

**Anti-IKB Alpha Picoband Antibody**  
Catalog # ABO11982**Specification****Anti-IKB Alpha Picoband Antibody - Product Information**

Application	WB, IHC
Primary Accession	<a href="#">P25963</a>
Host	Rabbit
Reactivity	Human, Mouse, Rat
Clonality	Polyclonal
Format	Lyophilized

**Description**

Rabbit IgG polyclonal antibody for NF-kappa-B inhibitor alpha(NFKBIA) 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-IKB Alpha Picoband Antibody - Additional Information**

**Gene ID** 4792

**Other Names**

NF-kappa-B inhibitor alpha, I-kappa-B-alpha, Ikb-alpha, IkappaBalphabet, Major histocompatibility complex enhancer-binding protein MAD3, NFKBIA, IKBA, MAD3, NFKBI

**Calculated MW**

35609 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>

**Subcellular Localization**

Cytoplasm. Nucleus. Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export. .

**Protein Name**

NF-kappa-B inhibitor alpha

**Contents**

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

**Immunogen**

E.coli-derived human IKB alpha recombinant protein (Position: Q3-Q112). Human IKB alpha shares 87% and 86% amino acid (aa) sequence identity with mouse and rat IKB alpha, respectively.

**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 NF-kappa-B inhibitor family.

**Anti-IKB Alpha Picoband Antibody - Protein Information**

**Name** NFKBIA

**Synonyms** IKBA, MAD3, NFKBI

**Function**

Inhibits the activity of dimeric NF-kappa-B/REL complexes by trapping REL (RELA/p65 and NFKB1/p50) dimers in the cytoplasm by masking their nuclear localization signals (PubMed:<a href="http://www.uniprot.org/citations/1493333" target="\_blank">1493333</a>, PubMed:<a href="http://www.uniprot.org/citations/36651806" target="\_blank">36651806</a>, PubMed:<a href="http://www.uniprot.org/citations/7479976" target="\_blank">7479976</a>). On cellular stimulation by immune and pro-inflammatory responses, becomes phosphorylated promoting ubiquitination and degradation, enabling the dimeric RELA to translocate to the nucleus and activate transcription (PubMed:<a href="http://www.uniprot.org/citations/7479976" target="\_blank">7479976</a>, PubMed:<a href="http://www.uniprot.org/citations/7628694" target="\_blank">7628694</a>, PubMed:<a href="http://www.uniprot.org/citations/7796813" target="\_blank">7796813</a>, PubMed:<a href="http://www.uniprot.org/citations/7878466" target="\_blank">7878466</a>).

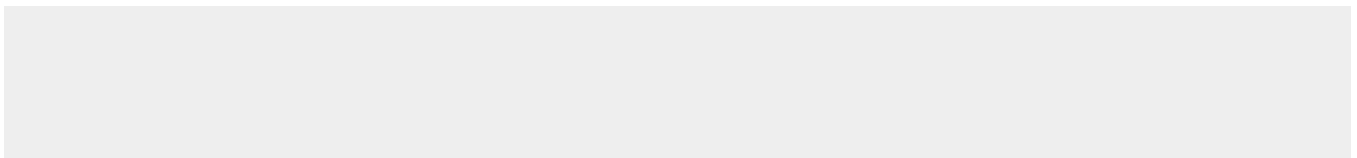
**Cellular Location**

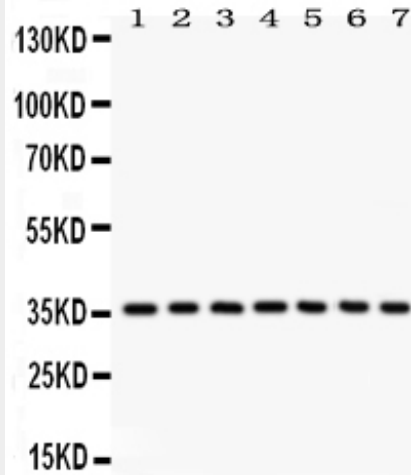
Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

**Anti-IKB Alpha Picoband Antibody - Protocols**

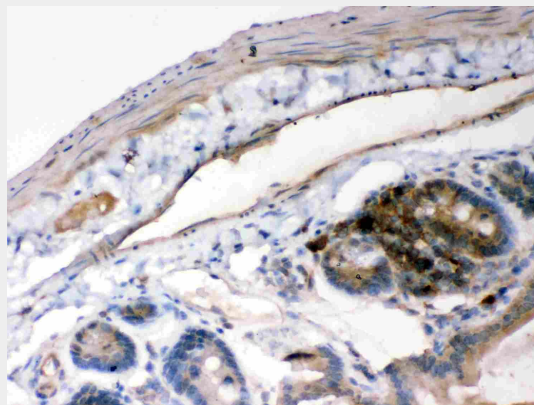
Provided below are standard protocols that you may find useful for product applications.

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

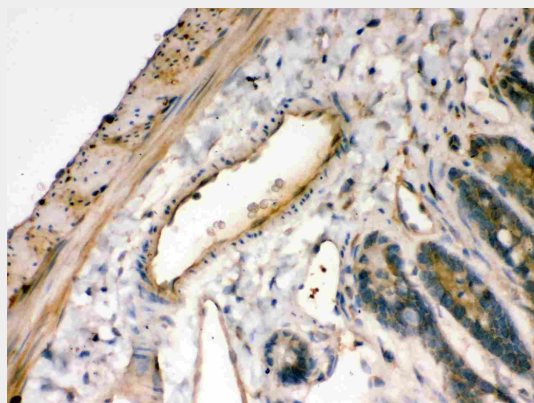
**Anti-IKB Alpha Picoband Antibody - Images**



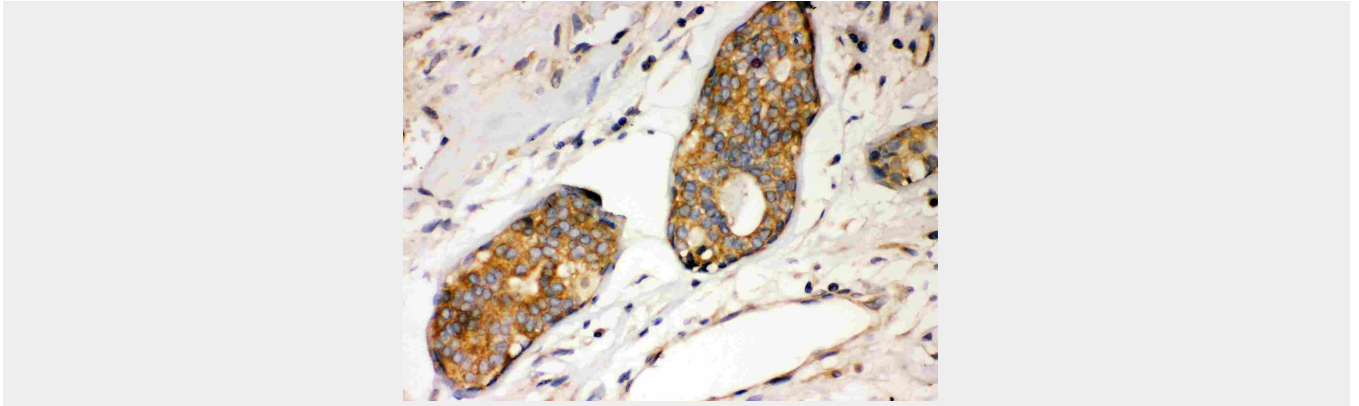
Anti- IKB alpha Picoband antibody, ABO11982, Western blotting All lanes: Anti IKB alpha (ABO11982) at 0.5ug/ml Lane 1: Rat Brain Tissue Lysate at 50ug Lane 2: Mouse Brain Tissue Lysate at 50ug Lane 3: Rat Kidney Tissue Lysate at 50ug Lane 4: Mouse Kidney Tissue Lysate at 50ug Lane 5: 293T Whole Cell Lysate at 40ug Lane 6: JURKAT Whole Cell Lysate at 40ug Lane 7: RAJI Whole Cell Lysate at 40ug Predicted bind size: 36KD Observed bind size: 36KD



Anti- IKB alpha Picoband antibody, ABO11982, IHC(P) IHC(P): Mouse Intestine Tissue



Anti- IKB alpha Picoband antibody, ABO11982, IHC(P) IHC(P): Rat Intestine Tissue



Anti- IKB alpha Picoband antibody, ABO11982, IHC(P)IHC(P): Human Mammary Cancer Tissue

### **Anti-IKB Alpha Picoband Antibody - Background**

NFKBIA, also called IKBA or MAD-3, is one member of a family of cellular proteins that function to inhibit the NF- $\kappa$ B transcription factor. It is mapped to 14q13.2. NFKBIA inhibits NF- $\kappa$ B by masking the nuclear localization signals(NLS) of NF- $\kappa$ B proteins and keeping them sequestered in an inactive state in the cytoplasm. It moves between the cytoplasm and the nucleus via a nuclear localization signal and CRM1-mediated nuclear export. The effect of the nonpathogenic bacteria is specific to the SCF complex substrates CTNNB1 and NFKBIA. This may help to explain the beneficial effects of treatment of inflammatory bowel disease with nonpathogenic probiotic enteric organisms. In addition, NFKBIA blocks the ability of NF- $\kappa$ B transcription factors to bind to DNA, which is required for NF- $\kappa$ B's proper functioning.