

Supplementary Materials

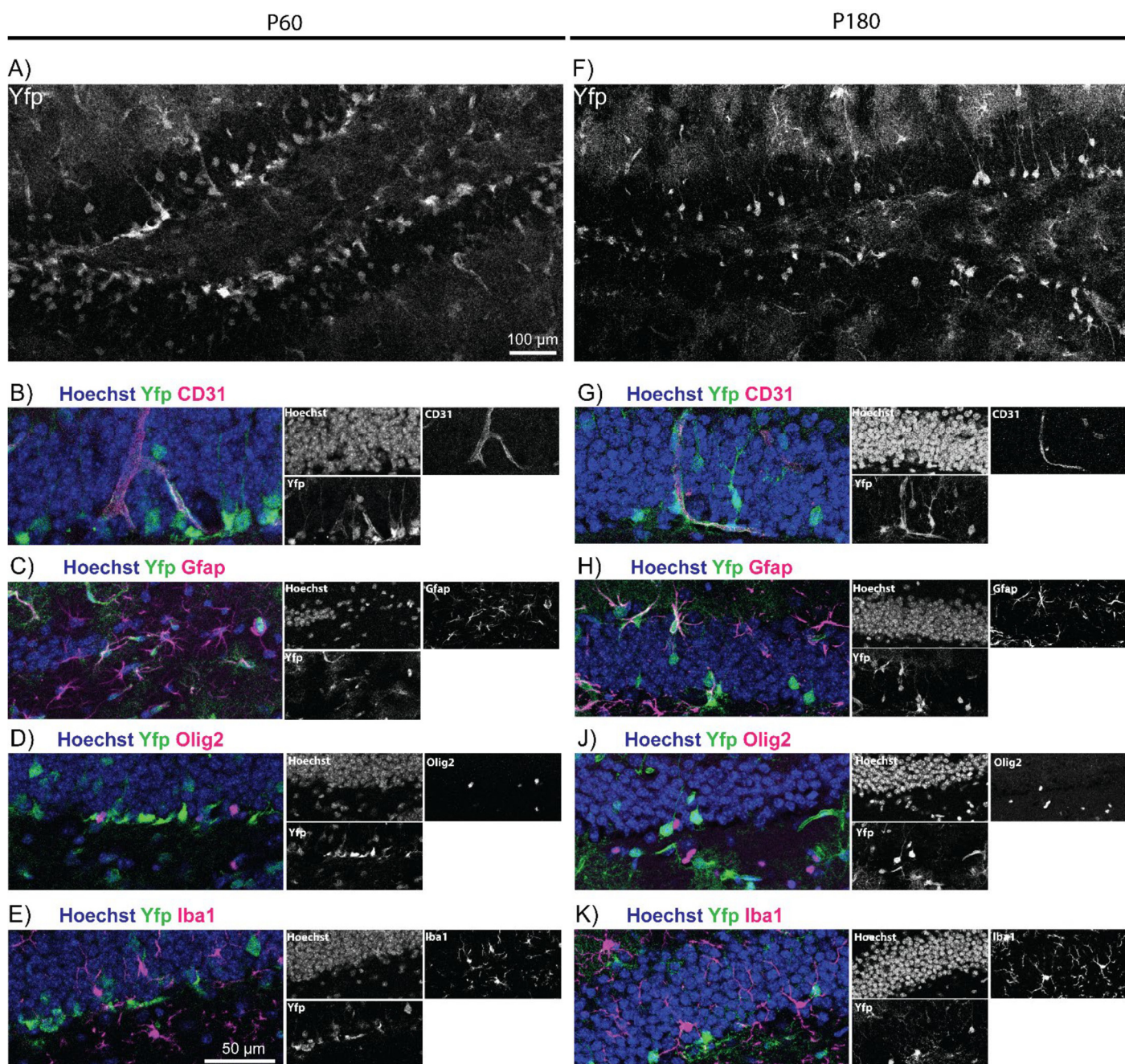


Figure S1. Oatp1c1 expression in non-neuronal cells: Male mice carrying the Oatp1c1-CreERT2 and an EYFP allele were subjected to 5 days of tamoxifen treatment and analysed 72 h after the last injection. **(A)** Using P60 mice, pronounced Yfp expression was seen in the dentate gyrus area. In detail, Yfp (in green) immuno-reactivity was visible in subsets of **(B)** CD31 (magenta) positive endothelial cells, **(C)** Gfap (magenta) positive astrocytes, but not in **(D)** Olig2 (magenta) positive oligodendroglia cells and **(E)** Iba1 (magenta) positive microglia. Likewise, mice were subjected to the same treatment at the age of 6 months (P180). Again, Yfp (in green) positive signals were observed in the entire dentate gyrus area **(F)** and specifically in a subset of **(G)** CD31 (magenta) positive endothelial cells, **(H)** Gfap (magenta) positive astrocytes, but not in **(J)** Olig2 (magenta) positive oligodendroglia cells and **(K)** Iba1 (magenta) positive microglia. Single channel pictures are presented in grey scale. Scale bars: 100 μ m (A and F), 50 μ m (B-E and G-K).

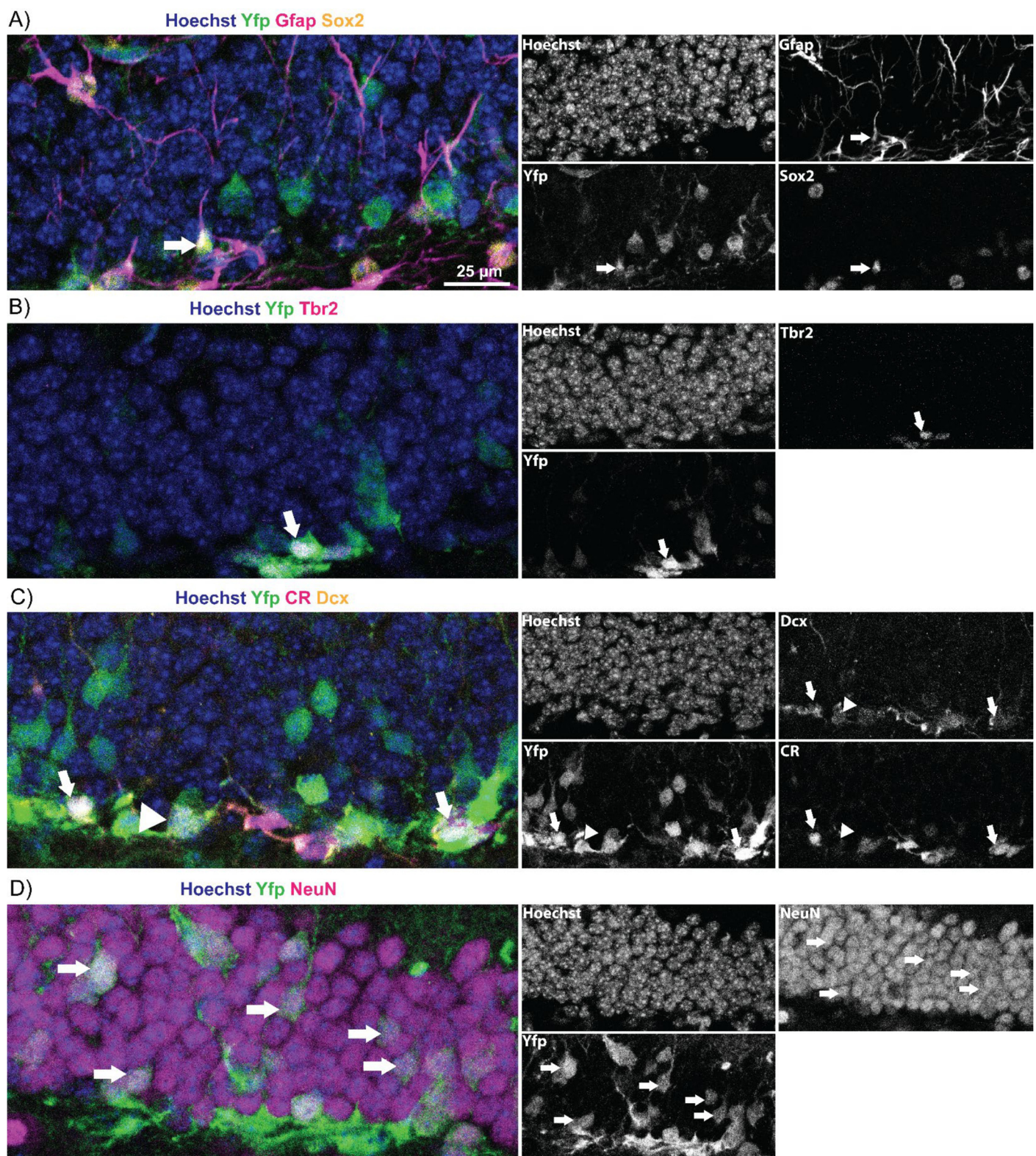


Figure S2. Oatp1c1 expression in adult hippocampal lineage cells at P60. Yfp (green) immuno-reactivity was detected in (A) Gfap+ (magenta), Sox2+ (yellow) NSCs that extend a radial process into the granule cell layer (arrow), (B) Tbr2+ (magenta) TAPs; (C) Dcx+ (yellow), CR- (magenta) neuroblasts and Dcx+/CR+ immature neurons; and (D) NeuN+ (magenta) neurons. Hoechst33258 labelled nuclei appear blue. Single channel pictures are displayed in grey scale. Scale bar: 25 μ m.

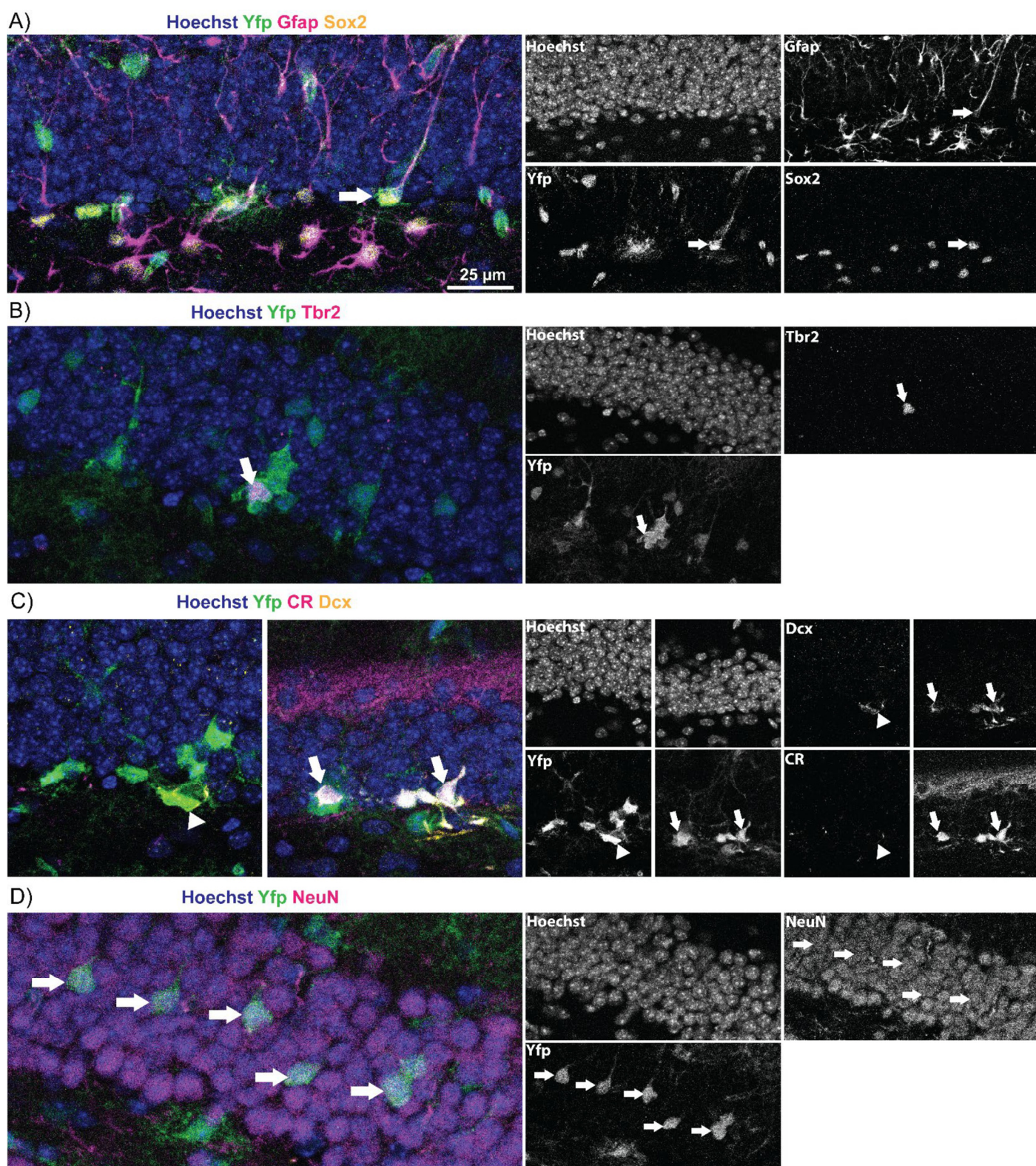


Figure S3. Oatp1c1 expression in adult hippocampal lineage cells at P180. Yfp immuno-reactivity shown in green was present in subsets of (A) Gfap+ (magenta), Sox2+ (yellow) NSCs extending a single radial process into the granule cell layer (arrow), (B) Tbr2+ (magenta) TAPs; (C) Dcx+ (yellow), CR- (magenta) neuroblasts and Dcx+/CR+ immature neurons, and (D) NeuN+ (magenta) neurons. Cell nuclei were counter-stained with Hoechst33258 (blue). Single channel pictures are presented in grey scale. Scale bar: 25 µm.

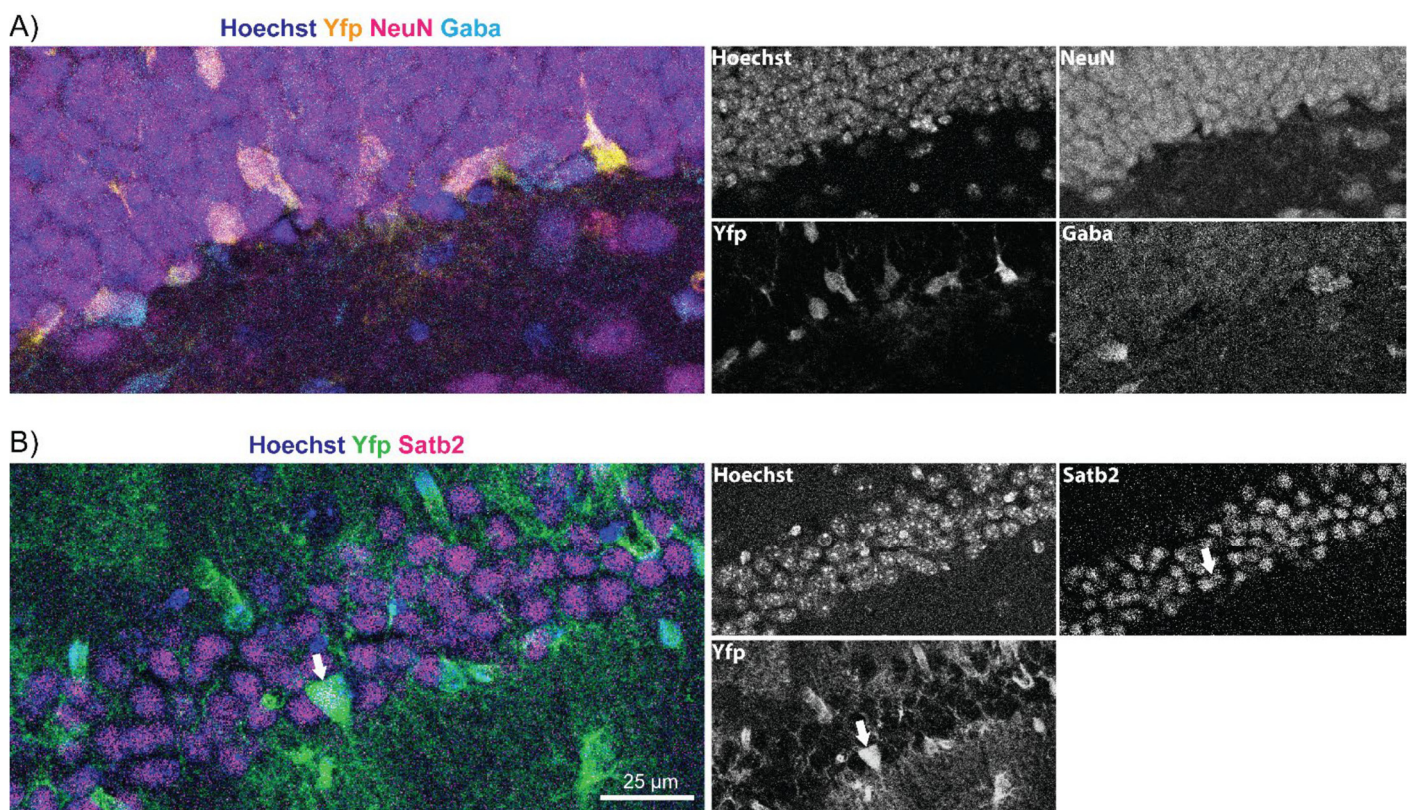


Figure S4. Oatp1c1 expression in neuronal subtypes. **(A)** Yfp (yellow)/NeuN (magenta) double positive neurons in the granule cell layer of P180 animals do not co-localize with GABA (cyan). **(B)** In the CA1 area of P60 animals, distinct pyramidal cell neurons positive for Satb2 (magenta) co-express Yfp (green). In both co-labelling studies, Hoechst33258 counter-stained nuclei are depicted in blue. Single channel pictures are shown in grey scale. Scale bar: 25 μ m.

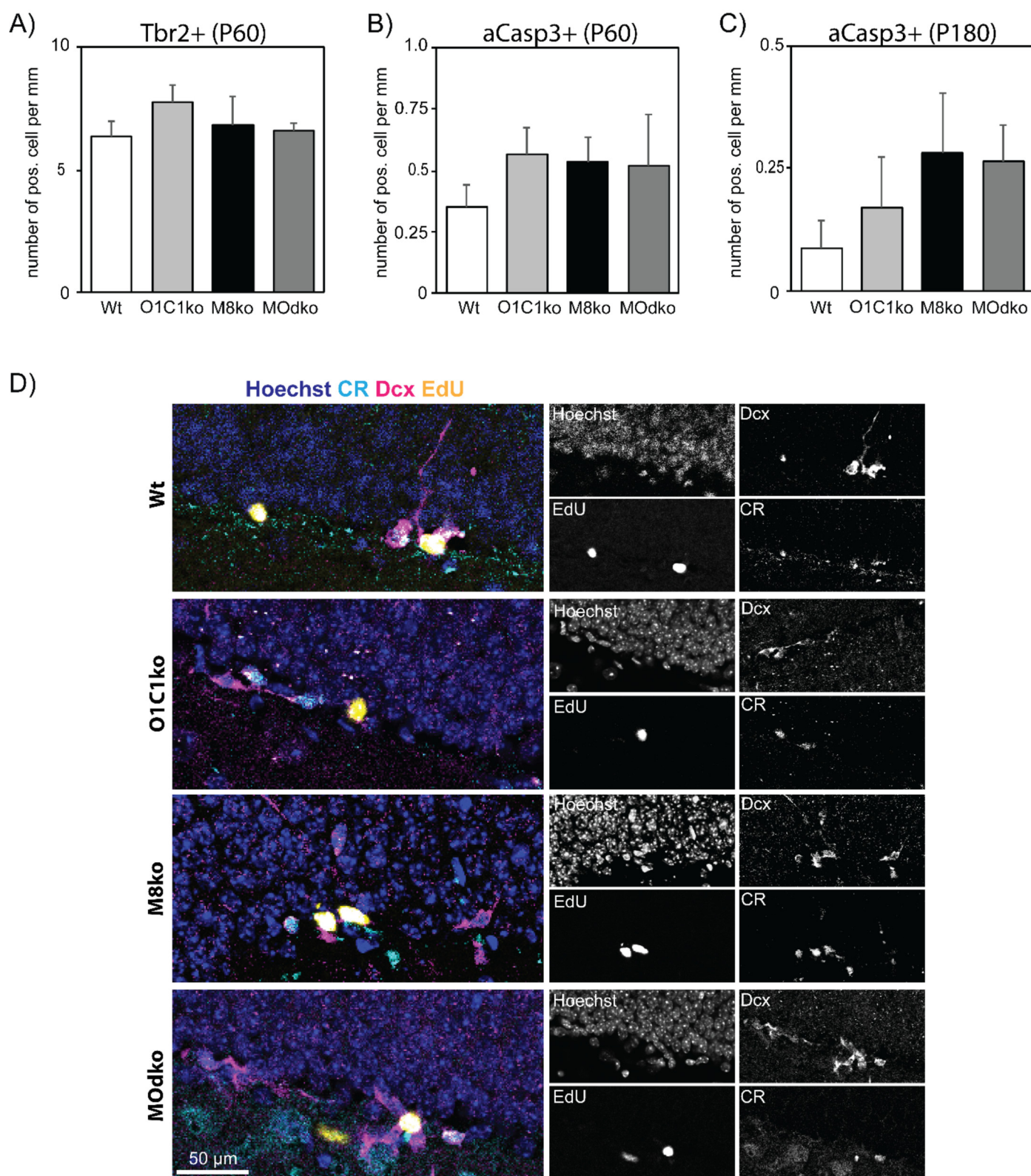


Figure S5. Progenitors in the SGZ in TH transporter deficiency. Transiently amplifying progenitors were analysed and numbers of Tbr2 positive cells were enumerated at P60 (A). Cleaved caspase 3 (aCasp3) positive cell numbers were quantified at P60 (B) and P180 (C). (D) 3 days after label injection, EdU (yellow) incorporation into Dcx+ (magenta) /CR+ (cyan) double positive immature neurons was analysed at P180. Hoechst33258 labelled cell nuclei are shown in blue. Single channel pictures are displayed in grey scale. Scale bar: 50 μ m.