

## APC/Cyanine7 anti-mouse CD16/32 Antibody

<b>Catalog# / Size</b>	101327 / 25 µg 101328 / 100 µg
<b>Clone</b>	93
<b>Regulatory Status</b>	RUO
<b>Other Names</b>	Fcγ R III/II, Ly-17
<b>Isotype</b>	Rat IgG2a, λ
<b>Description</b>	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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<b>Verified Reactivity</b>	Mouse
<b>Antibody Type</b>	Monoclonal
<b>Host Species</b>	Rat
<b>Immunogen</b>	Sorted pre-B cells
<b>Formulation</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.
<b>Preparation</b>	The antibody was purified by affinity chromatography, and conjugated with APC/Cyanine7 under optimal conditions.
<b>Concentration</b>	0.2 mg/ml
<b>Storage &amp; Handling</b>	The antibody solution should be stored undiluted between 2°C and 8°C, and protected from prolonged exposure to light. <b>Do not freeze.</b>
<b>Application</b>	<a href="#">FC - Quality tested</a>
<b>Recommended Usage</b>	Each lot of this antibody is quality control tested by <a href="#">immunofluorescent staining with flow cytometric analysis</a> . 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.
<b>Excitation Laser</b>	Red Laser (633 nm)
<b>Application Notes</b>	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: immunoprecipitation <sup>1</sup> and blocking of Fc-mediated reactions in functional studies <sup>2,4,23</sup> . 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 10 <sup>6</sup> 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).
<b>Additional Product Notes</b>	BioLegend is in the process of converting the name APC/Cy7 to APC/Cyanine7. The dye molecule remains the same, so you should expect the same quality and performance from our APC/Cyanine7 products. Please contact <a href="#">Technical Service</a> if you have any questions.
<b>Application References</b>	<ol style="list-style-type: none"> <li>1. Personal communication (IP)</li> <li>2. Oliver AM, <i>et al.</i> 1999. <i>Hybridoma</i> 18:113. (Block)</li> <li>3. Brummel R and Lenert P. 2005. <i>J. Immunol.</i> 174:2429.</li> <li>4. Terrazas LI, <i>et al.</i> 2005. <i>Int. J. Parasitol.</i> 35:1349. (Block)</li> <li>5. Clements JL, <i>et al.</i> 2006. <i>J. Immunol.</i> 177:905.</li> </ol>

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## RRID

AB\_1967102 (BioLegend Cat. No. 101327)  
 AB\_2104158 (BioLegend Cat. No. 101328)

## Antigen Details

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

## Related Protocols

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[Cell Surface Flow Cytometry Staining Protocol](#)

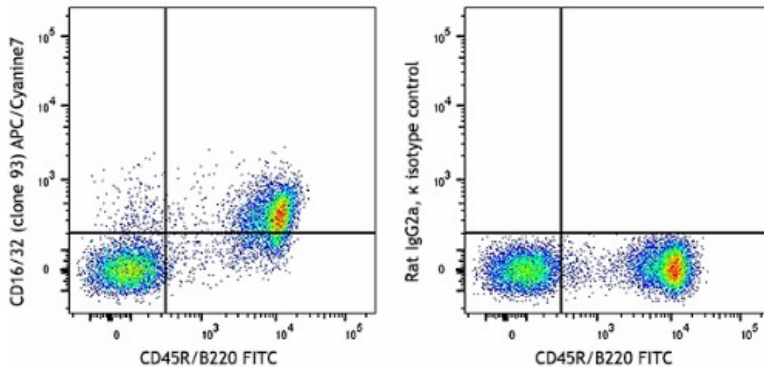
## Other Formats

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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

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BALB/c splenocytes stained with CD45R/B220 FITC and CD16/32 (clone 93) APC/Cyanine7 (left) or Rat IgG2a,  $\kappa$  APC/Cyanine7 isotype control (right).

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