
**Figure e-5:** Kv3.3 WT/A671V current and inactivation curves. A) Representative peak normalized and superimposed traces of Kv4.3 WT: A671V 1:0 (black), 0.5:0.5 (green) and 0:1 (purple). B) The normalized current-voltage relationships demonstrated no differences in half-maximal currents for WT:A671V 1:0 (13.2 ± 1.0 mV), 0.5:0.5 (12.1 ± 1.0 mV), and 0:1 (10.7 ± 0.8 mV; F, 1.88, p = 0.1548, F-test). C) Prepulse-activation relationships demonstrated no differences in half-maximal inhibition for WT:A671V 1:0 (-1.0 ± 0.5 mV), 0.5:0.5 (-1.7 ± 0.6 mV), and 0:1 (-2.5 ± 0.4 mV; F, 2.08, p = 0.1264, F-test). The prepulse duration was 730 ms. For B) an unconstrained sigmoidal curve was fit between -10 and +40 mV and for C) an unconstrained sigmoidal curve was fit between -30 and +20 mV. p<0.05 was considered significant.