

Supplemental Methods

Patients and controls. Coronary arteries from KD patients were individually embedded at autopsy/transplant, while control epicardial coronary arteries were microdissected from myocardial tissue blocks and re-embedded prior to sectioning. Tissues from patient KD4 became available after publication of our pathologic study; this child died suddenly 7 months after an illness consistent with incomplete KD. Coronary artery pathology in this patient revealed subacute/chronic inflammation with luminal myofibroblastic proliferation that totally obliterated the coronary artery lumen and resulted in myocardial infarction.

RNA isolation and quality control analyses. RNA was quantitated on a Nanodrop spectrophotometer (Thermo Scientific, Wilmington, DE). Samples were considered to be of good quality if the real-time PCR C(t) values for HGDC were at least 3 C(t) higher than for RPL13A (i.e., at least 8 fold more RNA than DNA was present in the sample), and the RPL13A C(t) was less than 32.

High-throughput RNA sequencing. Libraries were prepared using the Illumina Tru Seq RNA sample prep kit, omitting RNA fragmentation because FFPE RNA was already fragmented.

Pathways analysis. Because the fragmented nature of the FFPE RNA could have made isoform analyses unreliable, we did not perform these analyses. iReport™ uses a right tailed Fisher's Exact test to determine the significance value (p -value) associated with the Biological Processes and Pathways in the Ingenuity Knowledge Base. The p -value is calculated by considering the number of differentially expressed genes in the dataset that participate in a specific annotation (Biological Process or Pathway), the number of genes in the Ingenuity Knowledge Base that participate in that specific annotation, the number of differentially

expressed genes that participate in any annotation, and the number of genes in the Ingenuity Knowledge Base.

Real-time PCR. Real-time PCR assays using primers for CD74, HLA-F, NLRC5, IL18, CD226, and CD69 were performed on KD and control coronary artery FFPE tissue RNA using the RT2 Pre-AMP cDNA synthesis kit (Qiagen, Valencia, CA). Reactions using primers for the housekeeping gene HPRT1 (Qiagen) were performed as an internal control, and primers for human genomic DNA as a quality control measure. For differential expression analysis, we used the comparative C_T method⁸, where C_T is defined as the PCR cycle at which the fluorescent signal of the reporter dye crosses an arbitrarily placed threshold. The difference in expression levels of individual genes was determined by comparing ΔC_T values between the KD and control groups.

Supplemental Table 1. RNA sequencing metrics

ID	qc passed reads	% mapped	% duplication	% UTR bases	% coding bases	% intergenic bases	% intronic bases	% ribosomal bases	% mRNA bases
C1	79,849,136	86.38%	17.4%	20.6%	10.9%	6.0%	59.6%	3.0%	31.5%
C2	102,561,611	79.16%	22.8%	20.0%	8.6%	9.2%	59.2%	3.0%	28.6%
C3	113,905,139	74.02%	41.2%	14.4%	7.2%	17.2%	59.8%	1.4%	21.6%
C4	112,894,443	79.82%	48.5%	17.5%	10.8%	8.2%	62.5%	1.0%	28.3%
C5	84,373,360	86.20%	22.4%	18.7%	14.2%	5.3%	57.0%	4.7%	33.0%
C6	84,365,909	75.78%	28.5%	17.6%	9.0%	12.3%	59.7%	1.4%	26.6%
C7	109,410,697	90.82%	29.1%	20.7%	15.1%	19.6%	38.2%	6.5%	35.8%
KD1	84,779,783	50.20%	65.0%	9.3%	2.7%	57.7%	30.2%	0.1%	12.0%
KD2	122,931,914	53.22%	58.4%	13.1%	5.9%	30.0%	50.9%	0.1%	19.0%
KD3	81,854,092	87.77%	14.0%	15.2%	10.3%	8.6%	62.5%	3.4%	25.5%
KD4	40,419,542	49.95%	38.8%	36.6%	8.4%	7.8%	47.1%	0.0%	45.1%
KD5	92,878,797	85.79%	19.8%	14.9%	6.7%	6.4%	71.0%	0.9%	21.6%
KD6	99,048,879	84.68%	21.4%	20.5%	9.9%	6.0%	62.7%	0.9%	30.4%
KD7	94,342,947	60.87%	43.1%	15.1%	6.9%	11.2%	66.5%	0.3%	22.0%
KD8	119,207,003	84.02%	25.9%	22.3%	11.2%	7.1%	52.7%	6.7%	33.5%

Supplemental Table 2. All differentially expressed genes (8 KD cases vs 7 controls)

Symbol: Name	Fold Change	Molecular Function	Location
CXCL9: chemokine (C-X-C motif) ligand 9	48.042	cytokine	Extracellular Space
IGHG1: immunoglobulin heavy constant gamma 1 (G1m marker)	44.986	other	Extracellular Space
OLR1: oxidized low density lipoprotein (lectin-like) receptor 1	42.163	transmembrane receptor	Plasma Membrane
IGHM: immunoglobulin heavy constant mu	34.153	transmembrane receptor	Plasma Membrane
IGJ: immunoglobulin J polypeptide, linker protein for immunoglobulin alpha and mu polypeptide	31.305	other	Extracellular Space
CXCL13: chemokine (C-X-C motif) ligand 13	21.829	cytokine	Extracellular Space
FCRL5: Fc receptor-like 5	21.053	other	Plasma Membrane
ADAMDEC1: ADAM-like, decysin 1	20.541	peptidase	Extracellular Space
SFRP4: secreted frizzled-related protein 4	19.065	transmembrane receptor	Plasma Membrane
BCL11B: B-cell CLL/lymphoma 11B (zinc finger protein)	17.604	other	Nucleus
CD3E: CD3e molecule, epsilon (CD3-TCR complex)	17.498	transmembrane receptor	Plasma Membrane
IGHG3: immunoglobulin heavy constant gamma 3 (G3m marker)	16.976	other	Extracellular Space
RGS1: regulator of G-protein signaling 1	16.976	other	Plasma Membrane
HLA-DPA1: major histocompatibility complex, class II, DP alpha 1	16.753	other	Cytoplasm
FCGR3A/FCGR3B: Fc fragment of IgG, low affinity IIIa, receptor (CD16a)	16.736	transmembrane receptor	Plasma Membrane
FYB: FYN binding protein	16.498	other	Nucleus
SFRP2: secreted frizzled-related protein 2	16.159	transmembrane receptor	Plasma Membrane
IGKV3-20: immunoglobulin kappa variable 3-20	16.027	other	Extracellular Space
CD3G: CD3g molecule, gamma (CD3-TCR complex)	15.831	transmembrane receptor	Plasma Membrane
THEMIS: thymocyte selection associated	15.563	other	Cytoplasm
HLA-DQA1: major histocompatibility complex, class II, DQ alpha 1	15.359	transmembrane receptor	Plasma Membrane
CXCR4: chemokine (C-X-C motif) receptor 4	14.728	G-protein coupled receptor	Plasma Membrane
GBP5: guanylate binding protein 5	14.67	enzyme	Plasma Membrane
MS4A1: membrane-spanning 4-domains, subfamily A, member 1	14.228	other	Plasma Membrane
SELL: selectin L	14.025	transmembrane receptor	Plasma Membrane
IGHG2: immunoglobulin heavy constant gamma 2 (G2m marker)	13.666	other	Plasma Membrane
FAP: fibroblast activation protein, alpha	13.533	peptidase	Cytoplasm
IKZF3: IKAROS family zinc finger 3 (Aiolos)	13.166	transcription regulator	Nucleus
CD2: CD2 molecule	12.902	transmembrane receptor	Plasma Membrane
SLAMF7: SLAM family member 7	12.834	other	Plasma Membrane
IGHA1: immunoglobulin heavy constant alpha 1	12.818	other	Extracellular Space
IGHG4: immunoglobulin heavy constant gamma 4 (G4m marker)	12.528	other	Extracellular Space
IGLC3: immunoglobulin lambda constant 3 (Kern-Oz+ marker)	11.926	other	Extracellular Space
LEF1: lymphoid enhancer-binding factor 1	11.912	transcription regulator	Nucleus
TRAC: T cell receptor alpha constant	11.498	other	Plasma Membrane
IGKV1-5: immunoglobulin kappa variable 1-5	11.474	other	Extracellular Space

COMP: cartilage oligomeric matrix protein	11.372	other	Extracellular Space
CD8B: CD8b molecule	11.371	other	Plasma Membrane
TLR7: toll-like receptor 7	11.123	transmembrane receptor	Plasma Membrane
CD84: CD84 molecule	10.954	other	Plasma Membrane
ITGA4: integrin, alpha 4 (antigen CD49D, alpha 4 subunit of VLA-4 receptor)	10.925	transmembrane receptor	Plasma Membrane
ITK: IL2-inducible T-cell kinase	10.69	kinase	Cytoplasm
CCL18: chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated)	10.596	cytokine	Extracellular Space
CYBB: cytochrome b-245, beta polypeptide	10.52	enzyme	Cytoplasm
SCML4: sex comb on midleg-like 4 (Drosophila)	10.465	other	Unknown
ACAN: aggrecan	10.357	other	Extracellular Space
CCR2: chemokine (C-C motif) receptor 2	10.336	G-protein coupled recepto	Plasma Membrane
IGLC2: immunoglobulin lambda constant 2 (Kern-Oz- marker)	10.326	other	Extracellular Space
CD69: CD69 molecule	10.313	transmembrane receptor	Plasma Membrane
CYTIP: cytohesin 1 interacting protein	10.25	other	Cytoplasm
ANKRD22: ankyrin repeat domain 22	10.182	transcription regulator	Nucleus
SH2D1A: SH2 domain containing 1A	10.135	other	Cytoplasm
MS4A6A: membrane-spanning 4-domains, subfamily A, member 6A	10.082	other	Unknown
LINC00861: long intergenic non-protein coding RNA 861	10.055	other	Unknown
IKZF1: IKAROS family zinc finger 1 (Ikaros)	10.035	transcription regulator	Nucleus
HLA-DQB1: major histocompatibility complex, class II, DQ beta 1	10.018	other	Plasma Membrane
AMICA1: adhesion molecule, interacts with CXADR antigen 1	9.923	other	Plasma Membrane
FCGR2C: Fc fragment of IgG, low affinity IIc, receptor for (CD32) (gene/pseudogene)	9.895	transmembrane receptor	Plasma Membrane
BTLA: B and T lymphocyte associated	9.879	other	Plasma Membrane
HLA-DOA: major histocompatibility complex, class II, DO alpha	9.821	transmembrane receptor	Plasma Membrane
HLA-DRA: major histocompatibility complex, class II, DR alpha	9.491	transmembrane receptor	Plasma Membrane
IL7R: interleukin 7 receptor	9.424	transmembrane receptor	Plasma Membrane
LOC101929010: uncharacterized LOC101929010	9.318	other	Unknown
TIMD4: T-cell immunoglobulin and mucin domain containing 4	9.305	other	Plasma Membrane
ADAM28: ADAM metallopeptidase domain 28	9.283	peptidase	Plasma Membrane
PRND: prion protein 2 (dublet)	9.027	other	Plasma Membrane
HLA-DMB: major histocompatibility complex, class II, DM beta	8.917	other	Cytoplasm
NELL2: NEL-like 2 (chicken)	8.779	other	Extracellular Space
IGHV1-69: immunoglobulin heavy variable 1-69	8.749	other	Unknown
P2RY10: purinergic receptor P2Y, G-protein coupled, 10	8.704	G-protein coupled recepto	Plasma Membrane
ICOS: inducible T-cell co-stimulator	8.655	transmembrane receptor	Plasma Membrane
SLAMF6: SLAM family member 6	8.616	transmembrane receptor	Plasma Membrane
CERKL: ceramide kinase-like	8.603	other	Unknown
IL2RG: interleukin 2 receptor, gamma	8.537	transmembrane receptor	Plasma Membrane

ARL4C: ADP-ribosylation factor-like 4C	8.525	enzyme	Nucleus
PTPRC: protein tyrosine phosphatase, receptor type, C	8.516	phosphatase	Plasma Membrane
FCRL3: Fc receptor-like 3	8.493	other	Unknown
LYZ: lysozyme	8.366	enzyme	Extracellular Space
CD3D: CD3d molecule, delta (CD3-TCR complex)	8.251	transmembrane receptor	Plasma Membrane
LY9: lymphocyte antigen 9	8.249	other	Plasma Membrane
TRAF3IP3: TRAF3 interacting protein 3	8.238	other	Unknown
MXRA5: matrix-remodelling associated 5	8.125	other	Extracellular Space
CXCL14: chemokine (C-X-C motif) ligand 14	8.122	cytokine	Extracellular Space
DAPP1: dual adaptor of phosphotyrosine and 3-phosphoinositides	8.121	other	Cytoplasm
CD8A: CD8a molecule	8.066	other	Plasma Membrane
SAMD3: sterile alpha motif domain containing 3	7.919	other	Unknown
HLA-DPB1: major histocompatibility complex, class II, DP beta 1	7.856	transmembrane receptor	Plasma Membrane
LINC01094: long intergenic non-protein coding RNA 1094	7.759	other	Unknown
RHOH: ras homolog family member H	7.753	enzyme	Plasma Membrane
LCP2: lymphocyte cytosolic protein 2 (SH2 domain containing leukocyte protein of 76kDa)	7.739	other	Cytoplasm
CD74: CD74 molecule, major histocompatibility complex, class II invariant chain	7.738	transmembrane receptor	Plasma Membrane
SORL1: sortilin-related receptor, L(DLR class) A repeats containing	7.655	transporter	Cytoplasm
EMB: embigin	7.651	other	Plasma Membrane
KCNA3: potassium voltage-gated channel, shaker-related subfamily, member 3	7.638	ion channel	Plasma Membrane
CD96: CD96 molecule	7.62	other	Plasma Membrane
TXK: TXK tyrosine kinase	7.587	kinase	Cytoplasm
GAPT: GRB2-binding adaptor protein, transmembrane	7.481	other	Unknown
COL11A1: collagen, type XI, alpha 1	7.467	other	Extracellular Space
STAP1: signal transducing adaptor family member 1	7.409	other	Cytoplasm
TFEC: transcription factor EC	7.37	transcription regulator	Nucleus
IGKC: immunoglobulin kappa constant	7.269	other	Extracellular Space
IL2RA: interleukin 2 receptor, alpha	7.251	transmembrane receptor	Plasma Membrane
TESPA1: thymocyte expressed, positive selection associated 1	7.205	other	Cytoplasm
IFNG-AS1: IFNG antisense RNA 1	7.191	other	Unknown
MNDA: myeloid cell nuclear differentiation antigen	7.126	other	Nucleus
C5orf46: chromosome 5 open reading frame 46	7.117	other	Cytoplasm
CD6: CD6 molecule	7.117	transmembrane receptor	Plasma Membrane
GPR174: G protein-coupled receptor 174	7.082	G-protein coupled recepto	Plasma Membrane
FPR3: formyl peptide receptor 3	7.071	other	Plasma Membrane
IGHV3-21: immunoglobulin heavy variable 3-21	7.029	other	Unknown
LAX1: lymphocyte transmembrane adaptor 1	6.995	other	Cytoplasm
RNASE6: ribonuclease, RNase A family, k6	6.945	enzyme	Extracellular Space

LILRB4: leukocyte immunoglobulin-like receptor, subfamily B (with TM and ITIM domains), m	6.789	other	Plasma Membrane
IL2RB: interleukin 2 receptor, beta	6.737	transmembrane receptor	Plasma Membrane
LOC101060038: uncharacterized LOC101060038	6.68	other	Unknown
CD53: CD53 molecule	6.634	other	Plasma Membrane
PNRC2: proline-rich nuclear receptor coactivator 2	6.591	other	Nucleus
POSTN: periostin, osteoblast specific factor	6.53	other	Extracellular Space
CCL5: chemokine (C-C motif) ligand 5	6.529	cytokine	Extracellular Space
CCR5: chemokine (C-C motif) receptor 5 (gene/pseudogene)	6.501	G-protein coupled recepto	Plasma Membrane
FAM177B: family with sequence similarity 177, member B	6.496	other	Unknown
CAMK4: calcium/calmodulin-dependent protein kinase IV	6.485	kinase	Nucleus
PTPN22: protein tyrosine phosphatase, non-receptor type 22 (lymphoid)	6.481	phosphatase	Cytoplasm
CTSS: cathepsin S	6.454	peptidase	Cytoplasm
HOXC6: homeobox C6	6.454	transcription regulator	Nucleus
TMEM156: transmembrane protein 156	6.433	other	Unknown
IGKV4-1: immunoglobulin kappa variable 4-1	6.432	other	Extracellular Space
LOC100996286: uncharacterized LOC100996286	6.418	other	Unknown
PRSS35: protease, serine, 35	6.407	peptidase	Extracellular Space
TMEM52B: transmembrane protein 52B	6.401	other	Cytoplasm
CRTAM: cytotoxic and regulatory T cell molecule	6.381	other	Plasma Membrane
CD86: CD86 molecule	6.379	transmembrane receptor	Plasma Membrane
P2RY13: purinergic receptor P2Y, G-protein coupled, 13	6.356	G-protein coupled recepto	Plasma Membrane
LINC00426: long intergenic non-protein coding RNA 426	6.337	other	Unknown
PRKCB: protein kinase C, beta	6.333	kinase	Cytoplasm
IGLV3-21: immunoglobulin lambda variable 3-21	6.293	other	Unknown
MS4A4E: membrane-spanning 4-domains, subfamily A, member 4E	6.267	other	Unknown
POU2AF1: POU class 2 associating factor 1	6.265	transcription regulator	Nucleus
LAPTM5: lysosomal protein transmembrane 5	6.262	other	Plasma Membrane
CX3CR1: chemokine (C-X3-C motif) receptor 1	6.203	G-protein coupled recepto	Plasma Membrane
SCG2: secretogranin II	6.189	cytokine	Extracellular Space
EGFL6: EGF-like-domain, multiple 6	6.184	other	Extracellular Space
SNX10: sorting nexin 10	6.175	transporter	Cytoplasm
TAGAP: T-cell activation RhoGTPase activating protein	6.165	other	Cytoplasm
PLEK: pleckstrin	6.104	other	Cytoplasm
LCK: lymphocyte-specific protein tyrosine kinase	6.075	kinase	Cytoplasm
SP140: SP140 nuclear body protein	6.057	transcription regulator	Nucleus
RGS18: regulator of G-protein signaling 18	6.033	other	Cytoplasm
DOCK8: dedicator of cytokinesis 8	6.02	other	Cytoplasm
AOAH: acyloxyacyl hydrolase (neutrophil)	5.987	enzyme	Extracellular Space

ANKRD36BP2: ankyrin repeat domain 36B pseudogene 2	5.895	other	Unknown
LOC101927156: uncharacterized LOC101927156	5.894	other	Unknown
CXCR2P1: chemokine (C-X-C motif) receptor 2 pseudogene 1	5.89	other	Unknown
PLA2G7: phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)	5.878	enzyme	Extracellular Space
DOCK10: dedicator of cytokinesis 10	5.874	other	Cytoplasm
SULF1: sulfatase 1	5.823	enzyme	Cytoplasm
FCGR2A: Fc fragment of IgG, low affinity IIa, receptor (CD32)	5.821	transmembrane receptor	Plasma Membrane
GRAP2: GRB2-related adaptor protein 2	5.809	other	Cytoplasm
MSR1: macrophage scavenger receptor 1	5.762	transmembrane receptor	Plasma Membrane
PLAC8: placenta-specific 8	5.751	other	Nucleus
CD48: CD48 molecule	5.716	other	Plasma Membrane
CR2: complement component (3d/Epstein Barr virus) receptor 2	5.709	transmembrane receptor	Plasma Membrane
CXorf21: chromosome X open reading frame 21	5.69	enzyme	Unknown
ITGAL: integrin, alpha L (antigen CD11A (p180), lymphocyte function-associated antigen 1; a	5.68	transmembrane receptor	Plasma Membrane
CLEC5A: C-type lectin domain family 5, member A	5.653	other	Plasma Membrane
IL21R: interleukin 21 receptor	5.646	transmembrane receptor	Plasma Membrane
ITGB2-AS1: ITGB2 antisense RNA 1	5.645	other	Unknown
ZBP1: Z-DNA binding protein 1	5.643	other	Cytoplasm
SUSD3: sushi domain containing 3	5.627	other	Unknown
SULT1E1: sulfotransferase family 1E, estrogen-preferring, member 1	5.626	enzyme	Cytoplasm
FCRL2: Fc receptor-like 2	5.588	other	Unknown
GPR141: G protein-coupled receptor 141	5.55	G-protein coupled recepto	Plasma Membrane
TRABD2A: TraB domain containing 2A	5.549	peptidase	Plasma Membrane
MYB: v-myb avian myeloblastosis viral oncogene homolog	5.549	transcription regulator	Nucleus
CD247: CD247 molecule	5.533	transmembrane receptor	Plasma Membrane
CD52: CD52 molecule	5.484	other	Plasma Membrane
TRAT1: T cell receptor associated transmembrane adaptor 1	5.478	kinase	Plasma Membrane
AIF1: allograft inflammatory factor 1	5.463	other	Nucleus
IPCEF1: interaction protein for cytohesin exchange factors 1	5.455	enzyme	Cytoplasm
RNASET2: ribonuclease T2	5.444	enzyme	Cytoplasm
IGLV3-25: immunoglobulin lambda variable 3-25	5.435	other	Unknown
CA12: carbonic anhydrase XII	5.406	enzyme	Plasma Membrane
PRKCQ-AS1: PRKCQ antisense RNA 1	5.388	other	Unknown
XCL1: chemokine (C motif) ligand 1	5.357	cytokine	Extracellular Space
CD4: CD4 molecule	5.349	transmembrane receptor	Plasma Membrane
BTBD11: BTB (POZ) domain containing 11	5.333	transcription regulator	Unknown
LCP1: lymphocyte cytosolic protein 1 (L-plastin)	5.33	other	Cytoplasm
MIAT: myocardial infarction associated transcript (non-protein coding)	5.307	other	Unknown

IGHV4-39: immunoglobulin heavy variable 4-39	5.294	other	Unknown
ZBED2: zinc finger, BED-type containing 2	5.282	other	Unknown
IGLV1-40: immunoglobulin lambda variable 1-40	5.268	other	Unknown
FAM46C: family with sequence similarity 46, member C	5.251	other	Extracellular Space
TLR1: toll-like receptor 1	5.239	transmembrane receptor	Plasma Membrane
PAX5: paired box 5	5.213	transcription regulator	Nucleus
TLR6: toll-like receptor 6	5.168	transmembrane receptor	Plasma Membrane
UBASH3A: ubiquitin associated and SH3 domain containing A	5.13	enzyme	Cytoplasm
CD226: CD226 molecule	5.094	other	Plasma Membrane
FNDC1: fibronectin type III domain containing 1	5.077	other	Plasma Membrane
ARHGAP15: Rho GTPase activating protein 15	5.052	other	Cytoplasm
IL10RA: interleukin 10 receptor, alpha	5.021	transmembrane receptor	Plasma Membrane
SKAP1: src kinase associated phosphoprotein 1	5.017	kinase	Cytoplasm
IGHA2: immunoglobulin heavy constant alpha 2 (A2m marker)	5.016	other	Extracellular Space
SIGLEC10: sialic acid binding Ig-like lectin 10	5.01	other	Plasma Membrane
LRMP: lymphoid-restricted membrane protein	4.988	other	Cytoplasm
GPR65: G protein-coupled receptor 65	4.986	G-protein coupled recepto	Plasma Membrane
CLEC10A: C-type lectin domain family 10, member A	4.985	other	Plasma Membrane
OAS2: 2'-5'-oligoadenylate synthetase 2, 69/71kDa	4.964	enzyme	Cytoplasm
AQP9: aquaporin 9	4.939	transporter	Plasma Membrane
TMEM200A: transmembrane protein 200A	4.934	other	Unknown
SPIB: Spi-B transcription factor (Spi-1/PU.1 related)	4.933	transcription regulator	Nucleus
HORMAD1: HORMA domain containing 1	4.93	other	Nucleus
EPST11: epithelial stromal interaction 1 (breast)	4.918	other	Unknown
GVINP1: GTPase, very large interferon inducible pseudogene 1	4.898	other	Unknown
ITGBL1: integrin, beta-like 1 (with EGF-like repeat domains)	4.885	other	Unknown
SIGLEC1: sialic acid binding Ig-like lectin 1, sialoadhesin	4.875	other	Plasma Membrane
LOC101928100: uncharacterized LOC101928100	4.867	other	Unknown
CD28: CD28 molecule	4.848	transmembrane receptor	Plasma Membrane
DOCK2: dedicator of cytokinesis 2	4.848	other	Cytoplasm
C5orf58: chromosome 5 open reading frame 58	4.841	other	Unknown
BLNK: B-cell linker	4.825	other	Cytoplasm
MAP4K1: mitogen-activated protein kinase kinase kinase kinase 1	4.823	kinase	Cytoplasm
RUNX3: runt-related transcription factor 3	4.819	transcription regulator	Nucleus
TLR8: toll-like receptor 8	4.806	transmembrane receptor	Plasma Membrane
IGHD: immunoglobulin heavy constant delta	4.793	other	Extracellular Space
ZNF683: zinc finger protein 683	4.77	other	Unknown
IQGAP2: IQ motif containing GTPase activating protein 2	4.753	other	Cytoplasm

MX2: myxovirus (influenza virus) resistance 2 (mouse)	4.746	enzyme	Nucleus
ARHGAP30: Rho GTPase activating protein 30	4.745	other	Cytoplasm
TMC8: transmembrane channel-like 8	4.725	other	Cytoplasm
BCL2A1: BCL2-related protein A1	4.724	other	Cytoplasm
TNFSF8: tumor necrosis factor (ligand) superfamily, member 8	4.722	cytokine	Plasma Membrane
SAMD9L: sterile alpha motif domain containing 9-like	4.718	other	Extracellular Space
FAM159A: family with sequence similarity 159, member A	4.717	other	Unknown
PIM2: pim-2 oncogene	4.715	kinase	Unknown
CECR1: cat eye syndrome chromosome region, candidate 1	4.698	enzyme	Extracellular Space
CTLA4: cytotoxic T-lymphocyte-associated protein 4	4.681	transmembrane receptor	Plasma Membrane
DENND2D: DENN/MADD domain containing 2D	4.669	other	Cytoplasm
KYNU: kynureninase	4.668	enzyme	Cytoplasm
FCN1: ficolin (collagen/fibrinogen domain containing) 1	4.657	other	Extracellular Space
ARRDC5: arrestin domain containing 5	4.653	other	Unknown
LTBP2: latent transforming growth factor beta binding protein 2	4.652	other	Extracellular Space
LY75: lymphocyte antigen 75	4.641	transmembrane receptor	Plasma Membrane
FCRL1: Fc receptor-like 1	4.626	other	Unknown
RGS2: regulator of G-protein signaling 2, 24kDa	4.612	other	Nucleus
PIK3CG: phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit gamma	4.601	kinase	Cytoplasm
IFI30: interferon, gamma-inducible protein 30	4.576	enzyme	Cytoplasm
SAMD9: sterile alpha motif domain containing 9	4.575	other	Cytoplasm
CD79A: CD79a molecule, immunoglobulin-associated alpha	4.573	transmembrane receptor	Plasma Membrane
PYHIN1: pyrin and HIN domain family, member 1	4.565	other	Nucleus
GNLY: granulysin	4.556	other	Cytoplasm
EVI2B: ecotropic viral integration site 2B	4.544	other	Plasma Membrane
OLFML2B: olfactomedin-like 2B	4.52	other	Extracellular Space
ST8SIA4: ST8 alpha-N-acetyl-neuraminide alpha-2,8-sialyltransferase 4	4.512	enzyme	Cytoplasm
CIITA: class II, major histocompatibility complex, transactivator	4.499	transcription regulator	Nucleus
KIAA0125: KIAA0125	4.487	other	Unknown
PRDM1: PR domain containing 1, with ZNF domain	4.475	transcription regulator	Nucleus
CD7: CD7 molecule	4.466	other	Plasma Membrane
C14orf182: chromosome 14 open reading frame 182	4.464	other	Unknown
DMP1: dentin matrix acidic phosphoprotein 1	4.449	other	Extracellular Space
CENPE: centromere protein E, 312kDa	4.441	other	Nucleus
MS4A14: membrane-spanning 4-domains, subfamily A, member 14	4.434	other	Unknown
SNX20: sorting nexin 20	4.415	other	Unknown
GZMK: granzyme K (granzyme 3; tryptase II)	4.411	peptidase	Cytoplasm
NPL: N-acetylneuraminase pyruvate lyase (dihydrodipicolinate synthase)	4.401	enzyme	Unknown

LOC100132612: uncharacterized LOC100132612	4.383	other	Unknown
CSF2RA: colony stimulating factor 2 receptor, alpha, low-affinity (granulocyte-macrophage)	4.368	transmembrane receptor	Plasma Membrane
DPEP2: dipeptidase 2	4.367	peptidase	Plasma Membrane
PSD4: pleckstrin and Sec7 domain containing 4	4.365	other	Cytoplasm
CLEC12A: C-type lectin domain family 12, member A	4.363	other	Plasma Membrane
LEF1-AS1: LEF1 antisense RNA 1	4.36	other	Unknown
GGTA1P: glycoprotein, alpha-galactosyltransferase 1 pseudogene	4.359	other	Plasma Membrane
CCR4: chemokine (C-C motif) receptor 4	4.334	G-protein coupled recepto	Plasma Membrane
ERAP2: endoplasmic reticulum aminopeptidase 2	4.324	peptidase	Cytoplasm
TMEM130: transmembrane protein 130	4.322	other	Unknown
AOAH-IT1: AOAH intronic transcript 1 (non-protein coding)	4.314	other	Unknown
TENM1: teneurin transmembrane protein 1	4.314	peptidase	Plasma Membrane
NCF2: neutrophil cytosolic factor 2	4.307	enzyme	Cytoplasm
ANKRD44-IT1: ANKRD44 intronic transcript 1 (non-protein coding)	4.303	other	Unknown
FAM26F: family with sequence similarity 26, member F	4.297	other	Unknown
GBP2: guanylate binding protein 2, interferon-inducible	4.297	enzyme	Cytoplasm
NCKAP1L: NCK-associated protein 1-like	4.292	other	Plasma Membrane
RAB39B: RAB39B, member RAS oncogene family	4.28	enzyme	Plasma Membrane
OAS1: 2'-5'-oligoadenylate synthetase 1, 40/46kDa	4.274	enzyme	Cytoplasm
IDO2: indoleamine 2,3-dioxygenase 2	4.273	enzyme	Cytoplasm
KLHL6: kelch-like family member 6	4.269	other	Unknown
KLRC4-KLRK1/KLRK1: killer cell lectin-like receptor subfamily K, member 1	4.269	transmembrane receptor	Plasma Membrane
RASAL3: RAS protein activator like 3	4.269	other	Cytoplasm
ARHGDIB: Rho GDP dissociation inhibitor (GDI) beta	4.268	other	Cytoplasm
FLT3: fms-related tyrosine kinase 3	4.259	kinase	Plasma Membrane
CLEC7A: C-type lectin domain family 7, member A	4.243	transmembrane receptor	Plasma Membrane
SEMA4D: sema domain, immunoglobulin domain (Ig), transmembrane domain (TM) and shor	4.229	transmembrane receptor	Plasma Membrane
MX1: myxovirus (influenza virus) resistance 1, interferon-inducible protein p78 (mouse)	4.228	enzyme	Cytoplasm
SIRPG: signal-regulatory protein gamma	4.226	other	Plasma Membrane
CD300A: CD300a molecule	4.216	transmembrane receptor	Plasma Membrane
HCLS1: hematopoietic cell-specific Lyn substrate 1	4.199	other	Nucleus
GPR114: G protein-coupled receptor 114	4.189	G-protein coupled recepto	Plasma Membrane
BTN2A2: butyrophilin, subfamily 2, member A2	4.183	other	Unknown
TNFSF13B: tumor necrosis factor (ligand) superfamily, member 13b	4.171	cytokine	Extracellular Space
IFI44L: interferon-induced protein 44-like	4.166	other	Unknown
BTN3A1: butyrophilin, subfamily 3, member A1	4.138	other	Extracellular Space
RSAD2: radical S-adenosyl methionine domain containing 2	4.133	enzyme	Cytoplasm
LOC100507616: uncharacterized LOC100507616	4.127	other	Unknown

RGS10: regulator of G-protein signaling 10	4.118	other	Cytoplasm
ZC3H12D: zinc finger CCCH-type containing 12D	4.11	other	Cytoplasm
EMR3: egf-like module containing, mucin-like, hormone receptor-like 3	4.106	G-protein coupled recepto	Plasma Membrane
BIN2: bridging integrator 2	4.104	other	Plasma Membrane
ERMN: ermin, ERM-like protein	4.086	other	Extracellular Space
TLR10: toll-like receptor 10	4.057	transmembrane receptor	Plasma Membrane
NCF1: neutrophil cytosolic factor 1	4.054	enzyme	Cytoplasm
FAIM3: Fas apoptotic inhibitory molecule 3	4.053	other	Plasma Membrane
C16orf54: chromosome 16 open reading frame 54	4.033	other	Extracellular Space
CD72: CD72 molecule	4.032	transmembrane receptor	Plasma Membrane
ASPN: asporin	4.025	other	Extracellular Space
SLFN12L: schlafen family member 12-like	4.023	enzyme	Unknown
CCDC88B: coiled-coil domain containing 88B	4.021	enzyme	Nucleus
STK17B: serine/threonine kinase 17b	4.021	kinase	Nucleus
TNFSF11: tumor necrosis factor (ligand) superfamily, member 11	4.008	cytokine	Extracellular Space
FCER1G: Fc fragment of IgE, high affinity I, receptor for; gamma polypeptide	4.004	transmembrane receptor	Plasma Membrane
ITGAX: integrin, alpha X (complement component 3 receptor 4 subunit)	4	transmembrane receptor	Plasma Membrane
IKZF2: IKAROS family zinc finger 2 (Helios)	3.992	transcription regulator	Nucleus
NME8: NME/NM23 family member 8	3.985	kinase	Cytoplasm
C15orf48: chromosome 15 open reading frame 48	3.97	other	Nucleus
C1orf200: chromosome 1 open reading frame 200	3.955	other	Unknown
CCDC64: coiled-coil domain containing 64	3.95	other	Cytoplasm
FASLG: Fas ligand (TNF superfamily, member 6)	3.949	cytokine	Extracellular Space
SMAP2: small ArfGAP2	3.948	other	Unknown
HLA-DMA: major histocompatibility complex, class II, DM alpha	3.947	other	Cytoplasm
CDH11: cadherin 11, type 2, OB-cadherin (osteoblast)	3.929	other	Plasma Membrane
LOC100130476: uncharacterized LOC100130476	3.922	other	Unknown
KRT14: keratin 14	3.904	other	Cytoplasm
SHOX2: short stature homeobox 2	3.904	transcription regulator	Nucleus
CLEC4E: C-type lectin domain family 4, member E	3.901	other	Plasma Membrane
CD1C: CD1c molecule	3.897	other	Plasma Membrane
SELPLG: selectin P ligand	3.895	other	Plasma Membrane
KLRC1: killer cell lectin-like receptor subfamily C, member 1	3.894	transmembrane receptor	Plasma Membrane
EVI2A: ecotropic viral integration site 2A	3.883	transmembrane receptor	Plasma Membrane
ADAM8: ADAM metallopeptidase domain 8	3.87	peptidase	Plasma Membrane
ARHGAP9: Rho GTPase activating protein 9	3.867	other	Cytoplasm
HLA-DRB5: major histocompatibility complex, class II, DR beta 5	3.866	transmembrane receptor	Plasma Membrane
ANTXR1P1: anthrax toxin receptor-like pseudogene 1	3.827	other	Unknown

PLXNC1: plexin C1	3.782	transmembrane receptor	Plasma Membrane
LOC101929310: uncharacterized LOC101929310	3.778	other	Unknown
PARVG: parvin, gamma	3.778	other	Cytoplasm
KIAA1211: KIAA1211	3.765	other	Unknown
ZAP70: zeta-chain (TCR) associated protein kinase 70kDa	3.759	kinase	Plasma Membrane
TRIM59: tripartite motif containing 59	3.759	enzyme	Cytoplasm
DENND1C: DENN/MADD domain containing 1C	3.744	other	Unknown
HAVCR2: hepatitis A virus cellular receptor 2	3.714	other	Plasma Membrane
RASGEF1B: RasGEF domain family, member 1B	3.706	other	Unknown
TLR5: toll-like receptor 5	3.7	transmembrane receptor	Plasma Membrane
LOC101929917: uncharacterized LOC101929917	3.691	other	Unknown
AIM2: absent in melanoma 2	3.675	other	Cytoplasm
SPN: sialophorin	3.669	transmembrane receptor	Plasma Membrane
PCED1B-AS1: PCED1B antisense RNA 1	3.658	other	Unknown
KLRC2: killer cell lectin-like receptor subfamily C, member 2	3.657	transmembrane receptor	Plasma Membrane
PLB1: phospholipase B1	3.653	enzyme	Cytoplasm
LINC00996: long intergenic non-protein coding RNA 996	3.643	other	Unknown
C12orf75: chromosome 12 open reading frame 75	3.631	other	Unknown
VNN2: vanin 2	3.629	enzyme	Unknown
SIX1: SIX homeobox 1	3.629	transcription regulator	Nucleus
BEND4: BEN domain containing 4	3.613	other	Unknown
SASH3: SAM and SH3 domain containing 3	3.612	other	Cytoplasm
PIK3IP1: phosphoinositide-3-kinase interacting protein 1	3.609	other	Unknown
RCAN3: RCAN family member 3	3.596	other	Unknown
COL22A1: collagen, type XXII, alpha 1	3.594	other	Extracellular Space
ADAMTS14: ADAM metallopeptidase with thrombospondin type 1 motif, 14	3.593	peptidase	Extracellular Space
CLEC2D: C-type lectin domain family 2, member D	3.572	transmembrane receptor	Plasma Membrane
RAB37: RAB37, member RAS oncogene family	3.562	enzyme	Cytoplasm
LINC00649: long intergenic non-protein coding RNA 649	3.559	other	Unknown
RLTPR: RGD motif, leucine rich repeats, tropomodulin domain and proline-rich containing	3.542	other	Plasma Membrane
HLA-DQA2: major histocompatibility complex, class II, DQ alpha 2	3.536	transmembrane receptor	Plasma Membrane
APOBEC3G: apolipoprotein B mRNA editing enzyme, catalytic polypeptide-like 3G	3.52	enzyme	Nucleus
HLA-DRB1: major histocompatibility complex, class II, DR beta 1	3.509	other	Cytoplasm
SLITRK4: SLIT and NTRK-like family, member 4	3.504	other	Extracellular Space
TMIGD2: transmembrane and immunoglobulin domain containing 2	3.494	other	Unknown
CEACAM21: carcinoembryonic antigen-related cell adhesion molecule 21	3.493	other	Unknown
F2RL2: coagulation factor II (thrombin) receptor-like 2	3.492	G-protein coupled recepto	Plasma Membrane
ZNF831: zinc finger protein 831	3.487	other	Unknown

BTN3A3: butyrophilin, subfamily 3, member A3	3.483	other	Plasma Membrane
SLA: Src-like-adaptor	3.48	other	Plasma Membrane
BIRC3: baculoviral IAP repeat containing 3	3.474	enzyme	Cytoplasm
TDO2: tryptophan 2,3-dioxygenase	3.467	enzyme	Cytoplasm
CD83: CD83 molecule	3.466	transmembrane receptor	Plasma Membrane
NOG: noggin	3.466	growth factor	Extracellular Space
FAM129C: family with sequence similarity 129, member C	3.46	other	Unknown
NUP210: nucleoporin 210kDa	3.459	transporter	Nucleus
CLEC6A: C-type lectin domain family 6, member A	3.457	transmembrane receptor	Plasma Membrane
GLT1D1: glycosyltransferase 1 domain containing 1	3.455	enzyme	Extracellular Space
CRISPLD1: cysteine-rich secretory protein LCCL domain containing 1	3.448	other	Cytoplasm
TNFRSF13C: tumor necrosis factor receptor superfamily, member 13C	3.443	transmembrane receptor	Plasma Membrane
TIFAB: TRAF-interacting protein with forkhead-associated domain, family member B	3.439	other	Unknown
NKG7: natural killer cell granule protein 7	3.438	other	Plasma Membrane
TRAF5: TNF receptor-associated factor 5	3.437	transporter	Cytoplasm
IL24: interleukin 24	3.434	cytokine	Extracellular Space
FGL2: fibrinogen-like 2	3.433	peptidase	Extracellular Space
CD5: CD5 molecule	3.426	transmembrane receptor	Plasma Membrane
SLC14A1: solute carrier family 14 (urea transporter), member 1 (Kidd blood group)	3.415	transporter	Plasma Membrane
BASP1: brain abundant, membrane attached signal protein 1	3.411	transcription regulator	Nucleus
IL18: interleukin 18	3.405	cytokine	Extracellular Space
CXCL16: chemokine (C-X-C motif) ligand 16	3.397	cytokine	Extracellular Space
AIM1: absent in melanoma 1	3.389	other	Extracellular Space
FDCSP: follicular dendritic cell secreted protein	3.369	other	Extracellular Space
MZB1: marginal zone B and B1 cell-specific protein	3.368	other	Extracellular Space
CHRM3-AS2: CHRM3 antisense RNA 2	3.365	other	Unknown
CORO1A: coronin, actin binding protein, 1A	3.363	other	Cytoplasm
CLEC4D: C-type lectin domain family 4, member D	3.359	other	Plasma Membrane
TEX15: testis expressed 15	3.351	other	Extracellular Space
IFIT2: interferon-induced protein with tetratricopeptide repeats 2	3.347	other	Cytoplasm
PARP15: poly (ADP-ribose) polymerase family, member 15	3.347	other	Unknown
ARHGEF18: Rho/Rac guanine nucleotide exchange factor (GEF) 18	3.345	other	Cytoplasm
RAC2: ras-related C3 botulinum toxin substrate 2 (rho family, small GTP binding protein Rac2)	3.344	enzyme	Cytoplasm
SAMSN1: SAM domain, SH3 domain and nuclear localization signals 1	3.34	other	Nucleus
NOX4: NADPH oxidase 4	3.34	enzyme	Cytoplasm
TMEM154: transmembrane protein 154	3.339	other	Unknown
SIRPB1: signal-regulatory protein beta 1	3.339	other	Plasma Membrane
DAZL: deleted in azoospermia-like	3.336	translation regulator	Cytoplasm

MXD1: MAX dimerization protein 1	3.332	transcription regulator	Nucleus
SH2D2A: SH2 domain containing 2A	3.331	other	Cytoplasm
XAF1: XIAP associated factor 1	3.317	other	Nucleus
ZCCHC12: zinc finger, CCHC domain containing 12	3.317	transcription regulator	Nucleus
SNORD3C: small nucleolar RNA, C/D box 3C	3.306	other	Unknown
C12orf42: chromosome 12 open reading frame 42	3.288	other	Unknown
S100Z: S100 calcium binding protein Z	3.287	other	Unknown
NLRC5: NLR family, CARD domain containing 5	3.283	transcription regulator	Cytoplasm
PLXDC2: plexin domain containing 2	3.281	other	Extracellular Space
TNFAIP8: tumor necrosis factor, alpha-induced protein 8	3.274	other	Cytoplasm
PLA2R1: phospholipase A2 receptor 1, 180kDa	3.267	transmembrane receptor	Plasma Membrane
HSF5: heat shock transcription factor family member 5	3.257	other	Unknown
EOMES: eomesodermin	3.257	transcription regulator	Nucleus
IFI44: interferon-induced protein 44	3.256	other	Cytoplasm
CLDN1: claudin 1	3.251	other	Plasma Membrane
BANK1: B-cell scaffold protein with ankyrin repeats 1	3.238	other	Extracellular Space
DEF6: differentially expressed in FDCP 6 homolog (mouse)	3.233	other	Extracellular Space
LOC101928136: uncharacterized LOC101928136	3.229	other	Unknown
INPP5D: inositol polyphosphate-5-phosphatase, 145kDa	3.228	phosphatase	Cytoplasm
LPXN: leupaxin	3.226	transcription regulator	Cytoplasm
GIMAP2: GTPase, IMAP family member 2	3.214	other	Cytoplasm
JAK3: Janus kinase 3	3.214	kinase	Cytoplasm
LINC00607: long intergenic non-protein coding RNA 607	3.205	other	Unknown
CXCR2: chemokine (C-X-C motif) receptor 2	3.201	G-protein coupled recepto	Plasma Membrane
APBA2: amyloid beta (A4) precursor protein-binding, family A, member 2	3.198	transporter	Cytoplasm
P2RX7: purinergic receptor P2X, ligand-gated ion channel, 7	3.196	ion channel	Plasma Membrane
RGS4: regulator of G-protein signaling 4	3.193	other	Cytoplasm
LRRC15: leucine rich repeat containing 15	3.189	other	Plasma Membrane
PARP8: poly (ADP-ribose) polymerase family, member 8	3.186	other	Unknown
CARD11: caspase recruitment domain family, member 11	3.183	kinase	Cytoplasm
CARD16: caspase recruitment domain family, member 16	3.176	other	Unknown
PIK3R5: phosphoinositide-3-kinase, regulatory subunit 5	3.166	kinase	Cytoplasm
SPINK1: serine peptidase inhibitor, Kazal type 1	3.165	other	Extracellular Space
APOBR: apolipoprotein B receptor	3.163	transmembrane receptor	Plasma Membrane
TLR2: toll-like receptor 2	3.162	transmembrane receptor	Plasma Membrane
PATL2: protein associated with topoisomerase II homolog 2 (yeast)	3.156	translation regulator	Cytoplasm
HOXC8: homeobox C8	3.152	transcription regulator	Nucleus
TMC3: transmembrane channel-like 3	3.147	other	Unknown

BGN: biglycan	3.136	other	Extracellular Space
PTGDR: prostaglandin D2 receptor (DP)	3.128	G-protein coupled recepto	Plasma Membrane
ANKRD44: ankyrin repeat domain 44	3.126	other	Unknown
UBD: ubiquitin D	3.123	other	Nucleus
WIPF1: WAS/WASL interacting protein family, member 1	3.117	other	Cytoplasm
LINC00494: long intergenic non-protein coding RNA 494	3.116	other	Unknown
SIDT1: SID1 transmembrane family, member 1	3.115	other	Unknown
MYB-AS1: MYB antisense RNA 1	3.111	other	Unknown
MAP3K7CL: MAP3K7 C-terminal like	3.108	other	Unknown
TP53INP1: tumor protein p53 inducible nuclear protein 1	3.104	other	Nucleus
AKNA: AT-hook transcription factor	3.101	other	Nucleus
AMPD3: adenosine monophosphate deaminase 3	3.094	enzyme	Cytoplasm
GMIP: GEM interacting protein	3.088	enzyme	Cytoplasm
CLEC4M: C-type lectin domain family 4, member M	3.088	other	Plasma Membrane
LINC01222: long intergenic non-protein coding RNA 1222	3.085	other	Unknown
GPR171: G protein-coupled receptor 171	3.083	G-protein coupled recepto	Plasma Membrane
BLK: B lymphoid tyrosine kinase	3.077	kinase	Cytoplasm
BCL2L11: BCL2-like 11 (apoptosis facilitator)	3.073	other	Cytoplasm
HELB: helicase (DNA) B	3.068	enzyme	Nucleus
DSC1: desmocollin 1	3.066	other	Plasma Membrane
LOC101928744: uncharacterized LOC101928744	3.066	other	Unknown
PSTPIP2: proline-serine-threonine phosphatase interacting protein 2	3.061	other	Cytoplasm
SH2D1B: SH2 domain containing 1B	3.055	other	Cytoplasm
HLA-DRB6: major histocompatibility complex, class II, DR beta 6 (pseudogene)	3.051	other	Unknown
HOXC5: homeobox C5	3.05	transcription regulator	Nucleus
CNR1: cannabinoid receptor 1 (brain)	3.026	G-protein coupled recepto	Plasma Membrane
OSM: oncostatin M	3.017	cytokine	Extracellular Space
KLRD1: killer cell lectin-like receptor subfamily D, member 1	3.006	transmembrane receptor	Plasma Membrane
GPSM3: G-protein signaling modulator 3	3.002	other	Cytoplasm
KIF21B: kinesin family member 21B	2.993	other	Cytoplasm
FAM65B: family with sequence similarity 65, member B	2.99	other	Unknown
REXO1L1P: REX1, RNA exonuclease 1 homolog (S. cerevisiae)-like 1, pseudogene	2.99	other	Unknown
CLEC2B: C-type lectin domain family 2, member B	2.969	other	Plasma Membrane
GPR183: G protein-coupled receptor 183	2.966	other	Plasma Membrane
HOXA10: homeobox A10	2.956	transcription regulator	Nucleus
C9orf66: chromosome 9 open reading frame 66	2.943	other	Unknown
MS4A3: membrane-spanning 4-domains, subfamily A, member 3 (hematopoietic cell-specific)	2.942	other	Plasma Membrane
TIGIT: T cell immunoreceptor with Ig and ITIM domains	2.941	other	Plasma Membrane

HIF1A-AS2: HIF1A antisense RNA 2	2.935	other	Unknown
THSD7B: thrombospondin, type I, domain containing 7B	2.935	other	Unknown
ANKRD55: ankyrin repeat domain 55	2.935	transcription regulator	Nucleus
TRBV19: T cell receptor beta variable 19	2.934	other	Unknown
LOC101929241: uncharacterized LOC101929241	2.928	other	Unknown
C1orf162: chromosome 1 open reading frame 162	2.924	transporter	Unknown
GLYATL2: glycine-N-acyltransferase-like 2	2.922	other	Unknown
DNAH8: dynein, axonemal, heavy chain 8	2.913	enzyme	Cytoplasm
MYO1G: myosin IG	2.901	other	Cytoplasm
SLC27A2: solute carrier family 27 (fatty acid transporter), member 2	2.895	transporter	Cytoplasm
CTGF: connective tissue growth factor	2.895	growth factor	Extracellular Space
JAZF1-AS1: JAZF1 antisense RNA 1	2.895	other	Unknown
LPAR2: lysophosphatidic acid receptor 2	2.89	G-protein coupled recepto	Plasma Membrane
SLC22A2: solute carrier family 22 (organic cation transporter), member 2	2.89	transporter	Plasma Membrane
RASGRP1: RAS guanyl releasing protein 1 (calcium and DAG-regulated)	2.881	other	Cytoplasm
ARRB2: arrestin, beta 2	2.879	other	Cytoplasm
TNFRSF25: tumor necrosis factor receptor superfamily, member 25	2.874	transmembrane receptor	Plasma Membrane
PTPN7: protein tyrosine phosphatase, non-receptor type 7	2.87	phosphatase	Cytoplasm
HIST1H2AC: histone cluster 1, H2ac	2.859	other	Nucleus
HSH2D: hematopoietic SH2 domain containing	2.855	other	Cytoplasm
GRIA2: glutamate receptor, ionotropic, AMPA 2	2.854	ion channel	Plasma Membrane
FAM117B: family with sequence similarity 117, member B	2.852	other	Unknown
PMEL: premelanosome protein	2.839	enzyme	Plasma Membrane
DLEU7-AS1: DLEU7 antisense RNA 1	2.834	other	Unknown
FGD3: FYVE, RhoGEF and PH domain containing 3	2.828	other	Cytoplasm
LOC93432: maltase-glucoamylase (alpha-glucosidase) pseudogene	2.827	other	Unknown
LOC101928443: uncharacterized LOC101928443	2.823	other	Unknown
SIGLEC8: sialic acid binding Ig-like lectin 8	2.821	transmembrane receptor	Plasma Membrane
KLRG1: killer cell lectin-like receptor subfamily G, member 1	2.813	other	Plasma Membrane
IL1RN: interleukin 1 receptor antagonist	2.81	cytokine	Extracellular Space
PTGS2: prostaglandin-endoperoxide synthase 2 (prostaglandin G/H synthase and cyclooxygenase)	2.804	enzyme	Cytoplasm
GCNT4: glucosaminyl (N-acetyl) transferase 4, core 2	2.801	enzyme	Cytoplasm
CD5L: CD5 molecule-like	2.799	transmembrane receptor	Plasma Membrane
COL8A1: collagen, type VIII, alpha 1	2.786	other	Extracellular Space
NRK: Nik related kinase	2.786	kinase	Unknown
HOXC9: homeobox C9	2.782	transcription regulator	Nucleus
HLA-F: major histocompatibility complex, class I, F	2.778	transmembrane receptor	Plasma Membrane
HP09025: uncharacterized LOC100652929	2.778	other	Unknown

TBC1D10C: TBC1 domain family, member 10C	2.774	other	Nucleus
DLX6-AS1: DLX6 antisense RNA 1	2.759	other	Unknown
DEFA1 (includes others): defensin, alpha 1	2.759	other	Cytoplasm
CCL22: chemokine (C-C motif) ligand 22	2.757	cytokine	Extracellular Space
SMOC2: SPARC related modular calcium binding 2	2.757	other	Extracellular Space
ABCA13: ATP-binding cassette, sub-family A (ABC1), member 13	2.755	transporter	Extracellular Space
CYP11B1: cytochrome P450, family 11, subfamily B, polypeptide 1	2.755	enzyme	Cytoplasm
SYT12: synaptotagmin XII	2.737	transporter	Plasma Membrane
HOXC10: homeobox C10	2.736	transcription regulator	Nucleus
MUC2: mucin 2, oligomeric mucus/gel-forming	2.734	other	Unknown
PTK2B: protein tyrosine kinase 2 beta	2.734	kinase	Cytoplasm
MPO: myeloperoxidase	2.732	enzyme	Cytoplasm
HOXC4: homeobox C4	2.725	transcription regulator	Nucleus
LINC00643: long intergenic non-protein coding RNA 643	2.717	other	Unknown
MROH9: maestro heat-like repeat family member 9	2.712	other	Unknown
LIPM: lipase, family member M	2.701	enzyme	Extracellular Space
PIK3CD: phosphatidylinositol-4,5-bisphosphate 3-kinase, catalytic subunit delta	2.686	kinase	Cytoplasm
CD22: CD22 molecule	2.685	transmembrane receptor	Plasma Membrane
KIAA1210: KIAA1210	2.683	other	Unknown
TDGF1: teratocarcinoma-derived growth factor 1	2.681	growth factor	Extracellular Space
SSTR3: somatostatin receptor 3	2.676	G-protein coupled recepto	Plasma Membrane
SIDT1-AS1: SIDT1 antisense RNA 1	2.665	other	Unknown
CLC: Charcot-Leyden crystal galectin	2.639	enzyme	Cytoplasm
C15orf53: chromosome 15 open reading frame 53	2.633	other	Unknown
DGKA: diacylglycerol kinase, alpha 80kDa	2.632	kinase	Cytoplasm
PZP: pregnancy-zone protein	2.628	other	Extracellular Space
EDIL3: EGF-like repeats and discoidin I-like domains 3	2.628	other	Extracellular Space
SPOCK3: sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 3	2.621	other	Extracellular Space
IGKV2-24: immunoglobulin kappa variable 2-24	2.618	other	Unknown
CD1E: CD1e molecule	2.612	other	Cytoplasm
GPCPD1: glycerophosphocholine phosphodiesterase GDE1 homolog (S. cerevisiae)	2.607	other	Unknown
EVL: Enah/Vasp-like	2.6	other	Plasma Membrane
LOC101928716: uncharacterized LOC101928716	2.6	other	Unknown
GK: glycerol kinase	2.597	kinase	Cytoplasm
HMHA1: histocompatibility (minor) HA-1	2.595	transporter	Cytoplasm
SIT1: signaling threshold regulating transmembrane adaptor 1	2.594	other	Plasma Membrane
CCDC88C: coiled-coil domain containing 88C	2.592	other	Unknown
ITGA11: integrin, alpha 11	2.588	other	Plasma Membrane

SEPT1: septin 1	2.572	enzyme	Cytoplasm
SRGN: serglycin	2.568	other	Cytoplasm
TCF7: transcription factor 7 (T-cell specific, HMG-box)	2.564	transcription regulator	Nucleus
TCL1A: T-cell leukemia/lymphoma 1A	2.564	transcription regulator	Nucleus
CD19: CD19 molecule	2.562	transmembrane receptor	Plasma Membrane
CA6: carbonic anhydrase VI	2.562	enzyme	Extracellular Space
PRSS3P2: protease, serine, 3 pseudogene 2	2.561	other	Unknown
IGHV4-31: immunoglobulin heavy variable 4-31	2.55	other	Unknown
LOC100130992: uncharacterized LOC100130992	2.537	other	Unknown
LPO: lactoperoxidase	2.528	enzyme	Extracellular Space
SLC6A1: solute carrier family 6 (neurotransmitter transporter), member 1	2.525	transporter	Plasma Membrane
FCER1A: Fc fragment of IgE, high affinity I, receptor for; alpha polypeptide	2.518	transmembrane receptor	Plasma Membrane
TDRD6: tudor domain containing 6	2.517	other	Cytoplasm
CD27: CD27 molecule	2.514	transmembrane receptor	Plasma Membrane
NLRC3: NLR family, CARD domain containing 3	2.512	other	Cytoplasm
STK4: serine/threonine kinase 4	2.511	kinase	Cytoplasm
LINC01108: long intergenic non-protein coding RNA 1108	2.51	other	Unknown
TFAP2B: transcription factor AP-2 beta (activating enhancer binding protein 2 beta)	2.509	transcription regulator	Nucleus
HOTAIR: HOX transcript antisense RNA	2.508	other	Unknown
CXorf65: chromosome X open reading frame 65	2.505	other	Unknown
CNR2: cannabinoid receptor 2 (macrophage)	2.5	G-protein coupled recepto	Plasma Membrane
TRAF1: TNF receptor-associated factor 1	2.498	other	Cytoplasm
FCAR: Fc fragment of IgA, receptor for	2.487	other	Plasma Membrane
PNMA5: paraneoplastic Ma antigen family member 5	2.483	other	Unknown
P2RX5: purinergic receptor P2X, ligand-gated ion channel, 5	2.474	ion channel	Plasma Membrane
IGLL1/IGLL5: immunoglobulin lambda-like polypeptide 1	2.467	other	Plasma Membrane
VNN3: vanin 3	2.452	enzyme	Extracellular Space
BCORP1: BCL6 corepressor pseudogene 1	2.447	other	Unknown
BARX2: BARX homeobox 2	2.447	transcription regulator	Nucleus
C11orf21: chromosome 11 open reading frame 21	2.446	other	Cytoplasm
MIR1587: microRNA 1587	2.441	microRNA	Cytoplasm
OXTR: oxytocin receptor	2.426	G-protein coupled recepto	Plasma Membrane
LOC100506393: uncharacterized LOC100506393	2.419	other	Unknown
LAMP5: lysosomal-associated membrane protein family, member 5	2.409	other	Cytoplasm
C14orf64: chromosome 14 open reading frame 64	2.404	other	Unknown
BHLHE41: basic helix-loop-helix family, member e41	2.364	transcription regulator	Nucleus
MAS1: MAS1 oncogene	2.355	G-protein coupled recepto	Plasma Membrane
LOC100130502: uncharacterized LOC100130502	2.354	other	Unknown

LTB: lymphotoxin beta (TNF superfamily, member 3)	2.345	cytokine	Extracellular Space
SBK1: SH3 domain binding kinase 1	2.328	kinase	Unknown
HOXB-AS3: HOXB cluster antisense RNA 3	2.32	other	Unknown
CDX2: caudal type homeobox 2	2.319	transcription regulator	Nucleus
MST4: serine/threonine protein kinase MST4	2.309	kinase	Nucleus
APBB3: amyloid beta (A4) precursor protein-binding, family B, member 3	2.306	other	Cytoplasm
MPP1: membrane protein, palmitoylated 1, 55kDa	2.296	kinase	Plasma Membrane
DEFA4: defensin, alpha 4, corticostatin	2.274	other	Extracellular Space
APELA: apelin receptor early endogenous ligand	2.271	other	Extracellular Space
GK-AS1: GK antisense RNA 1	2.262	other	Unknown
SLAMF1: signaling lymphocytic activation molecule family member 1	2.256	transmembrane receptor	Plasma Membrane
KLRC3: killer cell lectin-like receptor subfamily C, member 3	2.245	transmembrane receptor	Plasma Membrane
GNA13: guanine nucleotide binding protein (G protein), alpha 13	2.245	enzyme	Plasma Membrane
RPS6KA2-AS1: RPS6KA2 antisense RNA 1	2.243	other	Unknown
ANKRD37: ankyrin repeat domain 37	2.229	other	Unknown
CPXM2: carboxypeptidase X (M14 family), member 2	2.223	peptidase	Extracellular Space
PFKFB4: 6-phosphofructo-2-kinase/fructose-2,6-biphosphatase 4	2.222	kinase	Cytoplasm
LINC01141: long intergenic non-protein coding RNA 1141	2.22	other	Unknown
A2MP1: alpha-2-macroglobulin pseudogene 1	2.216	other	Unknown
HMOX1: heme oxygenase (decycling) 1	2.205	enzyme	Cytoplasm
SPIC: Spi-C transcription factor (Spi-1/PU.1 related)	2.193	transcription regulator	Nucleus
FGF20: fibroblast growth factor 20	2.189	growth factor	Extracellular Space
ERRFI1: ERBB receptor feedback inhibitor 1	2.186	other	Cytoplasm
GPR128: G protein-coupled receptor 128	2.181	G-protein coupled recepto	Plasma Membrane
ITGA8: integrin, alpha 8	2.155	other	Plasma Membrane
LOC340113: uncharacterized LOC340113	2.147	other	Unknown
CCR7: chemokine (C-C motif) receptor 7	2.141	G-protein coupled recepto	Plasma Membrane
SUSD5: sushi domain containing 5	2.13	other	Unknown
GPA33: glycoprotein A33 (transmembrane)	2.121	other	Plasma Membrane
GLB1L3: galactosidase, beta 1-like 3	2.114	enzyme	Unknown
CLEC3A: C-type lectin domain family 3, member A	2.099	other	Unknown
MGAM: maltase-glucoamylase (alpha-glucosidase)	2.094	enzyme	Plasma Membrane
LINC00243: long intergenic non-protein coding RNA 243	2.09	other	Unknown
ATRNL1: attractin-like 1	2.081	other	Unknown
NREP-AS1: NREP antisense RNA 1	2.078	other	Unknown
LOC101929473: uncharacterized LOC101929473	2.068	other	Unknown
SIM1: single-minded family bHLH transcription factor 1	2.05	transcription regulator	Nucleus
XRCC6P5: X-ray repair complementing defective repair in Chinese hamster cells 6 pseudoge	2.044	other	Unknown

FSHR: follicle stimulating hormone receptor	2.039	G-protein coupled recepto	Plasma Membrane
OGN: osteoglycin	2.03	growth factor	Extracellular Space
PAPLN: papilin, proteoglycan-like sulfated glycoprotein	2.028	other	Extracellular Space
MUC19: mucin 19, oligomeric	2.024	other	Cytoplasm
LOC101927277: uncharacterized LOC101927277	1.989	other	Unknown
HOXC-AS2: HOXC cluster antisense RNA 2	1.981	other	Unknown
FLJ45825: uncharacterized LOC100505530	1.976	other	Unknown
C5orf17: chromosome 5 open reading frame 17	1.974	other	Unknown
C6orf118: chromosome 6 open reading frame 118	1.971	other	Unknown
LOC101929734: uncharacterized LOC101929734	1.966	other	Unknown
SLC9A2: solute carrier family 9, subfamily A (NHE2, cation proton antiporter 2), member 2	1.964	transporter	Plasma Membrane
CNGA4: cyclic nucleotide gated channel alpha 4	1.953	ion channel	Plasma Membrane
ASB9: ankyrin repeat and SOCS box containing 9	1.948	transcription regulator	Nucleus
TBC1D27: TBC1 domain family, member 27	1.902	other	Unknown
LOC101928535: uncharacterized LOC101928535	1.883	other	Unknown
PI16: peptidase inhibitor 16	1.878	other	Extracellular Space
HAVCR1: hepatitis A virus cellular receptor 1	1.868	other	Plasma Membrane
HBG2: hemoglobin, gamma G	1.858	other	Cytoplasm
LOC101928773: uncharacterized LOC101928773	1.855	other	Unknown
TRPV5: transient receptor potential cation channel, subfamily V, member 5	1.853	ion channel	Plasma Membrane
LINC01210: long intergenic non-protein coding RNA 1210	1.853	other	Unknown
SLC17A8: solute carrier family 17 (vesicular glutamate transporter), member 8	1.853	transporter	Plasma Membrane
SIX6: SIX homeobox 6	1.838	transcription regulator	Nucleus
LINC01281: long intergenic non-protein coding RNA 1281	1.836	other	Unknown
PCDH10: protocadherin 10	1.835	other	Plasma Membrane
RASGRP2: RAS guanyl releasing protein 2 (calcium and DAG-regulated)	1.834	other	Cytoplasm
ANKRD30BL: ankyrin repeat domain 30B-like	1.828	other	Unknown
TNFRSF13B: tumor necrosis factor receptor superfamily, member 13B	1.827	transmembrane receptor	Plasma Membrane
EIF4E1B: eukaryotic translation initiation factor 4E family member 1B	1.822	other	Unknown
CXCR1: chemokine (C-X-C motif) receptor 1	1.817	G-protein coupled recepto	Plasma Membrane
DMRT3: doublesex and mab-3 related transcription factor 3	1.809	transcription regulator	Nucleus
LOC101928075: uncharacterized LOC101928075	1.797	other	Unknown
LOC101928622: uncharacterized LOC101928622	1.794	other	Unknown
GABRR3: gamma-aminobutyric acid (GABA) A receptor, rho 3	1.791	transmembrane receptor	Plasma Membrane
CCDC42: coiled-coil domain containing 42	1.789	other	Unknown
KRT73-AS1: KRT73 antisense RNA 1	1.785	other	Unknown
SDS: serine dehydratase	1.744	enzyme	Cytoplasm
IBSP: integrin-binding sialoprotein	1.744	other	Extracellular Space

LINC01020: long intergenic non-protein coding RNA 1020	1.738	other	Unknown
DMBT1P1: deleted in malignant brain tumors 1 pseudogene 1	1.738	other	Unknown
C1QTNF9B-AS1: C1QTNF9B antisense RNA 1	1.726	other	Cytoplasm
HBB: hemoglobin, beta	1.721	transporter	Cytoplasm
TEX11: testis expressed 11	1.718	other	Nucleus
MAGEB18: melanoma antigen family B, 18	1.716	other	Cytoplasm
EREG: epiregulin	1.716	growth factor	Extracellular Space
LOC101928709: uncharacterized LOC101928709	1.708	other	Unknown
GP2: glycoprotein 2 (zymogen granule membrane)	1.707	other	Cytoplasm
MT1H: metallothionein 1H	1.692	other	Unknown
HOXC12: homeobox C12	1.681	transcription regulator	Nucleus
NALCN: sodium leak channel, non-selective	1.628	ion channel	Plasma Membrane
SPRR3: small proline-rich protein 3	1.628	other	Cytoplasm
OLFM4: olfactomedin 4	1.609	other	Extracellular Space
MMP27: matrix metalloproteinase 27	1.599	peptidase	Unknown
C1orf110: chromosome 1 open reading frame 110	1.598	other	Unknown
GABRA1: gamma-aminobutyric acid (GABA) A receptor, alpha 1	1.595	ion channel	Plasma Membrane
EPPIN: epididymal peptidase inhibitor	1.594	other	Extracellular Space
F13B: coagulation factor XIII, B polypeptide	1.563	enzyme	Extracellular Space
HCRTR2: hypocretin (orexin) receptor 2	1.563	G-protein coupled recepto	Plasma Membrane
LINC01203: long intergenic non-protein coding RNA 1203	1.559	other	Unknown
SYNPR: synaptoporin	1.544	transporter	Plasma Membrane
PGC: progastricsin (pepsinogen C)	-1.502	peptidase	Extracellular Space
SCNN1A: sodium channel, non-voltage-gated 1 alpha subunit	-1.503	ion channel	Plasma Membrane
CTSE: cathepsin E	-1.507	peptidase	Cytoplasm
EPCAM: epithelial cell adhesion molecule	-1.51	other	Plasma Membrane
DUOXA1: dual oxidase maturation factor 1	-1.529	other	Plasma Membrane
TMC5: transmembrane channel-like 5	-1.54	other	Unknown
CACNA2D2: calcium channel, voltage-dependent, alpha 2/delta subunit 2	-1.553	ion channel	Plasma Membrane
ATP13A4: ATPase type 13A4	-1.563	transporter	Unknown
KRT4: keratin 4	-1.567	other	Cytoplasm
TMEM125: transmembrane protein 125	-1.567	other	Unknown
AP1M2: adaptor-related protein complex 1, mu 2 subunit	-1.584	transporter	Cytoplasm
LRP2: low density lipoprotein receptor-related protein 2	-1.604	transporter	Plasma Membrane
CHI3L2: chitinase 3-like 2	-1.606	enzyme	Extracellular Space
GPRIN2: G protein regulated inducer of neurite outgrowth 2	-1.61	other	Unknown
BMP10: bone morphogenetic protein 10	-1.633	growth factor	Extracellular Space
PLIN1: perilipin 1	-1.633	other	Cytoplasm

ITGB6: integrin, beta 6	-1.638	other	Plasma Membrane
BMP3: bone morphogenetic protein 3	-1.64	growth factor	Extracellular Space
VEPH1: ventricular zone expressed PH domain-containing 1	-1.641	other	Nucleus
PLA2G1B: phospholipase A2, group IB (pancreas)	-1.685	enzyme	Extracellular Space
CDH1: cadherin 1, type 1, E-cadherin (epithelial)	-1.688	other	Plasma Membrane
SCN1A: sodium channel, voltage-gated, type I, alpha subunit	-1.715	ion channel	Plasma Membrane
ADIPOQ: adiponectin, C1Q and collagen domain containing	-1.722	other	Extracellular Space
DRD5: dopamine receptor D5	-1.731	G-protein coupled recepto	Plasma Membrane
SHANK2: SH3 and multiple ankyrin repeat domains 2	-1.754	other	Plasma Membrane
HAS2: hyaluronan synthase 2	-1.755	enzyme	Plasma Membrane
KLF5: Kruppel-like factor 5 (intestinal)	-1.76	transcription regulator	Nucleus
HRASLS5: HRAS-like suppressor family, member 5	-1.764	other	Unknown
EXPH5: exophilin 5	-1.769	other	Cytoplasm
CLDN11: claudin 11	-1.776	other	Plasma Membrane
NPY2R: neuropeptide Y receptor Y2	-1.795	G-protein coupled recepto	Plasma Membrane
MISP: mitotic spindle positioning	-1.798	other	Unknown
SFTA3: surfactant associated 3	-1.8	other	Unknown
CYP2B7P: cytochrome P450, family 2, subfamily B, polypeptide 7, pseudogene	-1.8	enzyme	Unknown
KIAA1244: KIAA1244	-1.805	other	Unknown
MGC27382: uncharacterized MGC27382	-1.819	other	Unknown
SDR16C5: short chain dehydrogenase/reductase family 16C, member 5	-1.824	enzyme	Cytoplasm
CCL2: chemokine (C-C motif) ligand 2	-1.825	cytokine	Extracellular Space
MLPH: melanophilin	-1.833	other	Cytoplasm
LAMB3: laminin, beta 3	-1.846	transporter	Extracellular Space
PCSK9: proprotein convertase subtilisin/kexin type 9	-1.848	peptidase	Extracellular Space
LEP: leptin	-1.852	growth factor	Extracellular Space
MFSD2A: major facilitator superfamily domain containing 2A	-1.863	other	Unknown
FOXA1: forkhead box A1	-1.873	transcription regulator	Nucleus
AGER: advanced glycosylation end product-specific receptor	-1.875	transmembrane receptor	Plasma Membrane
LOC101929612: uncharacterized LOC101929612	-1.879	other	Unknown
CPB2: carboxypeptidase B2 (plasma)	-1.885	peptidase	Extracellular Space
SLPI: secretory leukocyte peptidase inhibitor	-1.887	other	Cytoplasm
RAP1GAP: RAP1 GTPase activating protein	-1.917	other	Cytoplasm
NIPAL4: NIPA-like domain containing 4	-1.919	other	Unknown
MYL1: myosin, light chain 1, alkali; skeletal, fast	-1.92	other	Cytoplasm
AQP4: aquaporin 4	-1.934	transporter	Plasma Membrane
LTK: leukocyte receptor tyrosine kinase	-1.949	kinase	Plasma Membrane
FAM83E: family with sequence similarity 83, member E	-1.959	other	Unknown

KLB: klotho beta	-1.96	enzyme	Plasma Membrane
LOC286189: uncharacterized LOC286189	-1.961	other	Unknown
FNDC4: fibronectin type III domain containing 4	-1.969	other	Unknown
FGFR2: fibroblast growth factor receptor 2	-1.986	kinase	Plasma Membrane
OAF: OAF homolog (Drosophila)	-1.99	other	Unknown
TMEM100: transmembrane protein 100	-2.004	other	Unknown
LGALS12: lectin, galactoside-binding, soluble, 12	-2.004	other	Extracellular Space
EHF: ets homologous factor	-2.008	transcription regulator	Nucleus
MT-TF: tRNA	-2.013	other	Cytoplasm
MAL2: mal, T-cell differentiation protein 2 (gene/pseudogene)	-2.038	transporter	Plasma Membrane
NMB: neuromedin B	-2.046	other	Extracellular Space
LINC00319: long intergenic non-protein coding RNA 319	-2.07	other	Unknown
LIPH: lipase, member H	-2.073	enzyme	Extracellular Space
ACKR1: atypical chemokine receptor 1 (Duffy blood group)	-2.083	G-protein coupled recepto	Plasma Membrane
MET: met proto-oncogene	-2.114	kinase	Plasma Membrane
GPAM: glycerol-3-phosphate acyltransferase, mitochondrial	-2.126	enzyme	Cytoplasm
RHBDL2: rhomboid, veinlet-like 2 (Drosophila)	-2.147	peptidase	Plasma Membrane
CHIAP2: chitinase, acidic pseudogene 2	-2.157	other	Unknown
FRMD1: FERM domain containing 1	-2.158	other	Unknown
DNAJA4: DnaJ (Hsp40) homolog, subfamily A, member 4	-2.159	other	Nucleus
LIPG: lipase, endothelial	-2.173	enzyme	Extracellular Space
ID4: inhibitor of DNA binding 4, dominant negative helix-loop-helix protein	-2.179	transcription regulator	Nucleus
C1orf116: chromosome 1 open reading frame 116	-2.181	other	Cytoplasm
VIPR1: vasoactive intestinal peptide receptor 1	-2.208	G-protein coupled recepto	Plasma Membrane
FN3K: fructosamine 3 kinase	-2.218	kinase	Cytoplasm
AGR2: anterior gradient 2	-2.221	other	Extracellular Space
SLC6A14: solute carrier family 6 (amino acid transporter), member 14	-2.25	transporter	Plasma Membrane
HMGCS2: 3-hydroxy-3-methylglutaryl-CoA synthase 2 (mitochondrial)	-2.259	enzyme	Cytoplasm
RORC: RAR-related orphan receptor C	-2.265	ligand-dependent nuclear	Nucleus
NAPSA: napsin A aspartic peptidase	-2.27	peptidase	Extracellular Space
SFTPC: surfactant protein C	-2.272	other	Extracellular Space
ESRP1: epithelial splicing regulatory protein 1	-2.272	other	Nucleus
PLXNA2: plexin A2	-2.276	transmembrane receptor	Plasma Membrane
CAPN8: calpain 8	-2.297	peptidase	Cytoplasm
EPS8L2: EPS8-like 2	-2.308	other	Unknown
FXYD3: FXYP domain containing ion transport regulator 3	-2.308	other	Plasma Membrane
DUOX1: dual oxidase 1	-2.313	enzyme	Plasma Membrane
RBP4: retinol binding protein 4, plasma	-2.321	transporter	Extracellular Space

WWC1: WW and C2 domain containing 1	-2.349	transcription regulator	Cytoplasm
ADAMTS19: ADAM metallopeptidase with thrombospondin type 1 motif, 19	-2.351	peptidase	Extracellular Space
LPIN1: lipin 1	-2.36	phosphatase	Nucleus
SFTPB: surfactant protein B	-2.362	other	Extracellular Space
GRAMD2: GRAM domain containing 2	-2.373	other	Unknown
TMPRSS2: transmembrane protease, serine 2	-2.378	peptidase	Plasma Membrane
AGPAT9: 1-acylglycerol-3-phosphate O-acyltransferase 9	-2.379	enzyme	Cytoplasm
ACADL: acyl-CoA dehydrogenase, long chain	-2.382	enzyme	Cytoplasm
PCK1: phosphoenolpyruvate carboxykinase 1 (soluble)	-2.393	kinase	Cytoplasm
BOK: BCL2-related ovarian killer	-2.393	other	Cytoplasm
LRRC75A: leucine rich repeat containing 75A	-2.4	other	Unknown
PPRC1: peroxisome proliferator-activated receptor gamma, coactivator-related 1	-2.404	transcription regulator	Nucleus
CKMT1A/CKMT1B: creatine kinase, mitochondrial 1B	-2.412	kinase	Cytoplasm
ADAMTS15: ADAM metallopeptidase with thrombospondin type 1 motif, 15	-2.413	peptidase	Extracellular Space
CYP2B6: cytochrome P450, family 2, subfamily B, polypeptide 6	-2.421	enzyme	Cytoplasm
CLMP: CXADR-like membrane protein	-2.428	other	Plasma Membrane
SFTA2: surfactant associated 2	-2.434	other	Unknown
LRRC14B: leucine rich repeat containing 14B	-2.438	other	Unknown
DMBT1: deleted in malignant brain tumors 1	-2.445	transmembrane receptor	Plasma Membrane
CYP4B1: cytochrome P450, family 4, subfamily B, polypeptide 1	-2.46	enzyme	Cytoplasm
SHH: sonic hedgehog	-2.462	peptidase	Extracellular Space
GPD1: glycerol-3-phosphate dehydrogenase 1 (soluble)	-2.465	enzyme	Cytoplasm
ACACA: acetyl-CoA carboxylase alpha	-2.472	enzyme	Cytoplasm
DOT1L: DOT1-like histone H3K79 methyltransferase	-2.474	phosphatase	Nucleus
RRP12: ribosomal RNA processing 12 homolog (S. cerevisiae)	-2.476	other	Nucleus
ECHS1: enoyl CoA hydratase, short chain, 1, mitochondrial	-2.477	enzyme	Cytoplasm
FADS1: fatty acid desaturase 1	-2.48	enzyme	Plasma Membrane
NUDT4: nudix (nucleoside diphosphate linked moiety X)-type motif 4	-2.493	phosphatase	Cytoplasm
TF: transferrin	-2.494	transporter	Extracellular Space
PLA2G2A: phospholipase A2, group IIA (platelets, synovial fluid)	-2.495	enzyme	Cytoplasm
BAG3: BCL2-associated athanogene 3	-2.5	other	Cytoplasm
PIGR: polymeric immunoglobulin receptor	-2.506	transporter	Plasma Membrane
PLA2G4F: phospholipase A2, group IVF	-2.511	enzyme	Cytoplasm
AKR1C1/AKR1C2: aldo-keto reductase family 1, member C2	-2.52	enzyme	Cytoplasm
C10orf62: chromosome 10 open reading frame 62	-2.525	other	Unknown
MT1M: metallothionein 1M	-2.532	other	Unknown
MYH7B: myosin, heavy chain 7B, cardiac muscle, beta	-2.548	other	Unknown
ETNPPL: ethanolamine-phosphate phospho-lyase	-2.557	enzyme	Unknown

DGCR6/LOC102724770: DiGeorge syndrome critical region gene 6	-2.567	other	Nucleus
SNX22: sorting nexin 22	-2.573	transporter	Unknown
CSF3: colony stimulating factor 3 (granulocyte)	-2.579	cytokine	Extracellular Space
TFPI2: tissue factor pathway inhibitor 2	-2.58	other	Extracellular Space
ARTN: artemin	-2.585	growth factor	Extracellular Space
NR4A3: nuclear receptor subfamily 4, group A, member 3	-2.59	ligand-dependent nuclear	Nucleus
LBP: lipopolysaccharide binding protein	-2.591	transporter	Plasma Membrane
DNAJB5: DnaJ (Hsp40) homolog, subfamily B, member 5	-2.602	other	Cytoplasm
LONRF2: LON peptidase N-terminal domain and ring finger 2	-2.624	other	Unknown
RSPO4: R-spondin 4	-2.629	other	Plasma Membrane
ITGB1BP2: integrin beta 1 binding protein (melusin) 2	-2.633	other	Unknown
SCEL: sciellin	-2.646	other	Cytoplasm
SLC19A2: solute carrier family 19 (thiamine transporter), member 2	-2.646	transporter	Plasma Membrane
TESC: tescalcin	-2.654	other	Cytoplasm
LOC100507033: uncharacterized LOC100507033	-2.657	other	Unknown
MT-TP: tRNA	-2.663	other	Cytoplasm
MYL4: myosin, light chain 4, alkali; atrial, embryonic	-2.676	other	Cytoplasm
PEG10: paternally expressed 10	-2.677	other	Nucleus
KRBA1: KRAB-A domain containing 1	-2.681	other	Unknown
FILIP1: filamin A interacting protein 1	-2.682	other	Cytoplasm
PNPLA3: patatin-like phospholipase domain containing 3	-2.687	enzyme	Cytoplasm
COL4A4: collagen, type IV, alpha 4	-2.691	other	Extracellular Space
F11: coagulation factor XI	-2.699	peptidase	Extracellular Space
ART3: ADP-ribosyltransferase 3	-2.714	enzyme	Plasma Membrane
SYT7: synaptotagmin VII	-2.717	transporter	Cytoplasm
C3orf52: chromosome 3 open reading frame 52	-2.718	other	Unknown
MLXIPL: MLX interacting protein-like	-2.72	transcription regulator	Nucleus
BDKRB2: bradykinin receptor B2	-2.723	G-protein coupled recepto	Plasma Membrane
HOGA1: 4-hydroxy-2-oxoglutarate aldolase 1	-2.723	enzyme	Cytoplasm
GAREM: GRB2 associated, regulator of MAPK1	-2.728	other	Unknown
THRSP: thyroid hormone responsive	-2.733	other	Nucleus
DHCR7: 7-dehydrocholesterol reductase	-2.739	enzyme	Cytoplasm
SELENBP1: selenium binding protein 1	-2.762	other	Cytoplasm
RBM24: RNA binding motif protein 24	-2.778	other	Unknown
CADM4: cell adhesion molecule 4	-2.782	other	Plasma Membrane
DGKD: diacylglycerol kinase, delta 130kDa	-2.785	kinase	Cytoplasm
ALPL: alkaline phosphatase, liver/bone/kidney	-2.788	phosphatase	Plasma Membrane
SHC2: SHC (Src homology 2 domain containing) transforming protein 2	-2.791	other	Cytoplasm

SLC6A4: solute carrier family 6 (neurotransmitter transporter), member 4	-2.795	transporter	Plasma Membrane
PNPLA2: patatin-like phospholipase domain containing 2	-2.812	enzyme	Cytoplasm
GPR133: G protein-coupled receptor 133	-2.816	G-protein coupled recepto	Plasma Membrane
WIF1: WNT inhibitory factor 1	-2.823	other	Extracellular Space
PVR: poliovirus receptor	-2.825	other	Plasma Membrane
MIDN: midnolin	-2.825	other	Nucleus
KIF1A: kinesin family member 1A	-2.829	other	Cytoplasm
S1PR2: sphingosine-1-phosphate receptor 2	-2.853	G-protein coupled recepto	Plasma Membrane
MSLN: mesothelin	-2.862	other	Extracellular Space
DGAT2: diacylglycerol O-acyltransferase 2	-2.863	enzyme	Cytoplasm
GATA2: GATA binding protein 2	-2.871	transcription regulator	Nucleus
PTPRS: protein tyrosine phosphatase, receptor type, S	-2.883	phosphatase	Plasma Membrane
CIDEC: cell death-inducing DFFA-like effector c	-2.886	other	Cytoplasm
ETFB: electron-transfer-flavoprotein, beta polypeptide	-2.901	transporter	Cytoplasm
SAA2: serum amyloid A2	-2.907	other	Extracellular Space
SPNS2: spinster homolog 2 (Drosophila)	-2.909	transporter	Unknown
CISH: cytokine inducible SH2-containing protein	-2.92	other	Cytoplasm
PHACTR1: phosphatase and actin regulator 1	-2.929	other	Cytoplasm
LRRC2: leucine rich repeat containing 2	-2.932	other	Unknown
TIMP4: TIMP metalloproteinase inhibitor 4	-2.949	other	Extracellular Space
FGFR4: fibroblast growth factor receptor 4	-2.951	kinase	Plasma Membrane
NDUFB10: NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10, 22kDa	-2.954	enzyme	Cytoplasm
TMEM132B: transmembrane protein 132B	-2.962	other	Unknown
KLHL25: kelch-like family member 25	-2.967	other	Cytoplasm
TGM2: transglutaminase 2	-3.022	enzyme	Cytoplasm
WISP2: WNT1 inducible signaling pathway protein 2	-3.028	growth factor	Extracellular Space
HAMP: hepcidin antimicrobial peptide	-3.031	other	Extracellular Space
AGPAT2: 1-acylglycerol-3-phosphate O-acyltransferase 2	-3.034	enzyme	Cytoplasm
PAPPA: pregnancy-associated plasma protein A, pappalysin 1	-3.034	peptidase	Extracellular Space
HP: haptoglobin	-3.041	peptidase	Extracellular Space
HHATL: hedgehog acyltransferase-like	-3.042	enzyme	Cytoplasm
SRPX: sushi-repeat containing protein, X-linked	-3.046	other	Cytoplasm
EYA4: eyes absent homolog 4 (Drosophila)	-3.089	phosphatase	Cytoplasm
MAP3K6: mitogen-activated protein kinase kinase kinase 6	-3.09	kinase	Unknown
KRT19: keratin 19	-3.092	other	Cytoplasm
ADAMTS9: ADAM metalloproteinase with thrombospondin type 1 motif, 9	-3.096	peptidase	Extracellular Space
CA3: carbonic anhydrase III, muscle specific	-3.109	enzyme	Cytoplasm
ABCA3: ATP-binding cassette, sub-family A (ABC1), member 3	-3.115	transporter	Plasma Membrane

SELE: selectin E	-3.125	transmembrane receptor	Plasma Membrane
GRAMD4: GRAM domain containing 4	-3.13	other	Unknown
SCD: stearoyl-CoA desaturase (delta-9-desaturase)	-3.139	enzyme	Cytoplasm
TOMM40: translocase of outer mitochondrial membrane 40 homolog (yeast)	-3.161	ion channel	Cytoplasm
MYOC: myocilin, trabecular meshwork inducible glucocorticoid response	-3.164	other	Cytoplasm
C1QTNF1: C1q and tumor necrosis factor related protein 1	-3.165	other	Extracellular Space
FAM213A: family with sequence similarity 213, member A	-3.171	other	Extracellular Space
A4GALT: alpha 1,4-galactosyltransferase	-3.177	enzyme	Cytoplasm
P2RY2: purinergic receptor P2Y, G-protein coupled, 2	-3.191	G-protein coupled recepto	Plasma Membrane
ELOVL6: ELOVL fatty acid elongase 6	-3.193	enzyme	Cytoplasm
RMST: rhabdomyosarcoma 2 associated transcript (non-protein coding)	-3.194	other	Unknown
RBM20: RNA binding motif protein 20	-3.205	other	Nucleus
COL4A3: collagen, type IV, alpha 3 (Goodpasture antigen)	-3.206	other	Extracellular Space
SYNM: synemin, intermediate filament protein	-3.213	other	Cytoplasm
DPF3: D4, zinc and double PHD fingers, family 3	-3.215	other	Unknown
AASS: amino adipate-semialdehyde synthase	-3.24	enzyme	Cytoplasm
CECR2: cat eye syndrome chromosome region, candidate 2	-3.249	other	Nucleus
TMOD1: tropomodulin 1	-3.259	enzyme	Cytoplasm
DAPK3: death-associated protein kinase 3	-3.261	kinase	Cytoplasm
CGN: cingulin	-3.268	other	Plasma Membrane
OBSL1: obscurin-like 1	-3.273	other	Cytoplasm
RGR: retinal G protein coupled receptor	-3.282	G-protein coupled recepto	Plasma Membrane
SLCO5A1: solute carrier organic anion transporter family, member 5A1	-3.284	transporter	Unknown
ADAMTS8: ADAM metalloproteinase with thrombospondin type 1 motif, 8	-3.29	peptidase	Extracellular Space
PRX: periaxin	-3.327	other	Nucleus
SFTPA2: surfactant protein A2	-3.328	other	Extracellular Space
CYB5A: cytochrome b5 type A (microsomal)	-3.344	enzyme	Cytoplasm
FRAS1: Fraser syndrome 1	-3.372	other	Extracellular Space
USP54: ubiquitin specific peptidase 54	-3.376	peptidase	Unknown
SCGN: secretagoin, EF-hand calcium binding protein	-3.423	other	Cytoplasm
SFTPA1: surfactant protein A1	-3.428	transporter	Extracellular Space
CMTM5: CKLF-like MARVEL transmembrane domain containing 5	-3.43	cytokine	Unknown
COX5B: cytochrome c oxidase subunit Vb	-3.445	enzyme	Cytoplasm
SOX9: SRY (sex determining region Y)-box 9	-3.448	transcription regulator	Nucleus
KLHL41: kelch-like family member 41	-3.458	other	Cytoplasm
PLIN4: perilipin 4	-3.463	other	Cytoplasm
CFD: complement factor D (adipsin)	-3.481	peptidase	Extracellular Space
FLJ42969: uncharacterized LOC441374	-3.512	other	Unknown

SLC34A2: solute carrier family 34 (type II sodium/phosphate cotransporter), member 2	-3.516	transporter	Plasma Membrane
RHOBTB2: Rho-related BTB domain containing 2	-3.579	enzyme	Unknown
YBX2: Y box binding protein 2	-3.597	translation regulator	Cytoplasm
HOPX: HOP homeobox	-3.629	transcription regulator	Nucleus
ACADS: acyl-CoA dehydrogenase, C-2 to C-3 short chain	-3.63	enzyme	Cytoplasm
DHCR24: 24-dehydrocholesterol reductase	-3.631	enzyme	Cytoplasm
ADRB1: adrenoceptor beta 1	-3.637	G-protein coupled recepto	Plasma Membrane
QRFR: pyroglutamylated RFamide peptide receptor	-3.643	G-protein coupled recepto	Plasma Membrane
CDC42EP4: CDC42 effector protein (Rho GTPase binding) 4	-3.643	other	Cytoplasm
ANK3: ankyrin 3, node of Ranvier (ankyrin G)	-3.652	other	Plasma Membrane
ACSS2: acyl-CoA synthetase short-chain family member 2	-3.664	enzyme	Cytoplasm
LARGE: like-glycosyltransferase	-3.67	enzyme	Cytoplasm
ACTA1: actin, alpha 1, skeletal muscle	-3.703	other	Cytoplasm
PPP1R1A: protein phosphatase 1, regulatory (inhibitor) subunit 1A	-3.732	phosphatase	Cytoplasm
MYH8: myosin, heavy chain 8, skeletal muscle, perinatal	-3.761	enzyme	Cytoplasm
LOC102724788/PRODH: proline dehydrogenase (oxidase) 1	-3.765	enzyme	Cytoplasm
LOC101929335: uncharacterized LOC101929335	-3.795	other	Unknown
AKAP6: A kinase (PRKA) anchor protein 6	-3.844	other	Nucleus
FAM160A1: family with sequence similarity 160, member A1	-3.854	other	Unknown
CALB2: calbindin 2	-3.868	other	Cytoplasm
PACSIN3: protein kinase C and casein kinase substrate in neurons 3	-3.919	other	Cytoplasm
CLUH: clustered mitochondria (cluA/CLU1) homolog	-3.923	translation regulator	Cytoplasm
SFTPD: surfactant protein D	-3.95	other	Extracellular Space
CLGN: calmeglin	-3.964	peptidase	Cytoplasm
RARRES1: retinoic acid receptor responder (tazarotene induced) 1	-3.977	other	Plasma Membrane
RTP3: receptor (chemosensory) transporter protein 3	-3.98	other	Cytoplasm
PCDH9: protocadherin 9	-4.019	other	Plasma Membrane
CASZ1: castor zinc finger 1	-4.021	enzyme	Nucleus
CES1: carboxylesterase 1	-4.068	enzyme	Cytoplasm
CRYAB: crystallin, alpha B	-4.114	other	Nucleus
OPLAH: 5-oxoprolinase (ATP-hydrolysing)	-4.132	enzyme	Cytoplasm
MOG: myelin oligodendrocyte glycoprotein	-4.209	other	Extracellular Space
KCNIP2: Kv channel interacting protein 2	-4.22	other	Cytoplasm
CORO6: coronin 6	-4.23	other	Extracellular Space
LMO3: LIM domain only 3 (rhombotin-like 2)	-4.231	other	Nucleus
PLIN5: perilipin 5	-4.236	other	Plasma Membrane
ALDH1L1: aldehyde dehydrogenase 1 family, member L1	-4.236	enzyme	Cytoplasm
DUSP27: dual specificity phosphatase 27 (putative)	-4.239	phosphatase	Unknown

TAC1: tachykinin, precursor 1	-4.242	other	Extracellular Space
MYO7B: myosin VIIB	-4.26	peptidase	Unknown
CHI3L1: chitinase 3-like 1 (cartilage glycoprotein-39)	-4.274	enzyme	Extracellular Space
RAMP1: receptor (G protein-coupled) activity modifying protein 1	-4.288	transporter	Plasma Membrane
COBL: cordon-bleu WH2 repeat protein	-4.302	other	Plasma Membrane
C15orf41: chromosome 15 open reading frame 41	-4.375	other	Unknown
GOT1: glutamic-oxaloacetic transaminase 1, soluble	-4.391	enzyme	Cytoplasm
SLC2A4: solute carrier family 2 (facilitated glucose transporter), member 4	-4.429	transporter	Plasma Membrane
SMAD6: SMAD family member 6	-4.432	transcription regulator	Nucleus
MT1A: metallothionein 1A	-4.438	other	Cytoplasm
C14orf180: chromosome 14 open reading frame 180	-4.486	other	Plasma Membrane
IRX2: iroquois homeobox 2	-4.5	transcription regulator	Nucleus
MYOM2: myomesin 2	-4.503	other	Cytoplasm
ZNF385B: zinc finger protein 385B	-4.511	other	Nucleus
COX7A1: cytochrome c oxidase subunit VIIa polypeptide 1 (muscle)	-4.559	enzyme	Cytoplasm
STRIP2: striatin interacting protein 2	-4.561	other	Cytoplasm
GADD45G: growth arrest and DNA-damage-inducible, gamma	-4.757	other	Nucleus
FREM2: FRAS1 related extracellular matrix protein 2	-4.776	other	Extracellular Space
SLC6A8: solute carrier family 6 (neurotransmitter transporter), member 8	-4.815	transporter	Cytoplasm
POPDC2: popeye domain containing 2	-4.847	other	Unknown
GTF2IRD1: GTF2I repeat domain containing 1	-4.869	transcription regulator	Nucleus
MPP3: membrane protein, palmitoylated 3 (MAGUK p55 subfamily member 3)	-4.923	kinase	Plasma Membrane
TNNI1: troponin I type 1 (skeletal, slow)	-4.956	other	Cytoplasm
FCN3: ficolin (collagen/fibrinogen domain containing) 3	-4.962	other	Extracellular Space
NKD2: naked cuticle homolog 2 (Drosophila)	-4.975	other	Nucleus
SLC4A3: solute carrier family 4 (anion exchanger), member 3	-5.03	transporter	Plasma Membrane
MYH14: myosin, heavy chain 14, non-muscle	-5.06	other	Extracellular Space
HRC: histidine rich calcium binding protein	-5.062	other	Cytoplasm
CAMK2B: calcium/calmodulin-dependent protein kinase II beta	-5.087	kinase	Cytoplasm
GPX3: glutathione peroxidase 3 (plasma)	-5.098	enzyme	Extracellular Space
LMOD2: leiomodulin 2 (cardiac)	-5.133	other	Unknown
CDH19: cadherin 19, type 2	-5.166	other	Plasma Membrane
LPL: lipoprotein lipase	-5.196	enzyme	Cytoplasm
ADAMTS4: ADAM metalloproteinase with thrombospondin type 1 motif, 4	-5.257	peptidase	Extracellular Space
CKB: creatine kinase, brain	-5.291	kinase	Cytoplasm
LDLR: low density lipoprotein receptor	-5.305	transporter	Plasma Membrane
SAA1: serum amyloid A1	-5.31	transporter	Extracellular Space
RPL3L: ribosomal protein L3-like	-5.396	other	Cytoplasm

UNC45B: unc-45 homolog B (C. elegans)	-5.424	other	Cytoplasm
LINC00881: long intergenic non-protein coding RNA 881	-5.425	other	Unknown
HSPB7: heat shock 27kDa protein family, member 7 (cardiovascular)	-5.462	other	Cytoplasm
KLF15: Kruppel-like factor 15	-5.465	transcription regulator	Nucleus
B4GALNT3: beta-1,4-N-acetyl-galactosaminyl transferase 3	-5.521	enzyme	Unknown
ASB11: ankyrin repeat and SOCS box containing 11, E3 ubiquitin protein ligase	-5.522	transcription regulator	Nucleus
KLHL40: kelch-like family member 40	-5.545	other	Unknown
SLC25A4: solute carrier family 25 (mitochondrial carrier; adenine nucleotide translocator), me	-5.556	transporter	Cytoplasm
PTX3: pentraxin 3, long	-5.562	other	Extracellular Space
ELF3: E74-like factor 3 (ets domain transcription factor, epithelial-specific)	-5.629	transcription regulator	Nucleus
MYO18B: myosin XVIIIIB	-5.694	other	Cytoplasm
PPARGC1A: peroxisome proliferator-activated receptor gamma, coactivator 1 alpha	-5.725	transcription regulator	Nucleus
ANKRD2: ankyrin repeat domain 2 (stretch responsive muscle)	-5.738	transcription regulator	Nucleus
IRX3: iroquois homeobox 3	-5.78	transcription regulator	Nucleus
FLNC: filamin C, gamma	-5.981	other	Cytoplasm
PCDH20: protocadherin 20	-6.075	other	Unknown
TAS2R43: taste receptor, type 2, member 43	-6.267	G-protein coupled recepto	Plasma Membrane
LINC00473: long intergenic non-protein coding RNA 473	-6.397	other	Unknown
CYP1A1: cytochrome P450, family 1, subfamily A, polypeptide 1	-6.447	enzyme	Cytoplasm
PRSS45: protease, serine, 45	-6.487	peptidase	Unknown
MGST1: microsomal glutathione S-transferase 1	-6.612	enzyme	Cytoplasm
TRIM55: tripartite motif containing 55	-6.908	other	Cytoplasm
HPR: haptoglobin-related protein	-6.981	peptidase	Extracellular Space
CSRP3: cysteine and glycine-rich protein 3 (cardiac LIM protein)	-7.522	other	Nucleus
CACNA1C-IT1: CACNA1C intronic transcript 1 (non-protein coding)	-7.536	other	Unknown
TNNC1: troponin C type 1 (slow)	-7.615	other	Cytoplasm
FASN: fatty acid synthase	-7.661	enzyme	Cytoplasm
TBX20: T-box 20	-7.835	transcription regulator	Nucleus
TNNI3: troponin I type 3 (cardiac)	-7.934	transporter	Cytoplasm
RRAD: Ras-related associated with diabetes	-8.014	enzyme	Cytoplasm
NDRG4: NDRG family member 4	-8.061	other	Unknown
AZGP1: alpha-2-glycoprotein 1, zinc-binding	-8.082	transporter	Extracellular Space
NPPB: natriuretic peptide B	-8.346	other	Extracellular Space
EEF1A2: eukaryotic translation elongation factor 1 alpha 2	-8.464	translation regulator	Cytoplasm
XIRP2: xin actin-binding repeat containing 2	-8.473	other	Unknown
JPH1: junctophilin 1	-8.831	other	Plasma Membrane
SERPINA3: serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3	-9.146	other	Extracellular Space
ABRA: actin-binding Rho activating protein	-9.338	transcription regulator	Cytoplasm

MYPN: myopalladin	-9.537	other	Cytoplasm
IL1RL1: interleukin 1 receptor-like 1	-9.603	transmembrane receptor	Plasma Membrane
CKM: creatine kinase, muscle	-10.093	kinase	Cytoplasm
GATA4: GATA binding protein 4	-10.105	transcription regulator	Nucleus
ANKRD1: ankyrin repeat domain 1 (cardiac muscle)	-10.173	transcription regulator	Cytoplasm
TRIM63: tripartite motif containing 63, E3 ubiquitin protein ligase	-10.22	enzyme	Nucleus
MYL3: myosin, light chain 3, alkali; ventricular, skeletal, slow	-12.005	other	Cytoplasm
ZFP57: ZFP57 zinc finger protein	-12.047	transcription regulator	Nucleus
NRAP: nebulin-related anchoring protein	-12.763	other	Cytoplasm
MYH6: myosin, heavy chain 6, cardiac muscle, alpha	-14.387	enzyme	Cytoplasm
XIRP1: xin actin-binding repeat containing 1	-18.38	other	Plasma Membrane
LOC285556: uncharacterized LOC285556	-20.47	other	Unknown

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Supplemental Table 3. Dysregulated molecular pathways (8 KD cases vs 7 controls)

Pathways	DEGs	pValue
Primary Immunodeficiency Signaling	26	5.65348E-21
Communication between Innate and Adaptive Immune Cells	30	1.08186E-17
iCOS-iCOSL Signaling in T Helper Cells	32	3.1186E-17
Altered T Cell and B Cell Signaling in Rheumatoid Arthritis	29	3.83575E-17
B Cell Development	17	3.62354E-14
CD28 Signaling in T Helper Cells	28	1.34919E-12
Role of NFAT in Regulation of the Immune Response	33	6.43132E-12
PKC θ Signaling in T Lymphocytes	27	8.5034E-12
Autoimmune Thyroid Disease Signaling	17	5.10052E-11
Hematopoiesis from Pluripotent Stem Cells	17	1.05849E-10
T Cell Receptor Signaling	23	1.37973E-10
Antigen Presentation Pathway	14	6.88573E-10
Calcium-induced T Lymphocyte Apoptosis	18	7.0292E-10
Crosstalk between Dendritic Cells and Natural Killer Cells	21	9.60653E-10
Systemic Lupus Erythematosus Signaling	34	1.80005E-09
Allograft Rejection Signaling	20	3.15616E-09
Graft-versus-Host Disease Signaling	15	3.7009E-09
T Helper Cell Differentiation	18	4.41087E-09
CTLA4 Signaling in Cytotoxic T Lymphocytes	20	4.84116E-09
Nur77 Signaling in T Lymphocytes	16	6.42304E-09
Dendritic Cell Maturation	29	8.48813E-09
Agranulocyte Adhesion and Diapedesis	29	2.965E-08
OX40 Signaling Pathway	19	3.47848E-08
Natural Killer Cell Signaling	21	5.32136E-08
Hepatic Fibrosis / Hepatic Stellate Cell Activation	29	7.52606E-08
Phospholipase C Signaling	32	1.55327E-07
TREM1 Signaling	16	4.20503E-07
Cdc42 Signaling	25	4.25915E-07
Leukocyte Extravasation Signaling	27	9.94328E-07
Role of Macrophages, Fibroblasts and Endothelial Cells in Rheumatoid Arthritis	35	1.01207E-06
LXR/RXR Activation	20	1.2367E-06
B Cell Receptor Signaling	24	3.92104E-06
Granulocyte Adhesion and Diapedesis	24	4.33367E-06
Atherosclerosis Signaling	19	6.35784E-06
IL-4 Signaling	14	1.34785E-05
Type I Diabetes Mellitus Signaling	17	1.91582E-05
NF- κ B Signaling	22	2.97739E-05
Role of Pattern Recognition Receptors in Recognition of Bacteria and Viruses	18	3.66144E-05
TR/RXR Activation	14	4.98809E-05
CCR5 Signaling in Macrophages	12	9.89103E-05
Role of JAK1 and JAK3 in γ c Cytokine Signaling	11	0.0002
IL-8 Signaling	21	0.0002
Toll-like Receptor Signaling	12	0.0002
Creatine-phosphate Biosynthesis	3	0.0004
Tec Kinase Signaling	18	0.0006
Eicosanoid Signaling	10	0.0008
IL-2 Signaling	9	0.0009
G-Protein Coupled Receptor Signaling	24	0.001
MSP-RON Signaling Pathway	8	0.001
Role of MAPK Signaling in the Pathogenesis of Influenza	10	0.001

Phospholipases	9	0.001
Fcγ Receptor-mediated Phagocytosis in Macrophages and Monocytes	12	0.002
Fc Epsilon RI Signaling	13	0.002
NF-κB Activation by Viruses	10	0.002
Cytotoxic T Lymphocyte-mediated Apoptosis of Target Cells	6	0.004
Gα12/13 Signaling	13	0.004
Reelin Signaling in Neurons	10	0.004
Signaling by Rho Family GTPases	21	0.005
Role of Osteoblasts, Osteoclasts and Chondrocytes in Rheumatoid Arthritis	20	0.005
cAMP-mediated signaling	20	0.005
Sperm Motility	13	0.005
IL-10 Signaling	9	0.005
IL-9 Signaling	6	0.005
Tryptophan Degradation to 2-amino-3-carboxymuconate Semialdehyde	3	0.005
Triacylglycerol Biosynthesis	6	0.006
Triacylglycerol Degradation	5	0.006
Chemokine Signaling	9	0.007
Caveolar-mediated Endocytosis Signaling	9	0.007
Pathogenesis of Multiple Sclerosis	3	0.007
FXR/RXR Activation	13	0.008
ILK Signaling	17	0.008
PI3K Signaling in B Lymphocytes	13	0.009
Actin Cytoskeleton Signaling	19	0.009
GM-CSF Signaling	8	0.009
Paxillin Signaling	11	0.01
Virus Entry via Endocytic Pathways	10	0.01
FcγRIIB Signaling in B Lymphocytes	6	0.01
IL-15 Signaling	8	0.01
Cardiomyocyte Differentiation via BMP Receptors	4	0.01
Antioxidant Action of Vitamin C	10	0.02
Endothelin-1 Signaling	15	0.02
MIF-mediated Glucocorticoid Regulation	5	0.02
Oleate Biosynthesis II (Animals)	3	0.02
Retinol Biosynthesis	5	0.02
Calcium Signaling	15	0.02
RANK Signaling in Osteoclasts	9	0.03
Production of Nitric Oxide and Reactive Oxygen Species in Macrophages	15	0.03
Human Embryonic Stem Cell Pluripotency	12	0.03
Glycerol Degradation I	2	0.03
Factors Promoting Cardiogenesis in Vertebrates	9	0.03
NAD biosynthesis II (from tryptophan)	3	0.03
CDP-diacylglycerol Biosynthesis I	3	0.03
Acute Phase Response Signaling	14	0.03
fMLP Signaling in Neutrophils	10	0.03
Protein Ubiquitination Pathway	6	0.04
Regulation of IL-2 Expression in Activated and Anergic T Lymphocytes	8	0.04
CD40 Signaling	7	0.04
SAPK/JNK Signaling	9	0.04
Docosahexaenoic Acid (DHA) Signaling	5	0.04
B Cell Activating Factor Signaling	5	0.04
Lymphotoxin β Receptor Signaling	6	0.04
Role of IL-17A in Arthritis	6	0.04

CDK5 Signaling	1	0.05
MIF Regulation of Innate Immunity	5	0.05
Phosphatidylglycerol Biosynthesis II (Non-plastidic)	3	0.05
γ -linolenate Biosynthesis II (Animals)	3	0.05
Dopamine-DARPP32 Feedback in cAMP Signaling	3	0.05
Melatonin Degradation III	1	0.05

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Supplemental Table 4. Differential expression of genes involved in antigen presentation and dendritic cell function in KD compared to control coronary arteries by real-time reverse transcriptase PCR assays

<u>Gene</u>	<u>Fold Change (95% CI)</u>	<u>Adjusted <i>p</i>-value</u>
CD74	11.2 (3.3-37.9)	0.001
CD226	7.9 (2.3-26.9)	0.004
CD69	6.9 (2.0-23.5)	0.005
IL18	6.3 (1.9-21.6)	0.006
NLRC5	5.3 (1.5-17.9)	0.010
HLA-F	4.2 (1.2-14.4)	0.022

Supplemental Table 5. Extracellular genes dysregulated in 8 KD coronary arteries compared with 7 childhood control coronary arteries

Gene	Fold change	Molecular Function
CXCL9: chemokine (C-X-C motif) ligand 9	48.0	cytokine
IGHG1: immunoglobulin heavy constant gamma 1 (G1m marker)	45.0	other
IGJ: immunoglobulin J polypeptide, linker protein for immunoglobulin alpha and mu polypeptides	31.3	other
CXCL13: chemokine (C-X-C motif) ligand 13	21.8	cytokine
ADAMDEC1: ADAM-like, decysin 1	20.5	peptidase
IGHG3: immunoglobulin heavy constant gamma 3 (G3m marker)	17.0	other
IGKV3-20: immunoglobulin kappa variable 3-20	16.0	other
IGHA1: immunoglobulin heavy constant alpha 1	12.8	other
IGHG4: immunoglobulin heavy constant gamma 4 (G4m marker)	12.5	other
IGLC3: immunoglobulin lambda constant 3 (Kern-Oz+ marker)	11.9	other
IGKV1-5: immunoglobulin kappa variable 1-5	11.5	other
COMP: cartilage oligomeric matrix protein	11.4	other
CCL18: chemokine (C-C motif) ligand 18 (pulmonary and activation-regulated)	10.6	cytokine
ACAN: aggrecan	10.4	other
IGLC2: immunoglobulin lambda constant 2 (Kern-Oz- marker)	10.3	other
NELL2: NEL-like 2 (chicken)	8.8	other
LYZ: lysozyme	8.4	enzyme
MXRA5: matrix-remodelling associated 5	8.1	other
CXCL14: chemokine (C-X-C motif) ligand 14	8.1	cytokine
COL11A1: collagen, type XI, alpha 1	7.5	other
IGKC: immunoglobulin kappa constant	7.3	other
RNASE6: ribonuclease, RNase A family, k6	6.9	enzyme
POSTN: periostin, osteoblast specific factor	6.5	other
CCL5: chemokine (C-C motif) ligand 5	6.5	cytokine
IGKV4-1: immunoglobulin kappa variable 4-1	6.4	other
PRSS35: protease, serine, 35	6.4	peptidase
SCG2: secretogranin II	6.2	cytokine
EGFL6: EGF-like-domain, multiple 6	6.2	other
AOAH: acyloxyacyl hydrolase (neutrophil)	6.0	enzyme
PLA2G7: phospholipase A2, group VII (platelet-activating factor acetylhydrolase, plasma)	5.9	enzyme
XCL1: chemokine (C motif) ligand 1	5.4	cytokine
FAM46C: family with sequence similarity 46, member C	5.3	other

IGHA2: immunoglobulin heavy constant alpha 2 (A2m marker)	5.0 other
IGHD: immunoglobulin heavy constant delta	4.8 other
SAMD9L: sterile alpha motif domain containing 9-like	4.7 other
CECR1: cat eye syndrome chromosome region, candidate 1	4.7 enzyme
FCN1: ficolin (collagen/fibrinogen domain containing) 1	4.7 other
LTBP2: latent transforming growth factor beta binding protein 2	4.7 other
OLFML2B: olfactomedin-like 2B	4.5 other
DMP1: dentin matrix acidic phosphoprotein 1	4.4 other
TNFSF13B: tumor necrosis factor (ligand) superfamily, member 13b	4.2 cytokine
BTN3A1: butyrophilin, subfamily 3, member A1	4.1 other
ERMN: ermin, ERM-like protein	4.1 other
C16orf54: chromosome 16 open reading frame 54	4.0 other
ASPN: asporin	4.0 other
TNFSF11: tumor necrosis factor (ligand) superfamily, member 11	4.0 cytokine
FASLG: Fas ligand (TNF superfamily, member 6)	3.9 cytokine
COL22A1: collagen, type XXII, alpha 1	3.6 other
ADAMTS14: ADAM metallopeptidase with thrombospondin type 1 motif, 14	3.6 peptidase
SLITRK4: SLIT and NTRK-like family, member 4	3.5 other
NOG: noggin	3.5 growth factor
GLT1D1: glycosyltransferase 1 domain containing 1	3.5 enzyme
IL24: interleukin 24	3.4 cytokine
FGL2: fibrinogen-like 2	3.4 peptidase
IL18: interleukin 18	3.4 cytokine
CXCL16: chemokine (C-X-C motif) ligand 16	3.4 cytokine
AIM1: absent in melanoma 1	3.4 other
FDCSP: follicular dendritic cell secreted protein	3.4 other
MZB1: marginal zone B and B1 cell-specific protein	3.4 other
TEX15: testis expressed 15	3.4 other
PLXDC2: plexin domain containing 2	3.3 other
BANK1: B-cell scaffold protein with ankyrin repeats 1	3.2 other
DEF6: differentially expressed in FDCEP 6 homolog (mouse)	3.2 other
SPINK1: serine peptidase inhibitor, Kazal type 1	3.2 other
BGN: biglycan	3.1 other
OSM: oncostatin M	3.0 cytokine

CTGF: connective tissue growth factor	2.9 growth factor
IL1RN: interleukin 1 receptor antagonist	2.8 cytokine
COL8A1: collagen, type VIII, alpha 1	2.8 other
CCL22: chemokine (C-C motif) ligand 22	2.8 cytokine
SMOC2: SPARC related modular calcium binding 2	2.8 other
ABCA13: ATP-binding cassette, sub-family A (ABC1), member 13	2.8 transporter
LIPM: lipase, family member M	2.7 enzyme
TDGF1: teratocarcinoma-derived growth factor 1	2.7 growth factor
PZP: pregnancy-zone protein	2.6 other
EDIL3: EGF-like repeats and discoidin I-like domains 3	2.6 other
SPOCK3: sparc/osteonectin, cwcv and kazal-like domains proteoglycan (testican) 3	2.6 other
CA6: carbonic anhydrase VI	2.6 enzyme
LPO: lactoperoxidase	2.5 enzyme
VNN3: vanin 3	2.5 enzyme
LTB: lymphotoxin beta (TNF superfamily, member 3)	2.3 cytokine
DEFA4: defensin, alpha 4, corticostatin	2.3 other
APELA: apelin receptor early endogenous ligand	2.3 other
CPXM2: carboxypeptidase X (M14 family), member 2	2.2 peptidase
FGF20: fibroblast growth factor 20	2.2 growth factor
OGN: osteoglycin	2.0 growth factor
PAPLN: papilin, proteoglycan-like sulfated glycoprotein	2.0 other
PI16: peptidase inhibitor 16	1.9 other
IBSP: integrin-binding sialoprotein	1.7 other
EREG: epiregulin	1.7 growth factor
OLFM4: olfactomedin 4	1.6 other
EPPIN: epididymal peptidase inhibitor	1.6 other
F13B: coagulation factor XIII, B polypeptide	1.6 enzyme
PGC: progastricsin (pepsinogen C)	-1.5 peptidase
CHI3L2: chitinase 3-like 2	-1.6 enzyme
BMP10: bone morphogenetic protein 10	-1.6 growth factor
BMP3: bone morphogenetic protein 3	-1.6 growth factor
PLA2G1B: phospholipase A2, group IB (pancreas)	-1.7 enzyme
ADIPOQ: adiponectin, C1Q and collagen domain containing	-1.7 other
CCL2: chemokine (C-C motif) ligand 2	-1.8 cytokine

LAMB3: laminin, beta 3	-1.8 transporter
PCSK9: proprotein convertase subtilisin/kexin type 9	-1.8 peptidase
LEP: leptin	-1.9 growth factor
CPB2: carboxypeptidase B2 (plasma)	-1.9 peptidase
LGALS12: lectin, galactoside-binding, soluble, 12	-2.0 other
NMB: neuromedin B	-2.0 other
LIPH: lipase, member H	-2.1 enzyme
LIPG: lipase, endothelial	-2.2 enzyme
AGR2: anterior gradient 2	-2.2 other
NAPSA: napsin A aspartic peptidase	-2.3 peptidase
SFTPC: surfactant protein C	-2.3 other
RBP4: retinol binding protein 4, plasma	-2.3 transporter
ADAMTS19: ADAM metallopeptidase with thrombospondin type 1 motif, 19	-2.4 peptidase
SFTPB: surfactant protein B	-2.4 other
ADAMTS15: ADAM metallopeptidase with thrombospondin type 1 motif, 15	-2.4 peptidase
SHH: sonic hedgehog	-2.5 peptidase
TF: transferrin	-2.5 transporter
CSF3: colony stimulating factor 3 (granulocyte)	-2.6 cytokine
TFPI2: tissue factor pathway inhibitor 2	-2.6 other
ARTN: artemin	-2.6 growth factor
COL4A4: collagen, type IV, alpha 4	-2.7 other
F11: coagulation factor XI	-2.7 peptidase
WIF1: WNT inhibitory factor 1	-2.8 other
MSLN: mesothelin	-2.9 other
SAA2: serum amyloid A2	-2.9 other
TIMP4: TIMP metallopeptidase inhibitor 4	-2.9 other
WISP2: WNT1 inducible signaling pathway protein 2	-3.0 growth factor
HAMP: hepcidin antimicrobial peptide	-3.0 other
PAPPA: pregnancy-associated plasma protein A, pappalysin 1	-3.0 peptidase
HP: haptoglobin	-3.0 peptidase
ADAMTS9: ADAM metallopeptidase with thrombospondin type 1 motif, 9	-3.1 peptidase
C1QTNF1: C1q and tumor necrosis factor related protein 1	-3.2 other
FAM213A: family with sequence similarity 213, member A	-3.2 other
COL4A3: collagen, type IV, alpha 3 (Goodpasture antigen)	-3.2 other

ADAMTS8: ADAM metallopeptidase with thrombospondin type 1 motif, 8	-3.3 peptidase
SFTPA2: surfactant protein A2	-3.3 other
FRAS1: Fraser syndrome 1	-3.4 other
SFTPA1: surfactant protein A1	-3.4 transporter
CFD: complement factor D (adipsin)	-3.5 peptidase
SFTPD: surfactant protein D	-4.0 other
MOG: myelin oligodendrocyte glycoprotein	-4.2 other
CORO6: coronin 6	-4.2 other
TAC1: tachykinin, precursor 1	-4.2 other
CHI3L1: chitinase 3-like 1 (cartilage glycoprotein-39)	-4.3 enzyme
FREM2: FRAS1 related extracellular matrix protein 2	-4.8 other
FCN3: ficolin (collagen/fibrinogen domain containing) 3	-5.0 other
MYH14: myosin, heavy chain 14, non-muscle	-5.1 other
GPX3: glutathione peroxidase 3 (plasma)	-5.1 enzyme
ADAMTS4: ADAM metallopeptidase with thrombospondin type 1 motif, 4	-5.3 peptidase
SAA1: serum amyloid A1	-5.3 transporter
PTX3: pentraxin 3, long	-5.6 other
HPR: haptoglobin-related protein	-7.0 peptidase
AZGP1: alpha-2-glycoprotein 1, zinc-binding	-8.1 transporter
NPPB: natriuretic peptide B	-8.3 other
SERPINA3: serpin peptidase inhibitor, clade A (alpha-1 antiproteinase, antitrypsin), member 3	-9.1 other

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Supplemental Figure Legend.

Supplemental Figure 1. Principal components analysis of all genes in 8 KD (4 treated and 4 untreated) and 7 childhood control coronary artery tissues demonstrates that gene expression of untreated (red dots) and treated (black dots) KD patients are not distinguishable. Ellipses show the 80% confidence interval for gene expression in KD (red dashed line) and control (blue dashed line) coronary arteries. As expected, there is partial overlap of KD and control gene expression, although gene expression in most of the KD tissue samples falls outside the control gene expression ellipse.

Principal components of samples

