

Supplemental Table 1A. Top 100 Differentially Expressed Proteins (abundance ratios): Comparison 1

Protein Name	Gene ID	FC Ratio	Cellular Location	Molecular Function
Actin-related protein 2/3 complex subunit 1B	Arpc1b	4.34	cytoplasm; cytoskeleton	protein binding; structural molecule
Alpha-1-antitrypsin 1-1	Serpina1a; Serpina1d	5.01	ER; extracellular; Golgi	enzyme regulator activity; protein binding
Alpha-1-antitrypsin 1-2	Serpina1b	5.68	ER; extracellular; Golgi	enzyme regulator activity; protein binding
Alpha-1-antitrypsin 1-4	Serpina1d	6.88	ER; extracellular; Golgi	enzyme regulator activity; protein binding
Alpha-2-HS-glycoprotein	Ahsg	5.42	extracellular; Golgi	enzyme regulator activity
Antithrombin-III	Serpinc1	4.43	extracellular	enzyme regulator activity; protein binding
Apolipoprotein A-I	Apoa1	3.21	cell surface; cytosol; extracellular; nucleus	enzyme regulator activity; protein binding; transporter activity
Apolipoprotein A-IV	Apoa4	4.26	cell surface; cytosol; extracellular	antioxidant activity; catalytic activity; enzyme regulator; metal ion binding; protein binding; transporter activity
Apolipoprotein C-III	Apoc3	3.20	cytosol; extracellular	enzyme regulator activity; protein binding
Apolipoprotein E	ApoE	3.28	cytoplasm; cytosol; ER; endosome; extracellular; Golgi nucleus	antioxidant activity; catalytic activity; enzyme regulator; metal ion binding; protein binding; transporter activity
Arginase-1	Arg1	6.15	cytoplasm; membrane; nucleus	catalytic activity; metal ion binding
Beta-2-glycoprotein 1	ApoH	4.72	cell surface; cytoplasm; ECM	enzyme regulator activity; protein binding
beta-crystallin A1	Cryba1	-1.92	cytoplasm; nucleus	protein binding; structural molecule

Beta-crystallin A2	Cryba2	-2.08	other	protein binding; structural molecule
Beta-crystallin B1	Crybb1	-2.86	other	protein binding; structural molecule
Beta-crystallin B2	Crybb2	-2.50	other	protein binding; structural molecule
Beta-crystallin S	Crygs	-2.70	cytosol	structural molecule
Beta-enolase	Eno3	-2.00	cytoplasm; cytosol; membrane	catalytic activity; metal ion binding; protein binding
C2 domain-containing protein 5	5730419I09Rik; C2cd5	-1.79	cytoplasm; cytosol; membrane	metal ion binding; protein binding
carbonic anhydrase 3	Car3	-1.75	cytoplasm; cytosol	catalytic activity; metal ion binding
Carboxylesterase 1C	Ces1c	5.55	ER; organelle lumen	catalytic activity
Ciliary neurotrophic factor	Cntf; Zfp91Cntf; Gm44505	3.48	cytoplasm; cytosol; nucleus	protein binding
Clusterin	Clu	4.65	cell surface; cytoplasm; cytosol; ER; ECM; mitochondrion; nucleus	catalytic activity; protein binding
Complement C1q subcomponent subunit A	C1qa	5.82	ECM	protein binding
Complement component C8 beta chain	C8b	3.65	extracellular	protein binding
complement component C9	C9	5.00	cytosol; ECM	protein binding
Complement factor B	Cfb	6.07	extracellular	catalytic activity
Cone cGMP-specific 3',5'-cyclic phosphodiesterase subunit alpha'	Pde6c	3.57	membrane	catalytic activity; metal ion binding; nucleotide binding; protein binding

Conserved oligomeric Golgi complex subunit 7	Cog7	-1.79	Golgi; membrane	
corticosteroid-binding globulin	Serpina6	3.21	extracellular	enzyme regulator activity
Creatine kinase M-type	Ckm	-1.72	cytoplasm	catalytic activity; nucleotide binding
DDRGK domain-containing protein 1	Ddrbk1	-1.82	ER; membrane	protein binding
Dihydroorotate dehydrogenase (Quinone), mitochondrial	Dhodh	-1.75	cytoplasm; cytosol; membrane; mitochondrion	catalytic activity; nucleotide binding
Dynactin subunit 6	Dctn6	3.41	chromosome; cytoplasm; cytoskeleton; mitochondrion	catalytic activity; protein binding
Exocyst complex component 6B	Exoc6b	-2.22	other	
F-actin-capping protein subunit beta	Capzb	-1.96	cytoplasm; cytoskeleton; membrane	protein binding
Fascin-2	Fscn2; 0610009L18Rik	-1.85	cytoplasm; cytoskeleton	protein binding
Fatty acid-binding protein, epidermal	Fabp5	-3.57	cytoplasm	transporter activity
Fibrinogen alpha chain	Fga	5.51	cell surface; cytoplasm; ER; extracellular	metal ion binding; protein binding; structural molecule
Fibrinogen beta chain	Fgb	4.15	cell surface; cytoplasm; extracellular	protein binding; structural molecule
Fibrinogen gamma chain	Fgg	3.71	cell surface; cytoplasm; extracellular	metal ion binding; protein binding; structural molecule
Fibulin-1	Fbln1	9.29	extracellular	enzyme regulator activity; metal ion binding; protein binding
filensin	Bfsp1	-3.86	cytoplasm; cytoskeleton; membrane	protein binding; structural molecule

Gamma-crystallin A	Cryga	-1.89	cytoplasm; nucleus	structural molecule
Gamma-crystallin B	Crygb	-3.13	cytoplasm; nucleus	structural molecule
Gamma-crystallin C	Crygc	-3.45	cytoplasm; nucleus	structural molecule
Gamma-crystallin D	Crygd	-4.35	cytoplasm; nucleus	structural molecule
Gamma-crystallin E	Cryge	-12.50	other	structural molecule
Grifin	Grifin	-3.57	other	protein binding
H-2 class I histocompatibility antigen, K-B alpha chain	H2-K1	5.53	cell surface; ER; Golgi	protein binding; RNA binding
Heme-binding protein 2	Hebp2	-1.79	cytoplasm; mitochondrion	
Hemopexin	Hpx	3.17	extracellular	metal ion binding; transporter activity
Histone H3.1	Hist1h3i; Hist1h3a; Hist1h3g; Hist1h3h	3.74	chromosome; membrane; nucleus	DNA binding; protein binding
Ig gamma-1 chain C region, membrane-bound form	Ighg1	5.09	membrane	protein binding
Ig heavy chain V region AC38 205.12	IghmAC38.205.12	3.23	other	
Ig kappa chain C region	Igkc	6.04	membrane	metal ion binding; protein binding
Inositol hexakisphosphate/diphosphoinositol-pentakisphosphate kinase 1	Ppip5k1	-6.25	cytoplasm; cytosol; membrane	catalytic activity; nucleotide binding
Interferon-induced 35 kDa protein homolog	Ifi35	3.22	nucleus	

Isoform 2 of Eukaryotic initiation factor 4A-II	Eif4a2	-3.33	cytoplasm	catalytic activity; DNA binding; nucleotide binding; RNA binding
Isoform LMW of Kininogen-1	Kng1	4.06	extracellular	enzyme regulator activity; protein binding
Keratin, type II cytoskeletal 1	Krt1	-1.79	cytoskeleton; membrane; nucleus	structural molecule
Liver carboxylesterase 1	Ces1g	4.30	ER; organelle lumen	catalytic activity
major urinary protein 18	Mup11; Mup18; Mup2; Mup19	5.24	cytosol; extracellular; nucleus	catalytic activity; receptor activity; signal transducer; transporter
Methionine aminopeptidase 1	Metap1	3.15	cytoplasm	catalytic activity; metal ion binding
Mitochondrial 10-formyltetrahydrofolate dehydrogenase	Aldh1l2	-1.75	cytoplasm; mitochondrion	catalytic activity
Murinoglobulin-1	Mug1	4.60	extracellular	enzyme regulator activity
N-alpha-acetyltransferase 25, NatB auxiliary subunit	Naa25	-1.75	cytoplasm; cytosol; Golgi	catalytic activity; protein binding
NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 3	Ndufa3	-2.27	membrane; mitochondrion	
paralemmin-2	Palm2	-4.35	membrane	
Periaxin	Prx	-2.50	cytoplasm; cytosol; membrane; nucleus	protein binding
Phakinin	Bfsp2	-3.45	cytoplasm; cytoskeleton; membrane	protein binding; structural molecule
Pinin	Pnn	-1.72	cytoplasm; membrane; nucleus; spliceosomal complex	DNA binding; RNA binding
Plasminogen	Plg	3.21	cell surface; ECM	catalytic activity; protein binding

Potassium voltage-gated channel subfamily C member 2	Kcnc2	-2.08	membrane	protein binding; transporter activity
Probable ATP-dependent RNA helicase DDX58	Ddx58	3.33	cytoplasm; cytoskeleton; cytosol; membrane	catalytic activity; DNA binding; metal ion binding; nucleotide binding; protein binding; RNA binding
rho guanine nucleotide exchange factor 10	Arhgef10	-3.45	cytosol	protein binding
Rhodopsin	Rho	-2.50	Golgi; membrane	metal ion binding; protein binding; receptor activity; signal transducer activity
RING1 and YY1-binding protein	Rybp	-2.08	cytoplasm; nucleus	DNA binding; metal ion binding; protein binding
Serine protease HTRA1	Htra1	3.65	cytoplasm; cytosol; ECM	catalytic activity; protein binding
Serine protease inhibitor A3K	Serpina3k	6.05	extracellular	enzyme regulator activity; protein binding
Serine protease inhibitor A3N	Serpina3n	10.49	extracellular	enzyme regulator activity
Serine/threonine-protein kinase VRK1	Vrk1	-1.75	cytoplasm; cytoskeleton; cytosol; nucleus	catalytic activity; nucleotide binding; protein binding
Serotransferrin	Trf	4.79	cell surface; endosome; ECM	metal ion binding; protein binding; transporter activity
Serum albumin	Alb	3.96	cytoplasm; ER; extracellular; Golgi; nucleus	DNA binding; metal ion binding; protein binding
Solute carrier family 2, facilitated glucose transporter member 1	Slc2a1	-1.72	cytoplasm; cytoskeleton; cytosol; membrane; nucleus	protein binding; transporter activity
spliceosome-associated protein CWC15 homolog	Cwc15	-3.85	mitochondrion; nucleus; spliceosomal complex	RNA binding
syntaxin-1A	Stx1a	-2.44	membrane	protein binding
T-complex protein 11	Tcp11	-2.13	membrane	protein binding

THO complex subunit 5 homolog	Thoc5	-4.17	chromosome; cytoplasm; nucleus	protein binding; RNA binding
Transforming growth factor-beta-induced protein ig-h3	Tgfb1	5.23	extracellular	protein binding
Transmembrane glycoprotein NMB	Gpnmb	3.10	membrane	protein binding
Transthyretin	Ttr	4.72	extracellular	protein binding
Tubulin beta-6 chain	Tubb6	-2.44	cytoplasm; cytoskeleton; nucleus	catalytic activity; nucleotide binding; structural molecule
ubiquitin carboxyl-terminal hydrolase 8	Usp8	-2.17	cytoplasm; cytosol; endosome; membrane; nucleus	catalytic activity; protein binding
Ubiquitin conjugation factor E4 B	Ube4b	-1.75	cytoplasm; nucleus	catalytic activity; nucleotide binding; protein binding
Ubiquitin-conjugating enzyme E2 Z	Ube2z	-2.50	cytoplasm; cytosol; nucleus	catalytic activity; nucleotide binding; protein binding
UPF0598 protein C8orf82 homolog	C030006K11Rik	-6.67	mitochondrion	
vitamin D-binding protein	Gc	5.16	cytosol; extracellular	protein binding; transporter activity
Vitronectin	Vtn	4.19	cytoplasm; ER; extracellular; organelle lumen	protein binding; receptor activity

Supplemental Table 1B. Top 100 Differentially Expressed Proteins (abundance ratios): Comparison 2

Protein Name	Gene ID	FC Ratio	Cellular Location	Molecule Type
7SK snRNA methylphosphate capping enzyme	Mepce	2.91	nucleus	catalytic activity; RNA binding
Ankyrin repeat domain-containing protein 54	Ankrd54	5.09	cytoplasm; nucleus	enzyme regulator activity; protein binding
Adhesion G protein-coupled receptor A2	Gpr124; Adgra3; Adgra2	2.54	cell surface; membrane	protein binding; receptor activity; signal transducer activity
ADP-ribosylation factor-like protein 6-interacting protein 1	Arl6ip1	-9.09	cytoplasm; cytosol; ER; membrane	protein binding
Aldehyde dehydrogenase, cytosolic 1	Aldh1a7	2.86	cytoplasm	catalytic activity
annexin A1	Anxa1	2.18	Cell surface; cytoplasm; cytoskeleton; cytosol; endosome; ECM; nucleus; vacuole	catalytic activity; DNA binding; enzyme regulator activity; metal ion binding; protein binding; RNA binding; structural molecule
AP-5 complex subunit beta-1	Ap5b1; Gm962	2.17	membrane	
C2 domain-containing protein 5	5730419I09Rik; C2cd5	-1.96	cytoplasm; cytosol; membrane	metal ion binding; protein binding
CAAX prenyl protease 2	Rce1	-1.72	ER; membrane	catalytic activity
Calcium-binding protein 5	Cabp5	3.42	cytoplasm; cytosol	metal ion binding; protein binding
calcium/calmodulin-dependent protein kinase type 1	Camk1	-1.75	cytoplasm; nucleus	catalytic activity; nucleotide binding; protein binding
Casein kinase I isoform delta	Csnk1d	2.15	cytoplasm; cytoskeleton; cytosol; Golgi; membrane; nucleus	catalytic activity; nucleotide binding; protein binding
Catechol O-methyltransferase domain-containing protein 1	Comtd1	4.55	membrane; mitochondrion	catalytic activity

Cilia- and flagella-associated protein 20	Gtl3; Cfap20	2.61	cytoplasm; cytoskeleton; nucleus	RNA binding
Ciliary neurotrophic factor	Cntf; U05342; Zfp91Cntf; Gm44505	2.30	cytoplasm; cytosol; nucleus	protein binding
Coiled-coil-helix-coiled-coil-helix domain-containing protein 2	Chchd2	2.40	mitochondrion; nucleus	DNA binding; protein binding
Collagen alpha-1(XVIII) chain	Col18a1	2.36	extracellular	metal ion binding; protein binding; structural molecule
Conserved oligomeric Golgi complex subunit 7	Cog7	-2.86	Golgi; membrane	
DDRGK domain-containing protein 1	Ddrgk1	-1.75	ER; membrane	protein binding
Dihydroorotate dehydrogenase (Quinone), mitochondrial	Dhodh	-1.96	cytoplasm; cytosol; membrane; mitochondrion	catalytic activity; nucleotide binding
Dynactin subunit 6	Dctn6	3.71	chromosome; cytoplasm; cytoskeleton; mitochondrion	catalytic activity; protein binding
Dystrobrevin beta	Dtnb	2.36	cytoplasm	metal ion binding; protein binding
elongation of very long chain fatty acids protein 2	Elovl2	-1.89	ER; membrane	catalytic activity
ermin	Ermn	-1.75	cytoplasm; cytoskeleton	protein binding
Evolutionarily conserved signaling intermediate in Toll pathway, mitochondrial	Ecsit	2.47	cytoplasm; cytosol; mitochondrion; nucleus	catalytic activity; protein binding; signal transducer activity
Excitatory amino acid transporter 3	Slc1a1	2.40	membrane	metal ion binding; protein binding; transporter activity
Exocyst complex component 6B	Exoc6b	-2.08		
F-actin-capping protein subunit beta	Capzb	-2.38	cytoplasm; cytoskeleton; membrane	protein binding

Fibulin-1	Fbln1	2.18	extracellular	enzyme regulator activity; metal ion binding; protein binding; structural molecule
filensin	Bfsp1	-2.00	cytoplasm; cytoskeleton; membrane	protein binding; structural molecule
Gamma-crystallin A	Cryga	-8.33		structural molecule
Gamma-crystallin C	Crygc	-3.57	cytoplasm; nucleus	structural molecule
Gamma-crystallin D	Crygd	-3.44	cytoplasm; nucleus	structural molecule
Gamma-crystallin E	Cryge	-50.00	other	structural molecule
General transcription factor IIH subunit 4	Gtf2h4	2.47	nucleus	catalytic activity; DNA binding
Glutathione S-transferase theta-1	Gstt1	2.20	cytoplasm; cytosol; nucleus	antioxidant activity; catalytic activity; protein binding
Glycosylation-dependent cell adhesion molecule 1	Glycam1	3.96	ECM	protein binding
Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1	Gnb1	2.17	membrane	catalytic activity; protein binding; signal transducer activity
Guanine nucleotide-binding protein subunit beta-4	Gnb4	2.77	membrane	catalytic activity; protein binding; signal transducer activity
H-2 class I histocompatibility antigen, K-B alpha chain	H2-K1	3.15	cell surface; ER; Golgi; membrane	protein binding; RNA binding
Haptoglobin	Hp	2.23	ER; extracellular; Golgi	antioxidant activity; catalytic activity; protein binding
HD domain-containing protein 2	Hddc2	-2.86	mitochondrion	
Heat shock protein beta-1	Hspb1	-2.44	cytoplasm; cytoskeleton; membrane; nucleus; proteasome	enzyme regulator activity; protein binding; RNA binding

Histone H3.1	Hist1h3i; Hist1h3a; Hist1h3g; Hist1h3h	4.03	chromosome; membrane; nucleus	DNA binding; protein binding
histone H3.2	Hist1h3d; Hist1h3f; Hist2h3c1; Hist2h3b; Hist2h3c2; Hist1h3c; Hist1h3e; Hist1h3b	2.80	chromosome; membrane; nucleus	DNA binding; protein binding
Hydroxymethylglutaryl-CoA synthase, mitochondrial	Hmgcs2	3.44	membrane; mitochondrion; organelle lumen	catalytic activity
Inositol hexakisphosphate and diphosphoinositol-pentakisphosphate kinase 1	Ppip5k1	-5.88	cytoplasm; cytosol; membrane	catalytic activity; nucleotide binding
Insulin-like growth factor-binding protein 7	Igfbp7	2.34	extracellular	protein binding
Isoform 5 of Phosphatidylinositol-binding clathrin assembly protein	Picalm	-2.27	cell surface; endosome; Golgi; membrane; nucleus	protein binding
Isoform Gamma of Lamina-associated polypeptide 2, isoforms beta/delta/epsilon/gamma	Tmpo	-2.94	chromosome; membrane; nucleus	DNA binding; protein binding
Keratin, type I cytoskeletal 14	Krt14	2.90	cytoplasm; nucleus	protein binding; structural molecule
Lengsin	Lgsn	-3.85	membrane	catalytic activity; protein binding
Macrophage Migration inhibitory factor	Mif	2.70	cell surface; cytoplasm; cytosol; extracellular; nucleus	catalytic activity; protein binding
Methionine aminopeptidase 1	Metap1	3.28	cytoplasm	catalytic activity; metal ion binding
Mitochondrial 10-formyltetrahydrofolate dehydrogenase	Aldh1l2	-1.82	cytoplasm; mitochondrion	catalytic activity
molybdopterin synthase catalytic subunit	Mocs2	-1.75	cytoplasm; cytosol; nucleus	catalytic activity; nucleotide binding; protein binding
N-alpha-acetyltransferase 25, NatB auxiliary subunit	Naa25	-1.72	cytoplasm; cytosol; Golgi	catalytic activity; protein binding

NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 3	Ndufa3	-1.92	membrane; mitochondrion	
Nephrocystin-1	Nphp1	2.49	cytoplasm; cytoskeleton	protein binding
Nocturnin	Ccrn4l; Noct	2.23	cytoplasm; nucleus	catalytic activity; metal ion binding; protein binding; RNA binding
Non-lysosomal glucosylceramidase	Gba2	3.09	ER; Golgi; membrane	catalytic activity
NudC domain-containing protein 3	Nudcd3	-2.86	cytoplasm	protein binding
paralemmin-2	Palm2	-2.56	membrane	
Paxillin	Pxn	2.24	cytoplasm; cytoskeleton; cytosol; membrane	metal ion binding; protein binding; structural molecule
Peptidyl-prolyl cis-trans isomerase FKBP1A	Fkbp1a	2.29	cytoplasm; cytosol; ER; membrane	catalytic activity; protein binding; signal transducer activity
Periaxin	Prx	-2.38	cytoplasm; cytosol; membrane; nucleus	protein binding
Phakinin	Bfsp2	-2.70	cytoplasm; cytoskeleton; membrane	protein binding; structural molecule
Phosphatidylinositol 4-kinase beta	Pi4kb	-1.75	cytoplasm; cytosol; ER; Golgi; membrane; mitochondrion	catalytic activity; nucleotide binding; protein binding
Phosphatidylinositol-binding clathrin assembly protein	Picalm	-2.50	cell surface; endosome; Golgi; membrane; nucleus	protein binding
Probable 2-oxoglutarate dehydrogenase E1 component DHKTD1, mitochondrial	Dhtkd1	2.28	cytosol; mitochondrion	catalytic activity
Protein TBRG4	Tbrg4	2.36	mitochondrion	catalytic activity; RNA binding
protein virilizer homolog	1110037F02Rik; Virma	-4.76	cytosol; nucleus	RNA binding

putative D-tyrosyl-tRNA(Tyr) deacylase 2	6530401N04Rik; Dtd2	2.99	cytoplasm	catalytic activity
Reticulophagy regulator 2	Fam134a; Retreg2	-2.04	membrane	
Secreted frizzled-related protein 1	Sfrp1	2.22	cell surface; cytosol; ECM	catalytic activity; protein binding; receptor activity; signal transducer activity
Secretoglobin family 2B member 2	Scgb2b2	-2.56	extracellular	
Secretoglobin family 2B member 20	Scgb2b20	-2.94	extracellular	
Serine protease inhibitor A3F	Serpina3f	-1.79	extracellular	enzyme regulator activity
Serine/threonine-protein kinase SMG1	Smg1	2.67	cytoplasm; nucleus	catalytic activity; DNA binding; metal ion binding; nucleotide binding; protein binding; RNA binding
SH3 domain-binding glutamic acid-rich-like protein 2	Sh3bgrl2	-2.04	cytoplasm; membrane; nucleus	catalytic activity; protein binding
Sodium/calcium exchanger 3	Slc8a3	2.88	cytoplasm; ER; membrane; mitochondrion	metal ion binding; protein binding; transporter activity
Sodium/potassium/calcium exchanger 4	Slc24a4	3.62	cytoplasm; membrane	metal ion binding; transporter activity
Solute carrier family 25 member 46	Slc25a46	-3.85	membrane; mitochondrion	
spliceosome-associated protein CWC15 homolog	Cwc15	-3.85	mitochondrion; nucleus; spliceosomal complex	RNA binding
syntaxin-1A	Stx1a	-2.50	membrane	protein binding
T-complex protein 11	Tcp11	-1.92	membrane	protein binding
THO complex subunit 5 homolog	Thoc5	-5.88	chromosome; cytoplasm; nucleus	protein binding; RNA binding

Tubulin beta-6 chain	Tubb6	-5.56	cytoplasm; cytoskeleton; nucleus	catalytic activity; nucleotide binding; structural molecule
Ubiquitin-associated protein 1	Ubp1	2.33	cytoplasm; cytosol; endosome; Golgi; membrane	protein binding
Ubiquitin-conjugating enzyme E2 Z	Ube2z	-1.75	cytoplasm; cytosol; nucleus	catalytic activity; nucleotide binding; protein binding
UPF0598 protein C8orf82 homolog	C030006K11Rik	-6.25	mitochondrion	
UV-stimulated scaffold protein A	4933407H18Rik; Uvssa	3.87	chromosome	protein binding
V-type proton ATPase 16 kDa proteolipid subunit	Atp6v0c; Atp6v0c-ps2	-2.00	Golgi; membrane; vacuole	catalytic activity; protein binding; transporter activity
Vacuolar fusion protein MON1 homolog B	Mon1b	-1.82	cytoplasm	
Vacuolar protein sorting-associated protein 41 homolog	Vps41	2.51	cytoskeleton; cytosol; endosome; Golgi; membrane; vacuole	metal ion binding; protein binding
Vacuole membrane protein 1	Vmp1	-2.08	ER; membrane; vacuole	
Vinexin	Sorbs3	2.81	cytoplasm; cytoskeleton; nucleus	protein binding
Vitronectin	Vtn	2.19	cytoplasm; ER; extracellular; organelle lumen	protein binding; receptor activity
Zinc finger MYM-type protein 4	Zmym4	2.48	cytoplasm	DNA binding; metal ion binding

Supplemental Table 1C. Top 100 Differentially Expressed Proteins (abundance ratios): Comparison 3

Protein Name	Gene ID	FC Ratio	Cellular Location	Molecule Type
Actin-related protein 2/3 complex subunit 1B	Arpc1b	-2.86	cytoplasm; cytoskeleton	protein binding; structural molecule
ADP-ribosylation factor-like protein 6-interacting protein 1	Arl6ip1	-6.67	cytoplasm; cytosol; ER; membrane	protein binding
Aldehyde dehydrogenase, cytosolic 1	Aldh1a7	2.39	cytoplasm	catalytic activity
Alpha-1-antitrypsin 1-1	Serpina1a; Serpina1d	-7.69	ER; extracellular; Golgi	enzyme regulator activity; protein binding
Alpha-1-antitrypsin 1-2	Serpina1b	-8.33	ER; extracellular; Golgi	enzyme regulator activity; protein binding
Alpha-1-antitrypsin 1-4	Serpina1d	-3.57	ER; extracellular; Golgi	enzyme regulator activity; protein binding
Alpha-2-HS-glycoprotein	Ahsg	-5.26	extracellular; Golgi	enzyme regulator activity
Alpha-crystallin B chain	Cryab	2.03	cell surface; cytoplasm; cytoskeleton; cytosol; Golgi; membrane; mitochondrion; nucleus	metal ion binding; protein binding; structural molecule
Ankyrin repeat domain-containing protein 54	Ankrd54	3.62	cytoplasm; nucleus	enzyme regulator activity; protein binding
annexin A1	Anxa1	1.72	cell surface; cytoplasm; cytoskeleton; cytosol; endosome; ECM; nucleus; vacuole	catalytic activity; DNA binding; enzyme regulator activity; metal ion binding; protein binding; RNA binding; structural molecule
Antithrombin-III	Serpinc1	-4.35	extracellular	enzyme regulator activity; protein binding
AP-5 complex subunit beta-1	Ap5b1; Gm962	2.19	membrane	
Apolipoprotein A-I	Apoa1	-3.85	cell surface; cytosol; extracellular; nucleus	enzyme regulator activity; protein binding; transporter activity

Apolipoprotein A-IV	Apoa4	-5.88	cell surface; cytosol; extracellular	antioxidant activity; catalytic activity; enzyme regulator activity; metal ion binding; protein binding; transporter activity
Arginase-1	Arg1	-5.56	cytoplasm; membrane; nucleus	catalytic activity; metal ion binding
Beta-2-glycoprotein 1	Apoh	-3.13	cell surface; cytoplasm; ECM	enzyme regulator activity; protein binding
beta-crystallin A1	Cryba1	1.73	cytoplasm; nucleus	protein binding; structural molecule
Beta-crystallin A2	Cryba2	2.53	other	protein binding; structural molecule
Beta-crystallin B1	Crybb1	3.11	other	protein binding; structural molecule
Beta-crystallin B2	Crybb2	2.79	other	protein binding; structural molecule
Beta-crystallin S	Crygs	3.50	cytosol	structural molecule
Calcium-binding protein 5	Cabp5	1.67	cytoplasm; cytosol	metal ion binding; protein binding
Carboxylesterase 1C	Ces1c	-6.67	ER; organelle lumen	catalytic activity
Catechol O-methyltransferase domain-containing protein 1	Comtd1	2.72	membrane; mitochondrion	catalytic activity
Clusterin	Clu	-3.85	cell surface; cytoplasm; cytosol; ER; ECM; mitochondrion; nucleus	catalytic activity; protein binding
COMM domain-containing protein 1	Commd1	1.62	cytoplasm; cytosol; endosome; membrane; nucleus	metal ion binding; protein binding
Complement C1q subcomponent subunit A	C1qa	-3.85	ECM	protein binding
Complement C3	C3	-3.57	extracellular	enzyme regulator activity; protein binding

Complement component C8 beta chain	C8b	-4.00	extracellular	protein binding
complement component C9	C9	-4.35	cytosol; ECM	protein binding
Complement factor B	Cfb	-5.00	extracellular	catalytic activity
Cone cGMP-specific 3',5'-cyclic phosphodiesterase subunit alpha'	Pde6c	-4.00	membrane	catalytic activity; metal ion binding; nucleotide binding; protein binding
corticosteroid-binding globulin	Serpina6	-3.23	extracellular	enzyme regulator activity
D-3-phosphoglycerate dehydrogenase	Phgdh	1.88		catalytic activity; nucleotide binding
Desmoplakin	Dsp	1.70	cytoplasm; cytoskeleton; membrane; nucleus	catalytic activity; motor activity; protein binding; RNA binding; structural molecule
Dual specificity mitogen-activated protein kinase kinase 2	Map2k2	1.64	cytoplasm; cytosol; ER; endosome; Golgi; membrane; mitochondrion; nucleus	catalytic activity; enzyme regulator activity; metal ion binding; nucleotide binding; protein binding; structural molecule
E3 ubiquitin-protein ligase UBR1	Ubr1	1.65	cytoplasm; cytosol; proteasome	catalytic activity; metal ion binding; protein binding
Fatty acid-binding protein, epidermal	Fabp5	2.10	cytoplasm	transporter activity
Fibrinogen alpha chain	Fga	-4.17	cell surface; cytoplasm; ER; extracellular	metal ion binding; protein binding; structural molecule
Fibrinogen beta chain	Fgb	-3.45	cell surface; cytoplasm; extracellular	protein binding; structural molecule
Fibrinogen gamma chain	Fgg	-3.33	cell surface; cytoplasm; extracellular	metal ion binding; protein binding; structural molecule
Fibulin-1	Fbln1	-4.35	extracellular	enzyme regulator activity; metal ion binding; protein binding; structural molecule

Gamma-crystallin A	Cryga	-4.17		structural molecule
Gamma-crystallin B	Crygb	1.91	cytoplasm; nucleus	structural molecule
Gamma-crystallin E	Cryge	-3.45	other	structural molecule
Glial fibrillary acidic protein	Gfap	-3.23	cytoplasm; cytoskeleton; membrane	catalytic activity; motor activity; protein binding; structural molecule
Glutathione S-transferase Mu 1	Gstm1	1.70	cytoplasm; cytosol; extracellular	catalytic activity; metal ion binding; protein binding
Glutathione S-transferase Mu 2	Gstm2	2.28	cytoplasm; cytosol; membrane	catalytic activity; protein binding
Grifin	Grifin	2.89		protein binding
Histidine-rich glycoprotein	Hrg	-2.94	endosome; ECM; vacuole	enzyme regulator activity; metal ion binding; protein binding
Hydroxymethylglutaryl-CoA synthase, mitochondrial	Hmgcs2	4.06	membrane; mitochondrion; organelle lumen	catalytic activity
Ig kappa chain C region	Igkc	-4.55	membrane	metal ion binding; protein binding
Isoform 2 of Eukaryotic initiation factor 4A-II	Eif4a2	2.08	cytoplasm	catalytic activity; DNA binding; nucleotide binding; RNA binding
Isoform 5 of Phosphatidylinositol-binding clathrin assembly protein	Picalm	-3.03	cell surface; endosome; Golgi; membrane; nucleus	protein binding
Isoform Gamma of Lamina-associated polypeptide 2, isoforms beta/delta/epsilon/gamma	Tmpo	-3.03	chromosome; membrane; nucleus	DNA binding; protein binding
Isoform LMW of Kininogen-1	Kng1	-4.35	extracellular	enzyme regulator activity; protein binding
Keratin, type I cytoskeletal 14	Krt14	3.79	cytoplasm; nucleus	protein binding; structural molecule

Keratin, type II cytoskeletal 1	Krt1	2.40	cytoskeleton; membrane; nucleus	structural molecule
Keratin, type II cytoskeletal 2 epidermal	Krt2	1.93	cytoskeleton; membrane; nucleus	protein binding; structural molecule
Keratin, type II cytoskeletal 2 oral	Krt76	2.11	nucleus	catalytic activity; motor activity; protein binding; structural molecule
Keratin, type II cytoskeletal 72	Krt72; Krt72-ps	2.26	extracellular; matrix	catalytic activity; motor activity; protein binding; structural molecule
Keratin, type II cytoskeletal 75	Krt75	1.66	extracellular; matrix	catalytic activity; motor activity; protein binding; structural molecule; transporter activity
Keratin, type II cytoskeletal 79	Krt79	1.75	extracellular; matrix	catalytic activity; motor activity; protein binding; structural molecule
Keratin, type II cytoskeletal 80	Krt80	2.24	cytoplasm; cytoskeleton	catalytic activity; motor activity; structural molecule; transporter activity
Liver carboxylesterase 1	Ces1g	-3.45	ER; organelle lumen	catalytic activity
major urinary protein 18	Mup11; Mup18; Mup2; Mup19	-7.69	cytosol; extracellular; nucleus	catalytic activity; receptor activity; signal transducer activity; transporter activity
Major urinary protein 2	Mup2	-3.45	cytosol; extracellular; nucleus	catalytic activity; receptor activity; signal transducer activity; transporter activity
Murinoglobulin-1	Mug1	-4.76	extracellular	enzyme regulator activity
Myotubularin-related protein 7	Mtmr7	2.26	cytoplasm; cytosol; membrane	catalytic activity; protein binding; receptor activity; signal transducer activity
Neuron-specific calcium-binding protein hippocalcin	Hpca	1.65	cytoplasm; cytosol; membrane	metal ion binding; protein binding
Nocturnin	Ccrn4l; Noct	1.70	cytoplasm; nucleus	catalytic activity; metal ion binding; protein binding; RNA binding
Non-lysosomal glucosylceramidase	Gba2	1.79	ER; Golgi; membrane	catalytic activity

paralemmin-2	Palm2	1.64	membrane	
Phosphatidylinositol-binding clathrin assembly protein	Picalm	-3.03	cell surface; endosome; Golgi; membrane; nucleus	protein binding
Plasminogen	Plg	-3.57	cell surface; ECM	catalytic activity; protein binding
proton myo-inositol cotransporter	Slc2a13	2.65	membrane	transporter activity
Ras-related protein R-Ras2	Rras2	1.80	membrane	catalytic activity; nucleotide binding; protein binding
rho guanine nucleotide exchange factor 10	Arhgef10	3.40	cytosol	protein binding
Rhodopsin	Rho	1.74	Golgi; membrane	metal ion binding; protein binding; receptor activity; signal transducer activity
Secreted frizzled-related protein 1	Sfrp1	2.35	cell surface; cytosol; ECM	catalytic activity; protein binding; receptor activity; signal transducer activity
Secretoglobin family 2B member 2	Scgb2b2	-3.45	extracellular	
Secretoglobin family 2B member 20	Scgb2b20	-4.17	extracellular	
Serine incorporator 3	Serinc3	1.63	Golgi; membrane	transporter activity
Serine protease inhibitor A3K	Serpina3k	-7.14	extracellular	enzyme regulator activity; protein binding
Serine protease inhibitor A3N	Serpina3n	-6.67	extracellular	enzyme regulator activity
Serine/threonine-protein kinase TAO3	Taok3	1.92	cytoplasm	catalytic activity; nucleotide binding; signal transducer activity
Serotransferrin	Trf	-4.35	cell surface; endosome; ECM	metal ion binding; protein binding; transporter activity

Serum albumin	Alb	-6.25	cytoplasm; ER; extracellular; Golgi; nucleus	DNA binding; metal ion binding; protein binding
Sodium/potassium-transporting ATPase subunit alpha-2	Atp1a2	1.72	cytoplasm; endosome; membrane	catalytic activity; metal ion binding; nucleotide binding; protein binding; transporter activity
Solute carrier family 25 member 46	Slc25a46	-4.17	membrane; mitochondrion	
Sphingomyelin phosphodiesterase 4	Smpd4	2.39	ER; Golgi; membrane	catalytic activity; metal ion binding
Transforming growth factor-beta-induced protein ig-h3	Tgfbi	-7.14	extracellular	protein binding
Translin	Tsn	1.88	cytoplasm; nucleus	catalytic activity; DNA binding; protein binding; RNA binding
Transmembrane glycoprotein NMB	Gpmb	-3.70	membrane	protein binding
Transthyretin	Ttr	-4.55	extracellular	protein binding
Tyrosine 3-monooxygenase	Th	2.10	cytoplasm; cytosol; ER; membrane; mitochondrion; nucleus	catalytic activity; metal ion binding; protein binding
ubiquitin carboxyl-terminal hydrolase 8	Usp8	1.67	cytoplasm; cytosol; endosome; membrane; nucleus	catalytic activity; protein binding
Vinexin	Sorbs3	2.39	cytoplasm; cytoskeleton; nucleus	protein binding
vitamin D-binding protein	Gc	-5.56	cytosol; extracellular	protein binding; transporter activity