

Datasheet: MCA503A647

Description:	RAT ANTI HUMAN CD18:Alexa Fluor® 647
Specificity:	CD18
Other names:	INTEGRIN BETA 2 CHAIN
Format:	ALEXA FLUOR® 647
Product Type:	Monoclonal Antibody
Clone:	YFC118.3
Isotype:	IgG2b
Quantity:	100 TESTS/1ml

Product Details

RRID AB_324799

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	▪			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
N.B. Antibody reactivity and working conditions may vary between species.

Product Form Purified IgG conjugated to Alexa Fluor® 647 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®647	650	665

Preparation Purified IgG prepared by affinity chromatography on Protein G

Buffer Solution Phosphate buffered saline

Preservative 0.09% Sodium Azide
Stabilisers 1% Bovine Serum Albumin

Approx. Protein Concentrations IgG concentration 0.05 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 recognizing 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. The CD18 molecule is the receptor for ICAM-1 and is thus important for cell adhesion.</p> <p>The main cellular reactivity of Rat anti Human CD18 antibody, clone YFC118.3 is a strong reactivity with leucocytes (platelets negative).</p>
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	<ol style="list-style-type: none"> 1. Bindon, C.I. <i>et al.</i> (1988) Importance of antigen specificity for complement-mediated lysis by monoclonal antibodies. Eur J Immunol. 18 (10): 1507-14. 2. 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. Tissue Antigens. 43 (3): 202-5. 3. Sampaio, W.M. <i>et al.</i> (2007) <i>In vitro</i> binding and survival assays of Leishmania 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. 4. 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. Haematologica. 96: 526-33. 5. Gonçalves, R. <i>et al.</i> (2005) A sensitive flow cytometric methodology for studying the binding of <i>L. chagasi</i> to canine peritoneal macrophages. BMC Infect Dis. 5:39. 6. Zimmerman, K.L. <i>et al.</i> (2013) Leukocyte adhesion deficiency type I in a mixed-breed dog. J Vet Diagn Invest. 25: 291-6. 7. Araújo, M.S. <i>et al.</i> (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. 8. Garland, R.J. <i>et al.</i> (2002) Human CD8+ CTL recognition and in vitro lysis of herpes simplex virus-infected cells by a non-MHC restricted mechanism. Scand J Immunol. 55: 61-9. 9. Grote, K. <i>et al.</i> (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. 10. Holst, B.S. <i>et al.</i> (2010) Expression of four canine leukocyte adhesion factors in fresh and stored whole blood samples evaluated using a no-lyse, no-wash method. Vet Immunol Immunopathol. 139: 271-6. 11. Kupatt, C. <i>et al.</i> (1999) Tumor necrosis factor-alpha contributes to ischemia- and reperfusion-

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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. This product is photosensitive and should be protected from light.

Avoid repeated freezing and thawing as this may denature the antibody. Should this product contain a precipitate we recommend microcentrifugation before use.

Guarantee

18 months from date of despatch.

Acknowledgements

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Health And Safety Information

Material Safety Datasheet documentation #10041 available at:
10041: <https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf>

Related Products

Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL:Alexa Fluor® 647 \(MCA6006A647\)](#)

Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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