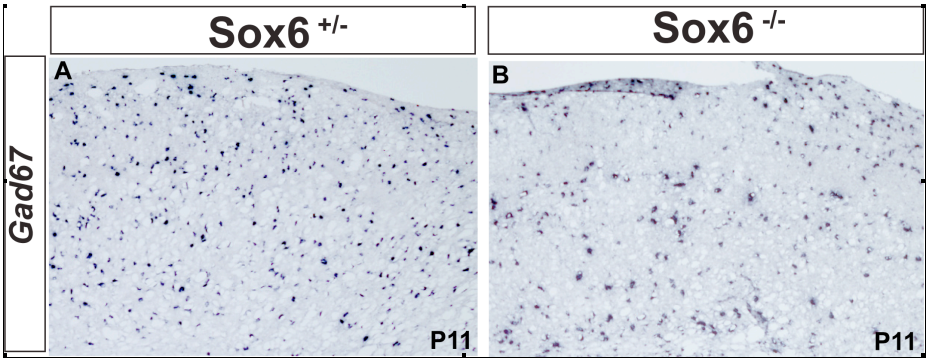
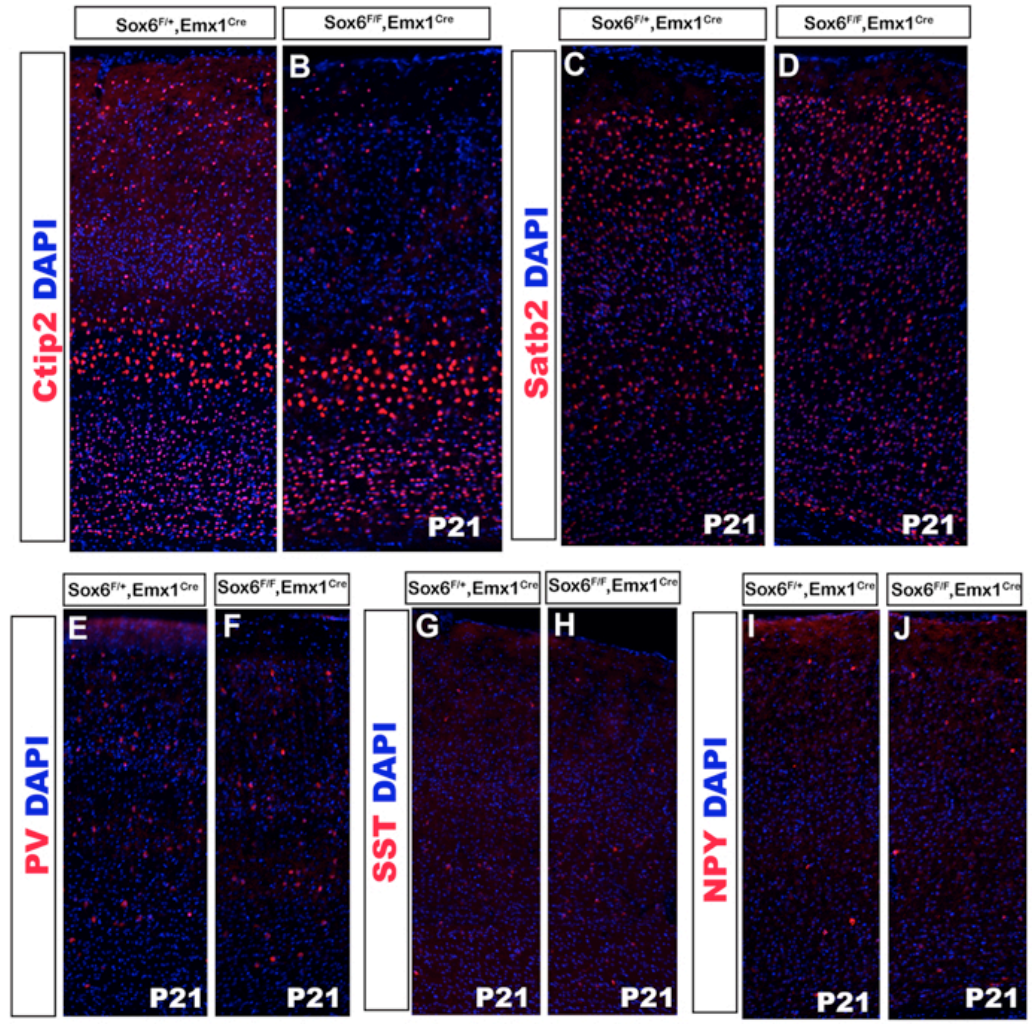
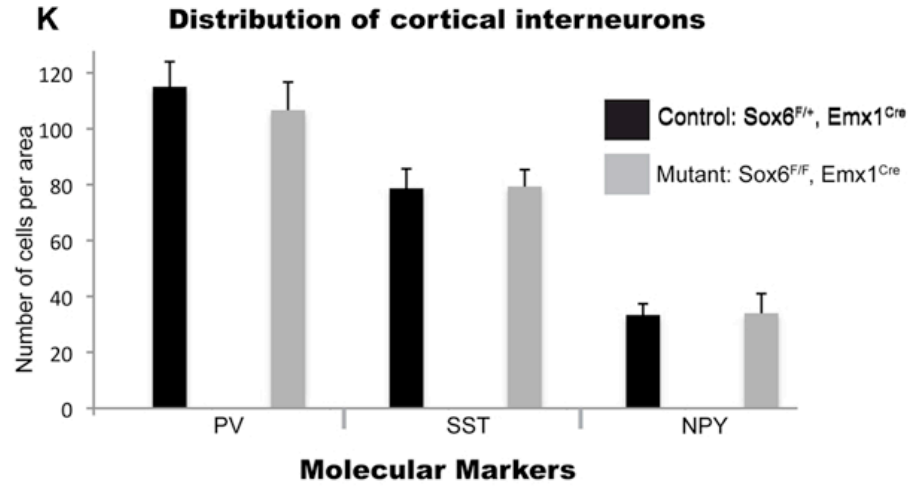


Figure S1. Cortical interneurons are mispositioned and molecular markers are affected in Sox6 null animals

(A-B) To test if the absence of *Sox6* affects cortical interneurons, we analyzed *Gad67* expression in P11 (A) control (*Sox6* $^{+/-}$) animals and (B) mutant *Sox6* $^{+/-}$ animals. *Gad67* is expressed relatively equivalently in both controls and mutants, but the distribution of *Gad67*-expressing cells is dramatically altered. *Gad67*-expressing cells in the mutant preferentially occupy layers I and VI at the expense of layers II-V. (C) The expression of molecular interneuron markers was calculated by counting the total number of cells expressing the specific marked per optical section. We saw a large decrease on the number of interneurons expressing PV, SST and SST/CR, while NPY was increased. Scale bar in (A) 60μm in A and B.

Supplemental Figure 2. Pyramidal cell and cortical interneuron fate is not obviously affected in Emx1^{Cre} mediated Sox6 removal





(A,B) In order to determine if the fate and/or distribution of pyramidal cells and interneurons were affected in Emx1 driven Sox6 removal, telencephalic coronal sections of control (*Sox$^{F/+}$;Emx1^{Cre}*) and mutant (*Sox$^{F/F}$;Emx1^{Cre}*) mice were analyzed. We did not detect any difference between control and mutant cortices in any of the pyramidal markers analyzed, namely Ctip2 (A,B) and Satb2 (C,D). Similarly, we did not detect any difference in the expression of cortical interneuron molecular markers, namely PV (E,F), SST (G,H) and NPY (I,J). (K) Shows the total number of cells expressing a given interneuron maker per optical field. PV: control (127±11) vs. mutant (110±12); SST: control (76±9) vs. mutant (78±7); NPY: control (27±6) vs. mutant (33±9). In this experiment we analyzed a total of three animals. All the analyses were confined to the somatosensory cortex. Scale bar in (A) corresponds to 50μm in A-C, and 70μm in E-J.