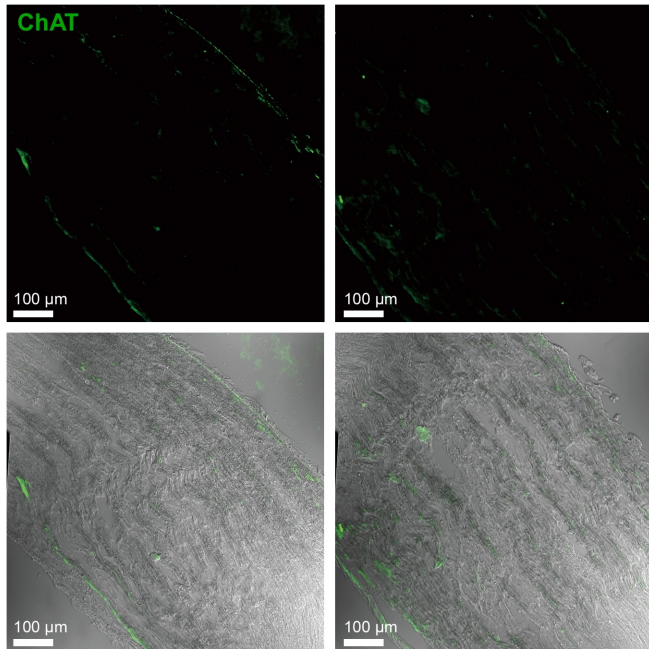
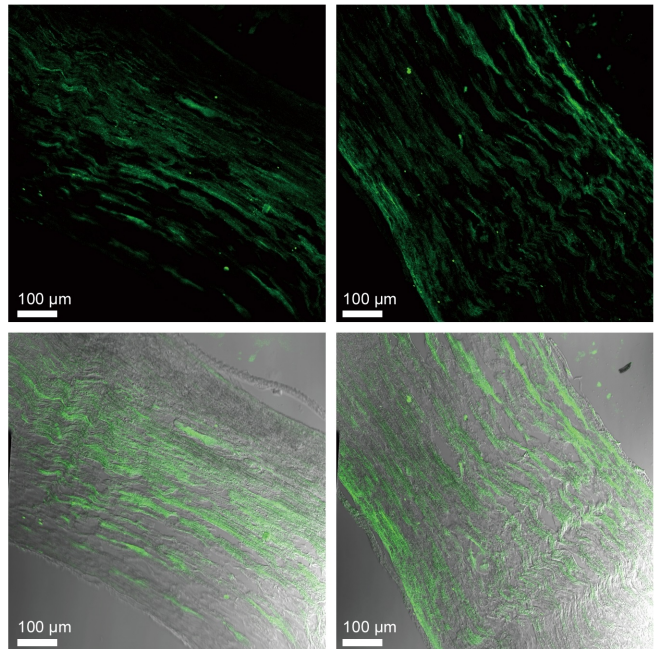


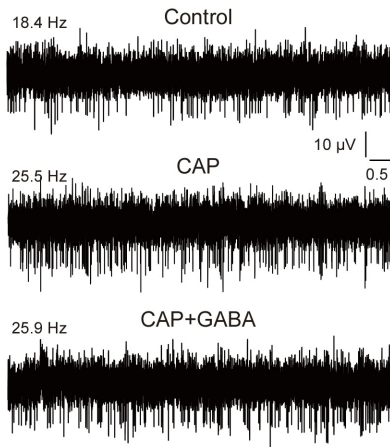
**A** L5 SN (2 weeks after VR transection)



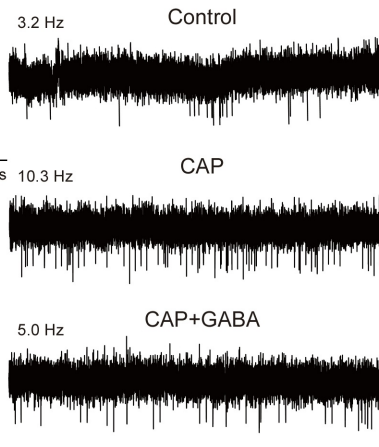
L5 SN (control; VR intact)



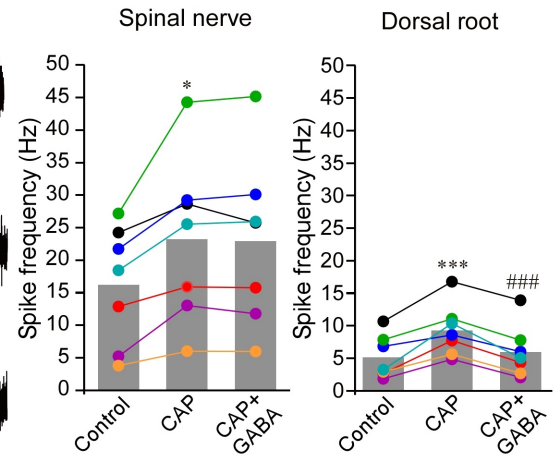
**B** Spinal nerve



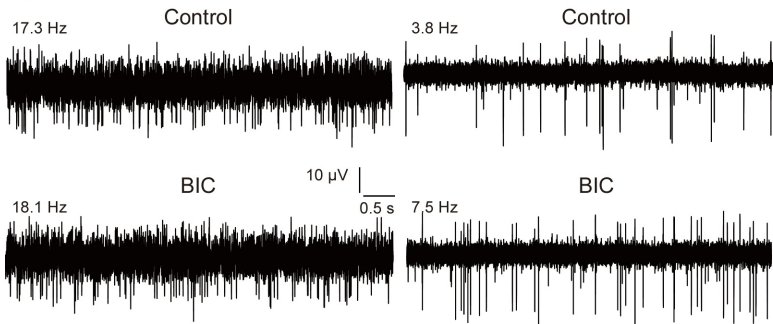
Dorsal root



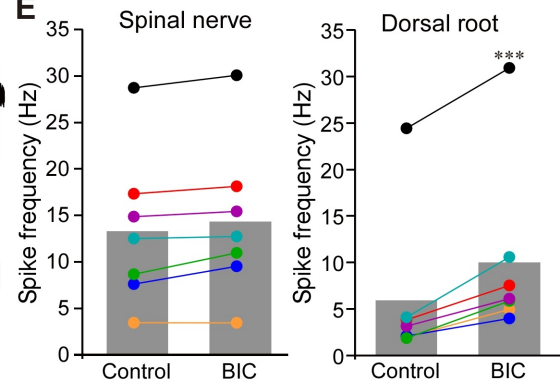
**C**



**D**



**E**



**S2 Fig. Efferent fiber elimination does not affect filtering at the DRG.** The ventral root was surgically transected as in Suppl. Fig. 1. The animals were left to recover (see Suppl. Methods) and further experiments were done 2 weeks after the transection. **(A)** Immunostaining of the L5 spinal nerve of control (right) and VR-transected animals for Choline Acetyltransferase (ChAT). **(B)** 2 weeks after the VR transection a baseline was recorded (control) and Capsaicin (CAP, 10  $\mu$ M, 50  $\mu$ l) was injected into the hindpaw. CAP increased firing frequency in both SN and DR branches of the nerve (middle traces, as compared to basal activity shown in the upper traces). Application of GABA (200  $\mu$ M, 3  $\mu$ l) to DRG reduced CAP-induced firing frequency in DR but not SN (bottom traces). **(C)** Summary for panel B. Two-factor (nerve site, drug application) repeated measures ANOVA: main effects associated with nerve site [ $F(1,12)=15.8$ ;  $p<0.01$ ] and drug application [ $F(2,11)=34.8$ ;  $p<0.01$ ]; significant interaction between nerve site and drug application [ $F(2,11)=7.7$ ;  $p<0.05$ ]. Bonferroni post-hoc test: \*,\*\*\*significant difference from control ( $p<0.05$ ,  $p<0.001$ ); ##significant difference from CAP ( $p<0.01$ ). **(D)** GABA<sub>A</sub> antagonist bicuculline (BIC, 200  $\mu$ M, 3  $\mu$ l) was applied to DRG; hindpaw was not stimulated. **(E)** Summary for panel D. Two-factor repeated measures ANOVA: main effects associated with nerve site [ $F(1,12)=12.9$ ;  $p<0.05$ ), drug application [ $F(1,12)=52.9$ ;  $p<0.001$ ), significant interaction between nerve site and drug application [ $F(1,12)=14.8$ ;  $p<0.01$ ]. Bonferroni post-hoc test: \*\*\*significant difference from control ( $p<0.001$ ). Metadata for quantifications presented in this figure can be found at <https://archive.researchdata.leeds.ac.uk/1042/>