

PRODUCT INFORMATION



(±)5(6)-EpETE methyl ester

Item No. 90114

Formal Name: (±)5(6)-epoxy-8Z,11Z,14Z,17Z-eicosatetraenoic acid, methyl ester

Synonyms: (±)5,6-EEQ methyl ester, (±)5,6-epoxy eicosatetraenoic acid methyl ester

MF: C₂₁H₃₂O₃

FW: 332.5

Purity: ≥98%

Supplied as: A solution in ethanol

Storage: -20°C

Stability: ≥2 years



NOTE: Relative stereochemistry shown in chemical structure

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

Laboratory Procedures

(±)5(6)-EpETE methyl ester is supplied as a solution in ethanol. To change the solvent, simply evaporate the (±)5(6)-EpETE methyl ester 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 (±)5(6)-EpETE methyl ester in these solvents is at least 20 and 10 mg/ml, respectively.

(±)5(6)-EpETE methyl ester is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of (±)5(6)-EpETE methyl ester should be diluted with the aqueous buffer of choice. (±)5(6)-EpETE methyl ester has a solubility of 500 µg/ml in a 1:1 solution of ethanol:PBS (pH 7.2) using this method. We do not recommend storing the aqueous solution for more than one day.

Description

(±)5(6)-EpETE methyl ester is a derivative of 5(6)-EpETE which is stable enough to ship and handle routinely. (±)5(6)-EpETE methyl ester is a chemically less reactive derivative of 5(6)-EpETE. The active free acid can be generated from the methyl ester by careful base hydrolysis. Epoxy eicosatetraenoic acids (EpETEs) are the epoxygenase metabolites of eicosapentaenoic acid. A number of vicinal diol metabolites of EpETEs have been detected in the plasma of patients on marine oil dietary supplementation, while in subjects on a typical western diet these compounds are generally not detected.¹ The specific biological activity of 5(6)-EpETE and its methyl ester have not been documented.

Reference

1. Knapp, H.R., Miller, A.J., and Lawson, J.A. Urinary excretion of diols derived from eicosapentaenoic acid during N-3 fatty acid ingestion. *Prostaglandins* **42**, 47-53 (1991).

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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