

Phosphoglycerate mutase 1 from Human, Recombinant

Cat. No. NATE-1647

Lot. No. (See product label)

Introduction

Description

Phosphoglycerate mutase (PGM) is an enzyme that catalyzes step 8 of glycolysis. It catalyzes the internal transfer of a phosphate group from C-3 to C-2 which results in the conversion of 3-phosphoglycerate (3PG) to 2-phosphoglycerate (2PG) through a 2,3-bisphosphoglycerate intermediate. These enzymes are categorized into the two distinct classes of either cofactor-dependent (dPGM) or cofactor-independent (iPGM). The dPGM enzyme (EC 5.4.2.11) is composed of approximately 250 amino acids and is found in all vertebrates as well as in some invertebrates, fungi, and bacteria. The iPGM (EC 5.4.2.12) class is found in all plants and algae as well as in some invertebrate, fungi, and Gram-positive bacteria. This class of PGM enzyme shares the same superfamily as alkaline phosphatase.

Synonyms

Pgam-1; PGAM1

Product Information

Species

Human

Source

E. coli and fused to His-tag at N-terminus

Form

Liquid

Formulation

0.5 mg/ml in 50 mM Tris, 100 mM NaCl, pH 8.0 and 20% glycerol

EC Number

EC 5.4.2.1

Molecular Weight

30.9 kDa

Purity

> 90% by SDS-PAGE

Activity

>300 units/mg

Concentration

1 mg/ml

Unit Definition

One unit will convert 1.0 umole of 3-phosphoglycerate to 2-phosphoglycerate per minute at pH 7.6 at 37°C.

Storage and Shipping Information

Storage

Store at +4°C for short term (1-2 weeks). For long term storage, aliquot and store at -70°C. Avoid repeated freeze/thaw cycles.