**Table I** Physiological parameters and ratios of converging fluxes during wild-type growth on glucose or galactose

|  | Glucose  | Galactose                                 |
|--|--|---|
| Wild-type physiology <sup>a</sup> Growth rate (h <sup>-1</sup> ) Hexose uptake (mmol gCDW <sup>-1</sup> h <sup>-1</sup> ) Acetate secretion (mmol gCDW <sup>-1</sup> h <sup>-1</sup> )                                       | $8.26 \pm 0.50$  | 0.18 ± 0.01<br>2.00 ± 0.33<br>0.11 ± 0.16 |
| Wild-type flux ratios <sup>b</sup> EMD, ED and PP pathways Serine through EMP pathway Pyruvate through ED pathway PEP from PP pathway (upper bound)  | 0.77 ± 0.01<br>0.07 ± 0.02<br>0.20 ± 0.07                      |   |
| Gluconeogenesis, TCA and glyoxylate shunt Oxaloacetate from phoshoenolpyruvate Oxaloacetate from glyoxylate shunt Pyruvate from malate (upper bound) Pyruvate from malate (lower bound) Phoshoenolpyruvate from oxaloacetate | 0.68 ± 0.01<br>NA<br>0.04 ± 0.02<br>0.01 ± 0.00<br>0.02 ± 0.00 |   |
| C1 metabolism<br>Serine from glycine<br>Glycine from serine  | 0.31 ± 0.02<br>0.98 ± 0.02                                     | 0.46 ± 0.02<br>0.99 ± 0.02                |

<sup>&</sup>lt;sup>a</sup>Values and standard deviations were obtained from at least three biological replicates.

<sup>&</sup>lt;sup>b</sup>Values are flux ratio values ±95% confidence intervals. Two experiments led to identical results.