
Anti-Human CD317 (BST2, PDCA-1) Functional Grade Purified

Catalog Number: 16-3179

RUO: For Research Use Only. Not for use in diagnostic procedures.

Product Information



Contents: Anti-Human CD317 (BST2, PDCA-1) Functional Grade Purified

Catalog Number: 16-3179

Clone: 26F8

Concentration: 1 mg/mL

Host/Isotype: Mouse IgG1, kappa

Handling Conditions: Use in sterile environment.

Endotoxin: Less than 0.001 ng/ug antibody, as determined by the LAL assay.



Formulation: aqueous buffer, no sodium azide

Temperature Limitation: Store at 2-8°C.

Batch Code: Refer to vial

Use By: Refer to vial

Description

This 26F8 monoclonal antibody reacts with human CD317 (also known as BST2 and tetherin). CD317 is a 30-36-kDa type II transmembrane protein expressed on B cells and bone marrow stromal cells. Although reports have indicated that CD317 mRNA is detectable in activated T cells, protein expression in primary T cells and macrophages is undetectable. Moreover, certain T cell lines, such as Jurkat, do not express detectable levels of CD317 protein. CD317 has been associated with pre-B cell growth and the terminal differentiation of plasma B cells. More recently, this molecule has been reported to prevent HIV-1 virion release from the surface of infected cells, leading to reuptake and degradation of the virus. This activity is inhibited by the HIV-1 accessory protein Vpu. CD317 has been identified as the ligand for the ILT7 receptor.

Applications Reported

This 26F8 antibody has been reported for use in flow cytometric analysis and functional assays. The 26F8 clone has been reported to block the binding of CD317 to the ILT7 receptor.

Applications Tested

This 26F8 antibody has been tested by flow cytometric analysis on MCF7 cells. This can be used at less than or equal to 0.125 µg per test. A test is defined as the amount (µg) of antibody that will stain a cell sample in a final volume of 100 µL. Cell number should be determined empirically but can range from 10⁵ to 10⁸ cells/test. It is recommended that the antibody be carefully titrated for optimal performance in the assay of interest.

References

Miyagi E, Andrew AJ, Kao S, Strebel K. Vpu enhances HIV-1 virus release in the absence of Bst-2 cell surface down-modulation and intracellular depletion. *Proc Natl Acad Sci U S A*. 2009 Feb 24;106(8):2868-73.

Van Damme N, Goff D, Katsura C, Jorgenson RL, Mitchell R, Johnson MC, Stephens EB, Guatelli J. The interferon-induced protein BST-2 restricts HIV-1 release and is downregulated from the cell surface by the viral Vpu protein. *Cell Host Microbe*. 2008 Apr 17;3(4):245-52.

Neil SJ, Zang T, Bieniasz PD. Tetherin inhibits retrovirus release and is antagonized by HIV-1 Vpu. *Nature*. 2008 Jan 24;451(7177):425-30.

Ishikawa J, Kaisho T, Tomizawa H, Lee BO, Kobune Y, Inazawa J, Oritani K, Itoh M, Ochi T, Ishihara K, et al. Molecular cloning and chromosomal mapping of a bone marrow stromal cell surface gene, BST2, that may be involved in pre-B-cell growth. *1995 Genomics* 26, 527-534.

Related Products

16-4714 Mouse IgG1 K Isotype Control Functional Grade Purified (P3.6.2.8.1)

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