

## 32-6878: PGAM1 Human, Active

**Application :** Functional Assay

**Alternative Name :** Phosphoglycerate mutase isozyme B, PGAM-B, PGAMA.

### Description

Source: Escherichia Coli.

Sterile Filtered clear colorless solution.

PGAM1 is part of the phosphoglycerate mutase family. PGAM1 is an essential component 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. PGAM1 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). PGAM1 mutations lead to muscle phosphoglycerate mutase deficiency, a.k.a. glycogen storage disease X.

PGAM1 Human Recombinant produced in E.Coli is a single, non-glycosylated, polypeptide chain containing 274 amino acids (1-254 a.a.) and having a molecular mass of 30.9 kDa. The PGAM1 is fused to a 20 amino acid His Tag at N-Terminus and purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 90% as determined by SDS-PAGE.

**Content :** The PGAM1 1mg/ml protein solution contains 20mM Tris-HCl pH-8, 1mM DTT, and 10% glycerol.

**Storage condition :** Store at 4°C if entire vial will be used within 2-4 weeks. Store, frozen at -20°C for longer periods of time. For long term storage it is recommended to add a carrier protein (0.1% HSA or BSA). Avoid multiple freeze-thaw cycles.

**Amino Acid :** MGSSHHHHHH SSGLVPRGSH MAAYKLVLR HGESAWNLEN RFSGWYDADL SPAGHEEAKR  
GGQALRDAGY EFDICFTSVQ KRAIRTLWTV LDAIDQMWLP VVRTWRLNER HYGGTLGLNK  
AETAAKHGEA QVKIWRRSYD VPPPPMEPDH PFYSNISKDR RYADLTEDQL PSCESLKDTI ARALPFWNEE  
IVPQIKEGKR VLIAAHGNSL RGIVKHLEGL SEEAIMELNL PTGIPIVYEL DKNLKPDKPM QFLGDEETVR  
KAMEAVAAQG KAKK.

### Application Note

Specific activity is >300 units/mg, in which One unit will convert 1.0 umole of 3-phosphoglycerate to 2-phosphoglycerate per minute at pH 7.6 at 37C.