

Figure S1: Effect of PAP on the expression of iNOS, TNF- α , and IL-1 β in LPSstimulated rat primary microglia. (A) Primary microglia were pretreated with PAP for 1 h and incubated with LPS (10 ng/ml). After incubation for 16 h, the supernatants were obtained and the levels of nitrite, TNF- α , and IL-1 β , were measured. (B) Primary microglia were pretreated with PAP for 1 h and incubated with LPS for 6 h. RT-PCR were performed to measure the expression of inflammatory molecules. Representative gels are shown in the left panel, and the quantification of three independent experiments is shown in the right panel. Data are shown as the mean ± SEM of three independent experiments. *P < 0.05 vs. control group; #P < 0.05 vs. LPS-treated samples.



Figure S2: **Morphological changes of microglia in response to MPTP.** (A, B) Representative high magnification images of microglia in the substantia nigra region of MPTP-injected mice are presented. Resting form (A), Activated form (B) of Iba-1positive microglia.



Figure S3: **High magnification images of GDNF-positive cells in the substantia nigra of MPTP-injected mice.** PAP treatment recovered MPTP-induced nigral decrease of GDNFpositive cells, which was reversed by H89 treatment.