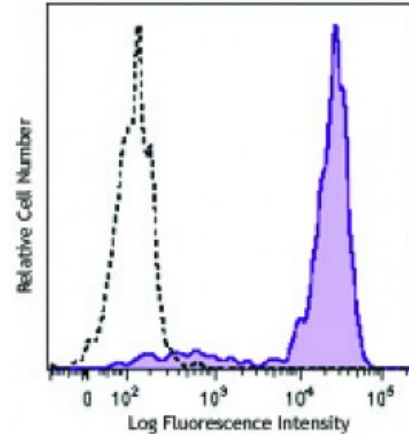


Brilliant Violet 421™ anti-human CD64

Catalog # / Size:	2125095 / 25 tests 2125100 / 100 tests
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 Brilliant Violet 421™ under optimal conditions. The solution is free of unconjugated Brilliant Violet 421™ and unconjugated antibody.
Formulation:	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and BSA (origin USA).
Workshop Number:	VI MA36
Concentration:	Lot-specific



Human peripheral blood monocytes were stained with CD64 (clone 10.1) Brilliant Violet 421™ (filled histogram) or mouse IgG1 Brilliant Violet 421™ 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.

Brilliant Violet 421™ excites at 405 nm and emits at 421 nm. The standard bandpass filter 450/50 nm is recommended for detection. Brilliant Violet 421™ is a trademark of Sirigen Group Ltd.

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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 γ RI^{2,5,6,11} and immunohistochemical staining of acetone-fixed frozen tissue sections¹².

Application References:

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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](#)
 9. Yoshino N, *et al.* 2000. *Exp. Anim. (Tokyo)* 49:97. (FC)
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 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 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.