

## 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 petroselinic acid [(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

$\Delta^4$ -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 + O<sub>2</sub> + 2 H<sup>+</sup> = (4Z)-hexadec-4-enoyl-[acyl-carrier protein] + 2 oxidized ferredoxin [iron-sulfur] cluster + 2 H<sub>2</sub>O

#### 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.