Creative Enzymes®

phytoene desaturase (neurosporene-forming)

Cat. No. EXWM-1430

Lot. No. (See product label)

Introduction

Description	This enzyme is involved in carotenoid biosynthesis and catalyses up to three desaturation steps (cf. EC 1.3.99.29 [phytoene desaturase (ζ-carotene-forming)], EC 1.3.99.30 [phytoene desaturase (3,4-didehydrolycopene-forming)], EC 1.3.99.31 [phytoene desaturase (lycopene-forming)]). The enzyme is activated by FAD. NAD+, NADP+ or ATP show no activating effect.
Synonyms	3-step phytoene desaturase; three-step phytoene desaturase; phytoene desaturase (ambiguous); CrtI (ambiguous)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.3.99.28
Reaction	15-cis-phytoene + 3 acceptor = all-trans-neurosporene + 3 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; (1c) all-trans-ζ-carotene + acceptor = all-trans-neurosporene + 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 ℃.