

## Certificate of Analysis

[www.tocris.com](http://www.tocris.com)

**Product Name:** Mecamylamine hydrochloride

**Catalog No.:** 2843

**Batch No.:** 5

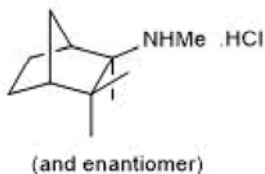
CAS Number: 110691-49-1

EC Number: 212-555-8

IUPAC Name: (1*R*,2*S*,4*S*)-*rel*-*N*,2,3,3-Tetramethylbicyclo[2.2.1]heptan-2-amine hydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>11</sub>H<sub>21</sub>N.HCl.  
**Batch Molecular Weight:** 203.75  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
 DMSO to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**<sup>1</sup>H NMR:** Consistent with structure

**Mass Spectrum:** Consistent with structure

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	64.84	10.88	6.87
Found	64.84	11.16	6.94

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

[www.tocris.com/distributors](http://www.tocris.com/distributors)

Tel: +1 612 379 2956

## Product Information

[www.tocris.com](http://www.tocris.com)

**Product Name:** Mecamylamine hydrochloride

**Catalog No.:** 2843

**Batch No.:** 5

CAS Number: 110691-49-1

EC Number: 212-555-8

IUPAC Name: (1*R*,2*S*,4*S*)-*rel*-*N*,2,3,3-Tetramethylbicyclo[2.2.1]heptan-2-amine hydrochloride

### Description:

Mecamylamine hydrochloride is a non-competitive nicotinic acetylcholine receptor antagonist. Displays antidepressant-like effects in mice.

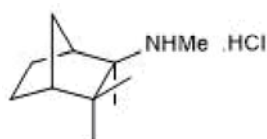
### Physical and Chemical Properties:

Batch Molecular Formula: C<sub>11</sub>H<sub>21</sub>N.HCl.

Batch Molecular Weight: 203.75

Physical Appearance: White solid

### Batch Molecular Structure:



(and enantiomer)

**Storage:** Desiccate at RT

### Solubility & Usage Info:

water to 100 mM

DMSO to 100 mM

### Stability and Solubility Advice:

Some solutions can be difficult to obtain and can be encouraged by rapid stirring, sonication or gentle warming (in a 45-60°C water bath).

Information concerning product stability, particularly in solution, has rarely been reported and in most cases we can only offer a general guide. Our standard recommendations are:

**SOLIDS:** Provided storage is as stated on the product label and the vial is kept tightly sealed, the product can be stored for up to 6 months from date of receipt.

**SOLUTIONS:** We recommend that stock solutions, once prepared, are stored aliquoted in tightly sealed vials at -20°C or below and used within 1 month. Wherever possible solutions should be made up and used on the same day.

### References:

**Ostromov *et al*** (2007) Modeling study of mecamylamine block of muscle type acetylcholine receptors. *Eur.Biophys.J.* **37** 393. PMID: 17938901.

**Rabenstein *et al*** (2006) The nicotinic antagonist mecamylamine has antidepressant-like effects in wild-type but not β2- or α7-nicotinic acetylcholine receptor subunit knockout mice. *Psychopharmacol.* **189** 395.

Caution - Not Fully Tested • Research Use Only • Not For Human or Veterinary Use

**bio-techne.com**

info@bio-techne.com

techsupport@bio-techne.com

**North America**

Tel: (800) 343 7475

**China**

info.cn@bio-techne.com

Tel: +86 (21) 52380373

**Europe Middle East Africa**

Tel: +44 (0)1235 529449

**Rest of World**

www.tocris.com/distributors

Tel:+1 612 379 2956