

PRODUCT INFORMATION



5(R)-HETE

Item No. 34225

CAS Registry No.: 61641-47-2

Formal Name: 5R-hydroxy-6E,8Z,11Z,14Z-eicosatetraenoic acid

Synonym: 5(R)-Hydroxyeicosatetraenoic Acid

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

FW: 320.5

Purity: $\geq 98\%$

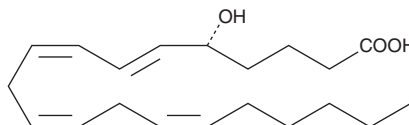
UV/Vis: λ_{\max} : 236 nm

Supplied as: A solution in ethanol

Storage: -20°C

Stability: ≥ 2 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

5(R)-HETE is supplied as a solution in ethanol. To change the solvent, evaporate the ethanol under a gentle stream of nitrogen and immediately add the solvent of choice. Solvents such as DMSO or dimethyl formamide purged with an inert gas can be used. The solubility of 5(R)-HETE in these solvents is approximately 50 mg/ml.

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made just 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 5(R)-HETE is needed, evaporate the ethanol under a gentle stream of nitrogen and dissolve the neat oil in the buffer of choice. The solubility of 5(R)-HETE in PBS, pH 7.2, is approximately 1 mg/ml. Store aqueous solutions of 5(R)-HETE on ice and use within twelve hours.

Description

5(R)-HETE is a monohydroxy polyunsaturated fatty acid produced by the nonenzymatic oxidation of arachidonic acid. It is a potent chemotactic agent. 5(R)-HETE induces human neutrophil migration across cellular and noncellular barriers in a dose- and time-dependent fashion, whereas 5(S)-HETE is inactive.¹

Reference

1. Bittleman, D.B. and Casale, T.B. 5-Hydroxyeicosatetraenoic acid (HETE)-induced neutrophil transcellular migration is dependent upon enantiomeric structure. *Am. J. Respir. Cell Mol. Biol.* 12, 260-267 (1995).

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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