

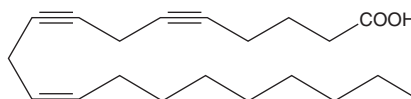
# PRODUCT INFORMATION



## 5,8,11-Eicosatriynoic Acid

Item No. 90200

CAS Registry No.: 13488-22-7  
Formal Name: 5,8,11-eicosatriynoic acid  
Synonyms: 5,8,11-ETI, FA 20:6  
MF:  $C_{20}H_{28}O_2$   
FW: 300.4  
Purity:  $\geq 95\%$   
Supplied as: A crystalline solid  
Storage:  $-20^{\circ}C$   
Stability:  $\geq 4$  years



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

### Laboratory Procedures

5,8,11-Eicosatriynoic acid (5,8,11-ETI) is supplied as a crystalline solid. A stock solution may be made by dissolving the 5,8,11-ETI in the solvent of choice, which should be purged with an inert gas. 5,8,11-ETI is soluble in organic solvents such as ethanol, DMSO, and dimethyl formamide (DMF). The solubility of 5,8,11-ETI in ethanol and DMSO is approximately 25 mg/ml and approximately 20 mg/ml in DMF.

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. 5,8,11-ETI is sparingly soluble in neutral aqueous buffers. For greater aqueous solubility, 5,8,11-ETI can be directly dissolved in 0.15 M Tris-HCl (pH 8.0) and then diluted with PBS (pH 7.2) to achieve the desired concentration or pH.

Ensure that the residual amount of organic solvent is insignificant, since organic solvents may have physiological effects at low concentrations. We do not recommend storing the aqueous solution for more than one day.

### Description

5,8,11-ETI is a nonselective inhibitor of lipoxygenases. It is a suicide inhibitor of 12-lipoxygenase in human platelets with an  $ID_{50} = 24 \mu M$ .<sup>1</sup> 5,8,11-ETI also inhibits A23187 and L-cysteine induced leukotriene  $C_4$  biosynthesis in mouse mastocytoma cells with an  $ID_{50} = 5 \mu M$ .<sup>2</sup> At higher concentrations, 5,8,11-ETI also inhibits cyclooxygenases ( $ID_{50} = 340 \mu M$ ).<sup>1</sup>

### References

1. Hammarström, S. Selective inhibition of platelet n-8 lipoxygenase by 5,8,11-eicosatriynoic acid. *Biochim. Biophys. Acta* **487(3)**, 517-519 (1977).
2. Örning, L. and Hammarström, S. Inhibition of leukotriene C and leukotriene D biosynthesis. *J. Biol. Chem.* **255(17)**, 8023-8026 (1980).

#### WARNING

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

#### SAFETY DATA

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.

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