

#### PBK Antibody

Purified Mouse Monoclonal Antibody Catalog # A01679a

# Specification

# PBK Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Isotype Calculated MW Description WB, IHC, FC, ICC, E <u>Q96KB5</u> Human Mouse Monoclonal IgG2b 36kDa KDa

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. <br />

**Formulation** Ascitic fluid containing 0.03% sodium azide. <br/>

## **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 WB~~1/500 - 1/2000 IHC~~1/200 - 1/1000 FC~~1/200 - 1/400 ICC~~N/A E~~1/10000

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.



# **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.

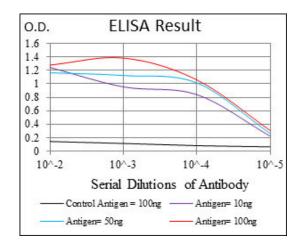
**Tissue Location** 

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.

- <u>Western Blot</u>
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- <u>Flow Cytomety</u>
- <u>Cell Culture</u>





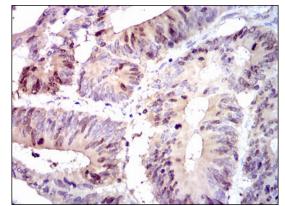


Figure5: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using PBK mouse mAb with DAB staining.

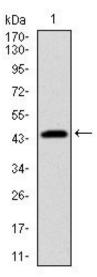


Figure 2: Western blot analysis using PBK mAb against human PBK (AA: 50-230) recombinant protein. (Expected MW is 45.8 kDa)

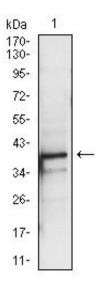


Figure 3: Western blot analysis using PBK mouse mAb against A431 (1) cell lysate.



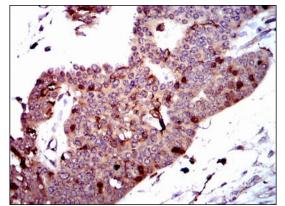


Figure 4: Immunohistochemical analysis of paraffin-embedded ovarian cancer tissues using PBK mouse mAb with DAB staining.

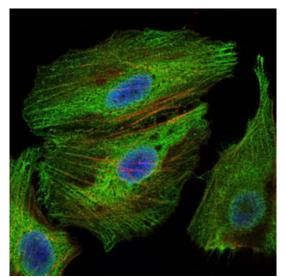


Figure 6: Immunofluorescence analysis of Hela cells using PBK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

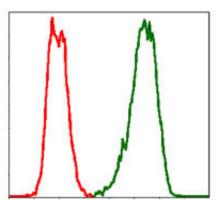


Figure 7: Flow cytometric analysis of Hela cells using PBK mouse mAb (green) and negative control (red).

# **PBK Antibody - References**

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

