

Datasheet: MCA503GA

Description:	RAT ANTI HUMAN CD18
Specificity:	CD18
Other names:	INTEGRIN BETA 2 CHAIN
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	YFC118.3
Isotype:	IgG2b
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	■			1/50 - 1/100
Immunohistology - Frozen (1)	■			1/1000 - 1/5000
Immunohistology - Paraffin		■		
ELISA			■	
Immunoprecipitation	■			
Western Blotting			■	
Immunofluorescence	■			

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.

(1)The epitope recognised by this antibody is reported to be sensitive to formaldehyde fixation and tissue processing. Bio-Rad recommends the use of acetone fixation for frozen sections.

Target Species	Human
Species Cross Reactivity	Reacts with: Dog, Guinea Pig N.B. Antibody reactivity and working conditions may vary between species.
Product Form	Purified IgG - liquid
Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide
Carrier Free	Yes

Approx. Protein Concentrations	IgG concentration 1 mg/ml
Immunogen	Human neutrophils.
External Database Links	UniProt: P05107 Related reagents Entrez Gene: 3689 ITGB2 Related reagents
Synonyms	CD18, MFI7
Fusion Partners	Spleen cells from immunised LOU rats were fused with cells of the rat Y3/Ag.1.2.3 myeloma cell line.
Specificity	Rat anti Human CD18 antibody, clone YFC118.3 was clustered at the Fourth International Workshop on Leucocyte Differentiation Antigen (code number N221) as recognising the CD18 antigen. The CD18 antigen is an integral membrane glycoprotein of ~95 kDa, known as the beta chain, of the LFA-1 complex. The CD18 antigen is non-covalently linked to CD11a, b, c molecules. The main cellular reactivity of Rat anti Human CD18 antibody, clone YFC118.3 is a strong reactivity with Leucocytes (platelets negative). The CD18 molecule is the receptor for ICAM-1 and is thus important for cell adhesion.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
Histology Positive Control Tissue	Human Tonsil
References	1. Bindon, C.I. <i>et al.</i> (1988) Importance of antigen specificity for complement-mediated lysis by monoclonal antibodies. Eur J Immunol. 18 (10): 1507-14. 2. Chabanne, L. <i>et al.</i> (1994) Screening of 78 monoclonal antibodies directed against human leukocyte antigens for cross-reactivity with surface markers on canine lymphocytes. Tissue Antigens. 43 (3): 202-5. 3. Sampaio, W.M. <i>et al.</i> (2007) <i>In vitro</i> binding and survival assays of Leishmania parasites to peripheral blood monocytes and monocyte-derived macrophages isolated from dogs naturally and experimentally infected with <i>Leishmania chagasi</i>. BMC Vet Res. 3:11. 4. Canalli, A.A. <i>et al.</i> (2011) Participation of Mac-1, LFA-1 and VLA-4 integrins in the in vitro adhesion of sickle cell disease neutrophils to endothelial layers, and reversal of adhesion by simvastatin. Haematologica. 96: 526-33. 5. Gonçalves, R. <i>et al.</i> (2005) A sensitive flow cytometric methodology for studying the binding of <i>L. chagasi</i> to canine peritoneal macrophages. BMC Infect Dis. 5:39. 6. Zimmerman, K.L. <i>et al.</i> (2013) Leukocyte adhesion deficiency type I in a mixed-breed dog. J Vet Diagn Invest. 25: 291-6. 7. Araújo, M.S. <i>et al.</i> (2011) Immunological changes in canine peripheral blood leukocytes triggered by immunization with first or second generation vaccines against canine visceral leishmaniasis. Vet Immunol Immunopathol. 141: 64-75. 8. Garland, R.J. <i>et al.</i> (2002) Human CD8+ CTL recognition and in vitro lysis of herpes simplex

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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. Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Shelf Life

18 months from date of despatch.

Health And Safety Information

Material Safety Datasheet documentation #10040 available at: 10040: <https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf>

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...)

[DyLight®800](#)

Goat Anti Rat IgG (STAR73...)	RPE
Rabbit Anti Rat IgG (STAR21...)	HRP
Rabbit Anti Rat IgG (STAR17...)	FITC
Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...)	DyLight®649 , DyLight®800
Goat Anti Rat IgG (STAR131...)	Alk. Phos. , Biotin
Goat Anti Rat IgG (STAR69...)	FITC
Goat Anti Rat IgG (STAR72...)	HRP

Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL \(MCA6006GA\)](#)

North & South America	Tel: +1 800 265 7376	Worldwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
	Fax: +1 919 878 3751		Fax: +44 (0)1865 852 739		Fax: +49 (0) 89 8090 95 50
	Email: antibody_sales_us@bio-rad.com		Email: antibody_sales_uk@bio-rad.com		Email: antibody_sales_de@bio-rad.com

'M318700:180718'

Printed on 01 Aug 2018