

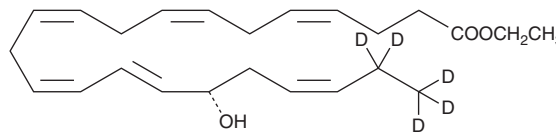
PRODUCT INFORMATION



17(S)-HDHA-d₅ ethyl ester

Item No. 30577

Formal Name:	17(S)-hydroxy-4Z,7Z,10Z,13Z,15E,19Z-docosahexaenoic-21,21,22,22,22,22-d ₅ , ethyl ester
Synonyms:	17(S)-hydroxy DHA-d ₅ ethyl ester, 17(S)-hydroxy Docosahexaenoic Acid-d ₅ ethyl ester, 17(S)-HDoHE-d ₅ ethyl ester
MF:	C ₂₄ H ₃₁ D ₅ O ₃
FW:	377.6
Chemical Purity:	≥95% (17-HDHA ethyl ester)
Deuterium Incorporation:	≥99% deuterated forms (d ₁ -d ₅); ≤1% d ₀
UV/Vis.:	λ _{max} : 237 nm
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥2 years



Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.

Laboratory Procedures

17(S)-HDHA-d₅ ethyl ester is intended for use as an internal standard for the quantification of 17-HDHA ethyl ester by GC- or LC-MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

17(S)-HDHA-d₅ ethyl ester is supplied as a solution in ethanol. A stock solution may be made by dissolving the 17(S)-HDHA-d₅ ethyl ester in the solvent of choice, which should be purged with an inert gas. 17(S)-HDHA-d₅ ethyl ester is soluble in DMSO and dimethyl formamide.

Description

17(S)-HDHA ethyl ester is an esterified form of the hydroxy fatty acid and docosahexaenoic acid (DHA; Item Nos. 90310 | 17950) 15-lipoxygenase (15-LO) metabolite 17(S)-HDHA (Item No. 10009799). (±)17-HDHA is an autooxidation product of DHA, and 17(R)-HDHA is formed by aspirin-acetylated COX-2-mediated oxidation of DHA.¹⁻³

References

1. VanRollins, M. and Murphy, R.C. Autooxidation of docosahexaenoic acid: Analysis of ten isomers of hydroxydocosahexaenoate. *J. Lipid Res.* **25**(5), 507-517 (1984).
2. Reynaud, D., Thickitt, C.P., and Pace-Asciak, C.R. Facile preparation and structural determination of monohydroxy derivatives of docosahexaenoic acid (HDoHE) by α-tocopherol-directed autooxidation. *Anal. Biochem.* **214**(1), 165-170 (1993).
3. Homann, J., Lehmann, C., Kahnt, A.S., et al. Chiral chromatography-tandem mass spectrometry applied to the determination of pro-resolving lipid mediators. *J. Chromatogr. A* **1360**, 150-163 (2014).

WARNING

THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until further information becomes available. Do not ingest, inhale, get in eyes, on skin, or on clothing. Wash thoroughly after handling. Before use, the user must review the [complete](#) Safety Data Sheet, which has been sent via email to your institution.

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