

NFκB p52 (1-447): sc-4095

BACKGROUND

The NFκB transcription factor was originally identified as a protein complex consisting of a 65 kDa DNA binding subunit and an associated 50 kDa protein. The 65 kDa subunit is functionally related to c-Rel p75 and Rel B 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 was isolated that encodes an alternative DNA binding subunit of NFκB. It is synthesized as a 100 kDa 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

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6. Schmid, R.M., Perkins, N.D., Duckett, C.S., Andrews, P.C. and Nabel, G.J. 1991. Cloning of an NFκB subunit which stimulates HIV transcription in synergy with p65. *Nature* 352: 733-736.
7. Ryseck, R.P., Bull, P., Takamiya, M., Bours, V., Siebenlist, U., Dobrzanski, P. and Bravo, R. 1992. RelB, a new Rel family transcription activator that can interact with p50-NFκB. *Mol. Cell. Biol.* 12: 674-684.

SOURCE

NFκB p52 (1-447) is expressed in *E. coli* as an 80 kDa tagged fusion protein corresponding to amino acids 1-447 representing full length NFκB p52 of human origin.

PRODUCT

NFκB p52 (1-447) is purified from bacterial lysates (> 98%) by glutathione agarose affinity chromatography; supplied as 50 μg purified protein in PBS containing 5 mM DTT and 50% glycerol.

Available as a Western blotting control; 10 μg in 0.1 ml SDS-PAGE loading buffer, NFκB p52 (1-447): sc-4095 WB.

STORAGE

Store at -20° C; stable for one year from the date of shipment.

APPLICATIONS

NFκB p52 (1-447) is suitable as a Western blotting control for sc-298, sc-848 and sc-7386.

SELECT PRODUCT CITATIONS

1. Xie, P., Hostager, B.S., Munroe, M.E., Moore, C.R. and Bishop, G.A. 2006. Cooperation between TNF receptor-associated factors 1 and 2 in CD40 signaling. *J. Immunol.* 176: 5388-5400.
2. Luhm, J., Langenkamp, U., Hensel, J., Frohn, C., Brand, J.M., Hennig, H., Rink, L., Koritke, P., Wittkopf, N., Williams, D.L. and Mueller, A. 2006. β-(1→3)-D-glucan modulates DNA binding of nuclear factors κB, AT and IL-6 leading to an anti-inflammatory shift of the IL-1β/IL-1 receptor antagonist ratio. *BMC Immunol.* 7: 5.

RESEARCH USE

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

PROTOCOLS

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