

**Anti-RELA / NFKB p65 Antibody (clone 8G3)**  
**Mouse Anti Human Monoclonal Antibody**  
**Catalog # ALS18403****Specification**

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**Anti-RELA / NFKB p65 Antibody (clone 8G3) - Product Information**

Application	WB, IHC-P, IF, E
Primary Accession	<a href="#">Q04206</a>
Predicted	Human
Host	Mouse
Clonality	Monoclonal
Isotype	IgG1, $\lambda$
Calculated MW	60219

**Anti-RELA / NFKB p65 Antibody (clone 8G3) - Additional Information****Gene ID** 5970**Alias Symbol** **RELA****Other Names**

RELA, NF-kappa-B p65delta3, NFKB3, p65, Transcription factor p65

**Target/Specificity**

Human RELA / NFKB p65

**Reconstitution & Storage**

Protein A purified

**Precautions**

Anti-RELA / NFKB p65 Antibody (clone 8G3) is for research use only and not for use in diagnostic or therapeutic procedures.

**Anti-RELA / NFKB p65 Antibody (clone 8G3) - 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:<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-RELA / NFKB p65 Antibody (clone 8G3) - 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-RELA / NFKB p65 Antibody (clone 8G3) - Images**

#### **Anti-RELA / NFKB p65 Antibody (clone 8G3) - Citations**

- [Euphorbia factor L2 alleviates lipopolysaccharide-induced acute lung injury and inflammation in mice through the suppression of NF-κB activation.](#)