# PRODUCT INFORMATION



(±)11(12)-DiHET-d<sub>11</sub> Item No. 10007975

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

16,16,17,17,18,18,19,19,20,20,20-d<sub>11</sub> acid

Synonyms: (±)11(12)-DHET-d<sub>11</sub>, (±)11,12-DiHETrE-d<sub>11</sub>

 $C_{20}H_{23}D_{11}O_4$ MF:

FW: **Chemical Purity:** ≥95%

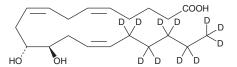
Deuterium

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**

It is intended for use as an internal standard for the quantification of (±)11(12)-DiHET (Item No. 51511) 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)-DiHET-d<sub>11</sub> 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 ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. The solubility of (±)11(12)-DiHET-d<sub>11</sub> in these solvents is approximately 50 mg/ml.

### Description

11(S),12(S)-DiHET and 11(R),12(R)-DiHET are vicinal diols formed via enzymatic hydration of 11(12)-EET by cytosolic or soluble epoxide hydrolases in a non-stereoselective manner. 1-3

### References

- 1. Fang, X., Kaduce, T.L., Weintraub, N.L., et al. Functional implications of a newly characterized pathway of 11,12-epoxyeicosatrienoic acid metabolism in arterial smooth muscle. Circ. Res. 79, 784-793 (1996).
- 2. Zeldin, D.C., Kobayashi, J., Falck, J.R., et al. Regio- and enantiofacial selectivity of epoxyeicosatrienoic acid hydration by cytosolic epoxide hydrolase. J. Biol. Chem. 268(9), 6402-6407 (1993).
- Zhang, G., Kodani, S., and Hammock, B.D. Stabilized epoxygenated fatty acids regulate inflammation, pain, angiogenesis and cancer. Prog. Lipid Res. 53, 108-123 (2014).

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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