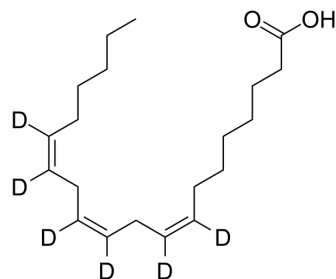


Dihomo- γ -linolenic acid-d₆

Cat. No.:	HY-A0143S
CAS No.:	81540-86-5
Molecular Formula:	C ₂₀ H ₂₈ D ₆ O ₂
Molecular Weight:	312.52
Target:	Endogenous Metabolite
Pathway:	Metabolic Enzyme/Protease
Storage:	Solution, -20°C, 2 years



SOLVENT & SOLUBILITY

In Vitro	Ethanol : \geq 100 mg/mL (319.98 mM) DMF : \geq 100 mg/mL (319.98 mM) DMSO : \geq 100 mg/mL (319.98 mM) 0.15 M Tris-HCl pH 8.5 : \geq 1 mg/mL (3.20 mM) * " \geq " means soluble, but saturation unknown.
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BIOLOGICAL ACTIVITY

Description	Dihomo- γ -linolenic acid-d ₆ (DGLA-d ₆) is the deuterium labeled Dihomo- γ -linolenic acid. Dihomo- γ -linolenic acid (all-cis-8,11,14-Eicosatrienoic acid) is a 20-carbon ω -6 fatty acid, with anti-inflammatory and anti-proliferative activities. Dihomo- γ -linolenic acid attenuates atherosclerosis in the apolipoprotein E deficient mouse model system[1][2][3].
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]. Wang X, et al. Multiple roles of dihomogamma-linolenic acid against proliferation diseases. *Lipids Health Dis*. 2012 Feb 14;11:25.
- [3]. Gallagher H, et al. Dihomo- γ -linolenic acid inhibits several key cellular processes associated with atherosclerosis. *Biochim Biophys Acta Mol Basis Dis*. 2019 Sep 1;1865(9):2538-2550.
- [4]. Yang X, et al. Dihomo- γ -linolenic acid inhibits growth of xenograft tumors in mice bearing human pancreatic cancer cells (BxPC-3) transfected with delta-5-desaturase shRNA. *Redox Biol*. 2019 Jan;20:236-246.

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

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