

Phosphomannose Isomerase from Escherichia coli, Recombinant

Cat. No. NATE-0599

Lot. No. (See product label)

Introduction

Description

Phosphomannose Isomerase (PMI) catalyses the interconversion of mannose 6-phosphate (Man-6-P) and fructose 6-phosphate (Fru-6-P), which provides a link between glucose metabolism and mannosylation.

Applications

PMI is used to study cell wall synthesis and energy production. PMI has been used to study how EDTA and metal ions, such as Zn⁺⁺, Co⁺⁺, Fe⁺⁺, Mn⁺⁺ and Cu⁺⁺, can affect recovery and thermal stability. It may be used to study PMI's effect on various alginate biosynthetic enzymes such as phosphomannomutase (PMM), GDP-mannose pyrophosphorylase (GMP), and GDP-mannose dehydrogenase (GMD).

Synonyms

phosphomannose isomerase; phosphohexomutase; phosphohexoisomerase; mannose phosphate isomerase; phosphomannoisomerase; D-mannose-6-phosphate ketol-isomerase; EC 5.3.1.8; mannose-6-phosphate isomerase; PMI

Product Information

Species

Escherichia coli

Source

E. coli

Form

ammonium sulfate suspension; Supplied as a suspension in 3.2 M ammonium sulfate

EC Number

EC 5.3.1.8

CAS No.

9023-88-5

Activity

> 50 units/mg protein

Unit Definition

One unit will convert 1.0 µmole of D-mannose 6-phosphate to D-fructose 6-phosphate per min at pH 7.6 at 25°C, using a coupled enzyme system with phosphoglucose isomerase and glucose-6-phosphate dehydrogenase.

Usage and Packaging

Package

Bottomless glass bottle. Contents are inside inserted fused cone.

Storage and Shipping Information

Storage

2-8°C