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PGK1 Antibody (Center S320)
Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7169a

Specification

PGK1 Antibody (Center S320) - Product Information

Application	**WB, IHC-P,E**
Primary Accession	P00558
Other Accession	Q60HD8, Q5J7W1
Reactivity	**Human**
Predicted	**Monkey**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**
Antigen Region	**305-334**

PGK1 Antibody (Center S320) - Additional Information

Gene ID 5230

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

Target/Specificity
This PGK1 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 305-334 amino acids from the Central region of human PGK1.

Dilution
WB~~1:1000
IHC-P~~1:10~50

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation 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 (Center S320) is for research use only and not for use in diagnostic or therapeutic procedures.

PGK1 Antibody (Center S320) - 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.

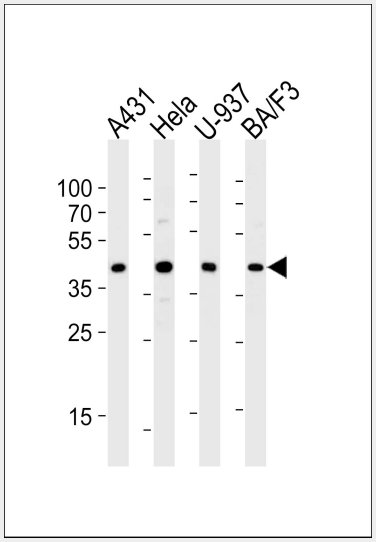
Tissue Location
Mainly expressed in spermatogonia. Localized on the principle piece in the sperm (at protein level). Expression significantly decreased in the testis of elderly men

PGK1 Antibody (Center S320) - Protocols

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

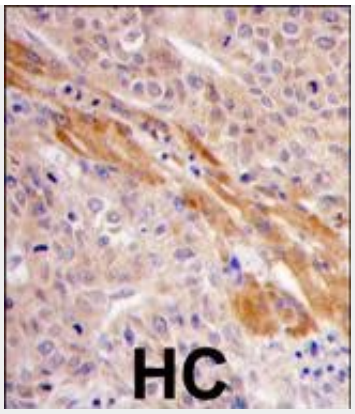
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

PGK1 Antibody (Center S320) - Images



Western blot analysis of lysates from A431, Hela, U-937, BA/F3 cell line (from left to right), using PGK1 Antibody (S320) (Cat. #AP7169a). AP7169a was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug per lane.

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Formalin-fixed and paraffin-embedded human hepatocarcinoma tissue reacted with PGK1 Antibody (Center S320)(Cat.#AP7169a), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.

PGK1 Antibody (Center S320) - Background

Also known as ATP:3-phosphoglycerate 1-phosphotransferase, this major enzyme in glycolysis catalyzes the reversible conversion of 1,3-diphosphoglycerate to 3-phosphoglycerate, generating one molecule of ATP. Phosphoglycerate kinase not only functions in glycolysis but is secreted by tumor cells and is proposed to participate in the angiogenic process as a disulfide reductase. Mutations in PGK1 may be associated with hemolytic anemia.

PGK1 Antibody (Center S320) - References

Shetty, S., et al., Am. J. Respir. Cell Mol. Biol. 31(1):100-106 (2004).
Daly, E.B., et al., Biochim. Biophys. Acta 1691(1):17-22 (2004).
Daly, E.B., et al., Int. J. Biol. Markers 19(2):170-172 (2004).
Saito, Y., et al., Biochem. Biophys. Res. Commun. 314(2):396-402 (2004).
Krishnan, P., et al., J. Biol. Chem. 278(38):36726-36732 (2003).

PGK1 Antibody (Center S320) - Citations

- A biotinylated analog of the anti-proliferative prostaglandin A1 allows assessment of PPAR-independent effects and identification of novel cellular targets for covalent modification.