

Product Data Sheet

Alexa Fluor® 488 anti-mouse CD317 (BST2, PDCA-1)

Catalog # / Size: 127012 / 100 µg

Clone: 927

Isotype: Rat IgG2b, κ

Immunogen: Mouse plasmacytoid dendritic cells (DCs)

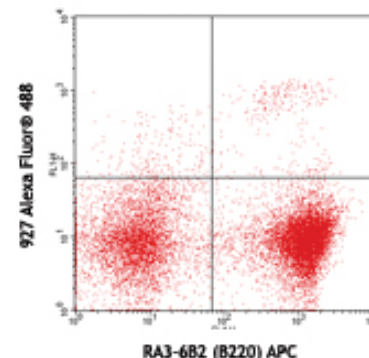
Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography, and conjugated with Alexa Fluor® 488 under optimal conditions. The solution is free of unconjugated Alexa Fluor® 488.

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.**



C57BL/6 splenocytes stained with RA3-6B2 (B220) APC and 927 Alexa Fluor® 488

Applications:

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 ≤0.25 µg per million cells in 100 µl volume. It is recommended that the reagent be titrated for optimal performance for each application.

* Alexa Fluor® 488 has a maximum emission of 519 nm when it is excited at 488 nm.

** Alexa Fluor® 488 is a registered trademark of Molecular Probes, Inc. Alexa Fluor® 488 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 issued patents.

Application Notes: Additional reported applications (for the relevant formats) include: immunofluorescence microscopy, functional assay², and depletion^{3,4}. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays.

Application References:

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

Related Products:

Product
 Alexa Fluor® 488 Rat IgG2b, κ Isotype Ctrl
 Cell Staining Buffer
 RBC Lysis Buffer (10X)
 TruStain fcX™ (anti-mouse CD16/32)

Clone
 RTK4530

93

Application
 FC, ICFC
 FC, ICC, ICFC
 FC, ICFC
 FC



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