

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-(hydroxyphosphonomethyl)malate = 3-(hydroxyphosphonomethyl)malate (overall reaction); (1a) 2-(hydroxyphosphonomethyl)malate = 2-(phosphinatomethylidene)butanedioate + H₂O; (1b) 2-(phosphinatomethylidene)butanedioate + H₂O = 3-(hydroxyphosphonomethyl)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 °C for short term. For long term storage, store it at -20 °C~-80 °C.