Creative Enzymes®

1,8-cineole synthase

Cat. No. EXWM-5119

Lot. No. (See product label)

Introduction

Description	Requires Mn2+ or Zn2+. Mg2+ 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 pyrophoshate: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 + H2O = 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 ℃ for short term. For long term storage, store it at -20 ℃~-80 ℃.