

Anti-PGK1 Antibody
Catalog # ABO11352**Specification**

Anti-PGK1 Antibody - Product Information

Application	WB, IHC
Primary Accession	P00558
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Phosphoglycerate kinase 1(PGK1) detection. Tested with WB, IHC-P in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-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

Calculated MW

44615 MW KDa

Application Details

Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Rat, Mouse, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Subcellular Localization

Cytoplasm.

Protein Name

Phosphoglycerate kinase 1

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence in the middle region of human PGK1(166-180aa FGTAHRAHSSMVGVN), identical to the related rat and mouse sequences.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the phosphoglycerate kinase family.

Anti-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](http://www.uniprot.org/citations/30323285), PubMed:[7391028](http://www.uniprot.org/citations/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](http://www.uniprot.org/citations/2324090)). May play a role in sperm motility (PubMed:[26677959](http://www.uniprot.org/citations/26677959)).

Cellular Location

Cytoplasm.

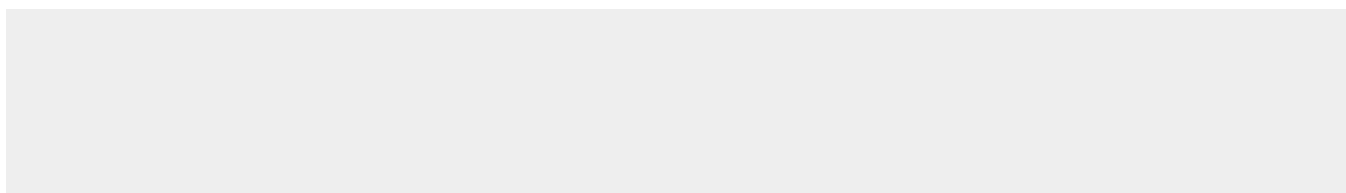
Tissue Location

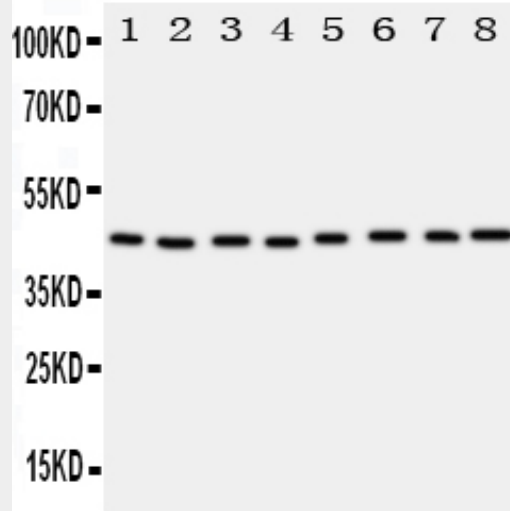
Mainly expressed in spermatogonia. Localized on the principle piece in the sperm (at protein level). Expression significantly decreased in the testis of elderly men

Anti-PGK1 Antibody - Protocols

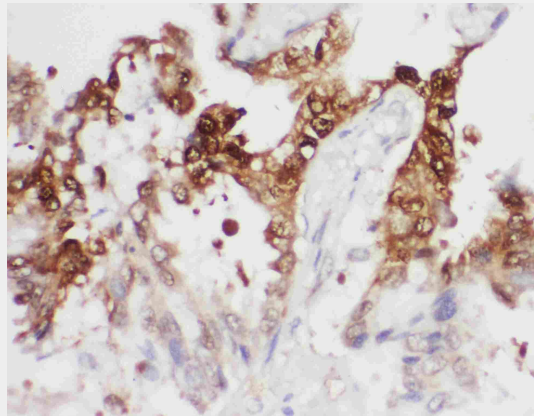
Provided below are standard protocols that you may find useful for product applications.

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

Anti-PGK1 Antibody - Images



Anti-PGK1 antibody, ABO11352, Western blotting
Lane 1: Rat Liver Tissue Lysate
Lane 2: Rat Brain Tissue Lysate
Lane 3: Rat Lung Tissue Lysate
Lane 4: A431 Cell Lysate
Lane 5: COLO320 Cell Lysate
Lane 6: HELA Cell Lysate
Lane 7: A549 Cell Lysate
Lane 8: JURKAT Cell Lysate



Anti-PGK1 antibody, ABO11352, IHC(P)
IHC(P): Human Lung Cancer Tissue

Anti-PGK1 Antibody - Background

PGK1 (Phosphoglycerate Kinase 1), also known as PGKA, is an enzyme that in humans is encoded by the PGK1 gene. The protein encoded by this gene is a glycolytic enzyme that catalyzes the conversion of 1,3-diphosphoglycerate to 3-phosphoglycerate. The encoded protein may also act as a cofactor for polymerase alpha. Additionally, this protein is secreted by tumor cells where it participates in angiogenesis by functioning to reduce disulfide bonds in the serine protease, plasmin, which consequently leads to the release of the tumor blood vessel inhibitor angiostatin. And the encoded protein has been identified as a moonlighting protein based on its ability to perform mechanistically distinct functions. Deficiency of the enzyme is associated with a wide range of clinical phenotypes hemolytic anemia and neurological impairment. Pseudogenes of this gene have been defined on chromosomes 19, 21 and the X chromosome.