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Phospho-PBK(Y74) Antibody

Affinity Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP3577a

Product Information

Application	DB, E
Primary Accession	Q96KB5
Reactivity	Human
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Clone Names	RB15572
Calculated MW	36085

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 E~~Use at an assay dependent concentration.
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.

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.

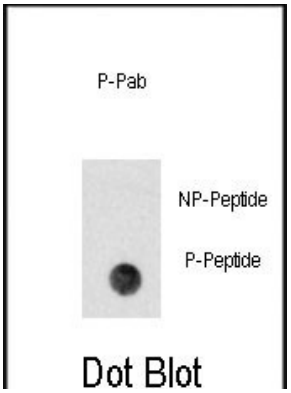
Background

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.

References

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Abe, Y., et al., J. Biol. Chem. 275(28):21525-21531 (2000).
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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.

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

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