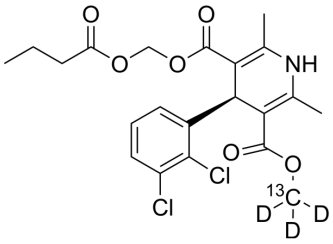
(R)-Clevidipine-$^{13}C,d_3$

Cat. No.:	HY-17436S3
Molecular Formula:	$C_{20}{}^{13}CH_{20}D_3Cl_2NO_6$
Molecular Weight:	460.33
Target:	Calcium Channel
Pathway:	Membrane Transporter/Ion Channel; Neuronal Signaling
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	(R)-Clevidipine-$^{13}C,d_3$ is the deuterium and ^{13}C labeled Clevidipine[1]. Clevidipine is a short-acting dihydropyridine calcium channel antagonist (IC50= 7.1 nM, V(H) = -40 mV) under development for treatment of perioperative hypertension[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 Feb;53(2):211-216.

[2]. Yi X, Vivien B, Lynch C 3rd. Clevidipine blockade of L-type Ca2+ currents: steady-state and kinetic electrophysiological studies in guinea pigventricular myocytes.;Huraux C, Makita T, Szlam F, The vasodilator effects of clevidipine on human internal mammary artery. Anesth Analg. 1997 Nov;85(5):1000-4.;Ericsson H, et al. In vitro hydrolysis rate and protein binding of clevidipine, a new ultrashort-acting calcium antagonist metabolised by esterases, in different animal species and man. Eur J Pharm Sci. 1999 Apr;8(1):29-37.;Ericsson H, et al. Pharmacokinetics of new calcium channel antagonist clevidipine in the rat, rabbit, and dog and pharmacokinetic/pharmacodynamic relationship in anesthetized dogs. Drug Metab Dispos. 1999 May;27(5):558-64.

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