

PRODUCT INFORMATION



17(S)-HpDHA

Item No. 13185

CAS Registry No.: 123673-33-6
Formal Name: 17S-hydroperoxy-4Z,7Z,10Z,13Z,15E,19Z-docosahexaenoic acid

Synonyms: 17(S)-hydroperoxy Docosahexaenoic Acid, 17(S)-HpDoHE

MF: C₂₂H₃₂O₄

FW: 360.5

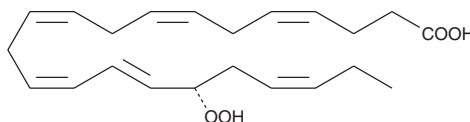
Purity: ≥98%

UV/Vis.: λ_{max}: 238 nm

Supplied as: A 100 µg/ml solution in ethanol

Storage: -80°C

Stability: ≥2 years



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

Laboratory Procedures

17(S)-HpDHA is supplied as a solution in ethanol. To change the solvent, simply evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO and dimethyl formamide purged with an inert gas can be used. 17(S)-HpDHA is miscible in these solvents.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of 17(S)-HpDHA is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 17(S)-HpDHA in PBS (pH 7.2) is at least 0.8 mg/ml. 17(S)-HpDHA is highly unstable in aqueous solutions. We recommend that aqueous solutions of 17(S)-HpDHA be kept on ice and used as soon as possible, preferably within 15 minutes.

Description

17(S)-HpDHA is a mono-oxygenation product of docosahexaenoic acid in human whole blood, human leukocytes, human glial cells, and mouse brain.¹ 17(S)-HpDHA is generally reduced to 17(S)-HDHA (Item No. 10009799), a compound that serves as a precursor to 17(S)-resolvins. 17(S)-HDHA has been shown to inhibit TNF-α-induced interleukin-1β expression in human glioma cells and inhibit TNF-α-induced leukocyte trafficking to the murine air pouch.¹

Reference

1. Hong, S., Gronert, K., Devchand, P.R., *et al.* Novel docosatrienes and 17(S)-resolvins generated from docosahexaenoic acid in murine brain, human blood, and glial cells. Autacoids in anti-inflammation. *J. Biol. Chem.* **278**(17), 14677-14687 (2003).

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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CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD

ANN ARBOR, MI 48108 · USA

PHONE: [800] 364-9897

[734] 971-3335

FAX: [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM