

Supplementary Table 4. Physiological concentrations of metabolites involved in the malic enzyme reaction in *B. subtilis*.

metabolite	Concentration (mM)	Standard deviation
Malate	0.57 ^a	0.14
Pyruvate	8.90 ^a	5.75
NAD ⁺	1.09 ^b	0.52
NADH	0.43 ^b	0.21
NADP ⁺	0.19 ^b	0.14
NADPH	0.36 ^b	0.25

^a Estimates from Kleijn et. al. (2010)²⁵. ^b Concentrations calculated from the determined cofactor ratios in Fuhrer et al. (2009)¹⁴ and absolute pool sizes of combined NAD⁺/NADH and NADP⁺/NADPH²⁵.