Nifedipine-d4

Cat. No.:	HY-B0284S1	-0
CAS No.:	1219798-99-8	
Molecular Formula:	$C_{17}H_{14}D_{4}N_{2}O_{6}$	
Molecular Weight:	350.36	
Target:	Calcium Channel; Autophagy; Isotope-Labeled Compounds	
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling; Autophagy; Others	DONH
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	_o I

BIOLOGICAL ACTIVITY		
ыссылали		
Nifedipine-d ₄ is the deuterium labeled Nifedipine. Nifedipine (BAY-a-1040) is a potent calcium channel blocker and agent of choice for cardiac insufficiencies.		
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]. Ratre MS, et al. Effect of azithromycin on gingival overgrowth induced by cyclosporine A + nifedipine combination therapy: A morphometric analysis in rats. J Indian Soc Periodontol. 2016 Jul-Aug;20(4):396-401.

[3]. Yu SS, et al. Nifedipine Increases Iron Content in WKPT-0293 Cl.2 Cells via Up-Regulating Iron Influx Proteins. Front Pharmacol. 2017 Feb 13;8:60

[4]. Carvajal JA, et al. The Synergic In Vitro Tocolytic Effect of Nifedipine Plus Ritodrine on Human Myometrial Contractility. Reprod Sci. 2017 Apr;24(4):635-640.

[5]. Liu P, et al. The L-type Ca(2+) Channel Blocker Nifedipine Inhibits Mycelial Growth, Sporulation, and Virulence of Phytophthora capsici. Front Microbiol. 2016 Aug 4;7:1236.

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

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Product Data Sheet



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