

Datasheet: MCA2318

BATCH NUMBER 1705

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

| | Yes | No | Not Determined | Suggested Dilution |
|----------------------------|-----|----|----------------|--------------------|
| Flow Cytometry | ▪ | | | 1/50 - 1/100 |
| Immunohistology - Frozen | | | ▪ | |
| Immunohistology - Paraffin | | | ▪ | |
| ELISA | | | ▪ | |
| Immunoprecipitation | | | ▪ | |
| Western Blotting | | | ▪ | |
| Immunofluorescence | ▪ | | | |

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.

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| Target Species | Human |
| Product Form | Purified IgG - liquid |
| Preparation | Purified IgG prepared by affinity chromatography on Protein A from tissue culture supernatant |
| Buffer Solution | Phosphate buffered saline |
| Preservative | 0.09% Sodium Azide |

Stabilisers

Carrier Free Yes

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_566637

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 *in vitro*. 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 et al.](#)).

Flow Cytometry Use 10ul of the suggested working dilution to label 10⁶ cells in 100ul.

References

1. 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.](#)
2. 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.](#)
3. 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.](#)
4. Chang, S.K. *et al.* (2008) B lymphocyte stimulator regulates adaptive immune responses by directly promoting dendritic cell maturation. [J Immunol. 180: 7394-403.](#)
5. 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.](#)
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. 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 \(9\)Sep 12 \[Epub ahead of print\].](#)

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| Storage | Store at +4°C or at -20°C if preferred. 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 #10040 available at: https://www.bio-rad-antibodies.com/SDS/MCA2318 10040 |
| Regulatory | For research purposes only |

Related Products

Recommended Secondary Antibodies

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| Rabbit Anti Mouse IgG (STAR12...) | RPE |
| Goat Anti Mouse IgG IgA IgM (STAR87...) | HRP |
| Goat Anti Mouse IgG (STAR76...) | RPE |
| 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 , DyLight®650 , DyLight®680 , DyLight®800 , FITC , HRP |
| Rabbit Anti Mouse IgG (STAR9...) | FITC |
| Goat Anti Mouse IgG (STAR77...) | HRP |
| Goat Anti Mouse IgG (Fc) (STAR120...) | FITC , HRP |

Recommended Negative Controls

[MOUSE IgG1 NEGATIVE CONTROL \(MCA928\)](#)

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|----------------------------------|---|------------------|---|---------------|---|
| North & South America | Tel: +1 800 265 7376 Fax: +1 919 878 3751 Email: antibody_sales_us@bio-rad.com | Worldwide | Tel: +44 (0)1865 852 700 Fax: +44 (0)1865 852 739 Email: antibody_sales_uk@bio-rad.com | Europe | Tel: +49 (0) 89 8090 95 21 Fax: +49 (0) 89 8090 95 50 Email: antibody_sales_de@bio-rad.com |
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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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