

### **Supplementary Figure 2.**

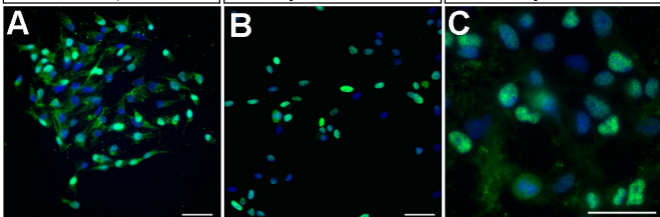
Co-expression of Mash1 and lineage-specific markers in neurosphere cultures from the neonatal SVZ. (A-C) Mash1 immunostaining of neurosphere cells plated for 2 hrs (A), or dissociated and cultivated for 1 day in EGF and FGF2 (B), followed by 3 days in FGF2 (C), showing Mash1 expression in a subset of cultured progenitor cells. (D-F) double antibody labelling for Mash1 (green) and  $\beta$ III-tubulin (D, red), NG2 (E, red), or GFAP (F, red), and counterstaining with DAPI, illustrating that in progenitor cultures maintained for 3 days in serum-containing medium, a large fraction of Mash1+ cells are neuronal (D) or oligodendrocyte (E) precursors, while very few are astrocytes (F). (G) analysis of cultures of dissociated neurosphere cells sequentially cultivated in EGF+FGF2 to select for progenitor cells, in FGF2 to expand progenitors, and in serum to differentiate them. The proportion of Mash1+ cells (black line) decreases as cells mature. Whereas most Mash1+ cells do not express lineage-specific markers at the beginning of the culture, suggesting that they may be multipotent at this stage, the proportion of Mash1+ neuronal precursors (green line) and Mash1+ OPCs (red line) increases transiently before falling down as cells differentiate. Scale bars: 20  $\mu$ m.

## Mash1 / DAPI

neurosphere

1 day in EGF+FGF

+3 days in FGF

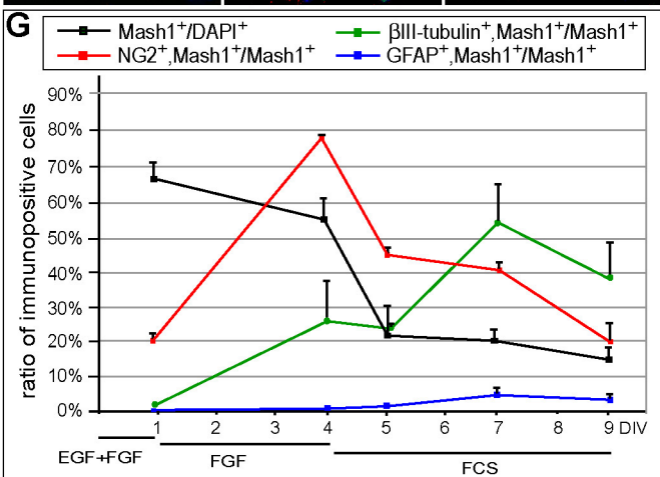
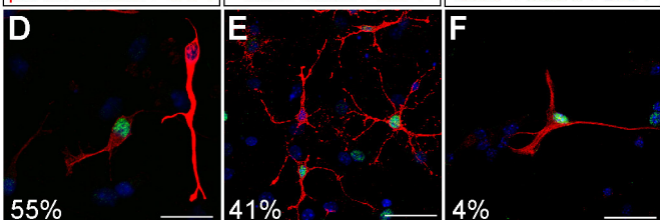


+3 days in FCS

 $\beta$ III-tub / Mash1 / DAPI

NG2 / Mash1 / DAPI

GFAP / Mash1 / DAPI



Supplementary figure2