

# Anti-NF-Kappa B p65 RELA Rabbit Monoclonal Antibody

Catalog # ABO14174

## **Specification**

# Anti-NF-Kappa B p65 RELA Rabbit Monoclonal Antibody - Product Information

Application WB, IHC, IF, ICC, IP, FC

Primary Accession

Host
Isotype
Reactivity
Clonality
Format

Q04206
Rabbit
Rabbit
Rabbit IgG
Human, Mouse
Monoclonal
Liquid

**Description** 

Anti-NF-Kappa B p65 RELA Rabbit Monoclonal Antibody . Tested in WB, IHC, ICC/IF, IP, Flow Cytometry applications. This antibody reacts with Human, Mouse.

# Anti-NF-Kappa B p65 RELA Rabbit Monoclonal Antibody - 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

# Calculated MW

60219 MW KDa

### **Application Details**

WB 1:5000-1:10000<br>IHC 1:50-1:100<br>ICC/IF 1:50-1:100<br>IP 1:50<br>FC 1:50

#### **Subcellular Localization**

Nucleus. Cytoplasm. Colocalized with DDX1 in the nucleus upon TNF-alpha induction (By similarity). Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I-kappa-B). Colocalizes with GFI1 in the nucleus after LPS stimulation..

#### Contents

Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.

# Immunogen

A synthesized peptide derived from human NF-kB p65

#### **Purification**

Affinity-chromatography

Storage

Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.



## Anti-NF-Kappa B p65 RELA Rabbit Monoclonal 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-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)

### Anti-NF-Kappa B p65 RELA Rabbit Monoclonal Antibody - Protocols

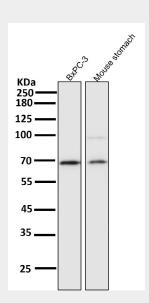
Provided below are standard protocols that you may find useful for product applications.

- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation

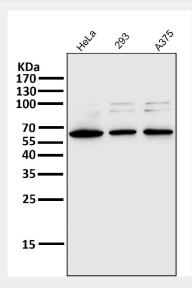


- Flow Cytomety
- Cell Culture

# Anti-NF-Kappa B p65 RELA Rabbit Monoclonal Antibody - Images

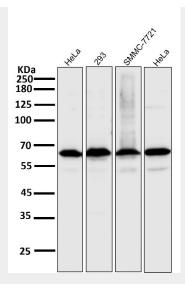


All lanes use the Antibody at 1:4W dilution for 1 hour at room temperature.

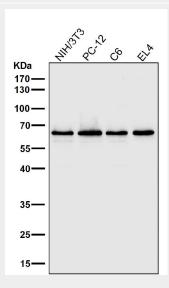


All lanes use the Antibody at 1:4W dilution for 1 hour at room temperature.

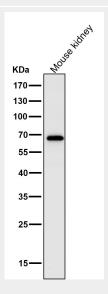




All lanes use the Antibody at 1:4W dilution for 1 hour at room temperature.

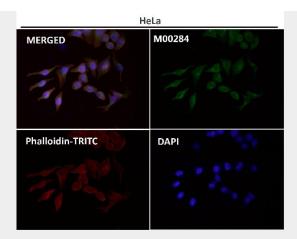


All lanes use the Antibody at 1:2W dilution for 1 hour at room temperature.

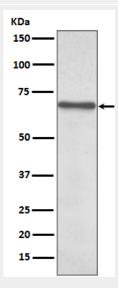


All lanes use the Antibody at 1:2W dilution for 1 hour at room temperature.

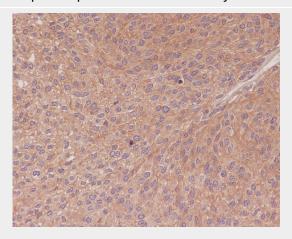




Immunofluorescent analysis using the Antibody at 1:50 dilution.

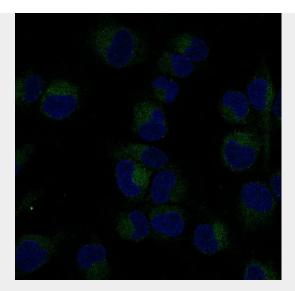


Western blot analysis of NF-κB p65 expression in HeLa cell lysate.



Immunohistochemical analysis of paraffin-embedded human transitional cell carcinoma of bladder, using NF-κB p65 Antibody.





Immunofluorescent analysis of HT-1080 cells, using NF-κB p65 Antibody.