

Desloratadine

Catalog No: tcsc2639



Available Sizes

Size: 50mg

Size: 100mg

Size: 500mg



Specifications

CAS No:

100643-71-8

Formula:

$C_{19}H_{19}ClN_2$

Pathway:

Immunology/Inflammation;GPCR/G Protein

Target:

Histamine Receptor;Histamine Receptor

Purity / Grade:

>98%

Solubility:

10 mM in DMSO

Alternative Names:

Sch34117

Observed Molecular Weight:

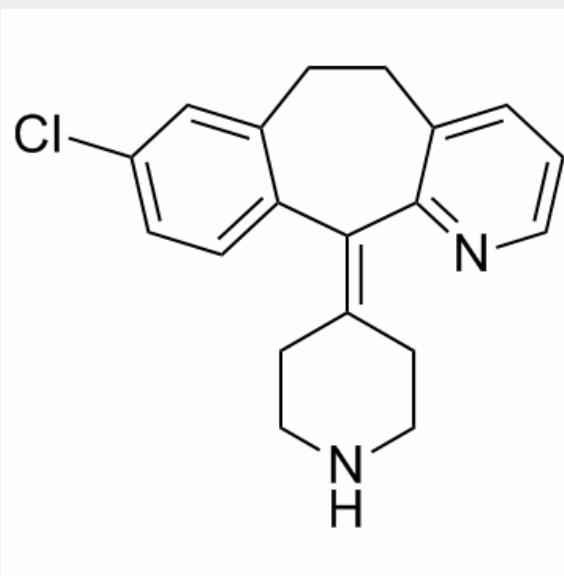
310.82

Product Description

Desloratadine(Sch34117) is a potent antagonist for human histamine H1 receptor used to treat allergies.

Target: Histamine H1 Receptor

Desloratadine binds to the human H1 receptor with K_i value of 0.87 nM in displacing tritiated mepyramine. Desloratadine (100 nM to 10 μ M) inhibits both IgE-mediated and non-IgE-mediated generation of the cytokines IL-4 and IL-13 by human basophils. Desloratadine (300 nM to 100 μ M) inhibits both IgE and non-IgE-mediated histamine release from human peripheral blood basophils. Desloratadine (0.1 μ M to 10 μ M) is also shown to inhibit platelet-activating factor-induced eosinophil chemotaxis and TNF- α -induced eosinophil adhesion in eosinophils obtained from patients with allergic rhinitis or allergic asthma [1]. Desloratadine (1 μ M-10 μ M) dose-dependently inhibits the release of histamine and LTC₄ from human basophils. Desloratadine (0.1 μ M-10 μ M) dose-dependently inhibits IL-13 secretion from basophils activated with IL-3 and PMA from human basophils. Desloratadine (10 μ M) pretreatment results in a substantial decrease of the induced cytokine message in cultured basophils. Desloratadine (10 μ M) pretreatment causes approximately an 80% reduction in the IL-4 message accumulated with anti-IgE activation in cultured basophils. Desloratadine (10 μ M) also inhibits the histamine and IL-4 protein secreted into the supernatants of cultured basophils [2]. [³H]Desloratadine binds to the human histamine H1 receptor expressed in CHO cells with K_d of 1.1 nM. Desloratadine is 52, 57, 194, and 153 times more potent than cetirizine, ebastine, fexofenadine, and loratadine, respectively, in competition-binding studies [3].



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