

## Active Recombinant Human PGAM2 protein, His-tagged (Bioactivity Validated)

**Cat. No.** PGAM2-15H    **Lot. No.** (See product label)

### SPECIFICATION

<b>Product Overview</b>	Recombinant human PGAM2 protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography.
<b>Species</b>	Human
<b>Source</b>	E.coli
<b>ProteinLength</b>	1-253 aa
<b>Description</b>	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.
<b>Form</b>	Liquid. 20mM Tris-HCl buffer (pH8.0) containing 20% glycerol, 0.1M NaCl, 1mM DTT
<b>Bio-activity</b>	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 37centigrade.
<b>Molecular Mass</b>	30.9 kDa (273aa) confirmed by MALDI-TOF

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**AA Sequence**

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

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

**Storage** Can be stored at +4centigrade short term (1-2 weeks). For long term storage, aliquot and store at -20centigrade or -70centigrade. Avoid repeated freezing and thawing cycles.

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

## GENE INFORMATION

**Gene Name** [PGAM2 phosphoglycerate mutase 2 \(muscle\) \[ Homo sapiens \]](#)

**Official Symbol** [PGAM2](#)

**Synonyms** PGAM2; phosphoglycerate mutase 2; PGAM M; BPG-dependent PGAM 2; GSD10; PGAMM; PGAM-M

**Gene ID** [5224](#)

**mRNA Refseq** [NM\\_000290](#)

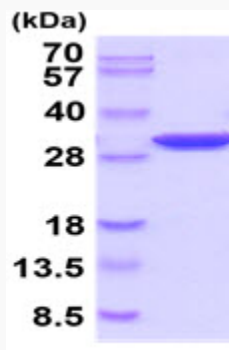
**Protein Refseq** [NP\\_000281](#)

**MIM** [612931](#)

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<b>UniProt ID</b>	P15259
<b>Chromosome Location</b>	7p13-p12
<b>Pathway</b>	Gluconeogenesis, organism-specific biosystem; Gluconeogenesis, oxaloacetate => fructose-6P, organism-specific biosystem; Gluconeogenesis, oxaloacetate => fructose-6P, conserved biosystem; Glucose metabolism, organism-specific biosystem; Glycine, serine and threonine metabolism, organism-specific biosystem;
<b>Function</b>	2,3-bisphosphoglycerate-dependent phosphoglycerate mutase activity; bisphosphoglycerate 2-phosphatase activity; bisphosphoglycerate mutase activity; cofactor binding; hydrolase activity; isomerase activity; phosphoglycerate mutase activity;
 <p>(kDa) 70 57 40 28 18 13.5 8.5</p> <p>15% SDS-PAGE (3ug)</p>	

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