

Purified anti-human CD64 (Maxpar[®] Ready) Antibody

Catalog# / Size	305029 / 100 µg
Clone	10.1
Regulatory Status	RUO
Workshop	VI MA36
Other Names	FcγRI, FcR I
Isotype	Mouse IgG1, κ
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).

Product Details

Verified Reactivity	Human, Cynomolgus, Rhesus
Reported Reactivity	Baboon, Capuchin Monkey, Chimpanzee, Squirrel Monkey
Antibody Type	Monoclonal
Host Species	Mouse
Immunogen	Human rheumatoid synovial fluid cells and fibronectin-purified monocytes.
Formulation	Phosphate-buffered solution, pH 7.2, containing 0.09% sodium azide and EDTA.
Preparation	The antibody was purified by affinity chromatography.
Concentration	1.0 mg/ml
Storage & Handling	The antibody solution should be stored undiluted between 2°C and 8°C.
Application	FC - Quality tested CyTOF[®] - Verified
Recommended Usage	This product is suitable for use with the Maxpar[®] Metal Labeling Kits . For metal labeling using Maxpar [®] Ready antibodies, proceed directly to the step to Partially Reduce the Antibody by adding 100 µl of Maxpar [®] Ready antibody to 100 µl of 4 mM TCEP-R in a 50 kDa filter and continue with the protocol. Always refer to the latest version of Maxpar [®] User Guide when conjugating Maxpar [®] Ready antibodies.
Application Notes	Clone 10.1 recognizes the EC3 epitope of CD64. While both contain the EC3 domain, in-house testing suggests that clone 10.1 preferentially binds to CD64A (FcγRIA), but not CD64B (FcγRIB). Additional reported applications (for the relevant formats) include: blocking of human IgG3 and murine IgG2a binding to FcγRI ^{2,5,6,11} and immunohistochemical staining of acetone-fixed frozen tissue sections ¹² .
Additional Product Notes	Maxpar [®] is a registered trademark of Standard BioTools Inc.
Application References	1. McMichael A, <i>et al.</i> Eds. 1987. Leucocyte Typing III. Oxford University Press. New York. 2. Schlossman S, <i>et al.</i> Eds. 1995. Leucocyte Typing V. Oxford University Press. New York. p. 874. 3. Kishimoto T, <i>et al.</i> Eds. 1997. Leucocyte Typing VI. Garland Publishing Inc. London. 4. Holl V, <i>et al.</i> 2004. <i>J. Immunol.</i> 173:6274. 5. Hober D, <i>et al.</i> 2002. <i>J. Gen. Virol.</i> 83:2169. 6. Cho HJ, <i>et al.</i> 2007. <i>Physiol Genomics</i> 149:60. 7. van Tits L, <i>et al.</i> 2005. <i>Arterioscler Thromb Vasc Biol.</i> 25:717. PubMed 8. Bruhns P, <i>et al.</i> 2008. <i>Blood</i> 113:3716. PubMed 9. Yoshino N, <i>et al.</i> 2000. <i>Exp. Anim. (Tokyo)</i> 49:97. (FC) 10. Carter DL, <i>et al.</i> 1999. <i>Cytometry</i> 37:41. (FC)
(PubMed link indicates BioLegend citation)	

11. Dougherty GJ, *et al.* 1987. *Eur. J. Immunol.* 17:1453.
12. Blom AB, *et al.* 2003. *Arthritis Rheum.* 48(4):1002-14. (IHC)

Product Citations

1. Stras SF, *et al.* 2020. *Developmental Cell.* 51(3):357-373.e5.. [PubMed](#)
2. Syrimi E, *et al.* 2021. *iScience.* 24:103215. [PubMed](#)
3. Jordan S, *et al.* 2020. *Cell.* 178(5):1102-1114.e17.. [PubMed](#)
4. Roussel M, *et al.* 2021. *Cell Reports Medicine.* 2(6):100291. [PubMed](#)

RRID AB_2563759 (BioLegend Cat. No. 305029)

Antigen Details

Structure	Ig superfamily, type I glycoprotein, 72 kD
Distribution	Monocytes, macrophages, dendritic cells, activated granulocytes
Function	Phagocytosis, ADCC
Ligand/Receptor	IgG receptor
Cell Type	Dendritic cells, Granulocytes, Macrophages, Monocytes
Biology Area	Immunology, Innate Immunity
Molecular Family	CD Molecules, Fc Receptors
Antigen References	<ol style="list-style-type: none"> 1. Hulett M, <i>et al.</i> 1994. <i>Adv. Immunol.</i> 57:1. 2. van de Winkel J, <i>et al.</i> 1993. <i>Immunol. Today</i> 14:215.
Gene ID	2209

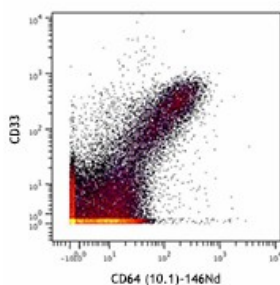
Related Protocols

[Cell Surface Flow Cytometry Staining Protocol](#)

Other Formats

Biotin anti-human CD64, FITC anti-human CD64, PE anti-human CD64, Purified anti-human CD64, Alexa Fluor® 488 anti-human CD64, Alexa Fluor® 647 anti-human CD64, APC anti-human CD64, Pacific Blue™ anti-human CD64, Brilliant Violet 421™ anti-human CD64, PE/Cyanine7 anti-human CD64, PerCP/Cyanine5.5 anti-human CD64, APC/Cyanine7 anti-human CD64, Brilliant Violet 510™ anti-human CD64, Purified anti-human CD64 (Maxpar® Ready), PE/Dazzle™ 594 anti-human CD64, Brilliant Violet 605™ anti-human CD64, APC/Fire™ 750 anti-human CD64, TotalSeq™-A0162 anti-human CD64, Brilliant Violet 711™ anti-human CD64, Alexa Fluor® 700 anti-human CD64, Brilliant Violet 785™ anti-human CD64, TotalSeq™-C0162 anti-human CD64, Ultra-LEAF™ Purified anti-human CD64, TotalSeq™-B0162 anti-human CD64, TotalSeq™-D0162 anti-human CD64, GMP PE anti-human CD64, GMP FITC anti-human CD64

Product Data



Human PBMCs stained with 158Gd-anti-CD33 (WM53) and 146Nd-anti-CD64 (10.1). Lymphocytes are displayed in the analysis. Data provided by DVS Sciences.

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