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Supplemental Information

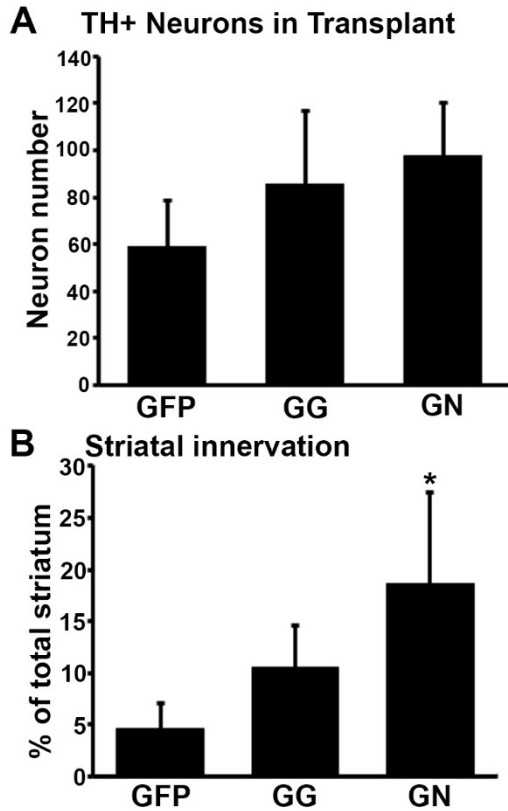
Partial Reconstruction of the Nigrostriatal

Circuit along a Preformed

Molecular Guidance Pathway

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Supplemental figure 1



A) For cell survival, TH+ cell bodies were counted manually at 200x total magnification using a tally counter and an ocular grid to move methodically through the transplant area. Three sections per rat spaced 150 micron through the transplants were counted. A) Data represents average TH+ neurons/section from each treatment groups (n=3-4 rats/group). There was no significant differences in TH+ neuronal counts between groups, as described previously for similar treatment groups (Zhang et al., 2013) Data are means \pm SEM; ANOVA $p = 0.66$. B) Quantification of dopaminergic striatal re-innervation. Dopaminergic innervation of the striatum was determined by thresholding images of brain sections immunostained for tyrosine hydroxylase. The area of the striatum was outlined and the percent of that area filled with TH+ staining was measured and averaged over 3 sections per animal (n=3-4 rats/treatment group). A statistical significant difference was observed between GFP and GDNF/Netrin-1 (GN) treatment groups, but not between GFP and GDNF/GFR α 1 (GG) treatment group. Data are means \pm SEM. * $P < 0.05$.