

# Product information

## PGAM2, 1-253aa

Human, His-tagged, Recombinant, *E.coli*

Cat. No. IBATGP3428

**Full name:** Phosphoglycerate mutase 2

**NCBI Accession No.:** NP\_000281

**Synonyms:** GSD10, PGAM-M, PGAMM

**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 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.

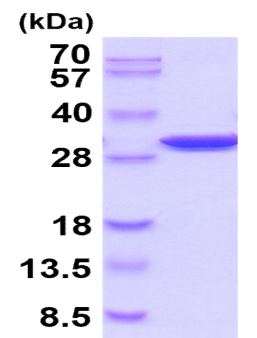
**Form:** Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol,  
0.1M NaCl, 1mM DTT

**Molecular Weight:** 30.9 kDa (273aa) confirmed by MALDI-TOF

**Purity:** > 95% by SDS - PAGE.

**Concentration:** 1 mg/ml (determined by Bradford assay)

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



15% SDS-PAGE (3ug)

### Sequences of amino acids:

MGSSHHHHHH SSGLVPRGSH MATHRLVMVR HGESTWNQEN RFCGWFDAEL SEKGTEEAKR GAKAIKDAKM EFDICYTSVL KRAIRTLWAI  
LDGTDQMMLP VVRTWRLNER HYGGLTGLNK AETAAKHGEE QVKIWRRSFD IPPPPMDEKH PYNYSISKER RYAGLKPGEL PTCESLKDTI  
ARALPFWNEE IVPQIKAGKR VLI AAHGNSL RGI VKHLEGM SDQA IMELNL PTGIPIVYEL NKELKPTKPM QFLGDEETVR KAMEAVAAQG  
KAK

**For research use only. This product is not intended or approved for human, diagnostics or veterinary use.**



Manufactured for:

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## General references:

Tsujino S., *et al.* (1989) *J. Biol. Chem.* 264:15334-15337

Hadjigeorgiou G.M., *et al.* (1999) *Neuromuscul. Disord.* 9:399-402

**Storage:** Can be stored at +4°C short term (1-2 weeks). For long term storage, aliquot and store at -20°C or -70°C.

Avoid repeated freezing and thawing cycles.

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