Table 8.3. Comparison of transport rates for selected systems[1]

System	Transport rate
Channels/Pores	
Sodium channel	$\sim 10^7$ sec^{-1}
Gramicidin A	$\sim 10^7$ sec^{-1}
Acetylcholine receptor channel	$\sim 10^7$ sec^{-1}
Permeases	
H^+-Lactose permease (*E. coli*)	30 sec^{-1}
Glucose transporter (erythrocyte)	300 sec^{-1}
Band 3 anion transporter[2] (erythrocyte)	100,000 sec^{-1}
Active transporters	
Bacteriorhodopsin	50 sec^{-1}
Na^+/K^+-ATPase[3]	450 sec^{-1}
Cytochrome *c* oxidase	1,000 sec^{-1}

[1]See text for references. Values are only approximate since they vary considerably depending on experimental conditions. The values for channels are estimated for 0.1 *M* NaCl, 100 mV, from ref. 1386.

[2]Exchange rate. See text.

[3]Na^+ transport rate (three per ATP hydrolyzed).