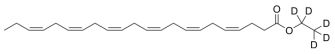
Docosahexaenoic acid ethyl ester-d5

Cat. No.:	HY-107343S
CAS No.:	2692624-15-8
Molecular Formula:	$C_{24}H_{31}D_5O_2$
Molecular Weight:	361.57
Target:	Isotope-Labeled Compounds
Pathway:	Others
Storage:	Please store the product under the recommended conditions in the Certificate of Analysis.



BIOLOGICAL ACTIVITY

Description	Docosahexaenoic acid ethyl ester-d5 (Ethyl docosahexaenoate-d5) is the deuterium labeled Docosahexaenoic acid ethyl ester. Docosahexaenoic acid ethyl ester (Ethyl docosahexaenoate) is a 90% concentrated ethyl ester of docosahexaenoic acid manufactured from the microalgal oil. Docosahexaenoic acid ethyl ester enhances 6-hydroxydopamine-induced neuronal damage by induction of lipid peroxidation in mouse striatum. Docosahexaenoic acid (DHA) is a key component of the cell membrane, and its peroxidation is inducible due to the double-bond chemical structure. Docosahexaenoic acid has neuroprotective effects[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.

[2]. Dahms I, et al. Safety of docosahexaenoic acid (DHA) administered as DHA ethyl ester in a 9-month toxicity study in dogs. Food Chem Toxicol. 2016;92:50-57.

[3]. Kabuto H, et al. Docosahexaenoic acid ethyl ester enhances 6-hydroxydopamine-induced neuronal damage by induction of lipid peroxidation in mouse striatum. Neurochem Res. 2009;34(7):1299-1303.

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