# **PRODUCT** INFORMATION



## 5,6-dehydro Arachidonic Acid

Item No. 90020

CAS Registry No.:	58688-54-3	
Formal Name:	8Z,11Z,14Z-eicosatrien-5-ynoic acid	
Synonyms:	5,6-dehydro AA, FA 20:5	
MF:	$C_{20}H_{30}O_{2}$	СООН
FW:	302.5	
Purity:	≥98%	$\setminus - \land - \land \land$
Supplied as:	A solution in ethanol	
Storage:	-20°C	
Stability:	≥2 years	
Special Conditions: Oxygen and light sensitive		
Information represents the product specifications. Batch specific analytical results are provided on each certificate of analysis.		

#### Laboratory Procedures

5,6-dehydro AA 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 or dimethyl formamide can be used. To prevent oxidation of 5,6-dehydro AA, the solvent should be purged with an inert gas. The solubility of 5,6-dehydro AA 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 aqueous solution of 5,6-dehydro AA is needed, it can be prepared by evaporating the ethanol and directly dissolving the neat oil in basic buffers. 5,6-dehydro AA is sparingly soluble in neutral buffers. We do not recommend storing the aqueous solution for more than one day.

#### Description

5,6-dehydro AA is an analog of arachidonic acid with an acetylene in the 5,6 positon. It inhibits 5-lipoxygenase (5-LO) in rat basophilic leukemia cells, with a K, value of 15  $\mu$ M.<sup>1</sup> In guinea pig leukocytes, 5-LO is inhibited by 5,6-dehydro AA with an IC<sub>50</sub> value of 10  $\mu$ M.

#### Reference

1. Sok, D-E., Han, C-Q., Pai, J-K., et al. Inhibition of leukotriene biosynthesis by acetylenic analogs. Biochem. Biophys. Res. Commun. 107, 101-108 (1982).

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

#### SAFFTY 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.

#### WARRANTY AND LIMITATION OF REMEDY

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