Creative Enzymes®

4,4'-diapophytoene desaturase (4,4'-diapolycopene-forming)

Cat. No. EXWM-1409

Lot. No. (See product label)

Introduction

Description	The enzyme catalyses four successive dehydrogenations, resulting in production of 4,4'-diapolycopene. While the enzyme from Staphylococcus aureus was only shown to produce 4,4'-diaponeurosporene in vivo, it is able to catalyse the last reaction in vitro.
Synonyms	dehydrosqualene desaturase (ambiguous); CrtN (ambiguous); 4,4'-diapophytoene:FAD oxidoreductase (ambiguous); 15-cis-4,4'-diapophytoene:FAD oxidoreductase; 4,4'-diapophytoene desaturase (ambiguous)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 1.3.8.2
Reaction	15-cis-4,4'-diapophytoene + 4 FAD = all-trans-4,4'-diapolycopene + 4 FADH2 (overall reaction); (1a) 15-cis-4,4'-diapophytoene + FAD = all-trans-4,4'-diapophytofluene + FADH2; (1b) all-trans-4,4'-diapophytofluene + FAD = all-trans-4,4'-diapo-ζ-carotene + FADH2; (1c) all-trans-4,4'-diapo-ζ-carotene + FAD = all-trans-4,4'-diaponeurosporene + FADH2; (1d) all-trans-4,4'-diaponeurosporene + FAD = all-trans-4,4'-diapolycopene + FADH2
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 ℃.