SONY

Product Data Sheet

Brilliant Violet 421™ anti-mouse CD16/32

Catalog # / Size: 1106655 / 125 µl
1106660 / 50 µg

Clone: 93

Isotype: Rat IgG2a, λ

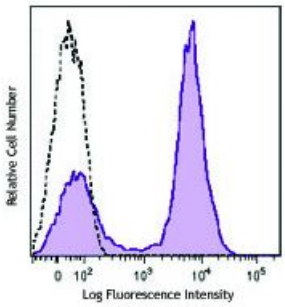
Immunogen: Sorted pre-B cells

Reactivity: Mouse

Preparation: The antibody was purified by affinity chromatography and conjugated with Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.

Formulation: Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).

Concentration: Lot-specific



C57BL/6 mouse splenocytes were stained with CD16/32 (clone 93) Brilliant Violet 421™ or rat IgG2a Brilliant Violet 421™ isotype control.

Applications:

Applications: Flow Cytometry

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 ≤5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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Application Notes: Clone 93 can be used for blocking of CD16/CD32 interactions with the Fc domain of immunoglobulins, but is not the same clone as 2.4G2.

The 93 mAb is specific to the common epitope of CD16/CD32. Additional reported applications (for the relevant formats) include: immunoprecipitation1 and blocking of Fc-mediated reactions in functional studies[2,4,23]. It is useful for blocking non-specific binding of immunoglobulin to Fc receptors. For blocking of Fc receptors in flow cytometric analysis, pre-incubate the cells with purified anti-CD16/CD32 antibody (≤1.0 microg per 10^6 cells in 100 microL volume) for 5-10 minutes on ice prior to immunostaining. The LEAF™ purified antibody (Endotoxin <0.1 EU/µg, Azide-Free, 0.2 µm filtered) is recommended for functional assays (Cat. No. 101310). For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 101330) with a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

Application References:
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10. Li J, *et al.* 2012. *Arthritis Rheum.* 64:1098. PubMed
11. Azuma M, *et al.* 2012. *Oncoimmunology.* 1:581. PubMed
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13. Hegde VL, *et al.* 2013. *J Biol Chem.* 288:36810. PubMed
14. Huang J, *et al.* 2013. *J. Immunol Methods.* 387:254. PubMed
15. Dutow P, *et al.* 2014. *J Infect Dis.* PubMed
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21. Kimura T, *et al.* 2014. *Int Immunol.* 26:697. PubMed
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Description: CD16 is low affinity IgG Fc receptor III (FcR III) and CD32 is FcR II. CD16/CD32 are expressed on B cells, monocytes/macrophages, NK cells, granulocytes, mast cells, and dendritic cells. The Fc receptors bind antibody-antigen immune complexes and mediate adaptive immune responses.

Antigen References:
1. Barclay AN, *et al.* 1997. The Leukocyte Antigen FactsBook Academic Press.
2. Unkeless JC. 1989. *J. Clin. Invest.* 83:355.
3. Qiu WQ, *et al.* 1990. *Science* 248:732.