

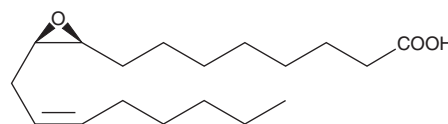
# PRODUCT INFORMATION



## (±)9(10)-EpOME MaxSpec® Standard

Item No. 31026

**Formal Name:** (±)9,10-epoxy-12Z-octadecenoic acid  
**Synonyms:** Coronaric Acid, (±)9,10-EODE, Leukotoxin  
**MF:** C<sub>18</sub>H<sub>32</sub>O<sub>3</sub>  
**FW:** 296.5  
**Purity:** ≥95%  
**Supplied as:** A solution in methyl acetate; in a deactivated glass ampule



NOTE: Relative stereochemistry shown in chemical structure

**Concentration:** 100 µg/ml (nominal); see certificate of analysis for verified concentration

**Storage:** -20°C

**Stability:** ≥3 years; Stability testing is ongoing to ensure concentration accuracy. The certificate of analysis and product expiry date will be updated upon completion of testing.

**Special Conditions:** Store upright and unopened at -20°C. Warm to room temperature prior to opening. Light sensitive.

### Description

(±)9(10)-EpOME is the 9,10-*cis* epoxide of linoleic acid, generated by neutrophils during the oxidative burst.<sup>1</sup> It has been recovered from the lungs of hyperoxic rats and from humans with acute respiratory distress syndrome.<sup>2</sup> Mitochondrial dysfunction is the main feature of (±)9(10)-EpOME cytotoxicity, which may be due to the diol metabolites as well as the parent epoxide.<sup>3,4</sup>

(±)9(10)-EpOME MaxSpec® standard is a quantitative grade standard of (±)9(10)-EpOME (Item No. 52400) that has been prepared specifically for mass spectrometry or any application where quantitative reproducibility is required. The solution has been prepared gravimetrically and is supplied in a deactivated glass ampule sealed under argon. The concentration was verified by comparison to an independently prepared calibration standard. This (±)9(10)-EpOME MaxSpec® standard is guaranteed to meet identity, purity, stability, and concentration specifications and is provided with a batch-specific certificate of analysis. Ongoing stability testing is performed to ensure the concentration remains accurate throughout the shelf life of the product. **Note:** The amount of solution added to the vial is in excess of the listed amount. Therefore, it is necessary to accurately measure volumes for preparation of calibration standards. Follow recommended storage and handling conditions to maintain product quality.

### References

- Hayakawa, M., Sugiyama, S., Takamura, T., et al. Neutrophils biosynthesize leukotoxin, 9,10-epoxy-12-octadecenoate. *Biochem. Biophys. Res. Commun.* **137**(1), 424-430 (1986).
- Ozawa, T., Hayakawa, M., Takamura, T., et al. Biosynthesis of leukotoxin, 9,10-epoxy-12 octadecenoate, by leukocytes in lung lavages of rat after exposure to hyperoxia. *Biochem. Biophys. Res. Commun.* **134**(3), 1071-1078 (1986).
- Kosaka, K., Suzuki, K., Hayakawa, M., et al. Leukotoxin, a linoleate epoxide: Its implication in the late death of patients with extensive burns. *Mol. Cell. Biochem.* **139**(2), 141-148 (1994).
- Moran, J.H., Weise, R., Schnellmann, R.G., et al. Cytotoxicity of linoleic acid diols to renal proximal tubular cells. *Toxicol. Appl. Pharmacol.* **146**(1), 53-59 (1997).

#### 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.

#### WARRANTY AND LIMITATION OF REMEDY

Buyer agrees to purchase the material subject to Cayman's Terms and Conditions. Complete Terms and Conditions including Warranty and Limitation of Liability information can be found on our website.

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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