

Brilliant Violet 650™ anti-mouse CD317 (BST2, PDCA-1) Antibody

Catalog# / Size	127019 / 50 µg
Clone	927
Regulatory Status	RUO
Other Names	BST2, tetherin, HM1.2 antigen, bone marrow stromal antigen 2, PDCA-1
Isotype	Rat IgG2b, κ
Description	CD317, known as BST2, tetherin, HM1.2 antigen, bone marrow stromal antigen 2, or PDCA-1, is type II transmembrane glycoprotein with a molecular mass of 29-33 kD. It is predominantly expressed on Type I IFN-producing cells (IPCs) in naïve mice, but is up-regulated on most cell types following stimulation with type I IFNs and IFN-gamma. It is highly expressed on terminally differentiated normal plasmacytoid dendritic cells and some tumor cells, such as multiple myeloma, renal cell carcinoma, and melanoma cells. BST2 is a recently identified, IFN-induced cellular response factor that blocks release of HIV-1 and other retroviruses from infected cells. BST2 has been found to be the natural ligand of ILT7 in human model.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Mouse plasmacytoid dendritic cells (DCs)
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 Brilliant Violet 650™ under optimal conditions.
Concentration	0.2 mg/ml
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	<p>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 ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.</p> <p>Brilliant Violet 650™ excites at 405 nm and emits at 645 nm. The bandpass filter 660/20 nm is recommended for detection, although filter optimization may be required depending on other fluorophores used. Be sure to verify that your cytometer configuration and software setup are appropriate for detecting this channel. Refer to your instrument manual or manufacturer for support. Brilliant Violet 650™ is a trademark of Sirigen Group Ltd.</p> <p>Learn more about Brilliant Violet™.</p> <p>This product is subject to proprietary rights of Sirigen Inc. and is made and sold under license from Sirigen Inc. The purchase of this product conveys to the buyer a non-transferable right to use the purchased product for research purposes only. This product may not be resold or incorporated in any manner into another product for resale. Any use for therapeutics or diagnostics is strictly prohibited. This product is covered by U.S. Patent(s), pending patent applications and foreign equivalents.</p>
Excitation Laser	Violet Laser (405 nm)
Application Notes	Additional reported applications (for the relevant formats) include: immunofluorescence microscopy, functional assay ² , and depletion ^{3,4} . The Ultra-LEAF™ purified antibody (Endotoxin <0.01 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays.

Application References

(PubMed link indicates BioLegend citation)

1. Blasius AL, *et al.* 2006. *J. Immunol.* 177:3260.
2. Schliemann C, *et al.* 2010. *Blood* 115:736. (FA, IF)
3. Rajagopal D, *et al.* 2010. *Blood* 115:1949. (Depletion)
4. Moniz RJ, *et al.* 2010. *FEMS Immunol. Med. Microbiol.* 58:397. (Depletion)
5. Chen YL, *et al.* 2013. *J Exp Med.* 210:2515. [PubMed](#)

Product Citations

1. Marco Barros R, *et al.* 2016. *Cell.* 167: 203-218. [PubMed](#)
2. Ellis G, *et al.* 2015. *EMBO Rep.* 16: 1203-1218. [PubMed](#)
3. Gubin MM, *et al.* 2018. *Cell.* 175:1014. [PubMed](#)
4. Rappe JCF, *et al.* 2021. *J Exp Med.* 218:. [PubMed](#)

RRID

AB_2562477 (BioLegend Cat. No. 127019)

Antigen Details

Structure	Type II transmembrane glycoprotein with a molecular mass of 29-33 kD.
Distribution	Expressed on type I IFN-producing cells, plasmacytoid dendritic cells, and neoplastic B cells, such as multiple myeloma.
Function	Recently identified antiviral protein that blocks the release of nascent retrovirus or other particles from infected cells.
Cell Type	Dendritic cells
Biology Area	Costimulatory Molecules, Immunology, Innate Immunity
Molecular Family	CD Molecules
Antigen References	<ol style="list-style-type: none">1. Douglas JL. <i>et al.</i> 2009. <i>J Virol.</i> 83(16):79312. Cao W <i>et al.</i> 2009. <i>J. Exp. Med.</i> 206(7):16033. Neil SJ. <i>et al.</i> 2008. <i>Nature</i> 451:425
Gene ID	69550

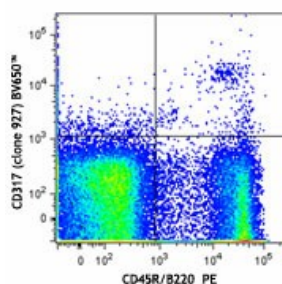
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

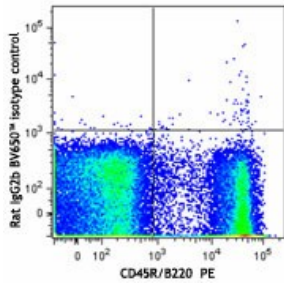
Other Formats

Purified anti-mouse CD317 (BST2, PDCA-1), PE anti-mouse CD317 (BST2, PDCA-1), Alexa Fluor® 488 anti-mouse CD317 (BST2, PDCA-1), Alexa Fluor® 647 anti-mouse CD317 (BST2, PDCA-1), APC anti-mouse CD317 (BST2, PDCA-1), Pacific Blue™ anti-mouse CD317 (BST2, PDCA-1), Biotin anti-mouse CD317 (BST2, PDCA-1), FITC anti-mouse CD317 (BST2, PDCA-1), Brilliant Violet 650™ anti-mouse CD317 (BST2, PDCA-1), PerCP/Cyanine5.5 anti-mouse CD317 (BST2, PDCA-1), Brilliant Violet 421™ anti-mouse CD317 (BST2, PDCA-1), Brilliant Violet 605™ anti-mouse CD317 (BST2, PDCA-1), TotalSeq™-A0811 anti-mouse CD317 (BST2, PDCA-1), Ultra-LEAF™ Purified anti-mouse CD317 (BST2, PDCA-1), TotalSeq™-C0811 anti-mouse CD317 (BST2, PDCA-1), Alexa Fluor® 700 anti-mouse CD317 (BST2, PDCA-1), Brilliant Violet 711™ anti-mouse CD317 (BST2, PDCA-1), TotalSeq™-B0811 anti-mouse CD317 (BST2, PDCA-1) Antibody, Spark UV™ 387 anti-mouse CD317 (BST2, PDCA-1)

Product Data



C57BL/6 splenocytes were stained with CD45R/B220 PE and CD317 (clone 927) Brilliant Violet 650™ (top) or rat IgG2b Brilliant Violet 650™ isotype control (bottom).



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