SANTA CRUZ BIOTECHNOLOGY, INC.

р-NFкB p65 (Ser 311): sc-101748



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 NFkB (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 NF κ B is activated and NF κ B 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 pdl, binds to p50 and regulates its activity. The NF κ B 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. NFkB 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

 $p\text{-NF}\kappa\text{B}$ p65 (Ser 311) is a rabbit polyclonal antibody raised against a short amino acid sequence containing Ser 311 phosphorylated NF κB p65 of human origin.

PRODUCT

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

APPLICATIONS

p-NF κ B p65 (Ser 311) is recommended for detection of Ser 311 phosphorylated NF κ B 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 NF κ B p65 siRNA (h): sc-29410, NF κ B p65 siRNA (m): sc-29411, NF κ B p65 shRNA Plasmid (h): sc-29410-SH, NF κ B p65 shRNA Plasmid (m): sc-29411-SH, NF κ B p65 shRNA (h) Lentiviral Particles: sc-29410-V and NF κ B p65 shRNA (m) Lentiviral Particles: sc-29411-V.

Molecular Weight of p-NF_KB p65: 65 kDa.

Positive Controls: IFN-treated HeLa whole cell lysate, HeLa whole cell lysate: sc-2200 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-NF κ B p65 (Ser 311): sc-101748. Western blot analysis of phosphorylated NF κ B p65 expression in untreated (**A**) and IFN-treated (**B**) HeLa whole cell lysates.

p-NFκB p65 (Ser 311): sc-101748. Immunoperoxidase staining of formalin-fixed, paraffin-embedded human breast carcinoma tissue showing cytoplasmic staining.

SELECT PRODUCT CITATIONS

- Fujiwara, Y., et al. 2011. Corosolic acid inhibits glioblastoma cell proliferation by suppressing the activation of signal transducer and activator of transcription-3 and nuclear factor-κ B in tumor cells and tumor-associated macrophages. Cancer Sci. 102: 206-211.
- 2. Harada, Y., et al. 2011. PLC ϵ cooperates with the NF κ B pathway to augment TNF α -stimulated CCL2/MCP1 expression in human keratinocyte. Biochem. Biophys. Res. Commun. 414: 106-111.
- 3. Charan, R.A., et al. 2012. Deubiquitinating enzyme A20 negatively regulates NF κ B signaling in skeletal muscle in mdx mice. FASEB J. 26: 587-595.
- Qin, S., et al. 2012. c-Met and NFκB-dependent overexpression of Wnt7a and -7b and Pax2 promotes cystogenesis in polycystic kidney disease. J. Am. Soc. Nephrol. 23: 1309-1318.

PROTOCOLS

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



Try **p-NFκB p65 (A-8): sc-166748** or **p-NFκB p65** (37.Ser 311): sc-135768, our highly recommended monoclonal aternatives to p-NFκB p65 (Ser 311).