Linoleic acid-$^{13}C_{18}$

Cat. No.: HY-N0729S2

CAS No.: 287111-25-5

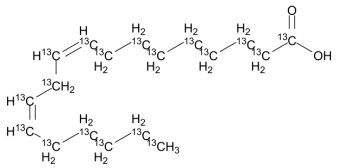
Molecular Formula: $^{13}C_{18}H_{32}O_2$

Molecular Weight: 298.31

Target: Endogenous Metabolite

Pathway: Metabolic Enzyme/Protease

Storage: -80°C, protect from light, stored under nitrogen



SOLVENT & SOLUBILITY

In Vitro

DMSO : 100 mg/mL (335.22 mM; Need ultrasonic and warming)

0.1 M NaOH : 8.33 mg/mL (27.92 mM; ultrasonic and warming and adjust pH to 11 with NaOH)

Preparing Stock Solutions

Solvent / Mass / Concentration	1 mg	5 mg	10 mg
1 mM	3.3522 mL	16.7611 mL	33.5222 mL
5 mM	0.6704 mL	3.3522 mL	6.7044 mL
10 mM	0.3352 mL	1.6761 mL	3.3522 mL

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

BIOLOGICAL ACTIVITY

Description

Linoleic acid-$^{13}C_{18}$ is the ^{13}C labeled Linoleic acid. Linoleic acid is a common polyunsaturated (PUFA) found in plant-based oils, nuts and seeds. Linoleic acid is a part of membrane phospholipids, and functions as a structural component to maintain a certain level of membrane fluidity of the transdermal water barrier of the epidermis. Linoleic acid induces red blood cells and hemoglobin damage via oxidative mechanism [1][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.

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

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