Supplementary Materials

Some Properties of the *C. elegans* Multicopper Oxidase F21D5.3, an Ortholog of Human Ceruloplasmin

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Table S1. The amino acid sequences of MCOs were used in the bioinformatics analysis.

Organism	Sequence number	Abbreviations
Caenorhabditis elegans	NP_001255321.1	F21D5.3_CAEEL
Mus musculus (Mouse)	NP_001263177.1	CERU_MOUSE
Mus musculus (Mouse)	NP_001153099.1	HEPH_MOUSE
Rattus norvegicus (Rat)	AAA40917.1	CERU_RAT
Saccharomyces cerevisiae	NP_013774.1	FET3_YEAST
Salmonella typhimurium	WP_000946047.1	CUEO_SALTY
Cucurbita pepo var. melopepo (Zucchini)	A51027	ASO_CUCPM
Homo sapiens (Human)	NP_000087.1	CERU_HUMAN
Homo sapiens (Human)	NP_001124332.1	HEPH_HUMAN
Homo sapiens (Human)	NP_001092142.1	HPHL1_HUMAN

Table S2. Sequences of primers used to determine the concentration of mature transcription products.

Gene	Forward primer, 5′→3′	Reverse primer, 5′→3′
F21D5.3	AGG GAA CTC ATT GGT ATC ACG G	CCA ACA TCC GTT GAC ACT GG
cdc-42	GTT TGC TTC TCC GTG GTT GC	CCA ACA TCC GTT GAC ACT GG
pmp-3	GTT CCC GTG TTC ATC ACT CAT	ACA CCG TCG AGA AGC TGT AGA

Abbreviation: *F21D5.3* – nematode putative MMO (Tm, ℃, 64.3 (Forward primer) and 63.9 (Reverse primer)); *cdc-42* – guanine nucleotide exchange factor (Tm, ℃, 64.6 (Forward primer) and 63.6 (Reverse primer)); *pmp-3* – ABC transporter (Tm, ℃, 63 (Forward primer) and 65.3 (Reverse primer)).

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CERU_HUMAN      QVQECNKS-       341
F21D5.3         IVVDQNDTS       220
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Figure S1. Homologous N-glycosylation sites of human Cp and F21D5.3

Description	Max Score	Total Score	Query Cover	E value	Per. Ident	Acc. Len	Accession
FET2_YEAST	95.1	148	52%	9e-24	29.04%	636	Query_3514743
CERU_MOUSE	32.7	61.2	8%	2e-04	34.88%	1061	Query_3514741
CERU_HUMAN	31.2	57.8	7%	7e-04	32.56%	1065	Query_3514742

Figure S2. Sequence similarity of F21D5.3 with human and mouse Cp, and yeast ferroxidase Fet3. Protein sequence alignment was performed using the BLASTP algorithm.