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# NFKBIA Antibody ( S32/36 )

**Affinity Purified Rabbit Polyclonal Antibody (Pab)**
**Catalog # AP7981b**

## Specification

### NFKBIA Antibody ( S32/36 ) - Product Information

| | |
|---|---|
| Application | **IF, WB, IHC-P, FC,E** |
| Primary Accession | P25963 |
| Other Accession | Q08353, Q9Z1E3 |
| Reactivity | **Human** |
| Predicted | **Mouse, Pig** |
| Host | **Rabbit** |
| Clonality | **Polyclonal** |
| Isotype | **Rabbit IgG** |
| Calculated MW | **35609** |
| Antigen Region | **12-41** |

### NFKBIA Antibody ( S32/36 ) - 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 NFKBIA antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 12-41 amino acids from human NFKBIA.

**Dilution**
IF~~1:10~50
WB~~1:1000
IHC-P~~1:50~100
FC~~1:10~50

**Format**
Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification.

**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**
NFKBIA Antibody ( S32/36 ) is for research use only and not for use in diagnostic or therapeutic procedures.

### NFKBIA Antibody ( S32/36 ) - 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).

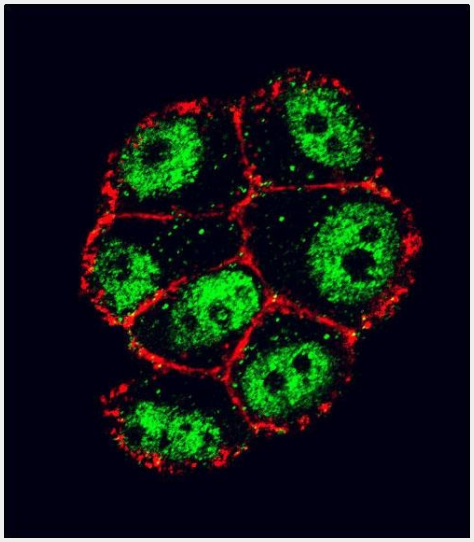
**Cellular Location**
Cytoplasm. Nucleus. Note=Shuttles between the nucleus and the cytoplasm by a nuclear localization signal (NLS) and a CRM1-dependent nuclear export.

## NFKBIA Antibody ( S32/36 ) - Protocols

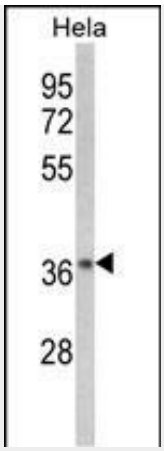
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

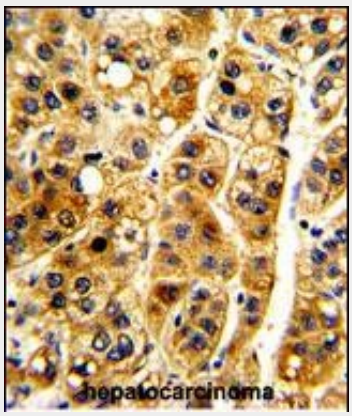
## NFKBIA Antibody ( S32/36 ) - Images



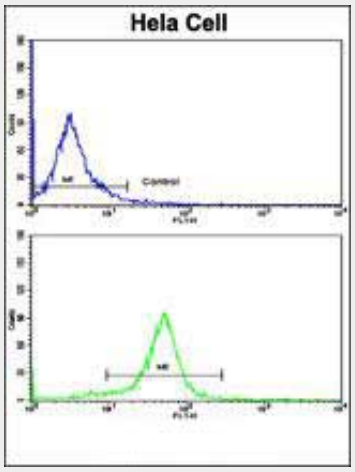
Confocal immunofluorescent analysis of NFKBIA Antibody ( S32/36 )(Cat#AP7981b) with ZR-75-1 cell followed by Alexa Fluor 488-conjugated goat anti-rabbit lgG (green).Actin filaments have been labeled with Alexa Fluor 555 phalloidin (red).




Western blot analysis of NFKBIA-S32/36 (Cat. #AP7981b) in Hela cell line lysates (35ug/lane). NFKBIA (arrow) was detected using the purified Pab.




Formalin-fixed and paraffin-embedded human hepatocarcinoma with NFKBIA Antibody (S32/36 ), which was peroxidase-conjugated to the secondary antibody, followed by DAB staining. This data demonstrates the use of this antibody for immunohistochemistry; clinical relevance has not been evaluated.




Flow cytometric analysis of hela cells using NFKBIA Antibody ( S32/36 )(bottom histogram) compared to a negative control cell (top histogram). FITC-conjugated goat-anti-rabbit secondary antibodies were used for the analysis.

**NFKBIA Antibody ( S32/36 ) - 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, 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).

**NFKBIA Antibody ( S32/36 ) - References**

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Fan,C., J. Biol. Chem. 278 (3), 2072-2080 (2003)
Tojima,Y., Nature 404 (6779), 778-782 (2000)
Gil,J., Oncogene 19 (11), 1369-1378 (2000)
Hay,R.T., Philos. Trans. R. Soc. Lond., B, Biol. Sci. 354 (1389), 1601-1609(1999)