

Certificate of Analysis

Product Name: Cetirizine dihydrochloride

Catalog No.: 2577

Batch No.: 2

CAS Number: 83881-52-1

IUPAC Name: [2-[4-(4-Chlorophenyl)phenylmethyl]-1-piperazinyl]ethoxy]acetic acid dihydrochloride

1. PHYSICAL AND CHEMICAL PROPERTIES

Batch Molecular Formula: C₂₁H₂₅ClN₂O₃.2HCl

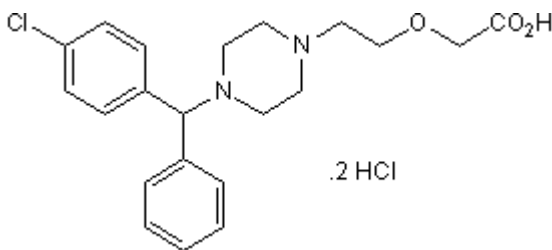
Batch Molecular Weight: 461.81

Physical Appearance: White solid

Solubility:
water to 100 mM
DMSO to 100 mM
ethanol to 10 mM

Storage: Desiccate at RT

Batch Molecular Structure:



2. ANALYTICAL DATA

HPLC: Shows 99.5% purity

¹H NMR: Consistent with structure

Mass Spectrum: Consistent with structure

Microanalysis:

	Carbon	Hydrogen	Nitrogen	Chlorine
Theoretical	54.62	5.89	6.06	23.03
Found	54.53	5.97	5.92	23.35

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

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Description:

Histamine H₁ receptor antagonist that displays selectivity over other receptors at concentrations up to 10 μM. A non-sedating antihistamine that inhibits histamine release and eosinophil chemotaxis during secondary phase allergic response. Inhibits activation of eosinophils, neutrophils and monocytes in vivo.

Physical and Chemical Properties:

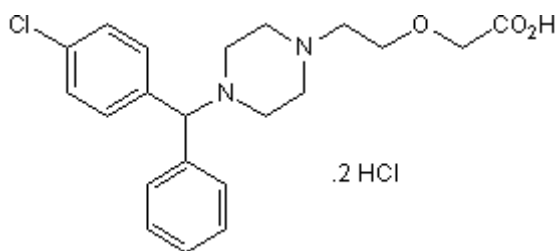
Batch Molecular Formula: C₂₁H₂₅ClN₂O₃·2HCl

Batch Molecular Weight: 461.81

Physical Appearance: White solid

Minimum Purity: >99%

Batch Molecular Structure:



Storage: Desiccate at RT

Solubility & Usage Info:

water to 100 mM
DMSO to 100 mM
ethanol 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:

Walsh et al (1991) Effects of cetirizine on human eosinophil and neutrophil activation in vitro. *Int.Arch.Allergy Appl.Immunol.* **95** 158. PMID: 1682275.

Campoli-Richards et al (1990) Cetirizine. A review of its pharmacological properties and clinical potential in allergic rhinitis, pollen-induced asthma, and chronic urticaria. *Drugs* **40** 762. PMID: 1981354.

Snowman and Snyder (1990) Cetirizine: actions on neurotransmitter receptors. *J.Allergy.Clin.Immunol.* **86** 1025. PMID: 1979798.

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bio-techne.com
info@bio-techne.com
techsupport@bio-techne.com

North America
Tel: (800) 343 7475

China
info.cn@bio-techne.com
Tel: +86 (21) 52380373

Europe Middle East Africa
Tel: +44 (0)1235 529449

Rest of World
www.tocris.com/distributors
Tel: +1 612 379 2956