

Datasheet: MCA2318EL

Description:	MOUSE ANTI HUMAN CD209:Low Endotoxin		
Specificity:	CD209		
Other names:	DC-SIGN		
Format:	Low Endotoxin		
Product Type:	Monoclonal Antibody		
Clone:	MR-1		
Isotype:	IgG1		
Quantity:	0.5 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	•			
Immunohistology - Frozen			•	
Immunohistology - Paraffin			•	
ELISA			•	
Immunoprecipitation				
Western Blotting			•	
Immunofluorescence	•			
Functional Assays	•			

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 - liquid	
Preparation	Purified IgG prepared by affinity chromatography on Protein A supernatant	A from tissue culture
Buffer Solution	Phosphate buffered saline	
Preservative Stabilisers	None present	

Carrier Free	Yes
Endotoxin Level	< 0.01 EU/µg
Approx. Protein Concentrations	IgG concentration 1.0 mg/ml
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_566636
Fusion Partners	Spleen cells from immunized Balb/c mice were fused 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 10μl of the suggested working dilution to label 10 ⁶ cells in 100μl
References	 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. <u>J Immunol. 168 (6)</u>: 2634-43. Melero, I. et al. (2002) An anti-ICAM-2 (CD102) monoclonal antibody induces immune-mediated regressions of transplanted ICAM-2-negative colon carcinomas. <u>Cancer Res. 62 (11): 3167-74.</u> 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. <u>J Virol. 76: 6841-4.</u> 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. <u>J Biol Chem. 277:36766-9</u> Chang, S.K. et al. (2008) B lymphocyte stimulator regulates adaptive immune responses by directly promoting dendritic cell maturation. <u>J Immunol.180: 7394-403.</u>

- 6. Zhang, S.S. *et al.* (2008) Plasminogen activator Pla of *Yersinia pestis* utilizes murine DEC-205 (CD205) as a receptor to promote dissemination J Biol Chem. 283: 31511-21.
- 7. 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. <u>J Immunol. 186: 2192-200</u>.
- 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. <u>Int J Mol Sci. 18 (9): 1957.</u>
- 10. Pham, H.L. *et al.* (2023) PDMS Micropatterns Coated with PDA and RGD Induce a Regulatory Macrophage-like Phenotype. <u>Micromachines (Basel)</u>. 14 (3):673.
- 11. Pham, H.L. *et al.* (2023) Human Regulatory Macrophages Derived from THP-1 Cells Using Arginylglycylaspartic Acid and Vitamin D3. <u>Biomedicines</u>. 11 (6): 1740.

Storage

Store at -20°C only.

Storage in frost-free freezers is not recommended.

This product should be stored undiluted. Avoid repeated freezing and thawing as this may denature the antibody. 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 #10162 available at: https://www.bio-rad-antibodies.com/SDS/MCA2318EL 10162
Regulatory	For research purposes only

Related Products

Recommended Secondary Antibodies

Rabbit Anti Mouse IgG (STAR12...) RPE

Goat Anti Mouse IgG IgA IgM (STAR87...) Alk. Phos., HRP

Goat Anti Mouse IgG (STAR76...)

Rabbit Anti Mouse IgG (STAR13...)

HRP

Goat Anti Mouse IgG (STAR70...)

FITC

Goat Anti Mouse IgG (H/L) (STAR117...) Alk. Phos., DyLight®488, DyLight®550,

<u>DyLight®650</u>, <u>DyLight®680</u>, <u>DyLight®800</u>,

FITC, HRP

Goat Anti Mouse IgG (Fc) (STAR120...) FITC, HRP

Goat Anti Mouse IgG (STAR77...)

Rabbit Anti Mouse IgG (STAR9...)

FITC

Recommended Negative Controls

MOUSE IgG1 NEGATIVE CONTROL:Low Endotoxin (MCA928EL)

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 Tel: +44 (0)1865 852 700
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batch/lot specific datasheet for this product, please use our online search tool at: bio-rad-antibodies.com/datasheets 'M414478:221209'

Printed on 29 Aug 2024

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