## Cholesteryl oleate-d<sub>7</sub>-1

Cat. No.: CAS No.: Molecular Formula: Molecular Weight: Target: Pathway: Storage:	HY-113217S1 2260669-48-3 C <sub>45</sub> H <sub>71</sub> D <sub>7</sub> O <sub>2</sub> 658.14 Endogenous Metabolite; Isotope-Labeled Compounds Metabolic Enzyme/Protease; Others Please store the product under the recommended conditions in the Certificate of	$ \begin{array}{c} \mu_{1}^{0} & \mu_{2}^{0} \\ \mu_{2}^{0} & \mu_{3}^{0} \\ \mu_{3}^{0} & \mu_{3}^{0} \end{array} \right) $
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.	

BIOLOGICAL ACTIV	
Description	Cholesteryl oleate-d <sub>7</sub> -1 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)
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 <sup>[3]</sup> . 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.

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

 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

**Product** Data Sheet

