

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 EFDICYTSLV KRAIRTLWAI LDGTDQMWLP VVRTWRLNER HYGGTLGLNK AETAAKHGEE
QVKIWRRSFD IPPPPMDEKH PYNSISKER RYAGLKPGEI PTCESLKDTI ARALPFWNEE IVPQIKAGKR
VLIAAHGNSL RGIVKHLEGM SDQAIMELNL PTGIPIVYEL NKEKPTKPM 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.