

## Pacific Blue™ anti-human CD64

**Catalog # / Size:** 305017 / 25 µg  
305018 / 100 µg

**Clone:** 10.1

**Isotype:** Mouse IgG1, κ

**Workshop Number:** VI MA36

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

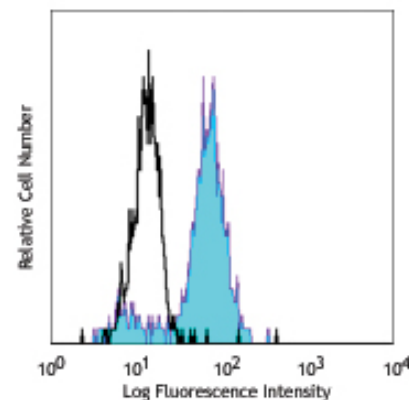
**Reactivity:** Human, **Cross-Reactivity:** Chimpanzee, Baboon, Cynomolgus, Rhesus, Capuchin Monkey, Squirrel Monkey

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

**Formulation:** Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide.

**Concentration:** 0.5 mg/ml

**Storage:** The antibody solution should be stored undiluted at 4°C and protected from prolonged exposure to light. **Do not freeze.**



Human peripheral blood monocytes stained with 10.1 Pacific Blue™

## Applications:

**Applications:** FC - Quality tested

**Recommended Usage:** Each lot of this antibody is quality control tested by immunofluorescent staining with flow cytometric analysis. For immunofluorescent staining, the suggested use of this reagent is ≤ 2.0 µg per 10<sup>6</sup> cells in 100 µl volume or 100 µl of whole blood. It is recommended that the reagent be titrated for optimal performance for each application.

\* Pacific Blue™ has a maximum emission of 455 nm when it is excited at 405 nm. Prior to using Pacific Blue™ conjugate for flow cytometric analysis, please verify your flow cytometer's capability of exciting and detecting the fluorochrome.

\*\* Pacific Blue™ is a registered trademark of Molecular Probes, Inc. Pacific Blue™ dye antibody conjugates are sold under license from Molecular Probes, Inc. for research use only, except for use in combination with microarrays and high content screening, and are covered by pending and issued patents.

**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.

**Application References:**

- McMichael A, *et al.* Eds. 1987. Leucocyte Typing III. Oxford University Press. New York.
- Schlossman S, *et al.* Eds. 1995. Leucocyte Typing V. Oxford University Press. New York. p. 874.
- Kishimoto T, *et al.* Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London.
- Holl V, *et al.* 2004. *J. Immunol.* 173:6274.
- Hober D, *et al.* 2002. *J. Gen. Virol.* 83:2169.
- Cho HJ, *et al.* 2007. *Physiol Genomics* 149:60.
- van Tits L, *et al.* 2005. *Arterioscler Thromb Vasc Biol.* 25:717. PubMed
- Bruhns P, *et al.* 2008. *Blood* 113:3716. PubMed
- Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
- Carter DL, *et al.* 1999. *Cytometry* 37:41. (FC)
- Dougherty GJ, *et al.* 1987. *Eur. J. Immunol.* 17:1453.

**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 References:**

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

Related Products:	Product	Clone	Application
	Pacific Blue™ Mouse IgG1, κ Isotype Ctrl	MOPC-21	FC, ICFC
	Cell Staining Buffer		FC, ICC, ICFC
	RBC Lysis Buffer (10X)		FC, ICFC
	Human TruStain FcX™ (Fc Receptor Blocking Solution)		FC, ICC, ICFC



For research use only. Not for diagnostic use. Not for resale. BioLegend will not be held responsible for patent infringement or other violations that may occur with the use of our products.



\*These products may be covered by one or more Limited Use Label Licenses (see the BioLegend Catalog or our website, [www.biolegend.com/ordering#license](http://www.biolegend.com/ordering#license)). BioLegend products may not be transferred to third parties, resold, modified for resale, or used to manufacture commercial products, reverse engineer functionally similar materials, or to provide a service to third parties without written approval of BioLegend. By use of these products you accept the terms and conditions of all applicable Limited Use Label Licenses. Unless otherwise indicated, these products are for research use only and are not intended for human or animal diagnostic, therapeutic or commercial use.