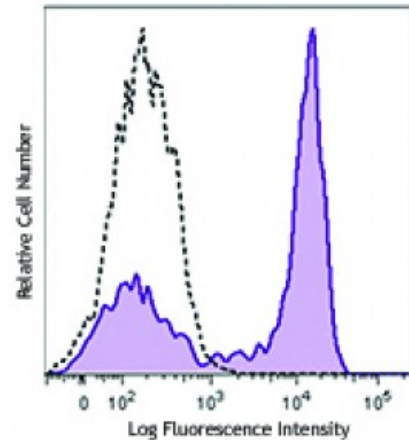


**PE/Dazzle™ 594 anti-human CD64**

<b>Catalog # / Size:</b>	2125160 / 100 tests 2125155 / 25 tests
<b>Clone:</b>	10.1
<b>Isotype:</b>	Mouse IgG1, κ
<b>Immunogen:</b>	Human rheumatoid synovial fluid cells and fibronectin-purified monocytes.
<b>Reactivity:</b>	Human
<b>Preparation:</b>	The antibody was purified by affinity chromatography and conjugated with PE/Dazzle™ 594 under optimal conditions. The solution is free of unconjugated PE/Dazzle™ 594 and unconjugated antibody.
<b>Formulation:</b>	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and 0.2% (w/v) BSA (origin USA).
<b>Workshop Number:</b>	VI MA36
<b>Concentration:</b>	Lot-specific



Human peripheral blood monocytes were stained with CD64 (clone 10.1) PE/Dazzle™ 594 (filled histogram) or mouse IgG1, κ PE/Dazzle™ 594 isotype control (open histogram).

**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 5 microL per million cells or 5 microL per 100 microL of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* PE/Dazzle™ 594 has a maximum excitation of 566 nm and a maximum emission of 610 nm.

**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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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](#)
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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)

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