Creative Enzymes®

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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.