

# c-Rel (G-7): sc-365720

## 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.

## REFERENCES

1. Theilen, G., et al. 1966. Biological studies with RE virus (strain T) that induces reticuloendotheliosis in turkeys, chickens, and Japanese quail. *J. Natl. Cancer Inst.* 37: 747-749.
2. Franklin, R.B., et al. 1974. Isolation and characterization of reticuloendotheliosis virus transformed bone marrow cells. *Intervirology* 3: 342-352.
3. Gilmore, T.D., et al. 1986. Different localization of the product of the v-Rel oncogene in chicken fibroblasts and spleen cells correlates with transformation by REV-T. *Cell* 44: 791-800.
4. Sassone-Corsi, P., et al. 1988. Transcriptional autoregulation of the proto-oncogene fos. *Nature* 334: 314-319.

## CHROMOSOMAL LOCATION

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

## SOURCE

c-Rel (G-7) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 489-524 within the C-terminus of c-Rel of mouse origin.

## PRODUCT

Each vial contains 200  $\mu$ g IgG<sub>1</sub> kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-365720 X, 200  $\mu$ g/0.1 ml.

c-Rel (G-7) is available conjugated to agarose (sc-365720 AC), 500  $\mu$ g/0.25 ml agarose in 1 ml, for IP; to HRP (sc-365720 HRP), 200  $\mu$ g/ml, for WB, IHC(P) and ELISA; to either phycoerythrin (sc-365720 PE), fluorescein (sc-365720 FITC), Alexa Fluor<sup>®</sup> 488 (sc-365720 AF488), Alexa Fluor<sup>®</sup> 546 (sc-365720 AF546), Alexa Fluor<sup>®</sup> 594 (sc-365720 AF594) or Alexa Fluor<sup>®</sup> 647 (sc-365720 AF647), 200  $\mu$ g/ml, for WB (RGB), IF, IHC(P) and FCM; and to either Alexa Fluor<sup>®</sup> 680 (sc-365720 AF680) or Alexa Fluor<sup>®</sup> 790 (sc-365720 AF790), 200  $\mu$ g/ml, for Near-Infrared (NIR) WB, IF and FCM.

Blocking peptide available for competition studies, sc-365720 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

c-Rel (G-7) is recommended for detection of c-Rel p75 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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).

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 (G-7) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

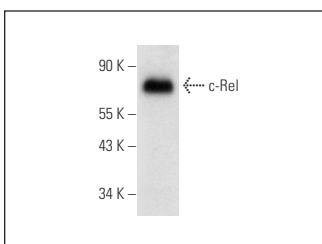
Molecular Weight of c-Rel: 75 kDa.

Positive Controls: K-562 nuclear extract: sc-2130, SP2/0 whole cell lysate: sc-364795 or Ramos cell lysate: sc-2216.

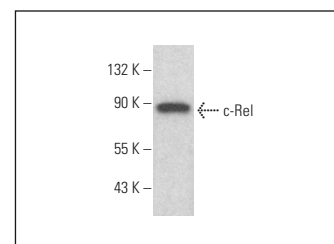
## RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG $\kappa$  BP-HRP: sc-516102 or m-IgG $\kappa$  BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker<sup>™</sup> Molecular Weight Standards: sc-2035, UltraCruz<sup>®</sup> Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgG $\kappa$  BP-FITC: sc-516140 or m-IgG $\kappa$  BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz<sup>®</sup> Mounting Medium: sc-24941 or UltraCruz<sup>®</sup> Hard-set Mounting Medium: sc-359850.

## DATA



c-Rel (G-7): sc-365720. Western blot analysis of c-Rel expression in SP2/0 whole cell lysate.



c-Rel (G-7): sc-365720. Western blot analysis of c-Rel expression in Ramos whole cell lysate.

## STORAGE

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

## RESEARCH USE

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

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