

Table S3: Relative Amino Acid Frequency at Position 2 by Compartment in Yeast

P2 Residue	Signal Sequence	Cytosol	f(ss)/f(cyt)
A	3.25	10.32	0.317
C	0.00	0.00	∞
D	0.72	6.75	0.108
E	0.72	4.37	0.167
F	6.50	1.19	4.887
G	0.72	5.56	0.131
H	2.17	0.79	2.749
I	6.86	0.79	8.705
K	16.61	3.17	5.269
L	13.72	3.17	4.353
M	1.44	1.19	1.222
N	3.61	2.38	1.527
P	1.44	5.56	0.262
Q	10.11	1.98	5.132
R	13.00	1.98	6.598
S	5.78	35.32	0.165
T	4.33	7.54	0.579
V	7.58	7.54	1.013
W	1.08	0.00	∞
Y	0.36	0.40	0.916
Total	100.00	100.00	
n	277	251	