

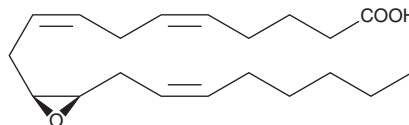
PRODUCT INFORMATION



(±)11(12)-EET

Item No. 50511

CAS Registry No.: 123931-40-8
Formal Name: (±)11,12-epoxy-5Z,8Z,14Z-eicosatrienoic acid
Synonym: (±)11,12-EpETrE
MF: C₂₀H₃₂O₃
FW: 320.5
Purity: ≥95%
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 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 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 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 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 is a fully racemic version of the R/S enantiomeric forms biosynthesized from arachidonic acid (Item No. 90010) by cytochrome P450 enzymes.¹⁻³ A higher proportion of 11(R),12(S)-EET is produced by the CYP450 isoforms CYP2C23 and CYP2C24 while CYP2B2 produces a higher proportion of 11(S),12(R)-EET.³ 11(12)-EET has been shown, along with 8(9)-EET (Item No. 50351), to play a role in the recovery of depleted calcium pools in cultured smooth muscle cells.⁴ It also inhibits basolateral 18-pS potassium channels in the renal cortical collecting duct when used at a concentration of 100 nM.⁵ 11(12)-EET (50 µg/kg per day) increases adhesion of isolated peripheral blood leukocytes in a chamber coated with P-selectin and ICAM-1 but does not affect choroidal neovascularization size following laser photocoagulation.⁶ It also has anti-inflammatory, angiogenic, and cardioprotective properties.⁷

References

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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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