

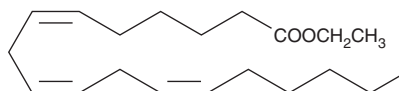
# PRODUCT INFORMATION



## $\gamma$ -Linolenic Acid ethyl ester

Item No. 9000738

**CAS Registry No.:** 31450-14-3  
**Formal Name:** 6Z,9Z,12Z-octadecatrienoic acid, ethyl ester  
**Synonyms:** GLA ethyl ester, SFE 19:3  
**MF:** C<sub>20</sub>H<sub>34</sub>O<sub>2</sub>  
**FW:** 306.5  
**Supplied as:** A solution in ethanol  
**Storage:** -20°C  
**Stability:** ≥2 years



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

### Laboratory Procedures

GLA 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 GLA ethyl ester in these solvents is approximately 100 mg/ml.

### Description

GLA is an  $\omega$ -6 fatty acid which can be elongated to arachidonic acid for endogenous eicosanoid synthesis. It is a weak leukotriene B<sub>4</sub> (LTB<sub>4</sub>) receptor antagonist, inhibiting [<sup>3</sup>H]-LTB<sub>4</sub> binding to porcine neutrophil membranes with a K<sub>i</sub> value of 1  $\mu$ M. GLA produces 53% inhibition at a 1 mg/kg dose in an *in vivo* model of LTB<sub>4</sub>-induced bronchoconstriction.<sup>1</sup> GLA ethyl ester is an esterified version of the free acid which is less water soluble but more amenable for the formulation of GLA-containing diets.

### Reference

1. Yagaloff, K.A., Franco, L., Simko, B., *et al.* Essential fatty acids are antagonists of the leukotriene B<sub>4</sub> receptor. *Prostaglandins Leukot. Essent. Fatty Acids* **52**, 293-297 (1995).

#### 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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