

## Datasheet: MCA907PB

Description:	MOUSE ANTI HUMAN CD106:Pacific Blue®			
Specificity:	CD106			
Other names:	VCAM-1			
Format:	Pacific Blue®			
Product Type:	Monoclonal Antibody			
Clone:	1.G11B1			
Isotype:	lgG1			
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	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: Pig, Rhesus Monkey <b>N.B.</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 Pacific Blue - liquid				
Max Ex/Em	Fluorophore	Excitation Ma	x (nm)	Emission Max (nm)	
	Pacific Blue®	410		455	
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant				
Buffer Solution	Phosphate buffered saline				

Preservative Stabilisers	0.09% Sodium Azide (NaN <sub>3</sub> ) 1% Bovine Serum Albumin
Approx. Protein Concentrations	IgG concentration 0.05 mg/ml
External Database Links	UniProt: <u>P19320</u> <u>Related reagents</u> Entrez Gene: <u>7412</u> VCAM1 <u>Related reagents</u>
Synonyms	L1CAM
Specificity	<b>Mouse anti Human CD106 antibody, clone 1.G11B1</b> recognizes human VCAM-1, a ~110 kDa molecule whose ligand is VLA4. The antigen is expressed on activated endothelial cells and on some tissue macrophages, bone marrow fibroblasts and myoblasts.
	Mouse anti Human CD106 antibody, clone 1.G11B1 inhibits cellular adhesion mediated by VCAM-1 ( <u>Patel 1998</u> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul
References	<ol> <li>Thornhill, M.H. <i>et al.</i> (1991) Tumor necrosis factor combines with IL-4 or IFN-gamma to selectively enhance endothelial cell adhesiveness for T cells. The contribution of vascular cell adhesion molecule-1-dependent and -independent binding mechanisms. J Immunol. 146 (2): 592-8.</li> <li>Rosenman, S.J. <i>et al.</i> (1995) Cytokine-induced expression of vascular cell adhesion molecule-1 (VCAM-1) by astrocytes and astrocytoma cell lines. J Immunol. 154 (4): 1888-99.</li> <li>Reparon-Schuijt, C.C. <i>et al.</i> (2000) Regulation of synovial B cell survival in rheumatoid arthritis by vascular cell adhesion molecule 1 (CD106) expressed on fibroblast-like synoviocytes. Arthritis Rheum. 43 (5): 1115-21.</li> <li>Ali, S. <i>et al.</i> (2000) Intercellular cell adhesion molecule-1, vascular cell adhesion molecule-1, and regulated on activation normal T cell expressed and secreted are expressed by human breast carcinoma cells and support eosinophil adhesion and activation. Am J Pathol. 157: 313-21.</li> <li>Faure, J.P. <i>et al.</i> (2002) Polyethylene glycol reduces early and long-term cold ischemiareperfusion and renal medulla injury. J Pharmacol Exp Ther. 302 (3): 861-70.</li> <li>Hauet, T. <i>et al.</i> (2004) Surface expression of collagen receptor Fc receptor-gamma/glycoprotein VI is enhanced on platelets in type 2 diabetes and mediates release of CD40 ligand and activation of endothelial cells. Diabetes 53: 2117-21.</li> <li>Dunoyer-Geindre, S. <i>et al.</i> (2004) Aspirin inhibits endothelial cell activation induced by antiphospholipid antibodies. J Thromb Haemost. 2: 1176-81.</li> </ol>

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VCAM-1 expression in vitro. BMC Res Notes. 4: 40.

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17. Murphy, A.J. *et al.* (2013) Anti-inflammatory functions of apolipoprotein a-I and high-density lipoprotein are preserved in trimeric apolipoprotein a-I. <u>J Pharmacol Exp</u> Ther. 344: 41-9.

Chadderdon, S.M. *et al.* (2014) Proinflammatory endothelial activation detected by molecular imaging in obese nonhuman primates coincides with onset of insulin resistance and progressively increases with duration of insulin resistance. <u>Circulation. 129 (4): 471-8.</u>
 Old, E.A. *et al.* (2014) Monocytes expressing CX3CR1 orchestrate the development of vincristine-induced pain. <u>J Clin Invest. 124 (5): 2023-36.</u>

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Further Reading	1. Kong, D.H. <i>et al.</i> (2018) Emerging Roles of Vascular Cell Adhesion Molecule-1 (VCAM-1) in Immunological Disorders and Cancer. <u>Int J Mol Sci. 19 (4): 1057.</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/MCA907PB 10041				
Regulatory	For research purposes only				
Related Produc	ots				

## **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL:Pacific Blue® (MCA928PB)

## **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@t	bio-rad.com	Email: antibody_sales_uk@bic	-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 'M437577:250316'

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