

Table S1: Mean fitness (doublings/hour) for initial and evolved strains

Strain ¹	Initial Fitness	Evolved Fitness
wt	45.08 ± 1.30	–
wt _{10_{deop}}	39.12 ± 0.55	–
$\Delta\phi_9$ _{wt}	41.05 ± 0.12	–
$\Delta\phi_9$ _{10_{deop}}	38.18 ± 0.42	–
$\Delta\phi_9$ _{8Δ_{stop}}	30.68 ± 0.42	40.04 ± 1.09
$\Delta\phi_{10}$ _{wt}	40.99 ± 0.45	–
$\Delta\phi_{10}$ _{10_{deop}}	34.80 ± 0.55	–
$\Delta\phi_9/\phi_{10}$ _{wt}	30.07 ± 0.09	35.60 ± 0.36
$\Delta\phi_9/\phi_{10}$ _{10_{deop}}	29.47 ± 0.21	33.37 ± 0.23
$\Delta\phi_9/\phi_{10}$ _{8Δ_{stop}}	27.16 ± 0.38	37.63 ± 0.22

¹Each strain is labeled according to the $\Delta\phi$ sequence that is present (“wt” indicates lack of promoter knockout) with the genetic background indicated in the superscript (wt, 10_{deop}, or 8 Δ _{stop}).