## 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 $B B X . \operatorname{BBX}$ 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 an 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 $\mathrm{G}_{1}$ to $S$ phase.

## CHROMOSOMAL LOCATION

Genetic locus: BBX (human) mapping to 3q13.12; Bbx (mouse) mapping to 16 B 5 .

## SOURCE

BBX ( $\mathrm{N}-19$ ) is an affinity purified rabbit polyclonal antibody raised against a peptide mapping near the N -terminus of BBX of human origin.

## PRODUCT

Each vial contains $100 \mu \mathrm{ggG}$ 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-99279 X, $200 \mu \mathrm{~g} / 0.1 \mathrm{ml}$.
Blocking peptide available for competition studies, sc-99279 P, (100 $\mu \mathrm{g}$ peptide in 0.5 ml PBS containing $<0.1 \%$ sodium azide and $0.2 \%$ BSA).

## APPLICATIONS

$\mathrm{BBX}(\mathrm{N}-19)$ is recommended for detection of BBX of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:1001:1000), immunoprecipitation [ $1-2 \mu \mathrm{~g}$ per $100-500 \mu \mathrm{~g}$ 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 ( $\mathrm{N}-19$ ) is also recommended for detection of BBX in additional species, including equine, canine, bovine and porcine.

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.
BBX (N-19) X TransCruz antibody is recommended for Gel Supershift and ChIP applications.
Molecular Weight of BBX: 105 kDa .
Positive Controls: NIH/3T3 nuclear extract: sc-2138 or mouse testis extract: sc-2405.

## 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 MarkerTM compatible goat antirabbit 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 (N-19): sc-99279. Western blot analysis of BBX expression in NIH/3T3 nuclear extract ( $\mathbf{A}$ ) and mouse testis tissue extract (B).

## STORAGE

Store at $4^{\circ} \mathrm{C},{ }^{* *}$ 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.

Try BBX (G-2): sc-377041 or BBX (2065C12a): sc-81055, our highly recommended monoclonal alternatives to BBX ( $\mathrm{N}-19$ ).

