

Datasheet: MCA503A700

BATCH NUMBER 162051

Description:	RAT ANTI HUMAN CD18:Alexa Fluor® 700
Specificity:	CD18
Other names:	INTEGRIN BETA 2 CHAIN
Format:	ALEXA FLUOR® 700
Product Type:	Monoclonal Antibody
Clone:	YFC118.3
Isotype:	IgG2b
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 www.bio-rad-antibodies.com/protocols.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/2

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. 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 Alexa Fluor 700 - liquid

Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	Alexa Fluor®700	702	723

Preparation

Purified IgG prepared by affinity chromatography on Protein G

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	<p>UniProt: P05107 Related reagents</p> <p>Entrez Gene: 3689 ITGB2 Related reagents</p>
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	<p>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.</p> <p>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).</p> <p>Rat anti Human CD18 antibody, clone YFC118.3 demonstrates strong reactivity with leucocytes and is not reactive with platelets.</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.

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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

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Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA503A700>
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Regulatory For research purposes only

Related Products

Recommended Negative Controls

[RAT IgG2b NEGATIVE CONTROL:Alexa Fluor® 700 \(MCA6006A700\)](#)

Recommended Useful Reagents

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

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

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