10320 Camino Santa Fe, Suite G
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Anti-PBK Picoband Antibody
Catalog # ABO12001

Specification

Anti-PBK Picoband Antibody - Product Information

Application	**WB, IHC-P**
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, IHC-P in Human;Mouse;Rat.

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

Anti-PBK Picoband 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
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, Mouse, Rat, By Heat
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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 NaN3.

Immunogen
E.coli-derived human PBK recombinant protein (Position: N71-V322). Human PBK shares 89% amino acid (aa) sequence identity with mouse PBK.

Purification

Immunogen affinity purified.

Cross Reactivity
No cross reactivity with other proteins

Storage **At -20˚C for one year. After r˚Constitution, 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 Picoband 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 Picoband 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

Anti-PBK Picoband Antibody - Images

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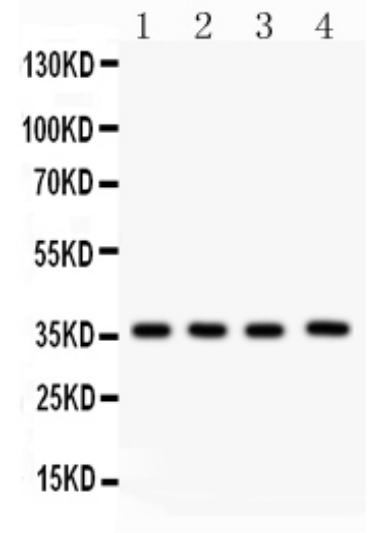
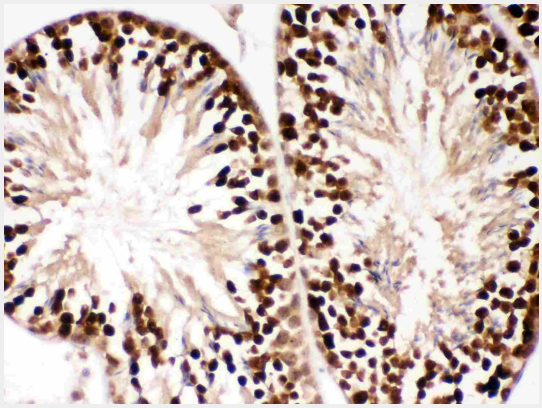
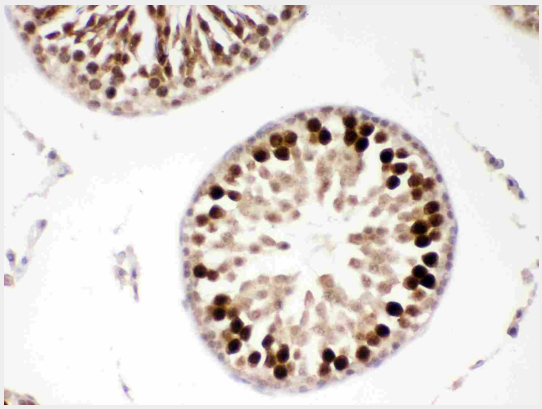


Anti- PBK Picoband antibody, ABO12001, Western blottingAll lanes: Anti PBK (ABO12001) at 0.5ug/mlLane 1: Rat Testis Tissue Lysate at 50ugLane 2: Mouse Testis Tissue Lysate at 50ugLane 3: Human Placenta Tissue Lysate at 50ugLane 4: JURKAT Whole Cell Lysate at 40ugPredicted bind size: 36KDObserved bind size: 36KD



Anti- PBK Picoband antibody, ABO12001, IHC(P)IHC(P): Mouse Testis Tissue



Anti- PBK Picoband antibody, ABO12001, IHC(P)IHC(P): Rat Testis Tissue

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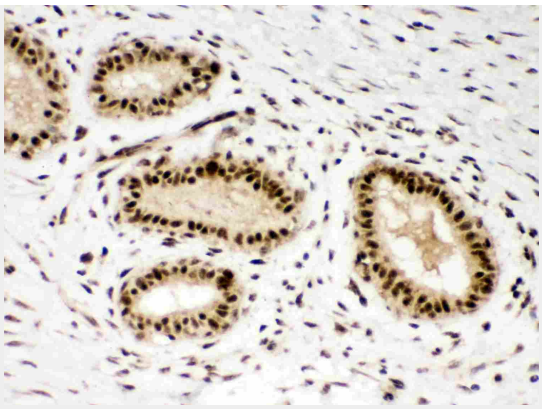

Anti- PBK Picoband antibody, ABO12001, IHC(P)IHC(P): Human Mammary Tissue

Anti-PBK Picoband 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.