

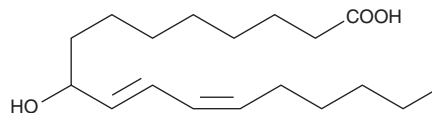
# PRODUCT INFORMATION



## (±)9-HODE

Item No. 38400

CAS Registry No.: 98524-19-7  
Formal Name: (±)-9-hydroxy-10E,12Z-octadecadienoic acid  
MF: C<sub>18</sub>H<sub>32</sub>O<sub>3</sub>  
FW: 296.5  
Purity: ≥98%  
UV/Vis.: λ<sub>max</sub>: 234 nm ε: 23,000  
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.

### Laboratory Procedures

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

Further dilutions of the stock solution into aqueous buffers or isotonic saline should be made prior to performing biological experiments. Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. If an organic solvent-free solution of (±)9-HODE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of (±)9-HODE 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-HODE is one of the two racemic monohydroxy fatty acids resulting from the non-enzymatic oxidation of linoleic acid. Approximately equal proportions of both isomers are found in mitochondrial and plasma membranes of rabbit reticulocytes.<sup>1,2</sup> Oxidized LDL contains significant amounts of esterified 9- and 13-HpODEs and HODEs.<sup>3,4</sup>

### References

1. Kühn, H., Belkner, J., and Wiesner, R. Subcellular distribution of lipoxygenase products in rabbit reticulocyte membranes. *Eur. J. Biochem.* **191**(1), 221-227 (1990).
2. Kühn, H., Belkner, J., and Wiesner, R. Metabolism of polyenoic fatty acids by rabbit reticulocytes. Intracellular action of the erythroid lipoxygenase on membrane lipids. *Biomed. Biochim. Acta* **49**(2-3), S25-S30 (1990).
3. 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).
4. Ku, G., Thomas, C.E., Akeson, A.L., et al. Induction of interleukin 1β expression from human peripheral blood monocyte-derived macrophages by 9-hydroxyoctadecadienoic acid. *J. Biol. Chem.* **267**(20), 14183-14188 (1992).

#### 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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