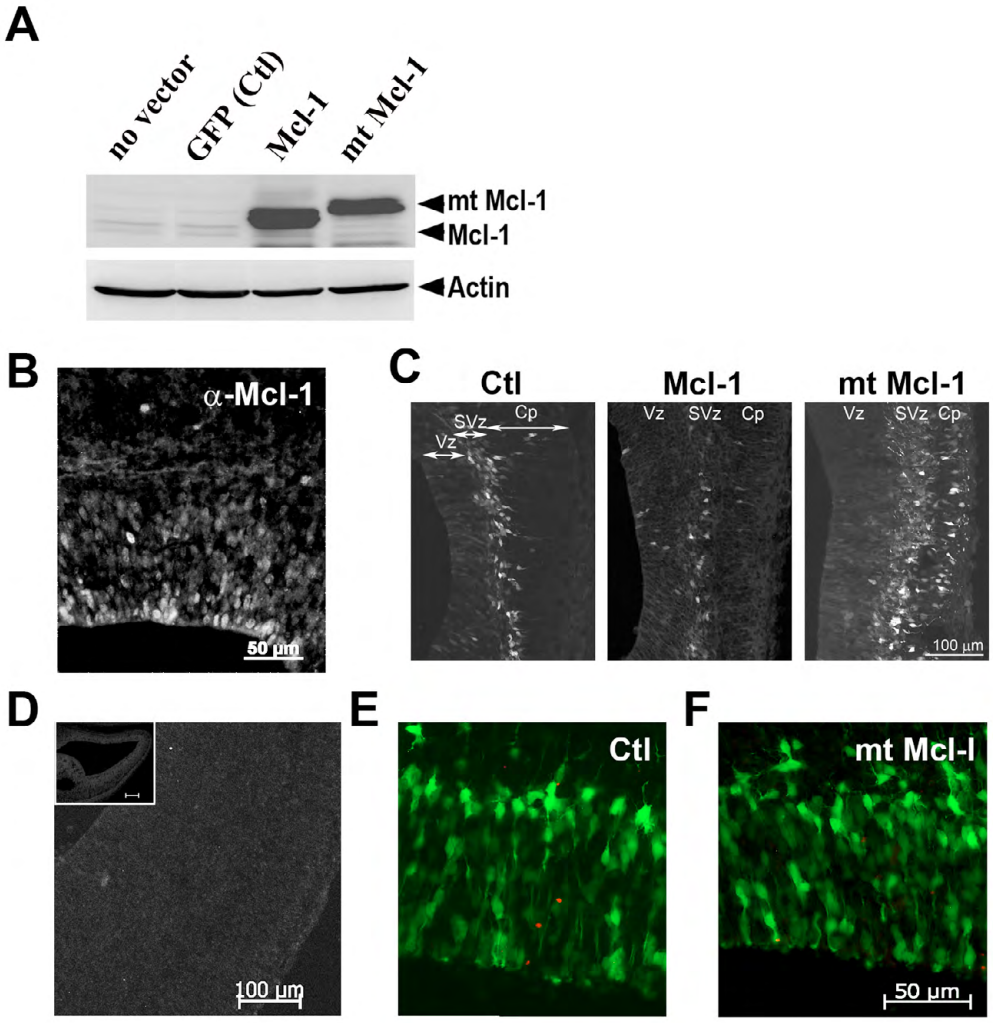

Fig. S1. Mcl1 is expressed in embryonic NPCs during cortical neurogenesis. (**A**) Mcl1 protein expression in NPCs 24 hours following *in vitro* transfection with Ctl, Mcl1 and mt Mcl1 constructs. Non-transfected cell lysates (no vector) were also loaded as controls. (**B**) Endogenous Mcl1 expression in an E14 mouse brain. (**C**) Representative high-magnification photomicrographs of transfected cells in the dorsomedial cortex in Ctl-, Mcl1- and mt Mcl1-electroporated brains. (**D**) TUNEL staining of an E14 non-transfected brain. Inset shows low magnification of the cortical hemisphere. (**E**,**F**) TUNEL staining of (E) Ctl- and (F) mt Mcl1-transfected brains at 24 h.p.e. Green, GFP^+ cells; red, $TUNEL^+$ cells.

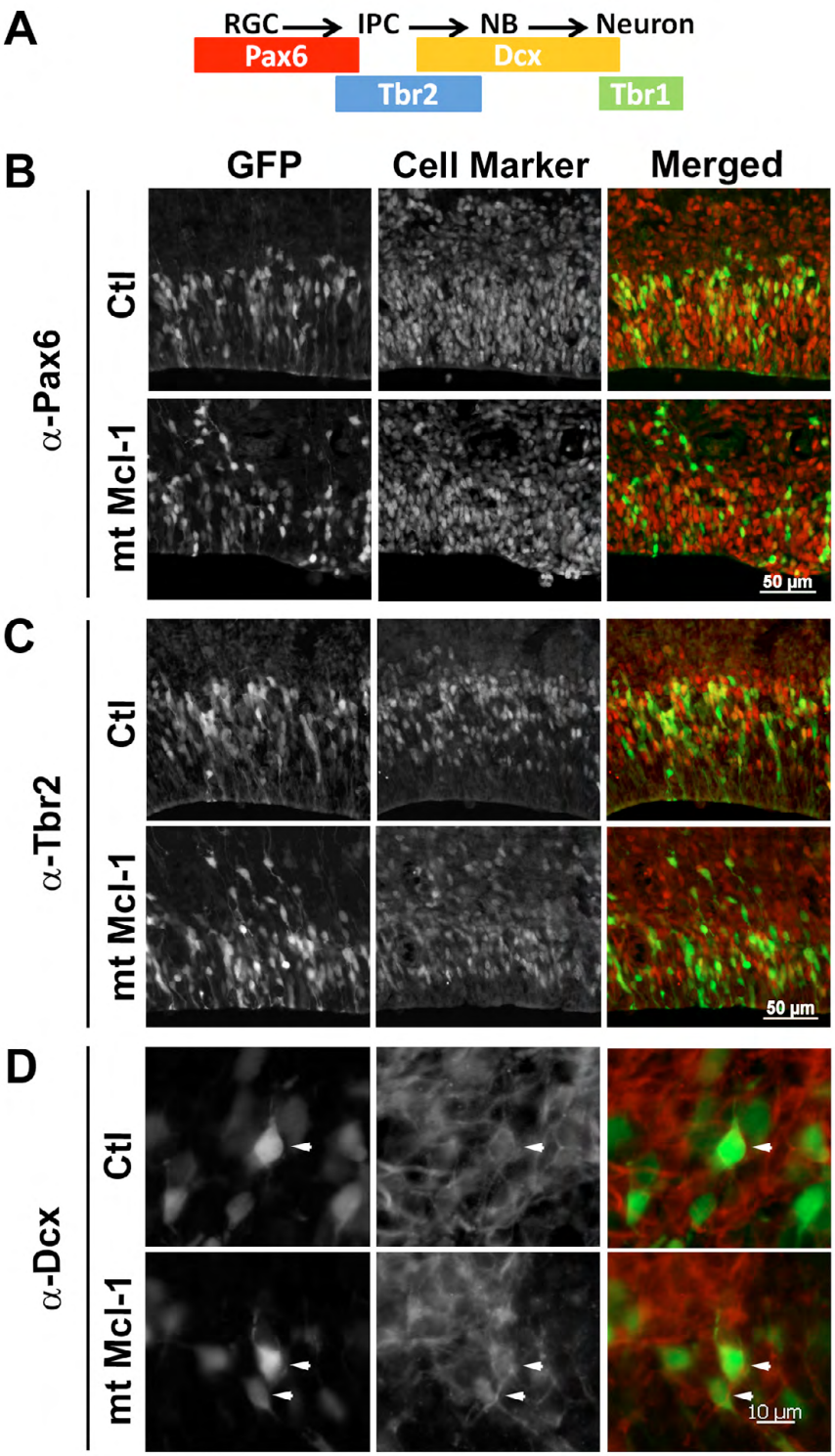

Fig. S2. Mcl1 promotes premature NPC differentiation in the embryonic brain. (**A**) Schematic showing the overlap in transcription factor expression during the transition from radial glial cell (RGC) to intermediate progenitor cell (IPC) to neuroblast (NB) to neuron (N). (**B-D**) E13 mouse embryos were *in utero* electroporated and collected at 20 h.p.e. and brain sections immunostained with antibodies to (B) Pax6, (C) Tbr2 and (D) Dcx. Note that higher magnification was used to observe GFP^+ Dcx^+ double-labeled cells. Green, GFP^+ cells; red, $Pax6^+$, $Tbr2^+$ or Dcx^+ cells.

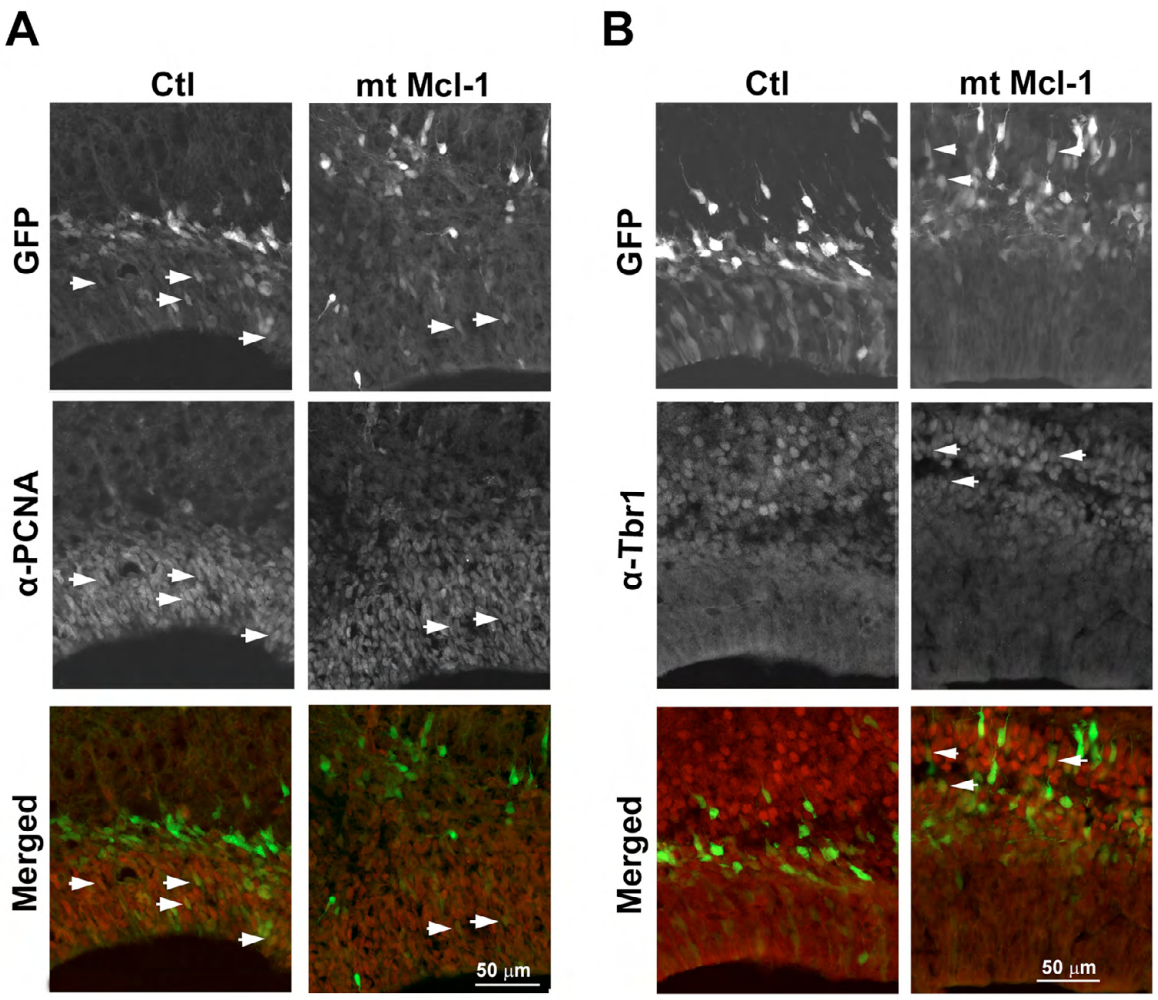

Fig. S3. Mcl1 promotes premature NPC terminal mitosis in the embryonic brain. E13 mouse embryos were *in utero* electroporated and collected at 48 h.p.e. and immunostained with antibodies to (**A**) Pcna and (**B**) Tbr1. Green, GFP^+ cells; red, $PCNA^+$ or $Tbr1^+$ cells.

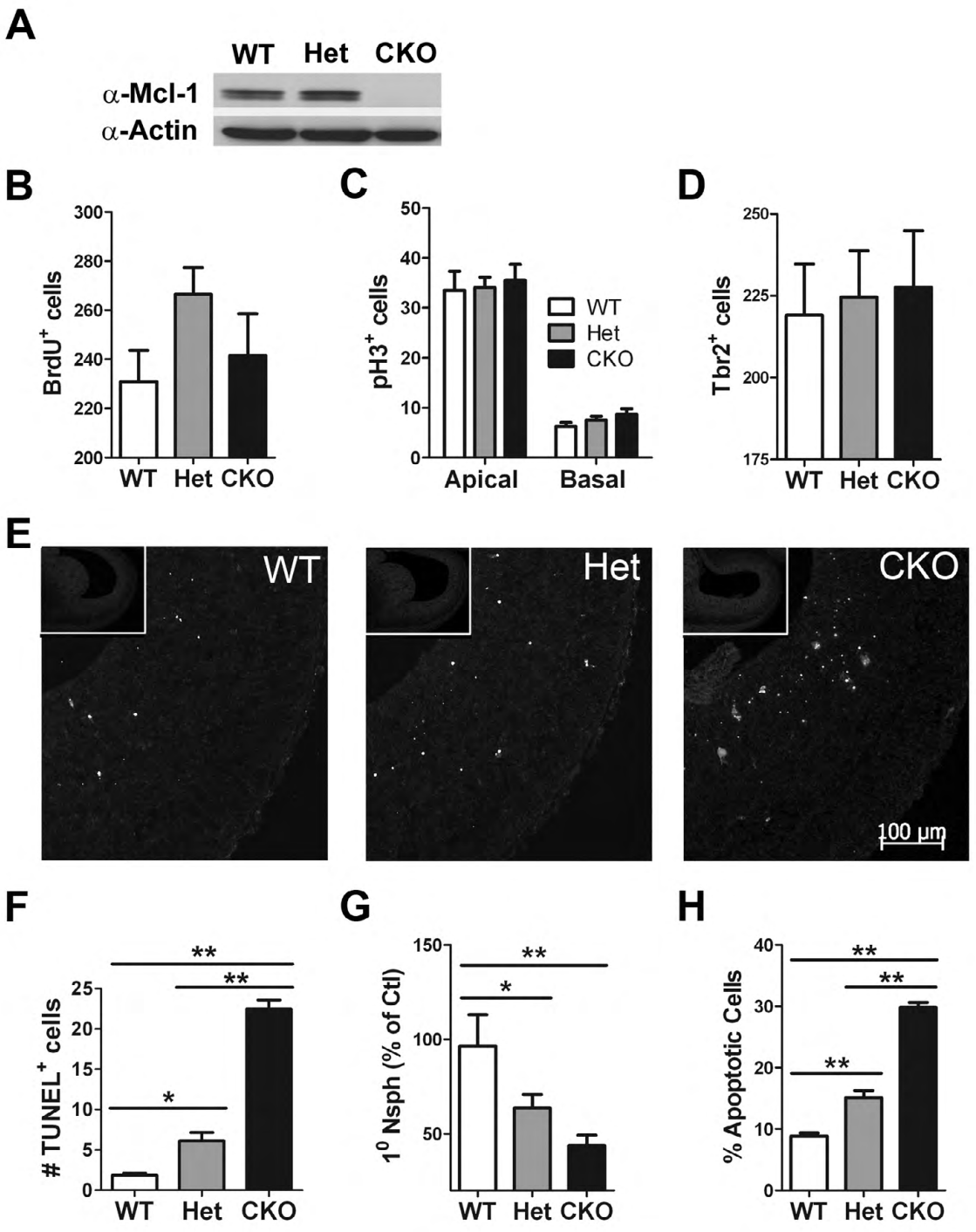

Fig. S4. Mcl1 loss-of-function *in vivo* results in apoptosis. (**A**) Mcl1 protein expression in NPCs from Mcl1 wild-type (WT), heterozygous (Het) and conditional knockout (CKO) embryos. Actin was used as a loading control. (**B**) Quantification of $BrdU^+$ cells following a 4-hour BrdU pulse in Mcl1 WT, Het and CKO embryos at E14 (*n*=4 embryos/genotype). (**C**,**D**) Quantification of (C) $PH3^+$ cells, a marker of cells in M phase, and of (D) $Tbr2^+$ cells in the cortices of E14 Mcl1 WT, Het and CKO littermates. (*n*=5 embryos/genotype). (**E**) TUNEL staining of E14 Mcl1 WT, Het and CKO embryos. Cortical hemispheres are shown at low magnification in insets. (**F**) Quantification of TUNEL-positive cells revealed significantly higher levels of apoptosis in Mcl1 CKO and Het embryos. (**G**) The neurosphere assay was performed with NPCs cultured from E12 Mcl1 WT, Het and CKO NPCs and after 7 days *in vitro* the number of primary neurospheres was quantified. *n*=13 WT, *n*=23 Het, *n*=24 CKO. (**H**) Quantification of apoptotic cells in E12 Mcl1 WT, Het and CKO NPC cultures after 3 days *in vitro*. *n*=5 embryos/genotype. Means were analysed by one-way ANOVA and Tukey's post hoc test (B,D,F-H) or two-way ANOVA (C). **P*<0.05, ***P*<0.01. Error bars indicate s.e.m.

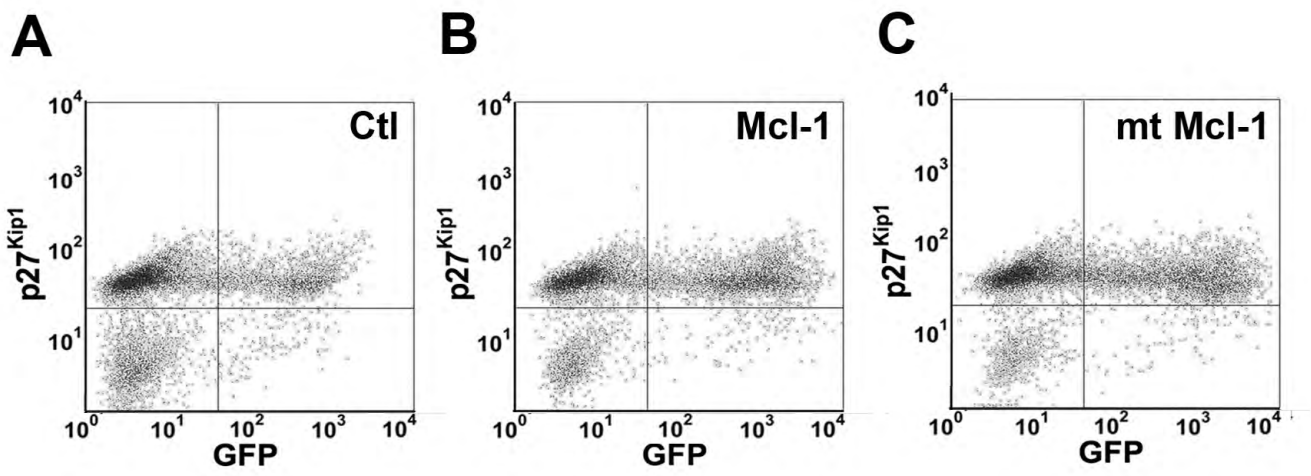

Fig. S5. Mcl1 upregulates p27^{Kip1} in NPCs. FACS analysis was performed 24 h.p.t. on NPCs transfected with (**A**) Ctl, (**B**) Mcl1 and (**C**) mt Mcl1 plasmids. Analysis was performed on 20,000 gated GFP^{+} cells. *n*=3/treatment.

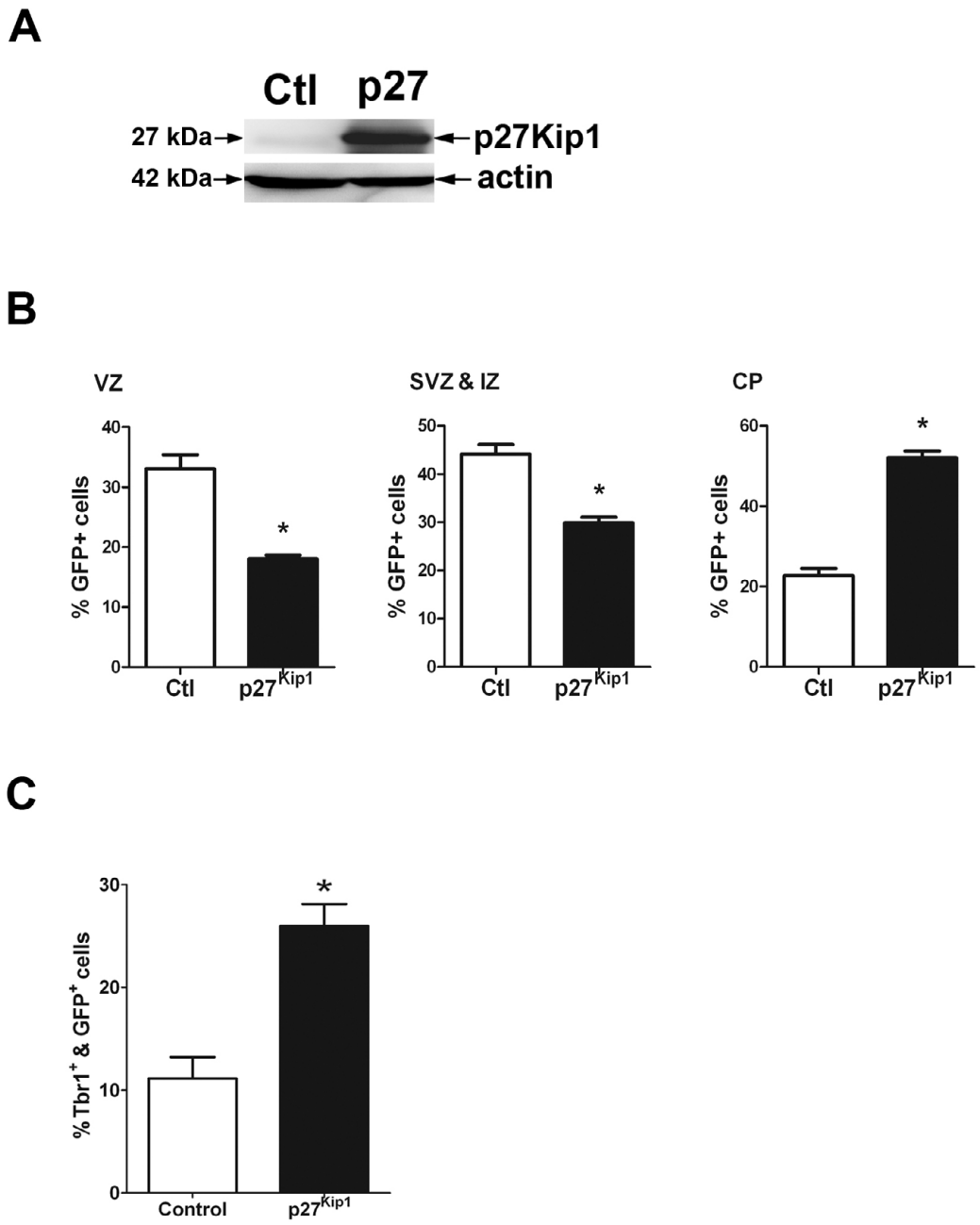

Fig. S6. p27^{Kip1} promotes NPC terminal mitosis similar to Mcl1. (**A**) Western blot analysis of p27^{Kip1} expression in HEK 293A cells at 48 h.p.t. with pCIG2 empty vector (control, Ctl) and pCIG2-p27^{Kip1} constructs. (**B**) Quantification of the percentage of GFP^{+} cells located in the VZ, SVZ and CP at 48 h.p.e. in Ctl- and p27^{Kip1}-electroporated brains. *n*=3 embryos/treatment. (**C**) Quantification of the percentage of Tbr1^{+} GFP^{+} double-labeled neurons at 48 h.p.e. in Ctl- and p27^{Kip1}-electroporated brains. *n*=3 embryos/treatment. Means were analysed by *t*-test. **P*<0.05. Error bars indicate s.e.m.