

**Supplementary Table 11. Statistics: Pairwise Comparisons of tetanic mechanical properties of TTX-Sensitive and -Resistant Skeletal Muscles from *Thamnophis sirtalis* and *Thamnophis atratus* (pertaining to Figures 3 and Supp. Fig. 4).**

Test: Dunn's Multiple Pairwise Comparison: Whole Cell Electrophysiology						
Variable: Baseline Force ( $\text{N g}^{-1}$ ) by Genotype						
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	4.5721	0.7139	-3.2704	0.00195	-3.9655	-0.6345
P.unadj	$4.83 \times 10^{-6}$	0.4753	0.001074	0.9985	$7.33 \times 10^{-5}$	0.5258
P.adj	$2.9 \times 10^{-5}$	1	0.0043	0.9984	0.0003663	1
Observations (N=n)	(15 - 17)	(10 - 17)	(10 - 15)	(10 - 17)	(10 - 15)	(10 - 10)
Variable: $F_{\max}$ ( $\text{N g}^{-1}$ ) by Genotype						
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	0.7546	-3.143	-3.723	-2.497	-3.093	0.575
P.unadj	0.4505	0.00167	0.0002	0.01252	0.002	0.565
P.adj	0.901	0.0084	0.0012	0.0375	0.008	0.565
Observations (N=n)	(15 - 17)	(10 - 17)	(10 - 15)	(10 - 17)	(10 - 15)	(10 - 10)
Variable: Time to 10% $F_{\max}$ (s) by Genotype						
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	-3.418	2.3025	5.2137	-0.0244	2.9423	-2.074
P.unadj	0.00063	0.0213	$1.85 \times 10^{-7}$	0.9805699	0.0033	0.0381
P.adj	0.00315	0.0639	$1.11 \times 10^{-6}$	0.9805699	0.013	0.07625064
Observations (N=n)	(15 - 17)	(10 - 17)	(10 - 15)	(10 - 17)	(10 - 15)	(10 - 10)
Variable: Time to 50% $F_{\max}$ relaxation (s) by Genotype						
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	4.3567	0.826	-2.974	2.051	-1.778	1.092
P.unadj	$1.32 \times 10^{-5}$	0.4088	0.00294	0.0402	0.0754	0.2749
P.adj	$7.92 \times 10^{-5}$	0.4088	0.0147	0.1609	0.2262	0.5497
Observations (N=n)	(15 - 17)	(10 - 17)	(10 - 15)	(10 - 17)	(10 - 15)	(10 - 10)
Variable: $dFdt_{\max}$ ( $\text{N g}^{-1} \text{ s}^{-1}$ ) by Genotype						
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	0.465	-3.648	-3.965	-1.91	-2.268	1.55
P.unadj	0.642	0.000264	$7.33 \times 10^{-5}$	0.0561	0.0233	0.121
P.adj	0.642	0.00132	0.00044	0.1684	0.0933	0.2426
Observations (N=n)	(15 - 17)	(10 - 17)	(10 - 15)	(10 - 17)	(10 - 15)	(10 - 10)
<b>Tetanus continued .</b>						
Variable: $dFdt_{\min}$ ( $\text{N g}^{-1} \text{ s}^{-1}$ ) by Genotype						
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	1.8211	2.745	1.0991	4.02	2.3437	1.1361
P.unadj	0.0686	0.0061	0.2717	$5.83 \times 10^{-5}$	0.0191	0.2559
P.adj	0.2058	0.0303	0.2717	0.00035	0.0764	0.5118
Observations (N=n)	(15 - 17)	(10 - 17)	(10 - 15)	(10 - 17)	(10 - 15)	(10 - 10)
Variable: Time to $dFdt_{\max}$ (s) by Genotype						
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	-2.5785	2.2287	4.4131	0.3989	2.6269	-1.63
P.unadj	0.001	0.0258	$1.02 \times 10^{-5}$	0.69	0.008618	0.103
P.adj	0.0397	0.0775	$6.11 \times 10^{-5}$	0.69	0.04309	0.2059
Observations (N=n)	(15 - 17)	(10 - 17)	(10 - 15)	(10 - 17)	(10 - 15)	(10 - 10)
Variable: Time to $dFdt_{\min}$ (s) by Genotype						
Comparison	WTa - WTs	LVNV - WTs	LVNV - WTa	EPN - WTs	EPN - WTa	EPN - LVNV
Z	2.4045	0.1144	-1.975	0.0731	-2.0151	-0.0369
P.unadj	0.0162	0.9089	0.0483	0.94176576	0.0439	0.9706
P.adj	0.0972	1	0.1932	1	0.2195	0.9706
Observations (N=n)	(15 - 17)	(10 - 17)	(10 - 15)	(10 - 17)	(10 - 15)	(10 - 10)

\*Note: WTa = Ancestral *Thamnophis atratus* , EPN = TTX resistant *Thamnophis atratus* ; WTs = Ancestral *Thamnophis sirtalis* , LVNV = TTX resistant *Thamnophis sirtalis*

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