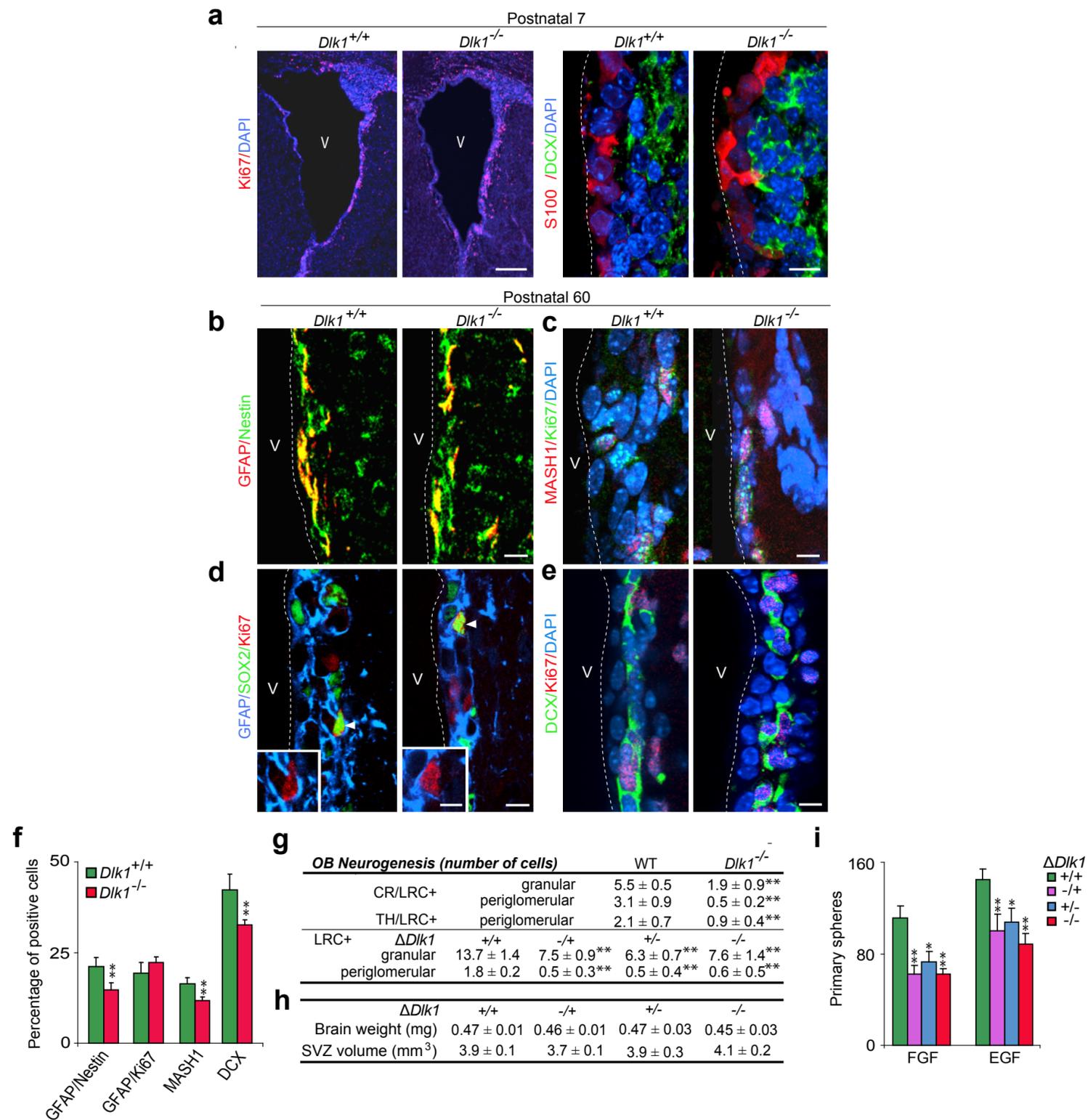


Supplementary Figure 3



Supplementary Figure 3. An increase in postnatal stem cell cycling parameters gives rise to exhaustion of the stem cell pool in the adult. (a) Immunohistochemistry for Ki67 (red) or DCX (green) on coronal sections of SVZ from wild-type and *Dik1*^{-/-} mice at postnatal age 7 (left panel). Immunohistochemistry for DCX (green) and S100 β (red) at the same stage (right panel). (b) Immunohistochemistry for GFAP (red) and Nestin (green) within the adult SVZ of wild-type and *Dik1*^{-/-} mice. (c) Immunohistochemistry for transit amplifying progenitors (TAP), showing MASH1 (red) and Ki67 (green). (d) Immunohistochemistry for GFAP (blue), SOX2 (green) and Ki67 (red) within the adult SVZ of wild-type and *Dik1*^{-/-} mice. Insets show high magnification images. (e) Immunohistochemistry for DCX (green) and Ki67 (red) in the adult SVZ of wild-type and *Dik1*^{-/-} mice. DAPI (blue) was used for counterstaining. (f) Percentage of different cell types within the adult SVZ of wild-type and *Dik1*^{-/-} mice. (g) Table showing the number of LRC/TH+ or LRC/CR+ neurons in *Dik1* mutant OB. (h) Table showing brain weight (mg) and SVZ volume (mm³) in *Dik1*^{+/+}, *Dik1*^{-/-}, *Dik1*^{+/-} and *Dik1*^{-/-} adult mice. No changes in brain size were observed. (i) Primary spheres formed from SVZs of different *Dik1* mutant mice in the presence of EGF or FGF. *p<0.05, **p<0.01. Error bars, s.e.m of of at least four mice per genotype. Scale bars: in a 200 μ m (right panel in a, 20 μ m); in b, 20 μ m; in c-e, 20 μ m.