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Anti-BST2 Monoclonal Antibody

Catalog # ABO14422

Product Information

Application	WB, IHC, FC
Primary Accession	Q10589
Host	Rabbit
Isotype	Rabbit IgG
Reactivity	Human
Clonality	Monoclonal
Format	Liquid
Description	Anti-BST2 Monoclonal Antibody . Tested in WB, IHC, Flow Cytometry applications. This antibody reacts with Human.

Additional Information

Gene ID	684
Other Names	Bone marrow stromal antigen 2, BST-2, HM1.24 antigen, Tetherin, CD317, BST2
Calculated MW	19769
Application Details	WB 1:500-1:2000 IHC 1:50-1:200 FC 1:50
Source	Eukaryota
Contents	Rabbit IgG in phosphate buffered saline, pH 7.4, 150mM NaCl, 0.02% sodium azide and 50% glycerol, 0.4-0.5mg/ml BSA.
Clone Names	Clone: ACCD-2
Immunogen	A synthesized peptide derived from human BST2 May be involved in the sorting of secreted proteins (By similarity). May be involved in pre-B-cell growth. Antiretroviral defense protein, that blocks release of retrovirus from the cell surface.
Purification	Affinity-chromatography
Storage	Store at -20°C for one year. For short term storage and frequent use, store at 4°C for up to one month. Avoid repeated freeze-thaw cycles.

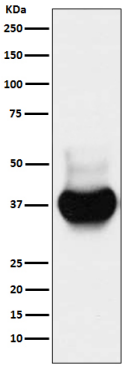
Protein Information

Name	BST2

Function	IFN-induced antiviral host restriction factor which efficiently blocks the release of diverse mammalian enveloped viruses by directly tethering nascent virions to the membranes of infected cells. Acts as a direct physical tether, holding virions to the cell membrane and linking virions to each other. The tethered virions can be internalized by endocytosis and subsequently degraded or they can remain on the cell surface. In either case, their spread as cell-free virions is restricted (PubMed:18200009, PubMed:18342597, PubMed:19036818, PubMed:19879838, PubMed:20019814, PubMed:20399176, PubMed:20419159, PubMed:20940320, PubMed:21529378, PubMed:22520941, PubMed:37922253). Its target viruses belong to diverse families, including retroviridae: human immunodeficiency virus type 1 (HIV-1), human immunodeficiency virus type 2 (HIV-2), simian immunodeficiency viruses (SIVs), equine infectious anemia virus (EIAV), feline immunodeficiency virus (FIV), prototype foamy virus (PFV), Mason-Pfizer monkey virus (MPMV), human T-cell leukemia virus type 1 (HTLV-1), Rous sarcoma virus (RSV) and murine leukemia virus (MLV), flaviviridae: hepatitis C virus (HCV), filoviridae: ebola virus (EBOV) and marburg virus (MARV), arenaviridae: lassa virus (LASV) and machupo virus (MACV), herpesviridae: kaposis sarcoma-associated herpesvirus (KSHV), rhabdoviridae: vesicular stomatitis virus (VSV), orthomyxoviridae: influenza A virus, paramyxoviridae: nipah virus, and coronaviridae: SARS-CoV (PubMed:18200009, PubMed:18342597, PubMed:19179289, PubMed:19879838, PubMed:20399176, PubMed:20419159, PubMed:20686043, PubMed:20943977, PubMed:21529378, PubMed:21621240, PubMed:22520941, PubMed:26378163, PubMed:31199522). Can inhibit cell surface proteolytic activity of MMP14 causing decreased activation of MMP15 which results in inhibition of cell growth and migration (PubMed:22065321). Can stimulate signaling by LILRA4/ILT7 and consequently provide negative feedback to the production of IFN by plasmacytoid dendritic cells in response to viral infection (PubMed:19564354, PubMed:26172439). Plays a role in the organization of the subapical actin cytoskeleton in polarized epithelial cells. Isoform 1 and isoform 2 are both effective viral restriction factors but have differing antiviral and signaling activities (PubMed:23028328, PubMed:26172439). Isoform 2 is resistant to HIV-1 Vpu-mediated degradation and restricts HIV-1 viral budding in the presence of Vpu (PubMed:23028328, PubMed:26172439). Isoform 1 acts as an activator of NF-kappa-B and this activity is inhibited by isoform 2 (PubMed:23028328).
Cellular Location	Golgi apparatus, trans-Golgi network. Cell membrane; Single-pass type II membrane protein. Cell membrane; Lipid- anchor, GPI-anchor. Membrane raft. Cytoplasm. Apical cell membrane. Note=Shuttles between the cell membrane, where it is present predominantly in membrane/lipid rafts, and the trans- Golgi network. Forms a complex with MMP14 and localizes to the cytoplasm
Tissue Location	Predominantly expressed in liver, lung, heart and placenta. Lower levels in pancreas, kidney, skeletal muscle and brain Overexpressed in multiple myeloma cells. Highly expressed during B-cell development, from pro-B precursors to plasma cells. Highly expressed on T-cells, monocytes, NK cells and dendritic cells (at protein level)

Images

Western blot analysis of BST2 expression in HeLa cell lysate.



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