

Product Data Sheet

Product Name: (±)8(9)-EET-d11

Cat. No.: GC46264

Chemical Properties

Cas. No. N/A

SMILES [2H]C(C([2H]))([2H])C([2H])([2H])C([2H])([2H])[2H])([2H])C([2H])([2H])/C=C/C/C=C/C[C@@H](O1)[C@@H]1C/C=C\CCCC(O)=O

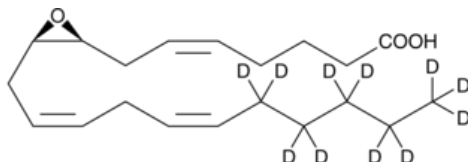
Formula C₂₀H₂₁D₁₁O₃ M.Wt 331.5

Solubility DMF: 50 mg/ml, DMSO: 50 mg/ml, Ethanol: 50 mg/ml, PBS (pH 7.2): 1 mg/ml
Storage Store at -20°C

General tips For obtaining a higher solubility, please warm the tube at 37 °C and shake it in the ultrasonic bath for a while. Stock solution can be stored below -20°C for several months.

Shipping Condition Evaluation sample solution: ship with blue ice. All other available size: ship with RT, or blue ice upon request.

Structure



NOTE: Relative stereochemistry shown in chemical structure

Background

(±)8(9)-EET-d₁₁ contains 11 deuterium atoms at the 16, 16', 17, 17', 18, 18', 19, 19', 20, 20, and 20 positions. It is intended for use as an internal standard for the quantification of (±)8(9)-EET by GC- or LC-mass spectrometry (MS). (±)8(9)-EET is biosynthesized from arachidonic acid in rat and rabbit liver microsomes by CYP450.^{1,2} (±)8(9)-EET is a major P450 metabolite in the renal cortex.³ (±)8(9)-EET reduces GFR through cyclooxygenase-dependent preglomerular vasoconstriction.⁴

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. Oliw, E.H., Guengerich, F.P., and Oates, J.A. Oxygenation of arachidonic acid by hepatic

Caution: Product has not been fully validated for medical applications. For research use only.

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monooxygenases. Isolation and metabolism of four epoxide intermediates *J. Biol. Chem.* 257(7)3771-3781(1982) 3. Zhang, J.Y., Prakash, C., Yamashita, K., et al. Regiospecific and enantioselective metabolism of 8,9-epoxyeicosatrienoic acid by cyclooxygenase *Biochem. Biophys. Res. Commun.* 183(1)138-143(1992) 4. Katoh, T., Takahashi, K., Capdevila, J., et al. Glomerular stereospecific synthesis and hemodynamic actions of 8,9-epoxyeicosatrienoic acid in rat kidney *Am. J. Physiol.* 261(4 Pt 2)F578-F586(1991)

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