SONY

# Product Data Sheet

## APC/Cy7 anti-mouse CD16/32

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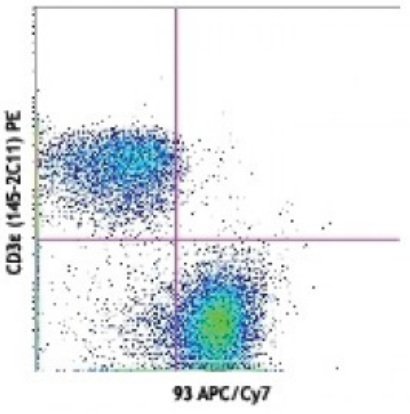
|---|---|
| **Catalog # / Size:** | 1106635 / 25 µg<br>1106640 / 100 µg |
| **Clone:** | 93 |
| **Isotype:** | Rat IgG2a, λ |
| **Immunogen:** | Sorted pre-B cells |
| **Reactivity:** | Mouse |
| **Preparation:** | The antibody was purified by affinity chromatography, and conjugated with APC/Cy7 under optimal conditions. The solution is free of unconjugated APC/Cy7 and unconjugated antibody. |
| **Formulation:** | Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide. |
| **Concentration:** | 0.2 |




Balb/c splenocytes stained with 93 APC/Cy7 and CD3ε (145-2C11) PE

## Applications:

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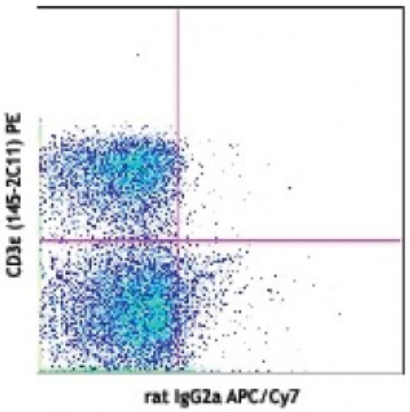
| **Applications:** | Flow Cytometry |
| **Recommended Usage:** | Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For flow cytometric staining, the suggested use of this reagent is ≤0.25 microg per million cells in 100 microL volume. It is recommended that the reagent be titrated for optimal performance for each application. |
| **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.<br><br>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 |




Balb/c splenocytes stained with rat IgG2a (RTK2758) APC/Cy7 isotype control and CD3σ (145-2C11) PE

a lower endotoxin limit than standard LEAF™ purified antibodies (Endotoxin <0.01 EU/microg).

**Application References:**


1. Personal communication (IP)
2. Oliver AM, *et al.* 1999. *Hybridoma* 18:113. (Block)
3. Brummel R and Lenert P. 2005. *J. Immunol.* 174:2429.
4. Terrazas LI, *et al.* 2005. *Int. J. Parasitol.* 35:1349. (Block)
5. Clements JL, *et al.* 2006. *J. Immunol.* 177:905.
6. Mohamed W, *et al.* 2010. *Infect Immun.* 78:3306. PubMed
7. Ouchi T, *et al.* 2011. *J. Exp Med.* 208:2607. PubMed
8. Kmieciak M, *et al.* 2011. *J. Vis. Exp.* 47:2381. PubMed
9. Yamazaki S, *et al.* 2012. *PLoS One.* 7:e51665. PubMed
10. Li J, *et al.* 2012. *Arthritis Rheum.* 64:1098. PubMed
11. Azuma M, *et al.* 2012. *Oncoimmunology.* 1:581. PubMed
12. Koon HW, *et al.* 2013. *J. Vis. Exp.* 68:4208. PubMed
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
16. Fan Y, *et al.* 2014. *J Exp Med.* 211:313. PubMed
17. Huang HN, *et al.* 2014. *Antimicrob Agents Chemother.* 58:1538. PubMed
18. Takei S, *et al.* 2014. *Vaccine.* 32:3066. PubMed
19. Richardson ML, *et al.* 2014. *PLoS Negl Trop Dis.* 8:2825. PubMed
20. Cekanaviciute E, *et al.* 2014. *J Immunol.* 193:139. PubMed
21. Kimura T, *et al.* 2014. *Int Immunol.* 26:697. PubMed
22. Everad A, *et al.* 2014. *Nat Commun.* 5:5648. PubMed
23. Cenci E, *et al.* 2006. *J. Leuko. Biol.* 79(1):40-5. (Block)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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.