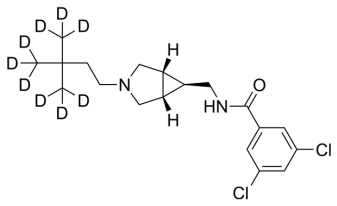
ML218-d_9

Cat. No.:	HY-103309S
Molecular Formula:	$C_{19}H_{17}D_9Cl_2N_2O$
Molecular Weight:	378.38
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	ML218-d_9 is the deuterium labeled ML218. ML218 is a potent, selective and orally active T-type Ca2+ channels (Cav3.1, Cav3.2, Cav3.3) inhibitor with IC50s of 310 nM and 270 nM for Cav3.2 and Cav3.3, respectively. ML218 inhibits the burst activity in subthalamic nucleus (STN) neurons. ML218 has no significant inhibition of L- or N-type calcium channels, KATP or hERG potassium channels. ML218 can penetrate the blood-brain barrier[1].
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]. Xiang Z, et al. The Discovery and Characterization of ML218: A Novel, Centrally Active T-Type Calcium Channel Inhibitor with Robust Effects in STN Neurons and in a Rodent Model of Parkinson's Disease. ACS Chem Neurosci. 2011 Dec 21;2(12):730-742.

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