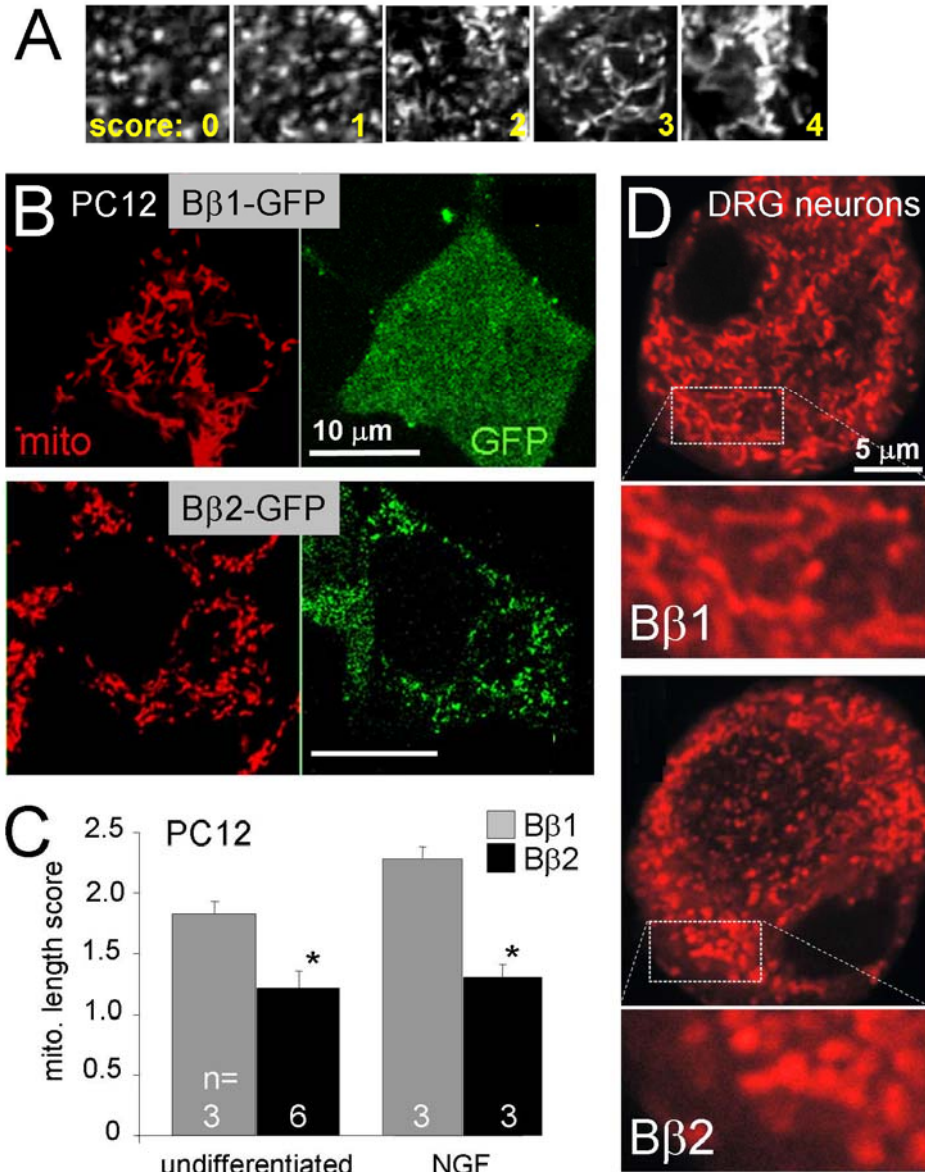


SUPPL. FIG. 1. **ShRNA-mediated silencing.** **A**, hippocampal cultures were cotransfected with a 1:1:2 mass ratio of plasmids expressing the indicated target proteins fused to the N terminus of firefly luciferase (luc), Renilla luciferase, and shRNAs (NS=nonsense). Knockdown was assessed 3 d later by dual-luciferase assays. The B $\beta$ 2 and Fis1-directed shRNAs were as effective as a positive control shRNA targeting the luc coding sequence (37). **B**, PC12 cells stably expressing FLAG-epitope tagged B $\beta$ 2 were transfected with plasmids expressing the indicated shRNAs, and lysates were immunoblotted 3 d later for B $\beta$ 2 and ERK1/2 as a loading control.



SUPPL. FIG. 2. **PP2A/Bβ2 induces mitochondrial fragmentation in PC12 cells and dorsal root ganglion neurons.** **A**, reference images for quantification of mitochondrial morphology (confocal images of TMRM-stained mitochondria in hippocampal neuron somata, increasing length scores from 0 to 4). **B-D**, PC12 cells were transfected (B,C) and dorsal root ganglion neurons were virally transduced (D) with Bβ1- or Bβ2-GFP and morphology of TMRM-stained mitochondria (mito) was assessed by confocal microscopy. Representative images are shown in (B) and (D), while (C) shows quantification of mitochondrial morphology in undifferentiated and differentiated (3 d + 20 ng/ml NGF) PC12 cells (means ± S.E. of 3-6 experiments; \*p<0.05 by Student's t-test comparison between Bβ1- and Bβ2-transfected cells).