Datasheet: MCA503PB BATCH NUMBER 165720

Description:	RAT ANTI HUMAN CD18:Pacific Blue®
Specificity:	CD18
Other names:	INTEGRIN BETA 2 CHAIN
Format:	Pacific Blue®
Product Type:	Monoclonal Antibody
Clone:	YFC118.3
Isotype:	lgG2b
Quantity:	100 TESTS/1ml

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 N	Not Determined	Suggested Dilution	
	Flow Cytometry	-		Neat	
	Where this product 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 product for use in their own system using appropriate negative/positive controls.				
Target Species	Human				
Species Cross	Reacts with: Dog, Guinea Pig				
Reactivity	N.B. Antibody reactivity and working conditions may vary between species. Cross			n 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 Pacific Blue - liquid				
Max Ex/Em	Fluorophore	Excitation Max (nm) Emission Max (nm)		
	Pacific Blue®	410	455		
Preparation	Purified IgG prepared supernatant	by affinity chrom	atography on Protein G fro	om tissue culture	

Buffer Solution	Phosphate buffered saline
Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
Immunogen	Human neutrophils
External Database Links	UniProt: <u>P05107</u> <u>Related reagents</u> Entrez Gene: <u>3689</u> ITGB2 <u>Related reagents</u>
Synonyms	CD18, MFI7
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
References	 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> 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> Mizuno, T. <i>et al.</i> (1997) cDNA cloning and chromosomal localization of the human telencephalin and its distinctive interaction with lymphocyte function-associated antigen-1. <u>J Biol Chem. 272: 1156-63.</u> Kupatt, C. <i>et al.</i> (1999) Tumor necrosis factor-alpha contributes to ischemia- and reperfusion-induced endothelial activation in isolated hearts. <u>Circ Res. 84: 392-400.</u> Salvatierra, A. <i>et al.</i> (2001) Antithrombin III prevents early pulmonary dysfunction after lung transplantation in the dog. <u>Circulation. 104: 2975-80.</u>

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 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</u> Oncol. 21 (1): 28-35.		
Further Reading	1. Marconato, L. (2013) The dog as a possible animal model for human non-Hodgkin lymphoma: a review. <u>Hematol Oncol. 31: 1-9.</u>		
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	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchased product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or outlicensing@thermofisher.com		
Health And Safety Information	Material Safety Datasheet documentation #10041 available at: https://www.bio-rad-antibodies.com/SDS/MCA503PB 10041		
Regulatory	For research purposes only		
Related Produc	ts		
Recommended Ne	gative Controls		
RAT IgG2b NEGATIVE	CONTROL:Pacific Blue® (MCA6006PB)		

Recommended Useful Reagents

HUMAN SEROBLOCK	(BUF070A)
HUMAN SEROBLOCK	(BUF070B)

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
	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 'M405559:220916'

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