

**Anti-NFkB K310ac (RABBIT) Antibody**  
**NFkB [ac Lys 310] Antibody**  
**Catalog # ASR5731**

### Specification

#### Anti-NFkB K310ac (RABBIT) Antibody - Product Information

Host	Rabbit
Conjugate	Unconjugated
Target Species	Human
Reactivity	Rat, Human, Mouse, Chicken
Clonality	Polyclonal
Application	WB, IHC, E, I, LCI
Application Note	Anti-NFkB [ac Lys 310] Antibody has been tested in ELISA. Anti-NFkB K310ac is useful for in Immunohistochemistry and Western Blot. Specific conditions for reactivity should be optimized by the end user. Expect a band approximately ~65kDa corresponding to the appropriate cell lysate or extract.
Physical State	Liquid (sterile filtered)
Buffer	0.02 M Potassium Phosphate, 0.15 M Sodium Chloride, pH 7.2
Immunogen	Anti-NFkB K310ac affinity purified antibody was prepared from whole rabbit serum produced by repeated immunizations with a synthetic acetylated peptide surrounding Lysine 310 of human TF65 protein.
Stabilizer	50% (v/v) Glycerol with 1 mg/ml Bovine Serum Albumin (BSA)

#### Anti-NFkB K310ac (RABBIT) Antibody - Additional Information

##### Gene ID 5970

##### Purity

Anti-NFkB [ac Lys 310] Antibody was affinity purified from monospecific antiserum by immunoaffinity chromatography. A BLAST analysis was used to suggest cross-reactivity with mouse and human based on 100% sequence homology. Cross-reactivity with NFkB K310 ac from other sources has not been determined.

##### Storage Condition

Store vial at -20° C prior to opening. Aliquot contents and freeze at -20° C or below for extended storage. Avoid cycles of freezing and thawing. Centrifuge product if not completely clear after standing at room temperature. This product is stable for several weeks at 4° C as an undiluted liquid. Dilute only prior to immediate use.

##### Precautions Note

This product is for research use only and is not intended for therapeutic or diagnostic applications.

## Anti-NFkB K310ac (RABBIT) Antibody - 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. Besides 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:<a href="http://www.uniprot.org/citations/15790681" target="\_blank">15790681</a>). 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:<a href="http://www.uniprot.org/citations/33440148" target="\_blank">33440148</a>).

### 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 induction (PubMed:19058135) Colocalizes with GFI1 in the nucleus after LPS stimulation (PubMed:20547752). Translocation to the nucleus is impaired in L.moncytogenes infection (PubMed:20855622)

## Anti-NFkB K310ac (RABBIT) Antibody - 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](#)

**Anti-NFkB K310ac (RABBIT) Antibody - Images****Anti-NFkB K310ac (RABBIT) Antibody - Background**

NFkB is a pleiotropic transcription factor present in most cell types and is the endpoint of a series of signal transduction events related to many biological processes such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. NFkB is contained in the cytoplasm inactively until it is released by a phosphorylated I-kappa-B, allowing the NFkB to translocate to the nucleus. This antibody is ideal for investigators interested in Metabolism, Cancer, Cardiovascular, Microbiology, Epigenetics and Nuclear Signaling, Immunology, Neuroscience, or Cell Biology research.