

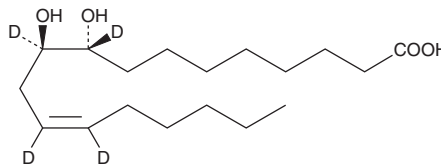
# PRODUCT INFORMATION



## (±)9(10)-DiHOME-d<sub>4</sub>

Item No. 10009993

**Formal Name:** (±)9,10-dihydroxy-12Z-octadecenoic-9,10,12,13-d<sub>4</sub> acid  
**Synonym:** Leukotoxin diol-d<sub>4</sub>  
**MF:** C<sub>18</sub>H<sub>30</sub>D<sub>4</sub>O<sub>4</sub>  
**FW:** 318.5  
**Deuterium Incorporation:** ≥99% deuterated forms (d<sub>1</sub>-d<sub>4</sub>); ≤1% d<sub>0</sub>  
**Supplied as:** A solution in methyl acetate  
**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

(±)9(10)-DiHOME-d<sub>4</sub> is intended for use as an internal standard for the quantification of 9(10)-DiHOME 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).

(±)9(10)-DiHOME-d<sub>4</sub> is supplied as a solution in methyl acetate. To change the solvent, simply evaporate the methyl acetate 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 (±)9(10)-DiHOME-d<sub>4</sub> in these solvents is approximately 20 mg/ml.

### Description

(±)9(10)-DiHOME is the diol form of (±)9(10)-EpOME (Item No. 52400), a cytochrome P450-derived epoxide of linoleic acid (Item Nos. 90150 | 90150.1 | 21909) also known as leukotoxin.<sup>1</sup> It is formed from 9(10)-EpOME by soluble epoxide hydrolase (sEH) in neutrophils.<sup>2</sup>

### References

- Greene, J.F., Williamson, K.C., Newman, J.W., *et al.* Metabolism of monoepoxides of methyl linoleate: Bioactivation and detoxification. *Arch. Biochem. Biophys.* **376**, 420-432 (2000).
- Moghaddam, M.F., Grant, D.F., Cheek, J.M., *et al.* Bioactivation of leukotoxins to their toxic diols by epoxide hydrolase. *Nat. Med.* **3(5)**, 562-566 (1997).

#### 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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