

Datasheet: MCA503 BATCH NUMBER 1702

Description:	RAT ANTI HUMAN CD18	
Specificity:	CD18	
Other names:	INTEGRIN BETA 2 CHAIN	
Format:	Purified	
Product Type:	Monoclonal Antibody	
Clone:	YFC118.3	
Isotype:	lgG2b	
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 - 1/100
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
Species Cross
Reactivity

Human

Reacts with: Dog, Guinea Pig

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

Product Form Purified IgG - liquid **Buffer Solution** Phosphate buffered saline **Preservative** 0.09% Sodium Azide **Stabilisers Carrier Free** Yes Approx. Protein IgG concentration 1 mg/ml Concentrations **Immunogen** Human neutrophils **External Database UniProt:** Links P05107 Related reagents **Entrez Gene:** 3689 ITGB2 Related reagents **Synonyms** CD18, MFI7 **RRID** AB 321325 **Fusion Partners** Spleen cells from immunized 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 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 (Reina &Espel 2017). 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 10⁶ cells in 100ul. **Histology Positive Human Tonsil Control Tissue** References 1. Bindon, C.I. et al. (1988) Importance of antigen specificity for complement-mediated lysis by monoclonal antibodies. Eur J Immunol. 18 (10): 1507-14.

further information.

- 2. Chabanne, L. *et al.* (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>
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- 4. Canalli, A.A. *et al.* (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</u>. 96: 526-33.
- 5. Gonçalves, R. *et al.* (2005) A sensitive flow cytometric methodology for studying the binding of *L. chagasi* to canine peritoneal macrophages. BMC Infect Dis. 5:39.
- 6. Zimmerman, K.L. *et al.* (2013) Leukocyte adhesion deficiency type I in a mixed-breed dog. J Vet Diagn Invest. 25: 291-6.
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- 9. Grote, K. *et al.* (2007) The angiogenic factor CCN1 promotes adhesion and migration of circulating CD34+ progenitor cells: potential role in angiogenesis and endothelial regeneration. <u>Blood. 110: 877-85.</u>
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- 12. Marconato, L. (2013) The dog as a possible animal model for human non-Hodgkin lymphoma: a review. <u>Hematol Oncol.</u> 31: 1-9.
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- 16. Lana, S. *et al.* (2006) Diagnosis of mediastinal masses in dogs by flow cytometry. <u>J</u> Vet Intern Med. 20: 1161-5.
- 17. Waché, Y.J. *et al.* (2009) The mycotoxin deoxynivalenol inhibits the cell surface expression of activation markers in human macrophages. <u>Toxicology</u>. 262: 239-44.
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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.

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/MCA503 10040
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...) DyLight®800

Rabbit Anti Rat IgG (STAR17...) FITC

Goat Anti Rat IgG (STAR73...) RPE

Rabbit Anti Rat IgG (STAR21...) HRP

Goat Anti Rat IgG (MOUSE ADSORBED) (STAR71...) DyLight®650, DyLight®650, DyLight@650, <a href="mailto:DyLig

Goat Anti Rat IgG (STAR131...) Alk. Phos., Biotin

Goat Anti Rat IgG (STAR72...)

HRP

Goat Anti Rat IgG (STAR69...)

FITC

Recommended Negative Controls

RAT IgG2b NEGATIVE CONTROL (MCA6006GA)

 North & South
 Tel: +1 800 265 7376
 Worldwide
 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

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M368125:200529'

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