

## Δ12 acyl-lipid conjugase (11E,13E-forming)

Cat. No. EXWM-0997

Lot. No. (See product label)

### Introduction

#### Description

The enzyme, characterized from the plants *Impatiens balsamina*, *Momordica charantia* (bitter melon) and *Vernicia fordii* (tung tree), converts a single cis double bond at carbon 12 to two conjugated trans bonds at positions 11 and 13. The enzyme from *Vernicia fordii* can also act as a 12(E) desaturase when acting on the monounsaturated fatty acids oleate and palmitoleate. cf. EC 1.14.19.16, linoleoyl-lipid Δ12 conjugase (11E,13Z-forming).

#### Synonyms

fatty acid Δ12-conjugase (ambiguous); FADX (gene name)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.14.19.33

#### Reaction

(1) a linoleoyl-[glycerolipid] + 2 ferrocytochrome b5 + O<sub>2</sub> + 2 H<sup>+</sup> = an α-eleostearoyl-[glycerolipid] + 2 ferricytochrome b5 + 2 H<sub>2</sub>O; (2) a γ-linolenoyl-[glycerolipid] + 2 ferrocytochrome b5 + O<sub>2</sub> + 2 H<sup>+</sup> = an α-parinaroyl-[glycerolipid] + 2 ferricytochrome b5 + 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.