

## MPTP HCl

货号: M7271

储存条件: 粉末-20°C 可保存 3 年; 液体-80°C 可保存 12 月。

## 产品描述

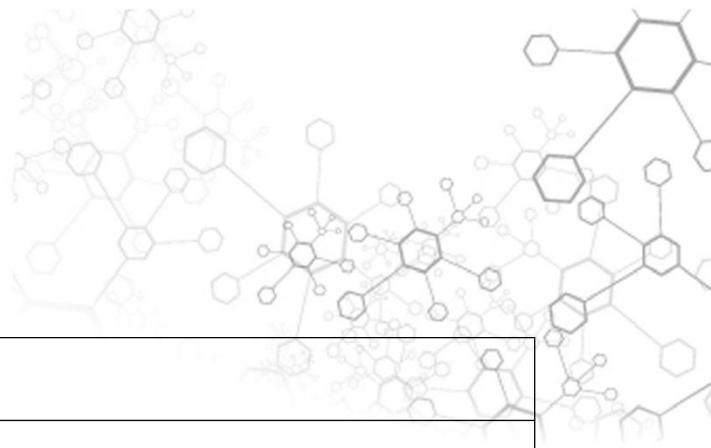
MPTP HCl is a neurotoxin that causes symptoms similar to parkinson's disease by destroying dopamine-producing nerve cells in the substantia nigra. It is widely used in the study of various animal models of Parkinson's disease.

Parkinson's disease (PD) is characterized by the selective loss of dopaminergic neurons in the substantia nigra (SN). MPTP is a neurotoxin that can induce symptoms similar to those observed in PD in humans, nonhuman primates, and mice. In addition, MPTP induces selective loss of dopaminergic neurons in mice SN. Mice in the MPTP group were intraperitoneally injected with 20 mg/kg MPTP hydrochloride dissolved in saline, with four injections at 3-hour intervals over a period of 1 day. The number of tyrosine hydroxylase-immunoreactive neurons in the MPTP group was significantly lower than in the normal group ( $P < 0.05$ ), indicating successful establishment of the Parkinson's disease model. The changes in thioredoxin reductase 1 protein expression in the midbrain 7 days after the last injection of MPTP were detected. The MPTP-treated mice showed a 40% decrease in thioredoxin reductase 1 protein level compared with the normal mice ( $P < 0.05$ ). Moreover, there was a pronounced reduction in thioredoxin reductase 1 mRNA level in MPTP-treated mice compared with normal mice ( $P < 0.05$ ).

**Synonyms:** 1-Methyl-4-phenyl-1,2,3,6-tetrahydropyridine hydrochloride

储存液制备	质量	1 mg	5 mg	10 mg
	1 mM	4.7684 mL	23.8419 mL	47.6837 mL
	5 mM	0.9537 mL	4.7684 mL	9.5367 mL
	10 mM	0.4768 mL	2.3842 mL	4.7684 mL





## 产品性质

CAS号	23007-85-4	
分子式	C <sub>12</sub> H <sub>16</sub> ClN	
分子量	209.72	
溶解度	DMSO	18.0 mg/mL (85.8 mM)
	Water	39.0 mg/mL (186.0 mM)
	Ethanol	40.0 mg/mL (190.7 mM)

