

Supplementary Materials

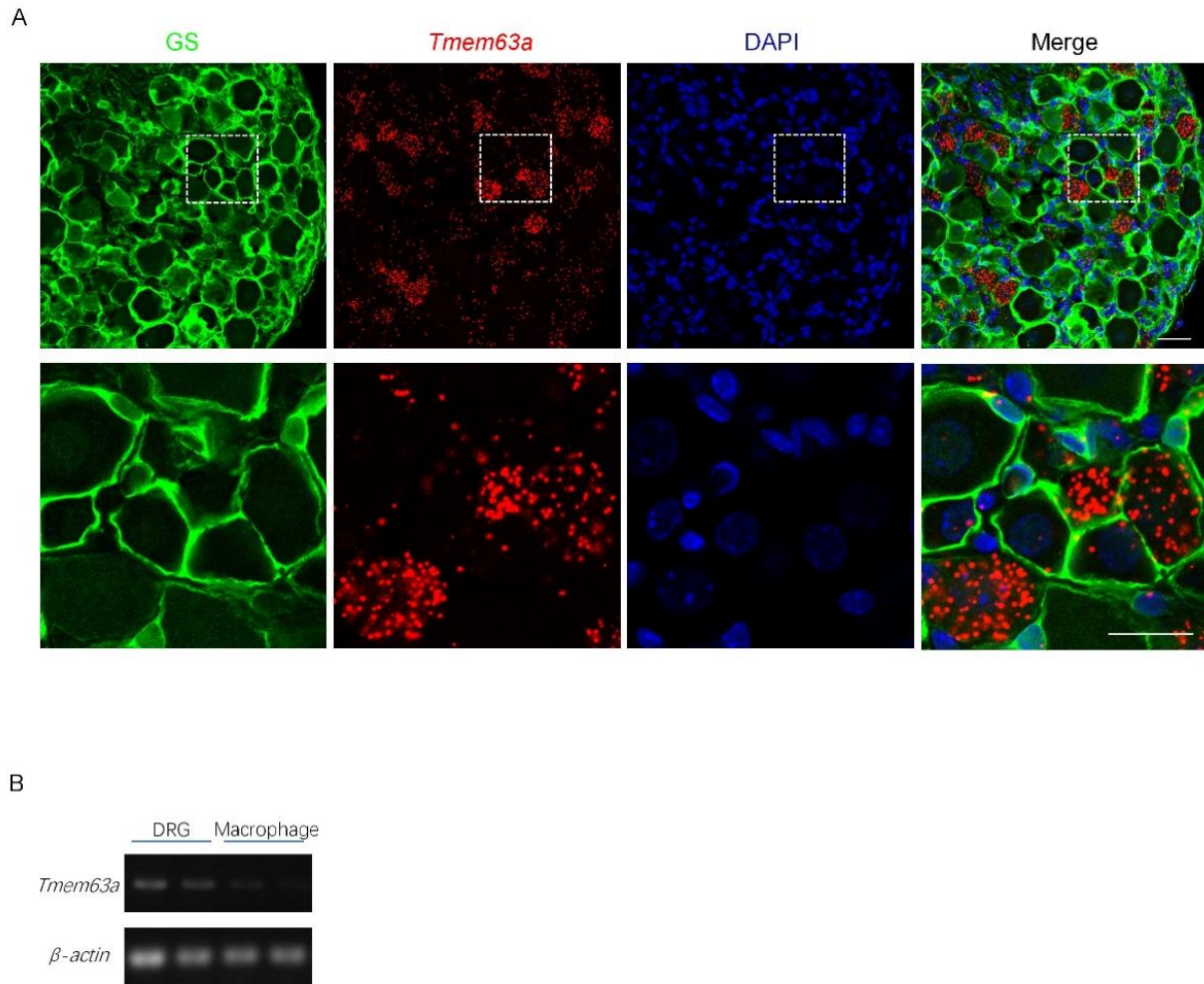


Fig. S1 The expression of TMEM63A in satellite glial cells and macrophages. **A** Representative images of ISH combined with IHC staining for the SGC marker GS (green) showing the expression of *Tmem63a* (red) in SGCs. The lower panels are partial enlargements of the boxed areas in the upper panels. Scale bars, 50 μ m (upper) and 25 μ m (lower). **B** RT-PCR images showing the expression of *Tmem63a* in FACS-purified peritoneal macrophages with CD68.

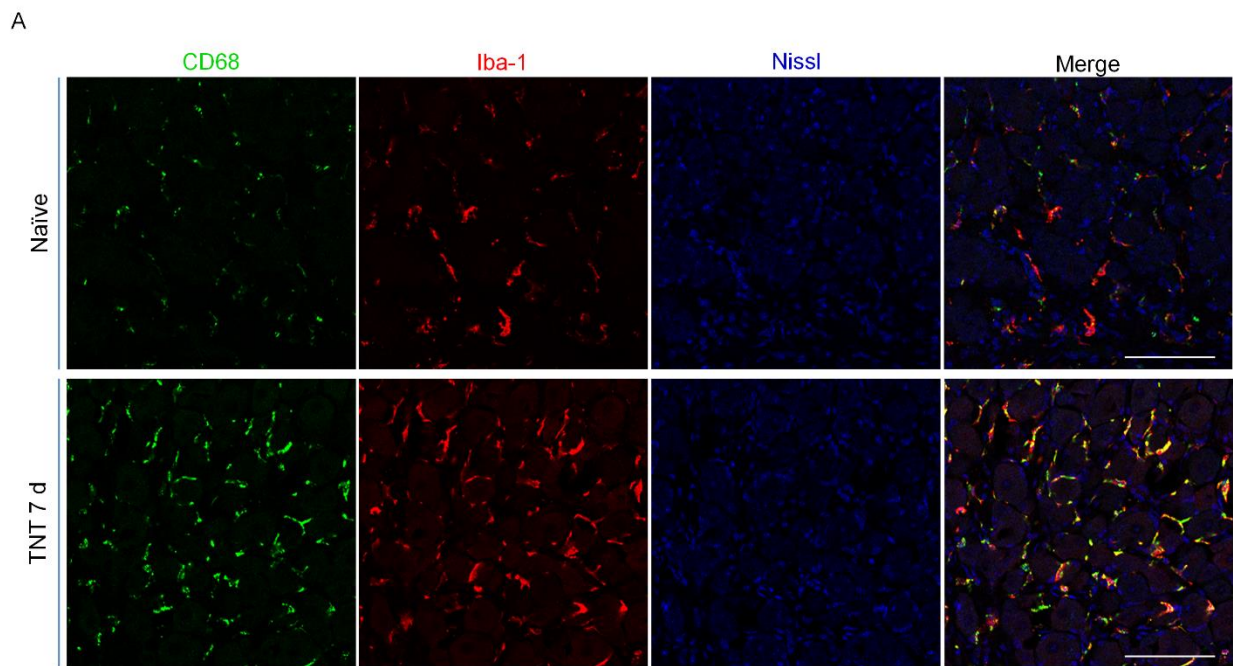


Fig. S2 Macrophage infiltration in the DRG of a naïve mouse and a TNT mouse. Double immunostaining with macrophage markers CD68 and Iba1 in the DRG from a naïve mouse and a day 7 TNT mouse (scale bars, 100 μ m).

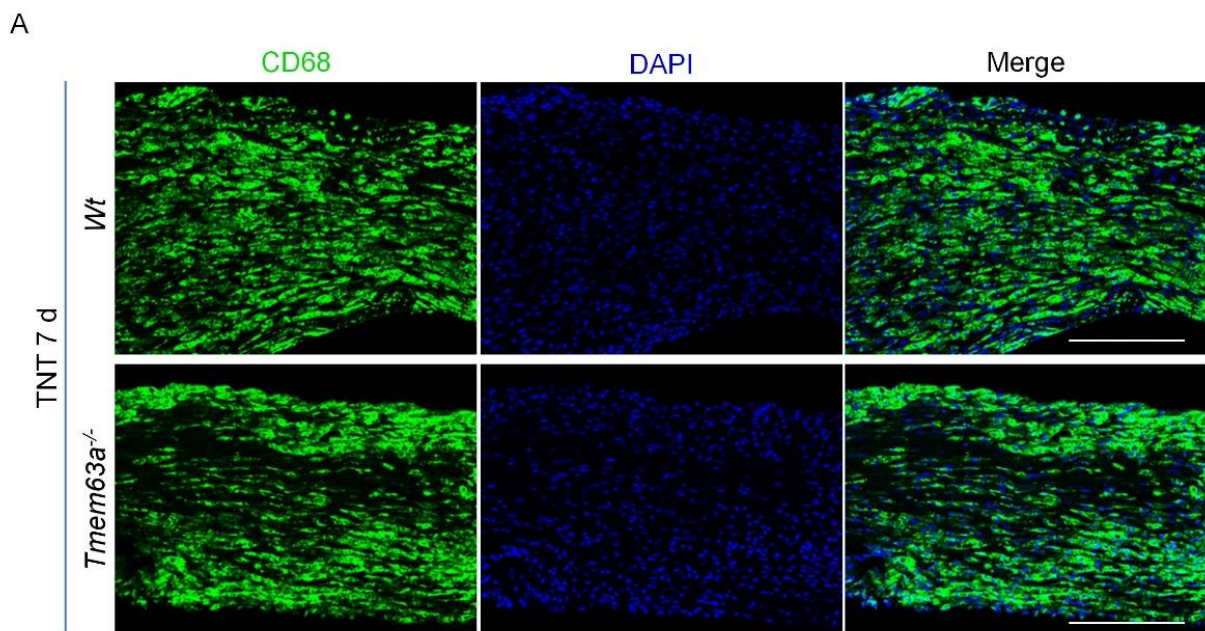


Fig. 3 Macrophage infiltration in the residual tibial stump of a WT and a *Tmem63a*^{-/-} mouse.

Immunostaining of CD68 in the residual nerve stump of WT and *Tmem63a*^{-/-} mice on day 7 after TNT surgery (scale bars, 100 μ m).

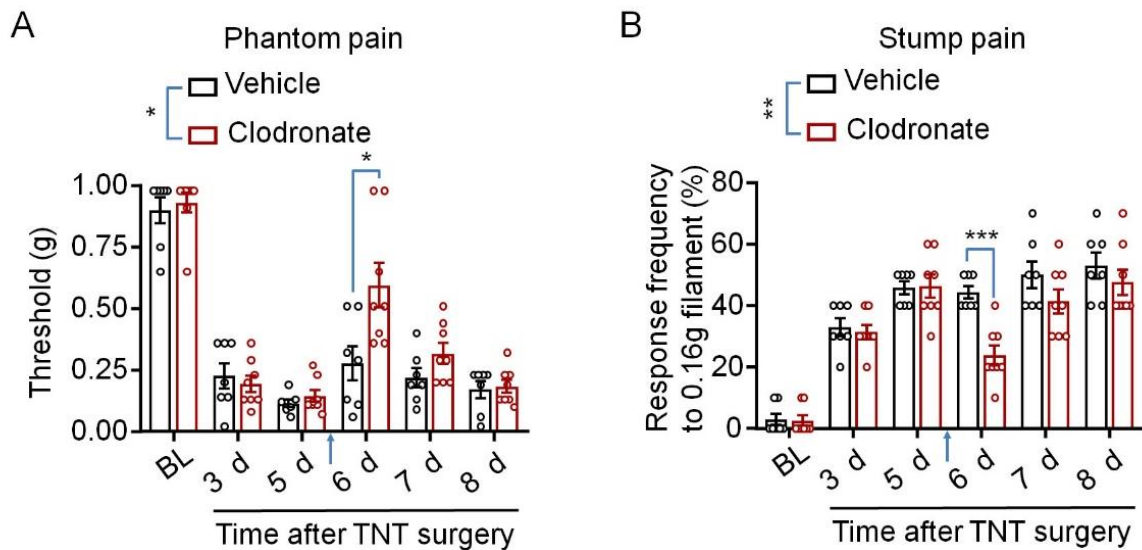


Fig. 4 The pain behaviors 24 h after macrophage ablation on day 5 after TNT. **A, B** Phantom pain (**A**) and stump pain (**B**) 24 h after intrathecal injection of clodronate liposomes on day 5 after TNT (blue arrows, time of intrathecal injection; $n = 7-8$; * $P < 0.05$, ** $P < 0.01$, *** $P < 0.001$, two-way ANOVA).

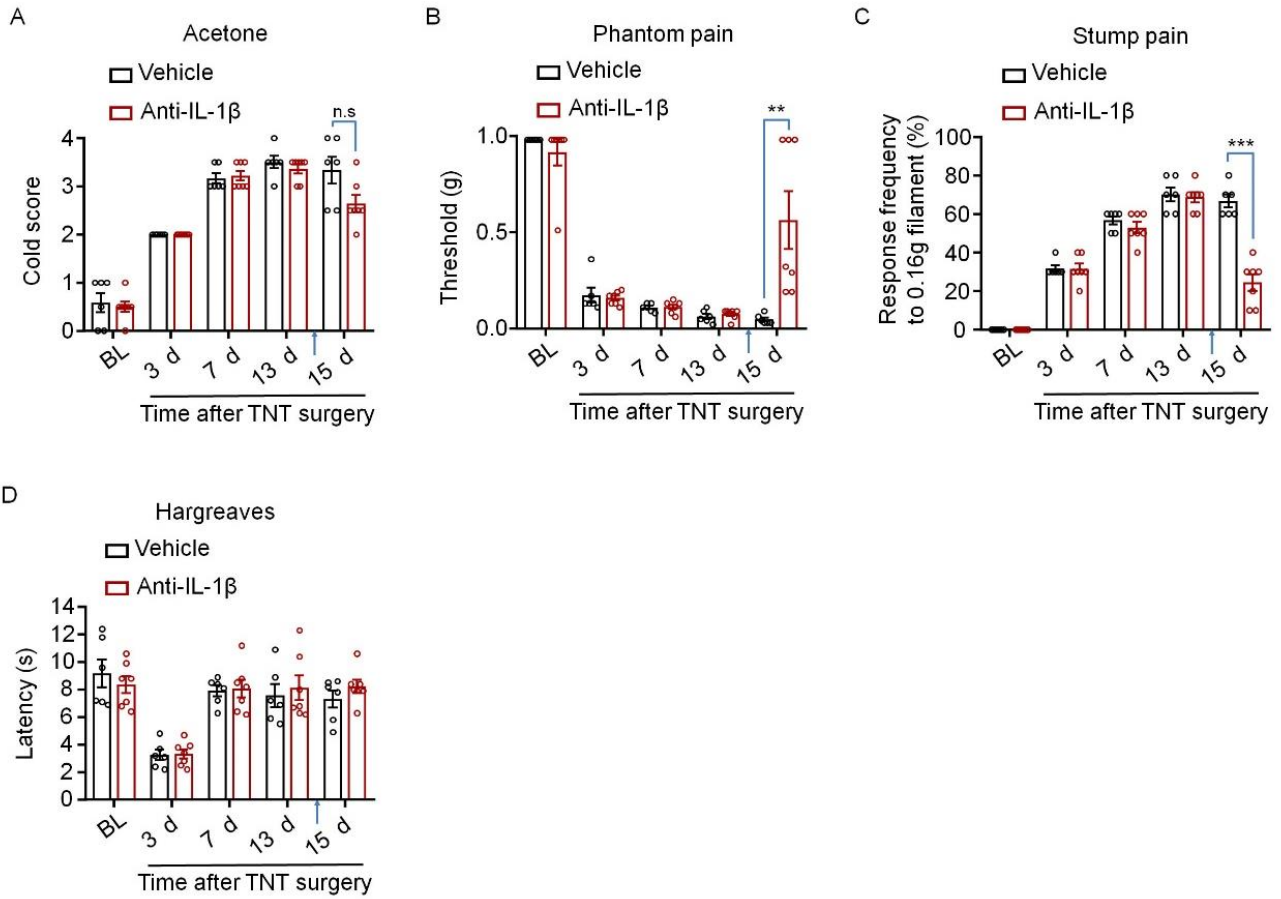


Fig. 5 The effect of IL-1 β neutralizing antibody on cold allodynia (A), phantom pain (B), stump pain (C), and heat hyperalgesia (D) in the TNT mouse model. Mice were given control antibody or IL-1 β neutralizing antibody (500 ng/ μ L, 10 μ L in saline) 15 days after TNT surgery. Blue arrows, time of intrathecal injection; $n = 6-7$; ** $P < 0.01$, *** $P < 0.001$, two-way ANOVA.