

Datasheet: MCA2318PE

#### **BATCH NUMBER 152304**

Description:	MOUSE ANTI HUMAN CD209:RPE		
Specificity:	CD209		
Other names:	DC-SIGN		
Format:	RPE		
<b>Product Type:</b>	Monoclonal Antibody		
Clone:	MR-1		
Isotype:	lgG1		
Quantity:	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 <a href="www.bio-rad-antibodies.com/protocols">www.bio-rad-antibodies.com/protocols</a>.

	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. 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 appropriate negative/positive controls.

Target Species	Human		
Product Form	Purified IgG conjuga	ted to R. Phycoerythrin	ı (RPE) - lyophilized
Reconstitution	Reconstitute with 1 i	ml distilled water	
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	RPE 488nm laser	496	578
Preparation	Purified IgG prepare supernatant	d by affinity chromatog	raphy on Protein A from tissue cul
Buffer Solution	Phosphate buffered	saline	
Preservative	0.09% Sodium Azide	е	
Stabilisers	1% Bovine Serur	n Albumin	

	5% Sucrose
Immunogen	Immature myeloid monocyte-derived dendritic cells (MDDCs).
External Database Links	UniProt:  Q9NNX6 Related reagents  Entrez Gene:  30835 CD209 Related reagents
Synonyms	CLEC4L
RRID	AB_566635
Fusion Partners	Spleen cells from immunized Balb/c mice were fuzed with cells of the Mouse SP2/0-Ag14 myeloma cell line.
Specificity	Mouse anti Human CD209 antibody, clone MR-1 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.  Mouse anti Human CD209 antibody, clone MR-1 is reported to partially block the functional activity of DC-SIGN (Melero <i>et al.</i> ).
Flow Cytometry	Use 10ul of the suggested working dilution to label 10 <sup>6</sup> cells in 100ul.
References	<ol> <li>Relloso, M. et al. (2002) DC-SIGN (CD209) expression is IL-4 dependent and is negatively regulated by IFN, TGF-beta, and anti-inflammatory agents. J Immunol. 168 (6): 2634-43.</li> <li>Melero, I. et al. (2002) An anti-ICAM-2 (CD102) monoclonal antibody induces immune-mediated regressions of transplanted ICAM-2-negative colon carcinomas. Cancer Res. 62 (11): 3167-74.</li> <li>Domínguez-Soto, A. et al. (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. J Immunol. 186: 2192-200.</li> <li>Chang, S.K. et al. (2008) B lymphocyte stimulator regulates adaptive immune responses by directly promoting dendritic cell maturation. J Immunol. 180: 7394-403.</li> <li>Alvarez, C.P. et al (2002) C-type lectins DC-SIGN and L-SIGN mediate cellular entry by Ebola virus in cis and in trans. J Virol. 76: 6841-4.</li> <li>Zhang, S.S. et al. (2008) Plasminogen activator Pla of Yersinia pestis utilizes murine</li> </ol>

is a receptor for Leishmania amastigotes. <u>J Biol Chem. 277:36766-9</u>

DEC-205 (CD205) as a receptor to promote dissemination <u>J Biol Chem. 283: 31511-21.</u>
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,

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)Sep 12 [Epub ahead of print].

Storage

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.

Guarantee	12 months from date of despatch
Health And Safety Information	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
Regulatory	For research purposes only

## Related Products

### **Recommended Negative Controls**

MOUSE IgG1 NEGATIVE CONTROL:RPE (MCA928PE)

# **Recommended Useful Reagents**

**HUMAN SEROBLOCK (BUF070A) HUMAN SEROBLOCK (BUF070B)** 

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North & South Tel: +1 800 265 7376 Fax: +1 919 878 3751 Worldwide

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Email: antibody sales uk@bio-rad.com

Email: antibody sales de@bio-rad.com

To find a batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M375462:210104'

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