SZABO SCANDIC

Part of Europa Biosite

Produktinformation

- Forschungsprodukte & Biochemikalien
- Zellkultur & Verbrauchsmaterial
- Diagnostik & molekulare Diagnostik
- Laborgeräte & Service

Weitere Information auf den folgenden Seiten!
See the following pages for more information!

Lieferung & Zahlungsart

siehe unsere Liefer- und Versandbedingungen

Zuschläge

- Mindermengenzuschlag
- Trockeneiszuschlag
- Gefahrgutzuschlag
- Expressversand

SZABO-SCANDIC HandelsgmbH

Quellenstraße 110, A-1100 Wien

T. +43(0)1 489 3961-0

F. +43(0)1 489 3961-7

mail@szabo-scandic.com

www.szabo-scandic.com

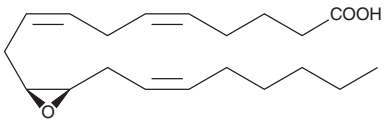
linkedin.com/company/szaboscandic

PRODUCT INFORMATION

11S(12R)-EET

Item No. 9004348

CAS Registry No.: 123931-40-8
Formal Name: 10-[(2S,3R)-3-(2Z)-2-octen-1-yl-2-oxiranyl]-5Z,8Z-decadienoic acid
Synonyms: 11S(12R)-EpETrE, 11S(12R)-epoxy-5(Z),8(Z),14(Z)-ETrE, 11S(12R)-epoxy-all-*cis*-5,8,14-Eicosatrienoic Acid, 11S(12R)-Epoxyeicosatrienoic Acid, FA 20:4;O
MF: $C_{20}H_{32}O_3$
FW: 320.5
Purity: ≥95%
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.

Laboratory Procedures

11S(12R)-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 acetonitrile purged with an inert gas can be used. 11S(12R)-EET is sparingly soluble (1-10 mg/ml) in acetonitrile.

Description

11S(12R)-EET is an oxylipin and a metabolite of arachidonic acid (Item Nos. 90010 | 90010.1 | 10006607).[1,2] It is selectively formed from arachidonic acid by the cytochrome P450 (CYP) isoform CYP2B2 over CYP2C23 and CYP2C24, as well as CYP2C9 over CYP2C8. 11S(12R)-EET (50 nM) activates large-conductance calcium-activated potassium channels (K_{Ca}1.1/BK) in isolated rat coronary small arterial smooth muscle cells.[3] It induces dilation of precontracted isolated canine epicardial arterioles (EC_{50} = 20 pM) and denuded porcine subepicardial arterioles (EC_{50} = 10 pM). Unlike 11R(12S)-EET (Item No. 9004344), 11S(12R)-EET does not inhibit the epithelial sodium channel (ENaC) in a patch-clamp assay using isolated rat cortical collecting duct tubules or induce migration of human umbilical vein endothelial cells (HUVECs).[4,5]

References

1. Capdevila, J.H., Falck, J.R., and Harris, R.C. Cytochrome P450 and arachidonic acid bioactivation: Molecular and functional properties of the arachidonate monooxygenase. *J. Lipid Res.* **41(2),** 163-181 (2000).
2. Daikh, B.E., Lasker, J.M., Raucy, J.L., *et al.* Regio- and stereoselective epoxidation of arachidonic acid by human cytochromes P450 2C8 and 2C91. *J. Pharmacol. Exp. Ther.* **271(3)**, 1427-1433 (1994).
3. Zhang, Y., Oltman, C.L., Lu, T., *et al.* EET homologs potently dilate coronary microvessels and activate BK_{Ca} channels. *Am. J. Physiol. Heart Circ. Physiol.* **280(6)**, H2430-H2440 (2001).
4. Sun, P., Lin, D.H., Yue, P., *et al.* High potassium intake enhances the inhibitory effect of 11,12-EET on ENaC. *J. Am. Soc. Nephrol.* **21(10)**, 1667-1677 (2010).
5. Ding, Y., Frömel, T., Popp, R., *et al.* The biological actions of 11,12-epoxyeicosatrienoic acid in endothelial cells are specific to the R/S-enantiomer and require the Gs protein. *J. Pharmacol. Exp. Ther.* **350(1)**, 14-21 (2014).

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