

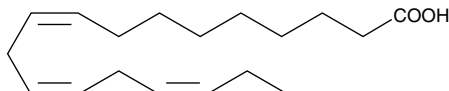
# Product Information



## $\alpha$ -Linolenic Acid

Item No. 90210

**CAS Registry No.:** 463-40-1  
**Formal Name:** 9Z,12Z,15Z-octadecatrienoic acid  
**Synonym:** ALA  
**MF:**  $C_{18}H_{30}O_2$   
**FW:** 278.4  
**Purity:**  $\geq 98\%$   
**Stability:**  $\geq 1$  year at  $-20^\circ\text{C}$   
**Supplied as:** A solution in ethanol



### Laboratory Procedures

For long term storage, we suggest that  $\alpha$ -linolenic acid (ALA) be stored as supplied at  $-20^\circ\text{C}$ . It should be stable for at least one year.

ALA 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 purged with an inert gas can be used. The solubility of ALA in these solvents is approximately 100 mg/ml.

ALA is sparingly soluble in aqueous buffers. For maximum solubility in aqueous buffers, the ethanolic solution of ALA should be diluted with the aqueous buffer of choice. ALA has a solubility of approximately 1 mg/ml in a 0.15 M solution of Tris-HCl (pH 8.5) using this method. Therefore, further dilutions of the organic solvent 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. We do not recommend storing the aqueous solution for more than one day.

ALA is an essential fatty acid found in green leafy vegetables. ALA, as part of a low saturated fat diet, helps prevent cardiovascular disease. ALA decreases blood pressure, serum cholesterol levels, and platelet aggregation.<sup>1</sup>

### Reference

1. Allman, M.A., Pena, M.M., Pang, D. Supplementation with flaxseed oil *versus* sunflowerseed oil in healthy young men consuming a low fat diet: Effects on platelet composition and function. *Eur. J. Clin. Nutr.* **49**, 169-178 (1995).

### Related Products

For a list of related products please visit: [www.caymanchem.com/catalog/90210](http://www.caymanchem.com/catalog/90210)

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

#### 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 Safety Data Sheet, which has been sent *via* email to your institution.

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