

## Datasheet: MCA2346B

### BATCH NUMBER 0515

<b>Description:</b>	RAT ANTI MOUSE CD321:Biotin
<b>Specificity:</b>	CD321
<b>Other names:</b>	JAM-1
<b>Format:</b>	Biotin
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	H202-106
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	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](http://www.bio-rad-antibodies.com/protocols).

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

Where this antibody has not been tested for use in a particular technique this does not necessarily exclude its use in such procedures. It is recommended that the user titrates the antibody for use in their own system using appropriate negative/positive controls.

<b>Target Species</b>	Mouse
<b>Product Form</b>	Purified IgG conjugated to Biotin - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein G from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative</b>	0.09% Sodium Azide
<b>Stabilisers</b>	1% Bovine Serum Albumin
<b>Approx. Protein Concentrations</b>	IgG concentration 0.1 mg/ml
<b>Immunogen</b>	MTE1/MTE2 stromal cell lines.

**External Database  
Links**

**UniProt:**

[O88792](#)    [Related reagents](#)

**Entrez Gene:**

[16456](#) F11r    [Related reagents](#)

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**Synonyms**

Jam1, Jcam, Jcam1

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**RRID**

AB\_616673

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**Fusion Partners**

Cells from immunized Lou rats were fused with cells of the X63 mouse myeloma cell line.

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**Specificity**

**Rat anti Mouse CD321 antibody, clone H202-106** recognizes murine CD321, also known as junctional adhesion molecule 1 (JAM-1). CD321 is a 274 amino acid ~32-4 1kDa single pass, type I transmembrane glycoprotein, which shares similarities with related proteins JAM-2 and JAM-3.

CD321 is a multifunctional protein primarily expressed by platelets, endothelial and epithelial cells. The CD321 protein co-localises with tight junction molecules in both epithelial and endothelial cells and plays an important role in the regulation of junctional integrity and permeability. In addition, CD321 is a ligand for the integrin LFA-1 and is also involved in the transmigration of leucocytes.

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**Flow Cytometry**

Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.

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**References**

1. Malergue, F. *et al.* (1998) A novel immunoglobulin superfamily junctional molecule expressed by antigen presenting cells, endothelial cells and platelets. [Mol Immunol. 35 \(17\): 1111-9.](#)
2. Aurrand-lions, M. *et al.* (2001) Heterogeneity of endothelial junctions is reflected by differential expression and specific subcellular localization of the three JAM family members. [Blood. 98 \(13\): 3699-707.](#)
3. Ebnet, K. *et al.* (2000) Junctional adhesion molecule interacts with the PDZ domain-containing proteins AF-6 and ZO-1. [J Biol Chem. 275 \(36\): 27979-88.](#)
4. Prestwich, R.J. *et al.* (2009) Immune-mediated antitumor activity of reovirus is required for therapy and is independent of direct viral oncolysis and replication. [Clin Cancer Res. 15 \(13\): 4374-4381.](#)
5. Morita, Y. *et al.* (2010) Heterogeneity and hierarchy within the most primitive hematopoietic stem cell compartment. [J Exp Med. 207 \(6\): 1173-82.](#)
6. Schmitt, M.M. *et al.* (2014) Endothelial junctional adhesion molecule-a guides monocytes into flow-dependent predilection sites of atherosclerosis. [Circulation. 129 \(1\): 66-76.](#)
7. Narni-Mancinelli, E. *et al.* (2017) Complement factor P is a ligand for the natural killer cell-activating receptor NKp46. [Sci Immunol; 2\(10\): eaam9628.](#)
8. Nagatake, T. *et al.* (2020) Selective expression of claudin-5 in thymic endothelial cells regulates the blood-thymus barrier and T-cell export. [Int Immunol. Oct 10 dxaa069 \[Epub ahead of print\].](#)

**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. 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** 12 months from date of despatch

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**Health And Safety Information** Material Safety Datasheet documentation #10041 available at:  
<https://www.bio-rad-antibodies.com/SDS/MCA2346B>  
10041

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**Regulatory** For research purposes only

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## Related Products

### Recommended Useful Reagents

[MOUSE SEROBLOCK FcR \(BUF041A\)](#)

[MOUSE SEROBLOCK FcR \(BUF041B\)](#)

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

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

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**Worldwide**

Tel: +44 (0)1865 852 700

Fax: +44 (0)1865 852 739

Email: [antibody\\_sales\\_uk@bio-rad.com](mailto: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](mailto: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](https://www.bio-rad-antibodies.com/datasheets)  
'M366692:200529'

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