

NFKBIA Antibody (Y181) Blocking Peptide
Synthetic peptide
Catalog # BP7981a**Specification****NFKBIA Antibody (Y181) Blocking Peptide -
Product Information**Primary Accession [P25963](#)**NFKBIA Antibody (Y181) 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 AP7981a
was selected from the Y181 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 (Y181) Blocking Peptide -
Protein Information****NFKBIA Antibody (Y181) 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 (Y181) 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)

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 (Y181) Blocking Peptide
- Protocols**

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

- [Blocking Peptides](#)