

Table I: Transient Decay Rate Constants for Enzymes and Substrates

substrate <sup>a</sup>	rate constant ( $s^{-1} \times 10^{-5}$ )	
	phosphorylase <i>a</i>	phosphorylase <i>b</i> <sup>b</sup>
none	1.51 ± 0.02	1.49 ± 0.02
glucose	1.42 ± 0.02	1.27 ± 0.03
maltoheptaose	1.45 ± 0.03	1.49 ± 0.02
glycogen	1.45 ± 0.04	1.47 ± 0.04
P <sub>i</sub>	1.93 ± 0.02	2.05 ± 0.03
P <sub>i</sub> + glucose	1.48 ± 0.02	1.36 ± 0.03
P <sub>i</sub> + maltoheptaose	1.74 ± 0.07	1.61 ± 0.03
P <sub>i</sub> + glycogen	1.77 ± 0.03	1.60 ± 0.03
glucose-1-P	1.3–1.69 (varies)	1.3–1.66 (varies)
glucose-1-P + maltoheptaose	1.69 ± 0.06	1.58 ± 0.02
glucose-1-P + glycogen	1.72 ± 0.08	1.59 ± 0.06
glucose-1-P + P <sub>i</sub>	1.45 ± 0.04	1.47 ± 0.02
glucose-1,2-P	1.73 ± 0.05	1.69 ± 0.02
glucose-1,2-P + maltoheptaose	1.65 ± 0.06	1.58 ± 0.03
glucose-1,2-P + glycogen	1.80 ± 0.05	1.59 ± 0.02

<sup>a</sup> Additions: 100 mM glucose, P<sub>i</sub>, glucose cyclic 1,2-phosphate, PP<sub>i</sub>, 10 mM maltoheptaose, and 0.4% glycogen. <sup>b</sup> AMP bound.