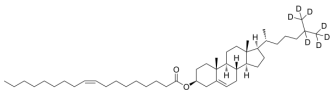
Cholesteryl oleate-d_7

Cat. No.:	HY-113217S
CAS No.:	1416275-35-8
Molecular Formula:	$C_{45}H_{71}D_7O_2$
Molecular Weight:	658.14
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Cholesteryl oleate-d_7 is deuterium labeled Cholesteryl oleate. Cholesteryl oleate is an esterified form of Cholesterol. Cholesteryl oleate can be used in the generation of solid lipid nanoparticle (SLN, a nanoparticle-based method for gene therapy)[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[3]. MCE has not independently confirmed the accuracy of these methods. They are for reference only.

REFERENCES

[1]. Souza SL, et al. Study of the miscibility of cholesteryl oleate in a matrix of ceramide, cholesterol and fatty acid. Chem Phys Lipids. 2011 Oct;164(7):664-71.

[2]. Suñé-Pou M, et, al. Cholesteryl oleate-loaded cationic solid lipid nanoparticles as carriers for efficient gene-silencing therapy. Int J Nanomedicine. 2018 May 30;13:3223-3233.

[3]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-223.

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