

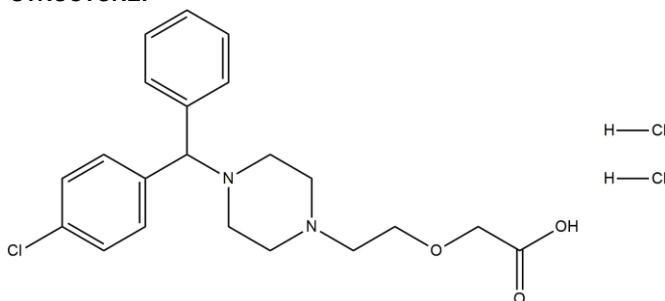
# Cetirizine dihydrochloride

02/20

**ALTERNATE NAMES:** 2-[2-[4-[(4-chlorophenyl)-phenylmethyl]piperazin-1-yl]ethoxy]acetic acid, dihydrochloride; (+/-)-(2-(4-(p-Chloro- $\alpha$ -phenylbenzyl)-1-piperazinyl)ethoxy)acetic acid, dihydrochloride; UCB-P 071; Zyrtec; Reactine

**CATALOG #:** B2993-100 100 mg  
B2993-500 500 mg

**STRUCTURE:**



**MOLECULAR FORMULA:**  $C_{21}H_{27}Cl_3N_2O_3$

**MOLECULAR WEIGHT:** 461.81

**CAS NUMBER:** 83881-52-1

**APPEARANCE:** White Powder

**PURITY:** >98.0%

**SOLUBILITY:** ~12 mg/ml in DMSO  
~10 mg/ml in PBS, pH 7.2  
~3 mg/ml in DMF

**DESCRIPTION:** Cetirizine is a selective histamine H1 receptor antagonist with a  $K_i$  of 6 nM. It is a highly efficacious, well-tolerated, treatment for the management of Allergic Rhinitis. Cetirizine exerts anti-inflammatory effects apart from H1 antagonism. It significantly decreases the amounts of leukotriene B4 generated from neutrophil granulocytes. It inhibits aerosol histamine-induced bronchospasm in guinea pigs ( $ED_{50}$  value of 100  $\mu$ g/kg, p.o.).

**STORAGE TEMPERATURE:** -20°C. Protect from air. Store under desiccating conditions.

**HANDLING:** Do not take internally. Wear gloves and mask when handling the product! Avoid contact by all modes of exposure.

**REFERENCES:**

1. Llupia, J., Gras, J., and Llenas, J. Comparative antiallergic effects of second-generation H1-antihistamines ebastine, cetirizine and loratadine in preclinical models. *Arzneimittelforschung* 53(2), 93-97 (2003).
2. Köller, M., Hilger, R.A., Rihoux, J.P., et al. Cetirizine exerts anti-inflammatory effects on human neutrophils. *Int. Arch. Allergy. Immunol.* 110(1), 52-56 (1996).
3. Zhang, L., Cheng, L., and Hong, J. The clinical use of cetirizine in the treatment of allergic rhinitis. *Pharmacology* 92(1-2), 14-25 (2013).

**RELATED PRODUCTS:**

Triamcinolone acetonide (Cat. No. B1520)  
VUF 8430 dihydrobromide (Cat. No. B2925)  
Clemastine Fumarate (Cat. No. B2525)  
BF2649 hydrochloride (Cat. No. B2279)  
Chlorpromazine Hydrochloride (Cat. No. B1992)

**DISCLAIMER:** *FOR RESEARCH USE ONLY! Not to be used on humans.*