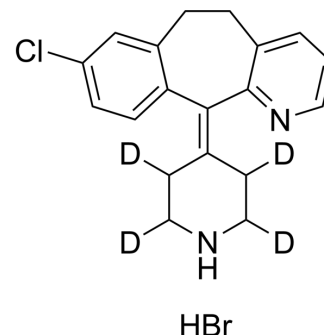


Desloratadine-d₄ hydrobromide

Cat. No.:	HY-B0539S4
Molecular Formula:	C ₁₉ H ₁₆ D ₄ BrClN ₂
Molecular Weight:	395.76
Target:	Histamine Receptor; Endogenous Metabolite; Drug Metabolite; Isotope-Labeled Compounds
Pathway:	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling; Metabolic Enzyme/Protease; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Desloratadine-d ₄ hydrobromide is deuterated labeled Desloratadine (HY-B0539). Desloratadine (Sch34117) is the orally active major metabolite of the non-sedating H ₁ -antihistamine Loratadine. Desloratadine is a selective H ₁ -receptor antagonist that has anti-allergic and anti-inflammatory activities ^{[1][2]} .
In Vitro	Stable heavy isotopes of hydrogen, carbon, and other elements have been incorporated into drug molecules, largely as tracers for quantitation during the drug development process. Deuteration has gained attention because of its potential to affect the pharmacokinetic and metabolic profiles of drugs ^[1] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

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- [3]. Schroeder, J.T., et al., Inhibition of cytokine generation and mediator release by human basophils treated with desloratadine. *Clin Exp Allergy*, 2001. 31(9): p. 1369-77.
- [4]. Anthes, J.C., et al., Biochemical characterization of desloratadine, a potent antagonist of the human histamine H(1) receptor. *Eur J Pharmacol*, 2002. 449(3): p. 229-37.
- [5]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother*. 2019 Feb;53(2):211-216.

Caution: Product has not been fully validated for medical applications. For research use only.

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