

PGK1 Antibody
Purified Mouse Monoclonal Antibody (Mab)
Catalog # AM8555b

Specification

PGK1 Antibody - Product Information

Application	WB, IHC-P, FC,E
Primary Accession	P00558
Other Accession	A5A6K4
Reactivity	Human, Mouse
Host	Mouse
Clonality	monoclonal
Isotype	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:[30323285](#), PubMed:[7391028](#)). 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:[2324090](#)). May play a role in sperm motility (PubMed:[26677959](#)).

Cellular Location

Cytoplasm.

Tissue Location

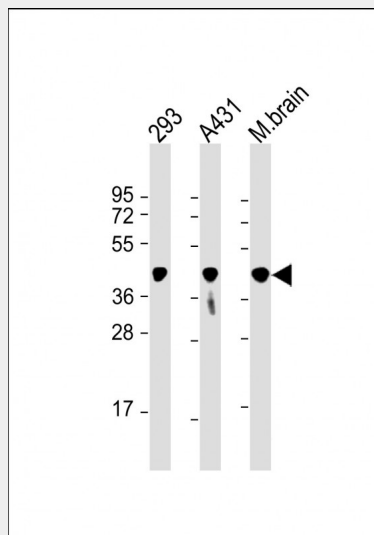
Mainly expressed in spermatogonia. Localized on the principle piece in the sperm (at protein level). Expression significantly decreased in the testis of elderly men

PGK1 Antibody - Protocols

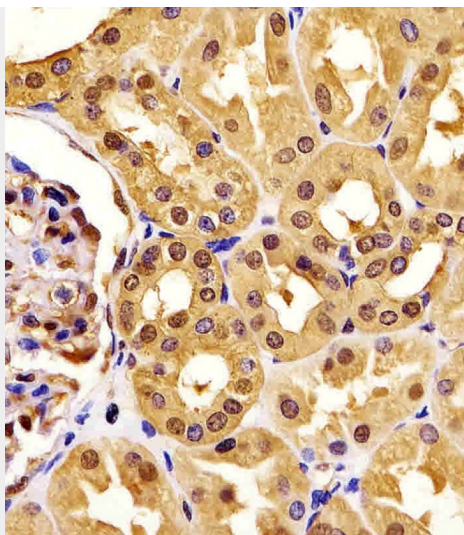
Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

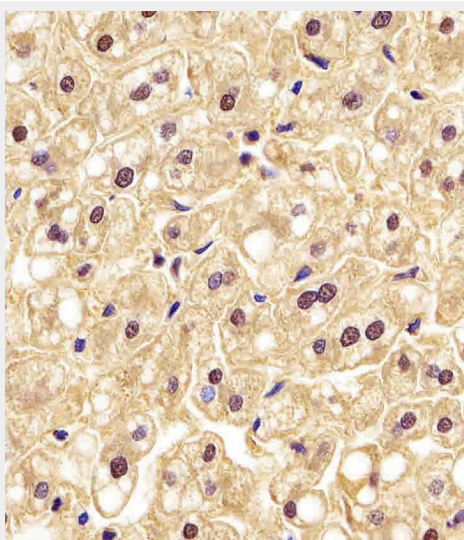
PGK1 Antibody - Images



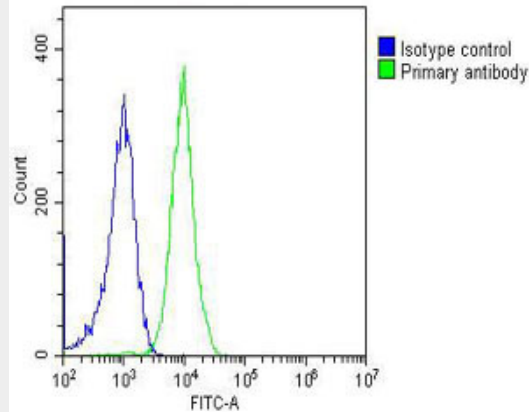
All lanes : Anti-PGK1 Antibody at 1:8000 dilution Lane 1: 293 whole cell lysate Lane 2: A431 whole cell lysate Lane 3: mouse brain lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-mouse IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 45 kDa Blocking/Dilution 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 hour 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 hour 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 incubated 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 antibody used was Goat-Anti-Mouse IgG, DyLight® 488 Conjugated Highly Cross-Adsorbed(OJ192088) at 1/200 dilution for 40 min at 37°C. Isotype control antibody (blue line) was mouse IgG2a (1µg/1x10⁶ 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).