



LKT Laboratories, Inc.

Memantine Hydrochloride

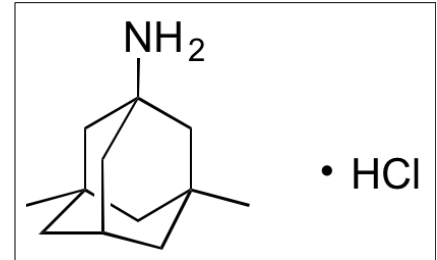
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Product Information

Product ID M1749
CAS No. 41100-52-1
Chemical Name 3,5-Dimethyltricyclo[3.3.1.1^{3,7}]decan-1-amine hydrochloride

Synonym Akatinol

Formula C₁₂H₂₁N • HCl
Formula Wt. 215.77
Melting Point 258° C
Purity ≥97%
Solubility Soluble in water.



Bulk quantities available upon request

Product ID	Size
M1749	25 mg
M1749	100 mg

Store Temp Ambient

Ship Temp Ambient

Description Memantine is an inhibitor of NMDA receptors that exhibits neuroprotective and cognition enhancing activities and is clinically used to treat Alzheimer's disease, dementia, and Parkinson's disease. Memantine also inhibits 5-HT₃ receptors and α₇ nicotinic acetylcholine receptors (nAChRs) and activates D₂ receptors. Memantine improves spatial learning and memory impairments in various animal models and clinical settings. Additionally, memantine stimulates dendritic spine maturation and synapse formation in vivo.

References Liu MY, Wang S, Yao WF, et al. Memantine improves spatial learning and memory impairments by regulating NGF signaling in APP/PS1 transgenic mice. *Neuroscience*. 2014 Jul 25;273:141-51. PMID: 24846616.

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Aracava Y, Pereira EF, Maelicke A, et al. Memantine blocks alpha₇* nicotinic acetylcholine receptors more potently than n-methyl-D-aspartate receptors in rat hippocampal neurons. *J Pharmacol Exp Ther*. 2005 Mar;312(3):1195-205. PMID: 15522999.

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Caution: This product is intended for laboratory and research use only. It is not for human or drug use.