

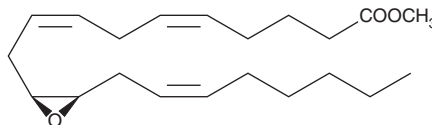
PRODUCT INFORMATION



(±)11(12)-EET methyl ester

Item No. 50510

Formal Name: (±)11,12-epoxy-5Z,8Z,14Z-eicosatrienoic acid, methyl ester
Synonym: (±)11,12-EpETrE methyl ester
MF: C₂₁H₃₄O₃
FW: 334.5
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

(±)11(12)-EET methyl ester 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 (±)11(12)-EET methyl ester 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 (±)11(12)-EET methyl ester is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of (±)11(12)-EET methyl ester in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

(±)11(12)-EET (Item No. 50511) is biosynthesized in rat and rabbit liver microsomes by cytochrome P450.^{1,2} (±)11(12)-EET has been shown, along with (±)8(9)-EET (Item No. 50351), to play a role in the recovery of depleted Ca²⁺ pools in cultured smooth muscle cells.³ (±)11(12)-EET methyl ester is a more stable for used for long-term storage. It can be readily hydrolyzed to the free acid as needed.

References

1. Chacos, N., Falck, J.R., Wixtrom, C., *et al.* Novel epoxides formed during the liver cytochrome P-450 oxidation of arachidonic acid. *Biochem. Biophys. Res. Commun.* **104**(3), 916-922 (1982).
2. Oliu, 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**(7), 3771-3781 (1982).
3. Graber, M.N., Alfonso, A., and Gill, D.L. Recovery of Ca²⁺ pools and growth in Ca²⁺ pool-depleted cells is mediated by specific epoxyeicosatrienoic acids derived from arachidonic acid. *J. Biol. Chem.* **272**(47), 29546-29553 (1997).

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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