

Datasheet: MCA503T

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:	20 µg

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		■		

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
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	<p>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.</p> <p>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.</p> <p>The main cellular reactivity of Rat anti Human CD18 antibody, clone YFC118.3 is a strong reactivity with Leucocytes (platelets negative).</p> <p>The CD18 molecule is the receptor for ICAM-1 and is thus important for cell adhesion.</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul.
Histology Positive Control Tissue	Human Tonsil
References	<ol style="list-style-type: none"> Bindon, C.I. et al. (1988) Importance of antigen specificity for complement-mediated lysis by monoclonal antibodies. Eur J Immunol. 18 (10): 1507-14. Chabanne, L. et al. (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. Sampaio, W.M. et al. (2007) <i>In vitro</i> binding and survival assays of <i>Leishmania</i> 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. Canalli, A.A. et al. (2011) Participation of Mac-1, LFA-1 and VLA-4 integrins in the <i>in vitro</i> adhesion of sickle cell disease neutrophils to endothelial layers, and reversal of adhesion by simvastatin. Haematologica. 96: 526-33. Gonçalves, R. et al. (2005) A sensitive flow cytometric methodology for studying the binding of <i>L. chagasi</i> to canine peritoneal macrophages. BMC Infect Dis. 5:39. Zimmerman, K.L. et al. (2013) Leukocyte adhesion deficiency type I in a mixed-breed dog. J Vet Diagn Invest. 25: 291-6. Araújo, M.S. et al. (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. Garland, R.J. et al. (2002) Human CD8+ CTL recognition and <i>in vitro</i> lysis of herpes simplex virus-infected cells by a non-MHC restricted mechanism. Scand J Immunol. 55: 61-9. 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. Blood. 110: 877-85. Holst, B.S. et al. (2010) Expression of four canine leukocyte adhesion factors in fresh and

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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: https://www.bio-rad-antibodies.com/uploads/MSDS/10040.pdf
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Goat Anti Rat IgG (STAR69...)	FITC
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®549 , DyLight®649 , DyLight®800

Rabbit Anti Rat IgG (STAR20...)

RPE

Goat Anti Rat IgG (STAR131...)

Alk. Phos., Biotin

Goat Anti Rat IgG (STAR72...)

HRP

Recommended Negative Controls

RAT IgG2b NEGATIVE CONTROL (MCA6006GA)

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Worldwide

Tel: +44 (0)1865 852 700

Europe

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