

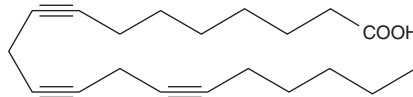
Product Information



8,11,14-Eicosatriynoic Acid

Catalog No. 10007900

CAS Registry No.: 34262-64-1
Formal Name: 8,11,14-eicosatriynoic acid
Synonym: 8,11,14-ETI
MF: C₂₀H₂₈O₂
FW: 300.4
Purity: ≥98%
Stability: ≥2 years at -20°C
Supplied as: A crystalline solid



Laboratory Procedures

For long term storage, we suggest that 8,11,14-eicosatriynoic (8,11,14-ETI) acid be stored as supplied at -20°C. It should be stable for at least two years.

8,11,14-ETI is supplied as a crystalline solid. A stock solution may be made by dissolving the 8,11,14-ETI in an organic solvent purged with an inert gas. 8,11,14-ETI is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide. The solubility of 8,11,14-ETI in these solvents is approximately 100 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. Organic solvent-free aqueous solutions of 8,11,14-ETI can be prepared by directly dissolving the crystalline compound in aqueous buffers. The solubility of 8,11,14-ETI in PBS, pH 7.2, is approximately 0.15 mg/ml. For greater aqueous solubility, 8,11,14-ETI can be directly dissolved in 0.15 M Tris-HCl, pH 8.5, (solubility of approximately 1 mg/ml) and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH. We do not recommend storing the aqueous solution for more than one day.

8,11,14-ETI is an inhibitor of prostaglandin and leukotriene biosynthesis as well as arachidonic acid induced platelet aggregation.¹ It inhibits cyclooxygenase (IC₅₀ = 14 μM), human 12-LO (IC₅₀ = 0.46 μM), 5-LO (IC₅₀ = 25 μM) and the actions of slow-reacting substance of anaphylaxis (SRS-A) (IC₅₀ = 10 μM).^{2,3}

References

1. Goetz, J.M., Sprecher, H., Cornwell, D.G., *et al.* Inhibition of prostaglandin biosynthesis by triynoic acids. *Prostaglandins* **12(2)**, 187-192 (1976).
2. Sun, F.F., McGuire, J.C., Morton, D.R., *et al.* Inhibition of platelet arachidonic acid 12-lipoxygenase by acetylenic acid compounds. *Prostaglandins* **21(2)**, 333-343 (1981).
3. Jakschik, B.A., DiSantis, D.M., Sankarappa, S.K., *et al.* Modulation of leukotriene formation by various acetylenic acids, *in* Leukotrienes and Other Lipoxygenase Products. Samuelsson, B. and Paoletti, R., editors, Raven Press, New York, 127-135 (1982).

Related Product

5,8,11-Eicosatriynoic Acid - Catalog No. 90200

WARNING: THIS PRODUCT IS FOR LABORATORY RESEARCH ONLY: NOT FOR ADMINISTRATION TO HUMANS. NOT FOR HUMAN OR VETERINARY DIAGNOSTIC OR THERAPEUTIC USE.

MATERIAL SAFETY DATA

This material should be considered hazardous until information to the contrary becomes available. Do not ingest, swallow, or inhale. Do not get in eyes, on skin, or on clothing. Wash thoroughly after handling. This information contains some, but not all, of the information required for the safe and proper use of this material. Before use, the user must review the complete Material Safety Data Sheet, which has been sent *via* email to your institution.

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Cayman Chemical

Mailing address

1180 E. Ellsworth Road
Ann Arbor, MI
48108 USA

Phone

(800) 364-9897
(734) 971-3335

Fax

(734) 971-3640

E-Mail

custserv@caymanchem.com

Web

www.caymanchem.com