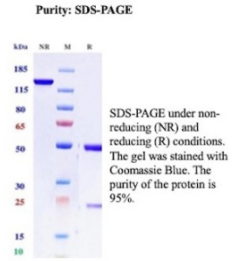
BST2 Antibody / Bone marrow stromal antigen 2 [clone BST2/13681R] (V6005)

Catalog No.	Formulation	Size
V6005-100UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	100 ug
V6005-20UG	0.2 mg/ml in 1X PBS with 0.05% BSA, 0.05% sodium azide	20 ug
V6005SAF-100UG	1 mg/ml in 1X PBS; BSA free, sodium azide free	100 ug

Recombinant RABBIT MONOCLONAL

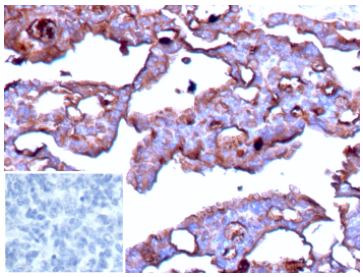
Bulk quote request

Species Reactivity	Human
Format	Purified
Host	Rabbit
Clonality	Recombinant Rabbit Monoclonal
Isotype	Rabbit IgG, kappa
Clone Name	BST2/13681R
UniProt	Q10589
Localization	Cell membrane, Cytoplasm
Applications	ELISA : Immunohistochemistry : 1-2ug/ml Western Blot : 2-4ug/ml
Limitations	This BST2/Bone marrow stromal antigen 2 antibody is available for research use only.

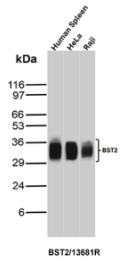


SDS-PAGE under non-reducing (NR) and reducing (R) conditions. The gel was stained with Coomassie Blue. The purity of the protein is 95%.

Immunohistochemistry analysis of BST2/Bone marrow stromal antigen 2 antibody in human ovary tissue (clone BST2/13681R). FFPE human ovary sections demonstrate HRP-DAB brown membranous and cytoplasmic staining in epithelial cells lining ovarian structures, with strong cell surface localization consistent with Bone marrow stromal antigen 2 expression. Surrounding stromal areas show comparatively weaker staining. The inset shows PBS used in place of primary antibody as a secondary antibody negative control, demonstrating absence of specific brown staining. 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 BST2/Bone marrow stromal antigen 2 antibody (clone BST2/13681R) in human samples. Lysates from human spleen tissue, human HeLa cells, and human Raji cells show a prominent immunoreactive band 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 migration within this range is consistent with known glycosylation-dependent mobility on SDS-PAGE. The band is detected in all three lysates, supporting endogenous expression of BST2 / Tetherin in immune-derived and epithelial cell types.



SDS-PAGE Analysis of Purified BST2/Bone marrow stromal antigen 2 antibody (BST2/13681R). Confirmation of Purity and Integrity of Antibody.

Description

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

Bone marrow stromal antigen 2 possesses a short N-terminal cytoplasmic tail, a single-pass transmembrane domain, an extracellular coiled-coil region, and a C-terminal glycosylphosphatidylinositol anchor. This unusual dual-anchor topology enables Tetherin to physically tether budding virions to the cell surface, thereby preventing viral particle release. BST2 expression is strongly induced by type I interferons, linking its function to antiviral defense pathways. BST2 antibody supports investigation of host-virus interactions and mechanisms of viral restriction.

BST2 is broadly expressed in immune cell populations including B lymphocytes, plasmacytoid dendritic cells, activated T cells, and monocytes. Expression is also observed in epithelial tissues during inflammatory responses. Tetherin has been extensively studied in the context of HIV-1 infection, where viral proteins such as Vpu antagonize BST2 to promote viral release. In addition to its antiviral role, CD317 has been implicated in NF-kappaB signaling and regulation of cytokine production, highlighting its broader involvement in immune signaling networks.

Beyond infectious disease research, BST2 expression has been reported in multiple myeloma and other hematologic malignancies, where it serves as a surface marker in research settings. Clone BST2/13681R is a recombinant rabbit monoclonal antibody developed to recognize BST2 for research applications. This antibody targets Bone marrow stromal antigen 2 in research settings and supports studies of antiviral defense, interferon biology, and immune regulation.

Application Notes

1. Optimal dilution of the BST2/Bone marrow stromal antigen 2 antibody should be determined by the researcher.

2. This BST2/Bone marrow stromal antigen 2 antibody is recombinantly produced by expression in CHO cells.

Immunogen

Recombinant BST2 protein was used as the immunogen for the BST2/Bone marrow stromal antigen 2 antibody.

Storage

BST2/Bone marrow stromal antigen 2 antibody with sodium azide - store at 2 to 8oC; antibody without sodium azide - store at -20 to -80oC.