

**IKB alpha (IKBA) Antibody**  
**Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP2506a**

**Specification**

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**IKB alpha (IKBA) Antibody - Product Information**

Application	WB,E
Primary Accession	<a href="#">P25963</a>
Other Accession	<a href="#">NP_065390</a>
Reactivity	Human, Mouse, Rat
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	35609
Antigen Region	1-30

**IKB alpha (IKBA) 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

**Target/Specificity**

This IKB alpha (IKBA) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 1-30 amino acids from human IKB alpha (IKBA).

**Dilution**

WB~~1:2000

**Format**

Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is prepared by Saturated Ammonium Sulfate (SAS) precipitation followed by dialysis against PBS.

**Storage**

Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

**Precautions**

IKB alpha (IKBA) Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

**IKB alpha (IKBA) 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

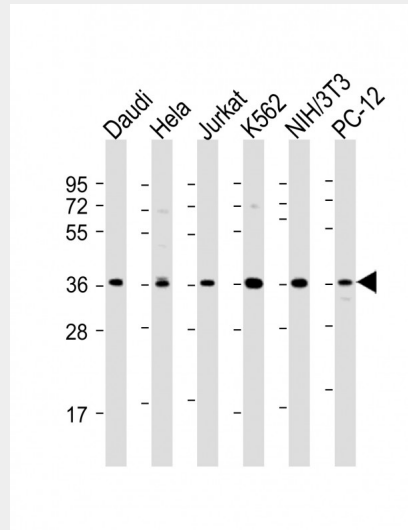
Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

### IKB alpha (IKBA) Antibody - Protocols

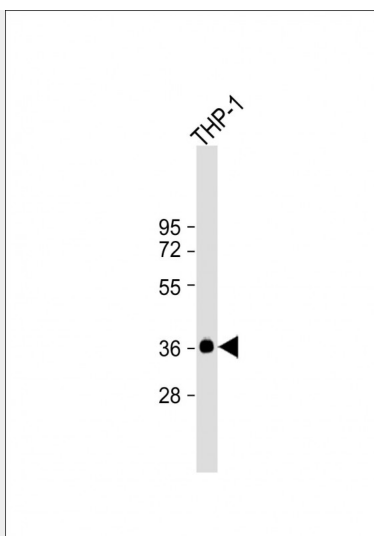
Provided below are standard protocols that you may find useful for product applications.

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

### IKB alpha (IKBA) Antibody - Images



All lanes : Anti-Sumo-site. NFKB Antibody at 1:2000 dilution Lane 1: Daudi whole cell lysate Lane 2: HeLa whole cell lysate Lane 3: Jurkat whole cell lysate Lane 4: K562 whole cell lysate Lane 5: NIH/3T3 whole cell lysate Lane 6: PC-12 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDN/TBST.



Anti-IKB alpha (IKBA) Antibody at 1:2000 dilution + THP-1 whole cell lysate Lysates/proteins at 20 µg per lane. Secondary Goat Anti-Rabbit IgG, (H+L), Peroxidase conjugated at 1/10000 dilution. Predicted band size : 36 kDa Blocking/Dilution buffer: 5% NFDN/TBST.

### **IKB alpha (IKBA) Antibody - Background**

NFKB1 or NFKB2 is bound to REL, RELA, or RELB to form the NFKB complex. The NFKB complex is inhibited by I-kappa-B proteins (NFKBIA or NFKBIB), which inactivate NF-kappa-B by trapping it in the cytoplasm. Phosphorylation of serine residues on the I-kappa-B proteins by kinases (IKBKA, or IKBKB) marks them for destruction via the ubiquitination pathway, thereby allowing activation of the NF-kappa-B complex. Activated NFKB complex translocates into the nucleus and binds DNA at kappa-B-binding motifs such as 5-prime GGGRNNYYCC 3-prime or 5-prime HGGARNYYCC 3-prime (where H is A, C, or T; R is an A or G purine; and Y is a C or T pyrimidine).

### **IKB alpha (IKBA) Antibody - References**

Miskolci, V., et al., Arch. Biochem. Biophys. 417(1):44-52 (2003).  
Kim, Y.S., et al., J. Biol. Chem. 278(31):28462-28469 (2003).  
Parcellier, A., et al., Mol. Cell. Biol. 23(16):5790-5802 (2003).  
Takada, Y., et al., J. Biol. Chem. 278(26):24233-24241 (2003).  
Place, R.F., et al., J. Cell. Physiol. 195(3):470-478 (2003).

### **IKB alpha (IKBA) Antibody - Citations**

- [A20 inhibits the release of inflammatory cytokines by suppressing the activation of the nuclear factor-kappa B pathway in osteoarthritic fibroblast-like synoviocytes.](#)
- [Nanoformulated paclitaxel and AZD9291 synergistically eradicate non-small-cell lung cancers in vivo.](#)
- [Roflumilast reverses polymicrobial sepsis-induced liver damage by inhibiting inflammation in mice.](#)