

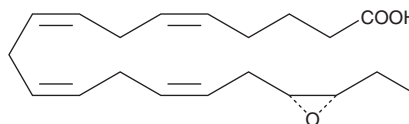
PRODUCT INFORMATION



17R(18S)-EpETE

Item No. 28630

CAS Registry No.: 725246-18-4
Formal Name: 16-[(2R,3S)-3-ethyl-2-oxiranyl]-5Z,8Z,11Z,14Z-hexadecatetraenoic acid
Synonyms: 17R,18S-EEQ, 17R,18S-epoxy Eicosatetraenoic Acid
MF: C₂₀H₃₀O₃
FW: 318.5
Purity: ≥95%
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.

Description

17R(18S)-EpETE is an oxylipin and a cytochrome P450 metabolite of eicosapentaenoic acid (EPA; Item Nos. 90110 | 90110.1 | 21908).^{1,2} 17R(18S)-EpETE is an activator of large-conductance calcium-activated potassium (K_{Ca}1.1/BK) channels, increasing the potassium current amplitude by 15-fold in isolated rat cerebral artery vascular smooth muscle cells (VSMCs) at +60 mV when used at a concentration of 50 nM.² It has negative chronotropic effects in isolated neonatal rat cardiomyocytes (NRCMs; EC₅₀ = ~1-2 nM) and prevents calcium-induced increases in the spontaneous beating of NRCMs.^{3,4}

References

- Schwarz, D., Kisselev, P., Ericksen, S.S., *et al.* Arachidonic and eicosapentaenoic acid metabolism by human CYP1A1: Highly stereoselective formation of 17(R),18(S)-epoxyeicosatetraenoic acid. *Biochem. Pharmacol.* **67(8)**, 1445-1457 (2004).
- 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).
- Falck, J.R., Wallukat, G., Puli, N., *et al.* 17(R),18(S)-Epoxyeicosatetraenoic acid, a potent eicosapentaenoic acid (EPA) derived regulator of cardiomyocyte contraction: Structure-activity relationships and stable analogues. *J. Med. Chem.* **54(12)**, 4109-4118 (2011).
- Arnold, C., Markovic, M., Blossey, K., *et al.* Arachidonic acid-metabolizing cytochrome P450 enzymes are targets of omega-3 fatty acids. *J. Biol. Chem.* **285(43)**, 32720-32733 (2010).

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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