

BBX (2065C12a): sc-81055

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 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 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 (2065C12a) is a mouse monoclonal antibody raised against a recombinant protein corresponding to a region near the C-terminus of BBX of human origin.

PRODUCT

Each vial contains 100 µg IgG₁ in 1.0 ml of PBS with < 0.1% sodium azide and 1.0% stabilizer protein.

APPLICATIONS

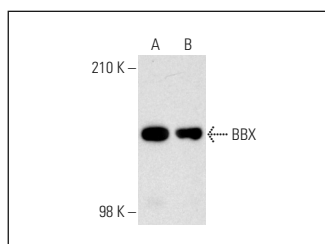
BBX (2065C12a) is recommended for detection of BBX of mouse, rat and human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), immunoprecipitation [1-2 µg per 100-500 µg of total protein (1 ml of cell lysate)] and immunofluorescence (starting dilution 1:50, dilution range 1:50-1:500).

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.

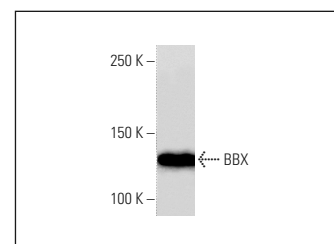
Molecular Weight of BBX: 105 kDa.

Positive Controls: MCF7 whole cell lysate: sc-2206, HeLa whole cell lysate: sc-2200 or A-673 cell lysate: sc-2414.

DATA



BBX (2065C12a): sc-81055. Western blot analysis of BBX expression in MCF7 (A) and A-673 (B) nuclear extracts.



BBX (2065C12a): sc-81055. Western blot analysis of BBX expression in HeLa whole cell lysate.

STORAGE

For immediate and continuous use, store at 4° C for up to one month. For sporadic use, freeze in working aliquots in order to avoid repeated freeze/thaw cycles. If turbidity is evident upon prolonged storage, clarify solution by centrifugation.

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.