

PRODUCT INFORMATION



9(R)-HETE

Item No. 34405

CAS Registry No.: 107656-14-4

Formal Name: 9R-hydroxy-5Z,7E,11Z,14Z-eicosatetraenoic acid

Synonym: 9(R)-Hydroxyeicosatetraenoic Acid

MF: $C_{20}H_{32}O_3$

FW: 320.5

Purity: $\geq 98\%$

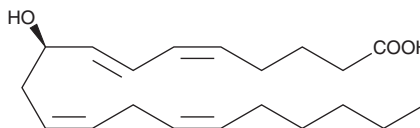
UV/Vis.: λ_{max} : 235 nm

Supplied as: A 100 μ g/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(R)-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. 9(R)-HETE is miscible in these solvents. The solubility of 9(R)-HETE in 0.1 M Na_2CO_3 is approximately 2 mg/ml.

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(R)-HETE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 9(R)-HETE in PBS (pH 7.2) is approximately 0.8 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

9(R)-HETE is an enantiomer which makes up 50% of ($\pm$)9-HETE (Item No. 34400). At a concentration of 300 nM, 9(R)-HETE activates RXR γ -dependent transcription 1.5 fold relative to a control.¹ Stereochemical assignment of the (R) enantiomer is based on comparison of chiral HPLC retention times to published results.²

References

1. 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).
2. 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).

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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