

KD-Validated Anti-RelB Rabbit Monoclonal Antibody

Rabbit monoclonal antibody Catalog # AGI1637

Specification

KD-Validated Anti-RelB Rabbit Monoclonal Antibody - Product Information

Application WB, FC, ICC Primary Accession O01201

Reactivity
Clonality
Monoclonal
Isotype
Rat, Human, Mouse
Monoclonal
Rabbit IgG

Calculated MW Predicted, 62 kDa , observed , 70 kDa KDa

Gene Name RE

Aliases RELB; RELB Proto-Oncogene, NF-KB

Subunit; REL-B; V-Rel Avian

Reticuloendotheliosis Viral Oncogene Homolog B (Nuclear Factor Of Kappa Light Polypeptide Gene Enhancer In B-Cells 3);

Transcription Factor RelB; V-Rel Reticuloendotheliosis Viral Oncogene Homolog B, Nuclear Factor Of Kappa Light Polypeptide Gene Enhancer In B-Cells 3;

I-REL; IMD53; I-Rel; IREL

Immunogen A synthesized peptide derived from human

RelB

KD-Validated Anti-RelB Rabbit Monoclonal Antibody - Additional Information

Gene ID 5971 Other Names

Transcription factor RelB, I-Rel, RELB

KD-Validated Anti-RelB Rabbit Monoclonal Antibody - Protein Information

Name RELB

Function

NF-kappa-B is a pleiotropic transcription factor which is present in almost all cell types and is involved in many biological processed 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 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. 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. NF-kappa-B heterodimeric ReIB-p50 and ReIB-p52 complexes are transcriptional activators. RELB neither associates with DNA nor with RELA/p65 or REL. Stimulates promoter activity in the presence of NFKB2/p49. As a member of the NUPR1/RELB/IER3 survival pathway, may provide pancreatic ductal adenocarcinoma with remarkable resistance to cell stress, such as starvation or gemcitabine treatment. Regulates the circadian clock by repressing the transcriptional activator activity of the CLOCK-BMAL1 heterodimer in a CRY1/CRY2 independent manner. Increased repression of the heterodimer is seen in the presence of NFKB2/p52. Is required for both T and B lymphocyte maturation and function (PubMed:26385063/a>).

Cellular Location

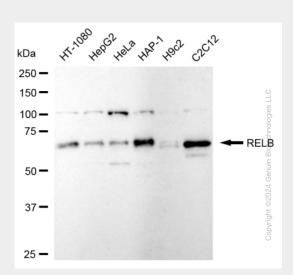
Nucleus. Cytoplasm, cytoskeleton, microtubule organizing center, centrosome. Note=Colocalizes with NEK6 in the centrosome

KD-Validated Anti-RelB Rabbit Monoclonal Antibody - Protocols

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

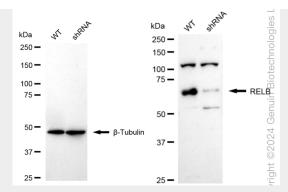
- Western Blot
- Blocking Peptides
- Dot Blot
- Immunohistochemistry
- <u>Immunofluorescence</u>
- Immunoprecipitation
- Flow Cytomety
- Cell Culture

KD-Validated Anti-RelB Rabbit Monoclonal Antibody - Images

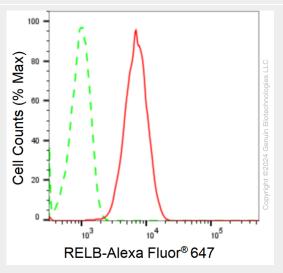


Western blotting analysis using anti-RELB antibody (Cat#AGI1637). Total cell lysates (30 μ g) from various cell lines were loaded and separated by SDS-PAGE. The blot was incubated with anti-RELB antibody (Cat#AGI1637, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.

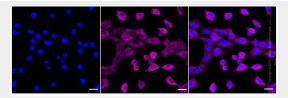




Western blotting analysis using anti-RELB antibody (Cat#AGI1637). RELB expression in wild type (WT) and RELB shRNA knockdown (KD) HT-1080 cells with 20 μ g of total cell lysates. β -Tubulin serves as a loading control. The blot was incubated with anti-RELB antibody (Cat#AGI1637, 1:5,000) and HRP-conjugated goat anti-rabbit secondary antibody respectively.



Flow cytometric analysis of RELB expression in C2C12 cells using anti-RELB antibody (Cat#AGI1637, 1:2,000). Green, isotype control; red, RELB.



Immunocytochemical staining of C2C12 cells with anti-RELB antibody (Cat#AGI1637, 1:1,000). Nuclei were stained blue with DAPI; RELB was stained magenta with Alexa Fluor® 647. Images were taken using Leica stellaris 5. Protein abundance based on laser Intensity and smart gain: Medium. Scale bar: $20~\mu m$.