

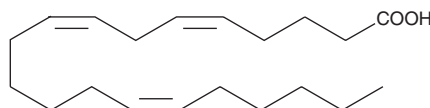
Product Information



5(Z),8(Z),14(Z)-Eicosatrienoic Acid

Item No. 10009733

CAS Registry No.: 90105-02-5
Formal Name: 5Z,8Z,14Z-eicosatrienoic acid
MF: C₂₀H₃₄O₂
FW: 306.5
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in ethanol



Laboratory Procedures

For long term storage, we suggest that 5(Z),8(Z),14(Z)-eicosatrienoic acid be stored as supplied at -20°C. It will be stable for at least one year.

5(Z),8(Z),14(Z)-Eicosatrienoic acid 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 DMSO and dimethyl formamide purged with an inert gas can be used. The solubility of 5(Z),8(Z),14(Z)-eicosatrienoic acid 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. If an organic solvent-free solution of 5(Z),8(Z),14(Z)-eicosatrienoic acid is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in aqueous buffers. For greater aqueous solubility, 5(Z),8(Z),14(Z)-eicosatrienoic acid can be directly dissolved in 0.1 M Na₂CO₃ (solubility of approximately 1.5 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.

5(Z),8(Z),14(Z)-Eicosatrienoic acid is a polyunsaturated fatty acid that can be a substrate for 5-lipoxygenase (5-LO). 5-LO from RBL-1 cells converts this fatty acid to 5-hydroxy-6,8,14-eicosatrienoic acid and 5-hydroperoxy-6,8,14-eicosatrienoic acid. However, only insignificant amounts of dihydroxy acid were produced. Due to the lack of a double bond at C-11, this particular fatty acid cannot be used in leukotriene A formation.¹

Reference

1. Wei, Y., Evanst, R.W., Morrison, A.R., *et al.* Double bond requirement for the 5-lipoxygenase pathway. *Prostaglandins* **29(4)**, 537-545 (1985).

Related Products

5(Z),8(Z),11(Z)-Eicosatrienoic Acid-d₆ - Item No. 10742 • 5(Z),8(Z),11(Z) Eicosatrienoic Acid - Item No. 90190 • 11(Z),14(Z),17(Z) Eicosatrienoic Acid - Item No. 90192 • 5(Z),11(Z),14(Z) Eicosatrienoic Acid - Item No. 10009999

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.

WARRANTY AND LIMITATION OF REMEDY

Cayman Chemical Company makes **no warranty or guarantee** of any kind, whether written or oral, expressed or implied, including without limitation, any warranty of fitness for a particular purpose, suitability and merchantability, which extends beyond the description of the chemicals hereof. Cayman **warrants only** to the original customer that the material will meet our specifications at the time of delivery.

Cayman will carry out its delivery obligations with due care and skill. Thus, in no event will Cayman have **any obligation or liability**, whether in tort (including negligence) or in contract, for any direct, indirect, incidental or consequential damages, even if Cayman is informed about their possible existence.

This limitation of liability does not apply in the case of intentional acts or negligence of Cayman, its directors or its employees.

Buyer's **exclusive remedy** and Cayman's sole liability hereunder shall be limited to a refund of the purchase price, or at Cayman's option, the replacement, at no cost to Buyer, of all material that does not meet our specifications.

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