MCE MedChemExpress

Isradipine-d3

Molecular Formula:

 Cat. No.:
 HY-B0233S

 CAS No.:
 1189959-59-8

Molecular Weight: 374.41

Target: Calcium Channel; Autophagy

 $C_{19}H_{18}D_3N_3O_5$

Pathway: Membrane Transporter/Ion Channel; Neuronal Signaling; Autophagy

Storage: Please store the product under the recommended conditions in the Certificate of

Analysis.

BIOLOGICAL ACTIVITY

Description	Isradipine-d3 (PN 200-110-d3) is the deuterium labeled Isradipine. Isradipine (PN 200-110) is an orally active L-type calcium channel blocker. Isradipine, as a powerful peripheral vasodilator, is a dihydropyridine calcium antagonist with selective actions on the heart as well as the peripheral circulation. Isradipine is a potentially viable neuroprotective agent for Parkinson's disease ^{[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 ^[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.

 $[2]. \ Ilijic E, et al. \ The L-type \ channel \ antagonist \ is radipine \ is \ neuroprotective \ in \ a \ mouse \ model \ of \ Parkinson's \ disease. \ Neurobiol \ Dis. \ 2011;43(2):364-371.$

[3]. Campbell CA, et al. Effects of isradipine, an L-type calcium channel blocker on permanent and transient focal cerebral ischemia in spontaneously hypertensive rats. Exp Neurol. 1997;148(1):45-50.

[4]. Hof RP, et al. Selective effects of PN 200-110 (isradipine) on the peripheral circulation and the heart. Am J Cardiol. 1987;59(3):30B-36B.

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

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