

# p-NFκB p50 (Ser 927): sc-101756

## 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 NH<sub>2</sub>-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.

## REFERENCES

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2. Schmid, R.M., et al. 1991. Cloning of an NFκB subunit which stimulates HIV transcription in synergy with p65. *Nature* 352: 733-736.
3. Ballard, D.W., et al. 1992. The 65 kDa subunit of human NFκB functions as a potent transcriptional activator and a target for v-Rel-mediated repression. *Proc. Natl. Acad. Sci. USA* 89: 1875-1879.
4. Hatada, E.N., et al. 1992. The ankyrin repeat domains of the NFκB precursor p105 and the proto-oncogene Bcl-3 act as specific inhibitors of NFκB DNA binding. *Proc. Natl. Acad. Sci. USA* 89: 2489-2493.
5. Henkel, T., et al. 1992. Intramolecular masking of the nuclear location signal and dimerization domain in the precursor for the p50 NFκB subunit. *Cell* 69: 1121-1133.
6. Beg, A.A., et al. 1995. Embryonic lethality and liver degeneration in mice lacking the RelA component of NFκB. *Nature* 376: 167-170.
7. Huxford, T., et al. 1998. The crystal structure of the IκBa/NFκB complex reveals mechanisms of NFκB inactivation. *Cell* 95: 759-770.
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## CHROMOSOMAL LOCATION

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

## STORAGE

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

## SOURCE

p-NFκB p50 (Ser 927) is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Ser 927 of NFκB p50 of human origin.

## PRODUCT

Each vial contains 100 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

## APPLICATIONS

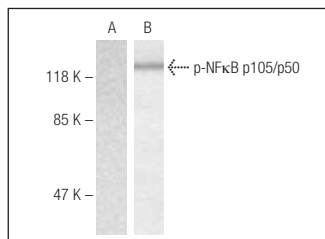
p-NFκB p50 (Ser 927) is recommended for detection of Ser 927 phosphorylated NFκB p105/p50 of human origin; correspondingly phosphorylated Ser 930 of mouse origin and correspondingly phosphorylated Ser 931 of rat origin of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution 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 immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500).

Molecular Weight of p-NFκB p105: 105 kDa.

Molecular Weight of p-NFκB p50: 50 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, HeLa whole cell lysate: sc-2200 or HeLa + Calyculin A cell lysate: sc-2271.

## DATA



p-NFκB p105/p50 (Ser 927): sc-101756. Western blot analysis of NFκB p105/p50 expression in untreated (A) and TNFα+Calyculin A-treated (B) HT-29 whole cell lysates.

## RESEARCH USE

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

## PROTOCOLS

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