TABLE 4. *Number of tRNA molecules and ribosomes in yeast cells growing in different media*

Medium	Growth rate[a] (μ)	No. of tRNA molecules per cell ($\times 10^6$)[b]	No. of ribosomes per cell ($\times 10^5$)[c]	No. of tRNA molecules per ribosome
C	0.62	3.30	3.48	9.5
Y	0.46	2.57	2.52	10.2
F	0.41	2.33	2.23	10.4
P	0.25	1.78	1.58	11.2
L	0.076	1.76	1.46	12.0
E	0.056	1.82	1.49	12.2

[a] Average values.

[b] Assuming an average molecular weight for yeast tRNA of 2.5×10^4.

[c] Assuming that each ribosome contains 2.09×10^6 daltons of rRNA and all rRNA is present in ribosomes.

TABLE 1. *Composition of growth media*[a]

Medium	Carbon source[b]	Nitrogen source (g/liter)	Range of growth rates (generations/h)	Avg growth rate (μ)	Avg generation time (h)
C	Glucose	Casein hydrolysate (10)	0.53–0.72	0.62	1.6
Y	Glucose	Ammonium sulfate (5)	0.38–0.54	0.46	2.1
F	Fructose	Ammonium sulfate (5)	0.38–0.45	0.41	2.4
P	Glucose	L-Proline (2)	0.20–0.29	0.25	4.0
L	Lactose	Ammonium sulfate (5)	0.057–0.088	0.076	13.2
E	Ethanol	Ammonium sulfate (5)	0.035–0.079	0.056	17.9

[a] All media contained uracil at a concentration of 10 μg/ml.

[b] For all media except P, the carbon source (20 g/liter) was added to a solution containing (per liter) 6.7 g of yeast nitrogen base without amino acids (Difco). Casein hydrolysate was also added to this solution when making medium C. The supplements for medium P were added to a solution containing (per liter) 1.45 g of yeast nitrogen base without amino acids or ammonium (Difco).