

**NFKBp65 Antibody (C-term S536)**  
**Affinity Purified Rabbit Polyclonal Antibody (Pab)**  
**Catalog # AP18216b****Specification**

---

**NFKBp65 Antibody (C-term S536) - Product Information**

Application	IF, WB,E
Primary Accession	<a href="#">Q04206</a>
Other Accession	<a href="#">Q04207</a> , <a href="#">Q6QN13</a> , <a href="#">P49895</a> , <a href="#">NP_001138610.1</a>
Reactivity	Human
Predicted	Pig, Mouse
Host	Rabbit
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	60219
Antigen Region	517-539

**NFKBp65 Antibody (C-term S536) - Additional Information****Gene ID** 5970**Other Names**

Transcription factor p65, Nuclear factor NF-kappa-B p65 subunit, Nuclear factor of kappa light polypeptide gene enhancer in B-cells 3, RELA, NFKB3

**Target/Specificity**

This NFKBp65 antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 517-539 amino acids from the C-terminal region of human NFKBp65.

**Dilution**

IF~~1:10~50

WB~~1:1000

**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**

NFKBp65 Antibody (C-term S536) is for research use only and not for use in diagnostic or therapeutic procedures.

**NFKBp65 Antibody (C-term S536) - Protein Information****Name** RELA

## Synonyms NFKB3

**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. The heterodimeric RELA-NFKB1 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. The NF-kappa-B heterodimeric RELA-NFKB1 and RELA-REL complexes, for instance, function as transcriptional activators. 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. The inhibitory effect of I- kappa-B on NF-kappa-B through retention in the cytoplasm is exerted primarily through the interaction with RELA. RELA shows a weak DNA- binding site which could contribute directly to DNA binding in the NF- kappa-B complex. Beside its activity as a direct transcriptional activator, it is also able to modulate promoters accessibility to transcription factors and thereby indirectly regulate gene expression. Associates with chromatin at the NF-kappa-B promoter region via association with DDX1. Essential for cytokine gene expression in T- cells (PubMed:[15790681](#)). The NF-kappa-B homodimeric RELA-RELA complex appears to be involved in invasin-mediated activation of IL-8 expression. Key transcription factor regulating the IFN response during SARS-CoV-2 infection (PubMed:[33440148](#)).

## Cellular Location

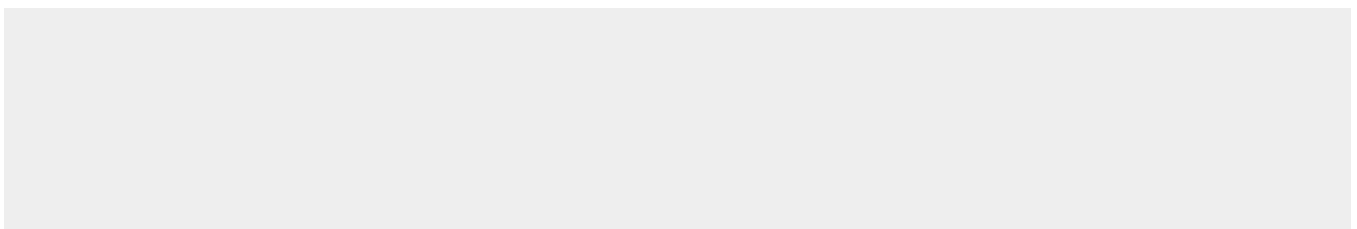
Nucleus. Cytoplasm. Note=Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I-kappa-B) (PubMed:1493333). Colocalized with DDX1 in the nucleus upon TNF-alpha induction (PubMed:19058135). Colocalizes with GFI1 in the nucleus after LPS stimulation (PubMed:20547752). Translocation to the nucleus is impaired in L.monocytogenes infection (PubMed:20855622)

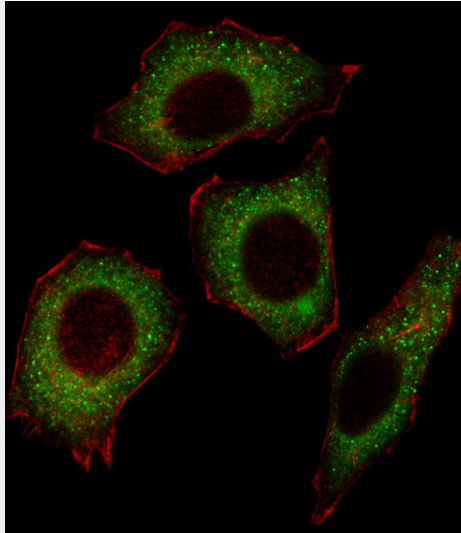
## NFKBp65 Antibody (C-term S536) - Protocols

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

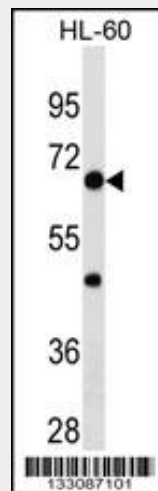
- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

## NFKBp65 Antibody (C-term S536) - Images





Fluorescent image of U251 cell stained with NFKBp5 Antibody(C-termS536)(Cat#AP18216b).U251 cells were fixed with 4% PFA (20 min), permeabilized with Triton X-100 (0.1%, 10 min), then incubated with NFKBp5 primary antibody (1:25, 1 h at 37°C). For secondary antibody, Alexa Fluor® 488 conjugated donkey anti-rabbit antibody (green) was used (1:400, 50 min at 37°C).Cytoplasmic actin was counterstained with Alexa Fluor® 555 (red) conjugated Phalloidin (7units/ml, 1 h at 37°C).NFKBp5 immunoreactivity is localized to Cytoplasm significantly.



NFKBp5 Antibody (pS536) (Cat. #AP18216b) western blot analysis in HL-60 cell line lysates (35ug/lane).This demonstrates the NFKBp5 antibody detected the NFKBp5 protein (arrow).

### **NFKBp5 Antibody (C-term S536) - Background**

NFKB1 (MIM 164011) or NFKB2 (MIM 164012) is bound to REL (MIM 164910), RELA, or RELB (MIM 604758) to form the NFKB complex. The p50 (NFKB1)/p65 (RELA) heterodimer is the most abundant form of NFKB. The NFKB complex is inhibited by I-kappa-B proteins (NFKBIA, MIM 164008 or NFKBIB, MIM 604495), which inactivate NFKB by trapping it in the cytoplasm. Phosphorylation of serine residues on the I-kappa-B proteins by kinases (IKBKA, MIM 600664, or IKBKB, MIM 603258) marks them for destruction via the ubiquitination pathway, thereby allowing activation of the NFKB 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).

#### **NFKBp65 Antibody (C-term S536) - References**

Pan, W.W., et al. J. Biol. Chem. 285(45):34348-34354(2010)  
Tago, K., et al. J. Biol. Chem. 285(40):30622-30633(2010)  
Park, J.S., et al. Oncol. Rep. 24(3):709-714(2010)  
Yu, Z.H., et al. Xi Bao Yu Fen Zi Mian Yi Xue Za Zhi 26(7):650-652(2010)  
Rohwer, N., et al. PLoS ONE 5 (8), E12038 (2010) :

#### **NFKBp65 Antibody (C-term S536) - Citations**

- [Heat shock protein 27 influences the anti-cancer effect of curcumin in colon cancer cells through ROS production and autophagy activation.](#)