

Datasheet: MCA503GA

BATCH NUMBER 164677

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:	0.1 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
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

further information.

Product Form	Purified IgG - liquid		
Preparation	Antibody purified from tissue culture supernatant		
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		
RRID	AB_324448		
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 10 ⁶ cells in 100ul.		
Histology Positive Control Tissue	Human Tonsil		

References

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- 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>
- 3. Mizuno, T. *et al.* (1997) cDNA cloning and chromosomal localization of the human telencephalin and its distinctive interaction with lymphocyte function-associated antigen-1. J Biol Chem. 272: 1156-63.
- 4. Kupatt, C. *et al.* (1999) Tumor necrosis factor-alpha contributes to ischemia- and reperfusion-induced endothelial activation in isolated hearts. Circ Res. 84: 392-400.
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- 11. 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>
- 12. Sampaio, W.M. *et al.* (2007) *In vitro* binding and survival assays of Leishmania parasites to peripherical blood monocytes and monocyte-derived macrophages isolated from dogs naturally and experimentally infected with *Leishmania chagasi*. <u>BMC Vet Res.</u> 3:11.
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- 15. Holst, B.S. *et al.* (2010) Expression of four canine leukocyte adhesion factors in fresh and stored whole blood samples evaluated using a no-lyse, no-wash method. <u>Vet</u> Immunol Immunopathol. 139: 271-6.
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dog. J Vet Diagn Invest. 25: 291-6.

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- 21. Cremer, S.E. *et al.* (2019) Proteomic profiling of the thrombin-activated canine platelet secretome (CAPS). <u>PLoS One. 14 (11): e0224891.</u>
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- 23. Sheng, R. *et al.* (2023) Prognostic significance of CD25 expression in dogs with a noninvasive diagnosis of B-cell lymphoma treated with CHOP chemotherapy. <u>Vet Comp Oncol.</u> 21 (1): 28-35.
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Further Reading

1. Marconato, L. (2013) The dog as a possible animal model for human non-Hodgkin lymphoma: a review. Hematol Oncol. 31: 1-9.

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/MCA503GA

10040

Regulatory

For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Rat IgG (STAR16...) <u>DyLight®800</u>

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®550, DyLight®650, DyLight®800

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 'M405558:220916'

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