

S4 Table. Parameters of the kinetic model. This table describes all the parameters of the kinetic model sorted by the reaction(s) to which they are associated.

Reaction(s) id	Reaction(s) name	Parameter	Value	Units	Reference
aatc	Aspartate aminotransferase (Cytosolic)	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
aatc	Aspartate aminotransferase (Cytosolic)	Keq	0.151515	–	[1]
aatc	Aspartate aminotransferase (Cytosolic)	kAsp	0.35	mM	[2]
aatc	Aspartate aminotransferase (Cytosolic)	kiAsp	1.6	mM	[2]
aatc	Aspartate aminotransferase (Cytosolic)	kKg	1.25	mM	
aatc	Aspartate aminotransferase (Cytosolic)	kOAA	2.05	mM	[2]
aatc	Aspartate aminotransferase (Cytosolic)	kiOAA	2.05	mM	
aatc	Aspartate aminotransferase (Cytosolic)	kGlu	0.38	mM	[2]
aatc	Aspartate aminotransferase (Cytosolic)	kiGlu	2.4	mM	[2]
aatm	Aspartate aminotransferase (Mitochondrial)	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
aatm	Aspartate aminotransferase (Mitochondrial)	Keq	0.151515	–	[1]
aatm	Aspartate aminotransferase (Mitochondrial)	kAsp	0.75	mM	[2]
aatm	Aspartate aminotransferase (Mitochondrial)	kiAsp	1.9	mM	[2]
aatm	Aspartate aminotransferase (Mitochondrial)	kKg	1.75	mM	[2]
aatm	Aspartate aminotransferase (Mitochondrial)	kOAA	1.85	mM	[2]
aatm	Aspartate aminotransferase (Mitochondrial)	kiOAA	1.85	mM	
aatm	Aspartate aminotransferase (Mitochondrial)	kGlu	0.48	mM	[2]
aatm	Aspartate aminotransferase (Mitochondrial)	kiGlu	1.8	mM	[2]
aco	Aconitase	V	2	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
aco	Aconitase	KCit	0.48	mM	[3]
aco	Aconitase	KiCit	0.12	mM	[3]
aco	Aconitase	Keq	0.556	–	[1]
acoacar	Acetyl-CoA carboxylase	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	

acoacar	Acetyl-CoA carboxylase	KATP	0.015	mM	[4]
acoacar	Acetyl-CoA carboxylase	KACoA	0.025	mM	[4]
acoacar	Acetyl-CoA carboxylase	KCO2	2.5	mM	[4]
acoacar	Acetyl-CoA carboxylase	KCit	0.8	mM	
acoacar	Acetyl-CoA carboxylase	KiPalm	0.4	mM	
adk	Adenylate kinase	V	2	pmol·min ⁻¹ ·cell ⁻¹	
adk	Adenylate kinase	Keq	0.95	_	[5]
adk	Adenylate kinase	KiAMP	0.18	mM	[6]
adk	Adenylate kinase	KATP	0.23	mM	[6]
adk	Adenylate kinase	KiATP	0.23	mM	
adk	Adenylate kinase	KADP	0.15	mM	[6]
adk	Adenylate kinase	KiADP	0.15	mM	
aldo1/ aldo2/aldo3/aldo_inv1/ aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) / Aldolase invisible (3)	E0	Fitted	pmol·cell ⁻¹ ₁	
aldo1/ aldo2/aldo3/aldo_inv1 /aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) / Aldolase invisible (3)	K1	4405.64	min ⁻¹	
aldo1/ aldo2/aldo3/aldo_inv1 /aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) / Aldolase invisible (3)	K2	10	min ⁻¹	
aldo1/ aldo2/aldo3/aldo_inv1 /aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) / Aldolase invisible (3)	K3	10	min ⁻¹	
aldo1/ aldo2/aldo3/aldo_inv1/ aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) / Aldolase invisible (3)	K4	2.1896	min ⁻¹	
aldo1/ aldo2/aldo3/aldo_inv1/ /aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) / Aldolase invisible (3)	K5	10	min ⁻¹	

aldo_inv2					
aldo1/ aldo2/aldo3/aldo_inv1/ aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) /Aldolase invisible (3)	Kr1	4.09804	min ⁻¹	
aldo1/ aldo2/aldo3/aldo_inv1/ aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) /Aldolase invisible (3)	Kr2	1985.64	min ⁻¹	
aldo1/ aldo2/aldo3/aldo_inv1 /aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) /Aldolase invisible (3)	Kr3	112.583	min ⁻¹	
aldo1/ aldo2/aldo3/aldo_inv1 /aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) /Aldolase invisible (3)	Kr4	0.0721817	min ⁻¹	
aldo1/ aldo2/aldo3/aldo_inv1 /aldo_inv2	Aldolase (1) / Aldolase (2) / Aldolase (3) / Aldolase invisible (1) /Aldolase invisible (3)	Kr5	1985.64	min ⁻¹	
asplumtrans	Aspartate/Glutamate carrier	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
asplumtrans	Aspartate/Glutamate carrier	KimAsp	2.8	mM	[7]
asplumtrans	Aspartate/Glutamate carrier	KcGlu	0.25	mM	[7]
asplumtrans	Aspartate/Glutamate carrier	KicGlu	0.25	mM	
asplumtrans	Aspartate/Glutamate carrier	KmGlu	3	mM	[7]
asplumtrans	Aspartate/Glutamate carrier	KimGlu	3	mM	
asplumtrans	Aspartate/Glutamate carrier	KicAsp	0.12	mM	[7]
asplumtrans	Aspartate/Glutamate carrier	Keq	1	–	
atpase	Atpase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
atpase	Atpase	KATP	0.5	mM	
atpmtrans	Mitochondrial ATP/ADP carrier	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	

atpmtrans	Mitochondrial ATP/ADP carrier	Keq	10	–	
atpmtrans	Mitochondrial ATP/ADP carrier	KmATP	0.75	mM	
atpmtrans	Mitochondrial ATP/ADP carrier	KimATP	0.75	mM	
atpmtrans	Mitochondrial ATP/ADP carrier	KcADP	0.75	mM	
atpmtrans	Mitochondrial ATP/ADP carrier	kcATP	0.75	mM	
atpmtrans	Mitochondrial ATP/ADP carrier	kicATP	0.75	mM	
atpmtrans	Mitochondrial ATP/ADP carrier	kmADP	0.75	mM	
atpmtrans	Mitochondrial ATP/ADP carrier	kimADP	0.75	mM	
box	β -Oxidation	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
box	β -Oxidation	KPalm	0.05	mM	
box	β -Oxidation	KATP	0.1	mM	
box	β -Oxidation	KCoA	0.001	mM	
box	β -Oxidation	KCoQ	0.0005	mM	
box	β -Oxidation	KNAD	0.075	mM	
box	β -Oxidation	KiMalCoA	0.05	mM	
citly	Citrate lyase	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
citly	Citrate lyase	Keq	1000	mM	[1]
citly	Citrate lyase	KCit	0.11	mM	[8]
citly	Citrate lyase	KATP	0.16	mM	[8]
citly	Citrate lyase	KCoA	0.004	mM	[8]
citly	Citrate lyase	KACoA	0.001	mM	
citly	Citrate lyase	KOAA	0.01	mM	
citly	Citrate lyase	KADP	0.16	mM	
citly	Citrate lyase	KPi	1	mM	
citmtr	Citrate carrier	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
citmtr	Citrate carrier	Keq	0.1	mM	

citmtr	Citrate carrier	KimCit	0.027	mM	[7]
citmtr	Citrate carrier	KcMal	0.25	mM	[7]
citmtr	Citrate carrier	KicMal	0.25	mM	
citmtr	Citrate carrier	KmMal	0.06	mM	[7]
citmtr	Citrate carrier	KimMal	0.06	mM	
citmtr	Citrate carrier	KicCit	0.032	mM	[7]
cmdh	Malate dehydrogenase (Cytosolic)	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
cmdh	Malate dehydrogenase (Cytosolic)	Keq	0.000028	_	[1]
cmdh	Malate dehydrogenase (Cytosolic)	kNAD	0.14	mM	[9]
cmdh	Malate dehydrogenase (Cytosolic)	kiNAD	0.14	mM	
cmdh	Malate dehydrogenase (Cytosolic)	kMal	8	mM	[10]
cmdh	Malate dehydrogenase (Cytosolic)	kiMal	8	mM	
cmdh	Malate dehydrogenase (Cytosolic)	kOAA	0.0083	mM	[11]
cmdh	Malate dehydrogenase (Cytosolic)	kiOAA	0.0083	mM	
cmdh	Malate dehydrogenase (Cytosolic)	kNADH	0.0205	mM	[11]
cmdh	Malate dehydrogenase (Cytosolic)	kiNADH	0.0205	mM	
cmdk1/ cmdk2	Nucleoside diphosphate kinase 1(Cytosolic) / Nucleoside diphosphate kinase 2(Cytosolic)	V	2	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
cmdk1/ cmdk2	Nucleoside diphosphate kinase 1(Cytosolic) / Nucleoside diphosphate kinase 2(Cytosolic)	Keq	1	_	[1]
cmdk1/ cmdk2	Nucleoside diphosphate kinase 1(Cytosolic) / Nucleoside diphosphate kinase 2(Cytosolic)	KATP	1.33	mM	[5]
cmdk1/ cmdk2	Nucleoside diphosphate kinase 1(Cytosolic) / Nucleoside diphosphate kinase 2(Cytosolic)	KiATP	1.33	mM	
cmdk1/ cmdk2	Nucleoside diphosphate kinase 1(Cytosolic) / Nucleoside diphosphate kinase 2(Cytosolic)	KGDP	0.031	mM	[5]
cmdk1/ cmdk2	Nucleoside diphosphate kinase 1(Cytosolic) / Nucleoside diphosphate kinase 2(Cytosolic)	KADP	0.042	mM	[5]

cdk1/ cdk2	Nucleoside diphosphate kinase 1(Cytosolic) / Nucleoside diphosphate kinase 2(Cytosolic)	KiADP	0.042	mM	
cdk1	Nucleoside diphosphate kinase 1(Cytosolic)	KGTP	0.15	mM	[5]
cdk1	Nucleoside diphosphate kinase 1(Cytosolic)	KiGTP	0.15	mM	
cdk1/ cdk2	Nucleoside diphosphate kinase 1(Cytosolic) / Nucleoside diphosphate kinase 2(Cytosolic)	KUDP	0.19	mM	[5]
cdk2	Nucleoside diphosphate kinase 2(Cytosolic)	KiUDP	0.19	mM	[5]
cdk2	Nucleoside diphosphate kinase 2(Cytosolic)	KUTP	16	mM	[5]
cdk2	Nucleoside diphosphate kinase 2(Cytosolic)	KiUTP	16	mM	
coqhoxi	Ubiquinol Oxidase	k	Fitted	$1^5 \cdot \text{mmol}^{-1} \cdot \text{cell}^{-1}$	
cs	Citrate synthase	V	Fitted	$\text{pmol} \cdot \text{min}^{-1} \cdot \text{cell}^{-1}$	
cs	Citrate synthase	KiACoA	0.005	mM	[12]
cs	Citrate synthase	KOAA	0.0059	mM	[12]
cs	Citrate synthase	KiOAA	0.0059	mM	
cs	Citrate synthase	KiCit	2	mM	
dic	Dicarboxylate Carrier	V	Fitted	$\text{pmol} \cdot \text{min}^{-1} \cdot \text{cell}^{-1}$	
dic	Dicarboxylate Carrier	Keq	1	–	
dic	Dicarboxylate Carrier	KimMal	0.92	mM	[7]
dic	Dicarboxylate Carrier	KcPi	1.41	mM	[7]
dic	Dicarboxylate Carrier	KicPi	1.41	mM	
dic	Dicarboxylate Carrier	KmPi	0.93	mM	[7]
dic	Dicarboxylate Carrier	KimPi	0.93	mM	
dic	Dicarboxylate Carrier	KicMal	0.49	mM	[7]
eno	Enolase	V	2	$\text{pmol} \cdot \text{min}^{-1} \cdot \text{cell}^{-1}$	
eno	Enolase	Keq	4	–	[1]

eno	Enolase	KPG2	0.14	mM	[13]
eno	Enolase	KPEP	0.31	mM	[13]
fasyn	Fatty acid synthesis	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
fasyn	Fatty acid synthesis	KMalCoA	0.0019	mM	[14]
fasyn	Fatty acid synthesis	KACoA	0.0039	mM	[14]
fasyn	Fatty acid synthesis	KNADPH	0.01	mM	
fbasea1	Fructose 1,6-bisphosphatase (Pool A)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
fbasea1/ fbaseb1	Fructose 1,6-bisphosphatase (Pool A) / Fructose 1,6-bisphosphatase (Pool B)	KFru16bp	0.0055	mM	[15]
fbasea1/ fbaseb1	Fructose 1,6-bisphosphatase (Pool A) / Fructose 1,6-bisphosphatase (Pool B)	kAMP	0.24	mM	[15]
fbasea1/ fbaseb1	Fructose 1,6-bisphosphatase (Pool A) / Fructose 1,6-bisphosphatase (Pool B)	nAMP	1	–	
fbasea1/ fbaseb1	Fructose 1,6-bisphosphatase (Pool A) / Fructose 1,6-bisphosphatase (Pool B)	KiFru26bp	0.001	mM	[5]
fbasea2/ pfkla2	Fructose 1,6-bisphosphatase (Pool A) / Phosphofructokinase-2 (Pool A)	V	0.0001	pmol·min ⁻¹ ·cell ⁻¹	
fbasea2/ fbaseb2	Fructose 2,6-bisphosphatase (Pool A) / Fructose 2,6-bisphosphatase (Pool B)	Pfk2Fb2Factor	0.4	–	[16]
fbasea2/ fbaseb2	Fructose 2,6-bisphosphatase (Pool A) / Fructose 2,6-bisphosphatase (Pool B)	p	0.7	–	[5]
fbasea2/ fbaseb2	Fructose 2,6-bisphosphatase (Pool A) / Fructose 2,6-bisphosphatase (Pool B)	KdpFru26bP	0.01	mM	[5]
fbasea2/ fbaseb2	Fructose 2,6-bisphosphatase (Pool A) / Fructose 2,6-bisphosphatase (Pool B)	KpFru26bP	0.005	mM	[5]
fbasea2/ fbaseb2	Fructose 2,6-bisphosphatase (Pool A) / Fructose 2,6-bisphosphatase (Pool B)	KidpFru6P	0.0035	mM	[5]

fbasea2/ fbaseb2	Fructose 2,6-bisphosphatase (Pool A) / Fructose 2,6-bisphosphatase (Pool B)	KipFru6p	0.05	mM	[5]
fbaseb1	Fructose 1,6-bisphosphatase (Pool B)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
fbaseb2/ pfklb2	Fructose 1,6-bisphosphatase (Pool B) / Phosphofructokinase-2 (Pool B)	V	0.0001	pmol·min ⁻¹ ·cell ⁻¹	
fh	Fumarate Hydratase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
fh	Fumarate Hydratase	Keq	12	–	[1]
fh	Fumarate Hydratase	KFum	0.005	mM	[17]
fh	Fumarate Hydratase	KMal	0.025	mM	[17]
fruhk	Fructokinase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
fruhk	Fructokinase	KiATP	0.15	mM	[18]
fruhk	Fructokinase	KFru	0.8	mM	[18]
fruhk	Fructokinase	KiFru	0.8	mM	
frutransport	Fructose carrier	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
frutransport	Fructose carrier	Keq	1	–	
frutr	Fructose carrier	KFru	67	mM	[19]
g6pasea	Glucose-6-Phosphatase (Pool A)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
g6pasea/ g6paseb	Glucose-6-Phosphatase (Pool A) / Fructose 1,6-bisphosphatase (Pool B)	KGlc6P	2	mM	[5]
g6paseb	Glucose-6-Phosphatase (Pool B)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
g6pdh	Glucose-6-Phosphate deshydrogenase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
g6pdh	Glucose-6-Phosphate deshydrogenase	KNADP	0.0048	mM	[20]
g6pdh	Glucose-6-Phosphate deshydrogenase	KiNADP	0.009	mM	[20]

g6pdh	Glucose-6-Phosphate deshydrogenase	KGlc6P	0.036	mM	[20]
g6pdh	Glucose-6-Phosphate deshydrogenase	KiGlc6P	0.036	mM	
g6pdh	Glucose-6-Phosphate deshydrogenase	KNADPH	0.0011	mM	
g6pdh	Glucose-6-Phosphate deshydrogenase	KiNADPH	0.0011	mM	[20]
g6pdh	Glucose-6-Phosphate deshydrogenase	KPGn	0.01	mM	
g6pdh	Glucose-6-Phosphate deshydrogenase	KiPGn	0.01	mM	
gapdh	Glyceraldehyde 3-phosphate dehydrogenase	V	2	pmol·min ⁻¹ ·cell ⁻¹	
gapdh	Glyceraldehyde 3-phosphate dehydrogenase	Keq	0.00015	_	[1]
gapdh	Glyceraldehyde 3-phosphate dehydrogenase	Kgrap	0.07	mM	[21]
gapdh	Glyceraldehyde 3-phosphate dehydrogenase	Knad	0.05	mM	[21]
gapdh	Glyceraldehyde 3-phosphate dehydrogenase	Kpi	3.9	mM	[5]
gapdh	Glyceraldehyde 3-phosphate dehydrogenase	Knadh	0.01	mM	[21]
gapdh	Glyceraldehyde 3-phosphate dehydrogenase	Kbpg13	0.14	mM	[21]
gka	Glucokinase (Pool A)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
gka/ gkb	Glucokinase (Pool A) / Glucokinase (Pool B)	nGlc	1.58	_	[22]
gka/ gkb	Glucokinase (Pool A) / Glucokinase (Pool B)	Kglc	9	mM	[22]
gka/ gkb	Glucokinase (Pool A) / Glucokinase (Pool B)	Katp	0.26	mM	[23]
gka/ gkb	Glucokinase (Pool A) / Glucokinase (Pool B)	ngkrp	2	_	[5]
gka/ gkb	Glucokinase (Pool A) / Glucokinase (Pool B)	bgkrp	0.7	_	[5]
gka/ gkb	Glucokinase (Pool A) / Glucokinase (Pool B)	KgkrpFru6p	0.01	mM	[5]
gka/ gkb	Glucokinase (Pool A) / Glucokinase (Pool B)	KFru1P	0.001	mM	[24]
gka/ gkb	Glucokinase (Pool A) / Glucokinase (Pool B)	KgkrpGlc	15	mM	[5]
gkb	Glucokinase (Pool B)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
glctr	Glucose carrier	V	2	pmol·min ⁻¹ ·cell ⁻¹	
glctr	Glucose carrier	kGlc	17	mM	[25]

glctr	Glucose carrier	Keq	1	mM	
glutr	Glutamate carrier	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
glutr	Glutamate carrier	KGlu	2	mM	
glutr	Glutamate carrier	Keq	10	–	
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	Keq	0.000056	–	[26]
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	kNAD	0.13	mM	[27]
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	kiNAD	0.13	mM	
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	KGlyc3P	0.22	mM	[27]
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	KiGlyc3P	0.22	mM	
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	KDhaP	0.16	mM	[27]
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	KiDhaP	0.16	mM	
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	kNADH	0.08	mM	[27]
glyc3pcdh	Glycerol-3-phosphate dehydrogenase (NAD)	kiNADH	0.08	mM	
glyc3pmdh	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
glyc3pmdh	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KGlyc3P	6.2	mM	[28]
glyc3pmdh	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KiGlyc3P	6.2	mM	
glyc3pmdh	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KCoQ	0.05	mM	[28]
gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	p	0.7	–	[5]
gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KDPGlyc	0.048	mM	[5]
gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KPGlyc	0.027	mM	[5]
gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KDPPi	300	mM	[5]
gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KPPi	5	mM	[5]
gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KGlcPi	5	mM	[5]

gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KDPAMPbase	0.03	mM	[5]
gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KDPAMPmax	0.3	mM	[5]
gp	Glycerol-3-phosphate dehydrogenase (Ubiquinone)	KDPAMPa	1	mM	[5]
gpia	Glucose-6-Phosphate-Isomerase (Pool A)	V	2	pmol·min ⁻¹ ·cell ⁻¹	
gpia/ gpib	Glucose-6-Phosphate-Isomerase (Pool A) / Glucose-6-Phosphate-Isomerase (Pool B)	Keq	0.4	–	[1]
gpia/ gpib	Glucose-6-Phosphate-Isomerase (Pool A) / Glucose-6-Phosphate-Isomerase (Pool B)	kGlc6p	0.445	mM	[29]
gpia/ gpib	Glucose-6-Phosphate-Isomerase (Pool A) / Glucose-6-Phosphate-Isomerase (Pool B)	kFru6P	0.0635	mM	[29]
gpib	Glucose-6-Phosphate-Isomerase (Pool B)	V	2	pmol·min ⁻¹ ·cell ⁻¹	
gs	Glycogen synthase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
gs	Glycogen synthase	p	0.7	–	[5]
gs	Glycogen synthase	K1dp	0.224	mM	[5]
gs	Glycogen synthase	K1p	3.003	mM	[5]
gs	Glycogen synthase	K2dp	0.1504	mM	[5]
gs	Glycogen synthase	K2p	0.09029	mM	[5]
idh	Isocitrate dehydrogenase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
idh	Isocitrate dehydrogenase	Keq	1200	mM	[1]
idh	Isocitrate dehydrogenase	KiCit	0.69	mM	[30]
idh	Isocitrate dehydrogenase	KNAD	0.08	mM	[30]
idh	Isocitrate dehydrogenase	KKg	0.69	mM	
idh	Isocitrate dehydrogenase	KNADH	0.08	mM	
idh	Isocitrate dehydrogenase	KCO2	2	mM	
kdh	α-Ketoglutarate dehydrogenase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	

kdh	α -Ketoglutarate dehydrogenase	Keq	60000	_	[1]
kdh	α -Ketoglutarate dehydrogenase	KKg	0.3	mM	[31]
kdh	α -Ketoglutarate dehydrogenase	KNAD	0.22	mM	[32]
kdh	α -Ketoglutarate dehydrogenase	KCoA	0.01	mM	
kdh	α -Ketoglutarate dehydrogenase	KSuCoA	0.03	mM	[33]
kdh	α -Ketoglutarate dehydrogenase	KNADH	0.07	mM	
kdh	α -Ketoglutarate dehydrogenase	KCO2	2	mM	
lactr/ pyrtr	Lactate carrier / Pyruvate extracellular carrier	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
lactr/ pyrtr	Lactate carrier / Pyruvate extracellular carrier	Keq	1	_	
lactr/ pyrtr	Lactate carrier / Pyruvate extracellular carrier	KLac	2.4	mM	[34]
lactr/ pyrtr	Lactate carrier / Pyruvate extracellular carrier	KPyr	0.6	mM	[34]
ldh	Lactate dehydrogenase	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
ldh	Lactate dehydrogenase	Keq	0.00011	_	
ldh	Lactate dehydrogenase	KNAD	1.1	mM	[35]
ldh	Lactate dehydrogenase	KiNAD	1.1	mM	
ldh	Lactate dehydrogenase	KLac	11.9	mM	[36]
ldh	Lactate dehydrogenase	KiLac	11.9	mM	
ldh	Lactate dehydrogenase	KPyr	0.398	mM	[37]
ldh	Lactate dehydrogenase	KiPyr	0.398	mM	
ldh	Lactate dehydrogenase	KNADH	0.061	mM	[35]
ldh	Lactate dehydrogenase	KiNADH	0.061	mM	
malic	Malic enzyme	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
malic	Malic enzyme	Keq	6	_	[1]
malic	Malic enzyme	KMal	0.12	mM	[38]
malic	Malic enzyme	kNADP	0.0092	mM	[38]

malic	Malic enzyme	KPyr	5.9	mM	[38]
malic	Malic enzyme	kNADPH	0.0053	mM	[38]
malic	Malic enzyme	KCO2	27	mM	[38]
malkgmtrans	α -Ketoglutarate/Malate carrier	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
malkgmtrans	α -Ketoglutarate/Malate carrier	Keq	1	–	
malkgmtrans	α -Ketoglutarate/Malate carrier	KimKg	0.17	mM	[7]
malkgmtrans	α -Ketoglutarate/Malate carrier	KcMal	1.36	mM	[7]
malkgmtrans	α -Ketoglutarate/Malate carrier	KicMal	1.36	mM	[7]
malkgmtrans	α -Ketoglutarate/Malate carrier	KmMal	0.71	mM	[7]
malkgmtrans	α -Ketoglutarate/Malate carrier	KimMal	0.71	mM	[7]
malkgmtrans	α -Ketoglutarate/Malate carrier	KicKg	0.31	mM	[7]
mmdh	Malate dehydrogenase (Mitochondrial)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
mmdh	Malate dehydrogenase (Mitochondrial)	Keq	0.000028	–	[1]
mmdh	Malate dehydrogenase (Mitochondrial)	kNAD	0.35	mM	[39]
mmdh	Malate dehydrogenase (Mitochondrial)	kiNAD	0.35	mM	
mmdh	Malate dehydrogenase (Mitochondrial)	kMal	3.53	mM	[39]
mmdh	Malate dehydrogenase (Mitochondrial)	kiMal	3.53	mM	
mmdh	Malate dehydrogenase (Mitochondrial)	kOAA	0.0348	mM	[11]
mmdh	Malate dehydrogenase (Mitochondrial)	kiOAA	0.0348	mM	
mmdh	Malate dehydrogenase (Mitochondrial)	kNADH	0.0145	mM	[11]
mmdh	Malate dehydrogenase (Mitochondrial)	kiNADH	0.0145	mM	
mndk	Nucleoside diphosphate kinase (Mitochondrial)	V	2	pmol·min ⁻¹ ·cell ⁻¹	
mndk	Nucleoside diphosphate kinase (Mitochondrial)	Keq	1	–	[1]
mndk	Nucleoside diphosphate kinase (Mitochondrial)	KATP	1.33	mM	[5]
mndk	Nucleoside diphosphate kinase (Mitochondrial)	KiATP	1.33	mM	
mndk	Nucleoside diphosphate kinase (Mitochondrial)	KGDP	0.031	mM	[5]

mndk	Nucleoside diphosphate kinase (Mitochondrial)	KADP	0.042	mM	[5]
mndk	Nucleoside diphosphate kinase (Mitochondrial)	KiADP	0.042	mM	
mndk	Nucleoside diphosphate kinase (Mitochondrial)	KGTP	0.15	mM	[5]
mndk	Nucleoside diphosphate kinase (Mitochondrial)	KiGTP	0.15	mM	
mpyrtr	Mitochondrial pyruvate carrier	V	2	pmol·min ⁻¹ ·cell ⁻¹	
mpyrtr	Mitochondrial pyruvate carrier	Keq	1	–	
mpyrtr	Mitochondrial pyruvate carrier	KPyr	0.24	mM	[7]
mpyrtr	Mitochondrial pyruvate carrier	KiMal	10	mM	
nadhhd	NADH dehydrogenase	k	Fitted		
pc	Pyruvate Carboxylase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
pc	Pyruvate Carboxylase	Keq	180	–	[1]
pc	Pyruvate Carboxylase	KPyr	0.22	mM	[40]
pc	Pyruvate Carboxylase	KATP	0.22	mM	[40]
pc	Pyruvate Carboxylase	KCO2	3.2	mM	[40]
pc	Pyruvate Carboxylase	KOAA	0.002	mM	
pc	Pyruvate Carboxylase	kADP	0.22	mM	
pc	Pyruvate Carboxylase	KPi	3.2	mM	
pc	Pyruvate Carboxylase	KACoA	0.022	mM	[41]
pc	Pyruvate Carboxylase	beta	50	–	[42]
pdh	Pyruvate dehydrogenase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
pdh	Pyruvate dehydrogenase	p	0.7	–	[5]
pdh	Pyruvate dehydrogenase	KPyr	0.025	mM	[5]
pdh	Pyruvate dehydrogenase	KCoA	0.013	mM	[5]
pdh	Pyruvate dehydrogenase	KNAD	0.05	mM	[5]
pdh	Pyruvate dehydrogenase	KiACoA	0.035	mM	[5]
pdh	Pyruvate dehydrogenase	KiNADH	0.036	mM	[5]

pdh	Pyruvate dehydrogenase	alfaDP	5	_	[5]
pdh	Pyruvate dehydrogenase	alfaP	1	_	[5]
pepck	Phosphoenolpyruvate carboxykinase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
pepck	Phosphoenolpyruvate carboxykinase	Keq	300	mM	[1]
pepck	Phosphoenolpyruvate carboxykinase	KGTP	0.068	mM	[43]
pepck	Phosphoenolpyruvate carboxykinase	KOAA	0.052	mM	[43]
pepck	Phosphoenolpyruvate carboxykinase	KPEP	0.294	mM	[43]
pepck	Phosphoenolpyruvate carboxykinase	KGDP	0.039	mM	[43]
pepck	Phosphoenolpyruvate carboxykinase	KCO2	1.194	mM	[43]
pfkla1	Phosphofructokinase 1(Pool A)	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
pfkla1/ pfklb1	Phosphofructokinase 1(Pool A) / Phosphofructokinase 1(Pool B)	KATP	0.111	mM	[5]
pfkla1/ pfklb1	Phosphofructokinase 1(Pool A) / Phosphofructokinase 1(Pool B)	KFru6P	0.077	mM	[5]
pfkla1/ pfklb1	Phosphofructokinase 1(Pool A) / Phosphofructokinase 1(Pool B)	KiFru6P	0.077	mM	[5]
pfkla1/ pfklb1	Phosphofructokinase 1(Pool A) / Phosphofructokinase 1(Pool B)	KFru26bP	0.001	mM	[5]
pfkla2/ pfklb2	Phosphofructokinase 2(Pool A) / Phosphofructokinase 2(Pool B)	p	0.7	_	[5]
pfkla2/ pfklb2	Phosphofructokinase 2(Pool A) / Phosphofructokinase 2(Pool B)	ndp	1.3	_	[5]
pfkla2/ pfklb2	Phosphofructokinase 2(Pool A) / Phosphofructokinase 2(Pool B)	np	2.1	_	[5]
pfkla2/ pfklb2	Phosphofructokinase 2(Pool A) / Phosphofructokinase 2(Pool B)	KdpATP	0.28	mM	[5]
pfkla2/ pfklb2	Phosphofructokinase 2(Pool A) / Phosphofructokinase 2(Pool B)	KpATP	0.65	mM	[5]

pfkla2/ pfklb2	Phosphofructokinase 2(Pool A) / Phosphofructokinase 2(Pool B)	KdpFru6P	0.016	mM	[5]
pfkla2/ pfklb2	Phosphofructokinase 2(Pool A) / Phosphofructokinase 2(Pool B)	KpFru6P	0.05	mM	[5]
pfkla2/ pfklb2	Phosphofructokinase 2(Pool A) / Phosphofructokinase 2(Pool B)	KiCit	0.2	mM	[44]
pfkla2/ pfklb2	Phosphofructokinase 2(Pool A) / Phosphofructokinase 2(Pool B)	KiPEP	0.2	mM	[44]
pfklb1	Phosphofructokinase 1(Pool B)	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
pgk	Phosphoglycerate kinase	V	6	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
pgk	Phosphoglycerate kinase	Keq	3200	_	[1]
pgk	Phosphoglycerate kinase	KibPG13	0.0005	mM	[45]
pgk	Phosphoglycerate kinase	KADP	0.11	mM	[45]
pgk	Phosphoglycerate kinase	KiADP	0.11	mM	
pgk	Phosphoglycerate kinase	KATP	0.12	mM	[45]
pgk	Phosphoglycerate kinase	KiATP	0.12	mM	
pgk	Phosphoglycerate kinase	KiPG3	0.05	mM	[45]
pglm	Phosphoglucomutase	V	0.15	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
pglm	Phosphoglucomutase	Keq	19	_	[1]
pglm	Phosphoglucomutase	KGlc1P	0.045	mM	[5]
pglm	Phosphoglucomutase	KGlc6Pb	0.67	mM	[5]
pgm	Phosphoglycerate mutase	V	2	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
pgm	Phosphoglycerate mutase	Keq	0.125	_	[1]
pgm	Phosphoglycerate mutase	KPG3	0.1	mM	[46]
pgm	Phosphoglycerate mutase	KPG2	0.2	mM	[46]

pgndh	Phosphogluconate dehydrogenase	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
pgndh	Phosphogluconate dehydrogenase	KNADP	0.0135	mM	[20]
pgndh	Phosphogluconate dehydrogenase	KiNADP	0.0048	mM	[20]
pgndh	Phosphogluconate dehydrogenase	KPgn	0.0292	mM	[20]
pgndh	Phosphogluconate dehydrogenase	KiPgn	2.176	mM	[20]
pgndh	Phosphogluconate dehydrogenase	KNADPH	0.00022	mM	[20]
pgndh	Phosphogluconate dehydrogenase	KiNADPH	0.0051	mM	[20]
pgndh	Phosphogluconate dehydrogenase	KRuI5P	0.02	mM	[20]
pgndh	Phosphogluconate dehydrogenase	KiRuI5P	0.02	mM	
pimtr	Phosphate mitochondrial carrier	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
pimtr	Phosphate mitochondrial carrier	Keq	1	–	
pimtr	Phosphate mitochondrial carrier	KcPi	1.8	mM	[7]
pimtr	Phosphate mitochondrial carrier	KmPi	9.4	mM	[7]
pitr	Phosphate carrier	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
pitr	Phosphate carrier	KPi	1	mM	
pitr	Phosphate carrier	Keq	1	–	
pk	Pyruvate kinase	V	Fitted	$\text{pmol}\cdot\text{min}^{-1}\cdot\text{cell}^{-1}$	
pk	Pyruvate kinase	p	0.7	–	[5]
pk	Pyruvate kinase	KADP	0.3	mM	[47]
pk	Pyruvate kinase	nDPPEP	3.5	–	[5]
pk	Pyruvate kinase	nPPEP	3.5	–	[5]
pk	Pyruvate kinase	alfaDPbase	0.08	–	[5]
pk	Pyruvate kinase	alfaPbase	0.04	–	[5]
pk	Pyruvate kinase	KDPFru16bP	0.00016	mM	[5]
pk	Pyruvate kinase	KPFru16bpP	0.00035	mM	[5]

pk	Pyruvate kinase	nefru16bp	1.8	_	[5]
pk	Pyruvate kinase	KminPEP	0.08	mM	[5]
pk	Pyruvate kinase	KDPPEP	0.58	mM	[5]
pk	Pyruvate kinase	KPEP	1.1	mM	[5]
pk	Pyruvate kinase	alfaend	1	_	[5]
pk	Pyruvate kinase	alfaDP	1	_	[5]
pk	Pyruvate kinase	alfaP	1.1	_	[5]
pk	Pyruvate kinase	KiPyr	1	mM	
ppase	Pyrophosphatase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
ppase	Pyrophosphatase	KPPi	0.005	mM	[5]
rpi	Ribose-5-phosphate isomerase	V	2	pmol·min ⁻¹ ·cell ⁻¹	
rpi	Ribose-5-phosphate isomerase	Keq	1.20	_	[20]
rpi	Ribose-5-phosphate isomerase	KRu5P	0.78	mM	[20]
rpi	Ribose-5-phosphate isomerase	KRib5P	2.2	mM	[20]
rpi	Ribose-5-phosphate isomerase	KiPGn	6	mM	[20]
ru5pepi	Ribulose-5-phosphate 4-epimerase	V	2	pmol·min ⁻¹ ·cell ⁻¹	
ru5pepi	Ribulose-5-phosphate 4-epimerase	Keq	1.82	_	[20]
ru5pepi	Ribulose-5-phosphate 4-epimerase	KRu5P	0.19	mM	[20]
ru5pepi	Ribulose-5-phosphate 4-epimerase	KXyl5P	0.5	mM	[20]
scs	Succinyl-CoA synthetase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
scs	Succinyl-CoA synthetase	Keq	1.33333	_	[26]
scs	Succinyl-CoA synthetase	KSuCoA	0.086	mM	
scs	Succinyl-CoA synthetase	KGDP	0.007	mM	
scs	Succinyl-CoA synthetase	KPi	2.26	mM	[48]
scs	Succinyl-CoA synthetase	KSuc	0.49	mM	[48]

scs	Succinyl-CoA synthetase	KGTP	0.036	mM	[48]
scs	Succinyl-CoA synthetase	KCoA	0.036	mM	[48]
sdh	Succinate dehydrogenase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
sdh	Succinate dehydrogenase	Keq	1	_	[1]
sdh	Succinate dehydrogenase	KiCoQ	0.01	mM	
sdh	Succinate dehydrogenase	KSuc	0.03	mM	[49]
sdh	Succinate dehydrogenase	KiSuc	0.03	mM	
sdh	Succinate dehydrogenase	KFum	0.025	mM	[49]
sdh	Succinate dehydrogenase	KiFum	0.025	mM	
sdh	Succinate dehydrogenase	KiCoQH	0.2	mM	
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	e0	Fitted	pmol·cell ⁻¹	
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	K1	113.595	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	K2	2887.37	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	K3	5000	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	K4	622860	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	K5	5300	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	K6	5000	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	Kr1	5000	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	Kr2	5300	min ⁻¹	[50]

Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	Kr3	6.85627*10 ⁸	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	Kr4	5000	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	Kr5	1770	min ⁻¹	[50]
Ta/ta_inv1 /ta_inv2	Transaldolase / Transaldolase invisible (1) / Transaldolase invisible (2)	Kr6	0.0622865	min ⁻¹	[50]
tim	Triose-phosphate isomerase	V	2	pmol·min ⁻¹ ·cell ⁻¹	
tim	Triose-phosphate isomerase	Keq	0.045	_	[1]
tim	Triose-phosphate isomerase	KDhaP	0.59	mM	[51]
tim	Triose-phosphate isomerase	KGraP	0.4	mM	[51]
tim	Triose-phosphate isomerase	Keq	0.045	_	
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	e0	Fitted	pmol·cell ⁻¹ ₁	
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	K1	1.07902*10 ⁷	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	K2	5300	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	K3	5000	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	K4	11760.9	min ⁻¹	[50]

tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	K5	5300	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	K6	5000	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	K7	63384.6	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	K8	98806.8	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	K9	5000	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	Kr1	5000	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	Kr2	5300	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	Kr3	3098.97	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	Kr4	5000	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	Kr5	1770	min ⁻¹	[50]

tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	Kr6	5.88567*10 ⁷	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	Kr7	5000	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	Kr8	1.46659*10 ⁶	min ⁻¹	[50]
tk1/tk2/tk3/tk_inv1/tk_inv2/ tk_inv3	Transketolase (1) / Transketolase (2) / Transketolase (3) / Transketolase invisible (1) / Transketolase invisible (2) / Transketolase invisible (3)	Kr9	36.4257	min ⁻¹	[50]
transa	Transaminase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
transa	Transaminase	Keq	1	–	
transa	Transaminase	KKg	1.25	mM	
transa	Transaminase	KGlu	5	mM	
transa	Transaminase	KiAsp	2	mM	
trik	Triokinase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
trik	Triokinase	KiATP	0.2	mM	
trik	Triokinase	KGra	0.012	mM	
trik	Triokinase	KiGra	0.012	mM	
ugt	UDP-glucuronosyltransferase	V	Fitted	pmol·min ⁻¹ ·cell ⁻¹	
ugt	UDP-glucuronosyltransferase	Keq	0.31	mM	[5]
ugt	UDP-glucuronosyltransferase	KUTP	0.563	mM	[5]
ugt	UDP-glucuronosyltransferase	KiUTP	0.563	mM	
ugt	UDP-glucuronosyltransferase	KGlc1P	0.172	mM	[5]
ugt	UDP-glucuronosyltransferase	KiGlc1P	0.172	mM	

ugt	UDP-glucuronosyltransferase	KPPi	0.166	mM	[5]
ugt	UDP-glucuronosyltransferase	KiPPi	0.166	mM	
ugt	UDP-glucuronosyltransferase	KUDPGlc	0.05	mM	[5]
ugt	UDP-glucuronosyltransferase	KiUDPGlc	0.05	mM	

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