

## **Product Data Sheet**

## Pacific Blue™ anti-mouse CD317 (BST2, PDCA-1)

Catalog # / Size: 127017 / 25 µg

127018 / 100 µg

**Clone: 927** 

**Isotype:** Rat IgG2b,  $\kappa$ 

Immunogen: Mouse plasmacytoid dendritic cells (DCs)

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with

Pacific Blue<sup>™</sup> under optimal conditions. The solution is free of unconjugated

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

Concentration: 0.5 mg/ml

Storage: The antibody solution should be stored undiluted at 4°C and protected from

prolonged exposure to light. Do not freeze.



Applications: FC - Quality tested

IF - Reported in the literature

Recommended Usage: Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is  $\leq$  0.25  $\mu g$  per 10<sup>6</sup> cells in 100  $\mu l$  volume or 100  $\mu l$  of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

> \* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and

Application Notes: Additional reported applications (for the relevant formats) include: immunofluorescence microscopy, functional assay<sup>2</sup>, and depletion<sup>3,4</sup>. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered)

is recommended for functional assays.



- 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)

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.

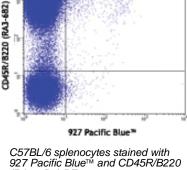
- Antigen References: 1. Douglas JL. et al. 2009. J Virol. 83(16):7931
  - 2. Cao W et al. 2009. J. Exp. Med. 206(7):1603
  - 3. Neil SJ. et al. 2008. Nature 451:425

**Application Related Products: Product** Clone Pacific Blue™ Rat IgG2b, κ Isotype Ctrl RTK4530 FC, ICFC Cell Staining Buffer FC, ICC, ICFC RBC Lysis Buffer (10X) FC, ICFC

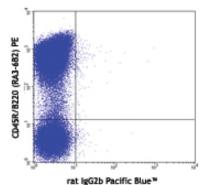
TruStain fcX™ (anti-mouse CD16/32)

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(RA3-6B2) PE



C57BL/6 splenocytes stained with rat IgG2b Pacific Blue™ isotype control and CD45R/B220 (RA3-6B2) PE