

## Datasheet: MCA4633F

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

## Product Details

**RRID** AB\_1658107

**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](http://www.bio-rad-antibodies.com/protocols).

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/5

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 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** 0.09% Sodium Azide (NaN<sub>3</sub>)  
**Stabilisers** 1% Bovine Serum Albumin

**Approx. Protein Concentrations** IgG concentration 0.1mg/ml

**Immunogen** Rat CD106-transfected L5178Y cells.

**External Database Links** **UniProt:**

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

**Entrez Gene:**

[25361](#) Vcam1 [Related reagents](#)

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**Synonyms**

Vcam-1

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**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.

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**Flow Cytometry**

Use 10ul of the suggested working dilution to label  $1 \times 10^6$  cells in 100ul.

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**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.](#)

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**Further Reading**

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

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**Storage**

Store at +4°C or at -20°C if preferred.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. 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.

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**Guarantee**

18 months from date of despatch.

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**Health And Safety Information**

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

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**Regulatory**

For research purposes only

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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA1209F\)](#)

**North & South** Tel: +1 800 265 7376

**America** Fax: +1 919 878 3751

Email: [antibody\\_sales\\_us@bio-rad.com](mailto:antibody_sales_us@bio-rad.com)

**Worldwide**

Tel: +44 (0)1865 852 700

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