Supplementary Information
for

Promoting axon regeneration by enhancing the non-coding function of the injury-responsive coding gene *Gpr151*

Bohm Lee[#1], Jinyoung Lee[#1], Yewon Jeon[#1], Hyemin Kim[1], Minjae Kwon[1], Jung Eun Shin[1,2] and Yongcheol Cho[*1]

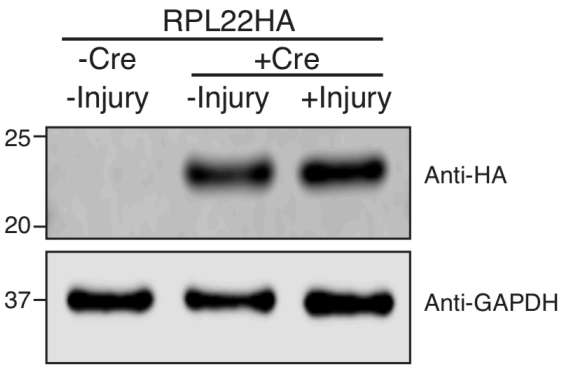
[1] Department of Life Sciences, Korea University, Seoul 02841, Republic of Korea

[2] Department of Molecular Neuroscience, Dong-A University College of Medicine, Busan 49201, Republic of Korea

This PDF file includes:

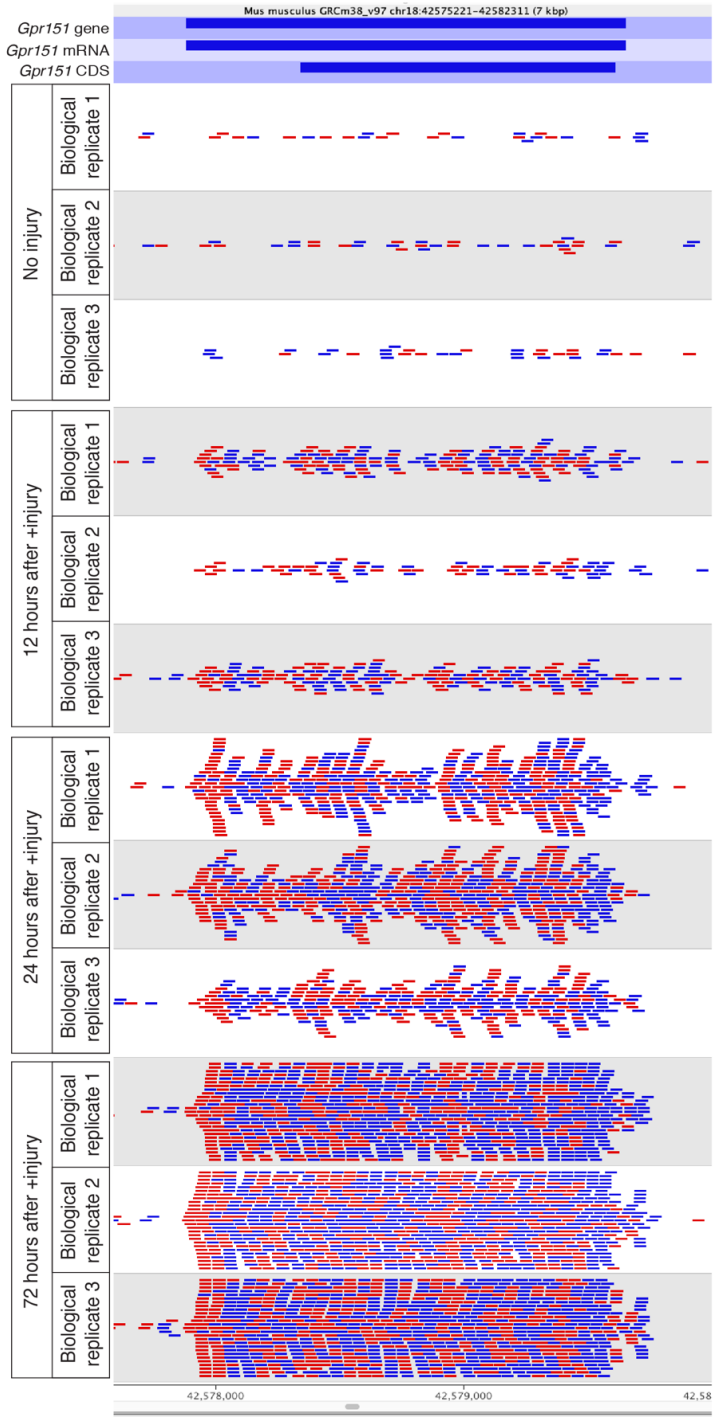
Supplementary figure 1 to 4

Supplementary Fig. 1.



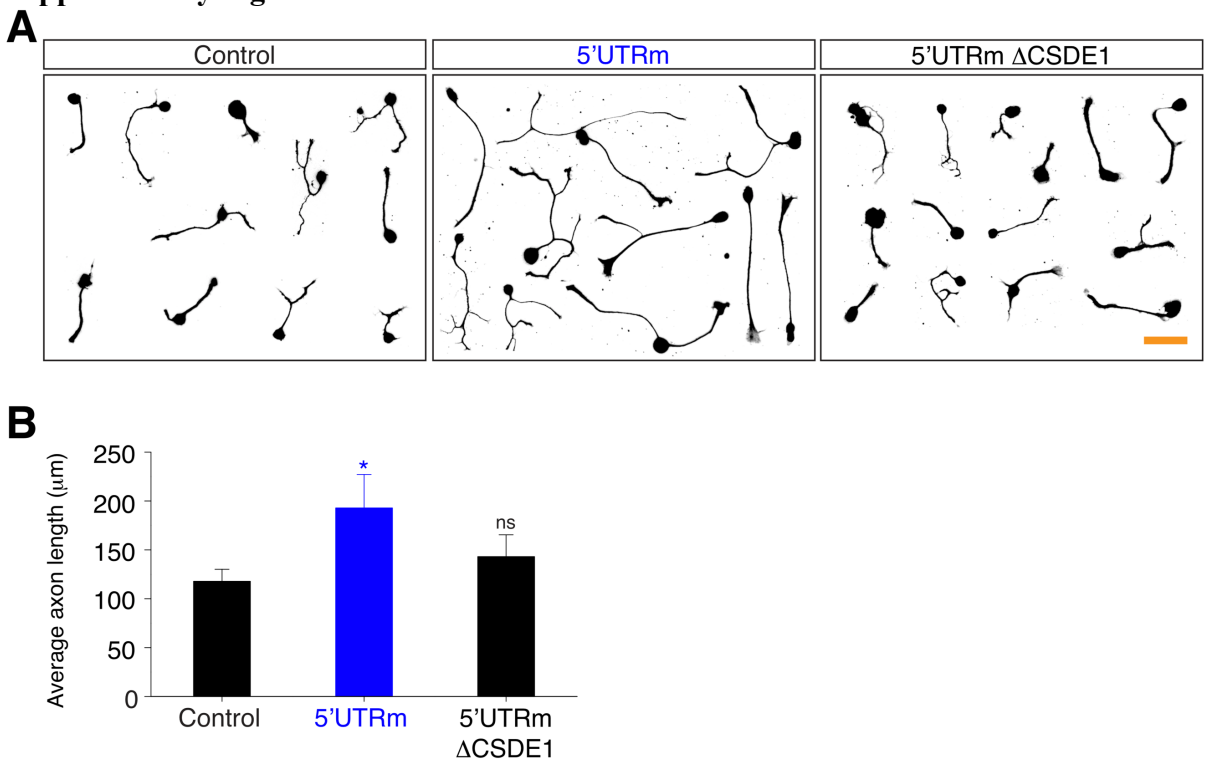
Western blot analysis of L4,L5 DRG tissues dissected from *RiboTag* x *Advillin*-Cre mice with (+Injury) or without (-Injury) sciatic nerve axotomy. Anti-HA epitope antibody was used to detect *Rpl22HA* protein, related to figure 1A.

Supplementary Fig. 2.



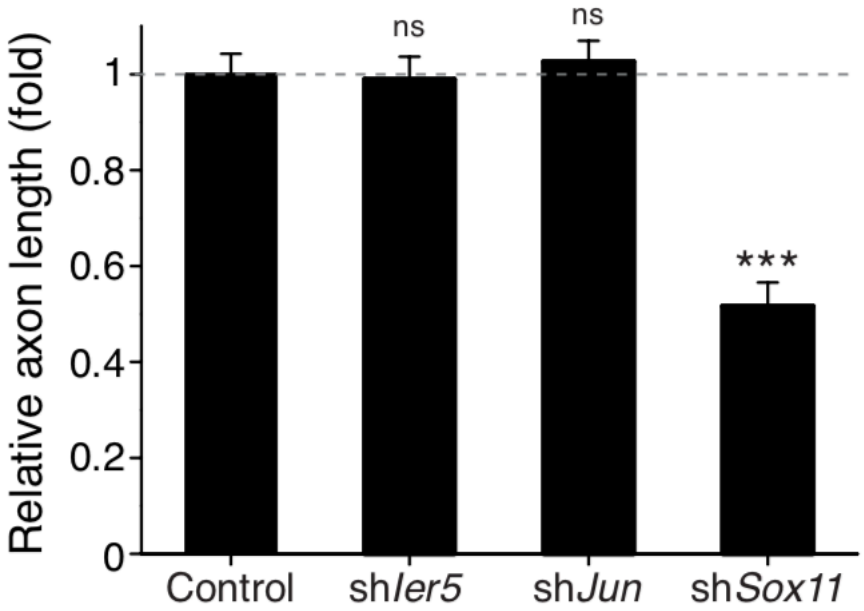
Visualization of the illumina sequencing results mapped with mouse *Gpr151* gene using SeqMonk.

Supplementary Fig. 3.



In vitro axon regeneration assay. (A) Representative images of control, 5'UTR$_m$-overexpressing, and 5'UTR$_m$ΔCSDE1-overexpressing embryonic DRG neurons. Scale bar, 100 μm. (B) Statistical analysis of regenerating axon length of (A) (n=254, 198, 167 for control, shCSDE1 and shKHDRBS1; ***p<0.001, ns, not significant by ANOVA followed by Tukey tests; mean±SEM). (B) Statistics of average of relative axon length of (A) (n=64, 55, 68 cells for control, 5'UTRm, 5'UTR$_m$ΔCSDE1; *p<0.05, ns, not significant by ANOVA followed by Tukey tests; mean±SEM).

Supplementary Fig. 4.



Statistical analysis of regenerating axon length of embryonic neurons of control, sh*Ier5*, sh*Jun*, sh*Sox11* (n=156, 79, 78, 45 for each condition; ***p<0.001, ns, not significant by ANOVA followed by Tukey tests; mean±SEM), related to figure 7A.