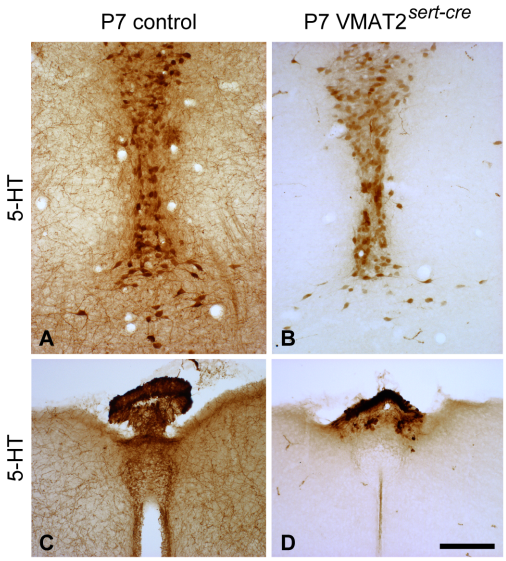
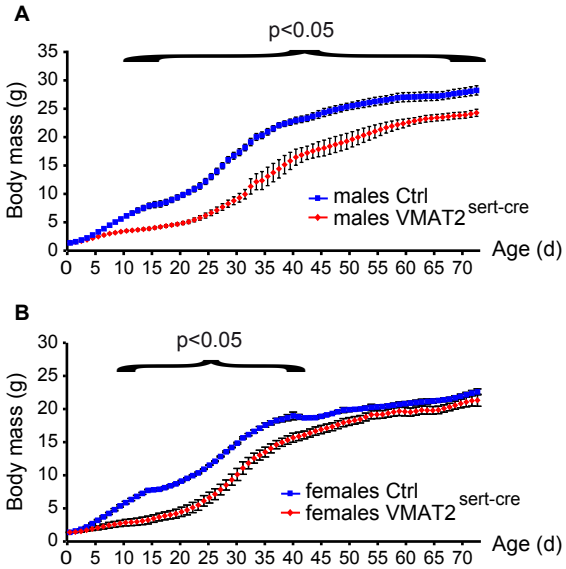
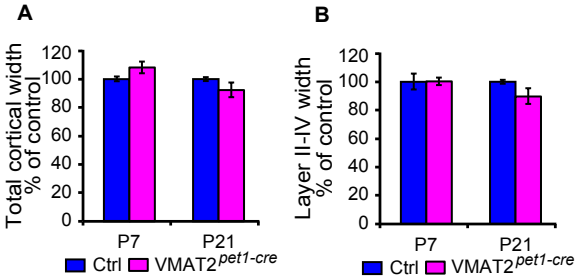


Supplementary Figure 1. Residual 5-HT in VMAT2$^{sert\text{-}cre}$ mice.
Control and VMAT2$^{sert\text{-}cre}$ littermates were perfused at P7 and 50 um-thick coronal sections were labeled with 5-HT antibodies and revealed with DAB. A,B) In the raphe, 5-HT immunolabeling is completely absent in the axons and neuropil, while faint residual staining persists in the cell soma.
CD) In pinealocytes, 5-HT immunostaining remains strong in mutants, but neighboring raphe axons and neuropil are depleted.
Scale bar = 100 um.



Supplementary Figure 2. Gender differences in growth rates in VMAT2$^{sert\text{-}cre}$ mice

Mean growth curves from 11 VMAT2$^{sert\text{-}cre}$ (red diamonds) and 7 control male mice (blue squares) (A) and 7 VMAT2$^{sert\text{-}cre}$(red diamonds) and 7 control female mice (blue squares) (B) from 6 different litters. The growth of the VMAT2$^{sert\text{-}cre}$ mice was significantly different from that of control mice from P11 to P75 for males, and from P9 to P41 for females (ANOVA $p<0.05$).



Supplementary Figure 3: Cortical growth in VMAT2$^{pet1\text{-}cre}$ mice
A,B) The cerebral cortex of VMAT2$^{pet1\text{-}cre}$ mice was measured at P7 (n=4 controls and 5 VMAT2$^{pet1\text{-}cre}$) for total (A) or superficial layers (B) thickness in the somatosensory cortex. No difference was found between control and recombined animals (Student test). Measures from P21 brains (n=4 for each genotype) are show no difference as well. Values are expressed as % of control values.