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Melatonin promotes neuroprotection of induced pluripotent stem cells-derived neural stem cells subjected to H<sub>2</sub>O<sub>2</sub>-induced injury in vitro

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## Abstract

Melatonin is a neurohormone mainly extracted from the pineal gland with neuroprotective effects. It has antioxidant, anti-inflammatory, and antiapoptotic functions. However, the mechanism of melatonin against reactive oxygen species is unclear. Here, we explore the potential proliferative and neuroprotective mechanism of melatonin on induced pluripotent stem cells (iPSC)-derived neural stem cells (NSCs) exposed to hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>). NSCs were induced from iPSCs,

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