

## 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<sup>++</sup>, Co<sup>++</sup>, Fe<sup>++</sup>, Mn<sup>++</sup> and Cu<sup>++</sup>., 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