## Product Information

### Olopatadine (hydrochloride)

**Item No. 11999**

**CAS Registry No.:** 140462-76-6  
**Formal Name:** 11Z-[3-(dimethylamino)propylidene]-6,11-dihydro-dibenz[b,e]oxepin-2-acetic acid, monohydrochloride  
**Synonyms:** Allerock, ALO 4943A, KW 4679, Olopatine, Panatanse  
**MF:** C21H23NO3 • HCl  
**FW:** 373.9  
**Purity:** ≥98%  
**Stability:** ≥2 years at -20°C  
**Supplied as:** A crystalline solid

### Laboratory Procedures

For long term storage, we suggest that olopatadine (hydrochloride) be stored as supplied at -20°C. It should be stable for at least two years.

Olopatadine (hydrochloride) is supplied as a crystalline solid. A stock solution may be made by dissolving the olopatadine (hydrochloride) in the solvent of choice. Olopatadine (hydrochloride) is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide, which should be purged with an inert gas. The solubility of olopatadine (hydrochloride) in these solvents is approximately 0.25, 3, and 5 mg/ml, respectively.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. Organic solvent-free aqueous solutions of olopatadine (hydrochloride) can be prepared by directly dissolving the crystalline solid in aqueous buffers. The solubility of olopatadine (hydrochloride) in PBS, pH 7.2, is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Olopatadine is a potent, selective antagonist of the H1 histamine receptor (Kᵦ = 16-41.1 nM), with much lower affinities for the H2 and H3 receptors (Kᵦ = 43.4 and 172 μM, respectively). It blocks histamine-induced phosphoinositide turnover in isolated cells (IC₅₀ = 9.5-39.9 nM) and prevents passive cutaneous anaphylaxis in rats (ED₅₀ = 49 μg/kg) and anaphylactic bronchoconstriction in guinea pigs (ID₅₀ = 30 μg/kg). Olopatadine is effective in treating allergic rhinitis and conjunctivitis. It also suppresses itch in patients with well-controlled chronic urticaria. In humans, this antihistamine does not cause cognitive or psychomotor impairment at therapeutic doses.

### References


### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/11999](http://www.caymanchem.com/catalog/11999)

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**WARNING:** This product is for laboratory research only: not for administration to humans. Not for human or veterinary diagnostic or therapeutic use.

### MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent via email to your institution.

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