

Biotin anti-mouse CD16/32 Antibody

Catalog# / Size	101303 / 50 µg
Clone	93
Regulatory Status	RUO
Other Names	Fcγ R III/II, Ly-17
Isotype	Rat IgG2a, λ
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.

Product Details

Verified Reactivity	Mouse
Antibody Type	Monoclonal
Host Species	Rat
Immunogen	Sorted pre-B cells
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
Preparation	The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions.
Concentration	0.5 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C. 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.
Application Notes	<p>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.</p> <p>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 µg per 10⁶ cells in 100 µL volume) for 5-10 minutes on ice prior to immunostaining. For highly sensitive assays, we recommend Ultra-LEAF™ purified antibody (Cat. No. 101330) (Endotoxin <0.01 EU/µg, Azide-Free, 0.2 µm filtered).</p>

Application References

(PubMed link indicates BioLegend citation)

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Product Citations

1. Lv X, *et al.* 2022. *Acta Pharm Sin B.* 12:735. [PubMed](#)
2. Ye Q, *et al.* 2022. *NPJ Vaccines.* 7:84. [PubMed](#)
3. Nakagawa MM, *et al.* 2018. *Cell Rep.* 25:2094. [PubMed](#)
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RRID

AB_312802 (BioLegend Cat. No. 101303)

Antigen Details

Structure	Ig superfamily, 40-60 kD
Distribution	B cells, monocyte/macrophages, NK cells, neutrophils, mast cells, dendritic cells
Function	Low affinity receptors for IgG
Ligand/Receptor	IgG
Cell Type	B cells, Dendritic cells, Macrophages, Mast cells, Monocytes, Neutrophils, NK cells
Biology Area	Immunology, Innate Immunity
Molecular Family	CD Molecules, Fc Receptors
Antigen References	<ol style="list-style-type: none"> 1. Barclay AN, <i>et al.</i> 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press. 2. Unkeless JC. 1989. <i>J. Clin. Invest.</i> 83:355. 3. Qiu WQ, <i>et al.</i> 1990. <i>Science</i> 248:732.
Gene ID	14130 14131

Related Protocols

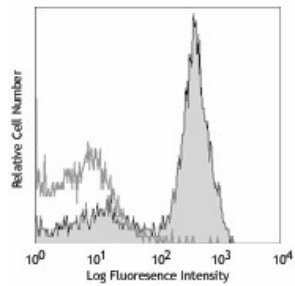
[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-mouse CD16/32, FITC anti-mouse CD16/32, PE anti-mouse CD16/32, Purified anti-mouse CD16/32, Ultra-LEAF™ Purified anti-mouse CD16/32, Alexa Fluor® 647 anti-mouse CD16/32, PE/Cyanine7 anti-mouse CD16/32, TruStain FcX™ (anti-mouse CD16/32), PerCP/Cyanine5.5 anti-mouse CD16/32, APC anti-mouse CD16/32, APC/Cyanine7 anti-mouse CD16/32, Brilliant Violet 421™ anti-mouse CD16/32, Brilliant Violet 510™ anti-mouse CD16/32, Purified anti-mouse CD16/32 (Maxpar® Ready), Brilliant Violet 711™ anti-mouse CD16/32, TotalSeq™-A0109 anti-mouse CD16/32, TotalSeq™-B0109 anti-mouse CD16/32, TotalSeq™-C0109 anti-mouse CD16/32

Product Data

C57BL/6 mouse splenocytes stained with biotinylated 93, followed by Sav-PE



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