

palmitoyl-[glycerolipid] 3-(E)-desaturase

Cat. No. EXWM-1008

Lot. No. (See product label)

Introduction

Description

The enzyme introduces an unusual trans double bond at carbon 3 of a palmitoyl group attached to the sn-2 position of glycerolipids. The enzyme from the plant *Arabidopsis thaliana* is specific for palmitate in phosphatidylglycerol. The enzyme from tobacco can also accept oleate and α -linolenate if present at the sn-2 position of phosphatidylglycerol.

Synonyms

FAD4

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 1.14.19.43

Reaction

a 1-acyl-2-palmitoyl-[glycerolipid] + 2 reduced ferredoxin [iron-sulfur] cluster + O₂ + 2 H⁺ = a 1-acyl-2-[(3E)-hexadec-3-enoyl]-[glycerolipid] + 2 oxidized ferredoxin [iron-sulfur] cluster + 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.