

# PGK1 Rabbit mAb

Catalog # AP75900

## Product Information

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Application	WB, ICC
Primary Accession	<a href="#">P00558</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Monoclonal Antibody
Calculated MW	44615

## Additional Information

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Gene ID	5230
Other Names	PGK1
Dilution	WB~~1/500-1/1000 ICC~~N/A
Format	Liquid

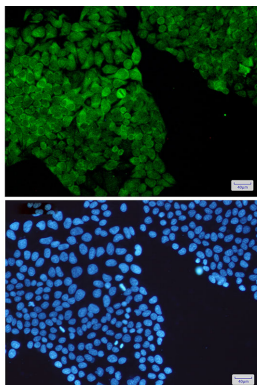
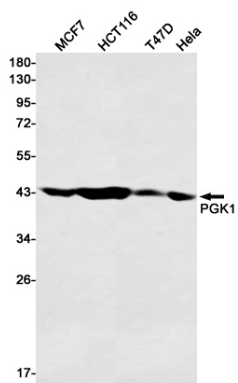
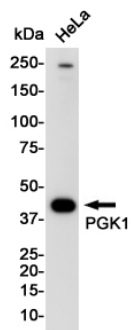
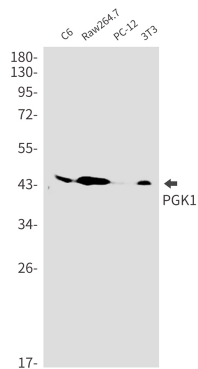
## Protein Information

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Name	PGK1
Synonyms	PGKA
Function	<p>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="#">30323285</a>, PubMed:<a href="#">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="#">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="#">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="#">26942675</a>, PubMed:<a href="#">36849569</a>). May play a role in sperm motility (PubMed:<a href="#">26677959</a>).</p>
Cellular Location	<p>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).</p>
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

## Images



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