

Table S1: Quantitative comparison of sequence characteristics and amino acid groupings of MTS and mature protein sequences for each species used in this investigation

MTS	N	Length	GAVIL	FW	P	CM	ST	Y	NQ	DE	RHK	pH7.5
<i>H. sapiens</i>	85	34.51 ±	43.35 ±	5.50 ±	6.45 ±	7.12 ±	11.72 ±	1.22 ±	4.47 ±	1.38 ±	18.79 ±	5.12 ±
		13.66	10.87	4.51	5.09	3.76	6.74	1.85	4.75	2.63	5.02	1.88
<i>M. musculus</i>	84	33.08 ±	41.66 ±	5.67 ±	5.28 ±	7.83 ±	13.71 ±	0.89 ±	4.34 ±	1.34 ±	19.29 ±	4.97 ±
		12.68	9.84	4.33	4.43	4.08	6.55	1.68	4.40	2.11	4.76	1.62
<i>S. cerevisiae</i>	56	28.77 ±	31.69 ±	6.2 ±	3.05 ±	6.91 ±	19.73 ±	2.87 ±	7.63 ±	0.71 ±	21.21 ±	4.94 ±
		19.01	9.97	4.36	3.42	4.24	8.5	3.7	5.83	2.42	5.75	2.5
<i>A. thaliana</i>	35	53.6 ±	34.31 ±	6.24 ±	3.81 ±	6.22 ±	22.73 ±	1.03 ±	5.85 ±	2.59 ±	17.23 ±	5.96 ±
		28.29	6.67	3.92	2.90	3.33	6.2	1.28	3.25	3.04	4.26	2.45
<i>O. sativa</i>	36	46.08 ±	45.5 ±	2.82 ±	7.43 ±	4.49 ±	12.95 ±	1.91 ±	3.50 ±	2.27 ±	19.12 ±	5.87 ±
		28.65	11.02	3.01	6.47	2.21	5.29	2.47	3.29	2.84	5.73	2.79
Significant variation?		yes	yes	no	no	no	yes	no	no	no	no	no

Mature Protein	N	Length	GAVIL	FW	P	CM	ST	Y	NQ	DE	RHK	pH7.5	pI
<i>H. sapiens</i>	85	399.13 ±	38.00 ±	4.99 ±	4.98 ±	4.00 ±	11.31 ±	2.91 ±	7.73 ±	12.25 ±	13.84 ±	-1.90 ±	6.86 ±
		192.79	4.46	1.6	1.37	1.29	2.17	1.09	1.67	2.66	2.22	7.16	1.39
<i>M. musculus</i>	84	481.4 ±	37.67 ±	4.99 ±	5.07 ±	4.11 ±	11.66 ±	2.96 ±	7.52 ±	12.08 ±	13.95 ±	-2.78 ±	6.85 ±
		224	3.4	1.33	1.43	1.05	1.76	0.99	1.4	2.03	1.8	7.07	1.16
<i>S. cerevisiae</i>	56	454 ±	35.62 ±	4.81 ±	4.46 ±	2.89 ±	12.98 ±	3.09 ±	8.7 ±	13.33 ±	14.11 ±	-4.21 ±	6.71 ±
		251.46	4.73	1.45	1.17	1.26	2.09	1.17	2.36	2.86	2.74	9.36	1.51
<i>A. thaliana</i>	35	398.97 ±	39.67 ±	4.09 ±	4.92 ±	3.67 ±	12.9 ±	2.87 ±	6.61 ±	12.55 ±	12.71 ±	-6.79 ±	5.93 ±
		204.93	3.73	1.54	1.72	1.32	1.71	0.99	1.69	2.04	2.07	6.12	0.78
<i>O. sativa</i>	36	427.19 ±	40.59 ±	4.3 ±	5.01 ±	3.88 ±	11.89 ±	2.75 ±	6.54 ±	12.22 ±	12.82 ±	-7.14 ±	6.06 ±
		201.14	4.09	1.18	1.71	1.39	2.42	0.93	1.29	1.85	1.55	7.25	0.93
Significant variation?		yes	no	no	no	no	no	no	no	no	no	no	no

¹ Data is presented and the mean ± standard deviation

² Significant variation was determined using a two-way ANOVA