

PRODUCT INFORMATION



(±)8(9)-DiHET

Item No. 51351

CAS Registry No.: 192461-96-4
Formal Name: (±)8,9-dihydroxy-5Z,11Z,14Z-

Synonym: (±)8,9-DiHETrE

MF: C₂₀H₃₄O₄

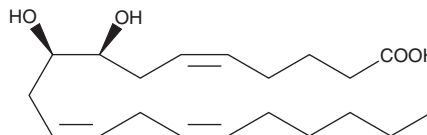
FW: 338.5

Purity: ≥98%

Supplied as: A solution in ethanol

Storage: -20°C

Stability: As supplied, 2 years from the QC date provided on the Certificate of Analysis, when stored properly



NOTE: Relative stereochemistry shown in chemical structure

Laboratory Procedures

(±)8(9)-DiHET 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. The solubility of (±)8(9)-DiHET in these solvents is approximately 50 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 (±)8(9)-DiHET is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of (±)8(9)-DiHET in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Epoxide hydrolases convert the EETs into vicinal diols, with the concurrent loss of much of their biological activity.¹ The 8(S),9(R)-EET isomer is metabolized by platelet cyclooxygenase to form 8(S),9(R)-THETA, a trihydroxy fatty acid which may act as a renal vasoconstrictor.²

References

- Oliw, E.H., Guengerich, F.P., and Oates, J.A. Oxygenation of arachidonic acid by hepatic monooxygenases. Isolation and metabolism of four epoxide intermediates. *J. Biol. Chem.* **257**, 3771-3781 (1982).
- Zhang, J.Y., Prakash, C., Yamashita, K., *et al.* Regiospecific and enantioselective metabolism of 8,9-epoxyeicosatrienoic acid by cyclooxygenase. *Biochem. Biophys. Res. Commun.* **183**, 138-143 (1992).

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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