Creative Enzymes®

acyl-lipid (9+3)-(E)-desaturase

Cat. No. EXWM-0998

Lot. No. (See product label)

Introduction

Description	The enzymes from the plants Dimorphotheca sinuata (African daisy) and Vernicia fordii (tung oil tree) insert a trans double bond in position C-12 of oleate and palmitoleate incorporated into glycerolipids. The enzyme introduces the new double bond at a position three carbons away from an existing double bond at position 9, towards the methyl end of the fatty acid. The enzyme from tung oil tree also possesses the activity of EC 1.14.19.33, Δ12 acyl-lipid conjugase.
Synonyms	acyl-lipid 12-(E)-desaturase; DsFAD2-1; FADX

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.19.34
Reaction	(1) an oleoyl-[glycerolipid] + 2 ferrocytochrome b5 + O2 + 2 H+ = a (9Z,12E)-octadeca-9,12-dienoyl-[glycerolipid] + 2 ferricytochrome b5 + 2 H2O; (2) a palmitoleoyl-[glycerolipid] + 2 ferrocytochrome b5 + O2 + 2 H+ = a (9Z,12E)-hexadeca-9,12-dienoyl-[glycerolipid] + 2 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.