Supplementary Information

Mechanosensitive ion channel inhibitors promote the stiffening of the plasma membrane of mouse sensory neurons

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Supplementary Figure 1. Young's modulus as a function of DRG sensory neurons size. The Young's modulus of sensory neurons was calculated from the first deformation \( E_1 \) for each subpopulation of DRG sensory neurons based on the diameter of the soma.
Supplementary Figure 2. Effect of mechanosensitive ion channels antagonists on Young’s modulus in function of DRG neurons size. Mean of normalized difference between Young’s moduli of both deformations in the absence and the presence of different concentrations of Gd$^{3+}$ (A), Ruthenium Red (B) or GsMTx-4 (C) in the medium. n = 4 mice, the bars indicate mean ± SEM.
Supplementary Figure 3. Cell size distribution of DRG sensory neurons for each experimental group. Distribution of soma diameter of DRG neurons without treatment (Control) or treated with Gd$^{3+}$, Ruthenium red or GsMTx-4 at the indicated concentrations. The top end of the box is the 75th percentile and the bottom end of the box is the 25th percentile, the median is marked by a horizontal line inside the box, the $\star$ indicates the mean, the whisker extends to ± 1.5 SD, the $\bigcirc$ indicate outliers and the $\bigtriangledown$ mark the minimum and maximum limit. n = 4 mice, the number in parenthesis at the bottom inside the plot indicates the number of cells tested in each group. As shown in the figure, the means and distribution of cell diameter are similar between the groups and showed no significant differences compared to the Control group (p < 0.05 ANOVA-Tukey).