

SUPPLEMENTARY TABLE S1. DIFFERENTIAL PROTEINS IDENTIFIED BY iTRAQ PROTEOMICS

<i>IPI No.</i>	<i>Gene symbol</i>	<i>Protein name</i>	<i>Biological function</i>	<i>Fold change</i>	<i>State change</i>
IPI00211640	Cpa5	Carboxypeptidase A5	Protein turnover	0.093	↓
IPI00363977	Rpap1	RNA polymerase II-associated protein 1	RNA biosynthesis	0.093	↓
IPI00210113	Rere	Arginine-glutamic acid dipeptide repeats protein	Transcription/translation	0.491	↓
IPI00464798	Dync1i2	Dynein, cytoplasmic, intermediate chain 2, isoform CRA_b	Cytoskeleton	0.511	↓
IPI00373072	Morc1	MORC family CW-type zinc finger 1	Transcription/translation	0.512	↓
IPI00760126	Ywhab	Isoform Short of 14-3-3 protein beta/alpha	Signaling	0.546	↓
IPI00208568	Plek	Pleckstrin	Cytoskeleton	0.549	↓
IPI00197709	Bglap	Osteocalcin	calcium metabolism	0.553	↓
IPI00464518	Hexb	Beta-hexosaminidase subunit beta	Lipid metabolism	0.577	↓
IPI00358830	Mak16	RNA binding motif protein 13	rRNA/ribosome processing	0.601	↓
IPI00200523	Slc9a3r2	Na(+)/H(+) exchange regulatory cofactor NHE-RF2	Scaffolding	0.615	↓
IPI00362992	Aldh5a1	Aldehyde dehydrogenase 5 family, member A1 isoform 3	Glucose metabolism	0.622	↓
IPI00189882	Scn2b	Sodium channel subunit beta-2	Ion channel	0.64	↓
IPI00201507	Ifrd1	Interferon-related developmental regulator 1	Neuroplasticity	0.643	↓
IPI00204510	Adrm1	Proteasomal ubiquitin receptor ADRM1	Protein turnover	0.647	↓
IPI00212767	Prss1	Anionic trypsin-1	Protein turnover	0.648	↓
IPI00914189	Eif3c	Eukaryotic translation initiation factor 3 subunit C	Transcription/translation	0.652	↓
IPI00366422	Pycr1	Pyroline-5-carboxylate reductase 3	Amino acid metabolism	0.67	↓
IPI00287835	Hba-a2	Hemoglobin subunit alpha-1/2		0.671	↓
IPI00195173	Cd59	CD59 glycoprotein	Apoptosis	0.677	↓
IPI00365951	Atcay	Caytaxin	Amino acid metabolism	0.679	↓
IPI00196730	Camk2g	Isoform A of Calcium/calmodulin-dependent protein kinase type II subunit gamma	Neuroplasticity	0.688	↓
IPI00211968	Map3k12	Mitogen-activated protein kinase kinase kinase 12	Signaling	0.693	↓
IPI00198890	MGC109340	Signal peptidase complex subunit 3	Protein turnover	0.694	↓
IPI00569391	Tmpo	Lamina-associated polypeptide 2, isoform beta	Transcription/translation	0.694	↓
IPI00214981	Adcy8	Adenylate cyclase type 8	Signaling	0.695	↓
IPI00870489	Snx2	Sorting nexin 2	Exocytosis/endocytosis	0.696	↓
IPI00231650	Hist1h1d	Histone H1.2	Transcription/translation	0.698	↓
IPI00202697	Rab13	Ras-related protein Rab-13	Transport	0.699	↓
IPI00367933	Kif2a	Isoform 2 of Kinesin-like protein KIF2A	Cytoskeleton	0.699	↓
IPI00212603	Pnpo	Pyridoxine-5 ~ -phosphate oxidase	Vitamin B6 metabolism	0.703	↓
IPI00230897	Hbb	Hemoglobin subunit beta-1		0.703	↓
IPI00204130	Hdgfrp3	Hepatoma-derived growth factor-related protein 3	Neuroplasticity	0.714	↓
IPI00327502	Sftpa1	Pulmonary surfactant-associated protein A	surfactant protein /anti-inflammatory	0.717	↓
IPI00200122	Slc38a3	Sodium-coupled neutral amino acid transporter 3	Transport	0.718	↓
IPI00207146	Hbb-b1	Zero beta-globin		0.718	↓
IPI00359829	Dctn5	Dynactin 5	Adaptor protein	0.72	↓
IPI00950461	Birc6	Protein Birc6	Apoptosis	0.72	↓
IPI00870052	Rfc5	Replication factor C (Activator 1) 5	Transcription/translation	0.724	↓

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SUPPLEMENTARY TABLE S1. (CONTINUED)

<i>IPI No.</i>	<i>Gene symbol</i>	<i>Protein name</i>	<i>Biological function</i>	<i>Fold change</i>	<i>State change</i>
IPI00367678	Tex21	Testis expressed gene 21		0.726	↓
IPI00287309	Gpm6a	Glycoprotein m6a, isoform CRA_b	Scaffolding	0.734	↓
IPI00213685	Rab3d	GTP-binding protein Rab-3D	Exocytosis/endocytosis	0.735	↓
IPI00764765	LOC690295	dynein, axonemal, heavy polypeptide 14-like	Cytoskeleton	0.736	↓
IPI00193878	Isca1	Iron-sulfur cluster assembly 1 homolog, mitochondrial	Scaffolding	0.737	↓
IPI00188732	Syngn1	Synaptogyrin 1, isoform CRA_c	Neuroplasticity	0.739	↓
IPI00205801	Usp15	Ubiquitin carboxyl-terminal hydrolase	Protein turnover	0.748	↓
IPI00199609	Ide	Insulin-degrading enzyme	Protein turnover	0.753	↓
IPI00331894	Rnasel	2-,5-oligoadenylate synthetase-dependent ribonuclease L	Immunity/inflammatory	0.753	↓
IPI00189463	Psm6	Proteasome (Prosome, macropain) 26S subunit, non-ATPase, 6, isoform CRA_a	Protein turnover	0.754	↓
IPI00948428	Nedd8	Neural precursor cell expressed, developmentally down-regulated 8	—	0.755	↓
IPI00373218	Ppid	Peptidyl-prolyl cis-trans isomerase D	Chaperone	0.756	↓
IPI00948259	Mthfd1	Formyltetrahydrofolate synthetase		0.759	↓
IPI00766956	Hist1h1b	Histone H1.5	Transcription/translation	0.76	↓
IPI00476739	Sphkap	A-kinase anchor protein SPHKAP	Signaling	0.762	↓
IPI00371101	Sema7a	Semaphorin 7A, GPI membrane anchor	Immunity/inflammatory	0.762	↓
IPI00231797	Slc32a1	Vesicular inhibitory amino acid transporter	Transport	0.763	↓
IPI00199911	Arfp1	Arfaptin-1	Transport	0.764	↓
IPI00390362	Ndufv3	NADH dehydrogenase [ubiquinone] flavoprotein 3, mitochondrial	Electron transport chain	0.765	↓
IPI00480687	Marcks	Myristoylated alanine-rich C-kinase substrate	Cytoskeleton	0.769	↓
IPI00515845	Ncald	Neurocalcin-delta	Signaling	0.771	↓
IPI00230927	Cltb	Isoform Non-brain of Clathrin light chain B	Neuroplasticity	0.773	↓
IPI00209203	Olr1687	Olfactory receptor (Fragment)	Signaling	0.774	↓
IPI00231451	Atp1a3	Sodium/potassium-transporting ATPase subunit alpha-3	ATP biosynthesis	0.777	↓
IPI00195248	Ufd11	Ubiquitin fusion degradation protein 1 homolog	Protein turnover	0.78	↓
IPI00231191	Glr1	Glutaredoxin-1	Electron transport chain	0.782	↓
IPI00327830	Fabp5	Fatty acid-binding protein, epidermal	Lipid metabolism	0.783	↓
IPI00193595	Eif4a2	Eukaryotic initiation factor 4A-II	Transcription/translation	0.784	↓
IPI00206395	Mcpt9	Granzyme J	Protein turnover	0.785	↓
IPI00203239	Epb4111	Isoform L of Band 4.1-like protein 1	Cytoskeleton	0.785	↓
IPI00367047	Irgq	Immunity-related GTPase family, Q	Immunity/inflammatory	0.785	↓
IPI00869525	Klf12	Kruppel-like factor 12 (Predicted), isoform CRA_a	Transcription/translation	0.787	↓
IPI00193361	Atp8a1	ATPase, aminophospholipid transporter (APLT), class I, type 8A, member 1	ATP biosynthesis	0.788	↓
IPI00326563	Caskin1	Caskin-1	Signaling	0.79	↓
IPI00198191	Cacybp	Calcyclin-binding protein	Protein turnover	0.791	↓
IPI00896142	Syt13	Syt13 protein	Transport	0.791	↓
IPI00944217	Cee	Conserved edge expressed protein		0.791	↓
IPI00211212	Prss3	Cationic trypsin-3	Protein turnover	0.795	↓

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SUPPLEMENTARY TABLE S1. (CONTINUED)

<i>IPI No.</i>	<i>Gene symbol</i>	<i>Protein name</i>	<i>Biological function</i>	<i>Fold change</i>	<i>State change</i>
IPI00189770	Nup54	Nuclear pore complex protein Nup54	Transport	0.799	↓
IPI00365985	Hsp90b1	Isoform 1 of Endoplasmic Protein IMPACT	Chaperone	0.799	↓
IPI00553918	Impact	Protein IMPACT	Transcription/translation	0.8	↓
IPI00190699	Opcml	Isoform 1 of Opioid-binding protein/cell adhesion molecule	cell adhesion	0.8	↓
IPI00326984	Itih3	Inter-alpha-trypsin inhibitor heavy chain H3	hyaluronan metabolic	0.804	↓
IPI00363849	Lamc1	laminin, gamma 1	Neuroplasticity	0.804	↓
IPI00209253	Gipc1	PDZ domain-containing protein GIPC1	Signaling	0.805	↓
IPI00191103	Ndufa2	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 2	Electron transport chain	0.807	↓
IPI00365600	Prkar2b	cAMP-dependent protein kinase type II-beta regulatory subunit	Signaling	0.807	↓
IPI00230855	S100a1	Protein S100-A1	Transcription/translation	0.807	↓
IPI00765168	Pura	Purine rich element binding protein A	Nucleotide biosynthesis	0.807	↓
IPI00191288	Cox4nb	Neighbor of COX4	Electron transport chain	0.809	↓
IPI00373587	Ppp2r4	Protein phosphatase 2A, regulatory subunit B	Neuroplasticity	0.809	↓
IPI00365532	Cpsf3	Cleavage and polyadenylation specificity factor 3	endonuclease activity	0.81	↓
IPI00206993	Baiap2	Brain-specific angiogenesis inhibitor 1-associated protein 2	Cytoskeleton	0.813	↓
IPI00896761	LOC683788	Fascin	Cytoskeleton	0.813	↓
IPI00198693	Atp6v1g2	V-type proton ATPase subunit G 2	ATP biosynthesis	0.814	↓
IPI00326566	Hdgf	Hepatoma-derived growth factor	Neuroplasticity	0.814	↓
IPI00389828	Ermn	Isoform 1 of Ermin	Cytoskeleton	0.814	↓
IPI00324618	Uso1	General vesicular transport factor p115	Neuroplasticity	0.815	↓
IPI00371634	Bcap31	B-cell receptor-associated protein 31, isoform CRA_a	Signaling	0.815	↓
IPI00231780	H1f0	Histone H1.0	Transcription/translation	0.815	↓
IPI00944224	Hagh	Isoform 1 of Hydroxyacylglutathione hydrolase, mitochondrial	carbohydrate metabolic	0.817	↓
IPI00391102	Rab3gap2	rab3 GTPase-activating protein non-catalytic subunit	Exocytosis/endocytosis	0.817	↓
IPI00371270	Pa2g4	Proliferation-associated 2G4, isoform CRA_a	Neuroplasticity	0.821	↓
IPI00195673	Tubb6	Tubulin, beta 6	Cytoskeleton	0.821	↓
IPI00370681	Capza2	F-actin-capping protein subunit alpha-2	Cytoskeleton	0.822	↓
IPI00369683	Prpf8	Pre-mRNA-processing-splicing factor 8	splicing	0.822	↓
IPI00196750	Ssbp1	Single-stranded DNA-binding protein, mitochondrial	Transcription/translation	0.824	↓
IPI00951020	Slc1a6	Excitatory amino acid transporter 4	Transport	0.826	↓
IPI00949378	Myh9	Myosin-9	Cytoskeleton	0.827	↓
IPI00231953	Copb2	Coatamer subunit beta	Cytoskeleton	0.827	↓
IPI00207305	Clta	Isoform Brain of Clathrin light chain A	Exocytosis/endocytosis	0.829	↓
IPI00191737	Alb	Serum albumin	stress related	0.829	↓
IPI00361492	Phyhipl	Isoform 1 of Phytanoyl-CoA hydroxylase-interacting protein-like	Neuroplasticity	0.83	↓
IPI00551732	Dnaja2	DnaJ (Hsp40) homolog, subfamily A, member 2, isoform CRA_b	Chaperone	0.831	↓

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SUPPLEMENTARY TABLE S1. (CONTINUED)

<i>IPI No.</i>	<i>Gene symbol</i>	<i>Protein name</i>	<i>Biological function</i>	<i>Fold change</i>	<i>State change</i>
IPI00400748	Lcmt1	Leucine carboxyl methyltransferase 1	methyltransferase activity	0.831	↓
IPI00562653	Ctsb	Cathepsin B preproprotein	Protein turnover	0.833	↓
IPI00230941	Vim	Vimentin	Cytoskeleton	0.833	↓
IPI00212258	Phpt1	Phosphohistidine phosphatase 1 (Predicted), isoform CRA_a	Vitamin B7 metabolism	1.202	↑
IPI00212141	Mlf2	Myeloid leukemia factor 2 (Predicted), isoform CRA_a	Transcription/translation	1.202	↑
IPI00362452	RGD1564958	Glyceraldehyde-3-phosphate dehydrogenase-like	Glucose metabolism	1.203	↑
IPI00231929	Pkm2	Isoform M1 of Pyruvate kinase isozymes M1/M2	Glucose metabolism	1.204	↑
IPI00362580	Ccdc22	Coiled-coil domain-containing protein 22	Transport	1.204	↑
IPI00959472	Trip11	Thyroid hormone receptor interactor 11 isoform 2	Coactivator	1.205	↑
IPI00192112	Hapln2	Hyaluronan and proteoglycan link protein 2	cell adhesion /binding	1.205	↑
IPI00373368	Dpm1	Dolichyl-phosphate mannosyltransferase polypeptide 1, catalytic subunit	metabolic enzyme	1.207	↑
IPI00211214	Usp8	Ubiquitin carboxyl-terminal hydrolase	Protein turnover	1.207	↑
IPI00417758	Abhd16a	Abhydrolase domain-containing protein 16A	Protein turnover	1.207	↑
IPI00359162	Dnajc11	DnaJ (Hsp40) homolog, subfamily C, member 11	Chaperone	1.207	↑
IPI00567379	RGD1308874	Isoform 1 of Adipocyte plasma membrane-associated protein	adipocyte differentiation	1.207	↑
IPI00191112	Ndufab1	Acyl carrier protein	Lipid metabolism	1.208	↑
IPI00950965	Aprt	Adenine phosphoribosyltransferase	ATP biosynthesis	1.21	↑
IPI00230873	Itrp1	Isoform 2 of Inositol 1,4,5-trisphosphate receptor type 1	Ion channel	1.211	↑
IPI00192486	Rps6	40S ribosomal protein S6	Protein turnover	1.212	↑
IPI00205519	Uggt1	UDP-glucose:glycoprotein glucosyltransferase 1	Chaperone	1.212	↑
IPI00208038	Eif3h	Eukaryotic translation initiation factor 3 subunit H	Transcription/translation	1.213	↑
IPI00199865	Farsa	Phenylalanyl-tRNA synthetase alpha chain	Amino acid metabolism	1.214	↑
IPI00366955	Als2	Alsin (amyotrophic lateral sclerosis 2 protein homolog)	Signaling	1.214	↑
IPI00200225	Fmod	Fibromodulin	cellular stress response	1.214	↑
IPI00326436	Oplah	5-oxoprolinase	Amino acid metabolism	1.215	↑
IPI00231381	Mvp	Major vault protein	Scaffolding	1.216	↑
IPI00324270	Pacs1	Isoform PACS-1a of Phosphofurin acidic cluster sorting protein 1	Transport	1.217	↑
IPI00231611	Fh1	Isoform mitochondrial of fumarate hydratase, mitochondrial	Glucose metabolism	1.22	↑
IPI00373418	Dbt	lipoamide acyltransferase component of branched-chain alpha-keto acid dehydrogenase complex, mitochondrial	Amino acid metabolism	1.22	↑
IPI00211997	Ap3m2	AP-3 complex subunit mu-2	Adaptor protein	1.221	↑
IPI00209303	Fbxo2	Neural F box protein NFB42	Neuroplasticity	1.223	↑
IPI00421969	Abcf1	ATP-binding cassette sub-family F member 1	Transcription/translation	1.223	↑
IPI00372941	Sam50	Sorting and assembly machinery component 50 homolog	sorting /assembly	1.224	↑
IPI00768581	Acsf3	Acyl-CoA synthetase family member 3	Lipid metabolism	1.227	↑
IPI00869998	Psmb5	Proteasome subunit beta type-5	Protein turnover	1.227	↑

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SUPPLEMENTARY TABLE S1. (CONTINUED)

<i>IPI No.</i>	<i>Gene symbol</i>	<i>Protein name</i>	<i>Biological function</i>	<i>Fold change</i>	<i>State change</i>
IPI00188819	Tmx2	Thioredoxin-related transmembrane protein 2	cell redox homeostasis	1.227	↑
IPI00207659	Banf1	Barrier-to-autointegration factor	chromatin protein	1.228	↑
IPI00188584	Psmb2	Proteasome subunit beta type-2	Protein turnover	1.229	↑
IPI00763392	Clvs1	Clavesin-1	regulating lysosomal morphology	1.229	↑
IPI00231819	Mbp	Isoform 1 of Myelin basic protein S	Cytoskeleton	1.23	↑
IPI00358524	Enpp6	Ectonucleotide pyrophosphatase/phosphodiesterase family member 6	Lipid metabolism	1.232	↑
IPI00371860	Sf3b4	Splicing factor 3B subunit 4	RNA splicing	1.232	↑
IPI00197585	Myg1	UPF0160 protein MYG1, mitochondrial		1.232	↑
IPI00208878	Trim32	Tripartite motif protein 32	Neuroplasticity	1.233	↑
IPI00362609	Use1	Unconventional SNARE in the ER 1 homolog	membrane fusion	1.233	↑
IPI00193828	Fxyd1	Phospholemman	Ion channel	1.234	↑
IPI00764098	Mcu	Coiled-coil domain-containing protein 109A	Ion channel	1.236	↑
IPI00392306	Sh3glb1	Endophilin-B1	Apoptosis	1.237	↑
IPI00767739	Asmtl	Acetylserotonin O-methyltransferase-like	methyltransferase activity	1.237	↑
IPI00285606	Cdc42	Isoform 1 of Cell division control protein 42 homolog	Signaling	1.239	↑
IPI00817078	Psmα7	Proteasome subunit alpha type	Protein turnover	1.24	↑
IPI00371952	Ubxn4	UBX domain-containing protein 4	ERAD component	1.242	↑
IPI00209908	Mt-co2	Cytochrome c oxidase subunit 2	Electron transport chain	1.243	↑
IPI00464877	Hcn2	Potassium/sodium hyperpolarization-activated cyclic nucleotide-gated channel 2	Ion channel	1.243	↑
IPI00554244	Ampd2	AMP deaminase 2	energy metabolism	1.244	↑
IPI00192736	Drg1	Developmentally regulated GTP binding protein 1	Signaling	1.244	↑
IPI00212314	Msn	Moesin	Cytoskeleton	1.244	↑
IPI00214889	Psmβ3	Proteasome subunit beta type-3	Protein turnover	1.246	↑
IPI00952133	Pfn2	Profilin	Cytoskeleton	1.249	↑
IPI00470302	Mpi	Mannose-6-phosphate isomerase	Glucose metabolism	1.253	↑
IPI00947645	Ttyh1	Protein tweety homolog 1	Ion channel	1.254	↑
IPI00365149	Coq9	Ubiquinone biosynthesis protein COQ9, mitochondrial	ATP biosynthesis	1.256	↑
IPI00209570	Me2	NAD-dependent malic enzyme, mitochondrial	Glucose metabolism	1.258	↑
IPI00565128	-	Glyceraldehyde-3-phosphate dehydrogenase	Glucose metabolism	1.26	↑
IPI00958502	Adam22	ADAM metallopeptidase domain 22	Protein turnover	1.26	↑
IPI00337111	Rhot2	Mitochondrial Rho GTPase 2	Transport	1.263	↑
IPI00471774	Rangap1	RAN GTPase activating protein 1	Transport	1.264	↑
IPI00560467	F8a1	Factor VIII intron 22 protein		1.265	↑
IPI00870837	Mlc1	Megalencephalic leukoencephalopathy with subcortical cysts 1 homolog (Human) (Predicted)	Exocytosis/endocytosis	1.271	↑
IPI00195818	Ipo9	Protein Ipo9	Transport	1.272	↑
IPI00777831	Abi1	abl interactor 1	Adaptor protein	1.273	↑
IPI00359978	Rps28	40S ribosomal protein S28	Protein turnover	1.276	↑
IPI00209744	Agt	Angiotensinogen	Signaling	1.28	↑
IPI00211812	Copb1	Coatomer subunit beta	Neuroplasticity	1.281	↑
IPI00781133	Aco1	Aconitase 1, soluble	Glucose metabolism	1.29	↑

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SUPPLEMENTARY TABLE S1. (CONTINUED)

<i>IPI No.</i>	<i>Gene symbol</i>	<i>Protein name</i>	<i>Biological function</i>	<i>Fold change</i>	<i>State change</i>
IPI00208714	Pip4k2b	Phosphatidylinositol-5-phosphate 4-kinase type-2 beta	inositol phosphate metabolism	1.291	↑
IPI00207370	Ppp1r9b	Neurabin-2	Scaffolding	1.295	↑
IPI00366129	Pitpnm1	Membrane-associated phosphatidylinositol transfer protein 1	Transport	1.296	↑
IPI00191130	Syt5	Synaptotagmin-5	Exocytosis/endocytosis	1.299	↑
IPI00192286	Abca2	ATP-binding cassette sub-family A member 2	Lipid metabolism	1.3	↑
IPI00361216	Adsl	Adenylosuccinate lyase (Predicted)	metabolite enzymes / purine biosynthesis	1.3	↑
IPI00777983	Mbp	Myelin basic protein S	Neuroplasticity	1.305	↑
IPI00373642	Cugbp1	CUGBP Elav-like family member 1	Transcription/translation	1.305	↑
IPI00208277	Pdap1	28 kDa heat- and acid-stable phosphoprotein	Neuroplasticity	1.307	↑
IPI00209309	Nlgn3	Isoform 1 of Neuroligin-3	Neuroplasticity	1.308	↑
IPI00190778	Nrgn	Neurogranin	Neuroplasticity	1.314	↑
IPI00206986	Itp3	Inositol 1,4,5-trisphosphate receptor type 3	Signaling	1.315	↑
IPI00373505	Tmod3	Tropomodulin 3	Cytoskeleton	1.317	↑
IPI00208382	Ppt1	Palmitoyl-protein thioesterase 1	Apoptosis	1.317	↑
IPI00191442	Arl6ip5	PRA1 family protein 3	Cytoskeleton	1.321	↑
IPI00198614	Asb2	Ankyrin repeat and SOCS box protein 2	Signaling	1.322	↑
IPI00464791	Acy1	Aminoacylase-1A	Amino acid metabolism	1.323	↑
IPI00202703	Ostf1	Osteoclast-stimulating factor 1	osteoclast formation / activity	1.329	↑
IPI00371043	Manf	Mesencephalic astrocyte-derived neurotrophic factor	Neuroplasticity	1.333	↑
IPI00230907	Mif	Macrophage migration inhibitory factor	Immunity/inflammatory	1.333	↑
IPI00207333	Pafah1b3	Platelet-activating factor acetylhydrolase IB subunit gamma	Lipid metabolism	1.334	↑
IPI00209690	Ephx1	Epoxide hydrolase 1	Lipid metabolism	1.339	↑
IPI00331878	Slc5a3	Solute carrier family 5 (inositol transporters), member 3	Transport	1.34	↑
IPI00779925	Ctps2	CTP synthase 2	Amino acid metabolism	1.341	↑
IPI00199421	Tsnax	Translin-associated protein X	Transcription/translation	1.342	↑
IPI00205537	Map2k6	Mitogen-activated protein kinase kinase 6, isoform CRA_a	Signaling	1.345	↑
IPI00361161	Olr145	Olfactory receptor Olr145	Signaling	1.347	↑
IPI00194565	Prl8a3	Prolactin-like protein-C variant		1.347	↑
IPI00198897	Ndufa6	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 6	Electron transport chain	1.351	↑
IPI00480620	Bdh1	D-beta-hydroxybutyrate dehydrogenase, mitochondrial	Lipid metabolism	1.355	↑
IPI00213548	Scn1b	Voltage-gated sodium channel subunit beta1-A	Ion channel	1.362	↑
IPI00198371	Ap2s1	AP-2 complex subunit sigma	Adaptor protein	1.362	↑
IPI00215523	Bcat1	Branched-chain-amino-acid aminotransferase, cytosolic	Amino acid metabolism	1.363	↑
IPI00214448	Crym	Mu-crystallin homolog	hormone metabolism	1.363	↑
IPI00422067	Gnb4	Guanine nucleotide-binding protein subunit beta-4	Signaling	1.374	↑
IPI00230949	Plcd1	1-phosphatidylinositol-4,5-bisphosphate phosphodiesterase delta-1	Signaling	1.375	↑
IPI00421376	Tomm40	Mitochondrial import receptor subunit TOM40 homolog	Ion channel	1.382	↑
IPI00369311	-	Enolase	Glucose metabolism	1.387	↑

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SUPPLEMENTARY TABLE S1. (CONTINUED)

<i>IPI No.</i>	<i>Gene symbol</i>	<i>Protein name</i>	<i>Biological function</i>	<i>Fold change</i>	<i>State change</i>
IPI00325272	Becn1	Beclin-1	autophagy	1.388	↑
IPI00209385	Apba1	Amyloid beta A4 precursor protein-binding family A member 1	Adaptor protein	1.389	↑
IPI00209297	Nol3	Nucleolar protein 3	Apoptosis	1.396	↑
IPI00201455	Yes1	Tyrosine-protein kinase Yes	Amino acid metabolism	1.402	↑
IPI00766690	Farp1	FERM, RhoGEF and pleckstrin domain-containing protein 1	Cytoskeleton	1.407	↑
IPI00190687	Vcpip1	Deubiquitinating protein VCIPI135	Protein turnover	1.412	↑
IPI00231359	Acads	Acyl-Coenzyme A dehydrogenase, C-2 to C-3 short chain	Lipid metabolism	1.413	↑
IPI00325878	Llg1	Lethal(2) giant larvae protein homolog 1	Cytoskeleton	1.416	↑
IPI00188364	Itm2c	Integral membrane protein 2C	Neuroplasticity	1.427	↑
IPI00215463	Calml3	Calmodulin-like protein 3	Neuroplasticity	1.428	↑
IPI00189098	Aimp2	Aminoacyl tRNA synthase complex-interacting multifunctional protein 2	Scaffolding	1.435	↑
IPI00195160	Psap	Sulfated glycoprotein 1	Lipid metabolism	1.436	↑
IPI00209353	Ilkap	Integrin-linked kinase-associated serine/threonine phosphatase 2C	Signaling	1.439	↑
IPI00362084	Dr1	Protein Dr1	Transcription/translation	1.447	↑
IPI00362106	Fermt2	Fermitin family homolog 2 (Drosophila)	Cytoskeleton	1.45	↑
IPI00392875	Cdc42bpb	Serine/threonine-protein kinase MRCK beta	Cytoskeleton	1.451	↑
IPI00205022	Nucb1	Nucleobindin-1	calcium-binding protein	1.462	↑
IPI01016350	Me1	NADP-dependent malic enzyme	Glucose metabolism	1.467	↑
IPI00358163	Slc25a13	Solute carrier family 25, member 13	ATP biosynthesis	1.476	↑
IPI00326211	Cpe	Carboxypeptidase E	Protein turnover	1.48	↑
IPI00561751	Ndufs5	NADH dehydrogenase (ubiquinone) Fe-S protein 5	Electron transport chain	1.488	↑
IPI00205394	Timm44	Mitochondrial import inner membrane translocase subunit TIM44	Adaptor protein	1.499	↑
IPI00476991	Ncam1	Neural cell adhesion molecule 1	cell adhesion	1.527	↑
IPI00734686	Mt-co2	Cytochrome c oxidase subunit 2	Electron transport chain	1.539	↑
IPI00208348	Pdxk	Pyridoxal kinase	Vitamin B8 metabolism	1.584	↑
IPI00948302	Atp5c1	ATP synthase gamma chain	ATP biosynthesis	1.586	↑
IPI00359253	Slc30a9	Protein Slc30a9	Cytoskeleton	1.607	↑
IPI00189989	Spr	Sepiapterin reductase	metabolite enzymes / tetrahydrobiopterin biosynthetic process	1.613	↑
IPI00199986	Fen1	Flap endonuclease 1	DNA metabolism	1.619	↑
IPI00475474	Rps4x	40S ribosomal protein S4, X isoform	Protein turnover	1.626	↑
IPI00763058	Arhgap21	Protein Arhgap21	Signaling	1.631	↑
IPI00764532	Ifi44	Interferon-induced protein 44, isoform CRA_a	Immunity/inflammatory	1.645	↑
IPI00950139	Mrpl46	39S ribosomal protein L46, mitochondrial	Protein turnover	1.65	↑
IPI00366160	Dpf2	Zinc finger protein ubi-d4	Apoptosis	1.651	↑
IPI00198444	Gatm	Glycine amidinotransferase, mitochondrial	metabolism/creatine biosynthesis	1.678	↑
IPI00199604	Cadps	Calcium-dependent secretion activator 1	Exocytosis/endocytosis	1.678	↑
IPI00785576	Ttc39c	Tetratricopeptide repeat protein 39C		1.682	↑
IPI00331898	Fam21c	WASH complex subunit FAM21	Transport	1.696	↑
IPI00364365	Isg20	Interferon stimulated exonuclease 20	Immunity/inflammatory	1.701	↑

(continued)

SUPPLEMENTARY TABLE S1. (CONTINUED)

<i>IPI No.</i>	<i>Gene symbol</i>	<i>Protein name</i>	<i>Biological function</i>	<i>Fold change</i>	<i>State change</i>
IPI00655249	Echdc3	Enoyl-CoA hydratase domain-containing protein 3, mitochondrial	Lipid metabolism	1.711	↑
IPI00991200	Ryr2	Ryanodine receptor 2	Ion channel	1.782	↑
IPI00369693	Osbpl8	Oxysterol-binding protein	Lipid metabolism	1.785	↑
IPI00357936	Dtd1	D-tyrosyl-tRNA(Tyr) deacylase	Amino acid metabolism	1.838	↑
IPI00210431	Dhcr7	7-dehydrocholesterol reductase	Lipid metabolism	1.861	↑
IPI00197468	Smu1	WD40 repeat-containing protein SMU1	splicing factor	1.88	↑
IPI00363160	Sephs1	Selenide, water dikinase 1	Neuroplasticity	1.925	↑
IPI00769218	RGD1565368	Glyceraldehyde-3-phosphate dehydrogenase-like	Glucose metabolism	1.995	↑
IPI00764713	Klc1	Isoform A of Kinesin light chain 1	Adaptor protein	2.188	↑
IPI00324991	Lbr	Lamin-B receptor	Cytoskeleton	2.276	↑
IPI00206172	Mapk3	Isoform 1 of Mitogen-activated protein kinase 3	Signaling	2.434	↑
IPI00197711	Ldha	L-lactate dehydrogenase A chain	Glucose metabolism	2.644	↑
IPI00779069	Tanc1	Protein TANC1	Scaffolding	2.75	↑
IPI00368449	Pmm2	Phosphomannomutase 2	Glucose metabolism	2.948	↑
IPI00561715	Gtf2i	General transcription factor II-I	Transcription/translation	3.008	↑
IPI00554196	Itsn1	Intersectin 1	Adaptor protein	3.138	↑
IPI00231023	Syn1	Isoform IB of Synapsin-1	Neuroplasticity	3.461	↑
IPI00464648	Ccdc91	Coiled-coil domain-containing protein 91	Transport	3.918	↑
IPI00362457	Ccdc150	Coiled-coil domain containing 150-like		4.696	↑

State change: arrows represent up/downregulation in depressed rats relative to controls.
112 uncharacterized proteins were not listed in this table.