Creative Enzymes®

syn-copalyl-diphosphate synthase

Cat. No. EXWM-5615

Lot. No. (See product label)

Introduction

Description	Requires a divalent metal ion, preferably Mg2+, for activity. This class II terpene synthase produces syn-copalyl diphosphate, a precursor of several rice phytoalexins, including oryzalexin S and momilactones A and B. Phytoalexins are diterpenoid secondary metabolites that are involved in the defense mechanism of the plant, and are produced in response to pathogen attack through the perception of elicitor signal molecules such as chitin oligosaccharide, or after exposure to UV irradiation. The enzyme is constitutively expressed in the roots of plants where one of its products, momilactone B, acts as an allelochemical (a molecule released into the environment to suppress the growth of neighbouring plants). In other tissues the enzyme is upregulated by conditions that stimulate the biosynthesis of phytoalexins.
Synonyms	OsCyc1; OsCPSsyn; syn-CPP synthase; syn-copalyl diphosphate synthase; 9α-copalyl-diphosphate lyase (decyclizing)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 5.5.1.14
Reaction	geranylgeranyl diphosphate = 9α-copalyl 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 ℃.