

Supplementary Table S2. Proteomic analysis of myelin in aging.

<b>Protein access</b>	<b>Protein description</b>	<b>Protein Score (Mascot)</b>	<b>Number of peptides</b>	<b>ratio Y/O</b>
<i>Plasma membrane</i>				
gi 6753074	adaptor protein complex AP-2, mu1	48	7	0.90
gi 21313640	adaptor-related protein complex 2, beta 1 subunit isoform b	94	4	0.98
gi 161086984	adaptor-related protein complex 2, sigma 1 subunit	31	4	0.89
gi 19526794	CD 81 antigen	436	8	1.17
gi 6754382	CD47 antigen	383	11	0.74
gi 6671718	CD82 antigen isoform 1	127	6	0.69
gi 6680894	CD9 antigen	69	9	0.51
gi 23346547	cell adhesion molecule 4 precursor	142	6	1.85
gi 10946620	cell cycle exit and neuronal differentiation 1	92	2	1.33
gi 6679186	claudin 11	1251	50	0.45
gi 46575910	gap junction membrane channel protein epsilon 1	68	3	1.04
gi 22165406	gap junction protein, beta 1, 32kDa	38	2	0.99
gi 12963495	glycoprotein m6b	75	4	0.76
gi 47271396	GNAS complex locus XLas	258	7	0.84
gi 32189434	immunoglobulin superfamily, member 8	308	16	2.60
gi 12963613	junction adhesion molecule 3 precursor	184	8	1.26
gi 10947010	junctophilin 2	30	3	0.57
gi 70778915	moesin	138	8	1.17
gi 113199771	myelin oligodendrocyte glycoprotein	2844	165	1.21
gi 162139829	myelin protein zero precursor	36	2	0.32
gi 6754614	myelin-associated glycoprotein	1806	74	1.08
gi 148271067	myeloid-associated differentiation marker	75	2	0.37
gi 21450277	Na <sup>+</sup> /K <sup>+</sup> -ATPase alpha 1 subunit precursor	1898	34	1.01
gi 30409956	Na <sup>+</sup> /K <sup>+</sup> -ATPase alpha 2 subunit precursor	1415	6	2.51
gi 21450321	Na <sup>+</sup> /K <sup>+</sup> -ATPase alpha 3 subunit	2325	132	1.12
gi 6753138	Na <sup>+</sup> /K <sup>+</sup> -ATPase beta 1 subunit	587	40	1.08
gi 6680744	Na <sup>+</sup> /K <sup>+</sup> -ATPase beta 3 subunit	283	8	0.93
gi 237858632	neurofascin isoform 3 precursor	339	22	0.91

gi 20279132	plasma membrane proteolipid	55	9	0.90
gi 7305379	pleckstrin homology domain containing, family B (evectins) member 1 isoform a	61	4	0.29
gi 23956058	proteolipid protein 1	12245	544	0.78
gi 124517716	solute carrier family 12, member 2	120	7	1.00
gi 165377226	solute carrier family 2 (facilitated glucose transporter), member 1	90	8	1.46
gi 227499980	solute carrier family 44, member 1 isoform A	387	21	0.65
gi 13259378	syntaxin 1B	239	6	1.04
gi 70608157	tetraspan 2	183	10	1.18
gi 30424705	transmembrane protein 177	41	2	0.79
<b><i>Plasma membrane, Lipid anchor</i></b>				
gi 226423907	2~,3~-cyclic nucleotide 3~ phosphodiesterase isoform 2	6496	303	1.07
gi 45598372	brain abundant, membrane attached signal protein 1	158	3	1.14
gi 6753364	cell division cycle 42 precursor	295	10	1.17
gi 266458391	c-K-ras2 protein	231	6	1.37
gi 6680954	contactin 1 precursor	56	6	0.89
gi 13384618	guanine nucleotide binding protein (G protein), gamma 12 precursor	270	8	2.16
gi 89001109	guanine nucleotide binding protein, alpha 13	260	6	0.78
gi 7106349	Ly6/neurotoxin 1 precursor	32	2	0.74
gi 7710086	RAB10, member RAS oncogene family	508	29	1.00
gi 225579124	Rab31-like	146	4	0.92
gi 37718983	RAB35, member RAS oncogene family	155	4	0.90
gi 6679593	RAB3A, member RAS oncogene family	265	7	1.19
gi 13386338	RAP2B, member of RAS oncogene family precursor	63	3	1.24
gi 31542143	ras homolog gene family, member A precursor	190	10	1.10
gi 6680726	ras homolog gene family, member B precursor	92	8	0.96
gi 9625037	ras homolog gene family, member G precursor	214	11	1.46
gi 34328471	ras related v-ral simian leukemia viral oncogene homolog A precursor	105	4	0.99
gi 45592934	RAS-related C3 botulinum substrate 1 precursor	430	22	1.18
gi 21704066	RAS-related protein-1a precursor	466	15	1.15
gi 6678347	thymus cell antigen 1, theta precursor	86	3	0.87
<b><i>Cytoplasm</i></b>				
gi 117938322	adenomatosis polyposis coli 2	29	2	0.68
gi 10946574	brain creatine kinase	571	23	1.05
gi 256985110	breast carcinoma amplified sequence 1 isoform 1	335	20	1.40
gi 28916677	calcium/calmodulin-dependent protein kinase II alpha isoform 2	141	13	1.16

gi 28173550	cell division cycle 10 homolog	425	3	0.96
gi 6753530	crystallin, alpha B	42	3	0.41
gi 6755186	cytohesin 2 isoform 1	58	2	1.20
gi 40254595	dihydropyrimidinase-like 2	41	5	1.01
gi 116063570	dynamamin	1268	71	1.25
gi 27369922	dynamamin 3 isoform 2	562	5	1.17
gi 213688406	dynein light chain LC8-type 1	85	2	0.85
gi 18087731	dynein light chain LC8-type 2	85	7	1.46
gi 126032329	eukaryotic translation elongation factor 1 alpha 1	242	9	1.17
gi 118136288	formin-like 1 isoform 2	52	2	1.02
gi 124378048	formin-like domain containing protein MAN	103	2	1.08
gi 31982332	glutamine synthetase	330	16	0.72
gi 13937391	guanine nucleotide-binding protein, beta-2 subunit	437	7	0.75
gi 116089273	guanosine diphosphate (GDP) dissociation inhibitor 2	104	3	0.97
gi 6754254	heat shock protein 1, alpha	45	2	1.58
gi 31981690	heat shock protein 8	217	3	0.97
gi 225735582	hexokinase 1 isoform HK1-sb	115	4	1.33
gi 7106335	keratin 17	66	2	0.94
gi 6678674	L-lactate dehydrogenase B	40	6	0.94
gi 69885032	myelin basic protein isoform 1	14052	851	0.91
gi 69885040	myelin basic protein isoform 2	13406	3	6.80
gi 69885049	myelin basic protein isoform 3	13898	3	0.26
gi 69885056	myelin basic protein isoform 4	12989	78	0.96
gi 86355503	myelin-associated oligodendrocytic basic protein isoform b	251	45	0.55
gi 118026911	myosin ID	221	14	0.96
gi 37700232	nucleoside-diphosphate kinase 1	456	23	1.14
gi 171906557	peptidyl arginine deiminase, type II	127	13	0.89
gi 6679439	peptidylprolyl isomerase A	54	4	0.82
gi 6754976	peroxiredoxin 1	78	3	0.76
gi 31560653	phosphofructokinase, liver, B-type	47	6	0.99
gi 254553344	phosphofructokinase, muscle	427	14	1.13
gi 224967068	phospholipase C, beta 1 isoform 2	501	12	1.32
gi 167900458	phospholipase C-like 1	65	4	0.87
gi 31980772	protein phosphatase 1, catalytic subunit, gamma isoform	58	2	0.93
gi 6677839	S100 protein, beta polypeptide, neural	126	6	0.78

gi 6755120	septin 4	397	13	1.16
gi 39930477	septin 8	431	17	1.20
gi 115496850	spectrin alpha 2	632	27	1.32
gi 6755690	syntaxin binding protein 3	51	2	0.72
gi 255522817	TBC1 domain family, member 24 isoform a	281	19	1.44
gi 145587082	triple functional domain (PTPRF interacting)	35	2	1.07
gi 33469051	tubulin polymerization-promoting protein	431	13	1.22
gi 226874906	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, epsilon polypeptide	184	2	0.76
gi 6756041	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide	219	11	0.94
gi 115511018	ubiquitin specific protease 9, X chromosome	31	2	0.58

***Cytoplasm/cytoskeleton***

gi 6671509	actin, beta	701	57	1.21
gi 116089318	dishevelled associated activator of morphogenesis 2	53	3	1.06
gi 157041260	erythrocyte protein band 4.1-like 2	76	6	0.95
gi 157817137	growth arrest specific 7 isoform a	41	3	1.35
gi 148539957	internexin neuronal intermediate filament protein, alpha	800	24	1.01
gi 124244033	microtubule-associated protein 1 A	80	4	1.05
gi 114326446	myosin, heavy polypeptide 9, non-muscle isoform 1	74	3	0.68
gi 112363107	neurofilament 3, medium	425	15	1.00
gi 124286811	neurofilament, heavy polypeptide	365	9	1.17
gi 39204499	neurofilament, light polypeptide	322	16	1.05
gi 228480253	septin 2 b	247	10	1.76
gi 170650630	sirtuin 2 isoform 1	1585	75	1.10
gi 117938332	spectrin beta 2 isoform 1	270	13	0.98
gi 55926127	spectrin beta 3	90	4	1.15
gi 77812697	titin isoform N2-A	46	3	1.83
gi 34740335	tubulin, alpha 1B	2798	5	1.06
gi 6678469	tubulin, alpha 1C	2866	103	1.14
gi 6678467	tubulin, alpha 4	1936	13	1.36
gi 21746161	tubulin, beta	3484	5	1.78
gi 22165384	tubulin, beta 2C	3583	17	0.97
gi 12963615	tubulin, beta 3	2212	17	1.46
gi 31981939	tubulin, beta 4	3307	11	1.40
gi 7106439	tubulin, beta 5	3656	150	1.20

***Cytoplasmic vesicle***

gi 163644277	adaptor protein complex AP-2, alpha 2 subunit	74	6	0.92
gi 51491845	clathrin, heavy polypeptide (Hc)	45	4	0.87
gi 41282044	pantophysin isoform 2	89	7	0.81
gi 84370282	syntaxin binding protein 6 (amisyn)	38	4	0.62
<b><i>ER, Golgi apparatus and endosomal structures</i></b>				
gi 6680716	ADP-ribosylation factor 1	74	3	0.90
gi 146198792	inositol 1,4,5-triphosphate receptor 1	51	2	1.36
gi 71774133	peptidylprolyl isomerase B precursor	93	2	1.21
gi 32567788	phosphatidylinositol-binding clathrin assembly protein	112	2	1.23
gi 6679587	RAB1, member RAS oncogene family	138	2	1.22
gi 10946940	RAB2A, member RAS oncogene family	117	2	1.16
gi 16716353	reticulon 3 isoform 4	37	3	0.93
gi 34610237	reticulon 4 isoform D	177	7	1.13
gi 6677779	ribosomal protein L28	30	6	0.01
gi 6678359	transketolase	32	2	0.77
gi 9845265	ubiquitin A-52 residue ribosomal protein fusion product 1	429	28	0.50
<b><i>G-protein complex</i></b>				
gi 6680045	guanine nucleotide-binding protein, beta-1 subunit	690	30	0.84
gi 41054806	guanine nucleotide binding protein (G protein), alpha inhibiting 2	506	8	0.73
gi 74271899	guanine nucleotide binding protein, alpha inhibiting 1	482	6	1.01
gi 6754012	guanine nucleotide binding protein, alpha o isoform A	852	45	0.72
gi 84662745	guanine nucleotide binding protein, alpha q polypeptide	255	10	0.80
<b><i>Mitochondria</i></b>				
gi 148747424	adenine nucleotide translocator 1	452	22	1.56
gi 22094075	adenine nucleotide translocator 2	372	7	1.24
gi 19527258	aldehyde dehydrogenase 6A1 precursor	41	6	0.35
gi 6754036	aspartate aminotransferase 2	69	3	1.42
gi 34538602	ATP synthase F0 subunit 8	47	5	1.28
gi 78214312	ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit b, isoform 1 precursor	81	4	1.36
gi 21313679	ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit d	94	6	1.42
gi 7949005	ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit F precursor	30	4	1.36
gi 10181184	ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit f, isoform 2	57	5	1.67
gi 31980744	ATP synthase, H <sup>+</sup> transporting, mitochondrial F0 complex, subunit G	45	3	1.45
gi 6680748	ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, alpha subunit, isoform 1 precursor	1514	53	1.35
gi 166851828	ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, delta subunit precursor	293	8	1.57

gi 163838641	ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, gamma subunit isoform a	33	2	1.37
gi 20070412	ATP synthase, H <sup>+</sup> transporting, mitochondrial F1 complex, O subunit precursor	156	6	1.49
gi 116268115	AU RNA binding protein/enoyl-Coenzyme A hydratase precursor	69	2	1.43
gi 13385942	citrate synthase precursor	67	5	1.33
gi 6753428	creatine kinase, mitochondrial 1, ubiquitous precursor	99	6	1.07
gi 34538600	cytochrome c oxidase subunit I	46	2	1.00
gi 34538601	cytochrome c oxidase subunit II	152	5	1.14
gi 6753498	cytochrome c oxidase subunit IV isoform 1 precursor	68	4	1.55
gi 13385090	cytochrome c oxidase subunit VIb polypeptide 1	188	10	1.85
gi 112181182	cytochrome c oxidase, subunit Va precursor	224	15	1.59
gi 16716343	cytochrome c oxidase, subunit VIc	84	4	1.38
gi 6681095	cytochrome c, somatic	172	18	1.10
gi 21313536	dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex)	79	7	1.88
gi 31560686	heat shock protein 2	218	7	1.10
gi 18250284	isocitrate dehydrogenase 3 (NAD <sup>+</sup> ) alpha precursor	77	2	1.96
gi 6680345	isocitrate dehydrogenase 3 (NAD <sup>+</sup> ), gamma precursor	54	4	1.16
gi 18700024	isocitrate dehydrogenase 3, beta subunit	44	2	1.48
gi 31982186	malate dehydrogenase 2, NAD (mitochondrial) precursor	279	10	1.37
gi 31980648	mitochondrial ATP synthase beta subunit precursor	1386	45	1.50
gi 9790055	mitochondrial carrier homolog 2	57	2	1.19
gi 13195624	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex 10 precursor	44	2	1.24
gi 12963633	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 13	46	2	1.87
gi 31981600	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2	212	3	1.56
gi 33563266	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4	281	10	1.47
gi 13385492	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6 (B14)	68	2	1.34
gi 254692859	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 9 precursor	254	6	1.47
gi 58037109	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10	88	7	1.48
gi 229892316	NADH dehydrogenase (ubiquinone) Fe-S protein 1 precursor	226	9	1.48
gi 58037117	NADH dehydrogenase (ubiquinone) Fe-S protein 3 precursor	104	6	1.35
gi 6754814	NADH dehydrogenase (ubiquinone) Fe-S protein 4	92	3	0.81
gi 72004262	NADH dehydrogenase (ubiquinone) Fe-S protein 5	146	4	1.36
gi 85861164	oxoglutarate dehydrogenase (lipoamide) precursor	83	5	2.12
gi 6755114	peroxiredoxin 5 precursor	147	5	1.49
gi 18152793	pyruvate dehydrogenase (lipoamide) beta precursor	37	2	1.08
gi 6679261	pyruvate dehydrogenase E1 alpha 1 precursor	78	4	1.55

gi 16716499	sideroflexin 3	95	2	1.39
gi 21312994	solute carrier family 25 (mitochondrial carrier oxoglutarate carrier), member 11	93	3	1.51
gi 19526818	solute carrier family 25 member 3 precursor	149	13	1.34
gi 27369581	solute carrier family 25, member 12	174	7	1.50
gi 54607098	succinate dehydrogenase Fp subunit precursor	146	5	1.38
gi 31980762	superoxide dismutase 2, mitochondrial precursor	122	4	1.54
gi 165972305	syntaxin binding protein 1 isoform b	290	11	1.32
gi 27370092	Tu translation elongation factor, mitochondrial isoform 1	59	2	1.54
gi 22267442	ubiquinol cytochrome c reductase core protein 2 precursor	212	14	1.48
gi 46593021	ubiquinol-cytochrome c reductase core protein 1 precursor	322	14	1.47
gi 21539599	ubiquinol-cytochrome c reductase hinge protein	218	5	1.87
gi 21539585	ubiquinol-cytochrome c reductase, complex III subunit VII	55	3	1.80
gi 13385168	ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1	31	2	1.13
gi 6755963	voltage-dependent anion channel 1	516	20	1.36
gi 6755965	voltage-dependent anion channel 2	187	2	1.89
<b>Nucleus</b>				
gi 90903233	glutathione peroxidase 4 isoform 1 precursor	89	6	0.33
gi 6677731	regulatory factor X, 2 (influences HLA class II expression) isoform 2	93	7	0.56
<b>Other</b>				
gi 31982300	hemoglobin, beta adult major chain	319	8	0.94
gi 21644575	leucine-rich repeat LGI family, member 3 precursor	238	9	0.70
gi 6754696	macrophage migration inhibitory factor	66	3	0.69
gi 83921581	pleckstrin and Sec7 domain containing 3 isoform 1	96	7	1.12
gi 83921574	SEC8	65	2	1.33
gi 124486650	SLIT-ROBO Rho GTPase activating protein 1	44	5	0.87
gi 160707903	synapsin I isoform b	82	5	1.01
gi 8567410	synapsin II isoform IIb	53	2	1.00
gi 41235779	tripartite motif-containing 56	37	2	0.67
gi 169234810	zinc finger protein 292	57	8	0.37
<b>Unknown/ No information retrieved</b>				
gi 125490368	1-phosphatidylinositol-5-phosphate 4-kinase A	113	3	0.97
gi 34328288	aldehyde dehydrogenase 3 family, member B1	53	2	1.06
gi 31982864	ATPase inhibitory factor 1 precursor	40	5	1.38
gi 62000629	cannabinoid receptor interacting protein 1	69	9	1.61
gi 125660464	dedicator of cytokinesis 11	39	2	1.23

gi 9910164	doublecortin-like kinase 1 isoform 1	65	2	1.40
gi 226823313	dual specificity phosphatase 15 isoform 1	101	11	0.78
gi 87299637	dynammin 2	578	5	0.98
gi 21313614	hypothetical protein LOC66086	54	2	0.31
gi 254588006	leucine-rich repeats and guanylate kinase domain containing	37	2	1.19
gi 149245375	PREDICTED: hypothetical protein	77	5	1.06
gi 149269609	PREDICTED: hypothetical protein	29	4	1.64
gi 149275059	PREDICTED: similar to Glyceraldehyde-3-phosphate dehydrogenase (GAPDH)	463	15	0.77
gi 149274923	PREDICTED: similar to monoclonal antibody heavy chain	32	7	1.39
gi 94402393	PREDICTED: similar to putative pheromone receptor	37	3	0.81
gi 85861247	UBX domain containing 6	51	2	1.10
gi 27369593	WD repeat domain 37 isoform a	76	4	1.43

**Supplementary Table S3.** Proteomic analysis of myelin after remyelination.

<b>Protein access</b>	<b>Protein description</b>	<b>Protein Score (Mascot)</b>	<b>Number of peptides</b>	<b>Ratio C/R</b>
<i>Plasma membrane</i>				
gi 148277671	a disintegrin and metalloprotease domain 22 isoform c	133	4	0.82
gi 6671561	adaptor protein complex AP-2, alpha 1 subunit isoform a	327	4	0.91
gi 6753074	adaptor protein complex AP-2, mu1	196	19	1.25
gi 21313640	adaptor-related protein complex 2, beta 1 subunit isoform b	195	7	1.05
gi 148747309	adenylate cyclase 5	50	3	0.85
gi 34915988	basigin isoform 1	182	6	1.01
gi 21704242	CaM kinase-like vesicle-associated	54	4	0.96
gi 19526794	CD 81 antigen	316	3	0.47
gi 6754382	CD47 antigen	261	5	1.01
gi 6671718	CD82 antigen isoform 1	77	4	0.71
gi 6680894	CD9 antigen	71	2	0.47
gi 225543375	cell adhesion molecule 2 isoform 1	61	7	0.88
gi 23346547	cell adhesion molecule 4 precursor	187	14	1.03
gi 10946620	cell cycle exit and neuronal differentiation 1	166	6	0.96
gi 6679186	claudin 11	1079	46	0.45
gi 116063560	contactin associated protein 1 precursor	206	27	0.68
gi 6680297	DnaJ (Hsp40) homolog, subfamily A, member 1	39	2	0.96
gi 28893409	ectonucleotide pyrophosphatase/phosphodiesterase 6 precursor	242	2	1.06
gi 16716489	endothelial differentiation, sphingolipid G-protein-coupled receptor, 8	50	2	0.95
gi 117606275	excitatory amino acid transporter 2 isoform 2	297	15	1.51
gi 46575910	gap junction membrane channel protein epsilon 1	102	7	0.83
gi 23957686	glycoprotein m6a	213	14	1.06
gi 12963495	glycoprotein m6b	47	3	0.92
gi 47271396	GNAS complex locus XLas	597	8	0.76
gi 6679935	growth associated protein 43	132	8	1.75
gi 194363764	Harvey rat sarcoma virus oncogene 1 isoform 1	82	2	0.72
gi 56790921	hepatocyte cell adhesion molecule precursor	58	2	1.02
gi 32189434	immunoglobulin superfamily, member 8	339	15	1.27
gi 12963613	junction adhesion molecule 3 precursor	320	17	0.85

gi 12963703	Kell blood group precursor (McLeod phenotype) homolog	32	4	0.97
gi 126116585	keratin complex 2, basic, gene 1	347	9	0.88
gi 30725780	MAL2 proteolipid protein	57	3	1.23
gi 70778915	moesin	242	3	1.24
gi 113199771	myelin oligodendrocyte glycoprotein	2403	133	0.84
gi 6754614	myelin-associated glycoprotein	1405	66	0.76
gi 148271067	myeloid-associated differentiation marker	187	6	0.75
gi 21450277	Na <sup>+</sup> /K <sup>+</sup> -ATPase alpha 1 subunit precursor	5715	89	1.01
gi 30409956	Na <sup>+</sup> /K <sup>+</sup> -ATPase alpha 2 subunit precursor	4378	21	1.58
gi 21450321	Na <sup>+</sup> /K <sup>+</sup> -ATPase alpha 3 subunit	7654	311	0.70
gi 6753138	Na <sup>+</sup> /K <sup>+</sup> -ATPase beta 1 subunit	1354	80	0.75
gi 6680744	Na <sup>+</sup> /K <sup>+</sup> -ATPase beta 3 subunit	452	12	0.87
gi 164448632	neural cell adhesion molecule 1 isoform 3	348	33	0.97
gi 237858632	neurofascin isoform 3 precursor	278	25	0.86
gi 153945724	neuroplastin precursor	37	5	1.13
gi 23943844	oligodendrocytic myelin paranodal and inner loop protein	75	2	0.91
gi 62234487	plasma membrane calcium ATPase 1	383	28	1.06
gi 6753140	plasma membrane calcium ATPase 2 isoform 1	366	10	1.15
gi 51317392	pleckstrin and Sec7 domain containing homolog	43	2	1.38
gi 7305379	pleckstrin homology domain containing, family B member 1 isoform a	63	3	0.63
gi 6681195	post-synaptic density protein 95 isoform 1	116	4	2.23
gi 157012015	potassium voltage-gated channel, shaker-related subfamily, member 2	71	4	0.97
gi 156523248	proline-rich transmembrane protein 2	115	7	1.09
gi 23956058	proteolipid protein 1	7945	339	0.74
gi 110626109	signal-regulatory protein alpha	150	3	0.85
gi 61656194	sodium channel, type IV, beta precursor	74	2	0.68
gi 24233554	solute carrier family 1, member 3	195	9	1.46
gi 124517716	solute carrier family 12, member 2	403	20	0.65
gi 158711686	solute carrier family 12, member 5	57	2	1.24
gi 261862282	solute carrier family 2, member 3	81	3	1.30
gi 238637277	solute carrier family 3, member 2 isoform a	156	12	1.08
gi 227499980	solute carrier family 44, member 1 isoform A	406	17	0.70
gi 71067352	solute carrier family 6 member 9	32	2	0.74
gi 22507355	solute carrier family 8 (sodium/calcium exchanger), member 2	330	9	1.20
gi 31560541	synaptogyrin 3	152	3	1.56

gi 13259378	syntaxin 1B	744	31	0.88
gi 70608157	tetraspan 2	90	3	0.75
gi 6678347	thymus cell antigen 1, theta precursor	788	37	0.73
gi 160333863	tight junction protein 2	60	5	0.89
gi 94721328	vesicle-associated membrane protein, associated protein A	72	2	0.94
gi 83921618	villin 2	548	33	0.60
<b><i>Plasma membrane, Lipid anchor</i></b>				
gi 226423907	2~,3~-cyclic nucleotide 3~ phosphodiesterase isoform 2	9038	374	1.00
gi 45598372	brain abundant, membrane attached signal protein 1	696	16	0.75
gi 6753364	cell division cycle 42 precursor	309	13	0.78
gi 266458391	c-K-ras2 protein	103	2	0.86
gi 6680954	contactin 1 precursor	853	53	0.77
gi 13384618	guanine nucleotide binding protein (G protein), gamma 12 precursor	345	16	1.00
gi 6754020	guanine nucleotide binding protein (G protein), gamma 2 subunit precursor	55	5	0.78
gi 6754022	guanine nucleotide binding protein (G protein), gamma 3 subunit precursor	62	9	0.99
gi 84579915	guanine nucleotide binding protein (G protein), gamma 7	108	7	0.52
gi 27532946	guanine nucleotide binding protein, alpha z polypeptide	64	5	0.92
gi 30425330	limbic system-associated membrane protein precursor	191	12	0.80
gi 6754586	lymphocyte antigen 6 complex, locus H isoform a	213	4	1.08
gi 239985643	paralemmin isoform 2	247	5	0.96
gi 13173473	prion protein precursor	112	4	0.51
gi 7710086	RAB10, member RAS oncogene family	736	35	0.89
gi 6679583	RAB11B, member RAS oncogene family	86	4	0.83
gi 37718983	RAB35, member RAS oncogene family	411	7	0.97
gi 6679593	RAB3A, member RAS oncogene family	630	20	0.92
gi 113866024	RAB5C, member RAS oncogene family	66	3	0.87
gi 13386338	RAP2B, member of RAS oncogene family precursor	178	9	0.59
gi 31542143	ras homolog gene family, member A precursor	145	9	0.76
gi 6680726	ras homolog gene family, member B precursor	308	16	0.76
gi 9625037	ras homolog gene family, member G precursor	111	8	1.00
gi 34328471	ras related v-ral simian leukemia viral oncogene homolog A precursor	353	19	0.71
gi 45592934	RAS-related C3 botulinum substrate 1 precursor	487	30	0.89
gi 21704066	RAS-related protein-1a precursor	572	24	0.71
gi 165972315	related RAS viral (r-ras) oncogene homolog 2 precursor	161	4	0.70

***Cytoplasm***

gi 31543976	3-monooxygenase/tryptophan 5-monooxygenase activation protein, gamma polypeptide	364	18	1.08
gi 34328288	aldehyde dehydrogenase 3 family, member B1	115	4	0.97
gi 10946574	brain creatine kinase	298	14	0.99
gi 256985110	breast carcinoma amplified sequence 1 isoform 1	621	34	1.21
gi 28916677	calcium/calmodulin-dependent protein kinase II alpha isoform 2	1539	103	1.35
gi 6680832	calmodulin 2	59	3	0.98
gi 6753530	crystallin, alpha B	103	5	0.81
gi 40254595	dihydropyrimidinase-like 2	399	19	1.29
gi 18087731	dynein light chain LC8-type 2	48	4	0.90
gi 126032329	eukaryotic translation elongation factor 1 alpha 1	335	12	0.89
gi 84000448	glial fibrillary acidic protein isoform 2	152	4	0.44
gi 31982332	glutamine synthetase	52	8	1.29
gi 6679937	glyceraldehyde-3-phosphate dehydrogenase	1130	52	0.95
gi 13937391	guanine nucleotide-binding protein, beta-2 subunit	1575	20	0.61
gi 6754254	heat shock protein 1, alpha	75	2	0.84
gi 31981690	heat shock protein 8	475	24	1.17
gi 197304780	IQ motif and Sec7 domain 1 isoform a	90	2	1.37
gi 7106335	keratin 17	336	3	2.19
gi 154090941	keratin 42	404	15	1.37
gi 20911031	keratin 5	267	4	1.61
gi 22164776	keratin 6L	322	10	1.50
gi 47059013	keratin 73	261	2	0.75
gi 124487419	keratin complex 2, basic, gene 17	357	14	0.77
gi 145580629	keratin Kb40	156	5	0.70
gi 6754524	lactate dehydrogenase A isoform 1	173	2	1.09
gi 6678674	L-lactate dehydrogenase B	222	11	0.93
gi 84370347	microtubule-associated protein tau isoform a	72	4	0.85
gi 69885032	MBP isoform 1	6077	367	1.06
gi 69885056	MBP isoform 4	5418	24	1.34
gi 86355503	myelin-associated oligodendrocytic basic protein isoform b	304	35	0.69
gi 118026911	myosin ID	150	18	0.92
gi 29336026	myosin, heavy polypeptide 14	110	3	0.86
gi 21728376	myosin, light chain 12B, regulatory	124	3	0.98
gi 33620739	myosin, light polypeptide 6, alkali, smooth muscle and non-muscle	79	3	0.84
gi 118150658	N-myc downstream regulated 1	254	4	1.70

gi 37700232	nucleoside-diphosphate kinase 1	159	13	0.50
gi 171906557	peptidyl arginine deiminase, type II	158	6	0.87
gi 6679439	peptidylprolyl isomerase A	38	2	1.02
gi 7948999	peroxiredoxin 4	81	2	0.90
gi 9790051	phosphofructokinase, platelet	217	3	0.97
gi 224967068	phospholipase C, beta 1 isoform 2	235	15	1.47
gi 31543030	potassium voltage-gated channel, shaker-related subfamily, beta member 2	83	6	1.01
gi 6679345	protein kinase C, beta	87	6	0.82
gi 161484668	protein phosphatase 1, catalytic subunit, beta	46	2	1.61
gi 115496850	spectrin alpha 2	2435	114	1.43
gi 6755588	synaptosomal-associated protein 25	1200	39	0.68
gi 6755690	syntaxin binding protein 3	61	3	0.84
gi 255522817	TBC1 domain family, member 24 isoform a	169	11	0.74
gi 226958349	triosephosphate isomerase 1	76	5	1.48
gi 31543974	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, beta polypeptide	262	2	1.50
gi 6756041	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide	327	8	1.20
gi 31543349	vesicle-fusing ATPase	141	15	1.92
<b><i>Cytoplasm/cytoskeleton</i></b>				
gi 14192922	actin, alpha, cardiac muscle 1	875	4	0.38
gi 6671509	actin, beta	1449	78	0.97
gi 28173550	cell division cycle 10 homolog	687	32	0.87
gi 40068507	collapsin response mediator protein 1 isoform 2	80	2	1.12
gi 116063570	dynamamin	715	35	1.80
gi 60097931	ermin, ERM-like protein	64	3	1.62
gi 157041260	erythrocyte protein band 4.1-like 2	144	6	1.19
gi 7305031	erythrocyte protein band 4.1-like 3	242	14	0.93
gi 28916693	gelsolin precursor	175	4	0.87
gi 148539957	internexin neuronal intermediate filament protein, alpha	2412	102	0.63
gi 226823220	keratin 15	394	5	0.59
gi 54607171	keratin 6A	303	14	1.28
gi 85701680	keratin 76	211	4	0.81
gi 112983636	keratin complex 1, acidic, gene 10	399	20	1.00
gi 6678696	lethal giant larvae homolog 1 isoform 2	47	2	1.20
gi 124244033	microtubule-associated protein 1 A	323	3	1.65
gi 171543853	microtubule-associated protein 1B	368	15	1.06

gi 113204613	microtubule-associated protein 6 isoform 1	54	2	1.37
gi 33598964	myosin heavy chain 10, non-muscle	167	7	1.02
gi 112363107	neurofilament 3, medium	1474	57	0.72
gi 124286811	neurofilament, heavy polypeptide	607	22	0.61
gi 39204499	neurofilament, light polypeptide	1335	48	0.64
gi 254675115	plectin isoform 12alpha	41	3	0.75
gi 157277948	radixin isoform a	290	6	0.97
gi 57634518	septin 11	337	10	0.59
gi 6754816	septin 2 a	135	6	1.84
gi 6755120	septin 4	170	6	1.54
gi 39930477	septin 8	443	13	1.04
gi 170650630	sirtuin 2 isoform 1	1536	76	0.95
gi 116089329	Snap-25-interacting protein	93	5	1.27
gi 117938332	spectrin beta 2 isoform 1	1077	61	1.30
gi 55926127	spectrin beta 3	473	25	1.29
gi 77812697	titin isoform N2-A	37	2	0.91
gi 33469051	tubulin polymerization-promoting protein	228	12	1.57
gi 6755901	tubulin, alpha 1	5113	7	0.80
gi 34740335	tubulin, alpha 1B	5137	172	0.72
gi 6678467	tubulin, alpha 4	4872	32	0.81
gi 33859488	tubulin, beta 2	6172	36	0.95
gi 22165384	tubulin, beta 2C	6480	285	0.79
gi 12963615	tubulin, beta 3	4958	65	0.75
gi 31981939	tubulin, beta 4	6122	30	0.73
gi 7106439	tubulin, beta 5	6460	29	0.62
<b><i>Cytoplasmic vesicle</i></b>				
gi 163644277	adaptor protein complex AP-2, alpha 2 subunit	374	22	0.88
gi 12025532	ATPase, H <sup>+</sup> transporting, lysosomal V0 subunit a1	136	4	1.66
gi 51491845	clathrin, heavy polypeptide (Hc)	321	15	0.65
gi 41282044	pantophysin isoform 2	72	4	0.75
gi 166235165	synaptophysin	100	5	0.81
gi 6678197	synaptotagmin I	255	14	1.11
gi 15011853	syntaxin 1A (brain)	493	19	1.07
gi 6678551	vesicle-associated membrane protein 2	84	3	1.29

***ER, Golgi apparatus and endosomal structures***

gi 6671571	ADP-ribosylation factor 2	63	2	1.28
gi 31981304	ATPase, H <sup>+</sup> transporting, V0 subunit D isoform 1	40	3	1.61
gi 6671664	calnexin precursor	162	9	0.79
gi 147904547	chromatin modifying protein 6	41	2	0.90
gi 31542563	DnaJ (Hsp40) homolog, subfamily C, member 3B precursor	42	2	1.32
gi 115511052	myosin Va	82	4	0.86
gi 110625902	N-ethylmaleimide sensitive fusion protein attachment protein gamma	70	2	1.28
gi 31980806	progesterone receptor membrane component	40	2	0.99
gi 6679587	RAB1, member RAS oncogene family	567	13	0.94
gi 33859751	RAB21, member RAS oncogene family	55	3	1.32
gi 10946940	RAB2A, member RAS oncogene family	131	6	1.01
gi 148747526	RAB7, member RAS oncogene family	105	9	1.08
gi 16716353	reticulon 3 isoform 4	64	4	0.83
gi 34610235	reticulon 4 isoform A	252	11	0.88
gi 13507622	SAC1 (supressor of actin mutations 1, homolog)-like	80	2	0.86
gi 237858757	small VCP/p97-interacting protein	95	2	0.65
gi 9845265	ubiquitin A-52 residue ribosomal protein fusion product 1	290	15	0.64
<b><i>G-protein complex</i></b>				
gi 41054806	guanine nucleotide binding protein (G protein), alpha inhibiting 2	1067	15	0.78
gi 33563256	guanine nucleotide binding protein (G protein), alpha inhibiting 3	803	2	0.92
gi 6754004	guanine nucleotide binding protein, alpha 11	272	3	0.82
gi 89001109	guanine nucleotide binding protein, alpha 13	556	7	0.79
gi 74271899	guanine nucleotide binding protein, alpha inhibiting 1	988	12	0.96
gi 6754012	guanine nucleotide binding protein, alpha o isoform A	1646	2	0.87
gi 164607137	guanine nucleotide binding protein, alpha o isoform B	1646	93	0.74
gi 84662745	guanine nucleotide binding protein, alpha q polypeptide	463	17	0.83
gi 6680045	guanine nucleotide-binding protein, beta-1 subunit	1813	64	0.81
gi 31542899	guanine nucleotide-binding protein, beta-4 subunit	600	3	0.81
<b><i>Mitochondria</i></b>				
gi 170014720	3-hydroxybutyrate dehydrogenase, type 1 precursor	152	8	1.48
gi 6679066	4-nitrophenylphosphatase domain and non-neuronal SNAP25-like protein homolog 1	149	12	0.87
gi 21450129	acetyl-Coenzyme A acetyltransferase 1 precursor	71	2	1.20
gi 18079339	aconitase 2, mitochondrial precursor	222	11	1.39
gi 148747424	adenine nucleotide translocator 1	645	8	1.09
gi 22094075	adenine nucleotide translocator 2	747	34	1.07

gi 19527258	aldehyde dehydrogenase 6A1 precursor	43	6	0.45
gi 6754036	aspartate aminotransferase 2	321	15	0.47
gi 34538602	ATP synthase F0 subunit 8	108	12	0.83
gi 78214312	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit b, isoform 1 precursor	308	7	0.75
gi 13385960	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit c (subunit 9), isoform 2 precursor	72	2	1.34
gi 21313679	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit d	157	16	1.06
gi 7949005	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit F precursor	43	6	1.04
gi 6680748	ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit, isoform 1 precursor	2089	82	1.03
gi 166851828	ATP synthase, H+ transporting, mitochondrial F1 complex, delta subunit precursor	271	6	2.06
gi 13385484	ATP synthase, H+ transporting, mitochondrial F1 complex, epsilon subunit	71	9	1.49
gi 163838641	ATP synthase, H+ transporting, mitochondrial F1 complex, gamma subunit isoform a	220	15	0.94
gi 20070412	ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit precursor	122	6	1.22
gi 83715998	ATP synthase, H+ transporting, mitochondrial F1F0 complex, subunit e	142	3	1.01
gi 31560731	ATPase, H+ transporting, lysosomal V1 subunit A	120	2	1.33
gi 126723336	B-cell receptor-associated protein 37	62	2	1.27
gi 19527228	CDGSH iron sulfur domain 1	82	2	0.67
gi 13386272	citrate synthase-like protein	172	7	1.81
gi 6753428	creatine kinase, mitochondrial 1, ubiquitous precursor	386	12	1.94
gi 34538601	cytochrome c oxidase subunit II	163	12	0.94
gi 6753498	cytochrome c oxidase subunit IV isoform 1 precursor	333	17	1.09
gi 13385090	cytochrome c oxidase subunit VIb polypeptide 1	110	9	1.40
gi 112181182	cytochrome c oxidase, subunit Va precursor	204	13	1.38
gi 112807195	cytochrome c oxidase, subunit Vb	73	3	1.01
gi 16716343	cytochrome c oxidase, subunit VIc	89	12	1.11
gi 31981830	cytochrome c oxidase, subunit VIIa 2 precursor	43	2	0.63
gi 6681095	cytochrome c, somatic	289	26	1.11
gi 13385006	cytochrome c-1	74	11	0.93
gi 257796245	dihydrolipoamide S-acetyltransferase	292	9	0.95
gi 20070420	es1 protein precursor	34	2	0.78
gi 224922803	glycerol-3-phosphate dehydrogenase 2, mitochondrial precursor	117	6	1.24
gi 162461907	heat shock protein 9	59	2	1.58
gi 225735584	hexokinase 1 isoform HK1	484	26	1.67
gi 70608131	inner membrane protein, mitochondrial	168	7	1.14
gi 18250284	isocitrate dehydrogenase 3 (NAD+) alpha precursor	144	7	1.35
gi 6680345	isocitrate dehydrogenase 3 (NAD+), gamma precursor	71	4	1.25

gi 18700024	isocitrate dehydrogenase 3, beta subunit	122	7	1.13
gi 31982186	malate dehydrogenase 2, NAD (mitochondrial) precursor	278	7	1.25
gi 31980648	mitochondrial ATP synthase beta subunit precursor	774	41	1.67
gi 9790055	mitochondrial carrier homolog 2	145	8	1.17
gi 31981600	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2	153	2	2.00
gi 33563266	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4	452	21	1.28
gi 13385492	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6 (B14)	107	3	2.20
gi 254692859	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 9 precursor	197	7	1.27
gi 58037109	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10	32	4	1.22
gi 13386096	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 2 precursor	43	2	1.65
gi 229892316	NADH dehydrogenase (ubiquinone) Fe-S protein 1 precursor	362	16	1.88
gi 23346461	NADH dehydrogenase (ubiquinone) Fe-S protein 2 precursor	33	3	1.15
gi 58037117	NADH dehydrogenase (ubiquinone) Fe-S protein 3 precursor	127	4	1.03
gi 72004262	NADH dehydrogenase (ubiquinone) Fe-S protein 5	106	5	1.03
gi 56711244	NADH dehydrogenase (ubiquinone) Fe-S protein 6 precursor	66	2	1.95
gi 46195430	NADH dehydrogenase ubiquinone Fe-S 8 precursor	74	2	1.10
gi 19526814	NADH dehydrogenase ubiquinone flavoprotein 1 precursor	78	3	2.13
gi 19526960	optic atrophy 1 homolog precursor	44	3	1.87
gi 85861164	oxoglutarate dehydrogenase (lipoamide) precursor	64	7	1.49
gi 6755114	peroxiredoxin 5 precursor	88	4	1.39
gi 6679299	prohibitin	281	7	1.27
gi 18152793	pyruvate dehydrogenase (lipoamide) beta precursor	148	10	1.13
gi 6679261	pyruvate dehydrogenase E1 alpha 1 precursor	113	7	1.16
gi 16716499	sideroflexin 3	308	15	1.29
gi 21312994	solute carrier family 25 (mitochondrial carrier oxoglutarate carrier), member 11	110	4	1.28
gi 21311845	solute carrier family 25 (mitochondrial carrier, glutamate), member 22	90	6	1.42
gi 19526818	solute carrier family 25 member 3 precursor	346	22	1.15
gi 27369581	solute carrier family 25, member 12	247	13	1.14
gi 54607098	succinate dehydrogenase Fp subunit precursor	120	7	1.43
gi 255958286	succinate-CoA ligase, GDP-forming alpha subunit precursor	95	5	0.57
gi 165972305	syntaxin binding protein 1 isoform b	1235	57	1.03
gi 27370092	Tu translation elongation factor, mitochondrial isoform 1	196	8	1.14
gi 22267442	ubiquinol cytochrome c reductase core protein 2 precursor	671	31	1.05
gi 13385726	ubiquinol-cytochrome c reductase binding protein	86	6	0.97
gi 46593021	ubiquinol-cytochrome c reductase core protein 1 precursor	367	29	1.20

gi 21539599	ubiquinol-cytochrome c reductase hinge protein	132	3	1.00
gi 21539585	ubiquinol-cytochrome c reductase, complex III subunit VII	162	9	0.95
gi 13385168	ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1	59	6	1.04
gi 6755963	voltage-dependent anion channel 1	1037	36	1.04
gi 6755965	voltage-dependent anion channel 2	538	19	0.95
gi 6755967	voltage-dependent anion channel 3	335	8	0.86
<b>Nucleus</b>				
gi 6681069	cysteine and glycine-rich protein 1	204	7	0.62
gi 28316756	histone cluster 1, H2aa	80	2	0.45
gi 30061377	histone cluster 1, H2bg	273	16	0.45
gi 30061401	histone cluster 2, H3c1	68	11	0.46
gi 21361209	histone cluster 2, H4	50	7	0.43
gi 27369519	hypothetical protein LOC69944	30	3	1.28
gi 38678526	nucleoporin 188	33	2	1.14
gi 7305363	platelet-activating factor acetylhydrolase, isoform Ib, subunit 1	65	2	0.26
gi 6755084	protein kinase C, epsilon	68	6	1.47
gi 6755080	protein kinase C, gamma	302	20	0.62
gi 6677731	regulatory factor X, 2 (influences HLA class II expression) isoform 2	39	2	0.58
<b>Other</b>				
gi 160333729	endonuclease domain containing 1 precursor	179	7	0.85
gi 16716597	estradiol 17-beta-dehydrogenase 11	59	2	1.75
gi 9938002	leucine-rich repeat LGI family, member 1 precursor	73	3	0.89
gi 21644575	leucine-rich repeat LGI family, member 3 precursor	78	4	1.44
gi 25121946	ankyrin 3, epithelial isoform c	63	2	1.12
gi 226693349	calcium/calmodulin-dependent protein kinase II beta	752	22	1.07
gi 145301549	hemoglobin alpha, adult chain 2	127	7	0.52
gi 31982300	hemoglobin, beta adult major chain	332	9	0.97
gi 134288904	intersectin 1 isoform 1	32	3	1.06
gi 163644296	pleckstrin and Sec7 domain containing 3 isoform 3	405	29	0.79
gi 160707903	synapsin I isoform b	488	25	1.00
<b>Unknown/ No information retrieved</b>				
gi 125490368	1-phosphatidylinositol-5-phosphate 4-kinase A	44	2	1.80
gi 124487433	ankyrin repeat domain 26	35	3	0.97
gi 62000629	cannabinoid receptor interacting protein 1	292	10	1.24
gi 134288917	cytoplasmic dynein 1 heavy chain 1	363	22	0.61

gi 257467625	Fc fragment of IgG binding protein-like	33	4	0.78
gi 28461135	heat shock protein 12A	73	5	0.84
gi 6754240	hippocalcin	76	3	1.16
gi 7710062	membrane protein, palmitoylated 2 (MAGUK p55 subfamily member 2)	42	2	0.77
gi 31982044	neurotrimin precursor	176	8	1.01
gi 51092272	opioid binding protein/cell adhesion molecule-like	248	12	1.08
gi 254553344	phosphofructokinase, muscle	401	23	1.05
gi 47059071	phospholipase D1	32	2	0.80
gi 149234023	PREDICTED: similar to ADAM23	58	12	0.90
gi 149268082	PREDICTED: similar to CDCrel-1AI isoform 1	179	9	1.26
gi 94408011	PREDICTED: similar to valosin isoform 1	46	4	0.88
gi 31543245	transformed mouse 3T3 cell double minute 4	37	2	0.94
gi 50234896	ubiquitin-conjugating enzyme E2O	36	2	1.29
gi 226958505	unc-51-like kinase 4	36	4	0.52

## Supplementary table S4

Protein access	Protein description	Uniprot access	Ratio C/R	Ratio Y/O
	<i>Associated to membrane</i>			
gi 19526794	CD 81 antigen	Q91V78	0.47	1.17
gi 6754382	CD47 antigen	Q61735	1.01	0.74
gi 6671718	CD82 antigen isoform 1	P40237	0.71	0.69
gi 6680894	CD9 antigen	P40240	0.47	0.51
gi 23346547	cell adhesion molecule 4 precursor	Q8R464	1.03	1.85
gi 10946620	cell cycle exit and neuronal differentiation 1	Q9JKC6	0.96	1.33
gi 6679186	claudin 11	Q60771	0.45	0.45
gi 46575910	gap junction membrane channel protein epsilon 1	Q921C1	0.83	1.04
gi 12963495	glycoprotein m6b	P35803	0.92	0.76
gi 32189434	immunoglobulin superfamily, member 8	Q8R366	1.27	2.60
gi 12963613	junction adhesion molecule 3 precursor	Q9D8B7	0.85	1.26
gi 113199771	myelin oligodendrocyte glycoprotein	Q61885	0.84	1.21
gi 6754614	myelin-associated glycoprotein	P20917	0.76	1.08
gi 148271067	myeloid-associated differentiation marker	O35682	0.75	0.37
gi 21450277	Na <sup>+</sup> /K <sup>+</sup> -ATPase alpha 1 subunit precursor	Q8VDN2	1.01	1.01
gi 30409956	Na <sup>+</sup> /K <sup>+</sup> -ATPase alpha 2 subunit precursor	Q6PIE5	1.58	2.51
gi 21450321	Na <sup>+</sup> /K <sup>+</sup> -ATPase alpha 3 subunit	Q8VCE0	0.70	1.12
gi 6753138	Na <sup>+</sup> /K <sup>+</sup> -ATPase beta 1 subunit	P14094	0.75	1.08
gi 6680744	Na <sup>+</sup> /K <sup>+</sup> -ATPase beta 3 subunit	P97370	0.87	0.93
gi 237858632	neurofascin isoform 3 precursor	Q6P6Q1	0.86	0.91
gi 7305379	pleckstrin homology domain containing, family B (evectins) member 1 isoform a	Q9QYE9	0.63	0.29
gi 23956058	proteolipid protein 1	P60202	0.74	0.78
gi 124517716	solute carrier family 12, member 2	P55012	0.65	1.00
gi 227499980	solute carrier family 44, member 1 isoform A	Q14DK0	0.70	0.65
gi 13259378	syntaxin 1B	P61264	0.88	1.04
gi 70608157	tetraspan 2	Q922J6	0.75	1.18
	<i>Associated to membrane - Lipid anchor</i>			
gi 226423907	2~,3~-cyclic nucleotide 3~ phosphodiesterase isoform 2	P16330	1.00	1.07
gi 45598372	brain abundant, membrane attached signal protein 1	Q91XV3	0.75	1.14
gi 6753364	cell division cycle 42 precursor	P60766	0.78	1.17

gi 266458391	c-K-ras2 protein	P32883	0.86	1.37
gi 6680954	contactin 1 precursor	P12960	0.77	0.89
gi 13384618	guanine nucleotide binding protein (G protein), gamma 12 precursor	Q9DAS9	1.00	2.16
gi 69885032	myelin basic protein isoform 1	P04370	1.06	0.91
gi 69885056	myelin basic protein isoform 4	P04370	1.34	0.96
gi 7710086	RAB10, member RAS oncogene family	P61027	0.89	1.00
gi 37718983	RAB35, member RAS oncogene family	Q6PHN9	0.97	0.90
gi 6679593	RAB3A, member RAS oncogene family	P63011	0.92	1.19
gi 13386338	RAP2B, member of RAS oncogene family precursor	P61226	0.59	1.24
gi 31542143	ras homolog gene family, member A precursor	Q9QUI0	0.76	1.10
gi 9625037	ras homolog gene family, member G precursor	P84096	1.00	1.46
gi 34328471	ras related v-ral simian leukemia viral oncogene homolog A precursor	P63321	0.71	0.99
gi 45592934	RAS-related C3 botulinum substrate 1 precursor	P63001	0.89	1.18
gi 21704066	RAS-related protein-1a precursor	P62835	0.71	1.15
gi 6678347	thymus cell antigen 1, theta precursor	P01831	0.73	0.87
	<b><i>Cytoplasm/Cytoskeleton</i></b>			
gi 6671509	actin, beta	P60710	0.97	1.21
gi 34328288	aldehyde dehydrogenase 3 family, member B1	Q80VQ0	0.97	1.06
gi 10946574	brain creatine kinase	Q04447	0.99	1.05
gi 256985110	breast carcinoma amplified sequence 1 isoform 1	Q80YN3	1.21	1.40
gi 28916677	calcium/calmodulin-dependent protein kinase II alpha isoform 2	P11798	1.35	1.16
gi 28173550	cell division cycle 10 homolog		0.87	0.96
gi 6753530	crystallin, alpha B	P23927	0.81	0.41
gi 40254595	dihydropyrimidinase-like 2	O08553	1.29	1.01
gi 116063570	dynamamin	P39053	1.80	1.25
gi 18087731	dynein light chain LC8-type 2	Q9D0M5	0.90	1.46
gi 157041260	erythrocyte protein band 4.1-like 2	Q3UNQ6	1.19	0.95
gi 126032329	eukaryotic translation elongation factor 1 alpha 1	P10126	0.89	1.17
gi 31982332	glutamine synthetase	P15105	1.29	0.72
gi 13937391	guanine nucleotide-binding protein, beta-2 subunit	P62880	0.61	0.75
gi 6754254	heat shock protein 1, alpha	P07901	0.84	1.58
gi 31981690	heat shock protein 8	P63017	1.17	0.97
gi 148539957	internexin neuronal intermediate filament protein, alpha	P46660	0.63	1.01
gi 7106335	keratin 17	Q9QWL7	2.19	0.94
gi 6678674	L-lactate dehydrogenase B	P16125	0.93	0.94

gi 124244033	microtubule-associated protein 1 A	A2ARP8	1.65	1.05
gi 70778915	moesin	P26041	1.24	1.17
gi 86355503	myelin-associated oligodendrocytic basic protein isoform b	Q9D2P8	0.69	0.55
gi 112363107	neurofilament 3, medium	P08553	0.72	1.00
gi 124286811	neurofilament, heavy polypeptide	P19246	0.61	1.17
gi 39204499	neurofilament, light polypeptide	P08551	0.64	1.05
gi 37700232	nucleoside-diphosphate kinase 1	P15532	0.50	1.14
gi 171906557	peptidyl arginine deiminase, type II	Q75WD0	0.87	0.89
gi 6679439	peptidylprolyl isomerase A	P17742	1.02	0.82
gi 224967068	phospholipase C, beta 1 isoform 2	A2AW58	1.47	1.32
gi 6755120	septin 4	P28661	1.54	1.16
gi 39930477	septin 8	Q8CHH9	1.04	1.20
gi 170650630	sirtuin 2 isoform 1	Q8VDQ8	0.95	1.10
gi 115496850	spectrin alpha 2		1.43	1.32
gi 117938332	spectrin beta 2 isoform 1	Q62261	1.30	0.98
gi 55926127	spectrin beta 3	Q68FG2	1.29	1.15
gi 6755690	syntaxin binding protein 3	Q60770	0.84	0.72
gi 255522817	TBC1 domain family, member 24 isoform a	Q3UUG6	0.74	1.44
gi 77812697	titin isoform N2-A	Q8C139	0.91	1.83
gi 33469051	tubulin polymerization-promoting protein	Q7TQD2	1.57	1.22
gi 34740335	tubulin, alpha 1B	P05213	0.72	1.06
gi 6678467	tubulin, alpha 4	P68368	0.81	1.36
gi 22165384	tubulin, beta 2C	P68372	0.79	0.97
gi 12963615	tubulin, beta 3	Q9ERD7	0.75	1.46
gi 31981939	tubulin, beta 4	Q9D6F9	0.73	1.40
gi 7106439	tubulin, beta 5	P99024	0.62	1.20
gi 6756041	tyrosine 3-monooxygenase/tryptophan 5-monooxygenase activation protein, zeta polypeptide	P63101	1.20	0.94
<b>Mitochondria</b>				
gi 148747424	adenine nucleotide translocator 1	P48962	1.09	1.56
gi 22094075	adenine nucleotide translocator 2	P51881	1.07	1.24
gi 19527258	aldehyde dehydrogenase 6A1 precursor	Q9EQ20	0.45	0.35
gi 6754036	aspartate aminotransferase 2	P05202	0.47	1.42
gi 34538602	ATP synthase F0 subunit 8	P03930	0.83	1.28
gi 78214312	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit b, isoform 1 precursor	Q9CQQ7	0.75	1.36
gi 21313679	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit d	Q9DCX2	1.06	1.42

gi 7949005	ATP synthase, H+ transporting, mitochondrial F0 complex, subunit F precursor	P97450	1.04	1.36
gi 6680748	ATP synthase, H+ transporting, mitochondrial F1 complex, alpha subunit, isoform 1 precursor	Q03265	1.03	1.35
gi 166851828	ATP synthase, H+ transporting, mitochondrial F1 complex, delta subunit precursor	Q9D3D9	2.06	1.57
gi 163838641	ATP synthase, H+ transporting, mitochondrial F1 complex, gamma subunit isoform a	Q91VR2	0.94	1.37
gi 20070412	ATP synthase, H+ transporting, mitochondrial F1 complex, O subunit precursor	Q9DB20	1.22	1.49
gi 6753428	creatine kinase, mitochondrial 1, ubiquitous precursor	P30275	1.94	1.07
gi 34538601	cytochrome c oxidase subunit II	P00405	0.94	1.14
gi 6753498	cytochrome c oxidase subunit IV isoform 1 precursor	P19783	1.09	1.55
gi 13385090	cytochrome c oxidase subunit VIb polypeptide 1	P56391	1.40	1.85
gi 112181182	cytochrome c oxidase, subunit Va precursor	P12787	1.38	1.59
gi 16716343	cytochrome c oxidase, subunit VIc	Q9CPQ1	1.11	1.38
gi 6681095	cytochrome c, somatic	P62897	1.11	1.10
gi 18250284	isocitrate dehydrogenase 3 (NAD+) alpha precursor	Q9D6R2	1.35	1.96
gi 6680345	isocitrate dehydrogenase 3 (NAD+), gamma precursor	P70404	1.25	1.16
gi 18700024	isocitrate dehydrogenase 3, beta subunit	Q91VA7	1.13	1.48
gi 31982186	malate dehydrogenase 2, NAD (mitochondrial) precursor	P08249	1.25	1.37
gi 31980648	mitochondrial ATP synthase beta subunit precursor	P56480	1.67	1.50
gi 9790055	mitochondrial carrier homolog 2	Q791V5	1.17	1.19
gi 31981600	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 2	Q9CQ75	2.00	1.56
gi 33563266	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4	Q62425	1.28	1.47
gi 13385492	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 6 (B14)	Q9CQZ5	2.20	1.34
gi 254692859	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 9 precursor	Q6GTD3	1.27	1.47
gi 58037109	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10	Q9DCS9	1.22	1.48
gi 229892316	NADH dehydrogenase (ubiquinone) Fe-S protein 1 precursor	Q91VD9	1.88	1.48
gi 58037117	NADH dehydrogenase (ubiquinone) Fe-S protein 3 precursor	Q9DCT2	1.03	1.35
gi 72004262	NADH dehydrogenase (ubiquinone) Fe-S protein 5	Q99LY9	1.03	1.36
gi 85861164	oxoglutarate dehydrogenase (lipoamide) precursor	Q60597	1.49	2.12
gi 6755114	peroxiredoxin 5 precursor	P99029	1.39	1.49
gi 18152793	pyruvate dehydrogenase (lipoamide) beta precursor	Q9D051	1.13	1.08
gi 6679261	pyruvate dehydrogenase E1 alpha 1 precursor	P35486	1.16	1.55
gi 16716499	sideroflexin 3	Q91V61	1.29	1.39
gi 21312994	solute carrier family 25 (mitochondrial carrier oxoglutarate carrier), member 11	Q9CR62	1.28	1.51
gi 19526818	solute carrier family 25 member 3 precursor	Q8VEM8	1.15	1.34
gi 27369581	solute carrier family 25, member 12	Q8BH59	1.14	1.50
gi 54607098	succinate dehydrogenase Fp subunit precursor	Q8K2B3	1.43	1.38

gi 165972305	syntaxin binding protein 1 isoform b	O08599	1.03	1.32
gi 27370092	Tu translation elongation factor, mitochondrial isoform 1	Q8BFR5	1.14	1.54
gi 22267442	ubiquinol cytochrome c reductase core protein 2 precursor	Q9DB77	1.05	1.48
gi 46593021	ubiquinol-cytochrome c reductase core protein 1 precursor	Q9CZ13	1.20	1.47
gi 21539599	ubiquinol-cytochrome c reductase hinge protein	P99028	1.00	1.87
gi 21539585	ubiquinol-cytochrome c reductase, complex III subunit VII	Q9CQ69	0.95	1.80
gi 13385168	ubiquinol-cytochrome c reductase, Rieske iron-sulfur polypeptide 1	Q9CR68	1.04	1.13
gi 6755963	voltage-dependent anion channel 1	Q60932	1.04	1.36
gi 6755965	voltage-dependent anion channel 2	Q60930	0.95	1.89
	<b><i>G-protein complex</i></b>			
gi 47271396	GNAS complex locus XLas	Q6R0H7	0.76	0.84
gi 41054806	guanine nucleotide binding protein (G protein), alpha inhibiting 2	P08752	0.78	0.73
gi 89001109	guanine nucleotide binding protein, alpha 13	P27601	0.79	0.78
gi 74271899	guanine nucleotide binding protein, alpha inhibiting 1	B2RSH2	0.96	1.01
gi 6754012	guanine nucleotide binding protein, alpha o isoform A	P18872	0.87	0.72
gi 84662745	guanine nucleotide binding protein, alpha q polypeptide	P21279	0.83	0.80
gi 6680045	guanine nucleotide-binding protein, beta-1 subunit	P62874	0.81	0.84
	<b><i>Other</i></b>			
gi 125490368	1-phosphatidylinositol-5-phosphate 4-kinase A	O70172	1.80	0.97
gi 163644277	adaptor protein complex AP-2, alpha 2 subunit	Q6PEE6	0.88	0.92
gi 6753074	adaptor protein complex AP-2, mu1	P84091	1.25	0.90
gi 21313640	adaptor-related protein complex 2, beta 1 subunit isoform b	Q9DBG3	1.05	0.98
gi 62000629	cannabinoid receptor interacting protein 1	Q5M8N0	1.24	1.61
gi 51491845	clathrin, heavy polypeptide (Hc)	Q68FD5	0.65	0.87
gi 31982300	hemoglobin, beta adult major chain	P02088	0.97	0.94
gi 21644575	leucine-rich repeat LGI family, member 3 precursor	Q8K406	1.44	0.70
gi 118026911	myosin ID	Q5SYD0	0.92	0.96
gi 41282044	pantophysin isoform 2	O09117	0.75	0.81
gi 254553344	phosphofructokinase, muscle	P47857	1.05	1.13
gi 6679587	RAB1, member RAS oncogene family	P62821	0.94	1.22
gi 10946940	RAB2A, member RAS oncogene family	P53994	1.01	1.16
gi 6680726	ras homolog gene family, member B precursor	P62746	0.76	0.96
gi 6677731	regulatory factor X, 2 (influences HLA class II expression) isoform 2	P48379	0.58	0.56
gi 16716353	reticulon 3 isoform 4	Q9ES97	0.83	0.93
gi 160707903	synapsin I isoform b	O88935	1.00	1.01

gi|9845265

ubiquitin A-52 residue ribosomal protein fusion product 1

P62984

0.64

0.50