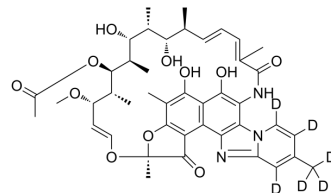


Rifaximin-d₆

Cat. No.:	HY-13234S		
CAS No.:	1262992-43-7		
Molecular Formula:	C ₄₃ H ₄₅ D ₆ N ₃ O ₁₁		
Molecular Weight:	791.92		
Target:	Bacterial; Antibiotic; Isotope-Labeled Compounds		
Pathway:	Anti-infection; Others		
Storage:	Powder	-20°C	3 years
	In solvent	-80°C	6 months
		-20°C	1 month



BIOLOGICAL ACTIVITY

Description	Rifaximin-d ₆ is the deuterium labeled Rifaximin. Rifaximin is an orally administered, semi-synthetic, nonsystemic antibiotic derived from rifamycin SV with antibacterial activity ^{[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]. Cruciani F, Brigidi P, Calanni F et al. Efficacy of rifaximin vaginal tablets in treatment of bacterial vaginosis: a molecular characterization of the vaginal microbiota. *Antimicrob Agents Chemother.* 2012 Aug;56(8):4062-70.
- [3]. Cremonini F, Lembo A. Rifaximin for the treatment of irritable bowel syndrome. *Expert Opin Pharmacother.* 2012 Feb;13(3):433-40.
- [4]. Rivkin A, Gim S. Rifaximin: new therapeutic indication and future directions. *Clin Ther.* 2011 Jul;33(7):812-27.
- [5]. Cottreau J, Baker SF, DuPont HL, Garey KW. Rifaximin: a nonsystemic rifamycin antibiotic for gastrointestinal infections. *Expert Rev Anti Infect Ther.* 2010 Jul;8(7):747-60.
- [6]. Koo HL, DuPont HL. Rifaximin: a unique gastrointestinal-selective antibiotic for enteric diseases. *Curr Opin Gastroenterol.* 2010 Jan;26(1):17-25.
- [7]. Ojetti V, Lauritano EC, Barbaro F et al. Rifaximin pharmacology and clinical implications. *Expert Opin Drug Metab Toxicol.* 2009 Jun;5(6):675-82.

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