Measured and predicted growth rates.

Carbon sources name	Formula	Maximum growth rate measured	Maximum growth rate predicted by MOMENT	Maximum growth rate predicted by FBAwMC
Acetate	'C2H3O2'	0.29 ±0.02	0.300	0.549
N-acetylglucosamine	'C8H15NO6'	0.61 ±0.03	0.518	0.666
Glycerol	'C3H8O3'	0.47 ±0.03	0.509	0.647
Oxoglutarate	'C5H4O5'	0.24 ±0.04	0.450	0.638
L-Alanine	'C3H7NO2'	0.24 ±0.03	0.432	0.627
Pyruvate	'C3H3O3'	0.41 ±0.03	0.477	0.621
Fructose	'C6H12O6'	0.54 ±0.04	0.497	0.648
Guanosine	'C10H13N5O5'	0.37 ±0.03	0.589	0.685
Fumarate	'C4H2O4'	0.47 ±0.03	0.460	0.622
Ribose	'C5H10O5'	0.41 ±0.01	0.407	0.611
Galactose	'C6H12O6'	0.24 ±0.02	0.489	0.633
L-Lactate	'C3H5O3'	0.41 ±0.03	0.424	0.591
Gluconate	'C6H11O7'	0.68 ±0.03	0.513	0.639
Sorbitol	'C6H14O6'	0.48 ±0.03	0.479	0.647
Glucosamine	'C6H14NO5'	0.4 ±0.03	0.497	0.662
L-Malate	'C4H4O5'	0.55 ±0.03	0.467	0.607
Succinate	'C4H4O4'	0.5 ±0.02	0.446	0.620
Glucose	'C6H12O6'	0.66 ±0.05	0.506	0.646
Maltose	'C12H22O11'	0.52 ±0.02	0.494	0.647
Glucose 6-Phosphate	'C6H11O9P'	0.78 ±0.04	0.567	0.654
Mannitol	'C6H14O6'	0.61 ±0.03	0.461	0.637
Trehalose	'C12H22O11'	0.48 ±0.04	0.509	0.651
Mannose	'C6H12O6'	0.35 ±0.03	0.487	0.646
Xylose	'C5H10O5'	0.51 ±0.03	0.495	0.630

Experimentally measurements of *E.coli's* maximal growth rates on 24 single carbon and energy source media and the predictions which obtained by applying MOMENT and FBAwMC on the genome-scale metabolic network model of E. coli iAF1260 [1]

[1] Feist AM, Henry CS, Reed JL, Krummenacker M, Joyce AR, et al. (2007) A genome-scale metabolic reconstruction for Escherichia coli K-12 MG1655 that accounts for 1260 ORFs and thermodynamic information. Molecular Systems Biology 3: -.