

Datasheet: MCA503SBV440

Description:	RAT ANTI HUMAN CD18:StarBright Violet 440
Specificity:	CD18
Other names:	INTEGRIN BETA 2 CHAIN
Format:	StarBright Violet 440
Product Type:	Monoclonal Antibody
Clone:	YFC118.3
Isotype:	IgG2b
Quantity:	100 TESTS/0.5ml

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

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 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 StarBright Violet 440 - liquid

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
StarBright Violet 440	383	436

Preparation

Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant

Buffer Solution

Phosphate buffered saline

Preservative Stabilisers	0.09% Sodium Azide (NaN ₃) 1% Bovine Serum Albumin 0.1% Pluronic F68 0.1% PEG 3350 0.05% Tween 20
Approx. Protein Concentrations	For information on the concentration of our StarBright Dye conjugated reagents please visit our FAQ page.
Immunogen	Human neutrophils
External Database Links	UniProt: P05107 Related reagents Entrez Gene: 3689 ITGB2 Related reagents
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 5µl of the suggested working dilution to label 0.5x10 ⁶ cells in 100µl. Best practices suggest a 5 min centrifugation at 6,000g prior to sample application.
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. 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. J Biol Chem. 272: 1156-63. 4. Kupatt, C. <i>et al.</i> (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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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.
Store at +4°C. DO NOT FREEZE.
This product should be stored undiluted.

Guarantee 12 months from date of despatch

Acknowledgements This product is covered by U.S. Patent No. 10,150,841 and related U.S. and foreign counterparts

Health And Safety Information Material Safety Datasheet documentation #20471 available at: <https://www.bio-rad-antibodies.com/SDS/MCA503SBV440>

Regulatory For research purposes only

Related Products

Recommended Useful Reagents

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

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

Product inquiries: www.bio-rad-antibodies.com/technical-support

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets

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