

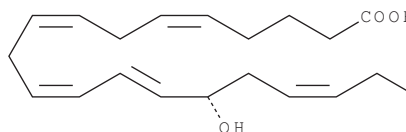
PRODUCT INFORMATION



15(S)-HEPE

Item No. 32710

CAS Registry No.: 86282-92-0
Formal Name: 15S-hydroxy-5Z,8Z,11Z,13E,17Z-eicosapentaenoic acid
Synonym: 15S-hydroxy-Eicosapentaenoic Acid
MF: C₂₀H₃₀O₃
FW: 318.5
Purity: ≥98%
UV/Vis.: λ_{max}: 236 nm
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

15(S)-HEPE is supplied as a solution in ethanol. To change the solvent, simply evaporate the 15(S)-HEPE 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. The solubility of 15(S)-HEPE in these solvents is miscible.

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 15(S)-HEPE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 15(S)-HEPE in PBS, pH 7.2, is approximately 0.8 mg/ml. For greater aqueous solubility, 15(S)-HEPE can be directly dissolved in 0.1 Na₂CO₃ (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

15(S)-HEPE is a monohydroxy fatty acid. 15(S)-HEPE is biosynthesized from eicosapentaenoic acid (Item Nos. 90110 | 90110.1 | 21908) by 15-lipoxygenase (15-LO).^{1,2} Serum levels of 15(S)-HEPE are elevated in patients with asthma.³

References

1. Miller, C., Yamaguchi, R.Y., and Ziboh, V.A. Guinea pig epidermis generates putative anti-inflammatory metabolites from fish oil polyunsaturated fatty acids. *Lipids* **24(12)**, 998-1003 (1989).
2. Tan, L., Xin, X., Zhai, L., et al. *Drosophila* fed ARA and EPA yields eicosanoids, 15S-hydroxy-5Z,8Z, 11Z, 13E-eicosatetraenoic acid, and 15S-hydroxy-5Z,8Z,11Z,13E,17Z-eicosapentaenoic acid. *Lipids* **51(4)**, 435-449 (2016).
3. Bian, X., Sun, B., Zheng, P., et al. Derivatization enhanced separation and sensitivity of long chain-free fatty acids: Application to asthma using targeted and non-targeted liquid chromatography-mass spectrometry approach. *Anal. Chim. Acta.* **989**, 59-70 (2017).

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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