Active Recombinant Human PGAM1 protein, His-tagged (Bioactivity Validated)

Cat. No. PGAM1-13H **Lot. No.** (See product label)

SPECIFICATION

Product Overview	Recombinant human PGAM protein, fused to His-tag at N-terminus, was expressed in E.coli and purified by using conventional chromatography techniques.
Species	Human
Source	E.coli
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 efficiency, also known as glycogen storage disease X.
Form	Liquid. In 20mM Tris-HCl buffer(pH 8.0) containing 10% glycerol, 1mM DTT
Bio-activity	Specific activity is >300 units/mg, in which One unit will convert 1.0 umole of 3-phosphoglycerate to 2-phosphoglcerate per minute at pH 7.6 at 37centigrade.
Molecular Mass	30.9 kDa (274aa), confirmed by MALDI-TOF
AA Sequence	MGSSHHHHHH SSGLVPRGSH MAAYKLVLIR HGESAWNLEN RFSGWYDADL

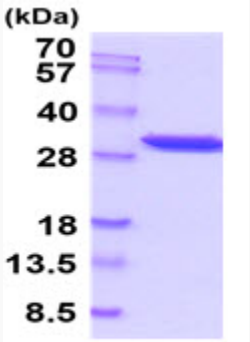
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	SPAGHEEAKR GGQALRDAGY EFDICFTSVQ KRAIRTLWTV LDAIDQMWLP VVRTWRLNER HYGGLTGLNK AETAAKHGEA QVKIWRRSYD VPPPPMEPDH PFYSNISKDR RYADLTEDQL PSCESLKDTI ARALPFWNEE IVPQIKEGKR VLIAAHGNSL RGIVKHLEGL SEEAIMELNL PTGIPIVYEL DKNLKPIKPM QFLGDEETVR KAMEAVAAQG KAKK
Purity	> 90% 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	PGAM1 phosphoglycerate mutase 1 (brain) [Homo sapiens]
Official Symbol	PGAM1
Synonyms	PGAM1; PGAMA; phosphoglycerate mutase 1; PGAM B; nonmuscle form; BPG-dependent PGAM 1; PGAM-B;
Gene ID	5223
mRNA Refseq	NM_002629
Protein Refseq	NP_002620
MIM	172250

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UniProt ID	P18669
Chromosome Location	10q25.3
Pathway	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;
Function	bisphosphoglycerate 2-phosphatase activity; bisphosphoglycerate mutase activity; hydrolase activity; isomerase activity; phosphoglycerate mutase activity; phosphoglycerate mutase activity; protein kinase binding;
	 15% SDS-PAGE (3ug)

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