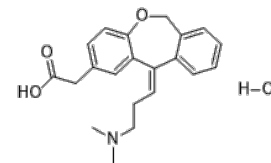


Product Name : Olopatadine hydrochloride
Cat. No. : PC-28137
CAS No. : 140462-76-6
Molecular Formula : C₂₁H₂₄ClNO₃
Molecular Weight : 373.88
Target : Histamine Receptor
Solubility : 10 mM in DMSO



Biological Activity

Olopatadine hydrochloride (AL-4943A, KW-4679) is an antiallergic/antihistaminic agent that inhibits mast cell mediator release and possesses **histamine H1 receptor (H1R)** antagonist activity with K_i of 31.6 nM, shows much lower affinities for H₂ receptors and H₃ receptors (K_i > 50 μM).

Olopatadine (AL-4943A, KW-4679) inhibits histamine release in a concentration-dependent fashion (IC₅₀ = 559 μM) from human conjunctival mast cell preparations in vitro.

Olopatadine inhibits histamine-induced phosphoinositide turnover in human conjunctival epithelial cells (IC₅₀ = 10 nM), exhibits apparent noncompetitive antagonist properties with an estimated dissociation constant (K_b) of 19.9 nM.

Olopatadine (AL-4943A, KW-4679) effectively inhibits antigen- and histamine-stimulated conjunctivitis in guinea pigs.

References

- Ohshima E, et al. *J Med Chem*. 1992 May 29;35(11):2074-84.
 Ohshima E, et al. *Chem Pharm Bull (Tokyo)*. 1992 Sep;40(9):2552-4.
 Miki I, et al. *Cell Immunol*. 1996 Aug 1;171(2):285-8.
 Sharif NA, et al. *J Pharmacol Exp Ther*. 1996 Sep;278(3):1252-61.

Caution: Product has not been fully validated for medical applications. Lab Use Only!

E-mail: tech@probechem.com