

Comprehensive identification of proteins from MALDI imaging

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Supplemental Table 5:

List of 72 proteins identified in MALDI IMS studies in rodents (compare references below and Table 1 in main text)

Protein name	Accession UniProt	Frequency of observations			Reference
		in extracts	in tissue	combined	
10 kDa heat shock protein, mitochondrial	P61604	20	10	30	1, 4
40S ribosomal protein S21	P63220	15	10	25	1
40S ribosomal protein S28	P62857	18	10	28	1, 4
40S ribosomal protein S29	P62273	14	8	22	1
60S acidic ribosomal protein P2	P05387	12	10	22	1
60S ribosomal protein L38	P63173	18	10	28	1
Acyl-CoA-binding protein	P07108	15	9	24	1, 2, 4, 7, 8
Apolipoprotein A-II	P02652	5	8	13	1
ATP synthase, H ⁺ transporting, mitochondrial F1F0 complex, subunit e	P56385	14	10	24	1
ATP synthase-coupling factor 6, mitochondrial	P18859	3	4	7	1
BASP1	P80723	8	2	10	5
Beta-2-microglobulin	P61769	18	9	27	1, 2
Calgranulin A	P05109	16	9	25	8
Calmodulin	P62158	16	9	25	2, 4, 5, 7, 8
Copper transport protein ATOX1	O00244	0	5	5	1
COX 7a	P24310	1	4	5	5
Cox6a		10	8	18	1
Cystatin-B	P04080	18	10	28	1, 2
Cystatin-C	P01034	8	5	13	4
Cysteine-rich protein 1	P50238	13	6	19	2
Cysteine-rich secretory protein 1	P54107	0	0	0	2
cytochrome b-c1 complex subunit 8	O14949	5	9	14	5
cytochrome c oxidase polypeptides VIc-2	P09669	18	10	28	5
Cytochrome c	P99999	20	10	30	1, 2, 7
Cytochrome C oxidase	P00395	0	2	2	4
Cytochrome c oxidase copper chaperone	Q14061	7	1	8	1

Cytochrome c oxidase subunit 6B1	P14854	0	0	0	1, 7
Cytochrome c oxidase subunit 7A2	Q49610	5	9	14	1, 2, 4, 7
Cytochrome c oxidase subunit 7C, mitochondrial	P15954	4	8	12	2
cytoplasmatic actin	P60709	20	10	30	9
Dynein light chain roadblock-type 1	Q9NP97	13	9	22	1
E-cadherin binding protein E7	Q75N03	0	0	0	9
Epididymal secretory glutathione peroxidase	O75715	0	0	0	2
eptidyl-prolyl cis-trans isomerase FKBP2	P26885	12	9	21	2
Galectin-1	P09382	18	10	28	1
Glutathione S-transferase Mu 1	P09488	0	3	3	2
Glutathione S-transferase P 1	P09211	15	10	25	2
H2A2A_MOUSE Histone H2A type 2-A	Q6FI13	20	10	30	1, 5
Hemoglobin alpha	P69905	20	10	30	1, 7, 8
Hemoglobin subunit beta	P68871	20	10	30	1, 8
Histone H2A type 1-C	Q93077	12	9	21	4
Histone H2B type 1	P33778	18	9	27	4
Histone H2B1	Q93079	20	10	30	7
Histone H3.1	P68431	20	10	30	4, 5, 8
Histone H4	P62805	20	10	30	1, 4, 5, 7, 8
Homeodomain-only protein	Q9BPY8	0	0	0	2
Long-chain-fatty-acid--CoA ligase ACSBG1	Q96GR2	0	0	0	6
Macrophage migration inhibitory factor	P14174	20	10	30	1, 2, 4
Metallothionein-2/Metallothionein-1G	P13640	8	4	12	1
Mitochondrial import receptor subunit TOM7 homolog	Q9P0U1	0	0	0	1
myelin basic protein	P02686	0	0	0	5
Myotrophin	P58546	10	10	20	1
neurogranin	Q92686	0	0	0	5
Peptidyl-prolyl cis-trans isomerase A	P62937	19	10	29	8
Peptidyl-prolyl cis-trans isomerase FKBP1A	P62942	18	10	28	1, 2, 4
Prostaglandin-H2 D-isomerase	P41222	0	0	0	2
Protein S100-A10	P60903	11	9	20	1
Protein S100-A11	P31949	20	10	30	1, 2, 8
Protein S100-A6	P06703	19	10	29	1
Prothymosin alpha	P06454	11	10	21	1, 2
Purkinje cell protein 4	P48539	0	0	0	1
S100A4	P26447	17	10	27	9

secretoneurin	P13521	0	0	0	5
Serine protease inhibitor Kazal-type 3	P00995	5	2	7	1
Serum albumin	P02768	20	10	30	2, 3
Thioredoxin	P10599	20	10	30	1, 2
Thymosin beta 10	P63313	9	4	13	6, 7
Thymosin beta-4	P62328	10	5	15	1, 2, 3, 4, 6, 7, 8, 9
Transthyretin	P02766	17	10	27	1, 2
Ubiquitin-40S ribosomal protein S27a	P62979	20	10	30	1, 2, 5, 8
Ubiquitin-60S ribosomal protein L40	P62987	0	0	0	1
Up-regulated during skeletal muscle growth protein 5	Q96IX5	7	10	17	5

total number of proteins in literature	72	56	59
		77.8 %	81.9 %

References

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