Table. Ion channel conductance and selectivity

Channel	Preparation	Ionic condition[c]	γ, pS	Selectivity	Reference
A. Ion-specific channels					
Na^+ channel	Squid axon (*N*)	450 Na_o/50 Na_i	7	$Na^+(1) \sim Li^+ > K^+(0.09)^x$	[27]
	Frog node (*N*)	105 Na_o/5 Na_i	8		
	Tunicate egg (*N*)	100 Na_o	3		[114]
	Rat muscle (*P*)	140 Na_o	18		[126]
	Frog skin (*N*)	60 Na_o	6	$Na^+(1) \sim Li^+ \gg Rb^+, K^+(0.001)^y$	[16, 90, 118]
K^+ channel (delayed rectifier)	Squid axon (*N*)	10 K_o/400 K_i	12	$K^+(1) > Rb^+ > NH_4^+$ (0.3) $\gg Cs^+$; $Na^+ Li^+$[b]	[27]
	Squid axon (*P*)	460 K_o/1 K_i	18		[28]
	Squid axon (*T*)	400 K	3		[7]
	Frog node (*N*)	2.5 K_o/140 K_i	4	$Tl^+(2.3) > K^+(1) > Rb^+ > NH_4^+(0.13)$ $\gg Na^+$, Li^+[b]	[64, 65]
	Helix neuron (*N*)	110 K	2	$Tl^+(1.3) > K^+(1) > Rb^+ > Cs^+ > Li^+$ $> Na^+(0.08)^x$	[121]
K^+ channel (inward rectifier)	Frog muscle (*N*)	150 K_o	10		[125]
	Rat muscle (*P*)	150 K	10		[48, 116]
	Tunicate egg (*N*)	100 K_o/400 K_i	7	$Tl^+(1.5) > K^+(1) > Rb^+ > NH_4^+$ (0.04) $\gg Cs^+$, Na^+, Li^+[b]	[57]
	Tunicate egg (*P*)	50 K_o/400 K_i	5		[115]
K^+ channel (Ca^{2+}-activated)	Human erythrocyte (*P*)	100 K	18	$K^+ \gg Na^+$[b]	[59]
	Helix neuron (*P*)	4 K_o/400 K_i	19	$K^+ \gg Na^+$[b]	[92]
Cl^- channel	*Torpedo* electroplax (*B*)	150 Cl	9	$Cl^-(1) > Br^-(0.3) \gg I^-, F^-$[c]	[106, 134]
B. Valence-selective channels					
ElM	Bilayer	100 K	400	$Cs^+(1) > Rb^+ > K^+ > Na^+ > Li^+(0.4)^c$	[40, 81]
Gramicidin A	Bilayer	100 Cs	15	$Cs^+(1) > Rb^+ > K^+ > Na^+ > Li^+(0.07)^b$	[108]
Acetylcholine receptor	Frog muscle (*P*)	100 Na_o	35		[109]
	Rat muscle (*P*)	100 Na	40		[71]
	Rat muscle (*P*)	150 Na_o/150 K_i	35, 25[a]	$Cs^+ > K^+ > Na^+ > Li^+$ (0.7)[c]	[61]
	Torpedo electroplax (*B*)	100 Na	16		[112]
Glutamate receptor	Locust muscle (*P*)	200 Na_o	130	$K^+ \sim Na^+$[b]	[120]
Cation channel	Rat heart (*P*)	140 Na	35	$K^+ \sim Na^+$[b]	[26]
(Ca^{2+}-activated)	Neuroblastoma (*P*)	120 Na	22	$Cs^+ \sim K^+ \sim Na^+$[c]	[138]
Cation channel	Calf heart (*B*)	100 K	95	$K^+ \sim Na^+$[c]	[30]
Cation channel	Calf heart (*B*)	100 K	28	$K^+ > Na^+$ (0.2)[c]	[30]
Cation channel	Calf heart (*B*)	100 K	18	$K^+(1) > Na^+(0.3)$[c]	[30]
Anion channel	Bovine heart (*B*)	100 Cl	55	Br^- (1) > Cl^- > I^- > F^- (0.4)[c]	[30, 35]
C. Nonselective channels					
Hemocyanin	Keyhole limpet (*B*)	100 K	200	K^+ (1) > Na^+ > Cl^- > Li^+ (0.1)[c]	[24, 82, 99]
Porin	*E. coli* (*B*)	100 Na	140–480	None[d]	[18, 124]
Porin	Mitochondria (*B*)	100 K	450	None[d]	[25]
Alamethicin (state 5)	Bilayer	120 Na	630	None[d]	[41, 123]
D. Maxi-K^+ channels					
SR K^+ channel	Rabbit SR (*B*)	100 K	130	$K^+(1) > Rb^+ > Na^+ > Li^+(0.03)$ Cs^+[c]	[34]
	Frog SR (*B*)	100	150,50[a]	$K^+(1) > Rb^+ > Na^+ > Li^+(0.07) \gg Cs^+$[c]	[80]
K^+ channel (Ca^{2+}-activated)	Rabbit T-tubule (*B*)	100 K	230	$K^+(1) \gg Rb^+$, Na^+, Li^+, Cs^+[b]	[84]
	Chromaffin cell (*P*)	140 K	180		[93]
	Rat myotubes (*P*)	140 K	187		[117]
	Rat pituitary (*P*)	145 K	208	$K^+ \gg Na^+$[b]	[135]
	Frog neuron (*P*)	2.5 K_o/100 K_i	100		[2]
	Rat axolemma (*B*)	100 K	230		[78]
	Rat muscle (*P*)	150 K	240		[100]

(*N*) Macroscopic noise method; (*P*) Patch method; (*B*) Planar bilayer method; (*T*) TEA-block method;
[a] Multiple open states;
[b] Selectivity determined from reversal potential.
[c] Selectivity determined from channel conductance.
[d] "None" indicates channels allowing permeation of molecules up to 500 molecular weight.
[e] Reported as concentration (in mM) of major conducting ion. Where no designation of internal or external concentration is given, symmetrical ionic conditions apply.