

## Certificate of Analysis

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**Product Name:** *N*<sup>ε</sup>-Methylhistamine dihydrochloride

**Catalog No.:** 0573

**Batch No.:** 2

**CAS Number:** 16503-22-3

**IUPAC Name:** *N*-Methyl-1*H*-imidazole-4-ethanamine dihydrochloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>6</sub>H<sub>11</sub>N<sub>3</sub>.2HCl.¼H<sub>2</sub>O

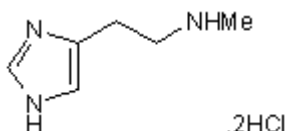
**Batch Molecular Weight:** 202.59

**Physical Appearance:** White solid

**Solubility:** water to 100 mM  
phosphate buffered saline to 100 mM

**Storage:** Desiccate at RT

**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**TLC:** R<sub>f</sub> = 0.22 (Dichloromethane:Methanol:Ammonia soln. [8:2:0.2])

**Melting Point:** At 181°C

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

**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	35.57	6.72	20.74
Found	35.57	6.57	20.5

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

## Product Information

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### Description:

Potent histamine agonist, particularly at H<sub>3</sub> receptors (potency relative to histamine is 81, 185, and 270% at H<sub>1</sub>, H<sub>2</sub> and H<sub>3</sub> respectively). Also displays agonist properties at H<sub>4</sub> receptors to which it binds with moderate affinity (K<sub>i</sub> = 23 nM).

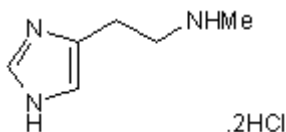
### Physical and Chemical Properties:

Batch Molecular Formula: C<sub>6</sub>H<sub>11</sub>N<sub>3</sub>.2HCl.¼H<sub>2</sub>O

Batch Molecular Weight: 202.59

Physical Appearance: White solid

### Batch Molecular Structure:



**Storage:** Desiccate at RT

### Solubility & Usage Info:

water to 100 mM

phosphate buffered saline 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:

**Hill *et al* (1990)** Distribution, properties, and functional characteristics of three classes of histamine receptor. *Pharmacol.Rev.* **42** 45. PMID: 2164693.

**Schwartz *et al* (1990)** A third histamine receptor subtype - characterization, localization and functions of the H<sub>3</sub>-receptor. *Agents Actions* **30** 13. PMID: 1695431.

**Zweig *et al* (1992)** Characterization of digitonin-solubilized bovine brain H<sub>3</sub> histamine receptor coupled to a guanine nucleotide-binding protein. *J.Neurochem.* **59** 1661. PMID: 1328529.

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