

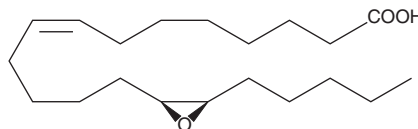
PRODUCT INFORMATION



14,15-EE-8(Z)-E

Item No. 10010486

CAS Registry No.: 519038-93-8
Formal Name: 13[(2R,3S)-3-pentyloxiranyl]-8Z-tridecenoic acid
Synonym: 14,15-Epoxyeicosa-8(Z)-enoic Acid
MF: C₂₀H₃₆O₃
FW: 324.5
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

14,15-EE-8(Z)-E 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 14,15-EE-8(Z)-E in these solvents is approximately 10 mg/ml.

14,15-EE-8(Z)-E is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of 14,15-EE-8(Z)-E should be diluted with the aqueous buffer of choice. The solubility of 14,15-EE-8(Z)-E in PBS (pH 7.2) is approximately 0.5 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

Epoxyeicosatrienoic acids (EETs), such as 11(12)-EET and 14(15)-EET, are cytochrome P450 metabolites of arachidonic acid that have been identified as endothelium-derived hyperpolarizing factors with vasodilator activity.¹ 14,15-EE-8(Z)-E is a structural analog of 14(15)-EET that demonstrates potent vasodilator agonist activity in bovine coronary arteries similar to that of 14(15)-EET.^{2,3}

References

1. Fleming, I. Epoxyeicosatrienoic acids, cell signaling and angiogenesis. *Prostaglandins Other Lipid Mediat.* **82(1-4)**, 60-67 (2007).
2. 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(6)**, 515-524 (2004).
3. Falck, J.R., Krishna, U.M., Reddy, Y.K., *et al.* Comparison of vasodilatory properties of 14,15-EET analogs: Structural requirements for dilation. *Am. J. Physiol. Heart Circ. Physiol.* **284(1)**, 337-349 (2003).

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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