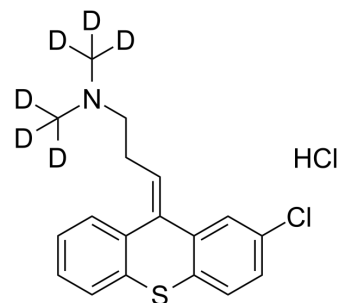


Chlorprothixene-d6 hydrochloride

Cat. No.:	HY-B0274AS
Molecular Formula:	C ₁₈ H ₁₃ D ₆ Cl ₂ NS
Molecular Weight:	358.36
Target:	Dopamine Receptor; Histamine Receptor; Bacterial
Pathway:	GPCR/G Protein; Neuronal Signaling; Immunology/Inflammation; Anti-infection
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Chlorprothixene-d6 hydrochloride is the deuterium labeled Chlorprothixene hydrochloride. Chlorprothixene hydrochloride is a dopamine and histamine receptors antagonist with K _i s of 18 nM, 2.96 nM, 4.56 nM, 9 nM and 3.75 nM for hD1, hD2, hD3, hD5 and hH1 receptors, respectively. Antipsychotic activity ^[1] .
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

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Y von Coburg, et al. Potential utility of histamine H3 receptor antagonist pharmacophore in antipsychotics. *Bioorg Med Chem Lett.* 2009 Jan 15;19(2):538-42.
- [3]. B L Roth, et al. Binding of typical and atypical antipsychotic agents to 5-hydroxytryptamine-6 and 5-hydroxytryptamine-7 receptors. *J Pharmacol Exp Ther.* 1994 Mar;268(3):1403-10.

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

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