

BBX (H-84): sc-292492

BACKGROUND

BBX (HMG box transcription factor BBX, bobby sox homolog, HMG box-containing protein 2) is a 941 amino acid protein encoded by the human gene BBX. BBX is a nuclear protein that contains one high mobility group (HMG) domain that belongs to the Sox (Sry-related HMG box) family of transcription factors. HMG proteins are thought to play a significant role in various human disorders. Disruptions and rearrangements in the genes coding for some of the HMG proteins are associated with common benign tumors. Commonly, antibodies against HMG proteins are found in patients suffering from autoimmune diseases. The SRY gene on the Y chromosome, responsible for male sexual differentiation, contains a HMG-Box domain. Some HMG proteins have demonstrated extracellular activity as a chemokine, attracting neutrophils and mononuclear inflammatory cells to the infected sites. BBX functions as a transcription factor that is necessary for cell cycle progression from G₁ to S phase.

REFERENCES

1. Yu, W., et al. 1997. Large-scale concatenation cDNA sequencing. *Genome Res.* 7: 353-358.
2. Sánchez-Díaz, A., et al. 2001. HBP2: a new mammalian protein that complements the fission yeast MBF transcription complex. *Curr. Genet.* 40: 110-118.
3. Wiemann, S., et al. 2001. Toward a catalog of human genes and proteins: sequencing and analysis of 500 novel complete protein coding human cDNAs. *Genome Res.* 11: 422-435.
4. Strausberg, R.L., et al. 2002. Generation and initial analysis of more than 15,000 full-length human and mouse cDNA sequences. *Proc. Natl. Acad. Sci. USA* 99: 16899-16903.
5. Ota, T., et al. 2003. Complete sequencing and characterization of 21,243 full-length human cDNAs. *Nat. Genet.* 36: 40-45.
6. Gerhard, D.S., et al. 2004. The status, quality, and expansion of the NIH full-length cDNA project: the mammalian gene collection (MGC). *Genome Res.* 14: 2121-2127.
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CHROMOSOMAL LOCATION

Genetic locus: BBX (human) mapping to 3q13.12; Bbx (mouse) mapping to 16 B5.

SOURCE

BBX (H-84) is a rabbit polyclonal antibody raised against amino acids 127-210 mapping near the N-terminus of BBX 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.

APPLICATIONS

BBX (H-84) is recommended for detection of BBX of mouse, rat and human 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).

BBX (H-84) is also recommended for detection of BBX in additional species, including equine, canine, bovine, porcine and avian.

Suitable for use as control antibody for BBX siRNA (h): sc-78083, BBX siRNA (m): sc-77401, BBX shRNA Plasmid (h): sc-78083-SH, BBX shRNA Plasmid (m): sc-77401-SH, BBX shRNA (h) Lentiviral Particles: sc-78083-V and BBX shRNA (m) Lentiviral Particles: sc-77401-V.

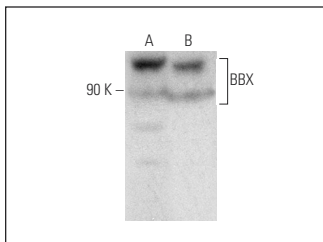
Molecular Weight of BBX: 105 kDa.

Positive Controls: MCF7 nuclear extract: sc-2149, Jurkat whole cell lysate: sc-2204 or HeLa whole cell lysate: sc-2200.

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



BBX (H-84): sc-292492. Western blot analysis of BBX expression in MCF7 nuclear extract (A) and Jurkat whole cell lysate (B).

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.