

# Recombinant human PGAM1 protein

Catalog Number: ATGP0691

## PRODUCT INFORMATION

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### Expression system

E.coli

### Domain

1-254aa

### UniProt No.

P18669

### NCBI Accession No.

NP\_002620

### Alternative Names

Phosphoglycerate mutase 1, Phosphoglycerate mutase isozyme B, PGAM-B, PGAMA, Phosphoglycerate mutase 1

## PRODUCT SPECIFICATION

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### Molecular Weight

30.9 kDa (274aa) confirmed by MALDI-TOF

### Concentration

1mg/ml (determined by Bradford assay)

### Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 10% glycerol, 1mM DTT

### Purity

> 90% by SDS-PAGE

### Tag

His-Tag

### Application

SDS-PAGE

### Storage Condition

Can be stored at +2C to +8C for 1 week. For long term storage, aliquot and store at -20C to -80C. Avoid repeated freezing and thawing cycles.

## BACKGROUND

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### Description

PGAM1 belongs to the phosphoglycerate mutase family. This protein is important components of glucose and 2, 3-BPGA (2, 3-bisphosphoglycerate) metabolism and catalyzes the reversible reaction of 3-phosphoglycerate (3-PGA) to 2-phosphoglycerate (2-PGA) in the glycolytic pathway. The PGAM is a dimeric enzyme containing, in different tissues, different proportions of a slow-migrating muscle (MM) isozyme, a fast-migrating brain (BB) isozyme, and a hybrid form (MB). Mutations in this protein cause muscle phosphoglycerate mutase efficiency, also known as glycogen storage disease X. Recombinant human PGAM protein, fused to His-tag at N-terminus,

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was expressed in *E. coli* and purified by using conventional chromatography techniques.

## Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MAAYKLVLR HGESAWNLEN RFSGWYDADL SPAGHEEAKR GGQALRDAGY  
EFDICFTSVQ KRAIRTLWTV LDAIDQMWLP VVRTWRLNER HYGGLTGLNK AETAAKHGEA QVKIWRRSYD VPPPPMEPDH  
PFYSNISKDR RYADLTEDQL PSCESLKDTI ARALPFWNEE IVPQIKEGKR VLIAAHGNSL RGIVKHLEGL SEEAIMELNL  
PTGIPIVYEL DKNLKPDKPM QFLGDEETVR KAMEAVAAQG KAKK

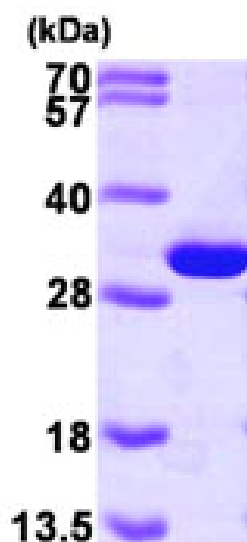
## General References

Sakoda S., et al. (1988) *J Biol Chem.* 263(32):16899-905.

Junien C., et al. (1982) *Ann Genet.* 25(1):25-7.

## DATA

### SDS-PAGE



3 $\mu$ g by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3 $\mu$ g)