

#### c-Rel Antibody

Purified Mouse Monoclonal Antibody Catalog # AO1573a

### **Specification**

## c-Rel Antibody - Product Information

Application WB, IHC, ICC, E

Primary Accession <u>Q04864</u>

Reactivity Human, Mouse

Host Mouse
Clonality Monoclonal
Isotype IgG1

Calculated MW 68.5kDa KDa

**Description** 

The REL gene encodes c-Rel, a transcription factor that is a member of the Rel/NFKB family, which also includes RELA (MIM 164014), RELB (604758), NFKB1 (MIM 164011), and NFKB2 (MIM 164012). These proteins are related through a highly conserved N-terminal region termed the 'Rel domain,' which is responsible for DNA binding, dimerization, nuclear localization, and binding to the NFKB inhibitor.

#### **Immunogen**

Purified recombinant fragment of human c-Rel expressed in E. Coli. <br/> />

## **Formulation**

Ascitic fluid containing 0.03% sodium azide.

# c-Rel Antibody - Additional Information

**Gene ID 5966** 

#### **Other Names**

Proto-oncogene c-Rel, REL

#### **Dilution**

WB~~1/500 - 1/2000 IHC~~1/500 - 1/2000 ICC~~N/A

E~~1/10000

### **Storage**

Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C in small aliquots to prevent freeze-thaw cycles.

## **Precautions**

c-Rel Antibody is for research use only and not for use in diagnostic or therapeutic procedures.

# c-Rel Antibody - Protein Information



#### **Name REL**

#### **Function**

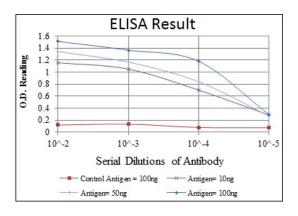
Proto-oncogene that may play a role in differentiation and lymphopoiesis. NF-kappa-B is a pleiotropic transcription factor which is present in almost all cell types and is involved in many biological processed such as inflammation, immunity, differentiation, cell growth, tumorigenesis and apoptosis. 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.

# c-Rel 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 Cytomety
- Cell Culture





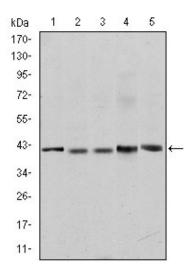


Figure 1: Western blot analysis using c-Rel mouse mAb against Jurkat (1), NIH/3T3 (2), Hela (3), HEK293 (4) and RAJI (5) cell lysate.

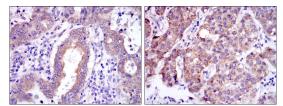


Figure 2: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues (left) and liver cancer tissues (right) using c-Rel mouse mAb with DAB staining.

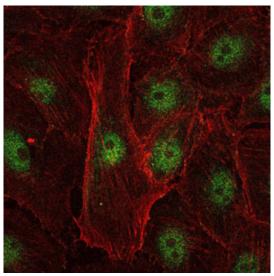


Figure 3: Immunofluorescence analysis of U251 cells using c-Rel mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.

# c-Rel Antibody - References

1. Gut. 2009 Aug;58(8):1078-83.2. Gene Expr. 2008;14(4):195-205.