PRODUCT INFORMATION



(±)9-HETE

Item No. 34400

CAS Registry No.: 70968-92-2

Formal Name: (±)-9-hydroxy-5Z,7E,11Z,14Z-eicosatetraenoic acid

Synonym: (±)9-Hydroxyeicosatetraenoic Acid

MF: $C_{20}H_{32}O_3$ FW: 320.5 **Purity:** ≥95% λ_{max} : 235 nm A solution in ethanol UV/Vis.: Supplied as:

-20°C

Storage: Stability: ≥2 vears

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



(±)9-HETE 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 DMSO and dimethyl formamide purged with an inert gas can be used. (±)9-HETE is miscible in these solvents. The solubility of (±)9-HETE in 0.1 M Na₂CO₃ is approximately 2 mg/ml.

(±)9-HETE is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of (±)9-HETE should be diluted with the aqueous buffer of choice. The solubility of (±)9-HETE in PBS (pH 7.2) is approximately 0.8 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

(±)9-HETE is a monohydroxy fatty acid formed by lipid peroxidation of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607), as well as by rat liver microsomal cytochrome P450 (CYP). 1.2 Plasma levels of (±)9-HETE are elevated in patients with angiographically defined coronary artery disease.³

References

- 1. Powell, W.S. and Rokach, J. Biosynthesis, biological effects, and receptors of hydroxyeicosatetraenoic acids (HETEs) and oxoeicosatetraenoic acids (oxo-ETEs) derived from arachidonic acid. Biochim. Biophys. Acta 1851(4), 340-355 (2014).
- 2. 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).
- 3. Shishehbor, M.H., Zhang, R., Medina, H., et al. Systemic elevations of free radical oxidation products of arachidonic acid are associated with angiographic evidence of coronary artery disease. Free Rad. Biol. Med. **41(11)**, 1678-1683 (2006).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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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