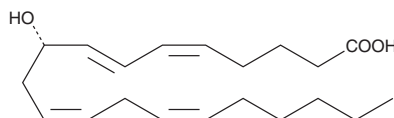


PRODUCT INFORMATION

9(S)-HETE

Item No. 34410

CAS Registry No.: 107656-13-3
Formal Name: 9S-hydroxy-5Z,7E,11Z,14Z-eicosatetraenoic acid
Synonym: 9(S)-Hydroxyeicosatetraenoic Acid
MF: C₂₀H₃₂O₃
FW: 320.5
Purity: ≥98%
UV/Vis.: λ_{max}: 235 nm ε: 27,000
Supplied as: A 100 µg/ml solution in ethanol
Storage: -20°C
Stability: ≥4 years
Special Conditions: Oxygen and light sensitive



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

Laboratory Procedures

9(S)-HETE is supplied as a solution in ethanol. To change the solvent, simply evaporate the 9(S)-HETE 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. 9(S)-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 9(S)-HETE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 9(S)-HETE in PBS, pH 7.2, is approximately 0.8 mg/ml. For greater aqueous solubility, 9(S)-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.

Description

9(S)-HETE is the (S) isomer of the monohydroxy fatty acid (±)9-HETE (Item No. 34400).¹ It is formed from arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) by rat liver microsomal cytochrome P450 (CYP).² 9(S)-HETE is an agonist of retinoid X receptor γ (RXRγ), inducing RXRγ-dependent transcription when used at a concentration of 300 nM in BHK cell extracts expressing chick RXRγ.³

References

- Schneider, C., Yu, Z., Boeglin, W.E., *et al.* Enantiomeric separation of hydroxy and hydroperoxy eicosanoids by chiral column chromatography. *Methods Enzymol.* **433**, 145-157 (2007).
- Capdevila, J., Yadagiri, P., Manna, S., *et al.* Absolute configuration of the hydroxyeicosatetraenoic acids (HETEs) formed during catalytic oxygenation of arachidonic acid by microsomal cytochrome P-450. *Biochem. Biophys. Res. Commun.* **141**(3), 1007-1011 (1986).
- Eager, N.S., Brickell, P.M., Snell, C., *et al.* Structural and functional evidence for activation of a chick retinoid X receptor by eicosanoids. *Proc. Biol. Sci.* **250**(1327), 63-69 (1992).

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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