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Supplemental Information

Destabilizing Domains Enable Long-Term

and Inert Regulation of GDNF Expression

in the Brain

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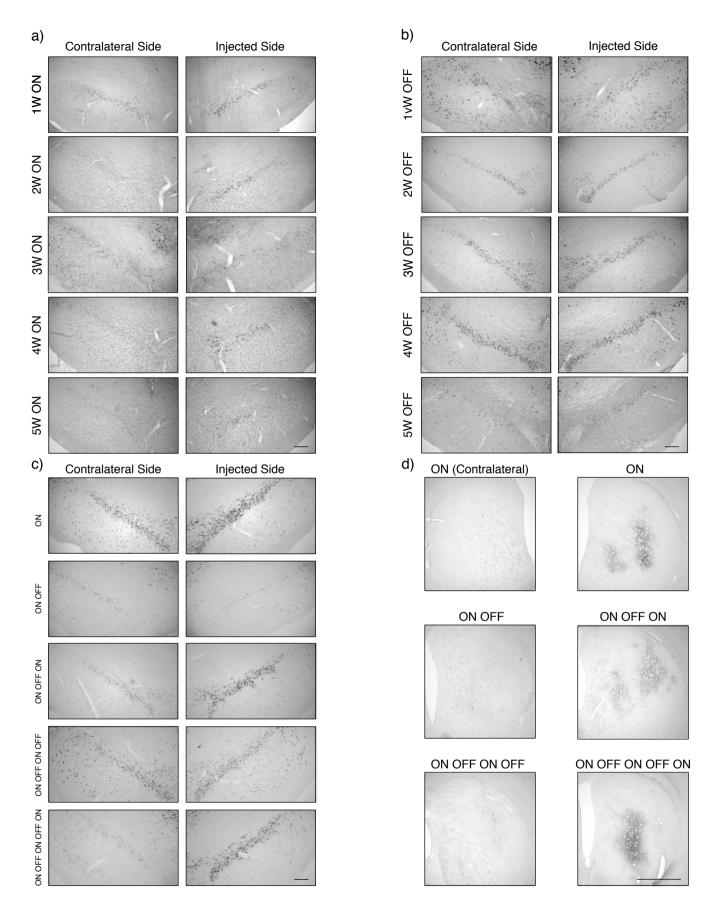


Figure S1- Immunohistochemical analysis of GDNF-F-DD induction kinetics and multiple induction cycles. Related to Figure 2. a) Substantia nigra sections from animals given TMP (ON) stained for pRPS6. b) Substantia nigra sections from animals given drinking water (OFF) stained for pRPS6. c) Substantia nigra sections from animals where GDNF-F-DD was induced multiple times were stained for pRPS6. d) Striatal sections from animals where GDNF-F-DD was induced multiple times were stained for GDNF. Images cropped to highlight areas with staining. Small scale bar-200 µm. Large scale bar- 1200 µm

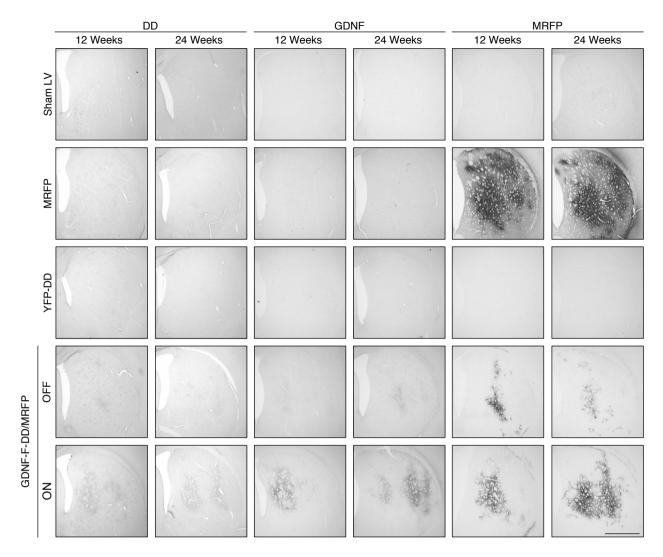


Figure S2- Immunohistochemical analysis of long-term expression off DD, GDNF and MRFP. Related to Figure 4. Striatal sections stained for DD, GDNF or MRFP from animals kept for 12 weeks or 24 weeks. Images cropped to highlight areas with staining. Scale bar- 1200 µm

GDNF-F-DD/MRFP

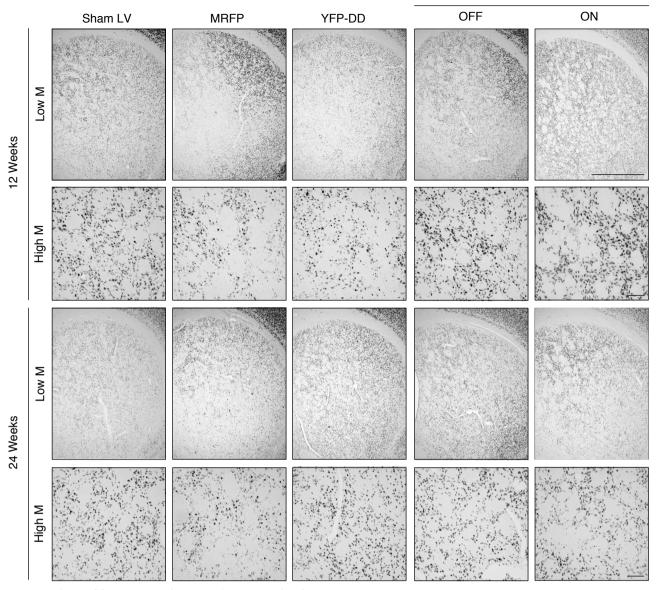


Figure S3- Immunohistochemical analysis of NeuN cells. Related to Table 1. Striatal sections stained for NeuN from animals kept for 12 weeks or 24 weeks. Low M- Low magnification. High M- High magnification. Images cropped to highlight areas with staining. Small scale bar-100 μ m. Large scale bar- 1200 μ m

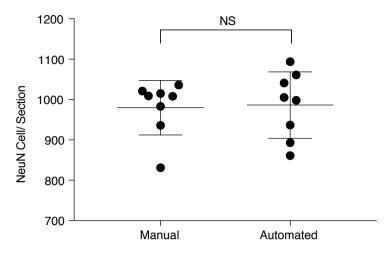


Figure S4- Comparison of manual vs automated NeuN cell counting. Related to Table 1. Striatal sections stained for NeuN were quantified manually or automatically using an algorithm in the FIJI software suite. Paired T test indicated no differences between groups. Error bars display Mean±Standard Error of Mean.

GDNF-F-DD/MRFP

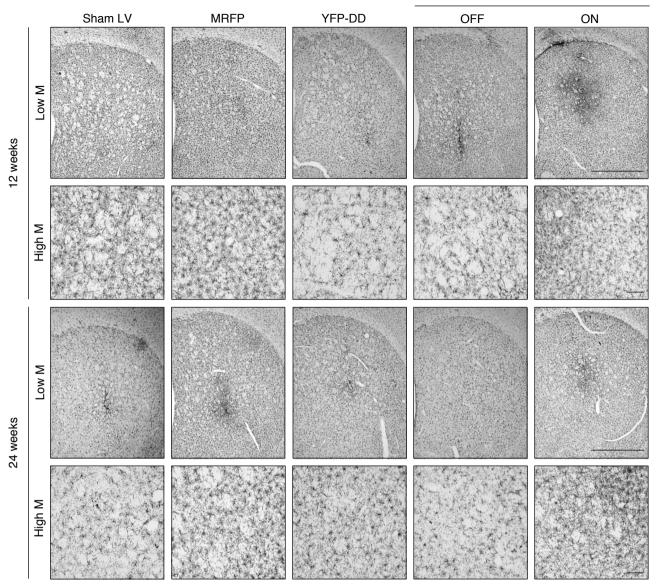


Figure S5-Immunohistochemical analysis of CD11B cells. Related to Table 2. Striatal sections stained for CD11B from animals kept for 12 weeks or 24 weeks. Images cropped to highlight areas with staining.Low M- Low magnification. High M- High magnification. Small scale bar- 100 µm. Large scale bar- 1200 µm