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Protocol status: Working
We use this protocol and it's working

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Chemicals and treatment paradigms

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ABSTRACT

This protocol is to enhance microglia response and nigral dopaminergic cell death in an acute MPTP model following peripheral inflammation resulting from single i.p. injection of LPS at 2 mg/kg (García-Domínguez et al. 2018).

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1 Mice were randomly divided into MPTP+LPS+NDP-MSH, MPTP+LPS, and control groups to receive i.p. once daily MPTP·HCl (Millipore Sigma, Cat# M0896; 20 mg/kg) or saline and LPS (Millipore Sigma, Cat# L4391; 1 mg/kg) or PBS from day 1 to day 4.

2 NDP-MSH (Genscript, Cat# RP10658; 400 µg/kg) or PBS was injected from day 1 to day 12.

3 Mice were tested for behavioral activities and were sacrificed thereafter on day 12.

To study the role of Tregs

4 Animals were treated with anti-mouse CD25 monoclonal antibody (clone PC61, Biolegend, Cat# 102059; 400 µg/mouse) or isotype control (Biolegend, Cat# 401916; 100µg/mice) for 3 alternate days, 1 week before the start of experiment.

5 Mice were subsequently treated with MPTP, LPS and NDP-MSH as described above.

6 Another dose of anti-mouse CD25 monoclonal antibody or isotype control was administered 2 days before the sacrifice.