SANTA CRUZ BIOTECHNOLOGY, INC.

Bcl-3 (H-146): sc-13038



BACKGROUND

On the basis of both functional and structural considerations, members of the IkB family of proteins can be divided into three groups. The first of these groups, IkB- α , includes the avian protein pp40 and the mammalian MAD-3, both of which inhibit binding of p50-p65 NFkB complex or Rel protein to their cognate binding sites but do not inhibit the binding of p50 homodimer to kB sites, suggesting that the IkB- α family binds to the p65 subunit of p50-p65 heterocomplex through ankyrin repeats. The second member of the IkB family is represented by a protein designated IkB- β . The third group of IkB proteins is represented by IkB- γ , a protein identical in sequence with the C-terminal domain of the p110 pre-cursor of NFkB p50 and expressed predominantly in lymphoid cells. The proto-oncogene BcI-3, believed to be involved in certain human B cell leukemias, encodes a protein that functions as an IkB-like molecule for native NFkB but is specific for the p50 subunit.

REFERENCES

- Ghosh, S., et al. 1990. Activation *in vitro* of NFκB by phosphorylation of its inhibitor IκB. Nature 344: 678-682.
- Davis, N., et al. 1991. Rel-associated pp40: an inhibitor of the Rel family of transcription factors. Science 252: 1268-1271.
- Kerr, L.D., et al. 1991. The Rel-associated pp40 protein prevents DNA binding of Rel and NFκB: relationship with IκB-β and regulation by phosphorylation. Genes Dev. 5: 1464-1476.
- 4. Haskill, S., et al. 1991. Characterization of an immediate-early gene induced in adherent monocytes that encodes $I\kappa B$ like activity. Cell 65: 1281-1289.
- Schmid, R.M., et al. 1991. Cloning of an NFκB subunit which stimulates HIV transcription in synergy with p65. Nature 352: 733-736.

CHROMOSOMAL LOCATION

Genetic locus: BCL3 (human) mapping to 19q13.32; Bcl3 (mouse) mapping to 7 A3.

SOURCE

Bcl-3 (H-146) is an affinity purified rabbit polyclonal antibody raised against amino acids 301-446 of Bcl-3 of human origin.

PRODUCT

Each vial contains 200 μg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

STORAGE

Store at 4° C, **D0 NOT FREEZE**. 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.

APPLICATIONS

Bcl-3 (H-146) is recommended for detection of Bcl-3 of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 μ g per 100-500 μ g of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500), immunohistochemistry (including paraffin-embedded sections) (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Bcl-3 (H-146) is also recommended for detection of Bcl-3 in additional species, including bovine and porcine.

Suitable for use as control antibody for Bcl-3 siRNA (h): sc-29789, Bcl-3 siRNA (m): sc-29790, Bcl-3 shRNA Plasmid (h): sc-29789-SH, Bcl-3 shRNA Plasmid (m): sc-29790-SH, Bcl-3 shRNA (h) Lentiviral Particles: sc-29789-V and Bcl-3 shRNA (m) Lentiviral Particles: sc-29790-V.

Molecular Weight of Bcl-3: 60 kDa.

Positive Controls: Jurkat nuclear extract: sc-2132, NAMALWA cell lysate: sc-2234 or WEHI-3 cell lysate: sc-3815.

DATA





Bcl-3 (H-146): sc-13038. Western blot analysis of Bcl-3 expression in Jurkat nuclear extract.

Bcl-3 (H-146): sc-13038. Immunoperoxidase staining of formalin fixed, paraffin-embedded human colon tissue showing nuclear and cytoplasmic staining of glandular cells.

SELECT PRODUCT CITATIONS

- 1. Pallares, J., et al. 2004. Abnormalities in the NFκB family and related proteins in endometrial carcinoma. J. Pathol. 204: 569-577.
- 2. Viatour, P., et al. 2004. GSK-3-mediated Bcl-3 phosphorylation modulates its degradation and its oncogenicity. Mol. Cell 16: 35-45.
- Dai, R., et al. 2007. Despite inhibition of nuclear localization of NFκB p65, c-Rel, and RelB, 17-β estradiol up-regulates NFκB signaling in mouse splenocytes: the potential role of Bcl-3. J. Immunol. 179: 1776-1783.
- Neznanov, N., et al. 2008. Quercetinase pirin makes poliovirus replication resistant to flavonoid quercetin. DNA Cell Biol. 27: 191-198.

MONOS Satisfation Guaranteed

Try BcI-3 (150-3.5): sc-32741, our highly recommended monoclonal aternative to BcI-3 (H-146). Also, for AC, HRP, FITC, PE, Alexa Fluor[®] 488 and Alexa Fluor[®] 647 conjugates, see BcI-3 (150-3.5): sc-32741.