

Datasheet: MCA4633GA

BATCH NUMBER 162072

Description:	MOUSE ANTI RAT CD106
Specificity:	CD106
Other names:	VCAM-1
Format:	Purified
Product Type:	Monoclonal Antibody
Clone:	MR106
Isotype:	IgG1
Quantity:	0.1 mg

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 - 1/25
Immunohistology - Frozen	▪			
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

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	Rat
Product Form	Purified IgG - liquid
Preparation	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
Buffer Solution	Phosphate buffered saline
Preservative	0.09% Sodium Azide (NaN ₃)

Stabilisers

Carrier Free Yes

Approx. Protein Concentrations IgG concentration 1.0mg/ml

Immunogen Rat CD106-transfected L5178Y cells.

External Database Links

UniProt:
[P29534](#) [Related reagents](#)

Entrez Gene:
[25361](#) Vcam1 [Related reagents](#)

Synonyms Vcam-1

RRID AB_1604705

Specificity **Mouse anti Rat CD106 antibody, clone MR106** recognizes rat CD106, otherwise known as VCAM-1 (vascular adhesion molecule 1), a 110kDa inducible type I transmembrane glycoprotein and member of the immunoglobulin supergene family, which is predominantly expressed on vascular endothelium, and also on bone marrow stromal cells, follicular dendritic cells and some macrophages.

CD106 interacts with the lymphocyte homing receptor VLA-4 (alpha4 beta1 integrin) and LPAM-1 (alpha4 beta7 integrin) and mediates leucocyte-endothelial cell adhesion and signal transduction. Expression of CD106 is upregulated following cytokine activation, and endothelial CD106 plays a role in the extravasation of leucocytes from blood vessels during inflammation.

Flow Cytometry Use 10ul of the suggested working dilution to label 1×10^6 cells in 100ul.

References

1. Miyao, N. *et al.* (2006) Various adhesion molecules impair microvascular leukocyte kinetics in ventilator-induced lung injury. [Am J Physiol Lung Cell Mol Physiol. 290 \(6\): L1059-68.](#)
2. Kubota, H. *et al.* (2007) Identification and characterization of vitamin A-storing cells in fetal liver: implications for functional importance of hepatic stellate cells in liver development and hematopoiesis. [Stem Cells. 25 \(9\): 2339-49.](#)

Further Reading

1. Bevilacqua, M.P. (1993) Endothelial-leukocyte adhesion molecules. [Annu Rev Immunol. 11: 767-804.](#)

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.

Guarantee	12 months from date of despatch
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Health And Safety Information	Material Safety Datasheet documentation #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA4633GA 10040
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Regulatory	For research purposes only
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Related Products

Recommended Secondary Antibodies

Goat Anti Mouse IgG (STAR77...)	HRP
Rabbit Anti Mouse IgG (STAR12...)	RPE
Rabbit Anti Mouse IgG (STAR8...)	DyLight@800
Goat Anti Mouse IgG (STAR76...)	RPE
Goat Anti Mouse IgG (Fc) (STAR120...)	FITC , HRP
Goat Anti Mouse IgG IgA IgM (STAR87...)	Alk. Phos. , HRP
Rabbit Anti Mouse IgG (STAR13...)	HRP
Goat Anti Mouse IgG (STAR70...)	FITC
Rabbit Anti Mouse IgG (STAR9...)	FITC
Goat Anti Mouse IgG (H/L) (STAR117...)	Alk. Phos. , DyLight@488 , DyLight@550 , DyLight@650 , DyLight@680 , DyLight@800 , FITC , HRP

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA1209\)](#)

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

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Printed on 25 Mar 2023