

Supplemental Table 1: Electrophysiological characteristics of wild-type and heterozygous Kv1.1 channels. The voltage-dependent parameters of activation ($V_{1/2}$ and k) were obtained from the Boltzmann equation as described in Methods. Data are presented as mean \pm SEM, with the number of investigated cells in parentheses. WT: wild-type Kv1.1 channel; WT/p.Val368Leu cotransfection of wild-type and mutant channel (p.Val368Leu). $V_{1/2}$ is the voltage of half-maximal activation. k is the slope factor.

	WT (n=11)	WT/ p.Val368Leu (n=15)
$V_{1/2}$ (mV)	-26.7 ± 1.2	-26.1 ± 1.6
k (mV)	7.4 ± 0.6	6.6 ± 0.5