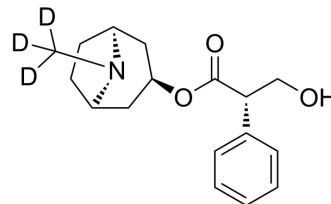


L-Hyoscyamine-d₃

Cat. No.:	HY-N0471S		
Molecular Formula:	C ₁₇ H ₂₀ D ₃ NO ₃		
Molecular Weight:	292.39		
Target:	mAChR		
Pathway:	GPCR/G Protein; Neuronal Signaling		
Storage:	Powder	-20°C	3 years
		4°C	2 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	L-Hyoscyamine-d ₃ is the deuterium labeled L-Hyoscyamine. L-Hyoscyamine (Daturine), a natural plant tropane alkaloid, is a potent and competitive muscarinic receptor (MR) antagonist. L-Hyoscyamine is a levo-isomer to Atropine (HY-B1205)[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

- [1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. *Ann Pharmacother.* 2019;53(2):211-216.
- [2]. Harald John, et al. Application of an enantioselective LC-ESI MS/MS procedure to determine R- and S-hyoscyamine following intravenous atropine administration in swine. *Drug Test Anal.* Mar-Apr 2012;4(3-4):194-8.
- [3]. Lars Göran Axelsson, et al. Regulatory role of 5-HT and muscarinic receptor antagonists on the migrating myoelectric complex in rats. *Eur J Pharmacol.* 2003 Apr 25;467(1-3):211-8.

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

Tel: 609-228-6898

Fax: 609-228-5909

E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA