



# LKT Laboratories, Inc.

## Mecamylamine Hydrochloride

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### Product Information

Product ID M1708  
CAS No. 826-39-1

#### Chemical Name

**Synonym** inversine, 2-(methylamino)isocamphane hydrochloride, N,2,3,3-tetramethyl-2-norbornanamine, N,2,3,3-tetramethylbicyclo[2.2.1]heptan-2-amine hydrochloride

**Formula** C<sub>11</sub>H<sub>21</sub>N • HCl

**Formula Wt.** 203.75

**Melting Point** 245.5-246.5 °C (dec)

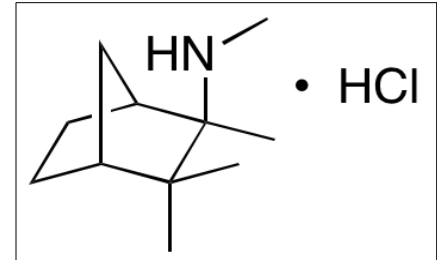
**Purity** ≥98%

**Solubility**

**Store Temp** Ambient

**Ship Temp** Ambient

**Description** Mecamylamine is a reversible, non-competitive, non-selective inhibitor of nicotinic acetylcholine receptors (nAChRs); it decreases channel open time and burst duration. This compound exhibits antihypertensive, antidepressant, and anxiolytic activities. Mecamylamine crosses the blood-brain barrier and acts both centrally and peripherally, resulting in high incidence of peripheral side effects. Mecamylamine was previously clinically used to decrease blood pressure, but also reduces mood instability and depression in subjects with Tourette's syndrome and shows potential benefit as a smoking cessation therapy. In animals, mecamylamine improves activity in the forced swim test, social interaction tests, and light/dark paradigms.



**Bulk quantities available upon request**

Product ID	Size
M1708	5 mg
M1708	25 mg
M1708	100 mg

**References** Peng C, Kimbrell MR, Tian C, et al. Multiple modes of  $\alpha 7$  nAChR noncompetitive antagonism of control agonist-evoked and allosterically enhanced currents. *Mol Pharmacol*. 2013 Sep;84(3):459-75. PMID: 23839567.

Sanberg PR, Vindrola-Padros C, Shytle RD. Translating laboratory discovery to the clinic: from nicotine and mecamylamine to Tourette's, depression, and beyond. *Physiol Behav*. 2012 Dec 5;107(5):801-8. PMID: 22776623.

LeSage MG, Shelley D, Pravetoni M, et al. Enhanced attenuation of nicotine discrimination in rats by combining nicotine-specific antibodies with a nicotinic receptor antagonist. *Pharmacol Biochem Behav*. 2012 Jul;102(1):157-62. PMID: 22503967.

Bacher I, Wu B, Shytle DR, et al. Mecamylamine - a nicotinic acetylcholine receptor antagonist with potential for the treatment of neuropsychiatric disorders. *Expert Opin Pharmacother*. 2009 Nov;10(16):2709-21. PMID: 19874251.

Lippiello PM, Beaver JS, Gatto GJ, et al. TC-5214 (S-(+)-mecamylamine): a neuronal nicotinic receptor modulator with antidepressant activity. *CNS Neurosci Ther*. 2008 Winter;14(4):266-77. PMID: 19040552.

Shytle RD, Penny E, Silver AA, et al. Mecamylamine (Inversine): an old antihypertensive with new research directions. *J Hum Hypertens*. 2002 Jul;16(7):453-7. PMID: 12080428.

Hayashi E, Yamada S, Mori M. Comparative studies on anti-nicotinic action of hexamethonium, mecamylamine and adenosine in the guinea pig isolated ileum. *Jpn J Pharmacol*. 1977 Oct;27(5):659-65. PMID: 592556.

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