

Table S1: Differentially-regulated genes in preeclampsia meta-analysis

Gene symbol	Entrez Gene Name	Location	Type(s)	Average Fold	P value
LEP	leptin	Extracellular Space	growth factor	19.69	6.05E-28
CRH	corticotropin releasing hormone	Extracellular Space	other	4.86	2.35E-14
HTRA4	HtrA serine peptidase 4	unknown	other	4.15	5.60E-08
CGB	chorionic gonadotropin, beta polypeptide	Extracellular Space	other	4.25	1.45E-03
FLT1	fms-related tyrosine kinase 1 (vascular endothelial growth factor/vascular permeability factor receptor)	Plasma Membrane	kinase	3.91	3.01E-12
INHBA	inhibin, beta A	Extracellular Space	growth factor	3.61	8.60E-12
NTRK2	neurotrophic tyrosine kinase, receptor, type 2	Plasma Membrane	kinase	3.28	8.94E-08
FSTL3	follistatin-like 3 (secreted glycoprotein)	Extracellular Space	other	3.17	5.75E-10
DERL3	derlin 3	Cytoplasm	other	2.90	3.51E-06
HK2	hexokinase 2	Cytoplasm	kinase	2.50	2.02E-07
AQP1	aquaporin 1 (Colton blood group)	Plasma Membrane	transporter	2.49	3.77E-05
BTNL9	butyrophilin-like 9	unknown	other	2.46	2.83E-05
PSG9	pregnancy specific beta-1-glycoprotein 9	Extracellular Space	other	2.45	5.29E-07
ADAM2	ADAM metallopeptidase domain 2	Plasma Membrane	peptidase	2.42	1.14E-03
LHB	luteinizing hormone beta polypeptide	Extracellular Space	other	2.37	8.65E-05
HMHA1	histocompatibility (minor) HA-1	Cytoplasm	transporter	2.37	7.53E-05
PAPPA2	pappalysin 2	Extracellular Space	peptidase	2.36	4.90E-08
INHA	inhibin, alpha	Extracellular Space	growth factor	2.34	9.41E-08
FABP4	fatty acid binding protein 4, adipocyte	Cytoplasm	transporter	2.32	1.38E-04
SLCO4A1	solute carrier organic anion transporter family, member 4A1	Plasma Membrane	transporter	2.29	7.54E-05
ANKRD37	ankyrin repeat domain 37	unknown	other	2.24	4.00E-03
PVRL4	poliovirus receptor-related 4	Plasma Membrane	other	2.22	8.86E-05
CCNT1	cyclin T1	Nucleus	transcription regulat	2.18	4.41E-03
BHLHE40	basic helix-loop-helix family, member e40	Nucleus	transcription regulat	2.16	1.64E-02
MUC1	mucin 1, cell surface associated	Plasma Membrane	transcription regulat	2.13	7.05E-04
GBA	glucosidase, beta, acid	Cytoplasm	enzyme	2.13	4.01E-04
TREM1	triggering receptor expressed on myeloid cells 1	Plasma Membrane	other	2.12	2.09E-05

PIK3R3	phosphoinositide-3-kinase, regulatory subunit 3 (gamma)	Cytoplasm	kinase	2.10	1.29E-03
BCL6	B-cell CLL/lymphoma 6	Nucleus	transcription regulator	2.10	1.85E-04
ARRDC3	arrestin domain containing 3	Plasma Membrane	other	2.06	3.94E-04
SIGLEC6	sialic acid binding Ig-like lectin 6	Extracellular Space	other	2.05	1.24E-06
RRM2	ribonucleotide reductase M2	Nucleus	enzyme	2.05	4.55E-02
DUSP1	dual specificity phosphatase 1	Nucleus	phosphatase	2.04	4.47E-06
SERPINA3	serpin peptidase inhibitor, clade A (alpha-1 antitrypsin), member 3	Extracellular Space	other	2.02	6.76E-03
ENG	endoglin	Plasma Membrane	transmembrane receptor	2.02	1.56E-06
EBI3	Epstein-Barr virus induced 3	Extracellular Space	cytokine	1.99	3.43E-06
SH3BP5	SH3-domain binding protein 5 (BTK-associated)	Cytoplasm	other	1.99	2.51E-06
KIAA1199	KIAA1199	Cytoplasm	other	1.98	7.76E-04
GREM2	gremlin 2	Extracellular Space	other	1.97	6.70E-06
NNAT	neuronatin	Plasma Membrane	transporter	1.97	1.41E-03
DNAH11	dynein, axonemal, heavy chain 11	Cytoplasm	enzyme	1.96	1.61E-03
PREX1	phosphatidylinositol-3,4,5-trisphosphate-dependent Rac exchange factor 1	Cytoplasm	other	1.96	1.41E-02
PSG11	pregnancy specific beta-1-glycoprotein 11	Extracellular Space	other	1.96	7.01E-04
HTRA1	HtrA serine peptidase 1	Extracellular Space	peptidase	1.95	3.95E-06
ATF3	activating transcription factor 3	Nucleus	transcription regulator	1.95	2.95E-02
PROCR	protein C receptor, endothelial	Plasma Membrane	other	1.92	9.81E-06
RASEF	RAS and EF-hand domain containing	unknown	other	1.91	1.56E-03
HEXB	hexosaminidase B (beta polypeptide)	Cytoplasm	enzyme	1.91	1.06E-03
LRTM2	leucine-rich repeats and transmembrane domains 2	unknown	other	1.91	1.18E-02
NEK11	NIMA (never in mitosis gene a)- related kinase 11	Nucleus	kinase	1.90	4.66E-05
NDRG1	N-myc downstream regulated 1	Nucleus	kinase	1.89	8.59E-06
PSG8	pregnancy specific beta-1-glycoprotein 8	unknown	other	1.89	2.32E-03
ERRF1	ERBB receptor feedback inhibitor 1	Cytoplasm	other	1.89	8.82E-04
CAPN11	calpain 11	Cytoplasm	peptidase	1.89	4.95E-03
SYT16	synaptotagmin XVI	unknown	transporter	1.88	3.25E-02

SPTLC3	serine palmitoyltransferase, long chain base subunit 3	Cytoplasm	enzyme	1.73	2.77E-02
MYO7B	myosin VIIb	unknown	peptidase	1.87	4.74E-03
PPL	periplakin	Cytoplasm	other	1.86	4.03E-03
CBLC	Cbl proto-oncogene, E3 ubiquitin protein ligase C	Nucleus	enzyme	1.86	2.24E-02
KIAA1984	KIAA1984	unknown	other	1.86	2.08E-03
KIF2A	kinesin heavy chain member 2A	Cytoplasm	other	1.79	2.56E-02
TGFB1	transforming growth factor, beta 1	Extracellular Space	growth factor	1.85	1.14E-05
ING1	inhibitor of growth family, member 1	Nucleus	transcription regulat	1.85	4.38E-02
RNF2	ring finger protein 2	Nucleus	transcription regulat	1.85	2.82E-02
SLC6A8	solute carrier family 6 (neurotransmitter transporter, creatine), member 8	Cytoplasm	transporter	1.85	1.18E-03
PSG1	pregnancy specific beta-1-glycoprotein 1	Extracellular Space	other	1.84	4.84E-03
NRIP1	nuclear receptor interacting protein 1	Nucleus	transcription regulat	1.84	1.42E-03
C1orf96	chromosome 1 open reading frame 96	Cytoplasm	other	1.82	1.34E-03
SPAG4	sperm associated antigen 4	Cytoplasm	other	1.82	2.54E-05
FLNB	filamin B, beta	Cytoplasm	other	1.81	4.85E-02
NUCB2	nucleobindin 2	Nucleus	other	1.80	8.17E-03
ZNF114	zinc finger protein 114	unknown	other	1.80	4.36E-03
C1orf21	chromosome 1 open reading frame 21	unknown	other	1.79	3.21E-03
LIMCH1	LIM and calponin homology domains 1	unknown	other	1.78	1.74E-03
CST6	cystatin E/M	Extracellular Space	other	1.78	1.68E-02
GPT2	glutamic pyruvate transaminase (alanine aminotransferase) 2	Cytoplasm	enzyme	1.76	2.49E-03
SASH1	SAM and SH3 domain containing 1	Extracellular Space	other	1.75	2.88E-05
KRT19	keratin 19	Cytoplasm	other	1.75	5.60E-05
ADAM9	ADAM metallopeptidase domain 9	Plasma Membrane	peptidase	1.75	2.57E-03
SH3PXD2A	SH3 and PX domains 2A	Cytoplasm	other	1.75	4.79E-03
OSMR	oncostatin M receptor	Plasma Membrane	plasmembrane recep	1.73	2.90E-03
CFB	complement factor B	Extracellular Space	peptidase	1.72	5.68E-03
BIN2	bridging integrator 2	unknown	other	1.71	3.63E-03
PIK3CB	phosphoinositide-3-kinase, catalytic, beta polypeptide	Cytoplasm	kinase	1.71	2.44E-03

SLCO2A1	solute carrier organic anion transporter family, member 2A1	Plasma Membrane	transporter	1.71	5.43E-05
SLC6A10P	solute carrier family 6 (neurotransmitter transporter, creatine), member 10, pseudogene	Plasma Membrane	transporter	1.70	4.42E-03
SLC16A3	solute carrier family 16, member 3 (monocarboxylic acid transporter 4)	Plasma Membrane	transporter	1.70	9.62E-05
LRRC1	leucine rich repeat containing 1	Cytoplasm	other	1.69	8.32E-05
KIT	v-kit Hardy-Zuckerman 4 feline sarcoma viral oncogene homolog	Plasma Membrane	kinase	1.69	7.32E-03
QPCT	glutaminyl-peptide cyclotransferase	Cytoplasm	enzyme	1.68	1.35E-04
ATAD3B	ATPase family, AAA domain containing 3A	Nucleus	other	1.68	9.48E-03
GLDN	gliomedin	Cytoplasm	other	1.68	3.10E-02
PDCD4	programmed cell death 4 (neoplastic transformation inhibitor)	Nucleus	other	1.67	8.20E-03
CDKN1B	cyclin-dependent kinase inhibitor 1B (p27, Kip1)	Nucleus	kinase	1.67	6.17E-03
CBLB	Cbl proto-oncogene, E3 ubiquitin protein ligase B	Nucleus	other	1.67	4.34E-03
MFSD4	major facilitator superfamily domain containing 4	unknown	other	1.66	7.10E-03
EPS8L1	EPS8-like 1	unknown	other	1.66	4.73E-03
C7orf68	hypoxia inducible lipid droplet-associated	Cytoplasm	other	1.65	5.99E-03
SCARB1	scavenger receptor class B, member 1	Plasma Membrane	transporter	1.65	1.11E-04
KLF4	Kruppel-like factor 4 (gut)	Nucleus	transcription regulator	1.65	5.26E-03
IL1RAP	interleukin 1 receptor accessory protein	Plasma Membrane	plasma membrane receptor	1.63	2.14E-04
PLA2G16	phospholipase A2, group XVI	Nucleus	enzyme	1.63	5.67E-03
LYN	v-src-1 Yamaguchi sarcoma viral related oncogene homolog	Cytoplasm	kinase	1.63	2.04E-04
TPBG	trophoblast glycoprotein	Plasma Membrane	other	1.63	2.05E-04
ZNF44	zinc finger protein 44	Nucleus	other	1.63	2.96E-02
PLCL2	phospholipase C-like 2	Cytoplasm	enzyme	1.62	2.77E-04
BACH1	BTB and CNC homology 1, basic leucine zipper transcription factor 1	Nucleus	transcription regulator	1.62	4.04E-04

LDHA	lactate dehydrogenase A	Cytoplasm	enzyme	1.62	2.00E-02
INSIG1	insulin induced gene 1	Cytoplasm	other	1.61	9.56E-04
PDLIM2	PDZ and LIM domain 2 (mystique)	Cytoplasm	other	1.61	2.78E-03
VWF	von Willebrand factor	Extracellular Space	other	1.61	1.14E-02
PHYHIP	phytanoyl-CoA 2-hydroxylase interacting protein	unknown	other	1.60	3.63E-02
LONRF1	LON peptidase N-terminal domain and ring finger 1	unknown	other	1.60	1.39E-02
FLT4	fms-related tyrosine kinase 4	Plasma Membrane	plasma membrane receptor	1.60	1.07E-02
DDR1	discoidin domain receptor tyrosine kinase 1	Plasma Membrane	kinase	1.60	4.78E-04
ZCCHC2	zinc finger, CCHC domain containing 2	Cytoplasm	other	1.60	8.87E-03
PPP1R3B	protein phosphatase 1, regulatory subunit 3B	Cytoplasm	other	1.60	1.10E-02
GDF10	growth differentiation factor 10	Extracellular Space	growth factor	1.59	3.80E-02
CRIP2	cysteine-rich protein 2	Plasma Membrane	other	1.59	1.05E-03
CYP2J2	cytochrome P450, family 2, subfamily J, polypeptide 2	Cytoplasm	enzyme	1.59	2.76E-04
KIAA1217	KIAA1217	Cytoplasm	other	1.59	4.91E-02
TCF19	transcription factor 19	Nucleus	transcription regulator	1.59	1.25E-02
PIK3AP1	phosphoinositide-3-kinase adaptor protein 1	Cytoplasm	other	1.58	1.43E-02
SRI	sorcini	Cytoplasm	transporter	1.58	5.70E-04
DLX5	distal-less homeobox 5	Nucleus	transcription regulator	1.58	9.25E-04
ABCA1	ATP-binding cassette, sub-family A (ABC1), member 1	Plasma Membrane	transporter	1.58	3.51E-03
PLXNC1	plexin C1	Plasma Membrane	other	1.58	1.98E-02
CALM1	calmodulin 1 (phosphorylase kinase, delta)	unknown	other	1.57	3.07E-04
PPME1	protein phosphatase methylesterase 1	unknown	enzyme	1.57	3.19E-02
EFHD1	EF-hand domain family, member D1	Cytoplasm	other	1.57	3.72E-04
GLRX	glutaredoxin (thioltransferase)	Cytoplasm	enzyme	1.56	4.73E-04
DPY19L4	dpy-19-like 4 (C. elegans)	unknown	other	1.56	1.96E-02
STEAP4	STEAP family member 4	Plasma Membrane	other	1.56	1.16E-02
CGA	glycoprotein hormones, alpha polypeptide	Extracellular Space	other	1.56	1.32E-03
JUNB	jun B proto-oncogene	Nucleus	transcription regulator	1.56	4.13E-04
LTBP1	latent transforming growth factor beta binding protein 1	Extracellular Space	other	1.56	1.16E-02

SLC2A1	solute carrier family 2 (facilitated glucose transporter), member 1	Plasma Membrane	transporter	1.55	5.35E-04
RDH13	retinol dehydrogenase 13 (all-trans/9-cis)	Cytoplasm	enzyme	1.55	1.35E-02
MIF	macrophage migration inhibitory factor (glycosylation-inhibiting factor)	Extracellular Space	cytokine	1.55	4.54E-04
SIPA1L1	signal-induced proliferation-associated 1 like 1	Cytoplasm	other	1.55	1.52E-02
GPNMB	glycoprotein (transmembrane) nmb	Plasma Membrane	enzyme	1.55	1.89E-02
MME	membrane metallo-endopeptidase	Plasma Membrane	peptidase	1.55	4.32E-03
POR	P450 (cytochrome) oxidoreductase	Cytoplasm	enzyme	1.54	4.83E-02
TRIM24	tripartite motif containing 24	Nucleus	transcription regulator	1.54	4.75E-04
ADRB2	adrenoceptor beta 2, surface	Plasma Membrane	protein coupled receptor	1.54	1.95E-02
MAN1C1	mannosidase, alpha, class 1C, member 1	Cytoplasm	enzyme	1.54	8.30E-04
ALDOA	aldolase A, fructose-bisphosphate	Cytoplasm	enzyme	1.54	1.91E-02
SSFA2	sperm specific antigen 2	Plasma Membrane	other	1.54	5.15E-04
MAFF	v-maf musculoaponeurotic fibrosarcoma oncogene homolog F (avian)	Nucleus	transcription regulator	1.54	9.33E-04
ADAM12	ADAM metallopeptidase domain 12	Plasma Membrane	peptidase	1.54	9.18E-04
ITPR3	inositol 1,4,5-trisphosphate receptor, type 3	Cytoplasm	ion channel	1.53	4.61E-02
KDM3A	lysine (K)-specific demethylase 3A	Nucleus	other	1.53	2.03E-02
MTMR4	myotubularin related protein 4	Cytoplasm	phosphatase	1.53	6.61E-04
SLC39A8	solute carrier family 39 (zinc transporter), member 8	Extracellular Space	transporter	1.53	9.20E-03
ASTE1	asteroid homolog 1 (Drosophila)	unknown	other	1.53	1.02E-03
DNAJC3	DnaJ (Hsp40) homolog, subfamily C, member 3	Cytoplasm	other	1.53	3.62E-02
INSL4	insulin-like 4 (placenta)	Extracellular Space	other	1.52	2.91E-02
HPCAL1	hippocalcin-like 1	Cytoplasm	other	1.52	3.33E-02
CCDC47	coiled-coil domain containing 47	Extracellular Space	other	1.52	1.80E-02
WDR60	WD repeat domain 60	Extracellular Space	other	1.51	2.68E-02
TRIM58	tripartite motif containing 58	unknown	other	1.51	1.29E-03
SLC39A6	solute carrier family 39 (zinc transporter), member 6	Plasma Membrane	transporter	1.51	2.93E-02
GPR126	G protein-coupled receptor 126	Plasma Membrane	protein coupled receptor	1.51	2.05E-03

FZD10	frizzled family receptor 10	Plasma Membrane	rotein coupled rece	1.51	2.46E-02
ZNF175	zinc finger protein 175	Nucleus	anscription regulat	1.51	1.92E-02
TPI1	triosephosphate isomerase 1	Cytoplasm	enzyme	1.50	1.78E-03
EFR3B	EFR3 homolog B (<i>S. cerevisiae</i>)	unknown	other	1.50	3.52E-02
GAPDH	glyceraldehyde-3-phosphate dehydrogenase	Cytoplasm	enzyme	1.50	2.02E-02
DDX17	DEAD (Asp-Glu-Ala-Asp) box helicase 17	Nucleus	enzyme	1.50	3.04E-02
ANXA4	annexin A4	Plasma Membrane	other	1.50	9.08E-04
SLC16A1	solute carrier family 16, member 1 (monocarboxylic acid transporter 1)	Plasma Membrane	transporter	1.50	2.02E-02
PTPRU	protein tyrosine phosphatase, receptor type, U	Plasma Membrane	phosphatase	1.50	2.57E-02
TET3	tet methylcytosine dioxygenase 3	unknown	other	1.50	2.49E-02
MAP7	microtubule-associated protein 7	Cytoplasm	other	1.50	3.26E-02
ERO1L	ERO1-like (<i>S. cerevisiae</i>)	Cytoplasm	enzyme	1.50	9.62E-04
DOCK4	dedicator of cytokinesis 4	Plasma Membrane	other	1.50	3.18E-02
VDR	vitamin D (1,25- dihydroxyvitamin D3) receptor	Nucleus	ependent nuclear	1.49	3.43E-02
LITAF	lipopolysaccharide-induced TNF factor	Nucleus	anscription regulat	1.49	2.46E-02
TCEAL2	transcription elongation factor A (SII)-like 2	unknown	other	1.49	3.72E-02
RAB25	RAB25, member RAS oncogene family	Cytoplasm	enzyme	1.49	1.09E-03
CYP11A1	cytochrome P450, family 11, subfamily A, polypeptide 1	Cytoplasm	enzyme	1.49	9.57E-04
SEC23A	Sec23 homolog A (<i>S. cerevisiae</i>)	Cytoplasm	transporter	1.49	3.98E-02
RPS6KA5	ribosomal protein S6 kinase, 90kDa, polypeptide 5	Nucleus	kinase	1.49	2.87E-02
LIMD1	LIM domains containing 1	Nucleus	anscription regulat	1.49	1.98E-02
SREBF1	sterol regulatory element binding transcription factor 1	Nucleus	anscription regulat	1.49	2.34E-02
KYNU	kynureninase	Cytoplasm	enzyme	1.49	1.59E-03
CDO1	cysteine dioxygenase, type I	Cytoplasm	enzyme	1.49	8.21E-03
LMAN1	lectin, mannose-binding, 1	Cytoplasm	other	1.49	4.24E-02
NT5E	5'-nucleotidase, ecto (CD73)	Plasma Membrane	phosphatase	1.48	2.19E-02
UBR1	ubiquitin protein ligase E3 component n-recognin 1	Cytoplasm	enzyme	1.48	2.05E-02

HSPB1	heat shock 27kDa protein 1	Cytoplasm	other	1.48	2.69E-03
EREG	epiregulin	Extracellular Space	growth factor	1.48	3.87E-02
SEMA7A	semaphorin 7A, GPI membrane anchor (John Milton Hagen blood group)	Plasma Membrane	other	1.48	2.21E-02
NFIL3	nuclear factor, interleukin 3 regulated	Nucleus	transcription regulat	1.47	3.34E-02
ILVBL	ilvB (bacterial acetolactate synthase)-like	Cytoplasm	enzyme	1.47	1.26E-03
FKBP2	FK506 binding protein 2, 13kDa	Cytoplasm	enzyme	1.47	2.30E-02
PHYHIPL	phytanoyl-CoA 2-hydroxylase interacting protein-like	Cytoplasm	other	1.47	2.66E-02
ARHGEF4	Rho guanine nucleotide exchange factor (GEF) 4	Cytoplasm	other	1.47	3.14E-02
NEURL	neuralized homolog (Drosophila)	Nucleus	other	1.47	3.57E-03
PRKD3	protein kinase D3	Nucleus	kinase	1.47	1.90E-03
CEBPA	CCAAT/enhancer binding protein (C/EBP), alpha	Nucleus	transcription regulat	1.47	3.85E-03
IL2RG	interleukin 2 receptor, gamma	Plasma Membrane	transmembrane recep	1.47	3.72E-02
PJA1	praja ring finger 1, E3 ubiquitin protein ligase	Cytoplasm	enzyme	1.46	7.58E-03
SFXN3	sideroflexin 3	Cytoplasm	transporter	1.46	2.21E-03
IQGAP1	IQ motif containing GTPase activating protein 1	Cytoplasm	other	1.46	2.46E-03
LGALS8	lectin, galactoside-binding, soluble, 8	Extracellular Space	other	1.46	2.10E-03
RFK	riboflavin kinase	Cytoplasm	kinase	1.46	2.65E-02
SYDE1	synapse defective 1, Rho GTPase, homolog 1 (C. elegans)	Cytoplasm	other	1.46	1.95E-03
KLHL8	kelch-like 8 (Drosophila)	unknown	other	1.46	3.48E-02
FAM120AOS	family with sequence similarity 120A opposite strand	unknown	other	1.45	2.92E-02
MGA	MAX gene associated	Nucleus	transcription regulat	1.45	4.20E-03
MID1	midline 1 (Opitz/BBB syndrome)	Nucleus	other	1.45	2.49E-03
BCAP29	B-cell receptor-associated protein 29	Cytoplasm	transporter	1.45	5.01E-03
TESK2	testis-specific kinase 2	Nucleus	kinase	1.45	3.75E-02
MXI1	MAX interactor 1	Nucleus	transcription regulat	1.45	6.78E-03
SLC7A4	solute carrier family 7 (orphan transporter), member 4	Plasma Membrane	transporter	1.45	3.21E-02

GPX3	glutathione peroxidase 3 (plasma)	Extracellular Space	enzyme	1.45	3.58E-02
CLIC3	chloride intracellular channel 3	Nucleus	ion channel	1.45	8.99E-03
SEMA3G	sema domain, immunoglobulin domain (Ig), short basic domain, secreted, (semaphorin) 3G	unknown	other	1.44	3.64E-03
SOCS6	suppressor of cytokine signaling 6	Cytoplasm	other	1.44	4.85E-02
TCL1B	T-cell leukemia/lymphoma 1B	unknown	other	1.44	4.76E-03
C8orf58	chromosome 8 open reading frame 58	unknown	other	1.44	3.53E-02
LAMA5	laminin, alpha 5	Extracellular Space	other	1.44	3.80E-02
PSG3	pregnancy specific beta-1-glycoprotein 3	Extracellular Space	other	1.44	1.06E-02
ACOT7	acyl-CoA thioesterase 7	Cytoplasm	enzyme	1.43	4.66E-02
STK24	serine/threonine kinase 24	Cytoplasm	kinase	1.43	3.03E-02
TRIM14	tripartite motif containing 14	Cytoplasm	other	1.43	6.19E-03
LYPLA1	lysophospholipase I	Cytoplasm	enzyme	1.43	4.12E-02
AMD1	adenosylmethionine decarboxylase 1	Cytoplasm	enzyme	1.43	2.44E-03
OCRL	oculocerebrorenal syndrome of Lowe	Cytoplasm	phosphatase	1.43	3.54E-03
SEPX1	methionine sulfoxide reductase B1	unknown	enzyme	1.43	4.39E-02
SERPINB9	serpin peptidase inhibitor, clade B (ovalbumin), member 9	Cytoplasm	other	1.43	3.11E-03
MCF2L	MCF.2 cell line derived transforming sequence-like	Cytoplasm	other	1.43	5.18E-03
ARNT2	aryl-hydrocarbon receptor nuclear translocator 2	Nucleus	transcription regulat	1.42	4.11E-03
TM9SF2	transmembrane 9 superfamily member 2	Plasma Membrane	transporter	1.42	4.36E-03
MTHFD1L	methylenetetrahydrofolate dehydrogenase (NADP+ dependent) 1-like	Cytoplasm	enzyme	1.42	3.46E-02
SWAP70	SWAP switching B-cell complex 70kDa subunit	Cytoplasm	other	1.42	3.09E-02
ELL2	elongation factor, RNA polymerase II, 2	Nucleus	transcription regulat	1.42	1.68E-02
ERGIC1	endoplasmic reticulum-golgi intermediate compartment (ERGIC) 1	Cytoplasm	other	1.42	4.55E-02
DUSP5	dual specificity phosphatase 5	Nucleus	phosphatase	1.42	4.89E-02
PAK3	p21 protein (Cdc42/Rac)-activated kinase 3	Cytoplasm	kinase	1.42	2.85E-02

GADD45G	growth arrest and DNA-damage-inducible, gamma	Nucleus	other	1.41	4.04E-03
CSNK2A2	casein kinase 2, alpha prime polypeptide	Cytoplasm	kinase	1.41	2.67E-03
ARID3A	AT rich interactive domain 3A (BRIGHT-like)	Nucleus	transcription regulat	1.41	4.74E-03
CYB5R1	cytochrome b5 reductase 1	Cytoplasm	enzyme	1.41	4.53E-02
BMPR2	bone morphogenetic protein receptor, type II (serine/threonine kinase)	Plasma Membrane	kinase	1.41	3.69E-03
EGLN1	egl nine homolog 1 (C. elegans)	Cytoplasm	other	1.40	2.38E-02
MBD2	methyl-CpG binding domain protein 2	Nucleus	transcription regulat	1.40	7.78E-03
ARNT	aryl hydrocarbon receptor nuclear translocator	Nucleus	transcription regulat	1.40	4.19E-02
PAM	peptidylglycine alpha-amidating monooxygenase	Plasma Membrane	enzyme	1.40	4.21E-03
ABCA12	ATP-binding cassette, sub-family A (ABC1), member 12	Plasma Membrane	transporter	1.75	9.86E-03
YIPF4	Yip1 domain family, member 4	Cytoplasm	other	1.40	1.25E-02
TGOLN2	trans-golgi network protein 2	Cytoplasm	other	1.40	4.91E-02
MIA3	melanoma inhibitory activity family, member 3	Cytoplasm	other	1.40	3.35E-02
PRRG1	proline rich Gla (G-carboxyglutamic acid) 1	Plasma Membrane	other	1.39	4.35E-03
TMEM38B	transmembrane protein 38B	Nucleus	ion channel	1.39	5.33E-03
SLC35F2	solute carrier family 35, member F2	unknown	other	1.38	7.15E-03
P4HA1	prolyl 4-hydroxylase, alpha polypeptide I	Cytoplasm	enzyme	1.38	5.56E-03
EGFR	epidermal growth factor receptor	Plasma Membrane	kinase	1.37	2.97E-02
PDE4D	phosphodiesterase 4D, cAMP-specific	Cytoplasm	enzyme	1.37	8.80E-03
ADRA1A	adrenoceptor alpha 1A	Plasma Membrane	protein coupled rece	1.37	4.67E-02
IER3	immediate early response 3	Cytoplasm	other	1.37	7.35E-03
TPP1	tripeptidyl peptidase I	Cytoplasm	peptidase	1.37	6.03E-03
CYB561	cytochrome b-561	Cytoplasm	enzyme	1.36	9.82E-03
PREP	prolyl endopeptidase	Cytoplasm	peptidase	1.36	7.78E-03
QKI	QKI, KH domain containing, RNA binding	Nucleus	other	1.36	4.38E-02
DNM2	dynamitin 2	Plasma Membrane	enzyme	1.36	7.88E-03
CLIC4	chloride intracellular channel 4	Plasma Membrane	ion channel	1.35	2.75E-02
JUP	junction plakoglobin	Plasma Membrane	other	1.35	7.57E-03

CAMSAP1L1	calmodulin regulated spectrin-associated protein family, member 2	unknown	other	1.34	1.55E-02
LEPROTL1	leptin receptor overlapping transcript-like 1	Plasma Membrane	other	1.33	1.47E-02
FAM120A	family with sequence similarity 120A	Cytoplasm	other	1.32	1.16E-02
MALL	mal, T-cell differentiation protein-like	Plasma Membrane	other	1.32	1.73E-02
NEDD9	neural precursor cell expressed, developmentally down-regulated 9	Nucleus	other	1.31	1.82E-02
GATA3	GATA binding protein 3	Nucleus	transcription regulator	1.30	1.96E-02
PKM2	pyruvate kinase, muscle	unknown	kinase	1.30	1.76E-02
GALE	UDP-galactose-4-epimerase	Cytoplasm	enzyme	1.30	1.79E-02
DCP2	DCP2 decapping enzyme homolog (<i>S. cerevisiae</i>)	Nucleus	enzyme	1.29	2.03E-02
CAPN6	calpain 6	Cytoplasm	peptidase	1.29	2.49E-02
ITGA5	integrin, alpha 5 (fibronectin receptor, alpha polypeptide)	Plasma Membrane	other	1.28	2.35E-02
YOD1	YOD1 OTU deubiquinating enzyme 1 homolog (<i>S. cerevisiae</i>)	unknown	enzyme	1.28	3.73E-02
SMARCA1	SWI/SNF related, matrix associated, actin dependent regulator of chromatin, subfamily a, member 1	Nucleus	transcription regulator	1.25	3.42E-02
EIF4B	eukaryotic translation initiation factor 4B	Cytoplasm	translation regulator	1.23	4.92E-02
FBXO9	F-box protein 9	Cytoplasm	enzyme	-1.29	4.90E-02
SYT17	synaptotagmin XVII	Plasma Membrane	other	-1.30	1.84E-02
SLC23A2	solute carrier family 23 (nucleobase transporters), member 2	Plasma Membrane	transporter	-1.33	1.30E-02
C20orf3	chromosome 20 open reading frame 3	Plasma Membrane	enzyme	-1.34	8.13E-03
MKL2	MKL/myocardin-like 2	Nucleus	transcription regulator	-1.34	1.39E-02
SLC22A3	solute carrier family 22 (extraneuronal monoamine transporter), member 3	Plasma Membrane	transporter	-1.34	1.53E-02
FAM111A	family with sequence similarity 111, member A	unknown	other	-1.34	3.25E-02
PTPN3	protein tyrosine phosphatase, non-receptor type 3	Cytoplasm	phosphatase	-1.36	1.11E-02
RAB15	RAB15, member RAS oncogene family	unknown	other	-1.37	7.00E-03

CTBP2	C-terminal binding protein 2	Nucleus	transcription regulator	-1.37	2.11E-02
CHKA	choline kinase alpha	Cytoplasm	kinase	-1.37	4.26E-02
DLX4	distal-less homeobox 4	Nucleus	transcription regulator	-1.37	8.76E-03
ANAPC4	anaphase promoting complex subunit 4	Nucleus	enzyme	-1.39	4.97E-02
ABCD3	ATP-binding cassette, sub-family D (ALD), member 3	Cytoplasm	transporter	-1.39	4.65E-02
ANKRD10	ankyrin repeat domain 10	Nucleus	transcription regulator	-1.39	4.28E-02
ENPP2	ectonucleotide pyrophosphatase/phosphodiesterase 2	Plasma Membrane	enzyme	-1.40	4.22E-02
ZNF702P	zinc finger protein 702, pseudogene	Nucleus	other	-1.41	4.80E-02
F13A1	coagulation factor XIII, A1 polypeptide	Extracellular Space	enzyme	-1.41	3.65E-02
USP33	ubiquitin specific peptidase 33	Cytoplasm	peptidase	-1.42	4.17E-02
VPS13B	vacuolar protein sorting 13 homolog B (yeast)	Nucleus	transporter	-1.42	4.01E-02
LAMB1	laminin, beta 1	Extracellular Space	other	-1.42	3.27E-03
CNOT10	CCR4-NOT transcription complex, subunit 10	Cytoplasm	other	-1.42	4.67E-02
PMAIP1	phorbol-12-myristate-13-acetate-induced protein 1	Cytoplasm	other	-1.43	4.41E-02
PDXK	pyridoxal (pyridoxine, vitamin B6) kinase	Cytoplasm	kinase	-1.43	4.38E-02
PARP6	poly (ADP-ribose) polymerase family, member 6	unknown	other	-1.44	3.97E-03
SRPX2	sushi-repeat containing protein, X-linked 2	Cytoplasm	other	-1.44	3.57E-02
UACA	uveal autoantigen with coiled-coil domains and ankyrin repeats	Cytoplasm	other	-1.45	3.28E-02
SHPRH	SNF2 histone linker PHD RING helicase, E3 ubiquitin protein ligase	Nucleus	transcription regulator	-1.45	3.65E-02
TMEM139	transmembrane protein 139	unknown	other	-1.45	3.39E-02
TARBP1	TAR (HIV-1) RNA binding protein 1	Nucleus	transcription regulator	-1.46	2.80E-02
FBN1	fibrillin 1	Extracellular Space	other	-1.46	2.46E-02
TMC1	transmembrane channel-like 1	Plasma Membrane	other	-1.46	3.52E-02
ABAT	4-aminobutyrate aminotransferase	Cytoplasm	enzyme	-1.46	2.84E-03
DTNB	dystrobrevin, beta	Plasma Membrane	other	-1.47	2.73E-03
TPCN1	two pore segment channel 1	Plasma Membrane	ion channel	-1.47	2.27E-02
ALDH4A1	aldehyde dehydrogenase 4 family, member A1	Cytoplasm	enzyme	-1.47	1.45E-03

HSD11B2	hydroxysteroid (11-beta) dehydrogenase 2	Cytoplasm	enzyme	-1.47	2.92E-02
SOD1	superoxide dismutase 1, soluble	Cytoplasm	enzyme	-1.47	1.13E-03
HERC2	HECT and RLD domain containing E3 ubiquitin protein ligase 2	Cytoplasm	enzyme	-1.47	3.59E-03
WDR59	WD repeat domain 59	unknown	transporter	-1.48	2.70E-02
ENPP1	ectonucleotide pyrophosphatase/phosphodiesterase 1	Plasma Membrane	enzyme	-1.48	2.15E-02
LSS	lanosterol synthase (2,3-oxidosqualene-lanosterol cyclase)	Cytoplasm	enzyme	-1.49	3.00E-02
MYO1A	myosin IA	Cytoplasm	peptidase	-1.49	3.75E-02
SLAMF1	signaling lymphocytic activation molecule family member 1	Plasma Membrane	transmembrane receptor	-1.50	1.45E-03
NEDD4	neural precursor cell expressed, developmentally down-regulated 4, E3 ubiquitin protein ligase	Cytoplasm	enzyme	-1.50	3.28E-02
ZNF555	zinc finger protein 555	unknown	other	-1.50	2.67E-02
TMEM168	transmembrane protein 168	Cytoplasm	other	-1.51	1.74E-02
KLHL3	kelch-like 3 (Drosophila)	Cytoplasm	other	-1.51	2.43E-02
CHD1L	chromodomain helicase DNA binding protein 1-like	Nucleus	enzyme	-1.51	3.25E-02
TIAM1	T-cell lymphoma invasion and metastasis 1	Cytoplasm	other	-1.51	2.68E-02
LAMA2	laminin, alpha 2	Extracellular Space	other	-1.52	1.46E-02
ZNF117	zinc finger protein 117	Nucleus	transcription regulator	-1.52	2.06E-02
RANBP17	RAN binding protein 17	Nucleus	transporter	-1.52	2.51E-02
KIAA1467	KIAA1467	unknown	other	-1.52	3.62E-02
CXorf57	chromosome X open reading frame 57	unknown	other	-1.52	2.52E-02
SMPDL3A	sphingomyelin phosphodiesterase, acid-like 3A	Extracellular Space	enzyme	-1.53	3.51E-02
GNG11	guanine nucleotide binding protein (G protein), gamma 11	Plasma Membrane	enzyme	-1.54	1.95E-02
F5	coagulation factor V (proaccelerin, labile factor)	Plasma Membrane	enzyme	-1.54	1.31E-02
C6orf70	chromosome 6 open reading frame 70	unknown	other	-1.54	2.30E-02
CLIC5	chloride intracellular channel 5	Cytoplasm	ion channel	-1.54	1.61E-02

GAP43	growth associated protein 43	Plasma Membrane	other	-1.54	1.91E-02
STXBP3	syntaxin binding protein 3	Plasma Membrane	transporter	-1.54	4.07E-02
CDK7	cyclin-dependent kinase 7	Nucleus	kinase	-1.54	1.33E-02
OLFML3	olfactomedin-like 3	Extracellular Space	other	-1.55	2.24E-02
SPON1	spondin 1, extracellular matrix protein	Extracellular Space	other	-1.56	2.42E-02
CATSPER2	cation channel, sperm associated 2	Plasma Membrane	ion channel	-1.56	1.61E-02
NBPF3	neuroblastoma breakpoint family, member 3	unknown	other	-1.56	1.48E-02
NR2F1	nuclear receptor subfamily 2, group F, member 1	Nucleus	pendent nuclear	-1.57	1.52E-02
AGL	amylase, alpha-1, 6-glucosidase, 4-alpha-glucanotransferase	Cytoplasm	enzyme	-1.57	9.89E-03
FBN2	fibrillin 2	Extracellular Space	other	-1.57	9.13E-03
ANKRD20A2	ankyrin repeat domain 20 family, member A3	Plasma Membrane	other	-1.59	9.54E-03
FAM164A	zinc finger, C2HC-type containing 1A	unknown	other	-1.59	9.12E-03
SRPX	sushi-repeat containing protein, X-linked	Cytoplasm	other	-1.59	1.25E-02
BMX	BMX non-receptor tyrosine kinase	Cytoplasm	kinase	-1.60	1.24E-02
SPINK5	serine peptidase inhibitor, Kazal type 5	Extracellular Space	other	-1.61	1.01E-02
HLF	hepatic leukemia factor	Nucleus	transcription regulat	-1.61	6.74E-03
SLC27A2	solute carrier family 27 (fatty acid transporter), member 2	Cytoplasm	transporter	-1.61	1.90E-02
GSTA3	glutathione S-transferase alpha 3	Cytoplasm	enzyme	-1.62	6.89E-03
ABCG2	ATP-binding cassette, sub-family G (WHITE), member 2	Plasma Membrane	transporter	-1.62	6.60E-03
CPAMD8	C3 and PZP-like, alpha-2-macroglobulin domain containing 8	Extracellular Space	other	-1.62	1.82E-02
MTA1	metastasis associated 1	Nucleus	transcription regulat	-1.63	4.45E-02
WNT2	wingless-type MMTV integration site family member 2	Extracellular Space	cytokine	-1.63	7.81E-03
DTYMK	deoxythymidylate kinase (thymidylate kinase)	Cytoplasm	kinase	-1.63	1.67E-02
ABCC2	ATP-binding cassette, sub-family C (CFTR/MRP), member 2	Plasma Membrane	transporter	-1.64	1.38E-02
OSBPL3	oxysterol binding protein-like 3	Cytoplasm	other	-1.64	6.94E-03
SLC25A35	solute carrier family 25, member 35	Cytoplasm	other	-1.65	7.34E-03

AGPAT5	1-acylglycerol-3-phosphate O-acyltransferase 5 (lysophosphatidic acid acyltransferase, epsilon)	Cytoplasm	enzyme	-1.68	2.99E-02
TRPV6	transient receptor potential cation channel, subfamily V, member 6	Plasma Membrane	ion channel	-1.68	3.90E-04
CCDC50	coiled-coil domain containing 50	Cytoplasm	other	-1.69	6.43E-03
KIF27	kinesin family member 27	Cytoplasm	other	-1.70	1.57E-02
CSHL1	chorionic somatomammotropin hormone-like 1	Nucleus	other	-1.70	2.13E-02
AFF3	AF4/FMR2 family, member 3	Nucleus	transcription regulat	-1.70	1.43E-02
GH1	growth hormone 1	Extracellular Space	growth factor	-1.71	4.02E-02
RUNDC2A	sorting nexin 29	unknown	other	-1.72	3.91E-02
COL21A1	collagen, type XXI, alpha 1	Extracellular Space	other	-1.72	4.12E-03
ADCY7	adenylate cyclase 7	Plasma Membrane	enzyme	-1.72	5.16E-05
NEB	nebulin	unknown	other	-1.72	4.52E-03
ICA1	islet cell autoantigen 1, 69kDa	Cytoplasm	other	-1.73	4.74E-03
GPR155	G protein-coupled receptor 155	Plasma Membrane	rotein coupled rece	-1.73	3.32E-03
PTPRD	protein tyrosine phosphatase, receptor type, D	Plasma Membrane	phosphatase	-1.73	5.31E-03
RBBP6	retinoblastoma binding protein 6	Nucleus	enzyme	-1.73	2.09E-02
FERMT1	fermitin family member 1	Plasma Membrane	other	-1.74	4.86E-02
SLC25A27	solute carrier family 25, member 27	Cytoplasm	transporter	-1.75	3.28E-03
HECW2	HECT, C2 and WW domain containing E3 ubiquitin protein ligase 2	Extracellular Space	enzyme	-1.75	3.56E-03
BNC2	basonuclin 2	Nucleus	other	-1.75	3.17E-03
ZBTB20	zinc finger and BTB domain containing 20	Nucleus	other	-1.78	2.08E-02
MYH3	myosin, heavy chain 3, skeletal muscle, embryonic	Cytoplasm	enzyme	-1.78	5.00E-02
TRIM45	tripartite motif containing 45	Cytoplasm	other	-1.79	2.06E-03
CCL13	chemokine (C-C motif) ligand 13	Extracellular Space	cytokine	-1.79	4.44E-03
GALNT11	UDP-N-acetyl-alpha-D-galactosamine:polypeptide N- acetylgalactosaminyltransferase 11 (GalNAc-T11)	Cytoplasm	enzyme	-1.80	1.62E-03

GREB1	growth regulation by estrogen in breast cancer 1	Cytoplasm	other	-1.81	6.48E-03
HSD17B1	hydroxysteroid (17-beta) dehydrogenase 1	Cytoplasm	enzyme	-1.82	2.89E-05
NAV3	neuron navigator 3	Nucleus	other	-1.83	4.86E-02
C8orf46	chromosome 8 open reading frame 46	unknown	other	-1.84	3.83E-02
LONRF2	LON peptidase N-terminal domain and ring finger 2	unknown	other	-1.85	1.23E-03
APLN	apelin	Extracellular Space	other	-1.86	1.05E-03
SULF1	sulfatase 1	Cytoplasm	enzyme	-1.88	2.50E-03
SH3TC2	SH3 domain and tetratricopeptide repeats 2	unknown	other	-1.92	1.62E-05
COASY	CoA synthase	Cytoplasm	kinase	-1.92	2.61E-05
C9orf93	coiled-coil domain containing 171	unknown	other	-1.96	1.90E-02
LEPREL1	leprecan-like 1	unknown	enzyme	-2.00	3.79E-06
ACOXL	acyl-CoA oxidase-like	unknown	enzyme	-2.01	3.51E-05
TMEM136	transmembrane protein 136	unknown	other	-2.02	3.80E-04
ADAMTS6	ADAM metallopeptidase with thrombospondin type 1 motif, 6	Extracellular Space	peptidase	-2.02	5.14E-04
ZNF83	zinc finger protein 83	Nucleus	transcription regulator	-2.10	8.13E-03
PCDH17	protocadherin 17	unknown	other	-2.17	3.37E-04
CFH	complement factor H	Extracellular Space	other	-2.18	1.53E-04
CFHR1	complement factor H-related 1	Extracellular Space	other	-2.30	9.78E-04
ZNF554	zinc finger protein 554	unknown	other	-2.37	3.88E-05
C21orf81	ankyrin repeat domain 20 family, member A11, pseudogene	unknown	other	-2.50	1.07E-03
CORO6	coronin 6	Extracellular Space	other	-2.55	1.93E-03
MMP1	matrix metallopeptidase 1 (interstitial collagenase)	Extracellular Space	peptidase	-2.59	2.67E-04
CCK	cholecystokinin	Extracellular Space	other	-2.62	6.27E-05
GABRE	gamma-aminobutyric acid (GABA) A receptor, epsilon	Plasma Membrane	ion channel	-2.64	2.07E-05
DEFA3	defensin, alpha 1	Cytoplasm	other	-3.08	9.10E-06