

p-NFκB p65 (37.Ser 311): sc-135768

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 (37.Ser 311) is a mouse monoclonal antibody raised against a short amino acid sequence containing Ser 311 phosphorylated NFκB p65 of human origin.

PRODUCT

Each vial contains 200 μg IgG₁ kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-135768 X, 200 μg/0.1 ml.

APPLICATIONS

p-NFκB p65 (37.Ser 311) is recommended for detection of Ser 311 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)] and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

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.

p-NFκB p65 (37.Ser 311) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

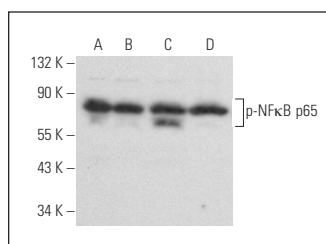
Molecular Weight of p-NFκB p65: 65 kDa.

Positive Controls: K-562 whole cell lysate: sc-2203, A-431 whole cell lysate: sc-2201 or MCF7 whole cell lysate: sc-2206.

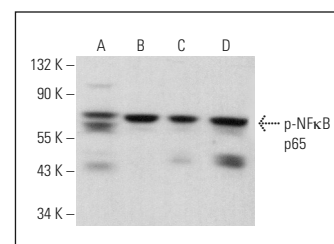
RECOMMENDED SUPPORT REAGENTS

To ensure optimal results, the following support reagents are recommended: 1) Western Blotting: use m-IgGκ BP-HRP: sc-516102 or m-IgGκ BP-HRP (Cruz Marker): sc-516102-CM (dilution range: 1:1000-1:10000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto B Blocking Reagent: sc-2335 (use 50 mM NaF, sc-24988, as diluent), Lambda Phosphatase: sc-200312A and Western Blotting Luminol Reagent: sc-2048. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml).

DATA



p-NFκB p65 (37.Ser 311): sc-135768. Western blot analysis of NFκB p65 phosphorylation expression in K-562 (A), A-431 (B), CCRF-CEM (C) and MCF7 (D) whole cell lysates.



p-NFκB p65 (37.Ser 311): sc-135768. Western blot analysis of NFκB p65 phosphorylation in CCRF-CEM (A), TK-1 (B), C2C12 (C) and PC-12 (D) whole cell lysates.

SELECT PRODUCT CITATIONS

- Shen, X., et al. 2015. Fetuin A promotes lipotoxicity in β cells through the TLR4 signaling pathway and the role of pioglitazone in anti-lipotoxicity. *Mol. Cell. Endocrinol.* 412: 1-11.
- Hong, H., et al. 2017. CDK7 inhibition suppresses rheumatoid arthritis inflammation via blockage of NFκB activation and IL-1β/IL-6 secretion. *J. Cell. Mol. Med.* 22: 1292-1301.
- Qiao, H.B., et al. 2018. Eupatilin inhibits microglia activation and attenuates brain injury in intracerebral hemorrhage. *Exp. Ther. Med.* 16: 4005-4009.

STORAGE

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

RESEARCH USE

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

PROTOCOLS

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