# PRODUCT INFORMATION



8S(9R)-EET

Item No. 9004345

CAS Registry No.: 123931-39-5

Formal Name: (5Z)-7-[(2S,3R)-3-(2Z,5Z)-2,5-

undecadien-1-yl-2-oxiranyl]-5-

heptenoic acid

Synonyms: 8S(9R)-epoxy-all-cis-

> 5,11,14-Eicosatrienoic Acid, 8S(9R)-EpETrE, 8S(9R)-

Epoxyeicosatrienoic Acid, 8S(9R)-

epoxy-5(Z),11(Z),14(Z)-ETrE,

FA 20:4;O

MF:  $C_{20}H_{32}O_3$ 320.5 FW: ≥95% **Purity:** 

Supplied as: A solution in ethanol

Storage: -20°C Stability: ≥1 year

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



8S(9R)-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. 8S(9R)-EET is sparingly soluble (1-10 mg/ml) in acetonitrile.

Description

8S(9R)-EET is an oxylipin and a metabolite of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607).1 It is formed via oxidation of arachidonic acid by the cytochrome P450 (CYP) isoforms CYP1A1, CYP1A2, CYP2B1, and CYP2B2. 8S(9R)-EET induces relaxation of precontracted isolated dog epicardial arterioles  $(EC_{50} = 121 \text{ pM}).^2$  Intrarenal infusion of 8S(9R)-EET (0.5, 1, or 2  $\mu$ g/kg per minute) induces glomerular vasoconstriction and reduces the glomerular filtration rate in rats.<sup>3</sup>

## References

- 1. Capdevila, J.H., Karara, A., Waxman, D.J., et al. Cytochrome P-450 enzyme-specific control of the regio- and enantiofacial selectivity of the microsomal arachidonic acid epoxygenase. J. Biol. Chem. 265(19), 10865-10871 (1990).
- 2. Zhang, Y., Oltman, C.L., Lu, T., et al. EET homologs potently dilate coronary microvessels and activate BK<sub>Ca</sub> channels. Am. J. Physiol. Heart Circ. Physiol. 280(6), H2430-H2440 (2001).
- Katoh, T., Takahashi, K., Capdevila, J., et al. Glomerular stereospecific synthesis and hemodynamic actions of 8,9-epoxyeicosatrienoic acid in rat kidney. Am. J. Physiol. 261(4 Pt 2), F578-F586 (1991).

WARNING
THIS PRODUCT IS FOR RESEARCH ONLY - NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

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

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

Copyright Cayman Chemical Company, 04/09/2024

### **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