

**Anti-PBK Picoband Antibody**  
Catalog # ABO12001**Specification****Anti-PBK Picoband Antibody - Product Information**

Application	<b>WB, IHC</b>
Primary Accession	<a href="#">O96KB5</a>
Host	<b>Rabbit</b>
Reactivity	<b>Human, Mouse, Rat</b>
Clonality	<b>Polyclonal</b>
Format	<b>Lyophilized</b>

**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<br>Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat<br>

**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 Na<sub>2</sub>HPO<sub>4</sub>, 0.05mg Na<sub>3</sub>N.

**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 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 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

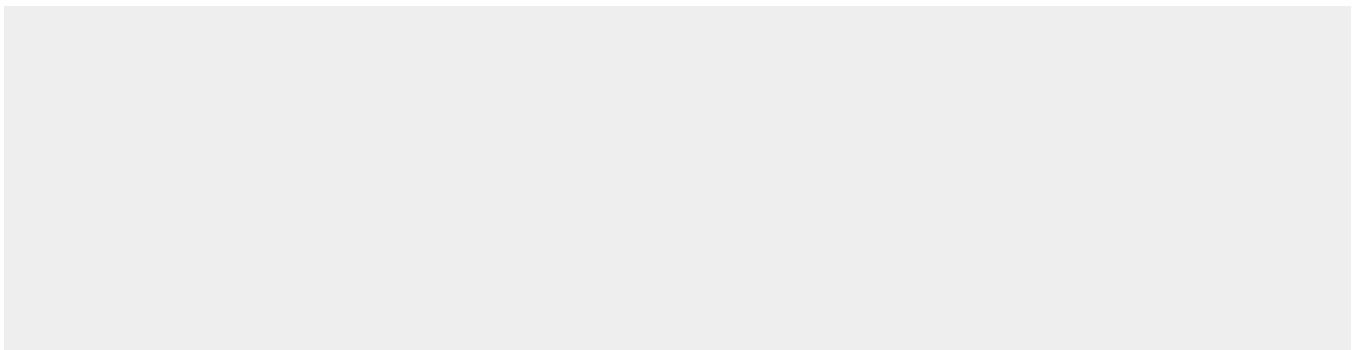
Expressed in the testis and placenta. In the testis, restrictedly expressed in outer cell layer of seminiferous tubules.

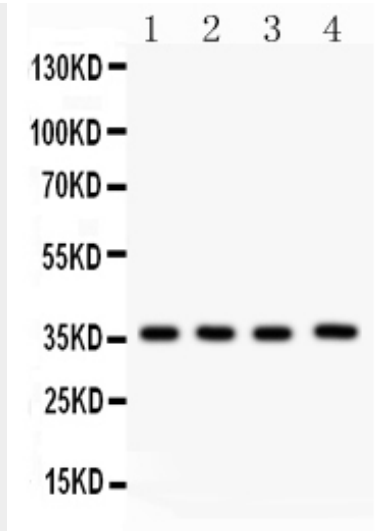
### Anti-PBK Picoband Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

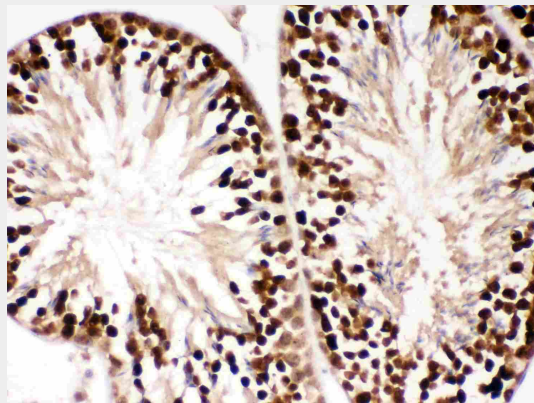
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

### Anti-PBK Picoband Antibody - Images

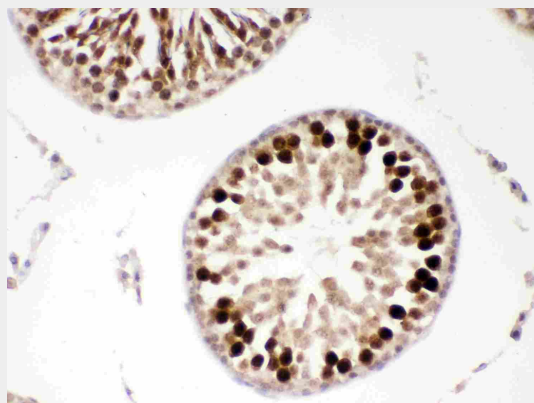




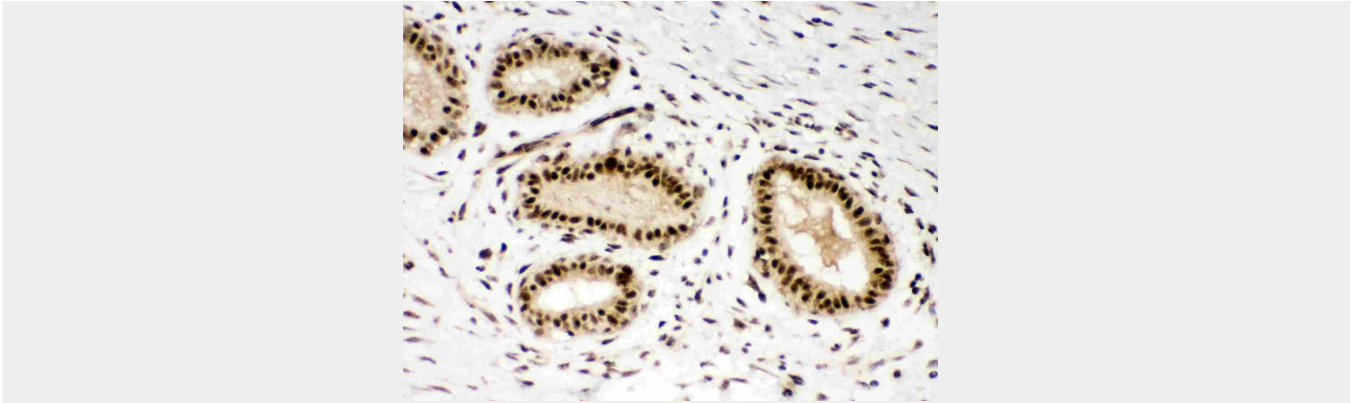
Anti- PBK Picoband antibody, ABO12001, Western blotting All lanes: Anti PBK (ABO12001) at 0.5ug/ml Lane 1: Rat Testis Tissue Lysate at 50ug Lane 2: Mouse Testis Tissue Lysate at 50ug Lane 3: Human Placenta Tissue Lysate at 50ug Lane 4: JURKAT Whole Cell Lysate at 40ug Predicted bind size: 36KD Observed 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



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.