

MPTP (hydrochloride)

Catalog No: tcsc1337



Available Sizes

Size: 10mg

Size: 50mg

Size: 100mg



Specifications

CAS No:

23007-85-4

Formula:

$C_{12}H_{16}ClN$

Pathway:

Others

Target:

Others

Purity / Grade:

>98%

Solubility:

DMSO : 12 mg/mL (57.22 mM; Need ultrasonic and warming); H₂O : ≥ 105 mg/mL (500.67 mM)

Observed Molecular Weight:

209.72

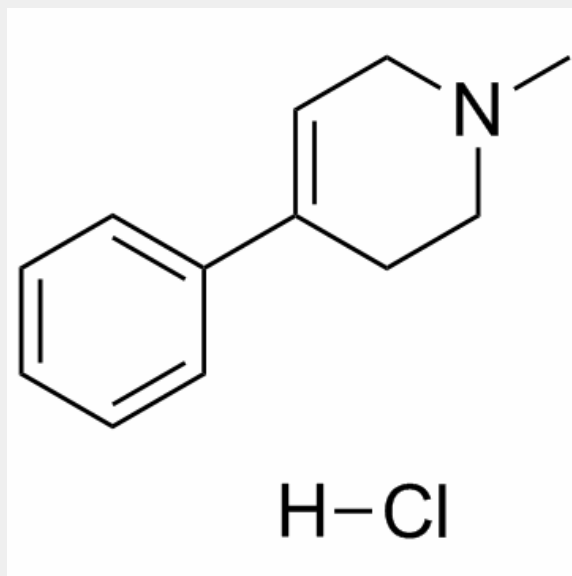
Product Description

MPTP hydrochloride is a brain penetrant **dopamine** neurotoxin, inducing Parkinson's Disease.

In Vitro: Pretreatment with 50 mM 4-phenylpyridine, reduces IC₅₀ (concentration for 50% inhibition of twitch amplitude) values of

MPTP from 53 to 18 mM and d-tubocurarine from 0.7 to 0.3 mM, respectively, in mouse phrenic nerve-diaphragm^[3].

In Vivo: The toxic effect of MPTP can be completely abolished in vivo by treatment with a monoamine oxidase inhibitor and potentiated by an inhibitor of catechol-O-methyltransferase^[1]. Allopurinol potentiated the MPTP (35 mg/kg)-induced decrease in the DOPAC+HVA/DA ratio and increase in striatal AA oxidation of the rat^[2]. Gas1 expressions are significantly elevated in the majority of the reactive astrocytes of the brains with LPS or MPTP insults in animal models^[4].



All products are for RESEARCH USE ONLY. Not for diagnostic & therapeutic purposes!