

# p-NFκB p65 (Ser 276): sc-101749

## 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 N-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 311 as a response to protein kinase C ζ.

## CHROMOSOMAL LOCATION

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

## SOURCE

p-NFκB p65 (Ser 276) is a rabbit polyclonal antibody raised against a short amino acid sequence containing phosphorylated Ser 276 of 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 276) is recommended for detection of Ser 276 phosphorylated 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 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 siRNA (r): sc-61876, NFκB p65 shRNA Plasmid (h): sc-29410-SH, NFκB p65 shRNA Plasmid (m): sc-29411-SH, NFκB p65 shRNA Plasmid (r): sc-61876-SH, NFκB p65 shRNA (h) Lentiviral Particles: sc-29410-V, NFκB p65 shRNA (m) Lentiviral Particles: sc-29411-V, and NFκB p65 shRNA (r) Lentiviral Particles: sc-61876-V.

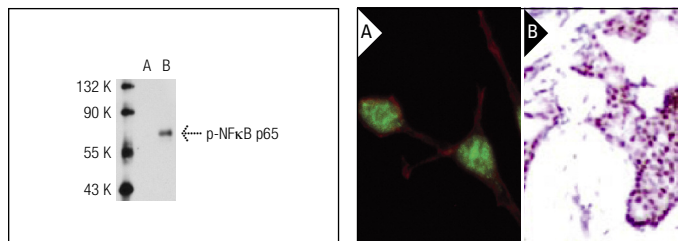
Molecular Weight of p-NFκB p65: 65 kDa.

Positive Controls: HeLa + TNFα cell lysate: sc-2228, NFκB p65 (m): 293T Lysate: sc-122027 or human breast carcinoma tissue.

## 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 276): sc-101749. 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 276): sc-101749. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear localization (A). Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing nuclear staining (B).

## SELECT PRODUCT CITATIONS

- Cheng, G., et al. 2009. IL-17 stimulates migration of carotid artery vascular smooth muscle cells in an MMP-9 dependent manner via p38 MAPK and ERK1/2-dependent NFκB and AP-1 activation. *Cell. Mol. Neurobiol.* 29: 1161-1168.
- Penna, G., et al. 2009. The vitamin D receptor agonist elocalcitol inhibits IL-8-dependent benign prostatic hyperplasia stromal cell proliferation and inflammatory response by targeting the RhoA/Rho kinase and NF-κB pathways. *Prostate* 69: 480-493.
- Kelleher, A.R., et al. 2010. STZ-induced skeletal muscle atrophy is associated with increased p65 content and downregulation of insulin pathway without NF-κB canonical cascade activation. *Acta Diabetol.* 47: 315-323.
- Macha, M.A., et al. 2011. Guggulsterone (GS) inhibits smokeless tobacco and nicotine-induced NF-κB and STAT3 pathways in head and neck cancer cells. *Carcinogenesis* 32: 368-380.
- Soetikno, V., et al. 2011. Curcumin ameliorates macrophage infiltration by inhibiting NF-κB activation and proinflammatory cytokines in streptozotocin induced-diabetic nephropathy. *Nutr. Metab.* 8: 35.

## 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.