

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 gluconeogenesis. 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 PGIuM 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.