

TABLE 8.8 Enzymes for which $k_{\text{cat}}/K_{\text{M}}$ is close to the diffusion-controlled rate of encounter

Enzyme	$k_{\text{cat}}/K_{\text{M}}$ ($\text{s}^{-1}\text{M}^{-1}$)
Acetylcholinesterase	1.6×10^8
Carbonic anhydrase	8.3×10^7
Catalase	4×10^7
Crotonase	2.8×10^8
Fumarase	1.6×10^8
Triose phosphate isomerase	2.4×10^8
β -Lactamase	1×10^8
Superoxide dismutase	7×10^9

Source: After A. Fersht, *Structure and Mechanism in Protein Science: A Guide to Enzyme Catalysis and Protein Folding* (W. H. Freeman and Company, 1999), Table 4.5.

