

Legends to supplementary figures

Figure S1: Quantification of striatal and lateral ventricle volume

Representative horizontal T2-weighted MRI slices of a wild type mouse at 5 months of age with overlaid volumetry results in the striatum (upper row) and ventricles (lower row) (red: left striatum, green: right striatum, magenta: ventricles).

Figure S2: Lack of dopaminergic degeneration in the substantia nigra of *Cra/+* brains

A-B Representative photographs of sections of the substantia nigra processed for tyrosine hydroxylase (TH) immunohistochemistry from wild-type mice (+/+) at 6 months of age as well as heterozygous *Cra/+* mice at 6 and 18 months of age.

C Stereological estimation of the total number of TH-positive neurons in the unilateral substantia nigra pars compacta did not show any differences between the groups (n=2-3 mice per group).

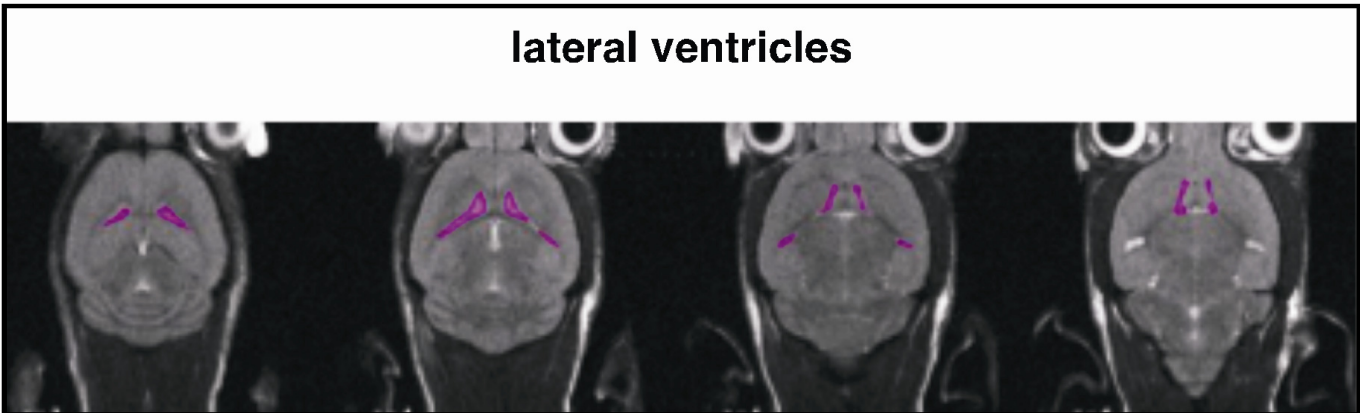
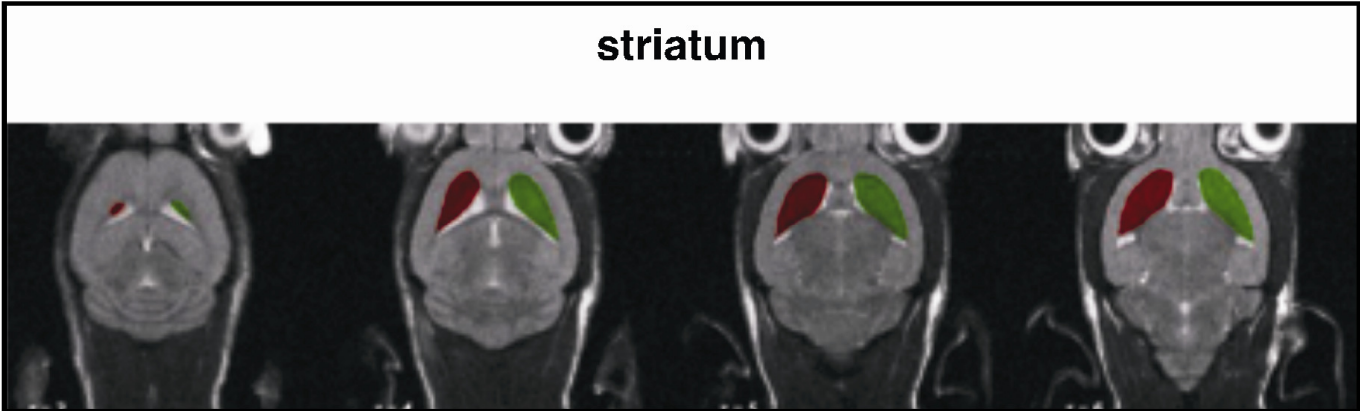
Figure S3: Normal BDNF supply to *Cra/+* striatum and normal BDNF response of *Cra/+* striatal neurons

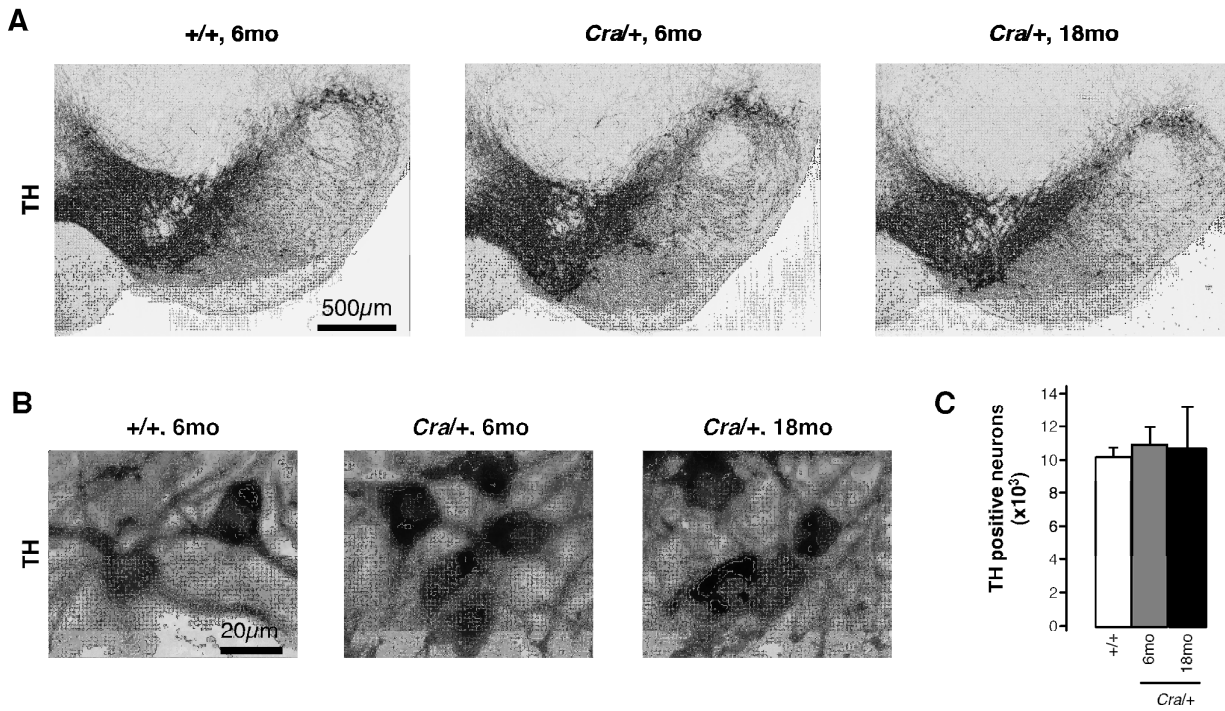
A mRNA levels of BDNF in the cortex from wild-type mice (+/+) and heterozygous *Cra/+* mice at 4 months of age. * $P < 0.05$ versus wild-type (n=5 mice per group).

B BDNF protein level in striatum from wild-type mice (+/+) and heterozygous *Cra/+* mice at 4 months of age. * $P < 0.05$ versus wild-type (n=7 mice per group).

C mRNA levels of DARPP-32 in primary striatal neuronal culture from wild-type embryo (+/+), heterozygous *Cra/+* embryo and homozygous *Cra/Cra* embryo stimulated with 0, 10 or 100 ng/ml of BDNF during 4 hours.

Braunstein, Eschbach, Rona-Vörös et al., figure S1





Braunstein, Eschbach, Vorös et al., supplementary figure 3

