

1 **Supplemental Table 2.** Details of similarity of AtHEMN1 with mitochondrial localized hemN type CPOs of different organisms

S.No.	Description	Max score	Total score	Query cover	E value	Ident	Accession
1	XP_010444214.1 <i>Camelina sativa</i>	911	911	100%	0	91%	53682 Hem N-C
2	XP_009112073.1 <i>Brassica rapa</i>	872	872	100%	0	86%	53683 Hem N-C
3	XP_010444215.1 <i>Camellina</i>	827	827	100%	0	85%	53688 Hem N-C
4	XP_004299192.1 <i>Fragaria</i>	644	644	100%	0	67%	53690 Hem N-C
5	XP_002318108.2 <i>Populus trichocarpa</i>	645	645	100%	0	64%	53689 Hem N-C
6	XP_006476967.1 <i>Citrus</i>	645	645	99%	0	64%	53691 Hem N-C
7	XP_008361148.1 <i>Malus</i>	471	471	77%	3.00E-167	63%	53693 Hem N-C
8	XP_002511254.1 <i>Ricinus communis</i>	623	623	100%	0	61%	53696 Hem N-C
9	XP_003522422.1 <i>Glycine</i>	583	583	99%	0	60%	53695 Hem N-C
10	NP_001066545.1 <i>Oryza sativa Japonica</i>	527	527	87%	0	59%	53694 Hem N-C
11	NP_001152192.1 <i>Zea mays</i>	531	531	87%	0	59%	53698 Hem N-C
12	73536239 Human Coproporphyrinogen	23.1	66.6	8%	0.014	56%	53702 Hem F
13	P36551.3 HEM6 HUMAN mitochondrial	22.7	37.7	6%	0.021	56%	53703 Hem F
14	159487437 <i>Chlamydomonas reinhardtii</i>	18.5	65.8	14%	0.38	56%	53707 Hem F
15	AHY75041.1 <i>Saccharomyces cerevisiae</i>	19.6	81.2	19%	0.17	50%	53687 Hem F
16	NP_171847.4 LIN2 A <i>thaliana</i>	19.6	132	23%	0.2	44%	53686 Hem F
17	XP_003074177.1 <i>Ostreococcus tauri</i>	350	350	86%	2.00E-119	44%	53692 Hem N-C
18	NP_440183.1 <i>Synechocystis sp</i>	18.1	93.9	45%	0.48	41%	53685 Hem F
19	77464802 <i>Rhodobacter sphaeroides</i>	184	184	70%	8.00E-57	34%	53706 Hem N-C
20	XP_005247182.1 <i>Homo sapiens</i>	15	43.5	5%	5.4	33%	53704 Hem F
21	384176173 <i>Bacillus subtilis</i>	213	231	83%	6.00E-68	33%	53705 Hem N-C
22	YP_002558347.1 <i>Escherichia coli</i>	117	131	62%	5.00E-33	27%	53699 Hem N-C
23	KFL09442.1 <i>Pseudomonas aeruginosa</i>	108	145	71%	9.00E-	27%	53700 Hem N-C

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24	Q42840.1 HEM6 HOR VU	18.5	51.6	12%	0.46	25%	53697	Hem F
25	AGF51906.1_Synechocystis sp	114	114	63%	4.00E-32	24%	53684	Hem N-C

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