

**FITC anti-human CD64**

**Catalog # / Size:** 2125030 / 100 tests  
2125025 / 25 tests

**Clone:** 10.1

**Isotype:** Mouse IgG1,  $\kappa$

**Immunogen:** Human rheumatoid synovial fluid cells and fibronectin-purified monocytes.

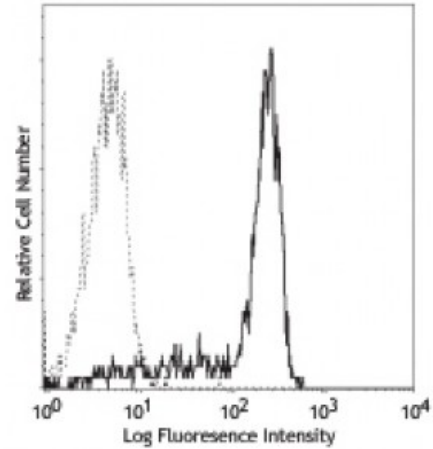
**Reactivity:** Human

**Preparation:** The antibody was purified by affinity chromatography, and conjugated with FITC under optimal conditions. The solution is free of unconjugated FITC.

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).

**Workshop Number:** VI MA36

**Concentration:** Lot-specific



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. **Test size products are transitioning from 20 microL to 5 microL per test.** Please check your vial or your CoA to find the suggested use of this reagent per million cells in 100 microL staining volume or per 100 microL of whole blood. 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 Fc $\gamma$ RI<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.
  2. Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York. p. 874.
  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)
  11. Dougherty GJ, *et al.* 1987. *Eur. J. Immunol.* 17:1453.
  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 Fc $\gamma$ RI 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- $\gamma$  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**  
**References:**

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