

Supplemental material

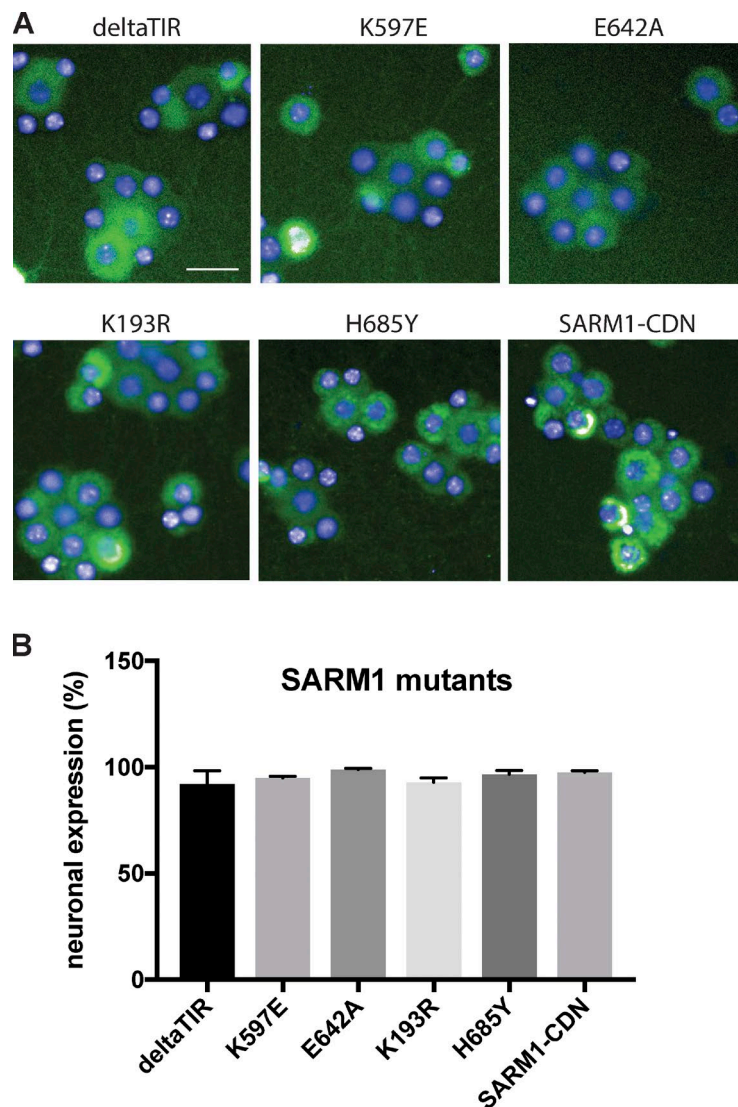
Geisler et al., <https://doi.org/10.1084/jem.20181040>

Figure S1. **Transduction efficiency of DRG neurons.** (A) Representative photomicrographs of DRG neurons transduced with lentivirus expressing SARM1 dominant-negative mutants tagged with Venus (green) and counterstained with Hoechst 33342 to label nuclei (blue). (B) Data are presented as means \pm SE (SEM) of Hoechst positive cells expressing SARM1 dominant-negatives. More than 100 cells per well were counted, and data from at least three independent experiments were averaged for each construct. Bar, 25 μ m.

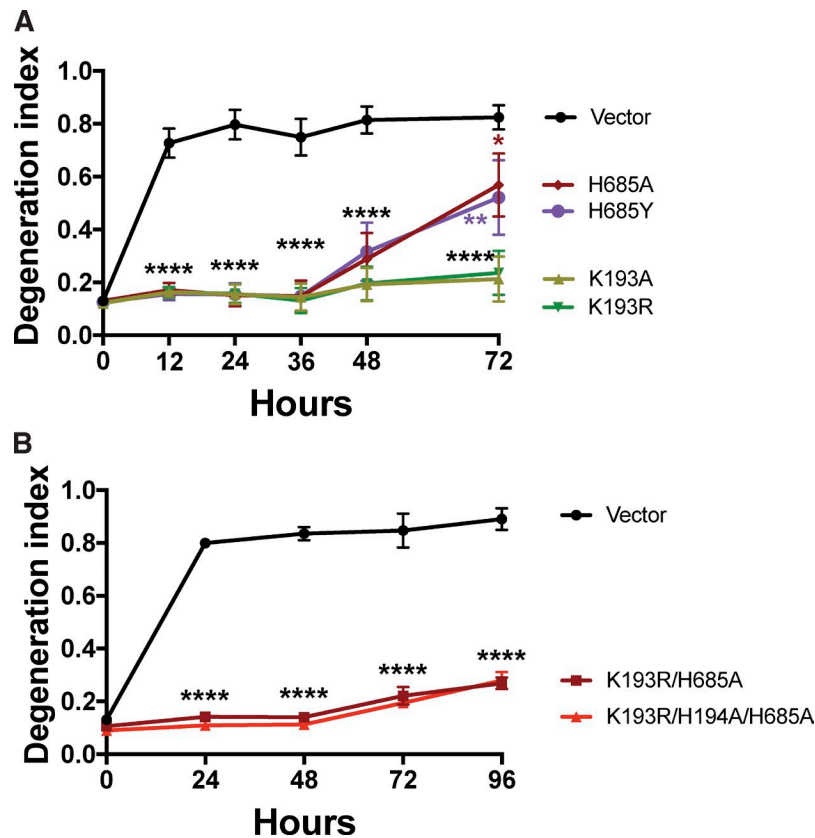


Figure S2. **Comparison of SARM1 dominant-negative transgenes. (A and B)** Axons of wild-type DRG neurons expressing the indicated constructs were transected and imaged using high-throughput automated imaging at indicated time points. AxD was quantified using a DI, which ranges from 0 (perfectly intact) to 1 (perfectly fragmented). Shown are means \pm SE (SEM) of three independent experiments, each reflecting averages of four wells per condition and experiment. The DI of at least six images was averaged per well. **(A)** Data were tested with a two-way ANOVA showing significant main effects of groups $F(4,13) = 22.77$; $P < 0.0001$; time, $F(5,65) = 48.59$, $P < 0.0001$; and interaction $F(20,65) = 15.31$; $P < 0.0001$; post hoc Tukey's multiple comparison test shows no statistical difference between H685A and H685Y or between K193R and K193A. Vector versus all constructs 12–48 h, ****, $P < 0.0001$; vector versus K193R and K193A 72 h, ****, $P < 0.0001$; vector versus H685A 72 h, **, $P = 0.0040$; vector versus H685Y 72 h, *, $P = 0.0225$. **(B)** Data were tested with a two-way ANOVA, which shows significant main effects of group $F(2,6) = 228.8$, $P < 0.0001$, time $F(5,30) = 189.9$, $P < 0.0001$, and interaction $F(10,30) = 54.53$, $P < 0.0001$. Tukey's multiple comparison test vector versus SARM1-K193R/H685A and versus SARM1-K193R/H194A/H685A, ****, $P < 0.0001$; SARM1K193R/H685A versus SARM1-K193R/H194A/H685A, no statistically significant difference.

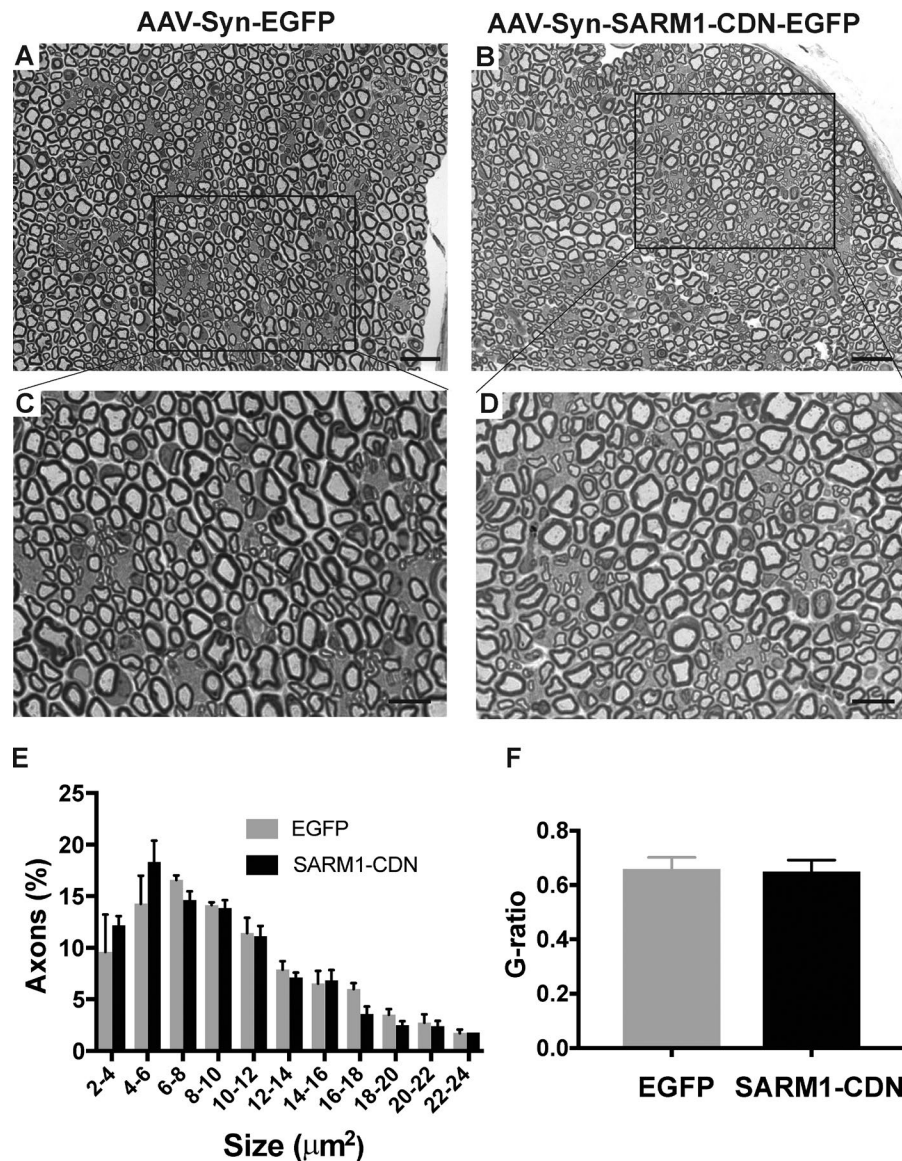


Figure S3. **No morphometric differences between uninjured sciatic nerves after injection with AAV-vector and AAV-SARM1 dominant-negative.** (A–D) Representative photomicrographs of toluidine blue–stained semithin cross sections of the uninjured sciatic nerve in mice injected with (A and C) EGFP vector (AAV-Syn-EGFP) or (B and D) AAV-Syn-SARM1-CDN-EGFP (AAV-SARM1-CDN-EGFP). C and D are enlargements of A and B, respectively. (E and F) Nerves of mice injected with AAV8-Syn-EGFP and AAV8-Syn-SARM1-CDN-EGFP exhibit no significant difference in axon size distribution (E) or G ratios, a measure of axonal myelination (F). Data are presented as means \pm SE (SEM) and were subjected to multiple (E) or simple (F) *t* tests ($n = 3$ per group). Bars, 20 μm (A and B); 10 μm (C and D).