



Supplementary Figure 1. Expression of sAC in rat neurons. **(a)** E15 rat DRG explant cultures (DIV 3) were labeled with an anti-sAC antibody (R37), that is directed against aa 435-466 of human sAC. Similar to R21 staining (Fig. 1a-c), sAC immunoreactivity (green) was detected throughout the axon and the central portion of the growth cone. Scale bar 40 μ m. **(b-d)** **(b)** E15 rat spinal cord sections were labeled with anti-sAC (R37). **(c)** Commissural axon tracts in the spinal cord were labeled with anti-Tag-1. **(d)** Control spinal cord immunostaining with no primary antibody. Scale bar 100 μ m. **(e-g)** All sAC-positive axons are commissural axons. **(e)** The commissural axons in the E15 rat DSC explant cultures were labeled with an anti-TAG-1 antibody (green). **(f)** Axons were stained with antibody directed against sAC (red). **(g)** Overlay of **(e)** and **(f)**. Scale bar 20 μ m. **(h-j)** sAC immunoreactivity was detected in dendrites and axons of stage III rat hippocampal neurons. **(h)** sAC (green) was detected using anti-sAC (R37). **(i)** Neurites were labeled with an antibody directed against Tuj1 (red). **(j)** Overlay of **(h)** and **(i)**. Scale bar 20 μ m.