

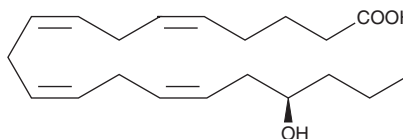
PRODUCT INFORMATION



17(R)-HETE

Item No. 10010637

CAS Registry No.: 183509-24-2
Formal Name: 17R-hydroxy-5Z,8Z,11Z,14Z-eicosatetraenoic acid
Synonym: 17(R)-Hydroxyeicosatetraenoic Acid
MF: C₂₀H₃₂O₃
FW: 320.5
Purity: ≥95%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

17(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. 17(R)-HETE is miscible in these solvents. 17(R)-HETE is soluble in 0.1 M Na₂CO₃ at a concentration of 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 17(R)-HETE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 17(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

Electrolyte and fluid transport in the kidney are regulated in part by arachidonic acid and its metabolites. 17-HETE is a cytochrome P450 (CYP450) metabolite of arachidonic acid that has stereospecific effects on sodium transport in the kidney. 17(R)-HETE is an inactive isomer of 17-HETE, whereas the (S) enantiomer can inhibit proximal tubule ATPase activity at a concentration of 2 μM.¹

Reference

1. Carroll, M.A., Balazy, M., Margiotta, P., *et al.* Cytochrome P-450-dependent HETEs: Profile of biological activity and stimulation by vasoactive peptides. *Am. J. Physiol.* **271**(4 Pt 2), R863-R869 (1996).

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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