

Anti-PBK Antibody
Catalog # ABO11613**Specification**

Anti-PBK Antibody - Product Information

Application	WB
Primary Accession	Q96KB5
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

Description

Rabbit IgG polyclonal antibody for Lymphokine-activated killer T-cell-originated protein kinase(PBK) detection. Tested with WB in Human;Mouse;Rat.

Reconstitution

Add 0.2ml of distilled water will yield a concentration of 500ug/ml.

Anti-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

Calculated MW

36085 MW KDa

Application Details

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse

Tissue Specificity

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

Protein Name

Lymphokine-activated killer T-cell-originated protein kinase

Contents

Each vial contains 5mg BSA, 0.9mg NaCl, 0.2mg Na₂HPO₄, 0.05mg Thimerosal, 0.05mg NaN₃.

Immunogen

A synthetic peptide corresponding to a sequence at the C-terminus of human PBK(306-322aa KDRPSAAHIVEALETDV), different from the related mouse and rat sequences by two amino acids.

Purification

Immunogen affinity purified.

Cross Reactivity

No cross reactivity with other proteins

Storage

At -20°C for one year. After reconstitution, at 4°C for one month. It can also be aliquotted and stored frozen at -20°C for a longer time. Avoid repeated freezing and thawing.

Sequence Similarities

Belongs to the protein kinase superfamily. STE Ser/Thr protein kinase family. MAP kinase kinase subfamily.

Anti-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.

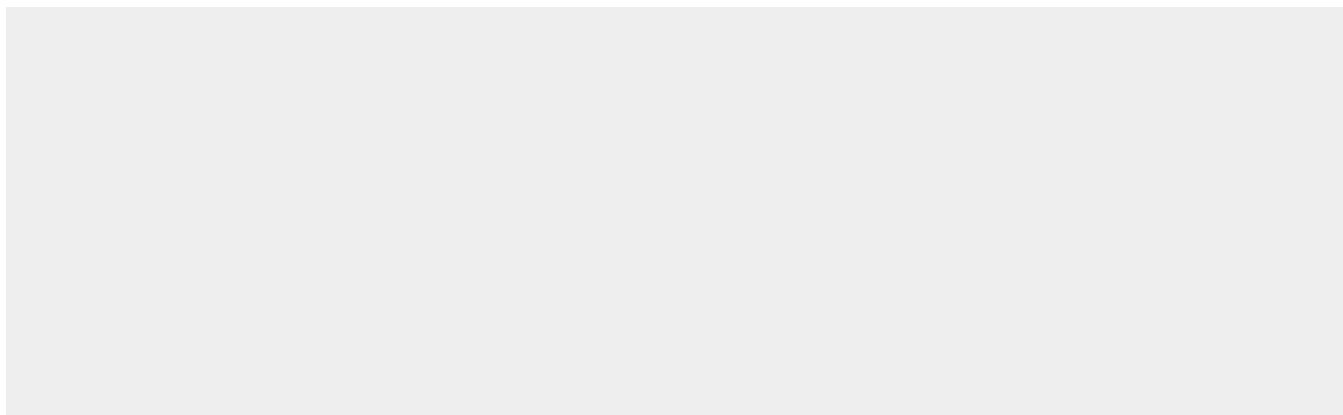
Tissue Location

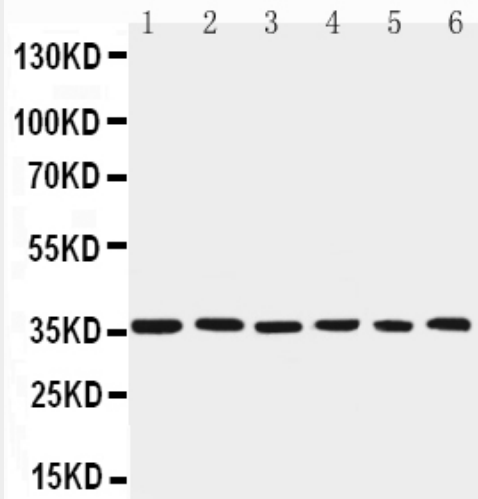
Expressed in the testis and placenta. In the testis, restrictedly expressed in outer cell layer of seminiferous tubules.

Anti-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 Cytometry](#)
- [Cell Culture](#)

Anti-PBK Antibody - Images



Anti-PBK antibody, ABO11613, All Western blotting All lanes: Anti-PBK(ABO11613) at 0.5ug/ml
Lane 1: Rat Testis Tissue Lysate at 40ug
Lane 2: HELA Whole Cell Lysate at 40ug
Lane 3: MCF-7 Whole Cell Lysate at 40ug
Lane 4: SKOV Whole Cell Lysate at 40ug
Lane 5: HEPG2 Whole Cell Lysate at 40ug
Lane 6: COLO320 Whole Cell Lysate at 40ug
Predicted bind size: 36KD
Observed bind size: 36KD

Anti-PBK Antibody - Background

Lymphokine-activated killer T-cell-originated protein kinase, also known as TOPK or PBK, is an enzyme that in humans is encoded by the PBK gene. The protein encoded by this gene is a serine/threonine kinase related to the dual specific mitogen-activated protein kinase kinase(MAPKK) family. It is mapped to 8p21.1. PBK can mediate cell growth through histone H3 modification. Evidence suggests that mitotic phosphorylation is required for its catalytic activity. The encoded protein may be involved in the activation of lymphoid cells and support testicular functions, with a suggested role in the process of spermatogenesis. Overexpression of this gene has been implicated in tumorigenesis.