

**Supplementary Table 1.** Sequence identity<sup>a</sup> and similarity<sup>b</sup> for K<sup>+</sup> channel pore domains of known structure.

	KcsA (1K4C)	KirBac1.1 (1P7B)	MLotiK (3BEH)	KvAP (1ORQ)	MthK (1LNQ)	Kv1.2 (2A79)
KcsA (1K4C)	–	23.6	38.2	28.6	29.0	29.7
KirBac1.1 (1P7B)	42.7	–	23.6	25.8	19.1	24.2
MLotiK (3BEH)	52.8	39.3	–	30.3	20.2	28.1
KvAP (1ORQ)	51.6	39.3	49.4	–	22.5	32.6
MthK (1LNQ)	43.0	32.6	34.8	37.1	–	21.3
Kv1.2 (2A79)	46.2	43.2	50.6	52.8	39.3	–

<sup>a</sup>Sequence % identities are shown above the diagonal.

<sup>b</sup>Sequence % similarities are shown below the diagonal.