SANTA CRUZ BIOTECHNOLOGY, INC.

c-Rel (C): sc-71



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 κB site binding transcription factor NF κB , 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 κB 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 (C) is available as either rabbit (sc-71) or goat (sc-71-G) polyclonal affinity purified antibody raised against a peptide mapping within the C-terminus of c-Rel of mouse origin.

PRODUCT

Each vial contains 100 μg (sc-71) or 200 μg (sc-71-G) lgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-71 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-71 X, 100 μ g/0.1 ml.

Available as fluorescein (sc-71 FITC) or rhodamine (sc-71 TRITC) conjugates for use in immunofluorescence, 200 µg/1 ml; as Alexa Fluor[®] 405 (sc-71 AF405), Alexa Fluor[®] 488 (sc-71 AF488) or Alexa Fluor[®] 647 (sc-71 AF647) conjugates for immunofluorescence; 100 µg/2 ml.

APPLICATIONS

c-Rel (C) 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 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (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.

Molecular Weight of c-Rel: 75 kDa.

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 c-Rel expression in RAW 264.7 (A) and MM-142 (B) whole cell lysates. Antibodies tested include c-Rel (C)-G: sc-71-G (A) and c-Rel (C): sc-71 (B). c-Rel (C): sc-71. Cytoplasmic immunofluorescence staining of non-induced NIH/313 mouse cells (**A**). Immunoperoxidase staining of formalin fixed, paraffinembedded human pancreas tissue showing cytoplasmic staining of glandular cells (**B**).

SELECT PRODUCT CITATIONS

- Lo, A.H., et al. 2002. Carnosol, an antioxidant in rosemary, suppresses inducible nitric oxide synthase through down-regulating nuclear factor-κB in mouse macrophages. Carcinogenesis 23: 983-991.
- 2. Zoja, C., et al. 2002. Shiga toxin-2 triggers endothelial leukocyte adhesion and transmigration via NF κ B dependent up-regulation of IL-8 and MCP-1. Kidney Int. 62: 846-856.
- Ramakrishnan, P., et al. 2011. Sam68 is required for both NFκB activation and apoptosis signaling by the TNF receptor. Mol. Cell 43: 167-179.
- Ramakrishnan, P., et al. 2011. Anti-apoptotic effect of hyperglycemia can allow survival of potentially autoreactive T cells. Cell Death Differ. 18: 690-699.
- Chu, Y., et al. 2011. B cells lacking the tumor suppressor TNFAIP3/A20 display impaired differentiation and hyperactivation and cause inflammation and autoimmunity in aged mice. Blood 117: 2227-2236.
- Chiba, T., et al. 2012. Interleukin-1β accelerates the onset of stroke in stroke-prone spontaneously hypertensive rats. Mediators Inflamm. 2012: 701976.

RESEARCH USE

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

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MONOS Satisfation Guaranteed Try c-Rel (B-6): sc-6955 or c-Rel (D-6): sc-373713, our highly recommended monoclonal alternatives to c-Rel (C). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see c-Rel (B-6): sc-6955.