

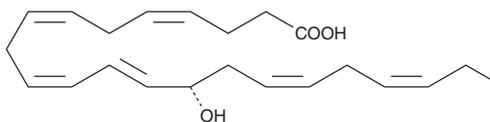
# PRODUCT INFORMATION



## 14(S)-HDHA

Item No. 15253

**CAS Registry No.:** 119433-37-3  
**Formal Name:** 14S-hydroxy-4Z,7Z,10Z,12E,16Z,19Z-docosahexaenoic acid  
**Synonyms:** 14(S)-hydroxy Docosahexaenoic Acid, FA 22:6, 14(S)-HDoHE  
**MF:** C<sub>22</sub>H<sub>32</sub>O<sub>3</sub>  
**FW:** 344.5  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 236 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

14(S)-HDHA 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. 14(S)-HDHA is miscible in ethanol, DMSO, and dimethyl formamide.

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 14(S)-HDHA is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 14(S)-HDHA in PBS, pH 7.2, is approximately 0.5 mg/ml. For greater aqueous solubility, 14(S)-HDHA can be directly dissolved in 0.1 M Na<sub>2</sub>CO<sub>3</sub> (solubility of 2 mg/ml) and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH. We do not recommend storing the aqueous solution for more than one day.

### Description

14(S)-HDHA is an oxygenation product formed by 12-lipoxygenase (12-LO) or 15-LO processing of docosahexaenoic acid (DHA; Item No. 90310).<sup>1</sup> It is a precursor to the pro-resolving mediator maresin 1 (Item No. 10878) and has been found in peritoneal exudates isolated from a mouse model of zymosan-induced peritonitis.

### Reference

1. Serhan, C.N., Yang, R., Martinod, K., *et al.* Maresins: Novel macrophage mediators with potent antiinflammatory and proresolving actions. *J. Exp. Med.* **206**(1), 15-23 (2009).

#### 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