

acyl-lipid ω -3 desaturase (cytochrome b5)

Cat. No. EXWM-0988

Lot. No. (See product label)

Introduction

Description

This microsomal enzyme introduces a cis double bond three carbons away from the methyl end of a fatty acid incorporated into a glycerolipid. The distance from the carboxylic acid end of the molecule does not have an effect. The plant enzyme acts on carbon 15 of linoleoyl groups incorporated into both the sn-1 and sn-2 positions of the glycerol backbone of phosphatidylcholine and other phospholipids, converting them into α -linolenoyl groups. The enzyme from the fungus *Mortierella alpina* acts on γ -linolenoyl and arachidonoyl groups, converting them into stearidonoyl and icosapentaenoyl groups, respectively. cf. EC 1.14.19.35, acyl-lipid ω -3 desaturase (ferredoxin).

Synonyms

FAD3

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.19.25

Reaction

a linoleoyl-[glycerolipid] + 2 ferrocytochrome b5 + O₂ + 2 H⁺ = an α -linolenoyl-[glycerolipid] + ferricytochrome b5 + 2 H₂O

Notes

This item requires custom production and lead time is between 5-9 weeks. We can custom produce according to your specifications.

Storage and Shipping Information

Storage

Store it at +4 °C for short term. For long term storage, store it at -20 °C~-80 °C.