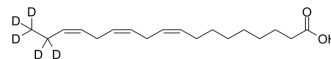


## $\alpha$ -Linolenic acid-d<sub>5</sub>

<b>Cat. No.:</b>	HY-N0728S
<b>CAS No.:</b>	145191-04-4
<b>Molecular Formula:</b>	C <sub>18</sub> H <sub>25</sub> D <sub>5</sub> O <sub>2</sub>
<b>Molecular Weight:</b>	283.46
<b>Target:</b>	PI3K; Akt
<b>Pathway:</b>	PI3K/Akt/mTOR
<b>Storage:</b>	-20°C, protect from light, stored under nitrogen * In solvent : -80°C, 6 months; -20°C, 1 month (protect from light, stored under nitrogen)



### SOLVENT & SOLUBILITY

#### In Vitro

DMSO : 100 mg/mL (352.78 mM; Need ultrasonic and warming)

Concentration	Mass		
	1 mg	5 mg	10 mg
1 mM	3.5278 mL	17.6392 mL	35.2783 mL
5 mM	0.7056 mL	3.5278 mL	7.0557 mL
10 mM	0.3528 mL	1.7639 mL	3.5278 mL

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

### BIOLOGICAL ACTIVITY

#### Description

$\alpha$ -Linolenic acid-d<sub>5</sub> is the deuterium labeled  $\alpha$ -Linolenic acid.  $\alpha$ -Linolenic acid, isolated from seed oils, is an essential fatty acid that cannot be synthesized by humans.  $\alpha$ -Linolenic acid can affect the process of thrombotic through the modulation of PI3K/Akt signaling.  $\alpha$ -Linolenic acid possess the anti-arrhythmic properties and is related to cardiovascular disease and cancer[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<sup>[1]</sup>.

MCE has not independently confirmed the accuracy of these methods. They are for reference only.

### REFERENCES

[1]. Yang Q, et al. Anti-thrombotic effects of  $\alpha$ -linolenic acid isolated from Zanthoxylum bungeanum Maxim seeds. BMC Complement Altern Med. 2014 Sep 23;14:348.

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

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