

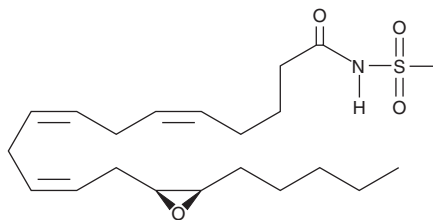
PRODUCT INFORMATION



(±)14(15)-EET-SI

Item No. 10009286

CAS Registry No.: 218461-97-3
Formal Name: N-(methylsulfonyl)-13-(3-pentyloxiranyl)-5Z,8Z,11Z-tridecatrienamide
Synonyms: 14,15-EpETrE-SI, 14(15)-EET-SI, 14(15)-EET-sulfonimide
MF: C₂₁H₃₅NO₄S
FW: 397.6
Purity: ≥95%
Supplied as: A solution in methyl acetate
Storage: -20°C
Stability: ≥1 year



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

(±)14(15)-EET-SI is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate 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 (±)14(15)-EET-SI in these solvents is approximately 10 mg/ml.

For maximum solubility in aqueous buffers, evaporate the methyl acetate and dissolve in ethanol. The ethanolic solution of (±)14(15)-EET-SI should be diluted with the aqueous buffer of choice. (±)14(15)-EET-SI has a solubility of approximately 0.3 mg/ml in a 1:2 solution of ethanol:PBS (pH 7.2) using this method.

Description

Arachidonic acid is metabolized in the vascular endothelium to epoxytrienoic acids (EETs; EETs) by cytochrome P450 enzymes. The EETs are released in response to acetylcholine, bradykinin, arachidonic acid, or cyclic stretch.¹ (±)14(15)-EET-SI is the methyl sulfonamide analog of 14(15)-EET. This substitution results in a metabolically more stable compound because it is not sensitive to β-oxidation or membrane esterification. (±)14(15)-EET-SI is equipotent to 14(15)-EET in vascular agonist activity as measured by relaxation of precontracted bovine coronary arteries.¹ In addition, 14(15)-EET and the methyl sulfonamide analog both stimulate tyrosine phosphorylation and induce mitogenesis in renal epithelial cells.²

References

- Gauthier, K.M., Falck, J.R., Reddy, L.M., *et al.* 14,15-EET analogs: Characterization of structural requirements for agonist and antagonist activity in bovine coronary arteries. *Pharmacol. Res.* **49**, 515-524 (2004).
- Chen, J.-K., Falck, J.R., Reddy, K.M., *et al.* Epoxyeicosatrienoic acids and their sulfonimide derivatives stimulate tyrosine phosphorylation and induce mitogenesis in renal epithelial cells. *J. Biol. Chem.* **273**(44), 29254-29261 (1998).

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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