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Anti-IKB Alpha Picoband Antibody
Catalog # ABO11982

Specification

Anti-IKB Alpha Picoband Antibody - Product Information

Application	**WB, IHC**
Primary Accession	P25963
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, IkappaBalpha, 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
Western blot, 0.1-0.5 µg/ml, Human, Mouse, Rat

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:1493333, PubMed:36651806, PubMed:7479976). 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:7479976, PubMed:7628694, PubMed:7796813, PubMed:7878466).

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 Cytomety
- Cell Culture

Anti-IKB Alpha Picoband Antibody - Images

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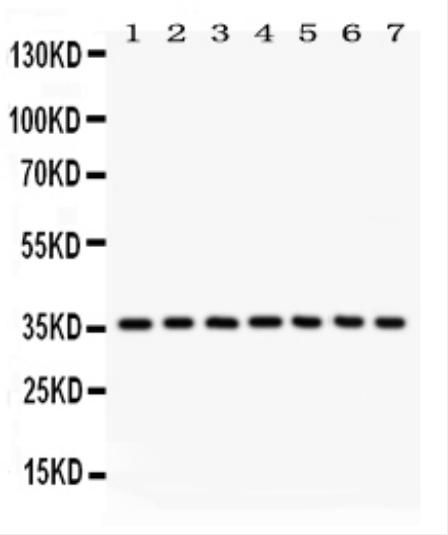
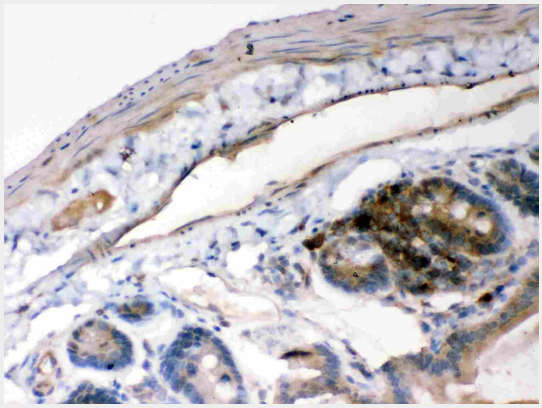
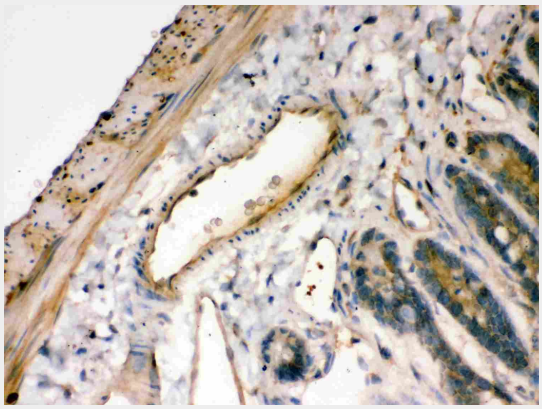


Anti- IKB alpha Picoband antibody, ABO11982, Western blottingAll lanes: Anti IKB alpha (ABO11982) at 0.5ug/mlLane 1: Rat Brain Tissue Lysate at 50ugLane 2: Mouse Brain Tissue Lysate at 50ugLane 3: Rat Kidney Tissue Lysate at 50ugLane 4: Mouse Kidney Tissue Lysate at 50ugLane 5: 293T Whole Cell Lysate at 40ugLane 6: JURKAT Whole Cell Lysate at 40ugLane 7: RAJI Whole Cell Lysate at 40ugPredicted bind size: 36KDObserved 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

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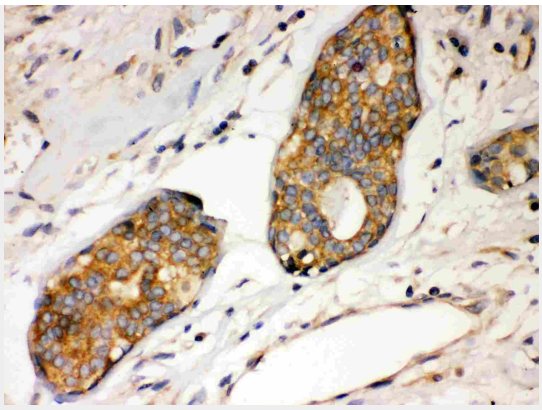

Anti- IKB alpha Picoband antibody, ABO11982, IHC(P)IHC(P): Human Mammary Cancer Tissue

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-ÎºB transcription factor. It is mapped to 14q13.2. NFKBIA inhibits NF-ÎºB by masking the nuclear localization signals(NLS) of NF-ÎºB 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-ÎºB transcription factors to bind to DNA, which is required for NF-ÎºB's proper functioning.