Creative Enzymes®

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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.