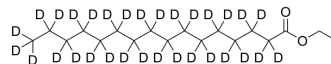


Ethyl palmitate-d₃₁

Cat. No.:	HY-N2086S
CAS No.:	1215721-57-5
Molecular Formula:	C ₁₈ H ₅ D ₃₁ O ₂
Molecular Weight:	315.67
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	4°C, sealed storage, away from moisture and light * In solvent : -80°C, 6 months; -20°C, 1 month (sealed storage, away from moisture and light)



SOLVENT & SOLUBILITY

In Vitro	DMSO : 100 mg/mL (316.79 mM; Need ultrasonic)					
	Preparing Stock Solutions	Solvent	Mass	1 mg	5 mg	10 mg
		Concentration				
		1 mM		3.1679 mL	15.8393 mL	31.6786 mL
		5 mM		0.6336 mL	3.1679 mL	6.3357 mL
	10 mM		0.3168 mL	1.5839 mL	3.1679 mL	
Please refer to the solubility information to select the appropriate solvent.						
In Vivo	1. Add each solvent one by one: 10% DMSO >> 90% corn oil Solubility: ≥ 2.5 mg/mL (7.92 mM); Clear solution					

BIOLOGICAL ACTIVITY

Description	Ethyl palmitate-d ₃₁ is the deuterium labeled Ethyl palmitate. Ethyl palmitate, a fatty acid ethyl ester (FAEE), shows a marked preference for the synthesis of ethyl palmitate and ethyl oleate over other FAEEs in human subjects after ethanol consumption. Ethyl palmitate is used as a hair- and skin-conditioning agent[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 ^[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.

[2]. Dan L, et al. Ethyl palmitate and ethyl oleate are the predominant fatty acid ethyl esters in the blood after ethanol ingestion and their synthesis is differentially influenced by the extracellular concentrations of their corresponding fatty acids. *Alcohol Clin Exp Res.* 1997 Apr;21(2):286-92.

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

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