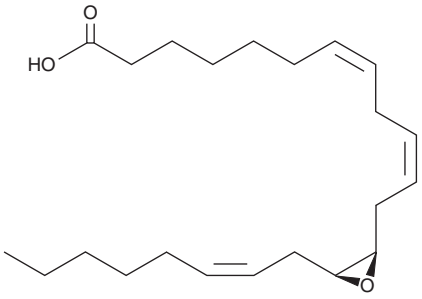
PRODUCT INFORMATION

(±)13,14-EDT

Item No. 38937

CAS Registry No.:	355016-19-2
Formal Name:	*rel*-12-[(2R,3S)-3-(2Z)-2-octen-1-yl-2-oxiranyl]-7Z,10Z-dodecadienoic acid
Synonyms:	(±)-Dihomo-13,14-EET, (±)13,14-EpDoTrE, (±)13,14-Epoxydocosatrienoic Acid
MF:	$C_{22}H_{36}O_3$
FW:	348.5
Purity:	≥98%
Supplied as:	A 100 µg/ml solution in ethanol
Storage:	-20°C
Stability:	≥4 years



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

Description

(±)13,14-EDT is an oxylipin and a metabolite of adrenic acid (Item No. 90300) formed *via* the cytochrome P450 (CYP) pathway.[1,2] It activates large-conductance calcium-activated potassium channels (K_{Ca}1.1/BK) in isolated rat coronary small arterial smooth muscle cells when used at a concentration of 50 nM and induces dilation of isolated porcine arterioles (EC_{50} = 12 pM).[3] (±)13,14-EDT also induces relaxation of isolated bovine coronary arteries precontracted with the TP receptor agonist U-46619 (Item No. 16450).[2]

References

1. Singh, N., Barnych, B., Wagner, K.M., *et al*. Adrenic acid-derived epoxy fatty acids are naturally occurring lipids and their methyl ester prodrug reduces endoplasmic reticulum stress and inflammatory pain. *ACS Omega* **6(10)**, 7165-7174 (2021).
2. Yi, X.-Y., Gauthier, K.M., Cui, L., *et al*. Metabolism of adrenic acid to vasodilatory 1α,1β-dihomo-epoxyeicosatrienoic acids by bovine coronary arteries. *Am. J. Physiol. Heart Circ. Physiol*. **292(5)**, H2265-H2274 (2007).
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).

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