10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Anti-KIN Picoband Antibody
Catalog # ABO12293

Specification

Anti-KIN Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	O60870
Host	**Rabbit**
Reactivity	**Human, Mouse**
Clonality	**Polyclonal**
Format	**Lyophilized**

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

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 (HGNC:6327), BTCD, KIN17

Calculated MW
45374 MW KDa

Application Details
Immunohistochemistry(Paraffin-embedded Section), 0.5-1 µg/ml, Human, By Heat
Western blot, 0.1-0.5 µg/ml, Human, 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 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
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).

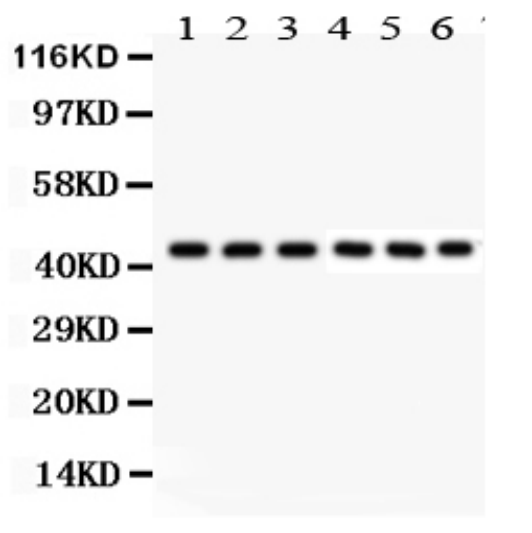
Anti-KIN Picoband Antibody - Protocols

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

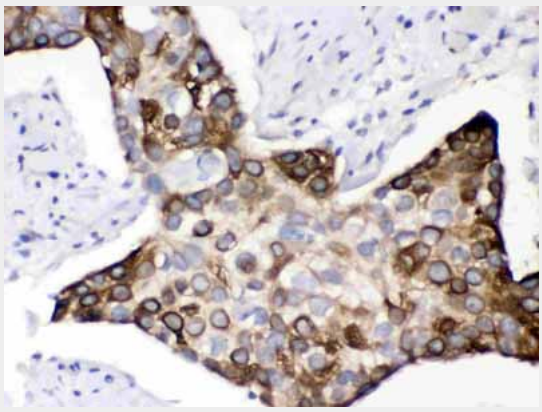
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence

- 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.