SANTA CRUZ BIOTECHNOLOGY, INC.

RelB (C-4): sc-48379

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The NFκB transcription factor was originally identified as a protein complex consisting of a DNA binding subunit and an associated protein. The DNA binding subunit is functionally related to c-Rel p75 and Rel B p68. The p50 subunit was initially believed to be a functionally unique protein derived from the amino terminus of a precursor designated p105. A second protein, designated p52 (previously referred to as p49), has been identified; it can act as an alternative NFκB subunit. RelB does not bind with high affinity to NFκB sites, but heterodimers between RelB and p50 bind with an affinity comparable to that of p50 NFκB homodimers. However, RelB/p50 hetero-dimers, in contrast to NFκB heterodimers, transactivates transcription of promotors containing κB binding sites.

REFERENCES

1. Sen, R. and Baltimore, D. 1986. Multiple nuclear factors interact with the immunoglobulin enhancer sequences. Cell 46: 705-716.
2. Baeuerle, P.A. and Baltimore, D. 1989. A 65 kDa subunit of active NFκB is required for inhibition of NFκB by IκB. Genes Dev. 3: 1689-1698.
3. Gilmore, T. 1990. NFκB, κBFI dorsal and related matters. Cell 62: 841-843.
4. Ghosh, S., et al. 1990. Cloning of the p50 DNA binding subunit of NFκB: homology to rel and dorsal. Cell 62: 1019-1029.

CROMOSOMAL LOCATION

Genetic locus: RELB (human) mapping to 19q13.32; Relb (mouse) mapping to 7 A3.

SOURCE

RelB (C-4) is a mouse monoclonal antibody raised against amino acids 380-579 of RelB of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

RelB (C-4) is recommended for detection of RelB 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 RelB siRNA (h): sc-36402, RelB siRNA (m): sc-36403, RelB shRNA Plasmid (h): sc-36402-SH, RelB shRNA Plasmid (m): sc-36403-SH, RelB shRNA (h) Lentiviral Particles: sc-36402-V and RelB shRNA (m) Lentiviral Particles: sc-36403-V.

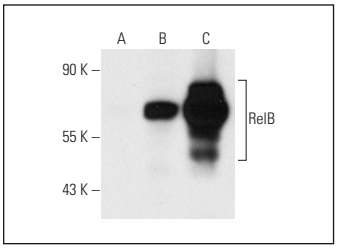
Molecular Weight of RelB: 68 kDa.

Positive Controls: RelB (h): 293T Lysate: sc-114651, NIH/3T3 whole cell lysate: sc-2210 or HeLa whole cell lysate: sc-2200.

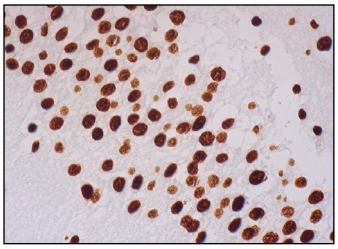
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ 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-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850. 4) Immunohistochemistry: use m-IgGκ BP-HRP: sc-516102 with DAB, 50X: sc-24982 and Immunohistomount: sc-45086, or Organo/Limonene Mount: sc-45087.

DATA



RelB (C-4): sc-48379. Western blot analysis of RelB expression in non-transfected 293T: sc-117752 (**A**), human RelB transfected 293T: sc-114651 (**B**) and HeLa (**C**) whole cell lysates.



RelB (C-4): sc-48379. Immunoperoxidase staining of formalin fixed, paraffin-embedded human hippocampus tissue showing nuclear staining of neuronal cells and glial cells.

SELECT PRODUCT CITATIONS

1. Xiao, X., et al. 2018. Guidance of super-enhancers in regulation of IL-9 induction and airway inflammation. J. Exp. Med. 215: 559-574.
2. Shudofsky, A.M.D. and Giam, C.Z. 2019. Cells of adult T-cell leukemia evade HTLV-1 Tax/NFκB hyperactivation-induced senescence. Blood Adv. 3: 564-569.

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.

PROTOCOLS

See our web site at www.scbt.com for detailed protocols and support products.

CONJUGATES

See **RelB (D-4): sc-48366** for RelB antibody conjugates, including AC, HRP, FITC, PE, and Alexa Fluor® 488, 546, 594, 647, 680 and 790.