

c-Rel (D4Y6M) Rabbit mAb

✓ 100 µl
(10 western blots)



Orders ■ 877-616-CELL (2355)
orders@cellsignaling.com
Support ■ 877-678-TECH (8324)
info@cellsignaling.com
Web ■ www.cellsignaling.com

New 07/13

For Research Use Only. Not For Use In Diagnostic Procedures.

Applications W Endogenous	Species Cross-Reactivity* H, M, R, (Mk)	Molecular Wt. 68-78 kDa	Isotype Rabbit IgG**
---------------------------------	--	----------------------------	-------------------------

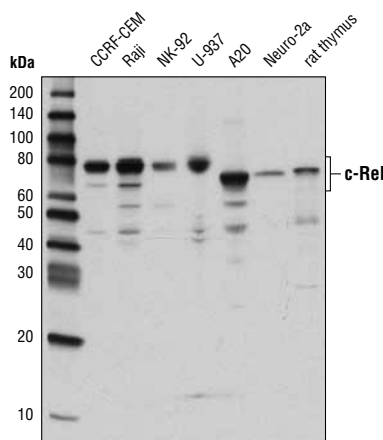
Background: Transcription factors of the nuclear factor κ B (NF- κ B)/Rel family play a pivotal role in inflammatory and immune responses (1,2). There are five family members in mammals: RelA, c-Rel, RelB, NF- κ B1 (p105/p50), and NF- κ B2 (p100/p52). Both p105 and p100 are proteolytically processed by the proteasome to produce p50 and p52, respectively. Rel proteins bind p50 and p52 to form dimeric complexes that bind DNA and regulate transcription. In unstimulated cells, NF- κ B is sequestered in the cytoplasm by I κ B inhibitory proteins (3-5). NF- κ B-activating agents can induce the phosphorylation of I κ B proteins, targeting them for rapid degradation through the ubiquitin-proteasome pathway and releasing NF- κ B to enter the nucleus where it regulates gene expression (6-8). NIK and IKK α (IKK1) regulate the phosphorylation and processing of NF- κ B2 (p100) to produce p52, which translocates to the nucleus (9-11).

c-Rel contains an amino-terminal DNA-binding domain referred to as the REL homology domain (REH) and carboxy-terminal transactivation domains. The c-Rel protein is typically inhibited in unstimulated cells by I κ B α and I κ B β . c-Rel expression is highest in hematopoietic cells with extensive research studies demonstrating its role in immune cell function and pathogenesis of disease (12,13).

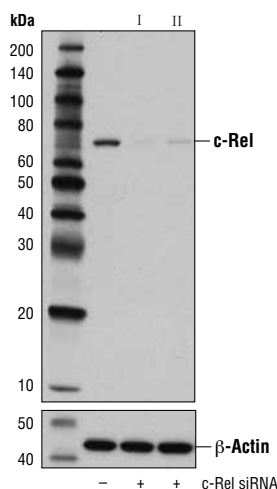
Specificity/Sensitivity: c-Rel (D4Y6M) Rabbit mAb recognizes endogenous levels of total c-Rel protein.

Source/Purification: Monoclonal antibody is produced by immunizing animals with a synthetic peptide corresponding to residues surrounding Leu65 of human c-Rel protein.

Western blot analysis of extracts from Neuro-2a cells, transfected with 100 nM SignalSilence® Control siRNA (Unconjugated) #6568 (-), SignalSilence® c-Rel siRNA I (Mouse Specific) #13058 (+) or SignalSilence® c-Rel siRNA II (Mouse Specific) #13170 (+), using c-Rel (D4Y6M) Rabbit mAb (upper) or β -Actin (D6A8) Rabbit mAb #8457 (lower). The c-Rel (D4Y6M) Rabbit mAb confirms silencing of c-Rel expression, while the β -Actin (D6A8) Rabbit mAb is used as a loading control.



Western blot analysis of extracts from various cell lines and tissues using c-Rel (D4Y6M) Rabbit mAb.



Entrez Gene ID #5966
UniProt ID #Q04864

Storage: Supplied in 10 mM sodium HEPES (pH 7.5), 150 mM NaCl, 100 µg/ml BSA, 50% glycerol and less than 0.02% sodium azide. Store at -20°C. Do not aliquot the antibody.

*Species cross-reactivity is determined by western blot.

**Anti-rabbit secondary antibodies must be used to detect this antibody.

Recommended Antibody Dilutions:

Western blotting 1:1000

For product specific protocols please see the web page for this product at www.cellsignaling.com.

Please visit www.cellsignaling.com for a complete listing of recommended complementary products.

Background References:

- (1) Baeuerle, P.A. and Henkel, T. (1994) *Annu Rev Immunol* 12, 141-79.
- (2) Baeuerle, P.A. and Baltimore, D. (1996) *Cell* 87, 13-20.
- (3) Haskill, S. et al. (1991) *Cell* 65, 1281-9.
- (4) Thompson, J.E. et al. (1995) *Cell* 80, 573-82.
- (5) Whiteside, S.T. et al. (1997) *EMBO J* 16, 1413-26.
- (6) Traenckner, E.B. et al. (1995) *EMBO J* 14, 2876-83.
- (7) Scherer, D.C. et al. (1995) *Proc Natl Acad Sci USA* 92, 11259-63.
- (8) Chen, Z.J. et al. (1996) *Cell* 84, 853-62.
- (9) Senftleben, U. et al. (2001) *Science* 293, 1495-9.
- (10) Coope, H.J. et al. (2002) *EMBO J* 21, 5375-85.
- (11) Xiao, G. et al. (2001) *Mol Cell* 7, 401-9.
- (12) Gilmore, T.D. and Gerondakis, S. (2011) *Genes Cancer* 2, 695-711.
- (13) Fullard, N. et al. (2012) *Int J Biochem Cell Biol* 44, 851-60.

IMPORTANT: For western blots, incubate membrane with diluted antibody in 5% w/v nonfat dry milk, 1X TBS, 0.1% Tween-20 at 4°C with gentle shaking, overnight.

Applications Key: W—Western IP—Immunoprecipitation IHC—Immunohistochemistry ChIP—Chromatin Immunoprecipitation IF—Immunofluorescence F—Flow cytometry E-P—ELISA-Peptide
Species Cross-Reactivity Key: H—human M—mouse R—rat Hm—hamster Mk—monkey Mi—mink C—chicken Dm—D. melanogaster X—Xenopus Z—zebrafish B—bovine
Dg—dog Pg—pig Sc—S. cerevisiae Ce—C. elegans Hr—horse All—all species expected Species enclosed in parentheses are predicted to react based on 100% homology.