

## Datasheet: MCA2346A488

<b>Description:</b>	RAT ANTI MOUSE CD321:Alexa Fluor® 488
<b>Specificity:</b>	CD321
<b>Other names:</b>	JAM-1
<b>Format:</b>	ALEXA FLUOR® 488
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	H202-106
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS/1ml

### 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 - 1/10

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.

#### Target Species

Mouse

#### Product Form

Purified IgG - liquid

#### Max Ex/Em

Fluorophore	Excitation Max (nm)	Emission Max (nm)
Alexa Fluor®488	495	519

#### 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

#### Approx. Protein Concentrations

IgG concentration 0.05 mg/ml

<b>Immunogen</b>	MTE1/MTE2 stromal cell lines.
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">O88792</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">16456</a> F11r    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	Jam1, Jcam, Jcam1
<b>RRID</b>	AB_616673
<b>Fusion Partners</b>	Cells from immunized Lou rats were fused with cells of the X63 mouse myeloma cell line.
<b>Specificity</b>	<p><b>Rat anti Mouse CD321 antibody, clone H202-106</b> 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.</p> <p>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.</p>
<b>Flow Cytometry</b>	<p>Use 10ul of the suggested working dilution to label 10<sup>6</sup> cells in 100ul.</p> <p>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 (<a href="#">BUF041A/B</a>).</p>
<b>References</b>	<ol style="list-style-type: none"> <li>Malergue, F. <i>et al.</i> (1998) A novel immunoglobulin superfamily junctional molecule expressed by antigen presenting cells, endothelial cells and platelets. <a href="#">Mol Immunol. 35 (17): 1111-9.</a></li> <li>Aurrand-lions, M. <i>et al.</i> (2001) Heterogeneity of endothelial junctions is reflected by differential expression and specific subcellular localization of the three JAM family members. <a href="#">Blood. 98 (13): 3699-707.</a></li> <li>Ebnet, K. <i>et al.</i> (2000) Junctional adhesion molecule interacts with the PDZ domain-containing proteins AF-6 and ZO-1. <a href="#">J Biol Chem. 275 (36): 27979-88.</a></li> <li>Prestwich, R.J. <i>et al.</i> (2009) Immune-mediated antitumor activity of reovirus is required for therapy and is independent of direct viral oncolysis and replication. <a href="#">Clin Cancer Res. 15 (13): 4374-4381.</a></li> <li>Morita, Y. <i>et al.</i> (2010) Heterogeneity and hierarchy within the most primitive hematopoietic stem cell compartment. <a href="#">J Exp Med. 207 (6): 1173-82.</a></li> <li>Schmitt, M.M. <i>et al.</i> (2014) Endothelial junctional adhesion molecule-a guides monocytes into flow-dependent predilection sites of atherosclerosis. <a href="#">Circulation. 129 (1): 66-76.</a></li> <li>Narni-Mancinelli, E. <i>et al.</i> (2017) Complement factor P is a ligand for the natural killer</li> </ol>

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 \[Epub ahead of print\].](#)

---

<b>Storage</b>	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.
<b>Guarantee</b>	12 months from date of despatch
<b>Acknowledgements</b>	This product is provided under an intellectual property licence from Life Technologies Corporation. The transfer of this product is contingent on the buyer using the purchase product solely in research, excluding contract research or any fee for service research, and the buyer must not sell or otherwise transfer this product or its components for (a) diagnostic, therapeutic or prophylactic purposes; (b) testing, analysis or screening services, or information in return for compensation on a per-test basis; (c) manufacturing or quality assurance or quality control, or (d) resale, whether or not resold for use in research. For information on purchasing a license to this product for purposes other than as described above, contact Life Technologies Corporation, 5791 Van Allen Way, Carlsbad CA 92008 USA or <a href="mailto:outlicensing@thermofisher.com">outlicensing@thermofisher.com</a>
<b>Health And Safety Information</b>	Material Safety Datasheet documentation #10041 available at: 10041: <a href="https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf">https://www.bio-rad-antibodies.com/uploads/MSDS/10041.pdf</a>
<b>Regulatory</b>	For research purposes only

---

## Related Products

### Recommended Useful Reagents

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

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

<b>North &amp; South America</b>	Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: <a href="mailto:antibody_sales_us@bio-rad.com">antibody_sales_us@bio-rad.com</a>	<b>Worldwide</b>	Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: <a href="mailto:antibody_sales_uk@bio-rad.com">antibody_sales_uk@bio-rad.com</a>	<b>Europe</b>	Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: <a href="mailto:antibody_sales_de@bio-rad.com">antibody_sales_de@bio-rad.com</a>
----------------------------------	---	------------------	---	---------------	---

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)  
'M366690:200529'

**Printed on 23 Mar 2021**