

BST2 Rabbit mAb

Catalog # AP77730

Product Information

Application	WB, IHC-P, FC
Primary Accession	Q10589
Reactivity	Human
Host	Rabbit
Clonality	Monoclonal Antibody
Isotype	IgG
Conjugate	Unconjugated
Immunogen	A synthesized peptide derived from human BST2
Purification	Affinity Chromatography
Calculated MW	19769

Additional Information

Gene ID	684
Other Names	BST2
Dilution	WB~~1/500-1/1000 IHC-P~~N/A FC~~1:10~50
Format	Liquid in 10mM PBS, pH 7.4, 150mM sodium chloride, 0.05% BSA, 0.02% sodium azide and 50% glycerol.
Storage	Store at 4°C short term. Aliquot and store at -20°C long term. Avoid 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: kaposi 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](#)).

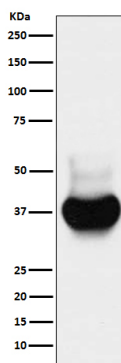
Cellular Location

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



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