

Bst2 Antibody

Bst2 (NT): Bone marrow stromal cell antigen 2, CD317, HM1.24, tetherin

CATALOG No.: 4661

BACKGROUND:

Bst2 was first identified as a novel terminal B-cell-restricted antigen termed HM1.24 that is expressed on certain bone marrow cells as well as other tissues (1). The surface expression of Bst2 on fibroblast cell lines facilitated the stromal cell-dependent growth of DW34, a pre-B-cell line, suggesting that this protein is involved in pre-B-cell growth (2). Later experiments also showed it to be upregulated in several myeloma cells (3). More recently, Bst2 was identified as an inhibitor of retroviral release from human cells whose activity is antagonized by the HIV-1 accessory protein Vpu. While Bst2 caused retention of virions on cell surfaces or endocytosis into Bst2-positive compartments, its depletion abolished the viral requirement for Vpu for virus release (4). This activity may represent a potential therapeutic strategy for the treatment of HIV/AIDS.

SOURCE:

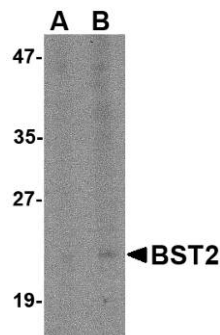
Rabbit polyclonal Bst2 antibody was raised against an 18 amino acid peptide near the amino terminus of the mouse Bst2 (GenBank accession no. AAH87949).

APPLICATION:

Bst2 antibody can be used for detection of Bst2 by Western blot at 1 – 2 µg/ml. (Optimal dilution should be determined by user.) Human brain tissue lysate can be used as positive control. Bst2 antibody is human and mouse reactive. **For research use only.**

STORAGE:

Bst2 antibody is supplied as immunoaffinity purified IgG in PBS containing 0.02% sodium azide. Store at 4°C, stable for one year.



Western blot analysis of Bst2 in Daudi cell lysate with Bst2 antibody at (A) 1 and (B) 2 µg/ml.

RELATED PRODUCTS:

Blocking Peptide, Catalog No. **4661P**.
Daudi Cell Lysate, Catalog No. **1224**.
Bst2 Antibody (CT), Catalog No. **4737**.

REFERENCES:

1. Goto T, Kennel SJ, Abe M, et al. A novel membrane antigen selectively expressed on terminally differentiated human B cells. *Blood* 1994; 84:1922-30.
2. Ishikawa J, Kaisho T, Tomizawa H, et al. Molecular cloning and chromosomal mapping of a bone marrow stromal cell surface gene, BST2, that may be involved in pre-B-cell growth. *Genomics* 1995; 26:527-34.
3. Ohtomo T, Sugamata Y, Ozaki Y, et al. Molecular cloning and characterization of a surface antigen preferentially overexpressed on multiple myeloma cells. *Biochem. Biophys. Res. Commun.* 1999; 258:583-91.
4. Neil SJ, Zang T, and Bieniasz PD. Tetherin inhibits retrovirus release and is antagonized by HIV-1 Vpu. *Nature* 2008; 451:425-30. (08-01D)