

NFκB p50 (C-19): sc-1190

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. These proteins share sequence homology over a region of 300 amino acids at their NH₂-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 Pdl, 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 (C-19) is an affinity purified goat polyclonal antibody raised against a peptide mapping at the C-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.

Blocking peptide available for competition studies, sc-1190 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

Available as agarose conjugate for immunoprecipitation, sc-1190 AC, 500 μg/0.25 ml agarose in 1 ml; and as TransCruz reagent for Gel Supershift and ChIP applications, sc-1190 X, 200 μg/0.1 ml.

APPLICATIONS

NFκB p50 (C-19) 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), 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).

NFκB p50 (C-19) is also recommended for detection of NFκB p50 and p105 in additional species, including equine, canine, bovine, porcine and avian.

NFκB p50 (C-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

Molecular Weight of NFκB p50: 50 kDa.

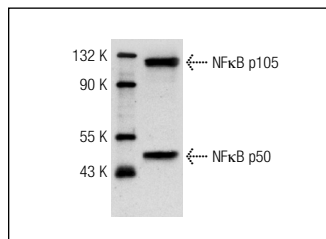
Molecular Weight of NFκB p100: 105 kDa.

Positive Controls: CTLL-2 cell lysate: sc-2242, K-562 whole cell lysate: sc-2203 or SW480 cell lysate: sc-2219.

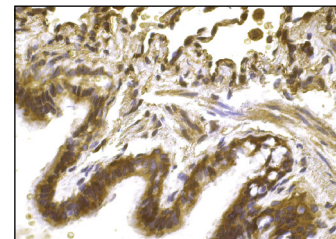
STORAGE

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

DATA



NFκB p50 (C-19): sc-1190. Western blot analysis of NFκB p50 and its precursor, p105, in CTLL-2 whole cell lysate.



NFκB p50 (C-19): sc-1190. Immunoperoxidase staining of formalin fixed, paraffin-embedded human lung tissue showing cytoplasmic staining of respiratory epithelial cells, smooth muscle cells and macrophages.

SELECT PRODUCT CITATIONS

- Chen, L., et al. 2001. Duration of nuclear NFκB action regulated by reversible acetylation. *Science* 293: 1653-1657.
- Alcón, S., et al. 2001. Relaxation of canine gallbladder to nerve stimulation involves adrenergic and non-adrenergic non-cholinergic mechanisms. *Neurogastroenterol. Motil.* 13: 555-566.
- He, B., et al. 2010. The transmembrane activator TAC1 triggers immunoglobulin class switching by activating B cells through the adaptor MyD88. *Nat. Immunol.* 11: 836-845.
- Annunziata, C.M., et al. 2010. Nuclear factor κB transcription factors are coexpressed and convey a poor outcome in ovarian cancer. *Cancer* 116: 3276-3284.
- Yeh, P.Y., et al. 2011. IκB kinases increase Myc protein stability and enhance progression of breast cancer cells. *Mol. Cancer* 10: 53.
- Jimenez-Vergara, A.C., et al. 2011. Influence of glycosaminoglycan identity on vocal fold fibroblast behavior. *Acta Biomater.* 7: 3964-3972.
- Garcia-Garcia, F.J., et al. 2012. Signal transduction pathways (MAPKs, NFκB, and C/EBP) regulating COX-2 expression in nasal fibroblasts from asthma patients with aspirin intolerance. *PLoS One* 7: e51281.

RESEARCH USE

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



Try **NFκB p50 (E-10): sc-8414** or **NFκB p50 (D-6): sc-166588**, our highly recommended monoclonal alternatives to NFκB p50 (C-19). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see **NFκB p50 (E-10): sc-8414**.