SANTA CRUZ BIOTECHNOLOGY, INC.

CBX7 (M-85): sc-292141

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The Power to Question

BACKGROUND

CBX7 (chromobox protein homolog 7) is a 251 amino acid nuclear protein that contains one N-terminal chromo domain and one C-terminal Pc box. Highly expressed in kidney, brain, heart and skeletal muscle, with weaker expression in peripheral blood leukocytes, CBX7 functions as a component of the chromatin-associated polycomb complex (PcG) and is involved in maintaining the transcriptionally repressed state of target genes. Additionally, CBX7 modifies chromatin and is thought to extend the cellular life span of epithelial cells by repressing p14 ARF expression, while simultaneously repressing telomerase activity. Due to its ability to repress the transcription of cell-cycle related proteins, CBX7 is thought to play a role in tumorigenesis, specifically in the development of follicular lymphoma and thyroid cancer.

REFERENCES

1. Online Mendelian Inheritance in Man, OMIM™. 2002. Johns Hopkins University, Baltimore, MD. MIM Number: 608457. World Wide Web URL: http://www.ncbi.nlm.nih.gov/omim/
2. Gil, J., et al. 2004. Polycomb CBX7 has a unifying role in cellular lifespan. Nat. Cell Biol. 6: 67-72.

CHROMOSOMAL LOCATION

Genetic locus: Cbx7 (mouse) mapping to 15 E1.

SOURCE

CBX7 (M-85) is a rabbit polyclonal antibody raised against amino acids 74-158 mapping at the C-terminus of CBX7 of mouse origin.

PRODUCT

Each vial contains 200 µg IgG in 1.0 ml of PBS with < 0.1% sodium azide and 0.1% gelatin. Also available as TransCruz reagent for Gel Supershift and ChIP applications, sc-292141 X, 200 µg/0.1 ml.

APPLICATIONS

CBX7 (M-85) is recommended for detection of CBX7 of mouse and rat origin by Western Blotting (starting dilution 1:200, 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 CBX7 siRNA (m): sc-72817, CBX7 shRNA Plasmid (m): sc-72817-SH and CBX7 shRNA (m) Lentiviral Particles: sc-72817-V.

CBX7 (M-85) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.

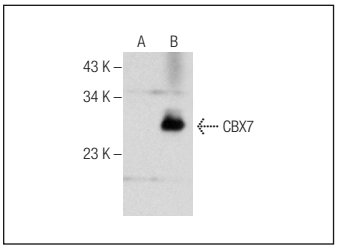
Molecular Weight of CBX7: 28 kDa.

Positive Controls: CBX7 (m): 293T Lysate: sc-119054 or NIH/3T3 whole cell lysate: sc-2210.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use goat anti-rabbit IgG-HRP: sc-2004 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible goat anti-rabbit IgG-HRP: sc-2030 (dilution range: 1:2000-1:5000), Cruz Marker™ Molecular Weight Standards: sc-2035, TBS Blotto A Blocking Reagent: sc-2333 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 goat anti-rabbit IgG-FITC: sc-2012 (dilution range: 1:100-1:400) or goat anti-rabbit IgG-TR: sc-2780 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

DATA



CBX7 (M-85): sc-292141. Western blot analysis of CBX7 expression in non-transfected: sc-117752 (**A**) and mouse CBX7 transfected: sc-119054 (**B**) 293T whole cell lysates.

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 or our catalog for detailed protocols and support products.