RelB (380-579): sc-4983 WB



The Power to Questio

BACKGROUND

The NF κ B 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 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 second protein designated p52 (previously referred to as p49) has been identified that can act as an alternative NF κ B subunit. Rel B does not bind with high affinity to NF κ B sites, but heterodimers between Rel B and p50 bind with an affinity comparable to that of p50 NF κ B homodimers. However, Rel B/p50 heterodimers, in contrast to NF κ B heterodimers, transactivates transcription of promotors containing κ B binding sites.

REFERENCES

- Sen, R. and Baltimore, D. 1986. Multiple nuclear factors interact with the immuno-globulin enhancer sequences. Cell 46: 705-716.
- 2. Baeuerle, P.A. and Baltimore, D. 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. NF κ B, κ BFI dorsal and related matters. Cell 62: 841-843.
- Ghosh, S., Gifford, A.M., Riviere, L.R., Tempst, P., Nolan, G.P. and Baltimore, D. 1990. Cloning of the p50 DNA binding subunit of NFκB: Homology to Rel and dorsal. Cell 62: 1019-1029.
- Bours, V., Villalobos, J., Burd, P.R., Kelly, K. and Siebenlist, U. 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.
- 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 NF κ B. Mol. Cell. Biol. 12: 674-684.
- 8. MacDonald, K.P., Kuns, R.D., Rowe, V., Morris, E.S., Banovic, T., Bofinger, H., O'Sullivan, B., Markey, K.A., Don, A.L., Thomas, R. and Hill, G.R. 2007. Effector and regulatory T cell function is differentially regulated by RelB within antigen-presenting cells during GVHD. Blood 109: 5049-5057.
- Vaira, S., Johnson, T., Hirbe, A.C., Alhawagri, M., Anwisye, I., Sammut, B., O'Neal, J., Zou, W., Weilbaecher, K.N., Faccio, R. and Novack, D.V. 2008. RelB is the NFκB subunit downstream of NIK responsible for osteoclast differentiation. Proc. Natl. Acad. Sci. USA 105: 3897-902.

CHROMOSOMAL LOCATION

Genetic locus: RELB (human) mapping to 19q13.31; Relb (mouse) mapping to 7 A2.

SOURCE

RelB (380-579) is expressed in *E. coli* as a 49 kDa GST-tagged fusion protein corresponding to amino acids 380-579 of RelB of human origin.

PRODUCT

RelB (380-579) is purified from bacterial lysates (>98%) by glutathione agarose affinity chromatography; supplied as 10 μ g in 0.1 ml SDS-PAGE loading buffer.

APPLICATIONS

RelB (380-579) is suitable as a Western blotting control for sc-226, sc-28689, sc-30889, sc-48366 and sc-48379.

STORAGE

Store at -20° C. 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.

Santa Cruz Biotechnology, Inc. 1.800.457.3801 831.457.3801 fax 831.457.3801 Europe +00800 4573 8000 49 6221 4503 0 www.scbt.com