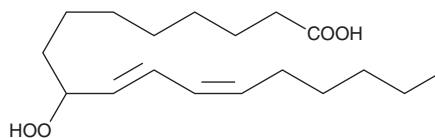


# PRODUCT INFORMATION



## (±)9-HpODE Item No. 10705

**CAS Registry No.:** 5502-91-0  
**Formal Name:** (±)9-hydroperoxy-10E,12Z-octadecadienoic acid  
**MF:** C<sub>18</sub>H<sub>32</sub>O<sub>4</sub>  
**FW:** 312.4  
**Purity:** ≥98%  
**UV/Vis.:** λ<sub>max</sub>: 233 nm  
**Supplied as:** A solution in ethanol  
**Storage:** -80°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

(±)9-HpODE 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 (±)9-HpODE in these solvents is approximately 50 mg/ml.

(±)9-HpODE is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanol solution of (±)9-HpODE should be diluted with the aqueous buffer of choice. The solubility of (±)9-HpODE in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

(±)9-HpODE is a racemic mixture of the fatty acid hydroperoxide product (9(S)-HpODE) formed from lipoxygenase action on linoleic acid. It shows antimicrobial activity against various fungal and bacterial pathogens and thus may play a role in plant defense.<sup>1</sup> In mammalian species, monocyte-induced oxidation of LDL generates significant amounts of esterified 9-HpODE, which is rapidly reduced to 9-HODE.<sup>2</sup>

### References

- Sucharitha, A. and Devi, P.U.M. Antimicrobial properties of chilli lipoxygenase products. *Afr. J. Microbiol. Res.* **4(9)**, 748-752 (2010).
- Folcik, V.A. and Cathcart, M.K. Predominance of esterified hydroperoxy-linoleic acid in human monocyte-oxidized LDL. *J. Lipid Res.* **35(9)**, 1570-1582 (1994).

#### 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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