Supplementary Table 7. Statistics: Non-parametric Analysis of Variance and Pairwise Comparisons of Pharmacological Properties of TTX-Sensitive and TTX-Resistant Skeletal Muscles from *Thamnophis atratus* and *Thamnophis sirtalis*

Test:	Kruskal-Wallis (Non-Parametric ANOVA)		
Variable:	IC50 (nM) by Genotype	Midpoint Slope (dx, %/nM) by Genotype	Concentration Range from 10% to 90% Inhibition by Genotype
chi-squared	33.472	14.58	29.615
df	3	3	3
p-value	2.56×10^{-7}	0.0022	1.66×10^{-6}
Observations (N=n)	48	47	46

Test:	Dunn's Multiple Pairwise Comparison: Whole Cell Electrophysiology					
Variable:	IC50 (nM)					
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	0.5264	3.477	2.8184	5.0526	4.3553	1.5951
P.unadj	0.5986	0.0005	0.00483	4.36×10^{-7}	1.3288E-05	0.1107
P.adj	0.5986	0.002	0.0145	2.61×10^{-6}	6.64×10^{-5}	0.2214
Observations (N=n)	16 - 21	13 - 20	13 - 16	11 - 21	11 - 16	11 - 13
Variable:	Midpoint Slope (% decline per nM)					
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	3.2439	2.6842	-0.346	0.3787	-2.3885	-1.968
P.unadj	0.0012	0.0073	0.7294	0.705	0.017	0.049
P.adj	0.0071	0.0364	0.7294	1	0.0677	0.1471
Observations (N=n)	16-21	13 -21	13 - 16	10 -21	10 - 16	10 - 13
Variable:	Concentration Range from 10% to 90% Inhibition by Genotype					
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	3.8102	4.4892	0.8606	4.1641	0.8305	0.0319
P.unadj	0.0001	7.15×10^{-6}	0.3895	3.13×10^{-5}	0.4063	0.9745
P.adj	0.0006	4.29×10^{-5}	1	0.0002	0.8125	0.9745
Observations (N=n)	16 - 20	10 - 20	10 - 16	10 - 20	10 - 16	10 - 13

Definitions:

IC50 (nM) by Genotype	Concentration of Tetrodotoin at half-maximal inhibition by Tetrodotoxin in nanomolar
Midpoint Slope (dx, %/nM) by Genotype	Boltzmann sigmoidal slope through the inflection point - % decline / increase in concentration
[TTX] Range from 10% to 90% Inhibition by Genotype	The range of intoxication where the muscle is weakened but still contractile (nanomolar)

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