



Certificate of Analysis

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Batch No.: 1

Catalog No.: 4241

Product Name: Olopatadine hydrochloride

CAS Number: 140462-76-6

IUPAC Name: (Z)-11-[3-(Dimethylamino)propylidene]-6,11-dihydro-dibenz[b,e]oxepin-2-acetic acid hydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₃NO₃.HCl

Batch Molecular Weight: 373.87

Physical Appearance: White solid

Solubility: water to 75 mM

DMSO to 100 mM

Storage: Desiccate at RT

Batch Molecular Structure:

2. ANALYTICAL DATA

HPLC: Shows 100% purity

¹H NMR: Consistent with structure Mass Spectrum: Consistent with structure

Microanalysis: Carbon Hydrogen Nitrogen

Theoretical 67.46 6.47 3.75 Found 67.34 6.8 3.79



Product Information

Print Date: Dec 14th 2011

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IUPAC Name: (Z)-11-[3-(Dimethylamino)propylidene]-6,11-dihydro-dibenz[b,e]oxepin-2-acetic acid hydrochloride

Description:

Histamine $\rm H_1$ receptor antagonist ($\rm K_i=31.6~nM$). Inhibits the release of histamine, prostaglandin $\rm D_2$ and tryptase in a concentration-dependent manner. Mast cell stabilizer; inhibits mast cell mediator release. Also suppresses inflammation by inhibition of cytokine production.

Physical and Chemical Properties:

Batch Molecular Formula: $C_{21}H_{23}NO_3$.HCl

Batch Molecular Weight: 373.87 Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:

Storage: Desiccate at RT

Solubility & Useage Info:

water to 75 mM DMSO 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).

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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:

Sharif et al (1996) Characterization of the ocular antiallergic and antihistaminic effects of olopatidine (AL-4943A), a novel drug for treating ocular allergic diseases. J.Pharm.Exp.Ther. **278** 1252.

Tamura et al (2007) Olopatidine ameliorates rat experimental cutaneous inflammation by improving skin barrier function. Pharmacology 81 118. PMID: 17962722.

