PRODUCT INFORMATION

(±)8(9)-EET-d11
Item No. 10009532

Formal Name: (±)8(9)-epoxy-5Z,8Z,14Z-eicosatrienoic acid

Synonyms: (±)8(9)-EET(8-9)-EpETrE-d11

MF: C20H21D11O3

FW: 331.5

Chemical Purity: ≥98%

Deuterium Incorporation: ≥99% deuterated forms (d1-d11); ≤1% d0

Supplied as: A solution in ethanol

Storage: -20°C

Stability: As supplied, 1 year from the QC date provided on the Certificate of Analysis, when stored properly

Laboratory Procedures

(±)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 (Item No. 50351) by GC- or LC-mass spectrometry (MS).

(±)8(9)-EET-d11 is supplied as a solution in ethanol. To change the solvent, simply evaporate the (±)8(9)-EET-d11 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 (±)8(9)-EET-d11 in these solvents is approximately ≥50 mg/ml.

(±)8(9)-EET-d11 is used as an internal standard for the quantification of (±)8(9)-EET by stable isotope dilution MS. The accuracy of the sample weight in this vial is between 5% over and 2% under the amount shown on the vial. If better precision is required, the deuterated standard should be quantitated against a more precisely weighed unlabeled standard by constructing a standard curve of peak intensity ratios (deuterated versus unlabeled).

Description

(±)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 the glomerular filtration rate (GFR) through cyclooxygenase-dependent preglomerular vasoconstriction.4

References


