

**BST-2 Polyclonal Antibody**  
**Catalog # AP73795****Specification****BST-2 Polyclonal Antibody - Product Information**

|                   |                        |
|-------------------|------------------------|
| Application       | WB, IHC-P              |
| Primary Accession | <a href="#">Q10589</a> |
| Reactivity        | Human                  |
| Host              | Rabbit                 |
| Clonality         | Polyclonal             |

**BST-2 Polyclonal Antibody - Additional Information****Gene ID** 684**Other Names**

BST2; Bone marrow stromal antigen 2; BST-2; HM1.24 antigen; Tetherin; CD317

**Dilution**

WB~~Western Blot: 1/500 - 1/2000. IHC-p: 1:100-1:300. ELISA: 1/10000. Not yet tested in other applications.

IHC-P~~N/A

**Format**

Liquid in PBS containing 50% glycerol, 0.5% BSA and 0.09% (W/V) sodium azide.

**Storage Conditions**

-20°C

**BST-2 Polyclonal Antibody - 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:<a href="http://www.uniprot.org/citations/18200009" target="\_blank">18200009</a>, PubMed:<a href="http://www.uniprot.org/citations/18342597" target="\_blank">18342597</a>, PubMed:<a href="http://www.uniprot.org/citations/19036818" target="\_blank">19036818</a>, PubMed:<a href="http://www.uniprot.org/citations/19879838" target="\_blank">19879838</a>, PubMed:<a href="http://www.uniprot.org/citations/20019814" target="\_blank">20019814</a>, PubMed:<a href="http://www.uniprot.org/citations/20399176" target="\_blank">20399176</a>, PubMed:<a href="http://www.uniprot.org/citations/20419159" target="\_blank">20419159</a>, PubMed:<a href="http://www.uniprot.org/citations/20940320" target="\_blank">20940320</a>, PubMed:<a href="http://www.uniprot.org/citations/21529378" target="\_blank">21529378</a>.

PubMed:<a href="http://www.uniprot.org/citations/22520941" target="\_blank">22520941</a>, PubMed:<a href="http://www.uniprot.org/citations/37922253" target="\_blank">37922253</a>). 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:<a href="http://www.uniprot.org/citations/18200009" target="\_blank">18200009</a>, PubMed:<a href="http://www.uniprot.org/citations/18342597" target="\_blank">18342597</a>, PubMed:<a href="http://www.uniprot.org/citations/19179289" target="\_blank">19179289</a>, PubMed:<a href="http://www.uniprot.org/citations/19879838" target="\_blank">19879838</a>, PubMed:<a href="http://www.uniprot.org/citations/20399176" target="\_blank">20399176</a>, PubMed:<a href="http://www.uniprot.org/citations/20419159" target="\_blank">20419159</a>, PubMed:<a href="http://www.uniprot.org/citations/20686043" target="\_blank">20686043</a>, PubMed:<a href="http://www.uniprot.org/citations/20943977" target="\_blank">20943977</a>, PubMed:<a href="http://www.uniprot.org/citations/21529378" target="\_blank">21529378</a>, PubMed:<a href="http://www.uniprot.org/citations/21621240" target="\_blank">21621240</a>, PubMed:<a href="http://www.uniprot.org/citations/22520941" target="\_blank">22520941</a>, PubMed:<a href="http://www.uniprot.org/citations/26378163" target="\_blank">26378163</a>, PubMed:<a href="http://www.uniprot.org/citations/31199522" target="\_blank">31199522</a>). Can inhibit cell surface proteolytic activity of MMP14 causing decreased activation of MMP15 which results in inhibition of cell growth and migration (PubMed:<a href="http://www.uniprot.org/citations/22065321" target="\_blank">22065321</a>). 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:<a href="http://www.uniprot.org/citations/19564354" target="\_blank">19564354</a>, PubMed:<a href="http://www.uniprot.org/citations/26172439" target="\_blank">26172439</a>). 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:<a href="http://www.uniprot.org/citations/23028328" target="\_blank">23028328</a>, PubMed:<a href="http://www.uniprot.org/citations/26172439" target="\_blank">26172439</a>). Isoform 2 is resistant to HIV-1 Vpu-mediated degradation and restricts HIV-1 viral budding in the presence of Vpu (PubMed:<a href="http://www.uniprot.org/citations/23028328" target="\_blank">23028328</a>, PubMed:<a href="http://www.uniprot.org/citations/26172439" target="\_blank">26172439</a>). Isoform 1 acts as an activator of NF-kappa-B and this activity is inhibited by isoform 2 (PubMed:<a href="http://www.uniprot.org/citations/23028328" target="\_blank">23028328</a>).

### 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

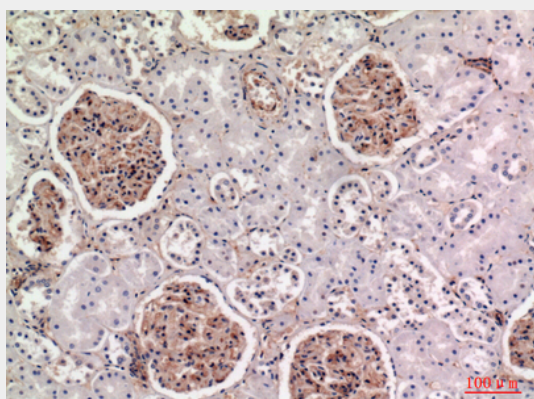
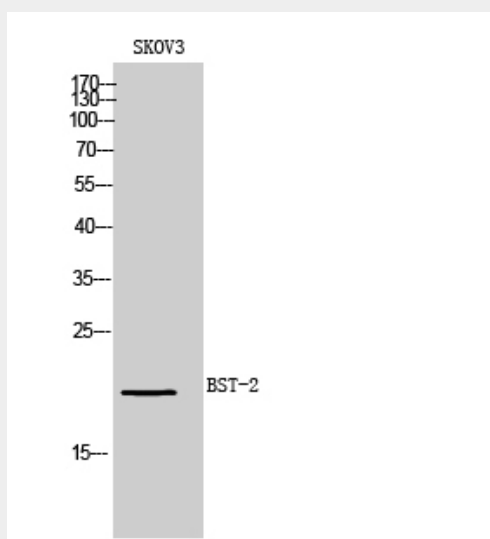
Predominantly expressed in liver, lung, heart and placenta. Lower levels in pancreas, kidney, skeletal muscle and brain Overexpressed in multiple myeloma cells. Highly expressed during B-cell development, from pro-B precursors to plasma cells. Highly expressed on T-cells, monocytes, NK cells and dendritic cells (at protein level)

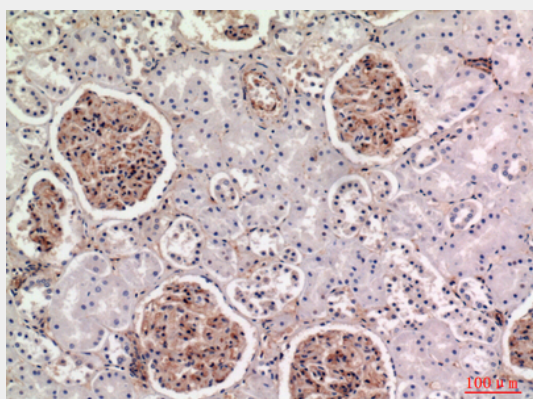
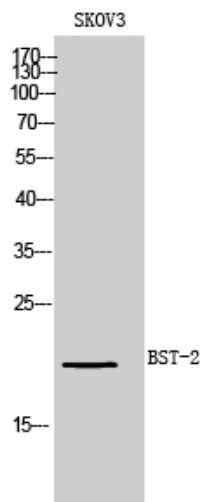
### BST-2 Polyclonal Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- [Western Blot](#)
- [Blocking Peptides](#)
- [Dot Blot](#)
- [Immunohistochemistry](#)
- [Immunofluorescence](#)
- [Immunoprecipitation](#)
- [Flow Cytometry](#)
- [Cell Culture](#)

#### **BST-2 Polyclonal Antibody - Images**





### BST-2 Polyclonal Antibody - Background

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. 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, and paramyxoviridae: nipah virus. Can inhibit cell surface proteolytic activity of MMP14 causing decreased activation of MMP15 which results in inhibition of cell growth and migration. 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).