

Datasheet: MCA1193A647T

BATCH NUMBER 148705

Description:	MOUSE ANTI HUMAN CD16:Alexa Fluor® 647
Specificity:	CD16
Other names:	FcRIII
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	LNK16
Isotype:	IgG1
Quantity:	25 TESTS/0.25ml

Product Details

Applications

This product has been reported to work in the following applications. This information is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information. For general protocol recommendations, please visit www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/10

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. Suggested working dilutions are given as a guide only. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

Target Species	Human		
Product Form	Purified IgG conjugated to Alexa Fluor® 647 - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665
Preparation	Purified IgG prepared by ion exchange chromatography		
Buffer Solution	Phosphate buffered saline		
Preservative Stabilisers	0.09% Sodium Azide		
	1%	Bovine Serum Albumin	
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml		

Immunogen	Normal human peripheral blood granulocytes.
External Database Links	UniProt: P08637 Related reagents O75015 Related reagents Entrez Gene: 2214 FCGR3A Related reagents 2215 FCGR3B Related reagents
Synonyms	CD16A, CD16B, FCG3, FCGR3, IGFR3
RRID	AB_1100858
Fusion Partners	Spleen cells from immunised BALB/c mice were fused with cells of the mouse X63.653 myeloma cell line.
Specificity	Mouse anti Human CD16 antibody, clone LNK16 recognizes CD16, a 50-65 kDa cell surface molecule which exists in two forms - a transmembranous form expressed by NK cells and some T cells, and a phosphatidylinositol linked form expressed by granulocytes. CD16 is a low affinity receptor for IgG (FcR III), and is an important receptor mediating ADCC by NK cells. Mouse anti Human CD16 antibody, clone LNK16 has been reported to block the binding of IgG to the CD16 molecule (Tamm and Schmidt 1996).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells or 100ul whole blood
References	1. Tamm, A. & Schmidt, R.E. (1996) The binding epitopes of human CD16 (Fc gamma RIII) monoclonal antibodies. Implications for ligand binding. J Immunol. 157 (4): 1576-81. 2. Fleit, H.B. <i>et al.</i> (1982) Human neutrophil Fc gamma receptor distribution and structure. Proc Natl Acad Sci U S A. 79 (10): 3275-9. 3. van de Winkel, J.G. & Capel, P.J. (1993) Human IgG Fc receptor heterogeneity: molecular aspects and clinical implications. Immunol Today. 14 (5): 215-21. 4. Pillay, J. <i>et al.</i> (2012) A subset of neutrophils in human systemic inflammation inhibits T cell responses through Mac-1. J Clin Invest. 122: 327-36. 5. Morris, D.L. <i>et al.</i> (2010) Evidence for both copy number and allelic (NA1/NA2) risk at the FCGR3B locus in systemic lupus erythematosus. Eur J Hum Genet. 18 (9): 1027-31. 6. Kamp, V.M. <i>et al.</i> (2012) Human suppressive neutrophils CD16bright/CD62Ldim exhibit decreased adhesion. J Leukoc Biol. 92 (5): 1011-20. 7. Hanna, J. <i>et al.</i> (2003) CXCL12 expression by invasive trophoblasts induces the specific migration of CD16- human natural killer cells. Blood. 102:1569-77. 8. Moalli, F. <i>et al.</i> (2010) Role of complement and Fc{gamma} receptors in the protective activity of the long pentraxin PTX3 against Aspergillus fumigatus. Blood. 116: 5170-80. 9. Armour, K.L. <i>et al.</i> (2010) Expression of human FcgammaRIIIa as a GPI-linked molecule on CHO cells to enable measurement of human IgG binding. J Immunol Methods. 354: 20-33. 10. Welters, I.D. <i>et al.</i> (2010) Ketamine inhibits transcription factors activator protein 1 and

nuclear factor-kappaB, interleukin-8 production, as well as CD11b and CD16 expression: studies in human leukocytes and leukocytic cell lines. [Anesth Analg. 110: 934-41.](#)

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13. Lee, S.F. *et al.* (1999) Cytokine receptor common beta chain as a potential activator of cytokine withdrawal-induced apoptosis. [Mol Cell Biol. 19: 7399-409.](#)

14. Sironi, M. *et al.* (2006) Differential regulation of chemokine production by Fcγ receptor engagement in human monocytes: association of CCL1 with a distinct form of M2 monocyte activation (M2b, Type 2). [J Leukoc Biol. 80: 342-9.](#)

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17. Onodera, R. *et al.* (2017) Anti-human neutrophil antigen-1a, -1b, and -2 antibodies in neonates and children with immune neutropenias analyzed by extracted granulocyte antigen immunofluorescence assay. [Transfusion. 57 \(11\): 2586-94.](#)

Further Reading	1. Ravetch, J.V. & Kinet, J.P. (1991) Fc receptors. Annu Rev Immunol. 9: 457-92.
Storage	Store at +4°C or at -20°C if preferred. This product should be stored undiluted. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Acknowledgements	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1193A647T 10041

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA928A647\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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'M364863:200529'

Printed on 23 Apr 2025