# PRODUCT INFORMATION



(±)11(12)-EET-d<sub>11</sub> Item No. 10006413

Formal Name: (±)11(12)-epoxy-5Z,8Z,14Z-eicosatrienoic-

16,16,17,17,18,18,19,19,20,20,20 acid

(±)11,12-EET-d<sub>11</sub> Synonym: MF:  $C_{20}H_{21}D_{11}O_3$ 

FW: 331.5 **Chemical Purity:** ≥98%

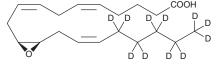
Deuterium

Incorporation:  $\geq$ 99% deuterated forms (d<sub>1</sub>-d<sub>11</sub>);  $\leq$ 1% d<sub>0</sub>

Supplied as: A solution in ethanol

Storage: -20°C Stability: ≥1 year

Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.



NOTE: Relative stereochemistry shown in chemical structure

# **Laboratory Procedures**

 $(\pm)11(12)$ -EET- $d_{11}$  is intended for use as an internal standard for the quantification of 11(12)-EET 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).

 $(\pm)11(12)$ -EET- $d_{11}$  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> 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 |  $90010.1 \mid 10006607$ ) by a variety of cytochrome P450 (CYP) isoforms.  $^{1}$  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. 1,2

### References

- 1. Spector, A.A. and Norris, A.W. Action of epoxyeicosatrienoic acids on cellular function. Am. J. Physiol. Cell Physiol. 292(3), C996-C1012 (2007).
- 2. 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).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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