

Supplementary Material

Shemesh, R., et al. 2010. Follow the leader: preference for specific amino acids directly following the initial methionine in proteins of different organisms. *Genomics Proteomics Bioinformatics* 8(3): 180-189.

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Table S1 Distribution of the second amino acid in proteins of different phylogenetic groups

Species	Amino acid	A	C	D	E	F	G	H	I	K	L	M	N	P	Q	R	S	T	V	W	Y	n
Human	22.9	0.8	6.2	9.1	1.8	7.5	0.9	1.5	4.6	5.5	1.6	3.6	4.9	2.4	5.0	11.4	4.4	3.8	1.2	0.9	10,790	
Dog	17.5	1.2	7.3	8.5	1.8	9.4	1.2	2.1	6.9	5.4	3.0	4.2	5.1	3.0	4.2	7.9	5.4	3.3	2.1	0.3	331	
Rat	22.4	0.5	5.3	9.1	1.7	6.8	0.8	2.4	5.6	4.8	1.7	3.8	4.6	2.3	4.8	11.6	5.1	4.6	0.8	1.3	8,420	
Mouse	24.1	0.7	5.8	9.4	2.0	6.7	0.9	1.4	4.9	5.2	1.5	3.1	5.0	2.4	4.5	12.2	4.3	3.5	1.2	1.0	7,764	
Chicken	21.8	1.3	6.0	9.0	1.9	5.9	1.7	1.2	4.7	4.4	1.7	3.7	5.4	2.4	6.6	10.2	5.0	4.7	0.6	1.9	835	
Frog	17.1	1.1	6.7	9.5	3.8	5.5	1.8	1.4	4.2	4.8	2.5	4.6	5.7	2.7	3.6	13.7	5.7	2.9	0.0	2.7	715	
Zebrafish	13.8	0.6	7.9	6.5	2.8	3.1	2.5	2.5	3.7	4.8	3.7	8.7	5.1	1.7	3.1	15.5	9.0	2.8	0.3	2.0	355	
Fruitfly	14.0	1.2	6.6	5.7	4.0	5.8	1.3	2.3	5.9	6.8	2.3	3.7	4.9	3.2	3.6	16.3	4.7	5.0	1.0	1.7	2,104	
Worm	10.0	1.1	5.7	4.5	3.5	5.4	1.6	3.8	5.0	6.2	1.1	5.3	4.9	2.7	5.3	19.9	7.9	4.3	0.5	1.4	2,566	
Trypanosoma	12.4	0.0	4.7	3.1	7.8	7.8	0.8	2.3	5.4	8.5	0.8	2.3	3.9	2.3	1.6	21.7	10.1	4.7	0.0	0.0	129	
<i>S. cerevisiae</i>	7.9	0.7	5.3	4.3	3.7	4.6	1.4	3.2	5.9	6.6	1.6	5.4	4.4	2.6	2.9	23.7	7.6	6.0	0.6	1.5	4,819	
<i>S. pombe</i>	10.9	0.3	6.9	6.3	3.7	5.1	0.9	2.8	5.9	5.2	0.7	5.7	4.3	2.4	3.5	23.3	6.4	4.2	0.6	0.9	2,672	
<i>C. albicans</i>	8.9	0.0	2.8	1.4	5.7	2.8	0.7	4.3	6.4	7.8	1.4	4.6	5.7	2.5	3.9	28.5	7.1	3.9	0.0	1.4	281	
<i>P. aeruginosa</i>	11.3	0.0	3.7	2.1	1.3	1.8	1.4	4.2	9.4	5.2	1.4	6.4	5.9	3.8	8.0	21.3	10.2	1.8	0.3	0.7	1,002	
<i>N. crassa</i>	24.9	0.6	4.5	3.4	3.6	5.0	1.4	1.7	3.6	4.5	0.8	3.4	8.4	0.8	3.6	19.0	4.5	4.5	0.0	1.7	357	
<i>Arabidopsis</i>	29.6	0.2	5.5	10.0	1.4	8.3	0.3	2.6	5.6	2.4	1.8	3.3	2.4	1.6	3.3	10.8	4.5	5.1	0.3	1.0	3,056	
Maize	40.9	0.3	4.5	6.3	1.0	6.8	0.3	2.5	3.0	3.3	1.0	1.5	2.8	2.0	5.3	9.1	4.0	4.0	0.3	1.0	396	
<i>E. coli</i>	7.1	0.4	3.5	4.5	3.0	2.0	1.5	5.7	16.7	6.2	2.1	8.9	2.9	4.0	6.2	13.6	8.1	2.1	0.4	1.2	4,474	
<i>B. subtilis</i>	6.2	0.3	4.1	6.8	3.4	3.3	1.1	5.1	19.7	6.2	1.8	11.1	2.0	2.6	5.1	9.7	6.7	2.7	0.4	1.7	2,651	
<i>H. influenzae</i>	7.5	0.4	2.7	4.2	3.1	1.7	0.9	6.4	18.6	8.0	2.1	8.9	2.3	5.7	4.0	10.3	9.1	2.1	0.4	1.6	1,706	
<i>S. pneumonia</i>	11.2	0.0	4.7	4.0	2.1	2.1	0.5	5.1	21.9	4.0	0.9	6.5	2.1	1.9	4.4	16.0	9.3	2.3	0.2	0.9	430	
<i>Shigella</i>	7.7	0.7	4.6	4.6	2.8	1.7	1.8	6.1	13.6	5.7	2.4	7.0	1.7	3.5	3.9	18.8	10.5	1.5	0.0	1.5	543	
<i>Salmo</i>	7.4	0.0	4.0	4.5	2.6	1.4	1.4	5.4	13.4	6.3	2.0	7.0	2.1	4.5	5.1	16.1	13.0	2.4	0.0	1.3	759	

Note: The numbers are presented in percents, “n” represents the total number of proteins analyzed. The most two abundant amino acids in the second position of protein sequences are presented in bold.