

PE anti-mouse CD317 (BST2, PDCA-1) Antibody

Catalog# / Size	127103 / 25 µg 127104 / 100 µg
Clone	129C1
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 as 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.
Preparation	The antibody was purified by affinity chromatography, and conjugated with PE 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	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.
Excitation Laser	Blue Laser (488 nm) Green Laser (532 nm)/Yellow-Green Laser (561 nm)
Application References	1. Blasius AL, <i>et al.</i> 2006. <i>J. Immunol.</i> 177:3260 2. Kojima K, <i>et al.</i> 2011. <i>Am J Respir Crit Care Med.</i> 184:328. PubMed .
(PubMed link indicates BioLegend citation)	
Product Citations	1. Ramakrishna C, <i>et al.</i> 2019. <i>Nat Commun.</i> 10:2153. PubMed 2. Shah D, <i>et al.</i> 2021. <i>Oncoimmunology.</i> 10:1939601. PubMed 3. Li Y, <i>et al.</i> 2020. <i>Cell Rep.</i> 30:1753. PubMed 4. Suryawanshi RK, <i>et al.</i> 2021. <i>Nat Commun.</i> 12:6020. PubMed 5. Dobosz E, <i>et al.</i> 2021. <i>Dis Model Mech.</i> :14. PubMed 6. Kojima K, <i>et al.</i> 2011. <i>Am J Respir Crit Care Med.</i> 184:328. PubMed 7. Lorenz G, <i>et al.</i> 2022. <i>J Innate Immun.</i> :1. PubMed
RRID	AB_1953282 (BioLegend Cat. No. 127103) AB_1953283 (BioLegend Cat. No. 127104)

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 as antiviral protein that blocks the release of nascent retrovirus or other particles from infected cells.
Cell Type	Dendritic cells, B cells
Biology Area	Immunology, Innate Immunity, Costimulatory Molecules
Molecular Family	CD Molecules
Antigen References	1. Douglas JL, <i>et al.</i> 2009. <i>J Virol.</i> 83(16):7931 2. Cao W, <i>et al.</i> 2009. <i>J. Exp. Med.</i> 206(7):1603 3. Neil SJ, <i>et al.</i> 2008. <i>Nature</i> 451:425
Gene ID	69550

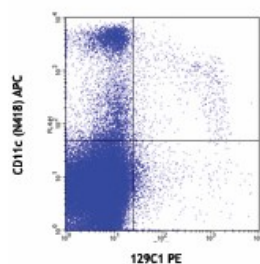
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

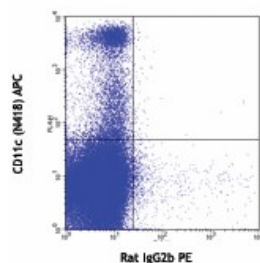
Other Formats

Purified anti-mouse CD317 (BST2, PDCA-1), PE anti-mouse CD317 (BST2, PDCA-1), Pacific Blue™ anti-mouse CD317 (BST2, PDCA-1), Alexa Fluor® 647 anti-mouse CD317 (BST2, PDCA-1)

Product Data



SJL mouse splenocytes double stained with 129C1 PE and CD11c (N418) APC



SJL mouse splenocytes double stained with rat IgG2b isotype control PE and CD11c (N418) APC

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