Desloratadine

Item No. 16931

CAS Registry No.: 100643-71-8

Formal Name: 8-chloro-6,11-dihydro-11-(4-piperidinylidene)-5H-benzo[5,6]cyclohepta[1,2-b]pyridine

Synonyms: Aerius™, Clarinex™, Descarboethoxyloratadine, NeoClarityn, NSC 675447, SCH 34117

MF: C_{19}H_{19}ClN_{2}

FW: 310.8

Purity: ≥98%

Stability: ≥2 years at -20°C

Supplied as: A crystalline solid

UV/Vis.: λ_{max}: 205, 245 nm

Laboratory Procedures

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

Desloratadine is supplied as a crystalline solid. A stock solution may be made by dissolving the desloratadine in the solvent of choice. Desloratadine is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF), which should be purged with an inert gas. The solubility of desloratadine in ethanol and DMF is approximately 30 mg/ml and approximately 10 mg/ml in DMSO.

Desloratadine is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, desloratadine should first be dissolved in ethanol and then diluted with the aqueous buffer of choice. Desloratadine has a solubility of approximately 0.5 mg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Desloratadine is the orally active metabolite of the non-sedating antihistamine loratadine (Item No. 15625). It is a tricyclic antagonist of the histamine H_{1} receptor (K_{i} = 0.97 nM).^{1,2} Its use in vivo features long duration of action with minimal sedation.^{2} Although studies indicate that desloratadine antagonizes muscarinic receptors, it has limited effects on peripheral muscarinic receptors in vivo and consequently minimally impacts xerostomia and dry eyes at therapeutic concentrations.^{3}

References


Related Products

For a list of related products please visit: www.caymanchem.com/catalog/16931

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

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 Safety Data Sheet, which has been sent via email to your institution.

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For further details, please refer to our Warranty and Limitation of Remedy located on our website and in our catalog.