



C-rel (NFkB) Antibody (C-term) Blocking Peptide

Synthetic peptide Catalog # BP6336c

# **Specification**

C-rel (NFkB) Antibody (C-term) Blocking Peptide - Product Information

Primary Accession <u>Q04864</u>

C-rel (NFkB) Antibody (C-term) Blocking Peptide - Additional Information

**Gene ID 5966** 

**Other Names** 

Proto-oncogene c-Rel, REL

## Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/pr oducts/AP6336c>AP6336c</a> was selected from the NFkB region of human C-rel (NFkB). A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

### **Format**

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### Storage

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

#### **Precautions**

This product is for research use only. Not for use in diagnostic or therapeutic procedures.

C-rel (NFkB) Antibody (C-term) Blocking Peptide - Protein Information

**Name REL** 

## **Function**

Proto-oncogene that may play a role in

# C-rel (NFkB) Antibody (C-term) Blocking Peptide - 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).

# C-rel (NFkB) Antibody (C-term) Blocking Peptide - 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).



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.

# C-rel (NFkB) Antibody (C-term) Blocking Peptide - Protocols

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

• Blocking Peptides