

Datasheet: MCA1193F

Description:	MOUSE ANTI HUMAN CD16:FITC
Specificity:	CD16
Other names:	FcRIII
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	LNK16
Isotype:	IgG1
Quantity:	0.1 mg

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
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	

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 Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by ion exchange chromatography from ascites		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein	IgG concentration 0.1 mg/ml		

Concentrations

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_321322

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 10µl of the suggested working dilution to label 10⁶ cells or 100µl whole blood

References

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4. Sironi, M. *et al.* (2006) Differential regulation of chemokine production by Fc gamma 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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7. Meknache, N. *et al.* (2009) Human basophils express the glycosylphosphatidylinositol-anchored low-affinity IgG receptor Fc gamma RIIIB (CD16B). [J Immunol. 182: 2542-50.](#)
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12. Kamp, V.M. *et al.* (2012) Human suppressive neutrophils CD16bright/CD62Ldim exhibit decreased adhesion. [J Leukoc Biol. 92 \(5\): 1011-20.](#)
13. Weissmüller, S. *et al.* (2012) ICOS-LICOS interaction is critically involved in TGN1412-mediated T-cell activation. [Blood. 119: 6268-77.](#)
14. Pillay, J. *et al.* (2012) A subset of neutrophils in human systemic inflammation inhibits T cell responses through Mac-1. [J Clin Invest. 122: 327-36.](#)
15. 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	<p>1. Ravetch, J.V. & Kinet, J.P. (1991) Fc receptors. Annu Rev Immunol. 9: 457-92.</p> <p>2. 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.</p>
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Storage	<p>This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.</p>
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Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended. This product is photosensitive and should be protected from light.

Guarantee	12 months from date of despatch
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Health And Safety Information	<p>Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA1193F</p> <p>10041</p>
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Regulatory	For research purposes only
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Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

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

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

To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://www.bio-rad-antibodies.com/datasheets)

North & South Tel: +1 800 265 7376

America Fax: +1 919 878 3751

Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: antibody_sales_uk@bio-rad.com

'M429155:240320'

Europe

Tel: +49 (0) 89 8090 95 21

Fax: +49 (0) 89 8090 95 50

Email: antibody_sales_de@bio-rad.com

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