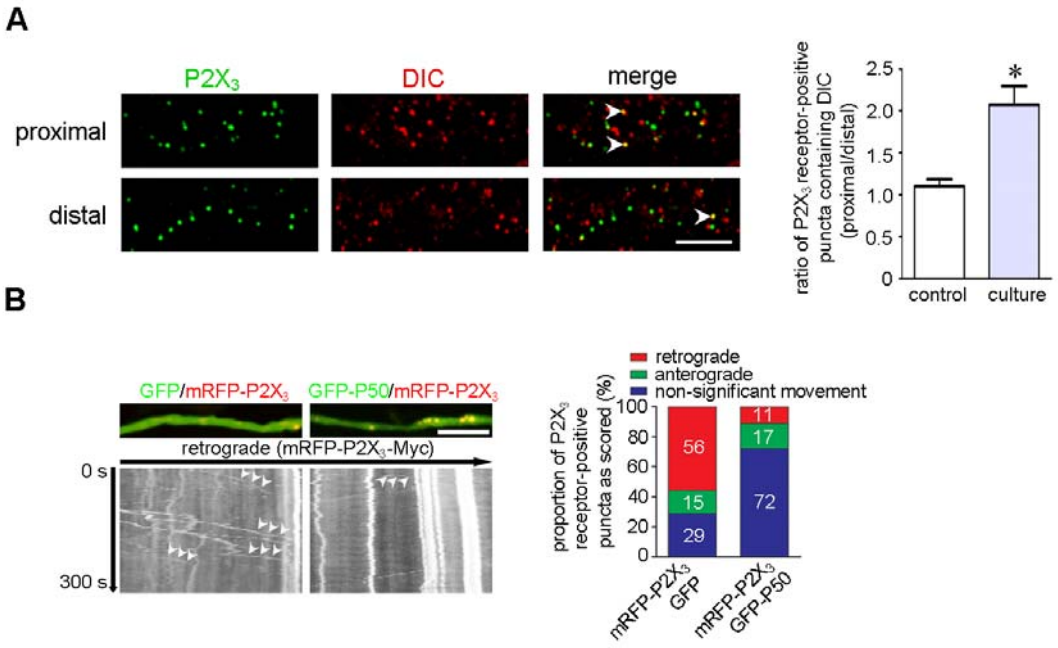

Supplementary information, Figure S4 Dynein complex mediated the retrograde transport of $P2X_3$ receptors.

(**A**) As in Figure 6B, representative images showed that DIC co-localized with $P2X_3$ receptor at both the proximal and the distal 0.5 cm sciatic nerve segments cultured for 10 h at 37° C. The retrograde-transported ratio calculated from the percentages of $P2X_3$ receptor-positive puncta containing DIC in the proximal versus distal segments showed a significant increase in cultured nerves compared with that in the freshly collected nerves. *, $P < 0.05$ versus control ($n = 3$, unpaired *t*-test). Scale bar, 10 μm. (**B**) Cultured DRG neurons were co-transfected with either mRFP-$P2X_3$-Myc/GFP or mRFP-$P2X_3$-Myc/GFP-P50. Axonal movement of these signals was captured by live imaging and representative images were shown. Kymographs derived from these time-lapse image series showed that over-expression of GFP-P50 induced most mRFP-$P2X_3$-Myc-positive puncta showing non-significant movement. The data regarding the percentages of retrograde, anterograde and non-significant movement were quantitated and shown. Scale bar, 5 μm.