



Certificate of Analysis

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Product Name: Biperiden hydrochloride Catalog No.: 2853 Batch No.: 1

CAS Number: 1235-82-1 EC Number: 214-976-2

IUPAC Name: α -Bicyclo[2.2.1]hept-5-en-2-yl- α -phenyl-1-piperidinepropanol hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₉NO.HCl

Batch Molecular Weight: 347.92

Physical Appearance: White solid

Solubility: water to 5 mM

DMSO to 10 mM

Storage: Desiccate at +4°C

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 99.9% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 72.5 8.7 4.03 Found 72.61 8.65 3.96



Product Information

Print Date: Aug 6th 2019

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IUPAC Name: α-Bicyclo[2.2.1]hept-5-en-2-yl-α-phenyl-1-piperidinepropanol hydrochloride

Description:

Muscarinic receptor antagonist that displays some selectivity for the M_1 subtype (K_i values are 0.48, 2.4, 3.9, 6.3 and 6.3 nM for $M_1,\ M_4,\ M_3,\ M_2$ and M_5 receptors respectively). Alleviates extrapyramidal symptoms associated with antipsychotic drugs. Displays antiparkinsonian activity.

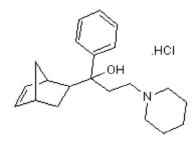
Physical and Chemical Properties:

Batch Molecular Formula: C21H29NO.HCI

Batch Molecular Weight: 347.92 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at +4°C

Solubility & Usage Info:

water to 5 mM DMSO to 10 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:

Brocks (1999) Anticholinergic drugs used in Parkinson's disease: an overlooked class of drugs from a pharmacokinetic perspective. J.Pharm.Pharmaceut.Sci. **2** 39.

Sudo et al (1999) Muscarinic receptor occupancy by bipe. in living human brain. Life Sci. 64 PL99. PMID: 10069534.

Bolden *et al* (1992) Antagonism by antimuscarinic and neuroleptic compounds at the five cloned human muscarinic cholinergic receptors expressed in chinese hamster ovary cells. J.Pharmacol.Exp.Ther. **260** 576. PMID: 1346637.