

## 32-6880: PGAM2 Human, Active

**Application :** Functional Assay

**Alternative Name :** Phosphoglycerate mutase 2, BPG-dependent PGAM 2, Muscle-specific phosphoglycerate mutase, Phosphoglycerate mutase isozyme M, PGAM-M, PGAM2, PGAMM, GSD10.

### Description

Source: Escherichia Coli.

Sterile Filtered colorless solution.

Phosphoglycerate mutase 2 (PGAM2) is a member of the phosphoglycerate mutase family. PGAM is a dimeric enzyme which contains in separate tissues, different proportions of a slow-migrating muscle (MM) isozyme, a fast-migrating brain (BB) isozyme, and a hybrid form (MB). PGAM (Phosphoglycerate mutase) catalyzes the reversible reaction of 3-phosphoglycerate (3-PGA) to 2-phosphoglycerate (2-PGA) in the glycolytic pathway. PGAM2 gene mutations cause muscle phosphoglycerate mutase efficiency, otherwise known as glycogen storage disease X.

PGAM2 Human Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 273 amino acids (1-253) and having a molecular mass of 30.9kDa. PGAM2 is fused to a 20 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

### Product Info

**Amount :** 2 µg / 10 µg

**Purification :** Greater than 95.0% as determined by SDS-PAGE.

**Content :** The PGAM2 solution (1mg/ml) contains 20mM Tris-HCl buffer (pH8.0), 20% glycerol, 0.1M NaCl and 1mM DTT.

**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 MATHRLVMVR HGESTWNQEN RFCGWFDAEL SEKGTEEAKR  
GAKAIKDAKM EFDICYSVL KRAIRTLWAI LDGTDQMWLP VVRTWRLNER HYGGLTGLNK AETAAKHGEE  
QVKIWRRSFD IPPPPMDEKH PYNSISKER RYAGLKPGEI PTCESLKDTI ARALPFWNEE IVPQIKAGKR  
VLIAAHGNSL RGIVKHLEGM SDQAIMELNL PTGIPIVYEL NKELKPTKPM QFLGDEETVR KAMEAVAAQG  
KAK.

### Application Note

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.