

DESCRIPTION

Species Reactivity	Mouse
Specificity	Detects mouse BST-2/Tetherin in flow cytometry.
Source	Recombinant Monoclonal Rat IgG _{2A} Clone # 44E9R
Purification	Protein A or G purified from cell culture supernatant
Immunogen	Recombinant extracellular domain of CD317
Conjugate	Allophycocyanin Excitation Wavelength: 620-650 nm Emission Wavelength: 660-670 nm
Formulation	Supplied in a saline solution containing BSA and Sodium Azide. See Certificate of Analysis for details. *Contains <0.1% Sodium Azide, which is not hazardous at this concentration according to GHS classifications. Refer to the Safety Data Sheet (SDS) for additional information and handling instructions.

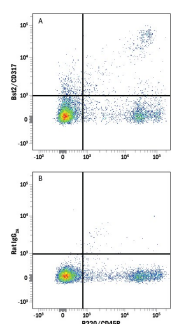
APPLICATIONS

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	10 µL/10 ⁶ cells	See Below

DATA

Flow Cytometry



Detection of BST-2/Tetherin in Mouse Bone Marrow Cells by Flow Cytometry. Mouse bone marrow cells were stained with Rat Anti-Mouse B220/CD45R PE-conjugated Monoclonal Antibody (Catalog # FAB1217P) and either (A) Rat Anti-Mouse BST-2/Tetherin APC-conjugated Monoclonal Antibody (Catalog # FAB8660A) or (B) Rat IgG_{2A} Allophycocyanin Isotype Control (Catalog # IC006A). View our protocol for [Staining Membrane-associated Proteins](#).

PREPARATION AND STORAGE

Shipping	The product is shipped with polar packs. Upon receipt, store it immediately at the temperature recommended below.
Stability & Storage	Protect from light. Do not freeze. <ul style="list-style-type: none"> ● 12 months from date of receipt, 2 to 8 °C as supplied.

BACKGROUND

BST2, also known as Tetherin or PDCA1 and designated CD317, is a 30-35 kDa interferon-inducible protein that shows an unusual topology. The N-terminus is cytoplasmic, followed by a transmembrane segment, an extracellular loop, and a C-terminal GPI-linkage. 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.