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NFKBIA Antibody (S32/36) Blocking Peptide

Synthetic peptide
Catalog # BP7981b

Specification

NFKBIA Antibody (S32/36) Blocking Peptide - Product Information

Primary Accession P25963

NFKBIA Antibody (S32/36) Blocking Peptide - 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
The synthetic peptide sequence used to generate the antibody AP7981b was selected from the region of human NFKBIA. A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format
Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

Storage
Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

Precautions
This product is for research use only. Not for use in diagnostic or therapeutic procedures.

NFKBIA Antibody (S32/36) Blocking Peptide - Protein Information

NFKBIA Antibody (S32/36) Blocking Peptide - 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) Blocking Peptide - References

Szamosi,T., Dig. Dis. Sci. (2008)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)

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Name NFKBIA

Synonyms IKBA, MAD3, NFKBI

Function
Inhibits the activity of dimeric NF-kappa-B/REL complexes by trapping REL dimers in the cytoplasm through masking of their nuclear localization signals. On cellular stimulation by immune and proinflammatory responses, becomes phosphorylated promoting ubiquitination and degradation, enabling the dimeric RELA to translocate to the nucleus and activate transcription.

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) Blocking Peptide - Protocols

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

- Blocking Peptides