

Additional file 1Kinetic constants and enzyme amino acid sequences of the yeast *Saccharomyces cerevisiae*

Enzyme (Substrate)	UniProtKB accession number ^a	Kinetic constants ^b		
		k_{cat} s ⁻¹	K_M mM	$K_{sp}=k_{cat}/K_M$ s ⁻¹ mM ⁻¹
Hexokinase EC 2.7.1.1 HXK (D-glucose)	P04806	1.06	0.120	8.333
Glyceraldehyde-3-phosphate dehydrogenase EC 1.2.1.12 GADH (D-glyceraldehyde 3-phosphate)	P00360	16.70	0.600	27.833
Phosphoglycerate kinase EC 2.7.2.3 PGK (3-phospho-D-glycerate)	P00560	354.00	0.770 1.280	459.740 276.563
Phosphoglycerate mutase EC 5.4.2.1 PGM (3-phosphoglycerate)	P00950	384.00 490.00	0.650 0.740	590.769 662.162
Enolase EC 4.2.1.11 ENO (2-phospho-D-glycerate)	P00924	78.00 230.00	0.043 0.050	1813.950 4600.000
Pyruvate kinase EC 2.7.1.40 PK (phosphoenolpyruvate)	P00549	58.40 66.00 226.00 232.00	0.021 0.045	3142.850 5022.220
Pyruvate decarboxylase EC 4.1.1.1 PDC (pyruvate)	P06169	2.10 10.00	2.290	0.917 1.562
Triosephosphate isomerase EC 5.3.1.1 TIM (D-glyceraldehyde 3-phosphate)	P00942	4700.00 6400.00 6900.00	1.100 1.130 1.400	4571.429 4928.571 5663.717
Pyruvate carboxylase EC 6.4.1.1 PYC (pyruvate)	P11154	60.00	0.495	121.212

a Protein knowledge base UniProtKB/Swiss Prot [15] accession numbers URL: <http://www.uniprot.org>

b Comprehensive Enzyme Information system BRENDA [14] URL: <http://www.brenda-enzymes.org>