

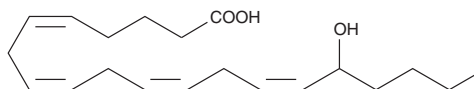
PRODUCT INFORMATION



(±)16-HETE

Item No. 10010635

CAS Registry No.: 128914-46-5
Formal Name: (±)16-hydroxy-5Z,8Z,11Z,14Z-eicosatetraenoic acid
Synonym: (±)16-Hydroxyeicosatetraenoic Acid
MF: C₂₀H₃₂O₃
FW: 320.5
Purity: ≥98%
Supplied as: A solution in ethanol
Storage: -20°C
Stability: ≥2 years



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

Laboratory Procedures

(±)16-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 ethanol, DMSO, and dimethyl formamide purged with an inert gas can be used. (±)16-HETE is miscible in these solvents. The solubility of (±)16-HETE in 0.1 M Na₂CO₃ is approximately 2 mg/ml.

(±)16-HETE is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of (±)16-HETE should be diluted with the aqueous buffer of choice. The solubility of (±)16-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

Electrolyte and fluid transport in the kidney are regulated in part by arachidonic acid and its metabolites. (±)16-HETE is the racemic version of a minor CYP450 metabolite of arachidonic acid released by the kidney upon angiotensin II stimulation. The biological activity of 16-HETE is stereospecific. 16(R)-HETE dose-dependently stimulates vasodilation of the rabbit kidney, however 16(S)-HETE does not affect perfusion pressure.¹ At a concentration of 2 μM the (S)-enantiomer of 16-HETE inhibits proximal tubule ATPase activity by as much as 60%, whereas the (R)-isomer has negligible effects on ATPase activity.¹

Reference

1. Carroll, M.A., Balazy, M., Margiotta, P., *et al.* Cytochrome P-450-dependent HETEs: Profile of biological activity and stimulation by vasoactive peptides. *Am. J. Physiol.* **271**(4 Pt 2), R863-R869 (1996).

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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