

**NFKB1 Antibody (S932) Blocking Peptide**  
**Synthetic peptide**  
**Catalog # BP1980c****Specification****NFKB1 Antibody (S932) Blocking Peptide -  
Product Information**Primary Accession [P19838](#)**NFKB1 Antibody (S932) Blocking Peptide -  
Additional Information****Gene ID 4790****Other Names**

Nuclear factor NF-kappa-B p105 subunit,  
DNA-binding factor KBF1, EBP-1, Nuclear  
factor of kappa light polypeptide gene  
enhancer in B-cells 1, Nuclear factor  
NF-kappa-B p50 subunit, NFKB1

**Target/Specificity**

The synthetic peptide sequence used to  
generate the antibody <a  
href=/products/AP1980c>AP1980c</a>  
was selected from the S932 region of  
human NFKB1. 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.

**NFKB1 Antibody (S932) Blocking Peptide -  
Protein Information****NFKB1 Antibody (S932) Blocking Peptide -  
Background**

NFKB1 is a 105 kD protein which can undergo  
cotranslational processing by the 26S  
proteasome to produce a 50 kD protein. The  
105 kD protein is a Rel protein-specific  
transcription inhibitor and the 50 kD protein is  
a DNA binding subunit of the NF-kappa-B  
(NFKB) protein complex. NFKB is a  
transcription regulator that is activated by  
various intra- and extra-cellular stimuli such as  
cytokines, oxidant-free radicals, ultraviolet  
irradiation, and bacterial or viral products.  
Activated NFKB translocates into the nucleus  
and stimulates the expression of genes  
involved in a wide variety of biological  
functions. Inappropriate activation of NFKB has  
been associated with a number of  
inflammatory diseases while persistent  
inhibition of NFKB leads to inappropriate  
immune cell development or delayed cell  
growth.

**NFKB1 Antibody (S932) Blocking Peptide -  
References**

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**Name** NFKB1**Function**

NF-kappa-B is a pleiotropic transcription factor present in almost all cell types and is the endpoint of a series of signal transduction events that are initiated by a vast array of stimuli related to many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NF-kappa-B is a homo- or heterodimeric complex formed by the Rel-like domain- containing proteins RELA/p65, RELB, NFKB1/p105, NFKB1/p50, REL and NFKB2/p52 and the heterodimeric p65-p50 complex appears to be most abundant one. The dimers bind at kappa-B sites in the DNA of their target genes and the individual dimers have distinct preferences for different kappa-B sites that they can bind with distinguishable affinity and specificity. Different dimer combinations act as transcriptional activators or repressors, respectively. NF-kappa-B is controlled by various mechanisms of post-translational modification and subcellular compartmentalization as well as by interactions with other cofactors or corepressors. NF-kappa-B complexes are held in the cytoplasm in an inactive state complexed with members of the NF-kappa-B inhibitor (I-kappa-B) family. In a conventional activation pathway, I- kappa-B is phosphorylated by I-kappa-B kinases (IKKs) in response to different activators, subsequently degraded thus liberating the active NF-kappa-B complex which translocates to the nucleus. NF-kappa-B heterodimeric p65-p50 and RelB-p50 complexes are transcriptional activators. The NF-kappa-B p50-p50 homodimer is a transcriptional repressor, but can act as a transcriptional activator when associated with BCL3. NFKB1 appears to have dual functions such as cytoplasmic retention of attached NF-kappa-B proteins by p105 and generation of p50 by a cotranslational processing. The proteasome-mediated process ensures the production of both p50 and p105 and preserves their independent function, although processing of NFKB1/p105 also appears to occur post-translationally. p50 binds to the kappa-B consensus sequence 5'-GGRNNYYCC-3', located in the enhancer region of genes involved in immune

response and acute phase reactions. In a complex with MAP3K8, NFKB1/p105 represses MAP3K8-induced MAPK signaling; active MAP3K8 is released by proteasome-dependent degradation of NFKB1/p105.

**Cellular Location**

Nucleus. Cytoplasm. Note=Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I- kappa-B)

**NFKB1 Antibody (S932) Blocking Peptide - Protocols**

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

- [Blocking Peptides](#)