

# PRODUCT INFORMATION



## (±)11(12)-EET-d<sub>11</sub> methyl ester

Item No. 29401

**Formal Name:** (±)11,12-epoxy-5Z,8Z,14Z-eicosatrienoic acid-d<sub>11</sub>, methyl ester

**Synonym:** (±)11,12-EpETrE-d<sub>11</sub> methyl ester

**MF:** C<sub>21</sub>H<sub>23</sub>D<sub>11</sub>O<sub>3</sub>

**FW:** 345.6

**Chemical Purity:** ≥98% ((±)11(12)-EET methyl ester)

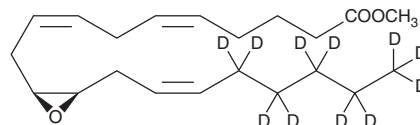
**Deuterium**

**Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>11</sub>); ≤1% d<sub>0</sub>

**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-d<sub>11</sub> methyl ester is intended for use as an internal standard for the quantification of (±)11(12)-EET methyl ester (Item No. 50510) by GC- or LC-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).

(±)11(12)-EET-d<sub>11</sub> methyl ester 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-d<sub>11</sub> methyl ester in these solvents is approximately 50 mg/ml.

### Description

11(R),12(S)-EET and 11(S),12(R)-EET are formed *via* epoxidation of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) by a variety of cytochrome P450 (CYP) isoforms.<sup>2</sup> 11(R),12(S)-EET is produced at a higher proportion by CYP2C8, CYP2C23, and CYP2C24 isoforms, whereas 11(S),12(R)-EET is produced at a greater proportion by CYP2B2 and CYP2C10 isoforms.<sup>1,2</sup>

### References

1. Capdevila, J.H., Falck, J.R., and Harris, R.C. Cytochrome P450 and arachidonic acid bioactivation: Molecular and functional properties of the arachidonate monooxygenase. *J. Lipid Res.* **41**(2), 163-181 (2000).
2. Spector, A.A. and Norris, A.W. Action of epoxyeicosatrienoic acids on cellular function. *Am. J. Physiol. Cell Physiol.* **292**(2), C996-C1012 (2007).

#### 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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