



Suppl Fig. 2. Fluorescent in situ hybridization (FISH) analysis of miR-30b expression in the cortex and hippocampus. **a.** FISH analysis of miR-30b scramble as a negative control. **b.** Detection of miR-30b expression in the mouse brain. **c.** Detection of miR-124 expression in the mouse brain as a positive control of FISH analysis. Scale bars (**a-c**): 500  $\mu\text{m}$ .

**d.** Expression of miR-30b in human cortex and hippocampus. Scale bars: 40  $\mu\text{m}$ .

**e** miR-30b is primarily expressed in neurons of mouse brains indicated by well colocalized miR-30b with neuronal marker NeuN in the cortex (Ctx), hippocampal CA1, and dentate gyrus (DG).

Scale bars: 500 and 50  $\mu\text{m}$ . **f** Expression of miR-30b is lower in astrocytes indicated by not well colocalized miR-30b with GFAP, an astrocytic marker, in the cortex (Ctx), hippocampal CA1, and dentate gyrus (DG). Scale bars: 50  $\mu\text{m}$ .