

MCT transport	LDH metabolism	PDH metabolism	Glycolysis	Mitoch. shuttle
$v_{\max, \text{MCT}} = 0.29 \text{mM/s}$ (1)	$v_{\max, \text{LDH}}^{\text{forward}} = 469 \text{mM/s}$ (7)	$k_{\text{cat}} = 0.077/\text{s}$ (8)	$v_{\max, \text{glyco}} = 0.041 \text{mM/s}$	$k_{\text{shuttle}} = 300/\text{s}$
$L_e = 1.2 \text{mM}$ (1)	$v_{\max, \text{LDH}}^{\text{reverse}} = 2035 \text{mM/s}$ (7)	$\text{PDH}_{\text{tot}} = 0.9 \text{mM}$	$\text{Glc} = 1 \text{mM}$ (10)	
$H_i = 10^{-4.0} \text{mM}$ (1)	$K_{\text{ia}} = 0.154 \text{mM}$ (5)	$v_{\max, \text{PDH}} = k_{\text{cat}} \text{PDH}_{\text{tot}}$	$K_{\text{Glc, glyco}} = 0.05 \text{mM}$ (9)	
$H_e = 10^{-4.3} \text{mM}$ (1)	$K_{\text{iq}} = 0.001 \text{mM}$ (5)	$K_{\text{P, PDH}} = 0.01 \text{mM}$ (8)	$K_{\text{NAD}^+, \text{glyco}} = 0.03 \text{mM}$	
$K_{\text{Hie}} = 0.7 H_e$ (1)	$K_{\text{mA}} = 0.000014 \text{mM}$ (5)			
	$K_{\text{mQ}} = 0.0018 \text{mM}$ (5)			
	$K_{\text{ib}} = 3892 \text{mM}$ (5)			
	$K_{\text{ip}} = 0.0625 \text{mM}$ (5)			
	$K_{\text{mB}} = 1.28 \text{mM}$ (5)			
	$K_{\text{mP}} = 0.093 \text{mM}$ (5)			

For the references, refer to the bibliography in Text S1.