

## **Anti-KIN Picoband Antibody**

**Catalog # ABO12293** 

### **Specification**

## **Anti-KIN Picoband Antibody - Product Information**

Application WB, IHC
Primary Accession O60870
Host Rabbit

Reactivity
Clonality
Format

Human, Mouse
Polyclonal
Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for DNA/RNA-binding protein KIN17(KIN) detection. Tested with WB, IHC-P in Human; Mouse. <br/>

### Reconstitution

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

## **Anti-KIN Picoband Antibody - Additional Information**

## **Gene ID 22944**

#### **Other Names**

DNA/RNA-binding protein KIN17, Binding to curved DNA, KIN, antigenic determinant of recA protein homolog, KIN (<a href="http://www.genenames.org/cgi-bin/gene\_symbol\_report?hgnc\_id=6327" target=" blank">HGNC:6327</a>), BTCD, KIN17

# **Calculated MW**

45374 MW KDa

### **Application Details**

Immunohistochemistry(Paraffin-embedded Section), 0.5-1  $\mu$ g/ml, Human, By Heat<br/>blot, 0.1-0.5  $\mu$ g/ml, Human, Mouse<br/>br>

## **Subcellular Localization**

Nucleus . Cytoplasm . During S phase, strongly associated with the nuclear matrix, and to chromosomal DNA in the presence of DNA damage. Also shows cytoplasmic localization in elongated spermatids. .

### **Tissue Specificity**

Ubiquitously expressed in all tissues examined, with highest levels in skeletal muscle, heart and testis. Differentially expressed in non-tumorigenic and tumorigenic cell lines. Highly expressed in proliferating epithelial keratinocyte cells in vitro (at protein level).

### **Protein Name**

DNA/RNA-binding protein KIN17

#### **Contents**

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



## **Immunogen**

E.coli-derived human KIN recombinant protein (Position: K3-K202). Human KIN shares 98% amino acid (aa) sequence identity with mouse KIN.

#### **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 KIN17 family.

## **Anti-KIN Picoband Antibody - Protein Information**

Name KIN (HGNC:6327)

Synonyms BTCD, KIN17

#### **Function**

Involved in DNA replication and the cellular response to DNA damage. May participate in DNA replication factories and create a bridge between DNA replication and repair mediated by high molecular weight complexes. May play a role in illegitimate recombination and regulation of gene expression. May participate in mRNA processing. Binds, in vitro, to double-stranded DNA. Also shown to bind preferentially to curved DNA in vitro and in vivo (By similarity). Binds via its C-terminal domain to RNA in vitro.

## **Cellular Location**

Nucleus. Cytoplasm. Note=During S phase, strongly associated with the nuclear matrix, and to chromosomal DNA in the presence of DNA damage. Also shows cytoplasmic localization in elongated spermatids {ECO:0000250|UniProtKB:Q8K339, ECO:0000269|PubMed:11880372, ECO:0000269|PubMed:12359749, ECO:0000269|PubMed:12754299, ECO:0000269|PubMed:12853634, ECO:0000269|PubMed:15831485}

### **Tissue Location**

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## **Anti-KIN Picoband Antibody - Protocols**

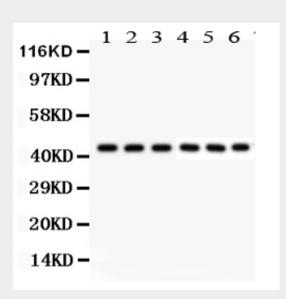
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

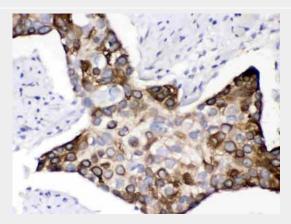


- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Anti-KIN Picoband Antibody - Images**



Anti- KIN Picoband antibody, ABO12293, Western blottingAll lanes: Anti KIN (ABO12293) at 0.5ug/mlLane 1: HELA Whole Cell Lysate at 40ugLane 2: 22RV1 Whole Cell Lysate at 40ugLane 3: COLO320 Whole Cell Lysate at 40ugLane 4: MCF-7 Whole Cell Lysate at 40ugLane 5: U20S Whole Cell Lysate at 40ugLane 6: NIH3T3 Whole Cell Lysate at 40ugPredicted bind size: 45KDObserved bind size: 45KD



Anti- KIN Picoband antibody, ABO12293, IHC(P)IHC(P): Human Oesophagus Squama Cancer Tissue

## **Anti-KIN Picoband Antibody - Background**

DNA/RNA-binding protein KIN17, also known as BTCD or KIN17, is a protein that in humans is encoded by the KIN gene. This gene is mapped to 10p14. The protein encoded by this gene is a nuclear protein that forms intranuclear foci during proliferation and is redistributed in the nucleoplasm during the cell cycle. Short-wave ultraviolet light provokes the relocalization of the protein, suggesting its participation in the cellular response to DNA damage. Originally selected based on protein-binding with RecA antibodies, the mouse protein presents a limited similarity with a functional domain of the bacterial RecA protein, a characteristic shared by this human ortholog. Alternative splicing of this gene results in multiple transcript variants.