

## Datasheet: MCA2318

<b>Description:</b>	MOUSE ANTI HUMAN CD209
<b>Specificity:</b>	CD209
<b>Other names:</b>	DC-SIGN
<b>Format:</b>	Purified
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MR-1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	0.2 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	▪			1/50 - 1/100
Immunohistology - Frozen			▪	
Immunohistology - Paraffin			▪	
ELISA			▪	
Immunoprecipitation			▪	
Western Blotting			▪	
Immunofluorescence	▪			

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.

<b>Target Species</b>	Human
<b>Product Form</b>	Purified IgG - liquid
<b>Preparation</b>	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant
<b>Buffer Solution</b>	Phosphate buffered saline
<b>Preservative Stabilisers</b>	0.09% sodium azide (NaN <sub>3</sub> )

<b>Carrier Free</b>	Yes
<b>Approx. Protein Concentrations</b>	IgG concentration 1.0 mg/ml
<b>Immunogen</b>	Immature myeloid monocyte-derived dendritic cells (MDDCs).
<b>External Database Links</b>	<p><b>UniProt:</b>  <a href="#">Q9NNX6</a>    <a href="#">Related reagents</a></p> <p><b>Entrez Gene:</b>  <a href="#">30835</a>    CD209    <a href="#">Related reagents</a></p>
<b>Synonyms</b>	CLEC4L
<b>RRID</b>	AB_566637
<b>Fusion Partners</b>	Spleen cells from immunized Balb/c mice were fused with cells of the Mouse SP2/0-Ag14 myeloma cell line.
<b>Specificity</b>	<p><b>Mouse anti Human CD209 antibody, clone MR-1</b> recognizes human DC-specific ICAM-3 grabbing nonintegrin (DC-SIGN), a ~45 kDa C-type lectin that binds ICAM-3 also known as CD209. CD209 is primarily expressed on a population of immature dendritic cells in peripheral tissues and on immature myeloid monocyte-derived DC's <i>in vitro</i>. CD209 is involved in dendritic cell (DC) migration and the initial interaction between DC's and naive T lymphocytes. CD209 also binds HIV-1 gp120 and plays a key role in the dissemination of HIV-1 by DC's.</p> <p>Mouse anti Human CD209 antibody, clone MR-1 is reported to partially block the functional activity of DC-SIGN (<a href="#">Melero <i>et al.</i></a>).</p>
<b>Flow Cytometry</b>	Use 10µl of the suggested working dilution to label 10 <sup>6</sup> cells in 100µl
<b>References</b>	<ol style="list-style-type: none"> <li>1. Relloso, M. <i>et al.</i> (2002) DC-SIGN (CD209) expression is IL-4 dependent and is negatively regulated by IFN, TGF-beta, and anti-inflammatory agents. <a href="#">J Immunol. 168 (6): 2634-43.</a></li> <li>2. Melero, I. <i>et al.</i> (2002) An anti-ICAM-2 (CD102) monoclonal antibody induces immune-mediated regressions of transplanted ICAM-2-negative colon carcinomas. <a href="#">Cancer Res. 62 (11): 3167-74.</a></li> <li>3. Domínguez-Soto, A. <i>et al.</i> (2011) Dendritic Cell-Specific ICAM-3-Grabbing Nonintegrin Expression on M2-Polarized and Tumor-Associated Macrophages Is Macrophage-CSF Dependent and Enhanced by Tumor-Derived IL-6 and IL-10. <a href="#">J Immunol. 186: 2192-200.</a></li> <li>4. Chang, S.K. <i>et al.</i> (2008) B lymphocyte stimulator regulates adaptive immune responses by directly promoting dendritic cell maturation. <a href="#">J Immunol. 180: 7394-403.</a></li> <li>5. Alvarez, C.P. <i>et al.</i> (2002) C-type lectins DC-SIGN and L-SIGN mediate cellular entry by Ebola virus in cis and in trans. <a href="#">J Virol. 76: 6841-4.</a></li> <li>6. Zhang, S.S. <i>et al.</i> (2008) Plasminogen activator Pla of <i>Yersinia pestis</i> utilizes murine DEC-205 (CD205) as a receptor to promote dissemination <a href="#">J Biol Chem. 283: 31511-21.</a></li> </ol>

7. Relloso, M. *et al.* (2002) Dendritic cell (DC)-specific intercellular adhesion molecule 3 (ICAM-3)-grabbing nonintegrin (DC-SIGN, CD209), a C-type surface lectin in human DCs, is a receptor for *Leishmania amastigotes*. [J Biol Chem. 277:36766-9](#)
8. Ciudad, M.T. *et al.* (2017) Analysis of the HLA-DR peptidome from human dendritic cells reveals high affinity repertoires and nonconventional pathways of peptide generation. [J Leukoc Biol. 101 \(1\): 15-27.](#)
9. Chen, J.M. *et al.* (2017) Bovine Lactoferrin Inhibits Dengue Virus Infectivity by Interacting with Heparan Sulfate, Low-Density Lipoprotein Receptor, and DC-SIGN. [Int J Mol Sci. 18 \(9\): 1957.](#)
10. Pham, L.H. *et al.* (2023) PDMS Micropatterns Coated with PDA and RGD Induce a Regulatory Macrophage-like Phenotype [Micromachines. 14 \(3\): 673.](#)

**Storage** This product is shipped at ambient temperature. It is recommended to aliquot and store at -20°C on receipt. When thawed, aliquot the sample as needed. Keep aliquots at 2-8°C for short term use (up to 4 weeks) and store the remaining aliquots at -20°C.

Avoid repeated freezing and thawing as this may denature the antibody. Storage in frost-free freezers is not recommended.

**Guarantee** 12 months from date of despatch

**Health And Safety Information** Material Safety Datasheet documentation #10040 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2318>  
10040

**Regulatory** For research purposes only

## Related Products

### Recommended Secondary Antibodies

- |   |   |
|---|---|
| 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 \(MCA928\)](#)

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

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

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