

Supplementary Table SII

Net Flux	WT		WT		ArcA	
	Ø2	Confidence interval	NO3	Confidence interval	NO3	Confidence interval
GLC + PEP => G6P + PYR	100.0	[100.0 - 100.0]	100.0	[100.0 - 100.0]	100.0	[100.0 - 100.0]
G6P <=> F6P	76.8	[74.8 - 77.2]	49.2	[48.5 - 51.6]	67.7	[67.5 - 68.9]
F6P => F16P	77.2	[74.4 - 77.2]	76.7	[67.3 - 78.7]	67.3	[67.0 - 68.3]
F16P <=> DHAP + G3P	77.2	[74.4 - 77.2]	76.7	[67.3 - 78.7]	67.3	[67.0 - 68.3]
DHAP <=> G3P	77.2	[74.4 - 77.2]	76.7	[67.3 - 78.7]	67.3	[67.0 - 68.3]
G3P => 3PG	173.6	[170.8 - 173.6]	171.9	[162.5 - 174.0]	162.1	[161.8 - 163.2]
3PG <=> PEP	170.8	[168.0 - 170.8]	168.2	[158.8 - 170.3]	158.1	[157.8 - 159.2]
PEP => PYR	60.8	[58.0 - 60.8]	59.0	[50.5 - 62.0]	56.7	[55.7 - 57.9]
PYR => ACA + CO2	10.1	[10.0 - 10.7]	16.2	[16.0 - 22.9]	31.4	[30.4 - 32.0]
PYR => ACA + FOR	162.9	[162.9 - 162.9]	140.8	[140.8 - 140.8]	145.6	[145.6 - 145.6]
ACA => ETH	67.6	[67.6 - 67.6]	0.2	[0.2 - 0.2]	0.1	[0.1 - 0.1]
PYR => LAC	1.7	[1.7 - 1.7]	0.0	[0.0 - 0.0]	0.1	[0.1 - 0.1]
PEP + CO2 <=> OAA	9.0	[8.9 - 9.1]	7.9	[5.8 - 8.2]	0.0	[-0.6 - 1.1]
G6P => 6PG	22.8	[22.4 - 24.8]	50.3	[47.8 - 51.0]	31.7	[30.5 - 31.9]
6PG => Ru5P + CO2	3.1	[1.4 - 3.2]	44.6	[28.7 - 46.8]	3.0	[2.2 - 3.5]
Ru5P <=> X5P	0.6	[-0.6 - 0.6]	27.7	[17.1 - 29.2]	-0.1	[-0.7 - 0.2]
Ru5P <=> R5P	2.5	[2.0 - 2.6]	16.8	[11.5 - 17.6]	3.2	[2.9 - 3.3]
R5P + X5P <=> S7P + G3P	0.7	[0.1 - 0.7]	14.4	[9.1 - 15.2]	0.5	[0.3 - 0.7]
S7P + G3P <=> E4P + F6P	0.7	[0.1 - 0.7]	14.4	[9.1 - 15.2]	0.5	[0.3 - 0.7]
X5P + E4P <=> F6P + G3P	-0.1	[-0.7 - -0.1]	13.3	[8.0 - 14.1]	-0.7	[-0.9 - -0.5]
ACA + OAA => CIT	6.9	[6.8 - 7.5]	11.3	[10.6 - 16.6]	53.3	[53.1 - 53.5]
CIT => ICT	6.9	[6.8 - 7.5]	11.3	[10.6 - 16.6]	53.3	[53.1 - 53.5]
ICT => 2KG + CO2	2.3	[2.2 - 2.8]	11.3	[9.6 - 15.7]	44.7	[44.1 - 45.9]
2KG => SUC + CO2	0.0	[0.0 - 0.6]	8.3	[6.6 - 12.7]	41.4	[40.8 - 42.7]
SUC => FUM	-3.0	[-3.0 - -2.4]	8.3	[7.6 - 13.6]	50.0	[49.8 - 50.3]
FUM <=> MAL	-3.0	[-3.0 - -2.4]	8.3	[7.6 - 13.6]	50.0	[49.8 - 50.3]
MAL <=> OAA	1.6	[1.5 - 2.2]	8.3	[8.1 - 15.0]	58.6	[57.5 - 59.2]
ICT => GLX + SUC	4.6	[4.5 - 4.7]	0.0	[-0.2 - 2.2]	8.6	[7.5 - 9.1]
GLX + ACA => MAL	4.6	[4.5 - 4.7]	0.0	[-0.2 - 2.2]	8.6	[7.5 - 9.1]
6PG => G3P + PYR	19.7	[19.7 - 22.9]	5.7	[3.0 - 20.3]	28.7	[27.6 - 29.1]
ACA => ACT	86.2	[86.2 - 86.2]	135.4	[135.4 - 135.4]	104.1	[104.1 - 104.1]
SUC =>	7.6	[7.6 - 7.6]	0.0	[0.0 - 0.0]	0.0	[0.0 - 0.0]
Exchange coefficient						
G6P <=> F6P	0.99	[0.95 - 0.99]	0.99	[0.96 - 0.99]	0.93	[0.81 - 0.99]
F16P <=> DHAP + G3P	0.55	[0.53 - 0.57]	0.72	[0.70 - 0.77]	0.77	[0.74 - 0.79]
DHAP <=> G3P	0.93	[0.92 - 0.94]	0.94	[0.92 - 0.96]	0.94	[0.93 - 0.96]
3PG <=> PEP	0.20	[0.11 - 0.49]	0.99	[0.27 - 0.88]	0.75	[0.39 - 0.83]
PEP + CO2 <=> OAA	0.36	[0.20 - 0.52]	0.36	[0.28 - 0.78]	0.17	[0.14 - 0.21]
Ru5P <=> X5P	0.21	[0.15 - 0.21]	0.74	[0.57 - 0.99]	0.10	[0.05 - 0.14]
Ru5P <=> R5P	0.99	[0.86 - 0.99]	0.58	[0.33 - 0.79]	0.99	[0.94 - 0.99]
R5P + X5P <=> S7P + G3P	0.51	[0.40 - 0.61]	0.00	[0.00 - 0.03]	0.03	[0.02 - 0.07]
S7P + G3P <=> E4P + F6P	0.30	[0.25 - 0.34]	0.87	[0.84 - 0.91]	0.92	[0.85 - 0.96]
X5P + E4P <=> F6P + G3P	0.00	[0.00 - 0.01]	0.14	[0.06 - 0.14]	0.00	[0.00 - 0.01]
FUM <=> MAL	0.99	[0.72 - 0.99]	0.53	[0.36 - 0.82]	0.59	[0.37 - 0.78]
MAL <=> OAA	0.99	[0.95 - 0.99]	0.22	[0.16 - 0.61]	0.00	[0.00 - 0.12]
¹³ CO ₂ ratio	0.94	[0.94 - 0.95]	0.87	[0.85 - 0.91]	0.90	[0.90 - 0.96]

