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# C-rel (NFkB) Antibody (C-term)

Purified Rabbit Polyclonal Antibody (Pab)
Catalog # AP6336c

## Product Information

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| **Application** | WB, E |
| **Primary Accession** | Q04864 |
| **Reactivity** | Human, Mouse |
| **Host** | Rabbit |
| **Clonality** | Polyclonal |
| **Isotype** | Rabbit IgG |
| **Clone Names** | RB8325 |
| **Calculated MW** | 68520 |
| **Antigen Region** | 586-619 |

## Additional Information

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| **Gene ID** | 5966 |
| **Other Names** | Proto-oncogene c-Rel, REL |
| **Target/Specificity** | This C-rel (NFkB) antibody is generated from rabbits immunized with a KLH conjugated synthetic peptide between 586-619 amino acids from the C-terminal region of human C-rel (NFkB). |
| **Dilution** | WB~~1:1000 E~~Use at an assay dependent concentration. |
| **Format** | Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide. This antibody is purified through a protein A column, followed by peptide affinity purification. |
| **Storage** | Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles. |
| **Precautions** | C-rel (NFkB) Antibody (C-term) is for research use only and not for use in diagnostic or therapeutic procedures. |

## Protein Information

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| **Name** | REL |
| **Function** | Proto-oncogene that may play a role in differentiation and lymphopoiesis. 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. The NF-kappa-B heterodimer RELA/p65- c-Rel is a transcriptional activator.

**Cellular Location** Nucleus.

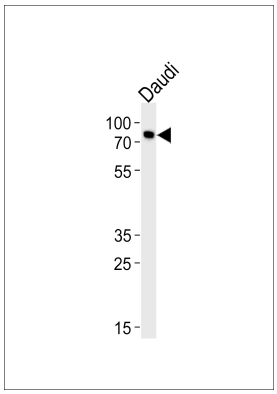
## Background

Nuclear factor (NF)-kappa B is a sequence specific transcriptional activator that binds to the intronic enhancer of kappa light chain gene in B lymphocytes. NF-kB regulates the expression of a wide variety of genes that involved in apoptosis, viral life cycle, tumorigenesis, autoimmune diseases and inflammation. NF-kB is a heterodimer of members of the rel family of proteins such as p50, p65, and c-rel. In most cells, inhibitory IkB proteins sequester NF-kB/Rel in the cytoplasm. Cellular stimulation precipitates degradation of IkB and modification of NF-kB/Rel proteins, permitting translocation of NF-kB/Rel (c-Rel and RelA) to the nucleus for action on target genes. The important role of c-Rel in B-cell development, growth, and survival has been intensively studied, as well as its function in differentiation and lymphopoiesis (particularly lymphoid cancer).

## References

Jain, A., et al., J. Clin. Invest. 114(11):1593-1602 (2004).
Xiao, Q., et al., Appl. Immunohistochem. Mol. Morphol. 12(3):211-215 (2004).
Houldsworth, J., et al., Blood 103(5):1862-1868 (2004).
Phelps, C.B., et al., Oncogene 23(6):1229-1238 (2004).
Bernard, D., et al., Cancer Res. 64(2):472-481 (2004).

## Images




Western blot analysis of lysate from Daudi cell line, using C-rel (NFkB)-G601 Antibody(Cat. #AP6336c). AP6336c was diluted at 1:1000 at each lane. A goat anti-rabbit IgG H&L(HRP) at 1:5000 dilution was used as the secondary antibody. Lysate at 35ug.