

NFκB p65 (m): 293T Lysate: sc-122027

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 of the same size 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 pΔI, binds to p50 and regulates its activity.

REFERENCES

1. Meyer, R., et al. 1991. Cloning of the DNA-binding subunit of human nuclear factor κB: the level of its mRNA is strongly regulated by phorbol ester or tumor necrosis factor α. *Proc. Natl. Acad. Sci. USA* 88: 966-970.
2. Schmid, R.M., et al. 1991. Cloning of an NFκB subunit which stimulates HIV transcription in synergy with p65. *Nature* 352: 733-736.
3. Perkins, N.D., et al. 1992. Distinct combinations of NFκB subunits determine the specificity of transcriptional activation. *Proc. Natl. Acad. Sci. USA* 89: 1529-1533.
4. Ballard, D.W., et al. 1992. The 65 kDa subunit of human NFκB functions as a potent transcriptional activator and a target for v-Rel-mediated repression. *Proc. Natl. Acad. Sci. USA* 89: 1875-1879.
5. Hatada, E.N., et al. 1992. The ankyrin repeat domains of the NFκB precursor p105 and the proto-oncogene Bcl-3 act as specific inhibitors of NFκB DNA binding. *Proc. Natl. Acad. Sci. USA* 89: 2489-2493.
6. Oikonomidou, O., et al. 2006. Glucocorticoid receptor, nuclear factor κB, activator protein-1 and c-Jun N-terminal kinase in systemic lupus erythematosus patients. *Neuroimmunomodulation* 13: 194-204.
7. Doleschall, M., et al. 2007. Cloning, expression and characterization of the bovine p65 subunit of NFκB. *Dev. Comp. Immunol.* 31: 945-961.
8. Matthews, C.P., et al. 2007. Dominant-negative activator protein 1 (TAM67) targets cyclooxygenase-2 and osteopontin under conditions in which it specifically inhibits tumorigenesis. *Cancer Res.* 67: 2430-2438.
9. Tomohiro, T., et al. 2007. Hypertension aggravates glomerular dysfunction with oxidative stress in a rat model of diabetic nephropathy. *Life Sci.* 80: 1364-1372.

CHROMOSOMAL LOCATION

Genetic locus: RelA (mouse) mapping to 19 A.

STORAGE

Store at -20° C. Repeated freezing and thawing should be minimized. Sample vial should be boiled once prior to use. Non-hazardous. No MSDS required.

PRODUCT

NFκB p65 (m): 293T Lysate represents a lysate of mouse NFκB p65 transfected 293T cells and is provided as 100 μg protein in 200 μl SDS-PAGE buffer.

APPLICATIONS

NFκB p65 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive NFκB p65 antibodies. Recommended use: 10-20 μl per lane.

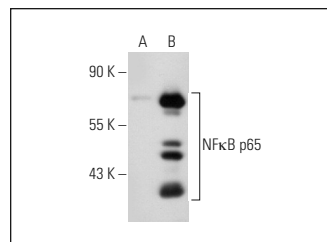
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NFκB p65 (F-6): sc-8008 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse NFκB p65 expression in NFκB p65 transfected 293T cells (starting dilution 1:100, dilution range 1:100-1:1,000).

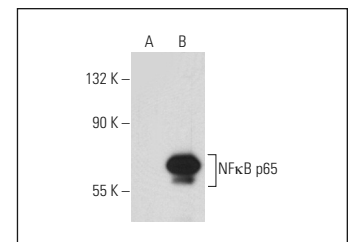
RECOMMENDED SUPPORT REAGENTS

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, UltraCruz® Blocking Reagent: sc-516214 and Western Blotting Luminol Reagent: sc-2048.

DATA



NFκB p65 (F-6): sc-8008. Western blot analysis of NFκB p65 expression in non-transfected: sc-117752 (A) and mouse NFκB p65 transfected: sc-122027 (B) 293T whole cell lysates.



NFκB p65 (4H211): sc-71675. Western blot analysis of NFκB p65 expression in non-transfected: sc-117752 (A) and mouse NFκB p65 transfected: sc-122027 (B) 293T whole cell lysates.

RESEARCH USE

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

PROTOCOLS

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