

32-6879: PGAM1 Mouse, Active

Application : Functional Assay

Alternative Name : Phosphoglycerate mutase 1, BPG-dependent PGAM 1, Phosphoglycerate mutase isozyme B, PGAM-B, Pgam1, Pgam-1, 2310050F24Rik.

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 Mouse Recombinant produced in E.coli is a single, non-glycosylated polypeptide chain containing 278 amino acids (1-254) and having a molecular mass of 31.4kDa. PGAM1 is fused to a 24 amino acid His-tag at N-terminus & purified by proprietary chromatographic techniques.

Product Info

Amount : 2 µg / 10 µg

Purification : Greater than 95% as determined by SDS-PAGE.

Content : The PGAM1 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 MGSMAAYKL VLIRHGESAW NLENRFSGWY DADLSPAGHE
EAKRGGQALR DAGYEFDICF TSVQKRAIRT LWTVLDAIDQ MWLPVVRTWR LNERHYGGTL GLNKAETA
AK HGEAQVKIWR RSYDVPPPPM EPDHPFYSNI SKDRRYADLT EDQLPSCESL KDTIARALPF WNEEIVPQIK
EGKRVLIAAH GNSLRGIVKH LEGLSEEAIM ELNLPTGIPI VYELDKNLKP IKPMQFLGDE ETVRKAMEAV
AAQGVKKK.

Application Note

Specific activity is >150units/mg, in which One unit will convert 1.0 umole of 3-phosphoglycerate to 2-phosphoglycerate per minute at pH 7.6 at 37C.