

Additional file 4. Measured extra- and intracellular metabolite concentrations at steady-state ($D=0.09\text{ h}^{-1}$).

Table 3.1. Measured intra- and extracellular amino acid concentrations

<i>Amino acid</i>	<i>Extracellular</i>		<i>Intracellular</i>	
	$\mu\text{mol/L}$		$\mu\text{mol/g}_{\text{CDW}}$	
	<i>value</i>	<i>sd</i>	<i>value</i>	<i>sd</i>
Ala	1.19	0.22	14.29	0.40
Gly	0.44	0.33	1.20	1.04
Val	n.d.	n.d.	1.24	0.04
Leu	0.06	0.03	0.63	0.02
Ile	0.04	0.02	0.28	0.02
Pro	0.03	0.03	2.57	0.04
Ser	n.d.	n.d.	5.50	0.05
Thr	0.04	0.02	2.44	0.08
Asp	0.08	0.00	38.68	0.53
Phe	0.02	0.01	0.17	0.02
Orn	1.53	1.08	21.23	1.81
Glut	n.d.	n.d.	84.31	2.58
Lys	0.27	0.18	6.83	0.06
Asn	0.11	0.07	4.20	0.09
Gln	0.01	0.06	83.27	2.40
Tyr	0.03	0.02	0.18	0.02
His	0.01	0.02	4.15	0.09
Trp	n.d.	n.d.	0.08	0.01
Met	n.d.	n.d.	0.44	0.04

Table 3.2. Measured intra- and extracellular metabolite concentrations.

<i>Metabolite</i>	<i>Extracellular</i>		<i>Intracellular</i>	
	$\mu\text{mol/L}$		$\mu\text{mol/g}_{\text{CDW}}$	
	<i>value</i>	<i>sd</i>	<i>value</i>	<i>sd</i>
FUM	0.36	0.02	0.67	0.03
SUCC	0.27	0.04	1.79	0.09
MAL	0.09	0.11	2.49	2.16
α KG	0.47	0.03	1.27	0.08
Pep	0.03	0.05	0.66	0.02
Glu	35.77	3.99	0.78	0.86
GA3P	n.d.	n.d.	0.001	0.0001
Citrate	n.d.	n.d.	7.03	0.20
PG2	0.05	0.01	0.20	0.02
IsoCitrate	n.d.	n.d.	0.05	0.00
DHAP	n.d.	n.d.	0.71	0.02
PG3	0.06	0.00	1.78	0.06
E4P	0.38	0.01	0.08	0.00
Rib5P	0.08	0.01	0.88	0.07
Rul5P	n.d.	n.d.	0.23	0.03
Xul5P	n.d.	n.d.	0.16	0.02
Man6P	0.14	0.04	1.16	0.03
Fru6P	0.17	0.02	3.19	0.13
Glc6P	0.52	0.05	14.31	0.43
Sed7P	0.27	0.02	5.41	0.17
FBP	0.21	0.13	0.93	0.05
T6P	0.12	0.00	0.11	0.01
Treh	1.69	0.06	24.50	0.71
Pyr	43.19	4.99	1.62	0.18

