Datasheet: MCA2297PE

Description:	RAT ANTI MOUSE CD106:RPE
Specificity:	CD106
Other names:	VCAM-1
Format:	RPE
Product Type:	Monoclonal Antibody
Clone:	MVCAM A (429)
Isotype:	IgG2a
Quantity:	100 TESTS

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

Mouse

Product Form

Purified IgG conjugated to R. Phycoerythrin (RPE) - lyophilized

Reconstitution

Reconstitute with 1.0 ml distilled water

Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
RPE 488nm laser	496	578

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
1%	Bovine Serum Albumin
5%	Sucrose

Immunogen	Stromal cell line PA6.
External Database Links	**UniProt:** P29533 Related reagents **Entrez Gene:** 22329 Vcam1 Related reagents
Synonyms	Vcam-1
RRID	AB_566437
Fusion Partners	Spleen cells from immunised Lewis rats were fused with cells of the mouse P3X63Ag8.653 myeloma cell line.
Specificity	**Rat anti Mouse CD106 antibody, clone MVCAM A (429)** recognizes murine vascular adhesion molecule 1 (VCAM-1), a cell surface glycoprotein that is also known as CD106. CD106 is expressed predominantly on endothelial cells and expression is up-regulated during inflammation. The ligand for CD106 is the alpha 4 subunit (CD49d) of the integrin VLA-4 (CD49d/CD29). Rat anti Mouse CD106 antibody, clone MVCAM A (429) is reported to partially block VCAM-1 mediated functions (Kinashi and Springer 1994).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10^6 cells in 100ul. The Fc region of monoclonal antibodies may bind non-specifically to cells expressing low affinity fc receptors. This may be reduced by using SeroBlock FcR (BUF041A/B).
References	1. Kinashi, T. and Springer, T.A. (1994) Adhesion molecules in hematopoietic cells. Blood Cells. 20:25-44. 2. Lau,. H.Y. and Bhatia, M. (2007) Effect of CP-96,345 on the expression of adhesion molecules in acute pancreatitis in mice. Am J Physiol Gastrointest Liver Physiol. 292: G1283-92. 3. Woo, J.M. *et al.* (2010) Treatment with apolipoprotein A-1 mimetic peptide reduces lupus-like manifestations in a murine lupus model of accelerated atherosclerosis. Arthritis Res Ther. 12(3):R93. 4. Hall, L.J. *et al.* (2010) Probing local innate immune responses after mucosal immunisation. J Immune Based Ther Vaccines. 8: 5. 5. Winnik S *et al.* (2011) Dietary α-linolenic acid diminishes experimental atherogenesis and restricts T cell-driven inflammation. Eur Heart J. 32 (20): 2573-84. 6. Hamada, T. *et al.* (2009) Inducible nitric oxide synthase deficiency impairs matrix metalloproteinase-9 activity and disrupts leukocyte migration in hepatic ischemia/reperfusion injury. Am J Pathol. 174: 2265-77. 7. Hamada, T. *et al.* (2008) Metalloproteinase-9 deficiency protects against hepatic ischemia/reperfusion injury. Hepatology. 47: 186-98. 8. Baumer, Y. *et al.* (2011) Telomerase-based immortalization modifies the

angiogenic/inflammatory responses of human coronary artery endothelial cells. Exp Biol Med (Maywood). 236: 692-700.
9. Li, M. *et al.* (2014) The indoleamine 2,3-dioxygenase pathway controls complement-dependent enhancement of chemo-radiation therapy against murine glioblastoma. J Immunother Cancer. 2: 21.
10. Kumpers, P. *et al.* (2011) The synthetic tie2 agonist peptide vasculotide protects against vascular leakage and reduces mortality in murine abdominal sepsis. Crit Care. 15 (5): R261.
11. Püntener, U. *et al.* (2012) Long-term impact of systemic bacterial infection on the cerebral vasculature and microglia. J Neuroinflammation. 9: 146.
12. David, S. *et al.* (2011) Acute administration of recombinant Angiopoietin-1 ameliorates multiple-organ dysfunction syndrome and improves survival in murine sepsis. Cytokine. 55 (2): 251-9.
13. Kuriyama, N. *et al.* (2011) Tenascin-C: a novel mediator of hepatic ischemia and reperfusion injury. Hepatology. 54 (6): 2125-36.
14. Braach, N. *et al.* (2014) RAGE controls activation and anti-inflammatory signalling of protein C. PLoS One. 9 (2): e89422.

Storage	Store at +4ºC. DO NOT FREEZE This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this product contain a precipitate we recommend microcentrifugation before use.
Guarantee	12 months from date of despatch
Health And Safety Information	Material Safety Datasheet documentation #20487 available at: 20487: https://www.bio-rad-antibodies.com/uploads/MSDS/20487.pdf
Regulatory	For research purposes only

Related Products

Recommended Negative Controls

RAT IgG2a NEGATIVE CONTROL:RPE (MCA1212PE)

Recommended Useful Reagents

MOUSE SEROBLOCK FcR (BUF041A)
MOUSE SEROBLOCK FcR (BUF041B)

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