Product Data Sheet

Inhibitors • **Screening Libraries** • Proteins

D

`OH

Emedastine-¹³C,d₃ fumarate

Cat. No.:	HY-108411S	N N
Molecular Formula:	$C_{20}^{13}CH_{27}D_{3}N_{4}O_{5}$	
Molecular Weight:	422.5	
Target:	Histamine Receptor; Isotope-Labeled Compounds	, 0
Pathway:	GPCR/G Protein; Immunology/Inflammation; Neuronal Signaling; Others	١
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	но

DIDEOGICAE ACTIVITY		
Description	Emedastine- ¹³ C,d ₃ (fumarate) is the ¹³ C- and deuterium labeled Emedastine. Emedastine is an orally active, selective and high affinity histamine H1 receptor antagonist with a Ki value of 1.3 nM. Emedastine is a benzimidazole derivative with potent antiallergic properties and used for allergic rhinitis, allergic skin diseases and allergic conjunctivitis[1][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 ^[67] . MCE has not independently confirmed the accuracy of these methods. They are for reference only.	

REFERENCES

[1]. Andoh T, et al. Involvement of blockade of leukotriene B(4) action in anti-pruritic effects of emedastine in mice. Eur J Pharmacol. 2000 Oct 6;406(1):149-52.

[2]. Murota H, et al. Emedastine difumarate: a review of its potential ameliorating effect for tissue remodeling in allergic diseases. Expert Opin Pharmacother. 2009 Aug;10(11):1859-67.

[3]. Sharif NA, et al. Emedastine: a potent, high affinity histamine H1-receptor-selective antagonist for ocular use: receptor binding and second messenger studies. J Ocul Pharmacol. 1994 Winter;10(4):653-64.

[4]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-223.

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

