

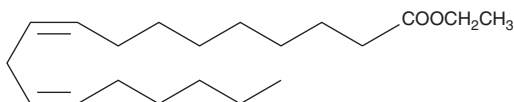
Product Information



Linoleic Acid ethyl ester

Catalog No. 10008198

CAS Registry No.: 544-35-4
Formal Name: 9Z,12Z-octadecadienoic acid, ethyl ester
Synonyms: Ethyl Linolate; Ethyl Linoleate; Telfairic Acid ethyl ester
MF: C₂₀H₃₆O₂
FW: 308.5
Purity: ≥98%
Stability: ≥1 year at -20°C
Supplied as: A solution in ethanol



Laboratory Procedures

For long term storage, we suggest that linoleic acid ethyl ester be stored as supplied at -20°C. It should be stable for at least one year.

Linoleic acid ethyl ester 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 linoleic acid ethyl ester in these solvents is approximately 100 mg/ml.

Linoleic acid ethyl ester is sparingly soluble in aqueous buffers. 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.

Linoleic acid is an essential fatty acid and one of the most abundant polyunsaturated fatty acids in the western diet. Deficiencies in linoleic acid are linked to defective wound healing, growth retardation, and dermatitis.^{1,2} Linoleic acid is metabolized by 15-lipoxygenase in both plants and animals to form 9- and 13-HODE.³ Linoleic acid ethyl ester is a neutral, lipid-soluble form of linoleic acid.

References

1. Hashimoto, A., Katagiri, M., Torii, S., *et al.* Effect of the dietary α -linolenate/linoleate balance on leukotriene production and histamine release in rats. *Prostaglandins* **36**, 3-15 (1988).
2. Soyland, E., Fund, J., Rajka, G., *et al.* Effect of dietary supplementation with very-long-chain n-3 fatty acids in patients with psoriasis. *N. Engl. J. Med.* **328**, 1812-1816 (1993).
3. Vick, B.A. Oxygenated fatty acids of the lipoxygenase pathway, Chapter 5, *in* Lipid Metabolism in Plants. Moore, T.S., Jr., editor, CRC Press, Boca Raton, 167-191 (1993).

Related Products

Conjugated Linoleic Acid (9Z,11E) - Cat. No. 90140 • Conjugated Linoleic Acid (10E,12Z) - Cat. No. 90145 • Linoleic Acid - Cat. No. 90150 • Linoleic Acid (peroxide free) - Cat. No. 90150.1 • Conjugated Linoleic Acid (9E,11E) - Cat. No. 90370 • Linoleic Acid-d₄ - Cat. No. 390150 • Fatty Acid ethyl ester Standard-PAK - Cat. No. 10008188 • Stearic Acid ethyl ester - Cat. No. 10008196 • Myristic Acid ethyl ester - Cat. No. 10008197 • Linolenic Acid ethyl ester - Cat. No. 10008199 • Arachidonic Acid ethyl ester - Cat. No. 10008200 • Oleic Acid ethyl ester - Cat. No. 10008201 • Palmitic Acid ethyl ester - Cat. No. 10008202 • Lauric Acid ethyl ester - Cat. No. 10008203 • Palmitoleic Acid ethyl ester - Cat. No. 10008204

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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