

Datasheet: MCA907FT

Description:	MOUSE ANTI HUMAN CD106:FITC
Specificity:	CD106
Other names:	VCAM-1
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	1.G11B1
Isotype:	IgG1
Quantity:	25 µg

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 - 1/10

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: Pig, Rhesus Monkey N.B. Antibody reactivity and working conditions may vary between species.		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
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		
	0.1% Bovine Serum Albumin		
Approx. Protein Concentrations	IgG concentration 0.1mg/ml		
External Database Links	UniProt: P19320 Related reagents		

Entrez Gene:[7412](#) VCAM1 [Related reagents](#)

Synonyms	L1CAM
Specificity	Mouse anti Human CD106 antibody, clone 1.G11B1 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 (Patel 1998).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 ⁶ cells in 100ul.
References	1. 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. 2. 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. 3. Peterson, M.D. <i>et al.</i> (2005) Monocyte-induced endothelial calcium signaling mediates early xenogeneic endothelial activation. Am J Transplant 5 (2): 237-47. 4. 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. 5. Faure, J.P. <i>et al.</i> (2002) Polyethylene glycol reduces early and long-term cold ischemia-reperfusion and renal medulla injury. J Pharmacol Exp Ther. 302 (3): 861-70. 6. Ruschulte, H. <i>et al.</i> (2011) Adrenoceptor stimulation does not affect ICAM-1 and VCAM-1 expression <i>in vitro</i>. BMC Res Notes. 4: 40. 7. Old, E.A. <i>et al.</i> (2014) Monocytes expressing CX3CR1 orchestrate the development of vincristine-induced pain. J Clin Invest. 124 (5): 2023-36. 8. Cabeza, N. <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. 9. Corvaisier, M. <i>et al.</i> (2005) V gamma 9V delta 2 T cell response to colon carcinoma cells. J Immunol. 175: 5481-8. 10. Dunoyer-Geindre, S. <i>et al.</i> (2004) Aspirin inhibits endothelial cell activation induced by antiphospholipid antibodies. J Thromb Haemost. 2: 1176-81. 11. Hauet, T. <i>et al.</i> (2002) Polyethylene glycol reduces the inflammatory injury due to cold ischemia/reperfusion in autotransplanted pig kidneys. Kidney Int. 62: 654-67. 12. Kindle, L. <i>et al.</i> (2005) Human microvascular endothelial cell activation by IL-1 and TNF-alpha stimulates the adhesion and transendothelial migration of circulating human CD14+ monocytes that develop with RANKL into functional osteoclasts. J Bone Miner Res. 21: 193-206. 13. Kahler, C.M. (2007) Peripheral infusion of rat bone marrow derived endothelial progenitor cells leads to homing in acute lung injury. Respir Res. 8: 50. 14. Norling, L.V. <i>et al.</i> (2008) Inhibitory control of endothelial galectin-1 on <i>in vitro</i> and <i>in vivo</i> lymphocyte trafficking. FASEB J. 22: 682-90. 15. Colleselli, D. <i>et al.</i> (2006) Inhibition of cyclooxygenase (COX)-2 affects endothelial progenitor cell proliferation. Exp Cell Res. 312: 2933-41. 16. Hayashida, K. <i>et al.</i> (2000) Rheumatoid arthritis synovial stromal cells inhibit apoptosis and up-regulate Bcl-xL expression by B cells in a CD49/CD29-CD106-dependent mechanism. J Immunol. 164: 1110-6. 17. 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.](#)

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20. 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. [Circulation. 129 \(4\): 471-8.](#)

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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.

Shelf Life

18 months from date of despatch.

Health And Safety Information

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

Regulatory

For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

Recommended Useful Reagents

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

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

North & South America

Tel: +1 800 265 7376
Fax: +1 919 878 3751
Email: antibody_sales_us@bio-rad.com

Worldwide

Tel: +44 (0)1865 852 700
Fax: +44 (0)1865 852 739
Email: antibody_sales_uk@bio-rad.com

Europe

Tel: +49 (0) 89 8090 95 21
Fax: +49 (0) 89 8090 95 50
Email: antibody_sales_de@bio-rad.com

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