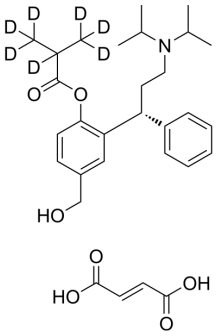
Fesoterodine-d7 fumarate

Cat. No.:	HY-A0030S
CAS No.:	2747918-94-9
Molecular Formula:	$C_{30}H_{34}D_7NO_7$
Molecular Weight:	534.69
Target:	mAChR
Pathway:	GPCR/G Protein; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Fesoterodine-d_7 (fumarate) is the deuterium labeled Fesoterodine fumarate[1]. Fesoterodine Fumarate is an orally active, nonsubtype selective, competitive muscarinic receptor (mAChR) antagonist with pKi values of 8.0, 7.7, 7.4, 7.3, 7.5 for M1, M2, M3, M4, M5 receptors, respectively. Fesoterodine Fumarate is used for the overactive bladder (OAB)[2][3].
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 Feb;53(2):211-216.

[2]. Ellsworth P, et al. Fesoterodine for the treatment of urinary incontinence and overactive bladder. Ther Clin Risk Manag. 2009;5:869-76. Epub 2009 Nov 18.

[3]. Didem Yilmaz-Oral, et al. The Beneficial Effect of Fesoterodine, a Competitive Muscarinic Receptor Antagonist on Erectile Dysfunction in Streptozotocin-induced Diabetic Rats.

[4]. Peter Ney, et al. Pharmacological Characterization of a Novel Investigational Antimuscarinic Drug, Fesoterodine, in Vitro and in Vivo. BJU Int. 2008 Apr101(8):1036-42.

[5]. Martin C Michel, et al. Fesoterodine: A Novel Muscarinic Receptor Antagonist for the Treatment of Overactive Bladder Syndrome. Expert Opin Pharmacother. 2008 Jul9(10):1787-96.

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