Supplementary Table 6. Statistics: Whole Cell Electrophysiology - Non-Stationary Noise Analysis - pertains to Figure 2, Supp. Figs.

Test:	Kruskal-Wallis (Non-Parametric ANOVA)			
Variable	Unitary Conductance (pS) by Genotype	N (Predicted Number of Channels)	Peak Open Probability (I/Ni)	Predicted Maximum Current (Ni)
chi-squared	19.005	3.5556	0.96853	8.7897
df	2	2	2	2
p-value	0.000075	0.169	0.6161	0.01234
Observations	59	52	52	52

Test:	Dunn's Multiple Pairwise Comparison		
Variable:	Unitary Conductance (pS) by Genotype		
Comparison	WT-EPN	WT-LVNV	LVNV-EPN
Z	-2.41131	-4.17767	1.114092
P.unadj	0.01589534	2.94511E-05	0.2652398
P.adj	0.03179068	0.0000884	0.2652398
Observations	32-11	32-16	16-11
Variable:	N (Predicted Number of Channels)		
Comparison	WT-EPN	WT-LVNV	LVNV-EPN
Z	0.384144	-1.690925	1.633591
P.unadj	0.70087173	0.09085112	0.10234479
P.adj	0.7008717	0.2725534	0.2046896
Observations	31-9	31-12	9-12
Variable:	Peak Open Probability (I/Ni)		
Comparison	WT-EPN	WT-LVNV	LVNV-EPN
Z	-0.4622615	-0.9569334	0.3408801
P.unadj	0.6438938	0.3386009	0.7331938
P.adj	1	1	0.7331938
Observations	31-9	31-12	9-12
Variable:	Predicted Maximum Current (Ni)		
Comparison	WT-EPN	WT-LVNV	LVNV-EPN
Z	-0.7546107	-2.9647196	1.6378874
P.unadj	0.450482627	0.003029589	0.101445179
P.adj	0.450482627	0.009088767	0.202890359
Observations	31-9	31-12	9-12

Note: WT = Ancestral *Rattus norvegicus* sodium channel; EPN = *R.n.* channel bearing TTX resistant *Thamnophis atratus* mutations; LVNV = *R.n.* channel bearing TTX resistant *Thamnophis sirtalis*

Note: Shaded values represent adjusted p-values that fall below a predetermined significance level (α=0.05)