Recombinant human PGAM1 protein

Catalog Number: ATGP0691

PRODUCT INFORMATION

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

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

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 eficiency, also known as glycogen storage disease X. Recombinant human PGAM protein, fused to His-tag at N-terminus,

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

Amino acid Sequence

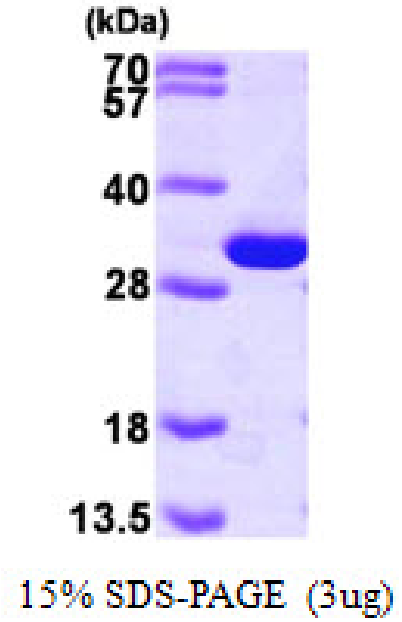
MGSSHHHHHH SSGLVPRGSH MAAYKLVLIR HGESAWNLEN RFSGWYDADL SPAGHEEAKR GGQALRDAGY EFDICFTSVQ KRAIRTLWTV LDAIDQMWLP VVRTWRLNER HYGGLTGLNK AETAAKHGEA QVKIWRRSYD VPPPPMEPDH PFYSNISKDR RYADLTEDQL PSCESLKDTI ARALPFWNEE IVPQIKEGKR VLIAAHGNSL RGIVKHLEGL SEEAIMELNL PTGIPIVYEL DKNLKPIKPM QFLGDEETVR KAMEAVAAQG KAKK

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



15% SDS-PAGE (3ug)

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