

**Table 1 | Half-life of organic coenzymes in exponentially growing cells.**

	<i>E. coli</i>	<i>B. subtilis</i>	<i>S. cerevisiae</i>
Doubling time (min)	58.7 ± 0.5	73.4 ± 0.4	160.3 ± 6.8
Compound	Half-life* ( $T_{50}$ , min)		
PLP	54.2 ± 1.8	55.4 ± 2	Supp.
FMN	56.2 ± 2.8	55.6 ± 3	176.1 ± 40.3
FAD	40 ± 2.2	57 ± 1.8	110.4 ± 7.8
CoA	29.9 ± 1.2	57.2 ± 2.4	Supp.
CoA (w/o salvage)	57.1 ± 3	NQ	Supp.
NAD	28.3 ± 1	28.3 ± 0.6	42 ± 1.9
NAD (w/o salvage)	49.5 ± 1.1	55.2 ± 0.9	165.6 ± 10.3
THF	43.6 ± 1.5	65.4 ± 3.4	NQ
GSH	23.1 ± 1.8	ND	68.4 ± 2.3
Bacillithiol	ND	5.6 ± 0.1	ND

\*Half-life ( $T_{50}$ ) values are based on curves obtained from fitting decaying isotopologue fractions of respective coenzymes from DLEs. Models are based on single DLEs with  $\geq 14$  data points. Data are available in Supplementary Data 1, 4 and 5. The indicated s.d. are calculated from the standard deviations of the obtained parameters from curve fitting. Details on calculations and fittings are available in the Supplementary Methods. Additional information and compounds are provided in Supplementary Table 1. ND, not detected; NQ, not quantified; Supp., supplemented with precursor.