

Alexa Fluor® 647 anti-mouse CD16/32 Antibody

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|--------------------------|---|
| Catalog# / Size | 101314 / 100 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

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|-------------------------------|---|
| 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 Alexa Fluor® 647 under optimal conditions. |
| Concentration | 0.5 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 | <p>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.</p> <p>* Alexa Fluor® 647 has a maximum emission of 668 nm when it is excited at 633 nm / 635 nm.</p> <p>Alexa Fluor® and Pacific Blue™ are trademarks of Life Technologies Corporation.</p> <p>View full statement regarding label licenses</p> |
| Excitation Laser | Red Laser (633 nm) |
| 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 | <ol style="list-style-type: none">1. Personal communication (IP)2. Oliver AM, <i>et al.</i> 1999. <i>Hybridoma</i> 18:113. (Block)3. Brummel R and Lenert P. 2005. <i>J. Immunol.</i> 174:2429.4. Terrazas LI, <i>et al.</i> 2005. <i>Int. J. Parasitol.</i> 35:1349. (Block) |

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Product Citations

1. Stivala S, et al. 2019. *J Clin Invest.* 130:1596. [PubMed](#)
2. Coquery C, et al. 2014. *PLoS One.* 9:102284. [PubMed](#)
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RRID

AB_2278396 (BioLegend Cat. No. 101314)

Antigen Details

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|---------------------------|--|
| 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, et al. 1997. <i>The Leukocyte Antigen FactsBook</i> Academic Press. 2. Unkeless JC. 1989. <i>J. Clin. Invest.</i> 83:355. 3. Qiu WQ, et al. 1990. <i>Science</i> 248:732. |
| Gene ID | 14130 14131 |

Related Protocols

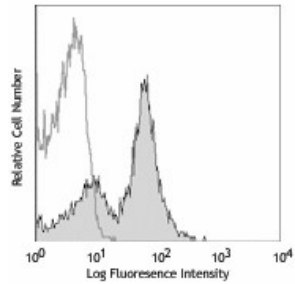
[Cell Surface Flow Cytometry Staining Protocol](#)

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 Alexa Fluor® 647



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