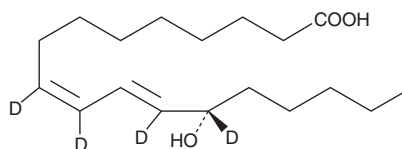


PRODUCT INFORMATION



13(S)-HODE-d₄ Item No. 338610

CAS Registry No.: 139408-39-2
Formal Name: 13S-hydroxy-9Z,11E-octadecadienoic-9,10,12,13-d₄ acid
MF: C₁₈H₂₈D₄O₃
FW: 300.5
Chemical Purity: ≥98% (13(S)-HODE)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₄); ≤1% d₀
UV/Vis.: λ_{max}: 234 nm
Supplied as: A solution in acetonitrile
Storage: -20°C
Stability: ≥1 year



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

Laboratory Procedures

13(S)-HODE-d₄ is intended for use as an internal standard for the quantification of 13-HODE 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).

13(S)-HODE-d₄ is supplied as a solution in acetonitrile. To change the solvent, simply evaporate the acetonitrile 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 13(S)-HODE-d₄ in these solvents is approximately 50 mg/ml.

Description

(±)-13-HODE is formed via non-enzymatic oxidation of linoleic acid (Item Nos. 90150 | 90150.1 | 21909).¹ 13(S)-HODE and 13(R)-HODE are formed by lipoxygenase- and cyclooxygenase-mediated oxidation of linoleic acid, respectively.²

References

1. Spiteller, P. and Spiteller, G. 9-Hydroxy-10,12-octadecadienoic acid (9-HODE) and 13-hydroxy-9,11-octadecadienoic acid (13-HODE): Excellent markers for lipid peroxidation. *Chem. Phys. Lipids* **89(2)**, 131-139 (1997).
2. Baer, A.N., Costello, P.B., and Green, F.A. Stereospecificity of the hydroxyeicosatetraenoic and hydroxyoctadecadienoic acids produced by cultured bovine endothelial cells. *Biochim. Biophys. Acta* **1085(1)**, 45-52 (1991).

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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