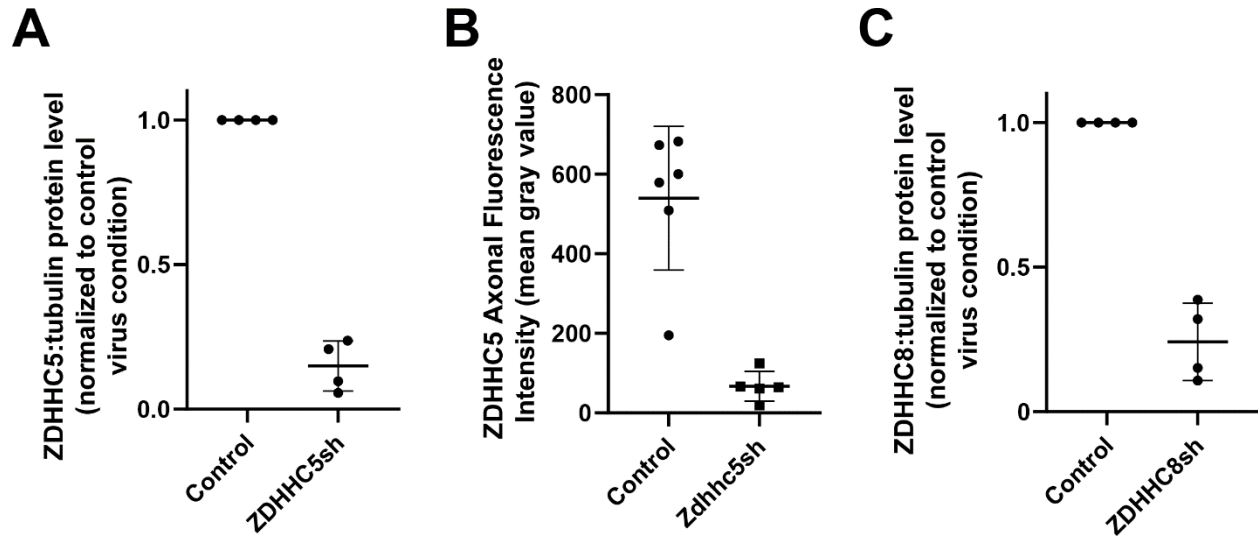


**Supplementary Figure S1: Several ZDHHC-PATs Colocalize with the Golgi Marker GM130 in DRG neurons.** Cultured DRG neurons were infected with control lentivirus expressing GFP plus a second virus expressing the indicated HA-tagged ZDHHC-PAT. Cultures were fixed and immunostained with the indicated antibodies. Right hand column shows line profile plots, generated for each PAT by measuring the Average Gray values for both HA (red line) and GM130 (cyan line) fluorescent signals along the yellow line shown in the overlay image.



**Supplementary Figure S2: Confirmation of effective knockdown of ZDHHC5 and ZDHHC8 by their respective shRNAs in DRG neurons.** (A) DRG neurons were infected with the indicated viruses and lysates western blotted to detect ZDHHC5 and tubulin as in Figure 2A. Data from 4 determinations per condition confirm that *Zdhhc5* shRNA reduces ZDHHC5 protein level by  $85.1 \pm 4.3\%$ . (B) Quantified axonal ZDHHC5 fluorescent signal from DRG neurons infected with the indicated lentiviruses, similar to Figure 2C. Data from 5-6 neurons per condition confirm that *Zdhhc5* shRNA reduces ZDHHC5 fluorescent signal in axons by  $87.6 \pm 3.1\%$  (C) As A, except that DRG neurons were infected with the indicated viruses and lysates western blotted to detect ZDHHC8 and tubulin, similar to Figure 3E. Data from 4 determinations per condition confirm that *Zdhhc8* shRNA reduces ZDHHC8 protein level by  $75.2 \pm 6.7\%$ . All data are mean  $\pm$  SD.