SANTA CRUZ BIOTECHNOLOGY, INC.

NFκB p52 (m): 293T Lysate: sc-122026

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

The NFκB transcription factor was originally identified as a protein complex consisting of a DNA binding subunit and an associated protein. The DNA binding subunit is functionally related to c-Rel p75 and RelB p68. The p50 subunit was initially believed to be a functionally unique protein derived from the amino-terminus of a precursor designated p105. A cDNA has been isolated that encodes an alternative DNA binding subunit of NFκB. It is synthesized as a protein that is expressed in a variety of cell types and, like p105, undergoes cleavage to generate its NFκB subunit, in this case a protein designated p52 (previously referred to as p49). In contrast to p50 derived from p105, p52 acts in synergy with p65 to stimulate the HIV enhancer in transiently transfected Jurkat cells.

REFERENCES

1. Sen, R., et al. 1986. Multiple nuclear factors interact with the immunoglobulin enhancer sequences. Cell 46: 705-716.
2. Baeuerle, P.A., et al. 1989. A 65 kDa subunit of active NFκB is required for inhibition of NFκB by IκB. Genes Dev. 3: 1689-1698.
3. Gilmore, T. 1990. NFκB, κBFI Dorsal and related matters. Cell 62: 841-843.
4. Ghosh, S., et al. 1990. Cloning of the p50 DNA binding subunit of NFκB: homology to Rel and Dorsal. Cell 62: 1019-1029.
5. Bours, V., et al. 1990. Cloning of a mitogen-inducible gene encoding a κB DNA-binding protein with homology to the Rel oncogene and to cell cycle motifs. Nature 348: 76-80.
6. Schmid, R.M., et al. 1991. Cloning of an NFκB subunit which stimulates HIV transcription in synergy with p65. Nature 352: 733-736.
7. Ryseck, R.P., et al. 1992. RelB, a new rel family transcription activator that can interact with p50-NFκB. Mol. Cell. Biol. 12: 674-684.
8. Oomizu, S. et al. 2006. Fucoidan prevents Cε germline transcription and NFκB p52 translocation for IgE production in B cells. Biochem. Biophys. Res. Commun. 350: 501-507.
9. Zhang, J. et al. 2007. NFκB1/p50 is not required for tumor necrosis factor-stimulated growth of primary mammary epithelial cells: implications for NFκB2/p52 and RelB. Endocrinology 148: 268-278.

CHROMOSOMAL LOCATION

Genetic locus: Nfkb2 (mouse) mapping to 19 C3.

PRODUCT

NFκB p52 (m): 293T Lysate represents a lysate of mouse NFκB p52 transfected 293T cells and is provided as 100 µg protein in 200 µl SDS-PAGE buffer.

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.

APPLICATIONS

NFκB p52 (m): 293T Lysate is suitable as a Western Blotting positive control for mouse reactive NFκB p52 antibodies. Recommended use: 10-20 µl per lane.

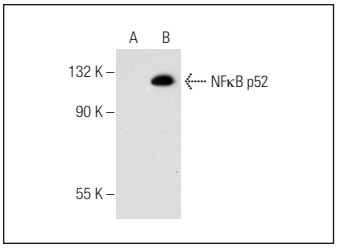
Control 293T Lysate: sc-117752 is available as a Western Blotting negative control lysate derived from non-transfected 293T cells.

NFκB p52 (C-5): sc-7386 is recommended as a positive control antibody for Western Blot analysis of enhanced mouse NFκB p52 expression in NFκB p52 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 p52 (C-5): sc-7386. Western blot analysis of NFκB p52 expression in non-transfected: sc-117752 (**A**) and mouse NFκB p52 transfected: sc-122026 (**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.