

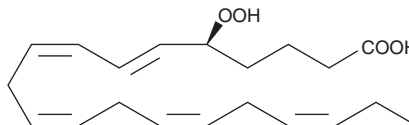
PRODUCT INFORMATION



5(S)-HpEPE

Item No. 42210

CAS Registry No.: 143292-98-2
Formal Name: 5S-hydroperoxy-6E,8Z,11Z,14Z,17Z-eicosapentaenoic acid
MF: C₂₀H₃₀O₄
FW: 334.5
Purity: ≥95%
UV/Vis.: λ_{max}: 236 nm
Supplied as: A 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

5(S)-HpEPE 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. 5(S)-HpEPE 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 5(S)-HpEPE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 5(S)-HpEPE in PBS, pH 7.2, is approximately 0.8 mg/ml. For greater aqueous solubility, 5(S)-HpEPE can be directly dissolved in 0.1 M Na₂CO₃ (solubility of 2 mg/ml) and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH. 5(S)-HpEPE is highly unstable in aqueous solutions. We recommend that aqueous solutions of 5(S)-HpEPE be kept on ice and used as soon as possible, preferably within 15 minutes.

Description

5(S)-HpEPE is a monohydroperoxy polyunsaturated fatty acid formed by the action of 5-lipoxygenase on eicosapentaenoic acid.¹ It is metabolized to LTA₅, a key intermediate in the formation of the 5-series leukotrienes. Alternatively, 5(S)-HpEPE is reduced to 5(S)-HEPE by peroxidases.

Reference

1. Kulkarni, P.S., Kaufman, P.L., and Srinivasan, B.D. Eicosapentaenoic acid metabolism in cynomolgus and rhesus conjunctiva and eyelid. *J. Ocul. Pharmacol.* **3**, 349-356 (1987).

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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