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Phospho-PBK(Y74) Antibody
Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3577a

Specification

Phospho-PBK(Y74) Antibody - Product Information

Application	**DB,E**
Primary Accession	Q96KB5
Reactivity	**Human**
Host	**Rabbit**
Clonality	**Polyclonal**
Isotype	**Rabbit IgG**

Phospho-PBK(Y74) Antibody - Additional Information

Gene ID 55872

Other Names
Lymphokine-activated killer T-cell-originated protein kinase, 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

Target/Specificity
This PBK Antibody is generated from rabbits immunized with a KLH conjugated synthetic phosphopeptide corresponding to amino acid residues surrounding Y74 of human PBK.

Dilution
DB~~1:500

Format
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

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
Phospho-PBK(Y74) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

Phospho-PBK(Y74) 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.

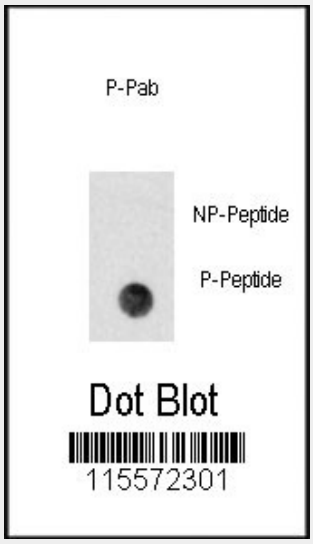
Tissue Location
Expressed in the testis and placenta. In the testis, restrictedly expressed in outer cell layer of seminiferous tubules.

Phospho-PBK(Y74) 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

Phospho-PBK(Y74) Antibody - Images



Dot blot analysis of anti-Phospho-PBK-Y74 Antibody (Cat.#AP3577a) on nitrocellulose membrane. 50ng of Phospho-peptide or Non Phospho-peptide per dot were adsorbed. Antibody working concentrations are 0.5ug per ml.

Phospho-PBK(Y74) Antibody - Background

PBK is 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.

Phospho-PBK(Y74) Antibody - References

Nandi, A., et al., Blood Cells Mol. Dis. 32(1):240-245 (2004).

Simons-Evelyn, M., et al., Blood Cells Mol. Dis. 27(5):825-829 (2001).
Zhao, S., et al., Int. J. Biochem. Cell Biol. 33(6):631-636 (2001).
Abe, Y., et al., J. Biol. Chem. 275(28):21525-21531 (2000).
Gaudet, S., et al., Proc. Natl. Acad. Sci. U.S.A. 97(10):5167-5172 (2000).

Phospho-PBK(Y74) Antibody - Citations

- TOPK/PBK is phosphorylated by ERK2 at serine 32, promotes tumorigenesis and is involved in sorafenib resistance in RCC
- Phosphorylation of TOPK at Y74, Y272 by Src increases the stability of TOPK and promotes tumorigenesis of colon