TABLE 1. Comparison of the steady-state glucose consumption rate with the zero *trans*-influx kinetics of glucose transport and the intracellular glucose concentration in derepressed and repressed cells[a]

Extracellular glucose concn (mM)	V_{max} (nmol · min^{-1} · mg of protein^{-1})	K_m (mM)	Calculated zero *trans*-influx rate (nmol · min^{-1} · mg of protein^{-1})	Measured intracellular glucose concn (mM)	Measured glucose consumption rate (nmol · min^{-1} · mg of protein^{-1})	Calculated glucose consumption rate (nmol · min^{-1} · mg of protein^{-1})
Derepressed cells						
13.3	536 ± 12	1.7 ± 0.1	475 ± 10	1.5 ± 0.1	220 ± 16	233
34	536 ± 12	1.7 ± 0.1	511 ± 11	1.6 ± 0.1	245 ± 18	261
Repressed cells						
9.4	614 ± 38	55 ± 5	90 ± 8	<0.1	145 ± 16	88
36	614 ± 38	55 ± 5	243 ± 15	<0.1	420 ± 38	240
255	614 ± 38	55 ± 5	503 ± 31	2.7 ± 0.5	568 ± 55	481

[a] Values are means ± standard deviations. Values for V_{max} and K_m were measured as described in Walsh et al. (45). Estimation of the glucose consumption rate was based on the assumption that the facilitated diffusion carrier is symmetrical, and estimates were obtained by using the rate equation detailed in Appendix.