

**KD-Validated Anti-RELA Rabbit Polyclonal Antibody**  
Rabbit polyclonal antibody  
Catalog # AGI2131

**Specification**

**KD-Validated Anti-RELA Rabbit Polyclonal Antibody - Product Information**

Application	WB
Primary Accession	<a href="#">Q04206</a>
Reactivity	Rat, Human, Mouse
Clonality	Polyclonal
Isotype	Rabbit IgG
Calculated MW	Predicted, 60 kDa, observed, 68 kDa KDa
Gene Name	RELA
Aliases	RELA; RELA Proto-Oncogene, NF-KB Subunit; Nuclear Factor Of Kappa Light Polypeptide Gene Enhancer In B-Cells 3; NFKB3; P65; V-Rel Avian Reticuloendotheliosis Viral Oncogene Homolog A; Nuclear Factor NF-Kappa-B P65 Subunit; Transcription Factor P65; NF-Kappa-B Transcription Factor P65; NF-Kappa-B P65delta3; AIF3BL3; CMCU A synthesized peptide derived from human NF-kappaB p65
Immunogen	

**KD-Validated Anti-RELA Rabbit Polyclonal 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

**KD-Validated Anti-RELA Rabbit Polyclonal 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

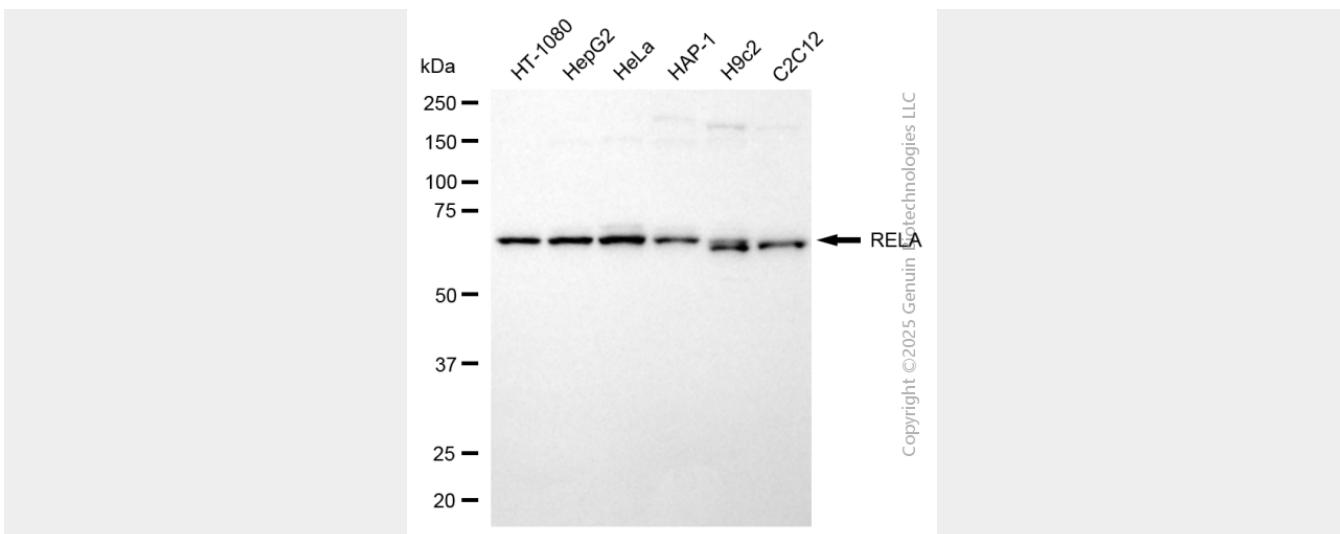
Nucleus. Cytoplasm Note=Nuclear, but also found in the cytoplasm in an inactive form complexed to an inhibitor (I-kappa-B) (PubMed:1493333). Colocalized with DDX1 in the nucleus upon TNF induction (PubMed:19058135) Colocalizes with GFI1 in the nucleus after LPS stimulation (PubMed:20547752). Translocation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

### KD-Validated Anti-RELA Rabbit Polyclonal Antibody - Protocols

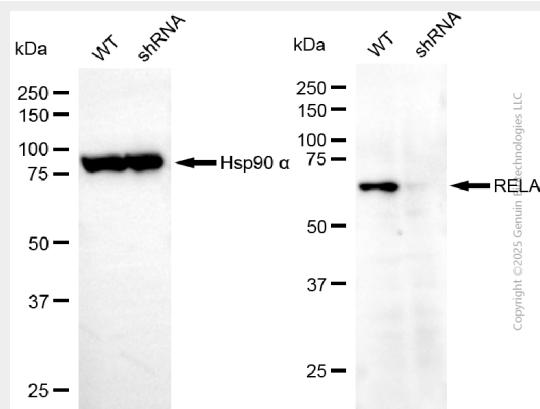
Provided below are standard protocols that you may find useful for product applications.

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

### KD-Validated Anti-RELA Rabbit Polyclonal Antibody - Images



Western blotting analysis using anti-RELA antibody (Cat#AGI2131). Total cell lysates (30 µg) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-RELA antibody (Cat#AGI2131, 1:2,500) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Western blotting analysis using anti-RELA antibody (Cat#AGI2131). RELA expression in wild-type (WT) and RELA shRNA knockdown (KD) HT-1080 cells with 20 µg of total cell lysates. Hsp90 α serves as a loading control. The blot was incubated with anti-RELA antibody (Cat#AGI2131, 1:2,500) and HRP-conjugated goat anti-rabbit secondary antibody respectively.