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# **Dopamine neuron loss by selective deletion of autophagy-related gene 5 is not exacerbated by MPTP toxicity in midbrain**

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## **Highlights**

- Conditional knockout of Atg5 reduced midbrain dopamine neurons.
- MPTP-induced neural toxicity was not observed in Atg5 knockout mice.
- Atg5-involved autophagy is likely necessary for midbrain dopamine neuron survival.
- Atg5-involved autophagy is likely involved in MPTP-induced neuronal degeneration.

## **Abstract**

Parkinson's disease (PD) is a progressive neurological disease, one of the pathological characteristics is a gradual loss of midbrain dopaminergic (mDA) neurons in the substantia nigra pars compacta (SNpc). In animals, PD-like symptoms can be induced

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