

# PRODUCT INFORMATION



(±)14(15)-DiHET-d<sub>11</sub>  
Item No. 10008040

**Formal Name:** (±)14,15-dihydroxy-5Z,8Z,11Z-eicosatrienoic-16,16,17,17,18,18,19,19,20,20,20-d<sub>11</sub> acid

**Synonyms:** (±)14,15-DiHETrE-d<sub>11</sub>

**MF:** C<sub>20</sub>H<sub>23</sub>D<sub>11</sub>O<sub>4</sub>

**FW:** 349.6

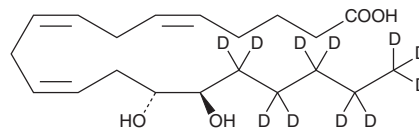
**Chemical Purity:** ≥95% ((±)14(15)-DiHET)

**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:** ≥1 year



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

(±)14(15)-DiHET-d<sub>11</sub> is intended for use as an internal standard for the quantification of 14(15)-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).

(±)14(15)-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 DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of (±)14(15)-DiHET-d<sub>11</sub> in these solvents is approximately 50 mg/ml.

## Description

14(R),15(R)-DiHET and 14(S),15(S)-DiHET are vicinal diols formed via enzymatic hydration of 14(15)-EET by cytosolic or soluble epoxide hydrolases.<sup>1,2</sup> 14(R),15(R)-DiHET is produced at a greater proportion than 14(S),15(S)-DiHET by cytosolic epoxide hydrolase.<sup>1</sup>

## References

- 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.

### 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.

### WARRANTY AND LIMITATION OF REMEDY

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