

TABLE 3.3

Calculated and Measured Equivalent Conductances for Some Single Channels for Which Estimates of Cross-Sectional Channel Area Are Available<sup>a</sup>

Channel	Estimated Cross-Sectional Area (Å)	Equivalent Conductance (pS M <sup>-1</sup> )		Reference
		Calculated	Measured	
Frog muscle end-plate (sodium)	40.3	585	310	Dwyer <i>et al.</i> (1980), Hamill and Sakmann (1981)
Frog neuron (potassium)	8.6	181	36	Dwyer <i>et al.</i> (1980)
Frog neuron (sodium)	15.8	230	130	Dwyer <i>et al.</i> (1980)
Gramicidin (sodium)	12.6	265	286	Eisenman <i>et al.</i> (1980)
Sarcoplasmic reticulum (sodium)	5 (10 Å length)	2600	4900	Coronado <i>et al.</i> (1980), Miller (1982)
Porin (sodium)	65	2250	1900	Benz <i>et al.</i> (1978, 1979, 1980)

<sup>a</sup> Assuming channel length of 30 Å (or 10 Å) and converting to 25°C.