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# c-Rel Antibody

Purified Mouse Monoclonal Antibody
Catalog # AO1573a

## Product Information

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| **Application** | WB, IHC, ICC, E |
| **Primary Accession** | Q04864 |
| **Reactivity** | Human, Mouse |
| **Host** | Mouse |
| **Clonality** | Monoclonal |
| **Clone Names** | 1E7 |
| **Isotype** | IgG1 |
| **Calculated MW** | 68520 |
| **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. |
| **Formulation** | Ascitic fluid containing 0.03% sodium azide. |

## Additional Information

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| **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. |

## 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.

## References

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

## Images

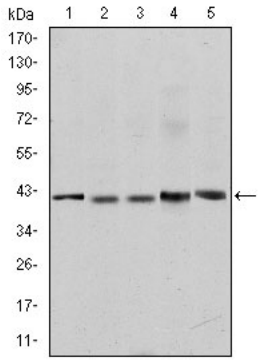


Figure 1: Western blot analysis using c-Rel mouse mAb against Jurkat (1), NIH/3T3 (2), Hela (3), HEK293 (4) and RAJI (5) cell lysate.

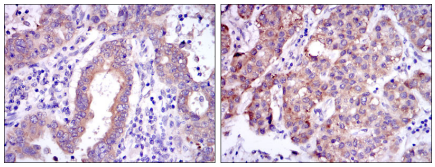

Figure 2: Immunohistochemical analysis of paraffin-embedded endometrial cancer tissues (left) and liver cancer tissues (right) using c-Rel mouse mAb with DAB staining.

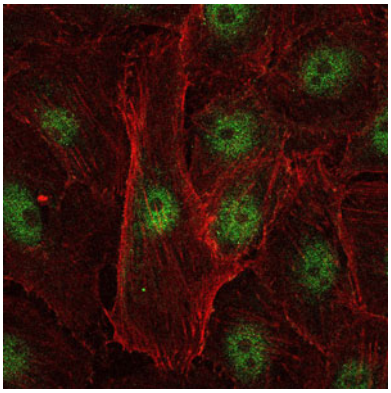

Figure 3: Immunofluorescence analysis of U251 cells using c-Rel mouse mAb (green). Blue: DRAQ5 fluorescent DNA dye. Red: Actin filaments have been labeled with Alexa Fluor-555 phalloidin.