

Anti-IKB Alpha Picoband Antibody

Catalog # ABO11982

Product Information

Application	WB, IHC-P
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.

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
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. .
Source	Eukaryota
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 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.

Belongs to the NF-kappa-B inhibitor family.

Sequence Similarities

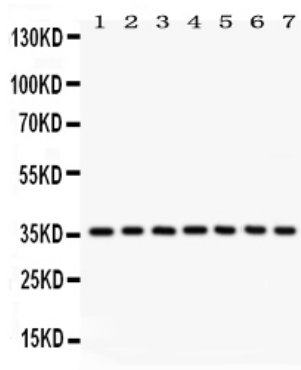
Protein Information

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.

Background

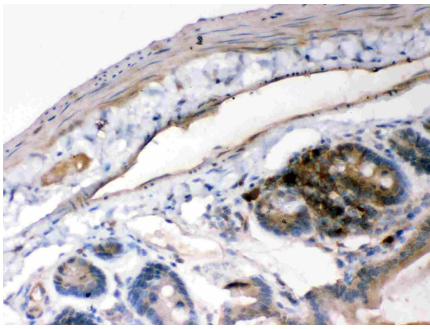
NFKBIA, also called IKBA or MAD-3, is one member of a family of cellular proteins that function to inhibit the NF- κ B transcription factor. It is mapped to 14q13.2. NFKBIA inhibits NF- κ B by masking the nuclear localization signals(NLS) of NF- κ B proteins and keeping them sequestered in an inactive 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- κ B transcription factors to bind to DNA, which is required for NF- κ B's proper functioning.

Images

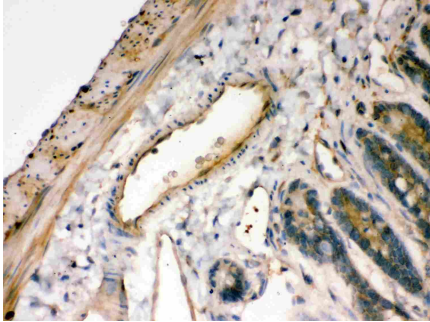


Anti- IKB alpha Picoband antibody, ABO11982, Western blotting
All lanes: Anti IKB alpha (ABO11982) at 0.5ug/ml
Lane 1: Rat Brain Tissue Lysate at 50ug
Lane 2: Mouse Brain Tissue Lysate at 50ug
Lane 3: Rat Kidney Tissue Lysate at 50ug
Lane 4: Mouse Kidney Tissue Lysate at 50ug
Lane 5: 293T Whole Cell 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

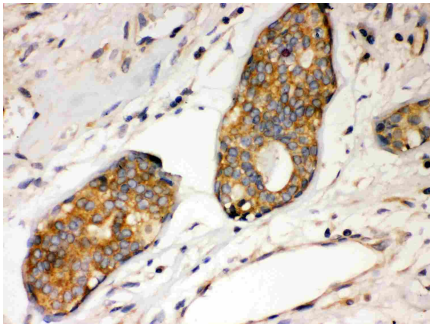
Anti- IKB alpha Picoband antibody, ABO11982,
IHC(P)
IHC(P): Mouse Intestine Tissue



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



Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.