

# RelB (A-9): sc-166416

## BACKGROUND

The NF $\kappa$ B 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 NF $\kappa$ B subunit. Rel B does not bind with high affinity to NF $\kappa$ B sites, but heterodimers between Rel B and p50 bind with an affinity comparable to that of p50 NF $\kappa$ B homodimers. However, Rel B/p50 heterodimers, in contrast to NF $\kappa$ B heterodimers, transactivates transcription of promoters containing  $\kappa$ B binding sites.

## CHROMOSOMAL LOCATION

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

## SOURCE

RelB (A-9) 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  $\mu$ g IgG<sub>3</sub> 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-166416 X, 200  $\mu$ g/0.1 ml.

Blocking peptide available for competition studies, sc-166416 P, (100  $\mu$ g peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

## APPLICATIONS

RelB (A-9) 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  $\mu$ g per 100-500  $\mu$ 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 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 (A-9) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of RelB: 68 kDa.

Positive Controls: Raji whole cell lysate: sc-364236, BJAB whole cell lysate: sc-2207 or RelB (h): 293T Lysate: sc-114651.

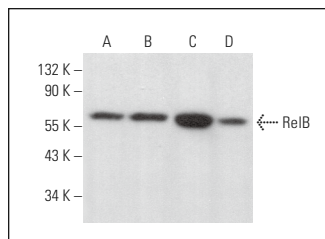
## STORAGE

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

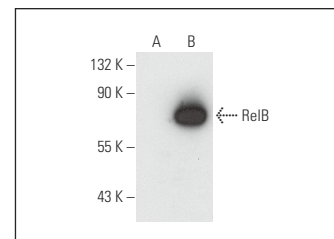
## RESEARCH USE

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

## DATA



RelB (A-9): sc-166416. Western blot analysis of RelB expression in Raji (A), BJAB (B), NAMALWA (C) and GA-10 (D) whole cell lysates.



RelB (A-9): sc-166416. Western blot analysis of RelB expression in non-transfected: sc-117752 (A) and human RelB transfected: sc-114651 (B) 293T whole cell lysates.

## SELECT PRODUCT CITATIONS

- Chen, P., et al. 2017. MicroRNA-449a modulates medullary thymic epithelial cell differentiation. *Sci. Rep.* 7: 15915.
- Mondragón, L., et al. 2019. GAPDH overexpression in the T cell lineage promotes angioimmunoblastic T cell lymphoma through an NF $\kappa$ B-dependent mechanism. *Cancer Cell* 36: 268-287.
- Soto, M., et al. 2020. Targeting the protective arm of the Renin-Angiotensin system to reduce systemic lupus erythematosus related pathologies in MRL-lpr mice. *Front. Immunol.* 11: 1572.
- Sun, Z., et al. 2020. 17 $\beta$ -estradiol promotes trained immunity in females against sepsis via regulating nucleus translocation of RelB. *Front. Immunol.* 11: 1591.
- Gargaro, M., et al. 2022. Indoleamine 2,3-dioxygenase 1 activation in mature cDC1 promotes tolerogenic education of inflammatory cDC2 via metabolic communication. *Immunity* 55: 1032-1050.e14.
- Zhang, L., et al. 2022. Expression of nuclear factor  $\kappa$  B in ovine maternal inguinal lymph nodes during early pregnancy. *BMC Vet. Res.* 18: 266.
- Yang, L., et al. 2022. Changes in expression of nuclear factor  $\kappa$  B subunits in the ovine thymus during early pregnancy. *Sci. Rep.* 12: 17683.

## PROTOCOLS

See our web site at [www.scbt.com](http://www.scbt.com) for detailed protocols and support products.



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.