

c-Rel (N): sc-70



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 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.

CHROMOSOMAL LOCATION

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

SOURCE

c-Rel (N) is available as either rabbit (sc-70) or goat (sc-70-G) polyclonal affinity purified antibody raised against a peptide mapping within the N-terminus of c-Rel of human origin.

PRODUCT

Each vial contains either 100 μ g (sc-70) or 200 μ g (sc-70-G) IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Blocking peptide available for competition studies, sc-70 P, (100 μ g 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-70 X, 200 μ g/0.1 ml.

APPLICATIONS

c-Rel (N) 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 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

c-Rel (N) is also recommended for detection of c-Rel p75 in additional species, including equine, canine, bovine and porcine.

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) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

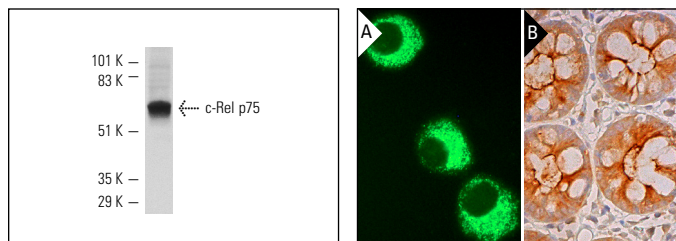
Molecular Weight of c-Rel: 75 kDa.

Positive Controls: KNRK whole cell lysate: sc-2214.

STORAGE

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

DATA



c-Rel (N): sc-70. Western blot analysis of c-Rel expression in uninduced KNRK whole cell lysate.

c-Rel (N): sc-70. Immunofluorescence staining of methanol-fixed KNRK cells showing cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing cytoplasmic staining of glandular cells and endothelial cells (B).

SELECT PRODUCT CITATIONS

1. Bourcier, T., et al. 1997. The NF κ B signaling pathway participates in dysregulation of vascular smooth muscle cells *in vitro* and in human atherosclerosis. *J. Biol. Chem.* 272: 15817-15824.
2. Haddad, J.J. et al. 2009. Endotoxin-mediated regulation of nuclear factor κ B nuclear translocation and activation in the hippocampus of the central nervous system: modulation by intracerebroventricular treatment with thymulin and the immunomodulatory role of the I κ B- α /pI κ B- α pathway. *Neuroscience* 164: 1509-1520.
3. Mishra, A., et al. 2010. Transactivation and expression patterns of Jun and Fos/AP-1 super-family proteins in human oral cancer. *Int. J. Cancer* 126: 819-829.
4. Han, S.S., et al. 2010. NF κ B/STAT3/PI3K signaling crosstalk in iMyc E μ B lymphoma. *Mol. Cancer* 9: 97.
5. Song, S., et al. 2011. A requirement for the p85 PI3K adapter protein BCAP in the protection of macrophages from apoptosis induced by endoplasmic reticulum stress. *J. Immunol.* 187: 619-625.
6. Alvarez, Y., et al. 2011. Notch- and transducin-like enhancer of split (TLE)-dependent histone deacetylation explain interleukin 12 (IL-12) p70 inhibition by zymosan. *J. Biol. Chem.* 286: 16583-16595.

RESEARCH USE

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

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