

Text S1

Equations used to calculate flux ratios for the LTEE. The notation v(x) represents the flux through reaction x of the iaf1260 genome-scale model of metabolism.

serine through glycolysis

$$=2*(v(1006)+v(1043)-v(2246)-v(2203))/(v(688)+2*(v(1006)+v(1043))+v(2245)+v(2246));$$

pyruvate through Entner-Doudoroff

$$=v(688)/(v(688)+v(575)+v(1233)+v(1626)+v(1627));$$

oxaloacetate from phosphoenolpyruvate

$$=v(2020)/(v(2020)+v(1622)+v(1623)+v(1624));$$

phosphoenolpyruvate from oxaloacetate

$$=v(2022)/(v(2022)+v(695));$$

pyruvate from malate

$$\text{PYR}=(v(1626)+v(1627))/((v(1626)+v(1627)+v(575)+v(1233)+v(1626)+v(1627)));$$