

BST-2 (K-15): sc-46811

BACKGROUND

Bone marrow stromal cells act as regulators for B-cell growth and development through their surface molecules and cytokines. Bone marrow stromal antigen-2 (BST-2), also designated CD317 antigen, is a single-pass type II membrane protein. BST-2, which is expressed mainly on synovial cell lines and bone marrow stromal cell lines, is primarily expressed in liver, heart, placenta and lung tissues. BST-2 is thought to be involved in pre-B cell growth. It has been implicated in B cell activation in rheumatoid arthritis.

REFERENCES

1. Ishikawa, J. et al. 1995. Molecular cloning and chromosomal mapping of a bone marrow stromal cell surface gene, BST-2, that may be involved in pre-B cell growth. *Genomics* 26: 527-534.
2. Kaisho, T., et al. 1994. BST-1, a surface molecule of bone marrow stromal cell lines that facilitates pre-B cell growth. *Proc. Natl. Acad. Sci. USA* 91: 5325-5329.
3. Ishihara, K., et al. 1996. Stage-specific expression of mouse BST-1/BP-3 on the early B and T cell progenitors prior to gene rearrangement of antigen receptor. *Int. Immunol.* 8: 1395-1404.
4. Ohtomo, T., et al. 1999. Molecular cloning and characterization of a surface antigen preferentially overexpressed on multiple myeloma cells. *Biochem. Biophys. Res. Commun.* 258: 583-591.
5. Becker, M., et al. 2005. Distinct gene expression patterns in a tamoxifen-sensitive human mammary carcinoma xenograft and its tamoxifen-resistant subline MaCa 3366/TAM. *Mol. Cancer Ther.* 4: 151-168.
6. Loyet, K., et al. 2005. Proteomic profiling of surface proteins on Th1 and Th2 cells. *J. Proteome Res.* 4: 400-409.

CHROMOSOMAL LOCATION

Genetic locus: BST2 (human) mapping to 19p13.2.

SOURCE

BST-2 (K-15) is an affinity purified goat polyclonal antibody raised against a peptide mapping within an internal region of BST-2 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.

Blocking peptide available for competition studies, sc-46811 P, (100 µg peptide in 0.5 ml PBS containing < 0.1% sodium azide and 0.2% BSA).

STORAGE

Store at 4° C, ****DO NOT FREEZE****. Stable for one year from the date of shipment. Non-hazardous. No MSDS required.

PROTOCOLS

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

APPLICATIONS

BST-2 (K-15) is recommended for detection of BST-2 of human origin by Western Blotting (starting dilution 1:200, dilution range 1:100-1:1000), 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 BST-2 siRNA (h): sc-60294, BST-2 shRNA Plasmid (h): sc-60294-SH and BST-2 shRNA (h) Lentiviral Particles: sc-60294-V.

Molecular Weight of BST-2: 30-36 kDa.

RECOMMENDED SECONDARY REAGENTS

To ensure optimal results, the following support (secondary) reagents are recommended: 1) Western Blotting: use donkey anti-goat IgG-HRP: sc-2020 (dilution range: 1:2000-1:100,000) or Cruz Marker™ compatible donkey anti-goat IgG-HRP: sc-2033 (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) Immunofluorescence: use donkey anti-goat IgG-FITC: sc-2024 (dilution range: 1:100-1:400) or donkey anti-goat IgG-TR: sc-2783 (dilution range: 1:100-1:400) with UltraCruz™ Mounting Medium: sc-24941.

SELECT PRODUCT CITATIONS

1. Gu, G., et al. 2012. BST-2 binding with cellular MT1-MMP blocks cell growth and migration via decreasing MMP2 activity. *J. Cell. Biochem.* 113: 1013-1021.

RESEARCH USE

For research use only, not for use in diagnostic procedures.

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Try **BST-2 (E-4): sc-390719**, our highly recommended monoclonal alternative to BST-2 (K-15).