Oleic acid-d_2

Cat. No.: HY-N1446S1

CAS No.: 5711-29-5

Molecular Formula: $C_{18}H_{32}D_2O_2$

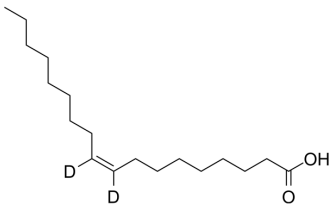
Molecular Weight: 284.47

Target: Apoptosis; Na+/K+ ATPase; Endogenous Metabolite; Isotope-Labeled Compounds

Pathway: Apoptosis; Membrane Transporter/Ion Channel; Metabolic Enzyme/Protease; Others

Storage:

Pure form	-20°C	3 years
	4°C	2 years
In solvent	-80°C	6 months
	-20°C	1 month



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (351.53 mM; ultrasonic and warming and heat to 60°C)

DMSO : 100 mg/mL (351.53 mM; ultrasonic and warming and heat to 60°C)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	3.5153 mL	17.5765 mL	35.1531 mL
5 mM	0.7031 mL	3.5153 mL	7.0306 mL
10 mM	0.3515 mL	1.7577 mL	3.5153 mL

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

In Vivo

1. Add each solvent one by one: 10% DMSO >> 40% PEG300 >> 5% Tween-80 >> 45% saline
   Solubility: ≥ 2.5 mg/mL (8.79 mM); Clear solution
2. Add each solvent one by one: 10% DMSO >> 90% (20% SBE-β-CD in saline)
   Solubility: ≥ 2.5 mg/mL (8.79 mM); Clear solution
3. Add each solvent one by one: 10% DMSO >> 90% corn oil
   Solubility: ≥ 2.5 mg/mL (8.79 mM); Clear solution

BIOLOGICAL ACTIVITY

Description

Oleic acid-d_2) is the deuterium labeled Oleic acid. Oleic acid (9-cis-Octadecenoic acid) is an abundant monounsaturated fatty acid[1]. Oleic acid is a Na+/K+ ATPase activator[2].

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.

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