Pitavastatin-d_4 hemicalcium

Cat. No.: HY-B0144S

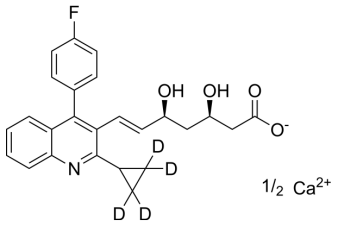
Molecular Formula: $C_{25}H_{19}D_4FNO._1/_2Ca^{2+}$

Molecular Weight: 444.52

Target: Apoptosis; Autophagy; HMG-CoA Reductase (HMGCR); Mitophagy; Isotope-Labeled Compounds

Pathway: Apoptosis; Autophagy; Metabolic Enzyme/Protease; Others

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



BIOLOGICAL ACTIVITY

Description	Pitavastatin-d_4 (hemicalcium) is deuterium labeled Pitavastatin (Calcium). Pitavastatin Calcium (NK-104 hemicalcium) is a potent hydroxymethylglutaryl-CoA (HMG-CoA) reductase inhibitor. Pitavastatin Calcium (NK-104 hemicalcium) inhibits cholesterol synthesis from acetic acid with an IC50 of 5.8 nM in HepG2 cells. Pitavastatin Calcium is an efficient hepatocyte low-density lipoprotein-cholesterol (LDL-C) receptor inducer. Anti-cancer activity[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]. de Wolf E, et al.Dietary geranylgeraniol can limit the activity of pitavastatin as a potential treatment for drug-resistant ovarian cancer.Sci Rep. 2017 Jul 14;7(1):5410.

[3]. Kajinami K, et al. Pitavastatin: efficacy and safety profiles of a novel synthetic HMG-CoA reductase inhibitor. Cardiovasc Drug Rev. 2003 Fall;21(3):199-215.

[4]. Mukhtar RY, et al. Pitavastatin. Int J Clin Pract. 2005 Feb;59(2):239-52.

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