

TABLE 1. Contents of RNA and protein in pyrimidine-limited steady states^a

Pyrimidine source ^b	Doubling time (min)	μg of RNA/OD ₄₃₆ U	μg of DNA/OD ₄₃₆ U	μg of protein/OD ₄₃₆ U	α EF-Tu	α S1	ppGpp	UTP	CTP	ATP	GTP
Ura 20	46	52	7.8	115	0.74	0.22	44	450	280	1,320	580
Oro 200	51	45	7.8	109	0.75	0.22	26	250	150	1,510	800
Oro 75	65	40	7.2	109	0.66	0.13	23	110	150	1,720	970
Oro 50	73	37	7.7	111	0.61	0.11	15	33	86	2,080	1,080

^a α (EF-Tu or S1) means the differential rate of synthesis of that particular protein relative to the rate of total protein synthesis in arbitrary units for each protein. α was determined by growing the cells with [³H]lysine and pulse-labeling for 2 min with [³⁵S]methionine. The nucleotide pools are expressed as picomoles per OD₄₃₆ unit.

^b Ura, Uracil; Oro, orotate. Numbers indicate the concentrations (in micrograms per milliliter) used.