

# **Anti-KIN Antibody**

**Catalog # ABO11548** 

## **Specification**

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

Application WB
Primary Accession O60870
Host Rabbit

Reactivity Human, Mouse, Rat

Clonality Polyclonal Lyophilized

**Description** 

Rabbit IgG polyclonal antibody for DNA/RNA-binding protein KIN17(KIN) detection. Tested with WB in Human: Mouse: Rat.

## Reconstitution

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

# **Anti-KIN 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**

Western blot, 0.1-0.5 µg/ml, Human, Rat, Mouse<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 Thimerosal, 0.05mg NaN3.



# **Immunogen**

A synthetic peptide corresponding to a sequence at the N-terminus of human KIN(48-64aa ESHQRQLLLASENPQQF), identical to the related mouse and rat sequences.

#### **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 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 Antibody - Protocols**

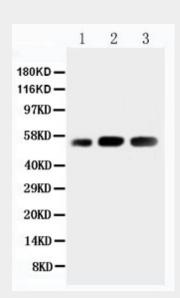
Provided below are standard protocols that you may find useful for product applications.

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



- Immunoprecipitation
- Flow Cytomety
- Cell Culture

# **Anti-KIN Antibody - Images**



Anti-KIN antibody, ABO11548, Western blottingLane 1: Rat Skeletal Muscle Tissue LysateLane 2: Human Placenta Tissue LysateLane 3: Rat Testis Tissue Lysate

## **Anti-KIN 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.