

## Datasheet: MCA2318PE

<b>Description:</b>	MOUSE ANTI HUMAN CD209:RPE
<b>Specificity:</b>	CD209
<b>Other names:</b>	DC-SIGN
<b>Format:</b>	RPE
<b>Product Type:</b>	Monoclonal Antibody
<b>Clone:</b>	MR-1
<b>Isotype:</b>	IgG1
<b>Quantity:</b>	100 TESTS

### 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 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 conjugated to R. Phycoerythrin (RPE) - lyophilized		
<b>Reconstitution</b>	Reconstitute with 1 ml distilled water		
<b>Max Ex/Em</b>	<b>Fluorophore</b>	<b>Excitation Max (nm)</b>	<b>Emission Max (nm)</b>
	RPE 488nm laser	496	578
<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</b>	0.09% sodium azide (NaN <sub>3</sub> )		
<b>Stabilisers</b>	1% bovine serum albumin		
	5% sucrose		

<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_566635
<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. 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>4. Relloso, M. <i>et al.</i> (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. <a href="#">J Biol Chem. 277:36766-9</a></li> <li>5. 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>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> <li>7. 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>8. Ciudad, M.T. <i>et al.</i> (2017) Analysis of the HLA-DR peptidome from human dendritic cells reveals high affinity repertoires and nonconventional pathways of peptide generation.</li> </ol>

[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, H.L. *et al.* (2023) PDMS Micropatterns Coated with PDA and RGD Induce a Regulatory Macrophage-like Phenotype. [Micromachines \(Basel\). 14 \(3\) :673.](#)

11. Pham, H.L. *et al.* (2023) Human Regulatory Macrophages Derived from THP-1 Cells Using Arginylglycylaspartic Acid and Vitamin D3. [Biomedicines. 11 \(6\): 1740.](#)

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<b>Storage</b>	Store at +4°C. DO NOT FREEZE This product should be stored undiluted. This product is photosensitive and should be protected from light. Should this 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 #20487 available at: <a href="https://www.bio-rad-antibodies.com/SDS/MCA2318PE">https://www.bio-rad-antibodies.com/SDS/MCA2318PE</a> 20487
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<b>Regulatory</b>	For research purposes only
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## Related Products

### Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:RPE \(MCA928PE\)](#)

### Recommended Useful Reagents

[HUMAN SEROBLOCK \(BUF070A\)](#)

[HUMAN SEROBLOCK \(BUF070B\)](#)

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To find a batch/lot specific datasheet for this product, please use our online search tool at: [bio-rad-antibodies.com/datasheets](https://bio-rad-antibodies.com/datasheets)

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