



# **Certificate of Analysis**

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Product Name: Olopatadine hydrochloride Catalog No.: 4241 Batch No.: 1

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: C<sub>21</sub>H<sub>23</sub>NO<sub>3</sub>.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

<sup>1</sup>H 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: Jan 15<sup>th</sup> 2016 **WWW.tocris.com** 

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# **Description:**

Histamine  $H_1$  receptor antagonist ( $K_i = 31.6$  nM). Inhibits the release of histamine, prostaglandin  $D_2$  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: C21H23NO3.HCI

Batch Molecular Weight: 373.87 Physical Appearance: White solid

**Minimum Purity:** >99%

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

Storage: Desiccate at RT

## Solubility & Usage 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).

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.