

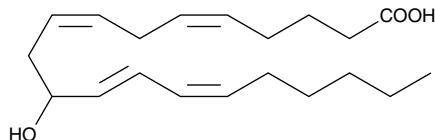
Product Information



(±)11-HETE

Item No. 34500

CAS Registry No.: 73804-65-6
Formal Name: (±)11-hydroxy-5Z,8Z,12E,14Z-eicosatetraenoic acid
MF: C₂₀H₃₂O₃
FW: 320.5
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A solution in ethanol
UV/Vis: λ_{max}: 236 nm ε: 27,000



Laboratory Procedures

For long term storage, we suggest that (±)11-HETE be stored as supplied at -20°C. It should be stable for at least one year.

(±)11-HETE 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. (±)11-HETE 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 (±)11-HETE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of (±)11-HETE in PBS (pH 7.2) is approximately 0.8 mg/ml. For greater aqueous solubility, (±)11-HETE 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.

(±)11-HETE is one of the six monohydroxylated products produced by the nonenzymatic oxidation of arachidonic acid. The individual R and S isomers of racemic HETEs have been separated and identified using chiral phase HPLC.¹ The racemic HETEs have been quantified as an index of lipid peroxidation using GC/MS.²

References

1. Kühn, H., Wiesner, R., Lankin, V.Z., *et al.* Analysis of the stereochemistry of lipoxygenase-derived hydroxypolenic fatty acids by means of chiral phase high-pressure liquid chromatography. *Anal. Biochem.* **160**, 24-34 (1987).
2. Guido, D.M., McKenna, R., and Mathews, W.R. Quantitation of hydroperoxy-eicosatetraenoic acids and hydroxy-eicosatetraenoic acids as indicators of lipid peroxidation using gas chromatography-mass spectrometry. *Anal. Biochem.* **209**, 123-129 (1993).

Related Products

11(R)-HETE - Item No.34505 • 11(S)-HETE - Item No. 34510 • Arachidonic acid - Item No. 90010

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

MATERIAL 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 Material Safety Data Sheet, which has been sent *via* email to your institution.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will **meet our specifications at the time of delivery.**

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

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Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a **refund** of the purchase price, or at Cayman's option, the **replacement**, at no cost to Buyer, of all material that does not meet our specifications.

Said refund or replacement is conditioned on Buyer giving written notice to Cayman within thirty (30) days after arrival of the material at its destination. Failure of Buyer to give said notice within thirty (30) days shall constitute a waiver by Buyer of all claims hereunder with respect to said material.

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