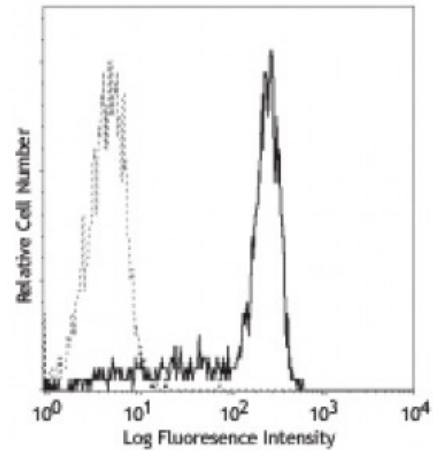


**Biotin anti-human CD64**

**Catalog # / Size:** 2125020 / 100 µg  
**Clone:** 10.1  
**Isotype:** Mouse IgG1, κ  
**Immunogen:** Human rheumatoid synovial fluid cells and fibronectin-purified monocytes.  
**Reactivity:** Human  
**Preparation:** The antibody was purified by affinity chromatography, and conjugated with biotin under optimal conditions. The solution is free of unconjugated biotin.  
**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.  
**Workshop Number:** VI MA36  
**Concentration:** 0.5



Human peripheral blood monocytes stained with 10.1 FITC

**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 ≤2.0 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 10.1 recognizes the EC3 epitope of CD64. Additional reported applications (for the relevant formats) include: blocking of human IgG3 and murine IgG2a binding to FcγRI<sup>2,5,6,11</sup> and immunohistochemical staining of acetone-fixed frozen tissue sections<sup>12</sup>.

**Application References:**

1. McMichael A, *et al.* Eds. 1987. Leucocyte Typing III. Oxford University Press. New York.
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3. Kishimoto T, *et al.* Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London.
4. Holl V, *et al.* 2004. *J. Immunol.* 173:6274.
5. Hober D, *et al.* 2002. *J. Gen. Virol.* 83:2169.
6. Cho HJ, *et al.* 2007. *Physiol Genomics* 149:60.
7. van Tits L, *et al.* 2005. *Arterioscler Thromb Vasc Biol.* 25:717. [PubMed](#)
8. Bruhns P, *et al.* 2008. *Blood* 113:3716. [PubMed](#)
9. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
10. Carter DL, *et al.* 1999. *Cytometry* 37:41. (FC)
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12. Blom AB, *et al.* 2003. *Arthritis Rheum.* 48(4):1002-14. (IHC)

**Description:** CD64 is a 72 kD single chain type I glycoprotein also known as FcγRI and FcR I. CD64 is a member of the immunoglobulin superfamily and is expressed on monocytes/macrophages, dendritic cells, and activated granulocytes. The expression can be upregulated by IFN-γ stimulation. CD64 binds IgG immune

complex. It plays a role in antigen capture, phagocytosis of IgG/antigen complexes, and antibody-dependent cellular cytotoxicity (ADCC).

- Antigen** 1. Hulett M, *et al.* 1994. *Adv. Immunol.* 57:1.  
**References:** 2. van de Winkel J, *et al.* 1993. *Immunol. Today* 14:215.