

### Goat Anti-PGAM1 / PGAM2 / PGAM4 Antibody

Peptide-affinity purified goat antibody Catalog # AF1816a

### **Specification**

### Goat Anti-PGAM1 / PGAM2 / PGAM4 Antibody - Product Information

Application WB
Primary Accession P18669

Other Accession NP 001025062, 5223, 5224, 441531

Reactivity Human

Predicted Mouse, Rat, Pig, Cow, Dog

Host Goat
Clonality Polyclonal
Concentration 100ug/200ul

Isotype IgG
Calculated MW 28804

# Goat Anti-PGAM1 / PGAM2 / PGAM4 Antibody - Additional Information

#### **Gene ID 5223**

#### **Other Names**

Phosphoglycerate mutase 1, 3.1.3.13, 5.4.2.11, 5.4.2.4, BPG-dependent PGAM 1, Phosphoglycerate mutase isozyme B, PGAM-B, PGAM1, PGAMA

#### **Format**

0.5~mg lgG/ml in Tris saline (20mM Tris pH7.3, 150mM NaCl), 0.02% sodium azide, with 0.5% bovine serum albumin

#### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

#### **Precautions**

Goat Anti-PGAM1 / PGAM2 / PGAM4 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

### Goat Anti-PGAM1 / PGAM2 / PGAM4 Antibody - Protein Information

### Name PGAM1 (HGNC:8888)

## **Synonyms PGAMA**

## **Function**

Catalyzes the interconversion of 2-phosphoglycerate and 3- phosphoglyceratea crucial step in glycolysis, by using 2,3- bisphosphoglycerate (PubMed:<a href="http://www.uniprot.org/citations/23653202" target="\_blank">23653202</a>). Also



catalyzes the interconversion of (2R)-2,3-bisphosphoglycerate and (2R)-3-phospho- glyceroyl phosphate (PubMed:<a href="http://www.uniprot.org/citations/23653202" target="\_blank">23653202</a>).

#### **Tissue Location**

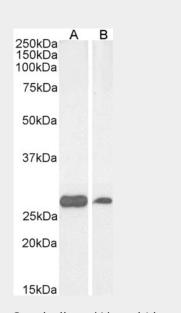
Expressed in the liver and brain. Not found in the muscle.

## Goat Anti-PGAM1 / PGAM2 / PGAM4 Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

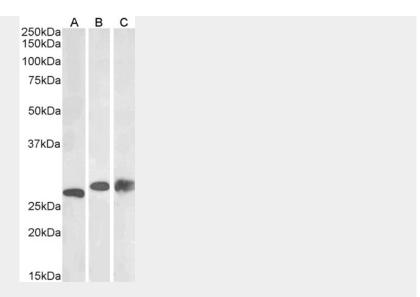
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

## Goat Anti-PGAM1 / PGAM2 / PGAM4 Antibody - Images



Antibody (0.03µg/ml) staining of Human Cerebellum (A) and Liver (B) lysate (35µg protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.





Antibody (0.03 $\mu$ g/ml) staining of Human Cerebellum (A) and Liver (B) lysate (35 $\mu$ g protein in RIPA buffer). Primary incubation was 1 hour. Detected by chemiluminescence.

### Goat Anti-PGAM1 / PGAM2 / PGAM4 Antibody - Background

Phosphoglycerate mutase (PGAM) catalyzes the reversible reaction of 3-phosphoglycerate (3-PGA) to 2-phosphoglycerate (2-PGA) in the glycolytic pathway. The PGAM 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). This gene encodes muscle-specific PGAM subunit. Mutations in this gene cause muscle phosphoglycerate mutase eficiency, also known as glycogen storage disease X.

## Goat Anti-PGAM1 / PGAM2 / PGAM4 Antibody - References

Defining the human deubiquitinating enzyme interaction landscape. Sowa ME, et al. Cell, 2009 Jul 23. PMID 19615732.

The status, quality, and expansion of the NIH full-length cDNA project: the Mammalian Gene Collection (MGC). Gerhard DS, et al. Genome Res, 2004 Oct. PMID 15489334.

Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. Strausberg RL, et al. Proc Natl Acad Sci U S A, 2002 Dec 24. PMID 12477932.

Manifesting heterozygotes in a Japanese family with a novel mutation in the muscle-specific phosphoglycerate mutase (PGAM-M) gene. Hadjigeorgiou GM, et al. Neuromuscul Disord, 1999 Oct. PMID 10545043.

The molecular genetic basis of muscle phosphoglycerate mutase (PGAM) deficiency. Tsujino S, et al. Am J Hum Genet, 1993 Mar. PMID 8447317.