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

PBK Antibody
Purified Mouse Monoclonal Antibody
Catalog # AO1679a

Specification

PBK Antibody - Product Information

Application	**E, IHC, WB, IF, FC**
Primary Accession	Q96KB5
Reactivity	**Human**
Host	**Mouse**
Clonality	**Monoclonal**
Isotype	**IgG2b**
Calculated MW	**36kDa KDa**

Description
This genes encodes a serine/threonine kinase related to the dual specific mitogen-activated protein kinase kinase (MAPKK) family. Evidence suggests that mitotic phosphorylation is required for its catalytic activity. This mitotic kinase may be involved in the activation of lymphoid cells and support testicular functions, with a suggested role in the process of spermatogenesis.

Immunogen
Purified recombinant fragment of human PBK expressed in E. Coli.

Formulation
Ascitic fluid containing 0.03% sodium azide.

PBK Antibody - Additional Information

Gene ID 55872

Other Names
Lymphokine-activated killer T-cell-originated protein kinase, 2.7.12.2, Cancer/testis antigen 84, CT84, MAPKK-like protein kinase, Nori-3, PDZ-binding kinase, Spermatogenesis-related protein kinase, SPK, T-LAK cell-originated protein kinase, PBK, TOPK

Dilution
E~~1/10000
IHC~~1/200 - 1/1000
WB~~1/500 - 1/2000
IF~~1/200 - 1/1000
FC~~1/200 - 1/400

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions
PBK Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

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PBK Antibody - Protein Information

Name PBK

Synonyms TOPK

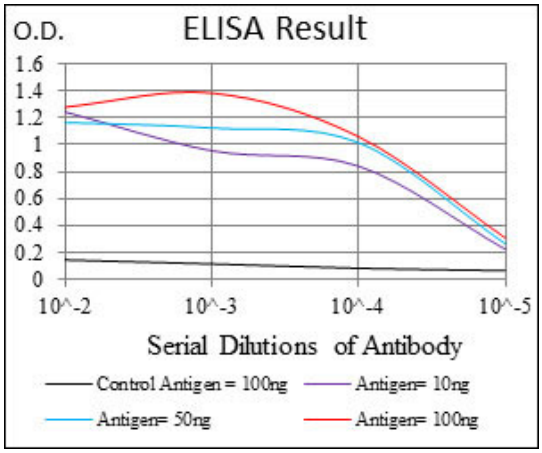
Function
Phosphorylates MAP kinase p38. Seems to be active only in mitosis. May also play a role in the activation of lymphoid cells. When phosphorylated, forms a complex with TP53, leading to TP53 destabilization and attenuation of G2/M checkpoint during doxorubicin- induced DNA damage.

Tissue Location
Expressed in the testis and placenta. In the testis, restrictedly expressed in outer cell layer of seminiferous tubules.

PBK 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 Cytomety
- Cell Culture



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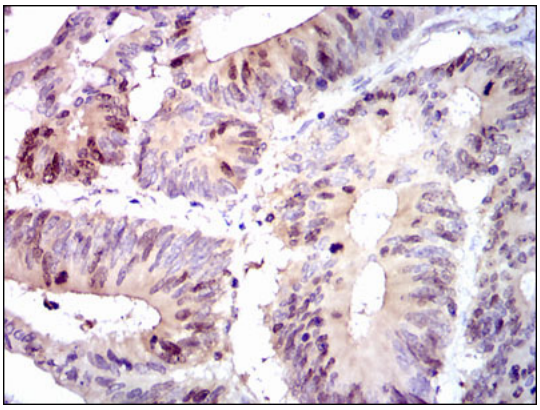


Figure5: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using PBK mouse mAb with DAB staining.

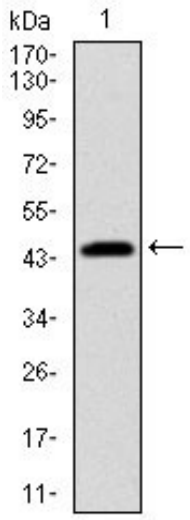


Figure 2: Western blot analysis using PBK mAb against human PBK (AA: 50-230) recombinant protein. (Expected MW is 45.8 kDa)

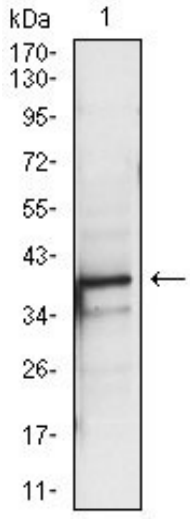


Figure 3: Western blot analysis using PBK mouse mAb against A431 (1) cell lysate.

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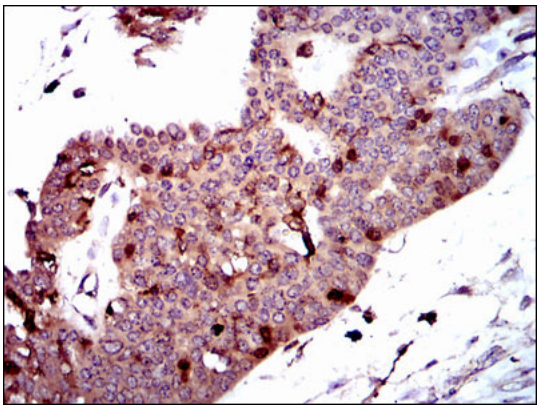


Figure 4: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using PBK mouse mAb with DAB staining.

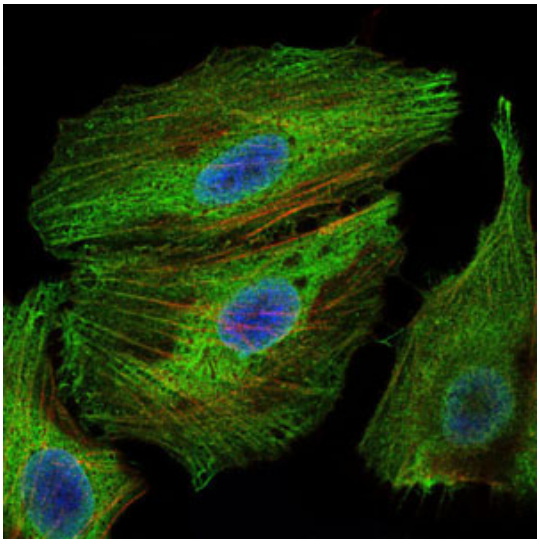


Figure 6: Immunofluorescence analysis of Hela cells using PBK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

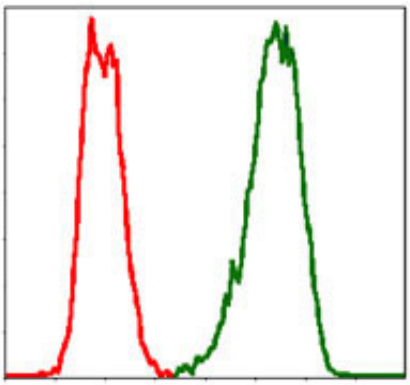


Figure 7: Flow cytometric analysis of Hela cells using PBK mouse mAb (green) and negative control (red).

PBK Antibody - References

Cancer Res. 2007 Jun 1;67(11):5186-94 Cancer Sci. 2010 Feb;101(2):403-11

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