

Memantine (hydrochloride)

Catalog No: tcsc2422



Available Sizes

Size: 1g

Size: 5g

Size: 25g



Specifications

CAS No:

41100-52-1

Formula:

$C_{12}H_{22}ClN$

Pathway:

Autophagy;Metabolic Enzyme/Protease;Membrane Transporter/Ion Channel;Neuronal Signaling

Target:

Autophagy;Cytochrome P450;iGluR;iGluR

Purity / Grade:

>98%

Solubility:

H₂O : ≥ 33.33 mg/mL (154.48 mM)

Alternative Names:

D-145 (hydrochloride)

Observed Molecular Weight:

215.76

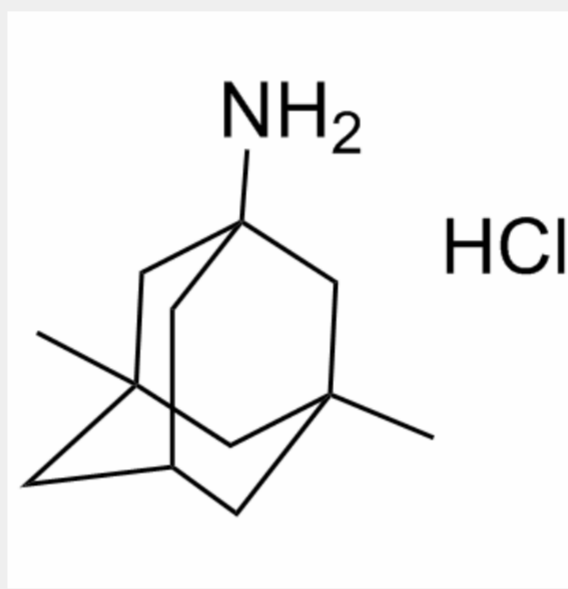
Product Description

Memantine, an amantadine derivative with low to moderate-affinity for NMDA receptors, inhibit CYP2B6 and CYP2D6 with K_i of 0.51 nM and 94.9 μ M, respectively..

Target: NMDA Receptor,

Memantine (Ebixa, Axura, Namenda, Akatinol) is a moderate-affinity, uncompetitive, voltage-dependent, NMDA-receptor antagonist with fast on/off kinetics that inhibits excessive calcium influx induced by chronic overstimulation of the NMDA receptor. Memantine is approved in the US and the EU for the treatment of patients with moderate to severe dementia of the Alzheimer's type [1].

Memantine has considerable therapeutic potential for the myriad of clinical entities associated with NMDA receptor-mediated neurotoxicity [2]. Memantine blocked 200 μ M NMDA-evoked responses with a 50% inhibition constant (IC_{50}) of approximately 1 μ M at -60 mV and an empirical Hill coefficient of approximately 1 [3].



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