SANTA CRUZ BIOTECHNOLOGY, INC.

p-NFκB p65 (Ser 536): sc-101752

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 have been described, designated p105 and p100. The p105 precursor contains p50 at its amino terminus and a C-terminal region that when expressed as a separate molecule, designated pdI, binds to p50 and regulates its activity. The NFκB transcription factor is a protein complex consisting of a DNA binding subunit and an associated protein. The DNA binding subunit, also referred to as Rel A, is functionally related to c-Rel p75 and RelB p68. NFκB p65 is phosphorylated at Serine 276 as a response to TNF.

CHROMOSOMAL LOCATION

Genetic locus: RELA (human) mapping to 11q13.1; Rela (mouse) mapping to 19 A.

SOURCE

p-NFκB p65 (Ser 536) is a rabbit polyclonal antibody raised against a short amino acid sequence containing Ser 536 phosphorylated NFκB p65 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 p65 (Ser 536) is recommended for detection of Ser 536 phosphorylated NFκB p65 of human origin; correspondingly phosphorylated Ser 534 of mouse origin and correspondingly phosphorylated Ser 535 of rat 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).

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 (m) Lentiviral Particles: sc-29411-V.

Molecular Weight of p-NFκB p65: 65 kDa.

Positive Controls: HeLa + TNFα cell lysate: sc-2228, NFκB p65 (m): 293T Lysate: sc-122027 or K-562 whole cell lysate: sc-2203.

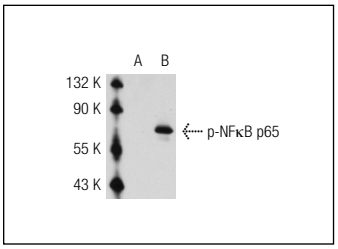
RESEARCH USE

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

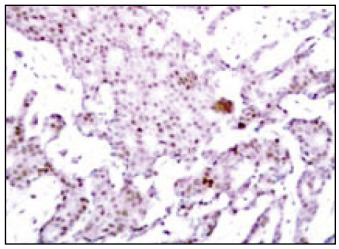
STORAGE

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

DATA



p-NFκB p65 (Ser 536): sc-101752. Western blot analysis of NFκB p65 phosphorylation in non-transfected: sc-117752 (**A**) and mouse NFκB p65 transfected: sc-122027 (**B**) 293T whole cell lysates.



p-NFκB p65 (Ser 536): sc-101752. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing nuclear staining.

SELECT PRODUCT CITATIONS

1. Yadav, U.C., et al. 2010. Protective role of benfotiamine, a fat-soluble vitamin B1 analogue, in lipopolysaccharide-induced cytotoxic signals in murine macrophages. Free Radic. Biol. Med. 48: 1423-1434.
2. Sun, D., et al. 2011. Cardioprotective effects of tanshinone IIA pretreatment via kinin B2 receptor-Akt-GSK-3β dependent pathway in experimental diabetic cardiomyopathy. Cardiovasc Diabetol. 10: 4.
3. Jiang, T., et al. 2012. Suppressing inflammation by inhibiting NFκB pathway contributes to the neuroprotection ofik Angiotensin-(1-7) in rats with permanent cerebral ischemia. Br. J. Pharmacol. 167: 1520-1532.
4. Hu, Y.M., et al. 2012. Glutamine administration ameliorates sepsis-induced kidney injury by downregulating the high-mobility group box protein-1-mediated pathway in mice. Am. J. Physiol. Renal Physiol. 302: F150-F158.
5. Pal, D., et al. 2012. Fetuin-A acts as an endogenous ligand of TLR4 to promote lipid-induced Insulin resistance. Nat. Med. 18: 1279-1285.

PROTOCOLS

See our web site at www.scbt.com or our catalog for detailed protocols and support products.