SANTA CRUZ BIOTECHNOLOGY, INC.

NFκB p50 (H-119): sc-7178

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Proteins encoded by the v-Rel viral oncogene and its cellular homolog, c-Rel, are members of a family of transcription factors that include the two subunits of the transcription factor NFκB (p50 and p65) and the *Drosophila* maternal morphagen, dorsal. These proteins share sequence homology over a region of 300 amino acids at their NH_2-terminus, the region that contains their DNA binding and dimerization domains. The DNA binding activity of NFκB is activated and rapidly transported from the cytoplasm to the nucleus in cells exposed to mitogens or growth factors. cDNAs encoding precursors for two distinct proteins have been described. These proteins, designated p105 and p100, are highly related but map on different chromosomes. The p105 (p110) precursor contains p50 at its N-terminus and a C-terminal region that when expressed as a separate molecule, designated PdI, binds to p50 and regulates its activity.

CHROMOSOMAL LOCATION

Genetic locus: NFKB1 (human) mapping to 4q24; Nfkb1 (mouse) mapping to 3 G3.

SOURCE

NFκB p50 (H-119) is a rabbit polyclonal antibody raised against amino acids 120-239 mapping at the N-terminus of NFκB p50 of human origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

Available as TransCruz reagent for Gel Supershift and ChIP applications, sc-7178 X, 200 µg/0.1 ml.

APPLICATIONS

NFκB p50 (H-119) is recommended for detection of NFκB p50 and p105 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) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

NFκB p50 (H-119) is also recommended for detection of NFκB p50 and p105 in additional species, including equine, canine, bovine and porcine.

NFκB p50 (H-119) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NFκB p50 : 50 kDa.

Molecular Weight of NFκB p105: 105 kDa.

Positive Controls:A-431 whole cell lysate : sc-2201, K-562 whole cell lysate : sc-2203 or SW480 nuclear extract : sc-2155.

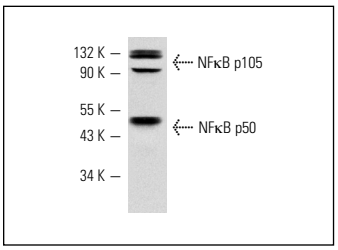
STORAGE

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

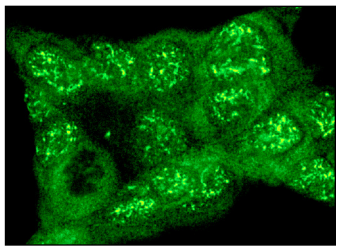
RESEARCH USE

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

DATA



NFκB p50 (H-119): sc-7178. Western blot analysis of NFκB p50 and p105 expression in A-431 whole cell lysate.



NFκB p50 (H-119): sc-7178. Immunofluorescence staining of methanol-fixed A-431 cells showing cytoplasmic and nuclear staining.

SELECT PRODUCT CITATIONS

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3. Jang, M.J., et al. 2011. UCH-L1 promotes cancer metastasis in prostate cancer cells through EMT induction. Cancer Lett. 302: 128-135.
4. Choo, K.B., et al. 2011. Nuclear factor κB and tumor necrosis factor-α modulation of transcription of the mouse testis- and pre-implantation development-specific Rnf33/Trim60 gene. FEBS J. 278: 837-850.
5. Ramakrishnan, P., et al. 2011. Sam68 is required for both NFκB activation and apoptosis signaling by the TNF receptor. Mol. Cell 43: 167-179.
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.
7. Donica, C.L., et al. 2011. Orphanin FQ/nociceptin activates nuclear factor κB. J. Neuroimmune Pharmacol. 6: 617-625.
8. Inglés-Esteve, J., et al. 2012. Inhibition of specific NFκB activity contributes to the tumor suppressor function of 14-3-3σ in breast cancer. PLoS ONE 7: e38347.
9. Skrypek, N., et al. 2013. The MUC4 mucin mediates gemcitabine resistance of human pancreatic cancer cells via the concentrative nucleoside transporter family. Oncogene 32: 1714-1723.