

1,8-cineole synthase

Cat. No. EXWM-5119

Lot. No. (See product label)

Introduction

Description

Requires Mn^{2+} or Zn^{2+} . Mg^{2+} is less effective than either. 1,8-Cineole is the main product from the enzyme with just traces of other monoterpenoids. The oxygen atom is derived from water. The reaction proceeds via linalyl diphosphate and α -terpineol, the stereochemistry of both depends on the organism. However neither intermediate can substitute for geranyl diphosphate. The reaction in *Salvia officinalis* (sage) proceeds via (-)-(3R)-linalyl diphosphate while that in *Arabidopsis* (rock cress) proceeds via (+)-(3S)-linalyl diphosphate.

Synonyms

1,8-cineole cyclase; geranyl pyrophosphate:1,8-cineole cyclase; 1,8-cineole synthetase

Product Information

Form

Liquid or lyophilized powder

EC Number

EC 4.2.3.108

CAS No.

110637-19-9

Reaction

geranyl diphosphate + H_2O = 1,8-cineole + 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.