

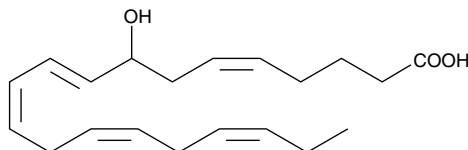
Product Information



(±)8-HEPE

Item No. 32340

CAS Registry No.: 99217-77-3
Formal Name: (±)-8-hydroxy-5Z,9E,11Z,14Z,17Z-eicosapentaenoic acid
MF: C₂₀H₃₀O₃
FW: 318.5
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in ethanol
UV/Vis.: λ_{max}: 236 nm ε: 23,000



Laboratory Procedures

For long term storage, we suggest that (±)8-HEPE be stored as supplied at -20°C. It should be stable for at least one year. (±)8-HEPE 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. (±)8-HEPE 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 (±)8-HEPE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of (±)8-HEPE in PBS (pH 7.2) is approximately 0.8 mg/ml. For greater aqueous solubility, (±)8-HEPE can be directly dissolved in 0.1 M 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.

(±)8-HEPE is produced by non-enzymatic oxidation of EPA. It contains equal amounts of 8(S)-HEPE and 8(R)-HEPE. The ability of (±)8-HEPE to induce hatching of *E. modestus* and *B. balanoides* eggs is probably due to the presence of the 8(R) isomer within the racemic mixture.^{1,2}

References

- Shing, T.K.M., Gibson, K.H., Wiley, J.R., *et al.* First total synthesis of a barnacle hatching factor 8(R)-hydroxy-eicosa-5(Z),9(E),11(Z)-pentaenoic acid. *Tetrahedron Lett.* **35**, 1067-1070 (1994).
- Hill, E.M. and Holland, D.L. Identification and egg hatching activity of monohydroxy fatty acid eicosanoids in the barnacle *Balanus balanoides*. *Proc. R. Soc. Lond. B* **247**, 41-46 (1991).

Related Products

For a list of related products please visit: www.caymanchem.com/catalog/32340

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Safety Data Sheet, which has been sent via email to your institution.

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