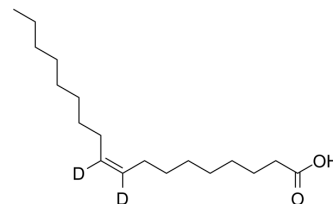


Oleic acid-d₂

Cat. No.:	HY-N1446S1
CAS No.:	5711-29-5
Molecular Formula:	C ₁₈ H ₃₂ D ₂ O 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:	<div>Pure form</div> <div>-20°C 3 years</div> <div>4°C 2 years</div> <div>In solvent</div> <div>-80°C 6 months</div> <div>-20°C 1 month</div>



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (351.53 mM; ultrasonic and warming and heat to 60°C)					
	Preparing Stock Solutions	<div><div>Solvent</div><div>Concentration</div></div>	Mass	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	<p>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].</p> <p>MCE has not independently confirmed the accuracy of these methods. They are for reference only.</p>

REFERENCES

[1]. Russak EM, et al. Impact of Deuterium Substitution on the Pharmacokinetics of Pharmaceuticals. Ann Pharmacother. 2019;53(2):211-216.

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

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