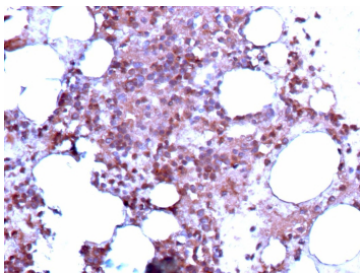
CD317 Antibody / BST2 [clone BST2/13682R] (V6006)

Catalog No.	Formulation	Size
V6006-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6006-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V6006SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

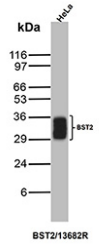
Recombinant RABBIT MONOCLONAL

Bulk quote request

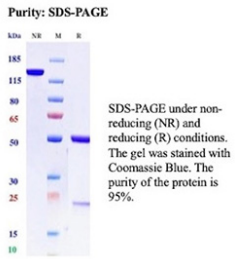
Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	BST2/13682R
UniProt	Q10589
Localization	Cell membrane, Cytoplasm
Applications	ELISA : Immunohistochemistry : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This CD317/BST2 antibody is available for research use only.



Immunohistochemistry analysis of CD317/BST2 antibody in human bone marrow tissue (clone BST2/13682R). FFPE human bone marrow sections demonstrate HRP-DAB brown membranous and cytoplasmic staining in hematopoietic cells within marrow spaces, consistent with Bone marrow stromal antigen 2 expression in immune cell populations. Megakaryocytic and mononuclear cells show prominent staining, while adipocytic spaces remain negative. Heat induced epitope retrieval was performed by boiling tissue sections in pH 9 10 mM Tris with 1 mM EDTA for 20 minutes followed by cooling prior to antibody incubation.



Western blot analysis of CD317/BST2 antibody (clone BST2/13682R) in human HeLa cell lysate. A prominent immunoreactive band is observed at approximately 30-36 kDa, consistent with the predicted molecular weight of Bone marrow stromal antigen 2. BST2 is a glycosylated type II transmembrane protein, and the observed band migrating within this range is consistent with known glycosylation-dependent mobility on SDS-PAGE. The detected band supports endogenous expression of BST2 / Tetherin in HeLa cells under the conditions tested.



SDS-PAGE Analysis of Purified CD317/BST2 antibody (BST2/13682R). Confirmation of Purity and Integrity of Antibody.

Description

CD317 antibody, also known as BST2 antibody, recognizes Bone marrow stromal antigen 2, an interferon-inducible type II transmembrane protein encoded by the human BST2 gene located on chromosome 19p13.2. CD317 is widely referred to in the literature as Tetherin and HM1.24. CD317 localizes to the plasma membrane, endosomes, and the trans-Golgi network, where it functions as an antiviral restriction factor and immune regulatory protein. CD317 antibody is commonly used in research investigating innate immunity, interferon responses, and viral host defense mechanisms.

Bone marrow stromal antigen 2 contains a short N-terminal cytoplasmic tail, a single-pass transmembrane domain, an extracellular coiled-coil region, and a C-terminal glycosylphosphatidylinositol anchor. This dual-anchor topology enables CD317 to tether budding virions to the host cell membrane, physically restricting viral particle release. Expression of BST2 is strongly upregulated by type I interferons, linking its function to antiviral signaling pathways. CD317 antibody supports studies of host-virus interactions and interferon-mediated immune responses.

CD317 is expressed in immune cell populations including B lymphocytes, plasmacytoid dendritic cells, activated T cells, and monocytes, and can also be detected in epithelial tissues under inflammatory conditions. In addition to its antiviral role, BST2 has been implicated in NF-kappaB activation and regulation of cytokine production, highlighting its broader involvement in immune signaling networks. CD317 antibody is therefore frequently applied in research examining inflammatory pathways and immune cell activation.

Beyond infectious disease research, CD317 expression has been reported in multiple myeloma and other hematologic malignancies, where HM1.24 serves as a cell surface marker in research settings. Clone BST2/13682R is a recombinant rabbit monoclonal antibody developed to recognize CD317 for research applications. This antibody targets Bone marrow stromal antigen 2 in research settings and supports studies of antiviral defense, immune regulation, and cancer biology.

Application Notes

1. Optimal dilution of the CD317/BST2 antibody should be determined by the researcher.

2. This CD317/BST2 antibody is recombinantly produced by expression in CHO cells.

Immunogen

Recombinant BST2 protein was used as the immunogen for the CD317/BST2 antibody.

Storage

CD317/BST2 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.