

## Certificate of Analysis

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**Product Name:** McN-A 343

**Catalog No.:** 1384

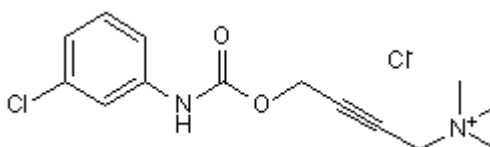
**Batch No.:** 2

CAS Number: 55-45-8

IUPAC Name: 4-[[[(3-Chlorophenyl)amino]carbonyl]oxy]-*N,N,N*-trimethyl-2-butyne-1-aminium chloride

### 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>14</sub>H<sub>18</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>2</sub>  
**Batch Molecular Weight:** 317.21  
**Physical Appearance:** White solid  
**Solubility:** water to 100 mM  
**Storage:** Desiccate at RT  
**Batch Molecular Structure:**



### 2. ANALYTICAL DATA

**HPLC:** Shows 100% purity  
**<sup>1</sup>H NMR:** Consistent with structure  
**Mass Spectrum:** Consistent with structure  
**Microanalysis:**

	Carbon	Hydrogen	Nitrogen
Theoretical	53.01	5.72	8.83
Found	53.04	5.76	8.85

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

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**Description:**

Selective muscarinic M<sub>1</sub> receptor agonist. Selectivity for M<sub>1</sub> over other muscarinic receptor types appears to arise from a high efficacy at M<sub>1</sub> receptors.

**Physical and Chemical Properties:**

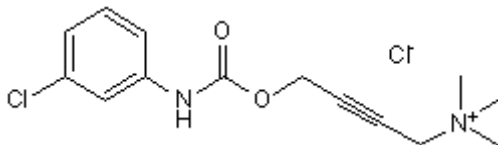
Batch Molecular Formula: C<sub>14</sub>H<sub>18</sub>Cl<sub>2</sub>N<sub>2</sub>O<sub>2</sub>

Batch Molecular Weight: 317.21

Physical Appearance: White solid

**Minimum Purity:** >99%

**Batch Molecular Structure:**



**Storage:** Desiccate at RT

**Solubility & Usage Info:**

water 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:**

**Micheletti and Schiavone** (1990) Functional determination of McN-A-343 affinity for M<sub>1</sub> muscarinic receptors. *J.Pharmacol.Exp.Ther.* **253** 310. PMID: 1691785.

**Eglen et al** (1996) Muscarinic receptor subtypes and smooth muscle function. *Pharmacol.Rev.* **48** 531. PMID: 8981565.

**Davies et al** (2001) Inhibition of field stimulation-induced contractions of rabbit vas deferens by muscarinic receptor agonists: selectivity of McN-A-343 for M<sub>1</sub> receptors. *J.Pharm.Pharmacol.* **53** 487. PMID: 11341365.

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