

Recombinant Human Phosphoglycerate Mutase 2 (muscle), His-tagged

Cat. No. PGAM2-1932H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PGAM2 protein, fused to His-tag at N-terminus, was expressed in E. coli and purified by using conventional chromatography.
Species	Human
Protein Length	1-253 aa
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 deficiency, also known as glycogen storage disease X.
Form	Liquid. 20mM Tris-HCl buffer (pH 8.0) 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)

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Sequences of aminoacids

MGSSHHHHHSSGLVPRGSH MATHRLVMVR HGESTWNQEN RFCGWFDAEL
 SEKGTEEAKR GAKAIKDAKMEFDICYTSVL KRAIRTLWAI LDGTDQMWLP
 VVRTWRLNER HYGGLTGLNK AETAAKHGEE QVKIWRRSFDIPPPPMDEKH
 PYYNSISKER RYAGLKPGEI PTCESLKDTI ARALPFWNEE IVPQIKAGKR
 VLIAAHGNSLRGIVKHLEGM SDQAIMELNL PTGIPIVYEL NKELKPTKPM
 QFLGDEETVR KAMEAVAAQG KAK

Storage

Can bestored at +4°C short term (1-2 weeks). For long term storage, aliquot andstore at -20°C or -70°C. Avoidrepeated freezing and thawing cycles.

Pathways

Gluconeogenesis; Glucose metabolism;Glycolysis; Glycolysis (Embden-Meyerhof pathway); Glycolysis / Gluconeogenesis; Glycolysisand Gluconeogenesis; Metabolic pathways; MetRabolism of carbohydrates

GENE INFORMATION

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

Official Symbol [PGAM2](#)

Synonyms PGAM2;phosphoglycerate mutase 2 (muscle); GSD10; PGAMM; PGAM-M; phosphoglyceratemutase 2; BPG-dependent PGAM 2; phosphoglycerate mutase isozyme M;muscle-specific phosphoglycerate mutase

Gene ID [5224](#)

mRNA Refseq [NM_000290](#)

Protein Refseq [NP_000281](#)

MIM [612931](#)

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UniProt ID	P15259
Chromosome Location	7p13-p12
Function	2,3-bisphosphoglycerate-dependent phosphoglycerate mutase activity ; bisphosphoglycerate 2-phosphatase activity; bisphosphoglycerate mutase activity; cofactor binding ; hydrolase activity ; isomerase activity ; phosphoglycerate mutase activity

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