

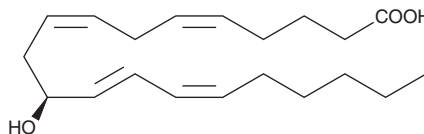
# PRODUCT INFORMATION



## 11(S)-HETE

Item No. 34510

CAS Registry No.: 54886-50-9  
Formal Name: 11S-hydroxy-5Z,8Z,12E,14Z-eicosatetraenoic acid  
MF:  $C_{20}H_{32}O_3$   
FW: 320.5  
Purity:  $\geq 98\%$   
Stability:  $\geq 1$  year at  $-20^{\circ}C$   
Supplied as: A solution in ethanol  
Special Conditions: Oxygen and light sensitive  
UV/Vis.:  $\lambda_{max}$ : 236 nm  $\epsilon$ : 27,000



### Laboratory Procedures

For long term storage, we suggest that 11(S)-HETE be stored as supplied at  $-20^{\circ}C$ . It should be stable for at least one year.

11(S)-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(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 11(S)-HETE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 11(S)-HETE in PBS (pH 7.2) is approximately 1 mg/ml. For greater aqueous solubility, 11(S)-HETE can be directly dissolved in 0.1 M  $Na_2CO_3$  (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

The synthesis of 11-HETE by rat polymorphonuclear neutrophils has been reported, but the stereochemistry of the 11-HETE produced was not defined.<sup>1</sup> There are no definitive reports of a mammalian 11(S)-lipoxygenase. Stereochemical assignment of the (R) enantiomer is based on comparison of chiral HPLC retention times to published results.<sup>2</sup>

### References

1. Myers, R.F. and Siegel, M.I. Differential effects of anti-inflammatory drugs in lipoxygenase and cyclooxygenase activities of neutrophils from a reverse passive arthus reaction. *Biochem. Biophys. Res. Commun.* **112**, 586-594 (1983).
2. Schneider, C., Yu, Z., Boeglin, W.E., et al. Enantiomeric separation of hydroxy and hydroperoxy eicosanoids by chiral column chromatography. *Method. Enzymol.* **433**, 145-157 (2015).

**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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