

SUPPLEMENTARY TABLE S1B. RESULTS OF SINGLE STEP TANDEM AFFINITY PURIFICATIONS OF GLRX5

<i>GI</i>	<i>Peptides neg.</i>	<i>Peptides pos.</i>	<i>emPAI neg.</i>	<i>emPAI pos.</i>	<i>Ratio pos./neg.</i>	<i>Background peptides</i>	<i>Protein</i>
17981858	0	1	0	0.77	9999	0	ATP synthase F0 subunit 6 [<i>Homo sapiens</i>]
14150128	0	1	0	0.58	9999	0	Hypothetical protein LOC84300 [<i>Homo sapiens</i>]
11024700	0	1	0	0.46	9999	0	Translocase of inner mitochondrial membrane 13 [<i>Homo sapiens</i>]
7705638	0	1	0	0.38	9999	0	bolA-like 1 [<i>Homo sapiens</i>]
55769543	0	1	0	0.33	9999	0	Mitochondrial ribosomal protein L14 [<i>Homo sapiens</i>]
20127408	0	3	0	0.21	9999	2	Mitochondrial trifunctional protein, alpha subunit precursor [<i>Homo sapiens</i>]
5174539	0	1	0	0.19	9999	17	Cytosolic malate dehydrogenase [<i>Homo sapiens</i>]
33519455	0	1	0	0.15	9999	0	Methionine adenosyltransferase II, beta isoform 2 [<i>Homo sapiens</i>]
20127454	0	2	0	0.14	9999	30	5-Aminoimidazole-4-carboxamide ribonucleotide formyltransferase/IMP cyclohydrolase [<i>Homo sapiens</i>]
50592988	0	1	0	0.14	9999	4	Ubiquinol-cytochrome c reductase core protein II [<i>Homo sapiens</i>]
167614485	0	1	0	0.13	9999	0	Acetyl-coenzyme A acyltransferase 2 [<i>Homo sapiens</i>]
212549553	0	2	0	0.12	9999	34	Interleukin enhancer binding factor 3 isoform d [<i>Homo sapiens</i>]
46593007	0	1	0	0.11	9999	1	Ubiquinol-cytochrome c reductase core protein I [<i>Homo sapiens</i>]
22547134	0	1	0	0.08	9999	0	Mitochondrial ribosomal protein L37 [<i>Homo sapiens</i>]
42516576	5	11	2.16	49.11	22.71	0	Glutaredoxin 5
50592994	1	3	0.38	1.68	4.32	26	Thioredoxin [<i>Homo sapiens</i>]
4758304	1	3	0.06	0.20	3.19	17	Protein disulfide isomerase-associated 4 [<i>Homo sapiens</i>]
4502989	1	2	1.15	3.64	3.15	1	Cytochrome c oxidase subunit VIIa polypeptide 2 (liver) precursor [<i>Homo sapiens</i>]
14043026	1	2	0.46	1.15	2.46	3	Vesicle-associated membrane protein 8 [<i>Homo sapiens</i>]
25188179	2	4	0.42	1.03	2.42	21	Voltage-dependent anion channel 3 isoform b [<i>Homo sapiens</i>]
21735621	5	9	0.83	1.97	2.37	63	Mitochondrial malate dehydrogenase precursor [<i>Homo sapiens</i>]

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SUPPLEMENTARY TABLE S1B. (CONTINUED)

<i>GI</i>	<i>Peptides neg.</i>	<i>Peptides pos.</i>	<i>emPAI neg.</i>	<i>emPAI pos.</i>	<i>Ratio pos./neg.</i>	<i>Background peptides</i>	<i>Protein</i>
156071462	2	4	0.31	0.71	2.31	10	Solute carrier family 25, member A6 [<i>Homo sapiens</i>]
27436901	1	2	0.29	0.66	2.29	6	Mitochondrial ribosomal protein L12 [<i>Homo sapiens</i>]
4557809	2	4	0.27	0.62	2.27	31	Ornithine aminotransferase precursor [<i>Homo sapiens</i>]
70995211	1	2	0.14	0.31	2.14	17	Peroxisomal enoyl-coenzyme A hydratase-like protein [<i>Homo sapiens</i>]
33636719	1	2	0.09	0.19	2.09	4	Translocase of inner mitochondrial membrane 44 [<i>Homo sapiens</i>]
62912457	1	2	0.05	0.11	2.05	27	Pyrroline-5-carboxylate synthetase isoform 2 [<i>Homo sapiens</i>]
4502491	3	4	0.63	1.27	2.00	39	Complement component 1, q subcomponent binding protein precursor [<i>Homo sapiens</i>]
4507879	3	5	0.53	1.05	1.95	28	Voltage-dependent anion channel 1 [<i>Homo sapiens</i>]
155722983	6	9	0.50	0.83	1.67	38	TNF receptor-associated protein 1 [<i>Homo sapiens</i>]
32483377	3	4	0.87	1.31	1.49	15	Peroxiredoxin 3 isoform b [<i>Homo sapiens</i>]
31542947	9	11	1.27	1.91	1.49	181	Chaperonin [<i>Homo sapiens</i>]
15149476	5	7	0.35	0.52	1.49	33	Arginyl-tRNA synthetase [<i>Homo sapiens</i>]
116805327	10	11	1.26	1.82	1.44	179	Methylcrotonoyl-Coenzyme A carboxylase 1 (alpha) precursor [<i>Homo sapiens</i>]
5453607	3	4	0.30	0.42	1.39	56	Chaperonin containing TCP1, subunit 7 isoform a [<i>Homo sapiens</i>]
50345984	8	10	0.97	1.34	1.37	99	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, alpha subunit precursor [<i>Homo sapiens</i>]
154354964	3	4	0.19	0.26	1.37	0	Inner membrane protein, mitochondrial isoform 1 [<i>Homo sapiens</i>]
38569421	3	4	0.13	0.18	1.36	31	ATP citrate lyase isoform 1 [<i>Homo sapiens</i>]
4557032	4	4	0.77	1.05	1.35	118	L-lactate dehydrogenase B [<i>Homo sapiens</i>]
156071459	4	5	0.77	1.05	1.35	62	Solute carrier family 25, member 5 [<i>Homo sapiens</i>]
48526509	4	4	0.71	0.96	1.34	5	Translocase of inner mitochondrial membrane 50 homolog [<i>Homo sapiens</i>]
11386135	11	11	2.67	3.48	1.30	33	Branched chain keto acid dehydrogenase E1, alpha polypeptide [<i>Homo sapiens</i>]
106049528	23	27	2.03	2.56	1.25	302	Pyruvate carboxylase precursor [<i>Homo sapiens</i>]
41872631	9	10	0.20	0.22	1.12	160	Fatty acid synthase [<i>Homo sapiens</i>]
194248072	19	16	4.29	4.73	1.10	216	Heat shock 70 kDa protein 1A [<i>Homo sapiens</i>]
24234688	16	16	2.51	2.76	1.10	137	Heat shock 70 kDa protein 9 precursor [<i>Homo sapiens</i>]
4757812	2	2	2.16	2.16	1	0	ATP synthase, H ⁺ transporting, mitochondrial F0 complex, subunit F2 isoform 2a [<i>Homo sapiens</i>]
4505773	5	5	1.37	1.37	1	77	Prohibitin [<i>Homo sapiens</i>]
190885499	2	2	1.15	1.15	1	7	Cytochrome c oxidase subunit Va precursor [<i>Homo sapiens</i>]
51479156	2	2	1.15	1.15	1	5	ATP synthase, H ⁺ transporting, mitochondrial F0 complex, subunit G [<i>Homo sapiens</i>]
14249376	1	1	1.15	1.15	1	5	Upregulated during skeletal muscle growth 5 [<i>Homo sapiens</i>]
91199540	6	5	0.87	0.87	1	88	Dihydrolipoamide dehydrogenase precursor [<i>Homo sapiens</i>]
7657369	2	2	0.77	0.77	1	0	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 8, 19 kDa [<i>Homo sapiens</i>]
32189394	6	6	0.63	0.63	1	118	ATP synthase, H ⁺ transporting, mitochondrial F1 complex, beta subunit precursor [<i>Homo sapiens</i>]
42476281	3	3	0.63	0.63	1	19	Voltage-dependent anion channel 2 [<i>Homo sapiens</i>]
55956777	2	2	0.58	0.58	1	0	Sterol carrier protein 2 isoform 1 precursor [<i>Homo sapiens</i>]
5032051	1	1	0.58	0.58	1	7	Ribosomal protein S14 [<i>Homo sapiens</i>]
4826848	1	1	0.58	0.58	1	1	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 5 [<i>Homo sapiens</i>]

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SUPPLEMENTARY TABLE S1B. (CONTINUED)

<i>GI</i>	<i>Peptides neg.</i>	<i>Peptides pos.</i>	<i>emPAI neg.</i>	<i>emPAI pos.</i>	<i>Ratio pos./neg.</i>	<i>Background peptides</i>	<i>Protein</i>
4505357	1	1	0.58	0.58	1	2	NADH dehydrogenase (ubiquinone) 1 alpha subcomplex, 4, 9 kDa [<i>Homo sapiens</i>]
4557353	3	3	0.53	0.53	1	12	Branched chain keto acid dehydrogenase E1 beta polypeptide precursor [<i>Homo sapiens</i>]
16554604	2	2	0.51	0.51	1	0	Mitochondrial ribosomal protein S23 [<i>Homo sapiens</i>]
119395754	5	5	0.48	0.48	1	105	Keratin 5 [<i>Homo sapiens</i>]
91984773	2	2	0.33	0.33	1	6	Apolipoprotein A-I binding protein precursor [<i>Homo sapiens</i>]
62420877	2	2	0.29	0.29	1	1	Electron-transfer-flavoprotein, beta polypeptide isoform 2 [<i>Homo sapiens</i>]
4507231	1	1	0.29	0.29	1	20	Single-stranded DNA binding protein 1 [<i>Homo sapiens</i>]
4758774	1	1	0.23	0.23	1	0	NADH dehydrogenase (ubiquinone) 1 beta subcomplex, 10, 22 kDa [<i>Homo sapiens</i>]
4557237	2	2	0.22	0.22	1	11	Acetyl-Coenzyme A acetyltransferase 1 precursor [<i>Homo sapiens</i>]
8922701	2	2	0.22	0.22	1	0	Acylglycerol kinase [<i>Homo sapiens</i>]
19923315	2	2	0.19	0.19	1	37	Serine hydroxymethyltransferase 2 (mitochondrial) [<i>Homo sapiens</i>]
4507401	1	1	0.19	0.19	1	0	Transcription factor A, mitochondrial [<i>Homo sapiens</i>]
189181759	1	1	0.17	0.17	1	3	Electron transfer flavoprotein, alpha polypeptide isoform b [<i>Homo sapiens</i>]
190358517	1	1	0.17	0.17	1	0	RAB11B, member RAS oncogene family [<i>Homo sapiens</i>]
194097323	1	1	0.16	0.16	1	6	Mitochondrial short-chain enoyl-coenzyme A hydratase 1 precursor [<i>Homo sapiens</i>]
21389315	1	1	0.16	0.16	1	10	Solute carrier family 25 (mitochondrial carrier; citrate transporter), member 1 precursor [<i>Homo sapiens</i>]
169636418	1	1	0.14	0.14	1	0	Mitochondrial ribosomal protein L38 [<i>Homo sapiens</i>]
66392203	1	1	0.13	0.13	1	67	NME1-NME2 protein [<i>Homo sapiens</i>]
25777721	1	1	0.10	0.10	1	0	Aldehyde dehydrogenase 5A1 isoform 1 precursor [<i>Homo sapiens</i>]
34147522	1	1	0.09	0.09	1	0	Chaperone, ABC1 activity of bc1 complex like precursor [<i>Homo sapiens</i>]
38679967	82	74	5.38	5.13	0.95	1028	Acetyl-Coenzyme A carboxylase alpha isoform 2 [<i>Homo sapiens</i>]
38679974	78	71	5.28	5.03	0.95	995	Acetyl-Coenzyme A carboxylase alpha isoform 4 [<i>Homo sapiens</i>]
134142062	21	18	0.51	0.43	0.83	241	Acetyl-Coenzyme A carboxylase beta [<i>Homo sapiens</i>]
119943100	18	19	5.40	4.51	0.83	209	Propionyl Coenzyme A carboxylase, beta polypeptide [<i>Homo sapiens</i>]
4505591	7	6	2.83	2.16	0.76	78	Peroxiredoxin 1 [<i>Homo sapiens</i>]
5031857	5	4	0.89	0.66	0.74	94	L-lactate dehydrogenase A isoform 1 [<i>Homo sapiens</i>]
34147630	4	3	0.42	0.30	0.71	40	Tu translation elongation factor, mitochondrial precursor [<i>Homo sapiens</i>]
21361114	4	3	0.66	0.46	0.70	27	Solute carrier family 25 (mitochondrial carrier; oxoglutarate carrier), member 11 [<i>Homo sapiens</i>]
65506442	28	22	5.61	3.92	0.69	288	Propionyl-Coenzyme A carboxylase, alpha polypeptide isoform a precursor [<i>Homo sapiens</i>]
94538322	3	2	0.63	0.38	0.61	4	Hydroxyacyl glutathione hydrolase isoform 1 [<i>Homo sapiens</i>]
110671329	15	14	7.11	4.33	0.60	123	Dihydrolipoamide branched chain transacylase precursor [<i>Homo sapiens</i>]

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SUPPLEMENTARY TABLE S1B. (CONTINUED)

<i>GI</i>	<i>Peptides neg.</i>	<i>Peptides pos.</i>	<i>emPAI neg.</i>	<i>emPAI pos.</i>	<i>Ratio pos./neg.</i>	<i>Background peptides</i>	<i>Protein</i>
4758504	3	2	0.70	0.42	0.60	25	Hydroxysteroid (17-beta) dehydrogenase 10 isoform 1 [<i>Homo sapiens</i>]
4758638	3	2	0.70	0.42	0.60	48	Peroxiredoxin 6 [<i>Homo sapiens</i>]
4502303	3	2	0.77	0.46	0.60	13	Mitochondrial ATP synthase, O subunit precursor [<i>Homo sapiens</i>]
11545863	15	12	3.52	2.03	0.57	213	Methylcrotonoyl-Coenzyme A carboxylase 2 (beta) [<i>Homo sapiens</i>]
183227678	3	2	1.37	0.77	0.56	31	Parkinson disease protein 7 [<i>Homo sapiens</i>]
4504523	3	2	2.16	1.15	0.53	17	Heat shock 10 kDa protein 1 [<i>Homo sapiens</i>]
31621305	2	1	0.06	0.03	0.49	17	Leucine-rich PPR motif-containing protein [<i>Homo sapiens</i>]
14043022	2	1	0.13	0.06	0.48	1	Methionyl-tRNA synthetase [<i>Homo sapiens</i>]
7657581	2	1	0.16	0.07	0.48	4	Solute carrier family 25, member 13 (citrin) [<i>Homo sapiens</i>]
42476028	2	1	0.17	0.08	0.48	0	ATPase family, AAA domain containing 3A [<i>Homo sapiens</i>]
75677353	2	1	0.17	0.08	0.48	3	AAA-ATPase TOB3 [<i>Homo sapiens</i>]
47132595	2	1	0.29	0.13	0.46	32	Solute carrier family 25 member 3 isoform b precursor [<i>Homo sapiens</i>]
32189392	5	3	2.16	0.99	0.46	17	Peroxiredoxin 2 isoform a [<i>Homo sapiens</i>]
94538362	4	2	0.49	0.22	0.45	59	Flotillin 2 [<i>Homo sapiens</i>]
4507149	2	1	1.51	0.58	0.38	13	Superoxide dismutase 1, soluble [<i>Homo sapiens</i>]
4757732	5	2	0.48	0.17	0.35	19	Programmed cell death 8 isoform 1 [<i>Homo sapiens</i>]
186928850	3	1	0.33	0.10	0.30	0	Mitochondrial ribosomal protein S27 [<i>Homo sapiens</i>]
171906593	3	1	0.50	0.14	0.28	4	Branched chain ketoacid dehydrogenase kinase isoform b [<i>Homo sapiens</i>]
19923748	5	1	1.27	0.17	0.14	105	Dihydrolipoamide S-succinyltransferase (E2 component of 2-oxo-glutarate complex) [<i>Homo sapiens</i>]
24308295	3	0	1.31	0	0	23	GrpE-like 1, mitochondrial [<i>Homo sapiens</i>]
156564403	3	0	0.53	0	0	13	Pyruvate dehydrogenase (lipoamide) beta [<i>Homo sapiens</i>]
51873036	2	0	0.09	0	0	252	Oxoglutarate (alpha-ketoglutarate) dehydrogenase (lipoamide) isoform 1 precursor [<i>Homo sapiens</i>]
21361565	2	0	0.33	0	0	8	ATP synthase, H ⁺ transporting, mitochondrial F0 complex, subunit B1 precursor [<i>Homo sapiens</i>]
70906441	2	0	0.38	0	0	11	Deoxyuridine triphosphatase isoform 1 precursor [<i>Homo sapiens</i>]
31711992	1	0	0.07	0	0	0	Dihydrolipoamide S-acetyltransferase [<i>Homo sapiens</i>]
25777732	1	0	0.10	0	0	3	Mitochondrial aldehyde dehydrogenase 2 precursor [<i>Homo sapiens</i>]
4504505	1	0	0.07	0	0	4	Hydroxysteroid (17-beta) dehydrogenase 4 [<i>Homo sapiens</i>]
61175258	1	0	0.46	0	0	1	Hypothetical protein LOC388753 [<i>Homo sapiens</i>]

Experiment carried out in cells that inducibly express the proteins with a C-terminal TAP-tagged GLRX5 (see Supplementary Table S1a). Proteins that were not copurified with control proteins and only copurified after antibiotic induction are marked with bold typeface.