

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 SGLVPRGSH MAAYKLVLR HGESAWNLEN RFGWYDADL SPAGHEEAKR
GGQALRDAGY EFDICFTSVQ KRAIRTLWTV LDAIDQMWLP VVRTWRLNER HYGGLTGLNK
AETAAKHGEA QVKIWRRSYD VPPPPMEPDH PFYSNISKDR RYADLTEDQL PSCESLKDTI ARALPFWNEE
IVPQIKEGKR VLIAAHGNSL RGIVKHLEGL SEEAIMELNL PTGIPIVYEL DKNLKPIKPM 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.