

## Datasheet: MCA2320T

**BATCH NUMBER 158078**

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| <b>Description:</b>  | MOUSE ANTI HUMAN MAdCAM-1                  |
| <b>Specificity:</b>  | MAdCAM-1                                   |
| <b>Other names:</b>  | MUCOSAL ADDRESSIN CELL ADHESION MOLECULE-1 |
| <b>Format:</b>       | Purified                                   |
| <b>Product Type:</b> | Monoclonal Antibody                        |
| <b>Clone:</b>        | 314G8                                      |
| <b>Isotype:</b>      | IgG1                                       |
| <b>Quantity:</b>     | 25 µg                                      |

## 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             | ▪   |    |                | 1/10 - 1/100       |
| Immunohistology - Frozen   | ▪   |    |                | 1/25 - 1/200       |
| Immunohistology - Paraffin |     |    | ▪              |                    |
| ELISA                      | ▪   |    |                |                    |
| Immunoprecipitation        |     |    | ▪              |                    |

Where this antibody 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 antibody for use in their own system using the appropriate negative/positive controls.

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| <b>Target Species</b>           | Human   |
| <b>Product Form</b>             | Purified IgG - 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  |

|                                       |   |
|---------------------------------------|---|
| <b>Carrier Free</b>                   | Yes   |
| <b>Approx. Protein Concentrations</b> | IgG concentration 1.0 mg/ml   |
| <b>Immunogen</b>                      | Recombinant soluble MAdCAM-1-fc fusion protein.   |
| <b>External Database Links</b>        | <p><b>UniProt:</b><br/> <a href="#">Q13477</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b><br/> <a href="#">8174</a>    MADCAM1    <a href="#">Related reagents</a></p>  |
| <b>RRID</b>                           | AB_2281548  |
| <b>Fusion Partners</b>                | Spleen cells from immunised Balb/c mice were fused with cells of the mouse P3X63Ag8.653 myeloma cell line.  |
| <b>Specificity</b>                    | <b>Mouse anti Human MAdCAM-1 antibody, clone 314G8</b> recognizes human mucosal addressin cell adhesion molecule 1 (MAdCAM-1) a 60kD cell surface protein that is involved in lymphocyte trafficking. MAdCAM-1 is expressed on high endothelial venules of Peyer's patches and mesenteric lymph nodes. MAdCAM-1 expression has also been reported in the gut lamina propria but clone 314G8 does not recognize MAdCAM-1 in these tissues. Clone 314G8 reacts with the ligand-binding first Ig domain and reports suggest that a splice variant exists in the gut which is not recognized by clone 314G8. Clone 314G8 is reported to block the interaction of MAdCAM-1 with alpha 4 beta 7 ( <a href="#">Leung et al. 2004</a> ).  |
| <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. Leung, E. <i>et al.</i> (1996) Cloning of the mucosal addressin MAdCAM-1 from human brain: identification of novel alternatively spliced transcripts. <a href="#">Immunol Cell Biol. 74 (6): 490-6.</a></li> <li>2. Leung, E. <i>et al.</i> (2004) Bioassay detects soluble MAdCAM-1 in body fluids. <a href="#">Immunol Cell Biol. 82 (4): 400-9.</a></li> <li>3. Olloquequi, J. <i>et al.</i> (2011) Significant increase of CD57+ cells in pulmonary lymphoid follicles of COPD patients. <a href="#">Eur Respir J. 37 (2): 289-98.</a></li> <li>4. Guerra-Pérez, N. <i>et al.</i> (2015) Retinoic Acid Imprints a Mucosal-like Phenotype on Dendritic Cells with an Increased Ability To Fuel HIV-1 Infection. <a href="#">J Immunol. pii: 1402623.</a></li> <li>5. Goode, D. <i>et al.</i> (2014) Sex hormones selectively impact the endocervical mucosal microenvironment: implications for HIV transmission. <a href="#">PLoS One. 9 (5): e97767.</a></li> <li>6. Guzzo, C. <i>et al.</i> (2017) Virion incorporation of integrin <math>\alpha 4\beta 7</math> facilitates HIV-1 infection and intestinal homing. <a href="#">Sci Immunol. 2 (11) [Epub ahead of print].</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. This product should be stored undiluted.</p> <p>Avoid repeated freezing and thawing as this may denature the antibody. Should this</p>   |

product contain a precipitate we recommend microcentrifugation before use.

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| <b>Guarantee</b> | 12 months from date of despatch |
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| <b>Health And Safety Information</b> | Material Safety Datasheet documentation #10040 available at:<br><a href="https://www.bio-rad-antibodies.com/SDS/MCA2320T">https://www.bio-rad-antibodies.com/SDS/MCA2320T</a><br>10040 |
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|                   |                            |
|-------------------|----------------------------|
| <b>Regulatory</b> | For research purposes only |
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## Related Products

### Recommended Secondary Antibodies

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|---|---|
| Goat Anti Mouse IgG (STAR77...)         | <a href="#">HRP</a>   |
| Rabbit Anti Mouse IgG (STAR12...)       | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG (STAR70...)         | <a href="#">FITC</a>  |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | <a href="#">Alk. Phos.</a> , <a href="#">HRP</a>  |
| Goat Anti Mouse IgG (STAR76...)         | <a href="#">RPE</a>   |
| Goat Anti Mouse IgG (H/L) (STAR117...)  | <a href="#">Alk. Phos.</a> , <a href="#">DyLight®488</a> , <a href="#">DyLight®550</a> ,<br><a href="#">DyLight®650</a> , <a href="#">DyLight®680</a> , <a href="#">DyLight®800</a> ,<br><a href="#">FITC</a> , <a href="#">HRP</a> |
| Rabbit Anti Mouse IgG (STAR13...)       | <a href="#">HRP</a>   |
| Goat Anti Mouse IgG (Fc) (STAR120...)   | <a href="#">FITC</a> , <a href="#">HRP</a>  |
| Rabbit Anti Mouse IgG (STAR9...)        | <a href="#">FITC</a>  |

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

|                                  |   |                  |   |               |   |
|----------------------------------|---|------------------|---|---------------|---|
| <b>North &amp; South America</b> | Tel: +1 800 265 7376<br>Fax: +1 919 878 3751<br>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<br>Fax: +44 (0)1865 852 739<br>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<br>Fax: +49 (0) 89 8090 95 50<br>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)  
'M366650:200529'

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