

Native *Bacillus stearothermophilus* Phosphoglucose Isomerase

Cat. No. NATE-0553

Lot. No. (See product label)

Introduction

Description

Phosphoglucose Isomerase (PGI) is an enzyme crucial for the interconversion of D-glucose 6-phosphate and D-fructose 6-phosphate. PGI is responsible for the second step of glycolysis and is involved in gluconeogenesis. It is highly conserved in bacteria and eukaryotes.

Applications

Phosphoglucose Isomerase (PGI) is an enzyme crucial for the interconversion of D-glucose 6-phosphate and D-fructose 6-phosphate. PGI is responsible for the second step of glycolysis and is involved in gluconeogenesis. It is highly conserved in bacteria and eukaryotes. It is used in sugar assays to convert fructose to glucose. This product is from *Bacillus stearothermophilus*. The enzyme from Creative Enzymes has been used in the determination of fructose 6-phosphate in a mutant strain of *Rhizobium meliloti*.

Synonyms

Glucose-6-phosphate isomerase; EC 5.3.1.9; phosphohexose isomerase; phosphohexomutase; oxoisomerase; hexosephosphate isomerase; phosphosaccharomutase; phosphoglucoisomerase; phosphohexoisomerase; phosphoglucose isomerase; glucose phosphate isomerase; hexose phosphate isomerase; D-glucose-6-phosphate ketol-isomerase; 9001-41-6; PGI

Product Information

Source

Bacillus stearothermophilus

Form

lyophilized powder containing Tris buffer

EC Number

EC 5.3.1.9

CAS No.

9001-41-6

Activity

300-1,000 units/mg protein

Isoelectric point

4.2

pH Stability

42623

Optimum pH

42623

Unit Definition

One unit will convert 1.0 μ mole of D-fructose 6-phosphate to D-glucose 6-phosphate per min at pH 9.0 at 30°C.

Storage and Shipping Information

Storage

-20°C