

# **Certificate of Analysis**

Print Date: Jan 15th 2016

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Product Name: 4-DAMP Catalog No.: 0482 Batch No.: 1

CAS Number: 1952-15-4

IUPAC Name: 1,1-Dimethyl-4-diphenylacetoxypiperidinium iodide

# 1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula:  $C_{21}H_{26}INO_2$ Batch Molecular Weight: 451.33

Physical Appearance: White crystalline solid
Solubility: DMSO to 25 mM
Storage: Store at RT

**Batch Molecular Structure:** 

#### 2. ANALYTICAL DATA

Melting Point:

HPLC:

Shows >99.9% purity

HNMR:

Consistent with structure

Mass Spectrum:

Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 55.88 5.81 3.1 Found 55.76 5.74 2.94



# **Product Information**

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CAS Number: 1952-15-4

IUPAC Name: 1,1-Dimethyl-4-diphenylacetoxypiperidinium iodide

## **Description:**

Antagonist at the  $M_3$  cholinergic receptor. [3H]-4-DAMP selectively labels  $M_1$  and  $M_3$  receptors.

#### **Physical and Chemical Properties:**

Batch Molecular Formula: C<sub>21</sub>H<sub>26</sub>INO<sub>2</sub> Batch Molecular Weight: 451.33

Physical Appearance: White crystalline solid

# **Minimum Purity:** >99%

#### **Batch Molecular Structure:**

Storage: Store at RT

#### Solubility & Usage Info:

DMSO to 25 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:

**Barlow and Shepherd** (1986) A further search for selective antagonists at M<sub>2</sub>- muscarinic receptors. Br.J.Pharmacol. **89** 837. PMID: 3814912.

Michel et al (1989) Direct labelling of rat M<sub>3</sub>-muscarinic receptors by [3H]4-DAMP. Eur.J.Pharmacol. 166 459. PMID: 2806372.