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PBK Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1679a

Product Information

Application	WB, IHC, FC, ICC, E
Primary Accession	Q96KB5
Reactivity	Human
Host	Mouse
Clonality	Monoclonal
Clone Names	2C8
Isotype	IgG2b
Calculated MW	36085
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.

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.

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.

References

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

Images

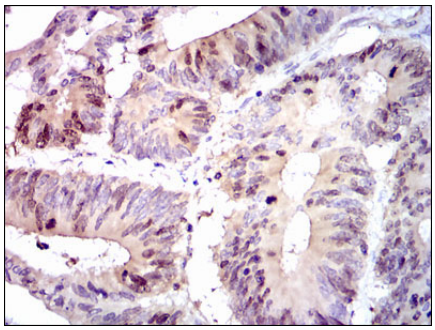


Figure5: Immunohistochemical analysis of paraffin-embedded colon cancer tissues using PBK mouse mAb with DAB staining.

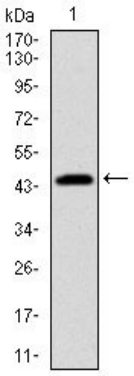


Figure 2: Western blot analysis using PBK mAb against human PBK (AA: 50-230) recombinant protein. (Expected MW is 45.8 kDa)

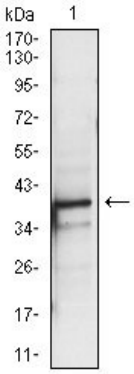
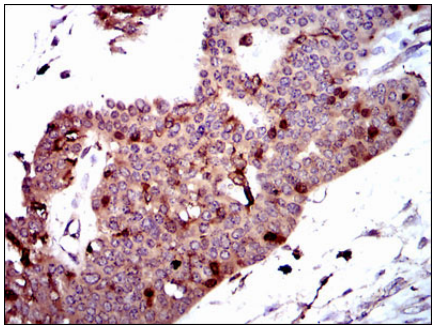


Figure 3: Western blot analysis using PBK mouse mAb against A431 (1) cell lysate.

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



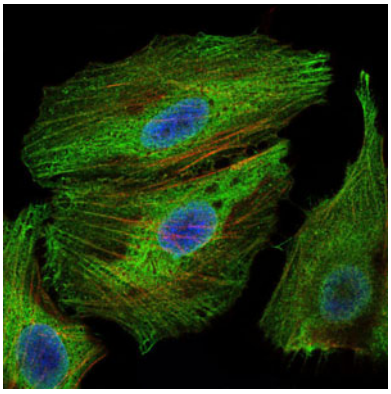


Figure 6: Immunofluorescence analysis of Hela cells using PBK mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

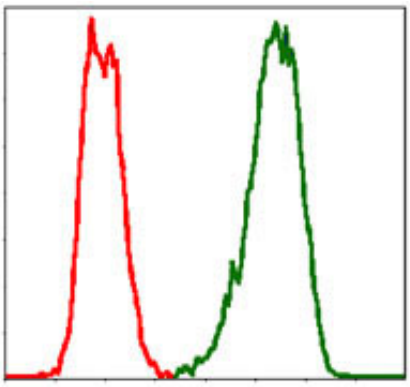


Figure 7: Flow cytometric analysis of Hela cells using PBK mouse mAb (green) and negative control (red).

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