

Table 5. The intracellular concentration (μM) of tRNA isoacceptors as a function of growth rate (doublings/hour)

tRNA	0.4	0.7	1.07	1.6	2.5
Ala1B	10.25	11.73	14.06	17.52	20.97
Ala2	1.95	2.12	2.33	3.19	3.57
Arg2	15.00	14.54	15.54	23.77	25.57
Arg3	2.01	2.61	1.45	2.26	2.30
Arg4	2.74	2.35	2.64	3.26	3.52
Arg5	1.23	1.57	1.61	2.46	2.20
Asn	3.77	3.86	4.35	6.10	7.29
Asp1	7.56	8.13	8.42	12.04	15.46
Cys	5.01	4.88	5.23	7.04	7.07
Gln1	2.41	2.72	3.63	3.17	4.38
Gln2	2.78	3.08	3.47	5.07	6.27
Glu2	14.88	15.58	16.71	24.12	29.35
Gly1 + 2	6.75	7.18	7.74	10.95	11.08
Gly3	13.76	15.21	16.75	19.84	24.96
His	2.02	2.19	2.63	3.35	4.38
Ile1 + 2	10.96	11.85	13.24	18.92	24.74
Leu1	14.11	14.91	16.76	21.32	22.20
Leu2	2.97	3.47	4.04	4.72	5.93
Leu3	2.10	2.49	2.62	3.19	3.17
Leu4	6.04	6.33	6.97	9.66	9.30
Leu5	3.57	3.47	4.07	3.65	3.78
Lys	6.08	6.80	7.35	8.73	10.43
Met f1	3.82	4.82	6.01	6.33	10.22
Met f2	2.26	2.28	2.36	3.38	3.77
Met m	2.23	2.59	2.91	4.10	4.43
Phe	3.27	3.60	4.29	4.69	5.11
Pro1	2.84	2.44	3.51	2.75	2.67
Pro2	2.27	2.51	2.26	4.01	3.75
Pro3	1.83	1.89	2.22	2.55	2.56
Sel-Cys	0.69	0.86	0.96	1.05	1.04
Ser1	4.09	5.56	5.47	6.98	7.36
Ser2	1.09	1.04	1.17	1.37	1.45
Ser3	4.44	4.39	4.53	5.40	5.67
Ser5	2.41	2.60	2.87	3.68	4.03
Thr1	0.32	0.41	0.54	0.56	0.67
Thr2	1.71	2.00	2.11	2.67	3.12
Thr3	3.46	3.73	3.87	4.86	5.54
Thr4	2.89	3.17	3.25	4.99	6.89
Trp	2.98	2.78	3.35	4.15	5.02
Tyr1	2.43	2.41	2.70	4.61	4.19
Tyr2	3.98	3.86	3.75	5.22	5.04
Val1	12.12	12.07	11.07	18.99	20.39
Val2A	1.99	2.00	2.38	2.70	2.79
Val2B	2.00	2.39	2.64	3.61	4.42
4.5 S RNA	1.13	1.46	1.72	2.18	2.55

The intracellular concentration of tRNA (expressed as μM) was calculated from data for the number of ribosomes per cell at different growth rates (Bremer & Dennis, 1987), the volume of cells at different growth rates (Donachie & Robinson, 1987) and the data obtained here for the tRNA/ribosome ratios.