10320 Camino Santa Fe, Suite G
San Diego, CA 92121
Tel: 858.875.1900 Fax: 858.875.1999

Bi-Phospho-NFKBIA(S32/36) Antibody Blocking peptide

Synthetic peptide
Catalog # BP3666a

Specification

Bi-Phospho-NFKBIA(S32/36) Antibody Blocking peptide - Product Information

Primary Accession P25963

Bi-Phospho-NFKBIA(S32/36) Antibody 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 <a >AP3666a was selected from the region of human Phospho-NFKBIA-S32/36. 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.

Bi-Phospho-NFKBIA(S32/36) Antibody Blocking peptide - 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:7479976, PubMed:36651806). 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:7796813, PubMed:7628694, PubMed:<a href="http://www.uniprot.org/citations/7878466"

target="_blank">7878466, PubMed:7479976).

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

Bi-Phospho-NFKBIA(S32/36) Antibody Blocking peptide - Protocols

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

- Blocking Peptides

Bi-Phospho-NFKBIA(S32/36) Antibody Blocking peptide - Images

Bi-Phospho-NFKBIA(S32/36) Antibody 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, MIM 604495), which inactivate NF-kappa-B by trapping it in the cytoplasm. Phosphorylation of serine residues on the I-kappa-B proteins by kinases 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.

Bi-Phospho-NFKBIA(S32/36) Antibody Blocking peptide - References

Gil,J.,et.al., Oncogene 19 (11), 1369-1378 (2000)Shimada,T., et.al., Int. Immunol. 11 (8), 1357-1362 (1999)