

**Figure S1.** (A) Western blot depicting Na<sub>v</sub>1.1 protein levels in  $Scn1a^{H939R/+}$  mice compared to controls (n=3 per genotype). (B) Inverse image of immunofluorescence showing the distribution of Na<sub>v</sub>1.1 in  $Scn1a^{H939R/+}$  mice compared to controls. There is not size, expression or localization differences in male  $Scn1a^{H939R/+}$  compared to control mice (n=3 per genotype).