SUPPLEMENTARY MATERIALS

Buneeva O.A., Kapitsa I.G., Kazieva L.Sh., Vavilov N.E., Zgoda V.G. (2023) Quantitative changes of brain isatin-binding proteins of rats with the rotenone-induced experimental parkinsonism. Biomeditsinskaya Khimiya, **69**(3), 188-192.

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Table S1. Rat brain proteins, amount of which changes when administering rotenone to animals (compared to the controls). Uniprot accession numbers of mitochondrial proteins are given in bold.

No.	Uniprot accession number	Uniprot gene name	Uniprot protein name	Functions	Difference from control after rotenone administration	
					-Log(P-value)	Difference
1	D3ZQG6	*Trim2*	Tripartite motif-containing protein 2	6	2.7	0.9
2	O08839	*Bin1*	Myc box-dependent-interacting protein 1	2	3.5	0.6
3	O88767	*Park7*	Parkinson disease protein 7 homolog	4	2.6	1.5
4	**S5RZM8**	*COX2*	Cytochrome c oxidase subunit 2	1	1.8	1.3
5	P04797	*Gapdh*	Glyceraldehyde-3-phosphate dehydrogenase	1	2.4	0.7
6	**P07895**	*Sod2*	Superoxide dismutase [Mn], mitochondrial	4	3.6	-1.6
7	P07943	*Akr1b1*	Aldo-keto reductase family 1 member B1	7	3.4	1.0
8	**P10888**	*Cox4i1*	Cytochrome c oxidase subunit 4 isoform 1, mitochondrial	1	3.1	1.1
9	**P11951**	*Cox6c2*	Cytochrome c oxidase subunit 6C-2	1	2.0	0.9
10	**P12075**	*Cox5b*	Cytochrome c oxidase subunit 5B, mitochondrial	1	2.6	1.9
11	P13668	*Stmn1*	Stathmin	2	2.7	0.7
12	P19527	*Nefl*	Neurofilament light polypeptide	2	3.1	-0.8
13	**P20788**	*Uqcrfs1*	Cytochrome b-c1 complex subunit Rieske, mitochondrial	1	2.1	1.8
14	A0A8I6AAG6	*Slc1a3*	Amino acid transporter	2	3.6	3.2

15	Q2I6B2	*Atp6v0a1*	V-type proton ATPase subunit a	2	4.5	4.5
16	A0A0A0MY31	*Itpr1*	Inositol 1,4,5-trisphosphate receptor	3	2.5	-0.6
17	A0A8L2R8Y3	*Mif*	Macrophage migration inhibitory factor	3	2.4	1.1
18	A0A8I5ZMM3	*Dlg4*	Discs large MAGUK scaffold protein 4	3	2.6	-0.5
19	P31596	*Slc1a2*	Excitatory amino acid transporter 2	2	2.7	0.8
20	F1M2I5	*Opcml*	Opioid binding protein/cell adhesion molecule-like	3	6.2	2.4
21	P37377	*Snca*	Alpha-synuclein	4	1.6	2.5
22	A0A8I6A6P9	*Arl3*	ADP ribosylation factor like GTPase 3	3	2.7	0.9
23	P38983	*Rpsa*	40S ribosomal protein SA	5	4.0	1.5
24	P55051	*Fabp7*	Fatty acid-binding protein, brain	7	2.8	1.5
25	P62329	*Tmsb4x*	Thymosin beta-4	2	2.4	1.6
26	P62744	*Ap2s1*	AP-2 complex subunit sigma	2	3.4	1.3
27	P62815	*Atp6v1b2*	V-type proton ATPase subunit B, brain isoform	2	4.4	0.8
28	P69682	*Necap1*	Adaptin ear-binding coat-associated protein 1	2	2.4	0.6
29	P81155	*Vdac2*	Voltage-dependent anion-selective channel protein 2	2	5.9	2.4
30	P84076	*Hpca*	Neuron-specific calcium-binding protein hippocalcin	3	4.2	1.4
31	P97697	*Impa1*	Inositol monophosphatase 1	3	3.5	1.6
32	P97846	*Cntnap1*	Contactin-associated protein 1	3	4.9	1.6
33	F8WFS9	*Add2*	Adducin 2	2	2.7	-1.3
34	Q4FZT2	*Ppme1*	Protein phosphatase methylesterase 1	3	4.2	-0.8
35	**Q5BK63**	*Ndufa9*	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 9, mitochondrial	1	3.8	0.8
36	Q5U2N3	*Pitpnm1*	Membrane-associated phosphatidylinositol transfer protein 1	2	2.3	-0.7

37	Q5U318	*Pea15*	Astrocytic phosphoprotein PEA-15	3	2.8	1.5
38	Q5XI22	*Acat2*	Acetyl-CoA acetyltransferase, cytosolic	7	1.9	1.3
39	**Q5XIH7**	*Phb2*	Prohibitin-2	3	2.8	1.2
40	**Q5XIN6**	*Letm1*	Mitochondrial proton/calcium exchanger protein	2	2.1	1.1
41	Q62813	*Lsamp*	Limbic system-associated membrane protein	3	2.7	3.9
42	Q63198	*Cntn1*	Contactin-1	3	3.0	1.9
43	Q63560	*Map6*	Microtubule-associated protein 6	1	2.0	1.1
44	**A0A8L2Q7K1**	*Ndufs1*	NADH-ubiquinone oxidoreductase 75 kDa subunit, mitochondrial	1	3.8	0.5
45	A0A8L2QK81	*Snd1*	Staphylococcal nuclease domain-containing protein	5	2.4	-0.8
46	Q6P0K8	*Jup*	Junction plakoglobin	2	3.0	3.4
47	A0A8I6A243	*Gpi*	Glucose-6-phosphate isomerase	1	2.9	0.8
48	Q812E9	*Gpm6a*	Neuronal membrane glycoprotein M6-a	5	2.8	1.2
49	A0A8I6AGZ2	*Pex5l*	Peroxin 2, isoform CRA_c	4	2.5	-0.9
50	A0A140TAA4	*Pdcd6ip*	Programmed cell death 6-interacting protein	4	2.3	-0.6
51	**Q9Z2L0**	*Vdac1*	Voltage-dependent anion-selective channel protein 1	2	4.3	1.6
52	A0A096MJT3	*Septin4*	Septin 4	1	3.2	-1.3
53	A0A0G2JSR0	*Vdac3*	Voltage-dependent anion channel 3	2	4.1	3.6
54	**A0A0G2JVL6**	*Ndufa8*	NADH dehydrogenase [ubiquinone] 1 alpha subcomplex subunit 8	1	1.9	1.2
55	Q6S3A1	*Status UniProtKB unreviewed*	Plectin 4	2	2.4	-0.6

56	G3V9N8	*Ap1b1*	AP complex subunit beta	2	3.2	1.2
57	A0A0G2K7Y2	*Oxr1*	Oxidation resistance 1	3	2.7	1.4
58	A0A8I5Y7K3	*Trappc3*	Trafficking protein particle complex subunit	2	2.9	-0.6
59	**F1LPG5**	*Ndufb4*	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 4	1	2.1	1.0
60	A0A8I6A0P2	*Nomo1*	Nodal modulator 1	3	2.9	-1.9
61	**A0A8I6A1Y1**	*Ogdh*	Oxoglutarate dehydrogenase (succinyl-transferring)	1	3.4	-0.5
62	A0A8I6A304	*Basp1*	Brain abundant, membrane attached signal protein 1	3	5.1	4.2
63	A0A8I6A522	*Rab2a*	RAB2A, member RAS oncogene family	3	3.4	0.7
64	A0A8I6A7U6	*Sfpq*	Splicing factor proline and glutamine rich	5	4.9	-1.5
65	**A0A8I6ADT5**	*Ndufs3*	NADH dehydrogenase [ubiquinone] iron-sulfur protein 3, mitochondrial	1	2.4	0.7
66	A0A8I6GEH9	*Ntm*	Neurotrimin	3	4.8	2.7
67	A0A8I6APA7	*Nefh*	Neurofilament heavy	2	3.6	-2.1
68	**Q5BJZ3**	*Nnt*	proton-translocating NAD(P)(+) transhydrogenase	4	2.6	0.7
69	A0A8I6GH02	*Cntnap2*	Contactin associated protein 2	3	1.9	-0.9
70	A0A8I6GH75	*Ddb1*	DNA damage-binding protein 1	5	3.1	0.9
71	**B2RYS8**	*Ndufb8*	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 8, mitochondrial	1	3.4	1.3
72	**B2RYW3**	*Ndufb9*	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 9	1	4.1	0.9

73	D3ZZK3	*Epha4*	Receptor protein-tyrosine kinase	3	3.2	-0.6
74	**D4A7L4**	*Ndufb11*	NADH dehydrogenase [ubiquinone] 1 beta subcomplex subunit 11, mitochondrial	1	1.8	1.3
75	D4ABT8	*Hnrnpul2*	Heterogeneous nuclear ribonucleoprotein U-like 2	5	2.8	-1.1
76	M0RAY1	*Pdcd5*	Programmed cell death 5	5	2.1	0.7
77	Q9JLT5	*Wfs1*	WFS1 (Wolfram Syndrome Protein 1)	3	2.7	3.0
78	F1LRI7	*Aak1*	AP2 associated kinase 1	3	2.6	0.9
79	F1M8K0	*Dag1*	Dystroglycan 1	3	1.7	-1.2
80	F7EPH4	*Ppa1*	Inorganic diphosphatase	7	4.0	3.3
81	Q6P9V1	*Cd81*	Tetraspanin	4	3.1	1.7
82	G3V7L8	*Atp6v1e1*	ATPase H+ transporting V1 subunit E1	2	3.7	0.8
83	G3V9Z3	*Maoa*	Amine oxidase	6	2.9	1.8
84	H1UBM5	*Cpne6*	Copine 6 protein	2	5.2	1.8
85	Q52KS1	*Pfkm*	ATP-dependent 6-phosphofructokinase	1	5.5	0.7
86	Q5M7T6	*Atp6v0d1*	V-type proton ATPase subunit	3	6.7	4.4

The figures in the column “Functions” indicate the following groups of the proteins: 1. Proteins involved in energy generation and carbohydrate metabolism; 2. Proteins involved in cytoskeleton formation and exocytosis; 3. Proteins involved in signal transduction and regulation of enzyme activity; 4. Antioxidant and protective proteins/enzymes; 5. Protein regulators of gene expression, cell division and differentiation; 6. Enzymes involved in metabolism of proteins, amino acids and other nitrogenous compounds; 7. Enzymes involved in lipid metabolism.