

## PGK1 Antibody

Purified Mouse Monoclonal Antibody (Mab) Catalog # AM8555b

### Specification

# PGK1 Antibody - Product Information

Application Primary Accession Other Accession Reactivity Host Clonality Isotype WB, IHC-P, FC,E <u>P00558</u> <u>A5A6K4</u> Human, Mouse Mouse monoclonal IgG2a,k

## **PGK1** Antibody - Additional Information

Gene ID 5230

**Other Names** Phosphoglycerate kinase 1, 2.7.2.3, Cell migration-inducing gene 10 protein, Primer recognition protein 2, PRP 2, PGK1, PGKA

#### Target/Specificity

This antibody is generated from a mouse immunized with a KLH conjugated synthetic peptide between 1-417 amino acids from human.

**Dilution** WB~~1:8000 IHC-P~~1:25 FC~~1:25

Format

Purified monoclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein G column, followed by dialysis against PBS.

Storage

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

#### Precautions

PGK1 Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

#### **PGK1 Antibody - Protein Information**

Name PGK1

Synonyms PGKA



**Function** Catalyzes one of the two ATP producing reactions in the glycolytic pathway via the reversible conversion of 1,3- diphosphoglycerate to 3-phosphoglycerate (PubMed:<u>30323285</u>, PubMed:<u>7391028</u>). In addition to its role as a glycolytic enzyme, it seems that PGK-1 acts as a polymerase alpha cofactor protein (primer recognition protein) (PubMed:<u>2324090</u>). May play a role in sperm motility (PubMed:<u>26677959</u>).

Cellular Location Cytoplasm.

**Tissue Location** 

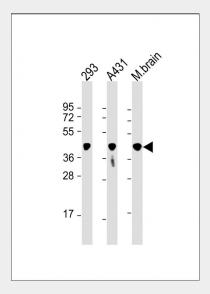
Mainly expressed in spermatogonia. Localized on the principle piece in the sperm (at protein level). Expression significantly decreased in the testis of elderly men

## PGK1 Antibody - Protocols

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

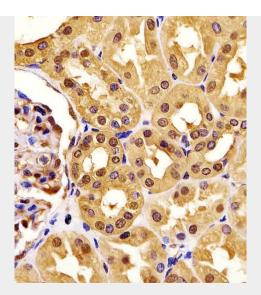
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

## PGK1 Antibody - Images

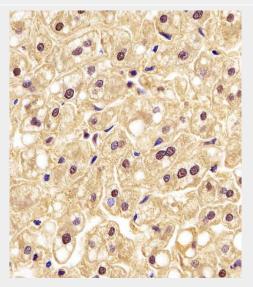


All lanes : Anti-PGK1 Antibody at 1:8000 dilution Lane 1: 293 whole cell lysate Lane 2: A431 whole cell lysate Lane 3: mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution buffer: 5% NFDM/TBST.



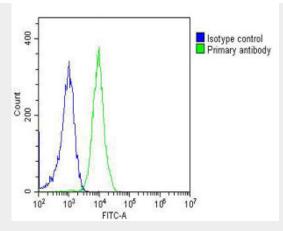


AM8555b staining PGK1 in human kidney tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.



AM8555b staining PGK1 in human liver tissue sections by Immunohistochemistry (IHC-P - paraformaldehyde-fixed, paraffin-embedded sections). Tissue was fixed with formaldehyde and blocked with 3% BSA for 0. 5 hour at room temperature; antigen retrieval was by heat mediation with a citrate buffer (pH6). Samples were incubated with primary antibody (1/25) for 1 hours at 37°C. A undiluted biotinylated goat polyvalent antibody was used as the secondary antibody.





Overlay histogram showing Jurkat cells stained with AM8555b(green line). The cells were fixed with 2% paraformaldehyde (10 min) and then permeabilized with 90% methanol for 10 min. The cells were then icubated in 2% bovine serum albumin to block non-specific protein-protein interactions followed by the antibody (AM8555b, 1:25 dilution) for 60 min at 37°C. The secondary Goat-Anti-Mouse **DyLight**® 488 antibody used was lgG, Conjugated Highly Cross-Adsorbed(OJ192088) at 1/200 dilution for 40 min at 37ºC. Isotype control antibody (blue line) was mouse IgG2a ( $1\mu g/1x10^6$  cells) used under the same conditions. Acquisition of >10, 000 events was performed.

#### PGK1 Antibody - Background

In addition to its role as a glycolytic enzyme, it seems that PGK-1 acts as a polymerase alpha cofactor protein (primer recognition protein).

### **PGK1 Antibody - References**

Michelson A.M., et al. Proc. Natl. Acad. Sci. U.S.A. 80:472-476(1983). Michelson A.M., et al. Proc. Natl. Acad. Sci. U.S.A. 82:6965-6969(1985). Kim J.W., et al. Submitted (SEP-2003) to the EMBL/GenBank/DDBJ databases. Shichijo S., et al. Submitted (MAY-2001) to the EMBL/GenBank/DDBJ databases. Ota T., et al. Nat. Genet. 36:40-45(2004).