

## PerCP/Cyanine5.5 anti-human CD317 (BST2, Tetherin) Antibody

<b>Catalog# / Size</b>	348413 / 25 tests 348414 / 100 tests
<b>Clone</b>	RS38E
<b>Regulatory Status</b>	RUO
<b>Workshop</b>	VIII
<b>Other Names</b>	BST2, Tetherin, HM1.24, Bone marrow stromal antigen 2
<b>Isotype</b>	Mouse IgG1, κ
<b>Description</b>	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

<b>Reactivity</b>	Human, African Green, Baboon, Cynomolgus, Pigtail, Rhesus Macaque
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Mouse
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA)
<b>Preparation</b>	The antibody was purified by affinity chromatography and conjugated with PerCP/Cyanine5.5 under optimal conditions.
<b>Concentration</b>	Lot-specific (to obtain lot-specific concentration, please enter the lot number in our <a href="#">Concentration and Expiration Lookup</a> or <a href="#">Certificate of Analysis</a> online tools.)
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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.  * PerCP/Cyanine5.5 has a maximum absorption of 482 nm and a maximum emission of 690 nm.
<b>Excitation Laser</b>	Blue Laser (488 nm)
<b>Additional Product Notes</b>	BioLegend is in the process of converting the name PerCP/Cy5.5 to PerCP/Cyanine5.5. The dye molecule remains the same, so you should expect the same quality and performance from our PerCP/Cyanine5.5 products. Contact <a href="#">Technical Service</a> if you have any questions.
<b>Application References</b>	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. <a href="#">PubMed</a> 3. Yokoyama T, <i>et al.</i> 2013. <i>Int. J. Cancer.</i> 132: 472. (FC) <a href="#">PubMed</a>
<b>(PubMed link indicates BioLegend citation)</b>	
<b>RRID</b>	AB_2716042 (BioLegend Cat. No. 348413) AB_2716043 (BioLegend Cat. No. 348414)
<b>Disclaimer</b>	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

<b>Structure</b>	Type II transmembrane, GPI-anchored protein, 29-33 kD
<b>Distribution</b>	Dendritic cells, plasma cells, B lymphoblast cells, monocytes, granulocytes, T cells, NK cells, stromal cells
<b>Function</b>	Regulate B cell growth, inhibit cytokine production, retain progeny virions on the surface of infected cells
<b>Ligand/Receptor</b>	ILT7 (CD85g)
<b>Cell Type</b>	B cells, Dendritic cells, Granulocytes, Monocytes, NK cells, Plasma cells, T cells
<b>Biology Area</b>	Costimulatory Molecules, Immunology, Innate Immunity
<b>Molecular Family</b>	Adhesion Molecules, CD Molecules
<b>Antigen References</b>	<ol style="list-style-type: none"><li>1. Sugamata OT, <i>et al.</i> 1999. <i>Biochem. Bioph. Res. Co.</i> 258:583.</li><li>2. Neil SJ, <i>et al.</i> 2008. <i>Nature</i> 451:425.</li><li>3. Fitzpatrick K, <i>et al.</i> 2010. <i>PLoS Pathog.</i> 6:e1000701.</li><li>4. Azuma KS, <i>et al.</i> 2008. <i>Cancer Sci.</i> 99:2461.</li><li>5. Cao W, <i>et al.</i> 2009. <i>J. Exp. Med.</i> 206:1603.</li><li>6. Zola H, <i>et al.</i> 2007. <i>Leukocyte and Stromal Cell Molecules: The CD Markers.</i></li></ol>
<b>Gene ID</b>	<a href="#">684</a>

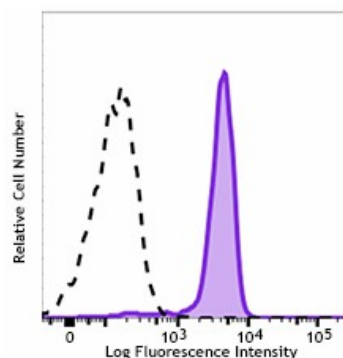
## Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

## Other Formats

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), PerCP/Cyanine5.5 anti-human CD317 (BST2, Tetherin), PE/Cyanine7 anti-human CD317 (BST2, Tetherin)

## Product Data



Human peripheral blood cells were stained with CD317 (clone RS38E) PerCP/Cyanine5.5 (filled histogram) or mouse IgG1 ? PerCP/Cyanine5.5 isotype control (open histogram). Data shown were from monocyte population.

For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.

\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all

applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.

8999 BioLegend Way, San Diego, CA 92121 [www.biolegend.com](http://www.biolegend.com)  
Toll-Free Phone: 1-877-Bio-Legend (246-5343) Phone: (858) 768-5800 Fax: (877) 455-9587