

# RelB (F-2): sc-166417

## 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 that can act as an alternative NFκB subunit. Rel B does not bind with high affinity to NFκB sites, but heterodimers between Rel B and p50 bind with an affinity comparable to that of p50 NFκB homodimers. However, Rel B/p50 heterodimers, in contrast to NFκB heterodimers, transactivates transcription of promoters 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, KBF1 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.
5. Bours, V., et al. 1990. Cloning of a mitogen-inducible gene encoding a κB DNA-binding protein with homology to the Rel oncogene and to cell cycle motifs. *Nature* 348: 76-80.
6. Schmid, R.M., et al. 1991. Cloning of an NFκB subunit which stimulates HIV transcription in synergy with p65. *Nature* 352: 733-736.
7. Ryseck, R.P., et al. 1992. Rel B, a new Rel family transcription activator that can interact with p50 NFκB. *Mol. Cell. Biol.* 12: 674-684.

## CHROMOSOMAL LOCATION

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

## SOURCE

RelB (F-2) is a mouse monoclonal antibody specific for an epitope mapping between amino acids 532-558 at the C-terminus of RelB of mouse origin.

## PRODUCT

Each vial contains 200 µg IgG<sub>2a</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-166417 X, 200 µg/0.1 ml.

Blocking peptide available for competition studies, sc-166417 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## STORAGE

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

## APPLICATIONS

RelB (F-2) is recommended for detection of RelB p68 of mouse, rat and human origin by Western Blotting (starting dilution 1:100, 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) 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.

RelB (F-2) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

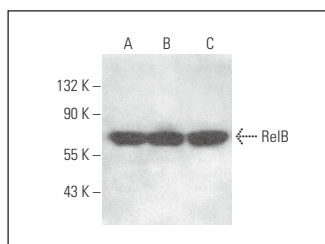
Molecular Weight of RelB: 68 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200, Raji whole cell lysate: sc-364236 or Ramos cell lysate: sc-2216.

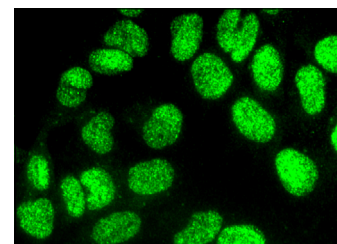
## RECOMMENDED SUPPORT REAGENTS

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.

## DATA



RelB (F-2): sc-166417. Western blot analysis of RelB expression in Raji (A), HeLa (B) and Ramos (C) whole cell lysates.



RelB (F-2): sc-166417. Immunofluorescence staining of formalin-fixed Hep G2 cells showing nuclear localization.

## RESEARCH USE

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



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.