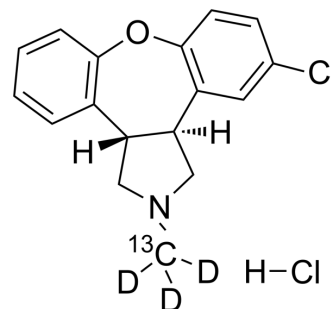


Asenapine-¹³C,₃D hydrochloride

Cat. No.:	HY-16567S
Molecular Formula:	C ₁₆ ¹³ CH ₁₄ D ₃ Cl ₂ NO
Molecular Weight:	326.24
Target:	Dopamine Receptor; 5-HT Receptor; Isotope-Labeled Compounds
Pathway:	GPCR/G Protein; Neuronal Signaling; Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Asenapine- ¹³ C, ₃ D ₃ (hydrochloride) is the ¹³ C- and deuterium labeled Asenapine (hydrochloride). Asenapine hydrochloride, an antipsychotic, is a 5-HT (1A, 1B, 2A, 2B, 2C, 5A, 6, 7) and Dopamine (D2, D3, D4) receptor antagonist with Ki values of 0.03-4.0 nM for 5-HT and 1.3, 0.42, 1.1 nM for Dopamine receptor, respectively.	
IC₅₀ & Target	D ₃ Receptor	D ₄ Receptor
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 ^[36] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

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- [2]. Ene HM, et al. Effects of repeated asenapine in a battery of tests for anxiety-like behaviours in mice. *Acta Neuropsychiatr.* 2016 Apr;28(2):85-91.
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- [4]. Shahid M, et al. Asenapine: a novel psychopharmacologic agent with a unique human receptor signature. *J Psychopharmacol.* 2009 Jan;23(1):65-73.
- [5]. Stoner SC, Pace HA. Asenapine: a clinical review of a second-generation antipsychotic. *Clin Ther.* 2012 May;34(5):1023-40.

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

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