

p-NFκB p65 (Ser 536): sc-33020

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.

Blocking peptide available for competition studies, sc-33020 P, (100 μg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

APPLICATIONS

p-NFκB p65 (Ser 536) is recommended for detection of Ser 536 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 (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).

p-NFκB p65 (Ser 536) is also recommended for detection of correspondingly phosphorylated NFκB p65 in additional species, including equine, canine, bovine and porcine.

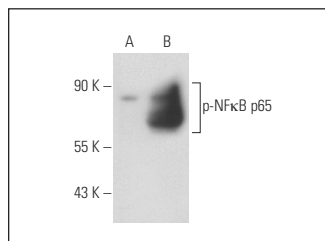
Suitable for use as control antibody for NFκB p65 siRNA (h): sc-29410, NFκB p65 siRNA (m): sc-29411, NFκB p65 shRNA Plasmid (h): sc-29410-SH, NFκB p65 shRNA Plasmid (m): sc-29411-SH, NFκB p65 shRNA (h) Lentiviral Particles: sc-29410-V and NFκB p65 shRNA (m) Lentiviral Particles: sc-29411-V.

Molecular Weight of p-NFκB p65: 65 kDa.

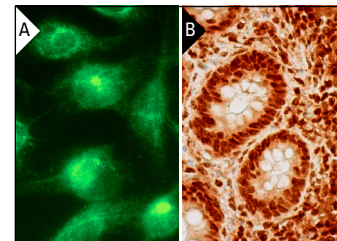
STORAGE

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

DATA



p-NFκB p65 (Ser 536): sc-33020. Western blot analysis of NFκB p65 phosphorylation in non-transfected: sc-117752 (A) and human NFκB p65 transfected: sc-122028 (B) 293T whole cell lysates.



p-NFκB p65 (Ser 536): sc-33020. Immunofluorescence staining of methanol-fixed HeLa cells showing nuclear and cytoplasmic localization (A). Immunoperoxidase staining of formalin fixed, paraffin-embedded human appendix tissue showing nuclear staining of glandular cells and lymphoid cells (B).

SELECT PRODUCT CITATIONS

- Wu, X., et al. 2008. Cooperation between EZH2, NSPc1-mediated histone H2A ubiquitination and Dnmt1 in HOX gene silencing. *Nucleic Acids Res.* 36: 3590-3599.
- Kim, H., et al. 2011. Cordycepin blocks lung injury-associated inflammation and promotes BRCA1-deficient breast cancer cell killing by effectively inhibiting PARP. *Mol. Med.* 17: 893-900.
- Li, T.M., et al. 2012. Interleukin-11 increases cell motility and up-regulates intercellular adhesion molecule-1 expression in human chondrosarcoma cells. *J. Cell. Biochem.* 113: 3353-3362.
- Albaghdadi, A.J. and Kan, F.W. 2012. Endometrial receptivity defects and impaired implantation in diabetic NOD mice. *Biol. Reprod.* 87: 30.
- Patrino, A., et al. 2012. Novel aminobenzyl-acetamide derivative modulate the differential regulation of NOSs in LPS induced inflammatory response: role of PI3K/Akt pathway. *Biochim. Biophys. Acta* 1820: 2095-2104.
- Stockert, J., et al. 2013. Regulation of TAK1/TAB1-mediated IL-1β signaling by cytoplasmic PPARβ/δ. *PLoS ONE* 8: e63011.
- Manna, S., et al. 2013. Proteasome Inhibition by bortezomib increases IL-8 expression in androgen-independent prostate cancer cells: the role of IKKα. *J. Immunol.* 191: 2837-2846.

RESEARCH USE

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



Try **p-NFκB p65 (27.Ser 536): sc-136548**, our highly recommended monoclonal alternative to p-NFκB p65 (Ser 536).