

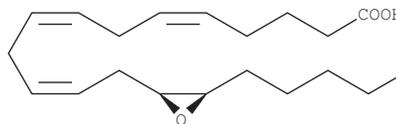
# PRODUCT INFORMATION



## (±)14(15)-EET

Item No. 50651

**CAS Registry No.:** 197508-62-6  
**Formal Name:** (±)14(15)-epoxy-5Z,8Z,11Z-eicosatrienoic acid  
**Synonyms:** (±)14,15-EET, (±)14,15-EpETrE  
**MF:** C<sub>20</sub>H<sub>32</sub>O<sub>3</sub>  
**FW:** 320.5  
**Chemical Purity:** ≥98%  
**Supplied as:** A solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥2 years



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

(±)14(15)-EET 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 (±)14(15)-EET 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 (±)14(15)-EET is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. The solubility of (±)14(15)-EET in PBS (pH 7.2) is approximately 1 mg/ml. We do not recommend storing the aqueous solution for more than one day.

### Description

(±)14(15)-EET is a metabolite of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607) that is formed *via* epoxidation of arachidonic acid by cytochrome P450.<sup>1,2</sup> It prevents increases in leukotriene B<sub>4</sub> (LTB<sub>4</sub>; Item No. 20110), ICAM-1, and chemokine (C-C motif) ligand 1 (CCL2) induced by oxidized LDL in primary rat pulmonary artery endothelial cells (RPAECs) when used at a concentration of 1 μM.<sup>3</sup> (±)14(15)-EET induces dilation of precontracted isolated canine coronary arterioles (EC<sub>50</sub> = 0.2 pM).<sup>4</sup> It reduces myocardial infarct size as a percentage of the area at risk in a canine model of ischemia-reperfusion injury induced by left anterior descending coronary artery (LAD) occlusion when administered at a dose of 0.128 mg/kg prior to occlusion or reperfusion.<sup>5</sup>

### References

1. Chacos, N., Falck, J.R., Wixtrom, C., *et al.* *Biochem. Biophys. Res. Commun.* **104(3)**, 916-922 (1982).
2. Oliw, E.H., Guengerich, F.P. and Oates, J.A. *J. Biol. Chem.* **257(7)**, 3771-3781 (1982).
3. Jiang, J.-X., Zhang, S.-J., Xiong, Y.-K., *et al.* *PLoS One* **10(6)**, e0128278 (2015).
4. Oltman, C.L., Weintraub, N.L., VanRollins, M., *et al.* *Circ. Res.* **83(9)**, 932-939 (1998).
5. Nithipatikom, K., Moore, J.M., Isbell, M.A., *et al.* *Am. J. Physiol. Heart Circ. Physiol.* **291(2)**, H537-H542 (2006).

#### 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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#### CAYMAN CHEMICAL

1180 EAST ELLSWORTH RD  
ANN ARBOR, MI 48108 · USA

**PHONE:** [800] 364-9897

[734] 971-3335

**FAX:** [734] 971-3640

CUSTSERV@CAYMANCHEM.COM

WWW.CAYMANCHEM.COM