Creative Enzymes®

phosphinomethylmalate isomerase

Cat. No. EXWM-5007

Lot. No. (See product label)

Introduction

Description	The enzyme, characterized from the bacterium Streptomyces viridochromogenes, is involved in bialaphos biosynthesis. The enzyme from the bacterium Kitasatospora phosalacinea participates in the biosynthesis of the related compound phosalacine. Both compounds contain the nonproteinogenic amino acid L-phosphinothricin that acts as a potent inhibitor of EC 6.3.1.2, glutamine synthetase. The similar enzyme EC 4.2.1.3, aconitate hydratase, cannot catalyse this reaction.
Synonyms	pmi (gene name)

Product Information

Form	Liquid or lyophilized powder
EC Number	EC 4.2.1.166
Reaction	2-(hydroxyphosphonoylmethyl)malate = 3-(hydroxyphosphonoylmethyl)malate (overall reaction); (1a) 2-(hydroxyphosphonoylmethyl)malate = 2-(phosphinatomethylidene)butanedioate + H2O; (1b) 2-(phosphinatomethylidene)butanedioate + H2O = 3-(hydroxyphosphonoylmethyl)malate
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 ℃.