10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

PGK2 Antibody (N-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP7170a

Product Information

Application	WB, IHC-P, E
Primary Accession	P07205
Other Accession	Q4R3K4
Reactivity	Human
Predicted	Monkey, Bovine
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB5466
Calculated MW	44796
Antigen Region	117-145

Additional Information

Gene ID	5232
Other Names	Phosphoglycerate kinase 2, Phosphoglycerate kinase, testis specific, PGK2, PGKB
Target/Specificity	This PGK2 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 117-145 amino acids from the N-terminal region of human PGK2.
Dilution	WB~~1:1000 IHC-P~~1:100~500 E~~Use at an assay dependent concentration.
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	PGK2 Antibody (N-term) is for research use only and not for use in diagnostic or therapeutic procedures.

Protein Information

Name	PGK2 (HGNC:8898)
Synonyms	PGKB

Function	Catalyzes the reversible conversion of 1,3-diphosphoglycerate to 3-phosphoglycerate and plays a role in glycolysis and gluconeogenesis (By similarity). Essential for sperm motility and male fertility (PubMed:26677959). Not required for the completion of spermatogenesis (By similarity).
Cellular Location	Cytoplasm.
Tissue Location	Mainly found in round spermatids. Localized on the principle piece in the sperm (at protein level). Testis-specific Expression significantly decreased in the testis of elderly men

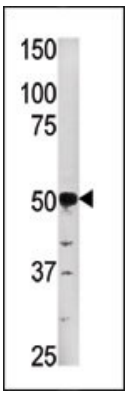
Background

PGK2 is a form of phosphoglycerate kinase unique to spermatozoa. The autosomal PGK2 gene lacks introns and contains characteristics of a processed gene. The conservation of function in this processed PGK2 gene and its tissue-specific expression in spermatogenesis suggests that it exists as a compensatory response to the inactivation of the X-linked PGK1 gene in spermatogenic cells before meiosis.

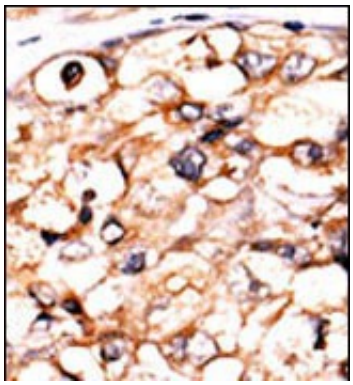
References

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McCarrey, J.R., et al., Dev. Genet. 19(4):321-332 (1996).
Blanche, H., et al., Genomics 9(3):420-428 (1991).
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Images

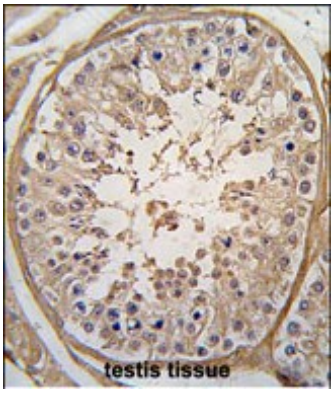


Western blot analysis of anti-PGK2 (Cat. #AP7170a) in HepG2 cell line lysate (35ug/lane).PGK2(arrow) was detected using the purified Pab.



Formalin-fixed and paraffin-embedded human cancer tissue reacted with the primary antibody, which was peroxidase-conjugated to the secondary antibody, followed by AEC staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated. BC = breast carcinoma; HC = hepatocarcinoma.

Formalin-fixed and paraffin-embedded human testis tissue reacted with PGK2 Antibody (N-term) (Cat.#AP7170a), 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.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.