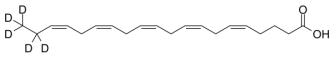
# Eicosapentaenoic Acid-d5

| | |
|---|---|
| **Cat. No.:** | HY-B0660S |
| **CAS No.:** | 1197205-73-4 |
| **Molecular Formula:** | $C_{20}H_{25}D_5O_2$ |
| **Molecular Weight:** | 307.48 |
| **Target:** | Endogenous Metabolite; Histone Demethylase |
| **Pathway:** | Metabolic Enzyme/Protease; Epigenetics |
| **Storage:** | Please store the product under the recommended conditions in the Certificate of Analysis. |



## BIOLOGICAL ACTIVITY

| | |
|---|---|
| **Description** | Eicosapentaenoic Acid-d5 (EPA-d5) is the deuterium labeled Eicosapentaenoic Acid. Eicosapentaenoic Acid (EPA; Timnodonic acid) is an omega-3 fatty acid. |
| **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].<br>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]. Martins, J.G., EPA but not DHA appears to be responsible for the efficacy of omega-3 long chain polyunsaturated fatty acid supplementation in depression: evidence from a meta-analysis of randomized controlled trials. J Am Coll Nutr, 2009. 28(5): p. 525-42.

[3]. Shun-he Wang, et al. Endogenous omega-3 long-chain fatty acid biosynthesis from alpha-linolenic acid is affected by substrate levels, gene expression, and product inhibition. RSC Adv., 2017, 7, 40946-40951.

[4]. Miaozhen Pan, et al. Dietary ω-3 polyunsaturated fatty acids are protective for myopia. Proc Natl Acad Sci U S A. 2021 Oct 26;118(43):e2104689118.



Tel: 609-228-6898 Fax: 609-228-5909 E-mail: tech@MedChemExpress.com

Address: 1 Deer Park Dr, Suite Q, Monmouth Junction, NJ 08852, USA