

Datasheet: MCA2318F

Description:	MOUSE ANTI HUMAN CD209:FITC
Specificity:	CD209
Other names:	DC-SIGN
Format:	FITC
Product Type:	Monoclonal Antibody
Clone:	MR-1
Isotype:	IgG1
Quantity:	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.

	Yes	No	Not Determined	Suggested Dilution
Flow Cytometry	▪			Neat - 1/5

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.

Target Species	Human		
Product Form	Purified IgG conjugated to Fluorescein Isothiocyanate Isomer 1 (FITC) - liquid		
Max Ex/Em	Fluorophore	Excitation Max (nm)	Emission Max (nm)
	FITC	490	525
Preparation	Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant		
Buffer Solution	Phosphate buffered saline		
Preservative	0.09% sodium azide (NaN ₃)		
Stabilisers	1% bovine serum albumin		
Approx. Protein Concentrations	IgG concentration 0.1 mg/ml		

Immunogen	Immature myeloid monocyte-derived dendritic cells (MDDCs).
External Database Links	<p>UniProt: Q9NNX6 Related reagents</p> <p>Entrez Gene: 30835 CD209 Related reagents</p>
Synonyms	CLEC4L
RRID	AB_566634
Fusion Partners	Spleen cells from immunized Balb/c mice were fused with cells of the Mouse SP2/0-Ag14 myeloma cell line.
Specificity	<p>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.</p> <p>Mouse anti Human CD209 antibody, clone MR-1 is reported to partially block the functional activity of DC-SIGN (Melero <i>et al.</i>).</p>
Flow Cytometry	Use 10µl of the suggested working dilution to label 10 ⁶ cells in 100µl
References	<ol style="list-style-type: none"> 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. J Immunol. 168 (6): 2634-43. 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. Cancer Res. 62 (11): 3167-74. 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. J Virol. 76: 6841-4. 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. J Biol Chem. 277:36766-9 5. Chang, S.K. <i>et al.</i> (2008) B lymphocyte stimulator regulates adaptive immune responses by directly promoting dendritic cell maturation. J Immunol. 180: 7394-403. 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 J Biol Chem. 283: 31511-21. 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. J Immunol. 186: 2192-200. 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.

[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.](#)

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. This product is photosensitive and should be protected from light.

Guarantee 12 months from date of despatch

Health And Safety Information Material Safety Datasheet documentation #10041 available at: <https://www.bio-rad-antibodies.com/SDS/MCA2318F>
10041

Regulatory For research purposes only

Related Products

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL:FITC \(MCA928F\)](#)

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://www.bio-rad-antibodies.com/datasheets)

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