Supplemental Fig. 1. Qualitative histological and cytoarchitectural analyses in the early postnatal forebrain of  $Emx1^{cre}/Met^{fx/fx}$  mice. A and A': Low-magnification photomicrographs of Cresyl Violet-stained coronal sections demonstrate grossly similar anatomical structure in wild type (A) and  $Emx1^{cre}/Met^{fx/fx}$  (A') forebrains at P8. B and B': High-magnification photomicrographs of the boxed regions in A and A' show comparable cortical lamination and cytoarchitecture in wild type and  $Emx1^{cre}/Met^{fx/fx}$  mice, respectively. C and C': Low-magnification photomicrographs of phosphorylated neurofilament-H immunoreactivity in coronal sections illustrate the grossly normal development of major axon tracts in  $Emx1^{cre}/Met^{fx/fx}$  (C') mice as compared to wild type mice (C) at P7. Scale bar = 1.1 mm for A, A', C, and C'; 275 µm for B and B'.

Supplemental Fig. 2. *Met* transcript and protein expression in the cingulate cortex and cingulum. A-C: Autoradiographic images of cingulate cortex at E18.5, P7, and P14 show *Met* transcript expression. DIC photomicrographs of Met immunoreactivity demonstrate expression of the protein in the wild type (**D**), but not in the *Emx1<sup>cre</sup>/Met*<sup>fx/fx</sup> (**E**) cingulum at P7. By P16 (**F**), expression is virtually absent in the wild type cingulum. Scale bar = 1.1mm for A-C; 275µm for **D-F**.

Supplemental Fig. 3. DIC photomicrographs illustrate Met immunohistochemistry in the posterior and anterior limbs of the anterior commissure in horizontal sections from P7 wild type mice. Heavily stained axons within the posterior limb course between posterior piriform cortices (**A**). In a more dorsal section, lightly stained axons within the

intrabulbar and anterior subdivisions of the anterior limb emanate from the olfactory bulbs and anterior piriform cortex (**B**). Scale bar =  $550 \mu m$  for **A** and **B**.

Supplemental Fig. 4. DIC photomicrographs illustrate Met immunohistochemistry in the external capsule (arrows) in coronal sections. At P7, Met immunoreactivity is present in the external capsule in wild type (**A**), but not  $Emx1^{cre}/Met^{fx/fx}$  (**A'**), mice. By P16, Met staining is not observed in the external capsule of wild type (**B**) or  $Emx1^{cre}/Met^{fx/fx}$  (**B'**) mice. Scale bar = 400µm for all panels.

Supplemental Fig. 5. DIC photomicrographs illustrate Met immunoreactivity in coronal sections through the caudo-rostral extent of the amygdala and stria terminalis (st) in wild type mice at P14 and P16. Met staining in the posterior cortical amygdala (**A**), nucleus of the lateral olfactory tract (**C**), and st before (**E**) and after (**G**) decussation at the midline (dashed line), is light at P14 and is further reduced in intensity in these same structures just two days later, as shown at P16 (**B**, **D**, **F**, and **H**). Scale bar = 550  $\mu$ m for all panels.

Supplemental Fig. 6. DIC photomicrographs illustrate Met immunoreactivity in coronal sections through the diencephalon of wild type mice at P16. Previously robust Met staining in the thalamic reticular nucleus and dorsolateral and ventrolateral thalamus (**A**) and mammillothalamic tract (**B**) is scarcely detectable above background at P16. Axonal Met staining is comparatively preserved in the fasciculus retroflexus (**C**) and interpeduncular nucleus (**D**) at this same age. Scale bar = 550  $\mu$ m for all panels.