# Datasheet: MCA503F BATCH NUMBER 160688

Description:	RAT ANTI HUMAN CD18:FITC
Specificity:	CD18
Other names:	INTEGRIN BETA 2 CHAIN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	YFC118.3
Isotype:	lgG2b
Quantity:	100 TESTS

## **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 <u>www.bio-rad-antibodies.com/protocols</u> .						
		Yes No	Not Determined	Suggested Dilution			
	Flow Cytometry	-		Neat			
	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						
Species Cross Reactivity	Reacts with: Dog, Guinea Pig <b>N.B.</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 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 affinity chromatography on Protein G						
Buffer Solution	Phosphate buffered saline						

Preservative Stabilisers	0.09% Sodium Azide 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.1mg/ml
Immunogen	Human neutrophils
External Database Links	UniProt: <u>P05107</u> <u>Related reagents</u> Entrez Gene: 3689 ITGB2 Related reagents
Synonyms	CD18, MFI7
RRID	AB_321327
Fusion Partners	Spleen cells from immunized LOU rats were fused with cells of the rat Y3/Ag.1.2.3 myeloma cell line
Specificity	<b>Rat anti Human CD18 antibody, clone YFC118.3</b> was clustered at the Fourth International Workshop on Leucocyte Differentiation Antigens (code number N221) as recognizing the CD18 antigen.
	CD18 is an integral membrane glycoprotein of ~95 kDa, also known as the beta 2 chain, of the LFA-1 complex. CD18 links non-covalently to either CD11a, b or c molecules forming the heteromeric LFA-1 complex. CD18 acts as the receptor for ICAM-1 and is important for cell adhesion and cell-cell interactions ( <u>Reina &amp;Espel 2017</u> ).
	Rat anti Human CD18 antibody, clone YFC118.3 demonstrates strong reactivity with leucocytes and is not reactive with platelets.
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <li>Bindon, C.I. <i>et al.</i> (1988) Importance of antigen specificity for complement-mediated lysis by monoclonal antibodies. <u>Eur J Immunol. 18 (10): 1507-14.</u></li> <li>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. <u>Tissue Antigens. 43 (3): 202-5.</u></li> <li>Sampaio, W.M. <i>et al.</i> (2007) <i>In vitro</i> binding and survival assays of Leishmania parasites to peripherical blood monocytes and monocyte-derived macrophages isolated from dogs naturally and experimentally infected with <i>Leishmania chagasi</i>. <u>BMC Vet Res.</u> <u>3:11.</u></li> <li>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. <u>Haematologica. 96: 526-33.</u></li> </ol>

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	lymphoma treated with a 19-week CHOP protocol. Vet Comp Oncol. 18 (3): 342-52.			
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. This product is photosensitive and should be protected from light.			
Guarantee	12 months from date of despatch			
Acknowledgements	The isolation and characterisation of this cell line was carried out with help of funds supplied by the Medical Research Council, UK.			
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA503F 10041			
Regulatory	For research purposes only			

### Related Products

### **Recommended Negative Controls**

RAT IgG2b NEGATIVE CONTROL:FITC (MCA6006F)

#### **Recommended Useful Reagents**

HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)

North & South	Tel: +1 800 265 7376 World	dwide	Tel: +44 (0)1865 852 700	Europe	Tel: +49 (0) 89 8090 95 21
America	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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M385723:210513'

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