# PRODUCT INFORMATION



(±)8(9)-DiHET-d<sub>11</sub> Item No. 10009998

Formal Name: (±)8,9-dihydroxy-5Z,11Z,14Z-eicosatrienoic-

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

(±)8,9-DiHETrE-d<sub>11</sub> Synonym:

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

FW: 349.6

**Chemical Purity:** ≥95% (8(9)-DiHET)

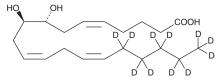
Deuterium

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: ≥2 years

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**

(±)8(9)-DiHET-d<sub>11</sub> is intended for use as an internal standard for the quantification of 8(9)-DiHET 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).

(±)8(9)-DiHET-d<sub>11</sub> is supplied as a solution in ethanol. A stock solution may be made by dissolving the (±)8(9)-DiHET- $d_{11}$  in the solvent of choice, which should be purged with an inert gas. (±)8(9)-DiHET- $d_{11}$ is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of  $(\pm)8(9)$ -DiHET-d<sub>11</sub> in these solvents is approximately 50 mg/ml.

### Description

8(S),9(S)-DiHET and 8(R),9(R)-DiHET are vicinal diols formed via enzymatic hydration of 8(9)-EET by cytosolic or soluble epoxide hydrolases. 1.2 8(S), 9(S)-DiHET is produced at a greater proportion than 8(R),9(R)-DiHET by cytosolic epoxide hydrolase.

### References

- 1. 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).
- 2. 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, 138-143 (1992).

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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