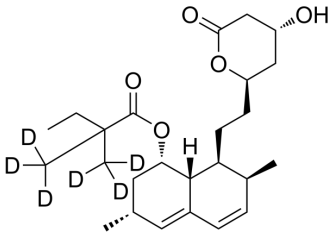
Simvastatin-d6

Cat. No.:	HY-110231
CAS No.:	1002347-71-8
Molecular Formula:	$C_{25}H_{32}D_6O_5$
Molecular Weight:	424.6
Target:	HMG-CoA Reductase (HMGCR); Autophagy; Mitophagy; Apoptosis; Ferroptosis
Pathway:	Metabolic Enzyme/Protease; Autophagy; Apoptosis
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Simvastatin-d6 (MK 733-d6) is the deuterium labeled Simvastatin. Simvastatin (MK 733) is a competitive inhibitor of HMG-CoA reductase with a K_i of 0.2 nM.
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]. Slater E E., et al. Mechanism of action and biological profile of HMG CoA reductase inhibitors. A new therapeutic alternative. Drugs, 1988. 36 Suppl 3: p. 72-82.;Kureishi, Y., et al. The HMG-CoA reductase inhibitor simvastatin activates the protein kinas

[2]. Kureishi Y, et al. The HMG-CoA reductase inhibitor simvastatin activates the protein kinase Akt and promotes angiogenesis in normocholesterolemic animals. Nat Med. 2000 Sep;6(9):1004-10.

[3]. Slater EE, et al. Mechanism of action and biological profile of HMG CoA reductase inhibitors. A new therapeutic alternative. Drugs. 1988;36 Suppl 3:72-82.

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