

### Supplemental Figure Legends

**Supplemental Figure 1.** NiDAB immunohistochemical labeling with goat anti-CGRP (Abcam #ab36001; see **Table 2**) in several brain regions in homozygous *Calca-Cre* mice (*Calca*<sup>Cre:/Cre</sup>), heterozygotes (*Calca*<sup>Cre/WT</sup>), and wild-type littermates (*Calca*<sup>WT/WT</sup>). Wild-type and heterozygous mice exhibit labeling in previously reported distributions throughout the brain, with slightly less-intense labeling in heterozygotes. CGRP-like immunoreactivity was absent in homozygous mice. Scale bars are 200  $\mu$ M.

**Supplemental Figure 2.** NiDAB immunohistochemical labeling with rabbit anti-CGRP (Peninsula #T-4032; see **Table 2**) in several brain regions in homozygous *Calca-Cre* mice (*Calca*<sup>Cre:/Cre</sup>), heterozygotes (*Calca*<sup>Cre/WT</sup>), and wild-type littermates (*Calca*<sup>WT/WT</sup>). Wild-type and heterozygous mice exhibit labeling in previously reported distributions throughout the brain, with slightly less-intense labeling in heterozygotes. Homozygous mice had a light, uniform background of nonspecific nuclear labeling, and did not have CGRP-like immunoreactivity in any brain region. Scale bars are 200  $\mu$ M.

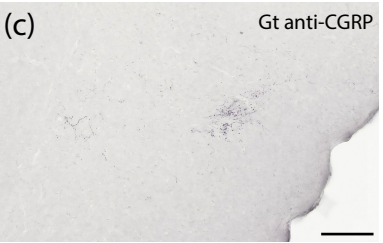
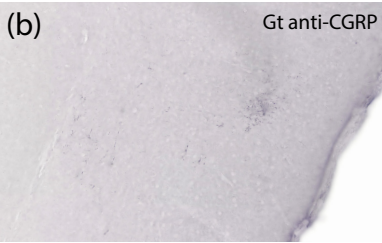
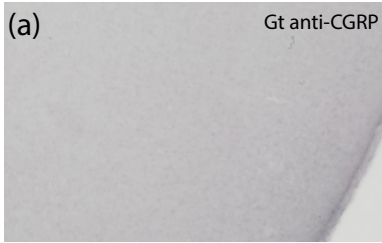
**Supplemental Figure 3.** Full distribution of Syp-mCherry-expressing neurons at all rostro-caudal levels through the injection site of each case used for full-brain analysis in this study. Nickel-diaminobenzidine (NiDAB) immunohistochemical labeling for dsRed (Syp-mCherry in somata, dendrites, and axons) is shown in black, along with blue thionin (Nissl) counterstaining to reveal cytoarchitecture.

*Calca*<sup>Cre/Cre</sup>  
homozygous

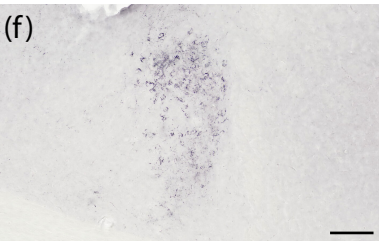
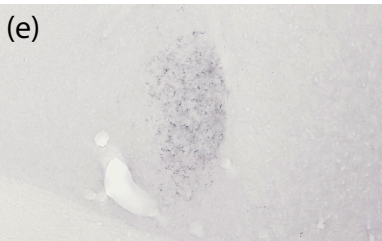
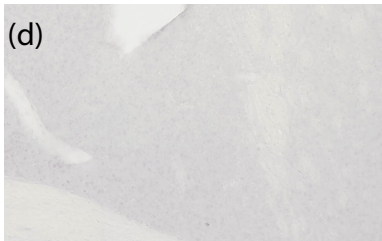
*Calca*<sup>Cre/WT</sup>  
heterozygous

*Calca*<sup>WT/WT</sup>  
wild-type

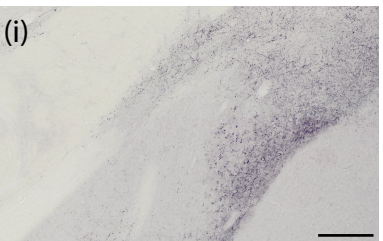
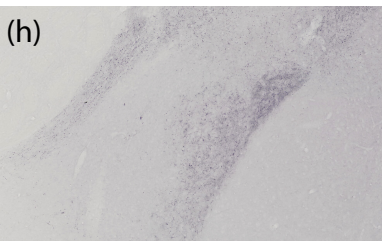
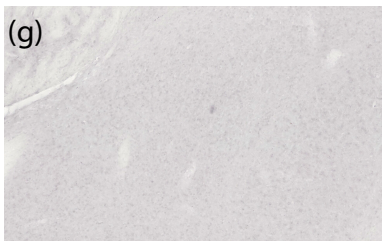
insular cortex



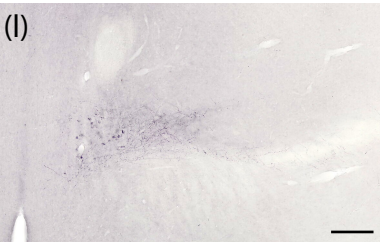
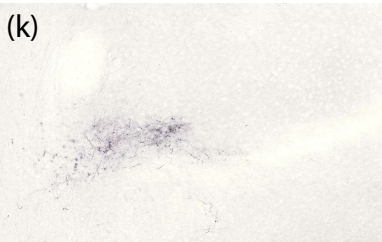
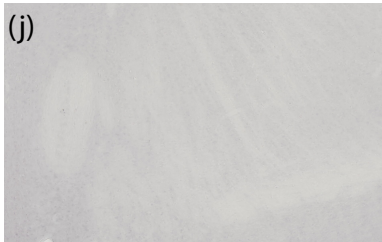
bed nucleus of the stria terminalis



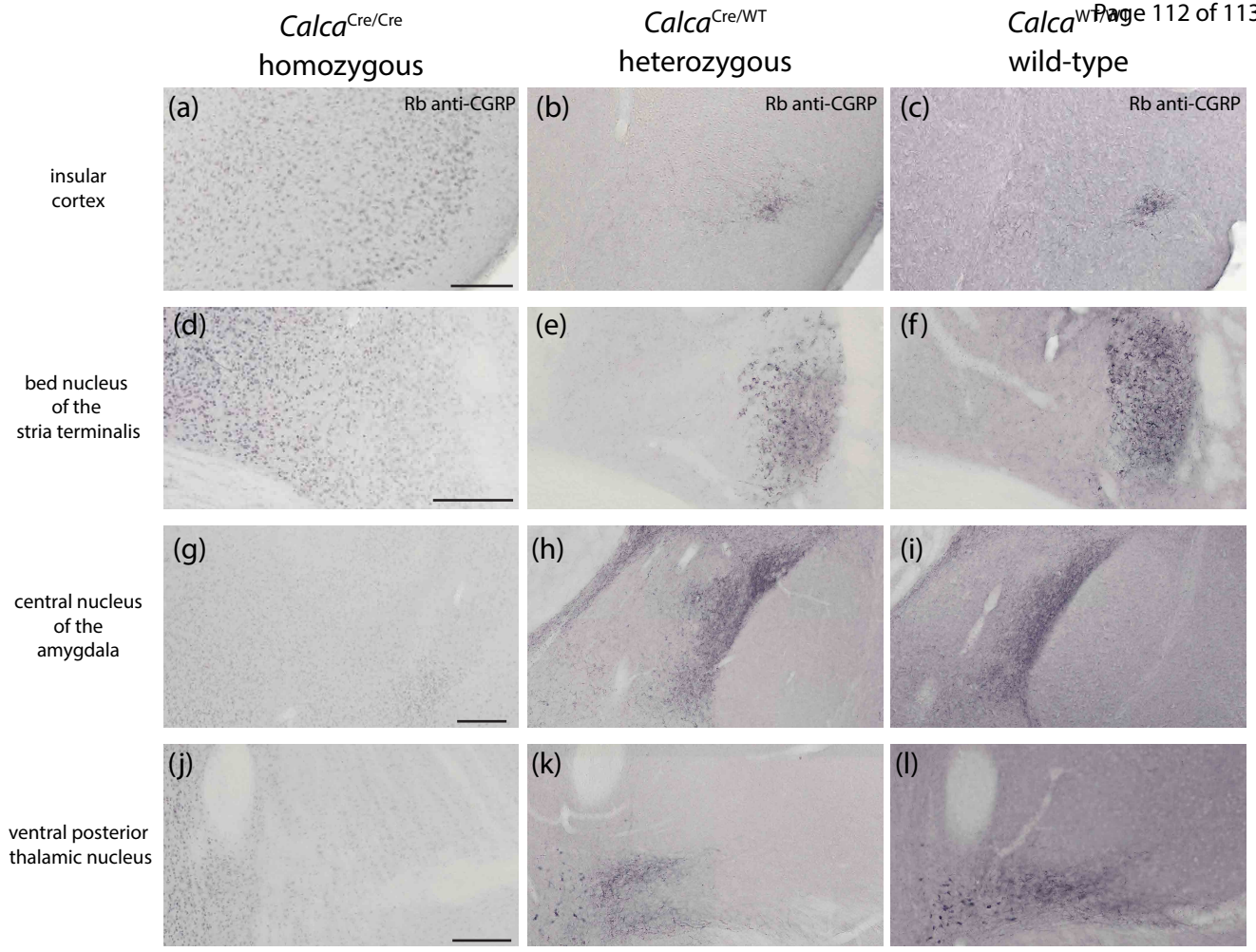
central nucleus of the amygdala



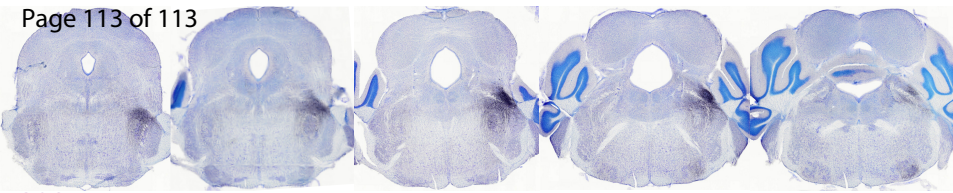
ventral posterior thalamic nucleus



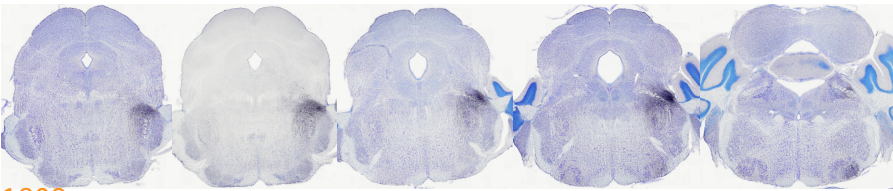
Supplemental Figure 1



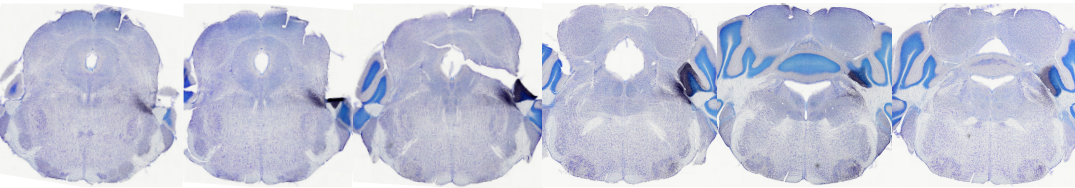
Supplemental Figure 2



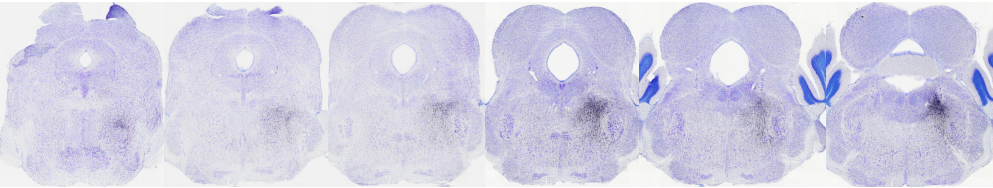
1808



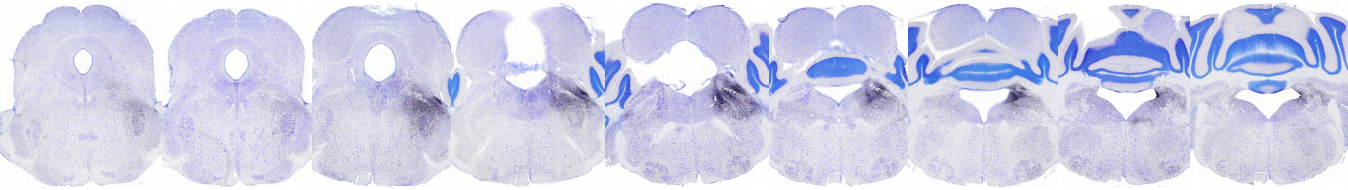
1809



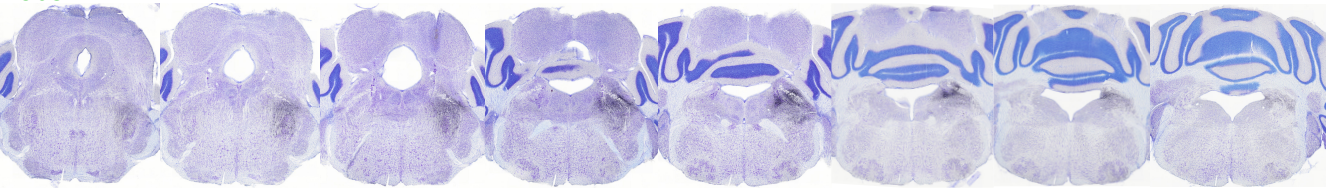
1800



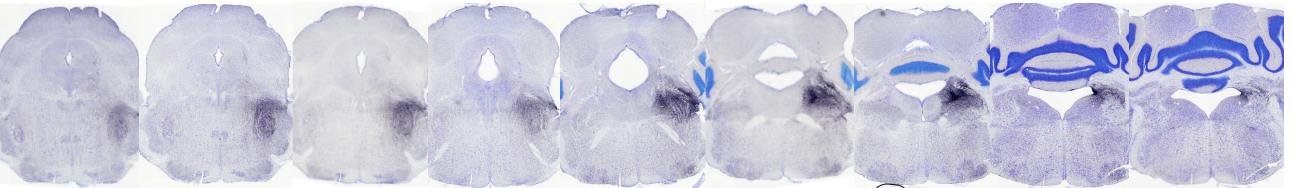
1802



1805



1807



Supplemental Figure 3