x_at	1.66	0.00
Efna5	ephrin A5	1436866_at	1.66	0.01
Rit1	Ras-like without CAAX 1	1420540_a_at	1.66	0.00
Ubqln1	ubiquilin 1	1419385_a_at	1.66	0.00
Clu	clusterin	1454849_x_at	1.66	0.00
Glul	glutamate-ammonia ligase (glutamine synthetase)	1426236_a_at	1.66	0.00
1110007L15Rik	RIKEN cDNA 1110007L15 gene	1451700_a_at	1.66	0.00
RP23-14F5.7	hypothetical gene Rp23-14f5.7	1425728_at	1.66	0.02
Cotl1	coactosin-like 1 (Dictyostelium)	1436838_x_at	1.66	0.06
Gna13	guanine nucleotide binding protein, alpha 13	1422555_s_at	1.66	0.03
4930535B03Rik	RIKEN cDNA 4930535B03 gene	1434817_s_at	1.66	0.01
Zfp313	zinc finger protein 313	1455975_x_at	1.66	0.00
BB114266	expressed sequence BB114266	1440890_a_at	1.66	0.00
6430710C18Rik	RIKEN cDNA 6430710C18 gene	1431559_at	1.66	0.00
Ddi2	DNA-damage inducible protein 2	1429094_at	1.66	0.14
Tmed5	transmembrane emp24 protein transport domain containing 5	1424573_at	1.66	0.02
Rpl3 /// LOC242809 /// LOC433745 /// LOC545864 /// LOC635340 /// LOC668219 /// LOC669672 /// LOC670435 /// LOC670753 /// LOC674810 /// LOC674874	ribosomal protein L3 /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (L4) /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (L4) /// similar to ribosomal protein L3 isoform b /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to ribosomal protein L3 isoform b	1438527_at	1.66	0.01
Ptpn1	protein tyrosine phosphatase, non-receptor type 1	1417068_a_at	1.65	0.00
D17Wsu104e	DNA segment, Chr 17, Wayne State University 104, expressed	1448440_x_at	1.65	0.00
0610012D09Rik	RIKEN cDNA 0610012D09 gene	1417710_at	1.65	0.01
Lrrc16	leucine rich repeat containing 16	1451804_a_at	1.65	0.00
Ift57	intraflagellar transport 57 homolog (Chlamydomonas)	1418929_at	1.65	0.00
Uck2	uridine-cytidine kinase 2	1457980_x_at	1.65	0.00
Wdtc1	WD and tetratricopeptide repeats 1	1434560_at	1.65	0.00
Slc25a25	solute carrier family 25 (mitochondrial carrier, phosphate carrier), member 25	1424735_at	1.65	0.02
Psen1	presenilin 1	1450399_at	1.65	0.00
Rasl10b	RAS-like, family 10, member B	1433566_at	1.65	0.00
Limd2 /// LOC632329	LIM domain containing 2 /// similar to epithelial protein lost in neoplasm	1456377_x_at	1.65	0.04
---	---	1456209_x_at	1.65	0.00
Pmm1	phosphomannomutase 1	1424167_a_at	1.65	0.01
Trip4	thyroid hormone receptor interactor 4	1422857_at	1.65	0.00
0610012D09Rik	RIKEN cDNA 0610012D09 gene	1438171_x_at	1.65	0.02

Masp1	mannan-binding lectin serine peptidase 1	1438602_s_at	1.65	0.00
Mmp14	matrix metallopeptidase 14 (membrane-inserted)	1416572_at	1.65	0.00
D13Wsu50e	DNA segment, Chr 13, Wayne State University 50, expressed	1448295_at	1.65	0.00
Ormdl2	ORM1-like 2 (S. cerevisiae)	1424235_at	1.65	0.00
Grb2	growth factor receptor bound protein 2	1449111_a_at	1.64	0.00
4632417K18Rik	RIKEN cDNA 4632417K18 gene	1422628_at	1.64	0.02
Plekhg1	pleckstrin homology domain containing, family G (with RhoGef domain) member 1	1435363_at	1.64	0.02
Prr13	proline rich 13	1423686_a_at	1.64	0.00
Hnrpa1	heterogeneous nuclear ribonucleoprotein A1	1430020_x_at	1.64	0.00
Ifnar2	interferon (alpha and beta) receptor 2	1440169_x_at	1.64	0.00
Zc3hav1	zinc finger CCCH type, antiviral 1	1428378_at	1.64	0.00
Rtn4	reticulon 4	1452649_at	1.64	0.00
9230106B05Rik	RIKEN cDNA 9230106B05 gene	1438805_at	1.64	0.03
Rap1b	RAS related protein 1b	1455349_at	1.64	0.07
G6pdx	glucose-6-phosphate dehydrogenase X-linked	1448354_at	1.64	0.00
Xbp1	X-box binding protein 1	1437223_s_at	1.64	0.00
Dhx40	DEAH (Asp-Glu-Ala-His) box polypeptide 40	1428267_at	1.64	0.00
Zfyve27	zinc finger, FYVE domain containing 27	1424550_at	1.64	0.00
B230312A22Rik	RIKEN cDNA B230312A22 gene	1434059_at	1.64	0.00
Traf1	Tnf receptor-associated factor 1	1445452_at	1.64	0.00
Pef1	penta-EF hand domain containing 1	1448644_at	1.64	0.00
Ms4a4d	membrane-spanning 4-domains, subfamily A, member 4D	1418990_at	1.64	0.02
Uap1	UDP-N-acetylglucosamine pyrophosphorylase 1	1416745_x_at	1.64	0.02
Parp3	poly (ADP-ribose) polymerase family, member 3	1445888_x_at	1.64	0.00
Lrp1	low density lipoprotein receptor-related protein 1	1442849_at	1.64	0.00
D10Ertd438e	DNA segment, Chr 10, ERATO Doi 438, expressed	1460563_at	1.64	0.05
Nol5	nucleolar protein 5	1450986_at	1.64	0.07
Tpbg	trophoblast glycoprotein	1423310_at	1.64	0.00
Armet	arginine-rich, mutated in early stage tumors	1428112_at	1.64	0.00
Lrrc8a	leucine rich repeat containing 8A	1434694_at	1.64	0.00
Cp	ceruloplasmin	1417497_at	1.63	0.00
Heatr1	HEAT repeat containing 1	1437965_at	1.63	0.00
Gcnt2	glucosaminyl (N-acetyl) transferase 2, I-branching enzyme	1451733_at	1.63	0.02
Agtrap	angiotensin II, type I receptor-associated protein	1422965_at	1.63	0.00
Fbxo6b	F-box only protein 6b	1417501_at	1.63	0.00
Ankrd1	ankyrin repeat domain 1 (cardiac muscle)	1420992_at	1.63	0.00
Ibrdc2	IBR domain containing 2	1439153_at	1.63	0.00
Hnrpa1 /// LOC225307 /// LOC434858 /// LOC654467 /// LOC665646	heterogeneous nuclear ribonucleoprotein A1 /// heterogeneous nuclear ribonucleoprotein A1 pseudogene /// heterogeneous nuclear ribonucleoprotein A1 pseudogene /// pseudo /// similar to Heterogeneous nuclear ribonucleoprotein A1 (Helix-destabilizing protein) (Single-strand binding protein) (hnRNP core protein A1) (HDP-1) (Topoisomerase-inhibitor suppressed)	1430019_a_at	1.63	0.00
Slc11a2	solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2	1426441_at	1.63	0.03
Bzw1	basic leucine zipper and W2 domains 1	1450845_a_at	1.63	0.02
Wdr32	WD repeat domain 32	1438727_at	1.63	0.00
Nme1	expressed in non-metastatic cells 1, protein	1424110_a_at	1.63	0.02
Baz1a	bromodomain adjacent to zinc finger domain 1A	1433599_at	1.63	0.00
Tegt	testis enhanced gene transcript	1451586_at	1.63	0.00
Cacnb2	Calcium channel, voltage-dependent, beta 2 subunit	1446632_at	1.63	0.00
Emb	embigin	1415856_at	1.63	0.00
Tbc1d1	TBC1 domain family, member 1	1447016_at	1.63	0.02
Zfp281	zinc finger protein 281	1452045_at	1.63	0.00
Synpo	synaptopodin	1434089_at	1.63	0.00
Ltbr	lymphotoxin B receptor	1416435_at	1.63	0.00
Rbed1	RNA binding motif and ELMO domain 1	1436695_x_at	1.63	0.00
LOC627232 /// LOC627424 /// Nrbf2	similar to nuclear receptor binding factor 2 /// similar to nuclear receptor binding factor 2 /// nuclear receptor binding factor 2	1448758_at	1.63	0.01
Npc2	Niemann Pick type C2	1448513_a_at	1.63	0.00
Ppp1r3d	protein phosphatase 1, regulatory subunit 3D	1452922_at	1.62	0.00
Ppp1r3g	protein phosphatase 1, regulatory (inhibitor) subunit 3G	1428923_at	1.62	0.02
Gpr56	G protein-coupled receptor 56	1433485_x_at	1.62	0.00
Syk	Spleen tyrosine kinase	1457239_at	1.62	0.04
Raph1	Ras association (RalGDS/AF-6) and pleckstrin homology domains 1	1434303_at	1.62	0.03
Pdcd6ip	programmed cell death 6 interacting protein	1449674_s_at	1.62	0.00
Limd1	LIM domains containing 1	1422730_at	1.62	0.00
Gna13	Guanine nucleotide binding protein, alpha 13	1446722_at	1.62	0.01
---	---	1428891_at	1.62	0.03
Schip1	Schwannomin interacting protein 1	1458588_at	1.62	0.08
5730411F24Rik	RIKEN cDNA 5730411F24 gene	1430470_at	1.62	0.00
1190002C06Rik	RIKEN cDNA 1190002C06 gene	1424058_at	1.62	0.00
4933412E12Rik	RIKEN cDNA 4933412E12 gene	1429422_at	1.62	0.00
2610002J02Rik	RIKEN cDNA 2610002J02 gene	1456310_a_at	1.62	0.00
Mgea5	meningioma expressed antigen 5 (hyaluronidase)	1422900_at	1.62	0.00
Mar-01	membrane-associated ring finger (C3HC4) 1	1434955_at	1.62	0.00
Wdr26	WD repeat domain 26	1423962_at	1.62	0.02
Wdr43	WD repeat domain 43	1428389_s_at	1.61	0.00
1110012M11Rik	RIKEN cDNA 1110012M11 gene	1437043_a_at	1.61	0.00
Ptgs2	prostaglandin-endoperoxide synthase 2	1417262_at	1.61	0.02
Mustn1	musculoskeletal, embryonic nuclear protein 1	1427201_at	1.61	0.00
D2Bwg1335e	DNA segment, Chr 2, Brigham & Women's Genetics 1335 expressed	1435528_at	1.61	0.00
---	---	1441177_at	1.61	0.01
Ncoa7	nuclear receptor coactivator 7	1454809_at	1.61	0.01
Ccdc104	coiled-coil domain containing 104	1451442_at	1.61	0.00
Pik3c3	phosphoinositide-3-kinase, class 3	1425580_a_at	1.61	0.00
H47	histocompatibility 47	1435735_x_at	1.61	0.02
Lass6	longevity assurance homolog 6 (S. cerevisiae)	1434418_at	1.61	0.00
Fkbp10	FK506 binding protein 10	1449632_s_at	1.61	0.00
Chmp4b	chromatin modifying protein 4B	1451988_s_at	1.61	0.01
Vps54	vacuolar protein sorting 54 (yeast)	1418479_at	1.61	0.04
Prkce	protein kinase C, epsilon	1437861_s_at	1.61	0.01
Ctdp1	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) phosphatase, subunit 1	1452697_at	1.61	0.01
4930504E06Rik	RIKEN cDNA 4930504E06 gene	1426655_a_at	1.61	0.00
Stc1	stanniocalcin 1	1450448_at	1.61	0.00
Ube2e2	Ubiquitin-conjugating enzyme E2E 2 (UBC4/5 homolog, yeast)	1447025_at	1.61	0.02
Tmem49	transmembrane protein 49	1423722_at	1.61	0.00
---	Transcribed locus	1436697_at	1.61	0.00

1810059G22Rik	RIKEN cDNA 1810059G22 gene	1449842_at	1.61	0.00
Slco3a1	solute carrier organic anion transporter family, member 3a1	1434537_at	1.61	0.00
Seh1l	SEH1-like (S. cerevisiae	1424200_s_at	1.61	0.02
Grrp1	glycine/arginine rich protein 1	1429843_at	1.61	0.00
Fst	follistatin	1421365_at	1.61	0.02
Psmd14	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 14	1446521_at	1.61	0.00
Nuak2	NUAK family, SNF1-like kinase, 2	1429049_at	1.61	0.00
BC027231	cDNA sequence BC027231	1451439_at	1.60	0.00
Gmds	GDP-mannose 4, 6-dehydratase	1434158_at	1.60	0.00
Zfand2a	zinc finger, AN1-type domain 2A	1415941_s_at	1.60	0.00
Ttc9c	tetratricopeptide repeat domain 9C	1443948_at	1.60	0.01
Tnip2	TNFAIP3 interacting protein 2	1419488_at	1.60	0.00
D11Wsu47e	DNA segment, Chr 11, Wayne State University 47, expressed	1452805_at	1.60	0.00
Glis3	GLIS family zinc finger 3	1443253_at	1.60	0.01
Ranbp9	RAN binding protein 9	1456199_x_at	1.60	0.00
4933412E12Rik	RIKEN cDNA 4933412E12 gene	1447711_x_at	1.60	0.00
1810031K17Rik	RIKEN cDNA 1810031K17 gene	1427879_at	1.60	0.00
Ppil2	peptidylprolyl isomerase (cyclophilin)-like 2	1452920_a_at	1.60	0.00
Stk19	serine/threonine kinase 19	1417334_at	1.60	0.00
Ptpn12	protein tyrosine phosphatase, non-receptor type 12	1422045_a_at	1.60	0.04
Psmc1	protease (prosome, macropain) 26S subunit, ATPase 1	1416005_at	1.60	0.00
Pdlim7	PDZ and LIM domain 7	1428319_at	1.60	0.02
Nploc4	nuclear protein localization 4 homolog (S. cerevisiae)	1454804_at	1.60	0.00
Mcrs1 /// LOC433780 /// LOC666215	microspherule protein 1 /// similar to Microspherule protein 1 (58 kDa microspherule protein) /// similar to Microspherule protein 1 (58 kDa microspherule protein)	1416535_at	1.60	0.00
Ripk1	receptor (TNFRSF)-interacting serine-threonine kinase 1	1449485_at	1.60	0.00
Sfpi1	SFFV proviral integration 1	1418747_at	1.60	0.04
Lipe	lipase, hormone sensitive	1422820_at	1.60	0.00
Med9	mediator of RNA polymerase II transcription, subunit 9 homolog (yeast)	1449448_at	1.60	0.00
Ube2d3	ubiquitin-conjugating enzyme E2D 3 (UBC4/5 homolog, yeast)	1455479_a_at	1.59	0.01
Edem2	ER degradation enhancer, mannosidase alpha-like 2	1423695_at	1.59	0.00
Cyld	cylindromatosis (turban tumor syndrome)	1429618_at	1.59	0.03
Dlgap4	discs, large homolog-associated protein 4 (Drosophila)	1426465_at	1.59	0.01
Parva	parvin, alpha	1416818_at	1.59	0.00
Dok1	docking protein 1	1417790_at	1.59	0.00
Arl4a	ADP-ribosylation factor-like 4A	1435092_at	1.59	0.02
BC021438	cDNA sequence BC021438	1424788_at	1.59	0.00
Sec61a1	Sec61 alpha 1 subunit (S. cerevisiae)	1416191_at	1.59	0.00
Acp2	acid phosphatase 2, lysosomal	1424654_at	1.59	0.02
Psmd14	Proteasome (prosome, macropain) 26S subunit, non-ATPase, 14	1459734_at	1.59	0.03
Sh2d3c	SH2 domain containing 3C	1415886_at	1.59	0.00
Car13	carbonic anhydrase 13	1421308_at	1.59	0.00
Serinc3	serine incorporator 3	1455550_x_at	1.59	0.00
Eif4e2	eukaryotic translation initiation factor 4E member 2	1421985_a_at	1.59	0.00
Cd40	CD40 antigen	1460415_a_at	1.59	0.00
Mical1	microtubule associated monoxygenase, calponin and LIM domain containing 1	1456439_x_at	1.59	0.01
Tgfb2	transforming growth factor, beta 2	1423250_a_at	1.59	0.10
0610040B10Rik	RIKEN cDNA 0610040B10 gene	1456161_at	1.59	0.00
Prkar1b	protein kinase, cAMP dependent regulatory, type I beta	1434325_x_at	1.59	0.00
Cmya1	cardiomyopathy associated 1	1419220_at	1.59	0.00
Cttn	cortactin	1421313_s_at	1.59	0.01
Rnf149	ring finger protein 149	1429321_at	1.59	0.00
Marcksl1	MARCKS-like 1	1415922_s_at	1.59	0.02
1110008P14Rik	RIKEN cDNA 1110008P14 gene	1459890_s_at	1.59	0.00
Prpf6	PRP6 pre-mRNA splicing factor 6 homolog (yeast)	1454789_x_at	1.59	0.01
Supt4h1 /// Supt4h2	suppressor of Ty 4 homolog 1 (S. cerevisiae) /// suppressor of Ty 4 homolog 2 (S. cerevisiae)	1422418_s_at	1.59	0.00
Arid5b	AT rich interactive domain 5B (Mrf1 like)	1442176_at	1.59	0.01
Ssr1 /// LOC636537	signal sequence receptor, alpha /// similar to signal sequence receptor, alpha	1417764_at	1.59	0.00
2410018G20Rik	RIKEN cDNA 2410018G20 gene	1452591_a_at	1.59	0.00
Mocs3	molybdenum cofactor synthesis 3	1428924_at	1.59	0.00
Baz1a	bromodomain adjacent to zinc finger domain 1A	1447930_at	1.59	0.02
AI662270	expressed sequence AI662270	1434068_s_at	1.59	0.02
Adipor2	adiponectin receptor 2	1434329_s_at	1.59	0.00
Hrasls3	HRAS like suppressor 3	1445597_s_at	1.59	0.00
Oact5	O-acyltransferase (membrane bound) domain containing 5	1423960_at	1.58	0.00
C730025P13Rik	RIKEN cDNA C730025P13 gene	1426277_at	1.58	0.00
Wdr46	WD repeat domain 46	1437828_s_at	1.58	0.00
Sec23b	SEC23B (S. cerevisiae)	1416059_at	1.58	0.03
Rpo1-3	RNA polymerase 1-3	1451120_at	1.58	0.00
Chka	choline kinase alpha	1450264_a_at	1.58	0.00
Elovl1	elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 1	1456530_x_at	1.58	0.00
C230035I16Rik	RIKEN cDNA C230035I16 gene	1458976_at	1.58	0.00
Carhsp1	calcium regulated heat stable protein 1	1415976_a_at	1.58	0.00
Ezh1	enhancer of zeste homolog 1 (Drosophila)	1418290_a_at	1.58	0.00
Pi4k2a	phosphatidylinositol 4-kinase type 2 alpha	1454605_a_at	1.58	0.01
E430034L04Rik	RIKEN cDNA E430034L04 gene	1415697_at	1.58	0.02
Limk1	LIM-domain containing, protein kinase	1417627_a_at	1.58	0.00
Pdia6	protein disulfide isomerase associated 6	1423648_at	1.58	0.00
Mmp19	matrix metallopeptidase 19	1421977_at	1.58	0.02
5033414D02Rik	RIKEN cDNA 5033414D02 gene	1460361_at	1.58	0.00
AI413582	expressed sequence AI413582	1452599_s_at	1.58	0.00
Psmc4	proteasome (prosome, macropain) 26S subunit, ATPase, 4	1416290_a_at	1.58	0.00
Rnf113a2	ring finger protein 113A2	1428415_at	1.58	0.00
Ufd1l	ubiquitin fusion degradation 1 like	1432367_a_at	1.58	0.00
Map2k1	mitogen activated protein kinase kinase 1	1416351_at	1.57	0.02
Ttc9c	tetratricopeptide repeat domain 9C	1434001_at	1.57	0.04
Obfc1	oligonucleotide/oligosaccharide-binding fold containing 1	1434737_at	1.57	0.00
Arid5b	AT rich interactive domain 5B (Mrf1 like)	1456973_at	1.57	0.01
Hnrpa1	heterogeneous nuclear ribonucleoprotein A1	1436549_a_at	1.57	0.00
Elovl1	elongation of very long chain fatty acids (FEN1/Elo2, SUR4/Elo3, yeast)-like 1	1455994_x_at	1.57	0.00
F11r	F11 receptor	1424595_at	1.57	0.00
Ube4a	ubiquitination factor E4A, UFD2 homolog (S. cerevisiae)	1437747_at	1.57	0.00
2510048O06Rik	RIKEN cDNA 2510048O06 gene	1416979_at	1.57	0.00
4930504E06Rik	RIKEN cDNA 4930504E06 gene	1437046_x_at	1.57	0.00
Tln1	talin 1	1436042_at	1.57	0.00
Ncf1	neutrophil cytosolic factor 1	1451767_at	1.57	0.01

Enpp4	ectonucleotide pyrophosphatase/phosphodiesterase 4	1434580_at	1.57	0.02
2500002L14Rik	RIKEN cDNA 2500002L14 gene	1423729_a_at	1.57	0.00
Ctdsp2	CTD (carboxy-terminal domain, RNA polymerase II, polypeptide A) small phosphatase 2	1423660_at	1.57	0.02
Ltv1	LTV1 homolog (S. cerevisiae)	1426813_at	1.57	0.04
1500032H18Rik	RIKEN cDNA 1500032H18 gene	1439261_x_at	1.57	0.00
Rffl	ring finger and FYVE like domain containing protein	1434432_at	1.57	0.03
Sel1h	Sel1 (suppressor of lin-12) 1 homolog (C. elegans)	1425187_at	1.57	0.00
BC060631	cDNA sequence BC060631	1434381_at	1.57	0.01
2310024N18Rik	RIKEN cDNA 2310024N18 gene	1453482_at	1.57	0.00
Stxbp3a	syntaxin binding protein 3A	1416653_at	1.57	0.01
Lrch1	leucine-rich repeats and calponin homology (CH) domain containing 1	1442502_at	1.57	0.00
---	---	1452870_at	1.57	0.00
Trib3	tribbles homolog 3 (Drosophila)	1456225_x_at	1.57	0.00
Zfp568	zinc finger protein 568	1435091_at	1.57	0.02
Pigl	Phosphatidylinositol glycan, class L	1440965_at	1.56	0.02
2610208M17Rik	RIKEN cDNA 2610208M17 gene	1460345_at	1.56	0.00
Cdh22	cadherin 22	1424767_at	1.56	0.00
Noc4l	nucleolar complex associated 4 homolog (S. cerevisiae)	1423827_s_at	1.56	0.00
Fem1b	feminization 1 homolog b (C. elegans)	1418324_at	1.56	0.00
Casp1	caspase 1	1449265_at	1.56	0.00
Lgi2	leucine-rich repeat LGI family, member 2	1457040_at	1.56	0.00
Srm	spermidine synthase	1421260_a_at	1.56	0.00
Abhd4	abhydrolase domain containing 4	1416315_at	1.56	0.00
Ufm1	ubiquitin-fold modifier 1	1449263_at	1.56	0.00
2410001C21Rik	RIKEN cDNA 2410001C21 gene	1460362_at	1.56	0.00
Vrk3	vaccinia related kinase 3	1418121_at	1.56	0.00
Psmd11	proteasome (prosome, macropain) 26S subunit, non-ATPase, 11	1456059_at	1.56	0.00
Tmem34	transmembrane protein 34	1426628_at	1.56	0.03
Rab34	RAB34, member of RAS oncogene family	1416591_at	1.56	0.00
Dapk1	death associated protein kinase 1	1426915_at	1.56	0.00
Sqstm1	sequestosome 1	1450957_a_at	1.56	0.00
1500034J01Rik	RIKEN cDNA 1500034J01 gene	1429038_at	1.56	0.00
9030619P08Rik	RIKEN cDNA 9030619P08 gene	1443889_at	1.56	0.00
Shc1	src homology 2 domain-containing transforming protein C1	1422854_at	1.56	0.00
Kcnq1	Potassium voltage-gated channel, subfamily Q, member 1	1459443_at	1.56	0.05
Snf1lk2	SNF1-like kinase 2	1457276_at	1.56	0.00
Ubxd2	UBX domain containing 2	1426486_at	1.56	0.00
5730403M16Rik	RIKEN cDNA 5730403M16 gene	1434343_at	1.56	0.00
Ipo4	importin 4	1436420_a_at	1.56	0.00
1110059G10Rik	RIKEN cDNA 1110059G10 gene	1418048_at	1.55	0.03
Lhx6	LIM homeobox protein 6	1425094_a_at	1.55	0.01
Ifnar2	interferon (alpha and beta) receptor 2	1451462_a_at	1.55	0.00
Hk3	hexokinase 3	1442798_x_at	1.55	0.02
Camkk2	calcium/calmodulin-dependent protein kinase kinase 2, beta	1424475_at	1.55	0.00
Timeless	timeless homolog (Drosophila)	1417586_at	1.55	0.01
---	Transcribed locus	1439616_at	1.55	0.02
Thrap2	thyroid hormone receptor associated protein 2	1434602_at	1.55	0.00
Wdr45	WD repeat domain 45	1424786_s_at	1.55	0.00
---	---	1458703_at	1.55	0.02
Igfbp3	insulin-like growth factor binding protein 3	1423062_at	1.55	0.00
Abce1	ATP-binding cassette, sub-family E (OABP), member 1	1416014_at	1.55	0.01
Slc35a2	solute carrier family 35 (UDP-galactose transporter), member 2	1439433_a_at	1.55	0.00
Col4a2	procollagen, type IV, alpha 2	1424051_at	1.55	0.00
Nsun2	NOL1/NOP2/Sun domain family 2	1423850_at	1.55	0.00
Zfp496	zinc finger protein 496	1434088_at	1.55	0.00
5430411K18Rik	RIKEN cDNA 5430411K18 gene	1428419_at	1.55	0.01
Lig3	ligase III, DNA, ATP-dependent	1425865_a_at	1.55	0.00
Sap30bp	SAP30 binding protein	1449295_at	1.55	0.00
Rabgef1	RAB guanine nucleotide exchange factor (GEF) 1	1419067_a_at	1.55	0.00
Lrch1	leucine-rich repeats and calponin homology (CH) domain containing 1	1438032_at	1.54	0.04
4930504E06Rik	RIKEN cDNA 4930504E06 gene	1426656_at	1.54	0.00
C430014M02Rik	RIKEN cDNA C430014M02 gene	1455339_at	1.54	0.00
Actn1	actinin, alpha 1	1452415_at	1.54	0.03
Snapc4	small nuclear RNA activating complex, polypeptide 4	1455552_at	1.54	0.00
Rcn1	reticulocalbin 1	1417090_at	1.54	0.02
---	CDNA clone MGC:107680 IMAGE:6766535	1436530_at	1.54	0.02
Rbm13	RNA binding motif protein 13	1426426_at	1.54	0.00
Snrpa1	small nuclear ribonucleoprotein polypeptide A'	1417352_s_at	1.54	0.00
Lsg1	large subunit GTPase 1 homolog (S. cerevisiae)	1437630_at	1.54	0.00
Pard6b	par-6 (partitioning defective 6) homolog beta (C. elegans)	1423175_s_at	1.54	0.00
Etf1	eukaryotic translation termination factor 1	1420023_at	1.54	0.00
Zfp217	zinc finger protein 217	1437414_at	1.54	0.01
D10Wsu52e	DNA segment, Chr 10, Wayne State University 52, expressed	1420129_s_at	1.54	0.00
Stam2	signal transducing adaptor molecule (SH3 domain and ITAM motif) 2	1416974_at	1.53	0.02
AI848100	expressed sequence AI848100	1455133_s_at	1.53	0.01
Eef2k	eukaryotic elongation factor-2 kinase	1437829_s_at	1.53	0.02
Rab10	RAB10, member RAS oncogene family	1422664_at	1.53	0.00
Socs1	suppressor of cytokine signaling 1	1440047_at	1.53	0.02
Slc35b3	solute carrier family 35, member B3	1448937_at	1.53	0.01
Gtpbp4	GTP binding protein 4	1450873_at	1.53	0.00
Ubb /// Gm1821	ubiquitin B /// gene model 1821, (NCBI)	1453723_x_at	1.53	0.00
4933421E11Rik	RIKEN cDNA 4933421E11 gene	1428162_at	1.53	0.10
Pabpc1	poly A binding protein, cytoplasmic 1	1418883_a_at	1.53	0.00
1110014J01Rik	RIKEN cDNA 1110014J01 gene	1448141_at	1.53	0.00
Abi1	abl-interactor 1	1450890_a_at	1.53	0.10
Itgb1	integrin beta 1 (fibronectin receptor beta)	1452545_a_at	1.53	0.07
C530014P21Rik	RIKEN cDNA C530014P21 gene	1441577_at	1.53	0.02
---	---	1422687_at	1.53	0.00
Malt1	mucosa associated lymphoid tissue lymphoma translocation gene 1	1456126_at	1.53	0.01
Coasy	Coenzyme A synthase	1443829_x_at	1.53	0.02
Mcm6	minichromosome maintenance deficient 6 (MIS5 homolog, S. pombe) (S. cerevisiae)	1438852_x_at	1.53	0.02
Ccbp2	chemokine binding protein 2	1437937_at	1.53	0.03
Arpc5	actin related protein 2/3 complex, subunit 5	1448129_at	1.53	0.00
Flnb	filamin, beta	1426750_at	1.53	0.01
Mki67ip	Mki67 (FHA domain) interacting nucleolar phosphoprotein	1424001_at	1.53	0.00
2610028H24Rik	RIKEN cDNA 2610028H24 gene	1453919_at	1.53	0.00
AV025504	Expressed sequence AV025504	1433898_at	1.53	0.01

Nras	neuroblastoma ras oncogene	1454060_a_at	1.53	0.02
Inhbb	inhibin beta-B	1426859_at	1.53	0.02
Picalm	phosphatidylinositol binding clathrin assembly protein	1451316_a_at	1.53	0.01
Ypel5	yippee-like 5 (Drosophila)	1451196_at	1.53	0.00
Gngt2	guanine nucleotide binding protein (G protein), gamma transducing activity polypeptide 2	1428733_at	1.53	0.00
Tom1 /// LOC545878	target of myb1 homolog (chicken) /// similar to TOM1	1431188_a_at	1.53	0.01
Rpl23	ribosomal protein L23	1422859_a_at	1.53	0.00
Tpm4	tropomyosin 4	1433883_at	1.53	0.02
Rab11a	RAB11a, member RAS oncogene family	1449256_a_at	1.53	0.00
Snora65	small nucleolar RNA, H/ACA box 65	1435655_at	1.53	0.01
D17Wsu104e	DNA segment, Chr 17, Wayne State University 104, expressed	1448439_at	1.52	0.02
1700066J24Rik	RIKEN cDNA 1700066J24 gene	1436150_at	1.52	0.02
Heatr1	HEAT repeat containing 1	1424522_at	1.52	0.00
A530088H08Rik	RIKEN cDNA A530088H08 gene	1447493_at	1.52	0.07
Prep	prolyl endopeptidase	1439942_at	1.52	0.03
Phc2	polyhomeotic-like 2 (Drosophila)	1416048_at	1.52	0.01
Eif3s1	eukaryotic translation initiation factor 3, subunit 1 alpha	1426395_s_at	1.52	0.01
Ick	intestinal cell kinase	1448310_at	1.52	0.00
Dpp9	dipeptidylpeptidase 9	1455884_at	1.52	0.01
Hivep3	human immunodeficiency virus type I enhancer binding protein 3	1429134_at	1.52	0.00
Scamp2	secretory carrier membrane protein 2	1416611_at	1.52	0.00
Pprc1	peroxisome proliferative activated receptor, gamma, coactivator-related 1	1426381_at	1.52	0.00
1110008L16Rik	RIKEN cDNA 1110008L16 gene	1428775_at	1.52	0.00
Rhog	ras homolog gene family, member G	1422572_at	1.52	0.00
1190005P17Rik	RIKEN cDNA 1190005P17 gene	1428475_at	1.52	0.00
BC087945	cDNA sequence BC087945	1427966_at	1.52	0.00
2010004M13Rik	RIKEN cDNA 2010004M13 gene	1455646_at	1.52	0.00
Stard5	StAR-related lipid transfer (START) domain containing 5	1422821_s_at	1.52	0.00
Parp4	poly (ADP-ribose) polymerase family, member 4	1441026_at	1.52	0.05
Inpp5d	inositol polyphosphate-5-phosphatase D	1418110_a_at	1.52	0.00
Bet1l	blocked early in transport 1 homolog (S. cerevisiae)-like	1453570_x_at	1.52	0.00
Entpd1	ectonucleoside triphosphate diphosphohydrolase 1	1453586_at	1.52	0.03
0910001A06Rik	RIKEN cDNA 0910001A06 gene	1423829_at	1.52	0.02
Csmd1	CUB and Sushi multiple domains 1	1443179_at	1.52	0.00
---	---	1460133_at	1.52	0.02
Rnf4	ring finger protein 4	1423654_a_at	1.52	0.03
Peci	peroxisomal delta3, delta2-enoyl-Coenzyme A isomerase	1431012_a_at	1.52	0.00
Rod1	ROD1 regulator of differentiation 1 (S. pombe)	1424084_at	1.52	0.07
---	---	1458586_at	1.51	0.03
Seh1l	SEH1-like (S. cerevisiae	1419967_at	1.51	0.07
Trib3	tribbles homolog 3 (Drosophila)	1426065_a_at	1.51	0.00
Rbm34	RNA binding motif protein 34	1436595_at	1.51	0.07
Dnajc1	DnaJ (Hsp40) homolog, subfamily C, member 1	1420500_at	1.51	0.00
2400006N03Rik	RIKEN cDNA 2400006N03 gene	1441814_s_at	1.51	0.00
Tax1bp1	Tax1 (human T-cell leukemia virus type I) binding protein 1	1448399_at	1.51	0.00
Rnf121	ring finger protein 121	1426503_a_at	1.51	0.00
Slc9a3r1	solute carrier family 9 (sodium/hydrogen exchanger), isoform 3 regulator 1	1438116_x_at	1.51	0.00
Cltb	clathrin, light polypeptide (Lcb)	1460740_at	1.51	0.00
5033414K04Rik	RIKEN cDNA 5033414K04 gene	1436999_at	1.51	0.00
Tmem19	transmembrane protein 19	1416261_at	1.51	0.00
Tmem62	transmembrane protein 62	1455350_at	1.51	0.00
Psmc2	proteasome (prosome, macropain) 26S subunit, ATPase 2	1426611_at	1.51	0.00
Polr3gl	polymerase (RNA) III (DNA directed) polypeptide G like	1451364_at	1.51	0.00
Phca	phytoceramidase, alkaline	1429520_a_at	1.51	0.02
C330023M02Rik	RIKEN cDNA C330023M02 gene	1439027_at	1.51	0.02
Zfp697	zinc finger protein 697	1427594_at	1.51	0.02
Ralb	v-ral simian leukemia viral oncogene homolog B (ras related)	1417744_a_at	1.51	0.00
Tmed10 /// LOC634748	transmembrane emp24-like trafficking protein 10 (yeast) /// similar to transmembrane trafficking protein	1439444_x_at	1.51	0.00
C1galt1	core 1 UDP-galactose:N-acetylgalactosamine-alpha-R beta 1,3-galactosyltransferase	1450745_at	1.51	0.00
Ell2	elongation factor RNA polymerase II 2	1450744_at	1.51	0.07
Dclre1b	DNA cross-link repair 1B, PSO2 homolog (S. cerevisiae)	1440383_at	1.51	0.00
Plp2	proteolipid protein 2	1453572_a_at	1.50	0.01
Ubb /// Gm1821	ubiquitin B /// gene model 1821, (NCBI)	1435643_x_at	1.50	0.00
Prmt5	protein arginine N-methyltransferase 5	1427439_s_at	1.50	0.00
Fkbp10	FK506 binding protein 10	1415951_at	1.50	0.02
Lrp10	low-density lipoprotein receptor-related protein 10	1416836_at	1.50	0.00
Etf1	eukaryotic translation termination factor 1	1420024_s_at	1.50	0.00
Zfp294	zinc finger protein 294	1452612_at	1.50	0.00
2610020H08Rik	RIKEN cDNA 2610020H08 gene	1436673_at	1.50	0.00
Cnot6	CCR4-NOT transcription complex, subunit 6	1426683_at	1.50	0.01
Btg1	B-cell translocation gene 1, anti-proliferative	1437455_a_at	1.50	0.03
BC003993	cDNA sequence BC003993	1438278_a_at	1.50	0.01
---	---	1446947_at	1.50	0.03
Psma2	proteasome (prosome, macropain) subunit, alpha type 2	1448206_at	1.50	0.00
D230025D16Rik	RIKEN cDNA D230025D16 gene	1426521_at	1.50	0.01
Furin	furin (paired basic amino acid cleaving enzyme)	1418518_at	1.50	0.00
Zfp207	zinc finger protein 207	1423545_a_at	1.50	0.04
2310061J03Rik	RIKEN cDNA 2310061J03 gene	1449304_at	1.50	0.00
Psma3	proteasome (prosome, macropain) subunit, alpha type 3	1448442_a_at	1.50	0.00
Atf4	activating transcription factor 4	1448135_at	1.50	0.00
Zfp313	zinc finger protein 313	1427874_at	1.50	0.00
Prg1	proteoglycan 1, secretory granule	1417426_at	1.50	0.05
2810457I06Rik	RIKEN cDNA 2810457I06 gene	1436805_at	1.50	0.00
LOC623809 /// LOC677159	similar to non-SMC element 1 homolog /// similar to non-SMC element 1 homolog	1455927_x_at	1.50	0.00
Cdc42	cell division cycle 42 homolog (S. cerevisiae)	1435807_at	1.50	0.02
Gabarapl2	gamma-aminobutyric acid (GABA-A) receptor-associated protein-like 2	1441376_at	1.50	0.02
Dnaja1	DnaJ (Hsp40) homolog, subfamily A, member 1	1437220_x_at	1.50	0.00
Ofd1	oral-facial-digital syndrome 1 gene homolog (human)	1427172_at	1.50	0.01
2610511O17Rik	RIKEN cDNA 2610511O17 gene	1452665_at	1.50	0.00
Mfsd1	major facilitator superfamily domain containing 1	1424129_at	1.50	0.00
Eif2s2	eukaryotic translation initiation factor 2, subunit 2 (beta)	1456617_a_at	1.50	0.01
Vti1a	vesicle transport through interaction with t-SNAREs homolog 1A (yeast)	1419190_at	1.50	0.00
Nup50	nucleoporin 50	1450722_at	1.50	0.01
C530014P21Rik	RIKEN cDNA C530014P21 gene	1447510_at	1.50	0.03
Lpin2	lipin 2	1452836_at	1.50	0.04
Rassf1	Ras association (RalGDS/AF-6) domain family 1	1441737_s_at	1.50	0.00

Gene Symbol	Gene Name	Affymetrix ID	Fold-Change	%FDR
	Down-Regulated			
Sulf1	sulfatase 1	1436319_at	-1.50	0.00
Fxyd2	FXYD domain-containing ion transport regulator 2	1419378_a_at	-1.50	0.00
Hist2h2be	histone 2, H2be	1455095_at	-1.50	0.01
Fgf13	fibroblast growth factor 13	1418497_at	-1.50	0.00
Ube2v2	ubiquitin-conjugating enzyme E2 variant 2	1429131_at	-1.50	0.00
Igsf4a	immunoglobulin superfamily, member 4A	1417378_at	-1.50	0.00
Myo10	myosin X	1454731_at	-1.50	0.00
1110001J03Rik	RIKEN cDNA 1110001J03 gene	1416367_at	-1.50	0.00
Fzd2	frizzled homolog 2 (Drosophila)	1418533_s_at	-1.50	0.01
Gprasp1	G protein-coupled receptor associated sorting protein 1	1424455_at	-1.50	0.00
Ddx5	DEAD (Asp-Glu-Ala-Asp) box polypeptide 5	1423645_a_at	-1.50	0.01
Zfp68	zinc finger protein 68	1457571_at	-1.50	0.00
Mrpl39	mitochondrial ribosomal protein L39	1417966_at	-1.50	0.00
Dnajc11	DnaJ (Hsp40) homolog, subfamily C, member 11	1433881_at	-1.50	0.00
---	---	1416737_at	-1.50	0.01
Zbtb20	zinc finger and BTB domain containing 20	1439278_at	-1.50	0.00
Dbt	dihydrolipoamide branched chain transacylase E2	1449118_at	-1.50	0.00
---	---	1438215_at	-1.50	0.00
Iqsec1	IQ motif and Sec7 domain 1	1452327_at	-1.50	0.00
Lrrfip2	leucine rich repeat (in FLII) interacting protein 2	1436378_at	-1.50	0.00
Gpr137b /// LOC664862 /// LOC673335	G protein-coupled receptor 137B /// similar to transmembrane 7 superfamily member 1 /// similar to transmembrane 7 superfamily member 1	1429775_a_at	-1.50	0.00
Notch3	Notch gene homolog 3 (Drosophila)	1421965_s_at	-1.50	0.01
Spnb2	spectrin beta 2	1452143_at	-1.50	0.00
Eif2c4	eukaryotic translation initiation factor 2C, 4	1429779_at	-1.50	0.00
Aytl2	acyltransferase like 2	1424460_s_at	-1.50	0.00
Ptcd2	pentatricopeptide repeat domain 2	1423769_at	-1.50	0.00
2410025L10Rik	RIKEN cDNA 2410025L10 gene	1428403_at	-1.50	0.01
Higd1a	HIG1 domain family, member 1A	1416480_a_at	-1.50	0.00
Hexb	hexosaminidase B	1460180_at	-1.50	0.01
Ttc7	tetratricopeptide repeat domain 7	1435334_at	-1.50	0.01
Bxdc2	brix domain containing 2	1423841_at	-1.50	0.00
Msrb2	methionine sulfoxide reductase B2	1424433_at	-1.50	0.00
Mrpl47	mitochondrial ribosomal protein L47	1429054_at	-1.50	0.00
Rassf8	Ras association (RalGDS/AF-6) domain family 8	1452283_at	-1.50	0.00
1200015N20Rik	RIKEN cDNA 1200015N20 gene	1448557_at	-1.50	0.01
Mrps2	mitochondrial ribosomal protein S2	1420846_at	-1.50	0.00
Arpp19	cAMP-regulated phosphoprotein 19	1422609_at	-1.50	0.00
Cd81	CD 81 antigen	1416330_at	-1.50	0.00
Tpcn1	two pore channel 1	1434930_at	-1.50	0.01
Prkca	Protein kinase C, alpha	1446598_at	-1.50	0.01
4930402E16Rik	RIKEN cDNA 4930402E16 gene	1434480_at	-1.50	0.00
2610203C20Rik	RIKEN cDNA 2610203C20 gene	1455160_at	-1.50	0.00
Zfp192	zinc finger protein 192	1455778_at	-1.50	0.00
Abtb2	ankyrin repeat and BTB (POZ) domain containing 2	1433454_at	-1.50	0.01
6720462K09Rik	RIKEN cDNA 6720462K09 gene	1456896_at	-1.50	0.00
Lsm14b	LSM14 homolog B (SCD6, S. cerevisiae)	1455155_at	-1.50	0.00
---	Transcribed locus	1441389_at	-1.50	0.01
Ogt	O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)	1425517_s_at	-1.50	0.00
Homer1	homer homolog 1 (Drosophila)	1439662_at	-1.50	0.00
Vegfb	vascular endothelial growth factor B	1451803_a_at	-1.50	0.00
Cysltr1	cysteinyl leukotriene receptor 1	1418944_at	-1.50	0.01
Snx5	sorting nexin 5	1417647_at	-1.50	0.00
C1qdc2	C1q domain containing 2	1417393_a_at	-1.50	0.01
Fath /// LOC672128	fat tumor suppressor homolog (Drosophila) /// similar to fat tumor suppressor homolog	1433857_at	-1.50	0.00
Mmrn1	multimerin 1	1437260_at	-1.50	0.00
Igsf4a	immunoglobulin superfamily, member 4A	1417377_at	-1.50	0.00
St3gal6	ST3 beta-galactoside alpha-2,3-sialyltransferase 6	1449079_s_at	-1.50	0.00
Reps2	RALBP1 associated Eps domain containing protein 2	1435389_at	-1.50	0.00
BC034664	cDNA sequence BC034664	1455588_at	-1.50	0.00
Golga4	golgi autoantigen, golgin subfamily a, 4	1460213_at	-1.50	0.00
Wdr35	WD repeat domain 35	1454790_at	-1.50	0.00
Adm	adrenomedullin	1416077_at	-1.51	0.01
Dusp22	dual specificity phosphatase 22	1448985_at	-1.51	0.00
Tfrc	transferrin receptor	AFFX-TransRecMur/X57349_3_at	-1.51	0.01
Myadm	myeloid-associated differentiation marker	1423321_at	-1.51	0.00
Tmem41b	transmembrane protein 41B	1460122_at	-1.51	0.00
1110031B06Rik	RIKEN cDNA 1110031B06 gene	1423745_at	-1.51	0.00
Ogt	O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)	1425516_at	-1.51	0.00
Sfrs14	splicing factor, arginine/serine-rich 14	1435798_a_at	-1.51	0.00
Lmo2	LIM domain only 2	1454086_a_at	-1.51	0.00
LOC432971	hypothetical gene supported by AK038224	1446618_at	-1.51	0.01
Ctnnb1	catenin (cadherin associated protein), beta 1	1420811_a_at	-1.51	0.00
Rnf128	ring finger protein 128	1449036_at	-1.51	0.00
Pigo	phosphatidylinositol glycan, class O	1438155_x_at	-1.51	0.00
Zfp3	zinc finger protein 3	1439563_at	-1.51	0.01
2310040A07Rik	RIKEN cDNA 2310040A07 gene	1428739_at	-1.51	0.00
Nfyc	nuclear transcription factor-Y gamma	1448963_at	-1.51	0.00
Zfp597	zinc finger protein 597	1460589_at	-1.51	0.00
Dock6 /// LOC670024	dedicator of cytokinesis 6 /// similar to Dedicator of cytokinesis protein 6	1427240_at	-1.51	0.01
Nmnat1	nicotinamide nucleotide adenylyltransferase 1	1425773_s_at	-1.51	0.00
Pnck	pregnancy upregulated non-ubiquitously expressed CaM kinase	1422711_a_at	-1.51	0.00
Ppm1l	protein phosphatase 1 (formerly 2C)-like	1435699_at	-1.51	0.01
Nqo2	NAD(P)H dehydrogenase, quinone 2	1455590_at	-1.51	0.00
Tln2	talin 2	1435700_at	-1.51	0.00
Srpk2	serine/arginine-rich protein specific kinase 2	1448603_at	-1.51	0.00
Stk39	serine/threonine kinase 39, STE20/SPS1 homolog (yeast)	1419550_a_at	-1.51	0.01
---	Transcribed locus	1444643_at	-1.51	0.00
Idh3a	isocitrate dehydrogenase 3 (NAD+) alpha	1422500_at	-1.51	0.00

Hnrph1	heterogeneous nuclear ribonucleoprotein H1	1415872_at	-1.51	0.00
Mtr	5-methyltetrahydrofolate-homocysteine methyltransferase	1439811_at	-1.51	0.00
Vim	vimentin	1456292_a_at	-1.51	0.01
Trio	Triple functional domain (PTPRF interacting)	1442248_at	-1.51	0.00
6330416G13Rik	RIKEN cDNA 6330416G13 gene	1426315_a_at	-1.51	0.00
Unc5b	unc-5 homolog B (C. elegans)	1453269_at	-1.51	0.00
Gna12	guanine nucleotide binding protein, alpha 12	1455008_at	-1.51	0.00
Zdhhc2	zinc finger, DHHC domain containing 2	1452656_at	-1.51	0.00
1810049H13Rik	RIKEN cDNA 1810049H13 gene	1460254_at	-1.51	0.00
A430106J12Rik	RIKEN cDNA A430106J12 gene	1436025_at	-1.51	0.00
---	---	1449505_at	-1.51	0.00
2900024O10Rik	RIKEN cDNA 2900024O10 gene	1437261_at	-1.51	0.00
Kif2a	Kinesin family member 2A	1450053_at	-1.51	0.00
Depdc6	DEP domain containing 6	1451348_at	-1.51	0.00
Cyhr1	cysteine and histidine rich 1	1435328_at	-1.51	0.01
Za20d2	zinc finger, A20 domain containing 2	1416083_at	-1.51	0.00
Kcnt2	Potassium channel, subfamily T, member 2	1459971_at	-1.51	0.00
Pdk2	pyruvate dehydrogenase kinase, isoenzyme 2	1448825_at	-1.51	0.01
Igsf3	immunoglobulin superfamily, member 3	1455048_at	-1.51	0.01
Rnmtl1	RNA methyltransferase like 1	1428766_at	-1.51	0.00
Mrg1	myeloid ecotropic viral integration site-related gene 1	1440091_at	-1.51	0.01
Prkag2	protein kinase, AMP-activated, gamma 2 non-catalytic subunit	1451140_s_at	-1.51	0.00
---	Transcribed locus	1434097_at	-1.51	0.00
Pcmtd1	protein-L-isoaspartate (D-aspartate) O-methyltransferase domain containing 1	1455388_at	-1.51	0.00
AI317395	expressed sequence AI317395	1425596_at	-1.51	0.00
Mtap2	microtubule-associated protein 2	1434194_at	-1.51	0.00
Nrp2	neuropilin 2	1435349_at	-1.52	0.00
3110050K21Rik	RIKEN cDNA 3110050K21 gene	1434894_at	-1.52	0.00
Smad7	MAD homolog 7 (Drosophila)	1423389_at	-1.52	0.00
Arhgef3	Rho guanine nucleotide exchange factor (GEF) 3	1424250_a_at	-1.52	0.00
Mrpl39	mitochondrial ribosomal protein L39	1448909_a_at	-1.52	0.00
Phf17	PHD finger protein 17	1452179_at	-1.52	0.01
C330006A16Rik	RIKEN cDNA C330006A16 gene	1433618_at	-1.52	0.00
Dock7	dedicator of cytokinesis 7	1425315_at	-1.52	0.00
Cdc37l1	cell division cycle 37 homolog (S. cerevisiae)-like 1	1417740_at	-1.52	0.00
Rarg	retinoic acid receptor, gamma	1419415_a_at	-1.52	0.01
Adk	adenosine kinase	1438292_x_at	-1.52	0.00
Kcnj8	potassium inwardly-rectifying channel, subfamily J, member 8	1418142_at	-1.52	0.00
Zfp39	zinc finger protein 39	1441198_at	-1.52	0.00
Ski	Sloan-Kettering viral oncogene homolog	1456547_at	-1.52	0.01
Ankrd26	ankyrin repeat domain 26	1436071_at	-1.52	0.00
Pbx1 /// LOC676870	pre B-cell leukemia transcription factor 1 /// region containing RIKEN cDNA 2310056B04 gene; pre B-cell leukemia transcription factor 1	1425383_a_at	-1.52	0.00
Maoa	monoamine oxidase A	1442676_at	-1.52	0.00
---	Transcribed locus	1448095_at	-1.52	0.00
Coq5	coenzyme Q5 homolog, methyltransferase (yeast)	1417264_at	-1.52	0.00
Ubiad1	UbiA prenyltransferase domain containing 1	1424213_at	-1.52	0.00
1700012G19Rik	RIKEN cDNA 1700012G19 gene	1428788_at	-1.52	0.00
Fmod	fibromodulin	1437685_x_at	-1.52	0.00
Zranb1	zinc finger, RAN-binding domain containing 1	1436228_at	-1.52	0.00
4930535B03Rik	RIKEN cDNA 4930535B03 gene	1438028_at	-1.52	0.00
Oxct1	3-oxoacid CoA transferase 1	1436750_a_at	-1.52	0.00
Lgals7	lectin, galactose binding, soluble 7	1436356_at	-1.52	0.00
Zfhx1b	zinc finger homeobox 1b	1456389_at	-1.52	0.00
Map3k5 /// LOC675366	mitogen activated protein kinase kinase kinase 5 /// similar to mitogen activated protein kinase kinase kinase 5	1421340_at	-1.52	0.00
Sfrs6	splicing factor, arginine/serine-rich 6	1448454_at	-1.52	0.00
Gsta4	glutathione S-transferase, alpha 4	1416368_at	-1.52	0.00
Gpr23	G protein-coupled receptor 23	1439665_at	-1.52	0.01
Tm7sf3	transmembrane 7 superfamily member 3	1452664_a_at	-1.52	0.00
Myh10	myosin, heavy polypeptide 10, non-muscle	1452740_at	-1.52	0.00
Inppl1	inositol polyphosphate phosphatase-like 1	1460394_a_at	-1.52	0.00
Acad11	acyl-Coenzyme A dehydrogenase family, member 11	1433545_s_at	-1.52	0.00
Lgals7	lectin, galactose binding, soluble 7	1424594_at	-1.52	0.00
Ric8b	resistance to inhibitors of cholinesterase 8 homolog B (C. elegans)	1435096_at	-1.52	0.00
Pigy	phosphatidylinositol glycan, class Y	1428556_at	-1.52	0.00
Mrps6	mitochondrial ribosomal protein S6	1424440_at	-1.52	0.00
Galc	galactosylceramidase	1452907_at	-1.52	0.00
Mlf1	myeloid leukemia factor 1	1418589_a_at	-1.52	0.00
1110060D06Rik /// Dock5	RIKEN cDNA 1110060D06 gene /// dedicator of cytokinesis 5	1430291_at	-1.52	0.00
Tmem38a	transmembrane protein 38a	1424178_at	-1.52	0.01
Lig4	ligase IV, DNA, ATP-dependent	1439487_at	-1.52	0.00
Pcyt2	phosphate cytidylyltransferase 2, ethanolamine	1420493_a_at	-1.52	0.00
Ank1	ankyrin 1, erythroid	1419421_at	-1.52	0.00
0610012G03Rik /// LOC638521	RIKEN cDNA 0610012G03 gene /// hypothetical protein LOC638521	1448540_a_at	-1.52	0.00
D930001I22Rik	RIKEN cDNA D930001I22 gene	1454935_at	-1.52	0.00
Neurl2	neuralized-like 2 (Drosophila)	1429141_at	-1.52	0.00
Tanc2	tetratricopeptide repeat, ankyrin repeat and coiled-coil containing 2	1435078_at	-1.52	0.01
Wwtr1	WW domain containing transcription regulator 1	1417818_at	-1.52	0.00
Csf1r	colony stimulating factor 1 receptor	1419873_s_at	-1.53	0.01
Usp2	ubiquitin specific peptidase 2	1417169_at	-1.53	0.01
Hbld2	HESB like domain containing 2	1423651_at	-1.53	0.00
Arpp19	cAMP-regulated phosphoprotein 19	1450685_at	-1.53	0.01
Tloc1	translocation protein 1	1455698_at	-1.53	0.01
9130004J05Rik	RIKEN cDNA 9130004J05 gene	1430191_at	-1.53	0.00
Grsf1	G-rich RNA sequence binding factor 1	1437838_x_at	-1.53	0.00
Mospd2	motile sperm domain containing 2	1424124_at	-1.53	0.00
Hdhd2	haloacid dehalogenase-like hydrolase domain containing 2	1428507_at	-1.53	0.00
Pcgf3	polycomb group ring finger 3	1428423_at	-1.53	0.00
Rgma	RGM domain family, member A	1438241_at	-1.53	0.00
Mbnl1	muscleblind-like 1 (Drosophila)	1416904_at	-1.53	0.00
Dsp	desmoplakin	1435493_at	-1.53	0.00
Rnf166	ring finger protein 166	1436906_at	-1.53	0.00
Fbxl10	F-box and leucine-rich repeat protein 10	1459861_s_at	-1.53	0.00
Stard4	StAR-related lipid transfer (START) domain containing 4	1455011_at	-1.53	0.01
Ppp4r2	protein phosphatase 4, regulatory subunit 2	1433851_at	-1.53	0.00
AW061290	expressed sequence AW061290	1438036_x_at	-1.53	0.00

Arfl4	ADP-ribosylation factor 4-like	1418250_at	-1.53	0.00
Podxl2	podocalyxin-like 2	1455622_at	-1.53	0.00
2610021A01Rik /// LOC668572	RIKEN cDNA 2610021A01 gene /// similar to zinc finger protein 347	1438786_a_at	-1.53	0.01
Zbtb12	zinc finger and BTB domain containing 12	1436382_at	-1.53	0.01
Hspb8	heat shock protein 8	1417013_at	-1.53	0.00
Rcor3	REST corepressor 3	1425352_at	-1.53	0.00
Ndufab1	NADH dehydrogenase (ubiquinone) 1, alpha/beta subcomplex, 1	1453565_at	-1.53	0.01
Sema3d	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3D	1429459_at	-1.53	0.00
Sesn3	sestrin 3	1449303_at	-1.53	0.00
5430419D17Rik /// LOC546006	RIKEN cDNA 5430419D17 gene /// similar to deleted in malignant brain tumors 1 isoform c precursor	1440645_at	-1.53	0.00
Trmt5	TRM5 tRNA methyltransferase 5 homolog (S. cerevisiae)	1452086_at	-1.53	0.00
Palld	palladin, cytoskeletal associated protein	1433768_at	-1.53	0.00
Mrg1	Myeloid ecotropic viral integration site-related gene 1	1443926_at	-1.53	0.00
Rala	v-ral simian leukemia viral oncogene homolog A (ras related)	1450870_at	-1.53	0.00
C130009A20Rik	RIKEN cDNA C130009A20 gene	1444109_at	-1.53	0.00
Bcl7a	B-cell CLL/lymphoma 7A	1428207_at	-1.53	0.00
Hsp110	heat shock protein 110	1425993_a_at	-1.53	0.01
---	---	1435380_at	-1.53	0.00
Adam23	a disintegrin and metallopeptidase domain 23	1447946_at	-1.53	0.00
Pum1	pumilio 1 (Drosophila)	1423117_at	-1.53	0.00
Bpgm	2,3-bisphosphoglycerate mutase	1415865_s_at	-1.53	0.01
Hes6	hairy and enhancer of split 6 (Drosophila)	1436050_x_at	-1.53	0.00
Wnk2	WNK lysine deficient protein kinase 2	1453355_at	-1.53	0.01
Stard7	START domain containing 7	1449628_s_at	-1.53	0.00
Hexb	hexosaminidase B	1437874_s_at	-1.53	0.01
Dpp4	dipeptidylpeptidase 4	1459973_x_at	-1.53	0.00
Letm1	leucine zipper-EF-hand containing transmembrane protein 1	1420826_at	-1.53	0.00
Ank2	ankyrin 2, brain	1434264_at	-1.54	0.00
Ptgfrn	prostaglandin F2 receptor negative regulator	1434891_at	-1.54	0.00
Bola3	bolA-like 3 (E. coli)	1433970_at	-1.54	0.00
Adcyap1r1	adenylate cyclase activating polypeptide 1 receptor 1	1429022_at	-1.54	0.00
Cdc42ep3	CDC42 effector protein (Rho GTPase binding) 3	1450700_at	-1.54	0.00
Atp2a2	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2	1427251_at	-1.54	0.01
Bicd2	bicaudal D homolog 2 (Drosophila)	1437875_at	-1.54	0.00
Tdrd3	tudor domain containing 3	1434869_at	-1.54	0.00
Enpp2	ectonucleotide pyrophosphatase/phosphodiesterase 2	1448136_at	-1.54	0.01
Ctnnb1	catenin (cadherin associated protein), beta 1	1450008_a_at	-1.54	0.00
Wdr6	WD repeat domain 6	1455940_x_at	-1.54	0.00
Apbb1	amyloid beta (A4) precursor protein-binding, family B, member 1	1423893_x_at	-1.54	0.01
---	---	1424746_at	-1.54	0.00
Mrpl51	mitochondrial ribosomal protein L51	1416879_at	-1.54	0.01
---	---	1434243_s_at	-1.54	0.00
Reln	reelin	1449465_at	-1.54	0.00
Trip11	thyroid hormone receptor interactor 11	1427406_at	-1.54	0.00
Ptprs	protein tyrosine phosphatase, receptor type, S	1426794_at	-1.54	0.00
Tm9sf3	transmembrane 9 superfamily member 3	1428412_at	-1.54	0.00
Zfp306	zinc finger protein 306	1422551_at	-1.54	0.00
C1qtnf7	C1q and tumor necrosis factor related protein 7	1460163_at	-1.54	0.00
Egln1	EGL nine homolog 1 (C. elegans)	1423785_at	-1.54	0.00
Wnk1	WNK lysine deficient protein kinase 1	1433676_at	-1.54	0.00
5730403B10Rik	RIKEN cDNA 5730403B10 gene	1460172_at	-1.54	0.00
Csrp1	cysteine and glycine-rich protein 1	1425811_a_at	-1.54	0.00
Ank2	ankyrin 2, brain	1434265_s_at	-1.54	0.00
Mef2a	myocyte enhancer factor 2A	1421252_a_at	-1.54	0.00
Ttc3	tetratricopeptide repeat domain 3	1441684_at	-1.54	0.00
Reep5	Receptor accessory protein 5	1442128_at	-1.54	0.00
Fut11	fucosyltransferase 11	1437748_at	-1.54	0.00
Ppfibp2	protein tyrosine phosphatase, receptor-type, F interacting protein, binding protein 2	1417801_a_at	-1.54	0.00
D9Ertd256e	DNA segment, Chr 9, ERATO Doi 256, expressed	1459326_at	-1.54	0.00
Dach1	dachshund 1 (Drosophila)	1433743_at	-1.54	0.00
Satb1	special AT-rich sequence binding protein 1	1416007_at	-1.54	0.00
Rilp	Rab interacting lysosomal protein	1457696_at	-1.55	0.01
2700049H19Rik	RIKEN cDNA 2700049H19 gene	1427113_s_at	-1.55	0.00
4833426J09Rik	RIKEN cDNA 4833426J09 gene	1428996_at	-1.55	0.01
0610009K11Rik	RIKEN cDNA 0610009K11 gene	1434118_at	-1.55	0.00
Ncbp2	nuclear cap binding protein subunit 2	1423045_at	-1.55	0.01
Cables2	Cdk5 and Abl enzyme substrate 2	1452307_at	-1.55	0.00
Slc37a4	solute carrier family 37 (glycerol-6-phosphate transporter), member 4	1417042_at	-1.55	0.00
Vldlr	very low density lipoprotein receptor	1435893_at	-1.55	0.01
Abcc8	ATP-binding cassette, sub-family C (CFTR/MRP), member 8	1455765_a_at	-1.55	0.01
B230380D07Rik	RIKEN cDNA B230380D07 gene	1436841_at	-1.55	0.00
1110002B05Rik	RIKEN cDNA 1110002B05 gene	1448388_a_at	-1.55	0.00
Itpr1	Inositol 1,4,5-triphosphate receptor 1	1457189_at	-1.55	0.00
Pura	purine rich element binding protein A	1420628_at	-1.55	0.00
Socs5	suppressor of cytokine signaling 5	1423350_at	-1.55	0.00
Bgn	biglycan	1448323_a_at	-1.55	0.01
Clec3b	C-type lectin domain family 3, member b	1449466_at	-1.55	0.01
Lrp6	low density lipoprotein receptor-related protein 6	1451022_at	-1.55	0.00
Pum1	pumilio 1 (Drosophila)	1456054_a_at	-1.55	0.00
Laptm4b	lysosomal-associated protein transmembrane 4B	1416148_at	-1.55	0.00
Col8a1	procollagen, type VIII, alpha 1	1447819_x_at	-1.55	0.00
Pp11r	placental protein 11 related	1449937_at	-1.55	0.00
AA409368	expressed sequence AA409368	1457466_at	-1.55	0.00
Sgca	sarcoglycan, alpha (dystrophin-associated glycoprotein)	1422654_at	-1.55	0.00
E2f6	E2F transcription factor 6	1448835_at	-1.55	0.00
B130021B11Rik	RIKEN cDNA B130021B11 gene	1438989_s_at	-1.55	0.00
Dct	dopachrome tautomerase	1418028_at	-1.55	0.00
Srf	serum response factor	1418255_s_at	-1.55	0.00
Rnf11	ring finger protein 11	1452058_a_at	-1.55	0.00
Ephb3	Eph receptor B3	1451550_at	-1.55	0.01
Zbtb20	zinc finger and BTB domain containing 20	1422064_a_at	-1.55	0.00
1700034H14Rik	RIKEN cDNA 1700034H14 gene	1452785_at	-1.55	0.00
A430106J12Rik	RIKEN cDNA A430106J12 gene	1437216_at	-1.55	0.00
Tmem109	transmembrane protein 109	1456057_x_at	-1.55	0.00
Asb15	ankyrin repeat and SOCS box-containing protein 15	1460281_at	-1.55	0.00

Glrx5	glutaredoxin 5 homolog (S. cerevisiae)	1428553_at	-1.55	0.00
---	Adult male corpora quadrigemina cDNA, RIKEN full-length enriched library, clone:B230209O07 product:unclassifiable, full insert sequence	1436096_at	-1.55	0.00
Bgn	biglycan	1416405_at	-1.55	0.01
Itsn1	intersectin 1 (SH3 domain protein 1A)	1452338_s_at	-1.55	0.00
Smpd1	sphingomyelin phosphodiesterase 1, acid lysosomal	1447874_x_at	-1.55	0.00
Sdc2	syndecan 2	1417011_at	-1.56	0.00
LOC552912	hypothetical LOC552912	1456499_at	-1.56	0.00
4930402E16Rik	RIKEN cDNA 4930402E16 gene	1459869_x_at	-1.56	0.00
Dynll2	dynein light chain LC8-type 2	1418371_at	-1.56	0.00
---	---	1436138_at	-1.56	0.00
AA536717	expressed sequence AA536717	1435686_at	-1.56	0.00
Tmem109	transmembrane protein 109	1437008_x_at	-1.56	0.00
Vapb	vesicle-associated membrane protein, associated protein B and C	1436079_s_at	-1.56	0.00
---	---	1430245_at	-1.56	0.00
Maf	avian musculoaponeurotic fibrosarcoma (v-maf) AS42 oncogene homolog	1456060_at	-1.56	0.01
5730494M16Rik	RIKEN cDNA 5730494M16 gene	1441960_x_at	-1.56	0.01
Nav1	Neuron navigator 1	1446497_at	-1.56	0.00
Sez6l2	seizure related 6 homolog like 2	1434641_x_at	-1.56	0.00
5730405O12Rik	RIKEN cDNA 5730405O12 gene	1432843_at	-1.56	0.01
Enpp3	ectonucleotide pyrophosphatase/phosphodiesterase 3	1427302_at	-1.56	0.00
Esrra	estrogen related receptor, alpha	1460652_at	-1.56	0.00
Ankrd12	Ankyrin repeat domain 12	1447165_at	-1.56	0.00
Luc7l2	LUC7-like 2 (S. cerevisiae)	1436767_at	-1.56	0.00
Dnm1l	dynamin 1-like	1428086_at	-1.56	0.00
1810021J13Rik	RIKEN cDNA 1810021J13 gene	1417174_at	-1.56	0.00
Atxn1	ataxin 1	1438294_at	-1.56	0.00
Zbtb20	zinc finger and BTB domain containing 20	1437598_at	-1.56	0.00
Cycs	cytochrome c, somatic	1445484_at	-1.56	0.00
Senp7	SUMO1/sentrin specific peptidase 7	1438413_at	-1.56	0.00
Ppp2r5c	protein phosphatase 2, regulatory subunit B (B56), gamma isoform	1434206_s_at	-1.56	0.00
Cebpa	CCAAT/enhancer binding protein (C/EBP), alpha	1418982_at	-1.56	0.00
BC018601	cDNA sequence BC018601	1460399_at	-1.56	0.00
Atxn1	Ataxin 1	1445695_at	-1.56	0.00
Mccc2	methylcrotonoyl-Coenzyme A carboxylase 2 (beta)	1454840_at	-1.56	0.00
Rora	RAR-related orphan receptor alpha	1436326_at	-1.56	0.00
Gdpd5	glycerophosphodiester phosphodiesterase domain containing 5	1424150_at	-1.56	0.00
P2ry14	purinergic receptor P2Y, G-protein coupled, 14	1424733_at	-1.56	0.00
Mtx3	metaxin 3	1434807_s_at	-1.56	0.00
Arhgap12	Rho GTPase activating protein 12	1451525_at	-1.56	0.00
Jarid2	jumonji, AT rich interactive domain 2	1422698_s_at	-1.56	0.00
Sox17	SRY-box containing gene 17	1421657_a_at	-1.56	0.00
Ms4a1	membrane-spanning 4-domains, subfamily A, member 1	1423226_at	-1.56	0.00
Grsf1	G-rich RNA sequence binding factor 1	1433824_x_at	-1.56	0.00
Ccdc85a	coiled-coil domain containing 85A	1427157_at	-1.56	0.00
Pstk	phosphoseryl-tRNA kinase	1455953_x_at	-1.56	0.00
Manea	mannosidase, endo-alpha	1455403_at	-1.56	0.00
Phldb1	pleckstrin homology-like domain, family B, member 1	1424467_at	-1.56	0.00
Armc1	armadillo repeat containing 1	1415719_s_at	-1.56	0.00
Stard8	START domain containing 8	1427072_at	-1.56	0.01
Lims1	LIM and senescent cell antigen-like domains 1	1443947_at	-1.57	0.00
Mfn1	mitofusin 1	1449697_s_at	-1.57	0.00
Srd5a2l2	steroid 5 alpha-reductase 2-like 2	1437482_at	-1.57	0.00
Coq10a	coenzyme Q10 homolog A (yeast)	1433628_at	-1.57	0.00
Aprin	androgen-induced proliferation inhibitor	1436161_at	-1.57	0.00
2900046L07Rik	RIKEN cDNA 2900046L07 gene	1432944_at	-1.57	0.01
B930012P20Rik	RIKEN cDNA B930012P20 gene	1457802_at	-1.57	0.01
Nox4	NADPH oxidase 4	1451827_a_at	-1.57	0.00
Sfrp1	secreted frizzled-related sequence protein 1	1428136_at	-1.57	0.00
LOC676870	region containing RIKEN cDNA 2310056B04 gene; pre B-cell leukemia transcription factor 1	1428646_at	-1.57	0.00
Trdn	triadin	1451801_at	-1.57	0.00
1810063B05Rik	RIKEN cDNA 1810063B05 gene	1435864_a_at	-1.57	0.00
Laptm4b	lysosomal-associated protein transmembrane 4B	1436915_x_at	-1.57	0.00
Chchd3	coiled-coil-helix-coiled-coil-helix domain containing 3	1431241_at	-1.57	0.00
Stox2	storkhead box 2	1447624_s_at	-1.57	0.00
Fez1	fasciculation and elongation protein zeta 1 (zygin I)	1454674_at	-1.57	0.00
Cpox	coproporphyrinogen oxidase	1422493_at	-1.57	0.01
B230208H17Rik	RIKEN cDNA B230208H17 gene	1452370_s_at	-1.57	0.00
---	---	1434886_at	-1.57	0.00
Ctsh	cathepsin H	1443814_x_at	-1.57	0.00
B3galtl	beta 1,3-galactosyltransferase-like	1457043_at	-1.57	0.00
Actc1	actin, alpha, cardiac	1415927_at	-1.57	0.00
Irx5	Iroquois related homeobox 5 (Drosophila)	1421072_at	-1.57	0.00
Lamb1-1	laminin B1 subunit 1	1424113_at	-1.57	0.01
Hrc	histidine rich calcium binding protein	1419109_at	-1.57	0.00
Hnrph3 /// LOC669773	heterogeneous nuclear ribonucleoprotein H3 /// similar to heterogeneous nuclear ribonucleoprotein H3 isoform a	1455491_at	-1.57	0.00
Ppapdc3	Phosphatidic acid phosphatase type 2 domain containing 3	1442592_at	-1.57	0.01
4732415M23Rik	RIKEN cDNA 4732415M23 gene	1435365_at	-1.57	0.00
Tspan2	tetraspanin 2	1432417_a_at	-1.57	0.00
Pde4a	phosphodiesterase 4A, cAMP specific	1421535_a_at	-1.57	0.00
Kif13a	kinesin family member 13A	1451890_at	-1.57	0.00
Mef2a	myocyte enhancer factor 2A	1427185_at	-1.57	0.00
Eml1 /// LOC634102	echinoderm microtubule associated protein like 1 /// similar to echinoderm microtubule associated protein like 1	1428321_at	-1.57	0.00
AI428795	expressed sequence AI428795	1435456_at	-1.57	0.00
Prpf19	PRP19/PSO4 pre-mRNA processing factor 19 homolog (S. cerevisiae)	1419839_x_at	-1.57	0.00
Grsf1	G-rich RNA sequence binding factor 1	1433457_s_at	-1.57	0.00
Zfp28	zinc finger protein 28	1439503_at	-1.57	0.00
Unc5b	unc-5 homolog B (C. elegans)	1435110_at	-1.57	0.00
2310004L02Rik	RIKEN cDNA 2310004L02 gene	1416775_at	-1.57	0.00
Rhobtb3	Rho-related BTB domain containing 3	1447869_x_at	-1.57	0.01
Serpini1	serine (or cysteine) peptidase inhibitor, clade I, member 1	1448443_at	-1.57	0.00
Jam2	junction adhesion molecule 2	1431416_a_at	-1.57	0.00
AI591476	Expressed sequence AI591476	1440439_at	-1.57	0.00
Hnt	neurotrimin	1426283_at	-1.57	0.00

Pex1	peroxisome biogenesis factor 1	1428716_at	-1.57	0.00
---	---	1444480_at	-1.58	0.00
Nptn	neuroplastin	1415821_at	-1.58	0.00
Trim35	tripartite motif-containing 35	1454650_at	-1.58	0.00
Ogt	O-linked N-acetylglucosamine (GlcNAc) transferase (UDP-N-acetylglucosamine:polypeptide-N-acetylglucosaminyl transferase)	1460631_at	-1.58	0.00
Ugp2	UDP-glucose pyrophosphorylase 2	1426460_a_at	-1.58	0.00
Zfp161	zinc finger protein 161	1420865_at	-1.58	0.00
Spred2	Sprouty-related, EVH1 domain containing 2	1441415_at	-1.58	0.00
Hod	homeobox only domain	1428662_a_at	-1.58	0.00
Prpf19	PRP19/PSO4 pre-mRNA processing factor 19 homolog (S. cerevisiae)	1449635_at	-1.58	0.00
Clstn1	calsyntenin 1	1421861_at	-1.58	0.00
Apln	apelin	1451038_at	-1.58	0.00
Ugp2	UDP-glucose pyrophosphorylase 2	1426461_at	-1.58	0.00
Ranbp6	RAN binding protein 6	1435167_at	-1.58	0.00
Agpat5	1-acylglycerol-3-phosphate O-acyltransferase 5 (lysophosphatidic acid acyltransferase, epsilon)	1434287_at	-1.58	0.00
Cbfa2t3h	core-binding factor, runt domain, alpha subunit 2, translocated to, 3 homolog (human)	1418582_at	-1.58	0.01
6530418L21Rik	RIKEN cDNA 6530418L21 gene	1444723_at	-1.58	0.00
Cog6	component of oligomeric golgi complex 6	1426216_at	-1.58	0.00
D9Ertd720e	DNA segment, Chr 9, ERATO Doi 720, expressed	1457776_at	-1.58	0.00
Palld	palladin, cytoskeletal associated protein	1427228_at	-1.58	0.00
Lphn1	latrophilin 1	1428510_at	-1.58	0.00
---	NOD-derived CD11c +ve dendritic cells cDNA, RIKEN full-length enriched library, clone:F630119A15 product:hypothetical protein, full insert sequence	1434451_at	-1.58	0.00
Ppm1b	protein phosphatase 1B, magnesium dependent, beta isoform	1426382_at	-1.58	0.00
Evi1	ecotropic viral integration site 1	1438325_at	-1.58	0.01
Plscr4	phospholipid scramblase 4	1443406_at	-1.58	0.01
Atp2a2	ATPase, Ca++ transporting, cardiac muscle, slow twitch 2	1427250_at	-1.58	0.00
Mef2a	myocyte enhancer factor 2A	1427186_a_at	-1.58	0.00
Afmid	arylformamidase	1452944_at	-1.58	0.00
Prkar2b	protein kinase, cAMP dependent regulatory, type II beta	1456475_s_at	-1.58	0.00
Nipa1	non imprinted in Prader-Willi/Angelman syndrome 1 homolog (human)	1434864_at	-1.58	0.00
Hdac2	histone deacetylase 2	1445684_s_at	-1.58	0.00
2510005D08Rik	RIKEN cDNA 2510005D08 gene	1418386_at	-1.58	0.00
Emcn	endomucin	1425582_a_at	-1.58	0.00
C330002I19Rik	RIKEN cDNA C330002I19 gene	1458528_at	-1.58	0.00
Wwp1	WW domain containing E3 ubiquitin protein ligase 1	1427098_at	-1.58	0.01
2310079P10Rik	RIKEN cDNA 2310079P10 gene	1428899_at	-1.58	0.00
Aadacl1	arylacetamide deacetylase-like 1	1455227_at	-1.58	0.00
Abhd3	abhydrolase domain containing 3	1417946_at	-1.58	0.00
Tmem109	transmembrane protein 109	1416032_at	-1.58	0.00
Rasa1	RAS p21 protein activator 1	1426477_at	-1.58	0.00
Ywhaq	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, theta polypeptide	1420829_a_at	-1.58	0.00
2310039E09Rik	RIKEN cDNA 2310039E09 gene	1420551_at	-1.59	0.00
Pip5k1a	phosphatidylinositol-4-phosphate 5-kinase, type 1 alpha	1450389_s_at	-1.59	0.00
Ankrd12	ankyrin repeat domain 12	1440193_at	-1.59	0.00
Pcdh17	protocadherin 17	1453070_at	-1.59	0.00
---	Transcribed locus	1436570_at	-1.59	0.00
Cpeb3	cytoplasmic polyadenylation element binding protein 3	1445868_at	-1.59	0.00
Zfp191	zinc finger protein 191	1430650_at	-1.59	0.01
A630051L19Rik	RIKEN cDNA A630051L19 gene	1455134_at	-1.59	0.00
Tmem53	transmembrane protein 53	1451479_a_at	-1.59	0.00
Ints6	integrator complex subunit 6	1423274_at	-1.59	0.00
Mfhas1	malignant fibrous histiocytoma amplified sequence 1	1436897_at	-1.59	0.00
Map3k4	mitogen activated protein kinase kinase kinase 4	1421450_a_at	-1.59	0.00
Disp1	dispatched homolog 1 (Drosophila)	1434795_at	-1.59	0.00
Rnd3	Rho family GTPase 3	1416700_at	-1.59	0.00
Tjp1	tight junction protein 1	1417749_a_at	-1.59	0.00
Plxnb3	plexin B3	1440813_s_at	-1.59	0.00
Foxp2	forkhead box P2	1438232_at	-1.59	0.00
Zbtb20	zinc finger and BTB domain containing 20	1437065_at	-1.59	0.00
Nrarp	Notch-regulated ankyrin repeat protein	1417986_at	-1.59	0.00
Kdelc2	KDEL (Lys-Asp-Glu-Leu) containing 2	1453071_s_at	-1.59	0.00
Tnks2	tankyrase, TRF1-interacting ankyrin-related ADP-ribose polymerase 2	1447522_s_at	-1.59	0.00
---	---	1434115_at	-1.59	0.00
Slc25a13	solute carrier family 25 (mitochondrial carrier, adenine nucleotide translocator), member 13	1449481_at	-1.59	0.00
Arnt2	Aryl hydrocarbon receptor nuclear translocator 2	1446894_at	-1.59	0.00
Zfp597	zinc finger protein 597	1435556_at	-1.59	0.00
Mtif2	mitochondrial translational initiation factor 2	1415685_at	-1.59	0.00
Bgn	biglycan	1437889_x_at	-1.59	0.00
AW061290	expressed sequence AW061290	1438035_at	-1.59	0.00
Dscr6	Down syndrome critical region homolog 6 (human)	1420459_at	-1.59	0.00
9430020K01Rik	RIKEN cDNA 9430020K01 gene	1428535_at	-1.59	0.00
Rbpms2	RNA binding protein with multiple splicing 2	1424008_a_at	-1.59	0.00
Acot11	acyl-CoA thioesterase 11	1429267_at	-1.59	0.00
Kdr	kinase insert domain protein receptor	1449379_at	-1.59	0.01
Klhl13	kelch-like 13 (Drosophila)	1448269_a_at	-1.59	0.01
Mll3	myeloid/lymphoid or mixed-lineage leukemia 3	1434178_at	-1.59	0.00
A830073O21Rik	RIKEN cDNA A830073O21 gene	1434273_at	-1.59	0.00
Pgam2	phosphoglycerate mutase 2	1418373_at	-1.59	0.00
---	---	1457894_at	-1.59	0.01
Lysmd4	LysM, putative peptidoglycan-binding, domain containing 4	1434093_at	-1.59	0.00
Mrvi1	MRV integration site 1	1459665_s_at	-1.59	0.01
Dnajb5	DnaJ (Hsp40) homolog, subfamily B, member 5	1421962_at	-1.60	0.00
BC011209	cDNA sequence BC011209	1424123_at	-1.60	0.00
Mgat5	mannoside acetylglucosaminyltransferase 5	1428643_at	-1.60	0.00
Xpo1	exportin 1, CRM1 homolog (yeast)	1418442_at	-1.60	0.00
Zfp128	zinc finger protein 128	1458515_at	-1.60	0.00
AW209491	expressed sequence AW209491	1423512_at	-1.60	0.00
Spred2	sprouty-related, EVH1 domain containing 2	1434403_at	-1.60	0.00
Ogdh	oxoglutarate dehydrogenase (lipoamide)	1445632_at	-1.60	0.01
Myh6	Myosin, heavy polypeptide 6, cardiac muscle, alpha	1458850_at	-1.60	0.00
Nrk	Nik related kinase	1450079_at	-1.60	0.00
2810482G21Rik	RIKEN cDNA 2810482G21 gene	1435754_at	-1.60	0.00

Ptger4	prostaglandin E receptor 4 (subtype EP4)	1424208_at	-1.60	0.01
Cks1b	CDC28 protein kinase 1b	1439514_at	-1.60	0.00
Fxr1h	fragile X mental retardation gene 1, autosomal homolog	1452247_at	-1.60	0.00
Cdc14a	CDC14 cell division cycle 14 homolog A (S. cerevisiae)	1436913_at	-1.60	0.00
Kcnb1 /// Pacsin2	potassium voltage gated channel, Shab-related subfamily, member 1 /// protein kinase C and casein kinase substrate in neurons 2	1417810_a_at	-1.60	0.00
---	---	1439500_at	-1.60	0.00
Col5a1	procollagen, type V, alpha 1	1416740_at	-1.60	0.01
Lrrtm3	Leucine rich repeat transmembrane neuronal 3	1444477_at	-1.60	0.00
Endog	endonuclease G	1438317_a_at	-1.60	0.00
Asph	aspartate-beta-hydroxylase	1426015_s_at	-1.60	0.00
---	Transcribed locus	1443847_x_at	-1.60	0.00
Rsad1	radical S-adenosyl methionine domain containing 1	1440875_a_at	-1.60	0.00
Trio	Triple functional domain (PTPRF interacting)	1457492_at	-1.60	0.00
Jub	ajuba	1421344_a_at	-1.60	0.00
Ches1	checkpoint suppressor 1	1434002_at	-1.60	0.00
Ptprd	protein tyrosine phosphatase, receptor type, D	1424886_at	-1.60	0.01
Cox11	COX11 homolog, cytochrome c oxidase assembly protein (yeast)	1429188_at	-1.60	0.00
Wdr33	WD repeat domain 33	1455281_at	-1.60	0.00
Ddit4l	DNA-damage-inducible transcript 4-like	1439332_at	-1.60	0.01
Ush1c	Usher syndrome 1C homolog (human)	1450001_a_at	-1.60	0.00
BC026657	cDNA sequence BC026657	1440064_at	-1.60	0.00
Gpsn2	glycoprotein, synaptic 2	1429681_a_at	-1.60	0.00
Pex19	peroxisome biogenesis factor 19	1455208_at	-1.60	0.00
Ankrd29	ankyrin repeat domain 29	1438756_at	-1.60	0.00
Klhdc8a	kelch domain containing 8A	1441940_x_at	-1.60	0.00
Slc25a26	solute carrier family 25 (mitochondrial carrier, phosphate carrier), member 26	1453886_a_at	-1.60	0.00
---	---	1442470_at	-1.60	0.00
Vtn	vitronectin	1455098_a_at	-1.60	0.00
Krt1-10	keratin complex 1, acidic, gene 10	1452166_a_at	-1.60	0.00
Ankrd32	ankyrin repeat domain 32	1423577_at	-1.60	0.00
Hcfc2	host cell factor C2	1438328_at	-1.61	0.00
Slc12a7	solute carrier family 12, member 7	1418257_at	-1.61	0.00
Nlk	nemo like kinase	1419112_at	-1.61	0.00
4833420G11Rik	RIKEN cDNA 4833420G11 gene	1455255_at	-1.61	0.00
Msrb3	methionine sulfoxide reductase B3	1454997_at	-1.61	0.00
Mrpl12	mitochondrial ribosomal protein L12	1452048_at	-1.61	0.00
Car8	carbonic anhydrase 8	1457904_at	-1.61	0.00
Scrn3	secernin 3	1426917_s_at	-1.61	0.00
Spred2	sprouty-related, EVH1 domain containing 2	1436892_at	-1.61	0.00
Efcab2	EF-hand calcium binding domain 2	1420513_at	-1.61	0.00
Clcn3	chloride channel 3	1438366_x_at	-1.61	0.00
L1cam	L1 cell adhesion molecule	1450435_at	-1.61	0.00
---	---	1447724_x_at	-1.61	0.00
Niban	niban protein	1454942_at	-1.61	0.00
Adssl1	adenylosuccinate synthetase like 1	1449383_at	-1.61	0.00
Trio	Triple functional domain (PTPRF interacting)	1437505_at	-1.61	0.00
Snx12	Sorting nexin 12	1455465_at	-1.61	0.00
Mylk	myosin, light polypeptide kinase	1425506_at	-1.61	0.00
Zbtb20	zinc finger and BTB domain containing 20	1438443_at	-1.61	0.00
---	Transcribed locus	1459630_at	-1.61	0.01
Clcn3	chloride channel 3	1416610_a_at	-1.61	0.00
Mapre2	Microtubule-associated protein, RP/EB family, member 2	1445492_at	-1.61	0.00
2410127L17Rik /// LOC626107 /// LOC666456 /// LOC677519 /// LOC677553	RIKEN cDNA 2410127L17 gene /// similar to RIKEN cDNA 2410127L17 /// similar to CG11596-PA, isoform A /// similar to CG11596-PA, isoform A /// similar to RIKEN cDNA 2410127L17 gene	1429458_at	-1.61	0.00
D430047L21Rik	RIKEN cDNA D430047L21 gene	1435590_at	-1.61	0.00
Ndn	necdin	1437853_x_at	-1.61	0.00
0610009O20Rik	RIKEN cDNA 0610009O20 gene	1452685_at	-1.61	0.00
Ttc3	tetratricopeptide repeat domain 3	1416482_at	-1.61	0.00
Dnahc8	dynein, axonemal, heavy chain 8	1424936_a_at	-1.61	0.00
Dhcr7	7-dehydrocholesterol reductase	1448619_at	-1.61	0.00
2810055G20Rik	RIKEN cDNA 2810055G20 gene	1445363_at	-1.61	0.01
---	---	1428280_at	-1.61	0.00
Timm8a1	translocase of inner mitochondrial membrane 8 homolog a1 (yeast)	1416345_at	-1.61	0.00
2610008E11Rik	RIKEN cDNA 2610008E11 gene	1429281_at	-1.61	0.00
Abcc8	ATP-binding cassette, sub-family C (CFTR/MRP), member 8	1457066_at	-1.61	0.00
Baz2b	bromodomain adjacent to zinc finger domain, 2B	1440984_at	-1.61	0.00
BC028528	CDNA sequence BC028528	1445301_at	-1.61	0.00
Tesc	tescalcin	1418744_s_at	-1.61	0.00
Daam1	dishevelled associated activator of morphogenesis 1	1455244_at	-1.61	0.00
Enpp3	ectonucleotide pyrophosphatase/phosphodiesterase 3	1452384_at	-1.61	0.01
Spna1 /// LOC630963	spectrin alpha 1 /// similar to spectrin alpha 1	1421277_at	-1.61	0.00
Hod	homeobox only domain	1451776_s_at	-1.62	0.00
Abcc9	ATP-binding cassette, sub-family C (CFTR/MRP), member 9	1435751_at	-1.62	0.00
Sccpdh	saccharopine dehydrogenase (putative)	1426510_at	-1.62	0.00
---	---	1459695_at	-1.62	0.00
---	---	1434444_s_at	-1.62	0.00
AI790298	expressed sequence AI790298	1427146_at	-1.62	0.00
Fzd2	frizzled homolog 2 (Drosophila)	1418532_at	-1.62	0.01
MGC73635	similar to histone 2a	1438009_at	-1.62	0.00
---	---	1434631_at	-1.62	0.00
6720420G18Rik	RIKEN cDNA 6720420G18 gene	1432787_at	-1.62	0.00
Sgce	sarcoglycan, epsilon	1420688_a_at	-1.62	0.00
Odz3	odd Oz/ten-m homolog 3 (Drosophila)	1449315_at	-1.62	0.00
Kcnmb1	potassium large conductance calcium-activated channel, subfamily M, beta member 1	1421400_at	-1.62	0.00
Pts	6-pyruvoyl-tetrahydropterin synthase	1450660_at	-1.62	0.00
Rab22a	RAB22A, member RAS oncogene family	1424504_at	-1.62	0.00
Abcb1a	ATP-binding cassette, sub-family B (MDR/TAP), member 1A	1419759_at	-1.62	0.00
Bicc1	bicaudal C homolog 1 (Drosophila)	1423484_at	-1.62	0.00
Gtl3	gene trap locus 3	1452896_at	-1.62	0.00
Phf20l1	PHD finger protein 20-like 1	1454939_at	-1.62	0.00
Scrn3	secernin 3	1436573_at	-1.62	0.00
9230110I02Rik	RIKEN cDNA 9230110I02 gene	1460499_at	-1.62	0.00
Neo1	neogenin	1447693_s_at	-1.62	0.00
Syne1	synaptic nuclear envelope 1	1455493_at	-1.62	0.00
Ccnt2	cyclin T2	1427089_at	-1.62	0.00

Abcb1a	ATP-binding cassette, sub-family B (MDR/TAP), member 1A	1419758_at	-1.62	0.00
Dab2	disabled homolog 2 (Drosophila)	1423805_at	-1.62	0.00
---	16 days embryo head cDNA, RIKEN full-length enriched library, clone:C130051K14 product:unclassifiable, full insert sequence	1458324_x_at	-1.62	0.00
---	Transcribed locus	1440015_at	-1.62	0.00
Abhd8	abhydrolase domain containing 8	1416863_at	-1.62	0.00
Zfp647	zinc finger protein 647	1455633_at	-1.62	0.00
Pdzd6	PDZ domain containing 6	1454350_at	-1.62	0.00
Syne2	synaptic nuclear envelope 2	1442285_at	-1.62	0.00
---	---	1428140_at	-1.62	0.00
BC024659	cDNA sequence BC024659	1433986_at	-1.62	0.00
Hfe2	hemochromatosis type 2 (juvenile) (human homolog)	1429223_a_at	-1.62	0.00
Ugt1a2 /// Ugt1a6a /// Ugt1a10 /// Ugt1a7c /// Ugt1a5 /// Ugt1a9 /// Ugt1a6b /// Ugt1a1	UDP glucuronosyltransferase 1 family, polypeptide A2 /// UDP glucuronosyltransferase 1 family, polypeptide A6A /// UDP glycosyltransferase 1 family, polypeptide A10 /// UDP glucuronosyltransferase 1 family, polypeptide A7C /// UDP glucuronosyltransferase 1 family, polypeptide A5 /// UDP glucuronosyltransferase 1 family, polypeptide A9 /// UDP glucuronosyltransferase 1 family, polypeptide A6B /// UDP glucuronosyltransferase 1 family, polypeptide A1	1426261_s_at	-1.62	0.00
Rcor3	REST corepressor 3	1428342_at	-1.62	0.00
Slc25a29	solute carrier family 25 (mitochondrial carrier, palmitoylcarnitine transporter), member 29	1423979_a_at	-1.62	0.01
Acot7	acyl-CoA thioesterase 7	1417094_at	-1.62	0.00
Zfp101	zinc finger protein 101	1450090_at	-1.62	0.00
Fbxl7	F-box and leucine-rich repeat protein 7	1440441_at	-1.62	0.01
Rgs4	regulator of G-protein signaling 4	1416287_at	-1.62	0.00
9630033F20Rik	RIKEN cDNA 9630033F20 gene	1447934_at	-1.62	0.00
2410005O16Rik	RIKEN cDNA 2410005O16 gene	1457017_at	-1.62	0.00
3110005L24Rik	RIKEN cDNA 3110005L24 gene	1431381_at	-1.62	0.00
Bach2	BTB and CNC homology 2	1440304_at	-1.63	0.00
Endog	endonuclease G	1421097_at	-1.63	0.00
Tmem16a	transmembrane protein 16A	1459713_s_at	-1.63	0.00
1810057P16Rik	RIKEN cDNA 1810057P16 gene	1440975_at	-1.63	0.00
Dennd4b	DENN/MADD domain containing 4B	1427014_at	-1.63	0.00
Mrg1	myeloid ecotropic viral integration site-related gene 1	1457632_s_at	-1.63	0.00
Gatm	glycine amidinotransferase (L-arginine:glycine amidinotransferase)	1423569_at	-1.63	0.00
Rapgef2	Rap guanine nucleotide exchange factor (GEF) 2	1452833_at	-1.63	0.00
Rab3il1	RAB3A interacting protein (rabin3)-like 1	1428391_at	-1.63	0.01
Cgnl1 /// LOC677485	cingulin-like 1 /// similar to cingulin-like 1 isoform 1	1452309_at	-1.63	0.00
Lrrc1	leucine rich repeat containing 1	1452411_at	-1.63	0.00
Cacna1s	calcium channel, voltage-dependent, L type, alpha 1S subunit	1420442_at	-1.63	0.00
6720477C19Rik	RIKEN cDNA 6720477C19 gene	1433184_at	-1.63	0.00
Slc16a1	solute carrier family 16 (monocarboxylic acid transporters), member 1	1415802_at	-1.63	0.00
Polrmt	polymerase (RNA) mitochondrial (DNA directed)	1437377_a_at	-1.63	0.00
Cap2	CAP, adenylate cyclase-associated protein, 2 (yeast)	1450910_at	-1.63	0.00
Dusp3	dual specificity phosphatase 3 (vaccinia virus phosphatase VH1-related)	1434472_at	-1.63	0.00
Entpd5	ectonucleoside triphosphate diphosphohydrolase 5	1451765_a_at	-1.63	0.00
Npnt	nephronectin	1452106_at	-1.63	0.00
Dicer1	Dicer1, Dcr-1 homolog (Drosophila)	1460571_at	-1.63	0.00
Nfatc2	nuclear factor of activated T-cells, cytoplasmic, calcineurin-dependent 2	1426032_at	-1.63	0.00
Eif4e /// LOC630527	eukaryotic translation initiation factor 4E /// hypothetical LOC630527	1450908_at	-1.63	0.00
AV009015	expressed sequence AV009015	1455014_at	-1.63	0.00
BC022224	cDNA sequence BC022224	1425704_at	-1.63	0.00
Tomm40l	translocase of outer mitochondrial membrane 40 homolog-like (yeast)	1455614_at	-1.63	0.00
Anks1	ankyrin repeat and SAM domain containing 1	1452204_at	-1.63	0.00
Sox17	SRY-box containing gene 17	1429177_x_at	-1.63	0.00
Coq7	demethyl-Q 7	1416665_at	-1.63	0.00
Ches1	checkpoint suppressor 1	1436925_at	-1.64	0.00
Klf12	Kruppel-like factor 12	1439846_at	-1.64	0.00
Magi2	membrane associated guanylate kinase, WW and PDZ domain containing 2	1454855_at	-1.64	0.01
Zfp329	zinc finger protein 329	1431830_at	-1.64	0.00
Sirt3	sirtuin 3 (silent mating type information regulation 2, homolog) 3 (S. cerevisiae)	1417892_a_at	-1.64	0.00
Akap1	A kinase (PRKA) anchor protein 1	1449019_at	-1.64	0.00
Ctnnb1	catenin (cadherin associated protein), beta 1	1430533_a_at	-1.64	0.00
AI428795	expressed sequence AI428795	1449520_at	-1.64	0.00
Nfib	nuclear factor I/B	1454834_at	-1.64	0.00
Csrp1	cysteine and glycine-rich protein 1	1425810_a_at	-1.64	0.00
Alas1	aminolevulinic acid synthase 1	1455282_x_at	-1.64	0.00
Dyrk2	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2	1428637_at	-1.64	0.00
Gpsn2	glycoprotein, synaptic 2	1416352_s_at	-1.64	0.00
Ehd2 /// LOC673251	EH-domain containing 2 /// similar to EH-domain containing 2	1435785_at	-1.64	0.00
Gpr177	G protein-coupled receptor 177	1423825_at	-1.64	0.00
Ppm1l	protein phosphatase 1 (formerly 2C)-like	1435787_at	-1.64	0.00
6430570G24	hypothetical protein 6430570G24	1454901_at	-1.64	0.01
Bche	butyrylcholinesterase	1436098_at	-1.64	0.00
C230004L04	hypothetical protein C230004L04	1457568_at	-1.64	0.00
Cand2	cullin-associated and neddylation-dissociated 2 (putative)	1429622_at	-1.64	0.00
Drctnnb1a	down-regulated by Ctnnb1, a	1450724_at	-1.64	0.00
Crip2	cysteine rich protein 2	1417311_at	-1.64	0.00
---	Adult male liver tumor cDNA, RIKEN full-length enriched library, clone:C730040G13 product:unclassifiable, full insert sequence	1444108_at	-1.64	0.00
---	---	1439789_at	-1.64	0.00
Tmcc2	transmembrane and coiled-coil domains 2	1428108_x_at	-1.64	0.00
Sh3bgr	SH3-binding domain glutamic acid-rich protein	1422644_at	-1.64	0.00
Ankrd44	ankyrin repeat domain 44	1434856_at	-1.64	0.00
Trio	triple functional domain (PTPRF interacting)	1454711_at	-1.64	0.00
Epha7	Eph receptor A7	1451991_at	-1.64	0.00
P4ha2	procollagen-proline, 2-oxoglutarate 4-dioxygenase (proline 4-hydroxylase), alpha II polypeptide	1417149_at	-1.64	0.00
Cep68	centrosomal protein 68	1456325_at	-1.64	0.00
Ipo13	importin 13	1433464_at	-1.64	0.00
LOC380843 /// LOC638266 /// LOC666794	similar to RNA binding motif protein 24 /// similar to RNA binding motif protein 24 /// similar to RNA binding motif protein 24	1456180_at	-1.64	0.00
Cox10	COX10 homolog, cytochrome c oxidase assembly protein, heme A: farnesyltransferase (yeast)	1429329_at	-1.64	0.00
Bank1	B-cell scaffold protein with ankyrin repeats 1	1456328_at	-1.64	0.00
4930534B04Rik	RIKEN cDNA 4930534B04 gene	1429228_at	-1.64	0.00
Ttc19	tetratricopeptide repeat domain 19	1427114_at	-1.64	0.00

Cbll1	Casitas B-lineage lymphoma-like 1	1437203_at	-1.65	0.00
Jarid2	jumonji, AT rich interactive domain 2	1450710_at	-1.65	0.00
---	Adult male brain cDNA, RIKEN full-length enriched library, clone:3526403L10 product:unclassifiable, full insert sequence	1440153_at	-1.65	0.00
Gpt1	glutamic pyruvic transaminase 1, soluble	1426502_s_at	-1.65	0.00
Efemp1	epidermal growth factor-containing fibulin-like extracellular matrix protein 1	1427183_at	-1.65	0.00
5730407I07Rik	RIKEN cDNA 5730407I07 gene	1432916_at	-1.65	0.00
Ldb3	LIM domain binding 3	1416752_at	-1.65	0.00
Sc5d	sterol-C5-desaturase (fungal ERG3, delta-5-desaturase) homolog (S. cerevisae)	1434520_at	-1.65	0.00
---	13 days embryo forelimb cDNA, RIKEN full-length enriched library, clone:5930438H13 product:unclassifiable, full insert sequence	1455150_at	-1.65	0.00
Gpr155	G protein-coupled receptor 155	1452353_at	-1.65	0.00
Htra1	HtrA serine peptidase 1	1438251_x_at	-1.65	0.00
A630025C20Rik	RIKEN cDNA A630025C20 gene	1443779_s_at	-1.65	0.00
---	---	1445315_at	-1.65	0.00
Mef2a	myocyte enhancer factor 2A	1452347_at	-1.65	0.00
Zfpn1a2	zinc finger protein, subfamily 1A, 2 (Helios)	1456956_at	-1.65	0.00
D430028G21Rik	RIKEN cDNA D430028G21 gene	1451176_at	-1.65	0.00
BC029103	cDNA sequence BC029103	1440226_at	-1.65	0.00
Btbd3	BTB (POZ) domain containing 3	1425660_at	-1.65	0.00
Kif13a	kinesin family member 13A	1455746_at	-1.65	0.00
Dlat	dihydrolipoamide S-acetyltransferase (E2 component of pyruvate dehydrogenase complex)	1452005_at	-1.65	0.00
Pigh	phosphatidylinositol glycan, class H	1455860_at	-1.65	0.00
Vapb	vesicle-associated membrane protein, associated protein B and C	1458501_at	-1.65	0.00
Osbpl3	oxysterol binding protein-like 3	1438724_at	-1.65	0.00
St5	suppression of tumorigenicity 5	1428372_at	-1.65	0.00
2510005D08Rik	RIKEN cDNA 2510005D08 gene	1449072_a_at	-1.65	0.00
---	---	1440440_at	-1.65	0.00
Tmpo	thymopoietin	1426349_s_at	-1.65	0.00
4931432P07Rik	RIKEN cDNA 4931432P07 gene	1443415_at	-1.65	0.00
Cdc14b	CDC14 cell division cycle 14 homolog B (S. cerevisiae)	1437070_at	-1.65	0.01
Tmem141	transmembrane protein 141	1435259_s_at	-1.65	0.00
Bicd2	bicaudal D homolog 2 (Drosophila)	1450733_at	-1.66	0.00
Jam3	junction adhesion molecule 3	1423503_at	-1.66	0.00
Tmod4	tropomodulin 4	1449969_at	-1.66	0.00
Tmem63b	transmembrane protein 63b	1452219_at	-1.66	0.00
Zfp449	zinc finger protein 449	1439945_at	-1.66	0.00
Dag1	dystroglycan 1	1423872_a_at	-1.66	0.00
E030016H06Rik	RIKEN cDNA E030016H06 gene	1440443_at	-1.66	0.00
Oxct1	3-oxoacid CoA transferase 1	1455804_x_at	-1.66	0.00
Pftk1	PFTAIRE protein kinase 1	1419249_at	-1.66	0.00
Lrrc20	leucine rich repeat containing 20	1438422_at	-1.66	0.00
Dag1	dystroglycan 1	1426779_x_at	-1.66	0.00
Rps6ka5	ribosomal protein S6 kinase, polypeptide 5	1431050_at	-1.66	0.00
Msi2	Musashi homolog 2 (Drosophila)	1421230_a_at	-1.66	0.00
Apbb1	amyloid beta (A4) precursor protein-binding, family B, member 1	1423892_at	-1.66	0.00
Adamts10	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 10	1427139_at	-1.66	0.01
5730509K17Rik	RIKEN cDNA 5730509K17 gene	1436426_at	-1.66	0.01
4732466D17Rik	RIKEN cDNA 4732466D17 gene	1426876_at	-1.66	0.00
Slc26a6	solute carrier family 26, member 6	1416275_at	-1.66	0.01
1810049H13Rik	RIKEN cDNA 1810049H13 gene	1441878_s_at	-1.66	0.00
Mbnl2	Muscleblind-like 2	1446475_at	-1.66	0.00
Map3k4	mitogen activated protein kinase kinase kinase 4	1459800_s_at	-1.66	0.00
Fmod	fibromodulin	1438966_x_at	-1.66	0.00
Dnase2a	deoxyribonuclease II alpha	1430135_at	-1.66	0.00
---	Transcribed locus	1441425_at	-1.66	0.00
Myl1	myosin, light polypeptide 1	1452651_a_at	-1.66	0.00
Trak1	trafficking protein, kinesin binding 1	1452742_at	-1.66	0.00
BC054059	cDNA sequence BC054059	1424729_at	-1.66	0.00
Kcnk3	potassium channel, subfamily K, member 3	1425342_a_at	-1.66	0.01
---	---	1447057_at	-1.66	0.00
AW112037	expressed sequence AW112037	1435326_at	-1.66	0.00
Mrpl19	mitochondrial ribosomal protein L19	1450405_at	-1.66	0.00
Odz3	odd Oz/ten-m homolog 3 (Drosophila)	1429178_at	-1.66	0.00
Sfrs1	splicing factor, arginine/serine-rich 1 (ASF/SF2)	1428100_at	-1.66	0.00
Smpx	small muscle protein, X-linked	1418095_at	-1.66	0.00
Pea15	phosphoprotein enriched in astrocytes 15	1416407_at	-1.67	0.00
Ppm1l	protein phosphatase 1 (formerly 2C)-like	1438012_at	-1.67	0.00
---	16 days embryo head cDNA, RIKEN full-length enriched library, clone:C130025B04 product:unclassifiable, full insert sequence	1439887_at	-1.67	0.00
Gsk3b	glycogen synthase kinase 3 beta	1437001_at	-1.67	0.00
Blnk	B-cell linker	1451780_at	-1.67	0.00
Cxxc5	CXXC finger 5	1431469_a_at	-1.67	0.00
Stk17b	serine/threonine kinase 17b (apoptosis-inducing)	1450997_at	-1.67	0.00
Usp15	ubiquitin specific peptidase 15	1455842_x_at	-1.67	0.00
Sirt5	sirtuin 5 (silent mating type information regulation 2 homolog) 5 (S. cerevisiae)	1428916_s_at	-1.67	0.00
Jam2	junction adhesion molecule 2	1449408_at	-1.67	0.00
Ppif	peptidylprolyl isomerase F (cyclophilin F)	1416940_at	-1.67	0.00
Slc2a4	solute carrier family 2 (facilitated glucose transporter), member 4	1415959_at	-1.67	0.01
Nfib	nuclear factor I/B	1427680_a_at	-1.67	0.00
1810058I24Rik	RIKEN cDNA 1810058I24 gene	1442129_at	-1.67	0.00
AW493563	expressed sequence AW493563	1441751_at	-1.67	0.00
Igf2r	insulin-like growth factor 2 receptor	1424112_at	-1.67	0.00
Larp5	La ribonucleoprotein domain family, member 5	1434598_at	-1.67	0.00
Dbh	dopamine beta hydroxylase	1450670_at	-1.67	0.00
Fcgrt	Fc receptor, IgG, alpha chain transporter	1416978_at	-1.67	0.00
Trdn	triadin	1426142_a_at	-1.67	0.00
Rhoq	ras homolog gene family, member Q	1427918_a_at	-1.67	0.00
Mdga1	MAM domain containing glycosylphosphatidylinositol anchor 1	1432062_at	-1.67	0.00
Sln	sarcolipin	1420884_at	-1.67	0.00
Setd8	SET domain containing (lysine methyltransferase) 8	1426406_at	-1.67	0.01
Scmh1	sex comb on midleg homolog 1	1439554_at	-1.67	0.00
Zbtb20	zinc finger and BTB domain containing 20	1439128_at	-1.67	0.00
Ralgps2	Ral GEF with PH domain and SH3 binding motif 2	1428789_at	-1.67	0.00

2310046A06Rik /// 2810047F03Rik	RIKEN cDNA 2310046A06 gene /// RIKEN cDNA 2810047F03 gene	1453059_at	-1.67	0.00
2700097O09Rik	RIKEN cDNA 2700097O09 gene	1428810_at	-1.67	0.00
Rcsd1	RCSD domain containing 1	1442866_at	-1.67	0.00
Xrcc6bp1	XRCC6 binding protein 1	1453380_a_at	-1.67	0.00
Jph2	junctophilin 2	1421453_at	-1.67	0.01
BC004004	cDNA sequence BC004004	1438534_x_at	-1.68	0.00
Epb4.1l4a	erythrocyte protein band 4.1-like 4a	1449167_at	-1.68	0.00
St6gal1	beta galactoside alpha 2,6 sialyltransferase 1	1420928_at	-1.68	0.00
Csf1r	colony stimulating factor 1 receptor	1419872_at	-1.68	0.01
---	---	1438702_at	-1.68	0.00
Txndc13	thioredoxin domain containing 13	1453120_at	-1.68	0.00
6430570G24	hypothetical protein 6430570G24	1434277_a_at	-1.68	0.01
BC026432	cDNA sequence BC026432	1424506_at	-1.68	0.00
Kcnk3	potassium channel, subfamily K, member 3	1426058_a_at	-1.68	0.01
Pla2g4e	phospholipase A2, group IVE	1429862_at	-1.68	0.00
Reep1	Receptor accessory protein 1	1449662_at	-1.68	0.00
AI585793	expressed sequence AI585793	1438719_at	-1.68	0.00
Mrpl1	mitochondrial ribosomal protein L1	1423351_at	-1.68	0.00
Igl-V1 /// 2010309G21Rik /// LOC207685 /// LOC386520	immunoglobulin lambda chain, variable 1 /// RIKEN cDNA 2010309G21 gene /// hypothetical protein LOC207685 /// similar to Ig lambda-3 chain C region - mouse	1428720_s_at	-1.68	0.00
AI585793	Expressed sequence AI585793	1455597_at	-1.68	0.00
LOC434128	Similar to KIAA1183 protein	1435960_at	-1.68	0.00
---	12 days embryo spinal ganglion cDNA, RIKEN full-length enriched library, clone:D130046A02 product:unclassifiable, full insert sequence	1439632_at	-1.68	0.00
2900062L11Rik	RIKEN cDNA 2900062L11 gene	1428333_at	-1.68	0.00
Stk38	serine/threonine kinase 38	1439938_at	-1.68	0.00
Camk1d	calcium/calmodulin-dependent protein kinase ID	1426389_at	-1.68	0.00
B230337E12Rik	RIKEN cDNA B230337E12 gene	1434671_at	-1.68	0.00
C630002B14Rik	RIKEN cDNA C630002B14 gene	1427057_at	-1.68	0.00
D430028G21Rik	RIKEN cDNA D430028G21 gene	1439185_x_at	-1.68	0.00
Thra	thyroid hormone receptor alpha	1443952_at	-1.68	0.00
Zfp629	zinc finger protein 629	1436537_at	-1.68	0.00
Il10rb	interleukin 10 receptor, beta	1419455_at	-1.68	0.00
Pstk	phosphoseryl-tRNA kinase	1434516_at	-1.68	0.00
She	src homology 2 domain-containing transforming protein E	1457094_at	-1.68	0.00
1810029C22Rik	RIKEN cDNA 1810029C22 gene	1449971_a_at	-1.68	0.00
Fbln1	fibulin 1	1451119_a_at	-1.68	0.01
AI851716	expressed sequence AI851716	1455139_at	-1.69	0.00
Trak1	trafficking protein, kinesin binding 1	1428327_at	-1.69	0.00
Macf1	microtubule-actin crosslinking factor 1	1428848_a_at	-1.69	0.00
Pura	purine rich element binding protein A	1456898_at	-1.69	0.00
Asb1	ankyrin repeat and SOCS box-containing protein 1	1434961_at	-1.69	0.00
Fbxo5	F-box only protein 5	1429499_at	-1.69	0.00
Als2cr19	Amyotrophic lateral sclerosis 2 (juvenile) chromosome region, candidate 19 (human)	1445377_at	-1.69	0.00
Optn	optineurin	1435679_at	-1.69	0.00
D6Wsu176e	DNA segment, Chr 6, Wayne State University 176, expressed	1448904_at	-1.69	0.00
Abra	actin-binding Rho activating protein	1458455_at	-1.69	0.00
4930543C13Rik	RIKEN cDNA 4930543C13 gene	1430154_at	-1.69	0.00
Them4	thioesterase superfamily member 4	1427055_at	-1.69	0.00
Ntf3	neurotrophin 3	1450803_at	-1.69	0.00
1110007M04Rik	RIKEN cDNA 1110007M04 gene	1427997_at	-1.69	0.00
Zfp191	zinc finger protein 191	1430651_s_at	-1.69	0.00
Bzw2	basic leucine zipper and W2 domains 2	1423456_at	-1.69	0.00
6330505F04Rik	RIKEN cDNA 6330505F04 gene	1426832_at	-1.69	0.00
Epha4	Eph receptor A4	1456863_at	-1.69	0.00
Bnc1	basonuclin 1	1424890_at	-1.69	0.00
Gcap14	granule cell antiserum positive 14	1453240_a_at	-1.69	0.00
Gm944	gene model 944, (NCBI)	1436827_at	-1.69	0.00
Snrpd3	Small nuclear ribonucleoprotein D3	1449629_s_at	-1.69	0.00
---	---	1423613_at	-1.69	0.00
Bace2	beta-site APP-cleaving enzyme 2	1416673_at	-1.69	0.00
Prps2	phosphoribosyl pyrophosphate synthetase 2	1454843_at	-1.69	0.00
2410003P15Rik	RIKEN cDNA 2410003P15 gene	1448337_at	-1.69	0.00
Phlpp	PH domain and leucine rich repeat protein phosphatase	1426994_at	-1.69	0.00
Clmn	calmin	1439117_at	-1.69	0.00
Ints12	integrator complex subunit 12	1428985_at	-1.69	0.00
Dut	deoxyuridine triphosphatase	1419270_a_at	-1.69	0.00
Dnajb5	DnaJ (Hsp40) homolog, subfamily B, member 5	1450436_s_at	-1.70	0.00
Prrx1	paired related homeobox 1	1425528_at	-1.70	0.00
Fahd1	fumarylacetoacetate hydrolase domain containing 1	1419547_at	-1.70	0.00
Mrps6	mitochondrial ribosomal protein S6	1447585_s_at	-1.70	0.00
Palm2	paralemmin 2	1441055_at	-1.70	0.00
Stk39	serine/threonine kinase 39, STE20/SPS1 homolog (yeast)	1419551_s_at	-1.70	0.00
Pbx1	Pre B-cell leukemia transcription factor 1	1440954_at	-1.70	0.01
Arpc5l	actin related protein 2/3 complex, subunit 5-like	1436421_s_at	-1.70	0.00
Dmxl1	Dmx-like 1	1424672_at	-1.70	0.00
Reep5	receptor accessory protein 5	1426376_at	-1.70	0.00
Tspan6	tetraspanin 6	1416872_at	-1.70	0.00
Rtn4ip1	reticulon 4 interacting protein 1	1417668_at	-1.70	0.01
Prox1	prospero-related homeobox 1	1437894_at	-1.70	0.00
Akr1c19	aldo-keto reductase family 1, member C19	1455454_at	-1.70	0.00
Itpr1	inositol 1,4,5-triphosphate receptor 1	1460203_at	-1.70	0.00
Cdh2	cadherin 2	1418815_at	-1.70	0.00
Tmem64	transmembrane protein 64	1433735_a_at	-1.70	0.00
3110031B13Rik	RIKEN cDNA 3110031B13 gene	1435696_s_at	-1.70	0.00
Klhdc1	kelch domain containing 1	1443932_at	-1.70	0.00
Dpysl2	dihydropyrimidinase-like 2	1433770_at	-1.70	0.00
2310005E10Rik	RIKEN cDNA 2310005E10 gene	1425684_at	-1.70	0.00
Dyrk2	dual-specificity tyrosine-(Y)-phosphorylation regulated kinase 2	1436918_at	-1.70	0.00
Ccdc85a	coiled-coil domain containing 85A	1452332_at	-1.70	0.00
Prkca	protein kinase C, alpha	1450945_at	-1.70	0.00
Mrc2	mannose receptor, C type 2	1421045_at	-1.70	0.01
Gtl3	gene trap locus 3	1419462_s_at	-1.70	0.00
BC028265	cDNA sequence BC028265	1452623_at	-1.70	0.00
Auts2	autism susceptibility candidate 2	1438680_at	-1.70	0.00
Deb1	differentially expressed in B16F10 1	1427955_a_at	-1.71	0.00

Zfp706	zinc finger protein 706	1456177_x_at	-1.71	0.00
Sdc2	syndecan 2	1448545_at	-1.71	0.00
Rgs10	regulator of G-protein signalling 10	1416882_at	-1.71	0.00
---	---	1418534_at	-1.71	0.00
C230078M08Rik	RIKEN cDNA C230078M08 gene	1435564_at	-1.71	0.00
2310067B10Rik	RIKEN cDNA 2310067B10 gene	1426984_at	-1.71	0.00
Ivns1abp	influenza virus NS1A binding protein	1425718_a_at	-1.71	0.00
Pgm2l1	phosphoglucomutase 2-like 1	1456478_at	-1.71	0.00
Serbp1	Serpine1 mRNA binding protein 1	1440195_at	-1.71	0.00
Rhot2	ras homolog gene family, member T2	1426822_at	-1.71	0.00
Msi2	Musashi homolog 2 (Drosophila)	1436818_a_at	-1.71	0.00
Epb4.1l3	erythrocyte protein band 4.1-like 3	1419062_at	-1.71	0.00
Gsn	gelsolin	1437171_x_at	-1.71	0.00
E330009J07Rik	RIKEN cDNA E330009J07 gene	1449056_at	-1.71	0.00
Cnot6l	CCR4-NOT transcription complex, subunit 6-like	1434311_at	-1.71	0.00
Synpo2	synaptopodin 2	1441206_at	-1.71	0.00
A630025C20Rik	RIKEN cDNA A630025C20 gene	1455121_at	-1.71	0.00
Mef2c	myocyte enhancer factor 2C	1451507_at	-1.71	0.00
Usp18	Ubiquitin specific peptidase 18	1444449_at	-1.71	0.00
Kcnj14	potassium inwardly-rectifying channel, subfamily J, member 14	1452243_at	-1.71	0.00
Nme3	expressed in non-metastatic cells 3	1448905_at	-1.71	0.00
Dag1	dystroglycan 1	1456131_x_at	-1.71	0.00
Tbx20	T-box 20	1425158_at	-1.71	0.00
Itga9	integrin alpha 9	1460285_at	-1.71	0.00
Pja2	praja 2, RING-H2 motif containing	1424442_a_at	-1.71	0.00
Kifc3	kinesin family member C3	1416199_at	-1.71	0.00
Ccdc80	coiled-coil domain containing 80	1424186_at	-1.71	0.01
Tmem51	transmembrane protein 51	1424383_at	-1.71	0.00
F3	coagulation factor III	1417408_at	-1.71	0.00
---	---	1442593_at	-1.71	0.00
Rbbp6	retinoblastoma binding protein 6	1425115_at	-1.71	0.00
Mak10	MAK10 homolog, amino-acid N-acetyltransferase subunit, (S. cerevisiae)	1433570_s_at	-1.71	0.00
Glt28d2	glycosyltransferase 28 domain containing 2	1455455_at	-1.71	0.00
1810014B01Rik	RIKEN cDNA 1810014B01 gene	1429260_at	-1.71	0.00
Ythdf3	YTH domain family 3	1426840_at	-1.72	0.00
Wdr40b	WD repeat domain 40B	1434170_at	-1.72	0.00
Fzd7	frizzled homolog 7 (Drosophila)	1450044_at	-1.72	0.00
Trf	transferrin	1425546_a_at	-1.72	0.00
5430431D22Rik	RIKEN cDNA 5430431D22 gene	1431110_at	-1.72	0.00
9630058J23Rik	RIKEN cDNA 9630058J23 gene	1436795_at	-1.72	0.00
Msi2	Musashi homolog 2 (Drosophila)	1435520_at	-1.72	0.00
Mef2c	Myocyte enhancer factor 2C	1446484_at	-1.72	0.00
Cep68	centrosomal protein 68	1436034_at	-1.72	0.00
Ptger3	prostaglandin E receptor 3 (subtype EP3)	1450344_a_at	-1.72	0.00
Oxa1l	oxidase assembly 1-like	1423738_at	-1.72	0.00
Omd	osteomodulin	1418745_at	-1.72	0.00
2310047C04Rik	RIKEN cDNA 2310047C04 gene	1458439_a_at	-1.72	0.00
Cdh2	Cadherin 2	1439307_at	-1.72	0.00
Rcor3	REST corepressor 3	1442538_at	-1.72	0.00
Serbp1	Serpine1 mRNA binding protein 1	1418565_at	-1.72	0.00
Arhgap20	Rho GTPase activating protein 20	1429918_at	-1.72	0.00
Pitpnc1	phosphatidylinositol transfer protein, cytoplasmic 1	1431074_a_at	-1.72	0.01
Opa3	optic atrophy 3 (human)	1455131_at	-1.72	0.00
Sncaip	synuclein, alpha interacting protein (synphilin)	1423499_at	-1.72	0.00
3222402P14Rik	RIKEN cDNA 3222402P14 gene	1455091_at	-1.72	0.00
Runx1t1	runt-related transcription factor 1; translocated to, 1 (cyclin D-related)	1444615_x_at	-1.72	0.00
Zfp397	zinc finger protein 397	1435664_at	-1.72	0.00
Cox7c	cytochrome c oxidase, subunit VIIc	1459885_s_at	-1.73	0.00
Stmn1	stathmin 1	1415849_s_at	-1.73	0.00
Chchd7	Coiled-coil-helix-coiled-coil-helix domain containing 7	1444318_at	-1.73	0.00
Bri3bp	Bri3 binding protein	1428744_s_at	-1.73	0.00
Rnf128	ring finger protein 128	1418318_at	-1.73	0.00
Mbnl1	muscleblind-like 1 (Drosophila)	1457924_at	-1.73	0.00
Lamb2	laminin, beta 2	1416513_at	-1.73	0.00
Tspan3	tetraspanin 3	1416009_at	-1.73	0.00
Nudt21	nudix (nucleoside diphosphate linked moiety X)-type motif 21	1428339_at	-1.73	0.00
Nr3c1	nuclear receptor subfamily 3, group C, member 1	1421866_at	-1.73	0.00
Sdc1	syndecan 1	1415943_at	-1.73	0.00
D19Wsu12e	DNA segment, Chr 19, Wayne State University 12, expressed	1433702_at	-1.73	0.00
C630002B14Rik	RIKEN cDNA C630002B14 gene	1443558_s_at	-1.73	0.00
Tbc1d4	TBC1 domain family, member 4	1455903_at	-1.73	0.00
5430405N12Rik	RIKEN cDNA 5430405N12 gene	1456070_at	-1.73	0.00
2210010L05Rik	RIKEN cDNA 2210010L05 gene	1424464_s_at	-1.73	0.00
Tesc	tescalcin	1418743_a_at	-1.73	0.00
Tmem108	transmembrane protein 108	1454729_at	-1.73	0.00
Prdm1	PR domain containing 1, with ZNF domain	1420425_at	-1.73	0.00
Pea15	phosphoprotein enriched in astrocytes 15	1416406_at	-1.73	0.00
Hfe2	hemochromatosis type 2 (juvenile) (human homolog)	1454137_s_at	-1.73	0.00
Ube2g1	ubiquitin-conjugating enzyme E2G 1 (UBC7 homolog, C. elegans)	1455094_s_at	-1.73	0.00
---	Transcribed locus	1435935_at	-1.73	0.00
2310067E19Rik	RIKEN cDNA 2310067E19 gene	1453448_at	-1.74	0.00
Ebf1	early B-cell factor 1	1448293_at	-1.74	0.00
Pde4d	Phosphodiesterase 4D, cAMP specific	1443289_at	-1.74	0.00
Plxnc1	plexin C1	1423213_at	-1.74	0.00
Fcmd	Fukuyama type congenital muscular dystrophy homolog (human)	1446624_at	-1.74	0.00
Pura	purine rich element binding protein A	1453783_at	-1.74	0.00
G430002G23Rik	RIKEN cDNA G430002G23 gene	1416804_at	-1.74	0.00
D4Bwg0951e	DNA segment, Chr 4, Brigham & Women's Genetics 0951 expressed	1428384_at	-1.74	0.00
Arhgef9	Cdc42 guanine nucleotide exchange factor (GEF) 9	1436577_at	-1.74	0.00
Dip2c	DIP2 disco-interacting protein 2 homolog C (Drosophila)	1429064_at	-1.74	0.00
Trak1	trafficking protein, kinesin binding 1	1456755_at	-1.74	0.00
Kitl	kit ligand	1426152_a_at	-1.74	0.00
Spsb4	splA/ryanodine receptor domain and SOCS box containing 4	1451419_at	-1.74	0.01
---	0 day neonate cerebellum cDNA, RIKEN full-length enriched library, clone:C230004E12 product:hypothetical protein, full insert sequence	1443306_at	-1.74	0.00
Xrcc2	X-ray repair complementing defective repair in Chinese hamster cells 2	1455335_at	-1.74	0.00
Htra1	HtrA serine peptidase 1	1416749_at	-1.74	0.00

Etv1	ets variant gene 1	1450684_at	-1.74	0.00
Col6a2	procollagen, type VI, alpha 2	1426947_x_at	-1.74	0.01
Auts2	Autism susceptibility candidate 2	1441869_x_at	-1.74	0.00
6430510M02Rik	RIKEN cDNA 6430510M02 gene	1457218_at	-1.74	0.00
Serpina1a /// Serpina1b	serine (or cysteine) peptidase inhibitor, clade A, member 1a /// serine (or cysteine) preptidase inhibitor, clade A, member 1b	1451513_x_at	-1.74	0.01
Plekhh1	pleckstrin homology domain containing, family H (with MyTH4 domain) member 1	1452517_at	-1.74	0.00
LOC676870	region containing RIKEN cDNA 2310056B04 gene; pre B-cell leukemia transcription factor 1	1428647_at	-1.74	0.00
Pfkl	phosphofructokinase, liver, B-type	1439148_a_at	-1.74	0.00
Zfp706	zinc finger protein 706	1426678_at	-1.74	0.00
Gpd2	glycerol phosphate dehydrogenase 2, mitochondrial	1428323_at	-1.74	0.00
Magi2	Membrane associated guanylate kinase, WW and PDZ domain containing 2	1440807_at	-1.74	0.00
4833423F13Rik	RIKEN cDNA 4833423F13 gene	1430622_at	-1.74	0.00
Nr1d1	nuclear receptor subfamily 1, group D, member 1	1426464_at	-1.74	0.00
Phldb1	pleckstrin homology-like domain, family B, member 1	1424468_s_at	-1.75	0.00
---	PREDICTED: Mus musculus hypothetical LOC434436 (LOC434436), mRNA	1447393_at	-1.75	0.00
Mkks	McKusick-Kaufman syndrome protein	1454014_a_at	-1.75	0.00
2310047C04Rik	RIKEN cDNA 2310047C04 gene	1454878_at	-1.75	0.00
Pi16	peptidase inhibitor 16	1453839_a_at	-1.75	0.01
Prkag2	protein kinase, AMP-activated, gamma 2 non-catalytic subunit	1423831_at	-1.75	0.00
Tmem48	transmembrane protein 48	1433813_at	-1.75	0.00
Ptprd	Protein tyrosine phosphatase, receptor type, D	1443053_at	-1.75	0.00
---	---	1437987_at	-1.75	0.00
Sec14l1	SEC14-like 1 (S. cerevisiae)	1453412_a_at	-1.75	0.00
Zbtb20	Zinc finger and BTB domain containing 20	1440565_at	-1.75	0.00
Prickle1	Prickle like 1 (Drosophila)	1442400_at	-1.75	0.00
Tbx20	T-box 20	1453351_at	-1.75	0.00
Kcnip2	Kv channel-interacting protein 2	1425870_a_at	-1.75	0.01
A530016L24Rik	RIKEN cDNA A530016L24 gene	1451606_at	-1.75	0.00
---	---	1433968_a_at	-1.75	0.00
Dnmt3a	DNA methyltransferase 3A	1423066_at	-1.75	0.00
Fbxl7	F-box and leucine-rich repeat protein 7	1457966_at	-1.75	0.00
Mgrn1	mahogunin, ring finger 1	1454645_at	-1.75	0.00
Podxl	podocalyxin-like	1448688_at	-1.75	0.01
2810416A17Rik	RIKEN cDNA 2810416A17 gene	1433266_at	-1.75	0.00
2410022L05Rik	RIKEN cDNA 2410022L05 gene	1420113_s_at	-1.76	0.00
B3galnt2	UDP-GalNAc:betaGlcNAc beta 1,3-galactosaminyltransferase, polypeptide 2	1454842_a_at	-1.76	0.00
Slc8a1	Solute carrier family 8 (sodium/calcium exchanger), member 1	1444985_at	-1.76	0.00
Rbm3	RNA binding motif protein 3	1429169_at	-1.76	0.00
---	Transcribed locus	1438078_at	-1.76	0.00
Tmcc2	transmembrane and coiled-coil domains 2	1452666_a_at	-1.76	0.00
Slc25a29	solute carrier family 25 (mitochondrial carrier, palmitoylcarnitine transporter), member 29	1438187_at	-1.76	0.00
4930402H24Rik	RIKEN cDNA 4930402H24 gene	1453465_x_at	-1.76	0.00
Gpsm1	G-protein signalling modulator 1 (AGS3-like, C. elegans)	1436917_s_at	-1.76	0.01
H2-Aa	histocompatibility 2, class II antigen A, alpha	1435290_x_at	-1.76	0.00
Mrpl45	mitochondrial ribosomal protein L45	1423492_at	-1.76	0.00
Zfyve21	zinc finger, FYVE domain containing 21	1424670_s_at	-1.76	0.00
Ube2n	ubiquitin-conjugating enzyme E2N	1435384_at	-1.76	0.00
Smpd1	sphingomyelin phosphodiesterase 1, acid lysosomal	1448621_a_at	-1.76	0.00
---	---	1434581_at	-1.76	0.00
1190017O12Rik	RIKEN cDNA 1190017O12 gene	1417402_at	-1.76	0.00
Zfp238	zinc finger protein 238	1417010_at	-1.76	0.00
1110012J17Rik	RIKEN cDNA 1110012J17 gene	1429053_at	-1.76	0.00
Pdzd3	PDZ domain containing 3	1449330_at	-1.76	0.00
Sncg	synuclein, gamma	1417788_at	-1.76	0.00
Arhgap5	Rho GTPase activating protein 5	1450896_at	-1.76	0.00
Atp8a1	ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	1444355_at	-1.76	0.00
---	---	1443534_at	-1.76	0.01
Ets1	E26 avian leukemia oncogene 1, 5' domain	1452163_at	-1.76	0.00
Cpox	coproporphyrinogen oxidase	1422492_at	-1.76	0.00
Snai2	snail homolog 2 (Drosophila)	1418673_at	-1.76	0.00
---	12 days embryo spinal cord cDNA, RIKEN full-length enriched library, clone:C530050B12 product:unclassifiable, full insert sequence	1439035_at	-1.76	0.00
Elk3	ELK3, member of ETS oncogene family	1448797_at	-1.76	0.00
Cables1 /// LOC635753	Cdk5 and Abl enzyme substrate 1 /// similar to Cdk5 and Abl enzyme substrate 1	1422477_at	-1.76	0.00
Srpk2	serine/arginine-rich protein specific kinase 2	1417134_at	-1.77	0.00
C230093N12Rik	RIKEN cDNA C230093N12 gene	1426893_at	-1.77	0.00
---	---	1446963_at	-1.77	0.00
---	Transcribed locus	1456885_at	-1.77	0.00
Gnb1l	Guanine nucleotide binding protein (G protein), beta polypeptide 1-like	1441391_at	-1.77	0.00
Glt25d2	glycosyltransferase 25 domain containing 2	1437930_at	-1.77	0.00
D4Ertd429e	DNA segment, Chr 4, ERATO Doi 429, expressed	1454868_at	-1.77	0.00
Zfyve21	zinc finger, FYVE domain containing 21	1424669_at	-1.77	0.00
Yipf4	Yip1 domain family, member 4	1450418_a_at	-1.77	0.00
Aspa	aspartoacylase (aminoacylase) 2	1418472_at	-1.77	0.00
AU041783	expressed sequence AU041783	1436870_s_at	-1.77	0.01
Hemk1	HemK methyltransferase family member 1	1430287_s_at	-1.77	0.00
Nek1	NIMA (never in mitosis gene a)-related expressed kinase 1	1434267_at	-1.77	0.00
Bdh1	3-hydroxybutyrate dehydrogenase, type 1	1452257_at	-1.77	0.00
2410005O16Rik	RIKEN cDNA 2410005O16 gene	1457999_at	-1.77	0.00
Olfm1	olfactomedin 1	1425784_a_at	-1.77	0.00
---	Transcribed locus	1440411_at	-1.77	0.00
B230317C12Rik	RIKEN cDNA B230317C12 gene	1417147_at	-1.77	0.00
Chordc1	Cysteine and histidine-rich domain (CHORD)-containing, zinc-binding protein 1	1435574_at	-1.77	0.00
Ankrd50	ankrin repeat domain 50	1435880_at	-1.77	0.00
Pgm5	phosphoglucomutase 5	1437871_at	-1.77	0.00
Ncald	neurocalcin delta	1417568_at	-1.77	0.00
Slc22a1	solute carrier family 22 (organic cation transporter), member 1	1418118_at	-1.77	0.00
Mrpl19	mitochondrial ribosomal protein L19	1421914_s_at	-1.78	0.00
Rcbtb2	regulator of chromosome condensation (RCC1) and BTB (POZ) domain containing protein 2	1416390_at	-1.78	0.00
Cx3cr1	chemokine (C-X3-C) receptor 1	1450020_at	-1.78	0.00
Lpgat1	lysophosphatidylglycerol acyltransferase 1	1424350_s_at	-1.78	0.00
Etv1	ets variant gene 1	1422607_at	-1.78	0.00
Lace1	lactation elevated 1	1427073_at	-1.78	0.00

4930533K18Rik /// Bicc1	RIKEN cDNA 4930533K18 gene /// bicaudal C homolog 1 (Drosophila)	1436029_at	-1.78	0.00
Ccdc3	coiled-coil domain containing 3	1428549_at	-1.78	0.00
Tbx3	T-box 3	1437479_x_at	-1.78	0.00
Larp5	La ribonucleoprotein domain family, member 5	1434597_at	-1.78	0.00
Atxn1	Ataxin 1	1457605_at	-1.78	0.00
Pde3b	phosphodiesterase 3B, cGMP-inhibited	1433694_at	-1.78	0.00
Ebf1	Early B-cell factor 1	1441627_at	-1.78	0.00
Mterfd3	MTERF domain containing 3	1455700_at	-1.78	0.00
Cideb	cell death-inducing DNA fragmentation factor, alpha subunit-like effector B	1418976_s_at	-1.78	0.00
Tmem25	transmembrane protein 25	1452962_at	-1.78	0.00
Rragd	Ras-related GTP binding D	1434909_at	-1.78	0.00
Itpkb	inositol 1,4,5-trisphosphate 3-kinase B	1441058_at	-1.78	0.00
Ift81	intraflagellar transport 81 homolog (Chlamydomonas)	1449407_at	-1.78	0.00
---	Adult male hypothalamus cDNA, RIKEN full-length enriched library, clone:A230069E07 product:unclassifiable, full insert sequence	1456813_at	-1.78	0.01
Rgs4	regulator of G-protein signaling 4	1416286_at	-1.78	0.00
Itpkb	inositol 1,4,5-trisphosphate 3-kinase B	1435272_at	-1.78	0.00
Bmp6	bone morphogenetic protein 6	1450759_at	-1.78	0.00
Fcmd	Fukuyama type congenital muscular dystrophy homolog (human)	1435801_at	-1.78	0.00
1200009O22Rik	RIKEN cDNA 1200009O22 gene	1452961_at	-1.78	0.00
Adcy5	adenylate cyclase 5	1455296_at	-1.78	0.00
Gpm6a	glycoprotein m6a	1426442_at	-1.78	0.00
D530005L17Rik	RIKEN cDNA D530005L17 gene	1451469_at	-1.78	0.00
Nfia	nuclear factor I/A	1446990_at	-1.78	0.00
Yipf7	Yip1 domain family, member 7	1422927_at	-1.78	0.00
Tgfbi	transforming growth factor, beta induced	1437463_x_at	-1.78	0.00
A830039H10Rik	RIKEN cDNA A830039H10 gene	1456712_at	-1.78	0.00
---	---	1455690_at	-1.78	0.00
Phf17	PHD finger protein 17	1426752_at	-1.78	0.00
Vegfa	vascular endothelial growth factor A	1451959_a_at	-1.78	0.00
Asph	aspartate-beta-hydroxylase	1450058_at	-1.78	0.00
Pvrl3	poliovirus receptor-related 3	1448673_at	-1.79	0.00
Ppp1r12b	protein phosphatase 1, regulatory (inhibitor) subunit 12B	1434786_at	-1.79	0.00
Ptpla	protein tyrosine phosphatase-like (proline instead of catalytic arginine), member a	1457434_s_at	-1.79	0.00
Oact2	O-acyltransferase (membrane bound) domain containing 2	1425029_a_at	-1.79	0.00
Centg2	centaurin, gamma 2	1435433_at	-1.79	0.00
Zfp462	Zinc finger protein 462	1456789_at	-1.79	0.00
2700049H19Rik	RIKEN cDNA 2700049H19 gene	1427112_at	-1.79	0.00
Ephx1	epoxide hydrolase 1, microsomal	1422438_at	-1.79	0.01
Ncald	Neurocalcin delta	1458037_at	-1.79	0.00
1200009F10Rik	RIKEN cDNA 1200009F10 gene	1429065_at	-1.79	0.00
Slit2	slit homolog 2 (Drosophila)	1424659_at	-1.79	0.00
---	---	1457227_at	-1.79	0.00
Tfrc	transferrin receptor	1422966_a_at	-1.79	0.01
Tubb2c	tubulin, beta 2c	1423642_at	-1.79	0.00
Mapre2	microtubule-associated protein, RP/EB family, member 2	1451990_at	-1.79	0.00
Itpr2	inositol 1,4,5-triphosphate receptor 2	1424833_at	-1.79	0.00
Pitpnc1	phosphatidylinositol transfer protein, cytoplasmic 1	1452939_a_at	-1.79	0.00
---	0 day neonate thymus cDNA, RIKEN full-length enriched library, clone:A430079C03 product:unclassifiable, full insert sequence	1455601_at	-1.79	0.00
Abtb2	ankyrin repeat and BTB (POZ) domain containing 2	1433453_a_at	-1.79	0.00
Amd1	S-adenosylmethionine decarboxylase 1	1448484_at	-1.79	0.00
Rhobtb3	Rho-related BTB domain containing 3	1433647_s_at	-1.79	0.00
Heph	hephaestin	1448696_at	-1.79	0.00
Hmgb3	high mobility group box 3	1416155_at	-1.80	0.00
Crhr2	corticotropin releasing hormone receptor 2	1422012_at	-1.80	0.00
Cdon	cell adhesion molecule-related/down-regulated by oncogenes	1434957_at	-1.80	0.00
Gmps	guanine monphosphate synthetase	1435656_at	-1.80	0.00
Slc6a6	solute carrier family 6 (neurotransmitter transporter, taurine), member 6	1421346_a_at	-1.80	0.01
4931420C21Rik	RIKEN cDNA 4931420C21 gene	1418749_at	-1.80	0.00
Tob1	transducer of ErbB-2.1	1423176_at	-1.80	0.00
Cand1	cullin associated and neddylation disassociated 1	1435781_at	-1.80	0.00
Acvr2a	Activin receptor IIA	1437382_at	-1.80	0.00
Tial1	Tial1 cytotoxic granule-associated RNA binding protein-like 1	1452821_at	-1.80	0.00
---	---	1438537_at	-1.80	0.00
Pde7a	phosphodiesterase 7A	1423313_at	-1.80	0.00
1110007M04Rik	RIKEN cDNA 1110007M04 gene	1435333_at	-1.80	0.00
Gstt1	glutathione S-transferase, theta 1	1418186_at	-1.80	0.01
Acvr2a	Activin receptor IIA	1439643_at	-1.80	0.00
Nudt8	nudix (nucleoside diphosphate linked moiety X)-type motif 8	1450111_a_at	-1.80	0.00
A930008G19Rik	RIKEN cDNA A930008G19 gene	1455428_at	-1.80	0.00
Homer1	homer homolog 1 (Drosophila)	1421768_a_at	-1.80	0.00
Zfp306	zinc finger protein 306	1437892_at	-1.80	0.00
Slc38a1	solute carrier family 38, member 1	1454764_s_at	-1.80	0.00
Abcb7	ATP-binding cassette, sub-family B (MDR/TAP), member 7	1435006_s_at	-1.80	0.00
Nudt3	nudix (nucleotide diphosphate linked moiety X)-type motif 3	1451575_a_at	-1.80	0.00
C230093N12Rik	RIKEN cDNA C230093N12 gene	1426894_s_at	-1.80	0.00
Osbpl1a	oxysterol binding protein-like 1A	1460192_at	-1.80	0.00
Ankrd25	ankyrin repeat domain 25	1460559_at	-1.80	0.00
Narf	nuclear prelamin A recognition factor	1425344_at	-1.80	0.00
1700110N18Rik	RIKEN cDNA 1700110N18 gene	1430596_s_at	-1.80	0.00
Ccdc21	coiled-coil domain containing 21	1451212_at	-1.81	0.00
Ehbp1	EH domain binding protein 1	1442772_at	-1.81	0.00
Ivns1abp	influenza virus NS1A binding protein	1450084_s_at	-1.81	0.00
Lonrf2	LON peptidase N-terminal domain and ring finger 2	1429965_at	-1.81	0.00
Mrpl3	Mitochondrial ribosomal protein L3	1440636_at	-1.81	0.00
Map2k6	mitogen activated protein kinase kinase 6	1426850_a_at	-1.81	0.00
Irx4	Iroquois related homeobox 4 (Drosophila)	1419539_at	-1.81	0.00
---	Adult male urinary bladder cDNA, RIKEN full-length enriched library, clone:9530098H01 product:unclassifiable, full insert sequence	1439362_at	-1.81	0.00
Waspip	Wiskott-Aldrich syndrome protein interacting protein	1436954_at	-1.81	0.00
Gnb5	guanine nucleotide binding protein, beta 5	1422208_a_at	-1.81	0.00
2900054C01Rik	RIKEN cDNA 2900054C01 gene	1429625_at	-1.81	0.00
Mum1l1	melanoma associated antigen (mutated) 1-like 1	1455238_at	-1.81	0.00
Bmp6	Bone morphogenetic protein 6	1459947_at	-1.81	0.00
Smpdl3a	sphingomyelin phosphodiesterase, acid-like 3A	1416635_at	-1.81	0.00
Pdss1	prenyl (solanesyl) diphosphate synthase, subunit 1	1431893_a_at	-1.81	0.00

Tgfb3	transforming growth factor, beta 3	1417455_at	-1.81	0.00
Mrpl34	mitochondrial ribosomal protein L34	1416349_at	-1.81	0.00
Ccnd2	cyclin D2	1434745_at	-1.81	0.00
5730472N09Rik	RIKEN cDNA 5730472N09 gene	1454621_s_at	-1.81	0.00
Myl4	myosin, light polypeptide 4	1422580_at	-1.81	0.00
Ptpla	protein tyrosine phosphatase-like (proline instead of catalytic arginine), member a	1456315_a_at	-1.81	0.00
3222402P14Rik	RIKEN cDNA 3222402P14 gene	1437869_at	-1.81	0.00
Kcnk2	potassium channel, subfamily K, member 2	1449158_at	-1.81	0.00
AW547186	expressed sequence AW547186	1433854_at	-1.81	0.00
Gsn	gelsolin	1436991_x_at	-1.81	0.00
Zfp422-rs1	zinc finger protein 422, related sequence 1	1429560_at	-1.81	0.00
Nrxn1	neurexin I	1454691_at	-1.81	0.00
---	16 days neonate heart cDNA, RIKEN full-length enriched library, clone:D830033B01 product:unclassifiable, full insert sequence	1444153_at	-1.81	0.01
Tspan18	tetraspanin 18	1442174_at	-1.81	0.00
Mgll	monoglyceride lipase	1453836_a_at	-1.82	0.00
Ahr	aryl-hydrocarbon receptor	1422631_at	-1.82	0.00
---	---	1458099_at	-1.82	0.00
Farp2	FERM, RhoGEF and pleckstrin domain protein 2	1435985_at	-1.82	0.00
Grhl2	grainyhead-like 2 (Drosophila)	1427046_at	-1.82	0.00
LOC667373 /// LOC669129 /// LOC676702	similar to interferon-induced protein with tetratricopeptide repeats 1 /// similar to interferon-induced protein with tetratricopeptide repeats 1 /// similar to interferon-induced protein with tetratricopeptide repeats 1	1435529_at	-1.82	0.00
2400010G15Rik	RIKEN cDNA 2400010G15 gene	1424259_at	-1.82	0.00
9930024M15Rik	RIKEN cDNA 9930024M15 gene	1457801_at	-1.82	0.00
Camk2n1	calcium/calmodulin-dependent protein kinase II inhibitor 1	1456609_at	-1.82	0.00
Acvr1	activin A receptor, type 1	1448460_at	-1.82	0.00
Frzb	frizzled-related protein	1416658_at	-1.82	0.00
Tbc1d16	TBC1 domain family, member 16	1435763_at	-1.82	0.00
2700089E24Rik	RIKEN cDNA 2700089E24 gene	1453208_at	-1.82	0.00
Gata4	GATA binding protein 4	1418863_at	-1.82	0.00
1500001A10Rik	RIKEN cDNA 1500001A10 gene	1435062_at	-1.82	0.00
Mgll	monoglyceride lipase	1426785_s_at	-1.82	0.00
AI663975	Expressed sequence AI663975	1440084_at	-1.82	0.00
Mrpl18	mitochondrial ribosomal protein L18	1448373_at	-1.82	0.00
Rab21	RAB21, member RAS oncogene family	1437742_at	-1.82	0.00
Prox1	prospero-related homeobox 1	1457432_at	-1.82	0.00
Nkiras1	NFKB inhibitor interacting Ras-like protein 1	1428503_a_at	-1.82	0.00
Frmd6	FERM domain containing 6	1451264_at	-1.82	0.00
Ptprb	protein tyrosine phosphatase, receptor type, B	1427486_at	-1.83	0.00
Hrsp12	heat-responsive protein 12	1428326_s_at	-1.83	0.00
BC017612	cDNA sequence BC017612	1419403_at	-1.83	0.00
9930021J17Rik	RIKEN cDNA 9930021J17 gene	1437371_at	-1.83	0.00
Kbtbd3	kelch repeat and BTB (POZ) domain containing 3	1439062_at	-1.83	0.00
1700113I22Rik	RIKEN cDNA 1700113I22 gene	1454256_s_at	-1.83	0.00
Rgs2	regulator of G-protein signaling 2	1419247_at	-1.83	0.00
AW547186	expressed sequence AW547186	1454741_s_at	-1.83	0.00
Il17d	interleukin 17D	1435714_x_at	-1.83	0.00
Plekha6	pleckstrin homology domain containing, family A member 6	1427149_at	-1.83	0.00
Slc4a4	solute carrier family 4 (anion exchanger), member 4	1426432_a_at	-1.83	0.00
Gtl2	GTL2, imprinted maternally expressed untranslated mRNA	1436713_s_at	-1.83	0.00
Entpd5	ectonucleoside triphosphate diphosphohydrolase 5	1417384_at	-1.83	0.00
E430002G05Rik	RIKEN cDNA E430002G05 gene	1433529_at	-1.83	0.00
Ift81	intraflagellar transport 81 homolog (Chlamydomonas)	1419286_s_at	-1.83	0.00
6330403M23Rik	RIKEN cDNA 6330403M23 gene	1455538_at	-1.83	0.00
1110019J04Rik	RIKEN cDNA 1110019J04 gene	1415733_a_at	-1.83	0.00
Ar	androgen receptor	1437064_at	-1.83	0.00
Ndn	necdin	1415923_at	-1.83	0.00
Ndn	necdin	1455792_x_at	-1.83	0.00
Clcn3	chloride channel 3	1433486_at	-1.83	0.00
5730472N09Rik	RIKEN cDNA 5730472N09 gene	1449714_at	-1.83	0.00
Ndn	necdin	1435383_x_at	-1.83	0.00
Vav3	vav 3 oncogene	1417122_at	-1.83	0.00
Npy1r	neuropeptide Y receptor Y1	1421471_at	-1.83	0.00
Ube2a	ubiquitin-conjugating enzyme E2A, RAD6 homolog (S. cerevisiae)	1417609_at	-1.84	0.00
Pea15	Phosphoprotein enriched in astrocytes 15	1459733_at	-1.84	0.00
Plagl1	pleiomorphic adenoma gene-like 1	1426208_x_at	-1.84	0.00
Hccs	holocytochrome c synthetase	1420889_at	-1.84	0.00
A930008G19Rik	RIKEN cDNA A930008G19 gene	1431173_at	-1.84	0.00
Arhgef6	Rac/Cdc42 guanine nucleotide exchange factor (GEF) 6	1429012_at	-1.84	0.00
D030029J20Rik	RIKEN cDNA D030029J20 gene	1437885_at	-1.84	0.00
Tspan6	tetraspanin 6	1448501_at	-1.84	0.00
1700021F05Rik	RIKEN cDNA 1700021F05 gene	1421019_at	-1.84	0.00
Pfkm	phosphofructokinase, muscle	1416780_at	-1.84	0.00
Vegfc	vascular endothelial growth factor C	1419417_at	-1.84	0.00
Sfrp2	secreted frizzled-related protein 2	1448201_at	-1.84	0.00
Fhod3	formin homology 2 domain containing 3	1435551_at	-1.84	0.00
Gga2	golgi associated, gamma adaptin ear containing, ARF binding protein 2	1428141_at	-1.84	0.00
Rgnef	Rho-guanine nucleotide exchange factor	1419458_at	-1.84	0.00
Nhlrc1	NHL repeat containing 1	1435213_at	-1.84	0.00
Lbh	limb-bud and heart	1429088_at	-1.84	0.00
Thy1	thymus cell antigen 1, theta	1423135_at	-1.84	0.00
6430514L14Rik	RIKEN cDNA 6430514L14 gene	1425213_at	-1.84	0.00
Ndn	necdin	1435382_at	-1.84	0.00
Aldh5a1	aldhehyde dehydrogenase family 5, subfamily A1	1453065_at	-1.85	0.00
C030018P15Rik	RIKEN cDNA C030018P15 gene	1419940_at	-1.85	0.00
Cacna1c	Calcium channel, voltage-dependent, L type, alpha 1C subunit	1441679_at	-1.85	0.00
Dbh	dopamine beta hydroxylase	1459848_x_at	-1.85	0.00
Ebf3	early B-cell factor 3	1452751_at	-1.85	0.00
Ppapdc3	phosphatidic acid phosphatase type 2 domain containing 3	1424362_at	-1.85	0.00
Dach1	Dachshund 1 (Drosophila)	1447174_at	-1.85	0.01
Elovl5	ELOVL family member 5, elongation of long chain fatty acids (yeast)	1437211_x_at	-1.85	0.00
Cacnb2	calcium channel, voltage-dependent, beta 2 subunit	1452476_at	-1.85	0.00
Klhl23	kelch-like 23 (Drosophila)	1435743_at	-1.85	0.00
Vil2	villin 2	1450850_at	-1.85	0.00
1110003E01Rik	RIKEN cDNA 1110003E01 gene	1416767_a_at	-1.85	0.00
Zfp715	zinc finger protein 715	1434461_at	-1.85	0.00

Shox2	short stature homeobox 2	1438042_at	-1.85	0.00
Syne1	synaptic nuclear envelope 1	1421545_a_at	-1.85	0.00
Rora	RAR-related orphan receptor alpha	1457177_at	-1.85	0.00
Zc3h8	zinc finger CCCH type containing 8	1418495_at	-1.85	0.00
Cacna2d1	Calcium channel, voltage-dependent, alpha2/delta subunit 1	1446324_at	-1.85	0.00
Pp11r	placental protein 11 related	1449938_at	-1.85	0.00
Tnfaip8	tumor necrosis factor, alpha-induced protein 8	1416950_at	-1.85	0.00
AA407270	expressed sequence AA407270	1455180_at	-1.86	0.00
1110003F05Rik	RIKEN cDNA 1110003F05 gene	1441964_at	-1.86	0.00
Myo10	Myosin X	1427363_at	-1.86	0.00
Pitpnc1	phosphatidylinositol transfer protein, cytoplasmic 1	1428878_a_at	-1.86	0.00
Dkk3	dickkopf homolog 3 (Xenopus laevis)	1417312_at	-1.86	0.00
Stard10	START domain containing 10	1448956_at	-1.86	0.00
Lims1	LIM and senescent cell antigen-like domains 1	1418232_s_at	-1.86	0.00
Camk1d	Calcium/calmodulin-dependent protein kinase ID	1438643_at	-1.86	0.00
Narf	nuclear prelamin A recognition factor	1451678_at	-1.86	0.00
Tnxb	tenascin XB	1450798_at	-1.86	0.01
5730409N24Rik	RIKEN cDNA 5730409N24 gene	1430362_at	-1.87	0.01
Samd12	sterile alpha motif domain containing 12	1458114_at	-1.87	0.00
Kcnd3	potassium voltage-gated channel, Shal-related family, member 3	1435720_at	-1.87	0.00
Dact1	dapper homolog 1, antagonist of beta-catenin (xenopus)	1417937_at	-1.87	0.00
AA536749	expressed sequence AA536749	1456763_at	-1.87	0.00
Atp1b2	ATPase, Na+/K+ transporting, beta 2 polypeptide	1435148_at	-1.87	0.00
Metrn	meteorin, glial cell differentiation regulator	1427100_at	-1.87	0.00
Elovl5	ELOVL family member 5, elongation of long chain fatty acids (yeast)	1415840_at	-1.87	0.00
Ltbp1	latent transforming growth factor beta binding protein 1	1448870_at	-1.87	0.00
Mllt4	myeloid/lymphoid or mixed lineage-leukemia translocation to 4 homolog (Drosophila)	1436303_at	-1.87	0.00
Supv3l1	suppressor of var1, 3-like 1 (S. cerevisiae)	1460557_at	-1.87	0.00
Heyl	hairy/enhancer-of-split related with YRPW motif-like	1419303_at	-1.87	0.00
Zbtb20	zinc finger and BTB domain containing 20	1451577_at	-1.87	0.00
Macf1	microtubule-actin crosslinking factor 1	1428847_a_at	-1.87	0.00
Rwdd4a	RWD domain containing 4A	1424244_at	-1.87	0.00
Ivns1abp	influenza virus NS1A binding protein	1420961_a_at	-1.87	0.00
Dnaja1	DnaJ (Hsp40) homolog, subfamily A, member 1	1445729_at	-1.87	0.00
Kcnj5	potassium inwardly-rectifying channel, subfamily J, member 5	1441590_at	-1.87	0.00
Dspg3	dermatan sulphate proteoglycan 3	1421114_a_at	-1.87	0.00
6330509G02Rik	RIKEN cDNA 6330509G02 gene	1457354_at	-1.87	0.00
Zadh1	zinc binding alcohol dehydrogenase, domain containing 1	1429474_at	-1.87	0.00
Atp8a1	ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	1423597_at	-1.87	0.01
Maf	avian musculoaponeurotic fibrosarcoma (v-maf) AS42 oncogene homolog	1447849_s_at	-1.87	0.00
Srl /// LOC669709	sarcalumenin /// similar to sarcalumenin	1436867_at	-1.87	0.00
Pank4	pantothenate kinase 4	1435004_at	-1.87	0.00
Bicc1	bicaudal C homolog 1 (Drosophila)	1441137_at	-1.87	0.00
Egln1	EGL nine homolog 1 (C. elegans)	1451110_at	-1.87	0.00
Alad	aminolevulinate, delta-, dehydratase	1424877_a_at	-1.88	0.00
Slco2b1	solute carrier organic anion transporter family, member 2b1	1433933_s_at	-1.88	0.01
4933403F05Rik	RIKEN cDNA 4933403F05 gene	1434978_at	-1.88	0.00
Susd5	sushi domain containing 5	1438636_s_at	-1.88	0.00
Clasp1	CLIP associating protein 1	1452265_at	-1.88	0.00
Bri3	brain protein I3	1416924_at	-1.88	0.00
Entpd5	ectonucleoside triphosphate diphosphohydrolase 5	1417382_at	-1.88	0.00
LOC270335 /// LOC434328 /// LOC544983 /// LOC545175 /// LOC619711 /// LOC622782 /// LOC623857 /// LOC624831 /// LOC665837 /// LOC666017 /// LOC666200 /// LOC666464 /// LOC668524 /// LOC670117 /// LOC670242	hypothetical gene supported by BC019681; BC027236 /// hypothetical LOC434328 /// hypothetical LOC544983 /// hypothetical LOC545175 /// hypothetical LOC619711 /// hypothetical LOC622782 /// hypothetical protein LOC623857 /// hypothetical LOC624831 /// hypothetical protein LOC665837 /// hypothetical protein LOC666017 /// hypothetical protein LOC666200 /// hypothetical protein LOC666464 /// hypothetical protein LOC668524 /// hypothetical protein LOC670117 /// hypothetical protein LOC670242	1423071_x_at	-1.88	0.00
Col6a2	procollagen, type VI, alpha 2	1452250_a_at	-1.88	0.01
Atp2a3	ATPase, Ca++ transporting, ubiquitous	1421129_a_at	-1.88	0.00
9530096D07Rik	RIKEN cDNA 9530096D07 gene	1444450_at	-1.88	0.00
Pde4b	Phosphodiesterase 4B, cAMP specific	1447237_at	-1.88	0.00
5730406M06Rik	RIKEN cDNA 5730406M06 gene	1437041_at	-1.88	0.00
Thrb	Thyroid hormone receptor beta	1443100_at	-1.88	0.00
Atxn2	ataxin 2	1419866_s_at	-1.88	0.00
Qrsl1	glutaminyl-tRNA synthase (glutamine-hydrolyzing)-like 1	1456542_s_at	-1.88	0.00
2010001E11Rik /// AI317395	RIKEN cDNA 2010001E11 gene /// expressed sequence AI317395	1451760_s_at	-1.88	0.00
AW495713	expressed sequence AW495713	1441522_at	-1.88	0.00
Sesn1	Sestrin 1	1441649_at	-1.89	0.00
Sirt5	sirtuin 5 (silent mating type information regulation 2 homolog) 5 (S. cerevisiae)	1428915_at	-1.89	0.00
Usp15	ubiquitin specific peptidase 15	1436891_at	-1.89	0.00
Dapk2	death-associated kinase 2	1451453_at	-1.89	0.00
Pcolce2	procollagen C-endopeptidase enhancer 2	1451527_at	-1.89	0.01
Pck1	phosphoenolpyruvate carboxykinase 1, cytosolic	1423439_at	-1.89	0.00
Tmem64	transmembrane protein 64	1434307_at	-1.89	0.00
D230012E17Rik	RIKEN cDNA D230012E17 gene	1436317_at	-1.89	0.00
Elk3	ELK3, member of ETS oncogene family	1417662_at	-1.89	0.01
Ces3	carboxylesterase 3	1435371_x_at	-1.89	0.00
Trpc3	transient receptor potential cation channel, subfamily C, member 3	1417577_at	-1.89	0.00
Msi2	Musashi homolog 2 (Drosophila)	1435521_at	-1.89	0.00
Akap6	A kinase (PRKA) anchor protein 6	1440859_at	-1.89	0.00
Scd2	stearoyl-Coenzyme A desaturase 2	1415822_at	-1.89	0.00
BC037032	cDNA Sequence BC037032	1444682_at	-1.89	0.00
Rom1	rod outer segment membrane protein 1	1448996_at	-1.89	0.00
Tns3	tensin 3	1455333_at	-1.89	0.00
Anp32a	acidic (leucine-rich) nuclear phosphoprotein 32 family, member A	1421918_at	-1.89	0.00
Ppp1r14c	Protein phosphatase 1, regulatory (inhibitor) subunit 14c	1443799_at	-1.90	0.00
Gmnn	geminin	1417506_at	-1.90	0.00
BC004004	cDNA sequence BC004004	1434276_x_at	-1.90	0.00
B230380D07Rik	RIKEN cDNA B230380D07 gene	1436842_at	-1.90	0.00
A930004K21Rik	RIKEN cDNA A930004K21 gene	1435956_at	-1.90	0.00
2810013C04Rik	RIKEN cDNA 2810013C04 gene	1452991_at	-1.90	0.00
Sfrp1	secreted frizzled-related sequence protein 1	1460187_at	-1.90	0.00
Svep1	sushi, von Willebrand factor type A, EGF and pentraxin domain containing 1	1419182_at	-1.90	0.00
Tpm1	tropomyosin 1, alpha	1423721_at	-1.90	0.00
Olfml1	olfactomedin-like 1	1455663_at	-1.90	0.00

Ankrd24	ankyrin repeat domain 24	1430776_s_at	-1.90	0.00
AW495713	expressed sequence AW495713	1437077_at	-1.90	0.00
2810406C15Rik	RIKEN cDNA 2810406C15 gene	1423847_at	-1.91	0.00
2810055F11Rik	RIKEN cDNA 2810055F11 gene	1424692_at	-1.91	0.00
Setd8	SET domain containing (lysine methyltransferase) 8	1460687_at	-1.91	0.00
---	---	1439305_at	-1.91	0.00
8430408J09Rik	RIKEN cDNA 8430408J09 gene	1430196_at	-1.91	0.00
9630033F20Rik	RIKEN cDNA 9630033F20 gene	1439859_at	-1.91	0.00
5730472N09Rik	RIKEN cDNA 5730472N09 gene	1433493_at	-1.91	0.00
Sema6a	sema domain, transmembrane domain (TM), and cytoplasmic domain, (semaphorin) 6A	1436458_at	-1.91	0.00
BC004004	cDNA sequence BC004004	1416609_at	-1.91	0.00
Rxrg	retinoid X receptor gamma	1418782_at	-1.91	0.00
Ccnd2	cyclin D2	1455956_x_at	-1.91	0.00
Nr2f1	nuclear receptor subfamily 2, group F, member 1	1418157_at	-1.91	0.00
Klf12	Kruppel-like factor 12	1455521_at	-1.91	0.00
Trp53inp2	tumor protein p53 inducible nuclear protein 2	1452646_at	-1.91	0.00
Med12l	mediator of RNA polymerase II transcription, subunit 12 homolog (yeast)-like	1452864_at	-1.91	0.00
Mtap4	Microtubule-associated protein 4	1439467_at	-1.91	0.00
Plp1	proteolipid protein (myelin) 1	1451718_at	-1.91	0.00
4833416E15Rik	RIKEN cDNA 4833416E15 gene	1440339_at	-1.91	0.00
Cacna2d1	Calcium channel, voltage-dependent, alpha2/delta subunit 1	1441608_at	-1.91	0.00
Speg	SPEG complex locus	1425968_s_at	-1.92	0.00
Pfkfb1	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 1	1427213_at	-1.92	0.00
Gpsm1	G-protein signalling modulator 1 (AGS3-like, C. elegans)	1423690_s_at	-1.92	0.00
Ahrr	aryl-hydrocarbon receptor repressor	1420796_at	-1.92	0.00
Itpr1	inositol 1,4,5-triphosphate receptor 1	1417279_at	-1.92	0.00
Mapt	microtubule-associated protein tau	1455028_at	-1.92	0.00
Mtap1b	microtubule-associated protein 1 B	1450397_at	-1.92	0.00
Igsf4c	immunoglobulin superfamily, member 4C	1426263_at	-1.92	0.00
Atxn2	ataxin 2	1438143_s_at	-1.92	0.00
E030049G20Rik	RIKEN cDNA E030049G20 gene	1444086_at	-1.92	0.00
Runx1t1	runt-related transcription factor 1; translocated to, 1 (cyclin D-related)	1448785_at	-1.92	0.00
1110018F16Rik	RIKEN cDNA 1110018F16 gene	1429468_at	-1.92	0.00
Id4	inhibitor of DNA binding 4	1423259_at	-1.92	0.00
D7Ertd715e	DNA segment, Chr 7, ERATO Doi 715, expressed	1436964_at	-1.92	0.00
9530009M10Rik	RIKEN cDNA 9530009M10 gene	1445850_at	-1.92	0.00
Spata13	Spermatogenesis associated 13	1438543_at	-1.92	0.00
Smarcd3	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily d, member 3	1418467_at	-1.93	0.00
Ppat	phosphoribosyl pyrophosphate amidotransferase	1452831_s_at	-1.93	0.00
Id4	inhibitor of DNA binding 4	1450928_at	-1.93	0.00
Paqr4	progestin and adipoQ receptor family member IV	1423101_at	-1.93	0.00
Cdh11	cadherin 11	1450757_at	-1.93	0.00
E430016P22Rik	RIKEN cDNA E430016P22 gene	1456756_at	-1.93	0.00
Gas2l3	growth arrest-specific 2 like 3	1437244_at	-1.93	0.00
Ptplad2	protein tyrosine phosphatase-like A domain containing 2	1450967_at	-1.93	0.00
Pitpnc1	phosphatidylinositol transfer protein, cytoplasmic 1	1452940_x_at	-1.93	0.00
Dsc2	desmocollin 2	1426911_at	-1.93	0.00
Plxdc2	plexin domain containing 2	1418912_at	-1.93	0.00
---	---	1441193_at	-1.93	0.00
Efcab2	EF-hand calcium binding domain 2	1449884_at	-1.93	0.00
2810432L12Rik	RIKEN cDNA 2810432L12 gene	1423679_at	-1.93	0.00
Pde7a	phosphodiesterase 7A	1423314_s_at	-1.93	0.00
Ebf1	early B-cell factor 1	1416302_at	-1.93	0.00
1700110N18Rik	RIKEN cDNA 1700110N18 gene	1455299_at	-1.94	0.00
Prkcm	protein kinase C, mu	1422673_at	-1.94	0.00
Sfrs7	splicing factor, arginine/serine-rich 7	1424033_at	-1.94	0.00
Phf17	PHD finger protein 17	1452180_at	-1.94	0.00
Mgll	monoglyceride lipase	1450391_a_at	-1.94	0.00
5033430I15Rik	RIKEN cDNA 5033430I15 gene	1432509_at	-1.94	0.00
Higd1b	HIG1 domain family, member 1B	1449860_at	-1.94	0.00
Olfml2b	olfactomedin-like 2B	1423915_at	-1.94	0.00
2210015D19Rik	RIKEN cDNA 2210015D19 gene	1438285_at	-1.94	0.00
BC028528	cDNA sequence BC028528	1427996_at	-1.94	0.00
Txndc14	thioredoxin domain containing 14	1452130_at	-1.94	0.00
Mef2c	myocyte enhancer factor 2C	1451506_at	-1.94	0.00
Ptprm	protein tyrosine phosphatase, receptor type, M	1422541_at	-1.94	0.00
D13Ertd787e	DNA segment, Chr 13, ERATO Doi 787, expressed	1457304_at	-1.94	0.00
Tef	thyrotroph embryonic factor	1438033_at	-1.94	0.00
B230218O03	hypothetical protein B230218O03	1439777_at	-1.94	0.00
Ccnd2	cyclin D2	1448229_s_at	-1.94	0.00
Palld	palladin, cytoskeletal associated protein	1440635_at	-1.94	0.00
Ppm2c	protein phosphatase 2C, magnesium dependent, catalytic subunit	1438201_at	-1.94	0.00
Slc25a36	solute carrier family 25, member 36	1438520_at	-1.94	0.00
Ebf1	Early B-cell factor 1	1446669_at	-1.95	0.00
Rbmx	RNA binding motif protein, X chromosome	1416355_at	-1.95	0.00
Mitf	microphthalmia-associated transcription factor	1455214_at	-1.95	0.00
Snca	synuclein, alpha	1436853_a_at	-1.95	0.01
---	PREDICTED: Mus musculus similar to 60S ribosomal protein L12 (LOC382344), mRNA	1445539_at	-1.95	0.00
Timp2	tissue inhibitor of metalloproteinase 2	1454677_at	-1.95	0.00
Ccdc80	coiled-coil domain containing 80	1424187_at	-1.95	0.00
Ptcd2	Pentatricopeptide repeat domain 2	1458108_at	-1.95	0.00
B3galnt2	UDP-GalNAc:betaGlcNAc beta 1,3-galactosaminyltransferase, polypeptide 2	1434135_at	-1.95	0.00
1810013L24Rik	RIKEN cDNA 1810013L24 gene	1436478_at	-1.95	0.00
Kcnj3	potassium inwardly-rectifying channel, subfamily J, member 3	1421468_at	-1.95	0.00
Ebf3	early B-cell factor 3	1428349_s_at	-1.95	0.00
Gdpd1	glycerophosphodiester phosphodiesterase domain containing 1	1424077_at	-1.95	0.00
Dmpk	dystrophia myotonica-protein kinase	1434944_at	-1.95	0.00
AI464131	expressed sequence AI464131	1435417_at	-1.95	0.00
Ccnd2	cyclin D2	1430127_a_at	-1.95	0.00
Ptgfr	prostaglandin F receptor	1449828_at	-1.95	0.00
Plxnd1	Plexin D1	1451475_at	-1.95	0.00
AI256396	EST AI256396	1457042_at	-1.96	0.00
Gsn	gelsolin	1415812_at	-1.96	0.00
D13Bwg1146e	DNA segment, Chr 13, Brigham & Women's Genetics 1146 expressed	1437559_at	-1.96	0.00
Osbpl1a	oxysterol binding protein-like 1A	1416823_a_at	-1.96	0.00

2900084M01Rik	RIKEN cDNA 2900084M01 gene	1424790_at	-1.96	0.00
Slc4a4	solute carrier family 4 (anion exchanger), member 4	1452071_at	-1.96	0.00
Tmem47	Transmembrane protein 47	1420514_at	-1.96	0.00
Mef2c	myocyte enhancer factor 2C	1421028_a_at	-1.96	0.00
Fmod	fibromodulin	1415939_at	-1.96	0.00
Jam2	junction adhesion molecule 2	1419288_at	-1.96	0.00
Per3	period homolog 3 (Drosophila)	1460662_at	-1.96	0.01
Nrarp	Notch-regulated ankyrin repeat protein	1417985_at	-1.96	0.00
Rora	RAR-related orphan receptor alpha	1443511_at	-1.96	0.00
Asb14	ankyrin repeat and SOCS box-containing protein 14	1449547_at	-1.96	0.00
Mef2c	Myocyte enhancer factor 2C	1458551_at	-1.96	0.00
Mmachc	methylmalonic aciduria cblC type, with homocystinuria	1418915_at	-1.96	0.00
Itih5	inter-alpha (globulin) inhibitor H5	1436755_at	-1.96	0.00
H2-Aa /// H2-Ea	histocompatibility 2, class II antigen A, alpha /// histocompatibility 2, class II antigen E alpha	1452431_s_at	-1.96	0.00
Nr3c1	nuclear receptor subfamily 3, group C, member 1	1421867_at	-1.97	0.00
Thbs2	thrombospondin 2	1447862_x_at	-1.97	0.00
Slc8a1	solute carrier family 8 (sodium/calcium exchanger), member 1	1437675_at	-1.97	0.00
Tmod1	tropomodulin 1	1422754_at	-1.97	0.00
Ttn	Titin	1446450_at	-1.97	0.00
AB182283	cDNA sequence AB182283	1455509_at	-1.97	0.00
C78692	expressed sequence C78692	1446288_at	-1.97	0.00
Apcdd1	adenomatosis polyposis coli down-regulated 1	1449070_x_at	-1.97	0.00
Yipf4	Yip1 domain family, member 4	1426417_at	-1.97	0.00
Dmn	desmuslin	1455610_at	-1.97	0.00
Tmem38a	transmembrane protein 38a	1424177_at	-1.97	0.00
Zfp422-rs1	zinc finger protein 422, related sequence 1	1434896_at	-1.97	0.00
Nrp1	neuropilin 1	1448943_at	-1.97	0.00
Ptgfr	prostaglandin F receptor	1446331_at	-1.97	0.00
Gpc1	glypican 1	1417389_at	-1.97	0.00
---	Mus musculus, clone IMAGE:1512359, mRNA	1434766_at	-1.97	0.00
Gup1	Gup1, glycerol uptake/transporter homolog (yeast)	1424553_at	-1.97	0.00
Rwdd4a	RWD domain containing 4A	1457983_s_at	-1.97	0.00
Gas2l3	growth arrest-specific 2 like 3	1453416_at	-1.98	0.00
Hdgfrp3 /// Tm6sf1	hepatoma-derived growth factor, related protein 3 /// transmembrane 6 superfamily member 1	1424443_at	-1.98	0.00
A930031D07Rik	RIKEN cDNA A930031D07 gene	1436021_at	-1.98	0.00
---	---	1417466_at	-1.98	0.00
Fbln1	fibulin 1	1422540_at	-1.98	0.00
Txndc14 /// LOC433144	thioredoxin domain containing 14 /// similar to thioredoxin-related transmembrane protein 2	1437454_a_at	-1.98	0.00
Abcc9	ATP-binding cassette, sub-family C (CFTR/MRP), member 9	1435752_s_at	-1.98	0.00
6030490I01Rik	RIKEN cDNA 6030490I01 gene	1437873_at	-1.98	0.00
---	---	1438796_at	-1.98	0.00
Pctk2	PCTAIRE-motif protein kinase 2	1435143_at	-1.98	0.00
4732466D17Rik	RIKEN cDNA 4732466D17 gene	1438980_x_at	-1.98	0.00
---	Adult male corpora quadrigemina cDNA, RIKEN full-length enriched library, clone:B230306E21 product:unclassifiable, full insert sequence	1439994_at	-1.98	0.00
Golga4	golgi autoantigen, golgin subfamily a, 4	1448803_at	-1.98	0.00
Kcna1	potassium voltage-gated channel, shaker-related subfamily, member 1	1417416_at	-1.98	0.00
---	Adult male urinary bladder cDNA, RIKEN full-length enriched library, clone:9530098H01 product:unclassifiable, full insert sequence	1441885_s_at	-1.98	0.00
Esrrb	estrogen related receptor, beta	1436926_at	-1.99	0.00
Slc25a19	solute carrier family 25 (mitochondrial deoxynucleotide carrier), member 19	1424316_at	-1.99	0.00
6430601A21Rik	RIKEN cDNA 6430601A21 gene	1434682_at	-1.99	0.00
Rprc1	arginine/proline rich coiled-coil 1	1424040_at	-1.99	0.00
Efnb2	ephrin B2	1419638_at	-1.99	0.00
BC054438	cDNA sequence BC054438	1447915_x_at	-1.99	0.00
Rasgrp2	RAS, guanyl releasing protein 2	1442264_at	-1.99	0.00
Trak2	trafficking protein, kinesin binding 2	1435016_at	-1.99	0.00
---	---	1444269_at	-1.99	0.00
Arl15	ADP-ribosylation factor-like 15	1458605_at	-1.99	0.00
Qrsl1	glutaminyl-tRNA synthase (glutamine-hydrolyzing)-like 1	1429317_at	-1.99	0.00
---	---	1422697_s_at	-1.99	0.00
Hk2	hexokinase 2	1422612_at	-1.99	0.00
---	---	1459219_at	-1.99	0.00
D7Ertd715e	DNA segment, Chr 7, ERATO Doi 715, expressed	1455087_at	-1.99	0.00
1110032E23Rik	RIKEN cDNA 1110032E23 gene	1459490_at	-1.99	0.00
Pbx1	Pre B-cell leukemia transcription factor 1	1430183_at	-1.99	0.00
Ppm1a	protein phosphatase 1A, magnesium dependent, alpha isoform	1425537_at	-1.99	0.00
Zbtb20	zinc finger and BTB domain containing 20	1437066_at	-1.99	0.00
Gfra1	glial cell line derived neurotrophic factor family receptor alpha 1	1439015_at	-2.00	0.00
4833428M15Rik	RIKEN cDNA 4833428M15 gene	1431471_at	-2.00	0.00
Dhrs7c	dehydrogenase/reductase (SDR family) member 7C	1444504_at	-2.00	0.00
Arhgef6	Rac/Cdc42 guanine nucleotide exchange factor (GEF) 6	1442292_at	-2.00	0.00
Srpx2	sushi-repeat-containing protein, X-linked 2	1427919_at	-2.00	0.00
Ppm1k	protein phosphatase 1K (PP2C domain containing)	1441988_at	-2.00	0.00
Pbx1	Pre B-cell leukemia transcription factor 1	1442846_at	-2.00	0.00
Pbx1	pre B-cell leukemia transcription factor 1	1440037_at	-2.00	0.00
Mar-07	membrane-associated ring finger (C3HC4) 7	1440966_at	-2.00	0.00
4930402H24Rik	RIKEN cDNA 4930402H24 gene	1430285_at	-2.00	0.00
Slc4a3	solute carrier family 4 (anion exchanger), member 3	1453687_at	-2.00	0.00
Adrb1	adrenergic receptor, beta 1	1423420_at	-2.01	0.00
Kcnn2	potassium intermediate/small conductance calcium-activated channel, subfamily N, member 2	1448927_at	-2.01	0.00
---	Adult male olfactory brain cDNA, RIKEN full-length enriched library, clone:6430530M09 product:unclassifiable, full insert sequence	1460061_at	-2.01	0.00
Ppara	peroxisome proliferator activated receptor alpha	1449051_at	-2.01	0.00
Mtss1	metastasis suppressor 1	1424826_s_at	-2.01	0.00
Ankrd25	ankyrin repeat domain 25	1425991_a_at	-2.01	0.00
Chchd3	coiled-coil-helix-coiled-coil-helix domain containing 3	1459143_at	-2.01	0.00
Dpysl4	dihydropyrimidinase-like 4	1418298_s_at	-2.01	0.00
---	---	1456625_at	-2.01	0.00
Cacnb2	calcium channel, voltage-dependent, beta 2 subunit	1456401_at	-2.01	0.00
---	Transcribed locus	1458309_at	-2.01	0.00
Itgb1bp2	integrin beta 1 binding protein 2	1423238_at	-2.01	0.00

---	13 days embryo heart cDNA, RIKEN full-length enriched library, clone:D330025O06 product:unclassifiable, full insert sequence	1458081_at	-2.01	0.00
Neo1	neogenin	1444295_at	-2.01	0.00
Nnat	neuronatin	1423506_a_at	-2.02	0.00
Gucy1a3	guanylate cyclase 1, soluble, alpha 3	1420533_at	-2.02	0.00
Stk23	serine/threonine kinase 23	1418798_s_at	-2.02	0.00
1300001I01Rik	RIKEN cDNA 1300001I01 gene	1428106_at	-2.02	0.00
Car7	carbonic anhydrase 7	1443824_s_at	-2.02	0.00
1500005K14Rik	RIKEN cDNA 1500005K14 gene	1456603_at	-2.02	0.00
2410025L10Rik	RIKEN cDNA 2410025L10 gene	1428404_at	-2.02	0.00
Efnb2	ephrin B2	1419639_at	-2.02	0.00
BC004004	cDNA sequence BC004004	1416608_a_at	-2.02	0.00
Homer1	homer homolog 1 (Drosophila)	1425710_a_at	-2.02	0.00
Zfp191	zinc finger protein 191	1426896_at	-2.02	0.00
Mapre2	microtubule-associated protein, RP/EB family, member 2	1451989_a_at	-2.02	0.00
Pfkfb2	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2	1422090_a_at	-2.02	0.00
Lama2	laminin, alpha 2	1426285_at	-2.02	0.00
Sync	syncoilin	1422118_at	-2.02	0.00
Hist2h2be	histone 2, H2be	1447854_s_at	-2.03	0.00
D7Wsu130e	DNA segment, Chr 7, Wayne State University 130, expressed	1458040_at	-2.03	0.01
2310014F07Rik	RIKEN cDNA 2310014F07 gene	1453552_at	-2.03	0.00
Rwdd4a	RWD domain containing 4A	1424243_at	-2.03	0.00
4930534B04Rik	RIKEN cDNA 4930534B04 gene	1429229_s_at	-2.03	0.00
Rgs5	regulator of G-protein signaling 5	1420940_x_at	-2.03	0.00
Slc2a12	solute carrier family 2 (facilitated glucose transporter), member 12	1435911_s_at	-2.03	0.00
5430416B10Rik	RIKEN cDNA 5430416B10 gene	1454558_at	-2.03	0.00
BC053994	cDNA sequence BC053994	1455750_at	-2.03	0.00
Pde7a	phosphodiesterase 7A	1450933_at	-2.04	0.00
Nr3c1	nuclear receptor subfamily 3, group C, member 1	1460303_at	-2.04	0.00
Ndrg4	N-myc downstream regulated gene 4	1426615_s_at	-2.04	0.00
Doc2g	double C2, gamma	1450707_at	-2.04	0.00
Dnaja4	DnaJ (Hsp40) homolog, subfamily A, member 4	1434196_at	-2.04	0.00
Arhgap20	Rho GTPase activating protein 20	1427522_at	-2.05	0.00
1700113I22Rik	RIKEN cDNA 1700113I22 gene	1432073_at	-2.05	0.00
Asb5	ankyrin repeat and SOCs box-containing protein 5	1449356_at	-2.05	0.00
2310061C15Rik	RIKEN cDNA 2310061C15 gene	1427922_at	-2.05	0.00
Klhl4	kelch-like 4 (Drosophila)	1439078_at	-2.05	0.00
9430082L08Rik	RIKEN cDNA 9430082L08 gene	1430929_at	-2.05	0.00
Ccnd2	cyclin D2	1416122_at	-2.05	0.00
Entpd5	ectonucleoside triphosphate diphosphohydrolase 5	1433763_at	-2.05	0.00
Sost	sclerostin	1450179_at	-2.06	0.00
Myl7	myosin, light polypeptide 7, regulatory	1449071_at	-2.06	0.00
---	---	1455539_at	-2.06	0.00
2610018G03Rik	RIKEN cDNA 2610018G03 gene	1419033_at	-2.06	0.00
Fgf7	fibroblast growth factor 7	1438405_at	-2.06	0.00
Myct1	myc target 1	1452072_at	-2.06	0.00
Sh3d19	SH3 domain protein D19	1449084_s_at	-2.06	0.00
Tcea3	transcription elongation factor A (SII), 3	1424531_a_at	-2.06	0.00
Acpl2	acid phosphatase-like 2	1429390_at	-2.06	0.00
Fndc5	fibronectin type III domain containing 5	1453135_at	-2.06	0.00
Rhpn2	rhophilin, Rho GTPase binding protein 2	1434628_a_at	-2.06	0.00
---	Transcribed locus	1457306_at	-2.06	0.00
Gng11	guanine nucleotide binding protein (G protein), gamma 11	1448942_at	-2.06	0.00
Gas2l3	growth arrest-specific 2 like 3	1455980_a_at	-2.06	0.00
Smyd1	SET and MYND domain containing 1	1441667_s_at	-2.06	0.00
Ebf1	early B-cell factor 1	1416301_a_at	-2.06	0.00
Chchd3	Coiled-coil-helix-coiled-coil-helix domain containing 3	1437599_at	-2.07	0.00
Slc24a3	solute carrier family 24 (sodium/potassium/calcium exchanger), member 3	1424308_at	-2.07	0.00
Ncam1	neural cell adhesion molecule 1	1426865_a_at	-2.07	0.00
Prrx1	paired related homeobox 1	1439774_at	-2.07	0.00
Sema3b	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3B	1448415_a_at	-2.07	0.00
Olfml3	olfactomedin-like 3	1448475_at	-2.08	0.00
BF642829	expressed sequence BF642829	1435484_at	-2.08	0.00
Slc38a3	solute carrier family 38, member 3	1418706_at	-2.08	0.00
Fbln2	fibulin 2	1423407_a_at	-2.08	0.00
Aqp7	aquaporin 7	1418848_at	-2.08	0.00
Heyl	hairy/enhancer-of-split related with YRPW motif-like	1438886_at	-2.08	0.00
---	Transcribed locus	1458585_at	-2.08	0.00
---	Transcribed locus	1457373_at	-2.08	0.00
Hnt	neurotrimin	1458492_x_at	-2.08	0.00
Sesn3	sestrin 3	1453313_at	-2.08	0.00
Mrm1	mitochondrial rRNA methyltransferase 1 homolog (S. cerevisiae)	1424219_at	-2.08	0.00
Olfr78	olfactory receptor 78	1440009_at	-2.08	0.00
Msr2	macrophage scavenger receptor 2	1448891_at	-2.09	0.00
Pgm2l1	phosphoglucomutase 2-like 1	1452841_at	-2.09	0.00
Kcnv2	potassium channel, subfamily V, member 2	1440537_at	-2.09	0.00
Rgs2	regulator of G-protein signaling 2	1419248_at	-2.09	0.00
AI118064	Expressed sequence AI118064	1457721_at	-2.09	0.00
Ryr3	ryanodine receptor 3	1427427_at	-2.09	0.00
Tgfbi	transforming growth factor, beta induced	1448123_s_at	-2.09	0.00
AW061234	expressed sequence AW061234	1454984_at	-2.09	0.00
Mfhas1	Malignant fibrous histiocytoma amplified sequence 1	1439929_at	-2.09	0.00
Lynx1	Ly6/neurotoxin 1	1441952_x_at	-2.09	0.00
Atp2b2	ATPase, Ca++ transporting, plasma membrane 2	1433888_at	-2.09	0.00
Mgl2	macrophage galactose N-acetyl-galactosamine specific lectin 2	1438467_at	-2.10	0.00
Pdzx	PDZ domain containing, X chromosome	1449834_at	-2.10	0.00
Tspan12	tetraspanin 12	1454604_s_at	-2.10	0.00
Tgfbi	transforming growth factor, beta induced	1456250_x_at	-2.10	0.00
Col14a1	procollagen, type XIV, alpha 1	1428455_at	-2.10	0.00
1700110N18Rik	RIKEN cDNA 1700110N18 gene	1453593_at	-2.10	0.00
Vit	vitrin	1426231_at	-2.10	0.00
C330006P03Rik	RIKEN cDNA C330006P03 gene	1436387_at	-2.10	0.00
Apcdd1	adenomatosis polyposis coli down-regulated 1	1454822_x_at	-2.10	0.00
9530058B02Rik	RIKEN cDNA 9530058B02 gene	1417212_at	-2.10	0.00
Jarid2	Jumonji, AT rich interactive domain 2	1456661_at	-2.10	0.00
Slk	STE20-like kinase (yeast)	1441262_at	-2.10	0.00

Igf1	insulin-like growth factor 1	1452014_a_at	-2.10	0.00
Nr1d2	nuclear receptor subfamily 1, group D, member 2	1416958_at	-2.11	0.00
Ppargc1a	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	1456395_at	-2.11	0.00
Ptprr	protein tyrosine phosphatase, receptor type, R	1426047_a_at	-2.11	0.00
Cygb	cytoglobin	1423630_at	-2.11	0.00
---	0 day neonate eyeball cDNA, RIKEN full-length enriched library, clone:E130004J04 product:unclassifiable, full insert sequence	1439906_at	-2.11	0.00
Ches1	Checkpoint suppressor 1	1447325_at	-2.12	0.00
Nebl	nebulette	1438452_at	-2.12	0.00
Phtf2	putative homeodomain transcription factor 2	1437067_at	-2.12	0.00
Prnd	prion protein dublet	1425681_a_at	-2.12	0.00
Pon1	paraoxonase 1	1418190_at	-2.12	0.00
Kif6	kinesin family member 6	1442238_a_at	-2.12	0.00
Daam1	dishevelled associated activator of morphogenesis 1	1431035_at	-2.12	0.00
Plcb1	phospholipase C, beta 1	1435043_at	-2.12	0.00
Sdc1	syndecan 1	1437279_x_at	-2.12	0.00
Pitpnc1	phosphatidylinositol transfer protein, cytoplasmic 1	1435066_at	-2.12	0.00
Nr1d2	nuclear receptor subfamily 1, group D, member 2	1416959_at	-2.12	0.00
Lbh	limb-bud and heart	1451629_at	-2.12	0.00
Ramp1	receptor (calcitonin) activity modifying protein 1	1417481_at	-2.12	0.00
Dusp18	dual specificity phosphatase 18	1451270_at	-2.12	0.00
2700081O15Rik	RIKEN cDNA 2700081O15 gene	1437291_at	-2.13	0.00
1700012H17Rik	RIKEN cDNA 1700012H17 gene	1437150_at	-2.13	0.00
Hspb3	heat shock protein 3	1449872_at	-2.13	0.00
Myo6	myosin VI	1435559_at	-2.13	0.00
1700020I14Rik	RIKEN cDNA 1700020I14 gene	1428411_at	-2.13	0.00
Mest	mesoderm specific transcript	1423294_at	-2.13	0.00
Antxr1	anthrax toxin receptor 1	1451446_at	-2.13	0.00
Ndrg4	N-myc downstream regulated gene 4	1436188_a_at	-2.13	0.00
Nid2	nidogen 2	1423516_a_at	-2.13	0.00
Abcc9	ATP-binding cassette, sub-family C (CFTR/MRP), member 9	1420408_a_at	-2.14	0.00
Fat4	FAT tumor suppressor homolog 4 (Drosophila)	1459749_s_at	-2.14	0.00
Mtss1	metastasis suppressor 1	1434036_at	-2.14	0.00
Itgb6	integrin beta 6	1422983_at	-2.14	0.00
6330407I18Rik	RIKEN cDNA 6330407I18 gene	1429579_at	-2.14	0.00
Slc36a2	solute carrier family 36 (proton/amino acid symporter), member 2	1436521_at	-2.14	0.00
2310061C15Rik	RIKEN cDNA 2310061C15 gene	1452597_at	-2.14	0.00
Serpinf1	serine (or cysteine) peptidase inhibitor, clade F, member 1	1416168_at	-2.14	0.00
Abca8b	ATP-binding cassette, sub-family A (ABC1), member 8b	1427546_at	-2.14	0.00
Stxbp6	syntaxin binding protein 6 (amisyn)	1435396_at	-2.14	0.00
Nrp1	neuropilin 1	1457198_at	-2.14	0.00
Rps6ka5	ribosomal protein S6 kinase, polypeptide 5	1440343_at	-2.14	0.00
2700089E24Rik	RIKEN cDNA 2700089E24 gene	1460464_at	-2.15	0.01
Ephb1	Eph receptor B1	1455188_at	-2.15	0.00
Cpxm1	carboxypeptidase X 1 (M14 family)	1448901_at	-2.15	0.00
---	Adult male diencephalon cDNA, RIKEN full-length enriched library, clone:9330183L06 product:unclassifiable, full insert sequence	1438778_at	-2.15	0.00
1110003E01Rik	RIKEN cDNA 1110003E01 gene	1435464_at	-2.15	0.00
Matn2	matrilin 2	1455978_a_at	-2.15	0.00
Prdm16	PR domain containing 16	1440870_at	-2.15	0.00
BC072620	cDNA sequence BC072620	1456838_at	-2.15	0.00
Fndc1	fibronectin type III domain containing 1	1453321_at	-2.15	0.00
Clec7a	C-type lectin domain family 7, member a	1420699_at	-2.15	0.00
LOC629378 /// LOC666671	hypothetical protein LOC629378 /// similar to thymus expressed gene 3-like	1434415_at	-2.15	0.00
Ptprb	Protein tyrosine phosphatase, receptor type, B	1436367_at	-2.15	0.00
1110058L19Rik	RIKEN cDNA 1110058L19 gene	1418327_at	-2.15	0.00
C330008K14Rik	RIKEN cDNA C330008K14 gene	1436194_at	-2.15	0.00
8030447M02Rik	RIKEN cDNA 8030447M02 gene	1458601_at	-2.15	0.00
A730009E18Rik	RIKEN cDNA A730009E18 gene	1460147_at	-2.15	0.00
Mef2c	myocyte enhancer factor 2C	1424852_at	-2.15	0.00
D13Bwg1146e	DNA segment, Chr 13, Brigham & Women's Genetics 1146 expressed	1457743_at	-2.16	0.00
Mfap3l	microfibrillar-associated protein 3-like	1428804_at	-2.16	0.00
Tnfrsf19	tumor necrosis factor receptor superfamily, member 19	1448147_at	-2.16	0.00
Pitpnc1	phosphatidylinositol transfer protein, cytoplasmic 1	1428025_s_at	-2.16	0.00
Ptn	pleiotrophin	1448254_at	-2.16	0.00
Slc9a9	solute carrier family 9 (sodium/hydrogen exchanger), isoform 9	1433719_at	-2.16	0.00
Ebf3	early B-cell factor 3	1460666_a_at	-2.16	0.00
6430601A21Rik	RIKEN cDNA 6430601A21 gene	1437305_at	-2.16	0.00
Nfia	nuclear factor I/A	1438236_at	-2.16	0.00
Osbpl6	oxysterol binding protein-like 6	1457881_at	-2.17	0.00
Rbmx	RNA binding motif protein, X chromosome	1426863_at	-2.17	0.00
Cidec	cell death-inducing DFFA-like effector c	1452260_at	-2.17	0.00
---	---	1420942_s_at	-2.17	0.00
Nope	neighbor of Punc E11	1416473_a_at	-2.17	0.00
Tpm2	tropomyosin 2, beta	1419738_a_at	-2.17	0.00
Mdh1	malate dehydrogenase 1, NAD (soluble)	1438338_at	-2.17	0.00
1110018M03Rik	RIKEN cDNA 1110018M03 gene	1419376_at	-2.17	0.00
---	---	1438041_at	-2.17	0.00
Scn7a	sodium channel, voltage-gated, type VII, alpha	1427495_at	-2.17	0.00
Nfib	nuclear factor I/B	1434101_at	-2.18	0.00
2310068J10Rik	RIKEN cDNA 2310068J10 gene	1435399_at	-2.18	0.00
Vegfc	vascular endothelial growth factor C	1439766_x_at	-2.18	0.00
6330417G04Rik	RIKEN cDNA 6330417G04 gene	1440849_at	-2.18	0.00
Prrx1	paired related homeobox 1	1425526_a_at	-2.18	0.00
E130203B14Rik	RIKEN cDNA E130203B14 gene	1455050_at	-2.18	0.00
Sep-04	septin 4	1448729_a_at	-2.18	0.00
Casq2	calsequestrin 2	1422529_s_at	-2.19	0.00
AI605517	expressed sequence AI605517	1457797_at	-2.19	0.00
1110003F05Rik	RIKEN cDNA 1110003F05 gene	1429735_at	-2.19	0.00
Ppp1r12b	Protein phosphatase 1, regulatory (inhibitor) subunit 12B	1457338_at	-2.19	0.00
Tcf21	transcription factor 21	1417447_at	-2.19	0.00
Bach2	BTB and CNC homology 2	1437667_a_at	-2.19	0.00
Ptprd	protein tyrosine phosphatase, receptor type, D	1429052_at	-2.19	0.00
Sep-04	septin 4	1455422_x_at	-2.20	0.00
Adcy7	adenylate cyclase 7	1450065_at	-2.20	0.00
Chek2	CHK2 checkpoint homolog (S. pombe)	1422747_at	-2.20	0.00
---	---	1440989_at	-2.20	0.00

Ndufab1	NADH dehydrogenase (ubiquinone) 1, alpha/beta subcomplex, 1	1435934_at	-2.20	0.00
Timp2	tissue inhibitor of metalloproteinase 2	1450040_at	-2.20	0.00
1110007C02Rik	RIKEN cDNA 1110007C02 gene	1429189_at	-2.20	0.00
Ppp1r14a	protein phosphatase 1, regulatory (inhibitor) subunit 14A	1418086_at	-2.20	0.00
Cyp2e1	cytochrome P450, family 2, subfamily e, polypeptide 1	1415994_at	-2.20	0.01
Col6a1	procollagen, type VI, alpha 1	1448590_at	-2.21	0.01
Col4a4	procollagen, type IV, alpha 4	1440250_at	-2.21	0.00
Opcml	opioid binding protein/cell adhesion molecule-like	1457446_at	-2.21	0.00
Dnmt3a	DNA methyltransferase 3A	1442309_at	-2.21	0.00
Kctd12b	potassium channel tetramerisation domain containing 12b	1440355_at	-2.21	0.00
Ppargc1a	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	1437751_at	-2.21	0.00
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Fbxo30	F-box protein 30	1436550_at	-2.21	0.00
E030004N02Rik	RIKEN cDNA E030004N02 gene	1436515_at	-2.22	0.00
Magi3	membrane associated guanylate kinase, WW and PDZ domain containing 3	1435461_at	-2.22	0.00
Rps6ka2	ribosomal protein S6 kinase, polypeptide 2	1417542_at	-2.22	0.00
Pptc7	PTC7 protein phosphatase homolog (S. cerevisiae)	1455958_s_at	-2.22	0.00
Nr3c2	nuclear receptor subfamily 3, group C, member 2	1435991_at	-2.22	0.00
2410005O16Rik	RIKEN cDNA 2410005O16 gene	1438034_at	-2.22	0.00
Pcdh18	protocadherin 18	1422889_at	-2.22	0.00
Calm1	calmodulin 1	1433592_at	-2.22	0.00
D630040G17Rik /// LOC622675	RIKEN cDNA D630040G17 gene /// similar to zinc finger protein 64 (predicted)	1442562_at	-2.22	0.00
Fn3k	fructosamine 3 kinase	1418311_at	-2.22	0.00
Ar	androgen receptor	1455647_at	-2.23	0.00
Runx1t1	runt-related transcription factor 1; translocated to, 1 (cyclin D-related)	1437784_at	-2.23	0.00
D13Ertd787e	DNA segment, Chr 13, ERATO Doi 787, expressed	1420098_s_at	-2.23	0.00
1110018J23Rik	RIKEN cDNA 1110018J23 gene	1429024_at	-2.23	0.00
Sacs	sacsin	1434958_at	-2.23	0.00
Crip1	cysteine-rich protein 1 (intestinal)	1416326_at	-2.23	0.00
Ak1	adenylate kinase 1	1422184_a_at	-2.23	0.00
Alas1	aminolevulinic acid synthase 1	1424126_at	-2.23	0.00
Pank1	pantothenate kinase 1	1418715_at	-2.24	0.00
Nr3c1	nuclear receptor subfamily 3, group C, member 1	1457635_s_at	-2.24	0.00
Dep1	diabetic embryopathy 1	1427602_at	-2.24	0.00
Gdf10	growth differentiation factor 10	1424007_at	-2.24	0.00
Ppp1r16b	protein phosphatase 1, regulatory (inhibitor) subunit 16B	1455080_at	-2.24	0.00
Pias2	protein inhibitor of activated STAT 2	1428725_at	-2.24	0.00
BC054438	cDNA sequence BC054438	1436698_x_at	-2.24	0.00
Syne2	synaptic nuclear envelope 2	1427982_s_at	-2.24	0.00
Ndufs4	NADH dehydrogenase (ubiquinone) Fe-S protein 4	1418117_at	-2.24	0.00
Ppp1r3c	protein phosphatase 1, regulatory (inhibitor) subunit 3C	1425631_at	-2.25	0.00
Mapt	microtubule-associated protein tau	1424719_a_at	-2.25	0.00
Mbp	myelin basic protein	1419646_a_at	-2.25	0.00
Tgfbi	transforming growth factor, beta induced	1415871_at	-2.25	0.00
Esrrg	estrogen-related receptor gamma	1455267_at	-2.25	0.00
BC054438	cDNA sequence BC054438	1434621_at	-2.25	0.00
2610301F02Rik	RIKEN cDNA 2610301F02 gene	1447251_x_at	-2.25	0.00
Acpl2	acid phosphatase-like 2	1456735_x_at	-2.25	0.00
Ehbp1	EH domain binding protein 1	1424586_at	-2.25	0.00
Slc4a4	solute carrier family 4 (anion exchanger), member 4	1434096_at	-2.25	0.00
Pde5a	Phosphodiesterase 5A, cGMP-specific	1455970_at	-2.26	0.00
4933403F05Rik	RIKEN cDNA 4933403F05 gene	1434977_at	-2.26	0.00
Nqo2	NAD(P)H dehydrogenase, quinone 2	1436189_at	-2.26	0.00
Pcdh18	protocadherin 18	1422890_at	-2.26	0.00
Per3	period homolog 3 (Drosophila)	1441445_at	-2.26	0.00
Kif13a	Kinesin family member 13A	1447853_x_at	-2.26	0.00
Zadh1	zinc binding alcohol dehydrogenase, domain containing 1	1453156_s_at	-2.26	0.00
Actr3b	ARP3 actin-related protein 3 homolog B (yeast)	1435605_at	-2.26	0.00
Stard9 /// LOC668856 /// LOC670354	START domain containing 9 /// similar to StAR-related lipid transfer protein 9 (StARD9) (START domain-containing protein 9) /// similar to StAR-related lipid transfer protein 9 (StARD9) (START domain-containing protein 9)	1436324_at	-2.26	0.00
Mpped2	metallophosphoesterase domain containing 2	1435285_at	-2.27	0.00
---	Adult male vesicular gland cDNA, RIKEN full-length enriched library, clone:G630023F10 product:unclassifiable, full insert sequence	1442917_at	-2.27	0.00
Grb14	growth factor receptor bound protein 14	1417673_at	-2.27	0.00
Lims1	LIM and senescent cell antigen-like domains 1	1441411_at	-2.27	0.00
Zadh1	zinc binding alcohol dehydrogenase, domain containing 1	1433503_at	-2.27	0.00
Btbd3	BTB (POZ) domain containing 3	1433868_at	-2.27	0.00
Slc2a4	solute carrier family 2 (facilitated glucose transporter), member 4	1415958_at	-2.27	0.00
Lamb3	laminin, beta 3	1417812_a_at	-2.27	0.00
Mcc	mutated in colorectal cancers	1438081_at	-2.27	0.00
Cxxc6	CXXC finger 6	1429448_s_at	-2.28	0.00
Gpc6	Glypican 6	1443201_at	-2.28	0.00
Rasgrp2	RAS, guanyl releasing protein 2	1417804_at	-2.28	0.00
6330436F06Rik	RIKEN cDNA 6330436F06 gene	1433015_at	-2.28	0.00
Mtss1	metastasis suppressor 1	1440847_at	-2.28	0.00
2900069M18Rik	RIKEN cDNA 2900069M18 gene	1460531_at	-2.28	0.00
D15Ertd30e	DNA segment, Chr 15, ERATO Doi 30, expressed	1442833_at	-2.29	0.00
Pdlim2	PDZ and LIM domain 2	1423946_at	-2.29	0.00
1500016O10Rik	RIKEN cDNA 1500016O10 gene	1438641_x_at	-2.29	0.00
Mrc1	mannose receptor, C type 1	1450430_at	-2.29	0.00
Pank1	pantothenate kinase 1	1431028_a_at	-2.29	0.00
D630040G17Rik /// LOC622675	RIKEN cDNA D630040G17 gene /// similar to zinc finger protein 64 (predicted)	1439493_at	-2.29	0.00
Slc25a26	solute carrier family 25 (mitochondrial carrier, phosphate carrier), member 26	1428929_s_at	-2.30	0.00
Sh3rf1	SH3 domain containing ring finger 1	1445178_at	-2.30	0.00
---	Transcribed locus	1445421_at	-2.30	0.00
2610024A01Rik	RIKEN cDNA 2610024A01 gene	1428077_at	-2.30	0.00
Lpin1	lipin 1	1426516_a_at	-2.30	0.00
---	---	1435194_at	-2.30	0.00
Gata4	GATA binding protein 4	1441364_at	-2.30	0.00
Fabp7	fatty acid binding protein 7, brain	1450779_at	-2.30	0.00
B3galt2	UDP-Gal:betaGlcNAc beta 1,3-galactosyltransferase, polypeptide 2	1423084_at	-2.30	0.00
2310061C15Rik	RIKEN cDNA 2310061C15 gene	1427921_s_at	-2.30	0.00
Ccnh	cyclin H	1418585_at	-2.31	0.00
Kcnd2	potassium voltage-gated channel, Shal-related family, member 2	1422835_at	-2.31	0.00
Auts2	autism susceptibility candidate 2	1457139_at	-2.31	0.00
Fndc5	fibronectin type III domain containing 5	1435115_at	-2.31	0.00

Eif4e /// LOC630527	eukaryotic translation initiation factor 4E /// hypothetical LOC630527	1423220_at	-2.31	0.00
---	---	1458847_at	-2.31	0.00
AW548124	expressed sequence AW548124	1460411_s_at	-2.31	0.00
Cd83	CD83 antigen	1416111_at	-2.32	0.00
Col8a1	procollagen, type VIII, alpha 1	1418440_at	-2.32	0.00
BB164513	Expressed sequence BB164513	1439397_at	-2.32	0.00
---	---	1458341_x_at	-2.32	0.00
Upk3b	uroplakin 3B	1434237_at	-2.32	0.00
Dnajb14	DnaJ (Hsp40) homolog, subfamily B, member 14	1430561_at	-2.33	0.00
Rasgrp3	RAS, guanyl releasing protein 3	1438030_at	-2.33	0.00
Heyl	hairy/enhancer-of-split related with YRPW motif-like	1419302_at	-2.33	0.00
Tmem65	transmembrane protein 65	1452942_at	-2.33	0.00
G0s2	G0/G1 switch gene 2	1448700_at	-2.33	0.00
Emilin2	elastin microfibril interfacer 2	1435264_at	-2.33	0.00
AI956758	expressed sequence AI956758	1460003_at	-2.33	0.00
Dnmt3a	DNA methyltransferase 3A	1423063_at	-2.33	0.00
Mitf	microphthalmia-associated transcription factor	1422025_at	-2.33	0.00
Prkaa2	protein kinase, AMP-activated, alpha 2 catalytic subunit	1429464_at	-2.34	0.00
Colec12	collectin sub-family member 12	1419693_at	-2.34	0.00
Ckb	creatine kinase, brain	1455106_a_at	-2.34	0.00
1110021L09Rik	RIKEN cDNA 1110021L09 gene	1428795_at	-2.34	0.00
Ppp1r3c	protein phosphatase 1, regulatory (inhibitor) subunit 3C	1433691_at	-2.34	0.00
Thbs2	thrombospondin 2	1450663_at	-2.34	0.00
Alkbh7	alkB, alkylation repair homolog 7 (E. coli)	1428516_a_at	-2.35	0.00
Ces3	carboxylesterase 3	1435370_a_at	-2.35	0.00
Rpa3	replication protein A3	1448938_at	-2.35	0.00
Mycn	v-myc myelocytomatosis viral related oncogene, neuroblastoma derived (avian)	1417155_at	-2.35	0.00
A130092J06Rik	RIKEN cDNA A130092J06 gene	1433657_at	-2.35	0.00
Ppargc1a	Peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	1434100_x_at	-2.36	0.00
---	---	1436219_at	-2.36	0.00
BF642829	expressed sequence BF642829	1440227_at	-2.36	0.00
Lynx1	Ly6/neurotoxin 1	1417283_at	-2.36	0.00
Rgs2	regulator of G-protein signaling 2	1447830_s_at	-2.36	0.00
Postn	periostin, osteoblast specific factor	1423606_at	-2.36	0.00
Per3	period homolog 3 (Drosophila)	1421087_at	-2.37	0.00
Syde2 /// LOC639654	synapse defective 1, Rho GTPase, homolog 2 (C. elegans) /// similar to synapse defective 1, Rho GTPase, homolog 1	1437424_at	-2.37	0.00
Ddit4l	DNA-damage-inducible transcript 4-like	1444139_at	-2.37	0.00
Lims1	LIM and senescent cell antigen-like domains 1	1418230_a_at	-2.37	0.00
Sipa1l2	signal-induced proliferation-associated 1 like 2	1434261_at	-2.37	0.00
Car3	carbonic anhydrase 3	1453588_at	-2.37	0.00
P2ry1	purinergic receptor P2Y, G-protein coupled 1	1421456_at	-2.38	0.00
Ddef1	Development and differentiation enhancing	1438301_at	-2.38	0.00
Timp2	tissue inhibitor of metalloproteinase 2	1420924_at	-2.38	0.00
---	Adult male aorta and vein cDNA, RIKEN full-length enriched library, clone:A530095B21 product:unclassifiable, full insert sequence	1457883_at	-2.38	0.00
Ces3	carboxylesterase 3	1449081_at	-2.38	0.00
Ppargc1a	Peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	1434099_at	-2.38	0.00
Plscr4	phospholipid scramblase 4	1433626_at	-2.38	0.00
Mpped2	metallophosphoesterase domain containing 2	1431751_a_at	-2.38	0.00
LOC672274	similar to Transcription factor SOX-4	1433575_at	-2.38	0.00
Ppig	peptidyl-prolyl isomerase G (cyclophilin G)	1434475_at	-2.38	0.00
Prickle1	prickle like 1 (Drosophila)	1452249_at	-2.38	0.00
Naalad2	N-acetylated alpha-linked acidic dipeptidase 2	1422671_s_at	-2.39	0.00
Meox2	mesenchyme homeobox 2	1424234_s_at	-2.39	0.00
Npr3	natriuretic peptide receptor 3	1448024_at	-2.39	0.00
Pde7a	phosphodiesterase 7A	1458218_s_at	-2.39	0.00
B430119L13Rik	RIKEN cDNA B430119L13 gene	1435648_at	-2.39	0.00
B230343J05Rik	RIKEN cDNA B230343J05 gene	1436432_at	-2.40	0.00
Colec11	collectin sub-family member 11	1429179_at	-2.40	0.00
Gmps	guanine monphosphate synthetase	1455057_at	-2.40	0.00
Siah2	seven in absentia 2	1448170_at	-2.40	0.00
Kcna1	potassium voltage-gated channel, shaker-related subfamily, member 1	1437230_at	-2.40	0.00
Timp2	tissue inhibitor of metalloproteinase 2	1433662_s_at	-2.40	0.00
Klf12	Kruppel-like factor 12	1439847_s_at	-2.41	0.00
AW548124	expressed sequence AW548124	1454838_s_at	-2.41	0.00
Stk23	serine/threonine kinase 23	1447806_s_at	-2.41	0.00
Nope	neighbor of Punc E11	1416474_at	-2.41	0.00
Srpk2	serine/arginine-rich protein specific kinase 2	1417135_at	-2.42	0.00
Vegfc	vascular endothelial growth factor C	1440739_at	-2.42	0.00
Garnl4	GTPase activating RANGAP domain-like 4	1434754_at	-2.42	0.00
Slc25a29	solute carrier family 25 (mitochondrial carrier, palmitoylcarnitine transporter), member 29	1438188_x_at	-2.42	0.00
C130009A20Rik	RIKEN cDNA C130009A20 gene	1447623_s_at	-2.42	0.00
Csrp2	cysteine and glycine-rich protein 2	1420731_a_at	-2.42	0.00
C730029A08Rik	RIKEN cDNA C730029A08 gene	1436168_at	-2.42	0.00
Pla2g5	phospholipase A2, group V	1417814_at	-2.43	0.00
Cpxm2	carboxypeptidase X 2 (M14 family)	1460248_at	-2.43	0.00
Pnkd	paroxysmal nonkinesiogenic dyskinesia	1418746_at	-2.43	0.00
Bdh1	3-hydroxybutyrate dehydrogenase, type 1	1426959_at	-2.43	0.00
Fkbp4	FK506 binding protein 4	1416362_a_at	-2.43	0.00
Hrasls	HRAS-like suppressor	1428991_at	-2.44	0.00
---	---	1442473_at	-2.44	0.00
6330509G02Rik	RIKEN cDNA 6330509G02 gene	1434535_at	-2.44	0.00
Jam2	junction adhesion molecule 2	1436568_at	-2.44	0.00
2310010M20Rik	RIKEN cDNA 2310010M20 gene	1432107_at	-2.44	0.00
Gja3	gap junction membrane channel protein alpha 3	1439793_at	-2.45	0.00
Srpk2	serine/arginine-rich protein specific kinase 2	1435746_at	-2.45	0.00
D330017J20Rik	RIKEN cDNA D330017J20 gene	1433847_at	-2.45	0.00
A730046J16	hypothetical protein A730046J16	1433939_at	-2.45	0.00
Car8 /// LOC676792	carbonic anhydrase 8 /// similar to Carbonic anhydrase-related protein (CARP) (CA-VIII)	1427482_a_at	-2.45	0.00
Fap	fibroblast activation protein	1417552_at	-2.46	0.00
Pkia	protein kinase inhibitor, alpha	1420859_at	-2.46	0.00
Car14	carbonic anhydrase 14	1450725_s_at	-2.46	0.00
Tnni3k	TNNI3 interacting kinase	1458482_at	-2.47	0.00
Hccs	holocytochrome c synthetase	1420890_at	-2.47	0.00
B330003H21	hypothetical protein B330003H21	1441139_at	-2.47	0.00

Mgp	matrix Gla protein	1448416_at	-2.47	0.00
Ppp1r14c	protein phosphatase 1, regulatory (inhibitor) subunit 14c	1417701_at	-2.47	0.00
Smtn	smoothelin	1452469_a_at	-2.47	0.00
D130058I21Rik	RIKEN cDNA D130058I21 gene	1455794_at	-2.47	0.00
Homer2	homer homolog 2 (Drosophila)	1424367_a_at	-2.47	0.00
Reck	reversion-inducing-cysteine-rich protein with kazal motifs	1450784_at	-2.47	0.00
Per3	Period homolog 3 (Drosophila)	1458176_at	-2.47	0.00
Hdhd3	haloacid dehalogenase-like hydrolase domain containing 3	1425343_at	-2.48	0.00
Gucy1b3	guanylate cyclase 1, soluble, beta 3	1420872_at	-2.48	0.00
Ddit3	DNA-damage inducible transcript 3	1443897_at	-2.48	0.00
Spsb4	splA/ryanodine receptor domain and SOCS box containing 4	1451418_a_at	-2.48	0.00
Fbxw7	F-box and WD-40 domain protein 7, archipelago homolog (Drosophila)	1424986_s_at	-2.48	0.00
Frmd6	FERM domain containing 6	1457184_at	-2.49	0.00
AI452195	expressed sequence AI452195	1435280_at	-2.49	0.00
Eno3	Enolase 3, beta muscle	1449631_at	-2.49	0.00
Hlf	hepatic leukemia factor	1434735_at	-2.49	0.00
Mef2c	myocyte enhancer factor 2C	1421027_a_at	-2.49	0.00
Ttll1	tubulin tyrosine ligase-like 1	1426427_at	-2.50	0.00
Dynll2	dynein light chain LC8-type 2	1418258_s_at	-2.50	0.00
Prkaa2	protein kinase, AMP-activated, alpha 2 catalytic subunit	1429463_at	-2.50	0.00
A930038C07Rik	RIKEN cDNA A930038C07 gene	1460465_at	-2.51	0.00
Mbp	myelin basic protein	1456228_x_at	-2.51	0.00
Angptl2	angiopoietin-like 2	1421002_at	-2.51	0.00
Tspan2	tetraspanin 2	1424568_at	-2.52	0.00
Asb15	ankyrin repeat and SOCS box-containing protein 15	1439836_at	-2.52	0.00
Gpc6	glypican 6	1419688_at	-2.52	0.00
1700020I14Rik	RIKEN cDNA 1700020I14 gene	1437774_at	-2.52	0.00
---	Transcribed locus	1444307_at	-2.53	0.00
Fgf9	fibroblast growth factor 9	1438718_at	-2.53	0.00
Fat4	FAT tumor suppressor homolog 4 (Drosophila)	1460574_at	-2.53	0.00
Fgf16	fibroblast growth factor 16	1420806_at	-2.53	0.00
4930431H11Rik	RIKEN cDNA 4930431H11 gene	1439484_at	-2.53	0.00
Dnmt3a	DNA methyltransferase 3A	1460324_at	-2.53	0.00
Ccdc69	coiled-coil domain containing 69	1419985_s_at	-2.53	0.00
Ank1	ankyrin 1, erythroid	1425677_a_at	-2.53	0.00
2510006C20Rik	RIKEN cDNA 2510006C20 gene	1419074_at	-2.54	0.00
2610528E23Rik	RIKEN cDNA 2610528E23 gene	1428519_at	-2.54	0.00
Qpct /// LOC639942	glutaminyl-peptide cyclotransferase (glutaminyl cyclase) /// similar to Glutaminyl-peptide cyclotransferase precursor (QC) (Glutaminyl-tRNA cyclotransferase) (Glutaminyl cyclase)	1426622_a_at	-2.54	0.00
Kif13a	kinesin family member 13A	1439532_s_at	-2.54	0.00
C730029A08Rik	RIKEN cDNA C730029A08 gene	1436169_at	-2.55	0.00
Rbp1	retinol binding protein 1, cellular	1448754_at	-2.55	0.00
Dpf3	D4, zinc and double PHD fingers, family 3	1442686_at	-2.56	0.00
Scn7a	sodium channel, voltage-gated, type VII, alpha	1436044_at	-2.56	0.00
Plxnb1	plexin B1	1435254_at	-2.56	0.00
Ank	progressive ankylosis	1450627_at	-2.56	0.00
Fgd4	FYVE, RhoGEF and PH domain containing 4	1455337_at	-2.56	0.00
A930008G19Rik	RIKEN cDNA A930008G19 gene	1447176_at	-2.56	0.00
Gucy1b3	guanylate cyclase 1, soluble, beta 3	1420871_at	-2.57	0.00
Ak3l1	adenylate kinase 3 alpha-like 1	1421830_at	-2.57	0.00
1700040L02Rik	RIKEN cDNA 1700040L02 gene	1428812_at	-2.58	0.00
6720475J19Rik /// LOC670480	RIKEN cDNA 6720475J19 gene /// similar to putative retrovirus-related gag protein	1423072_at	-2.58	0.00
D330050I23Rik	RIKEN cDNA D330050I23 gene	1434301_at	-2.58	0.00
Pltp	phospholipid transfer protein	1417963_at	-2.59	0.00
Gucy1a3	guanylate cyclase 1, soluble, alpha 3	1420534_at	-2.59	0.00
Ntf3	neurotrophin 3	1434802_s_at	-2.59	0.00
Cav2	caveolin 2	1417327_at	-2.60	0.00
Gucy1a3	guanylate cyclase 1, soluble, alpha 3	1434141_at	-2.60	0.00
Prickle1	Prickle like 1 (Drosophila)	1457637_at	-2.60	0.00
Rassf3	Ras association (RalGDS/AF-6) domain family 3	1448547_at	-2.60	0.00
5730410E15Rik	RIKEN cDNA 5730410E15 gene	1447609_at	-2.60	0.00
2610301F02Rik	RIKEN cDNA 2610301F02 gene	1457681_at	-2.60	0.00
Aadacl1	arylacetamide deacetylase-like 1	1435135_at	-2.61	0.00
Aqp1	aquaporin 1	1416203_at	-2.61	0.00
Qk	quaking	1417073_a_at	-2.61	0.00
Kitl	Kit ligand	1440621_at	-2.61	0.00
Gulp1	GULP, engulfment adaptor PTB domain containing 1	1453771_at	-2.61	0.00
---	---	1455090_at	-2.61	0.00
Tmem45b	transmembrane protein 45b	1424357_at	-2.61	0.00
9430047G12Rik	RIKEN cDNA 9430047G12 gene	1458892_at	-2.62	0.00
Myct1	myc target 1	1438048_at	-2.62	0.00
9330120H11Rik	RIKEN cDNA 9330120H11 gene	1457671_at	-2.62	0.00
Mef2c	Myocyte enhancer factor 2C	1439946_at	-2.63	0.00
Rassf3	Ras association (RalGDS/AF-6) domain family 3	1448546_at	-2.63	0.00
Dpt	dermatopontin	1418511_at	-2.63	0.00
Igf1	insulin-like growth factor 1	1419519_at	-2.63	0.00
Col15a1	procollagen, type XV	1448755_at	-2.63	0.00
9630010G10Rik	RIKEN cDNA 9630010G10 gene	1460121_at	-2.64	0.00
Thbs2	thrombospondin 2	1422571_at	-2.65	0.00
Kitl	kit ligand	1448117_at	-2.65	0.00
---	PREDICTED: Mus musculus hypothetical protein LOC628151 (LOC628151), mRNA	1445764_at	-2.65	0.00
A930004K21Rik	RIKEN cDNA A930004K21 gene	1436243_at	-2.65	0.00
Cdc14b	CDC14 cell division cycle 14 homolog B (S. cerevisiae)	1429418_at	-2.66	0.00
Pdlim4	PDZ and LIM domain 4	1417928_at	-2.66	0.00
Cmtm8	CKLF-like MARVEL transmembrane domain containing 8	1427964_at	-2.66	0.00
D330010C22Rik	RIKEN cDNA 330010C22 gene	1436277_at	-2.66	0.00
Pah	phenylalanine hydroxylase	1454638_a_at	-2.66	0.00
Adcy7	adenylate cyclase 7	1456307_s_at	-2.67	0.00
6330505F04Rik	RIKEN cDNA 6330505F04 gene	1438496_a_at	-2.67	0.00
Pltp	phospholipid transfer protein	1456424_s_at	-2.67	0.00
Vsig4	V-set and immunoglobulin domain containing 4	1451651_at	-2.67	0.00
Meox2	mesenchyme homeobox 2	1424233_at	-2.67	0.00
Slc6a6	solute carrier family 6 (neurotransmitter transporter, taurine), member 6	1437149_at	-2.68	0.00
Kif1b	kinesin family member 1B	1425270_at	-2.68	0.00
AI317395	expressed sequence AI317395	1436109_at	-2.69	0.00
Matn2	matrilin 2	1419442_at	-2.69	0.00

Manba	mannosidase, beta A, lysosomal	1450626_at	-2.69	0.00
Slc8a1	Solute carrier family 8 (sodium/calcium exchanger), member 1	1447231_at	-2.69	0.00
Epha4	Eph receptor A4	1421928_at	-2.69	0.00
Prkar2b	protein kinase, cAMP dependent regulatory, type II beta	1438664_at	-2.69	0.00
1110032E23Rik	RIKEN cDNA 1110032E23 gene	1416805_at	-2.70	0.00
Vtn	vitronectin	1420484_a_at	-2.70	0.00
Tcf15	transcription factor 15	1449592_at	-2.70	0.00
AI314604	expressed sequence AI314604	1442075_at	-2.70	0.00
Nhsl1	NHS-like 1	1426934_at	-2.70	0.00
Npr3	natriuretic peptide receptor 3	1435184_at	-2.71	0.00
Enpp3	ectonucleotide pyrophosphatase/phosphodiesterase 3	1439260_a_at	-2.71	0.00
Comp	cartilage oligomeric matrix protein	1419527_at	-2.72	0.00
Fhl2	four and a half LIM domains 2	1419184_a_at	-2.72	0.00
Eif4e	eukaryotic translation initiation factor 4E	1450909_at	-2.73	0.00
---	---	1455374_at	-2.73	0.00
BC026657	cDNA sequence BC026657	1426880_at	-2.74	0.00
Pfkfb2	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 2	1429486_at	-2.75	0.00
Pkd2l2	polycystic kidney disease 2-like 2	1449469_at	-2.75	0.00
Mamdc2	MAM domain containing 2	1453152_at	-2.76	0.00
Tpm2	tropomyosin 2, beta	1425028_a_at	-2.76	0.00
Pitpnc1	phosphatidylinositol transfer protein, cytoplasmic 1	1455204_at	-2.76	0.00
Kcnd2	Potassium voltage-gated channel, Shal-related family, member 2	1459288_at	-2.76	0.00
Lpin1	lipin 1	1418288_at	-2.78	0.00
Apoe	apolipoprotein E	1432466_a_at	-2.78	0.00
Ppargc1b	peroxisome proliferative activated receptor, gamma, coactivator 1 beta	1449945_at	-2.78	0.00
Zfp606	zinc finger protein 606	1454951_at	-2.79	0.00
Scn7a	sodium channel, voltage-gated, type VII, alpha	1436043_at	-2.79	0.00
Itm2a	integral membrane protein 2A	1451047_at	-2.79	0.00
Asb2	ankyrin repeat and SOCS box-containing protein 2	1428444_at	-2.79	0.00
1190002N15Rik	RIKEN cDNA 1190002N15 gene	1433582_at	-2.80	0.00
Asb10	ankyrin repeat and SOCS box-containing protein 10	1441581_at	-2.80	0.00
Ldhb	Lactate dehydrogenase B	1442618_at	-2.80	0.00
Kcnd2	Potassium voltage-gated channel, Shal-related family, member 2	1446065_at	-2.81	0.00
1810012P15Rik	RIKEN cDNA 1810012P15 gene	1436548_at	-2.81	0.00
Obscn	obscurin, cytoskeletal calmodulin and titin-interacting RhoGEF	1443632_at	-2.81	0.00
2610301F02Rik	RIKEN cDNA 2610301F02 gene	1429946_at	-2.82	0.00
Camk1d	calcium/calmodulin-dependent protein kinase ID	1452050_at	-2.82	0.00
Ky	kyphoscoliosis peptidase	1440435_at	-2.82	0.00
A530058N18Rik	RIKEN cDNA A530058N18 gene	1443470_at	-2.82	0.00
Fbxw7	F-box and WD-40 domain protein 7, archipelago homolog (Drosophila)	1451558_at	-2.83	0.00
BB144871	expressed sequence BB144871	1436453_at	-2.83	0.00
1500015O10Rik	RIKEN cDNA 1500015O10 gene	1460049_s_at	-2.83	0.00
Plxdc2	plexin domain containing 2	1449270_at	-2.83	0.00
Runx1t1	runt-related transcription factor 1; translocated to, 1 (cyclin D-related)	1427640_a_at	-2.83	0.00
2900041A09Rik	RIKEN cDNA 2900041A09 gene	1452766_at	-2.83	0.00
---	16 days neonate heart cDNA, RIKEN full-length enriched library, clone:D830044D09 product:unclassifiable, full insert sequence	1442304_at	-2.83	0.00
Arhgap18	Rho GTPase activating protein 18	1426952_at	-2.83	0.00
Esrrg	estrogen-related receptor gamma	1457896_at	-2.83	0.00
1810012P15Rik	RIKEN cDNA 1810012P15 gene	1440234_at	-2.84	0.00
---	Transcribed locus	1445574_at	-2.84	0.00
Pde7a	phosphodiesterase 7A	1451839_a_at	-2.85	0.00
Pcdh12	protocadherin 12	1437928_at	-2.85	0.00
LOC380843 /// LOC638266 /// LOC666794	similar to RNA binding motif protein 24 /// similar to RNA binding motif protein 24 /// similar to RNA binding motif protein 24	1443715_at	-2.85	0.00
6030442H21Rik	RIKEN cDNA 6030442H21 gene	1432746_at	-2.86	0.00
---	PREDICTED: Mus musculus similar to HYPOTHETICAL PROTEIN ORF-1137 (LOC626631), mRNA	1446524_at	-2.86	0.00
Nov	nephroblastoma overexpressed gene	1426851_a_at	-2.88	0.00
Snai2	snail homolog 2 (Drosophila)	1447643_x_at	-2.88	0.00
Lrrc17	leucine rich repeat containing 17	1429679_at	-2.89	0.00
Vegfa	vascular endothelial growth factor A	1420909_at	-2.90	0.00
4631423F02Rik	RIKEN cDNA 4631423F02 gene	1452707_at	-2.90	0.00
Iqgap2	IQ motif containing GTPase activating protein 2	1433885_at	-2.90	0.00
Igfbp5	insulin-like growth factor binding protein 5	1452114_s_at	-2.91	0.00
Ung	uracil DNA glycosylase	1425753_a_at	-2.92	0.00
Lepr	leptin receptor	1456156_at	-2.92	0.00
Lepr	leptin receptor	1425644_at	-2.92	0.00
Col4a4	procollagen, type IV, alpha 4	1445328_at	-2.93	0.00
Paqr9	progestin and adipoQ receptor family member IX	1455025_at	-2.93	0.00
Pank1	pantothenate kinase 1	1457110_at	-2.93	0.00
Kcnk3	potassium channel, subfamily K, member 3	1425341_at	-2.94	0.00
Mfap4	microfibrillar-associated protein 4	1424010_at	-2.94	0.00
2310005P05Rik	RIKEN cDNA 2310005P05 gene	1417877_at	-2.94	0.00
Egln3	EGL nine homolog 3 (C. elegans)	1418648_at	-2.95	0.00
Lrrc39	leucine rich repeat containing 39	1445841_at	-2.95	0.00
Cxcr4	chemokine (C-X-C motif) receptor 4	1448710_at	-2.96	0.00
Ak3l1	adenylate kinase 3 alpha-like 1	1450387_s_at	-2.97	0.00
Ptgfr	prostaglandin F receptor	1453924_a_at	-2.97	0.00
Fgf12	fibroblast growth factor 12	1451693_a_at	-2.97	0.00
Tmem86a	transmembrane protein 86A	1428758_at	-2.97	0.00
Kcnd2	potassium voltage-gated channel, Shal-related family, member 2	1450773_at	-2.98	0.00
1110037P11Rik	RIKEN cDNA 1110037P11 gene	1430269_at	-2.98	0.00
Efhd1	EF hand domain containing 1	1448507_at	-2.98	0.00
1190002N15Rik	RIKEN cDNA 1190002N15 gene	1433581_at	-2.99	0.00
AI317158	expressed sequence AI317158	1445481_at	-2.99	0.00
Stc2	stanniocalcin 2	1449484_at	-2.99	0.00
Rab3a	RAB3A, member RAS oncogene family	1422589_at	-3.00	0.00
Mtss1	metastasis suppressor 1	1446284_at	-3.00	0.00
Ppil1	peptidylprolyl isomerase (cyclophilin)-like 1	1428892_at	-3.00	0.00
Hdac9	histone deacetylase 9	1434572_at	-3.00	0.00
1500005K14Rik	RIKEN cDNA 1500005K14 gene	1429764_at	-3.01	0.00
Kctd12b	potassium channel tetramerisation domain containing 12b	1442368_at	-3.01	0.00
Sparcl1	SPARC-like 1 (mast9, hevin)	1416114_at	-3.01	0.00
Wif1	Wnt inhibitory factor 1	1425425_a_at	-3.03	0.00
Galm	galactose mutarotase	1452583_s_at	-3.03	0.00
Upk3b	uroplakin 3B	1454881_s_at	-3.04	0.00

Jph2	junctophilin 2	1455404_at	-3.04	0.00
Sema3c	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3C	1429348_at	-3.05	0.00
Pde4d	phosphodiesterase 4D, cAMP specific	1459311_at	-3.05	0.00
Gpm6a	glycoprotein m6a	1456741_s_at	-3.06	0.00
Sox7	SRY-box containing gene 7	1416564_at	-3.06	0.00
---	Transcribed locus	1437967_at	-3.08	0.00
Wnt5a	wingless-related MMTV integration site 5A	1436791_at	-3.08	0.00
Fblim1	filamin binding LIM protein 1	1449141_at	-3.08	0.00
4930534B04Rik	RIKEN cDNA 4930534B04 gene	1441867_x_at	-3.09	0.00
---	---	1450085_at	-3.09	0.00
Kif1b	kinesin family member 1B	1455182_at	-3.10	0.00
Acta2	actin, alpha 2, smooth muscle, aorta	1416454_s_at	-3.11	0.00
Itih5	inter-alpha (globulin) inhibitor H5	1441946_at	-3.11	0.00
---	0 day neonate thymus cDNA, RIKEN full-length enriched library, clone:A430057L20 product:unclassifiable, full insert sequence	1446205_at	-3.11	0.00
Ppp1r14c /// 4930402H24Rik	protein phosphatase 1, regulatory (inhibitor) subunit 14c /// RIKEN cDNA 4930402H24 gene	1430286_s_at	-3.12	0.00
Cenpa	Centromere autoantigen A	1444416_at	-3.12	0.00
LOC669637	similar to calcium channel, voltage-dependent, alpha 2/delta subunit 2	1450754_at	-3.14	0.00
---	---	1444025_at	-3.14	0.00
Nov	nephroblastoma overexpressed gene	1426852_x_at	-3.15	0.00
Epha4	Eph receptor A4	1421929_at	-3.16	0.00
Lrrc3b	leucine rich repeat containing 3B	1451245_at	-3.16	0.00
D330010C22Rik	RIKEN cDNA 330010C22 gene	1444404_at	-3.17	0.00
Kcnd2	potassium voltage-gated channel, Shal-related family, member 2	1422834_at	-3.19	0.00
Epha4	Eph receptor A4	1429021_at	-3.21	0.00
Cpeb3	cytoplasmic polyadenylation element binding protein 3	1437765_at	-3.21	0.00
Hey1	hairy/enhancer-of-split related with YRPW motif 1	1415999_at	-3.21	0.00
St8sia4	ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4	1419186_a_at	-3.22	0.00
Tmc7	transmembrane channel-like gene family 7	1456981_at	-3.23	0.00
Tmprss13	transmembrane protease, serine 13	1427477_at	-3.24	0.00
D0H4S114	DNA segment, human D4S114	1450839_at	-3.24	0.00
D0H4S114	DNA segment, human D4S114	1436736_x_at	-3.24	0.00
Slc22a3	solute carrier family 22 (organic cation transporter), member 3	1420444_at	-3.25	0.00
Dnmt3a	DNA methyltransferase 3A	1423065_at	-3.26	0.00
Mmp15	matrix metallopeptidase 15	1422597_at	-3.26	0.00
Iqgap2	IQ motif containing GTPase activating protein 2	1459894_at	-3.27	0.00
Arhgap18	Rho GTPase activating protein 18	1438882_at	-3.27	0.00
Cilp	cartilage intermediate layer protein, nucleotide pyrophosphohydrolase	1457296_at	-3.28	0.00
Mmp15	Matrix metallopeptidase 15	1439734_at	-3.28	0.00
2610301F02Rik	RIKEN cDNA 2610301F02 gene	1447250_a_at	-3.29	0.00
Fsd2	fibronectin type III and SPRY domain containing 2	1457031_at	-3.29	0.00
Cpeb3	cytoplasmic polyadenylation element binding protein 3	1456048_at	-3.30	0.00
Lum	lumican	1423607_at	-3.30	0.00
Hmcn1	hemicentin 1	1438532_at	-3.31	0.00
Dcakd	dephospho-CoA kinase domain containing	1460205_at	-3.32	0.00
Igf2	insulin-like growth factor 2	1448152_at	-3.32	0.00
Stmn2	stathmin-like 2	1423280_at	-3.32	0.00
---	---	1441220_at	-3.32	0.00
Myh11	myosin, heavy polypeptide 11, smooth muscle	1448962_at	-3.33	0.00
Sdpr	serum deprivation response	1416778_at	-3.33	0.00
Cpeb3	cytoplasmic polyadenylation element binding protein 3	1455372_at	-3.33	0.00
---	---	1434423_at	-3.35	0.00
Cxcl12	chemokine (C-X-C motif) ligand 12	1417574_at	-3.35	0.00
Tspan13	tetraspanin 13	1418643_at	-3.35	0.00
Qk	Quaking	1438892_at	-3.37	0.00
Tbc1d10c	TBC1 domain family, member 10c	1454850_at	-3.37	0.00
Kitl	kit ligand	1415855_at	-3.38	0.00
Col8a1	procollagen, type VIII, alpha 1	1455627_at	-3.39	0.00
Mmp15	matrix metallopeptidase 15	1437462_x_at	-3.40	0.00
Copg2as2	coatomer protein complex, subunit gamma 2, antisense 2	1427123_s_at	-3.40	0.00
Cnn1	calponin 1	1417917_at	-3.40	0.00
Casq1	calsequestrin 1	1422598_at	-3.41	0.00
Tuba8	tubulin, alpha 8	1419518_at	-3.42	0.00
Sytl2	synaptotagmin-like 2	1421594_a_at	-3.44	0.00
Asb10	ankyrin repeat and SOCS box-containing protein 10	1421466_at	-3.48	0.00
Kcna1	potassium voltage-gated channel, shaker-related subfamily, member 1	1455785_at	-3.53	0.00
A530016O06Rik	RIKEN cDNA A530016O06 gene	1434191_at	-3.54	0.00
Dbp	D site albumin promoter binding protein	1438211_s_at	-3.54	0.00
Gas1	growth arrest specific 1	1416855_at	-3.54	0.00
Igsf1	immunoglobulin superfamily, member 1	1433652_at	-3.56	0.00
Tspan13	tetraspanin 13	1460239_at	-3.56	0.00
Wnt5a	wingless-related MMTV integration site 5A	1448818_at	-3.57	0.00
Cdkn1c	cyclin-dependent kinase inhibitor 1C (P57)	1417649_at	-3.58	0.00
Fbln5	fibulin 5	1416164_at	-3.59	0.00
Itm2a	integral membrane protein 2A	1423608_at	-3.60	0.00
Efnb3	ephrin B3	1423085_at	-3.61	0.00
Kif1b	kinesin family member 1B	1451642_at	-3.63	0.00
---	15 days embryo embryonic body below diaphragm cDNA, RIKEN full-length enriched library, clone:8230401F05 product:unclassifiable, full insert sequence	1441111_at	-3.64	0.00
Dbp	D site albumin promoter binding protein	1418174_at	-3.67	0.00
Ltbp4	latent transforming growth factor beta binding protein 4	1436665_a_at	-3.68	0.00
Gas1	growth arrest specific 1	1448494_at	-3.70	0.00
Myct1	myc target 1	1447584_s_at	-3.70	0.00
Plekhh1	pleckstrin homology domain containing, family H (with MyTH4 domain) member 1	1435053_s_at	-3.71	0.00
Itgbl1	integrin, beta-like 1	1425039_at	-3.71	0.00
Hlf	hepatic leukemia factor	1434736_at	-3.72	0.00
Myct1	myc target 1	1426433_at	-3.73	0.00
Abca9	ATP-binding cassette transporter sub-family A member 9	1440879_at	-3.74	0.00
Qk	quaking	1425597_a_at	-3.76	0.00
Tmem25	transmembrane protein 25	1436644_x_at	-3.77	0.00
Ptgfr	prostaglandin F receptor	1420349_at	-3.77	0.00
1200009O22Rik	RIKEN cDNA 1200009O22 gene	1428922_at	-3.78	0.00
Aqp7	aquaporin 7	1418849_x_at	-3.79	0.00
Fgf12	fibroblast growth factor 12	1440270_at	-3.80	0.00
Tspan2	tetraspanin 2	1424567_at	-3.83	0.00

Cfd	complement factor D (adipsin)	1417867_at	-3.83	0.00
Tmem16d	transmembrane protein 16D (eight membrane-spanning domains)	1442143_at	-3.84	0.00
BB001228	expressed sequence BB001228	1455425_at	-3.86	0.00
2610301F02Rik	RIKEN cDNA 2610301F02 gene	1460125_at	-3.86	0.00
Col6a3 /// LOC674521	procollagen, type VI, alpha 3 /// similar to alpha 3 type VI collagen isoform 1 precursor	1424131_at	-3.87	0.00
Epha4	Eph receptor A4	1439757_s_at	-3.87	0.00
Cenpa	centromere autoantigen A	1450842_a_at	-3.88	0.00
Reep1	receptor accessory protein 1	1433509_s_at	-3.89	0.00
1810011O10Rik	RIKEN cDNA 1810011O10 gene	1451415_at	-3.94	0.00
Ucp1	uncoupling protein 1 (mitochondrial, proton carrier)	1418197_at	-3.94	0.00
Islr	immunoglobulin superfamily containing leucine-rich repeat	1418450_at	-3.99	0.00
Igf1	insulin-like growth factor 1	1437401_at	-4.05	0.00
Tfrc	transferrin receptor	1452661_at	-4.06	0.00
Fblim1	filamin binding LIM protein 1	1418569_at	-4.06	0.00
Tagln	transgelin	1423505_at	-4.07	0.00
Lrtm1	leucine-rich repeats and transmembrane domains 1	1443866_at	-4.10	0.00
Ppargc1a	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	1460336_at	-4.11	0.00
Igh-6	immunoglobulin heavy chain 6 (heavy chain of IgM)	1427329_a_at	-4.13	0.00
Itga8	integrin alpha 8	1427489_at	-4.13	0.00
LOC668940 /// LOC669705 /// LOC674786	hypothetical protein LOC668940 /// hypothetical protein LOC669705 /// hypothetical protein LOC674786	1444305_at	-4.18	0.00
Cbr2	carbonyl reductase 2	1418509_at	-4.20	0.00
Mbp	myelin basic protein	1433532_a_at	-4.21	0.00
Copg2as2	coatomer protein complex, subunit gamma 2, antisense 2	1427320_at	-4.21	0.00
Car3	carbonic anhydrase 3	1430584_s_at	-4.22	0.00
Plekhh1	pleckstrin homology domain containing, family H (with MyTH4 domain) member 1	1447807_s_at	-4.23	0.00
Sdpr	serum deprivation response	1416779_at	-4.25	0.00
Agtrl1	angiotensin receptor-like 1	1423037_at	-4.26	0.00
Tuba4	tubulin, alpha 4	1417373_a_at	-4.28	0.00
Ogn	osteoglycin	1419662_at	-4.33	0.00
Aspn	asporin	1448421_s_at	-4.35	0.00
Lrtm1	leucine-rich repeats and transmembrane domains 1	1444429_at	-4.37	0.00
Sh3kbp1	SH3-domain kinase binding protein 1	1431592_a_at	-4.38	0.00
---	Transcribed locus	1455961_at	-4.38	0.00
Asph	aspartate-beta-hydroxylase	1425274_at	-4.44	0.00
1700020C11Rik	RIKEN cDNA 1700020C11 gene	1424223_at	-4.44	0.00
Gpc6	glypican 6	1428774_at	-4.44	0.00
Sdpr	serum deprivation response	1443832_s_at	-4.48	0.00
Ogn	osteoglycin	1419663_at	-4.50	0.00
---	---	1446771_at	-4.51	0.00
5730410E15Rik	RIKEN cDNA 5730410E15 gene	1438667_at	-4.53	0.00
Sertad4	SERTA domain containing 4	1454877_at	-4.53	0.00
Lmod3	leiomodin 3 (fetal)	1439658_at	-4.60	0.00
2310042D19Rik	RIKEN cDNA 2310042D19 gene	1429598_at	-4.60	0.00
Myl9	myosin, light polypeptide 9, regulatory	1452670_at	-4.60	0.00
C1qtnf9	C1q and tumor necrosis factor related protein 9	1442033_at	-4.61	0.00
Ecm2	extracellular matrix protein 2, female organ and adipocyte specific	1440096_at	-4.63	0.00
Klhdc8a	kelch domain containing 8A	1424885_at	-4.78	0.00
---	Transcribed locus, weakly similar to XP_328828.1 predicted protein [Neurospora crassa]	1434413_at	-4.80	0.00
Colec11	collectin sub-family member 11	1458345_s_at	-4.85	0.00
Pcsk6	proprotein convertase subtilisin/kexin type 6	1426981_at	-4.85	0.00
Retnla	resistin like alpha	1449015_at	-4.89	0.00
Sh3kbp1	SH3-domain kinase binding protein 1	1460337_at	-4.99	0.00
Akr1c14	aldo-keto reductase family 1, member C14	1418979_at	-5.13	0.00
1810011O10Rik	RIKEN cDNA 1810011O10 gene	1435595_at	-5.17	0.00
Gpc6	glypican 6	1437417_s_at	-5.18	0.00
Inmt	indolethylamine N-methyltransferase	1418697_at	-5.22	0.00
2210419I08Rik	RIKEN cDNA 2210419I08 gene	1429637_at	-5.24	0.00
Dmn	desmuslin	1457275_at	-5.28	0.00
Bex1	brain expressed gene 1	1448595_a_at	-5.39	0.00
Stmn2	stathmin-like 2	1423281_at	-5.52	0.00
Asph	aspartate-beta-hydroxylase	1425275_at	-5.65	0.00
Klra3	killer cell lectin-like receptor, subfamily A, member 3	1425436_x_at	-5.65	0.00
Fmod	fibromodulin	1456084_x_at	-5.67	0.00
Cenpf	centromere autoantigen F	1427161_at	-5.76	0.00
Cyt1	cytokine like 1	1456793_at	-5.78	0.00
Col14a1	procollagen, type XIV, alpha 1	1427168_a_at	-5.81	0.00
Ttll1	tubulin tyrosine ligase-like 1	1436833_x_at	-5.87	0.00
Aspn	asporin	1416652_at	-5.90	0.00
Tuba4	tubulin, alpha 4	1417374_at	-5.95	0.00
Sh3kbp1	SH3-domain kinase binding protein 1	1456261_at	-6.40	0.00
Abca8a	ATP-binding cassette, sub-family A (ABC1), member 8a	1427371_at	-6.59	0.00
Gpr22	G protein-coupled receptor 22	1434673_at	-6.66	0.00
Scube2	signal peptide, CUB domain, EGF-like 2	1453486_a_at	-7.18	0.00
Gpr22	G protein-coupled receptor 22	1434672_at	-7.34	0.00
Penk1	preproenkephalin 1	1427038_at	-7.73	0.00
4631408O11Rik	RIKEN cDNA 4631408O11 gene	1429159_at	-7.79	0.00
Itga8	integrin alpha 8	1454966_at	-8.48	0.00
Car3	carbonic anhydrase 3	1460256_at	-8.52	0.00
H19	H19 fetal liver mRNA	1448194_a_at	-10.83	0.00
Agtrl1	angiotensin receptor-like 1	1438651_a_at	-14.04	0.00
Adipoq	adiponectin, C1Q and collagen domain containing	1422651_at	-16.81	0.00
Car3	carbonic anhydrase 3	1449434_at	-38.05	0.00

TABLE S5 - Canonical pathways modified by LPS

Ingenuity Canonical Pathways	-log(p-value	Ratio	Molecules
Acute Phase Response Signaling	8.04E00	2.02E-01	SOCS3, RAC2, HAMP, SERPING1, NFKBIE, SOCS2, CP, SAA2, SERPINA3, JAK2, IL6, RBP1, NR3C1, C1R, HMOX1, SHC1, NFKBIA, CFB, LBP, SERPINE1, NFKBIB, SAA1, C3, TNFRSF1A, MYD88, C1S, RAC1, SERPINF1, CEBPB, STAT3, NFKB2, HP, RRAS2, IL1RN, C4A, C2
Interferon Signaling	7.74E00	4.33E-01	IFIT3, OAS1, PTPN2, MX1, IFI35, IRF9, PSMB8, JAK2, TAP1, IRF1, IFITM1, STAT2, STAT1
Activation of IRF by Cytosolic Pattern Recognition Receptors	6.88E00	2.33E-01	DHX58, NFKBIE, ZBP1, IRF9, TBK1, IL6, NFKB2, ADAR, ISG15, IFIH1, IRF7, NFKBIA, DDX58, STAT2, NFKBIB, STAT1, IFIT2
Hepatic Fibrosis / Hepatic Stellate Cell Activation	6.1E00	2.01E-01	ICAM1, LEPR, MYH7B (includes EG:668940), MYH11, CCL5, IL6, FAS, PGF, VEGFA, IL1R2, CXCL3, IGF1, CYP2E1, TIMP1, LBP, STAT1, TIMP2, EGFR, IL4R, VCAM1, TNFRSF1A, VEGFC, IGFBP5, NFKB2, MYL7, CSF1, CD14
Dendritic Cell Maturation	6.04E00	1.51E-01	B2M, RAC2, ICAM1, LEPR, NFKBIE, PIK3R5, CD83, IL6, JAK2, FCGR2B, FCGR1A, NFKBIA, HLA-B, TLR3, STAT1, NFKBIB, FCGR3A, HLA-C, MYD88, TNFRSF1A, RELB, RAC1, NFKB2, TLR2, IL1RN, FCER1G, STAT2, IRF8
Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis	5.59E00	1.34E-01	SOCS3, RAC2, ICAM1, MMP3, NFKBIE, PIK3R5, JAK2, CCL5, IL6, IL17RA, FCGR1A, PGF, MYC, C1R, IL1R2, VEGFA, NFKBIA, TRAF3IP2, WIF1, CFB, PLCB1, TLR3, NFKBIB, PRKD1, FCGR3A, CALM1, ADAMTS4, SELE, VCAM1, MYD88, TNFRSF1A, C1S, DAAM1, RAC1, VEGFC, STAT3, CEBPB, IRAK3, TLR2, HP, RRAS2, IL1RN, CSF1, CXCL12, CEBPD, SOST, WNT5A, IRAK2
Retinoic acid Mediated Apoptosis Signaling	5.27E00	1.94E-01	PARP10, ART1, TNFSF10, PARP3, PARP12, PARP9, TIPARP, IRF1, PARP4, BID, PARP11, CFLAR, PARP14
Antigen Presentation Pathway	5.18E00	2.56E-01	B2M, PSMB9, HLA-E, HLA-B, PSMB8, HLA-G, TAP1, TAP2, TAPBP, HLA-C
Role of Pattern Recognition Receptors in Recognition of Bacteria and Viruses	5.08E00	2.12E-01	PTX3, OAS1, C3, OAS2, MYD88, PIK3R5, IL6, NFKB2, CCL5, TLR2, IFIH1, CLEC7A, IRF7, SYK, DDX58, EIF2AK2, TLR3
Death Receptor Signaling	4.89E00	2.34E-01	HSPB3, TNFRSF1A, NFKBIE, TNFSF10, TBK1, NFKB2, FAS, DAXX, NFKBIA, BID, CFLAR, NFKBIB, BIRC3, BIRC2, HSPB1
IL-10 Signaling	4.49E00	2.14E-01	CCR1, SOCS3, IL4R, NFKBIE, IL6, STAT3, NFKB2, FCGR2B, IL1R2, HMOX1, NFKBIA, IL1RN, CD14, LBP, NFKBIB
Role of RIG1-like Receptors in Antiviral Innate Immunity	4.18E00	1.96E-01	DHX58, IFIH1, IRF7, NFKBIA, NFKBIE, DDX58, TBK1, NFKB2, NFKBIB, TRIM25
IL-6 Signaling	4E00	1.94E-01	HSPB3, TNFRSF1A, NFKBIE, IL6, NFKB2, STAT3, CEBPB, JAK2, IL1R2, SHC1, NFKBIA, RRAS2, IL1RN, CD14, LBP, NFKBIB, TNFAIP6, HSPB1
IL-8 Signaling	3.99E00	1.45E-01	RAC2, ICAM1, CXCL1, PIK3R5, PGF, EIF4EBP1, VEGFA, HMOX1, GNG11, GNA13, NFKBIB, PRKD1, EGFR, VCAM1, RHOC, RAC1, VEGFC, IRAK3, CSTB, MYL7, MYL9 (includes EG:98932), BCL2L1, ITGB2, RRAS2, CCND2, ITGAM, IRAK2
Bladder Cancer Signaling	3.9E00	1.89E-01	FGF16, MMP3, FGF9, MMP14, MMP15, VEGFC, PGF, MYC, VEGFA, RRAS2, MMP8, FGF12, CDKN1A, CHD1 (includes EG:1105), RPS6KA5, FGF7, EGFR
Pathogenesis of Multiple Sclerosis	3.84E00	5.56E-01	CXCL10, CCR1, CXCL9, CCL5, CXCL11
Role of PKR in Interferon Induction and Antiviral Response	3.8E00	2.39E-01	NFKBIA, TNFRSF1A, NFKBIE, BID, NFKB2, EIF2AK2, TLR3, STAT1, NFKBIB, FCGR1A, IRF1
JAK/Stat Signaling	3.7E00	2.19E-01	RAC2, SOCS3, PIAS2, SOCS2, RAC1, PIK3R5, STAT3, JAK2, SHC1, RRAS2, CDKN1A, CISH, STAT2, STAT1
Complement System	3.68E00	2.5E-01	C1R, CFD, SERPING1, C3, C1S, CFB, C4A, MASP1, C2
Glucocorticoid Receptor Signaling	3.67E00	1.25E-01	RAC2, ICAM1, NFKBIE, PIK3R5, PBX1, CCL5, JAK2, IL6, FCGR1A, NR3C1, IL1R2, SHC1, CXCL3, HSPA4, NFKBIA, AR, CCL13, CDKN1C, SERPINE1, STAT1, FKBP5, NFKBIB, SRA1, VCAM1, CCNH, SELE, RAC1, STAT3, CEBPB, BCL2L1, RRAS2, IL1RN, CDKN1A, FKBP4, NR3C2
GM-CSF Signaling	3.62E00	2.09E-01	RAC2, RAC1, PIK3R5, STAT3, JAK2, CSF2RB, SHC1, BCL2L1, RRAS2, PIM1, CISH, HCK, STAT1, BCL2A1
IL-9 Signaling	3.42E00	2.43E-01	SOCS3, IL2RG, CISH, SOCS2, PIK3R5, BCL3, STAT3, NFKB2, STAT1
Induction of Apoptosis by HIV1	3.38E00	2E-01	CXCR4, TNFRSF1A, NFKBIE, NFKB2, BAK1, FAS, BCL2L1, DAXX, NFKBIA, BID, NFKBIB, BIRC3, BIRC2
TREM1 Signaling	3.29E00	1.74E-01	TLR2, RAC2, ICAM1, CCL7, RAC1, CD83, STAT3, JAK2, NFKB2, IL6, TLR3, FCGR2B
NF-κB Signaling	3.21E00	1.44E-01	RAC2, TNFRSF1A, MYD88, RELB, NFKBIE, RAC1, PIK3R5, TNFAIP3, TBK1, IRAK3, NFKB2, TLR2, IL1R2, RRAS2, NFKBIA, IL1RN, FCER1G, MAP3K8, EIF2AK2, TLR3, NFKBIB, EGFR
IL-17 Signaling	3.18E00	1.89E-01	RAC2, MMP3, RAC1, PIK3R5, CXCL1, CEBPB, JAK2, IL6, IL17RA, CXCL10, TRAF3IP2, RRAS2, TIMP1, CXCL11
Prolactin Signaling	3.18E00	1.87E-01	SOCS3, SOCS2, PIK3R5, STAT3, CEBPB, JAK2, NR3C1, IRF1, MYC, SHC1, RRAS2, NMI, STAT1, PRKD1
Type I Diabetes Mellitus Signaling	3.14E00	1.51E-01	SOCS3, TNFRSF1A, MYD88, NFKBIE, SOCS2, JAK2, NFKB2, IRF1, FAS, NFKBIA, HLA-E, FCER1G, HLA-B, BID, NFKBIB, STAT1, HLA-G, HLA-C
p38 MAPK Signaling	3.08E00	1.77E-01	HSPB3, TIFA, DDIT3, TNFRSF1A, IRAK3, FAS, H3F3C, MYC, IL1R2, DAXX, IL1RN, PLA2G5, MEF2C, RPS6KA5, STAT1, IRAK2, HSPB1
Toll-like Receptor Signaling	3.04E00	2.04E-01	TLR2, PPARA, NFKBIA, MYD88, CD14, LBP, NFKB2, IRAK3, EIF2AK2, TLR3, IRAK2
TNFR2 Signaling	2.94E00	2.42E-01	NFKBIA, NFKBIE, TNFAIP3, TBK1, NFKB2, NFKBIB, BIRC3, BIRC2
Neuroprotective Role of THOP1 in Alzheimer's Disease	2.89E00	1.67E-01	PRKAR2B, ECE2, HLA-E, MAPT, NTS, HLA-B, SERPINA3, HLA-G, HLA-C
Hepatic Cholestasis	2.84E00	1.21E-01	PPARA, CYP7B1, TNFRSF1A, MYD88, NFKBIE, IL6, NFKB2, IRAK3, ATP8B1, IL1R2, NFKBIA, PRKAR2B, IL1RN, CD14, LBP, NFKBIB, ABCC3, ADCY7, PRKD1, IRAK2
TR/RXR Activation	2.74E00	1.55E-01	RAC2, UCP2, SLC2A1, RAC1, PIK3R5, UCP1, BCL3, HIF1A, HP, UCP3, ADRB1, COL6A3, TBL1XR1, SYT12, PPARGC1A
Apoptosis Signaling	2.74E00	1.67E-01	TNFRSF1A, NFKBIE, CAPN10, NFKB2, BAK1, FAS, BCL2L1, RRAS2, NFKBIA, BID, CASP12 (includes EG:12364), BCL2A1, NFKBIB, BIRC3, BIRC2
Nitrogen Metabolism	2.71E00	7.52E-02	CA7, CA3, CA14, CA4, CA13, GLUL, ALAS1, ASNS, ADAR, CA8
TNFR1 Signaling	2.63E00	1.92E-01	NFKBIA, PAK6, TNFRSF1A, NFKBIE, TNFAIP3, BID, NFKB2, NFKBIB, BIRC3, BIRC2
Production of Nitric Oxide and Reactive Oxygen Species in Macrophages	2.58E00	1.19E-01	PPARA, PPP1R14C, RAC2, MAP3K6, RHOC, TNFRSF1A, NFKBIE, PPP1R3C, RAC1, PIK3R5, PPP1R14A, JAK2, NFKB2, NCF4, IRF1, TLR2, NFKBIA, MAP3K8, IRF8, STAT1, NFKBIB, PRKD1
Growth Hormone Signaling	2.57E00	1.71E-01	SOCS3, IGF2, IGF1, SOCS2, PIK3R5, RPS6KA5, STAT3, JAK2, RPS6KA2, STAT1, SLC2A4, PRKD1
Crosstalk between Dendritic Cells and Natural Killer Cells	2.45E00	1.33E-01	IL2RG, TNFSF10, CD83, NFKB2, IL6, FAS, CSF2RB, HLA-E, HLA-B, ACTG2 (includes EG:72), TLR3, HLA-G, HLA-C
Oncostatin M Signaling	2.45E00	2.29E-01	SHC1, RRAS2, MMP3, OSMR, STAT3, JAK2, CHI3L1, STAT1
Erythropoietin Signaling	2.45E00	1.58E-01	SHC1, RAC2, SOCS3, RRAS2, NFKBIA, NFKBIE, RAC1, PIK3R5, JAK2, NFKB2, NFKBIB, PRKD1
Type II Diabetes Mellitus Signaling	2.35E00	1.08E-01	RAC2, SOCS3, TNFRSF1A, NFKBIE, SOCS2, ADIPOQ, RAC1, PIK3R5, CEBPB, NFKB2, SLC2A4, NFKBIA, ACSL5, PRKAA2, ACSL4, NFKBIB, PRKD1
LXR/RXR Activation	2.33E00	1.4E-01	IL1R2, APOE, MSR1, CCL7, IL1RN, TNFRSF1A, CD14, LBP, PLTP, NFKB2, IL6, TLR3
HIF1α Signaling	2.25E00	1.39E-01	RAC2, SLC2A1, MMP3, MMP14, MMP15, RAC1, PIK3R5, VEGFC, HIF1A, SLC2A4, PGF, VEGFA, RRAS2, MMP8, EGLN3
IL-15 Signaling	2.21E00	1.64E-01	SHC1, BCL2L1, RAC2, IL2RG, RRAS2, SYK, RAC1, PIK3R5, STAT3, JAK2, NFKB2
Docosahexaenoic Acid (DHA) Signaling	2.2E00	1.67E-01	BCL2L1, RAC2, SERPINF1, RAC1, PIK3R5, BID, BCL2A1, PNPLA2
Graft-versus-Host Disease Signaling	2.2E00	1.63E-01	HLA-E, IL1RN, HLA-B, FCER1G, IL6, HLA-G, FAS, HLA-C
FLT3 Signaling in Hematopoietic Progenitor Cells	2.17E00	1.62E-01	SHC1, RAC2, RRAS2, RAC1, PIK3R5, STAT2, RPS6KA5, STAT3, RPS6KA2, STAT1, EIF4E, EIF4EBP1
Atherosclerosis Signaling	2.16E00	1.33E-01	TMEM87B, SELE, VCAM1, ICAM1, MSR1, MMP3, CXCR4, IL6, NFKB2, ITGB2, SELP, CSF1, IL1RN, CXCL12, PLA2G5
Lymphotoxin β Receptor Signaling	2.15E00	1.64E-01	BCL2L1, RAC2, VCAM1, NFKBIA, RELB, RAC1, PIK3R5, CXCL1, NFKB2, BIRC2
Caveolar-mediated Endocytosis Signaling	2.12E00	1.41E-01	B2M, ITGB2, ITGAM, ITGA8 (includes EG:8516), RAB5C, HLA-B, FLOT1, ACTG2 (includes EG:72), ITGB6, EGFR, HLA-C, ITGB3
Relaxin Signaling	2.04E00	1.14E-01	RAC2, PDE7A, GUCY1A3, NFKBIE, RAC1, PIK3R5, NFKB2, PDE4B, PDE4D, VEGFA, NFKBIA, GNG11, PRKAR2B, GNA13, NFKBIB, ADCY7, GUCY1B3
NF-κB Activation by Viruses	2.02E00	1.48E-01	ITGB2, RAC2, RRAS2, NFKBIA, NFKBIE, RAC1, PIK3R5, NFKB2, EIF2AK2, NFKBIB, PRKD1, ITGB3
ILK Signaling	2.01E00	1.18E-01	RAC2, FBLIM1, RHOC, TNFRSF1A, RAC1, PIK3R5, VEGFC, MYH7B (includes EG:668940), MYH11, NFKB2, HIF1A, MYL7, ITGB3, PGF, VEGFA, MYC, ITGB2, SNAI2, CHD1 (includes EG:1105), RPS6KA5, ACTG2 (includes EG:72), ITGB6
IL-4 Signaling	2E00	1.51E-01	SHC1, RAC2, IL2RG, IL4R, RRAS2, IL13RA1, RAC1, PIK3R5, NR3C2, JAK2, NR3C1
Amyotrophic Lateral Sclerosis Signaling	1.99E00	1.25E-01	RAC1, PIK3R5, VEGFC, CAPN10, PGF, VEGFA, BCL2L1, IGF1, RAB5C, GLUL, BID, CASP12 (includes EG:12364), BIRC3, BIRC2
Virus Entry via Endocytic Pathways	1.96E00	1.35E-01	B2M, RAC2, RAC1, PIK3R5, ITGB3, ITGB2, RRAS2, HLA-B, TFRC, ACTG2 (includes EG:72), ITGB6, PRKD1, HLA-C
TWEAK Signaling	1.95E00	1.84E-01	NFKBIA, NFKBIE, BID, NFKB2, NFKBIB, BIRC3, BIRC2
Angiopoietin Signaling	1.95E00	1.49E-01	RAC2, TNIP1, GRB14, RRAS2, NFKBIA, PAK6, NFKBIE, RAC1, PIK3R5, NFKB2, NFKBIB
Role of PI3K/AKT Signaling in the Pathogenesis of Influenza	1.92E00	1.18E-01	RAC2, NFKBIA, NFKBIE, RAC1, PIK3R5, CCL5, NFKB2, NFKBIB, PLAC8
Pancreatic Adenocarcinoma Signaling	1.91E00	1.29E-01	RAC2, RAC1, PIK3R5, VEGFC, NFKB2, JAK2, STAT3, PGF, VEGFA, HMOX1, BCL2L1, CYP2E1, CDKN1A, STAT1, EGFR
Systemic Lupus Erythematosus Signaling	1.91E00	9.32E-02	RAC2, RAC1, PIK3R5, IL6, FCGR2B, FCGR1A, RRAS2, HLA-E, IL1RN, FCER1G, HLA-B, IGHM, HLA-G, FCGR3A, HLA-C
Leukocyte Extravasation Signaling	1.89E00	1.13E-01	RAC2, VCAM1, ICAM1, MMP3, CXCR4, MMP14, MMP15, JAM2, PIK3R5, RAC1, NCF4, ITGB2, ITGAM, TIMP1, CXCL12, MMP8, CD44, ACTG2 (includes EG:72), PRKD1, TIMP2, MSN, ARHGAP8
Clathrin-mediated Endocytosis Signaling	1.88E00	1.2E-01	MYO6, FGF16, FGF9, PIK3R5, RAC1, VEGFC, ITGB3, PGF, UBD, VEGFA, ITGB2, IGF1, FGF12, RAB5C, TFRC, ACTG2 (includes EG:72), ITGB6, SH3KBP1, FGF7, RAB4B
PI3K/AKT Signaling	1.85E00	1.15E-01	RAC2, NFKBIE, RAC1, LIMS1, JAK2, NFKB2, EIF4E, EIF4EBP1, SHC1, BCL2L1, NFKBIA, RRAS2, CDKN1A, HLA-B, MAP3K8, NFKBIB
Acute Myeloid Leukemia Signaling	1.84E00	1.46E-01	KITLG, MYC, CSF2RB, RAC2, RRAS2, PIM1, RAC1, PIK3R5, STAT3, NFKB2, PML, EIF4EBP1
p53 Signaling	1.79E00	1.41E-01	RAC2, TP53INP1, GADD45B, GADD45G, RAC1, PIK3R5, FAS, BCL2L1, CCND2, SNAI2, CDKN1A, CHEK2, DRAM1
RANK Signaling in Osteoclasts	1.79E00	1.35E-01	RAC2, MAP3K6, MITF, NFKBIE, RAC1, PIK3R5, NFKB2, NFKBIA, MAP3K8, NFKBIB, BIRC3, CALM1, BIRC2
mTOR Signaling	1.78E00	1.15E-01	RAC2, DDIT4, RHOC, RAC1, PIK3R5, VEGFC, HIF1A, EIF4E, PGF, EIF4EBP1, VEGFA, HMOX1, RRAS2, EIF4A1, PRKAA2, RPS6KA5, RPS6KA2, PRKD1
Colorectal Cancer Metastasis Signaling	1.74E00	1.06E-01	RAC2, MMP3, MMP14, MMP15, PIK3R5, IL6, JAK2, PGF, VEGFA, MYC, GNG11, MMP8, TLR3, STAT1, EGFR, TNFRSF1A, RHOC, RAC1, VEGFC, STAT3, NFKB2, TLR2, BCL2L1, PRKAR2B, RRAS2, ADCY7, WNT5A
PXR/RXR Activation	1.72E00	1.1E-01	PPARA, RAC2, PRKAR2B, RAC1, ALAS1, CYP2B6, IL6, ABCC3, NR3C1, PPARGC1A
Small Cell Lung Cancer Signaling	1.71E00	1.24E-01	MYC, BCL2L1, RAC2, NFKBIA, NFKBIE, RAC1, PIK3R5, BID, NFKB2, NFKBIB, BIRC2
Glioma Invasiveness Signaling	1.7E00	1.58E-01	RRAS2, TIMP1, RHOC, VTN, CD44, PIK3R5, PLAUR, TIMP2, ITGB3
CNTF Signaling	1.68E00	1.54E-01	LIFR, RRAS2, PIK3R5, RPS6KA5, STAT3, JAK2, RPS6KA2, STAT1
Nicotinate and Nicotinamide Metabolism	1.65E00	1.03E-01	MAP3K6, GRK5, ENPP3, PIM1, PRKAA2, PNP, CLP, CD38, ART5, DUSP18, NAMPT, MAP3K8, EIF2AK2, BST1
PPAR Signaling	1.59E00	1.22E-01	IL1R2, PPARA, SHC1, SRA1, RRAS2, NFKBIA, IL1RN, TNFRSF1A, NFKBIE, NFKB2, NFKBIB, PPARGC1A
VEGF Signaling	1.59E00	1.24E-01	EIF1AY, VEGFA, SHC1, BCL2L1, RAC2, RRAS2, RAC1, PIK3R5, VEGFC, HIF1A, ACTG2 (includes EG:72), PGF
Aryl Hydrocarbon Receptor Signaling	1.58E00	1.1E-01	HSPB3, MGST1, NQO2, IL6, NFKB2, CYP1B1, FAS, MYC, TGM2, CCND2, NFIA, CDKN1A, NFIB, ALDH3A1, NFE2L2, CHEK2, HSPB1
ERK/MAPK Signaling	1.57E00	1.09E-01	HSPB3, MYCN, PPP1R14C, RAC2, PAK6, PPP1R3C, RAC1, PIK3R5, PPP1R14A, STAT3, EIF4E, H3F3C, EIF4EBP1, MYC, SHC1, PRKAR2B, RRAS2, PLA2G5, RPS6KA5, STAT1, HSPB1
Role of NFAT in Regulation of the Immune Response	1.57E00	1E-01	RAC2, NFKBIE, RAC1, PIK3R5, NFKB2, FCGR2B, FCGR1A, RCAN1, NFKBIA, GNG11, RRAS2, SYK, FCER1G, PLCB1, MEF2C, GNA13, NFKBIB, LCP2, FCGR3A, CALM1
Myc Mediated Apoptosis Signaling	1.51E00	1.43E-01	MYC, SHC1, RAC2, RRAS2, IGF1, RAC1, PIK3R5, BID, FAS
Renal Cell Carcinoma Signaling	1.5E00	1.39E-01	UBD, VEGFA, RAC2, RRAS2, PAK6, SLC2A1, RAC1, PIK3R5, EGLN3, HIF1A
IL-12 Signaling and Production in Macrophages	1.5E00	9.77E-02	RAC2, MYD88, RAC1, PIK3R5, CEBPB, NFKB2, IRF1, TLR2, MAP3K8, IRF8, STAT1, NFKBIB, PRKD1
Primary Immunodeficiency Signaling	1.5E00	1.11E-01	IL2RG, ADA, IGHM, RFX5, TAP1, TAP2, UNG
CD27 Signaling in Lymphocytes	1.47E00	1.4E-01	BCL2L1, NFKBIA, MAP3K6, NFKBIE, BID, MAP3K8, NFKB2, NFKBIB
Insulin Receptor Signaling	1.47E00	1.14E-01	PPP1R14C, RAC2, SOCS3, PPP1R3C, RAC1, PIK3R5, PPP1R14A, JAK2, SLC2A4, EIF4E, PTPRF, EIF4EBP1, SHC1, RRAS2, PRKAR2B, HLA-B
Allograft Rejection Signaling	1.42E00	1.02E-01	HLA-E, HLA-B, FCER1G, HLA-G, FAS, HLA-C
LPS-stimulated MAPK Signaling	1.42E00	1.28E-01	RRAS2, NFKBIA, NFKBIE, RAC1, PIK3R5, CD14, LBP, NFKB2, NFKBIB, PRKD1
Melanoma Signaling	1.39E00	1.52E-01	RAC2, RRAS2, MITF, CDKN1A, RAC1, PIK3R5, CHD1 (includes EG:1105)
B Cell Receptor Signaling	1.39E00	1.1E-01	RAC2, MAP3K6, NFKBIE, RAC1, PIK3R5, NFKB2, FCGR2B, SHC1, BCL2L1, NFKBIA, RRAS2, SYK, MAP3K8, PIK3AP1, NFKBIB, BCL2A1, CALM1
IL-3 Signaling	1.38E00	1.39E-01	CSF2RB, SHC1, RAC2, RRAS2, RAC1, PIK3R5, STAT3, JAK2, STAT1, PRKD1
Nitric Oxide Signaling in the Cardiovascular System	1.38E00	1.03E-01	VEGFA, RAC2, PRKAR2B, GUCY1A3, RAC1, PIK3R5, VEGFC, GUCY1B3, PGF, CALM1
Thrombopoietin Signaling	1.38E00	1.36E-01	MYC, SHC1, RRAS2, PIK3R5, STAT3, JAK2, STAT1, PRKD1
Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis	1.37E00	1.03E-01	RAC2, MMP3, TNFRSF1A, NFKBIE, MMP14, RAC1, PIK3R5, IL6, ITGB3, IL1R2, NFKBIA, WIF1, IGF1, CSF1, IL1RN, MMP8, SOST, NFKBIB, SMAD1, BIRC3, CALM1, WNT5A, BIRC2, ADAMTS4
Macropinocytosis Signaling	1.34E00	1.25E-01	ITGB2, RRAS2, CSF1, RAC1, PIK3R5, CD14, ITGB6, PRKD1, ITGB3
Semaphorin Signaling in Neurons	1.33E00	1.54E-01	RND1, PAK6, RHOC, DPYSL4, PLXNB1, RAC1, SEMA7A, NRP1
Leptin Signaling in Obesity	1.31E00	1.22E-01	RAC2, SOCS3, PRKAR2B, LEPR, RAC1, PIK3R5, PLCB1, STAT3, JAK2, ADCY7
Autoimmune Thyroid Disease Signaling	1.31E00	9.84E-02	HLA-E, HLA-B, FCER1G, HLA-G, FAS, HLA-C
IL-22 Signaling	1.29E00	1.79E-01	RAC2, SOCS3, RAC1, STAT3, STAT1
Role of Hypercytokinemia/hyperchemokinemia in the Pathogenesis of Influenza	1.29E00	1.11E-01	CXCL10, CCR1, IL1RN, CCL5, IL6
Lysine Biosynthesis	1.29E00	4.55E-02	AASDHPPT, ALAS1, TAP2
fMLP Signaling in Neutrophils	1.28E00	1.04E-01	NFKBIE, RAC1, PIK3R5, FPR2, NFKB2, FPR1, GNG11, RRAS2, NFKBIA, PLCB1, NFKBIB, PRKD1, CALM1
Renin-Angiotensin Signaling	1.28E00	1.08E-01	PAK6, RAC1, PIK3R5, STAT3, JAK2, CCL5, NFKB2, SHC1, PRKAR2B, RRAS2, STAT1, ADCY7, PRKD1
Cellular Effects of Sildenafil (Viagra)	1.25E00	9.93E-02	KCNN2, GUCY1A3, MYH7B (includes EG:668940), MYH11, PDE4B, PDE4D, MYL7, MYL9 (includes EG:98932), PRKAR2B, PDE5A, PLCB1, ACTG2 (includes EG:72), ADCY7, GUCY1B3, CALM1
HER-2 Signaling in Breast Cancer	1.24E00	1.27E-01	ITGB2, RAC2, RRAS2, CDKN1A, RAC1, PIK3R5, ITGB6, PRKD1, EGFR, ITGB3
PPARα/RXRα Activation	1.2E00	1E-01	PPARA, NFKBIE, ADIPOQ, IL6, NFKB2, JAK2, ACVR1B, IL1R2, SHC1, NFKBIA, PRKAR2B, RRAS2, PRIC285 (includes EG:85441), PRKAA2, PLCB1, NFKBIB, ADCY7, PPARGC1A
Axonal Guidance Signaling	1.19E00	8.89E-02	RAC2, NTF3, RND1, PIK3R5, EPHA4, EIF4E, PGF, VEGFA, SHC1, EFNB2, EPHB1, GNG11, IGF1, PLCB1, GNA13, SEMA3B, EFNB3, SEMA3F, PRKD1, PAK6, CXCR4, SEMA5A, RAC1, VEGFC, MYL7, MYL9 (includes EG:98932), PRKAR2B, RRAS2, CXCL12, PLXNB1, RTN4, SEMA3C, ADAM9, WNT5A, SEMA7A, NRP1
Natural Killer Cell Signaling	1.17E00	9.82E-02	SHC1, RAC2, RRAS2, PAK6, SYK, RAC1, PIK3R5, FCER1G, FCGR3A, LCP2, PRKD1
Glioma Signaling	1.17E00	1.07E-01	SHC1, RAC2, IGF2, RRAS2, IGF1, CAMK1D, CDKN1A, RAC1, PIK3R5, PRKD1, EGFR, CALM1
MIF Regulation of Innate Immunity	1.16E00	1.3E-01	NFKBIA, NFKBIE, PLA2G5, CD14, NFKB2, NFKBIB
Molecular Mechanisms of Cancer	1.12E00	8.87E-02	RAC2, PIAS2, NFKBIE, PIK3R5, JAK2, HIF1A, FAS, MYC, SHC1, NFKBIA, PLCB1, BID, GNA13, NFKBIB, SMAD1, BIRC3, PRKD1, CHEK2, PAK6, RHOC, RAC1, NFKB2, BAK1, DAXX, BCL2L1, RRAS2, PRKAR2B, CCND2, CDKN1A, CFLAR, ADCY7, BIRC2, WNT5A
Agrin Interactions at Neuromuscular Junction	1.12E00	1.3E-01	ITGB2, RAC2, RRAS2, PAK6, LAMA2, RAC1, ACTG2 (includes EG:72), EGFR, ITGB3
Prostate Cancer Signaling	1.11E00	1.04E-01	RAC2, RRAS2, AR, NFKBIA, NFKBIE, CDKN1A, RAC1, PIK3R5, NFKB2, NFKBIB
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	1.11E00	1.1E-01	TLR2, CXCL13, CSF1, IL1RN, RELB, FCER1G, NFKB2, IL6, TLR3, FAS
G-Protein Coupled Receptor Signaling	1.1E00	9.55E-02	RAC2, RGS2, PDE7A, NFKBIE, RAC1, PIK3R5, NFKB2, STAT3, PDE4B, PDE4D, SHC1, P2RY2, PRKAR2B, RRAS2, ADRB1, NFKBIA, PLCB1, P2RY1, MAP3K8, NFKBIB, ADCY7
PDGF Signaling	1.09E00	1.18E-01	MYC, SHC1, RRAS2, SPHK1, PIK3R5, STAT3, JAK2, EIF2AK2, STAT1
HMGB1 Signaling	1.08E00	1.12E-01	RAC2, SELE, VCAM1, ICAM1, RRAS2, TNFRSF1A, RHOC, RAC1, PIK3R5, NFKB2, SERPINE1
CD40 Signaling	1.06E00	1.19E-01	ICAM1, NFKBIA, NFKBIE, PIK3R5, TNFAIP3, STAT3, NFKB2, NFKBIB
Phospholipase C Signaling	1.06E00	8.98E-02	RHOC, RAC1, PPP1R14A, HDAC9 (includes EG:9734), NFKB2, FCGR2B, MYL7, MYL9 (includes EG:98932), TGM2, SHC1, HMOX1, RRAS2, GNG11, SYK, PLA2G5, FCER1G, PLCB1, MEF2C, GNA13, ADCY7, LCP2, PRKD1, CALM1
G Beta Gamma Signaling	1.05E00	9.24E-02	SHC1, RAC2, GNG11, PRKAR2B, RRAS2, RAC1, KCNJ3, GNA13, CAV2, PRKD1, EGFR
ICOS-ICOSL Signaling in T Helper Cells	1.03E00	9.84E-02	SHC1, RAC2, IL2RG, NFKBIA, NFKBIE, RAC1, PIK3R5, FCER1G, NFKB2, NFKBIB, LCP2, CALM1
IL-1 Signaling	1.03E00	1.04E-01	GNG11, PRKAR2B, NFKBIA, MYD88, NFKBIE, GNA13, NFKB2, IRAK3, NFKBIB, ADCY7, IRAK2
Thyroid Cancer Signaling	1.03E00	1.28E-01	CXCL10, MYC, SHC1, NTF3, RRAS2, CXCL1

Airway Pathology in Chronic Obstructive Pulmonary Disease	9.94E-01	2.22E-01	CXCL3, MMP8
Chemokine Signaling	9.94E-01	1.2E-01	CCL13, RRAS2, CAMK1D, CCL7, CXCR4, CXCL12, PLCB1, CCL5, CALM1
ERK5 Signaling	9.65E-01	1.13E-01	MYC, RRAS2, MAP3K8, MEF2C, RPS6KA5, RPS6KA2, GNA13, EGFR
Hypoxia Signaling in the Cardiovascular System	9.65E-01	1.14E-01	UBD, VEGFA, NFKBIA, NFKBIE, HIF1A, NFKBIB, SLC2A4, UBE2L6
PKCθ Signaling in T Lymphocytes	9.38E-01	8.63E-02	RAC2, RRAS2, NFKBIA, MAP3K6, NFKBIE, RAC1, PIK3R5, FCER1G, MAP3K8, NFKB2, NFKBIB, LCP2
IL-2 Signaling	9.37E-01	1.21E-01	SHC1, RAC2, IL2RG, RRAS2, SYK, RAC1, PIK3R5
IL-15 Production	9.28E-01	1.33E-01	JAK2, NFKB2, STAT1, IRF1
Ephrin Receptor Signaling	9.26E-01	9.09E-02	RAC2, PAK6, CXCR4, RAC1, VEGFC, EPHA4, JAK2, STAT3, PGF, VEGFA, EFNB2, SHC1, EPHB1, GNG11, RRAS2, CXCL12, EFNB3, GNA13
Integrin Signaling	9.25E-01	9.41E-02	RAC2, PAK6, RHOC, ITGA8 (includes EG:8516), RAC1, PIK3R5, TSPAN2, LIMS1, CAPN10, ITGB3, MYL7, MYL9 (includes EG:98932), SHC1, ITGB2, ITGAM, RRAS2, ACTG2 (includes EG:72), ITGB6, TSPAN4
FXR/RXR Activation	8.92E-01	9.71E-02	PPARA, RAC2, APOE, PON1, SDC1, IL1RN, RAC1, FBP1, PLTP, PPARGC1A
Sphingolipid Metabolism	8.57E-01	7.76E-02	LPIN1, ACER2, SPTLC2, SPHK1, DUSP18, LPIN3, ARSB, SGMS1, FADS3
VDR/RXR Activation	8.57E-01	1.12E-01	CXCL10, SERPINB1, CDKN1A, CD14, IGFBP5, SEMA3B, CEBPB, CCL5, PRKD1
Calcium Signaling	8.57E-01	8.29E-02	CAMK1D, TRDN, HDAC9 (includes EG:9734), MYH7B (includes EG:668940), TPM2, MYH11, RCAN1, MYL7, ATP2B2, PRKAR2B, TPM3, RYR3, CASQ1, MEF2C, ASPH, CASQ2, CALM1
PTEN Signaling	8.44E-01	9.52E-02	SHC1, BCL2L1, RAC2, RRAS2, CDKN1A, RAC1, PIK3R5, NFKB2, EGFR, MAGI3
Gα12/13 Signaling	8.29E-01	9.6E-02	MYL9 (includes EG:98932), RAC2, RRAS2, NFKBIA, NFKBIE, RAC1, PIK3R5, MEF2C, GNA13, NFKB2, NFKBIB, MYL7
Aminosugars Metabolism	8.22E-01	6.61E-02	PDE7A, DUSP18, UAP1, PDE4B, PDE4D, CYB561, CHI3L3, GFPT2
Fcγ Receptor-mediated Phagocytosis in Macrophages and Monocytes	7.98E-01	9.9E-02	HMOX1, RAC2, SYK, HCK, RAC1, ACTG2 (includes EG:72), FCGR1A, FCGR3A, LCP2, PRKD1
Actin Cytoskeleton Signaling	7.86E-01	8.51E-02	FGF16, RAC2, PAK6, FGF9, PIK3R5, RAC1, MYH7B (includes EG:668940), MYH11, MYL7, MYL9 (includes EG:98932), SHC1, IQGAP2, RRAS2, FGF12, CD14, LBP, ACTG2 (includes EG:72), GNA13, FGF7, MSN
FcγRIIB Signaling in B Lymphocytes	7.78E-01	8.93E-02	SHC1, RRAS2, SYK, PIK3R5, FCGR2B
Breast Cancer Regulation by Stathmin1	7.64E-01	9.05E-02	PPP1R14C, CAMK1D, PPP1R3C, RAC1, TUBA4A, PIK3R5, PPP1R14A, SHC1, RRAS2, PRKAR2B, GNG11, TUBA8, CDKN1A, PLCB1, GNA13, ADCY7, PRKD1, CALM1
Melanocyte Development and Pigmentation Signaling	7.61E-01	1.02E-01	KITLG, SHC1, PRKAR2B, RRAS2, MITF, PIK3R5, RPS6KA5, RPS6KA2, ADCY7
N-Glycan Degradation	7.48E-01	1.29E-01	EDEM1, MAN2A1, MANBA, CHI3L3
FGF Signaling	7.38E-01	1.02E-01	FGF16, RAC2, FGF9, FGF12, RAC1, PIK3R5, RPS6KA5, STAT3, FGF7
CXCR4 Signaling	7.38E-01	8.98E-02	RAC2, PAK6, RHOC, CXCR4, RAC1, PIK3R5, MYL7, MYL9 (includes EG:98932), GNG11, RRAS2, CXCL12, PLCB1, GNA13, ADCY7, PRKD1
AMPK Signaling	7.33E-01	7.88E-02	PFKFB3, RAC2, ADIPOQ, RAC1, PIK3R5, PFKFB2, EIF4EBP1, PRKAR2B, ADRB1, AK1, PRKAA2, HLA-B, AK3L1
Communication between Innate and Adaptive Immune Cells	7.32E-01	6.93E-02	CXCL10, TLR2, IL1RN, FCER1G, CD83, CCL5, TLR3
Estrogen-Dependent Breast Cancer Signaling	7.32E-01	1E-01	RAC2, RRAS2, IGF1, RAC1, PIK3R5, NFKB2, EGFR
4-1BB Signaling in T Lymphocytes	7.1E-01	1.18E-01	NFKBIA, NFKBIE, NFKB2, NFKBIB
p70S6K Signaling	6.96E-01	9.16E-02	SHC1, RAC2, IL2RG, IL4R, RRAS2, SYK, MAPT, RAC1, PIK3R5, PLCB1, PRKD1, EGFR
HGF Signaling	6.94E-01	9.71E-02	RAC2, RRAS2, MAP3K6, CDKN1A, RAC1, PIK3R5, MAP3K8, STAT3, IL6, PRKD1
T Helper Cell Differentiation	6.82E-01	9.72E-02	IL2RG, IL4R, TNFRSF1A, FCER1G, STAT3, IL6, STAT1
SAPK/JNK Signaling	6.74E-01	9.09E-02	SHC1, RAC2, DAXX, GNG11, RRAS2, RAC1, PIK3R5, FCER1G, GNA13
ATM Signaling	6.65E-01	1.13E-01	GADD45B, NFKBIA, GADD45G, CDKN1A, BID, CHEK2
Role of NFAT in Cardiac Hypertrophy	6.58E-01	8.21E-02	RAC2, CAMK1D, RAC1, PIK3R5, HDAC9 (includes EG:9734), IL6, RCAN1, SHC1, GNG11, PRKAR2B, RRAS2, IGF1, PLCB1, MEF2C, ADCY7, PRKD1, CALM1
Cholecystokinin/Gastrin-mediated Signaling	6.56E-01	9.62E-02	SHC1, RRAS2, IL1RN, RHOC, PLCB1, MEF2C, EPHA4, GNA13, PRKD1, EGFR
LPS/IL-1 Mediated Inhibition of RXR Function	6.45E-01	7.98E-02	PPARA, APOE, MGST1, TNFRSF1A, MYD88, IL1R2, SULT1A1, ACSL5, ALAS1, CD14, ACSL4, FABP7, CYP2B6, PLTP, LBP, ABCC3, ALDH3A1
Cytotoxic T Lymphocyte-mediated Apoptosis of Target Cells	6.38E-01	9.09E-02	FCER1G, BID, FAS
Ceramide Signaling	6.34E-01	9.2E-02	RAC2, RRAS2, CNKSR1, TNFRSF1A, RAC1, SPHK1, PIK3R5, NFKB2
CD28 Signaling in T Helper Cells	6.24E-01	8.33E-02	RAC2, NFKBIA, SYK, NFKBIE, RAC1, PIK3R5, FCER1G, NFKB2, NFKBIB, LCP2, CALM1
EGF Signaling	6.23E-01	1.02E-01	SHC1, PIK3R5, STAT3, STAT1, EGFR
IGF-1 Signaling	6.16E-01	9E-02	SHC1, RAC2, PRKAR2B, RRAS2, NOV, IGF1, RAC1, PIK3R5, IGFBP5
Lipid Antigen Presentation by CD1	6.09E-01	8.7E-02	B2M, FCER1G
Sphingosine-1-phosphate Signaling	6.02E-01	8.62E-02	RAC2, RHOC, ACER2, RAC1, SPHK1, PIK3R5, PLCB1, CASP4, GNA13, ADCY7
Pantothenate and CoA Biosynthesis	5.98E-01	4.69E-02	PANK1, ENPP3, CILP
Antiproliferative Role of Somatostatin Receptor 2	5.91E-01	8.97E-02	GNG11, RRAS2, GUCY1A3, CDKN1A, PIK3R5, ADCY7, GUCY1B3
Huntington's Disease Signaling	5.85E-01	7.92E-02	RAC2, PIK3R5, RAC1, HDAC9 (includes EG:9734), CASP4, CAPN10, UBD, TGM2, SHC1, BCL2L1, HSPA4, GNG11, IGF1, PENK, PLCB1, GOSR1, CASP12 (includes EG:12364), PRKD1, EGFR
RAR Activation	5.52E-01	8.29E-02	RAC2, SRA1, CCNH, RAC1, JAK2, NFKB2, RBP1, VEGFA, CSF2RB, PRKAR2B, PML, ADCY7, SMAD1, PRKD1, PPARGC1A
Endothelin-1 Signaling	5.52E-01	8.11E-02	TMEM87B, GUCY1A3, PIK3R5, CASP4, MYC, SHC1, HMOX1, RRAS2, ECE2, PLA2G5, PLCB1, GNA13, ADCY7, PRKD1, GUCY1B3
Ovarian Cancer Signaling	5.39E-01	8.57E-02	VEGFA, RAC2, PRKAR2B, RRAS2, FGF9, CD44, RAC1, PIK3R5, VEGFC, PGF, WNT5A, EGFR
Chronic Myeloid Leukemia Signaling	5.29E-01	8.57E-02	MYC, BCL2L1, RAC2, RRAS2, CDKN1A, RAC1, PIK3R5, HDAC9 (includes EG:9734), NFKB2
RhoA Signaling	5.21E-01	9.09E-02	MYL9 (includes EG:98932), RHPN2, IGF1, SEPT4, ACTG2 (includes EG:72), GNA13, CDC42EP4, ARHGAP8, MSN, MYL7
Glutamate Metabolism	5.21E-01	5.13E-02	GMPS, GLUL, GCLM, GFPT2
Cardiac Hypertrophy Signaling	5.19E-01	7.82E-02	MAP3K6, RHOC, PIK3R5, IL6, EIF4E, MYL7, MYL9 (includes EG:98932), ADRB1, GNG11, PRKAR2B, RRAS2, IGF1, PLCB1, MEF2C, MAP3K8, GNA13, ADCY7, CALM1, HSPB1
NRF2-mediated Oxidative Stress Response	5.15E-01	8.2E-02	MGST1, DNAJB4, NQO2, DNAJA4, PIK3R5, JUNB, DNAJB14, MAFF, HMOX1, RRAS2, GCLM, ACTG2 (includes EG:72), FKBP5, NFE2L2, PRKD1
Protein Ubiquitination Pathway	5.13E-01	7.96E-02	B2M, PSMB9, USP18, PSMB10, PSME2, FBXW7, PSMB8, TAP1, UBE2L6, UBD, PSMA5, HLA-B, BIRC3, TAP2, BIRC2, HLA-C
Fc Epsilon RI Signaling	5.12E-01	8.74E-02	RAC2, RRAS2, SYK, PLA2G5, RAC1, PIK3R5, FCER1G, LCP2, PRKD1
14-3-3-mediated Signaling	5.06E-01	8.77E-02	RAC2, RRAS2, TUBA8, TNFRSF1A, MAPT, RAC1, TUBA4A, PIK3R5, PLCB1, PRKD1
EIF2 Signaling	5.04E-01	8E-02	SHC1, RAC2, RRAS2, EIF4A1, RAC1, PIK3R5, EIF2AK2, EIF4E
GNRH Signaling	5.02E-01	7.64E-02	PRKAR2B, RRAS2, PAK6, MAP3K6, RAC1, PLCB1, MAP3K8, NFKB2, ADCY7, PRKD1, EGFR
Riboflavin Metabolism	4.96E-01	5.45E-02	ENPP3, CILP, DUSP18
Cardiac β-adrenergic Signaling	4.88E-01	7.75E-02	PPP1R14C, GNG11, PRKAR2B, ADRB1, PDE7A, PPP1R3C, PPP1R14A, PKIA, PDE4B, ADCY7, PDE4D
Glioblastoma Multiforme Signaling	4.83E-01	7.98E-02	RAC2, RHOC, RAC1, PIK3R5, MYC, SHC1, IGF2, RRAS2, IGF1, CDKN1A, PLCB1, WNT5A, EGFR
Role of MAPK Signaling in the Pathogenesis of Influenza	4.77E-01	9.33E-02	TMEM87B, CXCL10, RAC2, RRAS2, PLA2G5, RAC1, CCL5
Dopamine Receptor Signaling	4.77E-01	7.53E-02	PPP1R14C, GCH1, PRKAR2B, COMT, PPP1R3C, PPP1R14A, ADCY7
April Mediated Signaling	4.71E-01	9.52E-02	NFKBIA, NFKBIE, NFKB2, NFKBIB
Role of NANOG in Mammalian Embryonic Stem Cell Pluripotency	4.64E-01	8.77E-02	LIFR, SHC1, RAC2, RRAS2, RAC1, PIK3R5, STAT3, JAK2, SMAD1, WNT5A
FAK Signaling	4.56E-01	8E-02	RAC2, RRAS2, PAK6, RAC1, PIK3R5, ACTG2 (includes EG:72), CAPN10, EGFR
Androgen Signaling	4.5E-01	6.94E-02	SHC1, HSPA4, CCNH, GNG11, PRKAR2B, AR, GNA13, NFKB2, PRKD1, CALM1
Thrombin Signaling	4.38E-01	7.84E-02	RAC2, CAMK1D, RHOC, RAC1, PIK3R5, NFKB2, MYL7, MYL9 (includes EG:98932), SHC1, GNG11, RRAS2, PLCB1, GNA13, ADCY7, PRKD1, EGFR
Hereditary Breast Cancer Signaling	4.37E-01	7.75E-02	UBD, RAC2, GADD45B, RRAS2, GADD45G, CDKN1A, RAC1, PIK3R5, HDAC9 (includes EG:9734), CHEK2
Folate Biosynthesis	4.36E-01	2.5E-02	GCH1, CILP
CCR5 Signaling in Macrophages	4.32E-01	6.45E-02	GNG11, FCER1G, CCL5, FAS, PRKD1, CALM1
Reelin Signaling in Neurons	4.28E-01	8.97E-02	ITGB2, APOE, MAPT, HCK, PIK3R5, LRP8, ITGB3
Neuregulin Signaling	4.26E-01	7.77E-02	MYC, SHC1, RAC2, RRAS2, RAC1, ERRFI1, PRKD1, EGFR
B Cell Activating Factor Signaling	4.25E-01	9.09E-02	NFKBIA, NFKBIE, NFKB2, NFKBIB
Rac Signaling	4.25E-01	7.38E-02	IQGAP2, RRAS2, PAK6, CD44, RAC1, PIK3R5, SH3RF1, NFKB2, ANK1
Endometrial Cancer Signaling	4.19E-01	8.77E-02	MYC, RAC2, RRAS2, RAC1, PIK3R5
Amyloid Processing	4.19E-01	8.47E-02	RAC2, PRKAR2B, MAPT, RAC1, CAPN10
Glycosphingolipid Biosynthesis - Globoseries	4.13E-01	6.67E-02	ST8SIA4, ST3GAL1, CHI3L3
Metabolism of Xenobiotics by Cytochrome P450	3.98E-01	3.88E-02	MGST1, CYP2E1, CYP4B1, ADH1C (includes EG:126), CYP2B6, MEST, ALDH3A1, CYP1B1
Linoleic Acid Metabolism	3.84E-01	5.79E-02	TMEM87B, CYP2E1, CYP4B1, PLA2G5, CYP2B6, CYP1B1, FADS3
Fructose and Mannose Metabolism	3.83E-01	3.45E-02	PFKFB3, KHK, FBP1, DUSP18, PFKFB2
Xenobiotic Metabolism Signaling	3.82E-01	6.87E-02	SRA1, MGST1, MAP3K6, CAMK1D, NQO2, PIK3R5, IL6, NFKB2, CES1 (includes EG:1066), CYP1B1, HMOX1, RRAS2, SULT1A1, MAP3K8, CYP2B6, ABCC3, ALDH3A1, NFE2L2, PRKD1, PPARGC1A
Regulation of eIF4 and p70S6K Signaling	3.75E-01	6.82E-02	EIF1AY, SHC1, RAC2, RRAS2, EIF4A1, RAC1, PIK3R5, EIF4E, EIF4EBP1
Glyoxylate and Dicarboxylate Metabolism	3.72E-01	1.71E-02	MTHFD2, MDH1
Phenylalanine, Tyrosine and Tryptophan Biosynthesis	3.72E-01	2.99E-02	PAH, TOR3A
Biosynthesis of Steroids	3.67E-01	2.34E-02	CYP7B1, NQO2, FADS3
Regulation of Actin-based Motility by Rho	3.57E-01	7.61E-02	MYL9 (includes EG:98932), RAC2, PAK6, RHOC, RAC1, ACTG2 (includes EG:72), MYL7
Regulation of IL-2 Expression in Activated and Anergic T Lymphocytes	3.57E-01	7.78E-02	RRAS2, NFKBIA, NFKBIE, RAC1, NFKB2, NFKBIB, CALM1
Germ Cell-Sertoli Cell Junction Signaling	3.51E-01	7.59E-02	RAC2, RRAS2, TUBA8, PAK6, MAP3K6, TNFRSF1A, RHOC, RAC1, TUBA4A, PIK3R5, MAP3K8, ACTG2 (includes EG:72)
Protein Kinase A Signaling	3.46E-01	7.21E-02	PPP1R14C, HIST1H1C, PDE7A, NFKBIE, PPP1R3C, PPP1R14A, NFKB2, PDE4B, PDE4D, H3F3C, MYL7, MYL9 (includes EG:98932), GNG11, PRKAR2B, NFKBIA, RYR3, HLA-B, PLCB1, GNA13, NFKBIB, ADCY7, PRKD1, CALM1
Glutamate Receptor Signaling	3.36E-01	7.14E-02	GNG11, HOMER2, GLUL, HOMER1, CALM1
Pyrimidine Metabolism	3.32E-01	5.19E-02	ENPP3, APOBEC1, CMPK2, MAD2L2, ENTPD5, UPP1, CTPS2, PNP, AK3L1, UCK2, UNG, CTPS
CCR3 Signaling in Eosinophils	3.29E-01	7.5E-02	GNG11, RRAS2, PAK6, PLA2G5, RAC1, PIK3R5, PLCB1, PRKD1, CALM1
Synaptic Long Term Depression	3.28E-01	6.88E-02	TMEM87B, RRAS2, IGF1, GUCY1A3, RYR3, PLA2G5, PLCB1, GNA13, ADCY7, GUCY1B3, PRKD1
Glycosphingolipid Biosynthesis - Ganglioseries	3.25E-01	4.69E-02	ST8SIA4, ST3GAL1, CHI3L3
G Protein Signaling Mediated by Tubby	3.25E-01	7.32E-02	GNG11, PLCB1, JAK2
Nucleotide Excision Repair Pathway	3.25E-01	8.57E-02	CCNH, RPA3, ERCC1
PAK Signaling	3.2E-01	6.73E-02	MYL9 (includes EG:98932), SHC1, RRAS2, PAK6, RAC1, PIK3R5, MYL7
Role of Lipids/Lipid Rafts in the Pathogenesis of Influenza	3.15E-01	3.33E-02	RSAD2
CTLA4 Signaling in Cytotoxic T Lymphocytes	3.08E-01	7.14E-02	RAC2, SYK, RAC1, PIK3R5, FCER1G, JAK2, LCP2
Phospholipid Degradation	3.08E-01	6.67E-02	TMEM87B, HMOX1, LPIN1, PLA2G5, SPHK1, PLCB1, LPIN3
CDK5 Signaling	2.97E-01	7.45E-02	PPP1R14C, PRKAR2B, RRAS2, PPP1R3C, MAPT, PPP1R14A, ADCY7
Role of Cytokines in Mediating Communication between Immune Cells	2.89E-01	5.36E-02	IL1RN, IL6, CSF3
α-Adrenergic Signaling	2.75E-01	6.6E-02	GNG11, PRKAR2B, RRAS2, HLA-B, ADCY7, PRKD1, CALM1
Stilbene, Coumarine and Lignin Biosynthesis	2.75E-01	2.56E-02	CYP7B1, FADS3
Tryptophan Metabolism	2.69E-01	3.95E-02	WARS, CYP7B1, CYP2E1, CYP4B1, IDO1, SIAH2, CYP2B6, INMT, ALDH3A1, CYP1B1
Glycosphingolipid Biosynthesis - Lactoseries	2.49E-01	3.7E-02	ST3GAL1
Mechanisms of Viral Exit from Host Cells	2.42E-01	6.82E-02	ACTG2 (includes EG:72), CHMP4B, PRKD1
Glycosphingolipid Biosynthesis - Neolactoseries	2.37E-01	2.9E-02	ST8SIA4, GCNT2
Ascorbate and Aldarate Metabolism	2.37E-01	2.33E-02	ALDH3A1, FADS3
Synthesis and Degradation of Ketone Bodies	2.01E-01	5.26E-02	BDH1

TABLE S6 Functional gene groupings sensitive to LPS treatment in WT hearts

Functional Gene Groupings	*P*-value range	Number of Genes
Molecular and Cellular Functions		
Cellular Movement	4.29E-24 - 4.19E-06	246
Cell Death	5.11E-20 - 4.24E-06	356
Cell-To-Cell Signalling and Interaction	3.06E-17 - 3.19E-06	245
Cellular development	3.97E-16 - 4.19E-06	321
Cellular growth and proliferation	1.21E-14 - 3.74E-06	360
Physiological System Development and Function		
Haematological system development/function	8.17E-24 - 4.19E-06	258
Immune cell trafficking	8.17E-24 - 4.18E-06	175
Haematopoiesis	3.25E-21 - 4.19E-06	161
Tissue Development	2.00E-19 - 2.16E-06	158
Tissue Morphology	2.73E-19 - 2.43E-06	177
Tissue Morphology	2.73E-19 - 2.43E-06	177
Disease and Disorders		
Cancer	9.92E-27 - 2.44E-06	407
Inflammatory response	4.44E-21 - 4.18E-06	246
Skeletal and muscular disorders	1.60E-17 - 1.68E-06	355
Immunological Disease	3.04E-17 - 7.13E-09	320
Organismal Injury and Abnormalities	4.58E-15 - 3.06E-06	130
Tissue Morphology	2.73E-19 - 2.43E-06	177
Cardiac Toxicological Functions		
Cardiac Infarction	1.62E-09	28
Cardiac Dysfunction	1.95E-05 - 1.05E-01	12
Cardiac Hypertrophy	2.26E-05 - 3.37E-01	46
Cardiac Arteriopathy	5.36E-04	122
Cardiac Necrosis/Cell Death	8.93E-04 - 5.25E-01	22
Tachycardia	1.88E-03 - 1.53E-01	7
Cardiac Damage	3.60E-03 - 2.82E-01	11
Cardiac Fibrosis	8.63E-03 - 1.77E-02	14
Cardiac Congestive Cardiac Failure	1.01E-02	11
Heart Failure	1.01E-02 - 4.40E-01	21
Cardiac Arrhythmia	2.07E-02 - 1.00E00	5
Cardiac Output	2.07E-02 - 3.39E-02	4
Cardiac Degeneration	7.94E-02	1
Cardiac Stenosis	9.39E-02	6
Cardiac Inflammation	9.41E-02	3
Cardiac Dilation	1.13E-01	6
Congenital Heart Anomaly	1.11E-01	3
Bradycardia	5.31E-01	2
Cardiac Enlargement	2.20E-01	1
Cardiac Transformation	2.82E-01	1
Cardiac Hypoplasia	4.84E-01	1
Cardiac Proliferation	5.79E-01	2

Functional groupings of cardiac transcripts differentially modified at 24 hrs of LPS treatment. Also shown are P-values, and total numbers of involved genes. Functional groups are categorized into molecular and cellular functions, physiological system development and function, disease and disorders, and cardiac toxicological functions, and ranked according to P-value ranges determined by a Fisher's Exact Test. Also shown are the total numbers of genes involved.

TABLE S7: Biological functions modified by LPS

Category	Function	Function Annotation	P-value	Molecules	# of Molecules
Cancer	neoplasia	neoplasia	9.92E-27	ABCA8, ABCC3, ACOT9, ACSL5, ADA, ADAM9, ADAMTS1, ADAMTS9, ADH1C (includes EG:126), ADIPOQ, ADRB1, ALAS1, ALDH3A1, ANGPTL2, ANTXR1, ANXA4, APOD, APOE, APOLD1, AQP1, AR, ARHGAP8, ARHGAP18, ASB5, ASPH, ATF3, ATP2B2, ATP8B1, B2M, B4GALT5, BAK1, BCL3, BCL2L1, BCR, BDH1, BEX1, BIRC2, BIRC3, BST2, BTG2, C3, C11ORF52, C13ORF15, C15ORF48, C1R, C1S, C2ORF40, C4A, C7ORF68, CA3, CACNA2D2, CACNB2, CAPG, CASP4, CCL5, CCL19, CCND2, CCNH, CD14, CD24, CD38, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CENPA, CENPF, CES1 (includes EG:1066), CFB, CFD, CFLAR, CHEK2, CHI3L1, CLCA1 (includes EG:12722), CLEC10A, CLIC5, CMTM8, CNDP2, CNN1, COL15A1, COL4A4 (includes EG:1286), COL6A1, COL6A3, COLEC12, COMT, CP, CRIP1, CSF1, CSF3, CSF2RB, CSRP2, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYGB, CYP1B1, CYP2E1, DARC, DBN1, DDIT3, DDIT4, DNAJB4, DPT, DTNA, ECM2, EFNB2, EFNB3, EGFR, EHBP1, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, ENC1, ENTPD5, EPHA4, ERCC1, ERRFI1, ESRRG, FABP7, FAM198B, FAS, FBLN5, FBXW7, FCGR3A, FEN1, FGD4, FGF7, FGF12, FHL2, FMOD, FOSL2, GADD45B, GAS1, GBP2, GCH1, GINS1, GLRX, GLUL, GMPS, GNA13, GNG11, GPM6A, H19, HCCS, HCLS1, HCN1, HDAC9 (includes EG:9734), HEY1, HEYL, HIF1A, HLA-B, HLA-E, HLA-G, HLF (includes EG:3131), HMOX1, HP, HSD11B1, HSPA4, HSPB1, ICAM1, IDO1, IER3, IFI44, IFIH1, IFIT3, IFITM1, IFITM2, IGDCC4, IGF1, IGF2, IGFBP5, IGHM, IL6, IL33, IL13RA1, IL18BP, IL1RN, IL2RG, INHBB, IQGAP2, IRF1, ISG15, ISG20, ISLR, ITGB3, ITGB6, ITGBL1, ITIH5, JAK2, JUNB, KCNK3, KIAA0664, KIF1B, KITLG, KLF10, LBP, LCN2, LEPR, LGALS3, LGALS8, LGALS3BP, LIFR, LILRA6, LOX, LRG1, LRP8, LRRC17, LRRN4, LTBP4, LY6E, MAP1LC3B, MAP3K8, MAPT, MASP1, MBP, MDH1, MEOX2, MEST, MFAP3L, MGP, MGST1, MITF, MMP3, MMP14, MSR1, MT1E, MT1F, MTHFD2, MX1, MYC, MYCN, MYD88, MYH11, NAMPT, NCAM1, NDRG4, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NFKBIB, NOV, NR3C1, NR3C2, NRP1, NTS, OGFR, OLFML3, OLR1, OPCML, OR51E2, OSMR, PBX1, PCDH12, PCSK6, PDE4B, PDE4D, PDE5A, PDE7A, PDK4, PDLIM4, PGF, PIM1, PKIA, PLAUR, PLSCR4, PLXNB1, PML, PNP, POSTN, PPARA, PPARGC1A, PPIG, PPP1R3C, PRDM16, PRRX1, PSAT1, PSMB9, PSMF1, PTGFR, PTP4A1, PTPRE, PTPRF, PTX3, QPCT (includes EG:25797), RAB3A, RBP1, RECK, RELB, RETNLA, RGS2, RGS5, RHOC, RNASE1, RRAD, RRP12, RUNX1T1, S100A8, S100A9, SAA1, SCARA5, SCN7A, SCUBE2, SDC1, SDF2L1, SDPR, SELE, SELENBP1, SELL, SEMA3C, SEMA3F, SEMA5A, SERPINA3, SERPINB1, SERPINB9, SERPINE1, SERPINF1, SERPING1, SHC1, SLC22A3, SLC24A3, SLC2A1, SLC39A6, SLC5A3, SNAI2, SOCS2, SOCS3, SOSTDC1, SOX4, SPARCL1, SPHK1, STAT1, STAT2, STAT3, STMN2, STXBP6, SULT1A1, SYK, SYNPO2, SYT12, TACC2, TAGLN, TCF21, TFDP2, TFRC, THBS2, THBS4, TIMP1, TIMP2, TLR2, TLR3, TMEM176B, TNFRSF1A, TNFSF10, TP53INP1, TPM2, TPM3, TSPAN4, TSPAN12, TUBA8, TUBA4A, TXNIP, UCP1, UCP2, UNG, UPK3B, UPP1, VCAM1, VCAN, VEGFA, VEGFC, VTN, VWA5A, WARS, WIF1, WNT5A, XAF1, ZFP36, ZNF827, ZNF24 (includes EG:7572), ZWINT (includes EG:11130)	394
Cancer	cancer	cancer	4.26E-26	ABCA8, ABCC3, ACOT9, ACSL5, ADA, ADAM9, ADAMTS1, ADAMTS9, ADH1C (includes EG:126), ADIPOQ, ADRB1, ALAS1, ALDH3A1, ANGPTL2, ANTXR1, ANXA4, APOD, APOE, APOLD1, AQP1, AR, ARHGAP8, ARHGAP18, ASB5, ASPH, ATF3, ATP2B2, ATP8B1, B2M, B4GALT5, BAK1, BCL3, BCL2L1, BCR, BDH1, BEX1, BIRC2, BIRC3, BST2, BTG2, C3, C11ORF52, C13ORF15, C15ORF48, C1R, C1S, C2ORF40, C4A, C7ORF68, CA3, CACNA2D2, CACNB2, CAPG, CASP4, CCL5, CCL19, CCND2, CCNH, CD14, CD24, CD38, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CENPA, CENPF, CES1 (includes EG:1066), CFB, CFD, CFLAR, CHEK2, CHI3L1, CLEC10A, CLIC5, CMTM8, CNDP2, COL15A1, COL4A4 (includes EG:1286), COL6A1, COL6A3, COLEC12, COMT, CP, CRIP1, CSF1, CSF3, CSF2RB, CSRP2, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYGB, CYP1B1, CYP2E1, DDIT4, DNAJB4, DPT, DTNA, ECM2, EFNB2, EFNB3, EGFR, EHBP1, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, ENC1, ENTPD5, EPHA4, ERCC1, ERRFI1, ESRRG, FABP7, FAM198B, FAS, FBLN5, FBXW7, FCGR3A, FEN1, FGD4, FGF7, FGF12, FHL2, FMOD, FOSL2, GADD45B, GAS1, GBP2, GCH1, GINS1, GLRX, GLUL, GMPS, GNA13, GNG11, GPM6A, H19, HCCS, HCLS1, HCN1, HDAC9 (includes EG:9734), HEY1, HEYL, HIF1A, HLA-B, HLA-E, HLA-G, HLF (includes EG:3131), HMOX1, HP, HSD11B1, HSPA4, HSPB1, ICAM1, IDO1, IER3, IFI44, IFIH1, IFIT3, IFITM1, IFITM2, IGDCC4, IGF1, IGF2, IGFBP5, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IQGAP2, IRF1, ISG15, ISG20, ISLR, ITGB3, ITGB6, ITGBL1, ITIH5, JAK2, JUNB, KCNK3, KIAA0664, KIF1B, KITLG, KLF10, LBP, LCN2, LEPR, LGALS3, LGALS8, LGALS3BP, LIFR, LILRA6, LOX, LRG1, LRP8, LRRC17, LRRN4, LTBP4, LY6E, MAP1LC3B, MAP3K8, MAPT, MASP1, MBP, MDH1, MEOX2, MEST, MFAP3L, MGP, MGST1, MITF, MMP3, MMP14, MSR1, MT1E, MT1F, MTHFD2, MYC, MYCN, MYD88, MYH11, NAMPT, NCAM1, NDRG4, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NR3C1, NR3C2, NRP1, NTS, OGFR, OLFML3, OLR1, OPCML, OR51E2, OSMR, PBX1, PCDH12, PCSK6, PDE4B, PDE4D, PDE5A, PDE7A, PDK4, PDLIM4, PGF, PIM1, PKIA, PLAUR, PLSCR4, PLXNB1, PML, PNP, POSTN, PPARA, PPARGC1A, PPIG, PPP1R3C, PRDM16, PRRX1, PSAT1, PSMB9, PSMF1, PTGFR, PTP4A1, PTPRE, PTPRF, PTX3, QPCT (includes EG:25797), RAB3A, RBP1, RECK, RELB, RETNLA, RGS2, RGS5, RHOC, RNASE1, RRAD, RRP12, RUNX1T1, S100A8, S100A9, SAA1, SCARA5, SCN7A, SCUBE2, SDC1, SDF2L1, SDPR, SELE, SELENBP1, SELL, SEMA3C, SEMA3F, SEMA5A, SERPINA3, SERPINB1, SERPINB9, SERPINE1, SERPINF1, SERPING1, SLC22A3, SLC24A3, SLC2A1, SLC39A6, SLC5A3, SNAI2, SOCS2, SOCS3, SOSTDC1, SOX4, SPARCL1, SPHK1, STAT1, STAT2, STAT3, STMN2, STXBP6, SULT1A1, SYK, SYNPO2, SYT12, TACC2, TAGLN, TCF21, TFDP2, TFRC, THBS4, TIMP1, TIMP2, TLR2, TLR3, TMEM176B, TNFRSF1A, TNFSF10, TP53INP1, TPM2, TPM3, TSPAN4, TSPAN12, TUBA8, TUBA4A, TXNIP, UCP1, UNG, UPK3B, UPP1, VCAM1, VCAN, VEGFA, VEGFC, VTN, VWA5A, WARS, WIF1, WNT5A, XAF1, ZFP36, ZNF827, ZNF24 (includes EG:7572), ZWINT (includes EG:11130)	380
Cancer	tumorigenesis	tumorigenesis	8.95E-26	ABCA8, ABCC3, ACOT9, ACSL5, ADA, ADAM9, ADAMTS1, ADAMTS9, ADH1C (includes EG:126), ADIPOQ, ADRB1, ALAS1, ALDH3A1, ANGPTL2, ANGPTL4, ANTXR1, ANXA4, APOD, APOE, APOLD1, AQP1, AR, ARHGAP8, ARHGAP18, ASB5, ASPH, ATF3, ATP2B2, ATP8B1, B2M, B4GALT5, BAK1, BCL3, BCL2L1, BCR, BDH1, BEX1, BIRC2, BIRC3, BST2, BTG2, C3, C11ORF52, C13ORF15, C15ORF48, C1R, C1S, C2ORF40, C4A, C7ORF68, CA3, CACNA2D2, CACNB2, CAPG, CASP4, CCL5, CCL19, CCND2, CCNH, CD14, CD24, CD38, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CENPA, CENPF, CES1 (includes EG:1066), CFB, CFD, CFLAR, CHEK2, CHI3L1, CLCA1 (includes EG:12722), CLEC10A, CLIC5, CMTM8, CNDP2, CNN1, COL15A1, COL4A4 (includes EG:1286), COL6A1, COL6A3, COLEC12, COMT, CP, CRIP1, CSF1, CSF3, CSF2RB, CSRP2, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYGB, CYP1B1, CYP2E1, DARC, DBN1, DDIT3, DDIT4, DNAJB4, DPT, DTNA, ECM2, EFNB2, EFNB3, EGFR, EHBP1, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, ENC1, ENTPD5, EPHA4, ERCC1, ERRFI1, ESRRG, FABP7, FAM198B, FAS, FBLN5, FBXW7, FCGR3A, FEN1, FGD4, FGF7, FGF12, FHL2, FMOD, FOSL2, FPR1, GADD45B, GAS1, GBP2, GCH1, GINS1, GLRX, GLUL, GMPS, GNA13, GNG11, GPM6A, H19, HCCS, HCLS1, HCN1, HDAC9 (includes EG:9734), HEY1, HEYL, HIF1A, HLA-B, HLA-E, HLA-G, HLF (includes EG:3131), HMOX1, HP, HSD11B1, HSPA4, HSPB1, ICAM1, IDO1, IER3, IFI44, IFI202B, IFIH1, IFIT3, IFITM1, IFITM2, IGDCC4, IGF1, IGF2, IGFBP5, IGHM, IL6, IL33, IL13RA1, IL18BP, IL1RN, IL2RG, INHBB, IQGAP2, IRF1, IRF8, ISG15, ISG20, ISLR, ITGB3, ITGB6, ITGBL1, ITIH5, JAK2, JUNB, KCNK3, KIAA0664, KIF1B, KITLG, KLF10, LBP, LCN2, LEPR, LGALS3, LGALS8, LGALS3BP, LIFR, LILRA6, LIMD1, LIMS1, LOX, LRG1, LRP8, LRRC17, LRRN4, LTBP4, LY6E, MAP1LC3B, MAP3K8, MAPT, MASP1, MBP, MDH1, MEOX2, MEST, MFAP3L, MGP, MGST1, MITF, MMP3, MMP14, MSR1, MT1E, MT1F, MTHFD2, MX1, MYC, MYCN, MYD88, MYH11, NAMPT, NCAM1, NDRG4, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NFKBIB, NOV, NQO2, NR3C1, NR3C2, NRP1, NTS, OGFR, OLFML3, OLR1, OPCML, OR51E2, OSMR, PARP4, PBX1, PCDH12, PCSK6, PDE4B, PDE4D, PDE5A, PDE7A, PDK4, PDLIM4, PGF, PIM1, PKIA, PLAUR, PLSCR4, PLXNB1, PML, PNP, POSTN, PPARA, PPARGC1A, PPIG, PPP1R3C, PRDM16, PRRX1, PSAT1, PSMB9, PSMF1, PTGFR, PTN, PTP4A1, PTPRE, PTPRF, PTX3, QPCT (includes EG:25797), RAB3A, RAC1, RBP1, RECK, RELB, RETNLA, RGS2, RGS5, RHOC, RNASE1, RP6-213H19.1, RRAD, RRP12, RUNX1T1, S100A8, S100A9, SAA1, SCARA5, SCN7A, SCUBE2, SDC1, SDF2L1, SDPR, SELE, SELENBP1, SELL, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINA3, SERPINB1, SERPINB9, SERPINE1, SERPINF1, SERPING1, SHC1, SLC22A3, SLC24A3, SLC2A1, SLC39A6, SLC5A3, SNAI2, SOCS2, SOCS3, SOSTDC1, SOX4, SPARCL1, SPHK1, STAT1, STAT2, STAT3, STMN2, STXBP6, SULT1A1, SYK, SYNPO2, SYT12, TACC2, TAGLN, TCF21, TCIRG1, TFDP2, TFRC, THBS2, THBS4, TIMP1, TIMP2, TLR2, TLR3, TMEM176B, TNFRSF1A, TNFSF10, TP53INP1, TPM2, TPM3, TSPAN4, TSPAN12, TUBA8, TUBA4A, TXNIP, UCP1, UCP2, UNG, UPK3B, UPP1, VCAM1, VCAN, VEGFA, VEGFC, VTN, VWA5A, WARS, WIF1, WNT5A, XAF1, ZFP36, ZNF827, ZNF24 (includes EG:7572), ZWINT (includes EG:11130)	407
Cancer	tumorigenesis	tumorigenesis of cell lines	6.65E-07	ATF3, BAK1, CD24, CD44, CD274, CDKN1A, CNN1, CXCL2, CXCR4, DNAJB4, EGFR, EIF4E, FBLN5, FPR1, HMOX1, IFI202B, IGF1, IRF1, JAK2, MMP3, MYC, NFKBIA, NFKBIB, PLAUR, PML, RAC1, RP6-213H19.1, STAT1, STAT3, TIMP1, TXNIP, VEGFA	32
Cancer	tumor	tumor	8.68E-21	ABCA8, ABCC3, ACOT9, ADA, ADAM9, ADAMTS1, ADH1C (includes EG:126), ADIPOQ, ADRB1, ANGPTL4, ANTXR1, ANXA4, APOD, APOE, AQP1, AR, ASB5, ASPH, ATF3, ATP8B1, B2M, B4GALT5, BCL3, BCL2L1, BCR, BDH1, BEX1, BIRC2, BST2, BTG2, C3, C11ORF52, C13ORF15, C1R, C1S, C4A, CA3, CACNA2D2, CACNB2, CASP4, CCL19, CCND2, CCNH, CD14, CD24, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CES1 (includes EG:1066), CFB, CFD, CFLAR, CHEK2, CLEC10A, CMTM8, COL15A1, COL6A3, CP, CSF1, CSF2RB, CSRP2, CTSL2, CTSS, CX3CL1, CXCL1, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCR4, CYGB, CYP1B1, DARC, DBN1, DPT, DTNA, ECM2, EFNB2, EFNB3, EGFR, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, ENC1, ENTPD5, EPHA4, ERCC1, ESRRG, FABP7, FAS, FBLN5, FBXW7, FCGR3A, FEN1, FGD4, FGF7, FHL2, FMOD, GADD45B, GAS1, GBP2, GINS1, GLRX, GNA13, GNG11, GPM6A, H19, HDAC9 (includes EG:9734), HEY1, HIF1A, HLA-B, HLA-E, HLA-G, HLF (includes EG:3131), HP, HSD11B1, HSPA4, IDO1, IER3, IFI44, IFIH1, IFIT3, IFITM1, IFITM2, IGDCC4, IGF1, IGF2, IGFBP5, IL6, IL13RA1, IL18BP, IL1RN, IL2RG, IQGAP2, IRF1, IRF8, ITGB3, ITGB6, ITGBL1, JAK2, KCNK3, KIAA0664, KIF1B, KITLG, LCN2, LEPR, LGALS3, LGALS3BP, LIFR, LIMD1, LOX, LRP8, LRRN4, LTBP4, LY6E, MAP1LC3B, MAP3K8, MDH1, MEOX2, MEST, MFAP3L, MGP, MGST1, MITF, MMP3, MMP14, MSR1, MT1E, MT1F, MTHFD2, MX1, MYC, MYCN, MYD88, NCAM1, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NOV, NQO2, NR3C1, NR3C2, NRP1, NTS, OGFR, OLR1, OPCML, OR51E2, PARP4, PBX1, PCDH12, PCSK6, PDE4B, PDE4D, PDE5A, PDE7A, PDK4, PGF, PIM1, PKIA, PLAUR, PML, PNP, PPARA, PPIG, PRDM16, PSAT1, PSMB9, PTGFR, PTN, PTPRE, RECK, RELB, RETNLA, RGS5, RHOC, RNASE1, RRAD, S100A8, S100A9, SAA1, SCARA5, SCN7A, SCUBE2, SDC1, SDF2L1, SDPR, SELE, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINB1, SERPINB9, SERPINE1, SERPINF1, SERPING1, SHC1, SLC22A3, SLC24A3, SLC2A1, SLC39A6, SLC5A3, SNAI2, SOCS3, SOX4, STAT1, STAT2, STAT3, STMN2, STXBP6, SYK, SYT12, TFDP2, TFRC, THBS2, TIMP1, TIMP2, TLR3, TMEM176B, TNFRSF1A, TNFSF10, TP53INP1, TSPAN4, TSPAN12, TUBA8, TUBA4A, TXNIP, UCP1, UNG, UPK3B, UPP1, VCAM1, VCAN, VEGFA, VEGFC, WIF1, WNT5A, XAF1, ZNF827, ZNF24 (includes EG:7572)	288
Cancer	malignant tumor	malignant tumor	4.42E-19	ABCA8, ABCC3, ACOT9, ADA, ADAMTS1, ADH1C (includes EG:126), ADIPOQ, ADRB1, ANTXR1, ANXA4, APOD, APOE, AQP1, AR, ASB5, ASPH, ATP8B1, B2M, B4GALT5, BCL3, BCL2L1, BCR, BDH1, BEX1, BIRC2, BST2, BTG2, C3, C11ORF52, C13ORF15, C1R, C1S, C4A, CA3, CACNA2D2, CASP4, CCL19, CCNH, CD14, CD24, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CES1 (includes EG:1066), CFB, CFD, CFLAR, CHEK2, CLEC10A, CMTM8, COL15A1, COL6A3, CP, CSF1, CSF2RB, CSRP2, CTSL2, CTSS, CX3CL1, CXCL1, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCR4, CYGB, CYP1B1, DPT, DTNA, ECM2, EFNB2, EFNB3, EGFR, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, ENC1, ENTPD5, EPHA4, ERCC1, ESRRG, FABP7, FAS, FBLN5, FBXW7, FCGR3A, FEN1, FGD4, FGF7, FHL2, FMOD, GADD45B, GAS1, GBP2, GINS1, GLRX, GNA13, GNG11, GPM6A, H19, HDAC9 (includes EG:9734), HEY1, HIF1A, HLA-B, HLA-E, HLA-G, HLF (includes EG:3131), HP, HSD11B1, HSPA4, IDO1, IER3, IFI44, IFIH1, IFIT3, IFITM1, IFITM2, IGDCC4, IGF1, IGF2, IGFBP5, IL6, IL13RA1, IL1RN, IL2RG, IQGAP2, IRF1, ITGB3, ITGBL1, JAK2, KCNK3, KIAA0664, KIF1B, KITLG, LCN2, LEPR, LGALS3, LGALS3BP, LIFR, LOX, LRP8, LRRN4, LTBP4, LY6E, MAP1LC3B, MAP3K8, MDH1, MEOX2, MEST, MFAP3L, MGP, MGST1, MITF, MMP3, MMP14, MSR1, MT1E, MT1F, MTHFD2, MYC, MYCN, NCAM1, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NR3C1, NTS, OGFR, OPCML, OR51E2, PBX1, PCDH12, PCSK6, PDE4D, PDE5A, PDK4, PIM1, PKIA, PLAUR, PML, PNP, PPARA, PPIG, PRDM16, PSAT1, PSMB9, PTGFR, PTPRE, RECK, RELB, RETNLA, RGS5, RHOC, RNASE1, S100A8, S100A9, SAA1, SCARA5, SCN7A, SCUBE2, SDF2L1, SDPR, SELE, SEMA3C, SEMA3F, SEMA5A, SERPINB1, SERPINB9, SERPINE1, SERPINF1, SERPING1, SLC22A3, SLC24A3, SLC2A1, SLC39A6, SLC5A3, SNAI2, SOCS2, SOCS3, SOX4, STAT1, STAT2, STAT3, STMN2, STXBP6, SYK, SYT12, TFDP2, TFRC, TIMP1, TIMP2, TLR3, TMEM176B, TNFRSF1A, TNFSF10, TP53INP1, TSPAN4, TSPAN12, TUBA8, TUBA4A, TXNIP, UCP1, UNG, UPK3B, UPP1, VCAM1, VCAN, VEGFA, VEGFC, WIF1, WNT5A, XAF1, ZNF827, ZNF24 (includes EG:7572)	260
Cancer	primary tumor	primary tumor	1.79E-18	ABCA8, ABCC3, ACOT9, ADA, ADAMTS1, ADH1C (includes EG:126), ADIPOQ, ADRB1, ANTXR1, ANXA4, APOD, APOE, AQP1, AR, ASB5, ASPH, ATP8B1, B2M, B4GALT5, BCL3, BCL2L1, BCR, BDH1, BEX1, BIRC2, BST2, BTG2, C3, C11ORF52, C13ORF15, C1R, C1S, C4A, CA3, CACNA2D2, CACNB2, CASP4, CCL19, CCNH, CD14, CD24, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CES1 (includes EG:1066), CFB, CFD, CFLAR, CHEK2, CLEC10A, CMTM8, COL15A1, COL6A3, CP, CSF1, CSF2RB, CSRP2, CTSL2, CTSS, CX3CL1, CXCL1, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCR4, CYGB, CYP1B1, DARC, DBN1, DPT, DTNA, ECM2, EFNB2, EFNB3, EGFR, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, ENC1, ENTPD5, EPHA4, ERCC1, ESRRG, FABP7, FAS, FBLN5, FBXW7, FCGR3A, FEN1, FGD4, FGF7, FHL2, FMOD, GADD45B, GAS1, GBP2, GINS1, GLRX, GNA13, GNG11, GPM6A, H19, HDAC9 (includes EG:9734), HEY1, HIF1A, HLA-B, HLA-E, HLA-G, HLF (includes EG:3131), HP, HSD11B1, HSPA4, IDO1, IER3, IFI44, IFIH1, IFIT3, IFITM1, IFITM2, IGDCC4, IGF1, IGF2, IGFBP5, IL6, IL13RA1, IL1RN, IL2RG, IQGAP2, IRF1, ITGB3, ITGBL1, JAK2, KCNK3, KIAA0664, KIF1B, KITLG, LCN2, LEPR, LGALS3, LGALS3BP, LIFR, LOX, LRP8, LRRN4, LTBP4, LY6E, MAP1LC3B, MAP3K8, MDH1, MEOX2, MEST, MFAP3L, MGP, MGST1, MITF, MMP3, MMP14, MSR1, MT1E, MT1F, MTHFD2, MYC, MYCN, NCAM1, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NOV, NR3C1, NR3C2, NTS, OGFR, OPCML, OR51E2, PBX1, PCDH12, PCSK6, PDE4D, PDE5A, PDK4, PIM1, PKIA, PLAUR, PML, PNP, PPARA, PPIG, PRDM16, PSAT1, PSMB9, PTGFR, PTPRE, RECK, RELB, RETNLA, RGS5, RHOC, RNASE1, S100A8, S100A9, SAA1, SCARA5, SCN7A, SCUBE2, SDF2L1, SDPR, SELE, SEMA3C, SEMA3F, SEMA5A, SERPINB1, SERPINB9, SERPINE1, SERPINF1, SERPING1, SHC1, SLC22A3, SLC24A3, SLC2A1, SLC39A6, SLC5A3, SNAI2, SOCS2, SOCS3, SOX4, STAT1, STAT2, STAT3, STMN2, STXBP6, SYK, SYT12, TFDP2, TFRC, THBS2, TIMP1, TIMP2, TLR3, TMEM176B, TNFRSF1A, TNFSF10, TP53INP1, TSPAN4, TSPAN12, TUBA8, TUBA4A, TXNIP, UCP1, UNG, UPK3B, UPP1, VCAM1, VCAN, VEGFA, VEGFC, WIF1, WNT5A, XAF1, ZNF827, ZNF24 (includes EG:7572)	267
Cancer	carcinoma	carcinoma	7.12E-15	ABCA8, ABCC3, ACOT9, ADAMTS1, ADH1C (includes EG:126), ADIPOQ, ADRB1, ANTXR1, ANXA4, APOD, APOE, AQP1, AR, ASPH, ATP8B1, B2M, BCR, BEX1, BIRC2, BTG2, C3, C11ORF52, C13ORF15, C1R, C1S, C4A, CA3, CACNA2D2, CASP4, CD14, CD24, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CES1 (includes EG:1066), CFB, CFD, CLEC10A, CMTM8, COL15A1, COL6A3, CP, CSF1, CSF2RB, CSRP2, CTSL2, CTSS, CX3CL1, CXCL1, CXCL14, CXCR4, CYP1B1, DTNA, EFNB2, EGFR, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, ENTPD5, EPHA4, ERCC1, ESRRG, FABP7, FAS, FBLN5, FCGR3A, FEN1, FGD4, FGF7, FHL2, FMOD, GADD45B, GAS1, GBP2, GINS1, GLRX, HDAC9 (includes EG:9734), HIF1A, HLA-E, HLA-G, HLF (includes EG:3131), HP, HSD11B1, IDO1, IER3, IFI44, IFITM1, IFITM2, IGDCC4, IGF1, IGFBP5, IL6, IL2RG, IQGAP2, IRF1, ITGB3, ITGBL1, LCN2, LEPR, LGALS3, LOX, LRP8, LRRN4, LTBP4, LY6E, MAP1LC3B, MEOX2, MGP, MMP3, MMP14, MT1E, MT1F, MYC, MYCN, NCAM1, NFE2L2, NFKBIA, NR3C1, NTS, OGFR, OR51E2, PCDH12, PCSK6, PDE5A, PIM1, PLAUR, PML, PPARA, PSAT1, PTGFR, PTPRE, RECK, RELB, RETNLA, RHOC, RNASE1, S100A8, S100A9, SAA1, SCUBE2, SDF2L1, SELE, SEMA3C, SEMA3F, SEMA5A, SERPINB1, SERPINB9, SERPINE1, SERPINF1, SERPING1, SLC22A3, SLC2A1, SLC39A6, SOCS2, SOCS3, STAT1, STAT3, STMN2, SYK, SYT12, TFDP2, TFRC, TIMP1, TIMP2, TLR3, TMEM176B, TNFRSF1A, TNFSF10, TP53INP1, TSPAN4, TUBA8, TUBA4A, TXNIP, UCP1, UNG, UPK3B, UPP1, VCAN, VEGFA, VEGFC, WIF1, WNT5A, ZNF827, ZNF24 (includes EG:7572)	186
Cancer	genital tumor	genital tumor	1.16E-10	ABCA8, ADA, ADIPOQ, ADRB1, ANTXR1, APOD, APOE, AR, ASPH, ATP8B1, B2M, BCR, C3, C13ORF15, C1R, C4A, CD24, CD44, CD274, CFB, CMTM8, COL15A1, CP, CSF1, CSF2RB, CX3CL1, CYP1B1, DTNA, EGFR, EIF4EBP1, ENTPD5, EPHA4, ESRRG, FABP7, FAS, FCGR3A, FHL2, GBP2, GINS1, HDAC9 (includes EG:9734), HSD11B1, IDO1, IER3, IFITM2, IGF1, IL6, IRF1, ITGB3, KITLG, LCN2, LRP8, LRRN4, LY6E, MGP, MYC, NFKBIA, NR3C1, OR51E2, PDE5A, PIM1, PLAUR, PML, PSAT1, RECK, RELB, RHOC, S100A8, S100A9, SEMA3C, SERPINB1, SERPING1, SLC22A3, SLC2A1, SLC39A6, SOCS3, STAT1, TMEM176B, TSPAN4, TUBA8, TUBA4A, TXNIP, UPK3B, VCAN, VEGFA, WIF1, ZNF827	86
Cancer	colorectal cancer	colorectal cancer	1.33E-10	ABCC3, ACSL5, ADAMTS1, ALAS1, ANGPTL2, ANTXR1, ANXA4, ARHGAP18, ATF3, BAK1, BCR, BEX1, BST2, C15ORF48, C1R, CAPG, CCND2, CD24, CD44, CD274, CDKN1A, CEBPD, CENPA, CENPF, CLIC5, COL6A1, COL6A3, COLEC12, CRIP1, CXCL1, CXCL10, CXCL12, CXCR4, CYP1B1, EGFR, EIF2AK2, ENC1, EPHA4, ERCC1, ERRFI1, FEN1, FGF12, GCH1, GLRX, GLUL, GMPS, HCLS1, HDAC9 (includes EG:9734), HLA-E, HMOX1, ICAM1, IFITM1, IGF1, IGF2, IGFBP5, IL6, IL2RG, ISG20, ISLR, LEPR, LGALS3, LGALS8, LILRA6, LRP8, LRRC17, LTBP4, MEST, MMP3, MT1E, MT1F, MYC, NDRG4, NEK6, NEK7, NR3C1, NRP1, OLFML3, OSMR, PCSK6, PDE5A, PGF, PLAUR, PLSCR4, PPARA, PRRX1, PTPRF, PTX3, QPCT (includes EG:25797), RAB3A, RRAD, SDC1, SDF2L1, SELENBP1, SERPINA3, SERPINE1, SLC2A1, SLC5A3, STAT1, STMN2, STXBP6, TCF21, TFRC, THBS4, TIMP1, TIMP2, TLR2, TNFSF10, TUBA8, TUBA4A, UNG, VCAM1, VEGFA, VEGFC, WARS, ZNF24 (includes EG:7572), ZWINT (includes EG:11130)	116
Cancer	developmental process	developmental process of tumor	6.53E-10	ADAM9, ADIPOQ, ANGPTL4, ANTXR1, BST2, CD44, CD274, CDKN1A, CEBPB, CSF1, CTSL2, CTSS, EGFR, FAS, FBLN5, HIF1A, HSPA4, IER3, IGF1, IGF2, IGFBP5, IL6, IL1RN, IQGAP2, IRF1, IRF8, ITGB3, ITGB6, LIMD1, MMP3, MYC, MYCN, MYD88, NFKB2, NFKBIA, NQO2, NR3C1, NRP1, OLR1, PGF, PML, PPARA, RRAD, SDC1, SELE, SERPINE1, SNAI2, STAT3, TIMP1, TIMP2, TNFSF10, VEGFA, VEGFC	53
Cancer	prostate cancer	prostate cancer	5.18E-09	ADIPOQ, ADRB1, ANTXR1, APOD, APOLD1, AR, ASPH, B2M, BCL2L1, BCR, C3, C1R, CCL5, CD24, CD44, CDKN1A, CFB, CHEK2, CSF1, CSF2RB, CX3CL1, CXCR4, CYP1B1, EGFR, EHBP1, EIF4EBP1, ENTPD5, EPHA4, ESRRG, FABP7, FAS, FCGR3A, FHL2, GBP2, HDAC9 (includes EG:9734), HMOX1, IDO1, IER3, IGF1, IGHM, IL6, IRF1, ISG15, ITGB3, LGALS8, LY6E, MSR1, MYC, NFKBIA, NR3C1, OR51E2, PDE5A, PIM1, PLAUR, PLXNB1, PML, PSAT1, RELB, RHOC, S100A8, S100A9, SERPINB1, SERPING1, SLC22A3, SLC2A1, SLC39A6, SOCS3, STAT1, STAT3, SYNPO2, TUBA8, TUBA4A, VCAN, VEGFA, WIF1, ZFP36, ZNF827	77
Cancer	uterine tumor	uterine tumor	1.01E-08	ABCA8, AR, ASB5, BCR, BDH1, CD24, COL6A3, CSF1, CTSL2, CTSS, CXCL14, CYP1B1, DPT, ECM2, EGFR, EIF4EBP1, ESRRG, FAS, FMOD, GNG11, GPM6A, H19, HLA-B, IFIH1, IFIT3, IGF2, IGFBP5, IL6, KIAA0664, LIFR, MDH1, MEST, MFAP3L, MGST1, MTHFD2, MYC, PDE5A, PDK4, PKIA, PPIG, PSMB9, PTGFR, RGS5, SCARA5, SCN7A, SDPR, SERPINB9, SLC24A3, SLC5A3, SOCS3, SOX4, STXBP6, TIMP1, TSPAN12, TUBA8, TUBA4A, VCAN, VEGFA, XAF1	59
Cancer	uterine cancer	uterine cancer	1.33E-08	ABCA8, AR, ASB5, BCR, BDH1, CD24, COL6A3, CSF1, CTSL2, CTSS, CXCL14, CYP1B1, DPT, ECM2, EGFR, EIF4EBP1, ESRRG, FAS, FMOD, GNG11, GPM6A, H19, HLA-B, IFIH1, IFIT3, IGF2, IGFBP5, IL6, KIAA0664, LIFR, MDH1, MEST, MFAP3L, MGST1, MTHFD2, MYC, PDE5A, PDK4, PKIA, PPIG, PSMB9, PTGFR, RGS5, SCARA5, SCN7A, SDPR, SERPINB9, SLC24A3, SLC5A3, SOCS3, SOX4, STXBP6, TIMP1, TSPAN12, TUBA8, TUBA4A, VCAN, VEGFA, XAF1, ZFP36	60
Cancer	uterine leiomyoma	uterine leiomyoma	4.34E-08	ABCA8, ASB5, BDH1, CD24, COL6A3, CXCL14, DPT, ECM2, EGFR, EIF4EBP1, ESRRG, FAS, FMOD, GNG11, GPM6A, H19, IFIH1, IFIT3, IGF2, IGFBP5, KIAA0664, LIFR, MDH1, MEST, MFAP3L, MGST1, MTHFD2, MYC, PDE5A, PDK4, PKIA, PPIG, RGS5, SCARA5, SCN7A, SDPR, SLC24A3, SLC5A3, SOCS3, SOX4, STXBP6, TSPAN12, VCAN, XAF1	44
Cancer	growth	growth of tumor	8.16E-08	ADAM9, ADIPOQ, ANGPTL4, ANTXR1, BST2, CD44, CD274, CDKN1A, CTSL2, CTSS, EGFR, FAS, FBLN5, HIF1A, HSPA4, IGF1, IGF2, IGFBP5, IL6, IL1RN, IRF1, IRF8, ITGB3, ITGB6, LIMD1, MMP3, NRP1, OLR1, PGF, RRAD, SERPINE1, STAT3, TIMP1, TIMP2, TNFSF10, VEGFA, VEGFC	37
Cancer	prostatic carcinoma	prostatic carcinoma	1.03E-07	ADIPOQ, ADRB1, ANTXR1, APOD, AR, ASPH, B2M, BCR, C3, C1R, CD24, CD44, CFB, CSF1, CSF2RB, CX3CL1, CYP1B1, EGFR, EIF4EBP1, ENTPD5, EPHA4, ESRRG, FABP7, FAS, FCGR3A, FHL2, GBP2, HDAC9 (includes EG:9734), IDO1, IER3, IGF1, IL6, IRF1, ITGB3, LY6E, MYC, NFKBIA, NR3C1, OR51E2, PDE5A, PIM1, PLAUR, PML, PSAT1, RELB, RHOC, S100A8, S100A9, SERPINB1, SERPING1, SLC22A3, SLC2A1, SLC39A6, SOCS3, TUBA8, TUBA4A, VCAN, VEGFA, WIF1, ZNF827	60
Cancer	benign tumor	benign tumor	1.34E-07	ABCA8, ADIPOQ, AR, ASB5, BDH1, CA3, CACNB2, CD24, CDKN1A, CFD, COL6A3, CSF2RB, CX3CL1, CXCL12, CXCL14, CYP1B1, DARC, DBN1, DPT, ECM2, EGFR, EIF4EBP1, ESRRG, FAS, FGF7, FMOD, GLRX, GNG11, GPM6A, H19, IFIH1, IFIT3, IGF1, IGF2, IGFBP5, IL6, KIAA0664, KIF1B, LCN2, LIFR, MDH1, MEST, MFAP3L, MGST1, MMP3, MMP14, MTHFD2, MYC, NOV, NR3C1, NR3C2, PCDH12, PDE5A, PDK4, PKIA, PLAUR, PML, PPIG, RETNLA, RGS5, S100A8, S100A9, SCARA5, SCN7A, SDPR, SERPINE1, SHC1, SLC24A3, SLC2A1, SLC5A3, SOCS3, SOX4, STAT3, STMN2, STXBP6, THBS2, TNFSF10, TSPAN12, VCAM1, VCAN, VEGFA, XAF1	82
Cancer	breast cancer	breast cancer	1.59E-07	ACOT9, ADA, ADIPOQ, ADRB1, APOE, AR, ARHGAP8, ATF3, ATP2B2, BCR, BEX1, BTG2, C2ORF40, CACNA2D2, CD24, CD44, CD274, CDKN1A, CEBPD, CENPA, CES1 (includes EG:1066), CHEK2, CHI3L1, CLEC10A, CNDP2, COL4A4 (includes EG:1286), COMT, CSF1, CXCL1, CXCL2, CXCL9, CXCL12, CXCL14, CYP2E1, DDIT4, EGFR, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, ERCC1, FABP7, FAM198B, FBLN5, FBXW7, FGF7, GADD45B, H19, HCCS, HCN1, HDAC9 (includes EG:9734), HEYL, HIF1A, HP, ICAM1, IER3, IGF1, IGFBP5, IL6, IL33, IL2RG, ITGB3, ITGB6, ITIH5, JAK2, JUNB, KLF10, LCN2, MAP1LC3B, MAP3K8, MAPT, MMP14, MSR1, MT1E, MT1F, MYC, NAMPT, NEK6, NEK7, NFKBIA, NR3C1, NR3C2, NTS, PCSK6, PDE4B, PDE4D, PDE5A, PDE7A, PDLIM4, PML, PPARA, PTP4A1, PTPRE, RELB, RGS2, RHOC, RRP12, SCN7A, SCUBE2, SELL, SERPINF1, SLC39A6, SNAI2, SOSTDC1, TIMP1, TLR3, TUBA8, TUBA4A, UPP1, VEGFA, VWA5A, ZFP36, ZNF24 (includes EG:7572)	113
Cancer	leiomyoma	leiomyoma	1.74E-07	ABCA8, ASB5, BDH1, CD24, COL6A3, CXCL14, CYP1B1, DPT, ECM2, EGFR, EIF4EBP1, ESRRG, FAS, FMOD, GNG11, GPM6A, H19, IFIH1, IFIT3, IGF1, IGF2, IGFBP5, KIAA0664, LIFR, MDH1, MEST, MFAP3L, MGST1, MTHFD2, MYC, NOV, PDE5A, PDK4, PKIA, PPIG, RGS5, SCARA5, SCN7A, SDPR, SHC1, SLC24A3, SLC5A3, SOCS3, SOX4, STXBP6, TSPAN12, VCAN, XAF1	48
Cancer	serous ovarian carcinoma	serous ovarian carcinoma	2.24E-07	ABCA8, APOE, ATP8B1, BCR, C13ORF15, C4A, CD24, CMTM8, COL15A1, CP, DTNA, GINS1, HSD11B1, IFITM2, LCN2, LRP8, LRRN4, MGP, RECK, SEMA3C, SERPING1, STAT1, TMEM176B, TSPAN4, TXNIP, UPK3B	26
Cancer	prostatic intraepithelial tumor	prostatic intraepithelial tumor	4.98E-07	C3, C1R, CFB, CX3CL1, ENTPD5, ESRRG, FCGR3A, FHL2, GBP2, IER3, IRF1, LY6E, OR51E2, PSAT1, S100A8, S100A9, SERPINB1, SERPING1, SOCS3, VCAN, WIF1, ZNF827	22
Cancer	disease	disease of tumor	8.91E-07	AR, ATF3, BCL2L1, CD44, CDKN1A, CTSS, CYP1B1, EGFR, EIF4EBP1, IGF2, IL1RN, ITGB3, JAK2, MAP3K8, MMP3, MMP14, MYC, MYCN, NCAM1, NFKBIA, PML, RECK, RHOC, SELP, SOCS3, STAT1, STAT2, STAT3, THBS2, TIMP1, VEGFA, VEGFC	32
Cancer	prostatic intraepithelial neoplasia	prostatic intraepithelial neoplasia	1.21E-06	AR, C3, C1R, CFB, CX3CL1, ENTPD5, ESRRG, FCGR3A, FHL2, GBP2, IER3, IRF1, LY6E, OR51E2, PSAT1, S100A8, S100A9, SERPINB1, SERPING1, SOCS3, VCAN, WIF1, ZNF827	23
Cancer	squamous-cell carcinoma	squamous-cell carcinoma	2.09E-06	AQP1, BTG2, CA3, CACNA2D2, CD44, CFD, CSRP2, EGFR, GAS1, GLRX, HLF (includes EG:3131), IFI44, IGFBP5, IRF1, ITGBL1, LCN2, LTBP4, MEOX2, MMP3, MMP14, MYCN, NFKBIA, OGFR, PCDH12, PCSK6, PDE5A, RECK, RETNLA, S100A8, S100A9, SAA1, SEMA5A, SOCS2, STMN2, SYK, TIMP1, TNFRSF1A, TNFSF10, TUBA8, TUBA4A, UPP1, VEGFA	42
Cancer	squamous cell tumor	squamous cell tumor	2.44E-06	AQP1, BTG2, CA3, CACNA2D2, CD44, CFD, CSRP2, EGFR, GAS1, GLRX, HLF (includes EG:3131), IFI44, IGF1, IGFBP5, IRF1, ITGBL1, LCN2, LTBP4, MEOX2, MMP3, MMP14, MYCN, NFKBIA, OGFR, PCDH12, PCSK6, PDE5A, RECK, RETNLA, S100A8, S100A9, SAA1, SEMA5A, SOCS2, STMN2, SYK, TIMP1, TNFRSF1A, TNFSF10, TUBA8, TUBA4A, UPP1, VEGFA	43
Cellular Movement	cell movement	cell movement of blood cells	4.29E-24	ADIPOQ, APOE, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD38, CD44, CD47, CD274, CFB, CHI3L3, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGLN3, FAS, FCER1G, FCGR2B, FCGR3A, FPR1, FPR2, GNA13, HCK, HIF1A, HP, ICAM1, IL6, IL33, IL17RA, IL18BP, IL1RN, IL4R, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LILRA6, MMP8, MMP14, MSR1, MYD88, NFE2L2, NFKB2, NFKBIA, NFKBIZ, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, PVR, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINA3, SERPINE1, SERPING1, SOCS3, SPHK1, STAT1, STAT3, SYK, TCIRG1, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, VTN, ZC3H12A	110
Cellular Movement	cell movement	cell movement of leukocytes	8.17E-24	ADIPOQ, APOE, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD38, CD44, CD47, CD274, CFB, CHI3L3, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGLN3, FAS, FCER1G, FCGR2B, FCGR3A, FPR1, FPR2, GNA13, HCK, HIF1A, HP, ICAM1, IL6, IL33, IL17RA, IL18BP, IL1RN, IL4R, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LILRA6, MMP8, MMP14, MSR1, MYD88, NFE2L2, NFKB2, NFKBIA, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, PVR, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINA3, SERPINE1, SERPING1, SOCS3, SPHK1, STAT1, STAT3, SYK, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, VTN, ZC3H12A	108
Cellular Movement	cell movement	cell movement of normal cells	6.83E-21	ADIPOQ, APOE, AR, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD38, CD44, CD47, CD274, CFB, CHI3L3, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGLN3, FAS, FCER1G, FCGR2B, FCGR3A, FPR1, FPR2, GNA13, HCK, HIF1A, HP, ICAM1, IGF1, IL6, IL33, IL17RA, IL18BP, IL1RN, IL4R, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LCP2, LGALS3, LGALS9, LILRA6, LOX, LRP8, MMP8, MMP14, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NFKBIZ, NOV, NTF3, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, PRND, PVR, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SEMA3F, SERPINA3, SERPINE1, SERPING1, SOCS3, SPHK1, STAT1, STAT3, SYK, TCIRG1, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, VEGFC, VTN, WNT5A, ZC3H12A	122
Cellular Movement	cell movement	ell movement of lymphatic system cell	7.23E-20	C2, C3, C4A, CCL5, CCL7, CCL13, CCR1, CD44, CD47, CFB, CHI3L3, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FAS, FCER1G, FPR1, FPR2, HCK, ICAM1, IL6, IL33, IL17RA, IL1RN, IL4R, ITGAM, ITGB2, ITGB3, KITLG, LCP2, LGALS3, LGALS9, LILRA6, MMP8, MMP14, MYD88, NFE2L2, NFKBIA, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SELL, SELP, SERPINE1, SOCS3, SYK, TLR2, TNFAIP3, TNFRSF1A, VCAM1, VEGFC, VTN	69
Cellular Movement	cell movement	cell movement of eukaryotic cells	7.54E-19	ADIPOQ, APOE, AR, BCR, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD24, CD38, CD44, CD47, CD274, CFB, CHI3L3, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, DNAJB4, EAR2, EGFR, EGLN3, EPHB1, FAS, FCER1G, FCGR2B, FCGR3A, FOSL2, FPR1, FPR2, GNA13, HCK, HIF1A, HP, ICAM1, IGF1, IL6, IL33, IL17RA, IL18BP, IL1RN, IL4R, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LCP2, LGALS3, LGALS9, LIFR, LILRA6, LOX, LRP8, MMP8, MMP14, MSR1, MTSS1, MX1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NFKBIZ, NOV, NRP1, NTF3, P2RY2, PCSK6, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, PRKD1, PRND, PTN, PTP4A1, PVR, RAC1, RAC2, RHOC, S100A8, S100A9, SAA1, SELE, SELL, SELP, SEMA3F, SERPINA3, SERPINE1, SERPING1, SOCS2, SOCS3, SPHK1, STAT1, STAT3, SYK, TCIRG1, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, VEGFC, VTN, WNT5A, ZC3H12A	139
Cellular Movement	cell movement	cell movement	2.13E-18	ADIPOQ, APLNR, APOE, AR, BCR, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CCL19, CCR1, CCRL2, CD14, CD24, CD38, CD44, CD47, CD274, CFB, CHI3L3, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, DBN1, DNAJB4, EAR2, EGFR, EGLN3, EPHB1, FAS, FCER1G, FCGR2B, FCGR3A, FGL2, FOSL2, FPR1, FPR2, GNA13, HCK, HIF1A, HP, HSPB1, ICAM1, IGF1, IL6, IL33, IL17RA, IL18BP, IL1RN, IL4R, IRGM, ITGAM, ITGB2, ITGB3, JAK2, KITLG, LCP2, LGALS3, LGALS8, LGALS9, LIFR, LILRA6, LIMS1, LOX, LRP8, MMP8, MMP14, MSN, MSR1, MTSS1, MX1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NFKBIZ, NOV, NRP1, NTF3, P2RY2, PCSK6, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PLXNB1, PPARA, PRKD1, PRND, PTN, PTP4A1, PVR, RAC1, RAC2, REG3G, RHOC, S100A8, S100A9, SAA1, SELE, SELL, SELP, SEMA3B, SEMA3F, SERPINA3, SERPINE1, SERPING1, SOCS2, SOCS3, SPHK1, STAT1, STAT3, SYK, TCIRG1, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TPM3, TRAF3IP2, UCP2, VCAM1, VCAN, VEGFA, VEGFC, VTN, WNT5A, ZC3H12A	153
Cellular Movement	cell movement	cell movement of granulocytes	2.81E-18	C2, C3, C4A, CCL5, CCL7, CCL13, CCR1, CD44, CD47, CFB, CHI3L3, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FAS, FCER1G, FPR1, FPR2, HCK, ICAM1, IL6, IL33, IL17RA, IL1RN, IL4R, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, LILRA6, MMP8, MYD88, NFE2L2, NFKBIA, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SELL, SELP, SERPINE1, SOCS3, SYK, TLR2, TNFAIP3, TNFRSF1A, VCAM1, VTN	65
Cellular Movement	cell movement	cell movement of phagocytes	1.29E-17	ADIPOQ, APOE, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CD44, CD47, CFB, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, DARC, EGLN3, FAS, FCER1G, FPR1, FPR2, HCK, HIF1A, ICAM1, IL6, IL17RA, IL1RN, IRGM, ITGAM, ITGB2, ITGB3, LILRA6, MMP8, MYD88, NFKBIA, PDE4B, PDE4D, PENK, PGF, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, SERPING1, SOCS3, SPHK1, SYK, TLR2, TLR3, TNFAIP3, TNFRSF1A, VTN	65
Cellular Movement	cell movement	cell movement of neutrophils	4.10E-16	C2, C3, C4A, CCL5, CCL7, CCL13, CD44, CD47, CFB, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FAS, FCER1G, FPR1, FPR2, HCK, ICAM1, IL6, IL17RA, IL1RN, ITGAM, ITGB2, ITGB3, LILRA6, MMP8, MYD88, NFKBIA, PDE4B, PDE4D, PENK, PGF, RAC1, RAC2, S100A8, S100A9, SELE, SELL, SELP, SERPINE1, SOCS3, SYK, TLR2, TNFAIP3, TNFRSF1A, VTN	53
Cellular Movement	cell movement	ell movement of mononuclear leukocyte	3.52E-13	APOE, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CD47, CHI3L3, CTSL2, CTSS, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, FAS, FPR1, FPR2, GNA13, HP, ICAM1, IL6, IL17RA, IL18BP, ITGB2, MMP14, NFKB2, PENK, PLAUR, PVR, RAC1, RAC2, SAA1, SELE, SELL, SELP, SERPINA3, SOCS3, STAT3, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, ZC3H12A	57
Cellular Movement	cell movement	cell movement of cell lines	9.45E-11	BCR, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD24, CD44, CD47, CSF1, CX3CL1, CXCL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCR4, DARC, DNAJB4, EGFR, EPHB1, FOSL2, FPR1, FPR2, GNA13, ICAM1, IGF1, IL6, ITGB2, ITGB3, KITLG, LGALS3, LIFR, LOX, MMP14, MTSS1, MX1, NRP1, P2RY2, PCSK6, PGF, PLAUR, PRKD1, PTN, PTP4A1, PVR, RAC1, RHOC, SELE, SELL, SELP, SERPINE1, SOCS2, SPHK1, STAT3, SYK, TLR2, VEGFA, VTN, WNT5A	64
Cellular Movement	cell movement	cell movement of lymphocytes	2.43E-10	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, FAS, GNA13, ICAM1, IL6, IL17RA, IL18BP, ITGB2, MMP14, NFKB2, RAC1, RAC2, SAA1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP1, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, ZC3H12A	45
Cellular Movement	cell movement	cell movement of monocytes	4.31E-10	APOE, CCL5, CCL7, CCL13, CD47, CTSL2, CTSS, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, FPR1, FPR2, HP, ICAM1, IL6, ITGB2, MMP14, PENK, PLAUR, PVR, SELE, SERPINA3, TIMP2, TNFRSF1A, VCAM1, VEGFA	29
Cellular Movement	cell movement	cell movement of bone marrow cells	5.86E-09	CD44, CD47, CHI3L3, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, FPR1, ICAM1, IL33, ITGAM, ITGB2, ITGB3, KITLG, MMP14, S100A9, SERPINE1, VCAM1	20
Cellular Movement	cell movement	ell movement of antigen presenting cel	7.88E-09	ADIPOQ, APOE, BID, C3, CCL5, CCL7, CCL13, CCL19, CD38, CD44, CSF1, CX3CL1, CXCL9, CXCL12, CXCL14, DARC, EAR2, EGLN3, FPR1, FPR2, HIF1A, ICAM1, IL17RA, IRGM, ITGB2, MYD88, RAC2, SAA1, SELE, SELL, SERPING1, SPHK1, TLR3, TNFAIP3	34
Cellular Movement	cell movement	cell movement of T lymphocytes	2.42E-08	C3, CCL5, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, CXCR4, DARC, FAS, ICAM1, IL6, IL17RA, IL18BP, ITGB2, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TLR2, TRAF3IP2	32
Cellular Movement	cell movement	cell movement of tumor cell lines	8.30E-08	BCR, C3, CCL5, CCL7, CCL13, CCL19, CD24, CD44, CX3CL1, CXCL3, CXCL9, CXCL12, CXCL14, CXCR4, DARC, DNAJB4, EGFR, FPR1, FPR2, IGF1, IL6, ITGB3, KITLG, LIFR, MMP14, MX1, NRP1, P2RY2, PCSK6, PGF, PLAUR, PRKD1, PTN, RAC1, SELE, SELL, SELP, SERPINE1, SPHK1, STAT3, SYK, VEGFA, VTN, WNT5A	44
Cellular Movement	cell movement	cell movement of macrophages	1.22E-07	ADIPOQ, APOE, BID, C3, CCL5, CCL13, CD44, CSF1, CX3CL1, CXCL9, DARC, EGLN3, FPR2, HIF1A, ICAM1, IL17RA, IRGM, ITGB2, MYD88, RAC2, SAA1, SELL, SERPING1, SPHK1, TLR3, TNFAIP3	26
Cellular Movement	cell movement	cell movement of leukemia cell lines	2.26E-07	BCR, CCL5, CCL7, CCL13, CX3CL1, CXCL12, CXCL14, FPR1, FPR2, KITLG, PGF, PLAUR, SELE, SELL, SELP, SPHK1	16
Cellular Movement	cell movement	cell movement of eosinophils	3.49E-07	C3, CCL5, CCL13, CCR1, CD47, CHI3L3, CXCL9, CXCL10, FPR1, IL33, IL17RA, IL4R, ITGAM, ITGB2, LGALS3, LGALS9, MMP8, NFE2L2, PLA2G7, PPARA, VCAM1	21
Cellular Movement	cell movement	movement of peripheral blood leukocy	7.14E-07	CCL5, CCL7, CCL13, CX3CL1, CXCL12, FPR1, FPR2, PLAUR, SELE, SELL, SELP	11
Cellular Movement	cell movement	ell movement of memory T lymphocyte	8.32E-07	CCL5, CCL13, CCL19, CCR1, CXCL9, CXCL11, CXCL12, ICAM1, ITGB2	9
Cellular Movement	cell movement	cell movement of leukocyte cell lines	3.42E-06	BCR, C3, CCL5, CCL19, CCR1, CD44, CSF1, CX3CL1, CXCL11, CXCL12, CXCL13, ICAM1, ITGB2, KITLG, SOCS2, VEGFA	16
Cellular Movement	migration	migration of lymphatic system cells	5.55E-23	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, DARC, FAS, FHL2, FPR1, GUCY1A3, GUCY1B3, HCK, HIF1A, ICAM1, IGF1, IGF2, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, JAK2, LUM, PDE4B, PDE4D, PGF, PIK3R5, PLAUR, RAC1, RETNLA, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TGM2, TNFRSF1A, VCAM1, VEGFA	52
Cellular Movement	migration	migration of bone marrow cells	3.25E-21	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, DARC, FAS, FHL2, FPR1, HCK, HIF1A, ICAM1, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, JAK2, LUM, PDE4B, PDE4D, PGF, PIK3R5, PLAUR, RAC1, RETNLA, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TGM2, TNFRSF1A, VCAM1, VEGFA	48
Cellular Movement	migration	migration of normal cells	1.07E-19	ADAM9, ADIPOQ, ANGPTL4, APOE, C3, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD24, CD38, CD44, CD47, CHI3L3, CLIC4, COMP, CSF1, CSF3, CTSL2, CTSS, CTSZ (includes EG:1522), CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EBF1, EFNB2, EGFR, ERAP1, ERRFI1, FAS, FBLN5, FCER1G, FGF7, FGF9, FHL2, FPR1, FPR2, GNA13, GUCY1A3, GUCY1B3, HCK, HDC, HEY1, HIF1A, HLA-G, HMOX1, HP, ICAM1, IGF1, IGF2, IGFBP5, IL6, IL33, IL17RA, IL18BP, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, LAMA2, LGALS3, LGALS9, LILRA6, LUM, LY6A, MAP3K8, MAPT, MEOX2, MGP, MMP14, MYC, MYD88, NCAM1, NCF1, NEO1, NFIA, NFKB2, NFKBIA, NOV, NRP1, NTF3, OLR1, PDE4B, PDE4D, PENK, PGF, PIK3R5, PIM1, PLA2G5, PLAUR, PPARA, PROCR, PTN, PTPN2, PTPRF, PVR, RAC1, RAC2, RASGRP2, RECK, RETNLA, S100A8, S100A9, SAA1, SDC1, SDC4, SELE, SELL, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINA3, SERPINE1, SOCS3, SPHK1, ST8SIA4, STAT3, SYK, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TNFSF10, TRAF3IP2, VCAM1, VCAN, VEGFA, VEGFC, VTN, WARS	150
Cellular Movement	migration	migration of leukocytes	6.83E-19	APOE, C3, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD24, CD38, CD44, CD47, CHI3L3, CSF1, CSF3, CTSL2, CTSS, CTSZ (includes EG:1522), CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGFR, FAS, FCER1G, FPR1, FPR2, GNA13, HCK, HDC, HLA-G, HP, ICAM1, IL6, IL33, IL17RA, IL18BP, ITGAM, ITGB2, ITGB3, JAK2, KITLG, LGALS3, LGALS9, LILRA6, LUM, LY6A, MMP14, MYD88, NFKB2, NFKBIA, PDE4B, PDE4D, PENK, PIK3R5, PLA2G5, PLAUR, PPARA, PROCR, PVR, RAC1, RAC2, RASGRP2, S100A8, S100A9, SAA1, SDC1, SELE, SELL, SELP, SERPINA3, SERPINE1, SOCS3, SPHK1, STAT3, SYK, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, VCAM1, VEGFA, VTN	98
Cellular Movement	migration	migration of cells	2.38E-18	ADAM9, ADAMTS1, ADIPOQ, ANGPTL4, APOE, AR, ARHGAP8, BCR, C3, C5ORF13, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD24, CD38, CD44, CD47, CDKN1A, CHI3L3, CLIC4, COMP, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CTSZ (includes EG:1522), CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EBF1, EFNB2, EFNB3, EGFR, EPHB1, ERAP1, ERRFI1, FABP7, FAP, FAS, FBLN5, FCER1G, FGF7, FGF9, FHL2, FPR1, FPR2, GNA13, GUCY1A3, GUCY1B3, HCK, HDC, HEY1, HIF1A, HLA-G, HMOX1, HP, ICAM1, IGF1, IGF2, IGFBP5, IL6, IL33, IL17RA, IL18BP, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, LAMA2, LAMB3, LCN2, LGALS3, LGALS9, LILRA6, LOX, LRP8, LUM, LY6A, MAP3K8, MAPT, MEOX2, MGP, MMP3, MMP14, MYC, MYD88, MYH11, NCAM1, NCF1, NEO1, NFIA, NFKB2, NFKBIA, NOV, NRP1, NTF3, NTS, OLR1, PARP9, PDE4B, PDE4D, PDLIM2, PENK, PGF, PIK3R5, PIM1, PLA2G5, PLAUR, POSTN, PPARA, PRKD1, PROCR, PTN, PTP4A1, PTPN2, PTPRF, PVR, RAC1, RAC2, RASGRP2, RECK, RETNLA, RHOC, RPS6KA5, RRAS2, RTN4, S100A8, S100A9, SAA1, SDC1, SDC4, SELE, SELL, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINA3, SERPINE1, SHC1, SNAI2, SOCS3, SPHK1, ST8SIA4, STAT1, STAT3, SYK, SYNM, TGFBI, TGM2, THBS2, THBS4, TIMP1, TIMP2, TLR2, TNFRSF1A, TNFSF10, TPM3, TRAF3IP2, VCAM1, VCAN, VEGFA, VEGFC, VTN, WARS, WNT5A, XDH	186
Cellular Movement	migration	migration of eukaryotic cells	2.72E-18	ADAM9, ADAMTS1, ADIPOQ, ANGPTL4, APOE, AR, ARHGAP8, C3, C5ORF13, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD24, CD38, CD44, CD47, CDKN1A, CHI3L3, CLIC4, COMP, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CTSZ (includes EG:1522), CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EBF1, EFNB2, EFNB3, EGFR, EPHB1, ERAP1, ERRFI1, FABP7, FAS, FBLN5, FCER1G, FGF7, FGF9, FHL2, FPR1, FPR2, GNA13, GUCY1A3, GUCY1B3, HCK, HDC, HEY1, HIF1A, HLA-G, HMOX1, HP, ICAM1, IGF1, IGF2, IGFBP5, IL6, IL33, IL17RA, IL18BP, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, LAMA2, LAMB3, LGALS3, LGALS9, LILRA6, LOX, LRP8, LUM, LY6A, MAP3K8, MAPT, MEOX2, MGP, MMP3, MMP14, MYC, MYD88, MYH11, NCAM1, NCF1, NEO1, NFIA, NFKB2, NFKBIA, NOV, NRP1, NTF3, NTS, OLR1, PARP9, PDE4B, PDE4D, PDLIM2, PENK, PGF, PIK3R5, PIM1, PLA2G5, PLAUR, POSTN, PPARA, PRKD1, PROCR, PTN, PTP4A1, PTPN2, PTPRF, PVR, RAC1, RAC2, RASGRP2, RECK, RETNLA, RHOC, RPS6KA5, S100A8, S100A9, SAA1, SDC1, SDC4, SELE, SELL, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINA3, SERPINE1, SHC1, SNAI2, SOCS3, SPHK1, ST8SIA4, STAT3, SYK, SYNM, TGFBI, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TNFSF10, TRAF3IP2, VCAM1, VCAN, VEGFA, VEGFC, VTN, WARS, WNT5A	177
Cellular Movement	migration	migration of phagocytes	3.39E-17	CCL5, CCL13, CCR1, CD47, CSF1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL12, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL17RA, ITGAM, ITGB2, ITGB3, LGALS3, LUM, PDE4B, PDE4D, PIK3R5, RAC1, RAC2, S100A8, S100A9, SAA1, SDC1, SELE, SELL, SELP, SERPINE1, TLR2, TNFRSF1A, VCAM1, VEGFA, VTN	40
Cellular Movement	migration	migration of myeloid cells	4.42E-17	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, PLAUR, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TGM2, TNFRSF1A, VCAM1	41
Cellular Movement	migration	migration of granulocytes	2.04E-16	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, PLAUR, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TNFRSF1A, VCAM1	40
Cellular Movement	migration	migration of neutrophils	7.26E-15	CCL5, CCL13, CCR1, CD47, CXCL1, CXCL2, CXCL3, CXCL6, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TNFRSF1A, VCAM1	32
Cellular Movement	migration	migration of cell lines	5.17E-13	ADAMTS1, ADIPOQ, AR, ARHGAP8, C3, C5ORF13, CCL5, CCL13, CCR1, CD24, CD44, CD47, CDKN1A, CLIC4, CSF3, CSF2RB, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, EFNB3, EGFR, EPHB1, ERRFI1, FABP7, FBLN5, FGF7, FHL2, FPR2, GNA13, GUCY1A3, GUCY1B3, HIF1A, ICAM1, IGF1, IGF2, IGFBP5, IL6, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, LAMB3, LOX, LRP8, MAP3K8, MEOX2, MMP3, MMP14, MYH11, NOV, NRP1, NTF3, NTS, PDLIM2, PLAUR, POSTN, PRKD1, PTN, PTP4A1, PVR, RAC1, RAC2, RHOC, RPS6KA5, SAA1, SDC1, SELE, SEMA3F, SERPINE1, SHC1, SNAI2, SOCS3, SPHK1, SYNM, TGFBI, TGM2, TIMP1, TIMP2, TLR2, TNFSF10, VCAM1, VEGFA, VEGFC, VTN, WNT5A	93
Cellular Movement	migration	migration of mononuclear leukocytes	8.06E-12	C3, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CD47, CHI3L3, CSF3, CTSL2, CTSS, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, EGFR, FAS, GNA13, HDC, HLA-G, ICAM1, IL6, IL17RA, IL18BP, ITGAM, ITGB2, ITGB3, JAK2, LGALS3, LY6A, MMP14, MYD88, NFKB2, PROCR, PVR, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, VCAM1, VEGFA	59
Cellular Movement	migration	Lymphocyte migration	6.72E-11	C3, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CD47, CHI3L3, CSF3, CTSL2, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, EGFR, FAS, GNA13, HDC, HLA-G, ICAM1, IL6, IL17RA, IL18BP, ITGB2, ITGB3, JAK2, LY6A, MYD88, NFKB2, PROCR, PVR, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, VCAM1	54
Cellular Movement	migration	migration of tumor cell lines	1.13E-08	AR, ARHGAP8, C5ORF13, CCL5, CCL13, CD24, CD44, CD47, CSF3, CX3CL1, CXCL2, CXCL10, CXCL12, CXCR4, EFNB3, EGFR, EPHB1, FABP7, FBLN5, GNA13, IGF1, IGF2, IGFBP5, IL6, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, LAMB3, LOX, MAP3K8, MMP3, MMP14, NOV, NRP1, PDLIM2, PLAUR, PRKD1, PTN, PVR, RAC1, RHOC, RPS6KA5, SDC1, SEMA3F, SERPINE1, SHC1, SNAI2, SOCS3, SPHK1, SYNM, TIMP1, TIMP2, TLR2, VCAM1, VEGFA, VEGFC, VTN, WNT5A	61
Cellular Movement	migration	migration of antigen presenting cells	1.52E-08	APOE, C3, CCL5, CCL7, CCL19, CCR1, CD38, CD44, CSF1, CTSZ (includes EG:1522), CXCL1, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, ICAM1, LGALS3, RAC1, RAC2, SDC1, SELE, TIMP1, TLR2, VEGFA, VTN	27
Cellular Movement	migration	migration of brain cancer cell lines	4.32E-08	C5ORF13, CD24, CXCL12, EFNB3, FABP7, IGF1, ITGB3, MMP14, PLAUR, PTN, PVR, RAC1, SEMA3F, SHC1, SYNM, VEGFA, VEGFC, VTN	18
Cellular Movement	migration	migration of smooth muscle cells	2.27E-07	ADIPOQ, APOE, CCL5, CD47, CLIC4, COMP, CTSL2, FBLN5, HMOX1, IGF1, IGFBP5, IL6, ITGAM, MEOX2, MYC, NEO1, NOV, PLAUR, PTPRF, SDC4, SERPINE1, TIMP1, VTN	23
Cellular Movement	migration	migration of leukocyte cell lines	5.74E-07	C3, CCL5, CCL13, CD44, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, ICAM1, ITGB2, ITGB3, KITLG, VEGFA	14
Cellular Movement	migration	migration of endothelial cells	6.27E-07	ANGPTL4, APOE, CXCL1, CXCL12, EFNB2, ERAP1, GUCY1A3, GUCY1B3, HEY1, ICAM1, IGF1, IGF2, ITGB2, ITGB3, MGP, MMP14, MYC, NRP1, OLR1, PGF, PIM1, PLAUR, RAC1, RECK, SEMA5A, SERPINE1, TIMP1, TIMP2, TNFSF10, VCAM1, VEGFA, VEGFC, VTN, WARS	34
Cellular Movement	migration	T cell migration	6.44E-07	C3, CCL5, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, FAS, ICAM1, IL6, IL17RA, IL18BP, ITGB2, ITGB3, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP2, TLR2, TRAF3IP2	35
Cellular Movement	migration	migration of dendritic cells	1.54E-06	APOE, C3, CCL5, CCL7, CCL19, CCR1, CD38, CD44, CTSZ (includes EG:1522), CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, ICAM1, RAC1, RAC2, SELE, TIMP1	20
Cellular Movement	migration	NK cell migration	2.01E-06	CCL5, CCL6, CCL7, CCL13, CD44, CX3CL1, CXCL9, CXCL10, HLA-G, PVR, SELL, VCAM1	12
Cellular Movement	movement	movement of cells	3.84E-18	ADAM9, ADAMTS1, ADIPOQ, ANGPTL4, APOE, AR, ARHGAP8, BCR, C3, C5ORF13, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD24, CD38, CD44, CD47, CDKN1A, CHI3L3, CLIC4, CNN1, COMP, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CTSZ (includes EG:1522), CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EBF1, EFNB2, EFNB3, EGFR, EPHB1, ERAP1, ERRFI1, FABP7, FAP, FAS, FBLN5, FCER1G, FGF7, FGF9, FHL2, FPR1, FPR2, GNA13, GUCY1A3, GUCY1B3, HCK, HDC, HEY1, HIF1A, HLA-G, HMOX1, HP, ICAM1, IGF1, IGF2, IGFBP5, IL6, IL33, IL17RA, IL18BP, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, LAMA2, LAMB3, LCN2, LGALS3, LGALS9, LILRA6, LOX, LRP8, LUM, LY6A, MAP3K8, MAPT, MEOX2, MGP, MMP3, MMP14, MYC, MYD88, MYH11, NCAM1, NCF1, NEO1, NFIA, NFKB2, NFKBIA, NOV, NRP1, NTF3, NTS, OLR1, PARP9, PDE4B, PDE4D, PDLIM2, PENK, PGF, PIK3R5, PIM1, PLA2G5, PLAUR, POSTN, PPARA, PRKD1, PROCR, PTN, PTP4A1, PTPN2, PTPRF, PVR, RAC1, RAC2, RASGRP2, RECK, RETNLA, RHOC, RPS6KA5, RRAS2, RTN4, S100A8, S100A9, SAA1, SDC1, SDC4, SELE, SELL, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINA3, SERPINE1, SHC1, SNAI2, SOCS3, SPHK1, ST8SIA4, STAT1, STAT3, SYK, SYNM, TGFBI, TGM2, THBS2, THBS4, TIMP1, TIMP2, TLR2, TNFRSF1A, TNFSF10, TPM3, TRAF3IP2, VCAM1, VCAN, VEGFA, VEGFC, VTN, WARS, WNT5A, XDH	187

Cellular Movement	movement	movement of eukaryotic cells	4.50E-18	ADAM9, ADAMTS1, ADIPOQ, ANGPTL4, APOE, AR, ARHGAP8, C3, C5ORF13, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD24, CD38, CD44, CD47, CDKN1A, CHI3L3, CLIC4, CNN1, COMP, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CTSZ (includes EG:1522), CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EBF1, EFNB2, EFNB3, EGFR, EPHB1, ERAP1, ERRFI1, FABP7, FAS, FBLN5, FCER1G, FGF7, FGF9, FHL2, FPR1, FPR2, GNA13, GUCY1A3, GUCY1B3, HCK, HDC, HEY1, HIF1A, HLA-G, HMOX1, HP, ICAM1, IGF1, IGF2, IGFBP5, IL6, IL33, IL17RA, IL18BP, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, LAMA2, LAMB3, LGALS3, LGALS9, LILRA6, LOX, LRP8, LUM, LY6A, MAP3K8, MAPT, MEOX2, MGP, MMP3, MMP14, MYC, MYD88, MYH11, NCAM1, NCF1, NEO1, NFIA, NFKB2, NFKBIA, NOV, NRP1, NTF3, NTS, OLR1, PARP9, PDE4B, PDE4D, PDLIM2, PENK, PGF, PIK3R5, PIM1, PLA2G5, PLAUR, POSTN, PPARA, PRKD1, PROCR, PTN, PTP4A1, PTPN2, PTPRF, PVR, RAC1, RAC2, RASGRP2, RECK, RETNLA, RHOC, RPS6KA5, S100A8, S100A9, SAA1, SDC1, SDC4, SELE, SELL, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINA3, SERPINE1, SHC1, SNAI2, SOCS3, SPHK1, ST8SIA4, STAT3, SYK, SYNM, TGFBI, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TNFSF10, TRAF3IP2, VCAM1, VCAN, VEGFA, VEGFC, VTN, WARS, WNT5A	178
Cellular Movement	movement	movement of cell lines	4.12E-13	ADAMTS1, ADIPOQ, AR, ARHGAP8, C3, C5ORF13, CCL5, CCL13, CCR1, CD24, CD44, CD47, CDKN1A, CLIC4, CNN1, CSF1, CSF3, CSF2RB, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, EFNB3, EGFR, EPHB1, ERRFI1, FABP7, FBLN5, FGF7, FHL2, FPR2, GNA13, GUCY1A3, GUCY1B3, HIF1A, ICAM1, IGF1, IGF2, IGFBP5, IL6, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, LAMB3, LOX, LRP8, MAP3K8, MEOX2, MMP3, MMP14, MYH11, NOV, NRP1, NTF3, NTS, PDLIM2, PLAUR, POSTN, PRKD1, PTN, PTP4A1, PVR, RAC1, RAC2, RHOC, RPS6KA5, SAA1, SDC1, SELE, SEMA3F, SERPINE1, SHC1, SNAI2, SOCS3, SPHK1, SYNM, TGFBI, TGM2, TIMP1, TIMP2, TLR2, TNFSF10, VCAM1, VEGFA, VEGFC, VTN, WNT5A	95
Cellular Movement	movement	movement of tumor cell lines	9.62E-09	AR, ARHGAP8, C5ORF13, CCL5, CCL13, CD24, CD44, CD47, CNN1, CSF3, CX3CL1, CXCL2, CXCL10, CXCL12, CXCR4, EFNB3, EGFR, EPHB1, FABP7, FBLN5, GNA13, IGF1, IGF2, IGFBP5, IL6, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, LAMB3, LOX, MAP3K8, MMP3, MMP14, NOV, NRP1, PDLIM2, PLAUR, PRKD1, PTN, PVR, RAC1, RHOC, RPS6KA5, SDC1, SEMA3F, SERPINE1, SHC1, SNAI2, SOCS3, SPHK1, SYNM, TIMP1, TIMP2, TLR2, VCAM1, VEGFA, VEGFC, VTN, WNT5A	62
Cellular Movement	movement	movement of brain cancer cell lines	1.34E-08	C5ORF13, CD24, CXCL12, EFNB3, EGFR, FABP7, IGF1, ITGB3, MMP14, PLAUR, PTN, PVR, RAC1, SEMA3F, SHC1, SYNM, VEGFA, VEGFC, VTN	19
Cellular Movement	homing	homing of eukaryotic cells	1.22E-14	BCR, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CD44, CD47, CHI3L3, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGFR, EPHB1, FCER1G, FPR1, FPR2, GNA13, HCK, HP, IGF1, IL6, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LIFR, LILRA6, LOX, MMP14, NFKB2, NOV, NRP1, NTF3, P2RY2, PDE4B, PDE4D, PENK, PGF, PLAUR, PPARA, PTN, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELP, SEMA3F, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TLR2, TNFRSF1A, VCAM1, VEGFA, VEGFC, VTN	79
Cellular Movement	homing	homing of lymphatic system cells	1.38E-14	C3, CCL5, CCL7, CCL13, CD44, CHI3L3, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, KITLG, LGALS9, LILRA6, MMP14, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VCAM1, VEGFC, VTN	41
Cellular Movement	homing	homing of cells	1.13E-13	APLNR, BCR, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CD44, CD47, CHI3L3, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGFR, EPHB1, FCER1G, FPR1, FPR2, GNA13, HCK, HP, IGF1, IL6, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LIFR, LILRA6, LOX, MMP14, NFKB2, NOV, NRP1, NTF3, P2RY2, PDE4B, PDE4D, PENK, PGF, PLAUR, PLXNB1, PPARA, PTN, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELP, SEMA3F, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TLR2, TNFRSF1A, VCAM1, VEGFA, VEGFC, VTN	81
Cellular Movement	homing	homing of normal cells	2.74E-13	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CD44, CHI3L3, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, EAR2, FCER1G, FPR1, FPR2, GNA13, HCK, HP, IL6, ITGAM, ITGB2, ITGB3, KITLG, LGALS9, LILRA6, LOX, MMP14, NFKB2, NOV, NTF3, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELP, SEMA3F, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TNFRSF1A, VCAM1, VEGFA, VEGFC, VTN	66
Cellular Movement	homing	homing of cell lines	1.55E-10	BCR, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD47, CSF1, CX3CL1, CXCL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCR4, DARC, EGFR, EPHB1, FPR1, FPR2, IGF1, ITGB3, KITLG, LGALS3, LIFR, LOX, NRP1, P2RY2, PGF, PLAUR, PTN, SELE, SPHK1, SYK, TLR2, VEGFA, VTN	41
Cellular Movement	homing	homing of tumor cell lines	6.22E-09	BCR, C3, CCL5, CCL7, CCL13, CCL19, CX3CL1, CXCL3, CXCL9, CXCL12, CXCL14, CXCR4, DARC, EGFR, FPR1, FPR2, IGF1, ITGB3, KITLG, LIFR, NRP1, P2RY2, PGF, PLAUR, PTN, SPHK1, SYK, VEGFA, VTN	29
Cellular Movement	homing	homing of bone marrow cells	6.10E-07	CD44, CHI3L3, CSF3, CXCL12, KITLG, MMP14, VCAM1	7
Cellular Movement	infiltration	infiltration of cells	4.12E-14	ADIPOQ, APOE, BID, C3, CCL13, CCL19, CCR1, CD44, CD274, CSF1, CSF3, CXCL10, CXCL12, DARC, EGLN3, FAS, FCGR2B, FGL2, FPR2, HIF1A, ICAM1, IL6, IL33, IL17RA, IL18BP, ITGB3, LCP2, LGALS3, MMP8, MMP14, MSR1, MYD88, NFKBIZ, NRP1, PTN, REG3G, SELE, SELP, SERPING1, SOCS3, STAT1, STAT3, TCIRG1, TGM2, TIMP1, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, ZC3H12A	52
Cellular Movement	infiltration	infiltration by neutrophils	1.47E-10	C2, C3, C4A, CD44, CFB, CSF3, CXCL2, CXCL3, CXCL10, FAS, FCER1G, FPR2, ICAM1, IL6, IL17RA, IL1RN, ITGAM, ITGB2, MMP8, MYD88, NFKBIA, PGF, RAC2, SELE, SELL, SELP, SOCS3, TLR2, TNFAIP3, TNFRSF1A	30
Cellular Movement	infiltration	infiltration of leukocytes	1.21E-09	ADIPOQ, APOE, BID, C3, CCL13, CCL19, CCR1, CD44, CD274, CXCL10, CXCL12, DARC, EGLN3, FAS, FCGR2B, FPR2, HIF1A, ICAM1, IL6, IL33, IL17RA, IL18BP, MMP8, MMP14, MSR1, SELE, SELP, SERPING1, STAT1, STAT3, TGM2, TIMP1, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, ZC3H12A	38
Cellular Movement	infiltration	infiltration by lymphocytes	3.12E-06	C3, CCL13, CCL19, CCR1, CD44, CXCL10, CXCL12, DARC, FAS, IL6, IL17RA, IL18BP, MMP14, SELE, SELP, STAT3, TIMP1, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, ZC3H12A	22
Cellular Movement	chemotaxis	chemotaxis of eukaryotic cells	1.20E-13	BCR, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CD47, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGFR, EPHB1, FCER1G, FPR1, FPR2, GNA13, HCK, HP, IGF1, IL6, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LIFR, LILRA6, LOX, MMP14, NFKB2, NOV, NRP1, NTF3, P2RY2, PDE4B, PDE4D, PENK, PGF, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SEMA3F, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TLR2, TNFRSF1A, VEGFA, VEGFC, VTN	74
Cellular Movement	chemotaxis	chemotaxis of cells	2.51E-13	APLNR, BCR, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CD44, CD47, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGFR, EPHB1, FCER1G, FPR1, FPR2, GNA13, HCK, HP, IGF1, IL6, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LIFR, LILRA6, LOX, MMP14, NFKB2, NOV, NRP1, NTF3, P2RY2, PDE4B, PDE4D, PENK, PGF, PLAUR, PLXNB1, PPARA, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SEMA3F, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TLR2, TNFRSF1A, VEGFA, VEGFC, VTN	77
Cellular Movement	chemotaxis	chemotaxis	6.18E-13	APLNR, BCR, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CCRL2, CD38, CD44, CD47, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGFR, EPHB1, FCER1G, FPR1, FPR2, GNA13, HCK, HP, IGF1, IL6, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LIFR, LILRA6, LOX, MMP14, NFKB2, NOV, NRP1, NTF3, P2RY2, PDE4B, PDE4D, PENK, PGF, PLAUR, PLXNB1, PPARA, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SEMA3B, SEMA3F, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TLR2, TNFRSF1A, VEGFA, VEGFC, VTN	79
Cellular Movement	chemotaxis	chemotaxis of leukocytes	1.90E-12	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, EAR2, FCER1G, FPR1, FPR2, GNA13, HCK, HP, ITGAM, ITGB2, KITLG, LGALS9, LILRA6, NFKB2, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TNFRSF1A, VEGFA, VTN	54
Cellular Movement	chemotaxis	chemotaxis of normal cells	2.12E-12	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, EAR2, FCER1G, FPR1, FPR2, GNA13, HCK, HP, IL6, ITGAM, ITGB2, ITGB3, KITLG, LGALS9, LILRA6, LOX, MMP14, NFKB2, NOV, NTF3, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SEMA3F, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TNFRSF1A, VEGFA, VEGFC, VTN	62
Cellular Movement	chemotaxis	chemotaxis of granulocytes	9.48E-12	C3, CCL5, CCL7, CCL13, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LGALS9, LILRA6, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	35
Cellular Movement	chemotaxis	chemotaxis of phagocytes	7.91E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, FPR2, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SPHK1, SYK, TNFRSF1A, VTN	33
Cellular Movement	chemotaxis	chemotaxis of neutrophils	8.24E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	29
Cellular Movement	chemotaxis	chemotaxis of cell lines	1.03E-10	BCR, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD47, CSF1, CX3CL1, CXCL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCR4, DARC, EGFR, EPHB1, FPR1, FPR2, IGF1, ITGB3, KITLG, LGALS3, LIFR, LOX, NRP1, P2RY2, PGF, PLAUR, SELE, SPHK1, SYK, TLR2, VEGFA, VTN	40
Cellular Movement	chemotaxis	chemotaxis of tumor cell lines	2.98E-08	BCR, C3, CCL5, CCL7, CCL13, CCL19, CX3CL1, CXCL3, CXCL9, CXCL12, CXCL14, CXCR4, DARC, EGFR, FPR1, FPR2, IGF1, ITGB3, KITLG, LIFR, NRP1, P2RY2, PGF, PLAUR, SPHK1, SYK, VEGFA	27
Cellular Movement	chemotaxis	:hemotaxis of mononuclear leukocytes	2.14E-07	CCL5, CCL7, CCL13, CCL19, CCR1, CHI3L3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, FPR1, FPR2, GNA13, HP, NFKB2, PENK, PLAUR, RAC1, RAC2, SAA1, SELE, SERPINA3, SOCS3, THBS2, VEGFA	30
Cellular Movement	chemotaxis	chemotaxis of leukemia cell lines	3.83E-06	BCR, CCL5, CCL7, CCL13, CX3CL1, CXCL12, CXCL14, FPR1, FPR2, KITLG, PGF, PLAUR, SPHK1	13
Cellular Movement	chemotaxis	chemotaxis of monocytes	4.18E-06	CCL5, CCL7, CCL13, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, FPR1, FPR2, HP, PENK, PLAUR, SELE, SERPINA3, VEGFA	17
Cellular Movement	transmigration	transmigration of eukaryotic cells	2.57E-13	APOE, CCL5, CCL7, CCL13, CCL19, CD44, CD47, CSF1, CTSL2, CTSS, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, FPR1, ICAM1, IGF1, ITGAM, ITGB2, ITGB3, MMP14, PVR, SELE, SERPINE1, TGM2, TIMP2, TNFRSF1A, VCAM1, VEGFA	33
Cellular Movement	transmigration	transmigration of normal cells	9.57E-13	APOE, CCL5, CCL7, CCL13, CCL19, CD44, CD47, CSF1, CTSL2, CTSS, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, FPR1, ICAM1, ITGAM, ITGB2, ITGB3, MMP14, PVR, SELE, SERPINE1, TGM2, TIMP2, TNFRSF1A, VCAM1, VEGFA	31
Cellular Movement	transmigration	transmigration of leukocytes	2.18E-12	CCL5, CCL7, CCL13, CCL19, CD44, CD47, CSF1, CTSL2, CTSS, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, FPR1, ICAM1, ITGAM, ITGB2, ITGB3, MMP14, PVR, SELE, SERPINE1, TGM2, TIMP2, TNFRSF1A, VCAM1, VEGFA	30
Cellular Movement	transmigration	ansmigration of mononuclear leukocyte	6.77E-09	CCL5, CCL7, CCL13, CD44, CD47, CTSL2, CTSS, CXCL11, CXCL12, CXCR4, ICAM1, ITGB2, MMP14, PVR, TGM2, TIMP2, TNFRSF1A, VCAM1	18
Cellular Movement	mobilization	mobilization of normal cells	3.05E-08	CCL7, CCR1, CSF1, CSF3, CXCL2, CXCL3, CXCL10, CXCL12, CXCL14, CXCR4, FPR1, ITGB2, KITLG, SELE, SELL, SOCS3, VCAM1, VEGFA	18
Cellular Movement	mobilization	mobilization of blood cells	5.14E-08	CCL7, CCR1, CSF1, CSF3, CXCL2, CXCL3, CXCL10, CXCL12, CXCL14, FPR1, ITGB2, KITLG, SELE, SELL, VCAM1, VEGFA	16
Cellular Movement	mobilization	bilization of hematopoietic progenitor c	4.19E-06	CSF1, CSF3, CXCL3, CXCL10, CXCL12, KITLG, SELE, SELL, VCAM1, VEGFA	10
Cellular Movement	extravasation	extravasation of cells	2.47E-07	CCL5, CCR1, CD44, CHI3L3, CXCL1, ICAM1, ITGAM, ITGB2, ITGB3, PVR, SELE, SELL, SELP	13
Cellular Movement	extravasation	extravasation	4.41E-07	CCL5, CCR1, CD44, CHI3L3, CXCL1, HDC, ICAM1, ITGAM, ITGB2, ITGB3, MMP3, PVR, RAMP1, SELE, SELL, SELP	16
Cellular Movement	extravasation	extravasation of leukocytes	2.98E-06	CCL5, CCR1, CD44, CHI3L3, CXCL1, ICAM1, ITGB3, PVR, SELE, SELL, SELP	11
Cellular Movement	invasion	invasion of cells	2.66E-07	ADAM9, AR, ATF3, B4GALT5, BCR, CCL19, CD14, CD24, CD44, CHI3L1, CSF1, CSF3, CTSL2, CXCL1, CXCL10, CXCL12, CXCR4, CYP1B1, DNAJB4, EFNB3, EGFR, ENTPD5, FAS, FBLN5, FGF7, FXYD5, HIF1A, HMOX1, IGF1, IGF2, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, LCN2, LOX, MMP3, MMP14, MMP15, MX1, MYCN, NFE2L2, NOV, NRP1, PCSK6, PDLIM2, PLAUR, POSTN, PTP4A1, RAC1, RECK, RHOC, SDC4, SERPINE1, SLC2A1, SPHK1, STAT3, SYK, TAGLN, TCIRG1, THBS2, TIMP1, TIMP2, TNFSF10, VEGFA, VEGFC, VTN, WNT5A, XDH	71
Cellular Movement	invasion	invasion of eukaryotic cells	3.05E-07	ADAM9, AR, ATF3, B4GALT5, BCR, CCL19, CD14, CD24, CD44, CHI3L1, CSF1, CSF3, CTSL2, CXCL1, CXCL10, CXCL12, CXCR4, CYP1B1, DNAJB4, EFNB3, EGFR, ENTPD5, FAS, FBLN5, FGF7, FXYD5, HIF1A, HMOX1, IGF1, IGF2, ITGB2, ITGB3, ITGB6, JAK2, JUNB, LCN2, LOX, MMP3, MMP14, MX1, MYCN, NFE2L2, NOV, NRP1, PCSK6, PDLIM2, PLAUR, POSTN, PTP4A1, RAC1, RECK, RHOC, SDC4, SLC2A1, SPHK1, STAT3, SYK, TAGLN, TCIRG1, THBS2, TIMP1, TIMP2, TNFSF10, VEGFA, VEGFC, VTN, WNT5A, XDH	68
Cellular Movement	cell rolling	cell rolling of leukocytes	1.12E-06	CCL13, CD14, CD44, CXCL2, CXCL3, FCGR3A, ICAM1, ITGAM, ITGB2, LGALS3, RAC2, SELE, SELL, SELP, VCAM1, VEGFA	16
Cellular Movement	cell rolling	cell rolling of eukaryotic cells	1.15E-06	CCL13, CD14, CD24, CD44, CXCL2, CXCL3, FCGR3A, ICAM1, ITGAM, ITGB2, LGALS3, RAC2, SELE, SELL, SELP, VCAM1, VEGFA	17
Cellular Movement	localization	localization of normal cells	1.31E-06	C3, CCL19, CXCL13, CXCR4, ICAM1, IGF2, IL6, MYD88, NCAM1, SELE, SELP, SOCS3, TLR2	13
Cellular Movement	influx	influx of neutrophils	2.98E-06	CXCL1, CXCL2, CXCL6, IGHM, IL6, IRAK3, MARCO, MSR1, MYD88, PLAUR, TLR2	11
Cellular Movement	recruitment	recruitment of T lymphocytes	3.19E-06	CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, VCAM1	14
natological System Development and Func	cell movement	cell movement of leukocytes	8.17E-24	ADIPOQ, APOE, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD38, CD44, CD47, CD274, CFB, CHI3L3, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGLN3, FAS, FCER1G, FCGR2B, FCGR3A, FPR1, FPR2, GNA13, HCK, HIF1A, HP, ICAM1, IL6, IL33, IL17RA, IL18BP, IL1RN, IL4R, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LILRA6, MMP8, MMP14, MSR1, MYD88, NFE2L2, NFKB2, NFKBIA, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, PVR, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINA3, SERPINE1, SERPING1, SOCS3, SPHK1, STAT1, STAT3, SYK, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, VTN, ZC3H12A	108
natological System Development and Func	cell movement	cell movement of granulocytes	2.81E-18	C2, C3, C4A, CCL5, CCL7, CCL13, CCR1, CD44, CD47, CFB, CHI3L3, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FAS, FCER1G, FPR1, FPR2, HCK, ICAM1, IL6, IL33, IL17RA, IL1RN, IL4R, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, LILRA6, MMP8, MYD88, NFE2L2, NFKBIA, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SELL, SELP, SERPINE1, SOCS3, SYK, TLR2, TNFAIP3, TNFRSF1A, VCAM1, VTN	65
natological System Development and Func	cell movement	cell movement of phagocytes	1.29E-17	ADIPOQ, APOE, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CD44, CD47, CFB, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, DARC, EGLN3, FAS, FCER1G, FPR1, FPR2, HCK, HIF1A, ICAM1, IL6, IL17RA, IL1RN, IRGM, ITGAM, ITGB2, ITGB3, LILRA6, MMP8, MYD88, NFKBIA, PDE4B, PDE4D, PENK, PGF, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, SERPING1, SOCS3, SPHK1, SYK, TLR2, TLR3, TNFAIP3, TNFRSF1A, VTN	65
natological System Development and Func	cell movement	cell movement of neutrophils	4.10E-16	C2, C3, C4A, CCL5, CCL7, CCL13, CD44, CD47, CFB, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FAS, FCER1G, FPR1, FPR2, HCK, ICAM1, IL6, IL17RA, IL1RN, ITGAM, ITGB2, ITGB3, LILRA6, MMP8, MYD88, NFKBIA, PDE4B, PDE4D, PENK, PGF, RAC1, RAC2, S100A8, S100A9, SELE, SELL, SELP, SERPINE1, SOCS3, SYK, TLR2, TNFAIP3, TNFRSF1A, VTN	53
natological System Development and Func	cell movement	›ll movement of mononuclear leukocyt›	3.52E-13	APOE, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CD47, CHI3L3, CTSL2, CTSS, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, FAS, FPR1, FPR2, GNA13, HP, ICAM1, IL6, IL17RA, IL18BP, ITGB2, MMP14, NFKB2, PENK, PLAUR, PVR, RAC1, RAC2, SAA1, SELE, SELL, SELP, SERPINA3, SOCS3, STAT3, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, ZC3H12A	57
natological System Development and Func	cell movement	cell movement of lymphocytes	2.43E-10	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, FAS, GNA13, ICAM1, IL6, IL17RA, IL18BP, ITGB2, MMP14, NFKB2, RAC1, RAC2, SAA1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP1, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, ZC3H12A	45
natological System Development and Func	cell movement	cell movement of monocytes	4.31E-10	APOE, CCL5, CCL7, CCL13, CD47, CTSL2, CTSS, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, FPR1, FPR2, HP, ICAM1, IL6, ITGB2, MMP14, PENK, PLAUR, PVR, SELE, SERPINA3, TIMP2, TNFRSF1A, VCAM1, VEGFA	29
natological System Development and Func	cell movement	›ll movement of antigen presenting cel	7.88E-09	ADIPOQ, APOE, BID, C3, CCL5, CCL7, CCL13, CCL19, CD38, CD44, CSF1, CX3CL1, CXCL9, CXCL12, CXCL14, DARC, EAR2, EGLN3, FPR1, FPR2, HIF1A, ICAM1, IL17RA, IRGM, ITGB2, MYD88, RAC2, SAA1, SELE, SELL, SERPING1, SPHK1, TLR3, TNFAIP3	34
natological System Development and Func	cell movement	cell movement of T lymphocytes	2.42E-08	C3, CCL5, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, CXCR4, DARC, FAS, ICAM1, IL6, IL17RA, IL18BP, ITGB2, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TLR2, TRAF3IP2	32
natological System Development and Func	cell movement	cell movement of macrophages	1.22E-07	ADIPOQ, APOE, BID, C3, CCL5, CCL13, CD44, CSF1, CX3CL1, CXCL9, DARC, EGLN3, FPR2, HIF1A, ICAM1, IL17RA, IRGM, ITGB2, MYD88, RAC2, SAA1, SELL, SERPING1, SPHK1, TLR3, TNFAIP3	26
natological System Development and Func	cell movement	cell movement of eosinophils	3.49E-07	C3, CCL5, CCL13, CCR1, CD47, CHI3L3, CXCL9, CXCL10, FPR1, IL33, IL17RA, IL4R, ITGAM, ITGB2, LGALS3, LGALS9, MMP8, NFE2L2, PLA2G7, PPARA, VCAM1	21
natological System Development and Func	cell movement	movement of peripheral blood leukocy	7.14E-07	CCL5, CCL7, CCL13, CX3CL1, CXCL12, FPR1, FPR2, PLAUR, SELE, SELL, SELP	11
natological System Development and Func	cell movement	ell movement of memory T lymphocyte	8.32E-07	CCL5, CCL13, CCL19, CCR1, CXCL9, CXCL11, CXCL12, ICAM1, ITGB2	9
natological System Development and Func	cell movement	cell movement of leukocyte cell lines	3.42E-06	BCR, C3, CCL5, CCL19, CCR1, CD44, CSF1, CX3CL1, CXCL11, CXCL12, CXCL13, ICAM1, ITGB2, KITLG, SOCS2, VEGFA	16
natological System Development and Func	quantity	quantity of leukocytes	2.73E-19	ADA, APOE, B2M, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL5, CCL7, CCL13, CCL19, CD24, CD38, CD47, CD83, CD274, CDKN1A, CEBPB, CES1 (includes EG:1066), CFLAR, CISH, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL2, CXCL10, CXCL12, CXCL13, CXCR4, EPHA4, FAS, FCER1G, FCGR1A, FGF7, FPR2, GNA13, HDC, HIF1A, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL18BP, IL2RG, IL4R, IRF1, IRF8, ISG15, ITGAM, ITGB2, ITGB6, JAK2, KITLG, KLRA3, LCP2, LEPR, LGALS3, LGALS8, MMP3, MMP8, MYC, MYD88, MYH11, NFKB2, NFKBIA, NQO2, NR3C1, PBX1, PDE4B, PDE4D, PIK3AP1, PIM1, PLSCR1, PML, PNP, PTPN2, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SHC1, SLFN1, SOCS3, ST3GAL1, STAT1, STAT3, TAP1, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA, VSIG4, VTN, ZC3H12A	106
natological System Development and Func	quantity	quantity of blood cells	5.64E-18	ADA, APOE, B2M, BAK1, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL5, CCL7, CCL13, CCL19, CD24, CD38, CD47, CD83, CD274, CDKN1A, CEBPB, CES1 (includes EG:1066), CFLAR, CISH, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL2, CXCL10, CXCL12, CXCL13, CXCR4, EPHA4, FAS, FCER1G, FCGR1A, FGF7, FPR2, GNA13, HDC, HIF1A, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL18BP, IL2RG, IL4R, IRF1, IRF8, ISG15, ITGAM, ITGB2, ITGB6, JAK2, KITLG, KLRA3, LCP2, LEPR, LGALS3, LGALS8, MMP3, MMP8, MYC, MYD88, MYH11, NFKB2, NFKBIA, NQO2, NR3C1, PBX1, PDE4B, PDE4D, PIK3AP1, PIM1, PLSCR1, PML, PNP, PTPN2, RAC1, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SHC1, SLFN1, SOCS3, ST3GAL1, STAT1, STAT3, TAP1, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA, VSIG4, VTN, ZC3H12A	110
natological System Development and Func	quantity	quantity of mononuclear leukocytes	5.45E-15	APOE, B2M, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL7, CCL13, CCL19, CD24, CD38, CD83, CD274, CDKN1A, CEBPB, CFLAR, CISH, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL10, CXCL12, CXCL13, CXCR4, EPHA4, FAS, FCER1G, FCGR1A, FGF7, GNA13, HIF1A, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL2RG, IRF1, ISG15, ITGAM, ITGB2, ITGB6, JAK2, KITLG, KLRA3, LCP2, LEPR, LGALS8, MYC, MYH11, NFKB2, NFKBIA, NR3C1, PIK3AP1, PIM1, PML, PNP, PTPN2, RAC2, RELB, SELE, SELL, SLFN1, ST3GAL1, STAT1, STAT3, TAP1, TLR2, TLR3, TNFRSF1A, TXNIP, VCAM1, VEGFA, VSIG4, ZC3H12A	81
natological System Development and Func	quantity	quantity of phagocytes	9.38E-15	ADA, APOE, B2M, BID, CCL7, CCL13, CES1 (includes EG:1066), CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL10, FAS, FCGR1A, FGF7, HDC, ICAM1, IL18BP, ITGB2, ITGB6, LGALS3, MMP3, MMP8, MYD88, MYH11, NFKBIA, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SHC1, SOCS3, STAT3, TLR2, TNFRSF1A, TNFSF10, VEGFA, VTN	47
natological System Development and Func	quantity	quantity of lymphocytes	1.44E-13	APOE, B2M, BCL2A1, BCL2L1, BID, BST1, C3, CCL19, CD24, CD38, CD83, CD274, CDKN1A, CEBPB, CFLAR, CISH, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CXCL10, CXCL12, CXCL13, CXCR4, EPHA4, FAS, FCER1G, FCGR1A, FGF7, GNA13, HIF1A, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL2RG, IRF1, ISG15, ITGAM, ITGB2, ITGB6, JAK2, KITLG, KLRA3, LCP2, LEPR, LGALS8, MYC, MYH11, NFKB2, NFKBIA, NR3C1, PIK3AP1, PIM1, PNP, PTPN2, RAC2, RELB, SELE, SELL, SLFN1, ST3GAL1, STAT1, STAT3, TAP1, TLR2, TLR3, TNFRSF1A, TXNIP, VCAM1, VEGFA, VSIG4, ZC3H12A	76
natological System Development and Func	quantity	quantity of granulocytes	8.32E-13	ADA, BCR, BID, CSF1, CSF3, CSF2RB, FAS, FCGR1A, FPR2, HDC, ICAM1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	38
natological System Development and Func	quantity	quantity of myeloid cells	3.26E-12	ADA, BCR, BID, CSF1, CSF3, CSF2RB, FAS, FCGR1A, FPR2, HDC, ICAM1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NQO2, PBX1, PDE4B, PDE4D, PLSCR1, PML, PTPN2, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	40
natological System Development and Func	quantity	quantity of neutrophils	1.13E-11	ADA, CSF1, CSF3, FAS, FCGR1A, HDC, ICAM1, IL18BP, ITGB2, MMP3, MMP8, MYH11, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	28
natological System Development and Func	quantity	quantity of antigen presenting cells	3.08E-09	ADA, APOE, B2M, BID, CCL7, CCL13, CCL19, CD47, CD83, CES1 (includes EG:1066), CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL10, CXCL13, FAS, FGF7, IL6, IRF1, IRF8, ITGB2, ITGB6, LGALS3, MMP3, MYD88, NFKB2, NFKBIA, RELB, SELP, SHC1, STAT3, TNFRSF1A, VEGFA	35
natological System Development and Func	quantity	quantity of T lymphocytes	4.63E-07	APOE, B2M, BCL2A1, BCL2L1, CCL19, CD83, CD274, CDKN1A, CFLAR, CISH, CSF3, CSF2RB, CTSL2, CTSS, CXCL10, CXCR4, EPHA4, FAS, FGF7, IGF1, IGF2, IL6, IL2RG, IRF1, ITGAM, ITGB2, JAK2, KITLG, LCP2, LEPR, LGALS8, MYH11, NFKBIA, NR3C1, PIM1, PNP, RELB, SLFN1, ST3GAL1, STAT1, STAT3, TAP1, TLR2, TLR3, TNFRSF1A, VSIG4	46
natological System Development and Func	quantity	quantity of macrophages	2.43E-06	ADA, APOE, B2M, BID, CCL7, CCL13, CES1 (includes EG:1066), CSF1, CTSL2, CTSS, CX3CL1, CXCL10, FAS, FGF7, ITGB6, LGALS3, MMP3, MYD88, NFKBIA, RELB, SELP, SHC1, STAT3, TNFRSF1A, VEGFA	25
natological System Development and Func	accumulation	accumulation of leukocytes	1.52E-15	ADIPOQ, APOE, B2M, BCL3, C4A, CCL5, CCL7, CCL13, CCR1, CD274, CFLAR, CSF3, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, EPHA4, FAS, HDC, ICAM1, IER3, IL33, IL1RN, IL2RG, ITGAM, ITGB2, JAK2, MMP3, MMP8, MYD88, NR3C1, PML, PTX3, S100A8, S100A9, SELE, SELL, SELP, SERPING1, STAT3, TIMP1, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1, VEGFA	48
natological System Development and Func	accumulation	accumulation of myeloid cells	5.89E-11	CCL5, CCL7, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, HDC, IL33, IL1RN, ITGB2, JAK2, MMP8, MYD88, PML, PTX3, S100A8, S100A9, SELP, SERPING1, STAT3, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1	26
natological System Development and Func	accumulation	accumulation of granulocytes	4.28E-10	CCL5, CCL7, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, HDC, IL33, IL1RN, ITGB2, MMP8, MYD88, PTX3, S100A8, S100A9, SELP, SERPING1, STAT3, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1	24
natological System Development and Func	accumulation	ccumulation of mononuclear leukocyte	6.33E-09	ADIPOQ, B2M, BCL3, C4A, CCL5, CCL13, CD274, CFLAR, CXCL2, CXCL10, EPHA4, FAS, ICAM1, IER3, IL2RG, ITGB2, MYD88, NR3C1, SELE, SELL, STAT3, VCAM1, VEGFA	23
natological System Development and Func	accumulation	accumulation of lymphocytes	7.94E-09	ADIPOQ, B2M, BCL3, C4A, CCL5, CCL13, CD274, CFLAR, CXCL10, EPHA4, FAS, ICAM1, IER3, IL2RG, ITGB2, MYD88, NR3C1, SELE, SELL, STAT3, VCAM1, VEGFA	22
natological System Development and Func	accumulation	accumulation of phagocytes	8.45E-09	APOE, CCL5, CCL13, CCR1, CSF3, CX3CL1, CXCL2, CXCL3, CXCL10, FAS, IL1RN, ITGAM, ITGB2, MMP3, MYD88, PTX3, S100A8, S100A9, SELP, TIMP1, TIMP2, TNFSF10, VEGFA	23
natological System Development and Func	accumulation	accumulation of macrophages	1.18E-06	APOE, CCL5, CCL13, CCR1, CX3CL1, FAS, IL1RN, ITGAM, MMP3, MYD88, PTX3, S100A9, TIMP1, VEGFA	14
natological System Development and Func	binding	binding of leukocytes	1.34E-14	ADIPOQ, APOE, C3, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CD47, CD83, CLEC10A, CSF1, CX3CL1, CXCL2, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, FAS, FCGR1A, FCGR2B, FCGR3A, FPR1, HCK, ICAM1, ITGAM, ITGB2, ITGB3, KITLG, LBP, LCP2, MARCO, MSN, MSR1, PENK, S100A9, SELE, SELL, SELP, VCAM1, VTN	45
natological System Development and Func	binding	binding of phagocytes	3.09E-09	ADIPOQ, APOE, C3, CD14, CLEC10A, CSF1, CXCL2, CXCL10, FCGR1A, FPR1, HCK, ICAM1, ITGAM, ITGB2, LBP, MARCO, MSN, MSR1, S100A9, SELL, SELP, VTN	22
natological System Development and Func	binding	binding of mononuclear leukocytes	4.69E-08	CBLB, CCL5, CCL13, CCL19, CCR1, CD44, CD47, CLEC10A, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, FAS, FCGR3A, ICAM1, ITGAM, ITGB2, LBP, LCP2, MSN, PENK, SELE, SELL, VCAM1	25
natological System Development and Func	binding	binding of granulocytes	4.41E-07	C3, CCL5, CCL7, CXCL2, CXCL10, HCK, ICAM1, ITGAM, ITGB2, KITLG, LBP, S100A9, SELE, SELL, SELP, VCAM1	16
natological System Development and Func	binding	binding of lymphocytes	2.38E-06	CBLB, CCL5, CCL19, CCR1, CD44, CD47, CLEC10A, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, FAS, FCGR3A, ICAM1, ITGB2, LCP2, MSN, SELL, VCAM1	20
natological System Development and Func	hematopoiesis	hematopoiesis	1.69E-14	ADA, ADAR, ADIPOQ, ADRB1, ANK1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CCR1, CD14, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CEBPD, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CSF2RB, CXCL3, CXCL11, CXCL12, CXCR4, EBF1, EGFR, EIF4E, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HAMP, HDAC9 (includes EG:9734), HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LCN2, LCP2, LGALS3, MBP, MSR1, MYC, MYCN, MYD88, MYH11, NFE2L2, NFKB2, NFKBIA, NR3C1, PBX1, PENK, PGF, PIM1, PLSCR1, PML, PNP, PRDM16, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, RUNX1T1, SELE, SELP, SHC1, SNAI2, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TIPARP, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC, ZFP36	124
natological System Development and Func	hematological process	hematological process	1.16E-13	ADA, ADAR, ADIPOQ, ADRB1, ANK1, ANXA7, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL5, CCL13, CCL19, CCR1, CD14, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CEBPD, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CSF2RB, CX3CL1, CXCL3, CXCL11, CXCL12, CXCR4, DDIT3, EBF1, EGFR, EIF4E, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, GNA13, HAMP, HDAC9 (includes EG:9734), HIF1A, HIST1H1C, HLA-C, HMOX1, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LCN2, LCP2, LGALS3, MBP, MSR1, MYC, MYCN, MYD88, MYH11, NFE2L2, NFKB2, NFKBIA, NR3C1, PBX1, PENK, PGF, PIM1, PLAUR, PLSCR1, PML, PNP, PRDM16, PRKD1, PROCR, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, RUNX1T1, SELE, SELP, SERPINE1, SERPING1, SHC1, SNAI2, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TIPARP, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC, ZFP36	134
natological System Development and Func	aggregation	aggregation of blood cells	1.18E-13	ADIPOQ, CCL5, CD24, CD44, CD47, CXCL9, CXCL10, CXCL12, EFNB2, EPHA4, EPHB1, FCER1G, FPR1, GNA13, GUCY1A3, GUCY1B3, HCLS1, HDC, HIF1A, ICAM1, IGHM, IL6, ITGAM, ITGB2, ITGB3, KITLG, LCP2, LY6A, NFKB2, NRP1, P2RY1, PLCB1, PTX3, RASGRP2, SELL, SELP, SYK, THBS2, TIMP2, TLR2, TNFRSF1A, TRAF3IP2	42
natological System Development and Func	aggregation	aggregation of leukocytes	2.27E-08	CD44, FPR1, HIF1A, ICAM1, IL6, ITGAM, ITGB2, KITLG, LY6A, NFKB2, NRP1, PLCB1, SELL, SELP, TLR2, TNFRSF1A, TRAF3IP2	17
natological System Development and Func	recruitment	recruitment of leukocytes	9.54E-13	APOE, C3, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, DARC, FCGR2B, HDC, HIF1A, ICAM1, IL6, IL1RN, ITGAM, ITGB2, KITLG, MYD88, NFE2L2, RAC1, SELE, SELL, SELP, SERPINE1, THBS2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1	43
natological System Development and Func	recruitment	recruitment of phagocytes	4.17E-10	APOE, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CSF1, CXCL1, CXCL2, CXCL3, CXCL10, CXCL12, DARC, FCGR2B, ICAM1, IL1RN, ITGAM, ITGB2, MYD88, NFE2L2, RAC1, SERPINE1, THBS2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1	30
natological System Development and Func	recruitment	recruitment of antigen presenting cells	4.32E-08	APOE, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CXCL3, CXCL10, CXCL12, ICAM1, ITGB2, MYD88, NFE2L2, THBS2, TLR2, UCP2, VCAM1	18
natological System Development and Func	recruitment	recruitment of granulocytes	9.94E-08	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CSF1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, DARC, FCGR2B, IL1RN, ITGAM, KITLG, MYD88, RAC1, SELE, SELP, SERPINE1, TNFRSF1A, TRAF3IP2, VCAM1	26
natological System Development and Func	recruitment	recruitment of mononuclear leukocytes	5.03E-07	APOE, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, IL6, MYD88, VCAM1	19
natological System Development and Func	recruitment	recruitment of macrophages	1.01E-06	APOE, CCL7, CCL13, CCR1, CD44, CXCL10, CXCL12, ICAM1, ITGB2, MYD88, NFE2L2, THBS2, TLR2, UCP2, VCAM1	15
natological System Development and Func	recruitment	recruitment of lymphocytes	1.15E-06	CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, MYD88, VCAM1	17
natological System Development and Func	recruitment	recruitment of T lymphocytes	3.19E-06	CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, VCAM1	14
natological System Development and Func	development	development of leukocytes	1.25E-12	ADA, ADAR, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CXCL11, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	99
natological System Development and Func	development	levelopment of mononuclear leukocyte	3.21E-12	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CXCL11, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	96
natological System Development and Func	development	development of blood cells	3.56E-12	ADA, ADAR, ADRB1, ANK1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CXCL11, CXCL12, CXCR4, EBF1, EGFR, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	101
natological System Development and Func	development	development of lymphocytes	3.00E-11	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	93
natological System Development and Func	development	T cell development	3.65E-10	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKBIA, NR3C1, PENK, PIM1, PNP, PRKD1, PSMB8, PSMB9, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA	85
natological System Development and Func	activation	activation of leukocytes	1.67E-12	ADA, ADAM9, ADIPOQ, APOE, B2M, BCL3, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL7, CCL13, CD14, CD38, CD44, CD47, CD83, CDKN1A, CENPF, CISH, CLEC4E, CLEC7A, CSF1, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, CXCL12, EFNB2, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, HCK, HLA-C, HSPA4, ICAM1, IGF1, IGHM, IL6, IL33, IL1RN, ITGAM, ITGB2, ITGB6, KITLG, LBP, LCN2, LCP2, LILRA6, MBP, MGST1, MYD88, NFKB2, PENK, PLXNB1, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA	83
natological System Development and Func	activation	activation of blood cells	2.75E-12	ADA, ADAM9, ADIPOQ, APOE, B2M, BCL3, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL7, CCL13, CD14, CD38, CD44, CD47, CD83, CDKN1A, CENPF, CISH, CLEC4E, CLEC7A, CSF1, CSF3, CX3CL1, CXCL1, CXCL3, CXCL6, CXCL9, CXCL12, EFNB2, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, GNA13, HCK, HLA-C, HSPA4, ICAM1, IGF1, IGHM, IL6, IL33, IL1RN, ITGAM, ITGB2, ITGB3, ITGB6, KITLG, LBP, LCN2, LCP2, LIFR, LILRA6, MBP, MGST1, MYD88, NFKB2, PENK, PLXNB1, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA	87
natological System Development and Func	activation	activation of phagocytes	7.74E-11	ADIPOQ, APOE, C3, CCL5, CCL7, CCL13, CD14, CLEC4E, CSF1, CSF3, CXCL1, CXCL3, CXCL6, FCER1G, FPR1, FPR2, HCK, ICAM1, IGF1, IL6, IL1RN, ITGAM, ITGB6, LBP, LCN2, MYD88, REG3G, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	36
natological System Development and Func	activation	activation of antigen presenting cells	1.76E-09	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, ERAP1, FAS, FCER1G, FCGR1A, HCK, HLA-C, ICAM1, IGF1, IGHM, IL6, ITGB6, LBP, MYD88, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TNFRSF1A, TNFSF10, VEGFA	36
natological System Development and Func	activation	activation of granulocytes	4.71E-09	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, FPR1, FPR2, IL6, IL33, IL1RN, ITGAM, ITGB2, KITLG, LCN2, MYD88, SELE, SELL, VCAM1	23
natological System Development and Func	activation	activation of neutrophils	2.88E-07	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, FPR1, FPR2, IL6, IL1RN, ITGAM, LCN2, MYD88, SELE, SELL	18
natological System Development and Func	activation	activation of macrophages	1.21E-06	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, FCER1G, HCK, ICAM1, IGF1, IL6, ITGB6, LBP, MYD88, REG3G, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	23
natological System Development and Func	chemotaxis	chemotaxis of leukocytes	1.90E-12	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, EAR2, FCER1G, FPR1, FPR2, GNA13, HCK, HP, ITGAM, ITGB2, KITLG, LGALS9, LILRA6, NFKB2, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TNFRSF1A, VEGFA, VTN	54
natological System Development and Func	chemotaxis	chemotaxis of granulocytes	9.48E-12	C3, CCL5, CCL7, CCL13, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LGALS9, LILRA6, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	35
natological System Development and Func	chemotaxis	chemotaxis of phagocytes	7.91E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, FPR2, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SPHK1, SYK, TNFRSF1A, VTN	33
natological System Development and Func	chemotaxis	chemotaxis of neutrophils	8.24E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	29
natological System Development and Func	chemotaxis	:hemotaxis of mononuclear leukocytes	2.14E-07	CCL5, CCL7, CCL13, CCL19, CCR1, CHI3L3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, FPR1, FPR2, GNA13, HP, NFKB2, PENK, PLAUR, RAC1, RAC2, SAA1, SELE, SERPINA3, SOCS3, THBS2, VEGFA	30
natological System Development and Func	chemotaxis	chemotaxis of monocytes	4.18E-06	CCL5, CCL7, CCL13, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, FPR1, FPR2, HP, PENK, PLAUR, SELE, SERPINA3, VEGFA	17
natological System Development and Func	transmigration	transmigration of leukocytes	2.18E-12	CCL5, CCL7, CCL13, CCL19, CD44, CD47, CSF1, CTSL2, CTSS, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, FPR1, ICAM1, ITGAM, ITGB2, ITGB3, MMP14, PVR, SELE, SERPINE1, TGM2, TIMP2, TNFRSF1A, VCAM1, VEGFA	30
natological System Development and Func	transmigration	ansmigration of mononuclear leukocyte	6.77E-09	CCL5, CCL7, CCL13, CD44, CD47, CTSL2, CTSS, CXCL11, CXCL12, CXCR4, ICAM1, ITGB2, MMP14, PVR, TGM2, TIMP2, TNFRSF1A, VCAM1	18
natological System Development and Func	differentiation	differentiation of blood cells	5.11E-12	ACVR1B, ADA, ADIPOQ, BCL3, BCL2A1, BCL2L1, BCR, BTG2, CCL13, CCL19, CCR1, CD14, CD24, CD83, CEBPB, CEBPD, CLEC4E, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, EBF1, EGFR, EIF4E, EPHA4, FAS, FCGR2B, GADD45G, HCLS1, HDAC9 (includes EG:9734), HIF1A, HLA-C, ICAM1, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, KLF10, LCN2, LCP2, LGALS3, LIFR, LILRA6, LRRC17, MBP, MYC, MYCN, MYCT1, MYD88, MYH11, NFKB2, NFKBIA, PGF, PLSCR1, PML, PNP, PRDM16, PRKD1, RELB, RUNX1T1, SHC1, SOCS3, SOX4, STAT1, STAT3, SYK, THBS2, TIMP1, TLR2, TNFRSF1A, TNFSF10, VEGFA, VEGFC, ZFP36	91
natological System Development and Func	differentiation	differentiation of leukocytes	1.44E-11	ADA, ADIPOQ, BCL3, BCL2A1, BCL2L1, BCR, CCL13, CCL19, CCR1, CD14, CD24, CD83, CEBPB, CEBPD, CLEC4E, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, EBF1, EIF4E, EPHA4, FAS, FCGR2B, GADD45G, HDAC9 (includes EG:9734), HLA-C, ICAM1, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, LIFR, LILRA6, MBP, MYC, MYCN, MYD88, MYH11, NFKB2, NFKBIA, PGF, PLSCR1, PML, PNP, PRDM16, PRKD1, RELB, RUNX1T1, SHC1, SOCS3, SOX4, STAT1, STAT3, SYK, TIMP1, TLR2, TNFRSF1A, TNFSF10, VEGFA, ZFP36	81
natological System Development and Func	differentiation	ifferentiation of mononuclear leukocyte	1.83E-07	ADA, BCL3, BCL2A1, BCR, CCL13, CCL19, CD14, CD24, CD83, CEBPB, CLEC4E, CSF1, CSF3, CXCL12, CXCR4, EBF1, EIF4E, EPHA4, FAS, FCGR2B, GADD45G, HDAC9 (includes EG:9734), HLA-C, ICAM1, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGB2, ITGB3, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MYC, MYCN, MYD88, PGF, PNP, PRKD1, RELB, SOCS3, SOX4, STAT1, STAT3, SYK, TLR2, TNFSF10, VEGFA	60
natological System Development and Func	differentiation	differentiation of myeloid cells	3.58E-06	ADIPOQ, BCL2L1, BCR, CCR1, CEBPD, CSF1, CSF3, CSF2RB, EIF4E, IGF1, IL6, IRF8, JAK2, KITLG, MYC, MYH11, NFKBIA, PLSCR1, PML, PRDM16, RUNX1T1, SHC1, STAT3, ZFP36	24
natological System Development and Func	differentiation	differentiation of leukocyte cell lines	4.19E-06	CCND2, CDKN1A, CEBPB, CENPF, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, IGF1, IL6, LCP2, MYC, PRDM16, RUNX1T1, SHC1, SOCS3, TIMP1, WNT5A	19
natological System Development and Func	adhesion	adhesion of leukocytes	5.18E-12	C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL11, CXCL12, FAS, FPR2, HCK, ICAM1, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LY6A, MARCO, MYD88, NFKBIA, NFKBIB, OLR1, PLAUR, PLTP, RAC1, RAC2, RASGRP2, S100A8, S100A9, SELE, SELL, SELP, SERPING1, SYK, THBS2, TLR2, VCAM1, VEGFA	50
natological System Development and Func	adhesion	adhesion of granulocytes	9.90E-08	C3, CD44, CXCL2, CXCL3, FPR2, HCK, ICAM1, IL33, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, PLAUR, PLTP, S100A8, S100A9, SELE, SELL, SELP, VCAM1	21
natological System Development and Func	proliferation	proliferation of leukocytes	1.12E-10	ADA, ADIPOQ, APOE, BCL2L1, BCR, CBLB, CCL13, CCND2, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CISH, CLEC10A, CSF1, CSF3, CSF2RB, CTSZ (includes EG:1522), CXCL12, CXCR4, EFNB2, EFNB3, EIF2AK2, FAS, FCGR2B, FCGR3A, FGL2, HCK, HIF1A, HLA-E, HMOX1, ICAM1, IDO1, IGF1, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ISG15, ISG20, ITGAM, ITGB2, ITGB3, JUNB, KITLG, LCP2, LEPR, LGALS9, LPIN1, LY6A, LY6C1, MBP, MMP3, MVP, MYC, MYCN, MYD88, NR3C1, PBX1, PDE4D, PENK, PIK3AP1, PIM1, PNP, PRKD1, PTPN2, RAC2, RGS2, SHC1, SOCS3, STAT1, STAT3, SYK, TCIRG1, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, VCAM1, VSIG4	91
natological System Development and Func	proliferation	proliferation of lymphocytes	3.68E-10	ADA, APOE, BCL2L1, BCR, CBLB, CCL13, CCND2, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CISH, CLEC10A, CSF2RB, CTSZ (includes EG:1522), CXCL12, CXCR4, EFNB2, EFNB3, EIF2AK2, FAS, FCGR2B, FCGR3A, FGL2, HCK, HIF1A, HLA-E, HMOX1, ICAM1, IDO1, IGF1, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ISG15, ISG20, ITGAM, ITGB2, ITGB3, JUNB, KITLG, LCP2, LEPR, LGALS9, LPIN1, LY6A, LY6C1, MBP, MMP3, MVP, MYC, MYCN, MYD88, PDE4D, PENK, PIK3AP1, PIM1, PNP, PRKD1, PTPN2, RAC2, RGS2, SHC1, SOCS3, STAT1, STAT3, SYK, TCIRG1, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, VCAM1, VSIG4	86
natological System Development and Func	proliferation	proliferation of T lymphocytes	2.66E-07	APOE, BCL2L1, CBLB, CCL13, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CFLAR, CISH, CLEC10A, CSF2RB, CTSZ (includes EG:1522), CXCL12, CXCR4, EFNB2, EFNB3, EIF2AK2, FAS, FCGR3A, FGL2, HLA-E, HMOX1, ICAM1, IDO1, IGF1, IGHM, IL6, IL2RG, ISG20, ITGAM, ITGB2, ITGB3, KITLG, LCP2, LEPR, LGALS9, LY6A, LY6C1, MBP, MVP, MYC, MYD88, PDE4D, PENK, PNP, PRKD1, PTPN2, RAC2, RGS2, SHC1, SOCS3, STAT1, STAT3, SYK, TCIRG1, TLR2, TNFRSF1A, TNFSF10, VCAM1, VSIG4	65
natological System Development and Func	proliferation	proliferation of B lymphocytes	1.63E-06	ADA, BCL2L1, BCR, CBLB, CCND2, CD24, CD38, CD44, CDKN1A, CEBPB, CXCL12, FAS, FCGR2B, HCK, HIF1A, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF8, JUNB, KITLG, LPIN1, MYC, MYCN, MYD88, PIK3AP1, PTPN2, STAT1, TCIRG1, TLR2, TLR3, TP53INP1	35
natological System Development and Func	proliferation	proliferation of leukocyte cell lines	1.84E-06	BCR, CD44, CLEC7A, CSF1, CSF3, CSF2RB, CXCL3, CXCL12, EGFR, FGF7, FGF9, HCK, IGF1, IGF2, IL6, IL13RA1, IL2RG, ITGB3, JAK2, KITLG, LEPR, LIFR, LY6E, MBP, MYC, NFKBIA, RUNX1T1, SHC1, SOCS2, SOCS3, STAT3, TFRC, VEGFA	33
natological System Development and Func	infiltration	infiltration by neutrophils	1.47E-10	C2, C3, C4A, CD44, CFB, CSF3, CXCL2, CXCL3, CXCL10, FAS, FCER1G, FPR2, ICAM1, IL6, IL17RA, IL1RN, ITGAM, ITGB2, MMP8, MYD88, NFKBIA, PGF, RAC2, SELE, SELL, SELP, SOCS3, TLR2, TNFAIP3, TNFRSF1A	30
natological System Development and Func	infiltration	infiltration of leukocytes	1.21E-09	ADIPOQ, APOE, BID, C3, CCL13, CCL19, CCR1, CD44, CD274, CXCL10, CXCL12, DARC, EGLN3, FAS, FCGR2B, FPR2, HIF1A, ICAM1, IL6, IL33, IL17RA, IL18BP, MMP8, MMP14, MSR1, SELE, SELP, SERPING1, STAT1, STAT3, TGM2, TIMP1, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, ZC3H12A	38
natological System Development and Func	infiltration	infiltration by lymphocytes	3.12E-06	C3, CCL13, CCL19, CCR1, CD44, CXCL10, CXCL12, DARC, FAS, IL6, IL17RA, IL18BP, MMP14, SELE, SELP, STAT3, TIMP1, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, ZC3H12A	22
natological System Development and Func	cell death	cell death of T lymphocytes	1.11E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CLEC10A, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IDO1, IER3, IGF1, IGHM, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TNFRSF1A, TNFSF10	48

natological System Development and Func	apoptosis	apoptosis of T lymphocytes	2.70E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IER3, IGF1, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10	43
natological System Development and Func	mobilization	mobilization of blood cells	5.14E-08	CCL7, CCR1, CSF1, CSF3, CXCL2, CXCL3, CXCL10, CXCL12, CXCL14, FPR1, ITGB2, KITLG, SELE, SELL, VCAM1, VEGFA	16
natological System Development and Func	mobilization	bilization of hematopoietic progenitor c	4.19E-06	CSF1, CSF3, CXCL3, CXCL10, CXCL12, KITLG, SELE, SELL, VCAM1, VEGFA	10
natological System Development and Func	cell rolling	cell rolling of leukocytes	1.12E-06	CCL13, CD14, CD44, CXCL2, CXCL3, FCGR3A, ICAM1, ITGAM, ITGB2, LGALS3, RAC2, SELE, SELL, SELP, VCAM1, VEGFA	16
natological System Development and Func	interaction	interaction of leukocytes	1.35E-06	CBLB, CCL5, CCR1, CD14, CD47, CLEC10A, CXCL9, CXCL10, CXCL11, CXCL12, FAS, ICAM1, ITGB2, LCP2, LY6A, MSN, NRP1, PLCB1, SELP, TLR2, VCAM1	21
natological System Development and Func	extravasation	extravasation of leukocytes	2.98E-06	CCL5, CCR1, CD44, CHI3L3, CXCL1, ICAM1, ITGB3, PVR, SELE, SELL, SELP	11
natological System Development and Func	influx	influx of neutrophils	2.98E-06	CXCL1, CXCL2, CXCL6, IGHM, IL6, IRAK3, MARCO, MSR1, MYD88, PLAUR, TLR2	11
Immune Cell Trafficking	cell movement	cell movement of leukocytes	8.17E-24	ADIPOQ, APOE, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD38, CD44, CD47, CD274, CFB, CHI3L3, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGLN3, FAS, FCER1G, FCGR2B, FCGR3A, FPR1, FPR2, GNA13, HCK, HIF1A, HP, ICAM1, IL6, IL33, IL17RA, IL18BP, IL1RN, IL4R, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LILRA6, MMP8, MMP14, MSR1, MYD88, NFE2L2, NFKB2, NFKBIA, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, PVR, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINA3, SERPINE1, SERPING1, SOCS3, SPHK1, STAT1, STAT3, SYK, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, VTN, ZC3H12A	108
Immune Cell Trafficking	cell movement	cell movement of granulocytes	2.81E-18	C2, C3, C4A, CCL5, CCL7, CCL13, CCR1, CD44, CD47, CFB, CHI3L3, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FAS, FCER1G, FPR1, FPR2, HCK, ICAM1, IL6, IL33, IL17RA, IL1RN, IL4R, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, LILRA6, MMP8, MYD88, NFE2L2, NFKBIA, PDE4B, PDE4D, PENK, PGF, PLA2G7, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SELL, SELP, SERPINE1, SOCS3, SYK, TLR2, TNFAIP3, TNFRSF1A, VCAM1, VTN	65
Immune Cell Trafficking	cell movement	cell movement of phagocytes	1.29E-17	ADIPOQ, APOE, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CD44, CD47, CFB, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, DARC, EGLN3, FAS, FCER1G, FPR1, FPR2, HCK, HIF1A, ICAM1, IL6, IL17RA, IL1RN, IRGM, ITGAM, ITGB2, ITGB3, LILRA6, MMP8, MYD88, NFKBIA, PDE4B, PDE4D, PENK, PGF, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, SERPING1, SOCS3, SPHK1, SYK, TLR2, TLR3, TNFAIP3, TNFRSF1A, VTN	65
Immune Cell Trafficking	cell movement	cell movement of neutrophils	4.10E-16	C2, C3, C4A, CCL5, CCL7, CCL13, CD44, CD47, CFB, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FAS, FCER1G, FPR1, FPR2, HCK, ICAM1, IL6, IL17RA, IL1RN, ITGAM, ITGB2, ITGB3, LILRA6, MMP8, MYD88, NFKBIA, PDE4B, PDE4D, PENK, PGF, RAC1, RAC2, S100A8, S100A9, SELE, SELL, SELP, SERPINE1, SOCS3, SYK, TLR2, TNFAIP3, TNFRSF1A, VTN	53
Immune Cell Trafficking	cell movement	ell movement of mononuclear leukocyt	3.52E-13	APOE, C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CD47, CHI3L3, CTSL2, CTSS, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, FAS, FPR1, FPR2, GNA13, HP, ICAM1, IL6, IL17RA, IL18BP, ITGB2, MMP14, NFKB2, PENK, PLAUR, PVR, RAC1, RAC2, SAA1, SELE, SELL, SELP, SERPINA3, SOCS3, STAT3, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA, ZC3H12A	57
Immune Cell Trafficking	cell movement	cell movement of lymphocytes	2.43E-10	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, FAS, GNA13, ICAM1, IL6, IL17RA, IL18BP, ITGB2, MMP14, NFKB2, RAC1, RAC2, SAA1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP1, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, ZC3H12A	45
Immune Cell Trafficking	cell movement	cell movement of monocytes	4.31E-10	APOE, CCL5, CCL7, CCL13, CD47, CTSL2, CTSS, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, FPR1, FPR2, HP, ICAM1, IL6, ITGB2, MMP14, PENK, PLAUR, PVR, SELE, SERPINA3, TIMP2, TNFRSF1A, VCAM1, VEGFA	29
Immune Cell Trafficking	cell movement	cell movement of bone marrow cells	5.86E-09	CD44, CD47, CHI3L3, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, FPR1, ICAM1, IL33, ITGAM, ITGB2, ITGB3, KITLG, MMP14, S100A9, SERPINE1, VCAM1	20
Immune Cell Trafficking	cell movement	ell movement of antigen presenting cel	7.88E-09	ADIPOQ, APOE, BID, C3, CCL5, CCL7, CCL13, CCL19, CD38, CD44, CSF1, CX3CL1, CXCL9, CXCL12, CXCL14, DARC, EAR2, EGLN3, FPR1, FPR2, HIF1A, ICAM1, IL17RA, IRGM, ITGB2, MYD88, RAC2, SAA1, SELE, SELL, SERPING1, SPHK1, TLR3, TNFAIP3	34
Immune Cell Trafficking	cell movement	cell movement of T lymphocytes	2.42E-08	C3, CCL5, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, CXCR4, DARC, FAS, ICAM1, IL6, IL17RA, IL18BP, ITGB2, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TLR2, TRAF3IP2	32
Immune Cell Trafficking	cell movement	cell movement of macrophages	1.22E-07	ADIPOQ, APOE, BID, C3, CCL5, CCL13, CD44, CSF1, CX3CL1, CXCL9, DARC, EGLN3, FPR2, HIF1A, ICAM1, IL17RA, IRGM, ITGB2, MYD88, RAC2, SAA1, SELL, SERPING1, SPHK1, TLR3, TNFAIP3	26
Immune Cell Trafficking	cell movement	cell movement of eosinophils	3.49E-07	C3, CCL5, CCL13, CCR1, CD47, CHI3L3, CXCL9, CXCL10, FPR1, IL33, IL17RA, IL4R, ITGAM, ITGB2, LGALS3, LGALS9, MMP8, NFE2L2, PLA2G7, PPARA, VCAM1	21
Immune Cell Trafficking	cell movement	movement of peripheral blood leukocy	7.14E-07	CCL5, CCL7, CCL13, CX3CL1, CXCL12, FPR1, FPR2, PLAUR, SELE, SELL, SELP	11
Immune Cell Trafficking	cell movement	ell movement of memory T lymphocyte	8.32E-07	CCL5, CCL13, CCL19, CCR1, CXCL9, CXCL11, CXCL12, ICAM1, ITGB2	9
Immune Cell Trafficking	cell movement	cell movement of leukocyte cell lines	3.42E-06	BCR, C3, CCL5, CCL19, CCR1, CD44, CSF1, CX3CL1, CXCL11, CXCL12, CXCL13, ICAM1, ITGB2, KITLG, SOCS2, VEGFA	16
Immune Cell Trafficking	migration	migration of bone marrow cells	3.25E-21	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, DARC, FAS, FHL2, FPR1, HCK, HIF1A, ICAM1, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, JAK2, LUM, PDE4B, PDE4D, PGF, PIK3R5, PLAUR, RAC1, RETNLA, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TGM2, TNFRSF1A, VCAM1, VEGFA	48
Immune Cell Trafficking	migration	migration of leukocytes	6.83E-19	APOE, C3, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD24, CD38, CD44, CD47, CHI3L3, CSF1, CSF3, CTSL2, CTSS, CTSZ (includes EG:1522), CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, EGFR, FAS, FCER1G, FPR1, FPR2, GNA13, HCK, HDC, HLA-G, HP, ICAM1, IL6, IL33, IL17RA, IL18BP, ITGAM, ITGB2, ITGB3, JAK2, KITLG, LGALS3, LGALS9, LILRA6, LUM, LY6A, MMP14, MYD88, NFKB2, NFKBIA, PDE4B, PDE4D, PENK, PIK3R5, PLA2G5, PLAUR, PPARA, PROCR, PVR, RAC1, RAC2, RASGRP2, S100A8, S100A9, SAA1, SDC1, SELE, SELL, SELP, SERPINA3, SERPINE1, SOCS3, SPHK1, STAT3, SYK, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, VCAM1, VEGFA, VTN	98
Immune Cell Trafficking	migration	migration of phagocytes	3.39E-17	CCL5, CCL13, CCR1, CD47, CSF1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL12, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL17RA, ITGAM, ITGB2, ITGB3, LGALS3, LUM, PDE4B, PDE4D, PIK3R5, RAC1, RAC2, S100A8, S100A9, SAA1, SDC1, SELE, SELL, SELP, SERPINE1, TLR2, TNFRSF1A, VCAM1, VEGFA, VTN	40
Immune Cell Trafficking	migration	migration of myeloid cells	4.42E-17	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, PLAUR, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TGM2, TNFRSF1A, VCAM1	41
Immune Cell Trafficking	migration	migration of granulocytes	2.04E-16	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, PLAUR, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TNFRSF1A, VCAM1	40
Immune Cell Trafficking	migration	migration of neutrophils	7.26E-15	CCL5, CCL13, CCR1, CD47, CXCL1, CXCL2, CXCL3, CXCL6, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TNFRSF1A, VCAM1	32
Immune Cell Trafficking	migration	migration of mononuclear leukocytes	8.06E-12	C3, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CD47, CHI3L3, CSF3, CTSL2, CTSS, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, EGFR, FAS, GNA13, HDC, HLA-G, ICAM1, IL6, IL17RA, IL18BP, ITGAM, ITGB2, ITGB3, JAK2, LGALS3, LY6A, MMP14, MYD88, NFKB2, PROCR, PVR, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, VCAM1, VEGFA	59
Immune Cell Trafficking	migration	Lymphocyte migration	6.72E-11	C3, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CD47, CHI3L3, CSF3, CTSL2, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, EGFR, FAS, GNA13, HDC, HLA-G, ICAM1, IL6, IL17RA, IL18BP, ITGB2, ITGB3, JAK2, LY6A, MYD88, NFKB2, PROCR, PVR, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, VCAM1	54
Immune Cell Trafficking	migration	migration of antigen presenting cells	1.52E-08	APOE, C3, CCL5, CCL7, CCL19, CCR1, CD38, CD44, CSF1, CTSZ (includes EG:1522), CXCL1, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, ICAM1, LGALS3, RAC1, RAC2, SDC1, SELE, TIMP1, TLR2, VEGFA, VTN	27
Immune Cell Trafficking	migration	migration of leukocyte cell lines	5.74E-07	C3, CCL5, CCL13, CD44, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, ICAM1, ITGB2, ITGB3, KITLG, VEGFA	14
Immune Cell Trafficking	migration	T cell migration	6.44E-07	C3, CCL5, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, FAS, ICAM1, IL6, IL17RA, IL18BP, ITGB2, ITGB3, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP2, TLR2, TRAF3IP2	35
Immune Cell Trafficking	migration	migration of dendritic cells	1.54E-06	APOE, C3, CCL5, CCL7, CCL19, CCR1, CD38, CD44, CTSZ (includes EG:1522), CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, ICAM1, RAC1, RAC2, SELE, TIMP1	20
Immune Cell Trafficking	migration	NK cell migration	2.01E-06	CCL5, CCL6, CCL7, CCL13, CD44, CX3CL1, CXCL9, CXCL10, HLA-G, PVR, SELL, VCAM1	12
Immune Cell Trafficking	accumulation	accumulation of leukocytes	1.52E-15	ADIPOQ, APOE, B2M, BCL3, C4A, CCL5, CCL7, CCL13, CCR1, CD274, CFLAR, CSF3, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, EPHA4, FAS, HDC, ICAM1, IER3, IL33, IL1RN, IL2RG, ITGAM, ITGB2, JAK2, MMP3, MMP8, MYD88, NR3C1, PML, PTX3, S100A8, S100A9, SELE, SELL, SELP, SERPING1, STAT3, TIMP1, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1, VEGFA	48
Immune Cell Trafficking	accumulation	accumulation of myeloid cells	5.89E-11	CCL5, CCL7, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, HDC, IL33, IL1RN, ITGB2, JAK2, MMP8, MYD88, PML, PTX3, S100A8, S100A9, SELP, SERPING1, STAT3, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1	26
Immune Cell Trafficking	accumulation	accumulation of granulocytes	4.28E-10	CCL5, CCL7, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, HDC, IL33, IL1RN, ITGB2, MMP8, MYD88, PTX3, S100A8, S100A9, SELP, SERPING1, STAT3, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1	24
Immune Cell Trafficking	accumulation	ccumulation of mononuclear leukocyte	6.33E-09	ADIPOQ, B2M, BCL3, C4A, CCL5, CCL13, CD274, CFLAR, CXCL2, CXCL10, EPHA4, FAS, ICAM1, IER3, IL2RG, ITGB2, MYD88, NR3C1, SELE, SELL, STAT3, VCAM1, VEGFA	23
Immune Cell Trafficking	accumulation	accumulation of lymphocytes	7.94E-09	ADIPOQ, B2M, BCL3, C4A, CCL5, CCL13, CD274, CFLAR, CXCL10, EPHA4, FAS, ICAM1, IER3, IL2RG, ITGB2, MYD88, NR3C1, SELE, SELL, STAT3, VCAM1, VEGFA	22
Immune Cell Trafficking	accumulation	accumulation of phagocytes	8.45E-09	APOE, CCL5, CCL13, CCR1, CSF3, CX3CL1, CXCL2, CXCL3, CXCL10, FAS, IL1RN, ITGAM, ITGB2, MMP3, MYD88, PTX3, S100A8, S100A9, SELP, TIMP1, TIMP2, TNFSF10, VEGFA	23
Immune Cell Trafficking	accumulation	accumulation of macrophages	1.18E-06	APOE, CCL5, CCL13, CCR1, CX3CL1, FAS, IL1RN, ITGAM, MMP3, MYD88, PTX3, S100A9, TIMP1, VEGFA	14
Immune Cell Trafficking	recruitment	recruitment of leukocytes	9.54E-13	APOE, C3, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, DARC, FCGR2B, HDC, HIF1A, ICAM1, IL6, IL1RN, ITGAM, ITGB2, KITLG, MYD88, NFE2L2, RAC1, SELE, SELL, SELP, SERPINE1, THBS2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1	43
Immune Cell Trafficking	recruitment	recruitment of phagocytes	4.17E-10	APOE, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CSF1, CXCL1, CXCL2, CXCL3, CXCL10, CXCL12, DARC, FCGR2B, ICAM1, IL1RN, ITGAM, ITGB2, MYD88, NFE2L2, RAC1, SERPINE1, THBS2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1	30
Immune Cell Trafficking	recruitment	recruitment of antigen presenting cells	4.32E-08	APOE, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CXCL3, CXCL10, CXCL12, ICAM1, ITGB2, MYD88, NFE2L2, THBS2, TLR2, UCP2, VCAM1	18
Immune Cell Trafficking	recruitment	recruitment of granulocytes	9.94E-08	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CSF1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, DARC, FCGR2B, IL1RN, ITGAM, KITLG, MYD88, RAC1, SELE, SELP, SERPINE1, TNFRSF1A, TRAF3IP2, VCAM1	26
Immune Cell Trafficking	recruitment	recruitment of mononuclear leukocytes	5.03E-07	APOE, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, IL6, MYD88, VCAM1	19
Immune Cell Trafficking	recruitment	recruitment of macrophages	1.01E-06	APOE, CCL7, CCL13, CCR1, CD44, CXCL10, CXCL12, ICAM1, ITGB2, MYD88, NFE2L2, THBS2, TLR2, UCP2, VCAM1	15
Immune Cell Trafficking	recruitment	recruitment of lymphocytes	1.15E-06	CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, MYD88, VCAM1	17
Immune Cell Trafficking	recruitment	recruitment of T lymphocytes	3.19E-06	CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, VCAM1	14
Immune Cell Trafficking	activation	activation of leukocytes	1.67E-12	ADA, ADAM9, ADIPOQ, APOE, B2M, BCL3, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL7, CCL13, CD14, CD38, CD44, CD47, CD83, CDKN1A, CENPF, CISH, CLEC4E, CLEC7A, CSF1, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, CXCL12, EFNB2, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, HCK, HLA-C, HSPA4, ICAM1, IGF1, IGHM, IL6, IL33, IL1RN, ITGAM, ITGB2, ITGB6, KITLG, LBP, LCN2, LCP2, LILRA6, MBP, MGST1, MYD88, NFKB2, PENK, PLXNB1, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA	83
Immune Cell Trafficking	activation	activation of phagocytes	7.74E-11	ADIPOQ, APOE, C3, CCL5, CCL7, CCL13, CD14, CLEC4E, CSF1, CSF3, CXCL1, CXCL3, CXCL6, FCER1G, FPR1, FPR2, HCK, ICAM1, IGF1, IL6, IL1RN, ITGAM, ITGB6, LBP, LCN2, MYD88, REG3G, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	36
Immune Cell Trafficking	activation	activation of antigen presenting cells	1.76E-09	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, ERAP1, FAS, FCER1G, FCGR1A, HCK, HLA-C, ICAM1, IGF1, IGHM, IL6, ITGB6, LBP, MYD88, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TNFRSF1A, TNFSF10, VEGFA	36
Immune Cell Trafficking	activation	activation of granulocytes	4.71E-09	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, FPR1, FPR2, IL6, IL33, IL1RN, ITGAM, ITGB2, KITLG, LCN2, MYD88, SELE, SELL, VCAM1	23
Immune Cell Trafficking	activation	activation of neutrophils	2.88E-07	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, FPR1, FPR2, IL6, IL1RN, ITGAM, LCN2, MYD88, SELE, SELL	18
Immune Cell Trafficking	activation	activation of macrophages	1.21E-06	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, FCER1G, HCK, ICAM1, IGF1, IL6, ITGB6, LBP, MYD88, REG3G, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	23
Immune Cell Trafficking	chemotaxis	chemotaxis of leukocytes	1.90E-12	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, EAR2, FCER1G, FPR1, FPR2, GNA13, HCK, HP, ITGAM, ITGB2, KITLG, LGALS9, LILRA6, NFKB2, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TNFRSF1A, VEGFA, VTN	54
Immune Cell Trafficking	chemotaxis	chemotaxis of granulocytes	9.48E-12	C3, CCL5, CCL7, CCL13, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LGALS9, LILRA6, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	35
Immune Cell Trafficking	chemotaxis	chemotaxis of phagocytes	7.91E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, FPR2, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SPHK1, SYK, TNFRSF1A, VTN	33
Immune Cell Trafficking	chemotaxis	chemotaxis of neutrophils	8.24E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	29
Immune Cell Trafficking	chemotaxis	chemotaxis of mononuclear leukocytes	2.14E-07	CCL5, CCL7, CCL13, CCL19, CCR1, CHI3L3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, FPR1, FPR2, GNA13, HP, NFKB2, PENK, PLAUR, RAC1, RAC2, SAA1, SELE, SERPINA3, SOCS3, THBS2, VEGFA	30
Immune Cell Trafficking	chemotaxis	chemotaxis of monocytes	4.18E-06	CCL5, CCL7, CCL13, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, FPR1, FPR2, HP, PENK, PLAUR, SELE, SERPINA3, VEGFA	17
Immune Cell Trafficking	transmigration	transmigration of leukocytes	2.18E-12	CCL5, CCL7, CCL13, CCL19, CD44, CD47, CSF1, CTSL2, CTSS, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, FPR1, ICAM1, ITGAM, ITGB2, ITGB3, MMP14, PVR, SELE, SERPINE1, TGM2, TIMP2, TNFRSF1A, VCAM1, VEGFA	30
Immune Cell Trafficking	transmigration	ansmigration of mononuclear leukocyte	6.77E-09	CCL5, CCL7, CCL13, CD44, CD47, CTSL2, CTSS, CXCL11, CXCL12, CXCR4, ICAM1, ITGB2, MMP14, PVR, TGM2, TIMP2, TNFRSF1A, VCAM1	18
Immune Cell Trafficking	adhesion	adhesion of leukocytes	5.18E-12	C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL11, CXCL12, FAS, FPR2, HCK, ICAM1, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LY6A, MARCO, MYD88, NFKBIA, NFKBIB, OLR1, PLAUR, PLTP, RAC1, RAC2, RASGRP2, S100A8, S100A9, SELE, SELL, SELP, SERPING1, SYK, THBS2, TLR2, VCAM1, VEGFA	50
Immune Cell Trafficking	adhesion	adhesion of granulocytes	9.90E-08	C3, CD44, CXCL2, CXCL3, FPR2, HCK, ICAM1, IL33, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, PLAUR, PLTP, S100A8, S100A9, SELE, SELL, SELP, VCAM1	21
Immune Cell Trafficking	infiltration	infiltration by neutrophils	1.47E-10	C2, C3, C4A, CD44, CFB, CSF3, CXCL2, CXCL3, CXCL10, FAS, FCER1G, FPR2, ICAM1, IL6, IL17RA, IL1RN, ITGAM, ITGB2, MMP8, MYD88, NFKBIA, PGF, RAC2, SELE, SELL, SELP, SOCS3, TLR2, TNFAIP3, TNFRSF1A	30
Immune Cell Trafficking	infiltration	infiltration of leukocytes	1.21E-09	ADIPOQ, APOE, BID, C3, CCL13, CCL19, CCR1, CD44, CD274, CXCL10, CXCL12, DARC, EGLN3, FAS, FCGR2B, FPR2, HIF1A, ICAM1, IL6, IL33, IL17RA, IL18BP, MMP8, MMP14, MSR1, SELE, SELP, SERPING1, STAT1, STAT3, TGM2, TIMP1, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, ZC3H12A	38
Immune Cell Trafficking	infiltration	infiltration by lymphocytes	3.12E-06	C3, CCL13, CCL19, CCR1, CD44, CXCL10, CXCL12, DARC, FAS, IL6, IL17RA, IL18BP, MMP14, SELE, SELP, STAT3, TIMP1, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, ZC3H12A	22
Immune Cell Trafficking	homing	homing of bone marrow cells	6.10E-07	CD44, CHI3L3, CSF3, CXCL12, KITLG, MMP14, VCAM1	7
Immune Cell Trafficking	cell rolling	cell rolling of leukocytes	1.12E-06	CCL13, CD14, CD44, CXCL2, CXCL3, FCGR3A, ICAM1, ITGAM, ITGB2, LGALS3, RAC2, SELE, SELL, SELP, VCAM1, VEGFA	16
Immune Cell Trafficking	influx	influx of neutrophils	2.98E-06	CXCL1, CXCL2, CXCL6, IGHM, IL6, IRAK3, MARCO, MSR1, MYD88, PLAUR, TLR2	11
Hematopoiesis	migration	migration of bone marrow cells	3.25E-21	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, DARC, FAS, FHL2, FPR1, HCK, HIF1A, ICAM1, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, JAK2, LUM, PDE4B, PDE4D, PGF, PIK3R5, PLAUR, RAC1, RETNLA, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TGM2, TNFRSF1A, VCAM1, VEGFA	48
Hematopoiesis	migration	migration of myeloid cells	4.42E-17	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, PLAUR, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TGM2, TNFRSF1A, VCAM1	41
Hematopoiesis	migration	migration of granulocytes	2.04E-16	C3, CCL5, CCL13, CCR1, CD47, CSF3, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL33, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, PLAUR, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TNFRSF1A, VCAM1	40
Hematopoiesis	migration	migration of neutrophils	7.26E-15	CCL5, CCL13, CCR1, CD47, CXCL1, CXCL2, CXCL3, CXCL6, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TNFRSF1A, VCAM1	32
Hematopoiesis	hematopoiesis	hematopoiesis	1.69E-14	ADA, ADAR, ADIPOQ, ADRB1, ANK1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CCR1, CD14, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CEBPD, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CSF2RB, CXCL3, CXCL11, CXCL12, CXCR4, EBF1, EGFR, EIF4E, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HAMP, HDAC9 (includes EG:9734), HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LCN2, LCP2, LGALS3, MBP, MSR1, MYC, MYCN, MYD88, MYH11, NFE2L2, NFKB2, NFKBIA, NR3C1, PBX1, PENK, PGF, PIM1, PLSCR1, PML, PNP, PRDM16, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, RUNX1T1, SELE, SELP, SHC1, SNAI2, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TIPARP, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC, ZFP36	124
Hematopoiesis	development	development of leukocytes	1.25E-12	ADA, ADAR, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CXCL11, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	99
Hematopoiesis	development	levelopment of mononuclear leukocyte	3.21E-12	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CXCL11, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	96
Hematopoiesis	development	development of blood cells	3.56E-12	ADA, ADAR, ADRB1, ANK1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CXCL11, CXCL12, CXCR4, EBF1, EGFR, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	101
Hematopoiesis	development	development of lymphocytes	3.00E-11	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	93
Hematopoiesis	development	T cell development	3.65E-10	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKBIA, NR3C1, PENK, PIM1, PNP, PRKD1, PSMB8, PSMB9, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA	85
Hematopoiesis	differentiation	differentiation of leukocytes	1.44E-11	ADA, ADIPOQ, BCL3, BCL2A1, BCL2L1, BCR, CCL13, CCL19, CCR1, CD14, CD24, CD83, CEBPB, CEBPD, CLEC4E, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, EBF1, EIF4E, EPHA4, FAS, FCGR2B, GADD45G, HDAC9 (includes EG:9734), HLA-C, ICAM1, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, LIFR, LILRA6, MBP, MYC, MYCN, MYD88, MYH11, NFKB2, NFKBIA, PGF, PLSCR1, PML, PNP, PRDM16, PRKD1, RELB, RUNX1T1, SHC1, SOCS3, SOX4, STAT1, STAT3, SYK, TIMP1, TLR2, TNFRSF1A, TNFSF10, VEGFA, ZFP36	81
Hematopoiesis	differentiation	ifferentiation of mononuclear leukocyte	1.83E-07	ADA, BCL3, BCL2A1, BCR, CCL13, CCL19, CD14, CD24, CD83, CEBPB, CLEC4E, CSF1, CSF3, CXCL12, CXCR4, EBF1, EIF4E, EPHA4, FAS, FCGR2B, GADD45G, HDAC9 (includes EG:9734), HLA-C, ICAM1, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGB2, ITGB3, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MYC, MYCN, MYD88, PGF, PNP, PRKD1, RELB, SOCS3, SOX4, STAT1, STAT3, SYK, TLR2, TNFSF10, VEGFA	60
Hematopoiesis	differentiation	differentiation of bone marrow cells	3.06E-06	ADIPOQ, BCL2L1, BCR, CCR1, CD38, CEBPD, CSF1, CSF3, CSF2RB, EIF4E, FAS, FCER1G, IGF1, IL6, IRF8, JAK2, KITLG, LRRC17, MYC, MYH11, NFKBIA, PGF, PLSCR1, PML, PRDM16, RUNX1T1, SHC1, STAT3, THBS2, VEGFA, ZFP36	31
Hematopoiesis	differentiation	differentiation of myeloid cells	3.58E-06	ADIPOQ, BCL2L1, BCR, CCR1, CEBPD, CSF1, CSF3, CSF2RB, EIF4E, IGF1, IL6, IRF8, JAK2, KITLG, MYC, MYH11, NFKBIA, PLSCR1, PML, PRDM16, RUNX1T1, SHC1, STAT3, ZFP36	24
Hematopoiesis	differentiation	differentiation of leukocyte cell lines	4.19E-06	CCND2, CDKN1A, CEBPB, CENPF, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, IGF1, IL6, LCP2, MYC, PRDM16, RUNX1T1, SHC1, SOCS3, TIMP1, WNT5A	19
Hematopoiesis	cell death	cell death of T lymphocytes	1.11E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CLEC10A, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IDO1, IER3, IGF1, IGHM, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TNFRSF1A, TNFSF10	48
Hematopoiesis	apoptosis	apoptosis of T lymphocytes	2.70E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IER3, IGF1, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10	43
Hematopoiesis	cell movement	cell movement of bone marrow cells	5.86E-09	CD44, CD47, CHI3L3, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, FPR1, ICAM1, IL33, ITGAM, ITGB2, ITGB3, KITLG, MMP14, S100A9, SERPINE1, VCAM1	20
Hematopoiesis	homing	homing of bone marrow cells	6.10E-07	CD44, CHI3L3, CSF3, CXCL12, KITLG, MMP14, VCAM1	7
Hematopoiesis	mobilization	bilization of hematopoietic progenitor c	4.19E-06	CSF1, CSF3, CXCL3, CXCL10, CXCL12, KITLG, SELE, SELL, VCAM1, VEGFA	10
Inflammatory Response	immune response	immune response	4.44E-21	ADA, ADAM9, ADIPOQ, ANKRD1, APOE, B2M, BAK1, BCL3, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD38, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CENPF, CISH, CLEC4E, CLEC7A, COLEC12, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, DDX58, EFNB2, EIF2AK2, EIF4EBP1, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF7, FPR1, FPR2, GBP2, H2-LD, HAMP, HCK, HIF1A, HLA-B, HLA-C, HP, HSPA4, ICAM1, IDO1, IER3, IFI47, IFIH1, IFITM2, IFITM3, IGF1, IGHM, IGSF6, IL6, IL33, IL1R2, IL1RN, IL2RG, IL4R, INHBB, IRF7, IRF8, IRGM, ITGAM, ITGB2, ITGB6, KITLG, LBP, LCN2, LCP2, LEPR, LILRA6, MBP, MGST1, MSR1, MX1, MX2, MYD88, NCF1, NCF4, NFKB2, OSMR, PENK, PIK3AP1, PLSCR1, PLXNB1, PNP, PSMB8, PSMB9, PSME2, REG3G, RELB, RGS2, S100A9, SBNO2, SELE, SELL, SEMA3C, SEMA7A, SERPING1, SLC11A1, SLC7A2, STAT1, STAT2, STAT3, SYK, TAP1, TAPBP, TBK1, TLR2, TLR3, TNFRSF1A, TNFSF10, TNIP1, TRIM21, TXNIP, VCAM1, VEGFA, VTN	143
Inflammatory Response	inflammatory response	inflammatory response	8.34E-20	ADA, ADIPOQ, APOE, C3, CASP4, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD38, CD44, CEBPB, CHI3L3, CLEC4E, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, DARC, EAR2, FCER1G, FCGR2B, FPR1, FPR2, GNA13, HCK, HDAC9 (includes EG:9734), HP, ICAM1, IGF1, IL6, IL1RN, IL4R, IRAK2, IRAK3, ITGAM, ITGB2, ITGB6, JAK2, KITLG, LBP, LCN2, LGALS9, LILRA6, MYD88, NCF1, NFKB2, NFKBIZ, NMI, OLR1, PARP4, PDE4B, PDE4D, PENK, PLA2G7, PLAUR, PPARA, PTX3, RAC1, RAC2, REG3G, S100A8, S100A9, SAA1, SBNO2, SELE, SELL, SELP, SERPINA3, SERPINF1, SERPING1, SGMS1, SLC11A1, SLC7A2, SOCS3, SPHK1, STAT1, STAT3, STEAP2, SYK, TGM2, THBS2, TLR2, TLR3, TNFAIP6, TNFRSF1A, VEGFA, VTN, ZFP36	102
Inflammatory Response	cell movement	cell movement of phagocytes	1.29E-17	ADIPOQ, APOE, BID, C2, C3, C4A, CCL5, CCL7, CCL13, CD44, CD47, CFB, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, DARC, EGLN3, FAS, FCER1G, FPR1, FPR2, HCK, HIF1A, ICAM1, IL6, IL17RA, IL1RN, IRGM, ITGAM, ITGB2, ITGB3, LILRA6, MMP8, MYD88, NFKBIA, PDE4B, PDE4D, PENK, PGF, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, SERPING1, SOCS3, SPHK1, SYK, TLR2, TLR3, TNFAIP3, TNFRSF1A, VTN	65
Inflammatory Response	cell movement	cell movement of neutrophils	4.10E-16	C2, C3, C4A, CCL5, CCL7, CCL13, CD44, CD47, CFB, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FAS, FCER1G, FPR1, FPR2, HCK, ICAM1, IL6, IL17RA, IL1RN, ITGAM, ITGB2, ITGB3, LILRA6, MMP8, MYD88, NFKBIA, PDE4B, PDE4D, PENK, PGF, RAC1, RAC2, S100A8, S100A9, SELE, SELL, SELP, SERPINE1, SOCS3, SYK, TLR2, TNFAIP3, TNFRSF1A, VTN	53
Inflammatory Response	cell movement	cell movement of bone marrow cells	5.86E-09	CD44, CD47, CHI3L3, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, FPR1, ICAM1, IL33, ITGAM, ITGB2, ITGB3, KITLG, MMP14, S100A9, SERPINE1, VCAM1	20
Inflammatory Response	cell movement	cell movement of macrophages	1.22E-07	ADIPOQ, APOE, BID, C3, CCL5, CCL13, CD44, CSF1, CX3CL1, CXCL9, DARC, EGLN3, FPR2, HIF1A, ICAM1, IL17RA, IRGM, ITGB2, MYD88, RAC2, SAA1, SELL, SERPING1, SPHK1, TLR3, TNFAIP3	26
Inflammatory Response	migration	migration of phagocytes	3.39E-17	CCL5, CCL13, CCR1, CD47, CSF1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL12, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL17RA, ITGAM, ITGB2, ITGB3, LGALS3, LUM, PDE4B, PDE4D, PIK3R5, RAC1, RAC2, S100A8, S100A9, SAA1, SDC1, SELE, SELL, SELP, SERPINE1, TLR2, TNFRSF1A, VCAM1, VEGFA, VTN	40
Inflammatory Response	migration	migration of neutrophils	7.26E-15	CCL5, CCL13, CCR1, CD47, CXCL1, CXCL2, CXCL3, CXCL6, DARC, FAS, FPR1, HCK, ICAM1, IL6, IL17RA, ITGAM, ITGB2, ITGB3, LUM, PDE4B, PDE4D, PIK3R5, RAC1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, TNFRSF1A, VCAM1	32
Inflammatory Response	inflammation	inflammation	5.61E-17	ADA, ADIPOQ, APOE, B2M, BID, C3, CASP4, CCL5, CCL6, CCL13, CD14, CD44, CD47, CEBPB, CEBPD, CFB, CTSS, CXCL2, CXCL3, CXCL10, CXCL12, DARC, EGFR, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, HMOX1, HP, ICAM1, IGF1, IL6, IL13RA1, IL17RA, IL1R2, IL1RN, IL2RG, IL4R, IRAK3, IRF9, ISG15, ITGB2, JUNB, LAMA2, LBP, MYD88, NCF1, NFE2L2, NFKBIA, NFKBIB, NR3C1, PGF, PLA2G7, PNKD (includes EG:25953), PPARA, RELB, RIPK3, S100A8, S100A9, SELL, SELP, STAT1, STAT3, STEAP2, THBS2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TNFSF10, TRAF3IP2, VEGFA, ZFP36	74
Inflammatory Response	inflammation	inflammation of organism	9.44E-14	ADIPOQ, B2M, CASP4, CCL5, CCL13, CD14, CEBPB, CEBPD, CXCL10, FAS, FCER1G, FCGR2B, FCGR3A, IL6, IL13RA1, IL1R2, IL1RN, IL2RG, IL4R, IRAK3, ITGB2, LBP, MYD88, NFKBIA, PGF, PLA2G7, PPARA, SELL, STAT1, STAT3, TLR2, TLR3, TNFAIP3, TNFRSF1A, ZFP36	35
Inflammatory Response	inflammation	inflammation of organ	2.19E-12	ADA, ADIPOQ, APOE, B2M, BID, CCL6, CCL13, CD14, CD44, CD47, CTSS, CXCL2, CXCL3, CXCL12, DARC, EGFR, FAS, FCGR2B, HMOX1, HP, ICAM1, IGF1, IL6, IL17RA, IL1RN, IRAK3, IRF9, ISG15, ITGB2, JUNB, MYD88, NCF1, NFKBIB, PNKD (includes EG:25953), PPARA, RELB, STAT1, STAT3, THBS2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TRAF3IP2, VEGFA	45
Inflammatory Response	inflammation	inflammation of animal	7.46E-10	ADIPOQ, B2M, CASP4, CCL5, CD14, CXCL10, FCER1G, FCGR2B, FCGR3A, IL6, IL1R2, IL1RN, IRAK3, ITGB2, LBP, MYD88, NFKBIA, PGF, PLA2G7, PPARA, SELL, STAT3, TLR2, TLR3, TNFAIP3, TNFRSF1A, ZFP36	27
Inflammatory Response	inflammation	inflammation of mammalia	6.52E-09	ADIPOQ, B2M, CASP4, CD14, CXCL10, FCER1G, FCGR2B, FCGR3A, IL6, IL1R2, IL1RN, IRAK3, ITGB2, LBP, MYD88, NFKBIA, PGF, PLA2G7, PPARA, SELL, STAT3, TLR3, TNFAIP3, TNFRSF1A, ZFP36	25
Inflammatory Response	inflammation	inflammation of mice	2.54E-08	ADIPOQ, B2M, CD14, CXCL10, FCER1G, FCGR2B, FCGR3A, IL6, IL1R2, IRAK3, ITGB2, LBP, MYD88, NFKBIA, PGF, PLA2G7, PPARA, SELL, STAT3, TNFAIP3, TNFRSF1A, ZFP36	22
Inflammatory Response	inflammation	inflammation of lung	1.35E-06	ADA, BID, CCL6, CCL13, CD14, CTSS, CXCL3, CXCL12, DARC, HMOX1, ICAM1, IL6, IL17RA, ISG15, MYD88, NCF1, RELB, TLR2, TLR3, TRAF3IP2, VEGFA	21
Inflammatory Response	inflammation	ımmation of respiratory system compo	2.58E-06	ADA, BID, C3, CCL6, CCL13, CD14, CTSS, CXCL3, CXCL12, DARC, HMOX1, ICAM1, IL6, IL17RA, ISG15, MYD88, NCF1, NFE2L2, RELB, TLR2, TLR3, TRAF3IP2, VEGFA	23
Inflammatory Response	accumulation	accumulation of leukocytes	1.52E-15	ADIPOQ, APOE, B2M, BCL3, C4A, CCL5, CCL7, CCL13, CCR1, CD274, CFLAR, CSF3, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, EPHA4, FAS, HDC, ICAM1, IER3, IL33, IL1RN, IL2RG, ITGAM, ITGB2, JAK2, MMP3, MMP8, MYD88, NR3C1, PML, PTX3, S100A8, S100A9, SELE, SELL, SELP, SERPING1, STAT3, TIMP1, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1, VEGFA	48
Inflammatory Response	accumulation	accumulation of myeloid cells	5.89E-11	CCL5, CCL7, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, HDC, IL33, IL1RN, ITGB2, JAK2, MMP8, MYD88, PML, PTX3, S100A8, S100A9, SELP, SERPING1, STAT3, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1	26
Inflammatory Response	accumulation	accumulation of granulocytes	4.28E-10	CCL5, CCL7, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, HDC, IL33, IL1RN, ITGB2, MMP8, MYD88, PTX3, S100A8, S100A9, SELP, SERPING1, STAT3, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1	24
Inflammatory Response	accumulation	ccumulation of mononuclear leukocyte	6.33E-09	ADIPOQ, B2M, BCL3, C4A, CCL5, CCL13, CD274, CFLAR, CXCL2, CXCL10, EPHA4, FAS, ICAM1, IER3, IL2RG, ITGB2, MYD88, NR3C1, SELE, SELL, STAT3, VCAM1, VEGFA	23
Inflammatory Response	accumulation	accumulation of lymphocytes	7.94E-09	ADIPOQ, B2M, BCL3, C4A, CCL5, CCL13, CD274, CFLAR, CXCL10, EPHA4, FAS, ICAM1, IER3, IL2RG, ITGB2, MYD88, NR3C1, SELE, SELL, STAT3, VCAM1, VEGFA	22
Inflammatory Response	accumulation	accumulation of phagocytes	8.45E-09	APOE, CCL5, CCL13, CCR1, CSF3, CX3CL1, CXCL2, CXCL3, CXCL10, FAS, IL1RN, ITGAM, ITGB2, MMP3, MYD88, PTX3, S100A8, S100A9, SELP, TIMP1, TIMP2, TNFSF10, VEGFA	23
Inflammatory Response	accumulation	accumulation of macrophages	1.18E-06	APOE, CCL5, CCL13, CCR1, CX3CL1, FAS, IL1RN, ITGAM, MMP3, MYD88, PTX3, S100A9, TIMP1, VEGFA	14
Inflammatory Response	quantity	quantity of phagocytes	9.38E-15	ADA, APOE, B2M, BID, CCL7, CCL13, CES1 (includes EG:1066), CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL10, FAS, FCGR1A, FGF7, HDC, ICAM1, IL18BP, ITGB2, ITGB6, LGALS3, MMP3, MMP8, MYD88, MYH11, NFKBIA, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SHC1, SOCS3, STAT3, TLR2, TNFRSF1A, TNFSF10, VEGFA, VTN	47
Inflammatory Response	quantity	quantity of neutrophils	1.13E-11	ADA, CSF1, CSF3, FAS, FCGR1A, HDC, ICAM1, IL18BP, ITGB2, MMP3, MMP8, MYH11, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	28
Inflammatory Response	quantity	quantity of macrophages	2.43E-06	ADA, APOE, B2M, BID, CCL7, CCL13, CES1 (includes EG:1066), CSF1, CTSL2, CTSS, CX3CL1, CXCL10, FAS, FGF7, ITGB6, LGALS3, MMP3, MYD88, NFKBIA, RELB, SELP, SHC1, STAT3, TNFRSF1A, VEGFA	25
Inflammatory Response	activation	activation of leukocytes	1.67E-12	ADA, ADAM9, ADIPOQ, APOE, B2M, BCL3, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL7, CCL13, CD14, CD38, CD44, CD47, CD83, CDKN1A, CENPF, CISH, CLEC4E, CLEC7A, CSF1, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, CXCL12, EFNB2, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, HCK, HLA-C, HSPA4, ICAM1, IGF1, IGHM, IL6, IL33, IL1RN, ITGAM, ITGB2, ITGB6, KITLG, LBP, LCN2, LCP2, LILRA6, MBP, MGST1, MYD88, NFKB2, PENK, PLXNB1, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA	83
Inflammatory Response	activation	activation of phagocytes	7.74E-11	ADIPOQ, APOE, C3, CCL5, CCL7, CCL13, CD14, CLEC4E, CSF1, CSF3, CXCL1, CXCL3, CXCL6, FCER1G, FPR1, FPR2, HCK, ICAM1, IGF1, IL6, IL1RN, ITGAM, ITGB6, LBP, LCN2, MYD88, REG3G, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	36
Inflammatory Response	activation	activation of antigen presenting cells	1.76E-09	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, ERAP1, FAS, FCER1G, FCGR1A, HCK, HLA-C, ICAM1, IGF1, IGHM, IL6, ITGB6, LBP, MYD88, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TNFRSF1A, TNFSF10, VEGFA	36
Inflammatory Response	activation	activation of granulocytes	4.71E-09	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, FPR1, FPR2, IL6, IL33, IL1RN, ITGAM, ITGB2, KITLG, LCN2, MYD88, SELE, SELL, VCAM1	23
Inflammatory Response	activation	activation of neutrophils	2.88E-07	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, FPR1, FPR2, IL6, IL1RN, ITGAM, LCN2, MYD88, SELE, SELL	18
Inflammatory Response	activation	activation of macrophages	1.21E-06	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, FCER1G, HCK, ICAM1, IGF1, IL6, ITGB6, LBP, MYD88, REG3G, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	23
Inflammatory Response	chemotaxis	chemotaxis of leukocytes	1.90E-12	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, EAR2, FCER1G, FPR1, FPR2, GNA13, HCK, HP, ITGAM, ITGB2, KITLG, LGALS9, LILRA6, NFKB2, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SERPINA3, SOCS3, SPHK1, SYK, THBS2, TNFRSF1A, VEGFA, VTN	54
Inflammatory Response	chemotaxis	chemotaxis of granulocytes	9.48E-12	C3, CCL5, CCL7, CCL13, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LGALS9, LILRA6, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	35
Inflammatory Response	chemotaxis	chemotaxis of phagocytes	7.91E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, FPR2, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SPHK1, SYK, TNFRSF1A, VTN	33
Inflammatory Response	chemotaxis	chemotaxis of neutrophils	8.24E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	29
Inflammatory Response	chemotaxis	chemotaxis of mononuclear leukocytes	2.14E-07	CCL5, CCL7, CCL13, CCL19, CCR1, CHI3L3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, FPR1, FPR2, GNA13, HP, NFKB2, PENK, PLAUR, RAC1, RAC2, SAA1, SELE, SERPINA3, SOCS3, THBS2, VEGFA	30
Inflammatory Response	chemotaxis	chemotaxis of monocytes	4.18E-06	CCL5, CCL7, CCL13, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, FPR1, FPR2, HP, PENK, PLAUR, SELE, SERPINA3, VEGFA	17
Inflammatory Response	phagocytosis	phagocytosis of cells	1.38E-11	ADIPOQ, C3, CAPG, CD14, CD44, CD47, CLEC7A, COLEC12, CSF1, CSF3, CSF2RB, CXCL10, FAS, FCER1G, FCGR1A, FCGR2B, GULP1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, MARCO, MRC1L1, MSR1, MYC, MYD88, PTX3, RAC1, RAC2, SERPINE1, SLC11A1, SYK, TGM2, TLR2, TLR3	37
Inflammatory Response	phagocytosis	phagocytosis of eukaryotic cells	4.58E-08	CD14, CD44, CD47, CSF1, CSF3, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MARCO, MRC1L1, MSR1, MYC, RAC1, RAC2, SERPINE1, SYK, TGM2, TLR2, TLR3	27
Inflammatory Response	phagocytosis	phagocytosis of normal cells	2.52E-07	CD44, CD47, CSF1, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MSR1, RAC1, RAC2, SERPINE1, SYK, TGM2, TLR2, TLR3	22
Inflammatory Response	phagocytosis	phagocytosis of blood cells	1.07E-06	CD44, CD47, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MSR1, RAC1, RAC2, SERPINE1, SYK, TGM2	19
Inflammatory Response	antiviral response	antiviral response of organism	7.84E-11	BCL3, CCL5, CCL19, CXCL12, CXCR4, DDX58, DHX58, EIF2AK2, HLA-C, IFI44, IFIH1, IRF7, ISG20, LCN2, MX1, MX2, MYD88, OAS1, STAT1, TBK1, TGTP1, TLR3, ZC3HAV1	23
Inflammatory Response	antiviral response	antiviral response	2.61E-10	BCL3, CCL5, CCL19, CXCL12, CXCR4, DDX58, DHX58, EIF2AK2, HLA-C, IFI44, IFIH1, IRF1, IRF7, ISG20, LCN2, MX1, MX2, MYD88, OAS1, SOCS3, STAT1, TBK1, TGTP1, TLR3, ZC3HAV1	25
Inflammatory Response	antiviral response	antiviral response of animal	1.64E-06	DDX58, DHX58, EIF2AK2, HLA-C, IFIH1, IRF7, MYD88, TBK1, TLR3	9
Inflammatory Response	infiltration	infiltration by neutrophils	1.47E-10	C2, C3, C4A, CD44, CFB, CSF3, CXCL2, CXCL3, CXCL10, FAS, FCER1G, FPR2, ICAM1, IL6, IL17RA, IL1RN, ITGAM, ITGB2, MMP8, MYD88, NFKBIA, PGF, RAC2, SELE, SELL, SELP, SOCS3, TLR2, TNFAIP3, TNFRSF1A	30
Inflammatory Response	recruitment	recruitment of phagocytes	4.17E-10	APOE, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CSF1, CXCL1, CXCL2, CXCL3, CXCL10, CXCL12, DARC, FCGR2B, ICAM1, IL1RN, ITGAM, ITGB2, MYD88, NFE2L2, RAC1, SERPINE1, THBS2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1	30
Inflammatory Response	recruitment	recruitment of macrophages	1.01E-06	APOE, CCL7, CCL13, CCR1, CD44, CXCL10, CXCL12, ICAM1, ITGB2, MYD88, NFE2L2, THBS2, TLR2, UCP2, VCAM1	15
Inflammatory Response	binding	binding of phagocytes	3.09E-09	ADIPOQ, APOE, C3, CD14, CLEC10A, CSF1, CXCL2, CXCL10, FCGR1A, FPR1, HCK, ICAM1, ITGAM, ITGB2, LBP, MARCO, MSN, MSR1, S100A9, SELL, SELP, VTN	22
Inflammatory Response	aggregation	aggregation of leukocytes	2.27E-08	CD44, FPR1, HIF1A, ICAM1, IL6, ITGAM, ITGB2, KITLG, LY6A, NFKB2, NRP1, PLCB1, SELL, SELP, TLR2, TNFRSF1A, TRAF3IP2	17
Inflammatory Response	respiratory burst	respiratory burst	2.24E-07	C3, CD14, CD24, CXCL3, FCER1G, FPR1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, LBP, LILRA6, NCF1, SLC11A1, SYK, VCAM1, VTN	19
Inflammatory Response	respiratory burst	respiratory burst of neutrophils	3.86E-07	C3, CXCL3, FCER1G, FPR1, HCK, ICAM1, ITGAM, ITGB2, ITGB3, LILRA6, SYK, VCAM1, VTN	13
Inflammatory Response	respiratory burst	respiratory burst of phagocytes	3.91E-07	C3, CXCL3, FCER1G, FPR1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, LILRA6, SYK, VCAM1, VTN	14
Inflammatory Response	respiratory burst	respiratory burst of cells	1.89E-06	C3, CD14, CXCL3, FCER1G, FPR1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, LILRA6, SYK, VCAM1, VTN	15
Inflammatory Response	homing	homing of bone marrow cells	6.10E-07	CD44, CHI3L3, CSF3, CXCL12, KITLG, MMP14, VCAM1	7
Inflammatory Response	degranulation	degranulation of eukaryotic cells	1.18E-06	C3, C4A, CCL13, CCR1, CX3CL1, CXCL3, FCER1G, FCGR2B, FPR1, HCK, IL33, IL4R, ITGAM, ITGB2, JUNB, KITLG, LCP2, LILRA6, NCAM1, PILRA, PLAUR, PLSCR1, RAC2, SPHK1, SYK, TLR2	26
Inflammatory Response	influx	influx of neutrophils	2.98E-06	CXCL1, CXCL2, CXCL6, IGHM, IL6, IRAK3, MARCO, MSR1, MYD88, PLAUR, TLR2	11
Cell Death	cell death	cell death of leukocytes	5.11E-20	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, BIRC3, CASP4, CCL5, CCL13, CCL19, CD14, CD24, CD44, CD47, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CSF1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, DDIT3, EIF2AK2, EIF4E, FAS, FBXW7, FCER1G, FCGR2B, GADD45B, HIF1A, HIST1H1C, HLA-G, IDO1, IER3, IGF1, IGHM, IL6, IL1RN, IL2RG, IRAK3, IRF1, IRF8, ITGAM, ITGB2, JAK2, KITLG, LCN2, LEPR, LGALS3, LGALS8, MMP8, MSR1, MYC, MYD88, NAMPT, NFE2L2, NFKB2, NFKBIA, NFKBIB, NQO2, NR3C1, PIM1, PNP, PPARA, RAC1, RAC2, RCAN1, RIPK3, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TLR2, TNFRSF1A, TNFSF10, TRAF3IP2, UBD, VEGFA	89
Cell Death	cell death	cell death of blood cells	1.04E-18	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, BIRC3, CASP4, CCL5, CCL13, CCL19, CD14, CD24, CD44, CD47, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CSF1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, DDIT3, EIF2AK2, EIF4E, FAS, FBXW7, FCER1G, FCGR2B, GADD45B, HIF1A, HIST1H1C, HLA-G, IDO1, IER3, IGF1, IGHM, IL6, IL1RN, IL2RG, IRAK3, IRF1, IRF8, ITGAM, ITGB2, JAK2, KITLG, LCN2, LEPR, LGALS3, LGALS8, MMP8, MSR1, MYC, MYD88, NAMPT, NFE2L2, NFKB2, NFKBIA, NFKBIB, NQO2, NR3C1, PIM1, PML, PNP, PPARA, RAC1, RAC2, RCAN1, RIPK3, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TLR2, TNFRSF1A, TNFSF10, TRAF3IP2, UBD, VEGFA	90

Cell Death	cell death	cell death of eukaryotic cells	6.19E-18	ACVR1B, ADA, ADIPOQ, ADRB1, ALDH3A1, ANKRD1, ANTXR1, APOE, AQP7, AR, ASNS, ATF3, ATP2B2, B2M, B4GALT5, BACH2 (includes EG:60468), BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BIRC2, BIRC3, BNIP3 (includes EG:12176), BTG1, BTG2, C3, C8ORF4, CACNA2D2, CACNB2, CAPN10, CASP4, CASP12 (includes EG:12364), CBLB, CCL5, CCL13, CCL19, CCND2, CD14, CD24, CD44, CD47, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CFLAR, CHEK2, CLEC10A, CLIC4, COMP, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL12, CXCR4, CYP1B1, CYP2E1, DAXX, DDIT3, DDIT4, DNMT3A, DPYSL4, EFNB2, EGFR, EGLN3, EIF2AK2, EIF4E, EIF4EBP1, EMILIN2, ENTPD5, ERCC1, FAP, FAS, FBXO32, FBXW7, FCER1G, FCGR1A, FCGR2B, FEM1B, FGF7, FGL2, FHL2, FKBP5, G0S2, GADD45B, GADD45G, GCLM, GLRX, HCK, HCLS1, HDAC9 (includes EG:9734), HEYL, HFE, HIF1A, HIST1H1C, HLA-B, HLA-G, HLF (includes EG:3131), HMOX1, HSPA4, HSPB1, ICAM1, IDO1, IER3, IFI16, IFI202B, IFIH1, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, IP6K2, IRAK3, IRF1, IRF8, ITGAM, ITGB2, ITGB3, JAK2, JUNB, KCNK3, KITLG, LAMA2, LCN2, LEPR, LGALS3, LGALS8, LGALS3BP, LIMS1, MAP1LC3B, MAPT, MBD1, MBP, MDH1, MEF2C, MEOX2, MGP, MMP3, MMP8, MMP14, MSN, MSR1, MT1E, MT1F, MTP18, MYC, MYCN, MYD88, MYH11, MYO6, NAMPT, NCAM1, NCF1, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NFKBIB, NFKBIZ, NQO2, NR3C1, NRP1, NTF3, NTS, OLR1, PAK6, PDLIM4, PIAS2, PIM1, PIM3, PLA2G7, PLAC8, PLAUR, PLSCR1, PML, PNP, POU3F1, PPARA, PPARGC1A, PRKAA2, PRKAR2B, PRKD1, PROCR, PTN, PTPRE, PTPRF, PVR, QKI, RAC1, RAC2, RAI14, RASD1, RCAN1, RECK, REG3G, RELB, RGS5, RHOC, RIPK3, RNASE1, RP6-213H19.1, RPS6KA2, RPS6KA5, RRAS2, RTN4, RUNX1T1, S100A8, S100A9, SAA1, SDC1, SDC4, SEMA3B, SEMA3F, SEMA7A, SEPT4, SERPINA3, SERPINB9, SERPINE1, SERPINF1, SGMS1, SH3KBP1, SH3RF1, SHC1, SLC2A1, SNAI2, SOCS3, SPHK1, SPRR1A, SRPK2, ST3GAL1, STAT1, STAT3, SYK, TBK1, TFRC, TGM2, THBS2, TIMP1, TIMP2, TLR2, TMEM173, TNFAIP3, TNFRSF19, TNFRSF1A, TNFSF10, TNIP1, TP53INP1, TPM3, TRAF3IP2, TRIM21, TXNIP, UBA7, UBD, UCP1, UCP2, UNG, USP18, VCAN, VEGFA, VEGFC, VTN, WIF1, WNT5A, XAF1, XDH	278
Cell Death	cell death	cell death	1.60E-17	ACSL4, ACVR1B, ADA, ADIPOQ, ADRB1, ALDH3A1, ANGPTL4, ANKRD1, ANTXR1, ANXA7, APOE, AQP7, AR, ARG1, ASNS, ATF3, ATP2B2, B2M, B4GALT5, BACH2 (includes EG:60468), BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BIRC2, BIRC3, BNIP3 (includes EG:12176), BTG1, BTG2, C3, C8ORF4, CACNA2D2, CACNB2, CAMK1D, CAPN10, CASP4, CASP12 (includes EG:12364), CBLB, CCL5, CCL6, CCL13, CCL19, CCND2, CD14, CD24, CD38, CD44, CD47, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CENPF, CES1 (includes EG:1066), CFLAR, CHEK2, CIDEC, CLEC10A, CLIC4, CNKSR1, COMP, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL12, CXCR4, CYP1B1, CYP2E1, DAXX, DDIT3, DDIT4, DDX58, DNMT3A, DPYSL4, EBF1, EFNB2, EGFR, EGLN3, EIF2AK2, EIF4E, EIF4EBP1, EMILIN2, ENTPD5, ERCC1, FAP, FAS, FBXO32, FBXW7, FCER1G, FCGR1A, FCGR2B, FEM1B, FEN1, FGF7, FGL2, FHL2, FKBP5, FOSL2, G0S2, GADD45B, GADD45G, GAS1, GCLM, GLRX, GNA13, GULP1, HCK, HCLS1, HDAC9 (includes EG:9734), HEY1, HEYL, HFE, HIF1A, HIST1H1C, HLA-B, HLA-G, HLF (includes EG:3131), HMOX1, HSPA4, HSPB1, ICAM1, IDO1, IER3, IFI16, IFI202B, IFIH1, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, IL4R, IP6K2, IQGAP2, IRAK3, IRF1, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KCNK3, KITLG, KLF10, LAMA2, LBP, LCN2, LEPR, LGALS3, LGALS8, LGALS3BP, LIMS1, MAP1LC3B, MAP3K8, MAPT, MBD1, MBP, MDH1, MEF2C, MEOX2, MGP, MITF, MMP3, MMP8, MMP14, MSN, MSR1, MT1E, MT1F, MTP18, MX1, MYC, MYCN, MYCT1, MYD88, MYH11, MYO6, NAMPT, NCAM1, NCF1, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NFKBIB, NFKBIZ, NQO2, NR3C1, NRP1, NTF3, NTS, OAS1, OLR1, PAK6, PARP4, PDLIM4, PGF, PIAS2, PIM1, PIM3, PLA2G7, PLAC8, PLAUR, PLSCR1, PML, PNP, POU3F1, PPARA, PPARGC1A, PRKAA2, PRKAR2B, PRKD1, PROCR, PTN, PTPRE, PTPRF, PVR, QKI, RAC1, RAC2, RAI14, RASD1, RCAN1, RECK, REG3G, RELB, RGS5, RHOC, RIPK3, RNASE1, RP6-213H19.1, RPS6KA2, RPS6KA5, RRAS2, RTN4, RUNX1T1, S100A8, S100A9, SAA1, SDC1, SDC4, SEMA3B, SEMA3F, SEMA7A, SEPT4, SERINC3, SERPINA3, SERPINB9, SERPINE1, SERPINF1, SGMS1, SH3KBP1, SH3RF1, SHC1, SHISA5, SIAH2, SLC2A1, SNAI2, SOCS3, SOX4, SPHK1, SPRR1A, SRA1, SRPK2, ST3GAL1, ST8SIA4, STAT1, STAT3, SYK, TBK1, TCF21, TFRC, TGFBI, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TMEM173, TNFAIP3, TNFRSF19, TNFRSF1A, TNFSF10, TNIP1, TP53INP1, TPM3, TRAF3IP2, TRIM21, TSPO, TXNIP, UBA7, UBD, UCP1, UCP2, UNG, USP18, VCAN, VEGFA, VEGFC, VTN, WIF1, WNT5A, XAF1, XDH, ZFP36	320
Cell Death	cell death	cell death of normal cells	2.79E-17	ADA, ADIPOQ, ADRB1, APOE, AQP7, AR, ATF3, BAK1, BCL3, BCL2A1, BCL2L1, BID, BIRC2, BIRC3, BNIP3 (includes EG:12176), BTG1, C3, C8ORF4, CACNA2D2, CACNB2, CAPN10, CASP4, CASP12 (includes EG:12364), CCL5, CCL13, CCL19, CD14, CD24, CD44, CD47, CD274, CDKN1A, CDKN1C, CEBPB, CFLAR, CHEK2, CLEC10A, CLIC4, COMP, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL12, CXCR4, CYP1B1, DAXX, DDIT3, DNMT3A, EFNB2, EGFR, EIF2AK2, EIF4E, ERCC1, FAS, FBXW7, FCER1G, FCGR1A, FCGR2B, FGF7, FGL2, GADD45B, GCLM, GLRX, HDAC9 (includes EG:9734), HEYL, HFE, HIF1A, HIST1H1C, HLA-B, HLA-G, HMOX1, HSPB1, ICAM1, IDO1, IER3, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, IRAK3, IRF1, IRF8, ITGAM, ITGB2, ITGB3, JAK2, JUNB, KCNK3, KITLG, LAMA2, LCN2, LEPR, LGALS3, LGALS8, LIMS1, MAPT, MDH1, MEOX2, MMP3, MMP8, MMP14, MSR1, MT1E, MT1F, MYC, MYCN, MYD88, NAMPT, NCF1, NFE2L2, NFKB2, NFKBIA, NFKBIB, NQO2, NR3C1, NRP1, NTF3, NTS, OLR1, PIAS2, PIM1, PLA2G7, PLAUR, PML, PNP, POU3F1, PPARA, PPARGC1A, PRKAR2B, PTN, PTPRF, QKI, RAC1, RAC2, RCAN1, REG3G, RGS5, RIPK3, RPS6KA2, SAA1, SEMA7A, SERPINA3, SERPINE1, SERPINF1, SH3KBP1, SH3RF1, SHC1, SLC2A1, SOCS3, SPHK1, SPRR1A, SRPK2, ST3GAL1, STAT1, STAT3, TBK1, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFAIP3, TNFRSF1A, TNFSF10, TNIP1, TPM3, TRAF3IP2, TXNIP, UBD, UCP1, UCP2, UNG, VEGFA, VTN, WIF1, WNT5A, XAF1, XDH	186
Cell Death	cell death	cell death of phagocytes	1.81E-14	APOE, BCL2A1, BCL2L1, BIRC3, CASP4, CCL5, CD14, CDKN1A, CEBPB, CFLAR, CSF1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, DDIT3, EIF2AK2, FAS, HIF1A, IL6, IL1RN, IRF1, ITGB2, LEPR, LGALS3, MMP8, MSR1, MYD88, NAMPT, NFKBIA, NR3C1, RIPK3, STAT3, TLR2, TNFRSF1A, TNFSF10	37
Cell Death	cell death	cell death of cell lines	1.77E-12	ACVR1B, ADIPOQ, ALDH3A1, ANKRD1, ANTXR1, APOE, AR, ASNS, ATF3, ATP2B2, B2M, BACH2 (includes EG:60468), BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BIRC2, BIRC3, BNIP3 (includes EG:12176), BTG2, CACNA2D2, CASP4, CASP12 (includes EG:12364), CBLB, CCL5, CCL13, CCND2, CD24, CD44, CD47, CDKN1A, CDKN1C, CEBPB, CEBPD, CFLAR, CHEK2, CLIC4, CSF3, CSF2RB, CTSL2, CXCL12, CYP1B1, CYP2E1, DAXX, DDIT3, DDIT4, DPYSL4, EGFR, EGLN3, EIF2AK2, EIF4E, EIF4EBP1, EMILIN2, ENTPD5, FAP, FAS, FBXO32, FCGR2B, FHL2, FKBP5, G0S2, GADD45B, GADD45G, GLRX, HCK, HCLS1, HIF1A, HLF (includes EG:3131), HMOX1, HSPA4, HSPB1, IER3, IFI16, IFI202B, IFIH1, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, IP6K2, IRF1, IRF8, ITGAM, ITGB3, JAK2, KITLG, LCN2, LGALS3, LGALS8, LGALS3BP, LIMS1, MAP1LC3B, MAPT, MBD1, MBP, MEF2C, MGP, MSN, MSR1, MT1F, MTP18, MYC, MYCN, MYH11, MYO6, NAMPT, NCAM1, NEK6, NEK7, NFKB2, NFKBIA, NFKBIB, NFKBIZ, NR3C1, NRP1, NTF3, PAK6, PDLIM4, PIM1, PIM3, PLA2G7, PLAC8, PLAUR, PLSCR1, PML, PRKAA2, PRKAR2B, PRKD1, PROCR, PTN, PTPRE, PTPRF, PVR, QKI, RAC1, RAI14, RASD1, RCAN1, RELB, RGS5, RHOC, RIPK3, RNASE1, RP6-213H19.1, RPS6KA5, RRAS2, RTN4, RUNX1T1, S100A8, S100A9, SDC1, SDC4, SEMA3B, SEMA3F, SEPT4, SERPINE1, SERPINF1, SGMS1, SH3RF1, SHC1, SLC2A1, SOCS3, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TBK1, TFRC, TGM2, TIMP1, TLR2, TMEM173, TNFAIP3, TNFRSF19, TNFRSF1A, TNFSF10, TNIP1, TP53INP1, TRIM21, TXNIP, UBA7, UCP2, USP18, VCAN, VEGFA, VEGFC, VTN, WIF1, XAF1, XDH	196
Cell Death	cell death	cell death of mononuclear leukocytes	3.33E-12	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CASP4, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CLEC10A, CSF1, CSF3, CXCL12, CXCR4, EIF4E, FAS, FBXW7, FCGR2B, GADD45B, HIST1H1C, HLA-G, IDO1, IER3, IGF1, IGHM, IL6, IL2RG, KITLG, LGALS3, MYC, NFE2L2, NFKB2, NFKBIA, NFKBIB, NR3C1, PNP, PPARA, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TNFRSF1A, TNFSF10, TRAF3IP2, UBD, VEGFA	62
Cell Death	cell death	cell death of lymphocytes	1.14E-11	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CASP4, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CLEC10A, CSF3, CXCL12, CXCR4, EIF4E, FAS, FBXW7, FCGR2B, HIST1H1C, HLA-G, IDO1, IER3, IGF1, IGHM, IL6, IL2RG, KITLG, LGALS3, MYC, NFE2L2, NFKB2, NFKBIA, NFKBIB, NR3C1, PNP, PPARA, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TNFRSF1A, TNFSF10, TRAF3IP2, UBD, VEGFA	60
Cell Death	cell death	cell death of bone marrow cells	3.76E-11	BAK1, BCL2A1, BCL2L1, CD44, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, FAS, GADD45B, IGF1, IL6, IL1RN, IRAK3, IRF8, ITGAM, ITGB2, JAK2, KITLG, LEPR, MMP8, MMP14, MYC, NAMPT, NQO2, NR3C1, PIM1, PML, STAT1, TNFSF10	31
Cell Death	cell death	cell death of myeloid cells	1.14E-10	BAK1, BCL2A1, BCL2L1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, FAS, IGF1, IL6, IL1RN, IRAK3, IRF8, ITGAM, ITGB2, JAK2, KITLG, LEPR, MMP8, MYC, NAMPT, NQO2, NR3C1, PIM1, TNFSF10	26
Cell Death	cell death	cell death of leukemia cell lines	1.17E-10	B2M, BCL2A1, BCL2L1, BCR, BID, CD24, CD47, CDKN1A, CEBPD, CFLAR, CSF2RB, CXCL12, EMILIN2, FAS, FKBP5, HCLS1, HLF (includes EG:3131), HMOX1, HSPB1, IGF1, IL6, IL2RG, ITGAM, JAK2, KITLG, LGALS3, LGALS8, LGALS3BP, MSN, MSR1, MYC, NFKBIA, PLA2G7, PML, PTPRE, RAC1, RHOC, RIPK3, RUNX1T1, S100A8, S100A9, SGMS1, SHC1, SPHK1, TLR2, TNFAIP3, TNFRSF1A, TNFSF10, UBA7	49
Cell Death	cell death	cell death of tumor cell lines	1.67E-10	ACVR1B, ADIPOQ, ANKRD1, APOE, AR, ASNS, ATF3, B2M, BACH2 (includes EG:60468), BAK1, BCL2A1, BCL2L1, BCR, BID, BIRC2, BIRC3, BNIP3 (includes EG:12176), BTG2, CACNA2D2, CASP4, CD24, CD44, CD47, CDKN1A, CDKN1C, CEBPB, CEBPD, CFLAR, CHEK2, CSF2RB, CXCL12, CYP1B1, CYP2E1, DAXX, DDIT3, DDIT4, EGFR, EGLN3, EIF2AK2, EIF4E, EIF4EBP1, EMILIN2, FAP, FAS, FBXO32, FCGR2B, FKBP5, G0S2, GADD45B, GADD45G, GLRX, HCK, HCLS1, HIF1A, HLF (includes EG:3131), HMOX1, HSPA4, HSPB1, IER3, IFI16, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, IP6K2, IRF1, IRF8, ITGAM, ITGB3, JAK2, KITLG, LCN2, LGALS3, LGALS8, LGALS3BP, LIMS1, MAPT, MBD1, MBP, MEF2C, MSN, MSR1, MTP18, MYC, MYCN, MYO6, NAMPT, NCAM1, NEK6, NEK7, NFKB2, NFKBIA, NFKBIB, NFKBIZ, NR3C1, NRP1, NTF3, PDLIM4, PLA2G7, PLAUR, PML, PRKAR2B, PRKD1, PTPRE, PTPRF, RAC1, RASD1, RELB, RHOC, RIPK3, RNASE1, RP6-213H19.1, RTN4, RUNX1T1, S100A8, S100A9, SDC1, SEMA3B, SEMA3F, SERPINE1, SGMS1, SH3RF1, SHC1, SOCS3, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TBK1, TGM2, TLR2, TMEM173, TNFAIP3, TNFRSF1A, TNFSF10, TRIM21, UBA7, UCP2, VCAN, VEGFA, VEGFC, VTN, WIF1, XAF1, XDH	151
Cell Death	cell death	cell death of lymphatic system cells	2.38E-10	ADA, BAK1, BCL2A1, BCL2L1, CD44, CDKN1A, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, FAS, GADD45B, IGF1, IL6, IL1RN, IRAK3, IRF8, ITGAM, ITGB2, JAK2, KITLG, LEPR, MMP8, MMP14, MYC, MYD88, NAMPT, NQO2, NR3C1, PIM1, PML, STAT1, TNFSF10	34
Cell Death	cell death	cell death of granulocytes	6.98E-10	BAK1, BCL2A1, BCL2L1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, FAS, IGF1, IL6, IL1RN, IRAK3, ITGAM, ITGB2, JAK2, LEPR, MMP8, NAMPT, NQO2, NR3C1, PIM1, TNFSF10	23
Cell Death	cell death	cell death of T lymphocytes	1.11E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CLEC10A, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IDO1, IER3, IGF1, IGHM, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TNFRSF1A, TNFSF10	48
Cell Death	cell death	cell death of leukocyte cell lines	1.99E-08	BAK1, BCL3, BCL2L1, BCR, BID, BIRC3, CBLB, CCL5, CCL13, CCND2, CD44, CDKN1A, CFLAR, CSF3, DAXX, DDIT3, EGFR, FAS, GADD45B, HCLS1, IFIH1, IGF1, IGHM, IL6, JAK2, KITLG, LCN2, LGALS3, MYC, MYH11, NFKB2, NFKBIA, PIM1, PLAC8, RAC1, RUNX1T1, SHC1, SLC2A1, TNFAIP3, TNFRSF1A, TNFSF10	41
Cell Death	cell death	cell death of macrophages	2.54E-08	APOE, BCL2L1, BIRC3, CASP4, CCL5, CD14, CDKN1A, CEBPB, CFLAR, CSF1, DDIT3, EIF2AK2, HIF1A, IRF1, LGALS3, MSR1, MYD88, NFKBIA, RIPK3, STAT3, TLR2, TNFRSF1A, TNFSF10	23
Cell Death	cell death	cell death of epithelial cells	4.34E-08	BAK1, BCL2A1, BCL2L1, CASP12 (includes EG:12364), CDKN1A, CEBPB, CFLAR, CLIC4, CTSS, DDIT3, EGFR, EIF4E, FAS, FGF7, ICAM1, IGF1, IGFBP5, IRAK3, IRF1, LCN2, LGALS3, MMP3, MSR1, MYC, MYD88, NFKBIA, NQO2, NR3C1, PLAUR, RIPK3, SEMA7A, SPHK1, STAT3, TGM2, TIMP1, TLR2, TNFRSF1A, TNFSF10, VTN	39
Cell Death	cell death	cell death of connective tissue cells	7.78E-08	ADIPOQ, AR, ATF3, BAK1, BCL2L1, BID, BIRC2, BIRC3, CASP4, CD44, CDKN1A, CEBPB, CFLAR, CLIC4, CSF1, CYP1B1, DAXX, DDIT3, EGFR, EIF2AK2, EIF4E, FAS, HMOX1, IGF1, IGF2, ITGB3, LGALS8, MMP14, MT1E, MT1F, MYC, PML, PRKAR2B, QKI, RAC1, RIPK3, RPS6KA2, SAA1, SERPINE1, SPHK1, TBK1, TGM2, TIMP1, TNFRSF1A, TNFSF10, TNIP1, UBD, UCP1, UNG, VEGFA, WIF1	51
Cell Death	cell death	cell death of tumor cells	8.32E-08	AR, B4GALT5, BCL2L1, BID, CD47, CDKN1A, CFLAR, CXCL12, DDIT3, EGFR, EIF2AK2, FAS, FEM1B, FHL2, HIF1A, HMOX1, IFI202B, IGF1, IGHM, IL6, IRF1, ITGB3, MEF2C, MYC, MYCN, NFE2L2, NFKBIA, NRP1, PLAUR, RECK, RTN4, SEMA3B, SERPINB9, SERPINE1, SNAI2, SOCS3, STAT3, THBS2, TIMP1, TIMP2, TNFSF10, VEGFA, VEGFC	43
Cell Death	cell death	cell death of liver cells	1.07E-07	ADIPOQ, APOE, BAK1, BCL2L1, BID, CD274, CDKN1A, CEBPB, DAXX, DDIT3, EGFR, FAS, FGL2, GADD45B, HMOX1, IGF1, IL6, ITGB2, ITGB3, MYC, MYD88, NCF1, SOCS3, TBK1, TIMP1, TNFRSF1A, TNFSF10, TNIP1	28
Cell Death	cell death	cell death of lymphoma cell lines	1.31E-07	BACH2 (includes EG:60468), BCL2A1, BCL2L1, BCR, BIRC3, BTG2, CASP4, CD24, CDKN1A, CFLAR, CHEK2, EIF2AK2, EIF4E, FAS, FCGR2B, HSPB1, IGHM, IRF8, LGALS3, MSN, MYC, NFKB2, NFKBIA, PML, RUNX1T1, SGMS1, STAT3, SYK, TGM2, TMEM173, TNFRSF1A, TNFSF10, TRIM21	33
Cell Death	cell death	cell death of fibrosarcoma cell lines	1.39E-07	BCL2A1, BCL2L1, BIRC2, BIRC3, CDKN1A, CFLAR, EMILIN2, FAP, FAS, LIMS1, NAMPT, NFKB2, NFKBIZ, SERPINE1, STAT1, TNFRSF1A, TNFSF10	17
Cell Death	cell death	cell death of brain cells	2.66E-07	APOE, BAK1, BCL2L1, BID, CACNA2D2, CASP12 (includes EG:12364), CDKN1A, CFLAR, CXCL1, CXCL3, CXCL12, DDIT3, FAS, FCGR1A, GCLM, GLRX, HDAC9 (includes EG:9734), IGF1, IL1RN, JUNB, KCNK3, MAPT, NCF1, NFE2L2, NFKBIA, NFKBIB, NTF3, PPARGC1A, SERPINA3, SERPINE1, SERPINF1, SLC2A1, SRPK2, TLR2, TNFRSF1A, TNFSF10, UCP2, UNG, VEGFA	39
Cell Death	cell death	cell death of antigen presenting cells	3.78E-07	APOE, BCL2L1, BIRC3, CASP4, CCL5, CD14, CDKN1A, CEBPB, CFLAR, CSF1, DDIT3, EIF2AK2, FAS, HIF1A, IRF1, LGALS3, MSR1, MYD88, NFKBIA, RIPK3, STAT3, TLR2, TNFRSF1A, TNFSF10	24
Cell Death	cell death	cell death of bone cell lines	4.79E-07	BCL2L1, BCR, BID, CBLB, CCND2, CFLAR, CSF3, EGFR, FAS, IGF1, IL6, JAK2, KITLG, LCN2, MGP, MYC, PIM1, PLAC8, RUNX1T1, SHC1	20
Cell Death	cell death	ell death of central nervous system cel	4.92E-07	APOE, BAK1, BCL2L1, BID, CACNA2D2, CASP12 (includes EG:12364), CDKN1A, CFLAR, CXCL1, CXCL3, CXCL12, DDIT3, FAS, FCGR1A, GCLM, GLRX, HDAC9 (includes EG:9734), IGF1, IL1RN, JUNB, KCNK3, MAPT, NCF1, NFE2L2, NFKBIA, NFKBIB, NTF3, PPARGC1A, SERPINA3, SERPINE1, SERPINF1, SH3KBP1, SLC2A1, SRPK2, TLR2, TNFRSF1A, TNFSF10, UCP2, UNG, VEGFA, XDH	41
Cell Death	cell death	cell death of neutrophils	1.01E-06	BCL2A1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, FAS, IL6, IL1RN, ITGB2, LEPR, MMP8, NAMPT, NR3C1, TNFSF10	15
Cell Death	cell death	cell death of neuroglia	1.21E-06	BTG1, CASP4, CD44, CX3CL1, CXCL12, FAS, IGF1, IRF1, LAMA2, LCN2, MYC, MYD88, NFE2L2, NTF3, POU3F1, QKI, SH3KBP1, STAT1, TLR2, TNFRSF1A, TNFSF10, VEGFA, XDH	23
Cell Death	cell death	cell death of fibroblast cell lines	2.18E-06	ATF3, BACH2 (includes EG:60468), BAK1, BCL2A1, BCL2L1, BID, BIRC2, BIRC3, CDKN1A, CDKN1C, CEBPB, CFLAR, CLIC4, CTSL2, DAXX, DDIT3, DPYSL4, EGFR, EIF2AK2, EIF4E, EIF4EBP1, ENTPD5, FAS, GADD45B, HIF1A, IER3, IFI16, IFI202B, IGF1, IRF1, MAP1LC3B, MAPT, MT1F, MYC, NFKB2, NR3C1, PIM1, PLAC8, PML, PTN, PVR, QKI, RAC1, RAI14, RHOC, RIPK3, RPS6KA5, SDC4, SEMA3F, SPHK1, STAT1, TNFAIP3, TNFRSF1A, TNFSF10, TNIP1, TP53INP1, TXNIP, USP18	58
Cell Death	cell death	cell death of cancer cells	3.50E-06	AR, B4GALT5, BCL2L1, BID, CD47, CDKN1A, CFLAR, CXCL12, DDIT3, EGFR, EIF2AK2, FAS, FEM1B, FHL2, HMOX1, IFI202B, IGF1, IGHM, IL6, IRF1, ITGB3, MYC, MYCN, NFE2L2, NFKBIA, RTN4, SEMA3B, SOCS3, TNFSF10, VEGFA, VEGFC	31
Cell Death	cell death	cell death of neurons	3.67E-06	ADA, APOE, ATF3, BAK1, BCL2L1, BID, CACNA2D2, CASP12 (includes EG:12364), CCL5, CDKN1A, CFLAR, CSF3, CTSL2, CX3CL1, CXCL1, CXCL3, CXCL12, DAXX, DDIT3, EFNB2, FAS, FBXW7, FCGR1A, GCLM, GLRX, HDAC9 (includes EG:9734), HIF1A, HSPB1, IGF1, IGF2, IL1RN, JUNB, KCNK3, MAPT, MYCN, NCF1, NFE2L2, NFKBIA, NFKBIB, NR3C1, NTF3, NTS, PLA2G7, PPARGC1A, PTN, PTPRF, RAC1, SERPINA3, SERPINE1, SERPINF1, SH3KBP1, SH3RF1, SLC2A1, SRPK2, STAT3, TGM2, TLR2, TNFRSF1A, TNFSF10, UCP2, UNG, VEGFA, WNT5A	63
Cell Death	apoptosis	apoptosis of eukaryotic cells	8.53E-20	ACVR1B, ADA, ADIPOQ, ADRB1, ALDH3A1, ANKRD1, APOE, AQP7, AR, ASNS, ATF3, ATP2B2, B2M, B4GALT5, BACH2 (includes EG:60468), BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BIRC2, BIRC3, BNIP3 (includes EG:12176), BTG1, BTG2, C3, C8ORF4, CACNA2D2, CAPN10, CASP4, CASP12 (includes EG:12364), CBLB, CCL5, CCL13, CCND2, CD14, CD24, CD44, CD47, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CFLAR, CHEK2, CLIC4, COMP, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL12, CXCR4, CYP1B1, DAXX, DDIT3, DDIT4, DNMT3A, EGFR, EIF2AK2, EIF4E, EIF4EBP1, EMILIN2, ENTPD5, ERCC1, FAP, FAS, FBXO32, FBXW7, FCER1G, FCGR1A, FCGR2B, FEM1B, FHL2, FKBP5, G0S2, GADD45B, GADD45G, GCLM, GLRX, HCK, HCLS1, HEYL, HFE, HIF1A, HIST1H1C, HLA-B, HLA-G, HLF (includes EG:3131), HMOX1, HSPA4, HSPB1, IER3, IFI16, IFI202B, IFIH1, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, IP6K2, IRAK3, IRF1, IRF8, ITGAM, ITGB2, ITGB3, JAK2, KITLG, LAMA2, LCN2, LEPR, LGALS3, LGALS8, LGALS3BP, LIMS1, MAPT, MDH1, MEF2C, MEOX2, MGP, MMP3, MMP8, MSN, MSR1, MT1E, MT1F, MTP18, MYC, MYCN, MYD88, MYH11, MYO6, NAMPT, NCAM1, NCF1, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NFKBIB, NFKBIZ, NQO2, NR3C1, NRP1, NTF3, NTS, OLR1, PAK6, PDLIM4, PIAS2, PIM1, PIM3, PLA2G7, PLAC8, PLAUR, PLSCR1, PML, PNP, PPARA, PPARGC1A, PRKAA2, PRKAR2B, PRKD1, PROCR, PTN, PTPRE, PTPRF, QKI, RAC1, RAC2, RAI14, RASD1, RCAN1, RGS5, RHOC, RIPK3, RNASE1, RP6-213H19.1, RPS6KA2, RPS6KA5, RRAS2, RTN4, RUNX1T1, S100A8, S100A9, SAA1, SDC1, SDC4, SEMA3B, SEMA3F, SEMA7A, SEPT4, SERPINA3, SERPINE1, SERPINF1, SGMS1, SH3KBP1, SH3RF1, SHC1, SLC2A1, SNAI2, SOCS3, SPHK1, SRPK2, ST3GAL1, STAT1, STAT3, SYK, TBK1, TFRC, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFAIP3, TNFRSF19, TNFRSF1A, TNFSF10, TNIP1, TP53INP1, TRAF3IP2, TXNIP, UBA7, UBD, UCP1, UNG, USP18, VCAN, VEGFA, VEGFC, VTN, WIF1, WNT5A, XAF1, XDH	247
Cell Death	apoptosis	apoptosis of leukocytes	1.89E-19	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, BIRC3, CASP4, CCL5, CCL13, CD14, CD24, CD44, CD47, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CSF1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, DDIT3, EIF2AK2, EIF4E, FAS, FBXW7, FCER1G, FCGR2B, GADD45B, HIF1A, HIST1H1C, HLA-G, IER3, IGF1, IGHM, IL6, IL1RN, IL2RG, IRAK3, IRF1, IRF8, ITGAM, ITGB2, JAK2, KITLG, LCN2, LEPR, LGALS3, LGALS8, MMP8, MSR1, MYC, NAMPT, NFE2L2, NFKB2, NFKBIA, NFKBIB, NQO2, NR3C1, PIM1, PNP, PPARA, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10, TRAF3IP2, UBD, VEGFA	82
Cell Death	apoptosis	apoptosis of normal cells	1.53E-18	ADA, ADIPOQ, ADRB1, APOE, AQP7, AR, ATF3, BAK1, BCL3, BCL2A1, BCL2L1, BID, BIRC2, BIRC3, BNIP3 (includes EG:12176), BTG1, C3, C8ORF4, CACNA2D2, CAPN10, CASP4, CASP12 (includes EG:12364), CCL5, CCL13, CD14, CD24, CD44, CD47, CD274, CDKN1A, CDKN1C, CEBPB, CFLAR, CHEK2, CLIC4, COMP, CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL12, CXCR4, DAXX, DDIT3, DNMT3A, EGFR, EIF2AK2, EIF4E, ERCC1, FAS, FBXW7, FCER1G, FCGR1A, FCGR2B, GADD45B, GCLM, GLRX, HEYL, HFE, HIF1A, HIST1H1C, HLA-B, HLA-G, HMOX1, HSPB1, IER3, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, IRAK3, IRF1, IRF8, ITGAM, ITGB2, ITGB3, JAK2, KITLG, LAMA2, LCN2, LEPR, LGALS3, LGALS8, LIMS1, MAPT, MDH1, MEOX2, MMP3, MMP8, MSR1, MT1E, MT1F, MYC, MYCN, MYD88, NAMPT, NCF1, NFE2L2, NFKB2, NFKBIA, NFKBIB, NQO2, NR3C1, NRP1, NTF3, NTS, OLR1, PIAS2, PIM1, PLA2G7, PLAUR, PML, PNP, PPARA, PPARGC1A, PRKAR2B, PTN, PTPRF, QKI, RAC1, RAC2, RCAN1, RGS5, RPS6KA2, SAA1, SEMA7A, SERPINA3, SERPINE1, SERPINF1, SH3KBP1, SH3RF1, SHC1, SLC2A1, SOCS3, SPHK1, SRPK2, ST3GAL1, STAT1, STAT3, TBK1, TGM2, THBS2, TIMP1, TIMP2, TLR2, TNFAIP3, TNFRSF1A, TNFSF10, TNIP1, TRAF3IP2, TXNIP, UBD, UCP1, UNG, VEGFA, WNT5A, XAF1, XDH	164
Cell Death	apoptosis	apoptosis	1.76E-18	ACSL4, ACVR1B, ADA, ADIPOQ, ADRB1, ALDH3A1, ANGPTL4, ANKRD1, ANXA7, APOE, AQP7, AR, ARG1, ASNS, ATF3, ATP2B2, B2M, B4GALT5, BACH2 (includes EG:60468), BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BIRC2, BIRC3, BNIP3 (includes EG:12176), BTG1, BTG2, C3, C8ORF4, CACNA2D2, CAMK1D, CAPN10, CASP4, CASP12 (includes EG:12364), CBLB, CCL5, CCL6, CCL13, CCND2, CD14, CD24, CD38, CD44, CD47, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CENPF, CFLAR, CHEK2, CIDEC, CLIC4, CNKSR1, COMP, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL12, CXCR4, CYP1B1, DAXX, DDIT3, DDIT4, DDX58, DNMT3A, EBF1, EGFR, EIF2AK2, EIF4E, EIF4EBP1, EMILIN2, ENTPD5, ERCC1, FAP, FAS, FBXO32, FBXW7, FCER1G, FCGR1A, FCGR2B, FEM1B, FEN1, FHL2, FKBP5, G0S2, GADD45B, GADD45G, GAS1, GCLM, GLRX, GNA13, GULP1, HCK, HCLS1, HEY1, HEYL, HFE, HIF1A, HIST1H1C, HLA-B, HLA-G, HLF (includes EG:3131), HMOX1, HSPA4, HSPB1, IER3, IFI16, IFI202B, IFIH1, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, IL4R, IP6K2, IQGAP2, IRAK3, IRF1, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, KITLG, KLF10, LAMA2, LCN2, LEPR, LGALS3, LGALS8, LGALS3BP, LIMS1, MAP3K8, MAPT, MDH1, MEF2C, MEOX2, MGP, MITF, MMP3, MMP8, MSN, MSR1, MT1E, MT1F, MTP18, MX1, MYC, MYCN, MYCT1, MYD88, MYH11, MYO6, NAMPT, NCAM1, NCF1, NEK6, NEK7, NFE2L2, NFKB2, NFKBIA, NFKBIB, NFKBIZ, NQO2, NR3C1, NRP1, NTF3, NTS, OAS1, OLR1, PAK6, PDLIM4, PGF, PIAS2, PIM1, PIM3, PLA2G7, PLAC8, PLAUR, PLSCR1, PML, PNP, PPARA, PPARGC1A, PRKAA2, PRKAR2B, PRKD1, PROCR, PTN, PTPRE, PTPRF, QKI, RAC1, RAC2, RAI14, RASD1, RCAN1, RGS5, RHOC, RIPK3, RNASE1, RP6-213H19.1, RPS6KA2, RPS6KA5, RRAS2, RTN4, RUNX1T1, S100A8, S100A9, SAA1, SDC1, SDC4, SEMA3B, SEMA3F, SEMA7A, SEPT4, SERINC3, SERPINA3, SERPINE1, SERPINF1, SGMS1, SH3KBP1, SH3RF1, SHC1, SHISA5, SIAH2, SLC2A1, SNAI2, SOCS3, SOX4, SPHK1, SRA1, SRPK2, ST3GAL1, ST8SIA4, STAT1, STAT3, SYK, TBK1, TCF21, TFRC, TGFBI, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TNFAIP3, TNFRSF19, TNFRSF1A, TNFSF10, TNIP1, TP53INP1, TRAF3IP2, TSPO, TXNIP, UBA7, UBD, UCP1, UNG, USP18, VCAN, VEGFA, VEGFC, VTN, WIF1, WNT5A, XAF1, XDH, ZFP36	285
Cell Death	apoptosis	apoptosis of blood cells	3.23E-18	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, BIRC3, CASP4, CCL5, CCL13, CD14, CD24, CD44, CD47, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CSF1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, DDIT3, EIF2AK2, EIF4E, FAS, FBXW7, FCER1G, FCGR2B, GADD45B, HIF1A, HIST1H1C, HLA-G, IER3, IGF1, IGHM, IL6, IL1RN, IL2RG, IRAK3, IRF1, IRF8, ITGAM, ITGB2, JAK2, KITLG, LCN2, LEPR, LGALS3, LGALS8, MMP8, MSR1, MYC, NAMPT, NFE2L2, NFKB2, NFKBIA, NFKBIB, NQO2, NR3C1, PIM1, PML, PNP, PPARA, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10, TRAF3IP2, UBD, VEGFA	83
Cell Death	apoptosis	apoptosis of cell lines	2.16E-14	ACVR1B, ADIPOQ, ALDH3A1, ANKRD1, APOE, AR, ASNS, ATF3, ATP2B2, B2M, BACH2 (includes EG:60468), BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BIRC2, BIRC3, BTG2, CACNA2D2, CASP4, CASP12 (includes EG:12364), CBLB, CCL5, CCL13, CCND2, CD24, CD44, CD47, CDKN1A, CDKN1C, CEBPB, CEBPD, CFLAR, CHEK2, CLIC4, CSF3, CSF2RB, CXCL12, CYP1B1, DAXX, DDIT3, DDIT4, EGFR, EIF2AK2, EIF4E, EIF4EBP1, EMILIN2, ENTPD5, FAP, FAS, FBXO32, FCGR2B, FHL2, FKBP5, G0S2, GADD45B, GADD45G, GLRX, HCK, HCLS1, HIF1A, HLF (includes EG:3131), HMOX1, HSPA4, HSPB1, IER3, IFI16, IFI202B, IFIH1, IGF1, IGF2, IGFBP5, IGHM, IL6, IL2RG, IP6K2, IRF1, IRF8, ITGAM, ITGB3, JAK2, KITLG, LCN2, LGALS3, LGALS8, LGALS3BP, LIMS1, MAPT, MEF2C, MGP, MSN, MSR1, MTP18, MYC, MYCN, MYH11, MYO6, NCAM1, NEK6, NEK7, NFKB2, NFKBIA, NFKBIB, NFKBIZ, NR3C1, NRP1, NTF3, PAK6, PDLIM4, PIM1, PIM3, PLA2G7, PLAC8, PLAUR, PLSCR1, PML, PRKAA2, PRKAR2B, PRKD1, PROCR, PTN, PTPRE, QKI, RAC1, RAI14, RASD1, RGS5, RHOC, RIPK3, RNASE1, RP6-213H19.1, RPS6KA5, RRAS2, RTN4, RUNX1T1, S100A8, S100A9, SDC1, SDC4, SEMA3B, SEMA3F, SEPT4, SERPINE1, SERPINF1, SGMS1, SH3RF1, SHC1, SLC2A1, SOCS3, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TBK1, TFRC, TGM2, TIMP1, TLR2, TNFAIP3, TNFRSF19, TNFRSF1A, TNFSF10, TNIP1, TP53INP1, TXNIP, UBA7, USP18, VCAN, VEGFA, VTN, WIF1, XAF1, XDH	176
Cell Death	apoptosis	apoptosis of phagocytes	4.92E-13	APOE, BCL2A1, BCL2L1, BIRC3, CASP4, CCL5, CD14, CDKN1A, CEBPB, CFLAR, CSF1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, DDIT3, EIF2AK2, FAS, HIF1A, IL6, IL1RN, IRF1, ITGB2, LEPR, LGALS3, MMP8, MSR1, NAMPT, NFKBIA, STAT3, TNFRSF1A, TNFSF10	33
Cell Death	apoptosis	apoptosis of mononuclear leukocytes	3.72E-12	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CASP4, CCL5, CCL13, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CSF1, CXCL12, CXCR4, EIF4E, FAS, FBXW7, FCGR2B, GADD45B, HIST1H1C, HLA-G, IER3, IGF1, IGHM, IL6, IL2RG, KITLG, LGALS3, MYC, NFE2L2, NFKB2, NFKBIA, NFKBIB, NR3C1, PNP, PPARA, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10, TRAF3IP2, UBD, VEGFA	57
Cell Death	apoptosis	apoptosis of tumor cell lines	5.73E-12	ACVR1B, ADIPOQ, ANKRD1, APOE, AR, ASNS, ATF3, B2M, BACH2 (includes EG:60468), BAK1, BCL2A1, BCL2L1, BCR, BID, BIRC2, BIRC3, BTG2, CACNA2D2, CASP4, CD24, CD44, CD47, CDKN1A, CDKN1C, CEBPB, CEBPD, CFLAR, CHEK2, CSF2RB, CXCL12, CYP1B1, DAXX, DDIT3, DDIT4, EGFR, EIF2AK2, EIF4E, EIF4EBP1, EMILIN2, FAP, FAS, FBXO32, FCGR2B, FKBP5, G0S2, GADD45B, GADD45G, GLRX, HCK, HCLS1, HIF1A, HLF (includes EG:3131), HMOX1, HSPA4, HSPB1, IER3, IFI16, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL2RG, IP6K2, IRF1, IRF8, ITGAM, ITGB3, JAK2, KITLG, LCN2, LGALS3, LGALS8, LGALS3BP, LIMS1, MAPT, MEF2C, MSN, MSR1, MTP18, MYC, MYCN, MYO6, NCAM1, NEK6, NEK7, NFKB2, NFKBIA, NFKBIB, NFKBIZ, NR3C1, NRP1, NTF3, PDLIM4, PLA2G7, PLAUR, PML, PRKAA2, PRKAR2B, PRKD1, PTPRE, RAC1, RASD1, RHOC, RIPK3, RNASE1, RP6-213H19.1, RTN4, RUNX1T1, S100A8, S100A9, SDC1, SEMA3B, SEMA3F, SERPINE1, SGMS1, SH3RF1, SHC1, SOCS3, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TBK1, TGM2, TLR2, TNFAIP3, TNFRSF1A, TNFSF10, UBA7, VCAN, VEGFA, WIF1, XAF1, XDH	137
Cell Death	apoptosis	apoptosis of lymphocytes	1.12E-11	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CASP4, CCL5, CCL13, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CXCL12, CXCR4, EIF4E, FAS, FBXW7, FCGR2B, HIST1H1C, HLA-G, IER3, IGF1, IGHM, IL6, IL2RG, KITLG, LGALS3, MYC, NFE2L2, NFKB2, NFKBIA, NFKBIB, NR3C1, PNP, PPARA, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10, TRAF3IP2, UBD, VEGFA	55
Cell Death	apoptosis	apoptosis of bone marrow cells	6.16E-11	BAK1, BCL2A1, BCL2L1, CD44, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, FAS, GADD45B, IGF1, IL6, IL1RN, IRAK3, IRF8, ITGAM, ITGB2, JAK2, KITLG, LEPR, MMP8, MYC, NAMPT, NQO2, PIM1, PML, STAT1, TNFSF10	29
Cell Death	apoptosis	apoptosis of myeloid cells	6.73E-11	BAK1, BCL2A1, BCL2L1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, FAS, IGF1, IL6, IL1RN, IRAK3, IRF8, ITGAM, ITGB2, JAK2, KITLG, LEPR, MMP8, MYC, NAMPT, NQO2, PIM1, TNFSF10	25
Cell Death	apoptosis	apoptosis of leukemia cell lines	6.97E-11	B2M, BCL2A1, BCL2L1, BCR, BID, CD24, CD47, CDKN1A, CEBPD, CFLAR, CSF2RB, CXCL12, FAS, FKBP5, HCLS1, HLF (includes EG:3131), HMOX1, HSPB1, IGF1, IL6, IL2RG, ITGAM, JAK2, KITLG, LGALS3, LGALS8, LGALS3BP, MSR1, MYC, NFKBIA, PLA2G7, PML, PTPRE, RAC1, RHOC, RIPK3, RUNX1T1, S100A8, S100A9, SGMS1, SPHK1, TLR2, TNFAIP3, TNFRSF1A, TNFSF10, UBA7	46
Cell Death	apoptosis	apoptosis of lymphatic system cells	3.65E-10	ADA, BAK1, BCL2A1, BCL2L1, CD44, CDKN1A, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, FAS, GADD45B, IGF1, IL6, IL1RN, IRAK3, IRF8, ITGAM, ITGB2, JAK2, KITLG, LEPR, MMP8, MYC, MYD88, NAMPT, NQO2, PIM1, PML, STAT1, TNFSF10	32
Cell Death	apoptosis	apoptosis of granulocytes	1.59E-09	BAK1, BCL2A1, BCL2L1, CSF3, CXCL1, CXCL2, CXCL12, CXCR4, FAS, IGF1, IL6, IL1RN, IRAK3, ITGAM, ITGB2, JAK2, LEPR, MMP8, NAMPT, NQO2, PIM1, TNFSF10	22
Cell Death	apoptosis	apoptosis of T lymphocytes	2.70E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IER3, IGF1, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10	43
Cell Death	apoptosis	apoptosis of leukocyte cell lines	1.01E-08	BAK1, BCL3, BCL2L1, BCR, BID, BIRC3, CBLB, CCL5, CCL13, CCND2, CD44, CDKN1A, CFLAR, CSF3, DAXX, DDIT3, EGFR, FAS, GADD45B, HCLS1, IFIH1, IGF1, IGHM, IL6, JAK2, KITLG, LCN2, LGALS3, MYC, MYH11, NFKB2, NFKBIA, PIM1, PLAC8, RUNX1T1, SHC1, SLC2A1, TNFAIP3, TNFRSF1A, TNFSF10	40
Cell Death	apoptosis	apoptosis of macrophages	1.30E-07	APOE, BCL2L1, BIRC3, CASP4, CCL5, CD14, CDKN1A, CEBPB, CFLAR, CSF1, DDIT3, EIF2AK2, HIF1A, IRF1, LGALS3, MSR1, NFKBIA, STAT3, TNFRSF1A, TNFSF10	20
Cell Death	apoptosis	apoptosis of connective tissue cells	2.01E-07	ADIPOQ, AR, ATF3, BAK1, BCL2L1, BID, BIRC2, BIRC3, CASP4, CD44, CDKN1A, CEBPB, CFLAR, CLIC4, CSF1, DAXX, DDIT3, EGFR, EIF2AK2, EIF4E, FAS, IGF1, ITGB3, LGALS8, MT1E, MT1F, MYC, PRKAR2B, QKI, RAC1, RPS6KA2, SAA1, SERPINE1, SPHK1, TBK1, TGM2, TIMP1, TNFRSF1A, TNFSF10, TNIP1, UBD, UCP1, VEGFA	43
Cell Death	apoptosis	apoptosis of fibroblast cell lines	2.58E-07	ATF3, BACH2 (includes EG:60468), BAK1, BCL2A1, BCL2L1, BID, BIRC2, CDKN1A, CDKN1C, CEBPB, CFLAR, CLIC4, DAXX, DDIT3, EGFR, EIF2AK2, EIF4E, EIF4EBP1, ENTPD5, FAS, HIF1A, IER3, IFI16, IFI202B, IGF1, IRF1, MYC, NFKB2, NR3C1, PIM1, PLAC8, PML, PTN, QKI, RAC1, RAI14, RHOC, RPS6KA5, SDC4, SEMA3F, SPHK1, STAT1, TNFAIP3, TNFRSF1A, TNFSF10, TNIP1, TP53INP1, TXNIP, USP18	49
Cell Death	apoptosis	apoptosis of epithelial cell lines	3.53E-07	ALDH3A1, ATF3, ATP2B2, BCL2A1, BCL2L1, BID, BIRC2, BIRC3, CASP12 (includes EG:12364), CD44, CEBPD, CFLAR, CLIC4, DAXX, DDIT3, EGFR, EIF2AK2, FAS, IER3, IGF1, IRF1, JAK2, MAPT, MYC, PIM1, RRAS2, SERPINF1, SPHK1, TFRC, TNFRSF19, TNFRSF1A, TNFSF10, TP53INP1, VTN	34
Cell Death	apoptosis	apoptosis of tumor cells	3.92E-07	AR, B4GALT5, BCL2L1, BID, CDKN1A, CFLAR, CXCL12, DDIT3, EGFR, EIF2AK2, FAS, FEM1B, FHL2, HIF1A, IFI202B, IGF1, IGHM, IL6, IRF1, ITGB3, MEF2C, MYC, NFE2L2, NFKBIA, NRP1, PLAUR, RTN4, SEMA3B, SERPINE1, SNAI2, SOCS3, STAT3, THBS2, TIMP1, TIMP2, TNFSF10, VEGFA, VEGFC	38
Cell Death	apoptosis	apoptosis of fibrosarcoma cell lines	5.17E-07	BCL2A1, BCL2L1, BIRC2, BIRC3, CDKN1A, CFLAR, EMILIN2, FAP, FAS, LIMS1, NFKB2, SERPINE1, STAT1, TNFRSF1A, TNFSF10	15
Cell Death	apoptosis	apoptosis of microglia	8.32E-07	BTG1, CASP4, CX3CL1, FAS, IRF1, LCN2, MYD88, STAT1, TLR2	9
Cell Death	apoptosis	apoptosis of lymphoma cell lines	8.49E-07	BACH2 (includes EG:60468), BCL2A1, BCL2L1, BCR, BIRC3, CASP4, CD24, CDKN1A, CFLAR, CHEK2, EIF2AK2, EIF4E, FAS, FCGR2B, HSPB1, IGHM, IRF8, MSN, MYC, NFKB2, NFKBIA, PML, RUNX1T1, SGMS1, STAT3, SYK, TGM2, TNFRSF1A, TNFSF10	29
Cell Death	apoptosis	apoptosis of liver cells	9.49E-07	ADIPOQ, BAK1, BCL2L1, BID, CD274, CDKN1A, CEBPB, DAXX, EGFR, FAS, GADD45B, IL6, ITGB3, MYC, MYD88, NCF1, SOCS3, TBK1, TIMP1, TNFRSF1A, TNFSF10, TNIP1	22
Cell Death	apoptosis	apoptosis of epithelial cells	9.50E-07	BAK1, BCL2A1, BCL2L1, CDKN1A, CEBPB, CFLAR, CLIC4, CTSS, DDIT3, EGFR, EIF4E, FAS, IGF1, IGFBP5, IRAK3, IRF1, LCN2, LGALS3, MMP3, MSR1, MYC, MYD88, NFKBIA, NQO2, NR3C1, PLAUR, SEMA7A, SPHK1, STAT3, TGM2, TIMP1, TLR2, TNFRSF1A, TNFSF10	34
Cell Death	apoptosis	apoptosis of bone cell lines	1.07E-06	BCL2L1, BCR, BID, CBLB, CFLAR, CSF3, EGFR, FAS, IGF1, IL6, JAK2, KITLG, LCN2, MGP, MYC, PIM1, PLAC8, RUNX1T1, SHC1	19
Cell Death	apoptosis	apoptosis of antigen presenting cells	2.05E-06	APOE, BCL2L1, BIRC3, CASP4, CCL5, CD14, CDKN1A, CEBPB, CFLAR, CSF1, DDIT3, EIF2AK2, FAS, HIF1A, IRF1, LGALS3, MSR1, NFKBIA, STAT3, TNFRSF1A, TNFSF10	21
Cell Death	apoptosis	apoptosis of muscle cell lines	3.19E-06	ANKRD1, BCL2L1, BIRC3, CDKN1A, DDIT3, IGF1, IGF2, IRF1, S100A8, S100A9, SPHK1, TNFSF10, TXNIP, VEGFA	14
Cell Death	apoptosis	apoptosis of muscle cells	4.02E-06	ADIPOQ, ADRB1, BCL2L1, BNIP3 (includes EG:12176), CDKN1A, CDKN1C, CSF3, CXCL12, FAS, HLA-B, HSPB1, IGF1, IL6, IRF1, ITGB3, LAMA2, LEPR, LIMS1, MDH1, NAMPT, PIM1, PPARGC1A, PTN, SHC1, SOCS3, STAT3, TIMP2, TNFAIP3, TNFRSF1A, TNFSF10, TXNIP, XAF1	32
Cell Death	apoptosis	apoptosis of cancer cells	4.24E-06	AR, B4GALT5, BCL2L1, BID, CDKN1A, CFLAR, CXCL12, DDIT3, EGFR, EIF2AK2, FAS, FEM1B, FHL2, IFI202B, IGF1, IGHM, IL6, IRF1, ITGB3, MYC, NFE2L2, NFKBIA, RTN4, SEMA3B, SOCS3, TNFSF10, VEGFA, VEGFC	28
Cell Death	survival	survival of normal cells	5.45E-09	ADIPOQ, APOE, B4GALT5, BCL3, BCL2A1, BCL2L1, CCL5, CCR1, CD38, CD44, CDKN1A, CEBPB, CFLAR, CHEK2, CHI3L1, CISH, CSF1, CSF3, CSF2RB, CX3CL1, CXCL3, CXCL9, CXCL12, EGFR, EIF4E, FAS, FCER1G, GADD45B, HCK, HIF1A, HLF (includes EG:3131), HSPB1, ICAM1, IGF1, IGF2, IL6, IL33, IL2RG, ITGB2, ITGB3, JAK2, KIF1B, KITLG, LGALS3, LIFR, MAPT, MVP, MYC, MYCN, MYD88, MYH11, NFKBIA, NTF3, OLR1, PENK, PIM1, PTN, RAC2, REG3G, RETNLA, RUNX1T1, SERPINE1, SERPINF1, SNAI2, STAT1, STAT3, SYK, TGM2, TIMP1, TLR2, TNFSF10, TRAF3IP2, VEGFA	73
Cell Death	survival	survival of eukaryotic cells	2.94E-08	ABCC3, ADIPOQ, ANTXR1, APOE, AR, B4GALT5, BCL3, BCL2A1, BCL2L1, BCR, CCL5, CCR1, CD38, CD44, CDKN1A, CEBPB, CFLAR, CHEK2, CHI3L1, CISH, CSF1, CSF3, CSF2RB, CX3CL1, CXCL3, CXCL9, CXCL12, DAXX, DDIT3, EGFR, EIF4E, EMILIN2, FAS, FCER1G, FKBP5, FN3K, GADD45B, HCK, HIF1A, HLF (includes EG:3131), HMOX1, HSPB1, ICAM1, IGF1, IGF2, IGTP, IL6, IL33, IL2RG, IRF9, ITGB2, ITGB3, JAK2, KHK, KIF1B, KITLG, LGALS3, LIFR, MAPT, MGST1, MVP, MYC, MYCN, MYD88, MYH11, NFKB2, NFKBIA, NR3C1, NTF3, OLR1, PENK, PFKFB2, PIM1, PLAC8, PLAUR, PLSCR1, PML, PPP1R16B, PRKAA2, PTN, PTPRF, RAC1, RAC2, RBP1, RCAN1, REG3G, RELB, RETNLA, RUNX1T1, SERPINE1, SERPINF1, SLC22A3, SLC2A1, SNAI2, SPHK1, STAT1, STAT2, STAT3, SYK, TGM2, TIMP1, TIMP2, TLR2, TNFRSF1A, TNFSF10, TRAF3IP2, TXNIP, UNG, VEGFA, VEGFC, VTN, ZFP36	112
Cell Death	survival	survival of cells	3.07E-08	ABCC3, ADIPOQ, ANTXR1, APOE, AR, B4GALT5, BCL3, BCL2A1, BCL2L1, BCR, CCL5, CCR1, CD38, CD44, CDKN1A, CEBPB, CFLAR, CHEK2, CHI3L1, CISH, CSF1, CSF3, CSF2RB, CX3CL1, CXCL3, CXCL9, CXCL12, CXCR4, DAXX, DDIT3, EGFR, EIF4E, EMILIN2, FAS, FCER1G, FGF7, FKBP5, FN3K, GADD45B, GLRX, HCK, HIF1A, HLF (includes EG:3131), HMOX1, HSPB1, ICAM1, IGF1, IGF2, IGTP, IL6, IL33, IL2RG, IRF9, ITGB2, ITGB3, JAK2, KHK, KIF1B, KITLG, LGALS3, LIFR, LIMS1, MAP3K8, MAPT, MGST1, MVP, MYC, MYCN, MYD88, MYH11, NFE2L2, NFKB2, NFKBIA, NR3C1, NTF3, OLR1, PENK, PFKFB2, PGF, PIM1, PLAC8, PLAUR, PLSCR1, PML, PPP1R16B, PRKAA2, PTN, PTPRF, RAC1, RAC2, RBP1, RCAN1, REG3G, RELB, RETNLA, RUNX1T1, SERPINE1, SERPINF1, SLC22A3, SLC2A1, SMAD1, SNAI2, SPHK1, STAT1, STAT2, STAT3, SYK, TGM2, TIMP1, TIMP2, TLR2, TNFRSF1A, TNFSF10, TRAF3IP2, TXNIP, UNG, VEGFA, VEGFC, VTN, ZFP36	120
Cell Death	survival	survival of blood cells	4.34E-08	BCL3, BCL2A1, BCL2L1, CD38, CD44, CEBPB, CHEK2, CISH, CSF1, CSF3, CSF2RB, CXCL12, FAS, FCER1G, GADD45B, HCK, HIF1A, HLF (includes EG:3131), ICAM1, IL6, IL33, IL2RG, ITGB2, JAK2, KITLG, LGALS3, MYC, MYD88, MYH11, PIM1, RAC2, RUNX1T1, SNAI2, STAT1, STAT3, SYK, TNFSF10, TRAF3IP2, VEGFA	39
Cell Death	survival	survival of leukocytes	1.04E-07	BCL3, BCL2A1, BCL2L1, CD38, CD44, CEBPB, CHEK2, CISH, CSF1, CSF3, CSF2RB, CXCL12, FAS, FCER1G, HCK, HIF1A, HLF (includes EG:3131), ICAM1, IL6, IL33, IL2RG, ITGB2, JAK2, KITLG, LGALS3, MYC, MYD88, MYH11, PIM1, RAC2, SNAI2, STAT1, STAT3, SYK, TNFSF10, TRAF3IP2	36
Cell Death	cell viability	cell viability of cell lines	4.09E-08	ANTXR1, AR, BCL2A1, BCL2L1, CDKN1A, CDKN1C, CFLAR, DDIT3, EPHA4, FAS, GMFG, HMOX1, IGF1, IL6, JAK2, KITLG, MAP3K8, MAPT, MBP, MT1E, MT1F, NFKBIA, PBX1, PCSK6, PLAUR, SHC1, SOCS2, SOCS3, SPHK1, STAT3, SYK, THBS2, TNFAIP3, TNFRSF1A, TNFSF10, TRIM21, VEGFA, XDH	38
Cell Death	cell viability	cell viability of eukaryotic cells	4.92E-08	ANTXR1, APOE, AR, BCL2A1, BCL2L1, CD47, CDKN1A, CDKN1C, CFLAR, CXCL12, DDIT3, EPHA4, FAS, GMFG, HMOX1, IGF1, IL6, JAK2, KITLG, MAP3K8, MAPT, MBP, MSR1, MT1E, MT1F, MVP, MX1, NFKBIA, PBX1, PCSK6, PLAUR, SHC1, SOCS2, SOCS3, SPHK1, STAT3, SYK, TGM2, THBS2, TNFAIP3, TNFRSF1A, TNFSF10, TRIM21, VCAM1, VEGFA, XDH	46
Cell Death	cell viability	cell viability	7.72E-08	ANTXR1, APOE, AR, BCL2A1, BCL2L1, CD47, CDKN1A, CDKN1C, CFLAR, CSF1, CXCL12, DDIT3, EPHA4, ERCC1, FAS, GMFG, HMOX1, IGF1, IL6, JAK2, KITLG, MAP3K8, MAPT, MBP, MSR1, MT1E, MT1F, MVP, MX1, NFKBIA, PBX1, PCSK6, PLAUR, SHC1, SOCS2, SOCS3, SPHK1, STAT3, SYK, TGM2, THBS2, TNFAIP3, TNFRSF1A, TNFSF10, TRIM21, VCAM1, VEGFA, XDH	48
Cell Death	cytotoxicity	cytotoxicity of cells	2.72E-06	B2M, CCL5, CCL7, CCL13, CD38, CD44, CFLAR, CLEC2D (includes EG:93694), CX3CL1, FAS, FCER1G, FCGR1A, FCGR3A, HCK, HLA-B, HLA-C, HLA-G, IGF1, IL6, ITGB2, KITLG, MT1E, MT1F, NFKB2, PLTP, PNP, RASGRP2, STAT1, SYK, TAP1, TAP2, TNFAIP3, TNFRSF1A, TNFSF10	34
Tissue Development	accumulation	accumulation of cells	2.00E-19	ADIPOQ, APOE, AR, B2M, BCL3, BCR, BID, C4A, CCL5, CCL7, CCL13, CCR1, CD24, CD274, CDKN1A, CDKN1C, CFLAR, CSF3, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, EPHA4, FAS, HDC, HMOX1, ICAM1, IER3, IFI16, IGF1, IL6, IL33, IL1RN, IL2RG, ITGAM, ITGB2, JAK2, LAMA2, LRP8, MMP3, MMP8, MYC, MYD88, NR3C1, NTF3, PBX1, PML, PTX3, RAC2, S100A8, S100A9, SELE, SELL, SELP, SEMA7A, SERPING1, STAT3, TIMP1, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1, VEGFA	66
Tissue Development	accumulation	accumulation of leukocytes	1.52E-15	ADIPOQ, APOE, B2M, BCL3, C4A, CCL5, CCL7, CCL13, CCR1, CD274, CFLAR, CSF3, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, EPHA4, FAS, HDC, ICAM1, IER3, IL33, IL1RN, IL2RG, ITGAM, ITGB2, JAK2, MMP3, MMP8, MYD88, NR3C1, PML, PTX3, S100A8, S100A9, SELE, SELL, SELP, SERPING1, STAT3, TIMP1, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1, VEGFA	48
Tissue Development	accumulation	accumulation of myeloid cells	5.89E-11	CCL5, CCL7, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, HDC, IL33, IL1RN, ITGB2, JAK2, MMP8, MYD88, PML, PTX3, S100A8, S100A9, SELP, SERPING1, STAT3, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1	26
Tissue Development	accumulation	accumulation of granulocytes	4.28E-10	CCL5, CCL7, CSF3, CXCL2, CXCL3, CXCL9, CXCL10, HDC, IL33, IL1RN, ITGB2, MMP8, MYD88, PTX3, S100A8, S100A9, SELP, SERPING1, STAT3, TIMP2, TLR3, TNFRSF1A, TNFSF10, VCAM1	24
Tissue Development	accumulation	ccumulation of mononuclear leukocyte	6.33E-09	ADIPOQ, B2M, BCL3, C4A, CCL5, CCL13, CD274, CFLAR, CXCL2, CXCL10, EPHA4, FAS, ICAM1, IER3, IL2RG, ITGB2, MYD88, NR3C1, SELE, SELL, STAT3, VCAM1, VEGFA	23
Tissue Development	accumulation	accumulation of lymphocytes	7.94E-09	ADIPOQ, B2M, BCL3, C4A, CCL5, CCL13, CD274, CFLAR, CXCL10, EPHA4, FAS, ICAM1, IER3, IL2RG, ITGB2, MYD88, NR3C1, SELE, SELL, STAT3, VCAM1, VEGFA	22
Tissue Development	accumulation	accumulation of phagocytes	8.45E-09	APOE, CCL5, CCL13, CCR1, CSF3, CX3CL1, CXCL2, CXCL3, CXCL10, FAS, IL1RN, ITGAM, ITGB2, MMP3, MYD88, PTX3, S100A8, S100A9, SELP, TIMP1, TIMP2, TNFSF10, VEGFA	23
Tissue Development	accumulation	accumulation of macrophages	1.18E-06	APOE, CCL5, CCL13, CCR1, CX3CL1, FAS, IL1RN, ITGAM, MMP3, MYD88, PTX3, S100A9, TIMP1, VEGFA	14
Tissue Development	aggregation	aggregation of blood cells	1.18E-13	ADIPOQ, CCL5, CD24, CD44, CD47, CXCL9, CXCL10, CXCL12, EFNB2, EPHA4, EPHB1, FCER1G, FPR1, GNA13, GUCY1A3, GUCY1B3, HCLS1, HDC, HIF1A, ICAM1, IGHM, IL6, ITGAM, ITGB2, ITGB3, KITLG, LCP2, LY6A, NFKB2, NRP1, P2RY1, PLCB1, PTX3, RASGRP2, SELL, SELP, SYK, THBS2, TIMP2, TLR2, TNFRSF1A, TRAF3IP2	42
Tissue Development	aggregation	aggregation of cells	9.09E-13	ADIPOQ, CCL5, CD24, CD38, CD44, CD47, CDKN1A, COL14A1, CXCL9, CXCL10, CXCL12, EFNB2, EGFR, EPHA4, EPHB1, FCER1G, FPR1, GNA13, GUCY1A3, GUCY1B3, HCLS1, HDC, HIF1A, ICAM1, IGHM, IL6, ITGAM, ITGB2, ITGB3, KITLG, LCP2, LY6A, MMP3, NCAM1, NFKB2, NRP1, P2RY1, PCDH12, PLCB1, PRKD1, PTX3, RASGRP2, SELL, SELP, SERPINF1, SHC1, STAT3, SYK, THBS2, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, WNT5A	55
Tissue Development	aggregation	aggregation of leukocytes	2.27E-08	CD44, FPR1, HIF1A, ICAM1, IL6, ITGAM, ITGB2, KITLG, LY6A, NFKB2, NRP1, PLCB1, SELL, SELP, TLR2, TNFRSF1A, TRAF3IP2	17
Tissue Development	adhesion	adhesion of eukaryotic cells	1.23E-13	ADAM9, APOE, BCR, C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CSF3, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, CXCR4, EGFR, EPHA4, EPHB1, FAS, FBLN5, FCER1G, FPR2, FXYD5, HCK, HIF1A, ICAM1, IGF1, IGHM, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS8, LGALS9, LGALS3BP, LY6A, MAN2A1, MAP3K8, MARCO, MMP14, MSR1, MYC, MYD88, MYO6, NCAM1, NEO1, NFKBIA, NFKBIB, OLR1, PCDH12, PLAUR, PLTP, POSTN, PTX3, RAC1, RAC2, RASGRP2, RCAN1, RND1, S100A8, S100A9, SAA1, SDC1, SELE, SELL, SELP, SEMA3F, SERPINE1, SERPING1, STAT3, SYK, TGFBI, TGM2, THBS2, TIMP1, TLR2, VCAM1, VCAN, VEGFA, VEGFC, VTN	92
Tissue Development	adhesion	adhesion of normal cells	5.76E-13	APOE, BCR, C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, EPHA4, FAS, FBLN5, FCER1G, FPR2, HCK, HIF1A, ICAM1, IGHM, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LY6A, MAN2A1, MARCO, MYD88, NCAM1, NEO1, NFKBIA, NFKBIB, OLR1, PLAUR, PLTP, POSTN, PTX3, RAC1, RAC2, RASGRP2, RND1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, SERPING1, STAT3, SYK, THBS2, TLR2, VCAM1, VEGFA, VTN	69
Tissue Development	adhesion	adhesion of blood cells	2.43E-12	C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, EPHA4, FAS, FCER1G, FPR2, HCK, ICAM1, IGHM, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LY6A, MARCO, MYD88, NFKBIA, NFKBIB, OLR1, PLAUR, PLTP, PTX3, RAC1, RAC2, RASGRP2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPING1, SYK, THBS2, TLR2, VCAM1, VEGFA	56
Tissue Development	adhesion	adhesion of leukocytes	5.18E-12	C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL11, CXCL12, FAS, FPR2, HCK, ICAM1, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LY6A, MARCO, MYD88, NFKBIA, NFKBIB, OLR1, PLAUR, PLTP, RAC1, RAC2, RASGRP2, S100A8, S100A9, SELE, SELL, SELP, SERPING1, SYK, THBS2, TLR2, VCAM1, VEGFA	50
Tissue Development	adhesion	adhesion of cells	1.30E-09	ADAM9, APOE, BCR, C3, CBLB, CCL5, CCL13, CCL19, CCR1, CD24, CD38, CD44, CD47, CLEC7A, CSF1, CSF3, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, CXCR4, EGFR, EPHA4, EPHB1, FAS, FBLN5, FCER1G, FPR2, FXYD5, HCK, HIF1A, ICAM1, IGF1, IGHM, IGSF1, IL6, IL33, IRGM, ISLR, ITGAM, ITGB2, ITGB3, ITGB6, ITGBL1, JAK2, JAM2, KITLG, LGALS3, LGALS8, LGALS9, LGALS3BP, LIMS1, LY6A, MAN2A1, MAP3K8, MARCO, MMP14, MMP15, MSR1, MYC, MYD88, MYO6, NCAM1, NEO1, NFKBIA, NFKBIB, NID2, OLR1, OPCML, PCDH12, PLAUR, PLTP, POSTN, PTPRF, PTX3, PVR, RAC1, RAC2, RASGRP2, RCAN1, RND1, S100A8, S100A9, SAA1, SDC1, SELE, SELL, SELP, SEMA3F, SEMA5A, SERPINE1, SERPING1, SHC1, ST8SIA4, STAT1, STAT3, SYK, TGFBI, TGM2, THBS2, TIMP1, TLR2, TNFAIP6, VCAM1, VCAN, VEGFA, VEGFC, VTN	112
Tissue Development	adhesion	adhesion of cell lines	1.81E-08	ADAM9, C3, CCL13, CD24, CD44, CD47, CSF3, CX3CL1, CXCL2, CXCL10, CXCL12, CXCR4, EGFR, EPHB1, FXYD5, ICAM1, IGF1, IL6, ITGAM, ITGB2, ITGB3, LGALS3, LGALS8, LGALS9, LGALS3BP, MAP3K8, MMP14, MSR1, MYC, MYO6, NCAM1, NFKBIA, PCDH12, PLAUR, POSTN, RAC1, RASGRP2, RCAN1, SDC1, SELE, SELL, SELP, SEMA3F, SERPINE1, TGFBI, TGM2, TIMP1, TLR2, VCAM1, VCAN, VEGFA, VEGFC, VTN	53
Tissue Development	adhesion	adhesion of lymphatic system cells	1.94E-08	APOE, C3, CD44, CXCL2, CXCL3, CXCL12, FPR2, HCK, ICAM1, IL33, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, PLAUR, PLTP, S100A8, S100A9, SELE, SELL, SELP, VCAM1	23
Tissue Development	adhesion	adhesion of bone marrow cells	2.54E-08	C3, CD44, CXCL2, CXCL3, CXCL12, FPR2, HCK, ICAM1, IL33, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, PLAUR, PLTP, S100A8, S100A9, SELE, SELL, SELP, VCAM1	22
Tissue Development	adhesion	adhesion of granulocytes	9.90E-08	C3, CD44, CXCL2, CXCL3, FPR2, HCK, ICAM1, IL33, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, PLAUR, PLTP, S100A8, S100A9, SELE, SELL, SELP, VCAM1	21
Tissue Development	adhesion	adhesion of leukemia cells	2.48E-07	CD44, ICAM1, ITGB2, SELE, SELL, VCAM1	6
Tissue Development	adhesion	adhesion of tumor cell lines	3.45E-07	ADAM9, CCL13, CD24, CD44, CD47, CX3CL1, CXCL2, CXCL10, CXCL12, CXCR4, EGFR, EPHB1, FXYD5, ICAM1, IGF1, IL6, ITGAM, ITGB2, ITGB3, LGALS3, LGALS8, MAP3K8, MMP14, MYO6, NCAM1, PLAUR, RAC1, RASGRP2, RCAN1, SDC1, SELE, SELP, SEMA3F, SERPINE1, TLR2, VCAM1, VCAN, VEGFA, VTN	39
Tissue Development	adhesion	adhesion of cancer cells	8.59E-07	CD44, CD47, CXCL12, EGFR, ICAM1, IGF1, ITGB2, ITGB3, SELE, SELL, VCAM1, VTN	12
Tissue Development	adhesion	adhesion of endothelial cell lines	2.16E-06	CD44, CX3CL1, CXCL12, CXCR4, ICAM1, ITGAM, ITGB2, ITGB3, LGALS3, NFKBIA, PLAUR, RCAN1, SELE, SELP, TGFBI, TLR2, VCAM1, VEGFA, VEGFC	19
Tissue Morphology	quantity	quantity of leukocytes	2.73E-19	ADA, APOE, B2M, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL5, CCL7, CCL13, CCL19, CD24, CD38, CD47, CD83, CD274, CDKN1A, CEBPB, CES1 (includes EG:1066), CFLAR, CISH, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL2, CXCL10, CXCL12, CXCL13, CXCR4, EPHA4, FAS, FCER1G, FCGR1A, FGF7, FPR2, GNA13, HDC, HIF1A, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL18BP, IL2RG, IRF1, IRF8, ISG15, ITGAM, ITGB2, ITGB6, JAK2, KITLG, KLRA3, LCP2, LEPR, LGALS3, LGALS8, MMP3, MMP8, MYC, MYD88, MYH11, NFKB2, NFKBIA, NQO2, NR3C1, PBX1, PDE4B, PDE4D, PIK3AP1, PIM1, PLSCR1, PML, PNP, PTPN2, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SHC1, SLFN1, SOCS3, ST3GAL1, STAT1, STAT3, TAP1, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA, VSIG4, VTN, ZC3H12A	106
Tissue Morphology	quantity	quantity of blood cells	5.64E-18	ADA, APOE, B2M, BAK1, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL5, CCL7, CCL13, CCL19, CD24, CD38, CD47, CD83, CD274, CDKN1A, CEBPB, CES1 (includes EG:1066), CFLAR, CISH, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL2, CXCL10, CXCL12, CXCL13, CXCR4, EPHA4, FAS, FCER1G, FCGR1A, FGF7, FPR2, GNA13, HDC, HIF1A, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL18BP, IL2RG, IL4R, IRF1, IRF8, ISG15, ITGAM, ITGB2, ITGB6, JAK2, KITLG, KLRA3, LCP2, LEPR, LGALS3, LGALS8, MMP3, MMP8, MYC, MYD88, MYH11, NFKB2, NFKBIA, NQO2, NR3C1, PBX1, PDE4B, PDE4D, PIK3AP1, PIM1, PLSCR1, PML, PNP, PTPN2, RAC1, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SHC1, SLFN1, SOCS3, ST3GAL1, STAT1, STAT3, TAP1, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA, VSIG4, VTN, ZC3H12A	110
Tissue Morphology	quantity	quantity of mononuclear leukocytes	5.45E-15	APOE, B2M, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL7, CCL13, CCL19, CD24, CD38, CD83, CD274, CDKN1A, CEBPB, CFLAR, CISH, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL10, CXCL12, CXCL13, CXCR4, EPHA4, FAS, FCER1G, FCGR1A, FGF7, GNA13, HIF1A, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL2RG, IRF1, ISG15, ITGAM, ITGB2, ITGB6, JAK2, KITLG, KLRA3, LCP2, LEPR, LGALS8, MYC, MYH11, NFKB2, NFKBIA, NR3C1, PIK3AP1, PIM1, PML, PNP, PTPN2, RAC2, RELB, SELE, SELL, SLFN1, ST3GAL1, STAT1, STAT3, TAP1, TLR2, TLR3, TNFRSF1A, TXNIP, VCAM1, VEGFA, VSIG4, ZC3H12A	81

Tissue Morphology	quantity	quantity of phagocytes	9.38E-15	ADA, APOE, B2M, BID, CCL7, CCL13, CES1 (includes EG:1066), CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL10, FAS, FCGR1A, FGF7, HDC, ICAM1, IL18BP, ITGB2, ITGB6, LGALS3, MMP3, MMP8, MYD88, MYH11, NFKBIA, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SHC1, SOCS3, STAT3, TLR2, TNFRSF1A, TNFSF10, VEGFA, VTN	47
Tissue Morphology	quantity	quantity of lymphatic system cells	8.85E-14	ADA, BCL2L1, BCR, BID, CDKN1A, CSF1, CSF3, CSF2RB, CXCL13, FAS, FCGR1A, FPR2, HDC, ICAM1, IGF1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NFKB2, NQO2, PBX1, PDE4B, PDE4D, PLSCR1, PML, PSMB10, PTPN2, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SOCS3, THBS2, TLR2, TNFRSF1A, TNFSF10, VTN	48
Tissue Morphology	quantity	quantity of lymphocytes	1.44E-13	APOE, B2M, BCL2A1, BCL2L1, BID, BST1, C3, CCL19, CD24, CD38, CD83, CD274, CDKN1A, CEBPB, CFLAR, CISH, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CXCL10, CXCL12, CXCL13, CXCR4, EPHA4, FAS, FCER1G, FCGR1A, FGF7, GNA13, HIF1A, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL2RG, IRF1, ISG15, ITGAM, ITGB2, ITGB6, JAK2, KITLG, KLRA3, LCP2, LEPR, LGALS8, MYC, MYH11, NFKB2, NFKBIA, NR3C1, PIK3AP1, PIM1, PNP, PTPN2, RAC2, RELB, SELE, SELL, SLFN1, ST3GAL1, STAT1, STAT3, TAP1, TLR2, TLR3, TNFRSF1A, TXNIP, VCAM1, VEGFA, VSIG4, ZC3H12A	76
Tissue Morphology	quantity	quantity of bone marrow cells	2.46E-13	ADA, BCL2L1, BCR, BID, CDKN1A, CSF1, CSF3, CSF2RB, FAS, FCGR1A, FPR2, HDC, ICAM1, IGF1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NQO2, PBX1, PDE4B, PDE4D, PLSCR1, PML, PTPN2, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SOCS3, THBS2, TLR2, TNFRSF1A, TNFSF10, VTN	45
Tissue Morphology	quantity	quantity of cells	4.08E-13	ADA, ADAMTS1, ADRB1, APOE, AR, ARL4A, B2M, BAK1, BCL2A1, BCL2L1, BCR, BID, BST1, C3, C4A, CA3, CACNA2D2, CAV2, CCL5, CCL7, CCL13, CCL19, CCND2, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CES1 (includes EG:1066), CFLAR, CISH, CNN1, COMT, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL10, CXCL12, CXCL13, CXCR4, DDIT3, EGFR, EIF4EBP1, EPHA4, ERRFI1, FAS, FCER1G, FCGR1A, FGF7, FOSL2, FPR2, GNA13, HDC, HIF1A, HMOX1, HOMER1, HRASLS, HSD11B1, ICAM1, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL33, IL18BP, IL1RN, IL2RG, IL4R, IRF1, IRF8, ISG15, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, KLRA3, LCP2, LEPR, LGALS3, LGALS8, LIFR, LIMD1, MAPT, MMP3, MMP8, MSR1, MTHFD2, MYC, MYD88, MYH11, NFE2L2, NFIA, NFKB2, NFKBIA, NQO2, NR3C1, NR3C2, NRP1, NTF3, PBX1, PDE4B, PDE4D, PIK3AP1, PIM1, PLAUR, PLSCR1, PML, PNP, POU3F1, PPARGC1A, PRND, PSMB10, PTPN2, RAC1, RAC2, RCAN1, RELB, S100A8, S100A9, SELE, SELL, SELP, SERPING1, SHC1, SLFN1, SMAD1, SOCS3, SPHK1, ST3GAL1, ST8SIA4, STAT1, STAT3, TAP1, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA, VEGFC, VSIG4, VTN, WNT5A, ZC3H12A	159
Tissue Morphology	quantity	quantity of granulocytes	8.32E-13	ADA, BCR, BID, CSF1, CSF3, CSF2RB, FAS, FCGR1A, FPR2, HDC, ICAM1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	38
Tissue Morphology	quantity	quantity of myeloid cells	3.26E-12	ADA, BCR, BID, CSF1, CSF3, CSF2RB, FAS, FCGR1A, FPR2, HDC, ICAM1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NQO2, PBX1, PDE4B, PDE4D, PLSCR1, PML, PTPN2, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	40
Tissue Morphology	quantity	quantity of neutrophils	1.13E-11	ADA, CSF1, CSF3, FAS, FCGR1A, HDC, ICAM1, IL18BP, ITGB2, MMP3, MMP8, MYH11, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	28
Tissue Morphology	quantity	quantity of antigen presenting cells	3.08E-09	ADA, APOE, B2M, BID, CCL7, CCL13, CCL19, CD47, CD83, CES1 (includes EG:1066), CSF1, CSF3, CTSL2, CTSS, CX3CL1, CXCL10, CXCL13, FAS, FGF7, IL6, IRF1, IRF8, ITGB2, ITGB6, LGALS3, MMP3, MYD88, NFKB2, NFKBIA, RELB, SELP, SHC1, STAT3, TNFRSF1A, VEGFA	35
Tissue Morphology	quantity	quantity of tissue	3.30E-07	ARG1, CEBPB, CEBPD, CSF1, DPT, EGFR, FGF9, HDC, HIF1A, HMOX1, HSD11B1, IGF1, IGFBP5, IGHM, LEPR, MSR1, MT1E, MT1F, NR3C1, NTF3, PPARA, PPARGC1A, PRKAR2B, PRRX1, SERPINE1, UCP1	26
Tissue Morphology	quantity	quantity of T lymphocytes	4.63E-07	APOE, B2M, BCL2A1, BCL2L1, CCL19, CD83, CD274, CDKN1A, CFLAR, CISH, CSF3, CSF2RB, CTSL2, CTSS, CXCL10, CXCR4, EPHA4, FAS, FGF7, IGF1, IGF2, IL6, IL2RG, IRF1, ITGAM, ITGB2, JAK2, KITLG, LCP2, LEPR, LGALS8, MYH11, NFKBIA, NR3C1, PIM1, PNP, RELB, SLFN1, ST3GAL1, STAT1, STAT3, TAP1, TLR2, TLR3, TNFRSF1A, VSIG4	46
Tissue Morphology	quantity	quantity of connective tissue	4.79E-07	CEBPB, CEBPD, CSF1, DPT, EGFR, HDC, HSD11B1, IGF1, IGFBP5, LEPR, MSR1, MT1E, MT1F, NR3C1, PPARA, PPARGC1A, PRKAR2B, PRRX1, SERPINE1, UCP1	20
Tissue Morphology	quantity	quantity of macrophages	2.43E-06	ADA, APOE, B2M, BID, CCL7, CCL13, CES1 (includes EG:1066), CSF1, CTSL2, CTSS, CX3CL1, CXCL10, FAS, FGF7, ITGB6, LGALS3, MMP3, MYD88, NFKBIA, RELB, SELP, SHC1, STAT3, TNFRSF1A, VEGFA	25
Tissue Morphology	size	size of lesion	1.91E-08	ABCC9, ADIPOQ, APOE, C3, CCL13, CSF1, CTSL2, CTSS, CXCL12, EGFR, HMOX1, ICAM1, IGF2, IL33, MMP3, NAMPT, NFE2L2, NFKBIA, PIM1, SELE, SELP, TIMP1, TNFAIP3, TNFRSF1A, UNG, VCAM1, VEGFA	27
Tissue Morphology	size	size of atherosclerotic lesion	1.67E-06	APOE, CCL13, CTSL2, CTSS, ICAM1, IGF2, IL33, MMP3, SELE, SELP, TIMP1, TNFAIP3, VCAM1, VEGFA	14
Tissue Morphology	density	density of tissue	2.00E-07	CSF1, HDC, HSD11B1, IGF1, IGFBP5, IL1RN, MSR1, NRP1, PTPRF, RCAN1, THBS2, VEGFA	12
Skeletal and Muscular Disorders	skeletal and muscular disorder	skeletal and muscular disorder	1.60E-17	ACPL2, ACVR1B, ADAMTS1, ADAMTS4, ADAMTS9, ADCY7, ADH1C (includes EG:126), ADIPOQ, AFF3, AG2, AK1, AMPD3, ANGPTL2, ANK1, ANKH, ANKRD2, ANTXR1, APLNR, APOD, APOE, AQP1, AR, ARG1, ARHGAP8, ARSB, ART1, ASNS, ASPN, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, B4GALT5, BCL2L1, BCR, BIRC2, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C1S, C2ORF40, C4A, C5ORF13, CA3, CA4, CA7, CA8, CA13, CA14, CACNA2D2, CACNB2, CAMK1D, CAPN10, CASQ1, CASQ2, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD14, CD24, CD38, CD44, CD83, CD274, CDKN1A, CDKN1C, CEBPB, CENPJ, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CILP, CKB, CLEC4D, CLEC4E, CLIC5, COL6A1, COL6A3, COMP, COMT, CP, CSF1, CSF3, CSF2RB, CSRP2, CTSS, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, DBP, DDIT3, DTNA, EBF1, EPHA4, ESRRG, FABP7, FAM101B, FAM107A, FAS, FBXW7, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGD4, FGF12, FHL2, FKBP4, FKBP5, FLOT1, FMNL2 (includes EG:114793), FPR1, FPR2, G0S2, GADD45B, GALM, GAS1, GAS5, GBP2, GCH1, GCNT2, GLIPR2, GLUL, GPC6, GRK5, GUCY1B3, HAMP, HCK, HCLS1, HLA-B, HLA-C, HLA-E, HLA-G, HMOX1, HOMER1, HP, HSPB1, ICAM1, IDO1, IER3, IFIH1, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, IRAK3, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JPH2, JUNB, KCNA1, KCNIP2, KCNV2, KIAA0247, KIAA1217, KIF6, KIF13A, KIF1B, KLF12, LAMA2, LBP, LCN2, LEPR, LIFR, LOX, LPIN1, LRG1, LUM, MAFF, MAGI3, MAP3K8, MAPRE2, MAPT, MATN2, MBD1, MBP, MCC, MCTP2, MDH1, MGP, MMP3, MMP14, MRAP2, MS4A6C, MS4A6D, MT1E, MTMR14, MTSS1, MTUS1, MYD88, NAALAD2, NAMPT, NCF1, NCF4, NDUFS4, NEBL, NFE2L2, NFIA, NFKBIA, NFKBIB, NHSL1, NR3C1, NR3C2, NTF3, OR51E2, P2RY1, PBX1, PDE4B, PDE4D, PDE5A, PDLIM4, PENK, PHF15, PIK3AP1, PKIA, PLAUR, PLCB1, PLSCR4, PLXDC2, PON1, POU3F1, PPARGC1A, PPARGC1B, PRDM16, PRG4 (includes EG:10216), PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSAT1, PSMB8, PSMB9, PTPN2, PTPRR, RAB3A, RAC1, RAI14, RAP1GAP2, RAPH1, RASGRP2, RECK, RELB, RGS5, RNF213, RTN4, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SCN7A, SCUBE2, SDC1, SDC4, SELE, SELP, SEMA5A, SERINC3, SERPINA3, SERPINB1, SERPINE1, SGMS1, SH3KBP1, SH3RF1, SLC22A3, SLC24A3, SLC25A26, SLC2A4, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SMTN, SNX10, SOCS3, SOST, SPARCL1, SRPK2, STAT1, STAT3, STEAP4, STXBP6, SYN2, TACC2, TAP1, TAP2, TAPBP, TFRC, TGM2, THBS2, TIMP1, TINAGL1, TLR2, TLR3, TMEM163, TMEM173, TMEM204, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TOR3A, TPM2, TPM3, TREX1 (includes EG:11277), TRIM21, TSPAN2, TSPO, TUBA8, TUBA4A, UBE2L6, UCK2, VCAM1, VCAN, VEGFA, VEGFC, VIT, VSIG4, VWA5A, WNT5A, XDH, ZFP36	355
Skeletal and Muscular Disorders	skeletal and muscular disorder	keletal and muscular disorder of roden	8.82E-07	APOE, AR, B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, FHL2, GCH1, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, IRAK3, ITGB2, ITGB3, LAMA2, LEPR, LUM, MAPT, MBP, MMP3, MMP14, MYD88, NCF1, NFE2L2, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	44
Skeletal and Muscular Disorders	rheumatic disease	rheumatic disease	5.28E-14	ACPL2, ACVR1B, ADAMTS1, ADAMTS4, ADAMTS9, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANKH, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ASPN, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, BCL2L1, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C1S, C4A, CA8, CACNA2D2, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CILP, CLEC4D, CLEC4E, CLIC5, COL6A1, COMP, CSF1, CSF3, CSF2RB, CTSS, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, DDIT3, EBF1, ESRRG, FAM101B, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-B, HLA-C, HLA-E, HLA-G, HP, ICAM1, IFIH1, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGAM, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LEPR, LOX, LPIN1, LUM, MAGI3, MATN2, MBD1, MCC, MCTP2, MMP3, MMP14, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, MYD88, NAMPT, NCF1, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RAC1, RAPH1, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SELP, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STAT3, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, THBS2, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TREX1 (includes EG:11277), TRIM21, TSPAN2, TUBA8, TUBA4A, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, XDH, ZFP36	229
Skeletal and Muscular Disorders	rheumatic disease	rheumatic disease of mammalia	2.52E-08	B2M, C2, C3, C1R, C1S, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	36
Skeletal and Muscular Disorders	rheumatic disease	rheumatic disease of rodents	2.46E-07	B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	33
Skeletal and Muscular Disorders	rheumatic disease	rheumatic disease of mice	1.68E-06	B2M, C3, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	30
Skeletal and Muscular Disorders	arthritis	arthritis	3.68E-13	ACPL2, ACVR1B, ADAMTS1, ADAMTS4, ADAMTS9, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANKH, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ASPN, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C4A, CA8, CACNA2D2, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CILP, CLEC4D, CLEC4E, CLIC5, COL6A1, COMP, CSF1, CSF3, CSF2RB, CTSS, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, DDIT3, EBF1, ESRRG, FAM101B, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-B, HLA-C, HLA-E, HLA-G, HP, ICAM1, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LEPR, LOX, LPIN1, LUM, MAGI3, MATN2, MBD1, MCC, MCTP2, MMP3, MMP14, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, MYD88, NAMPT, NCF1, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RAPH1, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STAT3, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, THBS2, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TSPAN2, TUBA8, TUBA4A, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, XDH, ZFP36	221
Skeletal and Muscular Disorders	arthritis	arthritis of rodents	1.93E-07	B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TLR2, TNFRSF1A, TNFSF10, ZFP36	32
Skeletal and Muscular Disorders	arthritis	arthritis of animal	2.11E-07	ADAMTS4, B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TLR2, TNFRSF1A, TNFSF10, ZFP36	33
Skeletal and Muscular Disorders	arthritis	arthritis of mice	1.36E-06	B2M, C3, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TLR2, TNFRSF1A, TNFSF10, ZFP36	29
Skeletal and Muscular Disorders	rheumatoid arthritis	rheumatoid arthritis	3.71E-10	ACPL2, ACVR1B, ADAMTS4, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, C2, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C4A, CA8, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CLEC4D, CLEC4E, CLIC5, COMP, CSF1, CSF2RB, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, EBF1, ESRRG, FAM101B, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-C, HLA-G, HP, ICAM1, IGF1, IGFBP5, IGHM, IL6, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LOX, MAGI3, MATN2, MBD1, MCC, MMP3, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, NAMPT, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TSPAN2, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, ZFP36	190
Immunological Disease	immunological disorder	immunological disorder	3.04E-17	AASDHPPT, ACPL2, ACVR1B, ADA, ADAMTS4, ADIPOQ, ADRB1, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANO4, ANTXR1, APOE, AR, ARG1, ARHGAP8, ARHGAP18, ARHGAP20, ARSB, ART1, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, B3GALT2, BACH2 (includes EG:60468), BCL3, BCL2L1, BCR, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C1S, C4A, C6ORF57, CA8, CACNB2, CAMK1D, CAPN10, CASP4, CASQ2, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CLEC4D, CLEC4E, CLIC4, CLIC5, COL14A1, COL8A1, COMP, CSF1, CSF3, CSF2RB, CTSS, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, EBF1, EIF2AK2, EPHA4, EPHB1, ESRRG, FAM101B, FAS, FBXW7, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF9, FGF12, FKBP5, FLOT1, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GNA13, GPC6, GRK5, HAMP, HCK, HCLS1, HDC, HLA-B, HLA-C, HLA-E, HLA-G, HP, ICAM1, IDO1, IFIH1, IFIT2, IFITM1, IFITM2, IFITM3, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL2RG, IL4R, IQGAP2, IRF1, IRF8, ITGA8 (includes EG:8516), ITGAM, ITGB2, ITGB6, JAK2, JPH2, JUNB, KCNV2, KIAA0247, KIAA1217, KIF13A, KITLG, KLF12, KRT222, LAMA2, LBP, LCP2, LGALS8, LMOD3, LOX, LRP8, MAGI3, MAMDC2, MARCH5, MATN2, MBD1, MBP, MCC, MMP3, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, MYC, MYD88, NAALAD2, NAMPT, NCAM1, NCF1, NCF4, NEBL, NEK6, NFE2L2, NFIA, NFKB2, NFKBIA, NFKBIZ, NHSL1, NR3C1, NTF3, NTM, OAS1, OPCML, OR51E2, OSMR, PBX1, PDE4B, PDE4D, PDE5A, PDE7A, PDLIM5, PFKFB3, PHF15, PIK3AP1, PITPNC1, PLA2G7, PLAUR, PLCB1, PLXDC2, PML, PNKD (includes EG:25953), PNP, PON1, PPARA, PPARGC1A, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, PTGFR, PTPN2, PTPRR, RAC2, RAI14, RASGRP2, RECK, RELB, RFX5, RGS5, RNF213, RPS6KA2, RUNX1T1, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SELENBP1, SELL, SELP, SEMA5A, SERINC3, SERPINA3, SERPING1, SIPA1L2, SLC11A1, SLC24A3, SLC25A26, SLC39A14, SLC6A6, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SPON1, SRPK2, STAT1, STAT3, STEAP4, STXBP6, SYK, SYNE2, TACC2, TAP1, TAP2, TAPBP, TCIRG1, TFRC, TGM2, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TRAF3IP2, TRAFD1, TREX1 (includes EG:11277), TRIM21, TSPAN2, TUBA8, TUBA4A, TULP4, TXNIP, UBE2L6, UCP2, UNG, VCAM1, VCAN, VEGFA, VEGFC, VIT, VSIG4, WARS, WNT5A, ZFP36, ZNFX1	320
Immunological Disease	immunological disorder	immunological disorder of mammalia	2.12E-13	APOE, B2M, BCL3, BCL2L1, BCR, C2, C3, C1R, C1S, C4A, CASP4, CBLB, CCL5, CCL13, CCR1, CD14, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CSF1, CSF3, CXCL9, CXCL10, EIF2AK2, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, HDC, HLA-B, HLA-C, HP, IDO1, IGF1, IGHM, IL6, IL18BP, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, KITLG, LCP2, MBP, MYC, MYD88, NCF1, NFE2L2, NFKB2, NFKBIA, NR3C1, PBX1, PPARA, RUNX1T1, SELL, SERPING1, SLC6A6, SOCS3, STAT1, TAP1, TCIRG1, TGM2, TLR3, TNFRSF1A, TNFSF10, TRAF3IP2, UCP2, VEGFC	74
Immunological Disease	immunological disorder	immunological disorder of mice	7.67E-13	APOE, B2M, BCL3, BCL2L1, BCR, C3, C4A, CASP4, CBLB, CCL5, CCL13, CCR1, CD14, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CSF1, CSF3, CXCL10, EIF2AK2, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, HDC, HLA-B, HLA-C, HP, IDO1, IGF1, IGHM, IL6, IL18BP, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, KITLG, LCP2, MBP, MYC, MYD88, NCF1, NFE2L2, NFKB2, NFKBIA, NR3C1, PBX1, PPARA, RUNX1T1, SELL, SLC6A6, SOCS3, STAT1, TAP1, TCIRG1, TGM2, TLR3, TNFRSF1A, TNFSF10, TRAF3IP2, UCP2, VEGFC	69
Immunological Disease	autoimmune disease	autoimmune disease	4.36E-15	AASDHPPT, ACPL2, ACVR1B, ADAMTS4, ADIPOQ, ADRB1, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANO4, ANTXR1, APOE, ARG1, ARHGAP8, ARHGAP20, ARSB, ART1, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, B3GALT2, BACH2 (includes EG:60468), BCL2L1, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C1S, C4A, C6ORF57, CA8, CACNB2, CAMK1D, CAPN10, CASP4, CBLB, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CLEC4D, CLEC4E, CLIC4, CLIC5, COL8A1, COMP, CSF1, CSF3, CSF2RB, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, EBF1, EPHA4, EPHB1, ESRRG, FAM101B, FAS, FCGR1A, FCGR2B, FCGR3A, FGF9, FGF12, FKBP5, FLOT1, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GNA13, GPC6, GRK5, HAMP, HCK, HCLS1, HDC, HLA-B, HLA-C, HLA-E, HLA-G, HP, ICAM1, IDO1, IFIH1, IFIT2, IFITM1, IFITM2, IFITM3, IGF1, IGFBP5, IGHM, IL6, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, IQGAP2, IRF1, ITGA8 (includes EG:8516), ITGAM, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, KITLG, KLF12, KRT222, LAMA2, LBP, LGALS8, LOX, LRP8, MAGI3, MAMDC2, MARCH5, MATN2, MBD1, MBP, MCC, MMP3, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, MYD88, NAALAD2, NAMPT, NCAM1, NCF1, NCF4, NEBL, NEK6, NFE2L2, NFIA, NFKB2, NFKBIA, NHSL1, NR3C1, NTF3, OAS1, OPCML, OR51E2, PBX1, PDE4B, PDE4D, PDLIM5, PFKFB3, PHF15, PIK3AP1, PITPNC1, PLAUR, PLCB1, PLXDC2, PML, PNKD (includes EG:25953), PNP, PON1, PPARA, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, PTGFR, PTPN2, PTPRR, RASGRP2, RECK, RGS5, RNF213, RPS6KA2, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SELL, SELP, SEMA5A, SERINC3, SERPINA3, SLC11A1, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SPON1, SRPK2, STAT1, STEAP4, STXBP6, SYK, SYNE2, TACC2, TAP1, TAP2, TAPBP, TFRC, TGM2, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TRAF3IP2, TRAFD1, TREX1 (includes EG:11277), TRIM21, TSPAN2, TULP4, UBE2L6, UCP2, VCAM1, VCAN, VEGFA, VEGFC, VIT, VSIG4, WARS, WNT5A, ZFP36, ZNFX1	276
Immunological Disease	autoimmune disease	autoimmune disease of mammalia	2.65E-09	B2M, BCL2L1, C2, C3, C1R, C1S, C4A, CASP4, CBLB, CCL5, CCL13, CCR1, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CSF3, CXCL10, FAS, FCGR1A, FCGR2B, FCGR3A, HDC, HLA-B, HLA-C, IDO1, IGF1, IL6, IL1RN, KITLG, MBP, MYD88, NCF1, NFE2L2, NFKB2, NR3C1, PPARA, SELL, STAT1, TAP1, TGM2, TLR3, TNFRSF1A, TNFSF10, TRAF3IP2, UCP2	48
Immunological Disease	autoimmune disease	autoimmune disease of mice	7.13E-09	B2M, BCL2L1, C3, C4A, CASP4, CBLB, CCL5, CCL13, CCR1, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CSF3, CXCL10, FAS, FCGR1A, FCGR2B, FCGR3A, HDC, HLA-B, HLA-C, IDO1, IGF1, IL6, IL1RN, KITLG, MBP, MYD88, NCF1, NFE2L2, NFKB2, NR3C1, PPARA, SELL, STAT1, TAP1, TLR3, TNFRSF1A, TNFSF10, TRAF3IP2, UCP2	44
Immunological Disease	Sjogren's syndrome	Sjogren's syndrome	3.52E-12	B2M, C3, CCL5, CCL7, CCL13, CCL19, CSF1, CXCL3, CXCL6, CXCL10, EPHA4, FAS, FGF9, HP, IFITM1, IFITM2, IFITM3, IL6, IL4R, IRF1, KITLG, PML, SOCS3, STAT1, SYK, TAP2, TIMP1, TLR2, TRIM21, VCAM1, VEGFA	31
Immunological Disease	rheumatoid arthritis	rheumatoid arthritis	3.71E-10	ACPL2, ACVR1B, ADAMTS4, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, C2, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C4A, CA8, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CLEC4D, CLEC4E, CLIC5, COMP, CSF1, CSF2RB, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, EBF1, ESRRG, FAM101B, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-C, HLA-G, HP, ICAM1, IGF1, IGFBP5, IGHM, IL6, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LOX, MAGI3, MATN2, MBD1, MCC, MMP3, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, NAMPT, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TSPAN2, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, ZFP36	190
Cell-To-Cell Signaling and Interaction	binding	binding of eukaryotic cells	3.06E-17	ADIPOQ, APOE, AR, BCR, C3, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD24, CD38, CD44, CD47, CD83, CLEC10A, CLEC7A, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, DARC, FAS, FCGR1A, FCGR2B, FCGR3A, FHL2, FPR1, HCK, ICAM1, IGF1, IGF2, IGFBP5, IL6, IL13RA1, IL2RG, IL4R, INHBB, IRF8, ITGAM, ITGB2, ITGB3, JAK2, KITLG, LAMA2, LBP, LCP2, LEPR, LGALS3, LGALS3BP, LOX, MARCO, MSN, MSR1, NFE2L2, NRP1, OLR1, PDLIM2, PENK, PGF, PLAUR, PLCB1, PTPRF, PVR, RAMP1, RTN4RL2, S100A9, SDC1, SDC4, SELE, SELL, SELP, SEMA3B, SERPINE1, SERPINF1, SERPING1, SYK, TFRC, THBS2, TLR2, VCAM1, VEGFA, VTN	92
Cell-To-Cell Signaling and Interaction	binding	binding of cells	2.68E-16	ADIPOQ, APOE, AR, BCR, C3, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD24, CD38, CD44, CD47, CD83, CLEC10A, CLEC7A, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, DARC, FAS, FCGR1A, FCGR2B, FCGR3A, FHL2, FPR1, HCK, ICAM1, IGF1, IGF2, IGFBP5, IL6, IL13RA1, IL2RG, IL4R, INHBB, IRF8, ITGAM, ITGB2, ITGB3, JAK2, KITLG, LAMA2, LBP, LCP2, LEPR, LGALS3, LGALS3BP, LOX, MARCO, MSN, MSR1, NFE2L2, NRP1, OLR1, PDLIM2, PENK, PGF, PLAUR, PLCB1, PTPRF, PTX3, PVR, RAMP1, RTN4RL2, S100A9, SDC1, SDC4, SELE, SELL, SELP, SEMA3B, SERPINE1, SERPINF1, SERPING1, SYK, TFRC, TGM2, THBS2, TLR2, VCAM1, VEGFA, VTN	94
Cell-To-Cell Signaling and Interaction	binding	binding of normal cells	1.01E-14	ADIPOQ, APOE, C3, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD24, CD44, CD47, CD83, CLEC10A, CSF1, CX3CL1, CXCL1, CXCL2, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, DARC, FAS, FCGR1A, FCGR2B, FCGR3A, FPR1, HCK, ICAM1, IGF1, IGF2, IL6, IRF8, ITGAM, ITGB2, ITGB3, KITLG, LAMA2, LBP, LCP2, LEPR, LGALS3BP, MARCO, MSN, MSR1, NFE2L2, NRP1, PENK, PGF, PLAUR, PLCB1, PTPRF, RTN4RL2, S100A9, SELE, SELL, SELP, SERPINE1, SYK, THBS2, TLR2, VCAM1, VEGFA, VTN	67
Cell-To-Cell Signaling and Interaction	binding	binding of leukocytes	1.34E-14	ADIPOQ, APOE, C3, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CD47, CD83, CLEC10A, CSF1, CX3CL1, CXCL2, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, FAS, FCGR1A, FCGR2B, FCGR3A, FPR1, HCK, ICAM1, ITGAM, ITGB2, ITGB3, KITLG, LBP, LCP2, MARCO, MSN, MSR1, PENK, S100A9, SELE, SELL, SELP, VCAM1, VTN	45
Cell-To-Cell Signaling and Interaction	binding	binding of blood cells	8.42E-14	ADIPOQ, APOE, C3, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CD24, CD44, CD47, CD83, CLEC10A, CSF1, CX3CL1, CXCL2, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, DARC, FAS, FCGR1A, FCGR2B, FCGR3A, FPR1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, KITLG, LBP, LCP2, MARCO, MSN, MSR1, NFE2L2, PENK, S100A9, SELE, SELL, SELP, TLR2, VCAM1, VTN	50
Cell-To-Cell Signaling and Interaction	binding	binding of cell lines	3.74E-12	APOE, AR, BCR, CD14, CD24, CD38, CD44, CD47, CLEC7A, CSF1, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, FAS, FHL2, ICAM1, IGF1, IGF2, IGFBP5, IL6, IL13RA1, IL2RG, IL4R, INHBB, ITGAM, ITGB2, ITGB3, JAK2, KITLG, LBP, LEPR, LGALS3, LGALS3BP, LOX, MARCO, MSR1, NRP1, OLR1, PDLIM2, PLAUR, PVR, RAMP1, SDC1, SDC4, SELE, SELL, SELP, SEMA3B, SERPINE1, SERPINF1, SERPING1, TFRC, VCAM1, VEGFA, VTN	59
Cell-To-Cell Signaling and Interaction	binding	binding of endothelial cells	5.53E-10	C3, CCL5, CCR1, CD44, CD47, CX3CL1, CXCL11, CXCL12, DARC, ICAM1, IL6, ITGAM, ITGB2, ITGB3, LEPR, NRP1, PGF, SELE, SELL, SERPINE1, VCAM1, VEGFA	22
Cell-To-Cell Signaling and Interaction	binding	binding of tumor cell lines	1.01E-09	AR, CD14, CD24, CD44, CD47, CLEC7A, CSF1, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, FAS, IGF1, IGF2, IGFBP5, IL6, ITGAM, ITGB2, ITGB3, JAK2, LGALS3, LGALS3BP, NRP1, PDLIM2, PVR, RAMP1, SELL, SELP, SEMA3B, SERPINE1, SERPINF1, SERPING1, TFRC, VCAM1, VEGFA, VTN	38
Cell-To-Cell Signaling and Interaction	binding	binding of phagocytes	3.09E-09	ADIPOQ, APOE, C3, CD14, CLEC10A, CSF1, CXCL2, CXCL10, FCGR1A, FPR1, HCK, ICAM1, ITGAM, ITGB2, LBP, MARCO, MSN, MSR1, S100A9, SELL, SELP, VTN	22
Cell-To-Cell Signaling and Interaction	binding	binding of lymphatic system cells	1.61E-08	C3, CCL5, CCL7, CD47, CXCL2, CXCL10, CXCL12, HCK, ICAM1, ITGAM, ITGB2, ITGB3, KITLG, LBP, S100A9, SELE, SELL, SELP, SYK, VCAM1	20
Cell-To-Cell Signaling and Interaction	binding	binding of mononuclear leukocytes	4.69E-08	CBLB, CCL5, CCL13, CCL19, CCR1, CD44, CD47, CLEC10A, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, FAS, FCGR3A, ICAM1, ITGAM, ITGB2, LBP, LCP2, MSN, PENK, SELE, SELL, VCAM1	25
Cell-To-Cell Signaling and Interaction	binding	binding of bone marrow cells	2.14E-07	C3, CCL5, CCL7, CXCL2, CXCL10, CXCL12, HCK, ICAM1, ITGAM, ITGB2, ITGB3, KITLG, LBP, S100A9, SELE, SELL, SELP, VCAM1	18
Cell-To-Cell Signaling and Interaction	binding	binding of granulocytes	4.41E-07	C3, CCL5, CCL7, CXCL2, CXCL10, HCK, ICAM1, ITGAM, ITGB2, KITLG, LBP, S100A9, SELE, SELL, SELP, VCAM1	16
Cell-To-Cell Signaling and Interaction	binding	binding of fibroblast cell lines	1.33E-06	CD44, CXCL2, FHL2, ICAM1, IGF1, IL6, IL13RA1, IL2RG, ITGAM, ITGB2, LOX, PLAUR	12
Cell-To-Cell Signaling and Interaction	binding	binding of lymphocytes	2.38E-06	CBLB, CCL5, CCL19, CCR1, CD44, CD47, CLEC10A, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, FAS, FCGR3A, ICAM1, ITGB2, LCP2, MSN, SELL, VCAM1	20
Cell-To-Cell Signaling and Interaction	binding	binding of tumor cells	2.55E-06	CD14, CD24, CD44, CD47, CXCL12, ITGB3, PLAUR, SELP, SEMA3B, VCAM1	10
Cell-To-Cell Signaling and Interaction	activation	activation of cells	7.00E-15	ACSL5, ADA, ADAM9, ADIPOQ, APOE, B2M, BCL3, BCL2A1, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL6, CCL7, CCL13, CD14, CD24, CD38, CD44, CD47, CD83, CDKN1A, CDKN1C, CEBPB, CENPF, CISH, CLEC4E, CLEC7A, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL12, EFNB2, EGFR, EIF2AK2, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, GNA13, GOLSYN, HCK, HCN1, HLA-C, HMOX1, HSPA4, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRAK3, ITGAM, ITGB2, ITGB3, ITGB6, KITLG, LBP, LCN2, LCP2, LGALS3, LIFR, LILRA6, MBP, MGST1, MMP14, MYD88, NFKB2, NTF3, NTS, PENK, PLAUR, PLTP, PLXNB1, PSMB8, PSMB9, PSME2, RAC1, RAMP1, REG3G, RELB, RETNLA, S100A9, SAA1, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, SOST, STAT1, STAT3, SYK, TGM2, TIMP1, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA, VTN	118
Cell-To-Cell Signaling and Interaction	activation	activation of normal cells	5.68E-14	ADA, ADAM9, ADIPOQ, APOE, B2M, BCL3, BCL2A1, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL6, CCL7, CCL13, CD14, CD38, CD44, CD47, CD83, CDKN1A, CDKN1C, CENPF, CISH, CLEC4E, CLEC7A, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL12, EFNB2, EGFR, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, GNA13, GOLSYN, HCK, HCN1, HLA-C, HMOX1, HSPA4, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IRAK3, ITGAM, ITGB2, ITGB3, ITGB6, KITLG, LBP, LCN2, LCP2, LGALS3, LIFR, LILRA6, MBP, MGST1, MMP14, MYD88, NFKB2, NTF3, NTS, PENK, PLTP, PLXNB1, PSMB8, PSMB9, PSME2, REG3G, RELB, RETNLA, S100A9, SAA1, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, SOST, STAT1, STAT3, TGM2, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA, VTN	107
Cell-To-Cell Signaling and Interaction	activation	activation of eukaryotic cells	7.95E-14	ACSL5, ADA, ADAM9, ADIPOQ, APOE, B2M, BCL3, BCL2A1, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL6, CCL7, CCL13, CD14, CD38, CD44, CD47, CD83, CDKN1A, CDKN1C, CEBPB, CENPF, CISH, CLEC4E, CLEC7A, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL12, EFNB2, EGFR, EIF2AK2, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, GNA13, GOLSYN, HCK, HCN1, HLA-C, HMOX1, HSPA4, ICAM1, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IRAK3, ITGAM, ITGB2, ITGB3, ITGB6, KITLG, LBP, LCN2, LCP2, LGALS3, LIFR, LILRA6, MBP, MGST1, MMP14, MYD88, NFKB2, NTF3, NTS, PENK, PLAUR, PLTP, PLXNB1, PSMB8, PSMB9, PSME2, RAMP1, REG3G, RELB, RETNLA, S100A9, SAA1, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, SOST, STAT1, STAT3, TGM2, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA, VTN	112
Cell-To-Cell Signaling and Interaction	activation	activation of leukocytes	1.67E-12	ADA, ADAM9, ADIPOQ, APOE, B2M, BCL3, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL7, CCL13, CD14, CD38, CD44, CD47, CD83, CDKN1A, CENPF, CISH, CLEC4E, CLEC7A, CSF1, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, CXCL12, EFNB2, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, HCK, HLA-C, HSPA4, ICAM1, IGF1, IGHM, IL6, IL33, IL1RN, ITGAM, ITGB2, ITGB6, KITLG, LBP, LCN2, LCP2, LILRA6, MBP, MGST1, MYD88, NFKB2, PENK, PLXNB1, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA	83
Cell-To-Cell Signaling and Interaction	activation	activation of blood cells	2.75E-12	ADA, ADAM9, ADIPOQ, APOE, B2M, BCL3, BCL2L1, BCR, C3, C4A, CBLB, CCL5, CCL7, CCL13, CD14, CD38, CD44, CD47, CD83, CDKN1A, CENPF, CISH, CLEC4E, CLEC7A, CSF1, CSF3, CX3CL1, CXCL1, CXCL3, CXCL6, CXCL9, CXCL12, EFNB2, ERAP1, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, GNA13, HCK, HLA-C, HSPA4, ICAM1, IGF1, IGHM, IL6, IL33, IL1RN, ITGAM, ITGB2, ITGB3, ITGB6, KITLG, LBP, LCN2, LCP2, LIFR, LILRA6, MBP, MGST1, MYD88, NFKB2, PENK, PLXNB1, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAM1, VEGFA	87
Cell-To-Cell Signaling and Interaction	activation	activation of phagocytes	7.74E-11	ADIPOQ, APOE, C3, CCL5, CCL7, CCL13, CD14, CLEC4E, CSF1, CSF3, CXCL1, CXCL3, CXCL6, FCER1G, FPR1, FPR2, HCK, ICAM1, IGF1, IL6, IL1RN, ITGAM, ITGB6, LBP, LCN2, MYD88, REG3G, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	36
Cell-To-Cell Signaling and Interaction	activation	activation of antigen presenting cells	1.76E-09	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, ERAP1, FAS, FCER1G, FCGR1A, HCK, HLA-C, ICAM1, IGF1, IGHM, IL6, ITGB6, LBP, MYD88, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TNFRSF1A, TNFSF10, VEGFA	36
Cell-To-Cell Signaling and Interaction	activation	activation of lymphatic system cells	2.18E-09	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, FPR1, FPR2, IL6, IL33, IL1RN, ITGAM, ITGB2, KITLG, LCN2, LIFR, MYD88, PLTP, SELE, SELL, VCAM1	25
Cell-To-Cell Signaling and Interaction	activation	activation of bone marrow cells	3.72E-09	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, FPR1, FPR2, IL6, IL33, IL1RN, ITGAM, ITGB2, KITLG, LCN2, LIFR, MYD88, SELE, SELL, VCAM1	24
Cell-To-Cell Signaling and Interaction	activation	activation of granulocytes	4.71E-09	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, CXCL9, FPR1, FPR2, IL6, IL33, IL1RN, ITGAM, ITGB2, KITLG, LCN2, MYD88, SELE, SELL, VCAM1	23
Cell-To-Cell Signaling and Interaction	activation	activation of neutrophils	2.88E-07	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, FPR1, FPR2, IL6, IL1RN, ITGAM, LCN2, MYD88, SELE, SELL	18
Cell-To-Cell Signaling and Interaction	activation	activation of macrophages	1.21E-06	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, FCER1G, HCK, ICAM1, IGF1, IL6, ITGB6, LBP, MYD88, REG3G, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	23
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of normal cells	2.56E-14	APOE, C3, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, DARC, EFNB2, EGFR, FCGR2B, HDC, HIF1A, ICAM1, IL6, IL1RN, ITGAM, ITGB2, KITLG, LGALS3, MYD88, NFE2L2, PGF, RAC1, SELE, SELL, SELP, SERPINE1, THBS2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA	49
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of leukocytes	9.54E-13	APOE, C3, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, DARC, FCGR2B, HDC, HIF1A, ICAM1, IL6, IL1RN, ITGAM, ITGB2, KITLG, MYD88, NFE2L2, RAC1, SELE, SELL, SELP, SERPINE1, THBS2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1	43
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of blood cells	1.06E-12	APOE, C3, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD14, CD44, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, DARC, FCGR2B, HDC, HIF1A, ICAM1, IL6, IL1RN, ITGAM, ITGB2, KITLG, MYD88, NFE2L2, RAC1, SELE, SELL, SELP, SERPINE1, THBS2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1, VEGFA	44
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of phagocytes	4.17E-10	APOE, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CSF1, CXCL1, CXCL2, CXCL3, CXCL10, CXCL12, DARC, FCGR2B, ICAM1, IL1RN, ITGAM, ITGB2, MYD88, NFE2L2, RAC1, SERPINE1, THBS2, TLR2, TNFRSF1A, TRAF3IP2, UCP2, VCAM1	30
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of antigen presenting cells	4.32E-08	APOE, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CXCL3, CXCL10, CXCL12, ICAM1, ITGB2, MYD88, NFE2L2, THBS2, TLR2, UCP2, VCAM1	18
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of lymphatic system cells	4.58E-08	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CSF1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL13, DARC, FCGR2B, IL1RN, ITGAM, KITLG, MYD88, RAC1, SELE, SELP, SERPINE1, TNFRSF1A, TRAF3IP2, VCAM1	27
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of granulocytes	9.94E-08	C3, CCL5, CCL7, CCL13, CCL19, CCR1, CD14, CSF1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, DARC, FCGR2B, IL1RN, ITGAM, KITLG, MYD88, RAC1, SELE, SELP, SERPINE1, TNFRSF1A, TRAF3IP2, VCAM1	26
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of mononuclear leukocytes	5.03E-07	APOE, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, IL6, MYD88, VCAM1	19
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of macrophages	1.01E-06	APOE, CCL7, CCL13, CCR1, CD44, CXCL10, CXCL12, ICAM1, ITGB2, MYD88, NFE2L2, THBS2, TLR2, UCP2, VCAM1	15
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of lymphocytes	1.15E-06	CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CX3CL1, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, MYD88, VCAM1	17
Cell-To-Cell Signaling and Interaction	recruitment	recruitment of T lymphocytes	3.19E-06	CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, VCAM1	14
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of eukaryotic cells	1.23E-13	ADAM9, APOE, BCR, C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CSF3, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, CXCR4, EGFR, EPHA4, EPHB1, FAS, FBLN5, FCER1G, FPR2, FXYD5, HCK, HIF1A, ICAM1, IGF1, IGHM, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS8, LGALS9, LGALS3BP, LY6A, MAN2A1, MAP3K8, MARCO, MMP14, MSR1, MYC, MYD88, MYO6, NCAM1, NEO1, NFKBIA, NFKBIB, OLR1, PCDH12, PLAUR, PLTP, POSTN, PTX3, RAC1, RAC2, RASGRP2, RCAN1, RND1, S100A8, S100A9, SAA1, SDC1, SELE, SELL, SELP, SEMA3F, SERPINE1, SERPING1, STAT3, SYK, TGFBI, TGM2, THBS2, TIMP1, TLR2, VCAM1, VCAN, VEGFA, VEGFC, VTN	92
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of normal cells	5.76E-13	APOE, BCR, C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, EPHA4, FAS, FBLN5, FCER1G, FPR2, HCK, HIF1A, ICAM1, IGHM, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LY6A, MAN2A1, MARCO, MYD88, NCAM1, NEO1, NFKBIA, NFKBIB, OLR1, PLAUR, PLTP, POSTN, PTX3, RAC1, RAC2, RASGRP2, RND1, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPINE1, SERPING1, STAT3, SYK, THBS2, TLR2, VCAM1, VEGFA, VTN	69
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of blood cells	2.43E-12	C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, EPHA4, FAS, FCER1G, FPR2, HCK, ICAM1, IGHM, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LY6A, MARCO, MYD88, NFKBIA, NFKBIB, OLR1, PLAUR, PLTP, PTX3, RAC1, RAC2, RASGRP2, S100A8, S100A9, SAA1, SELE, SELL, SELP, SERPING1, SYK, THBS2, TLR2, VCAM1, VEGFA	56
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of leukocytes	5.18E-12	C3, CBLB, CCL5, CCL13, CCL19, CD24, CD44, CD47, CSF1, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL11, CXCL12, FAS, FPR2, HCK, ICAM1, IL6, IL33, IRGM, ITGAM, ITGB2, ITGB3, KITLG, LGALS3, LGALS9, LY6A, MARCO, MYD88, NFKBIA, NFKBIB, OLR1, PLAUR, PLTP, RAC1, RAC2, RASGRP2, S100A8, S100A9, SELE, SELL, SELP, SERPING1, SYK, THBS2, TLR2, VCAM1, VEGFA	50
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of cells	1.30E-09	ADAM9, APOE, BCR, C3, CBLB, CCL5, CCL13, CCL19, CCR1, CD24, CD38, CD44, CD47, CLEC7A, CSF1, CSF3, CX3CL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, CXCR4, EGFR, EPHA4, EPHB1, FAS, FBLN5, FCER1G, FPR2, FXYD5, HCK, HIF1A, ICAM1, IGF1, IGHM, IGSF1, IL6, IL33, IRGM, ISLR, ITGAM, ITGB2, ITGB3, ITGB6, ITGBL1, JAK2, JAM2, KITLG, LGALS3, LGALS8, LGALS9, LGALS3BP, LIMS1, LY6A, MAN2A1, MAP3K8, MARCO, MMP14, MMP15, MSR1, MYC, MYD88, MYO6, NCAM1, NEO1, NFKBIA, NFKBIB, NID2, OLR1, OPCML, PCDH12, PLAUR, PLTP, POSTN, PTPRF, PTX3, PVR, RAC1, RAC2, RASGRP2, RCAN1, RND1, S100A8, S100A9, SAA1, SDC1, SELE, SELL, SELP, SEMA3F, SEMA5A, SERPINE1, SERPING1, SHC1, ST8SIA4, STAT1, STAT3, SYK, TGFBI, TGM2, THBS2, TIMP1, TLR2, TNFAIP6, VCAM1, VCAN, VEGFA, VEGFC, VTN	112
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of cell lines	1.81E-08	ADAM9, C3, CCL13, CD24, CD44, CD47, CSF3, CX3CL1, CXCL2, CXCL10, CXCL12, CXCR4, EGFR, EPHB1, FXYD5, ICAM1, IGF1, IL6, ITGAM, ITGB2, ITGB3, LGALS3, LGALS8, LGALS9, LGALS3BP, MAP3K8, MMP14, MSR1, MYC, MYO6, NCAM1, NFKBIA, PCDH12, PLAUR, POSTN, RAC1, RASGRP2, RCAN1, SDC1, SELE, SELL, SELP, SEMA3F, SERPINE1, TGFBI, TGM2, TIMP1, TLR2, VCAM1, VCAN, VEGFA, VEGFC, VTN	53
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of lymphatic system cells	1.94E-08	APOE, C3, CD44, CXCL2, CXCL3, CXCL12, FPR2, HCK, ICAM1, IL33, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, PLAUR, PLTP, S100A8, S100A9, SELE, SELL, SELP, VCAM1	23
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of bone marrow cells	2.54E-08	C3, CD44, CXCL2, CXCL3, CXCL12, FPR2, HCK, ICAM1, IL33, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, PLAUR, PLTP, S100A8, S100A9, SELE, SELL, SELP, VCAM1	22
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of granulocytes	9.90E-08	C3, CD44, CXCL2, CXCL3, FPR2, HCK, ICAM1, IL33, ITGAM, ITGB2, ITGB3, LGALS3, LGALS9, PLAUR, PLTP, S100A8, S100A9, SELE, SELL, SELP, VCAM1	21
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of leukemia cells	2.48E-07	CD44, ICAM1, ITGB2, SELE, SELL, VCAM1	6
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of tumor cell lines	3.45E-07	ADAM9, CCL13, CD24, CD44, CD47, CX3CL1, CXCL2, CXCL10, CXCL12, CXCR4, EGFR, EPHB1, FXYD5, ICAM1, IGF1, IL6, ITGAM, ITGB2, ITGB3, LGALS3, LGALS8, MAP3K8, MMP14, MYO6, NCAM1, PLAUR, RAC1, RASGRP2, RCAN1, SDC1, SELE, SELP, SEMA3F, SERPINE1, TLR2, VCAM1, VCAN, VEGFA, VTN	39
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of cancer cells	8.59E-07	CD44, CD47, CXCL12, EGFR, ICAM1, IGF1, ITGB2, ITGB3, SELE, SELL, VCAM1, VTN	12
Cell-To-Cell Signaling and Interaction	adhesion	adhesion of endothelial cell lines	2.16E-06	CD44, CX3CL1, CXCL12, CXCR4, ICAM1, ITGAM, ITGB2, ITGB3, LGALS3, NFKBIA, PLAUR, RCAN1, SELE, SELP, TGFBI, TLR2, VCAM1, VEGFA, VEGFC	19
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of cells	1.38E-11	ADIPOQ, C3, CAPG, CD14, CD44, CD47, CLEC7A, COLEC12, CSF1, CSF3, CSF2RB, CXCL10, FAS, FCER1G, FCGR1A, FCGR2B, GULP1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, MARCO, MRC1L1, MSR1, MYC, MYD88, PTX3, RAC1, RAC2, SERPINE1, SLC11A1, SYK, TGM2, TLR2, TLR3	37
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of eukaryotic cells	4.58E-08	CD14, CD44, CD47, CSF1, CSF3, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MARCO, MRC1L1, MSR1, MYC, RAC1, RAC2, SERPINE1, SYK, TGM2, TLR2, TLR3	27
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of normal cells	2.52E-07	CD44, CD47, CSF1, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MSR1, RAC1, RAC2, SERPINE1, SYK, TGM2, TLR2, TLR3	22
Cell-To-Cell Signaling and Interaction	phagocytosis	phagocytosis of blood cells	1.07E-06	CD44, CD47, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MSR1, RAC1, RAC2, SERPINE1, SYK, TGM2	19
Cell-To-Cell Signaling and Interaction	response	response of eukaryotic cells	7.07E-08	CBLB, CCL5, CCL13, CCL19, CCR1, CD14, CD274, CLEC7A, CSF2RB, CXCL3, CXCL9, CXCL11, CXCL12, EGFR, FAS, FCGR2B, FPR1, HMOX1, ICAM1, IL6, IRAK2, IRAK3, ITGAM, MYD88, NFKB2, NTF3, PML, PSMB10, RELB, S100A8, S100A9, STAT3, TLR2, TLR3, TNFSF10	35
Cell-To-Cell Signaling and Interaction	response	response of cells	7.30E-08	APOE, AR, ARSB, B2M, CA3, CBLB, CCL5, CCL13, CCL19, CCR1, CD14, CD274, CLEC2D (includes EG:93694), CLEC7A, CSF2RB, CXCL3, CXCL9, CXCL11, CXCL12, EGFR, ERCC1, FAS, FCGR2B, FPR1, GCLM, GJA3, HLA-G, HMOX1, ICAM1, IFIH1, IL6, IL1R2, IRAK2, IRAK3, ITGAM, JAK2, LBP, LGALS3BP, LIFR, MAPT, MYD88, NCF1, NFKB2, NTF3, PML, PSMB10, RELB, S100A8, S100A9, SOCS2, SOCS3, STAT1, STAT2, STAT3, STC2, TCIRG1, TLR2, TLR3, TNFAIP3, TNFSF10, TULP4, TXNIP	62
Cell-To-Cell Signaling and Interaction	response	response of antigen presenting cells	1.26E-07	CCL5, CCL19, CD14, CLEC7A, CXCL12, IL6, ITGAM, MYD88, STAT3, TLR2, TLR3	11
Cell-To-Cell Signaling and Interaction	response	response of leukocytes	1.18E-06	CBLB, CCL5, CCL13, CCL19, CCR1, CD14, CD274, CLEC7A, CSF2RB, CXCL3, CXCL9, CXCL11, CXCL12, FCGR2B, FPR1, HMOX1, ICAM1, IL6, ITGAM, MYD88, NFKB2, PSMB10, RELB, STAT3, TLR2, TLR3	26
Cell-To-Cell Signaling and Interaction	response	response of normal cells	1.68E-06	CBLB, CCL5, CCL13, CCL19, CCR1, CD14, CD274, CLEC7A, CSF2RB, CXCL3, CXCL9, CXCL11, CXCL12, FAS, FCGR2B, FPR1, HMOX1, ICAM1, IL6, ITGAM, MYD88, NFKB2, NTF3, PSMB10, RELB, S100A8, S100A9, STAT3, TLR2, TLR3	30
Cell-To-Cell Signaling and Interaction	signaling	signaling of cells	2.45E-07	AR, BST2, CCL5, CCL7, CCL13, CCR1, CD14, CD24, CLEC7A, CXCL6, CXCL9, CXCL10, CXCL11, CXCL13, CXCL14, DDX58, ECE2, EFNB2, EFNB3, EGFR, EPHB1, FGF9, FGF12, FGF16, GJA3, IL6, IL2RG, ITGAM, ITGB2, JAK2, KITLG, KLF10, LBP, LCP2, MYD88, NAMPT, NRP1, NTF3, PCSK6, PGF, S100A9, SEMA3B, SEMA5A, STAT1, STC2, TLR2, TNFAIP6, TNFSF10, TRIM25, WNT5A	50
Cell-To-Cell Signaling and Interaction	communication	communication of cells	6.44E-07	AR, BST2, CCL5, CCL7, CCL13, CCR1, CD14, CD24, CD83, CLEC7A, CXCL6, CXCL9, CXCL10, CXCL11, CXCL13, CXCL14, DDX58, ECE2, EFNB2, EFNB3, EGFR, EPHB1, FGF9, FGF12, FGF16, GJA3, IL6, IL2RG, ITGAM, ITGB2, JAK2, KITLG, KLF10, LBP, LCP2, MYD88, NAMPT, NRP1, NTF3, PCSK6, PGF, S100A9, SEMA3B, SEMA5A, STAT1, STC2, TLR2, TNFAIP6, TNFSF10, TRIM25, WNT5A	51
Cell-To-Cell Signaling and Interaction	interaction	interaction of eukaryotic cells	6.64E-07	CBLB, CCL5, CCR1, CD14, CD47, CLEC10A, CXCL9, CXCL10, CXCL11, CXCL12, FABP7, FAS, ICAM1, ITGB2, KITLG, LCP2, LY6A, MSN, NRP1, PLCB1, SELP, TLR2, VCAM1	23
Cell-To-Cell Signaling and Interaction	interaction	interaction of leukocytes	1.35E-06	CBLB, CCL5, CCR1, CD14, CD47, CLEC10A, CXCL9, CXCL10, CXCL11, CXCL12, FAS, ICAM1, ITGB2, LCP2, LY6A, MSN, NRP1, PLCB1, SELP, TLR2, VCAM1	21
Cell-To-Cell Signaling and Interaction	interaction	interaction of normal cells	1.75E-06	CBLB, CCL5, CCR1, CD14, CD47, CLEC10A, CXCL9, CXCL10, CXCL11, CXCL12, FABP7, FAS, ICAM1, ITGB2, LCP2, LY6A, MSN, NRP1, PLCB1, SELP, TLR2, VCAM1	22
Cell-To-Cell Signaling and Interaction	attraction	attraction of blood cells	1.12E-06	C3, CCL5, CCL7, CCL13, CCL19, CX3CL1, CXCL1, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, KITLG	16
Cell-To-Cell Signaling and Interaction	attraction	attraction of cells	2.55E-06	C3, CCL5, CCL7, CCL13, CCL19, CX3CL1, CXCL1, CXCL3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL14, CXCL16, KITLG	17
Cell-To-Cell Signaling and Interaction	attachment	attachment of cells	1.47E-06	CD44, CSF1, CSF2RB, CXCL12, EGFR, EPHB1, ICAM1, IGF2, ITGAM, ITGB2, ITGB3, LOX, PLAUR, SELE, SELL, SERPINE1, TGFBI, TGM2, THBS2, TIMP2, VCAM1, VCAN, VTN	23
Cell-To-Cell Signaling and Interaction	attachment	attachment of eukaryotic cells	2.52E-06	CD44, CSF1, CSF2RB, CXCL12, EGFR, EPHB1, ICAM1, IGF2, ITGAM, ITGB2, ITGB3, LOX, PLAUR, SELE, SELL, SERPINE1, TGFBI, THBS2, TIMP2, VCAM1, VTN	21

Cellular Development	differentiation	differentiation of cells	3.97E-16	ACVR1B, ADA, ADIPOQ, ADRB1, APLNR, AR, ARL4A, ASPN, ATF3, ATP2B2, BCL3, BCL2A1, BCL2L1, BCR, BNIP3 (includes EG:12176), BTG1, BTG2, C5ORF13, CBR2, CCL5, CCL13, CCL19, CCND2, CCR1, CD14, CD24, CD38, CD44, CD83, CD300LF, CDKN1A, CDKN1C, CEBPB, CEBPD, CENPF, CHD1 (includes EG:1105), CLEC2D (includes EG:93694), CLEC4E, CLIC4, CSF1, CSF3, CSF2RB, CTSL2, CXCL10, CXCL12, CXCR4, CYTL1, DDIT3, EBF1, EGFR, EGLN3, EIF2AK2, EIF4E, ENC1, EPHA4, ESRRG, FABP7, FAS, FCER1G, FCGR2B, FGF7, FGF9, FHL2, FOSL2, GADD45B, GADD45G, GAS1, GJA3, GLUL, GNA13, HCLS1, HDAC9 (includes EG:9734), HEYL, HIF1A, HLA-C, HSD11B1, ICAM1, IFI16, IFITM2, IGF1, IGF2, IGFBP5, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRAK3, IRF1, IRF7, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, KLF10, LAMA2, LAMB3, LCN2, LCP2, LEPR, LGALS3, LIFR, LILRA6, LIMS1, LPIN1, LRG1, LRRC17, LTBP4, LY6A, MAFF, MAPT, MBP, MCC, MEF2C, MGP, MITF, MMP3, MYC, MYCN, MYCT1, MYD88, MYH11, MYO6, NCAM1, NFIA, NFKB2, NFKBIA, NID2, NR3C1, NR3C2, NRP1, NTF3, PBX1, PDE4D, PGF, PIM1, PIM3, PLAUR, PLCB1, PLSCR1, PML, PNP, POU3F1, PPARA, PPARGC1A, PRDM16, PRG4 (includes EG:10216), PRKAR2B, PRKD1, PTGFR, PTGR2, PTN, QKI, RCAN1, RELB, RETNLA, RGS2, RP6-213H19.1, RRAS2, RTN4, RUNX1T1, S100A8, S100A9, SACS, SELENBP1, SERPINF1, SHC1, SIAH2, SLC2A4, SMAD1, SOCS2, SOCS3, SOST, SOSTDC1, SOX4, SPHK1, SPRR1A, SRA1, ST8SIA4, STAT1, STAT3, STMN2, SYK, TCF21, TCF23, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TNFRSF1A, TNFSF10, TXNIP, VCAN, VEGFA, VEGFC, VTN, WIF1, WNT5A, XDH, ZFP36	208
Cellular Development	differentiation	differentiation of blood cells	5.11E-12	ACVR1B, ADA, ADIPOQ, BCL3, BCL2A1, BCL2L1, BCR, BTG2, CCL13, CCL19, CCR1, CD14, CD24, CD83, CEBPB, CEBPD, CLEC4E, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, EBF1, EGFR, EIF4E, EPHA4, FAS, FCGR2B, GADD45G, HCLS1, HDAC9 (includes EG:9734), HIF1A, HLA-C, ICAM1, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, KLF10, LCN2, LCP2, LGALS3, LIFR, LILRA6, LRRC17, MBP, MYC, MYCN, MYCT1, MYD88, MYH11, NFKB2, NFKBIA, PGF, PLSCR1, PML, PNP, PRDM16, PRKD1, RELB, RUNX1T1, SHC1, SOCS3, SOX4, STAT1, STAT3, SYK, THBS2, TIMP1, TLR2, TNFRSF1A, TNFSF10, VEGFA, VEGFC, ZFP36	91
Cellular Development	differentiation	differentiation of cell lines	1.40E-11	ADIPOQ, ADRB1, ASPN, BCL2L1, BCR, BTG2, CBR2, CCND2, CD14, CD38, CDKN1A, CEBPB, CEBPD, CENPF, CHD1 (includes EG:1105), CSF1, CSF3, CSF2RB, CXCL10, CXCL12, CXCR4, DDIT3, EBF1, EGFR, EGLN3, ENC1, ESRRG, FABP7, FGF9, FHL2, HIF1A, HSD11B1, IFI16, IGF1, IGF2, IGFBP5, IL6, IL1RN, IRF1, ITGAM, ITGB3, JAK2, KITLG, LCP2, LEPR, LIFR, LPIN1, MCC, MEF2C, MGP, MYC, NCAM1, NID2, NR3C1, NR3C2, PBX1, PDE4D, PIM1, PIM3, PLAUR, PLCB1, PML, PRDM16, PRKAR2B, PTGR2, RETNLA, RGS2, RP6-213H19.1, RRAS2, RUNX1T1, S100A8, S100A9, SACS, SHC1, SMAD1, SOCS3, SOST, SOSTDC1, SPHK1, ST8SIA4, STAT1, STAT3, STMN2, TCF21, TCF23, TGM2, TIMP1, TNFRSF1A, VCAN, WNT5A	90
Cellular Development	differentiation	differentiation of leukocytes	1.44E-11	ADA, ADIPOQ, BCL3, BCL2A1, BCL2L1, BCR, CCL13, CCL19, CCR1, CD14, CD24, CD83, CEBPB, CEBPD, CLEC4E, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, EBF1, EIF4E, EPHA4, FAS, FCGR2B, GADD45G, HDAC9 (includes EG:9734), HLA-C, ICAM1, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, LIFR, LILRA6, MBP, MYC, MYCN, MYD88, MYH11, NFKB2, NFKBIA, PGF, PLSCR1, PML, PNP, PRDM16, PRKD1, RELB, RUNX1T1, SHC1, SOCS3, SOX4, STAT1, STAT3, SYK, TIMP1, TLR2, TNFRSF1A, TNFSF10, VEGFA, ZFP36	81
Cellular Development	differentiation	differentiation of connective tissue cells	5.35E-09	ADIPOQ, ADRB1, ARL4A, BNIP3 (includes EG:12176), CCL5, CD38, CD300LF, CEBPB, CLEC2D (includes EG:93694), CSF1, CYTL1, DDIT3, EBF1, EGFR, FAS, FCER1G, FGF9, FHL2, FOSL2, GADD45B, HSD11B1, IFI16, IGF1, IL6, IRAK3, JUNB, KITLG, KLF10, LAMB3, LPIN1, LRG1, LRRC17, LY6A, MEF2C, MGP, MITF, MMP3, MYC, PGF, PPARA, PPARGC1A, PRG4 (includes EG:10216), PTGFR, RETNLA, RGS2, RUNX1T1, SELENBP1, SERPINF1, SLC2A4, SMAD1, SOCS3, STAT1, TIMP1, TLR2, TLR3, VEGFA, WIF1, WNT5A	58
Cellular Development	differentiation	differentiation of leukemia cell lines	6.11E-08	BCL2L1, BCR, BTG2, CD38, CEBPB, CEBPD, CHD1 (includes EG:1105), CSF1, CSF3, CSF2RB, HIF1A, IL6, IL1RN, KITLG, LEPR, LIFR, MCC, MYC, NID2, PDE4D, PML, PRKAR2B, RP6-213H19.1, RUNX1T1, SACS, SOCS3, STAT1, STAT3, TIMP1	29
Cellular Development	differentiation	differentiation of tumor cell lines	7.90E-08	ADRB1, BCL2L1, BCR, BTG2, CD14, CD38, CDKN1A, CEBPB, CEBPD, CHD1 (includes EG:1105), CSF1, CSF3, CSF2RB, DDIT3, EGFR, FABP7, HIF1A, IFI16, IGF1, IGF2, IGFBP5, IL6, IL1RN, IRF1, ITGAM, KITLG, LEPR, LIFR, MCC, MEF2C, MYC, NCAM1, NID2, PBX1, PDE4D, PLAUR, PML, PRKAR2B, RP6-213H19.1, RRAS2, RUNX1T1, SACS, SMAD1, SOCS3, SPHK1, ST8SIA4, STAT1, STAT3, STMN2, TGM2, TIMP1, TNFRSF1A, VCAN	53
Cellular Development	differentiation	ifferentiation of mononuclear leukocyte	1.83E-07	ADA, BCL3, BCL2A1, BCR, CCL13, CCL19, CD14, CD24, CD83, CEBPB, CLEC4E, CSF1, CSF3, CXCL12, CXCR4, EBF1, EIF4E, EPHA4, FAS, FCGR2B, GADD45G, HDAC9 (includes EG:9734), HLA-C, ICAM1, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGB2, ITGB3, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MYC, MYCN, MYD88, PGF, PNP, PRKD1, RELB, SOCS3, SOX4, STAT1, STAT3, SYK, TLR2, TNFSF10, VEGFA	60
Cellular Development	differentiation	differentiation of lymphatic system cells	1.07E-06	ADIPOQ, BCL3, BCL2L1, BCR, CCR1, CD38, CEBPD, CSF1, CSF3, CSF2RB, EIF4E, FAS, FCER1G, IGF1, IL6, IRF8, JAK2, KITLG, LRRC17, MYC, MYH11, NFKB2, NFKBIA, PGF, PLSCR1, PML, PRDM16, RUNX1T1, SHC1, STAT3, THBS2, VEGFA, ZFP36	33
Cellular Development	differentiation	differentiation of adipocytes	2.72E-06	ADIPOQ, ADRB1, ARL4A, BNIP3 (includes EG:12176), CEBPB, DDIT3, EBF1, HSD11B1, IGF1, IL6, LAMB3, LPIN1, LRG1, MMP3, MYC, PPARA, PPARGC1A, PRG4 (includes EG:10216), PTGFR, RETNLA, RGS2, RUNX1T1, SELENBP1, SERPINF1, SLC2A4, TIMP1	26
Cellular Development	differentiation	differentiation of bone marrow cells	3.06E-06	ADIPOQ, BCL2L1, BCR, CCR1, CD38, CEBPD, CSF1, CSF3, CSF2RB, EIF4E, FAS, FCER1G, IGF1, IL6, IRF8, JAK2, KITLG, LRRC17, MYC, MYH11, NFKBIA, PGF, PLSCR1, PML, PRDM16, RUNX1T1, SHC1, STAT3, THBS2, VEGFA, ZFP36	31
Cellular Development	differentiation	differentiation of bone cell lines	3.12E-06	ASPN, CCND2, CDKN1A, CEBPB, CENPF, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, FGF9, IGF1, IL6, MEF2C, MYC, PRDM16, RGS2, RUNX1T1, SHC1, SOST, TIMP1, WNT5A	22
Cellular Development	differentiation	differentiation of myeloid cells	3.58E-06	ADIPOQ, BCL2L1, BCR, CCR1, CEBPD, CSF1, CSF3, CSF2RB, EIF4E, IGF1, IL6, IRF8, JAK2, KITLG, MYC, MYH11, NFKBIA, PLSCR1, PML, PRDM16, RUNX1T1, SHC1, STAT3, ZFP36	24
Cellular Development	differentiation	differentiation of leukocyte cell lines	4.19E-06	CCND2, CDKN1A, CEBPB, CENPF, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, IGF1, IL6, LCP2, MYC, PRDM16, RUNX1T1, SHC1, SOCS3, TIMP1, WNT5A	19
Cellular Development	developmental process	developmental process of leukocytes	4.83E-15	ADA, ADAR, ADIPOQ, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL5, CCL13, CCL19, CCR1, CD14, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CEBPD, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CSF2RB, CXCL3, CXCL10, CXCL11, CXCL12, CXCR4, EBF1, EIF4E, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HDAC9 (includes EG:9734), HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IFI16, IFIH1, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, LIFR, LILRA6, MBP, MSR1, MYC, MYCN, MYD88, MYH11, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PLSCR1, PML, PNP, PRDM16, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, RNASE1, RUNX1T1, SHC1, SLFN1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TIMP1, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC, ZFP36	127
Cellular Development	developmental process	developmental process of blood cells	9.91E-15	ACVR1B, ADA, ADAR, ADIPOQ, ADRB1, ANK1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, BTG1, BTG2, C3, CCL5, CCL13, CCL19, CCND2, CCR1, CD14, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CEBPD, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CSF2RB, CXCL3, CXCL10, CXCL11, CXCL12, CXCR4, EBF1, EGFR, EIF4E, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HCLS1, HDAC9 (includes EG:9734), HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IFI16, IFIH1, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, JAK2, JUNB, KITLG, KLF10, LCN2, LCP2, LGALS3, LIFR, LILRA6, LRRC17, MBP, MSR1, MYC, MYCN, MYCT1, MYD88, MYH11, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PLSCR1, PML, PNP, PRDM16, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, RNASE1, RUNX1T1, SHC1, SLFN1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TIMP1, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC, ZFP36	137
Cellular Development	developmental process	›pmental process of mononuclear leuk	3.07E-12	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL5, CCL13, CCL19, CD14, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CXCL11, CXCL12, CXCR4, EBF1, EIF4E, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HDAC9 (includes EG:9734), HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF7, IRF8, ITGAM, ITGB2, ITGB3, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYCN, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SLFN1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	107
Cellular Development	developmental process	developmental process of lymphocytes	1.73E-10	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, C3, CCL5, CCL13, CCL19, CD14, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HDAC9 (includes EG:9734), HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYCN, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SLFN1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	99
Cellular Development	developmental process	evelopmental process of T lymphocyte	7.08E-10	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BID, C3, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKBIA, NR3C1, PENK, PIM1, PNP, PRKD1, PSMB8, PSMB9, RAC1, RAC2, RCAN1, RELB, SHC1, SLFN1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA	87
Cellular Development	developmental process	›elopmental process of fibroblast cell li	1.69E-09	ADIPOQ, CBR2, CDKN1A, CEBPB, CSF2RB, DDIT3, EBF1, EGFR, EIF2AK2, ENC1, ERRFI1, ESRRG, FHL2, GADD45B, GADD45G, GBP2, HEY1, HRASLS, HSD11B1, IER3, IFI202B, IGF1, IL6, IRF1, JAK2, JUNB, LOX, LPIN1, MGP, MITF, MYC, MYH11, NFKBIA, NFKBIB, NR3C1, NR3C2, PIM3, PLAC8, PLAUR, PML, PRKAR2B, PTGR2, RAC1, RASGRP2, RETNLA, RGS2, SERPINE1, SHC1, SLFN1, SOSTDC1, SPHK1, STAT3, STEAP2, TFRC, WNT5A	55
Cellular Development	developmental process	evelopmental process of bone cell line	2.42E-08	ASPN, BCR, CBLB, CCL6, CCND2, CDKN1A, CEBPB, CENPF, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, FGF9, IGF1, IL6, IRF1, JAK2, KITLG, MEF2C, MYC, PIM1, PLAC8, PRDM16, RASGRP2, RGS2, RUNX1T1, SHC1, SOCS2, SOST, TIMP1, WNT5A	32
Cellular Development	developmental process	›elopmental process of leukemia cell li	2.78E-08	BCL2L1, BCR, BTG2, CCND2, CD38, CDKN1A, CEBPB, CEBPD, CHD1 (includes EG:1105), CSF1, CSF3, CSF2RB, FCER1G, HIF1A, IL6, IL1RN, KITLG, LEPR, LGALS3, LIFR, MCC, MYC, NID2, NR3C1, PDE4D, PML, PRKAR2B, RP6-213H19.1, RUNX1T1, SACS, SOCS3, STAT1, STAT3, TIMP1, TNFSF10, TXNIP, VEGFC	37
Cellular Development	developmental process	evelopmental process of tumor cell line	6.01E-08	ACSL5, ADRB1, ANTXR1, ANXA7, AR, ATF3, BCL2L1, BCR, BTG2, CCND2, CD14, CD38, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CHD1 (includes EG:1105), COL6A3, CSF1, CSF3, CSF2RB, CXCL1, CXCL12, CXCR4, CYP2B6, DDIT3, DNAJB4, EGFR, EIF4E, EMILIN2, ENC1, ENTPD5, ESRRG, FABP7, FBLN5, FCER1G, FGF7, FKBP5, HIF1A, HMOX1, IER3, IFI16, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IRF1, ITGAM, JAK2, KIF13A, KITLG, LEPR, LGALS3, LIFR, LOX, MCC, MEF2C, MMP14, MYC, NCAM1, NEO1, NFKBIB, NID2, NOV, NR3C1, NTS, NUB1, NUBP1, OGFR, PBX1, PDE4D, PDLIM4, PENK, PIM1, PLAUR, PML, POSTN, PRDM16, PRKAR2B, PRKD1, PTN, RAC1, RASD1, RP6-213H19.1, RRAD, RRAS2, RUNX1T1, SACS, SEMA3B, SERPINE1, SGMS1, SMAD1, SOCS3, SPHK1, ST8SIA4, STAT1, STAT3, STEAP2, STMN2, TGM2, TIMP1, TNFRSF1A, TNFSF10, TRIM21, TSPAN13, TXNIP, VCAN, VEGFA, VEGFC, WIF1, WNT5A	116
Cellular Development	developmental process	›pmental process of antigen presentin	1.04E-07	BCL3, BCR, CCL5, CCL13, CCL19, CD44, CD83, CSF1, CSF3, CSF2RB, FAS, FCGR2B, IFIH1, IL6, IL1RN, IRF1, IRF7, IRF8, ITGB3, ITGB6, KITLG, LIFR, LILRA6, MYD88, NFKB2, NFKBIA, RELB, RNASE1, SOCS3, STAT1, STAT3, TIMP1, TLR2, TLR3, TNFRSF1A, TNFSF10	36
Cellular Development	developmental process	›elopmental process of leukocyte cell li	1.13E-07	BCR, CBLB, CCL6, CCND2, CDKN1A, CEBPB, CENPF, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, EGFR, GADD45B, GADD45G, IGF1, IL6, IL2RG, IRF1, JAK2, KITLG, LCP2, MYC, PIM1, PLAC8, PML, PRDM16, RASGRP2, RUNX1T1, SHC1, SOCS2, SOCS3, SYK, TIMP1, WNT5A	35
Cellular Development	developmental process	developmental process of tumor cells	1.40E-07	APCDD1, BCR, CACNA2D2, CD38, CD44, CDKN1A, CEBPB, CNKSR1, CSF1, CSF3, CXCL3, DDIT3, FAS, HIF1A, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, INHBB, ITGB3, LGALS3, MYC, NRP1, PDE4D, PML, RCAN1, RUNX1T1, SEMA3B, STAT1, STAT3, TIMP2, TNFSF10, VEGFA	36
Cellular Development	developmental process	developmental process of osteoclasts	1.41E-07	CCL5, CD300LF, CLEC2D (includes EG:93694), CSF1, CXCL11, FCER1G, FHL2, IGF1, IL6, IRAK3, JUNB, KITLG, KLF10, LRRC17, LY6A, MITF, NFKB2, PGF, SERPINF1, SOCS3, STAT1, TLR2, TLR3, TNFSF10, VEGFA	25
Cellular Development	developmental process	›elopmental process of bone marrow c	4.26E-07	ADAR, ADIPOQ, BCL2L1, BCR, CCND2, CCR1, CD38, CD44, CDKN1A, CEBPD, CSF1, CSF3, CSF2RB, CXCL3, CXCL10, CXCL12, CXCR4, EGFR, EIF4E, FAS, FCER1G, IGF1, IL6, IL1RN, IRF8, JAK2, KITLG, LRRC17, LY6A, MYC, MYH11, NFKBIA, PGF, PLSCR1, PML, PRDM16, RUNX1T1, SHC1, STAT3, THBS2, VEGFA, ZFP36	42
Cellular Development	developmental process	evelopmental process of endothelial ce	1.40E-06	ANGPTL4, BTG1, CD44, COMP, CSF1, CXCL1, CXCL2, CXCL10, EFNB2, HIF1A, IGF1, IL6, IL4R, MEOX2, MGP, NRP1, OLR1, PIM1, PPARA, RCAN1, SERPINE1, SERPINF1, TIMP2, VCAM1, VEGFA, VEGFC	26
Cellular Development	developmental process	levelopmental process of dendritic cell	1.45E-06	BCL3, CCL5, CCL13, CCL19, CD44, CD83, CSF1, FAS, FCGR2B, IFIH1, IL6, IRF1, IRF8, ITGB6, KITLG, LILRA6, MYD88, NFKB2, RELB, RNASE1, STAT1, STAT3, TLR2, TLR3, TNFRSF1A	25
Cellular Development	developmental process	developmental process of muscle cells	2.22E-06	APLNR, CDKN1A, CEBPD, CENPF, EGFR, FOSL2, HEYL, HMOX1, IFI16, IGF1, IGF2, IGFBP5, IL6, JPH2, LAMA2, LIMS1, LOX, MEF2C, MGP, MMP14, MYC, MYH11, NCAM1, NTF3, PIM1, PPARA, PRRX1, QKI, RCAN1, SDC1, SHC1, SMAD1, SMYD1, SOCS3, STAT1, TGM2, TNFRSF1A, VCAM1	38
Cellular Development	development	development of leukocytes	1.25E-12	ADA, ADAR, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CXCL11, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	99
Cellular Development	development	levelopment of mononuclear leukocyte	3.21E-12	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CXCL11, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	96
Cellular Development	development	development of blood cells	3.56E-12	ADA, ADAR, ADRB1, ANK1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CSF1, CSF3, CXCL11, CXCL12, CXCR4, EBF1, EGFR, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	101
Cellular Development	development	development of lymphocytes	3.00E-11	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EBF1, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, PTPN2, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, VEGFC	93
Cellular Development	development	T cell development	3.65E-10	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKBIA, NR3C1, PENK, PIM1, PNP, PRKD1, PSMB8, PSMB9, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA	85
Cellular Development	development	development of cells	4.60E-09	ADA, ADAR, ADRB1, ANGPTL2, ANK1, ANTXR1, APOE, AR, ATF3, ATP2B2, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST1, CAPG, CCL5, CCL7, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CDKN1C, CEBPB, CENPF, CFLAR, CHEK2, CLEC10A, CLEC4E, COMP, CSF1, CSF3, CX3CL1, CXCL2, CXCL11, CXCL12, CXCR4, EBF1, EBF3, EFNB2, EGFR, EIF4E, EPHA4, ERCC1, FABP7, FAS, FBXW7, FCER1G, FCGR2B, FGD4, FGF7, FOSL2, GADD45G, GNA13, HCK, HEY1, HIF1A, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IFI16, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, INHBB, IRF1, IRF8, ITGA8 (includes EG:8516), ITGAM, ITGB2, ITGB3, JAK2, JPH2, JUNB, KIF6, KITLG, KLF10, LAMA2, LCN2, LCP2, LGALS3, LGALS8, LIFR, LIMS1, LOX, LPXN, MBP, MEOX2, MITF, MSR1, MYC, MYD88, MYH11, NCAM1, NFE2L2, NFKB2, NFKBIA, NR3C1, NTF3, PENK, PGF, PIM1, PLAUR, PLXNB1, PML, PNP, POU3F1, PPARA, PRKD1, PSMB8, PSMB9, PTN, PTPN2, PVR, RAC1, RAC2, RCAN1, RELB, RRAD, RTN4, SDC1, SDC4, SELL, SEPT4, SERPINA3, SERPINE1, SHC1, SHROOM2, SNAI2, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, SYNE2, SYNM, TAPBP, TGFBI, TGM2, THBS2, TIMP2, TIPARP, TLR2, TLR3, TNFRSF1A, TNFSF10, TSPAN13, VCAM1, VCAN, VEGFA, VEGFC, VTN	168
Cellular Development	cell death	cell death of T lymphocytes	1.11E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CLEC10A, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IDO1, IER3, IGF1, IGHM, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TNFRSF1A, TNFSF10	48
Cellular Development	apoptosis	apoptosis of T lymphocytes	2.70E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IER3, IGF1, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10	43
Cellular Development	growth	growth of tumor cells	3.43E-06	APCDD1, CACNA2D2, CD44, CDKN1A, CNKSR1, CSF1, CSF3, CXCL3, DDIT3, FAS, HIF1A, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, INHBB, ITGB3, LGALS3, MYC, NRP1, RCAN1, SEMA3B, STAT1, STAT3, TIMP2, TNFSF10, VEGFA	30
Organismal Survival	survival	survival of mammalia	2.56E-15	ACTG2 (includes EG:72), APOBEC1, APOE, AQP1, AR, BCL2A1, BCL2L1, BCR, BID, C3, CCL13, CCND2, CCR1, CD14, CD44, CDKN1A, CEBPB, CHEK2, COMP, CSF1, CSF3, CXCL9, CXCL10, CXCL12, DHX58, EGFR, FAS, FBXW7, FCGR2B, FGL2, GNA13, HMOX1, HP, ICAM1, IDO1, IFI16, IGF1, IGF2, IGHM, IL6, IL1RN, IL4R, INHBB, IQGAP2, IRGM, ITGAM, ITGB6, KITLG, LBP, MARCKSL1, MARCO, MMP8, MT1E, MT1F, MX1, MYC, MYD88, NCF1, NFKBIA, NFKBIB, NQO2, NRP1, NTF3, P2RY1, PLTP, PNP, PTPRD, PTX3, SERPINE1, SERPING1, SHC1, SLC2A1, SOCS3, SOSTDC1, STAT1, STAT3, SYK, TAP1, TGM2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, ZC3H12A	85
Organismal Survival	survival	survival of mice	9.42E-15	ACTG2 (includes EG:72), APOBEC1, APOE, AQP1, AR, BCL2A1, BCL2L1, BCR, BID, C3, CCL13, CCND2, CCR1, CD14, CDKN1A, CEBPB, CHEK2, COMP, CSF1, CSF3, CXCL9, CXCL10, CXCL12, DHX58, EGFR, FAS, FCGR2B, FGL2, GNA13, HMOX1, HP, ICAM1, IDO1, IFI16, IGF1, IGF2, IGHM, IL6, IL1RN, IL4R, INHBB, IQGAP2, IRGM, ITGAM, KITLG, LBP, MARCKSL1, MARCO, MMP8, MT1E, MT1F, MX1, MYC, MYD88, NCF1, NFKBIA, NFKBIB, NQO2, NRP1, NTF3, P2RY1, PLTP, PNP, PTPRD, PTX3, SERPING1, SHC1, SLC2A1, SOCS3, SOSTDC1, STAT1, STAT3, TAP1, TGM2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA, ZC3H12A	80
Organismal Survival	death	death of mice	1.83E-09	ABCC9, ADA, ADAR, ADH1C (includes EG:126), ADRB1, APOE, ARG1, ASPH, B2M, BCL2A1, BCL2L1, BID, C3, C4A, CA4, CA14, CACNB2, CBLB, CCL13, CCND2, CCR1, CD14, CD44, CD274, CDKN1A, CEBPB, CEBPD, CFB, CFLAR, CSF1, CTSL2, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, DDX58, DNMT3A, EFNB2, EGLN3, FAS, FBXW7, FCER1G, FCGR2B, FGF7, GCH1, GNA13, GUCY1B3, HAMP, HIF1A, HIST1H1C, HMOX1, HP, IFI47, IGF1, IGF2, IGFBP5, IGTP, IL6, IL1RN, IRAK3, IRF8, IRF9, IRGM, ITGAM, ITGB3, JAK2, LCP2, LIFR, LIMS1, LOX, LRP8, LY6E, MAFF, MAN2A1, MAP3K8, MARCKSL1, MEF2C, MRC1L1, MSR1, MT1E, MT1F, MTHFD2, MYC, MYCN, MYD88, MYL7, NFE2L2, NFIA, NFKB2, NFKBIA, NFKBIB, NR3C1, NR3C2, NRP1, NTF3, PBX1, PCSK6, PIAS2, POSTN, POU3F1, PPP1R3C, PTPN2, RAC1, RECK, RELB, SDC4, SERPINE1, SERPING1, SLC2A1, SLC5A3, SMAD1, SOCS3, ST8SIA4, STAT1, STAT2, STAT3, TBK1, TGM2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TNIP1, TPM3, UBD, USP18, VCAM1, VEGFA, VEGFC	131
Organismal Survival	death	death of mammalia	2.24E-09	ABCC9, ADA, ADAR, ADH1C (includes EG:126), ADRB1, APOE, ARG1, ASPH, B2M, BCL2A1, BCL2L1, BID, C3, C4A, CA4, CA14, CACNB2, CBLB, CCL13, CCND2, CCR1, CD14, CD44, CD274, CDKN1A, CEBPB, CEBPD, CFB, CFLAR, CSF1, CSF3, CTSL2, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCR4, DDX58, DNMT3A, EFNB2, EGLN3, FAS, FBXW7, FCER1G, FCGR2B, FGF7, GCH1, GNA13, GUCY1B3, HAMP, HIF1A, HIST1H1C, HMOX1, HP, IFI47, IGF1, IGF2, IGFBP5, IGTP, IL6, IL1RN, IRAK3, IRF8, IRF9, IRGM, ITGAM, ITGB3, JAK2, LCP2, LIFR, LIMS1, LOX, LRP8, LY6E, MAFF, MAN2A1, MAP3K8, MARCKSL1, MEF2C, MRC1L1, MSR1, MT1E, MT1F, MTHFD2, MYC, MYCN, MYD88, MYL7, NFE2L2, NFIA, NFKB2, NFKBIA, NFKBIB, NR3C1, NR3C2, NRP1, NTF3, PBX1, PCSK6, PIAS2, POSTN, POU3F1, PPP1R3C, PTPN2, RAC1, RECK, RELB, SDC4, SERPINE1, SERPING1, SLC2A1, SLC5A3, SMAD1, SOCS3, ST8SIA4, STAT1, STAT2, STAT3, TBK1, TGM2, TLR2, TLR3, TNFAIP3, TNFRSF1A, TNIP1, TPM3, UBD, USP18, VCAM1, VEGFA, VEGFC	132
Organismal Survival	mortality	mortality of mice	2.38E-06	C3, C4A, CCL6, CCL13, CD14, CXCL3, CXCL10, HFE, HIF1A, HMOX1, IL6, IRAK3, ISG15, KITLG, MYD88, SERPING1, SOCS3, TGM2, TLR2, VEGFA	20
Organismal Injury and Abnormalities	fibrosis	fibrosis	4.58E-15	ADA, ADIPOQ, ADRB1, APOE, AR, ARG1, ATF3, BCR, BID, C3, CCL13, CSF3, CXCL6, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, CYP2E1, EGFR, EIF2AK2, FAS, FGF7, HCK, HIF1A, HLA-B, HP, ICAM1, IFI35, IFIT3, IFITM1, IGF1, IL6, IL1RN, IRF7, IRF9, JAK2, LGALS3, LIMS1, MMP14, MX1, MYD88, NCF1, NR3C2, OAS1, OAS2, P2RY1, PDE4B, PDE4D, PDE5A, PDE7A, PLSCR1, PNKD (includes EG:25953), POSTN, PPARA, PSMB9, SEMA7A, SERPINE1, STAT1, STAT2, STAT3, STMN2, TIMP1, TIMP2, TNFAIP3, TNFRSF1A, TRAF3IP2, VEGFA, VTN	69
Organismal Injury and Abnormalities	leukocytosis	leukocytosis of mammalia	9.91E-11	CCL13, CSF3, CXCL12, CXCR4, IL6, IL1RN, ITGB2, MYD88, NFKBIA, NFKBIB, PLSCR1, RAC2, S100A9, SELE, SELP, SOCS3, STAT3, TLR2	18
Organismal Injury and Abnormalities	leukocytosis	leukocytosis of mice	1.11E-10	CCL13, CSF3, CXCL12, CXCR4, IL6, ITGB2, MYD88, NFKBIA, NFKBIB, PLSCR1, RAC2, S100A9, SELE, SELP, SOCS3, STAT3, TLR2	17
Organismal Injury and Abnormalities	leukocytosis	leukocytosis	1.96E-09	ADA, CCL13, CSF3, CXCL12, CXCR4, IL6, IL1RN, ITGB2, MYD88, NFKBIA, NFKBIB, PLSCR1, RAC2, S100A9, SELE, SELL, SELP, SOCS3, STAT3, TLR2	20
Organismal Injury and Abnormalities	cytosis	cytosis	1.28E-10	ADA, APOE, AR, BCL3, BCR, CCL13, CSF3, CTSL2, CXCL12, CXCR4, GRK5, HAMP, HIF1A, IGF1, IL6, IL1RN, IL2RG, ITGB2, JAK2, MAPT, MYC, MYD88, NFKBIA, NFKBIB, PDE4B, PDE4D, PDE7A, PLSCR1, POU3F1, RAC1, RAC2, S100A9, SELE, SELL, SELP, SOCS3, STAT3, TLR2, TLR3, TUBA8, TUBA4A	41
Organismal Injury and Abnormalities	cytosis	cytosis of mammalia	1.87E-09	CCL13, CSF3, CTSL2, CXCL12, CXCR4, HIF1A, IGF1, IL6, IL1RN, ITGB2, MAPT, MYD88, NFKBIA, NFKBIB, PLSCR1, RAC2, S100A9, SELE, SELP, SOCS3, STAT3, TLR2, TLR3	23
Organismal Injury and Abnormalities	cytosis	cytosis of mice	1.33E-08	CCL13, CSF3, CTSL2, CXCL12, CXCR4, HIF1A, IL6, ITGB2, MAPT, MYD88, NFKBIA, NFKBIB, PLSCR1, RAC2, S100A9, SELE, SELP, SOCS3, STAT3, TLR2, TLR3	21
Organismal Injury and Abnormalities	damage	damage of organ	6.55E-10	ADIPOQ, C2, C3, C4A, CBLB, CCL13, CD44, CDKN1A, CFB, CXCL1, CXCL10, FAH, FAS, FCGR1A, HCK, HIF1A, HMOX1, HP, IGF1, IL6, IL1RN, ITGB2, ITGB6, MARCO, MT1E, MT1F, MYD88, NCF1, NFE2L2, PLAUR, PPARGC1A, PRKAA2, SAA2, SDC4, SELP, SERPINE1, STAT1, STAT3, TGM2, TIMP2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA	45
Organismal Injury and Abnormalities	damage	damage of liver	1.14E-07	C3, CBLB, CCL13, CD44, CDKN1A, CXCL1, CXCL10, FAS, HCK, IL6, ITGB2, MT1E, MT1F, MYD88, NCF1, NFE2L2, SAA2, SDC4, STAT1, TLR2, TLR3, TNFRSF1A, TNFSF10	23
Organismal Injury and Abnormalities	injury	injury of organ	1.04E-08	ADIPOQ, C2, CCL13, CDKN1A, CFB, CXCL1, CXCL10, FAS, FCGR1A, HMOX1, IGF1, IL6, ITGB2, ITGB6, MARCO, MYD88, NCF1, PLAUR, PRKAA2, SAA2, SDC4, SELP, STAT1, STAT3, TGM2, TIMP2, TLR2, TLR3, TNFRSF1A, VEGFA	30
Organismal Injury and Abnormalities	injury	injury of liver	1.39E-06	CCL13, CDKN1A, CXCL1, CXCL10, FAS, IL6, ITGB2, MYD88, NCF1, SAA2, SDC4, STAT1, TLR2, TLR3, TNFRSF1A	15
Organismal Injury and Abnormalities	neutrophilia	neutrophilia	7.08E-08	ADA, CSF3, CXCL12, IL6, IL1RN, ITGB2, MYD88, RAC2, S100A9, SELE, SELL, SOCS3, STAT3, TLR2	14
Organismal Injury and Abnormalities	neutrophilia	neutrophilia of mammalia	1.50E-06	CSF3, CXCL12, IL6, IL1RN, MYD88, RAC2, S100A9, SOCS3, STAT3, TLR2	10
Organismal Injury and Abnormalities	neutrophilia	neutrophilia of mice	3.06E-06	CSF3, CXCL12, IL6, MYD88, RAC2, S100A9, SOCS3, STAT3, TLR2	9
Organismal Injury and Abnormalities	organismal abnormalities	organismal abnormalities of mice	9.68E-08	ADIPOQ, AR, ARG1, BID, CCL13, CSF3, CTSL2, CXCL12, CXCR4, HIF1A, ICAM1, IL6, ITGB2, LIMS1, MAPT, MYD88, NFKBIA, NFKBIB, NR3C2, PBX1, PLSCR1, PNKD (includes EG:25953), PPARA, RAC2, S100A9, SELE, SELP, SERPINE1, SOCS3, STAT1, STAT3, TLR2, TLR3, VEGFA, VEGFC	35
Organismal Injury and Abnormalities	edema	edema	2.87E-07	ADRB1, AR, C1R, C1S, CA3, CA4, CA7, CA13, CA14, ICAM1, IL6, IRAK3, ITGB6, MYC, NR3C1, NR3C2, PBX1, PDE4B, PDE4D, PDE5A, PDE7A, PROCR, SELE, SELL, SELP, SERPINE1, SERPING1, SPHK1, TNFAIP6, UPP1, VEGFA, VEGFC, VTN	33
Organismal Injury and Abnormalities	bleeding	bleeding of skin	1.62E-06	ICAM1, ITGB3, S100A9, SELE, SELL, SELP	6
Cellular Growth and Proliferation	proliferation	proliferation of eukaryotic cells	1.21E-14	ADA, ADAMTS1, ADIPOQ, ANGPTL4, APLNR, APOBEC1, APOE, AQP7, AR, ARG1, ARID5B, BACH2 (includes EG:60468), BAK1, BCL2A1, BCL2L1, BCR, BID, BTG1, BTG2, C3, C5ORF13, C8ORF4, CAV2, CBLB, CCL5, CCL13, CCL19, CCND2, CCR1, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CFLAR, CHEK2, CISH, CLEC10A, CLEC2D (includes EG:93694), CLEC7A, CNN1, COL14A1, COL8A1, COMP, COMT, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CTSZ (includes EG:1522), CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCL16, CXCR4, CYP1B1, CYP7B1, DDX21, DNAJB4, EFNB2, EFNB3, EGFR, EIF2AK2, EIF4E, ERAP1, ERCC1, FABP7, FAS, FBLN5, FCER1G, FCGR2B, FCGR3A, FGF7, FGF9, FGL2, FKBP5, FOSL2, FPR2, GAS1, GRB14, GRK5, GUCY1A3, GUCY1B3, HCK, HEY1, HEYL, HIF1A, HLA-E, HMOX1, HSD11B1, ICAM1, IDO1, IER3, IFI16, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ISG15, ISG20, ITGAM, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LAMA2, LCN2, LCP2, LEPR, LGALS3, LGALS9, LIFR, LOX, LPIN1, LTBP4, LY6A, LY6C1, LY6E, MAPT, MBP, MGP, MMP3, MMP14, MSR1, MVP, MYC, MYCN, MYD88, MYH11, NAMPT, NCAM1, NCF1, NDUFS4, NFKB2, NFKBIA, NOV, NR3C1, NRP1, NTF3, PBX1, PDE4D, PENK, PFKFB3, PGF, PIK3AP1, PIM1, PLAC8, PLAUR, PLSCR1, PML, PNP, PPARA, PRDM16, PRKD1, PRRX1, PTN, PTP4A1, PTPN2, PTPRE, PTPRF, PTPRR, PTX3, PVR, RAC1, RAC2, RCAN1, RELB, RGS2, RP6-213H19.1, RUNX1T1, S100A8, S100A9, SAA1, SEMA3F, SERPINE1, SERPINF1, SHC1, SMAD1, SNAI2, SOCS2, SOCS3, SOX4, SPHK1, STAT1, STAT3, SYK, SYNM, TCIRG1, TFRC, TGM2, TIMP2, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, TPM3, TPMT, TRIM25, TSPO, TXNIP, VCAM1, VCAN, VEGFA, VEGFC, VSIG4, VTN, WIF1, WNT5A, XDH, ZFP36	231
Cellular Growth and Proliferation	proliferation	proliferation of normal cells	8.85E-14	ADA, ADAMTS1, ADIPOQ, ANGPTL4, APOBEC1, APOE, AQP7, AR, ARG1, BCL2A1, BCL2L1, BCR, BTG1, C3, C8ORF4, CAV2, CBLB, CCL5, CCL13, CCL19, CCND2, CCR1, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CFLAR, CISH, CLEC10A, CLEC2D (includes EG:93694), COL14A1, COL8A1, COMT, CSF1, CSF3, CSF2RB, CTSL2, CTSZ (includes EG:1522), CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCL16, CXCR4, CYP7B1, EFNB2, EFNB3, EGFR, EIF2AK2, EIF4E, ERAP1, FABP7, FAS, FBLN5, FCER1G, FCGR2B, FCGR3A, FGF7, FGF9, FGL2, FOSL2, FPR2, GAS1, GUCY1A3, GUCY1B3, HCK, HEY1, HEYL, HIF1A, HLA-E, HMOX1, ICAM1, IDO1, IGF1, IGF2, IGFBP5, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ISG15, ISG20, ITGAM, ITGB2, ITGB3, JAK2, JUNB, KITLG, LAMA2, LCN2, LCP2, LEPR, LGALS3, LGALS9, LPIN1, LTBP4, LY6A, LY6C1, MAPT, MBP, MGP, MMP3, MMP14, MVP, MYC, MYCN, MYD88, NAMPT, NCAM1, NCF1, NDUFS4, NFKB2, NFKBIA, NOV, NR3C1, NRP1, NTF3, PBX1, PDE4D, PENK, PGF, PIK3AP1, PIM1, PLAUR, PML, PNP, PPARA, PRKD1, PRRX1, PTN, PTPN2, PTPRF, RAC1, RAC2, RCAN1, RGS2, RUNX1T1, SAA1, SERPINE1, SHC1, SNAI2, SOCS3, SOX4, SPHK1, STAT1, STAT3, SYK, TCIRG1, TGM2, TIMP2, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, TRIM25, TXNIP, VCAM1, VCAN, VEGFA, VEGFC, VSIG4, VTN, WNT5A, XDH	178
Cellular Growth and Proliferation	proliferation	proliferation of cells	5.06E-13	ADA, ADAMTS1, ADIPOQ, ALDH3A1, ANGPTL4, ANXA7, APLNR, APOBEC1, APOE, AQP7, AR, ARG1, ARID5B, ASPH, ATF3, BACH2 (includes EG:60468), BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, BST2, BTG1, BTG2, C3, C5ORF13, C8ORF4, CAV2, CBLB, CCL5, CCL13, CCL19, CCND2, CCR1, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CENPF, CFB, CFLAR, CHEK2, CISH, CLEC10A, CLEC2D (includes EG:93694), CLEC7A, CNN1, COL14A1, COL8A1, COMP, COMT, CRIP1, CSF1, CSF3, CSF2RB, CTSL2, CTSS, CTSZ (includes EG:1522), CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL12, CXCL16, CXCR4, CYP1B1, CYP7B1, DAXX, DDX21, DNAJB4, DPT, EFNB2, EFNB3, EGFR, EGLN3, EIF2AK2, EIF4E, EIF4EBP1, ERAP1, ERCC1, FABP7, FAS, FBLN5, FCER1G, FCGR2B, FCGR3A, FGF7, FGF9, FGL2, FKBP5, FOSL2, FPR2, GAS1, GRB14, GRK5, GUCY1A3, GUCY1B3, H19, HCK, HCLS1, HEY1, HEYL, HIF1A, HLA-E, HMOX1, HSD11B1, ICAM1, IDO1, IER3, IFI16, IFI202B, IFITM1, IFITM3, IGF1, IGF2, IGFBP5, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ISG15, ISG20, ITGAM, ITGB2, ITGB3, JAK2, JUNB, KITLG, KLF10, LAMA2, LCN2, LCP2, LEPR, LGALS3, LGALS9, LIFR, LOX, LPIN1, LTBP4, LY6A, LY6C1, LY6E, MAPRE2, MAPT, MARCKSL1, MBP, MGP, MITF, MMP3, MMP14, MSR1, MTUS1, MVP, MYC, MYCN, MYD88, MYH11, NAMPT, NCAM1, NCF1, NDUFS4, NFIB, NFKB2, NFKBIA, NOV, NR3C1, NR3C2, NRP1, NTF3, OSMR, PBX1, PDE4D, PENK, PFKFB3, PGF, PIK3AP1, PIM1, PLAC8, PLAUR, PLSCR1, PML, PNP, PPARA, PRDM16, PRG4 (includes EG:10216), PRKAR2B, PRKD1, PRRX1, PTN, PTP4A1, PTPN2, PTPRE, PTPRF, PTPRR, PTX3, PVR, QSOX1, RAC1, RAC2, RCAN1, RELB, RGS2, RP6-213H19.1, RUNX1T1, S100A8, S100A9, SAA1, SEMA3F, SERINC3, SERPINE1, SERPINF1, SHC1, SKAP2, SLFN1, SLFN12, SLFN12L, SMAD1, SNAI2, SOCS2, SOCS3, SOX4, SPHK1, SRA1, STAT1, STAT3, SYK, SYNM, TACC2, TBRG1, TCIRG1, TFRC, TGFBI, TGM2, TIMP1, TIMP2, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, TPM3, TPMT, TRIM25, TSPO, TXNIP, VCAM1, VCAN, VEGFA, VEGFC, VSIG4, VTN, WARS, WIF1, WNT5A, XDH, ZFP36	269
Cellular Growth and Proliferation	proliferation	proliferation of blood cells	4.11E-11	ADA, ADIPOQ, APOE, BCL2L1, BCR, CBLB, CCL13, CCND2, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CDKN1C, CEBPB, CFLAR, CISH, CLEC10A, CSF1, CSF3, CSF2RB, CTSZ (includes EG:1522), CXCL12, CXCR4, EFNB2, EFNB3, EGFR, EIF2AK2, FAS, FCGR2B, FCGR3A, FGL2, HCK, HIF1A, HLA-E, HMOX1, ICAM1, IDO1, IGF1, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ISG15, ISG20, ITGAM, ITGB2, ITGB3, JAK2, JUNB, KITLG, LCP2, LEPR, LGALS9, LPIN1, LY6A, LY6C1, MBP, MMP3, MVP, MYC, MYCN, MYD88, NR3C1, PBX1, PDE4D, PENK, PIK3AP1, PIM1, PNP, PRKD1, PTPN2, RAC2, RGS2, RUNX1T1, SHC1, SNAI2, SOCS3, STAT1, STAT3, SYK, TCIRG1, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, VCAM1, VSIG4	96
Cellular Growth and Proliferation	proliferation	proliferation of leukocytes	1.12E-10	ADA, ADIPOQ, APOE, BCL2L1, BCR, CBLB, CCL13, CCND2, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CISH, CLEC10A, CSF1, CSF3, CSF2RB, CTSZ (includes EG:1522), CXCL12, CXCR4, EFNB2, EFNB3, EIF2AK2, FAS, FCGR2B, FCGR3A, FGL2, HCK, HIF1A, HLA-E, HMOX1, ICAM1, IDO1, IGF1, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ISG15, ISG20, ITGAM, ITGB2, ITGB3, JUNB, KITLG, LCP2, LEPR, LGALS9, LPIN1, LY6A, LY6C1, MBP, MMP3, MVP, MYC, MYCN, MYD88, NR3C1, PBX1, PDE4D, PENK, PIK3AP1, PIM1, PNP, PRKD1, PTPN2, RAC2, RGS2, SHC1, SOCS3, STAT1, STAT3, SYK, TCIRG1, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, VCAM1, VSIG4	91
Cellular Growth and Proliferation	proliferation	proliferation of lymphocytes	3.68E-10	ADA, APOE, BCL2L1, BCR, CBLB, CCL13, CCND2, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CISH, CLEC10A, CSF2RB, CTSZ (includes EG:1522), CXCL12, CXCR4, EFNB2, EFNB3, EIF2AK2, FAS, FCGR2B, FCGR3A, FGL2, HCK, HIF1A, HLA-E, HMOX1, ICAM1, IDO1, IGF1, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF1, IRF8, ISG15, ISG20, ITGAM, ITGB2, ITGB3, JUNB, KITLG, LCP2, LEPR, LGALS9, LPIN1, LY6A, LY6C1, MBP, MMP3, MVP, MYC, MYCN, MYD88, PDE4D, PENK, PIK3AP1, PIM1, PNP, PRKD1, PTPN2, RAC2, RGS2, SHC1, SOCS3, STAT1, STAT3, SYK, TCIRG1, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, VCAM1, VSIG4	86
Cellular Growth and Proliferation	proliferation	proliferation of cell lines	1.85E-09	ADAMTS1, ADIPOQ, APLNR, AR, ARG1, ARID5B, BACH2 (includes EG:60468), BAK1, BCL2L1, BCR, BID, BTG1, BTG2, C5ORF13, CAV2, CCL13, CCND2, CD24, CD44, CDKN1A, CDKN1C, CEBPB, CHEK2, CLEC7A, CNN1, COMP, CSF1, CSF3, CSF2RB, CXCL1, CXCL3, CXCL10, CXCL12, CXCR4, CYP1B1, DDX21, DNAJB4, EGFR, EIF2AK2, ERCC1, FGF7, FGF9, FKBP5, FPR2, GRB14, GRK5, HCK, HIF1A, HMOX1, HSD11B1, IER3, IFI16, IFI202B, IGF1, IGF2, IGFBP5, IL6, IL13RA1, IL2RG, IRF1, IRF8, ITGB3, JAK2, JUNB, KITLG, KLF10, LCN2, LEPR, LGALS3, LIFR, LOX, LY6E, MBP, MMP14, MSR1, MYC, MYH11, NFKBIA, NOV, NR3C1, NRP1, NTF3, PBX1, PFKFB3, PIM1, PLAC8, PLAUR, PLSCR1, PML, PRDM16, PTN, PTP4A1, PTPN2, PTPRF, PTPRR, PTX3, PVR, RAC1, RELB, RP6-213H19.1, RUNX1T1, S100A8, S100A9, SAA1, SEMA3F, SERPINE1, SERPINF1, SHC1, SMAD1, SOCS2, SOCS3, SOX4, SPHK1, STAT1, STAT3, SYK, SYNM, TFRC, TGM2, TIMP2, TLR2, TNFSF10, TPM3, TPMT, TSPO, TXNIP, VCAN, VEGFA, VEGFC, VTN, WIF1, WNT5A, ZFP36	133
Cellular Growth and Proliferation	proliferation	proliferation of endothelial cells	8.40E-08	ADAMTS1, ANGPTL4, APOE, C3, CAV2, CCL13, CD44, CSF1, CXCL10, CXCL12, EFNB2, ERAP1, GUCY1A3, GUCY1B3, HEY1, HEYL, HMOX1, IGF1, IGF2, IL6, ITGB3, MGP, MYC, NRP1, PGF, PIM1, PPARA, RCAN1, TIMP2, TNFSF10, VEGFA, VEGFC	32
Cellular Growth and Proliferation	proliferation	proliferation of smooth muscle cells	1.93E-07	ADIPOQ, APOE, ARG1, CDKN1A, CDKN1C, CEBPD, COMT, CXCL16, EGFR, FBLN5, FGF9, HIF1A, IGF1, IGFBP5, IL6, IL1RN, MMP14, MYC, MYD88, NAMPT, NCF1, NOV, PLAUR, PPARA, PTPRF, SERPINE1, SHC1, STAT1, TGM2, VEGFA, VTN, XDH	32
Cellular Growth and Proliferation	proliferation	proliferation of T lymphocytes	2.66E-07	APOE, BCL2L1, CBLB, CCL13, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CFLAR, CISH, CLEC10A, CSF2RB, CTSZ (includes EG:1522), CXCL12, CXCR4, EFNB2, EFNB3, EIF2AK2, FAS, FCGR3A, FGL2, HLA-E, HMOX1, ICAM1, IDO1, IGF1, IGHM, IL6, IL2RG, ISG20, ITGAM, ITGB2, ITGB3, KITLG, LCP2, LEPR, LGALS9, LY6A, LY6C1, MBP, MVP, MYC, MYD88, PDE4D, PENK, PNP, PRKD1, PTPN2, RAC2, RGS2, SHC1, SOCS3, STAT1, STAT3, SYK, TCIRG1, TLR2, TNFRSF1A, TNFSF10, VCAM1, VSIG4	65
Cellular Growth and Proliferation	proliferation	proliferation of lymphatic system cells	9.05E-07	ADIPOQ, BCR, CCND2, CD44, CDKN1A, CISH, CSF1, CSF3, GUCY1A3, GUCY1B3, IGF1, IGF2, IGHM, IL6, IL2RG, IRF8, JAK2, JUNB, KITLG, MYD88, PBX1, PIM1, RUNX1T1, SOCS3, STAT3, TLR2, TNFRSF1A, VEGFA	28
Cellular Growth and Proliferation	proliferation	proliferation of B lymphocytes	1.63E-06	ADA, BCL2L1, BCR, CBLB, CCND2, CD24, CD38, CD44, CDKN1A, CEBPB, CXCL12, FAS, FCGR2B, HCK, HIF1A, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF8, JUNB, KITLG, LPIN1, MYC, MYCN, MYD88, PIK3AP1, PTPN2, STAT1, TCIRG1, TLR2, TLR3, TP53INP1	35
Cellular Growth and Proliferation	proliferation	proliferation of leukocyte cell lines	1.84E-06	BCR, CD44, CLEC7A, CSF1, CSF3, CSF2RB, CXCL3, CXCL12, EGFR, FGF7, FGF9, HCK, IGF1, IGF2, IL6, IL13RA1, IL2RG, ITGB3, JAK2, KITLG, LEPR, LIFR, LY6E, MBP, MYC, NFKBIA, RUNX1T1, SHC1, SOCS2, SOCS3, STAT3, TFRC, VEGFA	33
Cellular Growth and Proliferation	proliferation	proliferation of leukemia cell lines	3.74E-06	BCL2L1, BCR, CD44, CDKN1A, CDKN1C, CSF1, CSF3, HMOX1, IGF1, IGF2, IL6, IL2RG, JUNB, KITLG, MYC, PTPRR, RELB, TNFSF10, TPMT, VEGFA, VEGFC	21
Cellular Growth and Proliferation	growth	growth of cells	1.31E-10	ACSL5, ACVR1B, ADAR, ADIPOQ, AK3L1, ANTXR1, ANXA7, APCDD1, AR, ATF3, B2M, BCL2A1, BCL2L1, BCR, BTG1, BTG2, C3, C8ORF4, CA3, CACNA2D2, CALM1, CBLB, CCL6, CCND2, CD14, CD24, CD38, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CNKSR1, COL6A1, COL6A3, CSF1, CSF3, CSF2RB, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL10, CXCL12, CXCL16, CXCR4, CYP2B6, DBN1, DDIT3, DNAJB4, DPT, EGFR, EIF1AY, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, EMILIN2, ENC1, ENTPD5, ERRFI1, ESRRG, FADS3, FAM107A, FAS, FBLN5, FCER1G, FGF7, FHL2, FKBP4, FKBP5, FLOT1, GADD45B, GADD45G, GAS1, GBP2, HIF1A, HMOX1, HRASLS, IER3, IFI16, IFI202B, IFIT3, IGF1, IGF2, IGFBP5, IGHM, IL6, IL17RA, IL1RN, IL2RG, IL4R, INHBB, IP6K2, IRF1, IRF8, ITGB3, ITGB6, ITPKC, JAK2, JUNB, KCNK3, KIF13A, KITLG, KLF10, LCP2, LGALS3, LITAF, LOX, LTBP4, MAFF, MAPT, MBD1, MEST, MITF, MMP14, MMP15, MT1E, MT1F, MX1, MYC, MYCN, MYCT1, MYD88, MYH11, NEO1, NFKB2, NFKBIA, NFKBIB, NOV, NR3C1, NRP1, NTF3, NTS, NUB1, NUBP1, OGFR, OSMR, PDLIM4, PENK, PGF, PIAS2, PIM1, PIM3, PLA2G5, PLAC8, PLAUR, PLIN2, PLSCR1, PML, POSTN, PPARA, PRDM16, PRKAR2B, PRKD1, PRRX1, PSMB10, PSME2, PSMF1, PTN, QSOX1, RAC1, RASD1, RASGRP2, RBM3, RCAN1, RELB, RGS5, RP6-213H19.1, RRAD, RUNX1T1, SEMA3B, SERPINE1, SERPINF1, SGMS1, SHC1, SLFN1, SOCS2, SOCS3, SPHK1, STAT1, STAT3, STEAP2, SYK, TAP1, TFRC, THBS2, TIMP1, TIMP2, TLR3, TNFAIP6, TNFRSF19, TNFRSF1A, TNFSF10, TPM2, TRIM21, TRIM25, TXNIP, UBE2L6, UCP2, UCP3, UPP1, VCAN, VEGFA, VEGFC, WIF1, WNT5A	208
Cellular Growth and Proliferation	growth	growth of eukaryotic cells	5.13E-10	ACSL5, ADIPOQ, ANTXR1, ANXA7, APCDD1, AR, ATF3, B2M, BCL2L1, BCR, BTG1, BTG2, C3, C8ORF4, CACNA2D2, CBLB, CCL6, CCND2, CD14, CD24, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, CNKSR1, COL6A3, CSF1, CSF3, CSF2RB, CXCL1, CXCL2, CXCL3, CXCL10, CXCL12, CXCR4, CYP2B6, DDIT3, DNAJB4, EGFR, EIF2AK2, EIF4E, EMILIN2, ENC1, ENTPD5, ERRFI1, ESRRG, FAS, FBLN5, FCER1G, FGF7, FHL2, FKBP5, GADD45B, GADD45G, GBP2, HIF1A, HMOX1, HRASLS, IER3, IFI16, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, INHBB, IRF1, IRF8, ITGB3, JAK2, JUNB, KIF13A, KITLG, LCP2, LGALS3, LOX, MITF, MMP14, MT1E, MT1F, MYC, MYCN, MYD88, MYH11, NEO1, NFKB2, NFKBIA, NFKBIB, NOV, NR3C1, NRP1, NTF3, NTS, NUB1, NUBP1, OGFR, OSMR, PDLIM4, PENK, PIM1, PIM3, PLAC8, PLAUR, PLSCR1, PML, POSTN, PPARA, PRDM16, PRKAR2B, PRKD1, PRRX1, PTN, RAC1, RASD1, RASGRP2, RCAN1, RELB, RGS5, RP6-213H19.1, RRAD, RUNX1T1, SEMA3B, SERPINE1, SERPINF1, SGMS1, SLFN1, SOCS2, SOCS3, SPHK1, STAT1, STAT3, STEAP2, SYK, TFRC, THBS2, TIMP1, TIMP2, TLR3, TNFAIP6, TNFRSF1A, TNFSF10, TPM2, TRIM21, TRIM25, TXNIP, VEGFA, VEGFC, WIF1, WNT5A	154
Cellular Growth and Proliferation	growth	growth of cell lines	4.90E-09	ACSL5, ADIPOQ, ANTXR1, ANXA7, AR, ATF3, BCL2L1, BCR, BTG2, C8ORF4, CBLB, CCL6, CD44, CD274, CDKN1A, CDKN1C, CEBPB, CEBPD, COL6A3, CSF1, CSF3, CSF2RB, CXCL1, CXCL2, CXCL12, CXCR4, CYP2B6, DNAJB4, EGFR, EIF2AK2, EIF4E, EMILIN2, ENC1, ENTPD5, ERRFI1, ESRRG, FBLN5, FCER1G, FGF7, FKBP5, GADD45B, GADD45G, GBP2, HIF1A, HMOX1, HRASLS, IER3, IFI16, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, IL2RG, IRF1, JAK2, JUNB, KIF13A, KITLG, LGALS3, LOX, MITF, MMP14, MT1E, MT1F, MYC, MYH11, NEO1, NFKB2, NFKBIA, NFKBIB, NOV, NR3C1, NRP1, NTS, NUB1, NUBP1, OGFR, PDLIM4, PENK, PIM1, PIM3, PLAC8, PLAUR, PLSCR1, PML, POSTN, PRDM16, PRKAR2B, PRKD1, PTN, RAC1, RASD1, RASGRP2, RELB, RGS5, RP6-213H19.1, RRAD, SEMA3B, SERPINE1, SGMS1, SLFN1, SOCS2, SOCS3, SPHK1, STAT1, STAT3, STEAP2, SYK, TFRC, THBS2, TIMP2, TNFRSF1A, TNFSF10, TPM2, TRIM21, TXNIP, VEGFA, VEGFC, WIF1, WNT5A	123
Cellular Growth and Proliferation	growth	growth of tumor cells	3.43E-06	APCDD1, CACNA2D2, CD44, CDKN1A, CNKSR1, CSF1, CSF3, CXCL3, DDIT3, FAS, HIF1A, IFI202B, IGF1, IGF2, IGFBP5, IGHM, IL6, IL1RN, INHBB, ITGB3, LGALS3, MYC, NRP1, RCAN1, SEMA3B, STAT1, STAT3, TIMP2, TNFSF10, VEGFA	30
Cellular Growth and Proliferation	colony formation	colony formation of cells	2.95E-08	ADIPOQ, ALDH3A1, ANKRD1, ANXA7, ATF3, BACH2 (includes EG:60468), BCL2L1, BCR, CCL13, CD44, CDKN1A, CLCA1 (includes EG:12722), CSF1, CSF3, CSF2RB, CXCL3, CXCL12, DDIT3, EGFR, EIF4EBP1, FAS, GADD45B, GADD45G, IFI16, IFIH1, IGF1, IL6, IL1RN, IP6K2, IRF8, ITGB6, JAK2, JUNB, KITLG, LIFR, LOX, LUM, MITF, MMP14, MYC, MYH11, NR3C1, PDLIM2, PLSCR1, PML, PTN, PTPRF, RAC2, RASD1, RCAN1, RHOC, RP6-213H19.1, RPS6KA5, RUNX1T1, SEMA3B, SEMA3F, SHC1, SLFN12L, SOCS2, SPHK1, STEAP2, TNFSF10, TPM3, VEGFA, WIF1	65
Cellular Growth and Proliferation	colony formation	colony formation of eukaryotic cells	3.22E-08	ADIPOQ, ALDH3A1, ANKRD1, ANXA7, ATF3, BACH2 (includes EG:60468), BCL2L1, BCR, CCL13, CD44, CDKN1A, CLCA1 (includes EG:12722), CSF1, CSF3, CSF2RB, CXCL3, DDIT3, EGFR, EIF4EBP1, FAS, GADD45B, GADD45G, IFI16, IFIH1, IGF1, IL6, IL1RN, IP6K2, IRF8, ITGB6, JAK2, JUNB, KITLG, LIFR, LOX, LUM, MITF, MMP14, MYC, MYH11, PDLIM2, PLSCR1, PML, PTN, PTPRF, RAC2, RASD1, RCAN1, RHOC, RP6-213H19.1, RPS6KA5, RUNX1T1, SEMA3B, SEMA3F, SLFN12L, SOCS2, STEAP2, TNFSF10, TPM3, VEGFA, WIF1	61
Cellular Growth and Proliferation	colony formation	colony formation of normal cells	2.72E-07	ADIPOQ, ATF3, BCR, CDKN1A, CSF1, CSF3, CSF2RB, CXCL3, DDIT3, FAS, IGF1, IL6, IL1RN, IRF8, JAK2, JUNB, KITLG, LIFR, MITF, MYC, PLSCR1, PML, RAC2, RPS6KA5, RUNX1T1, SLFN12L, TNFSF10, VEGFA	28
Connective Tissue Disorders	connective tissue disorder	connective tissue disorder	1.23E-14	ACPL2, ACVR1B, ADAMTS1, ADAMTS4, ADAMTS9, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANKH, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ASPN, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, BCL2L1, BCR, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C1S, C4A, CA8, CACNA2D2, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CILP, CLEC4D, CLEC4E, CLIC5, COL14A1, COL15A1, COL4A4 (includes EG:1286), COL6A1, COL6A3, COL8A1, COMP, CSF1, CSF3, CSF2RB, CTSS, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, DDIT3, EBF1, ESRRG, FAM101B, FAS, FBLN5, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-B, HLA-C, HLA-E, HLA-G, HP, ICAM1, IFIH1, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGAM, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LEPR, LOX, LPIN1, LUM, MAGI3, MANBA, MATN2, MBD1, MCC, MCTP2, MMP3, MMP14, MMP15, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, MYD88, NAMPT, NCF1, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NR3C2, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RAC1, RAPH1, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SELP, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STAT3, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, TGFBI, THBS2, TIMP1, TIMP2, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TREX1 (includes EG:11277), TRIM21, TSPAN2, TUBA8, TUBA4A, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, XDH, ZFP36	241
Connective Tissue Disorders	connective tissue disorder	:onnective tissue disorder of mammali	2.01E-08	B2M, C2, C3, C1R, C1S, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FBLN5, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	37
Connective Tissue Disorders	connective tissue disorder	connective tissue disorder of rodents	1.94E-07	B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FBLN5, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	34
Connective Tissue Disorders	connective tissue disorder	connective tissue disorder of mice	1.32E-06	B2M, C3, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FBLN5, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	31

Connective Tissue Disorders	rheumatic disease	rheumatic disease	5.28E-14	ACPL2, ACVR1B, ADAMTS1, ADAMTS4, ADAMTS9, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANKH, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ASPN, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, BCL2L1, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C1S, C4A, CA8, CACNA2D2, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CILP, CLEC4D, CLEC4E, CLIC5, COL6A1, COMP, CSF1, CSF3, CSF2RB, CTSS, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, DDIT3, EBF1, ESRRG, FAM101B, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-B, HLA-C, HLA-E, HLA-G, HP, ICAM1, IFIH1, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGAM, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LEPR, LOX, LPIN1, LUM, MAGI3, MATN2, MBD1, MCC, MCTP2, MMP3, MMP14, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, MYD88, NAMPT, NCF1, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RAC1, RAPH1, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SELP, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STAT3, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, THBS2, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TREX1 (includes EG:11277), TRIM21, TSPAN2, TUBA8, TUBA4A, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, XDH, ZFP36	229
Connective Tissue Disorders	rheumatic disease	rheumatic disease of mammalia	2.52E-08	B2M, C2, C3, C1R, C1S, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	36
Connective Tissue Disorders	rheumatic disease	rheumatic disease of rodents	2.46E-07	B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	33
Connective Tissue Disorders	rheumatic disease	rheumatic disease of mice	1.68E-06	B2M, C3, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	30
Connective Tissue Disorders	arthritis	arthritis	3.68E-13	ACPL2, ACVR1B, ADAMTS1, ADAMTS4, ADAMTS9, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANKH, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C4A, CA8, CACNA2D2, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CILP, CLEC4D, CLEC4E, CLIC5, COL6A1, COMP, CSF1, CSF3, CSF2RB, CTSS, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, DDIT3, EBF1, ESRRG, FAM101B, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-B, HLA-C, HLA-E, HLA-G, HP, ICAM1, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LEPR, LOX, LPIN1, LUM, MAGI3, MATN2, MBD1, MCC, MCTP2, MMP3, MMP14, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, MYD88, NAMPT, NCF1, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RAPH1, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STAT3, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, THBS2, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TSPAN2, TUBA8, TUBA4A, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, XDH, ZFP36	221
Connective Tissue Disorders	arthritis	arthritis of rodents	1.93E-07	B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TLR2, TNFRSF1A, TNFSF10, ZFP36	32
Connective Tissue Disorders	arthritis	arthritis of animal	2.11E-07	ADAMTS4, B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TLR2, TNFRSF1A, TNFSF10, ZFP36	33
Connective Tissue Disorders	arthritis	arthritis of mice	1.36E-06	B2M, C3, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TLR2, TNFRSF1A, TNFSF10, ZFP36	29
Connective Tissue Disorders	rheumatoid arthritis	rheumatoid arthritis	3.71E-10	ACPL2, ACVR1B, ADAMTS4, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, C2, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C4A, CA8, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CLEC4D, CLEC4E, CLIC5, COMP, CSF1, CSF2RB, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, EBF1, ESRRG, FAM101B, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-C, HLA-G, HP, ICAM1, IGF1, IGFBP5, IGHM, IL6, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LOX, MAGI3, MATN2, MBD1, MCC, MMP3, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, NAMPT, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TSPAN2, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, ZFP36	190
Connective Tissue Disorders	adiposity	adiposity of mice	8.54E-08	ADAMTS1, ADIPOQ, ADRB1, ARID5B, CDKN1A, CEBPB, CEBPD, EIF4EBP1, HDC, HSD11B1, ICAM1, IL6, IL1RN, LEPR, LPIN1, MEST, PLSCR1, PPARA, PPARGC1A, PRKAA2, PRKAR2B, SLC2A4, STAT3, UCP1, UCP2, UCP3, ZFP36	27
ymphoid Tissue Structure and Developmer	homing	homing of lymphatic system cells	1.38E-14	C3, CCL5, CCL7, CCL13, CD44, CHI3L3, CSF1, CSF3, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, KITLG, LGALS9, LILRA6, MMP14, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VCAM1, VEGFC, VTN	41
ymphoid Tissue Structure and Developmer	homing	homing of bone marrow cells	6.10E-07	CD44, CHI3L3, CSF3, CXCL12, KITLG, MMP14, VCAM1	7
ymphoid Tissue Structure and Developmer	quantity	quantity of lymphatic system cells	8.85E-14	ADA, BCL2L1, BCR, BID, CDKN1A, CSF1, CSF3, CSF2RB, CXCL13, FAS, FCGR1A, FPR2, HDC, ICAM1, IGF1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NFKB2, NQO2, PBX1, PDE4B, PDE4D, PLSCR1, PML, PSMB10, PTPN2, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SOCS3, THBS2, TLR2, TNFRSF1A, TNFSF10, VTN	48
ymphoid Tissue Structure and Developmer	quantity	quantity of bone marrow cells	2.46E-13	ADA, BCL2L1, BCR, BID, CDKN1A, CSF1, CSF3, CSF2RB, FAS, FCGR1A, FPR2, HDC, ICAM1, IGF1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NQO2, PBX1, PDE4B, PDE4D, PLSCR1, PML, PTPN2, RAC2, RELB, S100A8, S100A9, SELE, SELL, SELP, SOCS3, THBS2, TLR2, TNFRSF1A, TNFSF10, VTN	45
ymphoid Tissue Structure and Developmer	quantity	quantity of granulocytes	8.32E-13	ADA, BCR, BID, CSF1, CSF3, CSF2RB, FAS, FCGR1A, FPR2, HDC, ICAM1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	38
ymphoid Tissue Structure and Developmer	quantity	quantity of myeloid cells	3.26E-12	ADA, BCR, BID, CSF1, CSF3, CSF2RB, FAS, FCGR1A, FPR2, HDC, ICAM1, IL6, IL33, IL18BP, IRF8, ITGB2, KITLG, LGALS3, MMP3, MMP8, MYD88, MYH11, NQO2, PBX1, PDE4B, PDE4D, PLSCR1, PML, PTPN2, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	40
ymphoid Tissue Structure and Developmer	quantity	quantity of neutrophils	1.13E-11	ADA, CSF1, CSF3, FAS, FCGR1A, HDC, ICAM1, IL18BP, ITGB2, MMP3, MMP8, MYH11, NQO2, PDE4B, PDE4D, PLSCR1, PML, RAC2, RELB, S100A8, S100A9, SELE, SELL, SOCS3, TLR2, TNFRSF1A, TNFSF10, VTN	28
ymphoid Tissue Structure and Developmer	chemotaxis	chemotaxis of granulocytes	9.48E-12	C3, CCL5, CCL7, CCL13, CHI3L3, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LGALS9, LILRA6, PDE4B, PDE4D, PENK, PLAUR, PPARA, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	35
ymphoid Tissue Structure and Developmer	chemotaxis	chemotaxis of neutrophils	8.24E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	29
ymphoid Tissue Structure and Developmer	proliferation	proliferation of lymphatic system cells	9.05E-07	ADIPOQ, BCR, CCND2, CD44, CDKN1A, CISH, CSF1, CSF3, GUCY1A3, GUCY1B3, IGF1, IGF2, IGHM, IL6, IL2RG, IRF8, JAK2, JUNB, KITLG, MYD88, PBX1, PIM1, RUNX1T1, SOCS3, STAT3, TLR2, TNFRSF1A, VEGFA	28
Hematological Disease	hematological disorder	hematological disorder of rodents	2.99E-14	ABCC9, APOE, ATF3, BAK1, BCL2L1, C3, CCL13, CCND2, CD14, CD47, CDKN1A, CEBPB, CSF3, CXCL12, CXCL14, CXCR4, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, HAMP, HCLS1, HDC, HFE, HIF1A, HMOX1, HSD11B1, IGF1, IL6, IL1RN, IL2RG, IRF8, ITGB2, ITGB3, JAK2, KY, LCN2, MAN2A1, MYD88, NFE2L2, NFKBIA, NFKBIB, PBX1, PLSCR1, PNPLA2, PPARA, RAC1, RAC2, S100A9, SELE, SELP, SERPINE1, SOCS3, STAT3, STEAP2, TGM2, THBS2, TLR2, TNFRSF1A, TNIP1, ZC3H12A	62
Hematological Disease	hematological disorder	hematological disorder of mice	3.09E-14	ABCC9, APOE, ATF3, BAK1, BCL2L1, C3, CCL13, CCND2, CD14, CD47, CDKN1A, CEBPB, CSF3, CXCL12, CXCL14, CXCR4, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, HAMP, HCLS1, HDC, HFE, HIF1A, HMOX1, HSD11B1, IL6, IL1RN, IL2RG, IRF8, ITGB2, ITGB3, JAK2, KY, LCN2, MAN2A1, MYD88, NFE2L2, NFKBIA, NFKBIB, PBX1, PLSCR1, PNPLA2, PPARA, RAC1, RAC2, S100A9, SELE, SELP, SERPINE1, SOCS3, STAT3, STEAP2, TGM2, THBS2, TLR2, TNFRSF1A, TNIP1, ZC3H12A	61
Hematological Disease	hematological disorder	hematological disorder of mammalia	1.32E-13	ABCC9, APOE, ATF3, BAK1, BCL2L1, C3, CCL13, CCND2, CD14, CD47, CDKN1A, CEBPB, CSF3, CXCL9, CXCL12, CXCL14, CXCR4, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, HAMP, HCLS1, HDC, HFE, HIF1A, HMOX1, HSD11B1, IGF1, IL6, IL1RN, IL2RG, IRF8, ITGB2, ITGB3, JAK2, KY, LCN2, MAN2A1, MYD88, NFE2L2, NFKBIA, NFKBIB, PBX1, PLSCR1, PNPLA2, PPARA, RAC1, RAC2, S100A9, SELE, SELP, SERPINE1, SOCS3, STAT3, STEAP2, TGM2, THBS2, TLR2, TNFRSF1A, TNIP1, ZC3H12A	63
Hematological Disease	hematological disorder	hematological disorder	3.91E-13	ABCA8, ABCC9, ADA, ADAM9, ADIPOQ, ADRB1, ALDH3A1, ANTXR1, ANXA4, APOE, AR, ARG1, ATF3, ATP2B2, B2M, BAK1, BCL3, BCL2L1, BCR, BIRC2, C2, C3, CCL5, CCL7, CCL13, CCND2, CD14, CD38, CD47, CDKN1A, CEBPB, CFB, CHEK2, COMT, CSF3, CSF2RB, CTSS, CXCL9, CXCL10, CXCL12, CXCL14, CXCR4, DARC, DDIT4, EGFR, EGLN3, EIF2AK2, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, FEN1, FOSL2, HAMP, HCLS1, HDAC9 (includes EG:9734), HDC, HFE, HIF1A, HMOX1, HSD11B1, ICAM1, IGF1, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, ITGB3, ITGB6, ITGB1BP2, JAK2, KITLG, KY, LCN2, LPIN1, MAN2A1, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NFKBIB, NFKBIE, NR3C1, P2RY1, PBX1, PDE4B, PDE4D, PDE5A, PDE7A, PGF, PLSCR1, PML, PNPLA2, PPARA, PPARGC1A, PPARGC1B, PTPRF, RAC1, RAC2, RELB, S100A9, SELE, SELENBP1, SELL, SELP, SERPINE1, SOCS3, SOX4, SRPK2, STAT3, STEAP2, STMN2, TGM2, THBS2, TLR2, TNFRSF1A, TNIP1, UCP1, UCP3, UNG, VEGFA, VEGFC, ZC3H12A	130
Hematological Disease	leukocytosis	leukocytosis of mammalia	9.91E-11	CCL13, CSF3, CXCL12, CXCR4, IL6, IL1RN, ITGB2, MYD88, NFKBIA, NFKBIB, PLSCR1, RAC2, S100A9, SELE, SELP, SOCS3, STAT3, TLR2	18
Hematological Disease	leukocytosis	leukocytosis of mice	1.11E-10	CCL13, CSF3, CXCL12, CXCR4, IL6, ITGB2, MYD88, NFKBIA, NFKBIB, PLSCR1, RAC2, S100A9, SELE, SELP, SOCS3, STAT3, TLR2	17
Hematological Disease	leukocytosis	leukocytosis	1.96E-09	ADA, CCL13, CSF3, CXCL12, CXCR4, IL6, IL1RN, ITGB2, MYD88, NFKBIA, NFKBIB, PLSCR1, RAC2, S100A9, SELE, SELL, SELP, SOCS3, STAT3, TLR2	20
Hematological Disease	neutrophilia	neutrophilia	7.08E-08	ADA, CSF3, CXCL12, IL6, IL1RN, ITGB2, MYD88, RAC2, S100A9, SELE, SELL, SOCS3, STAT3, TLR2	14
Hematological Disease	neutrophilia	neutrophilia of mammalia	1.50E-06	CSF3, CXCL12, IL6, IL1RN, MYD88, RAC2, S100A9, SOCS3, STAT3, TLR2	10
Hematological Disease	neutrophilia	neutrophilia of mice	3.06E-06	CSF3, CXCL12, IL6, MYD88, RAC2, S100A9, SOCS3, STAT3, TLR2	9
Inflammatory Disease	rheumatic disease	rheumatic disease	5.28E-14	ACPL2, ACVR1B, ADAMTS1, ADAMTS4, ADAMTS9, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANKH, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ASPN, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, BCL2L1, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C1S, C4A, CA8, CACNA2D2, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CILP, CLEC4D, CLEC4E, CLIC5, COL6A1, COMP, CSF1, CSF3, CSF2RB, CTSS, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, DDIT3, EBF1, ESRRG, FAM101B, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-B, HLA-C, HLA-E, HLA-G, HP, ICAM1, IFIH1, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGAM, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LEPR, LOX, LPIN1, LUM, MAGI3, MATN2, MBD1, MCC, MCTP2, MMP3, MMP14, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, MYD88, NAMPT, NCF1, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RAC1, RAPH1, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SELP, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STAT3, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, THBS2, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TREX1 (includes EG:11277), TRIM21, TSPAN2, TUBA8, TUBA4A, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, XDH, ZFP36	229
Inflammatory Disease	rheumatic disease	rheumatic disease of mammalia	2.52E-08	B2M, C2, C3, C1R, C1S, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	36
Inflammatory Disease	rheumatic disease	rheumatic disease of rodents	2.46E-07	B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	33
Inflammatory Disease	rheumatic disease	rheumatic disease of mice	1.68E-06	B2M, C3, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TAP1, TLR2, TNFRSF1A, TNFSF10, ZFP36	30
Inflammatory Disease	inflammatory disorder	inflammatory disorder	1.45E-13	ABCC3, ACPL2, ACVR1B, ADA, ADAMTS1, ADAMTS4, ADAMTS9, ADIPOQ, ADRB1, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANKH, ANO4, ANTXR1, APOE, AQP1, ARG1, ARHGAP8, ARHGAP18, ARHGAP20, ARSB, ART1, ASPH, ASPN, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, BCL3, BCL2L1, BCR, BID, C2, C3, C10ORF107, C12ORF35, C13ORF15, C15ORF48, C17ORF108, C1R, C1S, C4A, C4ORF31, CA3, CA4, CA7, CA8, CA13, CA14, CACNA2D2, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD14, CD24, CD44, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CILP, CLEC4D, CLEC4E, CLEC7A, CLIC5, COL6A1, COLEC12, COMP, CSF1, CSF3, CSF2RB, CTSS, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, CYP2E1, DAXX, DDIT3, DDX58, DHX58, DNMT3A, DTNA, EBF1, EFNB2, EGFR, EIF2AK2, ESRRG, FAM101B, FAS, FBLN5, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FOSL2, FPR2, FRMD5, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, GUCY1A3, HAMP, HCK, HCLS1, HCN1, HDAC9 (includes EG:9734), HLA-B, HLA-C, HLA-E, HLA-G, HMOX1, HP, HSD11B1, ICAM1, IDO1, IFIH1, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, IRAK3, ITGAM, ITGB2, ITGB3, ITGB6, JPH2, JUNB, KCNV2, KIAA0146, KIAA0247, KIAA1217, KIF13A, KITLG, KLHL2, LAMA2, LBP, LCP2, LEPR, LGALS3, LIMD1, LOX, LOXL3, LPIN1, LTBP4, LUM, MAGI3, MAN2A1, MAP1LC3B, MAPT, MATN2, MBD1, MBP, MCC, MCTP2, MMP3, MMP8, MMP14, MRAP2, MS4A6C, MS4A6D, MT1F, MTSS1, MTUS1, MX2, MYC, MYD88, NAMPT, NCF1, NCF4, NEBL, NFE2L2, NFIA, NFKB2, NFKBIA, NFKBIB, NFKBIZ, NHSL1, NR3C1, NTF3, NUBP1, OAS2, OPCML, OR51E2, OSMR, PANK1, PARP4, PBX1, PDE4B, PDE4D, PDE5A, PDE7A, PHF15, PIAS2, PIK3AP1, PKIA, PLA2G7, PLAUR, PLCB1, PLXDC2, POSTN, PPARA, PPARGC1B, PPP1R14C, PRDM16, PRELID2, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PROCR, PSMB8, PSMB9, PTGFR, PTPN2, PTPRR, QPCT (includes EG:25797), RAC1, RAMP1, RAPH1, RASGRP3, RECK, RELB, RGS5, RHOC, RHPN2, RIPK3, RNF213, RNF19B, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SBNO2, SCN7A, SDC1, SDC4, SELE, SELENBP1, SELP, SEMA3F, SERINC3, SERPINA3, SERPINE1, SLC24A3, SLC25A26, SLC39A14, SLC41A2, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SPON1, SPTLC2, SRPK2, STAT1, STAT3, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, TGM2, THBS2, TIMP1, TIMP2, TLR2, TLR3, TMEM163, TMEM173, TMEM45B, TMEM86A, TNFAIP3, TNFAIP6, TNFRSF19, TNFRSF1A, TNFSF10, TNNI3K, TP53INP1, TPM2, TRAF3IP2, TREX1 (includes EG:11277), TRIM21, TSPAN2, TUBA8, TUBA4A, UBA7, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, XDH, ZFP36	336
Inflammatory Disease	inflammatory disorder	inflammatory disorder of mammalia	1.72E-12	APOE, ARG1, B2M, BCL3, BCL2L1, BID, C2, C3, C1R, C1S, C4A, CCL5, CCL13, CCR1, CD44, CDKN1A, CFB, CFLAR, CSF1, CSF3, CTSS, CXCL3, CXCL12, CXCR4, DDIT3, EIF2AK2, FAS, FBLN5, FCER1G, FCGR1A, FCGR2B, HCK, HP, ICAM1, IGF1, IGHM, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, ITGAM, ITGB2, ITGB3, ITGB6, LEPR, LGALS3, LTBP4, LUM, MAP1LC3B, MBP, MMP3, MMP14, MX2, MYD88, NCF1, NFE2L2, NFKB2, NFKBIA, NFKBIB, POSTN, PPARA, SELE, SELP, SOCS3, STAT1, STAT3, TAP1, TGM2, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, TRAF3IP2, VEGFA, ZFP36	78
Inflammatory Disease	inflammatory disorder	inflammatory disorder of rodents	5.63E-12	APOE, ARG1, B2M, BCL3, BCL2L1, BID, C3, C4A, CCL5, CCL13, CCR1, CD44, CDKN1A, CFB, CFLAR, CSF1, CSF3, CTSS, CXCL3, CXCL12, CXCR4, DDIT3, EIF2AK2, FAS, FBLN5, FCER1G, FCGR1A, FCGR2B, HCK, HP, ICAM1, IGF1, IGHM, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, ITGAM, ITGB2, ITGB3, ITGB6, LEPR, LGALS3, LTBP4, LUM, MAP1LC3B, MBP, MMP3, MMP14, MX2, MYD88, NCF1, NFE2L2, NFKB2, NFKBIA, NFKBIB, POSTN, PPARA, SELE, SELP, SOCS3, STAT1, STAT3, TAP1, TGM2, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, TRAF3IP2, VEGFA, ZFP36	75
Inflammatory Disease	inflammatory disorder	inflammatory disorder of mice	5.86E-12	APOE, ARG1, B2M, BCL3, BCL2L1, BID, C3, C4A, CCL5, CCL13, CCR1, CD44, CDKN1A, CFB, CFLAR, CSF1, CSF3, CTSS, CXCL3, CXCL12, CXCR4, DDIT3, EIF2AK2, FAS, FBLN5, FCER1G, FCGR1A, FCGR2B, HCK, HP, ICAM1, IGF1, IGHM, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, ITGAM, ITGB2, ITGB3, ITGB6, LEPR, LGALS3, LTBP4, MAP1LC3B, MBP, MMP14, MX2, MYD88, NCF1, NFE2L2, NFKB2, NFKBIA, NFKBIB, POSTN, PPARA, SELE, SELP, SOCS3, STAT1, STAT3, TAP1, TGM2, TLR2, TLR3, TNFRSF1A, TNFSF10, TP53INP1, TRAF3IP2, VEGFA, ZFP36	73
Inflammatory Disease	arthritis	arthritis	3.68E-13	ACPL2, ACVR1B, ADAMTS1, ADAMTS4, ADAMTS9, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANKH, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ASPN, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, C2, C3, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C4A, CA8, CACNA2D2, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CDKN1A, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CILP, CLEC4D, CLEC4E, CLIC5, COL6A1, COMP, CSF1, CSF3, CSF2RB, CTSS, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, DDIT3, EBF1, ESRRG, FAM101B, FAS, FCER1G, FCGR1A, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-B, HLA-C, HLA-E, HLA-G, HP, ICAM1, IGF1, IGFBP5, IGHM, IL6, IL33, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LEPR, LOX, LPIN1, LUM, MAGI3, MATN2, MBD1, MCC, MCTP2, MMP3, MMP14, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, MYD88, NAMPT, NCF1, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RAPH1, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STAT3, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, THBS2, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TSPAN2, TUBA8, TUBA4A, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, XDH, ZFP36	221
Inflammatory Disease	arthritis	arthritis of rodents	1.93E-07	B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TLR2, TNFRSF1A, TNFSF10, ZFP36	32
Inflammatory Disease	arthritis	arthritis of animal	2.11E-07	ADAMTS4, B2M, C3, CCL5, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, LUM, MMP3, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TLR2, TNFRSF1A, TNFSF10, ZFP36	33
Inflammatory Disease	arthritis	arthritis of mice	1.36E-06	B2M, C3, CD44, CDKN1A, CFB, CSF3, CTSS, CXCL3, FAS, FCER1G, FCGR1A, FCGR2B, IL6, IL33, IL17RA, IL1R2, IL1RN, IL4R, LEPR, MMP14, MYD88, NCF1, NFKBIA, SOCS3, STAT1, TLR2, TNFRSF1A, TNFSF10, ZFP36	29
Inflammatory Disease	rheumatoid arthritis	rheumatoid arthritis	3.71E-10	ACPL2, ACVR1B, ADAMTS4, ADIPOQ, AFF3, AG2, AMPD3, ANGPTL2, ANK1, ANTXR1, APOE, ARG1, ARHGAP8, ARSB, ART1, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, C2, C10ORF107, C12ORF35, C13ORF15, C17ORF108, C1R, C4A, CA8, CACNB2, CAMK1D, CAPN10, CCL5, CCL6, CCL7, CCL13, CCL19, CCR1, CCRL2, CD24, CD44, CD83, CD274, CEBPB, CFB, CFLAR, CHCHD3, CHEK2, CHI3L1, CLEC4D, CLEC4E, CLIC5, COMP, CSF1, CSF2RB, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL13, CXCL14, CXCL16, CXCR4, CYP2B6, DAXX, EBF1, ESRRG, FAM101B, FCGR2B, FCGR3A, FGF12, FKBP5, FMNL2 (includes EG:114793), FPR2, G0S2, GADD45B, GBP2, GLIPR2, GLUL, GPC6, GRK5, HAMP, HCK, HCLS1, HLA-C, HLA-G, HP, ICAM1, IGF1, IGFBP5, IGHM, IL6, IL17RA, IL18BP, IL1R2, IL1RN, IL4R, ITGB2, JPH2, KCNV2, KIAA0247, KIAA1217, KIF13A, LBP, LOX, MAGI3, MATN2, MBD1, MCC, MMP3, MRAP2, MS4A6C, MS4A6D, MTSS1, MTUS1, NAMPT, NCF4, NEBL, NFIA, NFKBIA, NHSL1, NR3C1, NTF3, OR51E2, PBX1, PDE4B, PDE4D, PHF15, PIK3AP1, PLAUR, PLCB1, PLXDC2, PPARGC1B, PRIC285 (includes EG:85441), PRICKLE1, PRKAR2B, PSMB8, PSMB9, RECK, RGS5, RNF213, RWDD4A, RYR3, S100A8, S100A9, SAA1, SAA2, SAMD9L, SDC1, SDC4, SELE, SERINC3, SERPINA3, SLC24A3, SLC25A26, SLC39A14, SLC7A2, SLFN1, SLFN12, SLFN12L, SOCS3, SRPK2, STAT1, STEAP4, STXBP6, TAP1, TAP2, TAPBP, TFRC, TIMP1, TLR2, TLR3, TMEM163, TMEM173, TNFAIP3, TNFAIP6, TNFRSF1A, TNFSF10, TNNI3K, TPM2, TSPAN2, UBE2L6, VCAM1, VEGFA, VEGFC, VIT, VSIG4, WNT5A, ZFP36	190
Inflammatory Disease	nephritis	nephritis	8.29E-07	C4A, CCL5, CCL13, CCR1, CDKN1A, CXCL16, FAS, FCGR2B, ICAM1, IL1RN, NFE2L2, NFKB2, NFKBIA, NR3C1, PDE4B, PDE4D, PDE5A, PDE7A, SELP, TGM2, TLR2, TLR3, TNFRSF1A, TRAF3IP2, VCAM1, VEGFA	26
Inflammatory Disease	dermatitis	dermatitis	3.66E-06	CCL5, CXCL13, CXCR4, EIF2AK2, FCER1G, IGHM, IL1RN, IL4R, ITGB2, JUNB, LCP2, MMP3, MYC, NFKBIA, NFKBIB, NFKBIZ, NR3C1, OSMR, PDE4B, RELB, SELE, SELP, SOCS3, STAT1, TNFAIP3, TNFRSF1A, TNFSF10, ZFP36	28
Respiratory Disease	respiratory disorder	respiratory disorder	1.11E-13	ADA, ADRB1, ALDH3A1, ANTXR1, APOE, ARG1, BCL3, BCR, BID, BIRC2, C3, CCL5, CCL7, CCL13, CCL19, CD14, CD24, CD38, CD44, CD274, CEBPD, CFLAR, CHI3L1, CLEC4E, CSF1, CSF3, CSF2RB, CTSS, CTSZ (includes EG:1522), CXCL3, CXCL10, CXCL11, CXCL12, CXCR4, DDIT4, EGFR, EGLN3, EIF1AY, FBLN5, FCGR3A, FOSL2, FPR1, GLUL, HCK, HIF1A, HIST1H1C, HLA-G, HMOX1, HP, ICAM1, IER3, IL6, IL33, IL1RN, IL4R, IRAK3, IRF8, ITGAM, ITGB2, ITGB3, ITGB6, LBP, LCN2, LGALS3, LTBP4, MAN2A1, MGP, MMP8, MMP14, MX2, MYD88, NAMPT, NCF1, NFE2L2, NFKBIA, NR3C1, PAH, PDE4B, PDE4D, PDE5A, PDE7A, PLA2G5, PLA2G7, PML, PPARA, PTX3, S100A9, SAA2, SELE, SELENBP1, SERPINE1, SLC5A3, SOCS3, SOX4, SPHK1, STAT1, STAT3, TCIRG1, TIMP1, TIMP2, TLR2, TNFRSF1A, TRAF3IP2, TSPO, VEGFA	105
Respiratory Disease	respiratory disorder	respiratory disorder of rodents	2.71E-10	APOE, ARG1, BID, CCL5, CCL13, CCL19, CD14, CD44, CFLAR, CSF1, CSF3, CTSS, CXCL12, CXCR4, FBLN5, ICAM1, IL6, IL1RN, IL4R, ITGB3, ITGB6, LGALS3, LTBP4, MAN2A1, MMP14, MX2, MYD88, NCF1, NFE2L2, NR3C1, PDE4D, PLA2G5, PTX3, SERPINE1, SLC5A3, SOCS3, STAT1, STAT3, TNFRSF1A, TRAF3IP2, VEGFA	41
Respiratory Disease	respiratory disorder	respiratory disorder of mice	3.95E-10	APOE, ARG1, BID, CCL5, CCL13, CCL19, CD14, CD44, CFLAR, CSF1, CSF3, CTSS, CXCL12, CXCR4, FBLN5, ICAM1, IL6, IL4R, ITGB3, ITGB6, LGALS3, LTBP4, MAN2A1, MMP14, MX2, MYD88, NCF1, NFE2L2, NR3C1, PDE4D, PLA2G5, PTX3, SERPINE1, SLC5A3, SOCS3, STAT1, STAT3, TNFRSF1A, TRAF3IP2, VEGFA	40
Respiratory Disease	disease	disease of lung	2.54E-07	ADA, BID, CDKN1A, CSF1, CXCL12, FAS, FBLN5, FGF9, HCK, HMOX1, IL6, IL4R, IRAK3, IRF1, ITGB6, LCN2, LGALS3, MYD88, NR3C1, SEMA7A, SPHK1, STAT1, TGFBI, TIMP2, TLR2, TLR3, VEGFA, VEGFC, VTN, WNT5A	30
Respiratory Disease	severe acute respiratory syndrome	severe acute respiratory syndrome	6.90E-07	BCL3, CD24, CEBPD, CLEC4E, CSF2RB, CTSZ (includes EG:1522), EIF1AY, FCGR3A, FPR1, GLUL, HIST1H1C, HP, IER3, IL6, IRF8, ITGAM, LCN2, NCF1, NFKBIA, S100A9, TCIRG1, TIMP1, TIMP2, TLR2	24
Infectious Disease	infectious disorder	infectious disorder of mice	6.62E-13	B2M, BCL3, BIRC3, C3, CASP4, CCL13, CD14, CEBPB, CXCL3, DDX58, EIF2AK2, EIF4EBP1, FAS, H2-LD, HCK, HDC, IFI47, IFIH1, IGHM, IGTP, IL6, IL1RN, IRF8, IRGM, ITGB2, KY, LCN2, LUM, MSR1, MYD88, NR3C1, PML, PTX3, RELB, SLC11A1, STAT1, STAT3, TLR2, TLR3, TNFAIP3, TNFRSF1A, TRIM30	42
Infectious Disease	infectious disorder	infectious disorder of mammalia	1.50E-12	B2M, BCL3, BIRC3, C3, CASP4, CCL13, CD14, CEBPB, CXCL3, CXCL12, DDX58, EIF2AK2, EIF4EBP1, FAS, H2-LD, HCK, HDC, IFI47, IFIH1, IGHM, IGTP, IL6, IL1RN, IRF8, IRGM, ITGB2, KY, LCN2, LUM, MSR1, MYD88, NR3C1, PML, PTX3, RELB, SLC11A1, STAT1, STAT3, TLR2, TLR3, TNFAIP3, TNFRSF1A, TRIM30	43
Infectious Disease	infectious disorder	infectious disorder	5.86E-07	ADA, ADRB1, APOE, AR, ARHGAP18, ARID5A, B2M, BAK1, BCL3, BCL2L1, BCR, BID, BIRC3, BTG2, C2, C3, C1R, C1S, CA3, CA4, CA7, CA13, CA14, CACNA2D2, CACNB2, CAMK1D, CASP4, CASQ2, CAV2, CCL5, CCL7, CCL13, CCR1, CCRL2, CD14, CD24, CD44, CD47, CD83, CEBPB, CEBPD, CLEC4E, COL14A1, CSF2RB, CTSS, CTSZ (includes EG:1522), CX3CL1, CXCL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCR4, DARC, DDX58, EFNB2, EGFR, EIF1AY, EIF2AK2, EIF4EBP1, ENC1, ERCC1, FAS, FBLIM1, FCER1G, FCGR2B, FCGR3A, FPR1, GLUL, GUCY1A3, GUCY1B3, H2-LD, HCK, HDC, HIST1H1C, HLA-C, HP, ICAM1, IER3, IFI47, IFIH1, IFIT2, IFITM3, IGHM, IGTP, IL6, IL1R2, IL1RN, IL2RG, IL4R, IRF1, IRF8, IRGM, ITGAM, ITGB2, KY, LBP, LCN2, LCP2, LMOD3, LUM, MANBA, MAPT, MARCO, MID1IP1, MSR1, MYD88, NCF1, NFKBIA, NR3C1, NTM, OSBPL6, PANK1, PARP9, PCSK6, PDE4B, PDE4D, PDE5A, PDE7A, PER3, PML, PPARGC1A, PPM1K, PRG4 (includes EG:10216), PROCR, PSMA5, PSME2, PTX3, RAI14, RELB, RHOC, RND1, RPS6KA2, S100A9, SAA2, SDC1, SEMA5A, SERPINE1, SIPA1L2, SLC11A1, SLC2A1, SLCO2A1, SOX4, SRPK3, STAT1, STAT3, TBK1, TCIRG1, TFDP2, TFRC, TIMP1, TIMP2, TLR2, TLR3, TMEM163, TMTC1, TNFAIP3, TNFRSF1A, TNFSF10, TPPP, TRIM5, TRIM30, TUBA8, TUBA4A, UAP1, UBD	167
Infectious Disease	sepsis	sepsis	8.10E-09	ADRB1, APOE, BAK1, BCL2L1, BID, BIRC3, CD14, FAS, GUCY1A3, GUCY1B3, IL6, IL1R2, IL1RN, ITGB2, LBP, NFKBIA, NR3C1, PDE4B, PDE4D, PDE5A, PDE7A, PROCR, RELB, SERPINE1, TLR2, TNFRSF1A	26
Infectious Disease	infection	infection of mice	9.19E-08	BCL3, CEBPB, CXCL3, DDX58, EIF2AK2, EIF4EBP1, H2-LD, IFI47, IFIH1, IGHM, IGTP, IL6, IRGM, ITGB2, LCN2, MSR1, MYD88, PML, PTX3, RELB, SLC11A1, STAT1, TLR2, TLR3, TNFRSF1A	25
Infectious Disease	infection	infection of mammalia	1.22E-07	BCL3, CEBPB, CXCL3, CXCL12, DDX58, EIF2AK2, EIF4EBP1, H2-LD, IFI47, IFIH1, IGHM, IGTP, IL6, IRGM, ITGB2, LCN2, MSR1, MYD88, PML, PTX3, RELB, SLC11A1, STAT1, TLR2, TLR3, TNFRSF1A	26
Infectious Disease	endotoxin shock response	endotoxin shock response	1.10E-07	B2M, CASP4, CD14, GUCY1A3, GUCY1B3, HCK, IL1RN, LUM, MYD88, NR3C1, PDE4B, PDE4D, PDE5A, PDE7A, TNFAIP3, TRIM30	16
Infectious Disease	septic shock	septic shock	1.69E-07	B2M, CASP4, CD14, FAS, GUCY1A3, GUCY1B3, HCK, IL6, IL1RN, LUM, MYD88, NR3C1, PDE4B, PDE4D, PDE5A, PDE7A, TLR2, TNFAIP3, TRIM30	19
Infectious Disease	severe acute respiratory syndrome	severe acute respiratory syndrome	6.90E-07	BCL3, CD24, CEBPD, CLEC4E, CSF2RB, CTSZ (includes EG:1522), EIF1AY, FCGR3A, FPR1, GLUL, HIST1H1C, HP, IER3, IL6, IRF8, ITGAM, LCN2, NCF1, NFKBIA, S100A9, TCIRG1, TIMP1, TIMP2, TLR2	24
Infection Mechanism	replication	replication of virus	1.01E-12	ADAR, BAK1, BST2, CCL5, CCR1, CD38, CXCL3, CXCL10, CXCR4, DDX58, EIF2AK2, EIF4EBP1, FGF7, HCK, HMOX1, IFIH1, IFITM1, IFITM2, IFITM3, IGTP, IL6, IRF9, ISG20, LIFR, MX1, MX2, MYC, NFKBIA, PML, POU3F1, PPARA, RSAD2, S100A8, S100A9, SNX10, STAT1, STAT2, TBK1, TLR2, TNFRSF1A, TNFSF10, TNIP1, TRIM5, TRIM25, ZBP1, ZC3HAV1	46
Reproductive System Disease	endometriosis	endometriosis	1.61E-12	ADIPOQ, APOE, AR, ATP2B2, C10ORF10, C13ORF15, C1S, CAV2, CCL19, CCR1, CEBPB, COL6A1, CX3CL1, CXCL9, CXCL10, CXCL13, CXCR4, DARC, DBP, DNMT3A, EGFR, ERRFI1, FGF7, FOSL2, FPR2, G0S2, GUCY1B3, HIF1A, HLA-C, HSPB1, ICAM1, IL6, IL1R2, IL2RG, ISG20, ITGAM, ITGB3, JUNB, LEPR, MAP3K8, MBP, MEST, MGST1, MMP3, MMP14, MT1E, MT1F, OGFR, PDE4B, PDE4D, PDE5A, PDE7A, PENK, PFKFB3, PKIA, PLAUR, PON1, PTP4A1, PTPRR, QSOX1, RAC1, RELB, S100A8, S100A9, SELE, SERPINB1, SLC6A6, TGFBI, THBS2, TIMP2, TNFRSF1A, VEGFA, VEGFC, ZFP36	74
Reproductive System Disease	genital tumor	genital tumor	1.16E-10	ABCA8, ADA, ADIPOQ, ADRB1, ANTXR1, APOD, APOE, AR, ASPH, ATP8B1, B2M, BCR, C3, C13ORF15, C1R, C4A, CD24, CD44, CD274, CFB, CMTM8, COL15A1, CP, CSF1, CSF2RB, CX3CL1, CYP1B1, DTNA, EGFR, EIF4EBP1, ENTPD5, EPHA4, ESRRG, FABP7, FAS, FCGR3A, FHL2, GBP2, GINS1, HDAC9 (includes EG:9734), HSD11B1, IDO1, IER3, IFITM2, IGF1, IL6, IRF1, ITGB3, KITLG, LCN2, LRP8, LRRN4, LY6E, MGP, MYC, NFKBIA, NR3C1, OR51E2, PDE5A, PIM1, PLAUR, PML, PSAT1, RECK, RELB, RHOC, S100A8, S100A9, SEMA3C, SERPINB1, SERPING1, SLC22A3, SLC2A1, SLC39A6, SOCS3, STAT1, TMEM176B, TSPAN4, TUBA8, TUBA4A, TXNIP, UPK3B, VCAN, VEGFA, WIF1, ZNF827	86
Reproductive System Disease	reproductive system disorder	reproductive system disorder	3.11E-10	ADIPOQ, APOE, AR, ATP2B2, C10ORF10, C13ORF15, C1S, CAV2, CCL19, CCR1, CD14, CDKN1C, CEBPB, COL6A1, CRIP1, CX3CL1, CXCL9, CXCL10, CXCL13, CXCR4, DARC, DBP, DNMT3A, EGFR, ENTPD5, ERRFI1, FGF7, FOSL2, FPR2, G0S2, GUCY1B3, HIF1A, HLA-C, HSPB1, ICAM1, IL6, IL1R2, IL2RG, INHBB, ISG20, ITGAM, ITGB3, JUNB, KCNE4, LEPR, MAP3K8, MBP, MEST, MFAP3L, MGST1, MMP3, MMP14, MT1E, MT1F, MTHFD2, NR3C1, OGFR, PDE4B, PDE4D, PDE5A, PDE7A, PENK, PFKFB3, PKIA, PLAUR, PLCB1, PON1, PTP4A1, PTPRR, QSOX1, RAC1, RELB, S100A8, S100A9, SCARA5, SELE, SERPINB1, SERPINE1, SLC6A6, SOX4, STXBP6, SYNC, TGFBI, THBS2, TIMP2, TNFRSF1A, TSPAN12, UCP2, VEGFA, VEGFC, ZFP36	91
Reproductive System Disease	prostate cancer	prostate cancer	5.18E-09	ADIPOQ, ADRB1, ANTXR1, APOD, APOLD1, AR, ASPH, B2M, BCL2L1, BCR, C3, C1R, CCL5, CD24, CD44, CDKN1A, CFB, CHEK2, CSF1, CSF2RB, CX3CL1, CXCR4, CYP1B1, EGFR, EHBP1, EIF4EBP1, ENTPD5, EPHA4, ESRRG, FABP7, FAS, FCGR3A, FHL2, GBP2, HDAC9 (includes EG:9734), HMOX1, IDO1, IER3, IGF1, IGHM, IL6, IRF1, ISG15, ITGB3, LGALS8, LY6E, MSR1, MYC, NFKBIA, NR3C1, OR51E2, PDE5A, PIM1, PLAUR, PLXNB1, PML, PSAT1, RELB, RHOC, S100A8, S100A9, SERPINB1, SERPING1, SLC22A3, SLC2A1, SLC39A6, SOCS3, STAT1, STAT3, SYNPO2, TUBA8, TUBA4A, VCAN, VEGFA, WIF1, ZFP36, ZNF827	77
Reproductive System Disease	uterine tumor	uterine tumor	1.01E-08	ABCA8, AR, ASB5, BCR, BDH1, CD24, COL6A3, CSF1, CTSL2, CTSS, CXCL14, CYP1B1, DPT, ECM2, EGFR, EIF4EBP1, ESRRG, FAS, FMOD, GNG11, GPM6A, H19, HLA-B, IFIH1, IFIT3, IGF2, IGFBP5, IL6, KIAA0664, LIFR, MDH1, MEST, MFAP3L, MGST1, MTHFD2, MYC, PDE5A, PDK4, PKIA, PPIG, PSMB9, PTGFR, RGS5, SCARA5, SCN7A, SDPR, SERPINB9, SLC24A3, SLC5A3, SOCS3, SOX4, STXBP6, TIMP1, TSPAN12, TUBA8, TUBA4A, VCAN, VEGFA, XAF1	59
Reproductive System Disease	uterine cancer	uterine cancer	1.33E-08	ABCA8, AR, ASB5, BCR, BDH1, CD24, COL6A3, CSF1, CTSL2, CTSS, CXCL14, CYP1B1, DPT, ECM2, EGFR, EIF4EBP1, ESRRG, FAS, FMOD, GNG11, GPM6A, H19, HLA-B, IFIH1, IFIT3, IGF2, IGFBP5, IL6, KIAA0664, LIFR, MDH1, MEST, MFAP3L, MGST1, MTHFD2, MYC, PDE5A, PDK4, PKIA, PPIG, PSMB9, PTGFR, RGS5, SCARA5, SCN7A, SDPR, SERPINB9, SLC24A3, SLC5A3, SOCS3, SOX4, STXBP6, TIMP1, TSPAN12, TUBA8, TUBA4A, VCAN, VEGFA, XAF1, ZFP36	60
Reproductive System Disease	uterine leiomyoma	uterine leiomyoma	4.34E-08	ABCA8, ASB5, BDH1, CD24, COL6A3, CXCL14, DPT, ECM2, EGFR, EIF4EBP1, ESRRG, FAS, FMOD, GNG11, GPM6A, H19, IFIH1, IFIT3, IGF2, IGFBP5, KIAA0664, LIFR, MDH1, MEST, MFAP3L, MGST1, MTHFD2, MYC, PDE5A, PDK4, PKIA, PPIG, RGS5, SCARA5, SCN7A, SDPR, SLC24A3, SLC5A3, SOCS3, SOX4, STXBP6, TSPAN12, VCAN, XAF1	44
Reproductive System Disease	prostatic carcinoma	prostatic carcinoma	1.03E-07	ADIPOQ, ADRB1, ANTXR1, APOD, AR, ASPH, B2M, BCR, C3, C1R, CD24, CD44, CFB, CSF1, CSF2RB, CX3CL1, CYP1B1, EGFR, EIF4EBP1, ENTPD5, EPHA4, ESRRG, FABP7, FAS, FCGR3A, FHL2, GBP2, HDAC9 (includes EG:9734), IDO1, IER3, IGF1, IL6, IRF1, ITGB3, LY6E, MYC, NFKBIA, NR3C1, OR51E2, PDE5A, PIM1, PLAUR, PML, PSAT1, RELB, RHOC, S100A8, S100A9, SERPINB1, SERPING1, SLC22A3, SLC2A1, SLC39A6, SOCS3, TUBA8, TUBA4A, VCAN, VEGFA, WIF1, ZNF827	60
Reproductive System Disease	breast cancer	breast cancer	1.59E-07	ACOT9, ADA, ADIPOQ, ADRB1, APOE, AR, ARHGAP8, ATF3, ATP2B2, BCR, BEX1, BTG2, C2ORF40, CACNA2D2, CD24, CD44, CD274, CDKN1A, CEBPD, CENPA, CES1 (includes EG:1066), CHEK2, CHI3L1, CLEC10A, CNDP2, COL4A4 (includes EG:1286), COMT, CSF1, CXCL1, CXCL2, CXCL9, CXCL12, CXCL14, CYP2E1, DDIT4, EGFR, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, ERCC1, FABP7, FAM198B, FBLN5, FBXW7, FGF7, GADD45B, H19, HCCS, HCN1, HDAC9 (includes EG:9734), HEYL, HIF1A, HP, ICAM1, IER3, IGF1, IGFBP5, IL6, IL33, IL2RG, ITGB3, ITGB6, ITIH5, JAK2, JUNB, KLF10, LCN2, MAP1LC3B, MAP3K8, MAPT, MMP14, MSR1, MT1E, MT1F, MYC, NAMPT, NEK6, NEK7, NFKBIA, NR3C1, NR3C2, NTS, PCSK6, PDE4B, PDE4D, PDE5A, PDE7A, PDLIM4, PML, PPARA, PTP4A1, PTPRE, RELB, RGS2, RHOC, RRP12, SCN7A, SCUBE2, SELL, SERPINF1, SLC39A6, SNAI2, SOSTDC1, TIMP1, TLR3, TUBA8, TUBA4A, UPP1, VEGFA, VWA5A, ZFP36, ZNF24 (includes EG:7572)	113
Reproductive System Disease	serous ovarian carcinoma	serous ovarian carcinoma	2.24E-07	ABCA8, APOE, ATP8B1, BCR, C13ORF15, C4A, CD24, CMTM8, COL15A1, CP, DTNA, GINS1, HSD11B1, IFITM2, LCN2, LRP8, LRRN4, MGP, RECK, SEMA3C, SERPING1, STAT1, TMEM176B, TSPAN4, TXNIP, UPK3B	26
Reproductive System Disease	prostatic intraepithelial tumor	prostatic intraepithelial tumor	4.98E-07	C3, C1R, CFB, CX3CL1, ENTPD5, ESRRG, FCGR3A, FHL2, GBP2, IER3, IRF1, LY6E, OR51E2, PSAT1, S100A8, S100A9, SERPINB1, SERPING1, SOCS3, VCAN, WIF1, ZNF827	22
Reproductive System Disease	prostatic intraepithelial neoplasia	prostatic intraepithelial neoplasia	1.21E-06	AR, C3, C1R, CFB, CX3CL1, ENTPD5, ESRRG, FCGR3A, FHL2, GBP2, IER3, IRF1, LY6E, OR51E2, PSAT1, S100A8, S100A9, SERPINB1, SERPING1, SOCS3, VCAN, WIF1, ZNF827	23
Cellular Function and Maintenance	phagocytosis	phagocytosis of cells	1.38E-11	ADIPOQ, C3, CAPG, CD14, CD44, CD47, CLEC7A, COLEC12, CSF1, CSF3, CSF2RB, CXCL10, FAS, FCER1G, FCGR1A, FCGR2B, GULP1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, MARCO, MRC1L1, MSR1, MYC, MYD88, PTX3, RAC1, RAC2, SERPINE1, SLC11A1, SYK, TGM2, TLR2, TLR3	37
Cellular Function and Maintenance	phagocytosis	phagocytosis of eukaryotic cells	4.58E-08	CD14, CD44, CD47, CSF1, CSF3, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MARCO, MRC1L1, MSR1, MYC, RAC1, RAC2, SERPINE1, SYK, TGM2, TLR2, TLR3	27
Cellular Function and Maintenance	phagocytosis	phagocytosis of normal cells	2.52E-07	CD44, CD47, CSF1, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MSR1, RAC1, RAC2, SERPINE1, SYK, TGM2, TLR2, TLR3	22
Cellular Function and Maintenance	phagocytosis	phagocytosis of blood cells	1.07E-06	CD44, CD47, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MSR1, RAC1, RAC2, SERPINE1, SYK, TGM2	19
Cellular Function and Maintenance	homeostasis	Lymphocyte homeostasis	1.60E-10	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, LILRA6, MBP, MSR1, MYC, MYD88, NFE2L2, NFKBIA, NR3C1, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA	88
Cellular Function and Maintenance	homeostasis	homeostasis of cells	3.41E-10	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BCR, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, LILRA6, MBP, MSR1, MYC, MYD88, NFE2L2, NFKBIA, NR3C1, P2RY2, PENK, PGF, PIM1, PNP, PRKD1, PSMB8, PSMB9, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA	89
Cellular Function and Maintenance	development	T cell development	3.65E-10	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKBIA, NR3C1, PENK, PIM1, PNP, PRKD1, PSMB8, PSMB9, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA	85
Cellular Function and Maintenance	cell death	cell death of T lymphocytes	1.11E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CLEC10A, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IDO1, IER3, IGF1, IGHM, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TNFRSF1A, TNFSF10	48
Cellular Function and Maintenance	apoptosis	apoptosis of T lymphocytes	2.70E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IER3, IGF1, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10	43
Cellular Function and Maintenance	engulfment	engulfment of cells	4.07E-09	ADIPOQ, APOE, C3, CAPG, CD14, CD44, CD47, CLEC7A, COLEC12, CSF1, CSF3, CSF2RB, CXCL10, FAS, FCER1G, FCGR1A, FCGR2B, GULP1, HCK, HP, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, MARCO, MRC1L1, MSR1, MYC, MYD88, PTX3, RAC1, RAC2, SERPINE1, SLC11A1, SYK, TGM2, TLR2, TLR3	39
Cellular Function and Maintenance	engulfment	engulfment of eukaryotic cells	7.26E-08	APOE, CD14, CD44, CD47, CSF1, CSF3, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MARCO, MRC1L1, MSR1, MYC, RAC1, RAC2, SERPINE1, SYK, TGM2, TLR2, TLR3	28
Cellular Function and Maintenance	engulfment	engulfment of normal cells	1.81E-07	APOE, CD44, CD47, CSF1, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MSR1, RAC1, RAC2, SERPINE1, SYK, TGM2, TLR2, TLR3	23
Cellular Function and Maintenance	engulfment	engulfment of blood cells	7.75E-07	APOE, CD44, CD47, CSF2RB, CXCL10, FAS, FCGR1A, FCGR2B, GULP1, HCK, IRF8, ITGAM, ITGB2, ITGB3, MSR1, RAC1, RAC2, SERPINE1, SYK, TGM2	20
Cellular Function and Maintenance	reorganization	reorganization of cytoskeleton	3.07E-07	ANTXR1, AR, CAPN10, CCL13, CD44, CD47, CSF1, CXCL9, CXCL12, EPHA4, ICAM1, IGF1, ITGB3, LPIN1, MSN, PLAUR, PTPRF, RAC1, S100A9, SHC1, SYK, TNFSF10, VEGFA, VTN	24
Cellular Function and Maintenance	respiratory burst	respiratory burst of neutrophils	3.86E-07	C3, CXCL3, FCER1G, FPR1, HCK, ICAM1, ITGAM, ITGB2, ITGB3, LILRA6, SYK, VCAM1, VTN	13
Cellular Function and Maintenance	respiratory burst	respiratory burst of phagocytes	3.91E-07	C3, CXCL3, FCER1G, FPR1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, LILRA6, SYK, VCAM1, VTN	14
Cellular Function and Maintenance	presence	presence of cells	6.07E-07	ATF3, C3, CCL19, CXCL13, CXCR4, HCK, ICAM1, IGF2, IL6, KITLG, MYD88, NCAM1, SELE, SELP, SOCS3, TLR2	16
Cellular Function and Maintenance	presence	presence of normal cells	1.39E-06	C3, CCL19, CXCL13, CXCR4, HCK, ICAM1, IGF2, IL6, KITLG, MYD88, NCAM1, SELE, SELP, SOCS3, TLR2	15
Cellular Function and Maintenance	organization	organization of cytoskeleton	1.13E-06	ANTXR1, AR, CAPN10, CCL13, CD44, CD47, CSF1, CXCL9, CXCL12, EPHA4, FAS, FHL2, ICAM1, IGF1, ITGB3, LPIN1, MARCO, MSN, PLAUR, PTPRF, RAC1, S100A9, SHC1, SYK, TNFSF10, VEGFA, VTN	27
Cellular Function and Maintenance	localization	localization of normal cells	1.31E-06	C3, CCL19, CXCL13, CXCR4, ICAM1, IGF2, IL6, MYD88, NCAM1, SELE, SELP, SOCS3, TLR2	13
Antigen Presentation	activation	activation of phagocytes	7.74E-11	ADIPOQ, APOE, C3, CCL5, CCL7, CCL13, CD14, CLEC4E, CSF1, CSF3, CXCL1, CXCL3, CXCL6, FCER1G, FPR1, FPR2, HCK, ICAM1, IGF1, IL6, IL1RN, ITGAM, ITGB6, LBP, LCN2, MYD88, REG3G, S100A9, SBNO2, SELE, SELL, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	36
Antigen Presentation	activation	activation of antigen presenting cells	1.76E-09	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, ERAP1, FAS, FCER1G, FCGR1A, HCK, HLA-C, ICAM1, IGF1, IGHM, IL6, ITGB6, LBP, MYD88, PSMB8, PSMB9, PSME2, REG3G, RELB, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3, TLR2, TNFRSF1A, TNFSF10, VEGFA	36
Antigen Presentation	activation	activation of neutrophils	2.88E-07	C3, CCL5, CCL7, CCL13, CD14, CSF3, CXCL1, CXCL3, CXCL6, FPR1, FPR2, IL6, IL1RN, ITGAM, LCN2, MYD88, SELE, SELL	18
Antigen Presentation	activation	activation of macrophages	1.21E-06	ADIPOQ, APOE, CCL5, CCL7, CLEC4E, CSF1, CSF3, FCER1G, HCK, ICAM1, IGF1, IL6, ITGB6, LBP, MYD88, REG3G, S100A9, SBNO2, SERPING1, SLC11A1, SLC7A2, STAT1, STAT3	23
Antigen Presentation	chemotaxis	chemotaxis of phagocytes	7.91E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, FPR2, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SAA1, SELE, SPHK1, SYK, TNFRSF1A, VTN	33
Antigen Presentation	chemotaxis	chemotaxis of neutrophils	8.24E-11	CCL5, CCL7, CCL13, CSF1, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL6, CXCL10, CXCL12, CXCL14, FCER1G, FPR1, HCK, ITGAM, ITGB2, LILRA6, PDE4B, PDE4D, PENK, RAC1, RAC2, S100A8, S100A9, SELE, SYK, TNFRSF1A, VTN	29
Antigen Presentation	recruitment	recruitment of antigen presenting cells	4.32E-08	APOE, CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CXCL3, CXCL10, CXCL12, ICAM1, ITGB2, MYD88, NFE2L2, THBS2, TLR2, UCP2, VCAM1	18
Antigen Presentation	recruitment	recruitment of macrophages	1.01E-06	APOE, CCL7, CCL13, CCR1, CD44, CXCL10, CXCL12, ICAM1, ITGB2, MYD88, NFE2L2, THBS2, TLR2, UCP2, VCAM1	15
Antigen Presentation	cell movement	cell movement of macrophages	1.22E-07	ADIPOQ, APOE, BID, C3, CCL5, CCL13, CD44, CSF1, CX3CL1, CXCL9, DARC, EGLN3, FPR2, HIF1A, ICAM1, IL17RA, IRGM, ITGB2, MYD88, RAC2, SAA1, SELL, SERPING1, SPHK1, TLR3, TNFAIP3	26
Antigen Presentation	accumulation	accumulation of macrophages	1.18E-06	APOE, CCL5, CCL13, CCR1, CX3CL1, FAS, IL1RN, ITGAM, MMP3, MYD88, PTX3, S100A9, TIMP1, VEGFA	14
Antigen Presentation	migration	migration of dendritic cells	1.54E-06	APOE, C3, CCL5, CCL7, CCL19, CCR1, CD38, CD44, CTSZ (includes EG:1522), CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, ICAM1, RAC1, RAC2, SELE, TIMP1	20
Antigen Presentation	quantity	quantity of macrophages	2.43E-06	ADA, APOE, B2M, BID, CCL7, CCL13, CES1 (includes EG:1066), CSF1, CTSL2, CTSS, CX3CL1, CXCL10, FAS, FGF7, ITGB6, LGALS3, MMP3, MYD88, NFKBIA, RELB, SELP, SHC1, STAT3, TNFRSF1A, VEGFA	25
Antimicrobial Response	antiviral response	antiviral response of organism	7.84E-11	BCL3, CCL5, CCL19, CXCL12, CXCR4, DDX58, DHX58, EIF2AK2, HLA-C, IFI44, IFIH1, IRF7, ISG20, LCN2, MX1, MX2, MYD88, OAS1, STAT1, TBK1, TGTP1, TLR3, ZC3HAV1	23
Antimicrobial Response	antiviral response	antiviral response	2.61E-10	BCL3, CCL5, CCL19, CXCL12, CXCR4, DDX58, DHX58, EIF2AK2, HLA-C, IFI44, IFIH1, IRF1, IRF7, ISG20, LCN2, MX1, MX2, MYD88, OAS1, SOCS3, STAT1, TBK1, TGTP1, TLR3, ZC3HAV1	25
Antimicrobial Response	antiviral response	antiviral response of animal	1.64E-06	DDX58, DHX58, EIF2AK2, HLA-C, IFIH1, IRF7, MYD88, TBK1, TLR3	9

diovascular System Development and Func	angiogenesis	angiogenesis	8.98E-11	ADA, ADAMTS1, ANGPTL2, ANGPTL4, APOE, BAK1, BTG1, CCL13, COMP, CSF3, CTSS, CX3CL1, CXCL6, CXCL10, CXCL12, CXCL14, CXCR4, EFNB2, ERAP1, FAS, FBLN5, FBXW7, FGF7, FGF9, GCH1, GNA13, HIF1A, HMOX1, IL6, IL18BP, IL1RN, ITGB2, ITGB3, KITLG, LEPR, LGALS3, MEF2C, MEOX2, MMP3, MMP14, MYC, MYL7, NRP1, PGF, PLAUR, PLXNB1, PML, PTX3, RECK, RGS5, RTN4, SEMA3C, SEMA3F, SEMA5A, SERPINE1, SERPINF1, SHC1, SPHK1, TGM2, THBS2, TIMP1, TIMP2, TNFRSF1A, VCAM1, VEGFA, VEGFC, WARS	67
diovascular System Development and Func	angiogenesis	angiogenesis of organism	4.89E-09	ANGPTL2, COMP, CXCL12, EFNB2, ERAP1, HIF1A, IL1RN, ITGB3, LGALS3, MMP14, MYC, MYL7, NRP1, PGF, PLAUR, PLXNB1, RGS5, SERPINE1, SERPINF1, SPHK1, TIMP1, TIMP2, TNFRSF1A, VEGFA, VEGFC, WARS	26
diovascular System Development and Func	angiogenesis	angiogenesis of animal	1.44E-08	ANGPTL2, COMP, CXCL12, EFNB2, ERAP1, HIF1A, IL1RN, ITGB3, LGALS3, MMP14, MYC, MYL7, NRP1, PGF, PLXNB1, RGS5, SERPINE1, SERPINF1, SPHK1, TNFRSF1A, VEGFA, WARS	22
diovascular System Development and Func	angiogenesis	angiogenesis of mammalia	1.30E-07	ANGPTL2, CXCL12, EFNB2, ERAP1, HIF1A, IL1RN, ITGB3, LGALS3, MMP14, MYC, MYL7, PGF, PLXNB1, RGS5, SERPINE1, SERPINF1, SPHK1, TNFRSF1A, VEGFA, WARS	20
diovascular System Development and Func	angiogenesis	angiogenesis of mice	1.69E-07	ANGPTL2, CXCL12, EFNB2, ERAP1, HIF1A, IL1RN, ITGB3, LGALS3, MMP14, MYC, MYL7, PGF, PLXNB1, RGS5, SERPINE1, SPHK1, TNFRSF1A, VEGFA, WARS	19
diovascular System Development and Func	angiogenesis	angiogenesis of blood vessel	9.89E-07	ADA, ANGPTL4, BTG1, CX3CL1, CXCL10, CXCL12, EFNB2, ERAP1, FGF7, HMOX1, IL6, ITGB2, KITLG, MMP14, MYC, PML, RECK, SEMA3F, SERPINE1, SERPINF1, SPHK1, THBS2, TIMP2, TNFRSF1A, VEGFA, VEGFC	26
diovascular System Development and Func	binding	binding of endothelial cells	5.53E-10	C3, CCL5, CCR1, CD44, CD47, CX3CL1, CXCL11, CXCL12, DARC, ICAM1, IL6, ITGAM, ITGB2, ITGB3, LEPR, NRP1, PGF, SELE, SELL, SERPINE1, VCAM1, VEGFA	22
diovascular System Development and Func	development	development of blood vessel	1.95E-09	ADA, ADAMTS1, ANGPTL2, ANGPTL4, APOE, BAK1, BTG1, CCL13, COMP, CSF3, CTSS, CX3CL1, CXCL6, CXCL10, CXCL12, CXCL14, CXCR4, EFNB2, ERAP1, FAS, FBLN5, FBXW7, FGF7, FGF9, GCH1, GNA13, HEY1, HIF1A, HMOX1, IL6, IL18BP, IL1RN, ITGB2, ITGB3, JUNB, KITLG, LEPR, LGALS3, LOX, MEF2C, MEOX2, MMP3, MMP14, MYC, MYL7, NRP1, PGF, PLAUR, PLXNB1, PML, PRRX1, PTX3, QKI, RECK, RGS5, RTN4, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINE1, SERPINF1, SHC1, SOCS3, SPHK1, TGM2, THBS2, TIMP1, TIMP2, TIPARP, TNFRSF1A, VCAM1, VEGFA, VEGFC, WARS	75
diovascular System Development and Func	proliferation	proliferation of endothelial cells	8.40E-08	ADAMTS1, ANGPTL4, APOE, C3, CAV2, CCL13, CD44, CSF1, CXCL10, CXCL12, EFNB2, ERAP1, GUCY1A3, GUCY1B3, HEY1, HEYL, HMOX1, IGF1, IGF2, IL6, ITGB3, MGP, MYC, NRP1, PGF, PIM1, PPARA, RCAN1, TIMP2, TNFSF10, VEGFA, VEGFC	32
diovascular System Development and Func	adhesion	adhesion of endothelial cell lines	2.16E-06	CD44, CX3CL1, CXCL12, CXCR4, ICAM1, ITGAM, ITGB2, ITGB3, LGALS3, NFKBIA, PLAUR, RCAN1, SELE, SELP, TGFBI, TLR2, VCAM1, VEGFA, VEGFC	19
diovascular System Development and Func	cardiovascular process	cardiovascular process of organism	2.96E-06	ANGPTL2, COMP, CXCL12, EFNB2, ERAP1, HIF1A, IL1RN, ITGB3, LGALS3, MMP14, MYC, MYL7, NRP1, PGF, PLAUR, PLXNB1, RGS5, SERPINE1, SERPINF1, SPHK1, TIMP1, TIMP2, TNFRSF1A, VCAM1, VEGFA, VEGFC, WARS	27
Organismal Development	angiogenesis	angiogenesis	8.98E-11	ADA, ADAMTS1, ANGPTL2, ANGPTL4, APOE, BAK1, BTG1, CCL13, COMP, CSF3, CTSS, CX3CL1, CXCL6, CXCL10, CXCL12, CXCL14, CXCR4, EFNB2, ERAP1, FAS, FBLN5, FBXW7, FGF7, FGF9, GCH1, GNA13, HIF1A, HMOX1, IL6, IL18BP, IL1RN, ITGB2, ITGB3, KITLG, LEPR, LGALS3, MEF2C, MEOX2, MMP3, MMP14, MYC, MYL7, NRP1, PGF, PLAUR, PLXNB1, PML, PTX3, RECK, RGS5, RTN4, SEMA3C, SEMA3F, SEMA5A, SERPINE1, SERPINF1, SHC1, SPHK1, TGM2, THBS2, TIMP1, TIMP2, TNFRSF1A, VCAM1, VEGFA, VEGFC, WARS	67
Organismal Development	angiogenesis	angiogenesis of organism	4.89E-09	ANGPTL2, COMP, CXCL12, EFNB2, ERAP1, HIF1A, IL1RN, ITGB3, LGALS3, MMP14, MYC, MYL7, NRP1, PGF, PLAUR, PLXNB1, RGS5, SERPINE1, SERPINF1, SPHK1, TIMP1, TIMP2, TNFRSF1A, VEGFA, VEGFC, WARS	26
Organismal Development	angiogenesis	angiogenesis of animal	1.44E-08	ANGPTL2, COMP, CXCL12, EFNB2, ERAP1, HIF1A, IL1RN, ITGB3, LGALS3, MMP14, MYC, MYL7, NRP1, PGF, PLXNB1, RGS5, SERPINE1, SERPINF1, SPHK1, TNFRSF1A, VEGFA, WARS	22
Organismal Development	angiogenesis	angiogenesis of mammalia	1.30E-07	ANGPTL2, CXCL12, EFNB2, ERAP1, HIF1A, IL1RN, ITGB3, LGALS3, MMP14, MYC, MYL7, PGF, PLXNB1, RGS5, SERPINE1, SERPINF1, SPHK1, TNFRSF1A, VEGFA, WARS	20
Organismal Development	angiogenesis	angiogenesis of mice	1.69E-07	ANGPTL2, CXCL12, EFNB2, ERAP1, HIF1A, IL1RN, ITGB3, LGALS3, MMP14, MYC, MYL7, PGF, PLXNB1, RGS5, SERPINE1, SPHK1, TNFRSF1A, VEGFA, WARS	19
Organismal Development	angiogenesis	angiogenesis of blood vessel	9.89E-07	ADA, ANGPTL4, BTG1, CX3CL1, CXCL10, CXCL12, EFNB2, ERAP1, FGF7, HMOX1, IL6, ITGB2, KITLG, MMP14, MYC, PML, RECK, SEMA3F, SERPINE1, SERPINF1, SPHK1, THBS2, TIMP2, TNFRSF1A, VEGFA, VEGFC	26
Organismal Development	development	development of blood vessel	1.95E-09	ADA, ADAMTS1, ANGPTL2, ANGPTL4, APOE, BAK1, BTG1, CCL13, COMP, CSF3, CTSS, CX3CL1, CXCL6, CXCL10, CXCL12, CXCL14, CXCR4, EFNB2, ERAP1, FAS, FBLN5, FBXW7, FGF7, FGF9, GCH1, GNA13, HEY1, HIF1A, HMOX1, IL6, IL18BP, IL1RN, ITGB2, ITGB3, JUNB, KITLG, LEPR, LGALS3, LOX, MEF2C, MEOX2, MMP3, MMP14, MYC, MYL7, NRP1, PGF, PLAUR, PLXNB1, PML, PRRX1, PTX3, QKI, RECK, RGS5, RTN4, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINE1, SERPINF1, SHC1, SOCS3, SPHK1, TGM2, THBS2, TIMP1, TIMP2, TIPARP, TNFRSF1A, VCAM1, VEGFA, VEGFC, WARS	75
Gastrointestinal Disease	colorectal cancer	colorectal cancer	1.33E-10	ABCC3, ACSL5, ADAMTS1, ALAS1, ANGPTL2, ANTXR1, ANXA4, ARHGAP18, ATF3, BAK1, BCR, BEX1, BST2, C15ORF48, C1R, CAPG, CCND2, CD24, CD44, CD274, CDKN1A, CEBPD, CENPA, CENPF, CLIC5, COL6A1, COL6A3, COLEC12, CRIP1, CXCL1, CXCL10, CXCL12, CXCR4, CYP1B1, EGFR, EIF2AK2, ENC1, EPHA4, ERCC1, ERRFI1, FEN1, FGF12, GCH1, GLRX, GLUL, GMPS, HCLS1, HDAC9 (includes EG:9734), HLA-E, HMOX1, ICAM1, IFITM1, IGF1, IGF2, IGFBP5, IL6, IL2RG, ISG20, ISLR, LEPR, LGALS3, LGALS8, LILRA6, LRP8, LRRC17, LTBP4, MEST, MMP3, MT1E, MT1F, MYC, NDRG4, NEK6, NEK7, NR3C1, NRP1, OLFML3, OSMR, PCSK6, PDE5A, PGF, PLAUR, PLSCR4, PPARA, PRRX1, PTPRF, PTX3, QPCT (includes EG:25797), RAB3A, RRAD, SDC1, SDF2L1, SELENBP1, SERPINA3, SERPINE1, SLC2A1, SLC5A3, STAT1, STMN2, STXBP6, TCF21, TFRC, THBS4, TIMP1, TIMP2, TLR2, TNFSF10, TUBA8, TUBA4A, UNG, VCAM1, VEGFA, VEGFC, WARS, ZNF24 (includes EG:7572), ZWINT (includes EG:11130)	116
Gastrointestinal Disease	damage	damage of liver	1.14E-07	C3, CBLB, CCL13, CD44, CDKN1A, CXCL1, CXCL10, FAS, HCK, IL6, ITGB2, MT1E, MT1F, MYD88, NCF1, NFE2L2, SAA2, SDC4, STAT1, TLR2, TLR3, TNFRSF1A, TNFSF10	23
Gastrointestinal Disease	injury	injury of liver	1.39E-06	CCL13, CDKN1A, CXCL1, CXCL10, FAS, IL6, ITGB2, MYD88, NCF1, SAA2, SDC4, STAT1, TLR2, TLR3, TNFRSF1A	15
Cell-mediated Immune Response	development	T cell development	3.65E-10	ADA, ADRB1, APOE, B2M, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD83, CD274, CDKN1A, CEBPB, CFLAR, CHEK2, CLEC10A, CLEC4E, CXCL12, CXCR4, EPHA4, FAS, FBXW7, FCER1G, FCGR2B, GADD45G, HIST1H1C, HLA-C, ICAM1, IDO1, IER3, IGF1, IGF2, IGHM, IL6, IL33, IL1RN, IL2RG, IL4R, IRF1, IRF8, ITGB2, JUNB, KITLG, KLF10, LCP2, LGALS3, MBP, MSR1, MYC, MYD88, NFE2L2, NFKBIA, NR3C1, PENK, PIM1, PNP, PRKD1, PSMB8, PSMB9, RAC1, RAC2, RCAN1, RELB, SHC1, SOCS3, SOX4, SPHK1, ST3GAL1, STAT1, STAT3, SYK, TAPBP, TGM2, THBS2, TLR2, TLR3, TNFRSF1A, TNFSF10, VEGFA	85
Cell-mediated Immune Response	cell death	cell death of T lymphocytes	1.11E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CCL19, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CLEC10A, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IDO1, IER3, IGF1, IGHM, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, TGM2, THBS2, TNFRSF1A, TNFSF10	48
Cell-mediated Immune Response	apoptosis	apoptosis of T lymphocytes	2.70E-09	ADA, ADRB1, APOE, BAK1, BCL3, BCL2A1, BCL2L1, BID, CCL5, CCL13, CD24, CD44, CD47, CD274, CDKN1A, CFLAR, CHEK2, CXCL12, CXCR4, FAS, FBXW7, HIST1H1C, IER3, IGF1, IL6, IL2RG, LGALS3, MYC, NFE2L2, NFKBIA, NR3C1, PNP, RAC1, RAC2, RCAN1, SHC1, SPHK1, ST3GAL1, STAT1, STAT3, THBS2, TNFRSF1A, TNFSF10	43
Cell-mediated Immune Response	cell movement	cell movement of T lymphocytes	2.42E-08	C3, CCL5, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL9, CXCL10, CXCL11, CXCL12, CXCL16, CXCR4, DARC, FAS, ICAM1, IL6, IL17RA, IL18BP, ITGB2, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TLR2, TRAF3IP2	32
Cell-mediated Immune Response	cell movement	ell movement of memory T lymphocyte	8.32E-07	CCL5, CCL13, CCL19, CCR1, CXCL9, CXCL11, CXCL12, ICAM1, ITGB2	9
Cell-mediated Immune Response	migration	T cell migration	6.44E-07	C3, CCL5, CCL13, CCL19, CCR1, CD44, CHI3L3, CTSL2, CX3CL1, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, DARC, FAS, ICAM1, IL6, IL17RA, IL18BP, ITGB2, ITGB3, RAC1, SELE, SELL, SELP, SOCS3, STAT3, TGM2, THBS2, TIMP2, TLR2, TRAF3IP2	35
Cell-mediated Immune Response	migration	NK cell migration	2.01E-06	CCL5, CCL6, CCL7, CCL13, CD44, CX3CL1, CXCL9, CXCL10, HLA-G, PVR, SELL, VCAM1	12
Cell-mediated Immune Response	recruitment	recruitment of T lymphocytes	3.19E-06	CCL5, CCL7, CCL13, CCL19, CCR1, CD44, CSF3, CXCL3, CXCL9, CXCL10, CXCR4, HDC, ICAM1, VCAM1	14
Cell Signaling	quantity	quantity of calcium	3.67E-10	ADRB1, APOE, ATP2B2, BCL2L1, C3, CACNA2D2, CASQ2, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CSF1, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, DARC, EGFR, FAS, FCER1G, FCGR3A, FGF7, FPR1, FPR2, GNA13, GRK5, ICAM1, IGF1, IGF2, IGHM, IL6, ITGAM, LCP2, MAPT, MARCKSL1, MYC, NCAM1, NR3C1, NTF3, NUCB2, P2RY1, P2RY2, PLA2G5, PLAUR, PLCB1, PRND, PTGFR, RASGRP3, RGS2, RYR3, S100A8, S100A9, SAA1, SELE, SELL, SELP, SHC1, SYK, TRDN, TRIM21, VCAM1, VEGFA, WNT5A, XDH	70
Cell Signaling	mobilization	mobilization of calcium	1.12E-09	B2M, BCL2L1, C3, C4A, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CD44, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, EGFR, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, GNA13, ITGB2, KITLG, LCP2, LGALS3, LILRA6, LY6A, MBP, NTS, P2RY1, P2RY2, PGF, PIK3AP1, PILRA, PLA2G5, PLAUR, PLSCR1, PTGFR, RAC2, RPS6KA5, SAA1, SELL, SPHK1, SYK, TLR2, TLR3, VEGFA, WNT5A	58
Molecular Transport	quantity	quantity of calcium	3.67E-10	ADRB1, APOE, ATP2B2, BCL2L1, C3, CACNA2D2, CASQ2, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CSF1, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, DARC, EGFR, FAS, FCER1G, FCGR3A, FGF7, FPR1, FPR2, GNA13, GRK5, ICAM1, IGF1, IGF2, IGHM, IL6, ITGAM, LCP2, MAPT, MARCKSL1, MYC, NCAM1, NR3C1, NTF3, NUCB2, P2RY1, P2RY2, PLA2G5, PLAUR, PLCB1, PRND, PTGFR, RASGRP3, RGS2, RYR3, S100A8, S100A9, SAA1, SELE, SELL, SELP, SHC1, SYK, TRDN, TRIM21, VCAM1, VEGFA, WNT5A, XDH	70
Molecular Transport	quantity	quantity of lipid	3.36E-06	ADA, ADIPOQ, ADRB1, ANGPTL4, APOBEC1, APOD, APOE, AQP7, ATF3, BID, C3, CCL13, CD38, CEBPB, CES1 (includes EG:1066), CFD, CSF1, CTSS, CX3CL1, CYP2E1, EGFR, FAS, FCER1G, FCGR2B, FGF7, FPR2, HIF1A, HMOX1, HP, HSD11B1, IGF1, IGF2, IL6, IL17RA, IL18BP, IL1R2, IL1RN, KITLG, LBP, LEPR, LGALS8, LPIN1, MBP, MYC, MYD88, NR3C1, OLR1, PLA2G5, PLIN2, PLTP, PNPLA2, PON1, PPARA, PPARGC1A, PPARGC1B, PPP1R3C, PRKAA2, PTGFR, RRAD, RSC1A1, SERPINE1, SGMS1, SLC2A4, SPHK1, STAT3, TIMP1, TLR2, TNFRSF1A, TNFSF10, UCP1, UCP2, UCP3, XDH	73
Molecular Transport	mobilization	mobilization of calcium	1.12E-09	B2M, BCL2L1, C3, C4A, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CD44, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, EGFR, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, GNA13, ITGB2, KITLG, LCP2, LGALS3, LILRA6, LY6A, MBP, NTS, P2RY1, P2RY2, PGF, PIK3AP1, PILRA, PLA2G5, PLAUR, PLSCR1, PTGFR, RAC2, RPS6KA5, SAA1, SELL, SPHK1, SYK, TLR2, TLR3, VEGFA, WNT5A	58
Molecular Transport	accumulation	accumulation of lipid	3.87E-06	ADIPOQ, APOE, AQP7, BCL2L1, BID, CCL13, CCL19, CEBPB, CEBPD, CIDEC, COL14A1, CSF2RB, CXCL12, FABP7, FAS, GULP1, HMOX1, IGF1, IL6, IL1RN, LPIN1, MSR1, MYD88, NAMPT, PIK3R5, PLIN2, PLTP, PON1, PPARA, PRKAA2, SGMS1, SYK, TIMP1, UCP1, UCP2	35
Vitamin and Mineral Metabolism	quantity	quantity of calcium	3.67E-10	ADRB1, APOE, ATP2B2, BCL2L1, C3, CACNA2D2, CASQ2, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CSF1, CX3CL1, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCR4, DARC, EGFR, FAS, FCER1G, FCGR3A, FGF7, FPR1, FPR2, GNA13, GRK5, ICAM1, IGF1, IGF2, IGHM, IL6, ITGAM, LCP2, MAPT, MARCKSL1, MYC, NCAM1, NR3C1, NTF3, NUCB2, P2RY1, P2RY2, PLA2G5, PLAUR, PLCB1, PRND, PTGFR, RASGRP3, RGS2, RYR3, S100A8, S100A9, SAA1, SELE, SELL, SELP, SHC1, SYK, TRDN, TRIM21, VCAM1, VEGFA, WNT5A, XDH	70
Vitamin and Mineral Metabolism	mobilization	mobilization of calcium	1.12E-09	B2M, BCL2L1, C3, C4A, CBLB, CCL5, CCL7, CCL13, CCL19, CCR1, CD38, CD44, CX3CL1, CXCL1, CXCL2, CXCL3, CXCL9, CXCL10, CXCL11, CXCL12, CXCL13, CXCL16, CXCR4, EGFR, FAS, FCER1G, FCGR1A, FCGR2B, FPR1, FPR2, GNA13, ITGB2, KITLG, LCP2, LGALS3, LILRA6, LY6A, MBP, NTS, P2RY1, P2RY2, PGF, PIK3AP1, PILRA, PLA2G5, PLAUR, PLSCR1, PTGFR, RAC2, RPS6KA5, SAA1, SELL, SPHK1, SYK, TLR2, TLR3, VEGFA, WNT5A	58
Genetic Disorder	genetic disorder	genetic disorder	5.51E-10	ABCA8, ABCA9, ABCC3, ABCC9, ACOT9, ACSL4, ACTG2 (includes EG:72), ADA, ADAM9, ADAMTS1, ADAMTS4, ADAMTS9, ADAR, ADCK4, ADCY7, ADH1C (includes EG:126), ADIPOQ, ADRB1, AFF3, AK1, AK3L1, ALDH3A1, AMN1, ANGPTL4, ANK1, ANKH, ANKRD2, ANO4, ANTXR1, ANXA4, APLNR, APOD, APOE, APOLD1, AQP1, AQP7, AR, ARG1, ARHGAP18, ARHGAP20, ARID5B, ARSB, ART5, ASB2, ASNS, ASPH, ASPN, ATF3, ATP2B2, ATP8B1, AUTS2 (includes EG:26053), B2M, B4GALT5, BACH2 (includes EG:60468), BAK1, BCL3, BCL2L1, BCR, BIRC2, BST1, BST2, BTBD3, BTG1, BTG2, C2, C3, C10ORF72, C10ORF107, C15ORF48, C1R, C1S, C2ORF40, C4A, C4ORF31, C5ORF13, C6ORF89, CA3, CA4, CA7, CA8, CA13, CA14, CACNA2D2, CACNB2, CAMK1D, CAPG, CAPN10, CASP4, CASQ1, CASQ2, CBLB, CCDC69, CCL5, CCL7, CCL13, CCND2, CCR1, CCRL2, CD14, CD24, CD38, CD44, CD47, CD83, CD274, CDKN1A, CDKN1C, CEBPB, CENPA, CENPF, CENPJ, CFB, CFD, CFLAR, CHCHD3, CHEK2, CHI3L1, CHMP4B, CIDEC, CILP, CKB, CLEC7A, CLIC4, CLIC5, CMTM8, CNKSR1, CNN1, COL14A1, COL15A1, COL4A4 (includes EG:1286), COL6A1, COL6A3, COL8A1, COLEC12, COMP, COMT, CP, CPEB3, CRBN, CRIP1, CSF1, CSF3, CSF2RB, CSRP2, CSTB, CTSL2, CTSS, CUL4B, CX3CL1, CXCL1, CXCL2, CXCL6, CXCL9, CXCL10, CXCL12, CXCL14, CXCL16, CXCR4, CYGB, CYP1B1, CYP2E1, CYP7B1, CYTL1, DAAM1, DARC, DBP, DCAKD, DDIT3, DDX58, DHX58, DNAJB4, DNMT3A, DTNA, EBF1, EBF3, ECE2, EEPD1, EFNB2, EGFR, EHBP1, EIF6, EIF2AK2, EIF4A1, EIF4E, EIF4EBP1, EMILIN2, ENC1, ENTPD5, EPHA4, EPHB1, ERAP1, ERCC1, ESRRG, FABP7, FAH, FAM107A, FAM40B, FAS, FBLN2, FBLN5, FBP1, FBRSL1, FBXW7, FCER1G, FCGR2B, FCGR3A, FEN1, FGD4, FGF7, FGF9, FGF12, FHL2, FKBP4, FKBP5, FLOT1, FMNL2 (includes EG:114793), FNDC1, FOSL2, FPR1, FRMD5, GADD45B, GALM, GALNTL2, GAS1, GAS5, GBP2, GCH1, GCLM, GCNT2, GJA3, GLIPR2, GLRX, GLUL, GMPS, GOLSYN, GPC6, GPM6A, GPR133, GRHL1, GRK5, GUCY1A3, GUCY1B3, GULP1, GVIN1, H19, HAMP, HCK, HCN1, HDAC9 (includes EG:9734), HDC, HERC6, HFE, HIF1A, HLA-B, HLA-C, HLA-E, HLA-G, HMOX1, HOMER1, HP, HSD11B1, HSPB1, ICAM1, IDO1, IER3, IFITM1, IGF1, IGF2, IGF2BP2, IGFBP5, IGHM, IGSF1, IL6, IL33, IL17RA, IL1R2, IL1RN, IL2RG, IL4R, INHBB, IQGAP2, IRAK3, IRF1, IRF8, ISG15, ISG20, ITGA8 (includes EG:8516), ITGAM, ITGB2, ITGB3, ITGB6, ITGBL1, ITIH5, JAK2, JPH2, JUNB, KCNA1, KCND2, KCNIP2, KCNK3, KCNN2, KIAA0146, KIAA1217, KIF6, KIF13A, KIF1B, KITLG, KLF12, KLHL4, KY, LAMA2, LAMB3, LBH, LBP, LCN2, LCP2, LEPR, LGALS3, LGALS8, LIFR, LIMD1, LITAF, LOX, LOXL3, LPIN1, LRG1, LRP8, LRRC17, LRRC39, LRRC3B, LY6E, MAFF, MAGI3, MAMDC2, MAN2A1, MANBA, MAP3K8, MAPRE2, MAPT, MARCKSL1, MARCO, MASP1, MATN2, MBP, MCC, MCTP2, MDH1, MEOX2, MFAP4, MGP, MGST1, MID1, MITF, MMP3, MMP14, MMP15, MSR1, MT1E, MT1F, MTMR14, MTUS1, MYC, MYCN, MYD88, MYH11, MYO6, NAALAD2, NAMPT, NCAM1, NCF1, NCF4, NDRG4, NDUFAB1, NDUFS4, NEBL, NEK6, NEO1, NFE2L2, NFIA, NFKB2, NFKBIA, NFKBIZ, NHSL1, NPR3, NQO2, NR3C1, NR3C2, NRP1, NTF3, NTM, NTS, NUB1, NUBP1, OAS2, OGFR, OGN, OLR1, OPCML, OR51E2, OSBPL6, OSMR, P2RY1, PAH, PANK1, PARP4, PARP12, PBX1, PCSK6, PDE4B, PDE4D, PDE5A, PDE7A, PDLIM2, PDLIM4, PDLIM5, PENK, PER3, PGF, PGM2L1, PHACTR1, PHTF2, PHYHD1, PIAS2, PIM1, PITPNC1, PKIA, PLA2G5, PLA2G7, PLAUR, PLCB1, PLSCR1, PLSCR2, PLSCR4, PLTP, PLXDC2, PLXNB1, PML, PNKD (includes EG:25953), PNPLA2, PNPO, PON1, POSTN, POU3F1, PPARA, PPARGC1A, PPARGC1B, PPP1R14C, PPP1R16B, PRDM16, PRELID2, PRG4 (includes EG:10216), PRICKLE1, PRKAA2, PRKAR2B, PROCR, PSAT1, PSMA5, PSMB8, PSMB9, PSMF1, PTGFR, PTGR2, PTN, PTPN2, PTPRD, PTPRE, PTPRF, PTPRR, QKI, QPCT (includes EG:25797), QSOX1, RAB3A, RAC1, RAC2, RAI14, RAMP1, RAP1GAP2, RAPH1, RASGRP2, RASGRP3, RASSF3, RBM18, RCAN1, RECK, REEP1, REG3G, RELB, RFX5, RGS5, RHOC, RHPN2, RIPK3, RNASE1, RNF213, RNF19B, RPA3, RPS6KA2, RPS6KA5, RRAD, RRAS2, RSC1A1, RTN4, RUNX1T1, RYR3, S100A8, S100A9, SAA1, SBNO2, SCARA5, SCN7A, SCUBE2, SDC1, SDC4, SDF2L1, SELE, SELENBP1, SELL, SELP, SEMA3C, SEMA3F, SEMA5A, SEPT4, SERPINA3, SERPINB1, SERPINE1, SERPING1, SESN3, SFI1, SGMS1, SH3KBP1, SH3RF1, SHROOM2, SHROOM3, SIPA1L2, SLC11A1, SLC22A3, SLC24A3, SLC25A26, SLC2A1, SLC2A4, SLC39A6, SLC4A4, SLC6A6, SLC7A2, SLC9A9 (includes EG:285195), SLCO2A1, SLFN12L, SMTN, SNAI2, SNX10, SOCS3, SOST, SOX4, SPARCL1, SPON1, SPTLC2, SRPK2, ST3GAL1, ST7L, STARD9, STAT1, STAT3, STMN2, STXBP6, SULT1A1, SYK, SYN2, SYNPO2, TACC2, TAGLN, TAP2, TCIRG1, TFDP2, TFRC, TGFBI, TGM2, TGOLN2 (includes EG:10618), THBS2, TIMP1, TIMP2, TINAGL1, TIPARP, TLR2, TLR3, TMEM163, TMEM204, TMEM45B, TMEM86A, TMEM87B, TMPRSS13, TMTC1, TNFAIP3, TNFAIP6, TNFRSF19, TNFRSF1A, TNFSF10, TNNI3K, TOR3A, TP53INP1, TPM2, TPM3, TPMT, TRAF3IP2, TRDN, TREX1 (includes EG:11277), TRIM5, TRIM21, TRIM68, TSPAN2, TSPAN13, TSPO, TUBA8, TUBA4A, TULP4, TXNIP, UBA7, UBD, UCK2, UCP1, UCP2, UCP3, UNG, VCAN, VEGFA, VEGFC, VIT, VWA5A, WIF1, WNT5A, XDH, ZFP36, ZNF827, ZNF24 (includes EG:7572), ZWINT (includes EG:11130)	637
Genetic Disorder	genetic disorder	genetic disorder of mice	1.46E-09	ADIPOQ, ADRB1, ANGPTL4, APOE, AQP7, AR, ARID5B, B2M, BCR, C3, CCL5, CCL13, CD38, CD44, CDKN1C, CEBPB, CFLAR, CSF1, CSF3, CYP1B1, DDIT3, EGFR, EIF4EBP1, FAS, FBLN5, FCER1G, FCGR2B, FGF9, FHL2, GAS1, H19, HAMP, HCK, HDC, HSD11B1, ICAM1, IGF1, IGHM, IL6, IL1RN, IL4R, IRAK3, ITGAM, ITGB2, KY, LAMA2, LCP2, LEPR, LPIN1, MAN2A1, MAPT, MBP, MITF, MT1E, MT1F, MYC, MYD88, MYH11, NCF1, NFE2L2, NFKB2, PBX1, PCSK6, PML, PPARA, PPARGC1A, PPARGC1B, PRKAA2, PRKAR2B, RSC1A1, RTN4, RUNX1T1, SDC1, SERPINE1, SNAI2, SOCS3, STAT3, TNFRSF1A, TP53INP1, UCP1, VEGFA, WNT5A	82
Genetic Disorder	myocardial infarction	myocardial infarction	1.62E-09	ACTG2 (includes EG:72), ADIPOQ, ADRB1, APOE, CCL13, CD14, CD47, CSF1, CSF3, CXCL12, CXCR4, GUCY1A3, GUCY1B3, IL6, IL1RN, ITGAM, ITGB2, ITGB3, LRP8, P2RY1, PDE4B, PDE4D, PON1, POSTN, RAC1, SELP, TLR2, TSPO	28
Genetic Disorder	prostate cancer	prostate cancer	5.18E-09	ADIPOQ, ADRB1, ANTXR1, APOD, APOLD1, AR, ASPH, B2M, BCL2L1, BCR, C3, C1R, CCL5, CD24, CD44, CDKN1A, CFB, CHEK2, CSF1, CSF2RB, CX3CL1, CXCR4, CYP1B1, EGFR, EHBP1, EIF4EBP1, ENTPD5, EPHA4, ESRRG, FABP7, FAS, FCGR3A, FHL2, GBP2, HDAC9 (includes EG:9734), HMOX1, IDO1, IER3, IGF1, IGHM, IL6, IRF1, ISG15, ITGB3, LGALS8, LY6E, MSR1, MYC, NFKBIA, NR3C1, OR51E2, PDE5A, PIM1, PLAUR, PLXNB1, PML, PSAT1, RELB, RHOC, S100A8, S100A9, SERPINB1, SERPING1, SLC22A3, SLC2A1, SLC39A6, SOCS3, STAT1, STAT3, SYNPO2, TUBA8, TUBA4A, VCAN, VEGFA, WIF1, ZFP36, ZNF827	77
Genetic Disorder	obesity	obesity	2.24E-08	ADIPOQ, ADRB1, APOE, AQP7, AR, ARID5B, ATF3, C3, CA3, CA4, CA7, CA13, CA14, CCL5, CD14, CD38, CEBPB, CTSS, CYP2E1, EIF4EBP1, HIF1A, HSD11B1, ICAM1, IL6, IL1RN, ITGAM, LEPR, LOX, LPIN1, MT1E, MT1F, MYC, NAMPT, NR3C1, PPARA, PPARGC1A, PPARGC1B, PRKAA2, PRKAR2B, RSC1A1, SDC1, SERPINE1, SOCS3, STAT3, TNFRSF1A, UCP1, UCP2, UCP3, VEGFA	49
Genetic Disorder	obesity	obesity of mice	3.09E-06	ADIPOQ, ADRB1, APOE, AQP7, AR, ARID5B, C3, CD38, CEBPB, EIF4EBP1, HSD11B1, ICAM1, IL6, IL1RN, ITGAM, LEPR, LPIN1, MT1E, MT1F, MYC, PPARA, PPARGC1A, PPARGC1B, PRKAA2, PRKAR2B, RSC1A1, SDC1, SERPINE1, SOCS3, STAT3, TNFRSF1A, UCP1	32
Genetic Disorder	prostatic carcinoma	prostatic carcinoma	1.03E-07	ADIPOQ, ADRB1, ANTXR1, APOD, AR, ASPH, B2M, BCR, C3, C1R, CD24, CD44, CFB, CSF1, CSF2RB, CX3CL1, CYP1B1, EGFR, EIF4EBP1, ENTPD5, EPHA4, ESRRG, FABP7, FAS, FCGR3A, FHL2, GBP2, HDAC9 (includes EG:9734), IDO1, IER3, IGF1, IL6, IRF1, ITGB3, LY6E, MYC, NFKBIA, NR3C1, OR51E2, PDE5A, PIM1, PLAUR, PML, PSAT1, RELB, RHOC, S100A8, S100A9, SERPINB1, SERPING1, SLC22A3, SLC2A1, SLC39A6, SOCS3, TUBA8, TUBA4A, VCAN, VEGFA, WIF1, ZNF827	60
Genetic Disorder	prostatic intraepithelial tumor	prostatic intraepithelial tumor	4.98E-07	C3, C1R, CFB, CX3CL1, ENTPD5, ESRRG, FCGR3A, FHL2, GBP2, IER3, IRF1, LY6E, OR51E2, PSAT1, S100A8, S100A9, SERPINB1, SERPING1, SOCS3, VCAN, WIF1, ZNF827	22
Genetic Disorder	prostatic intraepithelial neoplasia	prostatic intraepithelial neoplasia	1.21E-06	AR, C3, C1R, CFB, CX3CL1, ENTPD5, ESRRG, FCGR3A, FHL2, GBP2, IER3, IRF1, LY6E, OR51E2, PSAT1, S100A8, S100A9, SERPINB1, SERPING1, SOCS3, VCAN, WIF1, ZNF827	23
Endocrine System Disorders	experimentally-induced diabetes	experimentally-induced diabetes	7.22E-10	AQP1, BTG2, C2, C3, C1S, CCND2, CEBPD, CP, GBP2, HCN1, HLA-C, HSPB1, ICAM1, IFITM3, IL1RN, IRF1, LCN2, LGALS3, MT1F, PDLIM4, RSAD2, SCN7A, SERPINA3, SERPING1, TIMP1, VEGFA	26
Metabolic Disease	experimentally-induced diabetes	experimentally-induced diabetes	7.22E-10	AQP1, BTG2, C2, C3, C1S, CCND2, CEBPD, CP, GBP2, HCN1, HLA-C, HSPB1, ICAM1, IFITM3, IL1RN, IRF1, LCN2, LGALS3, MT1F, PDLIM4, RSAD2, SCN7A, SERPINA3, SERPING1, TIMP1, VEGFA	26
Metabolic Disease	adiposity	adiposity of mice	8.54E-08	ADAMTS1, ADIPOQ, ADRB1, ARID5B, CDKN1A, CEBPB, CEBPD, EIF4EBP1, HDC, HSD11B1, ICAM1, IL6, IL1RN, LEPR, LPIN1, MEST, PLSCR1, PPARA, PPARGC1A, PRKAA2, PRKAR2B, SLC2A4, STAT3, UCP1, UCP2, UCP3, ZFP36	27
Metabolic Disease	metabolic disorder	metabolic disorder	2.70E-06	AASDHPPT, ABCA8, ABCA9, ABCC3, ABCC9, ADA, ADAM9, ADIPOQ, ADRB1, AFF3, ANGPTL4, ANO4, APOE, AQP1, AR, ARG1, ARHGAP20, ARSB, ART5, ATF3, ATP8B1, AUTS2 (includes EG:26053), B2M, B3GALT2, B4GALT5, BACH2 (includes EG:60468), BCL2L1, BTBD3, BTG2, C2, C3, C10ORF72, C10ORF107, C17ORF108, C1S, C6ORF57, CA3, CA4, CA7, CA8, CA13, CA14, CACNB2, CAPN10, CBLB, CCDC69, CCL5, CCL13, CCND2, CD14, CD38, CD44, CD47, CD83, CD274, CEBPB, CEBPD, CFB, CHCHD3, CHEK2, CIDEC, CLIC4, CLIC5, COL8A1, COLEC12, CP, CSF1, CXCL12, CXCL14, CYP2E1, CYTL1, DAAM1, DCAKD, DDIT3, DNMT3A, DTNA, EBF1, EBF3, EIF6, EPHB1, ESRRG, FAH, FAS, FBP1, FBRSL1, FGD4, FGF7, FGF12, FLOT1, GALM, GBP2, GCH1, GLIPR2, GLUL, GNA13, GPC6, GPM6A, GPR133, GRHL1, GRK5, GULP1, HAMP, HCN1, HDAC9 (includes EG:9734), HDC, HFE, HIF1A, HLA-B, HLA-C, HMOX1, HSD11B1, HSPB1, ICAM1, IFIH1, IFIT2, IFITM3, IGF1, IGF2, IGF2BP2, IGFBP5, IL6, IL1RN, IL4R, IQGAP2, IRF1, ITGA8 (includes EG:8516), ITGB2, ITGB3, ITGBL1, ITIH5, JAK2, JPH2, KCND2, KIF13A, KIF1B, KLF12, KRT222, LAMA2, LBH, LBP, LCN2, LEPR, LGALS3, LGALS8, LPIN1, LRP8, MAGI3, MAMDC2, MAN2A1, MANBA, MAP3K8, MARCH5, MASP1, MATN2, MCTP2, MT1F, MTUS1, MYC, NAALAD2, NCAM1, NDUFS4, NEBL, NEK6, NEO1, NFKBIA, NHSL1, NR3C1, NR3C2, NRP1, NTM, NTS, OAS1, OPCML, OR51E2, OSBPL6, OSMR, PAH, PANK1, PARP12, PDE4B, PDE4D, PDE5A, PDE7A, PDLIM4, PDLIM5, PGM2L1, PITPNC1, PLCB1, PLSCR1, PLSCR2, PLXDC2, PNKD (includes EG:25953), PNPLA2, PNPO, PON1, PPARA, PPARGC1A, PPARGC1B, PRICKLE1, PSAT1, PSMB8, PSMB9, PTGFR, PTPN2, PTPRE, PTPRR, RAB3A, RAI14, RASGRP2, RASSF3, RBM18, RCAN1, REG3G, RGS5, RNF213, RPS6KA2, RRAS2, RSAD2, RYR3, SAA1, SCN7A, SELE, SELL, SELP, SEMA3C, SEMA5A, SEPT4, SERPINA3, SERPINE1, SERPINF1, SERPING1, SLC24A3, SLC2A1, SLC2A4, SLC9A9 (includes EG:285195), SLFN12L, SOCS3, SPON1, SPTLC2, SRPK2, ST3GAL1, STAT3, STEAP2, SYK, SYNE2, TACC2, TAP1, TAP2, TGM2, TIMP1, TLR2, TLR3, TMEM163, TMEM87B, TNFRSF1A, TNNI3K, TPMT, TRAFD1, TRDN, TSPAN2, TUBA8, TUBA4A, TULP4, TXNIP, UCP1, UCP2, UCP3, VCAM1, VCAN, VEGFA, VIT, WARS, WNT5A, XDH, ZNFX1	277
Renal and Urological Disease	renal and urological disorder	renal and urological disorder	1.18E-09	ADIPOQ, ADRB1, APOE, AQP1, AR, ATF3, B2M, BAK1, BCL2L1, C3, C4A, CA3, CA4, CA7, CA13, CA14, CCL5, CCL13, CCND2, CCR1, CDKN1A, CFB, CFD, COL4A4 (includes EG:1286), COL6A1, CPXM1, CSF1, CSF3, CXCL16, CYP1B1, EGFR, FAS, FCER1G, FCGR2B, FXYD5, HIF1A, HMOX1, ICAM1, IGF1, IL6, IL1RN, LCN2, LEPR, LGALS3, MMP14, MT1E, MT1F, MYC, MYD88, NFE2L2, NFKB2, NFKBIA, NPR3, NR3C1, NR3C2, P2RY1, PARP3, PDE4B, PDE4D, PDE5A, PDE7A, SELP, SERPINA3, SERPINE1, SMTN, TGM2, TIMP1, TIMP2, TLR2, TLR3, TNFRSF1A, TRAF3IP2, UBD, VCAM1, VEGFA	75
Renal and Urological Disease	nephritis	nephritis	8.29E-07	C4A, CCL5, CCL13, CCR1, CDKN1A, CXCL16, FAS, FCGR2B, ICAM1, IL1RN, NFE2L2, NFKB2, NFKBIA, NR3C1, PDE4B, PDE4D, PDE5A, PDE7A, SELP, TGM2, TLR2, TLR3, TNFRSF1A, TRAF3IP2, VCAM1, VEGFA	26
Renal and Urological Disease	disease	disease of renal glomerulus	3.00E-06	ADIPOQ, C2, CFB, ICAM1, LEPR, MT1F, TLR2, TRAF3IP2	8
Cardiovascular Disease	vascular lesion	vascular lesion	1.43E-09	ADIPOQ, APOE, CCL13, CTSL2, CTSS, CX3CL1, CXCL10, HMOX1, ICAM1, IGF1, IGF2, IL6, IL33, MMP3, NCF1, NFKBIA, PGF, PLA2G5, PON1, PPARA, PTX3, SELE, SELP, SERPINE1, SHC1, STAT3, TIMP1, TNFAIP3, TNFRSF1A, TNFSF10, VCAM1, VEGFA	32
Cardiovascular Disease	myocardial infarction	myocardial infarction	1.62E-09	ACTG2 (includes EG:72), ADIPOQ, ADRB1, APOE, CCL13, CD14, CD47, CSF1, CSF3, CXCL12, CXCR4, GUCY1A3, GUCY1B3, IL6, IL1RN, ITGAM, ITGB2, ITGB3, LRP8, P2RY1, PDE4B, PDE4D, PON1, POSTN, RAC1, SELP, TLR2, TSPO	28
Cardiovascular Disease	atherosclerotic lesion	atherosclerotic lesion	2.47E-09	ADIPOQ, APOE, CCL13, CTSL2, CTSS, CX3CL1, CXCL10, HMOX1, ICAM1, IGF1, IGF2, IL33, MMP3, NCF1, NFKBIA, PGF, PLA2G5, PON1, PPARA, PTX3, SELE, SELP, SERPINE1, TIMP1, TNFAIP3, TNFRSF1A, TNFSF10, VCAM1, VEGFA	29
Cardiovascular Disease	acute coronary syndrome	acute coronary syndrome	4.16E-09	ACTG2 (includes EG:72), ADIPOQ, ADRB1, APOE, CCL13, CD14, CD47, CSF1, CSF3, CXCL12, CXCR4, GUCY1A3, GUCY1B3, IL6, IL1RN, ITGAM, ITGB2, ITGB3, LRP8, NR3C1, OLR1, P2RY1, PDE4B, PDE4D, PON1, POSTN, RAC1, SELP, TLR2, TSPO, TUBA8, TUBA4A	32
Cardiovascular Disease	infarction	infarction	6.45E-09	ACTG2 (includes EG:72), ADIPOQ, ADRB1, APOE, BCL2L1, CCL13, CD14, CD47, CSF1, CSF3, CXCL12, CXCR4, GUCY1A3, GUCY1B3, IGF1, IL6, IL1RN, ITGAM, ITGB2, ITGB3, LRP8, MAPT, P2RY1, PDE4B, PDE4D, PON1, POSTN, PROCR, RAC1, SELP, SERPINE1, TLR2, TSPO	33
Cardiovascular Disease	cardiovascular disorder	cardiovascular disorder	1.31E-08	ABCC9, ACSL5, ACTG2 (includes EG:72), ADAM9, ADIPOQ, ADRB1, AFF3, AMN1, ANGPTL4, ANK1, ANKH, ANO4, ANTXR1, ANXA4, APLNR, APOE, AR, ARHGAP8, ARHGAP20, ARID5B, ARSB, ASB2, ASPH, ATP2B2, AUTS2 (includes EG:26053), B2M, BACH2 (includes EG:60468), BCL2L1, BCR, BIRC3, C2, C3, C10ORF72, C10ORF107, C12ORF72, C9ORF71, CA3, CA4, CA7, CA13, CA14, CACNB2, CASQ2, CCL7, CCL13, CD14, CD44, CD47, CDKN1A, CFB, CFLAR, CHEK2, CLIC5, COL15A1, COL6A1, COLEC12, COMP, COMT, CPEB3, CSF1, CSF3, CTSS, CX3CL1, CXCL12, CXCR4, DAAM1, DDIT3, DRAM1, DTNA, EBF3, EEPD1, EFNB2, EGFR, EGLN3, EIF4EBP1, ENTPD5, EPHB1, ESRRG, FAH, FAM40B, FAS, FAT4, FGF7, FGF12, FMNL2 (includes EG:114793), FNDC1, FPR1, GALM, GLIPR2, GOLSYN, GPC6, GPM6A, GRHL1, GUCY1A3, GUCY1B3, HCK, HCLS1, HDAC9 (includes EG:9734), HIF1A, HMOX1, HOMER2, HSD11B1, ICAM1, IGF1, IGF2, IL6, IL33, IL17RA, IL1RN, IQGAP2, IRF8, ISG20, ITGA8 (includes EG:8516), ITGAM, ITGB2, ITGB3, ITGB6, ITIH5, JAK2, JPH2, JUNB, KCNIP2, KCNK3, KCNV2, KIAA1217, KIF13A, KITLG, KLF12, LAMA2, LBP, LCN2, LCP2, LEPR, LIFR, LIMS1, LRP8, LRRC17, LTBP4, MAGI3, MAMDC2, MAN2A1, MAPT, MARCKSL1, MATN2, MGP, MITF, MMP3, MSR1, MTMR14, MYD88, MYH11, MYLK4, MYO6, NDUFS4, NEBL, NFIA, NFKBIA, NHSL1, NPR3, NR3C1, NR3C2, NTM, OLR1, OPCML, OSBPL6, P2RY1, PAH, PARP4, PBX1, PDE4B, PDE4D, PDE5A, PDE7A, PGF, PHACTR1, PHTF2, PIK3AP1, PLA2G5, PLA2G7, PLCB1, PLSCR4, PLTP, PLXDC2, PNKD (includes EG:25953), PON1, POSTN, PPARA, PPARGC1A, PRELID2, PRICKLE1, PRKD1, PROCR, PSMF1, PTGFR, PTPRD, PTPRE, PTPRR, QSOX1, RAC1, RAPH1, RCAN1, REG3G, RGS2, RGS5, RPS6KA2, RPS6KA5, RRAD, RSAD2, RTN4, RYR3, S100A9, SCN7A, SELE, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINE1, SERPING1, SGMS1, SHC1, SHROOM3, SLC22A3, SLC24A3, SLC6A6, SLC7A2, SLC9A9 (includes EG:285195), SMTNL2, SPON1, ST3GAL1, STAT3, STMN2, SYK, SYNPO2, TACC2, TIMP1, TIMP2, TINAGL1, TLR2, TMEM163, TMTC1, TNFAIP6, TNFRSF1A, TNIP1, TRDN, TREX1 (includes EG:11277), TRIM5, TRIM21, TSPO, TUBA8, TUBA4A, TULP4, TXNIP, VCAM1, VCAN, VEGFA, VEGFC, VIT, WARS, XDH, ZFP36, ZNF827	263
Cardiovascular Disease	cardiovascular disorder	cardiovascular disorder of mammalia	8.39E-07	ADIPOQ, ADRB1, ANGPTL4, APOE, AR, BCL2L1, C3, CACNB2, CCL13, CD44, CFLAR, CTSS, CX3CL1, EGLN3, FGF7, HCK, HCLS1, HIF1A, HMOX1, HSD11B1, ICAM1, IGF2, IL6, IL33, IL1RN, ITGAM, ITGB3, LEPR, LIMS1, LTBP4, MARCKSL1, MSR1, MYD88, NR3C1, NR3C2, OLR1, PBX1, PDE4D, PLTP, PNKD (includes EG:25953), PON1, PPARA, PPARGC1A, PRKD1, PTGFR, RGS2, SELE, SELP, SERPINE1, SHC1, TIMP1, TRIM21, TXNIP, VCAM1, VEGFA	55
Cardiovascular Disease	cardiovascular disorder	cardiovascular disorder of rodents	1.07E-06	ADIPOQ, ADRB1, ANGPTL4, APOE, AR, BCL2L1, C3, CACNB2, CCL13, CD44, CFLAR, CTSS, CX3CL1, EGLN3, FGF7, HCK, HCLS1, HIF1A, HMOX1, HSD11B1, IGF2, IL6, IL33, IL1RN, ITGAM, LEPR, LIMS1, LTBP4, MARCKSL1, MSR1, MYD88, NR3C1, NR3C2, OLR1, PBX1, PDE4D, PLTP, PNKD (includes EG:25953), PON1, PPARA, PPARGC1A, PRKD1, PTGFR, RGS2, SELE, SELP, SERPINE1, SHC1, TIMP1, TRIM21, TXNIP, VEGFA	52
Cardiovascular Disease	infarct	infarct	2.84E-07	ABCC9, ADIPOQ, BID, C3, CCL13, CSF1, CSF3, CXCL12, DAXX, HMOX1, IL6, IL1RN, IRF1, NAMPT, NFKBIA, PIM1, PPARA, SERPING1, STAT1, TIMP1, TNFAIP3, UNG, VEGFA	23
Cardiovascular Disease	atherosclerosis	atherosclerosis of animal	1.12E-06	ADIPOQ, APOE, CCL13, CD44, CTSS, CX3CL1, IGF2, IL6, IL33, MSR1, MYD88, PLTP, PON1, SELE, SELP, TLR2	16
Cardiovascular Disease	atherosclerosis	atherosclerosis of mammalia	3.41E-06	ADIPOQ, APOE, CCL13, CD44, CTSS, CX3CL1, IGF2, IL6, IL33, MSR1, MYD88, PLTP, PON1, SELE, SELP	15
Cardiovascular Disease	arteriosclerosis	arteriosclerosis	2.83E-06	ADAM9, ADIPOQ, ADRB1, AFF3, AMN1, ANK1, ANO4, ANXA4, APLNR, APOE, ARHGAP20, ARSB, ASB2, AUTS2 (includes EG:26053), BACH2 (includes EG:60468), BIRC3, C10ORF107, CACNB2, CCL13, CD14, CD44, CD47, CDKN1A, CHEK2, CLIC5, COLEC12, COMT, CPEB3, CTSS, CX3CL1, DAAM1, DTNA, EEPD1, EFNB2, EGFR, ENTPD5, EPHB1, ESRRG, FAH, FAM40B, FGF12, FNDC1, GALM, GLIPR2, GOLSYN, GPC6, GPM6A, GRHL1, GRK5, GUCY1A3, GUCY1B3, HDAC9 (includes EG:9734), ICAM1, IGF2, IL6, IL33, IL17RA, IQGAP2, ITGA8 (includes EG:8516), ITGAM, ITGB2, ITGB3, ITIH5, JUNB, KIAA1217, LAMA2, LBP, LCN2, LEPR, LIFR, LRRC17, MAGI3, MAMDC2, MAN2A1, MATN2, MGP, MSR1, MTMR14, MYD88, MYH11, NEBL, NFIA, NHSL1, NPR3, NR3C1, NR3C2, NTM, OLR1, P2RY1, PAH, PBX1, PDE4B, PDE4D, PDE5A, PDE7A, PHACTR1, PLA2G5, PLA2G7, PLCB1, PLTP, PLXDC2, PNKD (includes EG:25953), PON1, POSTN, PPARA, PPARGC1A, PRICKLE1, PSMF1, PTPRD, PTPRE, QSOX1, RAPH1, REG3G, RPS6KA2, RPS6KA5, RSAD2, RTN4, RYR3, SCN7A, SELE, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINE1, SHROOM3, SLC22A3, SPON1, ST3GAL1, STAT3, SYK, SYNPO2, TACC2, TIMP1, TLR2, TMEM163, TNFAIP6, TRDN, TRIM5, TUBA8, VCAM1, VEGFA, ZFP36, ZNF827	144
Dermatological Diseases and Conditions	dermatological disorder	dermatological disorder	2.43E-09	ADA, ADAMTS4, ADAR, ADRB1, APOE, AR, B2M, BCR, C1R, C1S, C4A, CACNA2D2, CCL5, CCL7, CCL13, CCR1, CCRL2, CD14, CD47, CD83, CFB, COL14A1, COL15A1, COL4A4 (includes EG:1286), COL6A1, COL6A3, COL8A1, CTSL2, CXCL13, CXCR4, EGFR, EIF2AK2, FAS, FBLN5, FCER1G, FCGR1A, HFE, HIF1A, HLA-B, HLA-C, HLA-E, IGHM, IL6, IL1RN, IL2RG, IL4R, ITGB2, JUNB, KITLG, LAMB3, LCP2, LOX, LPIN1, MAPT, MARCO, MITF, MMP3, MSR1, MYC, NFKBIA, NFKBIB, NFKBIZ, NR3C1, OSMR, PDE4B, PDE5A, PLAUR, PPARA, RAC1, RAPH1, RELB, S100A8, S100A9, SAA1, SDC1, SDC4, SELE, SELL, SELP, SERPING1, SNAI2, SOCS3, STAT1, STAT3, TLR2, TNFAIP3, TNFRSF1A, TNFSF10, TUBA8, TUBA4A, UBD, VEGFA, ZFP36	93
Dermatological Diseases and Conditions	bleeding	bleeding of skin	1.62E-06	ICAM1, ITGB3, S100A9, SELE, SELL, SELP	6
Dermatological Diseases and Conditions	dermatitis	dermatitis	3.66E-06	CCL5, CXCL13, CXCR4, EIF2AK2, FCER1G, IGHM, IL1RN, IL4R, ITGB2, JUNB, LCP2, MMP3, MYC, NFKBIA, NFKBIB, NFKBIZ, NR3C1, OSMR, PDE4B, RELB, SELE, SELP, SOCS3, STAT1, TNFAIP3, TNFRSF1A, TNFSF10, ZFP36	28
Nutritional Disease	nutritional disorder	nutritional disorder	5.66E-09	ADIPOQ, ADRB1, APOE, AQP7, AR, ARID5B, ATF3, ATP8B1, C3, CA3, CA4, CA7, CA13, CA14, CCL5, CCL13, CD14, CD38, CD274, CEBPB, CTSS, CXCL3, CYP1B1, CYP2E1, EIF4EBP1, FAS, GCH1, HAMP, HDC, HFE, HIF1A, HSD11B1, ICAM1, IGF1, IL6, IL17RA, IL1RN, ITGAM, LEPR, LOX, LPIN1, MAPT, MT1E, MT1F, MYC, MYD88, NAMPT, NFE2L2, NFKBIA, NR3C1, NR3C2, PPARA, PPARGC1A, PPARGC1B, PRKAA2, PRKAR2B, RSC1A1, SDC1, SERPINE1, SOCS3, STAT3, TGM2, TNFAIP3, TNFRSF1A, TSPO, UCP1, UCP2, UCP3, VEGFA, ZFP36	70
Nutritional Disease	nutritional disorder	nutritional disorder of mice	7.00E-09	ADIPOQ, ADRB1, APOE, AQP7, AR, ARID5B, ATF3, ATP8B1, C3, CCL13, CD38, CD274, CEBPB, CXCL3, CYP1B1, EIF4EBP1, FAS, GCH1, HAMP, HDC, HFE, HSD11B1, ICAM1, IGF1, IL6, IL17RA, IL1RN, ITGAM, LEPR, LPIN1, MAPT, MT1E, MT1F, MYC, MYD88, NFE2L2, PPARA, PPARGC1A, PPARGC1B, PRKAA2, PRKAR2B, RSC1A1, SDC1, SERPINE1, SOCS3, STAT3, TGM2, TNFAIP3, TNFRSF1A, UCP1, UCP3, ZFP36	52
Nutritional Disease	obesity	obesity	2.24E-08	ADIPOQ, ADRB1, APOE, AQP7, AR, ARID5B, ATF3, C3, CA3, CA4, CA7, CA13, CA14, CCL5, CD14, CD38, CEBPB, CTSS, CYP2E1, EIF4EBP1, HIF1A, HSD11B1, ICAM1, IL6, IL1RN, ITGAM, LEPR, LOX, LPIN1, MT1E, MT1F, MYC, NAMPT, NR3C1, PPARA, PPARGC1A, PPARGC1B, PRKAA2, PRKAR2B, RSC1A1, SDC1, SERPINE1, SOCS3, STAT3, TNFRSF1A, UCP1, UCP2, UCP3, VEGFA	49
Nutritional Disease	obesity	obesity of mice	3.09E-06	ADIPOQ, ADRB1, APOE, AQP7, AR, ARID5B, C3, CD38, CEBPB, EIF4EBP1, HSD11B1, ICAM1, IL6, IL1RN, ITGAM, LEPR, LPIN1, MT1E, MT1F, MYC, PPARA, PPARGC1A, PPARGC1B, PRKAA2, PRKAR2B, RSC1A1, SDC1, SERPINE1, SOCS3, STAT3, TNFRSF1A, UCP1	32
Nutritional Disease	body mass index	body mass index of humans	8.36E-07	ADA, ADIPOQ, APOD, APOE, AR, CAPN10, HSD11B1, IGF2, IL6, LEPR, NPR3, NR3C1, PON1, PPARA, PPARGC1A, PTPRF, UCP1, UCP2, UCP3	19
Cell Morphology	size	size of normal cells	7.65E-09	ADA, ADIPOQ, APOE, AQP7, AR, BCL3, BCL2L1, BCR, CASQ2, CCL13, CD44, CD47, CDKN1A, CSF1, CSF3, FBXW7, IGF1, IGF2, IL6, IL2RG, IL4R, KITLG, LEPR, LIMS1, MARCKSL1, MYC, NR3C1, NTF3, PLCB1, PPARGC1A, PTGFR, RGS2, SERPINE1, SLC2A4, SOCS3, TNFSF10	36
Cell Morphology	size	size of eukaryotic cells	5.03E-08	ADA, ADIPOQ, APOE, AQP7, AR, BCL3, BCL2L1, BCR, CASQ2, CCL13, CD44, CD47, CDKN1A, CSF1, CSF3, FAS, FBXW7, IGF1, IGF2, IL6, IL2RG, IL4R, ITGB3, KITLG, LEPR, LIMS1, MARCKSL1, MYC, NR3C1, NTF3, PLCB1, PPARGC1A, PTGFR, RGS2, SERPINE1, SLC2A4, SOCS3, SYNM, TNFSF10	39
Cell Morphology	size	size of cells	9.45E-08	ADA, ADIPOQ, APOE, AQP7, AR, ATP2B2, BCL3, BCL2L1, BCR, CASQ2, CCL13, CD44, CD47, CDKN1A, CSF1, CSF3, EIF4E, FAS, FBXW7, IGF1, IGF2, IL6, IL2RG, IL4R, ITGB3, KITLG, LEPR, LIMS1, MARCKSL1, MYC, NR3C1, NTF3, PLCB1, PPARGC1A, PTGFR, RGS2, SERPINE1, SLC2A4, SOCS3, SYNM, TNFSF10, TPM3	42
Cell Morphology	morphology	morphology of eukaryotic cells	1.41E-08	ADA, APOE, ARG1, ASPN, ATF3, ATP2B2, BAK1, BCL2L1, BCR, CD44, CDKN1A, CDKN1C, CEBPB, COL15A1, CSF1, CTSZ (includes EG:1522), CXCL12, EFNB3, EGFR, ENTPD5, FAS, GNA13, HLF (includes EG:3131), IGF1, IL6, IRGM, ITGB3, JUNB, KITLG, LAMA2, LCN2, LCP2, LGALS3, LRP8, MAD2L2, MAPT, MARCKSL1, MARCO, MITF, MMP14, MSR1, MT1F, MYC, MYH11, NFE2L2, NR3C1, NTF3, OSMR, PLAUR, PLSCR1, PRKAR2B, PRND, PTPRE, RAC1, RRAS2, RTN4, SERPINE1, SHC1, SMAD1, STAT3, SYTL2, TACC2, TLR2, TPM3, VEGFA, VTN, WNT5A	67
Cell Morphology	morphology	morphology of cells	2.19E-08	ADA, APOE, ARG1, ASPN, ATF3, ATP2B2, BAK1, BCL2L1, BCR, CD44, CDKN1A, CDKN1C, CEBPB, COL15A1, CSF1, CTSZ (includes EG:1522), CXCL10, CXCL12, EFNB3, EGFR, ENTPD5, FAS, FBLIM1, GNA13, HLF (includes EG:3131), IGF1, IL6, IRGM, ITGB3, JUNB, KITLG, LAMA2, LCN2, LCP2, LGALS3, LRP8, MAD2L2, MAPT, MARCKSL1, MARCO, MITF, MMP14, MSR1, MT1F, MYC, MYCN, MYCT1, MYH11, NFE2L2, NR3C1, NTF3, OSMR, PLAUR, PLSCR1, PRKAR2B, PRND, PTPRE, RAC1, RRAS2, RTN4, SDC4, SERPINE1, SHC1, SMAD1, STAT3, SYTL2, TACC2, TLR2, TPM3, VEGFA, VTN, WNT5A	72
Cell Morphology	reorganization	reorganization of cytoskeleton	3.07E-07	ANTXR1, AR, CAPN10, CCL13, CD44, CD47, CSF1, CXCL9, CXCL12, EPHA4, ICAM1, IGF1, ITGB3, LPIN1, MSN, PLAUR, PTPRF, RAC1, S100A9, SHC1, SYK, TNFSF10, VEGFA, VTN	24
Cell Morphology	shape change	shape change	1.16E-06	ANGPTL2, ANK1, ANTXR1, ANXA7, APOE, CAPG, CCL5, CCL7, CCL13, CCR1, CD24, CD44, CD47, CDC42EP4, CENPA, CENPF, CSF1, CX3CL1, CXCL12, EGFR, FAS, FGD4, GNA13, HCK, HMOX1, HSPB1, IGF1, IGF2, IL6, ITGAM, ITGB2, ITGB3, ITGB6, KITLG, LAMA2, LGALS8, LIMS1, LPXN, MAP1LC3B, MSR1, MTSS1, MYC, MYD88, NCAM1, NR3C2, NRP1, NTF3, OLR1, PLAUR, POSTN, PRKD1, PTGFR, PVR, RAC1, RECK, RRAD, RTN4, SDC1, SDC4, SELL, SERPINA3, SERPINE1, SHROOM3, SNAI2, SPHK1, STAT3, SYK, SYNE2, SYNM, TGFBI, THBS2, VCAM1, VEGFA, VEGFC, VTN	75
Gene Expression	activation	activation of NFkB binding site	7.03E-08	ADIPOQ, AR, ATF3, BCL3, CD14, CEBPB, CXCL16, IER3, IGF1, MAP3K8, MYD88, NFKB2, NFKBIA, NFKBIB, NFKBIE, NR3C1, SMAD1, SYK, TLR3, TNFAIP3, TNFRSF1A, VCAM1, VEGFA	23
Gene Expression	expression	expression of synthetic promoter	2.78E-06	ADRB1, ANKRD1, AR, ATF3, BACH2 (includes EG:60468), BCL3, BIRC2, BST2, CCL13, CCNH, CD44, CDKN1A, CEBPB, CEBPD, CENPJ, CFLAR, CXCR4, EGFR, FHL2, GADD45G, HIF1A, IFI16, IGF1, IGF2, IL6, IRF1, LCP2, LGALS9, LIMD1, LITAF, MYC, MYD88, NCAM1, NEK6, NFKBIA, NFKBIB, NR3C1, NR3C2, PIAS2, PML, POU3F1, PPARA, PPARGC1A, RELB, RHOC, RUNX1T1, SHC1, SLC44A2, SMAD1, SNAI2, SOCS2, SOCS3, SOX4, STAT1, STAT3, TAGLN, TBK1, TGM2, TNFRSF1A, TNFSF10, TRAF3IP2, VCAM1	62
Gene Expression	expression	expression of gene	3.66E-06	AR, ATF3, BCL3, BCR, BTG1, BTG2, CCNH, CD44, CDKN1A, CEBPB, CSF1, CSF2RB, DAXX, DDIT3, DNMT3A, EBF1, EGFR, EIF2AK2, EPHB1, ESRRG, FCGR1A, FHL2, FOSL2, FPR2, HDAC9 (includes EG:9734), HIF1A, IFI16, IGF2, IL6, IL33, IRF1, ISG20, JAK2, LEPR, MAP3K8, MBD1, MYC, NFE2L2, NFIA, NFIB, NFKB2, NFKBIA, NFKBIZ, NMI, NR3C1, NR3C2, OSMR, PAK6, PBX1, PIAS2, PML, PPARA, PPARGC1A, PRIC285 (includes EG:85441), PRKAR2B, PRRX1, RCAN1, RELB, RUNX1T1, SMAD1, SMYD1, SOCS3, STAT1, STAT2, STAT3, SYK, TBK1, TCF23, TLR3, VEGFA, ZBP1	71
Hepatic System Disease	damage	damage of liver	1.14E-07	C3, CBLB, CCL13, CD44, CDKN1A, CXCL1, CXCL10, FAS, HCK, IL6, ITGB2, MT1E, MT1F, MYD88, NCF1, NFE2L2, SAA2, SDC4, STAT1, TLR2, TLR3, TNFRSF1A, TNFSF10	23
Hepatic System Disease	injury	injury of liver	1.39E-06	CCL13, CDKN1A, CXCL1, CXCL10, FAS, IL6, ITGB2, MYD88, NCF1, SAA2, SDC4, STAT1, TLR2, TLR3, TNFRSF1A	15
l and Muscular System Development and F	proliferation	proliferation of smooth muscle cells	1.93E-07	ADIPOQ, APOE, ARG1, CDKN1A, CDKN1C, CEBPD, COMT, CXCL16, EGFR, FBLN5, FGF9, HIF1A, IGF1, IGFBP5, IL6, IL1RN, MMP14, MYC, MYD88, NAMPT, NCF1, NOV, PLAUR, PPARA, PTPRF, SERPINE1, SHC1, STAT1, TGM2, VEGFA, VTN, XDH	32
l and Muscular System Development and F	migration	migration of smooth muscle cells	2.27E-07	ADIPOQ, APOE, CCL5, CD47, CLIC4, COMP, CTSL2, FBLN5, HMOX1, IGF1, IGFBP5, IL6, ITGAM, MEOX2, MYC, NEO1, NOV, PLAUR, PTPRF, SDC4, SERPINE1, TIMP1, VTN	23
l and Muscular System Development and F	differentiation	differentiation of bone cell lines	3.12E-06	ASPN, CCND2, CDKN1A, CEBPB, CENPF, CSF1, CSF3, CSF2RB, CXCL12, CXCR4, FGF9, IGF1, IL6, MEF2C, MYC, PRDM16, RGS2, RUNX1T1, SHC1, SOST, TIMP1, WNT5A	22
Cellular Compromise	respiratory burst	respiratory burst	2.24E-07	C3, CD14, CD24, CXCL3, FCER1G, FPR1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, LBP, LILRA6, NCF1, SLC11A1, SYK, VCAM1, VTN	19
Cellular Compromise	respiratory burst	respiratory burst of neutrophils	3.86E-07	C3, CXCL3, FCER1G, FPR1, HCK, ICAM1, ITGAM, ITGB2, ITGB3, LILRA6, SYK, VCAM1, VTN	13
Cellular Compromise	respiratory burst	respiratory burst of phagocytes	3.91E-07	C3, CXCL3, FCER1G, FPR1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, LILRA6, SYK, VCAM1, VTN	14
Cellular Compromise	respiratory burst	respiratory burst of cells	1.89E-06	C3, CD14, CXCL3, FCER1G, FPR1, HCK, ICAM1, IRF8, ITGAM, ITGB2, ITGB3, LILRA6, SYK, VCAM1, VTN	15
Cellular Compromise	adhesion	adhesion of leukemia cells	2.48E-07	CD44, ICAM1, ITGB2, SELE, SELL, VCAM1	6
Cellular Compromise	adhesion	adhesion of cancer cells	8.59E-07	CD44, CD47, CXCL12, EGFR, ICAM1, IGF1, ITGB2, ITGB3, SELE, SELL, VCAM1, VTN	12
Cellular Compromise	degranulation	degranulation of eukaryotic cells	1.18E-06	C3, C4A, CCL13, CCR1, CX3CL1, CXCL3, FCER1G, FCGR2B, FPR1, HCK, IL33, IL4R, ITGAM, ITGB2, JUNB, KITLG, LCP2, LILRA6, NCAM1, PILRA, PLAUR, PLSCR1, RAC2, SPHK1, SYK, TLR2	26
Tumor Morphology	adhesion	adhesion of leukemia cells	2.48E-07	CD44, ICAM1, ITGB2, SELE, SELL, VCAM1	6
Tumor Morphology	adhesion	adhesion of cancer cells	8.59E-07	CD44, CD47, CXCL12, EGFR, ICAM1, IGF1, ITGB2, ITGB3, SELE, SELL, VCAM1, VTN	12
)NA Replication, Recombination, and Repai	synthesis	synthesis of DNA	2.62E-07	ADA, ADIPOQ, ALDH3A1, APOE, AR, ATF3, BCL3, CCND2, CDKN1A, CDKN1C, CHEK2, COL14A1, COMT, CSF1, CSF3, CXCL10, CXCL12, EGFR, ERRFI1, FBLN5, FEN1, FGF7, FGF9, GUCY1A3, GUCY1B3, IGF1, IGF2, IGFBP5, IL6, IL1RN, IRF1, ITGB3, KITLG, LGALS3, LGALS8, MAP3K8, MYC, NCF1, NFKBIA, NOV, NTF3, NTS, PGF, PML, PRKD1, PTGFR, PTPRE, PTPRF, RAC1, RRAD, RRAS2, SDC4, SHC1, SPHK1, THBS2, TIMP2, TNFSF10, VEGFA, VTN	59
Cellular Assembly and Organization	reorganization	reorganization of cytoskeleton	3.07E-07	ANTXR1, AR, CAPN10, CCL13, CD44, CD47, CSF1, CXCL9, CXCL12, EPHA4, ICAM1, IGF1, ITGB3, LPIN1, MSN, PLAUR, PTPRF, RAC1, S100A9, SHC1, SYK, TNFSF10, VEGFA, VTN	24
Cellular Assembly and Organization	organization	organization of cytoskeleton	1.13E-06	ANTXR1, AR, CAPN10, CCL13, CD44, CD47, CSF1, CXCL9, CXCL12, EPHA4, FAS, FHL2, ICAM1, IGF1, ITGB3, LPIN1, MARCO, MSN, PLAUR, PTPRF, RAC1, S100A9, SHC1, SYK, TNFSF10, VEGFA, VTN	27
Hypersensitivity Response	cell movement	cell movement of eosinophils	3.49E-07	C3, CCL5, CCL13, CCR1, CD47, CHI3L3, CXCL9, CXCL10, FPR1, IL33, IL17RA, IL4R, ITGAM, ITGB2, LGALS3, LGALS9, MMP8, NFE2L2, PLA2G7, PPARA, VCAM1	21
Free Radical Scavenging	production	production of reactive oxygen species	4.72E-07	BAK1, BCL2L1, BCR, CCL5, CCL13, CD14, CD44, CD47, CDKN1A, CSF1, CXCL12, CYP2E1, DDIT3, FAS, HMOX1, ICAM1, IGF1, ITGB3, LCP2, NCF1, PIM1, RAC1, RAC2, RIPK3, SELE, SESN3, SHC1, SLC2A1, TGM2, TLR2, UCP1, UCP2, UCP3, VCAM1	34
Free Radical Scavenging	production	production of superoxide	3.62E-06	ADIPOQ, APOE, ARG1, CSF1, CSF3, CXCL9, CYP2E1, FAS, FPR1, GCH1, HCK, ITGAM, ITGB2, ITGB3, MYD88, NCF1, RAC1, RAC2, SELP, TLR2	20
onnective Tissue Development and Functic	quantity	quantity of connective tissue	4.79E-07	CEBPB, CEBPD, CSF1, DPT, EGFR, HDC, HSD11B1, IGF1, IGFBP5, LEPR, MSR1, MT1E, MT1F, NR3C1, PPARA, PPARGC1A, PRKAR2B, PRRX1, SERPINE1, UCP1	20

onnective Tissue Development and Functio	binding	binding of fibroblast cell lines	1.33E-06	CD44, CXCL2, FHL2, ICAM1, IGF1, IL6, IL13RA1, IL2RG, ITGAM, ITGB2, LOX, PLAUR	12
onnective Tissue Development and Functio	differentiation	differentiation of adipocytes	2.72E-06	ADIPOQ, ADRB1, ARL4A, BNP3 (includes EG:12176), CEBPB, DDIT3, EBF1, HSD11B1, IGF1, IL6, LAMB3, LPIN1, LRG1, MMP3, MYC, PPARA, PPARGC1A, PRG4 (includes EG:10216), PTGFR, RETNLA, RGS2, RUNX1T1, SELENBP1, SERPINF1, SLC2A4, TIMP1	26
Neurological Disease	neurological disorder	neurological disorder	5.99E-07	ABCA9, ACOT9, ACSL4, ADA, ADCK4, ADCY7, ADH1C (includes EG:126), ADIPOQ, ADRB1, AK1, AK3L1, ANK1, ANKRD2, ANO4, APLNR, APOD, APOE, AQP1, AR, ARG1, ARHGAP8, ARHGAP18, ARSB, ASB2, ASNS, ASPH, ATP2B2, AUTS2 (includes EG:26053), B2M, B4GALT5, BCL3, BCL2L1, BCR, BIRC2, BST1, BTG1, BTG2, C3, C1R, C20RF43, C4A, C5ORF13, C6ORF89, CA3, CA4, CAT, CA13, CA14, CACNA2D2, CACNB2, CANK10, CAP2, CASP4, CASQ1, CASQ2, CBLB, CCL5, CCL13, CCND2, CCR1, CD14, CD24, CD38, CD44, CD274, CDKN1C, CENPF, CENPJ, CFB, CFD, CFLAR, CHCHD3, CHI3L1, CKB, CLIC5, CMTM8, CNKSR1, CNN1, COL14A1, COL4A4 (includes EG:1286), COL6A3, COL8A1, COLEC12, COMT, CP, CRBN, CSF1, CSF3, CSF2RB, CSRP2, CST8, CTSL2, CTSS, CUL4B, CX3CL1, CXCL1, CXCL2, CXCL6, CXCL10, CXCL12, CXCL16, CXCR4, CYP1B1, CYP7B1, DBP, DDIT3, DDX58, DTNA, EBF1, EBF3, ECE2, EGFR, EIF6, EIF2AK2, EIF4EBP1, EML1N2, ENTPD5, EPHA4, ERAP1, ERCC1, ESRRG, FABP7, FAM107A, FAS, FBLN2, FBLN5, FBXW7, FCER1G, FGD4, FGF12, FHL2, FKBP4, FKBP5, FLOT1, FPR1, FRMD5, GALM, GALNTL2, GAS5, GCH1, GCLM, GCNT2, GLRX, GMPS, GRK5, GUCY1B3, GVIN1, HCN1, HDC, HERC6, HIF1A, HLA-B, HLA-G, HMOX1, HOMER1, HP, HSPB1, ICAM1, IDO1, IER3, IGF1, IGF2, IGFBP5, IGHM, IGSF1, IL6, IL1R2, IL1RN, IQGAP2, IRAK3, IRF8, IRF9, ITGB2, ITGB3, ITGB6, ITGBL1, ITIH5, JPH2, JUNB, KCNA1, KCND2, KCNIP2, KCNN2, KIF6, KIF13A, KIF18, KITLG, KLF12, KLHL4, LAMA2, LCN2, LGALS3, LGALS8, LIFR, LIMD1, LITAF, LOXL3, LPIN1, LRG1, LRP8, LRRC39, LRRC3B, MAFF, MAP3K8, MAPRE2, MAPT, MARCKSL1, MBP, MCC, MCTP2, MDH1, MEOX2, MGP, MITF, MT1E, MT1F, MYC, MYCN, MYD88, MYH11, MYO6, NAALAD2, NAMPT, NCAM1, NCF1, NDUFAB1, NDUFS4, NEO1, NFE2L2, NFKB2, NFKBIA, NHSL1, NPR3, NQO2, NR3C1, NR3C2, NTF3, NTM, NUB1, OGN, OLR1, OPCML, OSBPL8, OSMR, P2RY1, P2RY2, PAH, PBX1, PC3K9, PDE4B, PDE4D, PDE5A, PDLIM2, PDLIM5, PENK, PER3, PHACTR1, PHTF2, PHYHD1, PITPNC1, PKIA, PLAUR, PLCB1, PLSCR4, PLTP, PLXDC2, PNKD (includes EG:25953), PNPO, PON1, POU3F1, PPARA, PPARGC1A, PPARGC1B, PPP1R14C, PPP1R16B, PRDM16, PRICKLE1, PRKAR2B, PRND, PSAT1, PSMA5, PSMB8, PSMB9, PSMF1, PTGR2, PTN, PTPN2, PTPRD, PTPRE, PTPRF, PTPRR, QKI, RAB3A, RAC1, RAI14, RAP1GAP2, RASGRP2, RCAN1, RECK, REEP1, RELB, RHOC, RPA3, RTN4, RYR3, S100A9, SCARA5, SCN7A, SCUBE2, SDC1, SDC4, SELE, SELENBP1, SELL, SELP, SEMA3F, SEMA5A, SERPINA3, SERPINB1, SERPINE1, SERPINF1, SESN3, SF1, SGMS1, SH3KBP1, SH3RF1, SHROOM2, SHROOM3, SIPA1L2, SLC22A3, SLC24A3, SLC25A26, SLC2A1, SLC2A4, SLC6A6, SLC7A2, SLCO2A1, SMTN, SNX10, SOX4, SPARCL1, SPHK1, SPON1, ST3GAL1, ST7L, ST8SIA4, STARD9, STAT1, STMN2, STXBP6, SYK, SYN2, TACC2, TAGLN, TAP2, TGM2, TGOLN2 (includes EG:10618), TIMP1, TINAGL1, TIPARP, TLR2, TLR3, TMEM204, TMPRSS13, TMTC1, TNFRSF1A, TNFSF10, TOR3A, TPM3, TRAF3IP2, TRDN, TREX1 (includes EG:11277), TRIM68, TSPAN13, TSPO, TUBA8, TUBA4A, TULP4, TXNIP, UCK2, UCP2, UNG, USP18, VCAM1, VCAN, VEGFA, VWA5A, ZNF827	388
Humoral Immune Response	proliferation	proliferation of B lymphocytes	1.63E-06	ADA, BCL2L1, BCR, CBLB, CCND2, CD24, CD38, CD44, CDKN1A, CEBPB, CXCL12, FAS, FCGR2B, HCK, HIF1A, IGHM, IL6, IL13RA1, IL1RN, IL2RG, IL4R, IRF8, JUNB, KITLG, LPIN1, MYC, MYCN, MYD88, PIK3AP1, PTPN2, STAT1, TCIRG1, TLR2, TLR3, TPS3INP1	35
Lipid Metabolism	quantity	quantity of lipid	3.36E-06	ADA, ADIPOQ, ADRB1, ANGPTL4, APOBEC1, APOD, APOE, AQP7, ATF3, BID, C3, CCL13, CD38, CEBPB, CES1 (includes EG:1066), CFD, CSF1, CTSS, CX3CL1, CYP2E1, EGFR, FAS, FCER1G, FCGR2B, FGF7, FPR2, HIF1A, HMOX1, HP, HSD11B1, IGF1, IGF2, IL6, IL17RA, IL1BP, IL1R2, IL1RN, KITLG, LBP, LEPR, LGALS8, LPIN1, MBP, MYC, MYD88, NR3C1, OLR1, PLA2G5, PLIN2, PLTP, PNPLA2, PON1, PPARA, PPARGC1A, PPARGC1B, PPP1R3C, PRKAA2, PTGFR, RRAD, RSC1A1, SERPINE1, SGMS1, SLC2A4, SPHK1, STAT3, TIMP1, TLR2, TNFRSF1A, TNFSF10, UCP1, UCP2, UCP3, XDH	73
Lipid Metabolism	accumulation	accumulation of lipid	3.87E-06	ADIPOQ, APOE, AQP7, BCL2L1, BID, CCL13, CCL19, CEBPB, CEBPD, CIDEC, COL14A1, CSF2RB, CXCL12, FABP7, FAS, GULP1, HMOX1, IGF1, IL6, IL1RN, LPIN1, MSR1, MYD88, NAMPT, PIK3R5, PLIN2, PLTP, PON1, PPARA, PRKAA2, SGMS1, SYK, TIMP1, UCP1, UCP2	35
Lipid Metabolism	mass	mass of fat	4.19E-06	ADRB1, APOE, IGF1, IGF2, IL6, LEPR, NR3C1, PPARGC1A, UCP2, UCP3	10
Small Molecule Biochemistry	quantity	quantity of lipid	3.36E-06	ADA, ADIPOQ, ADRB1, ANGPTL4, APOBEC1, APOD, APOE, AQP7, ATF3, BID, C3, CCL13, CD38, CEBPB, CES1 (includes EG:1066), CFD, CSF1, CTSS, CX3CL1, CYP2E1, EGFR, FAS, FCER1G, FCGR2B, FGF7, FPR2, HIF1A, HMOX1, HP, HSD11B1, IGF1, IGF2, IL6, IL17RA, IL1BP, IL1R2, IL1RN, KITLG, LBP, LEPR, LGALS8, LPIN1, MBP, MYC, MYD88, NR3C1, OLR1, PLA2G5, PLIN2, PLTP, PNPLA2, PON1, PPARA, PPARGC1A, PPARGC1B, PPP1R3C, PRKAA2, PTGFR, RRAD, RSC1A1, SERPINE1, SGMS1, SLC2A4, SPHK1, STAT3, TIMP1, TLR2, TNFRSF1A, TNFSF10, UCP1, UCP2, UCP3, XDH	73
Small Molecule Biochemistry	accumulation	accumulation of lipid	3.87E-06	ADIPOQ, APOE, AQP7, BCL2L1, BID, CCL13, CCL19, CEBPB, CEBPD, CIDEC, COL14A1, CSF2RB, CXCL12, FABP7, FAS, GULP1, HMOX1, IGF1, IL6, IL1RN, LPIN1, MSR1, MYD88, NAMPT, PIK3R5, PLIN2, PLTP, PON1, PPARA, PRKAA2, SGMS1, SYK, TIMP1, UCP1, UCP2	35
Small Molecule Biochemistry	mass	mass of fat	4.19E-06	ADRB1, APOE, IGF1, IGF2, IL6, LEPR, NR3C1, PPARGC1A, UCP2, UCP3	10
Cell Cycle	G0 phase	G0 phase of cell lines	3.41E-06	ADIPOQ, BCL2L1, CDKN1A, CEBPD, CSF3, DAXX, EIF2AK2, IGF1, IL6, KITLG, MEOX2, MYC, PLAUR, PVR, STAT1	15

TABLE S8: Toxicological functons altered by LPS

Category	Function	Function Annotation	P-value	Molecules	# of Molecules
Cardiac Infarction	myocardial infarction	myocardial infarction	1.62E-09	ACTG2 (includes EG:72), ADIPOQ, ADRB1, APOE, CCL13, CD14, CD47, CSF1, CSF3, CXCL12, CXCR4, GUCY1A3, GUCY1B3, IL6, IL1RN, ITGAM, ITGB2, ITGB3, LRP8, P2RY1, PDE4B, PDE4D, PON1, POSTN, RAC1, SELP, TLR2, TSPO	28
Cardiac Infarction	myocardial infarction	myocardial infarction of mammalia	6.40E-02	ADIPOQ, APOE, IL1RN	3
Cardiac Infarction	myocardial infarction	myocardial infarction of humans	3.39E-01	ADIPOQ	1
Cardiac Infarction	myocardial infarction	myocardial infarction of mice	3.91E-01	APOE	1
Cardiac Infarction	acute myocardial infarction	acute myocardial infarction	1.97E-03	CSF3, CXCL12, IL6, P2RY1, PON1, POSTN, SELP, TLR2, TSPO	9
Cardiac Infarction	infarction	infarction of myocardium	7.94E-02	CSF1	1
Cardiac Infarction	infarction	infarction of heart	4.40E-01	BCL2L1	1
Liver Necrosis/Cell Death	cell death	cell death of liver cells	1.07E-07	ADIPOQ, APOE, BAK1, BCL2L1, BID, CD274, CDKN1A, CEBPB, DAXX, DDIT3, EGFR, FAS, FGL2, GADD45B, HMOX1, IGF1, IL6, ITGB2, ITGB3, MYC, MYD88, NCF1, SOCS3, TBK1, TIMP1, TNFRSF1A, TNFSF10, TNIP1	28
Liver Necrosis/Cell Death	cell death	cell death of hepatocytes	4.71E-04	BAK1, BID, CDKN1A, DAXX, DDIT3, EGFR, FAS, FGL2, GADD45B, HMOX1, IL6, MYC, MYD88, NCF1, TNFRSF1A, TNFSF10	16
Liver Necrosis/Cell Death	cell death	cell death of liver	8.01E-02	CD14, FAS, MT1E, MT1F	4
Liver Necrosis/Cell Death	cell death	delay in cell death of hepatocytes	1.53E-01	FAS	1
Liver Necrosis/Cell Death	apoptosis	apoptosis of liver cells	9.49E-07	ADIPOQ, BAK1, BCL2L1, BID, CD274, CDKN1A, CEBPB, DAXX, EGFR, FAS, GADD45B, IL6, ITGB3, MYC, MYD88, NCF1, SOCS3, TBK1, TIMP1, TNFRSF1A, TNFSF10, TNIP1	22
Liver Necrosis/Cell Death	apoptosis	apoptosis of hepatocytes	5.99E-04	BAK1, BID, CDKN1A, DAXX, EGFR, FAS, GADD45B, IL6, MYC, MYD88, NCF1, TNFRSF1A, TNFSF10	13
Liver Necrosis/Cell Death	apoptosis	apoptosis of hepatic stellate cells	1.14E-03	ADIPOQ, CEBPB, ITGB3, TIMP1	4
Liver Necrosis/Cell Death	apoptosis	apoptosis of sinusoidal endothelial cells	7.94E-02	FAS	1
Liver Necrosis/Cell Death	apoptosis	apoptosis of liver	2.82E-01	FAS	1
Liver Necrosis/Cell Death	necrosis	necrosis of liver cells	2.63E-03	APOE, FAS, FGL2, IGF1, ITGB2, SOCS3, TNFRSF1A	7
Liver Necrosis/Cell Death	necrosis	necrosis of hepatocytes	1.56E-01	FAS, FGL2	2
Liver Necrosis/Cell Death	necrosis	necrosis of liver	1.68E-01	CD14, MT1E, MT1F	3
Liver Damage	damage	damage of liver	1.14E-07	C3, CBLB, CCL13, CD44, CDKN1A, CXCL1, CXCL10, FAS, HCK, IL6, ITGB2, MT1E, MT1F, MYD88, NCF1, NFE2L2, SAA2, SDC4, STAT1, TLR2, TLR3, TNFRSF1A, TNFSF10	23
Liver Damage	damage	damage of liver cells	3.93E-02	IL1RN, IRF1, TNFRSF1A	3
Liver Damage	damage	damage of hepatocytes	7.63E-02	IL1RN, IRF1	2
Liver Damage	injury	injury of liver	1.39E-06	CCL13, CDKN1A, CXCL1, CXCL10, FAS, IL6, ITGB2, MYD88, NCF1, SAA2, SDC4, STAT1, TLR2, TLR3, TNFRSF1A	15
Liver Damage	injury	injury of hepatocytes	1.53E-01	IRF1	1
Renal Nephritis	nephritis	nephritis	8.29E-07	C4A, CCL5, CCL13, CCR1, CDKN1A, CXCL16, FAS, FCGR2B, ICAM1, IL1RN, NFE2L2, NFKB2, NFKBIA, NR3C1, PDE4B, PDE4D, PDE5A, PDE7A, SELP, TGM2, TLR2, TLR3, TNFRSF1A, TRAF3IP2, VCAM1, VEGFA	26
Renal Nephritis	nephritis	nephritis of animal	3.49E-04	C4A, CCR1, CDKN1A, FAS, FCGR2B, IL1RN, NFE2L2, NFKB2, NFKBIA, TGM2, TLR2, TLR3, TRAF3IP2	13
Renal Nephritis	nephritis	nephritis of rodents	2.20E-03	C4A, CCR1, CDKN1A, FAS, FCGR2B, IL1RN, NFE2L2, NFKB2, NFKBIA, TGM2, TRAF3IP2	11
Renal Nephritis	nephritis	nephritis of mice	4.52E-03	C4A, CCR1, CDKN1A, FAS, FCGR2B, NFE2L2, NFKB2, NFKBIA, TGM2, TRAF3IP2	10
Renal Nephritis	glomerulonephritis	glomerulonephritis	4.42E-06	C4A, CCL5, CCL13, CCR1, CDKN1A, CXCL16, FAS, FCGR2B, ICAM1, IL1RN, NFE2L2, NFKBIA, NR3C1, PDE4B, PDE4D, PDE5A, PDE7A, SELP, TLR3, TNFRSF1A, TRAF3IP2, VCAM1, VEGFA	23
Renal Nephritis	glomerulonephritis	glomerulonephritis of animal	6.09E-03	C4A, CCR1, CDKN1A, FAS, FCGR2B, IL1RN, NFE2L2, NFKBIA, TLR3, TRAF3IP2	10
Renal Nephritis	glomerulonephritis	glomerulonephritis of rodents	1.39E-02	C4A, CCR1, CDKN1A, FAS, FCGR2B, IL1RN, NFE2L2, NFKBIA, TRAF3IP2	9
Renal Nephritis	glomerulonephritis	glomerulonephritis of mice	2.69E-02	C4A, CCR1, CDKN1A, FAS, FCGR2B, NFE2L2, NFKBIA, TRAF3IP2	8
Renal Nephritis	glomerulonephritis	glomerulonephritis of rats	3.39E-01	IL1RN	1
Renal Nephritis	glomerulonephritis	glomerulonephritis of kidney	3.91E-01	VEGFA	1
Renal Nephritis	immune complex nephritis	immune complex nephritis of organism	5.21E-04	IL1RN, NFKB2, TGM2, TLR2	4
Renal Nephritis	immune complex nephritis	immune complex nephritis of animal	4.42E-03	NFKB2, TGM2, TLR2	3
Renal Nephritis	immune complex nephritis	immune complex nephritis of mice	6.30E-03	NFKB2, TGM2	2
Renal Nephritis	lupus nephritis	lupus nephritis	4.22E-03	CXCL16, FAS, FCGR2B, NR3C1, SELP, TNFRSF1A, VCAM1	7
Renal Nephritis	lupus nephritis	lupus nephritis of mice	2.46E-01	FAS, FCGR2B	2
Renal Nephritis	perimental crescentic glomeruloneph	experimental crescentic glomerulonephritis	3.39E-02	IL1RN, VEGFA	2
Renal Nephritis	focal glomerulonephritis	focal glomerulonephritis	5.98E-01	NR3C1	1
Liver Inflammation	inflammation	inflammation of liver	1.00E-05	ADIPOQ, CD14, CXCL2, CXCL3, DARC, FAS, HP, IL1RN, ITGB2, NFKBIB, TNFRSF1A	11
Renal Proliferation	proliferation	proliferation of mesangial cells	1.00E-05	APOE, CXCL9, CXCL10, EGFR, FCER1G, FPR2, IGF1, IGF2, IL6, PLAUR, STAT3	11
Renal Proliferation	proliferation	proliferation of kidney cells	3.07E-05	APOE, CXCL9, CXCL10, EGFR, FCER1G, FPR2, IGF1, IGF2, IL6, LCN2, PLAUR, STAT3	12
Renal Proliferation	proliferation	proliferation of renal tubular epithelial cells	2.82E-01	LCN2	1
Renal Damage	damage	damage of renal tubule	1.11E-05	BID, CCL13, CSF1, CSF3, ICAM1, LCN2, MYD88, TLR2	8
Renal Damage	damage	damage of kidney	2.26E-05	C3, C4A, CCL13, CFB, FAH, FAS, FCGR1A, HCK, IGF1, IL6, ITGB6, MYD88, SELP, TLR2	14
Renal Damage	damage	damage of tubulointerstitium	2.82E-01	APOE	1
Renal Damage	injury	injury of kidney	1.54E-03	CFB, FCGR1A, IGF1, IL6, ITGB6, MYD88, TLR2	7
Renal Damage	injury	injury of kidney cells	6.30E-03	C3, ICAM1	2
Renal Damage	injury	injury of renal tubule	7.63E-02	CCL13, TLR2	2
Renal Damage	injury	injury of podocytes	7.94E-02	C3	1
Renal Damage	injury	injury of tubular cells	7.94E-02	ICAM1	1
Renal Tubule Injury	damage	damage of renal tubule	1.11E-05	BID, CCL13, CSF1, CSF3, ICAM1, LCN2, MYD88, TLR2	8
Renal Tubule Injury	damage	damage of tubulointerstitium	2.82E-01	APOE	1
Renal Tubule Injury	proximal tubular toxicity	proximal tubular toxicity	1.01E-02	BTG2, CD24, CP, CTSS, CXCR4, CYP2E1, HSPB1, IGF1, IGFBP5, JUNB, LGALS3, SLC38A3, SULT1A1, TIMP1	14
Renal Tubule Injury	injury	injury of renal tubule	7.63E-02	CCL13, TLR2	2
Renal Tubule Injury	injury	injury of tubular cells	7.94E-02	ICAM1	1
Cardiac Dysfunction	dysfunction	dysfunction of left ventricle	1.95E-05	ADRB1, ANGPTL4, CCL13, CSF1, NCF1, PPARGC1A, SERPINE1, TIMP1	8
Cardiac Dysfunction	dysfunction	dysfunction of heart	1.05E-01	APOE, CACNB2, PPARA, SLC2A1	4
Cardiac Hypertrophy	hypertrophy	hypertrophy of heart ventricle	2.26E-05	APOE, ATF3, CASQ2, CCL13, CXCL12, EGFR, GUCY1A3, HDAC9 (includes EG:9734), HIF1A, IL6, PBX1, PPARA, PPARGC1A, RCAN1	14
Cardiac Hypertrophy	hypertrophy	hypertrophy of cardiomyocytes	6.36E-04	ADRB1, CSF3, FBXO32, FHL2, HDAC9 (includes EG:9734), IER3, IGF1, IL33, KCND2, NCF1, NFKBIA, PLCB1, RRAD, SERPINE1, SHC1, TIMP1, TNFAIP3	17
Cardiac Hypertrophy	hypertrophy	hypertrophy of right ventricle of heart	6.62E-04	APOE, CXCL12, GUCY1A3, HDAC9 (includes EG:9734), IL6, PBX1	6
Cardiac Hypertrophy	hypertrophy	hypertrophy of heart cells	8.46E-04	ADRB1, CSF3, FBXO32, FHL2, HCK, HDAC9 (includes EG:9734), IER3, IGF1, IL33, KCND2, NCF1, NFKBIA, PIM1, PLCB1, RRAD, SERPINE1, SHC1, TCF15, TIMP1, TNFAIP3	20
Cardiac Hypertrophy	hypertrophy	hypertrophy of cardiac muscle	3.41E-03	FBXO32, IGF1, IL6, RAC1, STAT3	5
Cardiac Hypertrophy	hypertrophy	hypertrophy of left ventricle	1.13E-02	CASQ2, CCL13, EGFR, HDAC9 (includes EG:9734), PBX1, PPARGC1A, RCAN1	7
Cardiac Hypertrophy	hypertrophy	hypertrophy of heart	2.52E-02	ACTG2 (includes EG:72), CASQ2, CDKN1A, EGFR, FBXO32, FHL2, HMOX1, LEPR, NR3C2, PNKD (includes EG:25953), POSTN, RAC1, RCAN1, SLC2A4, SMTN	15
Cardiac Hypertrophy	hypertrophy	hypertrophy of myocardium	5.09E-02	IL6, RAC1, STAT3	3
Cardiac Hypertrophy	hypertrophy	hypertrophy of ventricular septum	7.94E-02	HDAC9 (includes EG:9734)	1
Cardiac Hypertrophy	hypertrophy	hypertrophy of ventricular myocardium	1.53E-01	IL6	1
Cardiac Hypertrophy	hypertrophy	hypertrophy of atrium	2.20E-01	ATF3	1
Cardiac Hypertrophy	hypertrophy	hypertrophy of ventricular myocytes	3.37E-01	KCND2, PLCB1	2
Renal Necrosis/Cell Death	cell death	cell death of tubular cells	1.10E-04	BID, CASP12 (includes EG:12364), CDKN1A, ICAM1, IGF1, LCN2, MT1F, MYD88, TLR2	9
Renal Necrosis/Cell Death	cell death	cell death of renal tubular epithelial cells	2.35E-03	CASP12 (includes EG:12364), ICAM1, LCN2, MYD88, TLR2	5
Renal Necrosis/Cell Death	cell death	cell death of kidney cells	2.58E-03	APOE, BID, CASP12 (includes EG:12364), CDKN1A, DDIT3, ICAM1, IGF1, LCN2, MT1F, MYD88, TLR2	11
Renal Necrosis/Cell Death	apoptosis	apoptosis of tubular cells	8.42E-04	BID, CDKN1A, IGF1, LCN2, MT1F, MYD88, TLR2	7
Renal Necrosis/Cell Death	apoptosis	apoptosis of kidney cells	9.20E-03	APOE, BID, CDKN1A, DDIT3, IGF1, LCN2, MT1F, MYD88, TLR2	9
Renal Necrosis/Cell Death	apoptosis	apoptosis of renal tubular epithelial cells	5.09E-02	LCN2, MYD88, TLR2	3
Renal Necrosis/Cell Death	apoptosis	apoptosis of proximal tubule cells	5.36E-02	CDKN1A, IGF1	2
Renal Necrosis/Cell Death	apoptosis	apoptosis of mesangial cells	6.30E-01	APOE	1
Renal Necrosis/Cell Death	necrosis	necrosis of tubular cells	5.36E-02	CDKN1A, ICAM1	2
Renal Necrosis/Cell Death	necrosis	necrosis of proximal tubule cells	1.53E-01	CDKN1A	1
Renal Necrosis/Cell Death	necrosis	necrosis of renal tubular epithelial cells	1.53E-01	ICAM1	1
Kidney Failure	renal failure	renal failure	1.62E-04	AR, ATF3, CDKN1A, CFB, CSF3, HMOX1, LCN2, MYD88, NPR3, NR3C1, NR3C2, PDE4B, PDE4D, PDE5A, PDE7A	15
Kidney Failure	renal failure	delay in renal failure of mice	7.94E-02	CFB	1
Kidney Failure	renal failure	renal failure of mice	4.52E-01	CFB, MYD88	2
Kidney Failure	chronic renal failure	chronic renal failure	1.46E-03	AR, CDKN1A, CSF3, NR3C2, PDE4B, PDE4D, PDE5A, PDE7A	8
Kidney Failure	acute renal failure	acute renal failure	4.79E-03	ATF3, HMOX1, LCN2, MYD88, NPR3	5
Kidney Failure	nephrotoxic acute renal failure	nephrotoxic acute renal failure	6.30E-03	ATF3, HMOX1	2
Kidney Failure	failure	failure of kidney	3.93E-02	FCER1G, HMOX1, VEGFA	3
Liver Proliferation	proliferation	proliferation of liver cells	1.72E-04	ADIPOQ, C3, CDKN1A, CEBPB, CXCL3, CXCL12, IGF1, IL6, ITGB3, KITLG, LGALS3, MYC, PML, SOCS3, STAT1, TNFRSF1A, XDH	17
Liver Proliferation	proliferation	proliferation of hepatic stellate cells	6.62E-04	ADIPOQ, IGF1, ITGB3, LGALS3, STAT1, XDH	6
Liver Proliferation	proliferation	proliferation of hepatocytes	8.94E-03	C3, CDKN1A, CEBPB, CXCL3, IGF1, IL6, KITLG, MYC, PML, SOCS3, TNFRSF1A	11
Liver Proliferation	proliferation	proliferation of liver	2.20E-01	CEBPB	1
Liver Hepatitis	hepatitis	hepatitis	1.92E-04	ADIPOQ, BCL2L1, BID, CD14, CD44, CD274, CYP2E1, FAS, IL6, NFE2L2, PDE4B, PDE4D, PDE5A, PDE7A, PPARA, TIMP1, TLR3, TNFRSF1A, TNFSF10	19
Liver Hepatitis	hepatitis	hepatitis of mice	3.59E-04	BCL2L1, BID, CD44, FAS, IL6, NFE2L2, PPARA, TLR3, TNFRSF1A, TNFSF10	10
Liver Hepatitis	steatohepatitis	steatohepatitis	8.16E-04	ADIPOQ, CD14, CYP2E1, PDE4B, PDE4D, PDE5A, PDE7A, PPARA, TNFRSF1A	9
Liver Hepatitis	steatohepatitis	steatohepatitis of liver	2.82E-01	CD14	1
Liver Hepatitis	steatohepatitis	steatohepatitis of mice	4.40E-01	PPARA	1
Liver Hepatitis	nonalcoholic steatohepatitis	nonalcoholic steatohepatitis	1.15E-03	ADIPOQ, CYP2E1, PDE4B, PDE4D, PDE5A, PDE7A, TNFRSF1A	7
Liver Hepatitis	fulminant hepatitis	fulminant hepatitis of mice	2.92E-02	BCL2L1, BID, FAS	3
Liver Hepatitis	chronic hepatitis B	chronic hepatitis B	3.93E-02	CD274, IL6, TIMP1	3
Liver Hepatitis	necroinflammatory liver disease	necroinflammatory liver disease	7.94E-02	ADIPOQ	1

Liver Hepatitis	alcoholic hepatitis	alcoholic hepatitis	1.01E-01	IL6, TNFRSF1A	2
Liver Hepatitis	acute hepatitis	acute hepatitis of mice	1.53E-01	CD44	1
Liver Hepatitis	chronic autoimmune hepatitis	chronic autoimmune hepatitis	1.53E-01	TLR3	1
Liver Hepatitis	chronic hepatitis	chronic hepatitis of mice	1.53E-01	TLR3	1
Liver Hepatitis	chronic hepatitis	chronic hepatitis	4.31E-01	CD274, IL6, TIMP1, TLR3	4
Liver Hepatitis	experimental hepatitis	experimental hepatitis of mice	4.40E-01	FAS	1
Liver Hemorrhaging	bleeding	bleeding of liver	5.00E-04	FAS, MT1E, MT1F	3
Cardiac Arteriopathy	coronary artery disease	coronary artery disease	5.36E-04	ADAM9, AFF3, AMN1, ANK1, ANO4, ANXA4, APLNR, APOE, ARHGAP20, ARSB, ASB2, AUTS2 (includes EG:26053), BACH2 (includes EG:60468), C10ORF107, CACNB2, CD14, CD47, CHEK2, CLIC5, COLEC12, COMT, CPEB3, DAAM1, DTNA, EEPD1, EFNB2, EGFR, ENTPD5, EPHB1, ESRRG, FAH, FAM40B, FGF12, FNDC1, GALM, GLIPR2, GOLSYN, GPC6, GPM6A, GRHL1, GRK5, GUCY1A3, GUCY1B3, HDAC9 (includes EG:9734), ICAM1, IL6, IL33, IL17RA, IQGAP2, ITGA8 (includes EG:8516), ITGAM, ITGB2, ITGB3, ITIH5, KIAA1217, LAMA2, LBP, LEPR, LIFR, LRRC17, MAGI3, MAMDC2, MAN2A1, MATN2, MSR1, MTMR14, MYH11, NEBL, NFIA, NHSL1, NPR3, NR3C1, NR3C2, NTM, P2RY1, PAH, PBX1, PDE4B, PDE4D, PDE5A, PDE7A, PHACTR1, PLA2G5, PLA2G7, PLCB1, PLXDC2, PNKD (includes EG:25953), PON1, POSTN, PPARA, PPARGC1A, PRICKLE1, PSMF1, PTPRD, PTPRE, QSOX1, RAPH1, REG3G, RPS6KA2, RPS6KA5, RYR3, SCN7A, SELE, SELP, SEMA3C, SEMA3F, SEMA5A, SERPINE1, SHROOM3, SLC22A3, SPON1, ST3GAL1, SYK, SYNPO2, TACC2, TMEM163, TNFAIP6, TRDN, TRIM5, TUBA8, VEGFA, ZNF827	122
Liver Steatohepatitis	steatohepatitis	steatohepatitis	8.16E-04	ADIPOQ, CD14, CYP2E1, PDE4B, PDE4D, PDE5A, PDE7A, PPARA, TNFRSF1A	9
Liver Steatohepatitis	steatohepatitis	steatohepatitis of liver	2.82E-01	CD14	1
Liver Steatohepatitis	steatohepatitis	steatohepatitis of mice	4.40E-01	PPARA	1
Liver Steatohepatitis	nonalcoholic steatohepatitis	nonalcoholic steatohepatitis	1.15E-03	ADIPOQ, CYP2E1, PDE4B, PDE4D, PDE5A, PDE7A, TNFRSF1A	7
Liver Steatosis	steatohepatitis	steatohepatitis	8.16E-04	ADIPOQ, CD14, CYP2E1, PDE4B, PDE4D, PDE5A, PDE7A, PPARA, TNFRSF1A	9
Liver Steatosis	steatohepatitis	steatohepatitis of liver	2.82E-01	CD14	1
Liver Steatosis	steatohepatitis	steatohepatitis of mice	4.40E-01	PPARA	1
Liver Steatosis	nonalcoholic steatohepatitis	nonalcoholic steatohepatitis	1.15E-03	ADIPOQ, CYP2E1, PDE4B, PDE4D, PDE5A, PDE7A, TNFRSF1A	7
Liver Steatosis	hepatic steatosis	hepatic steatosis	2.95E-03	ADIPOQ, APOE, CD14, CYP2E1, EGLN3, LBP, PDE4B, PDE4D, PDE5A, PDE7A, PLIN2, PPARA, PPARGC1B, STEAP2, TNFRSF1A	15
Liver Steatosis	hepatic steatosis	hepatic steatosis of mice	5.12E-02	ADIPOQ, APOE, CYP2E1, EGLN3, LBP, PPARA, PPARGC1B, STEAP2	8
Liver Steatosis	alcoholic fatty liver disease	alcoholic fatty liver disease of mice	7.94E-02	ADIPOQ	1
Liver Steatosis	nonalcoholic fatty liver disease	nonalcoholic fatty liver disease of mice	1.53E-01	ADIPOQ	1
Cardiac Necrosis/Cell Death	cell death	cell death of cardiomyocytes	8.93E-04	ADIPOQ, ADRB1, BCL2L1, BNIP3 (includes EG:12176), CACNB2, CDKN1A, CSF3, HSPB1, IGF1, IL6, LEPR, NAMPT, PIM1, PPARGC1A, PTN, SOCS3, SPRR1A, STAT1, TIMP2, TNFAIP3, TXNIP	21
Cardiac Necrosis/Cell Death	cell death	cell death of ventricular myocytes	4.52E-01	CDKN1A, TIMP2	2
Cardiac Necrosis/Cell Death	apoptosis	apoptosis of cardiomyocytes	5.28E-03	ADIPOQ, ADRB1, BCL2L1, BNIP3 (includes EG:12176), CSF3, IGF1, IL6, LEPR, NAMPT, PIM1, PPARGC1A, PTN, SOCS3, TIMP2, TNFAIP3, TXNIP	16
Cardiac Necrosis/Cell Death	apoptosis	apoptosis of heart	2.20E-01	STAT3	1
Cardiac Necrosis/Cell Death	necrosis	necrosis of cardiomyocytes	5.25E-01	CACNB2	1
Renal Hypertrophy	hypertrophy	hypertrophy of renal glomerulus	1.88E-03	ADIPOQ, ICAM1, LEPR	3
Renal Hypertrophy	hypertrophy	hypertrophy of distal tubule	1.53E-01	HSD11B1	1
Renal Thrombosis	thrombosis	thrombosis of renal glomerulus	1.88E-03	C2, CFB, TLR2	3
Tachycardia	tachycardia	tachycardia of heart ventricle	1.88E-03	CASQ2, CSF3, KITLG	3
Tachycardia	tachycardia	tachycardia	9.85E-02	ADRB1, CASQ2, CSF3, KCNK3, KITLG, LCP2, PTGFR	7
Tachycardia	tachycardia	tachycardia of mice	3.39E-01	PTGFR	1
Tachycardia	ventricular tachycardia	ventricular tachycardia of heart	4.42E-03	ADRB1, CASQ2, LCP2	3
Tachycardia	ventricular tachycardia	ventricular tachycardia	3.38E-01	ADRB1, CASQ2, KCNK3, LCP2	4
Tachycardia	polymorphic ventricular tachycardia	polymorphic ventricular tachycardia	1.53E-01	CASQ2	1
Cardiac Damage	damage	damage of myocardium	3.60E-03	IGF1, ITGB2, SERPINE1, SERPING1	4
Cardiac Damage	damage	damage of heart ventricle	1.79E-02	PIM1, POSTN	2
Cardiac Damage	damage	damage of heart	3.74E-02	ADIPOQ, HMOX1, PRKAA2, SERPINE1, STAT3	5
Cardiac Damage	injury	injury of myocardium	1.37E-02	IGF1, ITGB2, SERPING1	3
Cardiac Damage	injury	injury of heart	6.40E-02	ADIPOQ, PRKAA2, STAT3	3
Cardiac Damage	injury	injury of left ventricle	7.94E-02	PIM1	1
Cardiac Damage	injury	injury of cardiomyocytes	2.20E-01	PIM3	1
Cardiac Damage	rupture	rupture of myocardium	1.53E-01	SERPINE1	1
Cardiac Damage	rupture	rupture of heart	2.82E-01	SERPINE1	1
Liver Hyperplasia/Hyperproliferatior	tumorigenesis	tumorigenesis of hepatocytes	6.30E-03	C3, TIMP1	2
Liver Hyperplasia/Hyperproliferatior	tumorigenesis	delay in tumorigenesis of liver	1.53E-01	MYC	1
Liver Hyperplasia/Hyperproliferatior	neoplasia	neoplasia of liver	3.93E-02	MYC, PPARA, TIMP1	3
Liver Hyperplasia/Hyperproliferatior	neoplasia	neoplasia of hepatocytes	7.94E-02	TIMP1	1
Liver Hyperplasia/Hyperproliferatior	hyperplasia	delay in hyperplasia of hepatocytes	7.94E-02	C3	1
Liver Hyperplasia/Hyperproliferatior	hyperplasia	hyperplasia of liver	2.82E-01	TIMP1	1
Liver Hyperplasia/Hyperproliferatior	metastasis	metastasis of liver	1.01E-01	PPARA, TIMP1	2
Liver Hyperplasia/Hyperproliferatior	cancer	cancer of liver	2.20E-01	MYC	1
Renal Enlargement	nephromegaly	nephromegaly of mice	6.30E-03	MT1E, MT1F	2
Renal Enlargement	enlargement	enlargement of kidney	1.53E-01	MT1F	1
Cardiac Fibrosis	fibrosis	fibrosis of myocardium	8.63E-03	CSF3, NCF1, PPARA, SERPINE1, TIMP1	5
Cardiac Fibrosis	fibrosis	fibrosis of heart	6.93E-02	ADRB1, ATF3, POSTN, SERPINE1, STAT3, TNFAIP3	6
Cardiac Fibrosis	fibrosis	fibrosis of ventricular septum	7.94E-02	ADRB1	1
Cardiac Fibrosis	fibrosis	fibrosis of left ventricle	1.00E00	ADRB1	1
Cardiac Fibrosis	cardiac fibrosis	cardiac fibrosis of mice	1.77E-02	AR, LIMS1, NR3C2, PNKD (includes EG:25953), SERPINE1	5
Cardiac Congestive Cardiac Failure	congestive heart failure	congestive heart failure	1.01E-02	ADRB1, AR, IL6, KCNK3, NPR3, NR3C1, NR3C2, PDE4B, PDE4D, PDE5A, PDE7A	11
Heart Failure	congestive heart failure	congestive heart failure	1.01E-02	ADRB1, AR, IL6, KCNK3, NPR3, NR3C1, NR3C2, PDE4B, PDE4D, PDE5A, PDE7A	11
Heart Failure	diastolic heart failure	diastolic heart failure	2.07E-02	AR, NPR3, NR3C2	3
Heart Failure	heart failure	heart failure	4.59E-02	ADRB1, AR, BCL2L1, CACNB2, CFLAR, GUCY1A3, GUCY1B3, IL6, KCNK3, LIMS1, NPR3, NR3C1, NR3C2, PDE4B, PDE4D, PDE5A, PDE7A, PPARGC1A, RRAD, SERPINE1, TIMP1	21
Heart Failure	heart failure	heart failure of mice	4.60E-02	ADRB1, CACNB2, CFLAR, LIMS1, NR3C2, PDE4D, PPARGC1A, SERPINE1, TIMP1	9
Heart Failure	heart failure	heart failure of humans	1.53E-01	SERPINE1	1
Heart Failure	heart failure	heart failure of rats	1.53E-01	BCL2L1	1
Heart Failure	cardiac decompensation	cardiac decompensation	4.40E-01	ADRB1	1
Renal Inflammation	inflammation	inflammation of renal glomerulus	1.79E-02	CFB, TLR2	2
Renal Inflammation	inflammation	inflammation of kidney	5.09E-02	IGF1, RELB, TNFRSF1A	3
Cardiac Arrythmia	arrhythmia	arrhythmia of heart	2.07E-02	ADRB1, KCNIP2, PDE4D	3
Cardiac Arrythmia	arrhythmia	onset of arrhythmia of heart	7.94E-02	ADRB1	1
Cardiac Arrythmia	arrhythmia	arrhythmia of heart ventricle	1.53E-01	CASQ2	1
Cardiac Arrythmia	arrhythmia	arrhythmia	4.46E-01	ADRB1, CASQ2, KCNIP2, KCNK3, PDE4D	5
Cardiac Arrythmia	ventricular arrhythmia	ventricular arrhythmia	1.00E00	ADRB1, KCNK3	2
Cardiac Output	cardiac output	cardiac output of mice	2.07E-02	CSF3, IGF1, KITLG	3
Cardiac Output	cardiac output	cardiac output	3.33E-02	ADRB1, CSF3, IGF1, KITLG	4
Cardiac Output	cardiac output	cardiac output of heart	4.40E-01	ADRB1	1
Renal Dysplasia	dysplasia	dysplasia of kidney	3.39E-02	CDKN1C, H19	2
Liver Cirrhosis	cirrhosis	cirrhosis	3.81E-02	ABCC3, ADRB1, CD38, IL6, PPARA, TLR3, TNFRSF1A, TUBA8, TUBA4A	9
Liver Cirrhosis	primary biliary cirrhosis	primary biliary cirrhosis	1.88E-01	ABCC3, PPARA, TLR3	3
Pulmonary Hypertension	pulmonary hypertension	pulmonary hypertension	4.31E-02	ADRB1, APOE, BCR, IL1RN, PAH, PDE5A	6
Pulmonary Hypertension	pulmonary hypertension	pulmonary hypertension of mice	2.20E-01	APOE	1
Hepatocellular Carcinoma	hepatocellular carcinoma	hepatocellular carcinoma	5.62E-02	BIRC2, CDKN1A, EGFR, EIF2AK2, HIF1A, HP, IQGAP2, MYC, PML, PPARA, SOCS3, TUBA8, TUBA4A, VEGFA	14
Liver Cholestasis	cholestasis	cholestasis of humans	7.63E-02	ATP8B1, IL6	2
Liver Cholestasis	cholestasis	cholestasis	1.31E-01	ABCC3, ADH1C (includes EG:126), ATP8B1, IL6, LBP, MGST1, PAH, SULT1A1, TAP2	9
Liver Cholestasis	ssive familial intrahepatic cholestasis	ve familial intrahepatic cholestasis type 1 c	7.94E-02	ATP8B1	1
Liver Cholestasis	ssive familial intrahepatic cholestasis	pressive familial intrahepatic cholestasis ty	1.25E-01	ADH1C (includes EG:126), ATP8B1, LBP, MGST1, PAH, SULT1A1, TAP2	7
Liver Cholestasis	intrahepatic cholestasis	intrahepatic cholestasis	1.16E-01	ABCC3, ADH1C (includes EG:126), ATP8B1, LBP, MGST1, PAH, SULT1A1, TAP2	8
Liver Hyperbilirubinemia	hyperbilirubinemia	hyperbilirubinemia	7.63E-02	ABCC3, HMOX1	2
Renal Fibrosis	tubulo-interstitial fibrosis	tubulo-interstitial fibrosis of kidney	7.63E-02	C3, P2RY1	2
Cardiac Degeneration	degeneration	degeneration of myocardium	7.94E-02	PPARA	1
Liver Degradation	disintegration	disintegration of liver	7.94E-02	ADAR	1
Liver Dysfunction	dysfunction	dysfunction of liver	7.94E-02	ATF3	1
Renal Hyperplasia/Hyperproliferatio	hyperplasia	hyperplasia of kidney	7.94E-02	MYC	1
Renal Hyperplasia/Hyperproliferatio	hyperplasia	hyperplasia of distal tubule	1.53E-01	HSD11B1	1
Cardiac Stenosis	aortic stenosis	aortic stenosis	9.39E-02	ICAM1, MMP3, SELE, TIMP1, TIMP2, VCAM1	6

Cardiac Inflammation	inflammation	inflammation of heart	9.41E-02	B2M, PNKD (includes EG:25953), RELB	3
Cardiac Dilation	dilation	dilation of left ventricle	1.06E-01	BNIP3 (includes EG:12176), MARCKSL1, SERPINE1, SLC2A1, TIMP1	5
Cardiac Dilation	dilation	dilation of heart chamber	1.13E-01	BNIP3 (includes EG:12176), MARCKSL1, NCF1, SERPINE1, SLC2A1, TIMP1	6
Congenital Heart Anomaly	congenital heart disease	congenital heart disease	1.11E-01	ADRB1, DTNA, PBX1	3
Liver Regeneration	regeneration	regeneration of liver	1.11E-01	C3, CSF3, IL6	3
Liver Regeneration	regeneration	regeneration of liver cells	5.25E-01	IL6	1
Renal Dysfunction	dysfunction	dysfunction of kidney	1.11E-01	C3, MYD88, TLR2	3
Glomerular Injury	glomerulopathy	glomerulopathy of mice	1.32E-01	APOE, C3, FCER1G, LGALS3	4
Glomerular Injury	glomerulopathy	glomerulopathy	1.67E-01	APOE, C3, FCER1G, LGALS3, P2RY1	5
Glomerular Injury	glomerulosclerosis	glomerulosclerosis of kidney	1.53E-01	P2RY1	1
Glomerular Injury	glomerulosclerosis	glomerulosclerosis	4.93E-01	APOE, C3, P2RY1	3
Glomerular Injury	glomerulosclerosis	glomerulosclerosis of mice	5.06E-01	APOE, C3	2
Bradycardia	sinus bradycardia	sinus bradycardia of heart	1.53E-01	TRIM21	1
Bradycardia	bradycardia	bradycardia	5.31E-01	RAC1, TRIM21	2
Liver Edema	edema	edema of liver	1.53E-01	VEGFA	1
Renal Degeneration	degeneration	degeneration of tubular cells	1.53E-01	MT1F	1
Renal Regeneration	regeneration	regeneration of glomerular capillary	1.53E-01	VEGFA	1
Liver Degeneration	degeneration	degeneration of liver	1.86E-01	DDX58, TBK1	2
Liver Degeneration	degeneration	degeneration of liver cells	2.20E-01	TBK1	1
Cardiac Enlargement	enlargement	enlargement of heart ventricle	2.20E-01	CTSL2	1
Cardiac Enlargement	enlargement	enlargement of atrium	2.82E-01	CTSL2	1
Liver Adhesion	adhesion	adhesion of hepatic stellate cells	2.20E-01	ITGB3	1
Nephrosis	nephrosis	nephrosis	2.38E-01	NR3C1, PDE4B, PDE4D, PDE5A, PDE7A	5
Cardiac Transformation	transformation	transformation of endocardial cells	2.82E-01	VEGFA	1
Liver Dysplasia	dysplasia	dysplasia of liver	2.82E-01	PML	1
Liver Hepatomegaly	hepatomegaly	hepatomegaly of mice	3.07E-01	ADIPOQ, PPARA	2
Liver Fibrosis	fibrosis	fibrosis of liver	3.42E-01	HP, NCF1, STAT1	3
Liver Failure	liver failure	liver failure of mice	3.91E-01	FAS	1
Liver Hematopoiesis	hematopoiesis	hematopoiesis of liver	3.91E-01	SOCS3	1
Cardiac Hypoplasia	hypoplasia	hypoplasia of myocardium	4.84E-01	MYCN	1
Cardiac Proliferation	proliferation	proliferation of heart cells	5.79E-01	IGF1, ITGB2	2

TABLE 9A - LPS RESPONSES INHIBITED BY A2A KO

AffyID	RefSeq	Entrez Gene	Gene Title	Gene Symbol	WT Fold Change	KO Fold Change	KO/WT	Response
1449025_at	NM_010501	15959	interferon-induced protein with tetratricopeptide repeats 3	Ifit3	51.71	29.14	0.56	LPS Response in WT reduced by 1.5 with A2 KO
1425233_at	NM_144544	78354	RIKEN cDNA 2210407C18 gene	2210407C18Rik	19.33	12.97	0.67	LPS Response in WT reduced by 1.5 with A2 KO
1421008_at	NM_021384	58185	radical S-adenosyl methionine domain containing 2	Rsad2	11.14	5.54	0.50	LPS Response in WT reduced by 1.5 with A2 KO
1419598_at	NM_026835	68774	membrane-spanning 4-domains, subfamily A, member 6D	Ms4a6d	9.80	5.58	0.57	LPS Response in WT reduced by 1.5 with A2 KO
1424339_at	NM_145209	231655	2'-5' oligoadenylate synthetase-like 1	Oasl1	8.91	5.05	0.57	LPS Response in WT reduced by 1.5 with A2 KO
1448859_at	NM_018866	55985	chemokine (C-X-C motif) ligand 13	Cxcl13	8.35	4.41	0.53	LPS Response in WT reduced by 1.5 with A2 KO
1450291_s_at	NM_029499	64380	membrane-spanning 4-domains, subfamily A, member 4C	Ms4a4c	7.27	3.96	0.54	LPS Response in WT reduced by 1.5 with A2 KO
1434776_at	NM_009154	20356	sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A	Sema5a	6.63	3.07	0.46	LPS Response in WT reduced by 1.5 with A2 KO
1451644_a_at	10390 /// XM_9	15006 /// 68395	histocompatibility 2, Q region locus 1 /// RIKEN cDNA 0610037M15 gene	2-Q1 /// 0610037M15R	6.24	3.86	0.62	LPS Response in WT reduced by 1.5 with A2 KO
1448239_at	NM_010442	15368	heme oxygenase (decycling) 1	Hmox1	5.09	3.01	0.59	LPS Response in WT reduced by 1.5 with A2 KO
1449455_at	NM_010407	15162	hemopoietic cell kinase	Hck	5.07	3.14	0.62	LPS Response in WT reduced by 1.5 with A2 KO
1450808_at	NM_013521	14293	formyl peptide receptor 1	Fpr1	5.05	3.35	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1450484_a_at	NM_020557	22169	thymidylate kinase family LPS-inducible member	Tyki	4.92	3.06	0.62	LPS Response in WT reduced by 1.5 with A2 KO
1450378_at	1025313 /// NM	21356	TAP binding protein	Tapbp	4.71	3.04	0.65	LPS Response in WT reduced by 1.5 with A2 KO
1459557_at	NM_001033324	235320	Zinc finger and BTB domain containing 16	Zbtb16	4.65	3.06	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1424518_at	1005082 /// XM_	223672 /// 71898	RIKEN cDNA 2310016F22 gene /// cDNA sequence BC020489	10016F22Rik /// BC020	4.54	2.95	0.65	LPS Response in WT reduced by 1.5 with A2 KO
1439068_at	NM_030711	80898	type 1 tumor necrosis factor receptor shedding aminopeptidase regulator	Arts1	4.52	2.91	0.64	LPS Response in WT reduced by 1.5 with A2 KO
1458271_at	---	---	12 days embryo spinal cord cDNA, RIKEN full-length enriched library, clone:C530003P15 product:unclassifiable, full insert sequence	---	4.24	2.43	0.57	LPS Response in WT reduced by 1.5 with A2 KO
1458299_s_at	NM_008690	18037	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, epsilon	Nfkbie	4.20	2.46	0.59	LPS Response in WT reduced by 1.5 with A2 KO
1423954_at	NM_009778	12266	complement component 3	C3	4.19	2.77	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1451382_at	NM_026929	69065	ChaC, cation transport regulator-like 1 (E. coli)	Chac1	4.11	2.3	0.56	LPS Response in WT reduced by 1.5 with A2 KO
1435331_at	NM_175026	236312	expressed sequence AI447904	AI447904	3.99	2.56	0.64	LPS Response in WT reduced by 1.5 with A2 KO
1422512_a_at	NM_031373	72075	opioid growth factor receptor	Ogfr	3.75	2.41	0.64	LPS Response in WT reduced by 1.5 with A2 KO
1454211_a_at	NM_015756	27428	shroom	Shrm	3.62	2.22	0.61	LPS Response in WT reduced by 1.5 with A2 KO
1449453_at	NM_009763	12182	bone marrow stromal cell antigen 1	Bst1	3.48	2.14	0.61	LPS Response in WT reduced by 1.5 with A2 KO
1418148_at	NM_021304	57742	abhydrolase domain containing 1	Abhd1	3.22	1.83	0.57	LPS Response in WT reduced by 1.5 with A2 KO
1426235_a_at	NM_008131	14645	glutamate-ammonia ligase (glutamine synthetase)	Glul	3.18	1.77	0.56	LPS Response in WT reduced by 1.5 with A2 KO
1435261_at	---	320737	RIKEN cDNA 4732416N19 gene	4732416N19Rik	3.10	2.05	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1456890_at	NM_172689	230073	DEAD (Asp-Glu-Ala-Asp) box polypeptide 58	Ddx58	3.02	2.01	0.67	LPS Response in WT reduced by 1.5 with A2 KO
1451854_a_at	NM_015756	27428	shroom	Shrm	3.01	1.8	0.60	LPS Response in WT reduced by 1.5 with A2 KO
1420671_x_at	NM_029499	64380	membrane-spanning 4-domains, subfamily A, member 4C	Ms4a4c	2.88	1.7	0.59	LPS Response in WT reduced by 1.5 with A2 KO
1439855_at	NM_198967	387314	cDNA sequence BC023818	BC023818	2.74	1.66	0.61	LPS Response in WT reduced by 1.5 with A2 KO
1422006_at	NM_011163	19106	eukaryotic translation initiation factor 2-alpha kinase 2	Eif2ak2	2.72	1.68	0.62	LPS Response in WT reduced by 1.5 with A2 KO
1417562_at	NM_007918	13685	eukaryotic translation initiation factor 4E binding protein 1	Eif4ebp1	2.65	1.77	0.67	LPS Response in WT reduced by 1.5 with A2 KO
1429900_at	---	76671	RIKEN cDNA 5330406M23 gene	5330406M23Rik	2.57	1.53	0.60	LPS Response in WT reduced by 1.5 with A2 KO
1427759_a_at	NM_007491	11875	ADP-ribosyltransferase 5	Art5	2.50	1.39	0.56	LPS Response in WT reduced by 1.5 with A2 KO
1417522_at	NM_026346	67731	F-box only protein 32	Fbxo32	2.43	1.57	0.65	LPS Response in WT reduced by 1.5 with A2 KO
1436212_at	NM_172514	213068	transmembrane protein 71	Tmem71	2.41	1.56	0.65	LPS Response in WT reduced by 1.5 with A2 KO
1451314_a_at	NM_011693	22329	vascular cell adhesion molecule 1	Vcam1	2.41	1.56	0.65	LPS Response in WT reduced by 1.5 with A2 KO
1417620_at	NM_009008	19354	RAS-related C3 botulinum substrate 2	Rac2	2.39	1.57	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1444749_at	NM_007470	11815	Apolipoprotein D	Apod	2.34	1.38	0.59	LPS Response in WT reduced by 1.5 with A2 KO
1449454_at	NM_009763	12182	bone marrow stromal cell antigen 1	Bst1	2.33	1.39	0.60	LPS Response in WT reduced by 1.5 with A2 KO
1451905_a_at	NM_010846	17857	myxovirus (influenza virus) resistance 1	Mx1	2.33	1.48	0.64	LPS Response in WT reduced by 1.5 with A2 KO
1451553_at	NM_007491	11875	ADP-ribosyltransferase 5	Art5	2.31	1.55	0.67	LPS Response in WT reduced by 1.5 with A2 KO
1422167_at	NM_009154	20356	sema domain, seven thrombospondin repeats (type 1 and type 1-like), transmembrane domain (TM) and short cytoplasmic domain, (semaphorin) 5A	Sema5a	2.28	1.46	0.64	LPS Response in WT reduced by 1.5 with A2 KO
1416194_at	NM_007823	13120	cytochrome P450, family 4, subfamily b, polypeptide 1	Cyp4b1	2.23	1.45	0.65	LPS Response in WT reduced by 1.5 with A2 KO
1416371_at	NM_007470	11815	apolipoprotein D	Apod	2.21	1.3	0.59	LPS Response in WT reduced by 1.5 with A2 KO
1433963_a_at	NM_153795	108101	cDNA sequence BC032204	BC032204	2.17	1.43	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1422375_a_at	NM_009710	11870	ADP-ribosyltransferase 1	Art1	2.14	1.39	0.65	LPS Response in WT reduced by 1.5 with A2 KO
1434283_at	NM_023598	71371	AT rich interactive domain 5B (Mrf1 like)	Arid5b	2.07	1.33	0.64	LPS Response in WT reduced by 1.5 with A2 KO
1416265_at	NM_011796	23830	calpain 10	Capn10	1.96	1.29	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1451787_at	09998 /// NM_0	13088	cytochrome P450, family 2, subfamily b, polypeptide 10	Cyp2b10	1.90	1.12	0.59	LPS Response in WT reduced by 1.5 with A2 KO
1458802_at	NM_010657	16656	human immunodeficiency virus type I enhancer binding protein 3	Hivep3	1.81	1.13	0.62	LPS Response in WT reduced by 1.5 with A2 KO
1417563_at	NM_007918	13685	eukaryotic translation initiation factor 4E binding protein 1	Eif4ebp1	1.71	1.12	0.65	LPS Responsive in WT but Not KO
1426624_a_at	25347 /// NM_0	66090	yippee-like 3 (Drosophila)	Ypel3	1.70	1.05	0.62	LPS Response in WT reduced by 1.5 with A2 KO
1436121_a_at	NM_026330	67711	non-SMC element 1 homolog (S. cerevisiae)	Nsmce1	1.69	1.13	0.67	LPS Response in WT reduced by 1.5 with A2 KO
1420540_a_at	NM_009069	19769	Ras-like without CAAX 1	Rit1	1.64	1.06	0.65	LPS Responsive in WT but Not KO
1418290_a_at	NM_007970	14055	enhancer of zeste homolog 1 (Drosophila)	Ezh1	1.56	1.01	0.65	LPS Responsive in WT but Not KO
1416315_at	NM_134076	105501	abhydrolase domain containing 4	Abhd4	1.54	1.03	0.67	LPS Responsive in WT but Not KO
1457305_at	---	---	Transcribed locus	---	-1.41	1.04	-0.74	LPS Responsive in WT but Not KO
1440092_at	NM_010162	14042	Exostoses (multiple) 1	Ext1	-1.44	1.06	-0.74	LPS Responsive in WT but Not KO
1449465_at	NM_011261	19699	reelin	Reln	-1.55	-1.04	0.67	LPS Responsive in WT but Not KO
1455150_at	---	---	13 days embryo forelimb cDNA, RIKEN full-length enriched library, clone:5930438H13 product:unclassifiable, full insert sequence	---	-1.67	1.08	-0.65	LPS Responsive in WT but Not KO
1438719_at	---	106920	expressed sequence AI585793	AI585793	-1.69	1.06	-0.63	LPS Responsive in WT but Not KO
1415943_at	NM_011519	20969	syndecan 1	Sdc1	-1.74	-1.13	0.65	LPS Responsive in WT but Not KO
1441391_at	NM_023120	13972	Guanine nucleotide binding protein (G protein), beta polypeptide 1-like	Gnb1l	-1.76	-1.02	0.58	LPS Responsive in WT but Not KO
1439035_at	---	---	12 days embryo spinal cord cDNA, RIKEN full-length enriched library, clone:C530050B12 product:unclassifiable, full insert sequence	---	-1.76	-1.17	0.66	LPS Responsive in WT but Not KO
1439307_at	NM_007664	12558	Cadherin 2	Cdh2	-1.77	-1.09	0.62	LPS Responsive in WT but Not KO
1437479_x_at	11535 /// NM_1	21386	T-box 3	Tbx3	-1.78	-1.13	0.63	LPS Responsive in WT but Not KO
1448673_at	// NM_021496 ///	58998	poliovirus receptor-related 3	Pvrl3	-1.82	1.1	-0.60	LPS Responsive in WT but Not KO
1454764_s_at	NM_134086	105727	solute carrier family 38, member 1	Slc38a1	-1.85	-1.19	0.64	LPS Responsive in WT but Not KO
1424350_s_at	NM_172266	226856	lysophosphatidylglycerol acyltransferase 1	Lpgat1	-1.86	-1.15	0.62	LPS Responsive in WT but Not KO
1457304_at	---	52680	DNA segment, Chr 13, ERATO Doi 787, expressed	D13Ertd787e	-1.89	-1.24	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1435521_at	NM_054043	76626	Musashi homolog 2 (Drosophila)	Msi2	-1.91	-1.17	0.61	LPS Responsive in WT but Not KO
1442846_at	08783 /// NM_1	18514	Pre B-cell leukemia transcription factor 1	Pbx1	-1.94	-1.17	0.60	LPS Response in WT reduced by 1.5 with A2 KO
1455509_at	1004040 /// XM	192950	cDNA sequence AB182283	AB182283	-1.96	-1.27	0.65	LPS Response in WT reduced by 1.5 with A2 KO
1441608_at	NM_009784	12293	Calcium channel, voltage-dependent, alpha2/delta subunit 1	Cacna2d1	-1.96	-1.3	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1450397_at	NM_008634	17755	microtubule-associated protein 1 B	Mtap1b	-1.97	-1.17	0.59	LPS Responsive in WT but Not KO
1437675_at	NM_011406	20541	solute carrier family 8 (sodium/calcium exchanger), member 1	Slc8a1	-2.03	-1.34	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1440966_at	NM_020575	57438	membrane-associated ring finger (C3HC4) 7	Mar-07	-2.06	-1.19	0.58	LPS Response in WT reduced by 1.5 with A2 KO
1415822_at	NM_009128	20250	stearoyl-Coenzyme A desaturase 2	Scd2	-2.06	-1.35	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1441262_at	NM_009289	20874	STE20-like kinase (yeast)	Slk	-2.08	-1.31	0.63	LPS Response in WT reduced by 1.5 with A2 KO
1425710_a_at	// NM_147176 ///	26556	homer homolog 1 (Drosophila)	Homer1	-2.09	-1.19	0.57	LPS Response in WT reduced by 1.5 with A2 KO
1426417_at	NM_026417	67864	Yip1 domain family, member 4	Yip4	-2.09	-1.22	0.58	LPS Response in WT reduced by 1.5 with A2 KO
1453593_at	83372 /// XM_9	73569	RIKEN cDNA 1700110N18 gene	1700110N18Rik	-2.11	-1.26	0.60	LPS Response in WT reduced by 1.5 with A2 KO
1452260_at	NM_178373	14311	cell death-inducing DFFA-like effector c	Cidec	-2.15	-1.11	0.52	LPS Responsive in WT but Not KO
1450779_at	NM_021272	12140	fatty acid binding protein 7, brain	Fabp7	-2.15	-1.35	0.63	LPS Response in WT reduced by 1.5 with A2 KO

1458601_at	---	399578	RIKEN cDNA 8030447M02 gene	8030447M02Rik	-2.16	-1.33	0.62	LPS Response in WT reduced by 1.5 with A2 KO
1437279_x_at	NM_011519	20969	syndecan 1	Sdc1	-2.17	-1.33	0.61	LPS Response in WT reduced by 1.5 with A2 KO
1440227_at	---	503859	expressed sequence BF642829	BF642829	-2.17	-1.43	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1436387_at	---	320588	RIKEN cDNA C330006P03 gene	C330006P03Rik	-2.23	-1.25	0.56	LPS Response in WT reduced by 1.5 with A2 KO
1447853_x_at	NM_010617	16553	Kinesin family member 13A	Kif13a	-2.25	-1.41	0.63	LPS Response in WT reduced by 1.5 with A2 KO
1437305_at	NM_175466	228491	RIKEN cDNA 6430601A21 gene	6430601A21Rik	-2.28	-1.07	0.47	LPS Responsive in WT but Not KO
1441364_at	NM_008092	14463	GATA binding protein 4	Gata4	-2.28	-1.32	0.58	LPS Response in WT reduced by 1.5 with A2 KO
1434101_at	NM_008687	18028	nuclear factor I/B	Nfib	-2.30	-1.45	0.63	LPS Response in WT reduced by 1.5 with A2 KO
1434958_at	NM_172809	50720	sacsin	Sacs	-2.31	-1.15	0.50	LPS Responsive in WT but Not KO
1458847_at	---	---	---	---	-2.34	-1.41	0.60	LPS Response in WT reduced by 1.5 with A2 KO
1453588_at	NM_007606	12350	carbonic anhydrase 3	Car3	-2.37	-1.56	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1448170_at	NM_009174	20439	seven in absentia 2	Siah2	-2.40	-1.45	0.60	LPS Response in WT reduced by 1.5 with A2 KO
1425343_at	NM_024257	72748	haloacid dehalogenase-like hydrolase domain containing 3	Hdhd3	-2.47	-1.36	0.55	LPS Response in WT reduced by 1.5 with A2 KO
1447176_at	75268 /// NM_2	77938	RIKEN cDNA A930008G19 gene	A930008G19Rik	-2.54	-1.43	0.56	LPS Response in WT reduced by 1.5 with A2 KO
1424357_at	NM_144936	235135	transmembrane protein 45b	Tmem45b	-2.56	-1.37	0.54	LPS Response in WT reduced by 1.5 with A2 KO
1438301_at	NM_010026	13196	Development and differentiation enhancing	Ddef1	-2.56	-1.66	0.65	LPS Response in WT reduced by 1.5 with A2 KO
1430561_at	24514 /// XM_9	70604	DnaJ (Hsp40) homolog, subfamily B, member 14	Dnajb14	-2.58	-1.3	0.50	LPS Response in WT reduced by 1.5 with A2 KO
1417135_at	NM_009274	20817	serine/arginine-rich protein specific kinase 2	Srpk2	-2.60	-1.21	0.47	LPS Response in WT reduced by 1.5 with A2 KO
1442686_at	NM_058212	70127	D4, zinc and double PHD fingers, family 3	Dpf3	-2.61	-1.65	0.63	LPS Response in WT reduced by 1.5 with A2 KO
1447231_at	NM_011406	20541	Solute carrier family 8 (sodium/calcium exchanger), member 1	Slc8a1	-2.65	-1.59	0.60	LPS Response in WT reduced by 1.5 with A2 KO
1438664_at	NM_011158	19088	protein kinase, cAMP dependent regulatory, type II beta	Prkar2b	-2.71	-1.5	0.55	LPS Response in WT reduced by 1.5 with A2 KO
1438496_a_at	NM_172779	236790	RIKEN cDNA 6330505F04 gene	6330505F04Rik	-2.76	-1.61	0.58	LPS Response in WT reduced by 1.5 with A2 KO
1439532_s_at	NM_010617	16553	kinesin family member 13A	Kif13a	-2.77	-1.45	0.52	LPS Response in WT reduced by 1.5 with A2 KO
1436453_at	---	101918	expressed sequence BB144871	BB144871	-2.78	-1.37	0.49	LPS Response in WT reduced by 1.5 with A2 KO
1449270_at	NM_026162	67448	plexin domain containing 2	Plxdc2	-2.82	-1.89	0.67	LPS Response in WT reduced by 1.5 with A2 KO
1433885_at	---	544963	IQ motif containing GTPase activating protein 2	Iqgap2	-2.86	-1.91	0.67	LPS Response in WT reduced by 1.5 with A2 KO
1446284_at	NM_144800	211401	metastasis suppressor 1	Mtss1	-2.92	-1.87	0.64	LPS Response in WT reduced by 1.5 with A2 KO
1418648_at	NM_028133	112407	EGL nine homolog 3 (C. elegans)	Egln3	-3.02	-1.94	0.64	LPS Response in WT reduced by 1.5 with A2 KO
1444416_at	NM_007681	12615	Centromere autoantigen A	Cenpa	-3.08	-2.06	0.67	LPS Response in WT reduced by 1.5 with A2 KO
1450754_at	XM_976267	669637	similar to calcium channel, voltage-dependent, alpha 2/delta subunit 2	LOC669637	-3.20	-1.94	0.61	LPS Response in WT reduced by 1.5 with A2 KO
1442368_at	NM_175429	207474	potassium channel tetramerisation domain containing 12b	Kctd12b	-3.21	-1.73	0.54	LPS Response in WT reduced by 1.5 with A2 KO
1459894_at	---	544963	IQ motif containing GTPase activating protein 2	Iqgap2	-3.22	-1.84	0.57	LPS Response in WT reduced by 1.5 with A2 KO
1457296_at	NM_173385	214425	cartilage intermediate layer protein, nucleotide pyrophosphohydrolase	Cilp	-3.30	-2.12	0.64	LPS Response in WT reduced by 1.5 with A2 KO
1423065_at	07872 /// NM_1	13435	DNA methyltransferase 3A	Dnmt3a	-3.32	-1.43	0.43	LPS Response in WT reduced by 1.5 with A2 KO
1435135_at	NM_178772	320024	arylacetamide deacetylase-like 1	Aadacl1	-3.39	-1.74	0.51	LPS Response in WT reduced by 1.5 with A2 KO
1438892_at	NM_021881	19317	Quaking	Qk	-3.43	-1.56	0.45	LPS Response in WT reduced by 1.5 with A2 KO
1418197_at	NM_009463	22227	uncoupling protein 1 (mitochondrial, proton carrier)	Ucp1	-3.44	-1.69	0.49	LPS Response in WT reduced by 1.5 with A2 KO
1445481_at	---	106549	expressed sequence AI317158	AI317158	-3.49	-1.75	0.50	LPS Response in WT reduced by 1.5 with A2 KO
1425597_a_at	NM_021881	19317	quaking	Qk	-3.79	-2.1	0.55	LPS Response in WT reduced by 1.5 with A2 KO
1427320_at	NR_002845	54158	coatomer protein complex, subunit gamma 2, antisense 2	Copg2as2	-4.21	-2.82	0.67	LPS Response in WT reduced by 1.5 with A2 KO
1430584_s_at	NM_007606	12350	carbonic anhydrase 3	Car3	-4.26	-2.08	0.49	LPS Response in WT reduced by 1.5 with A2 KO
1460336_at	NM_008904	19017	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	Ppargc1a	-4.69	-2.54	0.54	LPS Response in WT reduced by 1.5 with A2 KO
1418509_at	NM_007621	12409	carbonyl reductase 2	Cbr2	-5.00	-2.78	0.56	LPS Response in WT reduced by 1.5 with A2 KO
1453486_a_at	NM_020052	56788	signal peptide, CUB domain, EGF-like 2	Scube2	-7.15	-3.74	0.52	LPS Response in WT reduced by 1.5 with A2 KO
1434672_at	NM_175191	73010	G protein-coupled receptor 22	Gpr22	-7.78	-4.45	0.57	LPS Response in WT reduced by 1.5 with A2 KO
1460256_at	NM_007606	12350	carbonic anhydrase 3	Car3	-8.49	-5.64	0.66	LPS Response in WT reduced by 1.5 with A2 KO
1422651_at	NM_009605	11450	adiponectin, C1Q and collagen domain containing	Adipoq	-19.39	-10.04	0.52	LPS Response in WT reduced by 1.5 with A2 KO

TABLE 9B - LPS RESPONSES AUGMENTED BY A2A KO

AffyID	RefSeq	Entrez Gene	Gene Title	Gene Symbol	WT Fold Change	KO Fold Change	KO/WT	Response
1427747_a_at	NM_008491	16819	lipocalin 2	Lcn2	622.75	953.77	1.53	KO Increases WT Response ≥1.5-fold
1417141_at	NM_018738	16145	interferon gamma induced GTPase	Igtp	34.60	57.68	1.67	KO Increases WT Response ≥1.5-fold
1419728_at	NM_009141	20311	chemokine (C-X-C motif) ligand 5	Cxcl5	28.99	55.52	1.92	KO Increases WT Response ≥1.5-fold
1419394_s_at	NM_013650	20201	S100 calcium binding protein A8 (calgranulin A)	S100a8	28.64	47.75	1.67	KO Increases WT Response ≥1.5-fold
1417793_at	NM_019440	54396	interferon inducible GTPase 2	Iigp2	24.93	37.66	1.51	KO Increases WT Response ≥1.5-fold
1458589_at	---	---	---	---	24.21	52.53	2.17	KO Increases WT Response ≥1.5-fold
1449984_at	NM_009140	20310	chemokine (C-X-C motif) ligand 2	Cxcl2	22.75	34.96	1.54	KO Increases WT Response ≥1.5-fold
1450297_at	NM_031168	16193	interleukin 6	Il6	16.85	28.84	1.71	KO Increases WT Response ≥1.5-fold
1428776_at	NM_029415	75750	solute carrier family 10 (sodium/bile acid cotransporter family), member 6	Slc10a6	14.70	24.38	1.66	KO Increases WT Response ≥1.5-fold
1417130_s_at	NM_020581	57875	angiopoietin-like 4	Angptl4	14.45	22.75	1.57	KO Increases WT Response ≥1.5-fold
1453678_at	NM_013594	17190	methyl-CpG binding domain protein 1	Mbd1	14.45	22.51	1.56	KO Increases WT Response ≥1.5-fold
1419427_at	NM_009971	12985	colony stimulating factor 3 (granulocyte)	Csf3	14.20	24.72	1.74	KO Increases WT Response ≥1.5-fold
1457666_s_at	08327 /// NM_0	26388	interferon activated gene 202B	Ifi202b	13.38	23.22	1.74	KO Increases WT Response ≥1.5-fold
1426858_at	NM_008381	16324	inhibin beta-B	Inhbb	10.57	27.81	2.63	KO Increases WT Response ≥1.5-fold
1424638_at	NM_007669	12575	cyclin-dependent kinase inhibitor 1A (P21)	Cdkn1a	10.21	17.69	1.73	KO Increases WT Response ≥1.5-fold
1452595_at	NM_172845	240913	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 4	Adamts4	10.02	18.64	1.86	KO Increases WT Response ≥1.5-fold
1416121_at	NM_010728	16948	lysyl oxidase	Lox	9.22	15.06	1.63	KO Increases WT Response ≥1.5-fold
1421551_s_at	08327 /// NM_0	26388	interferon activated gene 202B	Ifi202b	8.75	13.57	1.55	KO Increases WT Response ≥1.5-fold
1448562_at	NM_009477	22271	uridine phosphorylase 1	Upp1	8.51	12.75	1.50	KO Increases WT Response ≥1.5-fold
1447285_at	---	---	---	---	7.58	12.88	1.70	KO Increases WT Response ≥1.5-fold
1448881_at	NM_017370	15439	haptoglobin	Hp	7.31	17.51	2.40	KO Increases WT Response ≥1.5-fold
1456907_at	NM_008599	17329	chemokine (C-X-C motif) ligand 9	Cxcl9	7.21	11.39	1.58	KO Increases WT Response ≥1.5-fold
1434046_at	NM_001004174	433470	expressed sequence AA467197	AA467197	7.05	17	2.41	KO Increases WT Response ≥1.5-fold
1441326_at	NM_007752	12870	ceruloplasmin	Cp	6.70	11.77	1.76	KO Increases WT Response ≥1.5-fold
1457770_at	NM_144808	213053	solute carrier family 39 (zinc transporter), member 14	Slc39a14	6.24	10.48	1.68	KO Increases WT Response ≥1.5-fold
1418471_at	NM_008827	18654	placental growth factor	Pgf	5.95	9.61	1.62	KO Increases WT Response ≥1.5-fold
1440481_at	NM_009283	20846	signal transducer and activator of transcription 1	Stat1	5.85	10.43	1.78	KO Increases WT Response ≥1.5-fold
1448290_at	NM_011036	18489	pancreatitis-associated protein	Pap	5.81	11.02	1.90	KO Increases WT Response ≥1.5-fold
1440999_at	NM_172863	242109	zinc finger protein 697	Zfp697	5.62	8.68	1.54	KO Increases WT Response ≥1.5-fold
1448728_a_at	NM_030612	80859	nuclear factor of kappa light polypeptide gene enhancer in B-cells inhibitor, zeta	Nfkbiz	5.41	8.92	1.65	KO Increases WT Response ≥1.5-fold
1418722_at	NM_008694	18054	neutrophilic granule protein	Ngp	5.13	9.45	1.84	KO Increases WT Response ≥1.5-fold
1421854_at	NM_008013	14190	fibrinogen-like protein 2	Fgl2	5.12	9.87	1.93	KO Increases WT Response ≥1.5-fold
1422411_s_at	_007894 /// NM_/	13587 /// 503845 /	eosinophil-associated, ribonuclease A family, member 1 /// eosinophil-associated, ribonuclease A family, member 2 /// eosinophil-associated, ribonuclease A family, member 3 /// eosinophil-associated, ribonuclease A family, member 12	/// Ear2 /// Ear3 /// E	4.53	6.94	1.53	KO Increases WT Response ≥1.5-fold
1448793_a_at	NM_011521	20971	syndecan 4	Sdc4	4.50	7.2	1.60	KO Increases WT Response ≥1.5-fold
1449227_at	NM_009890	12642	cholesterol 25-hydroxylase	Ch25h	4.30	6.48	1.51	KO Increases WT Response ≥1.5-fold
1455271_at	XM_885087	620695	hypothetical protein LOC620695	LOC620695	4.26	8.01	1.88	KO Increases WT Response ≥1.5-fold
1440173_x_at	NM_011347	20344	selectin, platelet	Selp	4.23	7.43	1.76	KO Increases WT Response ≥1.5-fold
1436100_at	// XM_914492 /.	230863	SH2 domain containing 5	Sh2d5	4.20	6.58	1.57	KO Increases WT Response ≥1.5-fold
1449901_a_at	NM_016693	53608	mitogen-activated protein kinase kinase kinase 6	Map3k6	4.19	7.92	1.89	KO Increases WT Response ≥1.5-fold
1417496_at	NM_007752	12870	ceruloplasmin	Cp	4.13	7.59	1.84	KO Increases WT Response ≥1.5-fold
1455257_at	NM_016780	16416	integrin beta 3	Itgb3	4.02	7.59	1.89	KO Increases WT Response ≥1.5-fold
1449340_at	NM_025312	66042	sclerostin domain containing 1	Sostdc1	3.99	6.04	1.51	KO Increases WT Response ≥1.5-fold
1421731_a_at	NM_007999	14156	flap structure specific endonuclease 1	Fen1	3.95	6.88	1.74	KO Increases WT Response ≥1.5-fold
1435137_s_at	NR_002860	/ 319269 /// 319443 /	RIKEN cDNA 1200015M12 gene /// RIKEN cDNA 1200016E24 gene /// RIKEN cDNA A130040M12 gene /// RIKEN cDNA E430024C06 gene	6E24Rik /// A130040	3.93	6.96	1.77	KO Increases WT Response ≥1.5-fold
1443721_x_at	NM_183426	216161	strawberry notch homolog (Drosophila)	Stno	3.93	6.74	1.72	KO Increases WT Response ≥1.5-fold
1422473_at	NM_019840	18578	phosphodiesterase 4B, cAMP specific	Pde4b	3.88	6.35	1.64	KO Increases WT Response ≥1.5-fold
1428909_at	NR_002860	319269	RIKEN cDNA A130040M12 gene	A130040M12Rik	3.86	5.99	1.55	KO Increases WT Response ≥1.5-fold
1441858_at	NM_030724	80914	Uridine-cytidine kinase 2	Uck2	3.80	6.21	1.63	KO Increases WT Response ≥1.5-fold
1430352_at	NM_175209	74516	RIKEN cDNA 8430417A20 gene	8430417A20Rik	3.78	6.6	1.75	KO Increases WT Response ≥1.5-fold
1435640_x_at	NR_002860	319269	RIKEN cDNA A130040M12 gene	A130040M12Rik	3.67	6.2	1.69	KO Increases WT Response ≥1.5-fold
1441150_x_at	---	---	Transcribed locus	---	3.51	5.49	1.56	KO Increases WT Response ≥1.5-fold
1418094_s_at	NM_007607	12351	carbonic anhydrase 4	Car4	3.47	7.37	2.12	KO Increases WT Response ≥1.5-fold
1427932_s_at	NR_002860	I269 /// 319443 /// 7	RIKEN cDNA 1200003I10 gene /// RIKEN cDNA 1200015M12 gene /// RIKEN cDNA 1200016E24 gene /// RIKEN cDNA A130040M12 gene /// RIKEN cDNA E430024C06 gene	// 1200016E24Rik ///	3.45	7.2	2.09	KO Increases WT Response ≥1.5-fold
1422474_at	NM_019840	18578	phosphodiesterase 4B, cAMP specific	Pde4b	3.43	6.18	1.80	KO Increases WT Response ≥1.5-fold
1448949_at	NM_007607	12351	carbonic anhydrase 4	Car4	3.32	5.93	1.79	KO Increases WT Response ≥1.5-fold
1419149_at	NM_008871	18787	serine (or cysteine) peptidase inhibitor, clade E, member 1	Serpine1	3.28	6.09	1.86	KO Increases WT Response ≥1.5-fold
1425503_at	// NM_023887 /.	14538	glucosaminyl (N-acetyl) transferase 2, I-branching enzyme	Gcnt2	3.21	4.8	1.50	KO Increases WT Response ≥1.5-fold
1415897_a_at	NM_019946	56615	microsomal glutathione S-transferase 1	Mgst1	3.18	5.13	1.61	KO Increases WT Response ≥1.5-fold
1426808_at	NM_010705	16854	lectin, galactose binding, soluble 3	Lgals3	3.15	5.23	1.66	KO Increases WT Response ≥1.5-fold
1453238_s_at	NR_002860	/ 319269 /// 319443	RIKEN cDNA 3930401B19 gene /// RIKEN cDNA 1200016E24 gene /// RIKEN cDNA A130040M12 gene /// RIKEN cDNA E430024C06 gene	6E24Rik /// A130040	3.11	5.58	1.79	KO Increases WT Response ≥1.5-fold
1440865_at	NM_001033632	213002	interferon induced transmembrane protein 6	Ifitm6	3.07	4.74	1.54	KO Increases WT Response ≥1.5-fold
1424759_at	NM_025549	66412	arrestin domain containing 4	Arrdc4	3.02	4.93	1.63	KO Increases WT Response ≥1.5-fold
1438148_at	NM_203320	330122	gene model 1960, (NCBI)	Gm1960	2.99	5.02	1.68	KO Increases WT Response ≥1.5-fold
1450716_at	NM_009621	11504	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 1	Adamts1	2.88	4.98	1.73	KO Increases WT Response ≥1.5-fold
1428636_at	19422 /// XM_9	74051	six transmembrane epithelial antigen of prostate 2	Steap2	2.82	5.95	2.11	KO Increases WT Response ≥1.5-fold
1420831_at	024945 /// NM_	104009	quiescin Q6	Qscn6	2.70	4.24	1.57	KO Increases WT Response ≥1.5-fold
1448452_at	NM_008320	15900	interferon regulatory factor 8	Irf8	2.69	4.42	1.64	KO Increases WT Response ≥1.5-fold
1442018_at	---	103207	expressed sequence AI426953	AI426953	2.63	4.69	1.78	KO Increases WT Response ≥1.5-fold
1417400_at	NM_030690	75646	retinoic acid induced 14	Rai14	2.63	3.94	1.50	KO Increases WT Response ≥1.5-fold
1437785_at	---	101401	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 9	Adamts9	2.60	4.54	1.75	KO Increases WT Response ≥1.5-fold
1417654_at	NM_011521	20971	syndecan 4	Sdc4	2.58	4.87	1.89	KO Increases WT Response ≥1.5-fold
1451160_s_at	NM_027514	52118	poliovirus receptor	Pvr	2.57	4.04	1.57	KO Increases WT Response ≥1.5-fold
1449996_a_at	NM_022314	59069	tropomyosin 3, gamma	Tpm3	2.51	3.84	1.53	KO Increases WT Response ≥1.5-fold
1458351_s_at	NM_178633	77113	kelch-like 2, Mayven (Drosophila)	Klhl2	2.48	4.32	1.74	KO Increases WT Response ≥1.5-fold
1423393_at	NM_013885	29876	chloride intracellular channel 4 (mitochondrial)	Clic4	2.47	4.12	1.67	KO Increases WT Response ≥1.5-fold
1428671_at	---	72275	RIKEN cDNA 2200002D01 gene	2200002D01Rik	2.42	3.76	1.55	KO Increases WT Response ≥1.5-fold
1437247_at	08037 /// XM_9	14284 /// 634417	fos-like antigen 2 /// similar to fos-like antigen 2	Fosl2 /// LOC634417	2.40	3.96	1.65	KO Increases WT Response ≥1.5-fold
1441228_at	// XM_905672 /.	381823	apolipoprotein L domain containing 1	Apold1	2.38	3.57	1.50	KO Increases WT Response ≥1.5-fold
1431399_at	---	101401	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 9	Adamts9	2.33	3.88	1.67	KO Increases WT Response ≥1.5-fold
1426501_a_at	NM_145133	211550	Traf2 binding protein	T2bp	2.32	3.97	1.71	KO Increases WT Response ≥1.5-fold
1457575_at	---	99209	expressed sequence AU021128	AU021128	2.24	4.07	1.82	KO Increases WT Response ≥1.5-fold

1437502_x_at	NM_009846	12484	CD24a antigen	Cd24a	2.18	4.86	2.23	KO Increases WT Response ≥1.5-fold
1427334_s_at	NM_026054	67246	RIKEN cDNA 2810474O19 gene	2810474O19Rik	2.18	4.2	1.93	KO Increases WT Response ≥1.5-fold
1442880_at	---	---	---	---	2.14	3.74	1.75	KO Increases WT Response ≥1.5-fold
1439163_at	NM_001033324	235320	zinc finger and BTB domain containing 16	Zbtb16	2.12	3.24	1.53	KO Increases WT Response ≥1.5-fold
1454472_at	---	73107	RIKEN cDNA 2900092N22 gene	2900092N22Rik	2.07	3.88	1.87	KO Increases WT Response ≥1.5-fold
1438562_a_at	NM_008977	19255	protein tyrosine phosphatase, non-receptor type 2	Ptpn2	2.06	3.14	1.52	KO Increases WT Response ≥1.5-fold
1417398_at	NM_025846	66922	related RAS viral (r-ras) oncogene homolog 2	Rras2	2.01	3.63	1.81	KO Increases WT Response ≥1.5-fold
1455200_at	NM_001033254	214230	p21 (CDKN1A)-activated kinase 6	Pak6	2.01	3.21	1.60	KO Increases WT Response ≥1.5-fold
1450193_at	NM_010408	15165	hyperpolarization-activated, cyclic nucleotide-gated K+ 1	Hcn1	1.99	3.94	1.98	KO Increases WT Response ≥1.5-fold
1422412_x_at	NM_017388	53876	eosinophil-associated, ribonuclease A family, member 3	Ear3	1.97	3.74	1.90	KO Increases WT Response ≥1.5-fold
1438992_x_at	NM_009716	11911	activating transcription factor 4	Atf4	1.97	3	1.52	KO Increases WT Response ≥1.5-fold
1422861_s_at	XM_976375	669660	similar to PDZ and LIM domain protein 5 (Enigma homolog) (Enigma-like PDZ and LIM domains protein)	LOC669660	1.95	4.63	2.37	KO Increases WT Response ≥1.5-fold
1449363_at	NM_007498	11910	activating transcription factor 3	Atf3	1.95	3.15	1.62	KO Increases WT Response ≥1.5-fold
1423405_at	NM_080639	110595	tissue inhibitor of metalloproteinase 4	Timp4	1.92	3.01	1.57	KO Increases WT Response ≥1.5-fold
1438855_x_at	NM_009396	21928	tumor necrosis factor, alpha-induced protein 2	Tnfaip2	1.91	3.07	1.61	KO Increases WT Response ≥1.5-fold
1455904_at	NR_002840	14455	growth arrest specific 5	Gas5	1.89	3.07	1.62	KO Increases WT Response ≥1.5-fold
1437658_a_at	NR_002896	83673	small nucleolar RNA, C/D box 22	Snord22	1.89	2.96	1.57	KO Increases WT Response ≥1.5-fold
1448182_a_at	NM_009846	12484	CD24a antigen	Cd24a	1.88	3.4	1.81	KO Increases WT Response ≥1.5-fold
1427254_at	NM_173364	235682	zinc finger protein 445	Zfp445	1.87	3.39	1.81	KO Increases WT Response ≥1.5-fold
1436040_at	---	69471	RIKEN cDNA 2310005L22 gene	2310005L22Rik	1.85	3.29	1.78	KO Increases WT Response ≥1.5-fold
1423277_at	NM_008983	19272	protein tyrosine phosphatase, receptor type, K	Ptprk	1.84	2.76	1.50	KO Increases WT Response ≥1.5-fold
1439741_x_at	NM_030724	80914	uridine-cytidine kinase 2	Uck2	1.82	2.94	1.62	KO Increases WT Response ≥1.5-fold
1436454_x_at	NM_007999	14156	flap structure specific endonuclease 1	Fen1	1.82	2.78	1.53	KO Increases WT Response ≥1.5-fold
1455371_at	I025589 /// NM	19727	regulatory factor X-associated ankyrin-containing protein	Rfxank	1.81	3.24	1.79	KO Increases WT Response ≥1.5-fold
1449184_at	NM_009402	21946	peptidoglycan recognition protein 1	Pglyrp1	1.81	3.07	1.70	KO Increases WT Response ≥1.5-fold
1437716_x_at	NM_145588	110033	kinesin family member 22	Kif22	1.78	3.32	1.87	KO Increases WT Response ≥1.5-fold
1450786_x_at	XM_976375	669660	similar to PDZ and LIM domain protein 5 (Enigma homolog) (Enigma-like PDZ and LIM domains protein)	LOC669660	1.74	3.75	2.16	KO Increases WT Response ≥1.5-fold
1420249_s_at	NM_009139	20305	chemokine (C-C motif) ligand 6	Ccl6	1.74	3.03	1.74	KO Increases WT Response ≥1.5-fold
1423944_at	NM_017371	15458	hemopexin	Hpxn	1.74	2.64	1.52	KO Increases WT Response ≥1.5-fold
1450922_a_at	NM_009367	21808	transforming growth factor, beta 2	Tgfb2	1.71	3.29	1.92	KO Increases WT Response ≥1.5-fold
1435465_at	// XM_921147 /,	632344 /// 74901	kelch repeat and BTB (POZ) domain containing 11 /// similar to Protein KIAA0711	.btbd11 /// LOC63234	1.71	3.16	1.85	KO Increases WT Response ≥1.5-fold
1438773_at	19422 /// XM_9	74051	six transmembrane epithelial antigen of prostate 2	Steap2	1.71	2.97	1.74	KO Increases WT Response ≥1.5-fold
1452035_at	NM_009931	12826	procollagen, type IV, alpha 1	Col4a1	1.71	2.71	1.58	KO Increases WT Response ≥1.5-fold
1451054_at	NM_008768	18405	orosomucoid 1	Orm1	1.70	4.07	2.39	KO Increases WT Response ≥1.5-fold
1436600_at	NM_172913	244579	trinucleotide repeat containing 9	Tnrc9	1.68	3.27	1.95	KO Increases WT Response ≥1.5-fold
1429336_at	// XM_925529 /,	72477	RIKEN cDNA 2610301K12 gene	2610301K12Rik	1.68	2.74	1.63	KO Increases WT Response ≥1.5-fold
1418932_at	NM_017373	18030	nuclear factor, interleukin 3, regulated	Nfil3	1.68	2.63	1.57	KO Increases WT Response ≥1.5-fold
1438527_at	_977518 /// XM40 /// 668219 /// 665		ribosomal protein L3 /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (L4) /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (L4) /// similar to ribosomal protein L3 isoform b /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to 60S ribosomal protein L3 (J1 protein) /// similar to ribosomal protein L3 isoform b	LOC668219 /// LOC	1.64	2.79	1.70	KO Increases WT Response ≥1.5-fold
1449372_at	NM_008929	19107	DnaJ (Hsp40) homolog, subfamily C, member 3	Dnajc3	1.64	2.56	1.56	KO Increases WT Response ≥1.5-fold
1427056_at	NM_001024139	235130	a disintegrin-like and metallopeptidase (reprolysin type) with thrombospondin type 1 motif, 15	Adamts15	1.64	2.48	1.51	KO Increases WT Response ≥1.5-fold
1416431_at	NM_026473	67951	tubulin, beta 6	Tubb6	1.63	2.62	1.61	KO Increases WT Response ≥1.5-fold
1417101_at	I002012 /// NM	15512	heat shock protein 2	Hspa2	1.62	2.88	1.78	KO Increases WT Response ≥1.5-fold
1446939_at	NM_030684	94094	Tripartite motif protein 34	Trim34	1.62	2.72	1.68	KO Increases WT Response ≥1.5-fold
1437671_x_at	NM_029614	76453	protease, serine, 23	Prss23	1.62	2.53	1.56	KO Increases WT Response ≥1.5-fold
1458773_at	NM_022305	14595	UDP-Gal:betaGlcNAc beta 1,4- galactosyltransferase, polypeptide 1	B4galt1	1.61	2.89	1.80	KO Increases WT Response ≥1.5-fold
1426441_at	NM_008732	18174	solute carrier family 11 (proton-coupled divalent metal ion transporters), member 2	Slc11a2	1.61	2.74	1.70	KO Increases WT Response ≥1.5-fold
1418728_at	NM_011485	20845	steroidogenic acute regulatory protein	Star	1.60	2.47	1.54	KO Increases WT Response ≥1.5-fold
1431057_a_at	NM_029614	76453	protease, serine, 23	Prss23	1.60	2.47	1.54	KO Increases WT Response ≥1.5-fold
1456439_x_at	NM_138315	171580	microtubule associated monoxygenase, calponin and LIM domain containing 1	Mical1	1.57	2.74	1.75	KO Increases WT Response ≥1.5-fold
1428319_at	NM_026131	67399	PDZ and LIM domain 7	Pdlim7	1.57	2.43	1.55	KO Increases WT Response ≥1.5-fold
1418892_at	NM_023275	80837	ras homolog gene family, member J	Rhoj	1.56	2.38	1.53	KO Increases WT Response ≥1.5-fold
1447493_at	NM_178656	193003	RIKEN cDNA A530088H08 gene	A530088H08Rik	1.54	3.25	2.11	KO Increases WT Response ≥1.5-fold
1458703_at	---	---	---	---	1.53	2.3	1.50	KO Increases WT Response ≥1.5-fold
1425099_a_at	NM_007489	11865	aryl hydrocarbon receptor nuclear translocator-like	Arntl	1.52	3.27	2.15	KO Increases WT Response ≥1.5-fold
1458588_at	NM_013928	30953	Schwannomin interacting protein 1	Schip1	1.52	2.34	1.54	KO Increases WT Response ≥1.5-fold
1456126_at	NM_172833	240354	mucosa associated lymphoid tissue lymphoma translocation gene 1	Malt1	1.52	2.34	1.54	KO Increases WT Response ≥1.5-fold
1416059_at	NM_019787	27054	SEC23B (S. cerevisiae)	Sec23b	1.51	2.31	1.53	KO Increases WT Response ≥1.5-fold
1448439_at	NM_080837	28106	DNA segment, Chr 17, Wayne State University 104, expressed	D17Wsu104e	1.49	2.27	1.52	KO Increases WT Response ≥1.5-fold
1423250_a_at	NM_009367	21808	transforming growth factor, beta 2	Tgfb2	1.47	2.65	1.80	KO Increases WT Response ≥1.5-fold
1446947_at	---	---	---	---	1.47	2.37	1.61	KO Increases WT Response ≥1.5-fold
1427594_at	NM_172863	242109	zinc finger protein 697	Zfp697	1.47	2.23	1.52	KO Increases WT Response ≥1.5-fold
1421821_at	NM_010700	16835	low density lipoprotein receptor	Ldlr	1.46	2.49	1.71	KO Increases WT Response ≥1.5-fold
1416759_at	NM_138315	171580	microtubule associated monoxygenase, calponin and LIM domain containing 1	Mical1	1.45	2.86	1.97	KO Increases WT Response ≥1.5-fold
1450744_at	22000 /// XM_9	192657	elongation factor RNA polymerase II 2	Ell2	1.44	2.27	1.58	KO Increases WT Response ≥1.5-fold
1419898_s_at	NM_145931	106205	zinc finger CCCH type containing 7 A	Zc3h7a	1.44	2.18	1.51	KO Increases WT Response ≥1.5-fold
1444009_at	NM_178045	213391	Ras association (RalGDS/AF-6) domain family 4	Rassf4	1.39	2.36	1.70	KO Increases WT Response ≥1.5-fold
1449997_at	NM_022314	59069	tropomyosin 3, gamma	Tpm3	1.39	2.2	1.58	KO Increases WT Response ≥1.5-fold
1455247_at	// XM_973190 /,	75723	angiomotin-like 1	Amotl1	1.39	2.19	1.58	KO Increases WT Response ≥1.5-fold
1433789_at	02904 /// XM_9	399101 /// 670438	RNA, U17d small nucleolar /// similar to RNA, U17d small nucleolar	tnu17d /// LOC67043	1.39	2.12	1.53	KO Increases WT Response ≥1.5-fold
1429866_at	I039959 /// NM	66395	AHNAK nucleoprotein (desmoyokin)	Ahnak	1.39	2.11	1.52	KO Increases WT Response ≥1.5-fold
1438941_x_at	NM_028779	109674	adenosine monophosphate deaminase 2 (isoform L)	Ampd2	1.38	2.12	1.54	KO Increases WT Response ≥1.5-fold
1420843_at	NM_011213	19268	protein tyrosine phosphatase, receptor type, F	Ptprf	1.37	3.27	2.39	KO Increases WT Response ≥1.5-fold
1433891_at	// XM_917125 /,	107515 /// 669588	leucine-rich repeat-containing G protein-coupled receptor 4 /// similar to Leucine-rich repeat-containing G-protein coupled receptor 4 precursor	Lgr4 /// LOC669588	1.35	2.02	1.50	KO Increases WT Response ≥1.5-fold
1455841_s_at	NM_153419	101612	glutamate-rich WD repeat containing 1	Grwd1	1.34	2.05	1.53	KO Increases WT Response ≥1.5-fold
1437268_at	NM_173414	236285	LanC lantibiotic synthetase component C-like 3 (bacterial)	Lancl3	1.33	2.02	1.52	KO Increases WT Response ≥1.5-fold
1426958_at	I29767 /// XR_0	272691 /// 76846	ribosomal protein S9 /// similar to ribosomal protein S9	Rps9 /// LOC272691	1.32	1.98	1.50	KO Increases WT Response ≥1.5-fold
1446141_at	NM_009367	21808	Transforming growth factor, beta 2	Tgfb2	1.31	2.02	1.54	KO Increases WT Response ≥1.5-fold
1424214_at	NM_145562	231440	RIKEN cDNA 9130213B05 gene	9130213B05Rik	1.30	1.99	1.53	KO Increases WT Response ≥1.5-fold
1437756_at	NM_174960	317758	GTPase, IMAP family member 9	Gimap9	1.29	2.31	1.79	KO Increases WT Response ≥1.5-fold
1427941_at	NM_148948	192119	Dicer1, Dcr-1 homolog (Drosophila)	Dicer1	1.29	2.01	1.56	KO Increases WT Response ≥1.5-fold
1441915_s_at	NM_025874	66968	RIKEN cDNA 2310076L09 gene	2310076L09Rik	1.28	2.08	1.63	KO Increases WT Response ≥1.5-fold
1444326_at	NM_011032	18453	Prolyl 4-hydroxylase, beta polypeptide	P4hb	1.26	1.96	1.56	KO Increases WT Response ≥1.5-fold
1434684_at	NM_177620	217835	Ras and Rab interactor 3	Rin3	1.26	1.95	1.55	KO Increases WT Response ≥1.5-fold
1420841_at	NM_011213	19268	protein tyrosine phosphatase, receptor type, F	Ptprf	1.25	2.7	2.16	KO Increases WT Response ≥1.5-fold

1443115_at	09371 /// NM_0	21813	Transforming growth factor, beta receptor II	Tgfbr2	1.25	1.97	1.58	KO Increases WT Response ≥1.5-fold
1444763_at	NM_008983	19272	protein tyrosine phosphatase, receptor type, K	Ptprk	1.25	1.9	1.52	KO Increases WT Response ≥1.5-fold
1425514_at	1024955 /// NM_	18708	phosphatidylinositol 3-kinase, regulatory subunit, polypeptide 1 (p85 alpha)	Pik3r1	1.22	1.9	1.56	KO Increases WT Response ≥1.5-fold
1434660_at	---	211064	alkB, alkylation repair homolog 1 (E. coli)	Alkbh1	1.22	1.86	1.52	KO Increases WT Response ≥1.5-fold
1422570_at	NM_009537	22632	YY1 transcription factor	Yy1	1.22	1.84	1.51	KO Increases WT Response ≥1.5-fold
1438501_at	NM_009092	20068	Ribosomal protein S17	Rps17	1.20	2.05	1.71	KO Increases WT Response ≥1.5-fold
1441604_at	NM_016903	13885	Esterase D/formylglutathione hydrolase	Esd	1.17	1.73	1.48	KO and Not WT Responder
1454780_at	NM_173739	233733	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N-acetylgalactosaminyltransferase-like 4	Galntl4	1.11	1.62	1.46	KO and Not WT Responder
1454967_at	---	---	Transcribed locus	---	1.11	-1.52	-1.37	KO and Not WT Responder
1437318_at	NM_008778	18481	p21 (CDKN1A)-activated kinase 3	Pak3	1.08	1.92	1.78	KO and Not WT Responder
1423846_x_at	NM_011654	22143	tubulin, alpha 2	Tuba2	1.08	1.75	1.62	KO and Not WT Responder
1436158_at	NM_010124	13688	eukaryotic translation initiation factor 4E binding protein 2	Eif4ebp2	1.08	1.68	1.56	KO and Not WT Responder
1435486_at	---	---	Transcribed locus	---	1.08	1.67	1.55	KO and Not WT Responder
1449550_at	NM_008659	17913	myosin IC	Myo1c	1.06	1.56	1.47	KO and Not WT Responder
1455528_at	---	---	Transcribed locus, weakly similar to NP_665733.1 Lipogenin [Rattus norvegicus]	---	1.06	-1.75	-1.65	KO and Not WT Responder
1429639_at	27096 /// NM_0	74182	preimplantation protein 4	Prei4	-1.26	-2.15	1.71	KO Increases WT Response ≥1.5-fold
1433827_at	1038999 /// NM	11980	ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	Atp8a1	-1.26	-1.96	1.56	KO Increases WT Response ≥1.5-fold
1450004_at	NM_021367	53603	thymic stromal lymphopoietin	Tslp	-1.31	-1.96	1.50	KO Increases WT Response ≥1.5-fold
1435292_at	// XM_919023 /.	210789	TBC1 domain family, member 4	Tbc1d4	-1.33	-1.99	1.50	KO Increases WT Response ≥1.5-fold
1442169_at	NM_013703	22359	very low density lipoprotein receptor	Vldlr	-1.36	-2.06	1.51	KO Increases WT Response ≥1.5-fold
1452973_at	NM_175523	243382	protein phosphatase 1K (PP2C domain containing)	Ppm1k	-1.37	-2.29	1.67	KO Increases WT Response ≥1.5-fold
1460332_at	NM_023129	18821	phospholamban	Pln	-1.38	-2.1	1.52	KO Increases WT Response ≥1.5-fold
1418835_at	NM_009344	21664	pleckstrin homology-like domain, family A, member 1	Phlda1	-1.40	-2.31	1.65	KO Increases WT Response ≥1.5-fold
1429083_at	23830 /// XM_9	77559	amylo-1,6-glucosidase, 4-alpha-glucanotransferase	Agl	-1.40	-2.2	1.57	KO Increases WT Response ≥1.5-fold
1454647_at	NM_175324	102632	acyl-Coenzyme A dehydrogenase family, member 11	Acad11	-1.42	-2.18	1.54	KO Increases WT Response ≥1.5-fold
1418314_a_at	21477 /// NM_1	268859	ataxin 2 binding protein 1	A2bp1	-1.44	-2.49	1.73	KO Increases WT Response ≥1.5-fold
1415854_at	NM_013598	17311	kit ligand	Kitl	-1.45	-2.27	1.57	KO Increases WT Response ≥1.5-fold
1424178_at	NM_144534	74166	transmembrane protein 38a	Tmem38a	-1.49	-2.7	1.81	KO Increases WT Response ≥1.5-fold
1449118_at	NM_010022	13171	dihydrolipoamide branched chain transacylase E2	Dbt	-1.50	-2.28	1.52	KO Increases WT Response ≥1.5-fold
1418589_a_at	1039543 /// NM_	17349	myeloid leukemia factor 1	Mlf1	-1.55	-2.47	1.59	KO Increases WT Response ≥1.5-fold
1455301_at	XM_620310	330319	expressed sequence BQ952480	BQ952480	-1.56	-2.83	1.81	KO Increases WT Response ≥1.5-fold
1418944_at	NM_021476	58861	cysteinyl leukotriene receptor 1	Cysltr1	-1.56	-2.63	1.69	KO Increases WT Response ≥1.5-fold
1448557_at	NM_024244	71721	RIKEN cDNA 1200015N20 gene	1200015N20Rik	-1.57	-3.04	1.94	KO Increases WT Response ≥1.5-fold
1460281_at	NM_080847	78910	ankyrin repeat and SOCS box-containing protein 15	Asb15	-1.57	-2.77	1.76	KO Increases WT Response ≥1.5-fold
1441389_at	---	---	Transcribed locus	---	-1.57	-2.35	1.50	KO Increases WT Response ≥1.5-fold
1452179_at	NM_172303	269424	PHD finger protein 17	Phf17	-1.59	-2.51	1.58	KO Increases WT Response ≥1.5-fold
1454855_at	) /// XM_001006	50791	membrane associated guanylate kinase, WW and PDZ domain containing 2	Magi2	-1.59	-2.42	1.52	KO Increases WT Response ≥1.5-fold
1454350_at	NM_175515	380614	PDZ domain containing 6	Pdzd6	-1.61	-2.87	1.78	KO Increases WT Response ≥1.5-fold
1429228_at	NM_181815	75216	RIKEN cDNA 4930534B04 gene	4930534B04Rik	-1.64	-2.95	1.80	KO Increases WT Response ≥1.5-fold
1450710_at	NM_021878	16468	jumonji, AT rich interactive domain 2	Jarid2	-1.64	-2.58	1.57	KO Increases WT Response ≥1.5-fold
1432944_at	---	73027	RIKEN cDNA 2900046L07 gene	2900046L07Rik	-1.65	-3.48	2.11	KO Increases WT Response ≥1.5-fold
1438724_at	NM_027881	71720	oxysterol binding protein-like 3	Osbpl3	-1.67	-2.75	1.65	KO Increases WT Response ≥1.5-fold
1449466_at	NM_011606	21922	C-type lectin domain family 3, member b	Clec3b	-1.67	-2.52	1.51	KO Increases WT Response ≥1.5-fold
1428996_at	NM_001024606	382051	RIKEN cDNA 4833426J09 gene	4833426J09Rik	-1.68	-2.98	1.77	KO Increases WT Response ≥1.5-fold
1447693_s_at	NM_008684	18007	neogenin	Neo1	-1.68	-2.83	1.68	KO Increases WT Response ≥1.5-fold
1415959_at	NM_009204	20528	solute carrier family 2 (facilitated glucose transporter), member 4	Slc2a4	-1.70	-3.29	1.94	KO Increases WT Response ≥1.5-fold
1443406_at	NM_178711	235527	phospholipid scramblase 4	Plscr4	-1.70	-3.1	1.82	KO Increases WT Response ≥1.5-fold
1457066_at	NM_011510	20927	ATP-binding cassette, sub-family C (CFTR/MRP), member 8	Abcc8	-1.70	-2.99	1.76	KO Increases WT Response ≥1.5-fold
1455244_at	26102 /// NM_1	208846	dishevelled associated activator of morphogenesis 1	Daam1	-1.71	-2.61	1.53	KO Increases WT Response ≥1.5-fold
1455091_at	13 /// XM_9201	235542	RIKEN cDNA 3222402P14 gene	3222402P14Rik	-1.72	-2.65	1.54	KO Increases WT Response ≥1.5-fold
1443932_at	NM_178253	271005	kelch domain containing 1	Klhdc1	-1.75	-3.23	1.85	KO Increases WT Response ≥1.5-fold
1449407_at	NM_009879	12589	intraflagellar transport 81 homolog (Chlamydomonas)	Ift81	-1.75	-3.17	1.81	KO Increases WT Response ≥1.5-fold
1425344_at	NM_026272	67608	nuclear prelamin A recognition factor	Narf	-1.75	-2.69	1.54	KO Increases WT Response ≥1.5-fold
1425342_a_at	NM_010608	16527	potassium channel, subfamily K, member 3	Kcnk3	-1.77	-3.1	1.75	KO Increases WT Response ≥1.5-fold
1422927_at	NM_023784	75581	Yip1 domain family, member 7	Yipf7	-1.77	-2.78	1.57	KO Increases WT Response ≥1.5-fold
1421866_at	NM_008173	14815	nuclear receptor subfamily 3, group C, member 1	Nr3c1	-1.79	-2.74	1.53	KO Increases WT Response ≥1.5-fold
1424669_at	NM_026752	68520	zinc finger, FYVE domain containing 21	Zfyve21	-1.82	-3.57	1.96	KO Increases WT Response ≥1.5-fold
1460662_at	NM_011067	18628	period homolog 3 (Drosophila)	Per3	-1.82	-2.93	1.61	KO Increases WT Response ≥1.5-fold
1424670_s_at	NM_026752	68520	zinc finger, FYVE domain containing 21	Zfyve21	-1.82	-2.81	1.54	KO Increases WT Response ≥1.5-fold
1451606_at	NM_177039	319942	RIKEN cDNA A530016L24 gene	A530016L24Rik	-1.82	-2.78	1.53	KO Increases WT Response ≥1.5-fold
1425870_a_at	// NM_145703 /.	80906	Kv channel-interacting protein 2	Kcnip2	-1.84	-4.63	2.52	KO Increases WT Response ≥1.5-fold
1429918_at	NM_175535	244867	Rho GTPase activating protein 20	Arhgap20	-1.84	-3.81	2.07	KO Increases WT Response ≥1.5-fold
1419286_s_at	NM_009879	12589	intraflagellar transport 81 homolog (Chlamydomonas)	Ift81	-1.84	-3.39	1.84	KO Increases WT Response ≥1.5-fold
1458040_at	---	28017	DNA segment, Chr 7, Wayne State University 130, expressed	D7Wsu130e	-1.86	-3.86	2.08	KO Increases WT Response ≥1.5-fold
1421471_at	NM_010934	18166	neuropeptide Y receptor Y1	Npy1r	-1.86	-2.9	1.56	KO Increases WT Response ≥1.5-fold
1457354_at	NM_172946	268481	RIKEN cDNA 6330509G02 gene	6330509G02Rik	-1.90	-2.89	1.52	KO Increases WT Response ≥1.5-fold
1427213_at	NM_008824	18639	6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 1	Pfkfb1	-1.92	-3.18	1.66	KO Increases WT Response ≥1.5-fold
1434581_at	---	---	---	---	-1.92	-3.13	1.63	KO Increases WT Response ≥1.5-fold
1457177_at	NM_013646	19883	RAR-related orphan receptor alpha	Rora	-1.92	-3.04	1.58	KO Increases WT Response ≥1.5-fold
1419417_at	NM_009506	22341	vascular endothelial growth factor C	Vegfc	-1.93	-3.19	1.65	KO Increases WT Response ≥1.5-fold
1451119_a_at	NM_010180	14114	fibulin 1	Fbln1	-1.94	-2.91	1.50	KO Increases WT Response ≥1.5-fold
1438201_at	NM_001033453	381511	protein phosphatase 2C, magnesium dependent, catalytic subunit	Ppm2c	-1.98	-3.24	1.64	KO Increases WT Response ≥1.5-fold
1452431_s_at	10378 /// NM_0	14960 /// 14968	histocompatibility 2, class II antigen A, alpha /// histocompatibility 2, class II antigen E alpha	H2-Aa /// H2-Ea	-1.99	-3.03	1.52	KO Increases WT Response ≥1.5-fold
1449547_at	NM_080856	142687	ankyrin repeat and SOCS box-containing protein 14	Asb14	-2.06	-4.04	1.96	KO Increases WT Response ≥1.5-fold
1444153_at	---	---	16 days neonate heart cDNA, RIKEN full-length enriched library, clone:D830033B01 product:unclassifiable, full insert sequence	---	-2.07	-3.84	1.86	KO Increases WT Response ≥1.5-fold
1435911_s_at	NM_178934	353169	solute carrier family 2 (facilitated glucose transporter), member 12	Slc2a12	-2.09	-4.08	1.95	KO Increases WT Response ≥1.5-fold
1422438_at	NM_010145	13849	epoxide hydrolase 1, microsomal	Ephx1	-2.10	-4.26	2.03	KO Increases WT Response ≥1.5-fold
1450967_at	NM_025760	66775	protein tyrosine phosphatase-like A domain containing 2	Ptpla2	-2.10	-3.29	1.57	KO Increases WT Response ≥1.5-fold
1449884_at	NM_026626	68226	EF-hand calcium binding domain 2	Efcab2	-2.11	-3.65	1.73	KO Increases WT Response ≥1.5-fold
1453552_at	---	69631	RIKEN cDNA 2310014F07 gene	2310014F07Rik	-2.14	-4.4	2.06	KO Increases WT Response ≥1.5-fold
1427546_at	NM_013851	27404	ATP-binding cassette, sub-family A (ABC1), member 8b	Abca8b	-2.15	-3.76	1.75	KO Increases WT Response ≥1.5-fold
1440635_at	// XM_974432 /.	72333	palladin, cytoskeletal associated protein	Palld	-2.16	-3.64	1.69	KO Increases WT Response ≥1.5-fold
1443824_s_at	NM_053070	12354	carbonic anhydrase 7	Car7	-2.20	-3.29	1.50	KO Increases WT Response ≥1.5-fold
1453135_at	NM_027402	384061	fibronectin type III domain containing 5	Fndc5	-2.28	-3.92	1.72	KO Increases WT Response ≥1.5-fold
1435605_at	NM_001004369	242894	ARP3 actin-related protein 3 homolog B (yeast)	Actr3b	-2.30	-3.93	1.71	KO Increases WT Response ≥1.5-fold
1456395_at	NM_008904	19017	peroxisome proliferative activated receptor, gamma, coactivator 1 alpha	Ppargc1a	-2.32	-3.83	1.65	KO Increases WT Response ≥1.5-fold
1435194_at	---	---	---	---	-2.36	-3.7	1.57	KO Increases WT Response ≥1.5-fold
1417673_at	NM_016719	50915	growth factor receptor bound protein 14	Grb14	-2.37	-3.59	1.51	KO Increases WT Response ≥1.5-fold

1460003_at	---	99132	expressed sequence AI956758	AI956758	-2.40	-3.65	1.52	KO Increases WT Response ≥1.5-fold
1436275_at	---	---	---	---	-2.43	-4.55	1.87	KO Increases WT Response ≥1.5-fold
1422983_at	NM_021359	16420	integrin beta 6	Itgb6	-2.44	-3.98	1.63	KO Increases WT Response ≥1.5-fold
1434237_at	NM_175309	100647	uroplakin 3B	Upk3b	-2.46	-4.83	1.96	KO Increases WT Response ≥1.5-fold
1434735_at	NM_172563	217082	hepatic leukemia factor	Hlf	-2.48	-4.57	1.84	KO Increases WT Response ≥1.5-fold
1418311_at	I038699 /// NM_	63828	fructosamine 3 kinase	Fn3k	-2.48	-4.28	1.73	KO Increases WT Response ≥1.5-fold
1425631_at	NM_016854	53412	protein phosphatase 1, regulatory (inhibitor) subunit 3C	Ppp1r3c	-2.49	-3.84	1.54	KO Increases WT Response ≥1.5-fold
1421087_at	NM_011067	18628	period homolog 3 (Drosophila)	Per3	-2.56	-4.28	1.67	KO Increases WT Response ≥1.5-fold
1428812_at	NM_028491	73287	RIKEN cDNA 1700040L02 gene	1700040L02Rik	-2.59	-4.17	1.61	KO Increases WT Response ≥1.5-fold
1449469_at	NM_016927	53871	polycystic kidney disease 2-like 2	Pkd2l2	-2.60	-5.43	2.09	KO Increases WT Response ≥1.5-fold
1432107_at	NM_183283	69576	RIKEN cDNA 2310010M20 gene	2310010M20Rik	-2.62	-4.24	1.62	KO Increases WT Response ≥1.5-fold
1451527_at	NM_029620	76477	procollagen C-endopeptidase enhancer 2	Pcolce2	-2.63	-4.24	1.61	KO Increases WT Response ≥1.5-fold
1452249_at	NM_001033217	106042	prickle like 1 (Drosophila)	Prickle1	-2.64	-4.01	1.52	KO Increases WT Response ≥1.5-fold
1440739_at	NM_009506	22341	vascular endothelial growth factor C	Vegfc	-2.69	-4.17	1.55	KO Increases WT Response ≥1.5-fold
1447174_at	I038610 /// NM_	13134	Dachshund 1 (Drosophila)	Dach1	-2.69	-4.06	1.51	KO Increases WT Response ≥1.5-fold
1439836_at	NM_080847	78910	ankyrin repeat and SOCS box-containing protein 15	Asb15	-2.82	-8.15	2.89	KO Increases WT Response ≥1.5-fold
1453839_a_at	NM_023734	74116	peptidase inhibitor 16	Pi16	-2.92	-4.5	1.54	KO Increases WT Response ≥1.5-fold
1455090_at	---	---	---	---	-2.98	-4.77	1.60	KO Increases WT Response ≥1.5-fold
1425753_a_at	I040691 /// NM	22256	uracil DNA glycosylase	Ung	-3.08	-5.29	1.72	KO Increases WT Response ≥1.5-fold
1430269_at	NM_026831	68753	RIKEN cDNA 1110037P11 gene	1110037P11Rik	-3.13	-5.1	1.63	KO Increases WT Response ≥1.5-fold
1428758_at	NM_026436	67893	transmembrane protein 86A	Tmem86a	-3.19	-5.39	1.69	KO Increases WT Response ≥1.5-fold
1453924_a_at	NM_008966	19220	prostaglandin F receptor	Ptgfr	-3.22	-5.18	1.61	KO Increases WT Response ≥1.5-fold
1421928_at	NM_007936	13838	Eph receptor A4	Epha4	-3.27	-5.02	1.54	KO Increases WT Response ≥1.5-fold
1450085_at	---	---	---	---	-3.36	-5.86	1.74	KO Increases WT Response ≥1.5-fold
1444025_at	---	---	---	---	-3.40	-5.35	1.57	KO Increases WT Response ≥1.5-fold
1456741_s_at	NM_153581	234267	glycoprotein m6a	Gpm6a	-3.53	-6.03	1.71	KO Increases WT Response ≥1.5-fold
1438211_s_at	NM_016974	13170	D site albumin promoter binding protein	Dbp	-3.54	-7.25	2.05	KO Increases WT Response ≥1.5-fold
1418174_at	NM_016974	13170	D site albumin promoter binding protein	Dbp	-3.56	-7.96	2.24	KO Increases WT Response ≥1.5-fold
1423085_at	NM_007911	13643	ephrin B3	Efnb3	-3.61	-5.53	1.53	KO Increases WT Response ≥1.5-fold
1445764_at	---	---	PREDICTED: Mus musculus hypothetical protein LOC628151 (LOC628151), mRNA	---	-3.69	-6.94	1.88	KO Increases WT Response ≥1.5-fold
1443866_at	NM_176920	319476	leucine-rich repeats and transmembrane domains 1	Lrtm1	-4.18	-7.77	1.86	KO Increases WT Response ≥1.5-fold
1429021_at	NM_007936	13838	Eph receptor A4	Epha4	-4.42	-8.46	1.91	KO Increases WT Response ≥1.5-fold
1439658_at	// XM_916258 /_	320502	leiomodin 3 (fetal)	Lmod3	-5.08	-9.68	1.91	KO Increases WT Response ≥1.5-fold
1444429_at	NM_176920	319476	leucine-rich repeats and transmembrane domains 1	Lrtm1	-5.81	-8.91	1.53	KO Increases WT Response ≥1.5-fold
1446771_at	---	---	---	---	-6.42	-10.41	1.62	KO Increases WT Response ≥1.5-fold
1418697_at	NM_009349	21743	indolethylamine N-methyltransferase	Inmt	-6.77	-11.98	1.77	KO Increases WT Response ≥1.5-fold
1458345_s_at	NM_027866	71693	collectin sub-family member 11	Colec11	-7.96	-18.35	2.31	KO Increases WT Response ≥1.5-fold
1442033_at	NM_183175	239126	C1q and tumor necrosis factor related protein 9	C1qtnf9	-8.25	-14.2	1.72	KO Increases WT Response ≥1.5-fold

TABLE S10: CANONICAL PATHWAYS SENSITIVE TO A2AR KO IN ENDOTOXEMIC HEARTS

A: CANONICAL PATHWAY RESPONSES AUGMENTED BY A2AR KO

Ingenuity Canonical Pathways	-log(p-value)	Ratio	Molecules
Acute Phase Response Signaling	3.13E00	5.06E-02	HPX, HP, RRAS2, PIK3R1, CP, IL6, SERPINE1, NR3C1, ORM1
Glucocorticoid Receptor Signaling	3.03E00	3.9E-02	HSPA4, CXCL3, RRAS2, PIK3R1, CDKN1A, TGFB2, IL6, STAT1, SERPINE1, HSPA2, NR3C1
Glioma Invasiveness Signaling	2.89E00	8.47E-02	TIMP4, RRAS2, PIK3R1, RHOJ, ITGB3
Germ Cell-Sertoli Cell Junction Signaling	2.84E00	5E-02	RRAS2, TUBA8, PAK6, MAP3K6, PAK3, PIK3R1, TGFB2, RHOJ
Angiopoietin Signaling	2.5E00	6.58E-02	GRB14, RRAS2, PAK6, PAK3, PIK3R1
ILK Signaling	2.45E00	4.26E-02	PPP2R3A, PIK3R1, VEGFC, ATF4, RHOJ, ITGB6, PGF, ITGB3
Ephrin Receptor Signaling	2.4E00	4.04E-02	RRAS2, PAK6, PAK3, VEGFC, ATF4, EPHA4, EFNB3, PGF
ERK/MAPK Signaling	2.36E00	4.1E-02	RRAS2, PAK6, PAK3, PPP2R3A, PPP1R3C, PIK3R1, ATF4, STAT1
Pancreatic Adenocarcinoma Signaling	2.35E00	5.08E-02	PIK3R1, CDKN1A, TGFB2, VEGFC, STAT1, PGF
HER-2 Signaling in Breast Cancer	2.29E00	6.17E-02	RRAS2, PIK3R1, CDKN1A, ITGB6, ITGB3
Production of Nitric Oxide and Reactive Oxygen Species in Macrophage	2.15E00	3.74E-02	MAP3K6, PPP2R3A, PPP1R3C, PIK3R1, RHOJ, IRF8, STAT1
Hepatic Fibrosis / Hepatic Stellate Cell Activation	1.98E00	4.48E-02	CXCL3, TGFB2, VEGFC, IL6, STAT1, PGF
Circadian Rhythm Signaling	1.95E00	8.57E-02	PER3, ARNTL, ATF4
HIF1α Signaling	1.86E00	4.55E-02	RRAS2, PIK3R1, VEGFC, SLC2A4, PGF
JAK/Stat Signaling	1.85E00	6.06E-02	RRAS2, PIK3R1, CDKN1A, STAT1
Macropinocytosis Signaling	1.85E00	5.41E-02	RRAS2, PIK3R1, ITGB6, ITGB3
HGF Signaling	1.84E00	4.76E-02	RRAS2, MAP3K6, PIK3R1, CDKN1A, IL6
Dendritic Cell Maturation	1.83E00	3.19E-02	PIK3R1, HLA-DQA1, ATF4, IRF8, IL6, STAT1
mTOR Signaling	1.8E00	3.77E-02	RRAS2, PPP2R3A, PIK3R1, VEGFC, RHOJ, PGF
IL-4 Signaling	1.78E00	5.33E-02	RRAS2, PIK3R1, HLA-DQA1, NR3C1
Agrin Interactions at Neuromuscular Junction	1.76E00	5.8E-02	RRAS2, PAK6, PAK3, ITGB3
Renal Cell Carcinoma Signaling	1.74E00	5.41E-02	RRAS2, PAK6, PAK3, PIK3R1
Renin-Angiotensin Signaling	1.72E00	4.1E-02	RRAS2, PAK6, PAK3, PIK3R1, STAT1
Integrin Signaling	1.7E00	3.43E-02	RRAS2, PAK6, PAK3, PIK3R1, RHOJ, ITGB6, ITGB3
IL-17 Signaling	1.69E00	5.26E-02	RRAS2, PIK3R1, CXCL1, IL6
Prolactin Signaling	1.69E00	5.19E-02	RRAS2, PIK3R1, STAT1, NR3C1
Colorectal Cancer Metastasis Signaling	1.68E00	3.12E-02	RRAS2, PIK3R1, TGFB2, VEGFC, RHOJ, IL6, STAT1, PGF
FLT3 Signaling in Hematopoietic Progenitor Cells	1.67E00	5.26E-02	RRAS2, PIK3R1, ATF4, STAT1
Nitric Oxide Signaling in the Cardiovascular System	1.67E00	4.04E-02	PLN, PIK3R1, VEGFC, PGF
PKCθ Signaling in T Lymphocytes	1.67E00	3.55E-02	RRAS2, MAP3K6, PIK3R1, HLA-DQA1, MALT1
Clathrin-mediated Endocytosis Signaling	1.58E00	3.55E-02	LDLR, PIK3R1, VEGFC, ITGB6, PGF, ITGB3
Melanoma Signaling	1.57E00	6.25E-02	RRAS2, PIK3R1, CDKN1A
Xenobiotic Metabolism Signaling	1.55E00	2.7E-02	MGST1, RRAS2, MAP3K6, PPP2R3A, PIK3R1, IL6, PPARGC1A, ESD
TGF-β Signaling	1.54E00	4.82E-02	RRAS2, TGFB2, SERPINE1, INHBB
Endoplasmic Reticulum Stress Pathway	1.53E00	1.11E-01	DNAJC3, ATF4
Prostate Cancer Signaling	1.52E00	4.08E-02	RRAS2, PIK3R1, CDKN1A, ATF4
GNRH Signaling	1.51E00	3.47E-02	RRAS2, PAK6, MAP3K6, PAK3, ATF4
Bladder Cancer Signaling	1.5E00	4.44E-02	RRAS2, CDKN1A, VEGFC, PGF
CNTF Signaling	1.5E00	5.56E-02	RRAS2, PIK3R1, STAT1
IL-8 Signaling	1.48E00	3.19E-02	RRAS2, PIK3R1, CXCL1, VEGFC, RHOJ, PGF
Melanocyte Development and Pigmentation Signaling	1.47E00	4.44E-02	KITLG, RRAS2, PIK3R1, ATF4
Virus Entry via Endocytic Pathways	1.44E00	4.08E-02	RRAS2, PIK3R1, ITGB6, ITGB3
VEGF Signaling	1.44E00	4.04E-02	RRAS2, PIK3R1, VEGFC, PGF
NRF2-mediated Oxidative Stress Response	1.42E00	3.24E-02	MGST1, RRAS2, PIK3R1, DNAJC3, ATF4, EPHX1
TR/RXR Activation	1.42E00	4.04E-02	HP, LDLR, PIK3R1, PPARGC1A
PAK Signaling	1.42E00	3.77E-02	RRAS2, PAK6, PAK3, PIK3R1
Insulin Receptor Signaling	1.39E00	3.52E-02	RRAS2, PPP1R3C, PIK3R1, SLC2A4, PTPRF
Natural Killer Cell Signaling	1.39E00	3.51E-02	RRAS2, PAK6, PAK3, PIK3R1
FAK Signaling	1.39E00	3.92E-02	RRAS2, PAK6, PAK3, PIK3R1
PTEN Signaling	1.39E00	3.81E-02	RRAS2, PIK3R1, CDKN1A, MAGI2
Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid A	1.39E00	2.51E-02	HP, RRAS2, PIK3R1, DAAM1, VEGFC, ATF4, IL6, PGF, ADAMTS4
Semaphorin Signaling in Neurons	1.38E00	5.77E-02	PAK6, PAK3, RHOJ
Thrombopoietin Signaling	1.36E00	4.92E-02	RRAS2, PIK3R1, STAT1
HMGB1 Signaling	1.34E00	4E-02	RRAS2, PIK3R1, RHOJ, SERPINE1
PI3K Signaling in B Lymphocytes	1.33E00	3.4E-02	ATF3, RRAS2, PIK3R1, ATF4, MALT1
p38 MAPK Signaling	1.3E00	4.17E-02	TIFA, TGFB2, ATF4, STAT1
Chronic Myeloid Leukemia Signaling	1.28E00	3.74E-02	RRAS2, PIK3R1, CDKN1A, TGFB2
Breast Cancer Regulation by Stathmin1	1.26E00	2.99E-02	RRAS2, TUBA8, PPP2R3A, PPP1R3C, PIK3R1, CDKN1A
IL-12 Signaling and Production in Macrophages	1.26E00	2.96E-02	PIK3R1, TGFB2, IRF8, STAT1
B Cell Receptor Signaling	1.24E00	3.21E-02	RRAS2, MAP3K6, PIK3R1, ATF4, MALT1
Interferon Signaling	1.24E00	6.67E-02	PTPN2, STAT1
PXR/RXR Activation	1.21E00	3.3E-02	IL6, NR3C1, PPARGC1A
T Helper Cell Differentiation	1.19E00	4.17E-02	HLA-DQA1, IL6, STAT1
Estrogen-Dependent Breast Cancer Signaling	1.19E00	4.17E-02	RRAS2, PIK3R1, ATF4
Rac Signaling	1.19E00	3.23E-02	RRAS2, PAK6, PAK3, PIK3R1
Neurotrophin/TRK Signaling	1.17E00	3.9E-02	RRAS2, PIK3R1, ATF4
Eicosanoid Signaling	1.17E00	3.61E-02	TMEM87B, PTGFR, CYSLTR1
Growth Hormone Signaling	1.16E00	4.17E-02	PIK3R1, STAT1, SLC2A4
GM-CSF Signaling	1.16E00	4.35E-02	RRAS2, PIK3R1, STAT1
Regulation of eIF4 and p70S6K Signaling	1.15E00	2.99E-02	RRAS2, EIF4EBP2, PPP2R3A, PIK3R1
CXCR4 Signaling	1.13E00	2.96E-02	RRAS2, PAK6, PAK3, PIK3R1, RHOJ
Antiproliferative Role of Somatostatin Receptor 2	1.09E00	3.75E-02	RRAS2, PIK3R1, CDKN1A
CCR3 Signaling in Eosinophils	1.09E00	3.28E-02	RRAS2, PAK6, PAK3, PIK3R1
IL-9 Signaling	1.08E00	5.13E-02	PIK3R1, STAT1
Axonal Guidance Signaling	1.07E00	2.21E-02	MICAL1, RRAS2, PAK6, PAK3, PIK3R1, VEGFC, EPHA4, EFNB3, PGF
PDGF Signaling	1.07E00	3.85E-02	RRAS2, PIK3R1, STAT1
PI3K/AKT Signaling	1.06E00	2.88E-02	RRAS2, PPP2R3A, PIK3R1, CDKN1A
Oncostatin M Signaling	1.05E00	5.71E-02	RRAS2, STAT1
IL-3 Signaling	1.05E00	4.05E-02	RRAS2, PIK3R1, STAT1
P2Y Purigenic Receptor Signaling Pathway	1.04E00	2.94E-02	RRAS2, PIK3R1, ATF4, ITGB3
Role of Cytokines in Mediating Communication between Immune Cells	1.03E00	3.57E-02	IL6, CSF3
Cell Cycle Regulation by BTG Family Proteins	1.03E00	5.56E-02	PPP2R3A, BTG1
NF-κB Activation by Viruses	1.01E00	3.61E-02	RRAS2, PIK3R1, ITGB3
Cardiac Hypertrophy Signaling	9.99E-01	2.45E-02	RRAS2, MAP3K6, PIK3R1, TGFB2, RHOJ, IL6
Cardiac β-adrenergic Signaling	9.97E-01	2.82E-02	PLN, PPP2R3A, PPP1R3C, PDE4B
Airway Pathology in Chronic Obstructive Pulmonary Disease	9.96E-01	1.11E-01	CXCL3
Graft-versus-Host Disease Signaling	9.9E-01	4.08E-02	HLA-DQA1, IL6
VDR/RXR Activation	9.83E-01	3.75E-02	YY1, CDKN1A, TGFB2
Ceramide Signaling	9.7E-01	3.37E-02	RRAS2, PPP2R3A, PIK3R1
Reelin Signaling in Neurons	9.7E-01	3.75E-02	PIK3R1, VLDLR, ITGB3
Acute Myeloid Leukemia Signaling	9.57E-01	3.57E-02	KITLG, RRAS2, PIK3R1
Pathogenesis of Multiple Sclerosis	9.41E-01	1.11E-01	CXCL9
FcγRIIB Signaling in B Lymphocytes	9.32E-01	3.45E-02	RRAS2, PIK3R1
Primary Immunodeficiency Signaling	9.32E-01	3.17E-02	RFXANK, UNG
Regulation of Actin-based Motility by Rho	9.32E-01	3.26E-02	PAK6, PAK3, RHOJ
Regulation of IL-2 Expression in Activated and Anergic T Lymphocytes	9.32E-01	3.33E-02	RRAS2, TGFB2, MALT1
Thyroid Cancer Signaling	9.14E-01	4.26E-02	RRAS2, CXCL1
Ovarian Cancer Signaling	9.01E-01	2.82E-02	RRAS2, PIK3R1, VEGFC, PGF
Aryl Hydrocarbon Receptor Signaling	8.83E-01	2.6E-02	MGST1, CDKN1A, TGFB2, IL6
CDK5 Signaling	8.74E-01	3.19E-02	RRAS2, PPP2R3A, PPP1R3C
CTLA4 Signaling in Cytotoxic T Lymphocytes	8.63E-01	3E-02	PPP2R3A, PIK3R1, HLA-DQA1
EGF Signaling	8.47E-01	3.92E-02	PIK3R1, STAT1
Nitrogen Metabolism	8.47E-01	1.5E-02	CA7, CA4
TNFR1 Signaling	8.31E-01	3.85E-02	PAK6, PAK3
Amyotrophic Lateral Sclerosis Signaling	8.01E-01	2.63E-02	PIK3R1, VEGFC, PGF
T Cell Receptor Signaling	7.81E-01	2.75E-02	RRAS2, PIK3R1, MALT1
Atherosclerosis Signaling	7.71E-01	2.65E-02	TMEM87B, SELP, IL6
Glioblastoma Multiforme Signaling	7.69E-01	2.42E-02	RRAS2, PIK3R1, CDKN1A, RHOJ
Cholecystokinin/Gastrin-mediated Signaling	7.62E-01	2.88E-02	RRAS2, RHOJ, EPHA4
Activation of IRF by Cytosolic Pattern Recognition Receptors	7.59E-01	2.74E-02	IL6, STAT1
Glioma Signaling	7.53E-01	2.63E-02	RRAS2, PIK3R1, CDKN1A
ATM Signaling	7.46E-01	3.77E-02	CDKN1A, ATF4
Endometrial Cancer Signaling	7.21E-01	3.39E-02	RRAS2, PIK3R1
Cell Cycle: G1/S Checkpoint Regulation	7.21E-01	3.28E-02	CDKN1A, TGFB2
Synaptic Long Term Potentiation	7.08E-01	2.65E-02	RRAS2, PPP1R3C, ATF4
Lymphotoxin β Receptor Signaling	7.08E-01	3.17E-02	PIK3R1, CXCL1
IL-2 Signaling	7.08E-01	3.33E-02	RRAS2, PIK3R1
Systemic Lupus Erythematosus Signaling	7E-01	1.84E-02	RRAS2, PIK3R1, IL6
Role of BRCA1 in DNA Damage Response	6.96E-01	3.28E-02	CDKN1A, STAT1
PPARα/RXRα Activation	6.92E-01	2.22E-02	RRAS2, TGFB2, IL6, PPARGC1A
Estrogen Receptor Signaling	6.83E-01	2.54E-02	RRAS2, NR3C1, PPARGC1A
14-3-3-mediated Signaling	6.67E-01	2.59E-02	RRAS2, TUBA8, PIK3R1
Molecular Mechanisms of Cancer	6.65E-01	1.87E-02	RRAS2, PAK6, PAK3, PIK3R1, CDKN1A, TGFB2, RHOJ
Myc Mediated Apoptosis Signaling	6.62E-01	3.08E-02	RRAS2, PIK3R1
RAR Activation	6.59E-01	2.21E-02	PIK3R1, TGFB2, ZBTB16, PPARGC1A
Type II Diabetes Mellitus Signaling	6.44E-01	1.88E-02	PIK3R1, ABCC8, SLC2A4
CD28 Signaling in T Helper Cells	6.36E-01	2.24E-02	PIK3R1, HLA-DQA1, MALT1
IL-15 Signaling	6.3E-01	2.9E-02	RRAS2, PIK3R1
ERK5 Signaling	6.3E-01	2.82E-02	RRAS2, ATF4
Hypoxia Signaling in the Cardiovascular System	6.3E-01	2.86E-02	ATF4, SLC2A4
Hereditary Breast Cancer Signaling	6.29E-01	2.29E-02	RRAS2, PIK3R1, CDKN1A
LXR/RXR Activation	5.9E-01	2.33E-02	LDLR, IL6
p70S6K Signaling	5.86E-01	2.26E-02	RRAS2, PPP2R3A, PIK3R1
Erythropoietin Signaling	5.81E-01	2.53E-02	RRAS2, PIK3R1
Non-Small Cell Lung Cancer Signaling	5.81E-01	2.47E-02	RRAS2, PIK3R1
Role of Pattern Recognition Receptors in Recognition of Bacteria and Vi	5.72E-01	2.44E-02	PIK3R1, IL6
Role of NFAT in Cardiac Hypertrophy	5.61E-01	1.91E-02	RRAS2, PIK3R1, TGFB2, IL6
Caveolar-mediated Endocytosis Signaling	5.54E-01	2.35E-02	ITGB6, ITGB3
LPS-stimulated MAPK Signaling	5.54E-01	2.5E-02	RRAS2, PIK3R1
Role of MAPK Signaling in the Pathogenesis of Influenza	5.37E-01	2.67E-02	TMEM87B, RRAS2
Dopamine Receptor Signaling	5.37E-01	2.15E-02	PPP2R3A, PPP1R3C
AMPK Signaling	5.29E-01	1.8E-02	PFKFB1, PPP2R3A, PIK3R1
Glycosphingolipid Biosynthesis - Neolactoseries	5.14E-01	1.45E-02	GCNT2
IL-15 Production	5.14E-01	3.33E-02	STAT1
Antigen Presentation Pathway	5.14E-01	2.56E-02	HLA-DQA1
Antiproliferative Role of TOB in T Cell Signaling	5E-01	3.85E-02	TGFB2
Synaptic Long Term Depression	4.99E-01	1.89E-02	TMEM87B, RRAS2, PPP2R3A
Inositol Phosphate Metabolism	4.99E-01	1.69E-02	MAP3K6, PAK3, PIK3R1
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	4.97E-01	2.2E-02	HLA-DQA1, IL6
NF-κB Signaling	4.88E-01	1.94E-02	RRAS2, PIK3R1, MALT1
IL-22 Signaling	4.86E-01	3.57E-02	STAT1
B Cell Development	4.86E-01	2.7E-02	HLA-DQA1
Role of Hypercytokinemia/hyperchemokinemia in the Pathogenesis of In	4.86E-01	2.22E-02	IL6
G-Protein Coupled Receptor Signaling	4.78E-01	1.8E-02	RRAS2, PIK3R1, ATF4, PDE4B
PPAR Signaling	4.61E-01	2.04E-02	RRAS2, PPARGC1A
EIF2 Signaling	4.54E-01	1.94E-02	RRAS2, PIK3R1
FGF Signaling	4.54E-01	2.22E-02	PIK3R1, ATF4
O-Glycan Biosynthesis	4.48E-01	2.13E-02	GALNTL4
MIF-mediated Glucocorticoid Regulation	4.48E-01	2.63E-02	NR3C1
Actin Cytoskeleton Signaling	4.44E-01	1.69E-02	RRAS2, PAK6, PAK3, PIK3R1
FXR/RXR Activation	4.41E-01	1.94E-02	VLDLR, PPARGC1A
Pyrimidine Metabolism	4.36E-01	1.3E-02	UPP1, UCK2, UNG
SAPK/JNK Signaling	4.34E-01	1.98E-02	RRAS2, PIK3R1
IL-6 Signaling	4.34E-01	2.15E-02	RRAS2, IL6
Neuregulin Signaling	4.28E-01	1.94E-02	RRAS2, PIK3R1
Huntington's Disease Signaling	4.27E-01	1.65E-02	HSPA4, PIK3R1, ATF4, HSPA2
Lysine Degradation	4.26E-01	1.28E-02	FGL2, DBT, ADAMTS4
p53 Signaling	4.22E-01	2.13E-02	PIK3R1, CDKN1A
RANK Signaling in Osteoclasts	4.22E-01	2.04E-02	MAP3K6, PIK3R1
Metabolism of Xenobiotics by Cytochrome P450	4.15E-01	9.71E-03	MGST1, EPHX1
G Beta Gamma Signaling	4.15E-01	1.68E-02	RRAS2, KCNJ3
IGF-1 Signaling	4.15E-01	1.96E-02	RRAS2, PIK3R1
Glycosphingolipid Biosynthesis - Ganglioseries	4.14E-01	1.56E-02	DBT
Tight Junction Signaling	4.12E-01	1.8E-02	PPP2R3A, TGFB2, MAGI2
Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arth	4.04E-01	1.69E-02	PIK3R1, IL6, ADAMTS4, ITGB3
Role of CHK Proteins in Cell Cycle Checkpoint Control	4.04E-01	2.86E-02	CDKN1A
Coagulation System	3.94E-01	2.56E-02	SERPINE1
Autoimmune Thyroid Disease Signaling	3.94E-01	1.64E-02	HLA-DQA1
Phospholipase C Signaling	3.89E-01	1.56E-02	RRAS2, AHNAK, ATF4, RHOJ
Protein Kinase A Signaling	3.88E-01	1.57E-02	PLN, PPP1R3C, TGFB2, ATF4, PDE4B
Phenylalanine Metabolism	3.84E-01	9.17E-03	DBT
Fc Epsilon RI Signaling	3.81E-01	1.9E-02	RRAS2, PIK3R1
Nicotinate and Nicotinamide Metabolism	3.6E-01	1.47E-02	MAP3K6, PAK3
Docosahexaenoic Acid (DHA) Signaling	3.57E-01	2E-02	PIK3R1
Cell Cycle: G2/M DNA Damage Checkpoint Regulation	3.57E-01	2.22E-02	CDKN1A
Role of NFAT in Regulation of the Immune Response	3.57E-01	1.49E-02	RRAS2, PIK3R1, HLA-DQA1
Endothelin-1 Signaling	3.57E-01	1.6E-02	TMEM87B, RRAS2, PIK3R1
CREB Signaling in Neurons	3.57E-01	1.52E-02	RRAS2, PIK3R1, ATF4
Type I Diabetes Mellitus Signaling	3.55E-01	1.68E-02	HLA-DQA1, STAT1
Sphingosine-1-phosphate Signaling	3.5E-01	1.69E-02	PIK3R1, RHOJ
Role of PKR in Interferon Induction and Antiviral Response	3.49E-01	2.17E-02	STAT1
iCOS-iCOSL Signaling in T Helper Cells	3.45E-01	1.61E-02	PIK3R1, HLA-DQA1
fMLP Signaling in Neutrophils	3.4E-01	1.57E-02	RRAS2, PIK3R1
Allograft Rejection Signaling	3.33E-01	1.04E-02	HLA-DQA1
MSP-RON Signaling Pathway	3.26E-01	2E-02	PIK3R1
Cytotoxic T Lymphocyte-mediated Apoptosis of Target Cells	3.11E-01	1.16E-02	HLA-DQA1
Role of NANOG in Mammalian Embryonic Stem Cell Pluripotency	3.08E-01	1.72E-02	RRAS2, PIK3R1
Role of Oct4 in Mammalian Embryonic Stem Cell Pluripotency	3.04E-01	2.22E-02	JARID2
Gα12/13 Signaling	3.04E-01	1.57E-02	RRAS2, PIK3R1
CD27 Signaling in Lymphocytes	2.85E-01	1.75E-02	MAP3K6
Nur77 Signaling in T Lymphocytes	2.85E-01	1.56E-02	HLA-DQA1
Thrombin Signaling	2.81E-01	1.46E-02	RRAS2, PIK3R1, RHOJ
Relaxin Signaling	2.76E-01	1.32E-02	PIK3R1, PDE4B
Role of PI3K/AKT Signaling in the Pathogenesis of Influenza	2.73E-01	1.28E-02	PIK3R1
OX40 Signaling Pathway	2.73E-01	1.05E-02	HLA-DQA1
TREM1 Signaling	2.68E-01	1.45E-02	IL6
Histidine Metabolism	2.62E-01	8.33E-03	DBT
Fructose and Mannose Metabolism	2.57E-01	6.9E-03	PFKFB1
Cdc42 Signaling	2.54E-01	1.12E-02	PAK3, HLA-DQA1
Glycerophospholipid Metabolism	2.48E-01	1.04E-02	TMEM87B, DBT
Human Embryonic Stem Cell Pluripotency	2.48E-01	1.29E-02	PIK3R1, TGFB2
Calcium-induced T Lymphocyte Apoptosis	2.46E-01	1.43E-02	HLA-DQA1
Mitotic Roles of Polo-Like Kinase	2.46E-01	1.61E-02	PPP2R3A
Glutathione Metabolism	2.36E-01	1.02E-02	MGST1
IL-10 Signaling	2.32E-01	1.43E-02	IL6
Butanoate Metabolism	2.27E-01	7.58E-03	DBT
CD40 Signaling	2.22E-01	1.45E-02	PIK3R1
Tyrosine Metabolism	2.02E-01	4.95E-03	DBT
Aminosugars Metabolism	1.98E-01	8.26E-03	PDE4B

B: CANONICAL PATHWAY RESPONSES INHIBITED BY A2AR KO

Ingenuity Canonical Pathways	-log(p-value)	Ratio	Molecules
PXR/RXR Activation	3.19E00	4.4E-02	RAC2, PRKAR2B, CYP2B6
Nicotinate and Nicotinamide Metabolism	2.4E00	2.94E-02	CILP, ART5, EIF2AK2, BST1
Amyloid Processing	2.34E00	5.08E-02	RAC2, PRKAR2B, CAPN10
Glutamate Receptor Signaling	2.23E00	4.29E-02	GLUL, SLC38A1, HOMER1
AMPK Signaling	2.02E00	2.4E-02	RAC2, PRKAR2B, ADIPOQ, EIF4EBP1
Role of Pattern Recognition Receptors in Recognition of Bacteria and Viruses	2.01E00	3.66E-02	C3, DDX58, EIF2AK2
NF-κB Signaling	1.94E00	2.58E-02	RAC2, NFKBIE, BTRC, EIF2AK2
NF-κB Activation by Viruses	1.91E00	3.61E-02	RAC2, NFKBIE, EIF2AK2
Inhibition of Angiogenesis by TSP1	1.81E00	5.56E-02	RAC2, SDC1
Role of RIG1-like Receptors in Antiviral Innate Immunity	1.78E00	3.92E-02	NFKBIE, DDX58
FXR/RXR Activation	1.75E00	2.91E-02	RAC2, SDC1
TR/RXR Activation	1.75E00	3.03E-02	RAC2, UCP1
PPARα/RXRα Activation	1.73E00	2.22E-02	PRKAR2B, NFKBIE, ADIPOQ
RANK Signaling in Osteoclasts	1.71E00	3.06E-02	RAC2, NFKBIE, MAP3K2
Fcγ Receptor-mediated Phagocytosis in Macrophages and Monocytes	1.69E00	2.97E-02	HMOX1, RAC2, HCK
IL-8 Signaling	1.68E00	2.13E-02	HMOX1, RAC2, VCAM1, EIF4EBP1
Acute Phase Response Signaling	1.67E00	2.25E-02	HMOX1, RAC2, C3, NFKBIE
Role of PKR in Interferon Induction and Antiviral Response	1.57E00	4.35E-02	NFKBIE, EIF2AK2
PKCθ Signaling in T Lymphocytes	1.5E00	2.13E-02	RAC2, NFKBIE, MAP3K2
Nitrogen Metabolism	1.47E00	1.5E-02	CA3, GLUL
Type II Diabetes Mellitus Signaling	1.46E00	1.88E-02	RAC2, NFKBIE, ADIPOQ
PI3K/AKT Signaling	1.44E00	2.16E-02	RAC2, NFKBIE, EIF4EBP1
CD27 Signaling in Lymphocytes	1.4E00	3.51E-02	NFKBIE, MAP3K2
Relaxin Signaling	1.38E00	1.99E-02	RAC2, PRKAR2B, NFKBIE
Activation of IRF by Cytosolic Pattern Recognition Receptors	1.37E00	2.74E-02	NFKBIE, DDX58
Role of PI3K/AKT Signaling in the Pathogenesis of Influenza	1.37E00	2.56E-02	RAC2, NFKBIE
Arachidonic Acid Metabolism	1.32E00	1.34E-02	CYP4B1, CYP2B6, CBR2
Lymphotoxin β Receptor Signaling	1.31E00	3.17E-02	RAC2, VCAM1
Insulin Receptor Signaling	1.31E00	2.11E-02	RAC2, PRKAR2B, EIF4EBP1
Tryptophan Metabolism	1.31E00	1.19E-02	CYP4B1, SIAH2, CYP2B6
Role of Lipids/Lipid Rafts in the Pathogenesis of Influenza	1.29E00	3.33E-02	RSAD2
PI3K Signaling in B Lymphocytes	1.27E00	2.04E-02	RAC2, C3, NFKBIE
IL-10 Signaling	1.25E00	2.86E-02	HMOX1, NFKBIE
mTOR Signaling	1.23E00	1.89E-02	HMOX1, RAC2, EIF4EBP1
B Cell Receptor Signaling	1.2E00	1.92E-02	RAC2, NFKBIE, MAP3K2
GM-CSF Signaling	1.19E00	2.9E-02	RAC2, HCK
Germ Cell-Sertoli Cell Junction Signaling	1.17E00	1.88E-02	RAC2, PVRL3, MAP3K2
Erythropoietin Signaling	1.15E00	2.53E-02	RAC2, NFKBIE
Angiopoietin Signaling	1.15E00	2.63E-02	RAC2, NFKBIE
Xenobiotic Metabolism Signaling	1.14E00	1.35E-02	HMOX1, CYP2B6, MAP3K2
Renal Cell Carcinoma Signaling	1.14E00	2.7E-02	RAC2, EGLN3
Tight Junction Signaling	1.13E00	1.8E-02	RAC2, PRKAR2B, PVRL3
Production of Nitric Oxide and Reactive Oxygen Species in Macrophages	1.13E00	1.6E-02	RAC2, NFKBIE, MAP3K2
FLT3 Signaling in Hematopoietic Progenitor Cells	1.11E00	2.63E-02	RAC2, EIF4EBP1
Nitric Oxide Signaling in the Cardiovascular System	1.11E00	2.02E-02	RAC2, PRKAR2B
Small Cell Lung Cancer Signaling	1.1E00	2.2E-02	RAC2, NFKBIE
Leptin Signaling in Obesity	1.09E00	2.38E-02	RAC2, PRKAR2B
RAR Activation	1.06E00	1.66E-02	RAC2, PRKAR2B
Reelin Signaling in Neurons	1.05E00	2.5E-02	HCK, RELN
Linoleic Acid Metabolism	1.04E00	1.65E-02	CYP4B1, CYP2B6
Acute Myeloid Leukemia Signaling	1.04E00	2.38E-02	RAC2, EIF4EBP1
Prostate Cancer Signaling	1.03E00	2.04E-02	RAC2, NFKBIE
PPAR Signaling	1E00	2.04E-02	NFKBIE, PPARGC1A
Inositol Metabolism	1E00	2.06E-02	HMOX1, CYP2B6
Folate Biosynthesis	9.99E-01	1.25E-02	CILP
EIF2 Signaling	9.94E-01	1.94E-02	RAC2, EIF2AK2
Apoptosis Signaling	9.94E-01	2.22E-02	NFKBIE, CAPN10
ERK/MAPK Signaling	9.88E-01	1.54E-02	RAC2, PRKAR2B, EIF4EBP1
SAPK/JNK Signaling	9.68E-01	1.98E-02	RAC2, MAP3K2
Role of NFAT in Cardiac Hypertrophy	9.6E-01	1.44E-02	RAC2, PRKAR2B, SLC8A1
α-Adrenergic Signaling	9.59E-01	1.89E-02	PRKAR2B, SLC8A1
FAK Signaling	9.59E-01	1.96E-02	RAC2, CAPN10
Metabolism of Xenobiotics by Cytochrome P450	9.43E-01	9.71E-03	CYP4B1, CYP2B6
G Beta Gamma Signaling	9.43E-01	1.68E-02	RAC2, PRKAR2B
IGF-1 Signaling	9.43E-01	1.96E-02	RAC2, PRKAR2B
HMGB1 Signaling	9.35E-01	2E-02	RAC2, VCAM1
IL-1 Signaling	9.35E-01	1.89E-02	PRKAR2B, NFKBIE
Amyotrophic Lateral Sclerosis Signaling	9.19E-01	1.75E-02	GLUL, CAPN10
DNA Methylation and Transcriptional Repression Signaling	9.07E-01	4.35E-02	DNMT3A
HIF1α Signaling	8.96E-01	1.82E-02	RAC2, EGLN3
HGF Signaling	8.88E-01	1.9E-02	RAC2, MAP3K2
G-Protein Coupled Receptor Signaling	8.72E-01	1.35E-02	RAC2, PRKAR2B, NFKBIE
Pantothenate and CoA Biosynthesis	8.69E-01	1.56E-02	CILP
iCOS-iCOSL Signaling in T Helper Cells	8.45E-01	1.61E-02	RAC2, NFKBIE
fMLP Signaling in Neutrophils	8.39E-01	1.57E-02	NFKBIE, FPR1
Pancreatic Adenocarcinoma Signaling	8.39E-01	1.69E-02	HMOX1, RAC2
Antigen Presentation Pathway	8.34E-01	2.56E-02	TAPBP
Regulation of eIF4 and p70S6K Signaling	8.32E-01	1.49E-02	RAC2, EIF4EBP1
Riboflavin Metabolism	8.17E-01	1.82E-02	CILP
IL-22 Signaling	8.02E-01	3.57E-02	RAC2
Interferon Signaling	8.02E-01	3.33E-02	IFIT3
Fatty Acid Metabolism	7.99E-01	1.05E-02	CYP4B1, CYP2B6
CD28 Signaling in T Helper Cells	7.87E-01	1.49E-02	RAC2, NFKBIE
Gα12/13 Signaling	7.87E-01	1.57E-02	RAC2, NFKBIE
Sonic Hedgehog Signaling	7.87E-01	3.03E-02	PRKAR2B
TNFR2 Signaling	7.72E-01	3.03E-02	NFKBIE
Complement System	7.72E-01	2.78E-02	C3
P2Y Purigenic Receptor Signaling Pathway	7.69E-01	1.47E-02	RAC2, PRKAR2B
4-1BB Signaling in T Lymphocytes	7.58E-01	2.94E-02	NFKBIE
MIF-mediated Glucocorticoid Regulation	7.58E-01	2.63E-02	NFKBIE
GNRH Signaling	7.51E-01	1.39E-02	PRKAR2B, MAP3K2
Cardiac β-adrenergic Signaling	7.45E-01	1.41E-02	PRKAR2B, SLC8A1
Methionine Metabolism	7.45E-01	1.25E-02	DNMT3A
TWEAK Signaling	7.2E-01	2.63E-02	NFKBIE
Hepatic Cholestasis	7.18E-01	1.21E-02	PRKAR2B, NFKBIE
Ovarian Cancer Signaling	6.91E-01	1.41E-02	RAC2, PRKAR2B
Glucocorticoid Receptor Signaling	6.89E-01	1.06E-02	RAC2, VCAM1, NFKBIE
Neuroprotective Role of THOP1 in Alzheimer's Disease	6.85E-01	1.85E-02	PRKAR2B
Glutamate Metabolism	6.85E-01	1.28E-02	GLUL
Dendritic Cell Maturation	6.66E-01	1.06E-02	RAC2, NFKBIE
MIF Regulation of Innate Immunity	6.64E-01	2.17E-02	NFKBIE
April Mediated Signaling	6.64E-01	2.38E-02	NFKBIE
Docosahexaenoic Acid (DHA) Signaling	6.53E-01	2E-02	RAC2
Cell Cycle: G2/M DNA Damage Checkpoint Regulation	6.53E-01	2.22E-02	BTRC
B Cell Activating Factor Signaling	6.43E-01	2.27E-02	NFKBIE
Retinoic acid Mediated Apoptosis Signaling	6.43E-01	1.49E-02	ART1
Melanoma Signaling	6.06E-01	2.08E-02	RAC2
Phototransduction Pathway	5.98E-01	1.54E-02	PRKAR2B
TNFR1 Signaling	5.89E-01	1.92E-02	NFKBIE
Toll-like Receptor Signaling	5.73E-01	1.85E-02	EIF2AK2
Nur77 Signaling in T Lymphocytes	5.65E-01	1.56E-02	MAP3K2
Wnt/β-catenin Signaling	5.51E-01	1.18E-02	RAC2, BTRC
OX40 Signaling Pathway	5.5E-01	1.05E-02	NFKBIE
Role of NFAT in Regulation of the Immune Response	5.43E-01	9.9E-03	RAC2, NFKBIE
CREB Signaling in Neurons	5.43E-01	1.01E-02	RAC2, PRKAR2B
Calcium Signaling	5.43E-01	9.8E-03	PRKAR2B, SLC8A1
TREM1 Signaling	5.43E-01	1.45E-02	RAC2
NRF2-mediated Oxidative Stress Response	5.32E-01	1.08E-02	HMOX1, DNAJB14
Endometrial Cancer Signaling	5.29E-01	1.69E-02	RAC2
Cell Cycle: G1/S Checkpoint Regulation	5.29E-01	1.64E-02	BTRC
IL-2 Signaling	5.22E-01	1.67E-02	RAC2
Death Receptor Signaling	5.22E-01	1.56E-02	NFKBIE
Leukocyte Extravasation Signaling	5.15E-01	1.02E-02	RAC2, VCAM1
Induction of Apoptosis by HIV1	5.03E-01	1.54E-02	NFKBIE
Myc Mediated Apoptosis Signaling	4.97E-01	1.54E-02	RAC2
LPS/IL-1 Mediated Inhibition of RXR Function	4.94E-01	9.26E-03	FABP7, CYP2B6
Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis	4.9E-01	8.36E-03	RAC2, VCAM1, NFKBIE
CD40 Signaling	4.85E-01	1.45E-02	NFKBIE
IL-15 Signaling	4.79E-01	1.45E-02	RAC2
ERK5 Signaling	4.79E-01	1.41E-02	MAP3K2
Estrogen-Dependent Breast Cancer Signaling	4.79E-01	1.39E-02	RAC2
Hypoxia Signaling in the Cardiovascular System	4.79E-01	1.43E-02	NFKBIE
Integrin Signaling	4.75E-01	9.8E-03	RAC2, CAPN10
JAK/Stat Signaling	4.73E-01	1.52E-02	RAC2
Melatonin Signaling	4.62E-01	1.3E-02	PRKAR2B
IL-4 Signaling	4.56E-01	1.33E-02	RAC2
Agrin Interactions at Neuromuscular Junction	4.51E-01	1.45E-02	RAC2
Non-Small Cell Lung Cancer Signaling	4.51E-01	1.23E-02	RAC2
Molecular Mechanisms of Cancer	4.46E-01	8.02E-03	RAC2, PRKAR2B, NFKBIE
Starch and Sucrose Metabolism	4.46E-01	5.13E-03	CILP
Caveolar-mediated Endocytosis Signaling	4.36E-01	1.18E-02	MAP3K2
LPS-stimulated MAPK Signaling	4.36E-01	1.25E-02	NFKBIE
IL-17 Signaling	4.36E-01	1.32E-02	RAC2
PDGF Signaling	4.36E-01	1.28E-02	EIF2AK2
IL-3 Signaling	4.31E-01	1.35E-02	RAC2
BMP signaling pathway	4.31E-01	1.25E-02	PRKAR2B
Role of MAPK Signaling in the Pathogenesis of Influenza	4.26E-01	1.33E-02	RAC2
Dopamine Receptor Signaling	4.26E-01	1.08E-02	PRKAR2B
Actin Cytoskeleton Signaling	4.17E-01	8.44E-03	RAC2, IQGAP2
HER-2 Signaling in Breast Cancer	4.12E-01	1.23E-02	RAC2
Huntington's Disease Signaling	4.07E-01	8.26E-03	RAC2, CAPN10
Ceramide Signaling	4.03E-01	1.12E-02	RAC2
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	4.03E-01	1.1E-02	CXCL13
Cardiac Hypertrophy Signaling	3.92E-01	8.16E-03	PRKAR2B, MAP3K2
Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis	3.92E-01	8.47E-03	RAC2, NFKBIE
Regulation of Actin-based Motility by Rho	3.9E-01	1.09E-02	RAC2
Regulation of IL-2 Expression in Activated and Anergic T Lymphocytes	3.9E-01	1.11E-02	NFKBIE
Axonal Guidance Signaling	3.88E-01	7.37E-03	RAC2, PRKAR2B, SEMA5A
Melanocyte Development and Pigmentation Signaling	3.82E-01	1.11E-02	PRKAR2B
FGF Signaling	3.78E-01	1.11E-02	RAC2
Virus Entry via Endocytic Pathways	3.74E-01	1.02E-02	RAC2
VEGF Signaling	3.74E-01	1.01E-02	RAC2
Phospholipid Degradation	3.74E-01	9.52E-03	HMOX1
CDK5 Signaling	3.7E-01	1.06E-02	PRKAR2B
CTLA4 Signaling in Cytotoxic T Lymphocytes	3.66E-01	1E-02	RAC2
IL-6 Signaling	3.66E-01	1.08E-02	NFKBIE
Natural Killer Cell Signaling	3.62E-01	8.77E-03	RAC2
Neuregulin Signaling	3.62E-01	9.71E-03	RAC2
PTEN Signaling	3.62E-01	9.52E-03	RAC2
Colorectal Cancer Metastasis Signaling	3.59E-01	7.81E-03	RAC2, PRKAR2B
p53 Signaling	3.58E-01	1.06E-02	RAC2
Neuropathic Pain Signaling In Dorsal Horn Neurons	3.37E-01	9.52E-03	PRKAR2B
Chronic Myeloid Leukemia Signaling	3.37E-01	9.35E-03	RAC2
Fc Epsilon RI Signaling	3.34E-01	9.52E-03	RAC2
Atherosclerosis Signaling	3.34E-01	8.85E-03	VCAM1
IL-12 Signaling and Production in Macrophages	3.31E-01	7.41E-03	RAC2
Glioma Signaling	3.27E-01	8.77E-03	RAC2
Type I Diabetes Mellitus Signaling	3.18E-01	8.4E-03	NFKBIE
Sphingosine-1-phosphate Signaling	3.15E-01	8.47E-03	RAC2
Rac Signaling	3.15E-01	8.06E-03	IQGAP2
Synaptic Long Term Potentiation	3.12E-01	8.85E-03	PRKAR2B
Renin-Angiotensin Signaling	3.09E-01	8.2E-03	PRKAR2B
Systemic Lupus Erythematosus Signaling	3.09E-01	6.13E-03	RAC2
Estrogen Receptor Signaling	3.03E-01	8.47E-03	PPARGC1A
Corticotropin Releasing Hormone Signaling	3E-01	7.35E-03	PRKAR2B
14-3-3-mediated Signaling	2.97E-01	8.62E-03	RAC2
Androgen Signaling	2.91E-01	6.94E-03	PRKAR2B
Role of NANOG in Mammalian Embryonic Stem Cell Pluripotency	2.89E-01	8.62E-03	RAC2
Hereditary Breast Cancer Signaling	2.83E-01	7.63E-03	RAC2
p70S6K Signaling	2.68E-01	7.52E-03	RAC2
Protein Kinase A Signaling	2.6E-01	6.29E-03	PRKAR2B, NFKBIE
Cellular Effects of Sildenafil (Viagra)	2.58E-01	6.62E-03	PRKAR2B
Hepatic Fibrosis / Hepatic Stellate Cell Activation	2.56E-01	7.46E-03	VCAM1
Cdc42 Signaling	2.54E-01	5.59E-03	IQGAP2
Glycerophospholipid Metabolism	2.49E-01	5.21E-03	HMOX1
Human Embryonic Stem Cell Pluripotency	2.49E-01	6.45E-03	RAC2
Aryl Hydrocarbon Receptor Signaling	2.4E-01	6.49E-03	NFIB
Inositol Phosphate Metabolism	2.36E-01	5.65E-03	EIF2AK2
Glioblastoma Multiforme Signaling	2.12E-01	6.06E-03	RAC2
Pyrimidine Metabolism	2.12E-01	4.33E-03	CMPK2
cAMP-mediated Signaling	2.07E-01	6.21E-03	PRKAR2B
CXCR4 Signaling	2.04E-01	5.92E-03	RAC2

TABLE S11 Cardiac toxicological functions for LPS responsive genes modified by ≥1.5-fold (induction or repression) by $A_{2A}R$ KO

Category	P-value	Genes
Responses enhanced by $A_{2A}R$ KO (countered by $A_{2A}R$ activity)		
Cardiac Dysfunction	1.0E-04 - 1.0E-04	*Angptl4, Abcc8, Serpine1, Ppargc1a*
Heart Failure	5.6E-04 - 9.3E-02	*Ca7, Pln, Kcnk3, Ca4, Dicer1, Il6, Pde4b, Serpine1, Nr3c1, Ppargc1a*
Cardiac Hypertrophy	9.1E-04 - 4.0E-01	*Atf3, Pln, Pfkfb1, Pik3r1, Cdkn1a, Abcc8, Dnajc3, Il6, Csf3, Serpine1, Slc2a4, Ppargc1a*
Tachycardia	1.3E-03 - 4.5E-01	*Kitlg, Ca7, Ptgfr, Kcnk3, Ca4, Csf3*
Cardiac Infarction	1.5E-03 - 8.2E-03	*Kcnk3, Selp, Il6, Csf3, Serpine1, Itgb3*
Cardiac Output	6.0E-03 - 6.0E-03	*Kitlg, Csf3*
Congestive Cardiac Failure	1.8E-02 - 1.8E-02	*Kcnk3, Il6, Pde4b, Nr3c1*
Cardiac Fibrosis	2.2E-02 - 2.7E-01	*Pln, Atf3, Csf3, Serpine1*
Cardiac Damage	3.0E-02 - 1.8E-01	*Atf4, Serpine1*
Cardiac Stenosis	3.0E-02 - 1.3E-01	*Ldlr, Abcc8*
Cardiac Arteriopathy	4.5E-02 - 5.8E-02	*A2bp1, Il6, Nr3c1, Amotl1, Tuba8, Rin3, Arhgap20, Serpine1, Col4a1, Daam1, Qsox1, Mlf1, Pde4b, C10orf107, Tbc1d4, Itgb3, Ldlr, Selp, Fam13c, Gpm6a, Reg3g, Magi2, Osbpl3, Prickle1, Ppargc1a*
Cardiac Necrosis/Cell Death	4.8E-02 - 2.5E-01	*Cdkn1a, Il6, Csf3, Stat1, Ppargc1a*
Cardiac Arrythmia	5.7E-02 - 4.0E-01	*Arntl, Kcnk3, Kcnip2*
Cardiac Proliferation	3.0E-01 - 3.0E-01	*Csf3*
Cardiac Dilation	3.9E-01 - 3.9E-01	*Serpine1*
Responses inhibited by $A_{2A}R$ KO (promoted by $A_{2A}R$ activity)		
Cardiac Damage	1.2E-02 - 8.2E-02	*Hmox1, Adipoq*
Cardiac Proliferation	1.3E-02 - 1.3E-02	*Adipoq*
Heart Failure	2.1E-02 - 3.3E-01	*Ca3, Cacna2d1*
Cardiac Necrosis/Cell Death	3.1E-02 - 8.8E-02	*Adipoq, Slc8a1*
Cardiac Arrhythmia	3.3E-02 -3.3E-02	*Tbx3*
Cardiac Infarction	3.3E-02 - 3.3E-02	*Adipoq*
Cardiac Hypertrophy	8.8E-02 - 4.5E-01	*Hmox1, Hck, Fbxo32*
Cardiac Dilation	1.1E-01 - 1.1E-01	*Sdc1*
Cardiac Arteriopathy	1.6E-01 - 1.6E-01	*Iqgap2, Shroom3, Sema5a, Cacna2d1, Adipoq, Hivep3, Reln, Nsmce1, Msi2, Plxdc2*
Cardiac Stenosis	2.4E-01 - 2.4E-01	*Vcam1*
Tachycardia	4.8E-01 - 4.8E-01	*Ca3*

Toxicological functional groupings of LPS-responsive cardiac transcripts modified by $A_{2A}R$ KO (enhanced or repressed) by a factor of ≥1.5-fold. Groups derived from IPA analysis are ranked according to P-value ranges determined by a Fisher's Exact Test.