

Supplementary Information

Table S1. Identification of amyloid-binding proteins in mouse brain homogenates.

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
1	Carbamoyl-phosphate synthase [ammonia], mitochondrial	CPSM_RAT	164,476	1129	15	M	6
2	Pyruvate kinase isozymes M1/M2	KPYM_RAT	57,781	706	7	C, N	1
3	Betaine—Homocysteine <i>S</i> -methyltransferase 1	BHMT1_RAT	44,948	650	2	C	6
4	Adenylate kinase 2, mitochondrial	KAD2_RAT	26,363	540	4	M	1
5	δ -1-Pyrroline-5-carboxylate dehydrogenase, mitochondrial	AL4A1_RAT	61,830	538	4	M	6
6	Actin, cytoplasmic 1	ACTB_RAT	41,710	524	3	C	2 #
7	Myosin-4	MYH4_RAT	222,741	396	4	C	2
8	3-Ketoacyl-CoA thiolase, mitochondrial	THIM_RAT	41,844	350	1	M	7
9	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	HCDH_RAT	34,426	310	3	M	7
10	Heat shock cognate 71 kDa protein	HSP7C_RAT	70,827	305	3	C, N, S, Mel	5 #
11	ATP synthase subunit β , mitochondrial	ATPB_RAT	56,318	290	4	M	1 #
12	Calmodulin	CALM_RAT	16,827	288	1	C	2 #
13	Fructose-bisphosphate aldolase B	ALDOB_RAT	39,593	249	2	C, L, N, ER, CM	1 #
14	α -Enolase	ENOA_RAT	47,098	220	2	CM, C, Me	1 #
15	Ornithine carbamoyltransferase, mitochondrial	OTC_RAT	39,861	212	5	M	6
16	Myelin basic protein S	MBP_RAT	21,489	211	1	CM, Me	5
17	Glutathione <i>S</i> -transferase α -2	GSTA2_RAT	25,543	208	1	C, M, N	5
18	Phosphatidylethanolamine-binding protein 1	PEBP1_RAT	20,788	182	1	C, Me	4
19	Dihydropyrimidinase-related protein 2	DPYL2_RAT	62,239	177	2	C, Me, M	3 #
20	60 kDa Heat shock protein, mitochondrial	CH60_RAT	60,917	162	4	M	5
21	Glyceraldehyde-3-phosphate dehydrogenase	G3P_RAT	35,787	160	1	C, N	1 #
22	Electron transfer flavoprotein subunit α , mitochondrial	ETFA_RAT	34,929	137	3	M	1
23	Fructose-bisphosphate aldolase A	ALDOA_RAT	39,327	135	2	Me, M	1
24	ATP synthase subunit α , mitochondrial	ATPA_RAT	59,717	131	2	M	1
25	Thioredoxin-dependent peroxide reductase, mitochondrial	PRDX3_RAT	28,277	130	1	M	5
26	Elongation factor 1- α 1	EF1A1_RAT	50,082	129	2	N	3
27	Endoplasmin	ENPL_RAT	92,713	125	1	ER	5

Table S1. *Cont.*

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
28	Ral GTPase-activating protein subunit α -2	RGPA2_RAT	210,200	122	1	C, N	4 #
29	Profilin-1	PROF1_RAT	14,948	119	1	C	2
30	Citrate synthase, mitochondrial	CISY_RAT	51,833	104	1	M	1 #
31	Argininosuccinate synthase	ASSY_RAT	46,467	93	1	ER, L, M, N	6
32	Keratin, type II cytoskeletal 73	K2C73_RAT	60,349	90	2	C	2
33	Peroxisomal multifunctional enzyme type 2	DHB4_RAT	79,378	89	2	P	7
34	Peroxiredoxin-1	PRDX1_RAT	22,095	87	1	C	5
35	Non-specific lipid-transfer protein	NLTP_RAT	58,775	87	4	C, M, P	2
36	Stress-70 protein, mitochondrial	GRP75_RAT	73,812	85	1	M	5 #
37	Thioredoxin, mitochondrial	THIOM_RAT	18,220	78	1	M	5
38	Enoyl-CoA hydratase, mitochondrial	ECHM_RAT	31,496	77	2	M	7
39	Citrate lyase subunit β -like protein, mitochondrial	CLYBL_RAT	37,298	74	1	M	7
40	Retinol-binding protein 4	RET4_RAT	23,205	73	1	ES	2
41	10 kDa Heat shock protein, mitochondrial	CH10_RAT	10,895	69	2	M	5
42	Aspartate aminotransferase, mitochondrial	AATM_RAT	47,284	65	2	M	6 #
43	Pyruvate carboxylase, mitochondrial	PYC_RAT	129,695	63	1	M	1 #
44	Heterogeneous nuclear ribonucleoproteins A2/B1	ROA2_RAT	37,455	63	2	N, C	3 #
45	Aspartate aminotransferase, cytoplasmic	AATC_RAT	46,400	62	1	C	6
46	78 kDa Glucose-regulated protein	GRP78_RAT	72,302	61	1	C, ER	4
47	Peroxiredoxin-2	PRDX2_RAT	21,770	59	1	C	5
48	Glutamine synthetase	GLNA_RAT	42,240	57	1	C, M	6
49	Ornithine aminotransferase, mitochondrial	OAT_RAT	48,302	56	1	M	6
50	Glutathione <i>S</i> -transferase P	GSTP1_RAT	23,424	53	1	C, M, N	5
51	ATP synthase subunit δ , mitochondrial	ATPD_RAT	17,584	45	1	M	1
52	Tubulin α -1A chain	TBA1A_RAT	50,104	43	1	C	2 #
53	Electron transfer flavoprotein subunit β	ETFB_RAT	27,670	41	1	M	1

Table S1. *Cont.*

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
54	Elongation factor 2	EF2_RAT	95,223	38	1	C	3 #
55	AP-2 complex subunit mu	AP2M1_RAT	49,623	37	1	CM, Me	2 #
56	Catalase	CATA_RAT	59,719	37	1	P	5
57	Glutamate dehydrogenase 1, mitochondrial	DHE3_RAT	61,377	29	1	M	6
58	Very long-chain specific acyl-CoA dehydrogenase, mitochondrial	ACADV_RAT	70,705	29	1	M	7
59	Heat shock protein HSP 90- α	HS90A_RAT	84,762	29	1	C, Mel	5 #
60	Ubiquitin-40S ribosomal protein S27a	RS27A_RAT	17,939	29	1	C, N	5
61	Protein QN1 homolog	QN1_RAT	160,903	28	1	C, N	2
62	Ras-related protein Rab-1A	RAB1A_RAT	22,663	27	1	C, ER, E, G, Me	2
63	α -Fetoprotein	FETA_RAT	68,341	26	1	C	3
64	Trifunctional enzyme subunit β , mitochondrial	ECHB_RAT	51,382	26	1	M	7
65	Spectrin α chain, non-erythrocytic 1	SPTN1_RAT	284,462	25	2	C	2 #
66	Aldehyde dehydrogenase, mitochondrial	ALDH2_RAT	56,453	25	1	M	1
67	Phosphoglucomutase-1	PGM1_RAT	61,365	24	1	C	1
68	Arfaptin-1	ARFP1_RAT	40,754	24	1	C, G	2
69	Long-chain specific acyl-CoA dehydrogenase, mitochondrial	ACADL_RAT	47,842	23	1	M	7
70	Peroxisomal bifunctional enzyme	ECHP_RAT	78,608	23	1	P	7
71	Dimethylglycine dehydrogenase, mitochondrial	M2GD_RAT	95,987	22	1	M	6
72	Retinal dehydrogenase 1	AL1A1_RAT	54,424	21	1	C	4
73	Keratin, type I cytoskeletal 15	K1C15_RAT	48,840	20	3	C	2
74	NAD kinase domain-containing protein 1	NAKD1_RAT	48,087	20	1	M	1
75	Synaptotagmin-1	SYT1_RAT	47,369	19	1	C, Me	2 #
76	Ornithine decarboxylase antizyme 1	OAZ1_RAT	25,212	18	1	C	4
77	Protein disulfide-isomerase A5	PDIA5_RAT	59,361	17	1	ER	5
78	Regucalcin	RGN_RAT	33,368	17	1	C, N	4
79	Methylmalonate-semialdehyde dehydrogenase [acylating], mitochondrial	MMSA_RAT	57,771	17	1	M	6
80	Heterogeneous nuclear ribonucleoprotein K	HNRPK_RAT	50,944	17	1	N, C	3 #

Table S1. *Cont.*

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
81	Dihydrolipoyllysine-residue succinyltransferase component of 2-oxoglutarate dehydrogenase complex, mitochondrial	ODO2_RAT	48,894	16	1	M	1
82	Acyl-protein thioesterase 1	LYPA1_RAT	24,692	16	1	C	7
83	Peroxisomal carnitine <i>O</i> -octanoyltransferase	OCTC_RAT	70,257	16	1	P	7
84	2,4-Dienoyl-CoA reductase, mitochondrial	DECR_RAT	36,110	15	1	M	7
85	Hydroxymethylglutaryl-CoA synthase, mitochondrial	HMCS2_RAT	56,876	15	1	M	7
86	Superoxide dismutase [Mn], mitochondrial	SODM_RAT	24,659	15	1	M	5 #
87	Glutathione <i>S</i> -transferase α -3	GSTA3_RAT	25,303	14	1	C, N	5 #
88	Polyadenylate-binding protein 1	PABP1_RAT	70,656	14	1	C, N, Sp	3 #
89	Putative L-aspartate dehydrogenase	ASPD_RAT	31,240	14	1	C	6

Here and in other tables letters designate extracellular space (ES), and the following intracellular compartments: C—Cytoplasm, CM—Cell membrane, E—Endosomes, ER—Endoplasmic reticulum, G—Golgi apparatus, L—Lysosomes, M—Mitochondria, Me—Membranes, Mel—Melanosomes, Mi—Microsomes, N—Nucleus, R—Ribosomes, P—Peroxisomes, S—Sarcolemma, Sp—Spliceosomes. The symbol (#) designates isatin binding proteins. ^a Entry name is the item on the ID of the sequence. This name is a useful means of identifying a sequence; ^b MASCOT search engine uses MOWSE score system as a measure of absolute probability.

Table S2. Identification of amyloid-binding proteins in mouse brain homogenate treated with 0.1 mM isatin.

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
1	Carbamoyl-phosphate synthase [ammonia], mitochondrial	CPSM_RAT	164,476	587	2	M	6
2	Adenylate kinase 2, mitochondrial	KAD2_RAT	26,363	422	1	M	1
3	Heat shock 70 kDa protein 1A/1B	HSP71_RAT	70,142	421	2	C, M	5
4	Betaine—Homocysteine S-methyltransferase 1	BHMT1_RAT	44,948	397	2	C	6
5	δ -1-Pyrroline-5-carboxylate dehydrogenase, mitochondrial	AL4A1_RAT	61,830	350	1	M	6
6	3-Ketoacyl-CoA thiolase, mitochondrial	THIM_RAT	41,844	350	1	M	7
7	Fructose-bisphosphate aldolase B	ALDOB_RAT	39,593	286	1	C	1
8	α -Enolase	ENOA_RAT	47,098	271	1	C, N	1
9	Stress-70 protein, mitochondrial	GRP75_RAT	73,812	260	1	M	5
10	Ceruloplasmin	CERU_RAT	120,764	245	2	C	2
11	Keratin, type II cytoskeletal 73	K2C73_RAT	60,349	216	2	C	2
12	Keratin, type II cytoskeletal 8	K2C8_RAT	53,985	207	5	C	2
13	Keratin, type I cytoskeletal 15	K1C15_RAT	48,840	137	3	C	2
14	Semaphorin-3A	SEM3A_RAT	88,752	83	1	C, Me	3
15	Serine protease inhibitor A3K	SPA3K_RAT	46,532	81	1	C	3
16	Guanine nucleotide exchange factor DBS Ornithine carbamoyltransferase, mitochondrial	MCF2L_RAT	129,328	68	1	C, Me	4
17		OTC_RAT	39,861	64	1	M	6
18	Ral GTPase-activating protein subunit α -2	RGPA2_RAT	210,200	50	1	C	4
19	Thioredoxin-dependent peroxide reductase, mitochondrial	PRDX3_RAT	28,277	46	1	M	5
20	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	HCDH_RAT	34,426	45	1	M	7
21	Transient receptor potential cation channel subfamily M member 4	TRPM4_RAT	135,255	43	2	Me, ER, G	4
22	Glutathione S-transferase α -2	GSTA2_RAT	25,543	41	1	C, M, N	4

Table S2. Cont.

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
23	Endoplasmin	ENPL_RAT	92,713	38	1	ER	5
24	Proenkephalin-A	PENK_RAT	30,912	36	1	C	4
25	Vitamin D-binding protein	VTDB_RAT	53,509	35	1	C	2
26	Glial fibrillary acidic protein	GFAP_RAT	49,927	33	3	C	2
27	Ectonucleotide pyrophosphatase/phosphodiesterase family member 5	ENPP5_RAT	54,255	32	1	Me	6
28	Xylosyltransferase 2	XYLT2_RAT	96,729	27	1	G	1

^a Entry name is the item on the ID of the sequence. This name is a useful means of identifying a sequence;

^b MASCOT search engine uses MOWSE score system as a measure of absolute probability.

Table S3. Identification of amyloid-binding proteins in mouse brain homogenates treated with hydrogen peroxide.

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
1	Keratin, type II cytoskeletal 73	K2C73_RAT	60,349	2802	4	C	2
2	Carbamoyl-phosphate synthase [ammonia], mitochondrial	CPSM_RAT	164,476	848	6	M	6
3	Betaine—Homocysteine S-methyltransferase 1	BHMT1_RAT	44,948	823	2	C	6
4	Keratin, type I cytoskeletal 42	K1C42_RAT	50,182	753	5	C	2
5	Actin, cytoplasmic 1	ACTB_RAT	41,710	753	3	C	2
6	Junction plakoglobin	PLAK_RAT	81,749	676	3	C, Me	2
7	Adenylate kinase 2, mitochondrial	KAD2_RAT	26,363	556	4	M	1
8	Fructose-bisphosphate aldolase B	ALDOB_RAT	39,593	478	1	C, L, N, ER, CM	1
9	δ -1-Pyrroline-5-carboxylate dehydrogenase, mitochondrial	AL4A1_RAT	61,830	387	1	M	6
10	α -Enolase	ENOA_RAT	47,098	362	1	CM, C, Me	1
11	3-Ketoacyl-CoA thiolase, mitochondrial	THIM_RAT	41,844	354	1	M	7
12	Ornithine carbamoyltransferase, mitochondrial	OTC_RAT	39,861	272	2	M	6
13	Ubiquitin-40S ribosomal protein S27a	RS27A_RAT	17,939	244	1	C, N	5
14	Myosin-4	MYH4_RAT	222,741	226	2	C	2
15	Glutathione S-transferase α -2	GSTA2_RAT	25,543	202	1	C, M, N	5
16	Keratin, type II cytoskeletal 75	K2C75_RAT	58,991	192	2	C	2
17	Tropomyosin α -3 chain	TPM3_RAT	28,989	163	2	C	2

Table S3. *Cont.*

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
18	60 kDa Heat shock protein, mitochondrial	CH60_RAT	60,917	161	3	M	5
19	ATP synthase subunit β , mitochondrial	ATPB_RAT	56,318	159	2	M	1
20	Hydroxyacyl-coenzyme A dehydrogenase, mitochondrial	HCDH_RAT	34,426	155	1	M	7
21	Ral GTPase-activating protein subunit α -2	RGPA2_RAT	210,200	141	1	C, N	4
22	Annexin A2	ANXA2_RAT	38,654	133	1	Me, C, Mel	2
23	ATP synthase subunit α , mitochondrial	ATPA_RAT	59,717	51	2	M	1
24	Thioredoxin-dependent peroxide reductase, mitochondrial	PRDX3_RAT	28,277	89	1	M	5
25	Elongation factor 1- α 1	EF1A1_RAT	50,082	88	2	N	3
26	Electron transfer flavoprotein subunit α , mitochondrial	ETFA_RAT	34,929	88	2	M	1
27	Tubulin α -1A chain	TBA1A_RAT	50,104	84	1	C	2
28	Retinol-binding protein 4	RET4_RAT	23,205	82	1	ES	2
29	Peroxiredoxin-1	PRDX1_RAT	22,095	71	1	C	5
30	Citrate lyase subunit β -like protein, mitochondrial	CLYBL_RAT	37,298	70	1	M	7
31	Profilin-1	PROF1_RAT	14,948	70	2	C	2
32	Endoplasmic	ENPL_RAT	92,713	67	1	ER	5
33	Thioredoxin, mitochondrial	THIOM_RAT	18,220	65	1	M	5
34	Glutathione <i>S</i> -transferase P	GSTP1_RAT	23,424	63	1	C, M, N	5
35	Peroxisomal multifunctional enzyme type 2	DHB4_RAT	79,378	63	1	P	7
36	Stress-70 protein, mitochondrial	GRP75_RAT	73,812	55	1	M	5
37	Aspartate aminotransferase, mitochondrial	AATM_RAT	47,284	54	2	M	6
38	Keratin, type I cytoskeletal 15	K1C15_RAT	48,840	52	3	C	2
39	Keratin, type II cytoskeletal 8	K2C8_RAT	53,985	48	2	C	2
40	Ornithine aminotransferase, mitochondrial	OAT_RAT	48,302	48	1	M	6
41	78 kDa glucose-regulated protein	GRP78_RAT	72,302	43	1	C, ER	4
42	Chloride intracellular channel protein 1	CLIC1_RAT	26,964	40	1	CM, C, Me, N	2
43	10 kDa Heat shock protein, mitochondrial	CH10_RAT	10,895	40	1	M	5
44	ATP synthase subunit delta, mitochondrial	ATPD_RAT	17,584	32	1	M	1

Table S3. *Cont.*

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
45	2,4-Dienoyl-CoA reductase, mitochondrial	DECR_RAT	36,110	30	1	M	7
46	Dihydropyrimidinase-related protein 2	DPYL2_RAT	62,239	30	1	C, Me, M	4
47	Xylosyltransferase 2	XYLT2_RAT	96,729	30	1	ER, G, Me	1
48	Cytochrome P450 2A1	CP2A1_RAT	55,959	30	1	M	1
49	Kelch-like protein 38	KLH38_RAT	65,629	26	1	C	2
50	α -Fetoprotein	FETA_RAT	68,341	24	1	C	3
51	Myelin basic protein S	MBP_RAT	21,489	23	1	CM, Me	5
52	Calmodulin	CALM_RAT	16,827	22	2	C	2
53	Non-specific lipid-transfer protein	NLTP_RAT	58,775	22	2	C, M, P	2
54	Hydroxymethylglutaryl-CoA synthase, mitochondrial	HMCS2_RAT	56,876	22	2	M	7
55	TBC1 domain family member 14	TBC14_RAT	78,160	22	1	G	4
56	Glyceraldehyde-3-phosphate dehydrogenase	G3P_RAT	35,787	20	1	C, N	1
57	Protein piccolo	PCLO_RAT	552,376	19	1	G, Me	2
58	Synergism gamma	SYNRG_RAT	141,270	19	1	C, G, Me	2
59	Superoxide dismutase [Mn], mitochondrial	SODM_RAT	24,659	17	1	M	5
60	Hemopexin	HEMO_RAT	51,318	17	1	ES	2
61	Peroxiredoxin-2	PRDX2_RAT	21,770	16	1	C	5
62	Angiomotin-like protein 2	AMOL2_RAT	85,535	16	1	CM, G, E	4
63	Activated CDC42 kinase 1	ACK1_RAT	114,995	16	1	CM, E, Me, N	2
64	Probable G-protein coupled receptor 19	GPR19_RAT	47,603	15	1	CM, Me	4
65	Granulins	GRN_RAT	63,325	15	1	ES	3
66	Furin	FURIN_RAT	86,599	15	1	CM, Me, G	3
67	Enoyl-CoA hydratase, mitochondrial	ECHM_RAT	31,496	15	1	M	7
68	Cullin-associated NEDD8-dissociated protein 2	CAND2_RAT	139,585	14	1	N	3
69	Citrate synthase, mitochondrial	CISY_RAT	51,833	14	1	M	1
70	Heat shock protein HSP 90- α	HS90A_RAT	84,762	13	1	C, Me	5

^a Entry name is the item on the ID of the sequence. This name is a useful means of identifying a sequence;

^b MASCOT search engine uses MOWSE score system as a measure of absolute probability.

Table 4. Identification of amyloid-binding proteins in mouse brain homogenates treated with hydrogen peroxide in the presence of 0.1 mM isatin.

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
1	Dihydropyrimidinase-related protein 2	DPYL2_RAT	62,239	627	1	C, Me, M	3
2	Betaine—Homocysteine S-methyltransferase 1 Cytosolic	BHMT1_RAT	44,948	534	4	C	6
3	10-formyltetrahydrofolate dehydrogenase	AL1L1_RAT	98,812	387	8	C	1
4	Keratin, type II cytoskeletal 73	K2C73_RAT	60,349	345	3	C	2
5	78 kDa Glucose-regulated protein	GRP78_RAT	72,302	302	6	ER	5
6	Tubulin α -1A chain	TBA1A_RAT	50,104	261	4	C	2
7	Clathrin heavy chain 1	CLH_RAT	191,477	240	6	C	2
8	Glial fibrillary acidic protein	GFAP_RAT	49,927	240	2	C	2
9	Actin, cytoplasmic 1	ACTB_RAT	41,710	231	5	C	2
10	Heat shock cognate 71 kDa protein	HSP7C_RAT	70,827	213	7	C, M	5
11	Keratin, type II cytoskeletal 8	K2C8_RAT	53,985	207	5	C	2
12	Dynamin-1	DYN1_RAT	97,234	191	6	C	2
13	Tubulin β -2A chain	TBB2A_RAT	49,875	179	3	C	2
14	Annexin A6	ANXA6_RAT	75,706	152	4	C, Mel	2
15	Tubulin α -4A chain	TBA4A_RAT	49,892	149	4	C	2
16	Ubiquitin-40S ribosomal protein S27a	RS27A_RAT	17,939	133	2	C, N, R	3
17	Myosin-4	MYH4_RAT	222,741	129	2	C	2
18	Peroxiredoxin-1	PRDX1_RAT	22,095	129	3	C	5
19	Transitional endoplasmic reticulum ATPase	TERA_RAT	89,293	125	3	C, N, ER	2
20	Heterogeneous nuclear ribonucleoprotein A3	ROA3_RAT	39,628	125	2	N, C	3
21	Glutathione S-transferase P	GSTP1_RAT	23,424	116	1	C, M, N	5
22	Calmodulin	CALM_RAT	16,827	116	1	C	4
23	Synapsin-2	SYN2_RAT	63,417	106	2	C	4
24	Keratin, type I cytoskeletal 42	K1C42_RAT	50,182	105	4	C	2
25	Cytochrome b5	CYB5_RAT	15,346	100	3	ER, Me, Mi	1

Table S4. *Cont.*

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
26	Activated RNA polymerase II transcriptional coactivator p15	TCP4_RAT	14,432	91	2	N	3
27	Catalase	CATA_RAT	59,719	79	3	P	5
28	Polyadenylate-binding protein 1	PABP1_RAT	70,656	75	2	C, N, Sp	3
29	Neurofascin	NFASC_RAT	137,918	69	2	CM, Me	5
30	Glutamate dehydrogenase 1, mitochondrial	DHE3_RAT	61,377	68	4	M	6
31	Arginase-1	ARGI1_RAT	34,951	55	2	C	6
32	Creatine kinase U-type, mitochondrial	KCRU_RAT	46,999	54	1	M	1
33	Spectrin α chain, non-erythrocytic 1	SPTN1_RAT	284,462	50	4	C	2
34	Vesicle-fusing ATPase	NSF_RAT	82,600	47	1	C	2
35	Heat shock protein HSP 90- α	HS90A_RAT	84,762	45	1	C, Me	5
36	Heterogeneous nuclear ribonucleoproteins A2/B1	ROA2_RAT	37,455	43	2	N, C, R, Sp	3
37	Fructose-bisphosphate aldolase B	ALDOB_RAT	39,593	41	1	C, L, N, ER, CM	1
38	ATP synthase subunit β , mitochondrial	ATPB_RAT	56,318	39	2	M	1
39	Peroxiredoxin-2	PRDX2_RAT	21,770	38	1	C	5
40	Malate dehydrogenase, cytoplasmic	MDHC_RAT	36,460	38	2	C	1
41	Elongation factor 1- α 1	EF1A1_RAT	50,082	38	1	N, C	3
42	Calcium/calmodulin-dependent protein kinase type II subunit α	KCC2A_RAT	54,081	31	1	Me, CM	4
43	Pyruvate kinase isozymes M1/M2	KPYM_RAT	57,781	30	1	C, N	1
44	Myelin basic protein S	MBP_RAT	21,489	28	1	Me, CM	4
45	Stress-70 protein, mitochondrial	GRP75_RAT	73,812	26	1	M, N	5
46	Glutamine synthetase	GLNA_RAT	42,240	26	2	C, M	6
47	Heterogeneous nuclear ribonucleoprotein H2	HNRH2_RAT	49,262	24	2	C, N, R	3
48	Histone H3.1	H31_RAT	15,394	20	1	N	3

Table S4. Cont.

No.	Protein Name	Acc. Number ^a	Mol. Mass	Score ^b	Peptides	Localization	Function
49	Carbamoyl-phosphate synthase [ammonia], mitochondrial	CPSM_RAT	164,476	19	1	M	6
50	Ras-related protein Rab-4B	RAB4B_RAT	23,614	18	1	M, CM	4
51	Endoplasmic reticulum chaperone	ENPL_RAT	92,713	17	1	ER	5
52	Keratin, type II cytoskeletal 72	K2C72_RAT	56,816	17	1	C	2
53	Dihydrolipoyllysine-residue acetyltransferase component of pyruvate dehydrogenase complex, mitochondrial	ODP2_RAT	67,123	16	1	M	1
54	Histone H2B type 1-A	H2B1A_RAT	14,216	16	1	N	3
55	14-3-3 protein ζ/δ	1433Z_RAT	27,754	15	1	C, N, M, Me	3
56	Uricase	URIC_RAT	34,912	15	1	P	6
57	Kelch-like protein 38	KLH38_RAT	65,629	15	1	C, G	5
58	Glutathione S-transferase Yb-3	GSTM4_RAT	25,664	14	1	C	5
59	Isocitrate dehydrogenase [NADP] cytoplasmic OS	IDHC_RAT	46,705	13	1	C	1

^a Entry name is the item on the ID of the sequence. This name is a useful means of identifying a sequence;

^b MASCOT search engine uses MOWSE score system as a measure of absolute probability.