Creative Enzymes®

acyl-[acyl-carrier-protein] 4-desaturase

Cat. No. EXWM-0973

Lot. No. (See product label)

Introduction

Description	The enzymes from the plants Coriandrum sativum (coriander) and Hedera helix (English ivy) are involved in biosynthesis of petroselinate [(6Z)-octadec-6-enoate], which is formed by elongation of (4Z)-hexadec-4-enoate. The ivy enzyme can also act on oleoyl-[acyl-carrier protein] and palmitoleoyl-[acyl-carrier protein], generating the corresponding 4,9-diene.
Synonyms	Δ4-palmitoyl-[acyl carrier protein] desaturase

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.14.19.11
Reaction	palmitoyl-[acyl-carrier protein] + 2 reduced ferredoxin [iron-sulfur] cluster + O2 + 2 H+ = (4Z)-hexadec-4-enoyl-[acyl-carrier protein] + 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 ℃.