

## Anti-PGK1 Rabbit Monoclonal Antibody Catalog # ABO13384

### Specification

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#### Anti-PGK1 Rabbit Monoclonal Antibody - Product Information

Application	WB, IF, ICC, FC
Primary Accession	<a href="#">P00558</a>
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Rat, Human, Mouse
Clonality	Monoclonal
Format	Liquid

#### Description

Anti-PGK1 Rabbit Monoclonal Antibody . Tested in WB, ICC/IF, Flow Cytometry applications. This antibody reacts with Human, Mouse, Rat.

#### Anti-PGK1 Rabbit Monoclonal 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

WB 1:500-1:2000<br>ICC/IF 1:50-1:200<br>FC 1:50

#### Subcellular Localization

Cytoplasm.

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

#### Immunogen

A synthesized peptide derived from human PGK1

#### Purification

Affinity-chromatography

Storage

**Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.**

#### Anti-PGK1 Rabbit Monoclonal 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:<a href="http://www.uniprot.org/citations/30323285" target="\_blank">30323285</a>, PubMed:<a href="http://www.uniprot.org/citations/7391028" target="\_blank">7391028</a>). Both L- and D- forms of purine and pyrimidine nucleotides can be used as substrates, but the activity is much lower on pyrimidines (PubMed:<a href="http://www.uniprot.org/citations/18463139" target="\_blank">18463139</a>). In addition to its role as a glycolytic enzyme, it seems that PGK1 acts as a polymerase alpha cofactor protein (primer recognition protein) (PubMed:<a href="http://www.uniprot.org/citations/2324090" target="\_blank">2324090</a>). Acts as a protein kinase when localized to the mitochondrion where it phosphorylates pyruvate dehydrogenase kinase PDK1 to inhibit pyruvate dehydrogenase complex activity and suppress the formation of acetyl- coenzyme A from pyruvate, and consequently inhibit oxidative phosphorylation and promote glycolysis (PubMed:<a href="http://www.uniprot.org/citations/26942675" target="\_blank">26942675</a>, PubMed:<a href="http://www.uniprot.org/citations/36849569" target="\_blank">36849569</a>). May play a role in sperm motility (PubMed:<a href="http://www.uniprot.org/citations/26677959" target="\_blank">26677959</a>).

**Cellular Location**

Cytoplasm, cytosol. Mitochondrion matrix. Note=Hypoxic conditions promote mitochondrial targeting (PubMed:26942675). Targeted to the mitochondrion following phosphorylation by MAPK1/ERK2, cis-trans isomerization by PIN1, and binding to mitochondrial circRNA mcPGK1 (PubMed:36849569).

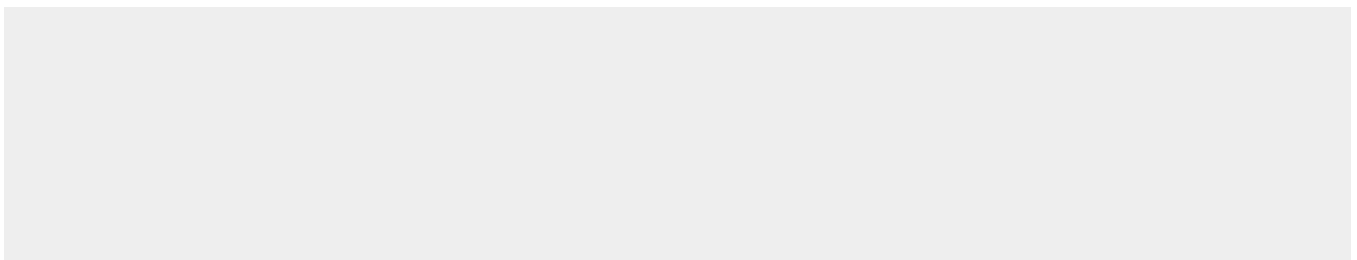
**Tissue Location**

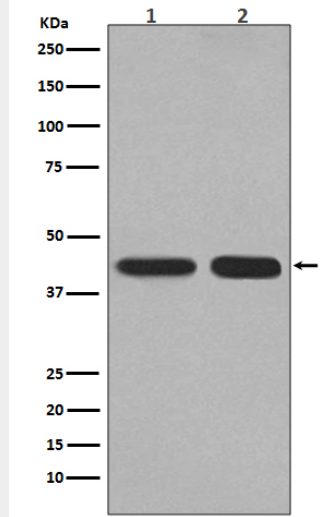
Mainly expressed in spermatogonia. Localized on the principle piece in the sperm (at protein level). Expression significantly decreased in the testis of elderly men

**Anti-PGK1 Rabbit Monoclonal 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 Rabbit Monoclonal Antibody - Images**



Western blot analysis of PGK1 expression in (1) HepG2 cell lysate; (2) Mouse kidney lysate.