

Table 1. Overall transcription elongation rates match that of translation under various growth conditions. MG1655 (wild type) and CH184 (*rpsL*[SmP]) were grown in Luria broth to the exponential phase ($OD_{600} \approx 0.4$) before IPTG induction, unless indicated otherwise. Stationary phase, IPTG was added at $OD_{600} \approx 2.5$. Alternative carbon sources: Glycerol, cells were grown in M9 minimal media supplemented with glycerol (0.5%) and casamino acids (0.2%); α MG, cells were grown in glucose minimal media in the presence of α -methyl-glucoside, at the 15:1 glucose ratio. IPTG was added at $OD_{600} \approx 0.4$. Numbers represent averaged values from three independent experiments ($P < 0.05$), including those described in Fig. 1 and figs. S2, S5, S6, and S7. The standard error for each value in each individual experiment was less than 10%.

Strain	Growth condition	Transcription rates (nt/s)	Translation rates (amino acids per s)	Ratio of nt to amino acid
MG1655		42	14	3.0
MG1655	+ Cm	27	9	3.0
MG1655	Stationary	21	7	3.0
MG1655	Glycerol	31	10	3.1
MG1655	α MG	23	8	2.9
CH184	+ Sm	31	10	3.1
CH184		19	6	3.2
CH184	Stationary + Sm	22	7	3.1
CH184	Stationary	12	4	3.0

