

## Native Baker's yeast (*S. cerevisiae*) Phosphoglucose Isomerase

Cat. No. NATE-0554

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 glucogenesis. It is highly conserved in bacteria and eukaryotes.

#### Applications

Isomerization of ketoses to aldoses

#### 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

Baker's yeast (*S. cerevisiae*)

#### EC Number

EC 5.3.1.9

#### CAS No.

9001-41-6

#### Molecular Weight

145 kDa

#### Activity

350 U/mg at +25°C with F6P as substrate.

#### Contaminants

< 0.01% F6P-K, GR, 6-PGDH and PGluM each < 0.2% B-fructosidase.

#### Optimum pH

7.0-7.6

#### Inhibitors

Pyridoxal-5'-phosphate

#### Buffer

Suspension in 3.2 M ammonium sulfate solution, pH approx. 6

#### Unit Definition

One unit (U) phosphoglucose isomerase will produce 1 mol of glucose-6-phosphate from fructose-6-phosphate in 1 min at +25°C and pH 7.6 (triethanolamine buffer). The above assay produces 1μmol of NAD (P)H per μmol of glucose-6-phosphate formed.

### Storage and Shipping Information

#### Storage

Stable at +2 to +8°C.