

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 κ B site binding transcription factor NF κ B, which plays a crucial role in the expression of immunoglobulin κ 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 κ 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: 731-743.
2. Franklin, R.B., et al. 1974. Isolation and characterization of reticuloendotheliosis virus transformed bone marrow cells. *Intervirology* 3: 342-352.

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 μ g IgG κ 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 μ g/0.1 ml.

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

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

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STORAGE

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

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 μ g per 100-500 μ 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.

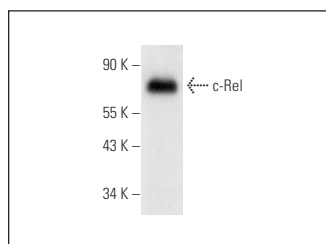
Molecular Weight of c-Rel: 75 kDa.

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

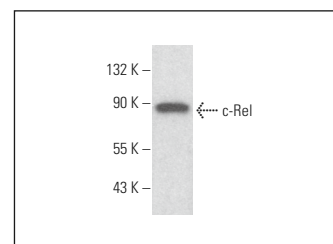
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgG κ BP-HRP: sc-516102 or m-IgG κ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, UltraCruz® 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 κ BP-FITC: sc-516140 or m-IgG κ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® 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.

SELECT PRODUCT CITATIONS

1. Jayawant, E., et al. 2023. NF κ B fingerprinting reveals heterogeneous NF κ B composition in diffuse large B-cell lymphoma. *Front. Oncol.* 13: 1181660.

RESEARCH USE

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