

## Datasheet: MCA2346B

|                      |                             |
|----------------------|-----------------------------|
| <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 Stabilisers</b>       | 0.09% Sodium Azide<br>1% Bovine Serum Albumin                                                                                                                        |
| <b>Approx. Protein Concentrations</b> | IgG concentration 0.1 mg/ml                                                                                                                                          |
| <b>Immunogen</b>                      | MTE1/MTE2 stromal cell lines.                                                                                                                                        |
| <b>External Database Links</b>        | <b>UniProt:</b><br><a href="#">O88792</a> <a href="#">Related reagents</a><br><br><b>Entrez Gene:</b><br><a href="#">16456</a> F11r <a href="#">Related reagents</a> |
| <b>Synonyms</b>                       | Jam1, Jcam, Jcam1                                                                                                                                                    |

|                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|--------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Fusion Partners</b>               | Cells from immunised 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>                | Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| <b>References</b>                    | <ol style="list-style-type: none"> <li>1. 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>2. 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>3. 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>4. 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>5. 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>6. 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> </ol> |
| <b>Storage</b>                       | <p>Store at +4°C or at -20°C if preferred.</p> <p>Storage in frost-free freezers is not recommended.</p> <p>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.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Shelf Life</b>                    | 18 months from date of despatch.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
| <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 \(BUF041B\)](#)

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

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