

Anti-KIN Antibody
Catalog # ABO11548**Specification****Anti-KIN Antibody - Product Information**

Application	WB
Primary Accession	O60870
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	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 (http://www.genenames.org/cgi-bin/gene_symbol_report?hgnc_id=6327 target="_blank">HGNC:6327), BTCD, KIN17

Calculated MW

45374 MW KDa

Application Details

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

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 Na₃N.

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 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 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

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).

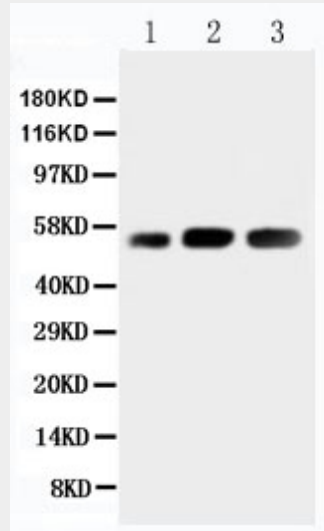
Anti-KIN Antibody - Protocols

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

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)

- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

Anti-KIN Antibody - Images



Anti-KIN antibody, ABO11548, Western blotting
Lane 1: Rat Skeletal Muscle Tissue Lysate
Lane 2: Human Placenta Tissue Lysate
Lane 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.