Datasheet: MCA2537

Description:	MOUSE ANTI HUMAN CD16
Specificity:	CD16
Other names:	FcRIII
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	DJ130c
Isotype:	IgG1
Quantity:	0.2 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	▪			1/50 - 1/200
Immunohistology - Frozen	▪			
Immunohistology - Paraffin (1)	▪			
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	

Where this product 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 product for use in their own system using appropriate negative/positive controls.

(1)**This product requires antigen retrieval using heat treatment prior to staining of paraffin sections.Sodium citrate buffer pH 6.0 is recommended for this purpose.**

Target Species

Human

Species Cross Reactivity

Reacts with: Macaque

N.B. Antibody reactivity and working conditions may vary between species. Cross reactivity is derived from testing within our laboratories, peer-reviewed publications or personal communications from the originators. Please refer to references indicated for further information.

Product Form

Purified IgG - liquid

Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN_3)
Carrier Free	Yes
Approx. Protein Concentrations	IgG concentration 1.0mg/ml
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_877454
Specificity	**Mouse anti Human CD16 antibody, clone DJ130c** recognizes human CD16, also known as Low affinity immunoglobulin gamma Fc region receptor III-A or Fc-gamma RIIIa. CD16a is a 254 amino acid ~50-65 kDa single pass type 1 transmembrane glycoprotein bearing two Ig-like C2 type domains. CD16 exists as a transmembranous form (Fc gammaRIIIA, or CD16A) and a glycosyl phosphatidylinositol (GPI) anchored form, Fc gammaRIIIB, or CD16B (Scallon *et al.* 1989). CD16A is expressed by NK cells, some T cells, and macrophages, whereas CD16B is primarily expressed by granulocytes (Ravetch and Perussia 1989). In addition, CD16B exists as two allelic variants NA1 and NA2 . DJ130c recognizes all polymorphonuclear cells irrespective of their NA phenotype. Mouse anti Human CD16 antibody, clone DJ130c recognizes an epitope in the first membrane-distal domain of CD16, recognizes both CD16a and CD16b and has been demonstrated to cross-react with CD16 from rhesus macaques, *Macaca mulatta* (Xu *et al.* 2012)
Flow Cytometry	Use 10ul of the suggested working dilution to label $1x10^6$ cells in 100ul.
Histology Positive Control Tissue	Human tonsil
References	1. Schmidt, R.E. (1993) CD16 cluster workshop report. In Leucocyte Typing V: White cell differentiation antigens, Vol.1. Edited by Schlossman, S.F. *et al*. Oxford University Press.

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18. Brown, R.A. *et al.* (2018) Impact of Mon2 monocyte-platelet aggregates on human coronary artery disease. Eur J Clin Invest. 48 (5): e12911.
19. Nakajima-Kato, Y. *et al.* (2023) A novel monoclonal antibody with improved FcγR blocking ability demonstrated non-inferior efficacy compared to IVIG in cynomolgus monkey ITP model at considerably lower dose. Clin Exp Immunol. 211 (1): 23-30.

Storage

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.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2537 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...)	RPE
Goat Anti Mouse IgG IgA IgM (STAR87...)	HRP
Goat Anti Mouse IgG (STAR76...)	RPE
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos., DyLight®488, DyLight®550, DyLight®650, DyLight®680, DyLight®800, FITC, HRP
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (STAR77...)	HRP
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC, HRP

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL (MCA928)

North & South America	Tel: +1 800 265 7376 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	**Europe**	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com

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

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