

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, Δ 12 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 °C for short term. For long term storage, store it at -20 °C~-80 °C.