Table S1. Parameters of the growth-rate dependence of the translation speed

	Fit to growth theory	Fit with Michaelis–Menten dependence	Comments
Maximal elongation speed, $k_{elong} \times 1$ aa	23.5 aa/s	25 aa/s	
Maximal translation speed, γ_{max}	10.2 h^{-1}	10.4 h^{-1}	$= k_{elong}/N_{aa,ribos}$ with $N_{aa,ribos} = 8{,}290$, no. amino acids per ribosome, including EF-G
Michaelis constant of translation, K_M	3.9 µM		Calculated from φ_M
Michaelis constant in proteome fraction units, φ_M	0.029		
Michaelis constant for growth rate, λ_M	0.49 h^{-1}	0.44 h^{-1}	$\lambda_M = \gamma_{max}\varphi_M/\alpha$
Offset for ribosomal fraction, inactive ribosomes, $\phi_{Rb,0}$	0.035		
Constant proteome fraction, ϕ_Q	0.55		Including the constant offsets of the ribosomal and tRNA-related fractions, $(1 + \alpha)\phi_{Rb,0}$