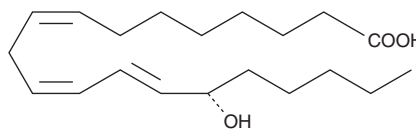


PRODUCT INFORMATION



15(S)-HETrE Item No. 36720

CAS Registry No.: 92693-02-2
Formal Name: 15S-hydroxy-8Z,11Z,13E-eicosatrienoic acid
MF: C₂₀H₃₄O₃
FW: 322.5
Purity: ≥98%
UV/Vis.: λ_{max}: 236 nm ε: 23,000
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

15(S)-HETrE 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 ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of 15(S)-HETrE in these solvents is miscible.

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 15(S)-HETrE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of 15(S)-HETrE in PBS, pH 7.2, is approximately 0.8 mg/ml. For greater aqueous solubility, 15(S)-HETrE can be directly dissolved in 0.1 M Na₂CO₃ (solubility of 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

15(S)-HETrE is the hydroxy-trienoic acid resulting from 15-lipoxygenation of dihomo-γ-linolenic acid (DGLA; Item No. 90230). It is an inhibitor of 5-LO in human PMNL with an IC₅₀ value of 4.6 μM.¹ In RBL cells, 15(S)-HETrE inhibits 5-LO, but is about 1/20 as potent as 15(S)-HpETE.²

References

1. Petrich, K., Ludwig, P., Kühn, H., *et al.* The suppression of 5-lipoxygenation of arachidonic acid in human polymorphonuclear leucocytes by the 15-lipoxygenase product (15S)-hydroxy-(5Z,8Z,11Z,13E)-eicosatetraenoic acid: Structure-activity relationship and mechanism of action. *Biochem. J.* **314**, 911-916 (1996).
2. Haviv, F., Ratajczyk, J.D., DeNet, R.W., *et al.* Structural requirements for the inhibition of 5-lipoxygenase by 15-hydroxyeicosa-5,8,11,13-tetraenoic acid analogues. *J. Med. Chem.* **30**, 254-263 (1987).

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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