# c-Rel (N-466): sc-272



The Power to Question

#### **BACKGROUND**

c-Rel is the cellular cognate of v-Rel, the avian reticuloendotheliosis virus strain T transforming gene. v-Rel encodes a phosphoprotein that is located in the cytoplasm of transformed spleen cells and in the nucleus of non-transformed fibroblasts, in contrast to the c-Rel protein, which is cytoplasmic. c-Rel has been shown to represent a constituent of the  $\kappa B$  site binding transcription factor NF $\kappa B$ , which plays a crucial role in the expression of immunoglobulin  $\kappa$  light chain gene. In contrast to c-Rel, v-Rel is truncated in its C-terminal transactivation domain and does not appear to function as a transcriptional transactivator. It has thus been postulated that v-Rel may interfere with the normal transcription of NF $\kappa B$  regulated genes and thus cause transformation by a mechanism analogous to v-ErbA, which binds to the thyroid hormone-responsive region in certain erythroid genes needed for differentiation, but cannot be activated by thyroid hormone.

## CHROMOSOMAL LOCATION

Genetic locus: REL (human) mapping to 2p16.1; Rel (mouse) mapping to 11 A3.2.

#### SOURCE

c-Rel (N-466) is a rabbit polyclonal antibody raised against amino acids 1-300 of c-Rel of human origin.

# **PRODUCT**

Each vial contains 200  $\mu g$  lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as agarose conjugate for immunoprecipitation, sc-272 AC, 500µg/ 0.25 ml agarose in 1 ml.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-272 X, 200  $\mu g/0.1$  ml.

## **APPLICATIONS**

c-Rel (N-466) is recommended for detection of c-Rel p75 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2  $\mu g$  per 100-500  $\mu g$  of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000). c-Rel (N-466) is also recommended for detection of c-Rel p75 in additional species, including canine and bovine.

Suitable for use as control antibody for c-Rel siRNA (h): sc-29857, c-Rel siRNA (m): sc-29858, c-Rel shRNA Plasmid (h): sc-29857-SH, c-Rel shRNA Plasmid (m): sc-29858-SH, c-Rel shRNA (h) Lentiviral Particles: sc-29857-V and c-Rel shRNA (m) Lentiviral Particles: sc-29858-V.

c-Rel (N-466) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of c-Rel: 75 kDa.

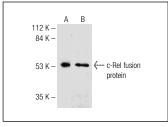
# **RESEARCH USE**

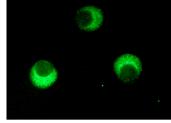
For research use only, not for use in diagnostic procedures.

### **STORAGE**

Store at 4° C, \*\*DO NOT FREEZE\*\*. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

## DATA





Western blot analysis of human recombinant c-Rel (**A,B**) fusion proteins. Antibodies tested include c-Rel (N): sc-70 (**A**) and c-Rel (N-466): sc-272 (**B**).

c-Rel (N-466): sc-272. Immunofluorescence staining of methanol-fixed KNRK cells showing cytoplasmic localization.

#### **SELECT PRODUCT CITATIONS**

- Singh, S., et al. 1996. Capsaicin (8-methyl-N-vanillyl-6-nonenamide) is a
  potent inhibitor of nuclear transcription factor-κB activation by diverse
  agents. J. Immunol. 157: 4412-4420.
- 2. Luhm, J., et al. 2006.  $\beta$ -(1 $\rightarrow$ 3)-D-glucan modulates DNA binding of nuclear factors  $\kappa$ B, AT and IL-6 leading to an anti-inflammatory shift of the IL-1 $\beta$ /IL-1 receptor antagonist ratio. BMC Immunol. 7: 5.
- 3. Dai, R., et al. 2007. Despite inhibition of nuclear localization of NF $\kappa$ B p65, c-Rel, and RelB, 17- $\beta$  estradiol up-regulates NF $\kappa$ B signaling in mouse splenocytes: the potential role of Bcl-3. J. Immunol. 179: 1776-1783.
- 4. Pandey, R., et al. 2007. NKp30 ligation induces rapid activation of the canonical NF-κB pathway in NK cells. J Immunol. 179: 7385-7396.
- Morello, S., et al. 2009. CI-IB-MECA enhances TRAIL-induced apoptosis via the modulation of NFκB signalling pathway in thyroid cancer cells. J. Cell. Physiol. 221: 378-386.
- 6. Göransson, M., et al. 2009. The myxoid liposarcoma FUS-DDIT3 fusion oncoprotein deregulates NF $\kappa$ B target genes by interaction with NFKBIZ. Oncogene 28: 270-278.
- Majewski, P.M., et al. 2010. Cooperative role of NFκB and poly(ADP-ribose) polymerase 1 (PARP-1) in the TNF-induced inhibition of PHEX expression in osteoblasts. J. Biol. Chem. 285: 34828-34838.
- Wagner, T., et al. 2015. Sumoylation of HDAC2 promotes NF-κB-dependent gene expression. Oncotarget 6: 7123-7135.



Try **c-Rel (B-6):** sc-6955 or **c-Rel (D-6):** sc-373713, our highly recommended monoclonal alternatives to c-Rel (N-466). Also, for AC, HRP, FITC, PE, Alexa Fluor<sup>®</sup> 488 and Alexa Fluor<sup>®</sup> 647 conjugates, see **c-Rel (B-6):** sc-6955.