Creative Enzymes®

(+)-car-3-ene synthase

Cat. No. EXWM-5118

Lot. No. (See product label)

Introduction

Description The enzyme reacts with (3S)-linalyl diphosphate twice as rapidly as geranyl diphosphate, but 25 times as rapidly as (3R)-linalyl diphosphate. It is assumed that (3S)-linalyl diphosphate is normally formed as an enzyme bound intermediate in the reaction. In the reaction the 5-pro-R hydrogen of geranyl diphosphate is eliminated during cyclopropane ring formation. In Picea abies (Norway spruce) and Picea sitchensis (Sitka spruce) terpinolene is also formed. See EC 4.2.3.113 terpinolene synthase. (+)-Car-3-ene is associated with resistance of Picea sitchensis (Sitka spruce) to white pine weevil.

Synonyms 3-carene cyclase; 3-carene synthase; 3CAR; (+)-3-carene synthase

Product Information

Form Liquid or lyophilized powder

EC Number EC 4.2.3.107

Reaction geranyl diphosphate = (+)-car-3-ene + diphosphate

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 ℃.