SANTA CRUZ BIOTECHNOLOGY, INC.

BCoR (C-10): sc-514576

SANTA CRUZ BIOTECHNOLOGY

The Power to Question

BACKGROUND

Bcl-6, a transcriptional repressor, can promote or inhibit apoptosis depending on the cell type and also plays an important role in normal immune responses. Bcl-6 negatively regulates NFκB expression, thereby inhibiting NFκB-mediated cellular functions and is frequently found to be deregulated in non-Hodgkin's lymphoma. BCoR (Bcl-6 corepressor) is a 1,755 amino acid protein that associates with histone deacetylases (HDACs) to transcriptionally repress Bcl-6. With ubiquitous expression, BCoR is localized to the nucleus where it interacts with other proteins through its three ANK repeat domains. Mutations in the gene encoding BCoR result in microphthalmia with associated anomalies 2, also known as anophthalmia, which is characterized by variable features, such as renal aplasia, mental retardation, hyospadias, microencephaly and cryptorchidism. There are four isoforms of BCoR which are produced as a result of alternative splicing events.

REFERENCES

1. Huynh, K.D., et al. 2000. BCoR, a novel corepressor involved in Bcl-6 repression. Genes Dev. 14: 1810-1823.
2. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 300166. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
3. Ng, D., et al. 2004. Oculofaciocardiodental and Lenz microphthalmia syndromes result from distinct classes of mutations in BCoR. Nat. Genet. 36: 411-416.
4. Gearhart, M.D., et al. 2006. Polycomb group and SCF ubiquitin ligases are found in a novel BCoR complex that is recruited to Bcl6 targets. Mol. Cell. Biol. 26: 6880-6889.
5. Martínez-Garay, I., et al. 2007. A two base pair deletion in the PQBP1 gene is associated with microphthalmia, microcephaly, and mental retardation. Eur. J. Hum. Genet. 15: 29-34.
6. Sánchez, C., et al. 2007. Proteomics analysis of Ring1B/Rnf2 interactors identifies a novel complex with the Fbxl10/Jhdm1B histone demethylase and the Bcl6 interacting corepressor. Mol. Cell. Proteomics 6: 820-834.
7. Ghetu, A.F., et al. 2008. Structure of a BCoR corepressor peptide in complex with the BCL6 BTB domain dimer. Mol. Cell 29: 384-391.
8. Wamstad, J.A., et al. 2008. Role of the transcriptional corepressor BCoR in embryonic stem cell differentiation and early embryonic development. PLoS ONE 3: e2814.

CHROMOSOMAL LOCATION

Genetic locus: BCOR (human) mapping to Xp11.4.

SOURCE

BCoR (C-10) is a mouse monoclonal antibody raised against amino acids 1-300 mapping at the N-terminus of BCoR of human origin.

PRODUCT

Each vial contains 200 µg IgG_1 kappa light chain in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin.

APPLICATIONS

BCoR (C-10) is recommended for detection of BCoR of human origin by Western Blotting (starting dilution 1:100, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)], immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500) and solid phase ELISA (starting dilution 1:30, dilution range 1:30-1:3000).

Suitable for use as control antibody for BCoR siRNA (h): sc-72635, BCoR shRNA Plasmid (h): sc-72635-SH and BCoR shRNA (h) Lentiviral Particles: sc-72635-V.

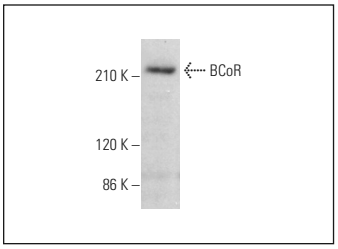
Molecular Weight of BCoR: 192 kDa.

Positive Controls: HeLa whole cell lysate: sc-2200 or Y79 cell lysate: sc-2240.

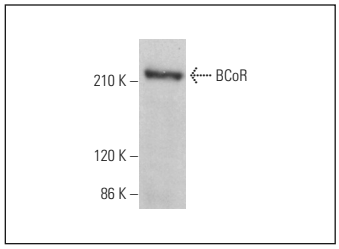
RECOMMENDED SUPPORT REAGENTS

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. 2) Immunoprecipitation: use Protein A/G PLUS-Agarose: sc-2003 (0.5 ml agarose/2.0 ml). 3) Immunofluorescence: use m-IgGκ BP-FITC: sc-516140 or m-IgGκ BP-PE: sc-516141 (dilution range: 1:50-1:200) with UltraCruz® Mounting Medium: sc-24941 or UltraCruz® Hard-set Mounting Medium: sc-359850.

DATA



BCoR (C-10): sc-514576. Western blot analysis of BCoR expression in Y79 whole cell lysate. Detection reagent used: m-IgGκ BP-HRP: sc-516102.



BCoR (C-10): sc-514576. Western blot analysis of BCoR expression in HeLa whole cell lysate. Detection reagent used: m-IgGκ BP-HRP: sc-516102.

STORAGE

Store at 4° C, **DO 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.

PROTOCOLS

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