

Alexa Fluor® 647 anti-human CD317 (BST2, Tetherin) Antibody

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| Catalog# / Size | 348404 / 100 tests |
| Clone | RS38E |
| Regulatory Status | RUO |
| Workshop | VIII |
| Other Names | BST2, Tetherin, HM1.24, Bone marrow stromal antigen 2 |
| Isotype | Mouse IgG1, κ |
| Description | CD317, also known as BST2, Tetherin, and HM1.24, is a type II transmembrane GPI-protein with a molecular weight of about 29-33 kD. It is an interferon-induced protein expressed on dendritic cells, plasma cells, B lymphoblast cells, monocytes, granulocytes, T cells, NK cells, stromal cells, and some non-hematopoietic cells. BST2 inhibits cytokine production through interaction with ILT7 (CD85g). It is also involved in the regulation of B cell growth. More importantly, BST2 has been found to restrict the release of a number of viruses from infected cells, including all tested retroviruses (such as HIV-1) and some arenaviruses and filoviruses. In HIV-1 studies, it has been reported that BST2 retains the nascent virions on the surface of infected cells by incorporation of the protein into HIV-1 particles. HIV-1 Vpu is able to induce BST2 degradation. |

Product Details

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| Verified Reactivity | Human, African Green, Baboon, Cynomolgus, Pigtail, Rhesus Macaque |
| Antibody Type | Monoclonal |
| Host Species | Mouse |
| Formulation | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA) |
| Preparation | The antibody was purified by affinity chromatography and conjugated with Alexa Fluor® 647 under optimal conditions. |
| Concentration | Lot-specific (to obtain lot-specific concentration, please enter the lot number in our Concentration and Expiration Lookup or Certificate of Analysis online tools.) |
| Storage & Handling | The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. Do not freeze. |
| Application | FC - Quality tested |
| Recommended Usage | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis . For flow cytometric staining, the suggested use of this reagent is 5 µl per million cells in 100 µl staining volume or 5 µl per 100 µl of whole blood. * Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm. Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation. View full statement regarding label licenses |
| Excitation Laser | Red Laser (633 nm) |
| Application References | 1. Ishikawa J, <i>et al.</i> 1995. <i>Genomics</i> 26:527. 2. Miyagi E, <i>et al.</i> 2011. <i>J. Virol.</i> 85:11981. PubMed 3. Yokoyama T, <i>et al.</i> 2013. <i>Int. J. Cancer.</i> 132: 472. (FC) PubMed |
| (PubMed link indicates BioLegend citation) | |
| Product Citations | 1. Grover J, <i>et al.</i> 2013. <i>J Virol.</i> 87:4650. PubMed 2. Jafari M, <i>et al.</i> 2014. <i>J Virol.</i> 88:5062. PubMed 3. Andrew A, <i>et al.</i> 2011. <i>J Biol Chem.</i> 286:39967. PubMed |

RRID AB_10567113 (BioLegend Cat. No. 348404)

Disclaimer This product is manufactured and sold under a license and covered by a number of issued patents. Users who intend to file a patent relating to the use of this product or who intend to develop therapeutic use of this antibody are required to report to BioLegend in advance.

Antigen Details

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| Structure | Type II transmembrane, GPI-anchored protein, 29-33 kD |
| Distribution | Dendritic cells, plasma cells, B lymphoblast cells, monocytes, granulocytes, T cells, NK cells, stromal cells |
| Function | Regulate B cell growth, inhibit cytokine production, retain progeny virions on the surface of infected cells |
| Ligand/Receptor | ILT7 (CD85g) |
| Cell Type | B cells, Dendritic cells, Granulocytes, Monocytes, NK cells, Plasma cells, T cells |
| Biology Area | Costimulatory Molecules, Immunology, Innate Immunity |
| Molecular Family | Adhesion Molecules, CD Molecules |
| Antigen References | <ol style="list-style-type: none">1. Sugamata OT, <i>et al.</i> 1999. <i>Biochem. Bioph. Res. Co.</i> 258:583.2. Neil SJ, <i>et al.</i> 2008. <i>Nature</i> 451:425.3. Fitzpatrick K, <i>et al.</i> 2010. <i>PLoS Pathog.</i> 6:e1000701.4. Azuma KS, <i>et al.</i> 2008. <i>Cancer Sci.</i> 99:2461.5. Cao W, <i>et al.</i> 2009. <i>J. Exp. Med.</i> 206:1603.6. Zola H, <i>et al.</i> 2007. <i>Leukocyte and Stromal Cell Molecules: The CD Markers.</i> |
| Gene ID | 684 |

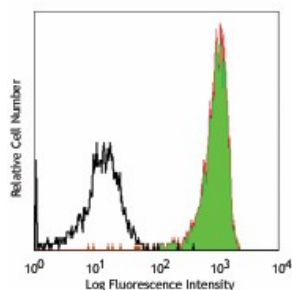
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

PerCP/Cyanine5.5 anti-human CD317 (BST2, Tetherin), PE/Cyanine7 anti-human CD317 (BST2, Tetherin), Purified anti-human CD317 (BST2, Tetherin), Alexa Fluor® 647 anti-human CD317 (BST2, Tetherin), PE anti-human CD317 (BST2, Tetherin), APC anti-human CD317 (BST2, Tetherin)

Product Data



Human peripheral blood monocytes stained with RS38E Alexa Fluor® 647

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