

## phytoene desaturase (ζ-carotene-forming)

Cat. No. EXWM-1431

Lot. No. (See product label)

### Introduction

#### Description

The enzyme is involved in carotenoid biosynthesis and catalyses up to two desaturation steps (cf. EC 1.3.99.28 [phytoene desaturase (neurosporene-forming)], EC 1.3.99.30 [phytoene desaturase (3,4-didehydrolycopene-forming)] and EC 1.3.99.31 [phytoene desaturase (lycopene-forming)]).

#### Synonyms

CrtIa; 2-step phytoene desaturase (ambiguous); two-step phytoene desaturase (ambiguous)

### Product Information

#### Form

Liquid or lyophilized powder

#### EC Number

EC 1.3.99.29

#### Reaction

15-cis-phytoene + 2 acceptor = all-trans-ζ-carotene + 2 reduced acceptor (overall reaction); (1a) 15-cis-phytoene + acceptor = all-trans-phytofluene + reduced acceptor; (1b) all-trans-phytofluene + acceptor = all-trans-ζ-carotene + reduced acceptor

#### 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.