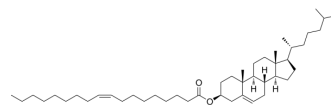


Cholesteryl oleate

Cat. No.:	HY-113217	
CAS No.:	303-43-5	
Molecular Formula:	C ₄₅ H ₇₈ O ₂	
Molecular Weight:	651.1	
Target:	Endogenous Metabolite; Liposome	
Pathway:	Metabolic Enzyme/Protease	
Storage:	Powder	-20°C 3 years
	In solvent	-80°C 6 months
		-20°C 1 month



SOLVENT & SOLUBILITY

In Vitro

Acetone : 50 mg/mL (76.79 mM; Need ultrasonic)
 Ethanol : 12.5 mg/mL (19.20 mM; ultrasonic and warming and heat to 50°C)
 DMSO : < 1 mg/mL (ultrasonic;warming;heat to 60°C) (insoluble or slightly soluble)

	Solvent Concentration	Mass		
		1 mg	5 mg	10 mg
Preparing Stock Solutions	1 mM	1.5359 mL	7.6793 mL	15.3586 mL
	5 mM	0.3072 mL	1.5359 mL	3.0717 mL
	10 mM	0.1536 mL	0.7679 mL	1.5359 mL

Please refer to the solubility information to select the appropriate solvent.

In Vivo

- Add each solvent one by one: 10% EtOH >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 1.25 mg/mL (1.92 mM); Clear solution
- Add each solvent one by one: 10% EtOH >> 90% (20% SBE-β-CD in saline)
Solubility: 1.25 mg/mL (1.92 mM); Suspended solution; Need ultrasonic
- Add each solvent one by one: 10% EtOH >> 90% corn oil
Solubility: ≥ 1.25 mg/mL (1.92 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
Solubility: ≥ 0.52 mg/mL (0.80 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
Solubility: ≥ 0.52 mg/mL (0.80 mM); Clear solution
- Add each solvent one by one: 10% DMSO >> 90% corn oil
Solubility: ≥ 0.52 mg/mL (0.80 mM); Clear solution

BIOLOGICAL ACTIVITY

Description	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][2]} .
IC₅₀ & Target	Human Endogenous Metabolite

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.

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

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