

## (+)-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 °C for short term. For long term storage, store it at -20 °C~-80 °C.