SANTA CRUZ BIOTECHNOLOGY, INC.

NFκB p65 (C-20): sc-372

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 morphogen, dorsal. Both proteins specifically bind to DNA sequences that are the same or slight variations of the 10 bp κB sequence in the immunoglobulin κ light chain enhancer. This same sequence is also present in a number of other cellular and viral enhancers. The DNA binding activity of NFκB is activated and NFκB is subsequently transported from the cytoplasm to the nucleus in cells exposed to mitogens or growth factors. cDNAs encoding precursors for two distinct proteins of the same size have been described, designated p105 and p100. The p105 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: RELA (human) mapping to 11q13.1; Rela (mouse) mapping to 19 A.

SOURCE

NFκB p65 (C-20) is available as either rabbit (sc-372) or goat (sc-372-G) affinity purified polyclonal antibody raised against a peptide mapping at the C-terminus of NFκB p65 of human origin.

PRODUCT

Each vial contains either 100 µg (sc-372) or 200 µg (sc-372-G) IgG 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-372 X, 100 µg/0.1 ml.

NFκB p65 (C-20) is available conjugated to agarose (sc-372 AC), 500 µg/ 0.25 ml agarose in 1 ml, for IP.

Blocking peptide available for competition studies, sc-372 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% stabilizer protein).

APPLICATIONS

NFκB p65 (C-20) is recommended for detection of NFκB p65 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 p65 (C-20) is also recommended for detection of NFκB p65 in additional species, including equine, canine, bovine and porcine.

Suitable for use as control antibody for NFκB p65 siRNA (h): sc-29410, NFκB p65 siRNA (m): sc-29411, NFκB p65 shRNA Plasmid (h): sc-29410-SH, NFκB p65 shRNA Plasmid (m): sc-29411-SH, NFκB p65 shRNA (h) Lentiviral Particles: sc-29410-V and NFκB p65 shRNA (m) Lentiviral Particles: sc-29411-V.

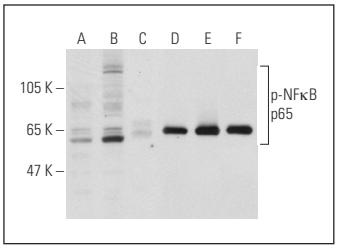
NFκB p65 (C-20) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NFκB p65: 65 kDa.

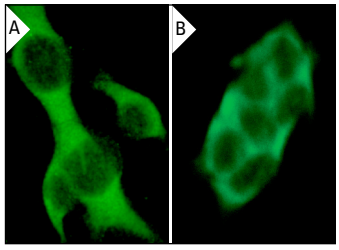
STORAGE

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

DATA



Western blot analysis of NFκB p65 phosphorylation in untreated (**A**,**D**), TNFα and calyculin A treated (**B**,**E**) and TNFα, calyculin and lambda protein phosphatase (sc-200312A) treated (**C**,**F**) HeLa whole cell lysates. Antibodies tested include p-NFκB p65 (Ser 311): sc-33039 (**A**,**B**,**C**) and NFκB p65 (C-20): sc-372 (**D**,**E**,**F**).



NFκB p65 (C-20): sc-372. (**A**) Immunofluorescence staining of methanol-fixed NIH/3T3 cells showing cytoplasmic staining. (**B**) NFκB p65 (C-20)-G: sc-372-G. Immunofluorescence staining of methanol-fixed A-431 cells showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

1. Jones, H.W., et al. 1989. The place of colposcopy and related systems in gynecological practice and research. J. Reprod. Med. 34: 75.
2. Zhang, Z., et al. 2015. Interferon regulatory factor 1 marks activated genes and can induce target gene expression in systemic lupus erythematosus. Arthritis Rheumatol. 67: 785-796.
3. Xie, Z., et al. 2015. MMSET regulates expression of IRF4 in t(4;14) myeloma and its silencing potentiates the effect of bortezomib. Leukemia 29: 2347-2354.
4. Simon, P.S., et al. 2015. The NFκB p65 and p50 homodimer cooperate with IRF8 to activate iNOS transcription. BMC Cancer 15: 770.
5. Todorovi , N., et al. 2016. Olanzapine modulation of hepatic oxidative stress and inflammation in socially isolated rats. Eur. J. Pharm. Sci. 81: 94-102.
6. Bugajev, V., et al. 2016. Negative regulatory roles of ORMDL3 in the FcεRI-triggered expression of proinflammatory mediators and chemotactic response in murine mast cells. Cell. Mol. Life Sci. 73: 1265-1285.
7. Chaudhary, P., et al. 2016. HSP70 binding protein 1 (HspBP1) suppresses HIV-1 replication by inhibiting NF-κB mediated activation of viral gene expression. Nucleic Acids Res. 44: 1613-1629.

RESEARCH USE

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

MONOS Satisfaction Guaranteed

Try **NFκB p65 (F-6): sc-8008** or **NFκB p65 (A-12): sc-514451**, our highly recommended monoclonal alternatives to NFκB p65 (C-20). Also, for AC, HRP, FITC, PE, Alexa Fluor® 488 and Alexa Fluor® 647 conjugates, see **NFκB p65 (F-6): sc-8008**.