Ion channel models based on self-assembling cyclic peptide nanotubes

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SUPPORTING INFORMATION

Table 1. Saturation parameters calculated for the transport of alkaline chlorides in peptide **CP2b** channels in *L*-α-lecithin.

Electrolyte	g_{max} (pS)	K_m (mM)[a]
LiCl	2.5 ± 0.3	3.4 ± 0.8
NaCl	12.1 ± 0.2	11.5 ± 1.8
KCl	21.5 ± 0.2	7.1 ± 0.8
RbCl	38.7 ± 0.3	14.9 ± 0.7
CsCl[a]	41.7 ± 0.9	20.4 ± 2.4

[a] Obtained by fitting to a first order Michaelis-menten equation the conductance data observed in the concentration range of 20 mM to 4M KCl. Data points at 2 and 4M were not included in the calculation.

Table 2. Conductance, saturation and dynamic parameters for cyclic octapeptide forming channels in 1-monooleoyl-*rac*-glycerol (GMO).

Channel	g_{max} (pS)[a]	K_m (mM)[a]	P_{open} (%)[b]	τ (ms)[b]
CP2a	45.8 ± 2.0	158 ± 29	52 ± 6	728 ± 13
CP2b	43.2 ± 1.4	59 ± 10	59 ± 7	346 ± 12
CP2c	45.0 ± 2.3	190 ± 40	49 ± 2	892 ± 11
CP2d	50.3 ± 1.6	301 ± 35	35 ± 2	577 ± 8
CP2e	49.0 ± 1.1	282 ± 22	37 ± 5	462 ± 7

[a] Obtained by fitting to a first order Michaelis-menten equation the conductance data observed in the concentration range of 20 mM to 4M KCl.

[b] Calculated from data analysis of traces containing one single ion channel active in 1M KCl at an applied transmembrane potential of +100mV.