

Recombinant human PGAM2 protein

Catalog Number: ATGP3428

PRODUCT INFORMATION

Expression system

E.coli

Domain

1-253aa

UniProt No.

P15259

NCBI Accession No.

NP_000281

Alternative Names

Phosphoglycerate mutase 2, GSD10, PGAM-M, PGAMM

PRODUCT SPECIFICATION

Molecular Weight

30.9 kDa (273aa) confirmed by MALDI-TOF

Concentration

1mg/ml (determined by Bradford assay)

Formulation

Liquid in. 20mM Tris-HCl buffer (pH 8.0) containing 20% glycerol, 0.1M NaCl, 1mM DTT

Purity

> 95% by SDS-PAGE

Biological Activity

Specific activity is >100unit/mg, in which one unit will convert 1.0 umole of 3-phosphoglycerate to 2-phosphoglycerate per minute at pH 7.6 at 37C.

Tag

His-Tag

Application

SDS-PAGE, Enzyme Activity

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

Description

PGAM2, also known as phosphoglycerate mutase 2, belongs to the phosphoglycerate mutase family. Phosphoglycerate mutase (PGAM) 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

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tissues, different proportions of a slow-migrating muscle (MM) isozyme, a fast-migrating brain (BB) isozyme, and a hybrid form (MB). This gene encodes muscle-specific PGAM subunit. Mutations in this gene cause muscle phosphoglycerate mutase efficiency, also known as glycogen storage disease X. Recombinant human PGAM2 protein, fused to His-tag at N-terminus, was expressed in *E. coli* and purified by using conventional chromatography.

Amino acid Sequence

MGSSHHHHHH SGLVPRGSH MATHRLVMVR HGESTWNQEN RFCGWFDAEL SEKGTEEAKR GAKAIKDAKM
EFDICYTSVL KRAIRTLWAI LDGTDQMWLP VVRTWRLNER HYGGLTGLNK AETAAKHGEE QVKIWRRSFD IPPPPMDEKH
PYNSISKER RYAGLKPGEI PTCESLKDTI ARALPFWNEE IVPQIKAGKR VLIAAHGNSL RGIVKHLEGM SDQAIMELNL
PTGIPIVYEL NKELKPTKPM QFLGDEETVR KAMEAVAAQG KAK

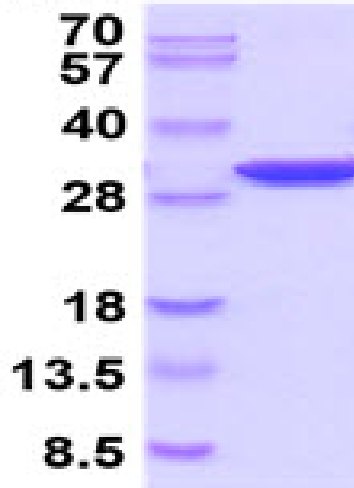
General References

Tsujino S., et al. (1989) *J. Biol. Chem.* 264:15334-15337
Hadjigeorgiou G.M., et al. (1999) *Neuromuscul. Disord.* 9:399-402

DATA

SDS-PAGE

(kDa)



3ug by SDS-PAGE under reducing condition and visualized by coomassie blue stain.

15% SDS-PAGE (3ug)