

PROTEOMICS

Supporting Information

for Proteomics

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Identification of host factors involved in coronavirus replication by quantitative proteomics analysis

Supporting information Table S1 List of identified proteins in a Golgi-enriched fraction of MHV-infected HeLa-CEACAM1a cells versus mock-infected cells by SILAC.

Protein ID	Protein	Gene symbol	Pept ID Exp A ^a	Pept ID Exp B ^b	Pept ID Exp C ^c	Mean ratio ^d	Stdev (ratio) ^e	p-value
IPI0000138	Alpha-1.3-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase	MGAT1	3	1	3	0.95	0.098	0.17
IPI0000494	60S ribosomal protein L5	RPL5	6	8	13	0.71	0.301	0.05
IPI0000643	BAG family molecular chaperone regulator 2	BAG2	1	4	3	1.08	0.250	0.25
IPI0000690	Isoform 1of Apoptosis-inducing factor 1. mitochondrial precursor	AIFM1	3	9	6	0.83	0.066	0.01
IPI0000816	14-3-3 protein epsilon	YWHAE	2	3	6	1.28	0.581	0.20
IPI0000856	Isoform 1of Pleckstrin homology domain-containing family C member 1	PLEKHC1	3	2	4	1.73	0.809	0.12
IPI0000861	Isoform 1of LIM and SH3 domain protein 1	LASP1	5	9	11	1.03	0.396	0.44
IPI0000874	Peroxiredoxin-1	PRDX1	5	10	16	1.14	0.433	0.27
IPI0000875	Elongation factor 1-gamma	EEF1G	3	1	3	0.89	1.089	0.41
IPI0000877	Hypoxia up-regulated protein 1 precursor	HYOU1	1	4	3	1.11	0.209	0.16
IPI0001632	Hypothetical protein LOC57648	KIAA1522	2	1	2	1.17	0.352	0.20
IPI0001871	PRKC apoptosis WT1 regulator protein	PAWR	2	4	9	0.82	0.318	0.13
IPI0001893	Isoform A of Protocadherin-7 precursor	PCDH7	2	10	13	0.82	0.261	0.10
IPI0001960	Chloride intracellular channel protein 4	CLIC4	2	4	9	1.55	0.901	0.17
IPI0002070	Leucine-rich repeat-containing protein 8A	LRRRC8A	5	5	5	0.77	0.202	0.04
IPI0002406	Lutheran blood group glycoprotein precursor	BCAM	3	5	3	1.21	0.344	0.15
IPI0002412	Palmitoyl-protein thioesterase 1 precursor	PPT1	6	4	5	1.73	0.333	0.03
IPI0002460	Isoform 1 of Annexin A7	ANXA7	5	6	10	1.37	0.884	0.23
IPI0002520	Serine hydroxymethyltransferase. mitochondrial precursor	SHMT2	3	3	3	1.04	0.965	0.46
IPI0002745	Cathepsin Z precursor	CTSZ	4	2	5	1.62	0.610	0.09
IPI0002821	60S ribosomal protein L14	RPL14	4	5	4	0.75	0.214	0.04
IPI0003348	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-2	GNB2	10	4	10	0.88	0.342	0.22
IPI0003362	HSPA5 protein	HSPA5	28	30	31	1.18	0.462	0.24
IPI0003527	Ezrin-radixin-moesin-binding phosphoprotein 50	SLC9A3R1	9	10	20	1.00	0.609	0.49
IPI0003833	Mitochondrial carrier homolog 2	MTCH2	1	2	3	0.98	0.739	0.48
IPI0003865	Isoform 1of Heat shock cognate 71 kDa protein	HSPA8	22	22	23	1.03	0.464	0.44
IPI0003918	60S ribosomal protein L4	RPL4	10	2	3	0.75	0.146	0.02
IPI0004397	Ras-related protein Ral-B precursor	RALB	1	2	4	1.01	0.342	0.47
IPI0004416	Charged multivesicular body protein 2a	CHMP2A	3	6	7	1.25	0.106	0.02
IPI0004503	Lysosomal-associated membrane protein 1	LAMP1	3	4	3	1.97	0.183	0.01

IPI00004669	Polypeptide N-acetylgalactosaminyltransferase 2	GALNT2	23	15	22	1.03	0.319	0.41
IPI00004671	Golgin subfamily B member 1	GOLGB1	37	59	33	1.23	0.164	0.04
IPI00004902	Isoform 1 of Electron transfer flavoprotein subunit beta	ETFB	7	2	3	1.23	1.437	0.38
IPI00004962	Golgi integral membrane protein 4	GOLIM4	4	13	15	1.40	0.287	0.05
IPI00005087	Tropomodulin-3	TMOD3	3	3	7	1.22	0.371	0.16
IPI00005129	Isoform 1of Secretory carrier-associated membrane protein 1	SCAMP1	2	3	1	1.12	0.383	0.27
IPI00005159	Actin-related protein 2	ACTR2	2	2	9	0.92	0.218	0.21
IPI00005160	Actin-related protein 2/3 complex subunit 1B	ARPC1B	5	3	2	0.92	0.316	0.30
IPI00005161	Actin-related protein 2/3 complex subunit 2	ARPC2	5	1	3	0.82	0.463	0.20
IPI00005162	Actin-related protein 2/3 complex subunit 3	ARPC3	5	2	5	0.81	0.301	0.11
IPI00005202	Membrane-associated progesterone receptor component 2	PGRMC2	4	3	5	1.46	0.225	0.03
IPI00005537	39S ribosomal protein L12. mitochondrial precursor	MRPL12	4	3	5	0.94	0.552	0.40
IPI00005614	Isoform Long of Spectrin beta chain. brain 1	SPTBN1	18	38	41	0.83	0.809	0.31
IPI00005707	Macrophage mannose receptor 2 precursor	MRC2	1	3	3	1.18	0.210	0.10
IPI00005745	Serine palmitoyltransferase 1	SPTLC1	2	2	1	2.23	1.002	0.09
IPI00005969	F-actin-capping protein subunit alpha-1	CAPZA1	4	2	4	1.06	0.069	0.08
IPI00006034	Cysteine-rich protein 2	CRIP2	3	2	5	0.86	0.272	0.15
IPI00006052	Prefoldin subunit 2	PFDN2	3	3	3	1.31	0.448	0.13
IPI00006211	Isoform 1of Vesicle-associated membrane protein-associated protein B/C	VAPB	4	5	6	1.29	0.373	0.11
IPI00006451	Vesicle-fusing ATPase	NSF	2	4	3	1.33	0.458	0.13
IPI00006482	Isoform Long of Sodium/potassium-transporting ATPase subunit alpha-1 precursor	ATP1A1	25	27	25	0.87	0.292	0.18
IPI00006666	Monocarboxylate transporter 4	SLC16A3	2	1	4	0.94	0.337	0.35
IPI00006865	Vesicle-trafficking protein SEC22b	SEC22B	9	9	10	1.43	0.035	0.00
IPI00006935	Eukaryotic translation initiation factor 5A-2	EIF5A2	5	2	3	1.13	0.647	0.34
IPI00007034	Isoform 2 of UBA domain-containing protein PHGDHL1 precursor	UBAC2	2	6	5	1.26	0.377	0.13
IPI00007058	Coronin-1B	CORO1B	5	4	4	1.15	0.626	0.32
IPI00007067	Golgi-associated plant pathogenesis-related protein 1	C9orf19	4	2	2	0.86	0.127	0.05
IPI00007084	Mitochondrial aspartate-glutamate carrier protein	SLC25A13	12	9	6	0.81	0.270	0.10
IPI00007188	ADP/ATP translocase 2	SLC25A5	9	6	6	0.75	0.363	0.10
IPI00007289	Alkaline phosphatase. placental type precursor	ALPP	2	2	3	1.16	0.708	0.33
IPI00007611	ATP synthase subunit O. mitochondrial precursor	ATP5O	2	4	6	0.85	0.428	0.22
IPI00007682	Vacuolar ATP synthase catalytic subunit A	ATP6V1A	3	7	5	0.98	0.530	0.47
IPI00007750	Tubulin alpha-4A chain	TUBA4A	2	3	2	1.02	0.886	0.48
IPI00007752	Tubulin beta-2C chain	TUBB2C	6	4	4	1.16	1.195	0.39
IPI00007755	Ras-related protein Rab-21	RAB21	5	3	3	1.13	0.483	0.29

IPI00007765	Stress-70 protein. mitochondrial precursor	HSPA9	12	20	16	0.87	1.120	0.39
IPI00007812	Vacuolar ATP synthase subunit B. brain isoform	ATP6V1B2	4	7	10	1.01	0.406	0.48
IPI00007935	PDZ and LIM domain protein 5	PDLIM5	6	5	8	0.91	0.474	0.33
IPI00007940	ER lipid raft associated 1	ERLIN1	1	4	8	1.48	0.255	0.03
IPI00008085	Zinc transporter ZIP10 precursor	SLC39A10	1	3	3	1.14	0.446	0.27
IPI00008338	Isoform 2 of Multidrug resistance-associated protein 1	ABCC1	3	3	3	0.92	0.115	0.11
IPI00008418	Diablo homolog. mitochondrial precursor	DIABLO	2	1	3	0.84	0.386	0.19
IPI00008438	40S ribosomal protein S10	RPS10	4	2	6	0.77	0.295	0.08
IPI00008454	DnaJ homolog subfamily B member 11 precursor	DNAJB11	4	4	2	1.20	0.254	0.11
IPI00008494	Intercellular adhesion molecule 1 precursor	ICAM1	2	2	3	0.75	0.433	0.12
IPI00008524	Isoform 1 of Polyadenylate-binding protein 1	PABPC1	9	8	8	0.81	0.298	0.11
IPI00008529	60S acidic ribosomal protein P2	RPLP2	6	4	6	0.86	0.337	0.18
IPI00008530	60S acidic ribosomal protein P0	RPLP0	6	3	6	0.84	0.293	0.13
IPI00008986	Large neutral amino acids transporter small subunit 1	SLC7A5	5	4	6	0.94	0.278	0.33
IPI00009057	Isoform A of Ras GTPase-activating protein-binding protein 2	G3BP2	6	3	4	0.60	0.305	0.03
IPI00009111	Trophoblast glycoprotein precursor	TPBG	2	3	4	0.69	0.171	0.02
IPI00009123	Nucleobindin-2 precursor	NUCB2	1	2	4	1.31	0.323	0.09
IPI00009225	Syntaxin-8	STX8	5	5	4	1.63	0.322	0.03
IPI00009236	Isoform Alpha of Caveolin-1	CAV1				0.90	0.308	0.25
IPI00009253	Alpha-soluble NSF attachment protein	NAPA	4	4	5	1.68	0.503	0.06
IPI00009329	Utrophin	UTRN	8	5	7	1.10	0.300	0.26
IPI00009342	Ras GTPase-activating-like protein IQGAP1	IQGAP1	24	14	24	2.16	1.046	0.10
IPI00009368	Sideroflexin-1	SFXN1	5	7	3	0.84	0.286	0.13
IPI00009505	Isoform 1 of Beta-2-syntrophin	SNTB2	4	4	7	0.99	0.214	0.47
IPI00009747	Lanosterol synthase	LSS	0	2	2	1.13	0.228	0.16
IPI00009904	Protein disulfide-isomerase A4 precursor	PDIA4	6	8	14	1.22	0.246	0.09
IPI00009923	Isoform 1 of Prolyl 4-hydroxylase subunit alpha-1 precursor	P4HA1	2	4	1	0.90	0.442	0.30
IPI00009946	Mitochondrial import receptor subunit TOM34	TOMM34	3	1	3	1.27	0.842	0.28
IPI00009960	Isoform 1 of Mitochondrial inner membrane protein	IMMT	12	23	3	0.78	0.110	0.02
IPI00010348	Deoxyribonuclease-2-alpha precursor	DNASE2	3	2	4	1.73	0.427	0.04
IPI00010414	PDZ and LIM domain protein 1	PDLIM1	7	3	2	1.49	1.428	0.28
IPI00010428	Cell division cycle-associated protein 3	CDCA3	1	2	5	0.85	0.409	0.21
IPI00010438	Isoform SNAP-23a of Synaptosomal-associated protein 23	SNAP23	4	6	9	1.20	0.696	0.29
IPI00010440	HS1-associating protein X-1	HAX1	2	2	2	0.88	0.436	0.28
IPI00010470	Isoform SNAP-25b of Synaptosomal-associated protein 25	SNAP25	4	3	3	0.92	0.956	0.43

IPI00010676	Isoform 1 of Urokinase plasminogen activator surface receptor precursor	PLAUR	4	6	8	0.88	0.104	0.04
IPI00010720	T-complex protein 1 subunit epsilon	CCT5	3	4	4	2.14	0.597	0.04
IPI00010779	Isoform 1 of Tropomyosin alpha-4 chain	TPM4	7	9	13	1.23	0.814	0.29
IPI00010796	Protein disulfide-isomerase precursor	P4HB	15	16	24	1.21	0.344	0.15
IPI00010896	Chloride intracellular channel protein 1	CLIC1	7	4	7	2.34	0.976	0.08
IPI00011200	D-3-phosphoglycerate dehydrogenase	PHGDH	8	6	5	1.71	0.885	0.14
IPI00011229	Cathepsin D precursor	CTSD	8	5	8	1.76	0.126	0.00
IPI00011253	40S ribosomal protein S3	RPS3	11	8	10	0.81	0.166	0.04
IPI00011284	Isoform Membrane-bound of Catechol O-methyltransferase	COMT	2	1	2	1.79	0.260	0.02
IPI00011302	CD59 glycoprotein precursor	CD59	5	3	4	0.90	0.334	0.26
IPI00011654	Tubulin beta chain	TUBB	20	14	20	1.20	0.925	0.33
IPI00011937	Peroxiredoxin-4	PRDX4	2	1	4	1.27	0.386	0.13
IPI00012011	Cofilin-1	CFL1	12	4	9	1.56	0.996	0.19
IPI00012442	Ras GTPase-activating protein-binding protein 1	G3BP1	6	7	9	0.65	0.086	0.00
IPI00012451	Guanine nucleotide-binding protein subunit beta-4	GNB4	2	2	3	0.84	0.163	0.06
IPI00012535	DnaJ homolog subfamily A member 1	DNAJA1	4	2	7	0.92	0.677	0.39
IPI00012645	Isoform 1 of Spectrin beta chain. brain 2	SPTBN2	3	6	4	0.66	0.447	0.07
IPI00012750	40S ribosomal protein S25	RPS25	6	6	4	0.83	0.084	0.02
IPI00012772	60S ribosomal protein L8	RPL8	7	4	4	0.92	0.731	0.40
IPI00012837	Kinesin heavy chain	KIF5B	1	5	5	0.81	0.610	0.24
IPI00013219	Integrin-linked protein kinase	ILK	2	3	3	1.84	0.389	0.03
IPI00013296	40S ribosomal protein S18	RPS18	9	4	7	0.76	0.360	0.10
IPI00013297	28 kDa heat- and acid-stable phosphoprotein	PDAP1	1	5	2	0.76	0.170	0.03
IPI00013485	40S ribosomal protein S2	RPS2	3	1	3	0.74	0.230	0.04
IPI00013508	Alpha-actinin-1	ACTN1	9	9	6	1.52	1.362	0.26
IPI00013744	Integrin alpha-2 precursor	ITGA2	1	3	6	1.08	0.401	0.34
IPI00013808	Alpha-actinin-4	ACTN4	39	27	31	1.73	1.471	0.23
IPI00013847	Cytochrome b-c1 complex subunit 1. mitochondrial precursor	UQCRC1	13	3	7	0.81	0.350	0.14
IPI00013881	Heterogeneous nuclear ribonucleoprotein H	HNRPH1	2	1	2	0.79	0.420	0.15
IPI00013890	Isoform 1 of 14-3-3 protein sigma	SFN	3	2	2	1.24	0.736	0.27
IPI00013894	Stress-induced-phosphoprotein 1	STIP1	1	4	2	1.29	0.872	0.27
IPI00013912	Uncharacterized protein C1orf198	C1orf198	3	1	4	0.95	0.713	0.44
IPI00013930	Syntaxin-6	STX6	2	3	1	1.03	0.471	0.45
IPI00013981	Proto-oncogene tyrosine-protein kinase Yes	YES1	4	1	7	0.95	0.065	0.10
IPI00014177	Septin-2	SEPT2	5	7	12	0.66	0.321	0.04

IPI00014230	Complement component 1 Q subcomponent-binding protein. mitochondrial precursor	C1QBP	2	3	1	1.00	1.269	0.50
IPI00014236	Isoform 1 of Zinc transporter ZIP14	SLC39A14	1	3	3	1.04	0.790	0.46
IPI00014377	Ras-related protein Rab-32	RAB32	1	3	4	1.23	0.422	0.17
IPI00014577	Ras-related protein Rab-18	RAB18	4	2	4	1.04	0.666	0.44
IPI00014938	Nuclear protein Hcc-1	CIP29	3	2	2	0.89	0.734	0.37
IPI00015102	Isoform 1 of CD166 antigen precursor	ALCAM	16	16	16	0.93	0.290	0.29
IPI00015148	Ras-related protein Rap-1b precursor	RAP1B	2	0	2	1.27	0.465	0.16
IPI00015262	Calponin-2	CNN2	11	5	9	1.02	0.063	0.31
IPI00015602	Mitochondrial precursor proteins import receptor	TOMM70A	3	4	3	0.94	0.377	0.35
IPI00015688	Glypican-1 precursor	GPC1	4	5	4	3.19	0.920	0.04
IPI00015833	Coiled-coil-helix-coiled-coil-helix domain-containing protein 3	CHCHD3	8	13	8	0.70	0.245	0.04
IPI00015947	DnaJ homolog subfamily B member 1	DNAJB1	2	3	2	0.96	0.913	0.47
IPI00015973	Band 4.1-like protein 2	EPB41L2	1	2	10	1.15	0.336	0.20
IPI00016334	Isoform 1of Cell surface glycoprotein MUC18 precursor	MCAM	8	12	19	0.86	0.073	0.02
IPI00016339	Ras-related protein Rab-5C	RAB5C	7	7	9	1.19	0.356	0.17
IPI00016342	Ras-related protein Rab-7a	RAB7A	3	6	8	1.22	0.658	0.27
IPI00016405	Isoform 1of OCIA domain-containing protein 1	OCIAD1	1	3	4	0.88	0.651	0.34
IPI00016610	Poly(rC)-binding protein 1	PCBP1	2	4	7	1.20	0.430	0.20
IPI00016621	Adaptor-related protein complex 2. alpha 2 subunit variant (Fragment)	AP2A2	5	1	4	0.93	0.522	0.38
IPI00016670	C11orf59 protein	C11orf59	6	2	6	2.20	0.571	0.04
IPI00016801	Glutamate dehydrogenase 1. mitochondrial precursor	GLUD1	2	1	2	1.23	0.954	0.32
IPI00016915	Insulin-like growth factor-binding protein 7 precursor	IGFBP7	9	8	7	1.97	0.157	0.00
IPI00017292	Isoform 1of Catenin beta-1	CTNNB1	9	9	9	0.82	0.268	0.10
IPI00017334	Prohibitin	PHB	13	9	12	0.87	0.260	0.16
IPI00017342	Rho-related GTP-binding protein RhoG precursor	RHOG	8	5	10	1.14	0.353	0.22
IPI00017344	Ras-related protein Rab-5B	RAB5B	2	3	3	1.19	0.264	0.12
IPI00017367	Radixin isoform b	RDX	3	9	7	0.87	1.060	0.38
IPI00017510	Cytochrome c oxidase subunit 2	MT-CO2	1	2	3	0.83	0.789	0.30
IPI00017529	Isoform 1 of Lymphocyte function-associated antigen 3 precursor	CD58				0.82	0.043	0.00
IPI00017567	Isoform Long of Endoglin precursor	ENG	3	1	3	1.28	0.449	0.15
IPI00017596	Microtubule-associated protein RP/EB family member 1	MAPRE1	2	4	2	1.28	0.466	0.16
IPI00017617	Probable ATP-dependent RNA helicase DDX5	DDX5	3	3	4	0.76	0.475	0.14
IPI00017726	Isoform 1of 3-hydroxyacyl-CoA dehydrogenase type-2	HSD17B10	5	1	2	1.13	1.246	0.41
IPI00017895	Isoform 1of Glycerol-3-phosphate dehydrogenase. mitochondrial precursor	GPD2	6	8	3	0.82	0.222	0.08
IPI00018146	14-3-3 protein theta	YWHAQ	2	4	2	1.42	0.915	0.22

IPI00018219	Transforming growth factor-beta-induced protein ig-h3 precursor	TGFBI	4	5	9	2.66	1.094	0.08
IPI00018274	Isoform 1 of Epidermal growth factor receptor precursor	EGFR	9	11	16	0.97	0.437	0.45
IPI00018415	Transmembrane 9 superfamily member 2 precursor	TM9SF2	3	2	1	1.44	0.295	0.04
IPI00018452	Copine-1	CPNE1	2	4	8	2.02	1.385	0.17
IPI00018871	ADP-ribosylation factor-like protein 8B	ARL8B	2	2	2	1.91	0.344	0.02
IPI00019146	Isoform 1 of Coxsackievirus and adenovirus receptor precursor	CXADR	8	2	7	1.13	0.380	0.25
IPI00019157	Chondroitin sulfate proteoglycan 4 precursor	CSPG4	3	13	12	1.47	0.849	0.19
IPI00019376	Septin-11	SEPT11	1	6	4	0.57	0.429	0.04
IPI00019472	Neutral amino acid transporter B	SLC1A5	8	6	9	0.91	0.499	0.34
IPI00019502	Myosin-9	MYH9	61	84	117	1.11	0.407	0.30
IPI00019835	Isoform 1 of Bcl-2-related proline-rich protein	BCL2L12	3	1	3	1.02	0.996	0.49
IPI00019906	Isoform 2 of Basigin precursor	BSG	7	7	10	0.94	0.137	0.17
IPI00019997	Lin-7 homolog C	LIN7C	3	4	7	1.62	0.153	0.01
IPI00020124	Phosphatidylinositol 4-kinase type 2-alpha	PI4K2A	1	2	5	1.45	0.420	0.08
IPI00020418	Ras-related protein R-Ras precursor	RRAS	5	3	8	1.10	0.266	0.23
IPI00020513	Zyxin	ZYX	7	7	10	1.31	0.694	0.22
IPI00020557	Prolow-density lipoprotein receptor-related protein 1 precursor	LRP1	14	29	5	1.18	0.477	0.24
IPI00020599	Calreticulin precursor	CALR	6	8	16	1.30	0.230	0.05
IPI00020928	Transcription factor A, mitochondrial precursor	TFAM	3	2	1	0.85	0.644	0.30
IPI00020984	Calnexin precursor	CANX	6	8	10	1.49	0.164	0.01
IPI00021033	Isoform 1 of Collagen alpha-1(III) chain precursor	COL3A1	4	6	6	2.32	0.325	0.01
IPI00021048	Isoform 1 of Myoferlin	FER1L3	20	29	33	0.82	0.292	0.12
IPI00021263	14-3-3 protein zeta/delta	YWHAZ	3	9	10	1.16	0.616	0.30
IPI00021266	60S ribosomal protein L23a	RPL23A	4	3	7	0.80	0.180	0.05
IPI00021405	Isoform A of Lamin-A/C	LMNA	5	9	11	1.33	0.202	0.04
IPI00021440	Actin, cytoplasmic 2	ACTG1	26	16	28	1.16	0.473	0.26
IPI00021812	Neuroblast differentiation-associated protein AHNAK	AHNAK	240	274	372	0.72	0.110	0.01
IPI00021840	40S ribosomal protein S6	RPS6	4	1	2	0.78	0.649	0.22
IPI00021975	Tumor necrosis factor receptor superfamily member 10A precursor	TNFRSF10A	1	2	2	0.94	0.561	0.41
IPI00021985	Transmembrane 9 superfamily member 4	TM9SF4	6	4	2	1.59	0.185	0.01
IPI00022048	Prostaglandin F2 receptor negative regulator precursor	PTGFRN	5	2	11	1.00	0.625	0.50
IPI00022143	Isoform 1 of Protein FAM62A	FAM62A	4	8	12	1.19	0.121	0.03
IPI00022202	Isoform A of Phosphate carrier protein, mitochondrial precursor	SLC25A3	3	0	3	0.83	0.440	0.20
IPI00022462	Transferrin receptor protein 1	TFRC	15	15	15	1.08	0.466	0.35
IPI00022542	Rho-associated protein kinase 1	ROCK1	2	1	3	1.52	0.399	0.06

IPI00022558	Isoform 1 of Myelin protein zero-like protein 1 precursor	MPZL1	1	2	3	1.07	0.078	0.08
IPI00022649	Isoform 1 of Solute carrier family 12 member 2	SLC12A2	3	2	5	0.92	0.254	0.26
IPI00022661	Isoform Delta of Poliovirus receptor-related protein 2 precursor	PVRL2	1	2	4	0.76	0.311	0.08
IPI00022774	Transitional endoplasmic reticulum ATPase	VCP	10	18	7	1.26	0.485	0.18
IPI00022793	Trifunctional enzyme beta subunit. mitochondrial precursor	HADHB	4	5	3	0.78	0.531	0.18
IPI00023048	Elongation factor 1-delta	EEF1D	5	7	7	1.22	1.045	0.34
IPI00023122	Isoform 1 of PDZ and LIM domain protein 7	PDLIM7	6	2	5	0.99	0.331	0.46
IPI00023510	Ras-related protein Rab-5A	RAB5A	4	3	4	1.19	0.427	0.21
IPI00023542	Transmembrane emp24 protein transport domain containing 9	TMED9	6	2	4	1.55	0.608	0.11
IPI00023605	Isoform 1 of Cdc42 effector protein 1	CDC42EP1	4	1	3	0.97	0.311	0.42
IPI00023704	Lipoma-preferred partner	LPP	1	4	3	1.62	0.788	0.13
IPI00024046	Cadherin-13 precursor	CDH13	2	7	6	1.09	0.491	0.35
IPI00024067	Isoform 1 of Clathrin heavy chain 1	CLTC	6	2	6	1.41	0.695	0.17
IPI00024095	Annexin A3	ANXA3	13	14	9	1.71	1.508	0.23
IPI00024145	Voltage-dependent anion-selective channel protein 2	VDAC2	6	5	5	0.99	0.617	0.48
IPI00024157	FK506-binding protein 3	FKBP3	0	5	7	0.61	0.204	0.01
IPI00024284	Basement membrane-specific heparan sulfate proteoglycan core protein precursor	HSPG2	5	7	4	1.46	0.175	0.02
IPI00024320	Putative RNA-binding protein 3	RBM3	1	3	2	0.83	0.301	0.13
IPI00024403	Copine-3	CPNE3	2	5	6	1.03	0.329	0.41
IPI00024650	Monocarboxylate transporter 1	SLC16A1	0	2	7	0.91	0.207	0.19
IPI00024705	PDZ domain-containing protein GIPC1	GIPC1	3	2	4	1.39	0.330	0.06
IPI00024911	Endoplasmic reticulum protein ERp29 precursor	ERP29	4	4	7	1.41	0.376	0.08
IPI00024919	Thioredoxin-dependent peroxide reductase. mitochondrial precursor	PRDX3	2	1	3	0.76	1.057	0.29
IPI00024920	ATP synthase delta chain. mitochondrial precursor	ATP5D	3	4	2	0.84	0.290	0.14
IPI00024933	60S ribosomal protein L12	RPL12	6	4	6	0.94	0.337	0.35
IPI00024976	Mitochondrial import receptor subunit TOM22 homolog	TOMM22	3	1	2	0.91	0.612	0.37
IPI00025091	40S ribosomal protein S11	RPS11	2	4	3	0.77	0.262	0.06
IPI00025156	Isoform 1 of STIP1 homology and U box-containing protein 1	STUB1	2	3	6	1.05	0.097	0.16
IPI00025252	Protein disulfide-isomerase A3 precursor	PDIA3	24	15	30	1.43	0.176	0.02
IPI00025277	Programmed cell death protein 6	PDCD6	5	2	6	1.35	0.707	0.20
IPI00025329	60S ribosomal protein L19	RPL19	7	6	6	0.97	0.418	0.44
IPI00025491	Eukaryotic initiation factor 4A-I	EIF4A1	3	3	4	1.19	0.598	0.27
IPI00025512	Heat shock protein beta-1	HSPB1	6	4	7	1.26	0.746	0.26
IPI00025717	Metaxin-2	MTX2	2	2	1	0.91	0.659	0.37
IPI00025796	NADH dehydrogenase [ubiquinone] iron-sulfur protein 3. mitochondrial precursor	NDUFS3	2	3	3	1.08	0.741	0.41

IPI00025809	Alpha-1.6-mannosyl-glycoprotein 2-beta-N-acetylglucosaminyltransferase	MGAT2	3	3	2	1.13	0.418	0.27
IPI00025818	Isoform 1 of Polypeptide N-acetylgalactosaminyltransferase 1	GALNT1	6	12	10	1.01	0.233	0.48
IPI00025849	Acidic leucine-rich nuclear phosphoprotein 32 family member A Dolichyl-diphosphooligosaccharide--protein glycosyltransferase 67 kDa subunit precursor	ANP32A	2	1	2	1.18	0.166	0.07
IPI00025874	Charged multivesicular body protein 4b	RPN1	8	9	12	1.30	0.150	0.02
IPI00025974	Glucosidase 2 subunit beta precursor	CHMP4B	3	5	8	1.27	0.375	0.13
IPI00026154	Bone marrow stromal antigen 2 precursor	PRKCSH	5	11	11	1.20	0.109	0.03
IPI00026241	Guanine nucleotide-binding protein G(I)/G(S)/G(T) subunit beta-1	BST2	5	2	4	1.03	0.086	0.22
IPI00026268	40S ribosomal protein S14	GNB1	3	3	4	1.00	0.351	0.50
IPI00026271	Succinyl-CoA:3-ketoacid-coenzyme A transferase 1. mitochondrial precursor	RPS14	5	3	4	0.68	0.536	0.11
IPI00026516	Protein ERGIC-53 precursor	OXCT1	4	3	1	0.88	1.575	0.43
IPI00026530	Putative uncharacterized protein DKFZp686L20222	LMAN1	6	5	9	1.35	0.470	0.12
IPI00026689	Heme oxygenase 2	CDC2	3	2	2	1.33	0.517	0.15
IPI00026824	Alpha-2-macroglobulin receptor-associated protein precursor	HMOX2	2	4	5	1.24	0.568	0.22
IPI00026848	Isoform 1 of Neural cell adhesion molecule L1 precursor	LRPAP1	3	3	4	1.26	0.194	0.05
IPI00027087	Tu translation elongation factor. mitochondrial	L1CAM	0	1	4	0.70	0.118	0.01
IPI00027107	Sorcin	TUFM	2	0	4	1.04	1.269	0.47
IPI00027175	Endoplasmic precursor	SRI	3	1	4	1.05	1.342	0.47
IPI00027230	Insulin-like growth factor 1receptor precursor	HSP90B1	17	20	20	1.16	0.119	0.04
IPI00027232	Prohibitin-2	IGF1R	4	6	5	0.86	0.417	0.23
IPI00027252	60S ribosomal protein L26	PHB2	11	8	10	0.88	0.183	0.11
IPI00027270	Peroxisome oxidoreductin-2	RPL26	1	2	2	0.73	0.467	0.12
IPI00027350	Isoform 1 of Hematological and neurological expressed 1-like protein	PRDX2	3	0	5	1.60	0.594	0.09
IPI00027397	Isoform Beta-4C of Integrin beta-4 precursor	HN1L	3	1	6	1.25	0.568	0.21
IPI00027422	Flotillin-1	ITGB4	9	11	12	0.98	0.210	0.40
IPI00027438	4F2 cell-surface antigen heavy chain	FLOT1	14	14	17	1.39	0.025	0.00
IPI00027493	Glucose-6-phosphate isomerase	SLC3A2	19	16	19	0.82	0.149	0.04
IPI00027497	Isoform 1 of Integrin alpha-V precursor	GPI	4	2	1	1.28	0.600	0.21
IPI00027505	T-complex protein 1 subunit zeta	ITGAV				0.99	0.142	0.46
IPI00027626	Beta-hexosaminidase alpha chain precursor	CCT6A	4	4	2	2.18	0.723	0.06
IPI00027851	Isoform 1 of Very long-chain specific acyl-CoA dehydrogenase. mitochondrial precursor	HEXA	2	1	4	1.40	0.765	0.19
IPI00028031	Transmembrane emp24 domain-containing protein 10 precursor	ACADVL	4	2	0	0.79	0.669	0.24
IPI00028055	Actin-related protein 3	TMED10	6	4	7	1.50	0.433	0.07
IPI00028091	Isoform 1 of Protein lunapark	ACTR3	6	5	8	0.93	0.210	0.24
IPI00028369		KIAA1715	2	1	3	1.54	0.283	0.03

IPI00028481	Ras-related protein Rab-8A	RAB8A	2	3	7	1.19	0.438	0.21
IPI00028888	Isoform 1 of Heterogeneous nuclear ribonucleoprotein D0	HNRPD	2	4	2	0.93	0.574	0.39
IPI00028911	Dystroglycan precursor	DAG1	2	2	2	0.98	0.458	0.46
IPI00028931	Desmoglein-2 precursor	DSG2	17	17	23	1.08	0.099	0.10
IPI00029111	DPYSL3 protein	DPYSL3	2	5	3	0.99	0.891	0.49
IPI00029133	ATP synthase B chain. mitochondrial precursor	ATP5F1	3	6	4	0.79	0.218	0.06
IPI00029264	Cytochrome c1. heme protein. mitochondrial precursor	CYC1	2	1	2	0.91	0.286	0.24
IPI00029601	Src substrate cortactin	CTTN	9	9	8	1.10	0.394	0.30
IPI00029730	Syntaxin-4	STX4	5	3	8	1.02	0.136	0.39
IPI00029737	Isoform Long of Long-chain-fatty-acid--CoA ligase 4	ACSL4	2	3	2	1.46	0.162	0.01
IPI00030131	Isoform Beta of Lamina-associated polypeptide 2. isoforms beta/gamma	TMPO	5	4	4	1.31	0.242	0.05
IPI00030351	Isoform 1 of Disks large homolog 1	DLG1	2	3	2	1.84	0.231	0.01
IPI00031169	Ras-related protein Rab-2A	RAB2A	3	3	4	1.49	0.708	0.15
IPI00031522	Trifunctional enzyme subunit alpha. mitochondrial precursor	HADHA	3	8	1	0.74	0.447	0.12
IPI00031697	Transmembrane protein 109 precursor	TMEM109	2	2	4	1.32	0.492	0.15
IPI00031804	Isoform 1 of Voltage-dependent anion-selective channel protein 3	VDAC3	5	3	4	1.00	0.439	0.50
IPI00031812	Nuclease sensitive element-binding protein 1	YBX1	5	5	9	0.76	0.357	0.10
IPI00031820	Phenylalanyl-tRNA synthetase alpha chain	FARSA	2	1	2	0.77	0.113	0.01
IPI00031836	Developmentally-regulated GTP-binding protein 1	DRG1	2	3	1	0.72	0.061	0.00
IPI00032003	Emerin	EMD	7	4	6	1.23	0.320	0.12
IPI00032064	PALM2-AKAP2 protein isoform 1	PALM2-AKAP2	3	7	11	0.85	0.544	0.26
IPI00032140	Serpin H1 precursor	SERPINH1	10	8	16	0.80	0.490	0.18
IPI00032831	Synaptosomal-associated protein 29	SNAP29	2	2	9	2.08	0.430	0.03
IPI00033025	Isoform 1 of Septin-7	SEPT7	3	6	16	0.57	0.200	0.01
IPI00033494	Myosin regulatory light chain	MRLC2	7	5	9	1.15	0.372	0.23
IPI00044683	Isoform 1 of Amyotrophic lateral sclerosis 2 chromosomal region candidate gene 4	ALS2CR4	2	4	4	0.92	0.603	0.38
IPI00046057	Isoform 2 of Syntaxin-binding protein 1	STXBP1	3	2	2	0.64	0.172	0.01
IPI00056334	Protein kinase C. delta binding protein	PRKCDBP	5	4	5	1.33	1.527	0.34
IPI00059472	Vesicle transport through interaction with t-SNAREs homolog 1A	VTI1A	2	2	1	1.16	0.165	0.08
IPI00060627	Coiled-coil domain-containing protein 124	CCDC124	2	2	7	1.04	0.801	0.46
IPI00060715	BTB/POZ domain-containing protein KCTD12	KCTD12	2	3	4	1.17	0.978	0.36
IPI00072377	Isoform 1 of Protein SET	SET	1	2	4	0.97	0.622	0.46
IPI00075248	Calmodulin	CALM2	1	4	4	1.28	0.751	0.25
IPI00100199	Cytochrome b reductase 1	CYBRD1	2	2	3	1.00	0.307	0.50
IPI00100796	Charged multivesicular body protein 5	CHMP5	1	4	2	1.61	0.227	0.02

IPI00100980	EH domain-containing protein 2	EHD2	5	3	3	1.73	0.367	0.03
IPI00101374	Transmembrane 9 superfamily member 1 precursor	TM9SF1	4	2	2	1.44	0.386	0.07
IPI00101952	Isoform 1of Solute carrier family 35 member E1	SLC35E1	1	2	2	1.40	0.491	0.11
IPI00102685	Myeloid-associated differentiation marker	MYADM	2	2	2	0.77	0.261	0.06
IPI00103175	Isoform 1 of Soluble calcium-activated nucleotidase 1	CANT1	1	5	3	1.47	0.720	0.16
IPI00106646	45 kDa calcium-binding protein precursor	SDF4	6	7	13	1.67	0.365	0.04
IPI00107831	Receptor-type tyrosine-protein phosphatase F precursor+E274	PTPRF	8	10	28	1.29	0.261	0.07
IPI00140420	Staphylococcal nuclease domain-containing protein 1	SND1	2	5	6	0.76	0.074	0.01
IPI00141318	Isoform 1of Cytoskeleton-associated protein 4	CKAP4	7	16	24	1.06	0.377	0.36
IPI00152418	Decay-accelerating factor splicing variant 4	CD55	1	2	2	0.87	0.435	0.25
IPI00152540	Isoform 1of CD109 antigen precursor	CD109	6	8	13	1.21	0.135	0.04
IPI00152642	Leucine-rich repeat-containing protein 8C	LRRC8C	1	2	2	0.79	0.828	0.28
IPI00152853	Isoform 1of Phostensin	KIAA1949	5	5	14	0.73	0.788	0.21
IPI00156689	Synaptic vesicle membrane protein VAT-1 homolog	VAT1	3	2	3	1.78	0.512	0.05
IPI00163187	Fascin	FSCN1	5	5	10	1.16	1.563	0.42
IPI00165393	Acidic leucine-rich nuclear phosphoprotein 32 family member E	ANP32E	1	2	2	1.57	1.476	0.26
IPI00168262	Glycosyltransferase 25 family member 1 precursor	GLT25D1	2	3	2	0.88	0.279	0.18
IPI00169383	Phosphoglycerate kinase 1	PGK1	3	3	8	1.16	0.590	0.29
IPI00170692	Vesicle-associated membrane protein-associated protein A	VAPA	3	4	6	1.29	0.272	0.07
IPI00171411	Golgi phosphoprotein 2	GOLM1	3	3	3	3.09	0.425	0.01
IPI00171412	Isoform 1of Sulfatase-modifying factor 2 precursor	SUMF2	9	4	5	1.24	0.138	0.03
IPI00171438	Thioredoxin domain-containing protein 5 precursor	TXNDC5	1	2	8	1.12	0.103	0.05
IPI00171614	Monocarboxylate transporter 2	SLC16A7	1	2	2	1.11	0.323	0.25
IPI00171626	1-acylglycerophosphocholine O-acyltransferase 1	AYTL2	2	4	2	1.34	0.161	0.02
IPI00171903	Isoform 1 of Heterogeneous nuclear ribonucleoprotein M	HNRPM	5	9	4	1.13	0.492	0.30
IPI00172656	UBX domain-containing protein 8	UBXD8	2	2	2	1.03	0.279	0.42
IPI00176221	Neuronal growth regulator 1precursor	NEGR1	4	4	8	1.12	0.313	0.23
IPI00176903	Isoform 1 of Polymerase I and transcript release factor	PTRF	5	3	7	1.34	1.171	0.30
IPI00178440	Elongation factor 1-beta	EEF1B2	3	2	2	1.07	0.973	0.44
IPI00179326	Brain-specific angiogenesis inhibitor 1-associated protein 2-like protein 1	BAIAP2L1	2	3	6	1.69	0.528	0.07
IPI00179330	Ubiquitin and ribosomal protein S27a precursor	UBB	6	5	3	0.90	1.111	0.42
IPI00180292	Isoform 5 of Brain-specific angiogenesis inhibitor 1-associated protein 2	BAIAP2	1	3	3	0.88	0.132	0.07
IPI00186290	Elongation factor 2	EEF2	12	11	6	0.98	0.352	0.45
IPI00186712	OTTHUMP00000018641	OTTHUMPO 000018641	2	2	1	0.74	0.476	0.13
IPI00215613	Integrin alpha-11precursor	ITGA11	9	9	12	0.79	1.030	0.31

IPI00215637	ATP-dependent RNA helicase DDX3X	DDX3X	3	4	2	0.72	0.454	0.10
IPI00215719	60S ribosomal protein L18	RPL18	5	3	3	0.76	0.193	0.03
IPI00215767	Isoform Long of Beta-1.4-galactosyltransferase 1	B4GALT1	4	2	3	1.79	0.315	0.02
IPI00215780	40S ribosomal protein S19	RPS19	6	8	8	0.82	0.191	0.06
IPI00215893	Heme oxygenase 1	HMOX1	4	2	4	0.93	0.872	0.43
IPI00215901	Isoform 1 of Adenylate kinase isoenzyme 2. mitochondrial	AK2	5	4	7	1.01	0.759	0.49
IPI00215948	Isoform 1 of Catenin alpha-1	CTNNA1	32	39	32	0.90	0.263	0.22
IPI00215965	Isoform A1-B of Heterogeneous nuclear ribonucleoprotein A1	HNRNPA1	3	2	2	0.97	0.374	0.44
IPI00215995	Isoform Alpha-3A of Integrin alpha-3 precursor	ITGA3	7	7	11	1.02	0.135	0.38
IPI00216049	Isoform 1 of Heterogeneous nuclear ribonucleoprotein K	HNRPK	9	6	5	0.93	0.290	0.30
IPI00216184	Isoform 2 of Phosphatidylinositol-binding clathrin assembly protein	PICALM	1	2	2	0.92	0.170	0.18
IPI00216308	Voltage-dependent anion-selective channel protein 1	VDAC1	12	11	8	1.06	0.381	0.38
IPI00216393	Isoform Non-brain of Clathrin light chain A	CLTA	2	3	5	1.57	0.621	0.11
IPI00216546	Isoform 2 of Probable palmitoyltransferase ZDHHC5	ZDHHC5	6	5	7	1.25	0.553	0.21
IPI00216587	40S ribosomal protein S8	RPS8	7	2	4	0.73	0.330	0.07
IPI00216592	Isoform C1 of Heterogeneous nuclear ribonucleoproteins C1/C2	HNRNPC	3	3	5	1.09	0.105	0.10
IPI00216682	Calponin-3	CNN3	8	6	9	0.87	0.407	0.25
IPI00216694	Plastin 3	PLS3	21	14	18	1.22	1.444	0.38
IPI00217030	40S ribosomal protein S4. X isoform	RPS4X	5	2	3	0.68	0.726	0.16
IPI00217121	Uncharacterized protein C19orf21	C19orf21	12	13	20	0.75	0.146	0.02
IPI00217465	Histone H1.2	HIST1H1C	4	7	8	1.19	0.224	0.09
IPI00217468	Histone H1.5	HIST1H1B	3	5	7	1.21	0.319	0.14
IPI00217519	Ras-related protein Ral-A precursor	RALA	8	6	8	1.01	0.236	0.46
IPI00217966	Isoform 1 of L-lactate dehydrogenase A chain	LDHA	7	5	9	1.14	0.558	0.31
IPI00217975	Lamin-B1	LMNB1	1	9	6	1.38	0.279	0.05
IPI00218200	B-cell receptor-associated protein 31	BCAP31	3	12	13	1.30	0.164	0.03
IPI00218236	Serine/threonine-protein phosphatase PP1-beta catalytic subunit	PPP1CB	2	1	2	1.03	0.663	0.46
IPI00218342	C-1-tetrahydrofolate synthase. cytoplasmic	MTHFD1	7	9	5	0.94	0.531	0.39
IPI00218696	Isoform 4 of Caldesmon	CALD1	9	24	16	0.69	0.143	0.01
IPI00218782	Capping protein	CAPZB	4	2	10	1.01	0.492	0.48
IPI00218918	Annexin A1	ANXA1	21	18	25	1.68	0.954	0.15
IPI00219018	Glyceraldehyde-3-phosphate dehydrogenase	GAPDH	12	7	10	1.67	0.480	0.06
IPI00219217	L-lactate dehydrogenase B chain	LDHB	4	4	8	1.01	0.605	0.48
IPI00219344	Hippocalcin-like protein 1	HPCAL1	5	2	8	1.21	0.276	0.11
IPI00219425	Isoform Beta of Poliovirus receptor precursor	PVR	3	6	7	1.14	0.767	0.36

IPI00219678	Eukaryotic translation initiation factor 2 subunit 1	EIF2S1	1	3	3	1.13	0.475	0.29
IPI00219682	Erythrocyte band 7 integral membrane protein	STOM	13	7	9	1.45	0.533	0.11
IPI00219868	Isoform 1AC of Catenin delta-1	CTNND1	28	27	39	0.83	0.183	0.06
IPI00220099	Isoform B of Syntaxin-3	STX3	0	4	5	0.88	0.384	0.25
IPI00220194	Solute carrier family 2. facilitated glucose transporter member 1	SLC2A1	5	6	7	0.66	0.096	0.00
IPI00220278	Myosin regulatory light chain 2. smooth muscle isoform	MYL9	3	2	2	1.04	0.471	0.42
IPI00220487	Isoform 1 of ATP synthase D chain. mitochondrial	ATP5H	9	2	10	0.83	0.166	0.05
IPI00220556	Isoform 3 of Pre-B-cell leukemia transcription factor-interacting protein 1	PBXIP1	1	4	4	1.62	0.277	0.02
IPI00220578	Guanine nucleotide-binding protein G	GNAI3	4	2	7	1.00	0.328	0.49
IPI00220642	14-3-3 protein gamma	YWHAG	1	4	4	1.20	0.696	0.29
IPI00220739	Membrane-associated progesterone receptor component 1	PGRMC1	4	4	10	1.28	0.370	0.12
IPI00220993	Isoform CNPI of 2'.3'-cyclic-nucleotide 3'-phosphodiesterase	CNP				1.09	0.569	0.37
IPI00221089	40S ribosomal protein S13	RPS13	5	2	3	0.65	0.477	0.07
IPI00221224	Aminopeptidase N	ANPEP	5	6	15	1.31	0.276	0.07
IPI00221354	Isoform Short of RNA-binding protein FUS	FUS	2	5	6	0.68	0.654	0.14
IPI00238262	Amphoterin-induced protein 2 precursor	AMIGO2	3	4	3	0.88	1.020	0.39
IPI00253036	Isoform I of CD99 antigen precursor	CD99	3	3	4	1.04	0.279	0.39
IPI00257508	Dihydropyrimidinase-related protein 2	DPYSL2	2	2	1	1.25	0.852	0.29
IPI00289334	Isoform 1 of Filamin-B	FLNB	82	71	59	0.70	0.339	0.06
IPI00289819	Cation-independent mannose-6-phosphate receptor precursor	IGF2R	3	2	8	1.10	0.382	0.30
IPI00289876	Isoform 1 of Syntaxin-7	STX7	3	4	4	1.36	0.641	0.18
IPI00290085	Cadherin-2 precursor	CDH2	9	13	18	1.00	0.146	0.49
IPI00290328	Receptor-type tyrosine-protein phosphatase eta precursor	PTPRJ	3	8	7	1.05	0.143	0.25
IPI00290566	T-complex protein 1 subunit alpha	TCP1	2	7	4	2.44	0.699	0.04
IPI00290770	Chaperonin containing TCP1. subunit 3 isoform b	CCT3	3	7	5	2.18	0.484	0.03
IPI00290928	Guanine nucleotide-binding protein alpha-13 subunit	GNAI3	3	4	4	0.90	0.315	0.25
IPI00291006	Malate dehydrogenase. mitochondrial precursor	MDH2	6	8	9	1.09	1.455	0.45
IPI00291175	Isoform 1 of Vinculin	VCL	6	19	3	0.89	0.571	0.33
IPI00291262	Clusterin precursor	CLU	5	1	2	2.57	0.490	0.02
IPI00291328	NADH dehydrogenase [ubiquinone] flavoprotein 2. mitochondrial precursor	NDUFV2	2	2	1	1.51	1.230	0.24
IPI00291802	Isoform 3 of LIM domain only protein 7	LMO7	1	7	14	0.99	0.617	0.48
IPI00291928	Ras-related protein Rab-14	RAB14	8	5	10	1.23	0.588	0.24
IPI00293402	Uncharacterized protein STX10	STX10	3	4	2	1.08	0.329	0.32
IPI00293434	Signal recognition particle 14 kDa protein	SRP14	5	1	4	1.28	0.643	0.22
IPI00294911	Succinate dehydrogenase [ubiquinone] iron-sulfur subunit. mitochondrial precursor	SDHB	3	2	2	0.89	0.225	0.17

IPI00295542	Nucleobindin-1precursor	NUCB1	16	21	32	1.84	0.238	0.01
IPI00295992	Isoform 2 of ATPase family AAA domain-containing protein 3A	ATAD3A	9	16	14	0.72	0.294	0.05
IPI00296099	Thrombospondin-1precursor	THBS1	6	9	14	0.60	1.159	0.19
IPI00296421	EH domain-binding protein 1-like protein 1	EHBP1L1	2	1	6	1.90	0.501	0.04
IPI00296992	AXL receptor tyrosine kinase isoform 1	AXL	2	2	4	1.21	0.563	0.25
IPI00297084	Dolichyl-diphosphooligosaccharide-protein glycosyltransferase precursor	DDOST	4	2	3	1.29	0.224	0.05
IPI00297160	Isoform 12 of CD44 antigen precursor	CD44	9	9	13	0.84	0.626	0.28
IPI00297626	Syntaxin-binding protein 3	STXBP3	4	3	5	0.87	0.233	0.14
IPI00297646	Collagen alpha-1(I) chain precursor	COL1A1	2	9	8	1.47	0.641	0.14
IPI00297655	Neurogenic locus notch homolog protein 2 precursor	NOTCH2	4	12	11	0.83	0.356	0.16
IPI00297779	T-complex protein 1 subunit beta	CCT2	3	5	3	2.20	0.804	0.07
IPI00297910	Tumor-associated calcium signal transducer 2 precursor	TACSTD2	3	3	5	0.85	0.099	0.03
IPI00298057	Periplakin	PPL	13	17	11	0.74	0.607	0.17
IPI00298237	Isoform 1 of Tripeptidyl-peptidase 1 precursor	TPP1	3	0	3	1.55	0.284	0.03
IPI00298347	Isoform 2 of Tyrosine-protein phosphatase non-receptor type 11	PTPN11	1	2	2	0.82	0.204	0.07
IPI00298994	Uncharacterized protein TLN1	TLN1	36	29	29	1.84	0.598	0.06
IPI00299024	Brain acid soluble protein 1	BASP1	6	18	17	1.35	0.624	0.18
IPI00299116	Podocalyxin-like protein 1precursor	PODXL	1	5	4	0.85	0.583	0.28
IPI00299412	Isoform 2 of CD97 antigen precursor	CD97	6	8	10	0.90	0.542	0.34
IPI00299571	Isoform 2 of Protein disulfide-isomerase A6 precursor	PDIA6	5	6	9	1.11	0.307	0.24
IPI00299573	60S ribosomal protein L7a	RPL7A	9	2	4	0.77	0.316	0.09
IPI00301058	Vasodilator-stimulated phosphoprotein	VASP	8	15	17	0.84	0.341	0.16
IPI00302592	Filamin A. alpha isoform 1	FLNA	130	86	109	0.72	0.335	0.07
IPI00302925	Uncharacterized protein CCT8	CCT8	4	11	13	2.29	0.591	0.04
IPI00302927	T-complex protein 1 subunit delta	CCT4	2	6	4	2.23	0.202	0.00
IPI00303318	Protein FAM49B	FAM49B	2	4	2	0.90	0.329	0.26
IPI00303476	ATP synthase subunit beta. mitochondrial precursor	ATP5B	22	21	16	0.81	0.264	0.09
IPI00303894	Protein FAM3A precursor	FAM3A	0	2	2	1.73	0.379	0.03
IPI00304331	Galactosylgalactosylxylosylprotein 3-beta-glucuronosyltransferase 3	B3GAT3	2	1	4	1.31	0.578	0.18
IPI00304589	Isoform 1 of 182 kDa tankyrase 1-binding protein	TNKS1BP1	5	2	7	1.10	0.284	0.24
IPI00304693	Isoform 2 of Nucleoporin-like protein RIP	HRB	1	3	3	1.24	0.530	0.21
IPI00304925	Heat shock 70 kDa protein 1	HSPA1A	9	11	14	1.20	0.574	0.25
IPI00305166	Succinate dehydrogenase [ubiquinone] flavoprotein subunit. mitochondrial precursor	SDHA	6	7	2	0.88	0.497	0.30
IPI00305383	Cytochrome b-c1 complex subunit 2. mitochondrial precursor	UQCRC2	2	2	4	0.92	0.339	0.31
IPI00305423	Charged multivesicular body protein 6	CHMP6	3	3	2	1.98	0.623	0.06

IPI00305551	Guanine nucleotide-binding protein subunit alpha-11 Isoform 1 of EGF-like repeat and discoidin I-like domain-containing protein 3 precursor	GNA11	2	3	6	0.97	0.146	0.32
IPI00306046		EDIL3	2	2	3	1.47	0.350	0.05
IPI00306332	60S ribosomal protein L24	RPL24	5	2	3	0.99	0.380	0.47
IPI00306604	Integrin alpha-5 precursor	ITGA5	14	12	16	0.94	0.132	0.18
IPI00306825	Isoform 1 of Tumor protein D54	TPD52L2	8	6	9	1.91	0.846	0.10
IPI00307155	Rho-associated protein kinase 2	ROCK2	10	7	15	1.24	0.598	0.23
IPI00328161	FK506-binding protein 8	FKBP8	1	3	2	1.49	0.234	0.03
IPI00328180	Isoform 1 of Ras-related protein Rab-34	RAB34	2	1	2	0.98	0.395	0.45
IPI00328391	N-acetylgalactosaminyltransferase 7	GALNT7	5	10	9	1.24	0.065	0.01
IPI00328415	Isoform 1 of NADH-cytochrome b5 reductase 3	CYB5R3	2	2	2	1.37	0.235	0.04
IPI00328715	Protein LYRIC	MTDH	0	3	3	1.30	0.149	0.02
IPI00328840	THO complex subunit 4	THOC4	5	3	3	0.98	0.835	0.48
IPI00329332	Syntaxin-12	STX12	3	3	4	1.29	0.610	0.21
IPI00329389	60S ribosomal protein L6	RPL6	5	3	5	0.76	0.069	0.00
IPI00329572	Uncharacterized protein PACSIN3	PACSIN3	9	10	13	1.07	0.129	0.17
IPI00329672	Myosin-Ie	MYO1E	1	2	3	1.18	0.324	0.17
IPI00329801	Annexin A5	ANXA5	14	18	14	1.17	1.170	0.38
IPI00333619	Isoform 1 of Fatty aldehyde dehydrogenase	ALDH3A2	1	3	3	1.43	0.192	0.02
IPI00334190	Stomatin-like protein 2	STOML2	5	8	7	0.84	0.281	0.13
IPI00334282	Uncharacterized protein ENSP00000310532	FAM3C	4	6	8	1.65	0.779	0.12
IPI00335168	Isoform Non-muscle of Myosin light polypeptide 6	MYL6	7	9	9	1.54	0.361	0.05
IPI00337415	Guanine nucleotide-binding protein G(i). alpha-1 subunit	GNAI1	1	3	7	1.09	0.247	0.24
IPI00337541	NAD(P) transhydrogenase. mitochondrial precursor	NNT	5	10	2	0.87	0.115	0.05
IPI00337612	Discoidin. CUB and LCCL domain-containing protein 1 precursor	DCBLD1	2	2	2	1.15	0.234	0.13
IPI00337800	Isoform 1 of Disheveled-associated activator of morphogenesis 1	DAAM1	1	4	3	0.80	0.279	0.09
IPI00339384	Isoform 1 of Retinol dehydrogenase 11	RDH11	2	1	2	1.28	0.412	0.14
IPI00374054	Isoform 2 of Protein enabled homolog	ENAH	3	5	4	0.99	0.142	0.46
IPI00374563	Agrin precursor	AGRN	5	4	3	1.16	0.084	0.02
IPI00374590	Cancer susceptibility candidate 4 isoform a	CASC4	2	1	7	1.58	0.409	0.05
IPI00374970	Isoform 1 of Septin-10	SEPT10	7	2	6	0.68	0.652	0.14
IPI00376394	Uncharacterized protein QSOX2	QSOX2				1.92	0.744	0.08
IPI00376427	Neural cell adhesion molecule 2 precursor	NCAM2	3	4	12	1.00	0.205	0.50
IPI00376798	Isoform 1 of 60S ribosomal protein L11	RPL11	5	4	5	0.83	0.295	0.13
IPI00383423	Isoform 1 of Coiled-coil domain-containing protein 50	CCDC50	0	2	6	1.49	0.998	0.21
IPI00384909	KIDINS220 protein	KIDINS220	2	4	2	0.81	0.637	0.25

IPI00385449	Protein kinase C alpha type	PRKCA	6	5	3	0.88	0.359	0.24
IPI00386271	Calcium-binding mitochondrial carrier protein Aralar1	SLC25A12	2	3	2	0.95	0.132	0.22
IPI00387144	Tubulin alpha-1B chain	TUBA1B	2	2	1	1.23	0.970	0.33
IPI00387156	Isoform 2 of Sodium bicarbonate cotransporter 3	SLC4A7	3	3	4	1.12	0.107	0.06
IPI00394809	Apolipoprotein O-like precursor	APOOL	1	4	2	0.81	0.397	0.16
IPI00395488	Vasorin precursor	VASN	1	2	2	1.42	0.548	0.12
IPI00395887	Thioredoxin domain-containing protein 1 precursor	TXNDC1	2	3	2	1.52	0.532	0.09
IPI00395906	Similar to RIKEN cDNA 2310002J15 gene	MGC59937	2	2	3	1.35	0.163	0.02
IPI00396321	Leucine-rich repeat-containing protein 59	LRRC59	6	5	10	1.15	0.323	0.20
IPI00396378	Isoform B1 of Heterogeneous nuclear ribonucleoproteins A2/B1	HNRNPA2B1	2	3	5	0.98	0.273	0.43
IPI00397526	Isoform 1 of Myosin-10	MYH10	1	6	9	1.02	0.669	0.48
IPI00397949	G protein-coupled receptor 56 isoform b	GPR56	4	5	6	1.15	0.566	0.30
IPI00399089	Mesoderm development candidate 2	MESDC2	1	2	3	1.14	0.212	0.13
IPI00401264	Thioredoxin domain-containing protein 4 precursor	TXNDC4	2	2	2	1.29	0.579	0.19
IPI00402183	Isoform 3 of Heterogeneous nuclear ribonucleoprotein Q	SYNCRIP	4	6	5	0.86	0.184	0.09
IPI00409635	Isoform 2 of Protein FAM62B	FAM62B	3	7	4	1.17	0.107	0.03
IPI00410693	Isoform 1 of Plasminogen activator inhibitor 1 RNA-binding protein	SERBP1	1	11	13	0.81	0.112	0.02
IPI00412579	60S ribosomal protein L10a	RPL10A	4	1	3	0.80	0.272	0.09
IPI00412607	60S ribosomal protein L35	RPL35	3	1	2	0.68	0.172	0.02
IPI00412737	Tryptophanyl-tRNA synthetase isoform b	WARS	3	1	1	1.12	0.729	0.37
IPI00413108	Ribosomal protein SA	RPSA	2	5	6	0.65	0.288	0.03
IPI00413293	Isoform 1 of Torsin-1A precursor	TOR1A	1	2	3	1.58	0.556	0.09
IPI00413895	Golgin subfamily A member 2	GOLGA2	3	10	3	1.46	0.499	0.10
IPI00414320	Annexin A11	ANXA11	10	11	13	1.17	0.364	0.20
IPI00414554	Actin-related protein 2/3 complex subunit 5-like protein	ARPC5L	3	3	2	0.94	0.426	0.37
IPI00414676	Heat shock protein HSP90-beta	HSP90AB1	3	10	7	1.20	0.786	0.31
IPI00414717	Golgi apparatus glycoprotein 1	GLG1	7	11	11	2.42	0.264	0.01
IPI00418169	Annexin A2 isoform 1	ANXA2	39	34	41	0.86	0.082	0.02
IPI00418262	Fructose-bisphosphate aldolase C	ALDOC	1	2	2	1.57	0.598	0.10
IPI00418471	Vimentin	VIM	22	29	39	0.85	0.460	0.24
IPI00418497	Isoform 2 of Import inner membrane translocase subunit TIM50. mitochondrial precursor	TIMM50	2	5	4	0.81	0.409	0.16
IPI00419585	Peptidyl-prolyl cis-trans isomerase A	PPIA	10	5	8	1.35	0.621	0.17
IPI00419880	40S ribosomal protein S3a	RPS3A	10	9	7	0.70	0.200	0.02
IPI00423570	Isoform 2B of GTPase KRas precursor	KRAS	6	3	7	1.29	0.309	0.09

IPI00438286	Isoform 1 of Protein LAP2	ERBB2IP	5	8	13	1.01	0.287	0.47
IPI00440493	ATP synthase subunit alpha. mitochondrial precursor	ATP5A1	26	18	18	0.84	0.319	0.16
IPI00441498	Folate receptor alpha precursor	FOLR1	7	4	7	1.17	0.131	0.05
IPI00442073	Cysteine and glycine-rich protein 1	CSRP1	11	5	8	0.84	0.169	0.06
IPI00453116	Secretory carrier membrane protein 3 isoform 1	SCAMP3	6	6	7	1.31	0.800	0.24
IPI00453476	Uncharacterized protein ENSP00000348237	ENSP00000348237	2	2	7	1.20	0.636	0.28
IPI00456925	Isoform 1 of Drebrin-like protein	DBNL	11	10	16	0.80	0.121	0.02
IPI00465248	Isoform alpha-enolase of Alpha-enolase	ENO1	9	7	17	1.05	0.589	0.43
IPI00465361	60S ribosomal protein L13	RPL13	8	5	5	0.67	0.375	0.06
IPI00465431	Galectin-3	LGALS3	4	3	6	1.84	0.482	0.04
IPI00465436	Catalase	CAT	4	3	2	1.16	0.931	0.37
IPI00465439	Fructose-bisphosphate aldolase A	ALDOA	12	10	15	1.52	0.406	0.06
IPI00470360	Isoform 1 of Kin of IRRE-like protein 1 precursor	KIRREL	1	4	7	0.81	0.531	0.22
IPI00470467	NADPH-cytochrome P450 reductase	POR	2	2	4	1.39	0.165	0.02
IPI00470535	Dihydropyridine receptor alpha 2 subunit	CACNA2D1	11	7	20	1.11	0.087	0.05
IPI00472164	Wiskott-Aldrich syndrome protein family member 2	WASF2	2	2	2	1.22	0.910	0.32
IPI00472882	HLA class I histocompatibility antigen. A-68 alpha chain precursor	HLA-A	11	11	17	1.23	0.028	0.00
IPI00478231	Uncharacterized protein RHOA	RHOA	5	5	8	1.19	0.196	0.08
IPI00479186	Isoform M2 of Pyruvate kinase isozymes M1/M2	PKM2	23	15	17	1.33	0.705	0.21
IPI00479786	Isoform 1 of Far upstream element-binding protein 2	KHSRP	2	4	2	0.88	0.568	0.31
IPI00479997	Stathmin	STMN1	2	3	7	1.01	0.571	0.48
IPI00514055	Isoform Gnas-1 of Guanine nucleotide-binding protein G(s) subunit alpha isoforms short	GNAS	3	4	9	1.03	0.044	0.10
IPI00550234	Isoform 1 of Actin-related protein 2/3 complex subunit 5	ARPC5	7	1	3	1.00	0.199	0.48
IPI00550363	Transgelin-2	TAGLN2	12	5	16	0.80	0.324	0.11
IPI00550523	Isoform 1 of Atlastin-3	DKFZP564J0863	1	2	5	1.04	0.245	0.35
IPI00550689	UPF0027 protein C22orf28	C22orf28	2	2	1	0.87	0.462	0.26
IPI00554521	Ferritin heavy chain	FTH1	6	1	1	1.02	0.595	0.47
IPI00554737	Serine/threonine-protein phosphatase 2A 65 kDa regulatory subunit A alpha isoform	PPP2R1A	2	4	3	1.17	0.372	0.20
IPI00554811	Actin-related protein 2/3 complex subunit 4	ARPC4	4	4	5	1.00	0.509	0.50
IPI00619951	Uncharacterized protein TPD52	TPD52	6	6	4	2.37	0.767	0.05
IPI00641181	MARCKS-related protein	MARCKSL1	3	3	4	2.41	0.870	0.06
IPI00641950	Lung cancer oncogene 7	GNB2L1	4	3	2	0.76	0.349	0.10
IPI00643920	Transketolase	TKT	10	6	12	1.15	0.741	0.34
IPI00644712	ATP-dependent DNA helicase 2 subunit 1	XRCC6	2	8	10	1.03	0.532	0.45

IPI00645194	Integrin beta 1 isoform 1A precursor	ITGB1	18	16	28	0.99	0.202	0.46
IPI00645815	Solute carrier family 9 isoform 3 regulator 2	SLC9A3R2	11	10	15	0.77	0.143	0.02
IPI00646083	HLA class I histocompatibility antigen. B-15 alpha chain precursor	HLA-C	2	1	4	0.89	0.341	0.24
IPI00646304	Peptidylprolyl isomerase B precursor	PPIB	9	9	12	1.22	0.349	0.15
IPI00654584	Isoform 4 of Neuroplastin precursor	NPTN	0	1	4	0.82	0.236	0.08
IPI00656088	Isoform 1 of Ras-associated and pleckstrin homology domains-containing protein 1	RAPH1	2	2	1	1.35	0.624	0.18
IPI00743716	HLA class I histocompatibility antigen. Cw-12 alpha chain precursor	HLA-C	3	3	9	1.16	0.115	0.04
IPI00746388	Ezrin	VIL2	7	11	13	1.15	1.103	0.39
IPI00747849	Uncharacterized protein ATP1B1	ATP1B1	3	2	4	0.86	0.234	0.12
IPI00784154	60 kDa heat shock protein. mitochondrial precursor	HSPD1	38	30	32	1.02	1.303	0.48
IPI00784156	Isoform 1 of AP-2 complex subunit beta-1	AP2B1	4	4	1	1.04	0.699	0.45
IPI00789008	Flotillin 2	FLOT2	11	10	18	1.58	0.142	0.01
IPI00789324	JUP protein	JUP	14	15	18	1.03	0.102	0.27
IPI00790010	Isoform 1 of PTB domain-containing engulfment adapter protein 1	GULP1	2	1	4	1.07	0.475	0.37
IPI00793199	Annexin IV	ANXA4	12	10	11	1.26	0.566	0.21
IPI00793874	Sideroflexin 3	SFXN3	3	5	4	0.92	0.183	0.18
IPI00794397	Chromatin modifying protein 4A	CHMP4A	3	3	3	1.16	0.108	0.04
IPI00797747	11 kDa protein	SRPRB	7	5	11	1.21	0.645	0.27
IPI00844215	Isoform 1 of Spectrin alpha chain. brain	SPTAN1	36	54	53	0.82	0.712	0.28
IPI00844394	42 kDa protein	CYR61	21	19	24	0.65	1.003	0.20
IPI00844578	ATP-dependent RNA helicase A	DHX9	2	2	1	0.83	0.528	0.24
IPI00853369	Plexin-B2 precursor	PLXNB2	10	8	11	0.98	0.099	0.36
IPI00855763	Isoform 3 of Palladin	PALLD	13	12	18	0.71	0.391	0.08
IPI00856045	AHNAK nucleoprotein 2	AHNAK2	13	40	11	0.80	0.137	0.03
IPI00867509	Coronin-1C protein	CORO1C	6	6	9	0.96	0.400	0.41
IPI00872814	Uncharacterized protein MSN	MSN	9	7	8	1.35	1.332	0.32

^{a,b,c} Pept ID; Number of unique peptides used for protein identification in experiment a, b and c

^d Mean ratio is the average ratio of the three independent experiments

^e Stdev (ratio) is the standard error of the mean ratio