

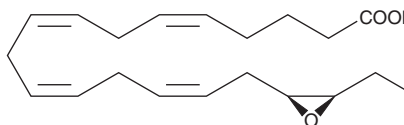
PRODUCT INFORMATION



(±)17(18)-EpETE

Item No. 50861

Formal Name:	(±)17,18-epoxy-5Z,8Z,11Z,14Z-eicosatetraenoic acid
Synonyms:	(±)17,18-EEQ, (±)17,18-epoxy Eicosatetraenoic Acid
MF:	C ₂₀ H ₃₀ O ₃
FW:	318.5
Purity:	≥90%
Supplied as:	A solution in ethanol
Storage:	-20°C
Stability:	≥1 year



NOTE: Relative stereochemistry shown in chemical structure

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

Laboratory Procedures

(±)17(18)-EpETE 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. The solubility of (±)17(18)-EpETE 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 (±)17(18)-EpETE is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of (±)17(18)-EpETE in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

Description

(±)17(18)-EpETE is biosynthesized by the stereospecific epoxidation of the ω-3 bond of EPA. (±)17(18)-EpETE at 100 nM was found to be a potent and selective activator of large-conductance calcium-activated potassium channels (K_{Ca}1.1/BK) in vascular smooth muscle cells.¹ It is possible that some of the physiologic effects of fish oil-enhanced diets could be due to this epoxygenase metabolite.

Reference

1. Lauterbach, B., Barbosa-Sicard, E., Wang, M.H., *et al.* Cytochrome P450-dependent eicosapentaenoic acid metabolites are novel BK channel activators. *Hypertension* **39**(2 Pt. 2), 609-613 (2002).

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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