Human BST2/Tetherin Antibody

Monoclonal Mouse IgG_{2A} Clone # 696739

Catalog Number: MAB7609

DESCRIPTION

Species Reactivity	Human
Specificity	Detects human BST2/Tetherin in direct ELISAs.
Source	Monoclonal Mouse IgG_{2A} Clone # 696739
Purification	Protein A or G purified from hybridoma culture supernatant
Immunogen	Human BST2/Tetherin synthetic peptide DAEKAQGQKKVEELE Accession # Q10589
Formulation	Lyophilized from a 0.2 μm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.

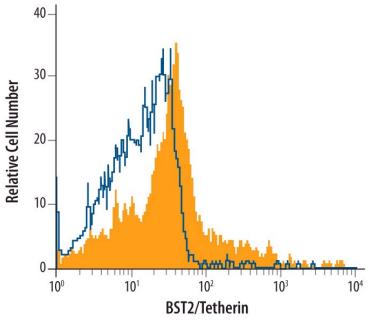
APPLICATIONS

Please Note: *Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.*

	Recommended Concentration	Sample
Flow Cytometry	2.5 µg/10^6 cells	See Below

DATA

Flow Cytometry



Detection of BST2/Tetherin in Human Monocytes by Flow Cytometry. Human peripheral blood monocytes were stained with Mouse Anti-Human BST2/Tetherin Monoclonal Antibody (Catalog # MAB7609, filled histogram) or isotype control antibody (Catalog # MAB003, open histogram), followed by Phycoerythrin-conjugated Anti-Mouse IgG Secondary Antibody (Catalog # F0102B).

PREPARATION AND STORAGE

Reconstitution	Sterile PBS to a final concentration of 0.5 mg/mL.
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	**Use a manual defrost freezer and avoid repeated freeze-thaw cycles.** ● 12 months from date of receipt, -20 to -70 °C as supplied. ● 1 month, 2 to 8 °C under sterile conditions after reconstitution. ● 6 months, -20 to -70 °C under sterile conditions after reconstitution.

BACKGROUND

BST2, also known as Tetherin or PDCA1 and designated CD317, is a 30-35 kDa interferon-inducible protein that associates with the plasma membrane with its transmembrane segment and GPI anchor. BST2 is expressed on bone marrow stromal cells and is upregulated in breast cancer and astrocytoma. It binds to ILT7 on plasmacytoid dendritic cells and inhibits proinflammatory TLR7 and TLR9 signaling. BST2 inhibits the release of Kaposi sarcoma virus, HIV-1, and Lassa virus from infected cells, but this function is counteracted by viral proteins which directly bind and trigger the degradation of BST2. Human BST2 is synthesized with a 20 aa cytoplasmic domain, a 28 aa transmembrane segment, a 113 aa extracellular domain, and a 19 aa C-terminal propeptide. Following removal of the propeptide BST2 is modified with a GPI anchor at Ser161. Within the peptide immunogen which represents aa 103-117 of the ECD, human BST2 shares 28% aa sequence identity with mouse and rat BST2.