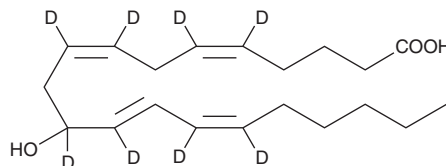


PRODUCT INFORMATION



(±)11-HETE-d₈ Item No. 9002385

Formal Name: (±)11-hydroxy-5Z,8Z,12E,14Z-eicosatetraenoic-5,6,8,9,11,12,14,15-d₈ acid
Synonym: (±)11-Hydroxyeicosatetraenoic Acid-d₈
MF: C₂₀H₂₄D₈O₃
FW: 328.5
Chemical Purity: ≥98% ((±)11-HETE)
Deuterium Incorporation: ≥99% deuterated forms (d₁-d₈); ≤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

(±)11-HETE-d₈ is intended for use as an internal standard for the quantification of 11-HETE 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).

(±)11-HETE-d₈ 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 (DMF) purged with an inert gas can be used. The solubility of (±)11-HETE-d₈ in ethanol is approximately 50 mg/ml and approximately 20 mg/ml in DMSO and DMF.

Description

(±)11-HETE is formed non-enzymatically from arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607).^{1,2} 11(R)-HETE is formed from arachidonic acid by COX-1, COX-2, and aspirin-acetylated COX-2.^{3,4} 11(R)- and 11(S)-HETE are formed from arachidonic acid via cytochrome P450 (CYP), with 11(R)-HETE formed at a higher ratio than 11(S)-HETE.⁵

References

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- Thuresson, E.D., Lakkides, K.M., and Smith, W.L. Different catalytically competent arrangements of arachidonic acid within the cyclooxygenase active site of prostaglandin endoperoxide H synthase-1 lead to the formation of different oxygenated products. *J. Biol. Chem.* **275(12)**, 8501-8507 (2000).
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- Capdevila, J., Yadagiri, P., Manna, S., et al. Absolute configuration of the hydroxyeicosatetraenoic acids (HETEs) formed during catalytic oxygenation of arachidonic acid by microsomal cytochrome P-450. *Biochem. Biophys. Res. Commun.* **141(3)**, 1007-1011 (1986).

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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