

# Certificate of Analysis

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**Product Name:** Pancuronium dibromide

**Catalog No.:** 0693

**Batch No.:** 8

CAS Number: 15500-66-0

EC Number: 239-532-5

IUPAC Name: 1,1'-(3 $\alpha$ ,17 $\beta$ -Dihydroxy-2 $\beta$ ,5 $\alpha$ -androstan-2 $\beta$ ,16 $\beta$ -ylene) bis[1-methylpiperidinium] diacetate dibromide

## 1. PHYSICAL AND CHEMICAL PROPERTIES

**Batch Molecular Formula:** C<sub>35</sub>H<sub>60</sub>Br<sub>2</sub>N<sub>2</sub>O<sub>4</sub>·<sup>3</sup>/<sub>4</sub>H<sub>2</sub>O

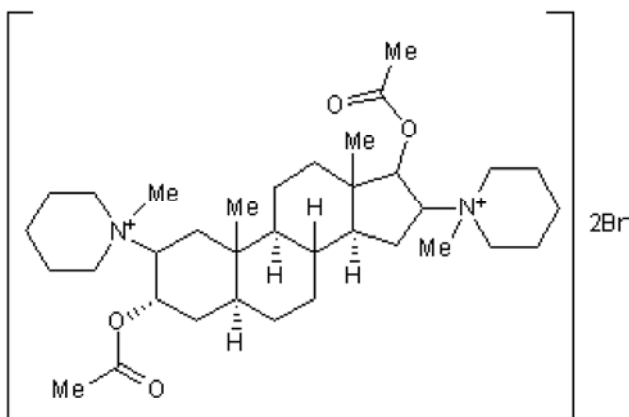
**Batch Molecular Weight:** 746.19

**Physical Appearance:** Pink solid

**Solubility:**  
water to 100 mM  
DMSO to 20 mM  
ethanol 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

	Carbon	Hydrogen	Nitrogen
Theoretical	56.34	8.31	3.75
Found	56.32	8.24	3.52

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

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## Product Information

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### Description:

Nicotine (neuromuscular) antagonist. Skeletal muscle relaxant.

### Physical and Chemical Properties:

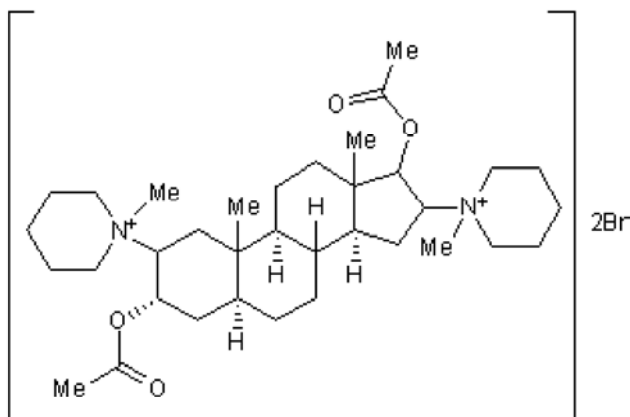
Batch Molecular Formula: C<sub>35</sub>H<sub>60</sub>Br<sub>2</sub>N<sub>2</sub>O<sub>4</sub>·½H<sub>2</sub>O

Batch Molecular Weight: 746.19

Physical Appearance: Pink solid

**Minimum Purity:** >99%

### Batch Molecular Structure:



**Storage:** Desiccate at RT

### Solubility & Usage Info:

water to 100 mM

DMSO to 20 mM

ethanol 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:

**Lowenick et al** (2001) Open channel and competitive block of nicotinic receptors by pancur. and atrac. *Eur.J.Pharmacol.* **413** 31. PMID: 11173060.

**Maestroni et al** (1994) Extracellular pancur. affects sodium current in chick embryo sensory neurones. *Br.J.Pharmacol.* **111** 283. PMID: 8012707.

**Fryer and MacLagan** (1987) Pancuronium and gallamine are antagonists for pre- and post-junctional muscarinic receptors in the guinea-pig lung. *Naunyn Schmiedebergs Arch.Pharmacol.* **335** 367. PMID: 3600815.

Merck Index **12** 7139.

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